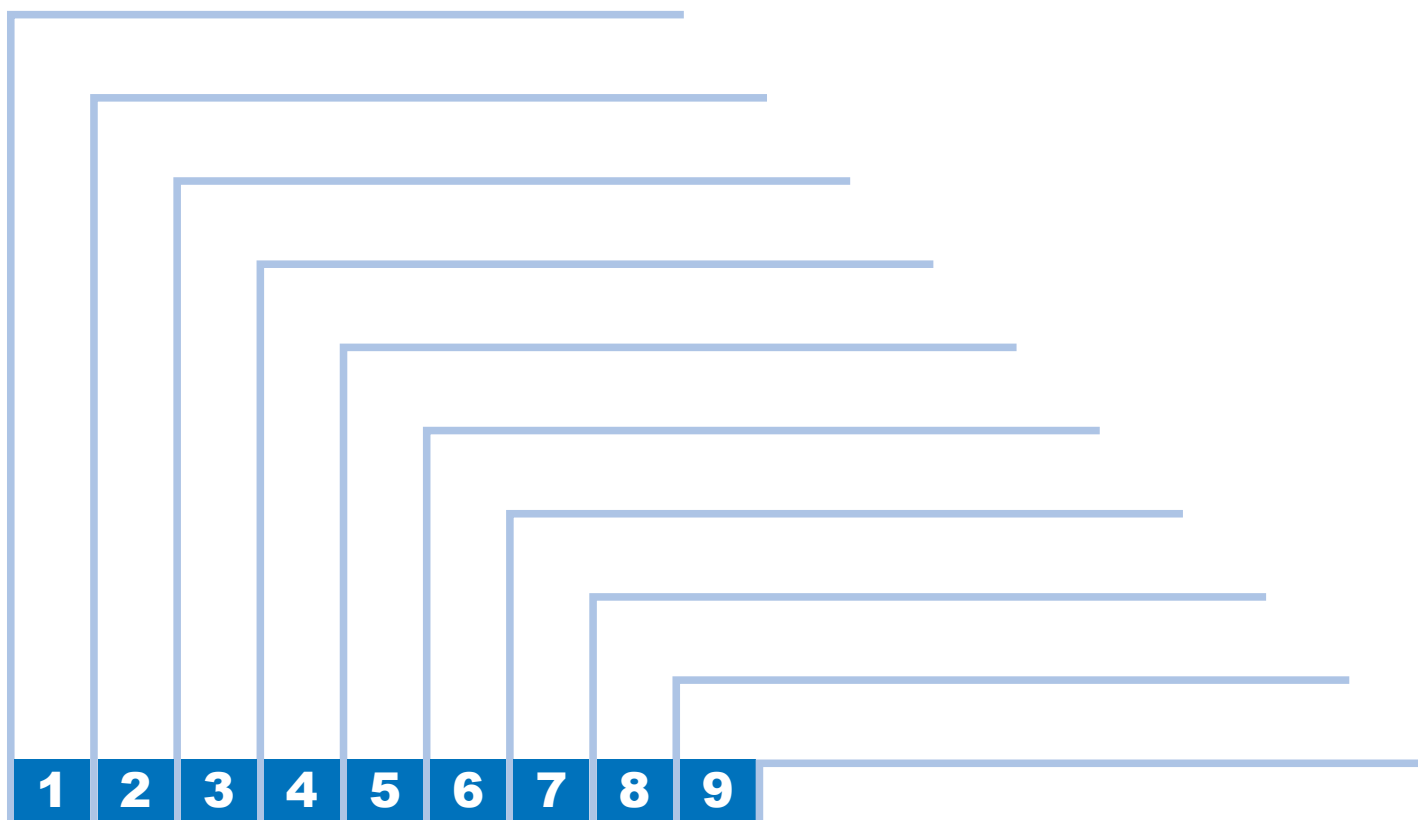


# imageRUNNER ADVANCE C5255/C5250/C5240/C5235 Series

## Service Manual



## 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 the noise.		Use the bundled part.
	Disconnect the connector.		Push the part.
	Connect the connector.		Plug the power cable.
	Remove the cable/wire from the cable guide or wire saddle.		Turn on the power.
	Set the cable/wire to the cable guide or wire saddle.		
	Remove the screw.		
	Tighten the screw.		

The following rules apply throughout this Service Manual:

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

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

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

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

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

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

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

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# Safety Precautions

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



imageRUNNER ADVANCE  
C5255/5250/5240/5235  
Series

## 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.

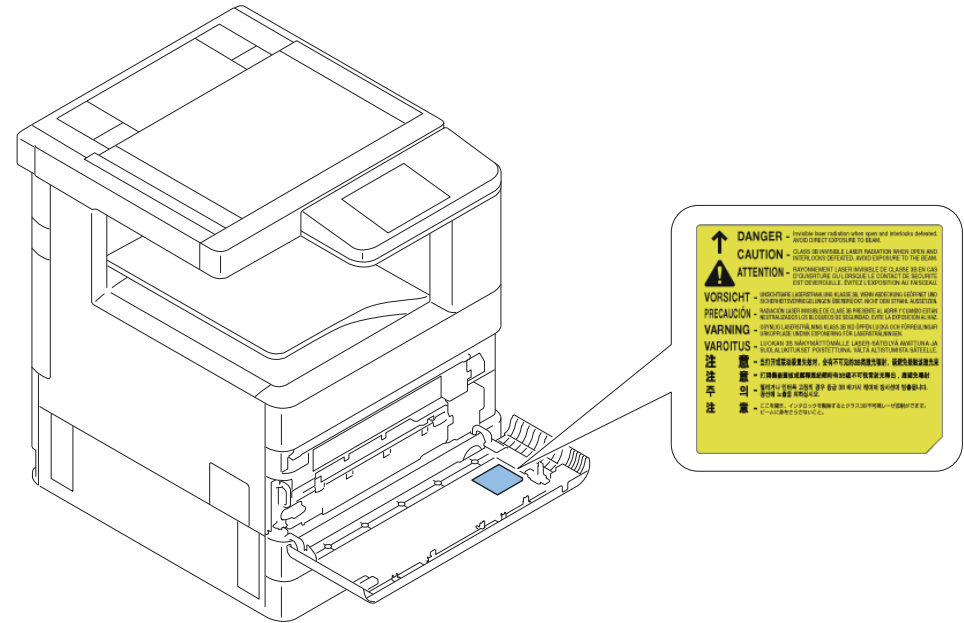
Bei Servicearbeiten am oder in der Nähe des Laserteils zuerst das Hauptgerät abschalten.

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 Warenaufkleber 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 panel power switch.

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

### CAUTION:

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



F-0-2

## 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).


 CAUTION:  
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

F-0-3

## Notes Before it Works Serving

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

## Points to Note at Cleaning

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

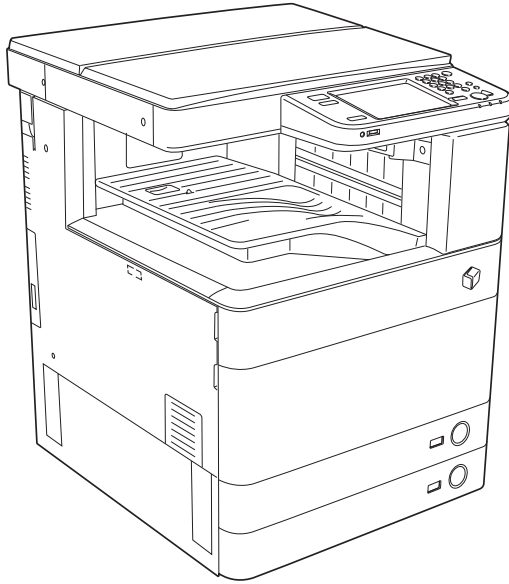


# Product Overview

- Product Lineup
- Feature
- Specification
- Name of Parts
- Operation

## Product Lineup

### Host machine



F-1-1

### Host machine configuration

Host machine configuration
Printer only

T-1-1

### Model type

	C5255	C5250	C5240	C5235
Print Speed (BW / Color)	55 / 51ppm	50 / 45ppm	40 / 35ppm	35 / 30ppm
Positioning	High-speed / high-quality Middle-Office model			

T-1-2

imageRUNNER ADVANCE C52 55  
A B

A: Product category (5X : Office model)

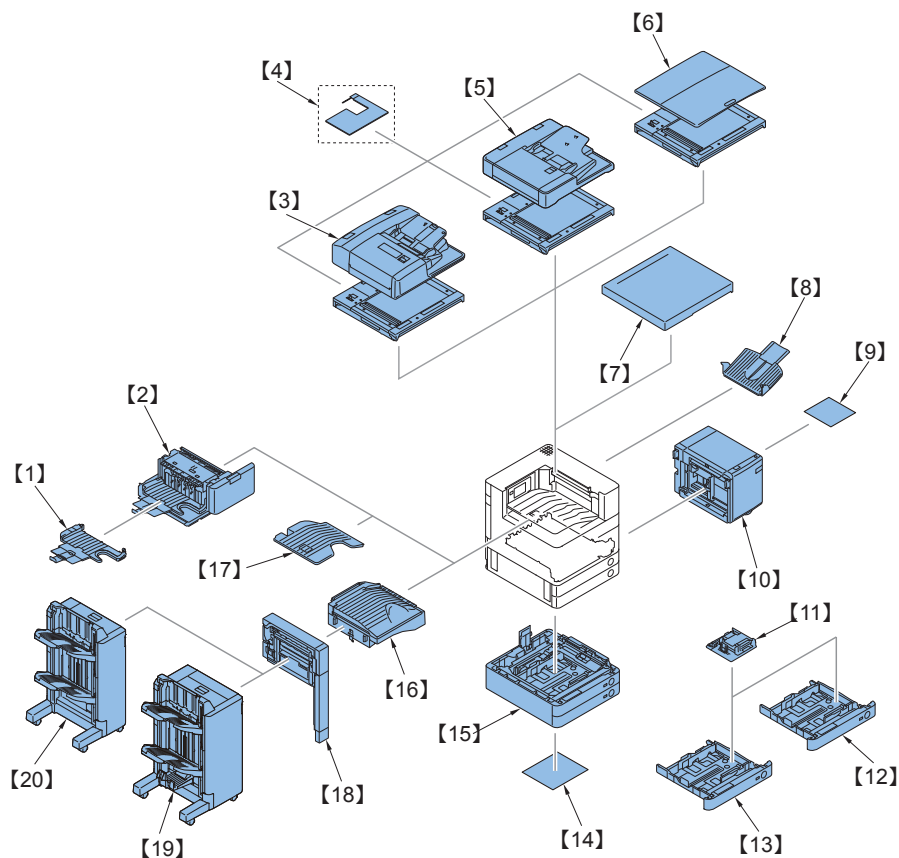
B: Print speed (unit is ppm : print per minutes)

F-1-2



## Option

### ■ Pickup delivery / image reading options

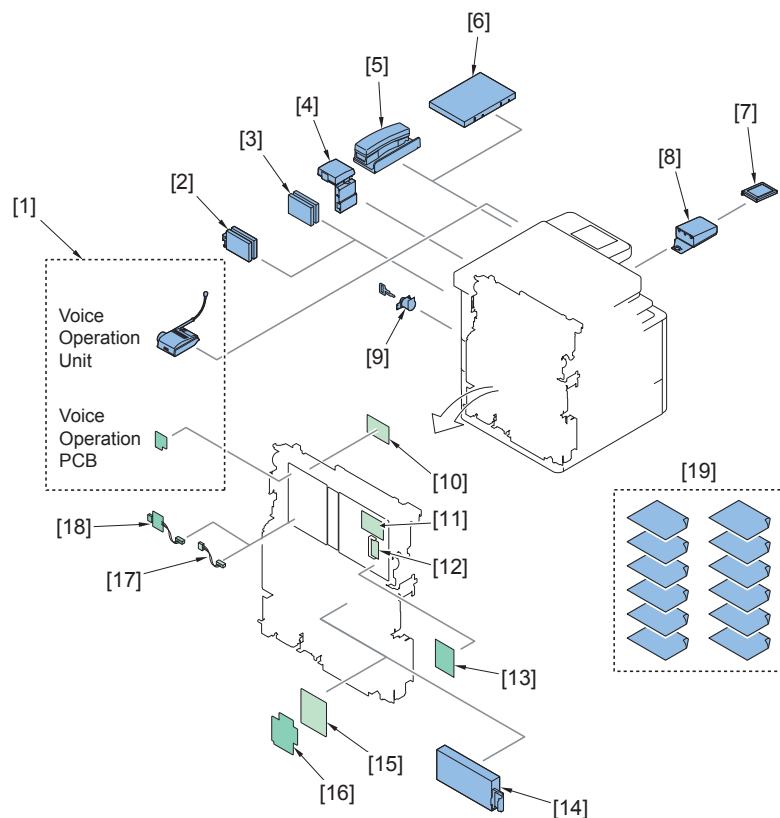


F-1-3

No.	Brand name	Remarks and condition
1	Inner Finisher Additional Tray-A1	-
2	Inner Finisher-E1	Built-in finisher
3	Duplex Color Image Reader Unit-E1	1 Path Duplex Type DADF + Reader
4	Reader Heater Kit-J1	-
5	Color Image Reader Unit-F1	Reverse Duplex Type DADF + Reader
6	Color Image Reader Unit-F2	Copyboard + Reader
7	Printer Cover-C2	-
8	Copy Tray-J1	-
9	Cassette Heater Unit-C1	Deck Heater for Paper Deck Unit-B2.
10	Paper Deck Unit-B2	-
11	Envelope Feeder Attachment-D1	Cassette Attachment for envelope
12	FL Cassette-AG1	-
13	FL Cassette-AH1	-
14	Cassette Heater Unit-37	Cassette Heater for host machine, 2-Cassette Pedestal-AD2
15	Cassette Feeding Unit-AD2	-
16	Buffer Pass Unit-G1	-
17	Inner 2Way Tray-F1	For host machine delivery additional tray
18	External 2 Hole Puncher-B2	External 2/3 Hole Puncher-B2(USA,CAN,CLA), External 2/4 Hole Puncher-B2(EUR,FRA,CA), External 4 Hole Puncher-B2(EUR)
19	Booklet Finisher-J1	Buffer Path Unit G1 is required
20	Staple Finisher-J1	Buffer Path Unit G1 is required

T-1-3

## Function expanding option



F-1-4

No.	Brand name	Remarks and condition
12	Additional Memory Type D (512MB)	-
13	Image Data Analyzer Board-B1	-
14	Super G3 FAX Board-AE2	-
15	Super G3 2nd Line Fax Board-AE1	1-line FAX board is required
16	Super G3 3rd/4th Line Fax Board-AE1	1-line FAX board + additional 2nd line FAX Board is required (A European region is excluded. )
17	Signal Interface Kit-A1	
18	Serial Interface Kit-K1	
19	PCL Printer Kit-AR1	-
	Direct Print Kit (for PDF/XPS)-H1	-
	Barcode Printing Kit-D1	-
	Universal Send Digital User Signature Kit-C1	-
	Remote Operators Software Kit-B1	-
	Remote Fax Kit-A1	-
	PS Printer Kit-AR1	-
	Secure Watermark-B1	-
	Document Scan Lock Kit-B1	-
	ACCESS MANAGEMENT SYSTEM Kit-B1	USA,ERU:standard, Other:option
	Web Access Software-H1	-
	iR-ADV Security Kit-C1 for IEEE 2600.1 Common Criteria Certification	

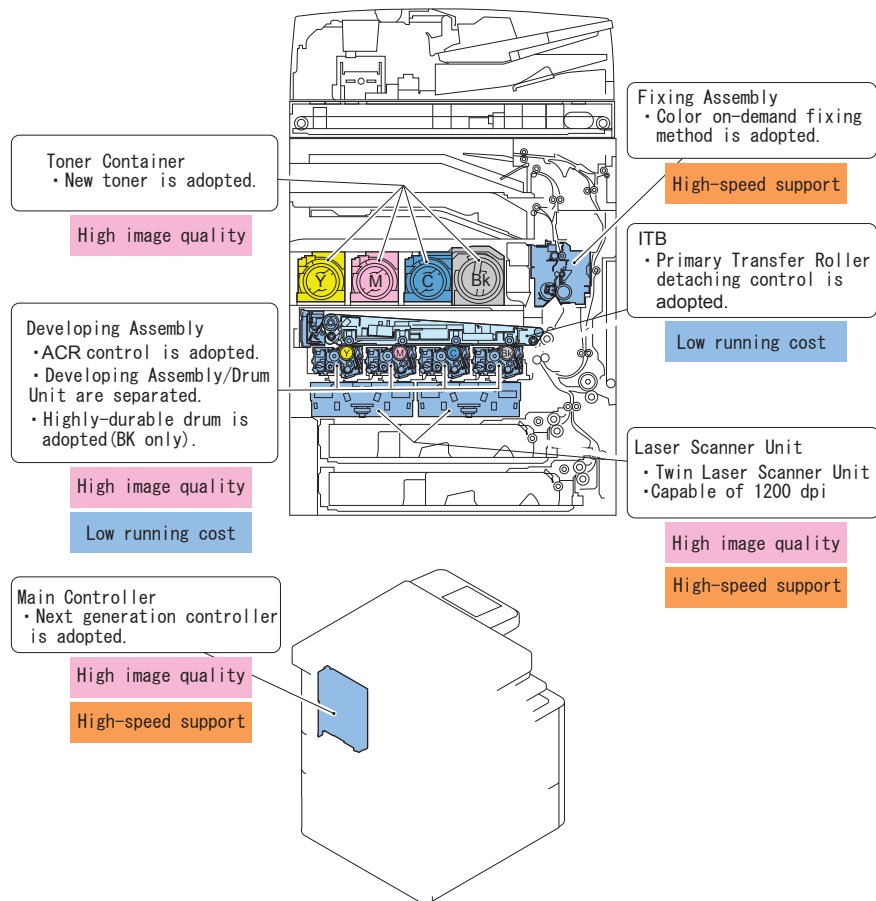
T-1-4

No.	Brand name	Remarks and condition
1	Voice Operation Kit-C1	Only for Japan
	Voice Guidance Kit-F1	Only for out of Japan
2	Removable HDD Kit-AC1	-
3	2.5inch/160GB HDD-G1	-
	2.5inch/1TB HDD-H1	Only when Mirroring Kit is extended
4	Copy Card Reader-F1	
	Copy Card Reader Attachment-B3	
6	Utility Tray-A2	
7	Multimedia Reader/Writer-A2	USB device port-E1 is required
8	USB Device Port-E1	-
9	Key Switch Unit-A2	-
10	HDD Data Encryption & Mirroring Kit-C1	-
11	imagePASS-B2 / ColorPASS-GX400	-

## Feature

### Product feature

#### Product feature



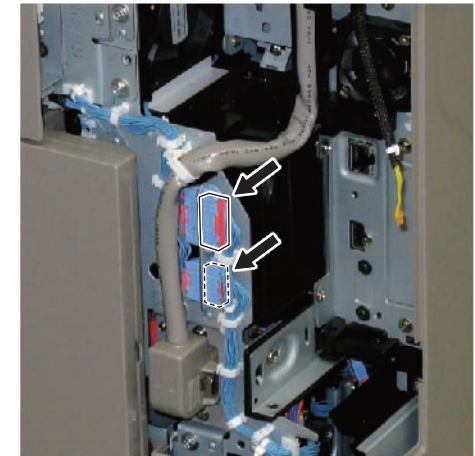
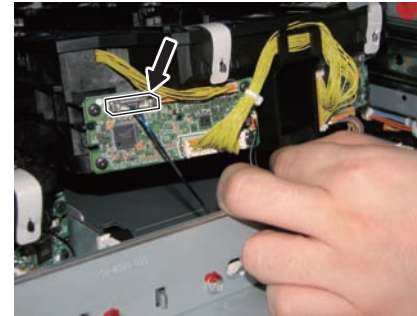
F-1-5

### Features at servicing

#### Improvement on upgrade operation

It is possible to upgrade options through the host machine.  
Same as conventional way, use SST (service support tool) to upgrade.

#### New type connector is adopted



To prevent the communication error due to following factors, new type connector is adopted.

- Loose connector / disconnection due to vibration during transportation
- Imperfect connection of connector at service operation

## Specification

### Specification

Host machine installation method	Desktop type
Photosensitive medium	Phi 30 OPC
Exposure method	Laser exposure
Charging method	Roller charging
Developing method	Dry type 2-component jumping development
Transfer method	Intermediate belt transfer (Primary transfer: roller transfer, secondary transfer: roller transfer)
Separation method	Curvature separation + static eliminator
Pickup method	Separation retard
Fixing method	On demand fixing (Ceramic nitride heater + Phi 30 elastic film)
Delivery method	Facedown (inner delivery)
Drum cleaning method	Cleaning blade
Transfer cleaning method	Cleaning blade
Toner type	Non-magnetic negative toner
Toner supply method	Toner container method
Toner level detection function	Yes
Leading edge image margin	4.0+1.5/-1.0mm
Left edge image margin	2.5+/-1.5mm
Leading edge blank width	4.0+1.5/-1.0mm
Left edge blank width	2.5+/-1.5mm
Warm-up time	At power-ON, 38 sec or less
First print time	image RUNNER ADVANCE C5255/C5250 Series B/W :4.0sec Color : 6.5sec image RUNNER ADVANCE C5240/C5235 Series B/W :5.5sec Color : 8.9sec
Image gradation	256 gradation
Print resolution	1200 x 1200dpi
Maximum image guaranteed area	300 x 450.5mm
Maximum printable area	305 x 450.5mm
Paper type (cassette)	Thin paper (52 to 63g/m <sup>2</sup> ), Recycled paper (64 to 81g/m <sup>2</sup> ), Color paper, Pre-Punched paper, Bond paper, Plain paper (64 to 105g/m <sup>2</sup> ), Heavy paper (106 to 209g/m <sup>2</sup> ), Textured paper, Transparency film, Tab paper, Envelope
Paper type (multi-purpose tray)	Thin paper (52 to 63g/m <sup>2</sup> ), Recycled paper (64 to 81g/m <sup>2</sup> ), Color paper, Pre-Punched paper, Bond paper, Plain paper (64 to 105g/m <sup>2</sup> ), Heavy paper (106 to 256g/m <sup>2</sup> ), Textured paper, Tracking paper, Coater paper, Labels paper, Washi paper, Transparency film, Tab

Paper size (upper cassette)	B4,A4,A4R,B5,B5R,A5R,LGL,LTRR,LTR,EXEC,Custom size (Min 139.7mm x 182mm to Max 304.8mm x 390mm),K8,K16,K16R
Paper size (lower cassette)	A3, B4, A4, A4R, B5, B5R, A5R, 12"-18"(305mm-457mm), 11" x 17", LGL, LTR, LTRR, STMT, EXEC, Custom size (Min 139.7mm x 182mm to Max 304.8mm x 457.2mm), K8, K16, K16R, Envelope (COM10, Monarch, DL, ISO-B5, ISO-C5)
Paper size (multi-purpose tray pickup)	A3, B4, A4, A4R, B5, A5,A5R,12"-18"(305mm-457mm),11"-17", LGL, LTR, LTRR, STMT, STMT, EXEC, K8, K16, K16R, FLS, 305-457, 320-450(SRA3), Custom size (Min 99mm x 139.7mm to Max 320 mm x 457.2mm),Postcard, Envelope (COM10, Monarch, DL, ISO-B5, ISO-C5)
Pickup capacity	Cassette: 550 sheet (80g/m <sup>2</sup> ), multi-purpose tray pickup: 100 sheet (80g/m <sup>2</sup> )
Duplexing method	Through path duplexing
Memory capacity	Main controller PCB: 1 GB Main controller PCB2: 1GB/1.5GB (differs depending on destination and model) Note: Option (additional memory 512MB) can be extended to main controller PCB 2.
HDD capacity	160GB (Option 160GB C1/ 1TB D1)
Operation noise	75dB or less (during printing)
Ozone amount	Maximum: 0.01 ppm or less
Power rating	AC120V/20A (image RUNNER ADVANCE C5255/C5250 Series) AC120V/15A (image RUNNER ADVANCE C5240/C5235 Series) AC220-240V/10A
Maximum power consumption	image RUNNER ADVANCE C5255/C5250 Series: 1.8kW or less image RUNNER ADVANCE C5240/C5235 Series: 1.3kW or less
Power consumption during copy	120V:1.1KW or less 220V-240:1.3KW or less
Power consumption during standby	120V: 120W or less 220V-240: 150W or less
Dimension (W x D x H)	620mm x735mmx 800mm (printer only)
Grammage	Approx. 130kg (printer only)

T-1-5

## Weight / Size

Product name	Width (mm)	Depth (mm)	Height (mm)	WeightApprox. (Kg)
iR ADVANCE C5255/C5250	620	735	800	130
iR ADVANCE C5240/C5235	620	735	800	130
Duplex Color Image Reader Unit-E1	620	545	219	23
Color Image Reader Unit-F1	620	542	201	17
Color Image Reader Unit-F2	620	530	99	10
Cassette Feeding Unit-AD2	620	700	248	27.5
Paper Deck Unit-B1	372	603	473	37
Envelope Feeder Attachment-D1	439	307	81	1.2
Inner Finisher-E1	865	541	234	11.5
Staple Finisher-J1	559	646	1097	46
Booklet Finisher-J1	671	646	1097	75
Buffer Pass Unit-G1	489	493	184	4
External 2 Hole Puncher-B1	107	623	908	7.2
External 2/3 Hole Puncher-B1	756	656	1071	76

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## Productivity (Print speed)

Size	Mode	Paper type	Paper basis weight(g/ m2)	ImageRUNNER ADVANCE			
				C5255		C5250	
				Cassette	Multi-purpose tray	Cassette	Multi-purpose tray
				Color, B/W	Color, B/W	Color, B/W	Color, B/W
A4 / LTR	1-sided	Plain paper /Thin paper	52-81	51.0/55.0	31.0	45.0/50.0	31.0
			82-105	40.0	31.0	40.0	31.0
		Thick paper	106-163	25.5	15.5	25.5	15.5
			164-220	20.0	15.5	20.0	15.5
			221-256	-	10.0	-	10.0
			-	-	-	-	-
	2-sided	Plain paper /Thin paper	52-81	51.0/55.0	31.0	45.0/50.0	31.0
			82-105	40.0	31.0	40.0	31.0
		Thick paper	106-163	25.5	15.5	25.5	15.5
			164-220	20.0	15.5	20.0	15.5
			221-256	-	-	-	-
			-	-	-	-	-

Size	Mode	Paper type	Paper basis weight(g/ m2)	ImageRUNNER ADVANCE			
				C5255		C5250	
				Cassette	Multi-purpose tray	Cassette	Multi-purpose tray
				Color, B/W	Color, B/W	Color, B/W	Color, B/W
A3 / LDR	1-sided	Plain paper /Thin paper	52-81	25.5/27.5	19.5	25.5/27.5	19.5
			82-105	20.0	19.5	20.0	19.5
		Thick paper	106-163	12.5	9.8	12.5	9.8
			164-220	10.0	9.8	10.0	9.8
			211-256	-	6.5	-	6.5
			-	-	-	-	-
	2-sided	Plain paper /Thin paper	52-81	25.5/27.5	19.5	25.5/27.5	19.5
			82-105	20.0	19.5	20.0	19.5
		Thick paper	106-163	12.5	9.8	12.5	9.8
			164-220	10.0	9.8	10.0	9.8
			211-256	-	-	-	-
			-	-	-	-	-

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Size	Mode	Paper type	Paper basis weight(g/ m2)	ImageRUNNER ADVANCE			
				C5240		C5235	
				Cassette	Multi-purpose tray	Cassette	Multi-purpose tray
				Color, B/W	Color, B/W	Color, B/W	Color, B/W
A4 / LTR	1-sided	Plain paper /Thin paper	52-81	35.0/40.0	20.0	30.0/35.0	20.0
			82-105	35.0/40.0	20.0	30.0/35.0	20.0
		Thick paper	106-163	17.0	10.0	17.0	10.0
			164-220	17.0	10.0	17.0	10.0
			211-256	-	10.0	-	10.0
			-	-	-	-	-
	2-sided	Plain paper /Thin paper	52-81	35.0/40.0	20.0	30.0/35.0	20.0
			82-105	35.0/40.0	20.0	30.0/35.0	20.0
		Thick paper	106-163	17.0	10.0	17.0	10.0
			164-220	17.0	10.0	17.0	10.0
			211-256	-	-	-	-
			-	-	-	-	-
A3 / LDR	1-sided	Plain paper /Thin paper	52-81	17.5/20.0	13.0	17.5/20.0	13.0
			82-105	17.5/20.0	13.0	17.5/20.0	13.0
		Thick paper	106-163	8.5	6.5	8.5	6.5
			164-220	8.5	6.5	8.5	6.5
			211-256	-	6.5	-	6.5
			-	-	-	-	-
	2-sided	Plain paper /Thin paper	52-81	17.5/20.0	13.0	17.5/20.0	13.0
			82-105	17.5/20.0	13.0	17.5/20.0	13.0
		Thick paper	106-163	8.5	6.5	8.5	6.5
			164-220	8.5	6.5	8.5	6.5
			221-256	-	-	-	-
			-	-	-	-	-

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## Paper type

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

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

Type	Feeding direction (mm)	Width direction (mm)
Irregular size 1-1	139.7 to 181.9	99 to 139.6
Irregular size 1-2	182.0 to 390.0	
Irregular size 1-3	390.1 to 457.2	
Irregular size 2-1	139.7 to 181.9	139.7 to 210.0
Irregular size 2-2	182.0 to 390.0	
Irregular size 2-3	390.1 to 457.2	
Irregular size 3-1	139.7 to 181.9	210.1 to 304.8
Irregular size 3-2	182.0 to 390.0	
Irregular size 3-3	390.1 to 457.2	
Irregular size 4-1	139.7 to 181.9	304.9 to 320.0
Irregular size 4-2	182.0 to 390.0	
Irregular size 4-3	390.1 to 457.2	
Irregular size 5	457.3 to 1200	99.0 to 320.0

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## Pickup position

Paper type(g/m <sup>2</sup> )	Size	Feeding direction (mm)	Width direction (mm)	Pickup position						Auto Duplex	2-Side Setting
				Multi-purpose tray	Cassette 1	Cassette 2	Cassette Feeding Unit 1	Cassette Feeding Unit 2	Paper Deck		
Thin paper(52 to 63g/m2)	A3	420.0	297.0	Yes	-	Yes	Yes	Yes	-	Yes	Yes
	B4	364.0	257.0	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
	A4R	297.0	210.0	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
	A4	210.0	297.0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	B5R	257.0	182.0	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
	B5	182.0	257.0	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
	A5	148.0	210.0	Yes	-	-	-	-	-	-	Yes
	A5R	210.0	148.0	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
	11x17	431.8	279.4	Yes	-	Yes	Yes	Yes	-	Yes	Yes
	LGL	355.6	215.9	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
	LTR	215.9	279.4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	LTRR	279.4	215.9	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
	STMTR	215.9	139.7	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
	STMT	139.7	215.9	Yes	-	-	-	-	-	-	Yes
	SRA3	450.0	320.0	Yes	-	-	-	-	-	-	Yes
	12x18	457.2	304.8	Yes	-	Yes	Yes	Yes	-	Yes	Yes
	EXEC	184.1	266.7	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
	EXEC-R	266.7	184.1	-	-	-	-	-	-	-	-
	OFFICIO	317.5	215.9	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	E-OFFICIO	320.0	220.0	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	B-OFFICIO	355.0	216.0	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	M-OFFICIO	341.0	216.0	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	A-OFFICIO	340.0	220.0	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	A-LTR	220.0	280.0	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	A-LTRR	280.0	220.0	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	GLTR-R	266.7	203.2	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	GLTR	203.2	266.7	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	GLGL	330.2	203.2	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	AFLS	337.0	206.0	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	FLS	330.2	215.9	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	13x19	482.6	330.2	-	-	-	-	-	-	-	-
	K8	390.0	270.0	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
	K16	195.0	270.0	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
K16R	270.0	195.0	-	Yes	Yes	Yes	Yes	-	Yes	Yes	
F4A	342.9	215.9	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1	
Irregular size1-1, 1-2, 1-3, 2-1, 3-1, 4-1, 4-2, 4-3				Yes	-	-	-	-	-	Yes	
Irregular size2-2, 3-2				Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
Irregular size2-3, 3-3				Yes	-	Yes	Yes	Yes	-	Yes	Yes
Irregular size5	457.3 to 1200	99 to 320		Yes*1	-	-	-	-	-	-	Yes*1

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Paper type(g/m <sup>2</sup> )	Size	Feeding direction (mm)	Width direction (mm)	Pickup position						Auto Duplex	2-Side Setting	
				Multi-purpose tray	Cassette 1	Cassette 2	Cassette Feeding Unit 1	Cassette Feeding Unit 2	Paper Deck			
Recycled paper(64 to 81g/m <sup>2</sup> ) Color paper(64 to 81g/m <sup>2</sup> ) Plain paper1(64 to 81g/m <sup>2</sup> ) Plain paper2(82 to 105g/m <sup>2</sup> )	A3	420.0	297.0	Yes	-	Yes	Yes	Yes	-	Yes	Yes	
	B4	364.0	257.0	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	A4R	297.0	210.0	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	A4	210.0	297.0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
	B5R	257.0	182.0	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	B5	182.0	257.0	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	A5	148.0	210.0	Yes	-	-	-	-	-	-	-	Yes
	A5R	210.0	148.0	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	11x17	431.8	279.4	Yes	-	Yes	Yes	Yes	-	Yes	Yes	
	LGL	355.6	215.9	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	LTR	215.9	279.4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
	LTRR	279.4	215.9	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	STMTR	215.9	139.7	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	STMT	139.7	215.9	Yes	-	-	-	-	-	-	-	Yes
	SRA3	450.0	320.0	Yes	-	-	-	-	-	-	-	Yes
	12x18	457.2	304.8	Yes	-	Yes	Yes	Yes	-	Yes	Yes	
	EXEC	184.1	266.7	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	EXEC-R	266.7	184.1	-	-	-	-	-	-	-	-	-
	OFFICIO	317.5	215.9	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	E-OFFICIO	320.0	220.0	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	B-OFFICIO	355.0	216.0	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	M-OFFICIO	341.0	216.0	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	A-OFFICIO	340.0	220.0	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	A-LTR	220.0	280.0	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	A-LTRR	280.0	220.0	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	GLTR-R	266.7	203.2	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	GLTR	203.2	266.7	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	GLGL	330.2	203.2	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	AFLS	337.0	206.0	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	FLS	330.2	215.9	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	13x19	482.6	330.2	-	-	-	-	-	-	-	-	-
	K8	390.0	270.0	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
	K16	195.0	270.0	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
	K16R	270.0	195.0	-	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
	F4A	342.9	215.9	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
	Irregular size1-1, 1-2, 1-3, 2-1, 3-1, 4-1, 4-2, 4-3				Yes	-	-	-	-	-	-	Yes
	Irregular size2-2, 3-2				Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
	Irregular size2-3, 3-3				Yes	-	Yes	Yes	Yes	-	Yes	Yes
	Irregular size5	457.3 to 1200	99 to 320		Yes*1	-	-	-	-	-	-	-

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Paper type(g/m <sup>2</sup> )	Size	Feeding direction (mm)	Width direction (mm)	Pickup position						Auto Duplex	2-Side Setting	
				Multi-purpose tray	Cassette 1	Cassette 2	Cassette Feeding Unit 1	Cassette Feeding Unit 2	Paper Deck			
Heavy 1(106 to 163g/m <sup>2</sup> ) Letter Head	A3	420.0	297.0	Yes	-	Yes	Yes	Yes	-	Yes	Yes	
	B4	364.0	257.0	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	A4R	297.0	210.0	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	A4	210.0	297.0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
	B5R	257.0	182.0	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	B5	182.0	257.0	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	A5	148.0	210.0	Yes	-	-	-	-	-	-	-	Yes
	A5R	210.0	148.0	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	11x17	431.8	279.4	Yes	-	Yes	Yes	Yes	-	Yes	Yes	
	LGL	355.6	215.9	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	LTR	215.9	279.4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
	LTRR	279.4	215.9	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	STMTR	215.9	139.7	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	STMT	139.7	215.9	Yes	-	-	-	-	-	-	-	Yes
	SRA3	450.0	320.0	Yes	-	-	-	-	-	-	-	Yes
	12x18	457.2	304.8	Yes	-	Yes	Yes	Yes	-	Yes	Yes	
	EXEC	184.1	266.7	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	EXEC-R	266.7	184.1	-	-	-	-	-	-	-	-	-
	OFFICIO	317.5	215.9	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	E-OFFICIO	320.0	220.0	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	B-OFFICIO	355.0	216.0	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	M-OFFICIO	341.0	216.0	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	A-OFFICIO	340.0	220.0	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	A-LTR	220.0	280.0	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	A-LTRR	280.0	220.0	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	GLTR-R	266.7	203.2	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	GLTR	203.2	266.7	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	GLGL	330.2	203.2	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	AFLS	337.0	206.0	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	FLS	330.2	215.9	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	13x19	482.6	330.2	-	-	-	-	-	-	-	-	-
	K8	390.0	270.0	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
	K16	195.0	270.0	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
	K16R	270.0	195.0	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
	F4A	342.9	215.9	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
	Irregular size1-1, 1-2, 1-3, 2-1, 3-1, 4-1, 4-2, 4-3			Yes	-	-	-	-	-	-	-	Yes
	Irregular size2-2, 3-2			Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
	Irregular size2-3, 3-3			Yes	-	Yes	Yes	Yes	Yes	-	Yes	Yes
	Irregular size5	457.3 to 1200	99 to 320	Yes*1	-	-	-	-	-	-	-	-

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Paper type(g/m <sup>2</sup> )	Size	Feeding direction (mm)	Width direction (mm)	Pickup position						Auto Duplex	2-Side Setting	
				Multi-purpose tray	Cassette 1	Cassette 2	Cassette Feeding Unit 1	Cassette Feeding Unit 2	Paper Deck			
Heavy 2(164 to 220g/m <sup>2</sup> )	A3	420.0	297.0	Yes	-	Yes	Yes	Yes	-	Yes	Yes	
	B4	364.0	257.0	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	A4R	297.0	210.0	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	A4	210.0	297.0	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	B5R	257.0	182.0	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	B5	182.0	257.0	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	A5	148.0	210.0	Yes	-	-	-	-	-	-	Yes	
	A5R	210.0	148.0	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	11x17	431.8	279.4	Yes	-	Yes	Yes	Yes	-	Yes	Yes	
	LGL	355.6	215.9	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	LTR	215.9	279.4	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	LTRR	279.4	215.9	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	STMTR	215.9	139.7	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	STMT	139.7	215.9	Yes	-	-	-	-	-	-	Yes	
	SRA3	450.0	320.0	Yes	-	-	-	-	-	-	Yes	
	12x18	457.2	304.8	Yes	-	Yes	Yes	Yes	-	Yes	Yes	
	EXEC	184.1	266.7	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	
	EXEC-R	266.7	184.1	-	-	-	-	-	-	-	-	
	OFFICIO	317.5	215.9	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	E-OFFICIO	320.0	220.0	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	B-OFFICIO	355.0	216.0	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	M-OFFICIO	341.0	216.0	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	A-OFFICIO	340.0	220.0	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	A-LTR	220.0	280.0	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	A-LTRR	280.0	220.0	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	GLTR-R	266.7	203.2	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	GLTR	203.2	266.7	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	GLGL	330.2	203.2	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	AFLS	337.0	206.0	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	FLS	330.2	215.9	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	13x19	482.6	330.2	-	-	-	-	-	-	-	-	-
	K8	390.0	270.0	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
	K16	195.0	270.0	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
	K16R	270.0	195.0	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
	F4A	342.9	215.9	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
	Irregular size1-1, 1-2, 1-3, 2-1, 3-1, 4-1, 4-2, 4-3			Yes	-	-	-	-	-	-	-	Yes
	Irregular size2-2, 3-2			Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
	Irregular size2-3, 3-3			Yes	-	Yes	Yes	Yes	Yes	-	Yes	Yes
	Irregular size5	457.3 to 1200	99 to 320	Yes*1	-	-	-	-	-	-	-	Yes*1

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Paper type(g/m <sup>2</sup> )	Size	Feeding direction (mm)	Width direction (mm)	Pickup position						Auto Duplex	2-Side Setting	
				Multi-purpose tray	Cassette 1	Cassette 2	Cassette Feeding Unit 1	Cassette Feeding Unit 2	Paper Deck			
Heavy 3(221 to 256g/m <sup>2</sup> )	A3	420.0	297.0	Yes*1	-	-	-	-	-	-	Yes*1	
	B4	364.0	257.0	Yes	-	-	-	-	-	-	Yes	
	A4R	297.0	210.0	Yes	-	-	-	-	-	-	Yes	
	A4	210.0	297.0	Yes	-	-	-	-	-	-	Yes	
	B5R	257.0	182.0	Yes*1	-	-	-	-	-	-	Yes*1	
	B5	182.0	257.0	Yes*1	-	-	-	-	-	-	Yes*1	
	A5	148.0	210.0	Yes*1	-	-	-	-	-	-	Yes*1	
	A5R	210.0	148.0	Yes*1	-	-	-	-	-	-	Yes*1	
	11x17	431.8	279.4	Yes*1	-	-	-	-	-	-	Yes*1	
	LGL	355.6	215.9	Yes*1	-	-	-	-	-	-	Yes*1	
	LTR	215.9	279.4	Yes	-	-	-	-	-	-	Yes	
	LTRR	279.4	215.9	Yes	-	-	-	-	-	-	Yes	
	STMTR	215.9	139.7	Yes*1	-	-	-	-	-	-	Yes*1	
	STMT	139.7	215.9	Yes*1	-	-	-	-	-	-	Yes*1	
	SRA3	450.0	320.0	Yes	-	-	-	-	-	-	Yes	
	12x18	457.2	304.8	Yes	-	-	-	-	-	-	Yes	
	EXEC	184.1	266.7	Yes*1	-	-	-	-	-	-	Yes*1	
	EXEC-R	266.7	184.1	-	-	-	-	-	-	-	-	
	OFFICIO	317.5	215.9	-	-	-	-	-	-	-	-	
	E-OFFICIO	320.0	220.0	-	-	-	-	-	-	-	-	
	B-OFFICIO	355.0	216.0	-	-	-	-	-	-	-	-	
	M-OFFICIO	341.0	216.0	-	-	-	-	-	-	-	-	
	A-OFFICIO	340.0	220.0	-	-	-	-	-	-	-	-	
	A-LTR	220.0	280.0	-	-	-	-	-	-	-	-	
	A-LTRR	280.0	220.0	-	-	-	-	-	-	-	-	
	GLTR-R	266.7	203.2	-	-	-	-	-	-	-	-	
	GLTR	203.2	266.7	-	-	-	-	-	-	-	-	
	GLGL	330.2	203.2	-	-	-	-	-	-	-	-	
	AFLS	337.0	206.0	-	-	-	-	-	-	-	-	
	FLS	330.2	215.9	-	-	-	-	-	-	-	-	
	13x19	482.6	330.2	-	-	-	-	-	-	-	-	
	K8	390.0	270.0	Yes*1	-	-	-	-	-	-	Yes*1	
	K16	195.0	270.0	Yes*1	-	-	-	-	-	-	Yes*1	
	K16R	270.0	195.0	-	-	-	-	-	-	-	-	
	F4A	342.9	215.9	-	-	-	-	-	-	-	-	
	Irregular size1-1, 1-2, 1-3, 2-1, 2-2, 2-3, 3-1, 3-2, 3-3, 4-1, 4-2, 4-3				Yes*1	-	-	-	-	-	-	Yes*1
	Irregular size5		457.3 to 1200	99 to 320	-	-	-	-	-	-	-	-

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Paper type(g/m <sup>2</sup> )	Size	Feeding direction (mm)	Width direction (mm)	Pickup position						Auto Duplex	2-Side Setting
				Multi-purpose tray	Cassette 1	Cassette 2	Cassette Feeding Unit 1	Cassette Feeding Unit 2	Paper Deck		
Tracing(64 to 81g/m <sup>2</sup> )	A3	420.0	297.0	Yes	-	-	-	-	-	-	-
	B4	364.0	257.0	Yes	-	-	-	-	-	-	-
	A4R	297.0	210.0	Yes	-	-	-	-	-	-	-
	A4	210.0	297.0	Yes	-	-	-	-	-	-	-
	B5R	257.0	182.0	Yes	-	-	-	-	-	-	-
	B5	182.0	257.0	Yes	-	-	-	-	-	-	-
	A5	148.0	210.0	Yes*1	-	-	-	-	-	-	-
	A5R	210.0	148.0	Yes*1	-	-	-	-	-	-	-
	11x17	431.8	279.4	Yes*1	-	-	-	-	-	-	-
	LGL	355.6	215.9	Yes*1	-	-	-	-	-	-	-
	LTR	215.9	279.4	Yes*1	-	-	-	-	-	-	-
	LTRR	279.4	215.9	Yes*1	-	-	-	-	-	-	-
	STMTR	215.9	139.7	Yes*1	-	-	-	-	-	-	-
	STMT	139.7	215.9	Yes*1	-	-	-	-	-	-	-
	SRA3	450.0	320.0	Yes*1	-	-	-	-	-	-	-
	12x18	457.2	304.8	Yes*1	-	-	-	-	-	-	-
	EXEC	184.1	266.7	Yes*1	-	-	-	-	-	-	-
	EXEC-R	266.7	184.1	-	-	-	-	-	-	-	-
	OFFICIO	317.5	215.9	-	-	-	-	-	-	-	-
	E-OFFICIO	320.0	220.0	-	-	-	-	-	-	-	-
	B-OFFICIO	355.0	216.0	-	-	-	-	-	-	-	-
	M-OFFICIO	341.0	216.0	-	-	-	-	-	-	-	-
	A-OFFICIO	340.0	220.0	-	-	-	-	-	-	-	-
	A-LTR	220.0	280.0	-	-	-	-	-	-	-	-
	A-LTRR	280.0	220.0	-	-	-	-	-	-	-	-
	GLTR-R	266.7	203.2	-	-	-	-	-	-	-	-
	GLTR	203.2	266.7	-	-	-	-	-	-	-	-
	GLGL	330.2	203.2	-	-	-	-	-	-	-	-
	AFLS	337.0	206.0	-	-	-	-	-	-	-	-
	FLS	330.2	215.9	-	-	-	-	-	-	-	-
	13x19	482.6	330.2	-	-	-	-	-	-	-	-
	K8	390.0	270.0	Yes*1	-	-	-	-	-	-	-
	K16	195.0	270.0	Yes*1	-	-	-	-	-	-	-
	K16R	270.0	195.0	-	-	-	-	-	-	-	-
F4A	342.9	215.9	-	-	-	-	-	-	-	-	
Irregular size1-1, 1-2, 1-3, 2-1, 2-2, 2-3, 3-1, 3-2, 3-3, 4-1, 4-2, 4-3				Yes*1	-	-	-	-	-	Yes*1	
Irregular size5		457.3 to 1200	99 to 320	-	-	-	-	-	-	-	

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Paper type(g/m <sup>2</sup> )	Size	Feeding direction (mm)	Width direction (mm)	Pickup position						Auto Duplex	2-Side Setting
				Multi-purpose tray	Cassette 1	Cassette 2	Cassette Feeding Unit 1	Cassette Feeding Unit 2	Paper Deck		
1-Side Coated Paper 1(106 to 163g/m <sup>2</sup> )	A3	420.0	297.0	Yes	-	-	-	-	-	-	Yes
	B4	364.0	257.0	Yes	-	-	-	-	-	-	Yes
1-Side Coated Paper 2(164 to 220g/m <sup>2</sup> )	A4R	297.0	210.0	Yes	-	-	-	-	-	-	Yes
	A4	210.0	297.0	Yes	-	-	-	-	-	-	Yes
Duplex Coated Paper 1(106 to 163g/m <sup>2</sup> )	B5R	257.0	182.0	Yes	-	-	-	-	-	-	Yes
	B5	182.0	257.0	Yes	-	-	-	-	-	-	Yes
Duplex Coated Paper 2(164 to 220g/m <sup>2</sup> )	A5	148.0	210.0	Yes*1	-	-	-	-	-	-	Yes*1
	A5R	210.0	148.0	Yes*1	-	-	-	-	-	-	Yes*1
	11x17	431.8	279.4	Yes*1	-	-	-	-	-	-	Yes*1
	LGL	355.6	215.9	Yes*1	-	-	-	-	-	-	Yes*1
	LTR	215.9	279.4	Yes*1	-	-	-	-	-	-	Yes*1
	LTRR	279.4	215.9	Yes*1	-	-	-	-	-	-	Yes*1
	STMTR	215.9	139.7	Yes*1	-	-	-	-	-	-	Yes*1
	STMT	139.7	215.9	Yes*1	-	-	-	-	-	-	Yes*1
	SRA3	450.0	320.0	Yes*1	-	-	-	-	-	-	Yes*1
	12x18	457.2	304.8	Yes*1	-	-	-	-	-	-	Yes*1
	EXEC	184.1	266.7	Yes*1	-	-	-	-	-	-	Yes*1
	EXEC-R	266.7	184.1	-	-	-	-	-	-	-	-
	OFFICIO	317.5	215.9	-	-	-	-	-	-	-	-
	E-OFFICIO	320.0	220.0	-	-	-	-	-	-	-	-
	B-OFFICIO	355.0	216.0	-	-	-	-	-	-	-	-
	M-OFFICIO	341.0	216.0	-	-	-	-	-	-	-	-
	A-OFFICIO	340.0	220.0	-	-	-	-	-	-	-	-
	A-LTR	220.0	280.0	-	-	-	-	-	-	-	-
	A-LTRR	280.0	220.0	-	-	-	-	-	-	-	-
	GLTR-R	266.7	203.2	-	-	-	-	-	-	-	-
	GLTR	203.2	266.7	-	-	-	-	-	-	-	-
	GLGL	330.2	203.2	-	-	-	-	-	-	-	-
	AFLS	337.0	206.0	-	-	-	-	-	-	-	-
	FLS	330.2	215.9	-	-	-	-	-	-	-	-
	13x19	482.6	330.2	-	-	-	-	-	-	-	-
	K8	390.0	270.0	Yes*1	-	-	-	-	-	-	Yes*1
	K16	195.0	270.0	Yes*1	-	-	-	-	-	-	Yes*1
	K16R	270.0	195.0	-	-	-	-	-	-	-	-
	F4A	342.9	215.9	-	-	-	-	-	-	-	-
	Irregular size1-1, 1-2, 1-3, 2-1, 2-2, 2-3, 3-1, 3-2, 3-3, 4-1, 4-2, 4-3			Yes*1	-	-	-	-	-	-	Yes*1
	Irregular size5	457.3 to 1200	99 to 320	-	-	-	-	-	-	-	-

T-1-16

Paper type(g/m <sup>2</sup> )	Size	Feeding direction (mm)	Width direction (mm)	Pickup position						Auto Duplex	2-Side Setting
				Multi-purpose tray	Cassette 1	Cassette 2	Cassette Feeding Unit 1	Cassette Feeding Unit 2	Paper Deck		
Labels (151 to 209g/m <sup>2</sup> )	A3	420.0	297.0	Yes*1	-	-	-	-	-	-	-
	B4	364.0	257.0	Yes	-	-	-	-	-	-	-
	A4R	297.0	210.0	Yes	-	-	-	-	-	-	-
	A4	210.0	297.0	Yes	-	-	-	-	-	-	-
	B5R	257.0	182.0	Yes*1	-	-	-	-	-	-	-
	B5	182.0	257.0	Yes*1	-	-	-	-	-	-	-
	A5	148.0	210.0	Yes*1	-	-	-	-	-	-	-
	A5R	210.0	148.0	Yes*1	-	-	-	-	-	-	-
	11x17	431.8	279.4	Yes*1	-	-	-	-	-	-	-
	LGL	355.6	215.9	Yes*1	-	-	-	-	-	-	-
	LTR	215.9	279.4	Yes	-	-	-	-	-	-	-
	LTRR	279.4	215.9	Yes	-	-	-	-	-	-	-
	STMTR	215.9	139.7	Yes*1	-	-	-	-	-	-	-
	STMT	139.7	215.9	Yes*1	-	-	-	-	-	-	-
	SRA3	450.0	320.0	Yes	-	-	-	-	-	-	-
	12x18	457.2	304.8	Yes	-	-	-	-	-	-	-
	EXEC	184.1	266.7	Yes*1	-	-	-	-	-	-	-
	EXEC-R	266.7	184.1	-	-	-	-	-	-	-	-
	OFFICIO	317.5	215.9	-	-	-	-	-	-	-	-
	E-OFFICIO	320.0	220.0	-	-	-	-	-	-	-	-
	B-OFFICIO	355.0	216.0	-	-	-	-	-	-	-	-
	M-OFFICIO	341.0	216.0	-	-	-	-	-	-	-	-
	A-OFFICIO	340.0	220.0	-	-	-	-	-	-	-	-
	A-LTR	220.0	280.0	-	-	-	-	-	-	-	-
	A-LTRR	280.0	220.0	-	-	-	-	-	-	-	-
	GLTR-R	266.7	203.2	-	-	-	-	-	-	-	-
	GLTR	203.2	266.7	-	-	-	-	-	-	-	-
	GLGL	330.2	203.2	-	-	-	-	-	-	-	-
	AFLS	337.0	206.0	-	-	-	-	-	-	-	-
	FLS	330.2	215.9	-	-	-	-	-	-	-	-
	13x19	482.6	330.2	-	-	-	-	-	-	-	-
	K8	390.0	270.0	Yes*1	-	-	-	-	-	-	-
	K16	195.0	270.0	Yes*1	-	-	-	-	-	-	-
	K16R	270.0	195.0	-	-	-	-	-	-	-	-
F4A	342.9	215.9	-	-	-	-	-	-	-	-	
Irregular size1-1, 1-2, 1-3, 2-1, 2-2, 2-3, 3-1, 3-2, 3-3, 4-1, 4-2, 4-3			Yes*1	-	-	-	-	-	-	Yes*1	
Irregular size5		457.3 to 1200	99 to 320	-	-	-	-	-	-	-	

T-1-17

Paper type(g/m <sup>2</sup> )	Size	Feeding direction (mm)	Width direction (mm)	Pickup position						Auto Duplex	2-Side Setting
				Multi-purpose tray	Cassette 1	Cassette 2	Cassette Feeding Unit 1	Cassette Feeding Unit 2	Paper Deck		
Pre-Punched paper (75 to 81g/m <sup>2</sup> )	A3	420.0	297.0	Yes*1	-	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
	B4	364.0	257.0	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
	A4R	297.0	210.0	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
	A4	210.0	297.0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	B5R	257.0	182.0	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
	B5	182.0	257.0	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
	A5	148.0	210.0	Yes*1	-	-	-	-	-	-	Yes*1
	A5R	210.0	148.0	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
	11x17	431.8	279.4	Yes*1	-	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
	LGL	355.6	215.9	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
	LTR	215.9	279.4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	LTRR	279.4	215.9	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
	STMTR	215.9	139.7	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
	STMT	139.7	215.9	Yes*1	-	-	-	-	-	-	Yes*1
	SRA3	450.0	320.0	Yes*1	-	-	-	-	-	-	Yes*1
	12x18	457.2	304.8	Yes*1	-	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
	EXEC	184.1	266.7	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
	EXEC-R	266.7	184.1	-	-	-	-	-	-	-	-
	OFFICIO	317.5	215.9	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	E-OFFICIO	320.0	220.0	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	B-OFFICIO	355.0	216.0	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	M-OFFICIO	341.0	216.0	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	A-OFFICIO	340.0	220.0	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	A-LTR	220.0	280.0	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	A-LTRR	280.0	220.0	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	GLTR-R	266.7	203.2	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	GLTR	203.2	266.7	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	GLGL	330.2	203.2	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	AFLS	337.0	206.0	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	FLS	330.2	215.9	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	-
	13x19	482.6	330.2	-	-	-	-	-	-	-	-
	K8	390.0	270.0	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
	K16	195.0	270.0	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
	K16R	270.0	195.0	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
	F4A	342.9	215.9	-	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
	Irregular size1-1, 1-2, 1-3, 2-1, 3-1, 4-1, 4-2, 4-3			Yes*1	-	-	-	-	-	-	Yes*1
	Irregular size2-2, 3-2			Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
	Irregular size2-3, 3-3			Yes*1	-	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
	Irregular size5	457.3 to 1200	99 to 320	-	-	-	-	-	-	-	-

T-1-18

Paper type(g/m <sup>2</sup> )	Size	Feeding direction (mm)	Width direction (mm)	Pickup position						Auto Duplex	2-Side Setting
				Multi-purpose tray	Cassette 1	Cassette 2	Cassette Feeding Unit 1	Cassette Feeding Unit 2	Paper Deck		
Transparency film (151 to 209g/m <sup>2</sup> )	A4	210.0	297.0	Yes	Yes	Yes	Yes	Yes	-	-	-
	LTR	215.9	279.4	Yes	Yes	Yes	Yes	Yes	-	-	-
Washi paper (93g/m <sup>2</sup> )	A4R	297.0	210.0	Yes	-	-	-	-	-	-	-
	A4	210.0	297.0	Yes	-	-	-	-	-	-	-
Bond (82 to 90g/m <sup>2</sup> )	LTR	215.9	279.4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	LTRR	279.4	215.9	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
	EXEC	184.1	266.7	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	-	Yes*1	Yes*1
Postcard (164 to 209g/m <sup>2</sup> )	Postcard	148.0	100.0	Yes	-	-	-	-	-	-	Yes
	Reply Postcard	200.0	148.0	Yes	-	-	-	-	-	-	Yes
	4 on 1 Postcard	200.0	296.0	Yes	-	-	-	-	-	-	Yes
Tab paper (151 to 209g/m <sup>2</sup> )	A4	210.0	297.0	Yes	-	Yes	-	-	-	-	-
	LTR	215.9	279.4	Yes	-	Yes	-	-	-	-	-
Envelope (75 to 105g/m <sup>2</sup> )	COM10	241.3	104.7	Yes	-	Yes	-	-	-	-	Yes
	Monarch	190.5	98.4	Yes	-	Yes	-	-	-	-	Yes
	ISO-C5	229.0	162.0	Yes	-	Yes	-	-	-	-	Yes
	ISO-B5	250.0	176.0	-	-	-	-	-	-	-	-
	DL	220.0	110.0	Yes	-	Yes	-	-	-	-	Yes
	Nagagata 3	235.0	120.0	Yes	-	-	-	-	-	-	Yes
	Yougatanaga 3	235.0	120.0	Yes	-	-	-	-	-	-	Yes
Kakugata 2	332.0	240.0	Yes	-	-	-	-	-	-	Yes	

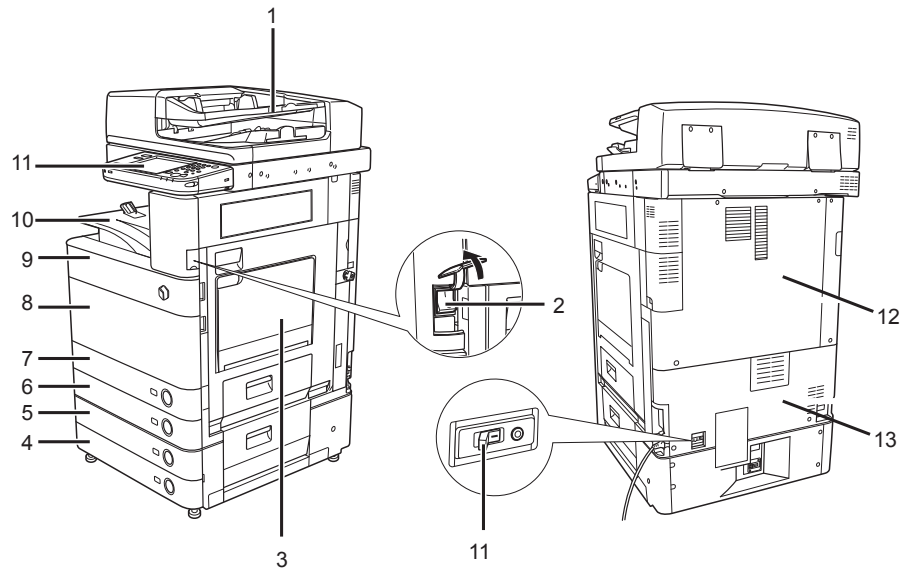
T-1-19

\*1: Setting is necessary.



## Name of Parts

### External View



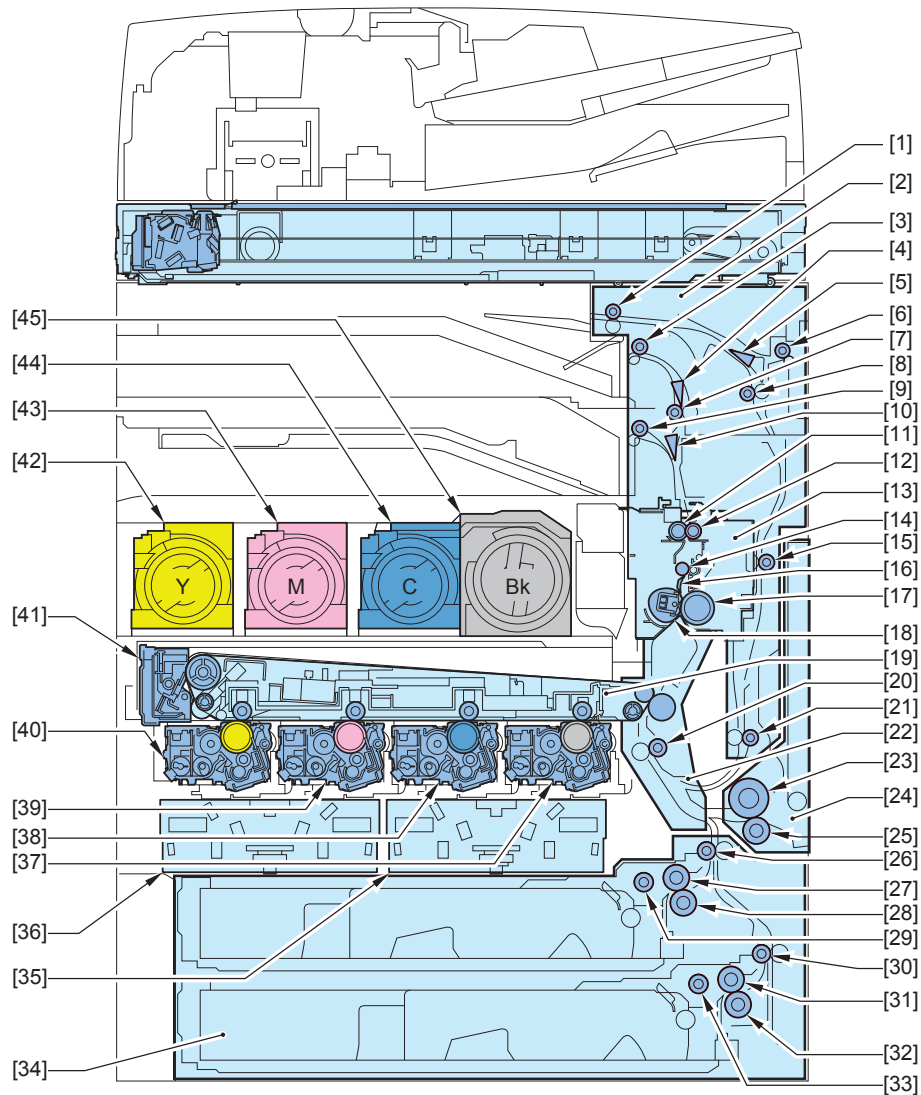
F-1-6

[1] DADF	[8] Front Cover
[2] Main Power Switch	[9] Front Upper Cover
[3] Stack Bypass Tray	[10] Output Tray
[4] Paper Drawer4	[11] Control Panel
[5] Paper Drawer3	[12] Rear Cover
[6] Paper Drawer2	[13] Rear Rower Cover
[7] Paper Drawer1	[14] Breaker

\* : Be sure to perform the following procedure for checking the breaker.

- 1) Turn OFF the main power switch and check that the Control Panel LED is off.
- 2) Using a pen point, press the test button of the breaker on the rear side of the machine.
- 3) Check that the breaker switch is OFF (O side).
- 4) Return the breaker switch to ON (I side).
- 5) Turn ON the main power switch.

## Cross Sectional View



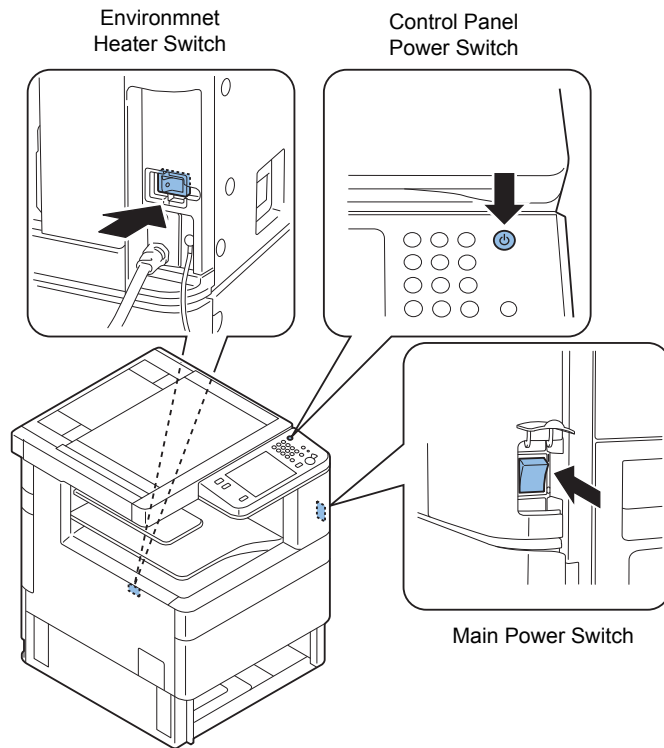
- |   |                                   |  |
|---|-----------------------------------|--|
| [1] Reversal roller                         | [16] Fixing separation guide      | [31] Cassette 2 feeding roller             |
| [2] 2-side delivery / delivery unit         | [17] Pressure roller              | [32] Cassette 2 separation roller          |
| [3] Secondary delivery roller               | [18] Film unit                    | [33] Cassette 2 pick-up roller             |
| [4] Second delivery entrance flapper        | [19] ITB unit                     | [34] Cassette pick-up unit                 |
| [5] Second delivery flapper                 | [20] Registration roller          | [35] Laser scanner unit (BK / C)           |
| [6] Third delivery roller                   | [21] 2-side delivery lower roller | [36] Laser scanner unit (M / Y)            |
| [7] Second / third delivery entrance roller | [22] Registration roller          | [37] Developing unit (Bk) + Drum unit (Bk) |
| [8] 2-side entrance roller                  | [23] Bypass feeding roller        | [38] Developing unit (C) + Drum unit (C)   |
| [9] Primary delivery roller                 | [24] Bypass pick-up roller        | [39] Developing unit (M) + Drum unit (M)   |
| [10] Primary delivery flapper               | [25] Bypass separation roller     | [40] Developing unit (Y) + Drum unit (Y)   |
| [11] Fixing inner delivery opposed roller   | [26] Vertical path roller 1       | [41] ITB cleaning unit                     |
| [12] Fixing inner delivery roller           | [27] Cassette 1 feeding roller    | [42] Hopper unit (Y)                       |
| [13] Fixing unit                            | [28] Cassette 1 separation roller | [43] Hopper unit (M)                       |
| [14] Post-fixing roller                     | [29] Cassette 1 pick-up roller    | [44] Hopper unit (C)                       |
| [15] 2-side delivery upper roller           | [30] Vertical path roller 2       | [45] Hopper unit (BK)                      |

F-1-7

## Operation

### Power Switch

#### Types of power switch



F-1-8

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

#### [1] Main Power Switch

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

#### [2] Control Panel Power Switch

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

#### [3] Environment Heater Switch

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

#### How to turn ON / OFF the power and points to note

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

#### CAUTION: Points to Note on Completion Process at Problem Occurrence

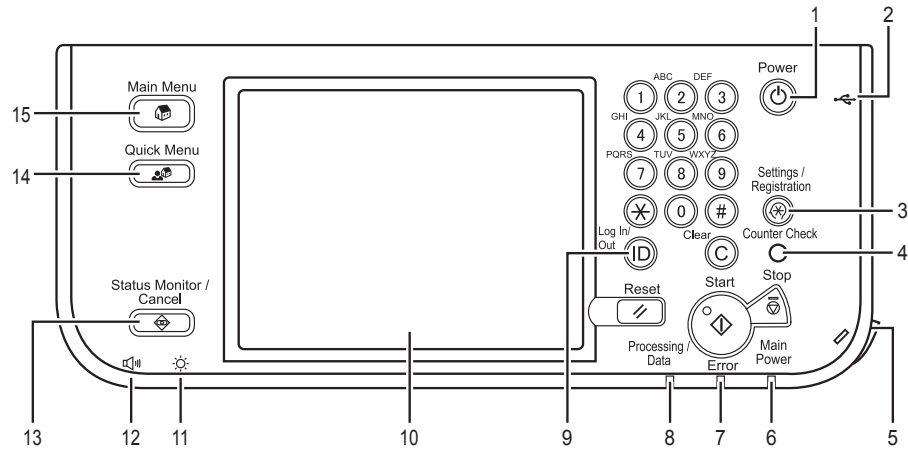
When a problem occurs, the normal shutdown screen may not be displayed regardless of turning OFF the main power switch.

In such a case, the power is turned OFF in 110 seconds at a maximum, so do not turn ON the power again during this time.

## Description of Control Panel

### Control Panel

iR ADVANCE C5051 / 5045 / 5035 / 5030 Series



F-1-9

- |                                 |  |
|---------------------------------|--|
| [1] Control Panel Power Switch  | [9] ID (authentication) Key            |
| [2] USB Insertion Slot          | [10] Touch Panel Display               |
| [3] Settings / Registration Key | [11] Screen Brightness Adjustment Dial |
| [4] Counter Check Key           | [12] FAX Volume Adjustment Key         |
| [5] Operation Pen               | [13] Status Check / Stop Key           |
| [6] Main Power Lamp             | [14] Custom Menu Key                   |
| [7] Error Lamp                  | [15] Main Menu Key                     |
| [8] Execution / Memory Lamp     |  |

# 2

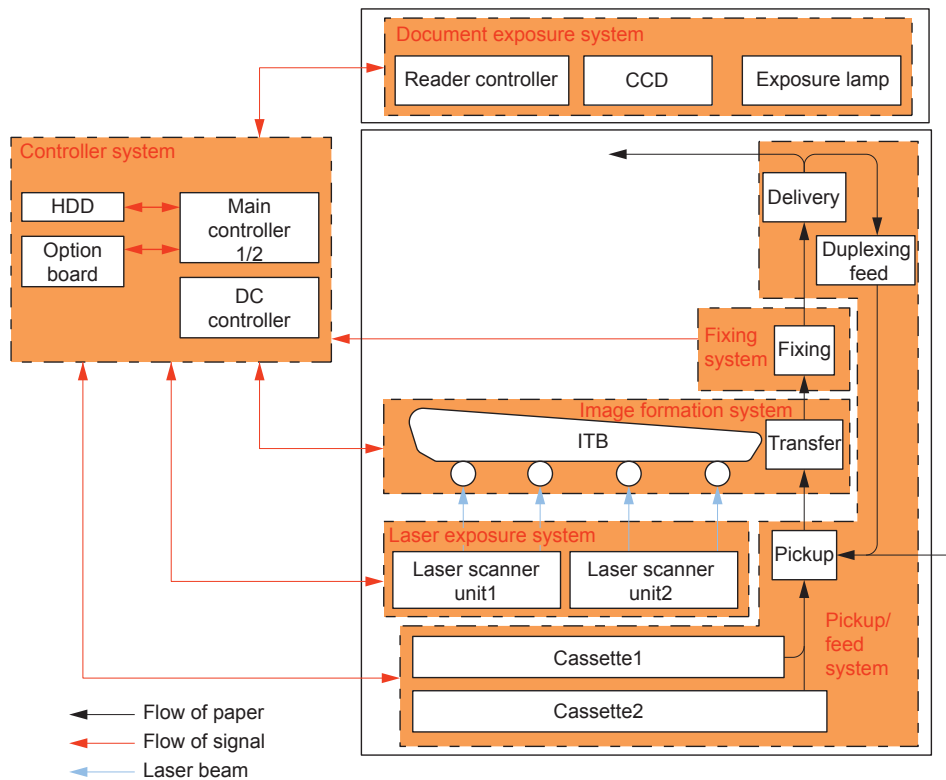
## Technology

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

# Basic Configuration

## Functional Configuration

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

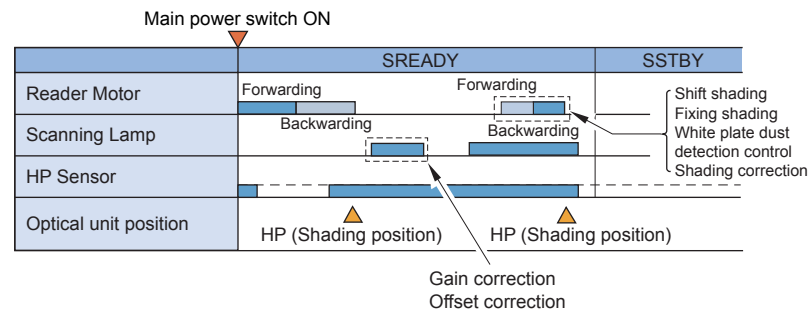


F-2-1

## Basic sequence

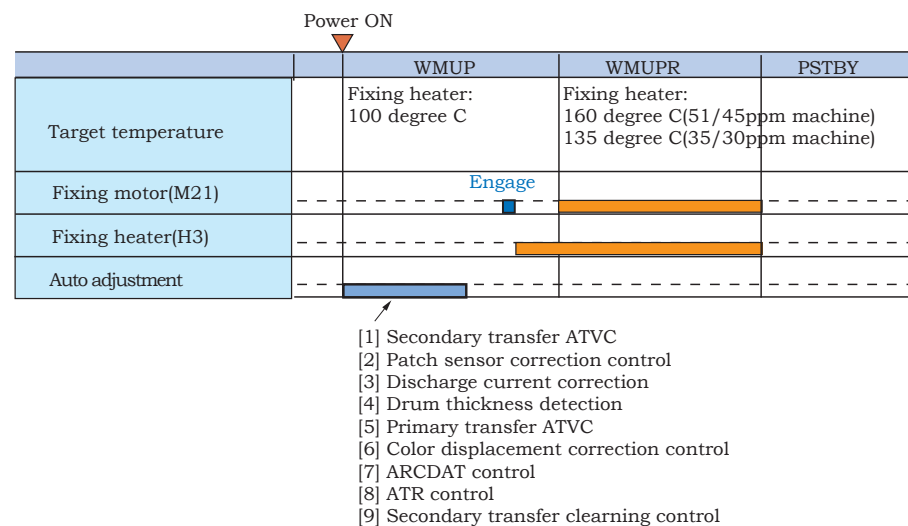
### Sequence at Power-On

- Reader



F-2-2

- Printer Unit



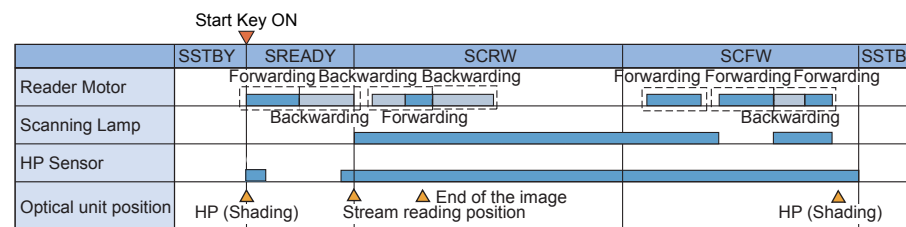
F-2-3

Period Definition	Definition
SREADY (Scanner Ready)	An interval in which the shading correction is executed after the Start key is pressed.
SSTBY (Scanner Standby)	An interval between the completion of the shading correction and switching the Start key ON / turning the main power OFF.
WMUP (Warm-up)	An interval in which the drive system stops, and it ends when the completion requirements of the fixing assembly startup is fulfilled.
WMUPR (Warm-up Rotation)	An interval in which the drive system starts, and the bias adjustment is executed.
PSTBY (Printer Standby)	An interval in which the copy/print request signal can be accepted.

T-2-1

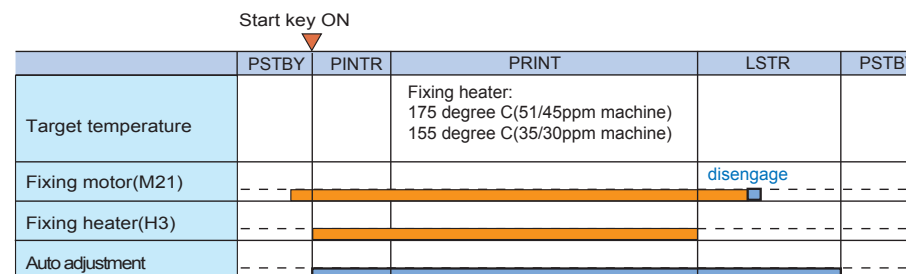
## Print sequence

### • Reader



F-2-4

### • Printer



The following adjustments to work, depending on the status of the product.

- [1] Discharge current corrections
- [2] Patch sensor correction control
- [3] ATR control
- [4] Primary transfer ATVC control
- [5] Secondary transfer ATVC control
- [6] Secondary transfer clearing
- [7] D-max control
- [8] ARCDAT control
- [9] D-Half control
- [10] Color displacement correction control

F-2-5

Period Definition	Definition
SREADY (Scanner Ready)	An interval in which the shading correction is executed after the Start key is pressed.
SSTBY (Scanner Standby)	An interval between the completion of the shading correction and switching the Start key ON / turning the main power OFF.
PSTBY (Print Standby State)	An interval in which the copy / print request signal can be accepted.
PRINTR (Printer Initial Rotation)	An interval between the reception of the print request signal and the state the image signal is sent.
PRINT	An interval in which all toner is transferred on the paper, and the paper is delivered.
LSTR (Last Rotation)	An interval between the completion of the paper delivery and the stop of all drives.

T-2-2

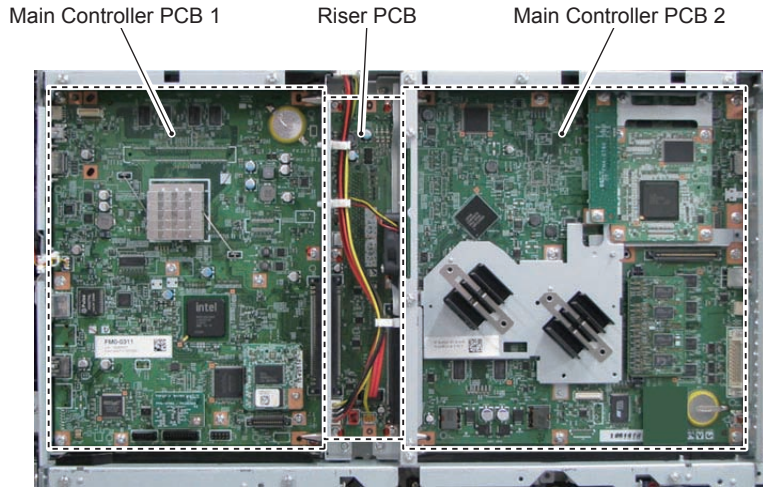


# Controller System

## Overview

### Features

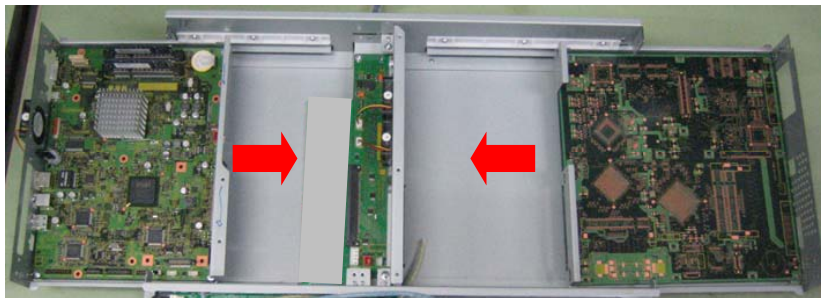
Using a new controller enables high speed PDL processing, high image quality and high functionality.



F-2-6

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

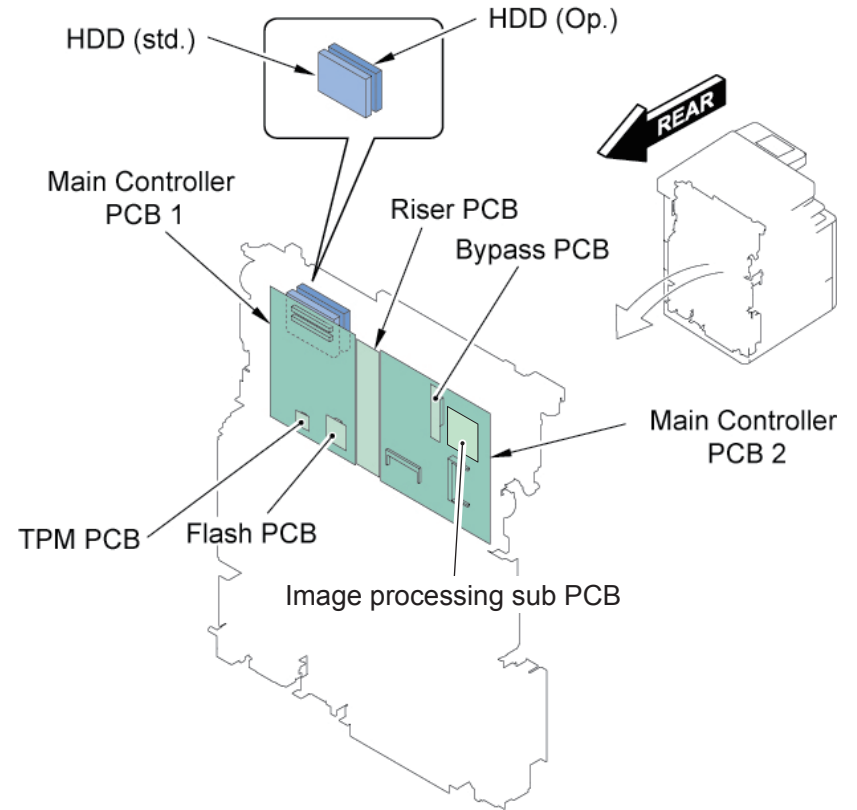
Main controller PCBs 1 and 2 are connected through the riser PCB. This configuration improves installability / removability of the main controller PCBs. (Slot-in / out)



F-2-7

## Specifications / configuration

### PCBs



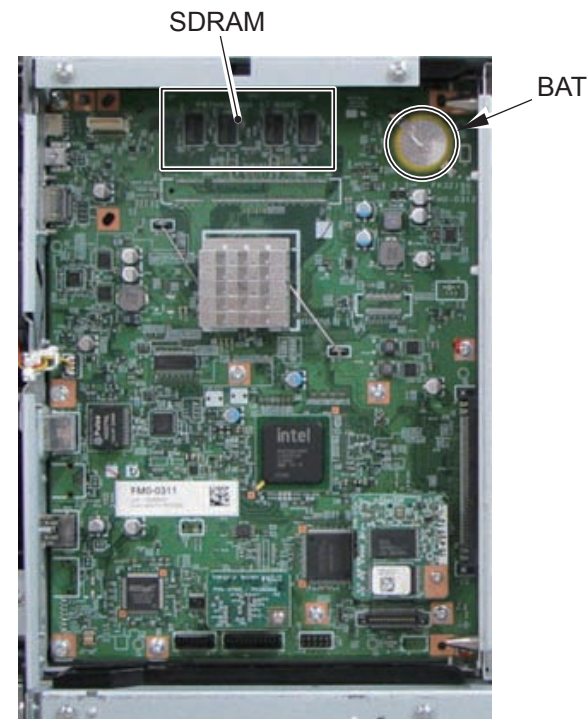
F-2-8

Parts name	Function, specifications, features
Main controller PCB 1	CPU: 1.2GHz, Control of the entire system Various controls (memory, control panel, electric power, voice), I/Fs (PCI, USB (host), RTC)
Flash PCB	Boot program
TPM PCB	To generate and save encryption key Available only when TPM settings is ON: Management Settings > Data Management > TPM Settings (default: OFF) Not available with China models
Main controller PCB 2	CPU: 400 MHz, Image control Various image processing (color space conversion, enlarge, reduction, rotation, composition, compression, rasterizing, resolution conversion, image binarization), delay memory control between drums, HDD control, I/Fs (reader, FAX, USB (device))
Image Processing Sub PCB	Image processing
Bypass PCB	Internal bus connection Remove this PCB when using ColorPASS-GX300 (server type) or imagePASS-B2 (to be attached to the main unit) and install the open I/F PCB.
Riser PCB	I/F (main controller 1 - 2, main controller - HDD, main controller - DC controller)
HDD	2.5 inch SATA I/F Standard: 160 GB (80G usable area) Up to 2 HDDs can be mounted in the case of mirroring configuration. BOX data, Address book, security information (password, certificate) Op.: 2.5 inch / 160GB HDD-C1, 2.5 inch / 1 TB HDD-D1

T-2-3

## Memory

### Main controller PCB 1

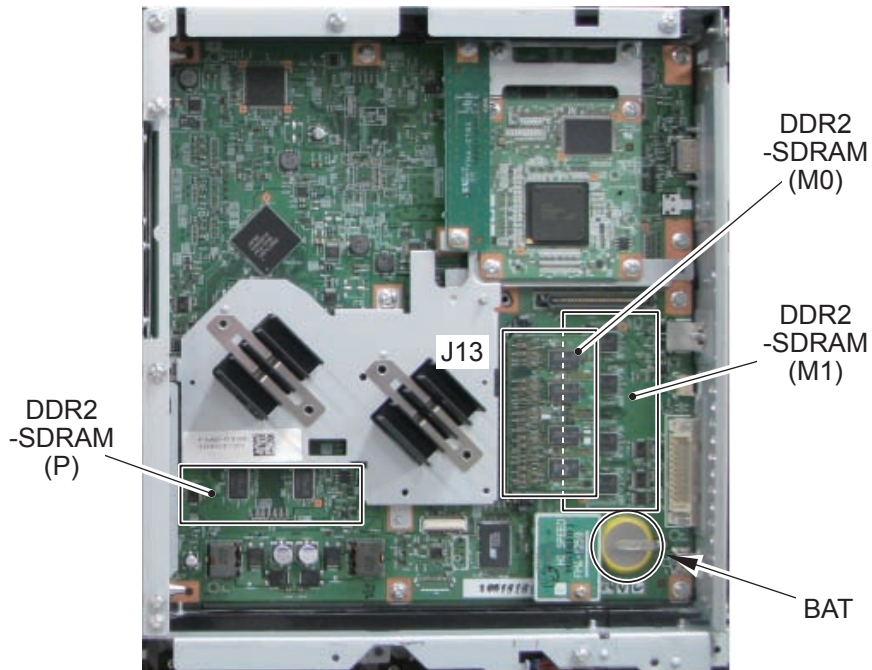


F-2-9

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

T-2-4

Main controller PCB 2



F-2-10

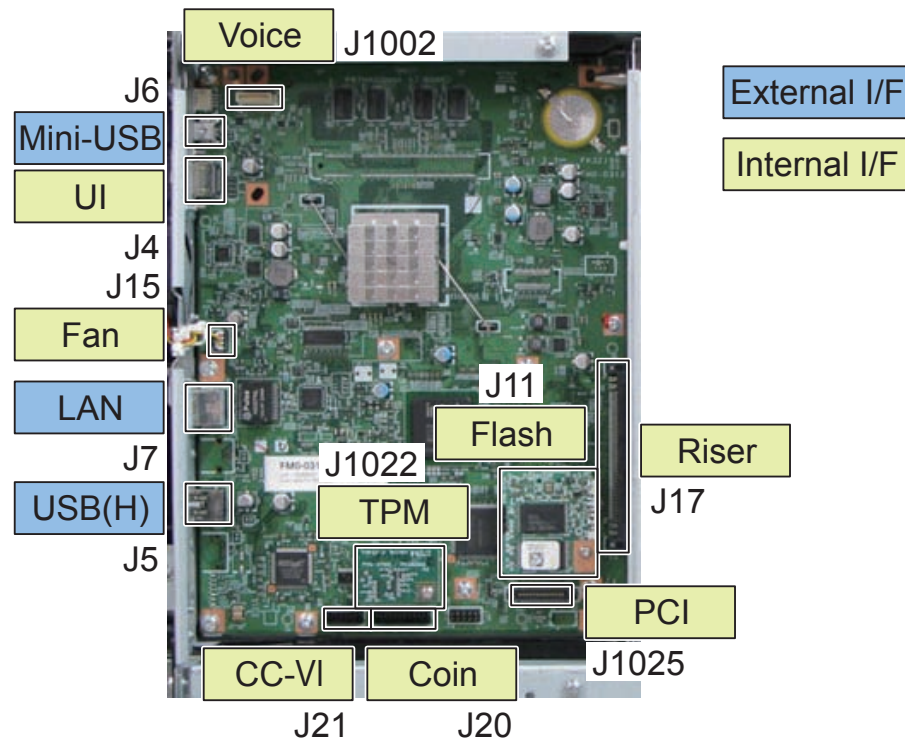
Parts name	Function, specifications, features
DDR2-SDRAM (M1)	1 GB (standard) / clock frequency: 200MHz Rasterizing, rendering, resolution conversion, coding / decoding
DDR2-SDRAM (M0)	512 MB (standard / Op.) / clock frequency: 200MHz Product name: Additional Memory Type D (512MB) Rasterizing, rendering, resolution conversion, coding / decoding To be used when using the following options: PS Printer Kit-AR1, Direct Print Kit (for PDF / XPS)-H1, imagePASS-B2, ColorPASS-GX400
DDR2-SDRAM (P)	512 MB (standard) / clock frequency: 200MHz Print image processing, delay processing between drums
SRAM	16 Mbit To save data in Settings / Registration Mode / Service Mode and image data management information in HDD
Lithium battery (BAT1)	For SRAM backup, Life: approx. 10 years

T-2-5

\* The capacity differs according to the location or model

I/F, connector

Main controller PCB 1



F-2-11

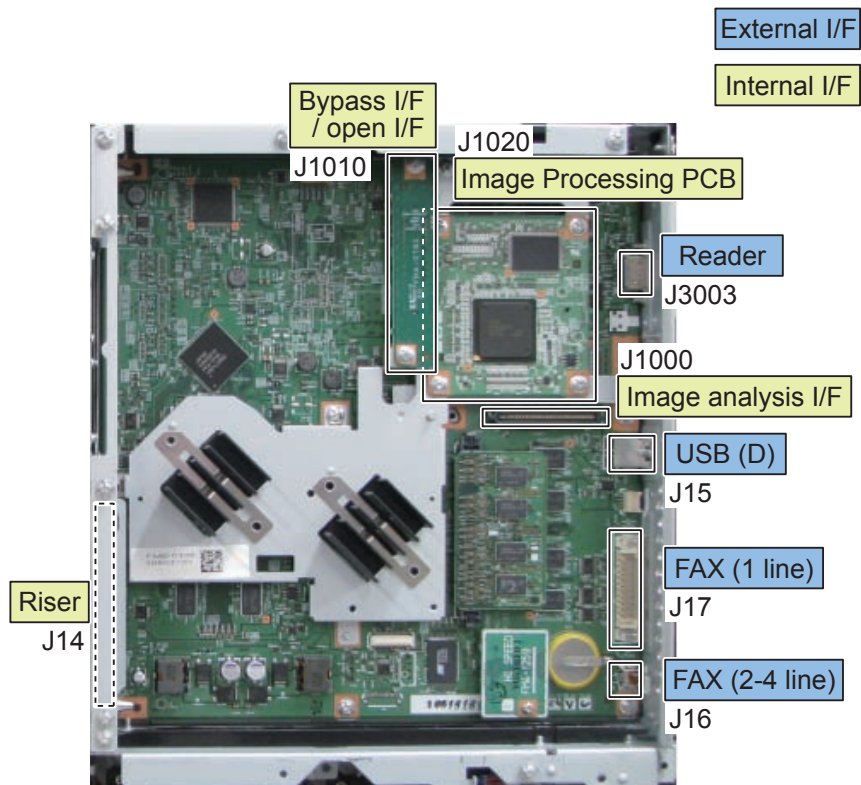
No.	Function, specifications	No.	Function, specifications
J1002	Voice I/F (Op.)	J11	Flash PCB I/F
J4	Control panel I/F	J5	USB I/F (Host) *1 For MEAP, For USB keyboard (Op.)
J6	Mini-USB I/F (Op.) Connect USB Device Port-B1	J1022	TPM PCB I/F
J15	Fan I/F	J1025	PCI expansion PCB I/F (Op.)
J7	LAN I/F 1000BASE-T / 100BASE-TX / 10BASE-T Also to be used as I/F for imagePASS-B1 / ColorPASS-GX400 (Op.)	J21	I/F for control interface kit (Op.)
J5	USB(H) I/F	J20	I/F for card reader, I/F for serial interface kit, I/F for coin manager (all Op.)
J17	Riser PCB I/F		

T-2-6

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



Main controller PCB 2



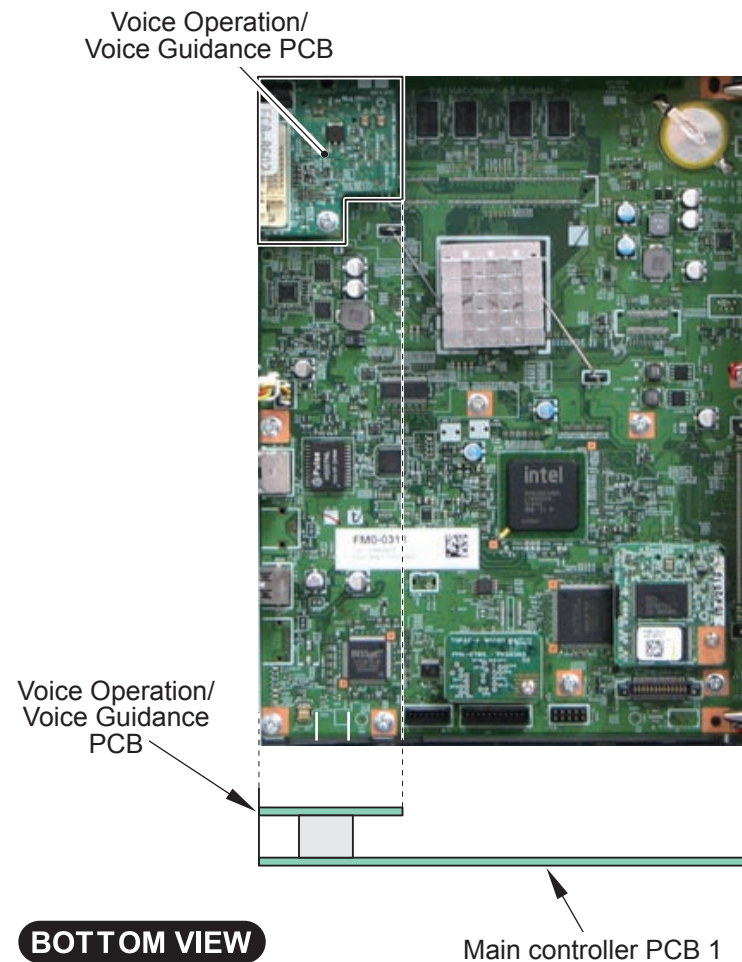
F-2-12

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

T-2-7

● Function expansion options

Main controller PCB1

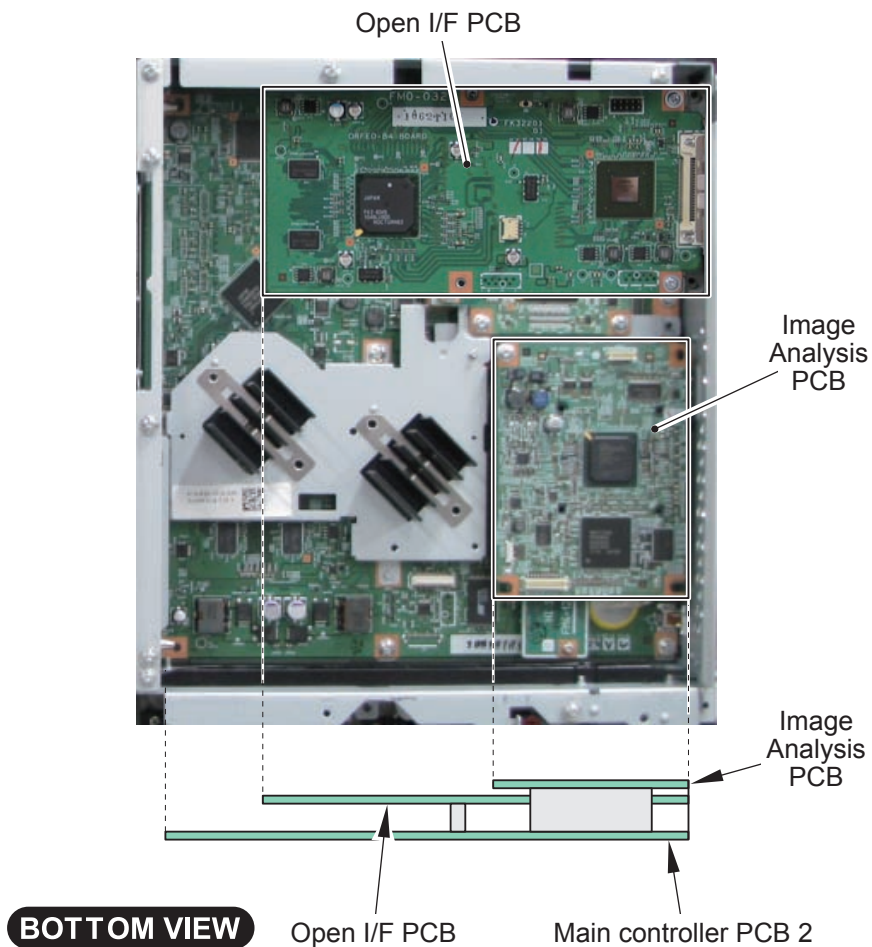


F-2-13

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

T-2-8

Main controller PCB 2



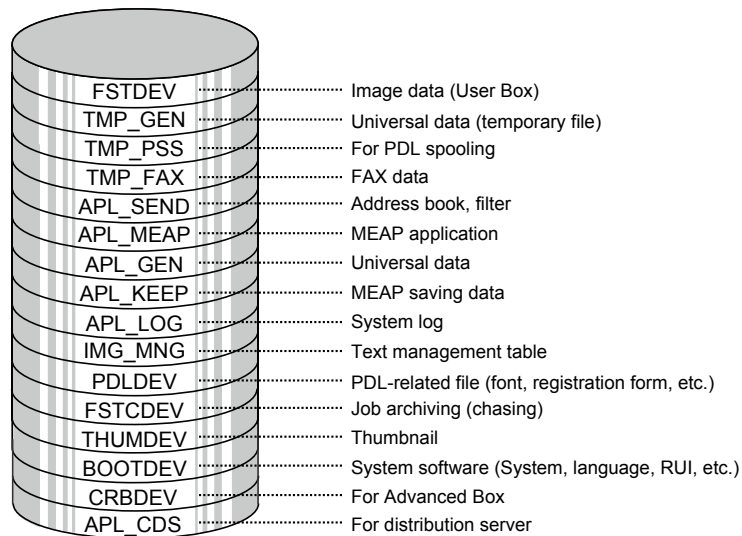
F-2-14

Name	Function, specifications, features
Open I/F PCB F link PCB (main) F link PCB (sub)	imagePASS-B2 / ColorPASS-GX300
Image analysis PCB	Product name: Image Data Analyzer Board-A1 Scan protection for output original (Copy / SEND / BOX)

T-2-9

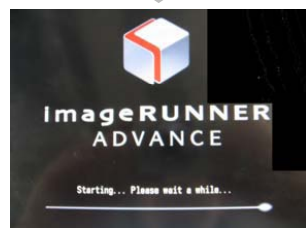
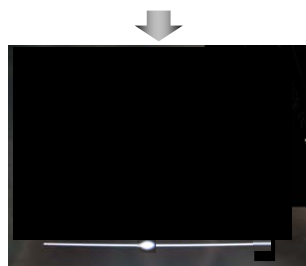
HDD

The partitions for Advanced Box and the distribution server are added.  
User Box (same as the existing machine) area is 23GB and Advanced Box area is 9GB.  
Advanced Box area can be increased by installing the high-capacity HDD option.



F-2-15

## Boot sequence



Standby screen display

[ ]: program storage location

- Initialization process of hardware
- Starting BIOS  
[Main controller PCB 1]
- Starting IPL, OS  
[Flash PCB]
- Starting system software for main/sub CPU  
[HDD -> DDR2-SDRAM]  
[Main controller PCB 2]
- Starting application

F-2-16

### NOTE :

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

Related Error Codes (major error codes):

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

T-2-10

## ■ Shutdown sequence

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

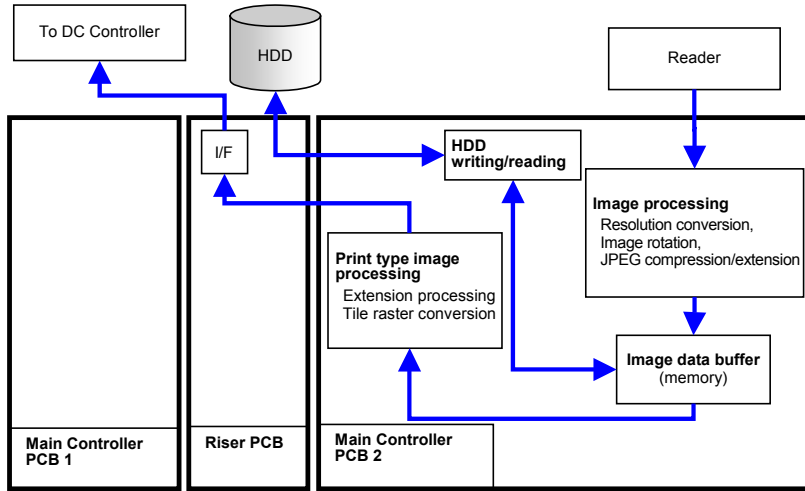
When the main power switch is turned OFF on the main body, Main Controller PCB 1 detects this operation and then the shutdown sequence starts / executes automatically.

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

● Controls

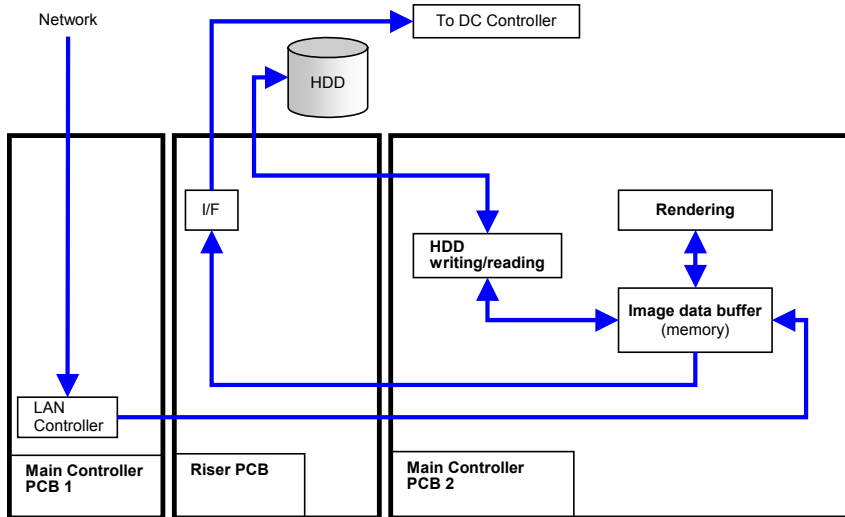
■ Flow of Image Data

● Copy



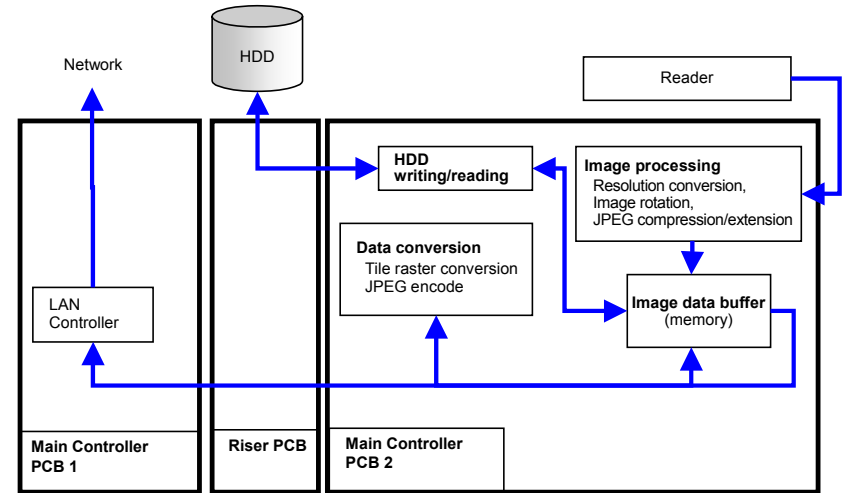
F-2-17

● Print



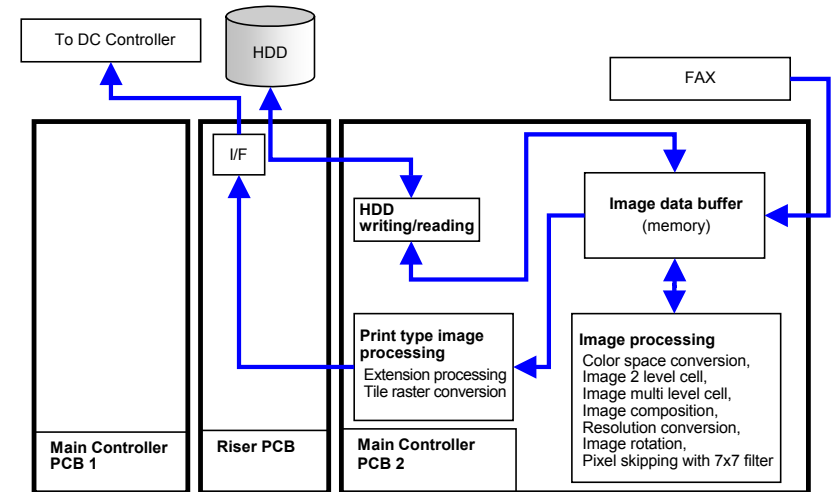
F-2-18

● SEND



F-2-19

● Box



F-2-20

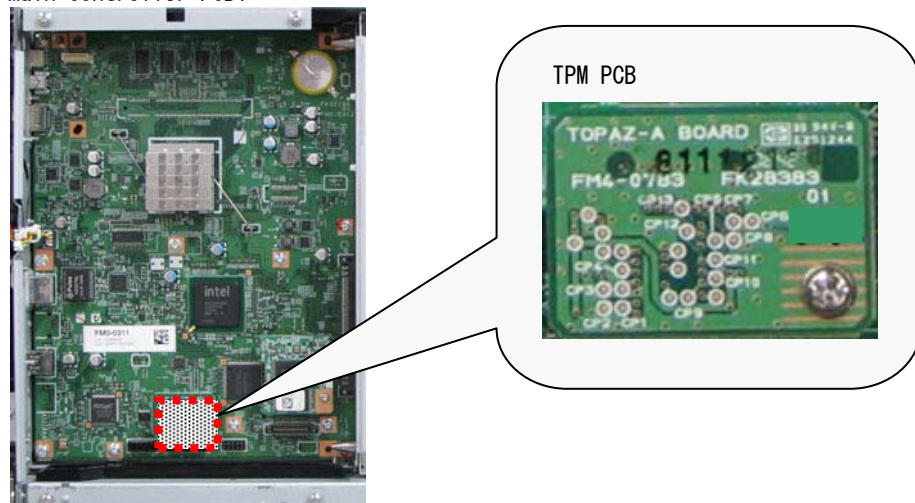


## Security Features (Encryption Key, Certificate, Password Protection)

### Overview

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

Main Controller PCB1



F-2-21

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

The TPM key embedded in the chip is used to encrypt / decrypt security information. The TPM key is protected from illegal access in a virtually perfect manner, thus the security information of the host machine is securely protected even in the following conditions.

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

Enable this function in Setting / Registration mode.

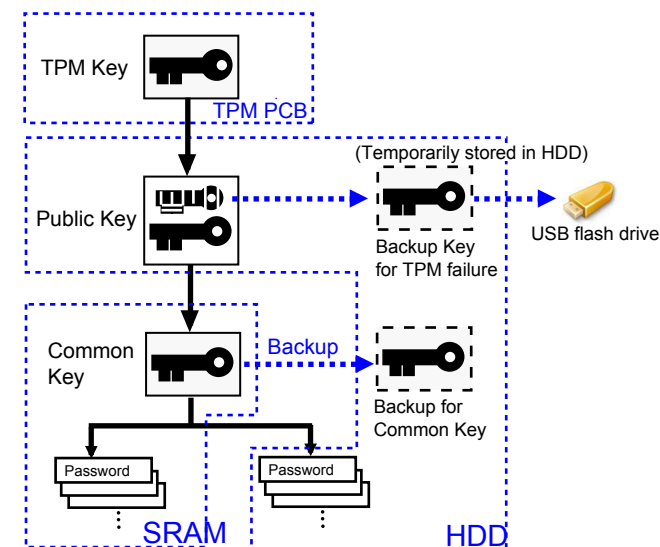
Management Setting > Data Management > TPM Setting -> ON (OFF by default)

### Configuration of Security Information

The security functionality behaves differently depending on the TPM setting on the UI.

This machine provides the two types of TPM settings. See the figure below for the security information flow in each setting.

- When the TPM setting is ON



F-2-22

When the TPM setting is ON, the TPM key is enabled to secure information with the three keys. Therefore, the security information held in each machine is safely protected.

The security information in this setting can be accessed by the three keys and multiple passwords stored in the SRAM and HDD.

Each data is stored in the specified location (enclosed with blue dots in the figure above).

Since the data in the upper layer are linked to those in the lower layer, security information is activated only when data in all the layers are linked.

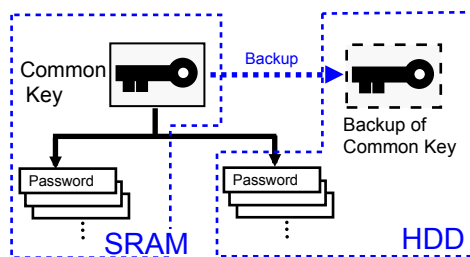
For the backup purpose, the backup key is temporarily stored also in the HDD to be prepared for a TPM failure (only for the initial failure after the TPM setting is ON).

This key can be backed up using the USB flash drive. Once backed up, the backup key is deleted from the HDD.

The common key information is stored in the HDD as well as the SRAM. The common key stored in the SRAM is cleared when the main controller PCB 2 (SRAM) is replaced or after MN-CON clear. However, the common key stored in the HDD automatically restores that in the SRAM so that the security information is decodable even after servicing. Note that the

security information is not decodable correctly in case the HDD is failed or formatted because the public key information stored in the HDD is cleared. If this occurs, execute “Initialize All Data / Settings” in user mode to set the TPM setting to OFF. This will maintain the password information in the SRAM even after the password information is initialized.

- When the TPM setting is OFF:



F-2-23

When the TPM setting is OFF, the TPM key is disabled. Thus, the security information is protected only by the common key.

Under this setting, the security information held in this machine is protected at the level equivalent to the conventional machines.

The security functionality in this setting is configured by the common key and multiple passwords stored in the SRAM and HDD.

When the TPM setting is set to OFF, the security information is protected by the common key and multiple passwords stored in SRAM and HDD.

The common key information is stored in the HDD as well as the SRAM. The common key stored in the SRAM is cleared when the main controller PCB 2 (SRAM) is replaced or after MN-CON clear. Since the common key stored in the HDD will automatically restore the common key in the SRAM, the security information is decodable correctly even after servicing. Unlike the case that the TPM setting is set to ON, the password information stored in the HDD is initialized when the HDD is replaced or formatted. However, the password information is maintained in the SRAM.

### TPM Setting for Security Information

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

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

### ● Preparation before Installing TPM

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

Follow the steps below to back up data.

1) From Remote UI, execute Setting / Registration > Management Setting > Data Management > Import / Export. The following data types should be backed up.

- Address book (see \*1)
- Device settings (transfer settings, address book, frequently-used Send functions) (see \*2)
- Setting / Registration
- Printer settings can be exported
- Favorites stored in the web browser (only when the web browser is enabled) (see \*3)

\*1 Each of address books can be exported. If the address book is seen as a part of device settings, this step can be disregarded.

\*2 Among settings in the main menu, only “Frequently-used Setting” under “Scan and Send” can be backed up.

\*3 These are available only in the specific models or configurations.

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

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

## Works before / after introduction

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

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

The works above are basically done by users.

### CAUTION:

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

Back up the TPM key swiftly after the setting is ON

Keep the password used at backup securely

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

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

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

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

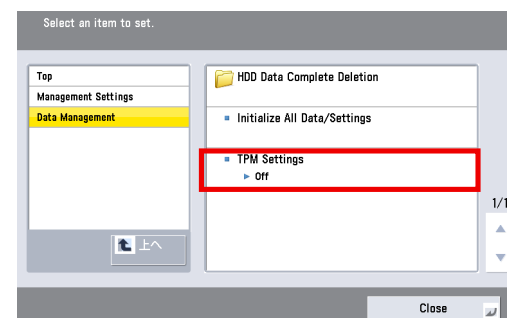
When the key restoration is failed due to the USB flash drive lost or others, “Initialize All Data / Settings” should be executed to reactivate TPM functionality. The security may be undermined if the old Setting / Registration data are maintained as it is.

## 1. Enable Functionality

### MEMO: Setup of “System Management PIN”

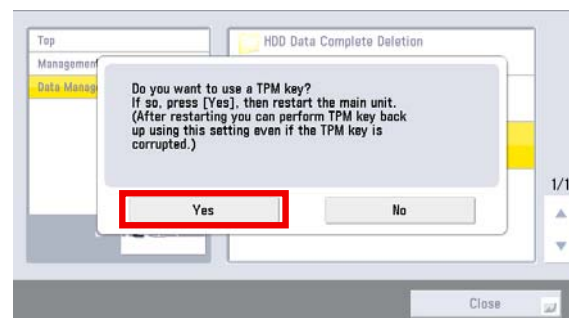
It is recommended for users (administrators) to set the system management PIN before installing TPM. The TPM key is backed up after the TPM setting is set to “ON”. However, the key backup is permitted only once. Unless the key is properly backed up, users other than administrators may illegally obtain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

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



F-2-24

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



F-2-25

This setting is enabled after the machine is restarted.

## 2. TPM Key Backup

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

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



F-2-26

1) Insert the USB flash drive to the machine.

The USB I/F (host) is found at the side of the control panel as well as the main controller PCB.

**CAUTION:**

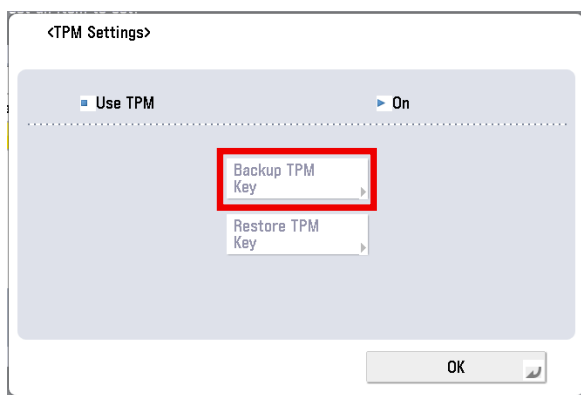
Ensure to insert only one USB flash drive.

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

**MEMO:**

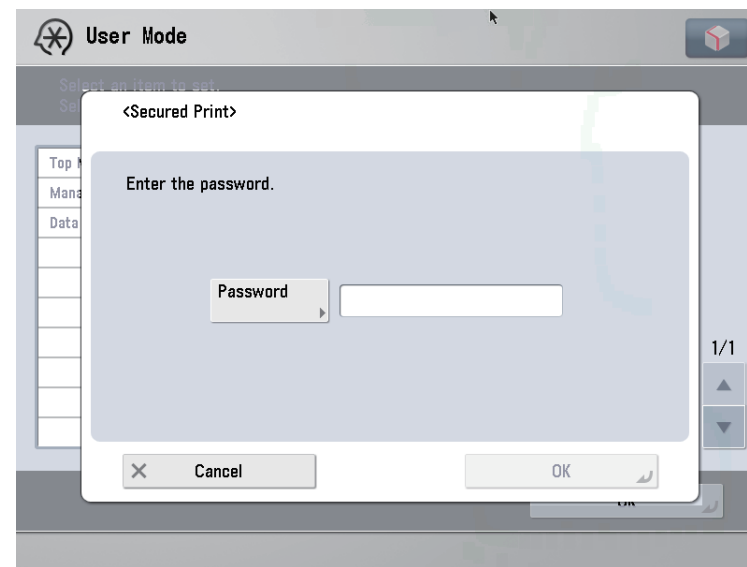
The USB flash drive holds the TPM key backup files by serial number. Thus, backup files for multiple machines can be saved in a USB flash drive.

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



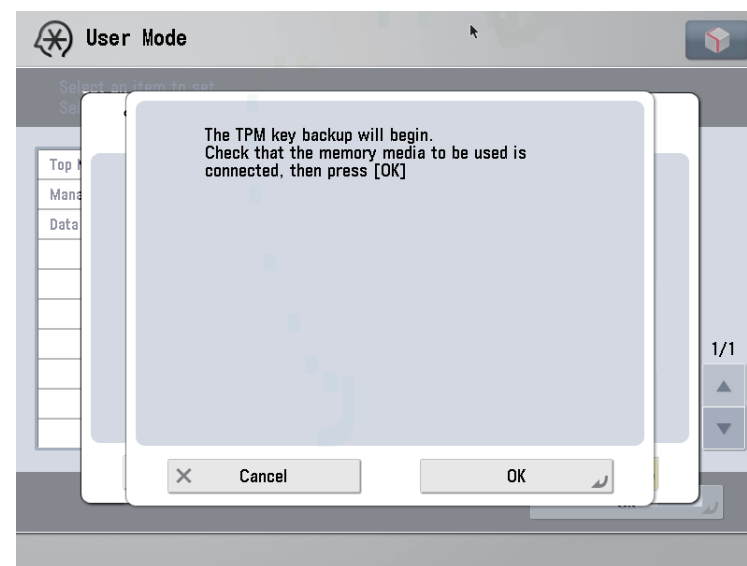
F-2-27

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



F-2-28

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



F-2-29

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

CAUTION: The following may cause failures in backup.

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

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

CAUTION: The USB flash drive should be securely stored.

Give advice users on the following points.

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

MEMO: Name of TPM key backup file

The serial number for the machine is automatically assigned as the backup file name.

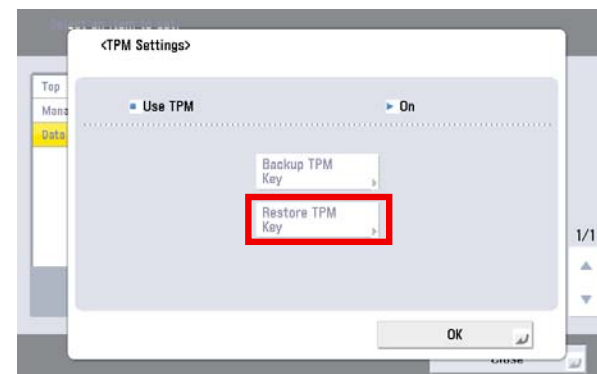
### 3. Restore of TPM key

Procedure is about the same as the backup work.

Difference between restore work and backup work:

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

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



F-2-30

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

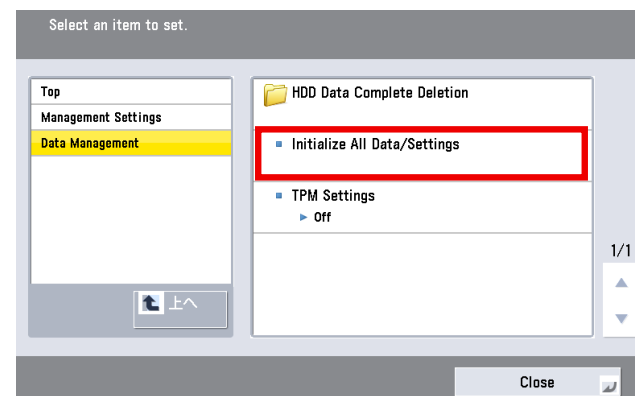
CAUTION: The following may cause failures in restoration.

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

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

#### 4. Disable the feature

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



F-2-31

CAUTION: Points to note when disabling functionality

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

#### List of data to be cleared

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

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

#### Steps of data restoration after recovery

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

#### Environment Settings

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

#### Function Settings

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

#### Address Settings

- Address Book

#### Management Settings

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

### ● Overview of Actions taken against Troubles

Location with failure	TPM Setting = ON	TPM Setting = OFF	Relevant Error Code
TPM PCB	<ol style="list-style-type: none"> <li>1. Check the TPM PCB connection</li> <li>2. Replace the TPM PCBs</li> <li>3. Turn OFF/ ON the power</li> <li>4. See the section of “Restoring TPM Key” to restore the TPM key.</li> <li>5. Turn OFF/ ON the main power for recovery</li> </ol>	N/A (TPM PCB is not in use when the TPM setting is set to OFF.)	Initially E746-0031 is shown on the screen. When the power is turned OFF/ON after the TPM PCB is replaced, E746-0032 is shown (only when the TPM setting is set to ON).
HDD	<ol style="list-style-type: none"> <li>1. Replace the HDDs.</li> <li>2. Format the HDD.</li> <li>3. Download the system software.</li> <li>4. See the section of “Disabling Functionality” to execute “Initialize All Data/ Settings”.</li> <li>5. Turn OFF/ON the power. The TPM setting is automatically set to OFF.</li> <li>6. Set the TPM setting to ON (the public key and the common key are automatically set).</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace the HDDs.</li> <li>2. Format the HDD.</li> <li>3. Download the system software.</li> <li>4. Restore the password information stored in the HDD.</li> </ol>	Initially E602-xxxx is shown (the different extension is shown depends on cases). After the system software is reinstalled, E746-0033 is shown.
Main Controller PCB 2 (SRAM)	<ol style="list-style-type: none"> <li>1. Replace the main controller PCB 2.</li> <li>2. The common key backed up in the HDD will be automatically restored in the SRAM.</li> <li>3. The TPM setting on the control panel is reset to OFF. Manually set the TPM setting to ON (the machine is operated in the TPM setting ON).</li> <li>4. Restore the password information stored in the SRAM (see *1).</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace the main controller PCB 2.</li> <li>2. The common key backed up in the HDD will be automatically restored in the SRAM.</li> <li>3. Restore the password information stored in the SRAM (see *1).</li> </ol>	E747-xxxx (the different extension is shown depends on cases).

T-2-11

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



## ● Related Error Code

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

T-2-12

## ● Security Information Storage Location

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



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

T-2-13

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

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

T-2-14

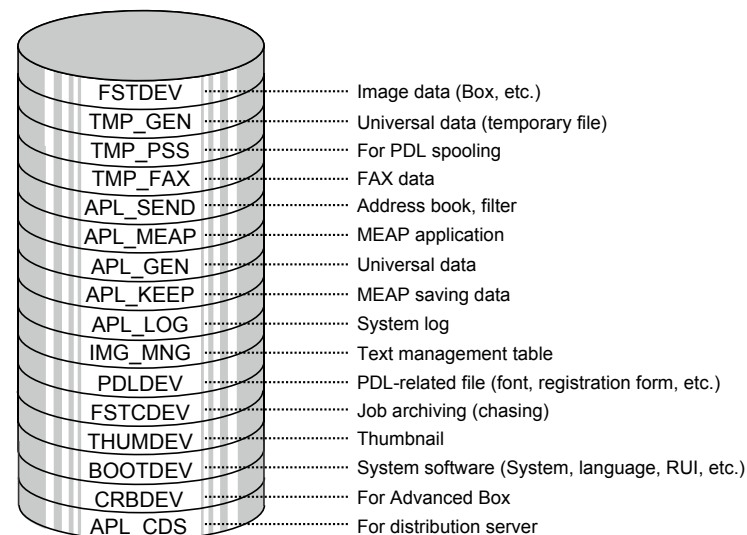
### ■ High capacity HDD (Option)

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

Mounting this option increases capacity for Advanced Box.

15GB: in the case of 160GB HDD capacity

629GB: in the case of 1TB HDD capacity



F-2-32

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

## HDD mirroring feature (option)

### Overview

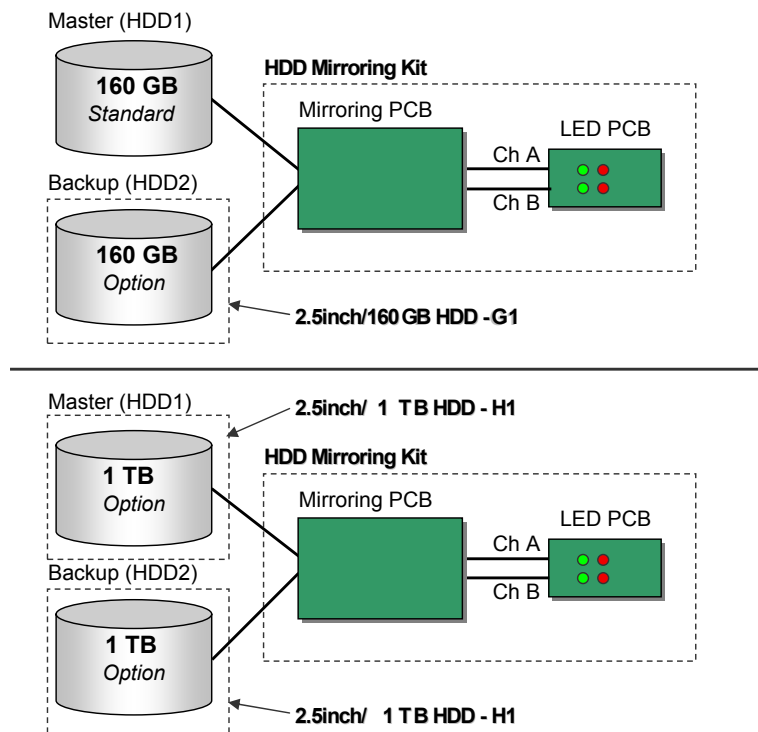
This option enables HDD data mirroring (RAID1).

When one HDD is crashed, the other HDD backs up the operation. This minimizes the downtime due to crash, thus enhancing the reliability as the document server.

Mirroring is performed in the following 2 ways depending on HDD capacities (160GB or 1TB).

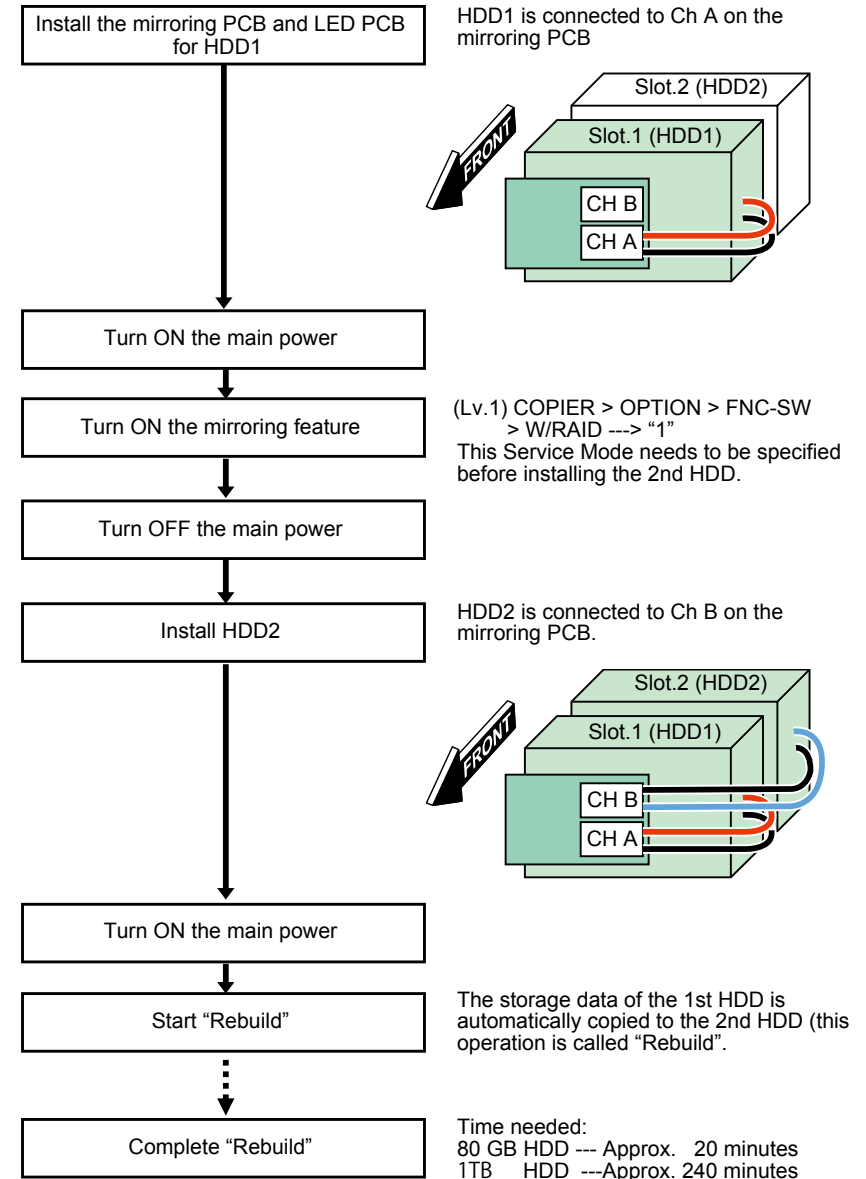
The mirroring PCB controls the reading / writing timing of HDD data.

The LED PCB indicates HDD operation statuses by LED.



F-2-33

### Works before using this functionality (installation)



F-2-34

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

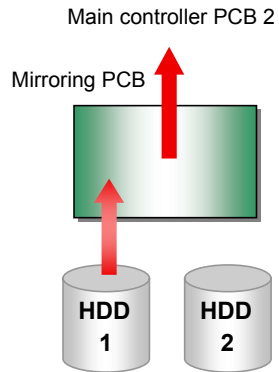
## MEMO:

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

## ● HDD reading / writing operation

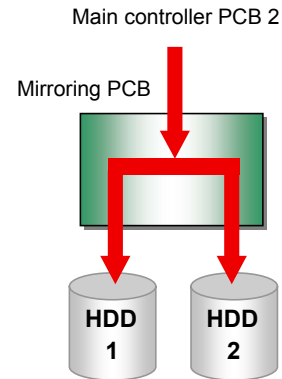
## At reading:

Data is read by HDD1 (master HDD) only



## At writing:

The same data is written to each HDD at the same timing



F-2-35

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

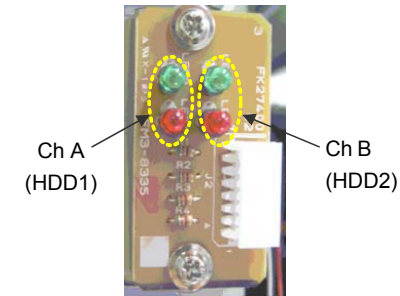
## In the case of failure:

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

## ● List of operation status (LED)

HDD operation statuses are indicated with 4 LEDs mounted on the LED PCB.

The green LED shows that the operation is normally in progress, while the red LED indicates any failures.



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The table below lists HDD statuses indicated by each LED.

For example, when HDD1 is in access, the green LED on the side of HDD1 (ChA) blinks in a high speed.

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

T-2-15

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

\*1: The LED is blinking in a high speed

\*2: The green LED may be lit

## Description of Modes

The mirroring system of this machine consists of 4 modes.

The modes in parentheses show the mirroring system statuses.

The status flows among the modes below during operation.

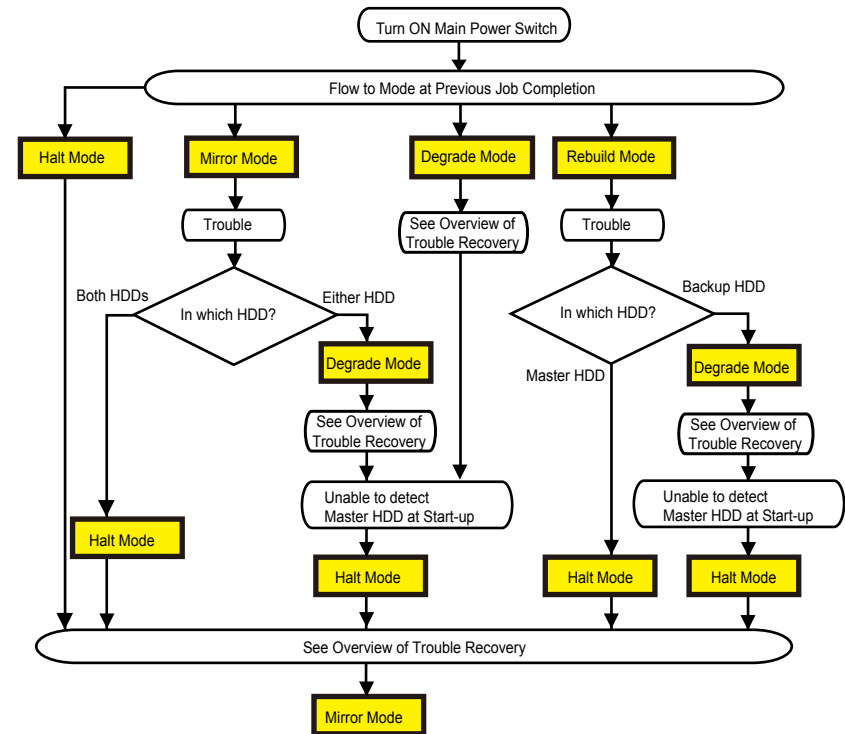
The table below lists descriptions of modes and operational overview.

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

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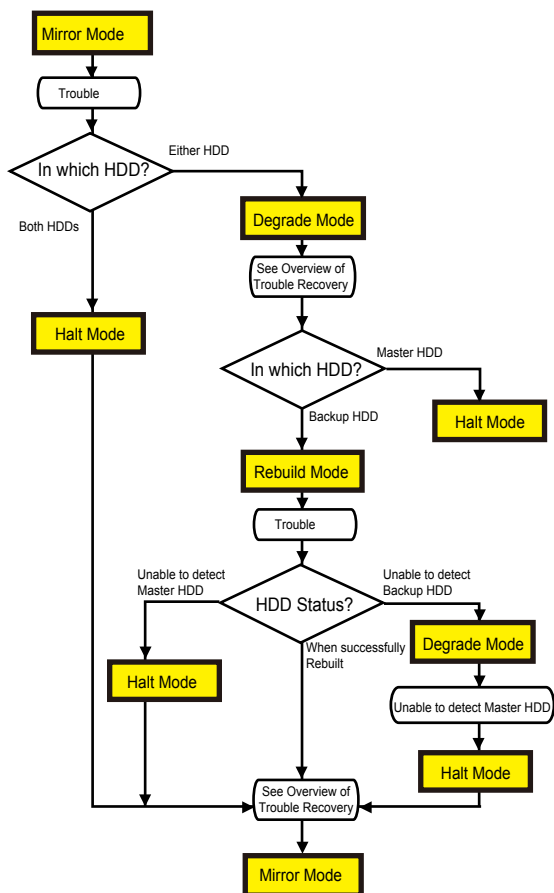
\*1: Turn OFF/ ON the power in this mode, the mode returns to the previous mode.

## Mode Flow at Start-up



F-2-37

## Mode Flow during Operation



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## ● Overview of Trouble Recovery

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

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

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

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

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

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

T-2-17

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

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

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

## ● Points to Note in Servicing concerning Mirroring Functionality

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

2. The mirroring board controls Master HDD and Backup HDD. This control is performed based on the HDD serial number and the model serial number instead of slot locations. If HDDs are replaced in a careless manner during servicing in the field, the Master and Backup HDDs may be switched.

Ex) When the master HDD is in trouble, the mirroring board automatically recognizes the backup HDD as the master. Thus, the master and backup HDDs are switched even without changing the slot locations.

If the Master HDD cannot be located, turn OFF/ ON the power to check on which channel the green LED is lit on the LED PCB.

The firstly-blinked LED (ChA or ChB) shows the Master HDD, which is accessed firstly after power-on.

3. For users who intend to use the removable and mirroring functionality concurrently, instruct them not to change the removable HDD location in advance.

Change of HDD locations after power-OFF is allowed as specifications only in Mirror Mode. Otherwise, HDD removal or change of location is not guaranteed.

4. The following conditions are required to replace HDDs at power-ON.

- Removable HDD is extended
- Either HDD is in trouble

### CAUTION:

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

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

## ■ Removable HDD (option)

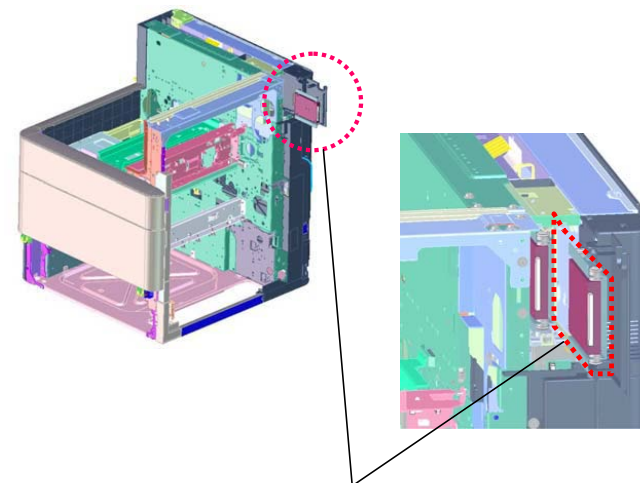
This option enables easier HDD mounting (slot-out/ in) at power-OFF (see \*1). In addition, the HDD slot can be locked.

Potential use case: To enhance information securities in government offices or enterprises

- Remove the HDD after business hours to store in a safe box.
- Mount the HDD before business hours. Lock the slot during operation.

\*1: The following conditions are required to replace HDDs at power-ON.

- - Removable HDD is extended
- - Either HDD is in trouble



Removable HDD Kit-AC1

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### MEMO:

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

## ■ HDD Encryption/ Mirroring Kit (optional)

This option enables to generate the encryption key inside the encryption board and to encrypt the whole HDD including the system software. Encryption allows leaks of confidential data, even when the HDD is stolen, including image data (temporarily generated at Copy or Print jobs) and user data stored in BOX/ Advanced BOX. In addition, the data written into the two hard disks are also encrypted when the HDD mirroring functionality is enabled. The following descriptions focus on the HDD encryption function. See the previous section for the mirroring functionality.

### ● HDD Encryption Functionality

The HDD of the host machine holds temporary image data including scanned images or PDL data as well as user data in BOX and Advanced BOX. Such images or user file information are saved in the HDD only with system information cleared. Under this condition, the data or images can be restored by accessing directly to the stolen HDD using the access editor and the like. To counter such threats against securities, data written to the disk should be always encrypted to protect them from illegal restoration of image data or others. This product employs an unconventional approach to achieve HDD encryption and mirroring functionality with the dedicated chipset on a board (Canon MFP Security Chip Version 2.00). Since the two functions are operated in a HDD, the encryption functionality can be independently enabled.

### ● Data Encryption Mechanism

The encryption board receives signals transmitted from the controller board, and encrypts and saves them in the HDD.

The encryption board receives the encrypted data saved in the HDD to decode and send them to the controller.

The encryption board can be configured with a HDD and an encryption/ mirroring board, or with 2 HDDs and an encryption/ mirroring board.

### ● Conditions for Encryption Board Operation

The encryption board has the function to recognize and authenticate the host machine. An error is triggered if a second-hand HDD encryption/ mirroring board is installed to the other machine.

### ● Compatibility among Device, Encryption Board and HDD

E602-2000 error may occur if the unmatched authentication information is found between the controller and the HDD encryption board and the encryption board is mounted.

The device, the encryption board and HDD can be connected in 4 use cases.

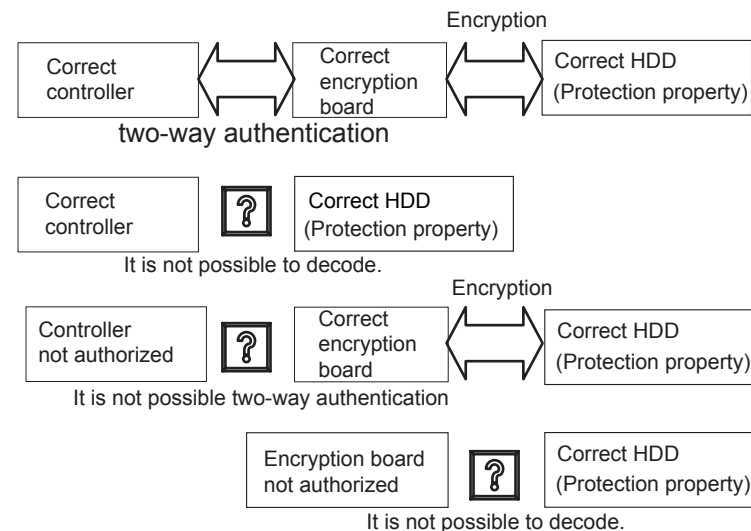
The following shows the statuses for each use case.

Case 1: Normally operated

Case 2: HDD-related error occurs because the system on the HDD cannot be read (other than E602-2000 error)

Case 3: E602-2000 is triggered by failure in mutual authentication

Case 4: Unable to decode properly due to unmatched key for the encryption board



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## ● Actions against Troubles – Overview

Servicing	User data	Recovery	Action
HDD replacement	cleared	Replace HDDs	1) Format the HDD 2) Install the system software
Encryption board replacement	cleared	Install HDD encryption Kit	1) Replace encryption board 2) Initialize Encryption Board (see *1) 3) Format the HDD 4) Install the system
Main controller 2 replacement (SRAM)	cleared	Clear the key for HDD data encryption kit	1) Initialize the encryption board (see *1) 2) Format the HDD 3) Install the system
Main controller 1 replacement	not cleared	N/A	N/A
Main controller clear	Information held in SRAM cleared	After MN-CON clear process is done	MN-CON clear does not clear authentication information; no work is required specifically for HDD encryption kit

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### \*1: How to Initialize Encryption Board

#### 1. Initialize the encryption board via SST.

This step makes the disk unformatted (E602-0001 is triggered if the unformatted disk is started).

#### 2. Format the HDD and reinstall SYSTEM via SST.

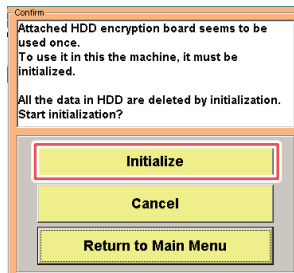
When you start the HDD formatting, the message is automatically shown to confirm whether to initialize the encryption board (Key Clear).

Key Clear will disable accesses to HDD data permanently. Cautions should be taken in Key Clear execution.

### <Points to Note in Initialization via SST>

The screen below is shown when you gain access to SST in safe mode due to E602-2000.

Poor board connection also causes this error. Check the board connection to seek error recovery. Initialization of the encryption board will disable accesses to HDD data permanently. Cautions should be taken in initialization.



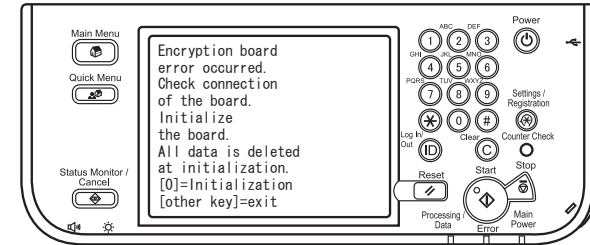
F-2-41

### <Points to Note in Initialization using USB>

The screen below is shown on the control panel when E602-2000 occurred and the machine is started in safe mode using the USB flash memory with system data stored.

The message as shown in the figure below is displayed.

Select "0" when you are ready to initialize the encryption board.



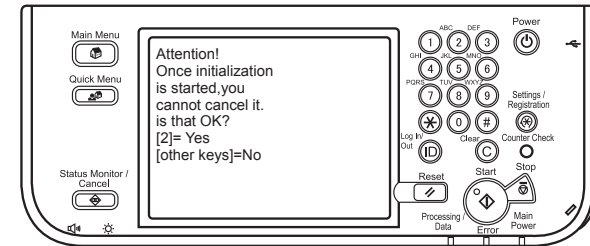
F-2-42

The figure below shows the final screen in initializing the encryption board.

The message as shown in the figure below is shown on the screen.

Select "2" when you initialize the encryption board.

We recommend checking the board connection before starting initialization



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## ● Relevant Error Codes

### E602 and detailed codes

E code	Description	Cause	Detection Timing	Actions
E602 -2000	Authentication Error	Error in authentication between the host machine and the encryption board	Start-up	Check connections between the encryption board and the HDD and between the encryption board and the main controller 2. This error may be triggered after replacement of the encryption board or the main controller 2. At any rate, this error disables accesses to HDD data. When no problem is found in connections, use SST to execute Key Clear > Format > Install System.
	Failure in Encryption Board	Error in recognition of the encryption board		
	Device Error	Failure in the encryption board		

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### E610 and detailed codes

E code	Detailed Code	Cause (Detected Error)	Actions
E610		Failure in the HDD encryption key	
	0001	Failure in the HDD encryption key (Error in hardware configuration). No encryption board is installed.	Ask the user to check the hardware configuration.
	0002	Failure in the HDD encryption key (Error in hardware configuration). The memory space is insufficient for encryption operation.	Ask the user to check the hardware configuration.
	0101	Failure in the HDD encryption key (Error in initialization). Failed to initialize the memory space where the key is stored.	Turn OFF/ON the power. If the error is not recovered, this may be caused by hardware-related factors.
	0102	Failure in the HDD encryption key (Error in initialization). Failed to initialize the encryption processing unit.	Turn OFF/ON the power. If the error is not recovered, this may be caused by hardware-related factors.
	0201	Failure in the HDD encryption key. Error in the encryption processing unit.	Turn OFF/ON the power. If the error is not recovered, this may be caused by hardware-related factors.
	0202	Failure in the HDD encryption key. Error in the encryption processing unit.	Turn OFF/ON the power. If the error is not recovered, this may be caused by hardware-related factors.
	0301	Failure in the HDD encryption key (Error in the encryption key). Failed to create the encryption key.	Turn OFF/ON the power. If the error is not recovered, this may be caused by hardware-related factors.
	0302	Failure in the HDD encryption key (Error in the encryption key). Detected the failure in the encryption key.	Turn OFF/ON the power. If the error is not recovered, this may be caused by a hardware-related factor (SRAM). Note that this error initializes the HDD.
	0303	Failure in the HDD encryption key (Error in the encryption key). Detected the failure in the encryption key.	Turn OFF/ON the power. If the error is not recovered, this may be caused by a hardware-related factor (SRAM). Note that this error initializes the HDD.
	0401	Failure in the HDD encryption key (Error in the encryption processing). Error is detected during the encryption process.	Turn OFF/ON the power. If the error is not recovered, this may be caused by a hardware-related factor (the encryption board).
	0402	Failure in the HDD encryption key (Error in the encryption processing). Error is detected during the decoding process.	Turn OFF/ON the power. If the error is not recovered, this may be caused by a hardware-related factor (the encryption board).

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## Service Operations

### When Replacing Parts

Parts name	Remedy	Reference
HDD	Backup of the set/registered data HDD format Downloading system software Restoring the backup data Executing "Auto Adjust Gradation (Full Adjust)"	see Chapter 5, "HDD."
Main Controller PCB 1	Transferring the parts from old PCB to new PCB	see Chapter 5, "Main controller PCB 1."
Main Controller PCB 2	Backup of the set/registered data Transferring the parts from old PCB to new PCB Restoring the backup data	see Chapter 5, "Main controller PCB 2."
TPM PCB	When TPM setting is "ON":Restoring the TPM key	see Chapter 5, "TPM PCB."

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### Consumables

N/A

### Points to note at servicing

N/A

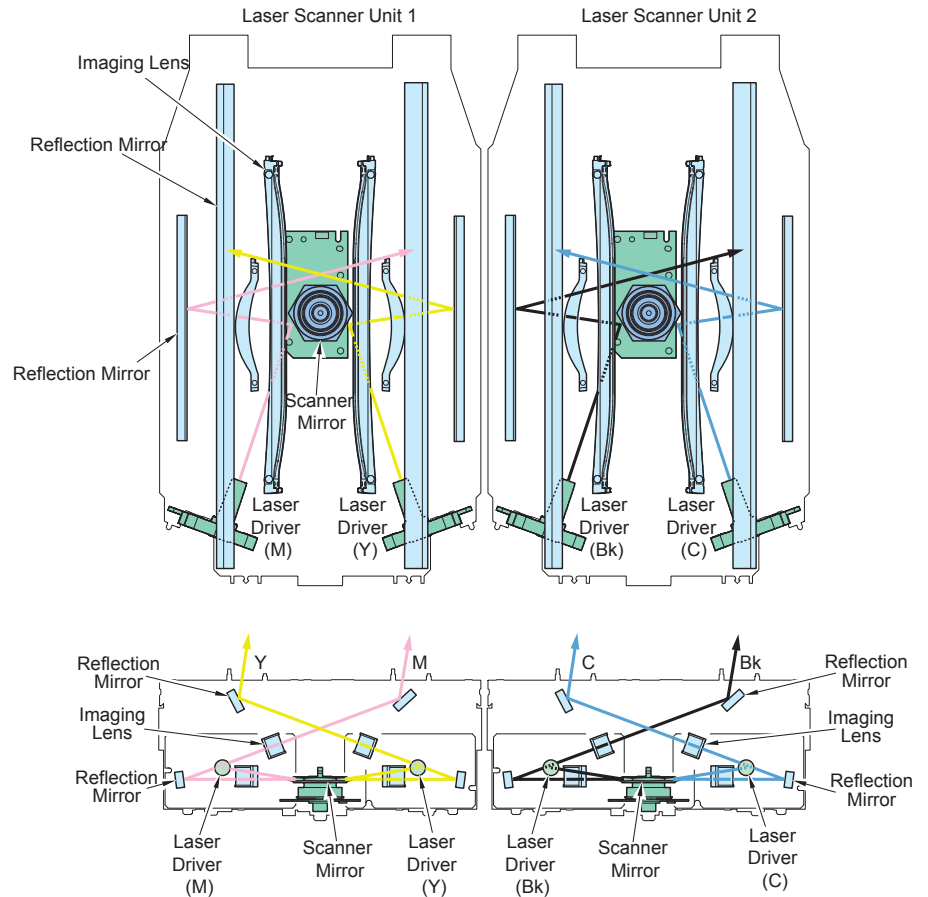
# Laser Exposure System

## Overview

### Overview

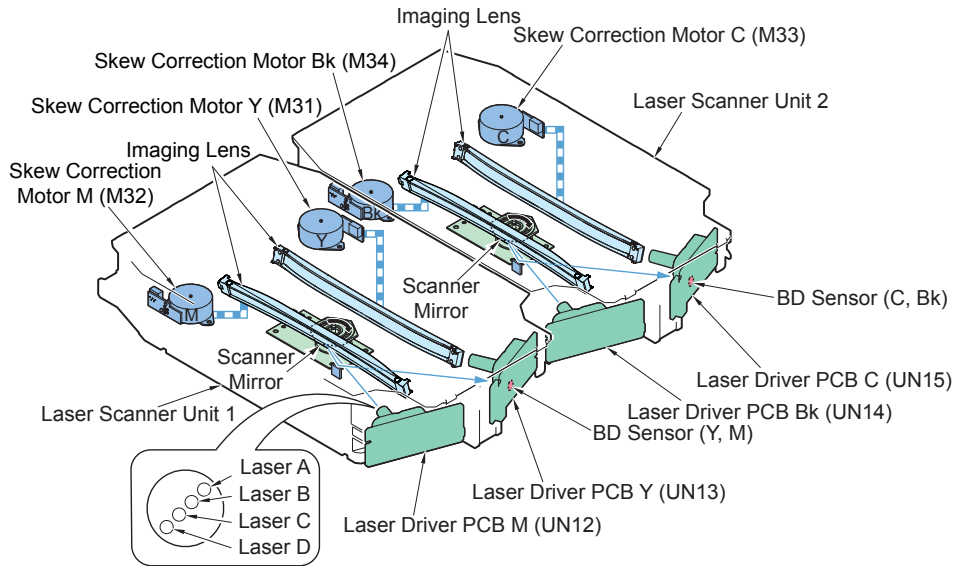
To realize the high-speed printing, this machine adopts the 2 Laser Scanner Units and the Laser Driver of each color executes laser scanning with 4-beam.

imageRUNNER ADVANCE C5255 / C5250 employs 4 beam and C5240 / 5235 employs 2 beam.

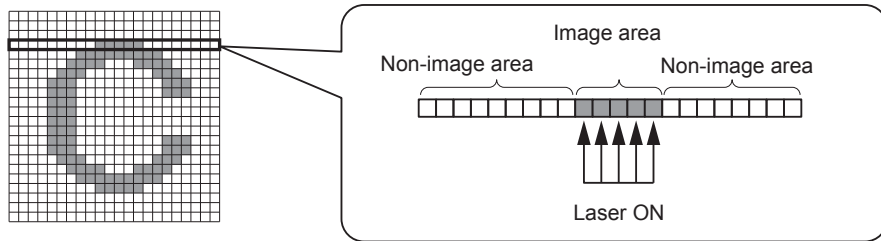


F-2-44

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This machine emits the laser to the image area on the drum negatively-charged.



Enlarged view

F-2-45

## ■ Specification

Item	Description
Wavelength	775 to 800nm
Laser type	Red color laser (non-visible light)
Laser output	10mW
Number of laser scanner unit	2
Number of laser light	imageRUNNER ADVANCE C5255 / C5240: 4 beam for each color imageRUNNER ADVANCE C5240 / C5235: 2 beam for each color
Resolution	1200dpi
Motor type	Brushless motor
Number of motor rotation	imageRUNNER ADVANCE C5255 / C5240: Approx. 29100rpm imageRUNNER ADVANCE C5240 / C5235: Approx. 37800rpm
Number of scanner mirror facet	6 facet (phi 40)
Control list	Laser ON / OFF control
	Horizontal scanning synchronous control
	Vertical scanning synchronous control
	APC control
	Laser scanner motor control
	BD correction control
	Laser shutter control
	Image tilt correction control

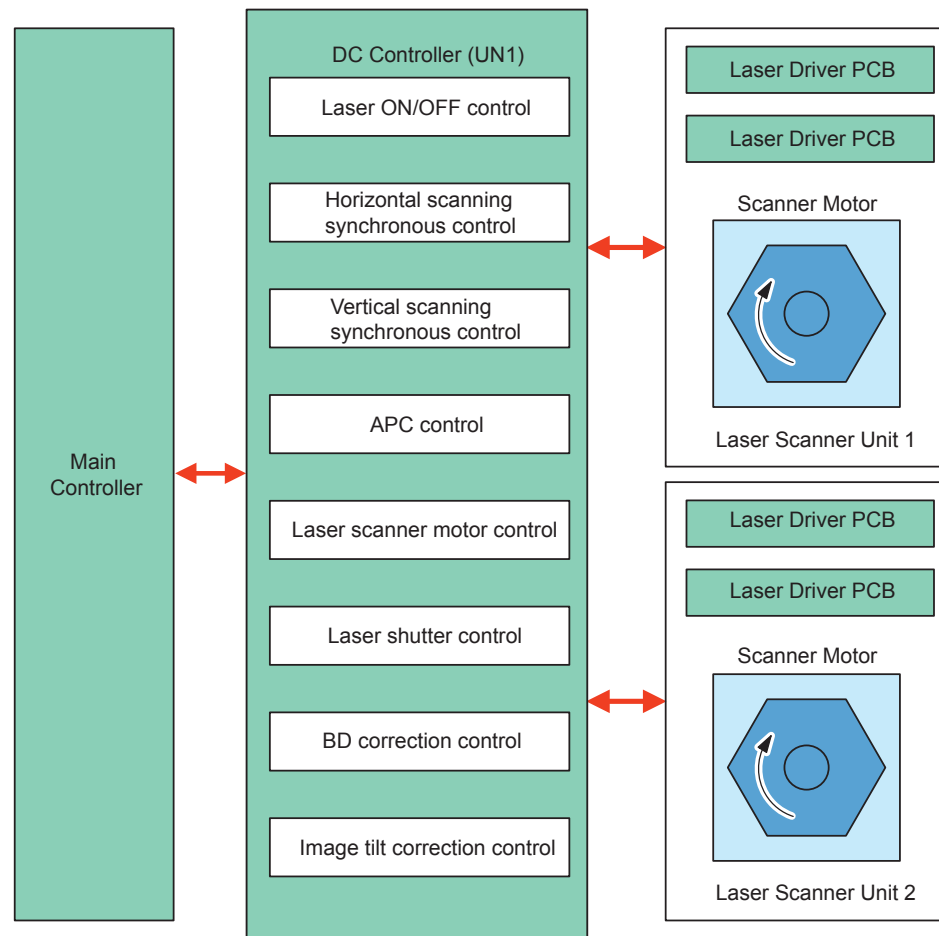
T-2-22

## Various Controls

### Overview

Item	Operation description
Laser ON / OFF control	Laser light is turned ON / OFF according to the combination of laser control signal
Horizontal scanning synchronous control	To align the writing start position in horizontal scanning direction.
Vertical scanning synchronous control	To align the writing start position in vertical scanning direction.
APC control	To make the laser light per 1 line consistent amount.
Laser Scanner Motor Control	To rotate the scanner mirror by the specified speed.
BD correction control	To correct the gap BD timing gap due to the angle variation of Scanner Mirror.
Laser shutter control	To prevent the laser light from being emitted to the machine inside.
Image tilt correction control	To correct the image tilt in vertical scanning direction (this control is operated based on the result of color displacement correction control).

T-2-23



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## Laser ON / OFF control

### Purpose

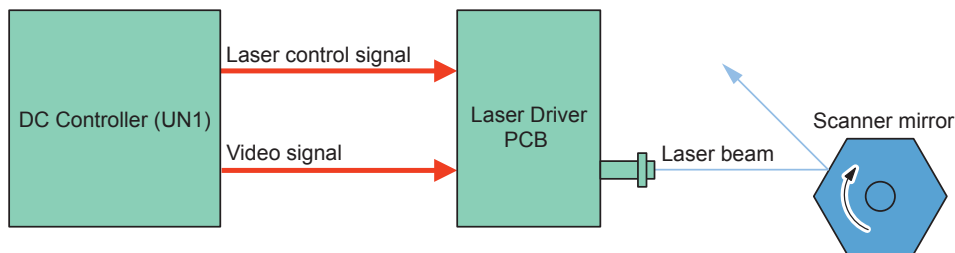
Laser light is turned ON / OFF according to the combination of laser control signals.

### Execution timing

After the power ON

### Control detail

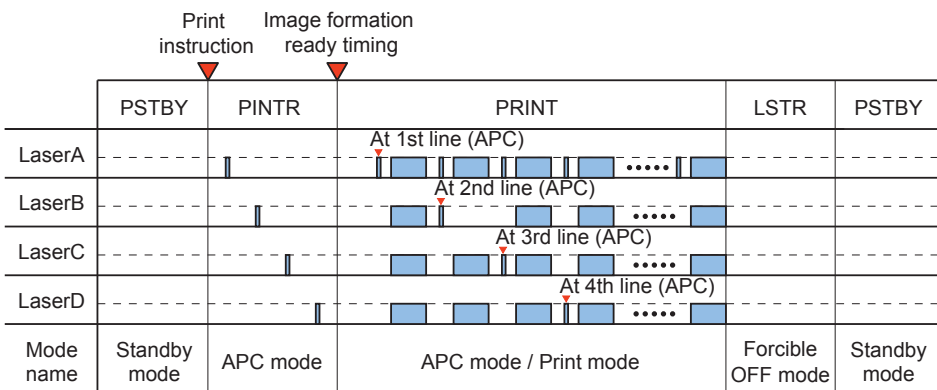
DC Controller switches the 4 modes (forcible OFF mode, APC mode, Print mode and standby mode) according to the laser control signal.



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Mode	Laser status	Remark
Forcible OFF mode	OFF	Light intensity setting decided on APC is cleared.
APC mode	ON	Laser light intensity adjustment
Print mode	ON / OFF	Laser is emitted according to the video signal.
Standby mode	OFF	Host machine is in standby status.

T-2-24



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## Horizontal scanning synchronous control

### Purpose

This is to align the writing start position in horizontal scanning direction.

### Execution timing

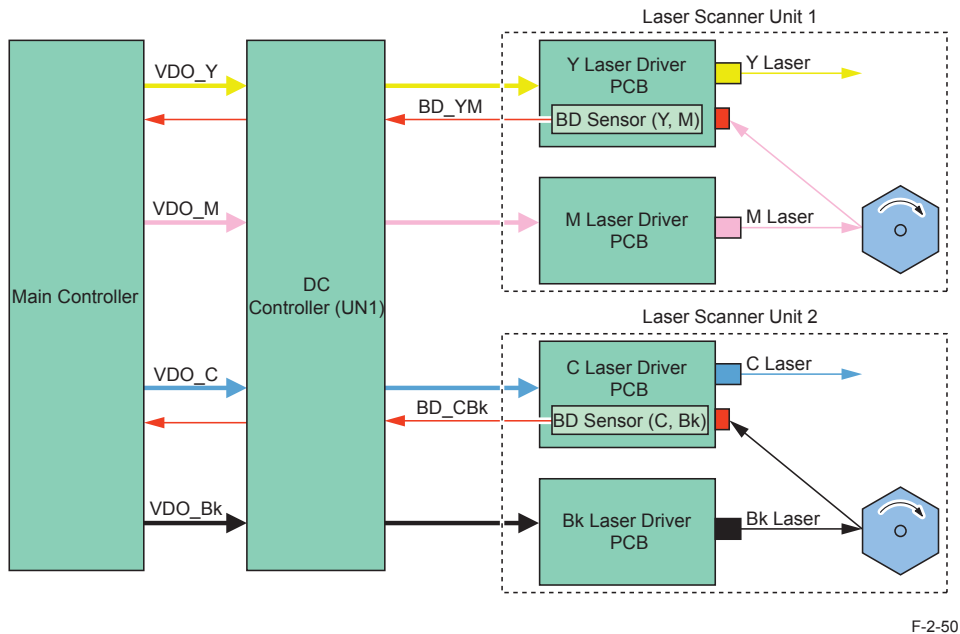
Per 1 line

### Execution time

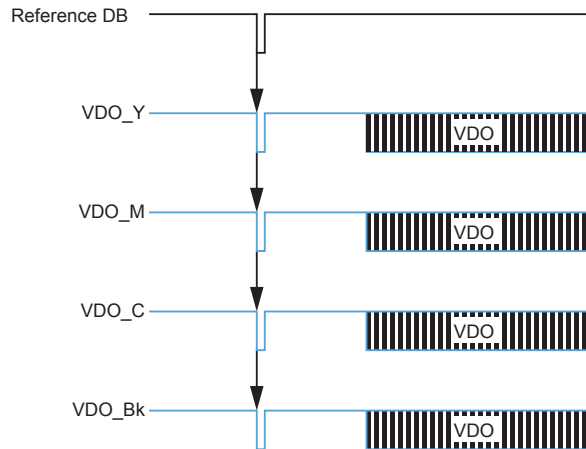
Approx. 7.5μs

### Control detail

- 1) DC Controller forcibly emits the laser diode on M-laser driver PCB by setting the laser control signal of M-laser to APC mode. Also, DC controller forcibly emits the laser diode of Bk laser driver PCB by setting the Bk laser control signal to APC mode.
- 2) Concerning the laser beam of M laser, there is a BD sensor (Y, M) on the scanning light path and the laser beam is emitted to the BD sensor (Y, M). Regarding the laser beam of Bk laser, there is a BD sensor (C, Bk) on the scanning light path and the laser beam is emitted to the BD sensor (C, Bk) as well.
- 3) Two BD sensors detect the laser beam, create the BD signal (BD\_YM, BD\_CBk) and send it to the DC controller.
- 4) DC Controller executes synchronous control based on this signal and sends the standard BD signal to Main Controller as a horizontal scanning synchronous signal (BD) per 1 line.
- 5) When Main Controller receives those signals, it outputs the video signal (VDO\_Y, VDO\_M, VOD\_C, VDO\_Bk) to DC Controller. As a result of this, the Laser Driver emits the laser beam from the specified position for each line.



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F-2-51

## Vertical Scanning Synchronous Control

### Purpose

This is to align the writing start position in vertical scanning direction.

### Execution timing

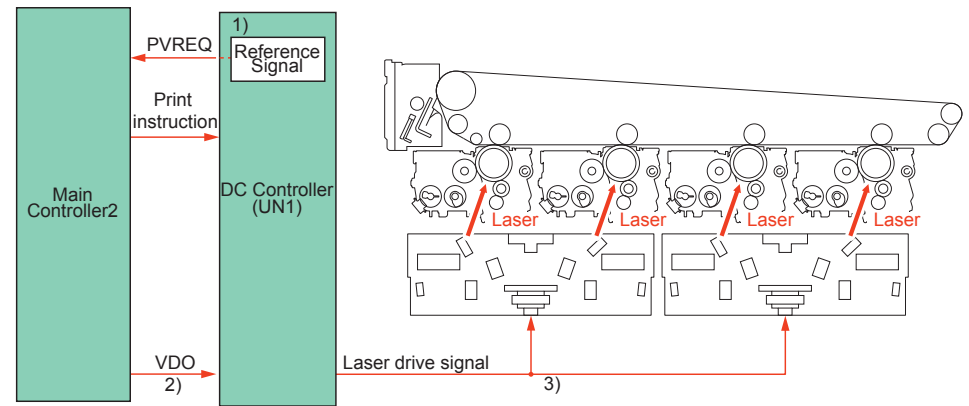
Per printing

### Execution time

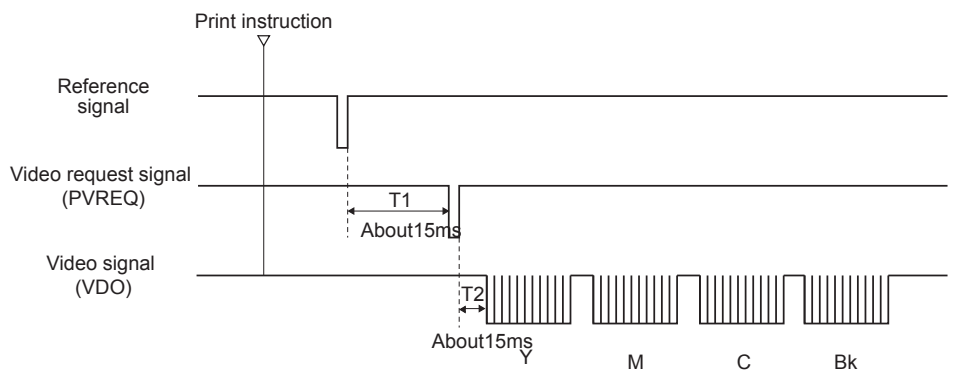
500ms

### Control detail

- 1) When DC Controller receives the print instruction, it detects the reference signal. Based on this signal, it creates the vertical scanning synchronous signal (PVREQ) and sends to Main Controller.
- 2) Main Controller is synchronized with PVREQ signal and sends VDO signal to DC Controller.
- 3) DC Controller creates the laser drive signal based on VDO signal and sends it to the Laser Scanner Unit. The Laser Scanner Unit conform the image leading edge with the paper leading edge by emitting the laser in this timing.



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F-2-53

## ■ APC (Auto Power Control) control

### ● Purpose

This is to make the laser light for 1 line consistent amount.

### ● Execution timing

Per each line (before image writing)

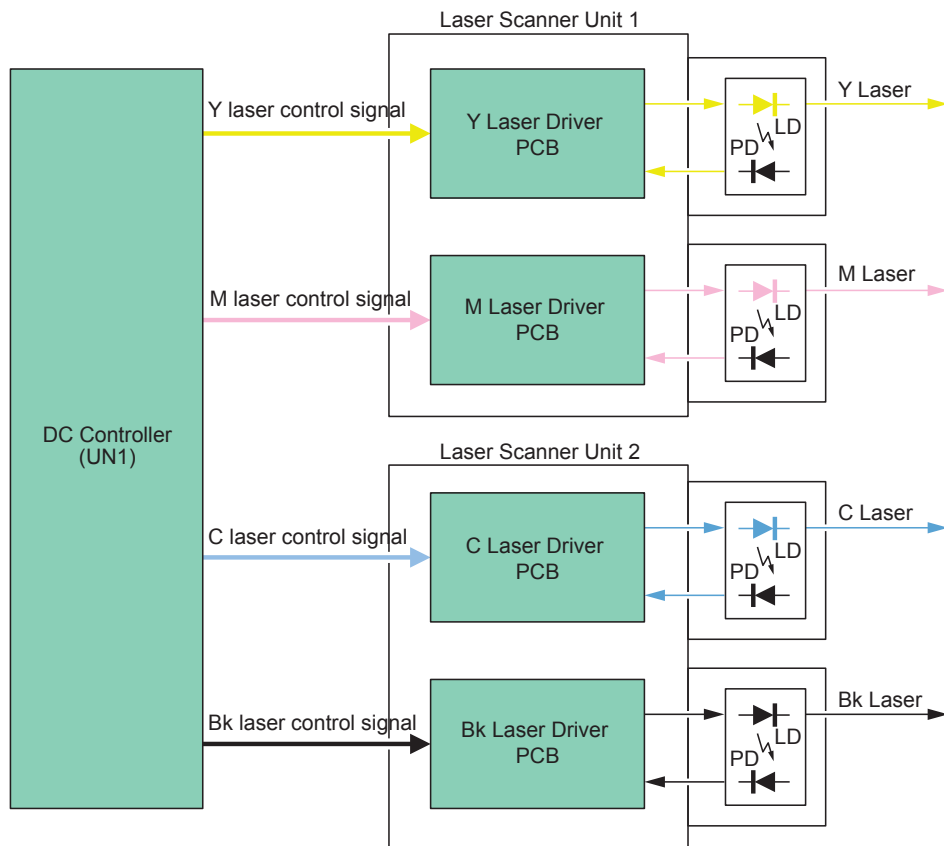
### ● Execution time

Approx. 2  $\mu$ s

### ● Control details

- 1) DC Controller outputs the laser control signal to the Laser Driver IC on the Laser Driver PCB.
- 2) APC mode is specified to the Laser Driver IC and it forcibly emits the laser diode of each color. At the same time, each laser driver IC monitors the laser diode (LD) on the photo diode (PD) and adjusts the output of laser diode until the light intensity becomes consistent amount.





F-2-54

## ■ Laser scanner motor control

### ● Purpose

This is to rotate the scanner mirror by the specified speed.

### ● Execution timing

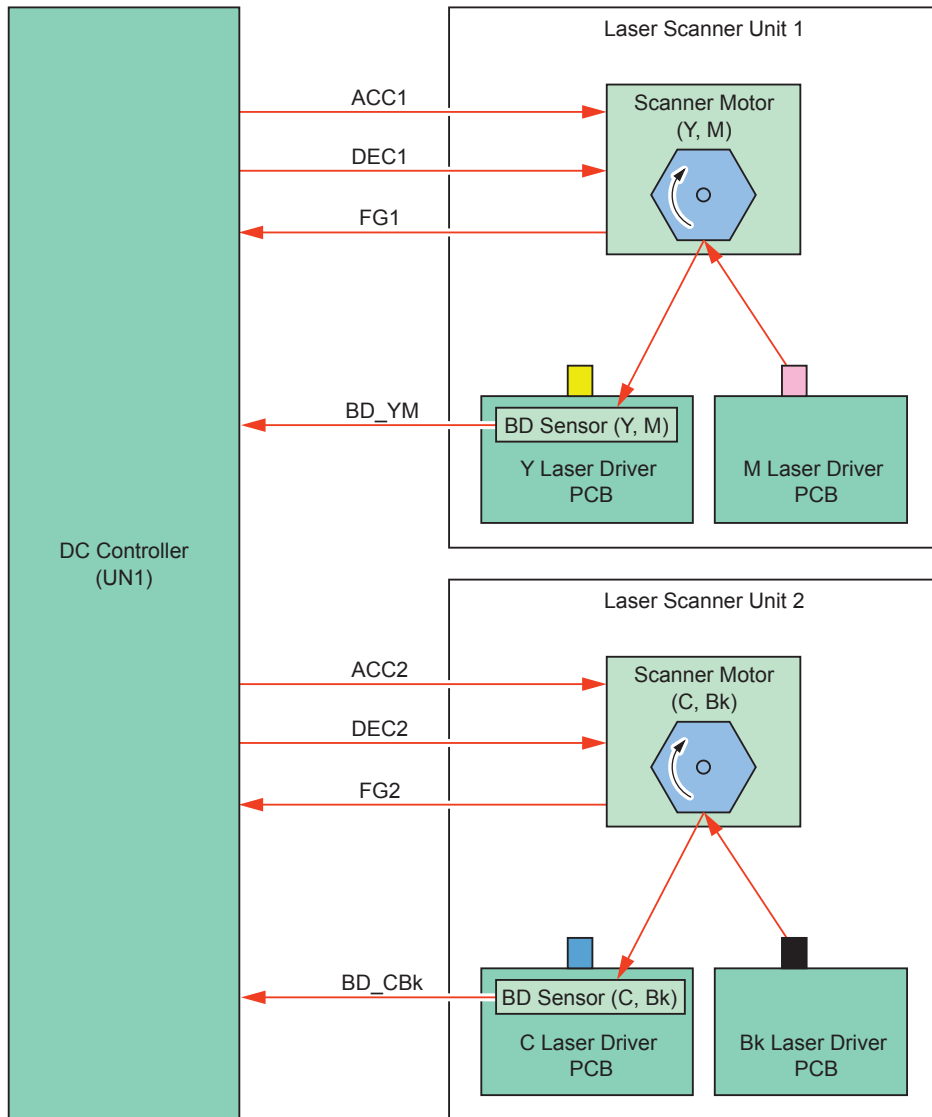
At power-ON, per printing

### ● Execution time

Approx. 3s (at power-ON), approx. 1s (at printing)

### ● Control detail

- 1) DC Controller forcibly rotates the motors in the two Laser Scanner Units.
- 2) It detects the speed detection signal (FG1 to 2, BD\_YM, BD\_CBk) and compares the signal with the standard signal in DC Controller and then, controls the acceleration signal (ACC1 to 2) and the deceleration signal (DEC1 to 2) to make the specified speed.



F-2-55

## Related error code

E100-0100: BD error (laser scanner unit 1)

When the Laser Scanner Unit 1 (YM laser) is started or print operation is processing, if the BD signal cannot be detected after the specified time.

E100-0300: BD error (laser scanner unit 2)

When the Laser Scanner Unit 2 (CBk laser) is started or print operation is processing, if the BD signal cannot be detected after the specified time.

E100-B000: BD error (laser scanner unit 1/2)

When the Laser Scanner Unit 1/2 is started or print operation is processing, if the BD cycle cannot be detected after the specified time.

E102-0100: EEPROM error (laser scanner unit 1)

Reading error of EEPROM on Laser Driver (Y) occurs.

E102-0300: EEPROM error (laser scanner unit 2)

Reading error of EEPROM on Laser Driver (C) occurs.

## BD correction control

### Purpose

This is to correct the displacement of writing start position of each color laser due to the angle variation of scanner mirror facet.

### Execution timing

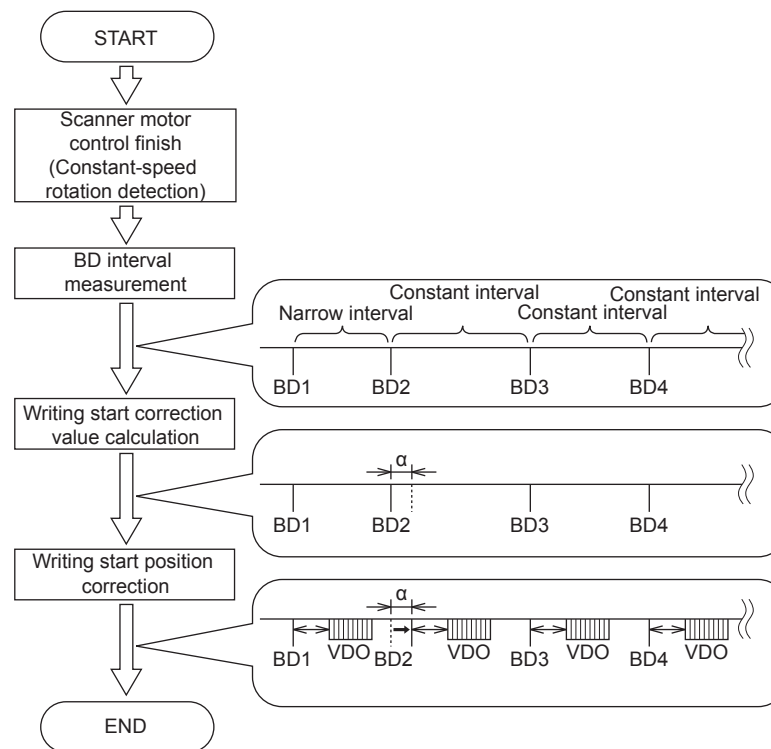
At power-ON, per printing

### Execution time

Within approx. 0.5s or less

### Control detail

- 1)DC Controller measures the BD interval after the constant-speed rotation control of Scanner Motor is completed.
- 2)DC Controller calculates the correction value according to the gap of BD interval.
- 3)Based on the foregoing correction value, image writing position is corrected.



F-2-56

## ■ Laser shutter control

### ● Purpose

This is to prevent the residue toner from sticking to the dust-prevention glass. Or to prevent the laser light from emitting to the machine inside when the front cover / right cover is opened.

### ● Execution timing

After power-ON

### ● Execution time

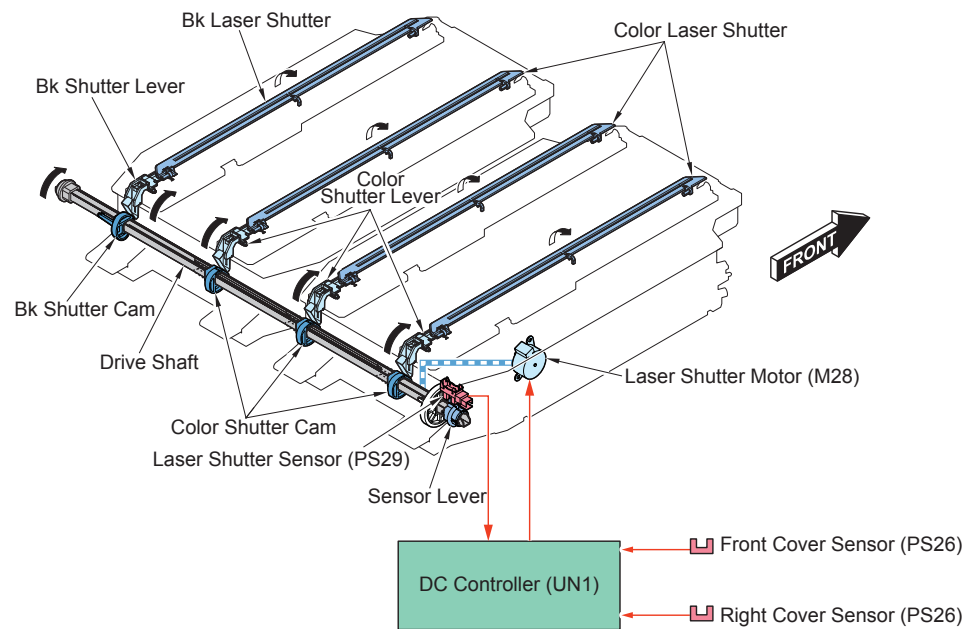
Approx. 3s (at power-ON), approx. 1s (when scanner motor is started or cover is opened)

### ● Control detail

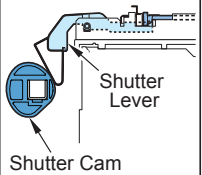
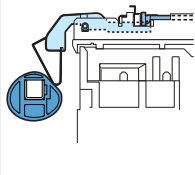
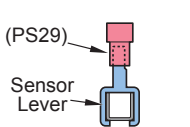
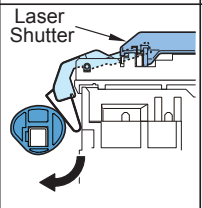
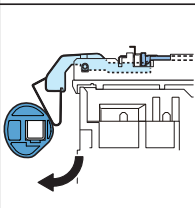
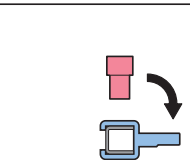
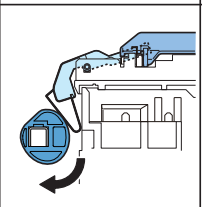
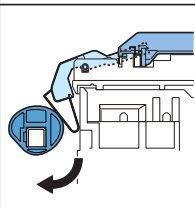
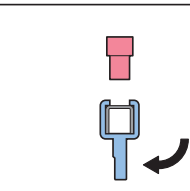
While the Laser Scanner Motor is operating, the Laser Shutter is opened. During other period, the laser shutter is closed.

Also, the Front Cover Sensor (PS18) or the Right Cover Sensor (PS20) works together and it stops the output signal of laser driver. At the same time, if the Front Cover or Right Cover is opened, the Shutter is closed and the laser light path is forcibly blocked.

Those operations are controlled by the DC Controller.



F-2-57

Laser shutter position		Relation of shutter lever and cam		Sensor lever position
For Bk	For color	For Bk	For color	
Close	Close			
Open	Close			
Open	Open			

F-2-58

## Image tilt correction control

### Purpose

This is to prevent the gap of laser emission.

### Execution timing

At power-ON, per total 360 sheets printing

### Execution time

Approx. 3 sec

### Control detail

- 1) DC Controller creates the patch pattern of each color on the ITB.
- 2) DC Controller compares the patch pattern with the standard value backed up in the DC Controller by reading this patch pattern at the Patch Sensor and detects the color displacement amount.
- 3) Based on the foregoing detection result, the laser emission position (tilt degree) of Laser Scanner Unit is changed.

#### Related error code

E0112-0000: Laser shutter motor error (not in home position)

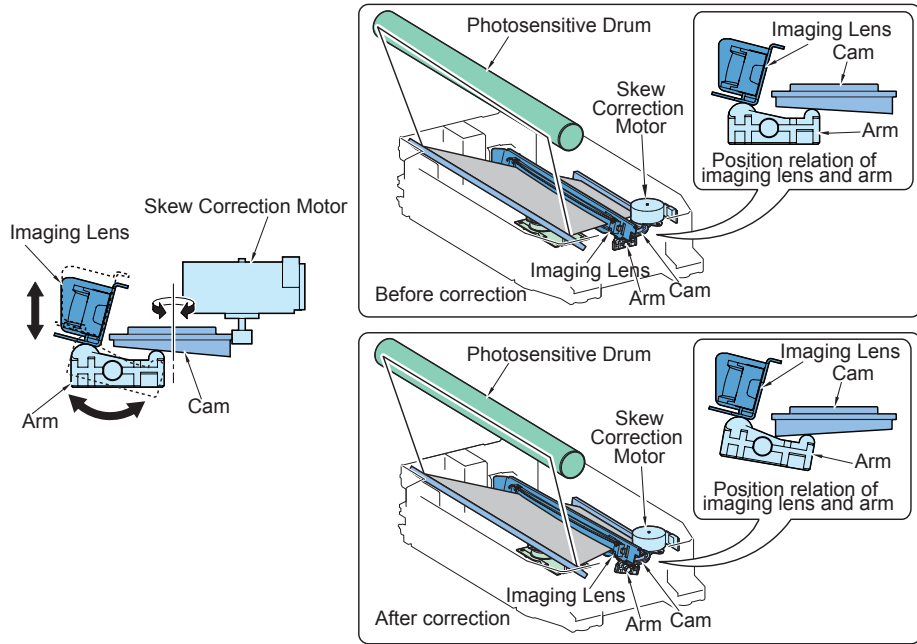
If the Laser Shutter Sensor (PS29) is not in the home position at initial operation.

E0112-0001: Laser shutter motor error (operation failure at shutter close)

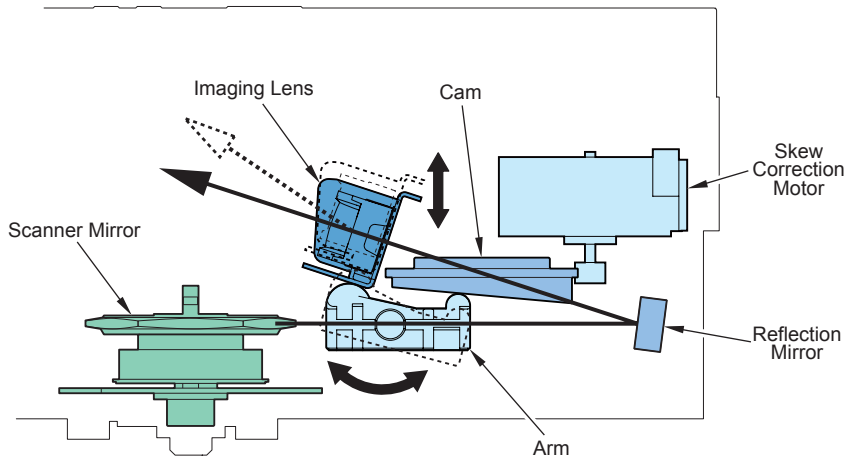
If the Laser Shutter Sensor (PS29) is not in the home position after approx. 10 sec from the shutter close operation.

E0112-0002: Laser shutter motor error (operation failure at shutter open)

If the Laser Shutter Sensor (PS29) is still in the home position after approx. 10 sec from the shutter open operation.



F-2-59



F-2-60

## Service Works

### Periodically replaced parts

There is no periodically replaced part.

### Consumables

No.	Parts Name	Parts Number	Qty	Estimated Life
1	Dust-blocking Glass cleaning pad	FL2-9476	1	150k

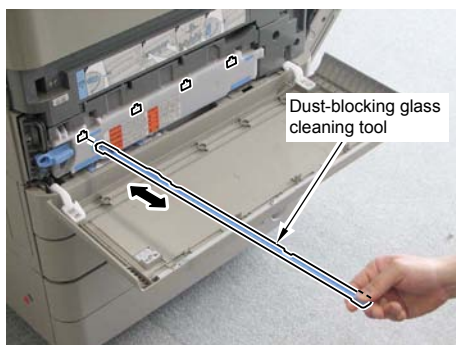
T-2-25

### Periodical service list

Parts name: Dust-blocking Glass

Expected life: per 50K sheet

Operation: Clean it with the Dust-blocking Glass Cleaning tool stored in the machine.



F-2-61

### Operation at parts replacement

N / A

### Points to note at servicing

Do not install a used Laser Scanner Unit 2 (C/Bk laser) to the position where a Laser Scanner Unit 1 (Y/M laser) should be installed.

With this machine, yellow laser is used as a reference to control other colors. This means that the reference will be changed if the Laser Scanner Unit for YM side and that for CBk side are replaced with each other. As a result of this, color displacement will occur and may not be solved. Even if the units are returned after they were replaced with each other once, the reference was changed when they were replaced, therefore color displacement will not be solved.

# Image Formation System

## Overview

### Overview

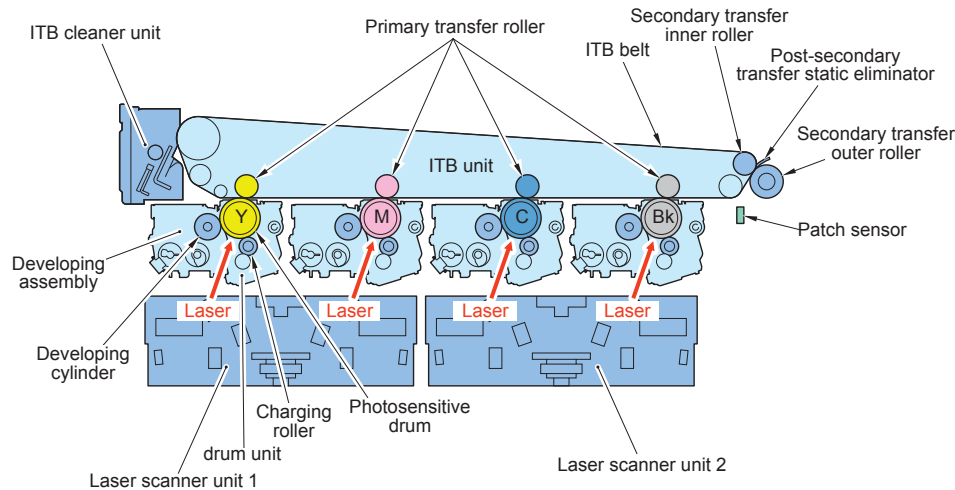
Image formation system of this machine uses the magnetic 2-component jumping developing method for developing and the intermediate transfer method for transfer to create toner image.

To increase life of the image formation unit, this machine uses the primary transfer disengagement method as a new technology.

Following shows major improved points compared to the previous iRC3880/2880 series.

**Purpose :**  
 Lower running cost  
 Improved life of drum unit  
 Improved life of developing assembly  
 Improved productivity

**Improved points :**  
 Separating developing assembly from drum unit  
 Introducing Bk drum (highly-durable type)  
 Introducing ACR (Auto Carrier Refresh) technology  
 Separating the laser scanner unit into 2 units  
 (4-beam for each laser driver) (see Note)



F-2-62

**Note :**  
 4-beam for iR ADVANCE 5255/5250, 2-beam for iR ADVANCE 5240/5235

## Specifications

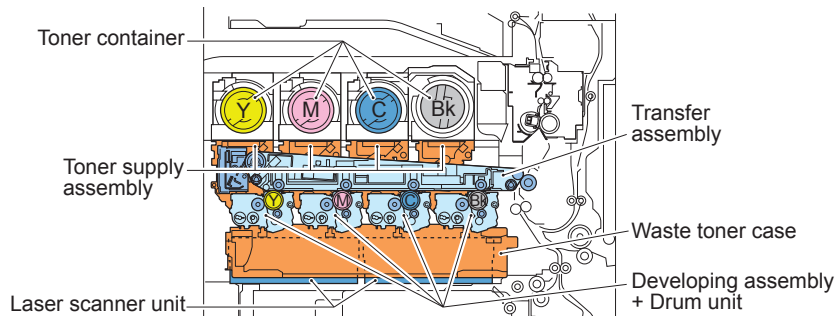
Item		Function/Method
Photosensitive Drum	Material	OPC
	O/D of drum	30mm
	Cleaning	Cleaning blade
	Process speed	imageRUNNER ADVANCE C5051=246mm/s, imageRUNNER ADVANCE C5045=246mm/s, imageRUNNER ADVANCE C5035/5030=160mm/s
	Drum heater	Mounted with Bk drum as a standard. Assigned as an option for color drums.
Developing assembly	Developing cylinder	1pc (single developing)
	Developing method	Dry, 2-component jumping
	Toner	Non-magnetic negative toner
	Toner level detection	Not available
	O/D of cylinder	20mm
Primary charging	Charging method	Roller charging
	O/D of roller	14mm
	Cleaning	Brush roller
Toner container	Toner amount (the life value is based on A4 size with 5% image ratio)	imageRUNNER ADVANCE C5051/5045 Bk: approx. 940g (Life: approx. 40k) Color: approx. 590g (Life: approx. 30k) imageRUNNER ADVANCE C5035/5030
	Detection of toner container (presence)	Not Available
	Availability to replace a toner container (during continuous print)	Available
	Transfer method	Intermediate Transfer (ITB)
ITB unit	Material	PI (Polyimide)
	Circumferential length	893mm
	Cleaning	Cleaning blade
	Belt displacement correction	Available (photosensitive sensor)
Primary transfer	Transfer method	Transfer roller
	Disengagement mechanism	Available
	O/D of roller	16mm
Secondary transfer	Transfer method	Transfer roller
	Disengagement mechanism	Not available
	Cleaning	Electrostatic cleaning
	O/D of secondary transfer inner roller	16mm
	O/D of secondary transfer outer roller	24mm
Separating method	Curvature separation + static eliminator	
Patch sensor	Yes	

T-2-26



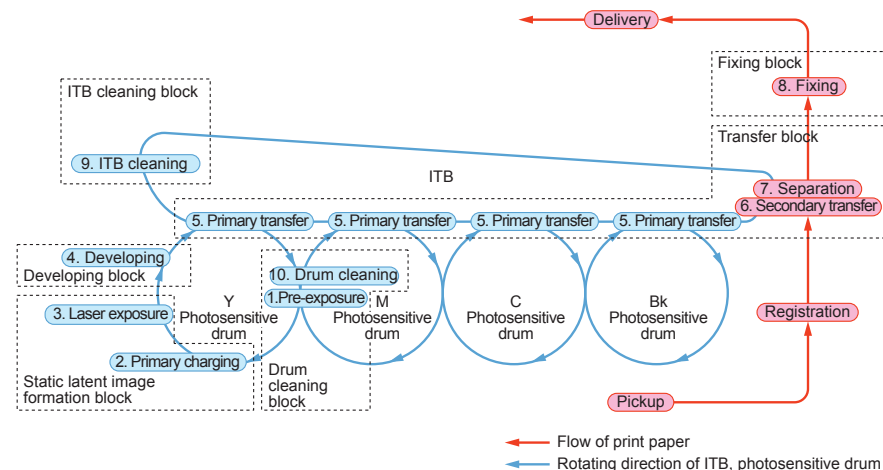
Parts configuration

Major Parts



F-2-63

Print process



F-2-64

Overview

Static latent image formation block	1	Pre-exposure	To remove residual charge on the surface of photosensitive drum by exposure of pre-exposure LED light
	2	Primary charging	To charge the surface of photosensitive drum to be uniformed negative potential
	3	Laser exposure	To create static latent image on the surface of photosensitive drum by emitting laser light (image exposure: laser exposure area becomes image area)
Developing block	4	Developing	To attach negatively-charged toner from the developing cylinder to the photosensitive drum by non-negative 2-component jumping developing method.
Transfer block	5	Primary transfer	To apply positively-charged potential from the back surface of ITB to transfer toner on the surface of photosensitive drum to ITB.
	6	Secondary transfer	To apply positively-charged potential to the secondary transfer outer roller to transfer toner on the ITB to the paper.
	7	Separation	To separate paper from the ITB by curvature separation method. In the case of thin paper which has low elastic force, the static eliminator reduces potential on the surface of paper to separate thin paper more easily.
Fixing block	8	Fixing	To fix toner on the paper with heat and pressure.
ITB cleaning block	9	ITB cleaning	To remove residual toner on the ITB by the cleaning blade.
Drum cleaning block	10	Drum cleaning	To remove residual toner on the photosensitive drum by the cleaning blade.

T-2-27

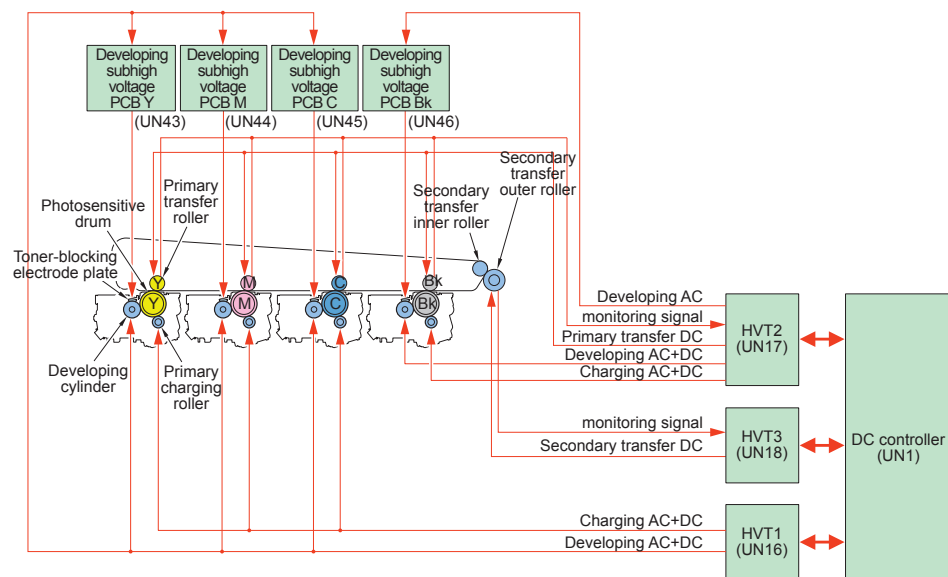
## Bias Types

There are the following 8 types biases used on this machine.

Bias name	Bias type	Bias value (Reference value)	Application destination
Primary charging bias (DC)	DC	Approx. -600V	Primary Charging Roller
Primary charging bias (AC)	AC	Approx. 1.5kVpp	
Flying toner blocking bias (DC)	DC	Approx. -1.3kV	Toner Blocking Terminal Plate
Developing bias (DC)	DC	Approx. -400V	Developing Cylinder
Developing bias (AC)	AC	Approx. 1.6kVpp	
Primary transfer bias	DC	Approx. 1.5kV	Primary Transfer Roller
Secondary transfer bias	DC	Approx. 3kV	Secondary Transfer Outer Roller
Secondary transfer cleaning bias	DC	Approx. -1.0kV	

T-2-28

Aforementioned biases are created by 3 HVT and are supplied to the loads used in the printing process.



F-2-65

## Controls

### Overview

<b>Pre-exposure</b>		<b>Image stabilization control</b>	
Pre-exposure control		Drum film thickness detection	
		D-max control	
		D-half control	
		ARCDAT control	
		PASCAL control	
		Color displacement correction control	
		ATVC control	
<b>Primary charging</b>		<b>Toner supply</b>	
Primary charging bias control		Toner cap automatic opening control	
Discharge current control		Toner level detection/toner supply control	
Primary charging cleaning control			
<b>Developing/drum</b>		<b>Waste toner feeding</b>	
Developing bias control		Waste toner full level detection	
ACR (Auto Carrier Refresh) control		Waste toner case (presence) detection	
Toner-blocking bias control			
Drum (presence) detection			
New/old detection of drum unit			
Drum life detection			
Drum heater control			
Drum Drum rotation speed control			
<b>Transfer/separation</b>			
Primary transfer disengagement control			
Primary transfer bias control			
Secondary transfer bias control			
ITB displacement correction control			
ITB cleaning control			
Secondary transfer outer roller cleaning control			
<b>Drum cleaning</b>			
Drum cleaning control			

T-2-29

## Pre-exposure

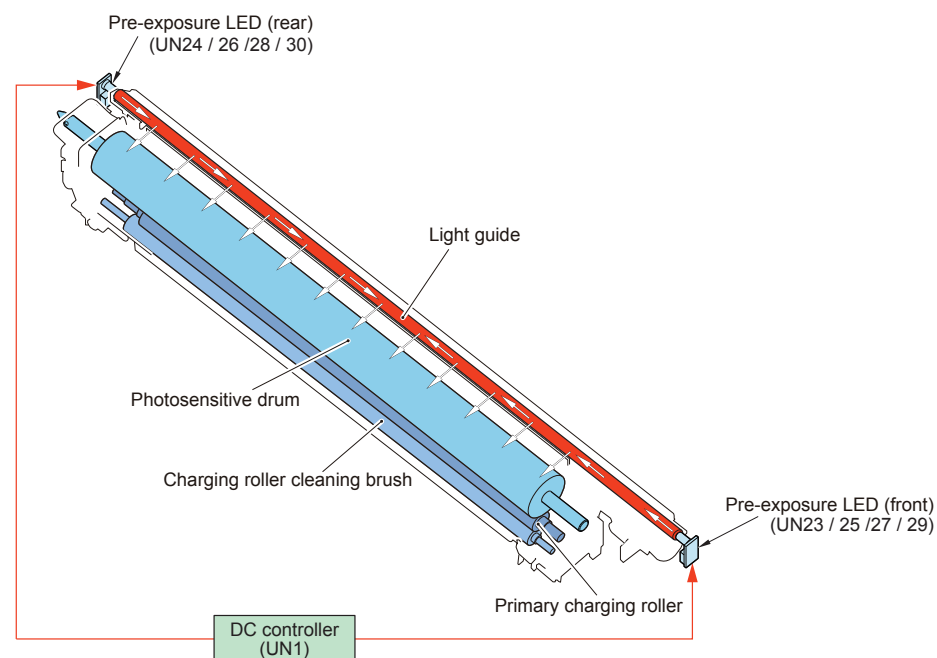
### Pre-exposure control

Removing residual potential on the photosensitive drum before executing the primary charging prevents drum ghost during continuous print.

According to the command from the DC controller PCB, the pre-exposure unit exposes (emits) LED when the photosensitive drum is rotated.

Emitting LED light through the light guide removes residual potential on the photosensitive drum.

To make up for the lack of LED's light intensity, two (2) pre-exposure LEDs are used in total: one at the front of the main unit, and the other at the rear of the main unit.



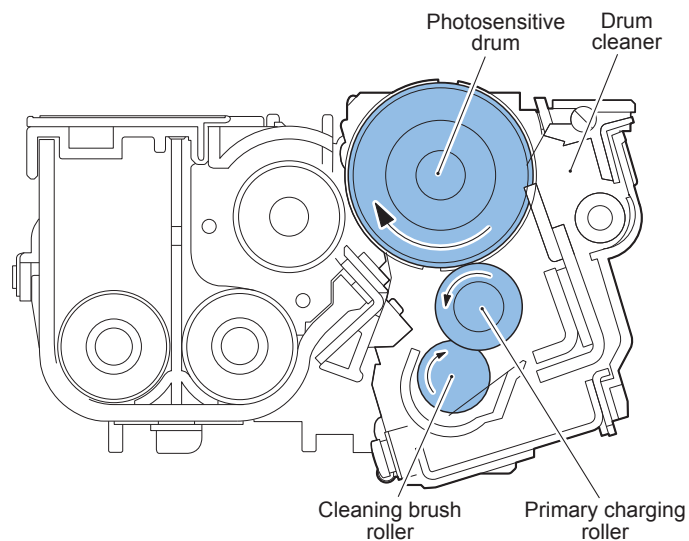
F-2-66

## Primary charging

### Overview

This machine uses the roller charging method for primary transfer.

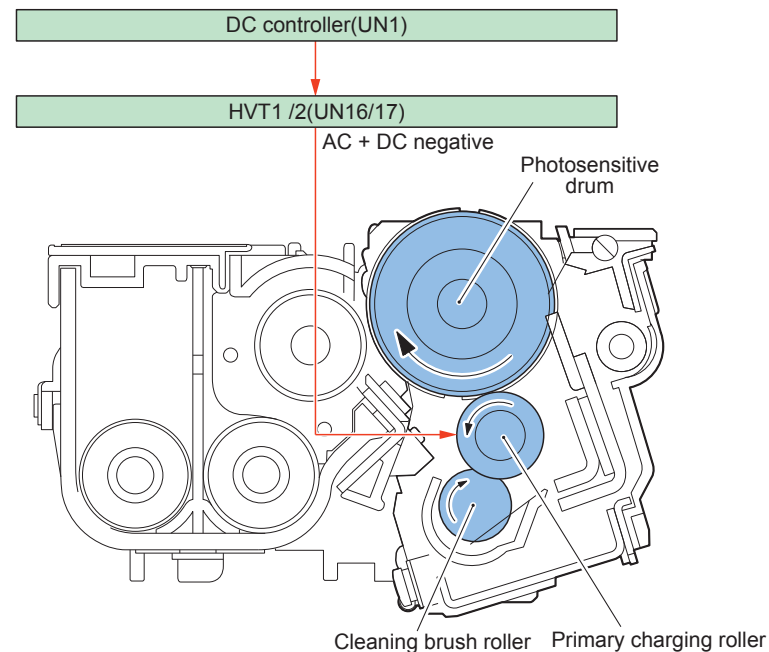
To prevent image fault (white spot/missing image) caused by residual toner, the cleaning brush roller is added to clean the primary charging roller.



F-2-67

### Primary charging bias control

To charge the surface of photosensitive drum to be uniform negatively-charged potential. The primary charging bias (AC+DC negative), generated by HVT1/2 PCB, is applied to the primary charging roller.



F-2-68

### Discharge current control

To apply optimal primary charging bias according to the environmental change or use condition of photosensitive drum

Execution timing

- 1) When the power is turned ON, at sleep recovery
- 2) At last rotation after printing 125 accumulated sheets, or at paper interval after printing 250 accumulated sheets (see Note1)

Note1: The number of accumulated sheets is counted by the counter common for color mode and Bk mode.

Detection description

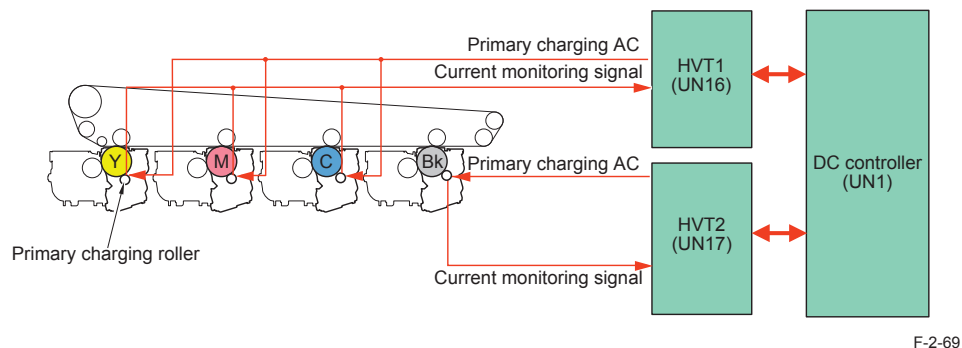
To detect the current monitoring value of the primary charging AC bias

Execution time

Approx. 4 seconds

Operation of the main unit

- 1) Current monitoring value of the primary charging AC bias is detected
- 2) Optimal primary charging current value is determined according to the result of the environment sensor (UN22) and the current monitoring value
- 3) The primary charging AC bias is determined to apply to the primary charging roller



F-2-69

Related error codes:

E061-0X01: Abnormal current run to the Drum (small current level or no drum is found)

E061-0XE0: The change in current level for Drum film thickness detection is too much compared to the previous time.

E061-0XF0: Abnormal initial current level at the time of initialization of the Drum film thickness (large current level)

E061-0XF1: Abnormal initial current level at the time of initialization of the Drum film thickness (small current level)

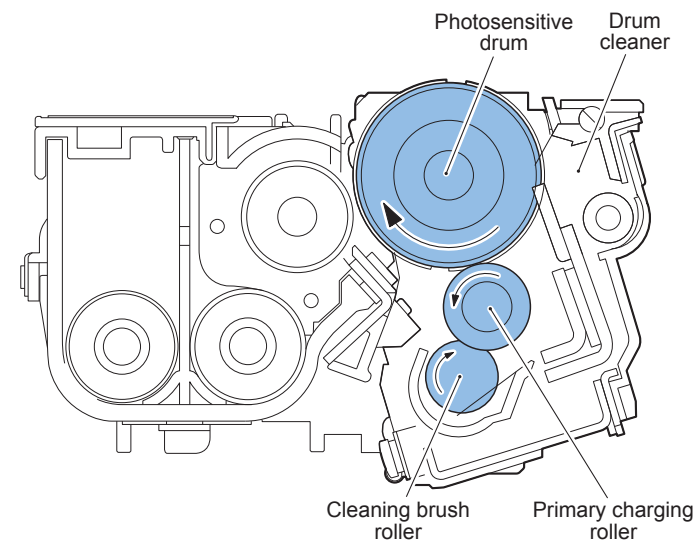
x indicates the corresponding color. (0=Y, 1=M, 2=C, 3=Bk)

## ● Primary charging cleaning control

This machine may not be able to collect residual toner on the drum because this machine uses fine-grain toner, which possibly results in image fault (image soiling) due to residual toner attached on the primary charging roller.

To prevent this symptom, the cleaning brush roller is added to forcibly remove residual toner attached on the primary charging roller.

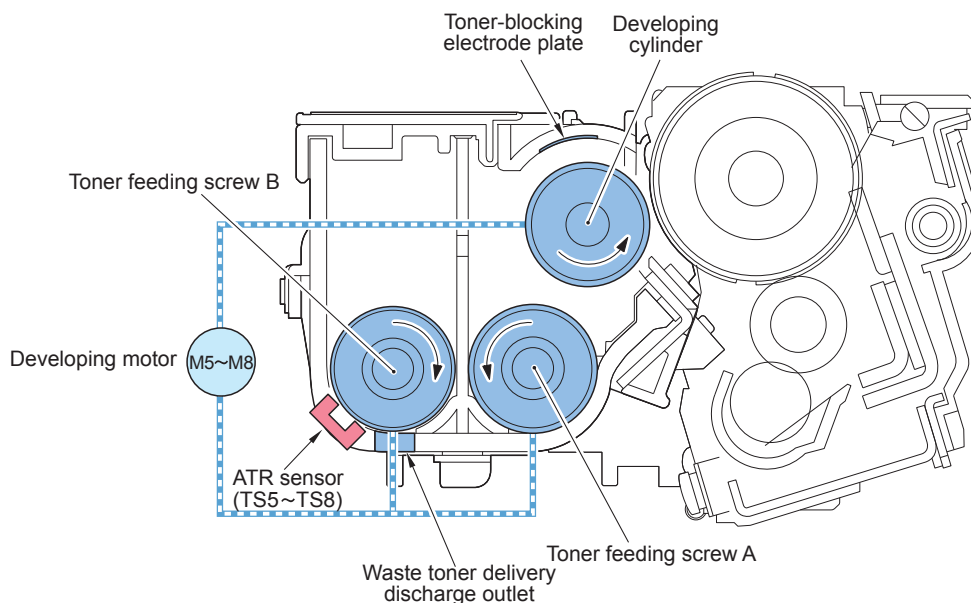
The drive of the brush roller is engaged with the primary charging roller.



F-2-70

## Developing/drum

### Developing overview



F-2-71

Parts name	Function
Developing assembly	To develop toner fed from the hopper unit on the photosensitive drum
Developing cylinder	To develop toner in the developing assembly on the photosensitive drum
Toner feeding screw A/B	To stir developer (toner and carrier) in the toner container to supply to the developing cylinder
Toner-blocking electrode plate	To apply DC bias to the electrode plate to increase retention strength of toner on the developing cylinder

T-2-30

### Drive configuration

Parts name	Function	
M5 to M8	Developing motor	To rotate the developing cylinder and the toner feeding screw
TS5 to TS8	ATR sensor	To detect the ratio of developer (toner + carrier) in the developing assembly

T-2-31

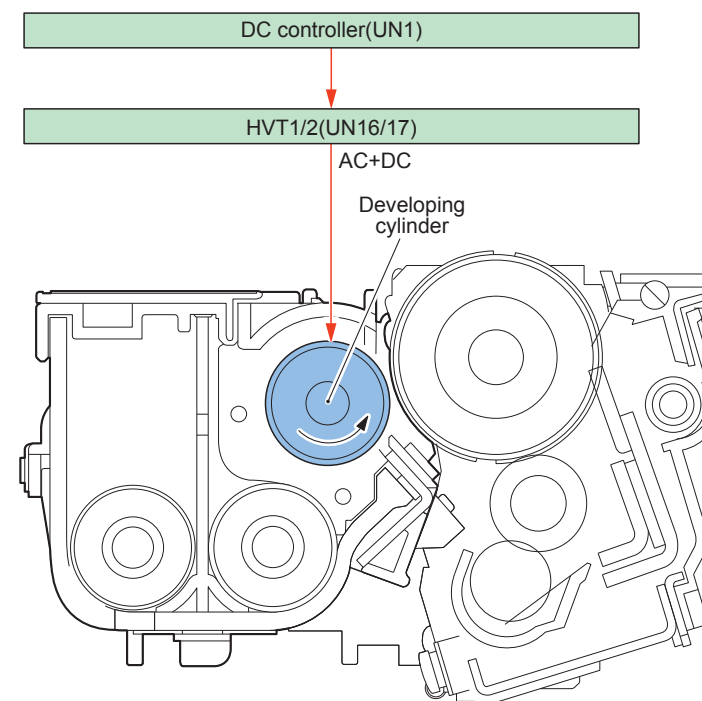
### Developing bias control

To create toner image on the photosensitive drum after the toner has been attached on the photosensitive drum

Control description

The developing bias (AC, DC negative) generated by HVT1/2 (UN16/17) is applied to the developing cylinder

- Developing DC bias: bias for generating potential difference from the photosensitive drum  
Bias value is determined based on detection result of the drum film thickness
- Developing AC bias: bias for improving image quality



F-2-72

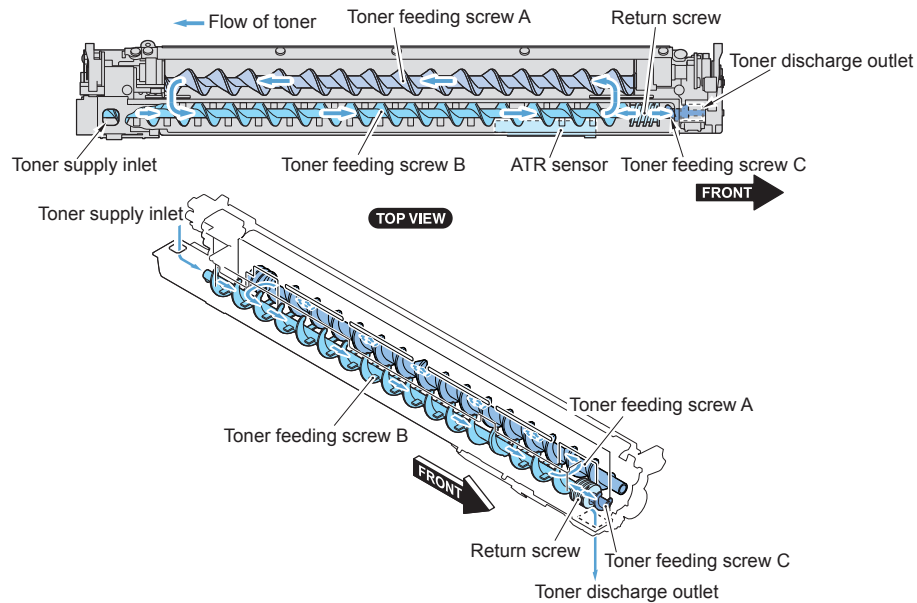
### ● ACR (Auto Carrier Refresh) control

This machine introduced a method to supply developer (toner + carrier) to improve life (longer life) of the developing assembly.

This is a control to supply developer to the developing assembly and also discharge developer to keep optimal developer amount in the developing assembly.

This control prevents deterioration of carrier, which had been occurred due to reuse of developer in the developing assembly.

The Toner Feed Screw A & B drive when the Developing Motor (M5 to 8) drives so that the developer will be exhausted. The developer is supplied at the right time based on the ATR control result.



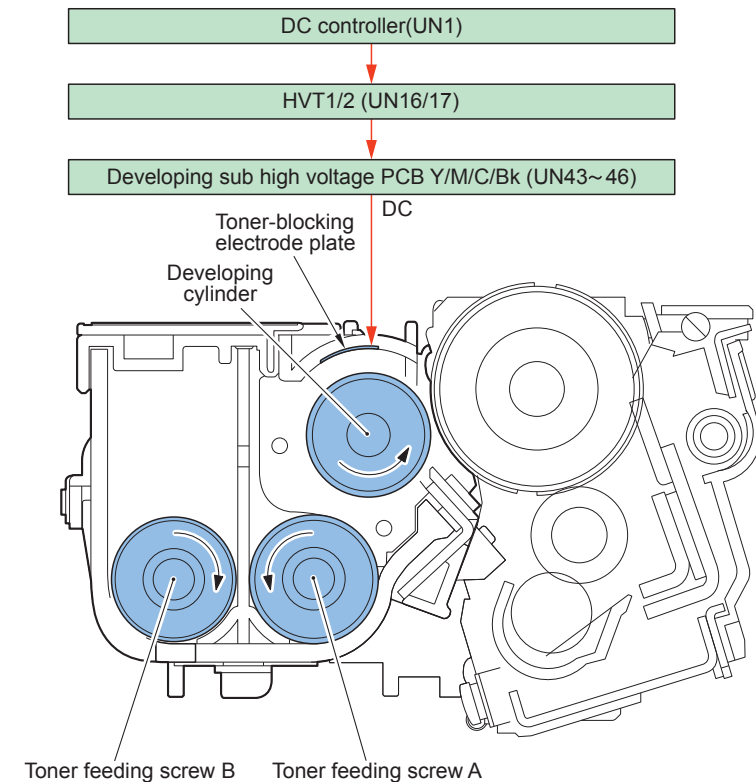
F-2-73

### ● Toner-blocking bias control

This control prevents scattering of toner on the developing cylinder due to deterioration of the developing assembly.

Developing AC bias which has been generated by HVT1 (UN16) is generated to be negative DC bias on the developing sub high voltage PCB (UN43 to 46).

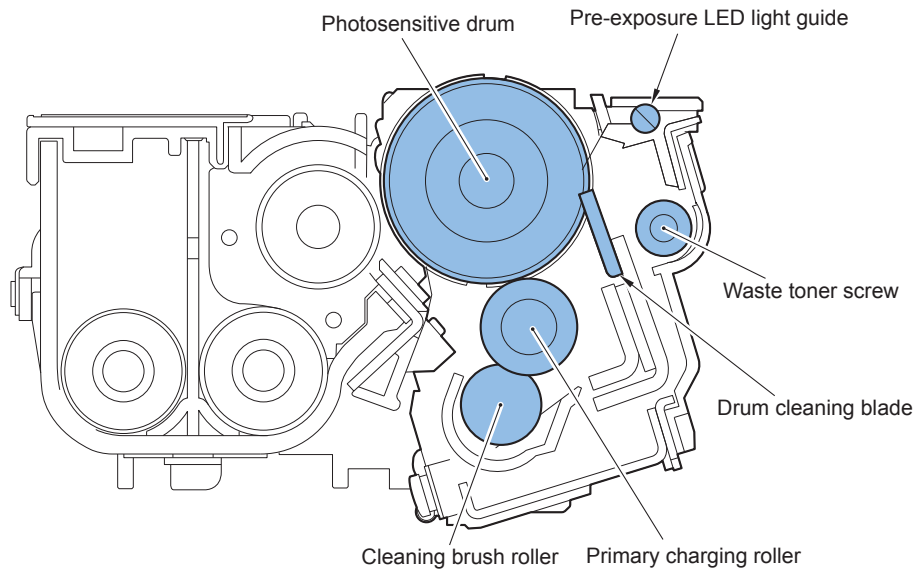
The generated bias is applied to the toner-blocking electrode plate. This improves retention strength of toner on the developing cylinder.



F-2-74



● Drum overview

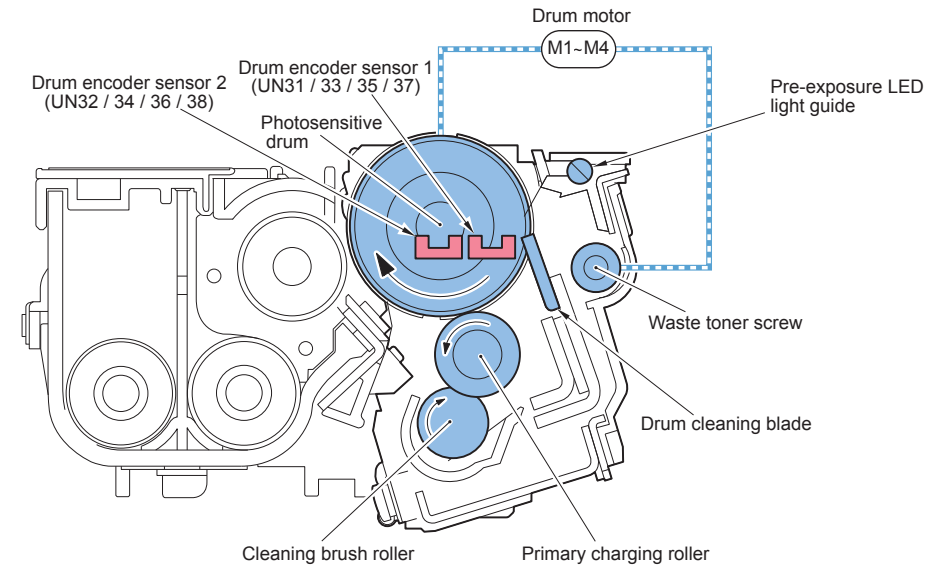


F-2-75

Parts name	Function
Drum unit	To create toner image by the toner from the developing cylinder after the static latent image has been created on the photosensitive drum.
Light guide	To expose pre-exposure LED light on the photosensitive drum
Photosensitive drum	To create toner image on the photosensitive drum
Primary charging roller	To make the surface of photosensitive drum to be evenly-charged potential
Charging cleaning brush roller	To remove residual toner on the primary charging roller
Drum cleaning blade	To remove residual toner on the photosensitive drum
Waste toner screw	To feed residual toner

T-2-32

● Drive configuration



F-2-76

Parts name		Function
M1 to M4	Drum motor	To rotate the photosensitive drum, the waste toner screw
UN31 to UN38	Drum rotation sensor 1/2	To detect rotation of the photosensitive drum

T-2-33



## ● Detection of drum (presence)

To detect if the drum unit is installed or not

Execution timing

- 1) When the power is turned ON
- 2) At recovery from sleep mode

Detection description

It is determined by the current monitor value of the primary charging AC bias at discharge current control.

In case that current monitor value is less than the specified value (1mA): no Drum Unit

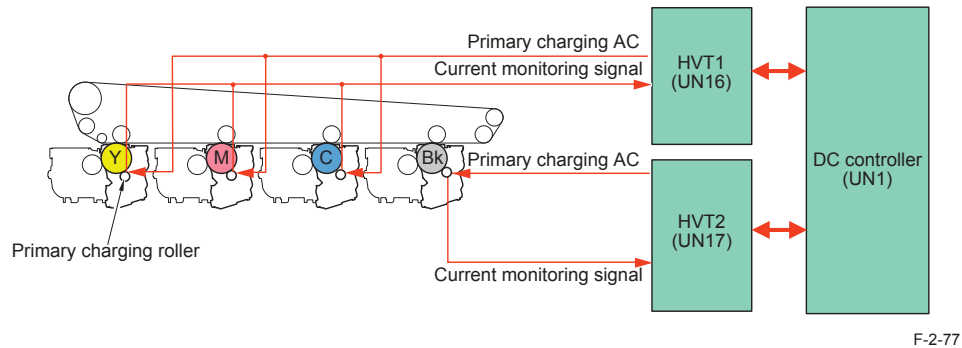
In case that current monitor value is the specified value (1mA) or more: Drum Unit present

Execution timing

Approx. 4 seconds

Operation of the main unit

Operation of the main unit is stopped while "No drum unit" is shown on the control panel.



## ● Old/new detection of drum unit

To detect whether the drum unit is new or old

Detection timing

When the power is turned ON

Detection description

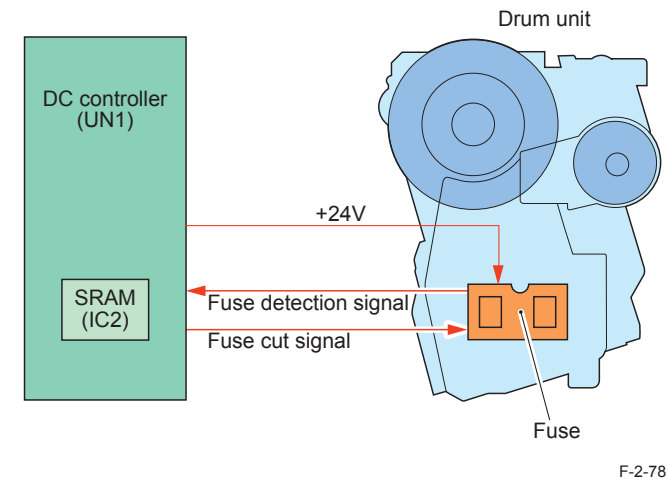
To check state of the fuse that is attached to each drum unit

There is a fuse: new drum

Fuse is blown: used drum

Operation of the main unit

- 1) The main unit checks presence of the fuse attached to each drum (the fuse detection signal is monitored)
- 2) If there is a fuse, the main unit clears the drum film thickness detection data of the applicable drum unit, which is kept in SRAM (IC2).
- 3) The main unit cuts the fuse (to make the fuse cut signal "H")



**MEMO:**

Fuse cut operation is executed when the power is turned ON after a new Drum Unit is installed.

Thus, if replacing a Drum Unit to another one (new one) to identify a cause of failure at a field, fuse is blown and the drum thickness data is cleared.

As a result, even though the original Drum Unit is installed to the host machine again, the host machine identifies it as like-new one and correct print image may not be output.

With consideration to above matter, do not use a new Drum Unit when identifying a cause of failure.

## ● Drum life detection

To detect life of the Photosensitive Drum.

The life data is stored in the SRAM (IC2) of the DC Controller.

The drum life value can be checked from the service mode.

Target drum	Detection items	Data storage location	Reference service mode	Unit
Color drum (YMC)	Primary Charging DC Bias Monitor value (For details, refer to "Drum film thickness detection".)	SRAM (IC2) of the DC Controller	Drum counter life display (COPIER > COUNTER > LF > Y-DRM-LF, M-DRM-LF, C-DRM-LF)	%
Bk drum	Drum rotation time + Primary charging AC bias applying time		Drum counter life display (COPIER > COUNTER > LF > K-DRM-LF)	%

T-2-34

\*1: The life data varies according to the image type, paper type, use environment, etc.

For this reason, the value written in the service mode (drum counter life display) is for reference, so this is not the accurate value.

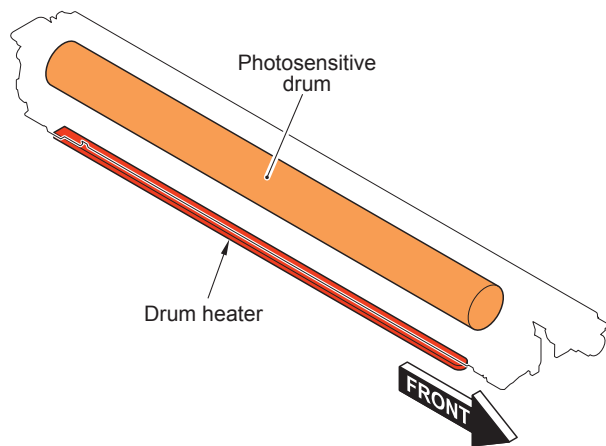
Because of detection sequence, display in service mode may not be changed from 0% for a while (approx. 2,000 sheets) when using a new drum. After feeding approx. 2000 sheets, approximate number can be displayed.

## ● Drum heater control

The drum heater is attached below the photosensitive drum to keep stabilized charging and exposure according to the environmental change in the machine.

This heater is controlled to keep constant internal temperature. Basically, when the Environment Switch is ON, the heater is ON regardless of ON/OFF of the main power except for during printing. (Excluding the case where the internal temperature is high).

It also controls the Cassette Heater in the same manner. (For details, refer to Cassette Heater Control in Pickup Feed System.)



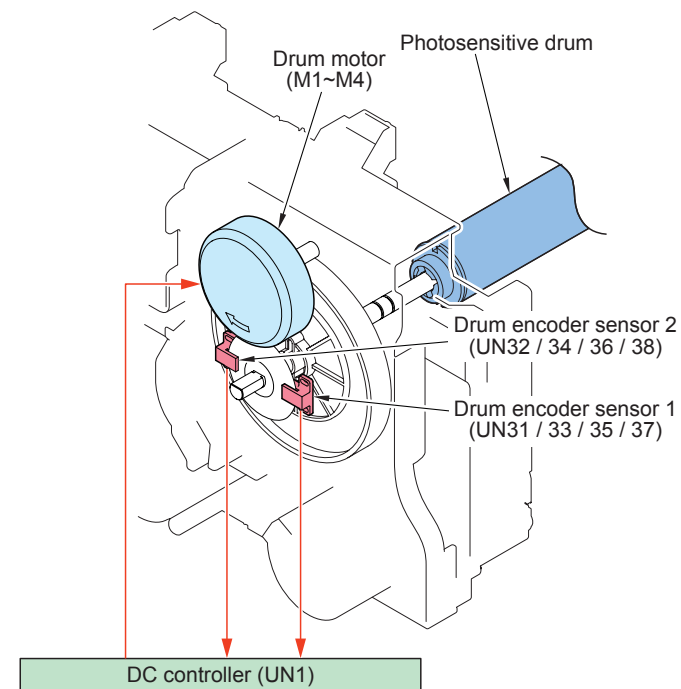
F-2-79

## ● Drum rotation speed control

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

Execution timing

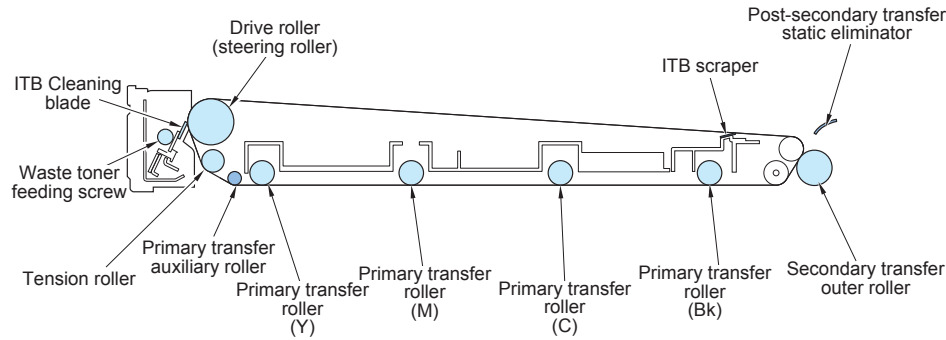
- 1) The drum rotates, driven by the drum motors (M1 to M4).
- 2) There is an encoder on the drum shaft, of which rotation is monitored by the two sensors (Y: UN31/32, M: UN33/34, C: UN35/36, Bk: UN37/38).
- 3) This sensor counts the drum count based on a pulse, and feeds back the drum rotation speed to the drum DC controller to perform speed control.



F-2-80

Transfer/separation

Overview



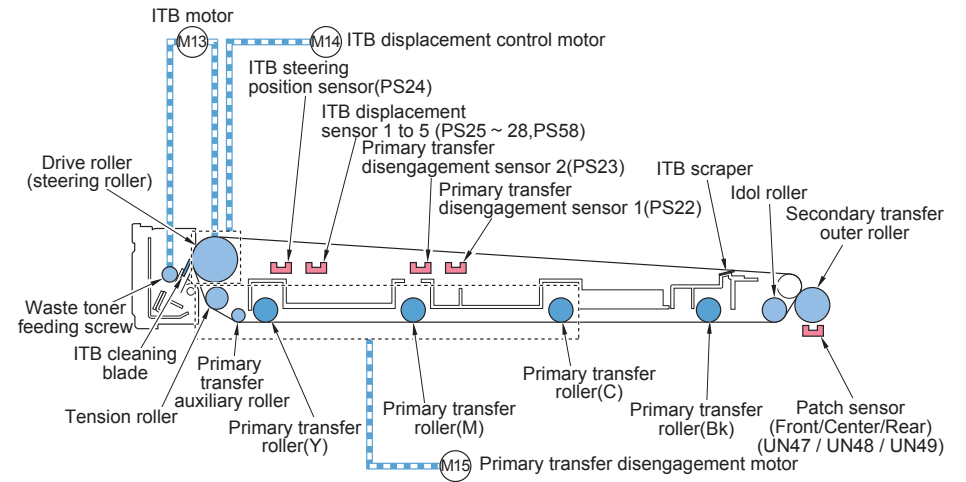
F-2-81

Toner on the photosensitive drum is transferred on paper

Parts name	Function
<b>ITB unit</b>	To transfer toner on the photosensitive drum to the paper
ITB (Intermediate Transfer Belt)	To transfer toner on the photosensitive drum
Primary transfer roller	To attract toner on the photosensitive drum to the ITB
Primary Transfer Auxiliary Roller	Make the contact surface of the ITB and the drum horizontal in color mode.
Static eliminator	To drive ITB. To correct the displacement of ITB.
ITB scraper	To scrape toner inside the ITB
Tension roller	To keep appropriate tension of the ITB
Cleaning blade	To scrape toner on the ITB
Waste toner feeding screw	To feed residual toner inside the ITB cleaner unit
<b>Secondary transfer unit</b>	To transfer toner on the ITB to the paper
Secondary transfer outer roller	To attract toner on the ITB to the paper and feed the paper
Static eliminator	To eliminate electric charge on the paper after secondary transfer

T-2-35

Drive configuration



F-2-82

Parts name	Function	
M13	ITB motor	To rotate the ITB and the waste toner screw
M14	ITB displacement control motor	To move the drive roller (steering roller)
M15	Primary transfer disengagement motor	To make the Primary Transfer Auxiliary Roller and the primary transfer roller (Y/M/C) engaged/disengaged
PS24	ITB steering position sensor	To detect position of the drive roller (steering roller)
PS22	Primary transfer detachment sensor 1	To detect whether the Tension Roller and Primary Transfer Roller (Y/M/C) are pressurized condition.
PS23	Primary transfer detachment sensor 2	To detect whether the Tension Roller and the Primary Transfer Roller (Y/M/C) is disengaged condition.
PS25 to 28, PS58	ITB displacement sensor	To detect position of the ITB
UN47 to 48	Patch Sensor (front/rear)	To detect color displacement level (amount)
UN49	Patch Sensor (center)	To detect patch density for image stabilization control (D-max, D-half, etc.) and to detect the color displacement amount

T-2-36

## Primary transfer disengagement control

The primary transfer roller for color is engaged or disengaged to keep longer life of the image formation parts (photosensitive drum, ITB)

### Execution timing

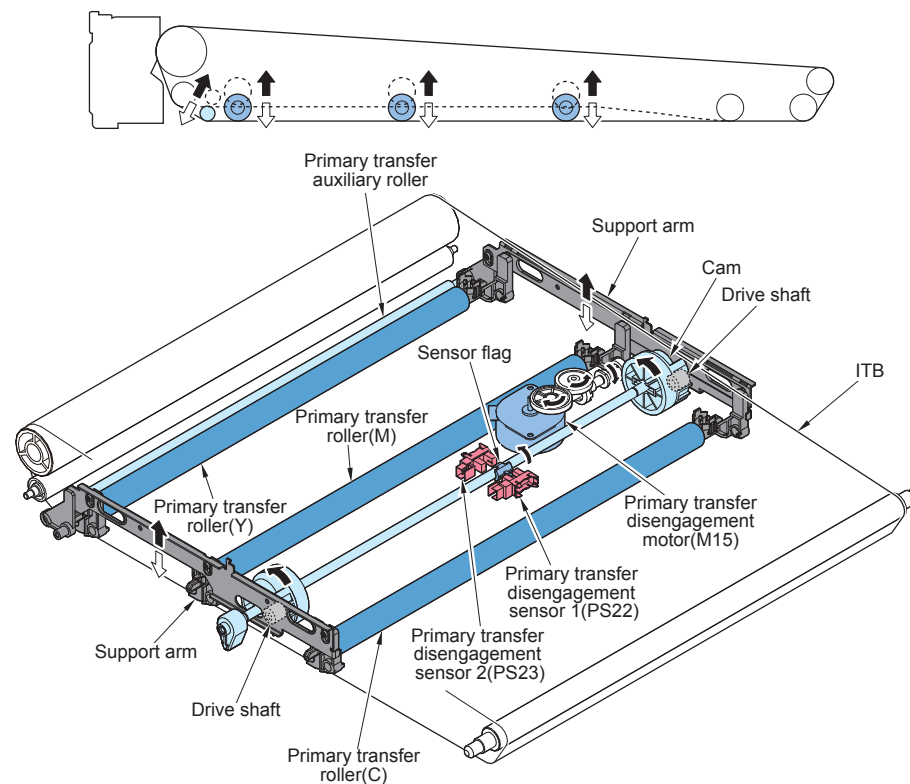
- Roller to be engaged: when making color prints (If 2 and more sheets of Bk continues within a job at Color + Bk mix printing, disengage the Primary Transfer Roller when printing color)
- Roller to be disengaged: anytime other than the above timing

### Control description

- 1) Drive of the primary transfer disengagement motor (M15) rotates the cam.
- 2) Rotation of the cam moves the support arm up/down, which separates (disengages) the color primary transfer roller from the ITB.
- 3) Position of the primary transfer roller is detected by the Primary transfer detachment sensor (PS22/23).

#### MEMO:

- At standby, the color's primary transfer roller is disengaged.



F-2-83

#### Related error code

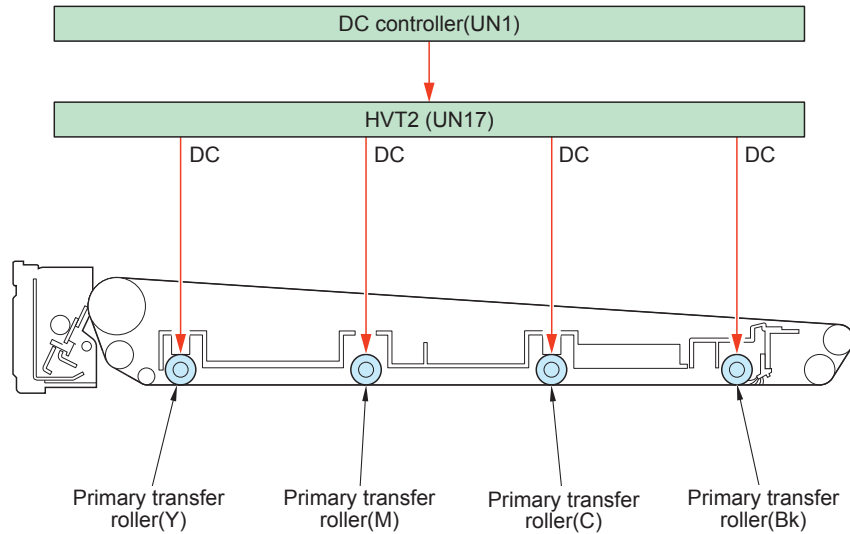
- E074-0001: Error in ITB disengagement operation
- E074-0002: Error in ITB engagement operation
- E074-0003: Breakdown of Primary Transfer Pressure Sensor and Primary Transfer Disengage Sensor.

### Primary transfer bias control

This control transfers toner on the photosensitive drum to the ITB.

The primary transfer bias (DC), which has been generated by HVT2 (UN17), is applied to the primary transfer roller.

Bias value is determined by the measurement value of environment sensor 1 (UN22)



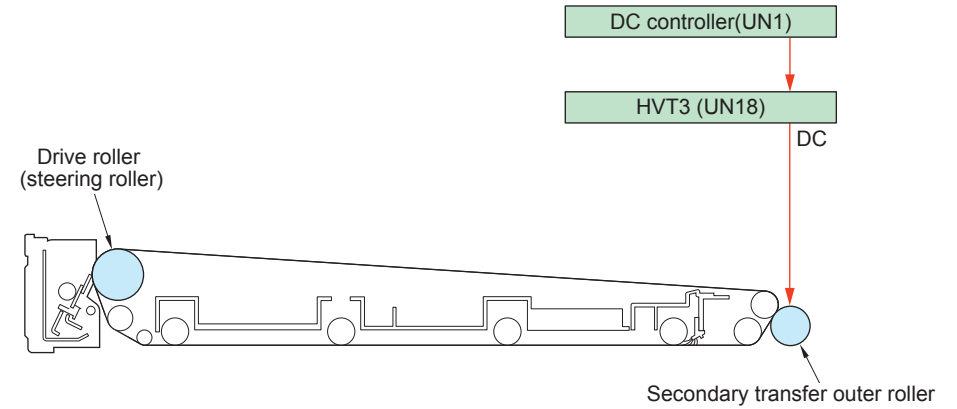
F-2-84

### Secondary transfer bias control

This control transfers toner on the ITB to the paper.

The secondary transfer bias (DC), which has been generated by HVY3 (UN18), is applied to the secondary transfer outer roller.

Bias value is determined by the measurement value of environment sensor 2 (UN50) and the paper type.



F-2-85

## ITB displacement correction control

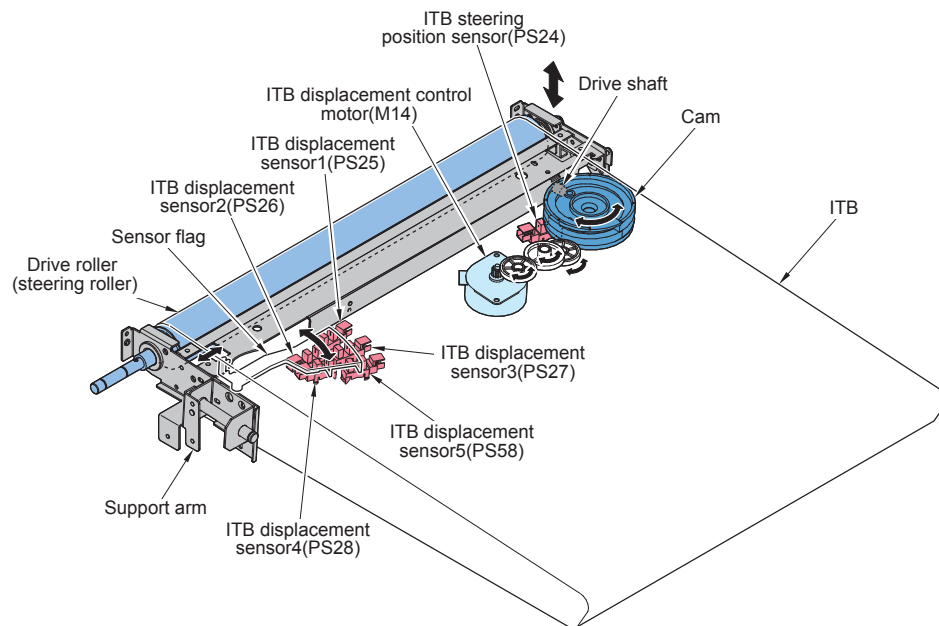
This control prevents damage on the ITB due to displacement of the ITB.

### Execution timing

When the ITB is rotated

### Control description

- 1) The ITB displacement sensors (PS25 to 28, PS58) detect displacement of the ITB.
- 2) Drive of the ITB displacement control motor (M14) rotates the cam.
  - The cam position is detected by the steering position sensor (PS24).
- 3) Rotation of the cam moves the drive shaft up/down to tilt the steering roller.
- 4) Tilt of the steering roller generates tension difference of the ITB to move the ITB to the front or rear.
- 5) Repeating steps 1) through 4) corrects displacement of the ITB.



F-2-86

### Related Error Codes

- E075-0002: failure in ITB steering position sensor
- E075-0003: failure in ITB displacement control (full displacement to the rear)
- E075-0004: failure in ITB displacement sensor
- E075-0005: Error/failure in searching ITB steering HP
- E075-0103: failure in ITB displacement control (full displacement to the front)

### MEMO:

Following table shows detection result of the ITB displacement sensor and operation of the main unit.

Edge state of ITB belt	State of ITB displacement sensor				Operation of main unit
	PS25	PS26	PS27	PS28	
Full displacement to the rear (approx. 5.8mm or more)	OFF	OFF	OFF	OFF	Error code (E075-0003) stops the main unit.
Displacement to the rear (approx. 4.0mm to 5.7mm)	OFF	OFF	OFF	ON	Steering roller (rear) is moved down.
Displacement to the rear (approx. 2.1mm to 3.9mm)	OFF	OFF	ON	ON	
Reference position	OFF	ON	ON	ON	Steering roller (rear) is moved up.
	ON	ON	ON	ON	
Displacement to the front (approx. 2.1mm to 3.9mm)	ON	ON	ON	OFF	Steering roller (rear) is moved up.
Displacement to the front (approx. 4.0mm to 5.7mm)	ON	ON	OFF	OFF	
Full displacement to the front (approx. 5.8mm or more)	ON	OFF	OFF	OFF	Error Code (E075-0103) stops the main unit.

T-2-37

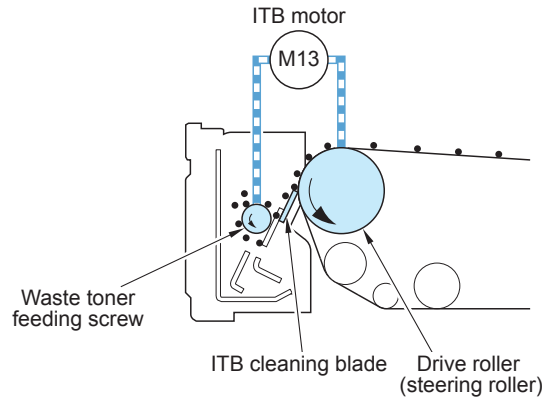
The "ON" state of the sensors above indicates that the light is blocked

## ITB cleaning control

To remove residual toner on the ITB

Control description

- 1)The ITB cleaning blade scrapes toner on the ITB.
- 2)Scraped toner is fed to the waste toner case by the waste toner feeding screw.



F-2-87

## Secondary transfer outer roller cleaning control

To prevent soil on the back of the sheet caused by soil on the secondary transfer outer roller

Execution timing

- 1)At warm-up rotation (fixing temperature is less than 50 deg C, jam recovery)
- 2)At the post-rotation
- 3)After executing image stabilization control (creating patch image on the ITB)

Control description

The secondary transfer bias (see Note 1), which has been generated by HVT3 (UN18), is applied to the secondary transfer outer roller.

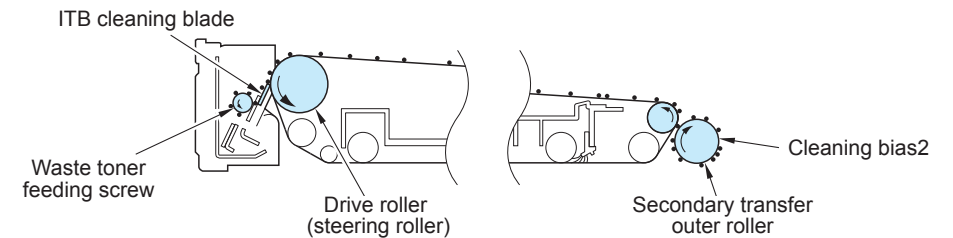
Residual toner on the secondary transfer outer roller is attached to the ITB, and then collected by the ITB cleaning unit.

Caution:

Both positive bias and negative bias are applied:

Because of polarized-charged (positive and negative) residual toner, both types of residual toner need to be removed.

Therefore, positively-charged bias is applied on the 1st cycle of ITB while negatively-charged bias is applied on the 2nd cycle of ITB.



F-2-88

Related Service Mode

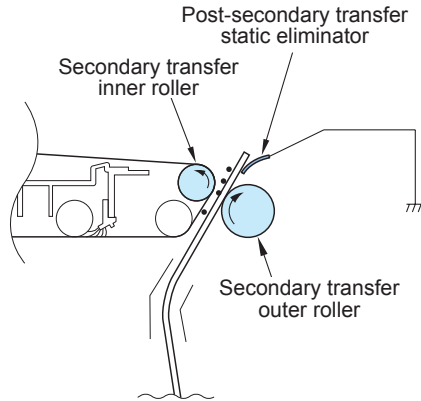
Forced execution of the secondary transfer outer roller cleaning  
COPIER > FUNCTION > CLEANING > 2TR-CLN



## ● Separation

Paper is separated from the ITB due to paper's elastic force.

In the case of thin paper which has low elastic force, the static eliminator reduces potential on the back surface of paper. This reduces electrostatic adsorption of paper so that thin paper is separated from the ITB more easily.



F-2-89

### MEMO:

On this machine, by reducing the diameter of Secondary Transfer Inner Roller, contact surface of the paper with the ITB is reduced. This prevents the thin paper from sticking onto the ITB.

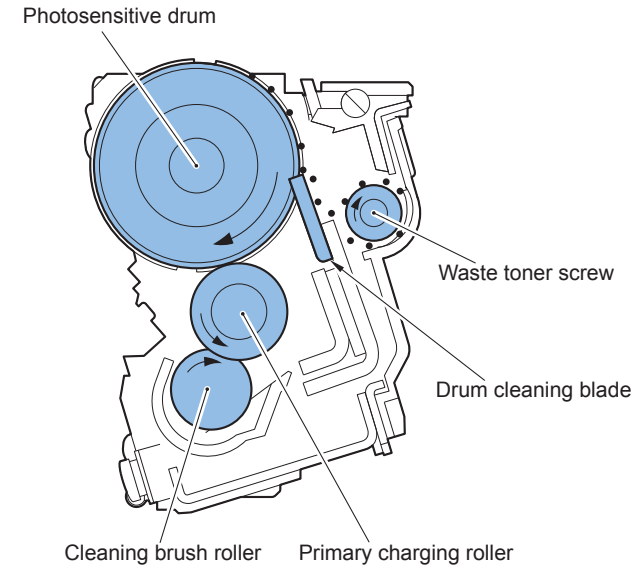
## ■ Drum cleaning

### ● Overview

To clean residual toner on the photosensitive drum

Residual toner on the drum is scraped by the drum cleaning blade.

Then, rotation of the waste toner screw feeds the residual toner to the waste toner case.

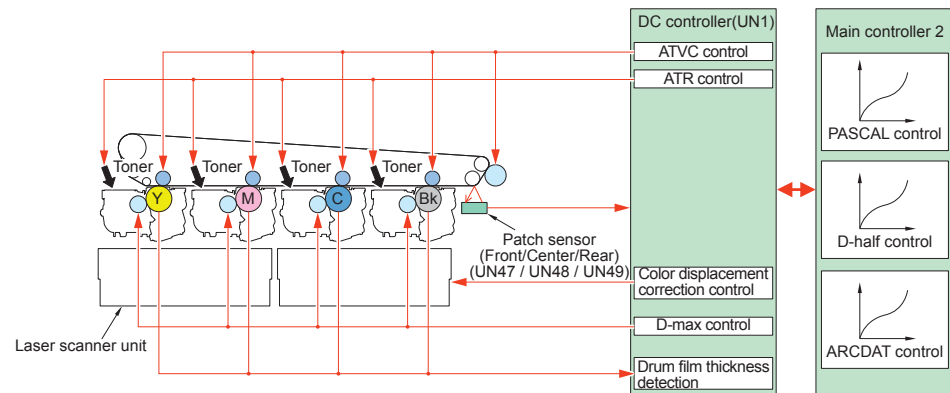


F-2-90

## Image stabilization control

### Overview

To prevent image fault due to environmental change or deterioration of photosensitive drum to make stable print image



F-2-91

### Control timing

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

Following shows the control items to be executed by each sequence as well as the downtime (estimation).

Execution timing	Execution condition	Required time (sec)	Control types										
			Startup correction (*1)	Discharge current correction	Drum thickness detection	ATR control (patch detection)	Primary transfer ATVC	Secondary transfer ATVC	Secondary transfer cleaning	D-Max control	ARCDAT control	D-Half control	Color displacement correction control
At power-on	At normal condition	Model A: approx 20.9 Model B: approx 29.5	Yes	Yes	Yes	-	Yes	Yes	Yes	-	Yes	-	Yes
	H/H environment	Model A: approx 46.0 Model B: approx 68.1	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes
At recovery from sleep mode	8 or more hours in sleep mode	Model A: approx 20.9 Model B: approx 29.5	Yes	Yes	Yes	-	Yes	Yes	Yes	-	Yes	-	Yes
	8 or more hours in sleep state (in H/H environment)	Model A: approx 46.0 Model B: approx 68.1	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes
At initial rotation	At normal time	Model A: approx 0.0 Model B: approx 0.0	-	-	-	-	-	Yes	-	-	-	-	-
	At environment change	Model A: approx 12.1 Model B: approx 17.6	-	Yes	-	-	Yes	Yes	Yes	-	-	-	Yes
	Every 500 sheets	Model A: approx 2.7 Model B: approx 4.0	-	-	-	-	Yes	-	-	-	-	-	-
At paper interval	Every 100 sheets during printing	Model A: approx 4.1 Model B: approx 8.7	-	-	-	-	-	-	Yes	-	Yes	-	-
	Every 250 sheets during printing	Model A: approx 3.3 Model B: approx 4.3	-	Yes	-	-	Yes	-	-	-	-	-	-
	Every 700 sheets during printing	Model A: approx 6.8 Model B: approx 12.7	-	-	-	-	Yes	-	Yes	-	Yes	-	-
	Every 360 sheets (Model A) or every 240 sheets (Model B) during printing	Model A: approx 6.1 Model B: approx 9.3	-	-	-	-	-	-	Yes	-	-	-	Yes
	Every 1000% of accumulated image ratio or every 200 sheets during printing	Model A: approx 2.8 Model B: approx 4.3	-	-	-	Yes	-	-	Yes	-	-	-	-
At last rotation	After printing of every 25 sheets	Model A: approx 4.1 Model B: approx 8.7	-	-	-	-	-	-	Yes	-	Yes	-	-
	After printing of every 125 sheets	Model A: approx 7.4 Model B: approx 13.0	-	Yes	-	-	-	-	Yes	-	Yes	-	-
	After printing of every 180 sheets (Model A) or every 120 sheets (Model B)	Model A: approx 5.0 Model B: approx 7.6	-	-	-	-	-	-	Yes	-	-	-	Yes
	After printing of every 500% of accumulated image ratio or every 100 sheets	Model A: approx 2.8 Model B: approx 4.3	-	-	-	Yes	-	-	Yes	-	-	-	-
	After printing of every 1000 sheets (500 sheets in an H/H environment)	Model A: approx 42.6 Model B: approx 65.7	-	Yes	-	-	Yes	-	Yes	Yes	Yes	Yes	-
	After printing of every 5000 sheets	Model A: approx 16.6 Model B: approx 25.4	Yes	Yes	Yes	-	Yes	-	Yes	-	-	-	-

T-2-38

Model A: iR ADVANCE C5255/5250

Model B: iR ADVANCE C5240/5235

\*1: ITB dirt correction, patch sensor correction etc.

## Related service mode

COPIER&gt;OPTION&gt;CLEANING&gt;OHP-PTH(setting of the number of sheet to execute ITB cleaning sequence after transparency feed)

COPIER&gt;OPTION&gt;CLEANING&gt;ITBB-TMG (setting of ITB cleaning interval)

## ● Drum film thickness detection

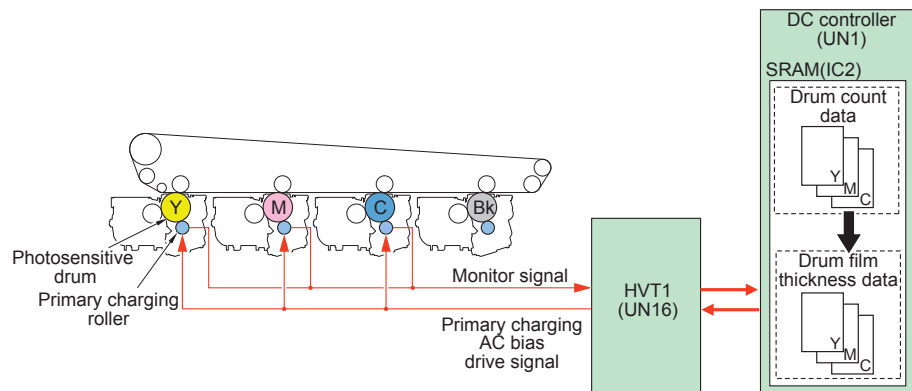
To detect use condition of the photosensitive drum

Execution timing

- 1) At power-on
- 2) At recovery from sleep mode
- 3) At last rotation on a specified print basis

Control description

- 1) The drum count value is calculated by the monitor signal of the primary charging AC bias.
- 2) The count value calculated in step 1) above is added to the drum count value that has been kept in SRAM.
- 3) The latest count value determined in step 2) above is classified to be one of the 10 levels as the drum film thickness detection data.
- 4) The determined data is compared to the existing drum film thickness detection data kept in the other area in SRAM. If there is any difference between both data, the newly-determined data is overwritten on SRAM as the latest drum film thickness detection data. If there is no difference in both data, the newly-determined data is not overwritten, but disposed.



F-2-92

MEMO:

Bk Drum for highly-durable type, the drum is no shave.  
Therefore, Bk drum is not the thickness detection.

The result of drum thickness detection is reflected to the following data.

- Developing bias
- Primary transfer bias
- ATR patch detection result
- Laser output

## D-max control

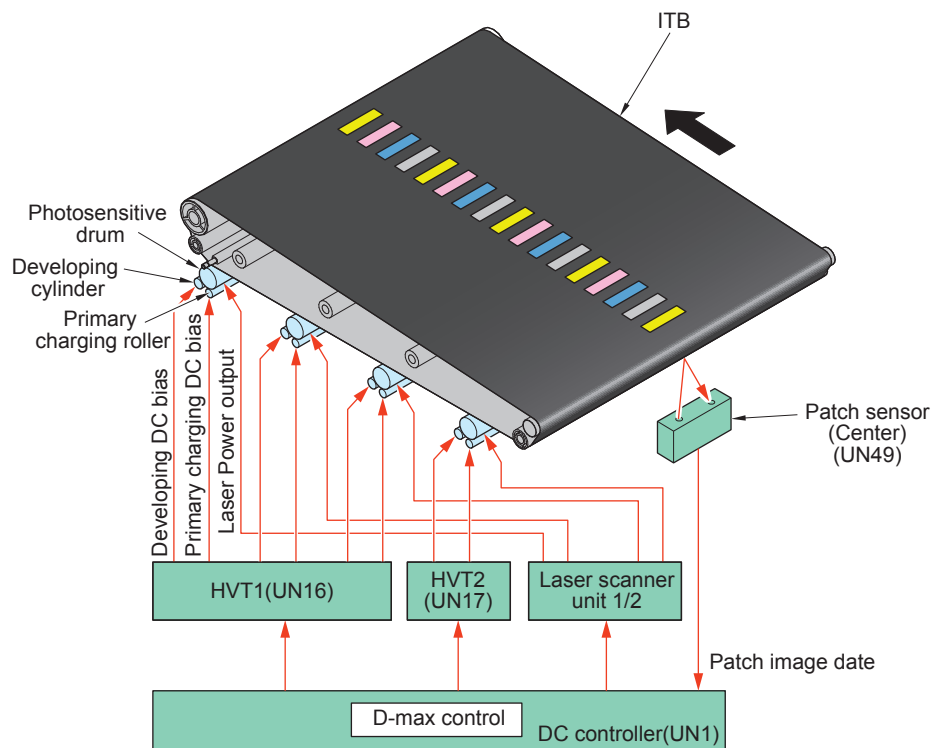
This control determines optimal developing DC bias, primary charging DC bias, laser power output.

Execution timing

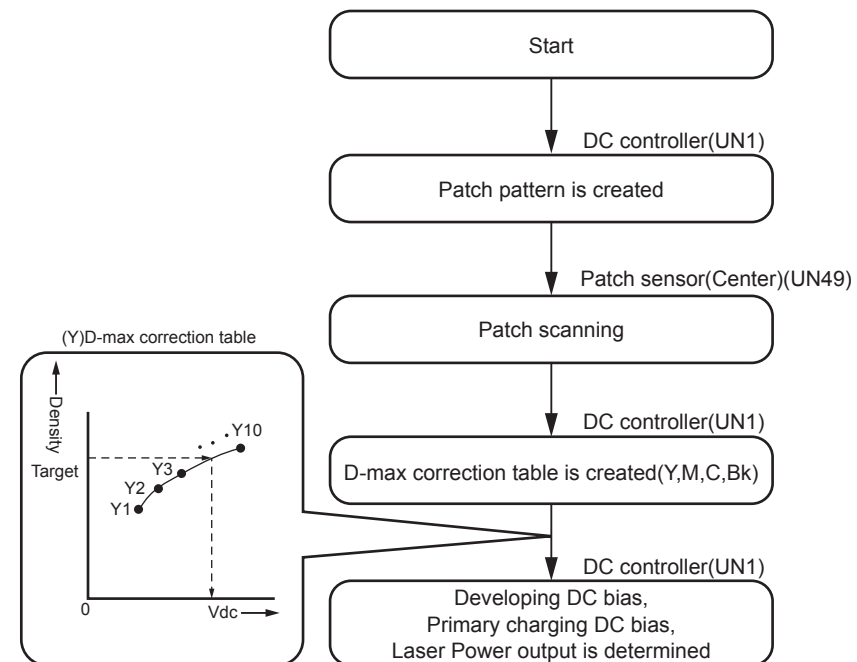
- 1) When replacing a drum unit or developing assembly.
- 2) At every post-rotation after the total reaches 1000 prints.
- 3) Power ON (High temperature and humidity) and corrects the each color developing DC bias, primary charging DC bias, laser power output to realize the target density.

Detection details

- 1) DC controller creates the patch pattern in corresponding color on the ITB.
- 2) DC Controller measures the patch density with the Patch Sensor (center) (UN49)



F-2-93



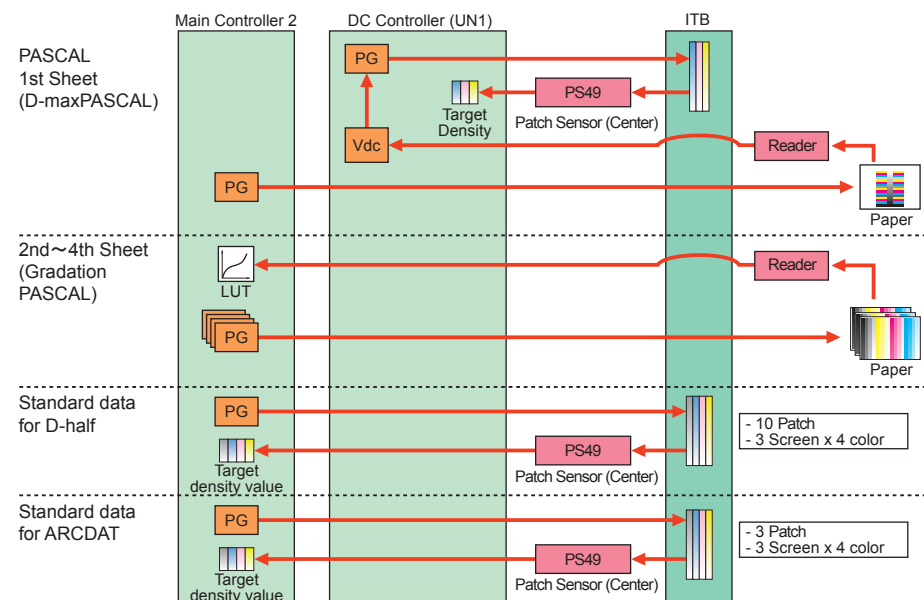
F-2-94

## PASCAL control

This control stabilizes gradation density characteristics of the image

This control is executed when selecting ["Auto gradation correction" > "Full correction"] in User Mode.

Density characteristics of the patch pattern made by test print is scanned by the reader to create the image density correction table. Using this table corrects image gradation density characteristics, which vary according to the environmental change or deterioration of photosensitive drum.



F-2-95

### Execution timing

When executing calibration (during execution of ["Auto gradation correction" > "Full correction"] in User Mode)

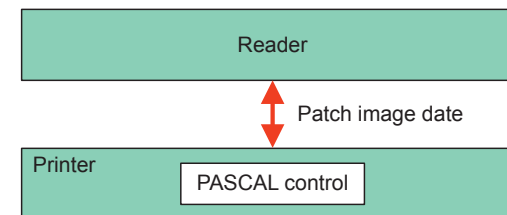
### Control description

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

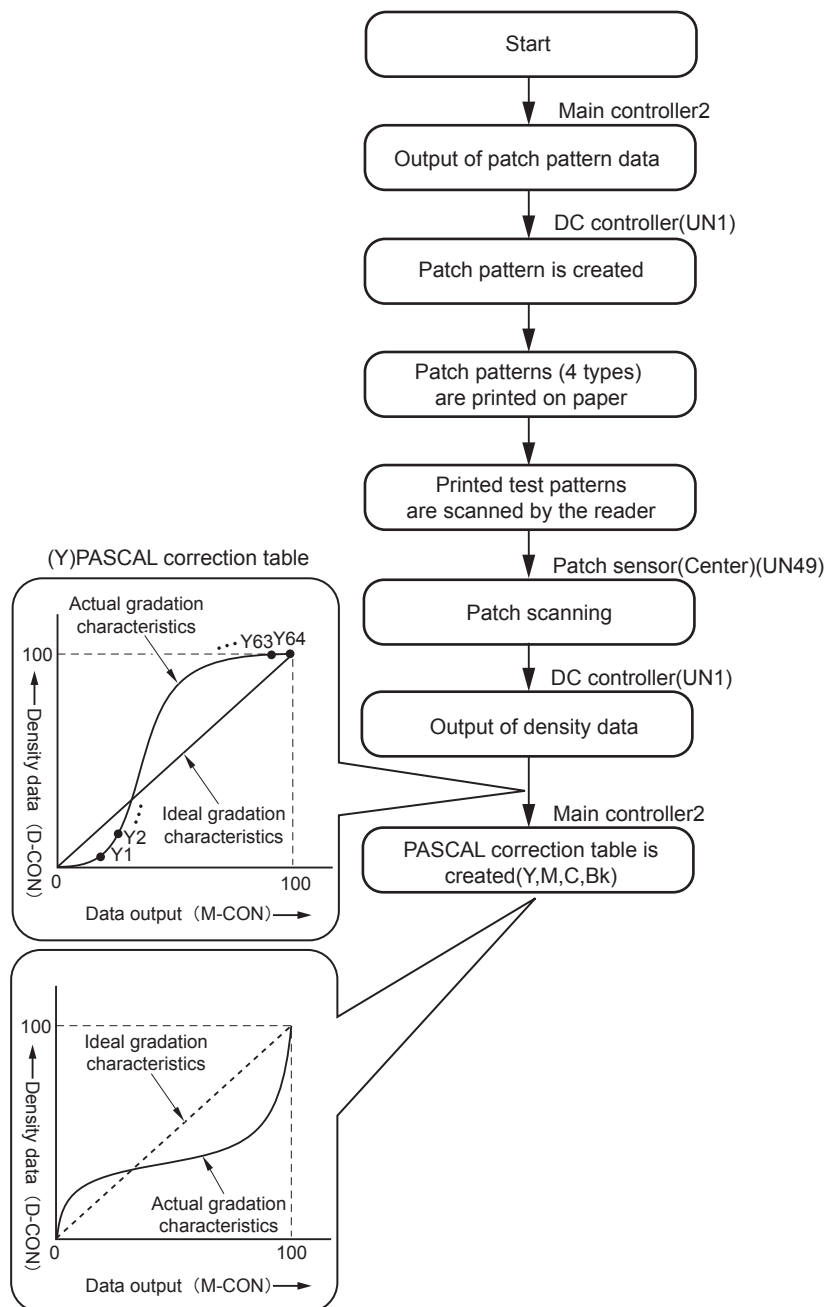
### MEMO:

This control creates 4 types of patch patterns as follows:

- Patch pattern for copy (64 patches for each color)
- Patch pattern for text (64 patches for each color)
- Patch pattern for photo (64 patches for each color)
- Patch pattern for D-max (64 patches for each color)



F-2-96



F-2-97

## ● D-half control

This control determines optimal image gradation

Execution timing

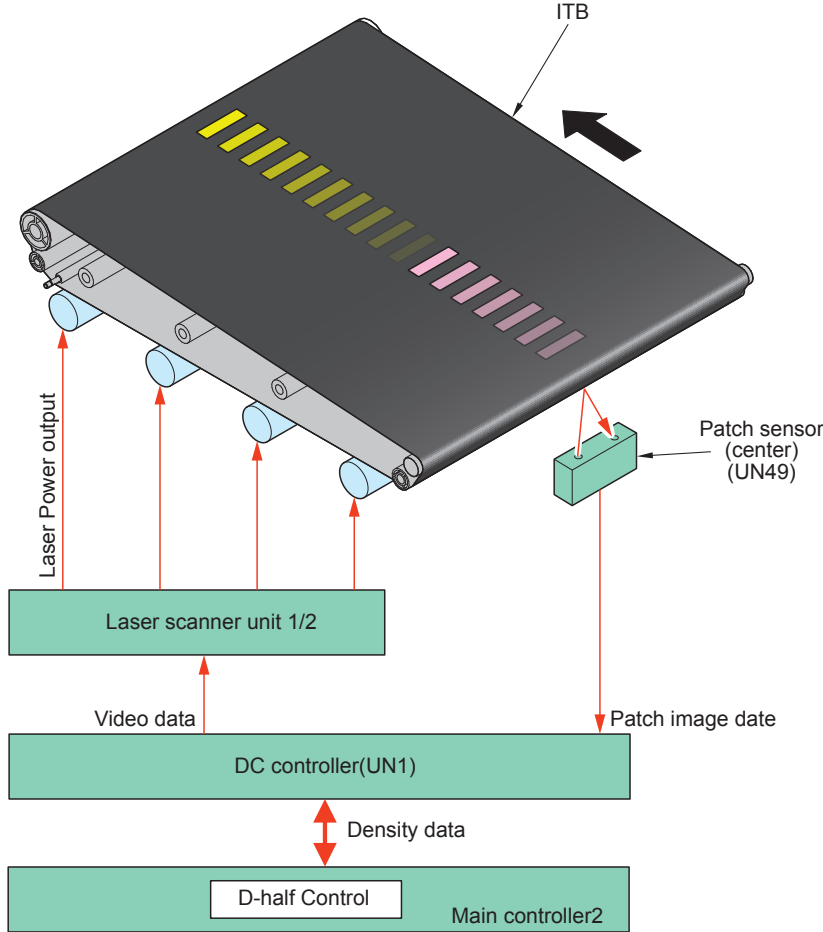
- 1) At replacement of the Drum Unit and Developing Assembly
- 2) At last rotation on a specified print basis
- 3) At power-on (H/H environment)

Control details

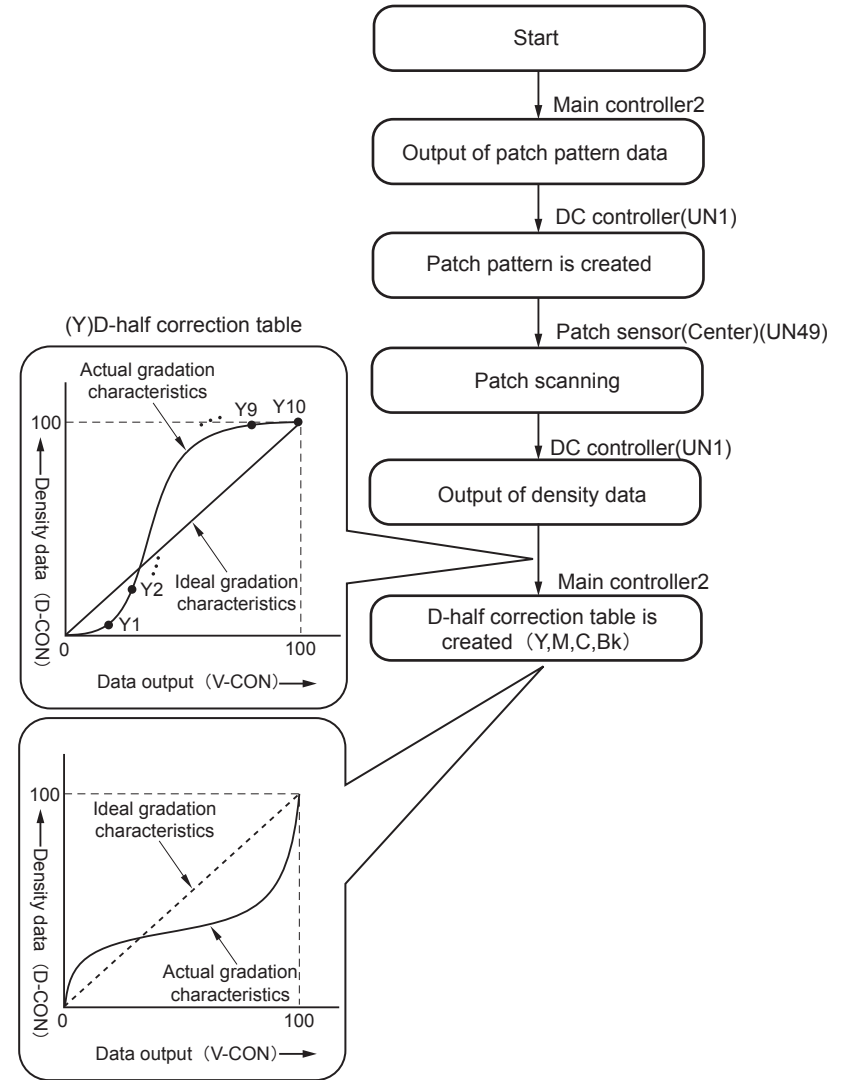
- 1) The Main Controller 2 outputs the patch data of each color (Y, M, C, Bk) to the DC Controller.
- 2) DC Controller creates the patch pattern of each color (Y, M, C, Bk) on the ITB based on this data.
- 3) DC Controller measures the patch pattern with the Patch Sensor (center) (UN49) and returns the result to the Main Controller 2.

4) The Main Controller 2 executes the gradation correction to realize the ideal halftone image based on this data.

Also, this control creates the standard patch used at ARCDAT control and stores the standard data for ARCDAT according to the measurement result of UN49. (refer to MEMO.)



F-2-98



F-2-99

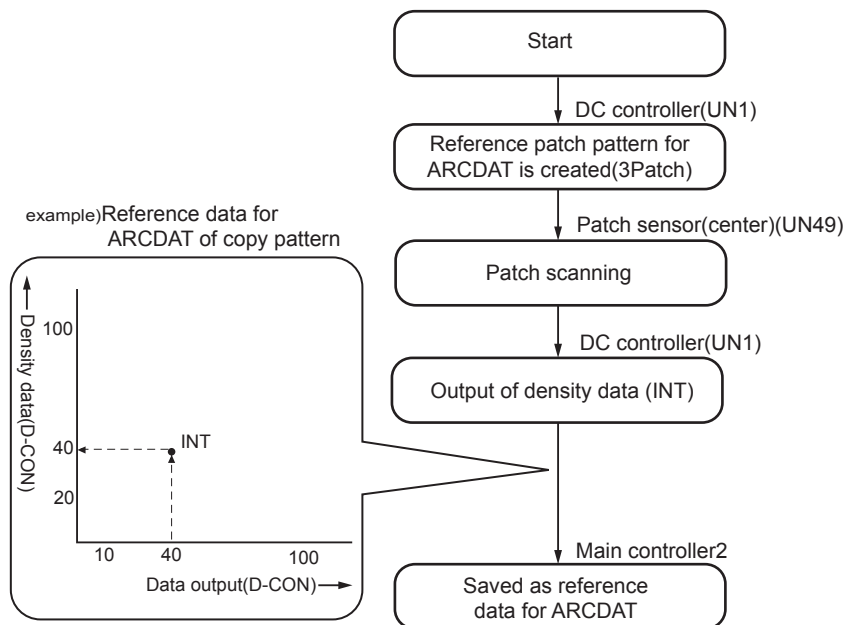
**MEMO:**

Following 4 types of patch patterns are created on this control.

- Copy pattern (10 patch per each color)
- Letter priority pattern (10 patch per each color)
- Photo priority pattern (10 patch per each color)
- Standard pattern for ARCDAT control (3 patch per each color)



Correction value calculation flow for ARCDAT control



F-2-100

## ● ARCDAT control

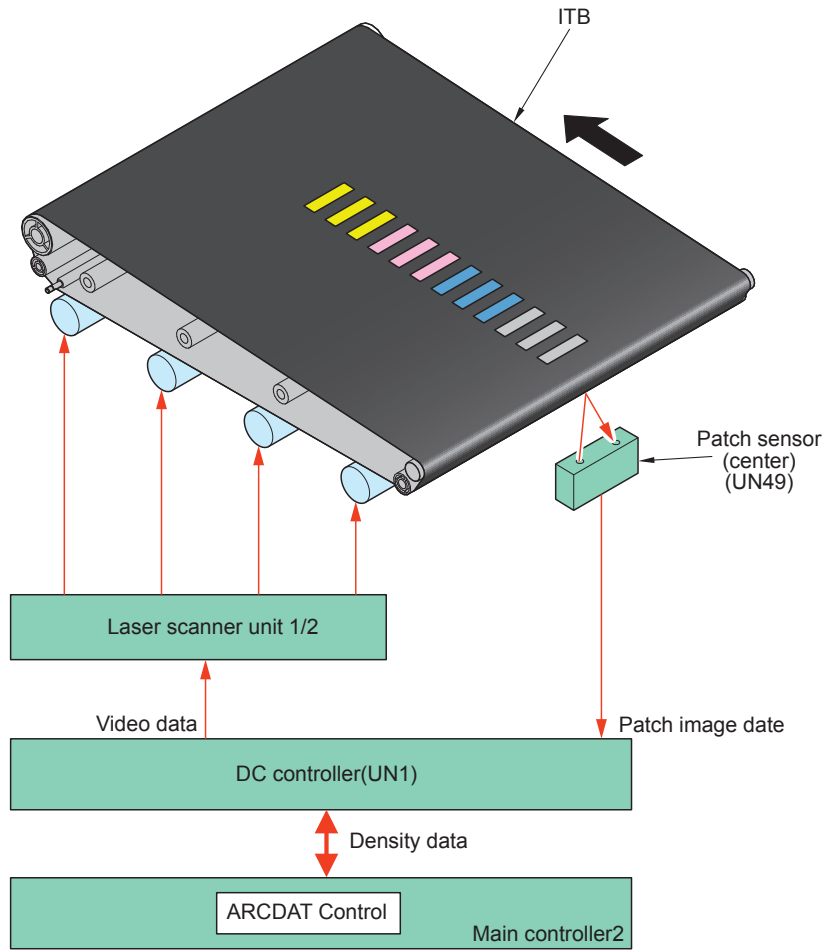
This control obtains ideal gradation characteristics while reducing down time

Execution timing

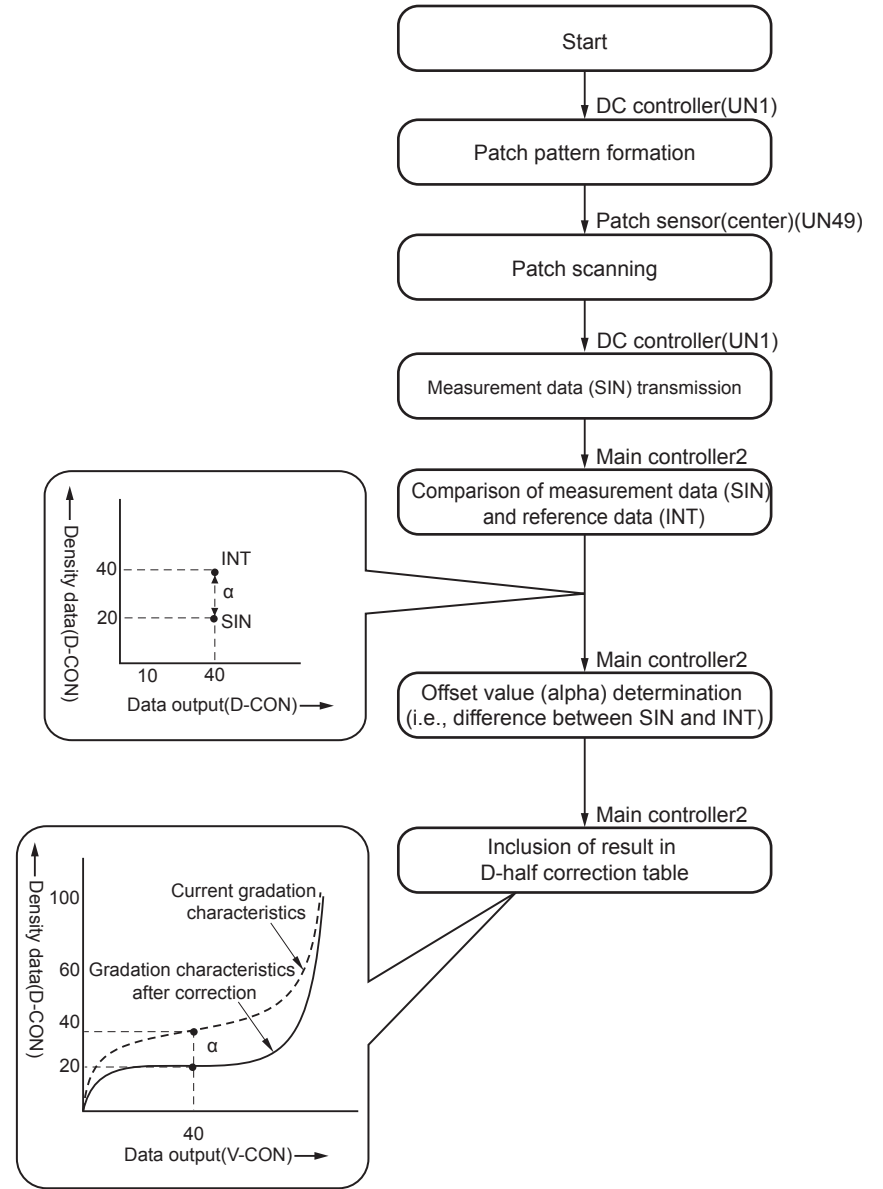
- 1) When replacing a drum unit or developing assembly
- 2) At post-rotation every time the total reaches 25 prints (when continuously making prints, printing is interrupted for every 100 prints to execute this control)

Control details

- 1) DC Controller creates the patch pattern of each color (Y, M, C, Bk) on the ITB. (3 patterns per each color, total 12 patterns)
- 2) DC Controller measures the patch pattern with the Patch Sensor (center) (UN49) and returns the result to the Main Controller 2.
- 3) The Main Controller 2 compares the actual measured data with the backed up standard data for ARCDAT control. Difference after comparison is reflected to D-half result as offset value.



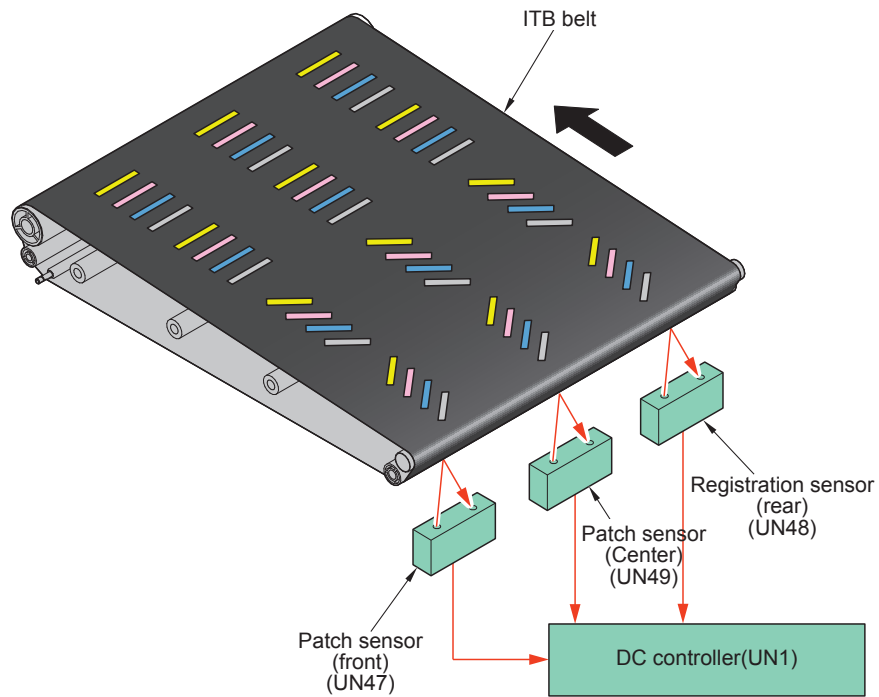
F-2-101



F-2-102

## Color displacement correction control

This control corrects uneven exposure of the laser scanner unit or color displacement caused by uneven rotation of the drum or ITB



F-2-103

### Control detail

- 1) DC Controller creates the patch pattern of each color on the ITB.
- 2) DC Controller compares those patterns with the standard value backed up in the DC Controller by reading the patch sensor (front, center, rear) (UN47 to 49) and detects the color displacement amount.
- 3) Based on the detected result as above, the DC Controller executes correction depending on the color displace amount.

Control type		Timing to start			Control description
		At power ON	During print for every 360 prints in total	During print for every 100 prints in total	
Correction in main scanning direction	Write-start correction	Yes	Yes	Yes	Change write-start timing in main scanning direction
	Correction of overall magnification ratio	Yes	Yes	No	Increase/reduce the number of pixels in main scanning direction (at both edges of image)
	Correction of odd magnification ratio	Yes	Yes	No	Increase/reduce the number of pixels in main scanning direction (at center of image)
Correction in sub scanning direction	Write-start correction	Yes	Yes	No	Change write-start timing in sub scanning direction
	Correction of skewed image	Yes	Yes	No	Change position of laser exposure by the laser scanner unit

T-2-39

## ● ATR control

This control supplies developer to the developing assembly to keep ideal ratio of developer in the developing assembly

Timing to start

When replacing with a new drum unit (ATR sensor)

At every print (Developing Assembly Toner Supply Count, ATR sensor)

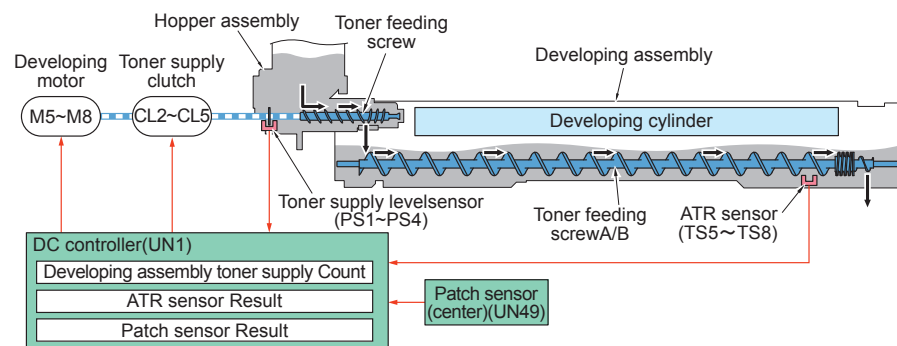
In the case of post-rotation every time the total reaches 150 prints or continuous print, the job is interrupted when the total reaches 250 prints to execute this control (patch sensor)

Control description

Developer is supplied to the drum unit while the supplying amount of the developer for each color is calculated by the above-mentioned start timing. The DC controller determines supplying amount of toner by 3 types of data as follows.

- Developing Assembly Toner Supply Count
- ATR sensor
- Patch sensor

When the DC controller determines that it is necessary to supply toner, the developing motors (M5 to M8) and the toner supply clutches (CL2 to CL5) are turned ON. This operation rotates the toner feeding screw A/B so that the specified amount of developer is supplied to the developing assembly.



F-2-104

### Related Error Codes

- E020-001x: Error in patch sensor of developing assembly (at initial state) (more than the upper limit)
- E020-002x: Error in patch sensor of developing assembly (at initial state) (less than the lower limit)
- E020-010x: Error in patch sensor (more than the upper limit)
- E020-020x: Error in patch sensor (less than the lower limit)
- E020-0x30: Error in ATR sensor (less than the lower limit, at initial state)
- E020-0x31: Error in ATR sensor (less than the upper limit, at initial state)
- E020-0x40: Error in ATR sensor (the control voltage less than the lower limit, at initial state)
- E020-0x41: Error in ATR sensor (the control voltage less than the upper limit, at initial state)
- E020-0x90: Error in ATR sensor (less than the lower limit)
- E020-0x91: Error in ATR sensor (more than the upper limit)
- E020-0xB0: Error in developer ratio when making prints (less than the lower limit)
- E020-0xB1: Error in developer ratio when making prints (more than the upper limit)

x indicates the target color (1=Y, 2=M, 3=C, 4=Bk)

## ● ATVC control

This control prevents transfer failure due to environmental change or deterioration of the primary transfer roller or the secondary transfer roller

### Primary transfer ATVC

#### Execution timing

- 1)When the power is turned ON
- 2)When replacing with a new drum unit
- 3)At recovery from sleep mode
- 4)At paper interval on a specified print basis or at initial rotation
- 5)When the environment is changed

#### Caution:

The total print is counted separately between the color mode and the Bk mode. This control is executed when the counter of either mode reaches the specified number.

#### Control description

- 1)Monitoring current value of the primary transfer DC bias is detected
- 2)Optimal primary charging current value is determined based on the temperature/ humidity data of Environment sensor 1.
- 3)The primary transfer DC bias is determined to apply to the primary transfer roller

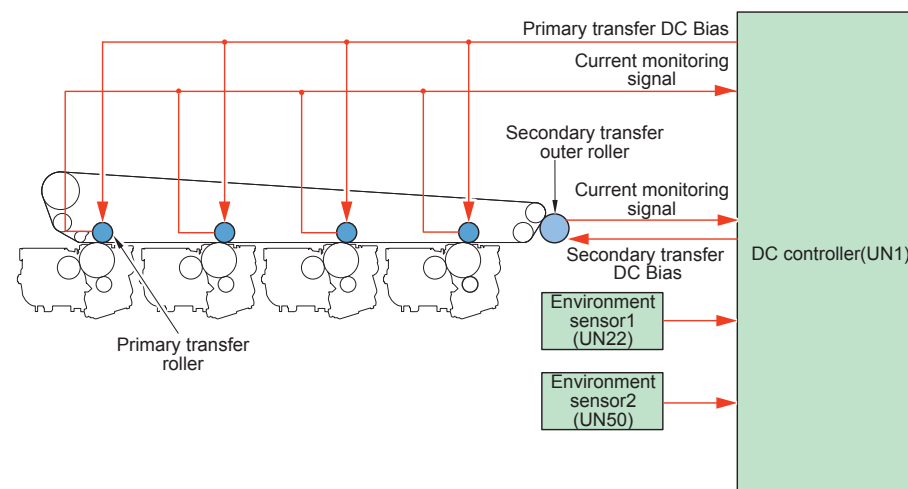
### Secondary transfer ATVC

#### Execution timing

At every print job

#### Control description

- 1)Monitoring current value of the secondary transfer DC bias is detected
- 2)Optimal primary charging current value is determined based on the temperature/ humidity data of environment sensor 2.
- 3)The secondary transfer DC bias is determined to apply to the secondary transfer roller

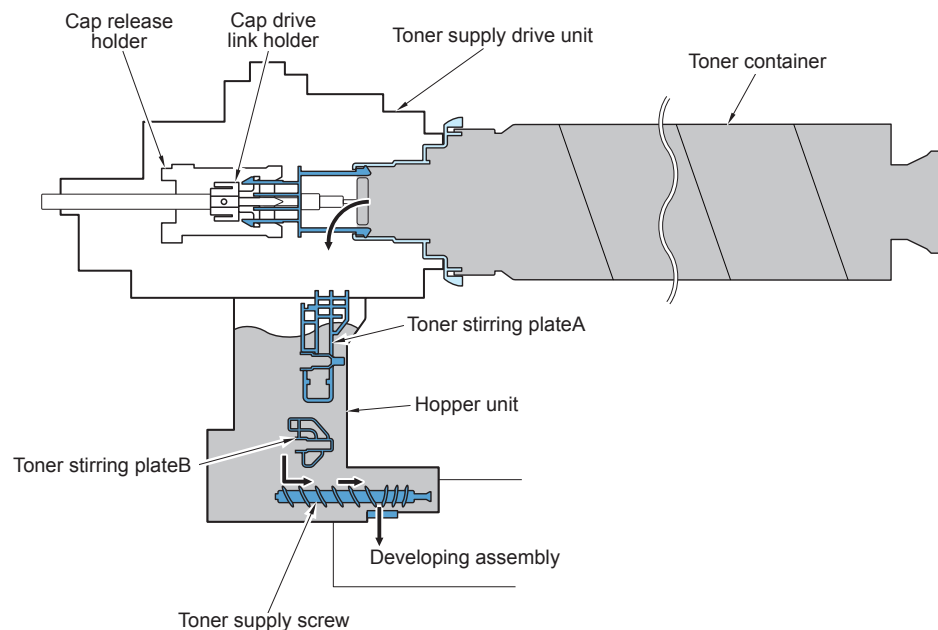


F-2-105

## Toner supply assembly

### Overview

To supply toner in the toner container to the developing assembly



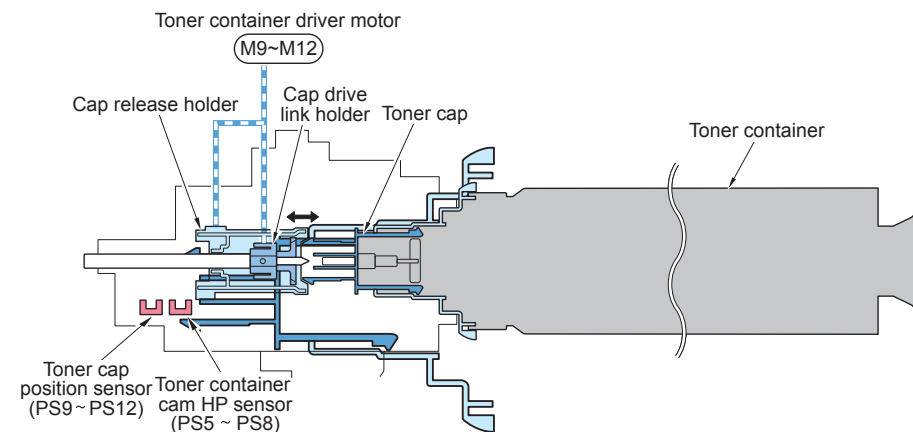
F-2-106

Parts name	Function
Toner supply drive unit	To supply toner in the toner container to the hopper unit
Cap drive link holder	To open/close the toner cap and rotate the toner container
Cap release holder	To release the toner cap
Hopper unit	To supply toner in the hopper unit to the developing assembly
Toner stirring plate A, B	To stir toner in the hopper unit
Toner supply screw	To supply toner in the hopper unit to the developing assembly

T-2-40

### Toner cap automatic opening control

This control automatically opens/closes the cap of toner container



F-2-107

Execution timing

When replacing a toner container

Control description (e.g.: release of toner cap)

- 1) Toner cap position sensor and Toner container cam HP sensor (PS5 to 12) detect the state of toner cap.
- 2) Operation of the toner container drive motors (M9 to 12) moves the cap drive link holder and the cap release holder to the right (toner container side).
- 3) The toner cap is secured with the cap drive link holder.  
<Hold the toner cap>
- 4) Operation of the toner container drive motors (M9 to 12) moves the cap drive link holder to the left. <Release the toner cap>

## Related Error Codes

E025-0100: Error in lock of toner container drive motor (Y)  
 E025-0200: Error in lock of toner container drive motor (M)  
 E025-0300: Error in lock of toner container drive motor (C)  
 E025-0400: Error in lock of toner container drive motor (Bk)  
 E025-0110: Error in timeout of toner cap position sensor (for Y toner container)  
 E025-0210: Error in timeout of toner cap position sensor (for M toner container)  
 E025-0310: Error in timeout of toner cap position sensor (for C toner container)  
 E025-0410: Error in timeout of toner cap position sensor (for Bk toner container)

## MEMO:

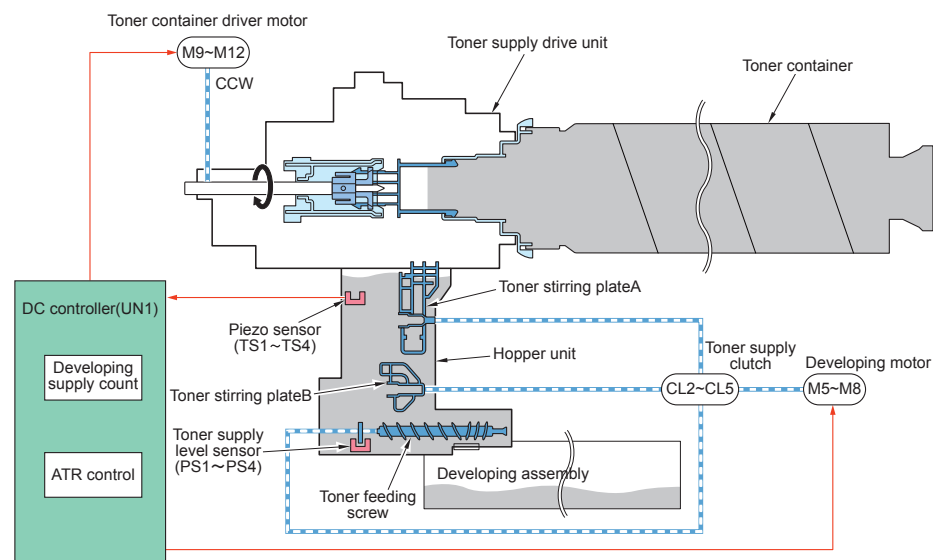
Following shows detection result of toner cap position sensor and the operational relationship with the main unit.

State of toner cap	Toner cap position sensor	Toner container cam HP sensor
Released	OFF	ON
In motion (released → sealed)	OFF	OFF
Sealed	ON	ON
In motion (sealed → released)	ON	OFF

T-2-41

## ● Toner supply control/toner level detection

Supplies the toner in the Toner Container to the Developing Assembly. At the same time, it detects the toner level inside the Hopper Unit.



F-2-108

## • Toner supply control

Title	Description	Timing to supply	Operation of main unit
Supply to hopper	To supply developer in the toner container to the hopper unit	When the output result of piezo sensors (TS1 to 4) is changed from H to L	The toner container drive motors (M9 to 12) are driven for 2 seconds (*1)
Supply to developing assembly	To supply developer in the hopper unit to the developing assembly	Toner supply is determined to be necessary by the result of ATR control	The developing motors (M5 to 8) and the toner supply clutches (CL2 to 5) are driven for the specified period.

T-2-42

\*1: If the output result of piezo sensors TS1 to 4 keeps L despite drive of M9 to 12, make M9 to 12 driven for 2 seconds and then stopped for 2 seconds and repeat this procedure up to 20 times. Due to this operation, when performing continuous printing with high image ratio, "Preparing toner..." may be displayed on the UI screen. In that case, wait for up to 80 seconds until the machine is recovered.

- Toner level detection

Detection description	Prior delivery alarm	Display Empty toner warning	Empty toner
The residual quantity of the toner	Toner container : EUR : 5% Other : 10% (A change of the setting is possible with a service mode) *1	Toner container : 0%	Toner container : 0%
	Hopper : 100%	Hopper : 100%	Hopper : 0%
Detection timing	Prediction from the Developing Assembly toner supply count (Judged from the number of toner supply to the Hopper Unit.)	When the sensor output result is changed from H to L	After approx. 1000 sheets are printed from the point that the Developing Assembly toner supply count is started after the empty toner warning (in case of A4 and dot ratio at 5% image for each color)
Detecting to (location)	Developing Assembly supply coun	Piezo sensor	Developing Assembly supply coun
Message (machine operation)	None (A change of the setting is possible with a service mode) *2	Replace toner cartridge. (XXXX)	Replace toner cartridge.
Alarm Code	10-0017 (Y), 0018 (M), 0019 (C), 0020 (Bk)	10-0001 (Bk), 0002 (C), 0003(M), 0004 (Y)	None
Whether Toner Container can be removed	Disable	Enabled	Enabled

XXXX: Yellow, Magenda, Cyan, or Black

T-2-43

\*1: COPIER> OPTION> FNC-SW> T-DLV-BK/CL

\*2: COPIER> OPTION> DSPLY-SW> TNR-WARN

When replacing to a new Toner Container after "empty toner warning", this machine recognizes that the container was replaced by opening and closing the Toner Replacement Cover. Then, the machine starts the toner supply operation and judges that the container was replaced to a new one from the Piezo Sensor detection result in the Hopper Unit. (When replacing to a new Toner Container, the detection result of Piezo Sensor is changed from L to H.)

#### Related Error Codes

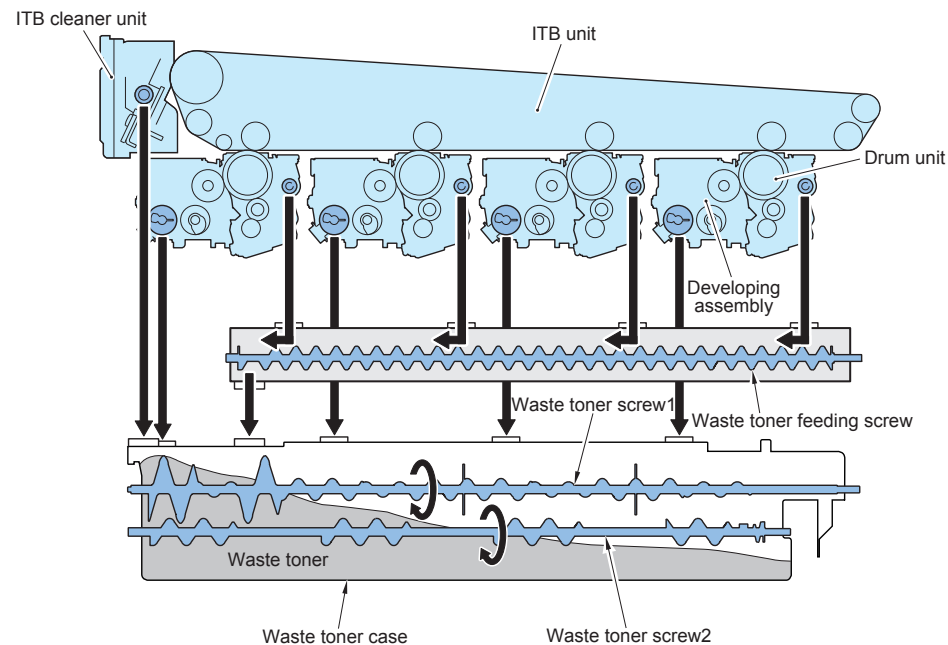
E025-0100: Error in toner container drive motor (Y)  
 E025-0200: Error in toner container drive motor (M)  
 E025-0300: Error in toner container drive motor (C)  
 E025-0400: Error in toner container drive motor (K)  
 E027-0100: Error in supply to developing assembly (Y)  
 E027-0200: Error in supply to developing assembly (M)  
 E027-0300: Error in supply to developing assembly (C)  
 E027-0400: Error in supply to developing assembly (K)



## Waste toner feeding assembly

### Overview

To feed waste toner of the drum cleaning unit and the ITB cleaning unit to the waste toner case



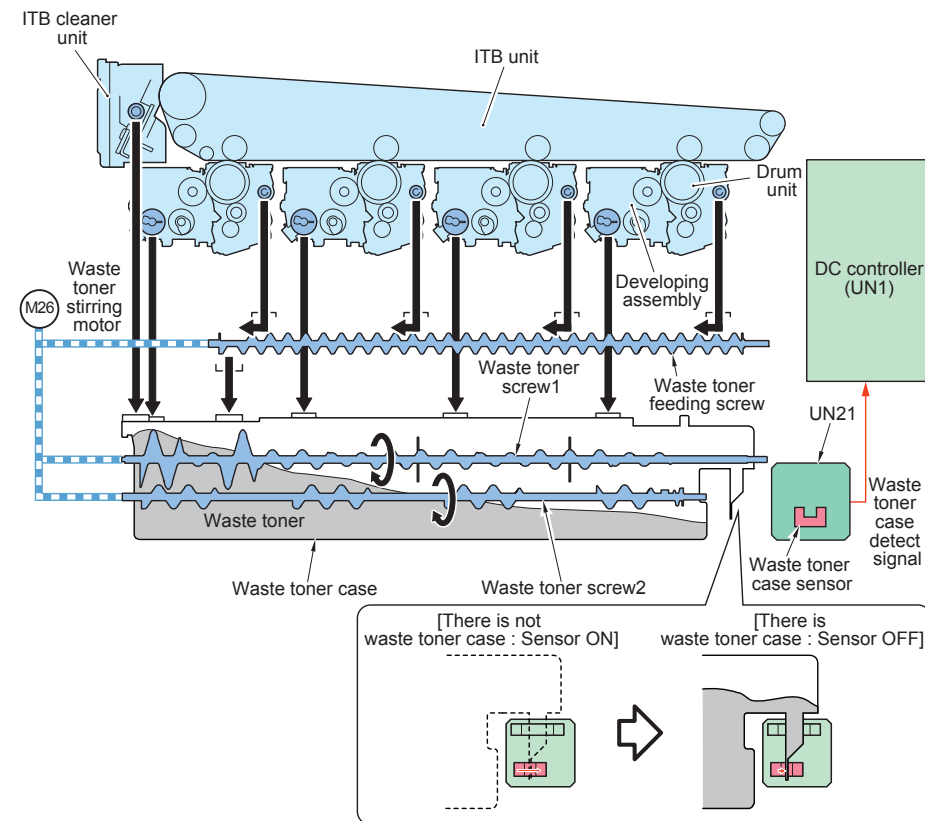
F-2-109

Parts name	Function
Waste toner feeding unit	To feed waste toner in each unit to the waste toner case
Waste toner feeding screw	To feed waste toner from the drum cleaning unit
Waste toner case	To keep waste toner
Waste toner screw 1, 2	To stir toner in the waste toner case

T-2-44

### Waste toner case full level detection

To detect toner level accumulated in the waste toner case



F-2-110

Detection description	Detection timing	Detection source	Message (operation of main unit)
Waste toner full level warning (approx. 7% until the waste toner level is full)	When the output result of sensor is changed from H to L	Waste toner full level sensor	Please prepare a waste toner case (continuous print is available)
Waste toner full level warning (approx. 0% until the waste toner level is full)	After the Developing Assembly toner supply count is started from full alert, when a total of approx. 1000 sheets is printed (in case of image on A4, dot ratio of each color is 5%)	Developing Assembly toner supply count	Please replace a waste toner case (the main unit stops the operation)

T-2-45

## Related Error Code

E013-0001: error in lock of waste toner feeding path

## ● Detection of waste toner case

To detect if the waste toner case is installed

Execution timing

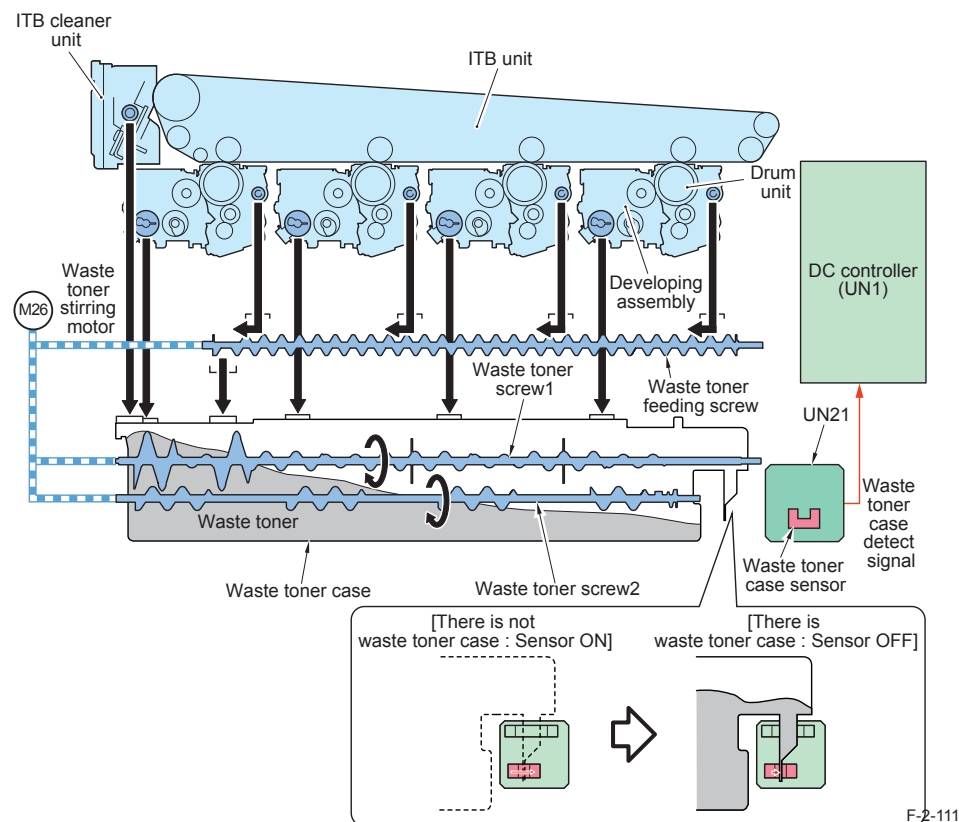
- 1) When the power is turned ON
- 2) When opening/closing the Front Cover

## Detection description

The waste toner case sensor (UN21) detects the presence of waste toner case.

ON: there is a waste toner case

OFF: there is no waste toner case (user message is displayed)



In order to prevent the toner leakage at removal of Waste Toner Case, the Shutter is prepared.

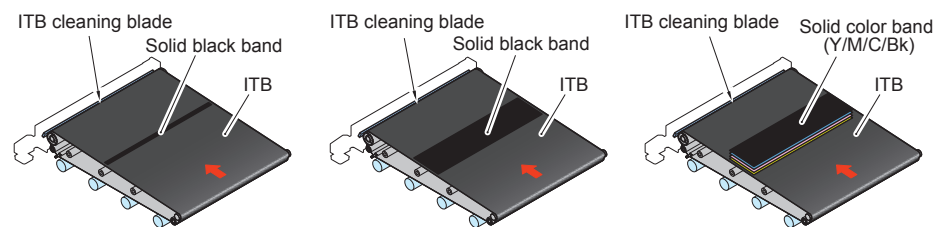
This Shutter has a mechanical mechanism, so when the Waste Toner Case is installed/removed, the Shutter is opened/closed.

Waste Toner Ejection Mouth Shutter of the main body is linked with the Waste Toner Case Shutter, so when the Waste Toner Case is installed/removed, this Ejection Mouth Shutter is also opened/closed simultaneously.

## Other controls

### Special control

Following sequences are assigned as special sequence with this machine



F-2-112

#### Sequence for black band

In the case of continuous prints while no toner is fed to the ITB cleaning blade, the ITB cleaning blade can be removed. Therefore, toner (width = full width of ITB, length = 1mm solid black band) is transferred on the ITB to supply toner to the ITB cleaning blade.

#### Execution timing

At post-rotation after the total reaches 100 prints

#### Related service mode

COPIER > OPTION > CLEANING > ITBB-TMG (Setting of drum/ITB cleaning band interval)

#### Sequence for transparency black band

When resistance adjustment agent on the transparency is attached on the ITB, it reduces transfer efficiency on the attached area. If considerable amount of resistance adjustment agent is attached on the ITB, it can cause fusion in the ITB cleaning assembly. To prevent this symptom, toner (width = full width of ITB, length = 80mm solid black band) is supplied to the ITB cleaning blade.

#### Execution timing

Sheet-to-sheet interval after 15 sheets of transparency are printed continuously

At post-rotation after 7 sheets are printed continuously since the last execution

#### Related service mode

COPIER > OPTION > CLEANING > OHP-PTH (Setting of the number of transparency to execute ITB cleaning)

#### Sequence for color band

Making prints with low image ratio can deteriorate toner and reduces developing performance. To prevent this symptom, average image ratio for each color is calculated by ATR control and appropriate amount of toner (width = A4, length = solid color band appropriate for deteriorated toner amount) determined by the calculation is transferred to the ITB.

#### Execution timing

When the average image ratio per sheet is the specified value or lower

## Service work

### Periodically replaced parts

Not applicable

### Consumable parts

No.	Parts name	Parts number	Qty	Estimated life	Remarks
1	ITB	FC0-0255	1	500k	Compatible with iR-ADV C5051 series
2	Primary transfer roller	FC0-0257	4	500k	Compatible with iR-ADV C5051 series
3	Secondary transfer inner roller	FC8-4402	1	500k	Compatible with iR-ADV C5051 series
4	Secondary transfer outer roller	FC0-4878	1	500k	Compatible with iR-ADV C5051 series
5	ITB cleaning blade	FM4-7246	1	150k	Compatible with iR-ADV C5051 series
6	Transfer separation guide unit	FM3-8893	1	500k	Compatible with iR-ADV C5051 series
7	Developing assembly (Y)	FM4-8351	1	500k	Possible to install to iR-ADV C5051 series. iR-ADV C5051/C5045 -> iR-ADV C5255 series: OK iR-ADV C5035/C5030 -> iR-ADV C5255 series: not compatible
	Developing assembly (M)	FM4-8352	1	500k	
	Developing assembly (C)	FM4-8353	1	500k	
	Developing assembly (Bk)	FM4-8354	1	500k	

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### List of periodical service works

No.	Parts name	Execution timing	Work	Remarks
1	Secondary transfer guide	50k	Cleaning	
2	Feeding contact guide	50k	Cleaning	
3	Patch sensor	50k	Inspection	

T-2-47

### When Replacing Parts

When replacing the Consumable Parts, be sure to clear the Parts Counter (COPIER > COUNTER > PRDC-1/DRBL-1)

### Points to note at servicing

Consumable parts in the ITB Unit are compatible with those of iR-ADV C5051 series.

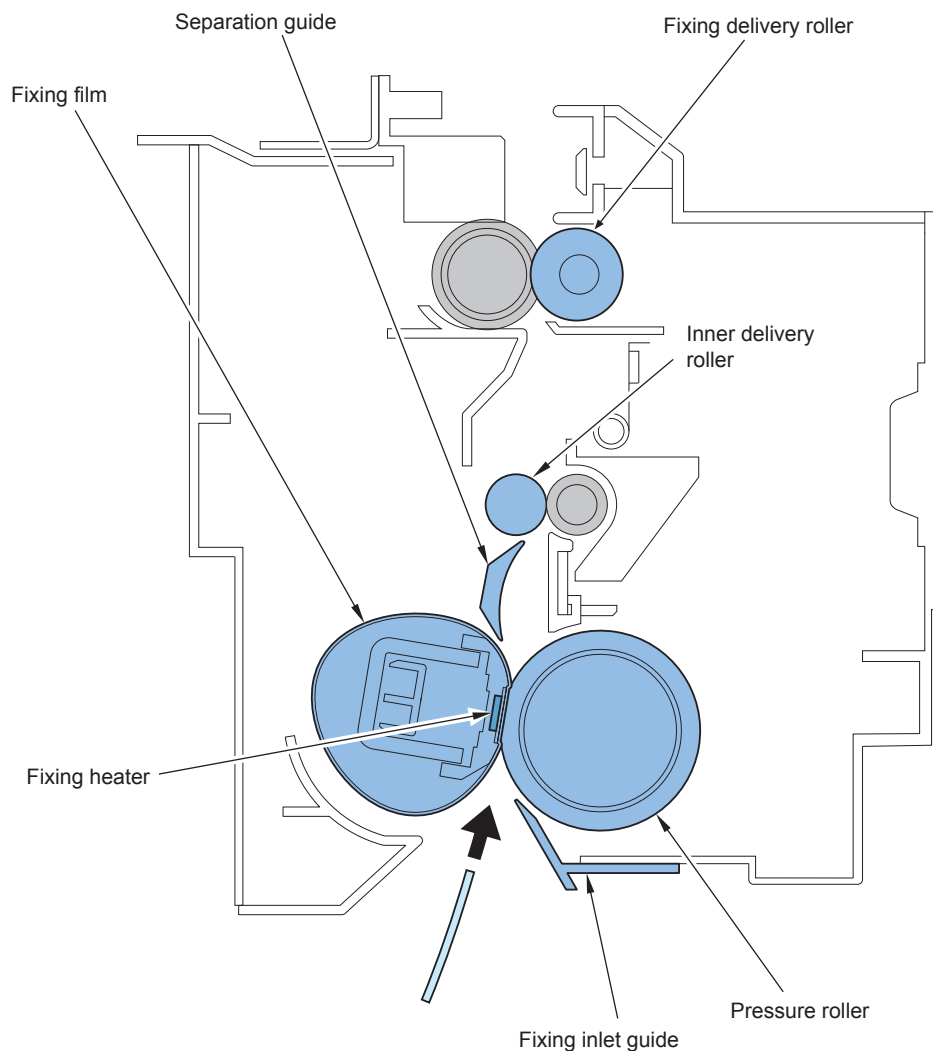
However, there is no compatibility between the ITB Unit of this machine and that of iR-ADV C5051 series. Therefore, it is not interchangeable.

## Fixing System

### Overview

#### Features

This machine introduces the on-demand fixing method.



F-2-113

#### 1. Saving energy

Fast warm-up reduces standby electric power thanks to low heat capacity.

#### 2. High speed

B&W 55ppm/ color 51ppm is enabled by introducing a new toner and the film capable of high heat transfer.

#### 3. Supported media

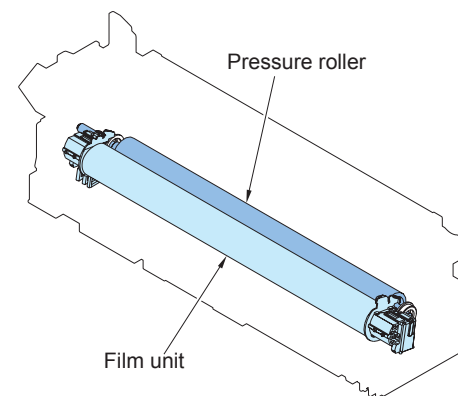
Feeding 52g/m<sup>2</sup> paper is available due to the modification of film path and Separation Guide, and image quality has been improved as well.

## Specifications

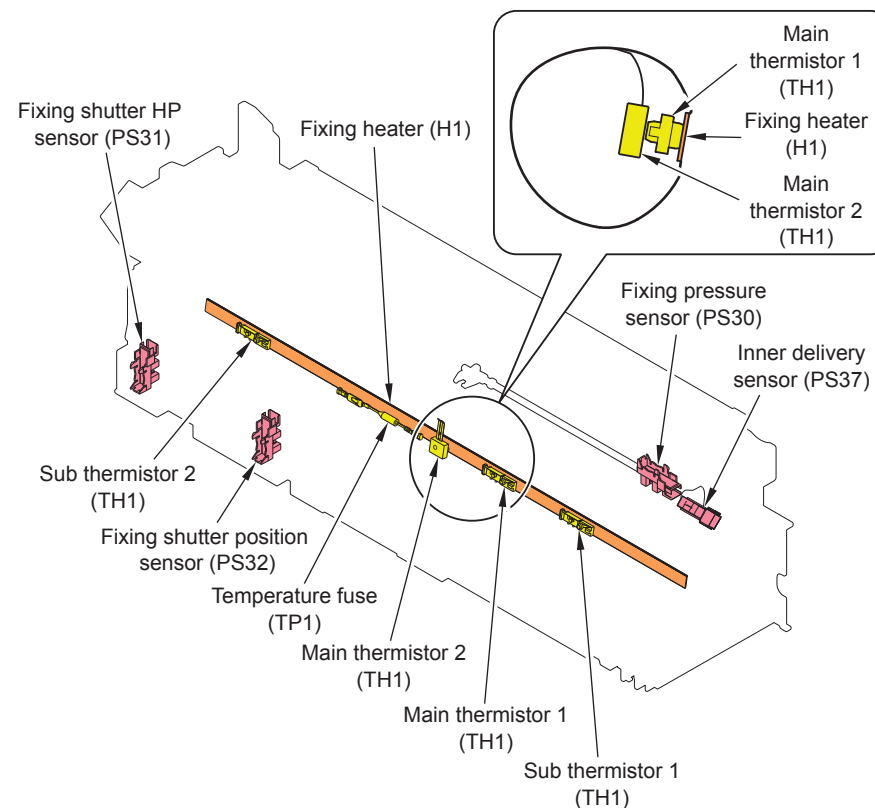
Item	Function/method
Fixing method	On-demand fixing
Fixing speed	55 / 50ppm machine 246 mm/s (1/1-speed, plain paper) 123 mm/s (1/2-speed, thick paper) 82 mm/s (1/3-speed, coated paper, transparency)
	40 / 35ppm machine 160 mm/s (1/1-speed, plain paper) 80 mm/s (1/2-speed, thick paper, coated paper, transparency)
Heater	Ceramic heater Individual drive of Main Heater (heat-generation distribution: high in center) / Sub Heater (heat-generation distribution: high in edges). Purpose: to control temperature rise at the edge
Control temperature	Target temperature at printing (plain paper 1 (64 to 81 g/m <sup>2</sup> )) 55 / 50 ppm machine: 169~180 deg C 40 / 35 ppm machine: 150~163 deg C
Temperature detection	By the main thermistors (2pc) and the sub thermistors (2pc)
Protection feature	Thermistors To block power supply to the fixing heater when a failure is detected Temperature fuse Rated operation temperature: 228 +0/-6 deg C

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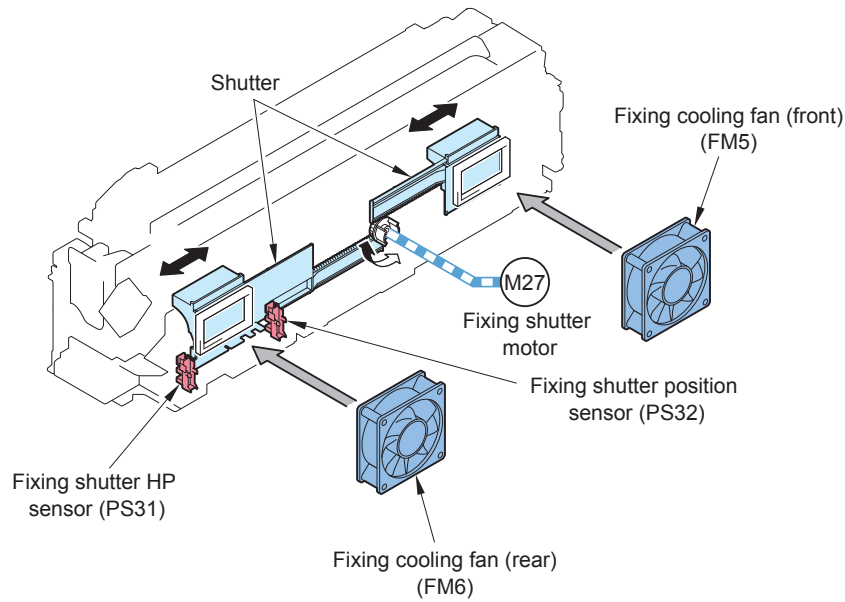
## Major parts configuration



F-2-114



F-2-115



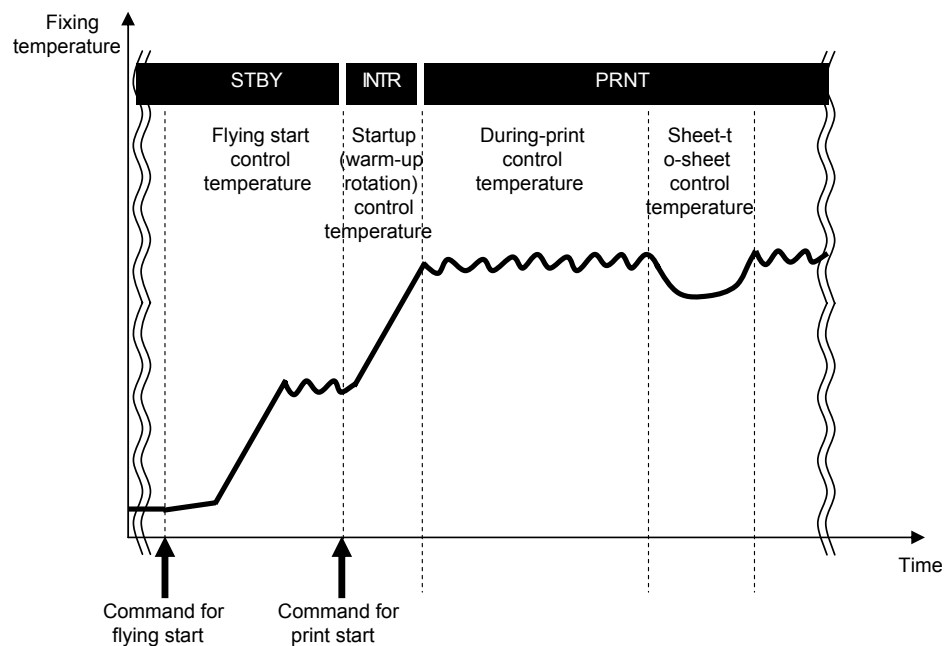
F-2-116

Parts name	Function / method
---	Film unit
---	Pressure roller
H1	Fixing heater
TH1	Main thermistor 1
	Main thermistor 2
	Sub thermistor 1
	Sub thermistor 2
TP1	Temperature fuse
PS30	Fixing pressure sensor
PS31	Shutter HP sensor
PS32	Shutter position sensor
PS37	Internal delivery sensor

T-2-49

## Controls

### Fixing temperature control: overview



F-2-117

#### Standby temperature control

- To preheat the fixing assembly to reduce time for starting print
- Flying start temperature control

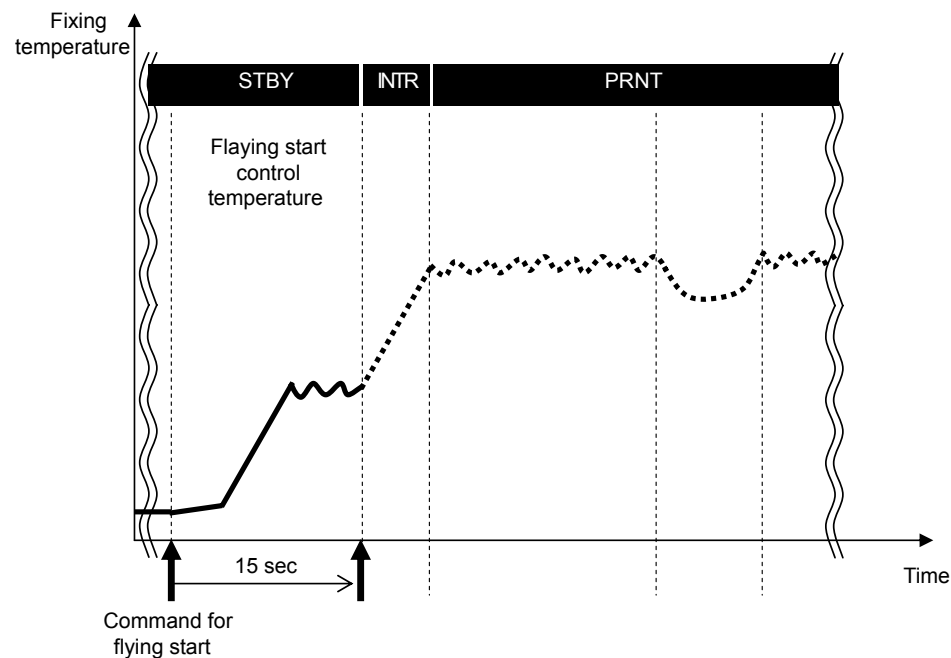
#### Print temperature control

- To increase temperature to meet the fixing target temperature and keep the target temperature during printing
- Startup (warm-up rotation) temperature control
- Print temperature control
- Sheet-to-sheet temperature control

#### Down sequence control

- To prevent fixing failure due to rising temperature at the edge or fall in temperature. This control causes reduced through-put.
- Down sequence when feeding small size paper
- Down sequence when switching paper size

### Standby temperature control



F-2-118

#### Flying start temperature control

Purpose:  
to reduce print time (FPOT) of the 1<sup>st</sup> sheet

Starting conditions:

- When pressing the numeric key on the control panel
- When pressing the button / key on the touch panel
- When opening / closing the cassette
- At recovery from sleep mode to standby mode

Control description:

Temperature rises to a certain point (150 degrees Centigrade: Main Thermistor 2). This operation takes for 15 seconds after the last operation.



## Related Service Mode

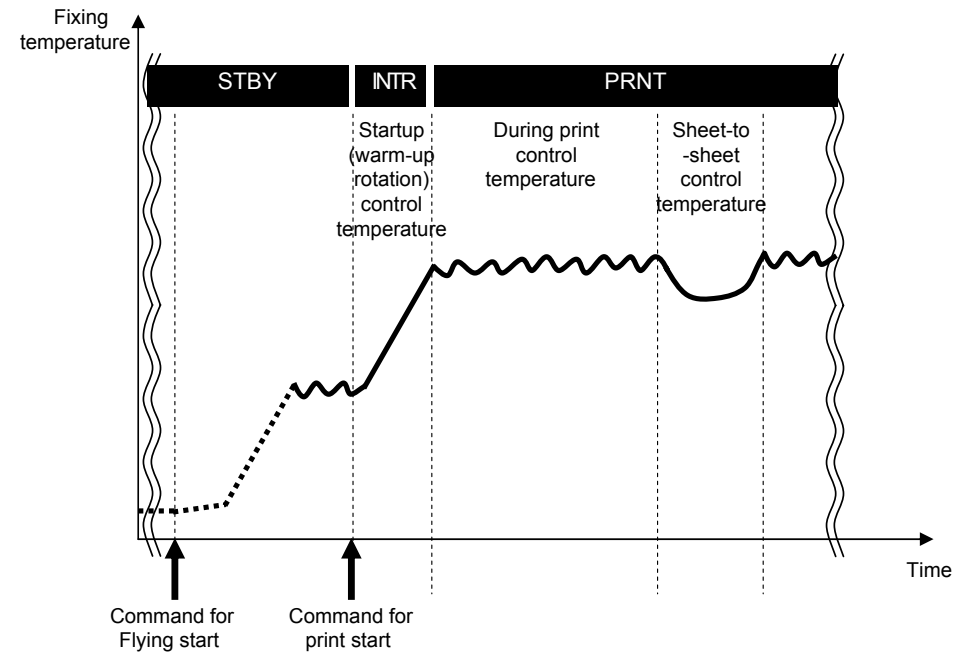
(Lv.2) COPIER > OPTION > IMG-FIX > FLYING  
 (To enable/disable Flying start (pre-mature start))

<Setting value>

0: Enable Flying start [default]

1: Disable Flying start

## Print temperature control



F-2-119

- Startup (warm-up rotation) temperature control  
 To increase fixing temperature to be ready for printing once the print-start command is received.
- Print temperature control  
 To set optimal target temperature to prevent fixing failure or offset, and keep the specified target temperature during printing
  - Setting target temperature → see the table on the next page  
 Target temperature is specified depending on the paper type, environment (temperature), fixing speed, elapsed time since the last control of fixing temperature and fixing temperature at the start of warm-up control.
  - Temperature control during printing  
 Temperature is controlled according to the detection result of main thermistors 1 and 2.

- Sheet-to-sheet distance temperature control

If the distance between sheets is longer than usual<sup>\*1</sup>, temperature between sheets is reduced to prevent temperature rise.

Temperature between sheets = target temperature during printing – (30 to 50 deg C)<sup>\*2</sup>

\*1:At down sequence

Between the 1<sup>st</sup> side and the 2<sup>nd</sup> side when making 2-sided print

When controls are executed (ATR control, registration control, ATVC control)

\*2:To be determined according to the elapsed time since the last control of fixing temperature (including standby control) and fixing temperature at the start of warm-up control

### Target temperature during printing

Model	Paper type ( ) : paper weight g / m <sup>2</sup>	Speed	Target temperature (deg C)	
55 / 50 ppm machine	Plain 1(64~81) / Color (64~81) / Recycled (64~81) / Pre-Punched / Tracing paper / Japanese paper (93)	1 / 1-speed 246 mm / sec.	169~194	
	Thin (52~63)		163~178	
	Plain 2 (82~105) / Bond (80~90)		181~197	
	Heavy 1 (106~163) / Label (151~180)	1 / 2-speed 123 mm / sec.	162~179	
	Heavy 2 (164~209) / Embossed(150) / Postcard, 4 on 1 postcard(190) / Tab		166~179	
	Envelope		140~149	
	Heavy 3(210~256)		160~172	
	40 / 35 ppm machine	Coated 1(106~163)	1 / 3-speed 82 mm / sec.	165
		Coated 2 (164~220)		170
		Transparency (151~180)	1 / 1-speed 160 mm / sec.	134~159
Plain 1(64~81) / Color (64~81) / Recycled (64~81) / Pre-Punched / Tracing paper / Japanese paper (93)		150~166		
Thin (52~63)		143~163		
Plain 2 (82~105) / Bond (80~90)		165~185		
Heavy 1 (106~163) / Label (151~180)		1 / 2-speed 80 mm / sec.		150~167
Heavy 2 (164~209) / Embossed(150) / Postcard, 4 on 1 postcard(190) / Tab	155~170			
Heavy 3(210~256)	160~172			
Coated 1(106~163)	165			
Coated 2 (164~220)	170			
Transparency (151~180)	134~159			
Envelope	130~149			

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## Related Service Mode

- Display of thermistor detection temperature

(Lv.1) COPIER &gt; DISPLAY &gt; ANALOG

- > FIX-C (detected temperature of main thermistor 2)
- > FIX-E (detected temperature of main thermistor 1)
- > FIX-E2 (detected temperature of sub thermistor 1)
- > FIX-E3 (detected temperature of sub thermistor 2)

- Offset of fixing control temperature

(Lv.1) COPIER &gt; OPTION &gt; IMG-FIX

- > TEMP-TBL (plain paper 1)
- > TMP-TBL2 (thick paper 1)
- > TMP-TBL3 (thick paper 2)
- > TMP-TBL4 (thick paper 3)
- > TMP-TBL5 (thin paper)
- > TMP-TBL6 (envelope)
- > TMP-TBL7 (plain paper 2)
- > TMP-TBL8 (transparency)
- > TMP-TBL9 (coated paper 1)
- > TMP-TBL10 (coated paper 2)

## &lt;Setting value&gt;

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

## Down sequence control

- Down sequence when feeding small size paper

## Purpose:

To prevent temperature rise of non-feeding area in the case of continuous print of small size paper (less than A4R of length in width direction), fixing offset or deterioration of fixing film.

## Starting conditions:

When the detected temperature of sub thermistor 1 or 2 reaches the specified temperature or higher (250 to 260 deg C) during printing

## Operation:

Temperature is reduced by making wider sheet-to-sheet distance to control the temperature at slightly lower than the target temperature for normal print.

Model	Paper type ( ) : paper weight g / m <sup>2</sup>	Target temperature (deg C)	Print speed (ppm)	
55 / 50 ppm machine	Plain 1 (64~81) / Color (64~81) / Recycled (64~81) / Pre-Punched / Tracing paper / Japanese paper (93)	165~194	12~4	
	Thin (52~63)	159~178		
	Plain 2 (82~105) / Bond (80~90)	177~197		
	9~3	Heavy 1 (106~163) / Label (151~180)	158~179	
		Heavy 2 (164~209) / Embossed (150) / Postcard, 4 on 1 postcard (190) / Tab (160~203)	162~179	
		Envelope	136~149	
		Coated 1 (106~163)	161~165	
		Coated 2 (164~220)	166~170	
	6~2	Heavy 3 (210~256)	156~172	
		Transparency (151~180)	133~159	
40 / 35 ppm machine		Plain 1 (64~81) / Color (64~81) / Recycled (64~81) / Pre-Punched / Tracing paper / Japanese paper (93)	146~166	12~4
		Thin (52~63)	139~163	
6~2		Plain 2 (82~105) / Bond (80~90)	161~185	
		Coated 1 (106~163)	161~165	
		Coated 2 (164~220)	166~170	
		Heavy 1 (106~163) / Label (151~180)	146~167	
	Heavy 2 (164~209) / Embossed (150) / Postcard, 4 on 1 postcard (190) / Tab (160~203)	151~170		
	Heavy 3 (210~256)	156~172		
	Transparency (151~180)	133~159		
Envelope	126~149			

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## Related Service Mode

- Setting for down sequence start temperature when feeding small size paper (Lv.1) COPIER > OPTION > IMG-SPD > FX-D-TMP

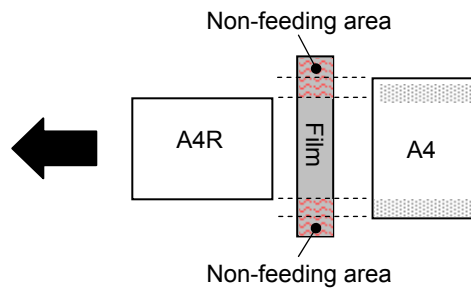
## &lt;Setting value&gt;

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

- Down sequence when switching paper size

## Purpose:

This down sequence prevents temperature rise of non-feeding area: there can be possible fixing offset or wrinkle of the succeeding paper due to increased temperature of non-feeding area of the preceding paper when continuously making prints or feeding wider length of paper than the preceding paper.



F-2-120

## Starting conditions:

If the detected temperature of sub thermistor 1 or 2 exceeds the specified temperature (250~260 deg C) when switching to the paper which has longer width than the preceding paper.

## Operation:

Pickup of the succeeding paper and power distribution to the heater are stopped as well.

## Completion conditions:

This down sequence is completed if any of the following conditions is satisfied:

- When the detected temperature of sub thermistor 1 or 2 reaches the specified temperature or less.
- When the specified period of time<sup>\*1</sup> has passed since the preceding paper went through the fixing nip.

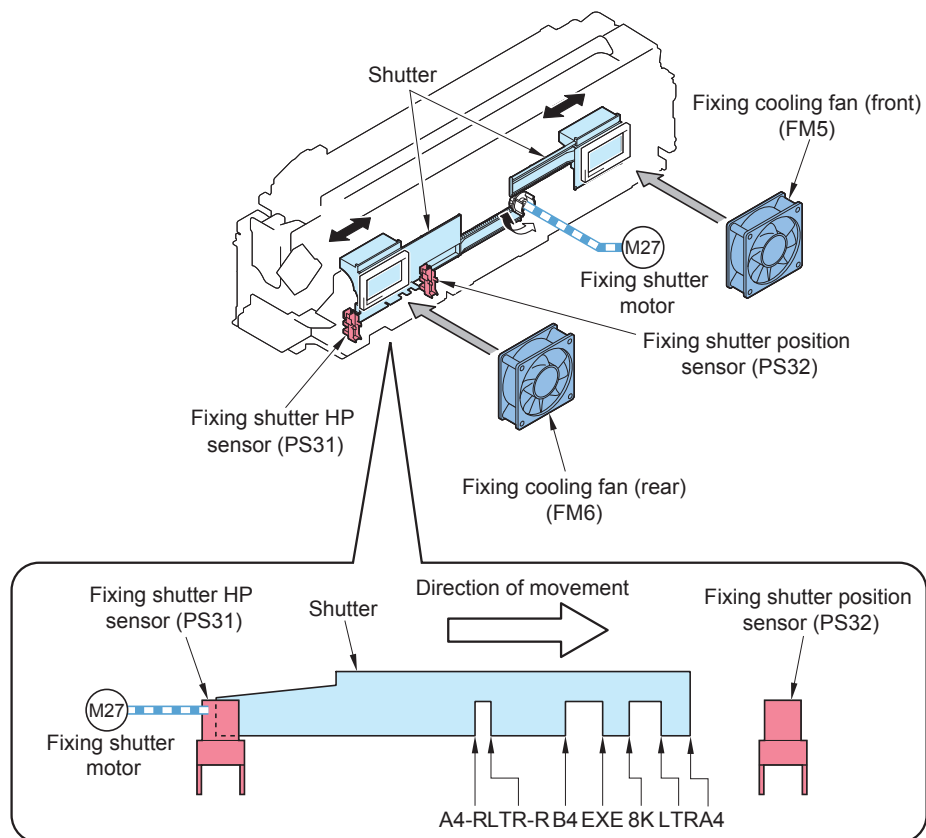
\*1: Specified period of time differs whether the fan has cooled the preceding paper or not.

- If the preceding paper is A4R or larger and A3 or smaller (the fan has cooled the paper)
  - 15 seconds
- If the preceding paper is smaller than A4R (the fan has not cooled the paper)
  - 30 seconds

## Fixing film edge cooling control

Temperature at the edge of the film is increased when continuously making prints. Excessive temperature rise can deteriorate the film. When small size paper (A4R or shorter size in width direction) is printed, the mode changes to the down sequence.

When making prints with paper that is A4R or longer and A3 or shorter in width direction while the film temperature exceeds the specified temperature (sub thermistor 1,2), the fan attached near the fixing assembly sends air and cools the film to control temperature rise. Unlike down sequence, this control will not reduce the through-put because this control is executed while printing is continued.



F-2-121

There is a shutter at the air vent, which moves (opens) in 7 levels according to the size of feeding paper. This feature enables to send air to optimal area on the film.

## Detection of fixing assembly

The thermistor connection signal, which is input to the DC controller, detects presence of fixing assembly at warm-up rotation (when the power is turned ON, the cover is open).

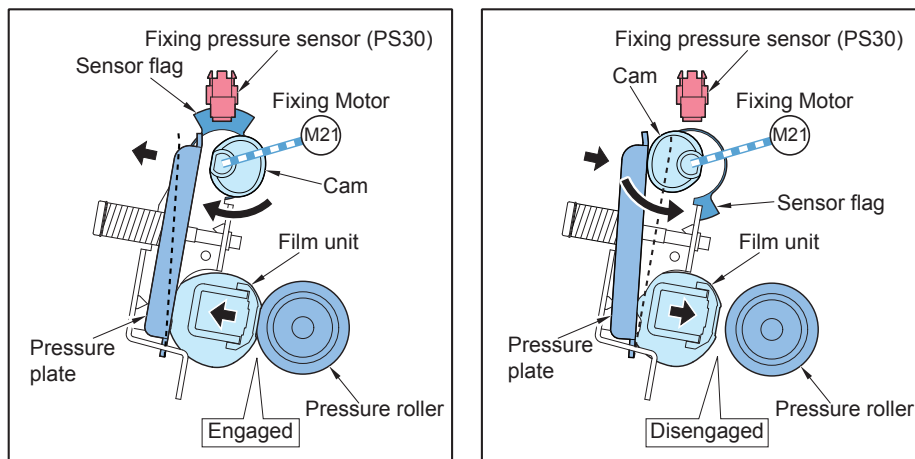
An error code "E004-0000" is displayed to stop the operation if no fixing assembly is detected.

Signal	Detection result
Thermistor connection signal (THRM_CNNT)	High: No fixing assembly is found. Low: There is a fixing assembly.

T-2-52

## Film unit engagement / disengagement control

To prevent deformation of the fixing film / pressure roller caused by heat and pressure when the drive of pressure roller is stopped, and also to improve jam recovering performance, the film unit is disengaged from the pressure roller under the following conditions:



F-2-122

### Execution conditions / timing

- The film unit is disengaged when the power is turned ON
- At recovery from sleep mode
- At recovery from jam removal
- When the front cover/right cover is closed.

### Execution conditions / timing

- When the power is turned OFF
- At jam detection when the power is turned ON
- When the mode is shifted to sleep mode (when the power switch on the control panel is OFF, when the specified period of time has passed since the mode has shifted to sleep mode)
- When a jam occurs
- When an error occurs

### Related Error Codes

E009 (Error in engagement/disengagement of film unit)

- 0000 Error in engagement
- 0001 Error in disengagement
- 0002 Error in engagement (it is highly possible that grease is scattered on the surface of the cam.)

## Protection features

Code	Description	Error Clear
E001	Detection of abnormal high temperature	
0000	When main thermistor 1/2 detects 255 deg C or more for 0.2 sec.	Clear
0001	When sub thermistor 1/2 detects 275 deg C or more for 0.2 sec	Clear
0003	When the thermistor detects temperature beyond the upper value: Main thermistor 2 = 265 deg C Main thermistor 1 = 264 deg C Sub thermistor 1 = 280 deg C Sub thermistor 2 = 280 deg C	Clear
E003	Detection of low temperature	
0000	When main thermistor 1/sub thermistor 1/sub thermistor2 detects 21 to 50 deg C for 3 sec.	Clear
0001	When main thermistor 1 detects "(target temperature - 70 deg C)" or less for 5 sec.	Clear
0002	When the thermistor detects disconnection (any thermistor detects 20 deg C or less for 3 sec)	Clear
0003	When the control fails to be completed 60 sec after the start of warm-up rotation.	Clear
E004	Detection of abnormal fixing heater drive circuit	
0000	When disconnection of the thermistor is detected.	Unnecessary
E808	Detection of abnormal fixing drive circuit/power supply	
0000	Zero-cross error (faulty low voltage circuit)	Unnecessary

T-2-53

## Service work

### Periodically replaced parts

No parts are assigned to be replaced periodically.

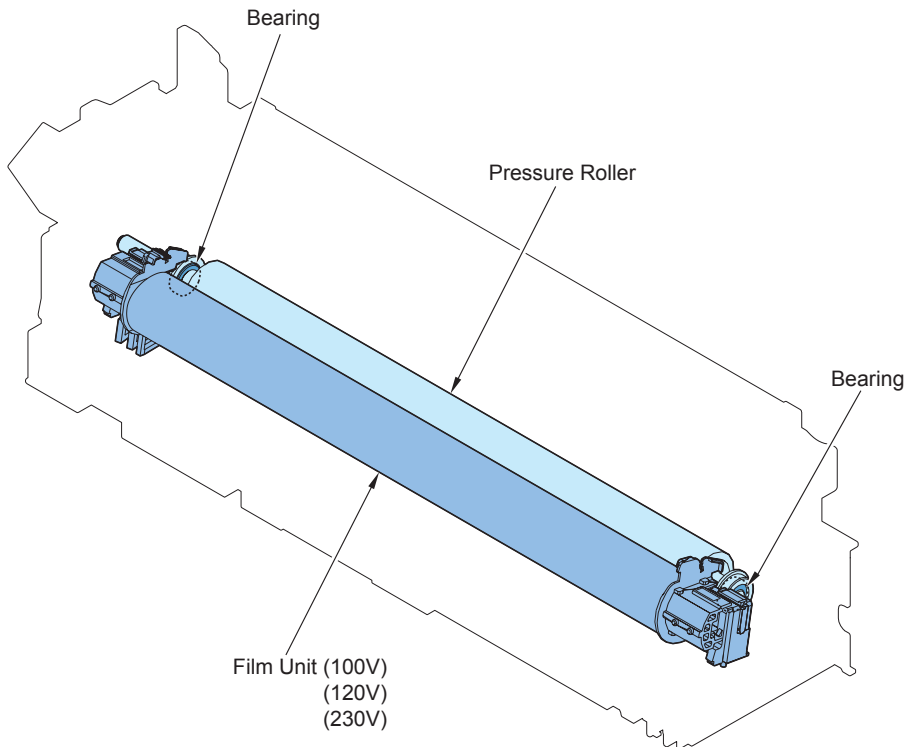
### Consumable parts

Parts name	Parts number	Qty	Estimated life (print)	Counter (DRBL-2)	Adjustment	Remarks
1 Film unit	FM3-5949	1	300,000	FX-UP-FR	N.A. *1	100V
	FM3-5950					120V
	FM3-5951					230V
2 Pressure roller	FC8-4906	1	300,000	FX-LW-RL	N.A. *1	
3 Fixing bearing	XG9-0172	2	300,000	FX-LW-BR	N.A.	

The parts mentioned above are in common with those of iR-ADV C5051 series.

T-2-54

\*1: Be sure to check if nip width is appropriate after replacement.



F-2-123

### List of periodical service works

Parts name	Parts number	Qty	Estimated life (print)	Remarks
1 Fixing Separation Guide	FC8-4906	1	300,000	Replace the Film Unit at the same time
2 Shutter Cover	XG9-0172	1	300,000	Replace the Film Unit at the same time

T-2-55

### When replacing parts

When replacing the Consumable Parts, be sure to clear the Parts Counter (COPIER > COUNTER > PRDC-1/DRBL-1)

#### Film unit, pressure roller

Check that the fixing nip width is within the specified range.

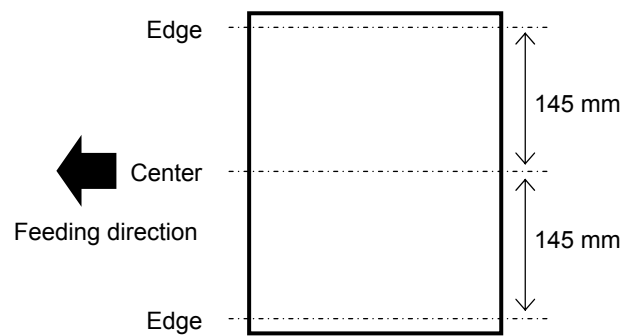
Paper to be used: A4 / LTR size (plain paper, 80 to 105 g/m<sup>2</sup>)

- 1) Set paper on the manual feed pickup tray.
- 2) Execute output of fixing nip paper in Service Mode:  
(Lv.1) COPIER > FUNCTION > FIXING > NIP-CHK  
Paper is picked up to make 2-sided print.  
1<sup>st</sup> side: solid image in Magenta, 2<sup>nd</sup> side: no image (blank)  
The paper is stopped at the nip area when fixing is performed on the 2<sup>nd</sup> side, and then delivered outside the machine approx. 15 sec later.
- 3) Measure the nip width and check that the measured value is within the specified range.

Specified value (range):

Center: 9.0 +/- 1.0mm

Edge (145mm from the center of feeding paper): 9.0 +/- 1.0mm



F-2-124

If measured value is out of the specified range, reinstall the replaced parts (film unit or pressure roller) and then measure the nip width again.

MEMO:

Fixing nip width cannot be adjusted in the field



## Pickup Feed System

### Overview

#### Features

- Improvement of productivity (33 sheets / min → 51 sheets / min)  
The number of circulation sheets is changed to 5 in 1 set at 2-sided feeding. As a result, although the motor speed is slowed down reducing the motor loads and noise, productivity is improved.
- Increase of supported paper size and types for printing  
The curve of feed path is made gentler and the curl occurrence is reduced by changing the fixing temperature depending on the paper grammage. As a result, it is realized to feed the paper with 52g / m<sup>2</sup> to 256g / m<sup>2</sup>.
- Auto paper size identification in cassette  
By using the 2 size switches and the guide plate, auto size identification is realized. Users do not have to configure the size setting.
- Increase of Multi-Purpose Tray pickup capacity (50 sheets → 100 sheets)  
Simple retard method is applied for the pickup method. The tray is lifted up and down at paper pickup, so stack capacity of the tray is increased from 50 sheets to 100 sheets.

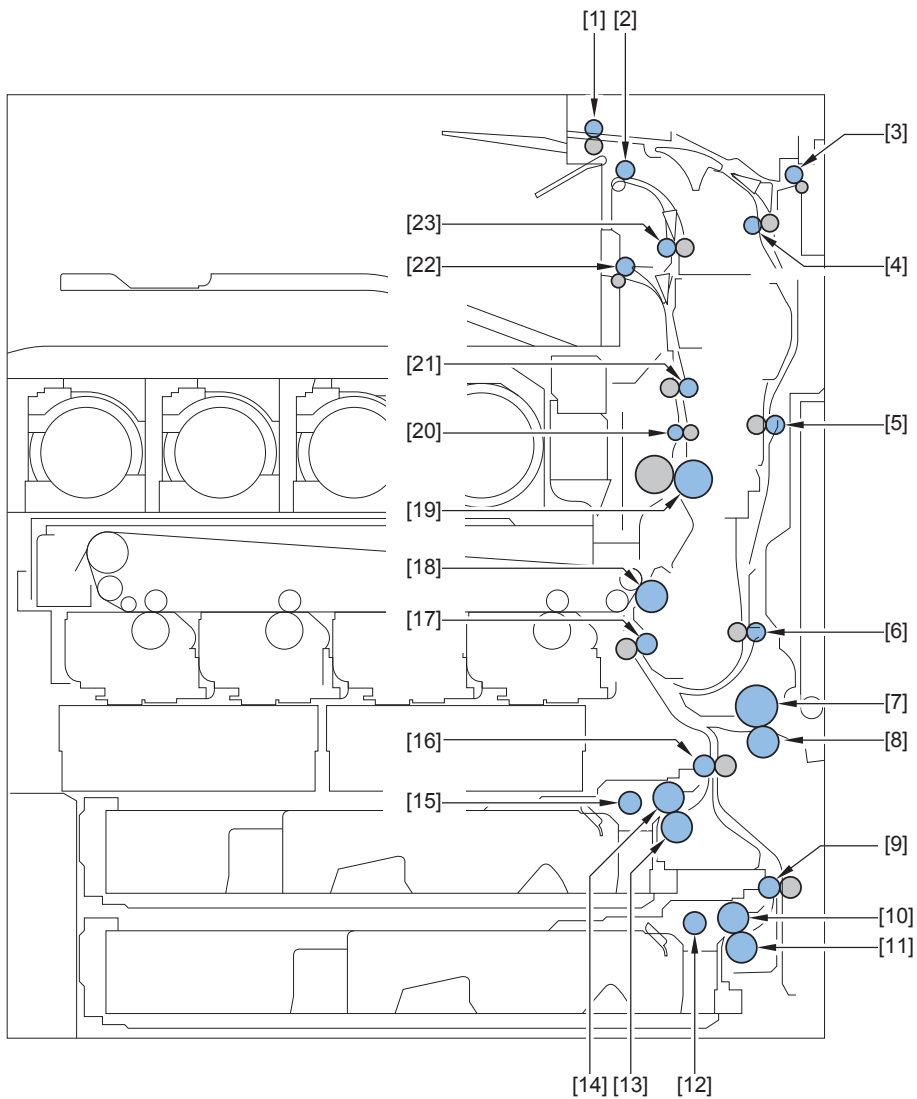
#### Specification

Item		Description
Paper storage method		Front loading method
Pickup method	Cassette 1, 2	Separation retard method
	Multi-purpose tray	Simple retard method
Paper stack capacity	Cassette 1, 2	550 sheets (80g / m <sup>2</sup> paper), 650 sheets (64g / m <sup>2</sup> paper)
	Multi-purpose tray	100 sheets (80g / m <sup>2</sup> paper), 100 sheets (64g / m <sup>2</sup> paper)
Paper feed reference		Center reference
Paper size	Cassette 1	Standard (universal) B4, A4, B5, LGL, LTR, EXE, A4R, B5R, LTRR, A5R, STMTR, 8K, 16K, 16KR,
	Cassette 2	Standard (universal) A3, B4, A4, B5, LDR, LGL, LTR, A4R, B5R, LTRR, EXE, A5R, STMTR, 12" x 18", 8K, 16K, 16KR, Envelope (when an option is installed.)
	Multi-purpose tray	A3, B4, A4, B5, LDR, LGL, LTR, A4R, B5R, LTRR, EXE, A5R, STMTR, 12"x18", SRA3, 8K, 16K, 16KR, postcard, envelope, non-standard size (99mm x 140mm to 320mm x 457.2mm)
Paper grammage	Cassette 1, 2	52 to 209g / m <sup>2</sup>
	Multi-purpose tray	52 to 256g / m <sup>2</sup> , For 210g / m <sup>2</sup> or more, multi-purpose tray 1-sided only.
Paper size switch	Cassette 1, 2	Size auto detection
	Multi-purpose tray	Input from the operation panel by uses
2-sided print method		Through path method
Paper level display		Yes (displayed in 3 levels on LCD panel)
OHP detection		Yes
Lead edge margin		4.0mm -1 ~ + 1.5mm
Right edge margin		2.5mm -1.5 ~ +1.5mm

T-2-56

## Parts Configuration

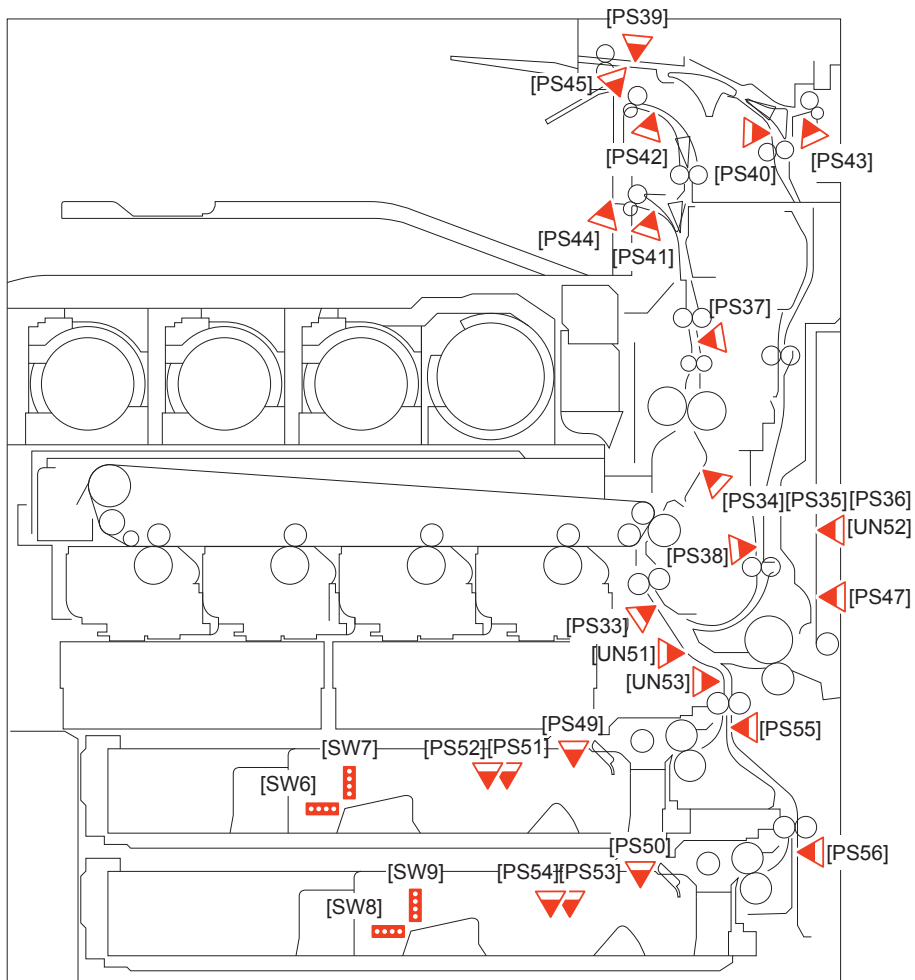
### Roller Layout Drawing



- |   |   |
|---|---|
| [1] Reverse Roller                          | [13] Cassette 1 Separation Roller         |
| [2] Second Delivery Roller                  | [14] Cassette 1 Feed Roller               |
| [3] Third Delivery Roller                   | [15] Cassette 1 Pickup Roller             |
| [4] Duplex Inlet Roller                     | [16] Vertical Path Roller 1               |
| [5] Duplex Feed Upper Roller                | [17] Registration Roller                  |
| [6] Duplex Feed Lower Roller                | [18] Secondary Transfer Roller            |
| [7] Multi-Purpose Tray Pickup / Feed Roller | [19] Pressure roller                      |
| [8] Multi-Purpose Tray Separation Roller    | [20] Post-Fixing Roller                   |
| [9] Vertical Path Roller 2                  | [21] Fixing Inner Delivery Roller         |
| [10] Cassette 2 Feed Roller                 | [22] First Delivery Roller                |
| [11] Cassette 2 Separation Roller           | [23] Second / Third Delivery Inlet Roller |
| [12] Cassette 2 Pickup Roller               |   |

F-2-125

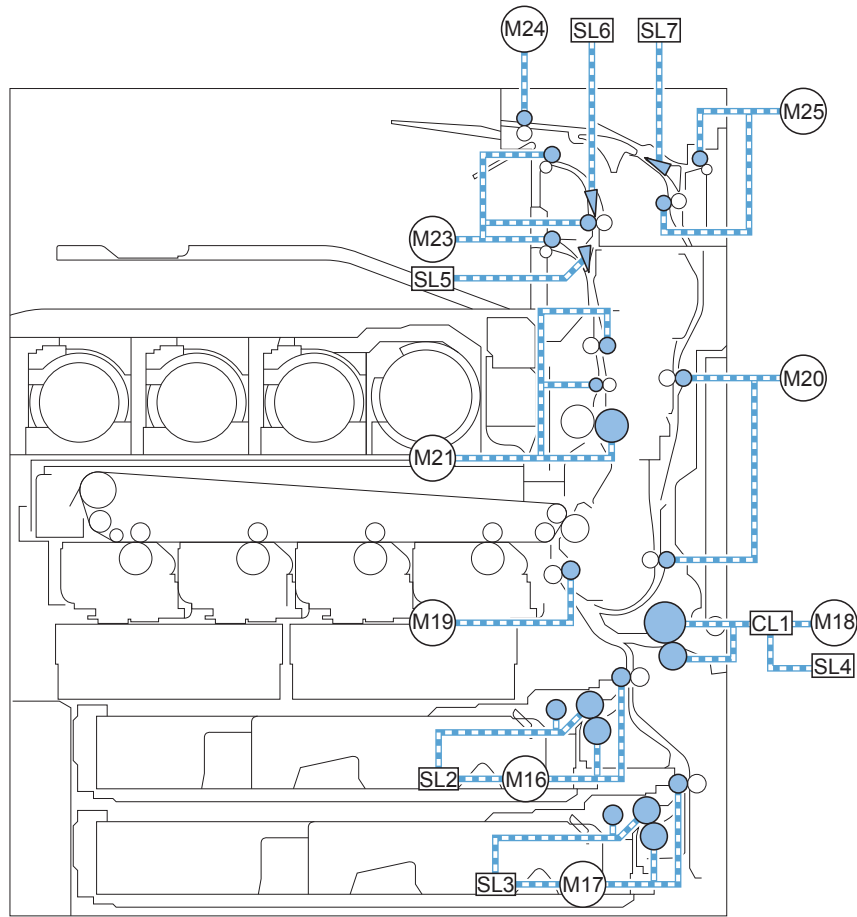
## Sensor / Switch Layout Drawing



F-2-126

PS33 Registration sensor	PS50 Cassette 2 Paper Presence Sensor
PS34 Fixing Inlet Sensor	PS51 Cassette 1 Paper Level Sensor A
PS35 Fixing Loop Sensor 1	PS52 Cassette 1 Paper Level Sensor B
PS36 Fixing Loop Sensor 2	PS53 Cassette 2 Paper Level Sensor A
PS37 Inner Delivery Sensor	PS54 Cassette 2 Paper Level Sensor B
PS38 Duplex Paper Sensor	PS55 Cassette 1 Pre-Registration Sensor
PS39 Reverse Sensor	PS56 Cassette 2 Pre-Registration Sensor
PS40 Duplex Inlet Sensor	PS57 Pre-reverse Sensor
PS41 First Delivery Sensor	UN51 OHP Sensor
PS42 Second Delivery Sensor	UN52 Multi-purpose tray size sensor
PS43 Third Delivery Sensor	UN53 Vertical Path Sensor
PS44 First Delivery Tray Full Sensor	SW6 Cassette 1 Size Switch A
PS45 Second Delivery Tray Full Sensor	SW7 Cassette 1 Size Switch B
PS47 Multi-Purpose Tray Paper Presence Sensor	SW8 Cassette 2 Size Switch A
PS49 Cassette 1 Paper Presence Sensor	SW9 Cassette 2 Size Switch B

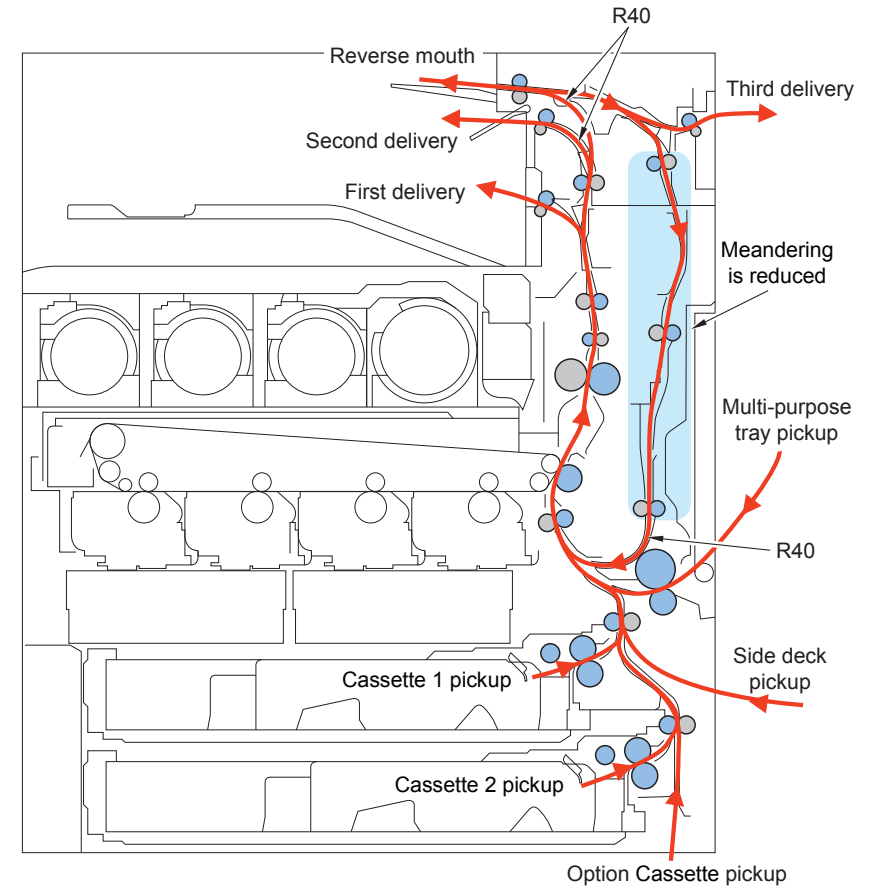
## ● Load Driving Drawing



F-2-127

M16	Cassette 1 Pickup Motor	SL2	Cassette 1 Pickup Solenoid
M17	Cassette 1 Pickup Motor	SL3	Cassette 2 Pickup Solenoid
M18	Multi-Purpose Tray Motor	SL4	Multi-purpose tray lifting solenoid
M19	Registration Motor	SL5	First Delivery Flapper Solenoid
M20	2-Sided Feed Motor	SL6	Second Delivery Flapper Solenoid
M21	Fixing Motor	SL7	Third Delivery Flapper Solenoid
M23	First / Second Delivery Motor	CL1	Multi-Purpose Pickup Clutch
M24	Reverse Roller Motor		
M25	Third Delivery Motor		

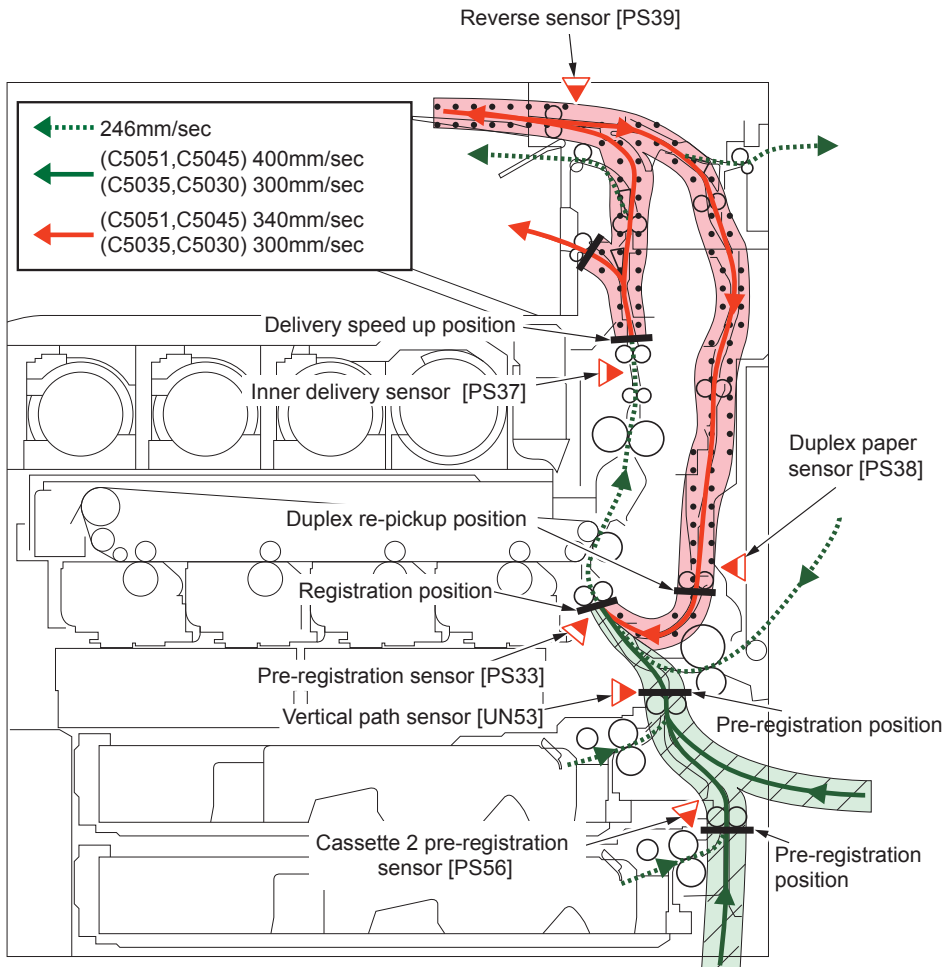
## ■ Paper Path



F-2-128

To support the heavy paper feeding, the feed path at Duplex Feed Assembly is made a gentle curve and damage on the paper is reduced.

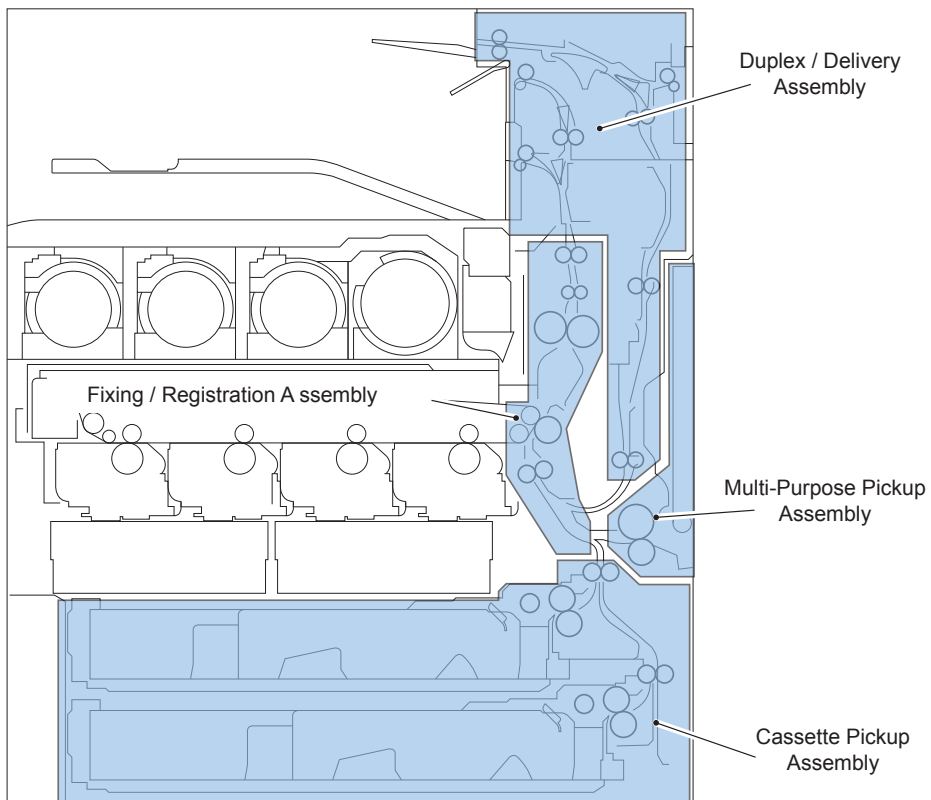
## Interval Speed Up



F-2-129

# Various Controls

## Overview



F-2-130

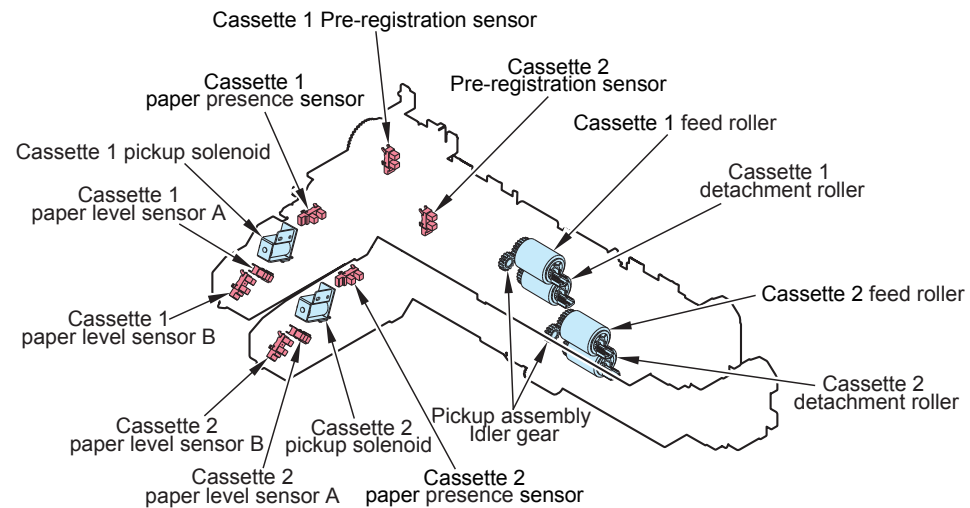
Area	Detection, Control
Cassette Pickup Assembly	Paper Level / Presence Detection
	Paper Size / Cassette Presence Detection
	Pre-Registration Control
Multi-Purpose Pickup Assembly	Paper Presence Detection
	Paper Size Detection
Fixing / Registration Assembly	OHP Control
	Registration Control
	Fixing Arch Control
Duplex / Delivery Assembly	Duplex Feed Control
	Duplex Wait Control
JAM Detection	JAM Detection

T-2-57

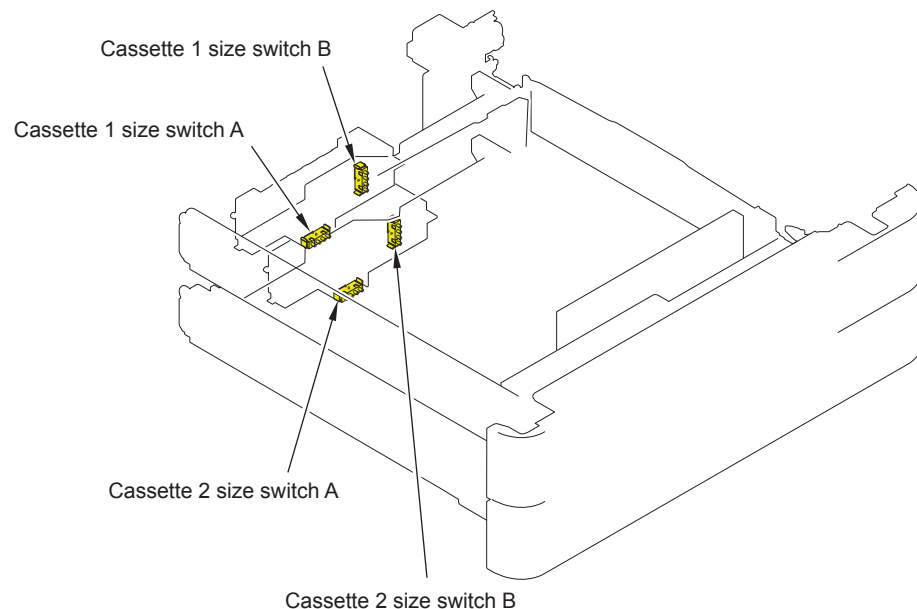
# Cassette Pickup Assembly

## Overview

### Parts Configuration

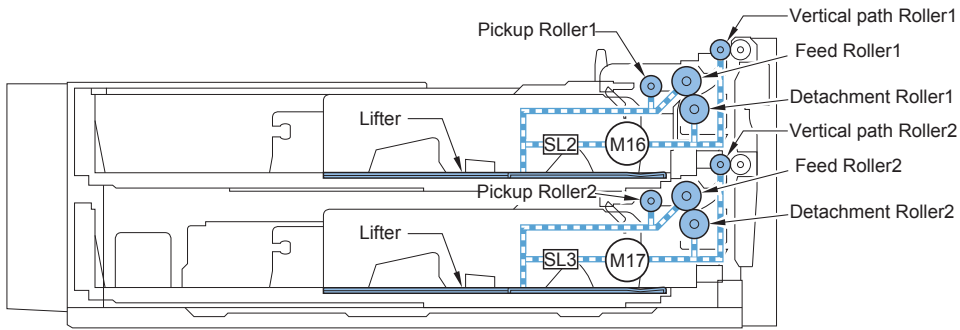


F-2-131



F-2-132

● Drive Configuration



F-2-133

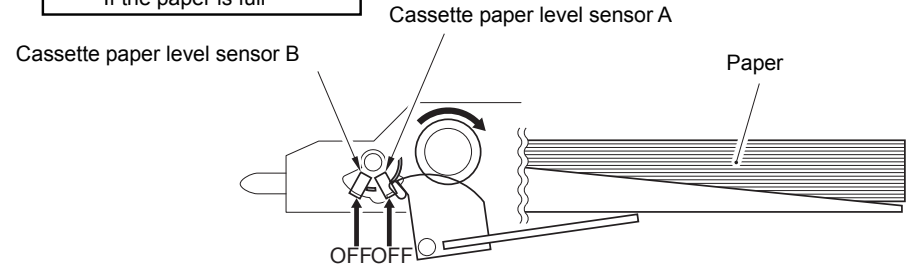
- M16 Cassette 1 Pickup Motor
- M17 Cassette 2 Pickup Motor
- SL2 Cassette 1 Pickup Solenoid
- SL3 Cassette 2 Pickup Solenoid

● Detection

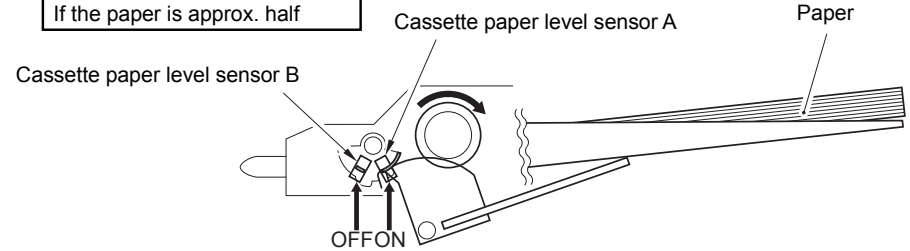
Paper Level / Presence Detection

There are 3 sensors to detect the paper level and paper presence in the cassette. Paper level is displayed on the operation panel.

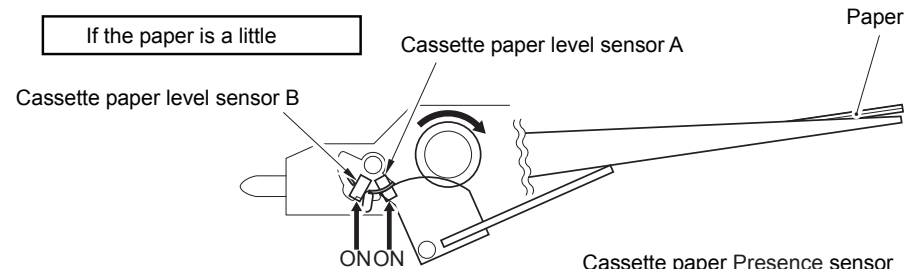
If the paper is full



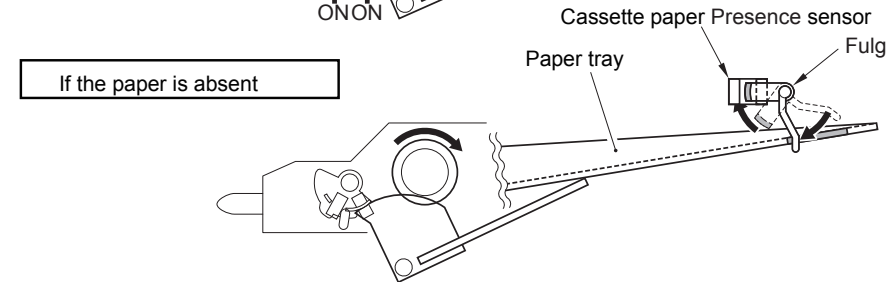
If the paper is approx. half



If the paper is a little



If the paper is absent



F-2-134

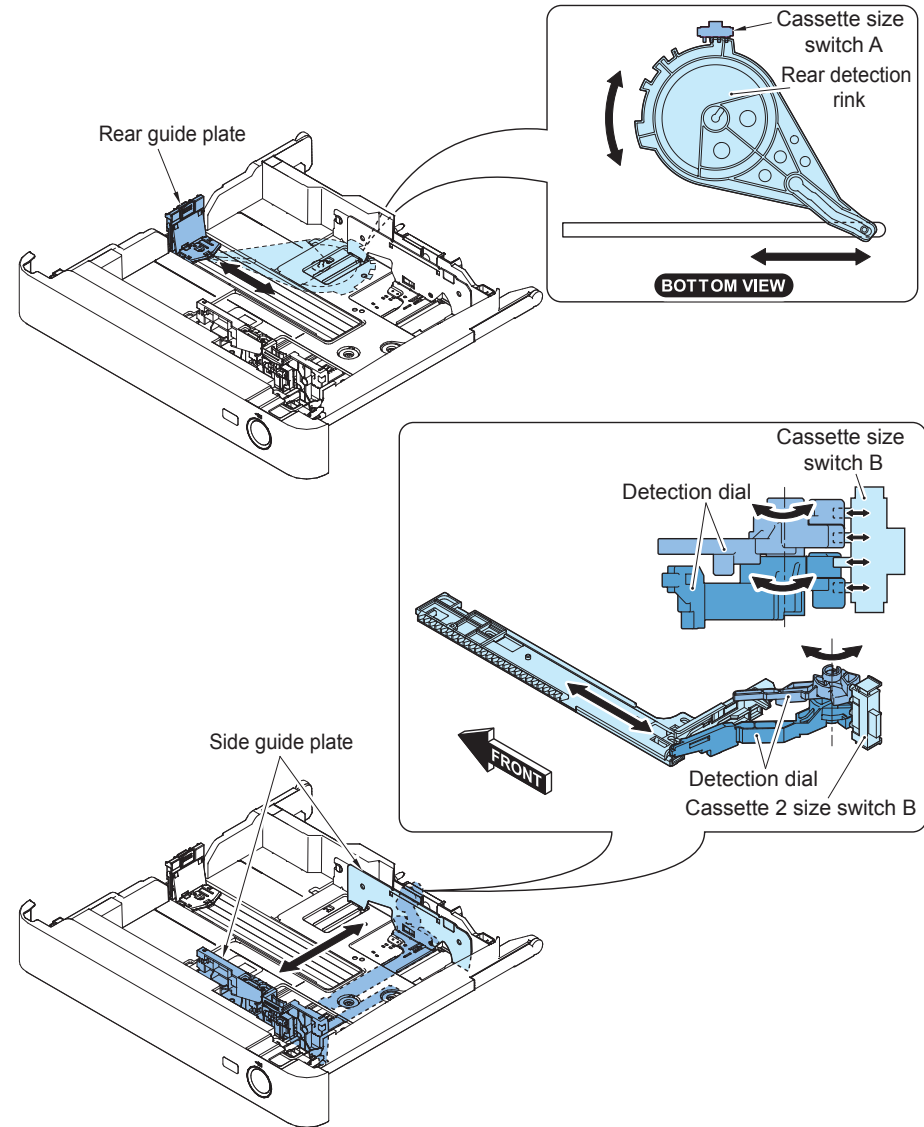
Display	Remaining Level	Sensor A	Sensor B	Paper Presence Sensor
	100% to approx. 50% of capacity	OFF	OFF	OFF
	Approx. 50% of capacity to approx. 50 sheets	ON	OFF	OFF
	Approx. 50 sheets or less	ON	ON	OFF
	No paper	-	-	ON

F-2-135

**Paper Size Detection / Cassette Presence Detection**

Paper size of the cassette can be automatically detected by adjusting the position of the guide plate.

Concavo-convex area of the cassette dial is switched when the guide plate is shifted and two Size Switches on a printer are switched. Length and width are detected according to the ON / OFF combination of switches. As long as standard paper, both AB type and inch type can be used. However, size should be found manually on the check screen for the combination of A5-Rand STMT-R or the combination of B5-R and EXEC.



F-2-136



	Width		Width detection				Length detection			
			1	2	3	4	1	2	3	4
B5	257	182	0	ON	ON	0	0	0	0	0
EXEC	267	184	0	ON	ON	0	0	0	0	0
16K	270	195	0	ON	ON	0	ON	0	0	0
A5-R	148.5	210	ON	0	ON	0	ON	ON	0	0
A4	297	210	0	ON	0	0	ON	ON	0	0
STMT-R	139.7	215.9	ON	0	ON	0	ON	ON	0	0
LTR	279.4	215.9	0	ON	ON	0	ON	ON	0	0
B5-R	182	257	ON	0	ON	0	0	ON	ON	ON
LTR-R	215.9	279.4	0	0	ON	0	ON	0	0	ON
A4-R	210	297	0	0	ON	0	0	ON	ON	0
LGL	215.9	355.6	0	0	ON	0	ON	ON	0	ON
B4	257	364	0	ON	ON	0	ON	ON	ON	0
8K	270	390	0	ON	ON	0	ON	ON	ON	ON
A3	297	420	0	ON	0	0	0	0	ON	ON
LDR	279.4	431.8	0	ON	ON	0	0	0	ON	ON
12x18	304.8	457.2	0	ON	0	0	0	0	0	ON

T-2-58

Also, the cassette presence is detected when the size switch is pushed. (If no switch is pushed, it is determined as no cassette.)

#### Separation paper list

It is recommended to separate the following paper depending on the paper status (especially moisture absorption) and paper trimming state when setting the paper.

This ""separation"" can avoid troubles.

Paper type	Basis weight/name etc	Main area
Carbonless paper	Overall	-
Transparency	Overall	-
Labels	Overall	-
Tub paper	Overall	-
Pre-punched paper	Overall	-
OK Prince Joshitsu	Especially thin paper, 52 gsm etc.	JPN
Canon Europe Canon Recycled 80 (Vision Classic White)	Overall	EUR
Canon Europe Canon High Grade (Mondi Business Paper)	Especially heavy paper 220/250 gsm etc.	EUR
Canon Digital Office Colour (Stora Enso MultiCopy Special Colour Laser)	Especially heavy paper 160 gsm etc.	EUR

T-2-59

#### Multi-purpose tray pickup 1 sheet feed list

Be sure to set the following paper sheet-by-sheet to the Multi-purpose Tray.

If fails to set the paper sheet-by-sheet, it may cause troubles.

Paper type	Basis weight/name
Glossy paper (coated paper)	Overall
Tracing paper	Overall
Washi	Overall
Extra long paper (up to 1200mm) Pickup can be enabled at service setting.	Overall
HAMMERMILL	216 g/m <sup>3</sup>
Mohawk	216 g/m <sup>3</sup>

T-2-60

#### Paper that requires extra caution at setting

Paper type	Basis weight/name	Caution
Envelope	Overall	Let out the air of envelope and disperse the glued tabs
Washi	Overall	Since there are size variations, non-image area appears in case of full copy. Handle this by free size setting.

T-2-61

#### ● .Method of Setting 8K and 16K (Chinese Paper)

- 1) Set the original detection size to AB configuration.  
(Lv.1) COPIER > OPTION > FNC-SW > MODEL-SZ = 0
- 2) Enable detection and display of Chinese paper (K size paper: 8K and 16K).  
(Lv.2) COPIER > OPTION > FNC-SW > KSIZE-SW = 1
- 3) Change the setting of Cassette 1 from EXEC to 16K.  
(Lv.2) COPIER > OPTION > CST > CST-K-SW = 1
- 4) (Lv.2) COPIER > OPTION > FNC-SW > MODELSZ2 = 0.
- 5) Turn OFF and then ON the main power.

## ● Method of Setting Special Paper

- Service mode

COPIER > OPTION > CST > CSTX-UY > Setting number

X: Cassette number, Y: Size category (X: 1 to 4, Y: 1 to 4)

### Size category

Size category	Size
U1	FLSC, A-FLS, OFI, E-OFI, A-LTRR, A-LGL, G-LGL, A-OFI, M-OFI, FA4
U2	K-LGLR, G-LTRR
U3	K-LGL, A-LTR, G-LTR
U4	B-OFI

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Setting No.	Size
22	K-LGL
23	K-LGLR
24	FLSC
25	A-FLS
26	OFI
27	E-OFI
28	B-OFI
29	A-LTR
30	A-LTRR
31	G-LTR
32	G-LTRR
33	A-LGL
34	G-LGL
36	A-OFI
37	M-OFI
42	FA4

T-2-63

Example: When setting G-LTR to Cassette 2

COPIER > OPTION > CST > CST2-U3 > 3

## ● Pre-Registration Control

To correct the feed variation at pickup and to perform the stabilized paper feed, pre-registration control is executed.

When the paper leading edge is detected at the Pre-Registration Sensor (at Vertical Path Sensor on cassette 1 only) on each cassette, the machine determines whether to stop the pre-registration or not.

Pre-registration stop is determined when the following conditions are true.

- There is preceding paper.
- The preceding paper has not reached the Registration Sensor.
- Time until the Registration Sensor of preceding paper is turned OFF > / = time until the Registration Sensor of succeeding paper is turned ON

## ● Cassette Heater Control

To prevent paper in the Cassette from absorbing moisture, this machine has a Cassette Heater at the bottom of the Cassette 2.

This heater is controlled to keep the internal temperature constant.

Whenever the Environment Switch is OFF, the control is always OFF. The behavior specifications when the Environment Switch is ON are shown below.

When the Main Power Switch is ON

While printing: OFF

While in sleep mode: ON

While in standby: ON\*

\* ON if the external temperature (COPIER > DISPLAY > ANALOG > TEMP) is lower than 20 deg C, and OFF if the external temperature is higher than 22 deg C.

When the external temperature reaches a temperature between 20 deg C and 22 deg C, it remains the same as it was immediately before that.

Example 1: When the temperature rises from 15 deg C to 21 deg C The control is ON when the temperature is 15 deg C, so it remains ON when the temperature rises to 21 deg C.

Example2: When the temperature lowers from 25 deg C to 21 deg C The control is OFF when the temperature is 25 deg C, so it remains OFF when the temperature lowers to 21 deg C.

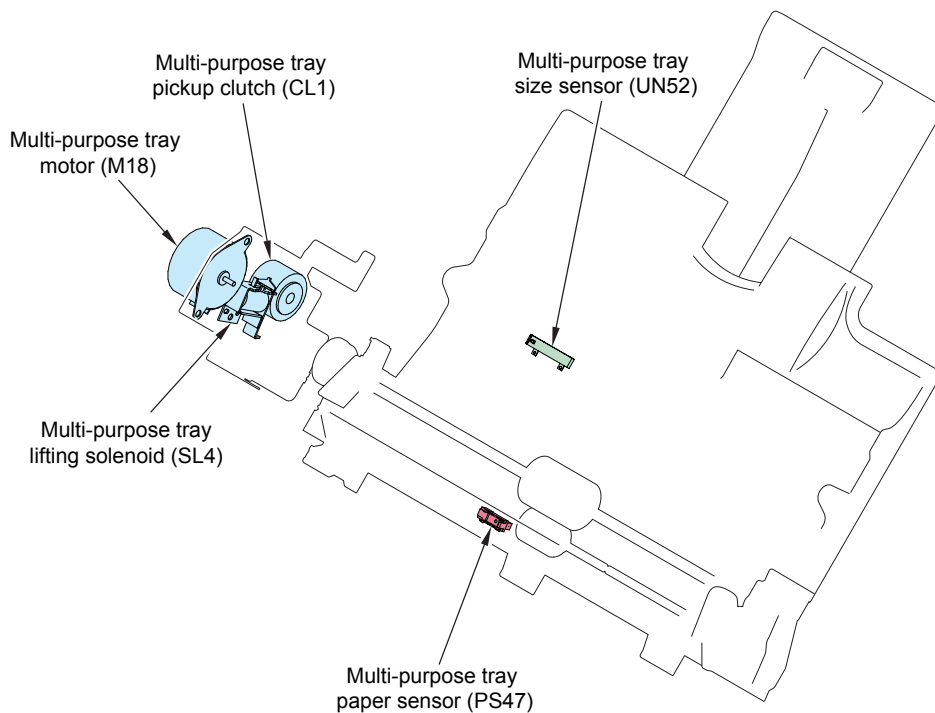
When the Main Power Switch is OFF

Always ON

## Multi-Purpose Tray Pickup Assembly

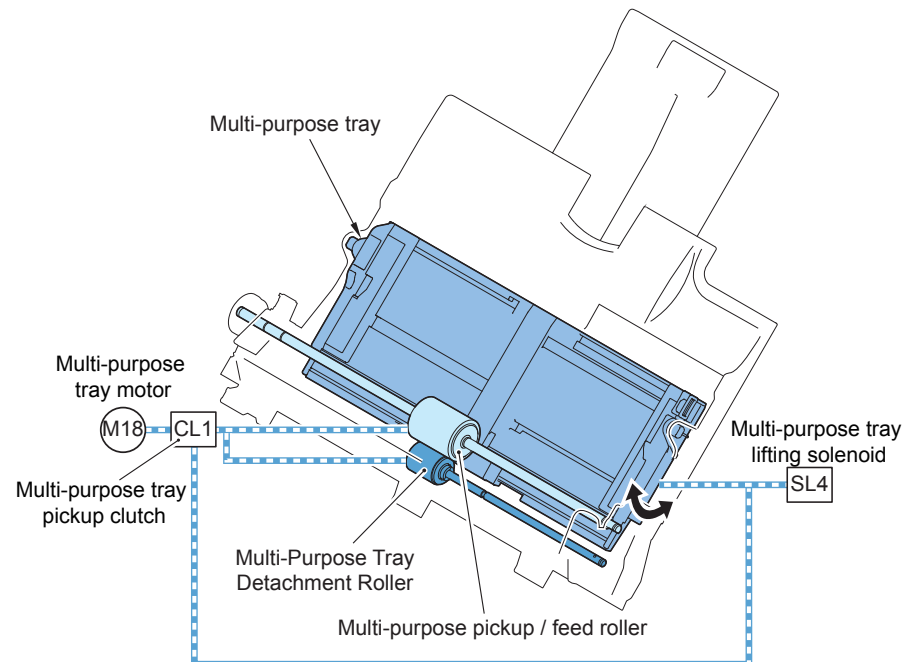
### Overview

#### Parts Configuration



F-2-137

#### Drive Configuration



F-2-138

### Detection

#### Paper Presence Detection

The paper presence is detected by the Multi-Purpose Tray Paper Presence Sensor. When the paper absence is detected, if there is the same size & same type paper exists in other cassette, auto cassette change is executed.

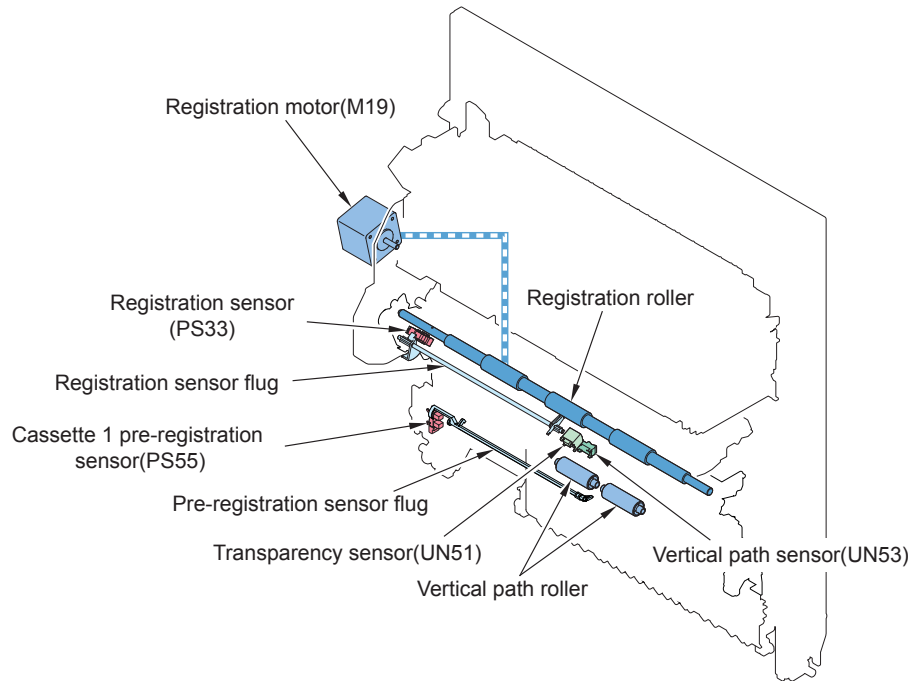
#### Paper Size Detection

The paper width is detected according to output value from the variable resistor that works in conjunction with the side guide. Since the length cannot be detected, users have to specify the setting.

## ■ Fixing / Registration Assembly

### ● Overview

#### Parts / Drive Configuration



F-2-139

### ● Registration Control

#### OHP Detection

Transparency detection is performed as a measure for the case where paper other than transparency is fed with transparency mode. Detection is performed using the Transparency Sensor and Registration Sensor. Presence of transparency is detected when the Transparency Sensor does not detect presence of paper and the Registration Sensor detects presence of paper.

#### Registration Control

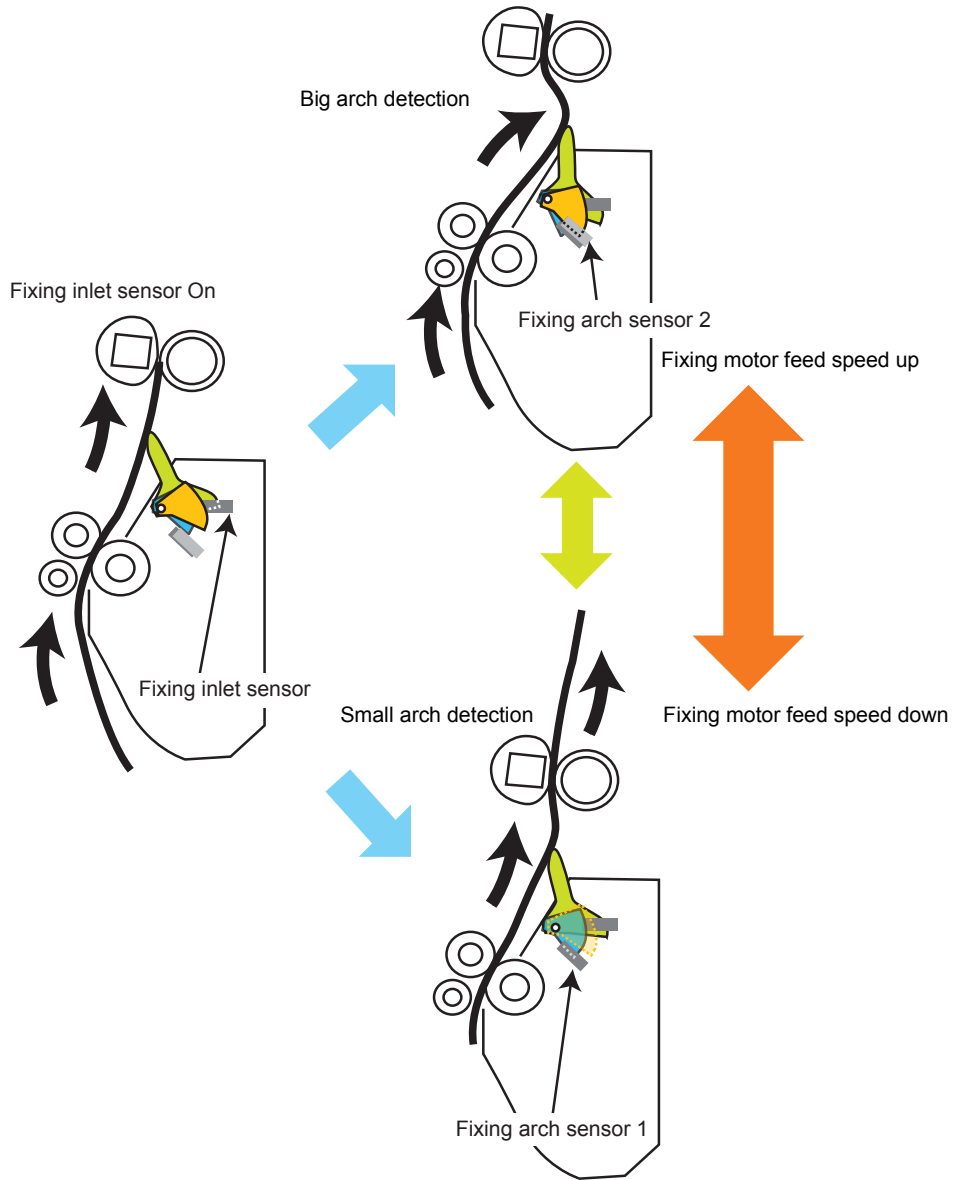
To make the paper straight-enter the transfer assembly, registration control is executed. In iR ADVANCE C5255/5250/5240/5235, detection of registration position is performed using the Registration Sensor. However, with this machine, the Transparency Sensor is used to perform registration control. To realize faster paper feed, the Transparency Sensor which can perform the detection faster is used.

After the paper passes through the Registration Sensor, the drive of the Pickup Motor (Multi-Purpose Tray Pickup Motor, Duplex Pickup Motor) is turned OFF to stop the paper by the distance from the Registration Sensor to the Registration Roller with arch amount added. To alleviate the noise generated by entry of paper to the Registration Roller, the paper feeding speed is reduced when the Transparency Sensor turns ON.

### ● Fixing Arch Control

To always feed the paper to the Fixing Unit in optimal status, this control is to monitor the paper slack (arch) condition and to switch the feed speed at the Fixing Motor according to the status.

This is executed between the Secondary Transfer Unit and the Fixing Unit. When the Pressure Roller of the Fixing Unit expands with heat, circumference of roller is also increased. Thus, even though the number of rotation is consistent, the feed speed at the fixing side is faster than the feed speed at the secondary transfer side. To fix this, change the speed of the Fixing Motor according to the arch condition using the Fixing Arch Sensor 1&2.

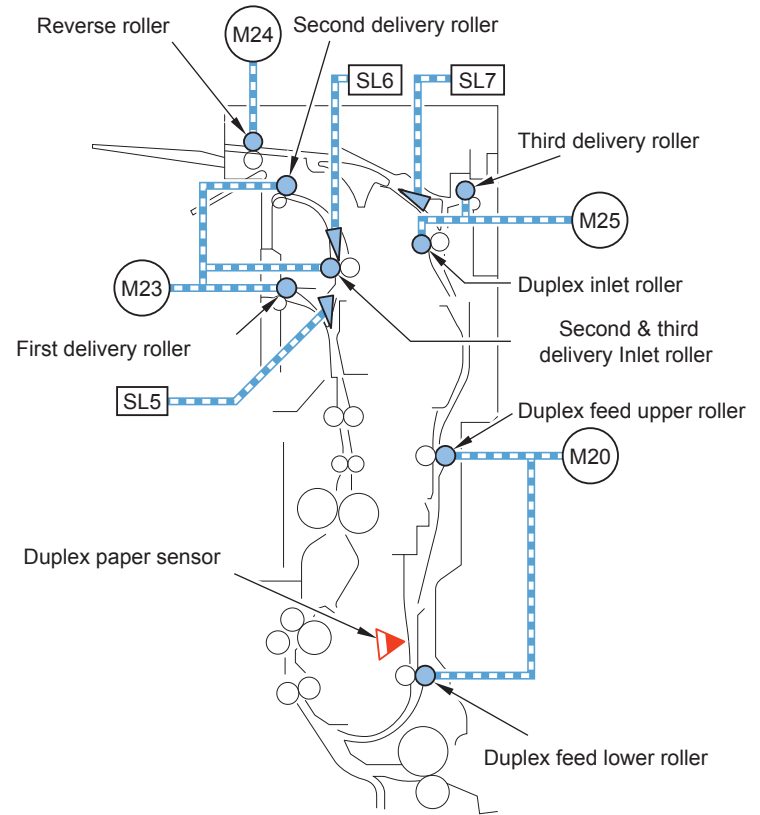


F-2-140

## Duplex / Delivery Assembly

### Overview

#### Parts / Drive Configuration



F-2-141

M20	Duplex Feed Motor	SL5	First Delivery Flapper Solenoid
M23	First / Second Delivery Motor	SL6	Second Delivery Flapper Solenoid
M24	Reverse Motor	SL7	Third Delivery Flapper Solenoid
M25	Third Delivery Motor		

## ● Duplex Control

### Duplex Feed Control

On this machine, the paper is reversed outside the machine with using the reverse mouth. After that, feed operation is performed by 340mm / sec on iR ADVANCE C5255/5250/5240/5235.

The paper fed to the duplex path is transferred to the duplex re-pickup position unless there is paper on the path at the downstream side. If there is paper on the downstream path, it is delivered from the reverse path or it stops at the duplex upstream.

In case of output to the First / Second Delivery Mouth, 5-sheet circulation is used for small size (LTR or smaller); however, 3-sheet circulation is used for large size (larger than A4R). This is because 2 sheets of paper cannot wait on the duplex feed path.

In case of output to third delivery mouth, 3-sheet circulation is used for middle size (A4R or smaller); however, 1-sheet circulation is used for large size (larger than A4R) since the succeeding paper enters the reverse path before the preceding paper goes through the reverse path and jam will occur.

Following is the each duplex reverse position and the number of sheet circulation by size.

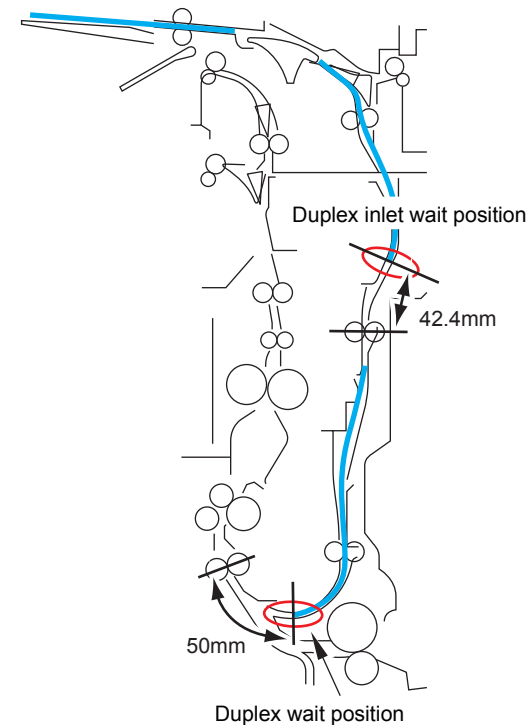
	First / Second Delivery	Third Delivery
Small size (LTR or smaller)	5	3
Middle size (A4R or smaller)	3	3
Large size (larger than A4R)	3	1

T-2-64

Compared to the conventional model (imageRUNNER C3380), feed speed at the duplex feed assembly is slowed down. This is to get the precise feed, to reduce the noise and the motor loads. However, by changing the circulation algorithm, the speed is accelerated when printing a number of sheets and bk 55 sheets / min, CL 51 sheets / min speed is achieved.

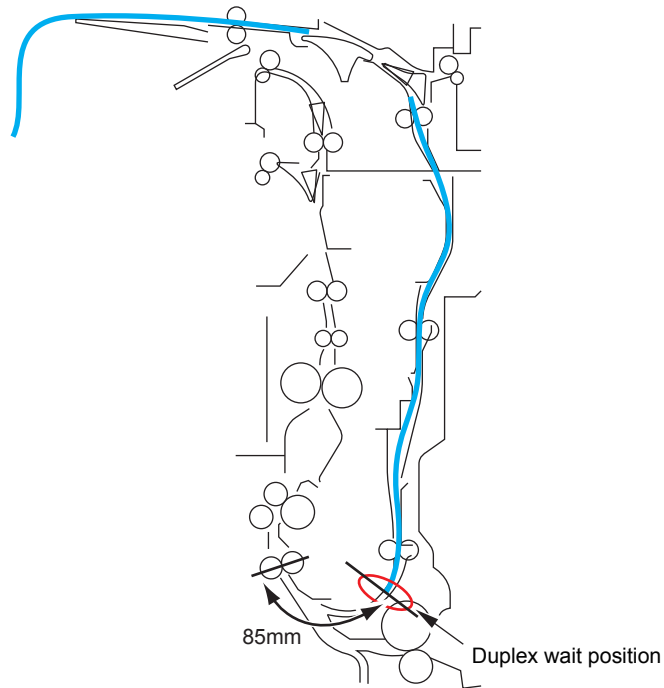
### Duplex Wait Control

To realize 5-sheet circulation, there are 2 duplex wait positions. Following is the duplex wait position for small paper.



F-2-142

Since the curve of duplex path shape gets steeper at the leading end, as duplex wait position gets closer to the registration, curl tends to occur frequently. For the paper smaller than A3, the duplex wait position is 50mm away from the Registration Sensor toward upstream in due consideration with the productivity. In case of A3 paper or larger, the sheet interval is wide enough to satisfy the productivity, so the position which avoids curl occurrence and is 85mm away from the Registration Sensor on the upstream side is to be the duplex wait position.



F-2-143

## JAM Detection

At the cassette pickup assembly, since the feed speed is increased, detection cannot catch up with it. Thus, delay and stationary jam detection are not executed at the Cassette 1 Pre-Registration Sensor. Instead of it, the Vertical Path Sensor executes the delay and stationary jam detection. Since the residual jam should be detected on each cassette, the Cassette 1 Pre-Registration Sensor detects it. Because the Vertical Path Sensor is too close and it is unnecessary to execute detection, the Vertical Path Sensor does not execute residual jam detection.

Jam code	Sensor		XX					
	Name	Code	01: Delay jam		02: Stationary jam		03: Residual jam	
			C5051	C5035	C5051	C5035	C5051	C5035
			/	/	/	/	/	/
		C5045	C5030	C5045	C5030	C5045	C5030	
XX01	Cassette 1 pre-registration sensor	PS55	N	N	N	N	Y	Y
XX02	Cassette 2 pre-registration sensor	PS56	Y	Y	Y	Y	Y	Y
XX13	Vertical path sensor	UN53	Y	Y	Y	Y	N	N
XX05	Registration sensor	PS33	Y	Y	Y	Y	Y	Y
XX06	Fixing inlet sensor	PS34	Y	Y	Y	Y	Y	Y
XX07	Inner delivery sensor	PS37	Y	Y	Y	Y	Y	Y
XX08	First delivery sensor	PS41	Y	Y	Y	Y	Y	Y
XX09	Second delivery sensor	PS42	Y	Y	Y	Y	Y	Y
XX0A	Reverse sensor	PS39	Y	Y	Y	Y	Y	Y
XX0B	Third delivery sensor	PS43	Y	Y	Y	Y	Y	Y
XX0C	Duplex inlet sensor	PS40	Y	Y	Y	Y	Y	Y
XX03	Cassette 3 pre-registration sensor*1	PS8	Y	Y	Y	Y	Y	Y
XX04	Cassette 4 pre-registration sensor*1	PS9	Y	Y	Y	Y	Y	Y

\*1: When the Cassette Pedestal is installed

T-2-65

Y: Detected

N: Not detected

## Service Works

### Periodically replacement parts

N / A

### Consumables

No.	Parts Name	Parts Number	Number of used part	Replacement timing	Remarks
1	Cassette Feed Roller	FC6-7083	2	150K	-
2	Cassette Detachment Roller	FC6-6661	2	150K	-
3	Multi-Purpose Feed Roller	FB1-8581	1	150K	-
4	Multi-Purpose Tray Detachment Roller	FC6-6661	1	150K	-
5	Pickup Assembly Idler Gear	FU0-0043	2	150K	For Chinese model only

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The parts mentioned above are in common with those of iR-ADV C5051 series.

### Periodical service

No.	Parts Name	Execution timing	Work	Remarks
1	Registration roller	50k	Cleaning	-
2	Pre-registration guide	50k	Cleaning	-
3	Transparency sensor	50k	Cleaning	-
4	Fixing delivery guide	50k	Cleaning	-
5	Post-fixing roller	50k	Cleaning	-
6	Fixing delivery roller	50k	Cleaning	-
7	First delivery roller	50k	Cleaning	-
8	Second delivery roller	50k	Cleaning	-
9	Third delivery roller	50k	Cleaning	-
10	Duplex feed upper roller	50k	Inspection	-
11	Duplex feed lower roller	50k	Inspection	-
12	Vertical path sensor	150k	Cleaning	-
13	Lightproof sheet	150k	Cleaning	-

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### When Replacing Parts

When replacing the Consumable Parts, be sure to clear the Parts Counter  
(COPIER > COUNTER > PRDC-1/DRBL-1)



## External Auxiliary System



### Controls

#### Counter Control

The machine is equipped with counters that indicate the counts of output according to types of job. These counters are indicated in response to a press on the Counter Check key on the control panel.

Target	Display code of each counter (in service mode)/Item								Country code
	Counter 1	Counter 2	Counter 3	Counter 4	Counter 5	Counter 6	Counter 7	Counter 8	
JP model type1	Total 1	Total (Black 1)	Copy (Full Color + Single Color1)	Total A (Full Color + Single Color 1)	*1	*1	*1	*1	JP
	101	108	232	149	0	0	0	0	
JP model type2	Total 2	Copy (Full Color + Single Color 2)	Total A (Full Color + Single Color 2)	Copy (Black 2)	Total A (Black 2)	*1	*1	*1	JP
	102	231	148	222	133	0	0	0	
Taiwan model	Total 1	Total (Black 1)	Copy + Print (Full Color/ Large)	Copy + Print (Full Color/ Small)	Total (Single Color 1)	*1	*1	*1	TW
	101	108	401	402	118	0	0	0	
UL model type1	Total 1	Total (Black 1)	Copy (Full Color + Single Color/ Large)	Copy (Full Color + Single Color/ Small)	Print (Full Color + Single Color/ Large)	Print (Full Color + Single Color/ Small)	*1	*1	US
	101	108	229	230	321	322	0	0	

Target	Display code of each counter (in service mode)/Item								Country code
	Counter 1	Counter 2	Counter 3	Counter 4	Counter 5	Counter 6	Counter 7	Counter 8	
UL model type1	Total 2	Total (Black 2)	Copy (Full Color + Single Color/ Large)	Copy (Full Color + Single Color/ Small)	Print (Full Color + Single Color/ Large)	Print (Full Color + Single Color/ Small)	*1	*1	US
	102	109	229	230	321	322	0	0	
General model	Total 1	Total (Black 1)	Copy + Print (Full Color/ Large)	Copy + Print (Full Color/ Small)	Total (Single Color 1)	Total1 (2-Sided)	*1	*1	SG/KO/ CN
	101	108	401	402	118	114	0	0	
UK model type1	Total (Black/ Large)	Total (Black/ Small)	Total (Full Color + Single Color/ Large)	Total (Full Color + Single Color/ Small)	Scan (Total 1)	Print (Total 1)	*1	*1	GB
	112	113	122	123	501	301	0	0	
240V UK model type2	Total 1	*1	*1	*1	*1	*1	*1	*1	GB
	101	0	0	0	0	0	0	0	
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	*1	AU
	101	108	229	230	321	322	0	0	
FRN mode 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	*1	FR
	112	113	122	123	501	301	0	0	
FRN model type2	Total 1	*1	*1	*1	*1	*1	*1	*1	FR
	101	0	0	0	0	0	0	0	

Target	Display code of each counter (in service mode)/Item								Country code
	Counter 1	Counter 2	Counter 3	Counter 4	Counter 5	Counter 6	Counter 7	Counter 8	
GER model 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	*1	DE
	112	113	122	123	501	301	0	0	
GER model type2	Total 1	*1	*1	*1	*1	*1	*1	*1	DE
	101	0	0	0	0	0	0	0	
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	*1	ES / SE / PT / NO / DK / FI / PL / HU / CZ / SI / GR / EE / RU / NL / SK / RO / HR / BG / TR
	112	113	122	123	501	301	0	0	
AMS model type2	Total 1	*1	*1	*1	*1	*1	*1	*1	
	101	0	0	0	0	0	0	0	
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	*1	IT
	112	113	122	123	501	301	0	0	
ITA model Total type2	Total 1	*1	*1	*1	*1	*1	*1	*1	IT
	101	0	0	0	0	0	0	0	

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&lt;Code description&gt;

- Large: Large size paper (if the width in paper feed direction is over 364mm/count up x1)
- Small: Small size paper (if the width in paper feed direction is 364mm or less)
- Total: All (C + P), count up x 1
- Duplex: At auto duplexing copy, count up x 1
- 3-digit code in counter column is the setting value of the following service mode items.  
COPIER > OPTION > USER > COUNTER1 to 6
- Counter2 to 6 can be changed in service mode: COPIER > OPTION > USER.

\*1: by default, not indicated; may be changed in service mode.

\*2: if '0' is set for the following: COPIER &gt; OPTION &gt; USER &gt; CNT-SW.

\*3: if '1' is set for the following: COPIER &gt; OPTION &gt; USER &gt; CNT-SW.

### ● Count-up timing

Count-up timing differs depending on the following conditions:

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

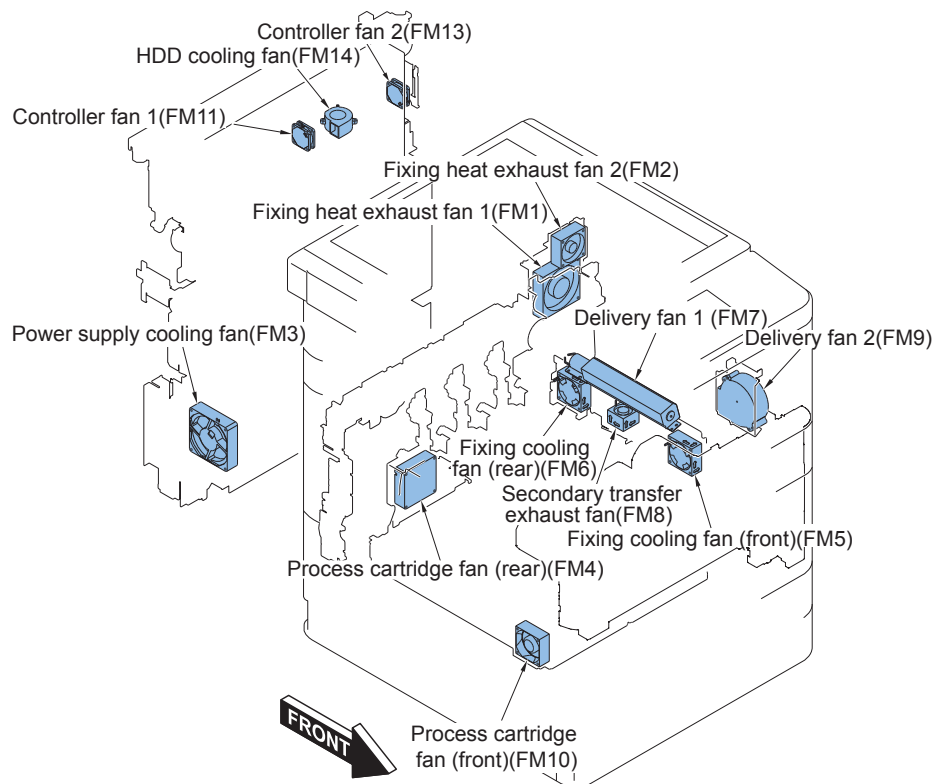
Delivery position		Print mode		
		1-sided/ 2nd side of 2-sided	1st side of 2-sided	
		Count-up timing		
1	Host Machine	First Delivery Tray	First Delivery Sensor (PS21)	Duplex Paper Sensor (PS31)
		Second Delivery Tray	Second Delivery Sensor (PS27)	
		Third Delivery Tray*	Third Delivery Sensor (PS30)	
2	When the Finisher is installed	Finisher: Inlet Sensor (S1)		

T-2-69

## Fan

### Overview

#### Fan Layout



F-2-144

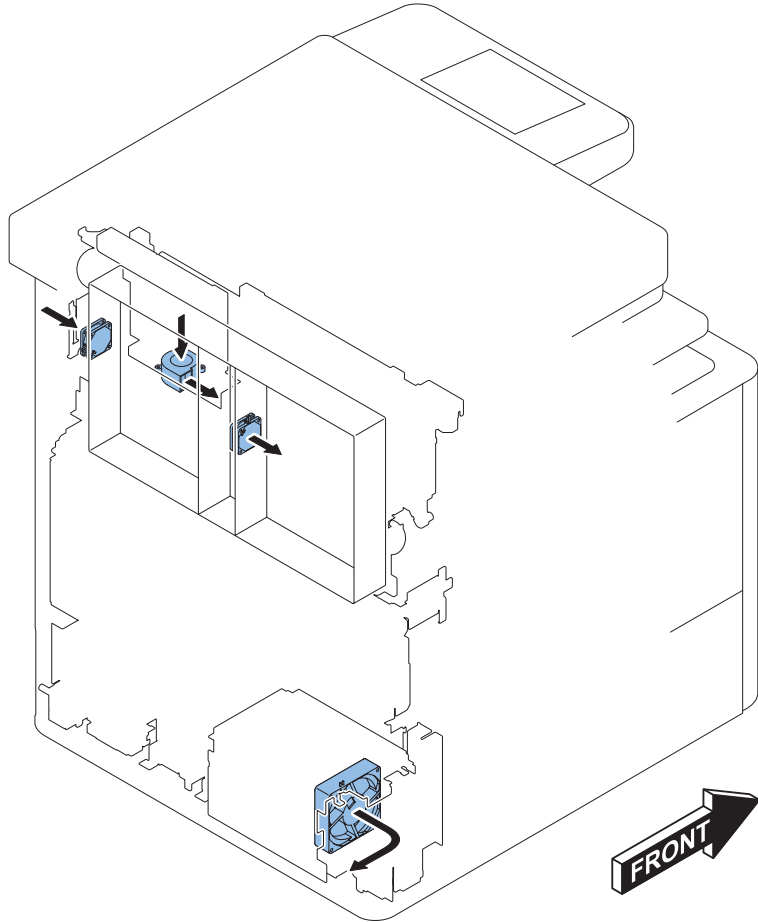
No.	Name	Function	Error code
FM1	Fixing Exhaust Fan 1	Heat exhaustion around Fixing Assembly	E805-0000
FM2	Fixing Exhaust Fan 2	Heat exhaustion around Fixing Assembly	E805-0001
FM3	Power Cooling Fan	Cooling down of Power Supply Assembly	E804
FM4	Process Cartridge Fan (rear)	Heat exhaustion around Process Cartridge	E807-0000
FM5	Fixing Cooling Fan (front)	Cooling down of Fixing Assembly	
FM6	Fixing Cooling Fan (rear)	Cooling down of Fixing Assembly	
FM7	Delivery Fan 1	Preventing delivery paper adhesion	E806-0000
FM8	Secondary Transfer Delivery Fan	Heat exhaustion around Secondary Transfer Unit	E806-0002
FM9	Delivery Fan 2	Preventing delivery paper adhesion	E806-0001
FM10	Process Cartridge Fan (front)	Heat exhaustion around Process Cartridge	E807-0001
FM11	Controller Fan 1	Cooling down of Controller	E880-0003
FM13	Controller Fan 2	Cooling down of Controller	E880-0001
FM14	HDD Cooling Fan	Cooling down of HDD	E880-0002

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Toner Filter is installed at the Ventilation Hole of the Process Cartridge Fan (rear) (FM4).

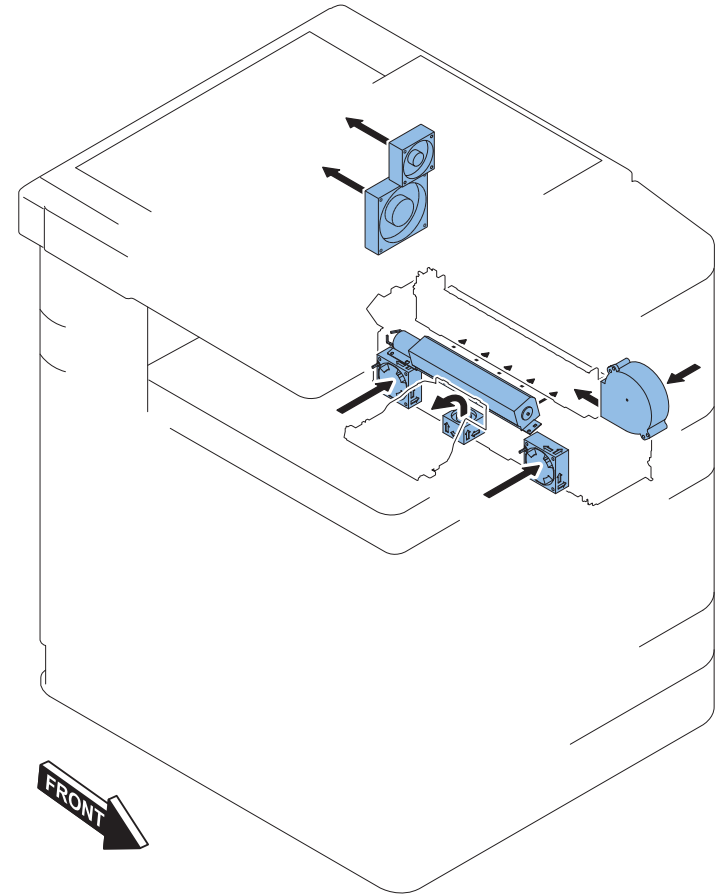
## Air Flow

Air flow around the Main Controller and the Power Supply



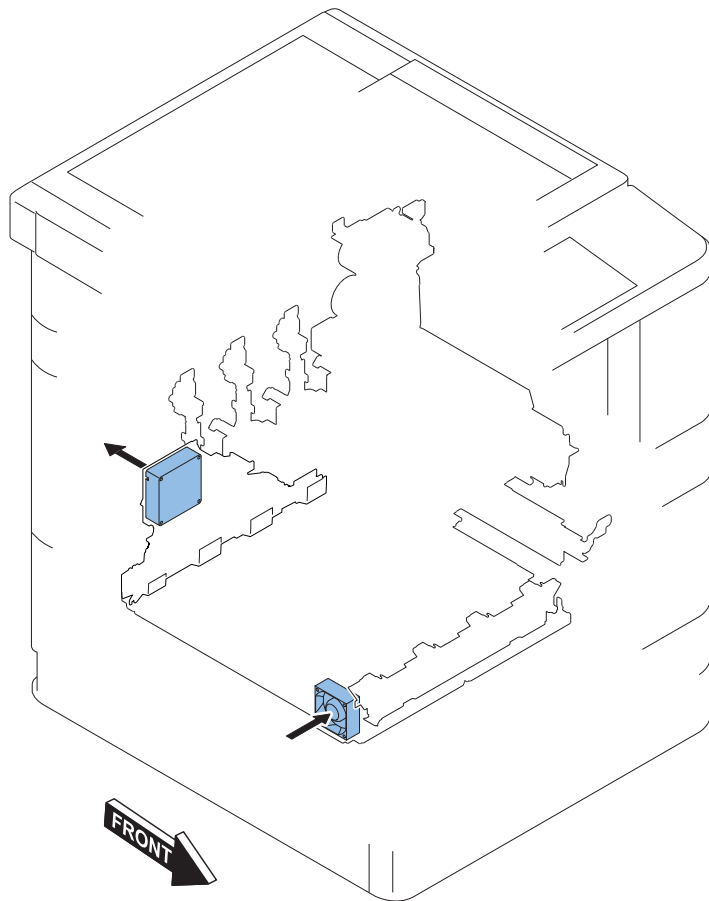
F-2-145

Air flow of fixing system



F-2-146

Air flow around the operation system



F-2-147

2-speed control

Among the fans installed in this machine, the Power Cooling Fan (FM3) and the Delivery Fan 1 (FM7) perform the 2-speed control. Rotation speed is switched when the Voltage switching PCB of Fan switches the voltage.

Operation Sequence

No.	Fan name	Pre rotation	Initial rotation	Stand by	Copy/print		Post rotation	Jam error	Reader	Low power	Sleep
					1-	2-					
FM10	Process Cartridge Fan (front)				Full speed						
FM4	Process Cartridge Fan (rear)				Full speed						
FM1	Fixing Exhaust Fan 1				Full speed						
FM2	Fixing Exhaust Fan 2				Full speed						
FM5	Fixing Cooling Fan (front)				Full speed						
FM6	Fixing Cooling Fan (rear)				Full speed						
FM8	Secondary Transfer Exhaust Fan				Full speed						
FM7	Delivery Fan 1				Half speed	Full speed					
FM9	Delivery Fan 2					Full speed					
FM3	Power Cooling fan				Half speed						
FM11	Controller Fan 1				Full speed			Full speed		Half speed	
FM13	Controller Fan 2				Full speed			Full speed		Half speed	
FM14	HDD Cooling Fan				Full speed			Full speed		Half speed	

- : Full speed
- : Half speed
- : Full speed at occurrence of jam during a job  
Half speed at occurrence of power-on jam  
Half speed at occurrence of service error

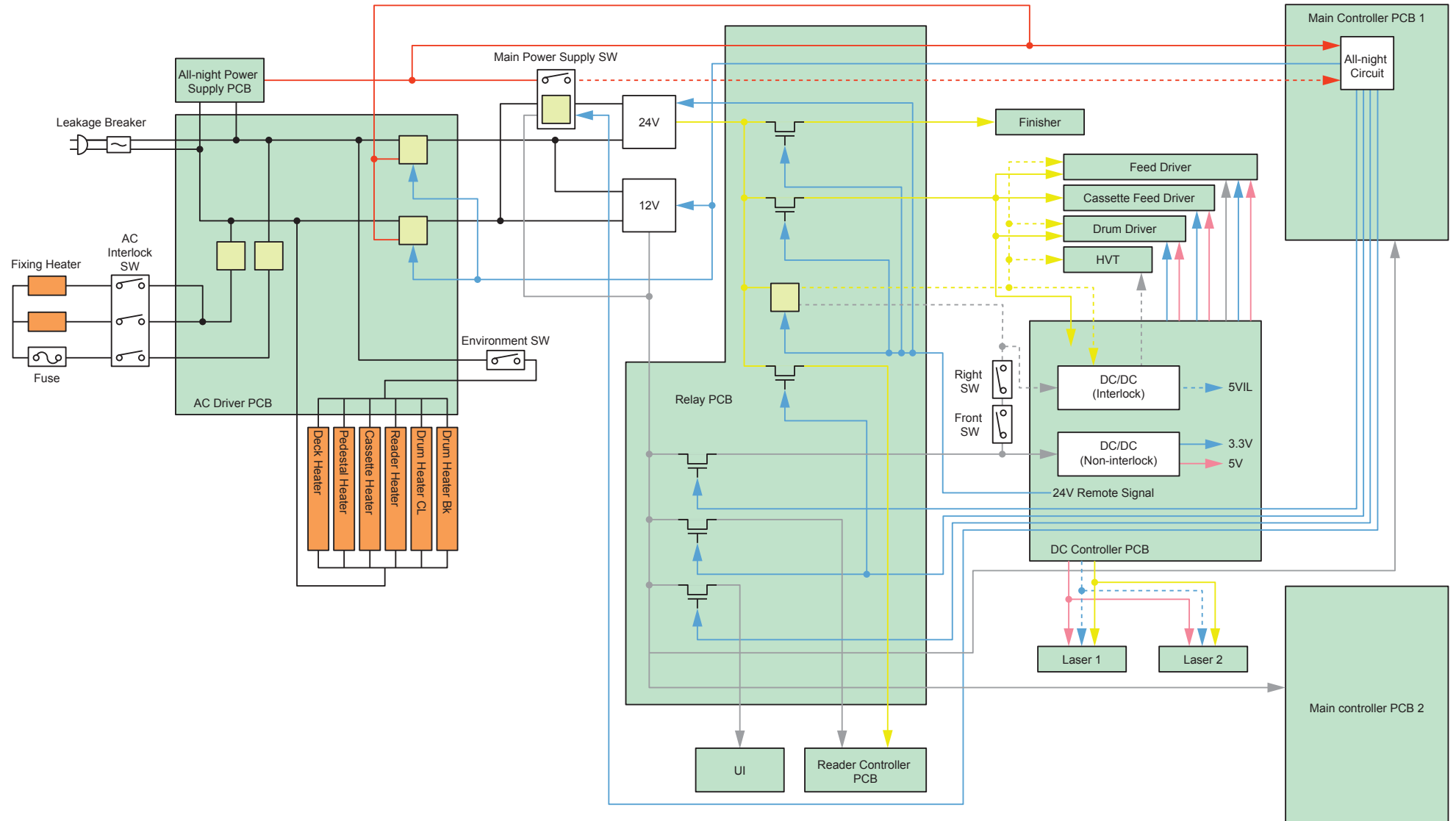
F-2-148

\* Depending on the temperature, FM10 (Process Cartridge Fan (Front)) and FM4 (Process Cartridge Fan (Rear)) may be turned OFF even during the full speed sequence described above.

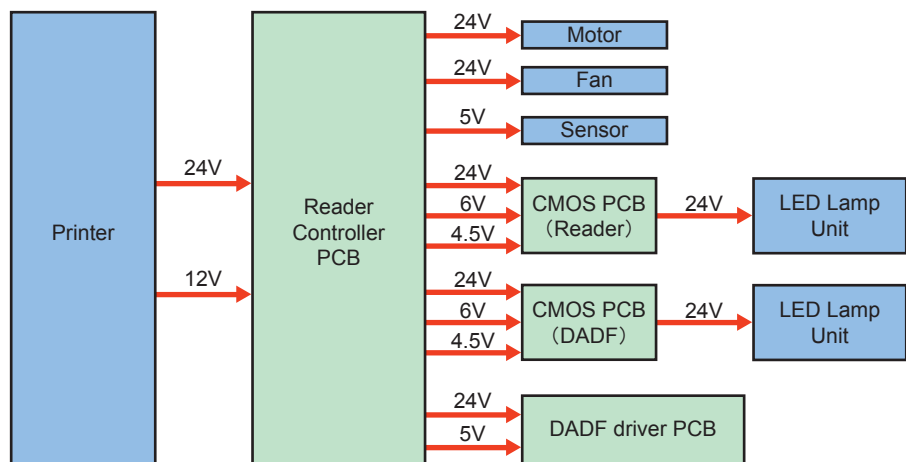
Power Supply Control

Power supply inside the printer

By turning ON the Main Switch, a signal is output from the Main Controller PCB 1 so that power supply starts.

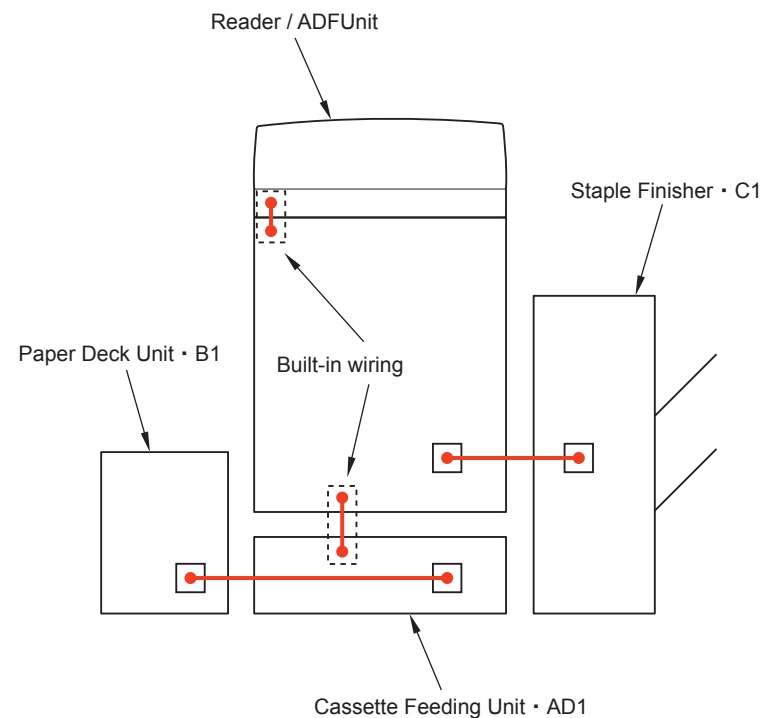


### ● Power supply of Reader Unit



F-2-150

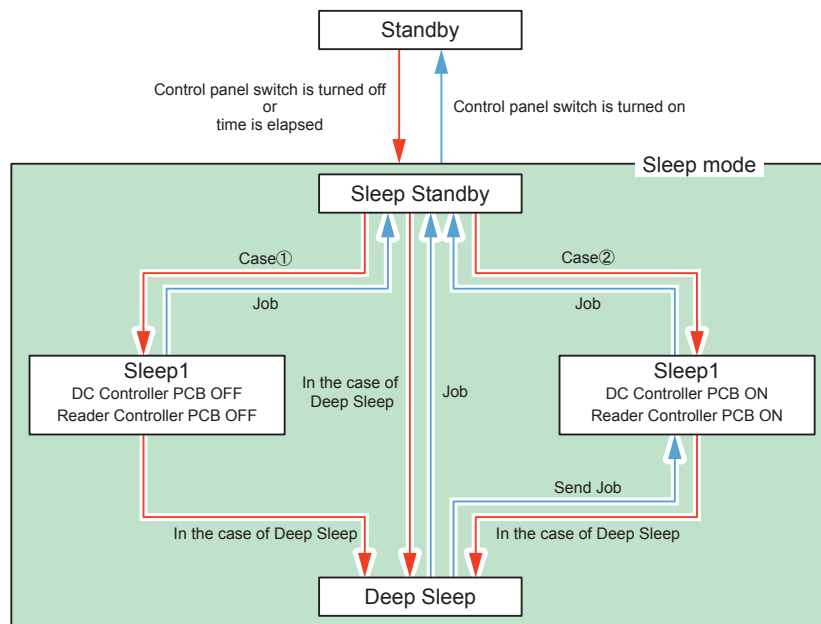
### ● Power connection with each option



F-2-151

Connector inside the cover is used for the connection with DADF Unit and the 2-Cassette Pedestal. External Cable is used for the connection with the Side Paper Deck and the Finisher.

## Power save function



F-2-152

Condition 1: Service mode "SLEEP1SW" = "0", and not in limited functions mode.

Meet the conditions not to move to Deep Sleep.

Condition 2: Service mode "SLEEP1SW" = "1", and in limited functions mode.

Meet the conditions not to move to Deep Sleep.

### Standby

The mode that the machine is running or is ready to start operation. All power is supplied in this mode.

### Sleep mode

Energy saving mode Depending on the active controller, it is classified into the following 4 modes:

### Sleep Standby

The Control Panel is OFF.

Other power supply states are the same as those in the standby mode.

### Sleep 1 (DC Controller PCB, Reader Controller PCB: OFF)

Power is not supplied to the DC Controller PCB and the Reader Controller PCB. (Power is supplied to the Main Controller PCB 1 and 2.)

When the value of service mode > COPIER > OPTION > USER > SLEEP1SW is "0" and the machine is not in limited functions mode, the machine moves to this mode.

### Sleep 1 (DC Controller PCB, Reader Controller PCB: ON)

Fixing Heater is OFF, and the Control Panel is OFF.

Other power supply states are the same as those in the standby mode.

When the value of service mode > COPIER > OPTION > USER > SLEEP1SW is "1" and the machine is in limited functions mode, the machine moves to this mode.

If a job is submitted while the machine is in Deep Sleep, the machine moves to this mode.

### Deep Sleep

The state that only 3V on the All-night Power Supply PCB is supplied.

- When a print job is submitted: The machine moves to Sleep Standby mode/Sleep 1 mode (DC Controller PCB, Reader Controller PCB: ON).

#### NOTE:

When [Sleep Mode Energy Use] is set to [Low] at the time of using NetSpot Device Installer (NSDI), there is a condition that causes startup from sleep mode to fail.

Condition: No IP address is specified.

Example: When the IP address is "0.0.0.0" and DHCP is set to OFF, the above condition is satisfied; therefore, the machine fails to start up from sleep mode even if connection is attempted from the network.

Remedy: Specify a static IP or set DHCP to ON.



Conditions not to move to Deep Sleep

When the following conditions are met, the machine does not move to Deep Sleep.

Software status	
Common	
	<ul style="list-style-type: none"> <li>User Mode &gt; Preferences &gt; Timer/Energy Settings &gt; Sleep Mode Energy Use is set to "High".</li> <li>User Mode &gt; Preferences &gt; Timer/Energy Settings &gt; Sleep Mode Exit Time Settings is set (and not blank).</li> </ul>
Network	
	<ul style="list-style-type: none"> <li>User Mode &gt; Preferences &gt; Network &gt; TCP/IP Settings &gt; BMLinkS Settings &gt; Use BMLinkS is set to "ON".</li> <li>User Mode &gt; Preferences &gt; Network &gt; TCP/IP Settings &gt; IPSec Settings &gt; Use IPSec is set to "ON".</li> <li>User Mode &gt; Preferences &gt; Network &gt; SMB Server Settings &gt; Use SMB Server is set to "ON".</li> <li>User Mode &gt; Preferences &gt; Network &gt; NetWare Settings &gt; Use NetWare is set to "ON".</li> <li>User Mode &gt; Preferences &gt; Network &gt; AppleTalk Settings &gt; Use AppleTalk is set to "ON".</li> <li>User Mode &gt; Preferences &gt; Network &gt; Ethernet Driver Settings &gt; Auto Detect is set to "OFF" and "1000 Base-T" is set for "Ethernet Type".</li> <li>User Mode &gt; Preferences &gt; Network &gt; IEEE802.1X Settings &gt; Use IEEE802.1X is set to "ON".</li> </ul>
Fax	
	<ul style="list-style-type: none"> <li>User Mode &gt; Function Settings &gt; Receive/Forward &gt; Fax Settings &gt; Selecting Reception Mode is not set to "Auto RX".</li> <li>User Mode &gt; Function Settings &gt; Receive/Forward &gt; Fax Settings &gt; Auto Reception Switching is set to "ON".</li> <li>User Mode &gt; Function Settings &gt; Receive/Forward &gt; Fax Settings &gt; Remote Reception is set to "ON".</li> <li>User Mode &gt; Function Settings &gt; Send &gt; Fax Settings &gt; Set Line &gt; Modem Dial in Settings &gt; Line 1 or Line 2 is set to "ON".</li> <li>User Mode &gt; Function Settings &gt; Receive/Forward &gt; Fax Settings &gt; Number Display Settings &gt; Line 1 or Line 2 is set to "ON".</li> </ul>

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Hardware status	
	<ul style="list-style-type: none"> <li>The Serial Coin Vendor is connected.</li> <li>The EFI (Video Option Board) is installed.</li> <li>The G4 Fax Board is installed.</li> <li>The iSlot Extension Card is connected.</li> <li>The IPSec Board is connected and User Mode &gt; Preferences &gt; Network &gt; TCP/IP Settings &gt; IPSec Settings &gt; Use IPSec is set to "ON".</li> <li>The host machine (such as a PC) is connected to the USB Device.</li> <li>The HID is connected to the USB host.</li> <li>The storage is connected to the USB host.</li> <li>The Device Port (Multimedia Card Reader with a card) is connected to the USB host.</li> <li>A device (general USB devices such as the IC Card Reader not used by host machine's functions) used by MEAP is connected to the USB host.</li> </ul>

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System Performance Status	
	<ul style="list-style-type: none"> <li>A network application is communicating.</li> <li>A print job is being processed or waiting.</li> <li>A scan job is being processed or waiting.</li> <li>A fax communication is in progress.</li> <li>A phone communication is in progress.</li> <li>An IFAX communication is in progress.</li> <li>A job is being processed.</li> <li>A report job is being processed.</li> <li>A forward send job is in progress.</li> <li>A forward receive job is in progress.</li> <li>A SEND job is being processed.</li> <li>The delivery of device information is in progress.</li> <li>RUI is being exported.</li> <li>RUI is being imported.</li> <li>A VNC connection is in progress.</li> <li>A MEAP Application is being executed. (However, when the MEAP Application is scheduling Timer Service Task within the time condition (within 12 minutes) of the Alarm Service not entering DEEP SLEEP, the machine may enter DEEP SLEEP.)</li> <li>The Resource Downloader is executing a task (such as downloading a font data and creating a backup).</li> <li>The Inbox is being backed up.</li> <li>A file in the Super BOX is being opened (reading or writing). (*Common with WebDAV and SMB)</li> <li>The printer is in a limited operation.</li> <li>The scanner is in a limited operation.</li> <li>A store job is being processed. (As with SEND, this include the storage process to Advanced Box or other storage after the scanning is completed.)</li> </ul>

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System Performance Status	
The Alarm Service is set to within 12 minutes.	
* When one of the following is being executed, the Alarm Service (Time) is set.	
- Time setting for ON/OFF of the Memory Lock	
• User Mode > Function Settings > Receive/Forward > Common Settings > Fax/I-Fax Inbox > Memory Lock Start Time	
• User Mode > Function Settings > Receive/Forward > Common Settings > Fax/I-Fax Inbox > Memory Lock End Time	
- Output of the scheduled report	
• User Mode > Function Settings > Send > Common Settings > Communication Management Report > Specify Print Time (when not set to "Off")	
• User Mode > Function Settings > Send > Fax Settings > Fax Activity Report > Specify Print Time (when not set to "Off")	
• User Mode > Management Settings > Device Management > Device Information Delivery Settings > Communication Log > Specify Print Time (when not set to "Off")	
- Scheduled Transmission Setting (Fax, Send)	
- POP settings	
• User Mode > Function Settings > Send > E-Mail/I-Fax Settings > Network Settings > Next > POP Issue Interval (when not set to "0")	
- DHCP Setting (The interval is specified by the server)	
- E-RDS Setting (The interval is specified by the server)	
- SNTP Setting (The interval is specified by the server)	
- Auto delivery of device information	
- Scheduled specified printing of web browser	
- Time specified backup of Inbox document	
• The auto sleep timer is running (and for the time set by User Mode > Preferences > Timer/Energy Settings > Weekly Timer Settings).	
• The sleep mode exit timer is running (for 15 seconds after exiting DEEP SLEEP)."	
• The network timer is running (and for the number of 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).	
• The hard disk drive protection timer is running (for 12 minutes after exiting from DEEP SLEEP and the HDD is powered ON. However, after a printing, scanning, and fax job is completed, this timer is disabled.)	
• The after linkup timer is running (for 1 minute after the machine is powered ON and the communication with the network is started).	
• The sleep notification timer is running (for 10 minutes after notifying the network module of entering DEEP SLEEP. However, when the network module responds, this timer is disabled).	

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### Effects of Spanning Tree-supported Hub

If you set the network as a loop, data keeps staying in this loop and efficiency of data transfer might be decreased. In order to prevent this symptom, some hubs have the function called "spanning tree". If this function is enabled, the device newly connected to the hub can make data communication with network 10 to 50 seconds (time changes due to the conditions) after the connection. When the machine enters Deep sleep mode and restores from the sleep mode, the machine electrically disconnects with the network once. Therefore, if the machine connects with the spanning tree-installed hub, the machine cannot communicate with network for approximately 1 minute at a maximum after restoring from the Deep sleep mode. For this reason, right after restoring from the Deep sleep mode, the following symptoms might occur: Device status cannot be collected, printing cannot be made, and login using a login application cannot be made. If such symptoms become any problems, perform the following operations.

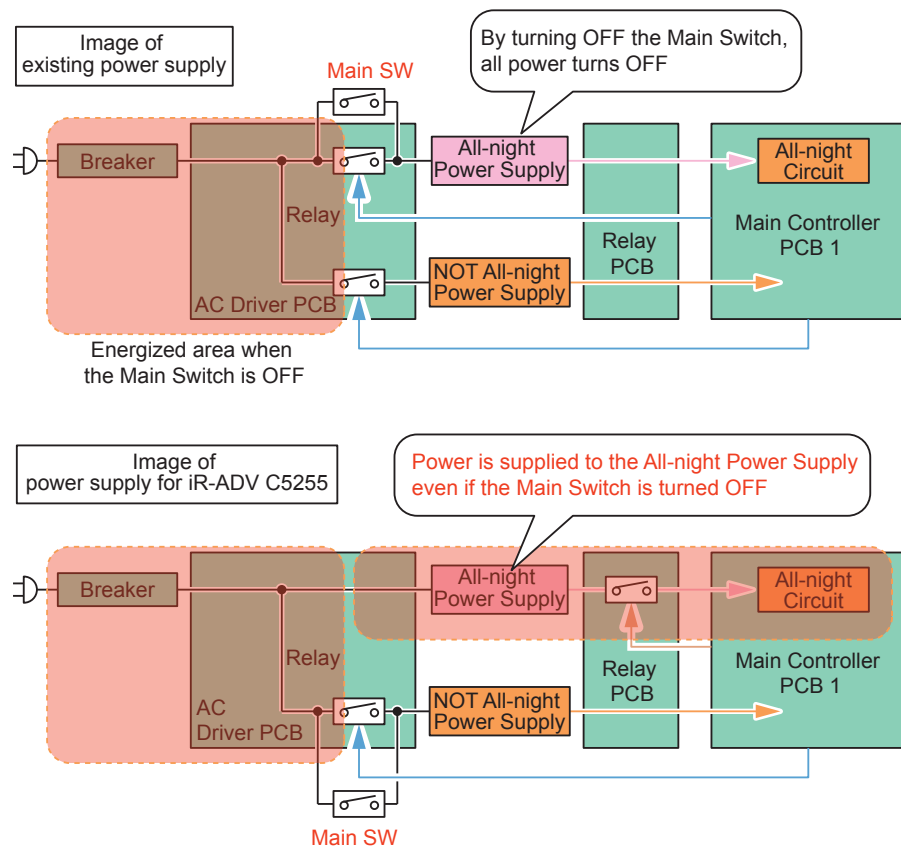
- Using user mode, set not to enter the Deep sleep mode.  
Preferences > Timer/Energy Settings > Sleep Mode Energy Use > High
- Disable the spanning tree function of hub.
- Request users to use the hub which supports Rapid Spanning-Tree Protocol (RSTP) that resolved such problems.

## Quick Startup

To realize faster startup, power configuration has been changed to always supply power to the All-night Power Supply PCB. Thereby, the main menu can be displayed after 30 seconds from turning ON the Main Power Supply Switch.

Although when the Main Power Supply Switch is OFF, power is supplied to the following PCBs.

- AC Driver PCB
- All-night Power Supply PCB
- Relay PCB
- Main Controller PCB 1

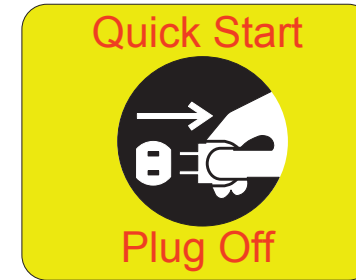


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Disconnect the plug from outlet or turn OFF the Breaker when performing work with the

possibility to come in contact with the PCBs above. PCBs may get damage. 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 illustration is used at the place where attention needs. When the following label is affixed, be sure to disconnect the plug from outlet or turn OFF the Breaker.



F-2-154

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

At first startup after the AC Power Plug is connected to the outlet	
Under the following conditions (settings), the machine always starts up normally (even quick startup is ON).	
When any of the following devices is connected.	• EFI Controller
	• Serial Interface Coin Vendor
	• Wireless LAN
	• Wireless LAN
When any of the following network settings is set to "ON".	• RARP
	• BOOTP
	• IPsec
	• IPv6
	• NetWare
	• AppleTalk
	• AppleTalk

As for startup right after shutting down of the machine under any of the following conditions, it starts up normally (even quick startup is ON).

FAX	
	<ul style="list-style-type: none"> <li>• There is a fax transmission reservation.</li> <li>• Within a specified period of time (10 seconds) from disconnection of a fax line</li> <li>• Within a specified period of time (10 seconds) from non-detection of reception from a fax line</li> <li>• Within a specified period of time (10 seconds) from putting down the fax sub device or handset</li> </ul>
MEAP	
	<p>During execution of MEAP application which prohibits moving to Deep Sleep A scheduled processing is reserved on MEAP.</p>
Job processing	
	<ul style="list-style-type: none"> <li>• During print/scan job processing</li> <li>• During SEND job processing</li> <li>• During I-Fax communication/job processing</li> <li>• During report job processing</li> <li>• During forwarding transmission job/reception job processing</li> <li>• During processing of data storage to Advanced Box</li> <li>• During fax communication/phone communication</li> <li>• During distribution of device information</li> <li>• During Box backup</li> <li>• During export/import by RUI</li> <li>• During opening/reading/writing file of Advanced Box (common with SMR/WebDAV)</li> <li>• During rebuilding with the HDD Data Encryption/Mirroring Board installed</li> </ul>
Others	
	<ul style="list-style-type: none"> <li>• When the machine state remains unchanged for more than 110 hours after turning ON the power as quick startup or turning OFF the power. -&gt; At the time of shutdown, it will be normal shutdown. * This is to prevent a risk of UI freeze caused by memory leak.</li> <li>• Within a specified period of time (20 seconds) from turning OFF the Main Power Supply Switch -&gt; 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.).</li> <li>• After moving to the Settings/Registration screen of service mode or RUI</li> <li>• After changing the user mode that requires restart</li> <li>• The machine is shut down from RUI</li> <li>• When an error occurs</li> <li>• When resource downloader is active</li> <li>• In printer/scanner limited functions mode</li> <li>• When a login application is switched by SMS</li> <li>• A license has been registered.</li> <li>• Startup by pressing the Control Panel Key</li> </ul>

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## Service Operations

### ■ When Replacing Parts

N/A

### ■ Consumables

No.	Parts Name	Parts number	Qty	Execution timing	Remark
1	Toner filter	FC6-9817	1	100k(B / W)	
				25k(CL)	

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### ■ When Replacing Parts

When replacing the Consumable Parts, be sure to clear the Parts Counter  
(COPIER > COUNTER > PRDC-1/DRBL-1)

### ■ Points to note at servicing

N/A

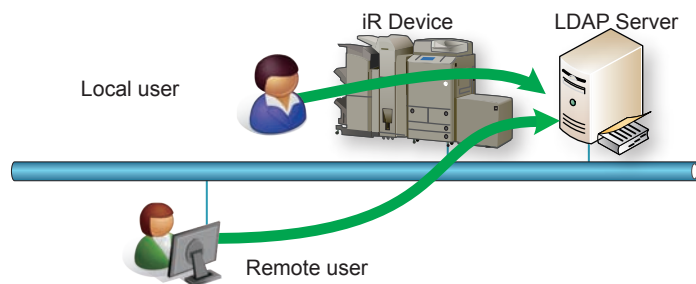
## MEAP

## Changes

## LDAP Authentication (SSO-H Server Authentication)

LDAP authentication has been added to the server authentication method using Single Sign-On H (hereinafter referred to as SSO-H).

LDAP authentication is a user authentication performed by using an LDAP server on the network linked with the device.

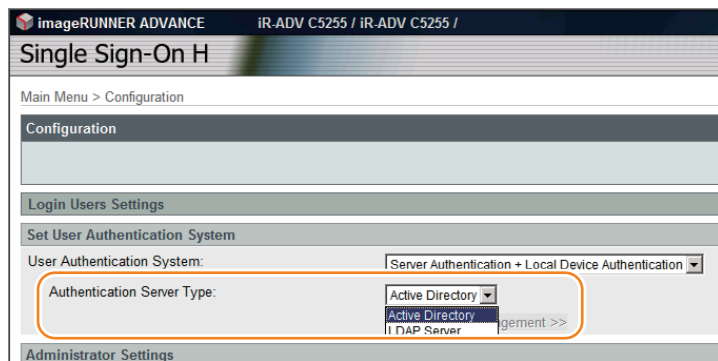


F-2-155

Accordingly, the following item and setting screens have been added to the SSO-H management screen of the remote UI.

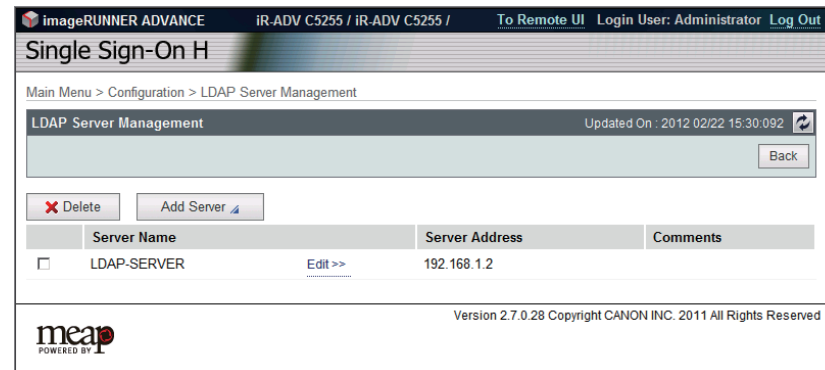
- Drop-down list for selecting the LDAP server as the authentication server
- The LDAP server management screen (when [LDAP Server] is selected from the foregoing drop-down list)
- The screen for adding an LDAP server

An example of the screen showing the drop-down list for selecting LDAP Server



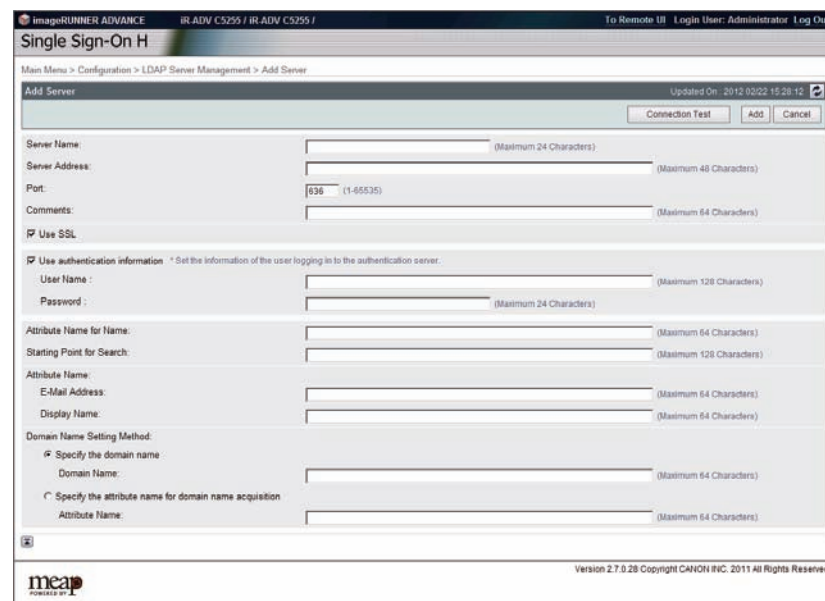
F-2-156

An example of the LDAP server management screen



F-2-157

An example of the screen for adding an LDAP server



F-2-158

For details, refer to "Server authentication (Active Directory authentication)" in this chapter.

## ■ Integrated Authentication Disabling Setting Screen

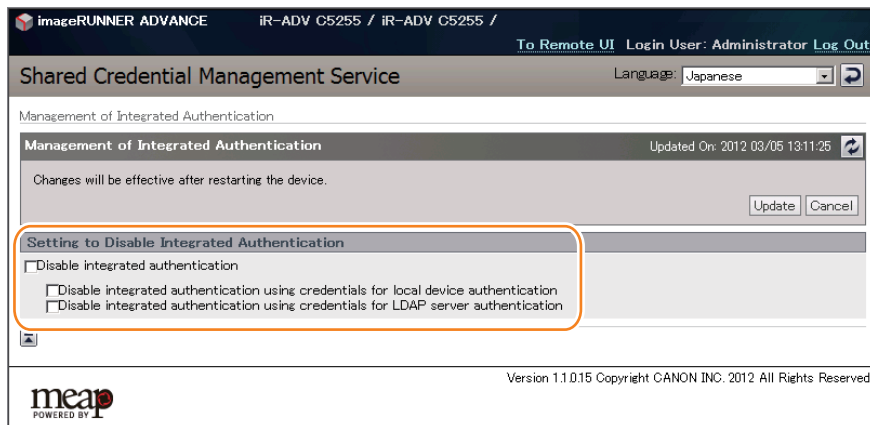
A user setting screen has been added to the integrated authentication function which allows the authentication information used for logging into the machine to be shared between MEAP applications.

From a security standpoint, the setting screen for disabling the function to allow authentication information (Volatile Credential), whose registered information is discarded at the time of logout or shutdown of the device, to be used has conventionally been included in service mode.

In addition to this service mode, a screen that allows even users to make the setting has been added to the remote UI.

This screen can be also used to disable the integrated authentication function for each authentication protocol.

For details, refer to "Integrated Authentication Function" in this chapter.



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## ● Preparation for Using SSO-H

### ■ Outline

When using Single Sign-On H (hereinafter referred to as SSO-H) for the login service, required system environments are different in server authentication or local device authentication.

See the following for system requirements in each of authentication methods:

### ■ Server authentication management

The system requirements necessary when using server authentication by SSO-H vary depending on the authentication server.

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

### ● Active Directory authentication

In order to use Active Directory authentication in SSO-H, the following system environments are required.

- 1) Authentication server (Active Directory : Windows server )
  - Active Directory and Domain Name System (DNS) should be installed.
  - A group named "Canon Peripheral Admins" should be created on the Active Directory.
  - The OS should be one of the followings.
    - Microsoft Windows Server 2003 SP2 \*
    - Microsoft Windows Server 2003 R2 SP2 \*
    - Microsoft Windows Server 2008 SP2 \*
    - Microsoft Windows Server 2008 R2 SP1
- \* 64-bit version is not supported.
- 2) Users accessing the authentication server (Active Directory: Windows Server)
  - The user should belong to the "Canon Peripheral Admins" group on the Active Directory.
  - The user name should contain only single-byte alphanumeric characters, - (hyphen), \_ (low line), and % (percent).

#### Note:

The difference in time setting between the authentication server (Active Directory) and the machine (and the computer for login) should be within 5 minutes. (If the difference in time setting is 5 minutes or longer, an error will occur at the time of login for the server authentication.)



**Note:**

As for the user name for logging into the machine, use the name registered as "User logon name (pre-Windows 2000)" in the Active Directory.

An example of the user registration screen (Windows Server 2003)

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### ● LDAP authentication

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

#### 1) LDAP server

- Novell eDirectory V8.8 SP6 for Windows
- Lotus Domino V8.5 for Windows

#### 2) OS where the LDAP server runs

- It should comply with the specifications of the LDAP server product.

Operation check has been conducted for the following OS.

- Microsoft Windows Server 2003 Enterprise SP2
- Microsoft Windows Server 2008 Enterprise

**Note:**

When an LDAP server other than the server shown above is used, SSO-H may not work properly.

Windows Active Directory works also as an LDAP server, but is not supported.

## ■ PC Environment of Administrator Users and General Users

The following environment is required to use this machine (managed by SSO-H) from a PC on the network.

### ● OS of the PC and Other Environments

Classification	Operating System	Supported browser	Java Runtime Environment
Client OS	Windows XP Professional SP3	Internet Explorer 7 Internet Explorer 8	Java Runtime Environment 1.5 or later *1 *3
	Windows Vista SP2	Internet Explorer 7 Internet Explorer 8	Java Runtime Environment 1.5 or later *1 *3
		Internet Explorer 9	Java Runtime Environment 1.5 or later *2 *3
	Windows 7 SP1	Internet Explorer 8	Java Runtime Environment 1.5 or later *1 *3
Internet Explorer 9		Java Runtime Environment 1.5 or later *2 *3	
Server OS	Windows Server 2003 SP2	Internet Explorer 7	Java Runtime Environment 1.5 or later *1 *3
	Windows Server 2003 R2 SP2	Internet Explorer 8	Java Runtime Environment 1.5 or later *1 *3
	Windows Server 2008 SP2	Internet Explorer 7 Internet Explorer 8	Java Runtime Environment 1.5 or later *1 *3
		Internet Explorer 9	Java Runtime Environment 1.5 or later *2 *3
Windows Server 2008 R2 SP1	Internet Explorer 8	Java Runtime Environment 1.5 or later *1 *3	
	Internet Explorer 9	Java Runtime Environment 1.5 or later *2 *3	
Mac OS	Mac OS X v10.5	Safari 4.0.5 Safari 5.0.5	Java 2 Standard Edition 5.0 *1 *3
	Mac OS X v10.6	Safari 4.0.5 Safari 5.0.5 Safari 5.1	
		Mac OS X v10.7	

JRE : Java Runtime Environment

J2SE : Java 2 Platform Standard Edition

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**Note:**

\*1 Excluding JRE6 update4/5

\*2 In order to use JRE1.6 with Internet Explorer 9, JRE1.6.0.24 or later is required.

\*3 Refer to the website of JAVA (<http://java.com/>) for how to obtain the Java environment.



**Note:**

- The ActiveX plug-in should be enabled in Internet Explorer.
- In Internet Explorer, if [Run ActiveX controls and plug-ins] is disabled in [Internet Options] > [Security] > [Custom level...], a warning message that JRE has not yet been installed is displayed.
- JavaScript should be enabled in all the browsers.
- In the case of an IP v6 environment, JRE1.5 or later is required.
- When using Windows XP in an IP v6 environment, IP v6 may need to be installed manually in some cases.

### ● Network ports used

	Port No.	Application
Connecting	53	Communication with DNS server (fixed)
	88	Kerberos authentication with KDC (Key Distribution Center)
	1-65535 ( default:389)	Communication with directory service using LDAP (default is 389, may be changed to any port on LDAP service side)
Listening	10000 - 10100	

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## ● Preparation for Using SMS

To use SMS, a PC and browser used to access SMS are required, and the network settings need to be set up on the device.

### ■ Preparation of PC for Accessing SMS

#### ● Checking of operation environment

In order to access SMS using password authentication, the PC and browser need to comply with the following system environment.

Combination of the Browser and the OS

Operating System	Supported browser
Windows XP Professional SP3	Microsoft Internet Explorer 7 Microsoft Internet Explorer 8
Windows Vista SP2	Microsoft Internet Explorer 7 Microsoft Internet Explorer 8 Microsoft Internet Explorer 9
Windows 7 SP1	Microsoft Internet Explorer 8 Microsoft Internet Explorer 9
Mac OS X v10.5	Safari 4.0.5 Safari 5.0.5
Mac OS X v10.6	Safari 4.0.5 Safari 5.0.5 Safari 5.1
Mac OS X Lion	Safari 5.1

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

#### ● PC and Browser Settings

The PC and browser used to access SMS need to satisfy the following conditions.

- The supported browser language should be the same with the language of the OS.
- Java Script should be enabled.
- The supported screen size should be 800 x 600 or larger (recommended size: 1024 x 768).
- Session cookie should be enabled.
- Only alphanumeric characters and some of the symbols ("-" or ".") should be used as the machine domain name and host name.
- If an invalid character string such as a low line ("\_") is included in the host name, cookies cannot be enabled.

## Settings on the Device Side

### Network configuration process

In order to provide support for the machine via network such as SMS, the network settings need to be made from the touch panel of the machine. (this setting is [ON] by default).

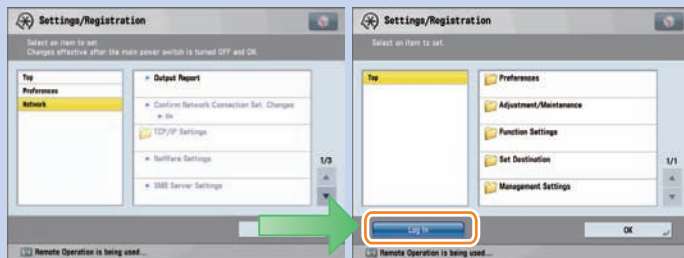
- 1) Press [Settings/Registration] button, select [Preferences] > [Network] > [TCP/IP Settings] > [Use HTTP] and press [On] button.



F-2-161

#### Note:

In iR-ADV series, the System Manager ID and the System PIN are configured by default, so "Network" and the items that follow are grayed out and cannot be selected. Return to the top screen, press "Login" button at the lower left of the screen, login as the system manager, and configure the settings. The default setting for the System Manager ID is "7654321", and the password is "7654321".



F-2-162

#### Note:

When using SSL, press [Settings/Registration] button, select [Management Settings]>[License / Other] > [MEAP Settings] > [SSL Settings] and press [On] button. (This setting is applied to SSL setting on RUI. Vice versa, [On] set for SSL on RUI is also applied to the touch panel.)

When [Use SSL] is set to On, the message dialog, [The Default Key is not set. Check the Key and Certificate List settings in Certificate Setting.], is shown. Press [OK] button for this message.



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- 2) Press [OK] button to return to Main Menu screen.
- 3) Restart this device.

#### CAUTION:

- The setting [ Use HTTP ] is not actually enabled/disabled until you have restarted the device.
- You cannot make a connection through a proxy server. If a proxy server is in use, enter the IP address of the MEAP device in the Exceptions field for the browser. Open Internet Options dialog of Internet Explorer and select Connections tab, LAN Settings button, Use a proxy server option, and Advanced button of Proxy server group. Proxy Settings dialog will opens. The Exceptions field is in the dialog. As network settings vary among environments, consult the network administrator.
- If Cookie and JavaScript are not enabled in the Web browser, you will not be able to use SMS.
- To type text using the Web browser, use the characters compatible with the MEAP device's touch panel display. The MEAP device may not properly recognize some characters.
- When [Use SSL] is made available, it is necessary to set the key and the certificate necessary for the SSL communication. Set the key and the certificate by SSL with [SSL Settings] that exists in [Preferences] > [Network] > [TCP/IP Settings] > [SSL Settings] on the iR device.

## ● Key Pair and Server Certificate when Using Encrypted SSL Communication

To use SMS via SSL connection, it is required to specify a key pair and server certificate as the key to be used.

Since a key (default key) that can be used for encrypted SSL communication is installed as standard on the device, advance setting of the key pair and server certificate is not required. In order to use an encryption key other than the default key, follow the procedure "Generating a key pair" shown below to make settings for the key pair and server certificate necessary for encrypted SSL communication.

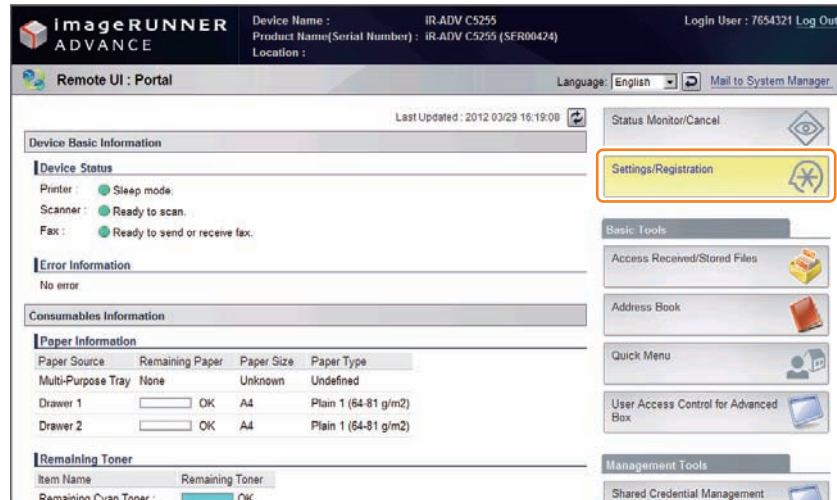
### Note:

- MFP has a server certificate registered as standard.
- For detailed procedures of the Default Key setting, refer to [e-Manual > Security].
- As for SMS, by setting a Default Key, encrypted SSL communication is always executed regardless of the following setting: [Settings/Registration] > [Management Settings] (Settings/Registration) > [MEAP Settings] > [SSL Settings]: ON/OFF.

### Generating a key pair

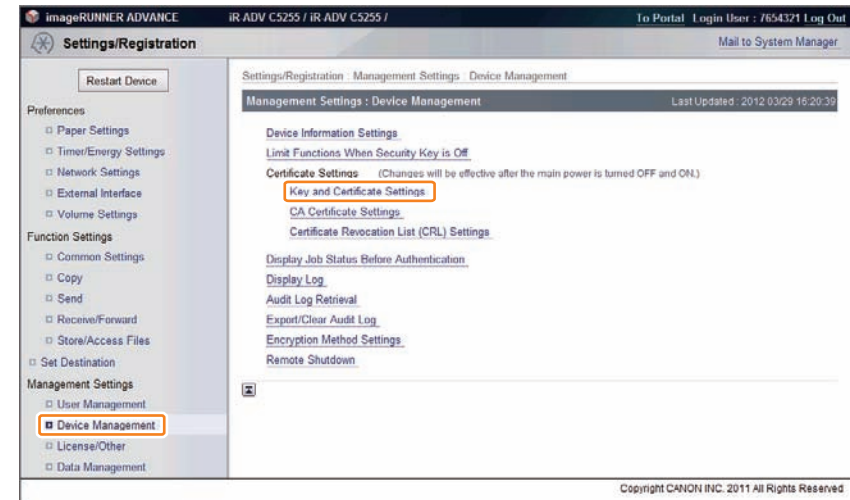
1) From a PC on the same network as the device, use a web browser to access the remote UI's portal page. Then, select [ Settings/Registration ] from the menu on the right side of the screen.

URL to access: <http://<device's IP address>:8000/>



F-2-164

2) Click [ Management Settings ] > [ Device Management ] > [ Certificate Settings ] > [ Key and Certificate Settings ].



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3) Click [ Generate Key... ] button.



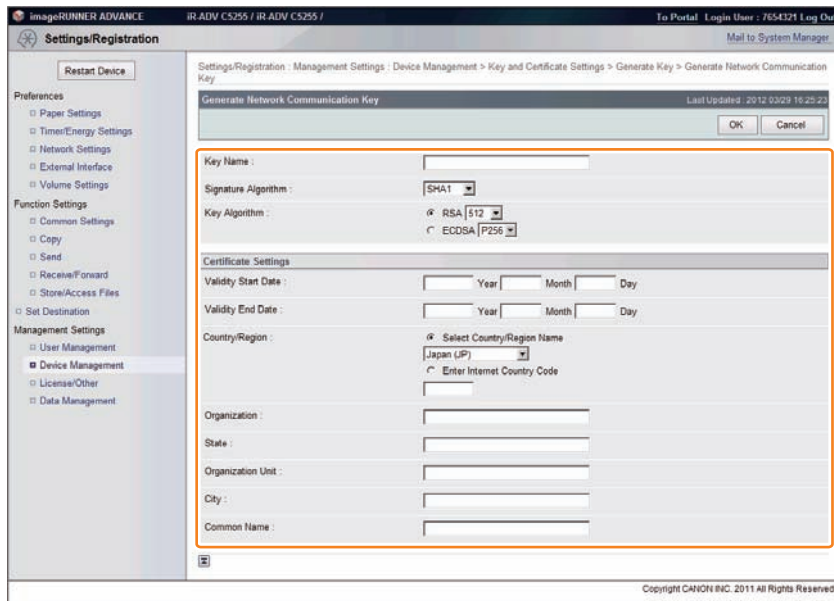
F-2-166

4) Click [ Network Communication ]



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5) Enter the necessary information, and then click the [ OK ] button.



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Input example

Item name	Type	Content	Entry
<b>Key Settings</b>			
Key Name	Compulsory	An arbitrary character string	Default Key
Signature Algorithm	Compulsory	Selected from:SHA1/SHA256/SHA384/SHA512	RSA
Key Algorithm	Compulsory	Selected from:512/1024/2048/4096	512
<b>Certificate Settings</b>			
Validly Start Date	Compulsory	Date	15/4/2012
Validly End Date	Compulsory	Date	15/4/2036
Country/Region	Compulsory	Country or region name	US
State	Arbitrary	State name	-
City	Arbitrary	City name	-
Organization	Arbitrary	Organization name	-
Organization Unit	Arbitrary	Organization unit	-
Common Name	Arbitrary	Common Name*	-

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**Note:**

When the IP address of the device has been entered in the [Common Name] entry field, if you install a server certificate to the browser ( see "Installing a server certificate (reference information)" ), the message "Certificate Error" that usually appears when access is made from Internet Explorer 7 or later will not be displayed.

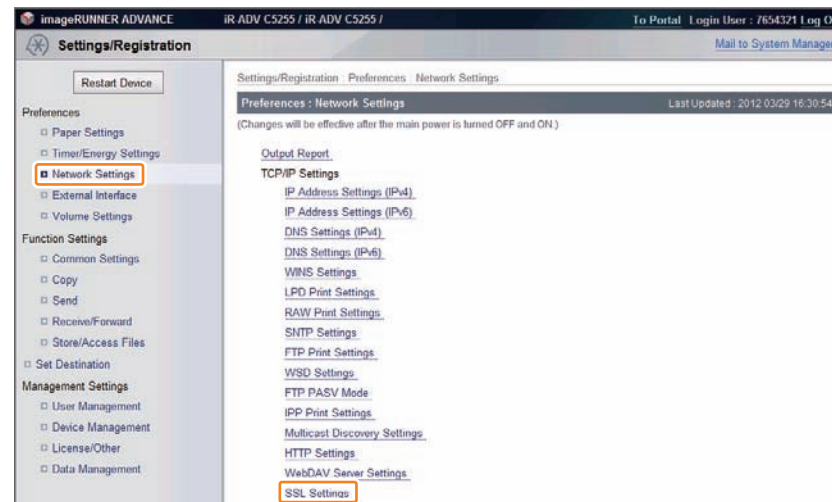
6) Check to see that the generated key appears in [ Registered Key and Certificate ].



F-2-169

**Default Key Settings**

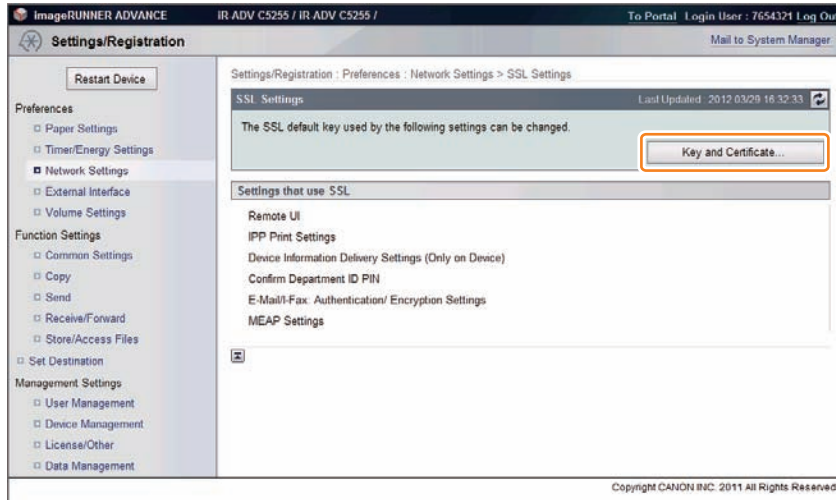
1) Click [ Preferences ] > [ Network Settings ] > [ TCP/IP Settings ] > [ SSL Settings ].



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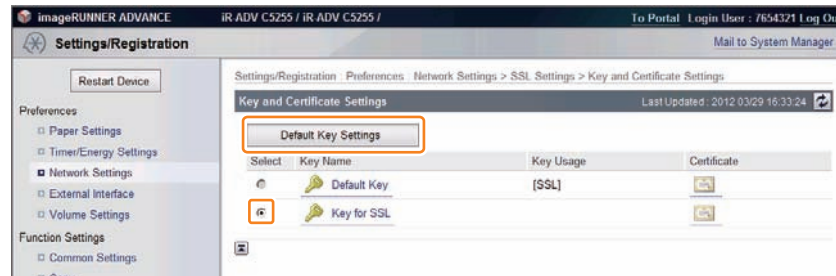


2) Click [ Key and Certificate... ] button.



F-2-171

3) Select the generated key, and then click the [ Default Key Settings ] button.



F-2-172

4) Check that [ SSL ] is displayed in the [ Key Usage ] entry field.



F-2-173

5) Log out from the remote UI, and then restart the device.

Installing a server certificate (reference information)

When you access a device where the key installed as standard [default key] is set as the key for SSL, "Certificate Error" appears if the version of Internet Explorer (IE) is Version 7 or later.

Error display example



F-2-174

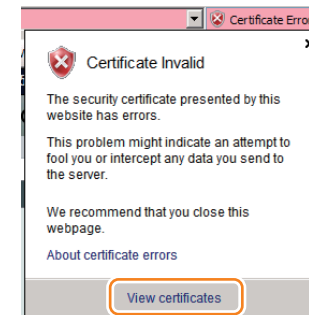
To disable display of "Certificate Error", use the following procedure (for IE8) to set the key generated in "Key Pair and Server Certificate when Using Encrypted SSL Communication" (i.e. the key with the IP address of the device specified as the shared name) as an SSL key.

1) Access SMS from the browser, and then click "Certificate Error" in the URL entry field.



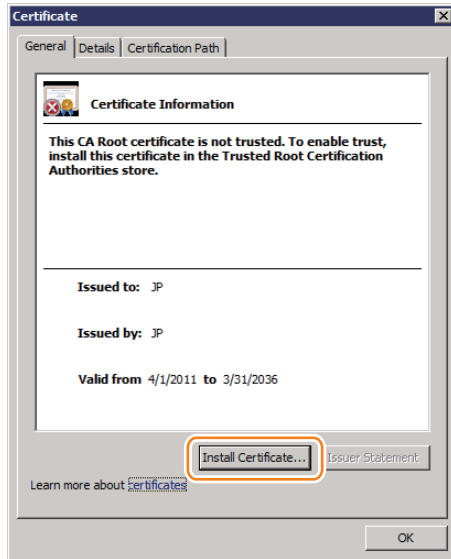
F-2-175

2) Click [ View certificates ].



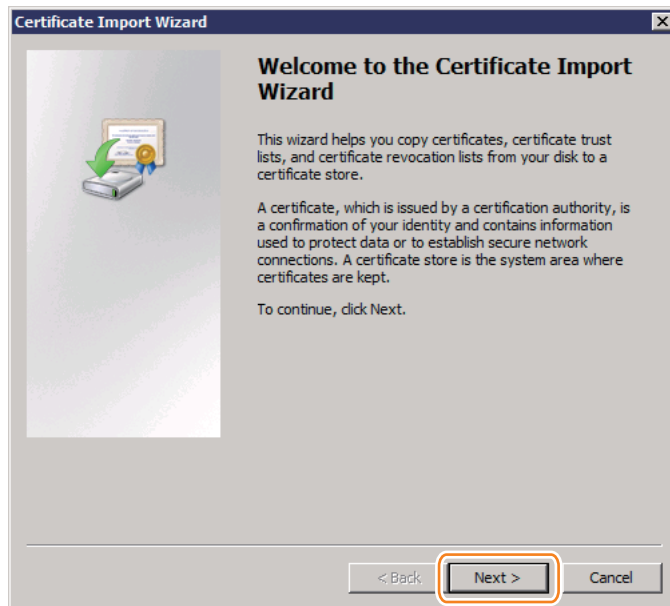
F-2-176

3) Click the [ Install Certificate... ] button on the [ General ] tab.



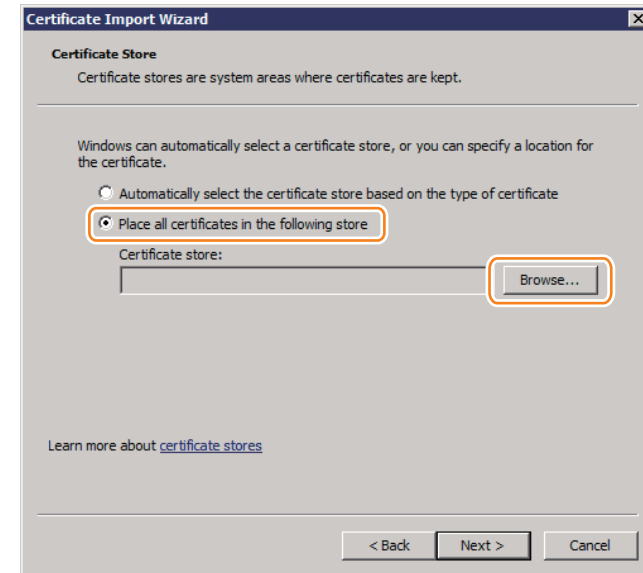
F-2-177

4) [ Certificate Import Wizard ] will appear. Click the [ Next ] button.



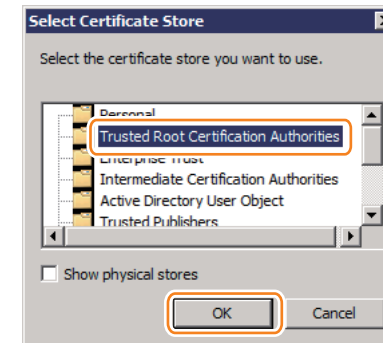
F-2-178

5) In [ Certificate Store ], select the [ Place all certificates in the following store ] option, and then click the [ Browse ] button.



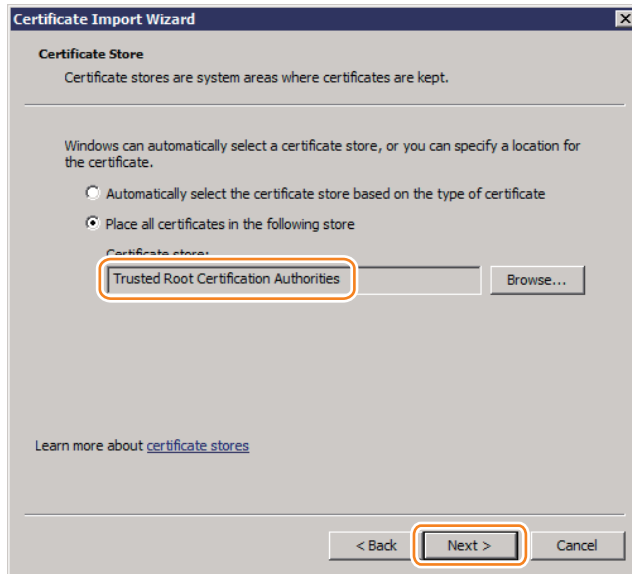
F-2-179

6) In [ Select Certificate Store ], select [ Trusted Root Certification Authorities ], and then click the [ OK ] button.



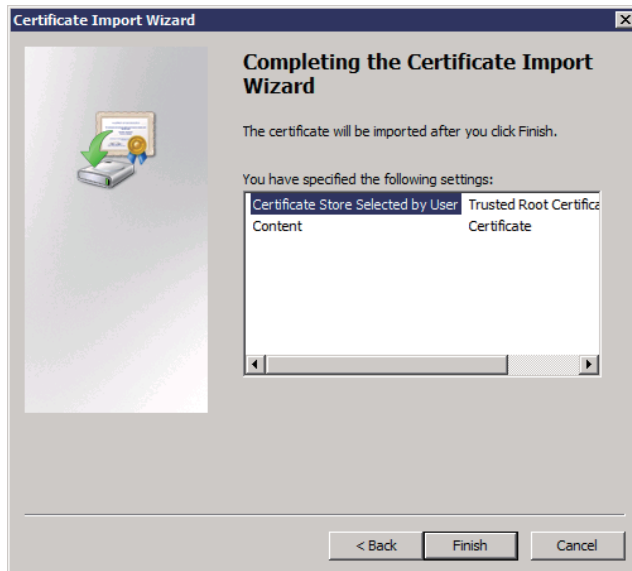
F-2-180

7) You will return to the [ Certificate Store ] dialog. Check that "Trusted Root Certification Authorities" appears in [ Certificate ], and then click the [ Next ] button.



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8) [ Completing the Certificate Import Wizard ] will appear. Click the [ Finish ] button.



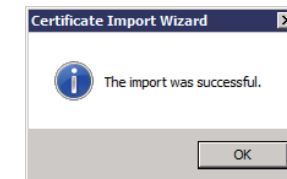
F-2-182

9) If the [Security Warning] appears, click the [Yes] button. (It does not appear when installing the same certificate again.)



F-2-183

10) A message will appear to indicate that import has been completed successfully. Click the [ OK ] button.



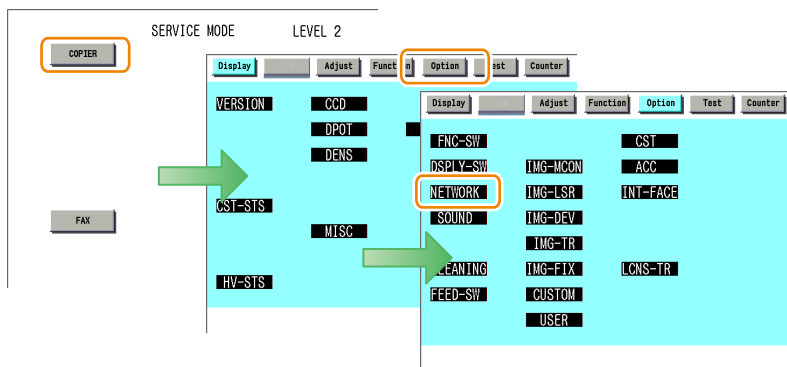
F-2-184

### Network Port Settings

The default port of the HTTP server used for MEAP and MEAP applications to provide the servlet function is 8000, and the HTTPS server's default port is 8443. In the case that these ports have already used by the customer who is to introduce this application, the MEAP application cannot use the HTTP (or HTTPS) server(s).

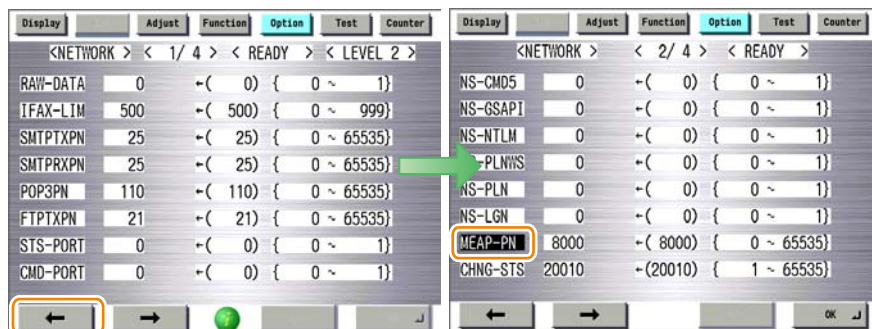
By changing the following ports to use, however, the MEAP application can be used as well as the existing system.

- 1) Start [SERVICE MODE] in Level 2.
- 2) Press [COPIER] > [Option] > [NETWORK] buttons.



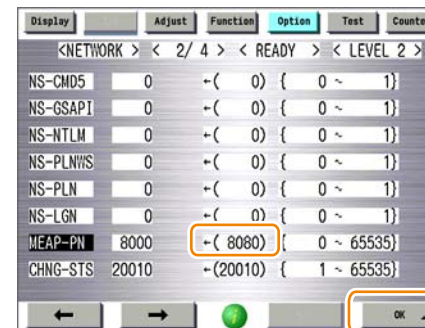
F-2-185

- 3) To set up the HTTP server port, select [ MEAP-PN ]. To set up the HTTPS server port, select [MEAP-SSL].



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- 4) Press the port number to specify on the control panel (the numerical value input in the field is displayed), and press [OK] button.



F-2-187

**Note:**

A port number can be any integer from 0 to 65535. To avoid port numbers that are frequently used, do not use any integer from 0 to 1023.

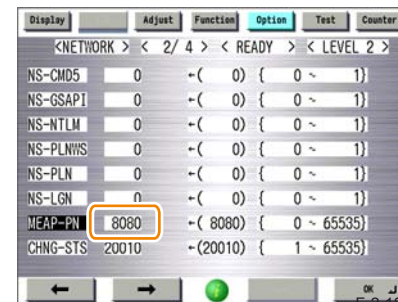
Server	Setting value	Default value / Value after RAM clear
HTTP Server	1024 to 65535	8000
HTTPS Server	1024 to 65535	8443

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**Note:**

If PS Print Server Unit is connected, do not specify port 8080. If port 8080 is specified, it is not possible to access the remote UI of the device where the MEAP authentication application is running. (Port 8080 is reserved to allow the PS Print Server Unit to redirect to the iR device.)

- 5) Restart the device if the port number is set.



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## How to Check the Serial Number

When performing MEAP device support, the serial number of the device is necessary in some cases.

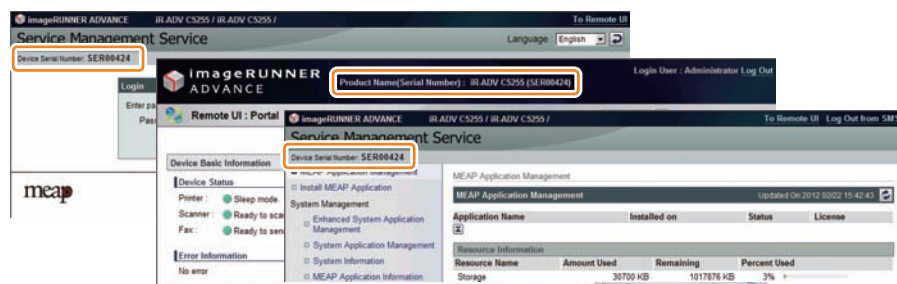
Examples of where the serial number is necessary

- When initializing SMS login password (obtaining a switch license)
- When obtaining a MEAP application license from LMS
- When obtaining a transfer license of MEAP application
- When obtaining a special license for reinstalling MEAP application

If a problem occurs in the MEAP device and you want to contact the support department of the sales company, you need to provide the serial number. Perform the following procedure to get the serial number.

### Checking from the PC browser

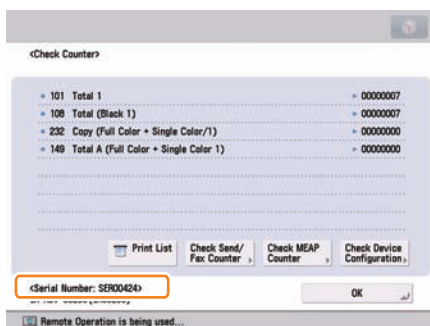
The serial number of the device is displayed on the SMS login screen, SMS screen, and remote UI portal screen.



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### Checking from the device's Touch Panel

You can see the number by pressing the counter key on the Control Panel of the machine.



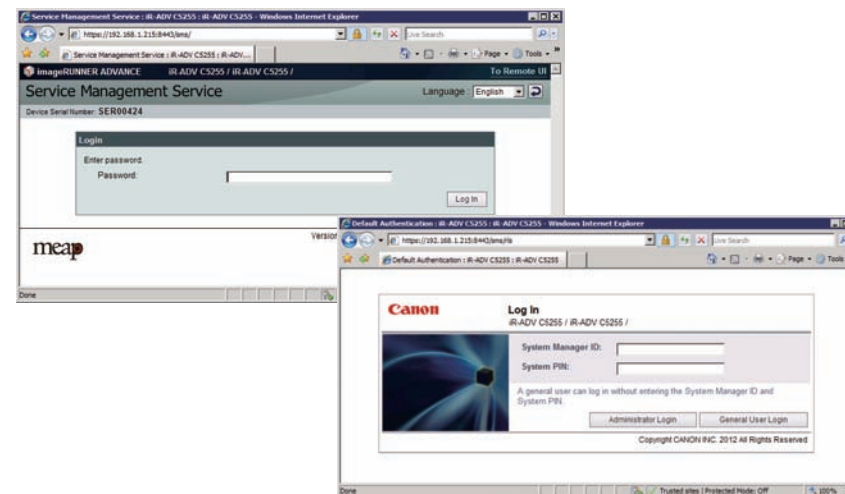
F-2-190

## Login to SMS

### Outline

SMS login may be done by entering a password for authentication, or by authentication via the Remote Login Service (RLS) login window (RLS authentication). Settings can be changed to allow either only one of these methods or both of them.

SMS login window (password auth) RLS login window (user name/ password auth)



F-2-191

Login method	Authentication method	Authentication service name	Users who may log in
Password authentication	Password authentication	SMS Installer Service (Password Authentication)	Users who know the SMS login password
RLS login	SSO-H	SMS Installer Service (Remote Login Service Authentication)	Users registered as administrators with SSO-H

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#### Note:

If Default Authentication is selected as the device authentication method, 'RLS Authentication' is not selectable as SMS Login method. Also, if 'RLS Authentication' is selected, the device authentication method (Default Authentication, SDL, SSO) cannot be changed.

## ● When SMS Cannot Be Accessed

### If you forgot the password (SMS login password initialization)

After changing the default SMS login password, if you forgot the new password and cannot log in to SMS, you can use a switch license for password initialization to change the password back to the default value "MeapSmsLogin".

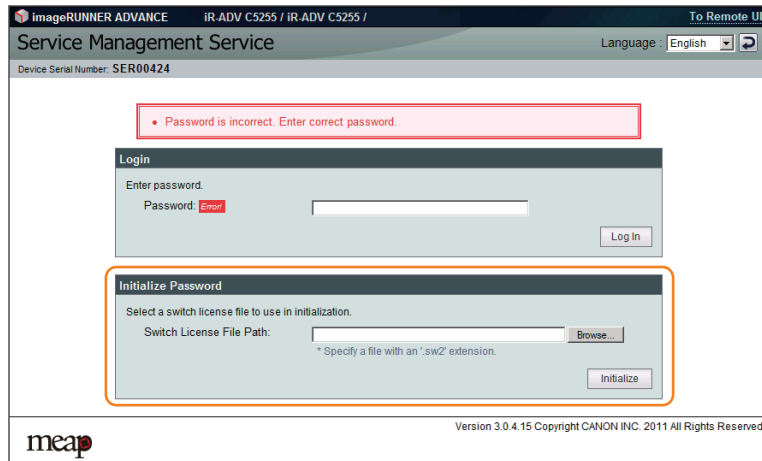
Note that there is no special password for service.

1) Obtain a switch license file for password initialization.

Contact the person in charge of support at the sales company, give the device's serial number, and have a switch license file for password initialization issued.

2) Load the switch license file.

With nothing entered, click the [ Log in ] button to display the area for specifying a switch license file for password initialization.



F-2-192

3) Specify the switch license file.

Click the [ Browse ] button and specify the switch license file.

4) Initialize the login password.

Click the [ Initialize ] button to display an initialization confirmation page, and click the [ OK ] button.

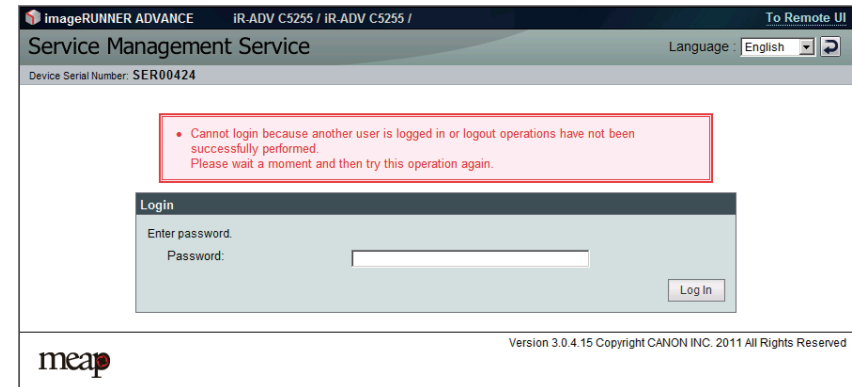
#### Note:

- The default password is "MeapSmsLogin." (The password is case-sensitive.)
- If you click [Cancel] button, the Login page opens without initializing the password.

### If login is not possible due to exclusive control

Since access to SMS is under exclusive control, you cannot log in if another user has already logged into the SMS of the same iR device.

An example of the exclusive control message



F-2-193

If you cannot log in due to exclusive control, you need to ask the other user to log out before you can try again.

#### Note:

If you close the browser without logging out, the session remains active. In that case, you cannot log in again. If this problem occurs, you can wait for 5 minutes so that the session is disconnected. Or, you can restart the device to force the session to disconnect.

### If [Key and Certificate Settings] is not set

If [Key and Certificate Settings] is not set correctly, you cannot access the URL for SMS (<https://<device's IP address>:8443/sms/>). In that case, perform the following procedure.

- 1) Go to <http://<device's IP address>:8000/sms/>, and check to see that "HTTP 500 Internal Server Error" appears.
- 2) If it appears, perform the procedure "Key Pair and Server Certificate when Using Encrypted SSL Communication" in this chapter.

#### Note:

In the case of SMS, by setting the key to be used, encrypted SSL communication is always executed regardless of the following setting: [Settings/Registration] > [Management Settings] > [License/Other] > [MEAP Settings] > [Use SSL] > ON/OFF.

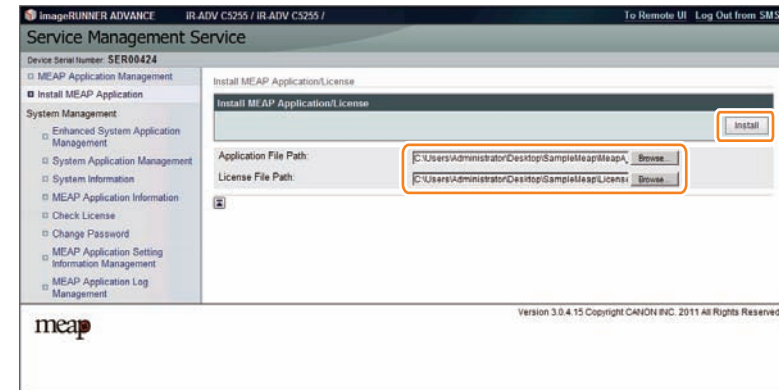
### ● How to Deal with a Message "Certificate Error" That Appears at the Time of Access

When accessing from the browser to SMS, a message "Certificate Error" appears in some cases. In that case, perform the procedure "Installing a server certificate (reference information)" in this chapter.

## ● Installing an MEAP Application

### ■ Outline

From the MEAP application installation screen, you can install the MEAP application as well as the license file.



F-2-194

Before installing the MEAP application, be sure to check the following items.

### ● Device compatibility with the MEAP application

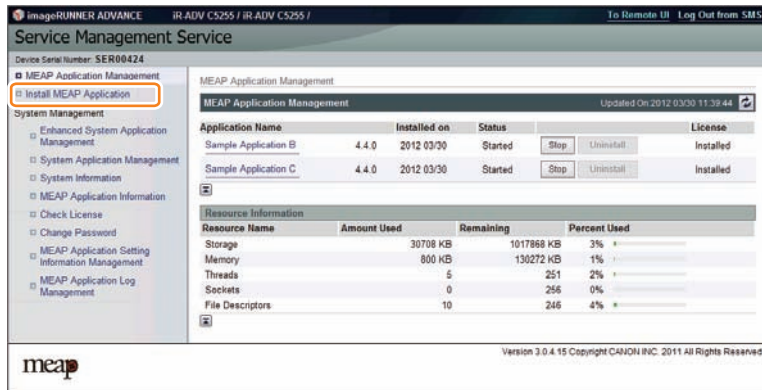
To find out whether the device is compatible with the MEAP application, check the devices supported by the MEAP application. Depending on the application, the device's firmware may require version upgrade.

### ● Resources availability (remaining amount)

The necessary resources (free storage space and free memory available) must be secured for an MEAP application to run; otherwise, you cannot install the MEAP application. To check the resource information, see "Device's resources" in this manual.

## Procedure to install applications

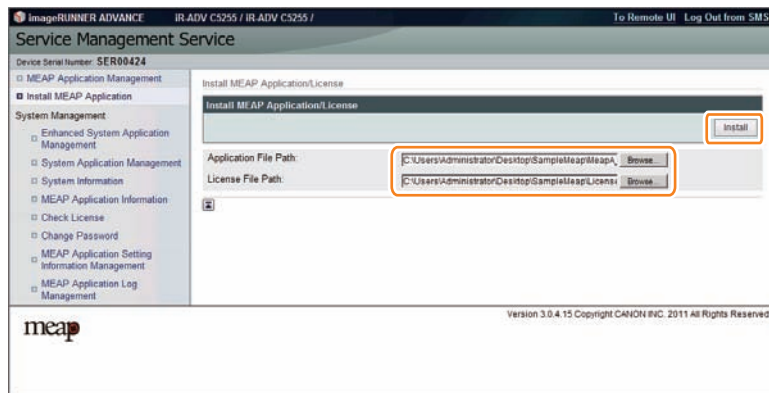
- 1) Long on to SMS.
- 2) Click [ Install MEAP Application ] on the menu.



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- 3) Check [ Install MEAP Application/License ] page appears.
- 4) Click [ Browse.. ] button, and select the application file and the license file of the application; then, click [ Install ] button.

**Note:**  
 Application File: identified by the extension “jar”.  
 License File: identified by the extension “lic”.



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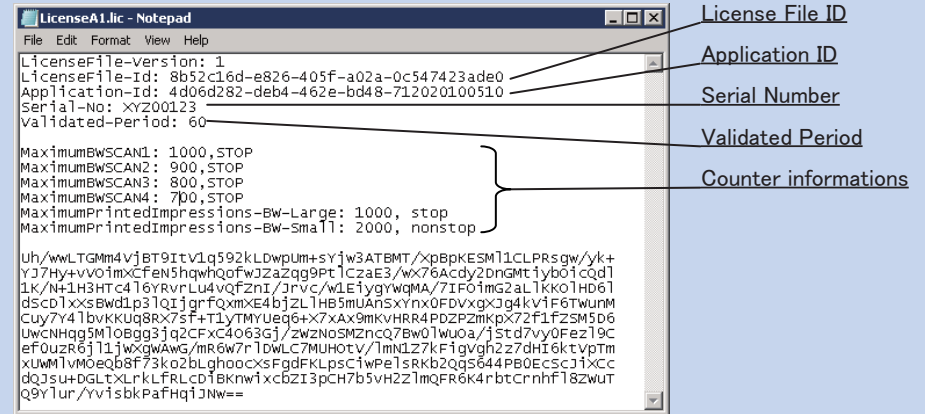
**CAUTION:**

- You cannot install only the license.
- You will not be able to install the application without using the appropriate license. Be sure to select its license file.
- If you are adding a license to an existing application, see "Procedure adding a license file".
- If you are updating an existing application, stop the application; then, install the new application or its license file. You will not be able to update an application while it is running.

**Note:**

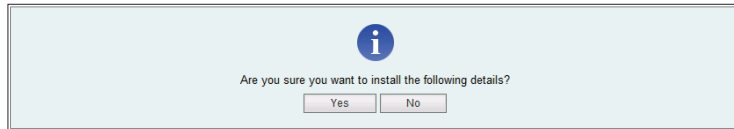
The license file is provided in text file format, enabling to view in a text editor. The application ID and device serial number shown in the file allow users to confirm which device to install with the license file. Note that any changes added to the license file may disable installation. Cares should be taken when confirming the contents of the license file.

**Sample file**



F-2-197

5) Check the contents of the Confirm page; then, click [ OK ] button.

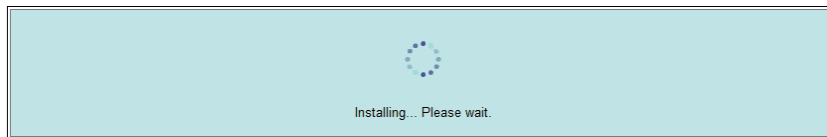


Application Information	
Application Name:	Sample Application A
Version:	4.4.0
Application ID:	A4N64287_dab4_A62a_Jd4R_74167-11739

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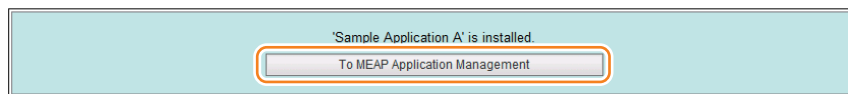
6) Some applications show a screen to indicate the terms of agreement. Read the terms, and click [ OK ].

7) Check the message "Installing...Please wait." appears, beginning the installation.



F-2-199

8) Upon installation completed, click [ To MEAP Application Management ] button shown on the screen to view MEAP Application Management page.



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#### Note:

As for an application that has just been installed, the status is "Installed". In order to use the application, it is necessary to click the [Start] button to change the status to [Started].

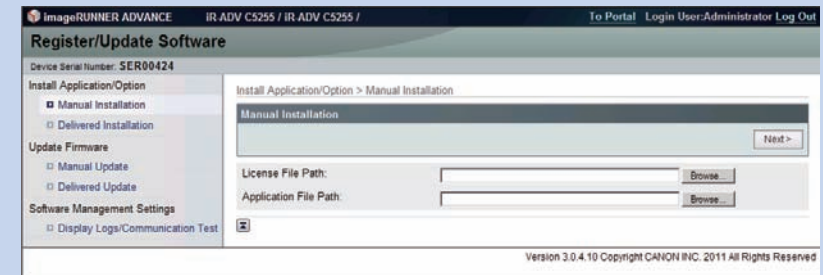
MEAP Application Management						
MEAP Application Management						Updated On: 2012/03/30 12:47:47
Application Name	Installed on	Status				License
Sample Application A	4.4.0 2012/03/30	Installed	Start	Uninstall		Installed
Sample Application B	4.4.0 2012/03/30	Started	Stop	Uninstall		Installed
Sample Application C	4.4.0 2012/03/30	Started	Stop	Uninstall		Installed

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#### Note:

There are two ways to install an MEAP application. You can install using SMS, or install using the [Register/Update Software] screen of the remote UI.

Screen example



F-2-202

[Register/Update Software] provides two types of installations. One is [Manual Installation] where you specify a jar file and a license file and then install. The other is [Delivered Installation] where you enter a license access number. For details of the procedures, please refer to the e-Manual.



## Resource Information

### Outline

Application Management page shows [ resource information ] for information of the whole device resources including Amount Used, Remaining, and Percent Used.

This function enables users to judge the remaining resources before installing the additional application. Such resource information is shown based on the manifest header stated at the top of each application, which declares the resources required in the application. Therefore, the information does not necessarily show the resources actually in use.

The following resource information is shown:

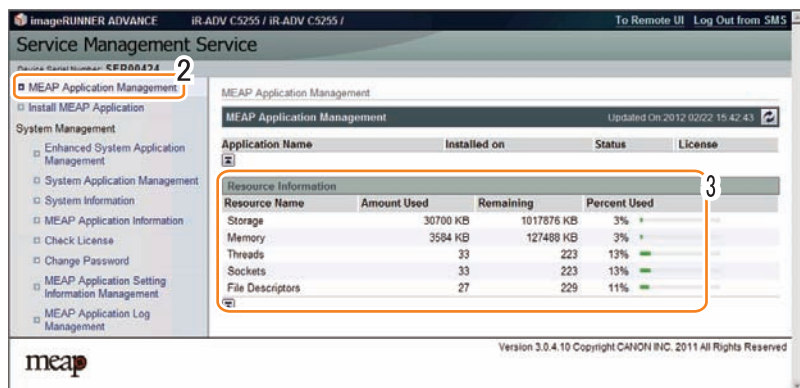
- Storage
- Memory
- Thread
- Socket
- File Descriptor

If the hard disk does not have enough free space for the application, the application cannot be installed.

Moreover, if the free space of any of the resources (Memory, Thread, Socket, and File Descriptor) is insufficient, the application cannot be started.

The following procedure shows how to check the resource information.

- 1) Log in to SMS.
- 2) Click [ MEAP Application Management ].
- 3) Check [ Resource Information ] for information of the whole device resources.



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### Device's resources

When 1 MEAP application operates, the resource volume allocated to each device is as follows (loaded resource list). Since the following value is an estimate, when installing the MEAP applications, it needs to check the available resource of SMS.

Since the indication of SMS resource volume fluctuates by the login service (authentication function) and configuration (future model), which the user selected, it may show a bigger value than the following values.

List of Available Resources

Product Name		Storage	Memory	Thread	Socket	File Description
iR-ADV C5051 series		1024MB	128MB	256	256	256
iR-ADV C9075 series		1024MB	128MB	256	256	256
iR-ADV 6075 series		1024MB	128MB	256	256	256
iR-ADV 8105 PRO series		1024MB	128MB	256	256	256
iR-ADV C2030/C2020 series	Flash model	220MB	32MB	162	128	128
	HDD model	1024MB	128MB	256	256	256
iR-ADV 4045 series		1024MB	128MB	256	256	256
iR-ADV C5255 series		1024MB	128MB	256	256	256

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#### Note:

- Among the resources, the free space of Storage is checked when installing an application. For other resources, the free space is checked when the application is started.
- Some applications call for a specific set of conditions for installation. For details, see the User's Guide that comes with the individual applications.
- Maximum installable application is up to 20 even if the remaining resource is adequate. (However, the Send function consumes 1, it must be 19 in practice.) Authentication application is not included in this number.
- The MEAP application, which can be started simultaneously, is up to 19. (Authentication application is not included in this number.)

#### CAUTION:

To install an application, the user needs to use the following URL when accessing the license control system to obtain a license file. In doing so, he/she needs to register the license access number of the application and the serial number of the device.

<http://www.canon.com/lms/license/>

## MEAP Specifications

### What is MEAP Specifications (MEAP Spec Version)?

MEAP Specifications is one of the information required to judge whether MEAP applications can be operated or not. With MEAP Specifications, you can prevent an application that uses a specific function of device from being installed onto the device that does not have the function.

#### About Name

The displayed name for Meap Specifications differs depending on the screen or the location where the name is displayed.

In this document, it is referred to as "Meap Specifications".

The location where the name is displayed/shown	Displayed name
Platform Information : SMS > [ System Management ] > [ System Information ] > [ Platform Information ]	MEAP Specifications
System Information Print : Local UI [ Settings/Registration ] > [ Management Settings ] > [ License/Other ] > [ MEAP Settings ] > [ System Information Print ]	
Manifest file of the MEAP application SDK documents	MeapSpecVersion

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#### Mechanism

MEAP platform judges whether MEAP applications can be operated on it using on the 2 information below:

- Device Specification ID
- MEAP Specifications

Device Specification ID shows information such as the original functions of MFP (including print, scan, and copy), and one that differs by model such as maximum copy number, thus each model has a different ID. (It is easy to determine the IDs for this reason.) MEAP application declares 1 or more Device Specification ID required for its execution. Declaration of multiple Device Specification IDs means that the application is operable in all the models declared. Upon installation of MEAP application in (using) SMS or MEAP Enterprise Service Manager, matching of Device Specification ID is executed on the side of MEAP platform machine. The machine which doesn't support the ID declared by the application rejects installation of such an application.

Meanwhile, MEAP Specifications shows other information than defined by Device Specification ID above, including network and security. Thus each model does not always have the same version.

MEAP application declares 1 or more MEAP Specifications required for its execution.

Declaration of multiple Device Specification IDs means that the application is operable in all the environments declared. Upon installation of MEAP application in SMS or MEAP Enterprise Service Manager, matching of MEAP Specifications is executed on the side of MEAP platform machine. The machine which doesn't support the version declared by the application rejects installation of such an application.

#### MEAP Specifications for each model

Product Name	Initial MEAP SpecVer	Remarks
iR-ADV C5051 iR-ADV C5045 iR-ADV C5035 iR-ADV C5030	5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45	Ver.37.xx or later 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46  Ver.38.xx or later 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 49  Ver.50.xx or later 5,6,7,9,10,11,13,14,15,17,18,19,25,26,27,29, 30,31,32,33,34,35,36,37,38,39,40,41,42,44,45 ,46,47,49,50,51,52,53,54,55,56,57,58,59
iR-ADV C9075 iR-ADV C9070 iR-ADV C9065 iR-ADV C9060 iR-ADV C7065 iR-ADV C7055	5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45	Ver.37.xx or later 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46  Ver.38.xx or later 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 49  Ver.50.xx or later 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59
iR-ADV 6075 iR-ADV 6065 iR-ADV 6055	5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 44, 45, 46, 49	Ver.20.xx or later 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 44, 45, 46, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59
iR-ADV 8105 PRO iR-ADV 8095 PRO iR-ADV 8085 PRO	5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 44, 45, 46, 49	Ver.20.xx or later 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 1, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 44, 45, 46, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59

Product Name	Initial MEAP SpecVer	Remarks
iR-ADV C2030 iR-ADV C2025 iR-ADV C2020	5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 48, 49	Ver.10.xx or later 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19,25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 48, 49, 53
iR-ADV 4045 iR-ADV 4035 iR-ADV 4025	5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59	-
iR-ADV C5255 iR-ADV C5250 iR-ADV C5240 iR-ADV C5235	5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 64, 65, 66, 67, 68, 69, 70, 71, 72, 74, 78, 80	-

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## MEAP Specifications List

Ver	Description
1	MEAP basic function
2	MEAP Spec Version 1 function and SSL/TSL + Proxy
5	MEAP Spec Version 1 function and CPCA V2 + ERS (Error Recovery Service) + New SSL/TSL
6	Reserved
7	MEAP Spec Version 5 function and Compact PDF + OCR PDF (Text Searchable) + USB Host (Buffering of Interrupt Transfer)
9	Reserved
10	MEAP Spec Version 5 function and USB-Host (Exception + Clear Feature + Set Feature+ Hot Plug) + WINS address acquisition using MIB Agent + Timer Service + SSL client authentication
11	MEAP Spec Version 5 function and AMS
13	MEAP Spec Version 5 function and J2ME1.1 Support + Encrypted PDF + Trace and smooth PDF + CTK2.0
14	Device signature PDF
15	IMI + ERS (API addition for IMI) , IPv6, Extended encryption function (AES/RC4)
17	Acquiring images of JBIG format
18	Parsing XML documents (XML parser)
19	Enhancement of IMI function (IMI Version1.2 series)
21	Reserved
25	API to access the HID/Mass Storage class devices.
26	MEAP driver preference function
27	Symbols that can be used with MibAgent added. (symbols for IPv6 address acquisition)
29	IMI API added (IMI version 1.2.1 enabled)
30	Extended address book function. (e-mail/group/i-FAX/file)
31	Integrated ERS function

Ver	Description
32	Extended Imaging function (function to generate PDF/OOXML (PowerPoint) with visible signature)
33	Extended function for imageRUNNER / iR ADVANCE series (API for address book/ CTK/ TopMenu)
34	Extended IMI Box function (v1.3.0)
35	Extended SIS function (function to check the network cable status, function to check PS print server unit status)
36	Reserved
37	CLS (Contextual Login Service) Supporting API Added
38	imageRUNNER / iR ADVANCE Series administrative privileges supported
39	MEAP Specifications added according to Jcrypto API Specification Change
40	ImagingAPI (Creation API of Visible Signature PDF) added
41	Reserved
42	Reserved
44	imageRUNNER / iR ADVANCE Series Remote Address Book Supported, RemoteFAX Supported
45	Addition of API that allows acquisition of the HID installation status
46	Multilingualization of the USB keyboard of the System Driver
47	Addition of API which executes a print order from the MEAP application of the IMI encryption PDF document
48	ID expressing the scan function for iR-ADV C2030/C2025/C2020 series
49	Reserved
50	SecurityOptionalPackage
51	IMI function expansion of iR-ADV C5051 series (Ver.50.xx or later) or later
52	(iR-ADV C5051 series (Ver.50.xx or later)) Addition of registered API to enable SSL communication setting (On/Off) for each URL
53	Disclosure of registration/deletion function to/from Quick Menu
54	Function to notify an event to the application at recovery from the sleep mode.
55	System account release function
56	MEAP User Preference Service
57	MEAP Application Configuration Service
58	MEAP Application Log Service
59	Reserved
59	Integrated authentication service
60	SFP basic functions
61	AVS (Lightweight Applet Viewer Service) for LBP
62	SIS (Lightweight System Interface Service) for LBP
63	LDT
64	IMI customization
65	Extension of MEAP User Preference Service (Ver56) (preference shared among applications)
66	Reserved
68	Addition of Office Open XML's Word creation API
69	Extension of the encryption PDF function (AES 128-bit/256-bit)
70	Addition of 3 formats (uncompressed searchable PDF, XPS, and linearized searchable PDF)
71	Reserved



Ver	Description
72	Reserved
73	IMI: API that supports A4 scanners and allows for specifying of the direction of the original image
74	SSL: Support for addition of the CN validation function
75	Reserved
76	Addition of the SFP ExtendedTextInputView class
77	Reserved
78	Reserved
80	Reserved

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## MEAP Application Management

### Outline

You can use the MEAP application management screen to perform basic management tasks of the MEAP application (start, stop, uninstall), or check the device's resource information.

### Starting, Stopping, or Uninstalling the MEAP Application

#### Procedure to start and stop a MEAP application

- 1) Log in to the SMS. (Refer to "Login to SMS" in this manual.)
- 2) Click [ Application List ]. (If the Application List is already being displayed, this operation is not necessary.)
- 3) Click [ Start ] or [ Stop ] button shown for the MEAP application to be started or stopped.

The screenshot shows the 'Service Management Service' interface for 'MEAP Application Management'. The left sidebar has 'MEAP Application Management' selected, indicated by a red box and the number '2'. The main content area shows a table of installed applications. The table has columns for 'Application Name', 'Installed on', 'Status', and 'License'. The first row is 'Sample Application A' with status 'Started'. A red box highlights the 'Stop' button in the 'Status' column, with the number '3' next to it. Below the table is a 'Resource Information' section with a table showing usage for Storage, Memory, Threads, Sockets, and File Descriptors.

Application Name	Installed on	Status	License
Sample Application A	4.4.0 2012/03/30	Started	Installed
Sample Application B	4.4.0 2012/03/30	Started	Installed
Sample Application C	4.4.0 2012/03/30	Started	Installed

Resource Name	Amount Used	Remaining	Percent Used
Storage	30712 KB	1017864 KB	3%
Memory	900 KB	130172 KB	1%
Threads	5	256	2%
Sockets	0	256	0%
File Descriptors	10	246	4%

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

The screenshot shows the 'Service Management Service' interface for 'MEAP Application Management'. It features a sidebar with navigation options and a main content area with two tables. The first table lists applications with columns for Name, Version, Installed on, Status, and License. The second table shows resource usage for Storage, Memory, Threads, Sockets, and File Descriptors.

Application Name	Installed on	Status	License
Sample Application A	4.4.0 2012 03/30	Stopped	Not Installed
Sample Application B	4.4.0 2012 03/30	Started	Installed
Sample Application C	4.4.0 2012 03/30	Started	Installed

Resource Name	Amount Used	Remaining	Percent Used
Storage	30712 KB	1017864 KB	3%
Memory	800 KB	130272 KB	1%
Threads	5	251	2%
Sockets	0	256	0%
File Descriptors	10	246	4%

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### ● If the MEAP application cannot be started

If the conditions to start the MEAP application are not satisfied, the MEAP application cannot be started.

If the MEAP application cannot be started, check the following items.

#### Is a valid license installed?

If the license has expired, you cannot start the application. If the license has already expired, obtain a new license and then update the license. ( See "Managing the License File" in this manual.)

#### Are the necessary resources available?

If the resources such as memory capacity or number of threads are not sufficient, the application also cannot be started.

Delete any unnecessary data to secure sufficient resources.

If the application still cannot be started after checking the foregoing conditions, contact the support department of the sales company.

- 5) Procedure to uninstall the MEAP application

Before uninstalling the MEAP application, check that the following conditions are met.

- The MEAP application has stopped.
- The license has been disabled or deleted. (The status is "Not Installed".)

Application Name	Installed on	Status	Start	Uninstall	License
Sample Application A	4.4.0 2012 03/30	Stopped	Start	Uninstall	Not Installed
Sample Application B	4.4.0 2012 03/30	Started	Stop	Uninstall	Installed
Sample Application C	4.4.0 2012 03/30	Started	Stop	Uninstall	Installed

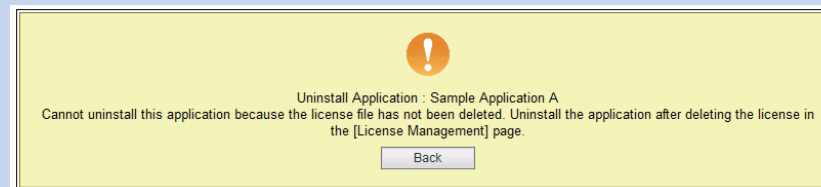
F-2-206

For information on the procedure to stop the MEAP application, see the previous section "Procedure to start and stop a MEAP application".

For information on the procedure to delete the license file, see the following section "Managing the License File".

#### Note:

When a user tries to uninstall an application before deleting the license, the following message is shown.



F-2-207

If the license file of the selected application cannot be deleted, the [Uninstall] button is grayed out and therefore the application cannot be uninstalled.

#### CAUTION:

If the application you are uninstalling is associated with another application, a message will appear to indicate that the package exported by the application will no longer be available. Uninstalling such an application may also disable its associated applications.

- 1) Log in to SMS to click [ MEAP Application Management ] on the menu.
- 2) Check that the status of the application you want to uninstall is [ Stop ] and the license has been disabled. (The status is "Not Installed".)

Application Name	Installed on	Status	Start	Uninstall	License
Sample Application A	4.4.0 2012 03/30	Stopped	Start	Uninstall	Not Installed
Sample Application B	4.4.0 2012 03/30	Started	Stop	Uninstall	Installed
Sample Application C	4.4.0 2012 03/30	Started	Stop	Uninstall	Installed

F-2-208

- 3) Click [ Uninstall ] button for the application to be uninstalled.

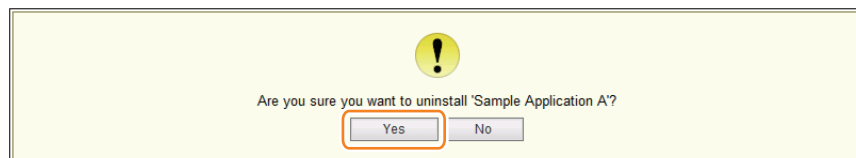
The screenshot shows the 'MEAP Application Management' interface. On the left is a navigation menu with options like 'MEAP Application Management', 'System Management', and 'MEAP Application Setting'. The main area displays a table of applications with columns for 'Application Name', 'Installed on', 'Status', and 'License'. The 'Uninstall' button for 'Sample Application A' is highlighted with a red box. Below the table is a 'Resource Information' section with a table showing 'Resource Name', 'Amount Used', 'Remaining', and 'Percent Used'.

Application Name	Installed on	Status	Start	Uninstall	License
Sample Application A	4.4.0 2012 03/30	Stopped	Start	Uninstall	Not Installed
Sample Application B	4.4.0 2012 03/30	Started	Stop	Uninstall	Installed
Sample Application C	4.4.0 2012 03/30	Started	Stop	Uninstall	Installed

Resource Name	Amount Used	Remaining	Percent Used
Storage	30712 KB	1017864 KB	3%
Memory	3784 KB	127288 KB	3%
Threads	33	223	13%
Sockets	33	223	13%
File Descriptors	27	229	11%

F-2-209

- 4) Check the application name to be uninstalled shown on the screen to click [ Yes ] button. Upon [ Yes ] button clicked, uninstallation process is started.



F-2-210

## 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.

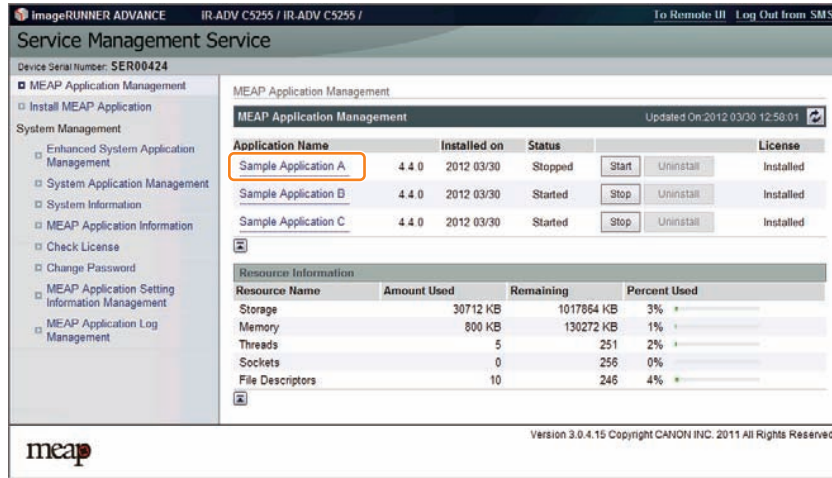
By downloading the license file to your PC before it is deleted, you can use it when installing the application again to the same device.

### CAUTION:

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

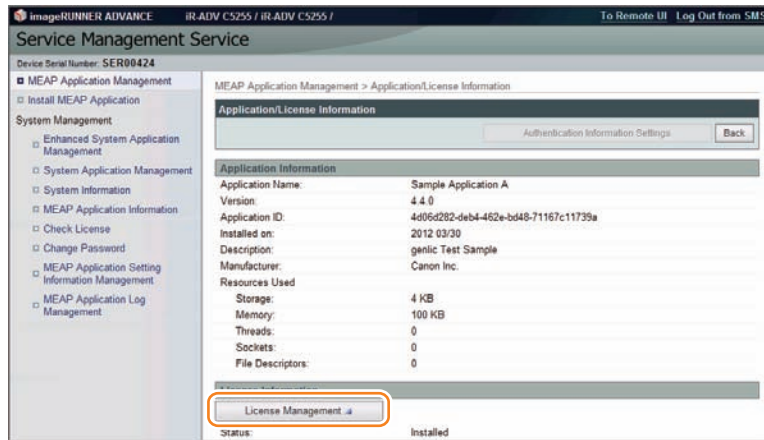
● Procedure adding a license file

- 1) Log on to SMS.
- 2) On MEAP Application Management, click the name of the application to which you want to add a license file.



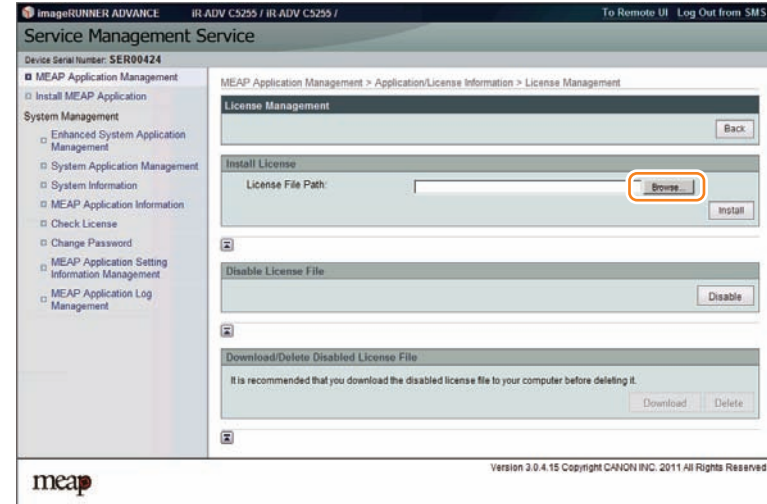
F-2-211

- 3) In [ Application / License Information ] page shown on the screen, click [ License Management ] button.



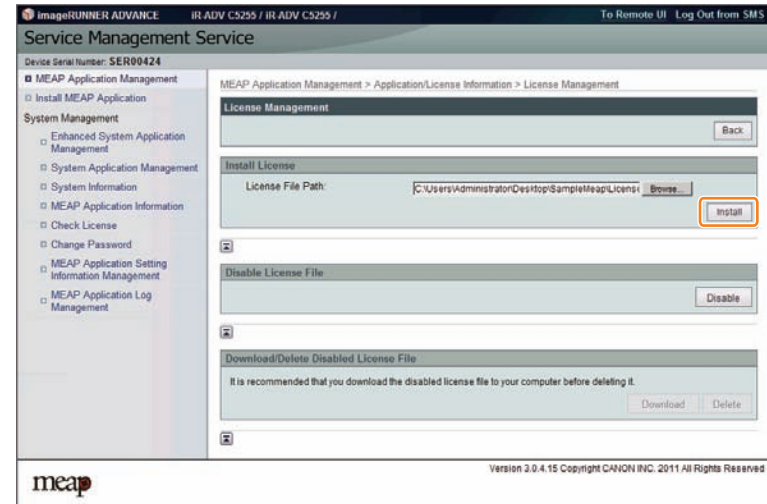
F-2-212

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



F-2-213

- 5) Click [ Install ] button.



F-2-214

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

## Procedure disabling a license file (suspending a license)

### CAUTION:

- Since the license file cannot be disabled when the application is still running, the application needs to be stopped before disabling the license file.
- Once suspended, the status of the license will be 'Not Installed', and its application will no longer be available for use.
- You can later restore a suspended license file as long as you are doing so on the same iR, the device with the same device serial number.
- If the machine needs to be replaced due to a device failure, use the transfer license during the replacement. (See "License for forwarding")

1) Stop the application you want to uninstall on MEAP Application Management page.

The screenshot shows the 'MEAP Application Management' page. On the left, there is a navigation menu with options like 'Install MEAP Application', 'System Management', 'Enhanced System Application Management', 'System Application Management', 'System Information', 'MEAP Application Information', 'Check License', 'Change Password', 'MEAP Application Setting Information Management', and 'MEAP Application Log Management'. The main content area displays a table of applications:

Application Name	Installed on	Status	License
Sample Application A	4.4.0 2012 03/30	Started	Installed
Sample Application B	4.4.0 2012 03/30	Started	Installed
Sample Application C	4.4.0 2012 03/30	Started	Installed

Below the table is a 'Resource Information' section with a table showing usage for Storage, Memory, Threads, Sockets, and File Descriptors. The 'Stop' button for Sample Application A is highlighted with a red box.

F-2-215

2) Click the name of the application that you want to disable.

The screenshot shows the 'MEAP Application Management' page. The application name 'Sample Application A' is highlighted with a red box. The page also displays a 'Resource Information' section with a table showing usage for Storage, Memory, Threads, Sockets, and File Descriptors.

F-2-216

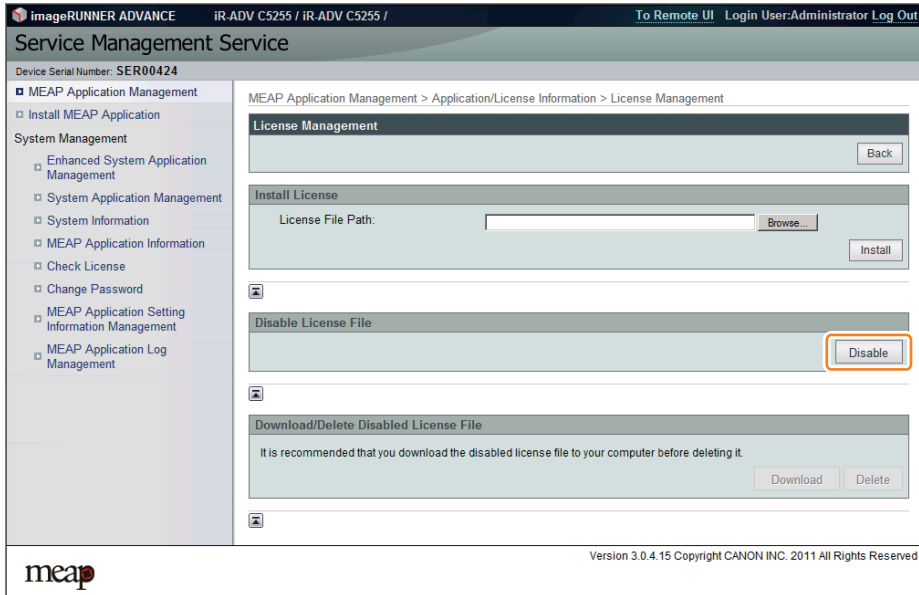
3) On Application/ License Information page, click [ License Management ] button.

The screenshot shows the 'License Management' page. The 'License Management' button is highlighted with a red box. The page displays the status of the license, including the serial number and expiration date.

F-2-217



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



F-2-218

5) Click [ Yes ].



F-2-219

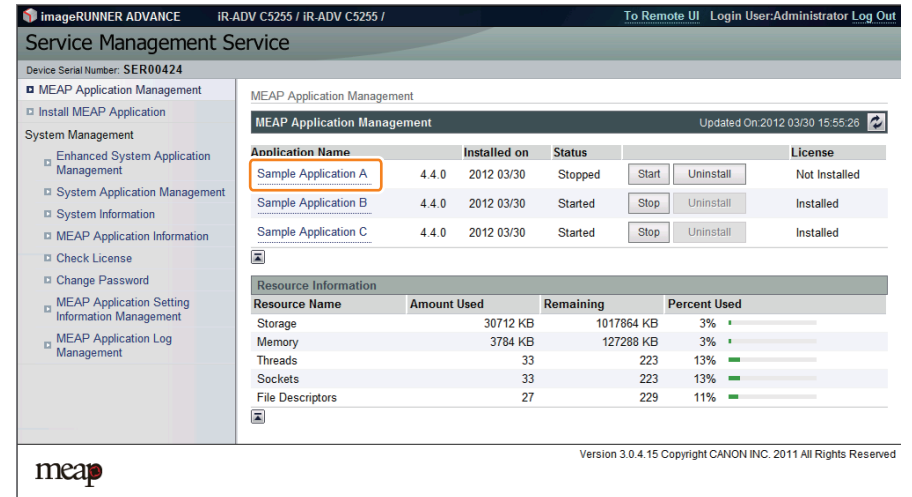
## Procedure downloading / removing an invalidated license file

Note:

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

1) Login to SMS.

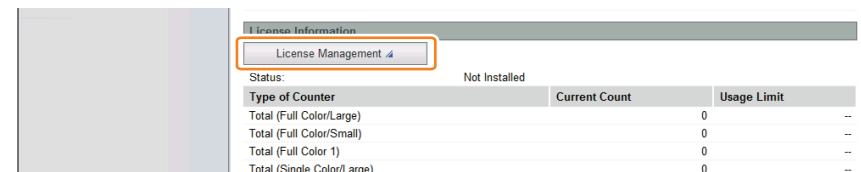
2) Application List page appears. On MEAP Application Management page, click the name of the application you want.



F-2-220

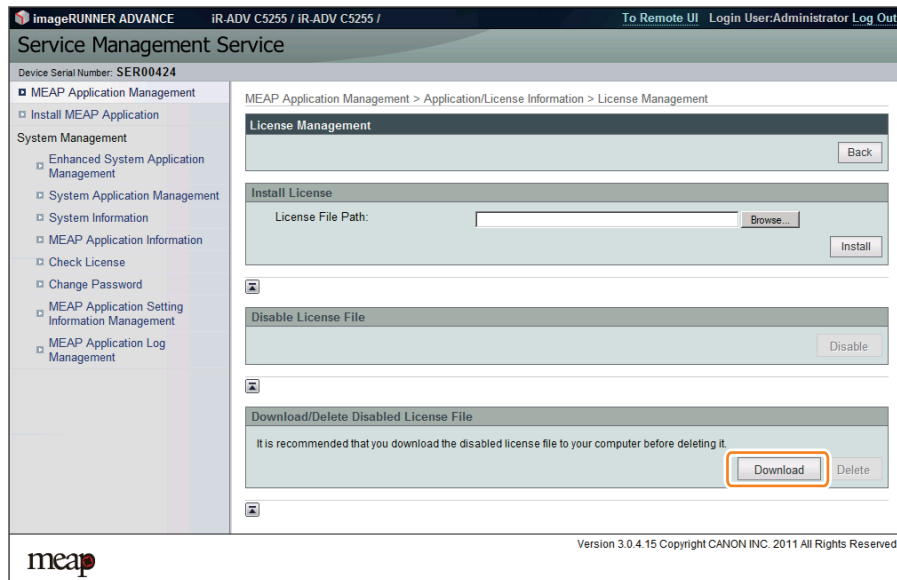
3) Check Application/ License Information page appears.

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



F-2-221

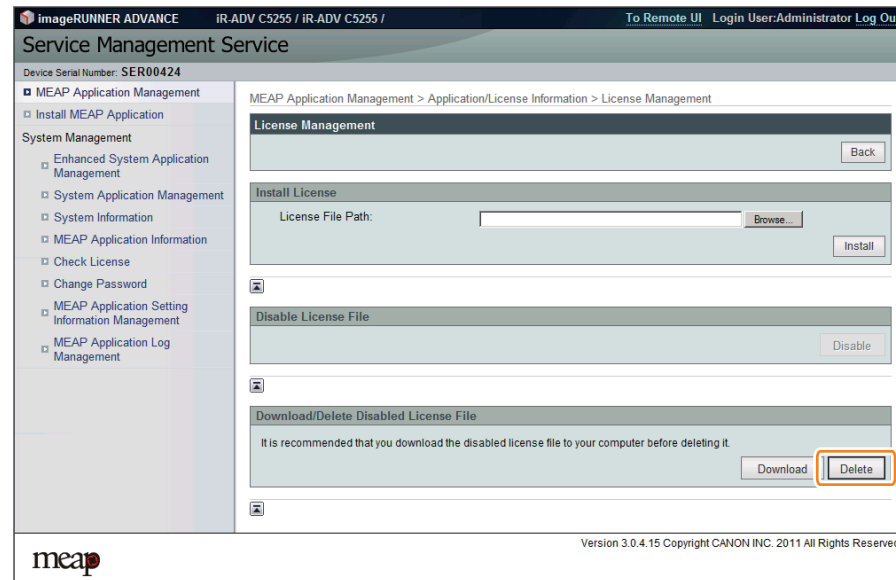
5) License Management page appears. To download, click [ Download ] button.



F-2-222

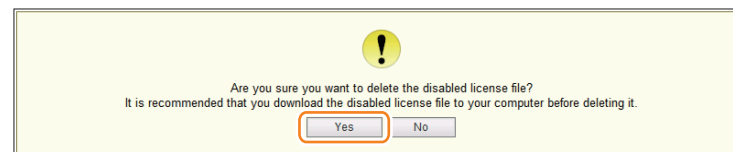
6) When you have selected [ Download ] button, specify where you want to store the file by following the instructions on the screen.

7) To delete, click [ Delete ] button.



F-2-223

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



F-2-224

#### CAUTION:

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

## Other License File Management Functions

### Reusable license

When reinstalling, Disable License file should be downloaded (see Chapter 0, “Disabling a License File .” and see Chapter 0, “Downloading / Removing an Invalidated License File.” in this manual) or a license for reinstallation should be obtained from LMS, before reinstallation. This specification aims to prevent misuse of applications.

To increase convenience of users, only application with unlimited validity date and application counter (e.g. Portal Service, SDL, SSO) has been made to be able to install as many times as needed by the same license file. This kind of license is called 'Reusable license'.

### License for forwarding

If the machine needs to be replaced due to a device failure, you can transfer the license information used in the MEAP application to the new machine and continue its usage. Service engineers are responsible for license transfer as this task requires the SMS hidden page (not open to users).

The procedure is shown below.

- 1) Log in to SMS, stop the application to be forwarded (see Chapter 0, “Starting and Stopping a MEAP Application.” in this manual).

Service Management Service

Device Serial Number: SER00424

MEAP Application Management

Application Name	Version	Installed on	Status	Actions	License
Sample Application A	4.4.0	2012 03/30	Started	Stop Uninstall	Installed
Sample Application B	4.4.0	2012 03/30	Started	Stop Uninstall	Installed
Sample Application C	4.4.0	2012 03/30	Started	Stop Uninstall	Installed

Resource Information

Resource Name	Amount Used	Remaining	Percent Used
Storage	30712 KB	1017864 KB	3%
Memory	3884 KB	127188 KB	3%
Threads	33	223	13%
Sockets	33	223	13%
File Descriptors	27	229	11%

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F-2-225

- 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-2-226

- 3) Specify the application to be forwarded.

Service Management Service

Device Serial Number: SER00424

License Management

Application Name	Version	Installed on	Application ID	Status	License
Sample Application A	4.4.0	2012 03/30	4d06d282-deb4-462e-bd48-71167c11739a	Started	Installed
Sample Application B	4.4.0	2012 03/30	4d06d282-deb4-462e-bd48-71167c11739b	Started	Installed
Sample Application C	4.4.0	2012 03/30	4d06d282-deb4-462e-bd48-71167c11739c	Started	Installed

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F-2-227

- 4) Click [ Disable ] button on the [ Disable License File ] .

Service Management Service

Device Serial Number: SER00424

License File Management

Application Name: Sample Application A

Disable License File

Download/Delete: Transfer License File

It is recommended that you download the transfer license file to your computer before deleting it.

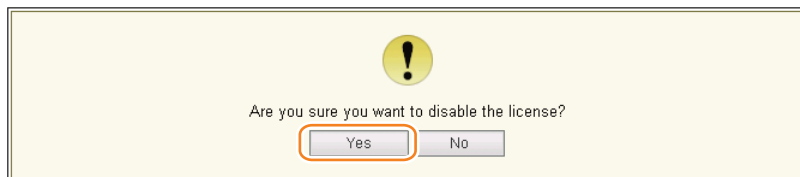
Download Delete

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F-2-228

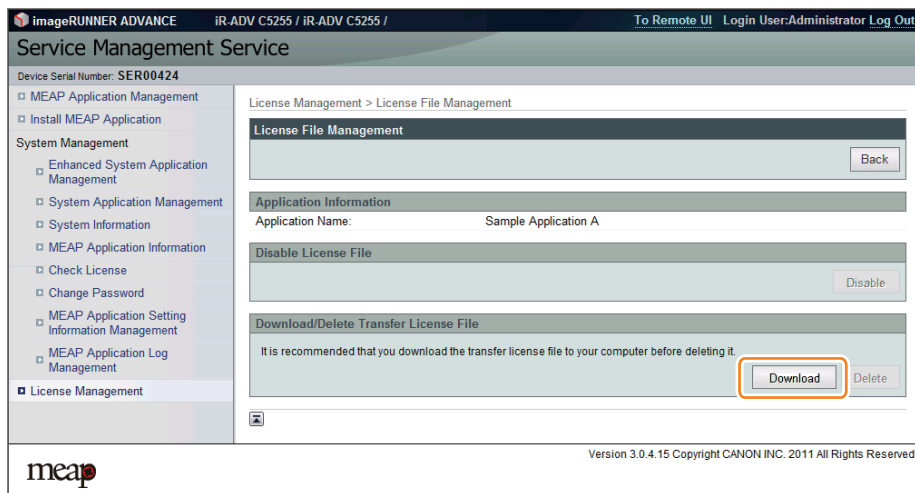


5) The window to confirm whether to create a transfer licence will be displayed. Click [ Yes ].



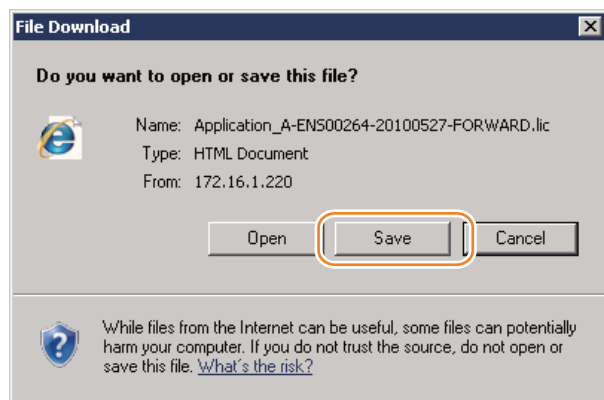
F-2-229

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



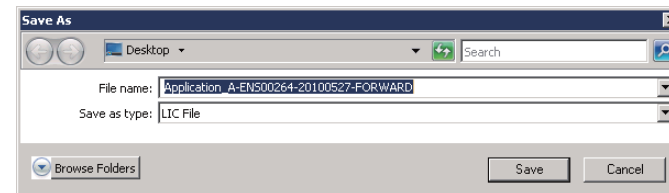
F-2-230

7) The dialogue [ File Download ] is displayed. Click [ Save ].



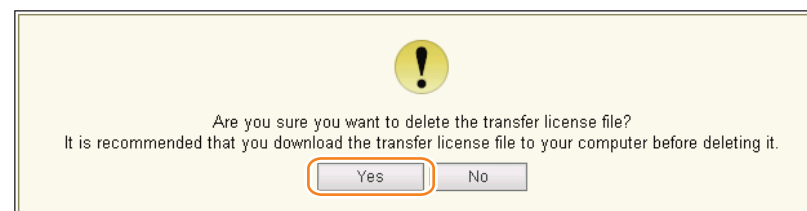
F-2-231

8) Specify the download destination, click [ Save ].



F-2-232

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-2-233

10) Log out of SMS.

11) Since this downloaded transfer license is the file only to prove the license invalidation, it cannot be used for installation to the other device as it is. Send the transfer license to the service support contact of your nearest sales company to request issuance of the new license for installation in the new device.

**Note:**

When requesting issuance of license for forwarding, inform the sales company of the name of product name and serial No. of the device as sender, and of the name of product name and serial No. of the forwarding destination.

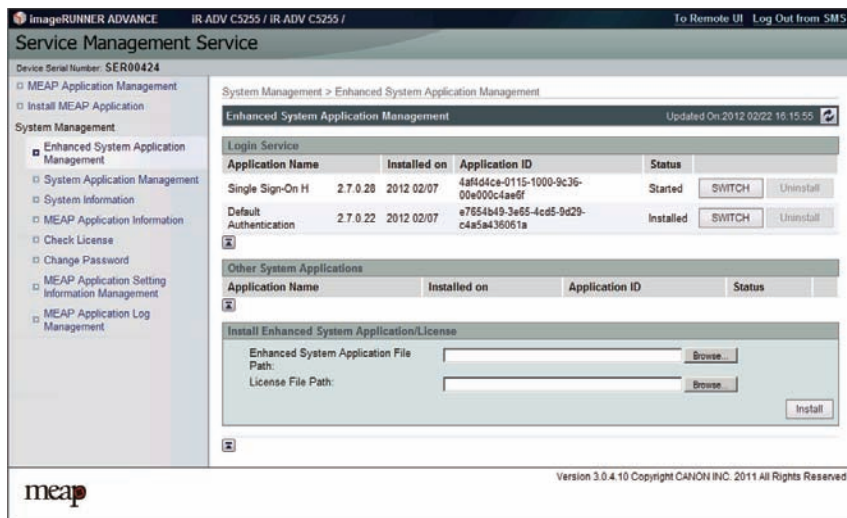
12) Install application using the license for forwarding issued by the sales company.

## Enhanced System Application Management

### Outline

[ Enhanced System Application Management ] mainly manages the login services for logging in to devices.

- Installing and uninstalling Enhanced System Application Management (login services, etc.)
- Switching login services (switching the method to log in to devices)
- Checking installation status of other System Applications



F-2-234

### About Login Service

The login service is started up to authenticate the user when MEAP-enabled iR device is booted up. Login service changes and install/ uninstall are carried out from the [ System Management ] page.

The preinstalled login applications are Default Authentication and Single Sign On-H, and Default Authentication is enabled by default.

#### CAUTION:

- This device does not support SDL, conventional SSO and Security Agent.

### Default Authentication overview

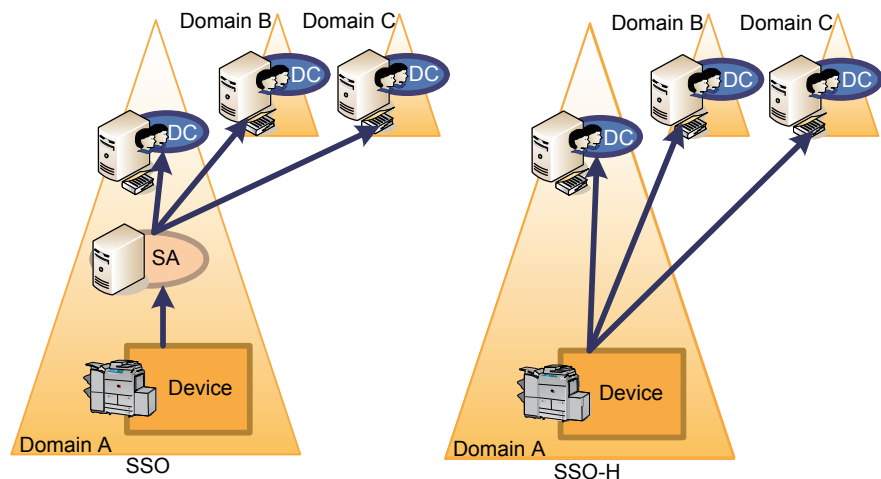
This login service is selected when the department ID management is enabled or no authentication function is set. Set the department ID management to [ON] on Setting / Registration (Additional Functions mode) of this device and register 7-digit ID and PIN by department. This setting restricts the use of this device only to users keying the registered ID and PIN. Department IDs/ and PINs can be registered on the touch panel of this device or Remote UI.

### SSO-H (Single Sign-On-H) overview

This is a merger of the existing SDL and SSO login services and has the following features.

- The following three authentication methods may be selected from.
  - Server authentication
  - Server authentication and local authentication
  - Local device authentication
- Active Directory or LDAP can be used as the server for server authentication.
- It is not necessary to prepare a server for Security Agent (SA). (In the case of SSO, SA is necessary.)

## Differences from conventional SSO



F-2-235

## CAUTION:

- When the setting is SSO-H, the card reader for the option controller card cannot be used.
- When the setting is SSO-H, start up takes a little longer when compared to Default Authentication (because of the time required for object initialization).
- To use the SEND function when the setting is for SSO-H, when sending email, mail addresses need to be programmed against each user. If they are not, email cannot be sent. Note, however, that when sending i-Fax, the mail addresses set in the device are used.
- The system configuration is different from previous SSO, so individual management is required.
- Data porting of user information that was being used with the earlier SSO local device authentication and SDL can be done by exporting/ importing. However, application settings information cannot be ported.

## ● Environment confirmation

Refer to the section of "Preparation for Using SSO-H" of this manual for system requirements needed in each login service.

## ● Specification of SSO-H

Item		Specification
No. of local device users		Up to 5000
Maximum number of domains		Active Directory : 200 domains ("this device" not included)
IPv6		Authentication provided in IPv6 supports AD/KDC/DNS of Windows Server 2008 only)
Resource used		Memory : 3584KB Storage : 25000KB File Description : 27 Thread : 33 Socket : 33
Network ports used	Connecting	88 : KDC 53 : DNS 1 - 65535 ( Default : 389) : LDAP
	Listening	10000 - 10100
Supported authentication server		Active Directory : Windows 2000 Server SP4/ Windows Server 2003 SP1 * / Windows Server 2003 R2 * / Windows 2008 Server * *64-bit OS is not supported.  LDAP : Novell eDirectory V8.8 SP6 for Windows Lotus Domino V8.5 for Window
Supported Active Directory		Windows 2000 Server SP4/ Windows Server 2003 SP1/Windows Server 2003 R2/ Windows 2008 Server(64BitOS not supported)
Availability of Department Management Linkage		Available only in local authentication

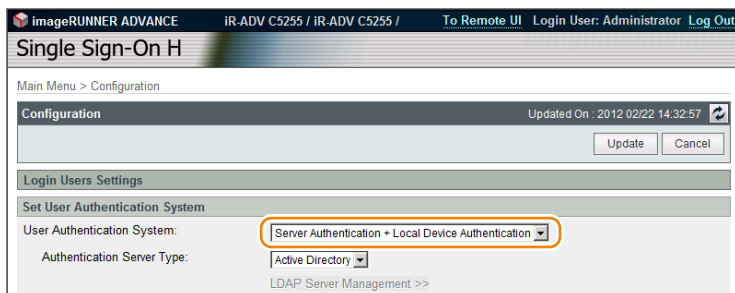
T-2-87

## SSO/SDL handling

This model does not support older versions of SSO or SDL released in the past.

## ● Setting the Authentication Method

In the case of SSO-H, it is possible to use a combination of multiple authentication methods. The combination can be changed from the SSO-H setting screen. (For details, refer to e-Manual > MEAP > Menu for Administrators > Setting the SSO-H > "Setting the User Authentication System".)



F-2-236

### Note:

The default settings are shown below.

- User authentication method : "Server Authentication + Local Device Authentication"
- Type of authentication : "Active Directory"

### CAUTION:

- To ensure the security, it is recommended to change the password and the user name of the Local Device Authentication administrator from those at the time of shipment immediately after you have started using SSO-H.
- Since department ID and password are not assigned to domain users, distributing setting information where the department ID is enabled to a device where the server authentication is enabled may make the device unable to be logged in. If the device has become unable to be logged in, follow "Remedy to Be Performed When the Device Has Become Unable to Be Logged in" in this manual.

## ● Using an Accounting Product When SSO-H Is Used

SSO-H has collaborative linkage with NetSpot Accountant, imageWARE / iW Accounting Manager, imageWARE Enterprise Management Console / iW Management Console Access Management Plug-in, imageWARE Enterprise Management Console / iW Management Console Accounting Management Plug-in.

For details on the combination, refer to the User's Manual or Service Manual of the product.

## ● Conducting Department ID Management When SSO-H Is Used

Department ID Management can be conducted also when SSO-H is used for login service.

### Usage Conditions

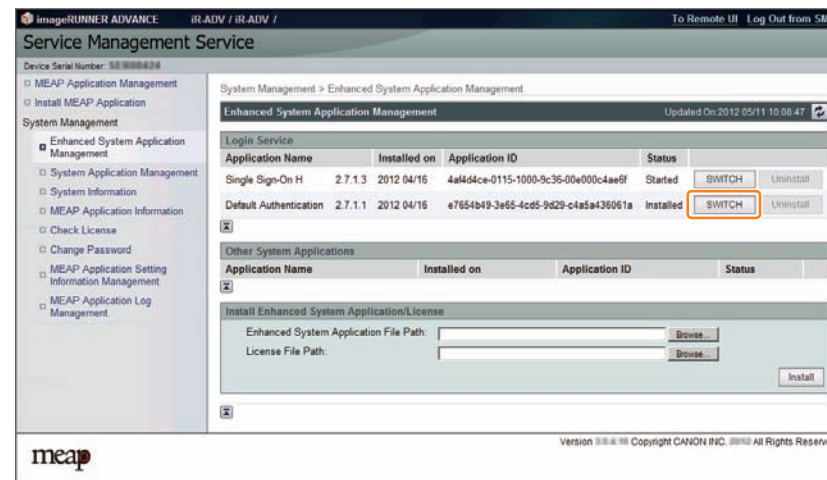
In order to allow coexistence of SSO-H and Department ID management, the following conditions need to be satisfied.

- Only "Local Device Authentication" can be used as the user authentication method.
- The department ID and password have been already set for the SSO-H login user before enabling department ID management.
- The information (the department ID and password) set for the login user coincides with the information registered in Department ID Management.

### Setting Procedure

In order to allow coexistence of SSO-H and Department ID management, the following procedure needs to be performed to enable the setting.

- 1) Change the authentication method to DA (Default Authentication).  
Access SMS, and select [Default Authentication] in [Enhanced System Application Management] > [Login Service]. (How to log in to SMS can be found in "Login to SMS".)



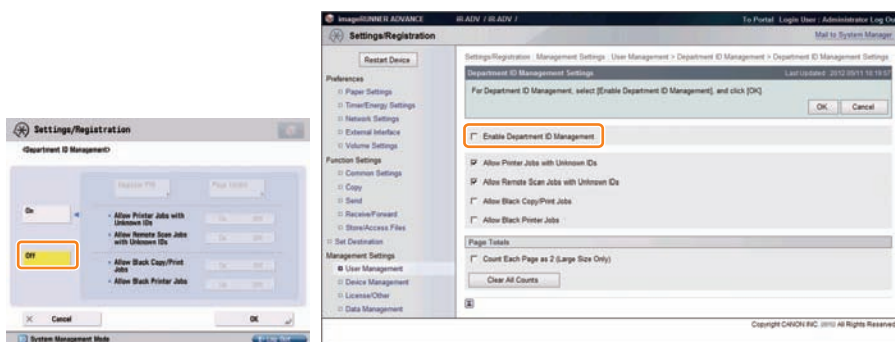
F-2-237

## 2) Restart the device.

Restart the device in order to reflect the changes in login service.

## 3) Disable Depart ID Management.

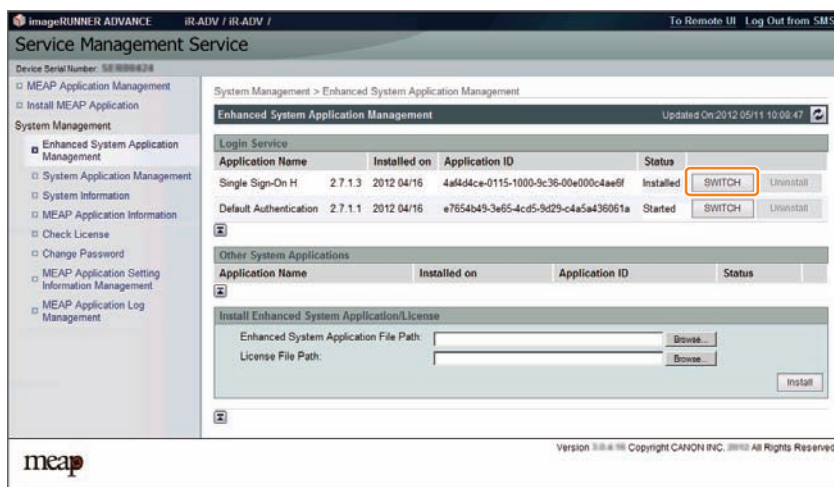
In user mode ([Settings/Registration]), select [Management Settings] > [User Management] > [Department ID Management] > [OFF]. In the case of remote UI, access [Settings/Registration] > [Management Settings] > [User Management] > [Department ID Management] > [Department ID Management Settings], and deselect [Enable Department ID Management].



F-2-238

## 4) Change the authentication method back to SSO-H authentication.

Access SMS, and select [Single Sign-On H] in [Enhanced System Application Management] > [Login Service]. (How to log in to SMS can be found in "Login to SMS".)



F-2-239

## 5) Restart the device.

Restart the device in order to reflect the changes in login service.

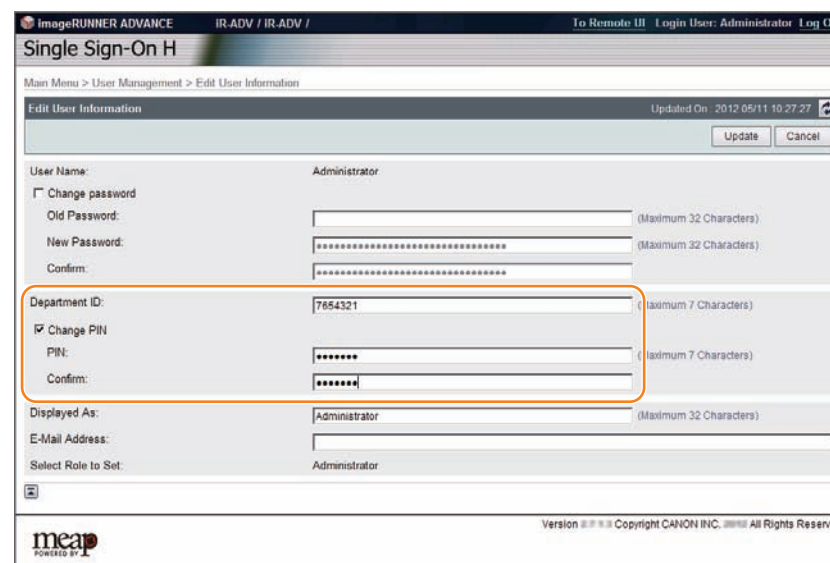
## 6) Change the user registration information of SSO-H.

Access the URL shown below, and change the content to the information registered in Department ID Management.

Or, import the setting file whose content you want to use.

## SSO-H user registration information edition screen

(SSO management screen [Main Menu] > [User Management] > [Edit User Information] or <https://<IP address>:8443/sso/Edit>).

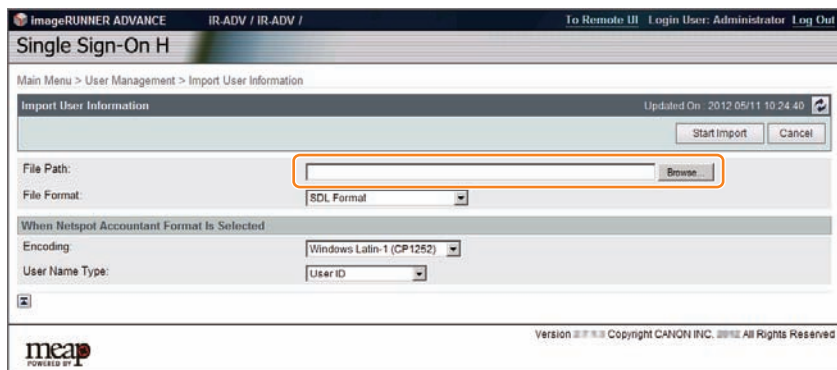


F-2-240



SSO-H user registration information import screen

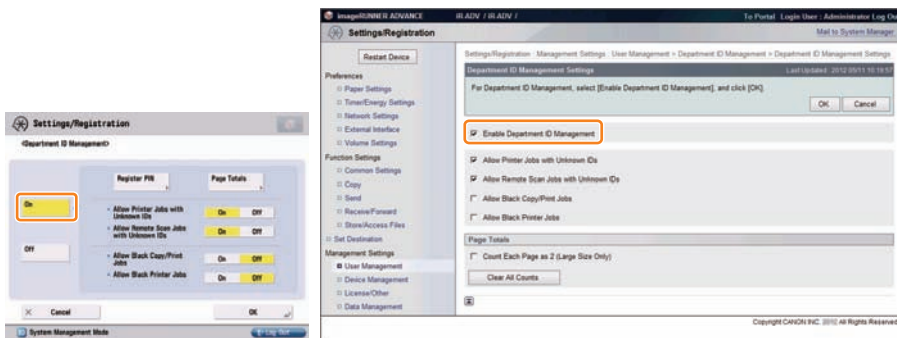
(SSO management screen [Main Menu] > [User Management] > [Import User Information] or (https://<IP address>:8443/sso/Import).



F-2-241

7) Enable Depart ID Management.

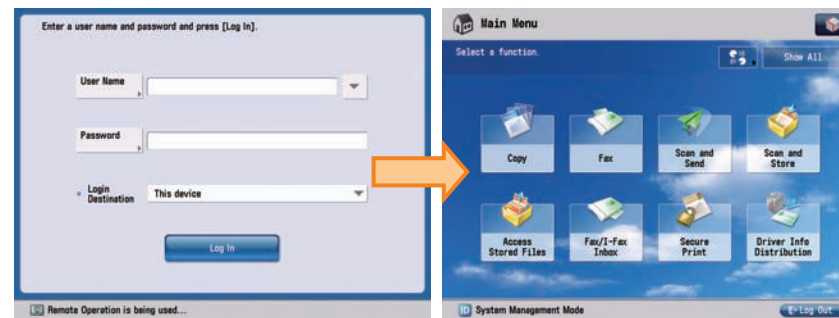
In user mode ([Settings/Registration]), select [Management Settings] > [User Management] > [Department ID Management] > [ON]. In the case of remote UI, access [Settings/Registration] > [Management Settings] > [User Management] > [Department ID Management] > [Department ID Management Settings], and select [Enable Department ID Management].



F-2-242

8) Check that the device can be logged in.

Log off and then log on to check that the device can be logged in with an environment where Local Device Authentication and Department ID Management are enabled.



F-2-243

Note:

In the case of conventional SSO, department management can be conducted also when server authentication is used provided that iWAM/iWM EMC account management is used, which is not supported by SSO-H.

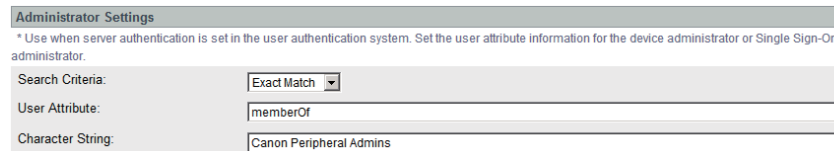
● Setting the Administrator for Server Authentication

When using Server Authentication, the user who satisfies the specified conditions (user attribute and its match criteria) becomes the administrator (the device administrator and the SSO-H administrator).

The default user attribute and whether the setting value can be changed or not are shown below.

Item	Default value	Active Directory	LDAP
Search Criteria:	Exact Match	Not Available	Available
User Attribute:	memberOf	Not Available	Available
Character String:	Canon Peripheral Admins	Available	Available

The settings of the administrator can be changed on the following screen: remote UI > Single Sign-On H > Configuration (http://device's IP address:8000/sso/ActionSet)



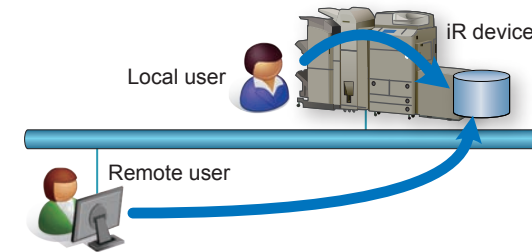
F-2-244

## ● System Manager Linkage (automatic ID allocation to SystemManagers)

SSO provided the automated function conventionally on Security Agent (hereinafter "SA") to authenticate System Manager by allocating IDs set on SA to domain authentication managers (users belonging to Canon Peripheral Admins group). However, SSO-H does not support this function.

## ■ Local device authentication

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



F-2-245

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

User management can be performed from the User Management screen (<http://device's IP address:8000/sso/>) or imageWARE Enterprise Management Console. The login destination is [This device].

User Management screen

The screenshot shows the 'User Management' screen in the imageRUNNER ADVANCE interface. The page title is 'Single Sign-On H'. The breadcrumb trail is 'Main Menu > User Management'. The page is updated on 2012/02/22 14:47:58. A note states: 'The users with an asterisk (\*) are administrators.' Below the note are buttons for 'Select All', 'Clear All', 'Delete', 'Add User', 'Import', and 'Export'. The table below shows the following data:

User Name	Displayed As	E-Mail Address	Role Name
Administrator *	Administrator		Administrator
user1	user1	user1@training.com	General User
user2	user2	user2@training.com	General User
user3	user3	user3@training.com	General User

The page footer includes the MEAP logo and the text 'Version 2.7.0.28 Copyright CANON INC. 2011 All Rights Reserved'.

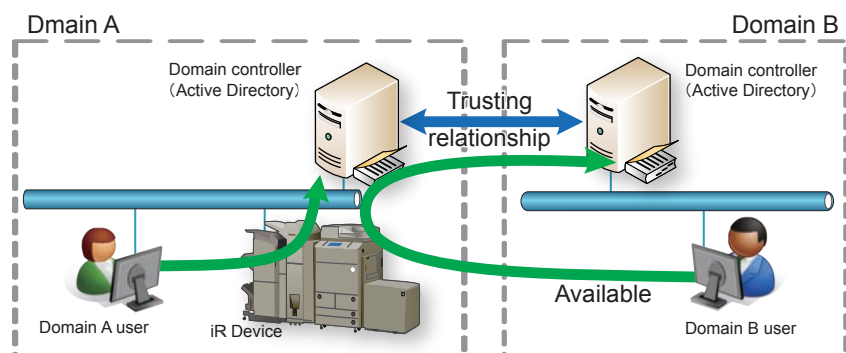
F-2-246

## Server authentication (Active Directory authentication)

### Outline

It is one of the user authentication methods using SSO-H. User authentication is performed with the device linked with a domain controller on the network in an Active Directory environment. It is a user authentication where the user is authenticated by the domain on the network when the user logs into the device. In addition to users belonging to the domain that includes the iR device, users belonging to domains that have a reliable relationship with the domain (multi-domain) can also be authenticated. The domain name of the login destination can be selected by the users themselves upon login.

Using one of the options (Net Spot Accountant, imageWARE Accounting Manager, or imageWARE EMC Accounting Management Plug-in) makes it possible to analyze/manage the iR device usage.



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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.)

#### CAUTION:

Since department ID and password are not assigned to domain users, distributing setting information where the department ID is enabled to a device where the server authentication is enabled may make the device unable to be logged in. If the device has become unable to be logged in, follow "Remedy to Be Performed When the Device Has Become Unable to Be Logged in" in this manual.

### Access Mode in Sites

With SSO-H, access to Active Directory within site can be prioritized or restricted, so there is a setting called 'Access Mode in Sites'. Sites programmed in Active Directory comprise multiple subnets. In this mode, SSO-H uses site information to access the same site as the device, or the subnet Active Directory.

- The SSO-H default setting is with the site internal access mode OFF.
- Access Active Directory within same site only.
- If there is no Active Directory within the same site, or if connection fails, there will be an authentication error.
- Access another site if Active Directory within the same site cannot be located.
- If there is no Active Directory within the same site, or if connection fails, an Active Directory external to the site will be accessed.
- If all attempts to access Active Directory fail, there will be an authentication error.

The operating specifications of the site internal access mode are as described below.

When first logging in to the login service after booting iR, the domain controller (DC) is obtained from the site list.

However, upon the first login, even if the site functionality is active, connection to DC is random. (This is because, if connection to DC should fail, the site to which the device belongs cannot be ascertained.)

If the device IP address or the domain name are changed, the site settings are acquired once more.

In this mode, at the first login (first authentication of domain to which the device belongs) LDAP-Bind is performed directly to DC and site information acquired by LDAP from DC.

From the acquired site list, the site to which the device subnet belongs is extracted and this becomes the site to which device belongs. Active Directory address is acquired (retrieved from DNS)



## Note:

- The Active Directory subnet is assumed to be the same subnet as the device sub-net.
- In the Active Directory addresses, the Active Directories of the same site are listed.
- Active Directories of the same subnet as the device are listed first.
- If there is no Active Directory with the same subnet as the device, Active Directories belonging to different subnets than the device are listed.
- The Active Directories within the same site are accessed in order. Note, however, that where there are multiple Active Directories within the same site, access to those Active Directories will be in the order in which the address list was obtained.
- If there is no Active Directory within the same site, if access outside of the site is programmed, Active Directories outside of the site will be accessed in the order in which the address list was obtained.

## Site list acquisition

After booting up, upon the first login by LLS or ILS/ RLS, the site list is obtained from the Active Directory. In order to obtain the site list from the Active Directory, Active Directory needs to be accessed in LDAP, so SASL-Kerberos-Bind is used by the login user account. If authentication by Active Directory should fail, an authentication error will be generated and the site list will be acquired again from Active Directory upon the next login.

In SSO-H, the Active Directory to be accessed when acquiring the site list cannot be specified. In other words, if there is no site list, which site's Active Directory is accessed depends upon the order of the Active Directory addresses returned by DNS. Therefore, when acquiring the site list, LDAP may access the Active Directory of a different site. Therefore, in such cases, it is sometimes necessary to access across sites or subnets, which means that LDAP protocol needs to have continuity across sites (subnets) (normally, LDAP is port No. 389). Further, if connection with Active Directory fails when acquiring site information, another Active Directory will be accessed.

Site information, once it has been acquired, is cached within the device. The life settings of the cache can be set so that site information in the cache is updated upon the first login after the device boots up, or so that the cache is not updated once acquired.

## Settings for access mode in sites

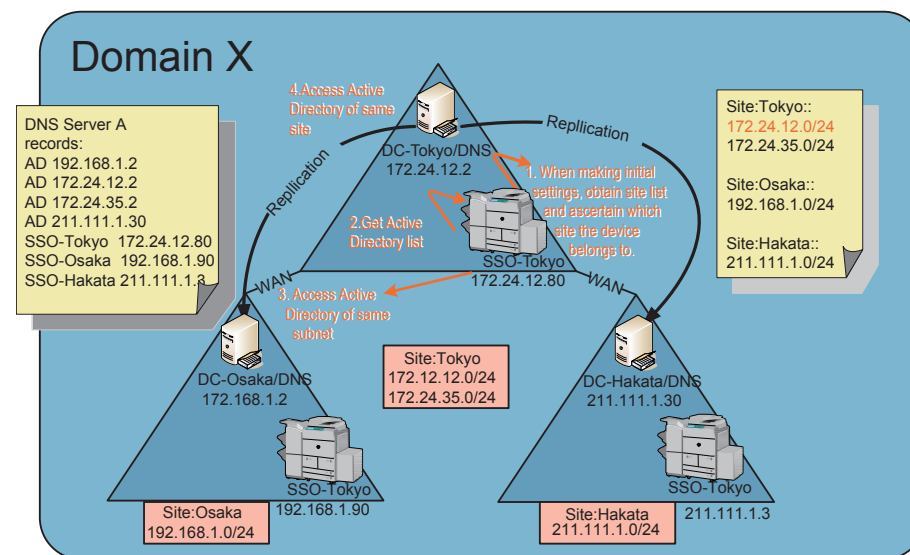
Switching between site internal access mode/ non site internal access mode, as well as detailed mode settings, are done via DMS or iWEMC.

## Site internal access mode settings window (DMS)

Access Mode in Sites	
* Effective at the time of domain authentication	
<b>Access Mode in Sites:</b>	<input checked="" type="checkbox"/> Set access mode in sites * Retrieve the site information from the Active Directory in order to access the domains within the sites.
<b>Retrieve Site Information:</b>	<input type="radio"/> Only at First Time <input type="radio"/> Every time when device starts up * Specify the timing to retrieve the Active Directory site information.
<b>Site Access Range:</b>	<input type="radio"/> Only site of device <input type="radio"/> Access other sites in addition to site of device * Refer to the site information to specify the range for accessing domains.

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The figure below shows a sample of processing Access Mode in Sites.  
Sample of Processing Access Mode in Sites



F-2-249

1) SSO-Tokyo acquires site lists from Active Directories.

Note, however, that the Active Directories accessed in order to acquire site lists are in the order in which they were returned by DNS, so there is no guarantee that the same Active Directory will be accessed as in the initial settings (upon device settings or changes to NW settings, etc.).

[Site subnet list]

Site: Tokyo: = 172.24.12.0/24, 172.24.35.0/24

Site: Osaka: = 192.168.1.0/24

Site: Hakata: = 211.111.1.0/24

As a result, since SSO-Tokyo is 172.24.12.80, the subnet is 172.24.12.0/24, and is judged as belonging to site Tokyo.

2) The DNS server obtains its Active Directory list from the primary or secondary DNS, as set in the device.

[Active Directory]

172.24.12.2, 172.24.35.2, 192.168.1.2, 211.111.1.30

3) Of the Active Directories in 2), above, the ones that belong to the same site (Tokyo) are 172.24.12.2 and 172.24.35.2.

Of these, the Active Directory that is the same subnet as SS-Tokyo is 172.24.12.2.

Therefore, this one will be accessed.

4) If access fails at step 3), above, the other Active Directory of the same site, 172.24.35.2, will be accessed.

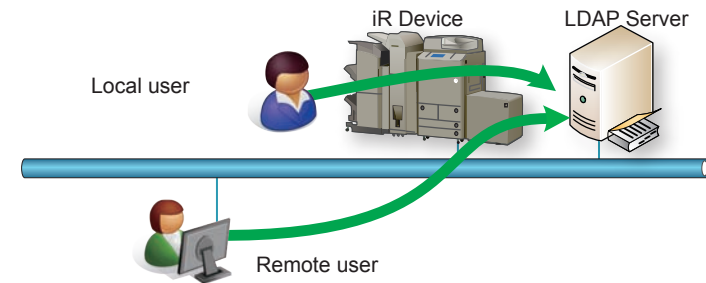
5) If access fails at step 4), above, also, SSO-Osaka and SSO-Hakata will be accessed (the order will depend on the order of the Active Directories in DNS). Note, however, that this is an optional operation.

#### Logging into other domains at multi-domain

At multi-domain, if another domain is logged into, based on the site/ subnet information retrieved in the home domain, the Active Directories of the login destination domain/ KDC address list are computed. In the event that the domain controller IP addresses of other domains are outside of the site access range, and only the domain controller within the site is programmed for access, an error message will be displayed to the effect that the site information is incorrect.

## Server Authentication (LDAP Authentication)

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



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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 SSO-H and LDAP server. It is therefore strongly recommended to always use SSL connection from a security standpoint.

As for the version of LDAP, only Ver.3 is supported.

ON/OFF of SSL connection can be changed on the LDAP Server Management page.

The time-out value of connection is 60 seconds.

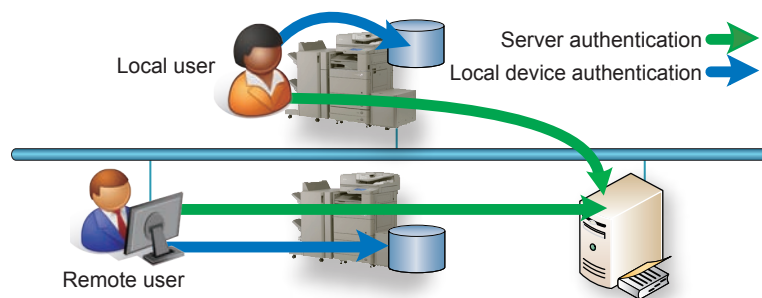
In the case of using LDAP server authentication, the characters entered as the user name are not case-sensitive, but the characters entered as the password are case-sensitive.

In the case of SSO-H, authentication is not allowed when the user name includes "\*" (asterisk)". If authentication is performed with "\*" (asterisk)" used in the user name, an authentication error occurs.

## Server authentication and local device authentication

It is a user authentication method provided with both the "server authentication" function and the "local device authentication" function.

It is possible to use server authentication to authenticate the users registered on the authentication server under normal conditions and use local device authentication when a user who cannot be added to the authentication server needs to be temporarily authenticated. If a trouble occurs in the authentication server, local device authentication can be used as an emergency measure until recovery from the trouble.



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## Steps to Change Login Services

1) Click [ Enhanced System Application Management ] on [ System Management ].

The screenshot shows the 'Service Management Service' interface. The 'MEAP Application Management' section is expanded, showing a table of applications:

Application Name	Installed on	Status	License
Sample Application A	4.4.0 2012 03/30	Stopped	Installed
Sample Application B	4.4.0 2012 03/30	Started	Installed
Sample Application C	4.4.0 2012 03/30	Started	Installed

The 'Enhanced System Application Management' link in the left sidebar is highlighted with a red box.

F-2-252

2) A page will appear showing the various selections you can make for the login service. Click [ SWITCH ] button for the login service to be used.

The screenshot shows the 'Service Management Service' interface with the 'Login Service' section expanded. A table lists login services:

Application Name	Installed on	Application ID	Status
Single Sign-On H	2.7.0.34 2012 03/07	4af4d4ce-0115-1000-9c36-00e000c4ae6f	Installed
Default Authentication	2.7.0.29 2012 03/07	e7654b49-3e65-4cd5-9d29-c4a5a436061a	Started

The 'SWITCH' button for the 'Default Authentication' service is highlighted with a red box.

F-2-253

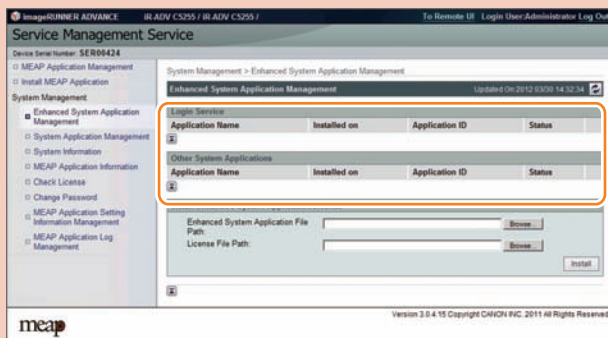
3) When login service application you have selected turns to Start after Restart, restart the device.

The screenshot shows the 'Service Management Service' interface with the 'Login Service' section expanded. The 'Status' column for the 'Default Authentication' service is highlighted with a red box, showing 'Start after Restart'.

F-2-254

**CAUTION:**

In case that the login method to a device is set to SSO-H, if you log in SMS with RLS authentication, no selection is displayed although it is the screen to change the login method.



F-2-255

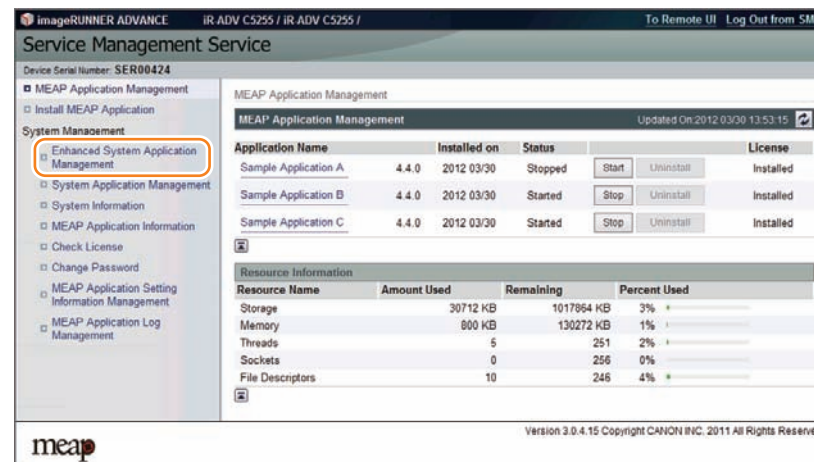
This is the specification to prevent the inconsistent setting which enables to stop SMS Installer Service (Password Authentication) by changing the login method to Default Authentication.

When you want to change the login method to a device, log in the SMS with the password authentication.

**Login Service Installation Procedure**

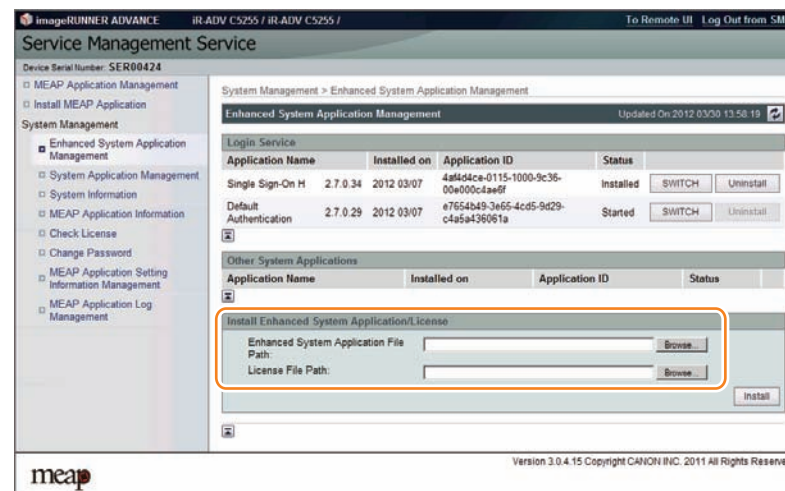
Follow the procedure show below to install login services.

- 1) Access SMS, and select [System Management] > [Enhanced System Application Management].



F-2-256

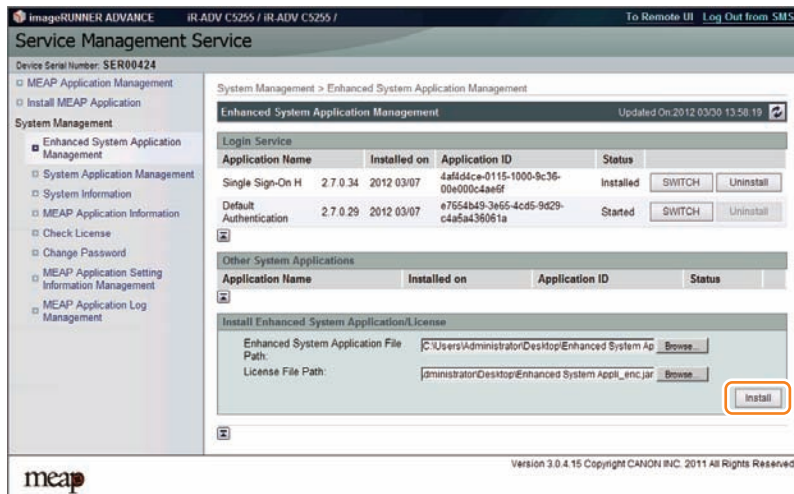
- 2) Click the [Browse] button, and specify the enhanced system application file and license file.



F-2-257



3) Click [Install] button.



F-2-258

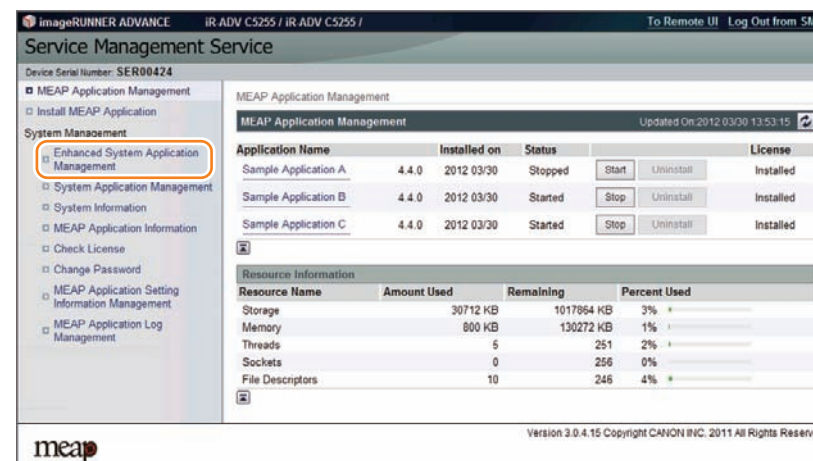
## Login Service Uninstallation Procedure

Follow the procedure show below to uninstall login services.

In order to uninstall a login service, the service needs to be stopped ("Installed" status).

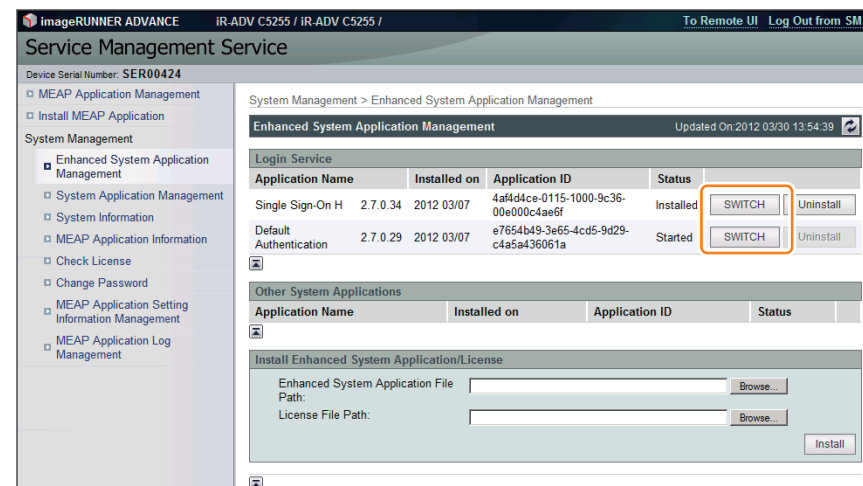
Default Authentication cannot be uninstalled even when the service is stopped.

1) Access SMS, and select [System Management] > [Enhanced System Application Management].



F-2-259

2) Click the [Uninstall] button of the login service you want to uninstall.



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## System Application Management

This function manages the login services for logging in to SMS.

There are two login methods: one is "password authentication" where you enter the password for SMS on the SMS login screen and log in, and the other is "RLS authentication" where you do not use the SMS login screen but enter the user ID and password on the RLS (Remote Login Service) screen for authentication.

### ■ Password authentication

Enter the password on the SMS login screen for authentication. Only one password can be set for SMS.

The login procedure is shown below.

1) Access SMS from the browser of a PC on the same network as the MEAP device. The URL is as follows.

URL: `https://<IP address of MEAP device>:8443/sms/`  
 Ex.) `https://172.16.188.240:8443/sms/`

#### Note:

To encrypt the password information input when logging in, SSL of the login screen was made effective. However, it is redirected to new URL (effective SSL) even when accessing with URL (non-SSL) before.

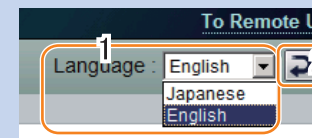
2) Enter the password in the password entry field, and click the [Log In] button. The default password is "MeapSmsLogin." (The password is case-sensitive.)



F-2-261

#### Note:

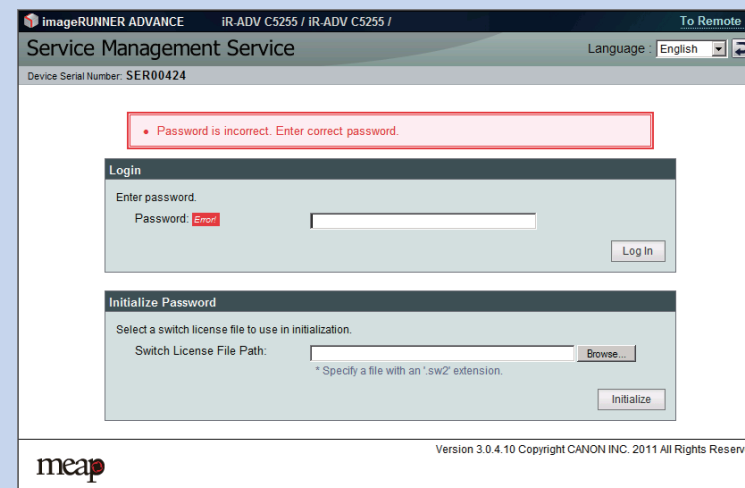
If you want to change the display language, select the language from the drop-down list of [Language] at the upper right of the login screen, and click the update button.



F-2-262

#### Note:

If the wrong password is entered, the following window is displayed. The user's system administrator may have changed the password, so confirm the password with the system administrator. Note that there is no special password for service.



F-2-263

## ■ RLS Authentication

Login without using the SMS login window but by entering the user ID and password for authentication in the RLS (Remote Login Service) window. The user information (user name and password) used is the information for server authentication or local device authentication. The login procedures are as follows.

1) Access SMS by RLS Authentication from the PC browser on the same network as the MEAP device.

URL: `https://<IP address of MEAP device>:8443/sms/rls/`

Ex.) `https://172.16.188.240:8443/sms/rls/`

### Note:

- To encrypt the password information input when logging in, SSL of the login screen was made effective. However, it is redirected to new URL (effective SSL) even when accessing with URL (non-SSL) before.

F-2-264

### Note:

- When the device authentication method used is server authentication, enter the user name, password and login destination registered with authentication server and then click 'Log In'.
- If the authentication method used is local device authentication, enter the user name, password and login destination registered in the device and click 'Log In' button. The user information is set as below for local device authentication by default. Both are case sensitive.
  - User Name: Administrator
  - Password: password

### Note:

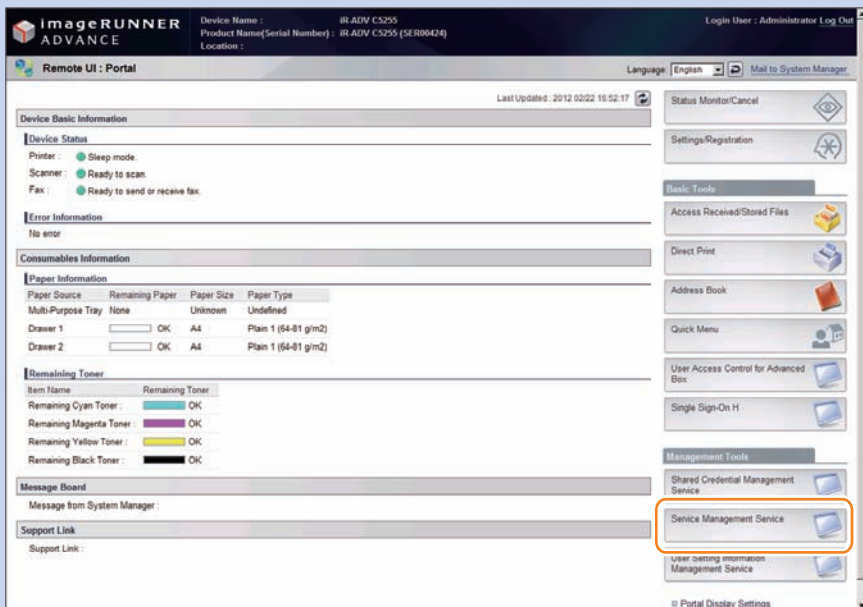
Only the following users may use SMS via RLS.

- For local device authentication, users with Administrator or Device Admin authority.
- In the case of server authentication, the users who belong to the group (default: Canon Peripheral Admins) specified as the device administrator on the SSO-H Configuration screen.

F-2-265

## Note:

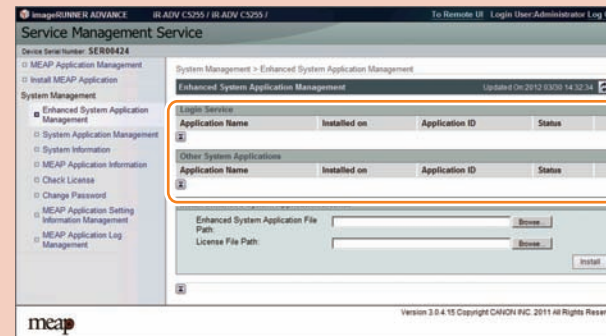
- SMS Access can be gained also from Remote UI. Access Remote UI and click on SMS shortcut shown on the lower right of the screen to gain access to SMS. When only the password authentication is enabled, the password authentication screen is shown. When only the RLS authentication is enabled, no further authentication is needed to access SMS. This is because users have already authorized upon accessing to Remote UI.



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## CAUTION:

In case that the login method to a device is set to SSO-H, if you log in SMS with RLS authentication, no selection is displayed although it is the screen to change the login method.



F-2-267

This is the specification to prevent the inconsistent setting which enables to stop SMS Installer Service (Password Authentication) by changing the login method to Default Authentication.

When you want to change the login method to a device, log in the SMS with the password authentication.



## Setting the method to login to SMS

### Outline

The method to log into SMS can be specified by one of the following methods.

- If you want to change the password authentication settings: Use RLS authentication to log in, and change the settings.
- If you want to change the RLS authentication settings: Use password authentication to log in, and change the settings.

The following table shows the start/stop combinations of the two login methods.

Combination of Login Methods

	Start RLS Authentication	Stop RLS Authentication
Start Password Authentication	Login available with either method	Login available only with
Stop Password Authentication	Login available only with RLS Authentication	Setting unavailable

T-2-89

#### CAUTION:

If only login via RLS is programmed, login may be disabled for the following reasons.

- Authentication server is down
- Network problem, no communication with authentication server

In the event of either of these cases, try the following.

1. If local device authentication is active, try logging in with local device authentication.
2. If only server authentication is active, launch in MEAP safe mode from the device service mode.

After launching in MEAP safe mode, the Default Authentication will become active, and you will be able to login to SMS with password authentication. After logging into SMS, set the password authentication login to ON (active) and restore the device from MEAP safe mode to normal mode. Until the problem blocking authentication is resolved, log into SMS with password authentication.

## Setting for login by Password Authentication

The procedures for changing the password authentication Start/ stop settings are as follows.

- 1) Access SMS login screen by RLS Authentication from the PC browser on the same network as the MEAP device.

URL: https://<IP address of MEAP device>:8443/sms/rls/

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

- 2) Enter the user name and the password of the user registered as an administrator, select the login destination, and then click the [Log In] button.

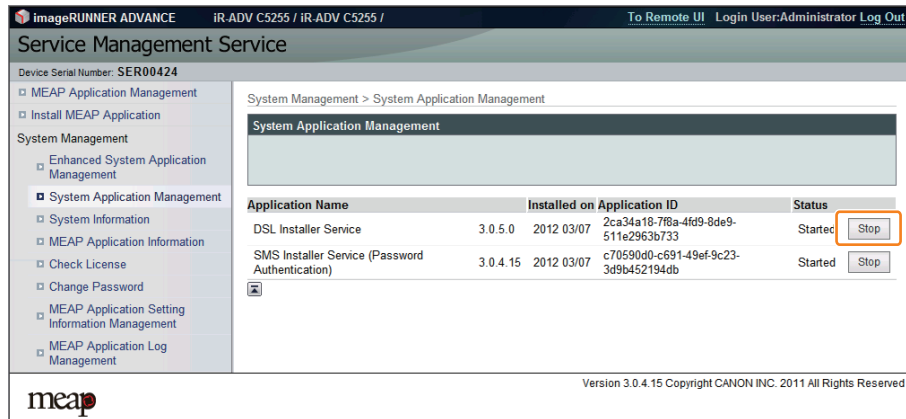
Login screen (In case authentication method is SSO-H)

F-2-268

- 3) Select [System Application Management]

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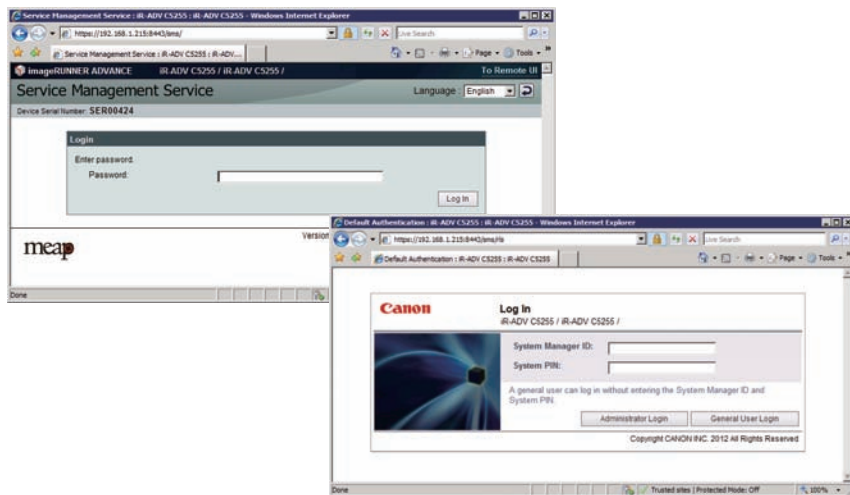
- 4) Click [Start] or [Stop] button shown in Status field of SMS Installer Service (Password Authentication) to check if the status is changed.



F-2-270

- 5) Logout once and login again to check to see that the setting is applied properly. When clicking [Stop] to change the status to [Start], another password authentication login screen is firstly shown. When trying to access the password authentication screen after clicking [Start] to change the status to [Stop], the user is automatically redirected to RLS authentication screen.

Password authentication started screen and Password authentication stopped screen



F-2-271

## ● Setting for login by RLS Authentication

The procedures for changing the RLS authentication Start/ Stop settings are as follows.

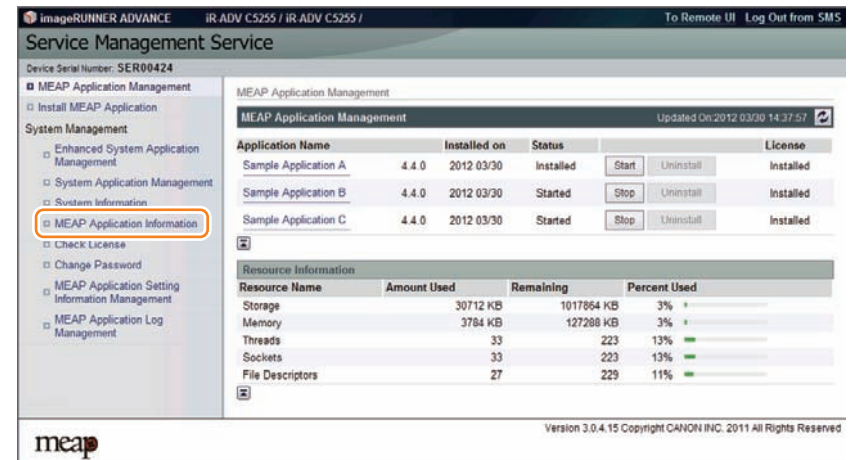
- 1) Access the SMS login screen using the normal method (password authentication). The URL is shown below.  
URL: `https://<IP address of MEAP device>:8443/sms/rls/`  
Ex.) `https://172.16.188.240:8443/sms/rls`
- 2) Enter the password in the password entry field, and click the [Log In] button. The default password is "MeapSmsLogin". (Case sensitive)

Login screen by Password Authentication



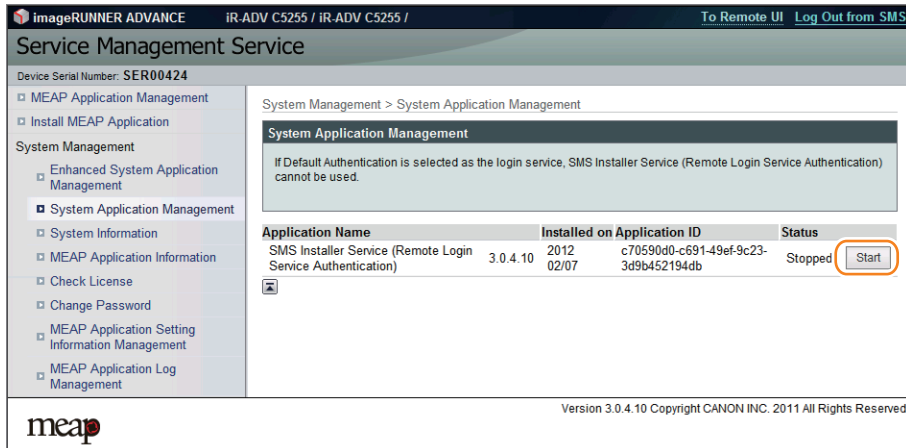
F-2-272

- 3) Select [System Application Management] on System Management menu.



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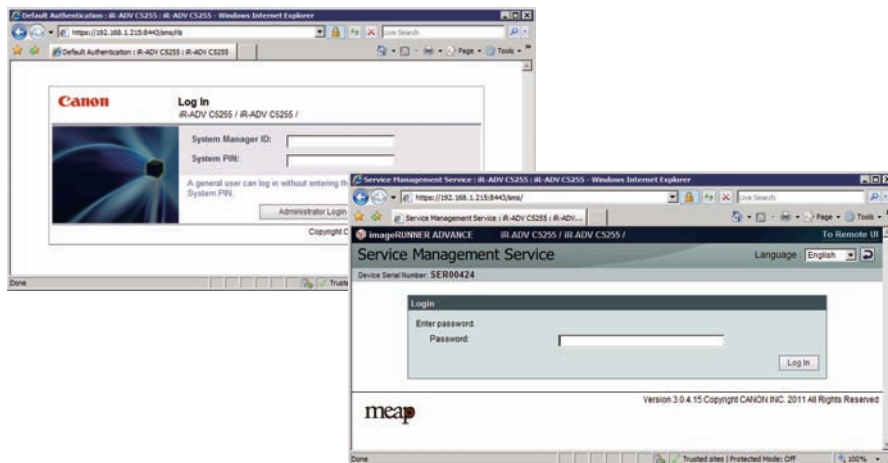
- 4) Click on [Start] or [Stop] button shown on Status field of SMS Installer Service (Remote Login Service Authentication) to check if the status is changed.



F-2-274

- 5) Log out and then log in again and access via the RLS authentication login window. When RLS authentication is set to [Start], another RLS login screen is firstly shown. When accessing to RLS status screen with the setting of [Stop], the user will be redirected to the password authentication screen.

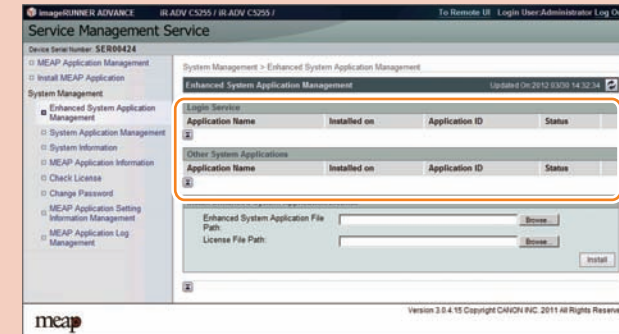
RLS authentication started screen and RLS authentication stopped screen



F-2-275

#### CAUTION:

In case that the login method to a device is set to SSO-H, if you log in SMS with RLS authentication, no selection is displayed although it is the screen to change the login method.



F-2-276

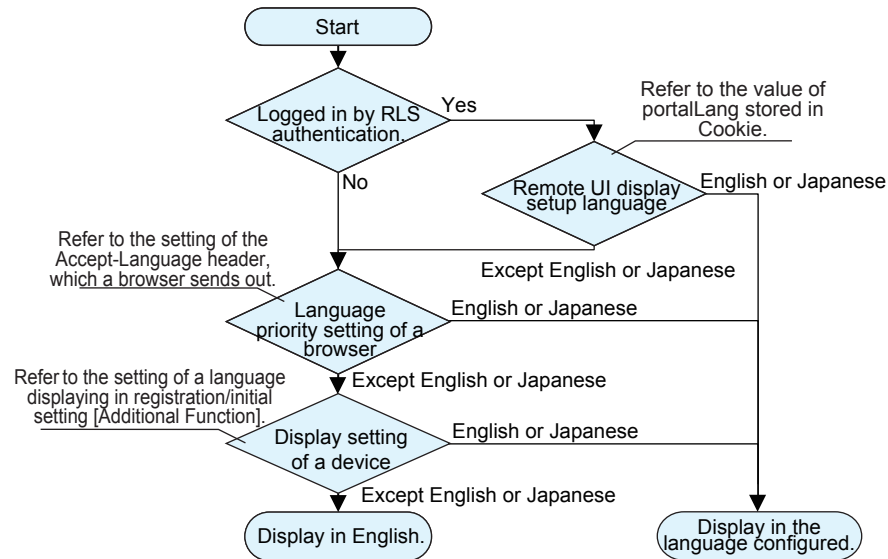
This is the specification to prevent the inconsistent setting which enables to stop SMS Installer Service (Password Authentication) by changing the login method to Default Authentication.

When you want to change the login method to a device, log in the SMS with the password authentication.

## Initial Display Languages of SMS

SMS supports English and Japanese. Display language can be changed with selecting by the drop down list on a login page.

The initial display language at the time of accessing SMS depends on the setting.



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### When accessing by SMS Installer Service (Password Authentication)

It is referred in order of the language priority (setting of the Accept-Language header which a browser sends out) and the display-language setting in the "user mode". When the language setup is other than English or Japanese, it is displayed in English.

### When accessing by SMS Installer Service (Remote Login Service Authentication).

Initial display language is set by the language setting (value of portalLang storing in Cookie) selected by the remote UI screen. When the setting is other than English or Japanese, Selection of display language is performed in a similar way with the SMS Installer Service (Password Authentication) mentioned above.

## MEAP Application System Information

### Outline

You can check the device's platform information and the MEAP application's system information.

### Checking the System Information

System information that can be checked from the screen

- MEAP Specifications version (MEAP Spec Ver)
  - MEAP Contents version
  - Java Virtual Machine version
  - System application information
- The name of the installed system application
  - The installation date of the installed system application
  - Application ID of the installed system application
  - The status of the installed system application

The checking procedure is shown below.

- 1) Log in to SMS.
- 2) Select [System Management] > [System Information] on System Management menu.

The screenshot shows the 'Service Management Service' interface. The left sidebar has 'System Information' selected. The main content area displays 'MEAP Application Management' with a table of resource information.

Resource Name	Amount Used	Remaining	Percent Used
Storage	30700 KB	1017876 KB	3%
Memory	3584 KB	127488 KB	3%
Threads	33	223	13%
Sockets	33	223	13%
File Descriptors	27	229	11%

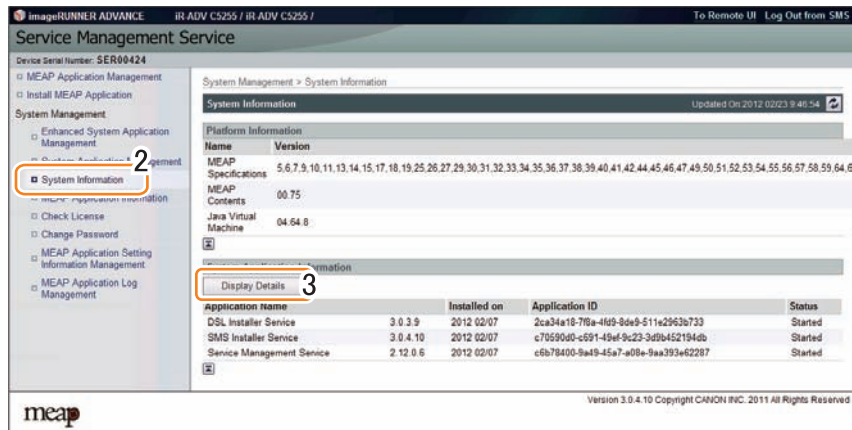
F-2-278



## ■ Display of System Information Details

The system information details can be displayed to check more than one pieces of information all at the same time: platform information, system application information, information on the installed MEAP applications, etc.

- 1) Log in to SMS.
- 2) Select [System Info] on System Management menu.
- 3) Click [Display Details] button.



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- 4) System information of each application (including system applications) is shown in an additional window. Copy and paste all the information in a file to attach to AR reports as text information. This function is useful to check status information of each application.



F-2-280

## ■ Printing the System Information of a MEAP Application

MEAP system information can be printed out with iR device for confirmation.

Note:

The system information of the MEAP application that you checked in the previous section is exactly the same as the system information of the MEAP application that is output.

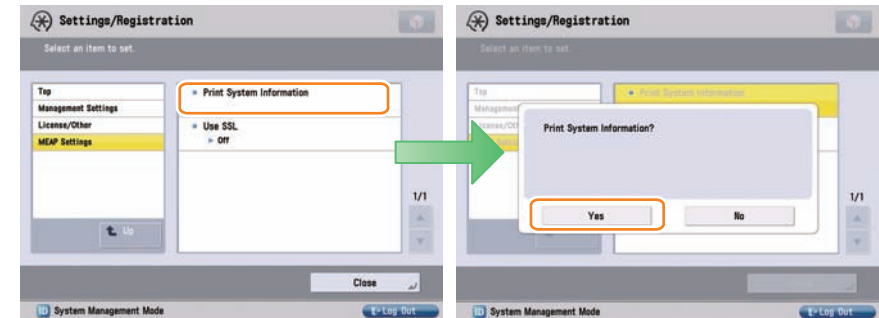
Follow the steps below when confirming information:

- 1) Select [ Settings/ Registration] > [ Management Settings] > [ License/ Other] > [MEAP Settings] > [ Print System Information] .

Note:

When System Manager ID and PIN are set, go to Top screen and log in as System Manager to continue jobs.

- 2) Press [ Yes] button.



F-2-281

Note:

MEAP system information was printed out in PDL format conventionally. However, the information has been printed out in text format instead of PDL format, enabling iR devices without PDL installation to print out information (iR C3220 and later).

## Content of MEAP system information

### Application System Information

Application Name: C-Cabinet Gateway for MEAP  
 Application ID/System Application Name: 03a46668-63e4-4636-9cbb-492b6cef05d5  
 Application Version: 1.0.0  
 Status: Resolved  
 Installed on: Tue Oct 21 14:00:11 GMT+09:00 2003  
 Vendor : Canon Inc.  
 License Status : Installed  
 Maximum Memory Usage : 1024  
 Registered Service :

item	content
Application Name	It is the name (bundle-name) declared in a statement within the application program. It may not necessarily be identical to the name of the program.
Application ID/System Application Name	Application ID (application-id) items which are declared on the declaration statement in the application program are printed.
Application Version	It is the version of the application (bundle-version) declared in a statement within the application program.
Status	It indicates the status of the application in question; specifically, Installed: the application has been installed. Active: the application is being in use. Resolved: the application is at rest.
Installed On	It indicates the date on which the application was installed.
Vendor	It is the name of the vendor that developed the application, and is the name (bundle-vendor) declared in a statement within the application program.
License Status	It indicates the status of the license; specifically, None: no license is needed. Not Installed: no license has been installed. Installed: the appropriate license has been installed. Invalid: the license has been invalidated. Overlimit: the license has been used beyond its permitted limit.
License Expires After	It indicates the date after which the license expires. If the status of the license is 'none', this item will not be printed.
License Upper Limit	It indicates the limit imposed on individual counter readings. If the status of the license is 'none', this item will not be printed.
Counter Value	It is the current counter reading of a specific counter. If the status of the license is 'none', this item will not be printed.
Maximum Memory Usage	It indicates the maximum amount of memory that the application uses. It is the amount (maximum memory usage) declared in a statement within the application program, and is expressed in kilobytes.
Registered Service	It is a list of services that have been registered by the application with the MEAP framework. Some services may not have printable data.

T-2-90

## MEAP Application Information

### Outline

You can check the MEAP application installed on the device.  
 The following information can be checked on the MEAP application information screen.

#### Application Information

- Application Name
- Application ID
- Description
- Resources Used (Storage, Memory, Threads, Sockets, File Descriptors)
- Version
- Installed on
- Manufacturer

#### License Information

- Status
- Expires after
- Serial Number
- Type of Counter

## Procedure to Check MEAP Application Information

- 1) Log in to SMS.
- 2) Select [System Management] > [MEAP Application Information] on System Management menu.

The screenshot displays the 'Service Management Service' interface. The left sidebar shows a navigation menu with 'MEAP Application Information' highlighted. The main content area shows 'MEAP Application Management' with a table of installed applications and a 'Resource Information' section below it.

Application Name	Version	Installed on	Status	License
Sample Application A	4.4.0	2012 03/30	Installed	Installed
Sample Application B	4.4.0	2012 03/30	Started	Installed
Sample Application C	4.4.0	2012 03/30	Started	Installed

Resource Name	Amount Used	Remaining	Percent Used
Storage	30712 KB	1017864 KB	3%
Memory	3784 KB	127288 KB	3%
Threads	33	223	13%
Sockets	33	223	13%
File Descriptors	27	229	11%

F-2-282

- 3) The MEAP application information screen appears. Scroll the screen and check the information of the target application.

The screenshot shows the 'MEAP Application Information' screen. The application name is 'Sample Application A'. The application ID is '4806d282-deb4-452e-bd48-71167c11739a'. It was installed on '2012 03/30' and is currently 'Installed'. The license status is 'Installed' and expires after '60 days'. Below this, there is a table showing the usage of various resources:

Type of Counter	Current Count	Usage Limit
Total (Full Color/Large)	0	--
Total (Full Color/Small)	0	--
Total (Full Color 1)	0	--
Total (Single Color/Large)	0	--
Total (Single Color/Small)	0	--
Total (Single Color)	0	--
Total (Black and White/Large)	0	1000
Total (Black and White/Small)	0	2000
Total (Black and White 1)	0	--
Total 1	0	--
Free 5	0	--
Free 6	0	--
Free 7	0	--
Free 8	0	--
Free 9	0	--
Free 10	0	--
Free 11	0	--
Free 12	0	--

F-2-283

## Check License

### Outline

You can check the contents of the license file.

### Procedure to Check the License File

- 1) Log in to SMS.
- 2) Select [System Management] > [Check License] on System Management menu.

The screenshot shows the 'Service Management Service' interface. The 'Check License' option is highlighted in the 'MEAP Application Information' menu. The main content area displays resource usage information:

Resource Name	Amount Used	Remaining	Percent Used
Storage	30700 KB	1017876 KB	3%
Memory	3584 KB	127488 KB	3%
Threads	33	223	13%
Sockets	33	223	13%
File Descriptors	27	229	11%

F-2-284

- 3) Click the [Browse...] button, specify a license file, and click the [Check] button.

The screenshot shows the 'Check License' dialog box. The 'License File Path' field is highlighted, and the 'Browse...' button is visible next to it. The 'Check' button is also visible.

F-2-285

## Changing SMS Login Password

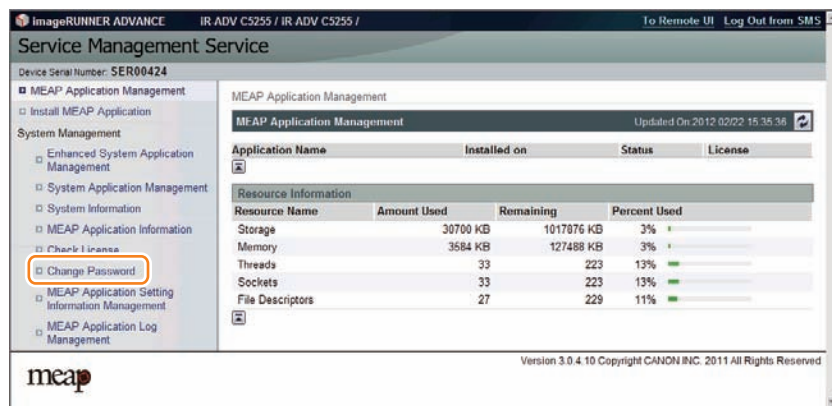
### Outline

You can change the password for logging into SMS.

If you forgot the login password and you want to change the password back to the default value (MeapSmsLogin), see "If you forgot the password (SMS login password initialization)" in this chapter.

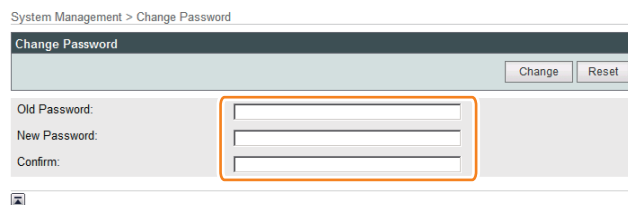
### Procedure to Change the SMS Login Password

- 1) Log in to SMS.
- 2) Select [System Management] > [Change Password] on System Management menu.



F-2-286

- 3) Enter the current password and a new password, and then click the [Change] button.



F-2-287

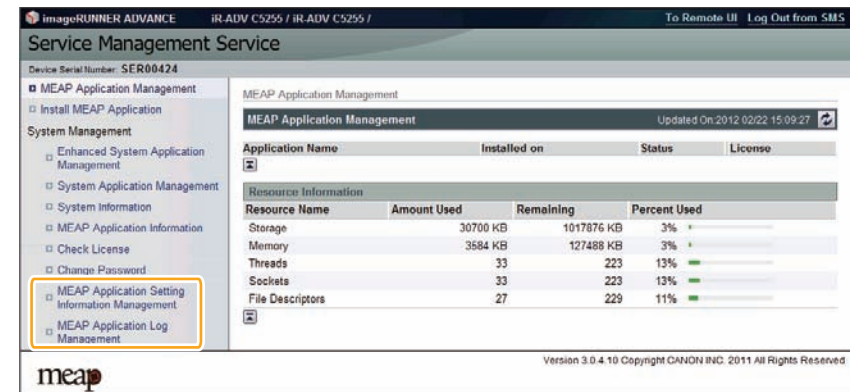
#### Note:

The [Reset] button on the [Change Password] screen is used to clear the value entered in the text field. It is not a button for changing the SMS login password back to the default value.

## MEAP Application Setting Information Management and Log Management

### Outline

The MEAP Application Setting Information Management page and the MEAP Application Log Management page provide menu related to "MEAP Application Configuration Service" for managing MEAP application setting information and menu related to "MEAP Application Log Service" for managing log information respectively.



F-2-288

### MEAP Application Configuration Service

This service is used to manage the MEAP application setting information. It has functions such as saving setting information to the MEAP area. Ver 57 of MEAP Specifications supports this service.

### MEAP Application Log Service

This service is used to collect MEAP application logs (debug logs and authentication logs). Ver 58 of MEAP Specifications supports this service.

The collected logs can be downloaded or deleted in user mode.

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

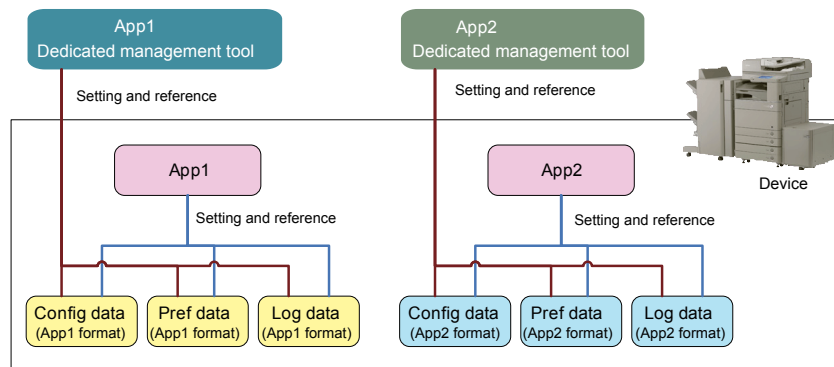
These settings depend on the MEAP application. For detailed information, refer to the manual for the application.



## Advantages Obtained When Using the Services

By using MEAP Application Setting Information Management and MEAP Application Log Service, as long as the MEAP application supports these services, you can collectively perform data management tasks.

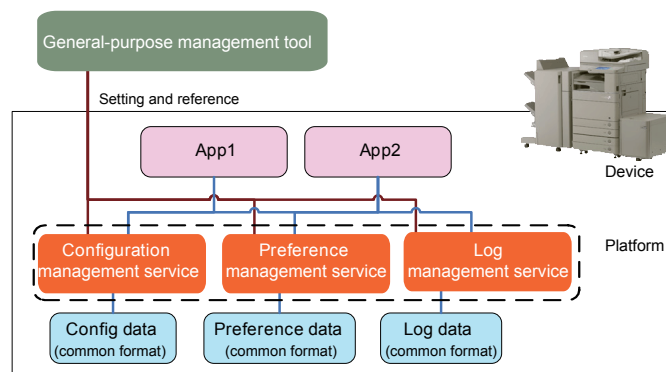
### Devices and MEAP applications which do not support new functions



F-2-289

As for devices and MEAP applications that do not support the service, the setting information and log data are managed on an application-by-application basis.

### Devices and MEAP applications which support new functions



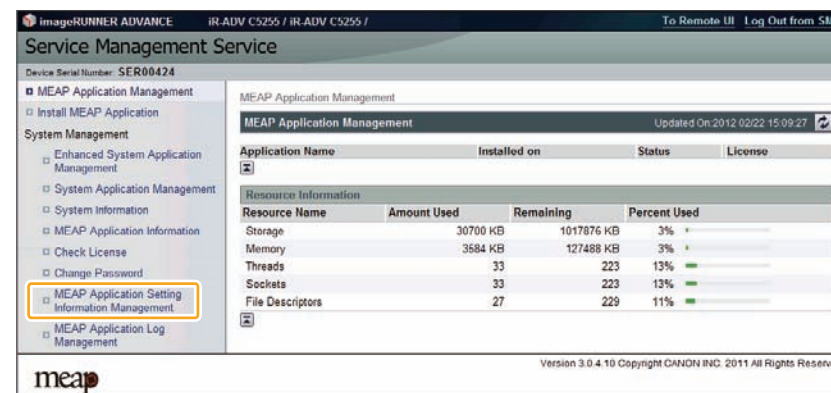
F-2-290

As for devices and MEAP applications that support the service, information can be collectively managed.

## MEAP Application Setting Information Management

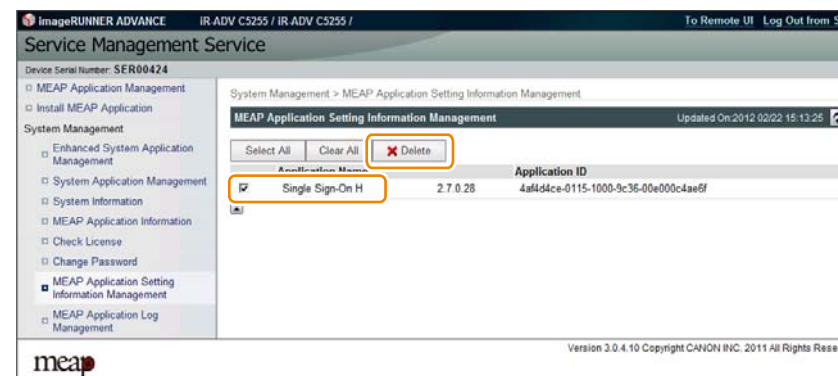
The setting data (stored on the device) of the MEAP applications which support MEAP Application Setting Information Management can be deleted. The procedure is shown below.

- 1) Log in to SMS.
- 2) Select [System Management] > [MEAP Application Setting Information Management] on System Management menu.



F-2-291

- 3) Select an application you want to delete, and click the [Delete] button.



F-2-292

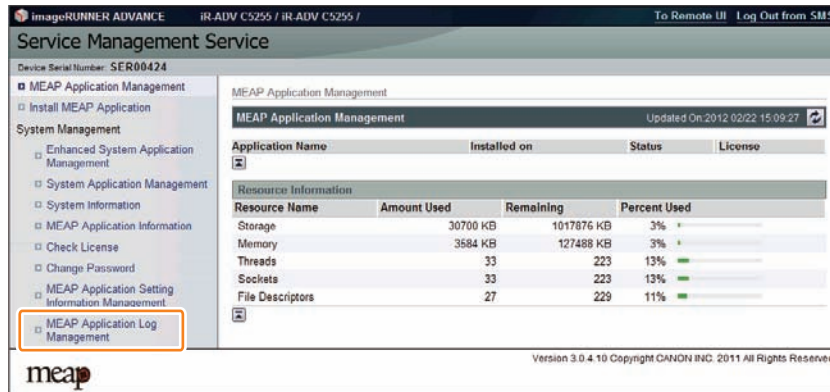
#### Note:

If a MEAP application that contains setting data which can be shared (not dedicated to the application) is installed, the application name [Shared Setting Information of Applications] is displayed.

## MEAP Application Log Management

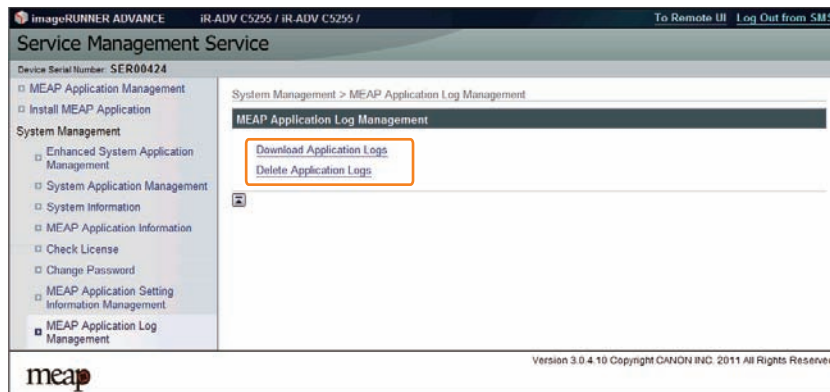
The log data (stored on the device) of the MEAP applications which support MEAP Application Log Service can be downloaded or deleted. The procedure is shown below.

- 1) Log in to SMS.
- 2) Select [System Management] > [MEAP Application Log Management] on System Management menu.



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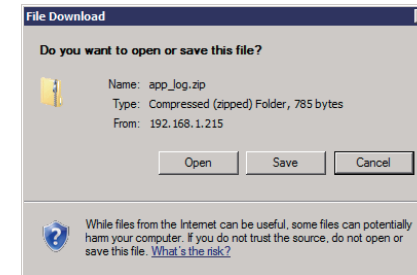
- 3) Select [Download Application Logs] or [Delete Application Logs].



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- 4) To download the logs

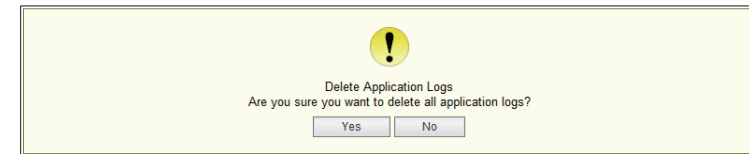
The file save dialog for the log file will appear. Specify the destination and save the file.



F-2-295

- 5) To delete the logs

The confirmation screen will appear to prompt you to delete the logs. Click the [Yes] button to delete the logs.



F-2-296

## 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.

#### CAUTION:

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

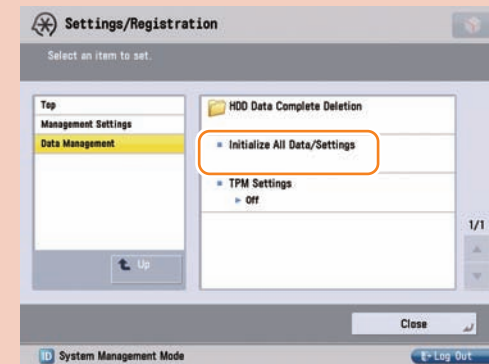
The following data are backed up using SST:

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 SSO-H
- SMS password

#### CAUTION:

Do not execute [Initialize All Data/Settings] in user mode during the period from backup using SST to recovery of the data.



F-2-297

When [Initialize All Data/Settings] is executed, the key used to decrypt encrypted backup data (SMS password, etc.) is initialized, which makes it impossible to decrypt the data.

It means that SMS cannot be accessed even when the backup data has been recovered using SST.

If you inadvertently executed [Initialize All Data/Settings] and can no longer access SMS, the SMS login password needs to be initialized by following the procedure shown in "When SMS Cannot Be Accessed" in "Login to SMS" in this manual.

## ● Data backed up using SST in the case of iR-ADV devices

In the case of iR-ADV devices, menus are implemented as MEAP application. Therefore the following items can be also backed up (stored as Meapbackup.bin).

- Setting items of each menu in the main menu ( Copy, Scan and Send, Fax, Scan and Store, Access Stored Files, Fax/I-Fax Inbox, ).
  - Favorite settings
  - Default settings
  - Settings of option shortcuts
  - Previous settings
- Settings of quick menu
  - Button size information
  - Wallpaper settings
  - Quick menu button information
  - Restrict quick menu use

## ● Requirements for Backup Using the SST

The following conditions must be met for use of the function:

### 1) Device Firmware Version

Device Firmware Version for SST (Ver4.2x)

	Boot ROM	System	SST
iR-ADV C2030/C2020 series	Boot ROM is not equipped.	Already supported since the 1st version.	The version supporting the corresponding devices.
imageRUNNER ADVANCE series other than iR-ADV C2030/C2020 series	Already supported since the 1st version.	Already supported since the 1st version.	The version supporting the corresponding devices.

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### 2) SST Version

Version 4.2.x or later. An earlier version will not permit the use of the function. If needed, upgrade the SST.

### 3) Space for backup

To back up the HDD of the iR, the PC must have approx 1024MB of free space at maximum. Sizes of backup files depend on actual data capacities to be backed up.

## ■ Procedure for backing up the MEAP application area using SST

### 1) Switching Login Service / Backup of Login User Information

If SSO-H is used for the login service, switch to default authentication before backing up the user information. Although SST will back up local device user information, it is recommended to export the user information just in case. For local device user information backup, go to User Management page of SSO-H site and export the data. (The SSO-H login page opens with the URL "https://<device IP address>:8443/ss0/").

#### CAUTION:

- If a HDD of a system that uses SSO-H is formatted without changing the login service to the default authentication, the error message "The login service must be set again with SMS" appears and the system cannot start up when you attempt to restart the system after formatting.
- If this problem occurs, change the login service to SSO-H with SMS. If you cannot access to SMS since you do not have the IP address of the device, start the system with FIXIP mode -hold down the numeric keys 1 and 7 and turn the power switch on. The IP address "172.16.1.100" will be automatically assigned for the device. Then log in to SMS specifying the address.

### 2) Starting the device in Download Mode

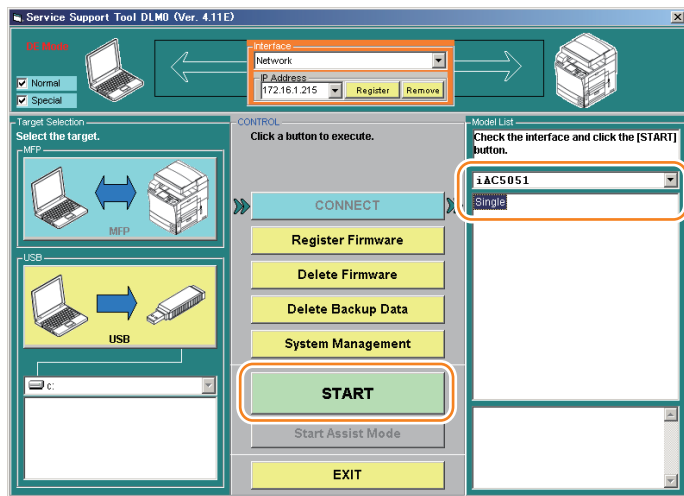
Press [2] and [8] buttons at the same time on the control panel and turn on the main power switch to start the device in Download Mode. Note that SST backup function is enabled only in Download Mode.

### 3) Connecting the main unit to the PC to start SST

Connect the main unit to the PC with SST installed using the crossing cable and the like to start SST on the PC.

4) Connecting the device using SST

When starting SST, select the target device type as Single and click [Start] button.



F-2-298

5) Generating backup data to transfer it to the PC (uploading)

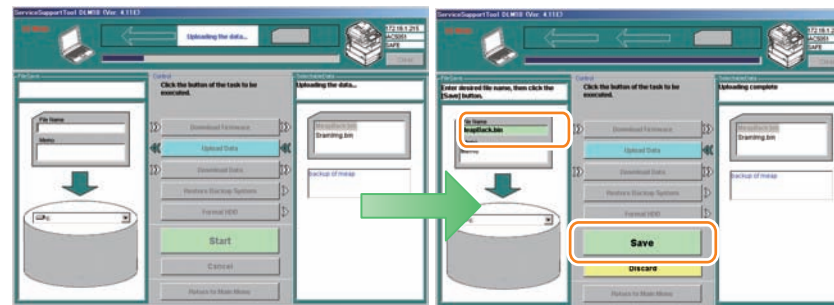
Click [Upload Data] button of SST and select "Meapback.bin" as the item to be backed up to click [ Start ] button.



F-2-299

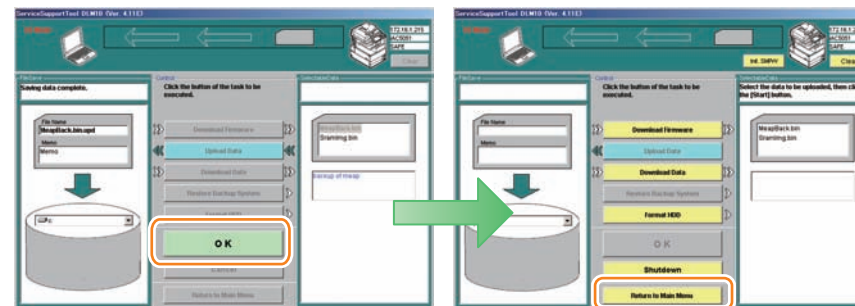
6) Saving backup data

Upon the backup data transferred to the PC, enter an appropriate file name and click [OK] button to save the backup data on the PC.



F-2-300

When the file is successfully saved, click [OK] button, and then click [Return to Menu] button.

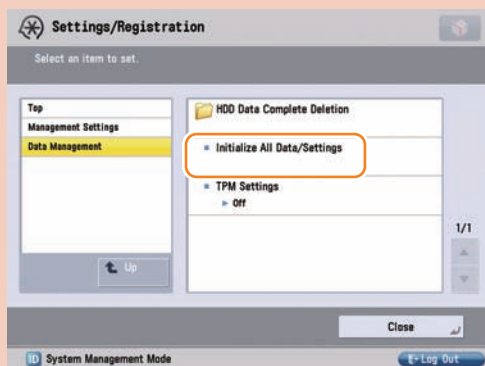


F-2-301



**CAUTION:**

Do not execute [Initialize All Data/Settings] in user mode during the period from backup using SST to recovery of the data.



F-2-302

When [Initialize All Data/Settings] is executed, the key used to decrypt encrypted backup data (SMS password, etc.) is initialized, which makes it impossible to decrypt the data.

It means that SMS cannot be accessed even when the backup data has been recovered using SST.

If you inadvertently executed [Initialize All Data/Settings] and can no longer access SMS, the SMS login password needs to be initialized by following the procedure shown in "When SMS Cannot Be Accessed" in "Login to SMS" in this manual.

## ■ Procedures to Restore Backup Data

### 1) Connecting to the device

Connect the device using SST by following step 1 to step 4 of the Procedure for backing up the MEAP application area using SST.

### 2) Restoring backup file

Click [Download Data] button and select the data backed up in the previous step (Meapback. bin) to click [Start Restoring Data]. Note that the data backed up in a different version cannot be restored.



F-2-303

### 3) Transferring Data

When the data is successfully transferred, click the [OK] button shown on the screen. To continue other jobs, click [Return to Menu] button.



F-2-304

4) Turn off and on the main power switch of the device to gain access in SMS to check that MEAP applications are surely restored.

5) Restore the backup data and setting saved. Note that the user information of the local device is included in the backup data, thus does not need to be restored.

## ● Formatting and Replacing the HDD

### ■ Outline

If the HDD is broken or does not function correctly due to failure of the system (excluding the MEAP application), it needs to be formatted or replaced.

When the HDD is formatted or replaced, the files of the MEAP application stored in it will be lost, so make a backup of the MEAP application area according to "Procedure for backing up the MEAP application area using SST" if possible. If a backup cannot be made, the MEAP application and the license files need to be reinstalled.

As for the MEAP counter information, it will not be lost because it is backed up just like the conventional counter.

If a backup cannot be made, a special license file (a license file for installation with the expiration date carried over from the current counter value) is required to reinstall the MEAP application. This special license file is treated as a service tool and cannot be obtained by a general user.

In order to obtain a special license file, a service technician needs to contact a person in charge of support of a sales company.

When contacting the person in charge of support, the service technician also needs to provide the serial number of the device and the name of the MEAP application installed.

In the support departments of regional headquarters of Canon, all license files of the applications that have been issued are filed according to device serial numbers, enabling you to obtain a series of license files through a single screen as long as you can identify the serial number of the device in question.

**Note:**

The application that is installed with a reusable license can be reinstalled by using the same license.

### ● Formatting the HDD

#### Procedure to format the hard disk

Follow the following procedure to format the HDD.

#### 1) Connecting to the device

Connect the device using SST by following step 1 to step 4 of "Procedure for backing up the MEAP application area using SST".

#### 2) Formatting the HDD

Select "Format HDD" from SST menu to format the HDD.

**Note:**

HDD can be formatted also by starting Download mode using the USB memory and executing formatting from the displayed menu.



## ● HDD replacement procedure

### Outline

The procedure for replacing the HDD differs according to whether the HDD functions normally or not.

### If the MEAP application area cannot be backed up

If the HDD does not function correctly due to failure or for other reason, the MEAP application area cannot be backed up. It is therefore necessary to reinstall the application after replacing the HDD. The procedure is shown below.

#### 1)Preparation for replacement

Copy a set of license files for reinstalling the MEAP application (special licenses and reusable licenses) to a laptop for service operation.

Register a set of system files of a target product to SST. Or, prepare USB thumb drive of the System file transfer settlement.

#### 2)Replacing the drive

Prepare the necessary service parts of the HDD, and replace the drive.

#### 3)Formatting HDD

Format the HDD referring to Procedure to format the hard disk.

#### 4)Reinstalling the MEAP application

When the device has started normally, obtain the jar files of the MEAP applications from the user, and install them using the license files for reinstallation.

Installation method is the same as normal installation.

#### 5)Importing user information

As necessary, make login service selections and import user information.

#### Note:

When you replace the HDD without uninstalling MEAP applications, make sure to reinstall the previously installed applications. Unless reinstalling them, MEAP counter will not be released and the message "The number of applications that can be installed has exceeded the limit. Try to install this application after uninstalling other applications." is displayed so that the installation of new applications may not be accepted. If you want to install new applications in this case, once reinstall the applications in-stalled before formatting and uninstall unnecessary applications.

## ● If the MEAP application area can be backed up

If the MEAP application area can be backed up, it can be recovered after replacing the HDD, so it is not necessary to prepare the special licenses for reinstallation.

#### 1)Preparation for replacement

Back up the MEAP application area of the device according to the procedure for backing up the MEAP application area using SST.

#### 2)Replacing the drive

Prepare the necessary service parts of the HDD, and replace the drive.

#### 3)Formatting HDD

Format the HDD referring to Procedure to format the hard disk.

#### 4)Restoring the backup file

Restore the backup data referring to the Procedures to Restore Backup Data.

#### 5)Importing user information

As necessary, make login service selections and import user information.

## MEAP Safe Mode (level 2)

### Outline

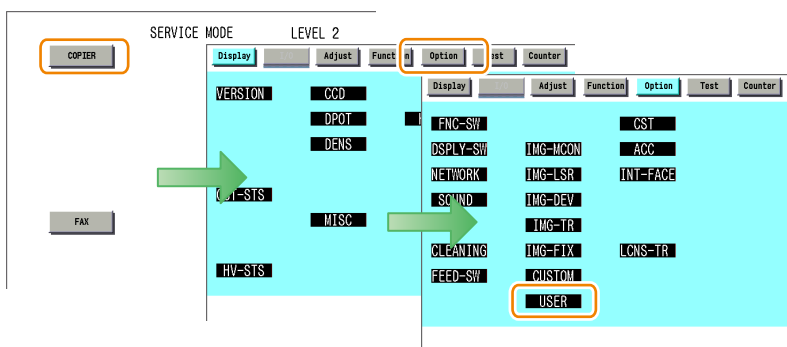
Use safe mode if you need to start up the system without worrying about extra applications. It will start up only those system software files (including SMS) that normally start up as default files while preventing MEAP applications and the like from starting up.

When you have made changes and restart the device, the control panel will indicate 'MPSF' in its lower right corner. The MEAP applications that may have been active before you shut down the equipment will not start up on their own. Make use of safe mode when restoring the system software as when MEAP applications or services cause a fault as the result of a conflict or wrong sequence of registration/use. You can access to SMS in this condition so that you can take necessary measures, for example, you can stop application that may cause the trouble.

If default authentication has been selected, the mode of authentication remains valid; otherwise, the message "The login service must be set again with SMS" appears. Change the login service as necessary.

### Starting in Safe Mode

- 1) Startup [SERVICE MODE] in level 2.
- 2) Press [COPIER] > [Option] > [USER] buttons.



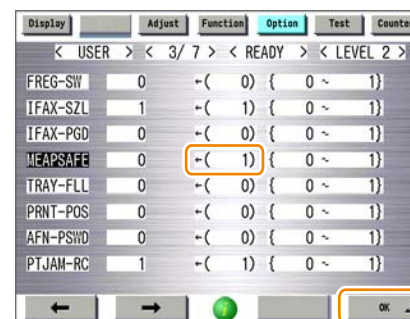
F-2-305

- 3) Press ← or → button for several times until [MEAPSAFE] button is shown. Click [MEAPSAFE] button.



F-2-306

- 4) Press the 1 key on the control panel keypad to change the setting to '1'; then, click [OK] button.



F-2-307

- 5) Check that the notation 'MPSF' has appeared in the upper left corner of the screen; then, restart the device.

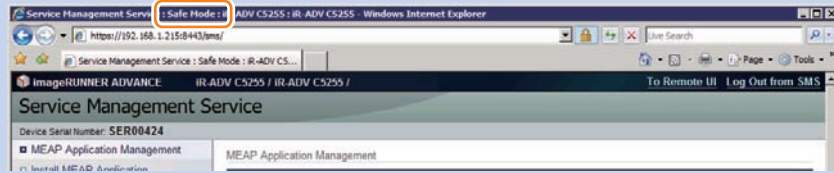


F-2-308

**Note:**

If accessed to SMS in MEAP SAFE mode, the device started mode is shown on the title bar of the browser.

An example of the title bar displayed at the time of startup in MEAP SAFE mode  
Service Management Service : <Device Name>:<Product Name>: Safe Mode

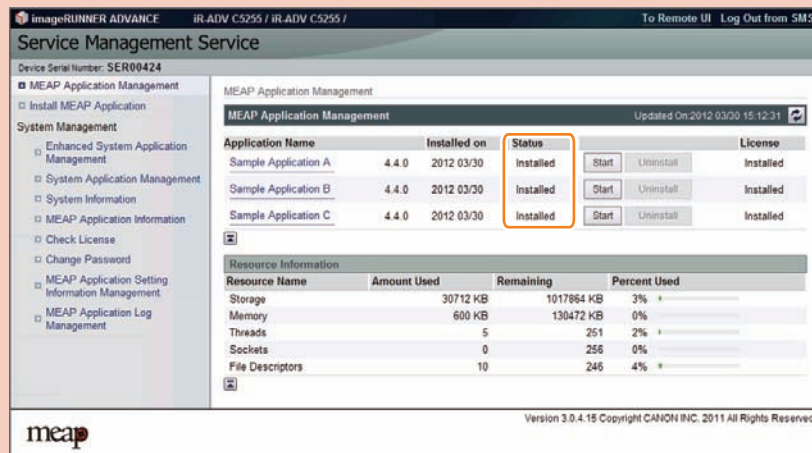


F-2-309

**CAUTION:**

If the device has been started in MEAP SAFE mode, all the MEAP applications stop and the status becomes "Installed".

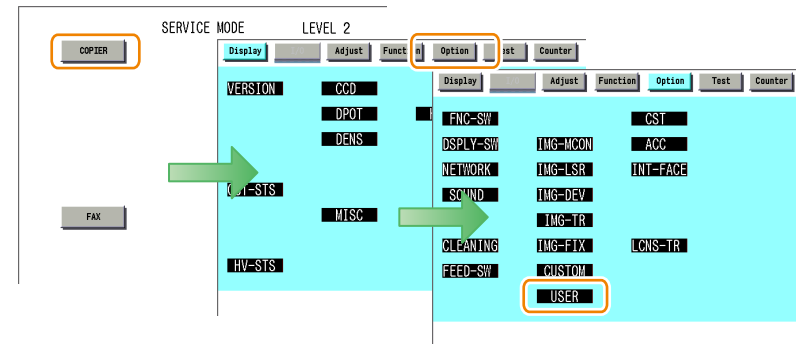
This status remains unchanged even if the MEAP SAFE mode is canceled and the device is started again in normal mode. It is therefore necessary to access SMS after normal startup and start the MEAP application.



F-2-310

**How to cancel MEAP SAFE mode**

- 1) Startup [SERVICE MODE] in level 2.
- 2) Press [COPIER] > [Option] > [USER] buttons.



F-2-311

- 3) Press ← or → button for several times until [MEAPSAFE] button is shown. Click [MEAPSAFE] button.



F-2-312

- 4) Press the 0 key on the control panel keypad to change the setting to '0'; then, press [OK] button.



F-2-313

- 5) Start service mode again after rebooting the device, and check that the displayed setting value has changed to "0" and that [MPSF] is no longer displayed at the upper left of the screen.



F-2-314

## Collection of MEAP Console Logs

### Overview

When debugging a MEAP application, console logs need to be collected in some cases.

The following shows how to collect MEAP console logs using commercially available terminal software and service mode.

### What to Prepare

- PC connected with the same network as the device
- Commercially available terminal software

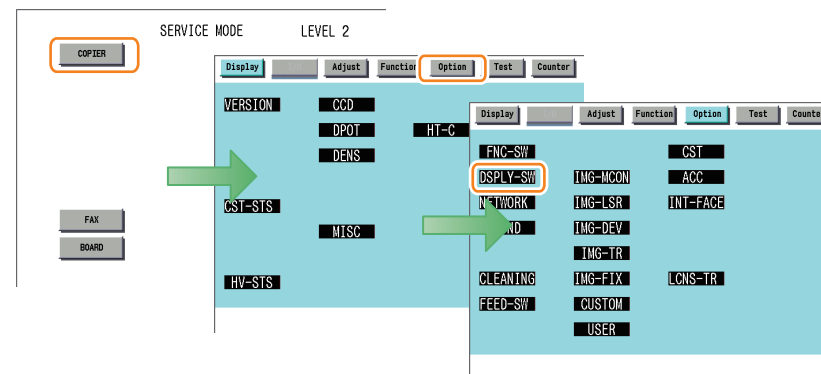
Note:

In the procedure shown in this manual, "Tera Term Pro" and "Hyper Terminal" are used as the terminal software.

### Work Procedure

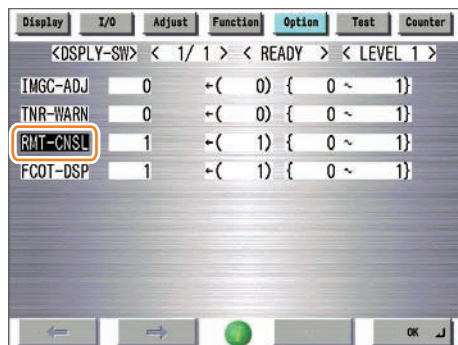
#### Device Setting Procedure

- 1) Start [ SERVICE MODE ] in Level 1.
- 2) Press [ COPIER ] > [ Option ] > [ DSPLY-SW ] buttons.



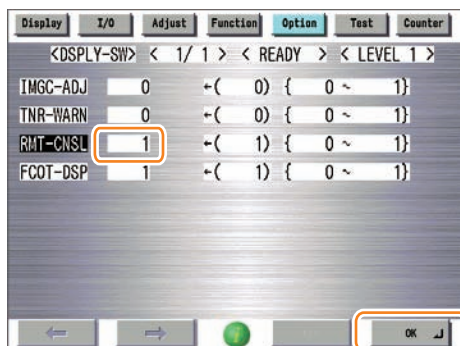
F-2-315

3) Press [ RMT-CNSL ] button.



F-2-316

4) Press either 1 (activate remote console function) on control panel (the numerical value input in the field is displayed), and press [ OK ] button.



F-2-317

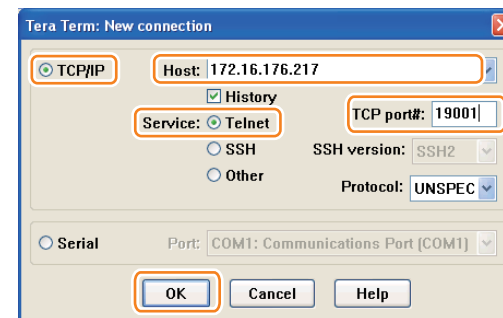
5) Check to see that it is reflected in setting field, and restart the device.



F-2-318

PC setting procedure (when Tera Term is used)

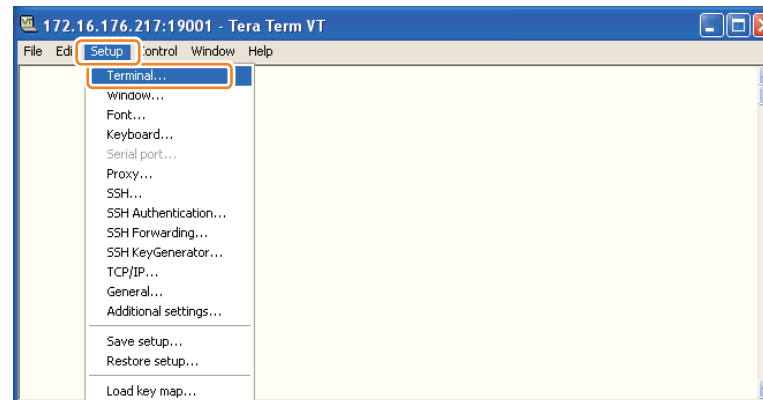
- 1) Install the terminal software on the PC.
- 2) Start the terminal software, make the following settings, and then click the "OK" button.



F-2-319

Connection : Select [TCP/IP] (Default)  
 Host : Device Host Name or IP Address  
 Service : Select "Telnet"  
 TCP port# : Enter 19001

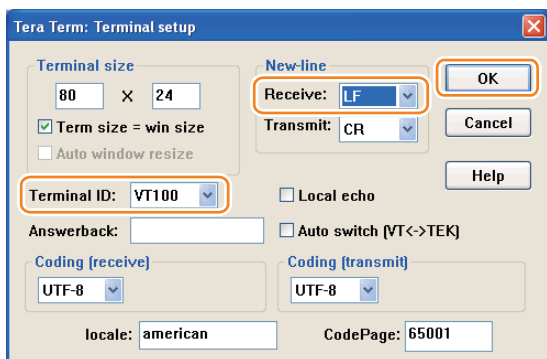
3) The connection window will open. Select [Terminal...] from the [Setup] menu.



F-2-320



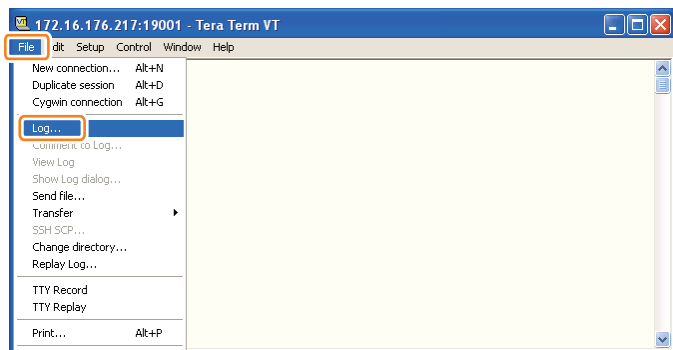
- 4) The terminal setting screen will appear. Make the following settings, and then click the "OK" button.



F-2-321

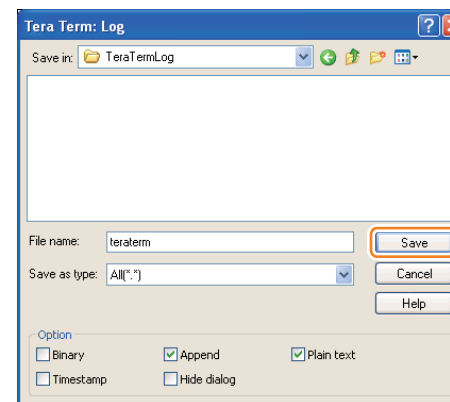
Terminal ID : VT100  
New-line Receive : LF

- 5) Select [Log...] from the [File] menu.



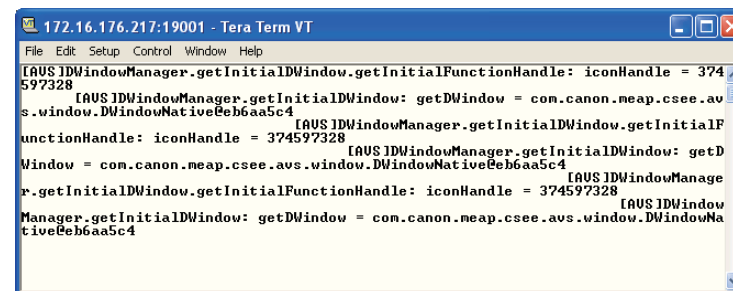
F-2-322

- 6) The dialog for specifying the save destination of the log file will appear. Set the save destination path and the file name, and then click the [Save] button.



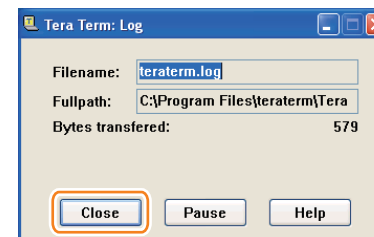
F-2-323

- 7) Perform the operation whose log you want to collect.



F-2-324

- 8) Click the [Close] button in the log dialog.



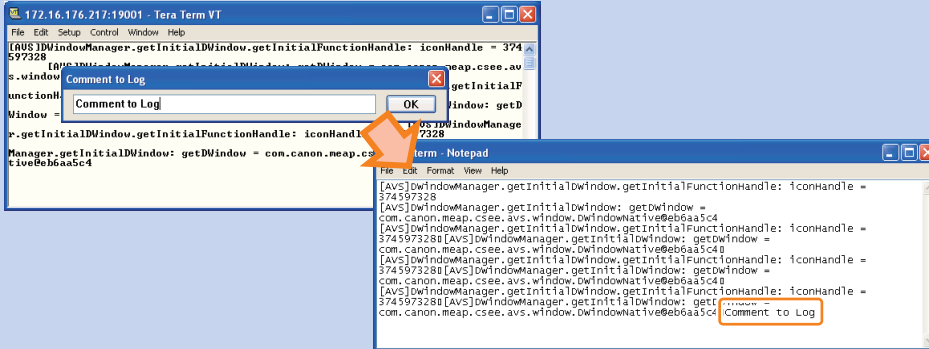
F-2-325

Note:  
To suspend log collection, click the [Pause] button.

Note:  
While collecting logs, the following operations are available from the [File] menu.

#### Comment to Log...

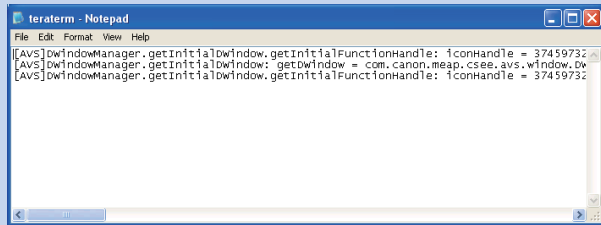
You can add a comment to the log being collected. The added comment is reflected in the log file.



F-2-326

#### Show Log dialog...

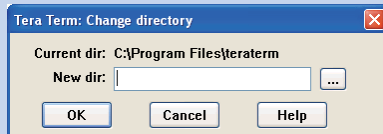
The logs that have been collected are pasted on Notepad and displayed.



F-2-327

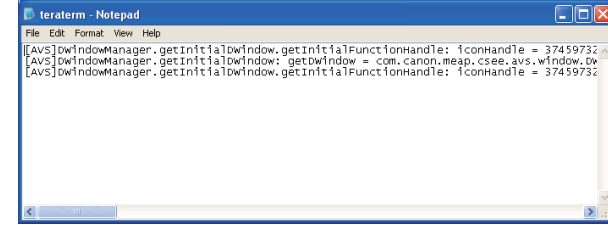
#### Change directory...

The preliminarily set save destination of the log file can be changed.



F-2-328

9) Open the file saved in the save destination, and check that the logs are stored correctly.



F-2-329

#### Note:

Depending on the MEAP application, the log output setting needs to be made in order to collect logs.

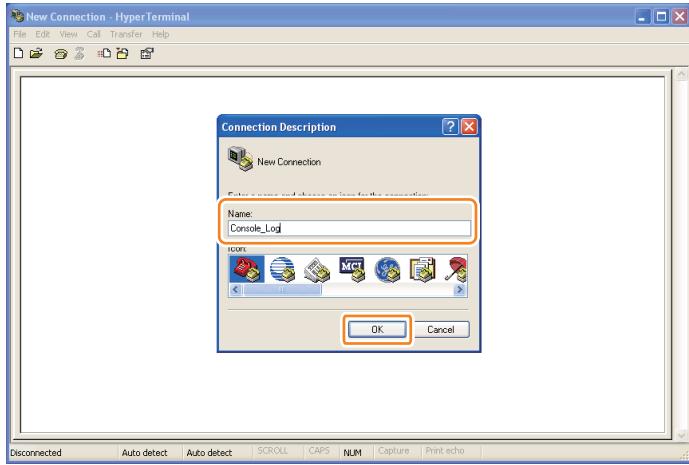
#### CAUTION:

After collecting logs, the remote console function of the device needs to be disabled (select [SERVICE MODE] LEVEL1 > [COPIER] > [Option] > [DSPLY-SW] > [RMT-CNSL] > 0, and restart the device).



PC setting procedure (when Hyper Terminal is used)

- 1) Start Hyper Terminal, set the connection name in the [Connect Description] dialog that appears on the screen, and then click the OK button.



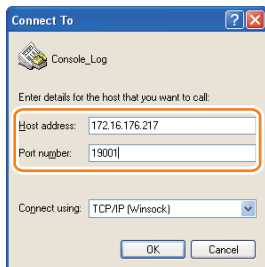
F-2-330

- 2) Set [TCP/IP(Winsock)] for [Connect using].



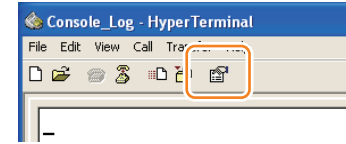
F-2-331

- 3) Enter the IP address of the target device in [Host address], and enter "19001" (fixed) in [Port number].



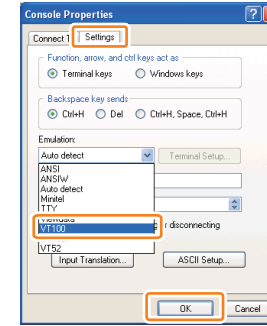
F-2-332

- 4) Click the "Properties" icon on the Hyper Terminal screen.



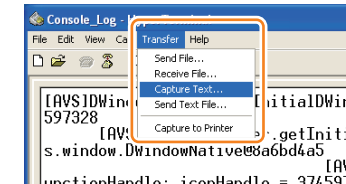
F-2-333

- 5) The [Console Properties] dialog will appear. Select the [Settings] tab, select [VT100] for [Emulation], and then click the [OK] button.



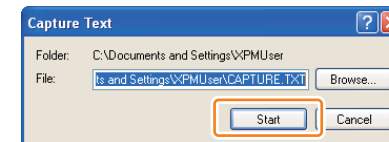
F-2-334

- 6) Return to the Hyper Terminal window, and select [Transfer] > [Capture Text...] from the menu.



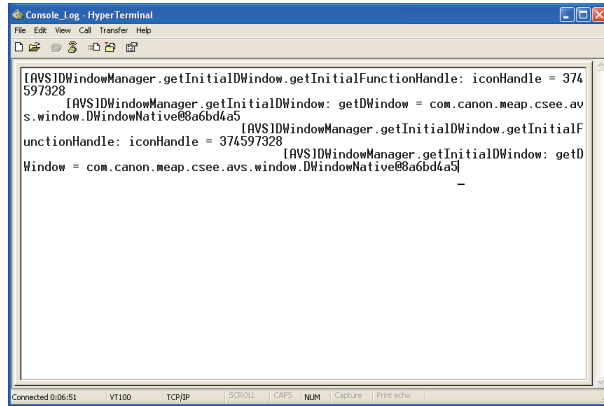
F-2-335

- 7) The dialog for specifying the save destination of the log file will appear. Specify the save destination.



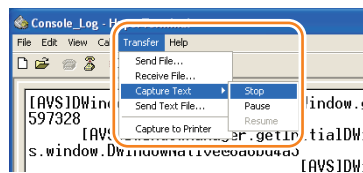
F-2-336

8) Perform the operation whose log you want to collect.



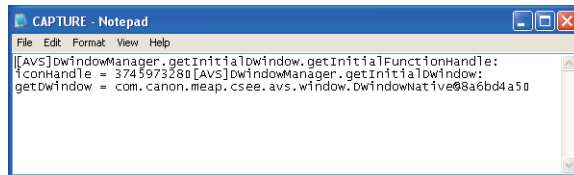
F-2-337

9) Select [Transfer] > [Capture Text...] > [Stop] from the menu.



F-2-338

10) Open the file saved in the save destination, and check that the logs are stored correctly.



F-2-339

**Note:**

Depending on the MEAP application, the log output setting needs to be made in order to collect logs.

**CAUTION:**

After collecting logs, the remote console function of the device needs to be disabled (select [SERVICE MODE] LEVEL1 > [COPIER] > [Option] > [DSPLY-SW] > [RMT-CNSL] > 0, and restart the device).

## Using USB Devices

### USB Driver

#### Two types of USB drivers

While the USB driver that can be used in iR series is only the USB driver designed exclusively for MEAP application (hereinafter referred to as “MEAP driver”), not only MEAP driver but also USB system driver (hereinafter referred to as “system driver”) can be used in iR-ADV series.

System driver and MEAP driver cannot be used together. When either of them is used, the other driver cannot be used.

#### USB driver setting (iR-ADV series):

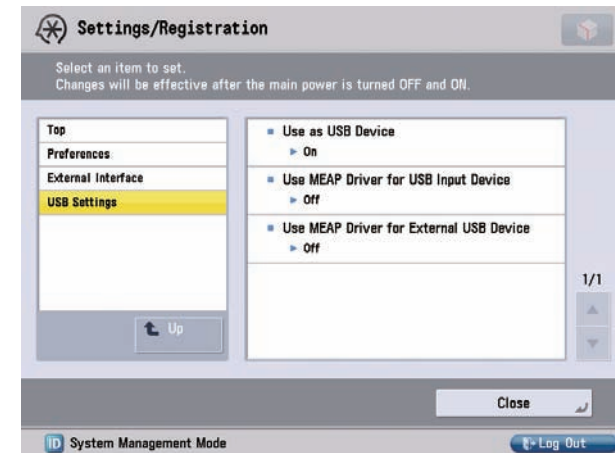
System driver is active by default in iR-ADV series.

The driver can be changed in Settings/Registration (user mode).

Usually, It is not necessary to change the setting because it is specified in the MEAP application side.

Only in the case of a special MEAP application, it is necessary to change the USB driver setting.

For details, refer to specifications of MEAP application side.



F-2-340

Operating mode settings [Use MEAP driver as USB input device]	Conventional USB keyboard enabled MEAP application	Software keyboard application (System Driver/ MEAP Driver)	System driver supported MEAP application
ON * MEAP driver (conventional compatibility mode)	Can use USB keyboard. Can work only on the conventional applications that support the MEAP application driver.	Cannot use USB keyboards. (Device cannot be detected.)	Cannot use USB keyboards.
OFF (*default) * Native driver	Cannot use USB keyboards. (Device cannot be detected.)	Can use USB keyboards.	Can use USB keyboards. Via software keyboards only.

T-2-92

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 iR device

Registration status of USB device A	When the HID keyboard is installed > USB Settings: [Use MEAP Driver for USB Input Device] When the Mass Storage is installed > USB Settings: [Use MEAP Driver for External USB Device]	Native application	MEAP application		
			System driver supported application	System driver not supported/ conventional application	Application with VID/ PID declared in Manifest for x
Not registered	OFF	YES	YES	NO	
	ON	NO	NO	YES	
Registered	OFF	NO	NO	YES	YES
	ON	NO	NO	YES	YES

YES: USB device available      NO: USB device not available

T-2-93

Availability for MEAP applications of USB devices B and C (either HID keyboard or Mass Storage) plugged to iR device

Registration status of USB device B	Setting to use MEAP driver (Additional Functions mode)	USB device	Native application	MEAP application		
				System driver supported application	System driver not supported / conventional application	Application with VID/PID declared in Manifest for B
Registered	Not used (Native driver to be used)	B	YES	YES	NO	
		C	YES	YES	NO	
	To be used	B	NO	NO	YES	
		C	NO	NO	YES	
Not registered	Not used (Native driver to be used)	B	NO	NO	YES	YES
		C	YES	YES	NO	NO
	To be used	B	NO	NO	YES	YES
		C	NO	NO	YES	YES

YES: USB device available      NO: USB device not available

T-2-94

### Specifications for the use of USB keyboards

Characters that could be entered on the software keyboard displayed on the conventional control panel can be entered using a USB connected keyboard.

- When the software keyboard window is displayed, characters can be entered from the USB keyboard (in-line entry not possible).
- When the software keyboard window is not displayed, entered characters will not be remembered.
- The characters, which can be entered from a USB keyboard, is only a character, which can be entered from the software keyboard.
- Even if characters are entered from the USB keyboard, the software keyboard window will not change (the corresponding key does not invert or change color).
- Input from the USB keyboard can be accepted at the same time as input from the software keyboard or numeric keys.
- Since the device supports Plug and Play, the USB keyboard can be disconnected/connected freely. However, do not disconnect and connect during in deep sleep (when in sleep with setting "low" at "the power consumption in sleep"). It is out of an operation guarantee to disconnect and connect the USB keyboard in deep sleep.
- When USB device is attached to iR device, iR devices do not shift to deep sleep mode.
- Keyboard layout changes according to the keyboard layout settings in the Settings/Registration screen. In addition, function keys and ten keys which are not displayed in the software keyboard cannot be used. (Keyboard which the operation check was conducted is 84-key Keyboard, but this does not mean that the operation of all 84-key Keyboards is guaranteed.)

#### Note:

The factory shipment default setting is to enable the use of native (main unit functionality) USB keyboards. Therefore, in order to use MEAP application keyboards, [Use MEAP driver for USB input device] under [System management settings (initial settings/ registration)] needs to be set to ON (factory shipment setting is OFF).

Operations change as described below in accordance with ON/ OFF settings.

ON: when using MEAP application keyboard

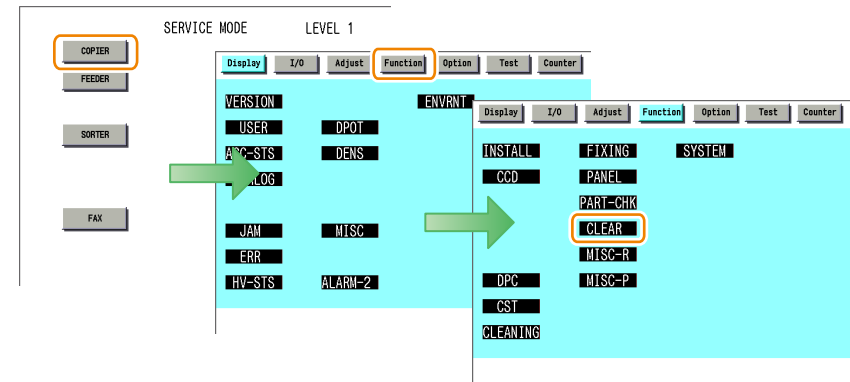
OFF: when using native (main unit functionality) keyboard (factory shipment default)

### Initialization of MEAP driver priority registration

When any trouble occurs regarding USB driver settings and it is necessary to reset the setting information, you can reset the MEAP driver preference registration by using service mode.

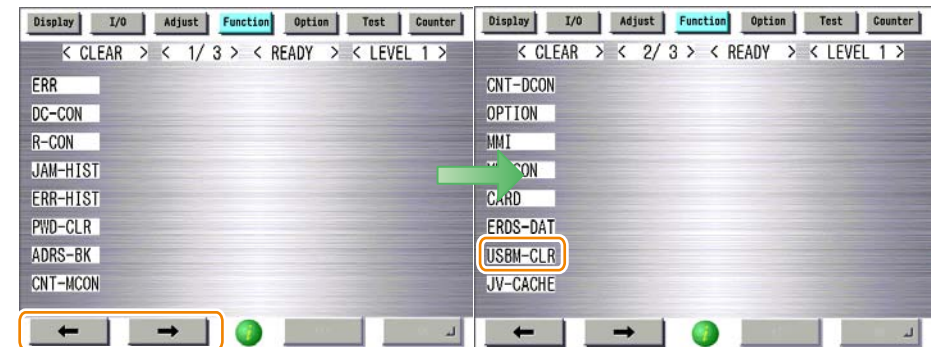
#### Steps to initialize preference use registration

- 1) Start [SERVICE MODE] in Level 1.
- 2) Press [COPIER] > [Function] > [CLEAR] > buttons.



F-2-341

- 3) Press **←** or **→** button for several times until [USBM-CLR] is shown on the screen. Press [USBM-CLR] button.



F-2-342

4) Press [OK] button to restart this device.



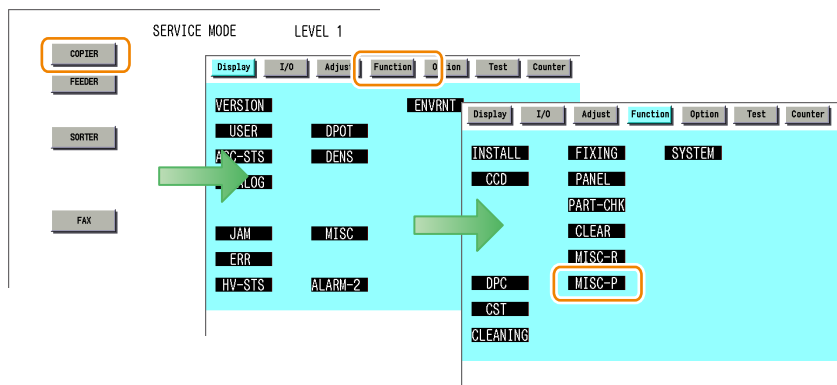
F-2-343

**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.

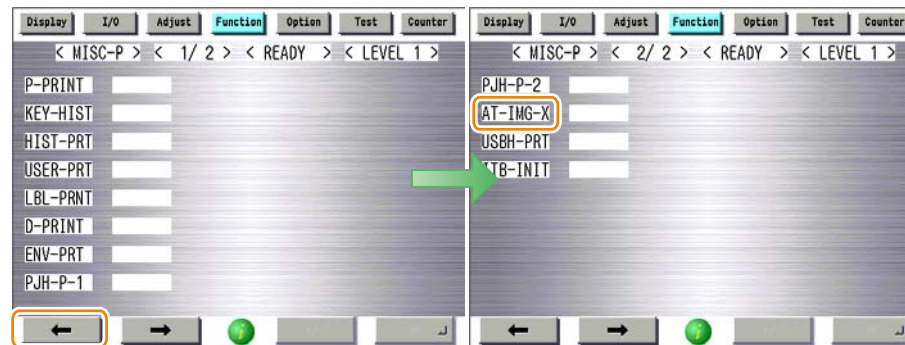
**Steps to output the USB Device report print**

- 1) Start [SERVICE MODE] in Level 1.
- 2) Press [COPIER] > [Function] > [MISC-P] > buttons.



F-2-344

3) Press ← or → button for several times until [USBH-PRT] is shown. Press [USBH-PRT] button.



F-2-345

4) When pressing [OK] button, [ACTIVE] blinks on the status field.



F-2-346

5) When [OK] is shown on the status field, the status print is output. Check the contents of the print.



F-2-347



## 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 CIs=00(>ifc) Sub=00 Prot=00 MxPS=64 #Cfgs= 1
P: Vendor=066f ProdID=4210 Rev=10.02
S: Manufacturer=SigmaTel, Inc.
S: Product=STlr42xx
S: SerialNumber=0002F0F7261287A5
C:* #Ifs= 1 Cfg#= 1 Atr=80 MxPwr=100mA
I: If#= 0 Alt= 0 #EPs= 2 CIs=fe(app.) Sub=02 Prot=00 Driver=irda-usb
E: Ad=81(I) Atr=02(Bulk) MxPS=512 Ivl=0ms
E: Ad=01(O) Atr=02(Bulk) MxPS=512 Ivl=0ms

```

F-2-348

## USB device information Content

Display the information of the USB device, which the device recognized.

If not displayed, there may be some fault occurred.

Some of standard optional devices are not displayed on a report.

The details of each item are as follows.

## T : Topology

Internal hierarchical structure, which a USB device is connected, is shown. The number of a connected bus, the hierarchical structure and connection speed can be indicated.

## D : Device

Information of USB devices is shown.

## P : Product

Product information of USB devices is shown. Vendor ID and Product ID can be recognized here.

## S : String

The character string embedded in a USB device is shown. A manufacture name and a product name can be recognized here.

## C : Configure

The configuration information of a USB device is shown. \* mark is to know whether it is active.

## I : Interface

The interface information of a USB device is shown. Interface class and the driver to handle can be recognized.

The value and the content of Driver are as follows.

Labeling	Content
usbhid	It is displayed when the USB system driver is assigned to the input device connected.
usb-storage	It is displayed when storage devices (USB memory storage etc.) are connected.
irda-usb IrDA	It is displayed when the dongle is connected.
hub	It is displayed when HUB is connected.
gpubs	It is displayed when the USB driver only for MEAP application is assigned to the input device connected.
gpubsex	It is displayed when a USB device, which specific vendor ID/ Product ID are preferentially registered using a manifest and MEAP API, is connected and the USB driver only for MEAP application is assigned.

T-2-95

## E:Endpoint

The Endpoint information of a USB device is shown.

## Right or wrong of report output

Connecting device		User installation	Report printing
HID		Available	Yes
Storage		Available	Yes
FAX		Not available	No
USB Device Port	IrDA	Not available	Yes
	Multimedia Card Reader	Not available	Yes
	IC Card Reader	Not available	Yes
Image Data Analyzer Board-A1		Not available	No
Hub	Internal Hub*	Not available	No
	External Hub	Available	Yes

\* USB Device Port-B1 Hub for device ports installed at the introduction

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### 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.

The screenshot shows the 'MEAP Application Management' interface. At the top, it displays 'Device Serial Number: SER00424'. Below this, there is a table of installed applications:

Application Name	Version	Installed on	Status	Start	Uninstall	License
Sample Application A	4.4.0	2012 03/30	Installed	Start	Uninstall	Installed
Sample Application B	4.4.0	2012 03/30	Installed	Start	Uninstall	Installed
Sample Application C	4.4.0	2012 03/30	Installed	Start	Uninstall	Installed

Below the application table, there is a 'Resource Information' section with a table showing system resources:

Resource Name	Amount Used	Remaining	Percent Used
Storage	30712 KB	1017864 KB	3%
Memory	600 KB	130472 KB	0%
Threads	5	251	2%
Sockets	0	256	0%
File Descriptors	10	246	4%

A warning message is displayed: 'You need to restart the device to have driver settings of the USB device take effect.' The interface also includes a sidebar with navigation options and a footer with the MEAP logo and version information: 'Version 3.0.4.15 Copyright CANON INC. 2011 All Rights Reserved'.

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## Integrated Authentication Function

### Sharing the Authentication Information

Separately managing the authentication information at login and the authentication information for MEAP applications creates inconveniences such as that the authentication process is executed many times.

In order to solve this problem, the device has an integrated authentication function. This function allows authentication information to be shared between MEAP applications in a MEAP environment.

The supported version of MEAP Specifications is Ver.59, which needs to be supported by both the device and the MEAP application in order to use this function.

There are 2 types of authentication information that can be shared: Volatile Credential whose registered information is discarded at the time of logout or shutdown of the device and Persistent Credential whose registered information is not discarded at the time of logout.

### Volatile Credential

Volatile Credential is used in cases where the authentication information is shared between applications which use the same security domain for authentication.

The credential is registered mainly by the login application, therefore the applications which access the security domain that was used for authentication by the login application can use the credential.

### Persistent Credential

Persistent Credential is used to help entry of authentication information when accessing a different security domain for authentication.

The credential is registered mainly by general MEAP applications, and the authentication information can be reused when the same user logs in for the second time or later.



### Comparison of Functions

	Volatile Credential		Persistent Credential	
Registered information	Character strings and arbitrary Java objects		Character strings only User ID/Password/Domain/Arbitrary character strings	
Lifetime	Registration	At login (the login application), and at any timing of registration by an application	At any timing of registration by an application	
	Deletion	Can be used until logout/shutdown.	Can be used until deletion by the application or management tool.	
Encryption of credential data	Not supported		Data retained on the HDD is encrypted.	
Store (Save) to	Memory in the device		HDD in the device	

T-2-97

### Disabling the Integrated Authentication Function

If you do not want Volatile Credential to be used from a security standpoint, the function can be disabled.

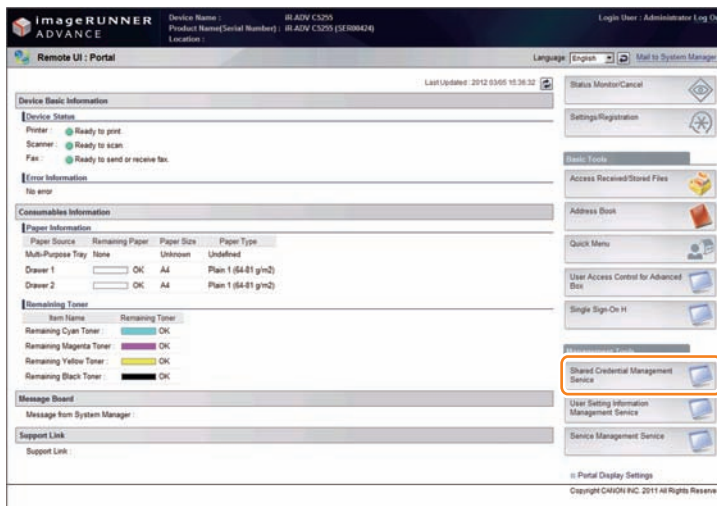
The function can be disabled from remote UI or service mode.

Persistent Credential cannot be disabled.

On the setting screen of remote UI, the function can be disabled on a protocol-by-protocol basis.

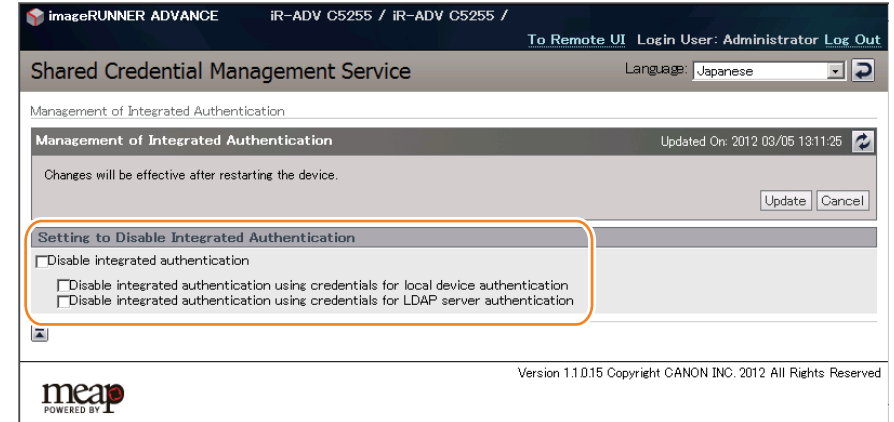
#### Remote UI

You can access the setting screen on remote UI for disabling integrated authentication as shown below.



F-2-350

Select the item you want to disable, and click the [Update] button.



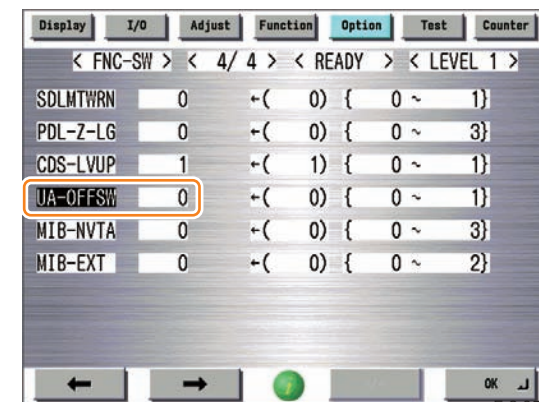
F-2-351

- [Disable integrated authentication]: The integrated authentication function is disabled regardless of the authentication method.
- [Disable integrated authentication using credentials for local device authentication]: The integrated authentication function is disabled only at the time of local device authentication.
- [Disable integrated authentication using credentials for LDAP server authentication]: The integrated authentication function is disabled only at the time of LDAP server authentication.

#### Service mode

The location of the service mode setting for disabling integrated authentication:

Setting value: 0 = Enabled, 1 = Disabled



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## Points to Note When Enabling the [Quick Startup Settings for Main Power] Setting

If some of the MEAP applications are running on the device, the following problems will occur.

### The [Quick Startup Settings for Main Power] setting cannot be enabled.

If a MEAP application that restricts the device from shifting to deep sleep mode is running, even when the setting of [Quick Startup Settings for Main Power] is enabled (On), the device starts normally instead of quick startup.

In that case, it does not affect the behavior of the MEAP application.

### Changes made in the settings of a MEAP application are not reflected.

If the startup setting [Quick Startup Settings for Main Power] is enabled (On), even when the Main Power Supply Switch of the machine is turned OFF, a shutdown process is not executed internally.

Therefore, in the case of a MEAP application where changes in settings are enabled when the device is restarted, changes in settings are not reflected just by changing the settings. Follow either of the restart procedures shown below to enable the changes made in the settings.

- Execute restart from remote UI.
- Turn OFF the Main Switch, and then turn it ON within 20 seconds.

### After recovery from quick startup, MEAP applications do not work properly.

MEAP applications that are scheduled to execute processes at specified times may not work properly after recovery from quick restart.

Unexpected problems such as that the application executes a task at an unexpected timing may occur.

Problems may occur in the following two cases.

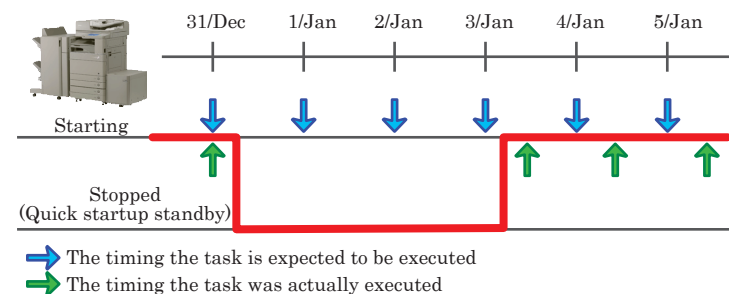
#### In the case of "Schedule: Execute the task every 24 hours"

A schedule is set to start the specified task at the specified time and repeat "fixed-delay execution".

If execution is delayed for some reason, the delay time is ignored.

Problem: If 24 hours have passed since the last execution of the task, the task is executed only once.

=> The task may be executed at a timing other than the time the user expects it to be executed.



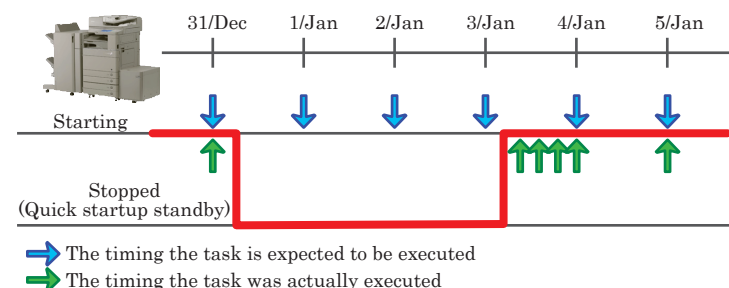
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#### In the case of "Schedule: Execute the task at 00:00 every day"

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.

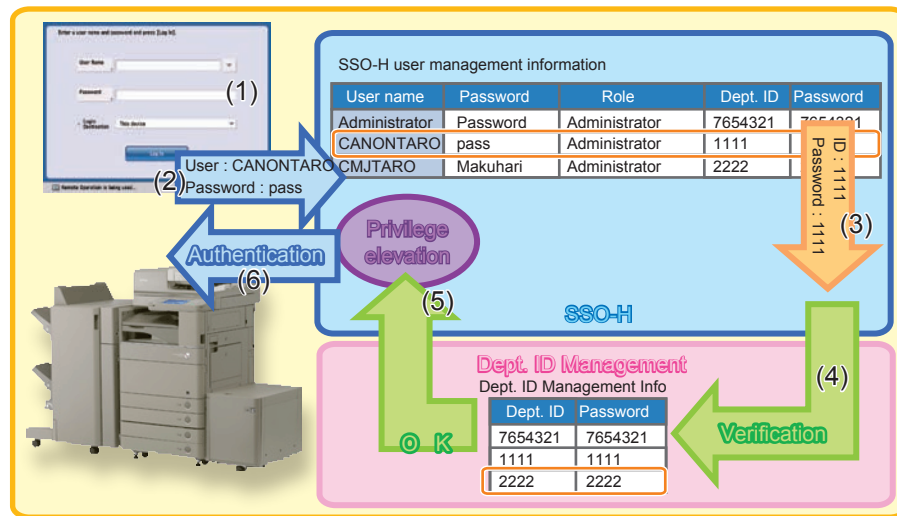


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## Remedy to Be Performed When the Device Has Become Unable to Be Logged in

### Overview

Department ID Management and SSO-H (Local Device Authentication) manage user information separately. Therefore, in order to allow coexistence of Department ID Management and SSO-H, it is necessary that the information of SSO-H and the information of Department ID Management are the same.



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- 1) The user enters the ID and password of SSO-H to a device where both SSO-H and Department ID Management are enabled.
- 2) SSO-H checks the entered ID and password with the SSO-H user information table.
- 3) SSO-H sends the department ID and password which correspond to the entered ID and password to the department ID management function.
- 4) The department ID management function checks the department ID and password sent from SSO-H with the user information table.
- 5) The user is elevated to the corresponding privilege.
- 6) The user is authenticated.

If the department ID and password registered in the user information of SSO-H do not coincide with the department ID and password registered in the Department ID Management, the authentication ends in failure and the user can no longer log in to the device.

#### Note :

Even if the department ID and password registered in the user information of SSO-H do not coincide with the department ID and password registered in the Department ID Management, login is possible when all of the following conditions are satisfied.

- System manager information of the device ([Settings/Registration] > [Management Settings] > [User Management] > [System Manager Information Settings]) is set.
- Login is performed as a user with the administrator right of SSO-H.

The user information of SSO-H does not coincide with the user information of Department ID Management in the following cases:

- The user information of SSO-H was different from that of Department ID Management when Department ID Management was enabled.

Department ID Management was enabled before changing the department ID and password registered in SSO-H to match with the information of Department ID Management.

SSO-H user management information

User name	Password	Role	Dept. ID	Password
Administrator	Password	Administrator	7654321	7654321
CANONTARO	pass	Administrator	1234	1234
CMJTARO	Makuhari	Administrator	5678	5678

Dept. ID Management info

Dept. ID	Password
1111	1111
2222	2222
3333	3333

Mismatch

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- Only one of information was updated, resulting in mismatch.  
Only the department ID and password registered in SSO-H or those in Department ID Management were changed.

SSO-H user management information

User name	Password	Role	Dept. ID	Password
Administrator	Password	Administrator	7654321	7654321
CANONTARO	pass	Administrator	1234	1234
CMJTARO	Makuhari	Administrator	5678	5678

Dept. ID Management info

Dept. ID	Password
7654321	7654321
1234	1234
5678	5678

Match

Only the SSO-H user information was updated

SSO-H user management information

User name	Password	Role	Dept. ID	Password
Administrator	Password	Administrator	1234567	1234567
CANONTARO	pass	Administrator	9999	9999
CMJTARO	Makuhari	Administrator	8888	8888

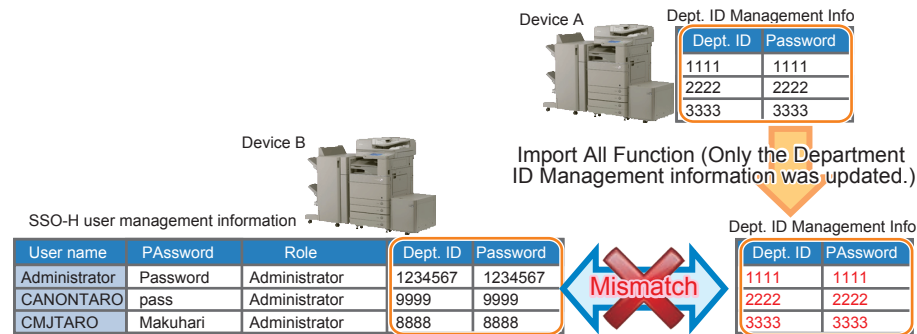
Dept. ID Management info

Dept. ID	Password
7654321	7654321
1234	1234
5678	5678

Mismatch

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- Only the information of Department ID Management was updated, resulting in mismatch. Only the Department ID Management information was changed in "Import All Function", resulting in mismatch. (The SSO-H user information cannot be changed in Import All Function.)



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## Remedy

If the device became unable to be logged in due to mismatch of the department ID/password, perform the following remedy.

### Note :

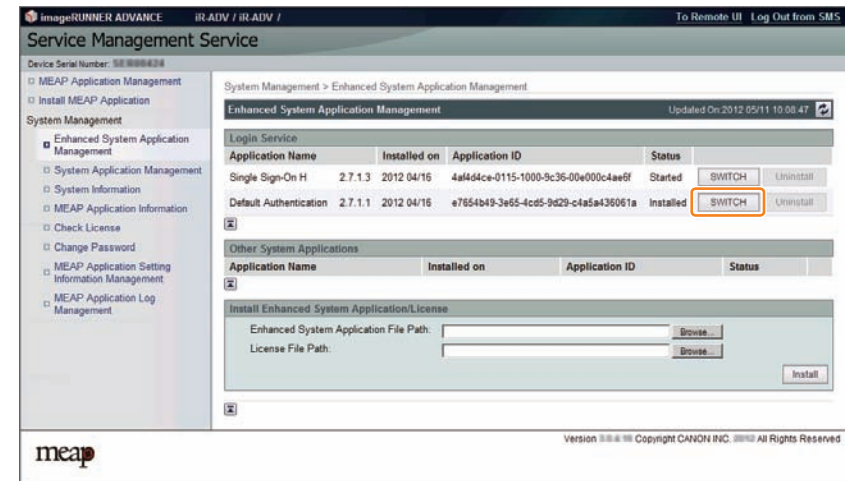
Since the device can be logged in if all of the following conditions are satisfied, performing only the step 6 of this section can clear the mismatch of the department ID/ password.

- System manager information of the device ([Settings/Registration] > [Management Settings] > [User Management] > [System Manager Information Settings]) is set.
- Login is performed as a user with the administrator right of SSO-H.

## Procedure

- 1) Change the authentication method to DA (Default Authentication).

Access SMS, and select [Default Authentication] in [Enhanced System Application Management] > [Login Service]. (How to log in to SMS can be found in "Login to SMS".)



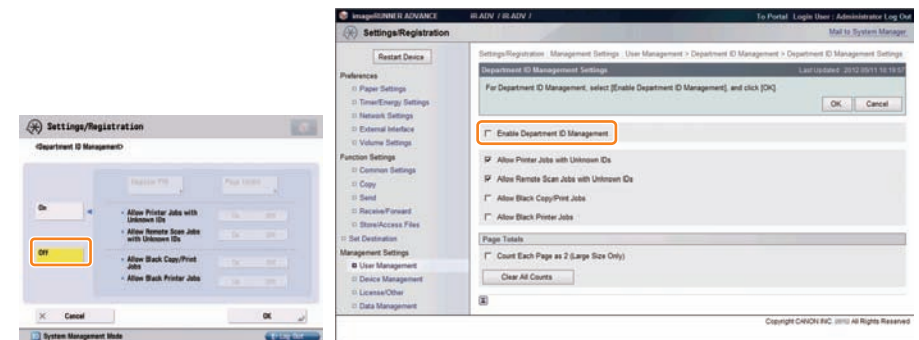
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- 2) Restart the device.

Restart the device in order to reflect the changes in login service.

- 3) Disable Depart ID Management.

In user mode ([Settings/Registration]), select [Management Settings] > [User Management] > [Department ID Management] > [OFF]. In the case of remote UI, access [Settings/Registration] > [Management Settings] > [User Management] > [Department ID Management] > [Department ID Management Settings], and deselect [Enable Department ID Management].

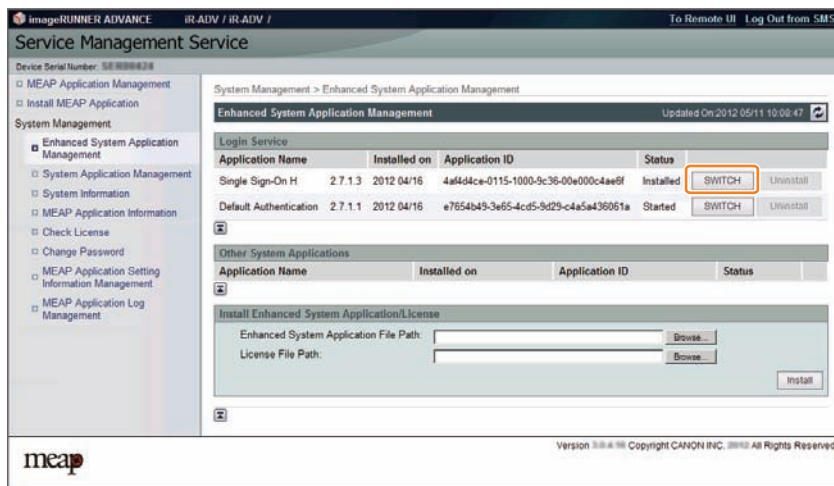


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4) Change the authentication method back to SSO-H authentication.

Access SMS, and select [Single Sign-On H] in [Enhanced System Application Management] > [Login Service]. (How to log in to SMS can be found in "Login to SMS".)



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5) Restart the device.

Restart the device in order to reflect the changes in login service.

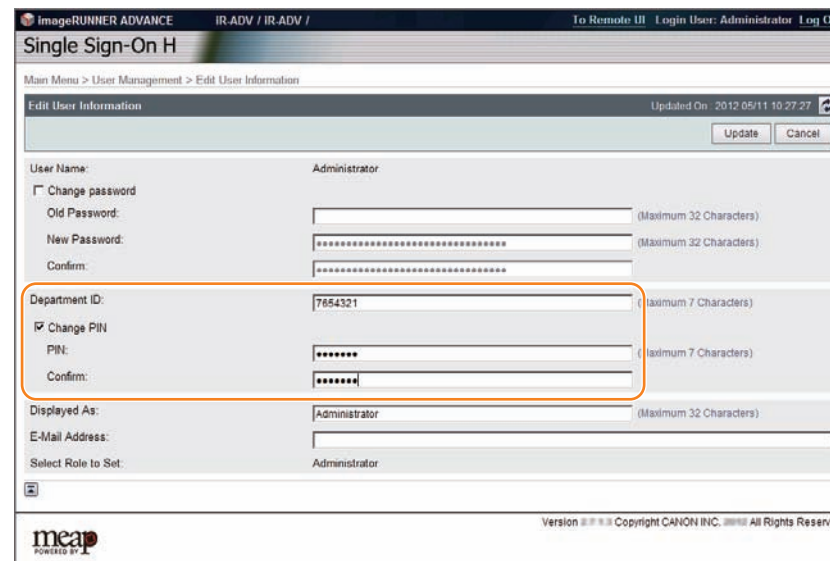
6) Change the user registration information of SSO-H.

Access the URL shown below, and change the content to the information registered in Department ID Management.

Or, import the setting file whose content you want to use.

SSO-H user registration information edition screen:

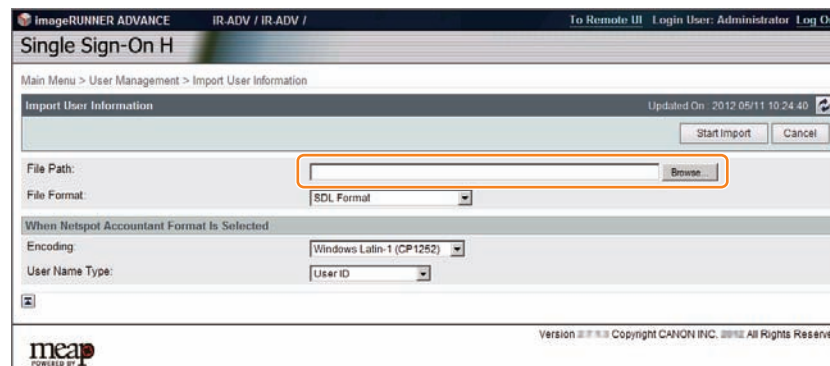
(SSO management screen [Main Menu] > [User Management] > [Edit User Information] or <https://<IP address>:8443/sso/Edit>).



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SSO-H user registration information import screen:

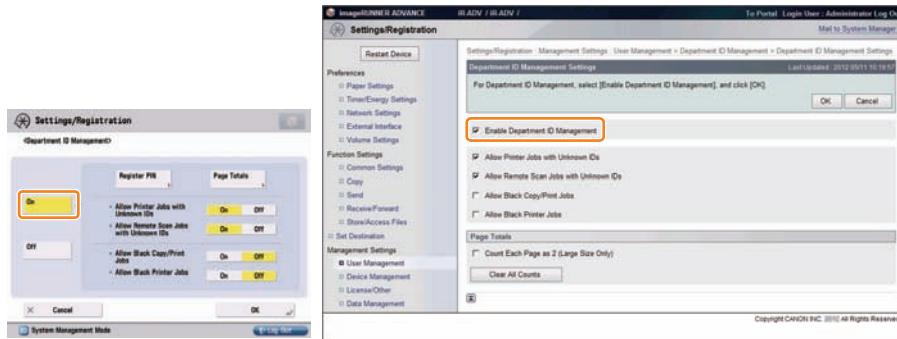
(SSO management screen [Main Menu] > [User Management] > [Import User Information] or (<https://<IP address>:8443/sso/Import>)).



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7) Enable Depart ID Management.

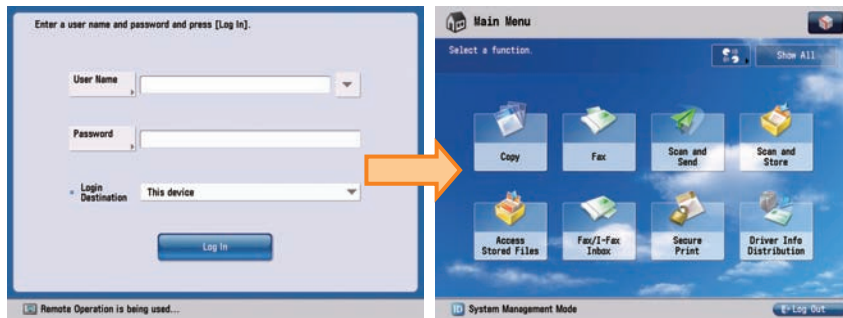
In user mode ([Settings/Registration]), select [Management Settings] > [User Management] > [Department ID Management] > [ON]. In the case of remote UI, access [Settings/Registration] > [Management Settings] > [User Management] > [Department ID Management] > [Department ID Management Settings], and select [Enable Department ID Management].



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8) Check that the device can be logged in.

Log off and then log on to check that the device can be logged in with an environment where Local Device Authentication and Department ID Management are enabled.



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Reference material  
Glossary

Terms & Acronyms	Definitions and Explanations
Application	A program unit to provide users with solutions.
Application ID	An identifier assigned to each application. A unique ID is assigned to each MEAP application.
Applet (Applet Type Application)	A MEAP application type created in Java. This type of applications show buttons on the touch panel display.
Code Sign	Information to check if an application is genuine. An application marketed in the normal procedure has a code sign assigned by LMS. MEAP platform rejects applications without Canon code signs for being installed or executed on the device.
CPCA (Common Peripheral Controlling Architecture)	Common Peripheral Controlling Architecture. CPCA defines an object model of peripheral devices. A client can control a device by creating or modifying objects in the device.
CPCA Java CL (Class Library)	CPCA Java Class Library. A Java class library, which is used to control a device.
Default Authentication -Department ID Management	The login service used when the department ID control is used but other authentication controls are not used. When the Department ID control is turned on, the login dialog prompts the users to enter the department ID and password. The dialog appears the initial screen of both the control panel on the MEAP device and Remote UI
Device Specification ID	ID allocated to each device type. This represents CPCA API specification and the version number to use MFP generic functions or obtain information including maximum allowable copies.
Esplet (Esplet Type Application)	A MEAP application type created in Java. This type of applications do not show user interfaces either on Local UI or Web. Esplet is a coined word created by Canon, consisting of [Espresso] or Italian coffee and [let] derived from Applet/Service.
File Description	An identifier for the OS to identify the destination file requested by a program. A program descriptor includes an identifier and information such as a file name and size, which helps OS to judge the file to be edited.
HID class	HID stands for Human Interface Device, representing man-machine interfaces of PC components and peripheral devices. HID class means USB class classified as HID.
iR Native application	The functionalities that existing imageRUNNER has such as Copy, Universal Send and Mailbox.
ISV (Independent Software Vendor)	Independent Software Vender. Software manufacturer who develops and/or sells applications and tools but does not entire computer systems. Refers application developer in this document.

Terms & Acronyms	Definitions and Explanations
J2ME (Java2 Platform Micro Edition)	Java 2 Platform Micro Edition. One of Java Platforms licensed by Sun Microsystems, Inc. It is applied for MEAP. Other devices such as cellular phones and PDA.
J2RE (Java 2 Runtime Environment)	A set of basic programs to run applications developed in the programming language of Java2. This set includes Java virtual machine providing runtime environment for Java applications among others. Java applets do not require J2RE since these are executed on Web browsers using Java runtime environment provided on browsers. However, standalone Java applications require Java runtime environment such as J2RE for execution. Runtime environments can be downloaded for free of charge from the Web site of Sun Microsystems, the Java developer.
Java	A programming language developed by Sun Microsystems, in the U. S. A. Low dependent on models and OSes and runs on various platforms. Taking advantage of this feature, many applications that runs on web servers uses Java. The MEAP platform uses J2ME - a type of Java.
JavaScript	A script language developed by Netscape Communications, in the U.S. A., runs on web browsers such as Netscape Navigator and Internet Explorer. Allows web designers to create interactive pages with HTML files such as animated buttons and display of timetables.
Java VM (Java Virtual Machine)	JAVA Virtual Machine. The Java byte code interpreter. The Virtual Machine acts as an interpreter for processing the byte code using the native instruction set.
License Access Number	A number issued for accessing license file. The Licensing server requires entries of application ID, expiration date/times information, and the number of access numbers, to issue license access numbers
Licensae File	A software manufacture of a MEAP application provides the users with the license files. Specifies the terms of agreement that a user concludes with the manufacturer. Required for installing a MEAP application.
LMS (License Management System)	The license is required for installing a MEAP application in a MEAPenabled iR device. LMS is the server issuing [License Files] as well as license access numbers.
Login Service	Manages user information of MEAP device. Authenticates users with user names and passwords. Three login services are available for MEAP device - Default Authentication, which provides department ID control, SDL (Simple Device Login) and SSO (Single Sign-On).
Mass Storage class	Mass Storage means a storage device with large capacity, generally secondary storage devices. Mass Storage class means USB class classified in the secondary storage device group.
MEAP (Multifunction Embedded Application Platform)	Multifunctional Embedded Application Platform. Provides an environment for executing application programs on a peripheral device. Uses the Java platform (J2ME - Java 2 platform Micro Edition) to run Java application for MEAP.
MEAP Contents	Required to install an MEAP application to a MEAP device.

Terms & Acronyms	Definitions and Explanations
MEAP Specifications (MEAP Spec Version)	MEAP Spec Version, the term used for the SDK. The version number that shows the APIs of the MEAP platform other than CPCA, such as network and security. The version number is not assigned for each device model. MEAP Application Runs on MEAP platform. Consists of application files (*.jar) and the license file (*.lic).
MEAP-enabled iR device	imageRUNNER (iR) devices with built-in MEAP platform.
MFP (Multi Function Peripheral)	Multi Function Peripheral. Peripheral device that supports more than one function, such as digital copier, printer, scanner, and fax.
OSGi (Open Service Gateway Initiative)	Open Service Gateway Initiative. See " <a href="http://www.osgi.org/">http://www.osgi.org/</a> ".
Portal Service	The web portal to gain access to a MEAP-enabled device. This service has been integrated in Remote UI top page in iR ADVANCE series.
Protocol	A set of rules applied to data transmission procedures over network. Major communication protocols include: <ul style="list-style-type: none"> <li>• FTP: File Transfer Protocol. This is a communication protocol or protocolimplemented commands to provide file transfer between a host and clients over TCP/IP network.</li> <li>• DHCP: An upward compatible protocol of BOOTP. This communication protocol allocates a dynamic IP address to each client machine upon communication startup on TCP/IP network and collects the allocated IP address when communication is completed. The server allocates one of multiple IP addresses and notifies the setup information to a client.</li> <li>• BOOTP: A communication protocol to automatically load setup information including IP address and a domain name from the server to a client on TCP/IP network.</li> <li>• RARP: A communication protocol to request IP address information via the network adaptor address (MAC address) of a client.</li> <li>• IPP: A communication protocol to execute remote printing between the print server and clients via Internet.</li> <li>• TCP/IP: A standard communication protocol required to access to Internet and other large-scale network.</li> </ul>
Proxy Server	Provides functions to store data fetched from remote servers. When a user request to display a web page that has been displayed and stored in the proxy, the proxy server read the stored data but does not access the remote server where the original page is present, for efficient access services. When a proxy server receives a URL from a PC, it searches the file in the cache and sends it to the PC if the requested file is found. If the requested file is not stored in the cache, it accesses the remote server of the URL to acquire the file and, at the same time, stores the acquired file in the cache so that the proxy server can quickly send the file at the next request.
Redistribution module	A built-in module of an application created with SDK. Applications without this module cannot work on MEAP platform.



Terms & Acronyms	Definitions and Explanations
SDK (Software Development Kit)	The kit containing information and tools required for software development.
Service	A functional unit or an application program working on MEAP platform. [Applications] are generally termed [Services] in Java world.
Servlet (Servlet Type Application)	A MEAP application type created in Java. This type of applications is designed to show user interface on the Web browser.
SMS (Service Management Service)	The web-base service to provide user interfaces for application life cycle management.
Socket	A virtual interface of an application for network communication. A user only needs to specify a socket as a unit of an address and a port from an application. This establishes the network connection for data transmission, eliminating complication related to detailed communication procedures.
SSO-H (Single Sign-On H)	Login service providing features of both local device authentication and domain authentication. The former is the method that iR device independently authorizes users; whereas the latter is that iR device links to the domain controller on the network in the Active Directory environment to authorize users.
Thread	A unit for program execution. A multi-task system allowing multiple programs to run concurrently assigns a memory space and other resources independently to each program, providing users with a feel as if only a program is running. At least one thread is generated upon a program generated.
URL (Uniform Resource Locator)	The method to denote Web page locations on Internet and the like. For instance, a URL on the Web is denoted as [http://www.w3.org/default.html]. [http] at the beginning means that an address following this is in a web page on the Internet.
USB	Abbreviation of Universal Serial Bus. This is the interface standard to link between information devices.
USB system driver	The general-purpose driver that control the behavior of the device, there are HID class driver, Mass Storage class driver and so on.

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## Option for exclusive individual measure

### Display Setting of Copy Icon (level2)

Make a setting as to whether to display/hide the copy screen (copy tab) on the control panel. This is the specification for users who want to customize hiding it on control panel.

Default value

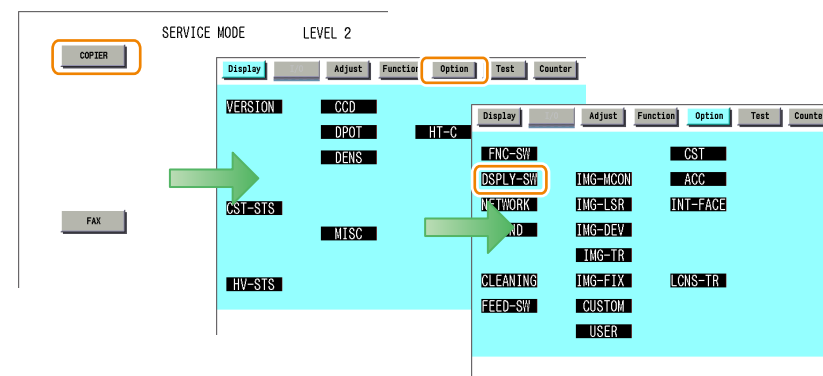
1: display

Setting range, item

0: hide 1: display

### Setting Procedure

- 1) Start [SERVICE MODE] in Level 1.
- 2) Press [COPIER] > [Option] > [DSPLY-SW] buttons.



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- 3) Press [UI-COPY] button.



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- 4) Press either 0 (hide) or 1 (display) on control panel (the numerical value input in the field is displayed), and press [OK] button.



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- 5) Check to see that it is reflected in setting field, and restart the device.

## ■ Error at starting up the MEAP application/Setting to hide JAM screen (level 2)

In the case that operation is restricted by MEAP application, hide the warning screen of error/JAM (such as JAM screen, door opening, no-toner). In the case that these errors occur, there will be a display indicating 'call the service personnel' etc.

### Note:

Part of the warning screens is displayed if shifting to the device screen.

- As for the screens for jam and no-toner, the warning screen (animation) can be displayed by pressing the followings: [Device Screen] > [Recovery Procedure]
- As for the screen for door opening, the warning screen cannot be displayed because there is no display for [[Device Screen] > [Recovery Procedure]

### Default value

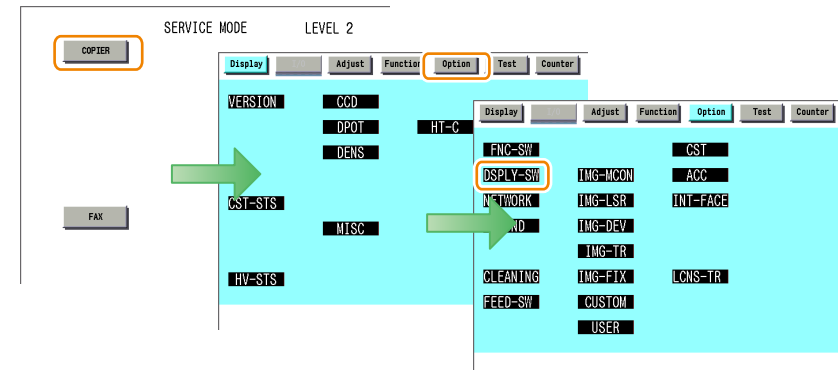
1: No activation of warning display

### Setting range, item

0: display warning screen 1: hide warning screen

## ● Setting Procedure

- 1) Start [SERVICE MODE] in Level 1.
- 2) Press [COPIER] > [Option] > [DSPLY-SW] buttons.



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3) Press [ANIM-SW] button.



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4) Press either 0 (display warning screen) or 1 (hide warning screen) on control panel (the numerical value input in the field is displayed), and press [OK] button.



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5) Check to see that it is reflected in setting field, and restart the device.

## Embedded RDS

### Product Overview

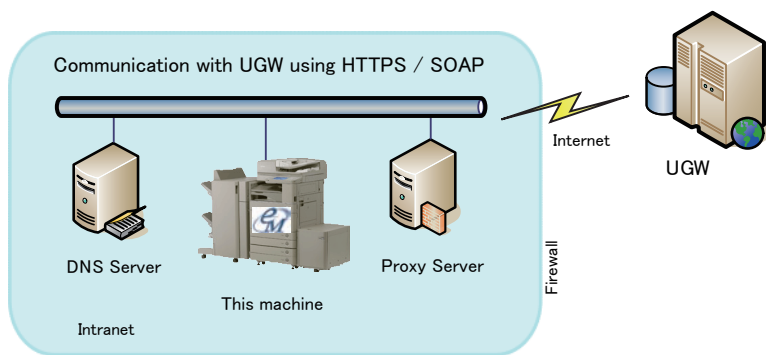
#### Overview

Embedded RDS (hereinafter referred to as E-RDS) is a monitoring program that runs on the host machine. When the monitoring option is enabled by making the setting on this machine, information such as the status change of the machine, counter information, and failure information are collected. The collected device information is sent to a remote maintenance server called UGW (Universal Gateway Server) via Internet, thus allowing for e-Maintenance/ imageWARE Remote (Remote Diagnosis System).

The following device information/ status can be monitored.

- Billing counts
- Parts counter
- Firmware info
- Service call error log
- Jam log
- Alarm log
- Status changes (Toner low/ out, etc.)

Since high confidentiality is required for the information shown above, it performs communication between this machine and the UGW using HTTPS/ SOAP protocol.



The e-Maintenance/ imageWARE Remote system using E-RDS

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#### Features and benefits

E-RDS embedded with a network module in advance can realize a front-end processing of e-Maintenance/ imageWARE Remote system without attaching any extra hardware equipment.

#### Major Functions

##### Service Call Button

If a user touches Service call button when corrupt image, paper jam, or/ and other problems has occurred, E-RDS generates an alarm and notifies it to UGW.

Moreover, E-RDS also notifies cancellation and the completion of the request

##### Service Browser

Service browser is a web browsing functionality only for service technicians in charge, and is used for referring to the FAQ contents which is connected to UGW.

In order to grasp on which devices the service browser is enabled, when the status of the service browser is changed from disabled (0: OFF) to enabled, E-RDS sends the browser information to the UGW.

##### Service mode menu Transmission

E-RDS sends the target service mode menu data to UGW in the following cases:

- When a specific alarm and service call error are detected
- When the setting is changed in service mode

The following shows the transmission timing and the target data for transmission in service mode menu:

Transmission timing	Transmitting data			Error retry
When the following alarm is detected.	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-ST5	
			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-STC 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-STC 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

- At the time of transmission when an alarm/ service call error is detected, even if the alarm log or service call log detected is the target code for service mode menu transmission, transmission of service mode menu data is not performed in the following cases.
  - An alarm log or service call log which has been detected by E-RDS as an unsent log at the time of power-on
  - An alarm log or service call log waiting for retry after its transmission failed
  - When service mode menu transmission (when an alarm log or service call error was detected) failed
  - Service mode menu data of which processing for acquisition has been already performed when an alarm or service call error subject to service mode menu transmission occurred
- When an alarm/ service call error occurred continuously AND when time correction/ change was performed to this machine during the target log transmission processing, a link number may be applied to the old log although it should be applied to the new log.
- 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 SRAM Board, initialization of the E-RDS setting (ERDS-DAT) and a communication test (COM-TEST) need to be performed. Failure to do so will result that the counter transmitting value to the UGW may become unusual.  
Also, after replacing the main controller board, all settings must be reprogrammed.
- 2) The following settings in service mode must not be change unless there are specific instructions to do so. Changing these values will cause error in communication with UGW.
  - Set port number of UGW  
[SERVICE MODE] > [COPIER] > [Function] > [INSTALL] > [RGW-PORT]  
Default : 443
  - URL setting of UGW  
[SERVICE MODE] > [COPIER] > [Function] > [INSTALL] > [RGW-ADR]  
Default : <https://a01.ugwdevice.net/ugw/agentif010>
- 3) If the e-Maintenance/imageWARE Remote contract of the device is invalid, be sure to turn OFF the E-RDS setting (E-RDS : 0).
- 4) This machine supports communication tests in user mode\*. When conducting a communication test in user mode, pay attention on the following points:
  - During a communication test in user mode, do not take any actions such as pressing a key. Actions are not accepted until the communication test is completed (actions are ignored).
  - When a communication test is being conducted from service mode or user mode, do not conduct a communication test from the other. These operations are not guaranteed.

### NOTE:

\*The user can conduct a communication test and seen the communication test result. If the communication results in failure, an error code (a hexadecimal number, 8 digits) appears on the local UI.



## E-RDS Setup

### Confirmation and preparation in advance

To monitor this machine with e-Maintenance/ imageWARE Remote, the following settings are required.

#### (1) Advance confirmation

Confirm with the UGW administrator that the device to be monitored with e-Maintenance/ imageWARE Remote is registered in the UGW.

#### (2) Advance preparations

The following network-related information needs to be obtained from the user's system administrator in advance.

##### Information item 1

IP address settings

- Automatic setting : DHCP, RARP, BOOTP
- Manual setting : IP address, subnet mask and gateway address to be set

##### Information item 2

Is there a DNS server in use?

If there is a DNS server in use, find out the following.

- Primary DNS server address
- Secondary DNS server address

##### Information item 3

Is there a proxy server?

If there is a proxy server in use, find out the following.

- Proxy server address
- Port No. for proxy server

##### Information item 4

Is proxy server authentication required?

If proxy server authentication is required, find out the following.

- User name and password required for proxy authentication

#### (3) Network settings

Based on the results of the information obtained in (2) Advance preparations, make this machine network related settings.

See Users' Guide for detailed procedures.

##### CAUTION:

When changes are made to the above-mentioned network settings, be sure to reboot this machine.



## Steps to E-RDS settings

1. Start [Service Mode] at Level 1.
2. Select [COPIER] > [Function] > [CLEAR] > [ERDS-DAT] and touch the [OK] button.

### NOTE:

This operation initializes the E-RDS settings to factory setting values.  
For the setting values to be initialized, see the section of "Initializing E-RDS settings".



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3. Perform installation or deletion of the CA certificate if necessary, and reboot this machine.
  - Installation of the CA certificate: Perform installation from SST or Remote UI.
  - Deletion of the CA certificate: When the following operation is performed, the CA certificate in the factory setting is automatically installed.

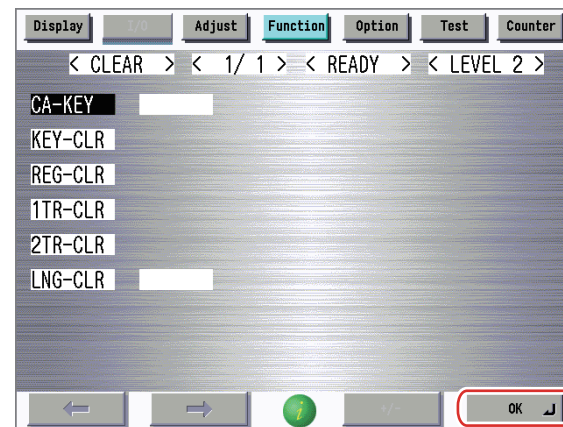
### CAUTION:

After following procedure, the registered key and CA certificate are deleted, and only the CA certificate installed at the time of shipment is registered.

It is therefore necessary to check with the user in advance.

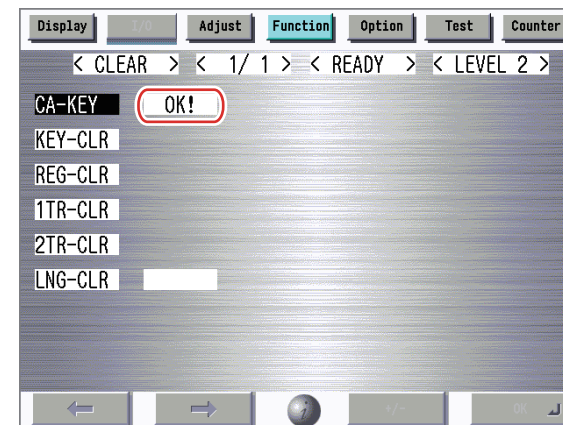
- (1) Start [Service Mode] at Level 2.

- (2) Select [COPIER] > [Function] > [CLEAR] > [CA-KEY] and touch the [OK] button.



F-2-374

"OK!" is displayed if the CA certificate is initialized. When "NG!" is displayed, see the section of "Troubleshooting" to execute the remedy, and then perform initialization of the CA certificate again and check to see if the CA certificate is initialized.



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- (3) Reboot this machine.

### CAUTION:

If a key and a CA certificate have been registered in order to use a function other than E-RDS, it is necessary to register again from SST or Remote UI.

- Start [Service Mode] at Level 1.
- Select [COPIER] > [Function] > [INSTALL] > [E-RDS].

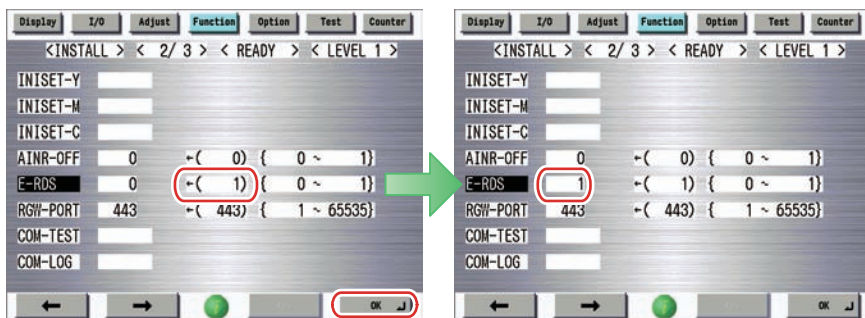


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- Touch the numeric button [1] on the control panel (the setting value is changed to 1) and touch the [OK] button. (The data is reflected to the setting value field.)

**NOTE:**

This operation enables the communication function with UGW.

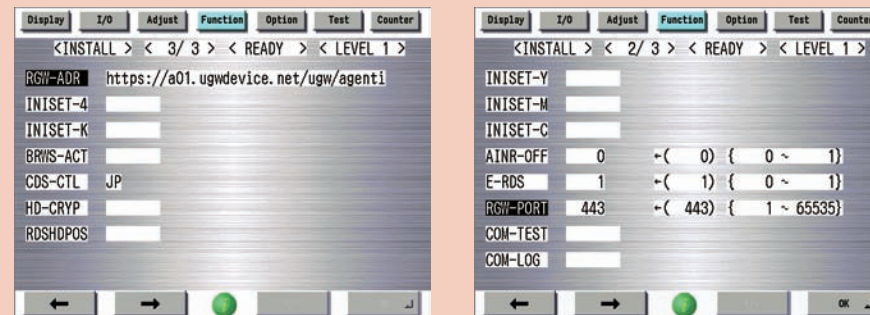


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**CAUTION:**

The following settings i.e. RGW-PORT and RGW-ADR in Service mode must not be change unless there are specific instructions to do so.

Changing these values will cause error in communication with UGW.



- Select [COM-TEST] and then touch [OK].

**NOTE:**

This initiates the communication test between the device and the UGW.



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If the communication is successful, "OK!" is displayed. If "NG!" (failed) appears, refer to the "Troubleshooting" and repeat until "OK!" is displayed.



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**NOTE:**

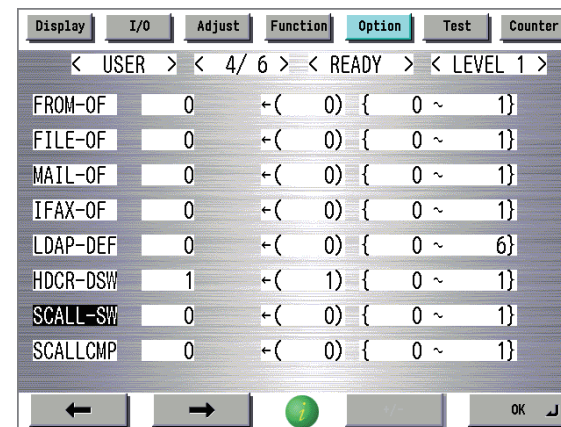
The communication results with UGW can be distinguished by referring to the COM-LOG. By performing the communication test with UGW, E-RDS acquires schedule information and starts monitoring and meter reads operation.

## Steps to Service Call button settings

### Steps for settings to display the service call button

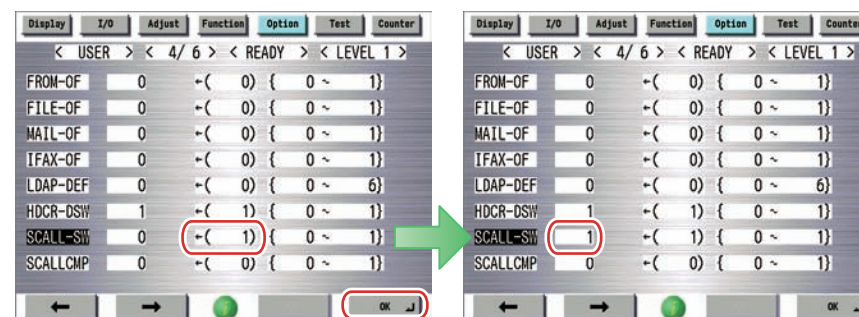
In the case of supporting a service by the service call button, follow the instructions described below to display the service call button.

1. Start [Service Mode] at Level 1.
2. Select [COPIER] > [Option] > [USER] > [SCALL-SW].



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3. Touch the numeric button [1] on the control panel (the setting value is changed to 1) and touch the [OK] button. (The data is reflected to the setting value field.)

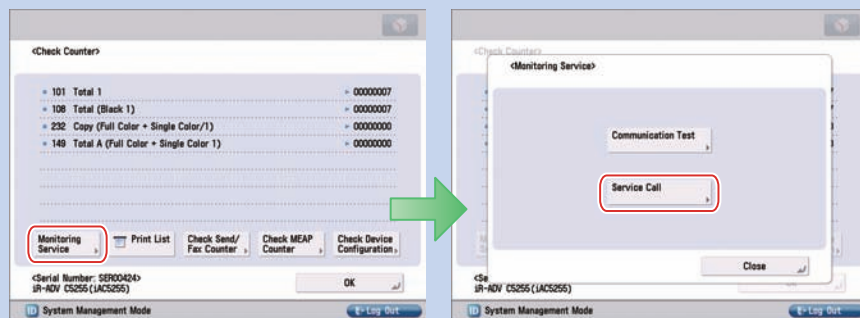


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## NOTE:

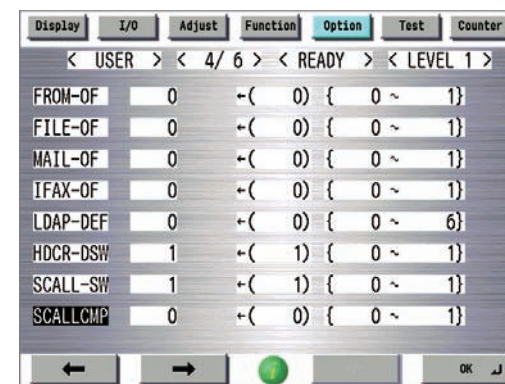
When the function is enabled, the [Service Call] button is displayed on the Monitoring Service screen by touching the [Monitoring Service] button on the Check Counter screen.



### Steps for settings of service call completion

When the service technician completes the work for the service call, follow the instruction as described below to execute the service call completion work.

1. Start [Service Mode] at Level 1.
2. Select [COPIER] > [Option] > [USER] > [SCALLCMP].

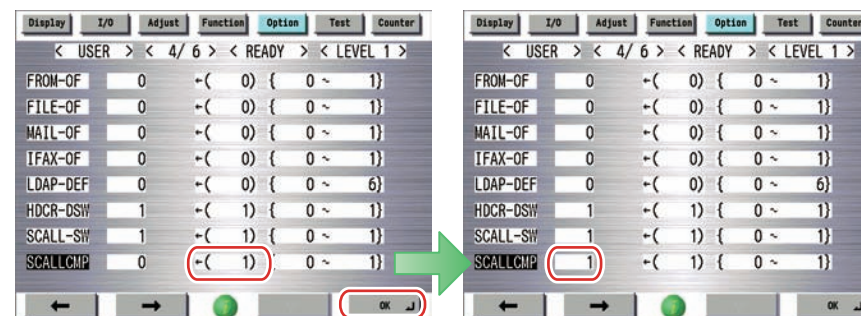


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3. Touch the numeric button [1] or [0] on the control panel (the setting value is changed to 1 or 0) and touch the [OK] button. (The data is reflected to the setting value field.)

## NOTE:

E-RDS generates an alarm of service call completion at this timing, and sends the alarm to UGW.



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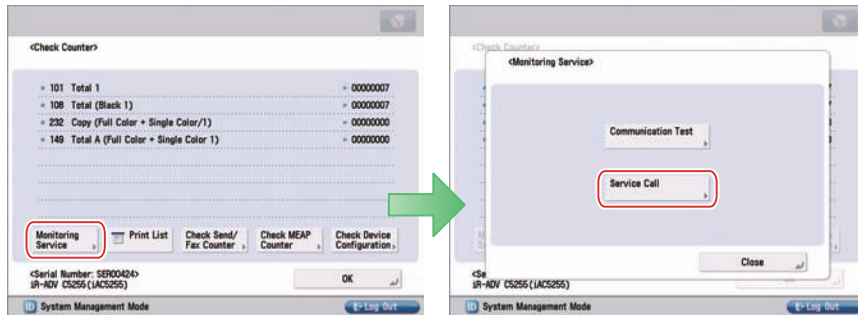
## NOTE:

In the current condition, touching the [OK] button completes the service call regardless of whether 0 or 1 is set.

## Steps for service call request

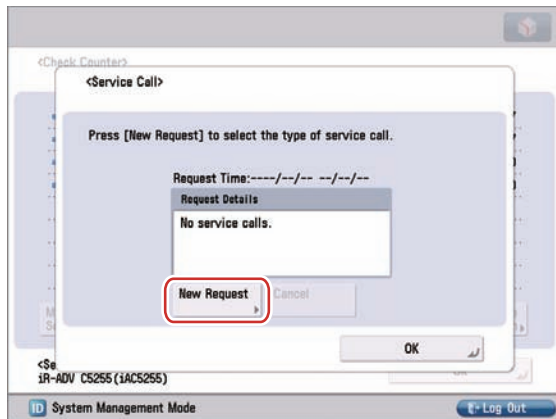
Users should follow the instructions as described below to request a service call.

1. Touch the [Counter Check] button on the control panel to display the Check Counter screen.
2. Touch the [Monitoring Service] button, and touch the [Service Call] button on the Monitoring Service screen.



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3. Touch the [New Request] button on the Service Call screen.



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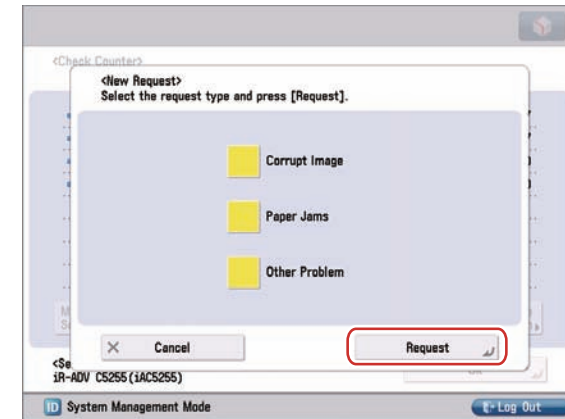
### CAUTION:

When a service call has been already requested, another service call cannot be sent. The previous service call needs to be canceled, or a service technician needs to perform processing for service call completion.

4. Select the request details and touch the [Request] button.

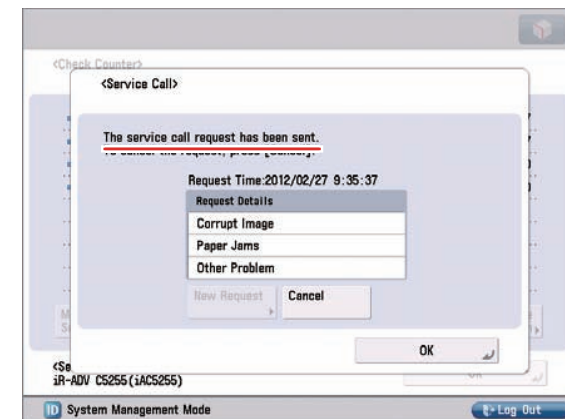
### NOTE:

E-RDS generates an alarm of service call request at this timing, and sends the alarm to UGW.



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5. If the service call request is successful, "The service call request has been sent." is displayed. If "Could not send the service call request." appears, refer to the "Troubleshooting" and repeat until "The service call request has been sent." is displayed.

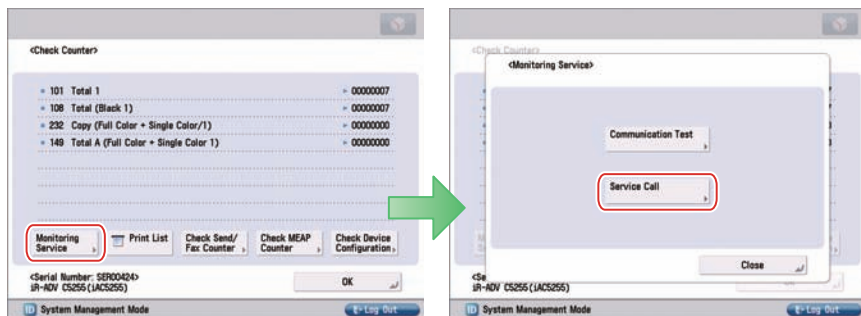


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## Steps for service call cancellation

To cancel the service call, follow the instructions as described below.

1. Touch the [Counter Check] button on the control panel to display the Check Counter screen.
2. Touch the [Monitoring Service] button, and touch the [Service Call] button on the Monitoring Service screen.

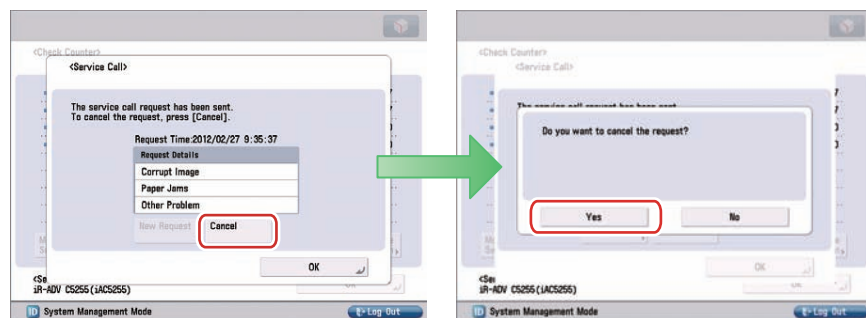


F-2-388

3. Touch the [Cancel] button, and touch the [Yes] button in the check screen.

### NOTE:

E-RDS generates an alarm of service call cancellation at this timing, and sends the alarm to UGW.



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4. "The request has been canceled." is displayed.



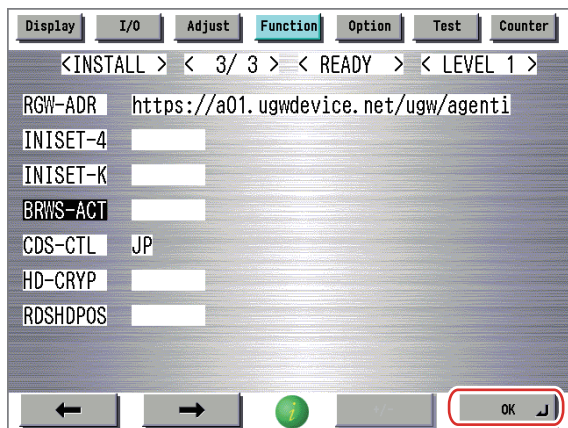
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## Steps to Service Browser settings

1. Start [Service Mode] at Level 1.
2. Select [COPIER] > [Function] > [INSTALL] > [BRWS-ACT] and then touch [OK].

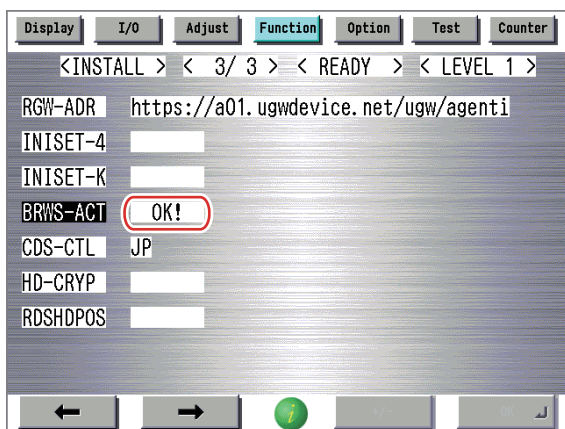
### NOTE:

When the status of the function is changed from disabled to enabled, E-RDS sends the browser information to the UGW.



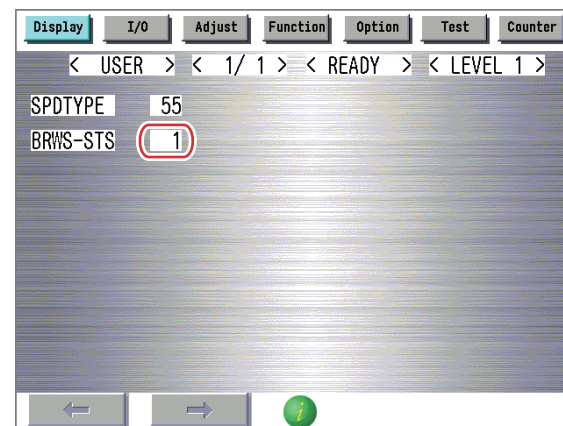
F-2-391

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.



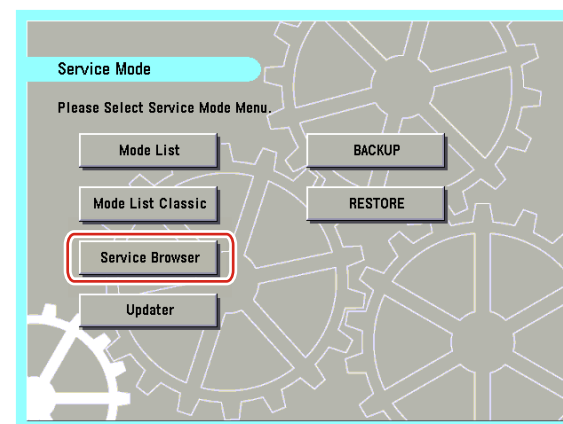
F-2-392

3. Reboot this machine.
4. Make sure that "1 (: ACTIVE)" is set under [COPIER] > [Display] > [USER] > [BRWS-ST5].



F-2-393

5. When the above-shown setting values are enabled, [Service Browser] is displayed in the Service Mode screen.



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### NOTE:

Generally, once service browsing is enabled (BRWS-ST5 : 1), it cannot be disabled (BRWS-ST5 : 0) again\*. To disable service browsing, clear SRAM.

\* The function is disabled (BRWS-ST5: 2) by executing BRWS-ACT again.



## ■ Initializing E-RDS settings

It is possible to clear the SRAM data of E-RDS and change the E-RDS setting back to the default value.

### ● Initialization procedure

1. Start [Service Mode] at Level 1.
2. Select [COPIER] > [Function] > [CLEAR] > [ERDS-DAT] and then touch [OK].



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### ● Setting values and data to be initialized

The following E-RDS settings, internal data, and Alarm filtering information are initialized.

- COPIER > Function > INSTALL > E-RDS
- COPIER > Function > INSTALL > RGW-ADR
- COPIER > Function > INSTALL > RGW-PORT
- COPIER > Function > INSTALL > COM-LOG

#### CAUTION:

In case of replacing the CA certificate file, even if initialization of E-RDS is executed, the status is not returned to the factory default.

When installing the certificate file other than the factory default CA certificate file, it is required to delete the certificate file after E-RDS initialization and install the factory default CA certificate file.

For detailed procedures, see "Steps to E-RDS settings - step 3."

## ● FAQ

### No.1

Q: In what case does a communication test with UGW fail?

A: The following cases can be considered in the becoming "NG!" case.

1. Name resolution was failed due to an incorrect host name or DNS server has been halted.
2. Network cable is blocked off.
3. Proxy server settings is not correct.

### No.2

Q: I want to know the interval of data transmitting from E-RDS to the UGW, and what data size is sent to the UGW?

A: The schedule of data transmitting, the start time are determined by settings in the UGW side. The timing is once per 16 hours by default, and counter data volume could be maximum 285 KB.

### No.3

Q: Will data which failed to be sent due to an error in communication with UGW be resent?

A: Data shown below will be resent.

- Jam log
- Service call log
- Alarm log
- Service mode menu

The newest data is resent only when the settings are changed in service mode.

- Browser information

It is resent only when the web browser option is enabled.

Data is resent endlessly (after 5, 10, 15, 20, 25, and 30 minutes since the occurrence of communication error; once 30 minutes have passed, it is resent at 30-minute intervals) until it is sent successfully. Resend continues even if the power is turned OFF and then ON.

### No.4

Q: What is the upper limit of the number of COM-LOGs? What is the upper limit of the number of characters of error information displayed in a COM-LOG?

A: Up to 30 log data can be saved. The data size of error information is maximum 128 characters.

No.5

Q: Although Microsoft ISA as a proxy server is introduced, the authentication check is failed.

Can E-RDS adopt with Microsoft ISA?

A: E-RDS must comply with "Basic" while "Integrated" authentication is used for Microsoft ISA (as default); therefore, authentication with E-RDS is available if you change the setting to "Basic" authentication on the server.

No.6

Q: Can I turn this machine power off during the e-Maintenance/ imageWARE Remote system operation?

A: While operating the e-Maintenance/ imageWARE Remote system, the power of the device must be ON. If power OFF is needed, do not leave the device power OFF for long time.

It will become "Device is busy, try later" errors if the power supply of network equipment such as HUB is made prolonged OFF.

No.7

Q: Although a Service call error may not be notified to UGW, the reason is what?

A: If a service technician in charge turns off the power supply of this machine immediately after error occurred once, It may be unable to notify to UGW because data processing does not take a time from the controller of this machine to NIC though, the data will be saved on the RAM.

If the power supply is blocked off while starting up, the data will be inevitably deleted.

No.8

Q: How does E-RDS operate while this machine is placed in the sleep mode?

A: While being in Real Deep Sleep, and if data to be sent is in E-RDS, the system wakes up asleep, then starts to send the data to the UGW. The system also waits for completion of data transmission and let the device to shift to asleep status again.

However, transition time to the Real Deep Sleep depends on the device, and the transition to sleep won't be done if the next data transmission will be done within 10 minutes.

No.9

Q: Is E-RDS compatible with Department counter?

A: No, E-RDS does not support Department counter.

No.10

Q: Is there any setting to be made on the device side to enable the service mode menu transmission function? Moreover, what is Service mode menu set as the object of transmission?

A: No steps peculiar to Transmitting Service mode menu. As for the data that applies to transmission of the service mode, see the "Service mode menu Transmission".

No.11

Q: What service browser data is transmitted to UGW by E-RDS in what timing?

A: The service browser data to be transmitted and the transmission timing are shown below.

Transmission timing	Detailed procedure	Transmission information	Error occurs
When the service browser is enabled from the disabled state [OFF]	1) Specify the service browser setting in the service mode menu. 2) Send browser information to UGW. 3) Once obtaining OK response from UGW, enable the service browser mode [ACTIVE]. (To use the setting, it is necessary to reboot this machine)	Service browser mode: [Register]  WEB browser option: [ON] or [OFF] according to the license status	Retransmission is not performed.  ("Disabling [OFF]" continues to be set.)

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No.12

Q: Can I make another service call request when I have already requested a service call?

A: No, you cannot make another service call request if you have already made a service call request.

Touch the [Cancel] button to cancel the service call which you'd made. Or the service technician performs a service call completion process.

No.13

Q: Is the "Requesting" status cancelled when this machine is rebooted?

A: The requesting status is not cancelled even if the device is rebooted. The information of the notified service call request (the time that the request was made, the service call request description) is also retained during the "Requesting" status.

No.14

Q: Some part of information seems to be suppressed as screens passes: Settings/Registration > Preferences > Network > TCP/ IP Settings, when the device is connected with a PS server unit. How the authentication information such as CA certificate is dealt?

A: The certificate-related items are displayed. Even when the device is connected with a PS Server Unit, E-RDS functions.

No.15

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 <sup>*1</sup>	Sent <sup>*2</sup>
Immediate send (Service call log / Alarm log / Jam log)	Sent	-	Sent <sup>*2</sup>

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\*1: Immediately sent if the send time has already passed at power-on.

\*2: Sent after recovery from sleep mode.

## Error code and strings

The following error information is output in the communication error log details display screen. (Here, "server" means UGW.)

- The error information are displayed in the following form.  
[\*] [Error strings] [Method name] [Error details provided by UGW]

### NOTE:

"\*\*" is added to the top of the error text in the case of an error in communication test (method name: getConfiguration or communicationTest) only.

No.	Code	Error strings	Cause	Remedy
1	0000 0000	SUSPEND: mode changed.	Unmatched Operation Mode	Initialize the E-RDS setting (ERDS-DAT).
2	0500 0003	SUSPEND: Communication test is not performed.	Rebooting the device while the communication test had not been performed although E-RDS is enabled.	Perform a communication test (COM-TEST).
3	0xxx 0003	Server schedule is not exist	Blank schedule data have been received from UGW.	Perform and complete a communication test (COM-TEST).
4	0xxx 0003	Communication test is not performed	Communication test has not completed.	Perform and complete a communication test (COM-TEST).
5	84xx 0003	E-RDS switch is setted OFF	A communication test has been attempted with the E-RDS switch being OFF.	Set E-RDS switch (E-RDS) to 1, and then perform a communication test (COM-TEST).
6	8600 0002 8600 0003 8600 0101 8600 0201 8600 0305 8600 0306 8600 0401 8600 0403 8600 0414 8600 0415	Event Registration is Failed	Processing (event processing) within the device has failed.	Turn the device OFF/ ON. If the error persists, replace the device system software. (Upgrade)
7	8700 0306	SRAM version unmatch!	Improper value is written in at the head of the Main Controller PCB 2 SRAM domain of E-RDS.	Turn the device OFF/ ON.
8	8700 0306	SRAM AeRDS version unmatch!	Improper value is written in at the head of the Main Controller PCB 2 SRAM domain of Ae-RDS.	Turn the device OFF/ ON.

No.	Code	Error strings	Cause	Remedy
9	8xxx 0004	Operation is not supported	Method which E-RDS is not supporting attempted.	Contact help desk
10	8xxx 0101	Server response error (NULL)	Communication with UGW has been successful, but an error of some sort has prevented UGW from responding. When (Null) is displayed at the end of the message, this indicates that there has been an error in the HTTPS communication method.	Perform and complete a communication test (COM-TEST).
11	8xxx 0201 8xxx 0202 8xxx 0203 8xxx 0204 8xxx 0206	Server schedule is invalid	During the communication test, there has been some kind of error in the schedule values passed from UGW.	When the error occurs, report the details to the support section. After the UGW side has responded, try the communication test again.
12	8xxx 0207 8xxx 0208	Internal Schedule is broken	The schedule data in the inside of E-RDS is not right.	Perform a communication test (COM-TEST).
13	8xxx 0221	Server specified list is too big	Alarm/Alert filtering error: The number of elements of the list specified by the server is over restriction value.	Alert filtering is not supported by UGW.
14	8xxx 0222	Server specified list is wrong	Alarm filtering error: Unjust value is included in the element of the list specified by the server.	Alert filtering is not supported by UGW.
15	8xxx 0304	Device is busy, try later	The semaphore consumption error at the time of a communication test.	Try again a communication test after a period of time.
16	8xxx 0709	Tracking ID is not match	When upgrading firmware, the TrackingID notified by Updater differs from the thing of UGW designates.	Obtain the sublog, and contact the support department of the sales company.
17	8xxx 2000	Unknown error	Some other kind of communication error has occurred.	Perform and complete a communication test (COM-TEST).
18	8xxx 2001	URL Scheme error(not https)	The header of the URL of the registered UGW is not in https format.	Check that the value of URL of UGW (RGW-ADR) is https://a01.ugwdevice.net/ugw/agentif010.
19	8xxx 2002	URL server specified is illegal	A URL different to that specified by the UGW has been set.	Check that the value of URL of UGW (RGW-ADR) is https://a01.ugwdevice.net/ugw/agentif010.

No.	Code	Error strings	Cause	Remedy
20	8xxx 2003	Network is not ready, try later	Communication attempted without confirming network connection, just after booting up a device in which the network preparations are not ready.	Check the network connection, as per the initial procedures described in the troubleshooting. Perform a communication test (COM-TEST) about 60 seconds later, after turn on the device.
21	8xxx 2004	Server response error ([Hexadecimal]) [Error detailed in UGW] <sup>1</sup>	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"> <li>TCP/IP communication fault</li> <li>The IP address of device is not set.</li> </ul>	Check the network connection, as per the initial procedures described in the troubleshooting.
23	8xxx 200B	Server address resolution error	Server address name resolution has failed.	Check that the value of URL of UGW (RGW-ADR) is https://a01.ugwdevice.net/ugw/agentif010.
24	8xxx 2014	Proxy connection error	Could not connect to proxy server due to improper address.	Check proxy server address and re-enter as needed.
25	8xxx 2015	Proxy address resolution error	Could not connect to proxy server due to name resolution error of proxy address.	Check that the proxy server name is correct. If the proxy server name is correct, check the DNS connection, as per the initial procedures described in the troubleshooting.
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.
27	8xxx 2028	Server certificate error	<ul style="list-style-type: none"> <li>No route certificate installed in device.</li> <li>Certificate other than that initially registered in the user's operating environment is being used, but has not been registered with the device.</li> </ul>	Install the latest device system software. (Upgrade)
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.

No.	Code	Error strings	Cause	Remedy
29	8xxx 2046	Server certificate expired	<ul style="list-style-type: none"> <li>The route certificate registered with the device has expired.</li> <li>Certificate other than that initially registered in the user's operating environment is being used, but has not been registered with the device.</li> <li>The device time and date is outside of the certificated period.</li> </ul>	Check that the device time and date are correctly set. If the device time and date are correct, upgrade to the latest system software.
30	8xxx 2047	Server response time out	Due to network congestion, etc., the response from UGW does not come within the specified time. (HTTPS level time out)	If this error occurs when the communication test is being run or Service Browser is being set, try again after a period of time.
31	8xxx 2048	Service not found	There is a mistake in the UGW URL, and UGW cannot be accessed. (Path is wrong)	Check that the value of URL of UGW (RGW-ADR) is https://a01.ugwdevice.net/ugw/agentif010.
32	8xxx 2052	URL error	The data which is not URL is inputted into URL field.	Check that the value of URL of UGW (RGW-ADR) is https://a01.ugwdevice.net/ugw/agentif010.
33	8xxx 2058	Unknown error	SOAP Client fails to obtain SOAP Response. Possibility of a problem in UGW or of a temporary problem in the network load.	Perform and complete a communication test (COM-TEST).
34	8xxx 2063	SOAP Fault	SOAP communication error has occurred.	Check that the value of port number of UGW (RGW-PORT) is 443.
35	xxxx xxxx	Device internal error	An internal error, such as memory unavailable, etc., has occurred during a device internal error phase.	Turn the device OFF/ ON. Or replace the device system software. (Upgrade)
36	xxxx xxxx	SUSPEND: Initialize Failure!	Internal error occurred at the initiating E-RDS.	Turn the device OFF/ ON.

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\*1: [Hexadecimal]: indicates an error code returned from UGW.

[Error details in UGW]: indicates error details returned from UGW.

# Updater

## Overview

### Outline

Updater provides functions that enable network communication with Content Delivery System (hereinafter CDS) or Local CDS to install firmware, MEAP applications and system options.

- Firmware Installation**  
 Updater function enables users to distribute firmware through CDS or Local CDS via Internet. Particularly on e-Maintenance/UGW (called NETEYE in Japan)-enabled devices, firmware can be updated remotely, which effectively slashes costs incurred in field services.
- MEAP Application/System Option Installation**  
 By linking devices to CDS and License Management System (providing the function to manage licenses; hereinafter LMS), applications can be installed in devices via Updater, regardless of those not embedded (MEAP application) or embedded (system options) in devices.

### Installing Firmware

With link to Updater, service technicians provide firmware install services in the following 3 methods.

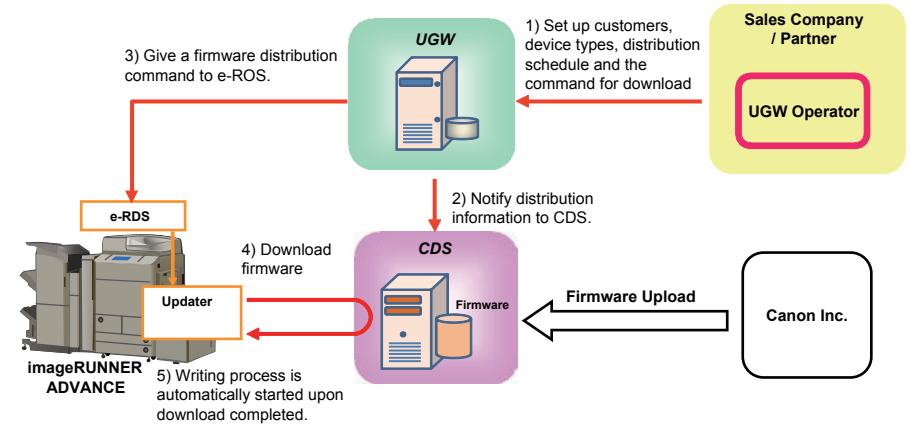
Distribution Method	Download Commanded by:	Update Timing	Downloadable Firmware Versions		
			Previous Ver	Current Ver	Newer Ver
a. UGW-linked Download / Update (Full-remote update)	UGW	Auto	No	Yes*1	Yes*2
b. UGW-linked Download (Remote Distribution / Update)	UGW	Manual	Yes	Yes*1	Yes
c. Manual Download / Update (On-site Update via Service mode)	Local UI	Auto	No	Yes*1	Yes*2
		Manual	Yes	Yes*1	Yes
d. Local CDS Download and Update (iW EMC + DFU Plug-in*3)	iW EMC + DFU Plug-in*3	Auto	No	No	Yes*2
e. Update by the SST	SST	-	Yes	Yes	Yes

T-2-103

- \*1: Do not execute distribution of updated module only.
- \*2: Only the versions for which remote update is allowed can be selected.
- \*3: Device Firmware Update Plug-in

#### a. UGW-linked Download and Update (Full-Remote Update)

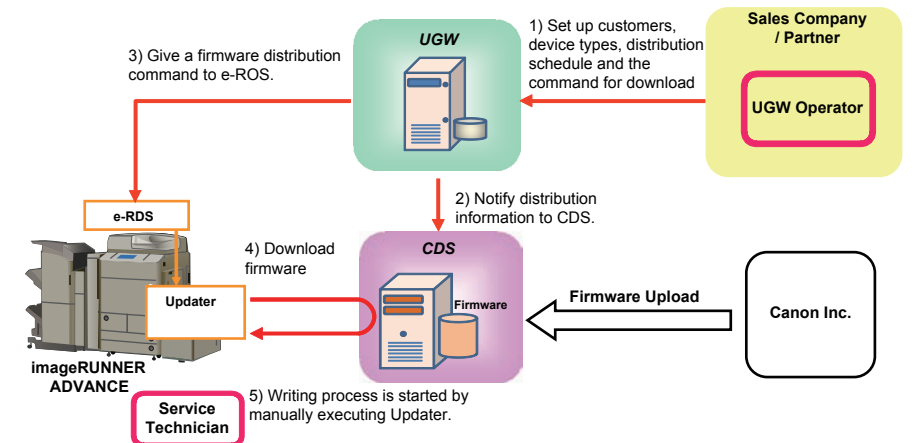
If the device is linked to UGW and the distribution schedule and update setting are registered on UGW in advance, full remote firmware update is available on an imageRUNNER ADVANCE-series device. Upon downloaded from CDS, the firmware is updated on the device.



F-2-396

#### b. UGW-linked Download (Remote Distribution / Update)

If the device is linked to UGW and the distribution schedule is registered on UGW in advance, firmware can be distributed to an imageRUNNER ADVANCE-series device before a service technician actually visits the customer site. This allows the service technician to update the firmware manually immediately after completing device inspection.

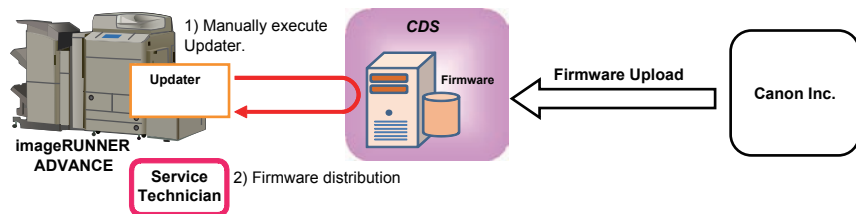


F-2-397



c. Manual Download and Update (On-site Update via Service Mode)

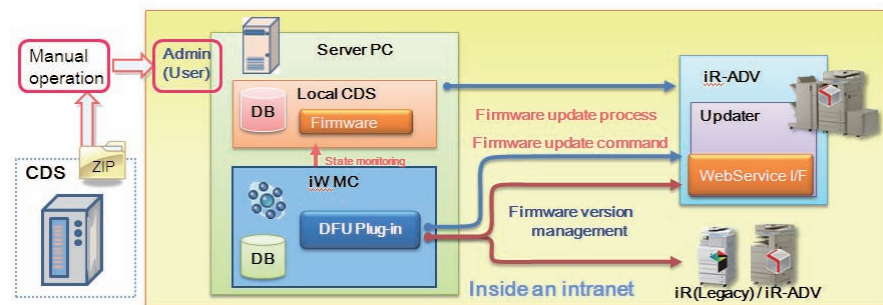
If an imageRUNNER ADVANCE-series device has connection with the external network, a service technician can gain access to CDS via Service mode to download and update firmware. This allows service technicians to update the firmware as needed on the customer site even without PCs.



F-2-398

NOTE:  
“External network” here means the network connecting the device to CDS via Internet.

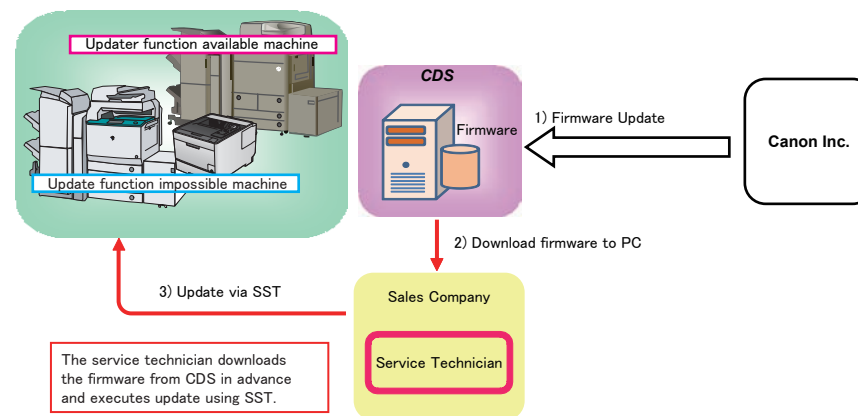
d. As preparation for distribution, obtain firmware from the update CDS using iW EMC + Device Firmware Update Plug-in (DFU Plug-in) and register the firmware in the local CDS. In service mode of the host machine, make preparations to allow reception of firmware distributed from the local CDS. The firmware can be updated on the user's intranet by executing the task from Device Firmware Update Plug-in on iW EMC.



F-2-399

e. SST update

In the cases of devices other than imageRUNNER ADVANCE series and devices of imageRUNNER ADVANCE series that are not connected with external network, the foregoing three methods cannot be used to distribute firmware. Firmware released in the future will be distributed via CDS instead of distribution using a master CD. In the field, these firmware can be downloaded from CDS using a PC web browser.



F-2-400

NOTE:  
Users are able to gain firmware distribution in the following 4 methods by introducing CDS. See User Manual for detailed information.

Distribution Method	Download Commanded by	Update Timing	Downloadable Firmware Versions		
			Previous Ver	Current Ver	Newer Ver
Manual download/ update via Local UI	Local UI	Auto	No	No	Yes *1
		Manual	No	No	Yes *1
Manual download/ upload via Remote UI	Remote UI	Auto	No	No	Yes *1
		Manual	No	No	Yes *1
Special download/ upload via Remote UI	Remote UI	-	Specific version only (Obtain it separately)		
Local CDS Download and Update (iW EMC + DFU Plug- in*3)	Firmware update process Plug- in	Auto	No	No	Yes *1

\*1: Only the latest version of Remote update-enabled version is downloadable.



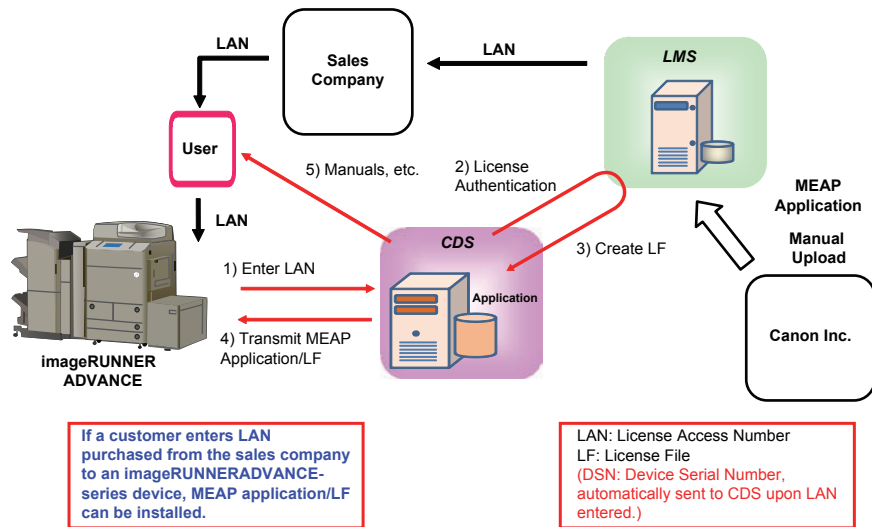
## Installing MEAP Application/System Option

The following is the installation method of MEAP application/system option which is enabled by applying CDS.

### a. LMS-linked MEAP Application/System Option Installation

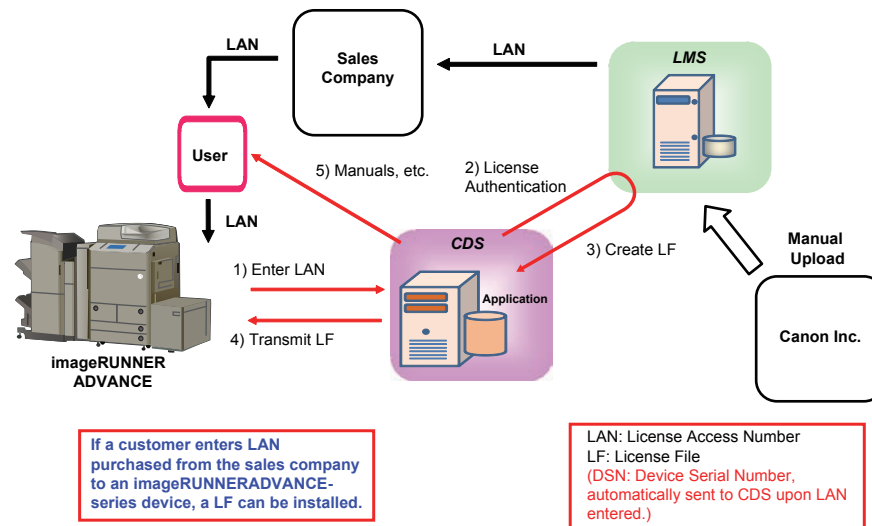
If an imageRUNNER ADVANCE-series device is connected to the external network, user or service technician can gain access to CDS from User mode to install a MEAP application or a system option.

#### Installing MEAP Application



F-2-401

#### Installing System Option

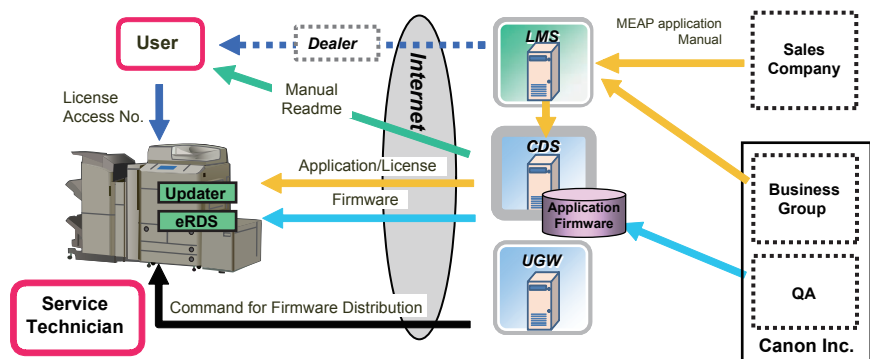


F-2-402

## System Configuration

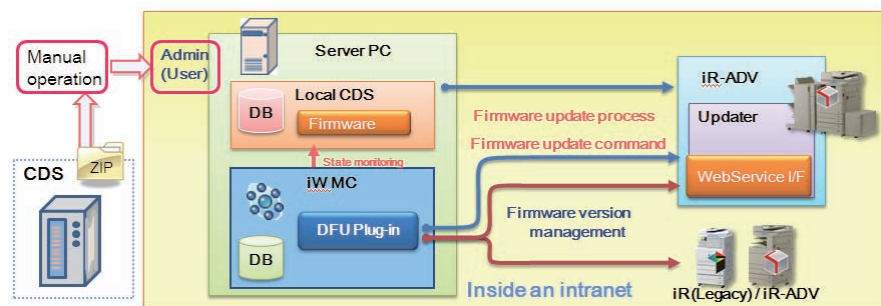
The figure below schematically shows the system configuration.

CDS



F-2-403

Local CDS



F-2-404

## List of Functions

The matrix below shows the list of functions provided by Updater.

Category	Function	Service Mode	User Mode	Remote UI	UGW-linked
Firmware	Checking firmware compatibility	Yes	-	-	-
	Checking special firmware	Yes	-	-	-
	Checking latest firmware version	-	Yes	Yes	-
	Registering/deleting firmware distribution schedule	Yes	Yes	Yes	-
	Confirming and downloading firmware	Yes	Yes	Yes	Yes
	Updating downloaded firmware	Yes	Yes	Yes	-
	Cancelling downloaded firmware	Yes	Yes	Yes	-
	Acquiring firmware distribution information registered from UGW	-	-	-	Yes
	Notifying firmware version information	-	-	-	Yes
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

T-2-104

Local CDS

Category	Function
Firmware	Checking latest firmware version
	Registering/deleting firmware distribution schedule
	Confirming and downloading firmware
	Updating downloaded firmware
MEAP application/ system option	Inquiring license for MEAP application/system option
	Installing MEAP application / system option
System Management	Settings
	Testing communications
	Displaying update logs
	Displaying system logs
Internal system error notification	Notifying internal system error occurrence to distribution server
	xxxxx

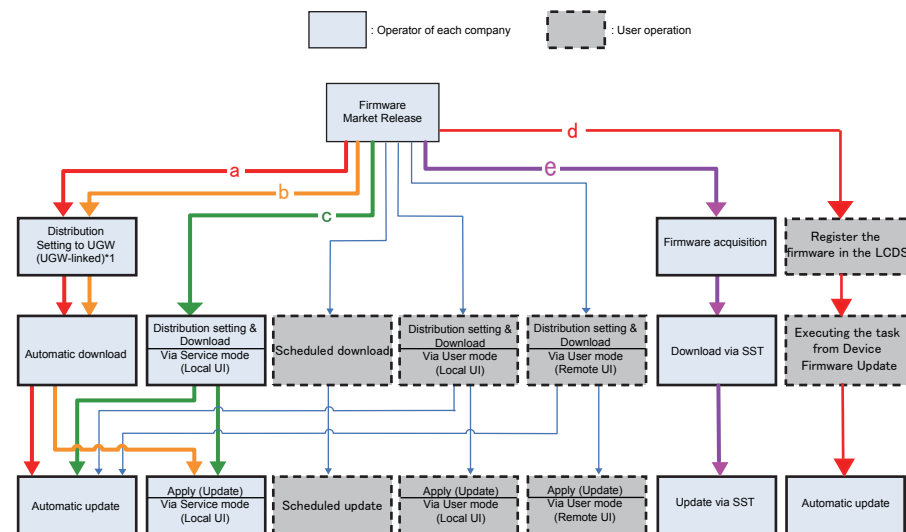
T-2-105

■ Distribution Flow

● Firmware Installation Flow

Service technicians provide firmware install services in the following 4 methods.

- a: UGW-linked download and update
- b: UGW-linked download
- c: Manual download and update
- d: Local CDS Download and Update (iW EMC + DFU Plug-in)
- e: Update via SST

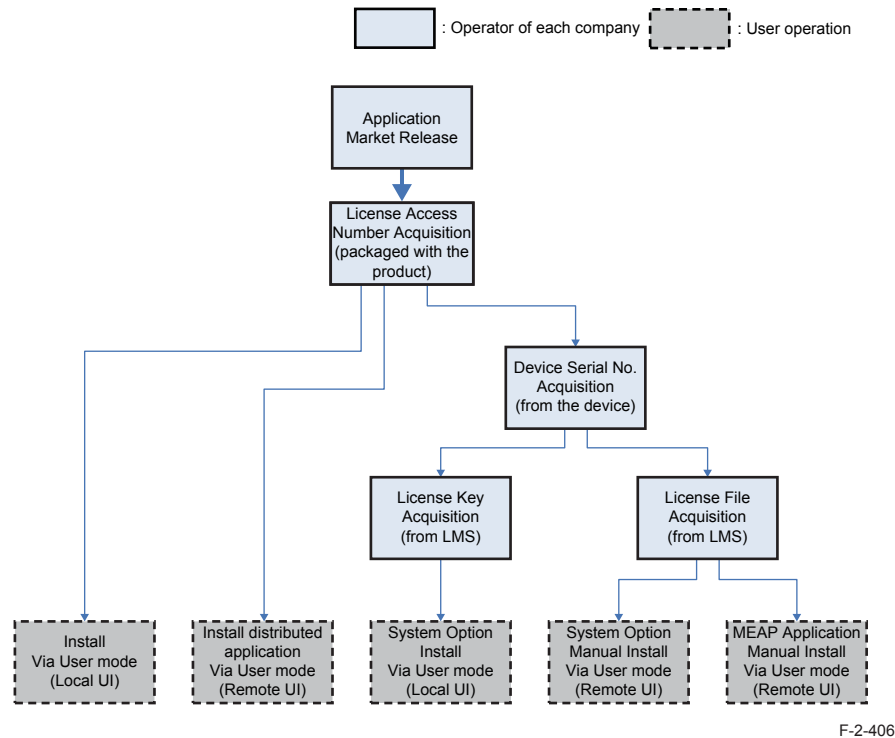


F-2-405

\*1: Schedules for UGW-linked distribution are maintained on CDS.

## MEAP Application/System Option Installation Flow

MEAP application/system option installation method using service mode is not provided. Be sure to use the user mode to install.



## 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 *

T-2-106

\*The data are guaranteed even if cut off in the middle of a job. It becomes the recovery object after the device reboot and carry out send / reception again.

Even during transfer, Pull SCAN job processing is cancelled soon after scanning is completed.

Firmware update is cancelled if the jobs are not completed within 10 minutes. If this occurs, the error code, 8x001106, will be returned (different numbers will be shown for x depending on the execution modes).

Firmware update is executed if the jobs stated above are not in the queue.

Follow the shutdown sequence to reboot the device after the firmware is updated.

## Preparation

### Overview of Preparation

The following should be prepared before using Updater.

- For updating of firmware

Service Mode	COPIER > FUNCTION > INSTALL	COPIER > OPTION > FNC-SW				
	CDS-CTL		CDS-UGW	CDS-FIRM	LOCLFIRM	LCDSFLG
Installation Method	Setting Sales Company's HQ	Network Settings	Enabling UGW Link	Enabling [Update Firmware] Button of User Mode	Enabling [Manual Update] Button of User Mode (Remote UI)	Enabling [Local CDS]
UGW-linked Download and Update	Yes	Yes	Yes	-	-	-
UGW-linked Download	Yes	Yes	Yes	-	-	-
Manual Download and Update	Yes	Yes	-	-	-	-
Manual Download and Update via Local UI	Yes	Yes	-	Yes	-	-
Manual Download and Update via Remote UI	Yes	Yes	-	Yes	-	-
Special Download and Update via Remote UI	Yes	-	-	-	Yes	-
Scheduled update via Local CDS	-	-	-	Yes	-	Yes

T-2-107

- For Install of Application

Installation Method	Network Settings	Enabling [Install Application/Options] Button of User Mode
LMS-linked Installation	Yes	-
LMA-linked installation via Local UI	Yes	Yes
LMS-linked installation via Remote UI	Yes	Yes

T-2-108

### Setting Sales Company's HQ

When using devices input in the markets listed below, the default setting of Sales Company's HQ should be changed before obtaining firmware distributed from CDS. Unless the setting is changed properly, the desired firmware may not be able to be selected.

Market	Default Setting of Sales Company's HQ	Setting of Sales Company's HQ after Change
Canada	US	CA
Latin America	US/SG	LA
Hong Kong	SG	HK

T-2-109

Go to the following screen to change the setting of Sales Company's HQ.

Service Technician	Setting of Device Service Mode (Level 1)	COPIER > FUNCTION > INSTALL > CDS-CTL
--------------------	--	---------------------------------------

#### NOTE:

The list below shows the setting of Sales Company's HQ for CDS-CTS by market. Check and adhere to the appropriate setting for your market.

<List of Sales Company's HQ and the settings for CDS-CTL>

Japan = JP	China = CN
USA = US	Hong Kong = HK
Singapore = SG	Australia = AU
Europe = NL	Canada = CA
Korea = KR	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:

- Before using UGW link or User mode, see the sections below to prepare as required.  
"Enabling UGW Link"  
"Enabling [Update Firmware] Button of User Mode"  
"Enabling [Install Application/Options] Button of User Mode"
- "External Network" here means the network connecting the device to CDS via Internet.

### Connection to the local CDS

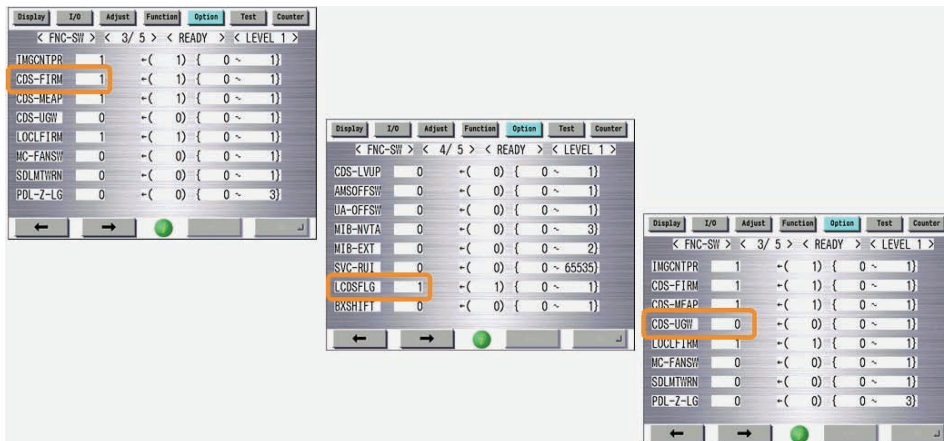
When updating firmware using iW EMC + Device Firmware Update Plug-in (DFU Plug-in), start service mode and enable the following setting.

```
[COPIER] > [OPTION] > [FNC-SW] > [CDS-FIRM]
```

```
[COPIER] > [OPTION] > [FNC-SW] > [LCDSFLG]
```

Then, disable the following setting.

```
[COPIER] > [OPTION] > [FNC-SW] > [CDS-UGW]
```



F-2-407

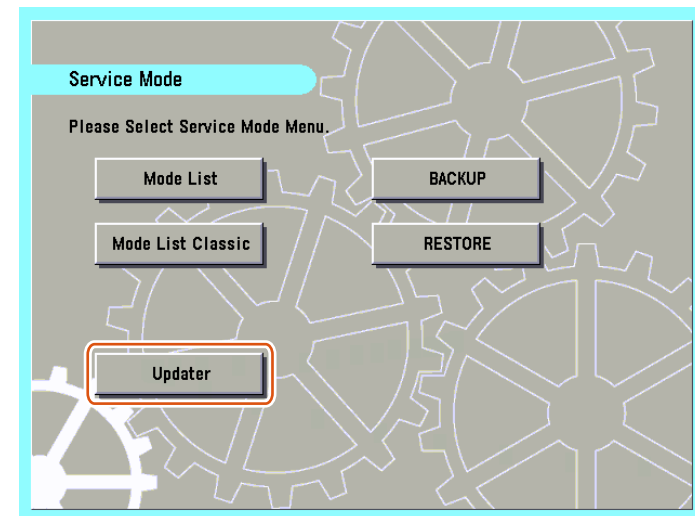
[COPIER] > [OPTION] > [FNC-SW]		CDS	Local CDS
CDS-FIRM	To set whether to permit update of the firmware by user (administrator). When "1: Enabled" is set, Updater can be activated from the user mode. 0 to 1 0: Disabled, 1: Enabled	1	1
LCDSFLG	Whether to display or hide the screen for setting the server to be connected 0: Hide 1: Display	0	1
CDS-UGW	To set whether to permit update of the firmware from the UGW server. When "1: Enabled" is set, Updater accepts the operation from the UGW server in cooperation with CDS. 0 to 1 0: Disabled 1: Enabled	1	0

T-2-110

### Confirming URL Setting of Distribution Server

This section describes how to confirm the URL setting of the distribution server.

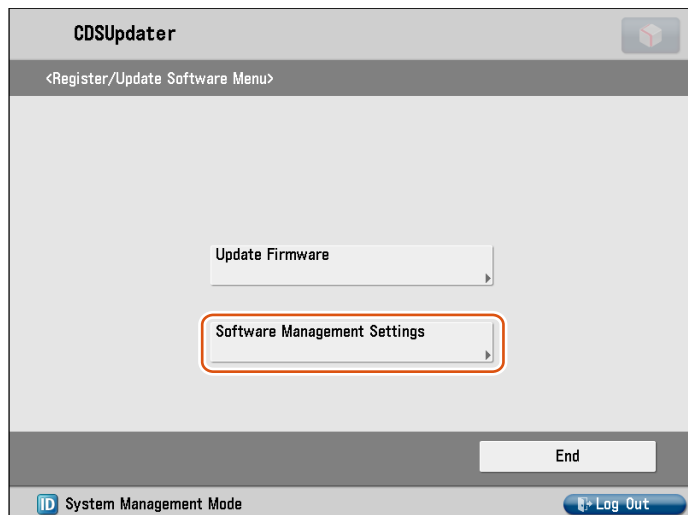
1. Start [Service Mode] at Level 1.
2. Press [Updater] button.



F-2-408

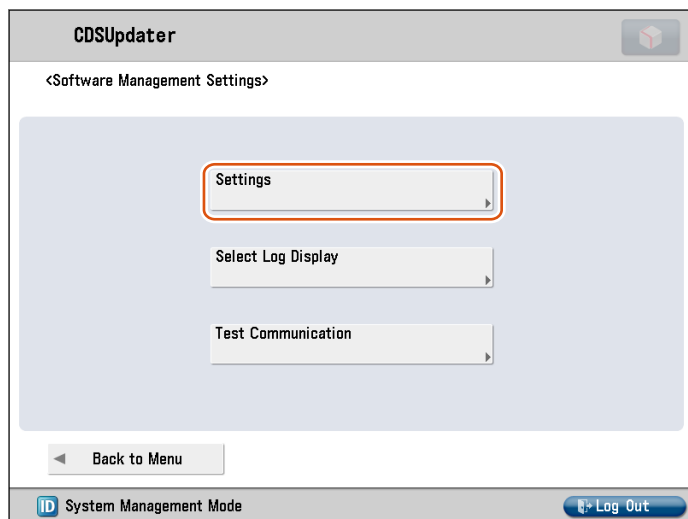


3. Press [Software Management Settings] button.



F-2-409

4. Press [Settings] button.

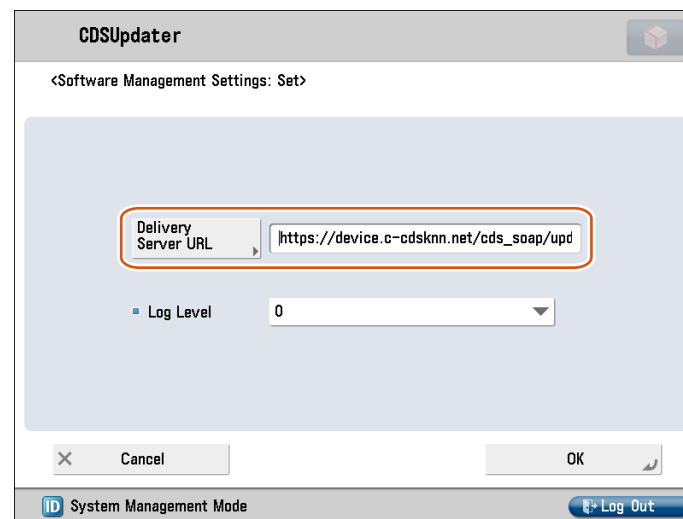


F-2-410

5. Ensure to enter “https://device.c-cdsknn.net/cds\_soap/updaterif” in the field beside the [Delivery Server URL] button.

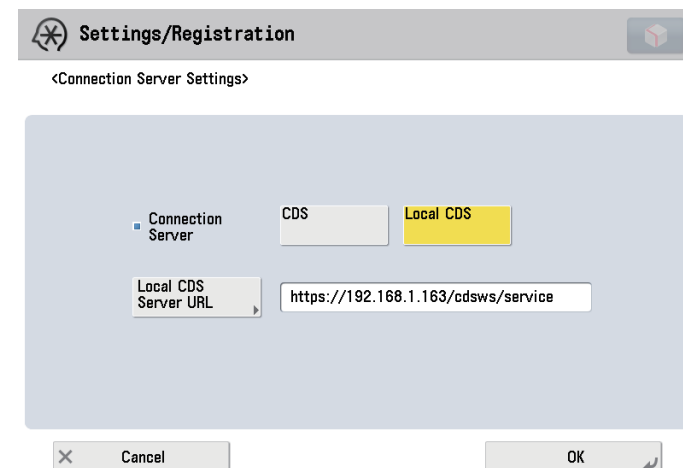
If the URL is not entered or a wrong URL is entered in the field, click [Delivery Server URL] button to show the virtual keypad. Check the URL and enter the correct one.

Delivery Server CDS



F-2-411

Delivery Server Local CDS



F-2-412

## Note:

- For the URL of the L-CDS server, enter the address beginning with "https://" specified in L-CDS. If the port number has not been specified, 443 is internally added as the port number.
- To display the button of the local CDS, execute Settings/Registration > Management Settings > License/Other > Register/Update Software. It is not displayed in service mode.

6. Press [OK] to set the entered items. Now the URL of the distribution server is successfully set.

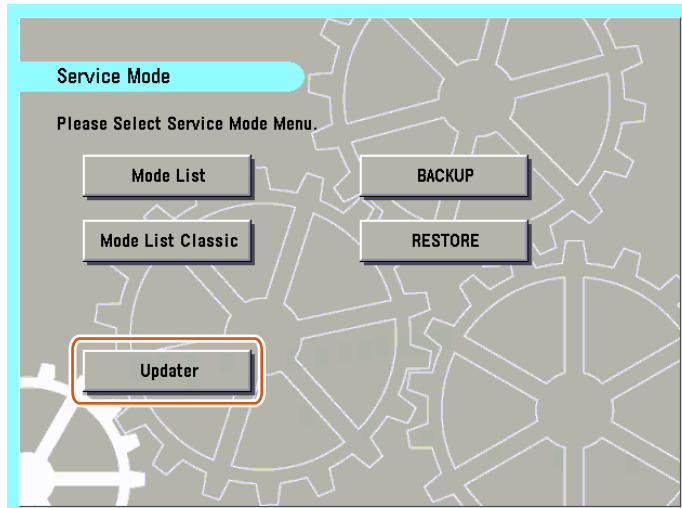
### ● Communication Test

This section describes how to check if the communication is normally done to the distribution server and/or the file server.

## Note:

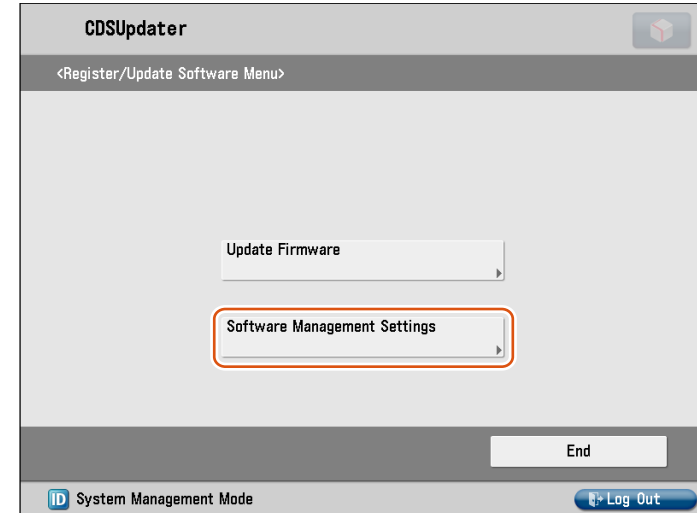
CDS and RDS are another servers. You need the communication test of CDS by all means even if You succeed in a communication test of the RDS.

1. Start [Service Mode] at Level 1.
2. Press [Updater] button.



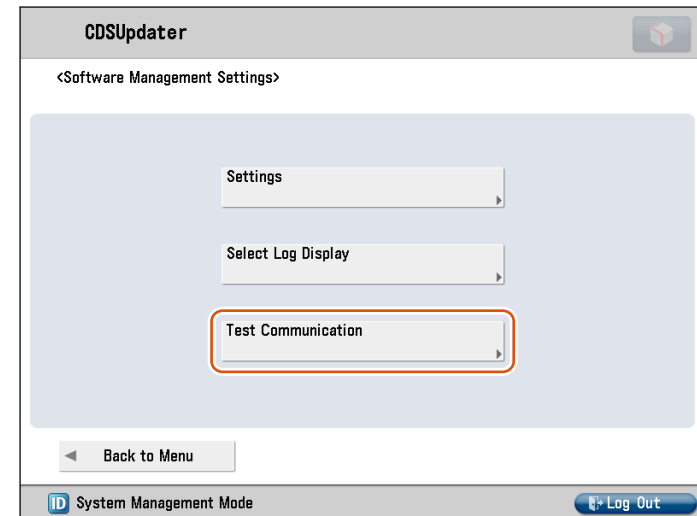
F-2-413

3. Press [Software Management Settings] button.



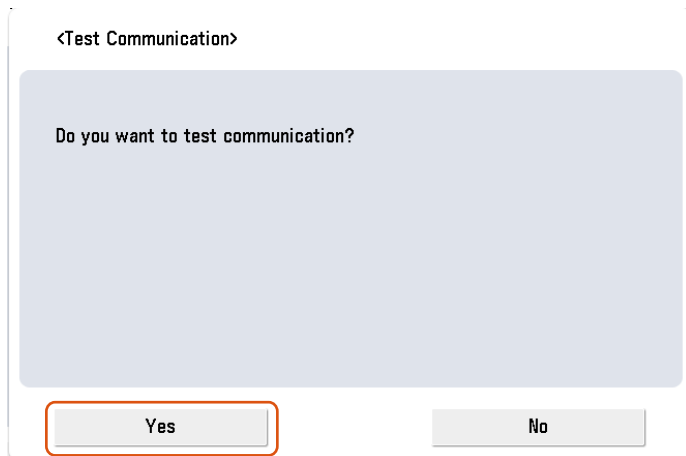
F-2-414

4. Press [Test Communication] button.



F-2-415

5. Press [Yes] button.



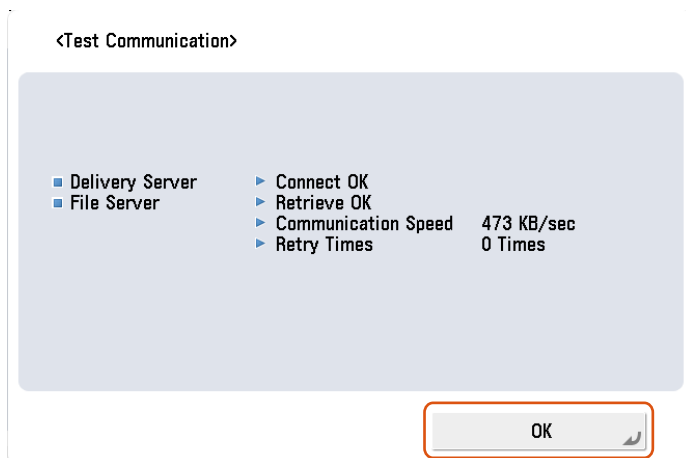
F-2-416

Obtain the download file information for communication test from the distribution server (to execute the communication test to the distribution server).

Using the download file information for communication test, the contents for test are downloaded from the file server (for the communication test to the file server).

6. Upon the communication test completed, the communication test result screen is shown.

Press [OK] button to exit this operation.



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## ■ Enabling UGW Link

When installing the firmware in the method of “UGW-linked Download and Update” or “UGW-linked Download”, the following should be set before actually using UGW link.

Service Technician	Setting of Device Service Mode (Level 1)	COPIER >OPTION >FNC-SW >CDS-UGW (0 -> 1)
	Setting of UGW WebPortal	In [Customer Management] screen, set [Do not distribute firmware] to [Distribute firmware].
Sales Company's HQ	Setting of Authorities on UGW WebPortal	See "Analysis>Firmware Distribution Information" to grant the appropriate authorities to each account.

### NOTE:

- See “imageWARE Remote Operator’s Manual / e-Maintenance Business Operation Manual” for how to operate UGW WebPortal.
- [Distribute Firmware] should be set on [Customer Management] screen for staff in charge of setting for [Enter customer information] or [Command for firmware distribution] in order to allow them to select the desired device on [Firmware Distribution Information] screen.
- If [Distribute Firmware] is not shown on [Customer Management] screen of UGW WebPortal, appropriate authorities may not be set to each account in Firmware Distribution Information. Contact the Sales Company HQ concerned for confirmation.

## ■ Enabling [Update Firmware] Button of User Mode

To allow users to install firmware using Updater, the setting of firmware installation should be set to ON for users in advance.

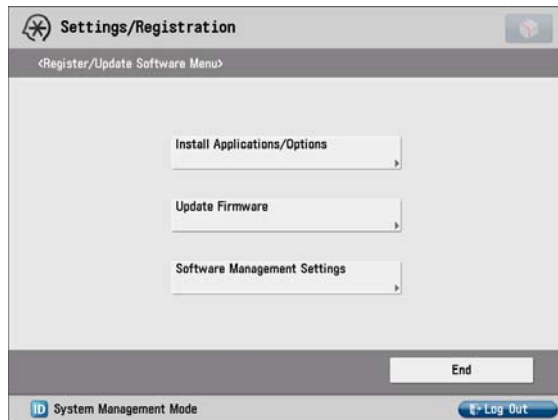
Service Technician	Setting of Device Service Mode (Level 1)	COPIER > OPTION > FNC-SW > CDS-FIRM (0 -> 1)
--------------------	--	--

- User Mode screen for Updater when the setting is not enabled (CDS-FIRM(0)):



F-2-418

- User Mode screen for Updater when the setting is enabled (CDS-FIRM(1)):



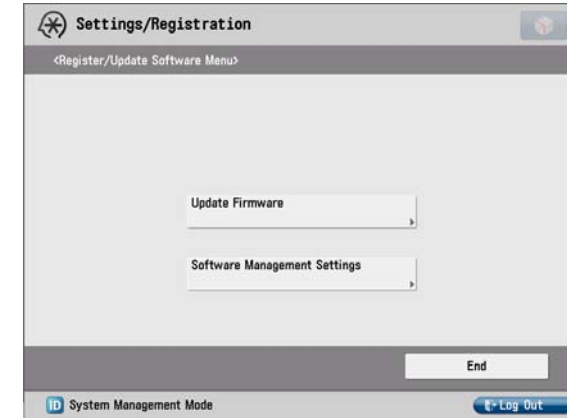
F-2-419

## ■ Enabling [Install Application/Options] Button of User Mode

To allow users to install applications using Updater, the setting of application installation should be set to ON for users in advance.

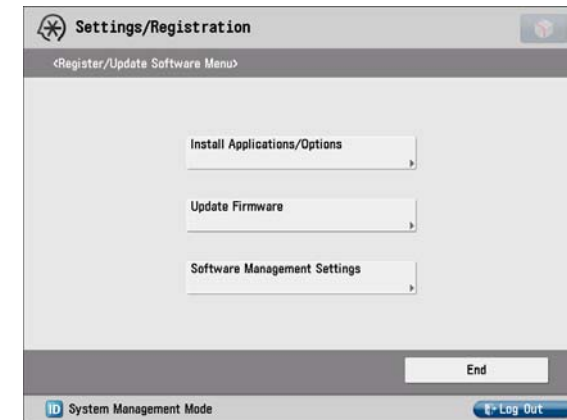
Service Technician	Setting of Device Service Mode (Level 1)	COPIER > OPTION > FNC-SW > CDS-MEAP (0 -> 1)
--------------------	--	--

- User Mode screen of Updater when the setting is not enabled (CDS-MEAP(0)):



F-2-420

- User Mode screen of Updater when the setting is enabled (CDS-MEAP(1)):



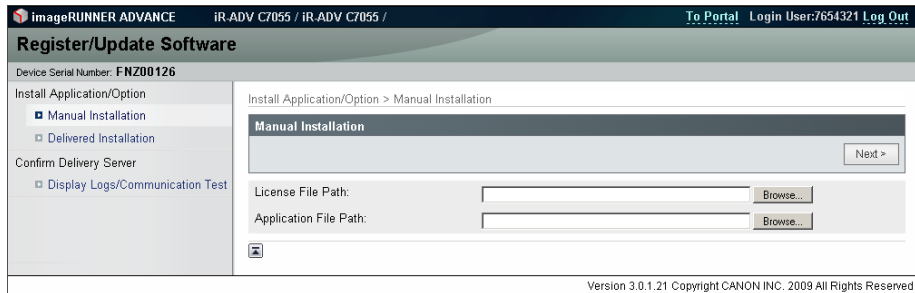
F-2-421

## ■ Enabling [Manual Update] Button of User Mode (Remote UI)

To allow users to install firmware from Updater using the file on Local PCs, the setting of firmware installation should be set to ON for users in advance.

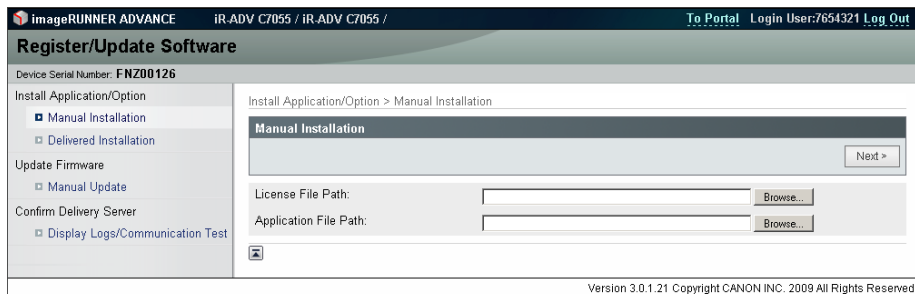
Service Technician	Setting of Device Service Mode (Level 1)	COPIER >OPTION >FNC-SW >LOCLFIRM (0 -> 1)
--------------------	--	---

- Remote UI screen of Updater when the setting is not enabled (LOCLFIRM (0)):



F-2-422

- Remote UI screen of Updater when the setting is enabled (LOCLFIRM (1)):



F-2-423

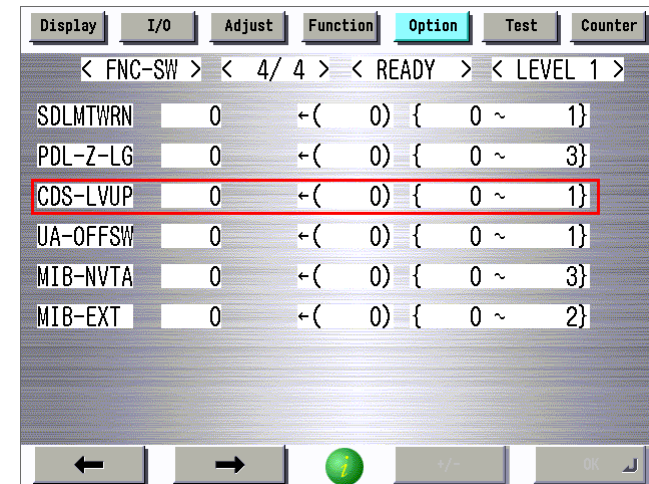
### Note:

In order to use manual update of the remote UI, firmware for manual update is required. Since firmware update is not supposed to be done by users at this point, we have no plan to provide dedicated firmware. Just in case it becomes necessary to support such update on the host machine side, the default value of LOCLFIRM in service mode is set to "1". On the RUI, the setting of manual update can be made in the following location.

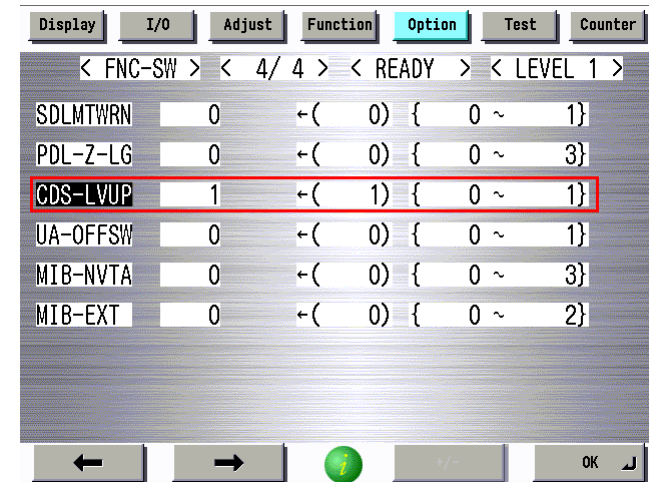
RUI > Settings/Registration > License/Other > Register/Update Software > Update Firmware > Manual Update

## ■ Enabling [Scheduled Update] Button of User Mode

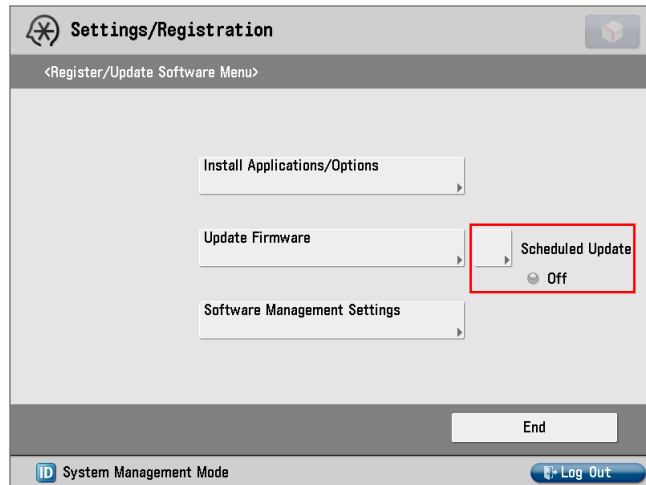
Service Technician	Setting of Device Service Mode (Level 1)	COPIER >OPTION >FNC-SW >CDS-LVUP (0 -> 1)
--------------------	--	---



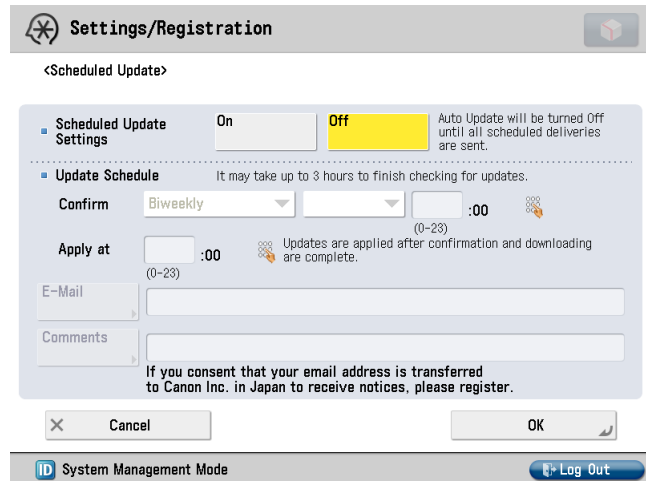
F-2-424



F-2-425



F-2-426



F-2-427

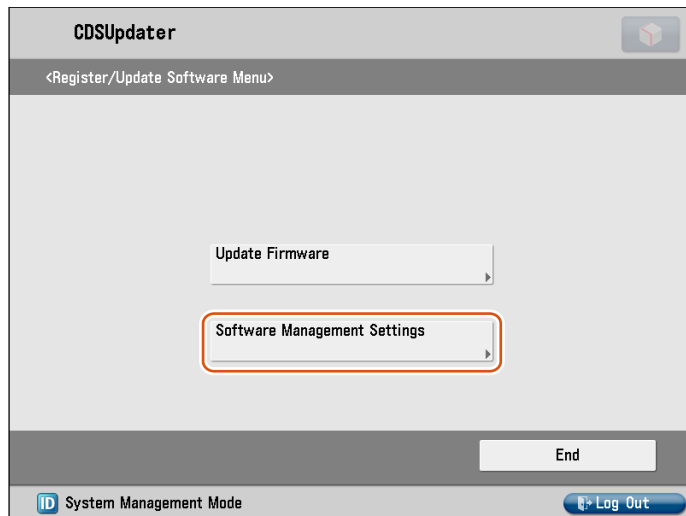
## System Management Operations

### Various Setting

#### Setting URL of Distribution Server

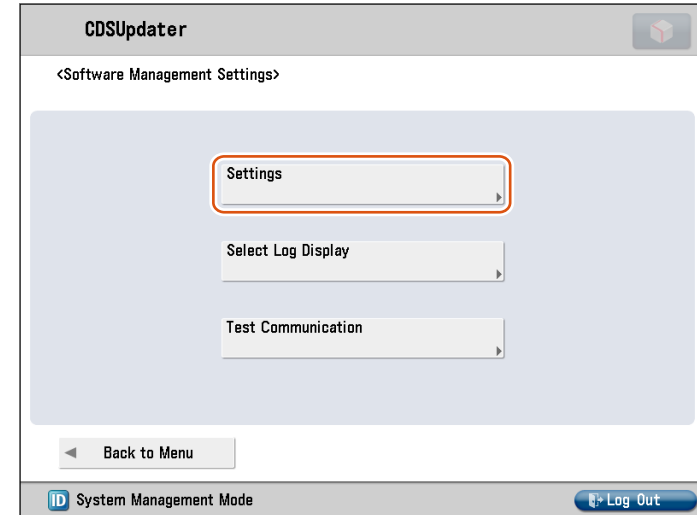
This section describes how to set URL of the distribution server.

1. Start [Service Mode] at Level 1.
2. Press [Updater] button.
3. Press [Software Management Settings] button.



F-2-428

4. Press [Settings] button.

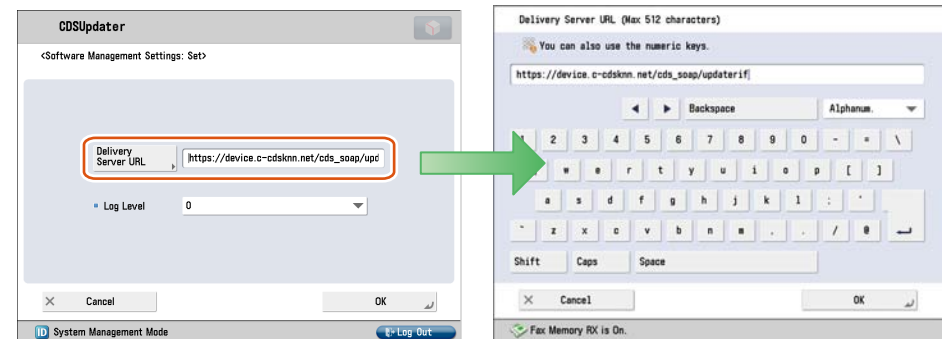


F-2-429

5. Press [Delivery Server URL] to show the virtual keypad. Enter the URL.

- [Delivery Server URL]:

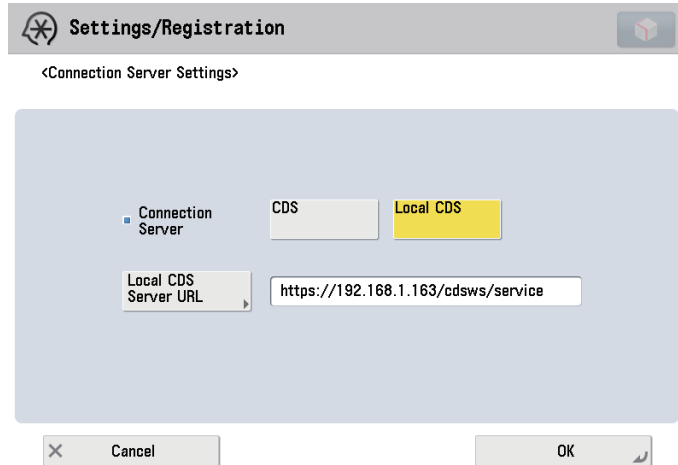
Enter the "https://device.c-cdsknn.net/cds\_soap/updaterif"



F-2-430



- [Delivery Server Local CDS]



F-2-431

**Note:**

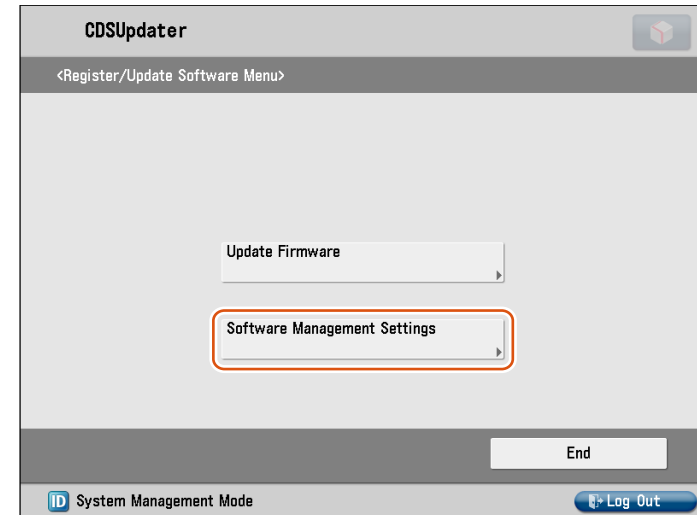
- For the URL of the L-CDS server, enter the address beginning with "https://" specified in L-CDS. If the port number has not been specified, 443 is internally added as the port number.
- To display the button of the local CDS, execute Settings/Registration > Management Settings > License/Other > Register/Update Software. It is not displayed in service mode.
- The URL setting of the local CDS server can be made through the following 2 methods:
  - Manual input on this screen
  - Distribute the setting information from Device Firmware Update Plug-in (DFU Plug-in), and remotely make the setting.

6. Press [OK] to set the entered items. Now the URL of the distribution server is successfully set.

## ● Setting Log Level

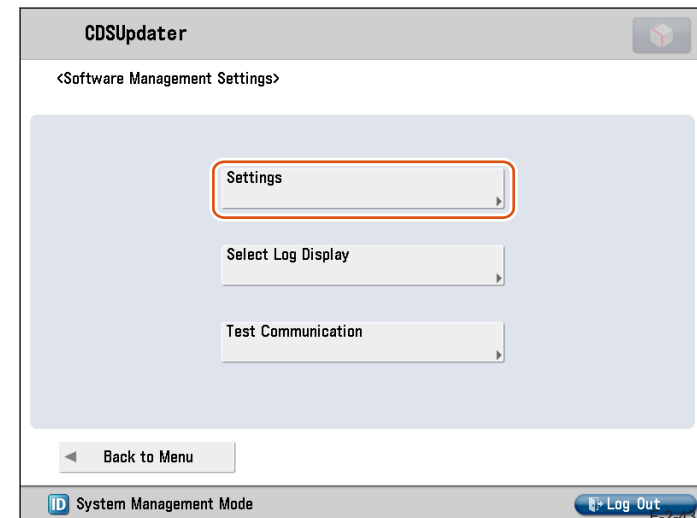
This section describes how to set system log levels.

1. Start [Service Mode] at Level 1.
2. Press [Updater] button.
3. Press [Software Management Settings] button.



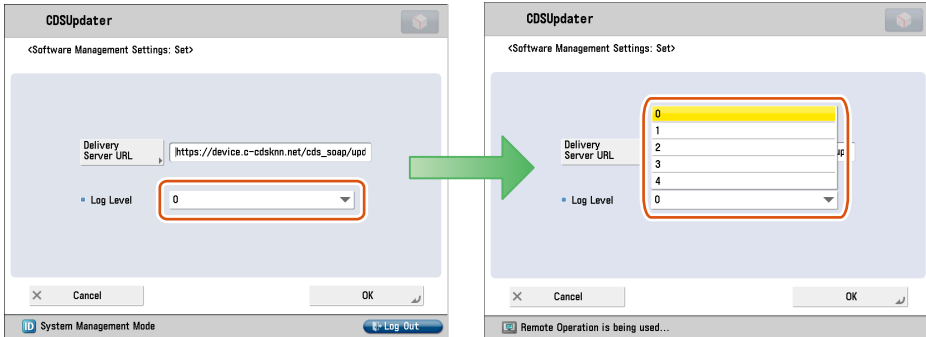
F-2-432

4. Press [Settings] button.



F-2-433

5. Select a log level from [Log Level] dropdown list.



F-2-434

• [Log Level]:

Select one of 5 levels ranging from [0] to [4].

See the table below for logs output in each level.

Log Level	Log Output				
	Trace	Information	Important Message	Ordinary Error	System Error
0	-	-	-	-	Yes
1	-	-	-	Yes	Yes
2	-	-	Yes	Yes	Yes
3	-	Yes	Yes	Yes	Yes
4	Yes	Yes	Yes	Yes	Yes

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NOTE:

This list shows the contents of the Log Output.

Log Output	Description
Trace	Detailed logs for debug
Information	Logs related to operations done on the system
Important Message	Update logs output by firmware type Installation logs by MEAP application Logs related to enabled functions by system option
Ordinary Error	Logs for ordinary errors
System Error	Logs for internal system errors

6. Press [OK] button to set the selected log level. Now the log level is successfully set.

## ■ Displaying Logs

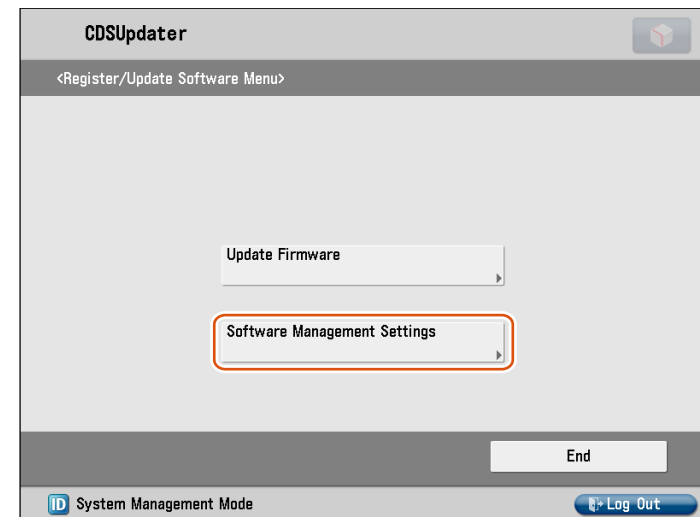
### ● Update Logs

This section describes how to confirm System Option/MEAP Application Installation Logs and Firmware Update Logs.

1. Start [Service Mode] at Level 1.

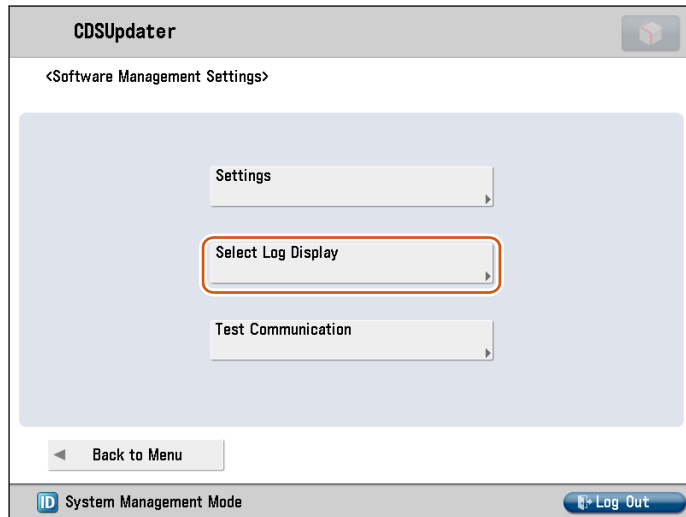
2. Press [Updater] button.

3. Press [Software Management Settings] button.



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4. Press [Select Log Display] button.



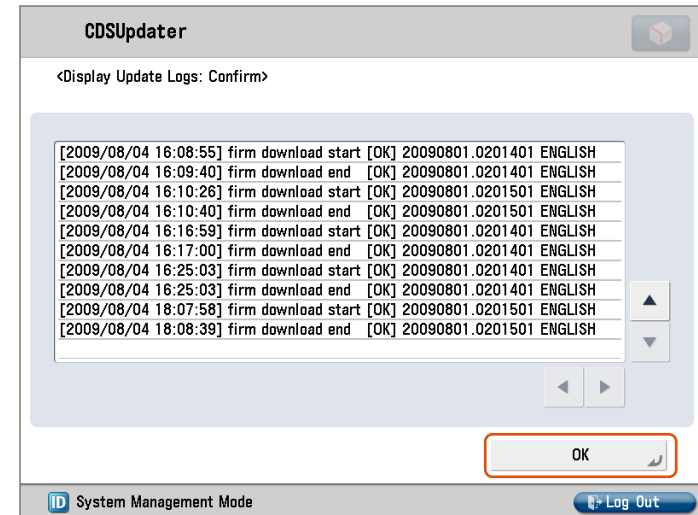
F-2-436

5. Press [Display Update Logs] button.



F-2-437

6. System Option/MEAP Application Installation Logs and Firmware Update Logs are shown.  
Press [OK] button to exit this operation.

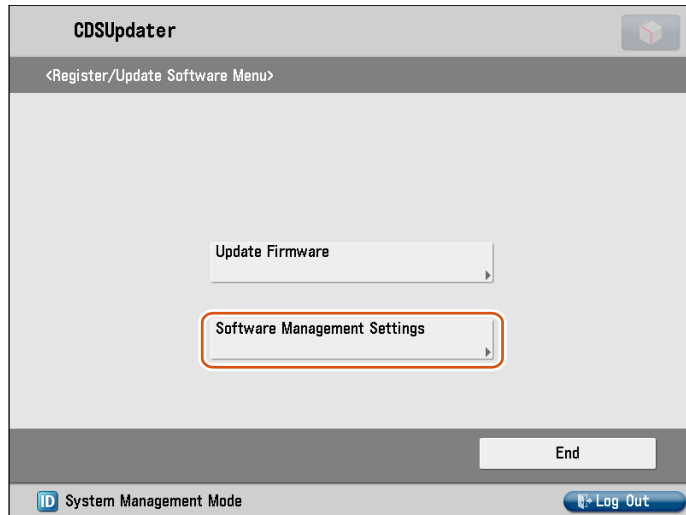


F-2-438

### System Logs

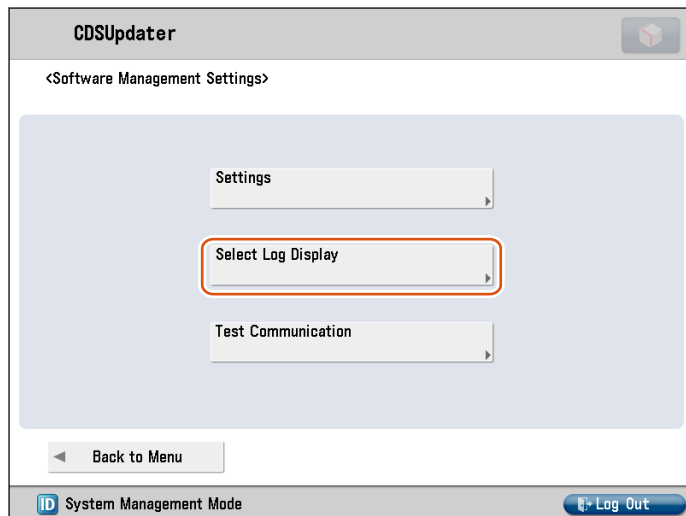
This section describes how to confirm System Logs.

1. Start [Service Mode] at Level 1.
2. Press [Updater] button.
3. Press [Software Management Settings] button.



F-2-439

4. Press [Select Log Display] button.



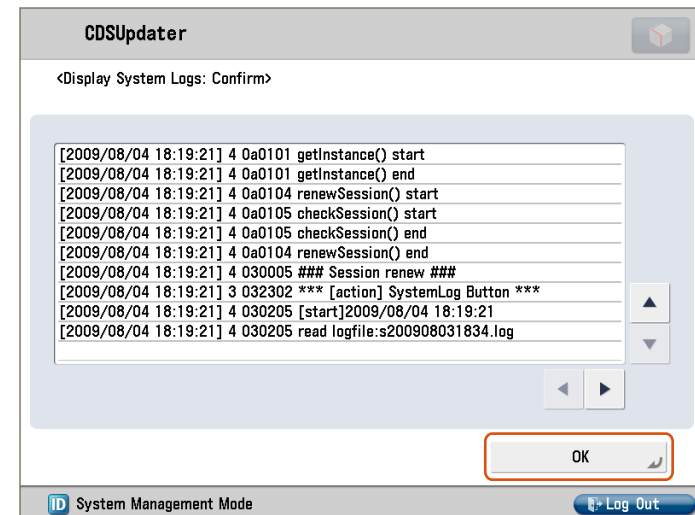
F-2-440

5. Press [Display System Logs] button.



F-2-441

6. Updater internal logs are displayed.  
Press [OK] button to exit this operation.



F-2-442

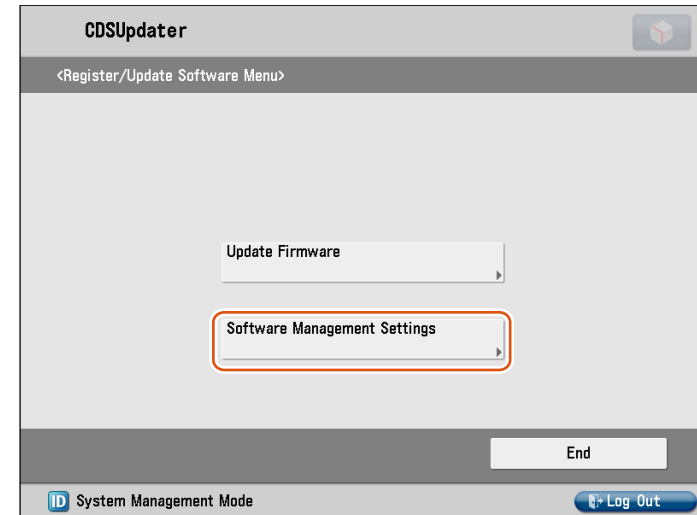
**NOTE:**

See the section of "Debug Logs" under "Version Upgrade via CDS", "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual for more detailed information.

## ■ Communication Test

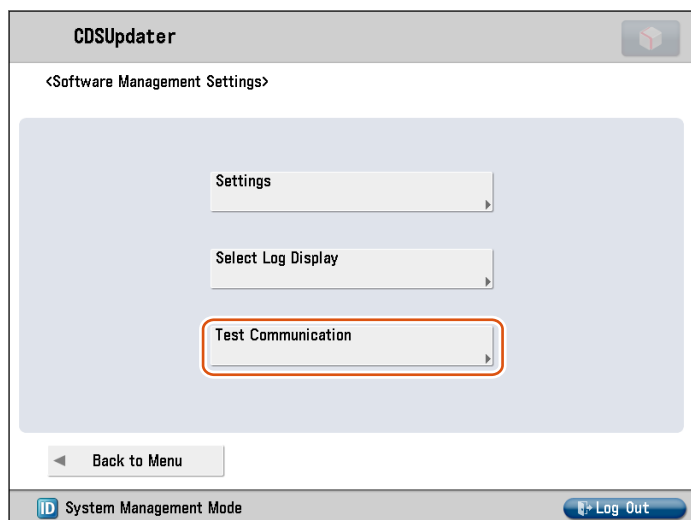
This section describes how to check if the communication is normally done to the distribution server and/or the file server.

1. Start [Service Mode] at Level 1.
2. Press [Updater] button.
3. Press [Software Management Settings] button.



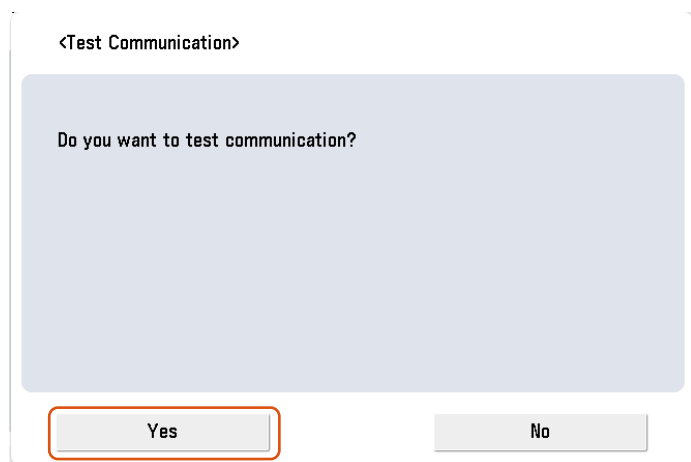
F-2-443

4. Press [Test Communication] button.



F-2-444

5. Press [Yes] button.

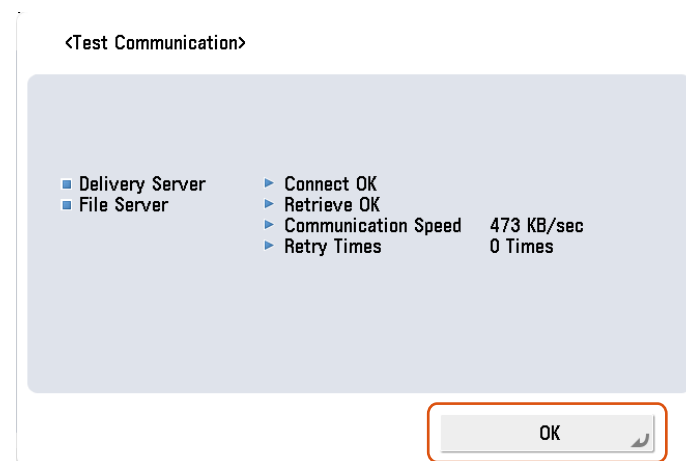


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Obtain the download file information for communication test from the distribution server (to execute the communication test to the distribution server).

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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Caution:

Carry out the communication test with both Embedded RDS and CDS.

## Maintenance

### ■ Upgrading Updater

The firmware installed in the device should be also upgraded when upgrading Updater. See the section of "Version upgrade", Chapter 6 "Troubleshooting" of this manual for how to update firmware.

The setting information and logs (update logs/system logs) are inherited in the upgraded version.

### ■ Formatting Hard Disk

Since Updater is a MEAP application, its contents can be temporarily saved in the MEAP application storage area on PC via SST during formatting or replacing HDD. See MEAP Service Manual for further information.

The settings initialized in format or replacement should be restored. See "Preparation" in chapter 2 of this manual for details.

#### NOTE:

When formatting or replacing HDD, distribution schedule, downloaded firmware (not updated yet) and logs (update/system logs) will be deleted.

### ■ How to Replace Controller Boards

The steps are different depending on which of 2 controller boards are to be replaced.

- Main Controller Board PCB 1  
No steps follow.
- Main Controller Board PCB 2 (including SRAM)  
The network and service mode setting should be set again after initialization. See "Preparation" in chapter 2 of this manual for details.

### ■ How to Replace Devices

All settings should be set again because no data are inherited. See "Preparation" in chapter 2 of this manual for details.





## FAQ

## FAQ on Installing Firmware

## No.1

Q: Is it also possible to downgrade firmware with using CDS?

A: Firmware can be downgraded in some methods shown in the table below.

If download and update are performed consecutively, firmware can't be downgraded.

Distribution Method	Downgrade Possibility
UGW-linked Download and Update	No
UGW-linked Download	Yes
Manual Download and Update(Timing to Apply : Manual)	Yes
Manual Download and Update(Timing to Apply : Automatic)	No

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## No.2

Q: When installing firmware, does it take less time in "manual download and update" compared to "update via SST"?

A: It depends on the number of devices to update firmware.

When updating the firmware on a device, it takes more time in "manual download and update" compared to "update via SST" (It depend on network environment.).

As for the time to update firmware to multiple devices, "manual download and update" takes less time compared to "update via SST" because updating the firmware to multiple devices can be executed simultaneously.

## No.3

Q: How can we confirm that the firmware is properly updated after "UGW-linked download and update" done?

A: You can confirm this in E-mail or the Device List on UGW-linked screen.

E-mail to notify firmware update will be sent from CDS server to the addresses set as destinations at the time of distribution setting to notify update completion.

On UGW-linked screen, search the device of your interest on [Select Device] screen to find the distribution status per device as shown in the search result.

## No.4

Q: In the course of "UGW-linked download", what will happen if the user downloads the firmware before the service technician update the firmware downloaded with "UGW-linked download" before?

A: The previously downloaded firmware in the method of "UGW-linked download" will be overridden by the subsequently downloaded one.

This is because only one downloaded firmware can be held on the device.

The firmware downloaded in the method of "Service mode-linked download" and "UGW-linked download" can be checked/deleted from User mode, but cannot be updated, so it cannot be updated by the user unnoticed by the service technician.

## No.5

Q: What happens if the user registers another distribution schedule when the distribution schedule has been set in "manual download and update"?

A: The distribution schedule subsequently registered by the user will override the existing schedule. This is because only one distribution schedule can be held. Any existing distribution schedule is deleted and the newly registered distribution schedule is made valid.

## No.6

Q: How is an individual response edition of firmware distributed?

A: Any individual response edition of firmware can be installed in all the methods provided by service technicians. Before installing the individual response edition, ensure to obtain the ID and password separately.

## No.7

Q: If the device is down during firmware update, can the device be started using the older firmware version?

A: No, it is impossible to start the device using older versions. If this occurs, the service technician in charge should reinstall the firmware via SST. See "Troubleshooting on Firmware Installation" in chapter 6 of this manual for details.

## No.8

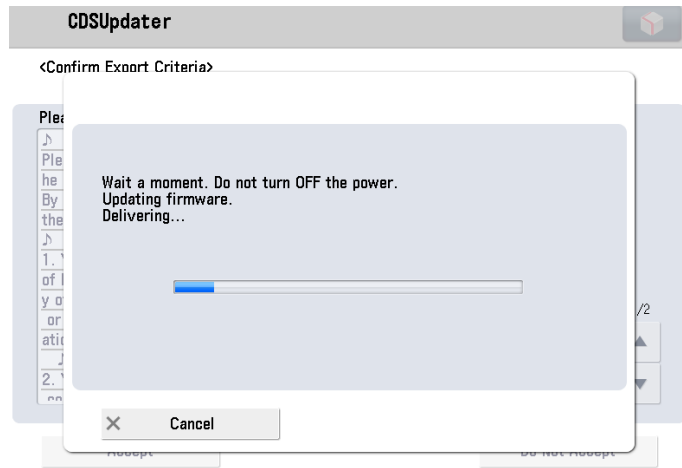
Q: If the device is down during firmware download, is it possible to download the firmware again?

A: Firmware cannot be downloaded again automatically. Instead, the error is notified in E-mail. The user should register the firmware distribution schedule again accordingly.

No.9

Q: Can we cancel the operation during firmware download?

A: Yes. [Cancel] button is shown.



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No.10

Q: E-mail is sent to users to notify update completion. Can service technicians also receive such a notification?

A: Yes. The notification E-mail is also set for the service technician in charge if the user enters his/her E-mail address at the time of firmware distribution setting.

Multiple E-mail addresses can be entered in the field. Delimit each E-mail address with “,” (comma) or “;” (semicolon) when you enter multiple E-mail addresses in the field.

No.11

Q: How long does the firmware update take?

A: Approx. 30 min. However, this does not include the download time. Download time relies on the network environment.

## FAQ on the Local CDS Operation Environment

### FAQ on the Number of Devices That Can Be Managed

Q: How many devices can be managed by 1 set of DFU Plug-in + Local CSD?

A: Up to 1000 devices can be registered. However, only up to 5 updaters can access the local CSD at a time.

### FAQ on Firmware Distribution Task

Q: If the version of the firmware on the local CDS is the same with or older than the firmware on the device, what will occur when firmware update is performed? (Will an error occur because firmware to be distributed does not exist?)

A: The firmware will not be updated, and the result will be "normally completed".

### FAQ on Firmware Update Process

Q: Won't timer shutdown occur during a firmware update process?

A: Updater deactivates the timer shutdown function at the start of a firmware update process. Therefore shutdown will not occur during update.

### Operation during Firmware Update

Q: Can the following operations be performed during device firmware update?

- Automatic timer shutdown
- Shutdown from the local UI
- Reboot from the remote UI
- Switching between authentication applications from SMS

A: Updater deactivates the following functions during device firmware update.

- Timer shutdown
- Shutdown from the local UI
- Reboot from the remote UI
- Access to SMS

## FAQ on Installing MEAP Application/System Option

No.1

Q: What happens if a MEAP application is installed in the system with insufficient HDD free space?

A: An error message is shown. Upon starting installation, the MEAP application checks the required space against free space to judge installation availability.

No.2

Q: Can we cancel the operation during installation of MEAP application?

A: Yes: [Cancel] button is shown.

No.3

Q: Is the device automatically restarted after the system option is enabled?

A: The device is not automatically restarted. Users should restart the device manually.

## FAQ on General Matters of Updater

No.1

Q: What preparation is needed in each installation method?

A: See the table below for preparation required in each installation method.

- For updating firmware

Service Mode	COPIER > FUNCTION > INSTALL		COPIER > OPTION > FNC-SW			
	CDS-CTL		CDS- UGW	CDS-FIRM	LOCLFIRM	LCDSFLG
Installation Method	Setting Sales Company's HQ	Network Settings	Enabling UGW Link	Enabling [Update Firmware] Button of User Mode	Enabling [Manual Update] Button of User Mode (Remote UI)	Enabling [Local CDS]
UGW-linked Download and Update	Yes	Yes	Yes	-	-	-
UGW-linked Download	Yes	Yes	Yes	-	-	-
Manual Download and Update	Yes	Yes	-	-	-	-
Manual Download and Update via Local UI	Yes	Yes	-	Yes	-	-
Manual Download and Update via Remote UI	Yes	Yes	-	Yes	-	-
Special Download and Update via Remote UI	Yes	-	-	-	Yes	-
Scheduled update via Local CDS	-	-	-	Yes	-	Yes

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- For install Application

Installation Method	Network Settings	Enabling [Install Application/Options] Button of User Mode
LMS-linked Installation	Yes	-
LMA-linked installation via Local UI	Yes	Yes
LMS-linked installation via Remote UI	Yes	Yes

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## No.2

Q: How can operations using Updater be masked on the users' side?

A: Be sure to perform the following from the service mode.

- Masking Firmware Installation

Setting Device Service Mode (Level 1)	COPIER >OPTION >FNC-SW >CDS-FIRM (1 -> 0)
Setting Device Service Mode (Level 1)	COPIER >OPTION >FNC-SW >LOCLFIRM (1 -> 0)

- Masking Application Installation

Setting Device Service Mode (Level 1)	COPIER >OPTION >FNC-SW >CDS-MEAP (1 -> 0)
---------------------------------------	---

## No.3

Q: Can the communication be cancelled during the communication test?

A: Yes. During the communication test, "Cancel" button is displayed.

## DCM

### DCM

#### Overview

DCM (Device Configuration Management) is a function to migrate the setting values (of user mode and service mode). In terms of the description in the User's Guide, it is synonymous with "Import/Export All". Service mode setting values can be backed up/restored from the top screen of service mode.

By the conventional method for backing up SRAM of the Main Controller 2, data could be backed up/restored only for the same machine. DCM supports the following 3 patterns.

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

#### Where data is stored

Store the backup data in the following location.

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

#### Setting values that can be backed up

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

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

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

#### General limitations on DCM

- With iR-ADV C52xx series, service mode for FAX cannot be migrated.
- With DCM, stored data, MEAP application, and system option license cannot be migrated.
- A .dcm file exported to the internal HDD is not deleted even when the machine is restarted. Only 2 files at a maximum are stored in HDD. When there are more than 2 files, the old .dcm files are deleted from the oldest.
- Continuous import is not guaranteed. After importing a file, the machine must be restarted. If executing import without restart, NG is displayed and a file is not imported.
- When importing DCM file in service mode and user mode separately, perform it in the following procedures.
  - 1) Perform the import of the DCM data of the service mode earlier.

2) Reboot the Host machine.

3) Import the DCM data of the user mode.

- As for service mode, if the process is not completed within 5 minutes in the case of export and 15 minutes in the case of import, the item performed at that time is continued until it ends, but the final result becomes ERROR.
- Data to which no password is set when exporting service mode cannot be loaded from collective import from RUI. When assuming to perform collective import from RUI, password must be set to data to be exported.
- Following limitations are applied to password for DCM data:
  - Character string of software keyboard: 0 to 32 characters
  - No password is set when 0 character is entered. (The setting in which no password is set is allowed only for service mode.)
  - No space is allowed in the middle of a password.
  - Password is case sensitive.
- At the time of following setting, Host machine does not recognize USB memory. The DCM function is not usable, too.
  - Settings/Registration > Preferences > External Interface > USB Settings > Use MEAP Driver for External USB Device = On

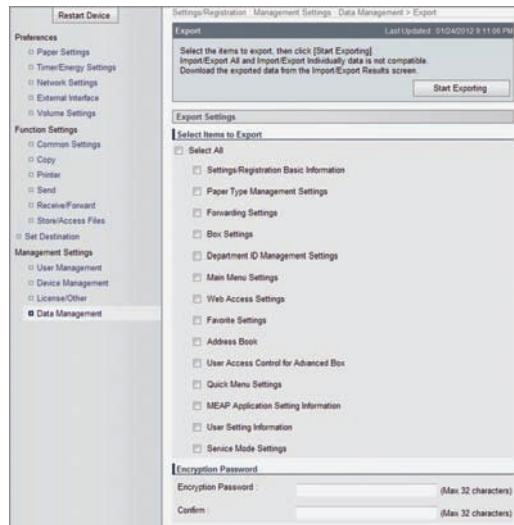
#### Restrictions about import/export

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

## ● Import/Export All from remote UI

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

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



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### Note:

Display/hide of the service mode settings on RUI can be switched by changing the setting in the following service mode.

Service mode L1 > Copier > Option > USER > SMD-EXPT

[0]: Hide the service mode settings. (Def.)

[1]: Display the service mode settings.

## Collective Import Using Data Collectively Exported from RUI

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

### Preparation

PC and web browser

USB memory device to store the data of reference machine

### Overall flow

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

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

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

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Setting Information			Lev.1	Lev.2	Lev.3
Preferences	Paper Settings	Paper Settings	Yes	Yes	
		Register Custom Size	Yes	Yes	
	Display Settings	Default Screen after Startup/Restoration	Yes	Yes	Yes
		Default Screen (Status Monitor/Cancel)	Yes	Yes	Yes
		Copy Screen Display Settings	Yes	Yes	Yes
		Display Fax Function	Yes	Yes	Yes
		Store Location Display Settings	Yes	Yes	Yes
		Language/Keyboard Switch On/Off	Yes	Yes	Yes
		Language/Keyboard Switch	Yes	Yes	Yes
		Use Keyboard Shift Lock Feature	Yes	Yes	Yes
		Display Remaining Paper Message	Yes	Yes	Yes
		No. of Copies/Job Duration Status	Yes	Yes	Yes
		Display Original Scanning Cleaning Area	Yes	Yes	Yes
		Select Paper Screen Priority	Yes	Yes	Yes
		mm/Inch Entry Switch	Yes	Yes	Yes
		ID/User Name Display On/Off	Yes	Yes	Yes
	Display Remaining Toner Error Message	Yes	Yes	Yes	
	Timer/Energy Settings	Time Format	Yes	Yes	Yes
		Quick Startup Settings for Main Power	Yes	Yes	Yes
		Auto Reset Time	Yes	Yes	Yes
		Restrict Auto Reset Time	Yes	Yes	Yes
		Function After Auto Reset	Yes	Yes	Yes
		Auto Shutdown Time	Yes	Yes	Yes
		Auto Shutdown Weekly Timer	Yes	Yes	Yes
		Auto Sleep Time	Yes	Yes	Yes
		Sleep Mode Energy Use	Yes	Yes	Yes
		Auto Sleep Weekly Timer	Yes	Yes	Yes
	Sleep Mode Exit Time Settings	Yes	Yes	Yes	
	Network	Confirm Network Connection Set. Changes	Yes	Yes	Yes
		TCP/IP Settings			

Setting Information			Lev.1	Lev.2	Lev.3		
	IPv4 Settings	Use IPv4	Yes	Yes	Yes		
		IP Address Settings					
		IP Address	Yes				
		Subnet Mask	Yes	Yes	Yes		
		Gateway Address	Yes	Yes	Yes		
		DHCP	Yes	Yes	Yes		
		RARP	Yes	Yes	Yes		
		BOOTP	Yes	Yes	Yes		
		DHCP Option Settings	Yes	Yes	Yes		
		IPv6 Settings	Use IPv6	Yes	Yes	Yes	
			Stateless Address Settings	Yes	Yes	Yes	
			Manual Address Settings	Yes			
			Use DHCPv6	Yes	Yes	Yes	
		DNS Settings	DNS Server Address Settings	Yes	Yes	Yes	
	DNS Host/Domain Name Settings		Yes				
	DNS Dynamic Update Settings		Yes	Yes	Yes		
	WINS Settings		Yes	Yes	Yes		
	LPD Print Settings		Yes	Yes	Yes		
	RAW Print Settings		Yes	Yes	Yes		
	SNTP Settings		Yes	Yes	Yes		
	FTP Print Settings		Yes	Yes	Yes		
	WSD Settings		Yes	Yes	Yes		
	Use FTP PASV Mode		Yes	Yes	Yes		
	Multicast Discovery Settings		Yes	Yes	Yes		
	Use HTTP		Yes	Yes	Yes		
	Use WebDAV Server		Yes	Yes	Yes		
	Proxy Settings		Yes	Yes	Yes		
	NetWare Settings		Yes	Yes	Yes		
	AppleTalk Settings		Yes				
	SMB Server Settings		Yes				
	SNMP Settings		Yes	Yes	Yes		
	Dedicated Port Settings		Yes	Yes	Yes		
	Use Spool Function		Yes	Yes	Yes		
	Startup Settings		Yes	Yes	Yes		
	Ethernet Driver Settings		Yes	Yes	Yes		



Setting Information		Lev.1	Lev.2	Lev.3		
Setting Information	Firewall Settings	Yes	Yes	Yes		
	External Interface	USB Settings	Yes	Yes	Yes	
	Accessibility	Key Repetition Settings	Yes	Yes	Yes	
		Reversed Display (Color)	Yes	Yes	Yes	
	Adjustment/Maintenance					
	Adjust Image Quality	Correct Density	Yes	Yes	Yes	
		Full Color Printing Vividness Settings	Yes			
		Fine Adjust Zoom	Yes			
	Function Settings	Common	Paper Feed Settings	Yes	Yes	
			Print Settings			
Text/Photo Priority When ACS Is Set to Black			Yes	Yes		
Output Report Default Settings			Yes	Yes	Yes	
Superimpose Image Quality Priority			Yes	Yes	Yes	
Register Characters for Page No./ Watermark			Yes	Yes	Yes	
Secure Watermark/Document Scan Lock			Yes	Yes	Yes	
Scan Settings						
Streak Prevention			Yes	Yes		
Feeder Black Scan Speed/Image Qlty. Priority			Yes	Yes		
LTRR/STMT Original Selection			Yes	Yes		
Remote Scan Gamma Value			Yes	Yes		
Auto Online			Yes	Yes	Yes	
Auto Offline			Yes	Yes	Yes	
Generate File						
High Compression Image Quality Level			Yes	Yes	Yes	
Compact PDF Settings for Text Original			Yes	Yes	Yes	
OCR (Text Searchable) Settings			Yes	Yes	Yes	
Trace & Smooth Settings			Yes	Yes	Yes	
OOXML Settings			Yes	Yes	Yes	
Include Background Images in Word File			Yes	Yes	Yes	
Specify Minimum PDF Version			Yes	Yes	Yes	
Format PDF to PDF/A			Yes	Yes	Yes	
Optimize PDF for Web			Yes	Yes	Yes	
256-bit AES Settings for Encrypted PDF			Yes	Yes	Yes	
Document Scan Lock Operational Settings			Yes	Yes	Yes	
Set Authentication Method			Yes	Yes	Yes	

Setting Information		Lev.1	Lev.2	Lev.3		
Setting Information	Copy	Auto Collate	Yes	Yes	Yes	
		Auto Orientation	Yes	Yes	Yes	
		Select Color Settings for Copy	Yes	Yes	Yes	
	Send	Common Settings	Yes	Yes	Yes	
		E-Mail/I-Fax Settings				
		Register Unit Name	Yes	Yes	Yes	
		Communication Settings	SMTP RX	Yes	Yes	Yes
			POP	Yes	Yes	Yes
			SMTP Server	Yes	Yes	Yes
			E-Mail Address	Yes		
			POP Server	Yes	Yes	Yes
			POP Login Name	Yes		
			POP Password	Yes		
			POP Interval	Yes	Yes	Yes
		Authent./Encryption	Yes	Yes	Yes	
		Confirm SSL Certificate for SMTP TX	Yes	Yes	Yes	
		Confirm SSL Certificate for POP RX	Yes	Yes	Yes	
		Maximum Data Size for Sending	Yes	Yes	Yes	
		Default Subject	Yes	Yes	Yes	
		Specify Authentication User Dest. to Reply	Yes	Yes	Yes	
		Set Authentication User Dest. to Sender	Yes	Yes	Yes	
		Allow Unregistered Users to Send E-Mail	Yes	Yes	Yes	
		Full Mode TX Timeout	Yes	Yes	Yes	
	Print MDN/DSN upon Receipt	Yes	Yes	Yes		
	Use Send via Server	Yes	Yes	Yes		
	Allow MDN Not via Server	Yes	Yes	Yes		
	Restrict TX Destination Domain	Yes	Yes	Yes		
	Autocomplete for Entering E-Mail Addresses	Yes	Yes	Yes		
	Fax Settings					
	Default Screen	Yes	Yes	Yes		
	Change Default Settings	Yes	Yes	Yes		
	Register Options Shortcuts	Yes	Yes	Yes		
	Register Sender Name (TTI)	Yes	Yes	Yes		
	Use Auth. User Name as Sender Name	Yes	Yes	Yes		
	ECM TX	Yes	Yes	Yes		
	Set Pause Time	Yes	Yes	Yes		
Auto Redial	Yes	Yes	Yes			

Setting Information		Lev.1	Lev.2	Lev.3	
	Check Dial Tone Before Sending	Yes	Yes	Yes	
	Fax TX Report	Yes	Yes	Yes	
	Fax Activity Report	Yes	Yes	Yes	
	Set Line	Line 1 to Line 2	Yes	Yes	Yes
		Register Unit Telephone Number	Yes		
		Register Unit Name	Yes		
		Select Line Type	Yes	Yes	Yes
		Select TX Line	Yes	Yes	Yes
	TX Start Speed	Yes	Yes	Yes	
	R-Key Setting	Yes	Yes	Yes	
	Confirm Entered Fax Number	Yes	Yes	Yes	
	Allow Fax Driver TX	Yes	Yes	Yes	
	Remote Fax TX Settings	Yes	Yes	Yes	
	Remote Fax Settings	Yes	Yes	Yes	
	Receive/Forward	Common Settings	Yes	Yes	Yes
		Fax Settings	Yes	Yes	Yes
	Store/Access Files	Mail Box Settings	Yes	Yes	Yes
		Advanced Space Settings	Yes	Yes	Yes
		Network Settings	Yes	Yes	Yes
		Memory Media Settings	Yes	Yes	Yes
Secure Print	Simple Authentication Settings	Yes	Yes	Yes	
	Only Allow Encrypted Print Jobs	Yes	Yes	Yes	
Set Destination	Change Default Display of Address Book	Yes	Yes	Yes	
	Address Book PIN	Yes	Yes	Yes	
	Manage Address Book Access Numbers	Yes	Yes	Yes	
	Include Pswd. When Exporting Address Book	Yes	Yes	Yes	
	Register LDAP Server	Yes	Yes		
	Auto Search When Using LDAP Server	Yes	Yes	Yes	
	Change Default LDAP Search Conditions	Yes	Yes	Yes	
	Register/Edit LDAP Search Conditions	Yes	Yes		
	Acquire Remote Address Book	Acquire Address Book	Yes	Yes	Yes
		Remote Address Book Server Address	Yes	Yes	Yes
Communication Timeout		Yes	Yes	Yes	
	Fax TX Line Auto Select Adjustment	Yes	Yes	Yes	
Make Remote Add. Book Open	Make Address Book Open	Yes	Yes	Yes	
Management Settings	Device Management	Yes			

Setting Information		Lev.1	Lev.2	Lev.3			
	Device Information Delivery Settings						
		Register Destinations	Yes	Yes			
		Set Auto Delivery	Yes	Yes			
		Restrict Receiving Device Information	Yes	Yes	Yes		
		Restrict Receiving for Each Function	Yes	Yes	Yes		
		Report Settings	Yes	Yes	Yes		
		Display Job Status Before Authentication	Yes	Yes	Yes		
		Display Log	Yes	Yes	Yes		
		Audit Log Retrieval	Yes	Yes	Yes		
		Format Encryption Method to FIPS 140-2	Yes	Yes	Yes		
		License/Other	Message Board/Support Link	Yes	Yes	Yes	
			Remote Operation Settings	Yes	Yes	Yes	
		Data Management	Back Up/Restore Settings	Yes	Yes	Yes	
			HDD Data Complete Deletion	Yes	Yes	Yes	
	Box Settings	Function Settings	Receive/Forward Common Settings	Yes	Yes	Yes	
Store/Access Files			Mail Box Settings	Yes	Yes	Yes	
Access Stored Files		Mail Box (Print)	Color Balance (Options)	Yes	Yes		
Scan and Store		Advanced Space (Scan)	Custom (Scan Size)	Yes	Yes		
Department ID Management Settings	Management Settings	User Management	System Manager Information Settings	Yes	Yes	Yes	
		Department ID Management					
		Register PIN	Yes	Yes	Yes		
Main Menu Settings	Main Menu Settings	Setting File	Yes	Yes	Yes		
Favorite Settings	Copy	Register/Edit Favorite Settings	Yes	Yes			
		Change Default Settings	Yes	Yes			
		Register Options Shortcuts (Regular Copy)	Yes	Yes			
		Register Options Shortcuts (Express Copy)	Yes	Yes			
	Send	Common Settings	Yes	Yes	Yes		
		Fax Settings	Yes	Yes	Yes		
	Store/Access Files	Common Settings	Yes	Yes			
	Copy Basic Features Screen	Color Balance (Options)	Yes	Yes			

Setting Information				Lev.1	Lev.2	Lev.3
Address Book	Set Destination	Register Destinations		Yes	Yes	Yes
		Rename Address List		Yes	Yes	Yes
		Register One-Touch		Yes	Yes	Yes
Forwarding Settings	Function Settings	Receive/Forward	Common Settings	Yes	Yes	Yes
Quick Menu Settings	Quick Menu Settings	Button File		Yes	Yes	
MEAP Application Setting Information	iW Function Flow	Flow Data File		Yes	Yes	Yes
		Operation Setting File		Yes	Yes	Yes
	MEAP User Setting Information	Data		Yes	Yes	Yes
	MEAP Application Setting Information	Data		Yes	Yes	Yes
Paper Type Management Settings	Preferences	Paper Settings	Paper Type Management Settings	Yes	Yes	Yes
User Access Control for Advanced Space	User Access Control for Advanced Space	User List		Yes	Yes	Yes
		Integrated Authentication Settings		Yes	Yes	Yes
		Authentication/Operation Log Management		Yes	Yes	Yes
Web Access Settings	Web Access Settings	Favorites		Yes	Yes	Yes
		Settings		Yes	Yes	Yes

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## Service mode setting values that can be backed up by DCM

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

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

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### DCM list for Service Mode

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

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

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	ADJUST	CCD	DFCH-B10	Yes		
COPIER	ADJUST	CCD	DFCH-G2	Yes		
COPIER	ADJUST	CCD	DFCH-G10	Yes		
COPIER	ADJUST	CCD	MTF2-M10	Yes		
COPIER	ADJUST	CCD	MTF2-M11	Yes		
COPIER	ADJUST	CCD	MTF2-M12	Yes		
COPIER	ADJUST	CCD	MTF2-S10	Yes		
COPIER	ADJUST	CCD	MTF2-S11	Yes		
COPIER	ADJUST	CCD	MTF2-S12	Yes		
COPIER	ADJUST	CCD	MTF-M10	Yes		
COPIER	ADJUST	CCD	MTF-M11	Yes		
COPIER	ADJUST	CCD	MTF-M12	Yes		
COPIER	ADJUST	CCD	MTF-S10	Yes		
COPIER	ADJUST	CCD	MTF-S11	Yes		
COPIER	ADJUST	CCD	MTF-S12	Yes		
COPIER	ADJUST	CCD	DFCH2K2	Yes		
COPIER	ADJUST	CCD	DFCH2K10	Yes		
COPIER	ADJUST	CCD	DFCH-K2	Yes		
COPIER	ADJUST	CCD	DFCH-K10	Yes		
COPIER	ADJUST	CCD	DFTAR-BW	Yes		
COPIER	ADJUST	CCD	DFTBK-G	Yes		
COPIER	ADJUST	CCD	DFTBK-B	Yes		
COPIER	ADJUST	CCD	DFTBK-R	Yes		
COPIER	ADJUST	CCD	CCD-CHG2	Yes		
COPIER	ADJUST	CCD	DFTBK-BW	Yes		
COPIER	ADJUST	IMG-REG	REG-H-Y	Yes		
COPIER	ADJUST	IMG-REG	REG-H-C	Yes		
COPIER	ADJUST	IMG-REG	REG-H-K	Yes		
COPIER	ADJUST	IMG-REG	REG-HS-Y	Yes		
COPIER	ADJUST	IMG-REG	REG-HS-C	Yes		
COPIER	ADJUST	IMG-REG	REG-HS-K	Yes		
COPIER	ADJUST	IMG-REG	REG-V-Y	Yes		
COPIER	ADJUST	IMG-REG	REG-V-C	Yes		
COPIER	ADJUST	IMG-REG	REG-V-K	Yes		
COPIER	ADJUST	IMG-REG	REG-H-M	Yes		
COPIER	ADJUST	IMG-REG	REG-V-M	Yes		
COPIER	ADJUST	IMG-REG	REG-HS-M	Yes		
COPIER	ADJUST	IMG-REG	MAG-H	Yes		
COPIER	ADJUST	IMG-REG	MAG-V	Yes		

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	ADJUST	DENS	SGNL-Y	Yes		
COPIER	ADJUST	DENS	SGNL-M	Yes		
COPIER	ADJUST	DENS	SGNL-C	Yes		
COPIER	ADJUST	DENS	REF-Y	Yes		
COPIER	ADJUST	DENS	REF-M	Yes		
COPIER	ADJUST	DENS	REF-C	Yes		
COPIER	ADJUST	DENS	SIGG-Y	Yes		
COPIER	ADJUST	DENS	SIGG-M	Yes		
COPIER	ADJUST	DENS	SIGG-C	Yes		
COPIER	ADJUST	DENS	SIGG-K	Yes		
COPIER	ADJUST	DENS	SGNL-K	Yes		
COPIER	ADJUST	DENS	T-SPLY-Y	Yes		
COPIER	ADJUST	DENS	T-SPLY-M	Yes		
COPIER	ADJUST	DENS	T-SPLY-C	Yes		
COPIER	ADJUST	DENS	T-SPLY-K	Yes		
COPIER	ADJUST	DENS	DMAX-Y	Yes		
COPIER	ADJUST	DENS	DMAX-M	Yes		
COPIER	ADJUST	DENS	DMAX-C	Yes		
COPIER	ADJUST	DENS	P-TG-Y	Yes		
COPIER	ADJUST	DENS	P-TG-M	Yes		
COPIER	ADJUST	DENS	P-TG-C	Yes		
COPIER	ADJUST	DENS	P-TG-K	Yes		
COPIER	ADJUST	DENS	DMAX-K	Yes		
COPIER	ADJUST	DENS	P-ALPHA	Yes		
COPIER	ADJUST	DENS	REF-K	Yes		
COPIER	ADJUST	DENS	DMLMT-HY	Yes		
COPIER	ADJUST	DENS	DMLMT-HM	Yes		
COPIER	ADJUST	DENS	DMLMT-HC	Yes		
COPIER	ADJUST	DENS	DMLMT-HK	Yes		
COPIER	ADJUST	DENS	DMLMT-LY	Yes		
COPIER	ADJUST	DENS	DMLMT-LM	Yes		
COPIER	ADJUST	DENS	DMLMT-LC	Yes		
COPIER	ADJUST	DENS	DMLMT-LK	Yes		
COPIER	ADJUST	DENS	CONT-Y	Yes		
COPIER	ADJUST	DENS	CONT-M	Yes		
COPIER	ADJUST	DENS	CONT-C	Yes		
COPIER	ADJUST	DENS	CONT-K	Yes		
COPIER	ADJUST	BLANK	BLANK-T	Yes		
COPIER	ADJUST	BLANK	BLANK-L	Yes		

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	ADJUST	BLANK	BLANK-R	Yes		
COPIER	ADJUST	BLANK	BLANK-B	Yes		
COPIER	ADJUST	V-CONT	VCONT-Y	Yes		
COPIER	ADJUST	V-CONT	VCONT-M	Yes		
COPIER	ADJUST	V-CONT	VCONT-C	Yes		
COPIER	ADJUST	V-CONT	VCONT-K	Yes		
COPIER	ADJUST	V-CONT	VBACK-Y	Yes		
COPIER	ADJUST	V-CONT	VBACK-M	Yes		
COPIER	ADJUST	V-CONT	VBACK-C	Yes		
COPIER	ADJUST	V-CONT	VBACK-K	Yes		
COPIER	ADJUST	V-CONT	PT-VCT-Y	Yes		
COPIER	ADJUST	V-CONT	PT-VCT-M	Yes		
COPIER	ADJUST	V-CONT	PT-VCT-C	Yes		
COPIER	ADJUST	V-CONT	PT-VCT-K	Yes		
COPIER	ADJUST	PASCAL	OFST-P-Y	Yes		
COPIER	ADJUST	PASCAL	OFST-P-M	Yes		
COPIER	ADJUST	PASCAL	OFST-P-C	Yes		
COPIER	ADJUST	PASCAL	OFST-P-K	Yes		
COPIER	ADJUST	COLOR	ADJ-Y	Yes		
COPIER	ADJUST	COLOR	ADJ-M	Yes		
COPIER	ADJUST	COLOR	ADJ-C	Yes		
COPIER	ADJUST	COLOR	ADJ-K	Yes		
COPIER	ADJUST	COLOR	OFST-Y	Yes		
COPIER	ADJUST	COLOR	OFST-M	Yes		
COPIER	ADJUST	COLOR	OFST-C	Yes		
COPIER	ADJUST	COLOR	OFST-K	Yes		
COPIER	ADJUST	COLOR	LD-OFS-Y	Yes		
COPIER	ADJUST	COLOR	LD-OFS-M	Yes		
COPIER	ADJUST	COLOR	LD-OFS-C	Yes		
COPIER	ADJUST	COLOR	LD-OFS-K	Yes		
COPIER	ADJUST	COLOR	MD-OFS-Y	Yes		
COPIER	ADJUST	COLOR	MD-OFS-M	Yes		
COPIER	ADJUST	COLOR	MD-OFS-C	Yes		
COPIER	ADJUST	COLOR	MD-OFS-K	Yes		
COPIER	ADJUST	COLOR	HD-OFS-Y	Yes		
COPIER	ADJUST	COLOR	HD-OFS-M	Yes		
COPIER	ADJUST	COLOR	HD-OFS-C	Yes		
COPIER	ADJUST	COLOR	HD-OFS-K	Yes		
COPIER	ADJUST	COLOR	PL-OFS-Y	Yes		

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	ADJUST	COLOR	PL-OFS-M	Yes		
COPIER	ADJUST	COLOR	PL-OFS-C	Yes		
COPIER	ADJUST	COLOR	PL-OFS-K	Yes		
COPIER	ADJUST	COLOR	PM-OFS-Y	Yes		
COPIER	ADJUST	COLOR	PM-OFS-M	Yes		
COPIER	ADJUST	COLOR	PM-OFS-C	Yes		
COPIER	ADJUST	COLOR	PM-OFS-K	Yes		
COPIER	ADJUST	COLOR	PH-OFS-Y	Yes		
COPIER	ADJUST	COLOR	PH-OFS-M	Yes		
COPIER	ADJUST	COLOR	PH-OFS-C	Yes		
COPIER	ADJUST	COLOR	PH-OFS-K	Yes		
COPIER	ADJUST	HV-PRI	DIS-TGY	Yes		
COPIER	ADJUST	HV-PRI	DIS-TGM	Yes		
COPIER	ADJUST	HV-PRI	DIS-TGC	Yes		
COPIER	ADJUST	HV-PRI	DIS-TGK	Yes		
COPIER	ADJUST	HV-PRI	DIS-TGY2	Yes		
COPIER	ADJUST	HV-PRI	DIS-TGM2	Yes		
COPIER	ADJUST	HV-PRI	DIS-TGC2	Yes		
COPIER	ADJUST	HV-PRI	DIS-TGK2	Yes		
COPIER	ADJUST	HV-PRI	OFSTAC-Y	Yes		
COPIER	ADJUST	HV-PRI	OFSTAC-M	Yes		
COPIER	ADJUST	HV-PRI	OFSTAC-C	Yes		
COPIER	ADJUST	HV-PRI	OFSTAC-K	Yes		
COPIER	ADJUST	HV-PRI	OFSTACY2	Yes		
COPIER	ADJUST	HV-PRI	OFSTACM2	Yes		
COPIER	ADJUST	HV-PRI	OFSTACC2	Yes		
COPIER	ADJUST	HV-PRI	OFSTACK2	Yes		
COPIER	ADJUST	HV-TR	1TR-TGY	Yes		
COPIER	ADJUST	HV-TR	1TR-TGM	Yes		
COPIER	ADJUST	HV-TR	1TR-TGC	Yes		
COPIER	ADJUST	HV-TR	1TR-TGK1	Yes		
COPIER	ADJUST	HV-TR	2TR-N1	Yes		
COPIER	ADJUST	HV-TR	2TR-N2	Yes		
COPIER	ADJUST	HV-TR	2TR-P1	Yes		
COPIER	ADJUST	HV-TR	2TR-P2	Yes		
COPIER	ADJUST	HV-TR	2TR-H1	Yes		
COPIER	ADJUST	HV-TR	2TR-H2	Yes		
COPIER	ADJUST	HV-TR	2TR-UH1	Yes		
COPIER	ADJUST	HV-TR	2TR-UH2	Yes		

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	ADJUST	HV-TR	2TR-N12	Yes		
COPIER	ADJUST	HV-TR	2TR-N22	Yes		
COPIER	ADJUST	HV-TR	2TR-H12	Yes		
COPIER	ADJUST	HV-TR	2TR-H22	Yes		
COPIER	ADJUST	HV-TR	2TR-UH12	Yes		
COPIER	ADJUST	HV-TR	2TR-UH22	Yes		
COPIER	ADJUST	HV-TR	2TR-P12	Yes		
COPIER	ADJUST	HV-TR	2TR-P22	Yes		
COPIER	ADJUST	HV-TR	2TR-N13	Yes		
COPIER	ADJUST	HV-TR	2TR-N23	Yes		
COPIER	ADJUST	HV-TR	2TR-H13	Yes		
COPIER	ADJUST	HV-TR	2TR-H23	Yes		
COPIER	ADJUST	HV-TR	2TR-UH13	Yes		
COPIER	ADJUST	HV-TR	2TR-UH23	Yes		
COPIER	ADJUST	HV-TR	2TR-P13	Yes		
COPIER	ADJUST	HV-TR	2TR-P23	Yes		
COPIER	ADJUST	HV-TR	2TR-O1	Yes		
COPIER	ADJUST	HV-TR	2TR-O12	Yes		
COPIER	ADJUST	HV-TR	2TR-O13	Yes		
COPIER	ADJUST	HV-TR	2TR-HN2	Yes		
COPIER	ADJUST	HV-TR	1TR-TGKT	Yes		
COPIER	ADJUST	HV-TR	2TR-T1	Yes		
COPIER	ADJUST	HV-TR	2TR-T2	Yes		
COPIER	ADJUST	HV-TR	2TR-T12	Yes		
COPIER	ADJUST	HV-TR	2TR-T22	Yes		
COPIER	ADJUST	HV-TR	2TR-T13	Yes		
COPIER	ADJUST	HV-TR	2TR-T23	Yes		
COPIER	ADJUST	HV-TR	2TR-R1	Yes		
COPIER	ADJUST	HV-TR	2TR-R2	Yes		
COPIER	ADJUST	HV-TR	2TR-R12	Yes		
COPIER	ADJUST	HV-TR	2TR-R22	Yes		
COPIER	ADJUST	HV-TR	2TR-R13	Yes		
COPIER	ADJUST	HV-TR	2TR-R23	Yes		
COPIER	ADJUST	HV-TR	2TR-HN1	Yes		
COPIER	ADJUST	HV-TR	2TR-HN12	Yes		
COPIER	ADJUST	HV-TR	2TR-HN22	Yes		
COPIER	ADJUST	HV-TR	2TR-HN13	Yes		
COPIER	ADJUST	HV-TR	2TR-HN23	Yes		
COPIER	ADJUST	HV-TR	2TR-SH1	Yes		



Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	ADJUST	HV-TR	2TR-SH2	Yes		
COPIER	ADJUST	HV-TR	2TR-SH12	Yes		
COPIER	ADJUST	HV-TR	2TR-SH22	Yes		
COPIER	ADJUST	HV-TR	2TR-SH13	Yes		
COPIER	ADJUST	HV-TR	2TR-E1	Yes		
COPIER	ADJUST	HV-TR	2TR-E2	Yes		
COPIER	ADJUST	HV-TR	2TR-E12	Yes		
COPIER	ADJUST	HV-TR	2TR-E22	Yes		
COPIER	ADJUST	HV-TR	2TR-E13	Yes		
COPIER	ADJUST	HV-TR	2TR-E23	Yes		
COPIER	ADJUST	HV-TR	2TR-SH23	Yes		
COPIER	ADJUST	HV-TR	2TR-OFF	Yes		
COPIER	ADJUST	HV-TR	1TR-TGY2	Yes		
COPIER	ADJUST	HV-TR	1TR-TGM2	Yes		
COPIER	ADJUST	HV-TR	1TR-TGC2	Yes		
COPIER	ADJUST	HV-TR	1TR-TK12	Yes		
COPIER	ADJUST	HV-TR	1TR-TGY3	Yes		
COPIER	ADJUST	HV-TR	1TR-TGM3	Yes		
COPIER	ADJUST	HV-TR	1TR-TGC3	Yes		
COPIER	ADJUST	HV-TR	1TR-TK13	Yes		
COPIER	ADJUST	HV-TR	1TR-TK42	Yes		
COPIER	ADJUST	HV-TR	1TR-TK43	Yes		
COPIER	ADJUST	FEED-ADJ	REGIST	Yes		
COPIER	ADJUST	FEED-ADJ	ADJ-C1	Yes		
COPIER	ADJUST	FEED-ADJ	ADJ-C2	Yes		
COPIER	ADJUST	FEED-ADJ	ADJ-C3	Yes		
COPIER	ADJUST	FEED-ADJ	ADJ-C4	Yes		
COPIER	ADJUST	FEED-ADJ	ADJ-MF	Yes		
COPIER	ADJUST	FEED-ADJ	ADJ-DK	Yes		
COPIER	ADJUST	FEED-ADJ	ADJ-C1RE	Yes		
COPIER	ADJUST	FEED-ADJ	ADJ-C2RE	Yes		
COPIER	ADJUST	FEED-ADJ	ADJ-C3RE	Yes		
COPIER	ADJUST	FEED-ADJ	ADJ-C4RE	Yes		
COPIER	ADJUST	FEED-ADJ	ADJ-DKRE	Yes		
COPIER	ADJUST	FEED-ADJ	ADJ-MFRE	Yes		
COPIER	ADJUST	FEED-ADJ	REG-THCK	Yes		
COPIER	ADJUST	FEED-ADJ	REG-OHT	Yes		
COPIER	ADJUST	FEED-ADJ	REG-DUP1	Yes		
COPIER	ADJUST	FEED-ADJ	REG-DUP2	Yes		

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	ADJUST	FEED-ADJ	LP-FEED1	Yes		
COPIER	ADJUST	FEED-ADJ	LP-MULT1	Yes		
COPIER	ADJUST	FEED-ADJ	LP-DUP1	Yes		
COPIER	ADJUST	FEED-ADJ	REG-SPD	Yes		
COPIER	ADJUST	CST-ADJ	MF-A4R	Yes		
COPIER	ADJUST	CST-ADJ	MF-A6R	Yes		
COPIER	ADJUST	CST-ADJ	MF-A4	Yes		
COPIER	ADJUST	MISC	SEG-ADJ	Yes		
COPIER	ADJUST	MISC	K-ADJ	Yes		
COPIER	ADJUST	MISC	ACS-ADJ	Yes		
COPIER	ADJUST	MISC	ACS-EN	Yes		
COPIER	ADJUST	MISC	ACS-CNT	Yes		
COPIER	ADJUST	MISC	ACS-EN2	Yes		
COPIER	ADJUST	MISC	ACS-CNT2	Yes		
COPIER	ADJUST	MISC	REOS-PG	Yes		
COPIER	ADJUST	MISC	SEG-ADJ3	Yes		
COPIER	ADJUST	MISC	K-ADJ3	Yes		
COPIER	ADJUST	MISC	ACS-ADJ3	Yes		
COPIER	ADJUST	MISC	ACS-EN3	Yes		
COPIER	ADJUST	MISC	ACS-CNT3	Yes		
COPIER	ADJUST	MISC	SH-ADJ	Yes		
COPIER	ADJUST	MISC	SH-ADJ2	Yes		
COPIER	ADJUST	EXP-LED	PR-EXP-Y	Yes		
COPIER	ADJUST	EXP-LED	PR-EXP-M	Yes		
COPIER	ADJUST	EXP-LED	PR-EXP-C	Yes		
COPIER	ADJUST	EXP-LED	PR-EXP-K	Yes		
COPIER	FUNCTION	INSTALL	KEY	Yes		
COPIER	FUNCTION	INSTALL	E-RDS	Yes	Yes	Yes
COPIER	FUNCTION	INSTALL	RGW-PORT	Yes	Yes	Yes
COPIER	FUNCTION	INSTALL	RGW-ADR	Yes	Yes	Yes
COPIER	FUNCTION	INSTALL	CDS-CTL	Yes	Yes	Yes
COPIER	FUNCTION	INSTALL	BIT-SVC	Yes	Yes	Yes
COPIER	FUNCTION	SYSTEM	DEBUG-1	Yes	Yes	Yes
COPIER	FUNCTION	MISC-R	1PCLBUDR	Yes		
COPIER	FUNCTION	MISC-R	1PCLBOVR	Yes		
COPIER	OPTION	FNC-SW	MODEL-SZ	Yes		
COPIER	OPTION	FNC-SW	SCANSLCT	Yes		
COPIER	OPTION	FNC-SW	DH-SW	Yes		
COPIER	OPTION	FNC-SW	SENS-CNF	Yes		



Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	OPTION	FNC-SW	CONFIG	Yes		
COPIER	OPTION	FNC-SW	W/SCNR	Yes		
COPIER	OPTION	FNC-SW	INTROT-1	Yes		
COPIER	OPTION	FNC-SW	INTROT-2	Yes		
COPIER	OPTION	FNC-SW	INTROT-T	Yes		
COPIER	OPTION	FNC-SW	DMAX-SW	Yes		
COPIER	OPTION	FNC-SW	BK-4CSW	Yes		
COPIER	OPTION	FNC-SW	MODELSZ2	Yes		
COPIER	OPTION	FNC-SW	DELV-FAN	Yes		
COPIER	OPTION	FNC-SW	FXWRNLVL	Yes		
COPIER	OPTION	FNC-SW	PT-W-SET	Yes		
COPIER	OPTION	FNC-SW	DELV-FN2	Yes		
COPIER	OPTION	FNC-SW	UNLMTBND	Yes		
COPIER	OPTION	FNC-SW	PSCL-MS	Yes		
COPIER	OPTION	FNC-SW	DMX-DISP	Yes		
COPIER	OPTION	FNC-SW	T-DLV-BK	Yes		
COPIER	OPTION	FNC-SW	JM-ERR-D	Yes		
COPIER	OPTION	FNC-SW	JM-ERR-R	Yes		
COPIER	OPTION	FNC-SW	ORG-LGL	Yes	Yes	
COPIER	OPTION	FNC-SW	ORG-LTR	Yes	Yes	
COPIER	OPTION	FNC-SW	ORG-LTRR	Yes	Yes	
COPIER	OPTION	FNC-SW	ORG-LDR	Yes	Yes	
COPIER	OPTION	FNC-SW	ORG-B5	Yes	Yes	
COPIER	OPTION	FNC-SW	KSIZE-SW	Yes	Yes	
COPIER	OPTION	FNC-SW	ORG-A4R	Yes	Yes	
COPIER	OPTION	FNC-SW	CARD-RNG	Yes	Yes	
COPIER	OPTION	FNC-SW	W/RAID	Yes	Yes	
COPIER	OPTION	FNC-SW	STND-PNL	Yes	Yes	
COPIER	OPTION	FNC-SW	INVALPDL	Yes	Yes	
COPIER	OPTION	FNC-SW	IMGCNTPR	Yes	Yes	
COPIER	OPTION	FNC-SW	PDL-Z-LG	Yes	Yes	
COPIER	OPTION	FNC-SW	MIB-NVTA	Yes	Yes	
COPIER	OPTION	FNC-SW	MIB-EXT	Yes	Yes	
COPIER	OPTION	FNC-SW	SVC-RUI	Yes	Yes	
COPIER	OPTION	FNC-SW	SVMD-ENT	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	PDF-RDCT	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	REBOOTSW	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	SJB-UNW	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	WEBV-SW	Yes	Yes	Yes

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	OPTION	FNC-SW	COMP-PRT	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	ARCDT-SW	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	SJOB-CL	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	USB-RCNT	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	MIBCOUNT	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	MEAP-PRI	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	PSWD-SW	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	SM-PSWD	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	RPT2SIDE	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	CDS-FIRM	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	CDS-MEAP	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	CDS-UGW	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	LOCLFIRM	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	MC-FANSW	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	BXNUPLOG	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	SDLMTWRN	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	JLK-PWSC	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	FAX-INT	Yes	Yes	
COPIER	OPTION	FNC-SW	CDS-LVUP	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	AMSOFFSW	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	UA-OFFSW	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	LCDSFLG	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	BXSHIFT	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	HOME-SW	Yes	Yes	Yes
COPIER	OPTION	FNC-SW	NO-LGOUT	Yes	Yes	Yes
COPIER	OPTION	DSPLY-SW	T-LW-LVL	Yes		
COPIER	OPTION	DSPLY-SW	T-CRG-SW	Yes		
COPIER	OPTION	DSPLY-SW	DRM-CNTR	Yes		
COPIER	OPTION	DSPLY-SW	CNTCNFSW	Yes		
COPIER	OPTION	DSPLY-SW	UI-COPY	Yes	Yes	Yes
COPIER	OPTION	DSPLY-SW	UI-BOX	Yes	Yes	Yes
COPIER	OPTION	DSPLY-SW	UI-SEND	Yes	Yes	Yes
COPIER	OPTION	DSPLY-SW	UI-FAX	Yes	Yes	Yes
COPIER	OPTION	DSPLY-SW	NWERR-SW	Yes	Yes	Yes
COPIER	OPTION	DSPLY-SW	UISW-DSP	Yes	Yes	Yes
COPIER	OPTION	DSPLY-SW	FXMSG-SW	Yes	Yes	Yes
COPIER	OPTION	DSPLY-SW	ANIM-SW	Yes	Yes	Yes
COPIER	OPTION	DSPLY-SW	UI-PRINT	Yes	Yes	Yes
COPIER	OPTION	DSPLY-SW	IMGC-ADJ	Yes	Yes	Yes

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	OPTION	DSPLY-SW	UI-RSCAN	Yes	Yes	Yes
COPIER	OPTION	DSPLY-SW	UI-EPRNT	Yes	Yes	Yes
COPIER	OPTION	DSPLY-SW	UI-WEB	Yes	Yes	Yes
COPIER	OPTION	DSPLY-SW	UI-HOLD	Yes	Yes	Yes
COPIER	OPTION	DSPLY-SW	TNR-WARN	Yes	Yes	Yes
COPIER	OPTION	DSPLY-SW	RMT-CNSL	Yes	Yes	Yes
COPIER	OPTION	DSPLY-SW	UI-SBOX	Yes	Yes	Yes
COPIER	OPTION	DSPLY-SW	UI-MEM	Yes	Yes	Yes
COPIER	OPTION	DSPLY-SW	UI-NAVI	Yes	Yes	Yes
COPIER	OPTION	DSPLY-SW	FCOT-DSP	Yes	Yes	Yes
COPIER	OPTION	DSPLY-SW	UI-CUSTM	Yes	Yes	Yes
COPIER	OPTION	DSPLY-SW	SCT-BTN	Yes	Yes	Yes
COPIER	OPTION	DSPLY-SW	USER-DSP	Yes	Yes	Yes
COPIER	OPTION	DSPLY-SW	SDTM-DSP	Yes	Yes	Yes
COPIER	OPTION	NETWORK	RAW-DATA	Yes	Yes	Yes
COPIER	OPTION	NETWORK	IFAX-LIM	Yes	Yes	Yes
COPIER	OPTION	NETWORK	SMTPTXPN	Yes	Yes	Yes
COPIER	OPTION	NETWORK	SMTPRXPN	Yes	Yes	Yes
COPIER	OPTION	NETWORK	POP3PN	Yes	Yes	Yes
COPIER	OPTION	NETWORK	FTPTXPN	Yes	Yes	Yes
COPIER	OPTION	NETWORK	STS-PORT	Yes	Yes	Yes
COPIER	OPTION	NETWORK	CMD-PORT	Yes	Yes	Yes
COPIER	OPTION	NETWORK	NS-CMD5	Yes	Yes	Yes
COPIER	OPTION	NETWORK	NS-GSAPI	Yes	Yes	Yes
COPIER	OPTION	NETWORK	NS-NTLM	Yes	Yes	Yes
COPIER	OPTION	NETWORK	NS-PLNWS	Yes	Yes	Yes
COPIER	OPTION	NETWORK	NS-PLN	Yes	Yes	Yes
COPIER	OPTION	NETWORK	NS-LGN	Yes	Yes	Yes
COPIER	OPTION	NETWORK	MEAP-PN	Yes	Yes	Yes
COPIER	OPTION	NETWORK	CHNG-STS	Yes	Yes	Yes
COPIER	OPTION	NETWORK	CHNG-CMD	Yes	Yes	Yes
COPIER	OPTION	NETWORK	MEAP-SSL	Yes	Yes	Yes
COPIER	OPTION	NETWORK	LPD-PORT	Yes	Yes	Yes
COPIER	OPTION	NETWORK	WUEV-SW	Yes	Yes	Yes
COPIER	OPTION	NETWORK	WUEV-INT	Yes	Yes	Yes
COPIER	OPTION	NETWORK	WUEV-POT	Yes	Yes	Yes
COPIER	OPTION	NETWORK	WUEV-RTR	Yes	Yes	Yes
COPIER	OPTION	NETWORK	WUEN-LIV	Yes	Yes	Yes
COPIER	OPTION	NETWORK	IFX-CHIG	Yes	Yes	Yes

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	OPTION	NETWORK	DNSTRANS	Yes	Yes	Yes
COPIER	OPTION	NETWORK	PROXYRES	Yes	Yes	Yes
COPIER	OPTION	NETWORK	WOLTRANS	Yes	Yes	Yes
COPIER	OPTION	NETWORK	802XTOUT	Yes	Yes	Yes
COPIER	OPTION	NETWORK	IKERETRY	Yes	Yes	Yes
COPIER	OPTION	NETWORK	SPDALDEL	Yes	Yes	Yes
COPIER	OPTION	NETWORK	NCONF-SW	Yes	Yes	Yes
COPIER	OPTION	NETWORK	IKEINTVL	Yes	Yes	Yes
COPIER	OPTION	NETWORK	IPSDEBLV	Yes	Yes	Yes
COPIER	OPTION	NETWORK	SP-LINK	Yes	Yes	Yes
COPIER	OPTION	NETWORK	AFS-JOB	Yes	Yes	Yes
COPIER	OPTION	NETWORK	AFC-EVNT	Yes	Yes	Yes
COPIER	OPTION	NETWORK	ILOGMODE	Yes	Yes	Yes
COPIER	OPTION	NETWORK	ILOGKEEP	Yes	Yes	Yes
COPIER	OPTION	NETWORK	IPTBROAD	Yes	Yes	Yes
COPIER	OPTION	NETWORK	PFWFTPRT	Yes	Yes	Yes
COPIER	OPTION	NETWORK	IPMTU	Yes	Yes	Yes
COPIER	OPTION	NETWORK	DDNSINTV	Yes	Yes	Yes
COPIER	OPTION	ENV-SET	ENVP-INT	Yes	Yes	Yes
COPIER	OPTION	FEED-SW	EVLP-SPD	Yes		
COPIER	OPTION	FEED-SW	EVLP-FS	Yes		
COPIER	OPTION	FEED-SW	MFENV-K2	Yes		
COPIER	OPTION	FEED-SW	MFENV-N3	Yes		
COPIER	OPTION	FEED-SW	MFENV-Y3	Yes		
COPIER	OPTION	FEED-SW	MFENV-MO	Yes		
COPIER	OPTION	FEED-SW	MFENV-10	Yes		
COPIER	OPTION	FEED-SW	MFENV-DL	Yes		
COPIER	OPTION	FEED-SW	MFENV-C5	Yes		
COPIER	OPTION	FEED-SW	TFL-RTC	Yes	Yes	
COPIER	OPTION	FEED-SW	USZ-FEED	Yes	Yes	Yes
COPIER	OPTION	IMG-SPD	FX-D-TMP	Yes		
COPIER	OPTION	IMG-SPD	FIX-ROT	Yes		
COPIER	OPTION	IMG-SPD	ARC-INT1	Yes		
COPIER	OPTION	IMG-SPD	ARC-INT2	Yes		
COPIER	OPTION	IMG-RDR	DFDST-L1	Yes		
COPIER	OPTION	IMG-RDR	DFDST-L2	Yes		
COPIER	OPTION	IMG-RDR	DF2DSTL1	Yes		
COPIER	OPTION	IMG-RDR	DF2DSTL2	Yes		
COPIER	OPTION	IMG-MCON	PASCAL	Yes		

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	OPTION	IMG-MCON	TMC-SLCT	Yes		
COPIER	OPTION	IMG-MCON	DH-MODE	Yes		
COPIER	OPTION	IMG-MCON	DH-TMG	Yes		
COPIER	OPTION	IMG-MCON	REDU-CNT	Yes		
COPIER	OPTION	IMG-MCON	VP-ART	Yes		
COPIER	OPTION	IMG-MCON	VP-TXT	Yes		
COPIER	OPTION	IMG-MCON	P-ALPHA	Yes		
COPIER	OPTION	IMG-MCON	AST-SEL	Yes		
COPIER	OPTION	IMG-MCON	REGM-SEL	Yes		
COPIER	OPTION	IMG-MCON	ERS-SEL	Yes		
COPIER	OPTION	IMG-MCON	SCR-SW	Yes		
COPIER	OPTION	IMG-MCON	PSCL-TBL	Yes		
COPIER	OPTION	IMG-MCON	BGE-OFS	Yes		
COPIER	OPTION	IMG-MCON	SCR-SLCT	Yes	Yes	
COPIER	OPTION	IMG-MCON	PRN-FLG	Yes	Yes	
COPIER	OPTION	IMG-MCON	SCN-FLG	Yes	Yes	
COPIER	OPTION	IMG-MCON	TMIC-BK	Yes	Yes	
COPIER	OPTION	IMG-MCON	MIX-FLG	Yes	Yes	
COPIER	OPTION	IMG-MCON	REPORT-Z	Yes	Yes	
COPIER	OPTION	IMG-MCON	IFXEML-Z	Yes	Yes	
COPIER	OPTION	IMG-MCON	BMLNKS-Z	Yes	Yes	
COPIER	OPTION	IMG-MCON	PASCL-TY	Yes	Yes	
COPIER	OPTION	IMG-MCON	VIVID-UP	Yes	Yes	
COPIER	OPTION	IMG-DEV	DEVL-VTH	Yes		
COPIER	OPTION	IMG-DEV	INTPPR-1	Yes		
COPIER	OPTION	IMG-DEV	DVTGT-K	Yes		
COPIER	OPTION	IMG-DEV	DVTGT-Y	Yes		
COPIER	OPTION	IMG-DEV	DVTGT-M	Yes		
COPIER	OPTION	IMG-DEV	DVTGT-C	Yes		
COPIER	OPTION	IMG-DEV	DEVL-PTH	Yes		
COPIER	OPTION	IMG-DEV	AUTO-DH	Yes		
COPIER	OPTION	IMG-DEV	PCHINT-1	Yes		
COPIER	OPTION	IMG-DEV	PCHINT-V	Yes		
COPIER	OPTION	IMG-DEV	DELV-THY	Yes		
COPIER	OPTION	IMG-DEV	DELV-THC	Yes		
COPIER	OPTION	IMG-DEV	DELV-THM	Yes		
COPIER	OPTION	IMG-DEV	DELV-THK	Yes		
COPIER	OPTION	IMG-DEV	ADJ-VPP	Yes		
COPIER	OPTION	IMG-DEV	PAP-W-EN	Yes		

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	OPTION	IMG-DEV	PTN-LVL	Yes		
COPIER	OPTION	IMG-DEV	DMX-OF-Y	Yes		
COPIER	OPTION	IMG-DEV	DMX-OF-M	Yes		
COPIER	OPTION	IMG-DEV	DMX-OF-C	Yes		
COPIER	OPTION	IMG-DEV	DMX-OF-K	Yes		
COPIER	OPTION	IMG-DEV	DRM-IDL	Yes	Yes	Yes
COPIER	OPTION	IMG-TR	2TR-RVON	Yes		
COPIER	OPTION	IMG-TR	ITB-TYPE	Yes		
COPIER	OPTION	IMG-FIX	FX-S-TMP	Yes		
COPIER	OPTION	IMG-FIX	TMP-TBL2	Yes		
COPIER	OPTION	IMG-FIX	TMP-TBL3	Yes		
COPIER	OPTION	IMG-FIX	TMP-TBL4	Yes		
COPIER	OPTION	IMG-FIX	TMP-TBL5	Yes		
COPIER	OPTION	IMG-FIX	TMP-TBL6	Yes		
COPIER	OPTION	IMG-FIX	FXS-TMP2	Yes		
COPIER	OPTION	IMG-FIX	FXS-TMP3	Yes		
COPIER	OPTION	IMG-FIX	FXS-TMP4	Yes		
COPIER	OPTION	IMG-FIX	FXS-TMP5	Yes		
COPIER	OPTION	IMG-FIX	FXS-TMP6	Yes		
COPIER	OPTION	IMG-FIX	FXST2-N2	Yes		
COPIER	OPTION	IMG-FIX	FXST2-UH	Yes		
COPIER	OPTION	IMG-FIX	FN-ENTMP	Yes		
COPIER	OPTION	IMG-FIX	FLYING	Yes		
COPIER	OPTION	IMG-FIX	TMP-TBL7	Yes		
COPIER	OPTION	IMG-FIX	TMP-TBL8	Yes		
COPIER	OPTION	IMG-FIX	TMP-TBL9	Yes		
COPIER	OPTION	IMG-FIX	TMP-TB10	Yes		
COPIER	OPTION	IMG-FIX	FXS-TMP7	Yes		
COPIER	OPTION	IMG-FIX	FXS-TMP8	Yes		
COPIER	OPTION	IMG-FIX	FXS-TM10	Yes		
COPIER	OPTION	IMG-FIX	FXS-TMP9	Yes		
COPIER	OPTION	IMG-FIX	THIN-LP	Yes		
COPIER	OPTION	IMG-FIX	TMP-TB11	Yes		
COPIER	OPTION	IMG-FIX	FXS-TM11	Yes		
COPIER	OPTION	IMG-FIX	FXTBL-SW	Yes		
COPIER	OPTION	IMG-FIX	PLN-LP	Yes		
COPIER	OPTION	IMG-FIX	TRC-LP	Yes		
COPIER	OPTION	CUSTOM	TEMP-TBL	Yes		
COPIER	OPTION	CUSTOM	DEV-SP1	Yes		

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	OPTION	CUSTOM	DEV-SP2	Yes		
COPIER	OPTION	CUSTOM	DEV-SP3	Yes		
COPIER	OPTION	CUSTOM	DEV-SP4	Yes		
COPIER	OPTION	CUSTOM	DEV-SP5	Yes		
COPIER	OPTION	CUSTOM	DEV-SP6	Yes		
COPIER	OPTION	CUSTOM	DEV-SP7	Yes		
COPIER	OPTION	CUSTOM	DEV-SP8	Yes		
COPIER	OPTION	CUSTOM	USEUPTNR	Yes		
COPIER	OPTION	CUSTOM	DFEJCLED	Yes		
COPIER	OPTION	CUSTOM	SC-L-CNT	Yes	Yes	
COPIER	OPTION	CUSTOM	SCANTYPE	Yes	Yes	
COPIER	OPTION	CUSTOM	ABK-TOOL	Yes	Yes	Yes
COPIER	OPTION	USER	SIZE-DET	Yes		
COPIER	OPTION	USER	MB-CCV	Yes		
COPIER	OPTION	USER	CONTROL	Yes		
COPIER	OPTION	USER	TRY-STP	Yes		
COPIER	OPTION	USER	P-CRG-LF	Yes		
COPIER	OPTION	USER	FREE-DSP	Yes		
COPIER	OPTION	USER	COPY-LIM	Yes	Yes	
COPIER	OPTION	USER	B4-L-CNT	Yes	Yes	
COPIER	OPTION	USER	COPY-JOB	Yes	Yes	
COPIER	OPTION	USER	OP-SZ-DT	Yes	Yes	
COPIER	OPTION	USER	TAB-ROT	Yes	Yes	
COPIER	OPTION	USER	IDPRN-SW	Yes	Yes	
COPIER	OPTION	USER	MEAPSAFE	Yes	Yes	
COPIER	OPTION	USER	PDL-NCSW	Yes	Yes	
COPIER	OPTION	USER	SLP-SLCT	Yes	Yes	
COPIER	OPTION	USER	STPL-MAX	Yes	Yes	
COPIER	OPTION	USER	CS-ACC	Yes	Yes	
COPIER	OPTION	USER	SLEEP	Yes	Yes	Yes
COPIER	OPTION	USER	COUNTER1	Yes	Yes	Yes
COPIER	OPTION	USER	COUNTER2	Yes	Yes	Yes
COPIER	OPTION	USER	COUNTER3	Yes	Yes	Yes
COPIER	OPTION	USER	COUNTER4	Yes	Yes	Yes
COPIER	OPTION	USER	COUNTER5	Yes	Yes	Yes
COPIER	OPTION	USER	COUNTER6	Yes	Yes	Yes
COPIER	OPTION	USER	DATE-DSP	Yes	Yes	Yes
COPIER	OPTION	USER	MF-LG-ST	Yes	Yes	Yes
COPIER	OPTION	USER	CNT-DISP	Yes	Yes	Yes

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	OPTION	USER	NW-SCAN	Yes	Yes	Yes
COPIER	OPTION	USER	JOB-INVL	Yes	Yes	Yes
COPIER	OPTION	USER	LGSW-DSP	Yes	Yes	Yes
COPIER	OPTION	USER	PR-PSESW	Yes	Yes	Yes
COPIER	OPTION	USER	CPRT-DSP	Yes	Yes	Yes
COPIER	OPTION	USER	PCL-COPY	Yes	Yes	Yes
COPIER	OPTION	USER	CNT-SW	Yes	Yes	Yes
COPIER	OPTION	USER	TAB-ACC	Yes	Yes	Yes
COPIER	OPTION	USER	BCNT-AST	Yes	Yes	Yes
COPIER	OPTION	USER	PRJOB-CP	Yes	Yes	Yes
COPIER	OPTION	USER	DFLT-CPY	Yes	Yes	Yes
COPIER	OPTION	USER	DFLT-BOX	Yes	Yes	Yes
COPIER	OPTION	USER	DOC-REM	Yes	Yes	Yes
COPIER	OPTION	USER	DPT-ID-7	Yes	Yes	Yes
COPIER	OPTION	USER	RUI-RJT	Yes	Yes	Yes
COPIER	OPTION	USER	SND-RATE	Yes	Yes	Yes
COPIER	OPTION	USER	FREG-SW	Yes	Yes	Yes
COPIER	OPTION	USER	IFAX-SZL	Yes	Yes	Yes
COPIER	OPTION	USER	IFAX-PGD	Yes	Yes	Yes
COPIER	OPTION	USER	TRAY-FLL	Yes	Yes	Yes
COPIER	OPTION	USER	PRNT-POS	Yes	Yes	Yes
COPIER	OPTION	USER	AFN-PSWD	Yes	Yes	Yes
COPIER	OPTION	USER	PTJAM-RC	Yes	Yes	Yes
COPIER	OPTION	USER	PS-MODE	Yes	Yes	Yes
COPIER	OPTION	USER	CNCT-RLZ	Yes	Yes	Yes
COPIER	OPTION	USER	COUNTER7	Yes	Yes	Yes
COPIER	OPTION	USER	COUNTER8	Yes	Yes	Yes
COPIER	OPTION	USER	2C-CT-SW	Yes	Yes	Yes
COPIER	OPTION	USER	LDAP-SW	Yes	Yes	Yes
COPIER	OPTION	USER	FROM-OF	Yes	Yes	Yes
COPIER	OPTION	USER	DOM-ADD	Yes	Yes	Yes
COPIER	OPTION	USER	FILE-OF	Yes	Yes	Yes
COPIER	OPTION	USER	MAIL-OF	Yes	Yes	Yes
COPIER	OPTION	USER	IFAX-OF	Yes	Yes	Yes
COPIER	OPTION	USER	LDAP-DEF	Yes	Yes	Yes
COPIER	OPTION	USER	TNRB-SW	Yes	Yes	Yes
COPIER	OPTION	USER	HDCR-DSW	Yes	Yes	Yes
COPIER	OPTION	USER	BWCL-DSP	Yes	Yes	Yes
COPIER	OPTION	USER	SCALL-SW	Yes	Yes	Yes

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	OPTION	USER	SCALLCMP	Yes	Yes	Yes
COPIER	OPTION	USER	USBH-DSP	Yes	Yes	Yes
COPIER	OPTION	USER	USBM-DSP	Yes	Yes	Yes
COPIER	OPTION	USER	USBI-DSP	Yes	Yes	Yes
COPIER	OPTION	USER	CTCHKDSP	Yes	Yes	Yes
COPIER	OPTION	USER	USBB-DSP	Yes	Yes	Yes
COPIER	OPTION	USER	USBR-DSP	Yes	Yes	Yes
COPIER	OPTION	USER	POL-SCAN	Yes	Yes	Yes
COPIER	OPTION	USER	JA-SBOX	Yes	Yes	Yes
COPIER	OPTION	USER	JA-DFAX	Yes	Yes	Yes
COPIER	OPTION	USER	JA-REP	Yes	Yes	Yes
COPIER	OPTION	USER	JA-FREP	Yes	Yes	Yes
COPIER	OPTION	USER	JA-BOX	Yes	Yes	Yes
COPIER	OPTION	USER	JA-FORM	Yes	Yes	Yes
COPIER	OPTION	USER	JA-PREV	Yes	Yes	Yes
COPIER	OPTION	USER	JA-PULL	Yes	Yes	Yes
COPIER	OPTION	USER	JA-PDLB	Yes	Yes	Yes
COPIER	OPTION	USER	JA-JOBK	Yes	Yes	Yes
COPIER	OPTION	USER	JA-JDF	Yes	Yes	Yes
COPIER	OPTION	USER	JA-RUI	Yes	Yes	Yes
COPIER	OPTION	USER	JA-WEB	Yes	Yes	Yes
COPIER	OPTION	USER	EXP-CRYP	Yes	Yes	Yes
COPIER	OPTION	USER	SLEEP1SW	Yes	Yes	Yes
COPIER	OPTION	USER	CNCL-ATH	Yes	Yes	Yes
COPIER	OPTION	USER	EZY-SCRIP	Yes	Yes	Yes
COPIER	OPTION	USER	DMN-MTCH	Yes	Yes	Yes
COPIER	OPTION	USER	SNDSTREN	Yes	Yes	Yes
COPIER	OPTION	USER	FAXSTREN	Yes	Yes	Yes
COPIER	OPTION	CST	U1-NAME	Yes	Yes	Yes
COPIER	OPTION	CST	U2-NAME	Yes	Yes	Yes
COPIER	OPTION	CST	U3-NAME	Yes	Yes	Yes
COPIER	OPTION	CST	U4-NAME	Yes	Yes	Yes
COPIER	OPTION	ACC	COIN	Yes		
COPIER	OPTION	ACC	DK-P	Yes		
COPIER	OPTION	ACC	CARD-SW	Yes		
COPIER	OPTION	ACC	SC-TYPE	Yes		
COPIER	OPTION	ACC	CC-SPSW	Yes		
COPIER	OPTION	ACC	UNIT-PRC	Yes		
COPIER	OPTION	ACC	MIN-PRC	Yes		

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	OPTION	ACC	MAX-PRC	Yes		
COPIER	OPTION	ACC	MIC-TUN	Yes		
COPIER	OPTION	ACC	SRL-SPSW	Yes		
COPIER	OPTION	ACC	PDL-THR	Yes		
COPIER	OPTION	ACC	DA-PUCT	Yes	Yes	
COPIER	OPTION	ACC	CR-TYPE	Yes	Yes	
COPIER	OPTION	ACC	STPL-LMT	Yes	Yes	Yes
COPIER	OPTION	INT-FACE	IMG-CONT	Yes		
COPIER	OPTION	INT-FACE	AP-OPT	Yes		
COPIER	OPTION	INT-FACE	AP-ACCNT	Yes		
COPIER	OPTION	INT-FACE	AP-CODE	Yes		
COPIER	OPTION	INT-FACE	NWCT-TM	Yes		
FEEDER	ADJUST		DOCST	Yes		
FEEDER	ADJUST		LA-SPEED	Yes		
FEEDER	ADJUST		DOCST2	Yes		
FEEDER	ADJUST		LA-SPD2	Yes		
FEEDER	ADJUST		ADJMSCN1	Yes		
FEEDER	ADJUST		ADJMSCN2	Yes		
FEEDER	ADJUST		ADJSSCN1	Yes		
FEEDER	ADJUST		ADJSSCN2	Yes		
SORTER	ADJUST		PNCH-HLE	Yes		
SORTER	ADJUST		STP-F1	Yes		
SORTER	ADJUST		STP-F2	Yes		
SORTER	ADJUST		STP-R1	Yes		
SORTER	ADJUST		STP-R2	Yes		
SORTER	ADJUST		STP-2P	Yes		
SORTER	ADJUST		SDL-STP	Yes		
SORTER	ADJUST		SDL-ALG	Yes		
SORTER	ADJUST		ST-ALG1	Yes		
SORTER	ADJUST		ST-ALG2	Yes		
SORTER	ADJUST		STP-F3	Yes		
SORTER	ADJUST		STP-F4	Yes		
SORTER	ADJUST		STP-R3	Yes		
SORTER	ADJUST		STP-R4	Yes		
SORTER	ADJUST		SW-UP-RL	Yes		
SORTER	ADJUST		PUN-V-RG	Yes		
SORTER	ADJUST		PRCS-RET	Yes		
SORTER	ADJUST		UP-CL	Yes		
SORTER	ADJUST		DW-CL	Yes		

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
SORTER	ADJUST		THC-CL	Yes		
SORTER	ADJUST		THC-PUSH	Yes		
SORTER	ADJUST		OFST-STC	Yes		
SORTER	ADJUST		THN-STC	Yes		
SORTER	ADJUST		STP-P-CH	Yes		
SORTER	ADJUST		TRY-NIS	Yes		
SORTER	ADJUST		TRY-SU	Yes		
SORTER	ADJUST		FIN-NIS	Yes		
SORTER	ADJUST		1SHT-SHF	Yes		
SORTER	ADJUST		SDL-SWCH	Yes		
SORTER	ADJUST		SDL-ALM	Yes		
SORTER	ADJUST		SFT-AMT1	Yes		
SORTER	ADJUST		SFT-AMT2	Yes		
SORTER	ADJUST		STP-NTN	Yes		
SORTER	ADJUST		INSTP-F1	Yes		
SORTER	ADJUST		INSTP-R1	Yes		
SORTER	ADJUST		THN-STCL	Yes		
SORTER	ADJUST		DSTP-F1	Yes		
SORTER	OPTION		BLNK-SW	Yes		
SORTER	OPTION		MD-SPRTN	Yes		
SORTER	OPTION		BUFF-SW	Yes		
SORTER	OPTION		PRCS-SP1	Yes		
SORTER	OPTION		STCR-DWN	Yes		
SORTER	OPTION		PRCS-SP3	Yes		
SORTER	OPTION		NSRT-STC	Yes		
SORTER	OPTION		THN-TRSW	Yes		
SORTER	OPTION		SWGUP-SW	Yes		

T-2-118

## ■ Import/export by service mode (external)

The following shows the procedure for importing and exporting the service mode setting values in service mode. With export by which data is collected from the machine, service mode setting values can be backed up. With import, data backed up from service mode and that backed up from remote UI can be restored.

The save destination of backup data can be selected from either a USB memory device or HDD of the machine.

### ● Export

#### Preparation

- USB memory device

\* Required when exporting to an external USB memory device.

It needs to have been formatted to be recognized by the device. No firmware registration is necessary.

#### Overall flow

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

#### Procedure

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

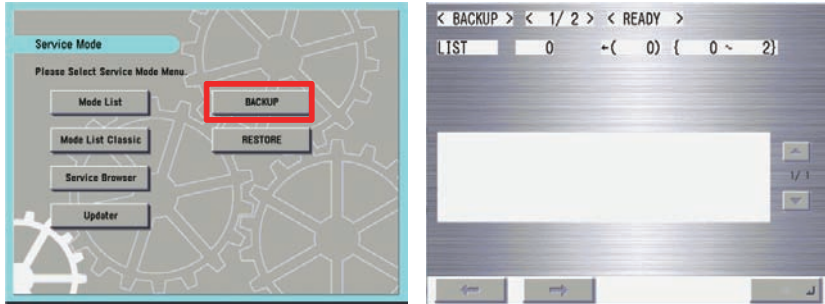
#### Exporting data to an external USB memory device

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





2. Log in to service mode and press BACKUP.



F-2-450

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



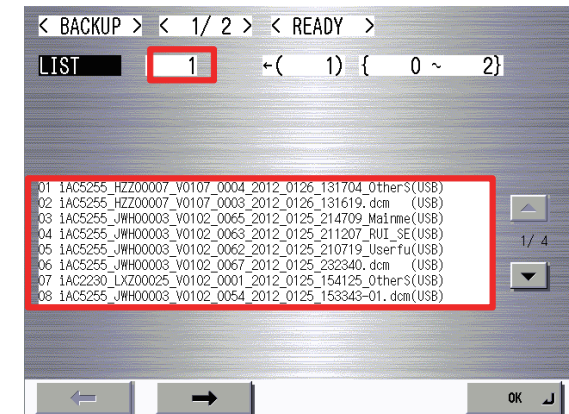
F-2-451

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



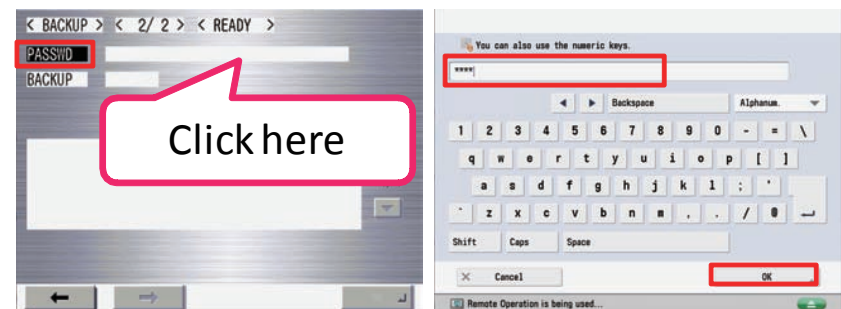
F-2-452

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



F-2-453

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



F-2-454

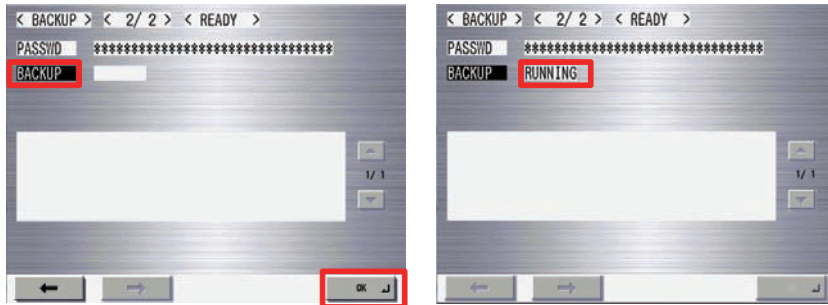


**Note:**

## Limitations regarding the DCM data password

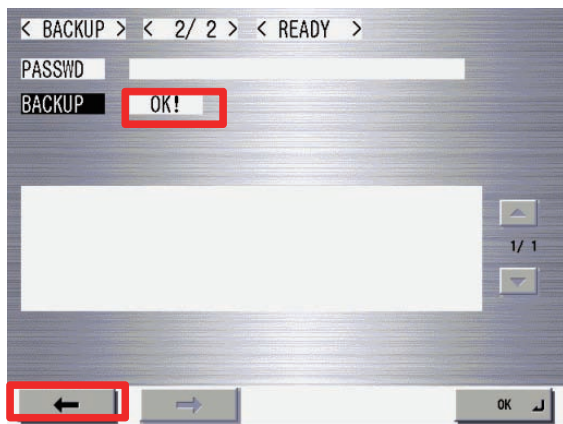
- Character string of software keyboard: 0 to 32 characters
- No password is set when 0 character is entered. (The setting in which no password is set is allowed only for service mode.)
- No space is allowed in the middle of a password.
- Password is case sensitive.

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



F-2-455

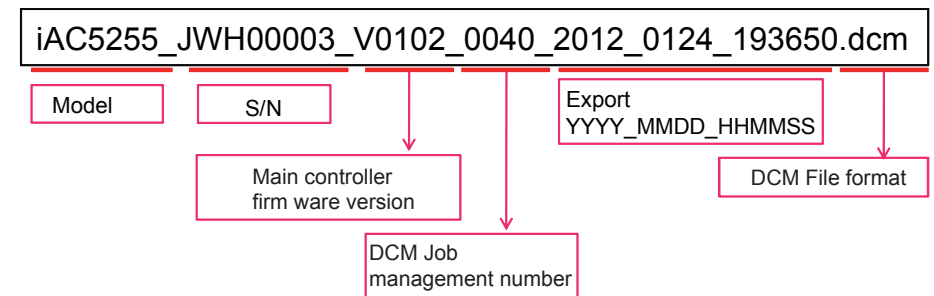
8. OK!" is displayed in the status column when the processing is successfully completed. Press <-.



F-2-456

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

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

**Reference:**

F-2-457

**● Import****Preparation**

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

**Overall flow**

Procedure for restoring data from an external USB memory device.

**Procedure**

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

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

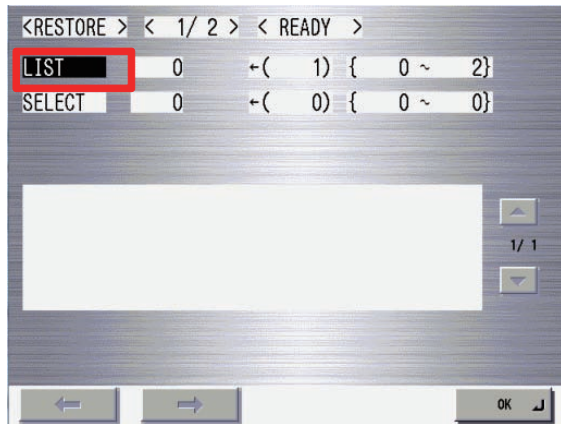
## Procedure for restoring data from an external USB memory device

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



F-2-458

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



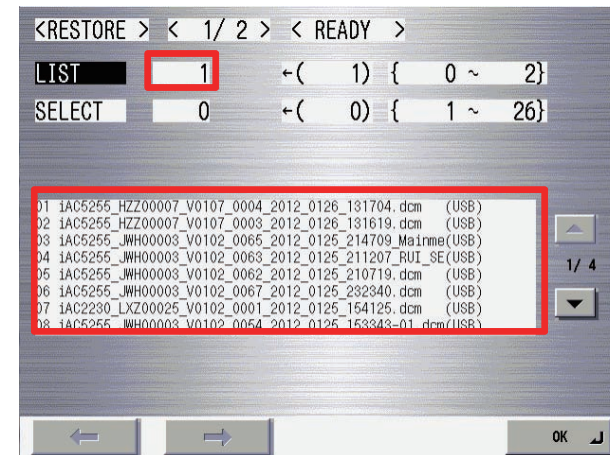
F-2-459

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



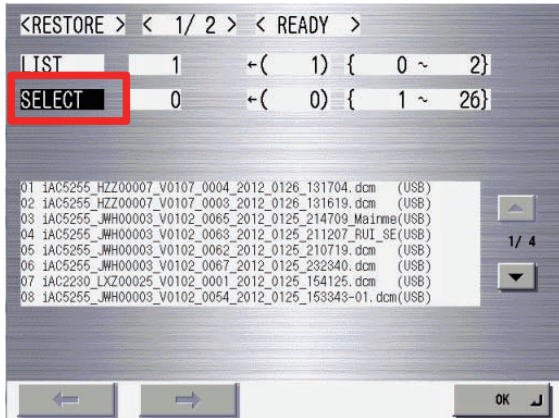
F-2-460

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



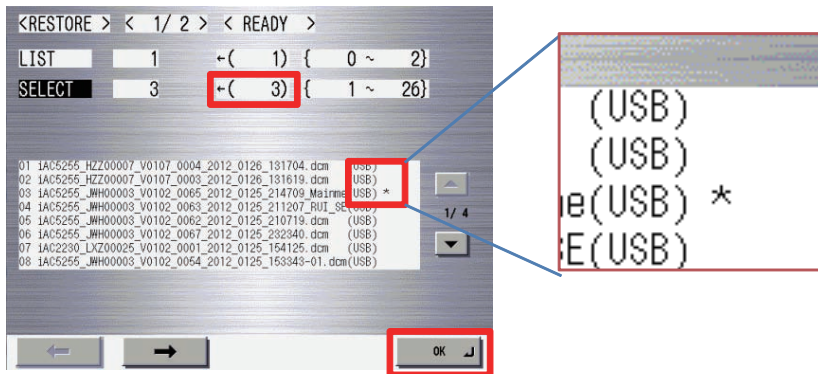
F-2-461

## 6. Select SELECT.



F-2-462

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



F-2-463

## 8. When the correct file is displayed, press -&gt;.



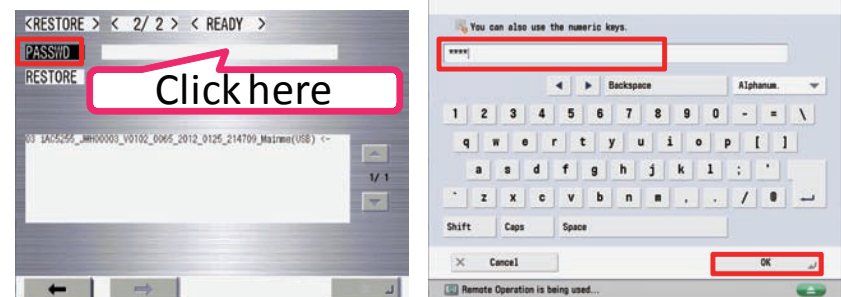
F-2-464

## Note:

## Specification of file selection display

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

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



F-2-465





F-2-466

Note:

Specification of file selection display

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

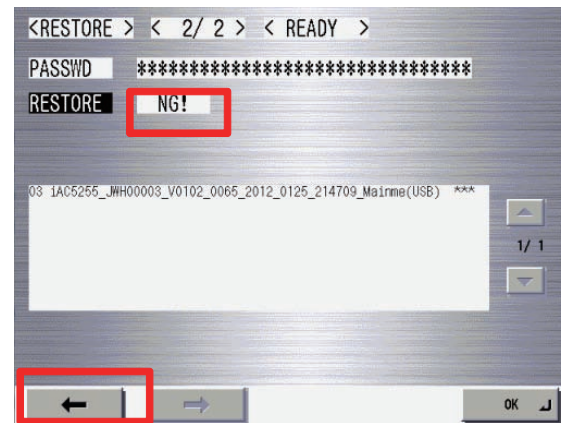
10. After registering the password, select RESTORE. Press OK to execute import.



F-2-467

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

Press <-.



F-2-468

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

Unmount the USB memory device.

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



F-2-469

## ■ Import/export by service mode (internal)

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

### Note:

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

## ● Export

### Preparation

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

### Overall flow

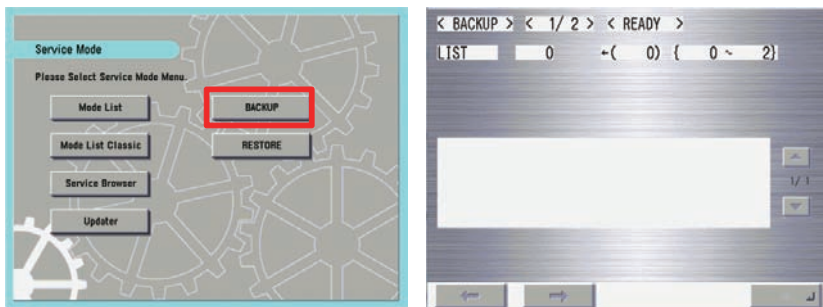
Here is a procedure for exporting data of the HDD of the machine.

### Procedure

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

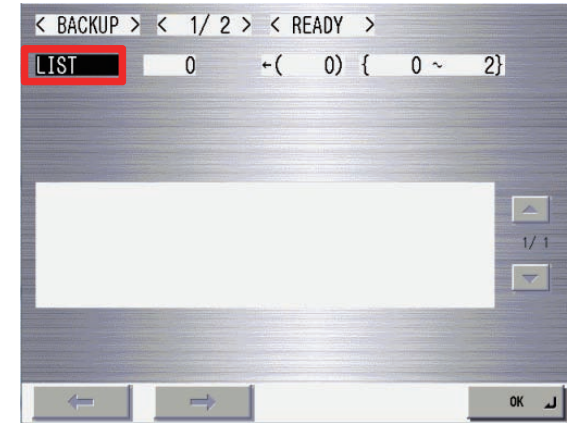
### Procedure for backing up data to the HDD of the machine

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



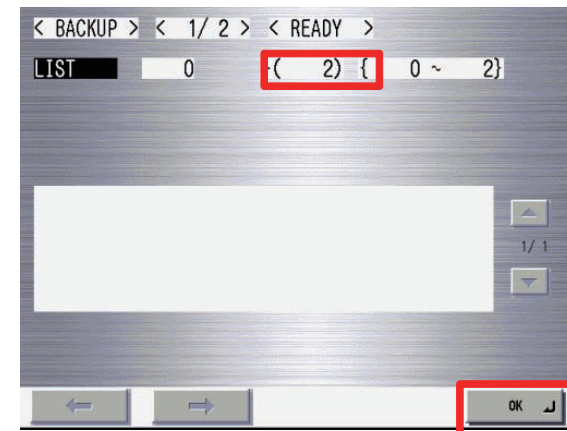
F-2-470

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

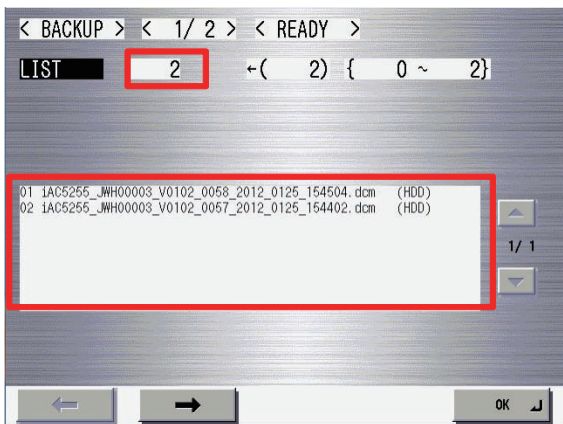


F-2-471

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

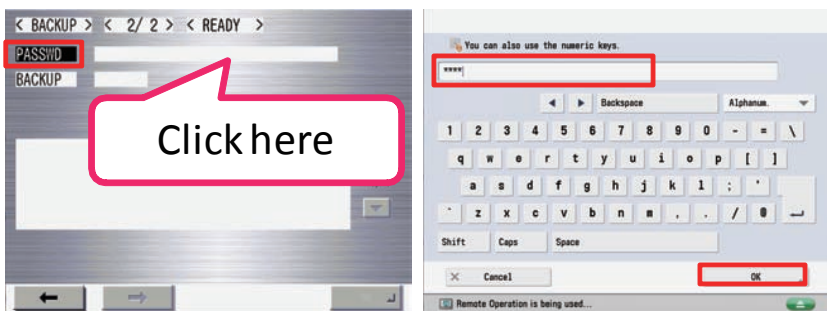


4. The names of .dcm files saved in the internal HDD are displayed. F-2-472



F-2-473

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



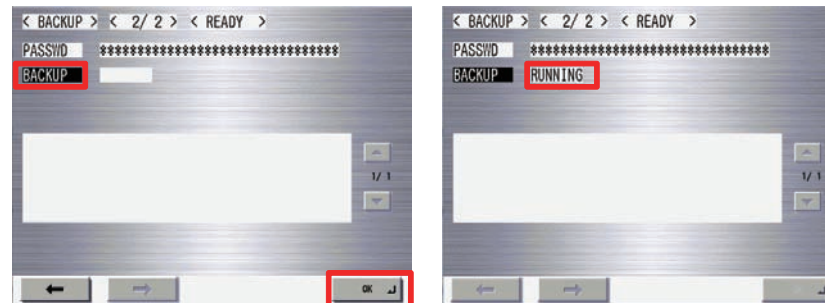
F-2-474

Note:

Limitations regarding the DCM data password

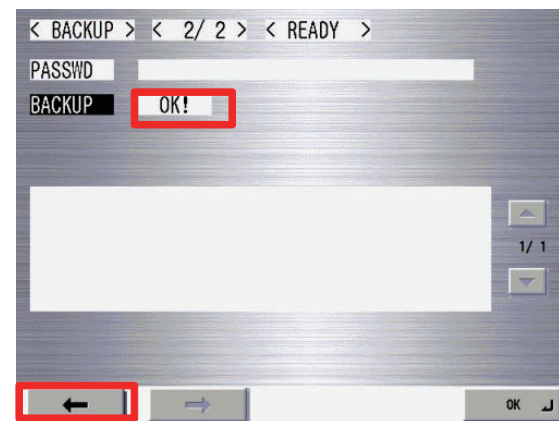
- Character string of software keyboard: 0 to 32 characters
- No password is set when 0 character is entered. (The setting in which no password is set is allowed only for service mode.)
- No space is allowed in the middle of a password.
- Password is case sensitive.

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



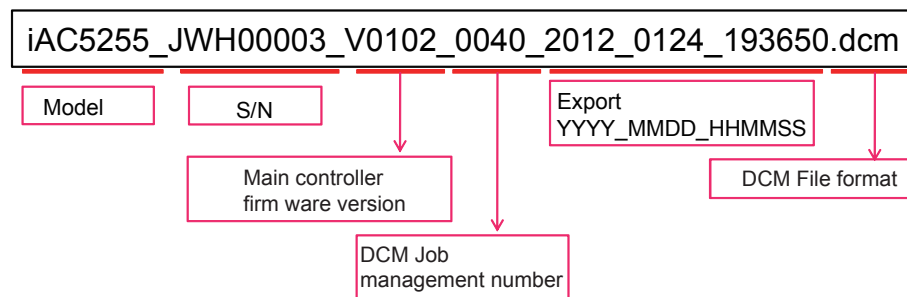
F-2-475

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



F-2-476

Reference:



F-2-477



## ● Import

### Preparation

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

### Overall flow

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

### Procedure

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

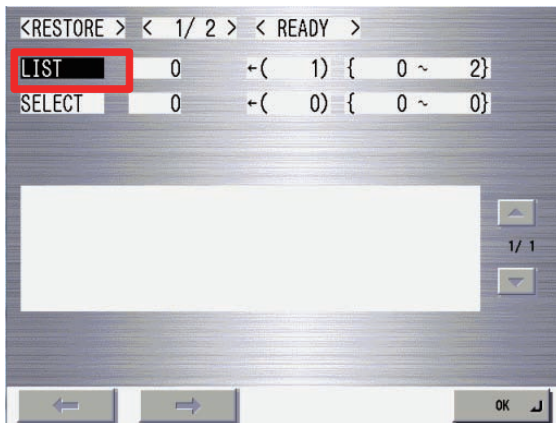
### Import from the internal HDD

1. Log in to service mode and press RESTORE.



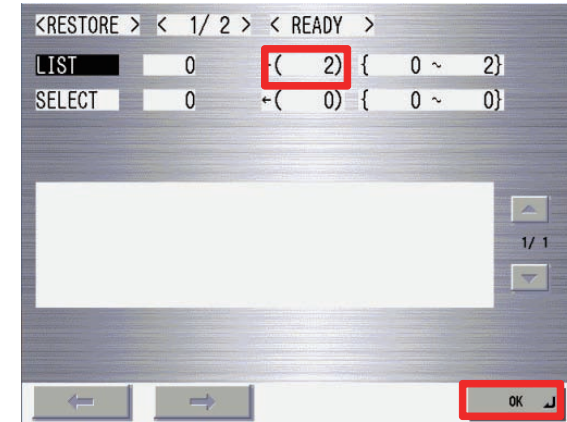
F-2-478

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



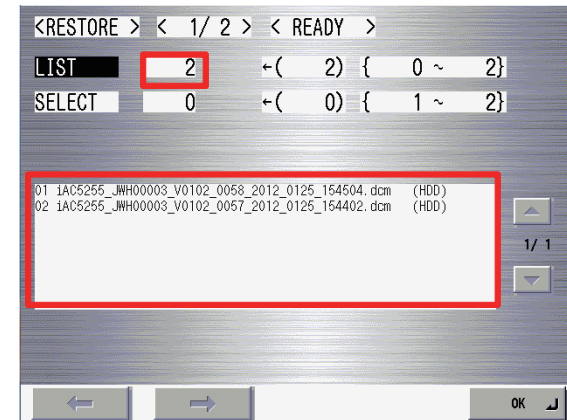
F-2-479

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



F-2-480

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



F-2-481

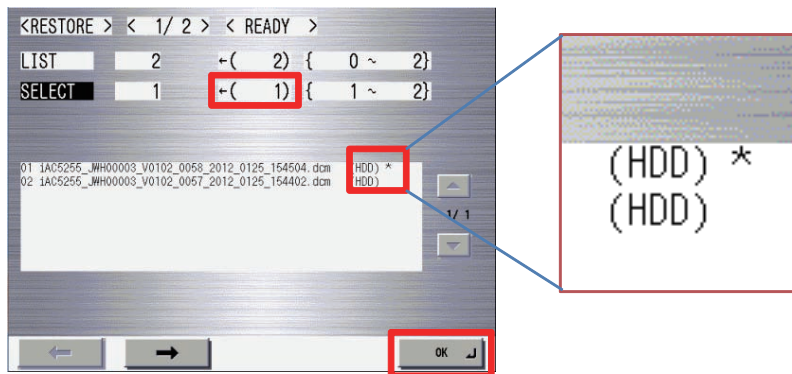


5. Select PASSWD.



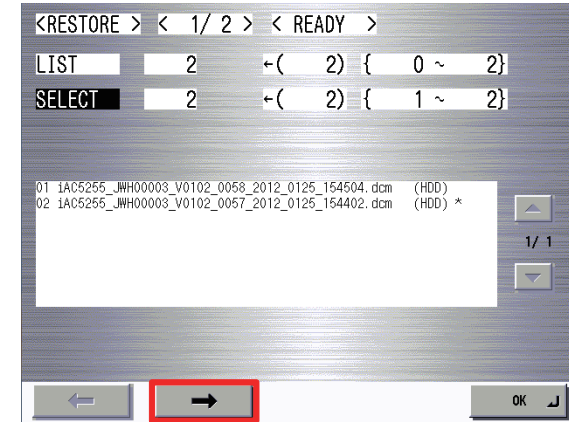
F-2-482

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



F-2-483

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



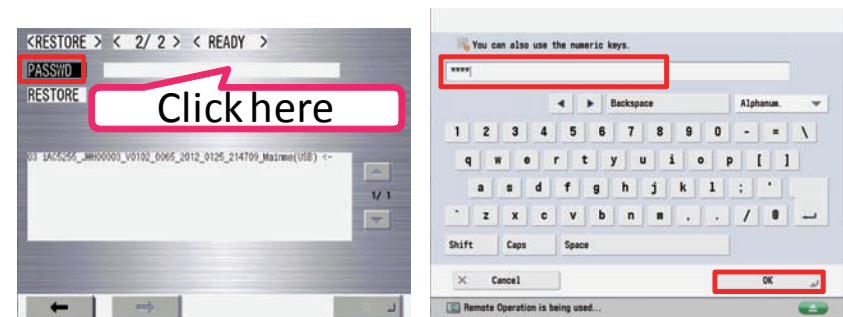
F-2-484

Note:

Specification of file selection display

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

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



F-2-485



F-2-486

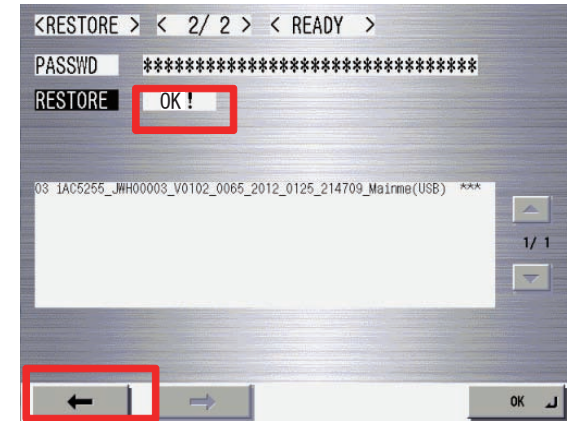
**Note:**

## Specification of file selection display

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

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

Press <-.



F-2-488

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



F-2-487

# 3

## Periodical Service

- Consumable Parts, Replacement Parts, and Cleaning Parts
- Cleaning Parts

## Consumable Parts, Replacement Parts, and Cleaning Parts

### Host machine

●: Replacement    Δ: Cleaning    ■: Inspection

No.	Category	Part Name	Part No	Number	Estimated time required for replacement	Interval						Counter	Adjustment (Yes/No)	Alarm	Remark	Reference	
						At installation	20K	50K	100K	150K	300K						500K
1	Body	Dust-blocking glass	-	1	Up to 1 minutes		Δ						-	-	Cleaning with Dust-blocking glass Cleaning tool	p. 4-96	
2		Dust-blocking glass cleaning pad	FL2-9476	1	Up to 1 minutes				●		-	-	-	-	Replacing when replace ITB cleaning blade	p. 4-96	
3	Image Formation System	Developing unit (Y)	FM4-8351	1	Up to 10 minutes					●	DRBL-1	DV-UNT-Y	Yes	-	Possible to install to iR-ADV C5051 series.	p. 4-138	
4		Developing unit (M)	FM4-8352	1	Up to 10 minutes					●	DRBL-1	DV-UNT-M	Yes	-		p. 4-138	
5		Developing unit (C)	FM4-8353	1	Up to 10 minutes					●	DRBL-1	DV-UNT-C	Yes	-		p. 4-138	
6		Developing unit (Bk)	FM4-8354	1	Up to 10 minutes					●	DRBL-1	DV-UNT-K	Yes	-		p. 4-138	
7		Primary transfer roller (Color)	FC0-0257	3	Up to 20 minutes					●	DRBL-1	TR-ROLC	Yes	-		p. 4-119	
8		Primary transfer roller (Bk)	FC0-0257	1	Up to 20 minutes					●	DRBL-1	TR-ROLK	Yes	-		p. 4-117	
9		Secondary transfer inner roller	FC8-4402	1	Up to 20 minutes					●	-	-	Yes	-	Replacing when replace secondary transfer outer roller	p. 4-123	
10		Secondary transfer outer roller	FC0-4878	1	Up to 5 minutes					●	DRBL-1	2TR-ROLL	Yes	-		p. 4-144	
11		Transfer separation guide unit	FM3-8893	1	Up to 5 minutes					●	DRBL-1	T/S-UNIT	-	-		p. 4-144	
12		ITB (intermediary transfer belt)	FC0-0255	1	Up to 15 minutes					●	DRBL-1	TR-BLT	Yes	-		p. 4-113	
13		Patch sensor	-	1	Up to 5 minutes		■							-	-	Cleaning when replace intermediary transfer belt (ITB) Clean with lint-free paper moistened with water 3 times in one direction	p. 4-107
14		ITB cleaning blade	FM4-7246	1	Up to 15 minutes				●		DRBL-1	T-CLN-BD	Yes	-		p. 4-110	

No.	Category	Part Name	Part No	Number	Estimated time required for replacement	Interval						Counter		Adjustment (Yes/No)	Alarm	Remark	Reference
						At installation	20K	50K	100K	150K	300K						
15	Fixing System	Film unit (100V)	FM3-5949	1	Up to 10 minutes					●		DRBL-1	FX-UP-FR	-	-	For 100V	p. 4-169
16		Film unit (120V)	FM3-5950	1						●		DRBL-1	FX-UP-FR	-	-	For 120V	p. 4-169
17		Film unit (230V)	FM3-5951	1						●		DRBL-1	FX-UP-FR	-	-	For 230V	p. 4-169
18		Pressure roller	FC8-4906	1	Up to 10 minutes					●		DRBL-1	FX-LW-RL	-	-		p. 4-173
19		Fixing bearing	XG9-0172	2	Up to 10 minutes					●		PRDC-1	FX-LW-BR	-	-		p. 4-173
20		Shutter cover	-	1	Up to 5 minutes					Δ					-	Cleaning when replace Film Unit	p. 4-172
21		Fixing separation guide	-	1	Up to 5 minutes					Δ					-	Cleaning when replace Film Unit	p. 4-172
22	Pickup/ Feeding System	Cassette 1 feeding roller	FC6-7083	1	Up to 5 minutes					●		DRBL-1	C1-FD-RL	-	-		p. 4-191
23		Cassette 2 feeding roller	FC6-7083	1	Up to 5 minutes					●		DRBL-1	C2-FD-RL	-	-		p. 4-191
24		Cassette 1 separation roller	FC6-6661	1	Up to 5 minutes					●		DRBL-1	C1-SP-RL	-	-		p. 4-192
25		Cassette 2 separation roller	FC6-6661	1	Up to 5 minutes					●		DRBL-1	C2-SP-RL	-	-		p. 4-192
26		Multi-Purpose Tray Feed Roller	FB1-8581	1	Up to 5 minutes					●		DRBL-1	M-PU-RL		-		p. 4-187
27		Multi-Purpose Tray Separation Roller	FC6-6661	1	Up to 5 minutes					●		DRBL-1	M-SP-RL		-		p. 4-188
28		Pickup assembly idler gear	FU0-0043	2	Up to 5 minutes					●		-	-	-	-	For Chinese model only. Replacing when replace feeding roller and separation roller.	p. 4-192
29		First delivery roller	-	1	Up to 5 minutes			Δ				-	-	-	-	If necessary cleaning with alcohol	p. 4-181
30		Second delivery roller	-	1	Up to 5 minutes			Δ				-	-	-	-	If necessary cleaning with alcohol	p. 4-181
31		Third delivery roller	-	1	Up to 5 minutes			Δ				-	-	-	-	If necessary cleaning with alcohol	p. 4-181
32		Registration roller	-	1	Up to 5 minutes			Δ				-	-	-	-	If necessary cleaning with alcohol	p. 4-176
33		Pre-registration guide	-	1	Up to 5 minutes			Δ				-	-	-	-	If necessary cleaning with lint-free paper	p. 4-176
34		Transparency sensor	RH7-7129	1	Up to 5 minutes			Δ				-	-	-	-	Cleaning with lint-free paper	p. 4-177
35		Fixing delivery guide	-	1	Up to 5 minutes			Δ				-	-	-	-	If necessary cleaning with lint-free paper	p. 4-179
36	Post-fixing roller	-	1	Up to 5 minutes			■				-	-	-	-	If necessary cleaning with alcohol	p. 4-179	

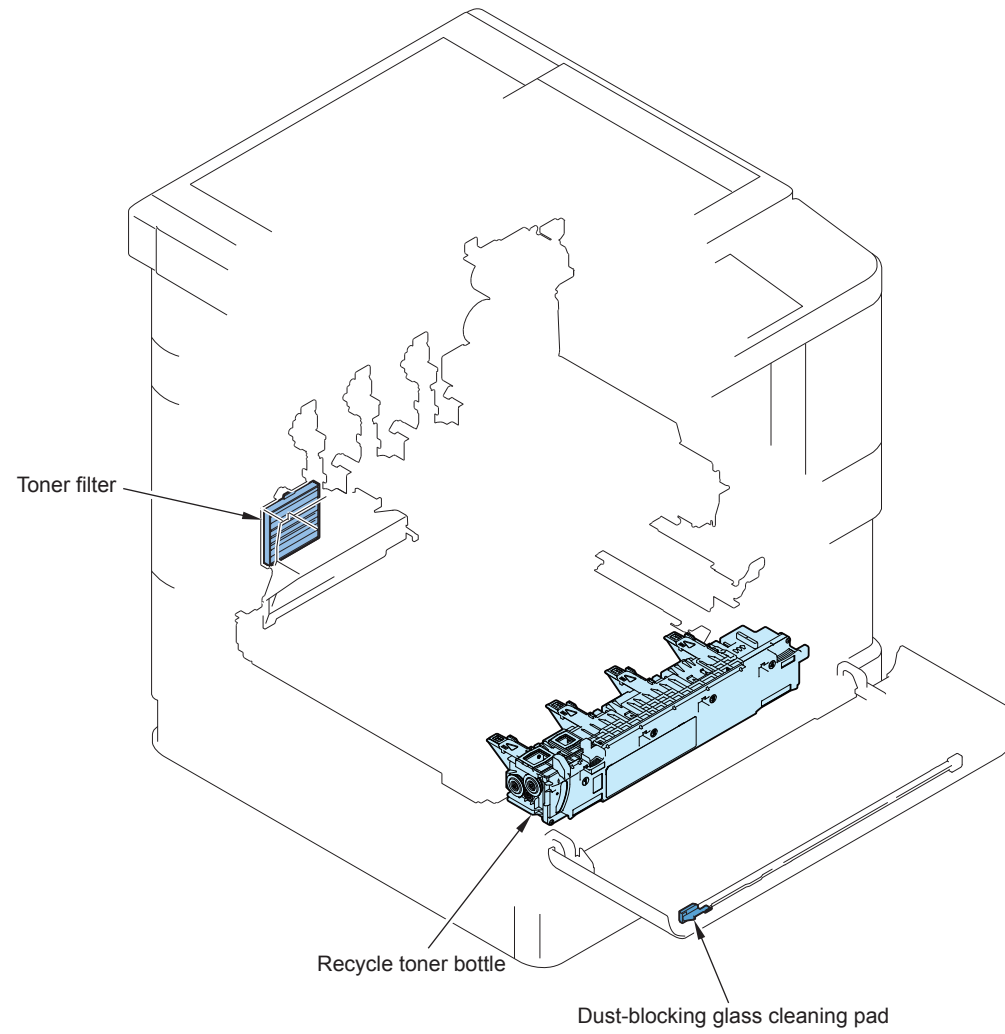
No.	Category	Part Name	Part No	Number	Estimated time required for replacement	Interval						Counter		Adjustment (Yes/No)	Alarm	Remark	Reference
						At installation	20K	50K	100K	150K	300K						
37	Pickup/ Feeding System	Fixing delivery roller	-	1	Up to 5 minutes		■					-	-	-	-	If necessary cleaning with alcohol	p. 4-180
38		Duplex feed upper roller	-	1	Up to 5 minutes		■					-	-	-	-	If necessary cleaning with alcohol	p. 4-180
39		Duplex feed lower roller	-	1	Up to 5 minutes		■					-	-	-	-	If necessary cleaning with alcohol	p. 4-181
40		Secondary transfer guide		1	Up to 5 minutes		Δ								-	Cleaning with lint-free paper	p. 4-175
41		Feeding contact guide	-	1	Up to 5 minutes		Δ					-	-	-	-	Cleaning with lint-free paper	p. 4-175
42		Vertical path sensor	FK2-6470	1	Up to 5 minutes		Δ								-	Cleaning with lint-free paper	p. 4-177
43		Lightproof Sheet		1	Up to 5 minutes		Δ								-	Cleaning with lint-free paper	p. 4-177
44	Filter	Toner filter	FC6-9817	1	Up to 5 minutes			●			DRBL-1	TN-FIL1	-	-		p. 4-104	
45	-	Recycle toner container	FM4-8400	1	Up to 5 minutes		●				DRBL-1	WSR-TNR	-	-	User maintenance. Reference in A4 size, image ratio 5%	p. 4-131	

T-3-1

Consumable parts in the ITB Unit are compatible with those of iR-ADV C5051 series. However, there is no compatibility between the ITB Unit itself of this machine and that of iR-ADV C5051 series. Therefore, it is not interchangeable.

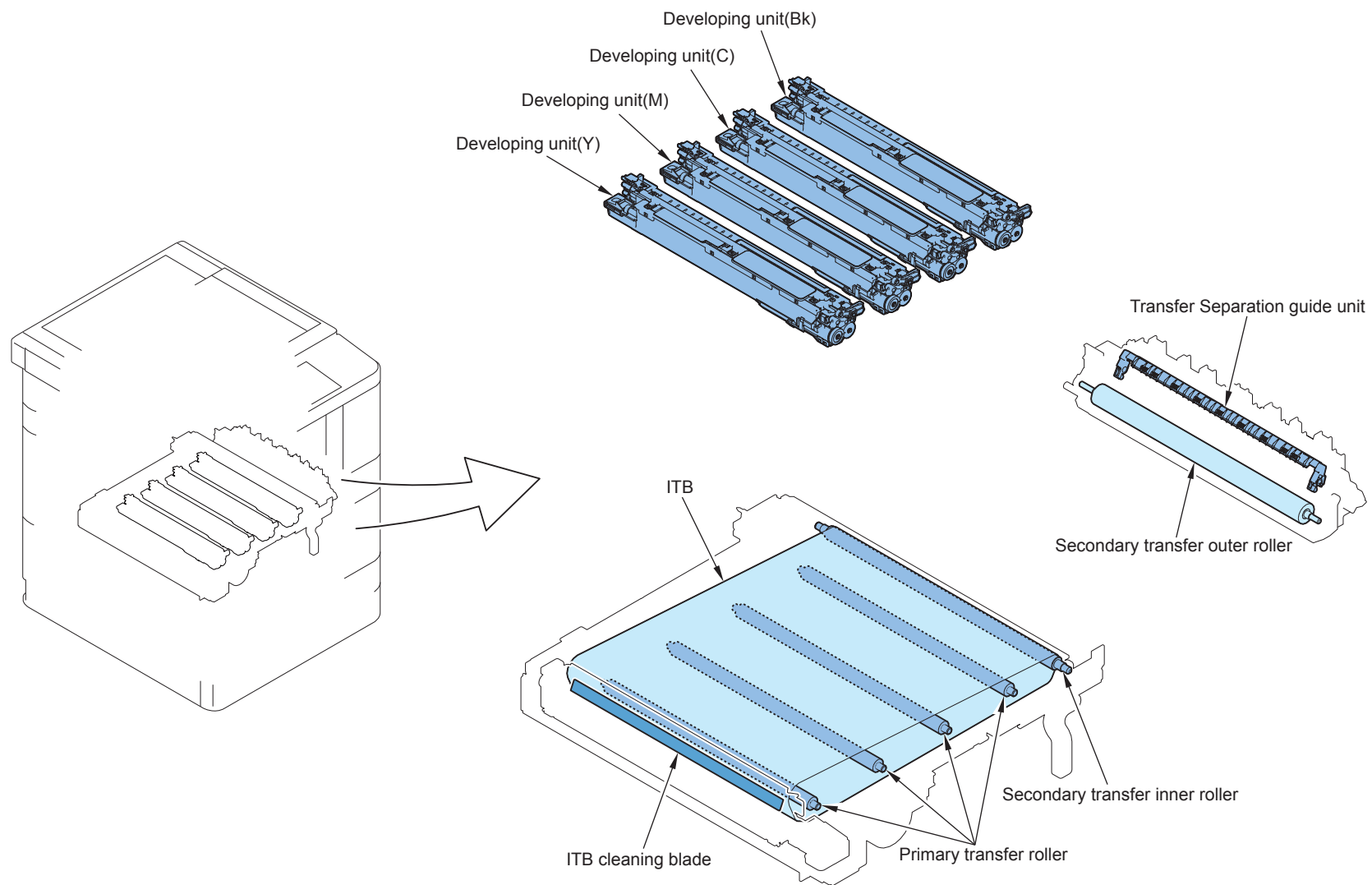
## ■ When Replacing Parts

When replacing the Consumable Parts, be sure to clear the Parts Counter  
(COPIER > COUNTER > PRDC-1/DRBL-1)

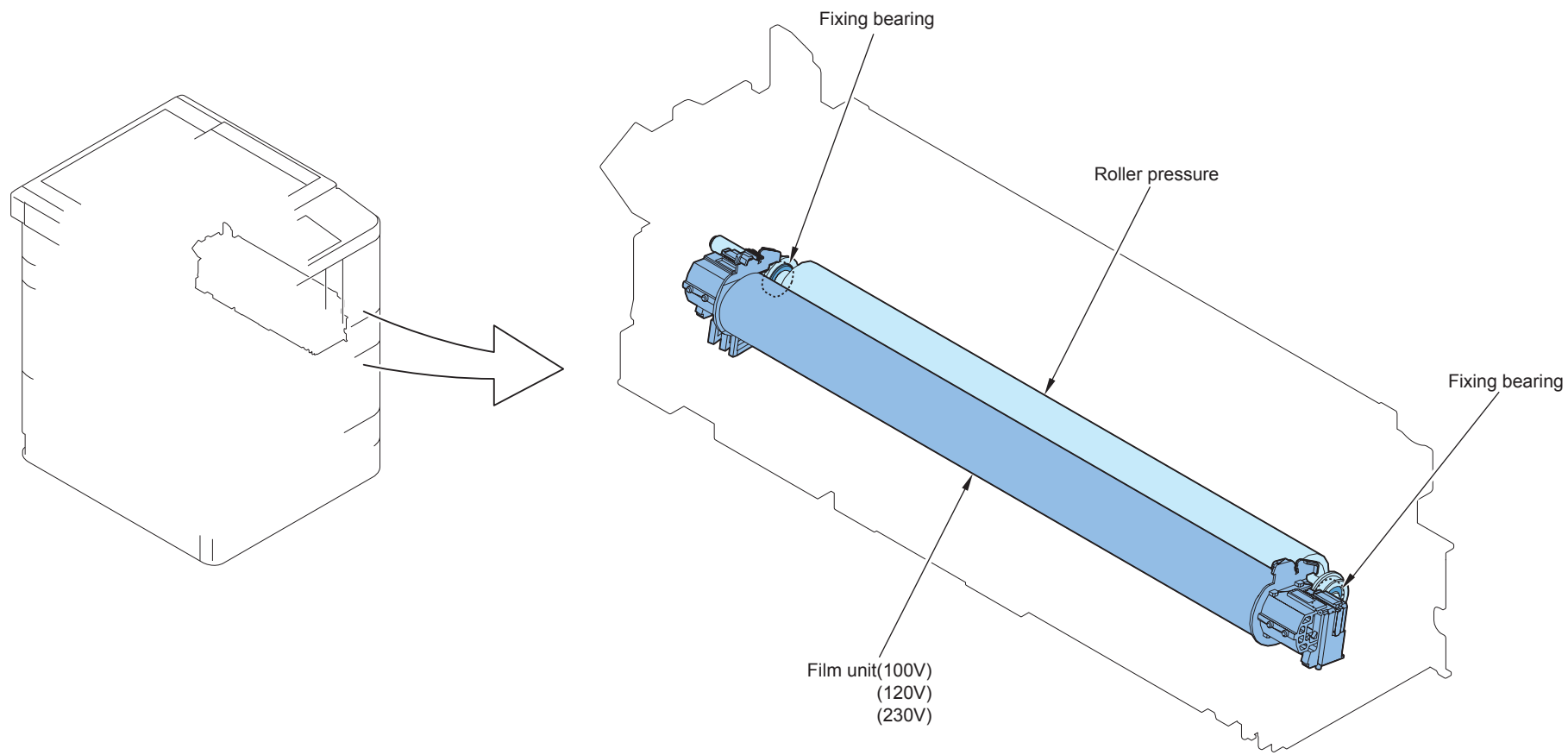


F-3-1

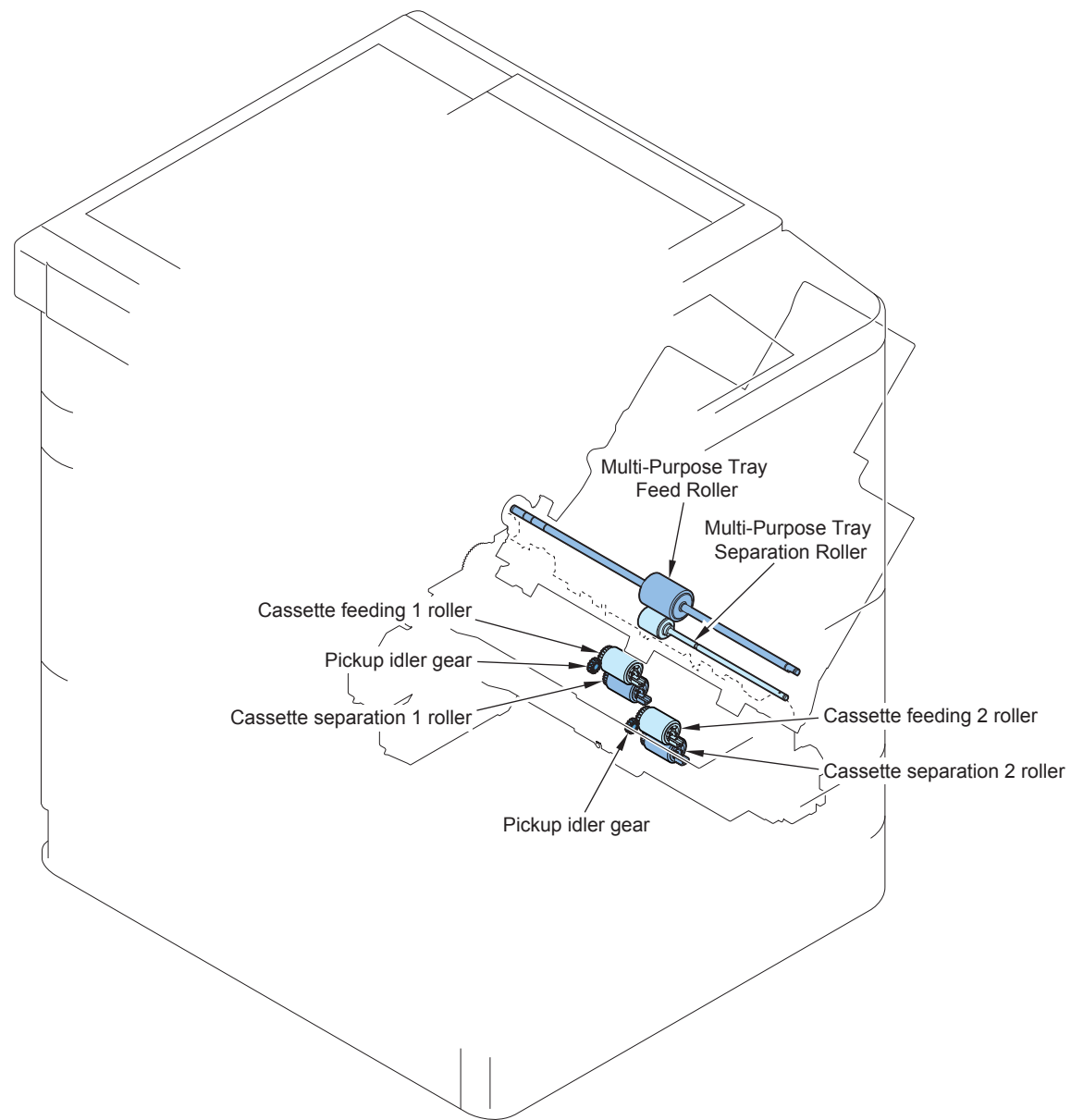




F-3-2



F-3-3



F-3-4

### Option (Consumable Parts, Replacement Parts)

No.	Category	Part Name	Part No	Number	Estimated time required for replacement	Interval	Counter		Adjustment (Yes/No)	Alarm	Remark	Reference
1	Duplex Color Image Reader Unit-E1	Pickup roller unit	FL3-4619	1	Up to 5 minutes	80K	DRBL-2	DF-PU-RL	-	-		
2		Separation roller	FC5-3115	1	Up to 5 minutes	80K						
3		Separation pad unit	FM4-6661	1	Up to 5 minutes	80K	DRBL-2	DF-SP-PD				
4		Stamp	FC7-5465	1	Up to 1 minutes	7,000 times	DRBL-2	STAMP				
5	Color Image Reader Unit-F1	Pickup roller unit	FM4-1728	1	Up to 5 minutes	80K	DRBL-2	DF-PU-RL	-	-		
6		Feed guide	FL3-2860	1	Up to 5 minutes	40K	DRBL-2	LNT-TAP1	-	-		
7		Separation pad	FL2-9942	1	Up to 5 minutes	80K	DRBL-2	DF-SP-PD	-	-		
8		Hinge unit	FC9-4956	1	Up to 30 minutes	150K	DRBL-2	DF-HNG-L	-	-		
9		Stamp	FC7-5465	1	Up to 1 minutes	7,000 times	DRBL-2	STAMP	-	-		
10	Cassette Feeding Unit-AD2	Cassette3 Feed Roller	FC6-7083	1	Up to 5 minutes	150K	DRBL-2	C3-FD-RL	-	-		
11		Cassette4 Feed Roller		1	Up to 5 minutes	150K	DRBL-2	C4-FD-RL	-	-		
12		Cassette3 Separation Roller	FC6-6661	1	Up to 5 minutes	150K	DRBL-2	C3-SP-RL	-	-		
13		Cassette4 Separation Roller		1	Up to 5 minutes	150K	DRBL-2	C4-SP-RL	-	-		
14	Paper Deck Unit-B2	Pickup Roller (Front)	FF5-7829	1	Up to 10 minutes	500K	DRBL-2	PD-PU-RL	-	-		
14		Pickup Roller (Rear)	FF5-7830	1	Up to 10 minutes	500K						
15		Feed Roller	FF5-7541	1	Up to 10 minutes	250K	DRBL-2	PD-FD-RL				
16		Separation roller	FB2-7777	1	Up to 10 minutes	250K	DRBL-2	PD-SP-RL				
17		Pullout roller	FB4-4868	1	Up to 10 minutes	250K	DRBL-2	PD-PL-RL				
18	Staple Finisher-J1	Stapler	FM2-0665	1	Up to 30 minutes	1,000,000 sheets	DRBL-2	FIN-STPR	-	610001		
19		Delivery static charge eliminator (L)	FC5-3667/ 4A3-5449	1	Up to 30 minutes	1,000,000 sheets	DRBL-2		-	-		
19		Delivery static charge eliminator (R)	FC5-5571/ 4A3-5450	1	Up to 30 minutes	1,000,000 sheets						
20		Inlet static charge eliminator	FL2-0822	1	Up to 30 minutes	1,000,000 sheets	DRBL-2	ENT-STC				
21		Swing guide inside static charge eliminator	4F3-0929	1	Up to 30 minutes	1,000,000 sheets	DRBL-2	CENT-STC				
22		Buffer Roller	FC5-3442	2	Up to 30 minutes	1,000,000 sheets	DRBL-2	FN-BFFRL				
23		Paper Return Roller (Rear)	4A3-0950	1	Up to 30 minutes	1,000,000 sheets	DRBL-2	BACK-ROL				
23	Paper Return Roller (Front)	4A3-0951	1	Up to 30 minutes	1,000,000 sheets							

No.	Category	Part Name	Part No	Number	Estimated time required for replacement	Interval	Counter		Adjustment (Yes/No)	Alarm	Remark	Reference
24	Booklet Finisher-J1	Stapler	FM2-0665	1	Up to 30 minutes	500K	DRBL-2	FIN-STPR	-	610001		
25		Delivery static charge eliminator (L)	FC5-3667/ 4A3-5449	1	Up to 30 minutes	1,000,000 sheets	DRBL-2	DL-STC	-	-		
25		Delivery static charge eliminator (R)	FC5-5571/ 4A3-5450	1	Up to 30 minutes	1,000,000 sheets						
26		Inlet static charge eliminator	FL2-0822	1	Up to 30 minutes	1,000,000 sheets	DRBL-2	ENT-STC	-	-		
27		Swing guide inside static charge eliminator	4F3-0929	1	Up to 30 minutes	1,000,000 sheets	DRBL-2	CENT-STC	-	-		
28		Buffer Roller	FC5-3442	2	Up to 30 minutes	1,000,000 sheets	DRBL-2	FN-BFFRL	-	-		
29		Paper Return Roller (Front)	4A3-0950	1	Up to 30 minutes	1,000,000 sheets	DRBL-2	BACK-ROL	-	-		
29		Paper Return Roller (Rear)	4A3-0951	1	Up to 30 minutes	1,000,000 sheets						
30		Stitcher	FL2-0846	2	Up to 30 minutes	100K	DRBL-2	SDL-STPL	-	620001		
31		Inner Finisher-E1	Stapler	FM4-2710	1	Up to 30 minutes	500K	DRBL-2	FIN-STPR	-	610001	
32	Offset Roller		4A3-1121	2	Up to 30 minutes	1,000,000 sheets	DRBL-2	OFST-RL	-	-		
33	Shutter unit		FL3-4298	1	Up to 30 minutes	1,000,000 sheets	DRBL-2	DL-STC	-	-		

T-3-2

## List of Work for Scheduled Servicing(Reader)

CL: Cleaning LU: Lubricate AD: Adjustment CH: Inspection

No.	Parts name	Parts No.	Number	Work Interval		Reference
				Installation	timely	
1	Copyboard glass (Surface)	FL2-9792-000	1		CL	
	Copyboard glass (Surface/Back)		1		CL	Including the white plate positioning of the glass surface.
2	Stream reading glass (Surface)	FL2-9620-000	1		CL	Use Oil Glass Cleaner FY9-6020 Do not use alcohol
	Stream reading glass (Surface/Back)		1		CL	Including the white plate positioning of the glass surface.
3	Scanner rail / shaft	-	-		CL,LU	SHC Oil : FY9-6029

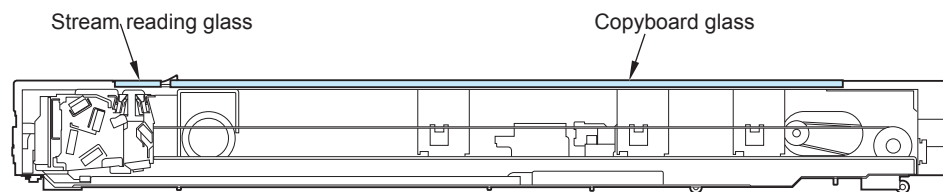
T-3-3

### CAUTION:

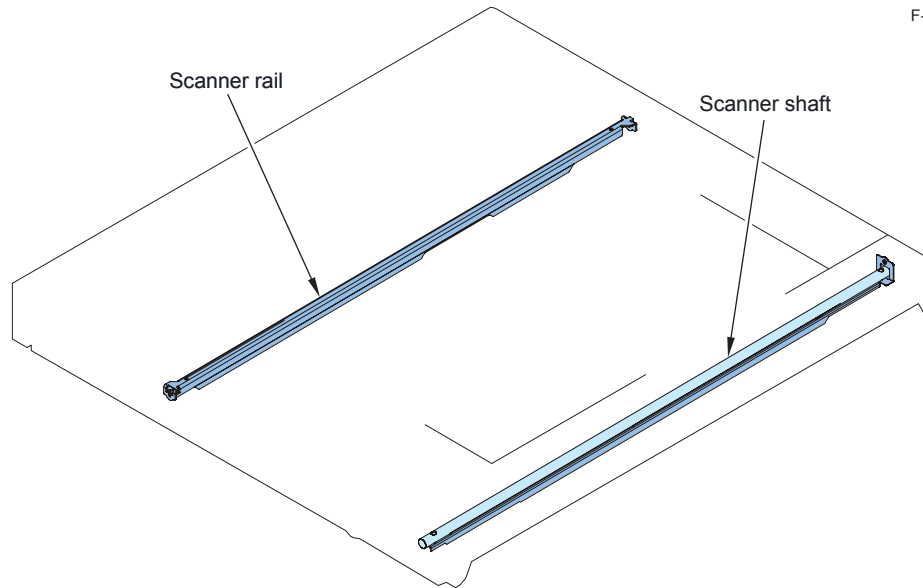
Cleaning the Stream Reading Glass with alcohol results in thinning of the oil film on the surface.

As a result, the frictional resistance of the surface is decreased, which allows more dust and dirt to adhere to the surface.

Therefore, be sure to use Oil Glass Cleaner FY9-6020 when cleaning the Stream Reading Glass.



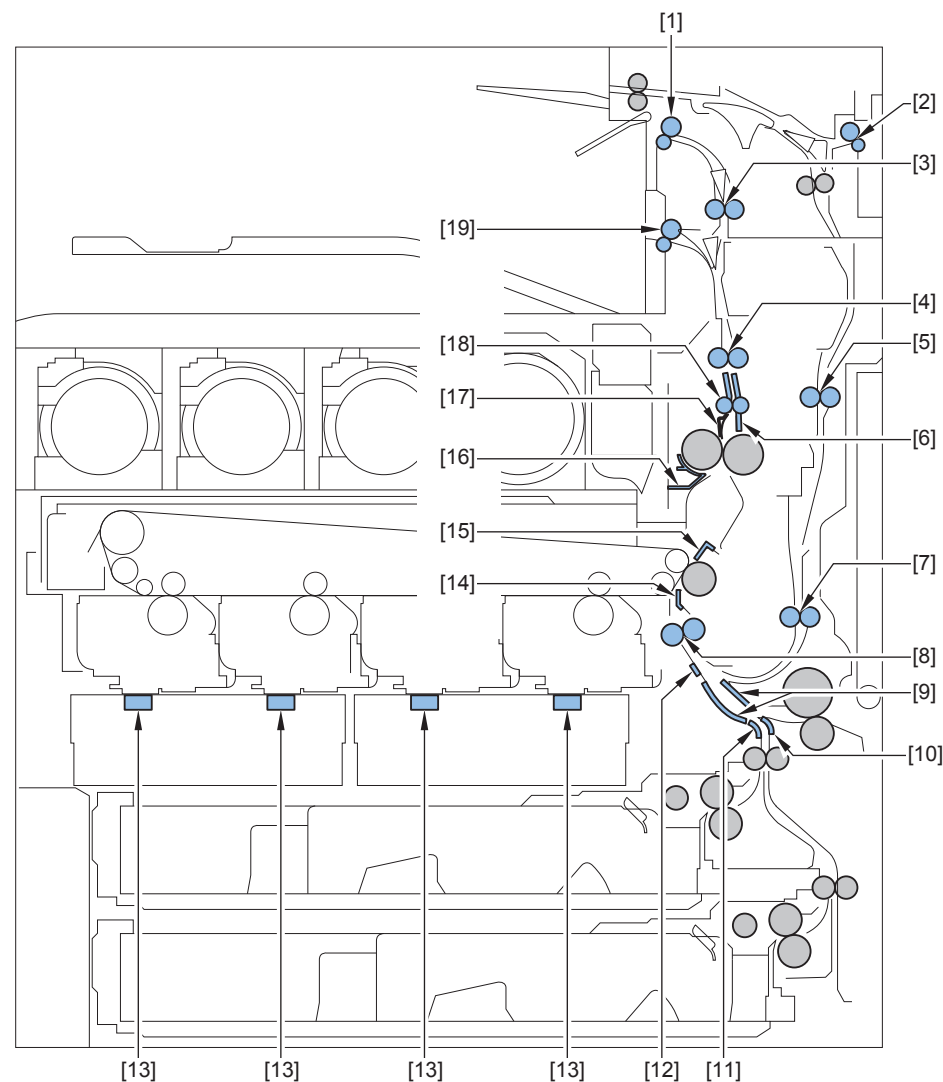
F-3-5



F-3-6



## Cleaning Parts



- |  |                                     |  |                              |
|--|-------------------------------------|--|------------------------------|
| [1] Second Delivery Roller             | [6] Fixing Delivery Guide Assembly  | [11] Vertical path sensor              | [16] Shutter cover           |
| [2] Third Delivery Roller              | [7] Duplex Feed Lower Roller        | [12] Transparency Sensor               | [17] Fixing separation guide |
| [3] Second/Third Delivery Inlet Roller | [8] Registration Roller             | [13] Dust-blocking Glass               | [18] Post-Fixing Roller      |
| [4] Fixing Inner Delivery Roller       | [9] Pre-registration Guide Assembly | [14] Secondary Transfer Guide Assembly | [19] First Delivery Roller   |
| [5] Duplex Feed Upper Roller           | [10] Lightproof Sheet               | [15] Feed Contact Point Guide Assembly |                              |

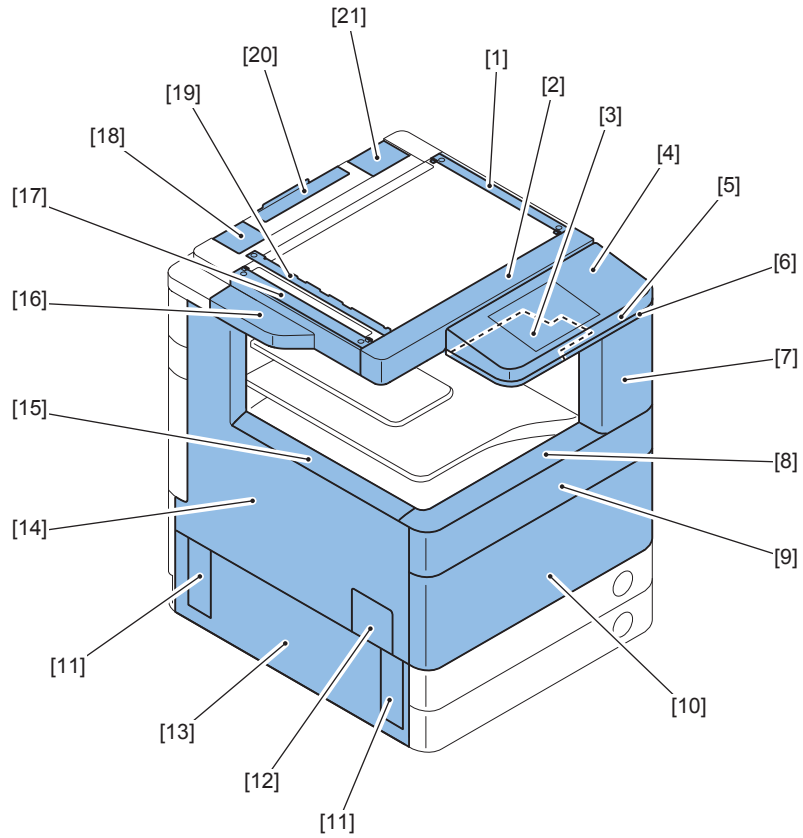
# 4

## Parts Replacement and Cleaning

- List of Parts
- Main Controller
- Laser Exposure System
- Image Formation System
- Fixing System
- Pickup Feed System
- Option
- Data to be handled by SRAM(with HDD Encryption Board)

# List of Parts

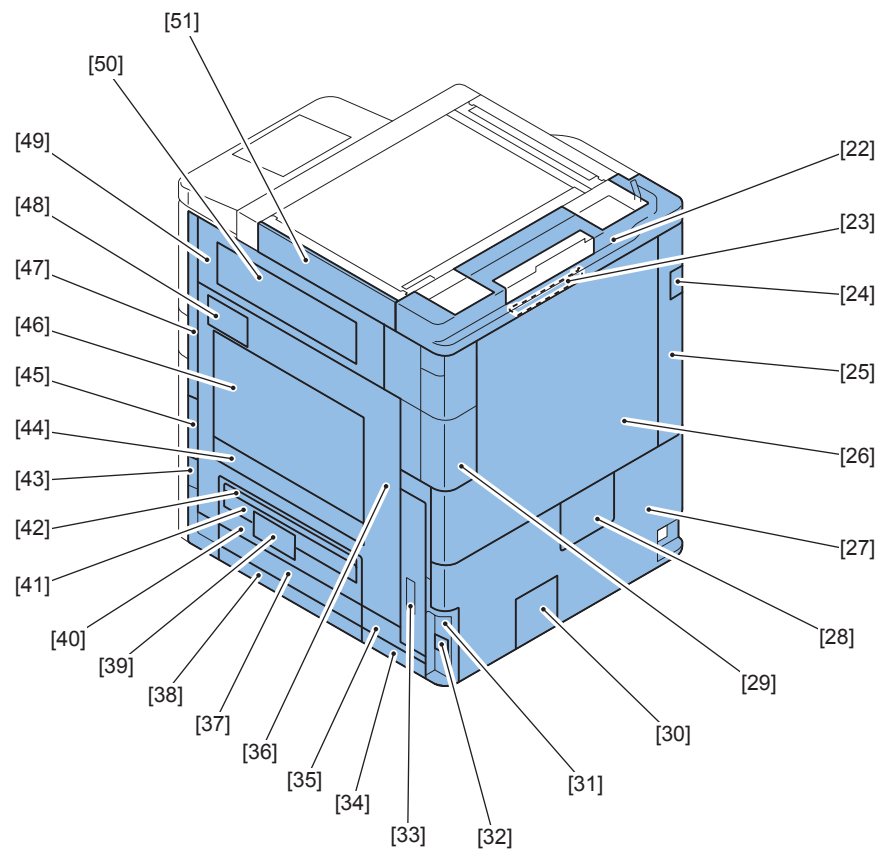
## List of Cover



F-4-1

No.	Name
[1]	Glass retainer (Right)
[2]	Reader front cover
[3]	Control panel under cover
[4]	Control panel upper cover
[5]	Control panel side cover 1
[6]	Control panel side cover 2
[7]	Front right cover
[8]	Front upper cover
[9]	Toner replacement cover
[10]	Front cover
[11]	Left grip cover
[12]	Left duct cover
[13]	Left lower cover
[14]	Left upper cover
[15]	Inner bottom cover
[16]	Reader left cover
[17]	Glass retainer (Left)
[18]	DF base left cover
[19]	Glass retainer (Center)
[20]	Reader PCB cover
[21]	DF base right cover

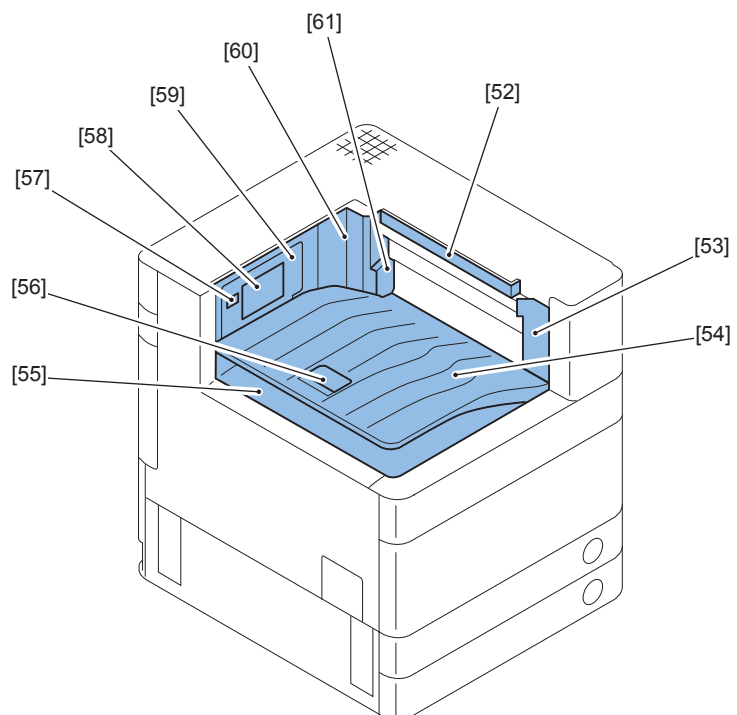
T-4-1



F-4-2

No.	Name
[22]	Reader rear cover
[23]	Reader rear under cover
[24]	Left rear sub cover
[25]	Left rear cover
[26]	Rear cover
[27]	Rear lower cover
[28]	Filter cover
[29]	Right rear cover 1
[30]	Connector cover
[31]	Right rear cover 2
[32]	Heater switch cover
[33]	Right rear cover 3
[34]	Right lower sub cover 2
[35]	Right lower sub cover 3
[36]	Right lower cover
[37]	casset right upper sub cover 2
[38]	Right lower sub cover 1
[39]	Casset grip
[40]	casset right upper cover 2
[41]	casset right upper sub cover 1
[42]	casset right upper sub cover 3
[43]	Right front cover 3
[44]	Stack bypass tray sub cover
[45]	Right front cover 2
[46]	Stack bypass tray
[47]	Right front cover 1
[48]	Grip
[49]	Right output frame cover
[50]	Right upper cover
[51]	Reader right cover

T-4-2



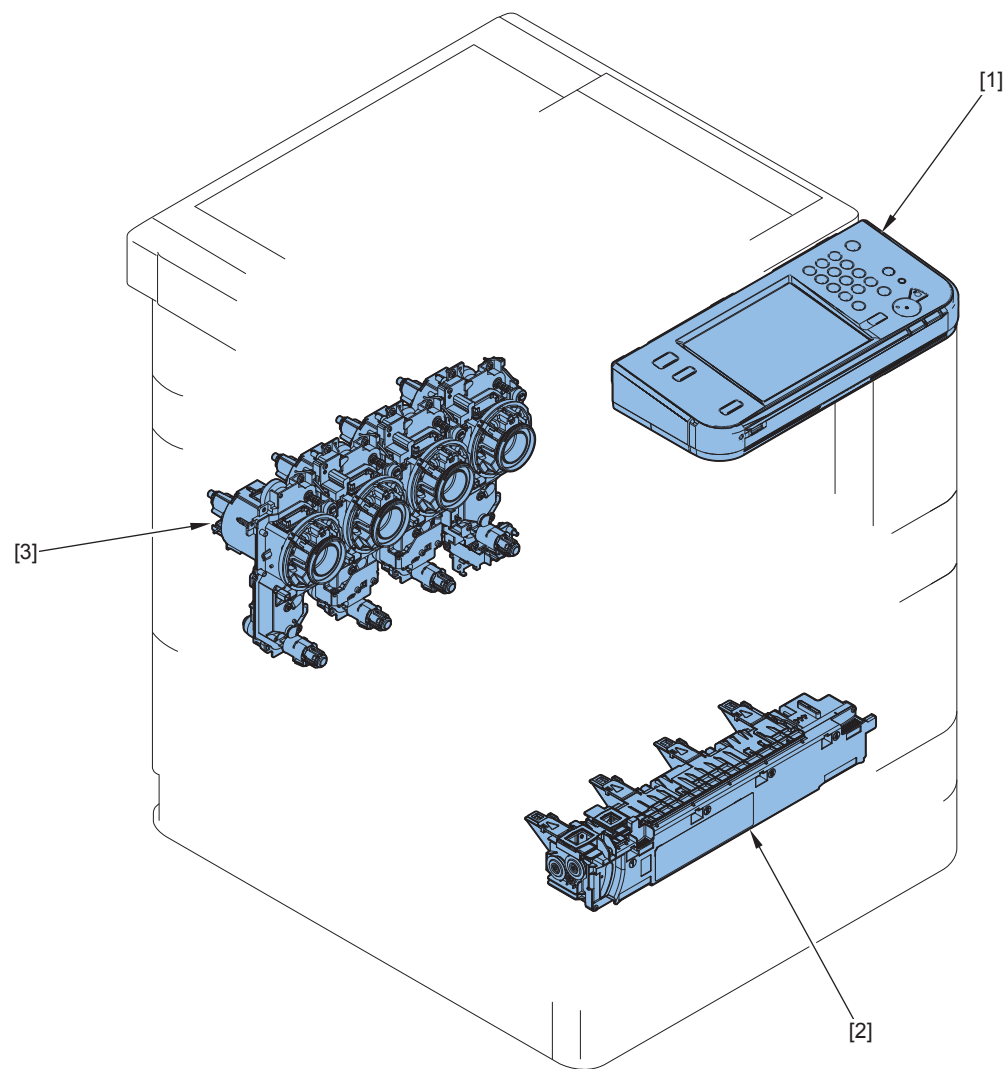
F-4-3

No.	Name
[52]	Inner output cover
[53]	Inner right cover
[54]	Output tray
[55]	Output tray guide
[56]	Output stopper
[57]	Output frame
[58]	Inner rear cover 3
[59]	Inner rear cover 2
[60]	Inner rear cover 1
[61]	Inner output sensor cover

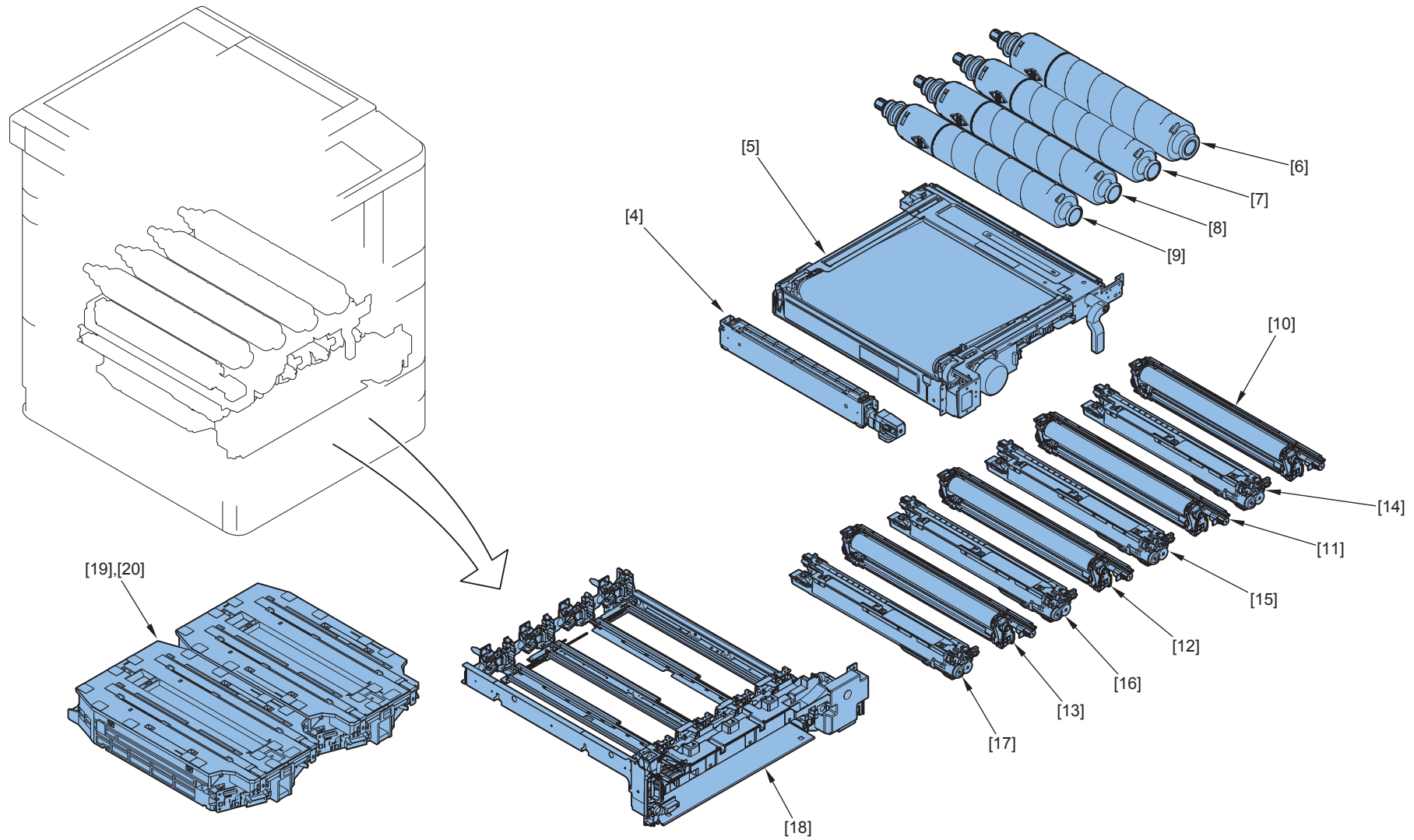
T-4-3

## List of Main Unit

### Unit Layout

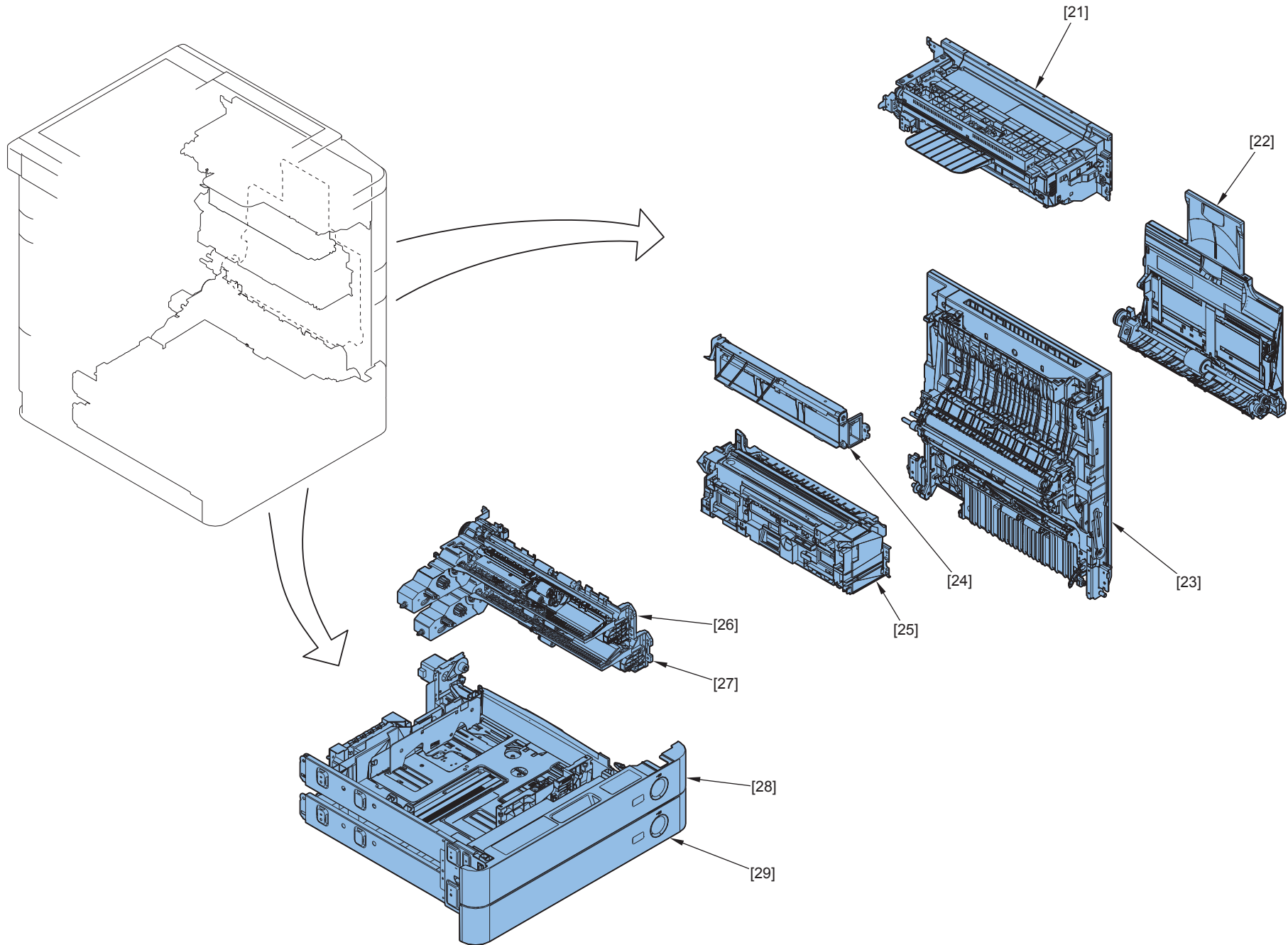


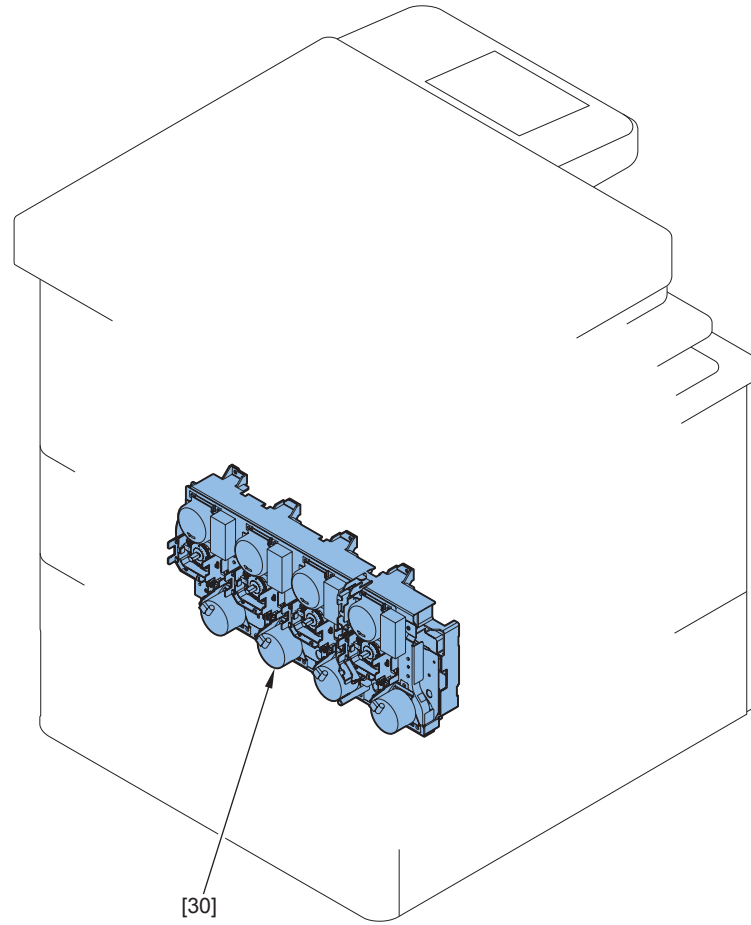
F-4-4



F-4-5



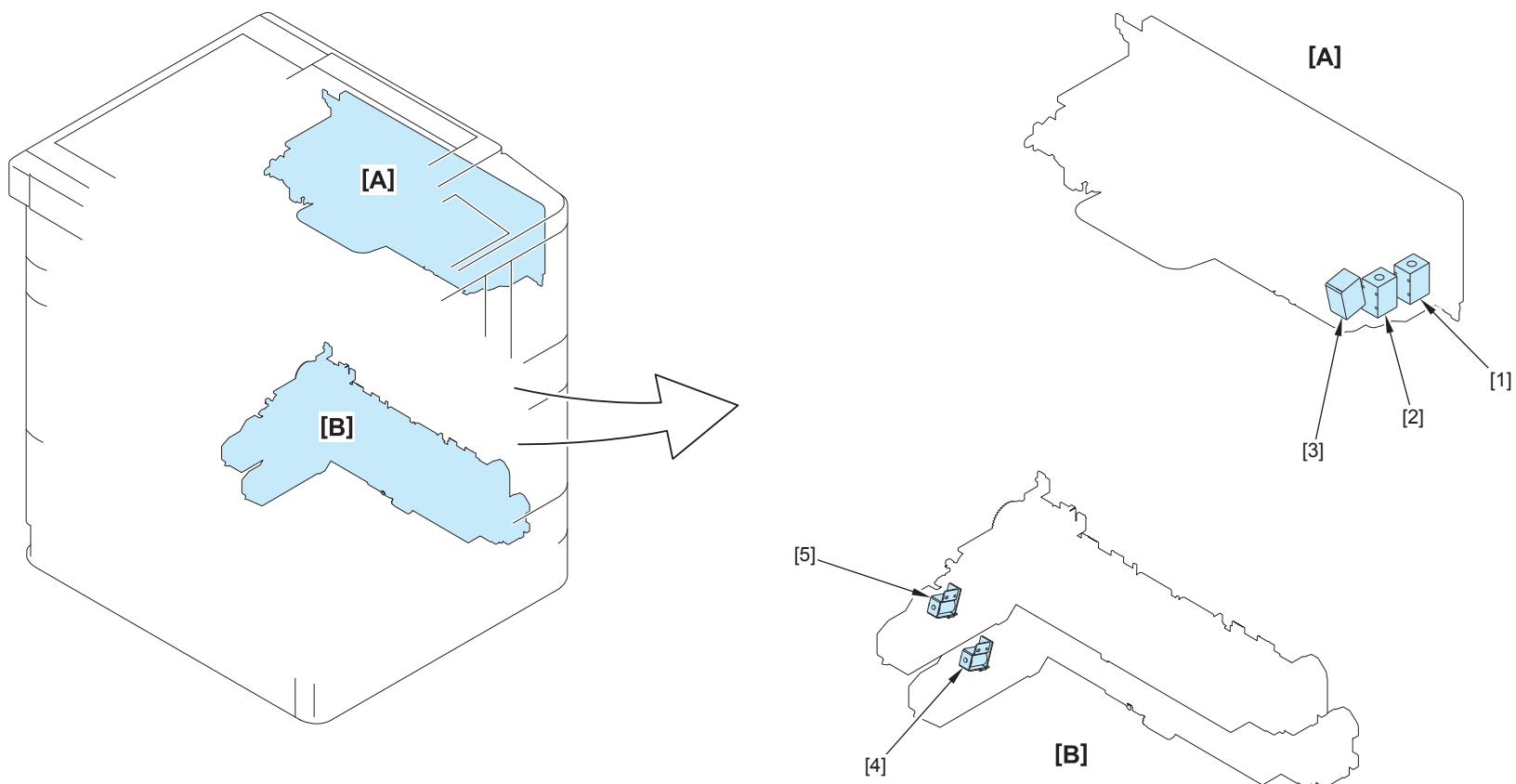




F-4-7

No.	Name	Reference
[1]	Control Panel	
[2]	Recycle toner container	
[3]	Hopper Unit	
[4]	ITB Cleaning Unit	
[5]	ITB Unit	Not compatible with iR-ADV C5051 series
[6]	Toner container(Bk)	
[7]	Toner container(C)	
[8]	Toner container(M)	
[9]	Toner container(Y)	
[10]	Drum Unit (Bk)	Compatible with iR-ADV C5051 series
[11]	Drum Unit (C)	Compatible with iR-ADV C5051 series
[12]	Drum Unit (M)	Compatible with iR-ADV C5051 series
[13]	Drum Unit (Y)	Compatible with iR-ADV C5051 series
[14]	Developing Assembly (Bk) (C5051/C5045)	iR-ADV C5051/C5045 is compatible with iR-ADV C5255/C5250.
[15]	Developing Assembly (C) (C5051/C5045)	iR-ADV C5035/C5030 is compatible with iR-ADV C5240/C5230.
[16]	Developing Assembly (M) (C5051/C5045)	No compatibility with other models.
[17]	Developing Assembly (Y) (C5051/C5045)	
[18]	Process Unit	
[19]	Laser Scanner Unit (C5051/C5045)	Not compatible with iR-ADV C5051 series
[20]	Laser Scanner Unit (C5035/C5030)	Not compatible with iR-ADV C5051 series
[21]	Second and Third Delivery Unit	
[22]	Multi-purpose Delivery Unit	
[23]	Right Door Unit	
[24]	First Delivery Unit	
[25]	Fixing Assembly	
[26]	Cassette 1 Pickup Unit	
[27]	Cassette 2 Pickup Unit	
[28]	Cassette 1	
[29]	Cassette 2	
[30]	Main Drive Unit	

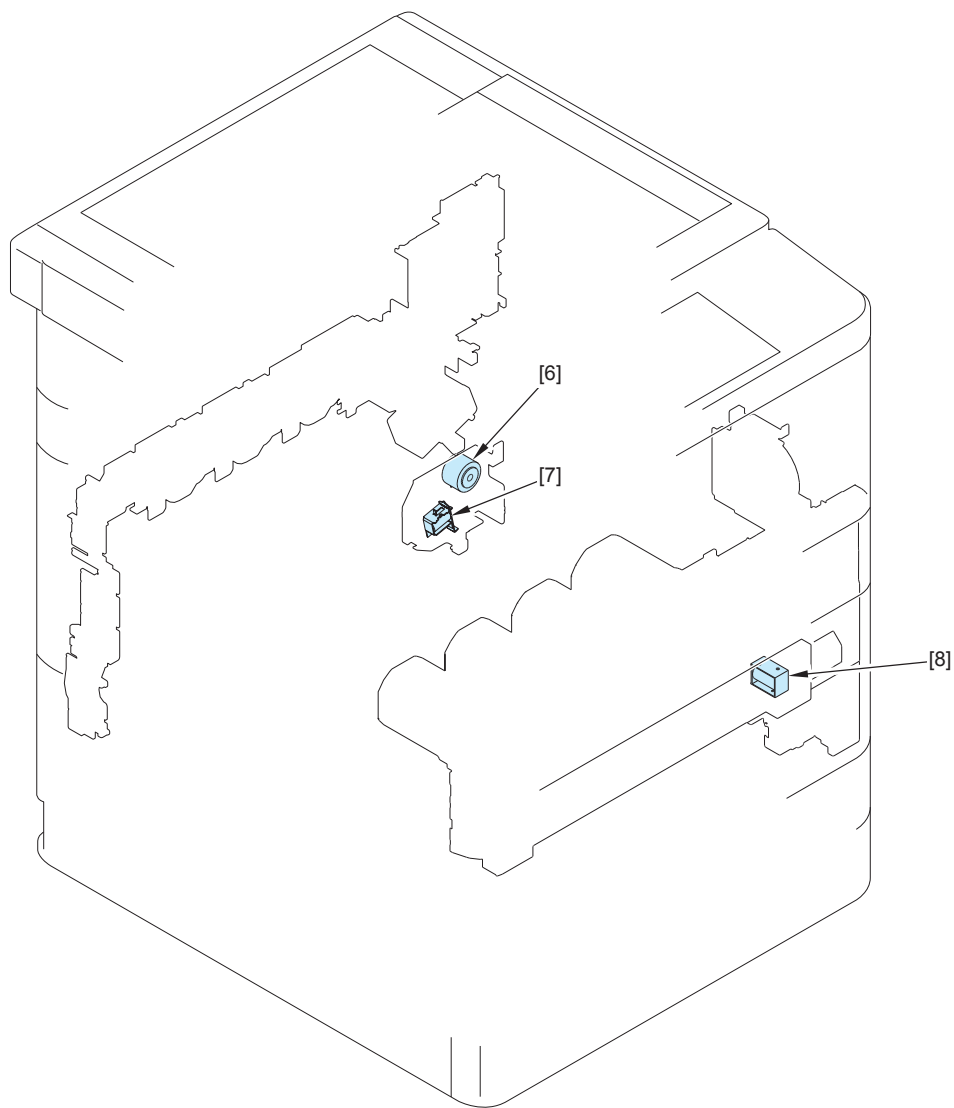
T-4-4

 Clutch / Solenoid


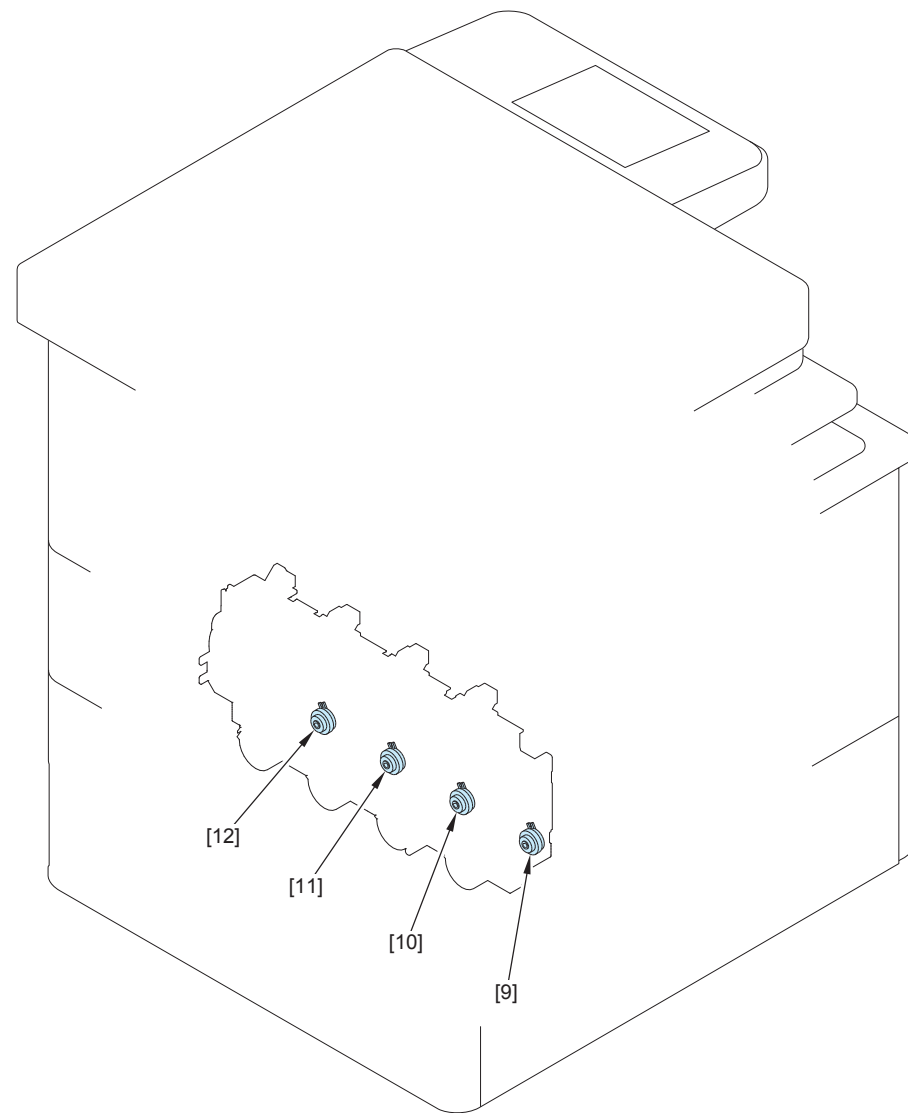
F-4-8

INDEX No.	No.	Name	Replacement unit	IO			PART-CHK	
				Address	bit	Remarks	Item No.	Remarks
[1]	SL7	Third delivery flapper solenoid	Third delivery flapper solenoid	P006	15	1:ON	SL>7	SL-ON>OK
[2]	SL6	Second delivery flapper solenoid	Second delivery flapper solenoid	P005	1	1:ON	SL>6	SL-ON>OK
[3]	SL5	First delivery flapper solenoid	First delivery flapper solenoid	P005	2	1:ON	SL>5	SL-ON>OK
[4]	SL3	Cassette 2 pickup solenoid	Cassette 2 pickup solenoid	P015	1	1:ON	SL>3	SL-ON>OK
[5]	SL2	Cassette 1 pickup solenoid	Cassette 1 pickup solenoid	P015	0	1:ON	SL>2	SL-ON>OK

T-4-5



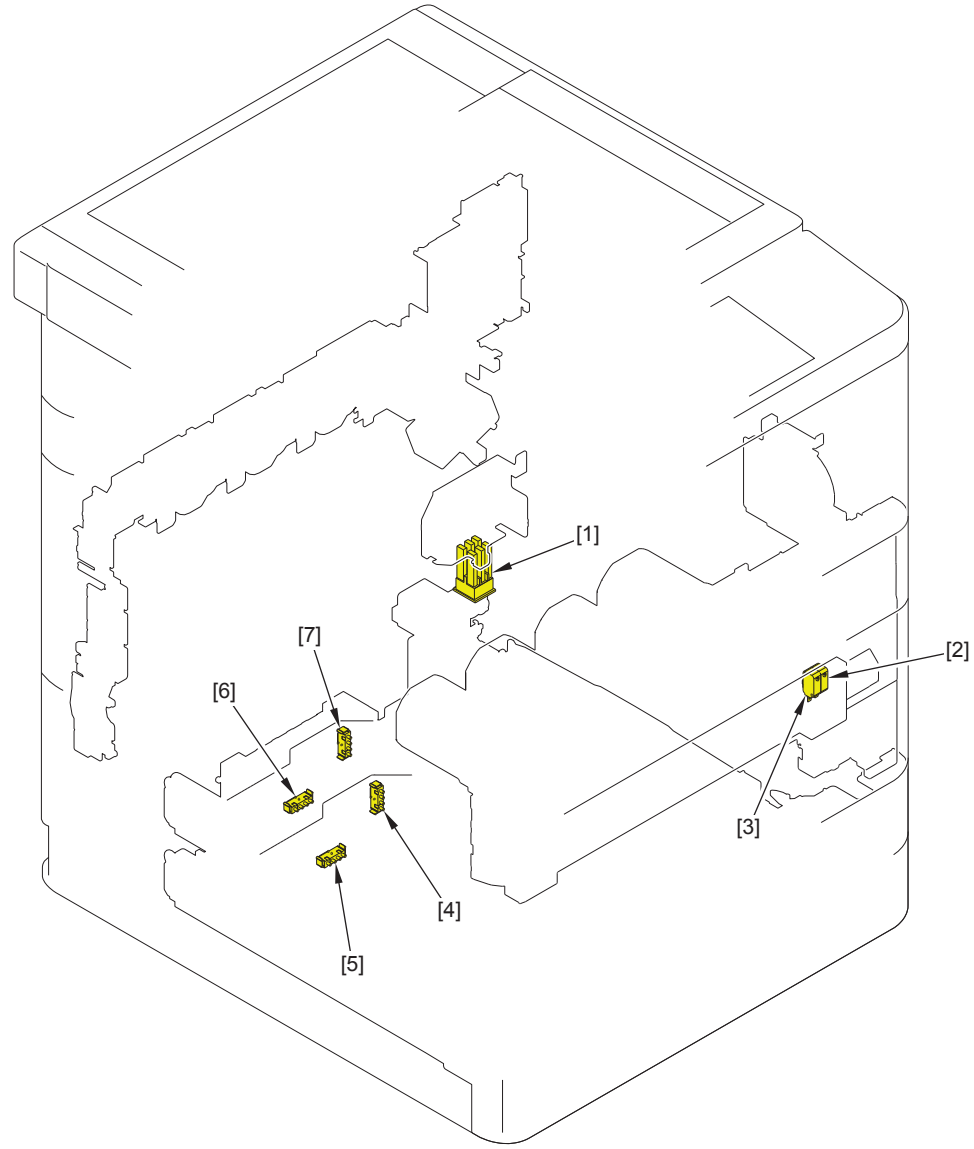
F-4-9



F-4-10

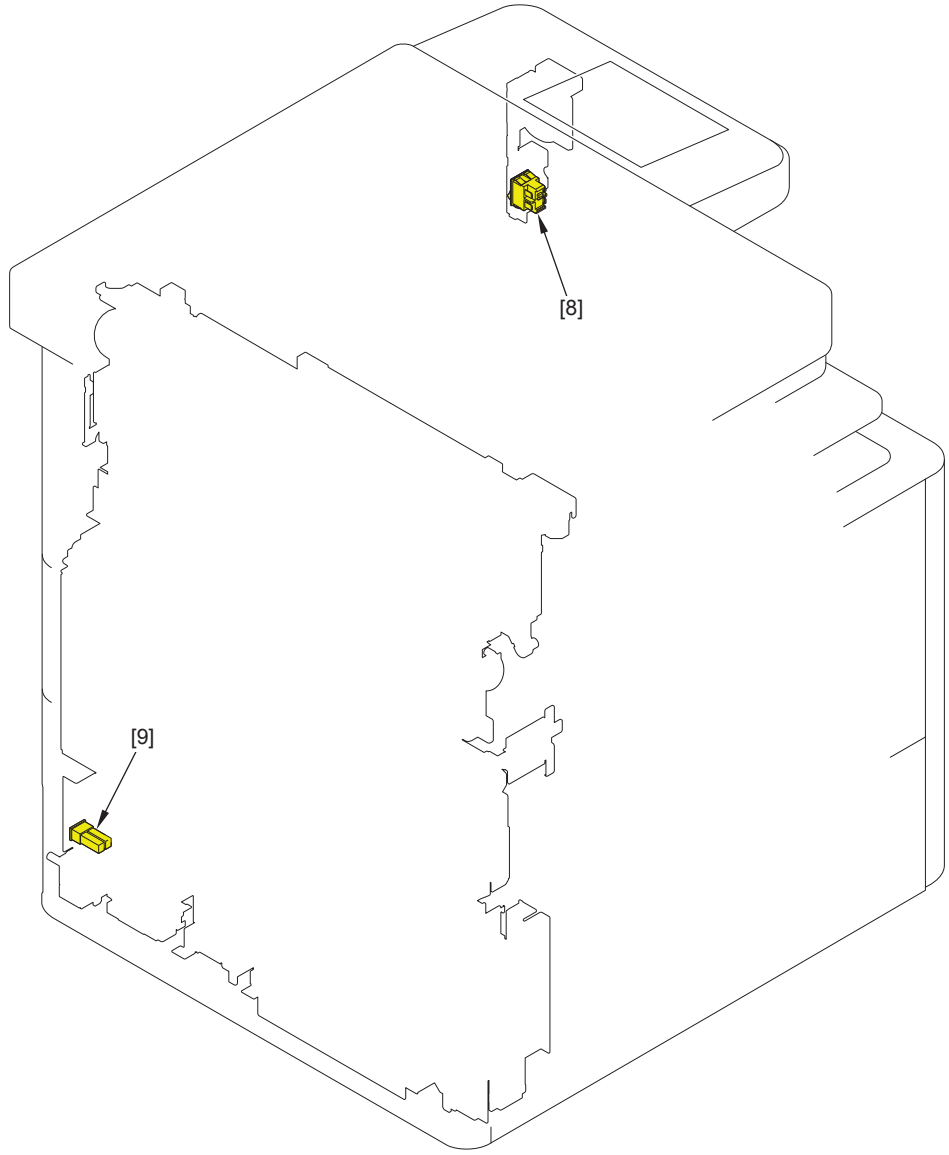
INDEX No.	No.	Name	Replacement unit	IO			PART-CHK	
				Address	bit	Remarks	Item No.	Remarks
[6]	CL1	Multi-purpose tray pickup clutch	Multi-purpose tray pickup clutch	P010	5	1:ON	CL>1	CL-ON>OK
[7]	SL4	Multi-purpose tray lifting solenoid	Multi-purpose tray lifting solenoid	P005	0	1:ON	SL>4	SL-ON>OK
[8]	SL1	Registration shutter solenoid	Registration shutter solenoid	-	-	-	SL>1	SL-ON>OK
[9]	CL2	Toner supply clutch (Y)	Toner supply clutch (Y)	-	-	-	CL>2	CL-ON>OK
[10]	CL3	Toner supply clutch (M)	Toner supply clutch (M)	-	-	-	CL>3	CL-ON>OK
[11]	CL4	Toner supply clutch (C)	Toner supply clutch (C)	-	-	-	CL>4	CL-ON>OK
[12]	CL5	Toner supply clutch (Bk)	Toner supply clutch (Bk)	-	-	-	CL>5	CL-ON>OK

T-4-6



F-4-11

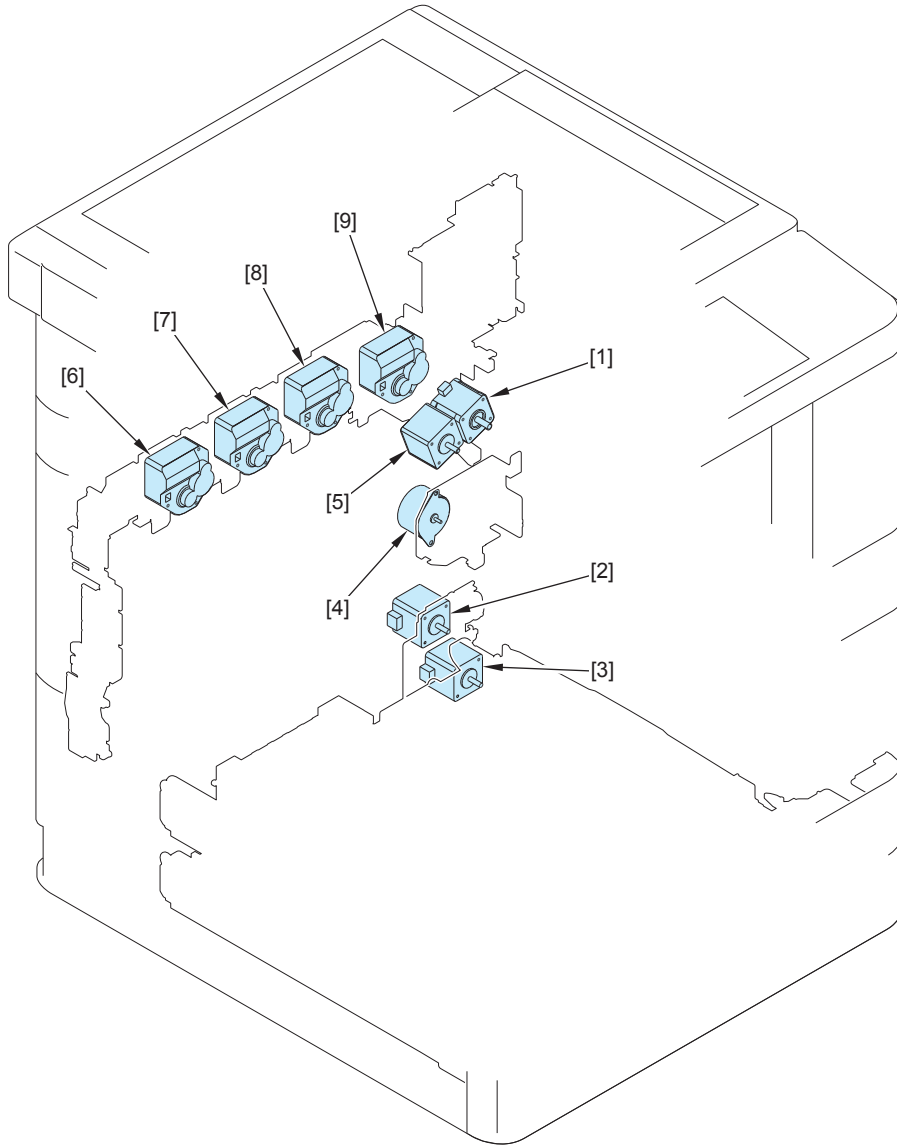




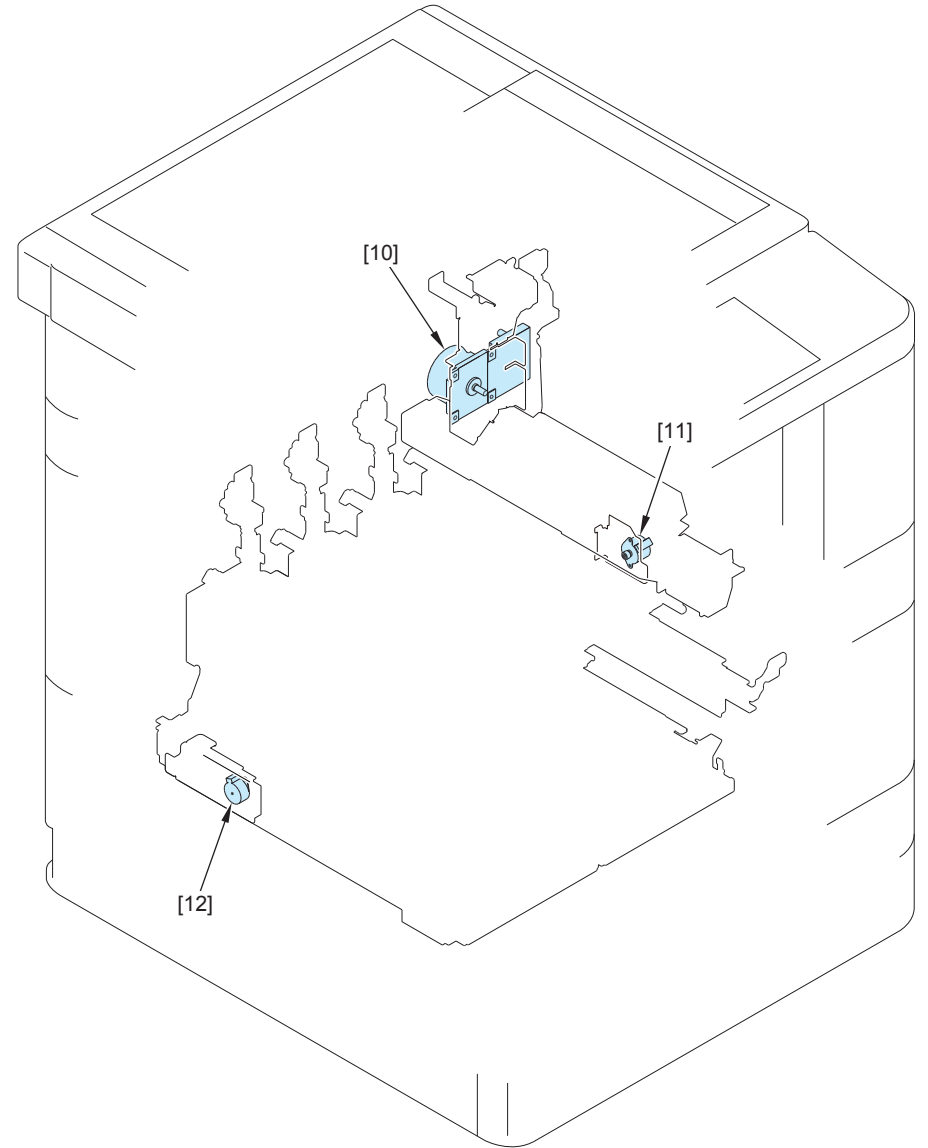
F-4-12

INDEX No.	No.	Name	Replacement unit	IO		
				Address	bit	Remarks
[1]	SW5	AC interlock switch	AC interlock switch	-	-	-
[2]	SW3	DC interlock switch 1	DC interlock switch 1	-	-	-
[3]	SW4	DC interlock switch 2	DC interlock switch 2	-	-	-
[4]	SW9	Cassette 2 size switch B	Cassette 2 size switch B	P012	4-7	0:detect
[5]	SW8	Cassette 2 size switch A	Cassette 2 size switch A	P012	0-3	0:detect
[6]	SW6	Cassette 1 size switch A	Cassette 1 size switch A	P012	8-11	0:detect
[7]	SW7	Cassette 1 size switch B	Cassette 1 size switch B	P012	12-15	0:detect
[8]	SW1	Main power supply switch	Main power supply switch	-	-	-
[9]	SW2	Environment switch	Environment switch	-	-	-

T-4-7



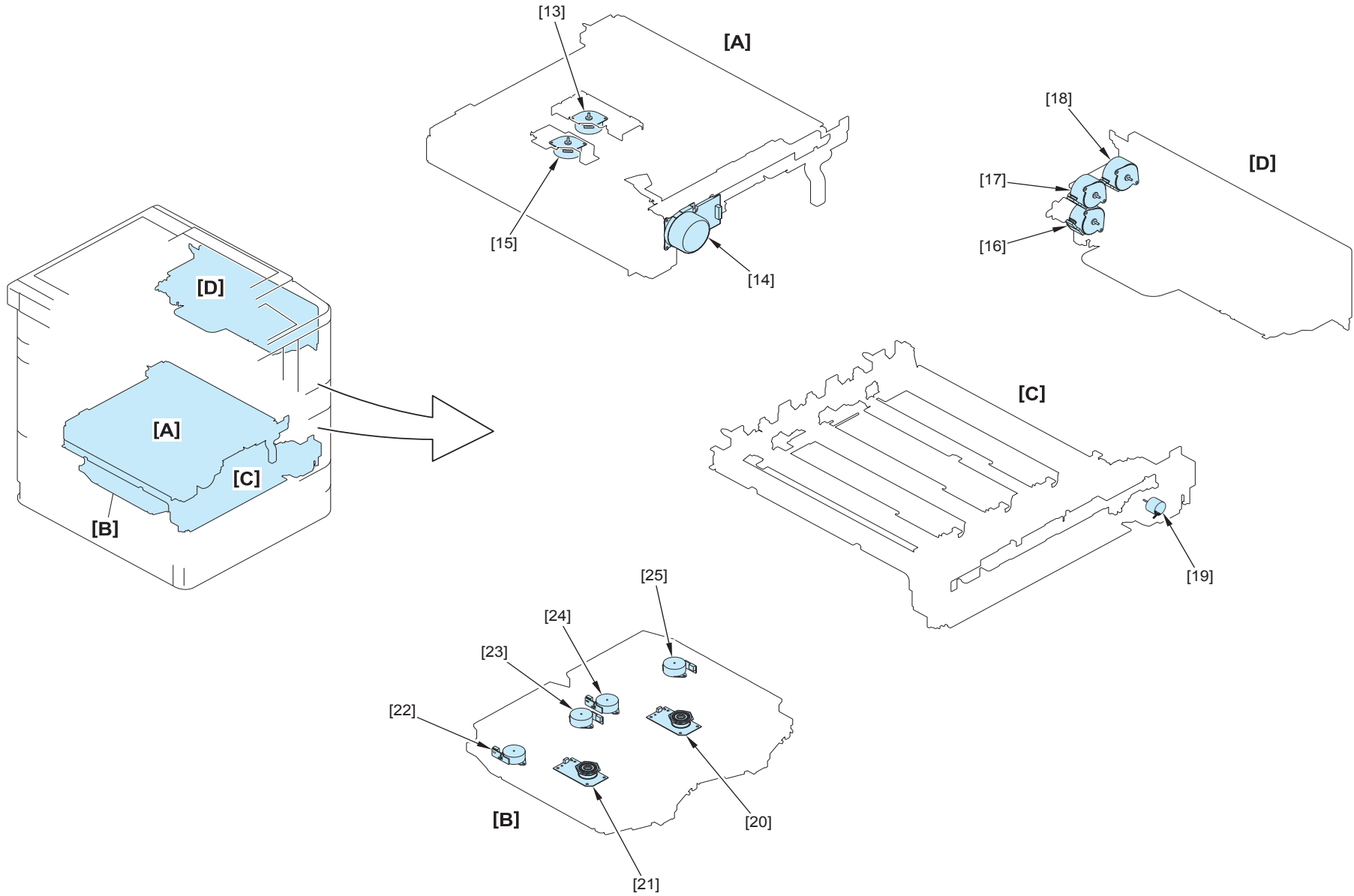
F-4-13



F-4-14

INDEX No.	No.	Name	Replacement unit	IO			PART-CHK	
				Address	bit	Remarks	Item No.	Remarks
[1]	M20	Duplex feed motor	Duplex feed motor	P011	3	1:enable	MTR>20	MTR-ON>OK
[2]	M16	Cassette 1 pickup motor	Cassette 1 pickup motor	P014	1	1:enable	MTR>16	MTR-ON>OK
[3]	M17	Cassette 2 pickup motor	Cassette 2 pickup motor	P015	13	1:enable	MTR>17	MTR-ON>OK
[4]	M18	Multi-purpose tray motor	Multi-purpose tray motor	P011	7	1:enable	MTR>18	MTR-ON>OK
[5]	M19	Registration motor	Registration motor	P011	11	1:enable	MTR>19	MTR-ON>OK
[6]	M9	Toner container motor (Y)	Toner container motor (Y)	-	-	-	MTR>9	MTR-ON>OK
[7]	M10	Toner container motor (M)	Toner container motor (M)	-	-	-	MTR>10	MTR-ON>OK
[8]	M11	Toner container motor (C)	Toner container motor (C)	-	-	-	MTR>11	MTR-ON>OK
[9]	M12	Toner container motor (Bk)	Toner container motor (Bk)	-	-	-	MTR>12	MTR-ON>OK
[10]	M21	Fixing motor	Fixing motor	P006	12	0:ON	-	-
[11]	M27	Fixing shutter motor	Fixing shutter motor	P007	5	1:enable	-	-
[12]	M28	Laser shutter motor	Laser shutter motor	-	-	-	-	-

T-4-8

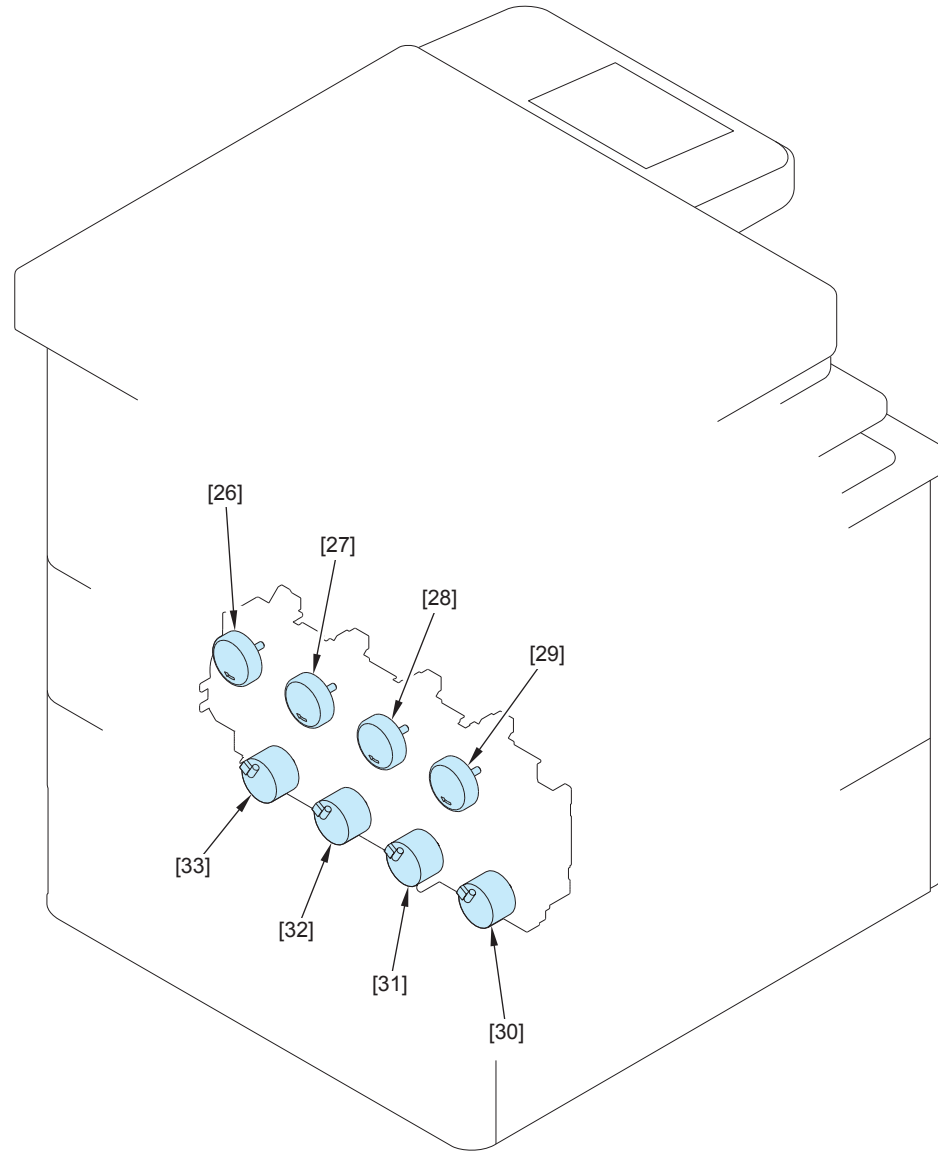


F-4-15

INDEX No.	No.	Name	Replacement unit	IO			PART-CHK	
				Address	bit	Remarks	Item No.	Remarks
[13]	M15	Primary transfer disengagement motor	Primary transfer disengagement motor	P026	5	1:enable	-	-
[14]	M13	ITB motor	ITB motor	-	-	-	MTR>13*	MTR-ON>OK
[15]	M14	ITB displacement control motor	ITB displacement control motor	P026	1	1:enable	-	-
[16]	M23	First & Second delivery motor	First & Second delivery motor	P011	15	1:enable	MTR>23	MTR-ON>OK
[17]	M24	Reverse roller motor	Reverse roller motor	P010	3	1:enable	MTR>24	MTR-ON>OK
[18]	M25	Third delivery motor	Third delivery motor	P005	7	1:enable	MTR>25	MTR-ON>OK
[19]	M26	Waste toner stirring motor	Waste toner stirring motor	P010	8	1:ON	MTR>26	MTR-ON>OK
[20]	M30	CBk Scanner Motor (High/Low)	Laser Scanner Unit	-	-	-	-	-
[21]	M29	YM Scanner Motor (High/Low)	Laser Scanner Unit	-	-	-	-	-
[22]	M32	Image skew correction motor (M)	Laser Scanner Unit	-	-	-	-	-
[23]	M31	Image skew correction motor (Y)	Laser Scanner Unit	-	-	-	-	-
[24]	M34	Image skew correction motor (Bk)	Laser Scanner Unit	-	-	-	-	-
[25]	M33	Image skew correction motor (C)	Laser Scanner Unit	-	-	-	-	-

- \*The 5 motors operate simultaneously.

T-4-9



F-4-16

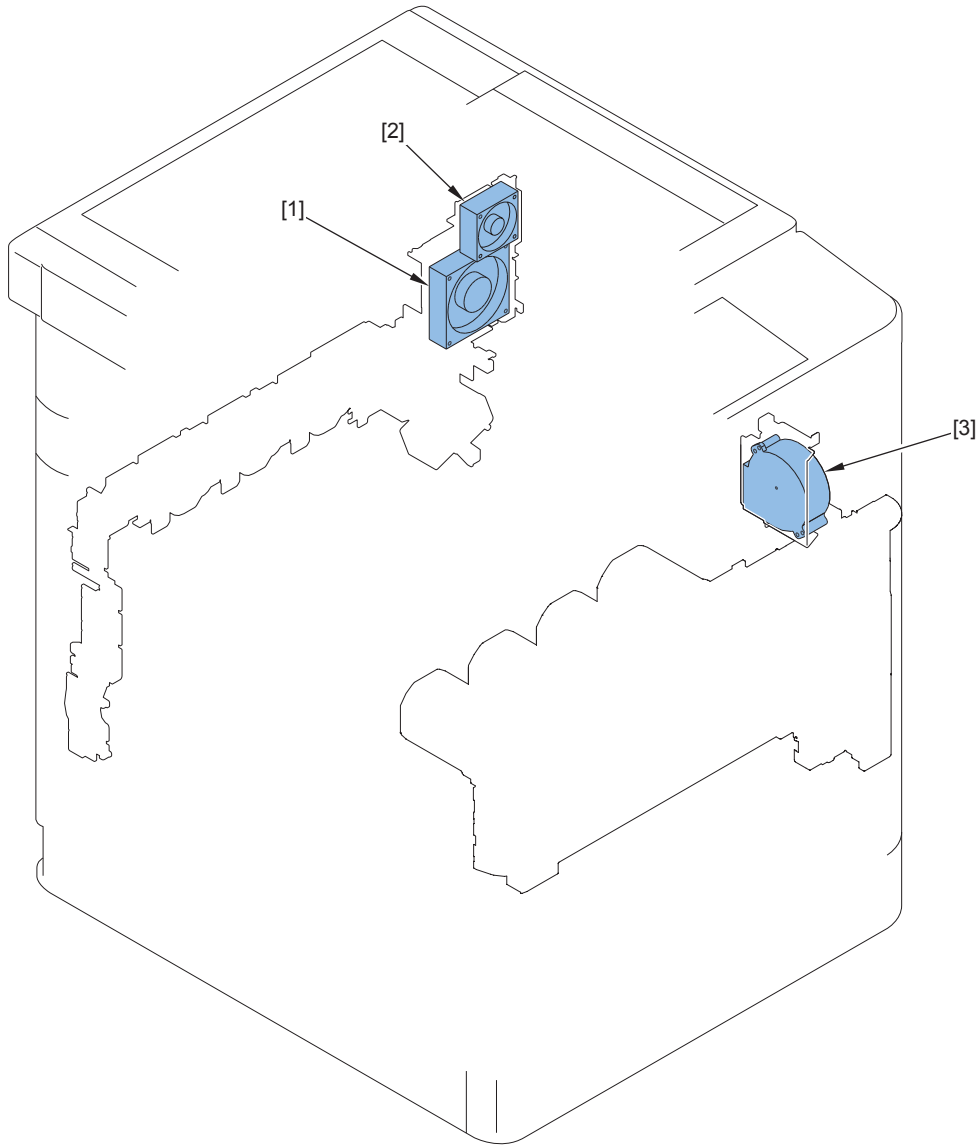


INDEX No.	No.	Name	Replacement unit	PART-CHK	
				Item No.	Remarks
[26]	M4	Drum motor (Bk)	Drum motor (Bk)	MTR>13*	MTR-ON>OK
[27]	M3	Drum motor (C)	Drum motor (C)	MTR>13*	MTR-ON>OK
[28]	M2	Drum motor (M)	Drum motor (M)	MTR>13*	MTR-ON>OK
[29]	M1	Drum motor (Y)	Drum motor (Y)	MTR>13*	MTR-ON>OK
[30]	M5	Developing motor (Y)	Developing motor (Y)	MTR>5	MTR-ON>OK
[31]	M6	Developing motor (M)	Developing motor (M)	MTR>6	MTR-ON>OK
[32]	M7	Developing motor (C)	Developing motor (C)	MTR>7	MTR-ON>OK
[33]	M8	Developing motor (Bk)	Developing motor (Bk)	MTR>8	MTR-ON>OK

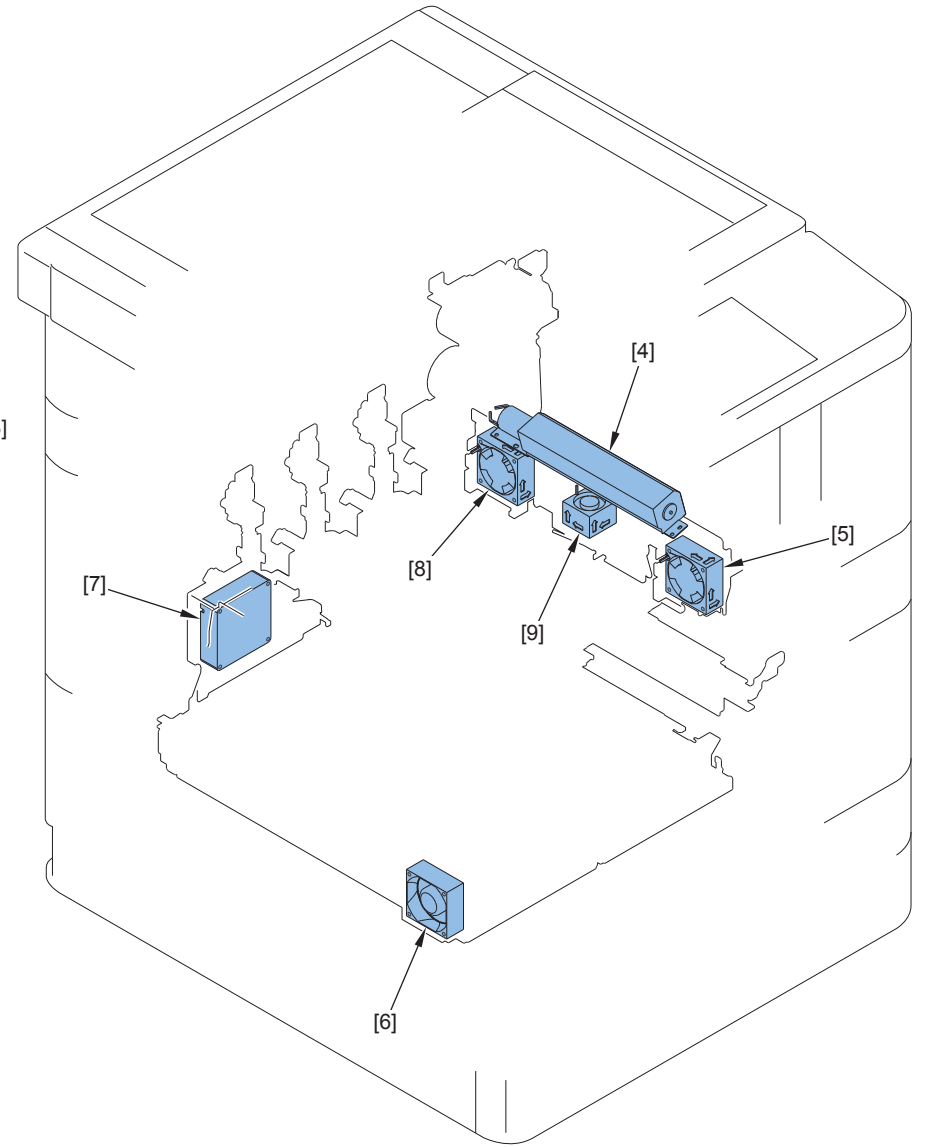
- \*The 5 motors operate simultaneously.

T-4-10

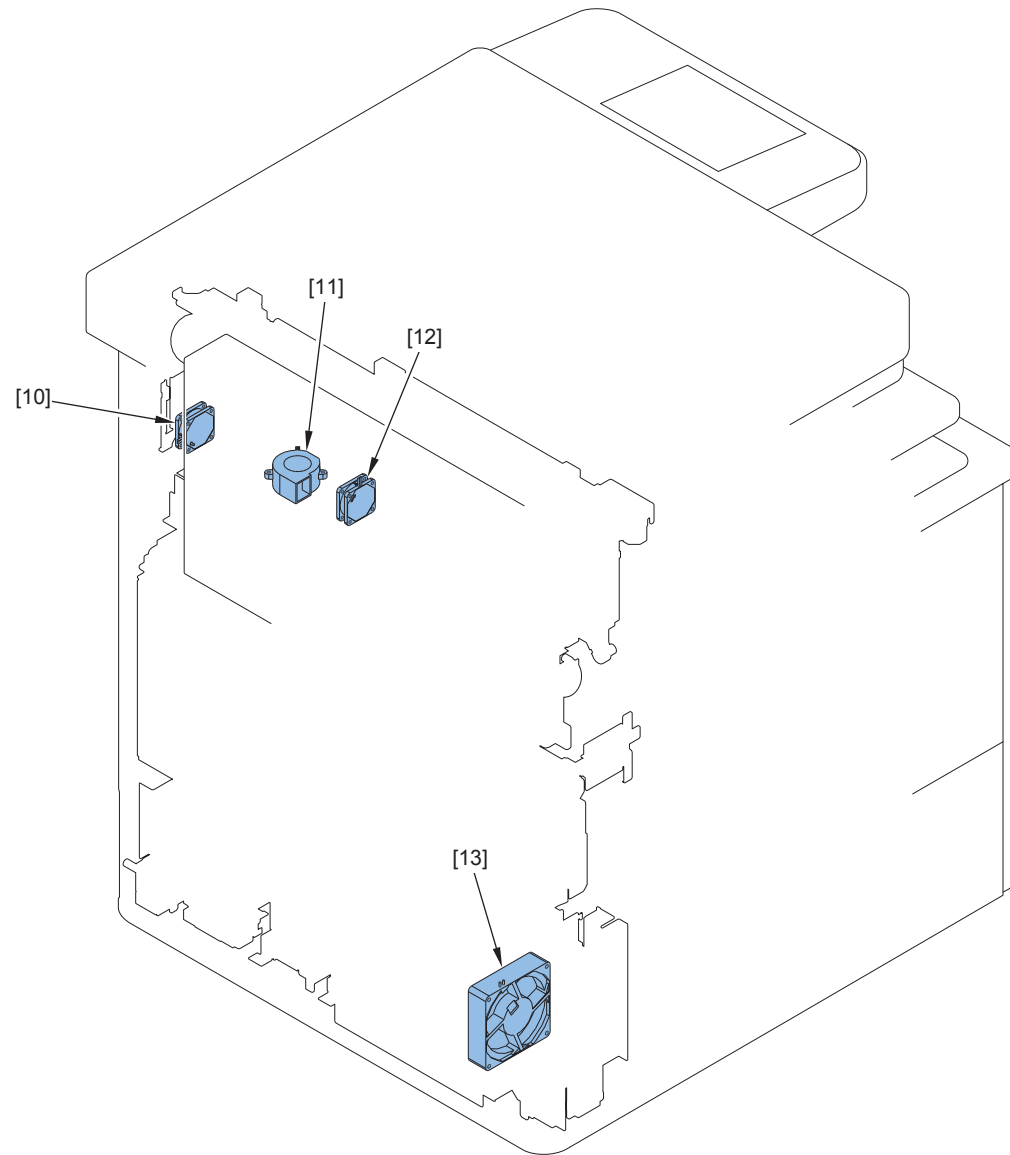
Fan



F-4-17



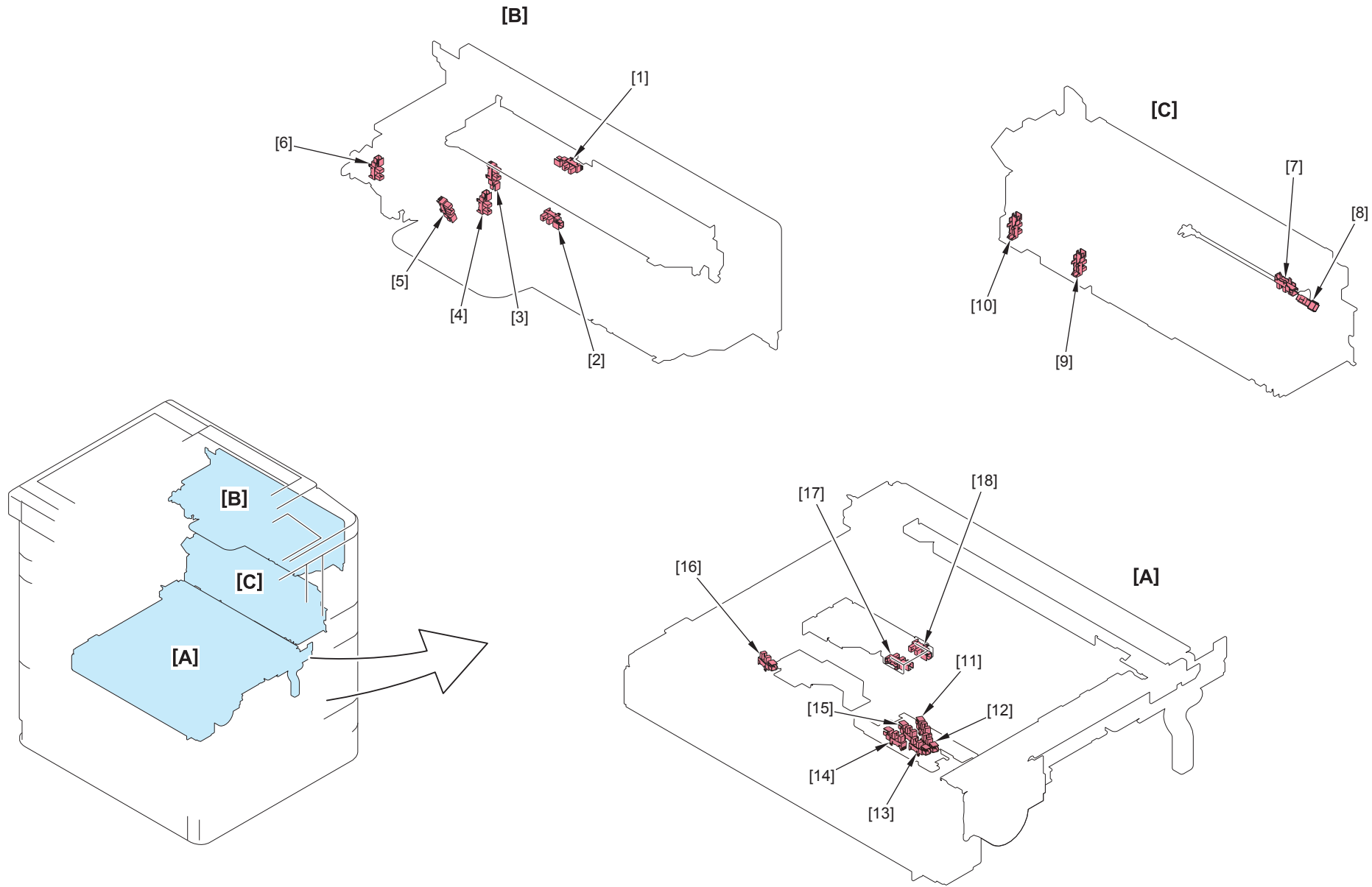
F-4-18



F-4-19

INDEX No.	No.	Name	Replacement unit	IO			PART-CHK	
				Address	bit	Remarks	Item No.	Remarks
[1]	FM1	Fixing heat exhaust fan 1	Fixing heat exhaust fan 1	P006	0	1:ON	FAN>1	FAN-ON>OK
[2]	FM2	Fixing heat exhaust fan 2	Fixing heat exhaust fan 2	P006	0	1:ON	FAN>2	FAN-ON>OK
[3]	FM9	Delivery fan 2	Delivery fan 2	P010	-	-	FAN>9	FAN-ON>OK
[4]	FM7	Delivery fan 1	Delivery fan 1	P004	14	0:connect	FAN>7	FAN-ON>OK
[5]	FM5	Fixing cooling fan (front)	Fixing cooling fan (front)	P007	14	1:ON	FAN>5	FAN-ON>OK
[6]	FM10	Process cartridge fan (front)	Process cartridge fan (front)	P015	-	1:ON	FAN>10	FAN-ON>OK
[7]	FM4	Process cartridge fan (rear)	Process cartridge fan (rear)	-	-	-	FAN>4	FAN-ON>OK
[8]	FM6	Fixing cooling fan (rear)	Fixing cooling fan (rear)	P007	14	1:ON	FAN>6	FAN-ON>OK
[9]	FM8	Secondary transfer exhaust fan	Secondary transfer exhaust fan	P007	-	-	FAN>8	FAN-ON>OK
[10]	FM13	Controller fan 2	Controller fan 2	-	-	-	-	-
[11]	FM14	HDD cooling fan	HDD cooling fan	-	-	-	-	-
[12]	FM11	Controller fan 1	Controller fan 1	-	-	-	-	-
[13]	FM3	Power supply cooling fan	Power supply cooling fan	-	-	-	-	-

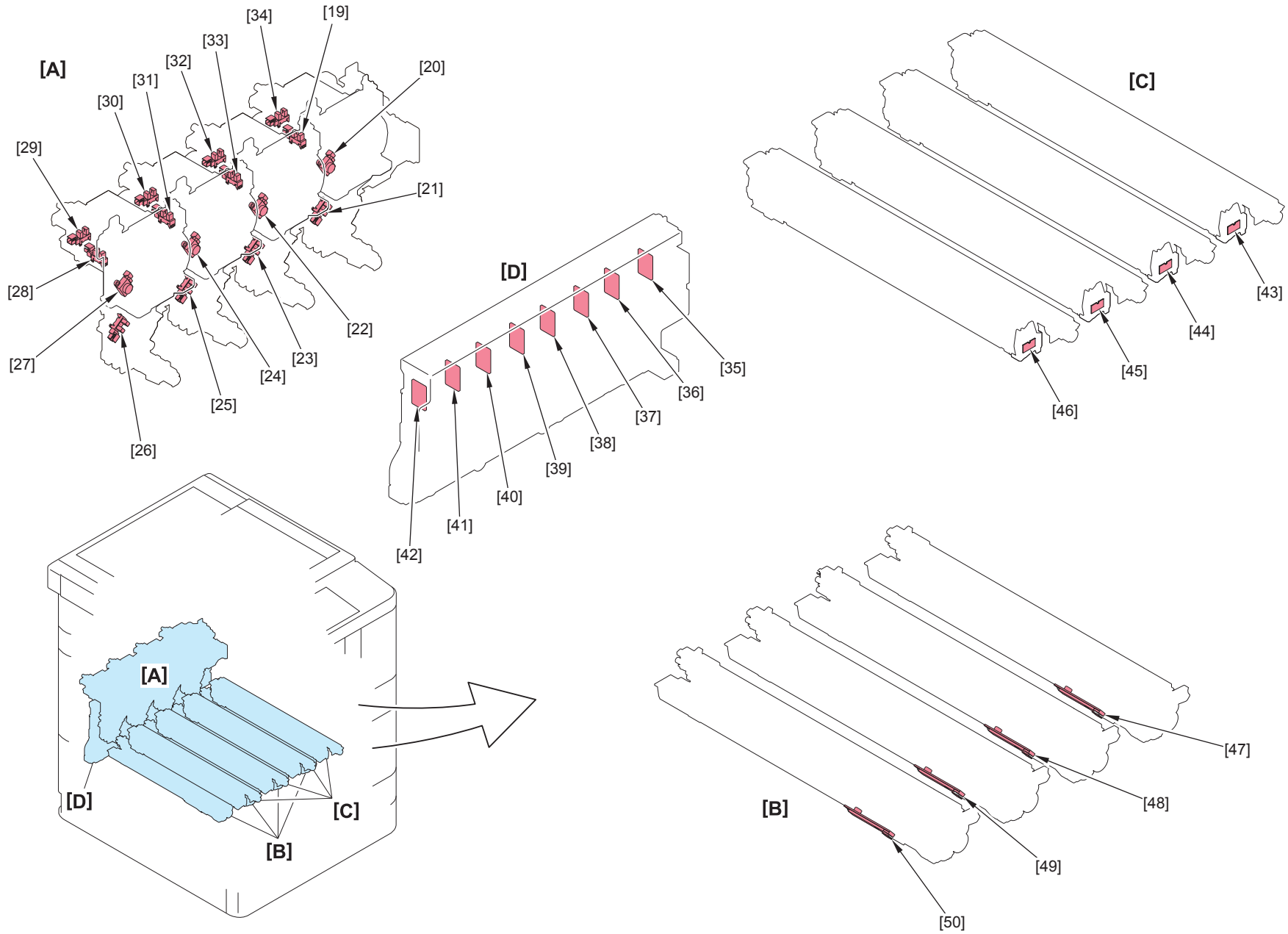
T-4-11



F-4-20

INDEX No.	No.	Name	Replacement unit	IO		
				Address	bit	Remarks
[1]	PS43	Third delivery sensor	Third delivery sensor	P004	11	1:paper
[2]	PS39	Reverse sensor	Reverse sensor	P005	14	1:paper
[3]	PS40	Duplex inlet sensor	Duplex inlet sensor	P004	10	1:paper
[4]	PS57	Pre-reverse sensor	Pre-reverse sensor	P004	12	1:paper
[5]	PS42	Second delivery sensor	Second delivery sensor	P005	13	1:paper
[6]	PS45	Second delivery tray full sensor	Second delivery tray full sensor	P009	14	0:full
[7]	PS30	Fixing pressure sensor	Fixing pressure sensor	P009	1	1:engage
[8]	PS37	Inner delivery sensor	Inner delivery sensor	P009	4	1:paper
[9]	PS32	Fixing shutter position sensor	Fixing shutter position sensor	P009	3	1:ON(lightproof)
[10]	PS31	Fixing shutter HP sensor	Fixing shutter HP sensor	P009	2	1:ON(lightproof)
[11]	PS58	ITB displacement sensor 5	ITB displacement sensor 5	P004	13	1:ON
[12]	PS28	ITB displacement sensor 4	ITB displacement sensor 4	P005	8	1:ON
[13]	PS26	ITB displacement sensor 2	ITB displacement sensor 2	P005	10	1:ON
[14]	PS25	ITB displacement sensor 1	ITB displacement sensor 1	P005	11	1:ON
[15]	PS27	ITB displacement sensor 3	ITB displacement sensor 3	P005	9	1:ON
[16]	PS24	ITB steering sensor	ITB steering sensor	P005	12	1:ON
[17]	PS22	Primary transfer disengagement sensor 1	Primary transfer disengagement sensor 1	P004	9	1:release
[18]	PS23	Primary transfer disengagement sensor 2	Primary transfer disengagement sensor 2	P004	8	1:contact

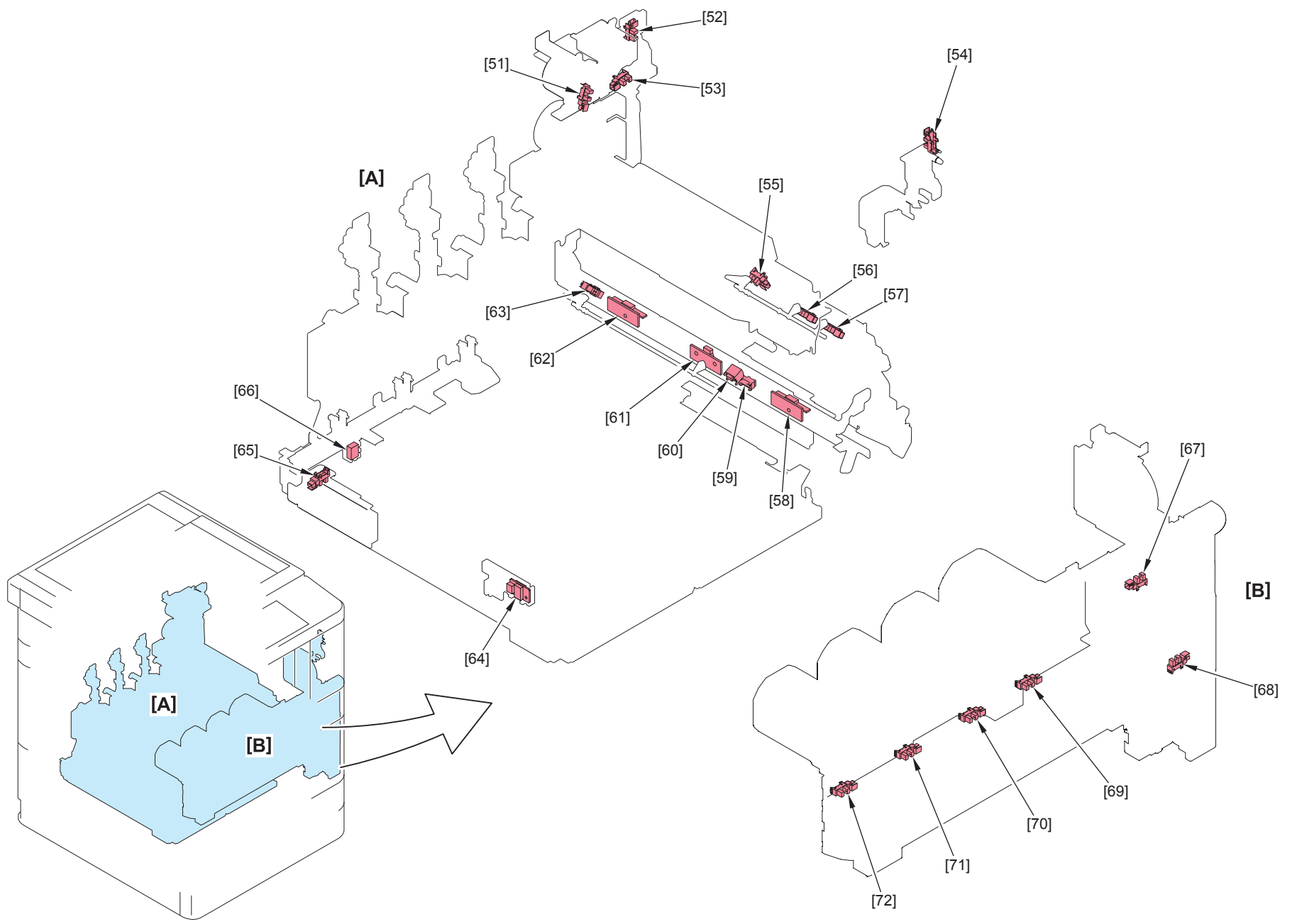
T-4-12





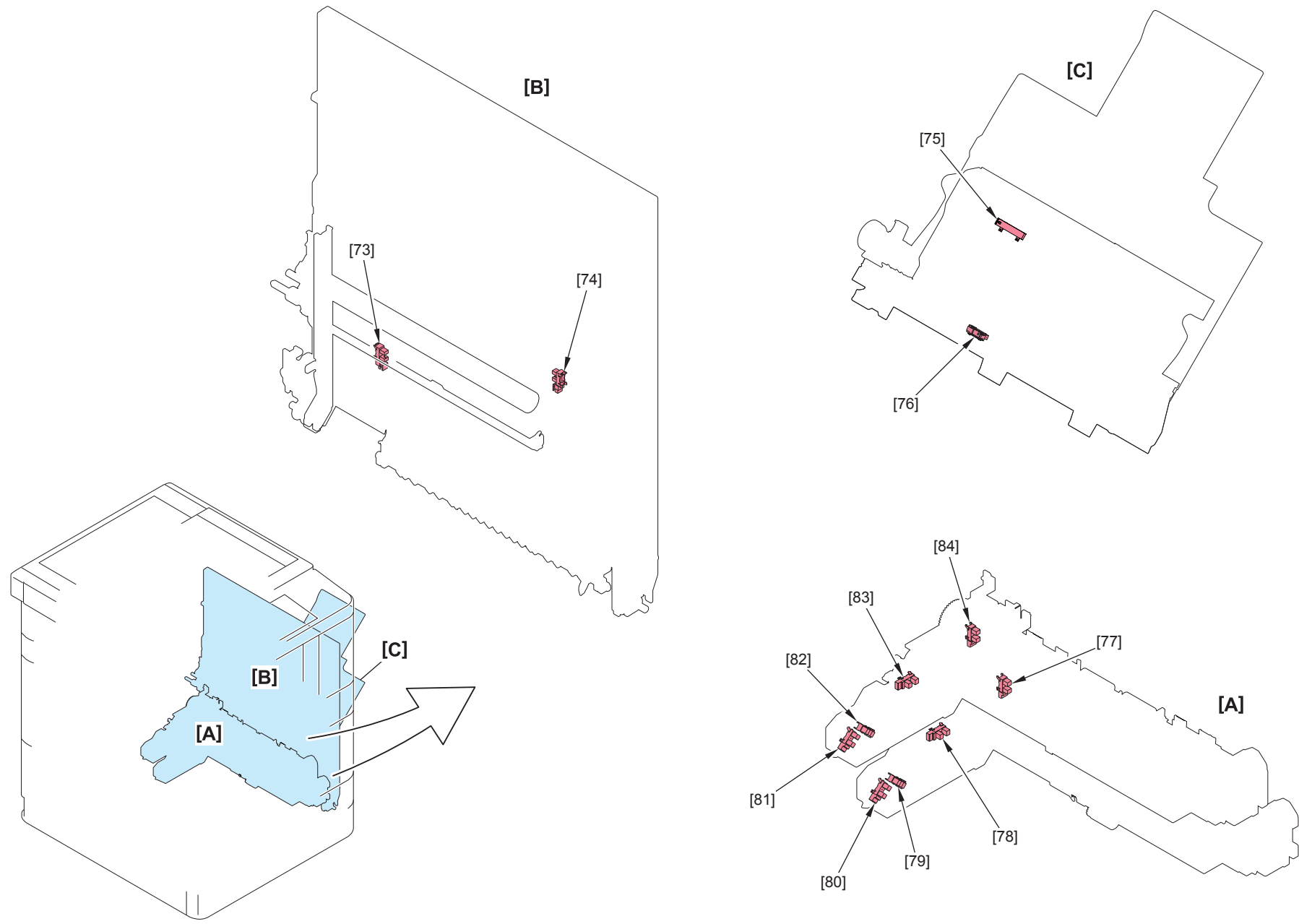
INDEX No.	No.	Name	Replacement unit	IO		
				Address	bit	Remarks
[19]	PS8	Toner container cam HP sensor (Bk)	Toner container cam HP sensor (Bk)	P024	7	1:HP
[20]	TS4	Piezo sensor (Bk)	Hopper Unit	P024	3	1:toner
[21]	PS4	Toner supply sensor (Bk)	Toner supply sensor (Bk)	-	-	-
[22]	TS3	Piezo sensor (C)	Hopper Unit	P024	2	1:toner
[23]	PS3	Toner supply sensor (C)	Toner supply sensor (C)	-	-	-
[24]	TS2	Piezo sensor (M)	Hopper Unit	P024	1	1:toner
[25]	PS2	Toner supply sensor (M)	Toner supply sensor (M)	-	-	-
[26]	PS1	Toner supply sensor (Y)	Toner supply sensor (Y)	-	-	-
[27]	TS1	Piezo sensor (Y)	Hopper Unit	P024	0	1:toner
[28]	PS5	Toner container cam HP sensor (Y)	Toner container cam HP sensor (Y)	P024	4	1:HP
[29]	PS9	Toner cap position sensor (Y)	Toner cap position sensor (Y)	-	-	-
[30]	PS10	Toner cap position sensor (M)	Toner cap position sensor (M)	-	-	-
[31]	PS6	Toner container cam HP sensor (M)	Toner container cam HP sensor (M)	P024	5	1:HP
[32]	PS11	Toner cap position sensor (C)	Toner cap position sensor (C)	-	-	-
[33]	PS7	Toner container cam HP sensor (C)	Toner container cam HP sensor (C)	P024	6	1:HP
[34]	PS12	Toner cap position sensor (Bk)	Toner cap position sensor (Bk)	-	-	-
[35]	UN38	Bk drum encoder sensor 2	Bk drum encoder sensor 2	-	-	-
[36]	UN37	Bk drum encoder sensor 1	Bk drum encoder sensor 1	-	-	-
[37]	UN36	C drum encoder sensor 2	C drum encoder sensor 2	-	-	-
[38]	UN35	C drum encoder sensor 1	C drum encoder sensor 1	-	-	-
[39]	UN34	M drum encoder sensor 2	M drum encoder sensor 2	-	-	-
[40]	UN33	M drum encoder sensor 1	M drum encoder sensor 1	-	-	-
[41]	UN32	Y drum encoder sensor 2	Y drum encoder sensor 2	-	-	-
[42]	UN31	Y drum encoder sensor 1	Y drum encoder sensor 1	-	-	-
[43]	UN59	New/old detection fuse (Bk)	Drum Unit	P008	4	0:NEW
[44]	UN58	New/old detection fuse (C)	Drum Unit	P008	3	0:NEW
[45]	UN57	New/old detection fuse (M)	Drum Unit	P008	2	0:NEW
[46]	UN56	New/old detection fuse (Y)	Drum Unit	P008	1	0:NEW
[47]	TS8	ATR sensor (Bk)	Developing Assembly	-	-	-
[48]	TS7	ATR sensor (C)	Developing Assembly	-	-	-
[49]	TS6	ATR sensor (M)	Developing Assembly	-	-	-
[50]	TS5	ATR sensor (Y)	Developing Assembly	-	-	-

T-4-13



INDEX No.	No.	Name	Replacement unit	IO		
				Address	bit	Remarks
[51]	PS44	First delivery tray full sensor	First delivery tray full sensor	P009	13	0:full
[52]	PS20	Right door sensor	Right door sensor	P009	5	0:DOOR_OPEN
[53]	PS41	First delivery sensor	First delivery sensor	P009	12	1:paper
[54]	PS21	Second & third delivery door sensor	Second & third delivery door sensor	P009	6	0:DOOR_OPEN
[55]	PS34	Fixing inlet sensor	Fixing inlet sensor	P013	3	1:paper
[56]	PS35	Fixing arch sensor 1	Fixing arch sensor 1	P013	5	1:ON
[57]	PS36	Fixing arch sensor 2	Fixing arch sensor 2	P013	4	1:ON
[58]	UN47	Patch sensor (front)	Patch sensor (front)	P006	8	1:LED_ON
[59]	UN53	Vertical path sensor	Vertical path sensor	P009	8	1:paper
[60]	UN51	Transparency sensor	Transparency sensor	P009	7	1:paper
[61]	UN49	Patch sensor (center)	Patch sensor (center)	P006	4	1:LED_ON
[62]	UN48	Patch sensor (rear)	Patch sensor (rear)	P006	5	1:LED_ON
[63]	PS33	Registration sensor	Registration sensor	P009	9	1:paper
[64]	UN50	Environment sensor 2	Environment sensor 2	-	-	-
[65]	PS29	Laser shutter sensor	Laser shutter sensor	P014	8	1:lightproof
[66]	UN22	Environment sensor 1	Environment sensor 1	-	-	-
[67]	PS17	Toner container outer cover sensor	Toner container outer cover sensor	P024	12	1:close
[68]	PS18	Front door sensor	Front door sensor	P009	10	0:DOOR_OPEN
[69]	PS16	Toner container inner cover sensor (Bk)	Toner container inner cover sensor (Bk)	P024	11	1:close
[70]	PS15	Toner container inner cover sensor (C)	Toner container inner cover sensor (C)	P024	10	1:close
[71]	PS14	Toner container inner cover sensor (M)	Toner container inner cover sensor (M)	P024	9	1:close
[72]	PS13	Toner container inner cover sensor (Y)	Toner container inner cover sensor (Y)	P024	8	1:close

T-4-14

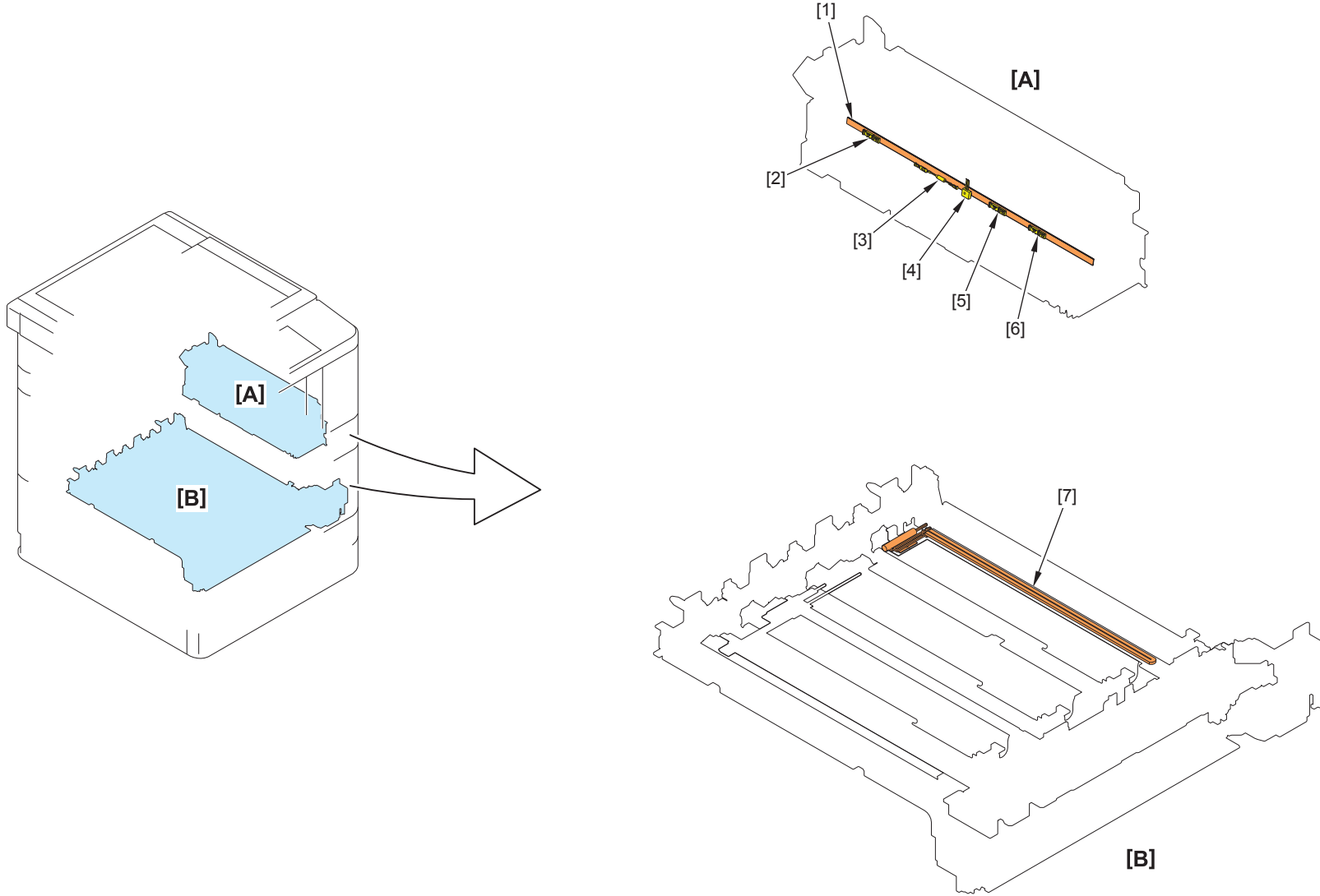


F-4-23

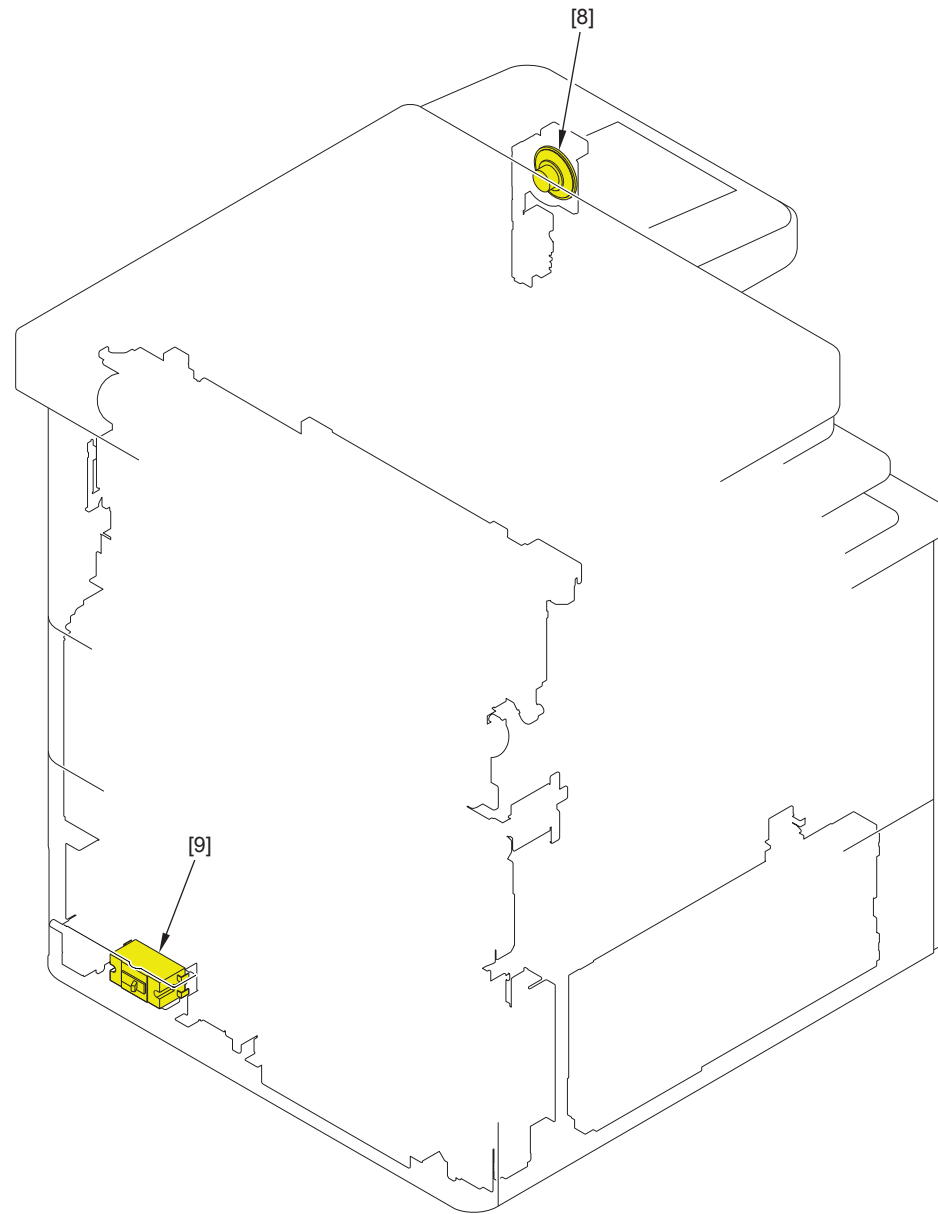
INDEX No.	No.	Name	Replacement unit	IO		
				Address	bit	Remarks
[73]	PS19	Right lower door sensor	Right lower door sensor	P014	11	0:DOOR_OPEN
[74]	PS38	Duplex paper sensor	Duplex paper sensor	P013	6	1:paper
[75]	UN52	Multi-purpose tray size sensor	Multi-purpose tray size sensor	-	-	-
[76]	PS47	Multi-purpose tray paper sensor	Multi-purpose tray paper sensor	P013	7	1:paper
[77]	PS56	Cassette 2 pre-registration sensor	Cassette 2 pre-registration sensor	P013	8	1:paper
[78]	PS50	Cassette 2 paper sensor	Cassette 2 paper sensor	P013	11	0:paper
[79]	PS53	Cassette 2 paper level sensor A	Cassette 2 paper level sensor A	P013	10	0:paper
[80]	PS54	Cassette 2 paper level sensor B	Cassette 2 paper level sensor B	P013	9	0:paper
[81]	PS52	Cassette 1 paper level sensor B	Cassette 1 paper level sensor B	P013	13	0:paper
[82]	PS51	Cassette 1 paper level sensor A	Cassette 1 paper level sensor A	P013	14	0:paper
[83]	PS49	Cassette 1 paper sensor	Cassette 1 paper sensor	P013	15	0:paper
[84]	PS55	Cassette 1 pre-registration sensor	Cassette 1 pre-registration sensor	P013	12	1:paper

T-4-15

Heater / Other



F-4-24

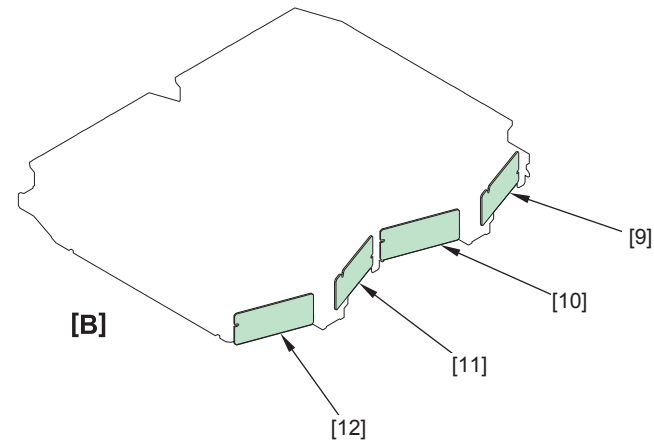
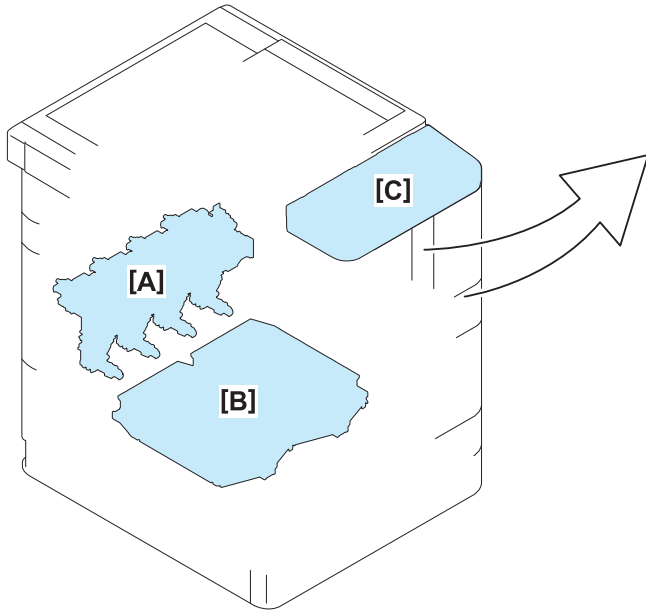
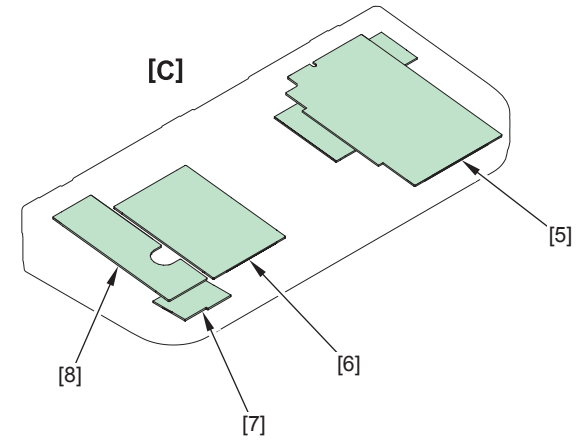
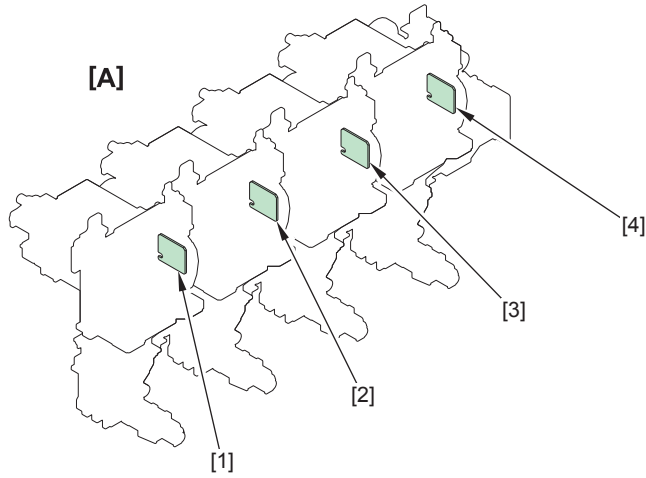


F-4-25



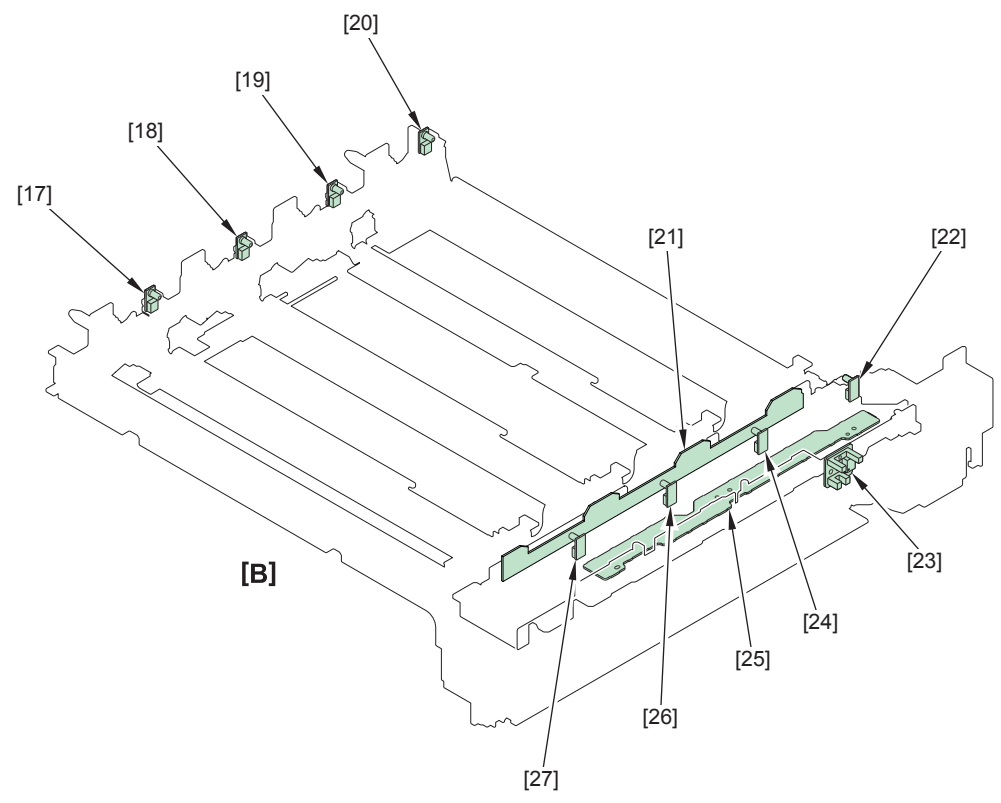
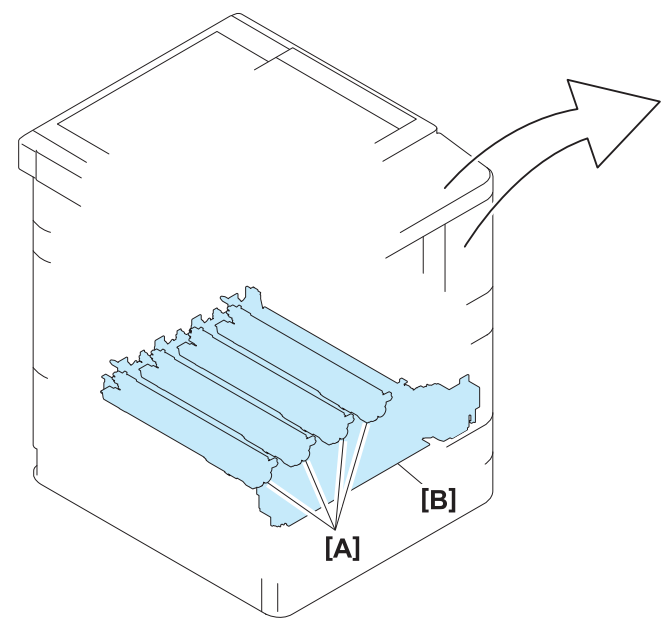
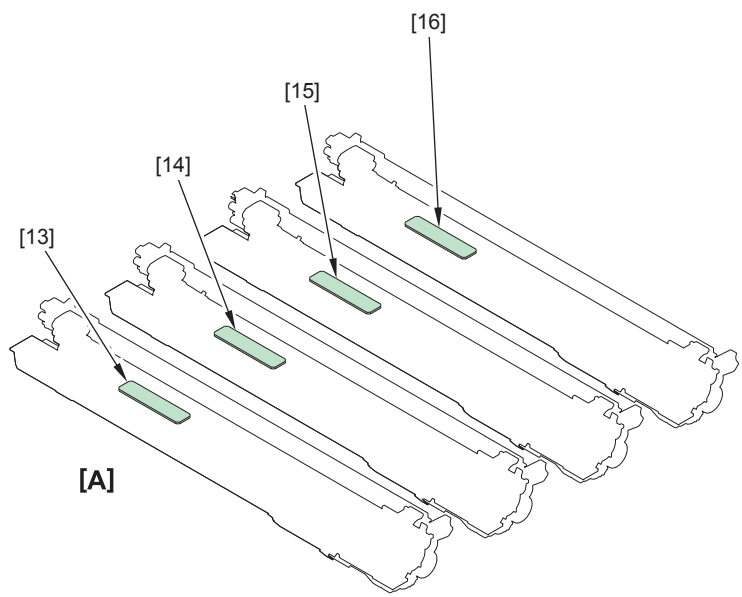
INDEX No.	No.	Name	Replacement unit
[1]	H1	Fixing heater	Film Unit
[2]	TH1	Sub thermistor 2	Film Unit
[3]	TP1	Temperature fuse	Film Unit
[4]	TH1	Main thermistor 2	Film Unit
[5]	TH1	Main thermistor 1	Film Unit
[6]	TH1	Sub thermistor 1	Film Unit
[7]	H2	Drum heater (Bk)	Drum heater (Bk)
[8]	SP1	Speaker	Speaker
[9]	ELCB1	Leakage breaker	Leakage breaker

T-4-16



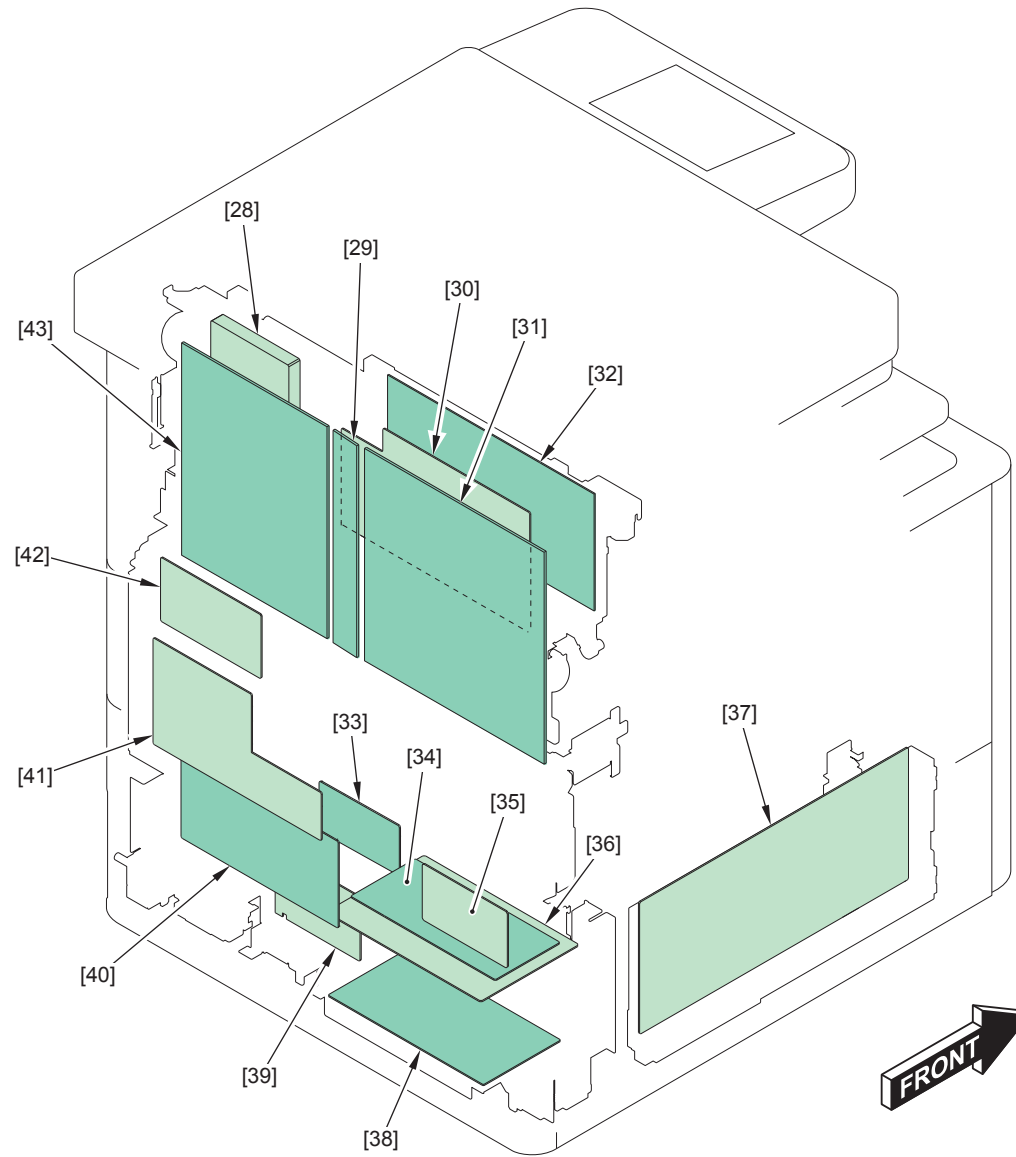
INDEX No.	No.	Name	Replacement Unit
[1]	UN39	Toner sensor relay PCB (Y)	Toner sensor relay PCB (Y)
[2]	UN40	Toner sensor relay PCB (M)	Toner sensor relay PCB (M)
[3]	UN41	Toner sensor relay PCB (C)	Toner sensor relay PCB (C)
[4]	UN42	Toner sensor relay PCB (Bk)	Toner sensor relay PCB (Bk)
[5]	-	Ten key PCB	Ten key PCB
[6]	-	CPU PCB	CPU PCB
[7]	-	Volume PCB	Volume PCB
[8]	-	Sub key PCB	Sub key PCB
C5051/C5045			
[9]	UN15	Laser driver PCB (C)	Laser Scanner Unit
[10]	UN14	Laser driver PCB (Bk)	Laser Scanner Unit
[11]	UN13	Laser driver PCB (Y)	Laser Scanner Unit
[12]	UN12	Laser driver PCB (M)	Laser Scanner Unit
C5035/C5030			
[9]	UN15	Laser driver PCB (C)	Laser Scanner Unit
[10]	UN14	Laser driver PCB (Bk)	Laser Scanner Unit
[11]	UN13	Laser driver PCB (Y)	Laser Scanner Unit
[12]	UN12	Laser driver PCB (M)	Laser Scanner Unit

T-4-17



INDEX No.	No.	Name	Replacement Unit
[13]	UN43	Developing sub bias PCB (Y)	Developing Assembly
[14]	UN44	Developing sub bias PCB (M)	Developing Assembly
[15]	UN45	Developing sub bias PCB (C)	Developing Assembly
[16]	UN46	Developing sub bias PCB (Bk)	Developing Assembly
[17]	UN24	Y pre-exposure LED PCB (rear)	LED PCB
[18]	UN26	M pre-exposure LED PCB (rear)	LED PCB
[19]	UN28	C pre-exposure LED PCB (rear)	LED PCB
[20]	UN30	Bk pre-exposure LED PCB (rear)	LED PCB
[21]	UN19	Drum unit new/old detection PCB	Drum unit new/old detection PCB
[22]	UN29	Bk pre-exposure LED PCB (front)	LED PCB
[23]	UN21	Recycle toner sensor PCB	Recycle toner sensor PCB
[24]	UN27	C pre-exposure LED PCB (front)	LED PCB
[25]	UN20	Process unit relay PCB	Process unit relay PCB
[26]	UN25	M pre-exposure LED PCB (front)	LED PCB
[27]	UN23	Y pre-exposure LED PCB (front)	LED PCB

T-4-18



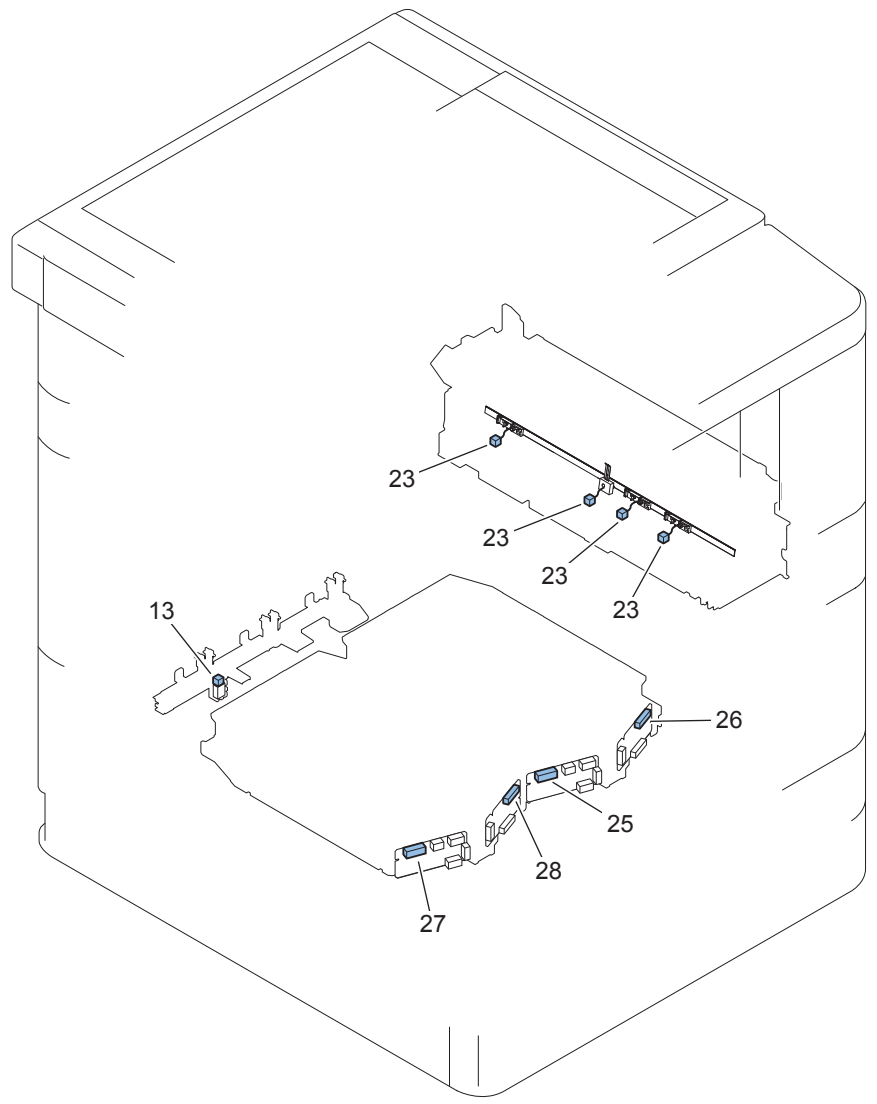
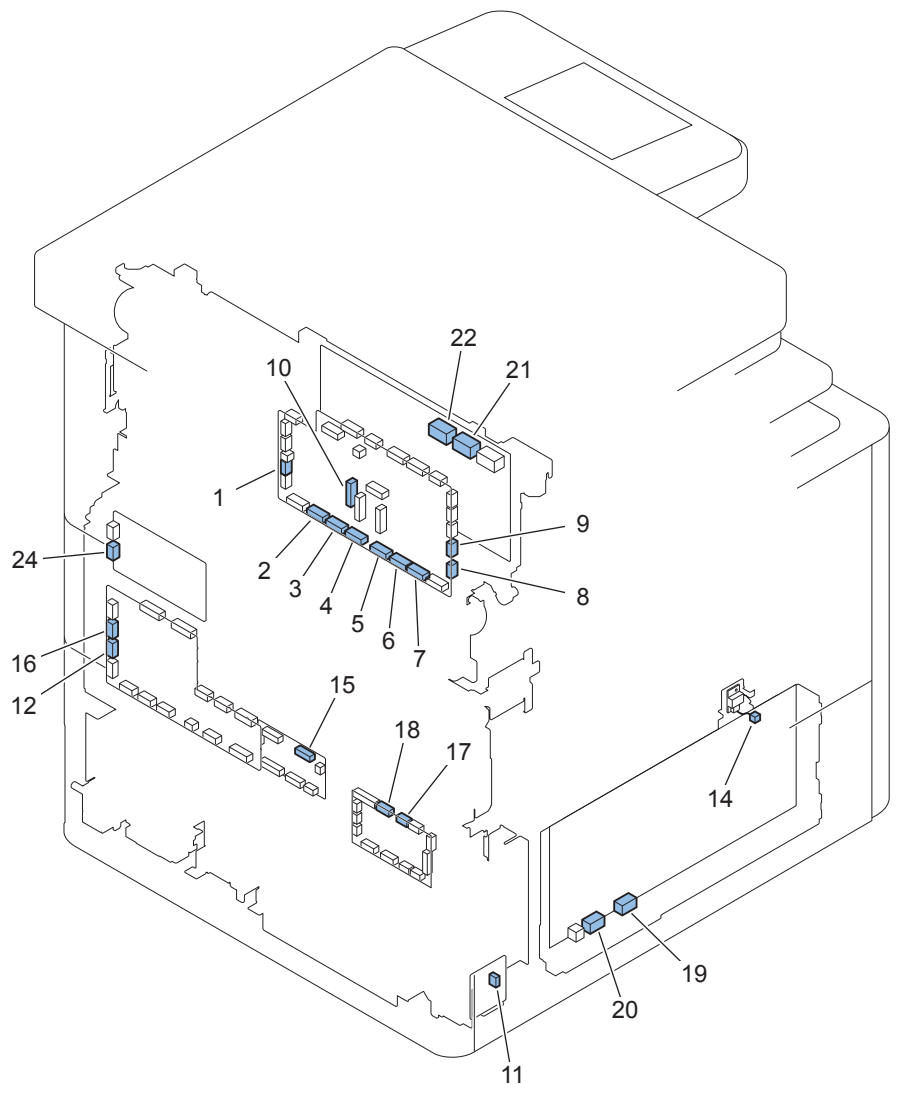
F-4-28

INDEX No.	No.	Name	Replacement Unit
[28]	-	HDD	HDD
[29]	-	Riser PCB	Riser PCB
[30]	UN1	DC controller PCB	DC controller PCB
[31]	-	Main controller PCB 2	Main controller PCB 2
[32]	UN17	HVT 2 PCB	HVT 2 PCB
[33]	UN3	Cassette feed driver PCB	Cassette feed driver PCB
[34]	UN5	Relay PCB	Relay PCB
[35]	UN4	Drum driver PCB	Drum driver PCB
[36]	UN10	24V power supply PCB 2	Power Supply Unit
[37]	UN16	HVT 1 PCB	HVT 1 PCB
[38]	UN11	12V power supply PCB	Power Supply Unit
[39]	UN9	All-night power supply PCB	All-night power supply PCB
[40]	UN6	AC driver PCB	AC driver PCB
[41]	UN2	Feed driver PCB	Feed driver PCB
[42]	UN18	HVT 3 PCB	HVT 3 PCB
[43]	-	Main controller PCB 1	Main controller PCB 1

T-4-19



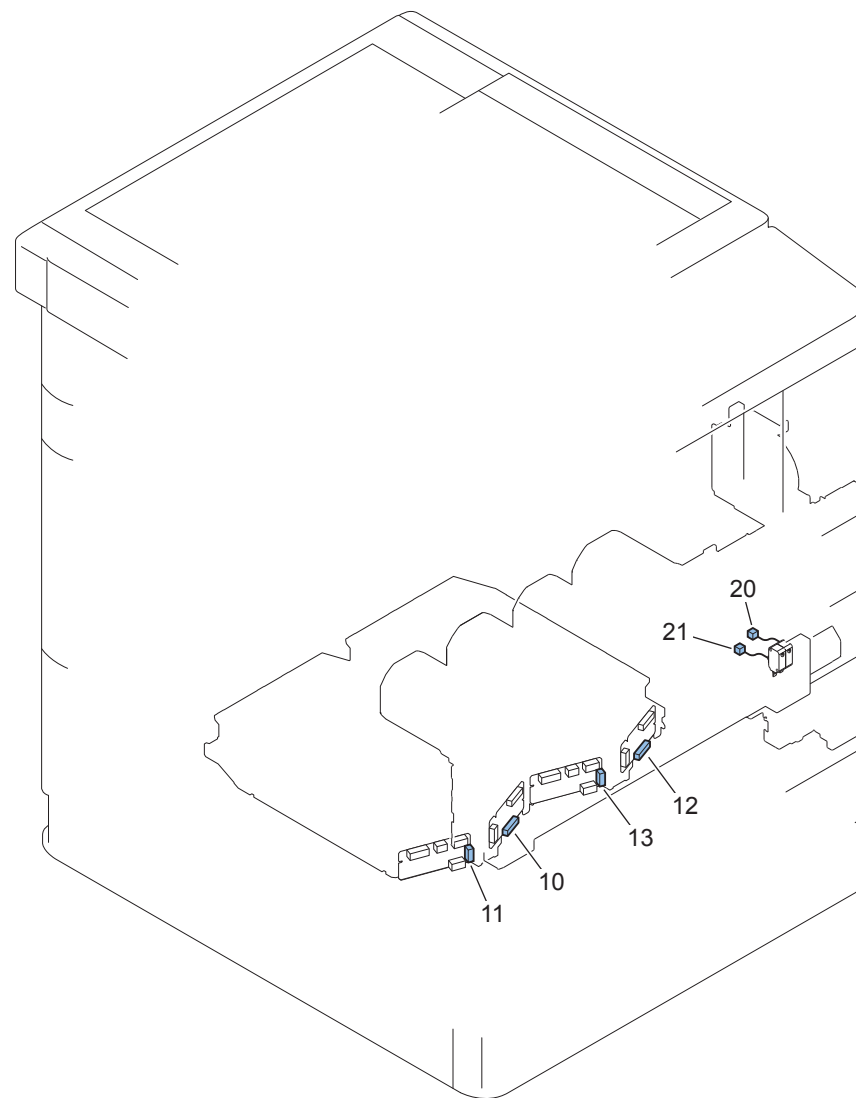
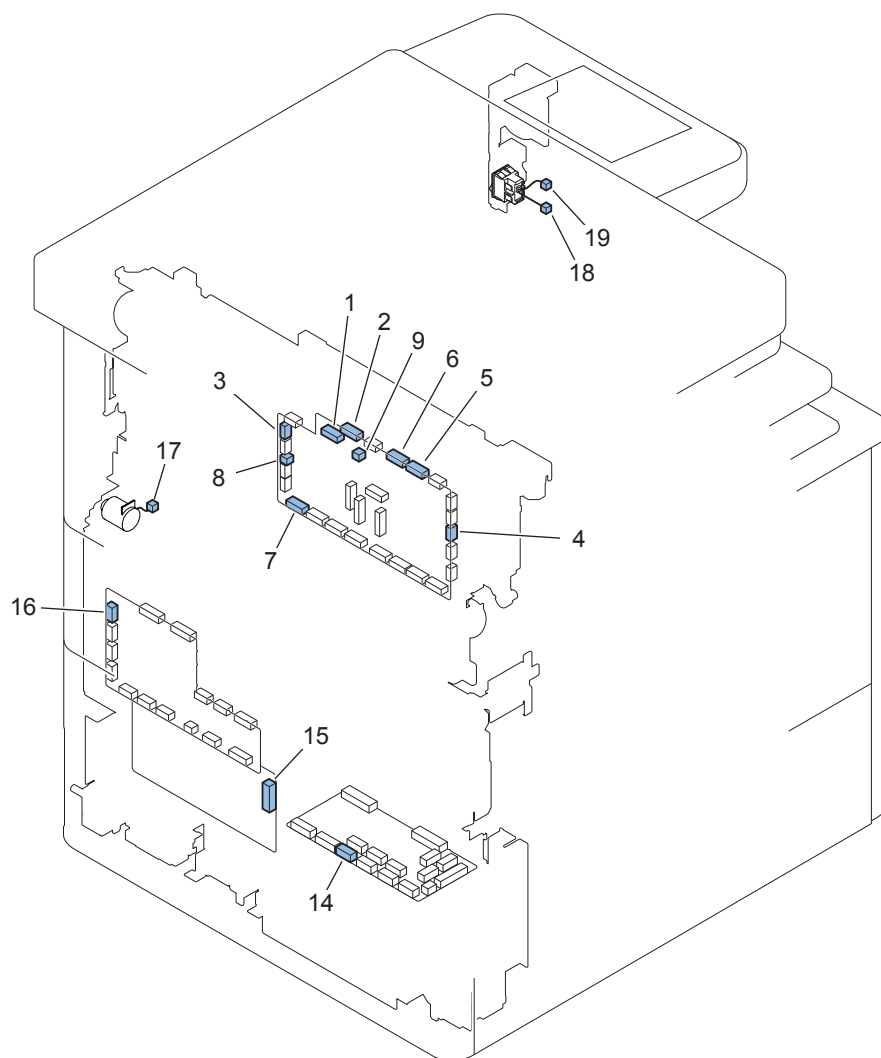
Conector



F-4-29

KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector			KeyNo.	J No.	Symbol	Parts Name
1	J102	UN1	DC controller PCB				11	J822	-	ECO-ID
2	J103	UN1	DC controller PCB				12	J253	UN2	Feed driver PCB
3	J104	UN1	DC controller PCB	J5066			13	J1300	UN22	Environment sensor 1
3	J104	UN1	DC controller PCB				14	J810	UN50	Environment sensor 2
3	J104	UN1	DC controller PCB				-	J3002	-	Cassette feeding Unit-AD1
4	J106	UN1	DC controller PCB				15	J271	UN3	Cassette feed driver PCB
5	J107	UN1	DC controller PCB				16	J251	UN2	Feed driver PCB
5	J107	UN1	DC controller PCB				14	J311	UN4	Drum driver PCB
6	J109	UN1	DC controller PCB				18	J313	UN4	Drum driver PCB
7	J110	UN1	DC controller PCB				19	J654	UN16	HVT 1 PCB
7	J110	UN1	DC controller PCB				20	J653	UN16	HVT 1 PCB
8	J111	UN1	DC controller PCB				21	J656	UN17	HVT 2 PCB
8	J111	UN1	DC controller PCB				22	J655	UN17	HVT 2 PCB
9	J112	UN1	DC controller PCB	J5026	J5075	J5012	23	J42	TH1	Main thermistor 1
9	J112	UN1	DC controller PCB	J5026	J5075	J5012	23	J42	TH1	Main thermistor 2
9	J112	UN1	DC controller PCB	J5026	J5075	J5012	23	J42	TH1	Sub thermistor 1
9	J112	UN1	DC controller PCB	J5026	J5075	J5012	23	J42	TH1	Sub thermistor 2
9	J112	UN1	DC controller PCB				24	J657	UN18	HVT 3 PCB
10	J114	UN1	DC controller PCB				25	J863	UN14	Laser driver PCB (Bk)
10	J114	UN1	DC controller PCB				26	J864	UN15	Laser driver PCB (C)
10	J114	UN1	DC controller PCB				27	J853	UN12	Laser driver PCB (M)
10	J114	UN1	DC controller PCB				28	J854	UN13	Laser driver PCB (Y)

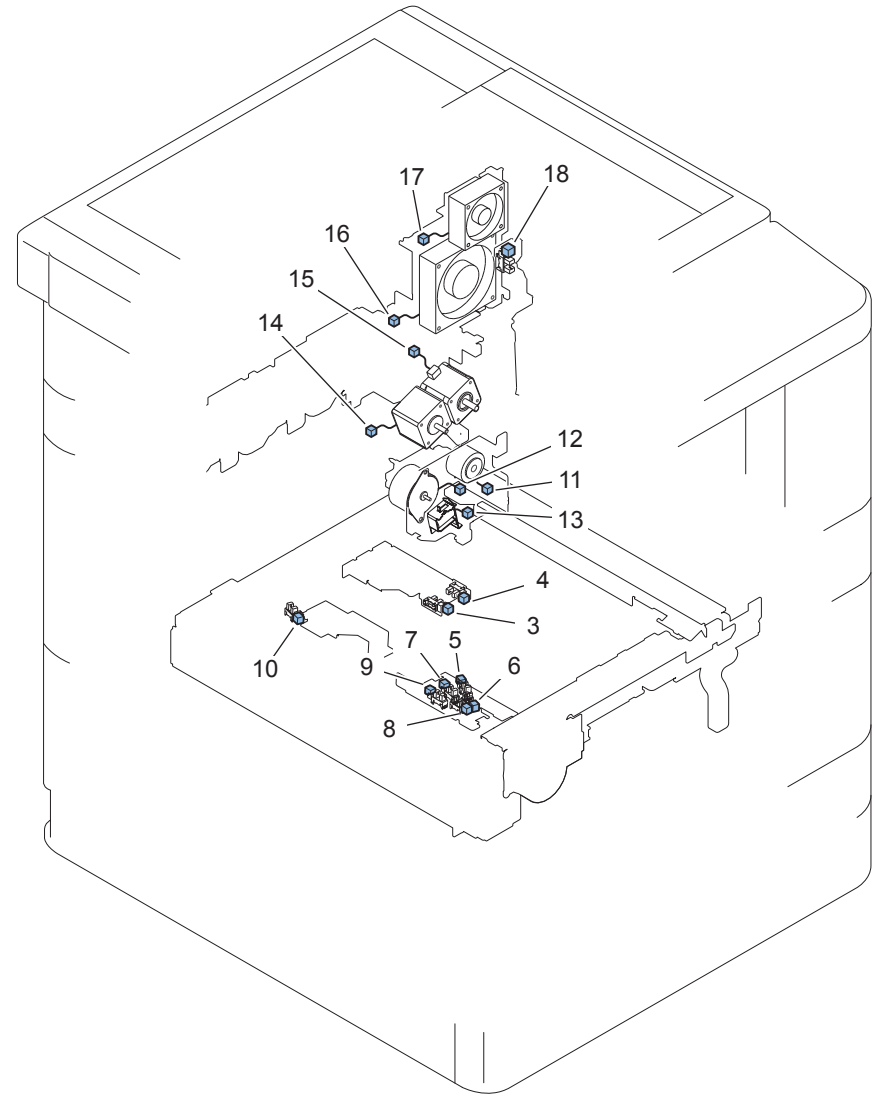
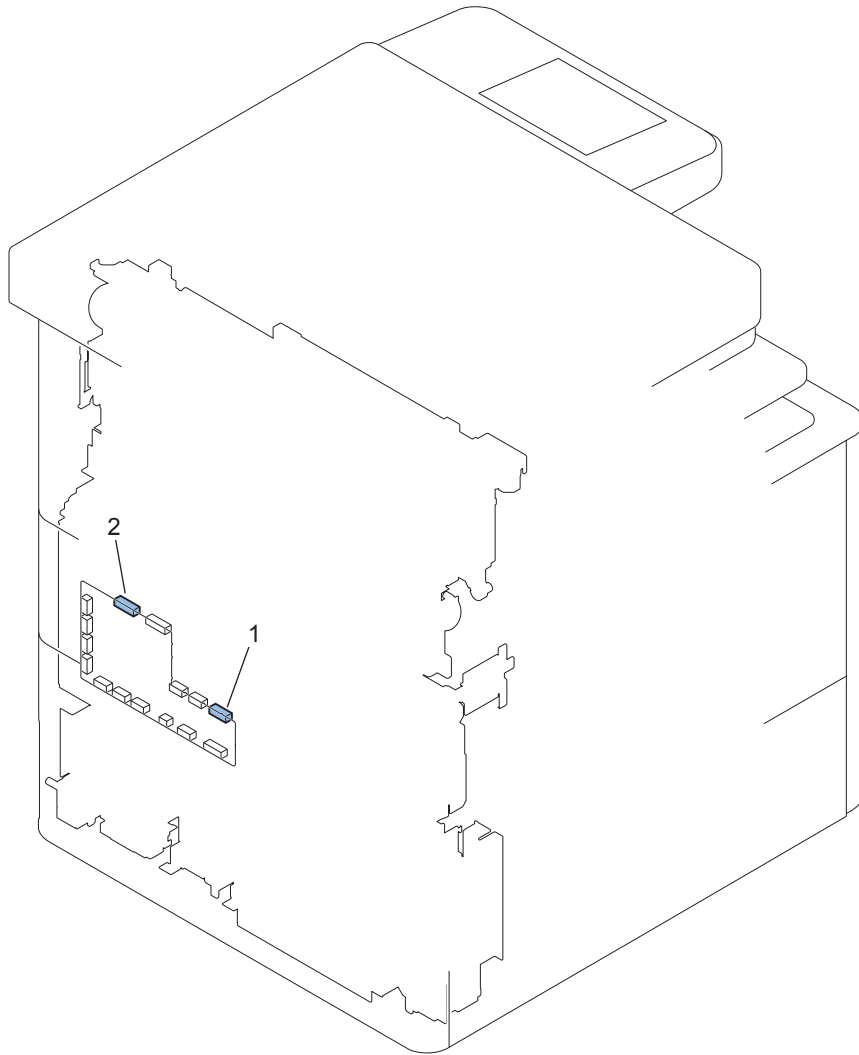
T-4-20



F-4-30

KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector			KeyNo.	J No.	Symbol	Parts Name
1	J118	UN1	DC controller PCB	J825			10	J102	UN13	Laser driver PCB (Y)
1	J118	UN1	DC controller PCB	J825			11	J203	UN12	Laser driver PCB (M)
2	J119	UN1	DC controller PCB	J823			12	J102	UN15	Laser driver PCB (C)
2	J119	UN1	DC controller PCB	J823			13	J203	UN14	Laser driver PCB (C)
3	J121	UN1	DC controller PCB				14	J401	UN5	Relay PCB
4	J122	UN1	DC controller PCB				15	J2001	UN6	AC driver PCB
5	J125	UN1	DC controller PCB				16	J252	UN2	Feed driver PCB
6	J126	UN1	DC controller PCB				-	J815	-	Buffer Pass Unit
6	J126	UN1	DC controller PCB				-	J816	-	Inner Finisher
7	J127	UN1	DC controller PCB	J5037			-	J809	-	Finisher
7	J127	UN1	DC controller PCB				-	J813	-	Paper Deck Unit-B1
8	J132	UN1	DC controller PCB				17	J5042	-	Key Switch Unit
8	J132	UN1	DC controller PCB	J998			18	J5061	SW1	Main power supply switch
8	J132	UN1	DC controller PCB	J998			19	J999	SW1	Main power supply switch
9	J136	UN1	DC controller PCB				20	J2111	SW3	DC interlock switch 1
9	J136	UN1	DC controller PCB				21	J2111	SW4	DC interlock switch 2

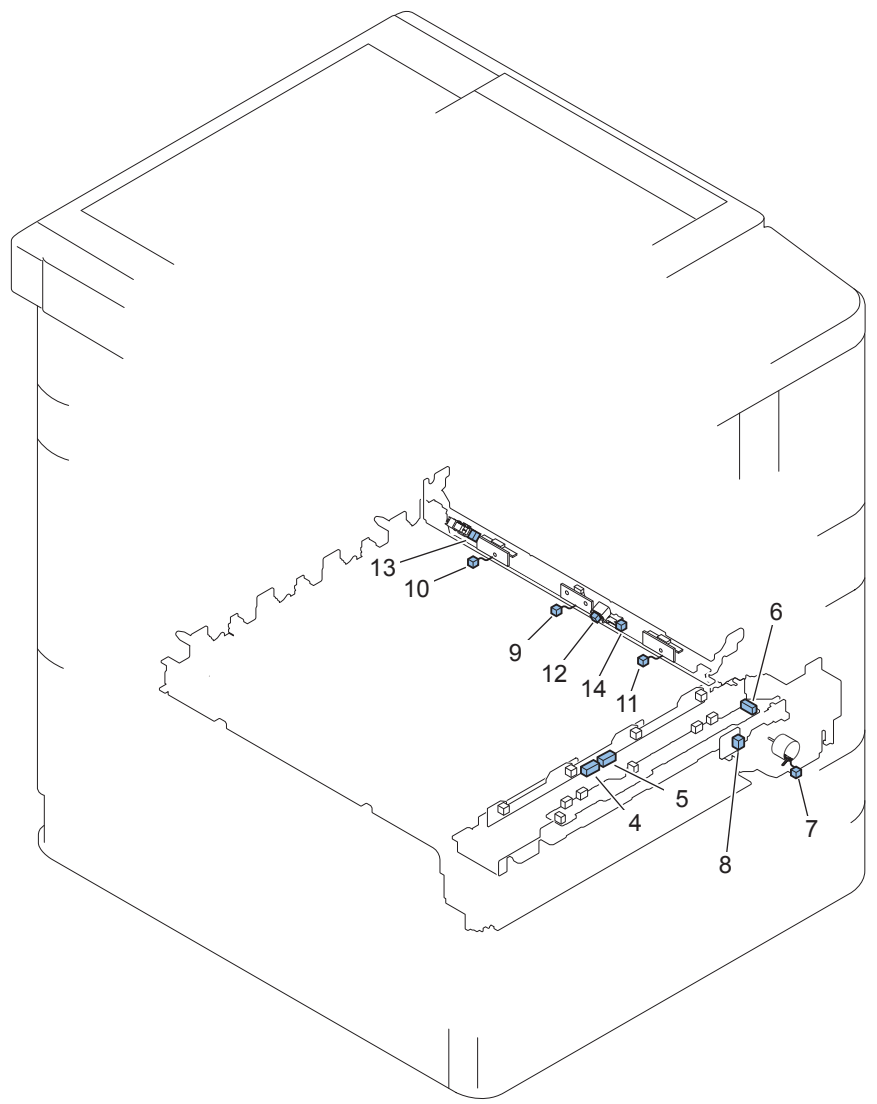
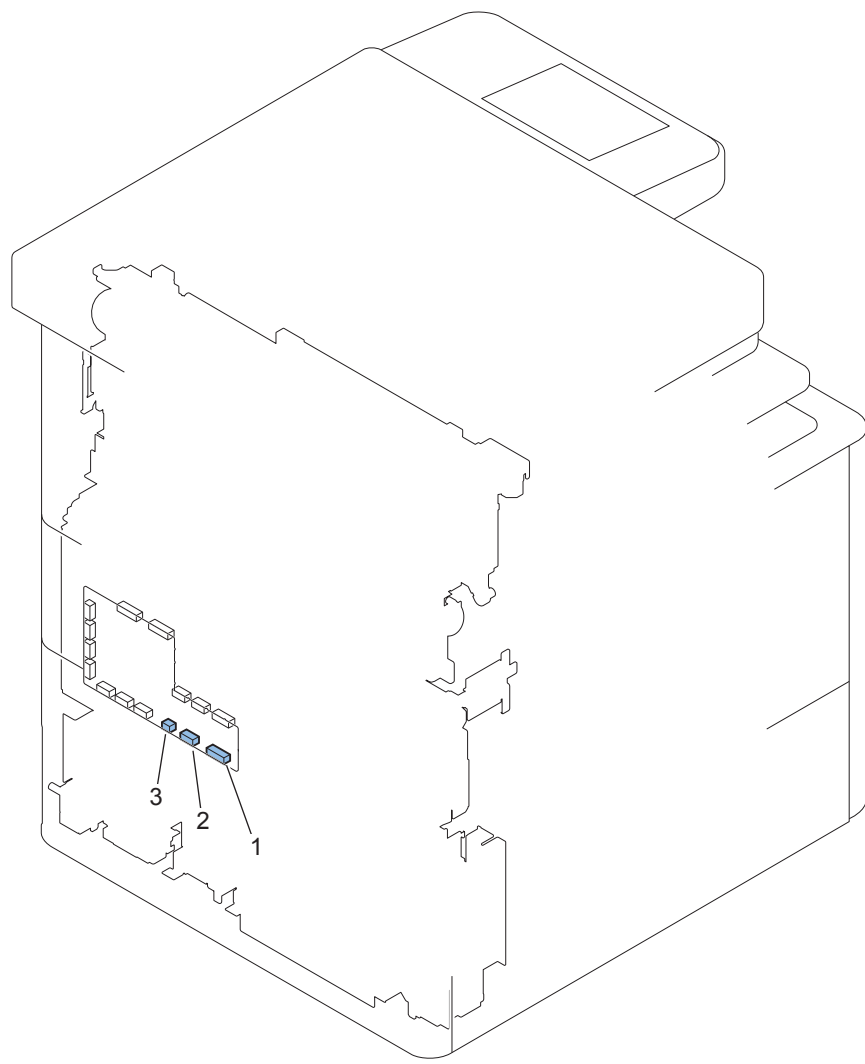
T-4-21



F-4-31

KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector			KeyNo.	J No.	Symbol	Parts Name
1	J255	UN2	Feed driver PCB	J5052			3	J5067	PS23	Primary transfer disengagement sensor 2
1	J255	UN2	Feed driver PCB	J5052			4	J6032	PS22	Primary transfer disengagement sensor 1
1	J255	UN2	Feed driver PCB	J5052			5	J6031	PS58	ITB displacement sensor 5
1	J255	UN2	Feed driver PCB	J5052	J5062		6	J6030	PS28	ITB displacement sensor 4
1	J255	UN2	Feed driver PCB	J5052	J5062		7	J6029	PS27	ITB displacement sensor 3
1	J255	UN2	Feed driver PCB	J5052	J5062		8	J6028	PS26	ITB displacement sensor 2
1	J255	UN2	Feed driver PCB	J5052	J5062		9	J6027	PS25	ITB displacement sensor 1
1	J255	UN2	Feed driver PCB	J5052			10	J6026	PS24	ITB steering sensor
2	J258	UN2	Feed driver PCB	J5086			11	J6082	CL1	Multi-purpose tray pickup clutch
2	J258	UN2	Feed driver PCB	J5086			12	J6083	M18	Multi-purpose tray motor
2	J258	UN2	Feed driver PCB	J5086			13	J6072	SL4	Bypass tray lifter solenoid
2	J258	UN2	Feed driver PCB	J6056			14	J6157	M19	Registration motor
2	J258	UN2	Feed driver PCB	J6057			15	J6158	M20	Duplex feed motor
2	J258	UN2	Feed driver PCB				16	J6066	FM1	Fixing heat exhaust fan 1
2	J258	UN2	Feed driver PCB				17	J6067	FM2	Fixing heat exhaust fan 2
2	J258	UN2	Feed driver PCB				18	J5004	PS20	Right door sensor

T-4-22

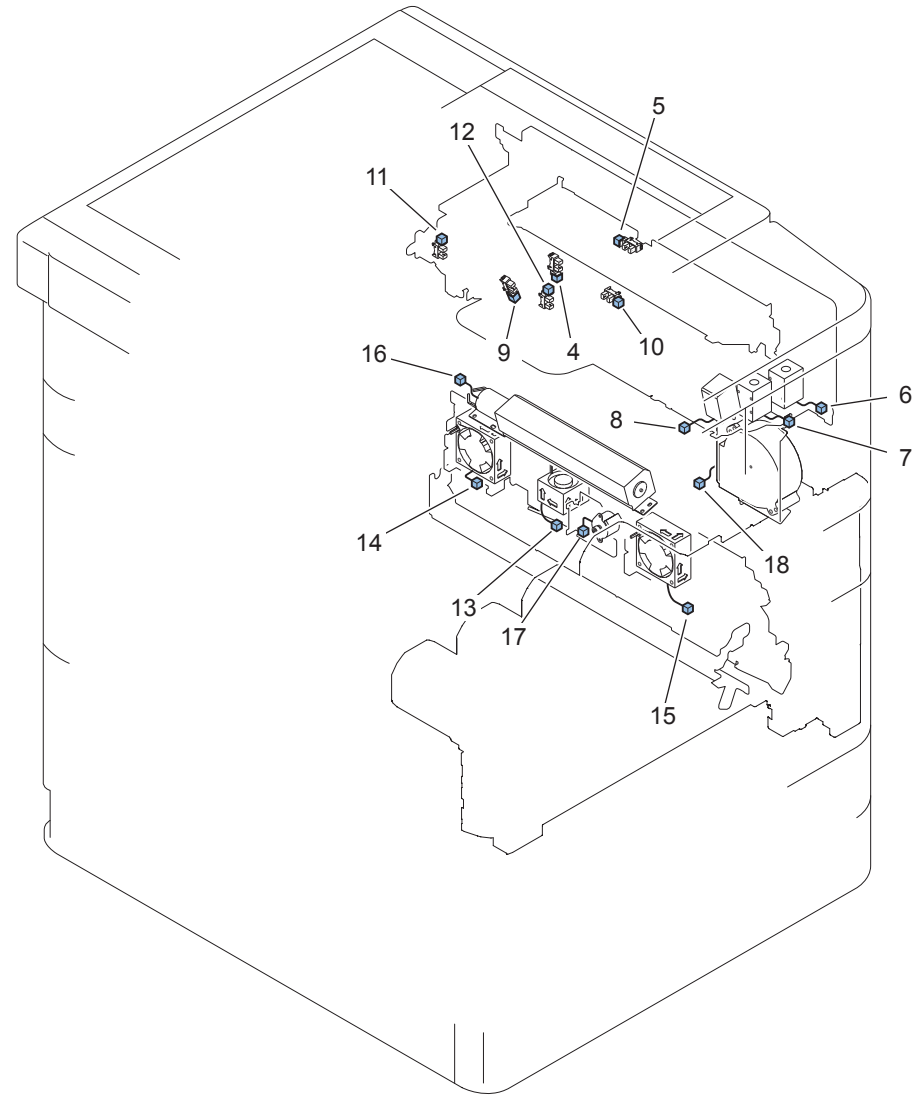
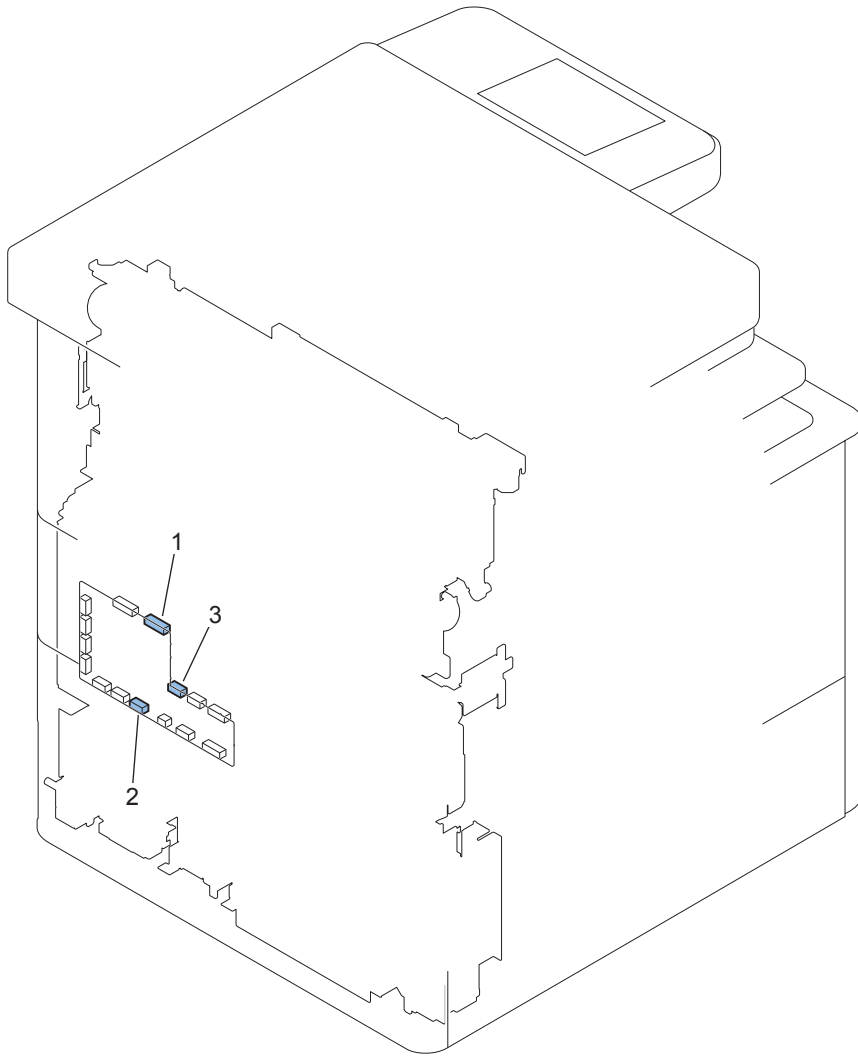


F-4-32



KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector			KeyNo.	J No.	Symbol	Parts Name
1	J254	UN2	Feed driver PCB	J5051	J755	J601	4	J900	UN19	Drum unit new/old detection PCB
1	J254	UN2	Feed driver PCB	J5051	J755	J601	5	J901	UN19	Drum unit new/old detection PCB
1	J254	UN2	Feed driver PCB	J5051	J755		6	J600	UN20	Process unit relay PCB
1	J254	UN2	Feed driver PCB	J5051	J755		7	J6111	M26	Waste toner stirring motor
1	J254	UN2	Feed driver PCB	J5051	J755		8	J6110	UN21	Waste toner sensor PCB
2	J256	UN2	Feed driver PCB	J5046			9	J6108	UN49	Patch sensor (center)
2	J256	UN2	Feed driver PCB	J5046			10	J6107	UN48	Patch sensor (rear)
2	J256	UN2	Feed driver PCB	J5046			11	J6106	UN47	Patch sensor (front)
3	J257	UN2	Feed driver PCB				12	J6093	PS33	Registration sensor
3	J257	UN2	Feed driver PCB				13	J6095	UN51	Transparency sensor
3	J257	UN2	Feed driver PCB				14	J6094	UN53	Vertical path sensor

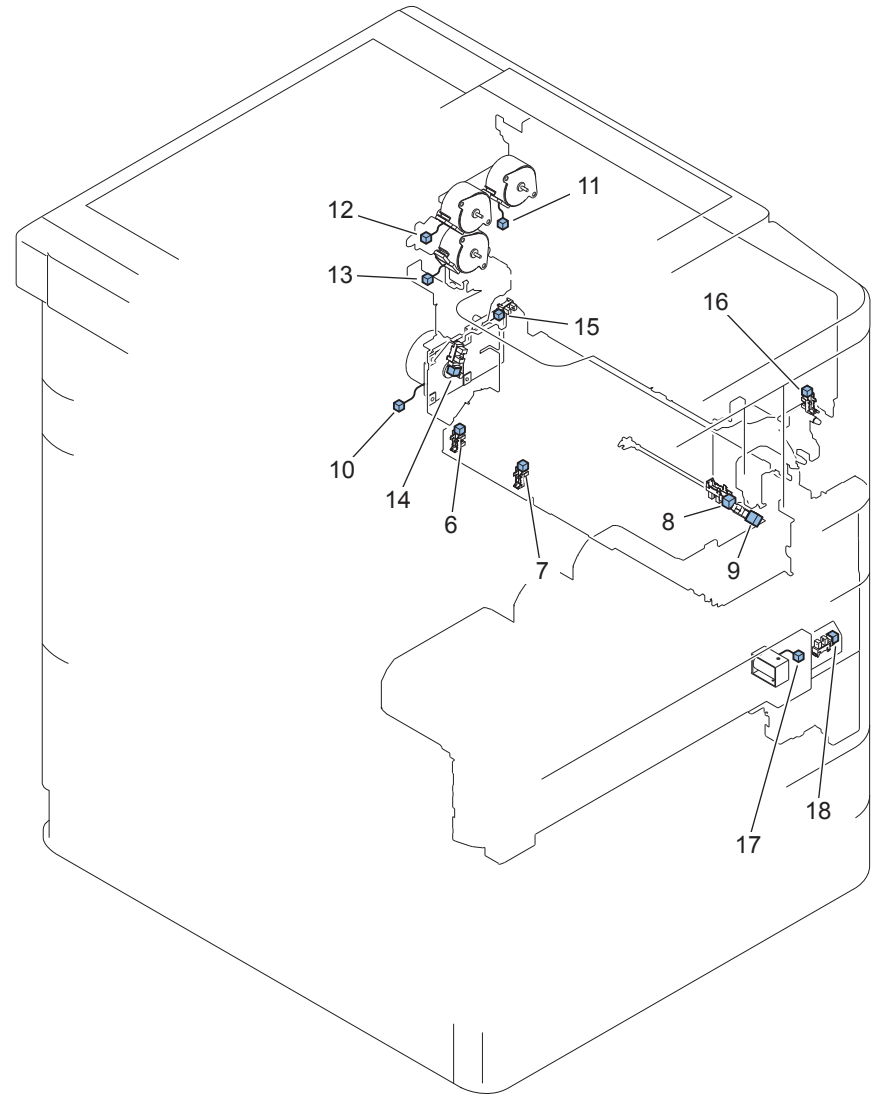
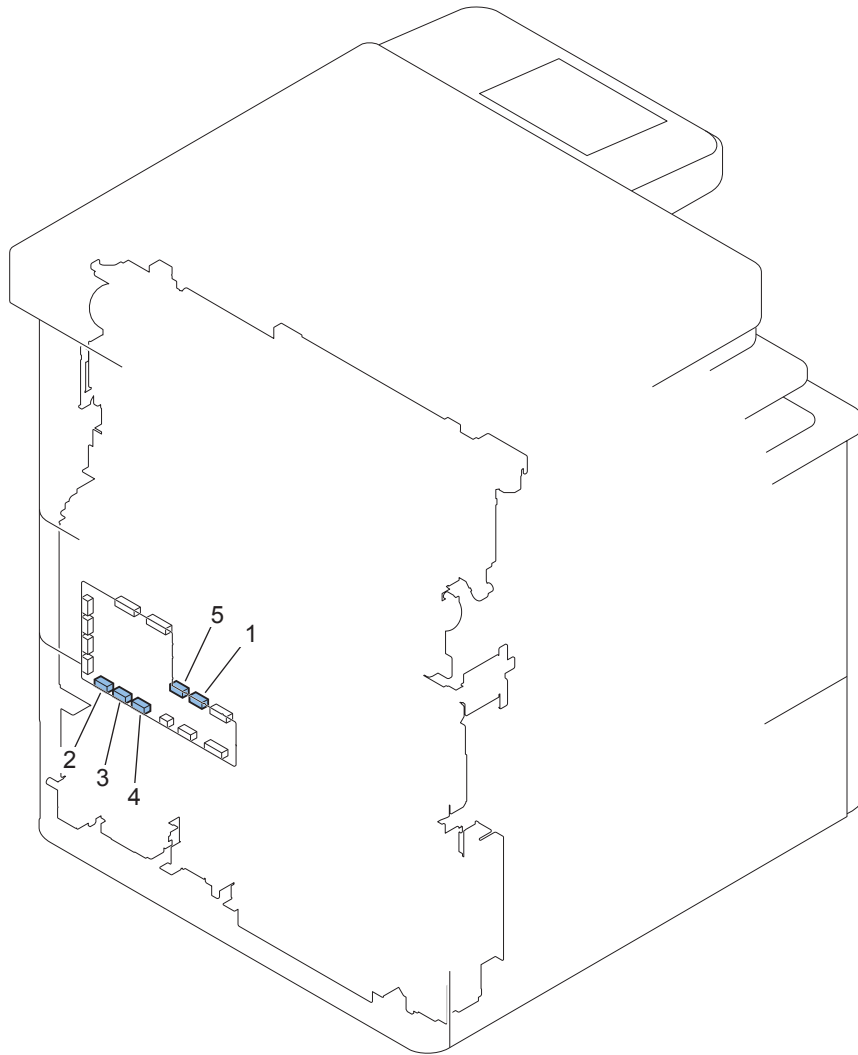
T-4-23



F-4-33

KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector			KeyNo.	J No.	Symbol	Parts Name
1	J262	UN2	Feed driver PCB	J5032			4	J6076	PS40	Duplex inlet sensor
1	J262	UN2	Feed driver PCB	J5032			5	J6075	PS43	Third delivery sensor
1	J262	UN2	Feed driver PCB	J5032	J5097		6	J6074	SL7	Third delivery flapper solenoid
1	J262	UN2	Feed driver PCB	J5032	J5097		7	J6073	SL6	Second delivery flapper solenoid
1	J262	UN2	Feed driver PCB	J5032	J5106	J5083	8	J6065	SL5	First delivery flapper solenoid
1	J262	UN2	Feed driver PCB	J5032	J5106	J5083	9	J6089	PS42	Second delivery sensor
1	J262	UN2	Feed driver PCB	J5032	J5106		10	J6090	PS39	Reverse sensor
1	J262	UN2	Feed driver PCB	J5032			11	J6092	PS45	Second delivery tray full sensor
1	J262	UN2	Feed driver PCB	J5032			12	J6078	PS57	Pre-reverse sensor
2	J264	UN2	Feed driver PCB				13	J6071	FM8	Secondary transfer exhaust fan
2	J264	UN2	Feed driver PCB				14	J6069	FM6	Fixing cooling fan (rear)
2	J264	UN2	Feed driver PCB				15	J6068	FM5	Fixing cooling fan (front)
2	J264	UN2	Feed driver PCB				16	J6061	FM7	Delivery fan 1
2	J264	UN2	Feed driver PCB				17	J6059	M27	Fixing shutter motor
3	J265	UN2	Feed driver PCB				18	J6062	FM9	Delivery fan 2

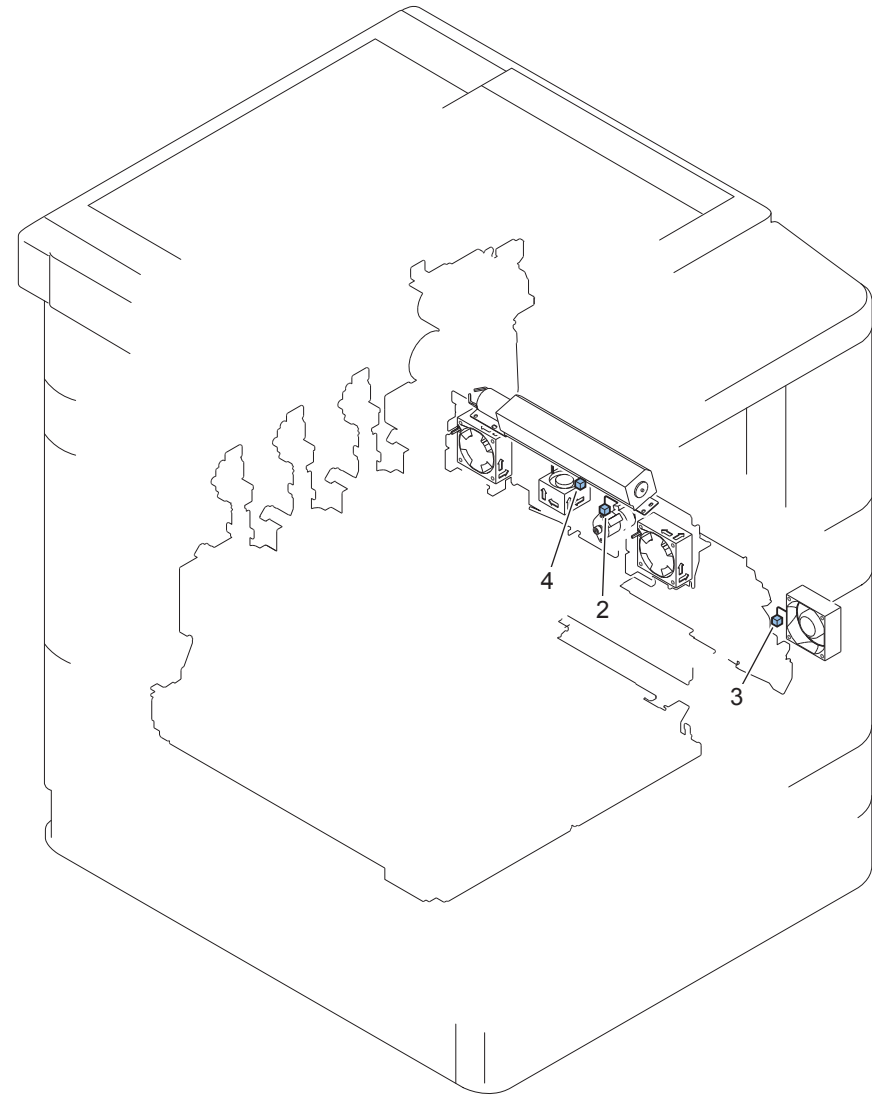
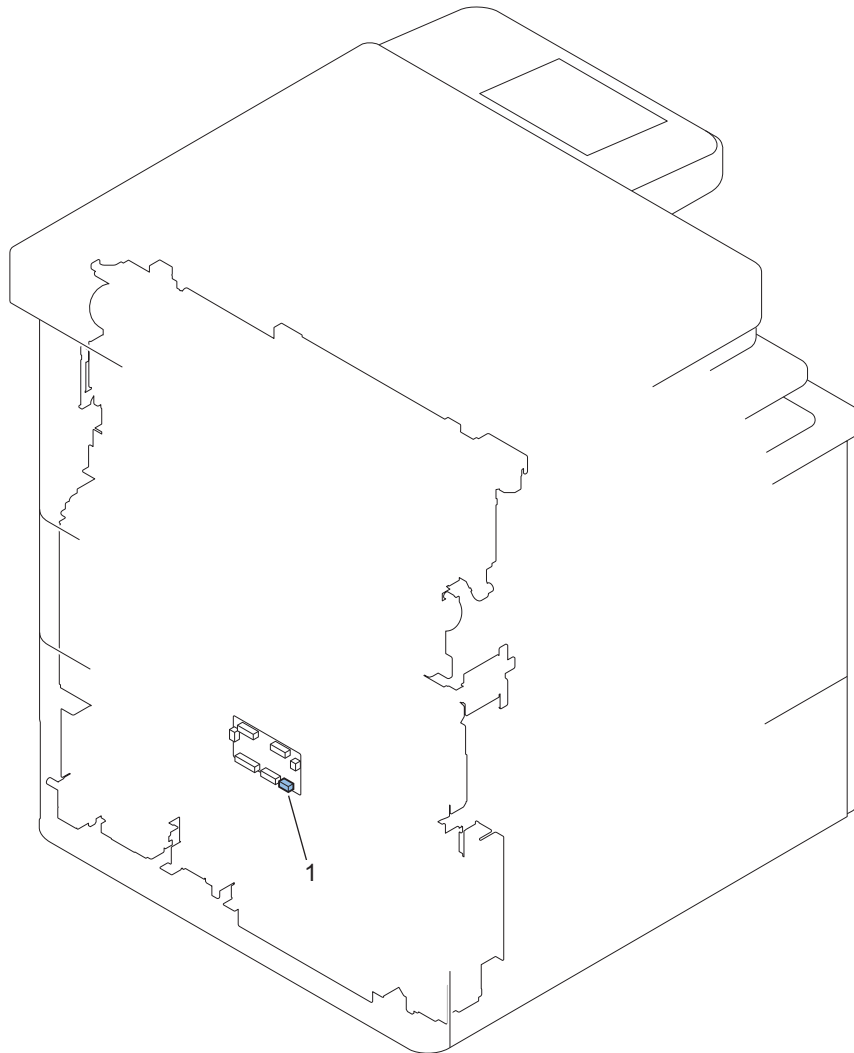
T-4-24



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KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector				KeyNo.	J No.	Symbol	Parts Name
1	J260	UN2	Feed driver PCB	J5075	J5012			6	J6103	PS31	Fixing shutter HP sensor
1	J260	UN2	Feed driver PCB	J5075	J5012			7	J6102	PS32	Fixing shutter position sensor
1	J260	UN2	Feed driver PCB	J5075	J5012	J5060		8	J6104	PS30	Fixing pressure sensor
1	J260	UN2	Feed driver PCB	J5075	J5012	J5060		9	J6101	PS37	Inner delivery sensor
2	J261	UN2	Feed driver PCB					10	J6084	M21	Fixing motor
3	J263	UN2	Feed driver PCB	J5031				11	J6140	M25	Third delivery motor
3	J263	UN2	Feed driver PCB	J5031				12	J6141	M24	Reverse roller motor
3	J263	UN2	Feed driver PCB	J5031				13	J6142	M23	First & Second delivery motor
4	J264	UN2	Feed driver PCB					14	J6091	PS44	First delivery tray full sensor
4	J264	UN2	Feed driver PCB					15	J6088	PS41	First delivery sensor
5	J265	UN2	Feed driver PCB	J5110				16	J6099	PS21	Second & third delivery door sensor
5	J265	UN2	Feed driver PCB	J5076				17	J6064	SL1	Registration shutter solenoid
5	J265	UN2	Feed driver PCB					18	J6096	PS18	Front door sensor

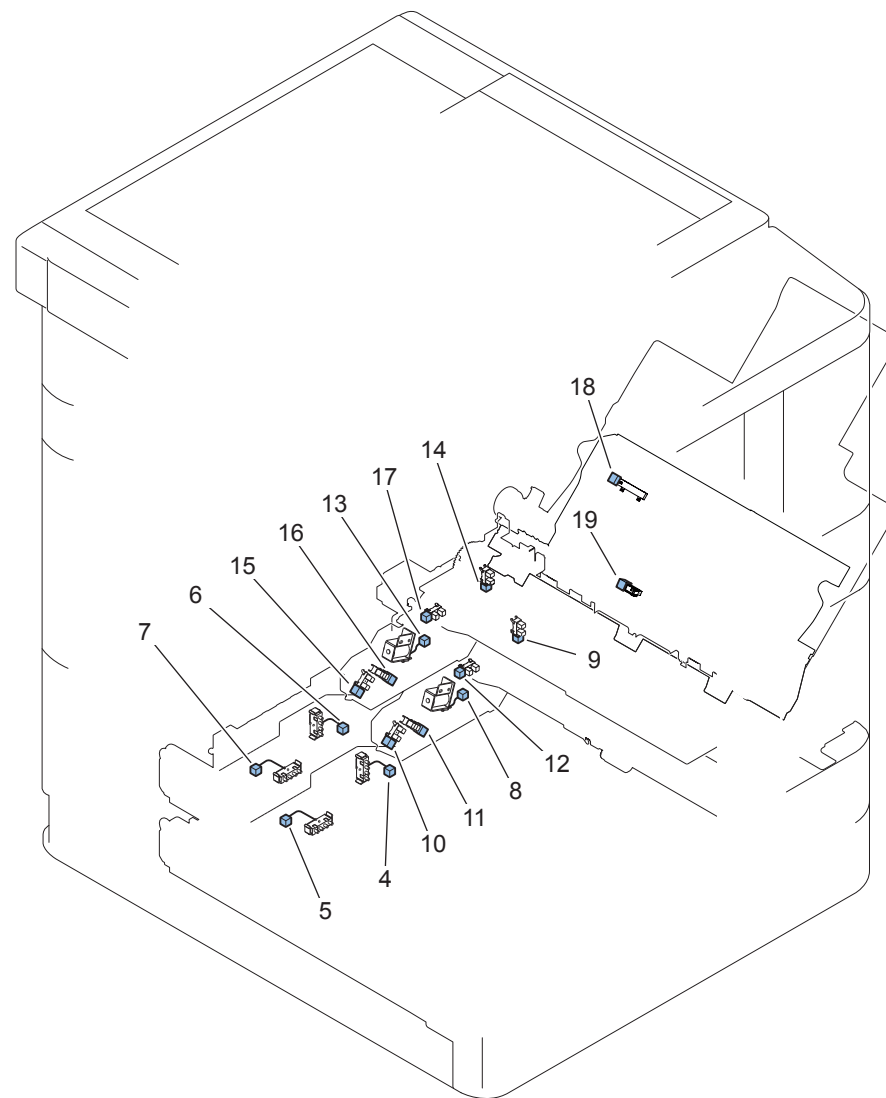
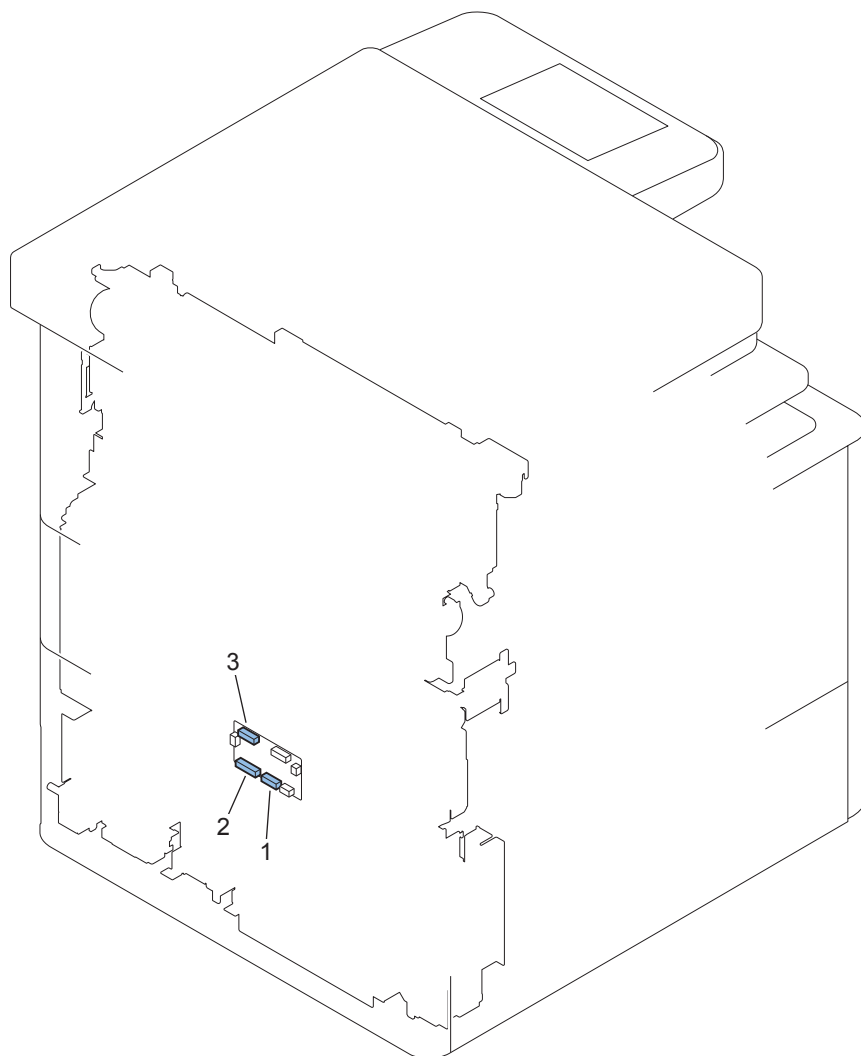
T-4-25



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KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector	KeyNo.	J No.	Symbol	Parts Name
1	J273	UN3	Cassette feed driver PCB		2	J6060	M28	Laser shutter motor
1	J273	UN3	Cassette feed driver PCB		3	J6123	FM10	Process cartridge fan (front)
1	J273	UN3	Cassette feed driver PCB		4	J6097	PS29	Laser shutter sensor

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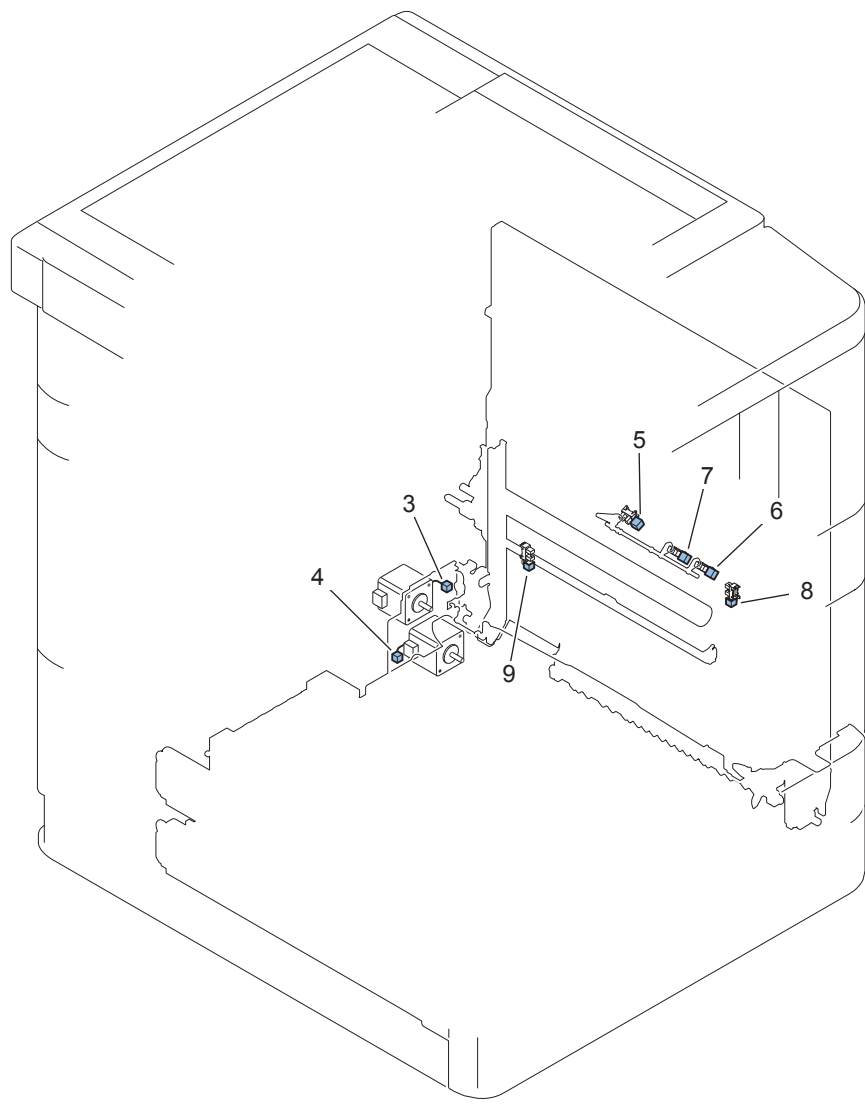
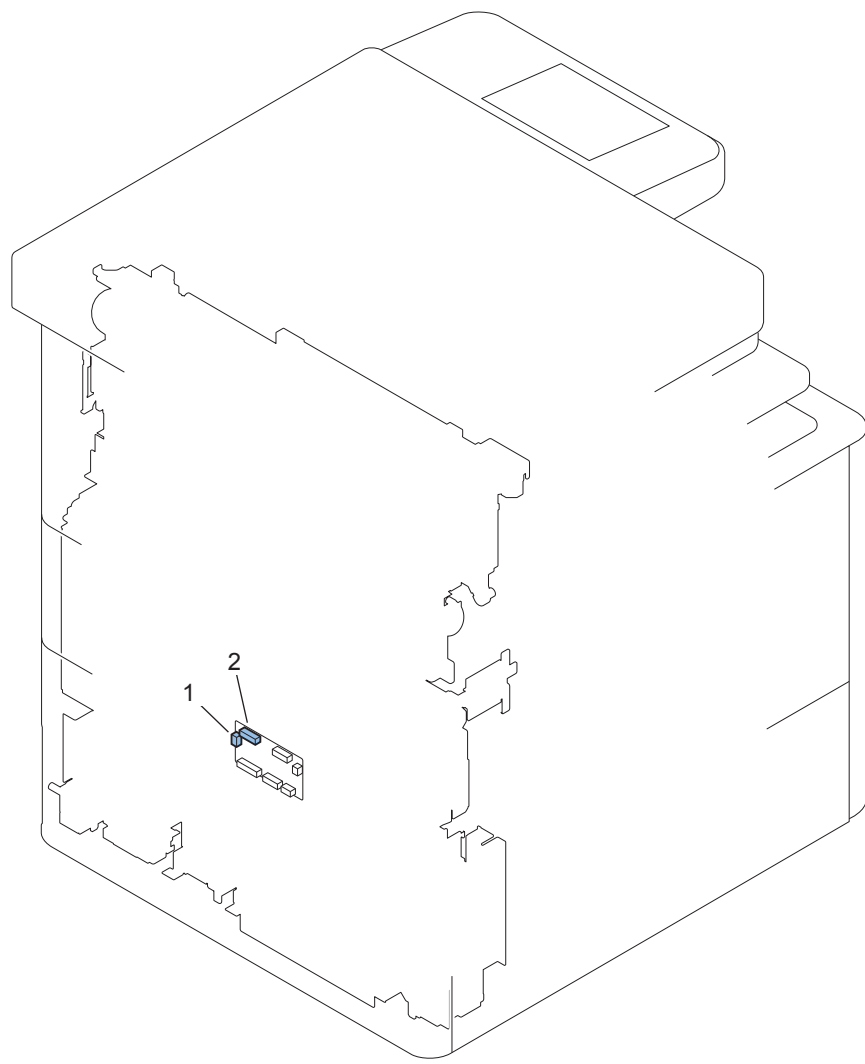


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KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector			KeyNo.	J No.	Symbol	Parts Name
1	J274	UN3	Cassette feed driver PCB	J5073			4	J6127	SW9	Cassette 2 size switch B
1	J274	UN3	Cassette feed driver PCB	J5073			5	J6128	SW8	Cassette 2 size switch A
1	J274	UN3	Cassette feed driver PCB	J5074			6	J6125	SW7	Cassette 1 size switch B
1	J274	UN3	Cassette feed driver PCB	J5074			7	J6126	SW6	Cassette 1 size switch A
2	J275	UN3	Cassette feed driver PCB	J5065			8	J6138	SL3	Cassette 2 pickup solenoid
2	J275	UN3	Cassette feed driver PCB	J5065			9	J6137	PS56	Cassette 2 pre-registration sensor
2	J275	UN3	Cassette feed driver PCB	J5065			10	J6136	PS54	Cassette 2 paper level sensor B
2	J275	UN3	Cassette feed driver PCB	J5065			11	J6135	PS53	Cassette 2 paper level sensor A
2	J275	UN3	Cassette feed driver PCB	J5065			12	J6134	PS50	Cassette 2 paper sensor
2	J275	UN3	Cassette feed driver PCB	J5064			13	J6133	SL2	Cassette 1 pickup solenoid
2	J275	UN3	Cassette feed driver PCB	J5064			14	J6132	PS55	Cassette 1 pre-registration sensor
2	J275	UN3	Cassette feed driver PCB	J5064			15	J6131	PS52	Cassette 1 paper level sensor B
2	J275	UN3	Cassette feed driver PCB	J5064			16	J6130	PS51	Cassette 1 paper level sensor A
2	J275	UN3	Cassette feed driver PCB	J5064			17	J6129	PS49	Cassette 1 paper sensor
3	J277	UN3	Cassette feed driver PCB	J5028	J5099		18	J6081	UN52	Multi-purpose tray size sensor
3	J277	UN3	Cassette feed driver PCB	J5028	J5099	J6080	19	J6171	PS47	Multi-purpose tray paper sensor

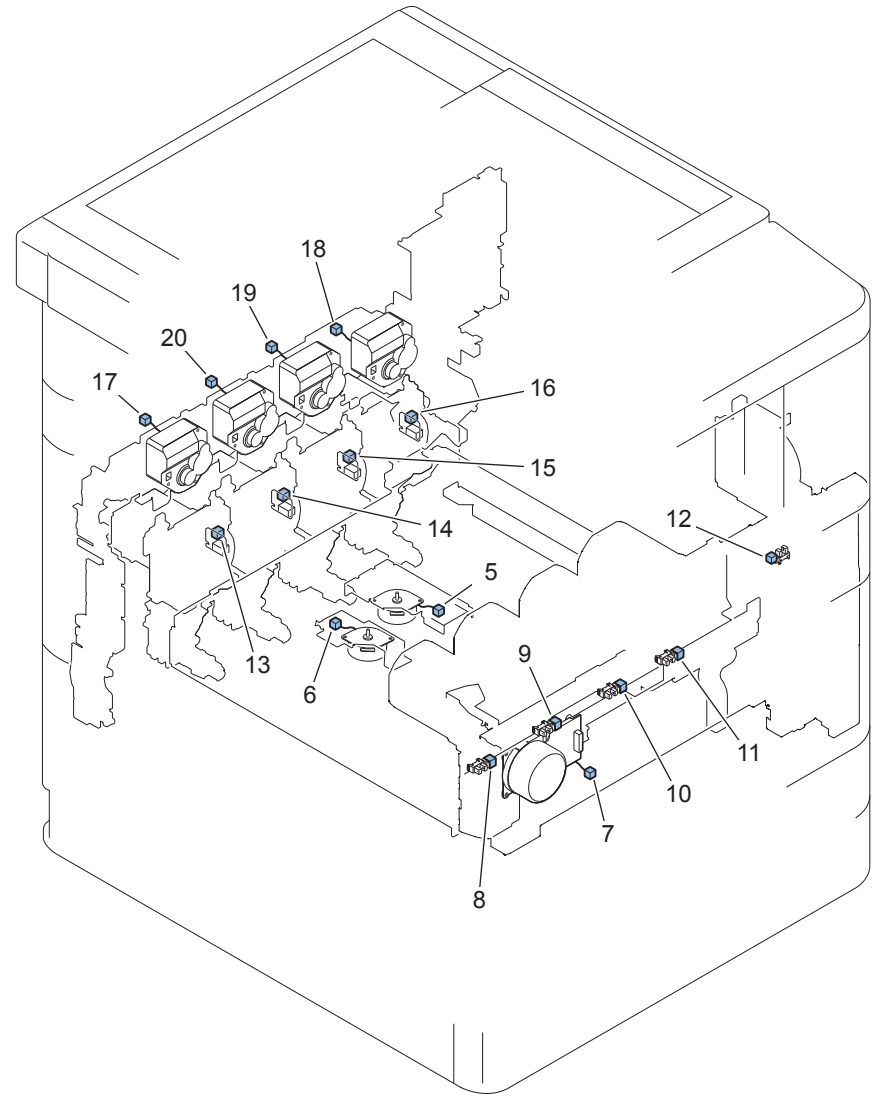
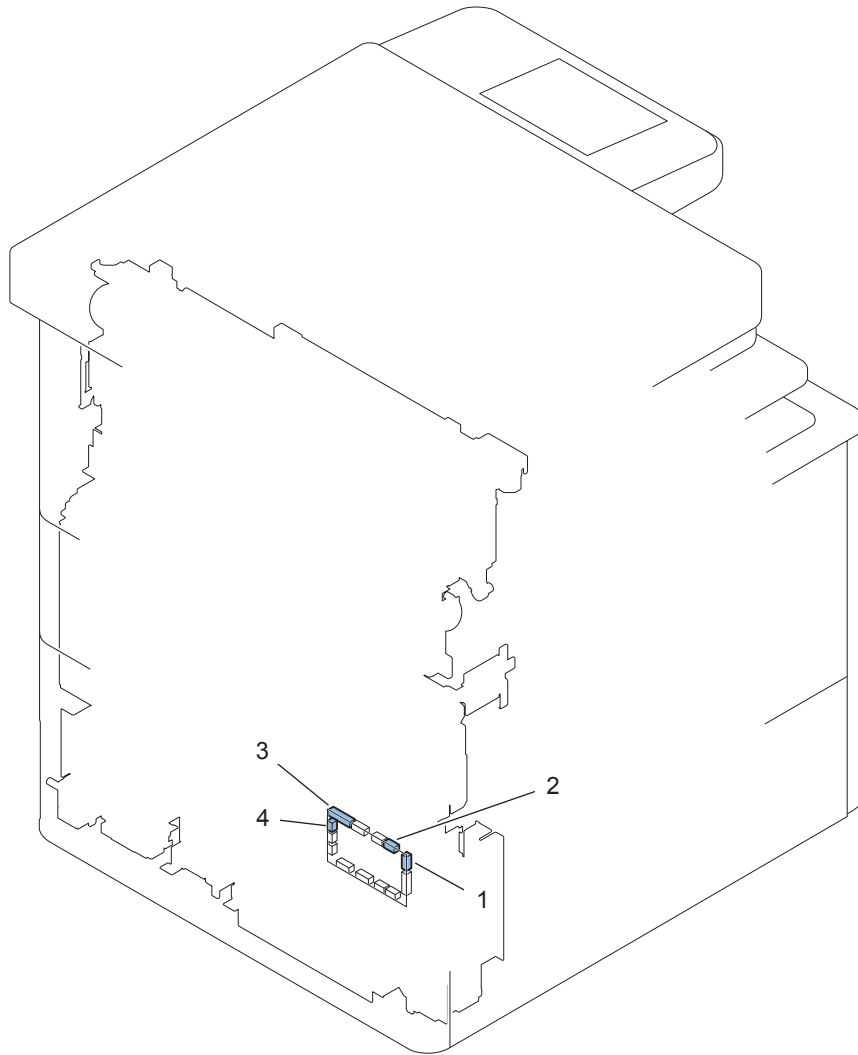
T-4-27



F-4-37

KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector			KeyNo.	J No.	Symbol	Parts Name
1	J276	UN3	Cassette feed driver PCB				3	J6155	M16	Cassette 1 pickup motor
1	J276	UN3	Cassette feed driver PCB				4	J6156	M17	Cassette 2 pickup motor
2	J277	UN3	Cassette feed driver PCB	J5028	J5068		5	J6087	PS34	Fixing inlet sensor
2	J277	UN3	Cassette feed driver PCB	J5028	J5068		6	J6086	PS36	Fixing arch sensor 2
2	J277	UN3	Cassette feed driver PCB	J5028	J5068		7	J6085	PS35	Fixing arch sensor 1
2	J277	UN3	Cassette feed driver PCB	J5028	J5054		8	J6077	PS38	Duplex paper sensor
2	J277	UN3	Cassette feed driver PCB	J5028			9	J5100	PS19	Right lower door sensor

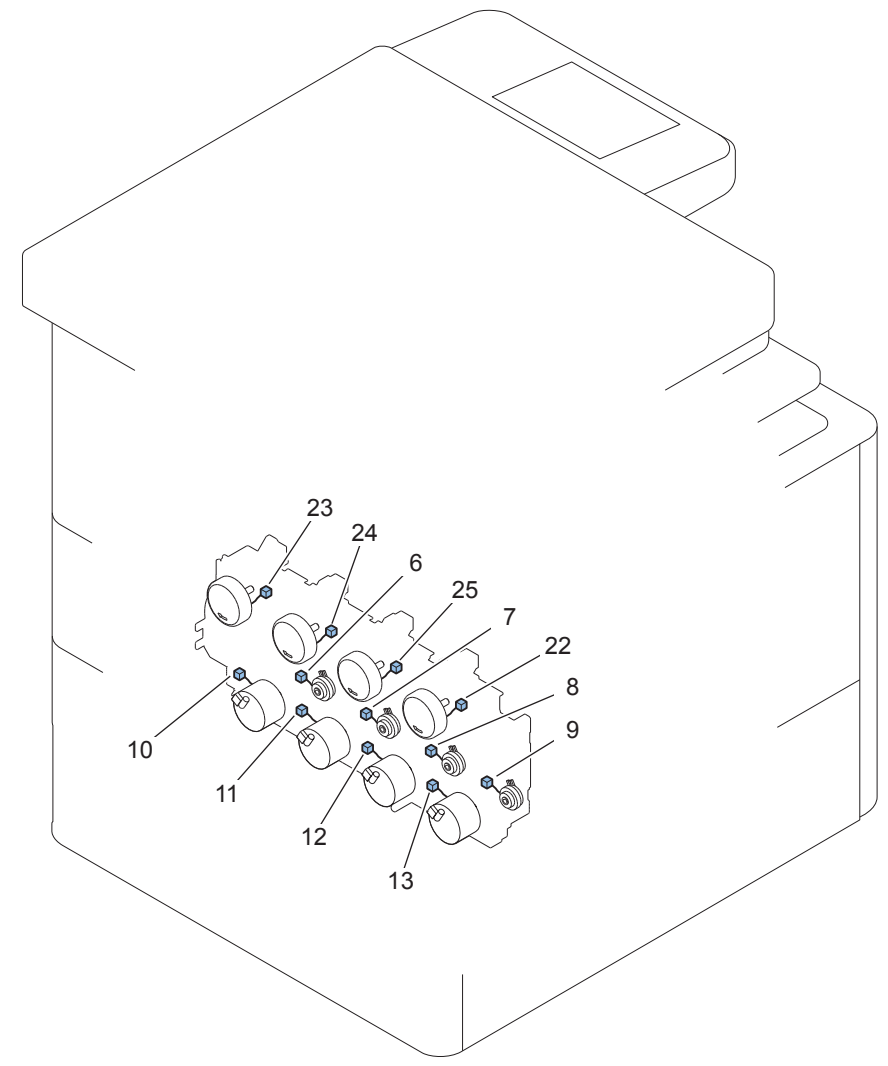
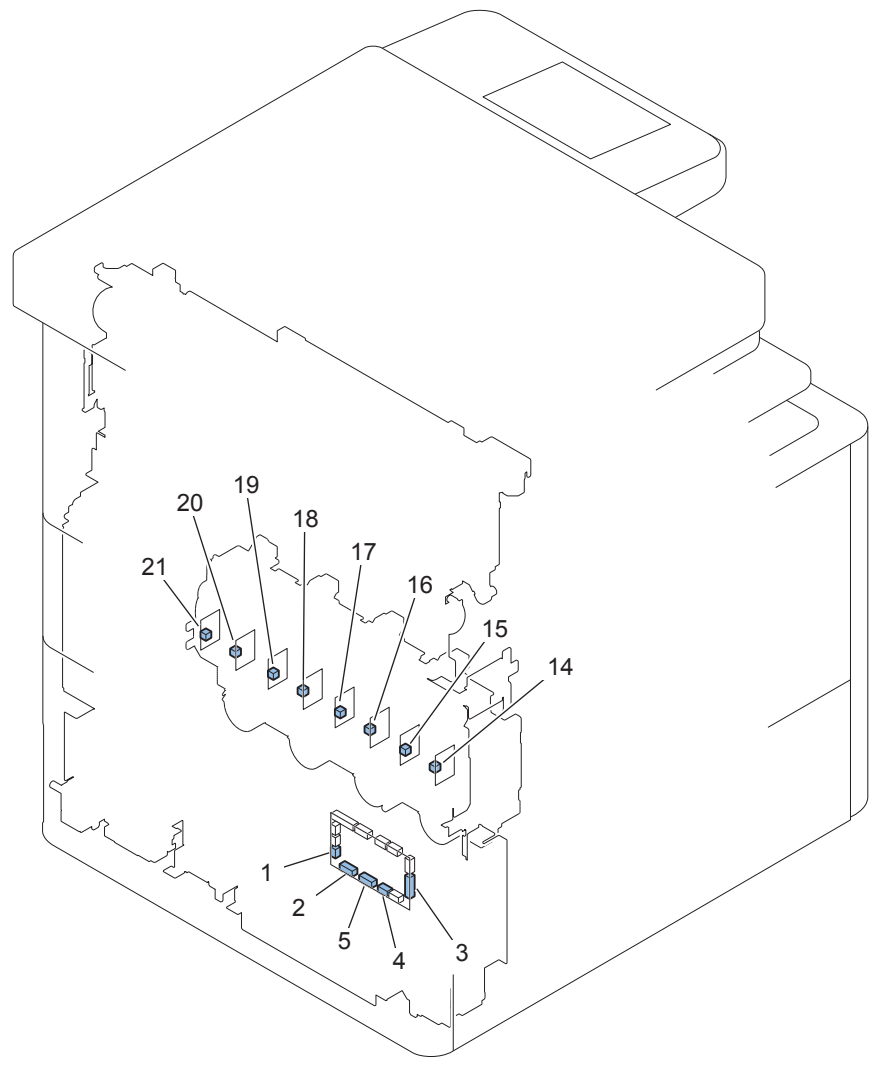
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KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector			KeyNo.	J No.	Symbol	Parts Name
1	J304	UN4	Drum driver PCB	J5070			5	J6004	M15	Primary transfer disengagement motor
1	J304	UN4	Drum driver PCB	J5070			6	J6003	M14	ITB displacement control motor
1	J304	UN4	Drum driver PCB	J5070			7	J6025	M13	ITB motor
2	J309	UN4	Drum driver PCB	J5030			8	J6053	PS13	Toner container inner cover sensor (Y)
2	J309	UN4	Drum driver PCB	J5030			9	J6052	PS14	Toner container inner cover sensor (M)
2	J309	UN4	Drum driver PCB	J5030			10	J6050	PS15	Toner container inner cover sensor (C)
2	J309	UN4	Drum driver PCB	J5030			11	J6048	PS16	Toner container inner cover sensor (Bk)
2	J309	UN4	Drum driver PCB				12	J6046	PS17	Toner container outer cover sensor
3	J310	UN4	Drum driver PCB	J5015	J5016		13	J5017	UN39	Toner sensor relay PCB (Y)
3	J310	UN4	Drum driver PCB	J5018	J5019		14	J5020	UN40	Toner sensor relay PCB (M)
3	J310	UN4	Drum driver PCB	J5021	J5022		15	J5023	UN41	Toner sensor relay PCB (C)
3	J310	UN4	Drum driver PCB	J5024	J5025		16	J5035	UN42	Toner sensor relay PCB (Bk)
4	J312	UN4	Drum driver PCB	J1180			17	J2	M9	Toner container motor (Y)
4	J312	UN4	Drum driver PCB	J1181			18	J5	M12	Toner container motor (Bk)
4	J312	UN4	Drum driver PCB	J1182			19	J4	M11	Toner container motor (C)
4	J312	UN4	Drum driver PCB	J1184			20	J3	M10	Toner container motor (M)

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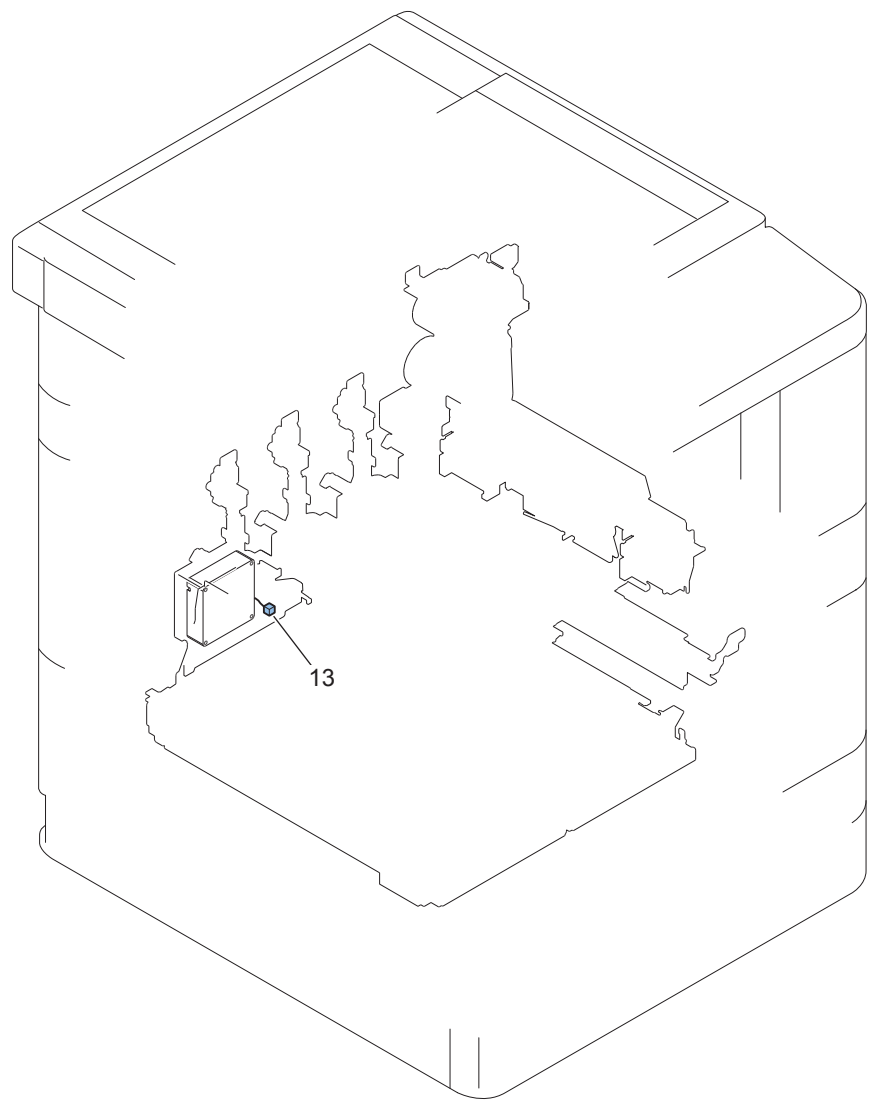
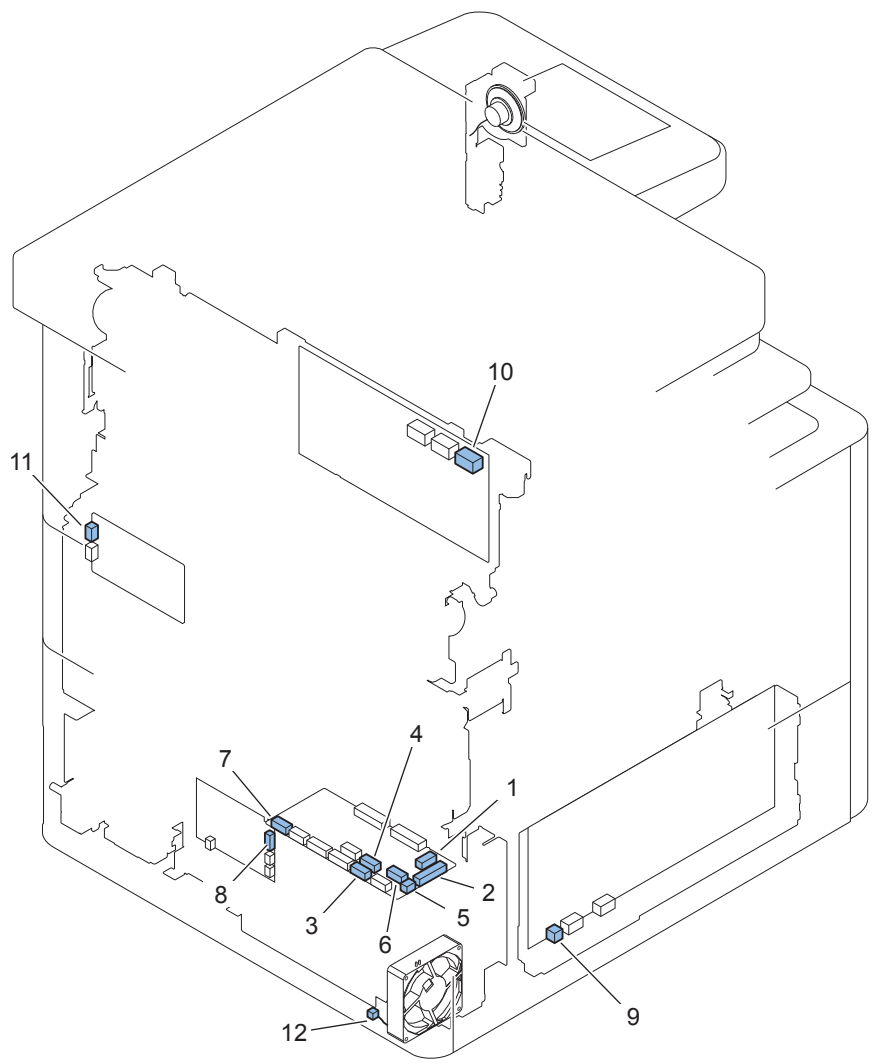


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KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector				KeyNo.	J No.	Symbol	Parts Name
1	J303	UN4	Drum driver PCB					6	J6008	CL5	Toner supply clutch (Bk)
1	J303	UN4	Drum driver PCB					7	J6007	CL4	Toner supply clutch (C)
1	J303	UN4	Drum driver PCB					8	J6006	CL3	Toner supply clutch (M)
1	J303	UN4	Drum driver PCB					9	J6005	CL2	Toner supply clutch (Y)
2	J305	UN4	Drum driver PCB					10	J6011	M8	Developing motor (Bk)
2	J305	UN4	Drum driver PCB					11	J6012	M7	Developing motor (C)
2	J305	UN4	Drum driver PCB					12	J6013	M6	Developing motor (M)
2	J305	UN4	Drum driver PCB					13	J6015	M5	Developing motor (Y)
3	J306	UN4	Drum driver PCB					14	J6024	UN31	Y drum encoder sensor 1
3	J306	UN4	Drum driver PCB					15	J6023	UN32	Y drum encoder sensor 2
3	J306	UN4	Drum driver PCB					16	J6022	UN33	M drum encoder sensor 1
3	J306	UN4	Drum driver PCB					17	J6021	UN34	M drum encoder sensor 2
3	J306	UN4	Drum driver PCB					18	J6020	UN35	C drum encoder sensor 1
3	J306	UN4	Drum driver PCB					19	J6019	UN36	C drum encoder sensor 2
3	J306	UN4	Drum driver PCB					20	J6018	UN37	Bk drum encoder sensor 1
3	J306	UN4	Drum driver PCB					21	J6017	UN38	Bk drum encoder sensor 2
4	J307	UN4	Drum driver PCB					22	J6010	M1	Drum motor (Y)
5	J308	UN4	Drum driver PCB					23	J6009	M4	Drum motor (Bk)
5	J308	UN4	Drum driver PCB					24	J6014	M3	Drum motor (C)
5	J308	UN4	Drum driver PCB					25	J6016	M2	Drum motor (M)

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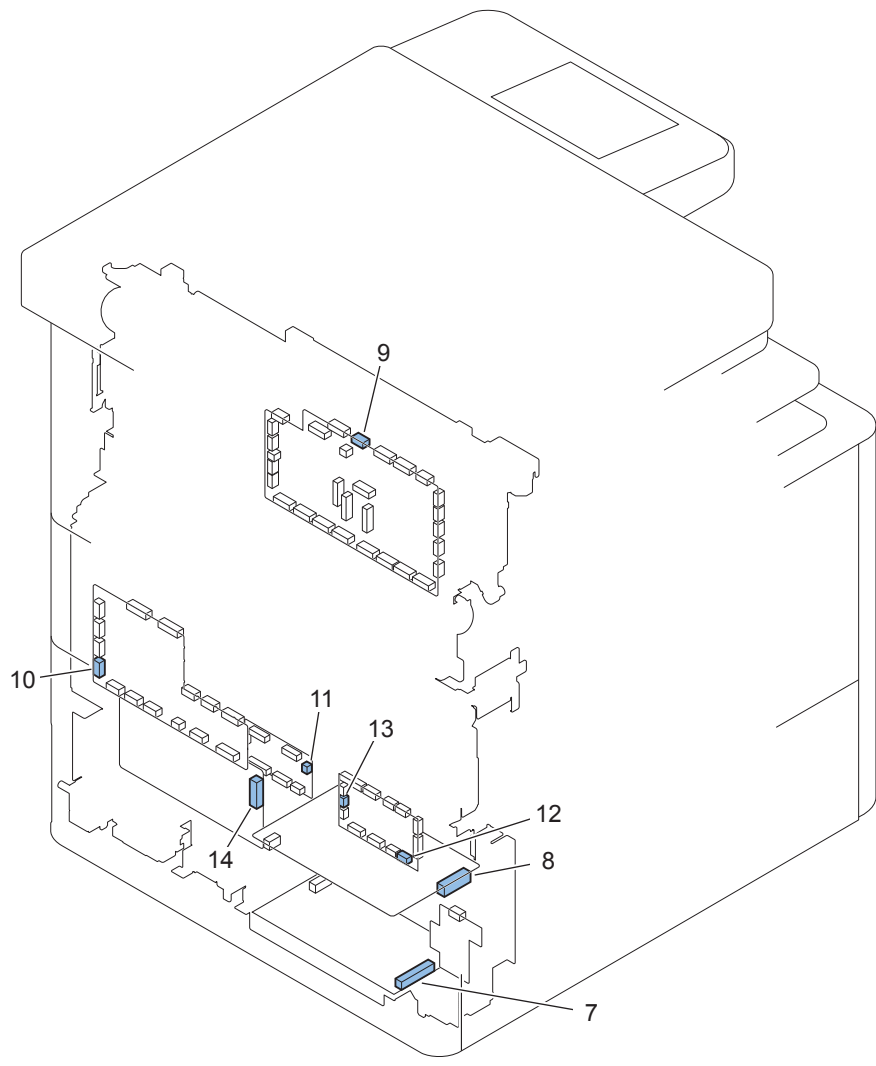
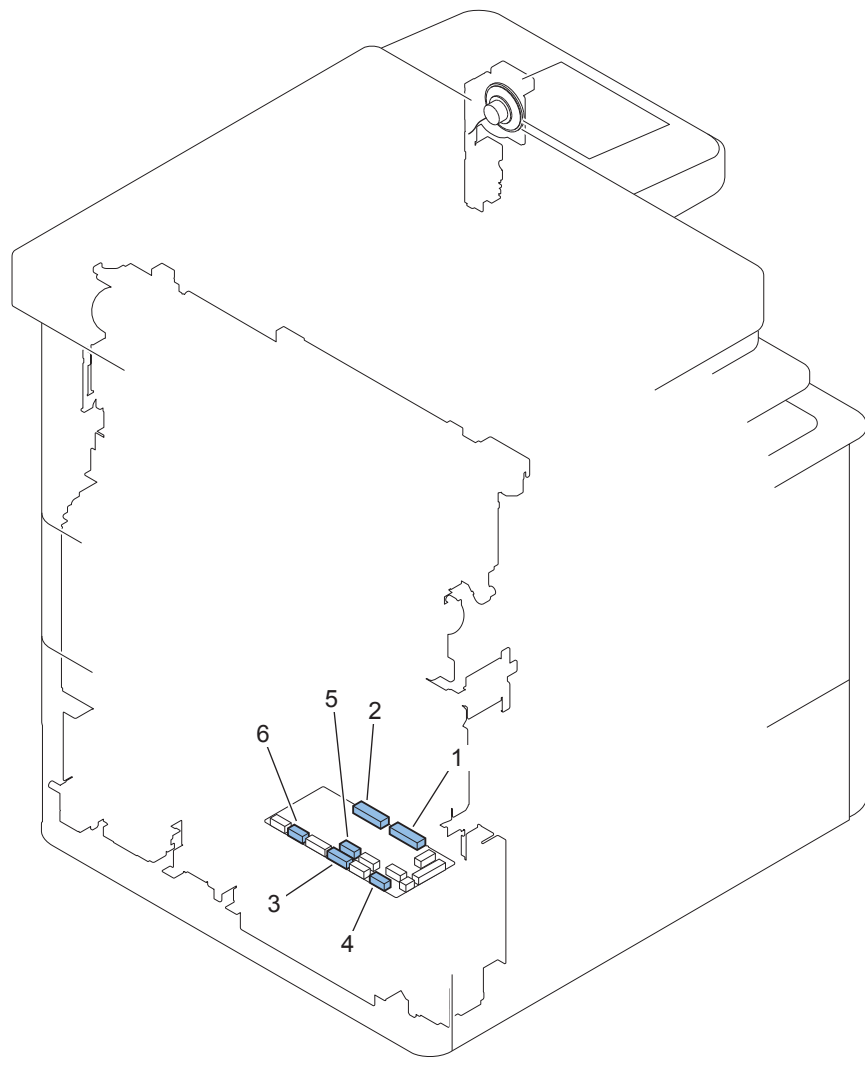




F-4-40

KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector				KeyNo.	J No.	Symbol	Parts Name
1	J413	UN5	Relay PCB					8	J691	UN9	All-night power supply PCB
2	J421	UN5	Relay PCB					-	J808	-	Reader controll PCB
3	J425	UN5	Relay PCB					9	J650	UN16	HVT 1 PCB
3	J425	UN5	Relay PCB					10	J651	UN17	HVT 2 PCB
3	J425	UN5	Relay PCB					11	J652	UN18	HVT 3 PCB
4	J426	UN5	Relay PCB					-	J5101	-	Reader controll PCB
5	J427	UN5	Relay PCB					-	J801	-	CPU PCB
5	J427	UN5	Relay PCB					-	J802	-	USB Device Port
6	J428	UN5	Relay PCB					-	J804	-	Inner Finisher
6	J428	UN5	Relay PCB					-	J805	-	Cassette feeding Unit
6	J428	UN5	Relay PCB					-	J803	-	Finisher
7	J432	UN5	Relay PCB					12	J6122	FM3	Power supply cooling fan
7	J432	UN5	Relay PCB					13	J6124	FM4	Process cartridge fan (rear)

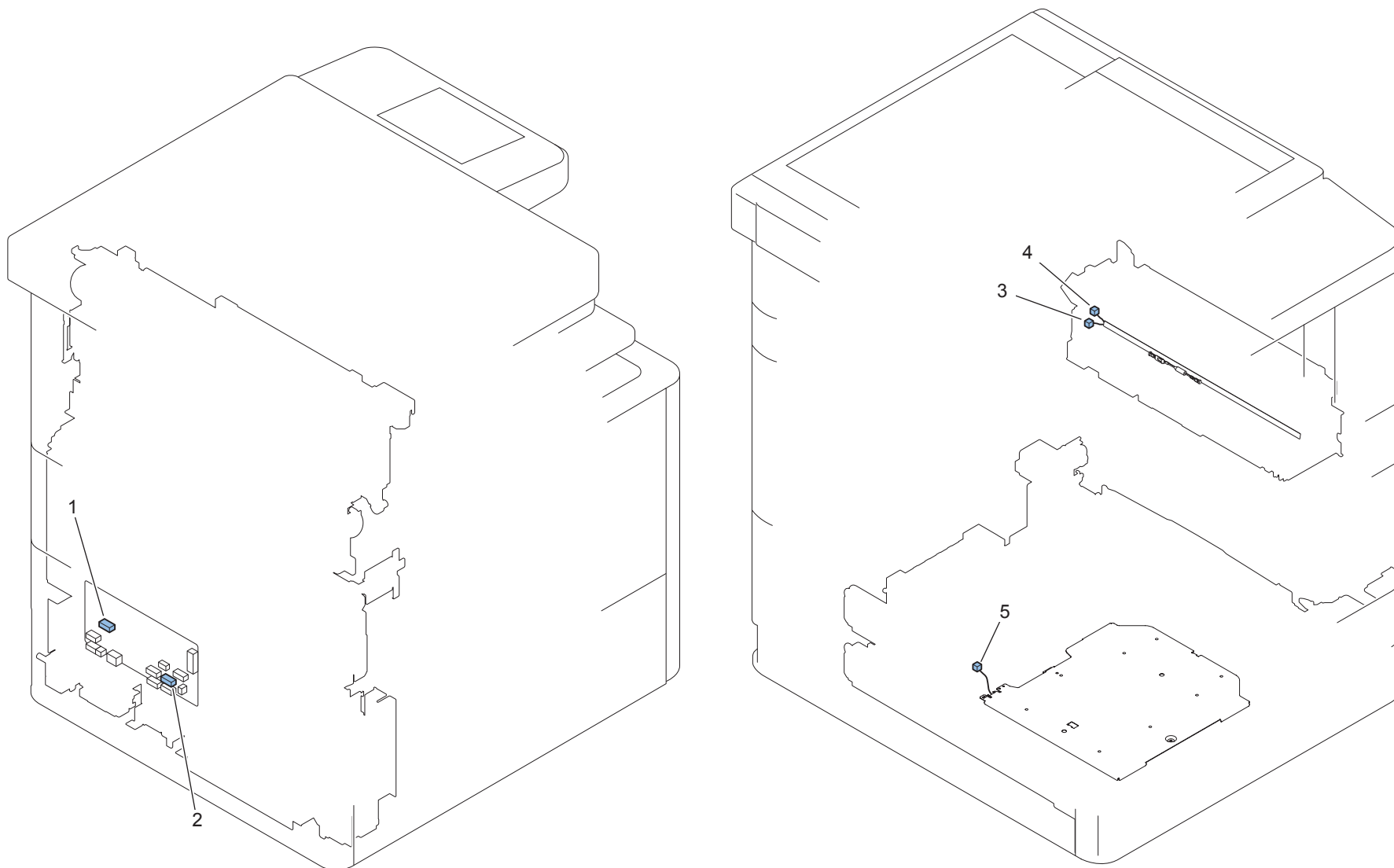
T-4-31



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KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector				KeyNo.	J No.	Symbol	Parts Name
1	J411	UN5	Relay PCB					7	J835	UN11	12V power supply PCB
2	J412	UN5	Relay PCB					8	J834	UN10	24V power supply PCB2
3	J422	UN5	Relay PCB					9	J129	UN1	DC controller PCB
4	J423	UN5	Relay PCB					10	J259	UN2	Feed driver PCB
4	J423	UN5	Relay PCB					11	J272	UN3	Cassette feed driver PCB
5	J424	UN5	Relay PCB					12	J301	UN4	Drum driver PCB
5	J424	UN5	Relay PCB					13	J302	UN4	Drum driver PCB
6	J431	UN5	Relay PCB					14	J2001	UN6	AC driver PCB

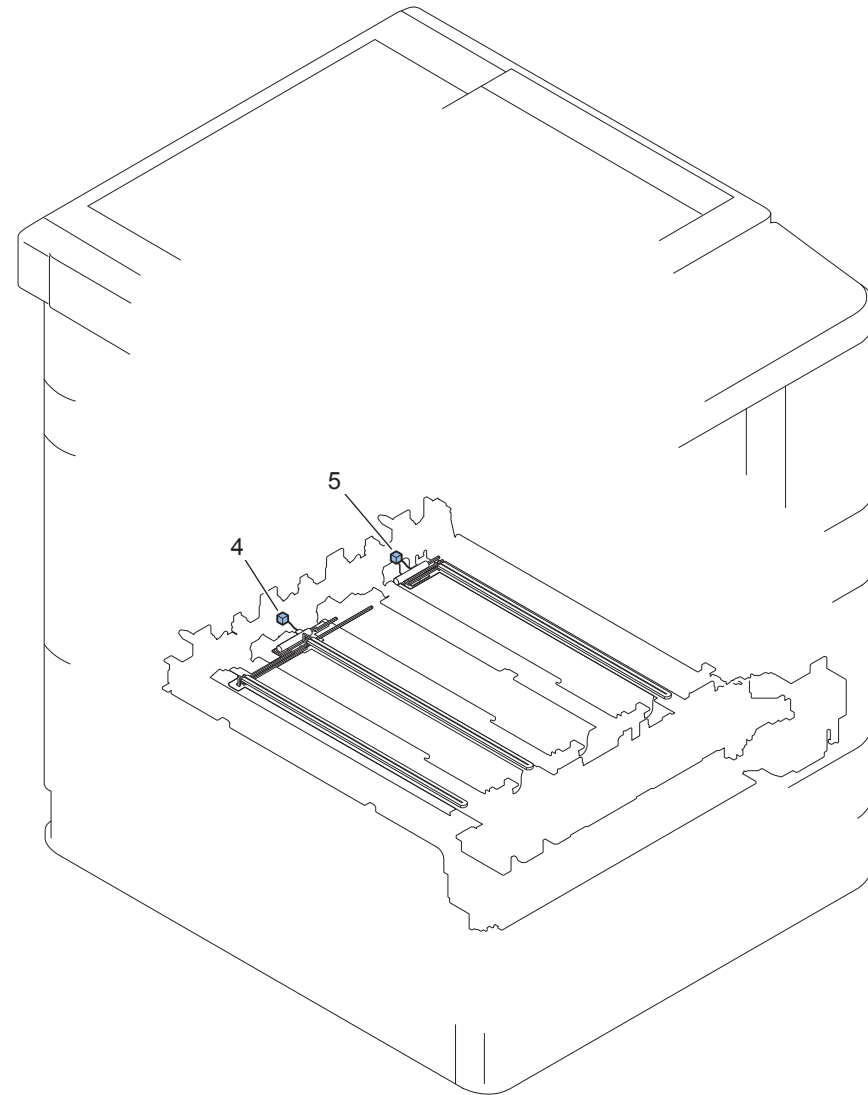
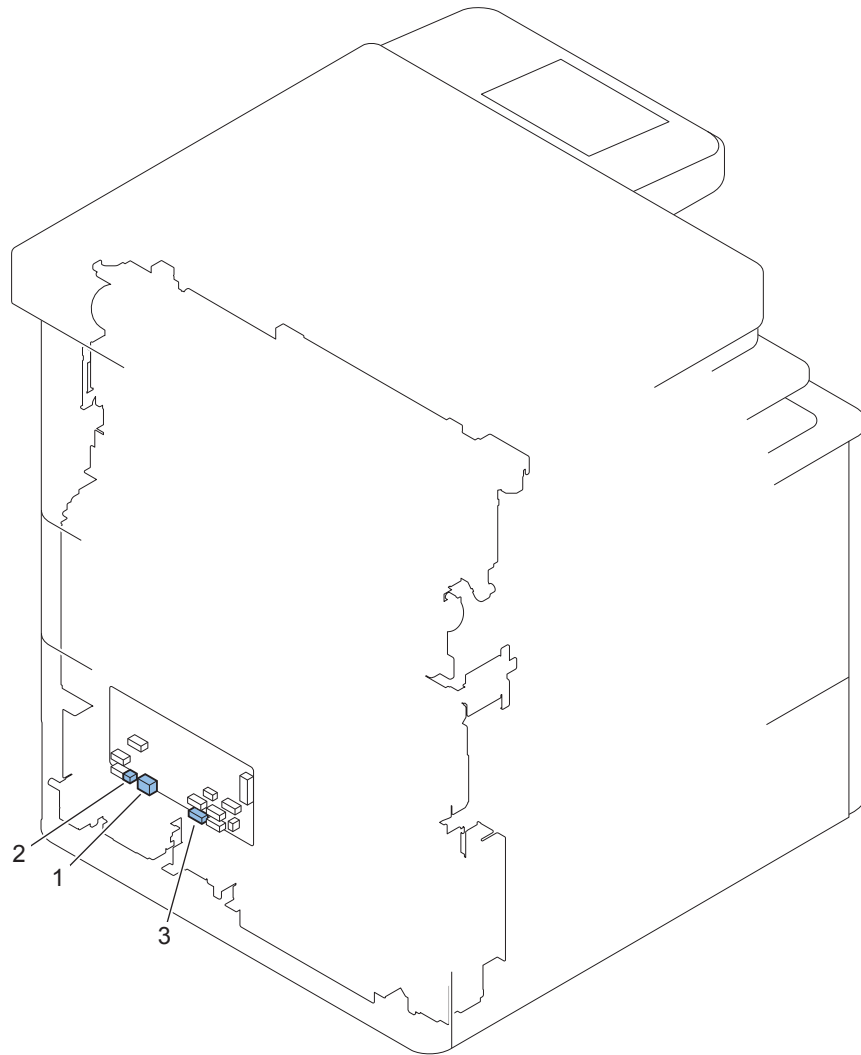
T-4-32



F-4-42

KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector				KeyNo.	J No.	Symbol	Parts Name
1	J1003	UN6	AC driver PCB					-	-	SW5	AC interlock switch
-	-	SW5	AC interlock switch	J5006	J5087	J5012	J5007	3	J5013	H1	Fixing heater
-	-	-	-					4	J5014	H1	Fixing heater
-	-	SW5	AC interlock switch	J5006	J5087	J5012	J5007	-	-	TP1	Temperature fuse
2	J1007	UN6	AC driver PCB					5	J5005	H4	Cassette heater

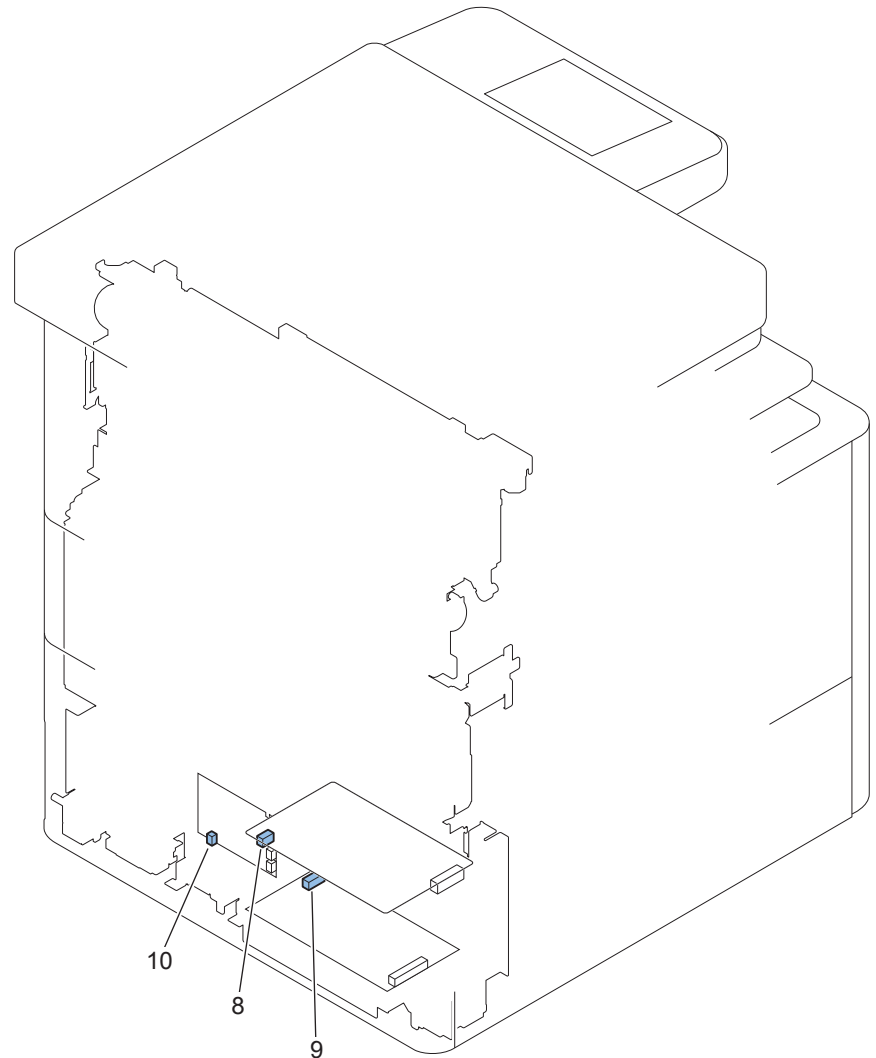
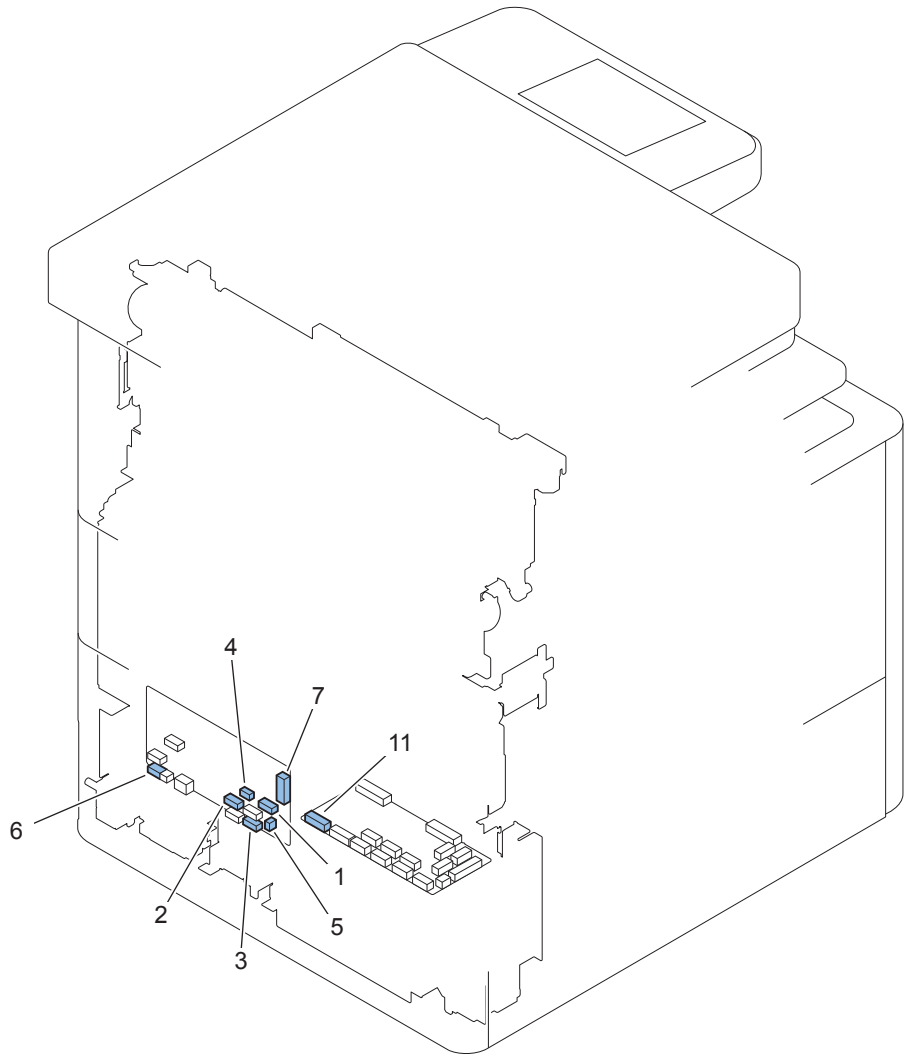
T-4-33



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KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector	KeyNo.	J No.	Symbol	Parts Name
1	J1001	UN6	AC driver PCB		-	-	-	AC in cable
2	J1002	UN6	AC driver PCB	J5099	-	J866	-	GND
2	J1002	UN6	AC driver PCB	J5099	-	J833	-	GND
3	J1005	UN6	AC driver PCB	J5038	4	J5088	H3	Drum heater (YMC)
3	J1005	UN6	AC driver PCB		5	J5039	H2	Drum heater (Bk)

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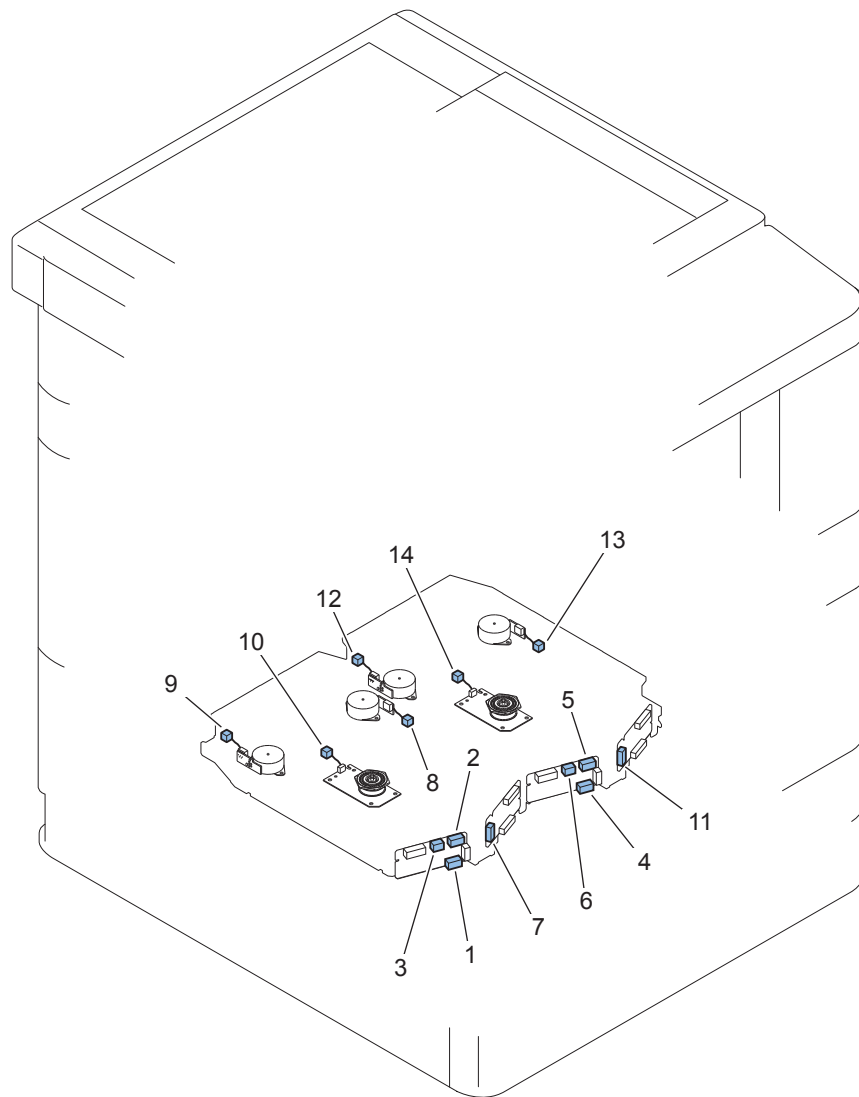


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KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector			KeyNo.	J No.	Symbol	Parts Name
1	J1004	UN6	AC driver PCB				8	J1102	UN10	24V power supply PCB2
1	J1004	UN6	AC driver PCB				9	J1101	UN11	12V power supply PCB
2	J1006	UN6	AC driver PCB	J5006	J5010		-	-	SW1	Main power supply switch
2	J1006	UN6	AC driver PCB				-	J5102	-	Reader controll PCB
3	J1008	UN6	AC driver PCB				-	-	-	Cassette Feeding Unit-AD1
4	J1009	UN6	AC driver PCB				-	-	SW2	Environment switch
5	J1012	UN6	AC driver PCB				-	-	-	Cassette heater unit-31/32
6	J1014	UN6	AC driver PCB				10	J681	UN9	All-night power supply PCB
7	J2001	UN6	AC driver PCB				11	J431	UN5	Relay PCB

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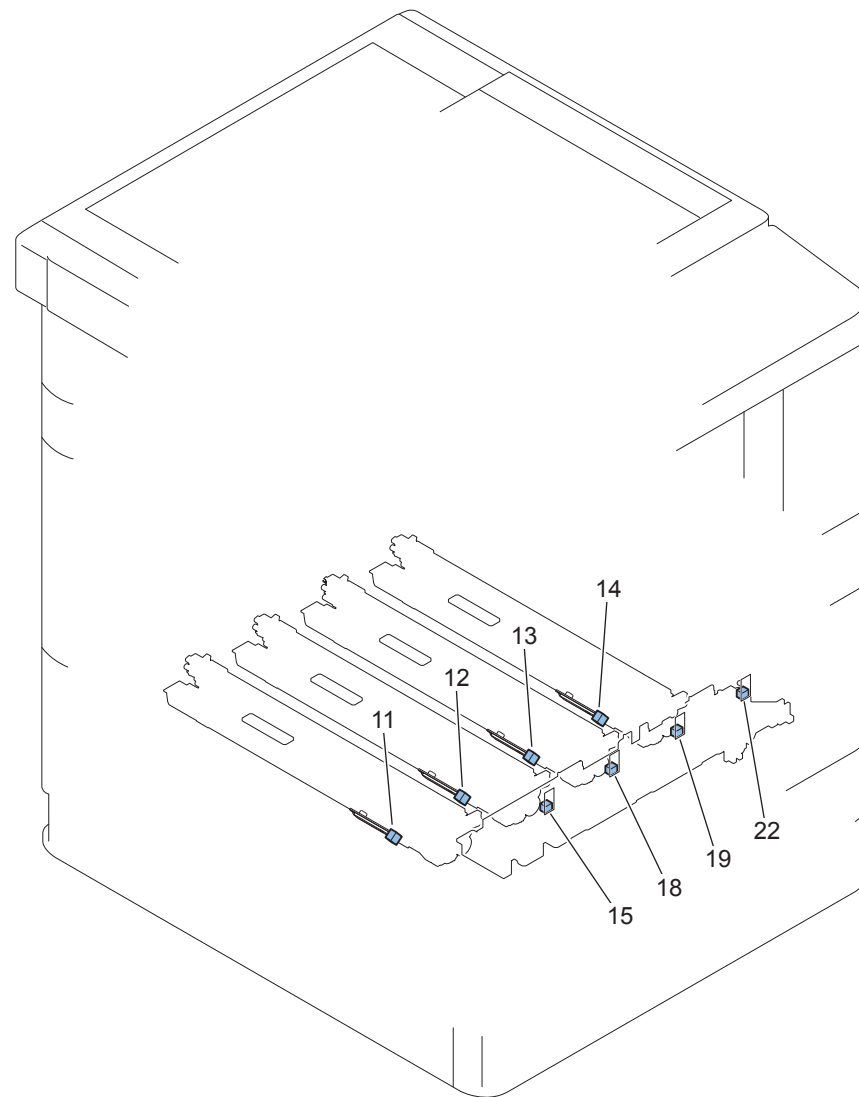
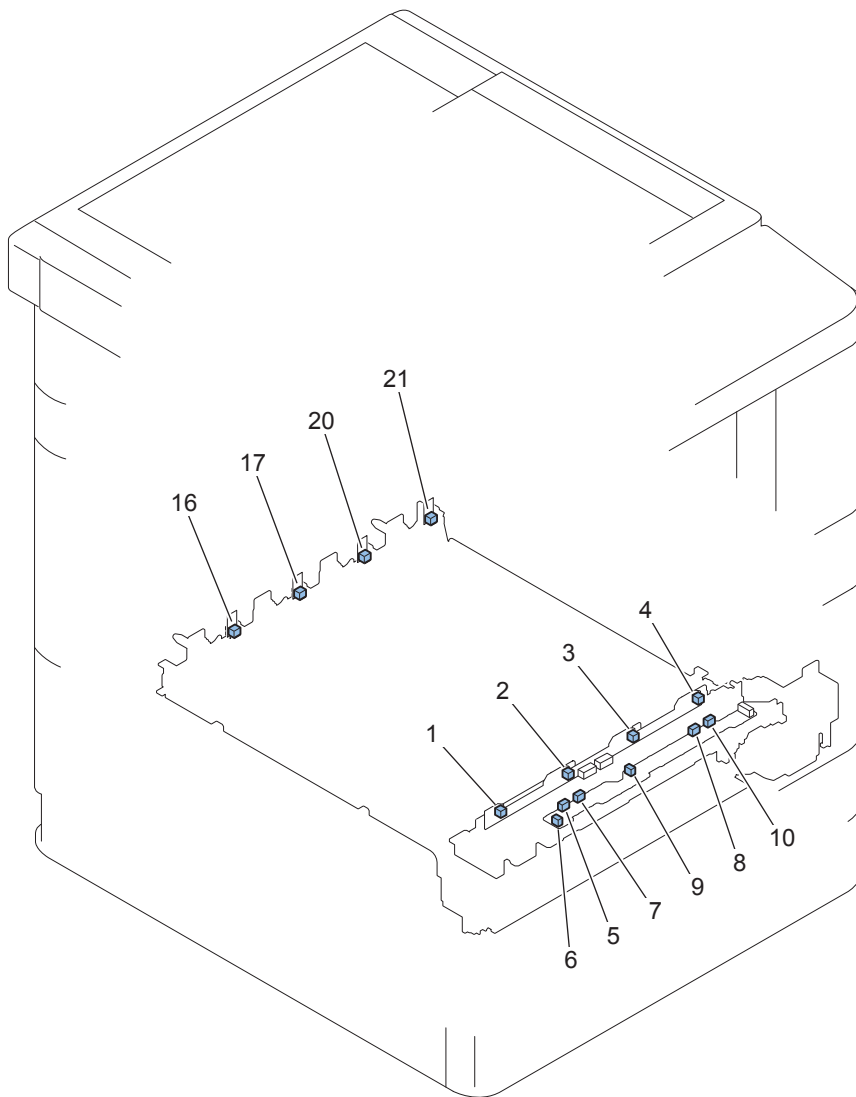




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KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector				KeyNo.	J No.	Symbol	Parts Name
1	J202	UN12	Laser driver PCB (M)					7	J103	UN13	Laser driver PCB (Y)
2	J204	UN12	Laser driver PCB (M)					8	J6159	M32	Image skew correction motor (M)
2	J204	UN12	Laser driver PCB (M)					9	J6160	M31	Image skew correction motor (Y)
3	J205	UN12	Laser driver PCB (M)					10	J6161	M29	YM Scanner Motor (High/Low)
4	J202	UN14	Laser driver PCB (Bk)					11	J103	UN15	Laser driver PCB (C)
5	J204	UN14	Laser driver PCB (Bk)					12	J6166	M33	Image skew correction motor (C)
5	J204	UN14	Laser driver PCB (Bk)					13	J6165	M34	Image skew correction motor (Bk)
6	J205	UN14	Laser driver PCB (Bk)					14	J6167	M30	CBk Scanner Motor (High/Low)

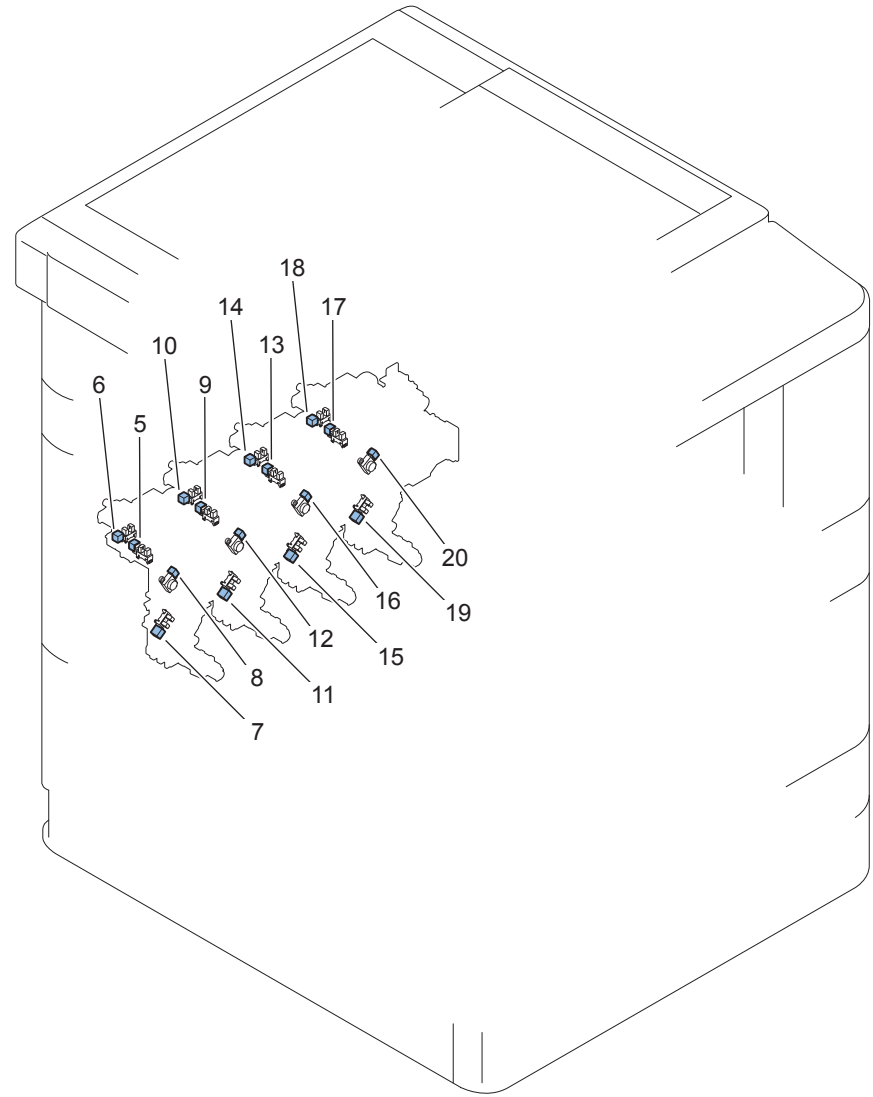
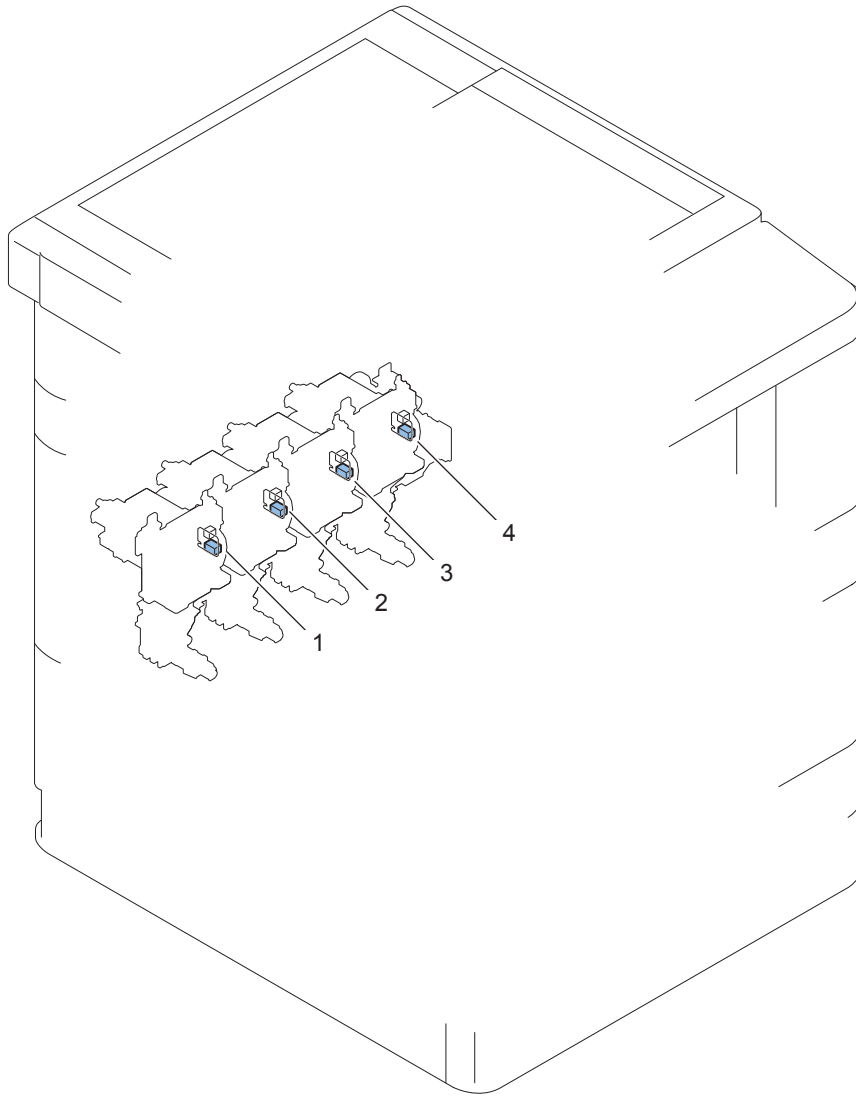
T-4-36



F-4-46

KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector			KeyNo.	J No.	Symbol	Parts Name
1	J902	UN19	Drum unit new/old detection PCB	J5093			11	J6114	TS5	ATR sensor (Y)
1	J902	UN19	Drum unit new/old detection PCB				11	J5093	UN43	Developing sub bias PCB (Y)
2	J903	UN19	Drum unit new/old detection PCB	J5094			12	J6116	TS6	ATR sensor (M)
2	J903	UN19	Drum unit new/old detection PCB				12	J5094	UN44	Developing sub bias PCB (M)
3	J904	UN19	Drum unit new/old detection PCB	J5095			13	J6118	TS7	ATR sensor (C)
3	J904	UN19	Drum unit new/old detection PCB				13	J5095	UN45	Developing sub bias PCB (C)
4	J905	UN19	Drum unit new/old detection PCB	J5096			14	J6120	TS8	ATR sensor (Bk)
4	J905	UN19	Drum unit new/old detection PCB				14	J5096	UN46	Developing sub bias PCB (Bk)
5	J601	UN20	Process unit relay PCB				15	J6115	UN23	Y pre-exposure LED PCB (front)
6	J602	UN20	Process unit relay PCB				16	J6147	UN24	Y pre-exposure LED PCB (rear)
6	J602	UN20	Process unit relay PCB				17	J6148	UN26	M pre-exposure LED PCB (rear)
7	J603	UN20	Process unit relay PCB				18	J6117	UN25	M pre-exposure LED PCB (front)
8	J604	UN20	Process unit relay PCB				19	J6119	UN27	C pre-exposure LED PCB (front)
9	J605	UN20	Process unit relay PCB				20	J6149	UN28	C pre-exposure LED PCB (rear)
9	J605	UN20	Process unit relay PCB				21	J6150	UN30	Bk pre-exposure LED PCB (rear)
10	J606	UN20	Process unit relay PCB				22	J6121	UN29	Bk pre-exposure LED PCB (front)

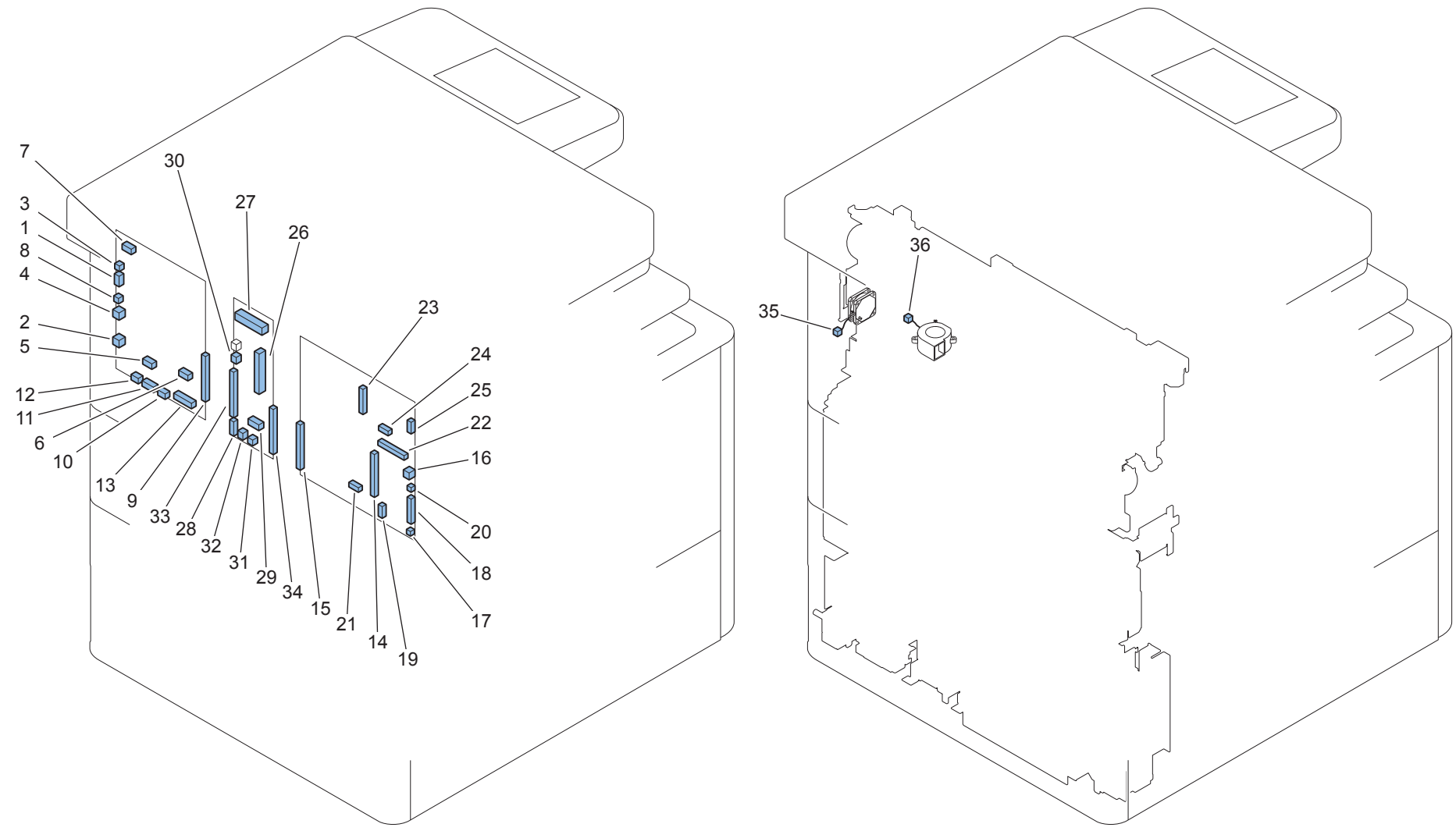
T-4-37



F-4-47

KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector	KeyNo.	J No.	Symbol	Parts Name
1	J658	UN39	Toner sensor relay PCB (Y)		5	J6154	PS5	Toner container cam HP sensor (Y)
1	J658	UN39	Toner sensor relay PCB (Y)		6	J6035	PS9	Toner cap position sensor (Y)
1	J658	UN39	Toner sensor relay PCB (Y)		7	J6034	PS1	Toner supply sensor (Y)
1	J658	UN39	Toner sensor relay PCB (Y)		8	J6033	TS1	Piezo sensor (Y)
2	J659	UN40	Toner sensor relay PCB (M)		9	J6151	PS6	Toner container cam HP sensor (M)
2	J659	UN40	Toner sensor relay PCB (M)		10	J6038	PS10	Toner cap position sensor (M)
2	J659	UN40	Toner sensor relay PCB (M)		11	J6037	PS2	Toner supply sensor (M)
2	J659	UN40	Toner sensor relay PCB (M)		12	J6036	TS2	Piezo sensor (M)
3	J660	UN41	Toner sensor relay PCB (C)		13	J6152	PS7	Toner container cam HP sensor (C)
3	J660	UN41	Toner sensor relay PCB (C)		14	J6041	PS11	Toner cap position sensor (C)
3	J660	UN41	Toner sensor relay PCB (C)		15	J6040	PS3	Toner supply sensor (C)
3	J660	UN41	Toner sensor relay PCB (C)		16	J6039	TS3	Piezo sensor (C)
4	J661	UN42	Toner sensor relay PCB (Bk)		17	J6153	PS8	Toner container cam HP sensor (Bk)
4	J661	UN42	Toner sensor relay PCB (Bk)		18	J6044	PS12	Toner cap position sensor (Bk)
4	J661	UN42	Toner sensor relay PCB (Bk)		19	J6043	PS4	Toner supply sensor (Bk)
4	J661	UN42	Toner sensor relay PCB (Bk)		20	J6042	TS4	Piezo sensor (Bk)

T-4-38

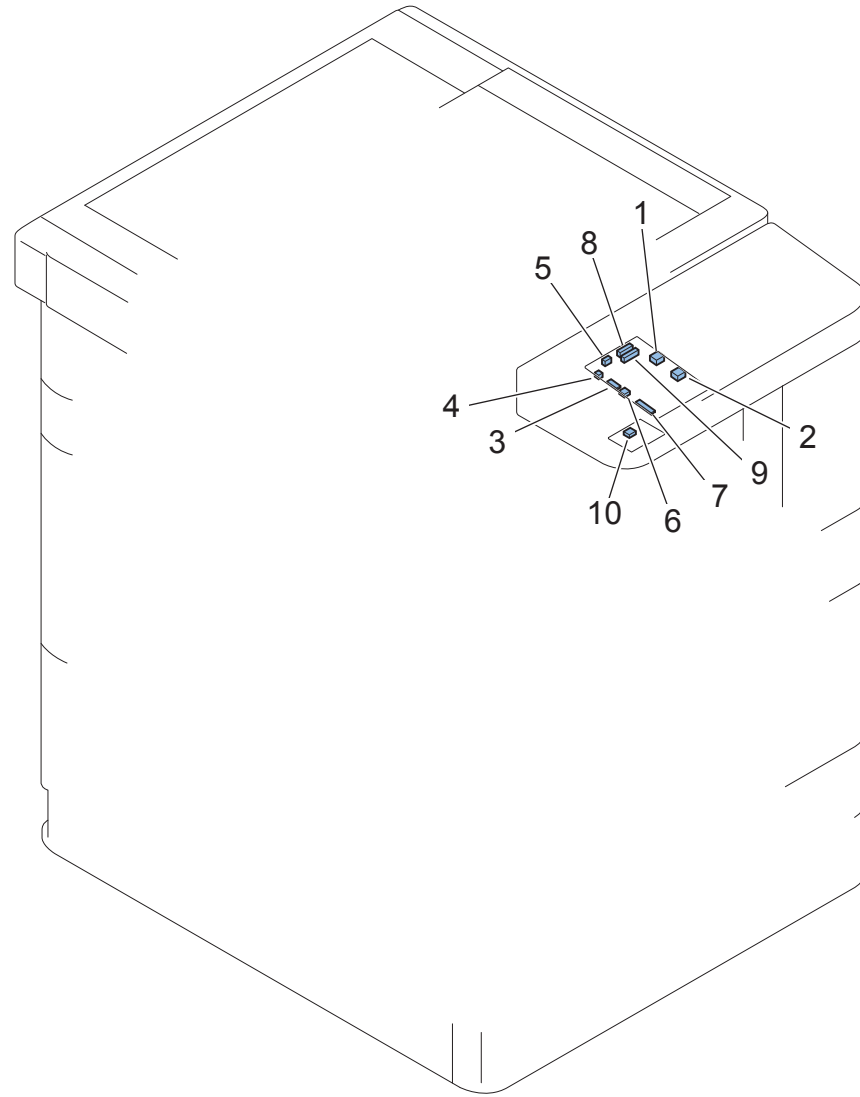


F-4-48

KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector	KeyNo.	J No.	Symbol	Parts Name
1	J4	-	Main controller PCB 1		-	-	-	UI
2	J5	-	Main controller PCB 1		-	-	-	USB(H)
3	J6	-	Main controller PCB 1		-	-	-	USB Device Port
4	J7	-	Main controller PCB 1		-	-	-	-
5	J8	-	Main controller PCB 1		-	-	-	TPM
6	J11	-	Main controller PCB 1		-	-	-	FLASH PCB
7	J13	-	Main controller PCB 1		-	-	-	Voice Operation (Option A)
7	J13	-	Main controller PCB 1		-	-	-	Voice Guidance (Option B)
8	J15	-	Main controller PCB 1		-	-	FM11	Controller fan 1
9	J17	-	Main controller PCB 1		33	J103	-	Riser PCB
10	J19	-	Main controller PCB 1		-	-	-	CPLD WR
11	J20	-	Main controller PCB 1		-	-	-	Serial Interface Kit
11	J20	-	Main controller PCB 1		-	-	-	Copu Card Reader Attachment
12	J21	-	Main controller PCB 1		-	-	-	Signal interface Kit
13	J1025	-	Main controller PCB 1		-	-	-	-
14	J13	-	Main controller PCB 2		-	-	-	Additional Memory
15	J14	-	Main controller PCB 2		34	J101	-	Riser PCB
16	J15	-	Main controller PCB 2		-	-	-	USB(D)
17	J16	-	Main controller PCB 2		-	-	-	-
18	J17	-	Main controller PCB 2		-	-	-	-
19	J18	-	Main controller PCB 2		-	-	-	IN
20	J23	-	Main controller PCB 2		-	-	-	Debug SERIAL
21	J24	-	Main controller PCB 2		-	-	-	Debu PCB
22	J1000	-	Main controller PCB 2		-	-	-	Image Data Analyzer Board
23	J1010	-	Main controller PCB 2		-	-	-	Bypass PCB
23	J1010	-	Main controller PCB 2		-	-	-	EFI controller (option)
24	J1020	-	Main controller PCB 2		-	-	-	Image Processing Sub PCB
25	J3003	-	Main controller PCB 2		-	-	-	Reader controller PCB
26	J102	-	Riser PCB		-	-	UN1	DC controller PCB
27	J104	-	Riser PCB		-	-	-	-
28	J105	-	Riser PCB		-	-	-	HDD
29	J107	-	Riser PCB		-	-	-	HDD
30	J109	-	Riser PCB		35	J7544	FM13	Controller fan 2
31	J110	-	Riser PCB		36	J7115	FM14	HDD cooling fan
32	J111	-	Riser PCB		-	-	-	-

T-4-39





F-4-49

KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector				KeyNo.	J No.	Symbol	Parts Name
1	J1001	-	CPU PCB						-	-	Mein Controller PCB 1
2	J1002	-	CPU PCB						-	-	Mein Controller PCB 1
3	J1003	-	CPU PCB					J4001	-	-	Sub key PCB
4	J1004	-	CPU PCB						-	-	-
5	J1005	-	CPU PCB						-	-	TTP
6	J1006	-	CPU PCB					J2	-	-	LCD
7	J1007	-	CPU PCB					J1	-	-	LCD
8	J1008	-	CPU PCB					J3002	-	-	Ten key PCB
9	J1009	-	CPU PCB					J3001	-	-	Ten key PCB
	-	-	Sub key PCB					10	J5001	-	Volume PCB

T-4-40

## Main Controller

### Removing the HDD

#### Actions before Replacement

Backup the Settings/Registration data.

- 1) Select the following so that the service mode setting values can be exported on remote UI.  
Service mode (Lv1) > Option > USER > SMD-EXPT > [1]
- 2) Execute the collective export on remote UI.  
Settings/Registration > Management Settings > Data Management > Import/Export All > Export  
Select "Select All", and enter the encryption password. Execute "Start Exporting" to create a backup file (DCM file).

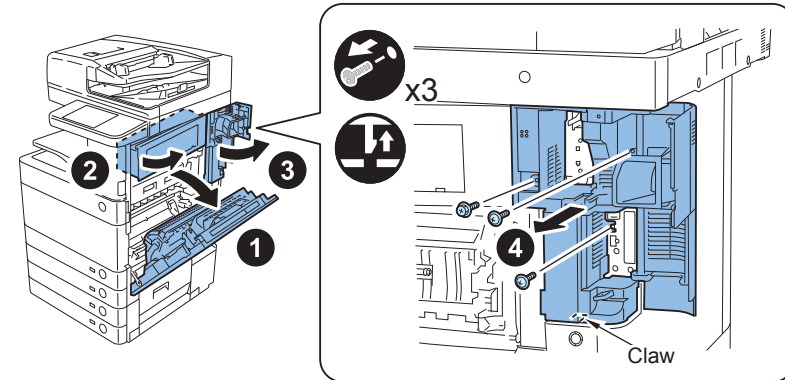
#### CAUTION:

Collective export cannot be executed in the following cases.

- Job is being executed, or job is being waited for (various functions set by transmission, forwarding, fax reception, I-FAX reception, report print and timer)
- Individual import/export is being executed
- The address book is being remotely referenced by another imageRUNNER ADVANCE
- Device information is being distributed
- An error has occurred
- Box is being backed up

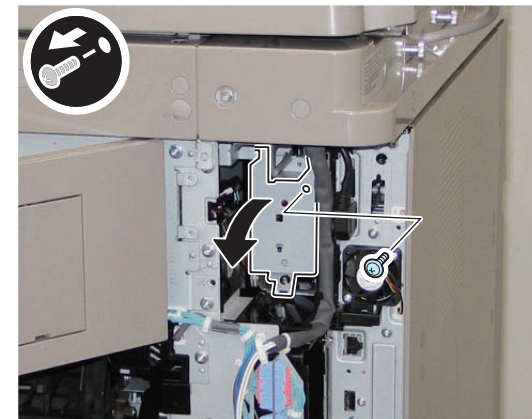
#### Procedure

- 1) Open the Right Lower Cover and Right Upper Cover.
- 2) Remove the Right Rear Cover.
  - 1 screw (RS tight; M4)
  - 2 screws (TP; M3)
  - 1 claw



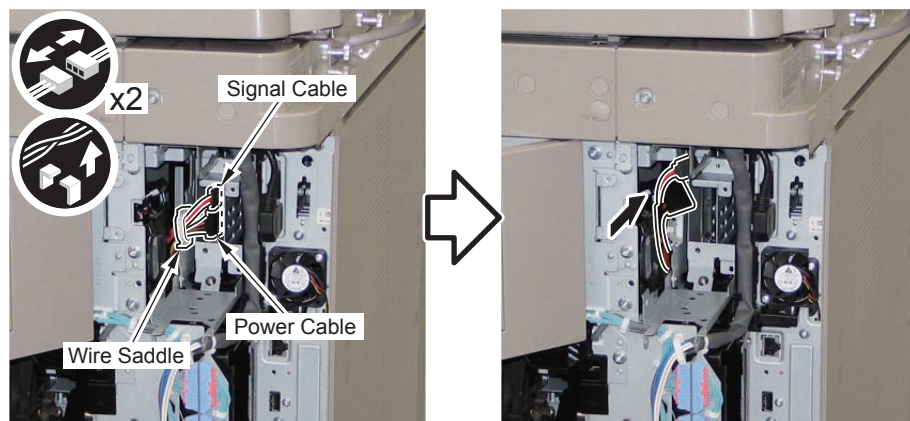
F-4-50

- 3) Open the HDD Lid.
  - 1 screw



F-4-51

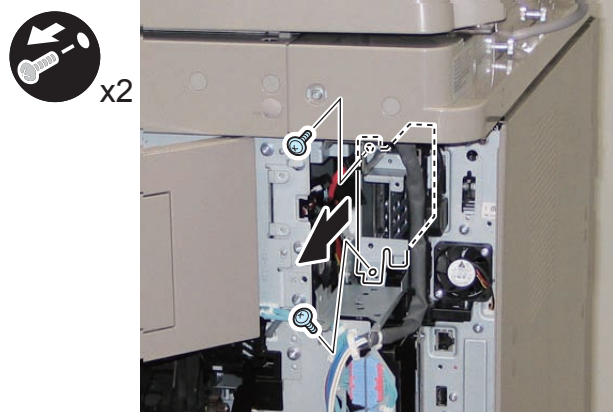
- 4) Disconnect the Signal Cable and the Power Supply Cable from HDD, and move them to the hole side of the Controller Box.



F-4-52

- 5) Remove the HDD Unit.

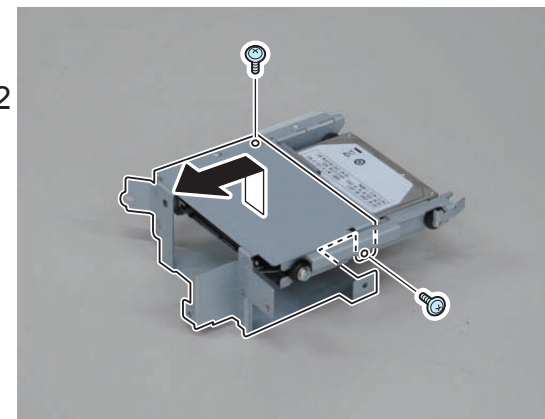
- 2 screws



F-4-53

- 6) Remove the plate.

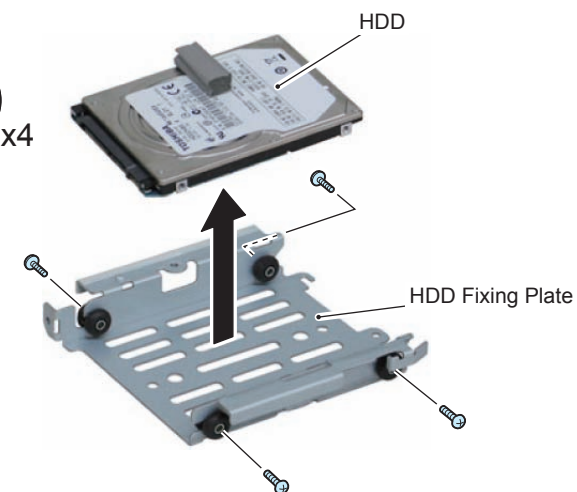
- 2 screws



F-4-54

- 7) Remove the HDD.

- 4 screws
- 1 grounding plate
- 4 spacers
- 4 vibration-prevention dumpers



F-4-55

## ■ Actions after Replacement

### 1) HDD format

- 1-1) Start the machine in safe mode (turn ON the main power switch while simultaneously pressing 2+8 keys).
- 1-2) Execute Formatting All Partitions using SST.
- 2) Download the system software (refer to Upgrade).
- 3) Initialize the key/certificate/CA certificate.  
(Lv.2) COPIER > FUNCTION > CLEAR > CA-KEY
- 4) Turn OFF and then ON the power.
- 5) Restore the backup data.  
Use the remote UI. Follow the steps below to specify the DCM file stored earlier.  
Settings/Registration > Management Settings > Data Management > Import/Export All > Import  
Enter the encryption password entered at exporting, and select "Start Importing". Turn OFF and then ON the power after importing.
- 6) When the user generates and adds the encryption key, certificate and/or CA certificate, request the user to generate them again.
- 7) Executing "Auto Adjust Gradation (Full Adjust)" Settings/Registration mode: Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation

### Points to note when using an HDD with system software already installed

Use of an HDD in which the system software of another machine (a machine of a different serial number) is installed for a troubleshooting is possible if it is an HDD of a model of iR-ADV C5255 series and later. However, be sure to format it after installing it. Operation is not guaranteed if it is continued to be used as is. At installation, HDD must be formatted. Therefore, it is not recommended to use an HDD which has been used with another machine. If you use an HDD which has been used with another machine, be sure to get agreement from user in advance that user data will be deleted.

In addition, an HDD used in iR-ADV C5255 series and later cannot be accessed from a PC due to enhanced security.

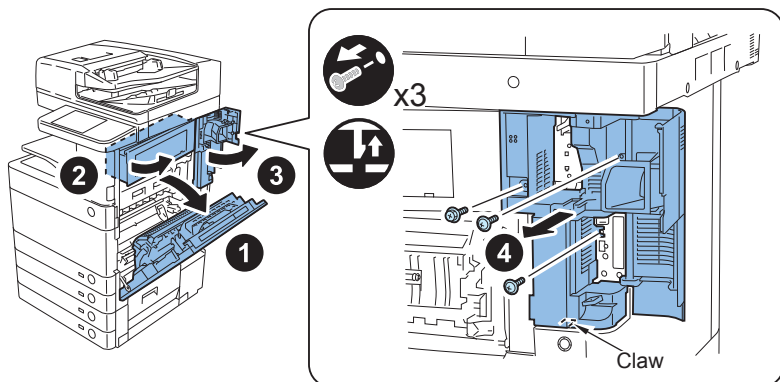
## ● When using the Card Reader and imageWARE Accounting Manager

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

## Removing the Main Controller PCB 1

### Preparations

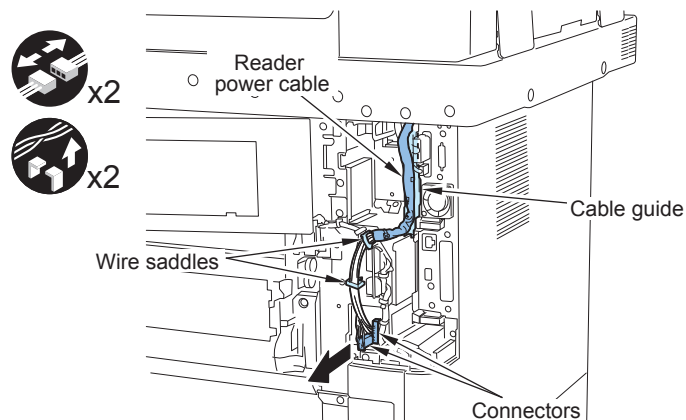
- 1) Open the Right Lower Cover and Right Upper Cover.
- 2) Remove the Right Rear Cover.
  - 1 screw (RS tight; M4)
  - 2 screws (TP; M3)
  - 1 claw



F-4-56

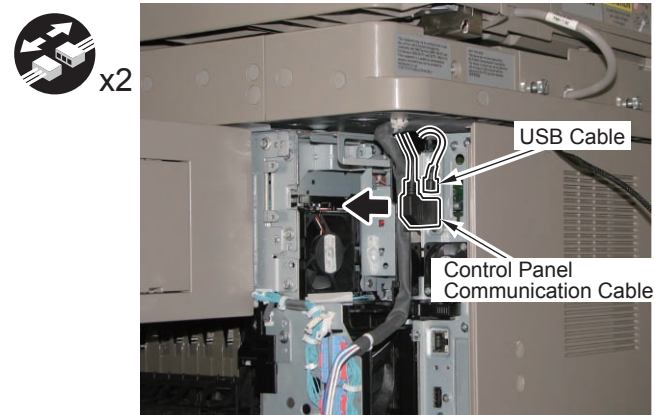
### Procedure

- 1) If the Reader is installed, remove the Reader Power Cable.
  - 2 connectors
  - 2 wire saddles
  - 1 cable guide



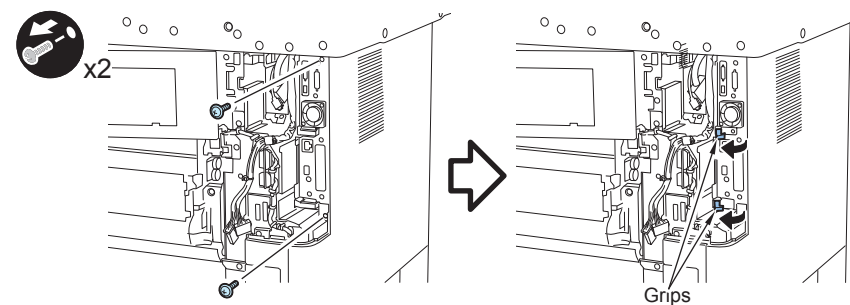
F-4-57

- 2) Remove the USB cable and the control panel communication cable.



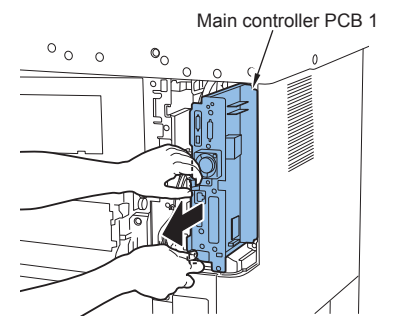
F-4-58

- 3) Remove the 2 screws and lift the grip.



F-4-59

- 4) Hold the grip and remove the Main Controller PCB 1.



F-4-60





- 5) Press the [C] key to return to the download Menu (HDD).
- 6) Press the [Reset] key to shut down the host machine.

**CAUTION:**

If mismatch between the box management information included in the SRAM data and box data on the HDD occurs, which is caused by starting the machine normally without restoring SRAM data after replacing the Main Controller 2 PCB, the box management information is initialized. As a result, box documents on the HDD are deleted.

Therefore, be sure to back up the box documents on remote UI.

### ● Temporarily backing up SRAM data to an HDD (only when the HDD Data Encryption Kit is not installed)

- 1) Service mode (Lv1) > COPIER > FUNCTION > SYSTEM > DOWNLOAD > OK
- 2) When the download Menu (HDD) appears, press the [5] key on the Control Panel.
- 3) When the Backup Menu (HDD) appears, press the [6] key on the Control Panel.

```
[[[[[ Backup Menu (HDD) ]]]]]
```

```
[6]: SRAM(HDD)
```

```
[C]: Return to Main Menu
```

F-4-64

- 4) Press the [0] key to confirm, and then the SRAM data is stored in the internal HDD.
- 5) Press the [C] key to return to the download Menu (HDD).
- 6) Press the [Reset] key to shut down the host machine.

**CAUTION:**

If mismatch between the box management information included in the SRAM data and box data on the HDD occurs, which is caused by starting the machine normally without restoring SRAM data after replacing the Main Controller 2 PCB, the box management information is initialized. As a result, box documents on the HDD are deleted.

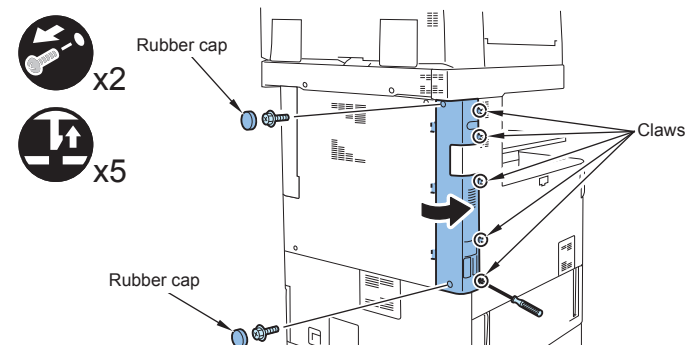
Therefore, be sure to back up the box documents on remote UI.

## ■ Preparations

### ● Remove the Left Rear Cover and the Left Rear Sub Cover.

- 1) Remove the Left Rear Cover.

- 2 rubber caps
- 2 screws
- 5 claws



F-4-65



2) If the Reader Unit is installed, remove the reader signal cable.

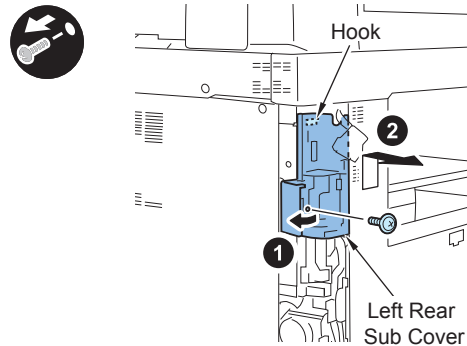
- 1 connector



F-4-66

3) Remove the Left Rear Sub Cover.

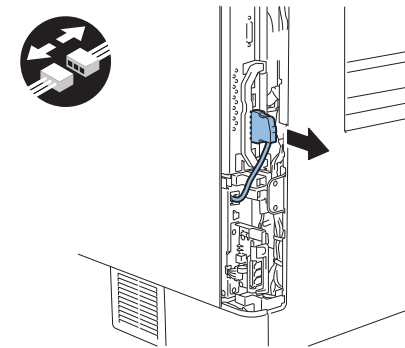
- 1 screw
- 1 hook



F-4-67

## Procedure

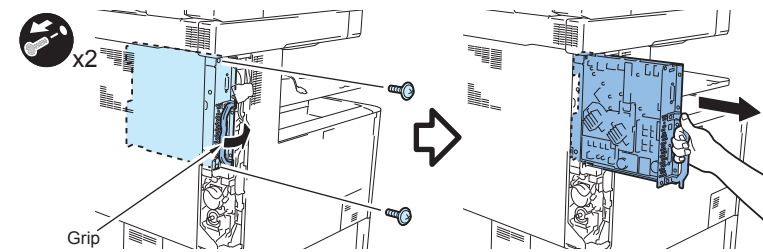
1) If the FAX Unit is installed, remove the connector of communication cable.



F-4-68

2) Hold the grip and remove the Main Controller PCB 2.

- 2 screws

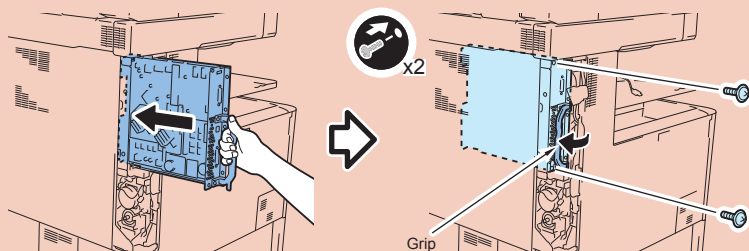


F-4-69

**NOTE:**  
When the option PCB is installed, remove it.

**CAUTION:**

At installation, avoid the harness, hold the grip in raised condition, put the Main Controller PCB 2 all the way in, tilt the grip, and install it.

**NOTE:**

- If the FAX Unit is installed, install the connector.
- Make sure that the Main Controller PCB 2 is fixed to the device.

## ■ Actions after Replacement

### ● When SRAM data is temporarily backed up to an USB memory device

- 1) After replacing the PCB, start the machine by 2+8 startup.
- 2) Connect the USB memory device to USB I/F (Host) of the machine.  
When the download Menu (USB) appears, press the [8] key on the Control Panel.
- 3) The download Menu 2nd (USB) will appear. Press the [2] key.

```
[[[[[ download Menu 2nd (USB) ]]]]]
```

```
[1]: Service Mode Password Clear
[2]: Restore
[C]: Return to Main Menu
```

F-4-70

- 4) Press the [0] key for confirmation.
- 5) The Restore Menu (USB) will appear. Press the [2] key.
- 6) Press the [0] key to confirm, and then the SRAM data is restored from the USB memory

device.

- 7) Press the [C] key to return to the download Menu (USB).
- 8) Press the [Reset] key to shut down the host machine.

### ● When SRAM data is temporarily backed up to an HDD

- 1) After replacing the PCB, start the machine by 2+8 startup.
- 2) When the download Menu (HDD) appears, press the [8] key on the Control Panel.
- 3) When the download Menu 2nd (HDD) appears, press the [2] key on the Control Panel.

```
[[[[[ download Menu 2nd (HDD) ]]]]]
```

```
[2]: Restore
[C]: Return to Main Menu
```

F-4-71

- 4) Press the [0] key for confirmation.
- 5) When the Restore Menu (HDD) appears, press the [2] key on the Control Panel.

```
[[[[[ Restore Menu (HDD) ]]]]]
```

```
[2]: SRAM(HDD)
[C]: Return to Main Menu
```

F-4-72

- 6) Press the [0] key to confirm, and then the SRAM data is restored from the internal HDD.
- 7) Press the [C] key to return to the download Menu (HDD).
- 8) Press the [Reset] key to shut down the host machine.

**CAUTION:**

Do not transfer the following parts to another machine (a machine of a different serial number.).

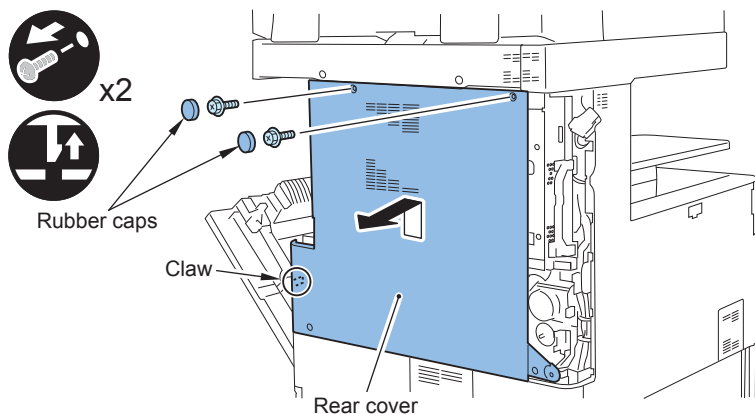
The machine will not start up normally, and may become unrecoverable in some cases.

- Main Controller PCB 2 (with the Memory PCB unremoved)
- Memory PCB

## Opening the Controller Box

### Preparations

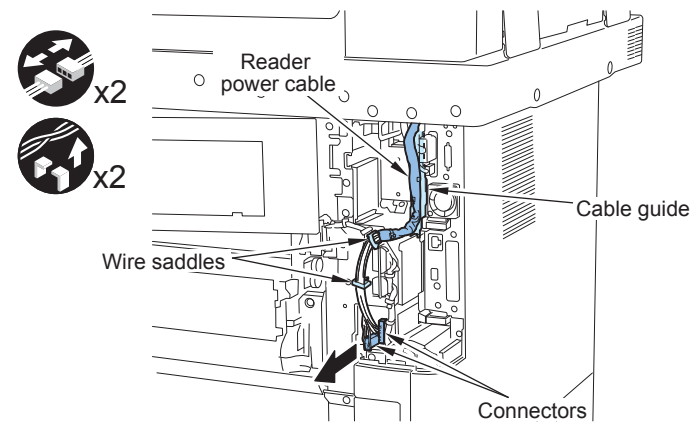
- 1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-84)
- 2) Remove the Right Rear Cover.
- 3) Remove the Left Rear Cover and the Left Rear Sub Cover. (Refer to page 4-86)
- 4) Remove the Rear Cover.
  - 2 rubber caps
  - 2 screws
  - 1 claw



F-4-73

### Procedure

- 1) When the Reader is installed, remove the reader power cable.
  - 2 connectors
  - 2 wire saddles
  - 1 cable guide



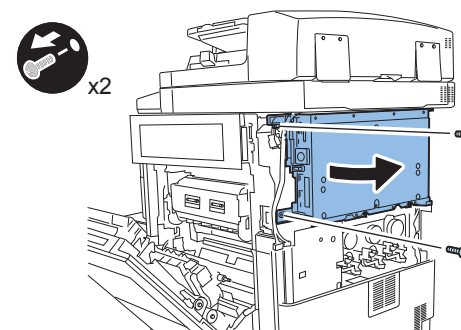
F-4-74

#### NOTE:

- If the Fax Unit is not installed, refer to step 2-1).
- If the Fax Unit is installed, refer to step 2-2).

- 2-1) Avoid the harness and open the Controller Box.

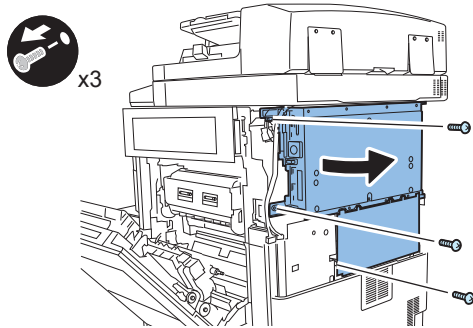
- 2 screws



F-4-75

2-2) Avoid the harness and open the Controller Box and the FAX Unit.

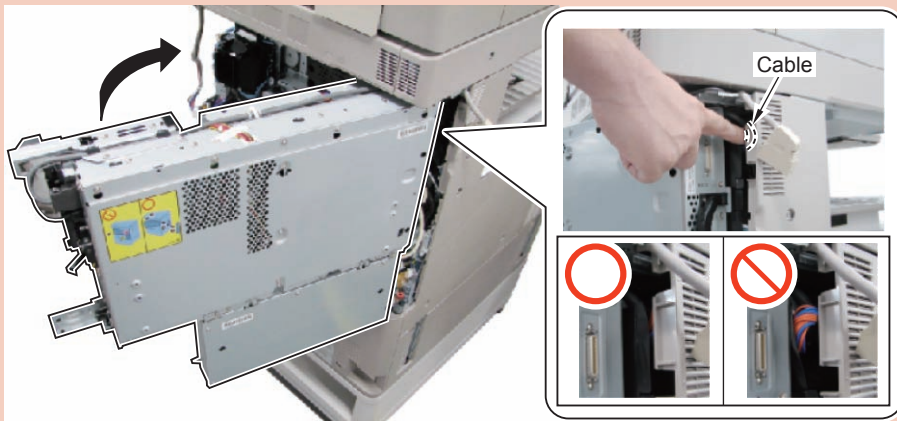
- 3 screws



F-4-76

#### CAUTION:

Close the Controller Box while pressing the cable with a finger. Check that the cable is stored when closing the box.



F-4-77

## Removing the DC Controller PCB

### Actions before Replacement

When replacing the DC Controller PCB, execute the following Service Mode to backup the DC Controller PCB SRAM.

Execute COPIER > FUNCTION > SYSTEM > DSRAMBUP (LEVEL2).

After "ACTIVE" is displayed for approx. 2 minutes, "OK!" is displayed.

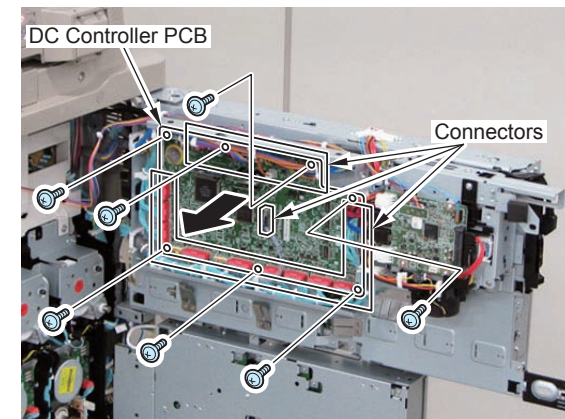
After the above execution is completed, turn OFF the main power supply.

### Preparations

- 1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-84)
- 2) Remove the Right Rear Cover.
- 3) Remove the Left Rear Cover and the Left Rear Sub Cover. (Refer to page 4-86)
- 4) Remove the Rear Cover. (Refer to page 4-89)
- 5) Open the Controller Box. (Refer to page 4-89)

### Procedure

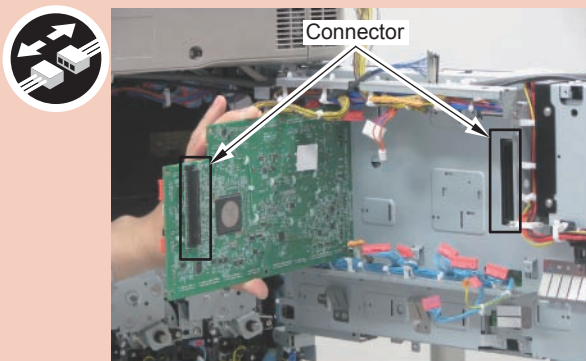
- 1) Remove the DC Controller PCB
  - 22 connectors
  - 7 screws



F-4-78

**CAUTION:**

There is a connector on the backside of the DC Controller PCB. When removing the DC Controller PCB, be careful about the connector.

**CAUTION:**

When replacing the DC Controller PCB, be sure to use a new one. Do not use the DC Controller PCB which was used with another machine.

## ■ Actions after Replacement

Turn ON the main power supply and restore the DC Controller PCB SRAM.

Execute COPIER > FUNCTION > SYSTEM > DSRAMRES (LEVEL2).

After the above execution, "ACTIVE" is displayed for approx. 2 minutes, then "OK!" is displayed. Restoration is completed now.

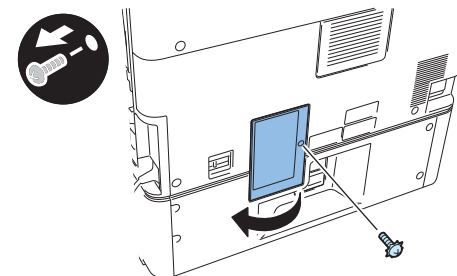
## ● Removing the Main Power Unit

### ■ Preparations

- 1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-84)
- 2) Remove the Right Rear Cover.
- 3) Remove the Left Rear Cover. (Refer to page 4-86)
- 4) Remove the Rear Cover. (Refer to page 4-89)

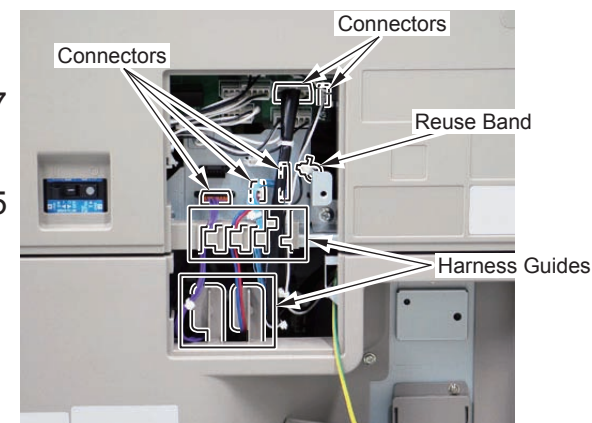
### ● Remove the Rear Lower Cover.

- 5) Remove the Connector Cover.
  - 1 screw



F-4-79

- 6) When the Cassette Pedestal is installed, remove the connector.
  - 1 Reuse Band
  - 6 harness guides
  - 5 connectors

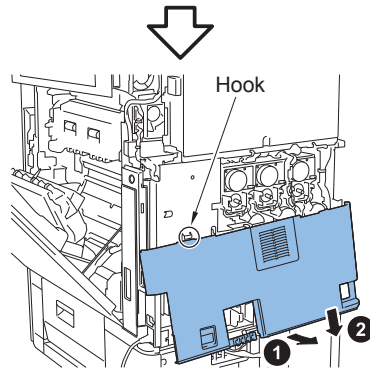
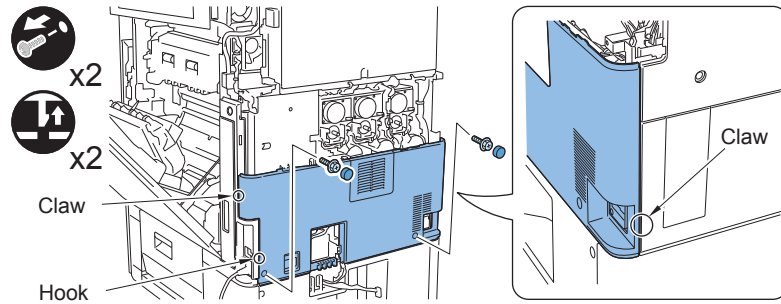


F-4-80



## 7) Remove the Rear Lower Cover.

- 2 rubber caps
- 2 screws
- 2 claws
- 2 hooks

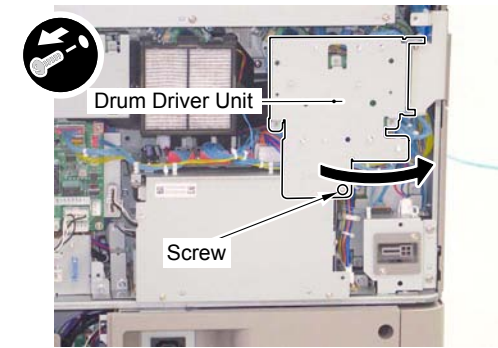


F-4-81

## ■ Procedure

## 1) Open the Drum Driver Unit.

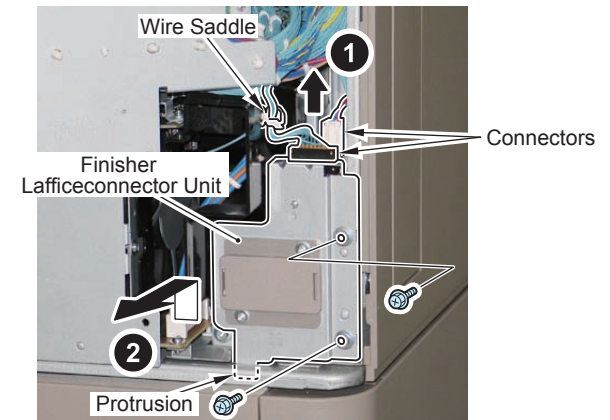
- 1 screw



F-4-82

## 2) Remove the FIN Lattice Connector Unit.

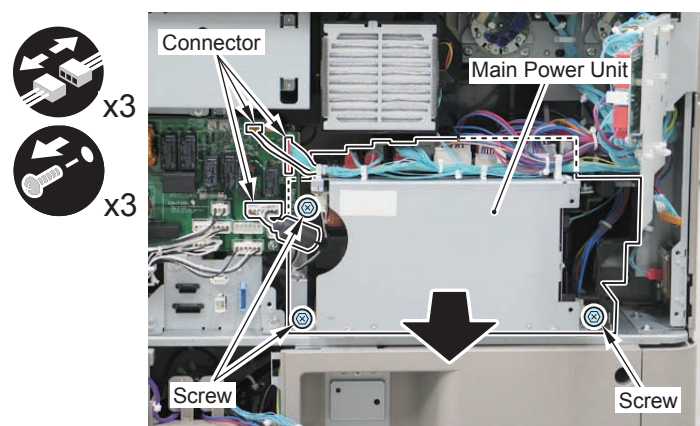
- 1 wire saddle
- 2 connectors
- 2 screws
- 1 Protrusion



F-4-83

3) Pull out the Main Power Unit.

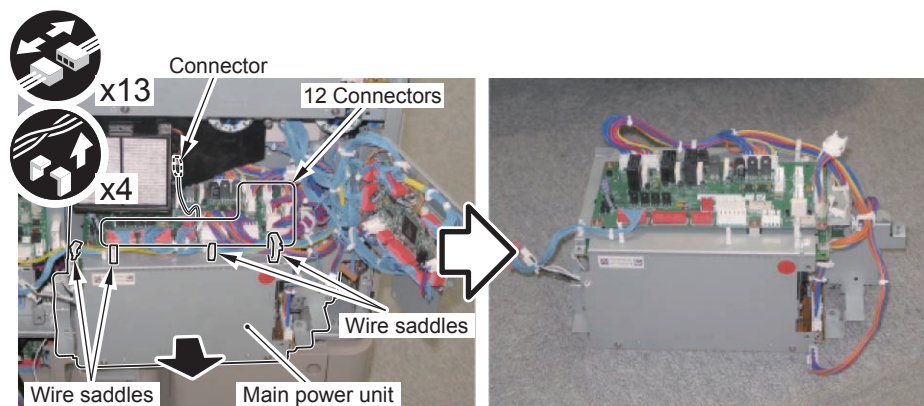
- 3 connectors
- 3 screws



F-4-84

4) Remove the Main Power Unit.

- 13 connectors
- 4 wire saddles



F-4-85

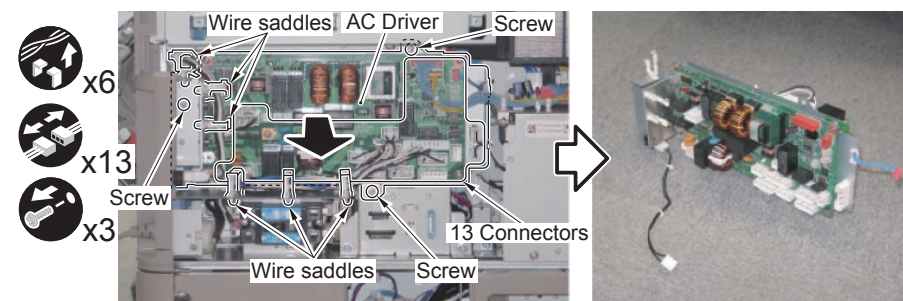
## Removing the AC Driver

### Preparations

- 1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-84)
- 2) Remove the Right Rear Cover.
- 3) Remove the Left Rear Cover. (Refer to page 4-86)
- 4) Remove the Rear Cover. (Refer to page 4-89)
- 5) Remove the Rear Lower Cover. (Refer to page 4-91)

### Procedure

- 1) Remove all the connector on the PCB and remove the AC Driver.
  - 6 wire saddles
  - 13 connectors (12 pieces for Not Japanese model)
  - 3 screws

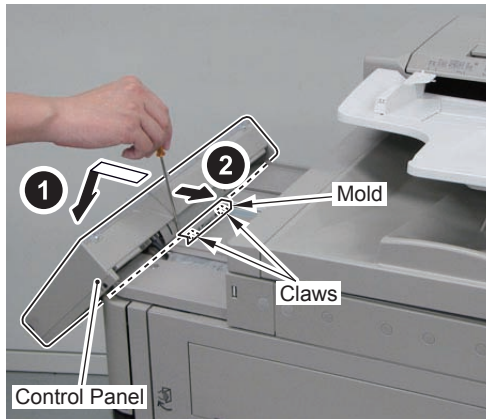


F-4-86

## Removing the Control Panel

### Procedure

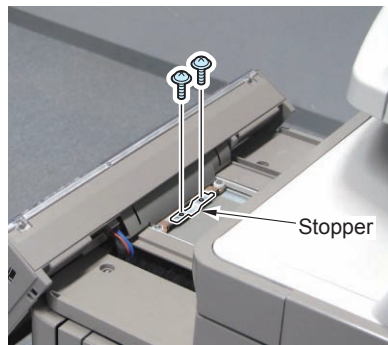
1) Pull out the Control Panel and remove the mold.



F-4-87

2) Remove the stopper.

- 2 screws



F-4-88

3) Stand the Control Panel as indicated.

#### CAUTION:

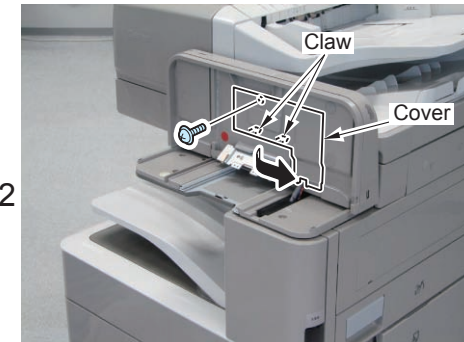
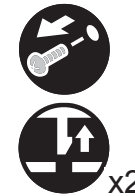
Be careful not to drop the Control Panel when pulling it out.



F-4-89

4) Remove the cover.

- 1 screw
- 2 Claws

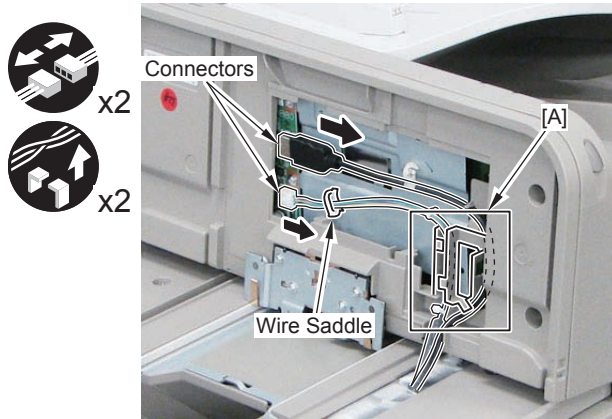


F-4-90



5) Remove the cable.

- Harness Guide [A]
- 1 wire saddle
- 2 connectors



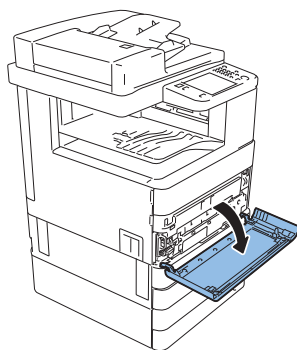
F-4-91

## Laser Exposure System

### Cleaning the Dust-blocking Glass

#### Preparations

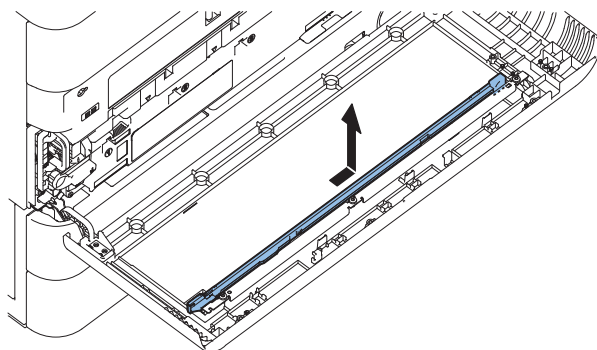
1) Open the Front Cover.



F-4-92

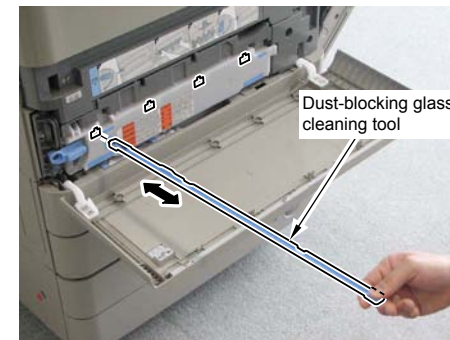
#### Procedure

1) Remove the Glass Cleaning Tool.



F-4-93

2) Clean the Dust-blocking Glass from the 4 holes of the Waste Toner Container.



F-4-94

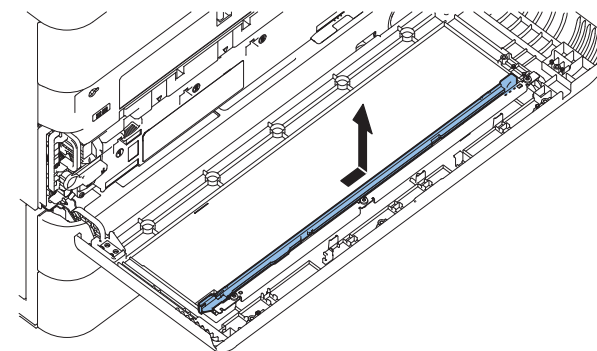
### Removing the Dust-blocking Glass Cleaning Pad

#### Preparations

1) Open the Front Cover. (Refer to page 4-96)

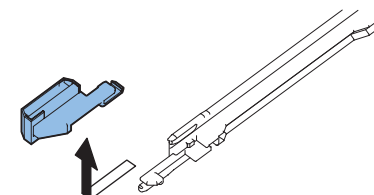
#### Procedure

1) Remove the Glass Cleaning Tool.



F-4-95

2) Remove the Dust-blocking Glass Cleaning Pad.

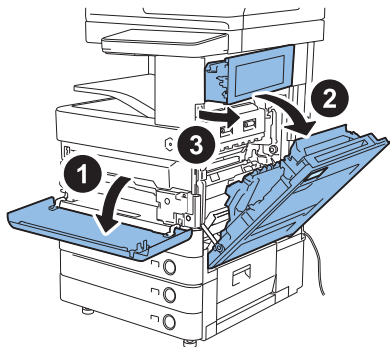


F-4-96

## Removing the Laser Scanner Unit

### Preparations

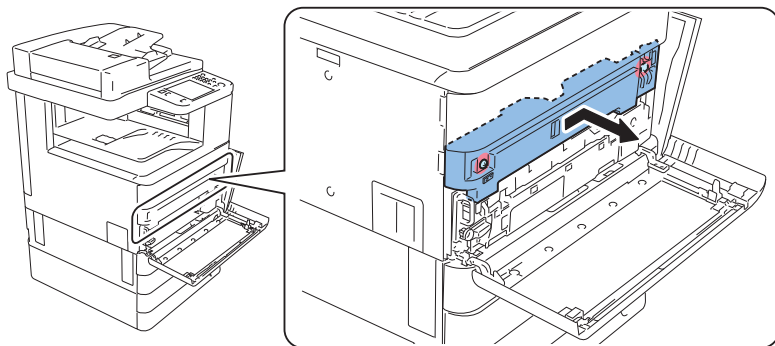
1) Open the Front Cover, Right Lower Cover and Right Upper Cover.



F-4-97

2) Remove the ITB Cover.

- 2 screws (loosen)



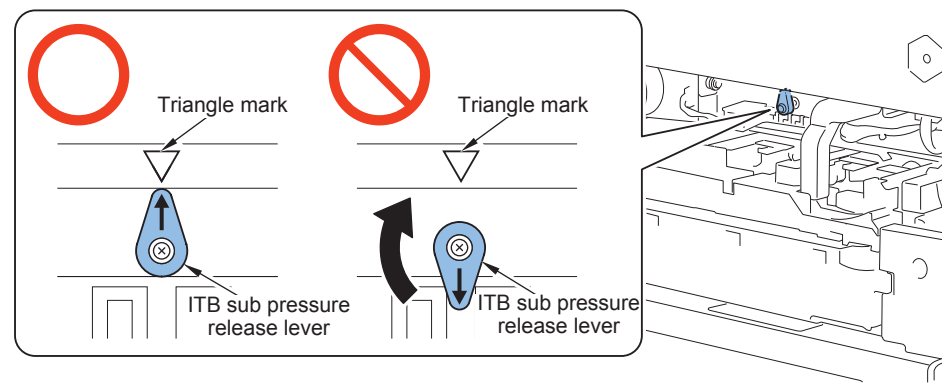
F-4-98

#### CAUTION:

- Do not touch the ITB surface.
- When installing the ITB Cover, be sure to push it to the left. If the pushing is insufficient, the plate is not inserted to the slit of the ITB Cover, which may cause the damage of the sensor.

### Remove the ITB Unit

3) Check that the arrow of ITB Sub Pressure Release Lever is aligned with the triangle mark.  
(If it is not aligned, adjust the arrow of lever to the triangle mark.)

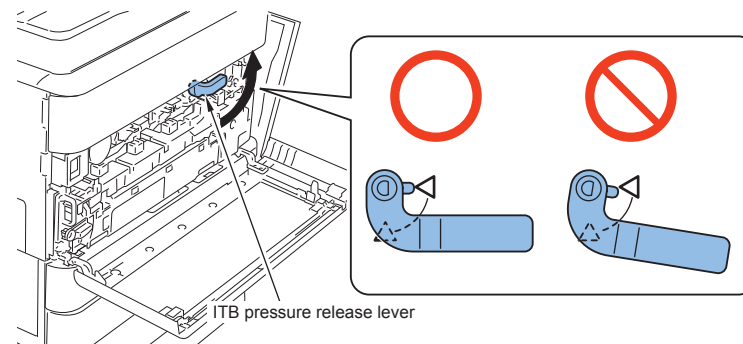


F-4-99

4) Turn the ITB Pressure Release Lever in the right direction until the protrusion of grip is aligned with the triangle mark on the plate to release the pressure.

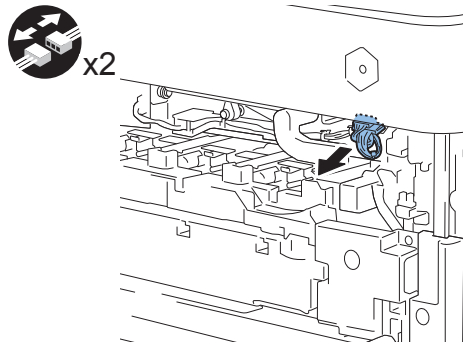
#### CAUTION:

Before operating the ITB Pressure Release Lever, check that the Right Lower Cover is open.



F-4-100

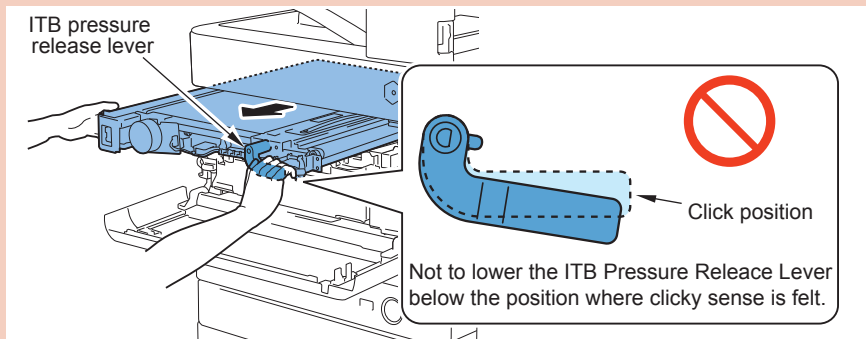
5) Remove the 2 connectors.



F-4-101

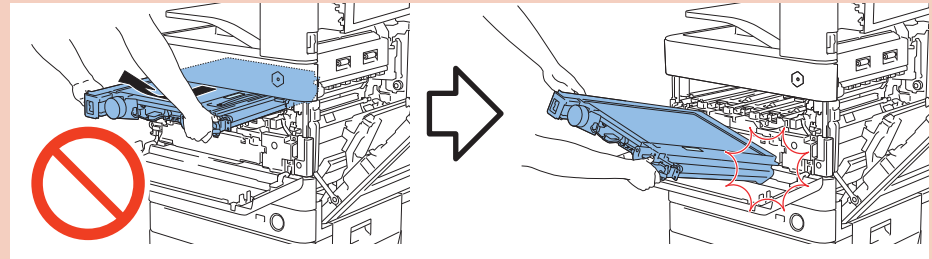
**CAUTION:**

- When pulling out the ITB Unit, be sure not to lower the ITB Pressure Release Lever below the position where clicky sense is felt. If the ITB Unit is pulled out while the lever is lowered, the ITB is scraped by the Plate and this may cause to make scratches on the ITB surface.



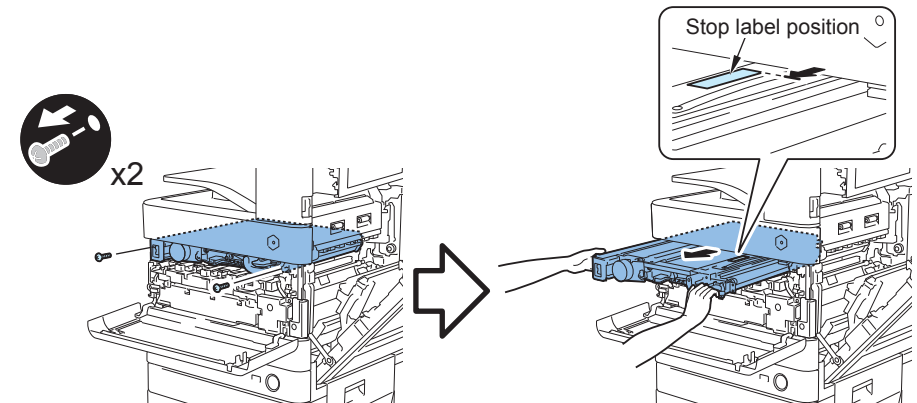
**CAUTION:**

- When pulling out the ITB Unit, it may drop because it does not click at stop position if pulled out while lifting it. Thus, be careful of pulling it out.



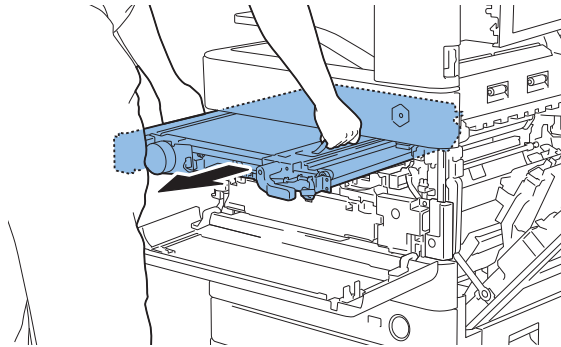
6) Pull out the ITB Unit up to the stop label position flatly.

- 2 screws



F-4-102

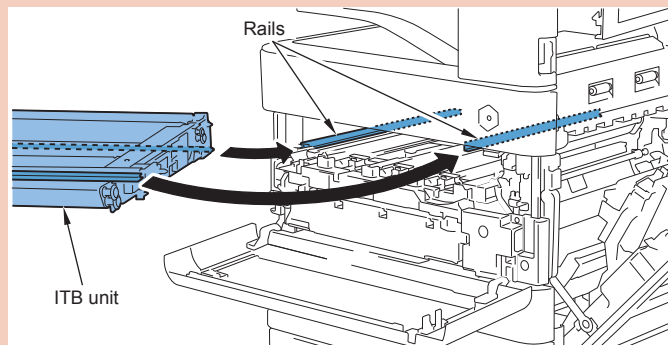
7) Hold the ITB Unit as show in the below figure, and remove in the direction of the arrow.



F-4-103

**CAUTION:**

When installing the ITB Unit, align the ITB Unit with the 2 positions at the lead edge of rail.



F-4-104

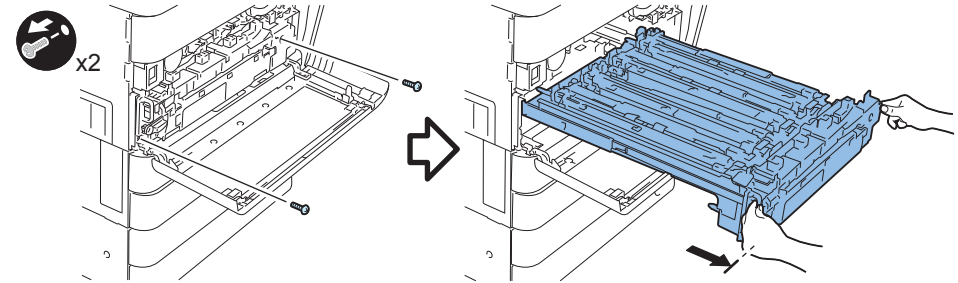
● **Removing the Process Unit**

**CAUTION:**

When installing/removing the Process Unit, do not remove the Waste Toner Container.

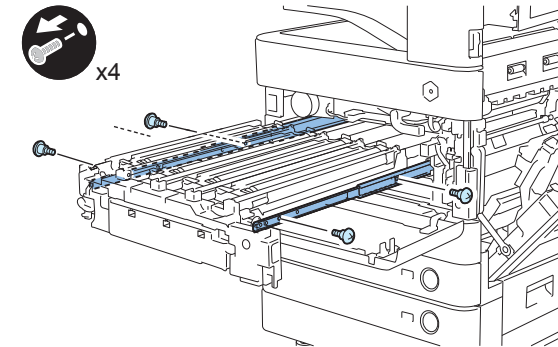
8) Pull out the Process Unit until it stops.

- 2 screws



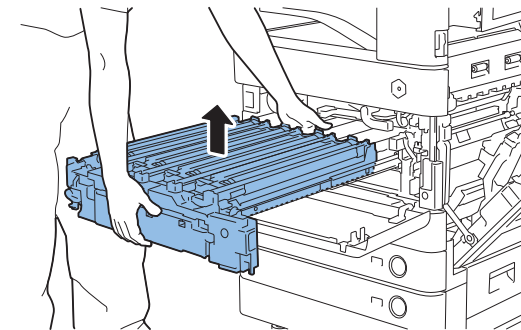
F-4-105

9) Remove the 4 stepped screws fixed on the right and left rails.



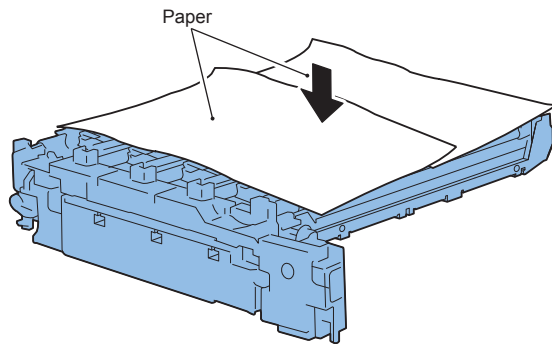
F-4-106

10) Hold the front and rear of Process Unit and remove it flatly.



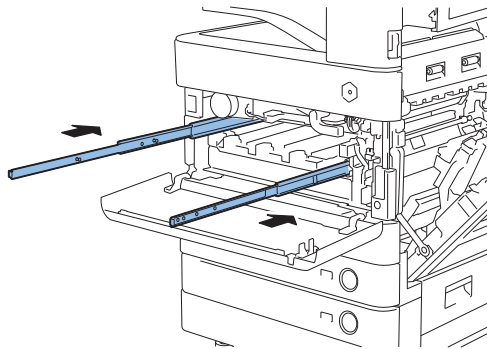
F-4-107

11) Place the paper onto the Process Unit to protect the Drum Unit from the light.



F-4-108

12) Take the 2 rails of Process Unit back to the host machine.



F-4-109

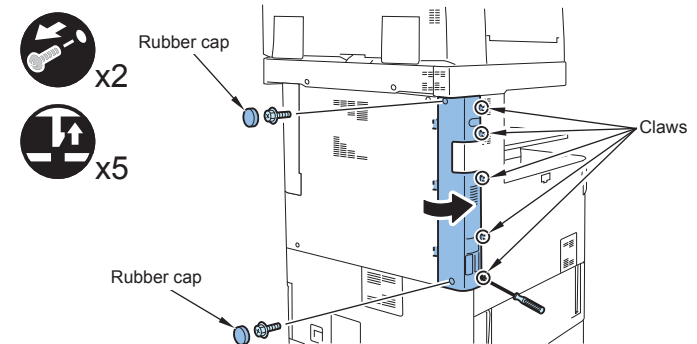
**NOTE:**

When removing the Laser Scanner Unit 1 (Y/M laser), Refer to procedure 13), 14), 15)

● Remove the Left Rear Cover and the Left Rear Sub Cover.

13) Remove the Left Rear Cover.

- 2 rubber caps
- 2 screws
- 5 claws



14) If the Reader Unit is installed, remove the reader signal cable.

- 1 connector

F-4-110

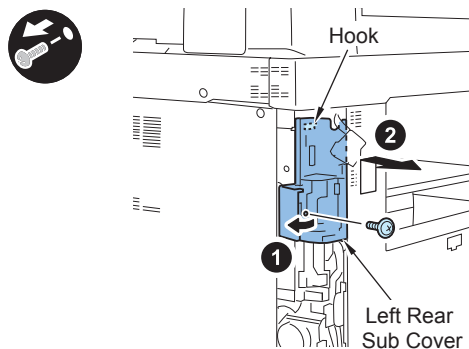


F-4-111



15) Remove the Left Rear Sub Cover.

- 1 screw
- 1 hook



F-4-112

## Procedure

### CAUTION:

When Replacing the Laser Scanner Unit

When removing the Laser Scanner Unit, be sure to check the serial numbers affixed on both units and installation position of the units before operation.

Before installing the units, be sure to see the foregoing serial numbers and install each unit to the original position.

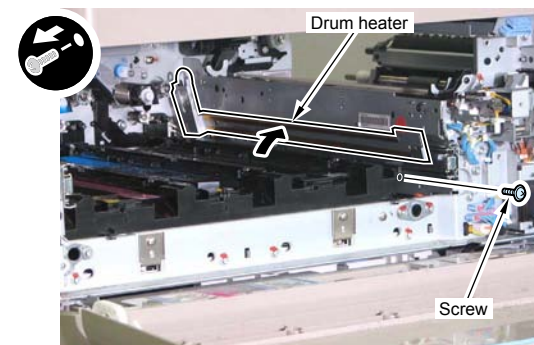
If the unit is installed reversely, the image displacement might occur.

### NOTE:

This procedure describes the removal of Bk,C Laser Scanner Unit. Go through the same procedure for removing the M,Y Laser Scanner Unit.

1) Remove the Drum Heater.

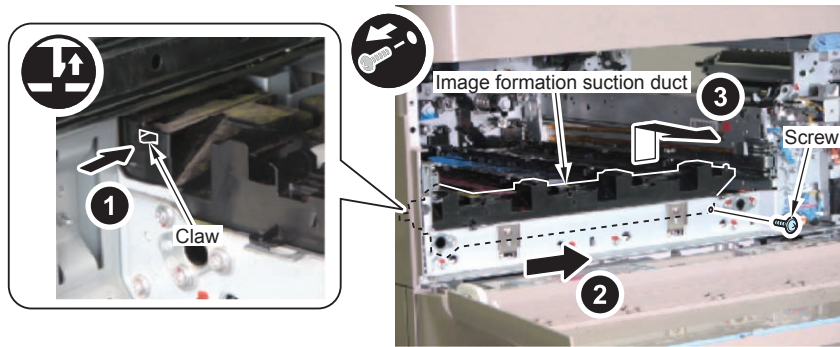
- 1 screw



F-4-113

## 2) Remove the Image Formation Suction Duct.

- 1 screw
- 1 claw



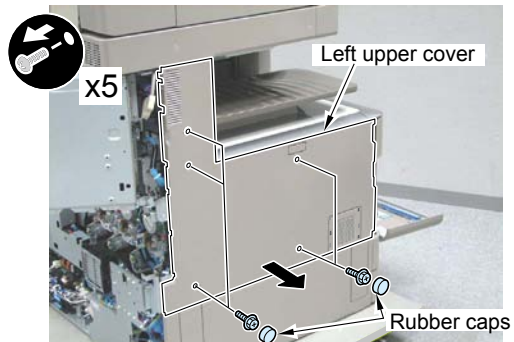
F-4-114

## NOTE:

When removing the Laser Scanner Unit 1 (Y/M laser), Refer to procedure 3), 4), 5)

## 3) Remove the Left Upper Cover.

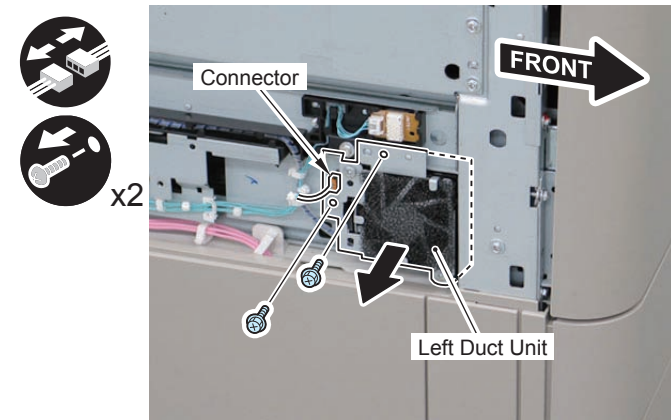
- 5 rubber caps
- 5 screws



F-4-115

## 4) Remove the Left Duct Unit.

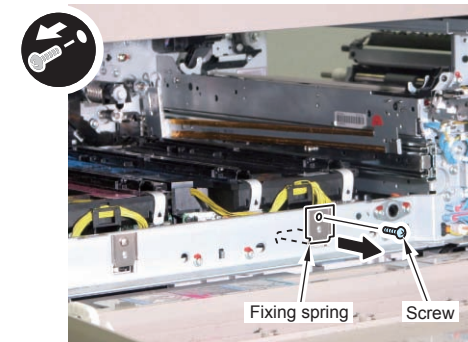
- 1 connector
- 2 screws



F-4-116

## 5) Remove the Scanner Fixing Spring.

- 1 screw

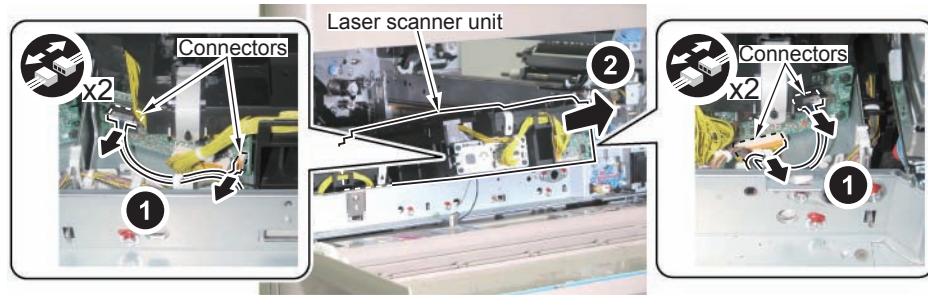


F-4-117



## 6) Remove the Laser Scanner Unit.

- 4 connectors



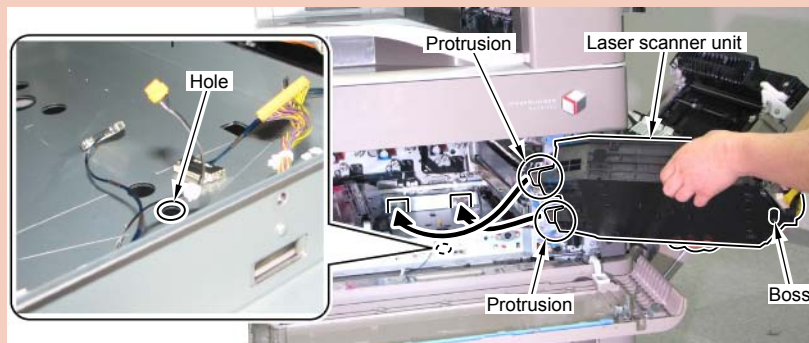
F-4-118

## CAUTION:

Since the Laser Scanner Unit needs adjustment, do not disassemble it.

## CAUTION:

At installation, push the protrusion of Laser Scanner Unit into the hole of rear plate and adjust the front boss with the plate hole and install it.



## CAUTION:

At installation, pass the harness through the Sheet Guide and install it.



## ■ Actions after Replacement

Execute the following in user mode: (Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation).

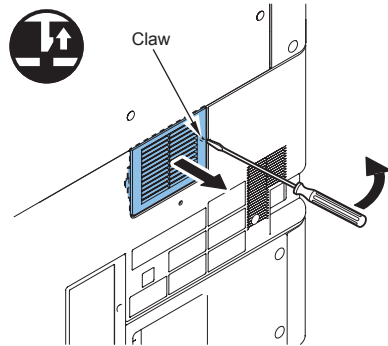
## Image Formation System

### Removing the Toner Filter

#### Procedure

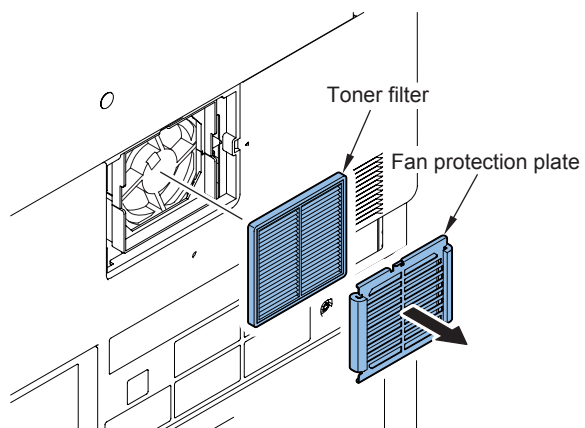
1) Remove the Toner Filter Cover.

- 1 claw



F-4-119

2) Remove the Fan Protection Plate and the Toner Filter.

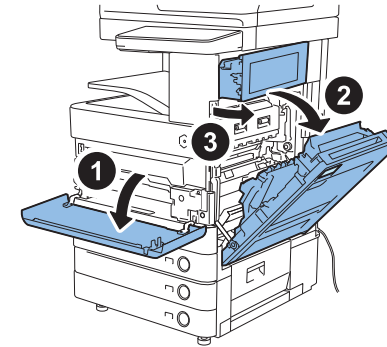


F-4-120

### Removing the ITB Unit

#### Preparations

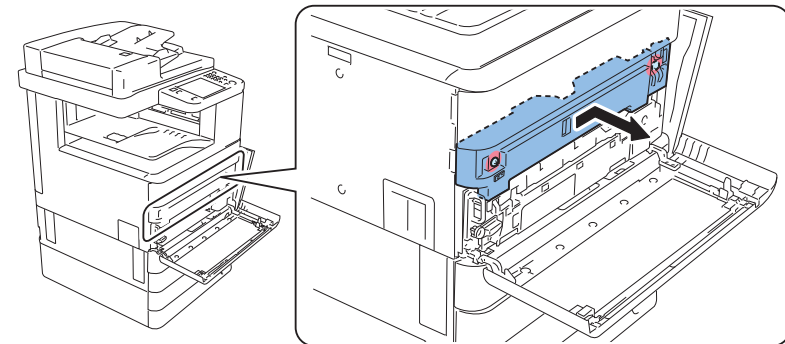
1) Open the Front Cover, Right Lower Cover and Right Upper Cover.



F-4-121

2) Remove the ITB Cover.

- 2 screws (loosen)



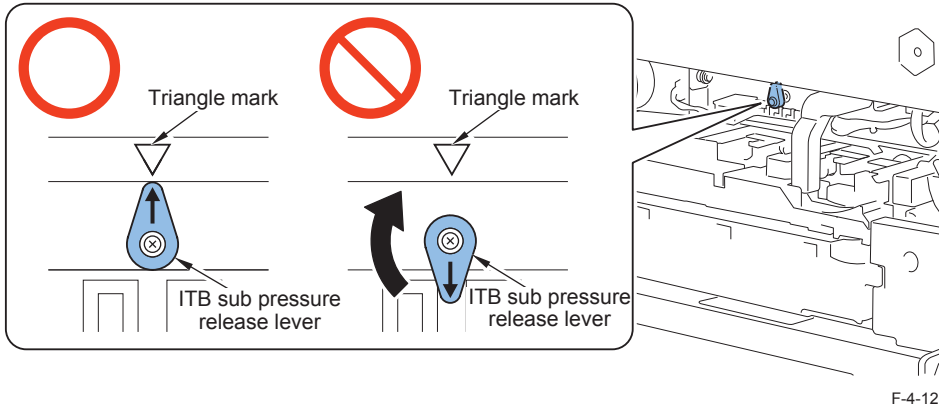
F-4-122

#### CAUTION:

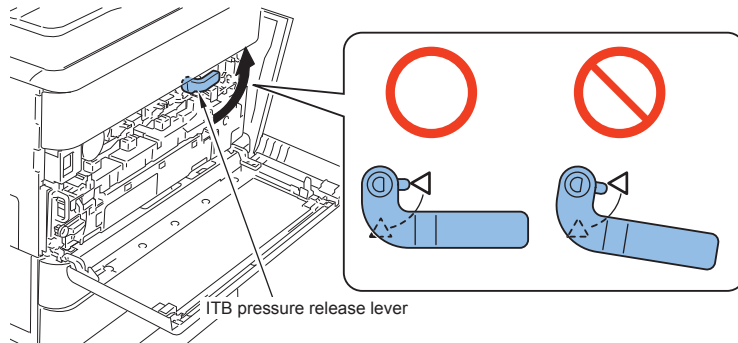
- Do not touch the ITB surface.
- When installing the ITB Cover, be sure to push it to the left. If the pushing is insufficient, the plate is not inserted to the slit of the ITB Cover, which may cause the damage of the sensor.

## Procedure

- 1) Check that the arrow of ITB Sub Pressure Release Lever is aligned with the triangle mark.  
(If it is not aligned, adjust the arrow of lever to the triangle mark.)



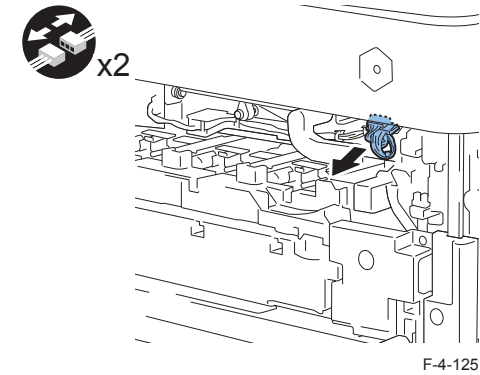
- 2) Turn the ITB Pressure Release Lever in the arrow direction until the protrusion of grip is aligned with the triangle mark on the plate to release the pressure.



### CAUTION:

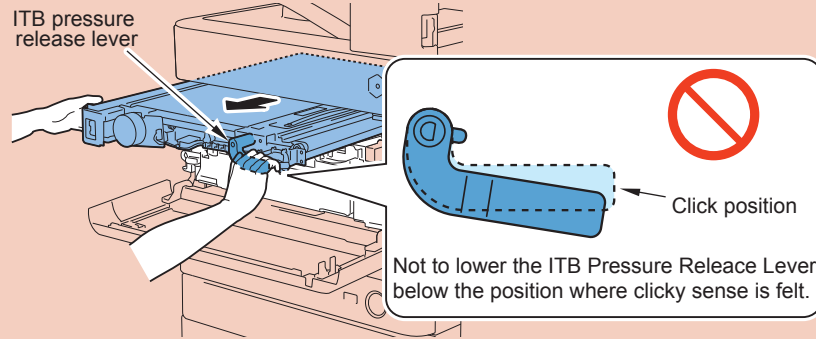
Before operating the ITB Pressure Release Lever, check that the Right Lower Cover is open.

- 3) Remove the 2 connectors.

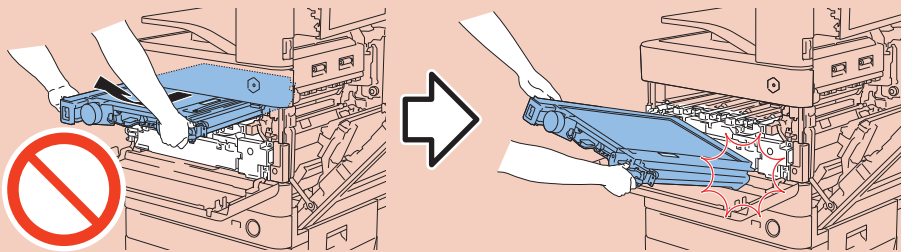


**CAUTION:**

When pulling out the ITB Unit, be sure not to lower the ITB Pressure Release Lever below the position where clicky sense is felt. If the ITB Unit is pulled out while the lever is lowered, the ITB is scraped by the Plate and this may cause to make scratches on the ITB surface.

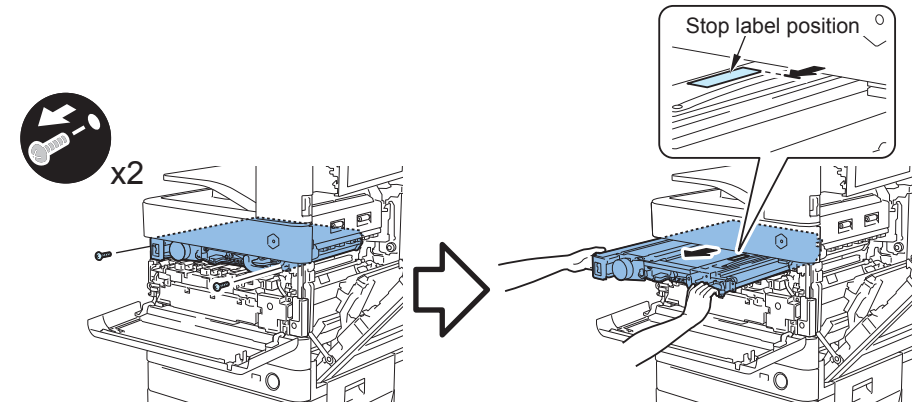


When pulling out the ITB Unit, it may drop because it does not click at stop position if pulled out while lifting it. Thus, be careful of pulling it out.

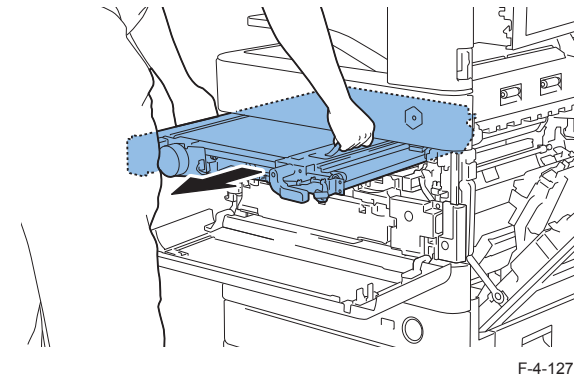


4) Pull out the ITB Unit up to the stop label position flatly.

- 2 screws

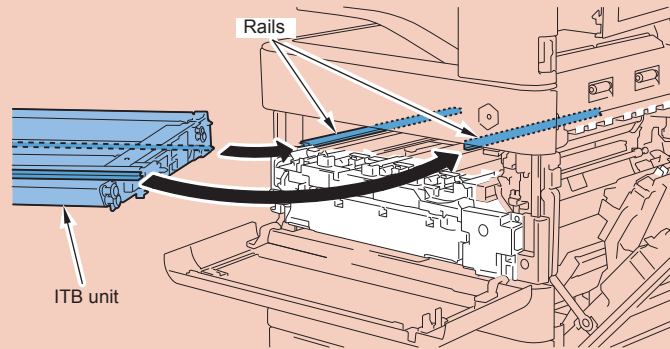


5) Hold the ITB Unit as show in the below figure, and remove in the direction of the arrow.



**CAUTION:**

- Be careful not to make mistakes when installing since there is no compatibility between the ITB Unit of iR-ADV-C52XX series and that of iR-ADV-C50XX series.
- When installing the ITB Unit, align the ITB Unit with the 2 positions at the lead edge of rail.



## Cleaning the Patch Sensor

### Preparations

- 1) Open the Front Cover, Right Lower Cover and Right Upper Cover. (Refer to page 4-104)
- 2) Remove the ITB Cover. (Refer to page 4-104)
- 3) Remove the ITB Unit. (Refer to page 4-105)

### Procedure

- 1) While pushing the shutter, clean the surface of Patch Sensor with a cotton swab moistened with water and tightly wrung by wiping it in one direction. After cleaning, make sure that there is no toner contamination on the sensor surface.

**CAUTION:**

- Do not use the alcohol since it melts the sensor window and causes white turbidity.
- Do not dry-wipe it since the sensor window is charged and attracts the toner.

### Actions after Replacement

Be sure to execute the following procedure after replacing the ITB.

- 1) After installing the ITB Unit, put the machine into a standby state.
- 2) When the machine is in a standby state, execute the following in user mode: (Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation).





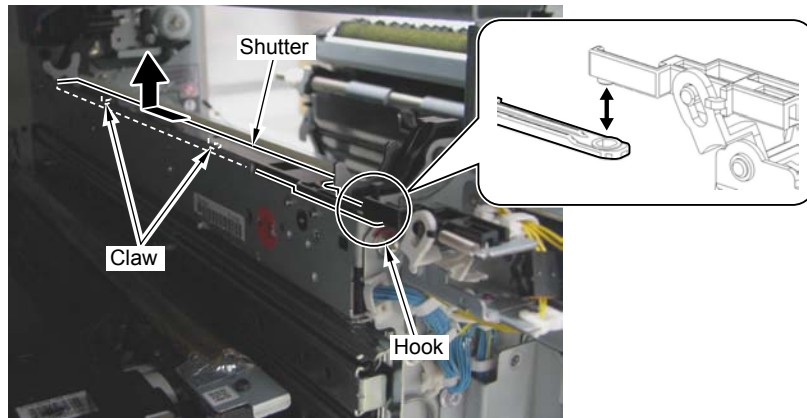
## Remove the Patch Sensor (front,center,rear)

### Preparations

- 1) Open the Front Cover, Right Lower Cover and Right Upper Cover. (Refer to page 4-104)
- 2) Remove the ITB Cover. (Refer to page 4-104)
- 3) Remove the ITB Unit. (Refer to page 4-105)
- 4) Remove the Process Unit. (Refer to page 4-132)

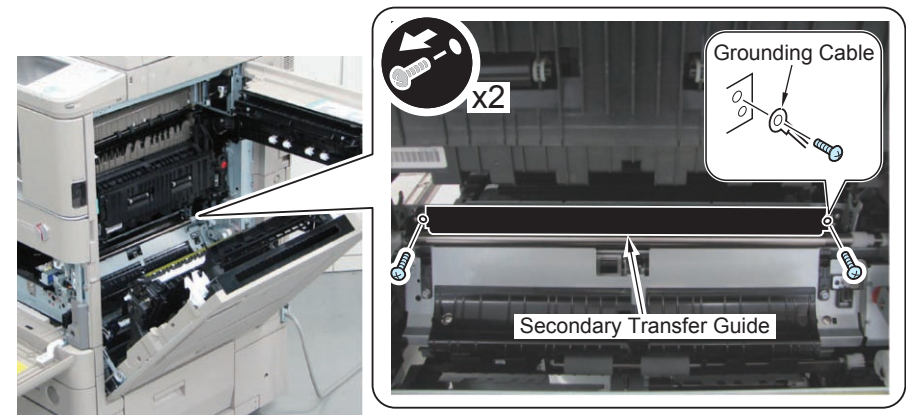
### Procedure

- 1) Release the hook and remove the Shutter of the sensor.
  - 2 Claws



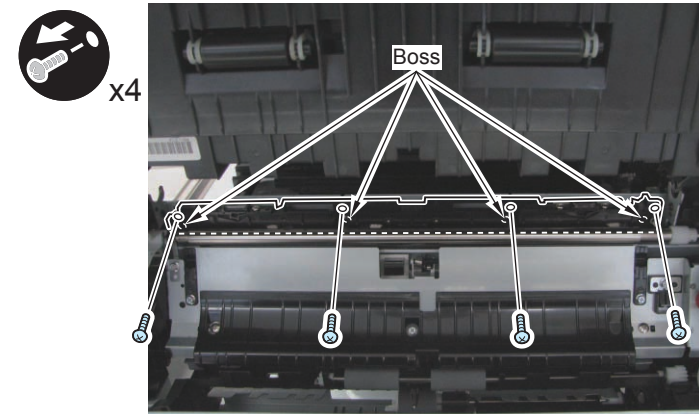
F-4-129

- 2) Remove the Pre-secondary Transfer Guide. Be sure not to put too much force on the Pre-secondary Transfer Guide when removing it.
  - 2 screws



F-4-130

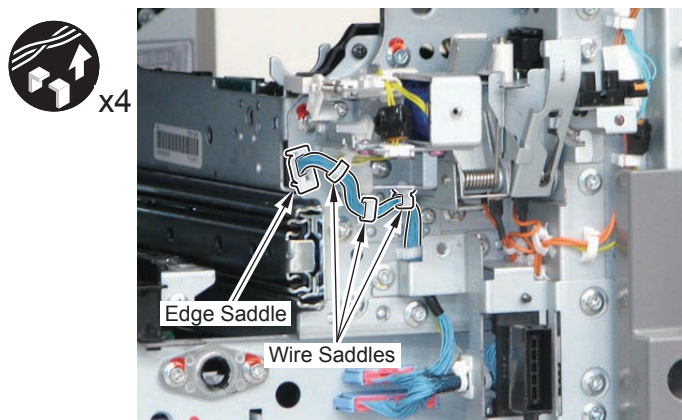
- 3) Remove the Patch Sensor unit.
  - 4 screws
  - 4 bosses



F-4-131

4) Remove the Wire Saddle, and Edge Saddle to make the Sensor Assembly moving freely.

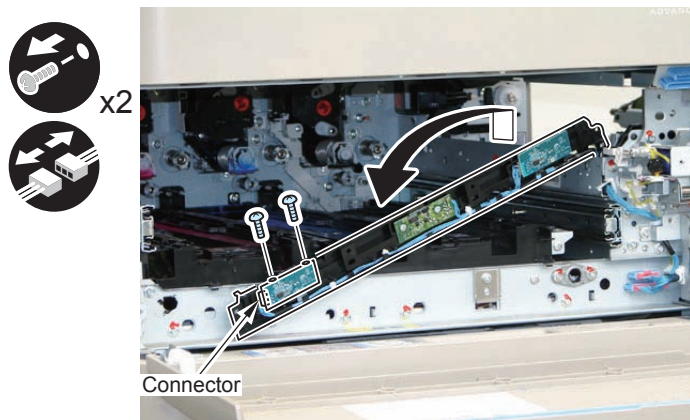
- 3 Wire Saddles
- 1 Edge Saddle



F-4-132

5) Pull out the Patch Sensor Unit, and Remove the sensor desired to be replaced. (Patch Sensor (Rear) as an example)

- 2 Screws
- 1 Connector



F-4-133

### Actions after Replacement

When replace the Patch Sensor (center), Initialization of Patch sensor (center) is necessary.  
 COPIER > ADJUST > DENS > P-ALPHA Input Patch Sensor alpha value  
 Execute the following in user mode: (Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation).

## Removing the ITB Cleaning Unit

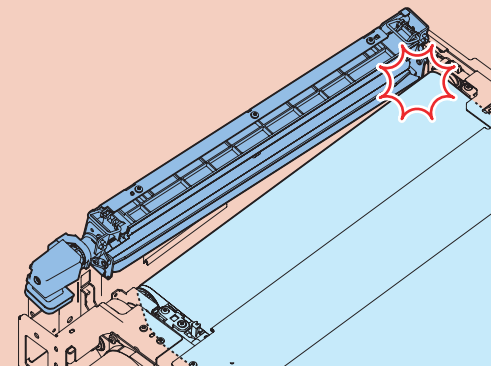
### Preparations

- 1) Open the Front Cover, Right Lower Cover and Right Upper Cover. (Refer to page 4-104)
- 2) Remove the ITB Cover. (Refer to page 4-104)
- 3) Remove the ITB Unit. (Refer to page 4-105)

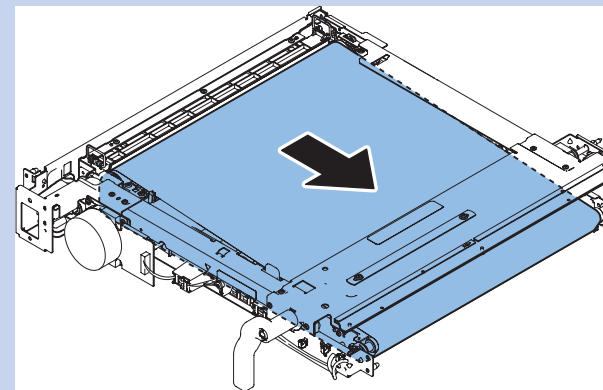
### Procedure

#### CAUTION:

When removing/installing it, do not contact the ITB Cleaning Unit to the ITB.



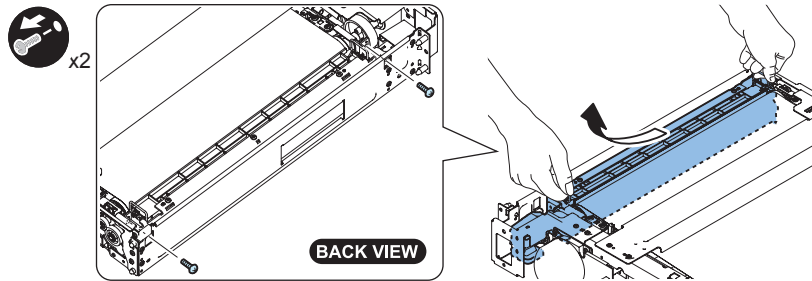
NOTE: Moving the ITB away from the ITB Cleaning Unit will generate a clearance, making work easier.



F-4-134

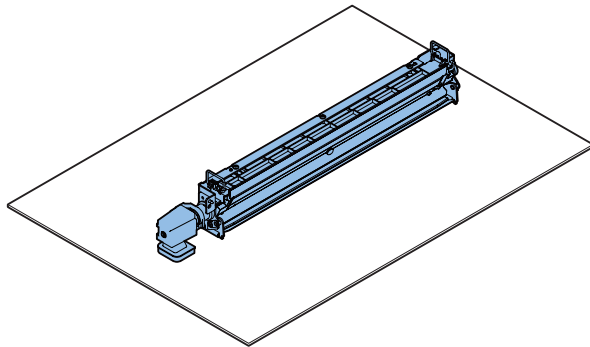
1) Hold the left and right grip and remove the ITB Cleaning Unit in the direction of the arrow.

- 2 screws



F-4-135

2) Place the removed ITB Cleaning Unit on the paper.



F-4-136

### Actions after Replacement

- 1) After installing the ITB Unit, put the machine into a standby state.
- 2) When the machine is in a standby state, execute the following in user mode: (Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation).

## Removing the ITB Cleaning Blade Unit

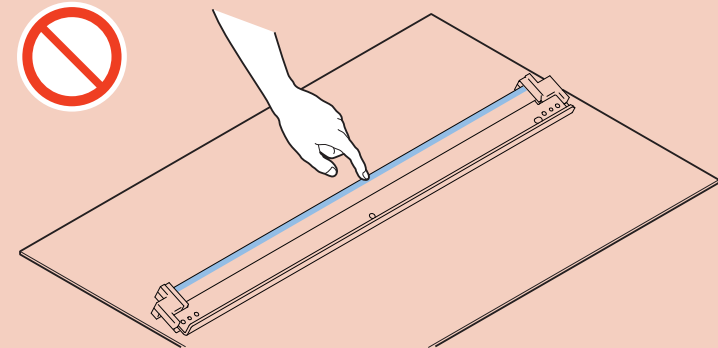
### Preparations

- 1) Open the Front Cover, Right Lower Cover and Right Upper Cover. (Refer to page 4-104)
- 2) Remove the ITB Cover. (Refer to page 4-104)
- 3) Remove the ITB Unit. (Refer to page 4-105)
- 4) Remove the ITB Cleaning Unit. (Refer to page 4-109)

### Procedure

#### CAUTION:

Do not touch the ITB Cleaning Blade.



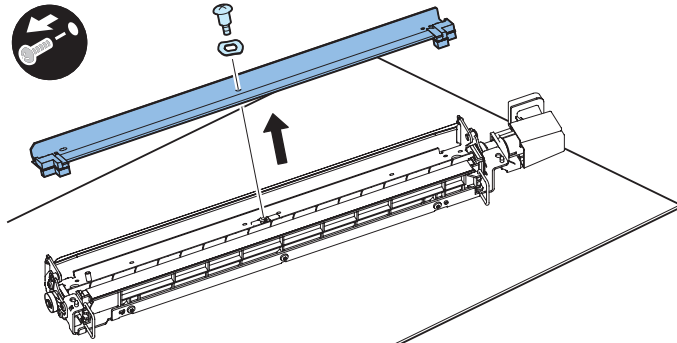
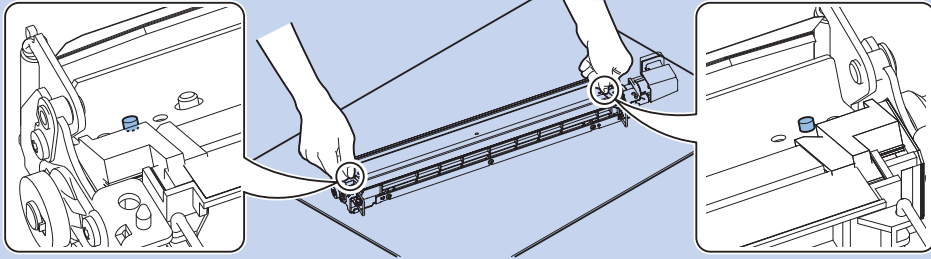


1) Remove the ITB Cleaning Blade Unit and put it on the paper.

- 1 Stepped Screw
- 1 Wave Washer

**NOTE:**

Hold the screw area of 2 screws on the ITB Cleaning Blade Unit so that it is easy to remove.



F-4-137

## Installing the ITB Cleaning Blade Unit

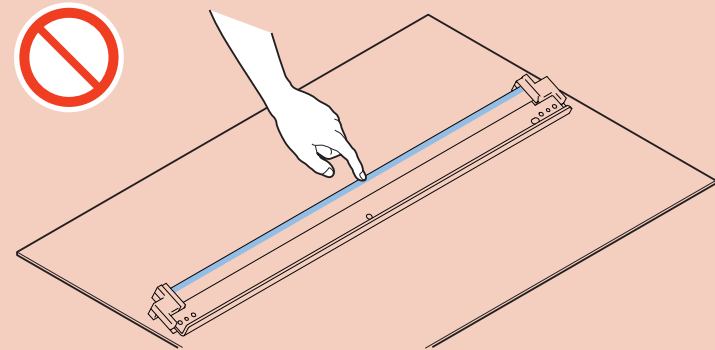
### Preparations

- 1) Open the Front Cover, Right Lower Cover and Right Upper Cover. (Refer to page 4-104)
- 2) Remove the ITB Cover. (Refer to page 4-104)
- 3) Remove the ITB Unit. (Refer to page 4-105)
- 4) Remove the ITB Cleaning Unit. (Refer to page 4-109)
- 5) Removing the ITB Cleaning Blade Unit. (Refer to page 4-110)

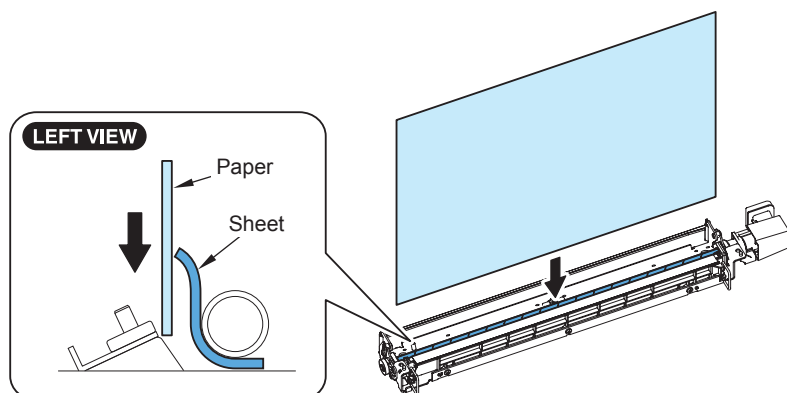
### Procedure

**CAUTION:**

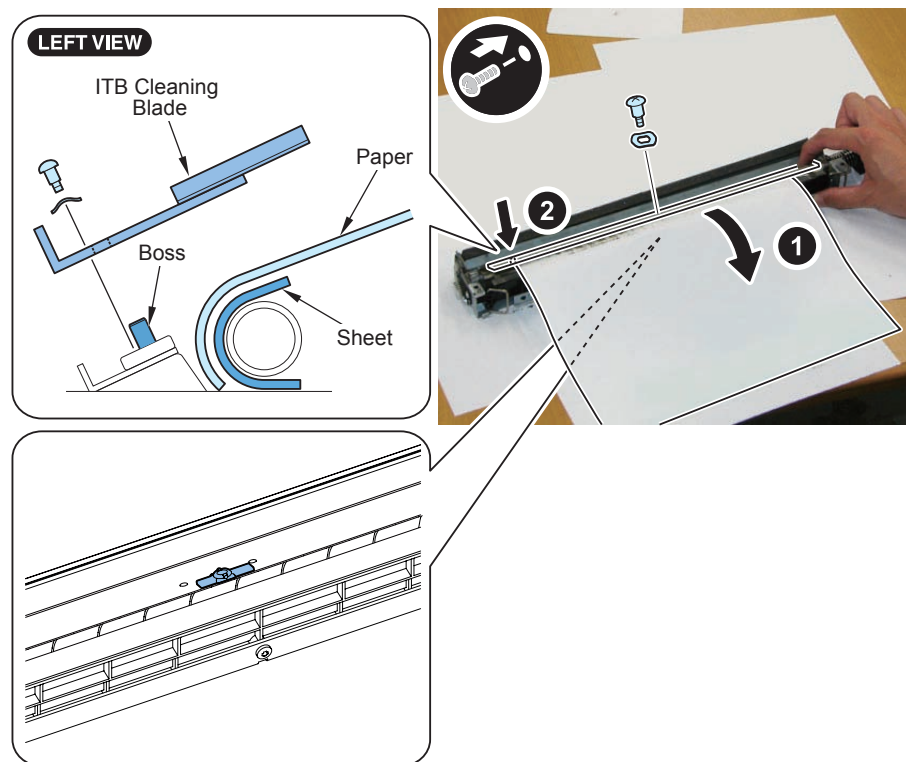
Do not touch the ITB Cleaning Blade.



- 1) Insert an A4 size paper between the Blade Unit installation position of the ITB Cleaning Unit and the sheet.

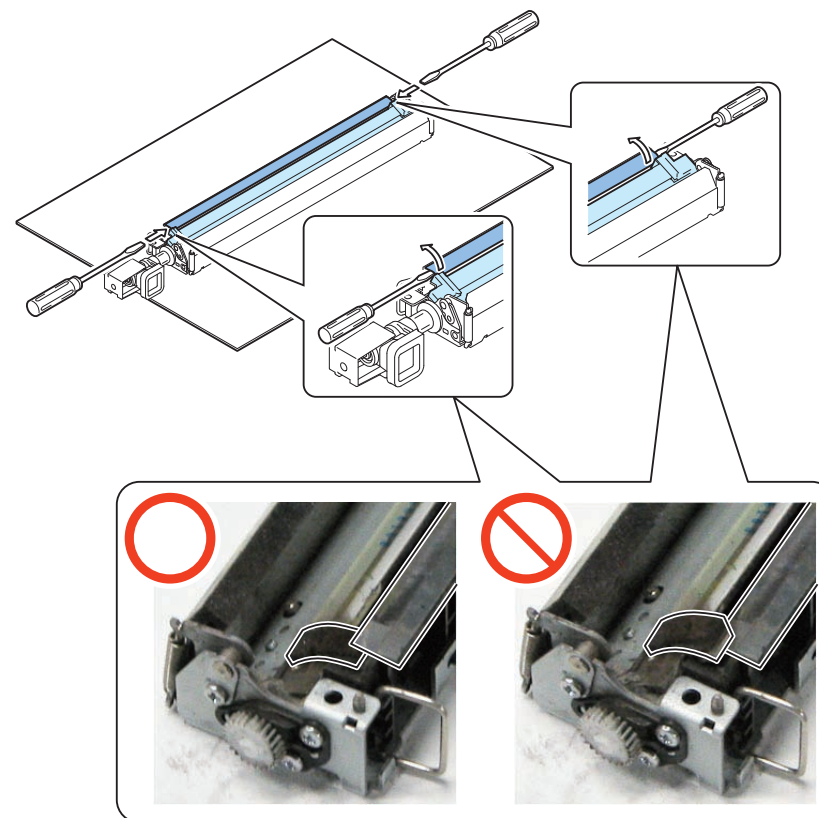


- 2) Check that the Blade Alignment Plate is installed, and then install the ITB Cleaning Blade Unit. At this time, be sure to move the paper inserted in step 1 toward the direction shown in the figure to prevent the sheet from flipping before the installation.



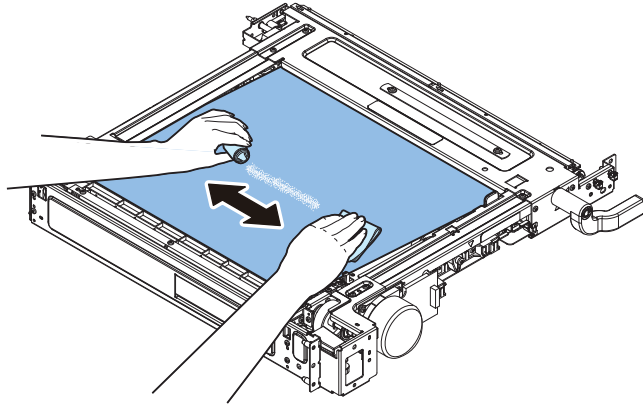
F-4-139

- 3) While paying attention not to bend the Protection Sheet, lift the sheet using a screwdriver. After that, check that the sheet that is being lifted is above the pad.



F-4-140

- 4) After installing the ITB Cleaning Unit to the ITB Unit, apply tosearl on the whole area indicated in the figure below.



F-4-141

**CAUTION:**

When applying tosearl, be careful not to scatter it on inside of the ITB, the Drive Roller and the Secondary Transfer Inner Roller.

If it is scattered on inside of the ITB, the Drive Roller or the Secondary Transfer Inner Roller, wipe it with lint-free paper moistened with alcohol while rotating the motor by hand. At this time, turn the motor counterclockwise and do not turn it clockwise.

**Actions after Replacement**

- 1) After installing the ITB Unit, put the machine into a standby state.
- 2) When the machine is in a standby state, execute the following in user mode: (Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation).

**Removing the ITB****Preparations**

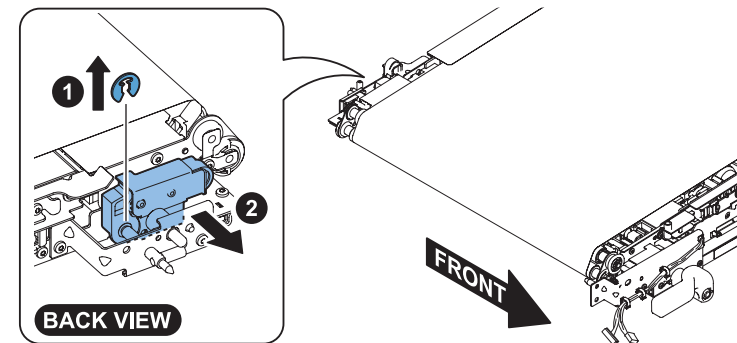
- 1) Open the Front Cover, Right Lower Cover and Right Upper Cover. (Refer to page 4-104)
- 2) Remove the ITB Cover. (Refer to page 4-104)
- 3) Remove the ITB Unit. (Refer to page 4-105)
- 4) Remove the ITB Cleaning Unit. (Refer to page 4-109)

**CAUTION:**

Do not touch the surface of ITB. (If needed, hold the ITB within 10mm from both edge of the belt.)

**Procedure**

- 1) Turn over the ITB Unit.
- 2) Remove the Push Slider.
  - 1 stop ring

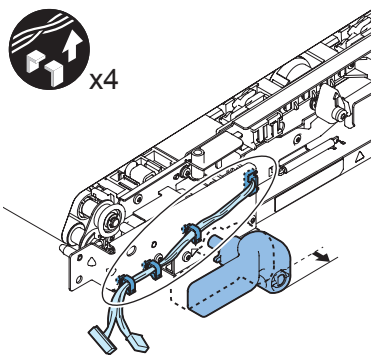


F-4-142

3) Pull the ITB Pressure Release Lever to the front.

4) Remove the harness.

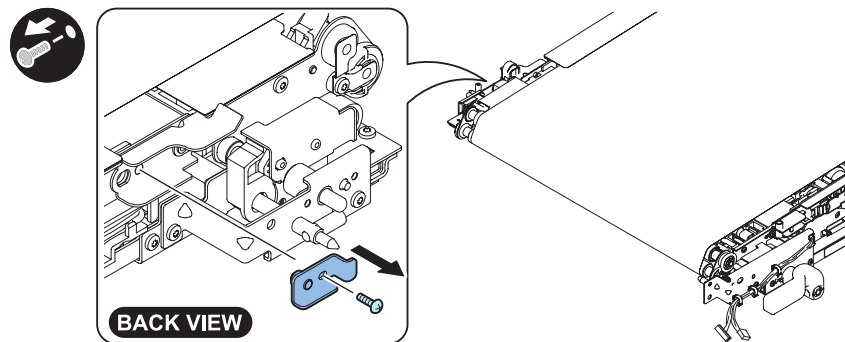
- 3 wire saddles
- 1 edge saddle



F-4-143

5) Remove the rear pin.

- 1 screw



F-4-144

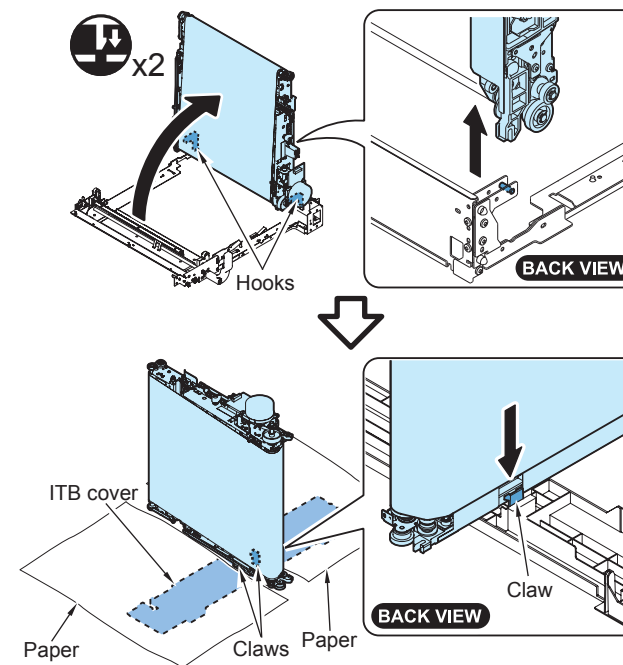
**NOTE:**  
Place the ITB cover upside down on the place where the ITB Unit will be stood.

6) Lift the ITB and stand it on the ITB Cover.

**CAUTION:**

- Make sure that it is removed from the front and rear hooks.
- Make sure to align the claw of the ITB Cover with the cut-off of protection sheet.
- In order to prevent the ITB from being damaged, be sure to place a sheet of paper between the ITB Unit and the ITB Cover as needed.

- 2 claws



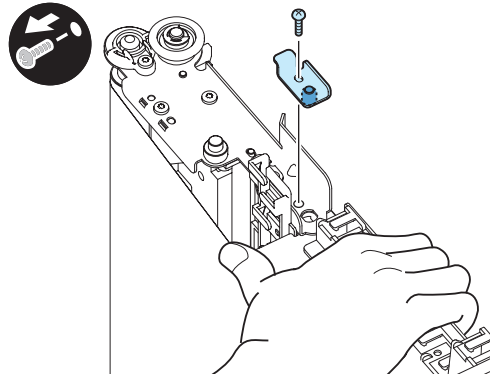
F-4-145

7) Pull out the front pin.

**NOTE:**

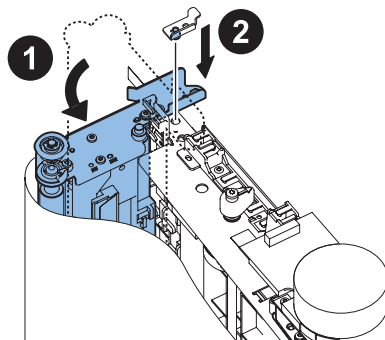
To lock the pressure, pull out the pin while holding the ITB Unit with hand.

- 1 screw



F-4-146

8) Bend the Secondary Transfer Inner Roller Unit by 90 degree and reinstall it with the pin removed in step 7).



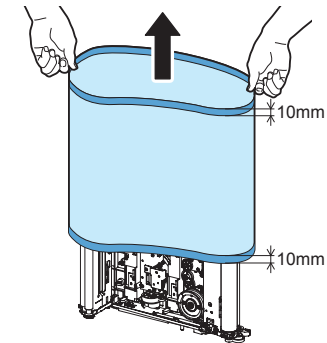
F-4-147

9) Insert papers as shown in the figure to prevent the ITB getting damage by the plate when removing the ITB.



F-4-148

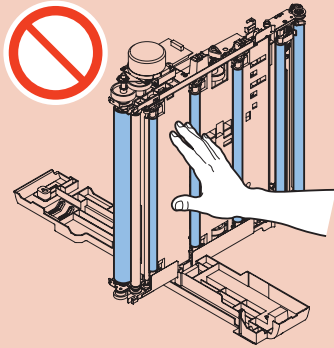
10) Hold the ITB within 10mm from the edge and remove it upward.



F-4-149

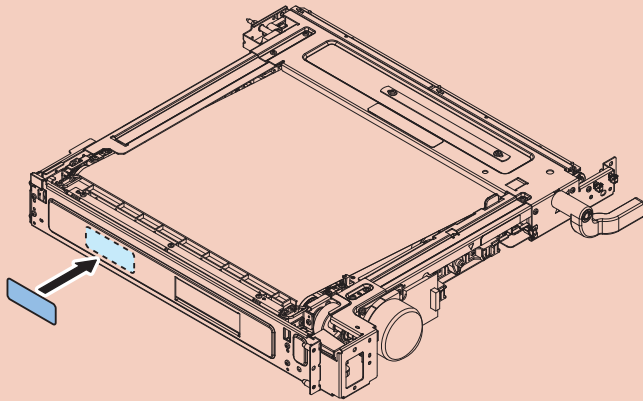
**CAUTION:**

Do not touch the surface of ITB Drive Roller, Secondary Transfer Inner Roller and Primary Transfer Roller as it may cause the image failure.

**CAUTION:**

When replacing ITB with a new one, affix the label to the specific position after the ITB Unit is installed.

When affixing the new label, be sure to remove the old label and replace with the new one on the same position.

**Actions after Replacement**

- 1) Turn ON the power of the host machine.
- 2) When the machine is in standby condition, execute the following in user mode: (Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation).

## Removing the Primary Transfer Roller (Bk)

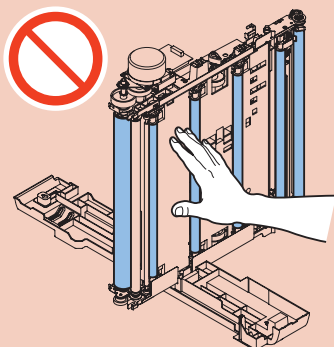
### Preparations

- 1) Open the Front Cover, Right Lower Cover and Right Upper Cover. (Refer to page 4-104)
- 2) Remove the ITB Cover. (Refer to page 4-104)
- 3) Remove the ITB Unit. (Refer to page 4-105)
- 4) Remove the ITB Cleaning Unit. (Refer to page 4-109)
- 5) Remove the ITB. (Refer to page 4-113)

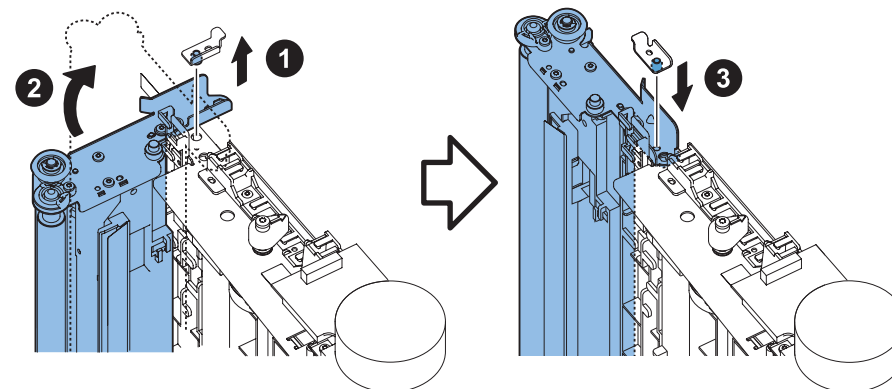
### Procedure

#### CAUTION:

Do not touch the surface of Drive Roller, Secondary Transfer Inner Roller and Primary Transfer Roller as it may cause the image failure.

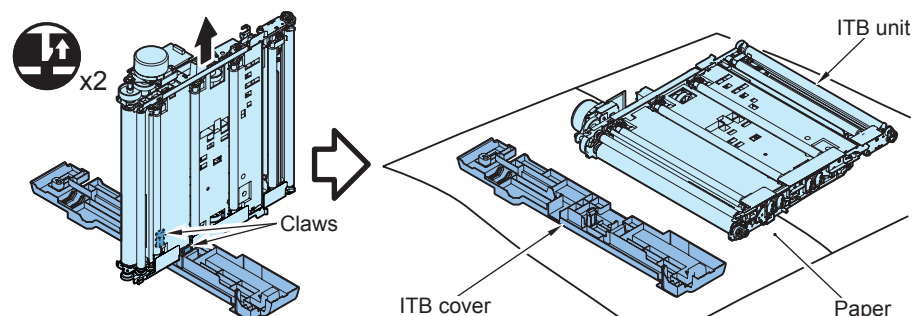


- 1) Pull out the pin, and make the Secondary Transfer Inner Roller Unit straight.
- 2) Install the pin removed in step 1 to the original position.

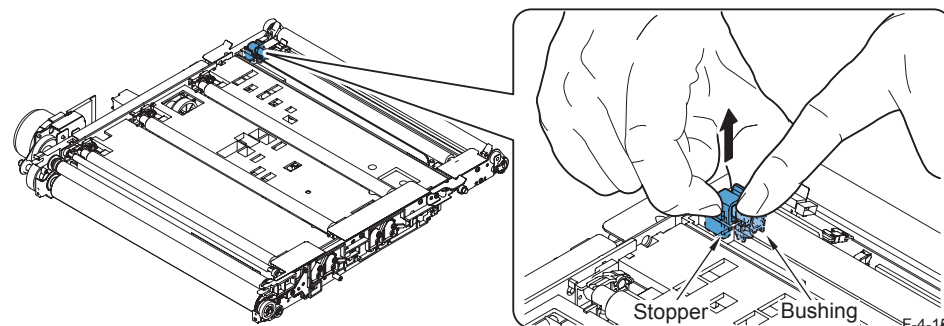


- 3) Remove the ITB Unit from the ITB Cover and place it onto the paper in the position where the roller is placed upside. F-4-150

- 2 claws



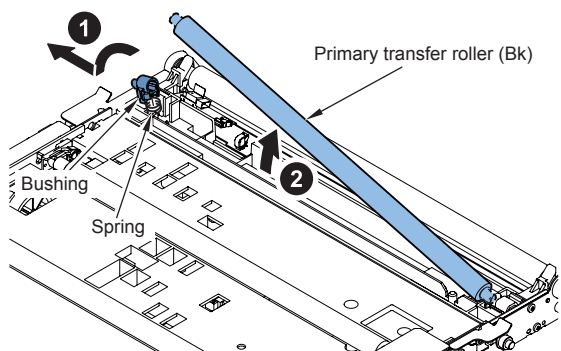
- 4) While holding the front bushing, pinch the claw and remove the Disengagement/Engagement Arm. F-4-151





## 5) Remove the Primary Transfer Roller (Bk).

- 1 Shaft Support (Front)
- 1 spring



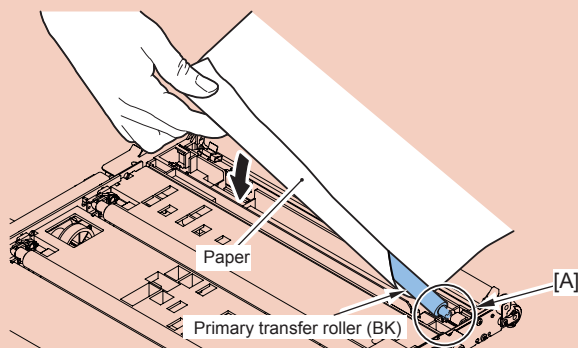
F-4-153

## NOTE:

There is no particular direction for the Primary Transfer Roller installation.

## CAUTION:

- Wind paper on the Primary Transfer Roller (Bk) and without touching the surface of the roller.
- Do not touch the roller surface.
- Grease is applied on the shaft [A] of the Primary Transfer Roller. When touching it, be careful not to accidentally put grease to other parts.





## CAUTION:

When the parts (Shaft support (front), Shaft support (rear), Spring) configuring the Primary Transfer Roller of each color(Bk/C/M/Y) are mixed, be sure to refer to the list in the figure below.

name	shape	feature	Num
Shaft support (front) (Bk,C,Y)		White. Common with BkCY. 1 rib. Shape at the back side is [C].	3
Shaft support (rear) (Bk,C,Y)		Black Common with BkCY. 1 rib. Shape at the back side is [C].	3
Shaft support (front) (M)		White. 2 ribs. Shape at the back side is [B]. M mark on the rear side.	1
Shaft support (rear) (M)		Black 2 ribs. Shape at the back side is [B]. M mark on the rear side.	1

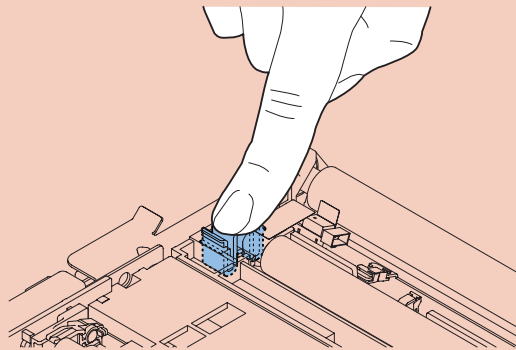
T-4-41

name	shape	feature	Num
Spring (Bk)		Blue marking on the side. Shorter compared to the springs for YMC. The edge of the spring is bent.	2
Spring (C,M,Y)		Blue marking on the side. Longer compared to the springs for Bk.	6

T-4-42

**CAUTION:**

Hold the stopper with finger lightly after installation to check that the claw is surely installed.



## Removing the Primary Transfer Roller (C,M,Y)

### Preparations

- 1) Open the Front Cover, Right Lower Cover and Right Upper Cover.(Refer to page 4-104)
- 2) Remove the ITB Cover.(Refer to page 4-104)
- 3) Remove the ITB Unit.(Refer to page 4-105)
- 4) Remove the ITB Cleaning Unit.(Refer to page 4-109)
- 5) Remove the ITB.(Refer to page 4-113)

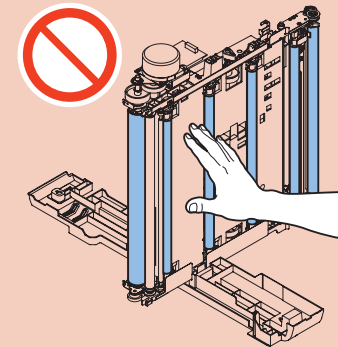
### Procedure

**NOTE:**

This procedure describes the steps for Primary Transfer Roller (C). Go through the same procedure for M and Y.

**CAUTION:**

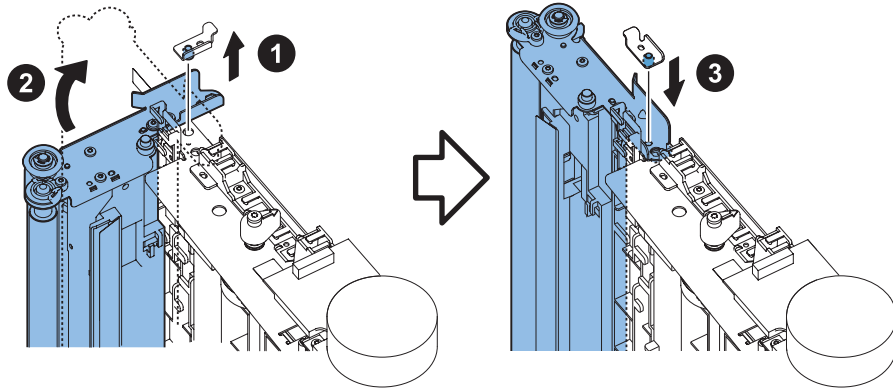
Do not touch the surface of Drive Roller, Secondary Transfer Inner Roller and Primary Transfer Roller as it may cause the image failure.



### Actions after Replacement

- 1) Turn ON the power of the host machine.
- 2) When the machine is in standby condition, execute the "Auto gradation correction".

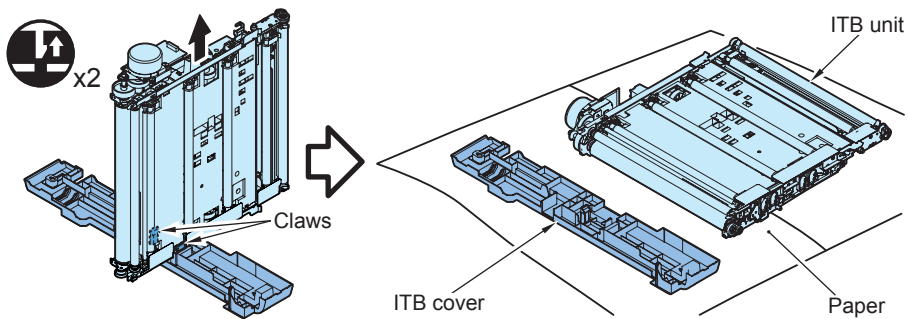
- 1) Pull out the pin, and make the Secondary Transfer Inner Roller Unit straight.
- 2) Install the pin removed in step 1 to the original position



- 3) Remove the ITB Unit from the ITB Cover and place it onto the paper.

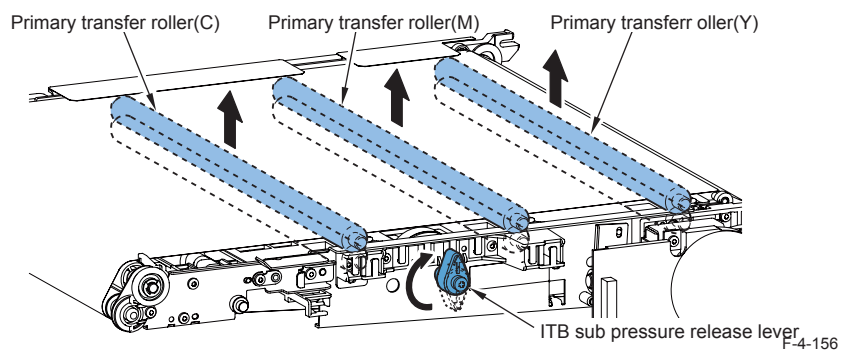
- 2 claws

F-4-154



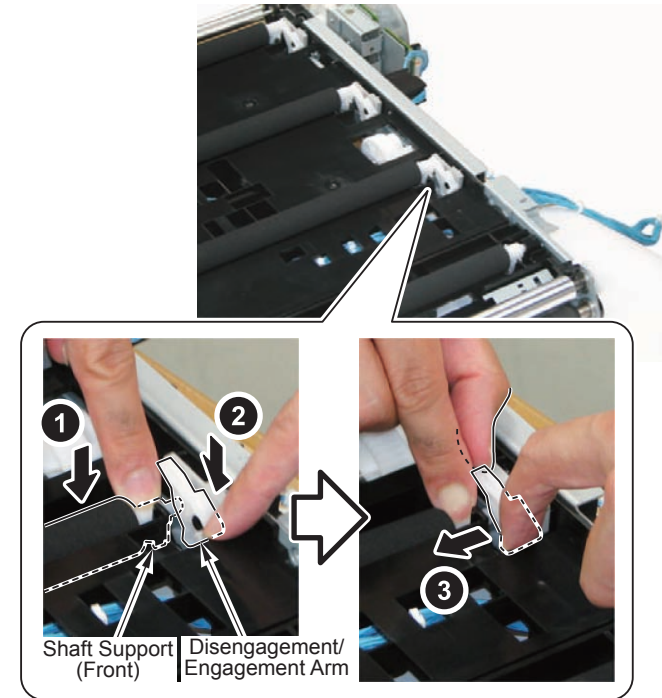
F-4-155

- 4) Turn the ITB Sub Pressure Release Lever to make the Primary Transfer Roller (C,M,Y) lifted.



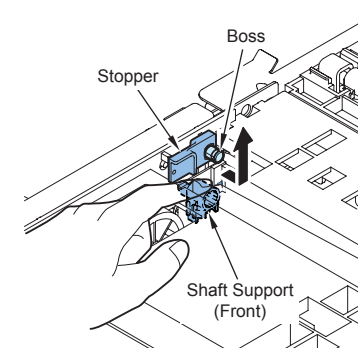
F-4-156

- 5) While holding down the Shaft Support (Front), remove the Engagement/Disengagement Arm from the boss by tilting it.



F-4-157

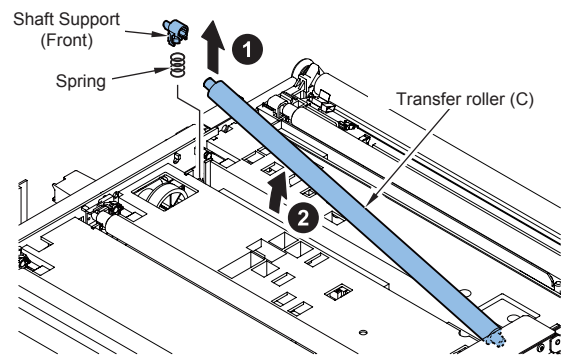
- 6) While holding down the Shaft Support (Front), remove the stopper from the boss.



F-4-158

## 7) Remove the Primary Transfer Roller (C).

- 1 Shaft Support (Front)
- 1 spring

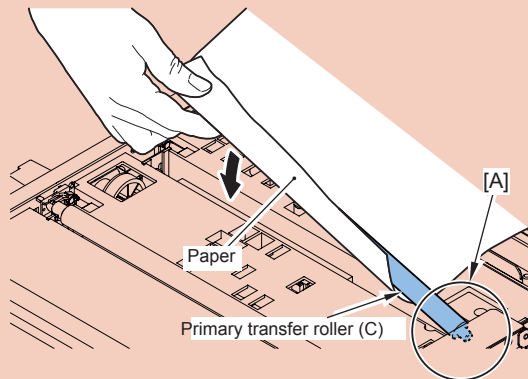


F-4-159

**NOTE:**  
There is no particular direction for the Primary Transfer Roller installation.

**CAUTION:**



- Wind paper on the Primary Transfer Roller (C) and without touching the surface of the roller.
- Do not touch the roller surface.
- Grease is applied on the shaft [A] of the Primary Transfer Roller. When touching it, be careful not to accidentally put grease to other parts.

**CAUTION:**

When the parts (Shaft support (front), Shaft support (rear), Spring) configuring the Primary Transfer Roller of each color(Bk/C/M/Y) are mixed, be sure to refer to the list in the figure below.

name	shape	feature	Num
Shaft support (front) (Bk,C,Y)	 front side back side [C]	White. Common with BkCY. 1 rib. Shape at the back side is [C].	3
Shaft support (rear) (Bk,C,Y)	 front side back side [C]	Black Common with BkCY. 1 rib. Shape at the back side is [C].	3
Shaft support (front) (M)	 front side back side [B]	White. 2 ribs. Shape at the back side is [B]. M mark on the rear side.	1
Shaft support (rear) (M)	 front side back side [B]	Black 2 ribs. Shape at the back side is [B]. M mark on the rear side.	1

T-4-43

name	shape	feature	Num
Spring (Bk)		Blue marking on the side. Shorter compared to the springs for YMC. The edge of the spring is bent.	2
Spring (C,M,Y)		Blue marking on the side. Longer compared to the springs for Bk.	6

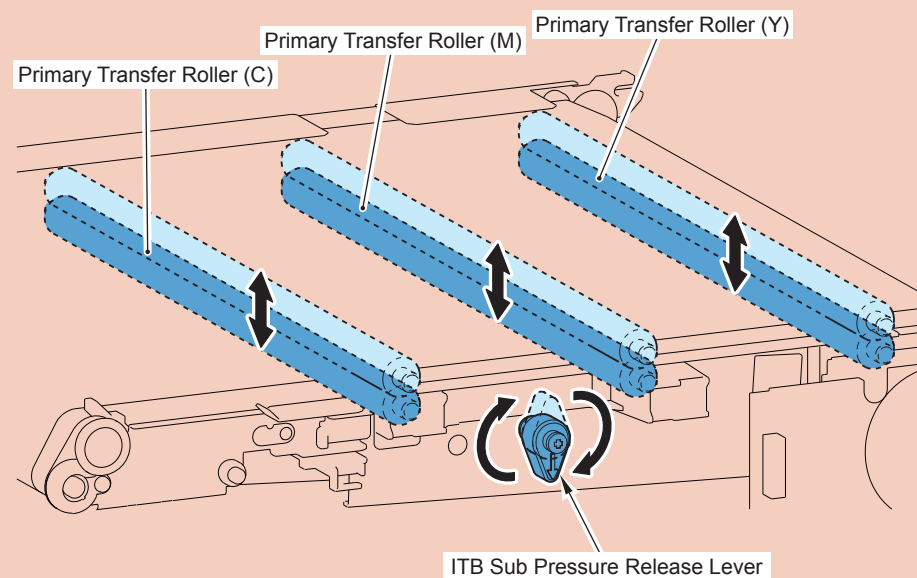
T-4-44

## ■ Actions after Replacement

- 1) Turn ON the power of the host machine.
- 2) When the machine is in standby condition, execute the following in user mode: (Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation).

### CAUTION:

- After installing the Primary Transfer Roller (C,M,Y), turn the ITB Sub Pressure Release Lever to make sure that the Primary Transfer Roller (C,M,Y) moves up and down.
- After checking, be sure to make the Primary Transfer Roller (C,M,Y) lowered position.



## Removing the Secondary Transfer Inner Roller

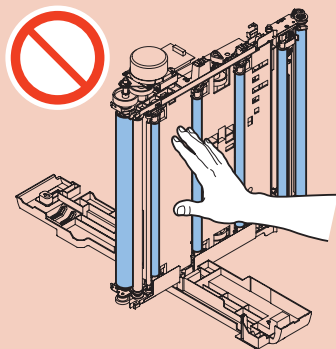
### Preparations

- 1) Open the Front Cover, Right Lower Cover and Right Upper Cover. (Refer to page 4-104)
- 2) Remove the ITB Cover. (Refer to page 4-104)
- 3) Remove the ITB Unit. (Refer to page 4-105)
- 4) Remove the ITB Cleaning Unit. (Refer to page 4-109)
- 5) Remove the ITB. (Refer to page 4-113)

### Procedure

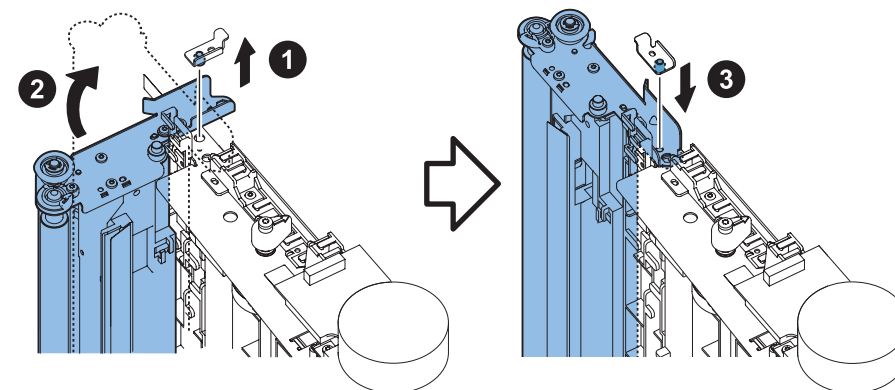
#### CAUTION:

Do not touch the surface of Drive Roller, Secondary Transfer Inner Roller and Primary Transfer Roller as it may cause the image failure.



F-4-160

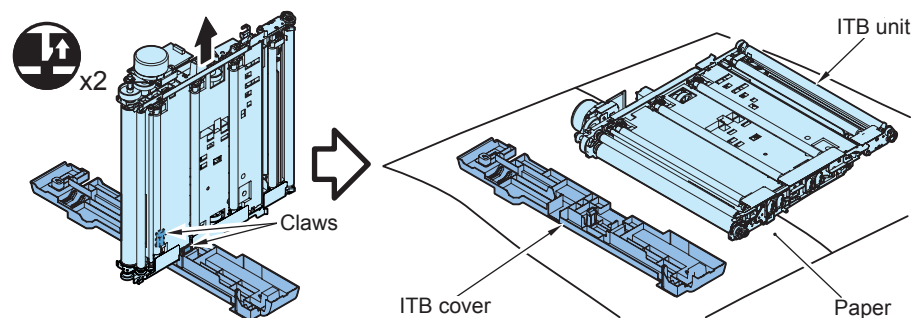
- 1) Pull out the pin, and make the Secondary Transfer Inner Roller Unit straight.
- 2) Install the pin removed in step 1 to the original position



F-4-161

- 3) Remove the ITB Unit from the ITB Cover and place it onto the paper in the position where the roller side faces up.

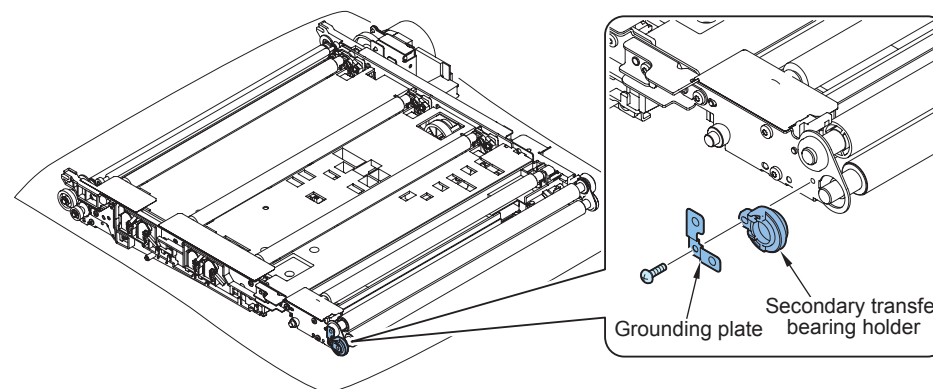
- 2 claws



- 4) Remove the Grounding Plate and the Secondary Transfer Bearing Holder.

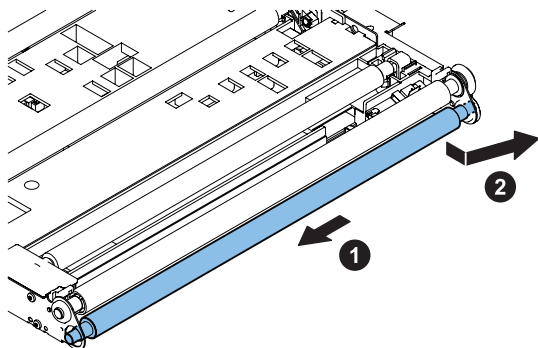
- 1 screw

F-4-162



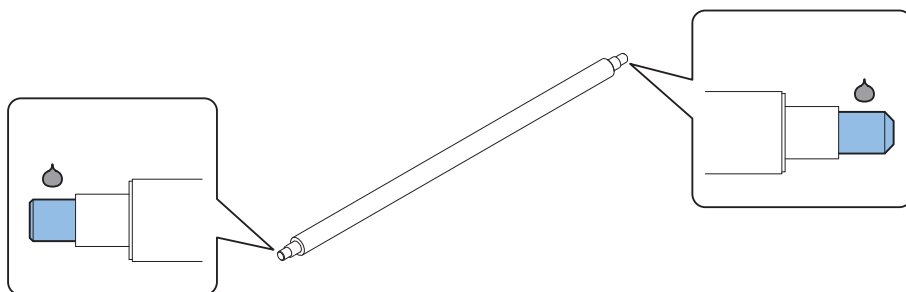


5) Remove the Secondary Transfer Inner Roller.



F-4-164

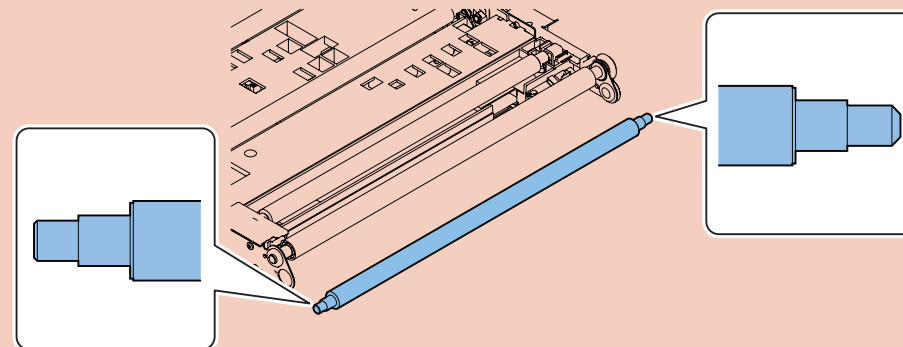
6) Apply 1 rice-grain sized grease (FY9-6006: Super Lube) to the edge of the Secondary Transfer Inner Roller.



F-4-165

#### CAUTION:

Be careful of the installation direction when installing the Secondary Transfer Inner Roller.



#### ■ Actions after Replacement

- 1) Turn ON the power of the host machine.
- 2) When the machine is in standby condition, Execute the following in user mode: (Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation).
- 3) Execute the ITB equilibrium position detection in service mode.

COPIER>FUNCTION>MISC-P>ITB-INIT

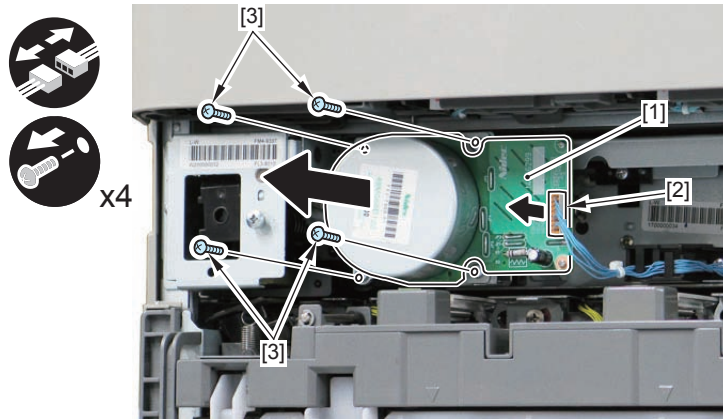
This service mode will take approx. 3 to 6 minutes (for iR-ADV C5255/C5250) or approx. 4 to 8 minutes (for iR-ADV C5240/C5235).

- 4) After executing the above, check that the values of COPIER>DISPLAY>MISC>ITB-POS and ITB-POS2 are within the range from -350 to 350.



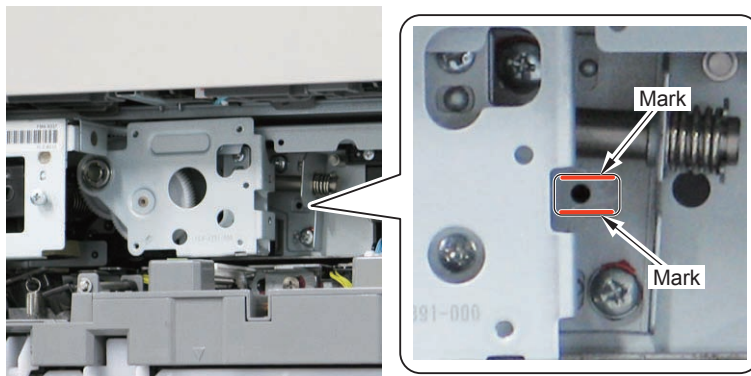
● If not, execute the following adjustment.

- 1) Open the ITB Cover.(Refer to page 4-104)
- 2) Remove the ITB Motor [1].
  - 4 Screws [3]
  - 1 Connector [2]



F-4-166

- 3) Put markings as shown in the figure below to use as the reference when correcting the position.



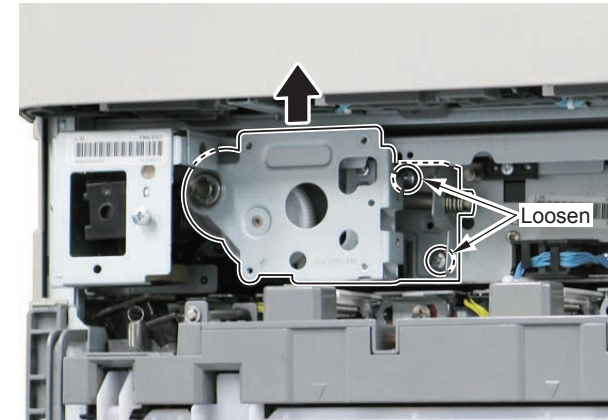
F-4-167

When the values are above 350

Move the ITB Motor Support Plate up.

Moving it by 1 mm changes the values of ITB-POS and ITB-POS2 by approx. 200.

After adjustment, check that the values of COPIER>DISPLAY>MISC>ITB-POS and ITB-POS2 are within the range from -350 to 350.



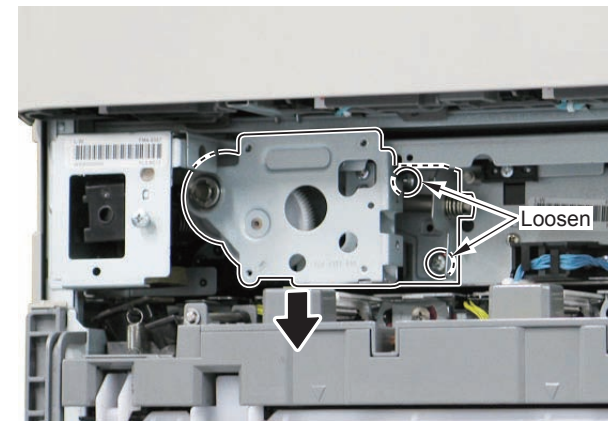
F-4-168

When the values are below -350

Move the ITB Motor Support Plate down.

Moving it by 1 mm changes the values of ITB-POS and ITB-POS2 by approx. 200.

After adjustment, check that the values of COPIER>DISPLAY>MISC>ITB-POS and ITB-POS2 are within the range from -350 to 350.



F-4-169

## Reinstalling the ITB

### Preparations

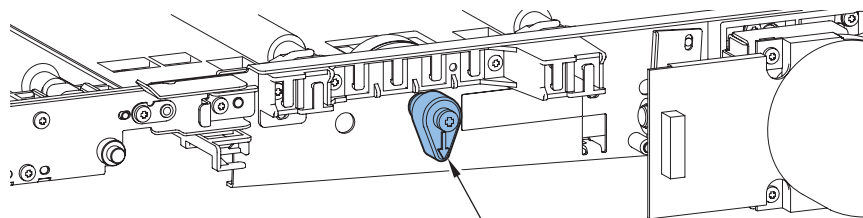
- 1) Open the Front Cover, Right Lower Cover and Right Upper Cover. (Refer to page 4-104)
- 2) Remove the ITB Cover. (Refer to page 4-104)
- 3) Remove the ITB Unit. (Refer to page 4-105)
- 4) Remove the ITB Cleaning Unit. (Refer to page 4-109)
- 5) Remove the ITB. (Refer to page 4-113)

### Procedure

#### CAUTION:

Be careful not to make mistakes when installing since there is no compatibility between the ITB Unit of iR-ADV-C52XX series and that of iR-ADV-C50XX series.

- 1) Check that the ITB Sub Pressure Release Lever is in the below position.

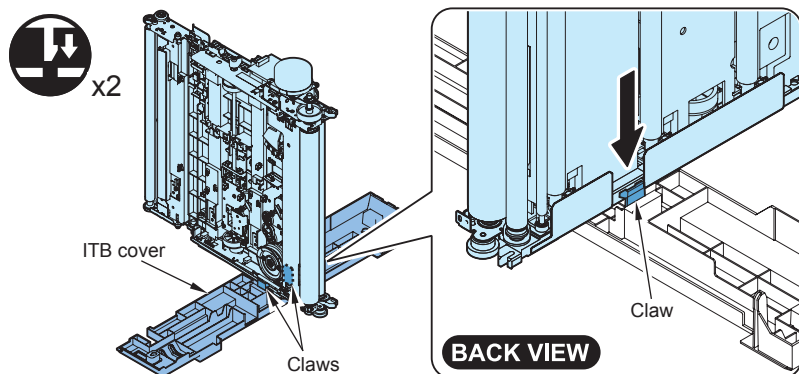


ITB sub pressure release lever

F-4-170

- 2) Stand the ITB Unit on the ITB Cover.

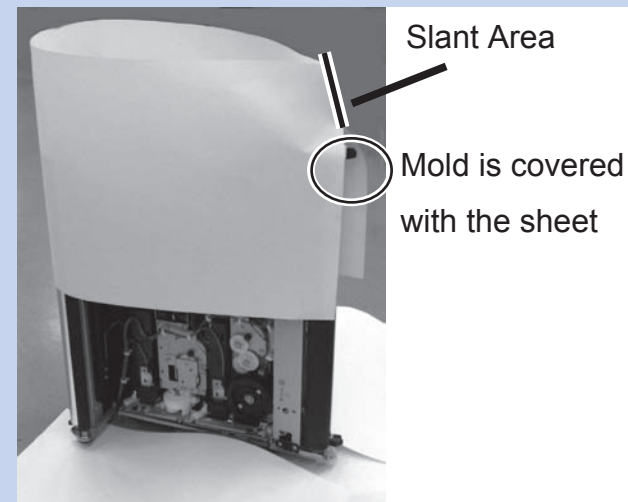
- 2 claws



F-4-171

#### NOTE:

Cover the ITB Installation Auxiliary Sheet included in the package as shown in the figure. (Place the slant area to the ITB Motor side.) The framed area is the area where the ITB is easily damaged, so be sure that the area is covered with the ITB Installation Auxiliary Sheet. After installing the ITB, remove the ITB Installation Auxiliary Sheet.

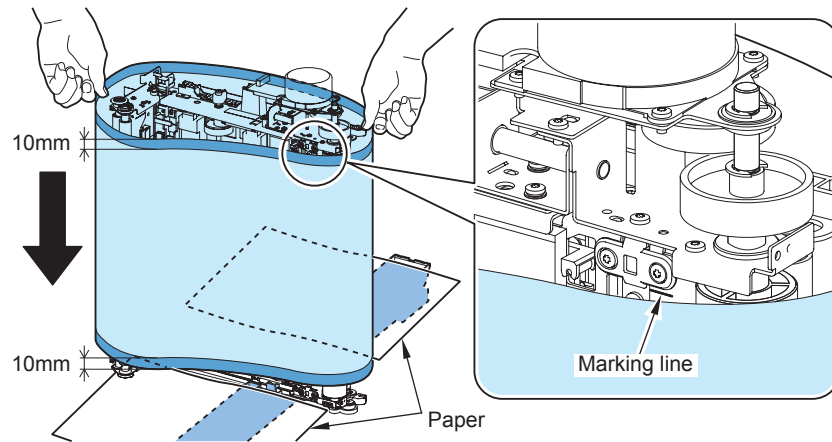


F-4-172

- 3) Place papers on the ITB Cover to prevent bending of the ITB because pressure is applied to a point when installing the ITB.
- 4) Hold within 10mm from the edge of the ITB and temporarily place the ITB using the marking line as a guide.

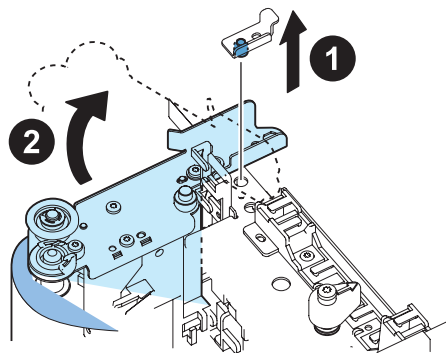
**CAUTION:**

Be careful not to bend ITB when bringing it down fully.



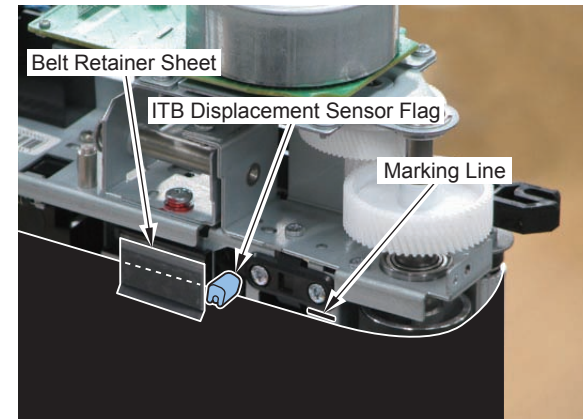
F-4-173

- 5) Remove the pin, and move the Secondary Transfer Inner Roller Unit toward the 2 direction to take up the slack of the belt. (To stretch the ITB fro approx. 90%.)



F-4-174

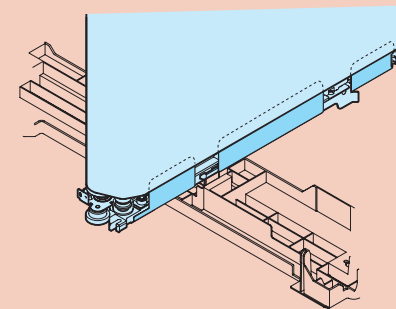
- 6) Put the ITB under the Belt Retainer Sheet (on the left side of the figure), bring the ITB Displacement Sensor Flag into contact with the ITB edge (at the center of the figure), and then, align the marking line (on the right side of the figure) with the position of the ITB.



F-4-175

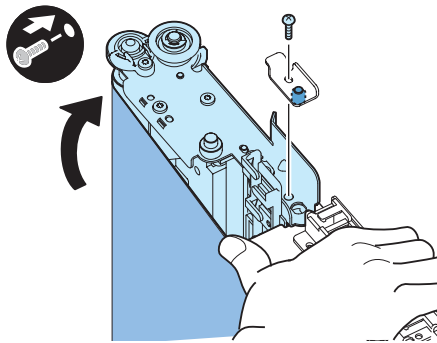
**CAUTION:**

When installing the ITB, be sure that the Sheet on the ITB Unit is inside of the ITB.



7) Return the Secondary Transfer Inner Roller Unit to straight, and then install the pin removed.

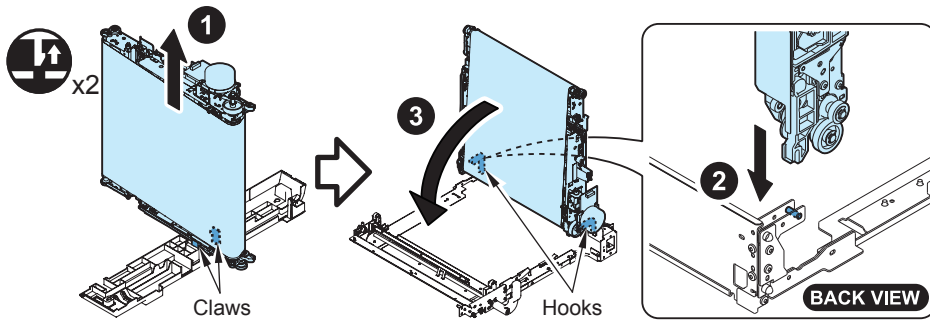
- 1 screw



F-4-176

8) Remove the ITB Unit from the ITB Cover, hook it on the 2 hooks, and then install it to the plate.

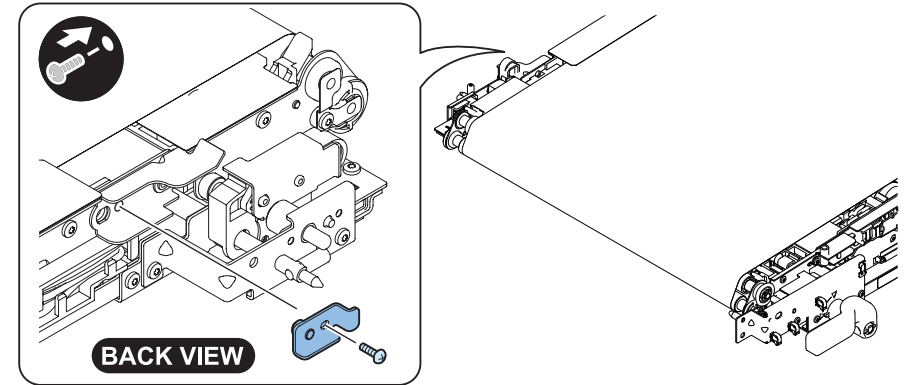
- 2 claws



F-4-177

9) Install the rear pin.

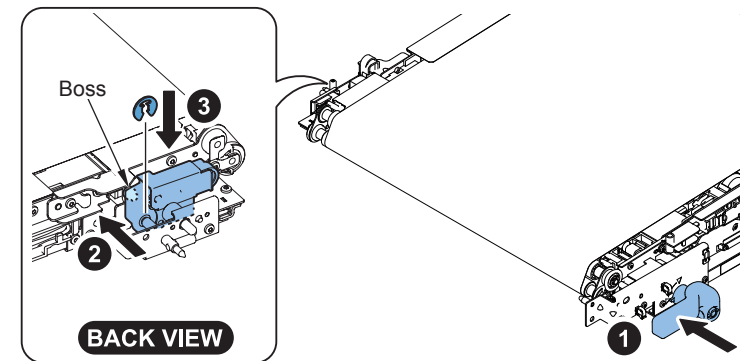
- 1 screw



F-4-178

10) Push the ITB Pressure Release Lever and install the Bush Slider to the boss.

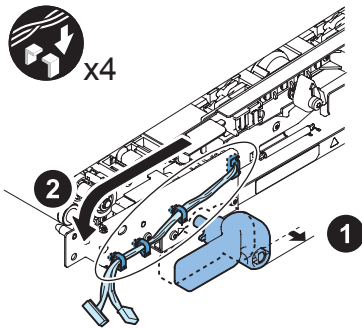
- 1 stop ring



F-4-179

11) Pull the ITB Pressure Release Lever and Install the harness.

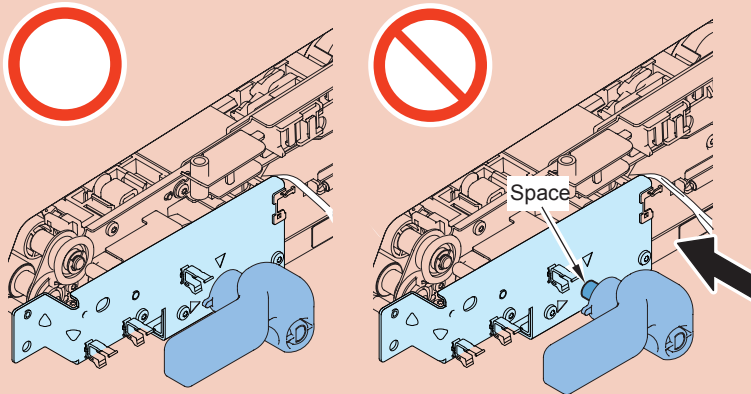
- 1 edge saddle
- 3 wire saddles



CAUTION:

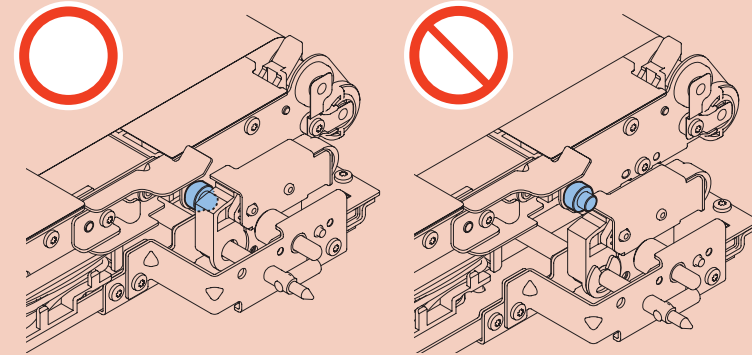
F-4-180

Make sure that there is no gap between the ITB Pressure Release Lever and the Plate.



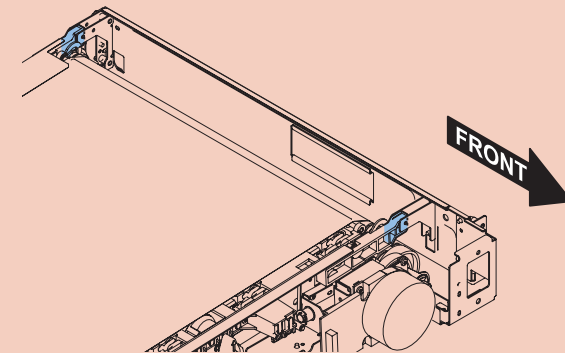
CAUTION:

Make sure that the shaft is fixed to the fixing member.



CAUTION:

Make sure that the hook is fixed to the plate.



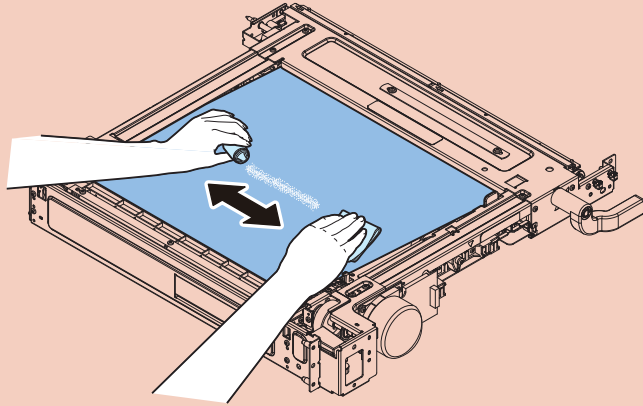
12) Turn over the ITB Unit.

13) Install the ITB Cleaning Unit.



**CAUTION:**

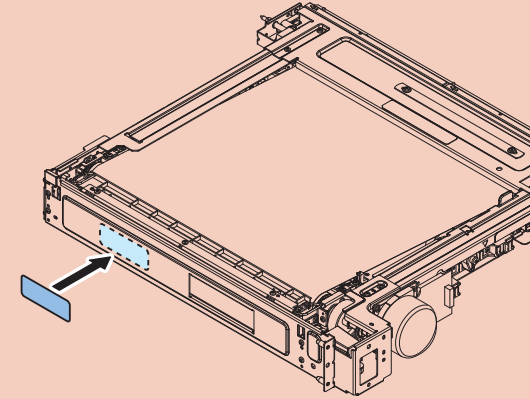
- When replacing ITB with a new one, after installing the ITB Cleaning Unit to the ITB Unit, apply tospearl on the whole area indicated in the figure below.



- When applying tospearl, be careful not to scatter it on inside of the ITB, the Drive Roller and the Secondary Transfer Inner Roller.
- If it is scattered on inside of the ITB, the Drive Roller or the Secondary Transfer Inner Roller, wipe it with lint-free paper moistened with alcohol while rotating the motor by hand. At this time, turn the motor counterclockwise and do not turn it clockwise.

**CAUTION:**

- When replacing ITB with a new one, affix the label to the specific position near the Waste Toner Ejection Mouth of the ITB Cleaning Unit after the ITB Unit is installed.
- When affixing the new label, be sure to remove the old label and replace with the new one on the same position.



### ■ Actions after Replacement

- 1) Turn ON the power of the host machine.
- 2) When the machine is in standby condition, execute the following in user mode: (Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation).

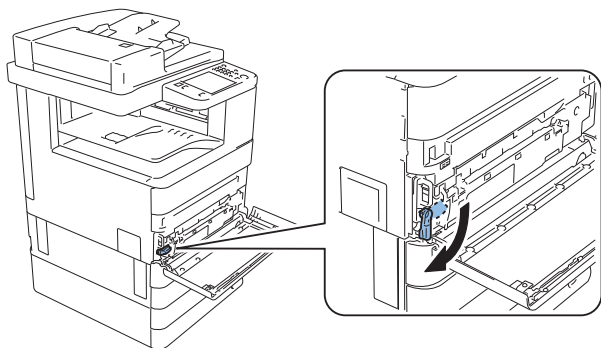
## Removing the Recycle Toner Bottle

### Preparations

1) Open the Front Cover.

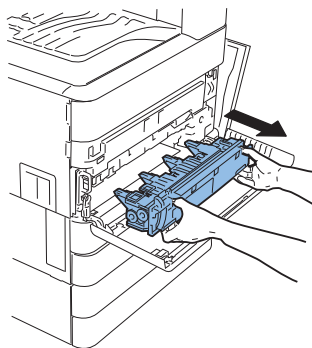
### Procedure

1) Release the Recycle Toner Bottle Lock Lever.



F-4-181

2) Remove the Recycle Toner Bottle.



F-4-182

#### CAUTION:

Do not tilt the Recycle Toner Bottle.  
(Because it may cause misdetection on the Full Detection Sensor.)

## Pulling Out the Process Unit

### Preparations

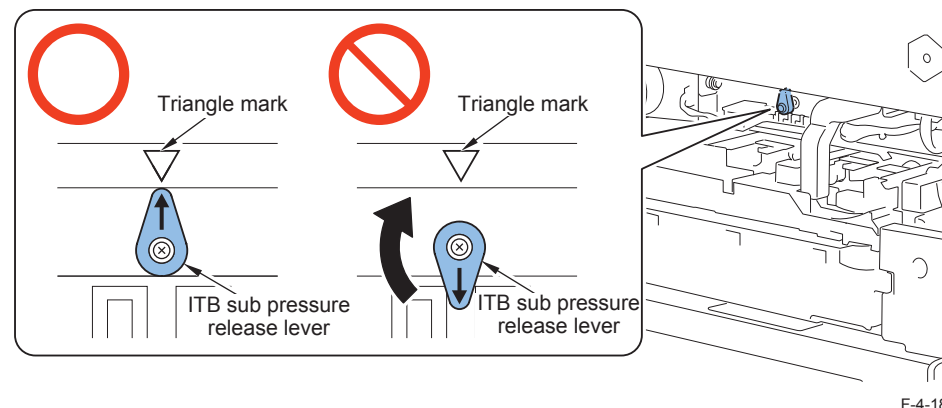
1) Open the Front Cover, Right Lower Cover and Right Upper Cover. (Refer to page 4-104)

2) Remove the ITB Cover. (Refer to page 4-104)

### Procedure

1) Make sure that the arrow of ITB Sub Pressure Release Lever is aligned with the triangle mark of the plate.

(If it is not aligned, align the arrow of lever with the triangle mark of plate.)

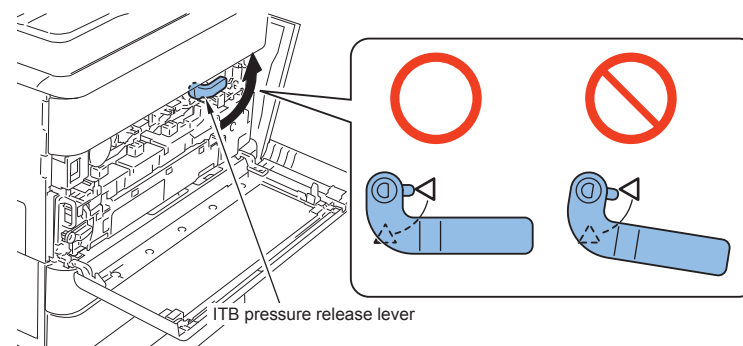


F-4-183

2) Turn the ITB Pressure Release Lever in the right direction and release the pressure.

#### CAUTION:

When releasing the pressure of ITB Pressure Release Lever, make sure that the protrusion of grip is aligned with the triangle mark of plate.

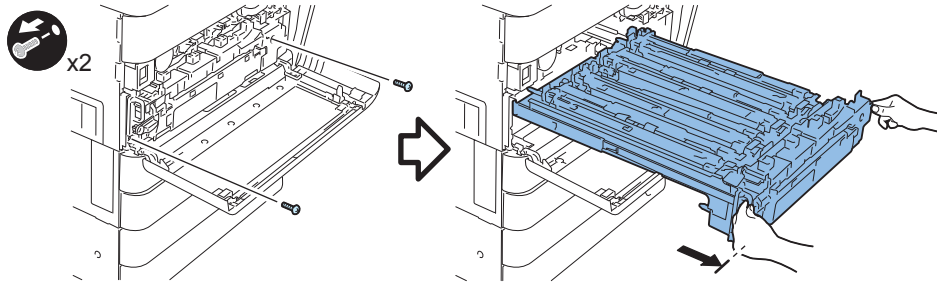


F-4-184



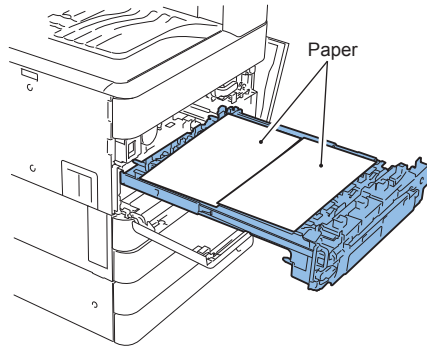
3) Pull out the Process Unit until it stops.

- 2 screws



F-4-185

4) Place the paper onto the Process Unit to protect the Drum Unit from the light.



F-4-186

## Removing the Process Unit

### Preparations

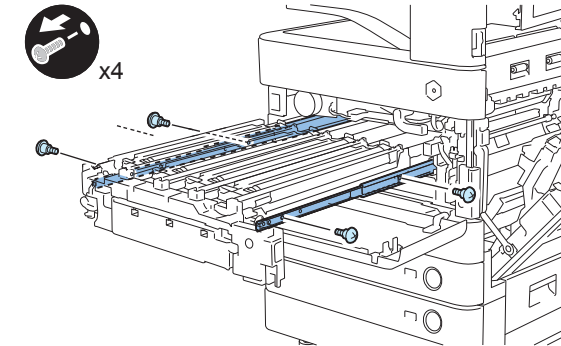
- 1) Open the Front Cover, Right Lower Cover and Right Upper Cover. (Refer to page 4-104)
- 2) Remove the ITB Cover. (Refer to page 4-104)
- 3) Pull out the Process Unit. (Refer to page 4-131)

### Procedure

#### CAUTION:

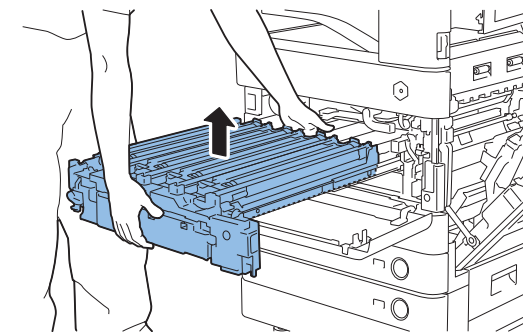
When installing/removing the Process Unit, do not remove the Recycle Toner Bottle.

- 1) Remove the 4 stepped screws fixed on the right and left rails.



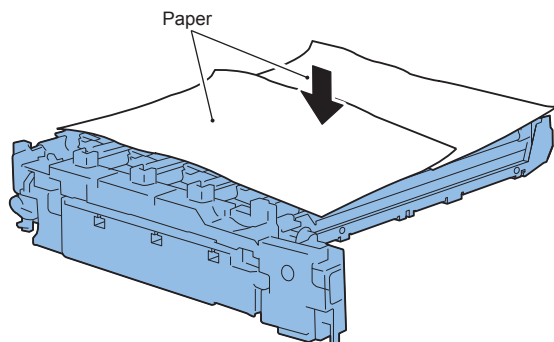
F-4-187

- 2) Hold the front and rear of Process Unit and remove it flatly.



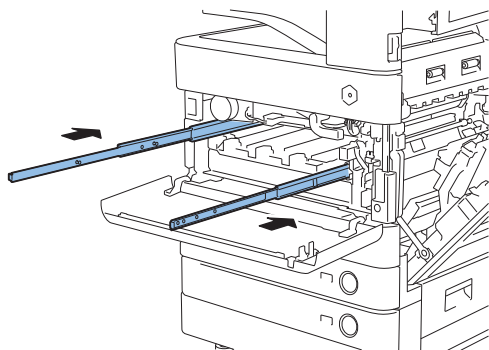
F-4-188

3) Place the paper onto the Process Unit to protect the Drum Unit from the light.



F-4-189

4) Take the 2 rails of Process Unit back to the host machine.



F-4-190

**NOTE:**

When installing the Process Unit, if the Dustproof Shutter is opened and blocks to install the unit, turn ON and then OFF the power. Be sure to check that the Dustproof Shutter is closed before installation.

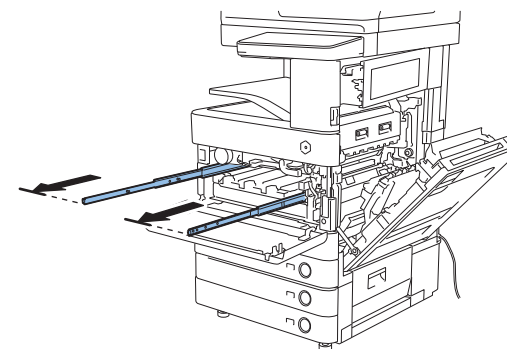
## Reinstalling the Process Unit

### Preparations

- 1) Open the Front Cover, Right Lower Cover and Right Upper Cover. (Refer to page 4-104)
- 2) Remove the ITB Cover. (Refer to page 4-104)
- 3) Pull out the Process Unit. (Refer to page 4-131)
- 4) Remove the Process Unit. (Refer to page 4-132)

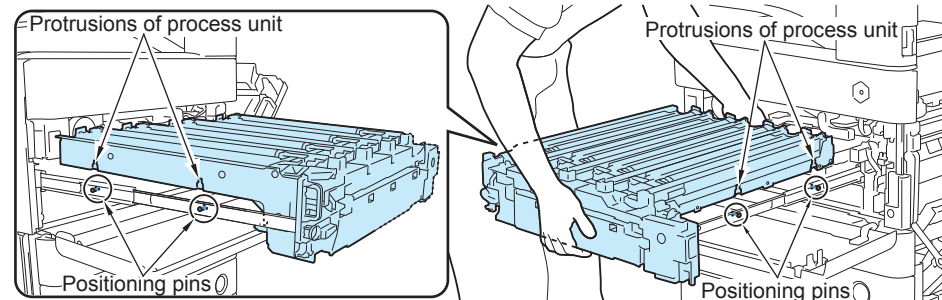
### Procedure

- 1) Pull out the 2 rails of Process Unit from the host machine.



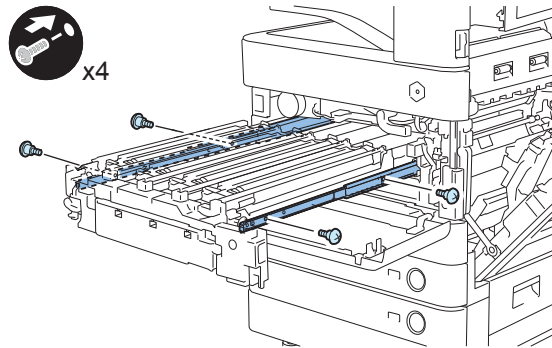
F-4-191

- 2) Align the 4 protrusions of Process Unit with the positioning pin of rail and install it.



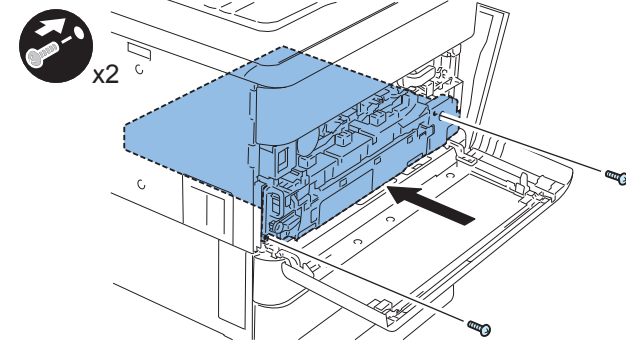
F-4-192

3) Install the right and left rails and the Process Unit with 4 stepped screws.



F-4-193

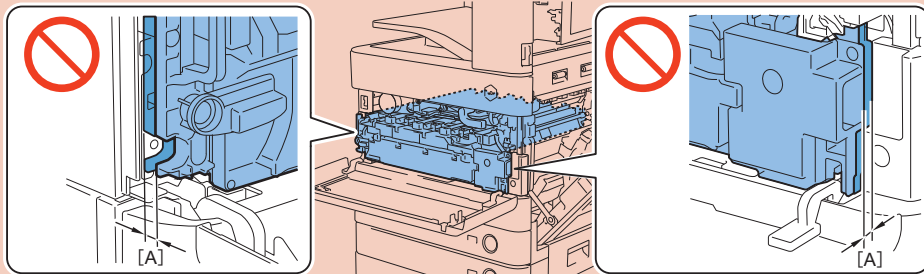
4) Slowly take the Process Unit back to the host machine and fix it with 2 screws.



F-4-195

**CAUTION:**

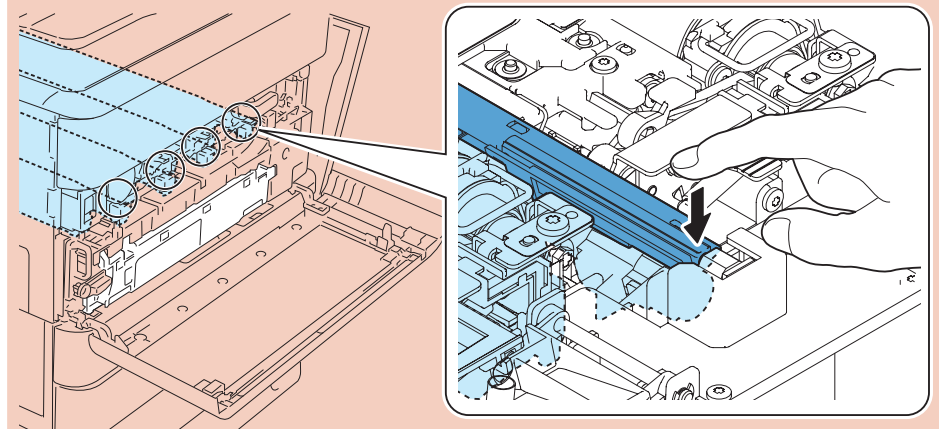
Make sure that there is no gap [A] between the host machine and the Process Unit and fix it with the screw.



F-4-194

**CAUTION:**

After closing the Process Unit, hold the edge of each Drum Unit from above as described below. If the Drum Unit is not secured, it may cause the color displacement.

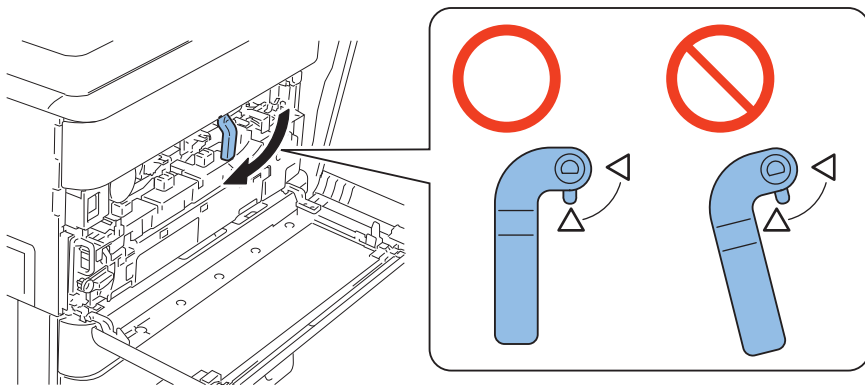


F-4-196

5) Turn the ITB Pressure Release Lever in the left direction to apply the pressure.

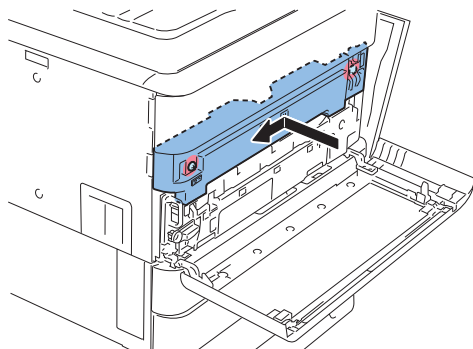
**CAUTION:**

When applying the pressure of ITB Pressure Release Lever, make sure that the protrusion of grip is aligned with the lower triangle mark of plate.



F-4-197

6) Install the ITB Cover and tighten the 2 loosened screws.



F-4-198

7) Close the Front Cover.

8) Close the Right Upper Cover.

9) Close the Right Lower Cover.

## Removing the Drum Unit

### Preparations

- 1) Open the Front Cover, Right Lower Cover and Right Upper Cover. (Refer to page 4-104)
- 2) Remove the ITB Cover. (Refer to page 4-104)
- 3) Pull out the Process Unit. (Refer to page 4-131)

### Procedure

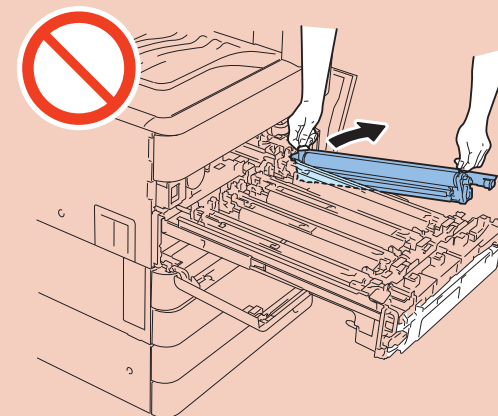
**CAUTION:**

Do not touch the drum surface.

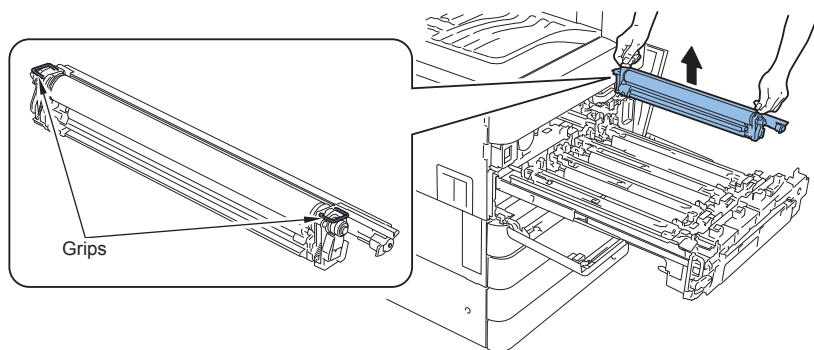
- 1) Hold the grip with both hands, and pull it out vertically.

**CAUTION:**

When removing the Drum Unit, do not pull it out from one handle.



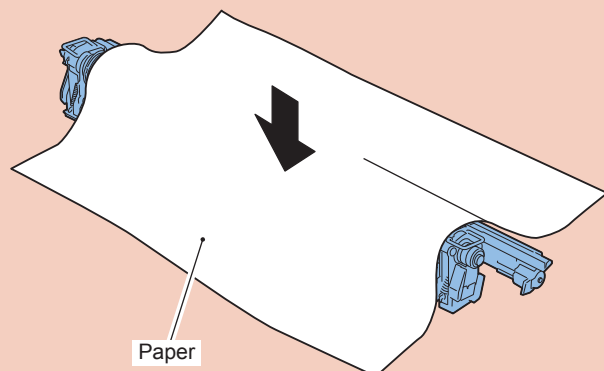
F-4-199



F-4-200

**CAUTION:**

Be sure to cover the removed Drum Unit with paper, etc. to block light.



F-4-201

## Reinstalling the Drum Unit

### Preparations

- 1) Open the Front Cover, Right Lower Cover and Right Upper Cover. (Refer to page 4-104)
- 2) Remove the ITB Cover. (Refer to page 4-104)
- 3) Pull out the Process Unit. (Refer to page 4-131)
- 4) Remove the Drum Unit. (Refer to page 4-135)

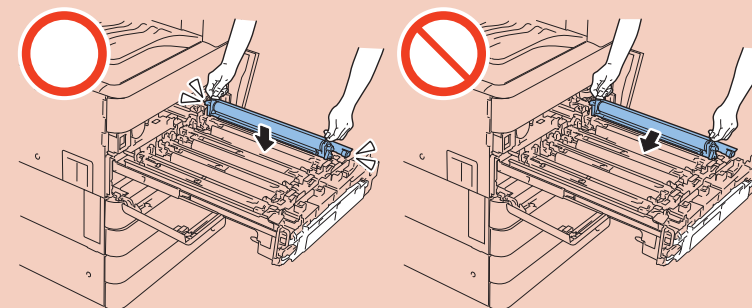
### Procedure

**CAUTION:**

- Do not touch the drum surface.
- Be sure to refer to the following NOTE when installing the Bk Drum.

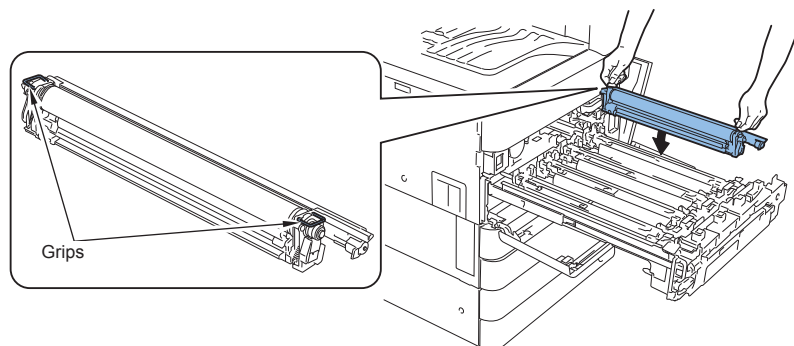
**CAUTION:**

When installing it at an angle, the shutter may be damaged. Thus, make sure to install it from directly above.



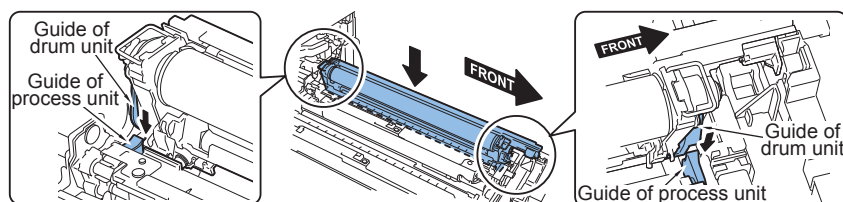
F-4-202

1) Hold the grip and install it from the top vertically.



F-4-203

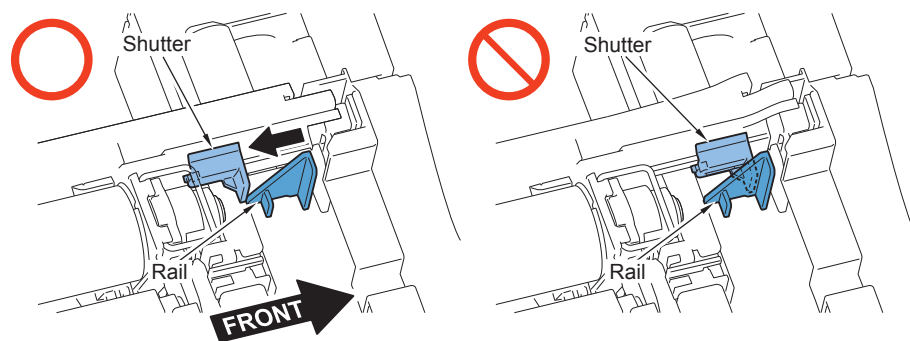
2) Align the guide of Process Unit with the guide of Drum Unit and install the Drum Unit.



F-4-204

#### CAUTION:

Be sure to check that the shutter slides along the rail and is located in the correct position as shown in the figure below to prevent the rail from being damaged.

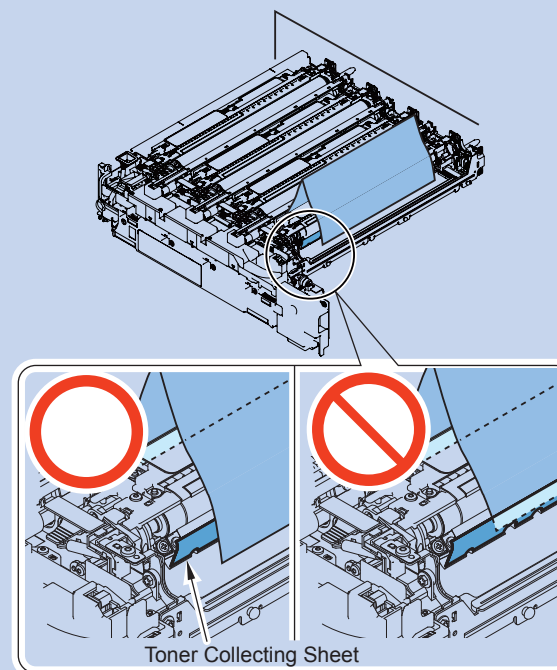


F-4-205

#### NOTE:

When installing the Drum Unit (Bk) to the host machine, perform the following procedures.

2-1) Place the half fold paper included in the packaging box on the Developing Assembly (Bk). Be sure to set the edge of half fold paper over the Toner Collecting Sheet of the Developing Assembly.

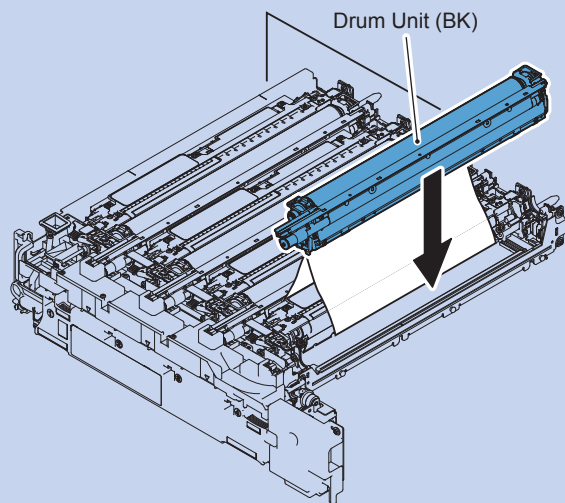


F-4-206



**NOTE:**

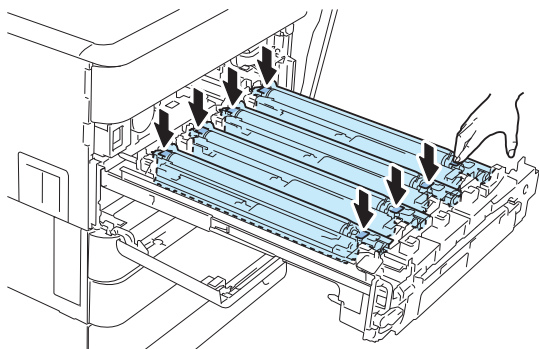
2-2) While the paper is set, install the Drum Unit (Bk) to the host machine.



F-4-207

2-3) Hold the folded portion and pull this paper out to the direction of arrow.

3) Hold the grip part (8 places) with finger lightly and make sure that the Drum Unit is securely installed.



F-4-208

## Removing the Developing Assembly

### Preparations

- 1) Open the Front Cover, Right Lower Cover and Right Upper Cover. (Refer to page 4-104)
- 2) Remove the ITB Cover. (Refer to page 4-104)
- 3) Pull out the Process Unit. (Refer to page 4-131)
- 4) Remove the Drum Unit. (Refer to page 4-135)
- 5) Remove the Recycle Toner Bottle. (Refer to page 4-131)

### Procedure

**NOTE:**

This procedure describes the removal of Bk Developing Assembly. Go through the same procedure for removing the Y,M,C Developing Assembly.

**CAUTION:**

When installing/removing it, do not touch the Developing Sleeve.

**CAUTION:**

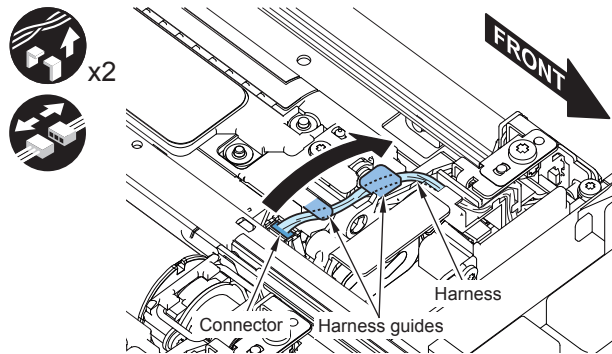
When installing/removing the Developing Assembly, be sure to remove the Recycle Toner Bottle.

### Actions after Replacement

- 1) Turn ON the power of the host machine.
- 2) When the machine is in standby condition, execute the following in user mode: (Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation).

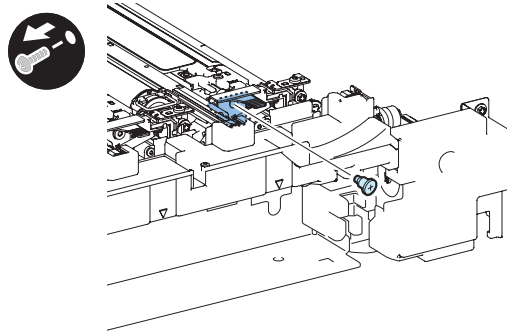


1) Remove the harness from the 2 harness guides and remove the connector.



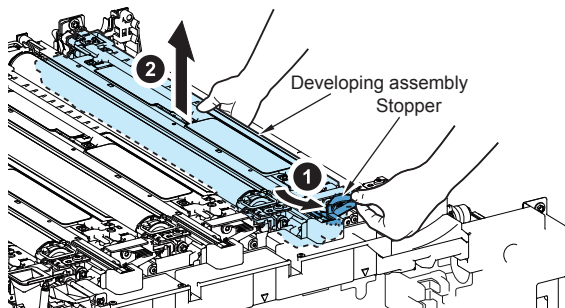
F-4-209

2) Remove the stepped screw.



F-4-210

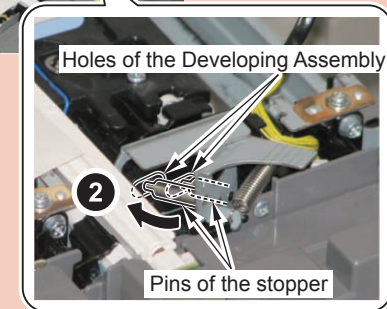
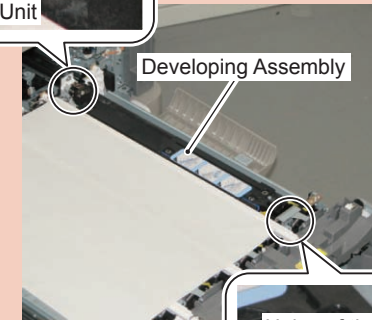
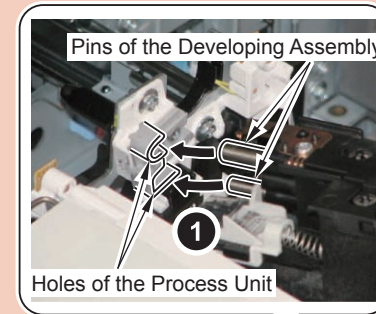
3) While pulling out the stopper, remove the Developing Assembly upward.



F-4-211

CAUTION:

Fit the 2 pins of the Developing Assembly into the holes of the Process Unit, and insert the 2 pins of the stopper in the holes of the Developing Assembly when assembling.



F-4-212

## ■ Actions after Replacement

Initialization of Developing Assembly (toner ratio and patch) is necessary and it differs depending on the color.

If 4 colors are replaced simultaneously, execute INISET-4.

COPIER > FUNCTION > INSTALL > INISET-Y Initialization of Y Developing Assembly (toner ratio and patch)

COPIER > FUNCTION > INSTALL > INISET-M Initialization of M Developing Assembly (toner ratio and patch)

COPIER > FUNCTION > INSTALL > INISET-C Initialization of C Developing Assembly (toner ratio and patch)

COPIER > FUNCTION > INSTALL > INISET-K Initialization of Bk Developing Assembly (toner ratio and patch)

COPIER > FUNCTION > INSTALL > INISET-4 Initialization of 4-colors Developing Assembly (toner ratio and patch)

Execute the following in user mode: (Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation).

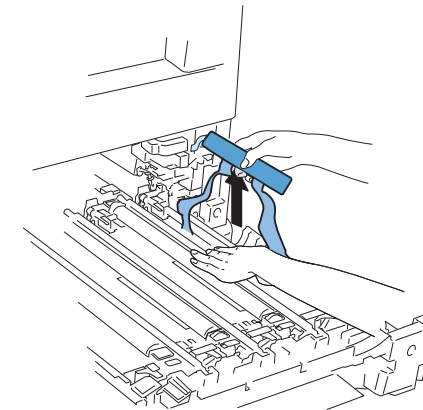
## ● Installing a new Developing Assembly

### ■ Preparations

- 1) Open the Front Cover, Right Lower Cover and Right Upper Cover.(Refer to page 4-104)
- 2) Removing the ITB Cover.(Refer to page 4-104)
- 3) Pulling out the Process Unit.(Refer to page 4-131)
- 4) Removing the Drum Unit.(Refer to page 4-135)
- 5) Removing the Waste Toner Container.(Refer to page 4-131)

### ■ Procedure

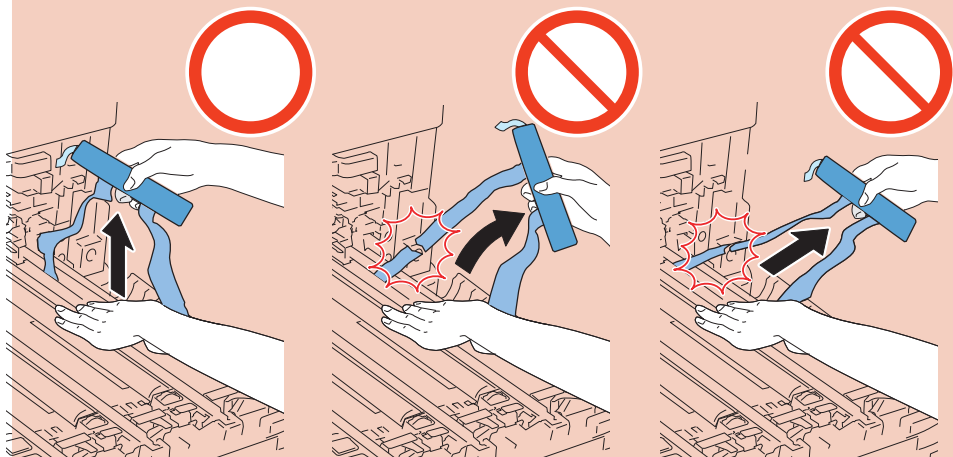
- 1) Install the Developing Assembly to the Process Unit in the reverse procedure of “Removing the Developing Assembly”.
- 2) Hold down the Developing Assembly, hold the grip of the Developing Assembly Seal, and pull out the Developing Assembly Seal.  
Perform this procedure for each color.



F-4-213

**CAUTION:**

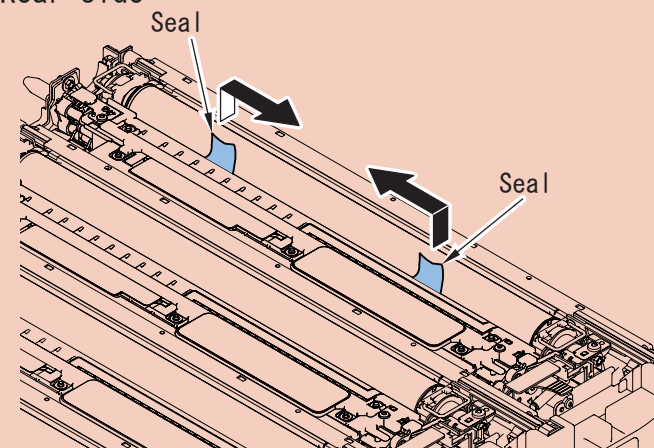
When removing the Seal on the Developing Assembly, be sure to lift it slowly and vertically. If lifting it in an oblique direction, the Seal on the Developing Assembly is stressed, and may cause tear of the seal.



F-4-214

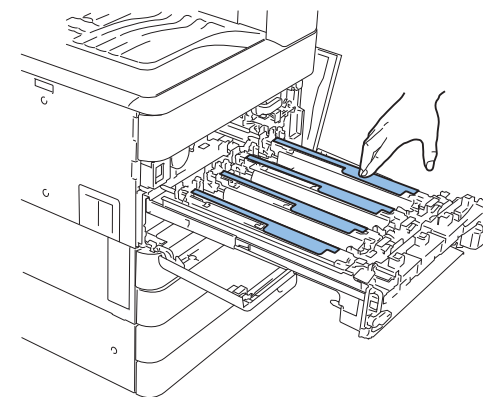
**CAUTION:**

If the Seal on the Developing Assembly is torn, remove the torn seal by pulling the end of it in the direction of the arrow. At that time, be careful not to leave the torn sheet in the Developing Assembly.

**Rear side****Front side**

F-4-215

- 3) By following "installing the Drum Unit", install the each color Drum Unit.
- 4) Be sure to hold the upper side of each Developing Assembly when removing the seal. Otherwise the cover will be off from its position.



F-4-216

## ■ Actions after Replacement

Initialization of Developing Assembly (toner ratio and patch) is necessary and it differs depending on the color.

If 4 colors are replaced simultaneously, execute INISET-4.

COPIER > FUNCTION > INSTALL > INISET-Y Initialization of Y Developing Assembly (toner ratio and patch)

COPIER > FUNCTION > INSTALL > INISET-M Initialization of M Developing Assembly (toner ratio and patch)

COPIER > FUNCTION > INSTALL > INISET-C Initialization of C Developing Assembly (toner ratio and patch)

COPIER > FUNCTION > INSTALL > INISET-K Initialization of Bk Developing Assembly (toner ratio and patch)

COPIER > FUNCTION > INSTALL > INISET-4 Initialization of 4-colors Developing Assembly (toner ratio and patch)

Execute the following in user mode: (Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation).

## ● Removing the Waste Toner Feed Unit

### ■ Preparations

- 1) Open the Front Cover, Right Lower Cover and Right Upper Cover.(Refer to page 4-104)
- 2) Removing the ITB Cover.(Refer to page 4-104)
- 3) Pulling out the Process Unit.(Refer to page 4-131)
- 4) Removing the Drum Unit.(Refer to page 4-135)
- 5) Removing the Waste Toner Container.(Refer to page 4-131)

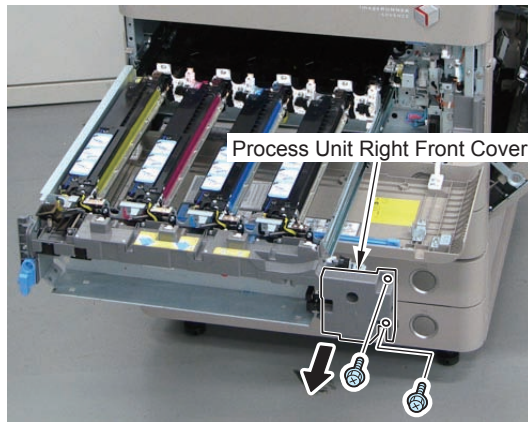
## Procedure

1) Remove the Process Unit Right Front Cover.

- 2 Screws



x2



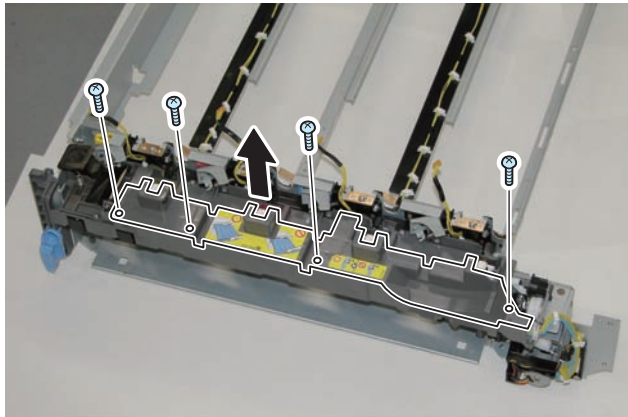
F-4-217

2) Remove the Waste Toner Feed Unit Upper Cover.

- 4 Screws



x4



F-4-218

3) Disconnect the 4 connectors from the PCB.

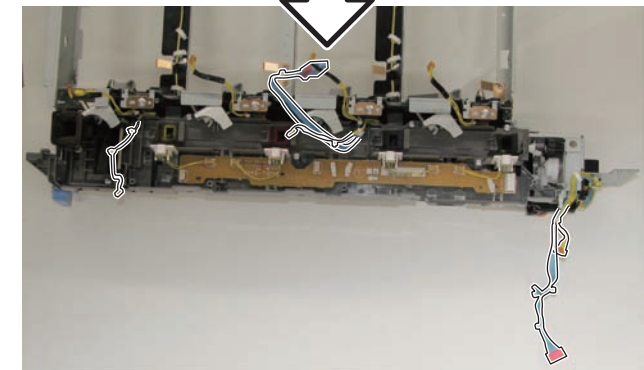
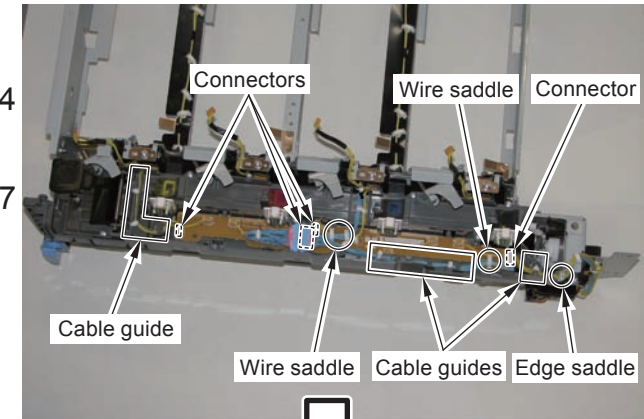
- 3 Wire Saddles
- 1 Edge Saddle
- 3 Harness Guides



x4



x7



F-4-219

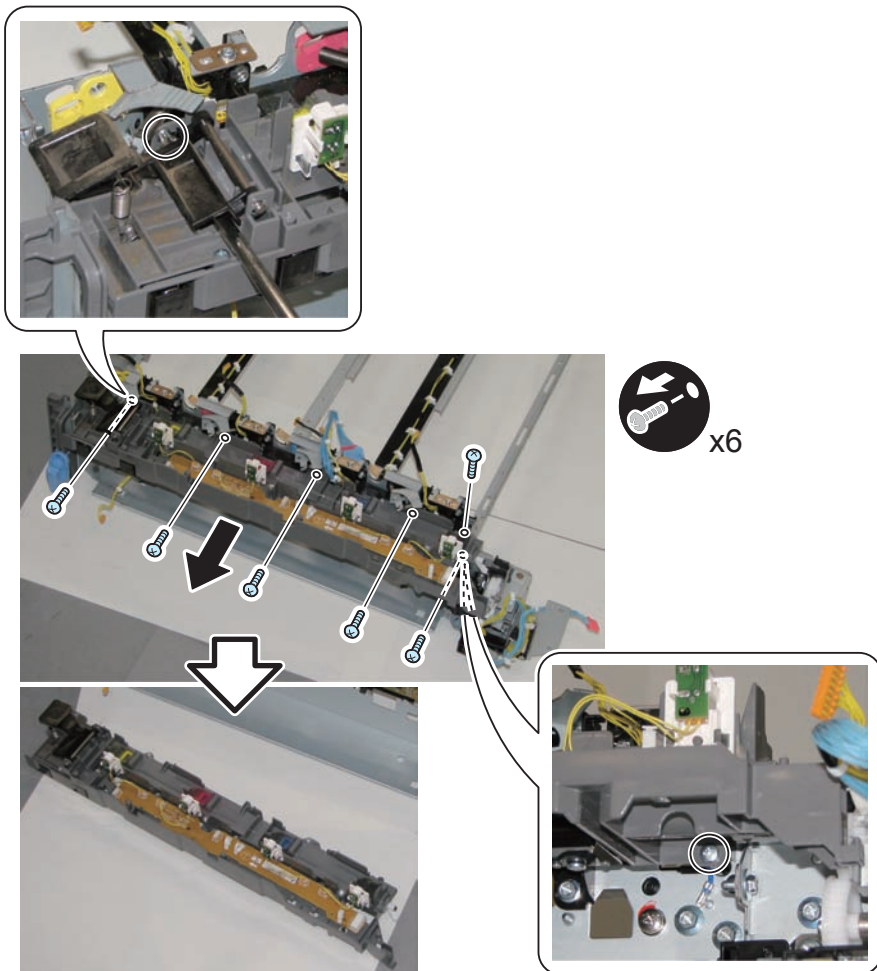


4) Remove the Waste Toner Feed Unit.

- 6 Screws

**NOTE:**

To make the work easier, remove the leftmost screw first (see the callout on the upper left of the figure).



F-4-220

## Removing the Secondary Transfer Outer Roller and Secondary Transfer Separation Guide Unit

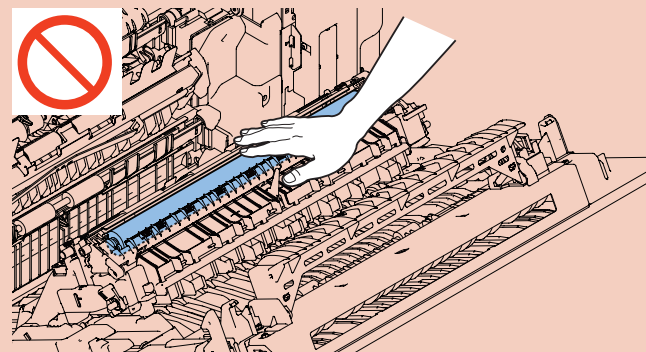
### Preparations

- 1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-175)

### Procedure

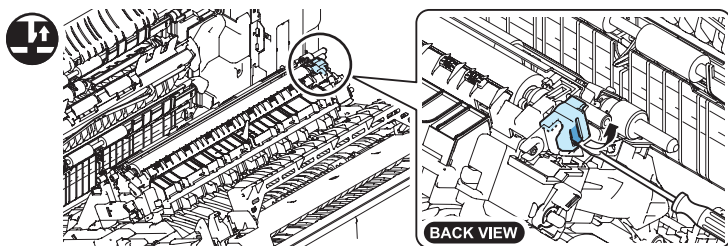
**CAUTION:**

Do not touch the surface of Secondary Transfer Outer Roller.



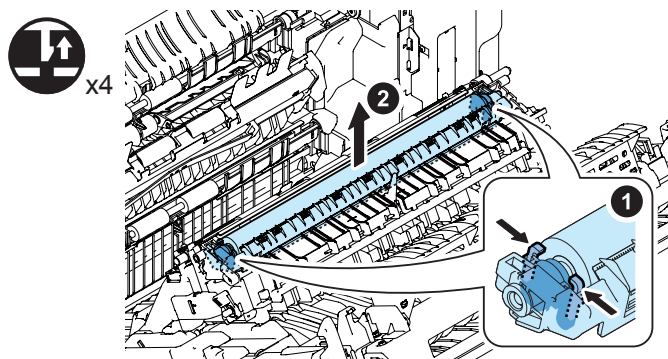
F-4-221

- 1) Place the paper to put the Secondary Transfer Outer Roller Unit.
- 2) Remove the rear stopper.
  - 1 claw



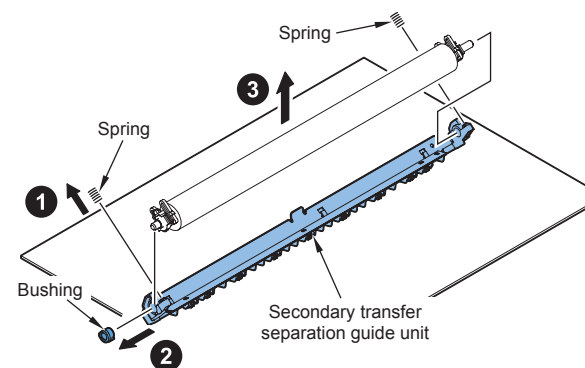
F-4-222

- 3) Pinch the claws on both sides of bearing holder and remove the Secondary Transfer Outer Roller Unit.
  - 4 claws



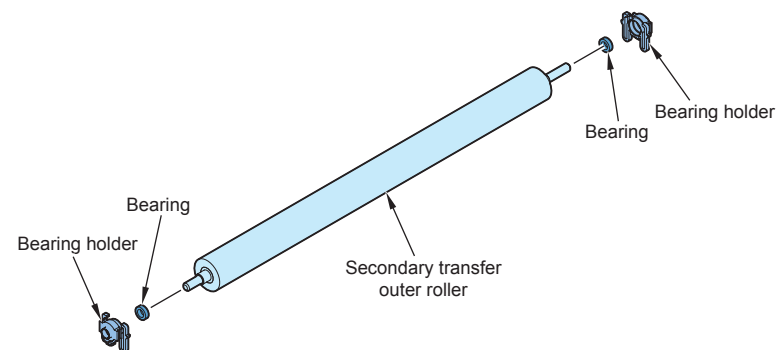
F-4-223

- 4) Remove the Secondary Transfer Separation Guide Unit.
  - 1 bushing
  - 2 springs



F-4-224

- 5) Remove the Secondary Transfer Outer Roller.
  - 2 bearing holders
  - 2 bearings



F-4-225



## Reinstalling the Secondary Transfer Outer Roller and Secondary Transfer Separation Guide Unit

### Preparations

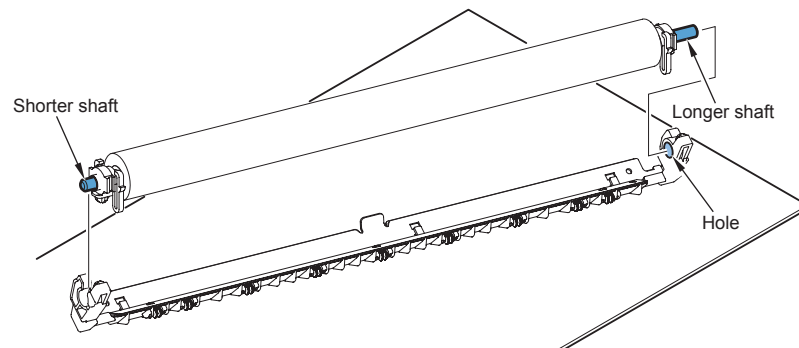
- 1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-175)
- 2) Remove the Secondary Transfer Outer Roller and Secondary Transfer Separation Guide Unit. (Refer to page 4-144)

### Procedure

#### CAUTION:

Do not touch the surface of Secondary Transfer Outer Roller.

- 1) Fit the side with longer shaft to the hole of Secondary Transfer Separation Guide Unit and install the Secondary Transfer Outer Roller.

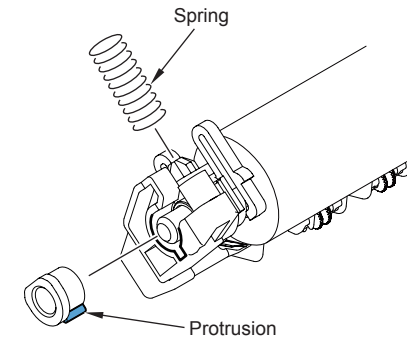


F-4-226

#### CAUTION:

After installing the Secondary Transfer Outer Roller, make sure that the bearing holder can rotate.

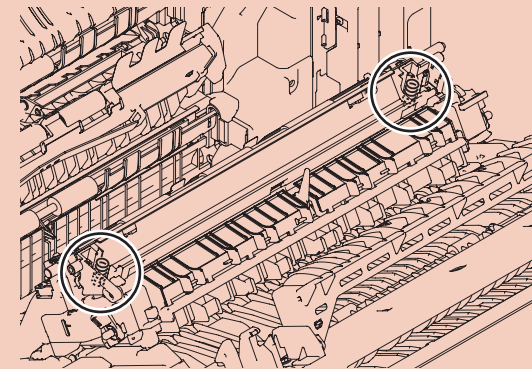
- 2) Fit the protrusion with the groove of the guide and install the bushing.
- 3) Install the spring onto both side of protrusion.



F-4-227

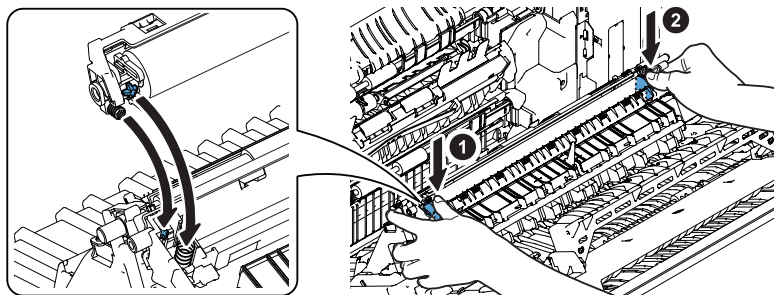
#### CAUTION:

Make sure that the spring on the Duplex Unit side is not skewed.



F-4-228

- 4) Fit the spring on the Duplex Unit to the protrusion on the bearing holder of Secondary Transfer Outer Roller Unit and install it one after other.



F-4-229

- 5) Reinstall the rear stopper.

### Actions after Replacement

When replacing the Secondary Transfer Outer Roller, execute the service mode.

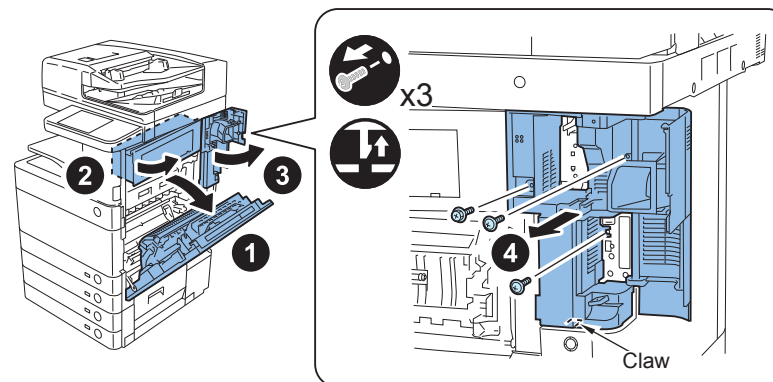
COPIER > FUNCTION > CLEANING > TNR-COAT

Execute the following in user mode: (Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation).

## Removing the Toner Bottle manually

### Preparations

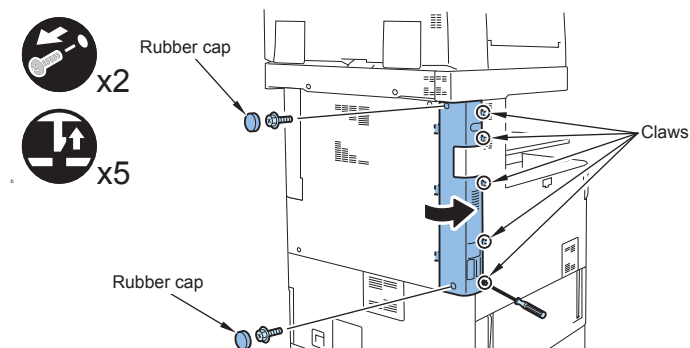
- 1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-175)
- 2) Remove the Right Rear Cover.
  - 1 screw (RS tight; M4)
  - 2 screws (TP; M3)
  - 1 claw



F-4-230

### Remove the Left Rear Cover, Left Rear Sub Cover.

- 3) Remove the Left Rear Cover.
  - 2 rubber caps
  - 2 screws
  - 5 claws



F-4-231

4) If the Reader Unit is installed, remove the reader signal cable.

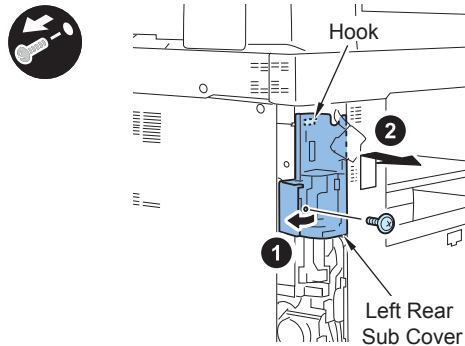
- 1 connector



F-4-232

5) Remove the Left Rear Sub Cover.

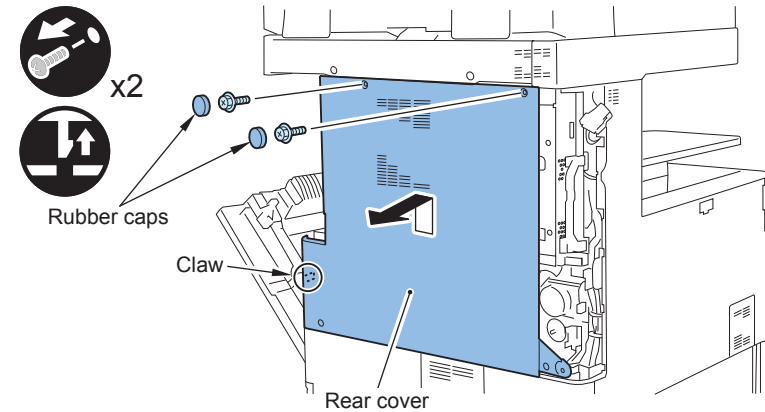
- 1 screw
- 1 hook



F-4-233

6) Remove the Rear Cover.

- 3 rubber caps
- 3 screws
- 1 claw

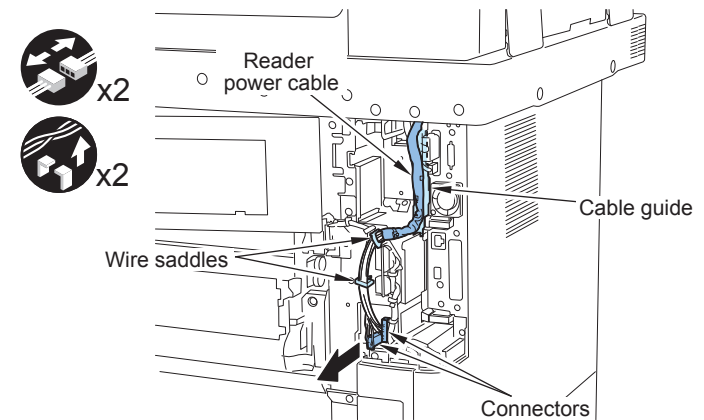


F-4-234

### ● Open the Controller Box

7) When the Reader is installed, remove the reader power cable.

- 2 connectors
- 2 wire saddles
- 1 cable guide



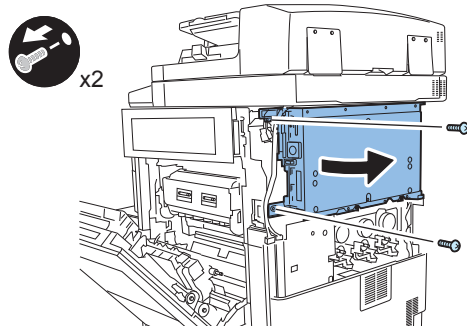
F-4-235

## NOTE:

- If the Fax Unit is not installed, refer to step 8-1).
- If the Fax Unit is installed, refer to step 8-2).

## 8-1) Avoid the harness and open the Controller Box.

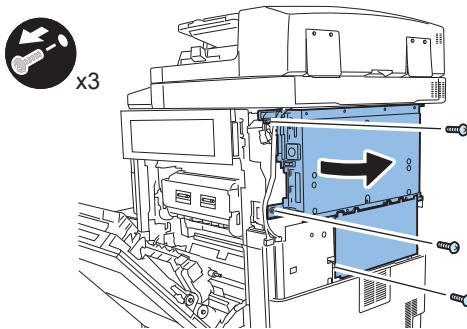
- 2 screws



F-4-236

## 8-2) Avoid the harness and open the Controller Box and the FAX Unit.

- 3 screws



F-4-237

## Procedure

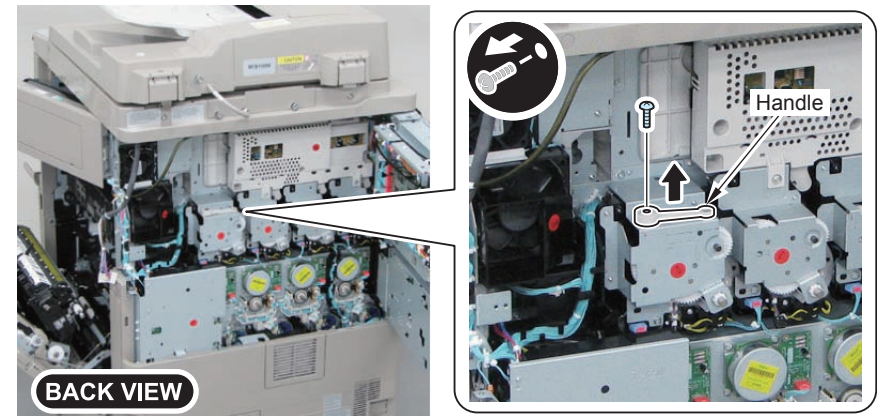
## NOTE:

This procedure describes the procedure of Toner Bottle (Bk). Go through the same procedure for Toner Bottle (C,M,Y).

## 1) Open the Toner Replacement Cover.

## 2) Remove the handle.

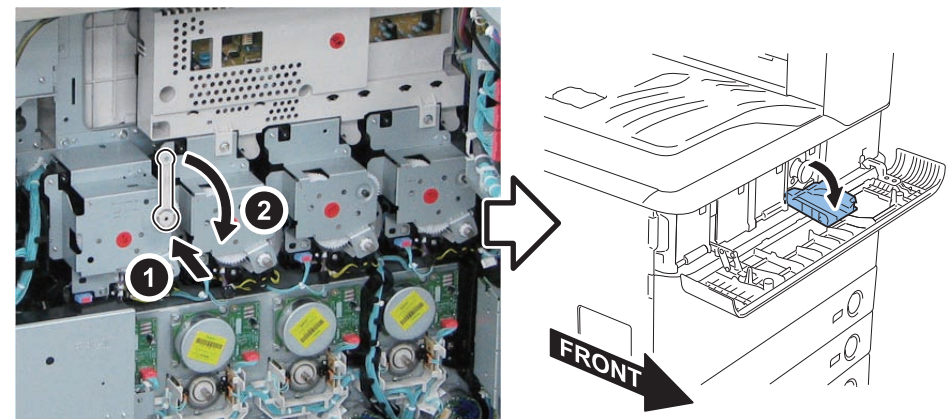
- 1 screw



F-4-238

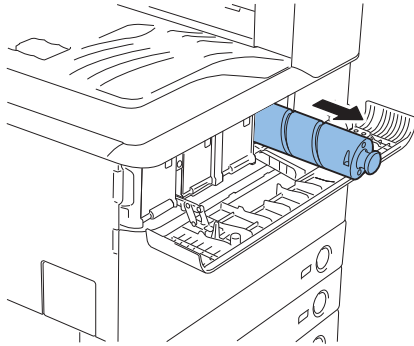
## 3) Install the handle to the shaft.

## 4) Turn the handle like ratchet and open the small cover.



F-4-239

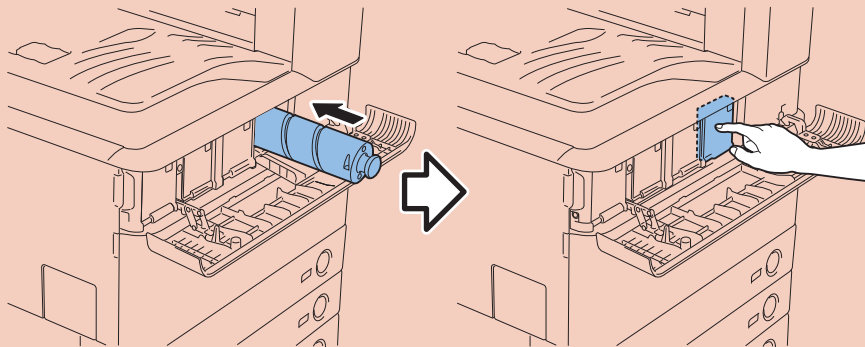
5) Pull out the toner container.



F-4-240

**CAUTION:**

At installation, make sure to insert the Toner Container all the way in and close the small cover.

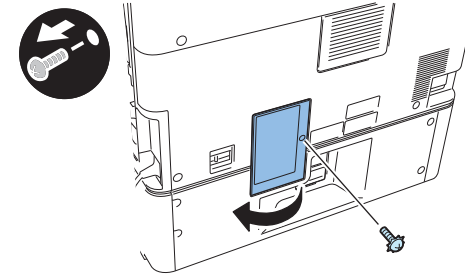


F-4-241

## Removing the Main Drive Unit

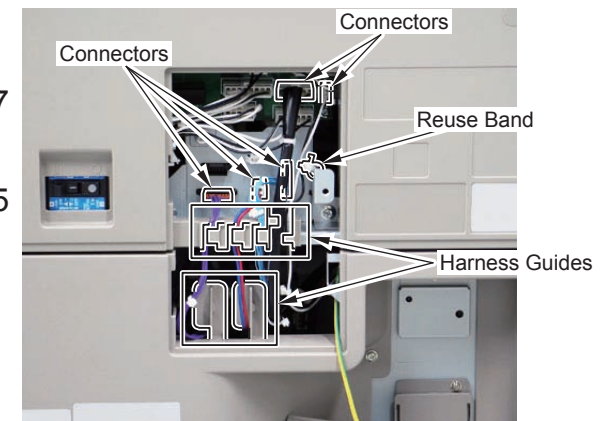
### Preparations

- 1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-175)
- 2) Remove the Right Rear Cover. (Refer to page 4-147)
- 3) Remove the Left Rear Cover and the Left Rear Sub Cover. (Refer to page 4-147)
- 4) Remove the Connector Cover.
  - 1 screw



F-4-242

- 5) When the Cassette Pedestal is installed, remove the connector.
  - 1 reuse band
  - 6 harness guides
  - 5 connectors

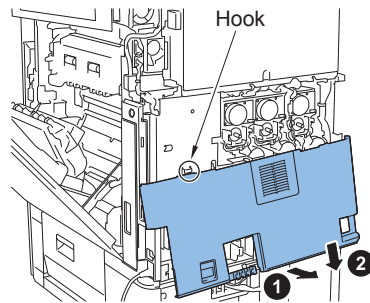
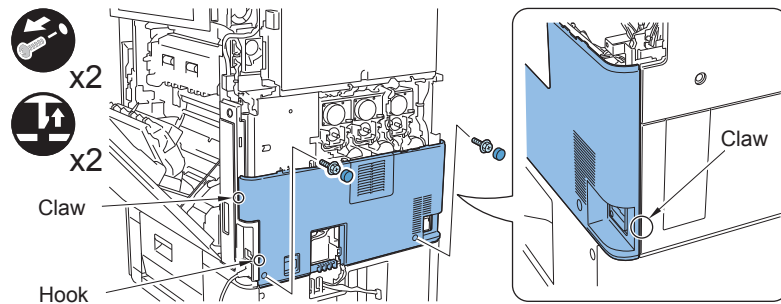


F-4-243



## 6) Remove the Rear Lower Cover.

- 2 rubber caps
- 2 screws
- 2 claws
- 2 hooks



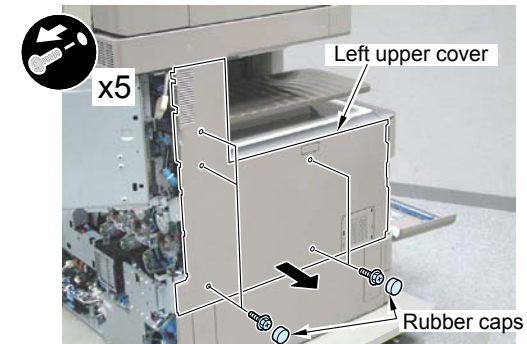
## 7) Open the Front Cover.

F-4-244

## ■ Procedure

## 1) Remove the Left Upper Cover.

- 5 rubber caps
- 5 screws

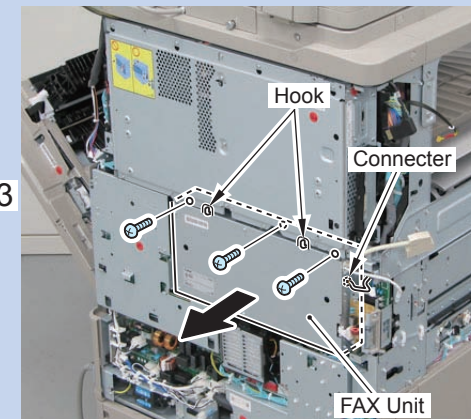


F-4-245

## NOTE:

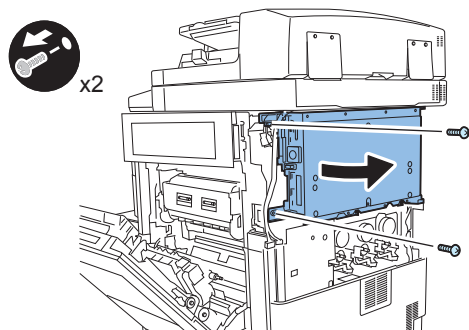
If the Fax Unit is installed, remove it from the host machine.

- 2 Hooks
- 3 Screws
- 1 Connector



2) Avoid the harness and open the Controller Box.

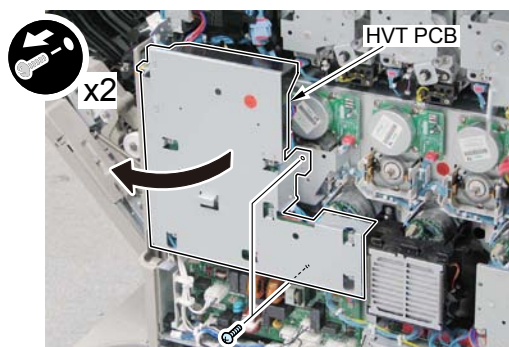
- 2 screws



F-4-246

3) Open the High-voltage PCB.

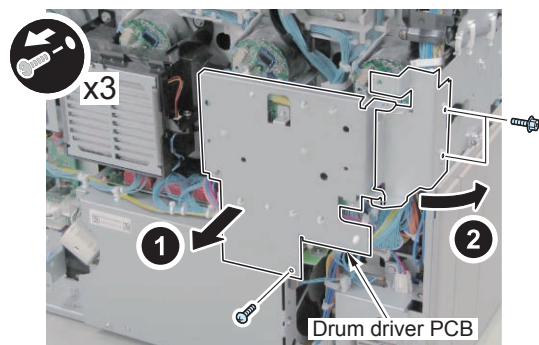
- 2 screws



F-4-247

4) Remove the Drum Driver PCB.

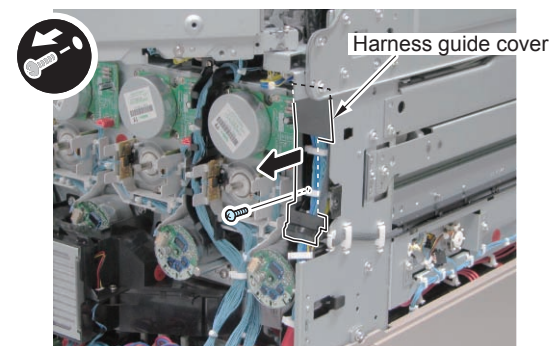
- 3 screws



F-4-248

5) Remove the Harness Guide Cover.

- 1 screw



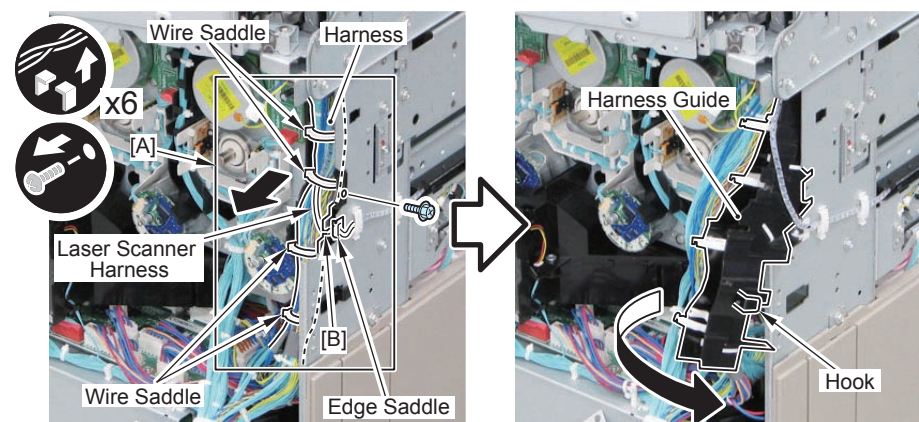
F-4-249

6) Free the Harness from the Harness Guide [A], and free the Laser Scanner harness from the Harness Guide [B].

- 1 Edge Saddle
- 4 Wire Saddles

7) Shift the Harness Guide.

- 1 Screw
- 1 Claw

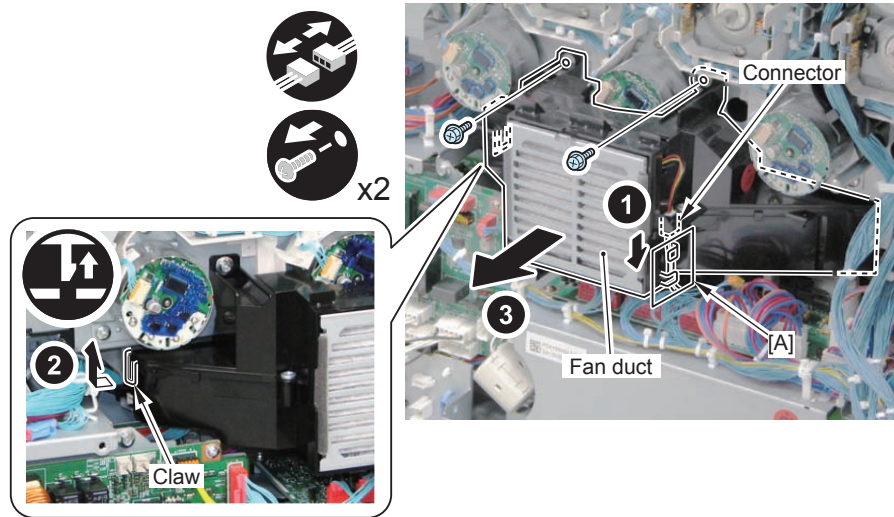


F-4-250



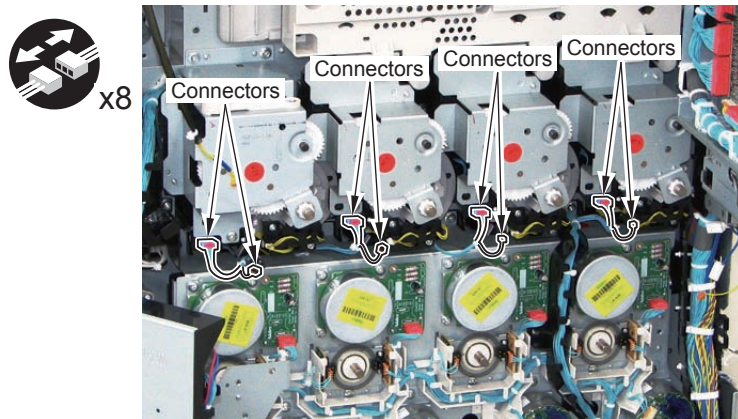
8) Remove the Fan Duct 1.

- 1 connector
- Harness Guide [A]
- 2 screws
- 1 claw



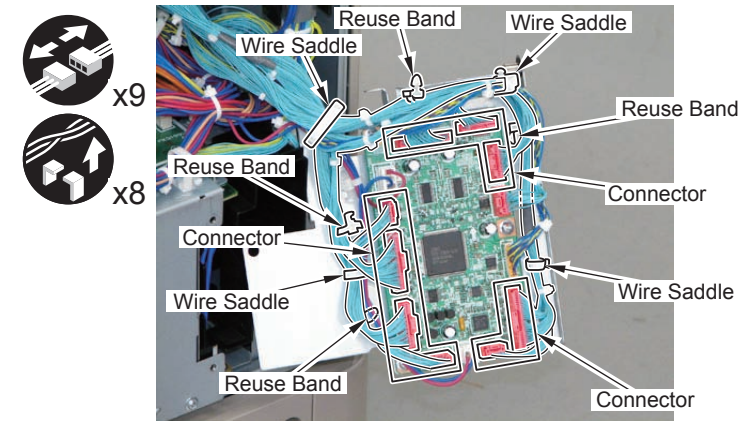
F-4-251

9) Disconnect the 8 connectors of the hopper.



F-4-252

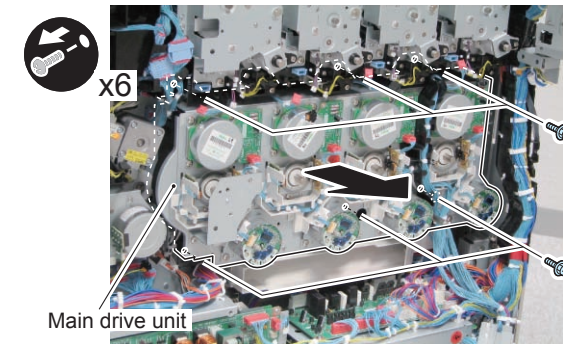
10) Disconnect the 9 connectors of the Drum Driver PCB and the 4 Reuse Bands, and free the harness by opening the 4 Wire Saddles.



F-4-253

11) Remove the Main Drive Unit.

- 6 screws

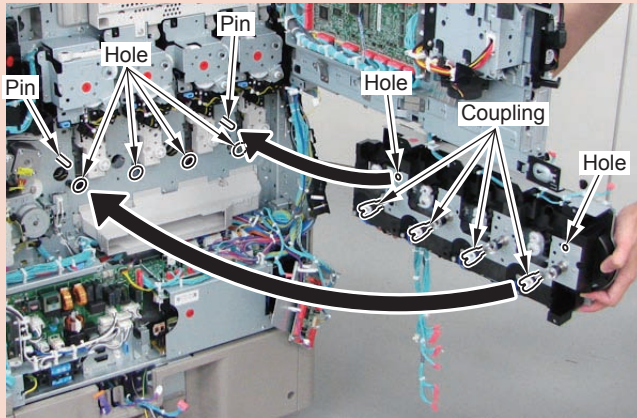


F-4-254

**CAUTION:**

Be sure to fit the 2 holes of the Main Drive Unit to the shafts of the host machine, and fit the 4 couplings into the holes of the host machine when installing.

At this time, pulling out the Process Unit will make installation easier.



F-4-255

## Removing the Toner Container Front Inner Cover

### Preparations

- 1) Open the Toner Replacement Cover.
- 2) Execute the service mode and release the lock of Toner Container.

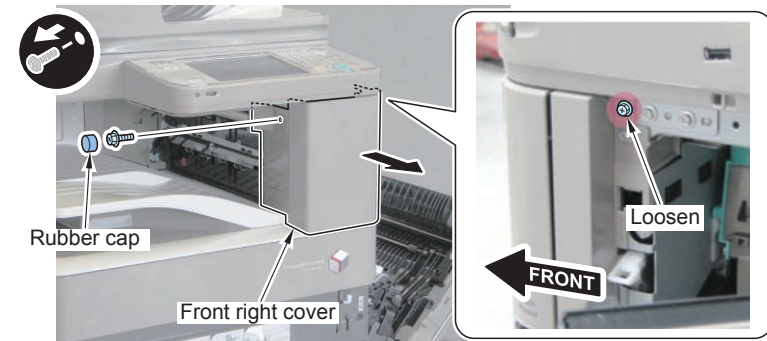
**NOTE:**

To release the lock of Toner Container manually, refer to the step 1) to 4) in "Removing the Toner Container manually". At that time, do not pull out the toner container.

- 3) Turn OFF the power before closing the Small Cover and the Toner Replacement Cover.
- 4) Close the 4 Small Covers and the Toner Replacement Cover. (Same in manual operation)
- 5) Open the Front Cover, the Right Lower Cover and Right Upper Cover. (Refer to page 4-104)
- 6) Remove the ITB Unit. (Refer to page 4-105)
- 7) Remove the Process Unit. (Refer to page 4-132)

### Procedure

- 1) Remove the Front Right Cover.
  - 1 rubber cap
  - 1 screw (remove)
  - 1 screw (loosen)

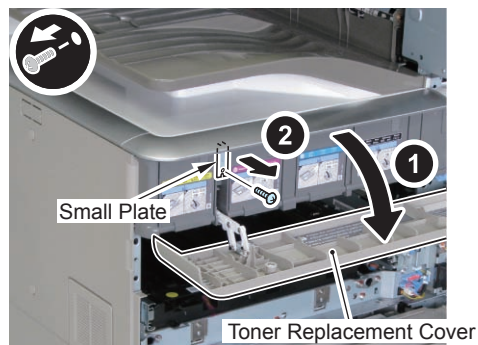


F-4-256



2) Open the Toner Replacement Cover, and Remove the Small Plate.

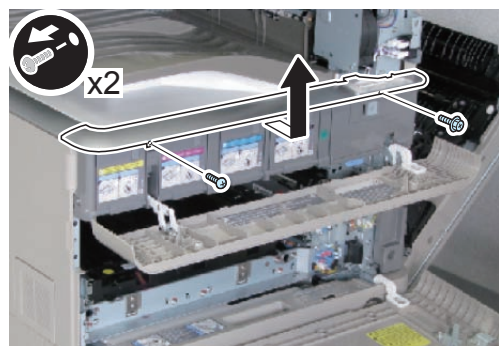
- 1 screw (P tight)



3) Remove the Front Upper Cover.

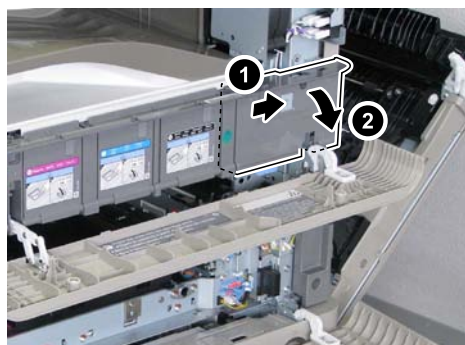
- 1 screw (P tight)
- 1 screw (RS)

F-4-257



F-4-258

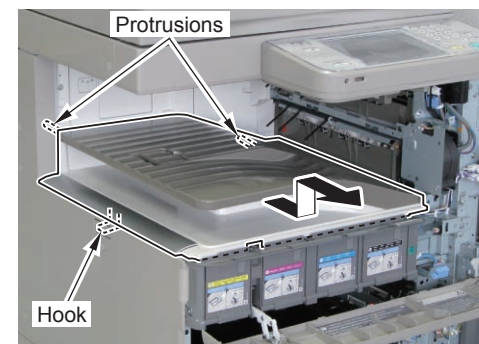
4) Remove the Front Upper Right Cover.



F-4-259

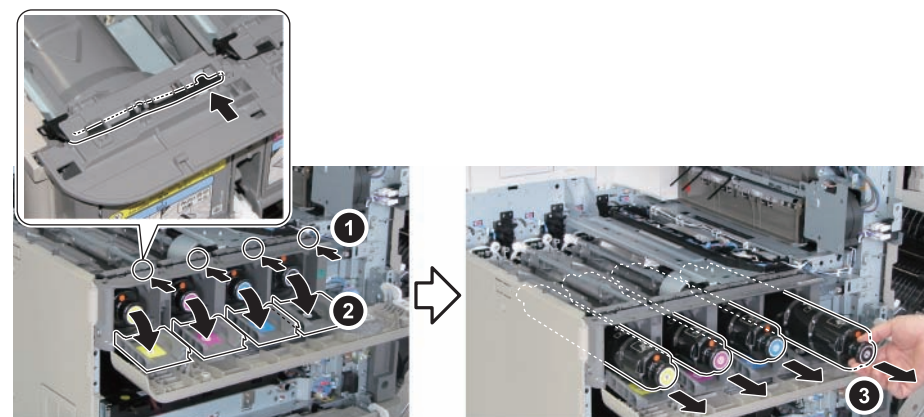
5) Remove the Delivery Tray.

- 1 Hook
- 2 Protrusions



F-4-260

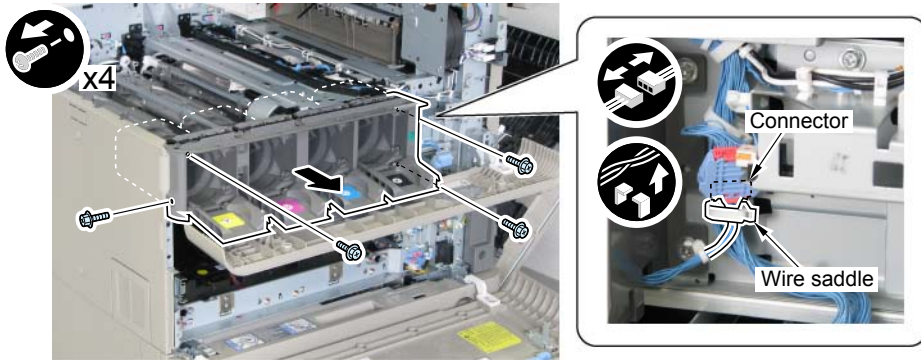
6) Open the 4 Small Covers and remove the 4 Toner Containers.



F-4-261

7) Remove the Toner Container Front Inner Cover.

- 1 connector
- 1 wire saddle
- 4 screws (RS)



F-4-262

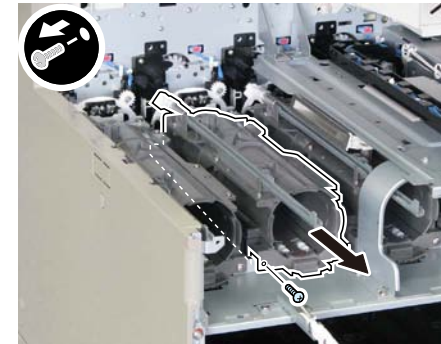
## Removing the Hopper (M)

### Preparations

- 1) Release the lock of Toner Container. (By service mode)
- 2) Open the Front Cover, the Right Lower Cover and Right Upper Cover. (Refer to page 4-104)
- 3) Remove the ITB Unit. (Refer to page 4-105)
- 4) Remove the Process Unit. (Refer to page 4-132)
- 5) Remove the Color Drum Heater. (When the option is installed) (Refer to page 1-1)
- 6) Remove the Toner Container Front Inner Cover. (Refer to page 4-154)

### Procedure

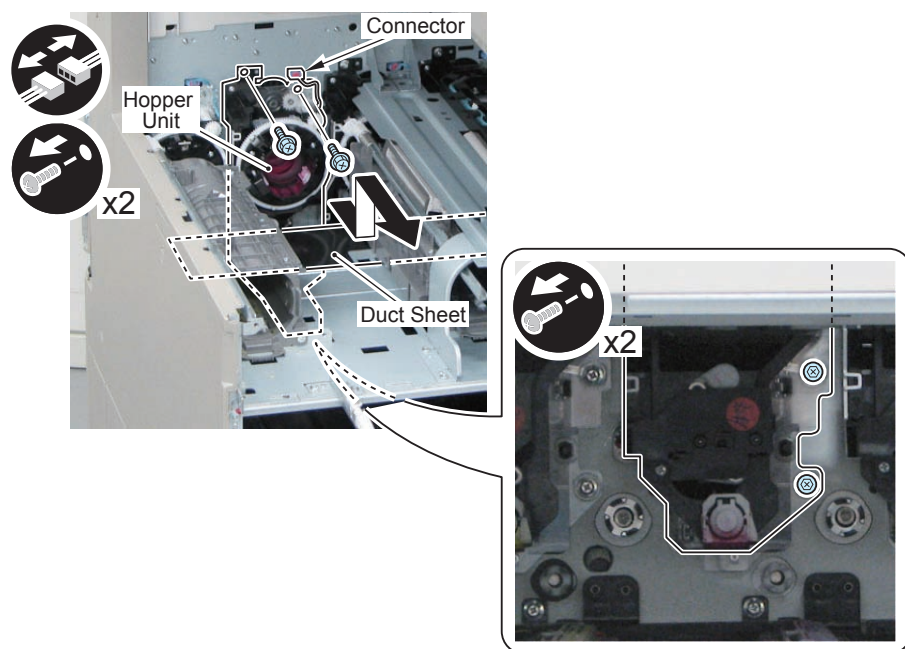
- 1) Remove the Toner Tray.
  - 1 screw (M4 binding)



F-4-263

2) While avoiding the duct sheet, remove the Hopper Unit.

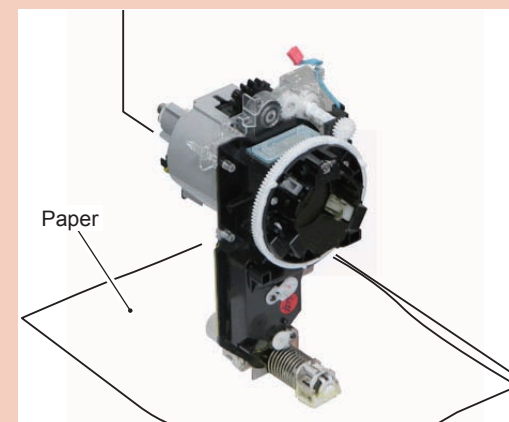
- 1 connector
- 4 screws



F-4-264

**CAUTION:**

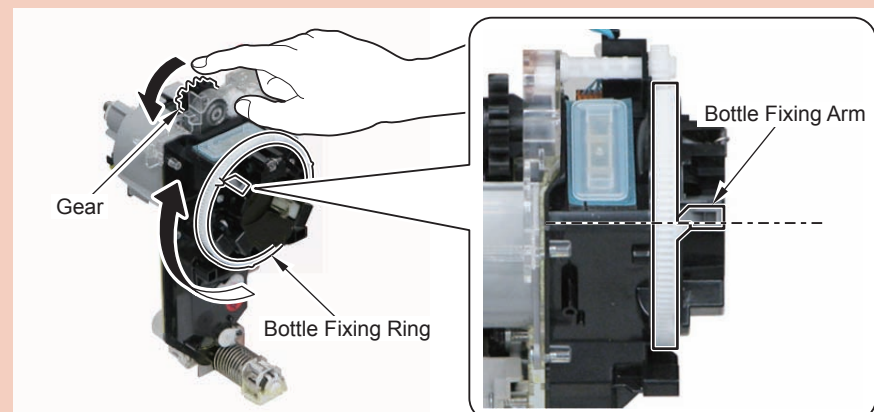
If it is placed sideways, toner may scatter inside the Hopper and it may cause the operation failure. Thus, stand and put the Hopper Unit on the paper.



F-4-265

**CAUTION:**

Before installing the hopper to the host machine, be sure to check that the leading edge of the protrusion of the Bottle Fixing Ring and the leading edge of the Bottle Fixing Arm are aligned. If not, rotate the gear in the direction as shown in the figure below to align the leading edge of the protrusion of the Bottle Fixing Ring with the leading edge of the Bottle Fixing Arm.

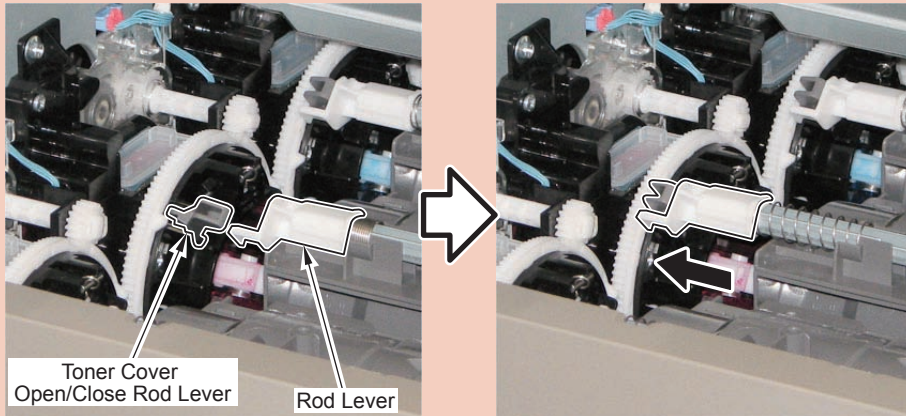


F-4-266



**CAUTION:**

When installing the Toner Tray, align the Rod Lever with the Toner Cover Open/Close Rod Lever and install it.



F-4-267

**CAUTION:**

When installing the removed Toner Container, be sure not to shake it.

**CAUTION:**

When the Main Drive Unit is removed simultaneously, make sure to install the Main Drive Unit first and then, the Hopper Unit in order. Otherwise, toner supply failure may occur.

## ■ Actions after Replacement

When replacing the Developing Assembly, make sure to initialize before installing the Toner Container.

COPIER > FUNCTION > INSTALL > INISET-M

If install the Toner Container before initialization, T/D ratio cannot set the right value.

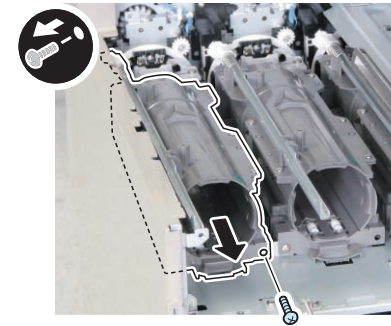
## ● Removing the Hopper (Y)

### ■ Preparations

- 1) Release the lock of Toner Container. (By service mode)
- 2) Open the Front Cover, the Right Lower Cover and Right Upper Cover. (Refer to page 4-104)
- 3) Remove the ITB Unit. (Refer to page 4-105)
- 4) Remove the Process Unit. (Refer to page 4-132)
- 5) Remove the Color Drum Heater. (When the option is installed) (Refer to page 1-1)
- 6) Remove the Toner Container Front Inner Cover. (Refer to page 4-154)

### ■ Procedure

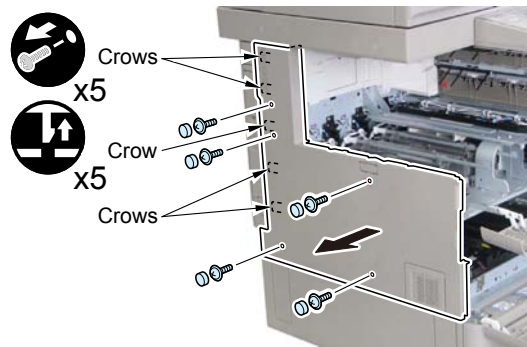
- 1) Remove the Toner Tray.
  - 1 screw (M4 binding)



F-4-268

## 2) Remove the Left Cover.

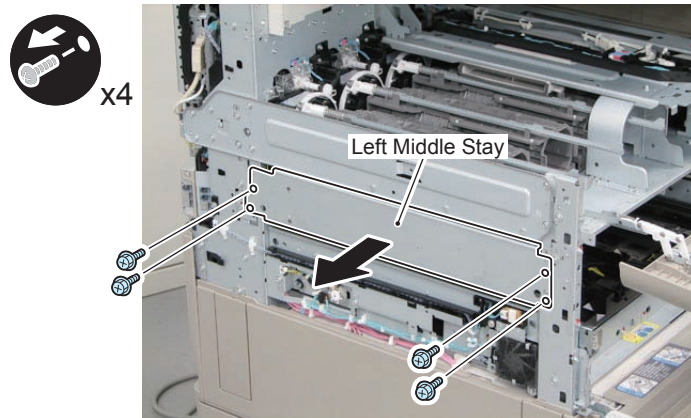
- 5 rubber caps
- 5 screws
- 5 claws



F-4-269

## 3) Remove the Left Middle Stay.

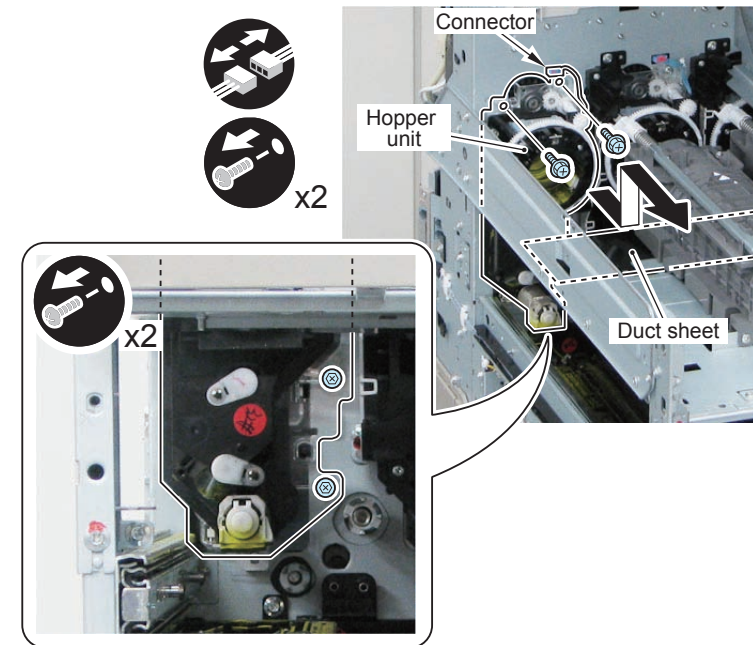
- 4 screws



F-4-270

## 4) While avoiding the duct sheet, remove the Hopper Unit.

- 1 connector
- 4 screws

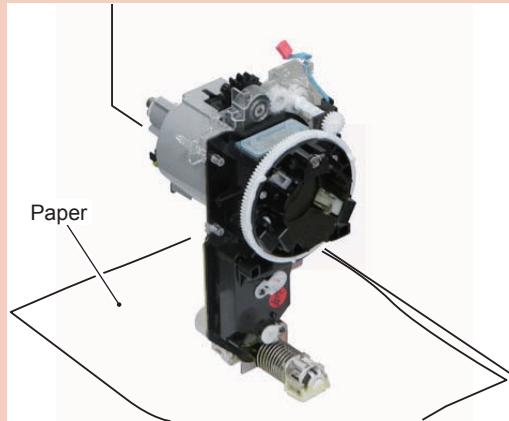


F-4-271



**CAUTION:**

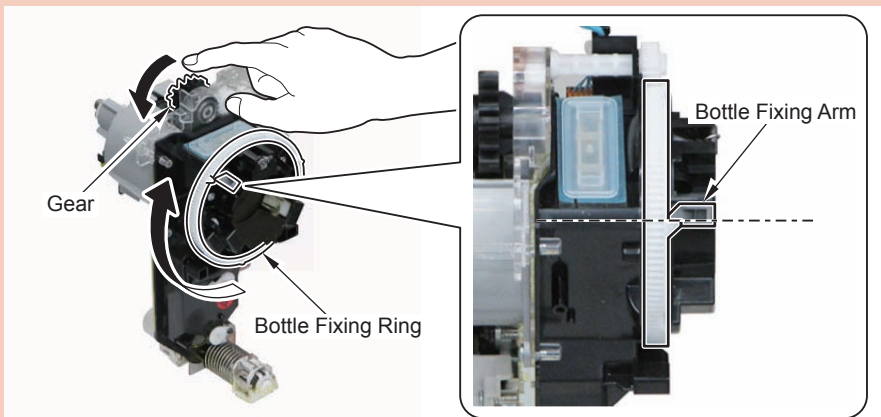
If it is placed sideways, toner may scatter inside the Hopper and it may cause the operation failure. Thus, stand and put the Hopper Unit on the paper.



F-4-272

**CAUTION:**

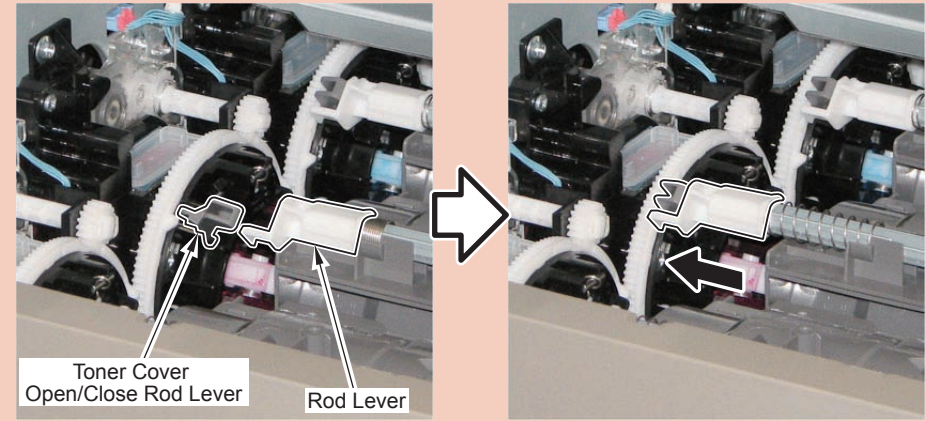
Before installing the hopper to the host machine, be sure to check that the leading edge of the protrusion of the Bottle Fixing Ring and the leading edge of the Bottle Fixing Arm are aligned. If not, rotate the gear in the direction as shown in the figure below to align the leading edge of the protrusion of the Bottle Fixing Ring with the leading edge of the Bottle Fixing Arm.



F-4-273

**CAUTION:**

When installing the Toner Tray, align the Rod Lever with the Toner Cover Open/Close Rod Lever and install it.



F-4-274

**CAUTION:**

When installing the removed Toner Container, be sure not to shake it.

**CAUTION:**

When the Main Drive Unit is removed simultaneously, make sure to install the Main Drive Unit first and then, the Hopper Unit in order. Otherwise, toner supply failure may occur.

## ■ Actions after Replacement

When replacing the Developing Assembly, make sure to initialize before installing the Toner Container.

COPIER > FUNCTION > INSTALL > INISET-Y

If install the Toner Container before initialization, T/D ratio cannot set the right value.

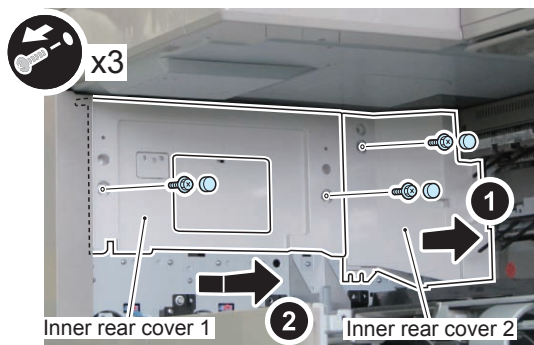
## Removing the Hopper (C)

### Preparations

- 1) Release the lock of Toner Container. (By service mode)
- 2) Open the Front Cover, the Right Lower Cover and Right Upper Cover. (Refer to page 4-104)
- 3) Remove the ITB Unit. (Refer to page 4-105)
- 4) Remove the Process Unit. (Refer to page 4-132)
- 5) Remove the Color Drum Heater. (When the option is installed) (Refer to page 1-1)
- 6) Remove the Toner Container Front Inner Cover. (Refer to page 4-154)

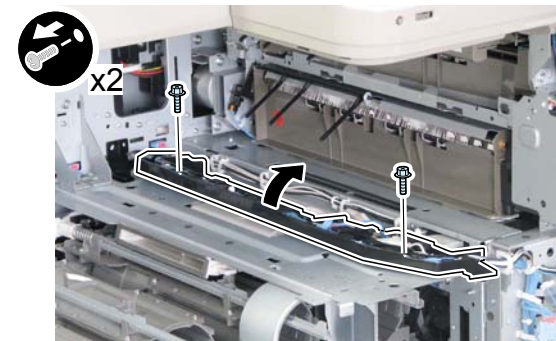
### Procedure

- 1) Remove the Reverse Tray.
- 2) Remove the Inside Rear Cover 1 & 2.
  - 3 caps
  - 3 screws (RS)



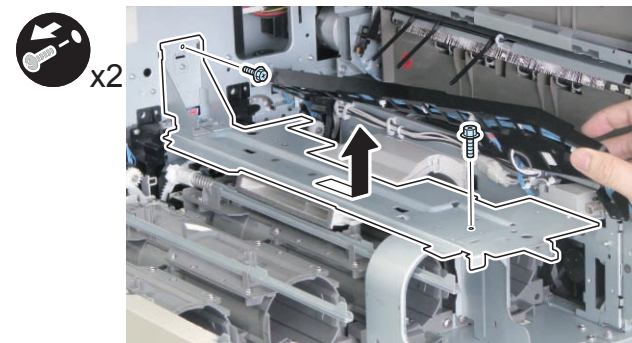
F-4-275

- 3) Remove the 2 screws from the Harness Guide.



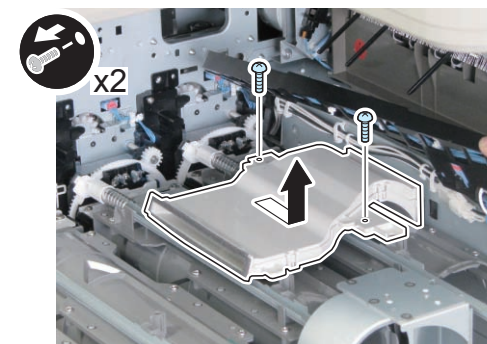
F-4-276

- 4) While opening the Guide, remove the Hopper Upper Stay.
  - 2 screws (RS)



F-4-277

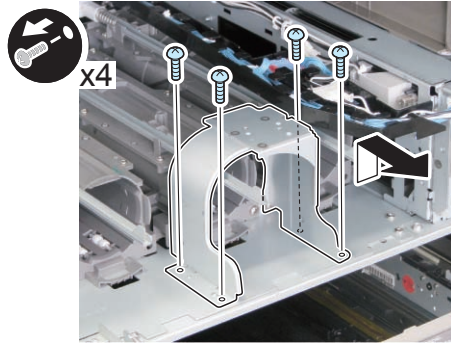
- 5) Remove the Secondary Delivery Duct.
  - 2 screws (P tight)



F-4-278

6) Remove the rail Retaining Plate.

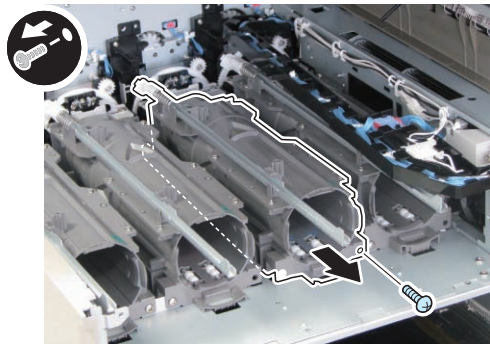
- 4 screws (M4 binding)



F-4-279

7) Remove the Toner Tray.

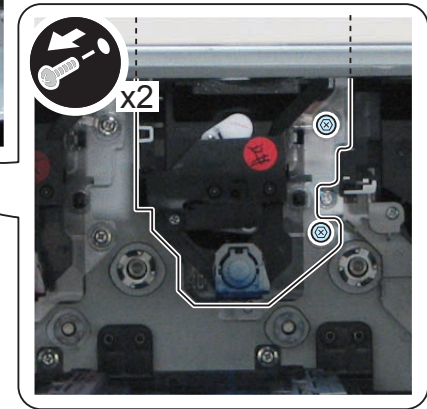
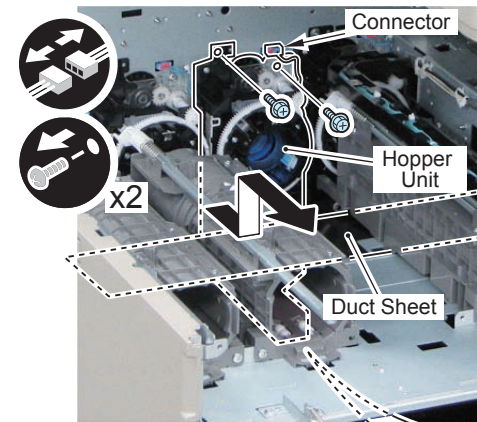
- 1 screw (M4 binding)



F-4-280

8) While avoiding the Duct Sheet, remove the Hopper Unit.

- 1 connector
- 4 screws

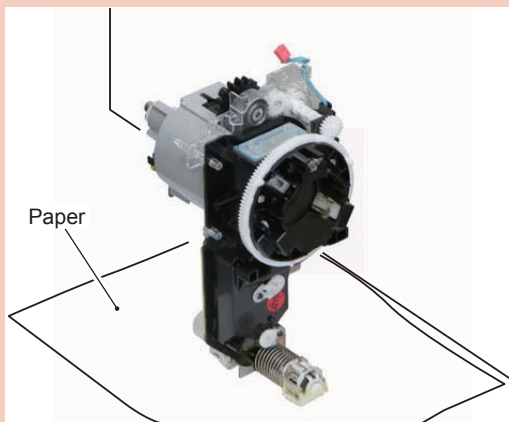


F-4-281



**CAUTION:**

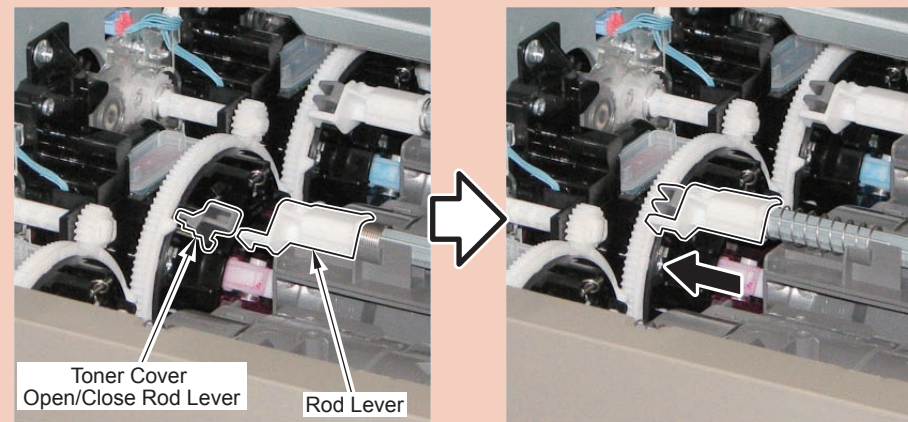
If it is placed sideways, toner may scatter inside the Hopper and it may cause the operation failure. Thus, stand and put the Hopper Unit on the paper.



F-4-282

**CAUTION:**

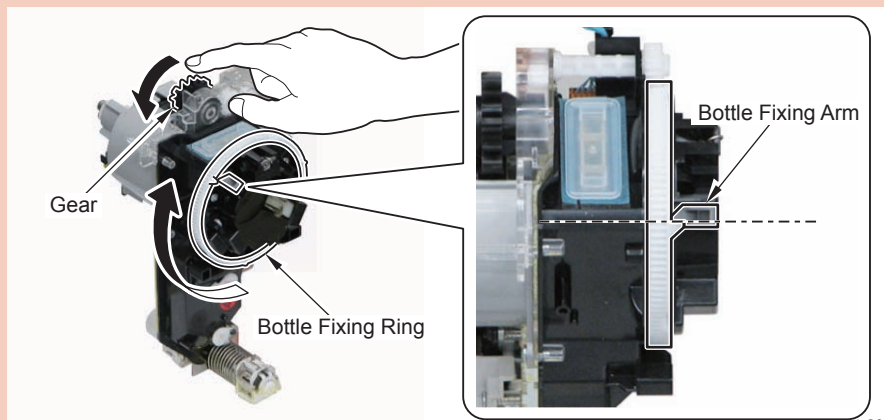
When installing the Toner Tray, align the Rod Lever with the Toner Cover Open/Close Rod Lever and install it.



F-4-284

**CAUTION:**

Before installing the hopper to the host machine, be sure to check that the leading edge of the protrusion of the Bottle Fixing Ring and the leading edge of the Bottle Fixing Arm are aligned. If not, rotate the gear in the direction as shown in the figure below to align the leading edge of the protrusion of the Bottle Fixing Ring with the leading edge of the Bottle Fixing Arm.



F-4-283

**CAUTION:**

When installing the removed Toner Container, be sure not to shake it.

**CAUTION:**

When the Main Drive Unit is removed simultaneously, make sure to install the Main Drive Unit first and then, the Hopper Unit in order. Otherwise, toner supply failure may occur.

### ■ Actions after Replacement

When replacing the Developing Assembly, make sure to initialize before installing the Toner Container.

COPIER > FUNCTION > INSTALL > INISET-C

If install the Toner Container before initialization, T/D ratio cannot set the right value.

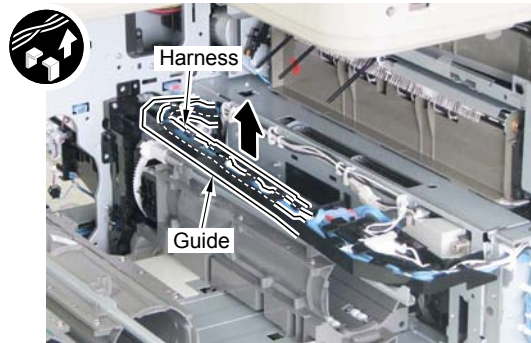
## Removing the Hopper (Bk)

### Preparations

- 1) Release the lock of Toner Container (By service mode).
- 2) Open the Front Cover, the Right Lower Cover and Right Upper Cover. (Refer to page 4-104)
- 3) Remove the ITB Unit. (Refer to page 4-105)
- 4) Remove the Process Unit. (Refer to page 4-132)
- 5) Remove the Color Drum Heater (When the option is installed). (Refer to page 1-1)
- 6) Remove the Drum Heater (Bk).
- 7) Remove the Toner Container Front Inner Cover. (Refer to page 4-154)
- 8) Remove the Hopper (C). (Refer to page 4-161)

### Procedure

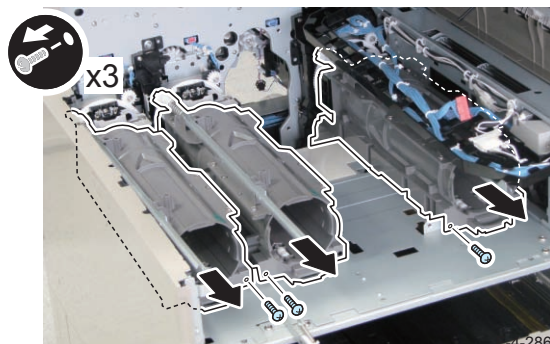
- 1) Remove the Harness from the Fixing Guide.



F-4-285

- 2) Remove all the Toner Trays.

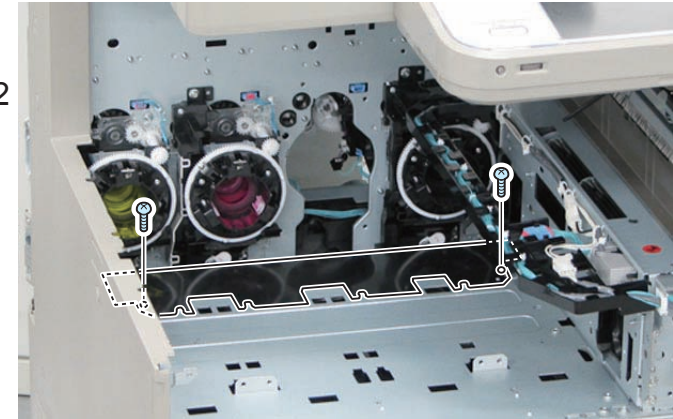
- 3 screws (M4 binding)



F-4-286

- 3) Remove the Duct Sheet.

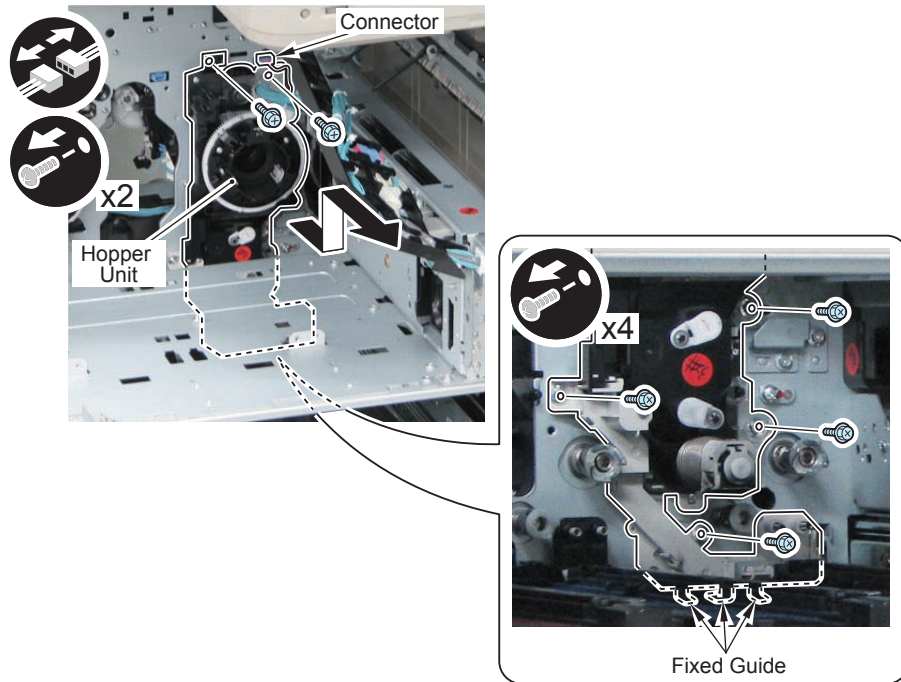
- 2 screws (binding)



F-4-287

## 4) Remove the Hopper Unit.

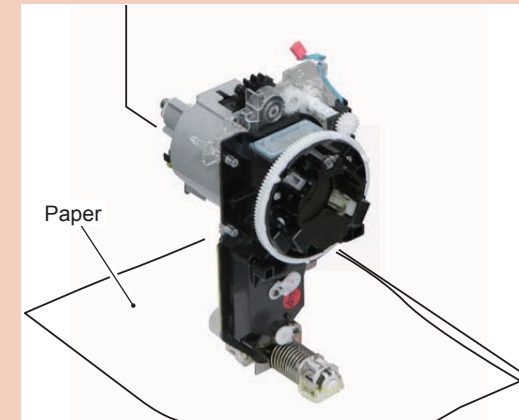
- 1 connector
- 6 screws
- 3 fixing guides



F-4-288

## CAUTION:

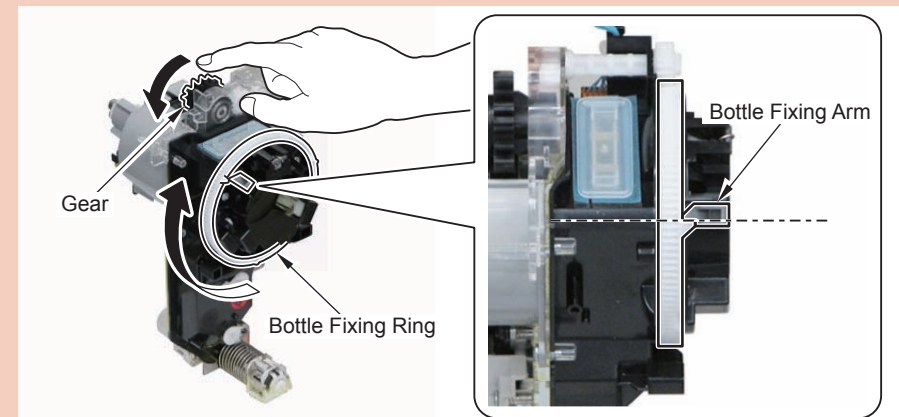
If it is placed sideways, toner may scatter inside the Hopper and it may cause the operation failure. Thus, stand and put the Hopper Unit on the paper.



F-4-289

## CAUTION:

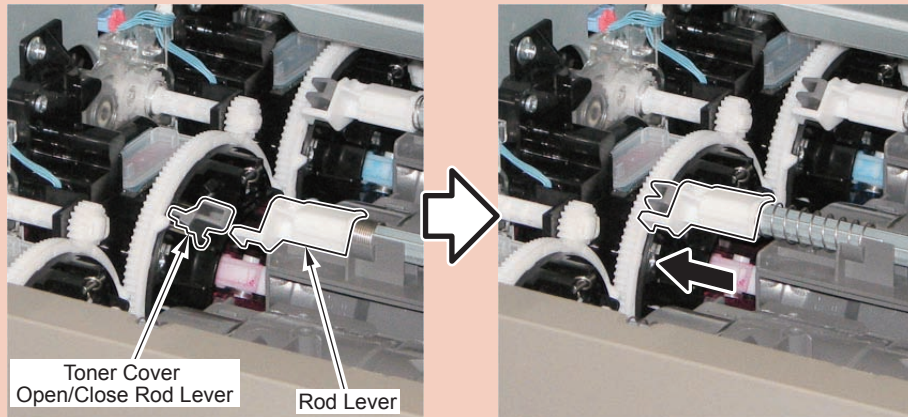
Before installing the hopper to the host machine, be sure to check that the leading edge of the protrusion of the Bottle Fixing Ring and the leading edge of the Bottle Fixing Arm are aligned. If not, rotate the gear in the direction as shown in the figure below to align the leading edge of the protrusion of the Bottle Fixing Ring with the leading edge of the Bottle Fixing Arm.



F-4-290

**CAUTION:**

When installing the Toner Tray, align the Rod aLever with the Toner Cover Open/Close Rod Lever and install it.



F-4-291

**CAUTION:**

When installing the removed Toner Container, be sure not to shake it.

**CAUTION:**

When the Main Drive Unit is removed simultaneously, make sure to install the Main Drive Unit first and then, the Hopper Unit in order. Otherwise, toner supply failure may occur.

**■ Actions after Replacement**

When replacing the Developing Assembly, make sure to initialize before installing the Toner Container.

COPIER > FUNCTION > INSTALL > INISET-K

If install the Toner Container before initialization, T/D ratio cannot set the right value.

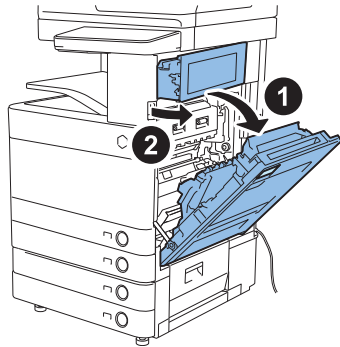


## Fixing System

### Removing the Fixing Assembly

#### Preparations

1) Open the Right Lower Cover and Right Upper Cover.



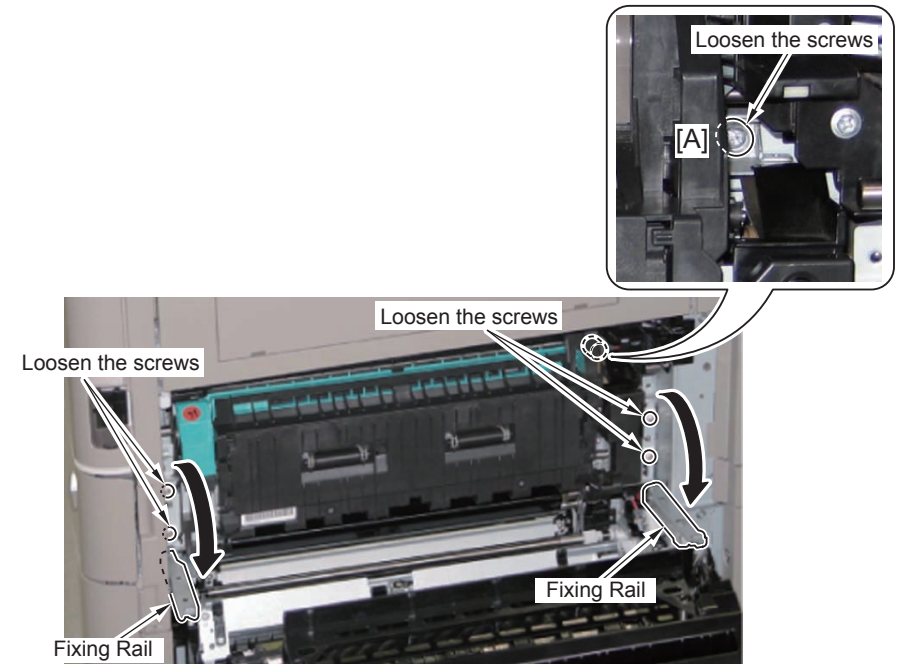
F-4-292

#### Procedure

1) Open the Fixing Rail and loosen the 5 screws (or 4 screws).

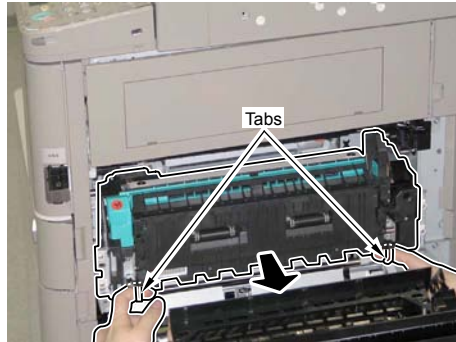
##### NOTE:

The screw [A] has been newly added. The machine has 5 screws or 4 screws.



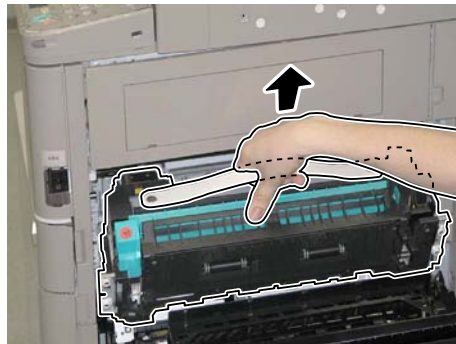
F-4-293

2) Pinch and pull out the tab of Fixing Assembly.



F-4-294

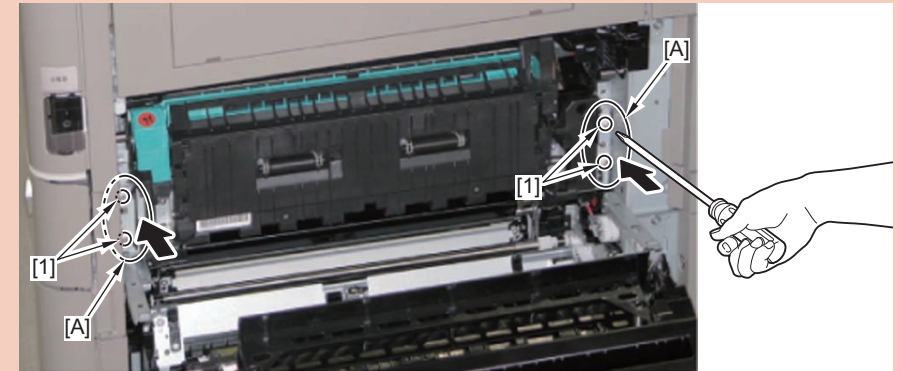
3) Hold the grip and remove the Fixing Assembly.



F-4-295

**CAUTION:**

- When installing the Fixing Assembly, be sure to insert it until it stops and then tighten the screws while holding the area [A] part as shown in the figure below.



F-4-296

- If the Fixing Assembly is not installed properly, abnormal noise from the Fixing Gear or E009 may occur.  
In such case, remove and then install the Fixing Assembly again.

## Removing the Film Unit

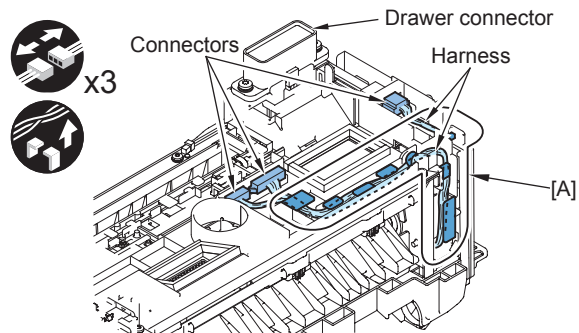
### Preparations

- 1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-175)
- 2) Remove the Fixing Unit. (Refer to page 4-167)

### Procedure

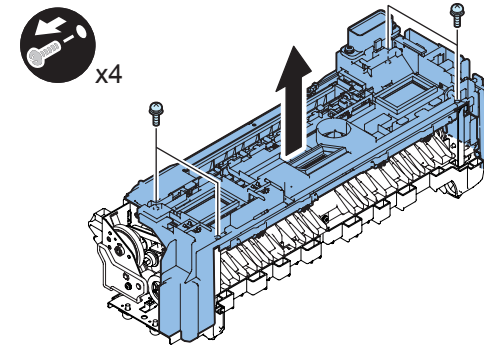
**NOTE:**  
When installing/removing it, do not touch the Film Unit and Pressure Roller.

- 1) Change the direction of the Fixing Assembly. (Place it in the position where the Drawer connector side faces up.)
- 2) Remove the harness.
  - 3 connectors
  - Harness Guide [A]



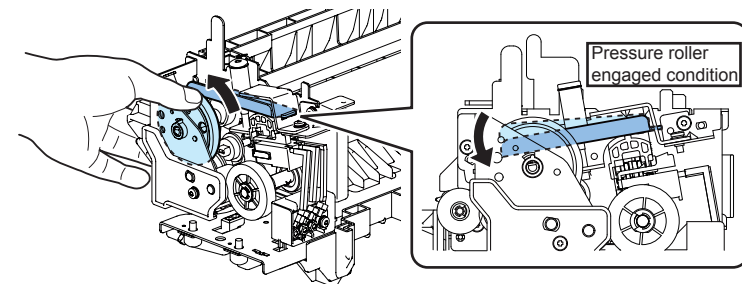
F-4-297

- 3) Remove the Shutter Unit.
  - 4 screws



F-4-298

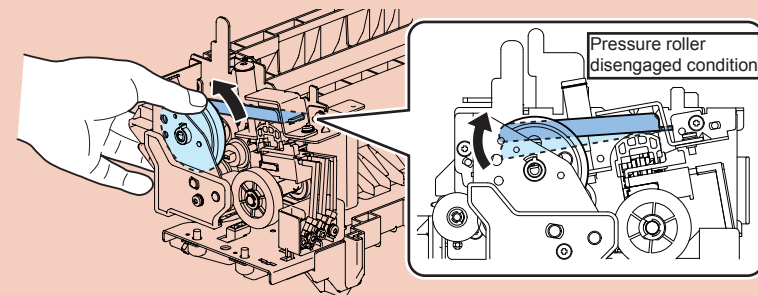
- 4) Turn the pressure gear with hand and make the Pressure Roller engaged condition.



F-4-299

#### CAUTION:

When keeping the Fixing Assembly for long periods, turn the pressure gear and make the Pressure Roller disengaged condition.



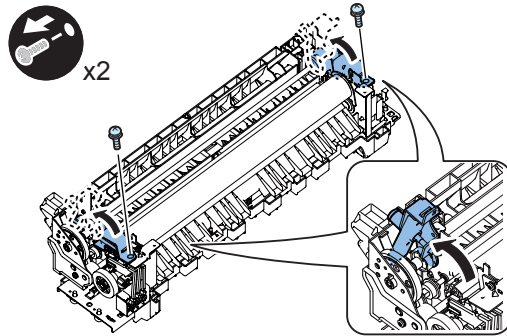
F-4-300

**CAUTION:**

Do not leave the Pressure Roller engaged for a long time.

5) Open the left and right Pressure Levers.

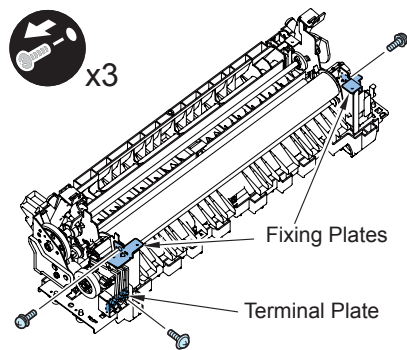
- 2 screws



F-4-301

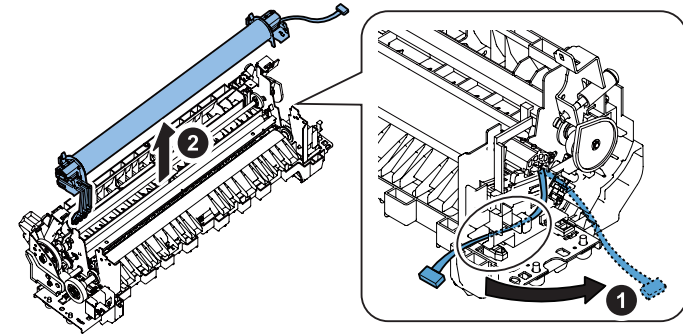
6) Remove the left and right Fixing Plates and the Terminal Plate.

- 3 screws



F-4-302

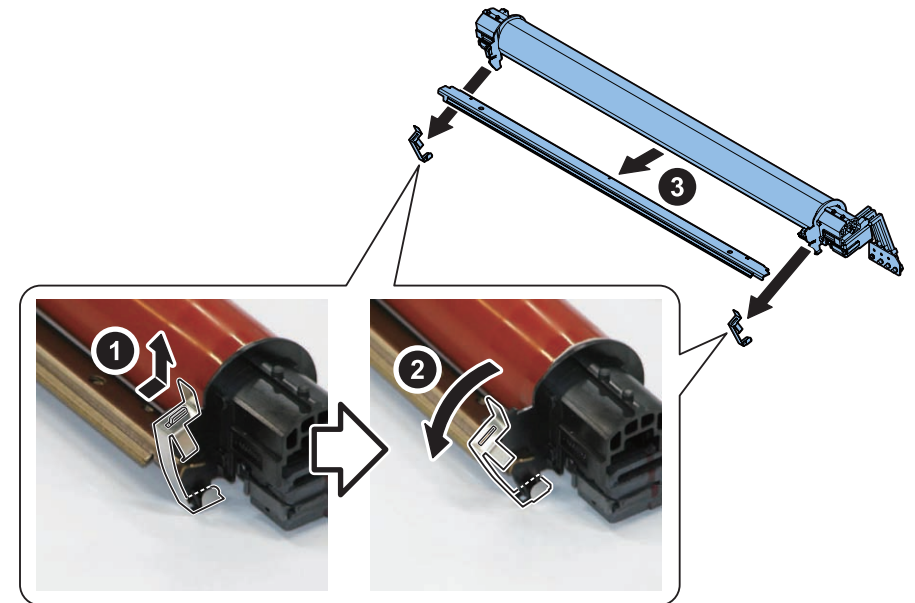
7) Remove the harness from the harness guide and remove the Film Unit.



F-4-303

8) Remove the Separation Guide from the Film Unit.

- 2 leaf springs

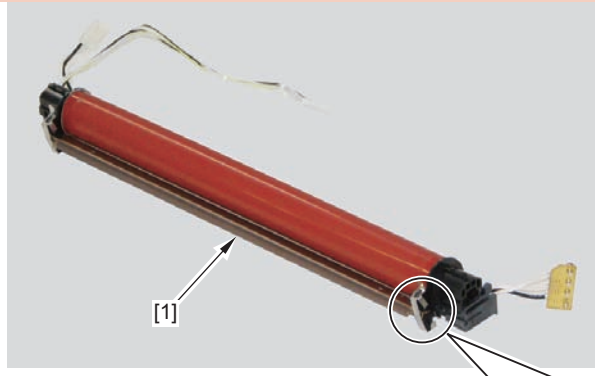
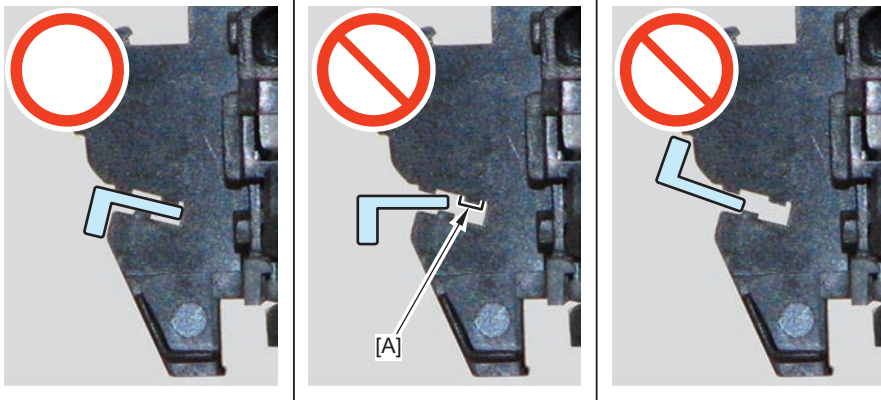


F-4-304

**CAUTION:**

Point to Note when Installing the Fixing Separation Guide:

Be sure to check that Fixing Separation Guide [1] is installed properly.

**SIDE VIEW**

F-4-305

**CAUTION:**

Example of improper installation:

- Illustration at the center: The Fixing Separation Guide is placed on the rib [A].
- Illustration at the right: The Fixing Separation Guide is installed in opposite direction.

Checking method:

- After installing the Fixing Separation Guide, swing the guide with your finger. If it is installed properly, it is stable. If not, it becomes wobbly.
- When installing the Leaf Spring while the guide is not installed properly, the spring will be expanded awkwardly.

### ■ Actions after Replacement

Execute the following in user mode: (Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation).

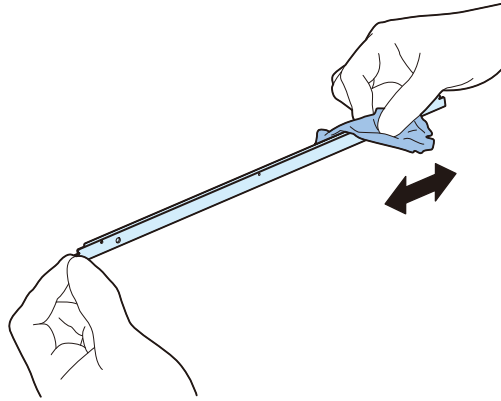
## Cleaning the Fixing Separation Guide

### ■ Preparations

- 1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-175)
- 2) Remove the Fixing Unit. (Refer to page 4-167)
- 3) Remove the Film Unit. (Refer to page 4-169)

### ■ Procedure

- 1) Clean the Fixing Separation Guide with lint-free paper moistened with alcohol.



F-4-306

## Cleaning the Shutter Cover

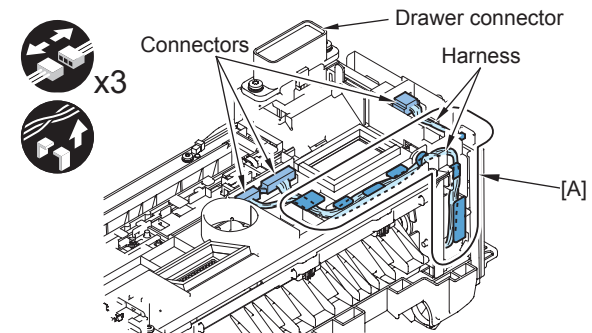
### ■ Preparations

- 1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-175)
- 2) Remove the Fixing Unit. (Refer to page 4-167)

### ■ Procedure

**NOTE:**  
When installing/removing it, do not touch the Film Unit and Pressure Roller.

- 1) Change the direction of the Fixing Assembly. (Place it in the position where the Drawer connector side faces up.)
- 2) Remove the harness.
  - 3 connectors
  - Harness Guide [A]

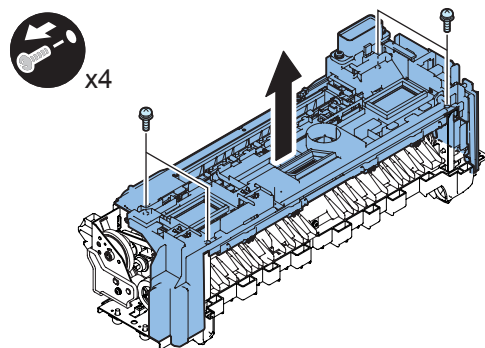


F-4-307



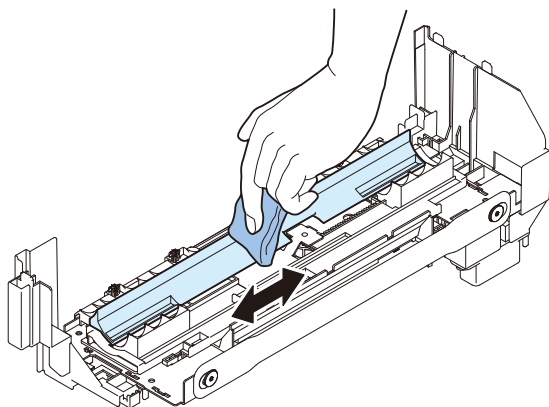
3) Remove the Shutter Unit.

- 4 screws



F-4-308

4) Clean the Shutter Cover with lint-free paper moistened with alcohol.



F-4-309

## Removing the Pressure Roller and Pressure Roller Bearing

### Preparations

- 1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-175)
- 2) Remove the Fixing Unit. (Refer to page 4-167)
- 3) Remove the Film Unit. (Refer to page 4-169)

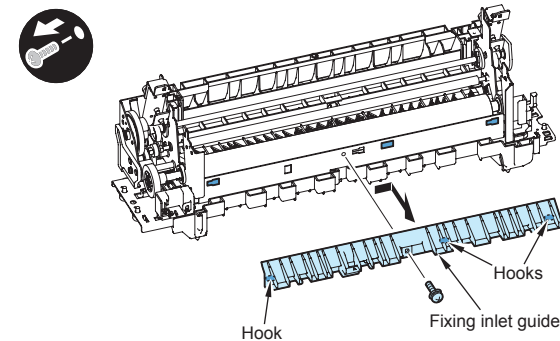
### Procedure

#### NOTE:

When installing/removing it, do not touch the Pressure Roller.

1) Remove the Fixing Inlet Guide.

- 1 screw
- 3 hooks



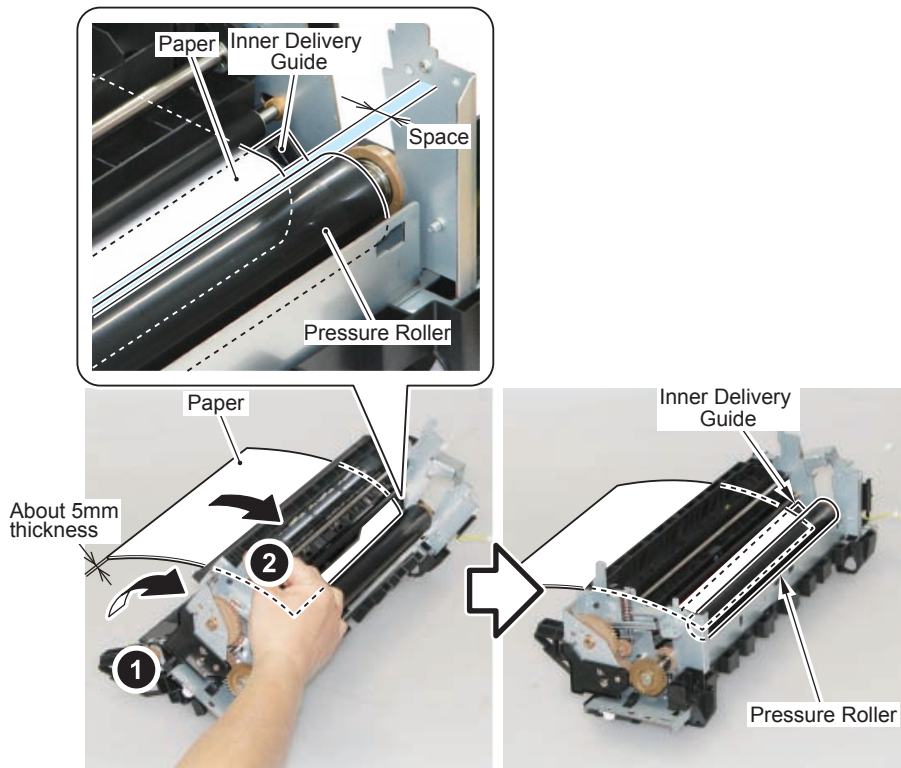
F-4-310

#### CAUTION:

At installation, install it after fitting the 3 hooks to the notches.

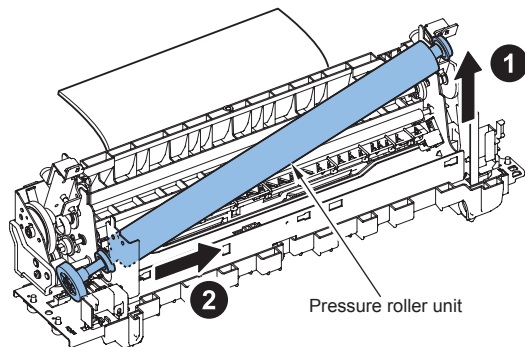


2) When installing/removing it, to prevent the Pressure Roller from being damaged, insert the paper (approx. 5mm) under the Fixing Delivery Lower Guide to make a space between the Inner Delivery Guide and the Pressure roller.



F-4-311

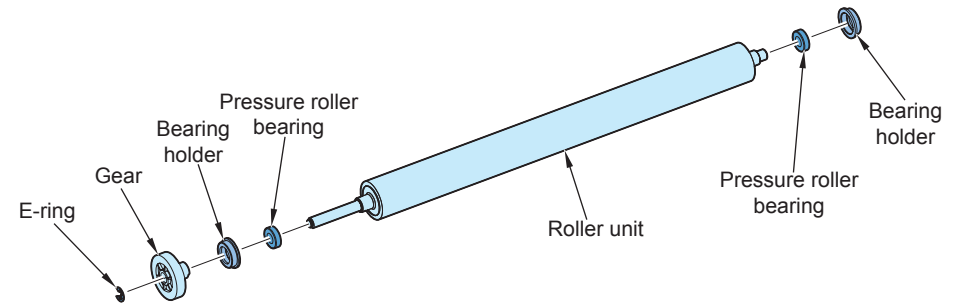
3) Lift the right side and remove the Pressure Roller Unit.



F-4-312

4) Remove the Pressure Roller and the 2 Pressure Roller Bearings from the Pressure Roller Unit.

- 2 bearing holders
- 1 E-ring
- 1 gear



F-4-313

### ■ Actions after Replacement

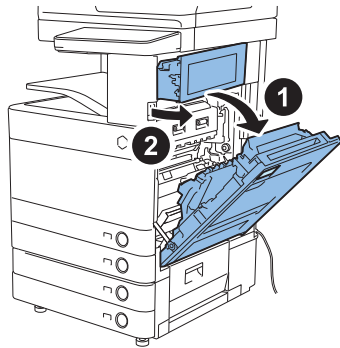
Execute the following in user mode: (Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation).

## Pickup Feed System

### Cleaning the Secondary Transfer Guide

#### Preparations

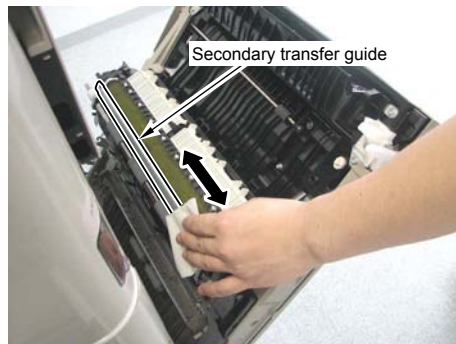
- 1) Open the Right Lower Cover and Right Upper Cover.



F-4-314

#### Procedure

- 1) Clean the Transfer Guide with the lint-free paper moistened with alcohol.



F-4-315

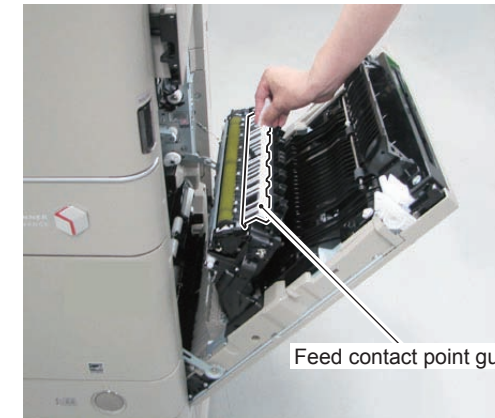
### Cleaning the Feed Contact Point Guide

#### Preparations

- 1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-175)

#### Procedure

- 1) Clean the Feed Contact Point Guide with lint-free paper moistened with alcohol.



F-4-316

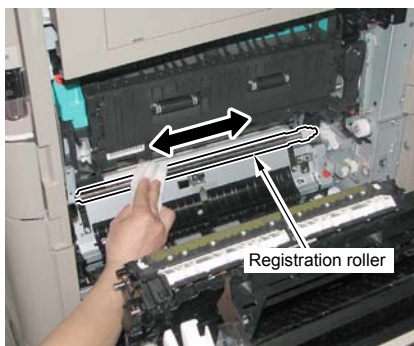
## Cleaning the Registration Roller

### Preparations

1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-175)

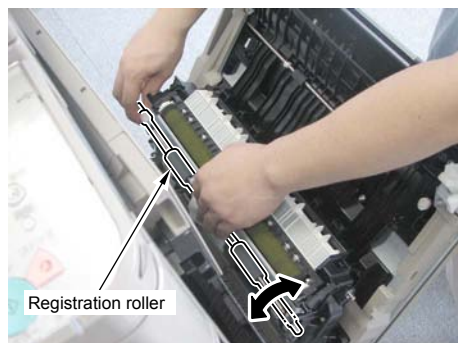
### Procedure

1) Clean the Feed Contact Point Guide with lint-free paper moistened with alcohol.



F-4-317

2) Clean the Outer Registration Roller with lint-free paper moistened with alcohol while rotating it.



F-4-318

## Cleaning the Pre-registration Guide Assembly

### Preparations

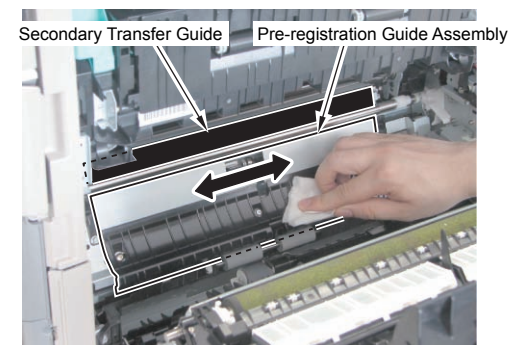
1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-175)

### Procedure

#### CAUTION:

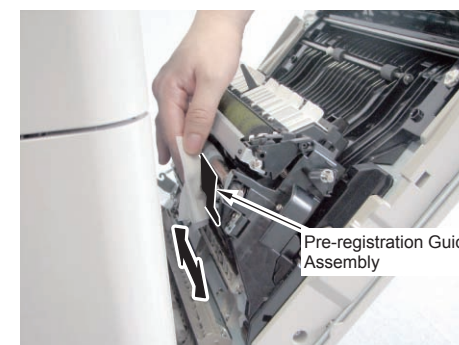
Be sure not to soil the ITB.

1) Clean the Secondary Transfer Guide (area covered by black sheet) and the inside of the Pre-registration Guide with lint-free paper moistened with alcohol.



F-4-319

2) Clean the outside of the Pre-registration Guide (area covered by black sheet) with lint-free paper moistened with alcohol.



F-4-320

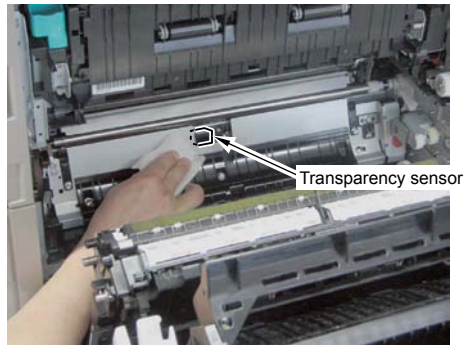
## Cleaning the Transparency Sensor

### Preparations

1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-175)

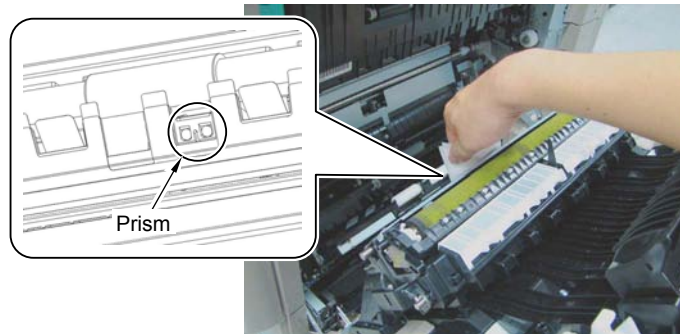
### Procedure

1) Clean the Transparency Sensor with lint-free paper moistened with water in one direction.



F-4-321

2) Clean the Prism with lint-free paper.



F-4-322

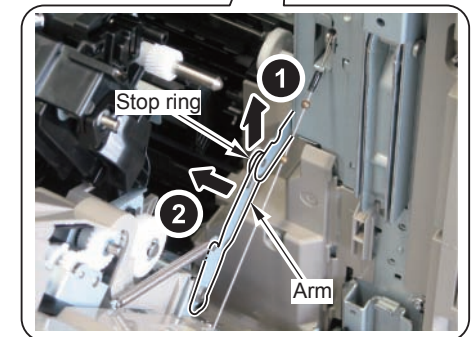
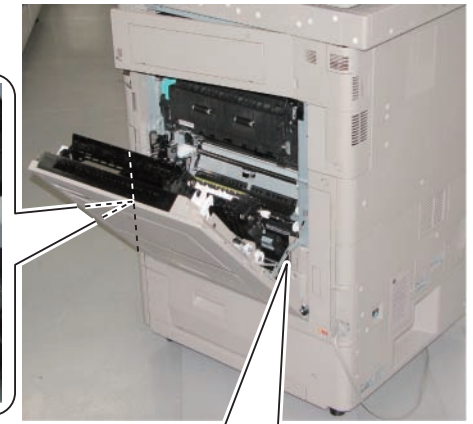
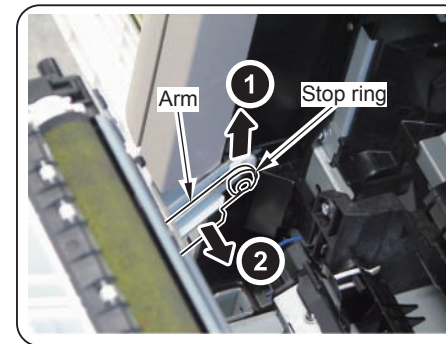
## Cleaning the Vertical Path Sensor and the Lightproof Sheet

### Preparations

1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-175)

### Procedure

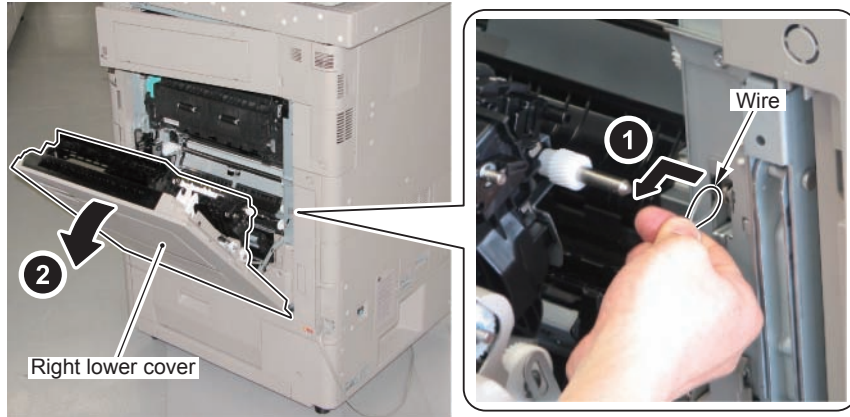
1) Remove the front stop ring and separate the arm.



F-4-323

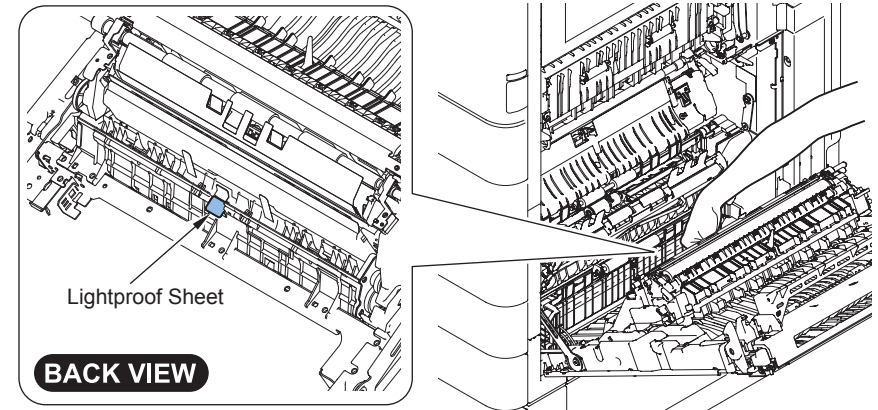


2) Remove the wire from the machine and further open the Right Lower Cover.



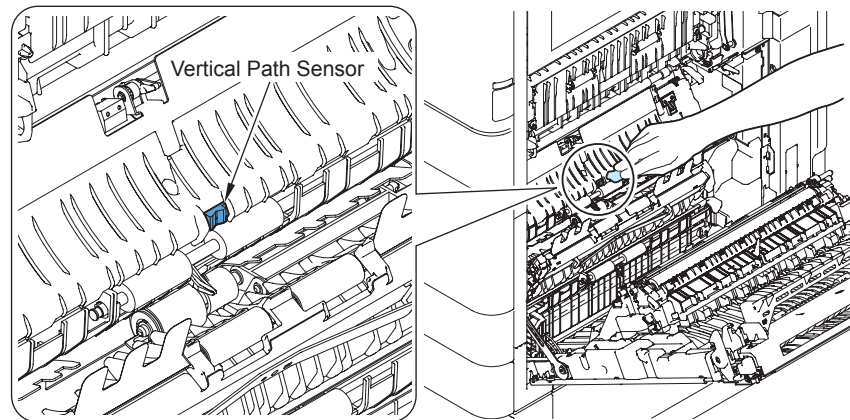
F-4-324

4) Clean the Lightproof Sheet with dry lint-free paper.



F-4-326

3) Clean the Vertical Path Sensor with dry lint-free paper.



F-4-325

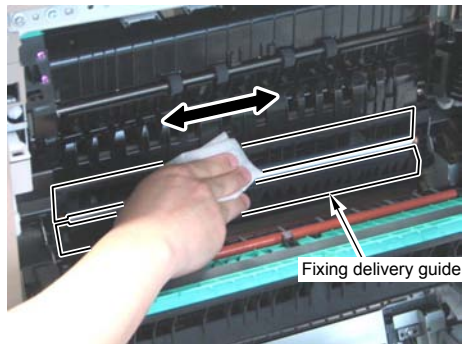
## Cleaning the Fixing Delivery Guide Assembly

### Preparations

1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-175)

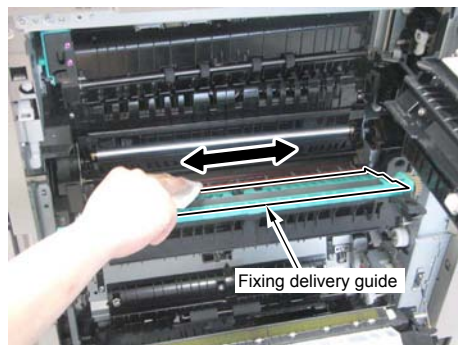
### Procedure

- 1) Open the Fixing Delivery Guide.
- 2) Clean the inside of Fixing Delivery Guide Assembly with lint-free paper moistened with alcohol.



F-4-327

- 3) Clean the outside of Fixing Delivery Guide Assembly with lint-free paper moistened with alcohol.



F-4-328

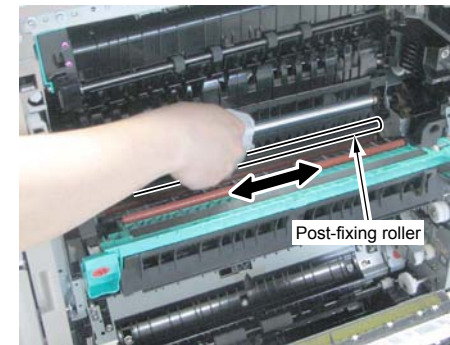
## Cleaning the Post-fixing Roller

### Preparations

1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-175)

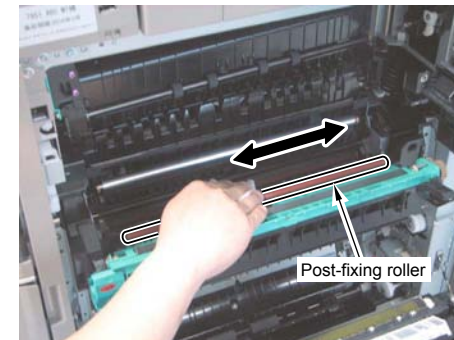
### Procedure

- 1) Open the Fixing Delivery Guide.
- 2) Clean the Post-fixing Roller 1 with lint-free paper moistened with alcohol while rotating it.



F-4-329

- 3) Clean the Post-fixing Roller 2 with lint-free paper moistened with alcohol while rotating it.



F-4-330

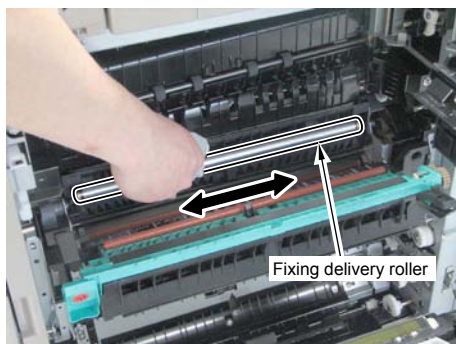
## Cleaning the Fixing Delivery Roller

### Preparations

1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-175)

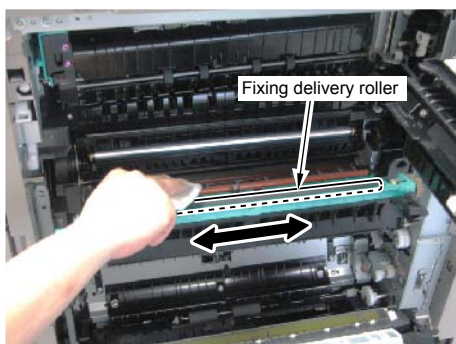
### Procedure

- 1) Open the Fixing Delivery Guide.
- 2) Clean the Fixing Delivery Roller 1 with lint-free paper moistened with alcohol while rotating the gear.



F-4-331

- 3) Clean the Fixing Delivery Roller 2 with lint-free paper moistened with alcohol while rotating it.



F-4-332

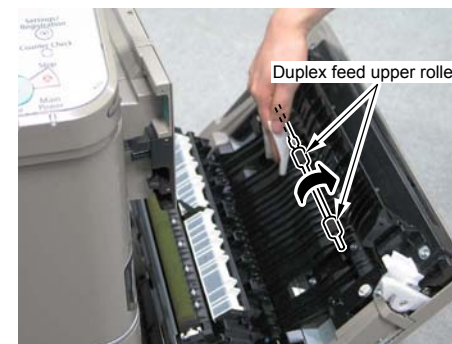
## Cleaning the Duplex Feed Upper Roller, Wheel

### Preparations

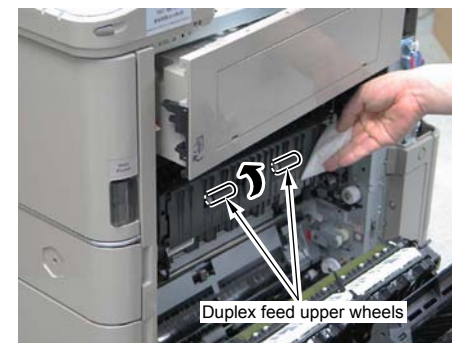
1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-175)

### Procedure

- 1) Open the Right Lower Cover.
- 2) Clean the Duplex Feed Upper Roller, Wheel with lint-free paper moistened with alcohol while rotating it.



F-4-333



F-4-334



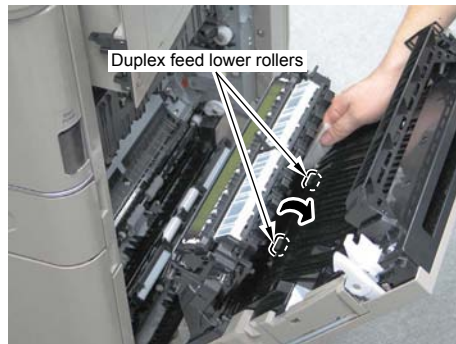
## Cleaning the Duplex Feed Lower Roller, Wheel

### ■ Preparations

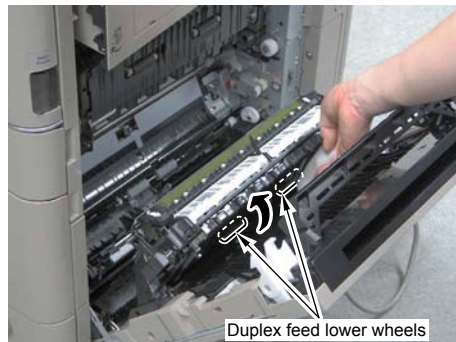
1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-175)

### ■ Procedure

- 1) Open the Right Lower Cover.
- 2) Clean the Duplex Feed Lower Roller, Wheel with lint-free paper moistened with alcohol while rotating it.



F-4-335



F-4-336

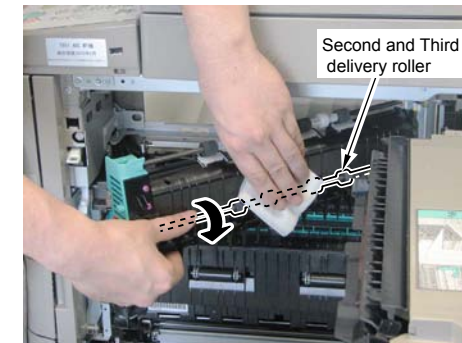
## Cleaning the Second and Third Delivery Roller and Wheels, and the First, Second and Third Delivery Rollers

### ■ Preparations

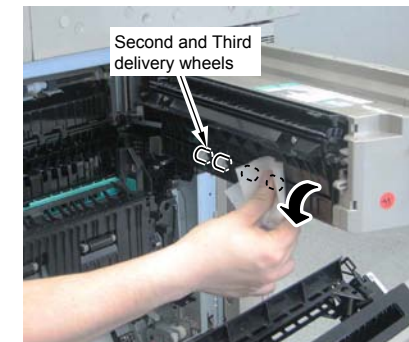
1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-175)

### ■ Procedure

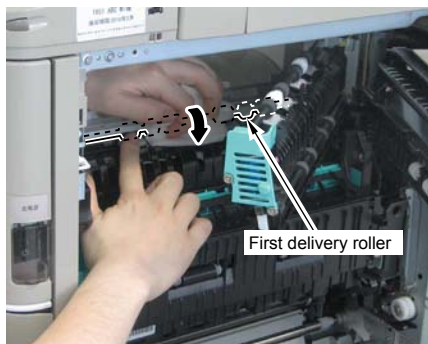
- 1) Clean the the Second and Third Delivery Roller and Wheels, and the First, Second and Third Delivery Rollers with lint-free paper moistened with alcohol.



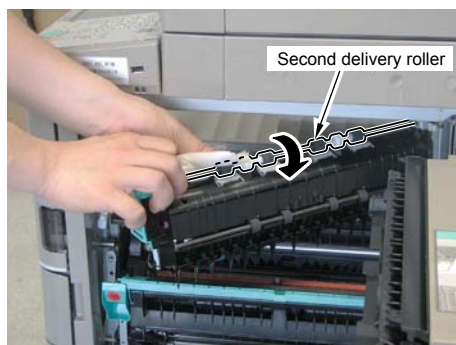
F-4-337



F-4-338



F-4-339



F-4-340

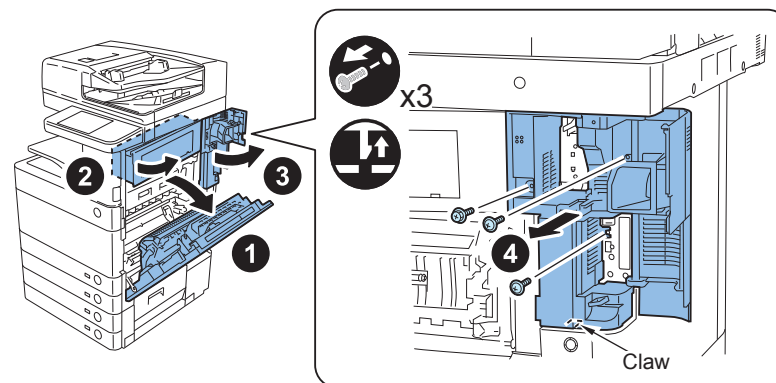


F-4-341

## Removing the Second and Third Delivery Unit

### Preparations

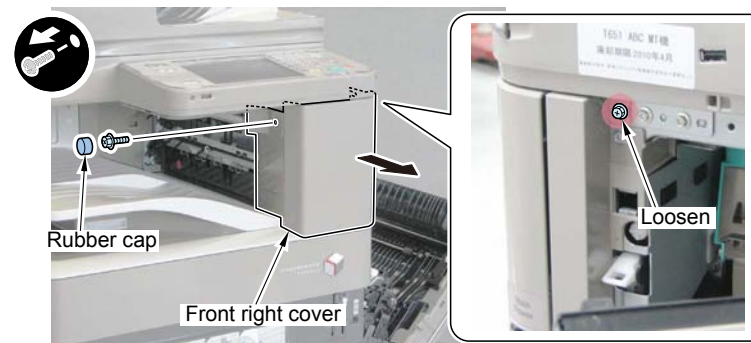
- 1) Open the Right Lower Cover and Right Upper Cover.(Refer to page 4-175)
- 2) Remove the Right Rear Cover.
  - 1 screw (RS tight; M4)
  - 2 screws (TP; M3)
  - 1 claw



F-4-342

- 3) Remove the Front Right Cover.

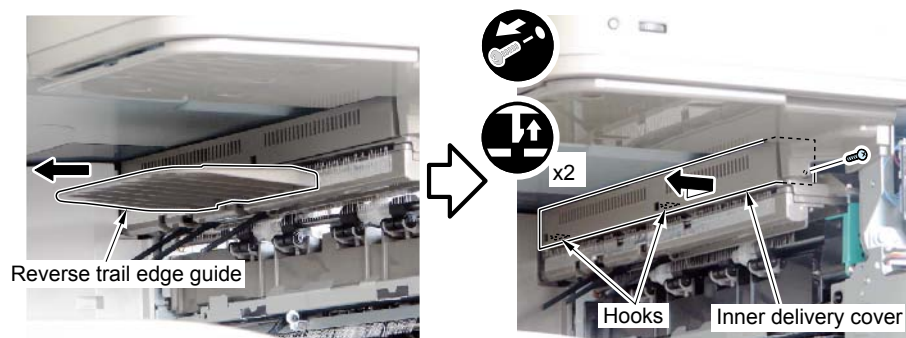
- 1 rubber cap
- 1 screw (remove)
- 1 screw (loosen)



F-4-343

4) Remove the Reverse Trail Edge Guide and the Inner Delivery Cover.

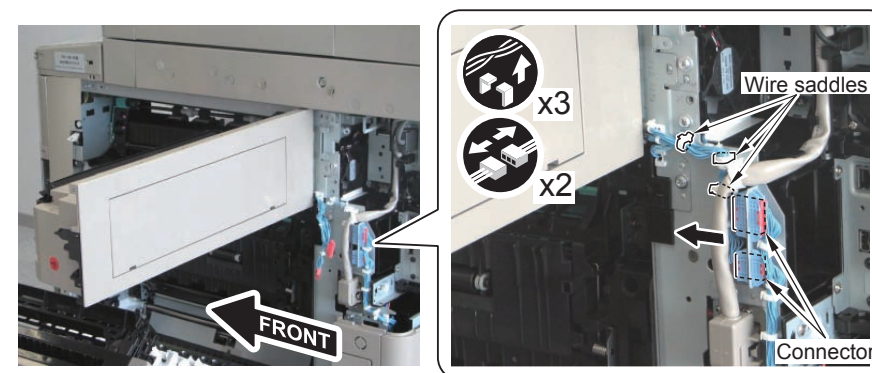
- 1 screw
- 2 hooks



F-4-344

## Procedure

1) Remove the 2 connectors and 3 wire saddles.

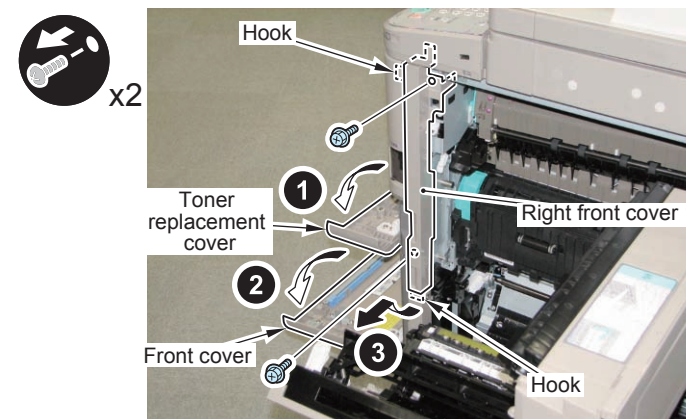


F-4-345

2) Open the Toner Replacement Cover 1 and the Front Cover.

3) Remove the Right Front Cover 1.

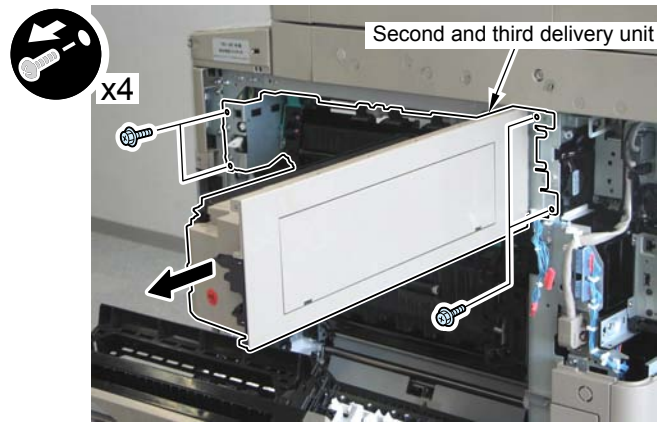
- 2 Screws
- 2 Hooks



F-4-346

4) Remove the Second and Third Delivery Unit.

- 4 screws

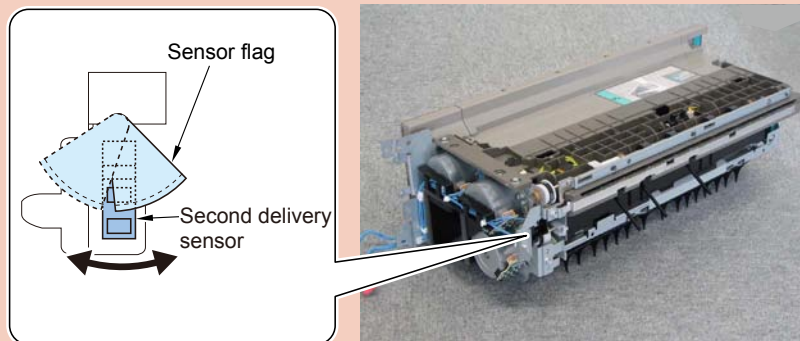


F-4-347

#### CAUTION:

After installing the Second and Third Delivery Unit, make sure that the Sensor Flag in 1 place works normally.

- Reference: Second delivery sensor, I/O>DC-CON>P005>13



F-4-348

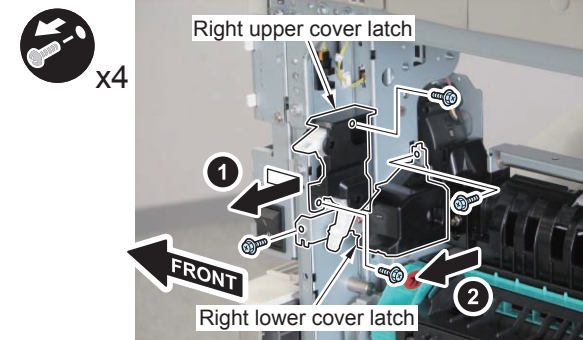
## Removing the First Delivery Unit

### Preparations

- 1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-175)
- 2) Remove the Right Rear Cover. (Refer to page 4-182)
- 3) Remove the Front Right Cover. (Refer to page 4-182)
- 4) Remove the Reverse Trail Edge Guide and the Inner Delivery Cover. (Refer to page 4-183)
- 5) Remove the Second and Third Delivery Unit. (Refer to page 4-184)

### Procedure

- 1) Remove the Right Upper Cover Latch.
  - 2 screws
- 2) Remove the Right Lower Cover Latch.
  - 2 screws

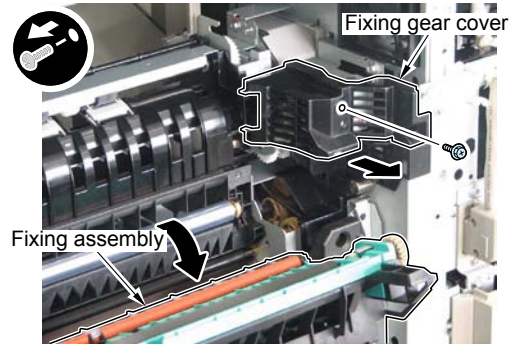


F-4-349



3) Open the Fixing Assembly and remove the Fixing Gear Cover.

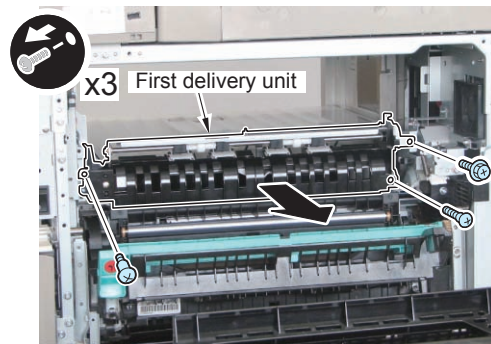
- 1 screw



F-4-350

4) Remove the First Delivery Unit.

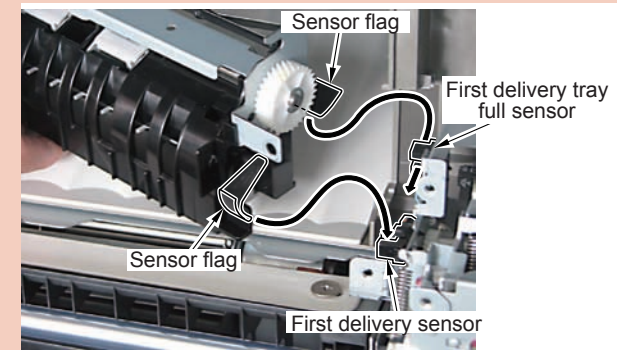
- 2 screws
- 1 stepped screw



F-4-351

CAUTION:

At installation, align the First Delivery Sensor and the Sensor Flag and install it.

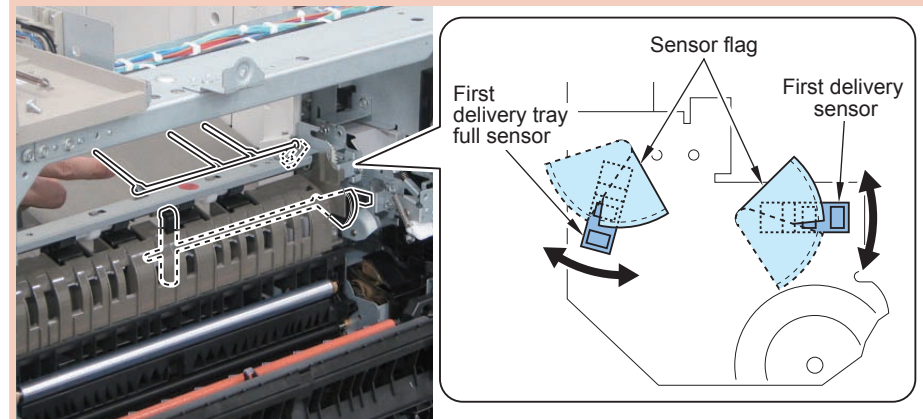


F-4-352

CAUTION:

After installing the First Delivery Unit, make sure that the 2 Sensor Flags work normally.

- Reference: First delivery sensor, I/O>DC-CON>P005>13
- Reference: First delivery tray full sensor, I/O>DC-CON>P005>13



F-4-353

## Removing the Duplex Unit

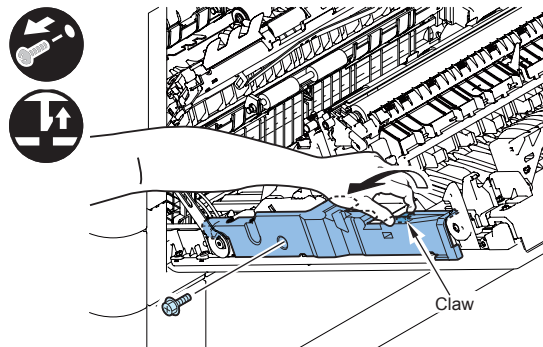
### Preparations

1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-175)

### Procedure

1) Remove the Front Cover of Right Unit.

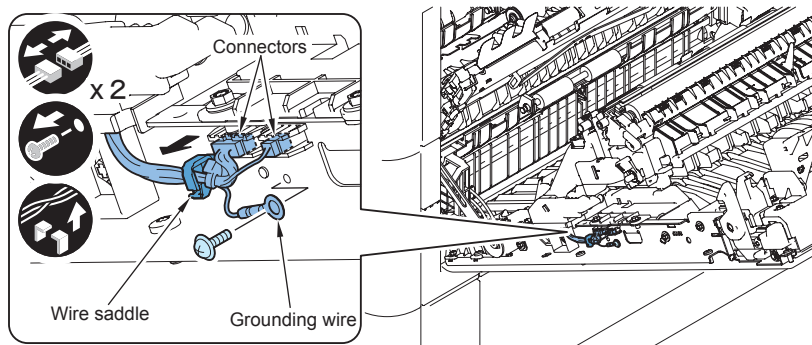
- 1 screw
- 1 claw



F-4-354

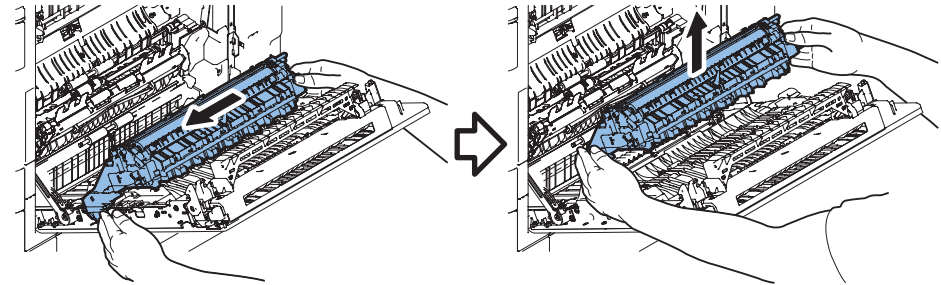
2) Remove the connector and the grounding wire.

- 1 screw
- 1 wire saddle
- 2 connectors



F-4-355

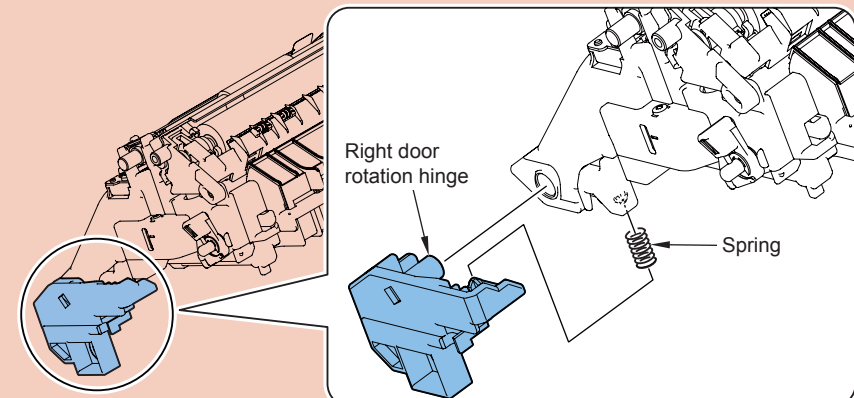
3) Hold the sides of Duplex Unit and remove it.



F-4-356

### CAUTION:

When removing the Duplex Unit, note that the Right Door Rotation Hinge and the spring are easily disassembled.



F-4-357

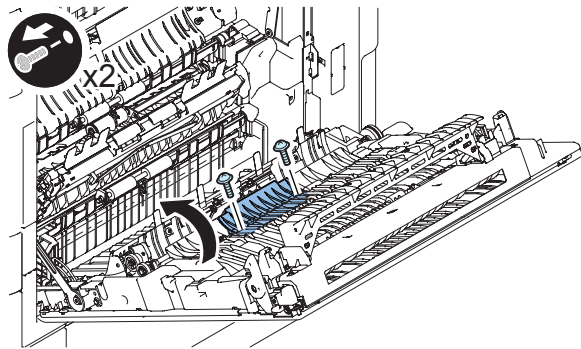
## Removing the Multi-purpose Tray Pickup Roller

### Preparations

- 1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-175)
- 2) Remove the Duplex Unit. (Refer to page 4-186)

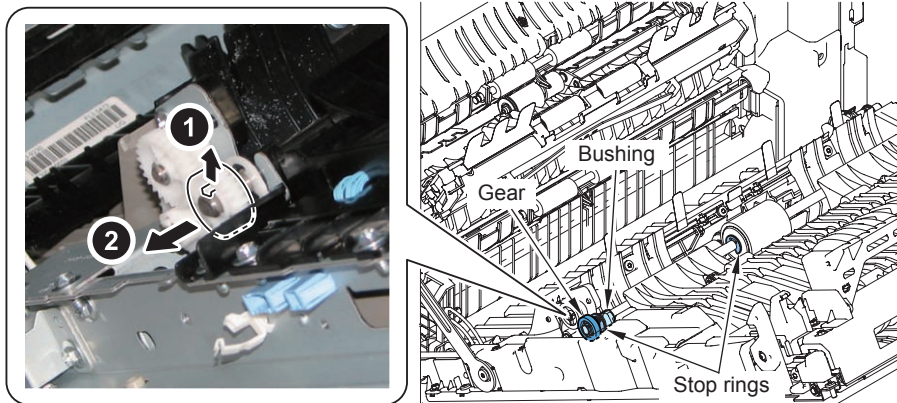
### Procedure

- 1) Remove the Both Angle Guide.
  - 2 screws



F-4-358

- 2) Remove the gear, 2 stop rings and the bushing.

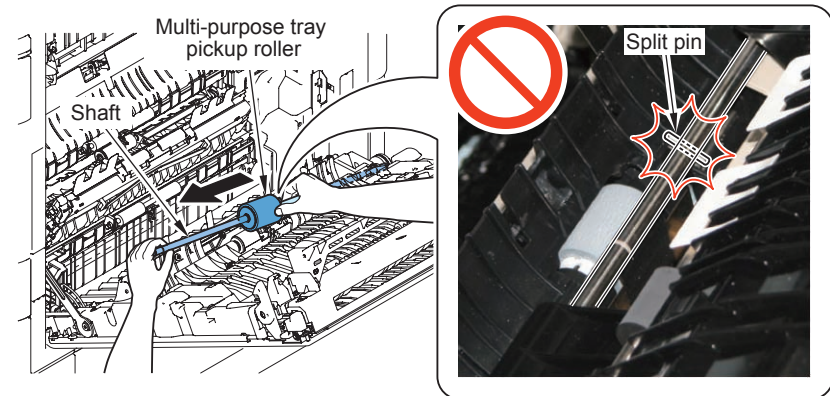


F-4-359

- 3) Tilt the shaft, pull the Multi-purpose Tray Pickup Roller and remove it.

#### CAUTION:

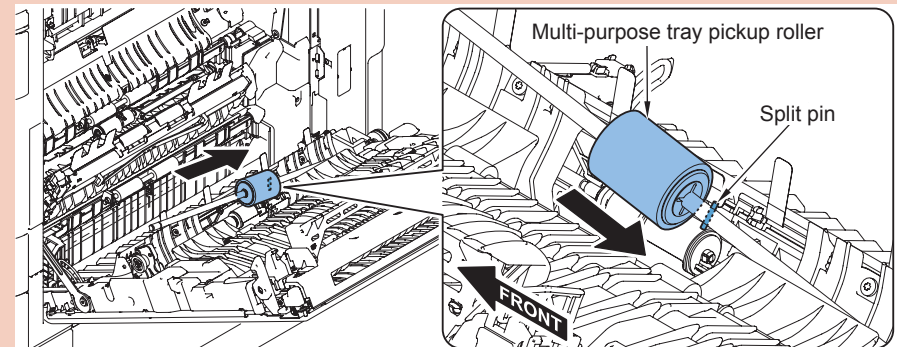
Be careful of the Split Pin securing the Multi-purpose Tray Pickup Roller.



F-4-360

#### CAUTION:

At installation, be sure to fit the Split Pin into the Multi-purpose Tray Pickup Roller.



F-4-361



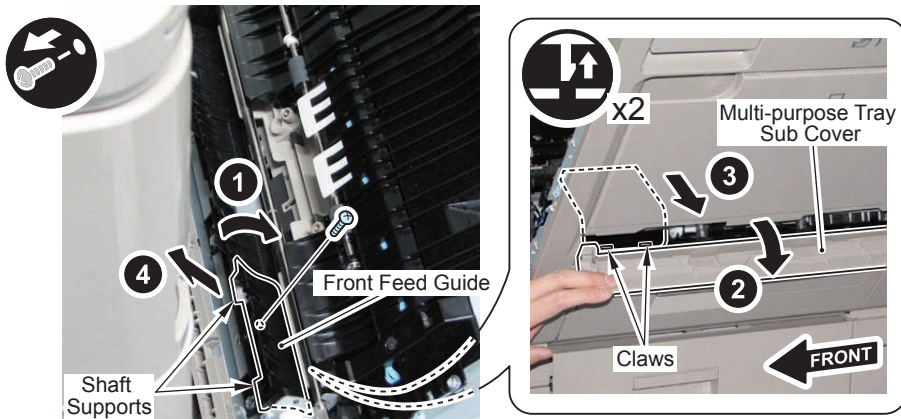
## Removing the Multi-purpose Tray Separation Roller

### Preparations

- 1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-175)
- 2) Remove the Duplex Unit. (Refer to page 4-186)
- 3) Removing the Multi-purpose Tray Pickup Roller. (Refer to page 4-187)

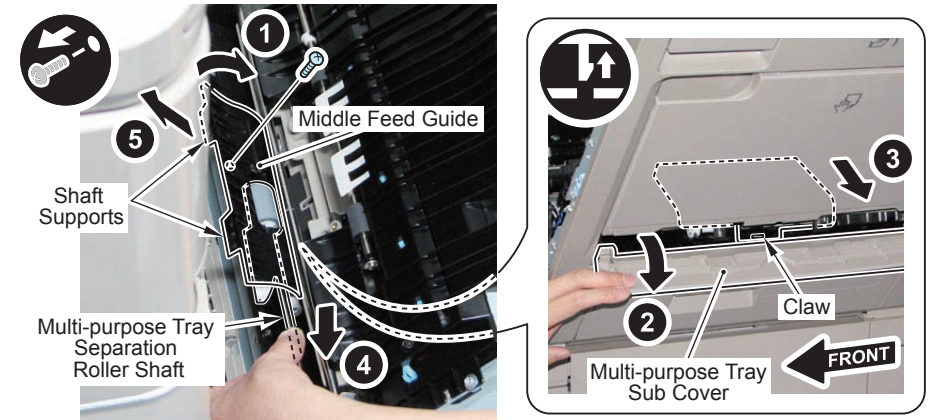
### Procedure

- 1) While opening the Multi-purpose Tray Sub Cover, remove the Front Feed Guide.
  - 1 Screw
  - 2 Shaft Supports
  - 2 Claws



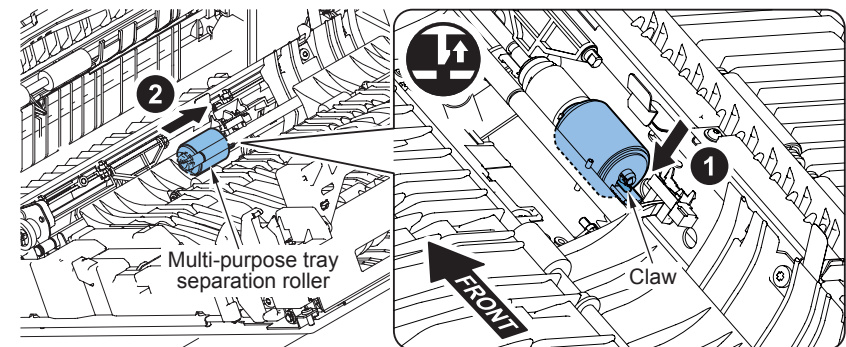
F-4-362

- 2) While holding down the Multi-purpose Tray Separation Roller Shaft, remove the Middle Feed Guide.
  - 1 Screw
  - 2 Shaft Supports
  - 1 Claw



F-4-363

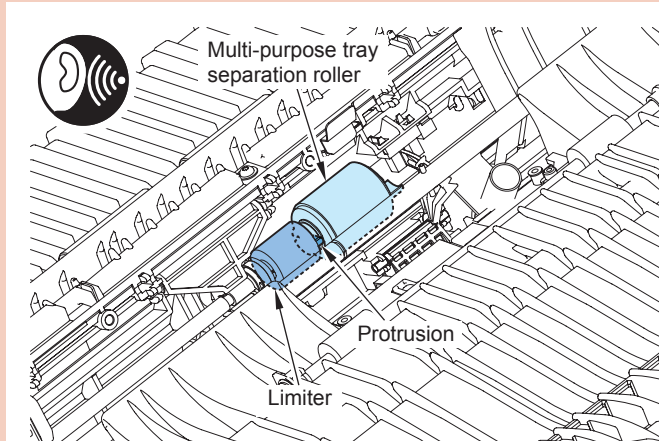
- 3) Remove the Multi-purpose Tray Separation Roller.
  - 1 claw



F-4-364

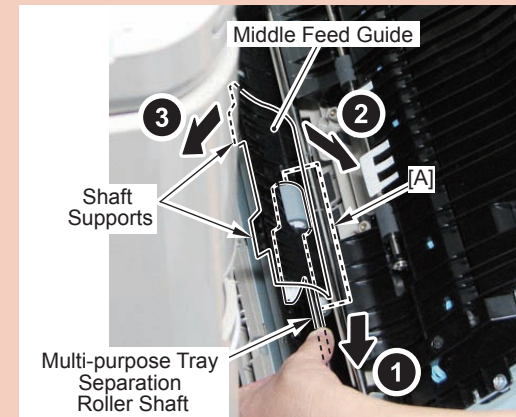
**CAUTION:**

Align the groove of Multi-purpose Tray Separation Roller with the protrusion of limiter and push it until it clicks.

**CAUTION:** Installing the Middle Feed Guide and the Front Feed Guide

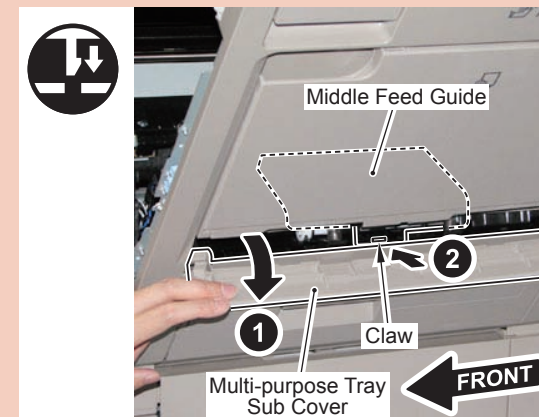
In order to align the height of the Middle Feed Guide and the Front Feed Guide, be sure to follow the following steps when installing.

- Be careful not to remove the 2 rubbers of the Middle Feed Guide when installing. When the rubbers are not properly installed, abnormal noise may occur at pickup from the Multi-purpose Tray.
1. While holding down the Multi-purpose Tray Separation Roller Shaft, insert the Middle Feed Guide from the hole [A] of the plate, and install the 2 Shaft Supports to the Feed Guide Shaft.

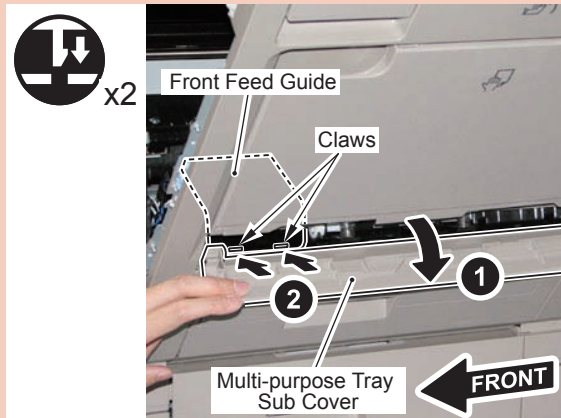


F-4-365

2. Open the Multi-purpose Tray Sub Cover, and fit the hole of the Middle Feed Guide to the claw of the Multi-purpose Tray Pickup Frame.

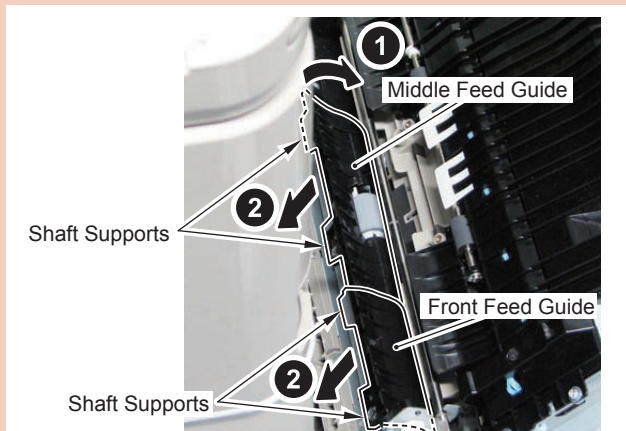


3. Open the Multi-purpose Tray Sub Cover, and fit the holes of the Front Feed Guide to the 2 claws of the Multi-purpose Tray Pickup Frame.



F-4-366

4. Remove only the 2 Shaft Supports of the Middle Feed Guide from the Feed Guide Shaft.
5. Align the height of the Middle Feed Guide and the Front Feed Guide, and install the 4 Shaft Supports of the Middle Feed Guide and the Front Feed Guide to the Feed Guide Shaft.

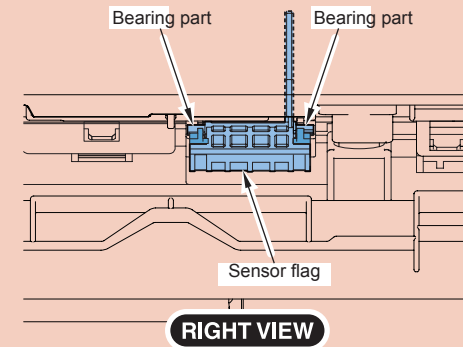


F-4-367

- Check by hand whether the height of the Middle Feed Guide and the Front Feed Guide is aligned.

**CAUTION:**

Open the Multi-purpose Tray Sub Cover and make sure that the bearing part of Multi-purpose Tray Pickup Sensor Flag is surely installed.



## Removing the Pickup Roller

### Procedure

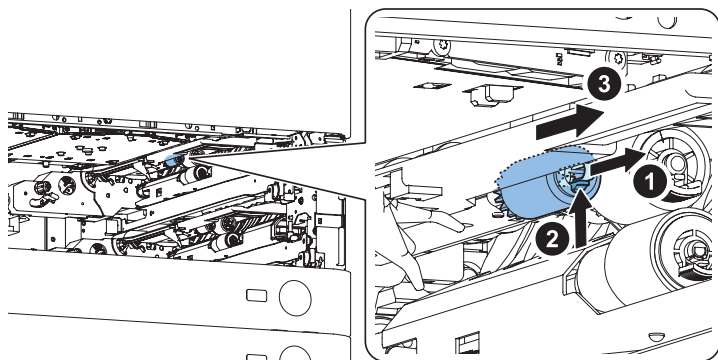
#### NOTE:

This procedure describes the removing step of cassette 1 Pickup Roller. Go through the same procedure for the Pickup Roller of cassette 2.

#### CAUTION:

Do not touch the surface of Pickup Roller and the Separation Roller.

- 1) Remove the cassette 1 and cassette 2.
- 2) Remove the Pickup Roller.
  - 1 pin
  - 1 tab



F-4-368

## Removing the Feed Roller

### Procedure

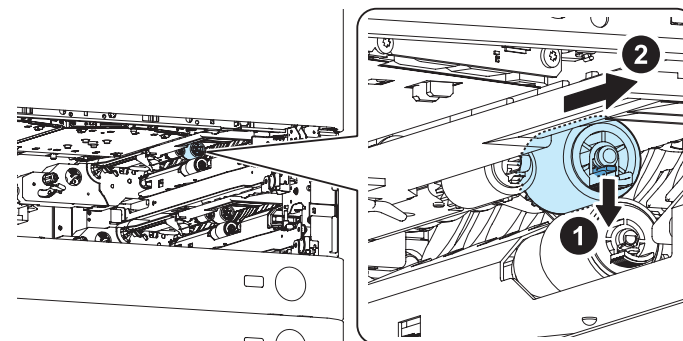
#### NOTE:

This procedure describes the removing steps of cassette 1 Feed Roller. Go through the same procedure for the Feed Roller of cassette 2.

#### CAUTION:

Do not touch the surface of Pickup Roller and the Separation Roller.

- 1) Remove the cassette 1 and cassette 2.
- 2) Remove the Cassette Feed Roller.
  - 1 tab



F-4-369

## Removing the Separation Roller

### Preparations

1) Open the Right Lower Cover and Right Upper Cover. (Refer to page 4-175)

### Procedure

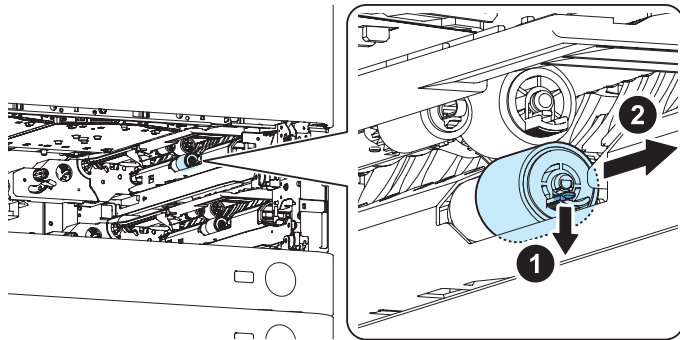
#### NOTE:

This procedure describes the removing procedure of cassette 1 Separation Roller. Go through the same procedure for the Separation Roller of cassette 2.

#### CAUTION:

Do not touch the surface of Pickup Roller and the Separation Roller.

- 1) Remove the cassette 1 and cassette 2.
- 2) Remove the Separation Roller.
  - 1 tab



F-4-370

## Removing the Pickup Assembly Idler Gear

### Preparations

- 1) Remove the Cassette1 and Cassette2.
- 2) Remove the Pickup Roller. (Refer to page 4-191)
- 3) Remove the Feed Roller. (Refer to page 4-191)

### Procedure

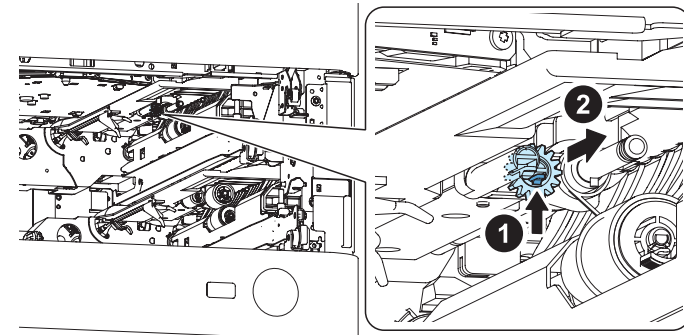
#### NOTE:

This procedure describes the removing procedure of cassette 1 Pickup Assembly Idler Gear. Go through the same procedure for the Pickup Assembly Idler Gear of cassette 2.

#### CAUTION:

Do not touch the surface of Pickup Roller and the Separation Roller.

- 1) Remove the Pickup Assembly Idler Gear.
  - 1 tab



F-4-371



## Removing the Right Lower Cover

### Preparations

1) Pull the Cassette1 and Cassette2.

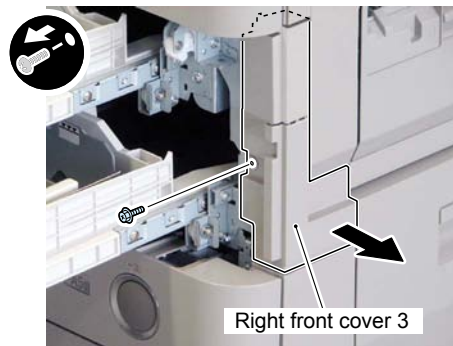
### Procedure

#### NOTE:

- If the Cassette Pedestal is connected, perform step 1-1).
- If the Cassette Pedestal is not connected, perform step 1-2).
- If the Side Paper Deck is connected, perform step 1-3).

1-1) When the Cassette Pedestal is installed, remove the Right Front Cover 3.

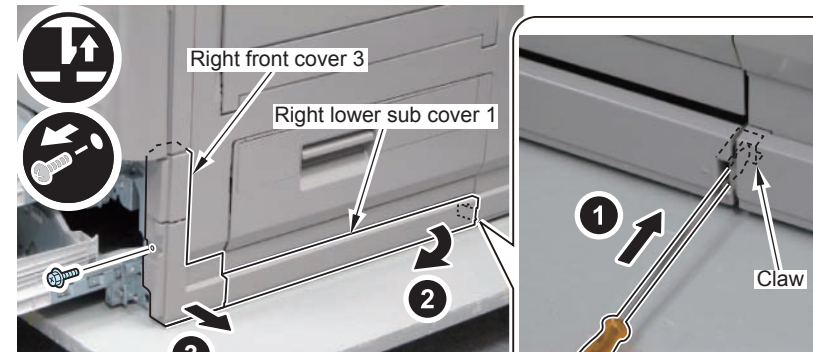
- 1 screw



F-4-372

1-2) When the Cassette Pedestal is not installed, remove the Right Lower Sub Cover 1 and the Right Front Cover 3.

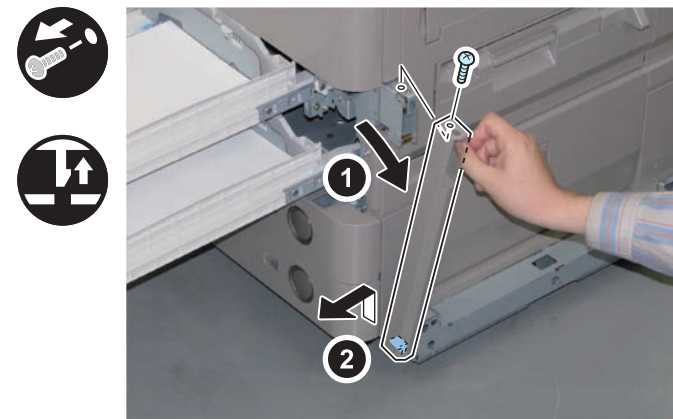
- 1 claw
- 1 screw



F-4-373

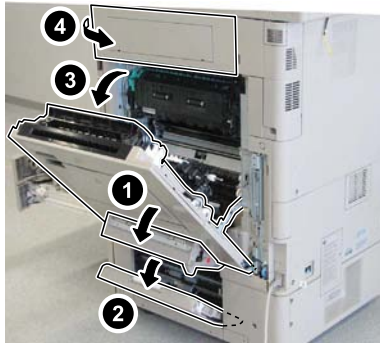
1-3) When the side paper deck is installed, remove the side paper deck, remove the Deck Connect Cover.

- 1 screw



F-4-374

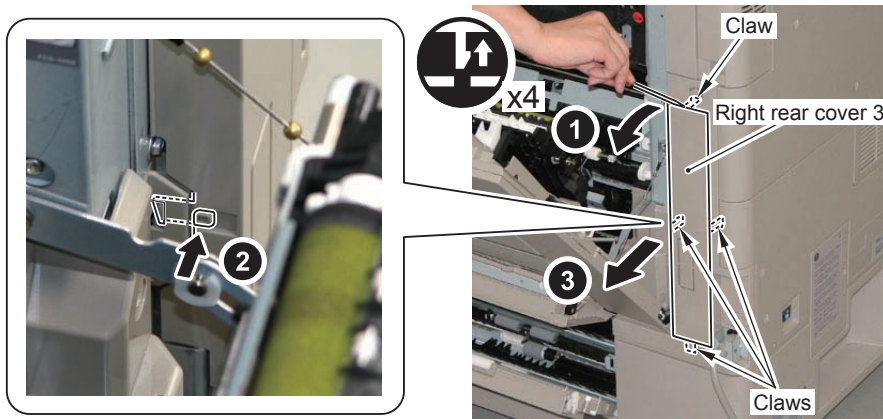
- 2) Open the Cassette Right Upper Cover.
- 3) If the Cassette Pedestal is connected, Open the Cassette Right Lower Cover.
- 4) Open the Right Upper Cover and the Right Lower Cover.



F-4-375

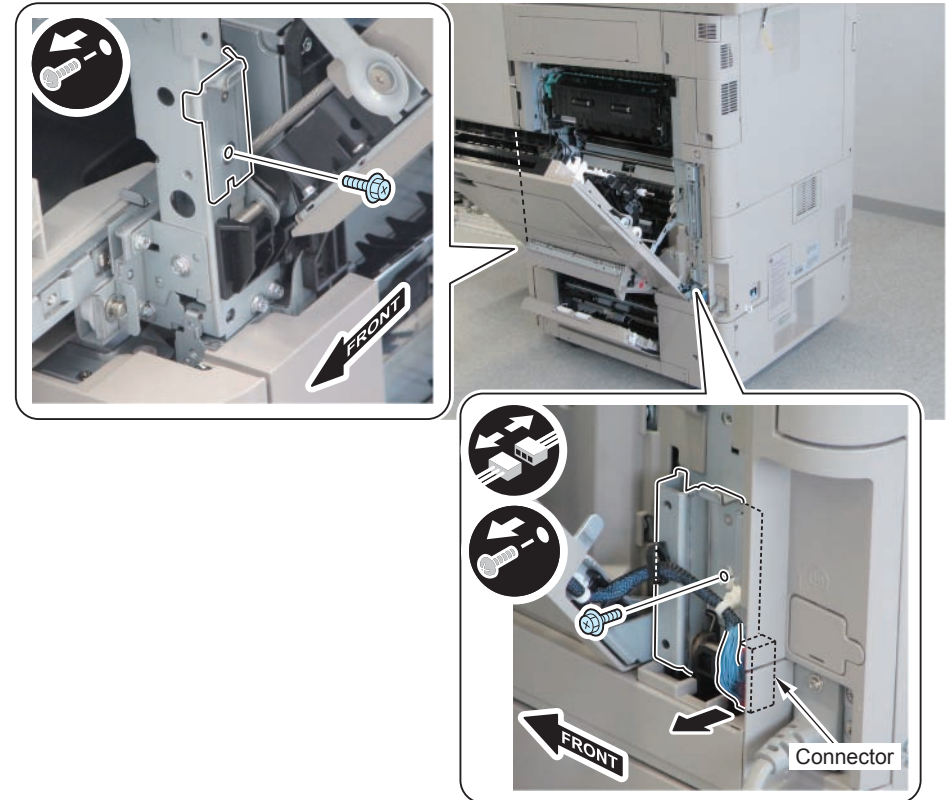
- 5) Remove the Right Rear Cover 3.

- 3 claws
- 1 hook



F-4-376

- 6) Remove the 2 screws and the connector.



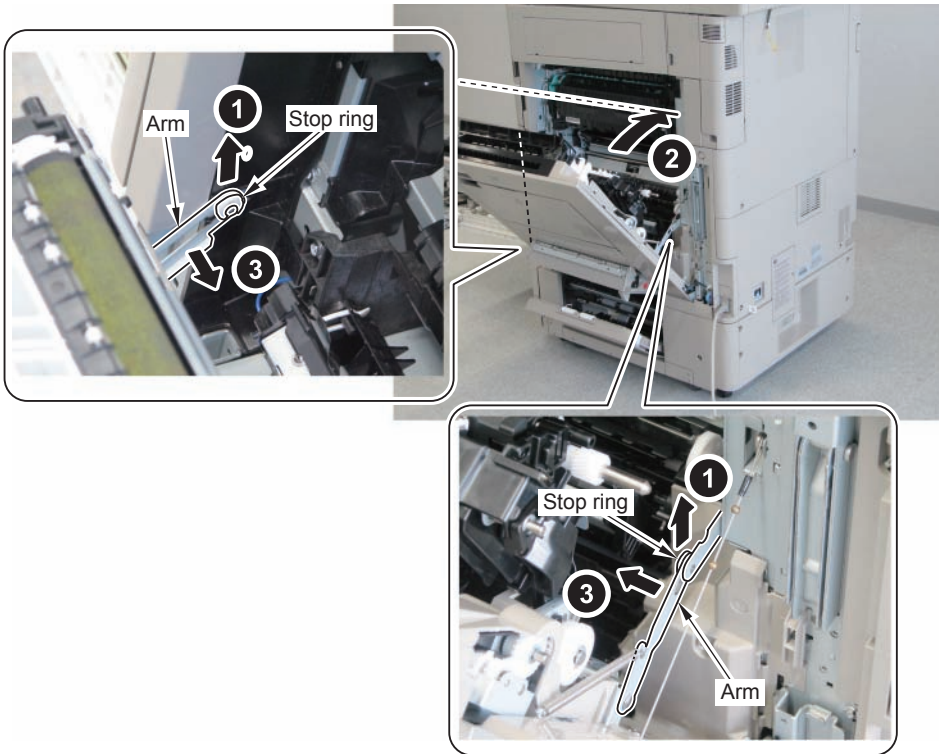
F-4-377



7) Remove the E-rings at the front and the rear sides, and disconnect the arm while closing the Right Lower Cover.

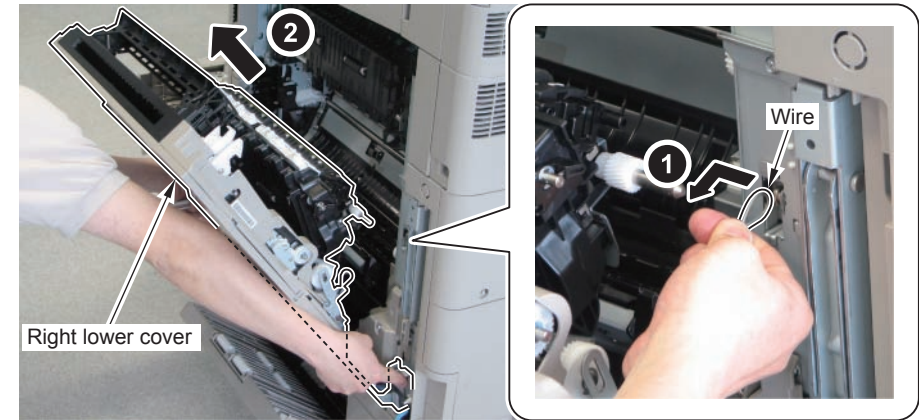
**CAUTION:**

Be sure not to touch the roller.



F-4-378

8) Remove the wire from the host machine and remove the Right Lower Cover.



F-4-379

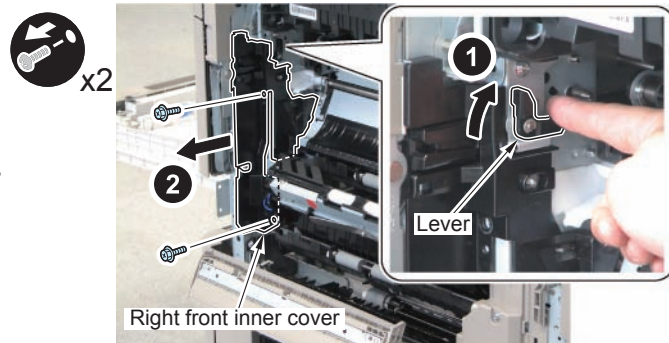
## Removing the Cassette 1 Pickup Unit

### Preparations

- 1) Pull the Cassette1 and Cassette2.
- 2) Remove the Right Lower Cover. (Refer to page 4-193)

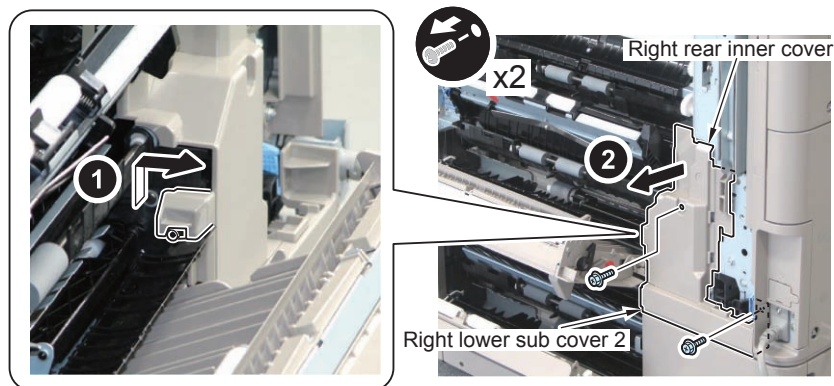
### Procedure

- 1) Lift the lever and remove the Right Front Inner Cover.
  - 2 screws



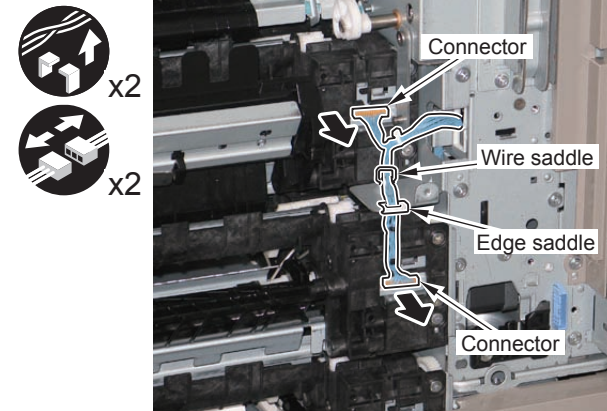
F-4-380

- 2) Remove the Right Lower Sub Cover 2 and the Right Rear Inner Cover simultaneously.
  - 2 Screws
  - 1 Shaft Support



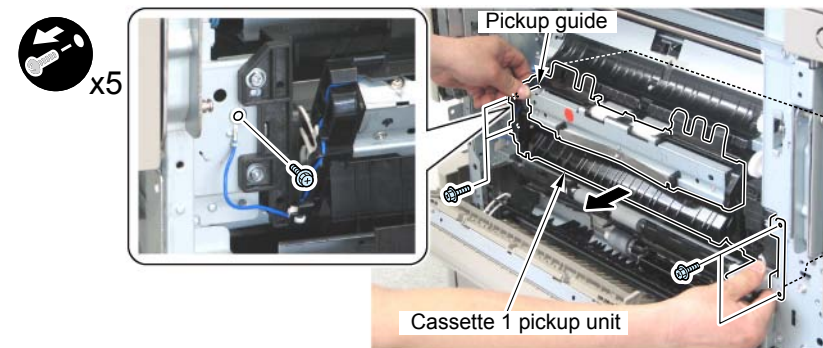
F-4-381

- 3) Remove the Pickup Harness.
  - 1 wire saddle
  - 1 edge saddle
  - 2 connectors



F-4-382

- 4) Hold the Pickup Guide and remove the Cassette 1 Pickup Unit.
  - 4 screws (RS; M4)
  - 1 screw (RS; M3)



F-4-383



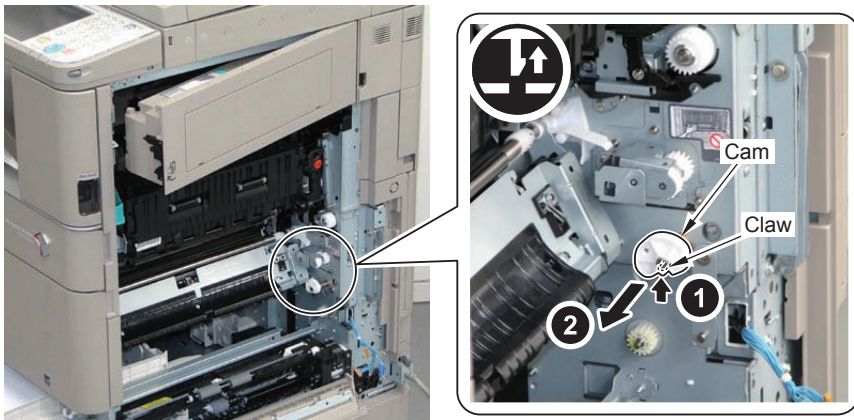
## Removing the Transparency/Registration/Vertical Path Sensor

### Preparations

- 1) Pull the Cassette1 and Cassette2.
- 2) Remove the Right Lower Cover.(Refer to page 4-193)
- 3) Remove the Cassette 1 Pickup Unit.(Refer to page 4-196)

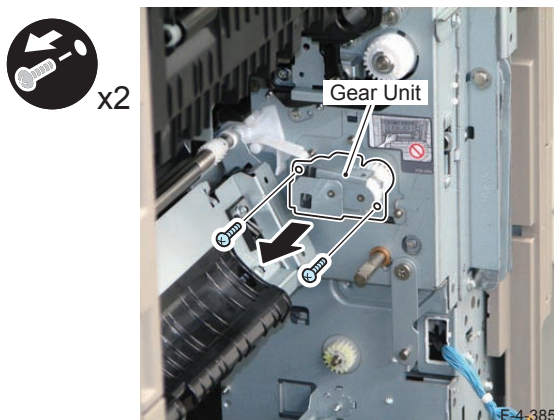
### Procedure

- 1) Remove the cam.
  - 1 Claw



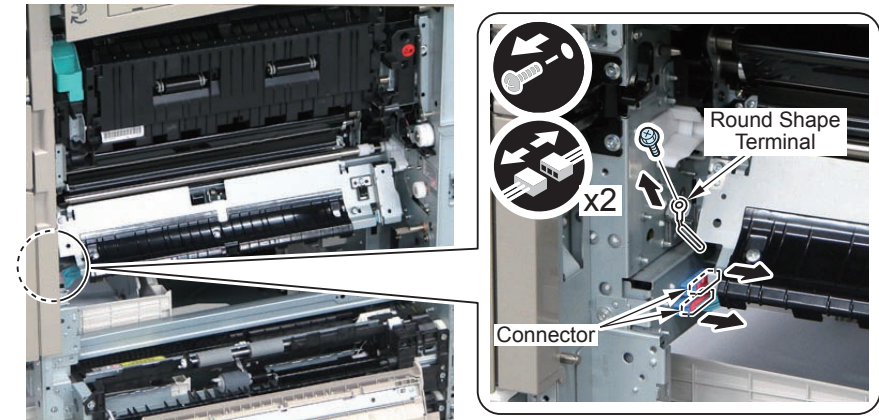
F-4-384

- 2) Remove the Gear Unit.
  - 2 Screws



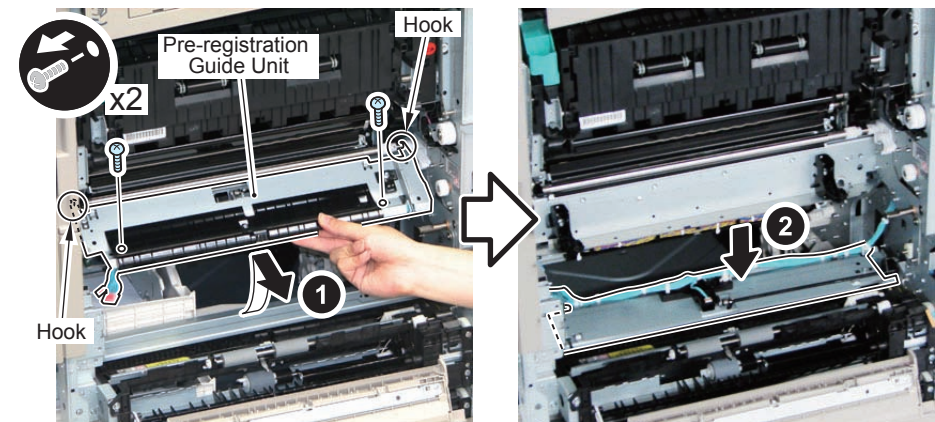
F-4-385

- 3) Disconnect the round shape terminal, and 2 Connectors.
  - 1 Screws



F-4-386

- 4) Turn over the Pre-registration Guide Unit.
  - 2 Connectors
  - 2 Hooks



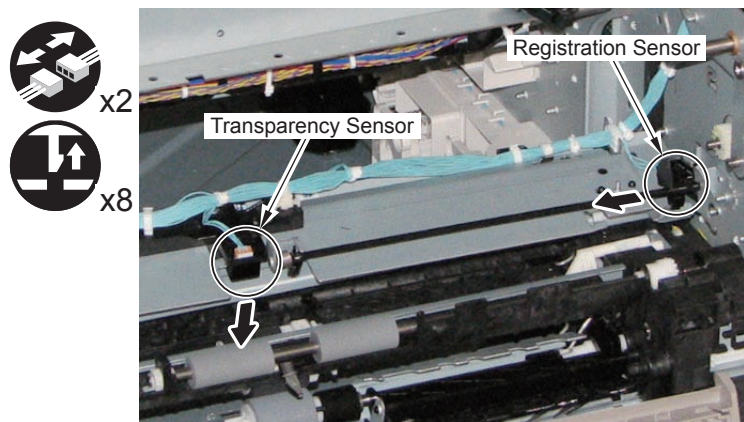
F-4-387

## NOTE:

In the following procedure, remove only sensors that require replacement.

5) Remove the Transparency Sensor. (4 Claws, 1 Connector)

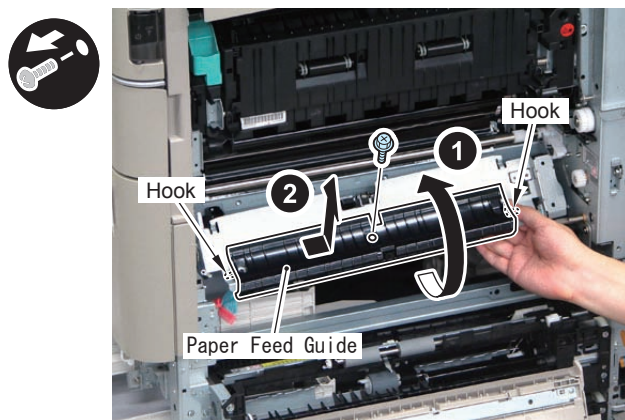
6) Remove the Registration Sensor. (4 Claws, 1 Connector)



F-4-388

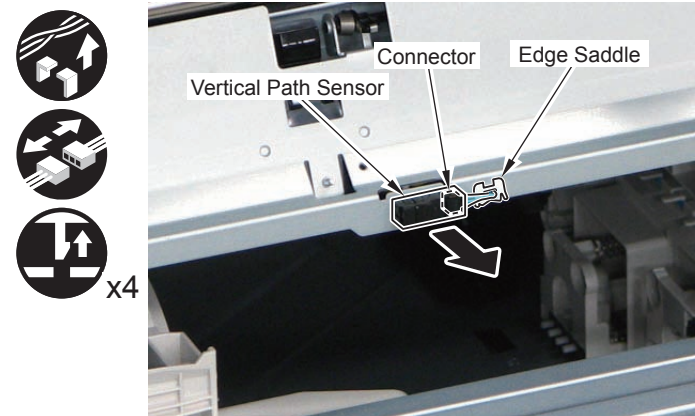
7) Turn over the Pre-registration Guide Unit, and remove the Paper Feed Guide.

- 1 Screw
- 2 Hooks



F-4-389

8) Open the Edge Saddle, and remove the Vertical Path Sensor. (4 Claws, 1 Connector)



F-4-390



## Removing the Cassette Right Upper Cover

### NOTE:

- If the Cassette Pedestal is connected, perform step 1-1).
- If the Cassette Pedestal is not connected, perform step 1-2).

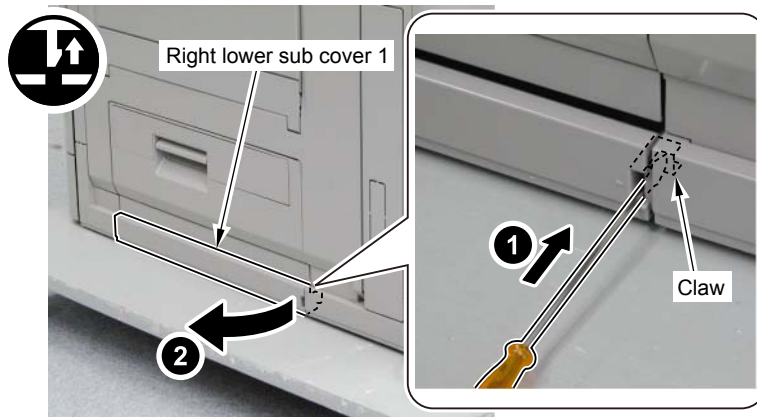
1-1)When the Cassette Pedestal is installed, open the Cassette Right Lower Cover.



F-4-391

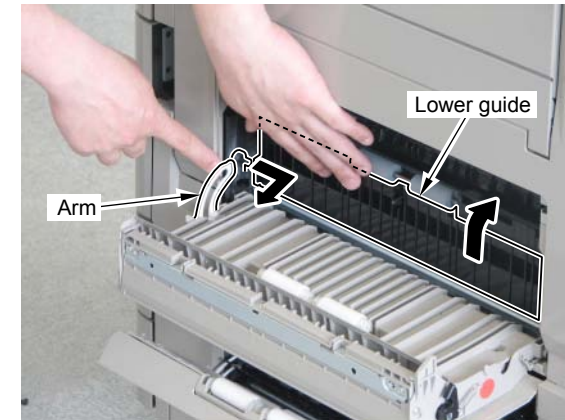
1-2)When the Cassette Pedestal is not installed, remove the Right Lower Sub Cover 1.

- 1 claw



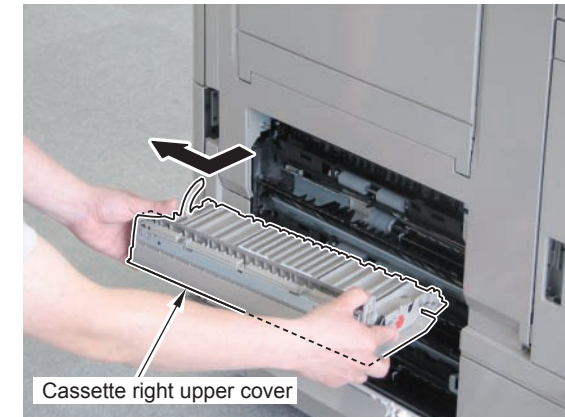
F-4-392

- 2)Open the Cassette Right Upper Cover.
- 3)Lift the Lower Guide and remove the arm.



F-4-393

4)Remove the Cassette Right Upper Cover.



F-4-394

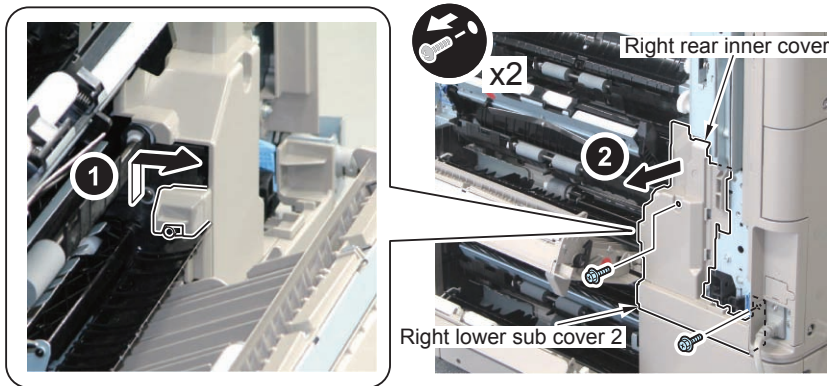
## Removing the Cassette 2 Pickup Unit

### Preparations

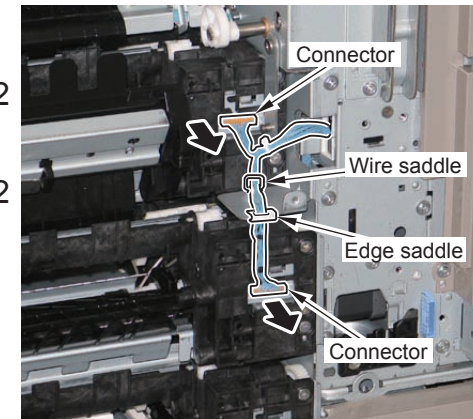
- 1) Pull the Cassette1 and Cassette2.
- 2) Remove the Right Lower Cover.(Refer to page 4-193)
- 3) Remove the Cassette Right Upper Cover.(Refer to page 4-199)

### Procedure

- 1) Remove the Right Lower Sub Cover 2 and the Right Rear Inner Cover simultaneously.
  - 2 Screws
  - 1 Shaft Support

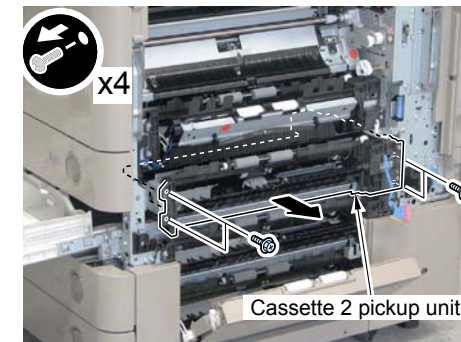


- 2) Remove the Pickup Harness.
  - 1 wire saddle
  - 1 edge saddle
  - 2 connectors



F-4-395

- 3) Remove the Cassette 2 Pickup Unit.
  - 4 screws



F-4-396

## Removing the Cassette Size Detection Unit

### Preparations

- 1) Remove the Cassette.
- 2) When removing the Cassette 1 Size Detection Unit, make sure to remove the Cassette 1 Pickup Unit. (Refer to page 4-196)
- 3) When removing the Cassette 2 Size Detection Unit, make sure to remove the Cassette 2 Pickup Unit. (Refer to page 4-200)

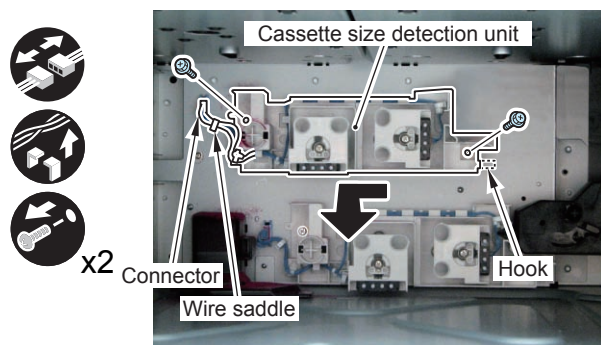
### Procedure

#### NOTE:

This procedure describes the removing steps of Cassette 1 Size Detection Unit. Go through the same procedure for Cassette 2 Size Detection Unit.

- 1) Remove the Cassette 1 Size Detection Unit.

- 1 connector
- 1 wire saddle
- 2 screws
- 1 hook



F-4-397

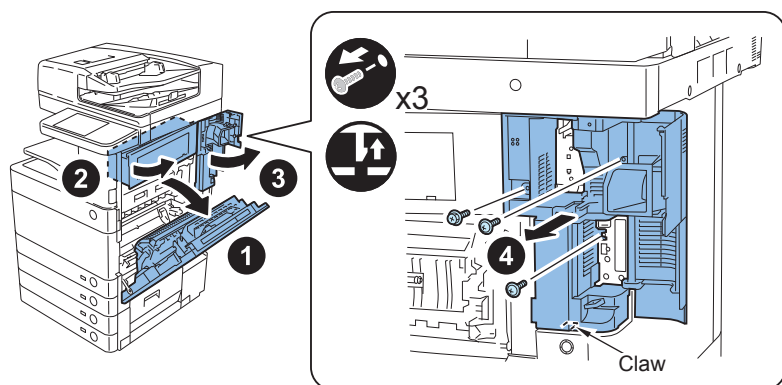


## Option

## Removing the Reader ADF Unit

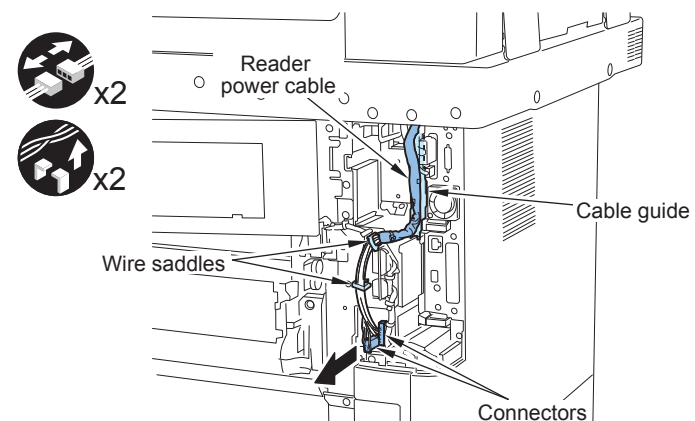
### Procedure

- 1) Execute service mode > COPIER > FUNCTION > MISC-R > RD-SHPOSC (Level 2), and move the Scanner Unit to the fixing position.
- 2) Remove the Reader Right Cover, Reader Left Cover, and Reader Front Cover.
- 3) Open the Right Lower Cover and Right Upper Cover.
- 4) Remove the Right Rear Cover.
  - 1 screw (RS tight; M4)
  - 2 screws (TP; M3)
  - 1 claw



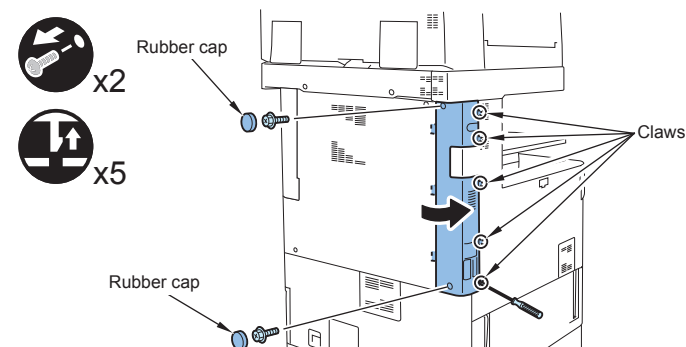
- 5) Close the Right Lower Cover and the Right Upper Cover.

- 6) Disconnect the Reader Power Supply Cable.
  - 2 Connectors
  - 2 Wire Saddles
  - 1 Cable Guide



F-4-399

- 7) Remove the Left Rear Cover.
  - 2 Rubber Caps
  - 2 Screws
  - 5 Claws



F-4-400

- 8) Disconnect the Reader Signal Cable.

9) Install the Scanner System Fixation Screws that have been kept in a safe place since installation.

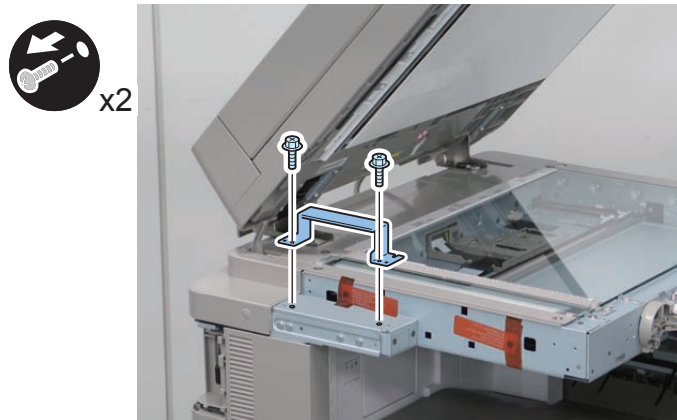
- 2 Screws



F-4-401

10) Install the handle.

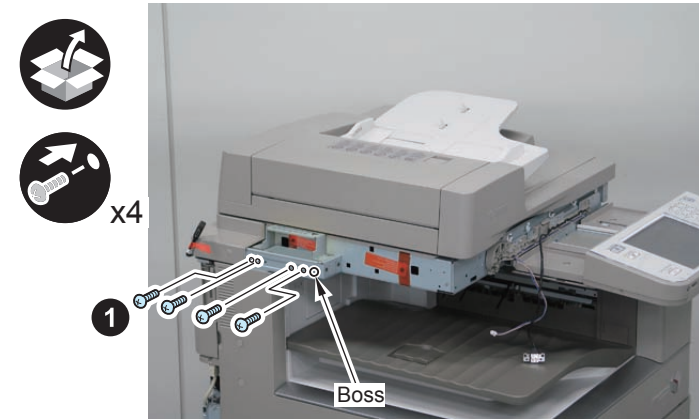
- 2 Bosses
- 2 Screws (RS Tightening; M3x8)



F-4-402

11) Release the fixation on the left side of the Reader Unit.

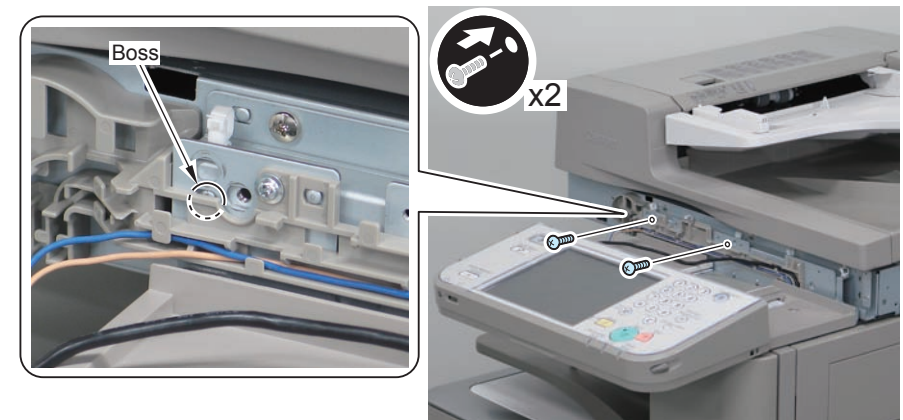
- 1 Boss
- Screws (Binding; M4x8)



F-4-403

12) Release the fixation on the front side of the Reader Unit.

- 1 Boss
- 2 Screws (Binding; M4x8)



F-4-404

13) Remove the 2 Reader Mounting Plates on the right side of the Reader Unit.

- 2 Screws (Binding; M4x8)



x2



F-4-405

14) Lift the Reader Unit with 2 or more people and remove it.

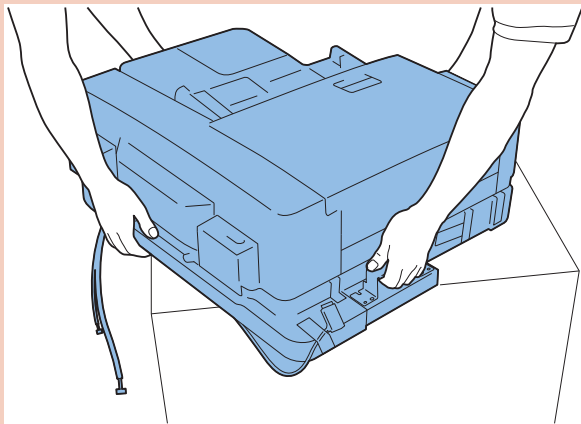
**CAUTION: How to hold the Reader Unit**

When lifting the Reader Unit, be sure to work with 2 or more people. Also, be sure to lift the equipment horizontally.

Be sure to lift the Reader Unit carefully as it is heavy at the rear.

When installing the Reader Unit on the host machine, be careful not to get the cables and fingers caught.

Be sure to hold the Reader Unit at the positions as shown in the figure.



F-4-406

## Data to be handled by SRAM(with HDD Encryption Board

### The kind of data to handle

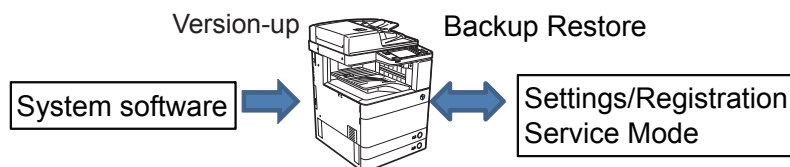
Data to operate this machine is largely divided into 2 categories.

System software	Common data among the same model
Data in SRAM and HDD on the boards	Factory settings value for the target machine and the values in Address Book and Settings/Registration, etc. entered by the user.

T-4-45

Upgrading and installation is used as the terms to handle the system software.

Backup and restoration is used as the terms to handle data in SRAM and HDD on the boards.



F-4-407

Be sure to use the latest possible backup data for the SRAM data of each board.

If restoring the SRAM data backed up long time ago, image failure, etc., may occur due to mismatch between the backup data and the parameter for host machine adjustment changed after backup.

### Handling SRAM data of this machine

With the normal service, the contents of SRAM of the Main Controller PCB 2 can be backed up to HDD in service mode and restored after replacing the board.

If there is an HDD Encryption Board, the encryption key of the HDD Encryption Board recorded on SRAM is lost when replacing the Main Controller PCB 2, and the contents of HDD cannot to be read. Therefore, restoration cannot be done although backup is performed. When replacing the Main Controller PCB 2, user data needs to be reentered in the same way as when replacing the HDD with a new one.

Part to be replaced	Description	Procedure	When TPM is enabled (ON)
Main Controller 2	SRAM of the Main Controller PCB 2 includes user data and MEAP-related data. If there are any files backed up from RUI by the user, restore them after recovery. Explain the user that the reinstallation of everything related to MEAP is necessary.  Reference: If Meapback.bin is saved using SST, it can be restored after replacing the Main Controller PCB 2. This makes the reinstallation of everything related to MEAP unnecessary.	Hold down 2 and 8 to start the machine, and then use SST to clear the encryption key of the HDD Encryption Board. Use SST or a USB memory device to Format ALL and install the system.	After the system is properly installed, enable TPM to execute a backup of TPM.
New HDD	Install the system software on the new HDD after formatting it by SST. If there are any files backed up from RUI by the user, restore them after recovery. Explain the user that the reinstallation of everything related to MEAP is necessary.  Reference: If Meapback.bin is saved using SST, it can be restored after replacing the Main Controller PCB 2. This makes the reinstallation of everything related to MEAP unnecessary.	Hold down 2 and 8 to start the machine, and then use SST or a USB memory device to Format ALL and install the system.	After the system is properly installed, enable TPM to execute a backup of TPM.
System installation when the HDD is properly working.	To upgrade the system version, the Assist Mode of SST is recommended.	Enter service mode and select the following: COPIER > FUNCTION > SYSTEM > DOWNLOAD > OK Use SST to install the system software in Assist mode.	No additional work
Backup of Reader Controller PCB	Enter service mode to make a backup of SRAM data into the HDD.	Select the following to execute system backup: COPIER > FUNCTION > SYSTEM RSRAMBUP Replace the Reader Controller PCB Select the following to restore the system: COPIER > FUNCTION > SYSTEM RSRAMRES	No additional work

Part to be replaced	Description	Procedure	When TPM is enabled (ON)
Backup of DC Controller PCB	Enter service mode to make a backup of SRAM data into the HDD.	Select the following to execute system backup: COPIER > FUNCTION > SYSTEM DSRAMBUP Replace the DC Controller PCB Select the following to restore the system: COPIER > FUNCTION > SYSTEM DSRAMRES	No additional work
HDD Encryption Board	An encryption key of the HDD Encryption Board is newly made. Install the system software on the HDD after formatting it by SST. If there are any files backed up from RUI by the user, restore them after recovery.	Hold down 2 and 8 to start the machine, and then use SST or a USB memory device to Format ALL and install the system.	After the system is properly installed, enable TPM to execute a backup of TPM.
TPM Board	When there is a backup of TPM, restore TPM. When there is no backup of TPM, select the following: Settings/Registration > Management Settings	Restore TPM when there is a backup of TPM. When there is no backup of TPM, use RUI to make a backup, and then select the following to restore from RUI: Settings/Registration > Management Settings > Data Management > Initialize All Data/Settings; enable TPM to make a backup.	Follow the description on the left.

T-4-46

### ● Items which needs to be backed up when replacing the Main Controller PCB 2

When replacing the Main Controller PCB 2, the encryption key of the HDD Encryption Board on SRAM is lost and HDD cannot be accessed. For recovery, perform "Items which needs to be backed up by the user when replacing the HDD" as well in addition to the table below to format the HDD.

	User
Forwarding Settings	Remote UI(Import/Export)
Settings/Registration(Except Paper Type Management Settings)	Remote UI(Import/Export)
Mail Box Memory RX Inbox Confidential Fax Inbox	Remote UI(Back Up/Restore Settings)
Form for Superimpose Image	Remote UI(Back Up/Restore Settings)
Auto Adjust Gradation	Enforcement of Auto Adjust Gradation
Key information to TPM to use for coding	Settings / Registration > Administrator > Management Settings > TPM Settings
Service mode MN-CON Settings	None

T-4-47

### ● Items which needs to be backed up by the user when replacing the HDD

The table below shows the items whose settings can be saved. Ask the user to save them before replacing the HDD and the Main Controller PCB 2. Part of the items can be recovered from Meapbac.bin.

	User	Service
Address Lists	Remote UI(Import/Export)	None
Settings/Registration > Paper Type Management Settings	Remote UI(Import/Export)	None
Quick Menu Settings	Remote UI(Import/Export)	SST(Meapback)
Quick Menu Settings	Remote UI(Import/Export)	SST(Meapback)
Mail Box Settings	Remote UI(Back Up/Restore Settings)	None
Advanced Box Settings	Remote UI(Back Up/Restore Settings)	None
Printer Settings	Remote UI(Back Up/Restore Settings)	None
Web Access Favorites	Remote UI(Import/Export)	None
MEAP Settings	SMS	SST(Meapback)
Key information to TPM to use for coding	Settings/Registration > Administrator > Management Settings > TPM Settings	None

T-4-48

### ● Items with no backup method when replacing the HDD

Regarding the items in the table below, there is no method for the user to back them up. Ask the user to make settings again. Part of the items can be recovered from Meapbac.bin.

	User	Service
Default setting	None	SST(Meapback)
Other Register Options Shortcuts	None	SST(Meapback)
History of the setting	None	SST(Meapback)
Certificate Settings	None	None
Document of non-transmission	None	None
Settings/Registration : Management Settings : Device Management > Display Log	None	None
Settings/Registration : Management Settings : Device Management > Key and Certificate Settings	None	None
PS font	None	None

T-4-49

### ● Using SST enables the following:

SST has the following functions that are necessary for service work:

1. To download system software
2. To copy the system software into a USB memory device.
3. To backup and restore information of SRAM and MEAP in Main Controller 2.
4. To format HDD
5. To collect device log
6. To clear the encryption key of HDD Encryption Board

### ● Upgrading using a USB memory device

Using a USB memory device, the following functions are available to upgrade the system:

1. To download system software
2. To clear download file
3. To format HDD
4. To collect device log

# 5

## Adjustment

- Main Controller
- Image Formation System
- Pickup Feed System



## Main Controller

### HDD

How to Replace the Parts	Refer to "Removing the HDD".
Before Replacing	<p>1) Back up the Settings/Registration data. Use the Remote UI. The data can be collectively saved in a DCM file format using the steps below. Settings/Registration &gt; Management Settings &gt; Data Management &gt; Import/Export All &gt; Export Target data:</p> <ul style="list-style-type: none"> <li>• Settings/Registration Basic Information</li> <li>• Paper Type Management Settings</li> <li>• Forwarding Settings</li> <li>• Box Settings</li> <li>• Department ID Management Settings</li> <li>• Main Menu Settings</li> <li>• Web Access Settings</li> <li>• Favorite Settings</li> <li>• Address Book</li> <li>• User Access Control for Advanced Box</li> <li>• Quick Menu Settings</li> <li>• MEAP Application Setting Information</li> <li>• User Setting Information</li> <li>• Service Mode Settings (hidden by default)</li> </ul> <p>* It can be displayed by selecting "1" in service mode (Lv1) &gt; Option &gt; USER &gt; SMD-EXPT. Printing out the Settings/Registration data becomes unnecessary by saving the service mode setting values. Select "Select All" for the items to export, enter the encryption password, and then select "Select Exporting".</p>

After Replacement	<p>1) Format the HDD. 1-1) Start the machine in safe mode (turn ON the main power switch while simultaneously pressing 2+8 keys). 1-2) Execute Formatting All Partitions using SST. 2) Download the system software 2-1) Download the system software (system/LANG/RUI, etc.) using SST. 3) Initialize the key/certificate/CA certificate. (Lv.2) COPIER &gt; FUNCTION &gt; CLEAR &gt; CA-KEY 4) Turn OFF and then ON the power 5) Restore the backup data. Use the Remote UI. Follow the steps below to specify the DCM file stored earlier. Settings/Registration &gt; Management Settings &gt; Data Management &gt; Import/Export All &gt; Import Enter the encryption password entered at exporting, and select "Start Importing". Turn OFF and then ON the power after importing. 6) When an encryption key/certificate/CA certificate has been generated or added by the user, ask the user to execute regeneration. 7) Execute auto gradation adjustment (full adjust). Settings/Registration mode: Adjustment/Maintenance &gt; Adjust Image Quality &gt; Auto Adjust Gradation</p>
When using the Card Reader and imageWARE Accounting Manager	<p>1) Go to COPIER &gt; FUNCTION &gt; INSTALL &gt; CARD and enter the numerical value of the leading card which is used for Department ID. Then, press "OK" button. (e.g.: If No.1 to No.1000 cards are used for Department ID, enter "1" of the leading card.) 2) After turning OFF and ON the main power switch, perform the following operations from Settings/Registration mode.</p> <ul style="list-style-type: none"> <li>• In Management Settings &gt; User Management &gt; Department ID Management &gt; Page Totals, be sure that "ID00000001" to "ID00001000" are created.</li> <li>• Set the following: Preferences &gt; Network &gt; TCP / IP Settings &gt; IPv4 Settings &gt; IP Address Settings &gt; IP Address, Gateway Address, Subnet Mask</li> <li>• In Management Settings &gt; User Management &gt; System Manager Information Settings &gt; System Manager ID and System PIN, register any number for them. Then, turn OFF and ON the main power switch.</li> </ul> <p>If "System Manager ID" and "System PIN" are not registered, "card registration to device" cannot be executed for the imageWARE Accounting Manager setting operation. 3) Download the card ID from imageWARE Accounting Manager to the Main Body again. 4) After downloading is completed, go to Management Settings &gt; User Management &gt; Department ID Management &gt; Page Totals. Be sure that only the downloaded card ID is displayed. 5) Print using the user card registered from imageWARE Accounting Manager. Be sure that the card information used for the target devices of imageWARE Accounting Manager is collected. Points to Note when Using the System Software-installed HDD When using the HDD which was installed the system software of the other machine (different serial number), be sure to format the HDD after the installation. If the HDD is not formatted, the operation cannot be guaranteed.</p>

Points to note when using an HDD with system software already installed	Use of an HDD in which the system software of another machine (a machine of a different serial number) is installed for a troubleshooting is possible if it is an HDD of a model of iR-ADV C5255 series and later. However, be sure to format it after installing it. Operation is not guaranteed if it is continued to be used as is. At installation, HDD must be formatted. Therefore, it is not recommended to use an HDD which has been used with another machine. If you use an HDD which has been used with another machine, be sure to get agreement from user in advance that user data will be deleted. In addition, an HDD used in iR-ADV C5255 series and later cannot be accessed from a PC due to enhanced security.
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T-5-1

## Main controller PCB 1

How to Replace the Parts	Refer to "Removing the Main Controller PCB 1".
Operation at Replacement	Transferring the parts from old PCB to new PCB <ul style="list-style-type: none"> <li>• DDR2-SDRAM (2 pc.)</li> <li>• Flash PCB</li> <li>• TPM PCB</li> </ul> Resetting/registering the data is not necessary after Main Controller PCB 1 is replaced.

- Points to Note When Clearing MN-CON(Refer to page 0-2)

T-5-2

## Main controller PCB 2

How to Replace the Parts	Refer to "Removing the Main Controller PCB 2".
Before Replacement	Data in SRAM on the Main Controller PCB 2 can be backed up to a USB memory device or an HDD from download mode. * However, if the HDD Encryption Board is installed, backup to an HDD is not possible. It is therefore recommended to perform backup to a USB memory device. Preparation: USB memory device where the system software for this machine has been registered using the SST Or, USB memory device formatted as FAT32 which has been checked that it can be recognized by the host machine In order to let the USB memory device be recognized in service mode, create an empty folder on the USB memory device and name the folder with the same name used when registering the system software for this machine using the SST. E.g.: iAC5255 1) Service mode (Lv1) > COPIER > FUNCTION > SYSTEM > DOWNLOAD > OK Connect the USB memory device where system software of the model to be connected is stored. 2) The download Mode (USB) will appear on the touch panel. Press the [5] key on the Control Panel. 3) The Backup Menu (USB) will appear. Press the [7] key. 4) Press the [0] key to confirm, and then the SRAM data is stored in the USB memory device. 5) Press the [C] key to return to the download Menu (HDD). 6) Press the [Reset] key to shut down the host machine.
	Temporarily backing up SRAM data to an HDD (only when the HDD Data Encryption Kit is not installed): 1) Service mode (Lv1) > COPIER > FUNCTION > SYSTEM > DOWNLOAD > OK 2) When the download Menu (HDD) appears, press the [5] key on the Control Panel. 3) When the Backup Menu (HDD) appears, press the [6] key on the Control Panel. 4) Press the [0] key to confirm, and then the SRAM data is stored in the internal HDD. 5) Press the [C] key to return to the download Menu (HDD). 6) Press the [Reset] key to shut down the host machine.
At replacement	Replace the part from the old PCB to the new PCB. <ul style="list-style-type: none"> <li>• 2 boards of DDR2-SDRAMs (3 boards when the option DDR2-SDRAM is installed)</li> <li>• Bypass PCB</li> <li>• Memory PCB</li> </ul>

After Replacement	<p>When SRAM data is temporarily backed up to an USB memory device:</p> <ol style="list-style-type: none"> <li>1) After replacing the PCB, start the machine by 2+8 startup.</li> <li>2) Connect the USB memory device to USB I/F (Host) of the machine. When the download Menu (USB) appears, press the [8] key on the Control Panel.</li> <li>3) The download Menu 2nd (USB) will appear. Press the [2] key.</li> <li>4) Press the [0] key for confirmation.</li> <li>5) The Restore Menu (USB) will appear. Press the [2] key.</li> <li>6) Press the [0] key to confirm, and then the SRAM data is restored from the USB memory device.</li> <li>7) Press the [C] key to return to the download Menu (USB).</li> <li>8) Press the [Reset] key to shut down the host machine.</li> </ol> <p>When SRAM data is temporarily backed up to an HDD:</p> <ol style="list-style-type: none"> <li>1) After replacing the PCB, start the machine by 2+8 startup.</li> <li>2) When the download Menu (HDD) appears, press the [8] key on the Control Panel.</li> <li>3) When the download Menu 2nd (HDD) appears, press the [2] key on the Control Panel.</li> <li>4) Press the [0] key for confirmation.</li> <li>5) When the Restore Menu (HDD) appears, press the [2] key on the Control Panel.</li> <li>6) Press the [0] key to confirm, and then the SRAM data is restored from the internal HDD.</li> <li>7) Press the [C] key to return to the download Menu (HDD).</li> <li>8) Press the [Reset] key to shut down the host machine.</li> </ol>
Points to Note	<p>If mismatch between the box management information included in the SRAM data and box data on the HDD occurs, which is caused by starting the machine normally without restoring SRAM data after replacing the Main Controller 2 PCB, the box management information is initialized. As a result, box documents on the HDD are deleted.</p> <p>Therefore, be sure to back up the box documents on remote UI.</p>
Restrictions	<p>Do not transfer the following parts to another machine (a machine of a different serial number). The machine will not start up normally, and may become unrecoverable in some cases.</p> <ul style="list-style-type: none"> <li>• Main Controller PCB 2 (with the Memory PCB unremoved)</li> <li>• Memory PCB</li> </ul>

T-5-3

## DC controller PCB

How to Replace the Parts	Refer to "Removing the DC Controller PCB".
Before Replacing	<p>Backup of DC Controller PCB SRAM COPIER &gt; FUNCTION &gt; SYSTEM &gt; DSRAMBUP (LEVEL2) "ACTIVE" is displayed and then "OK!" is displayed about 2 minutes later. Turn OFF the main power when the above work is complete.</p>
After Replacing	<p>Restoration of DC Controller PCB SRAM COPIER &gt; FUNCTION &gt; SYSTEM &gt; DSRAMRES (LEVEL2) "ACTIVE" is displayed at execution and then "OK!" is displayed about 2 minutes later. Restoration is complete.</p>
Prohibited Operation	<ul style="list-style-type: none"> <li>• When replacing the DC Controller PCB, be sure to use a new one. Do not use the DC Controller PCB which was used with another machine.</li> </ul>

T-5-4

## TPM PCB

How to Replace the Parts	Refer to "Security Features (Encryption Key, Certificate, Password Protection)"
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\* Be sure to perform the installation work by referring to the procedure above.

T-5-5

## Control Panel CPU PCB/LCD Panel

After replacement, make an adjustment in COPIER> FUNCTION> PANEL> TOUCHCHK.

## Image Formation System

### Developing Assembly

Adjustment procedure	<p>Initialization of Developing Assembly (toner ratio and patch) is necessary and it differs depending on the color.</p> <p>If 4 colors are replaced simultaneously, execute INISET-4.</p> <p>COPIER &gt; FUNCTION &gt; INSTALL &gt; INISET-Y Initialization of Y Developing Assembly (toner ratio and patch)</p> <p>COPIER &gt; FUNCTION &gt; INSTALL &gt; INISET-M Initialization of M Developing Assembly (toner ratio and patch)</p> <p>COPIER &gt; FUNCTION &gt; INSTALL &gt; INISET-C Initialization of C Developing Assembly (toner ratio and patch)</p> <p>COPIER &gt; FUNCTION &gt; INSTALL &gt; INISET-K Initialization of Bk Developing Assembly (toner ratio and patch)</p> <p>COPIER &gt; FUNCTION &gt; INSTALL &gt; INISET-4 Initialization of 4-colors Developing Assembly (toner ratio and patch)</p> <p>After replacement, execute the user mode (Settings/Registration &gt; Adjustment/Maintenance &gt; Adjust Image Quality &gt; Auto Adjust Gradation).</p>
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T-5-6

### Patch sensor

How to Replace the Parts	Refer to "Remove the Patch Sensor (front,center,rear)".
Adjustment procedure	<p>When replacing the Patch Sensor, enter the alpha value of the Patch Sensor in the following service mode.</p> <p>COPIER &gt; ADJUST &gt; DENS &gt; P-ALPHA Input Patch Sensor alpha value</p> <p>After replacement, execute the user mode (Settings/Registration &gt; Adjustment/Maintenance &gt; Adjust Image Quality &gt; Auto Adjust Gradation).</p>

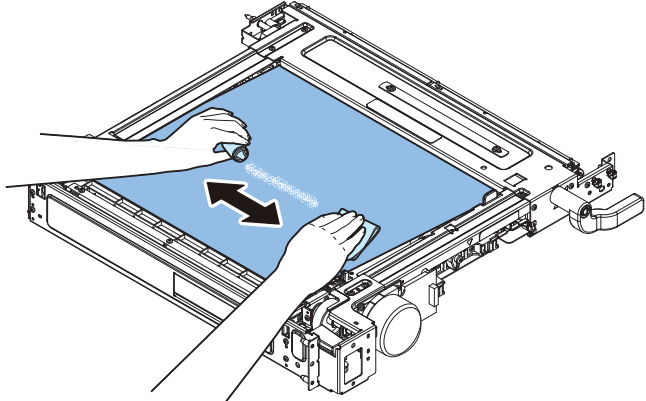
T-5-7

### ITB Unit

How to Replace the Parts	Refer to "Removing the ITB Unit".
Adjustment procedure	After replacement, execute the user mode (Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation).

T-5-8

### ITB

How to Replace the Parts	Refer to "Removing the ITB".
Adjustment Procedure	<p>Execute the user mode (Settings/Registration &gt; Adjustment/Maintenance &gt; Adjust Image Quality &gt; Auto Adjust Gradation).</p> 

T-5-9

## ITB Alignment Adjustment

### Adjustment Procedure

Execute the user mode (Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation).

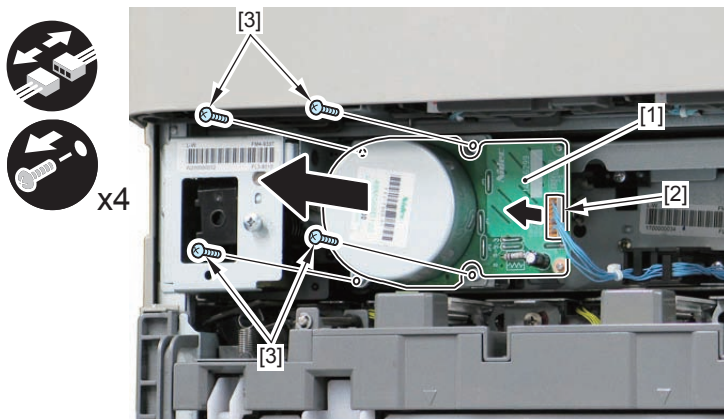
Execute the ITB equilibrium position detection in service mode. (COPIER>FUNCTION>MISC-P>ITB-INIT) (Level1) This service mode will take approx. 3 to 6 minutes (for iR-ADV C5255/C5250) or approx. 4 to 8 minutes (for iR-ADV C5240/C5235).

After executing the above, check that the values of COPIER>DISPLAY>MISC>ITB-POS and ITB-POS2 are within the range from -350 to 350.

If not, execute the following adjustment.

#### ■ Preparation

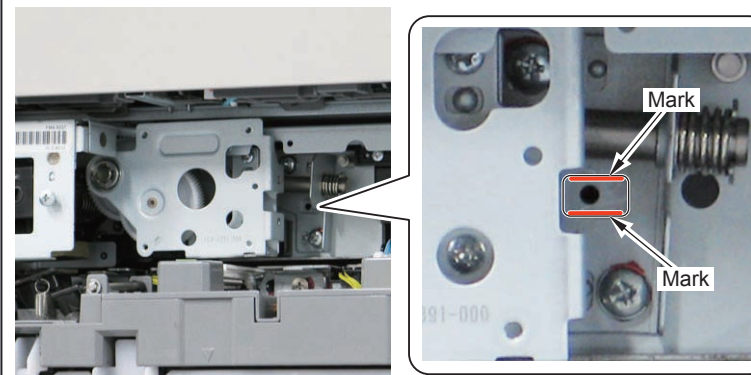
- 1) Open the ITB Cover.
- 2) Remove the ITB Motor [1].
  - 4 Screws [3]
  - 1 Connector [2]



### Adjustment Procedure

#### ■ Procedure

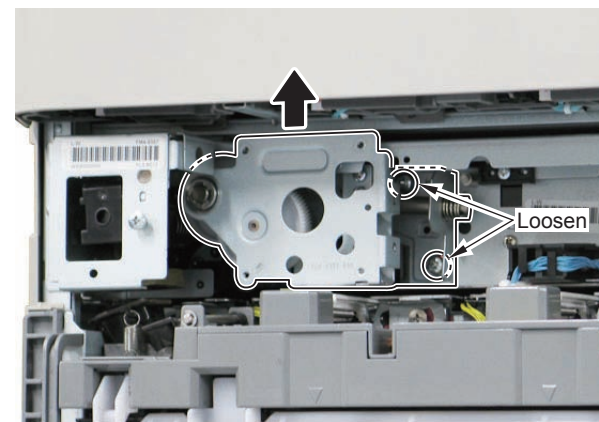
- 1) Put markings as shown in the figure below to use as the reference when correcting the position.



- When the values are above 350

Move the ITB Motor Support Plate up.

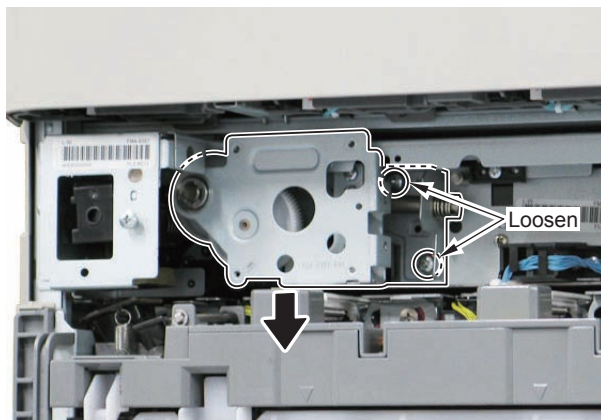
Moving it by 1 mm changes the values of ITB-POS and ITB-POS2 by approx. 200. After adjustment, check that the values of COPIER>DISPLAY>MISC>ITB-POS and ITB-POS2 are within the range from -350 to 350.





Adjustment  
Procedure

- When the values are below -350  
Move the ITB Motor Support Plate down.  
Moving it by 1 mm changes the values of ITB-POS and ITB-POS2 by approx. 200.  
After adjustment, check that the values of COPIER>DISPLAY>MISC>ITB-POS and ITB-POS2 are within the range from -350 to 350.



T-5-10

## Secondary Transfer Outer Roller

How to Replace the Parts	Refer to "Removing the Secondary Transfer Outer Roller and Secondary Transfer Separation Guide Unit".
Adjustment Procedure	When replacing the Secondary Transfer Outer Roller, execute the following service mode. COPIER > FUNCTION > CLEANING > TNR-COAT After replacement, execute the user mode (Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation).

T-5-11

## Hopper Unit

How to Replace the Parts	Refer to "Removing the Hopper (M),Removing the Hopper (Y),Removing the Hopper (C),Removing the Hopper (Bk)".
Adjustment Procedure	When installing the removed Toner Container, do not shake it. When removing the Main Drive Unit simultaneously, install the Main Drive Unit and Hopper Unit in that order. Toner supply failure may occur. In case that the Developing Assembly is replaced simultaneously, execute the following service mode to initialize the Developing Assembly before installing the Toner Container. COPIER > FUNCTION > INSTALL > INISET-X (X: Color changed) If the Toner Container is installed first, TD ratio of the Developing Assembly cannot be set to a correct value.

T-5-12

## Pickup Feed System

### Geometric Characteristics Adjustment

Geometric characteristics adjustment is executed when image distortion (on the entire image and the trailing edge only) occurs.

The following 3 adjustments are available as the geometric characteristics adjustment.

- 1) Pre-secondary transfer guide adjustment
- 2) Registration pressure adjustment
- 3) Fixing alignment adjustment

	Applicable image error	Adjustable maximum value	Adjustment order
Pre-secondary transfer guide adjustment	Fan-shaped distortion	+/- 0.7 mm *1	1
Registration pressure adjustment	Distortion on the trailing edge	+/- 0.3 mm *1	2
Fixing alignment adjustment	Distortion on the trailing edge	+/- 0.3 mm *1	3

T-5-13

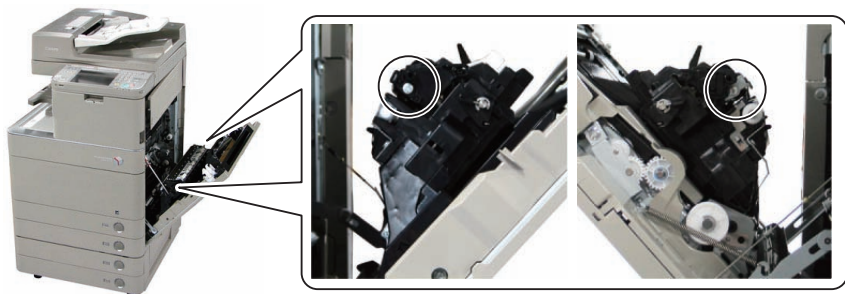
### Pre-secondary Transfer Guide Adjustment

Adjustment is possible by loosening the screws as shown in the figure below and moving the Pre-secondary Transfer Guide toward the inside of the machine.

The range which can be adjusted by this adjustment is maximum approx. 0.7 mm. (Differs according to the paper type)

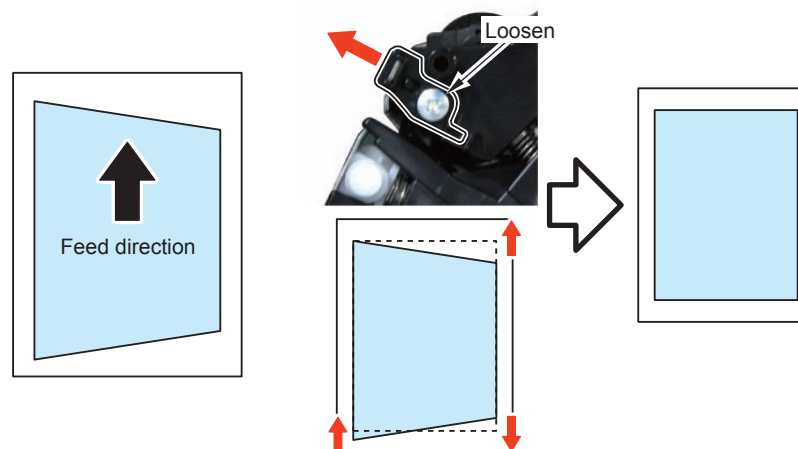
Symptom	Operation
The right side of image is distorted.	Move the front side of the guide toward the inside of the machine.
The left side of image is distorted.	Move the rear side of the guide toward the inside of the machine.

T-5-14



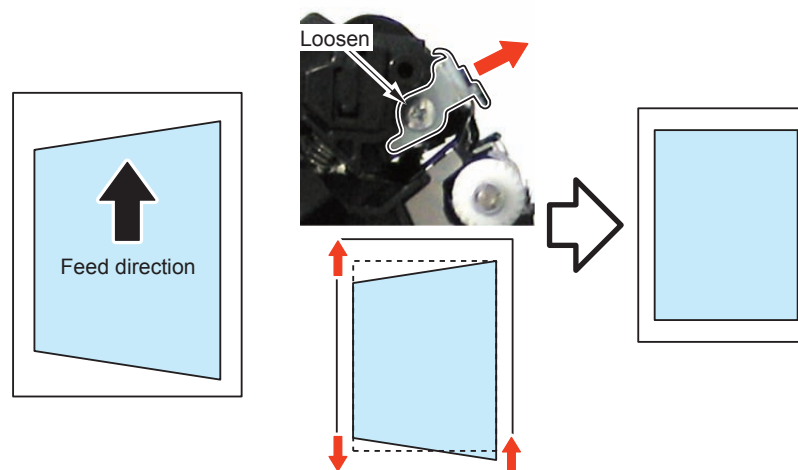
F-5-1

- When the right side of image is distorted  
Move the front side of the guide toward the inside of the machine.



F-5-2

- When the left side of image is distorted  
Move the rear side of the guide toward the inside of the machine.



F-5-3



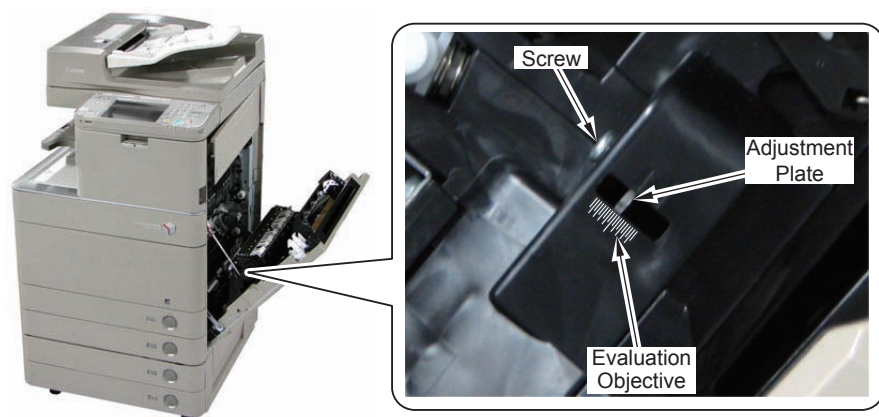
## Registration Roller Pressure Adjustment

Adjustment is possible by turning the screw located as shown in the figure below. Check the position of the Adjustment Plate before adjustment.

The range which can be adjusted by this adjustment is maximum approx. 0.3mm. (Differs according to the paper type)

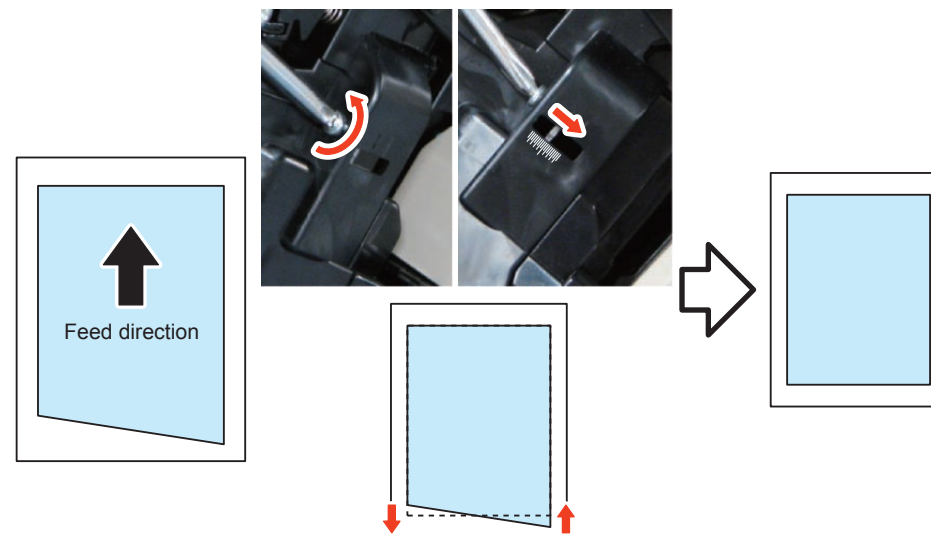
Symptom	Operation	Points to check
The left side of the trailing edge of image is distorted.	Turn the screw counterclockwise.	The Adjustment Plate moves to the right.
The right side of the trailing edge of image is distorted.	Turn the screw clockwise.	The Adjustment Plate moves to the left.

T-5-15



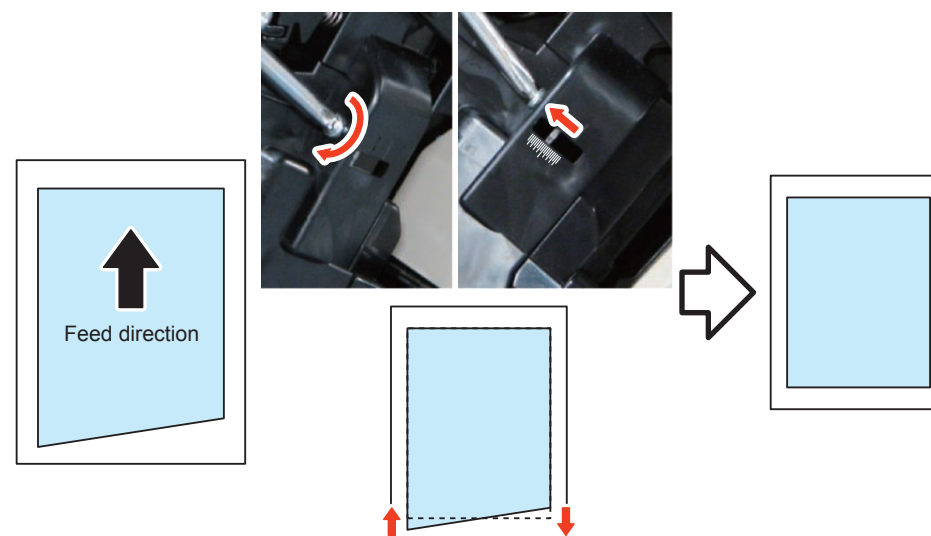
F-5-4

- When the left side of the trailing edge of image is distorted  
Turn the screw counterclockwise.



F-5-5

- When the right side of the trailing edge of image is distorted  
Turn the screw clockwise.



F-5-6

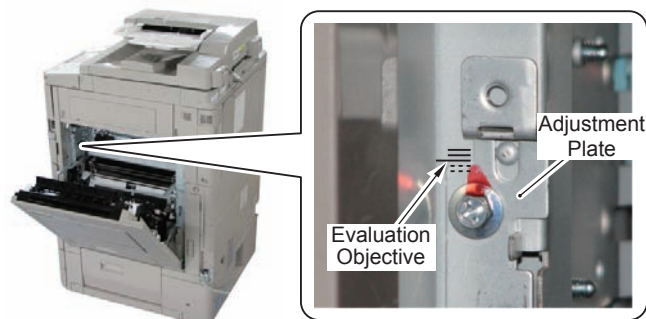
## Fixing Alignment Adjustment

Adjustment is possible by loosening the screw located as shown in the figure below and moving the Adjustment Plate up and down. Check the position of the Adjustment Plate before adjustment.

The range which can be adjusted by this adjustment is maximum approx. 0.3mm. (Differs according to the paper type)

Symptom	Operation
The right side of the trailing edge of image is distorted.	Move the Adjustment Plate up.
The left side of the trailing edge of image is distorted.	Move the Adjustment Plate down.

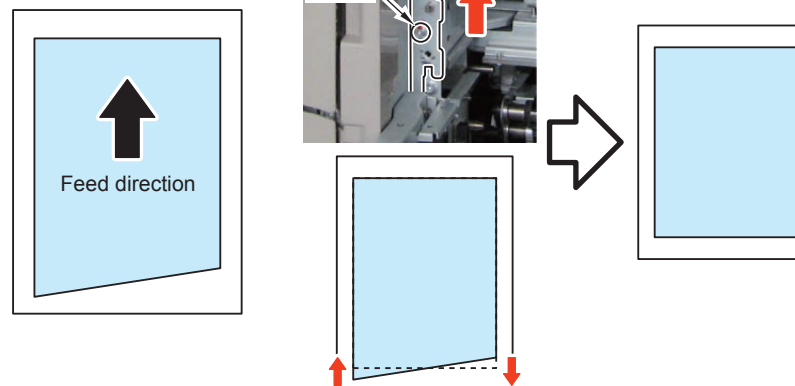
T-5-16



F-5-7

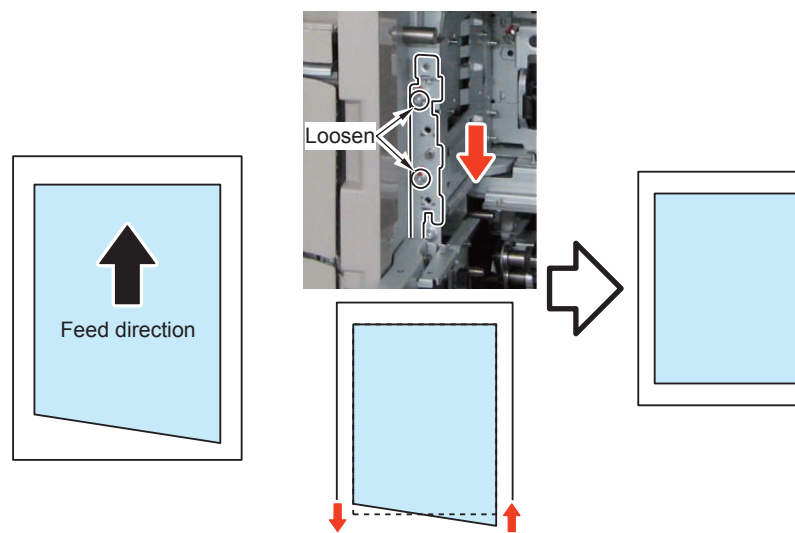
**Note:**  
This procedure cannot be performed correctly when the Fixing Assembly is installed. Be sure to remove the Fixing Assembly at adjustment.

- When the right side of the trailing edge of image is distorted  
Move the Adjustment Plate up.



F-5-8

- When the left side of the trailing edge of image is distorted  
Move the Adjustment Plate down.



F-5-9

## Method of Setting 8K and 16K (Chinese Paper)

- 1) Set the original detection size to AB configuration.  
(Lv.1) COPIER > OPTION > FNC-SW > MODEL-SZ = 0
- 2) Enable detection and display of Chinese paper (K size paper: 8K and 16K).  
(Lv.2) COPIER > OPTION > FNC-SW > KSIZE-SW = 1
- 3) Change the setting of Cassette 1 from EXEC to 16K.  
(Lv.2) COPIER > OPTION > CST > CST-K-SW = 1
- 4) (Lv.2) COPIER > OPTION > FNC-SW > MODELSZ2 = 0.
- 5) Turn OFF and then ON the main power.

## Method of Setting Special Paper

- Service mode  
COPIER > OPTION > CST > CSTX-UY > Setting number  
X: Cassette number, Y: Size category (X: 1 to 4, Y: 1 to 4)

### Size category

Size category	Size
U1	FLSC, A-FLS, OFI, E-OFI, A-LTRR, A-LGL, G-LGL, A-OFI, M-OFI, FA4, FB4
U2	K-LGLR, G-LTRR
U3	K-LGL, A-LTR, G-LTR
U4	B-OFI

T-5-17

Setting No.	Size
22	K-LGL
23	K-LGLR
24	FLSC
25	A-FLS
26	OFI
27	E-OFI
28	B-OFI
29	A-LTR
30	A-LTRR
31	G-LTR
32	G-LTRR
33	A-LGL
34	G-LGL
36	A-OFI
37	M-OFI
42	FA4
43	FB4

T-5-18

Example: When setting G-LTR to Cassette 2  
COPIER> OPTION> CST> CST2-U3> 31

# 6

## Troubleshooting

- Initial Check
- Test Print
- Troubleshooting items
- Version upgrade
- Startup System Failure  
Diagnosis
- Controller Self Diagnosis
- Debug log
- Embedded RDS  
Troubleshooting

## 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 2
5	Full half-tone			Yes	Yes	Yes	Yes	Yes				Main controller PCB 2
6	Grid								Yes	Yes	Yes	Main controller PCB 2
7to9	---(For R&D)											----
10	MCYBk horizontal stripes (sub scanning direction)				Yes	Yes		Yes				Main controller PCB 2
11	---(For R&D)											----
12	64-gradation	Yes	Yes			Yes						Main controller PCB 2
13	---(For R&D)											----
14	Full color 16-gradation	Yes	Yes									Main controller PCB 2
15to100	---(For R&D)											----

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)



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 (end of life)
		Failure of Laser Scanner Unit
Fogging	Check that fogging occurs on white image area only.	Failure of Drum Unit (end of life)
		Failure of Laser Scanner Unit
White line	Check that white line does not appear on entire image.	Failure of Developing Assembly
Uneven density at front & rear	Check that uneven density does not appear at front & rear.	Failure of Photosensitive Drum (approx. 94mm)
		Failure of Developing Cylinder (approx. 63mm)

T-6-3

### Full half tone (TYPE=5)



This test print is for mainly checking the black line, white line and uneven density.

#### MEMO:

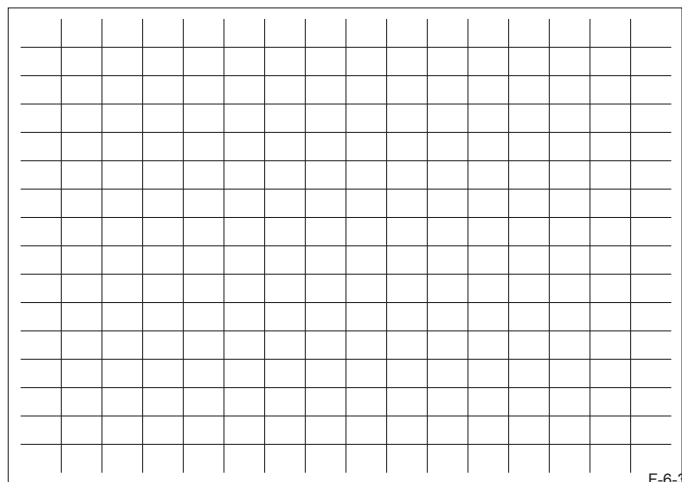
1. Select: service mode > COPIER > TEST > PG and specify developing color "COLOR-Y/M/C/K" to output the print by developing color.
2. To change the density of test print, select: service mode > TEST > PG > DENS-Y/M/C/K and set the density.

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 Photosensitive Drum (approx. 94mm)
		Failure of Developing Cylinder (approx. 94mm)
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

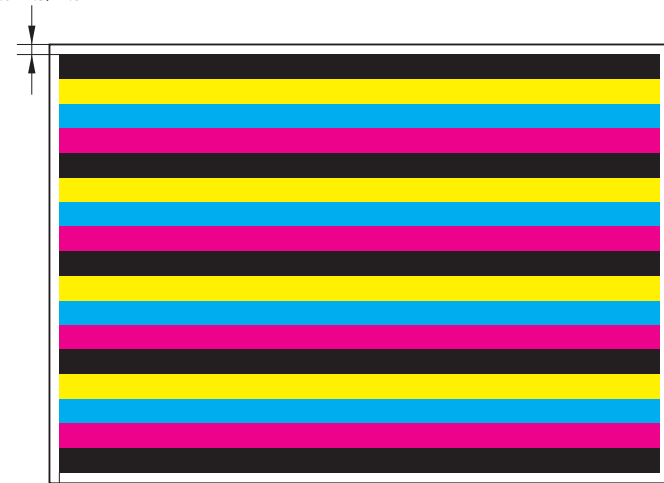
This test print is for mainly checking the color displacement, right angle accuracy and straight line accuracy.

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 Developing Assembly
		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)

4.0+1.5/-1.0mm



2.5 +1.5mm/-1.5mm

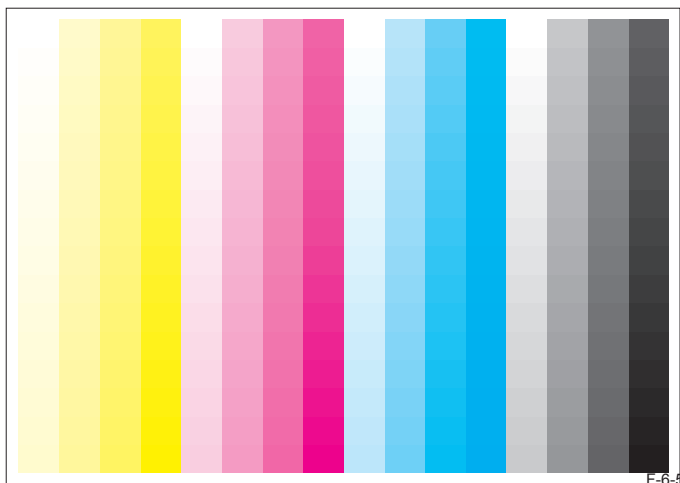
F-6-4

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 Developing Assembly
		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)

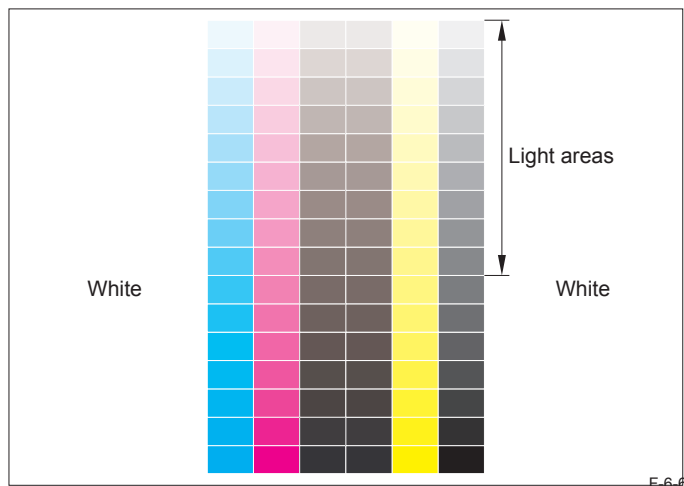


This test print is for mainly checking the gradations of YMCBk single color at one time.

Check item	Check method	Assumed cause
Gradation	Check that 64 gradations density is properly reproduced.	Failure of Drum Unit (end of life)
		Failure of Laser Scanner Unit
Fogging	Check that fogging appears on white image area only.	Failure of Drum Unit (end of life)
		Failure of Laser Scanner Unit
White line	Check that there is no white line on entire image.	Failure of Developing Assembly

T-6-7

## Full color 16-gradations (TYPE=14)



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 (end of life)
		Failure of Laser Scanner Unit
Fogging	Check that fogging appears on white image area only.	Failure of Drum Unit (end of life)
		Failure of Laser Scanner Unit
Gray balance	Check that density is even in each color on gray scale area.	Failure of Drum Unit (end of life)

T-6-8

## Troubleshooting items

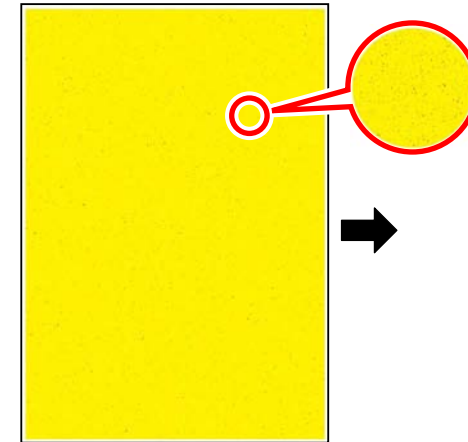
### Troubleshooting items list

Category	Item	Reference	
Image failure	Displacement/blur/smear/fogging	Foggy image due to charge failure	p. 6-7
		35mm pitch ghost due to toner deterioration	p. 6-8
		35mm uneven density due to cycle variation of Developing Cylinder	p. 6-9
	Dirt/line	95mm uneven density on paper lead edge	p. 6-9
	Blank image/line	Color spot due to laser exposure failure	p. 6-10
		Secondary transfer blank image	p. 6-12
		Fixing wrinkle due to deterioration of rib on Fixing Inlet Guide	p. 6-13
		Soiled image due to the oil attached to the Fixing Separation Guide	p. 6-14
	Operation failure	Noise around the Fixing Film Unit	p. 6-15
		Process Unit cannot be closed.	p. 6-16
Productivity is reduced on paper stack delivery in thin paper mode (52g/m2 to 63g/m2). <Staple Finisher C1/ Saddle Stitch Finisher C1>		p. 6-16	
Error Code	E732-0001: Scanner communication error	p. 6-17	
	E732-0021/E732-0022: Scanner communication error	p. 6-18	
	E732-0023: Scanner communication error	p. 6-19	
	E732-8888: ADF detection error	p. 6-20	
	E733-0000: Printer communication error	p. 6-21	
	E733-0001/E732-0002: Printer communication error	p. 6-22	

T-6-9

## Image Faults

### Image fogging due to the electrostatic charge failure



F-6-7

[Occurrence area]

Between the Primary Charging Roller and the drum

[Cause]

When the solid image of Y color is copied under the high temperature and high humidity environment, uneven discharge may occur between the Primary Charging Roller and the drum. As a result, there is a possibility that a mottled image may occur on other colors than Y.

[Occurrence condition]

In case that the drum unit is under the high temperature and high humidity environment at an initial state

[Remedy]

Please perform the following procedures.

### ● In Case that Paper Setting for the Poor Image is "Plain Paper"

- 1) Target current setting of discharge current control  
(COPIER > ADJUST > HV-PRI > DIS-TGM/TGC/TGK) <Level 2>  
Description modified: Set the setting value of the corresponding service mode to "+2", and turn OFF and then ON the main power. If not improved, the setting value is increased by every [ +2 ].
- 2) Adjustment of electrostatic charge AC current  
(COPIER > ADJUST > HV-PRI > DIS-TGM2/TGC2/TGK2) <Level 2 >  
Description modified: Set the setting value of the corresponding service mode to "+2", and turn OFF and then ON the main power. The setting value is set to +4, If not improved.

### ● In Case that Paper Setting for the Poor Image is "Heavy Paper"

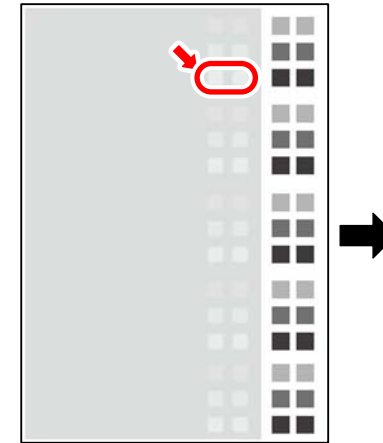
- 1) Target current setting of discharge current control (COPIER > ADJUST > HV-PRI > DIS-TGM2/TGC2/TGK2) <Level2>  
The setting value of the applicable service mode is set to "+2." If not improved, the setting value is set to +4.
- 2) Adjustment of electrostatic charge AC current (COPIER > ADJUST > HV-PRI > OFSTACM2/OFSTACC2/OFSTACK2) <Level1>  
The setting value of the applicable service mode is set to "+2." The setting value is set to +4, If not improved.

#### [Notes about remedy]

A drum life will be influenced if the 2nd service mode (adjustment of electrostatic charge AC current) is changed.

For this reason, please do not set the setting value to +4 or more at the maximum.

### ■ 35-mm pitch ghost due to toner deterioration



[Occurrence area]  
Developing cylinder

F-6-8

#### [Cause]

In case that the image pattern, which has extreme shading differences, is copied under the high temperature and high humidity environment, the deterioration toner of a previous image may adhere on a developing cylinder. For this reason, the inversion residual image (negative ghost) of the previous image may occur in the next image.

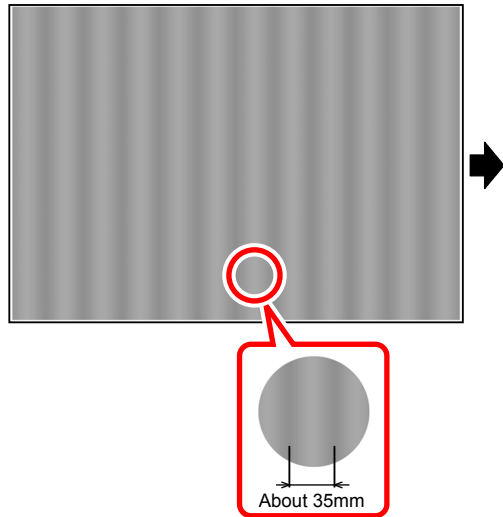
#### [Occurrence condition]

In case that the image pattern with extreme shading differences is copied (the halftone image was copied immediately after the solid image)

#### [Remedy]

- 1) Targeted value setting of ATR control (COPIER > ADJUST > DENS > P-TG-Y/M/C/K) <Level2>  
The applicable service mode setting value for the color, which the poor image has occurred, is set to "-1."
- 2) After cycling the power of the main unit, copy 8 A3 solid images.  
As a result, if the image on the 8th sheet is checked and a defect is not improved, please move on to the following step.
- 3) Lower the setting value of the applicable service mode by 1 step.
- 4) After cycling the power of the main unit, copy 8 A3 solid images.
- 5) Check the image on the 8th sheet.
- 6) If a poor image is not improved, repeat Step 3)-5).

## ■ The 35-mm uneven image density due to the periodic deflection of the developing cylinder



F-6-9

[Occurrence area]  
Developing cylinder

### [Cause]

In case that the durable advanced Developing Assembly is used under the high temperature and high humidity environment, the slight periodic deflection on the developing cylinder may occur. As a result, since the gap between the developing cylinder and the drum becomes uneven, the uneven image density in a cycle of 35 mm due to a developing failure may occur.

### [Occurrence condition]

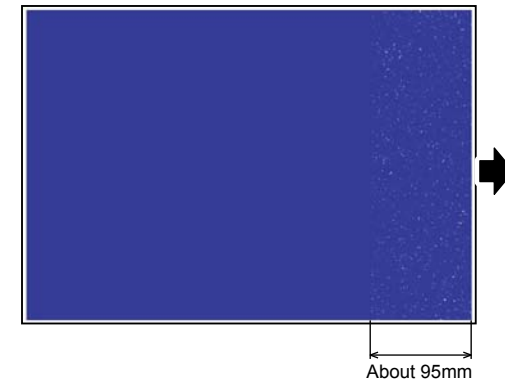
In case that the durable advanced Developing Assembly is used under the high temperature and high humidity environment.

This phenomenon tends to occur, when a solid image or a halftone image is copied.

### [Remedy]

Adjustment of the maximum developing AC bias value (COPIER > OPTION > IMG-DEV > ADJ-VPP) <Level 2> The applicable service mode setting value is set to "-1", and turn OFF and then ON the main power. If a defect is not improved, check the images with lowering the setting value one step by one step.

## ■ Uneven Image Density at 94 mm of Paper Leading Edge



F-6-10

[Occurrence area]  
Fixing Unit

### [Cause]

Usually, the paper, which passed the Fixing Unit, is fed to the Inner Delivery Roller along with the separation guide. However, when thin paper is used, since the elasticity of the paper is low, there is a possibility that the paper may be pulled by the roller if the paper leading edge reaches the Inner Delivery Roller.

As a result, since the paper, which met the separation guide, comes floating, the nip angle of the Fixing Unit changes.

For this reason, a density change may occur at around 94 mm from the image leading edge.

### [Occurrence condition]

In case that the solid image is copied on the thin paper under the high temperature and high humidity environment

### [Remedy]

Please perform the following steps.

### ● In case that the Paper Setting for the Poor Image is "Thin Paper"

Setting of the ITOP temperature in thin paper (COPIER > OPTION > IMG-TR > FXS-TMP5) <Level1>

Set the setting value of the applicable service mode to "-1", and turn OFF and then ON the main power. If not improved, set the setting value to "-2."

### ● In case that the Paper Setting for the Poor Image is "Plain Paper 1"

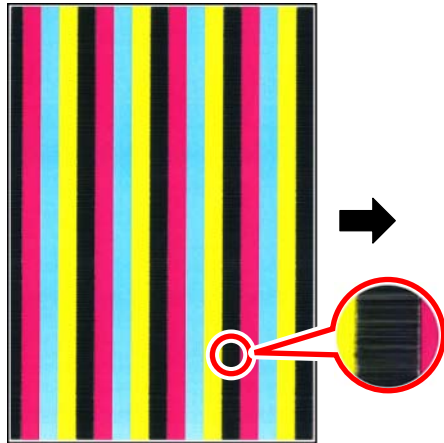
Setting of the ITOP temperature in the plain paper 1 (COPIER > OPTION > IMG-FIX > FX-S-TMP) <Level1>

Set the setting value of the applicable service mode to "-1", and turn OFF and then ON the main power. If not improved, set the setting value to "-2."

[Notes about remedy]

If the applicable service mode is changed and a heavy paper is fed, fixing capability may deteriorate.

### ■ Missing color due to the laser exposure failure



F-6-11

[Occurrence area]  
Developing Assembly

[Cause]

If pushing the drum unit to the Developing Assembly in installation, there is a possibility to catch the Mylar sheet of the Developing Assembly downward.

As a result, since an optical path is shut when the laser for the applicable color is irradiated, the image may become light.

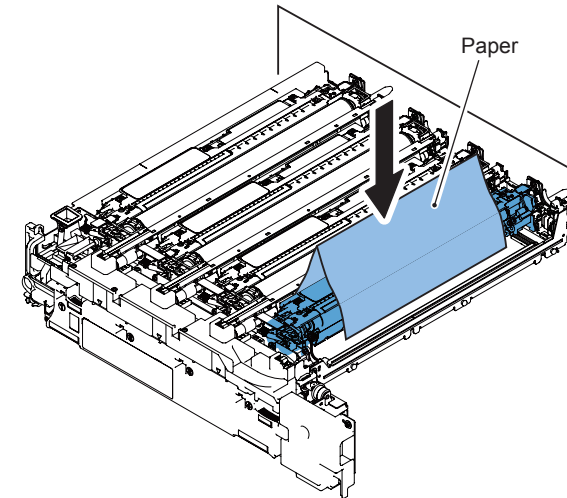
[Occurrence condition]

The installation failure of the drum unit

[Remedy]

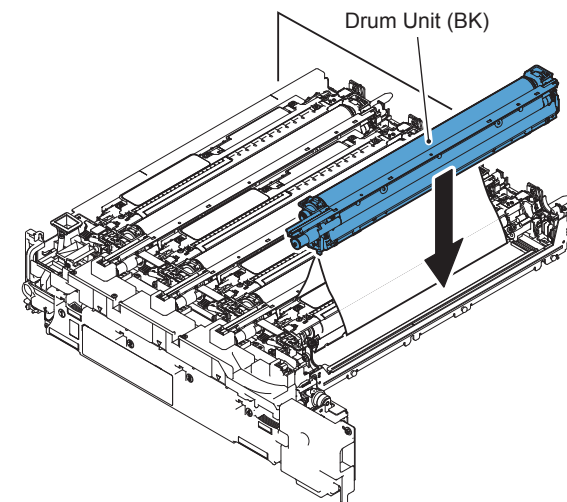
When installing the Drum Unit (Bk) to the host machine, perform the following procedures.

- 1) Pull out the Process Unit.
- 2) Remove a dummy Drum or Drum Unit.
- 3) Place the half fold paper on the Developing Assembly (Bk).



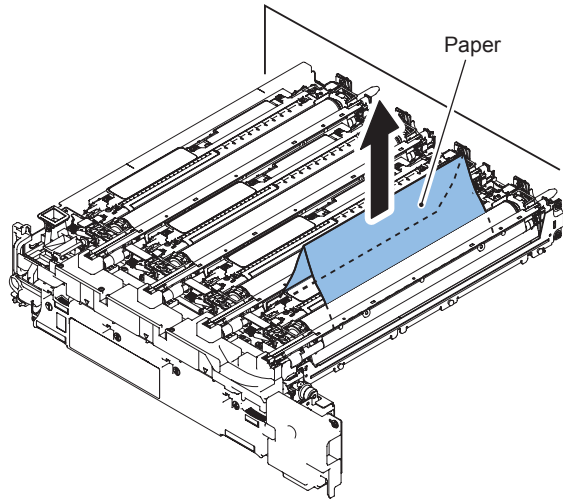
F-6-12

- 4) While the paper is set, install the Drum Unit (Bk) to the host machine.



F-6-13

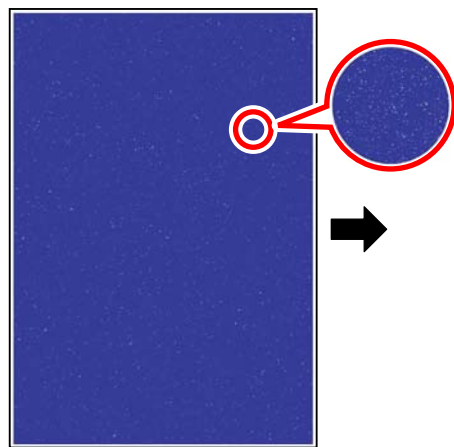
5) Hold the folded portion and pull this paper out to the direction of upper.



F-6-14



## Blank area caused by poor secondary transfer



F-6-15

[Occurrence area]

Secondary Transfer Outer Roller

[Cause]

Since the resistance of a paper changes when the recycled paper having bad surface nature is used under the high temperature and high humidity environment, the current value of the Secondary Transfer may be insufficient. As a result, the blank area caused by Secondary Transfer failure may occur.

[Occurrence condition]

In case that the recycled paper having bad surface nature is used under the high temperature and high humidity environment.

This phenomenon will be more obvious when a blue solid image is copied.

[Remedy]

Please perform the following steps.

1) Check environmental classification inside the machine.

Indication of inside environmental classification (COPIER > DISPLAY > MISC > ENV-TR)  
<Level1>

2) Check the "paper type" when the poor image occurred. (Example: Plain paper 1)

3) Check the "printing surface" which the poor image occurred. (Example: In the case of a first side)

4) Perform adjustment of secondary transcription ATVC target current (COPIER > ADJUST > HVTR > XXXX).

Set the setting value of the applicable service mode to "+10" after checking the sub-item name corresponding to XXXX from the following table. If not improved, please increase the setting value by +10 each.

(Example: When the paper type is the plain paper 1, environmental classification is 1 and it is on a first side, COPIER > ADJUST > HVTR > 2TR-N1)

Paper type	Environmental Classification	Service mode sub-item name	
		First side	Second side
Plane Paper1 64 ~ 82g	1	2TR-N1	2TR-N2
	2	2TR-N12	2TR-N22
	3	2TR-N13	2TR-N23
Plane Paper2 83 ~ 105g	1	2TR-HN1	2TR-HN2
	2	2TR-HN12	2TR-HN22
	3	2TR-HN13	2TR-HN23
Thin Paper 52 ~ 64g	1	2TR-T1	2TR-T2
	2	2TR-T12	2TR-T22
	3	2TR-T13	2TR-T23
Recycled Paper	1	2TR-R1	2TR-R2
	2	2TR-R12	2TR-R22
	3	2TR-R13	2TR-R23
Heavy paper 1 106 ~ 163g	1	2TR-H1	2TR-H2
	2	2TR-H12	2TR-H22
	3	2TR-H13	2TR-H23
Heavy paper 2 164 ~ 209g	1	2TR-SH1	2TR-SH2
	2	2TR-SH12	2TR-SH22
	3	2TR-SH13	2TR-SH23
Heavy paper 3 210 ~ 256g	1	2TR-UH1	2TR-UH2
	2	2TR-UH12	2TR-UH22
	3	2TR-UH13	2TR-UH23
Postcard	1	2TR-P1	2TR-P2
	2	2TR-P12	2TR-P22
	3	2TR-P13	2TR-P23
Envelope	1	2TR-E1	2TR-E2
	2	2TR-E12	2TR-E22
	3	2TR-E13	2TR-E23
Transparency	1	2TR-O1	-
	2	2TR-O12	-
	3	2TR-O13	-

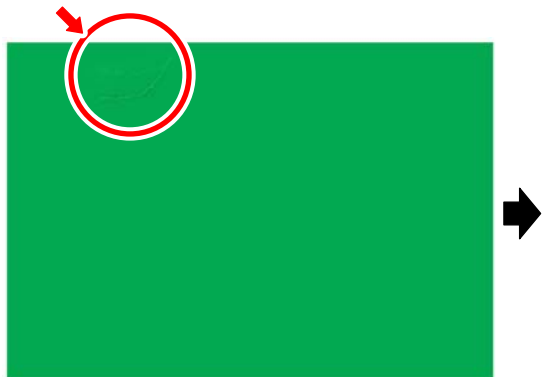
T-6-10

[Notes about remedy]

If the service mode is changed, the life of the Secondary Transfer Outer Roller will be influenced.

For this reason, please do not set the setting value to +80 or more at the maximum.

## ■ Fixing wrinkle due to deterioration of rib on Fixing Inlet Guide



F-6-16

[Location]  
Fixing Inlet Guide

### [Cause]

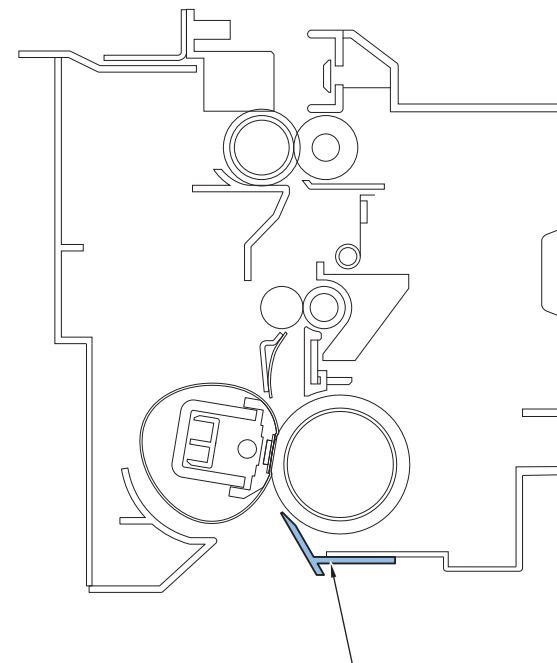
When making 2-sided copies of solid image continuously in high temperature & high humidity environment, rib side on the Fixing Inlet Guide is deteriorated and resin part may be scraped. As a result, when the leading edge of paper enters the Fixing Inlet Guide, it is trapped by the scraped rib and the paper deflects leading to the wrinkle at the trailing edge of paper.

### [Condition]

When making 2-sided copies of solid image continuously in high temperature & high humidity environment.

### [Field Remedy]

Replace the Fixing Inlet Guide.

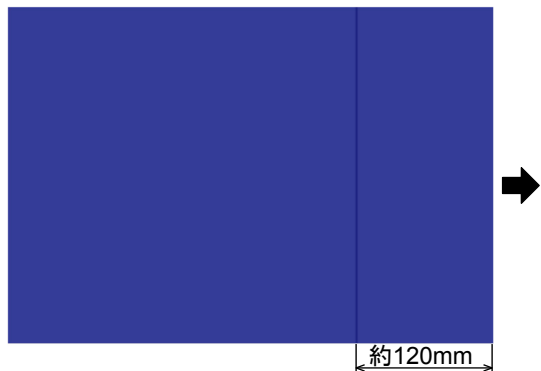


Fixing Inlet Guide

F-6-17

## ■ Soiled image due to the oil attached to the Fixing Separation Guide

### Guide



F-6-18

#### [Location]

Leading edge of Fixing Separation Guide

#### [Cause]

When the paper passes through the Fixing Assembly, oil of fused toner may attach to the leading edge of Fixing Separation Guide and it may accumulate.

At that time, when making 2-sided solid print with 2-colors, curled leading edge of paper on 2nd side may contact with the Delivery Flapper.

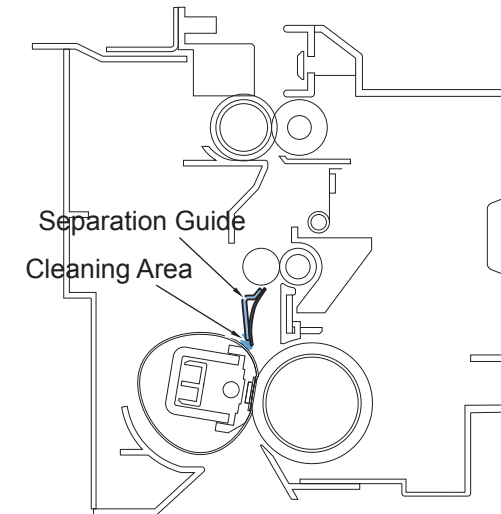
Thus, movement of this paper changes and it may touch the leading edge of Fixing Separation Guide. As a result, oil attached to the leading edge of guide may appear on the image.

#### [Condition]

With using the Fixing Assembly that is used over a prolonged period, when making 2-sided solid print with 2-colors.

#### [Field Remedy]

Clean the end of the Fixing Separation Guide with lint-free paper moistened with alcohol.



F-6-19

## Operation Error

### Noise around the Fixing Film Unit

[Location]  
Fixing Film Unit

[Cause]

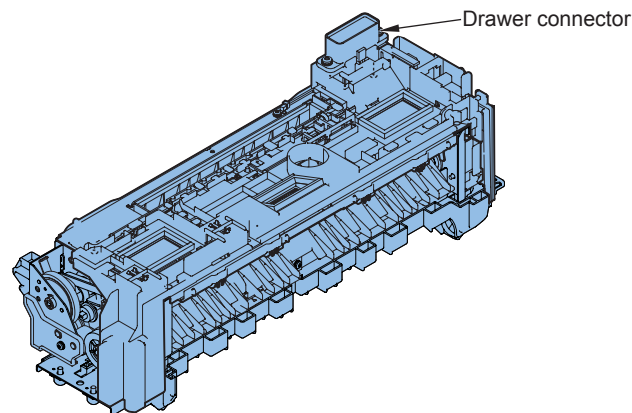
Because the grease inside the Fixing Film deteriorates due to prolonged use, sliding performance between the Fixing Film and the heater surface may be decreased. As a result, the Fixing Film contacts with the heater surface when it rotates and noise may be generated.

[Field Remedy]

By pushing the Fixing Film area, grease inside the film circulates and sliding performance will be improved.

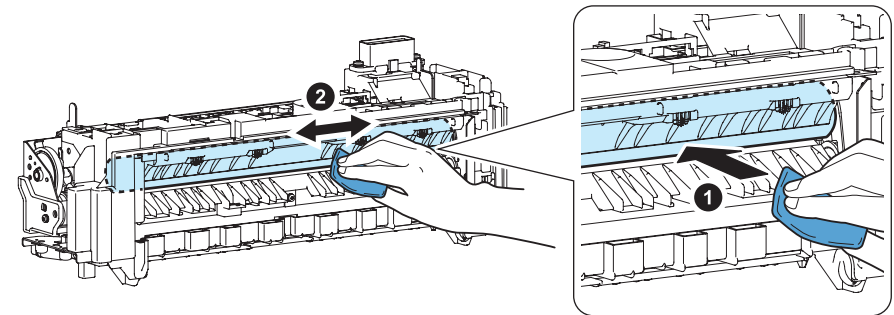
Operation procedure is as below.

- 1) Remove the Fixing Unit.
- 2) Change the direction of the Fixing Assembly. (Place the Fixing Assembly where the Drawer Connector faces up.)



F-6-20

- 3) While pushing the Fixing Film area with lint-free paper, move it right and left 2 times.



F-6-21

## ■ Cannot close the Process Unit

[Location]

Process Unit

[Cause]

If the main power switch is turned OFF just after the copy operation (approx. within 5 seconds) and the Process Unit is opened, the Laser Shutter May not be closed.

As a result, the rear side of Process Unit and the Laser Shutter interfere each other when the Unit is closed and the Process Unit cannot be installed to the host machine.

[Occurrence Condition]

If the main power switch is turned OFF just after the copy operation (approx. within 5 seconds) or if the power plug is disconnected without turning OFF the main power switch.

[Field Remedy]

Process Unit can be installed to the host machine by strongly pushing it.

However, if the Unit is installed to the host machine with brute force, it may damage other parts. Thus, be sure to follow the below operation procedure.

- 1) Turn OFF/ON the main power switch. (Laser Shutter is closed automatically.)
- 2) While the Process Unit remains pulled out, make sure that the Laser Shutter is surely closed. At this time, do not put your hands inside the machine.
- 3) Turn OFF the main power switch and install the Process Unit to the host machine.

## ■ Productivity decrease at stack delivery in thin paper (52g/m2 ~ 63g/m2) mode < Staple Finisher C1/Saddle Stitch Finisher C1>

[Location]

Process Tray on the Staple Finisher C1/Saddle Stitch Finisher C1

[Cause]

When the thin paper (52g/m2 to 63g/m2) is selected and the paper stack is delivered from the corresponding finisher, electrostatic is generated under the low humidity environment because the paper is fractioned in the Process Tray causing paper attraction. As a result, alignment failure may occur.

To avoid this, the electro static is prevented from being generated by decelerating the feed speed in case of foregoing condition.

[Occurrence condition]

This paper (52g/m2 to 63g/m2) is selected and the paper stack is delivered from the corresponding finisher.

[Field Remedy]

Change the paper selection to plain paper 1 (64g/m2 ~ 81g/m2) and deliver the paper stack.

Approx. 19% of productivity can be enhanced (in the following condition).

Condition: A4 paper and 10 sheets stack delivery (1-point staple)

[Note at operation]

Feed speed is enhanced when the plain paper 1 (64g/m2 ~ 81g/m2) is specified for paper selection.

However, the possibility to generate the electrostatic is also increased when the feed speed is enhanced and it may cause the alignment failure.

If such a case, change the paper selection to thin paper (52g/m2 ~ 63g/m2).

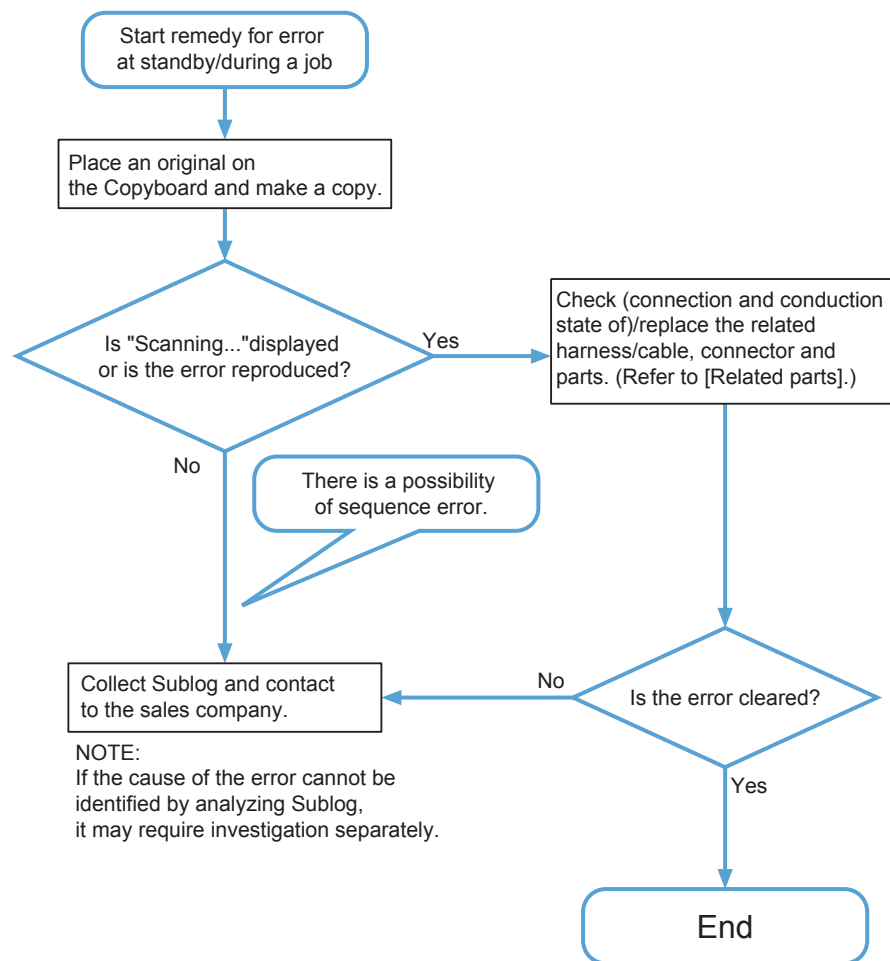
## Error Code

### E732-0001: Scanner communication error

#### [Description]

A communication error between the Reader Controller PCB and the Main Controller PCB 2 was detected at standby/scanning.

#### [Remedy]]



F-6-22

#### [Related parts]

- Harness between the Main Controller PCB 2 (J3003) and the Reader Controller PCB (PCB1/J109) (Unit of replacement: CABLE, INTERFACE)
- Harnesses from the Relay PCB to the Reader Controller PCB
  1. Relay PCB (UN5/J426) to Relay Connector (6P) (Unit of replacement: CABLE, DC POWER SUPPLY)
  2. Relay Connector (6P) to Reader Controller PCB (PCB1/J101) (Unit of replacement: CABLE, READER POWER SUPPLY)
- Main Controller PCB 2 (Unit of replacement: MAIN CONTROLLER PCB ASS'Y, 2)
- Reader Controller PCB (PCB1) (Unit of replacement: READER CONTROLLER PCB ASSEMBLY)
- Relay PCB (UN5) (Unit of replacement: RELAY PCB ASSEMBLY)

#### [Reference]

Before replacing the Reader 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.

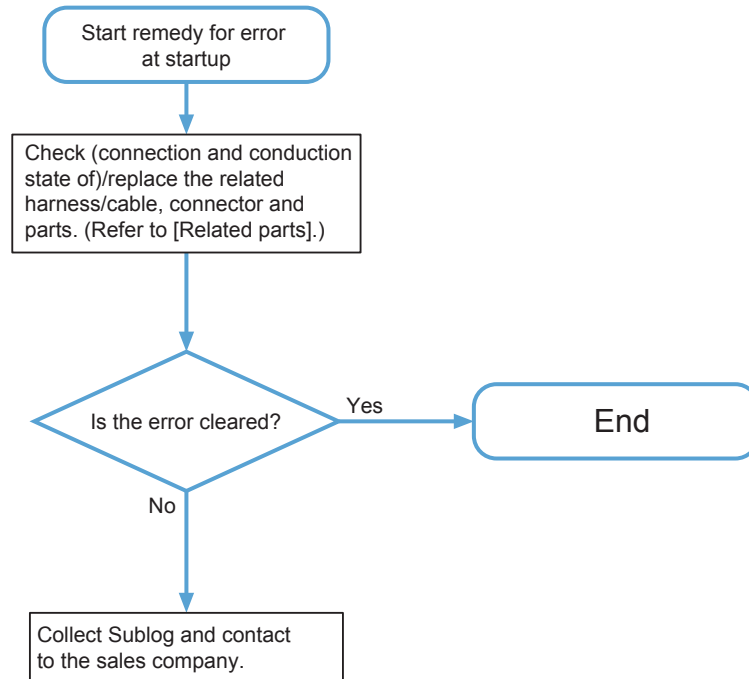
- Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> RSRAMBUP
- Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> RSRAMRES

## E732-0021/0022: Scanner communication error

### [Description]

A communication error between the Reader Controller PCB and the Main Controller PCB 2 was detected at startup/recovery from sleep.

### [Remedy]



### NOTE:

If the cause of the error cannot be identified by analyzing Sublog, it may require investigation separately.

### [Related parts]

- Harness between the Main Controller PCB 2 (J3003) and the Reader Controller PCB (PCB1/J109) (Unit of replacement: CABLE, INTERFACE)
- Harnesses from the Relay PCB to the Reader Controller PCB
  1. Relay PCB (UN5/J426) to Relay Connector (6P) (Unit of replacement: CABLE, DC POWER SUPPLY)
  2. Relay Connector (6P) to Reader Controller PCB (PCB1/J101) (Unit of replacement: CABLE, READER POWER SUPPLY)
- Main Controller PCB 2 (Unit of replacement: MAIN CONTROLLER PCB ASS'Y, 2)
- Reader Controller PCB (PCB1) (Unit of replacement: READER CONTROLLER PCB ASSEMBLY)
- Relay PCB (UN5) (Unit of replacement: RELAY PCB ASSEMBLY)

### [Reference]

Before replacing the Reader 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> RSRAMBUP
- Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> RSRAMRES

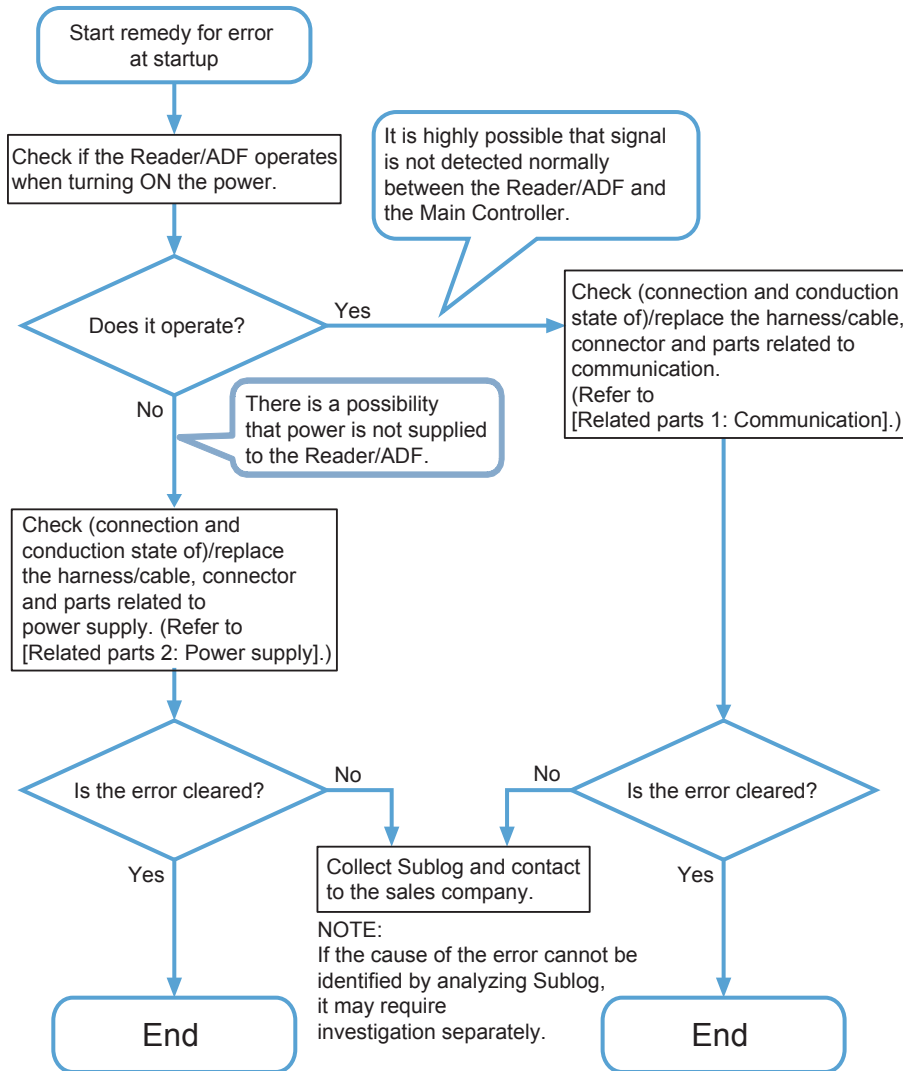


## E732-0023: Scanner communication error

### [Description]

A communication error between the Reader Controller PCB and the Main Controller PCB 2 was detected at startup/recovery from sleep.

### [Remedy]



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### [Related parts 1: Communication]

- Harness between the Main Controller PCB 2 (J3003) and the Reader Controller PCB (PCB1/J109) (Unit of replacement: CABLE, INTERFACE)
- Main Controller PCB 2 (Unit of replacement: MAIN CONTROLLER PCB ASS'Y, 2)
- Reader Controller PCB (PCB1) (Unit of replacement: READER CONTROLLER PCB ASSEMBLY)

### [Related parts 2: Power Supply]

- - Harnesses from the Relay PCB to the Reader Controller PCB
- 1. Relay PCB (UN5/J426) to Relay Connector (6P) (Unit of replacement: CABLE, DC POWER SUPPLY)
- 2. Relay Connector (6P) to Reader Controller PCB (PCB1/J101) (Unit of replacement: CABLE, READER POWER SUPPLY)
- Reader Controller PCB (PCB1) (Unit of replacement: READER CONTROLLER PCB ASSEMBLY)
- Relay PCB (UN5) (Unit of replacement: RELAY PCB ASSEMBLY)

### [Reference]

Before replacing the Reader 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.

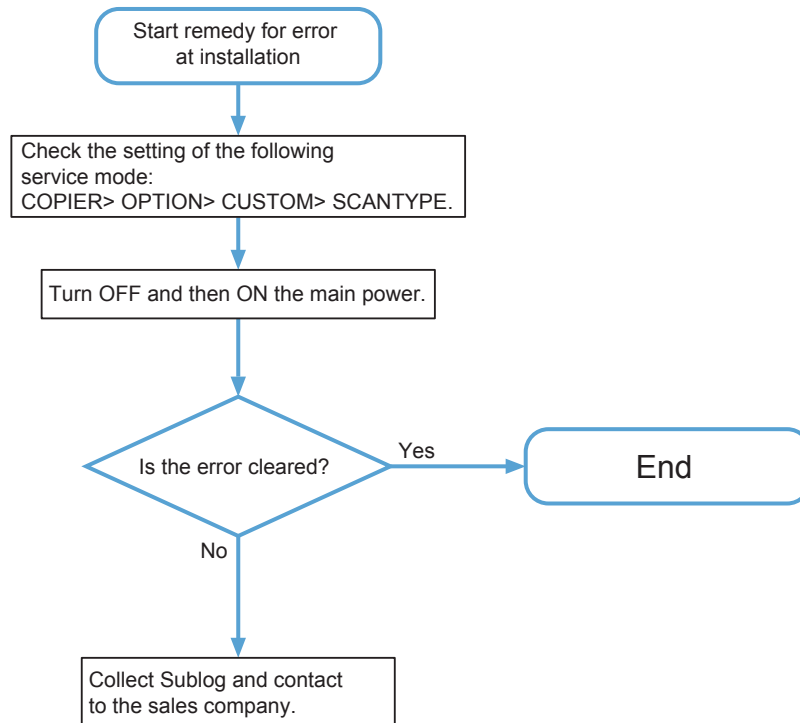
- Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> RSRAMBUP
- Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> RSRAMRES

## E732-8888: ADF detection error

### [Description]

ADF which was different from the one set in service mode was detected.

### [Remedy]



NOTE:  
If the cause of the error cannot be identified by analyzing Sublog, it may require investigation separately.

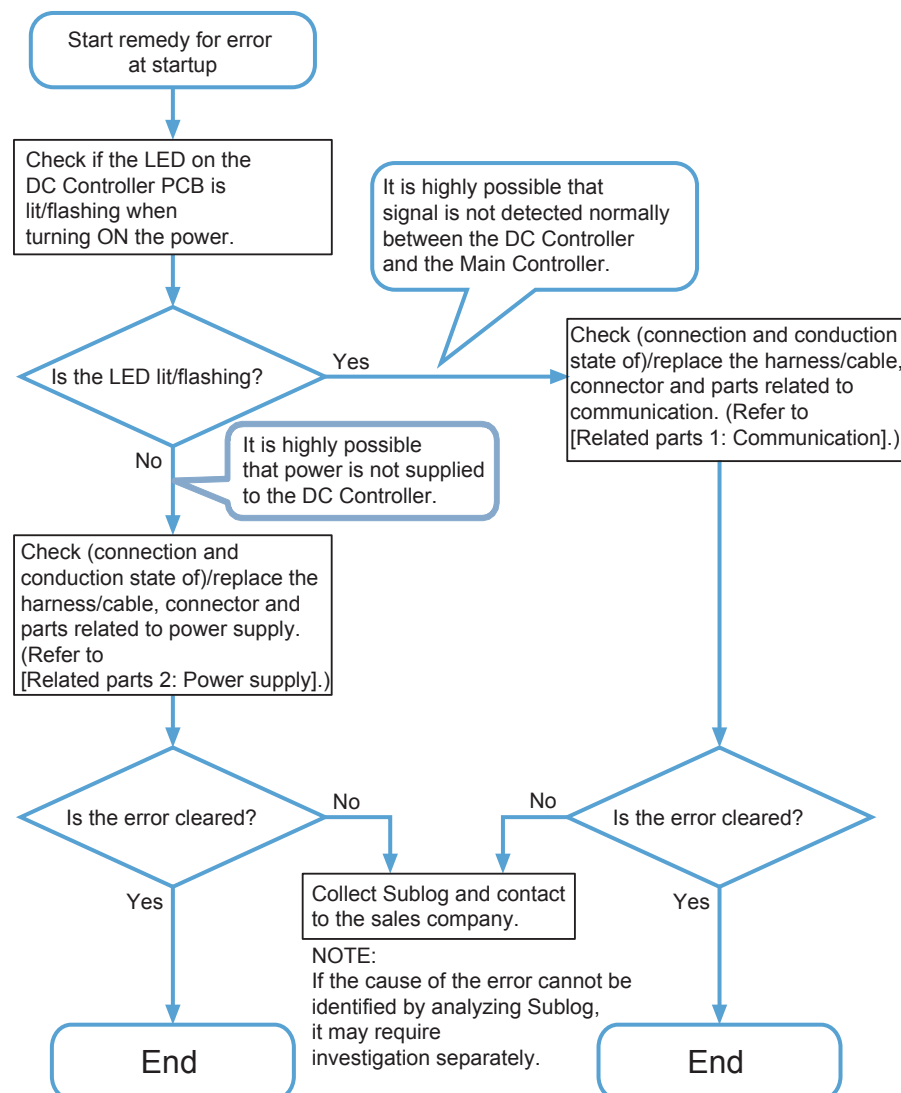
F-6-25

## E733-0000: Printer communication error

### [Description]

A communication error between the DC Controller PCB and the Main Controller PCB 2 was detected at startup.

### [Remedy]



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### [Related parts 1: Communication]

- Harness between the Riser PCB (J102) and the DC Controller PCB (UN1) (Unit of replacement: Flat Cable)
- DC Controller PCB (UN1) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY)
- Main Controller PCB 2 (Unit of replacement: MAIN CONTROLLER PCB ASS'Y, 2)

### [Related parts 2: Power Supply]

- Harness between the DC Controller PCB (UN1/J129) and the Relay PCB (UN5/J422) (Unit of replacement: DC POWER CABLE ASSEMBLY)
- DC Controller PCB (UN1) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY)
- Relay PCB (UN5) (Unit of replacement: RELAY 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.

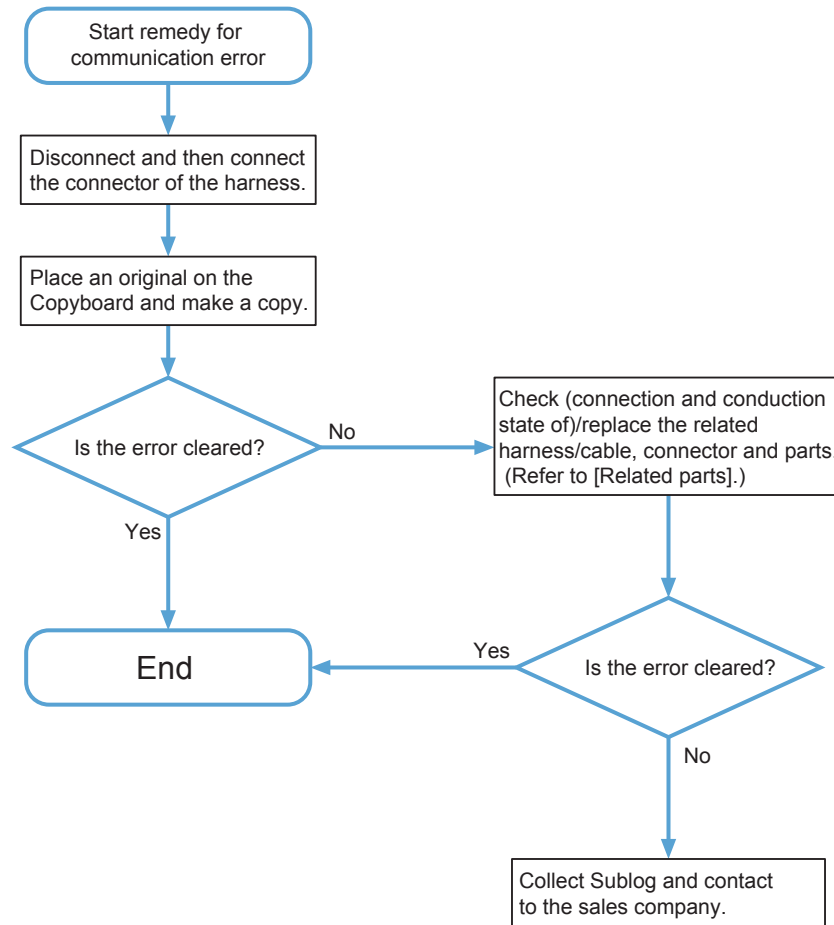
- Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP
- Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

## E733-0001/0002: Printer communication error

### [Description]

A communication error between the DC Controller PCB and the Main Controller PCB 2 was detected.

### [Remedy]



NOTE:  
If the cause of the error cannot be identified by analyzing Sublog, it may require investigation separately.

### [Related parts]

- Harness between the Riser PCB (J102) and the DC Controller PCB (UN1) (Unit of replacement: Flat Cable)
- DC Controller PCB (UN1) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY)
- Main Controller PCB 2 (Unit of replacement: MAIN CONTROLLER PCB ASS'Y, 2)

### [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

## Version upgrade

### Overview

#### Overview of Version Upgrade

The system software version is upgraded in 2 steps, downloading and writing the new version of the system software.

#### Downloading System Software

This machine supports the following 3 downloading methods.

1. Download via the service support tool (hereinafter "SST")

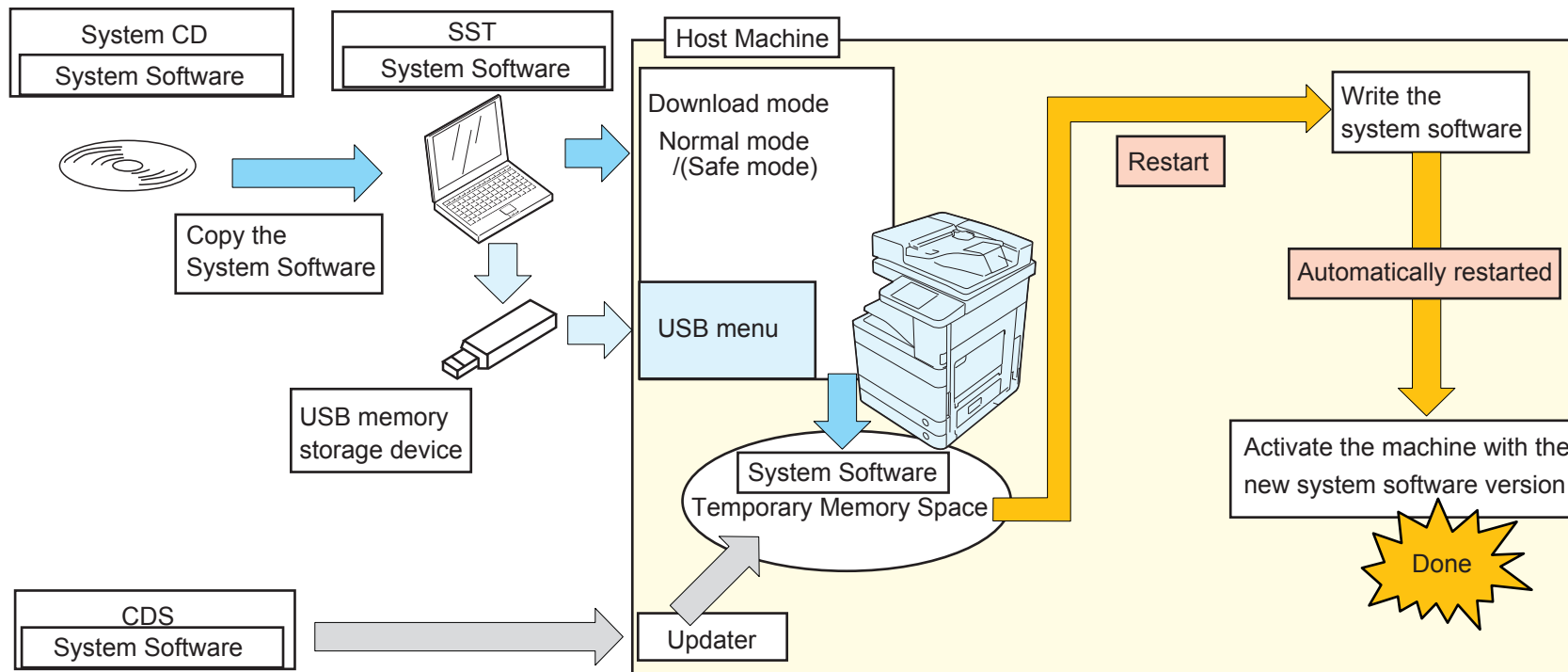
Connect this machine to the PC by the cross cable to download the system software using SST installed in the PC.

2. Download using the USB memory storage device

Insert the USB memory storage device storage device to the slot of the machine and download the system software stored in the device.

3. Download via Contents Delivery System (hereinafter "CDS")

Access to CDS via Internet to download the system software directly to the machine.



F-6-28

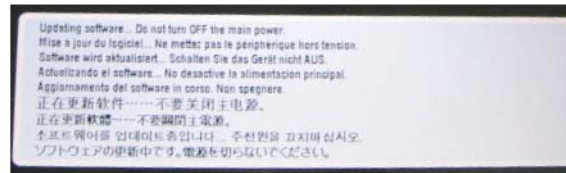
## ■ Writing System Software

The system software downloaded in either of the above-mentioned methods is stored in the temporary memory space.

After the system software is successfully downloaded, restart the machine to write the software in the machine.

In case the main power switch is turned OFF during the writing process, the machine may not be started.

This machine supports the remote version upgrade via CDS. When upgrading the system software via CDS, the warning message is shown on the control panel to alert the user not to turn OFF the power switch.

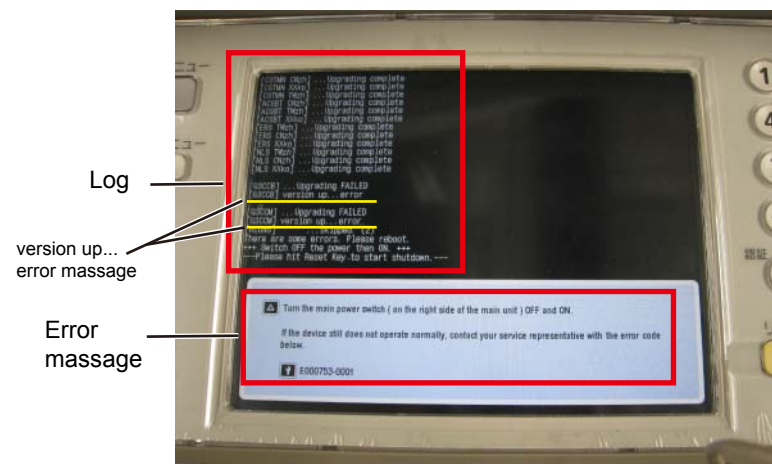


F-6-29

When the system software is successfully written, the machine is automatically restarted to activate the downloaded system software.

If any error occurs during the writing process, the error code, E753-0001, is shown.

The name of the system software component is shown to the left of the error log message, “version up.....error”. Check the name if the software is for the option not attached to the machine. If so, turn OFF / ON the machine to recover the error (see Troubleshooting for details).



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## ■ Download Mode

When the version is upgraded via SST or with the USB memory storage device storage device, start the machine in Download mode. This machine has the following 2 Download modes similarly with other iR-series models.

### ● Normal mode(recommend):

- Start from Copier > FUNCTION > SYSTEM > Download.
- Conventionally, the main power switch of this machine was turned ON while pressing 1 and 7 keys. However, the procedure above automatically assigns a static IP address and enables the download same as before.
- You can obtain the version information and avoid unnecessary download and errors.

#### NOTE :

When entering Download mode, be sure to go into Service mode after all items of main menu have been displayed.  
This machine reads the version information of system software when it starts. You must start Download mode after the version information has been obtained.

### ● Safe mode:

- Press 2 and 8 keys simultaneously on the numeric keypad when turning on the power.  
\* Be sure to use "Single mode" when using SST. SST "Assist mode" cannot be used in safe mode. Any mode can be used when using USB.

## System Software Components

The table below shows the system software components for this machine.

Software to be upgraded		Display on SST		How to upgrade versions			Remarks
		Registered name of product	Name of system software	SST	USB memory	Others	
Host Machine	Main Controller	iAC5051	SYSTEM	○	○	-	
	MEAP Controller		MEAPCON	○	○	-	
	Language Module		LANGUAGE	○	○	-	
	OCR Libraly		SDICT	○	○	-	
	Remote UI Contents		RUI	○	○	-	
	RUI portal		RPTL	○	○	-	
	Mobile print		MOBPR	○	○	-	
	UI-BOX		BOX	○	○	-	
	UI-COPY		COPY	○	○	-	
	UI-Intro		INTRO	○	○	-	
	UI-SEND		SEND	○	○	-	
	Voice Synthesis Dictionary		TTS	○	○	-	
	Voice Recognition Dictionary		ASR	○	○	-	
	Paper Type Information File		MEDIA	○	○	-	
	Service Mode Contents		SMCNT	○	○	-	
	Printer Controller		DCON	○	○	-	
	WebDAV Contents		WEBDAV	○	○	-	
	Resources for Web Browser		BROWSER	○	○	-	
	Reader Controller(2-sided Single Pass)		RCOND	○	○	-	Color Image Reader Unit-B1
	Reader Controller(2-sided Double Pass)		RCONS	○	○	-	Duplex Color Image Reader Unit-B1
Fax Board Boot Program Super G3 Fax Board AE1		G3CCB	○	○	-	Super G3FAX Board – AE1	
Fax Board Main Program Super G3 Fax Board AE1		G3CCM	○	○	-	Super G3FAX Board – AE1	
Box Checker		BCT	○	○	-		
Key/Certificatefor Encrypted Communication	iAXXXX	KEY	○	○	-		
Staple Finisher – C1/Saddle	Finisher Controller	FIN_C1	FIN_CON	○	○	-	Staple Finisher – C1/Saddle Stitch Finisher – C1
Stitch Finisher – C1	Saddle Controller		SDL_CON	○	○	-	Saddle Stitch Finisher – C1
External 2-hole Puncher B1	Punch Controller	EXP_B1	EXP_CON	-	-	○	External 2-hole Puncher B1
Inner Finisher – A1	Finisher Controller	IFN_A1	FIN_CON	○	○	-	Inner Finisher – A1

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This machine holds the increased number of system software components compared to conventional iR machines to meet vastly extended functionality.

The Image Reader for this machine consists of 2-sided Single Pass and 2-sided Double Pass, requiring specific system software for each.

- The name of the system software for the 2-sided Single Pass Image Reader (Duplex Color Image Reader Unit – B1): RCOND
- The name of the system software for the 2-sided Double Pass Image Reader (Color Image Reader Unit – B1): RCONS

The finisher for this machine supports version upgrade via the host machine in any of the above-mentioned methods, i.e., via SST, USB memory storage device storage device or CDS. Note that the External 2-hole Puncher B1 does not support version upgrade via the host machine. To upgrade versions, connect the option with the PC using the downloader PCB to download the system software via SST.

## Note on Download Process

CAUTION: Never turn OFF the power during the download / writing process.

Turning off the power during the download / writing process may cause a failure of machine start-up at power-on.

If this occurs, start the machine in Safe mode (by pressing 2 and 8 keys simultaneously on the numeric keypad).

When the machine is successfully started in Safe mode, execute formatting of BOOTDEV partition, retry downloading the system software.

CAUTION:

Be sure to use normal mode when using download mode except in a case where it is not possible to start this machine and enter service mode.

In safe mode, version information of SYSTEM, MEAPCONT, LANGUAGE, RUI, and SDICT can be obtained, but version information of other system software such as DCON and RCON cannot be obtained. Therefore the following points to note are required when downloading in safe mode.

[RCON]

The version is not upgraded except in a case where Single mode of SST is used or when "Overwrite all" of USB download menu is used.

[DCON and others]

The following symptoms occur when SST (Single mode) or USB download menu (Auto) is used.

- The time for download/write becomes longer because the software is overwritten even when system software of the same version is being written.
- A confirmation message is not displayed when a lower version is going to be downloaded.

CAUTION: error code E753-0001

When an error occurs during writing process of the system software downloaded using SST or USB memory, error code E753-0001 is displayed.

Check if the target option is properly installed and see if the software to download is for the correct target option, and then execute downloading again.

## Version Upgrade via SST

### Overview

The system software can be downloaded either of the two modes below via SST.

- Assist mode (recommended)
- Single mode

Assist mode provides the following features.

- Attached option types are automatically recognized.
- The new versions of the system software for attached option types are automatically searched.
- The set of system software with interactive behavior confirmed is automatically downloaded.
- The accessories attached to the host machine are automatically recognized to download the system software for each accessory.

This machine holds a number of system software components that mutually interacts during operation. Behaviors of such system software should be confirmed when these are downloaded as the set. Thus, Assist mode is basically recommended to download the system software for this machine.

#### NOTE :

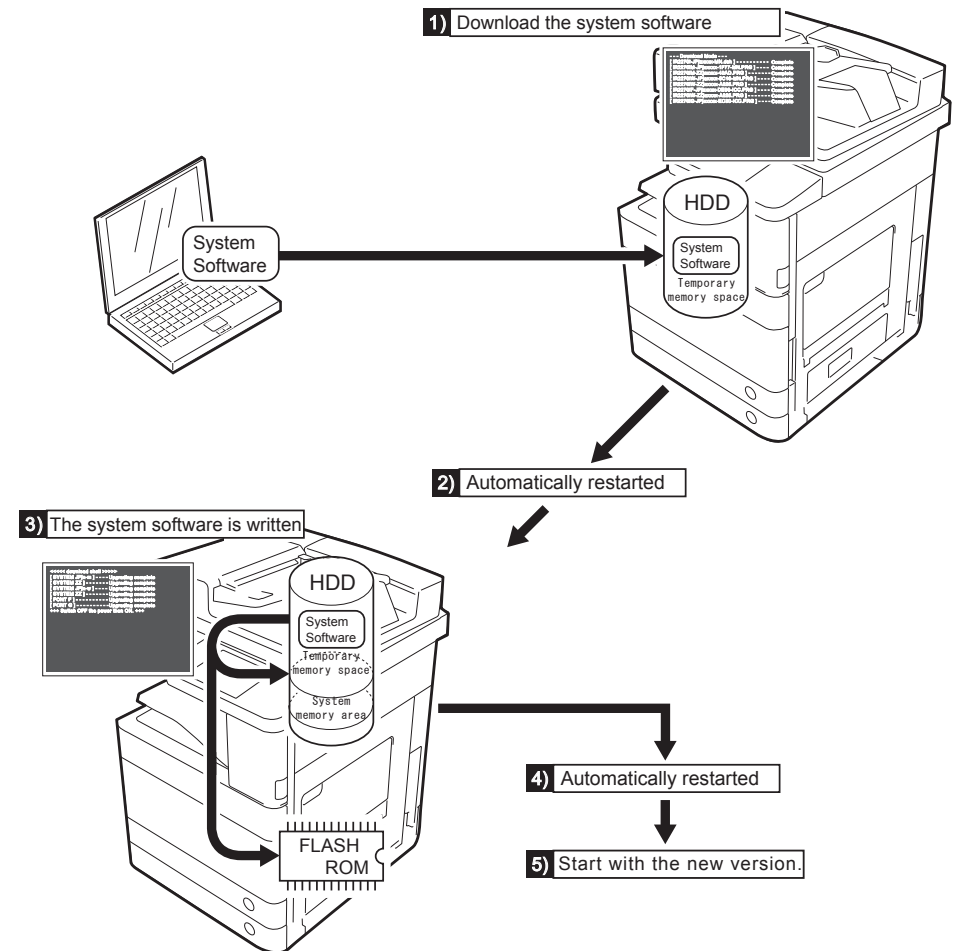
Use Single mode only when any of the following conditions is met.

- When downloading some the system software components, i.e. DCON, RCON or options.
- When reloading the system software after HDD is formatted.

### Downloading System Software

System software is saved in the temporary storage area on HDD after downloaded with SST. Restart the machine after download so that it will be written to the system area, and the flash ROM.

After the writing has been completed normally, this machine automatically restarts with the new system software.



## ■ Copying System Software

### ● System CD to SST

Copy the system software stored in the system CD to SST.

#### NOTE:

The system software is compressed if the file size exceeds the CD memory capacity. If the above is the case, decompress the file before copying it to SST.

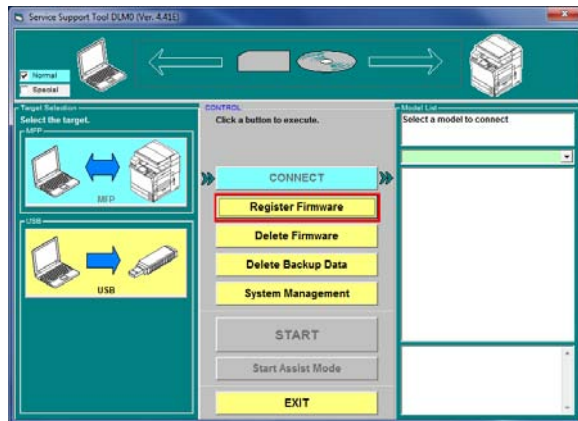
#### Preparation

Requirements:

- PC with SST Ver.4.41 or later installed
- The system CD for this machine

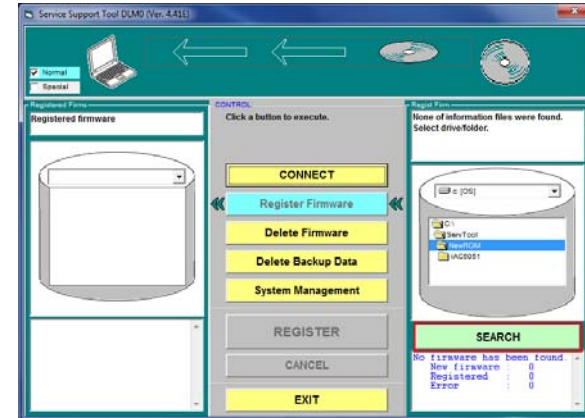
Steps to copy the system software

- 1) Start the PC
- 2) Set the system CD in the PC
- 3) Start SST
- 4) Click "Register Firmware" button.



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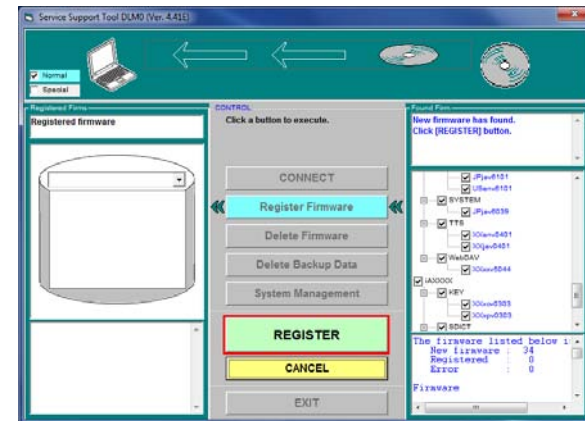
- 5) Select the drive where the system CD is set and click "Search" button.



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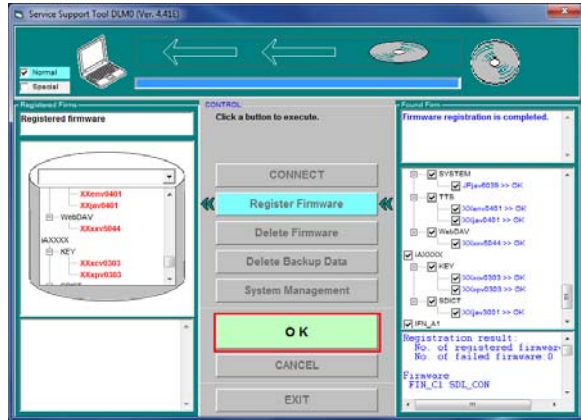
- 6) The system software stored in the system CD is listed.

Uncheck the box(es) for unnecessary folder(s) and/or system software and click "Copy" button.



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7) The message is shown when the system software is successfully copied. Click “OK” button.



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## Connection

The following IP address is automatically set for this machine at start-up in Download mode.

- IP address:172.16.1.100
- Subnet mask:255.255.255.0

When the PC with SST installed is connected to this machine, change the PC network address to the following.

- IP address:172.16.1.160
- Subnet mask:255.255.255.0
- Default gateway: arbitrary

### CAUTION:

If the PC has the connection to the network, the settings changed to the above-mentioned may cause network failures due to redundant IP addresses, etc. Ensure that the PC is disconnected from the network when you change the PC network settings. Alternatively use the cross cable to connect the PC to this machine.

### Preparation

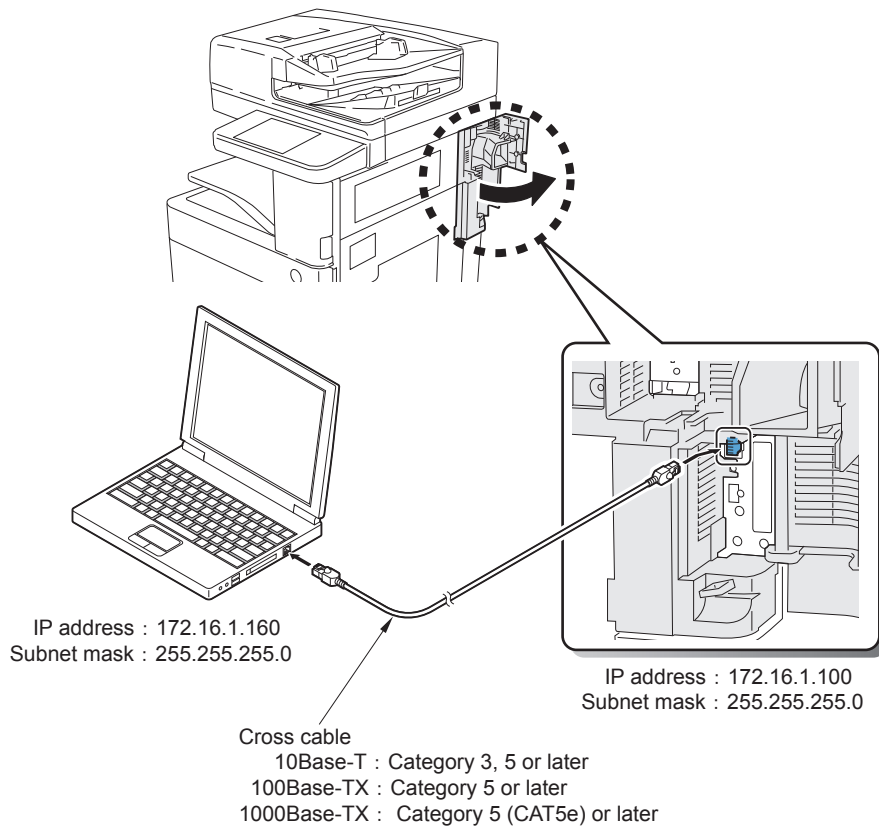
#### Requirements

- PC with SST Ver. 4.41 or later installed and the system software for this machine is stored
- Cross cable
  - 10Base-T : Category 3 or 5
  - 100Base-T : Category 5
  - 1000Base-T : Enhanced Category 5 (CAT5e) or later

### CAUTION:

Disconnect USB memory storage device storage devices if connected.

Communication to SST is disabled in this machine if any USB memory storage device storage device is recognized. SST and the USB memory storage device storage device cannot be used concurrently.



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### Steps

- 1) Use the cross cable to connect the machine to the PC with SST installed.
- 2) Turn on the main power switch of this machine.
- 3) Enter Service mode to start the machine in Download mode.  
Select COPIER > FUNCTION > SYSTEM > DOWNLOAD and press [OK].

- 4) Check the IP address of the PC.

Go to Start menu to select Program > Accessory > Command Prompt.

Type IPCONFIG and press [Return] to see the network settings of the PC.

If any discrepancies from the description in the figure below are found, change the network settings of the PC.

```
Administrator: Command Prompt
C:\>ipconfig
Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : 
    IP Address. . . . . : 172.16.1.160
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 

Tunnel adapter Local Area Connection* 8:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . : 

C:\>
```

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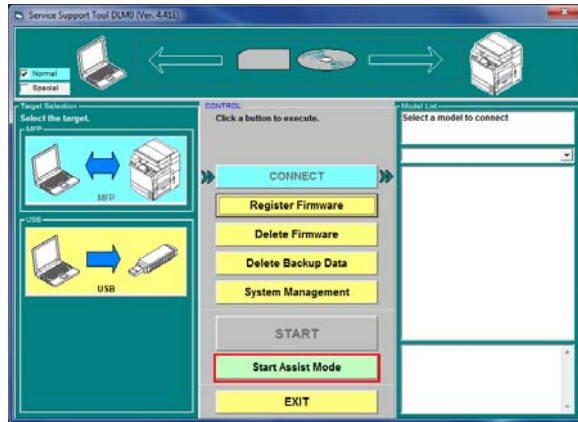
### CAUTION:

The network settings are not shown with IPCONFIG if the PC is disconnected from the network. To check the settings, connect the PC to this machine at power-on by the cross cable.



## ■ Downloading System Software (Assist mode)

- 1) Start this machine and enter Download mode (COPIER > FUNCTION > SYSTEM > DOWNLOAD).
- 2) Connect the PC to this machine and start SST.
- 3) Click "Start Assist mode" button.  
Skip this step when starting SST in Assist mode.



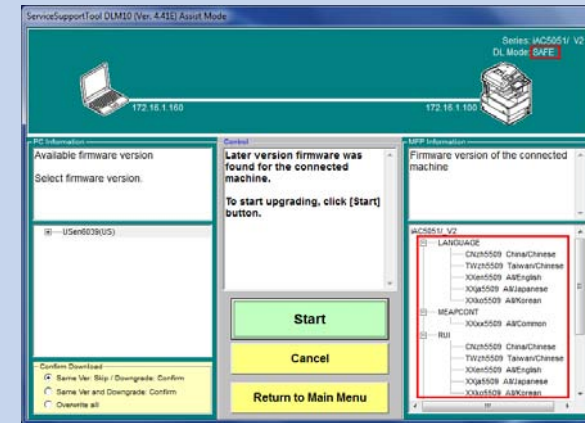
F-6-38

If the upgraded set of the system software is stored in SST, the new set is automatically selected.

### NOTE:

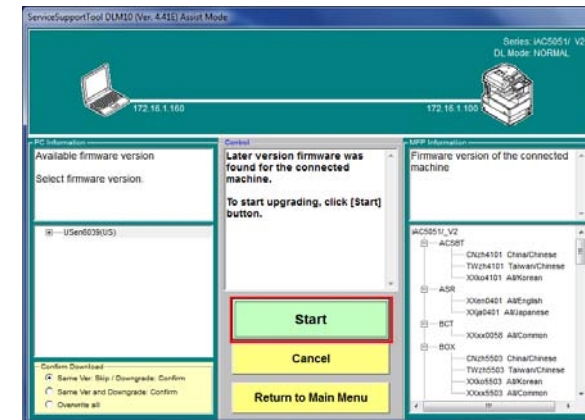
If no upgrade is stored, the existing system software set is unchanged. At any rate, any versions of the system software can be downloaded by manual selection.

NOTE:  
If the PC in Assist mode is connected to the machine in Safe mode,



only the system software of SYSTEM, LANGUAGE, RUI, MEAPCONT and SDICT can acquire version information.

- 4) Click "Start" button



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When download is completed, the machine is automatically restarted to initiate the writing process. The machine may repeat restarting several times depending on option configuration. Upon the system software written, the machine is restarted again and the main menu is displayed.

**NOTE: Download Confirmation Message Modes**

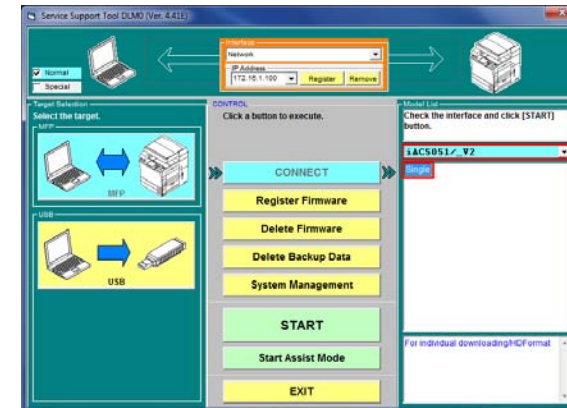
Download is confirmed in any of the three message modes.

- Skip the existing versions and confirm whether to download downgraded versions  
Upgraded versions are downloaded without message.  
Skip download of the existing versions.  
Confirm whether to download downgraded versions.
- Confirm whether to download the existing versions / downgraded versions  
Upgraded versions are downloaded without message.  
Confirm whether to download and overwrite the existing versions.  
Confirm whether to download downgraded versions.
- Overwrite all versions  
Regardless of version upgrade or downgrade, all versions of the system software are downloaded without message.  
By default, "Skip the existing versions and confirm whether to download downgraded versions" is selected.

**■ Downloading System Software (Single mode)**

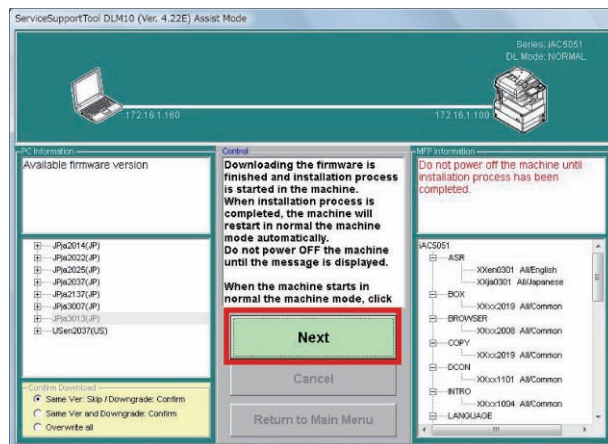
The following is the sample steps to download DCON (the other components of the system software can be downloaded similarly).

- 1) Start the machine in an appropriate Download mode.
- 2) Connect the PC to this machine to start SST.
- 3) Select the model to be connected and "Single", check the network settings. Click "Start" button.



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- 5) Click "Next" button.



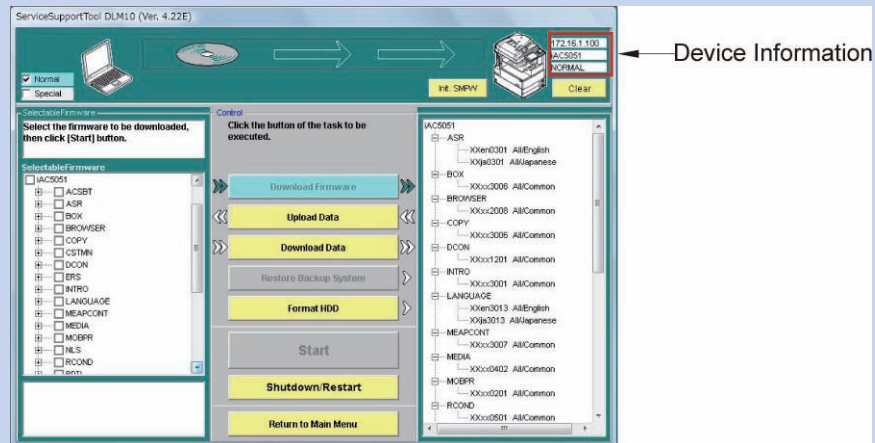
F-6-40

- 6) Disconnect the cross cable from the machine.
- 7) Enter Service mode to check the system software versions.
- 8) Click "OK" button.  
The main menu is displayed.

**NOTE:**

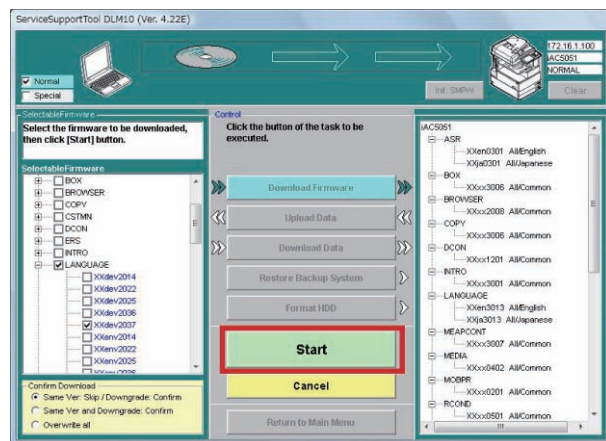
The following device information is shown at the right top of SST screen.

- IP address
- Model name
- Download mode



4) Select the DCON version to be downloaded and click “Start” button.

Multiple files can be selected in this step.



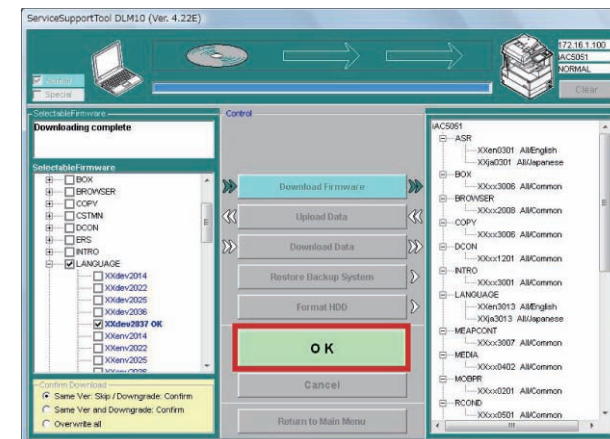
F-6-42

**NOTE:** Download Confirmation Message Modes  
Download is confirmed in any of the three message modes.

- Skip the existing versions and confirm whether to download downgraded versions  
Upgraded versions are downloaded without message.  
Skip download of the existing versions.  
Confirm whether to download downgraded versions.
- Confirm whether to download the existing versions / downgraded versions  
Upgraded versions are downloaded without message.  
Confirm whether to download and overwrite the existing versions.  
Confirm whether to download downgraded versions.
- Overwrite all versions.  
Regardless of version upgrade or downgrade, all versions of the system software are downloaded without message.

By default, “Skip the existing versions and confirm whether to download downgraded

5) When download is completed, click “OK” button.



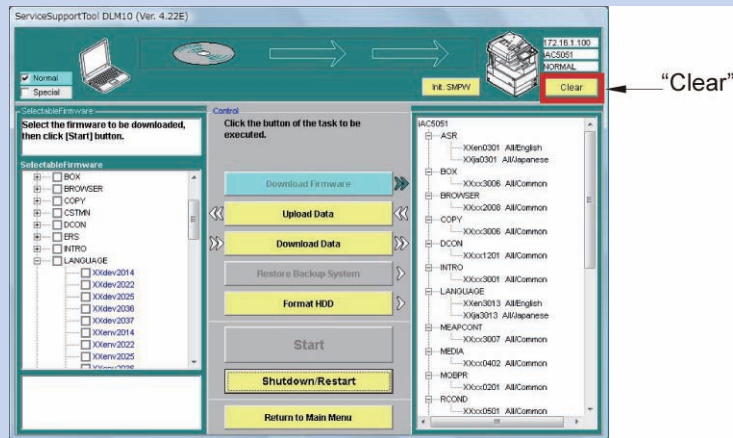
F-6-43

The main menu is displayed.

## NOTE:

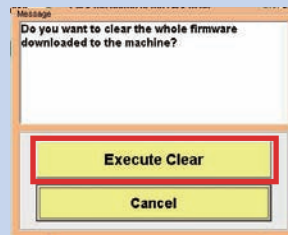
If it is before restarting the machine, the downloaded system software can be deleted not written on HDD or Flash ROM.

- 1) Click "Clear" button.  
"Clear" button



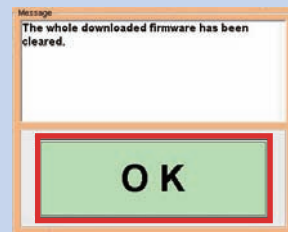
- 2) Click "Execute Clear" button.

The system software, which is stored in the temporary memory space of HDD, is deleted.

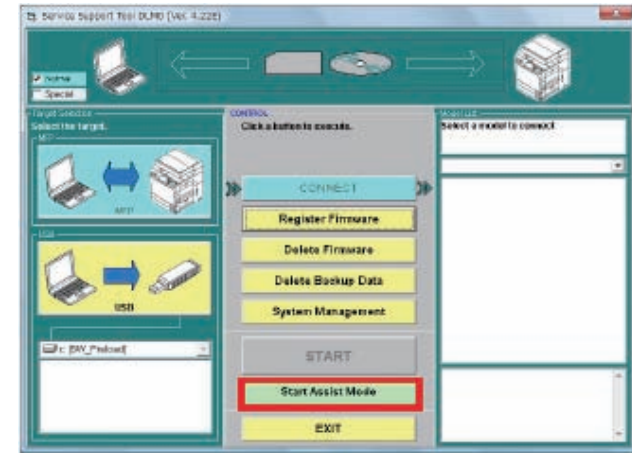


- 3) Click "OK" button.

Return to the previous screen.

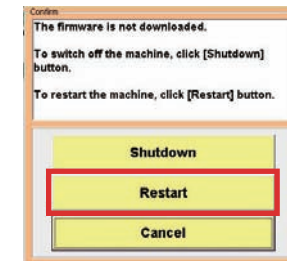


- 6) Click "Shutdown / Restart" button.



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- 7) Click "Restart" button.



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The machine is restarted.

The downloaded system software is written on HDD or Flash ROM.

- 8) Click "OK" button.
- 9) Enter Service mode to check the versions.

## ■ Formatting HDD

### ● Overview

This machine provides the following two types of HDD Formatting.

- ALL: to format the whole HDD
  - When HDD set as the service parts (the new HDD) is mounted
  - When clearing the system software and data completely from HDD and reloading the system software.

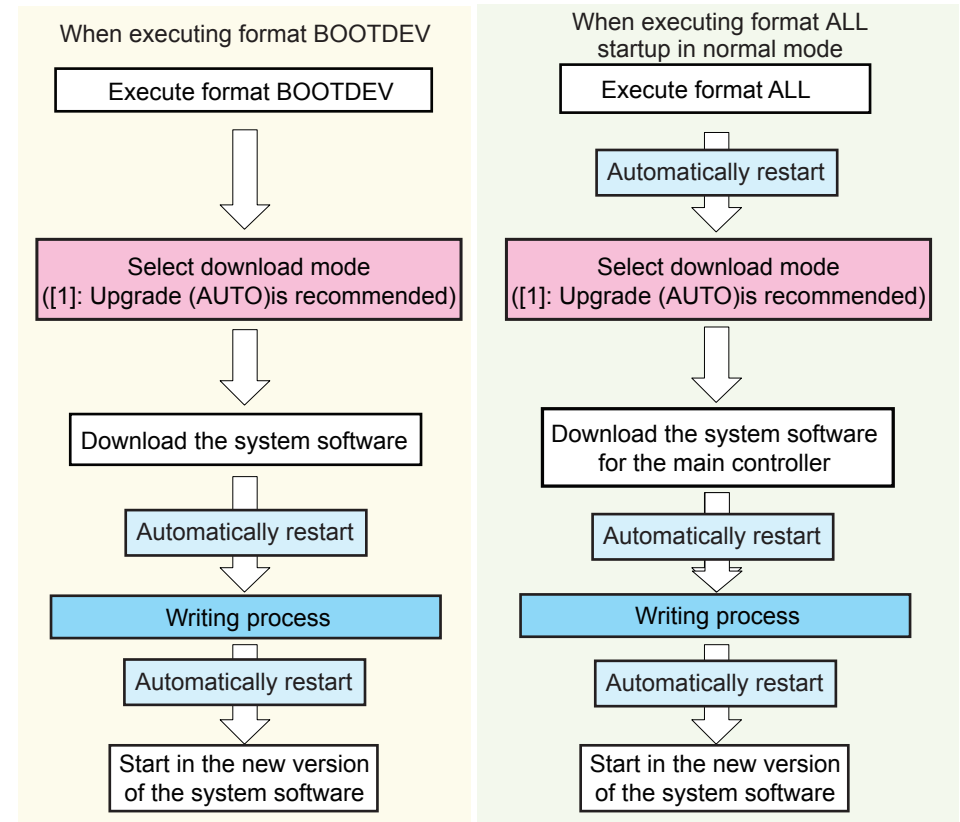
Once Format ALL is executed in your machine, all the user data and MEAP applications held in HDD will be cleared. Ensure to gain an agreement from the user before formatting.

- BOOTDEV: to format the system software storage area on HDD.
  - When clearing the system software storage area and reloading the system software HDD needs not to be formatted at version upgrade.

HDD can be formatted only in Single mode.

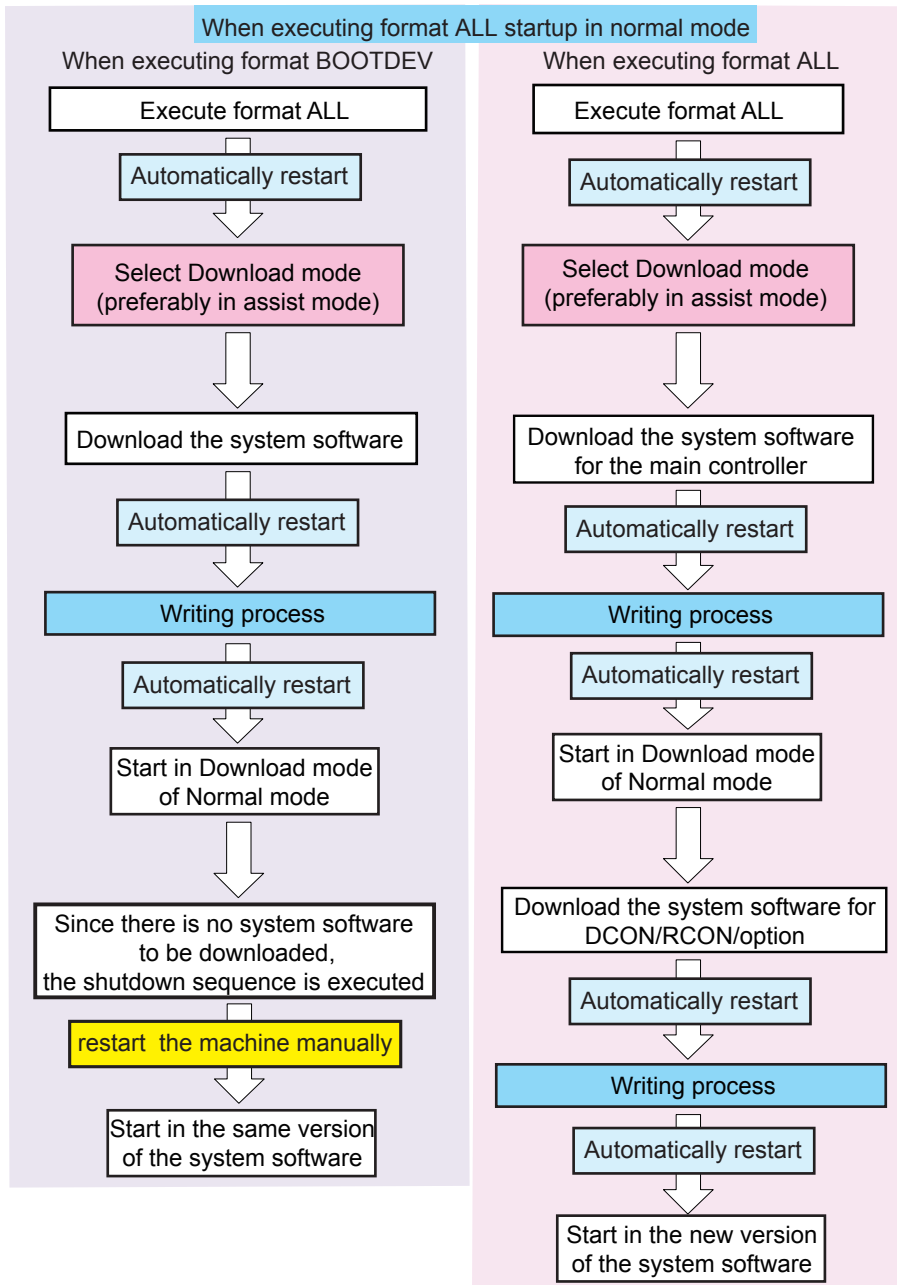
After HDD is formatted, the machine cannot be started before the system software is downloaded.

After Format ALL is executed, the machine is automatically restarted to reflect formatting to HDD. At this time, the machine automatically starts in Download mode. For BOOTDEV format, the machine is ready to download the system software without restarting. After formatting, enter either Assist mode (recommended) or Single mode to download the system software.



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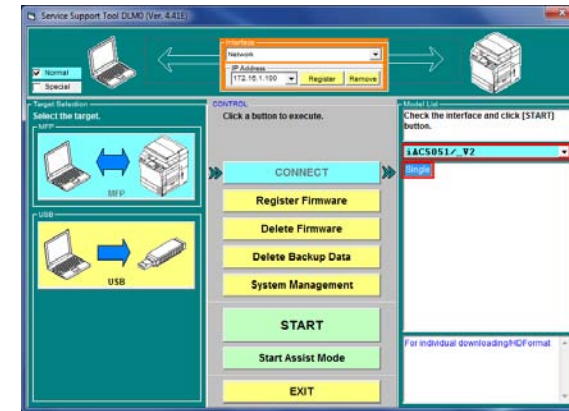




F-6-47

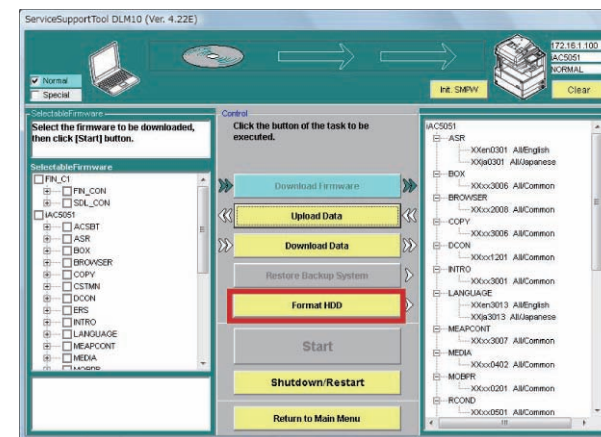
## Steps of Formatting

- 1) Enter Download mode. (Enter Safe mode when you mount the new HDD or when the machine is unable to start normally due to HDD failures, etc.)
- 2) Connect the PC to the machine to start SST.
- 3) Select the model to be connected and "single". Check the network settings and click "Start" button.



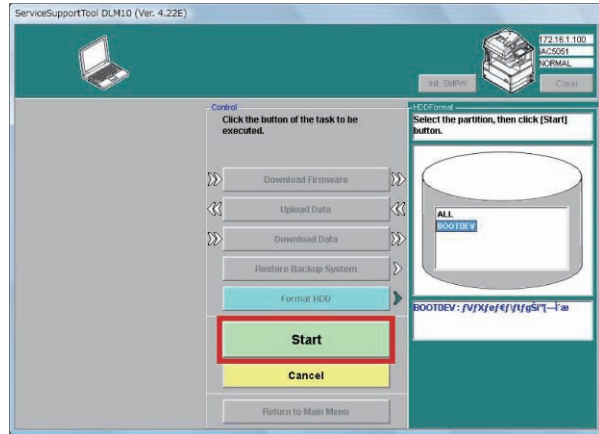
F-6-48

- 4) Click "Format HDD" button



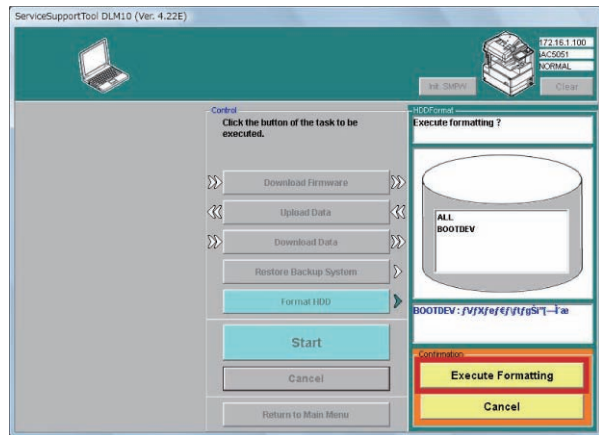
F-6-49

5) Select "BOOTDEV" or "ALL" to click "Start".



F-6-50

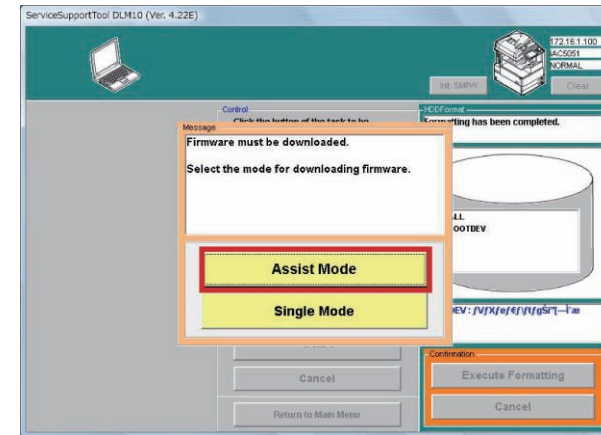
6) Click "Execute Format" button.



F-6-51

HDD is formatted.

7) Download the system software in any Download mode (Assist mode recommended). See the steps to download the system software for details.



F-6-52

**CAUTION:**

After HDD is formatted, ensure to download the system software. If the system software is not downloaded, E602 error is triggered at power-on.

**CAUTION:**

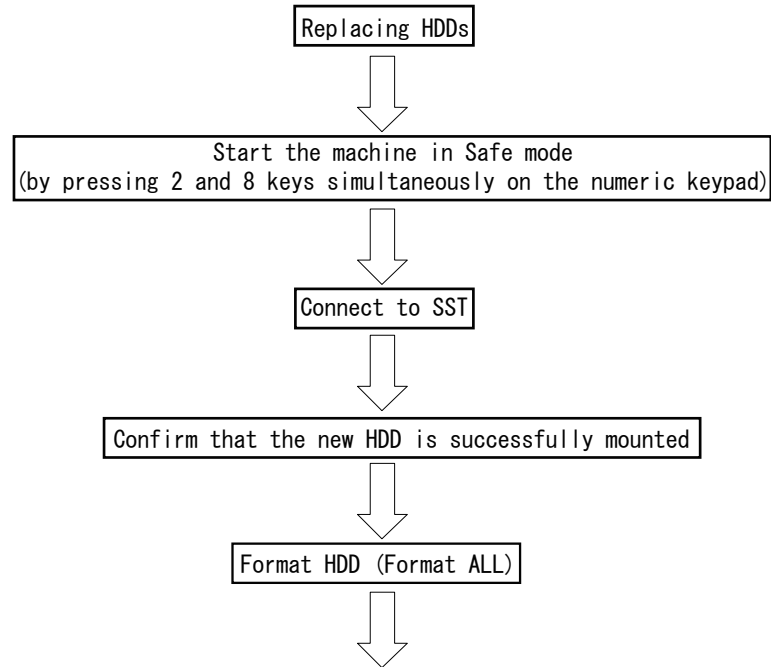
Restarting takes more time after HDD is formatted and the system software is downloaded (to write the downloaded software).  
Down time may be approx. 5 minutes in maximum to proceed the writing process.  
Never turn OFF the machine while Starting screen is shown.



## ● Mounting New HDD

After HDD set as the service parts is mounted, the new HDD should be formatted initially. In this case, the message is shown to confirm if the new HDD is mounted.

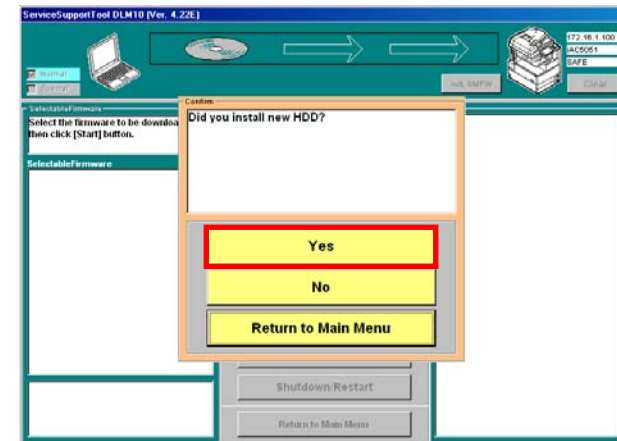
The figure below shows the abbreviated steps.



Follow the steps as described in Format ALL section.

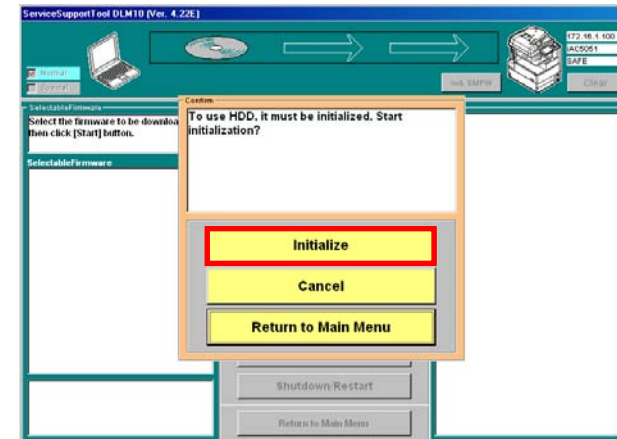
F-6-53

When the new HDD is mounted, the machine cannot be started in the normal procedure. Start the machine in Safe mode as Download mode. When gaining connection to SST, the message is shown to confirm if the new HDD is mounted.



F-6-54

Click "Yes" and the message is shown, confirming whether to format HDD.



F-6-55

Click "Initialize" button to initialize HDD (Format ALL). Follow the steps described in Format ALL section to download the system software.

## Backup

### Overview

At the time of replacing controller PCBs, the backup function enables to save data held in the PCB to migrate them to the new PCB.

- Backup via SST

Backup data	Downloaded/Uploaded file names
Backup data RAM	SramImg.bin(to be uploaded / downloaded)
MEAP applications	MeapBack.bin(to be uploaded / downloaded)
For investigation in Dev	Sublog.bin((Uploadable))
Service Print	The text file of the contents which You output to paper with a service mode(Uploadable).

T-6-12

- Backup RAM holds the data from Backup RAM of the Main Controller PCB 2.  
(Because setting data of service mode for the parts counter and the Main Controller are stored, be sure to back up the data when replacing the Main Controller PCB and the DC Controller PCB.)
- MeapBack holds MEAP applications and their data stored in HDD

- Backup via Service mode

Backup data	Service mode
Backup of Reader Controller PCB	COPIER > FUNCTION > SYSTEM RSRAMBUP (Backup) COPIER > FUNCTION > SYSTEM RSRAMRES (Restore)
Backup of DC Controller PCB	COPIER > FUNCTION > SYSTEM DSRAMBUP (Backup) COPIER > FUNCTION > SYSTEM DSRAMRES (Restore)

T-6-13

Data is stored in HDD.

#### NOTE:

Before replacing the Reader Controller PCBs, back up the data from Service mode. The backup data can be restored from Service mode when the PCBs are replaced. This enables to maintain the setting data including Service mode stored in the old Reader Controller PCB.

Before replacing the DC controller PCBs, back up the data from Service mode. The backup data can be restored from Service mode when the PCBs are replaced. This enables to maintain the setting data including Service mode stored in the old Controller PCB.

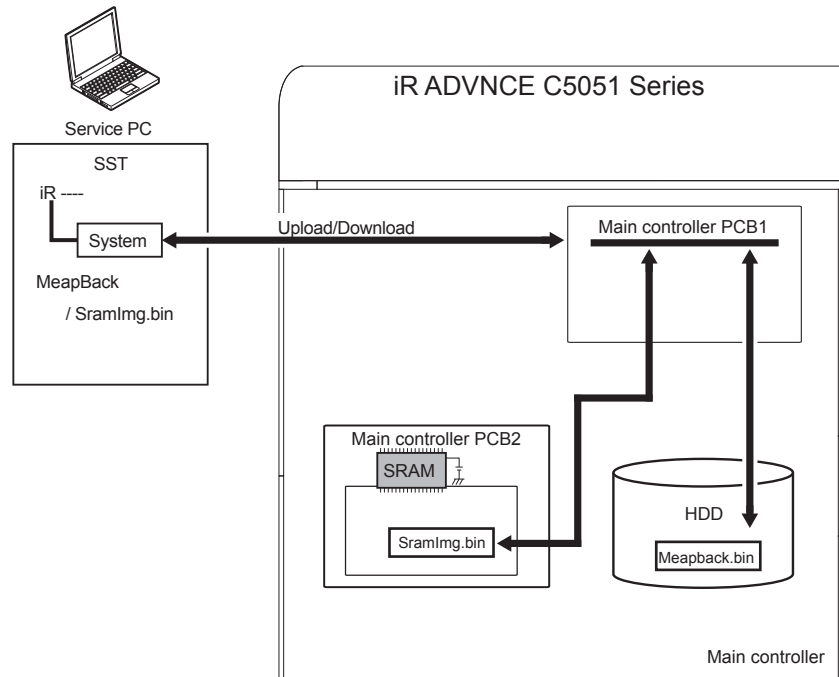
Before replacing the Main Controller PCB 2, upload SramImg.bin. By downloading SramImg.bin after replacement, the new Main Controller PCB 2 inherits the data including Service mode stored in the old PCB

Store Meapbackup.bin; and "Settings/Registration > Data Management> Initialize All Data/Setings"; Restore it; even if it, cannot log in to SMS.  
Restore Meapbackup.bin which backed up after "Initialize All Data/Setings"; store it.

## Steps to Upload Data

### CAUTION:

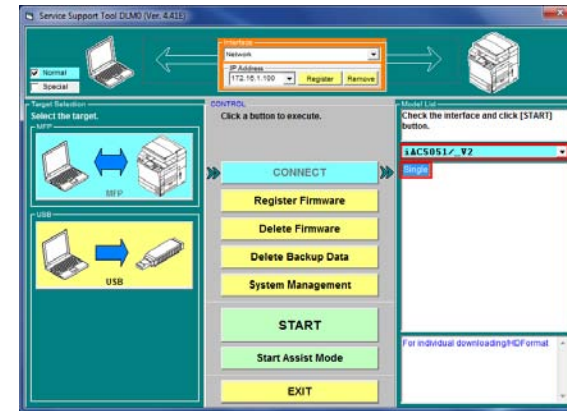
- When the Canon quality-appointed staff determines the need for an analysis of debug log by the R&D department, we ask the field to collect log for an investigation to determine the cause.
- The backup data can be downloaded only on the machine from which the data were uploaded.
- This machine does not use SramRCON and SramDcon



F-6-56

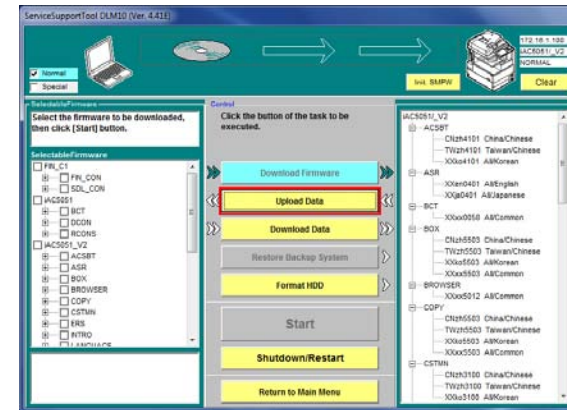
## Listed below are the sample steps to upload MeapBack.

- 1) Enter Download mode.
- 2) Connect the PC to the machine to start SST.
- 3) Select the model to be connected and "Single". Check the network settings and click "Start".



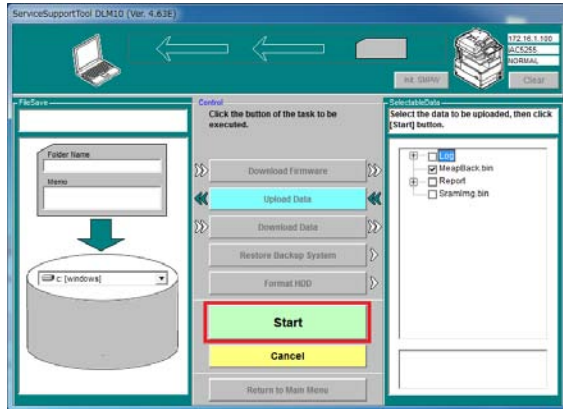
F-6-57

- 4) Click "Upload Data" button.



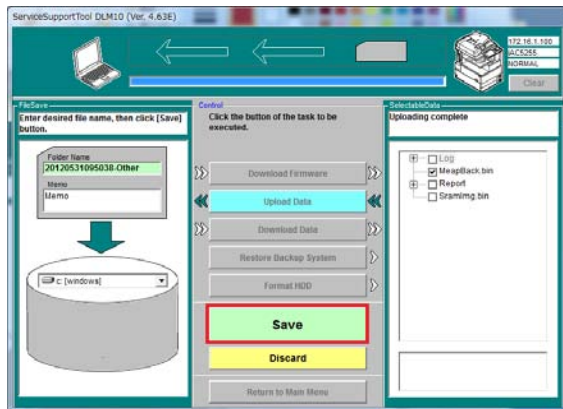
F-6-58

5) Select "MeapBack.bin" to click "Start" button.



F-6-59

6) Enter the file name to be saved and comments when necessary. Click "Save" button.



F-6-60

7) Click "OK" button.

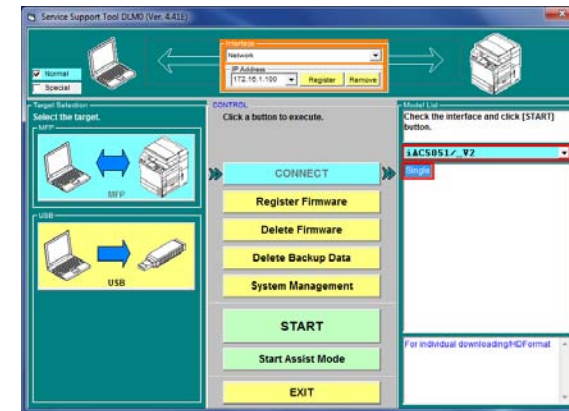
## Steps to Download Data

### CAUTION:

- The backup data can be downloaded to the machine from which the data were uploaded
- Store Meapbackup.bin; and "Settings/Registration > Data Management> Initialize All Data/Setings"; Restore it; even if it, cannot log in to SMS. Restore Meapbackup.bin which backed up after "Initialize All Data/Setings"; store it.

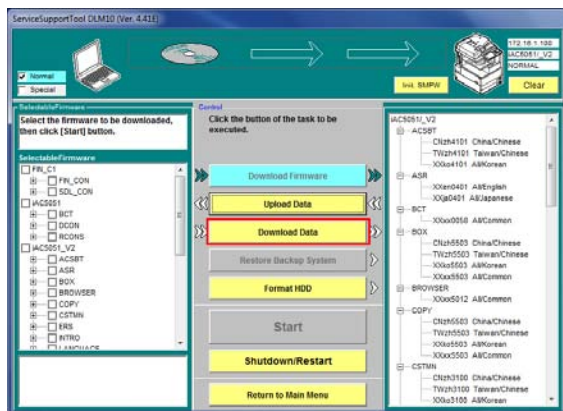
Listed below were the sample steps to download MeapBack.

- 1) Enter Download mode
- 2) Connect the PC to the machine and start SST.
- 3) Select the model to be connected and "Single". Check the network setting and click "Start" button.



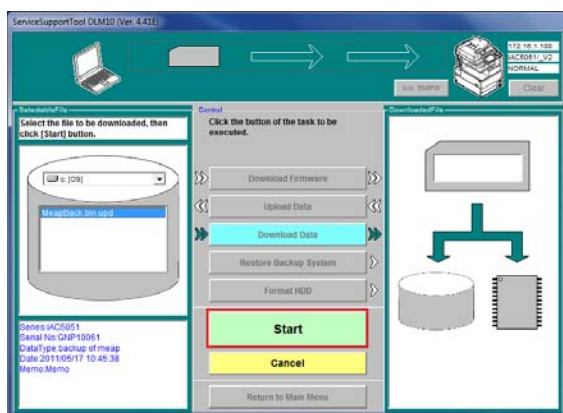
F-6-61

4) Click "Download Data" button.



F-6-62

5) Select the data to be downloaded and click "Start" button.



F-6-63

6) When the data are successfully downloaded, click "OK" button.

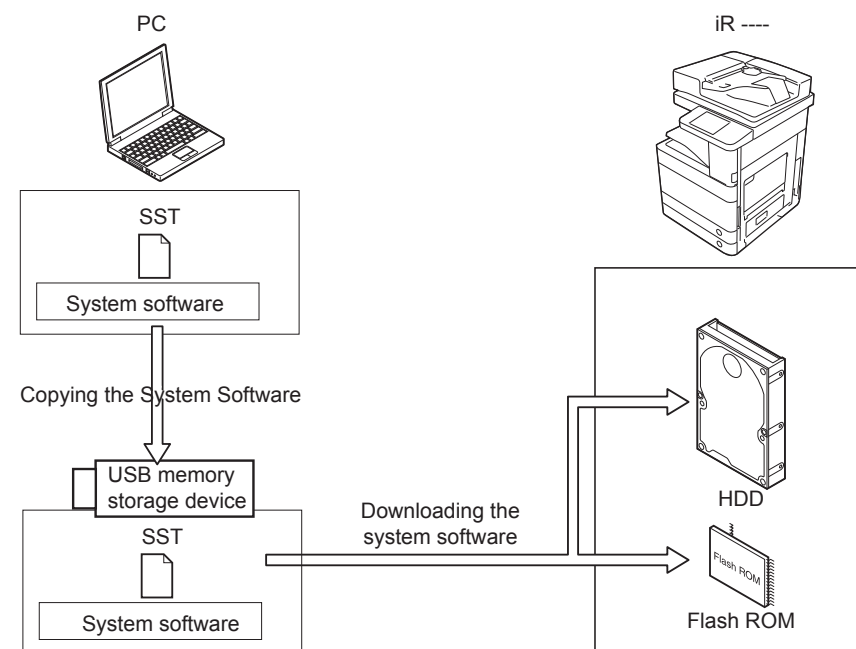
7) Restart the machine

## Version Upgrade using USB memory Storage Device

### Relation between SST and USB memory storage device Storage Device

When using the USB memory storage device storage device for version upgrade, the system software should be copied to the USB memory storage device storage device. By inserting the USB memory storage device storage device to the slot of the machine, the system software can be upgraded.

The figure below shows the relation between SST and USB memory storage device storage device.



F-6-64

When downloading the system software, enter any of Download modes below.

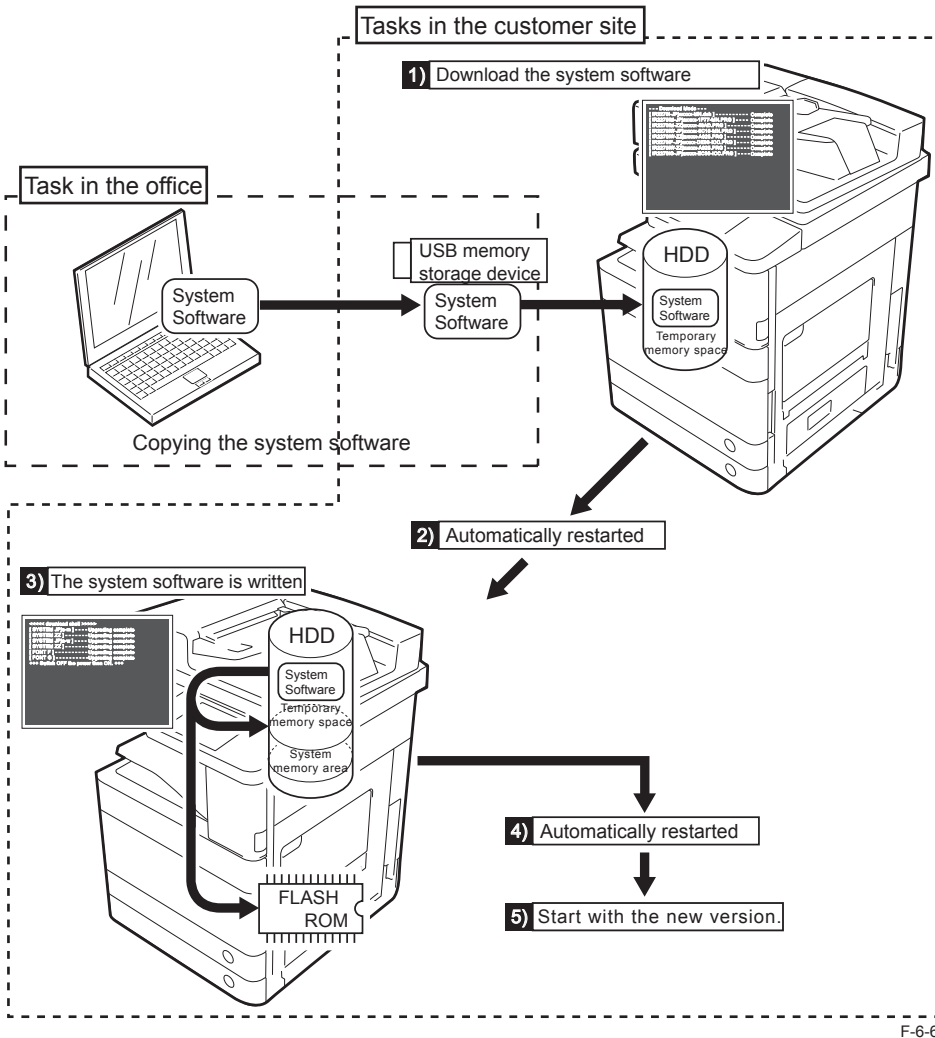
- Normal mode (recommended)  
Select COPIER > FUNCTION > SYSTEM > Download in Service mode and press [OK].
- Safe mode (only when any system error occurs or the machine is unable to start normally; turn ON the main power switch by pressing 2 and 8 keys simultaneously on the numeric keypad)

## ● Downloading System Software

Copy the system software from SST to the USB memory storage device storage device. Right after download from the USB memory storage device storage device, the system software is stored in the temporary memory space in HDD.

The system software is written in the system memory area, Boot area and Flash ROM upon the machine restarted.

When the writing process is successfully completed, the machine is automatically restarted with the new version of the system software.



F-6-65

## ■ Copying System Software

### ● System CD to SST

Copy the system software stored in the system CD to SST.

#### NOTE:

The system software is compressed if the file size exceeds the CD memory capacity. If the above is the case, decompress the file before copying it to SST.

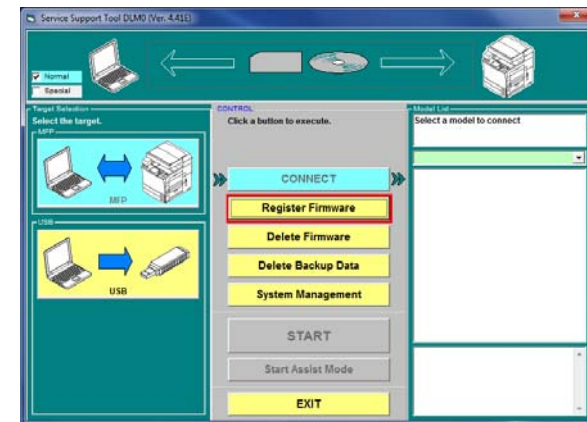
Preparation

Requirements:

- PC with SST Ver. 4.41 or later installed
- The system CD for this machine

Steps to copy the system software

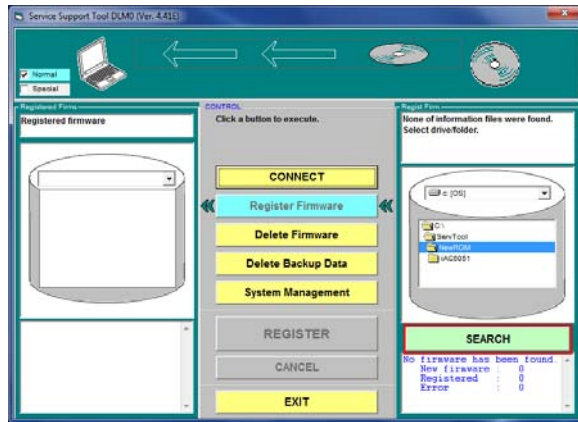
- 1) Start the PC.
- 2) Set the system CD to the PC.
- 3) Start SST.
- 4) Click "Register Firmware" button.



F-6-66



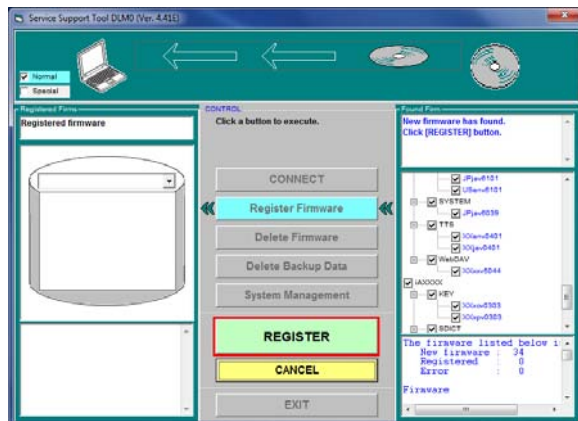
5) Select the drive where the system CD is set and click "Search" button.



F-6-67

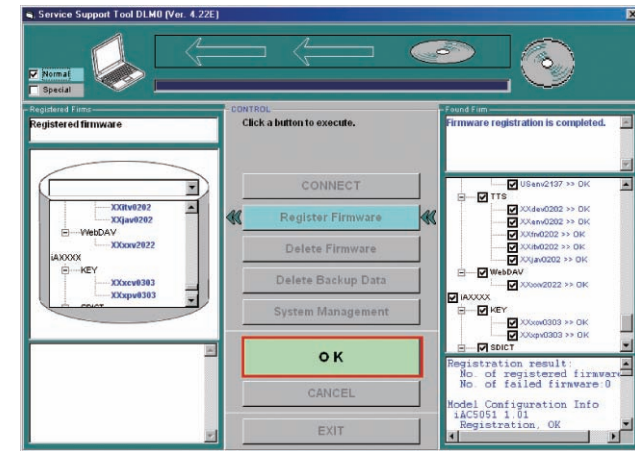
6) The list of the system software components stored in the system CD is shown on the screen.

Uncheck the box(es) of unnecessary folder(s) and/or system software component(s) and click "Copy" button.



F-6-68

7) The message is shown when the system software is copied. Click "OK" button.



F-6-69



## ● SST to USB memory Storage Device

Copy the system software stored in SST to the USB memory storage device storage device.

### Preparation

#### Requirements:

- PC with SST Ver. 4.41 or later installed
- USB memory storage device (\*)

#### Requirements for USB memory storage device:

Interface: USB 1.1 or later (USB 2.0 is recommended)

Memory capacity: 1GB or more is recommended (the total file size of the system software is approx. 500MB).

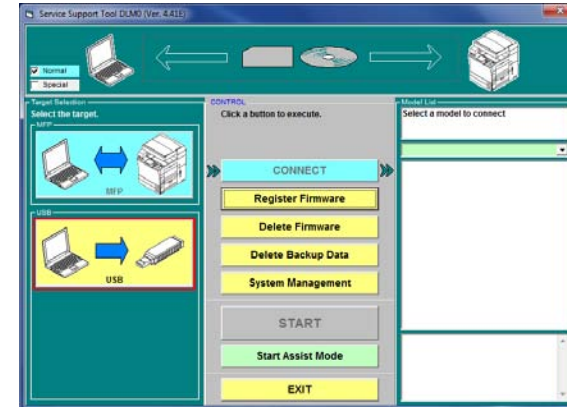
Format: FAT (FAT 16), FAT32 (NTFS and HFS are not supported). The memory is formatted in a partition (multiple partitions are not supported)

Unavailable USB memory: memory that is protected by a password or the encryption technology.

#### Steps to copy the system software

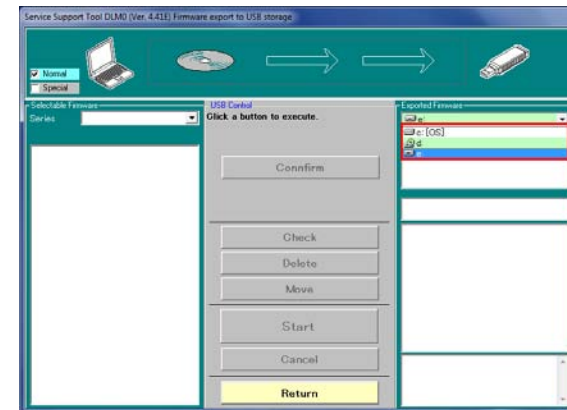
- 1) Start the PC.
- 2) Insert the USB memory storage device storage device to the slot of the PC.
- 3) Start SST.

- 4) Click the USB icon shown in "Select the target" Screen.



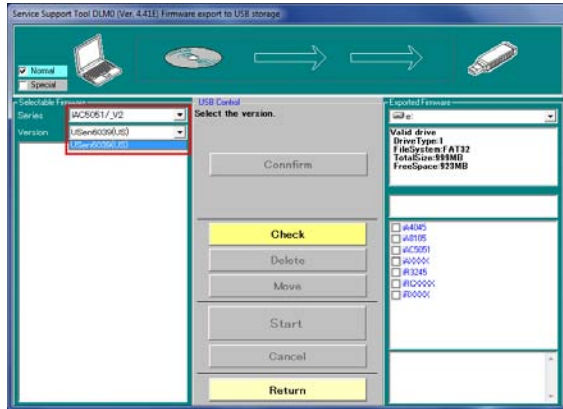
F-6-70

- 5) Select the drive (removable disk) where the USB memory storage device storage device is inserted.



F-6-71

6) Select “Series” and “Version” (the System Version).



F-6-72

**NOTE:**

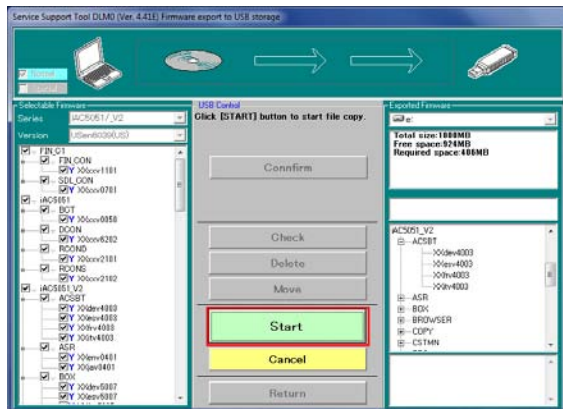
The signs shown in the field of “Firmware registration static” indicate the following:

Y: Stored in SST

N: Not stored in SST

7) Click “Start” button.

Start copying the system software to the USB memory storage device storage device.

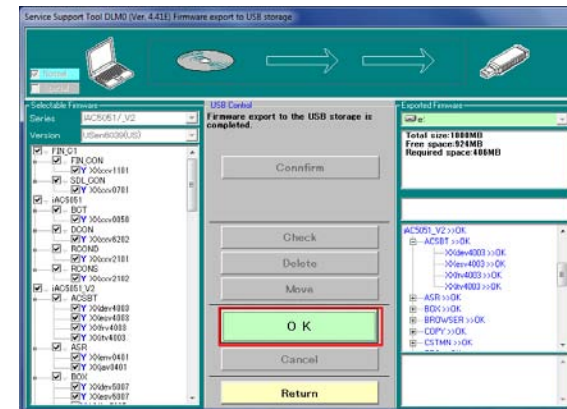


F-6-73

**NOTE:**

When the accessory configuration is known for the machine where the system software is to be downloaded, uncheck the boxes of unnecessary accessories. E753-0001 is triggered if the software for an unnecessary accessory is downloaded. (If this occurred, turn OFF/ON the power to recover the error.)

8) Click “OK” when the system software is successfully copied in the USB memory storage device storage device.



F-6-74

## Connection

### CAUTION:

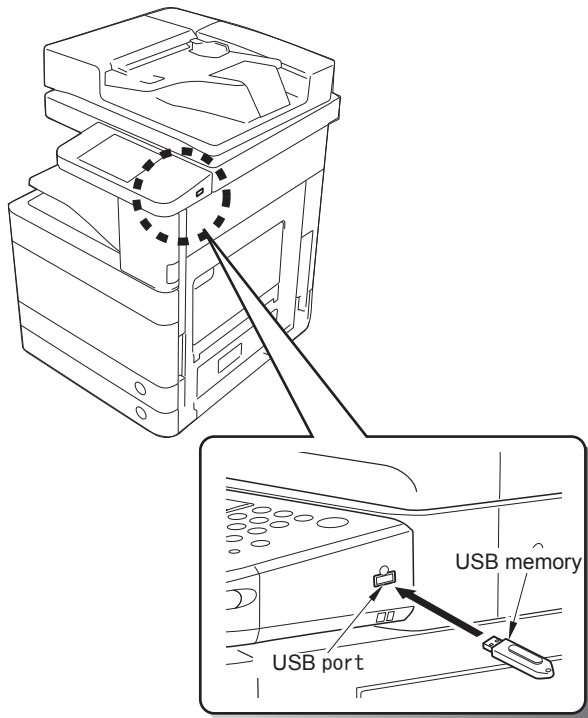
This machine does not communicate with SST once it recognizes a USB memory storage device; therefore, SST and a USB memory storage device cannot be used at the same time.

### Preparation

Item to prepare: a USB memory storage device, which the system software for this machine is stored.

### Procedure

- 1) If a cross cable is connected to this machine, remove the cross cable.
- 2) Connect the USB memory storage device to the USB port.



F-6-75

3) Switch to the download mode to use.

- In the case of normal mode (Recommended)  
Select the following in Service Mode: COPIER > FUNCTION > SYSTEM > DOWNLOAD; and then press [OK].
- In the case of safe mode (This mode should not be used as general rule. To be used only when normal startup fails, such as a system error, etc.)

While pressing 2 + 8 keys at the same time, turn ON the Main Power Switch.

Once this machine recognizes the USB memory storage device, the following menu is displayed on the Control Panel.

```
[[[[[ download Menu (USB) ]]]]]]]]]]]
```

```
[1]: Upgrade (Auto)
[2]: Upgrade (w Confirmation)
[3]: Upgrade (Overwrite all)
[4]: Format HDD
[5]: Backup
[7]: Clear downloaded files
[8]: download Menu 2
[9]: Other Menu
```

```
[Reset]: Shutdown
```

F-6-76

### CAUTION:

Depending on the manufacturer or the model, this machine may not recognize the USB memory storage device.

This machine retries the detection of a USB memory storage device for up to 60 seconds after power-ON. The above menu is not displayed if the recognition of a USB memory storage device is failed within the time period.

In such a case, use another USB memory storage device.

## ■ Upgrading System Software

### ● Menu/Function Overview

Press the key on the Control Panel to select/execute the functions.

```

[[[[[ download Menu (USB) ]]]]]]]]]]
-----
[1]: Upgrade (Auto)
[2]: Upgrade (w Confirmation)
[3]: Upgrade (Overwrite all)
[4]: Format HDD
[5]: Backup
[7]: Clear downloaded files
[8]: download Menu 2
[9]: Other Menu

[Reset]: Shutdown

```

F-6-77

#### Downloading System Software

##### [1]: Upgrade(Auto)

To download/write the system software (automatic)

##### [2]: Upgrade (w Confirmation)

To download the system software (confirmation)

##### [3]: Upgrade (Overwrite all)

To download the system software (overwriting)

##### [4]: Format HDD

To format the HDD/BOOTDEV partition

##### [5]: Backup

Collection of debug Log or Service Print(Because You are for R&D review, do not use it other than the following.)

##### [7]: Clear downloaded files

To clear the system software immediately after downloading (before writing)

##### [8]: Download Menu 2

To move to Download Menu 2

##### [9]: Other Menu

Others (e.g.: version information)

##### [Reset]: Shutdown

To execute shutdown sequence

## ● Points to Note When Operating/Using System Software

### NOTE:

The following download method is recommended to execute normal download of the system software (any download work other than downloading after replacing/formatting the HDD):

Download mode --- Normal mode

Download menu --- [1]: Upgrade (Auto)

### CAUTION: Prohibition to turn OFF the power during downloading/writing

Do not turn OFF the power during downloading or writing of the system software; otherwise, this machine may not be started even if the power is turned ON.

If the machine fails to be started even if the power is turned ON, start the machine in safe mode (pressing 2 + 8 keys).

When the machine can be started in safe mode, be sure to download the system software once again.

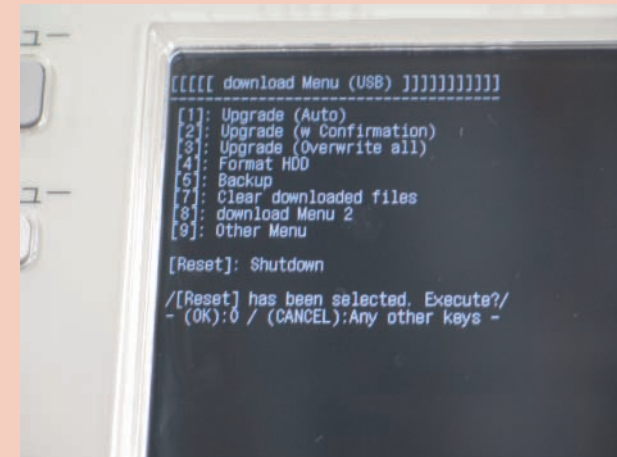
If the machine fails to be started, replace the HDD and then download the system software.

CAUTION: Note when the power is turned OFF

Be sure to execute shutdown sequence to quit download mode.

Pressing the [Reset] key and then the [0] key on the menu screen executes the shutdown sequence.

Once the message on the touch panel disappears, turn OFF the Main Power Switch.



F-6-78

### ■ Downloading/Writing System Software (Automatic)

#### ● [1]: Upgrade (Auto)

The version is compared between the host machine/option and the system software in the USB memory storage device to download only the system software with newer version in the USB memory storage device to the temporary storage area of the HDD.

In safe mode, only the following system software can retrieve the version information (the version is compared).

SYSTEM, LANGUAGE, RUI, MERAPCONT, SDICT

As for system software of the host machine whose version information cannot be obtained, the software for RCON is not downloaded, but other software are downloaded.

For the system software of the option that is not connected, it is handled as follows:

<In the case of startup in normal mode (Recommended)>

- When Download Mode Version (to be displayed on the initial screen when starting the download mode) is before 00.36

All the system software including the one of the non-connecting option is to be downloaded as well (E753 is displayed).

- When Download Mode Version (to be displayed on the initial screen when starting the download mode) is 00.36:

For the Finisher that is not connected, the system software is not to be downloaded. G3CCB/G3CCM is to be downloaded even if Super G3FAX Board – AE1 is not installed (E753 is displayed).

- When Download Mode Version (to be displayed on the initial screen when starting the download mode) is 00.40 or later:

For the option that is not connected, the system software is not to be downloaded.

<In the case of startup in safe mode>

The system software of the options which are not connected are not downloaded.

After downloading is complete, this machine is automatically restarted to write the downloaded system software to the HDD system area/flash ROM.

#### Operation procedure

- 1) Enter download mode.
- 2) Connect the USB memory storage device to the USB port.

- 3) Press the key on the Control Panel.

[1] -> [0]: To execute downloading/Any key other than [0] key: To return to the menu screen.

```

[[[[[ download Menu (USB) ]]]]]]]]]]]
-----
[1]: Upgrade (Auto)
[2]: Upgrade (w Confirmation)
[3]: Upgrade (Overwrite all)
[4]: Format HDD
[5]: Backup
[7]: Clear downloaded files
[8]: download Menu 2
[9]: Other Menu

[Reset]: Shutdown

```

F-6-79

During downloading, download status is displayed on the Control Panel.

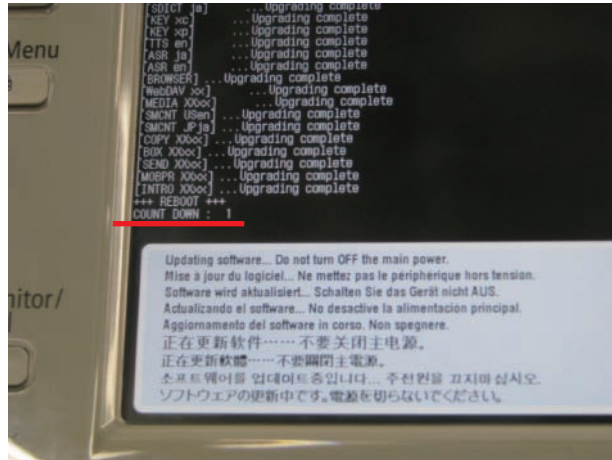


F-6-80

Once downloading is complete, this machine is automatically restarted to start writing to the HDD system area/flash ROM.

The screen shows the countdown once writing process is properly complete.





F-6-81

Once the countdown shows 0, this machine is automatically restarted.

4) When the main menu is displayed, press the removal key at the lower right on the touch panel and select removal of the memory media, and then remove the USB memory storage device.

#### CAUTION:

After HDD formatting and downloading, this machine takes a long time (for writing the software).

This machine, in some cases, stays in standby screen up to 10 min during writing. At this time, do not turn off the main power switch.

## ■ Downloading System Software (Confirmation)

### ● [2]: Upgrade (w Confirmation)

The version is compared between the host machine/option and the system software in the USB memory storage device to download the system software with newer version in the USB memory storage device to the temporary storage area of the HDD.

When the system software version in the USB memory storage device is the same or older, a confirmation message is displayed on the Control Panel so that the user can select whether to overwrite or not.

In safe mode, only the following system software can retrieve the version information (the version is compared).

SYSTEM, LANGUAGE, RUI, MERAPCONT, SDICT

As for system software of the host machine whose version information cannot be obtained, the software for RCON is not downloaded, but other software are downloaded.

For the system software of the option that is not connected, it is handled as follows:

<In the case of startup in normal mode (Recommended)>

- When Download Mode Version (to be displayed on the initial screen when starting the download mode) is before 00.36:
  - All the system software including the one of the non-connecting option is to be downloaded as well (E753 is displayed).
- When Download Mode Version (to be displayed on the initial screen when starting the download mode) is 00.36:
  - For the Finisher that is not connected, the system software is not to be downloaded. G3CCB/G3CCM is to be downloaded even if Super G3FAX Board – AE1 is not installed (E753 is displayed).
- When Download Mode Version (to be displayed on the initial screen when starting the download mode) is 00.40 or later:
  - For the option that is not connected, the system software is not to be downloaded.

<In the case of startup in safe mode>

The system software of the options which are not connected are not downloaded.

Unlike menu [1], this machine is not automatically started despite completion of downloading. By manually turning OFF/ON the power, the system software is written at the time of startup. In this case, starting the machine in safe mode deletes the downloaded system software saved in the temporary storage area; therefore, do not press the numeric keys (2 + 8), but execute normal startup to execute writing.



### Operation procedure

- 1) Enter download mode.
  - 2) Connect the USB memory storage device to the USB port.
  - 3) Press the key on the Control Panel.
- [2] -> [0]: To execute downloading/Any key other than [0] key: To return to the menu screen.

```
[[[[[ download Menu (USB) ]]]]]]]]]]]
```

```
[1]: Upgrade (Auto)
[2]: Upgrade (w Confirmation)
[3]: Upgrade (Overwrite all)
[4]: Format HDD
[5]: Backup
[7]: Clear downloaded files
[8]: download Menu 2
[9]: Other Menu
```

```
/[2] has been selected. Execute?/
- (OK):0 / (CANCEL):Any other keys -
```

F-6-82

During downloading, download status is displayed on the Control Panel.

#### NOTE:

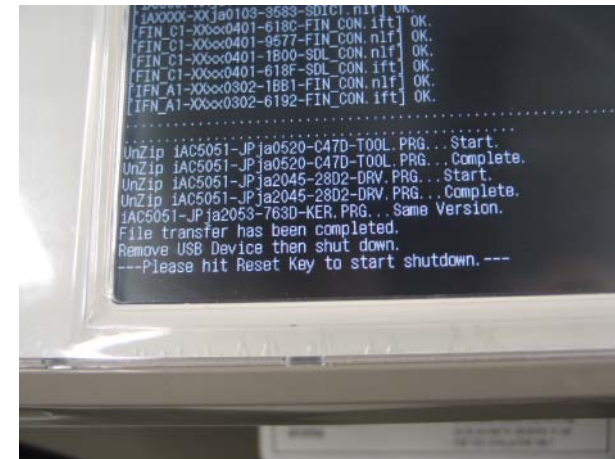
When the system software version in the USB memory storage device is the same or older than the system software in the HDD, a message is displayed in each case to confirm whether to overwrite or not.

Press the key on the Control Panel.

[0]: To overwrite/Any key other than [0]: Not to overwrite

```
////Copying files from USB-dev.////
[Warning] Same version or old version.
-----
[BOOT XXXx]... Same. OVERWRITE?
-- (YES):0 / (NO):The other keys--
```

F-6-83



F-6-84

- 4) Press the "Reset" key.  
Shutdown sequence is executed.
- 5) Once the message on the touch panel disappears, turn OFF the Main Power Switch.
- 6) Remove the USB memory storage device.
- 7) Ensure the LED at the lower right on the Control Panel is turned OFF, and turn ON the Main Power Switch.

Writing to the HDD system area/flash ROM is started after the startup. The screen shows the countdown once the writing process is properly completed.

The screen shows the countdown once the writing process is properly completed. This machine is restarted with the downloaded system software at the count of 0.

Once downloading is complete, a message is displayed to encourage pressing the "Reset" key.

## ■ Downloading System Software (Overwriting)

### ● [3]: Upgrade (Overwrite all)

Regardless of the system software version in the host machine, all the system software in the USB memory storage device is downloaded.

Regardless of the system software version in the host machine, all the system software in the USB memory storage device is downloaded.

Unlike menu [1], this machine is not automatically started despite completion of downloading.

By manually turning OFF/ON the power, the system software is written at the time of startup.

In this case, starting the machine in safe mode deletes the downloaded system software saved in the temporary storage area; therefore, do not press the numeric keys (2 + 8), but execute normal startup to execute writing.

#### Operation procedure

- 1) Enter download mode.
  - 2) Connect the USB memory storage device to the USB port.
  - 3) Press the key on the Control Panel.
- [3] -> [0]: To execute downloading/Any key other than [0] key: To return to the menu screen.

```
[[[[[ download Menu (USB) ]]]]]]]]]]]
```

```
[1]: Upgrade (Auto)
[2]: Upgrade (w Confirmation)
[3]: Upgrade (Overwrite all)
[4]: Format HDD
[5]: Backup
[7]: Clear downloaded files
[8]: download Menu 2
[9]: Other Menu
```

```
/[3] has been selected. Execute?/
- (OK):0 / (CANCEL):Any other keys -
```

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During downloading, download status is displayed on the Control Panel.

#### CAUTION:

In overwriting download mode of the USB memory storage device, all the system software stored in the USB memory storage device is downloaded as well. Therefore, be sure to keep the following in mind: If the USB memory storage device includes the system software of non-connecting option, E753-0001 is displayed when the writing process is completed.

In the case of an error in downloading of the non-connecting option, the machine can be recovered by turning OFF/ON the power.

To prevent such error, uncheck the applicable system software so that the system software of the non-connecting option is not downloaded when downloading the system software from SST to USB.

Once downloading is complete, a message is displayed to encourage pressing the "Reset" key.



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- 4) Press the "Reset" key.  
Shutdown sequence is executed.
- 5) Once the message on the touch panel disappears, turn OFF the Main Power Switch.
- 6) Remove the USB memory storage device.
- 7) After checking that the LED is turned OFF at the lower right on the Control Panel, turn ON the Main Power Switch.  
Writing to the HDD system area/flash ROM is started after the startup. The screen shows the countdown once the writing process is properly complete.  
When the countdown shows 0, this machine is restarted with the downloaded system software.

## ■ Formatting HDD

### ● HDD Format Overview

The following 2 types of formatting methods are available with this machine:

- ALL: To initialize the entire HDD
  - In the case of installing the HDD provided as a service part (a new HDD).
  - In the case of cleaning the entire software and data in the HDD to reinstall the system software.

All the user data and MEAP application in the HDD is deleted when executing Format ALL with the machine in use; therefore, be sure to obtain agreement from the user to execute Format ALL.

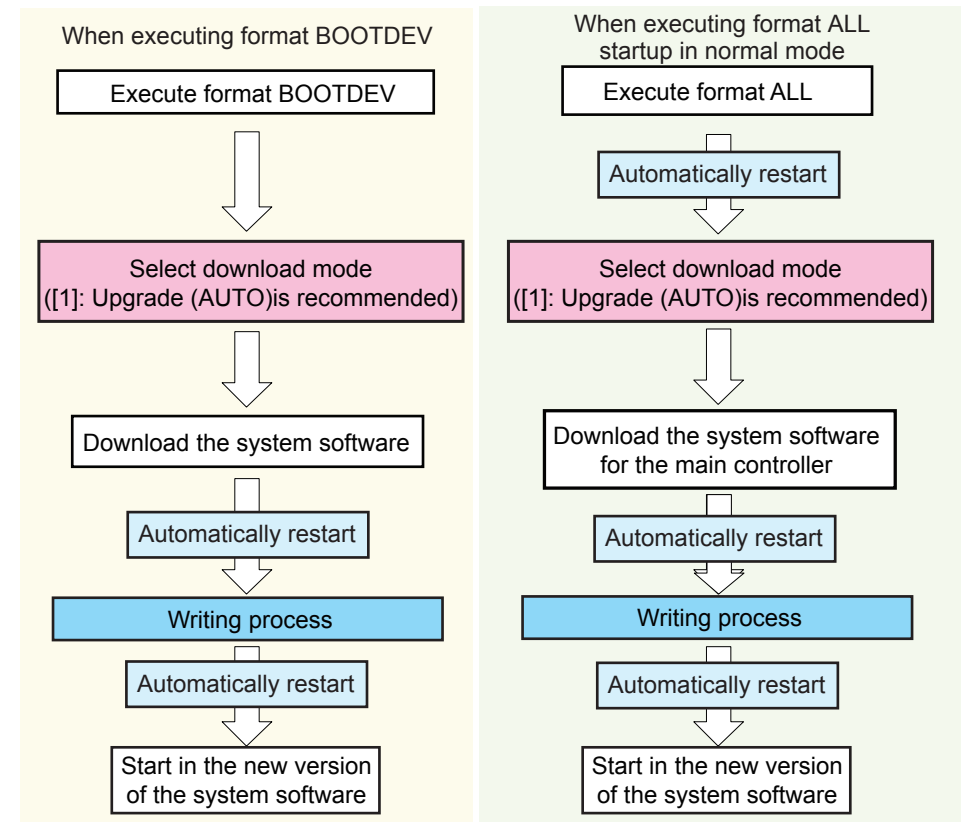
- BOOTDEV: to format the system software storage area on HDD.
  - In the case of normal upgrading by cleaning the storage area of the system software
  - User data will not be deleted.

To reinstall the system software, HDD formatting is not required.

After formatting, this machine cannot be started unless the system software is downloaded.

When Format ALL is executed, initialization process is reflected to the HDD so that this machine is automatically restarted to automatically enter download mode. In the case of formatting BOOTDEV, the machine is not automatically restarted, but the system software can be downloaded.

After formatting is executed, be sure to download the system software by “[1]: Upgrade (AUTO)” in main menu.



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## ● [4]: Format HDD

This mode executes formatting of BOOTDEV partition or the entire HDD.

### Operation procedure

- 1) Enter download mode.
  - 2) Connect the USB memory storage device to the USB port.
  - 3) Press the key on the Control Panel.
- [4] -> [0]: To execute formatting /Any key other than [0] key: To return to the menu screen.

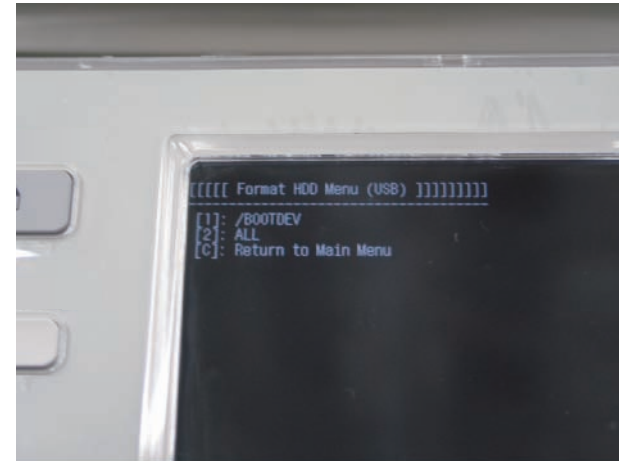
```
[[[[[ download Menu (USB) ]]]]]]]]]]]
```

```
-----
[1]: Upgrade (Auto)
[2]: Upgrade (w Confirmation)
[3]: Upgrade (Overwrite all)
[4]: Format HDD
[5]: Backup
[7]: Clear downloaded files
[8]: download Menu 2
[9]: Other Menu
```

```
/[4] has been selected. Execute?/
- (OK):0 / (CANCEL):Any other keys -
```

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- 4) Press the key on the Control Panel.
  - [1] -> [0]: To execute formatting BOOTDEV/Any key other than [0]: To return to the menu screen.
  - [2] -> [0]: To execute formatting the entire HDD/Any key other than [0]: To return to the menu screen.
  - [C]: To return to the menu screen.



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Once downloading is complete, a message is displayed to encourage pressing the “Reset” key.

- 5) Press any key to return to the menu screen.
- 6) Download the system software.  
Refer to “Separate Download” for details.

## Backup

### [5]: Backup

#### CAUTION:

This function includes R&D review.

Do not usually use it other than the following function.

The USB memory collecting log uses the USB memory where You registered a system software for this Host machine with by SST.

#### Operation procedure

- 1) Enter download mode.
- 2) Connect the USB memory storage device to the USB port.
- 3) Press the key on the Control Panel.  
[5] -> [0]: To execute formating /Any key other than [0] key: To return to the menu screen.
- 4) SRAM backup of Main Controller PCB 2  
[1] Sublog -> Collect debugging log.  
[4] ServicePrint -> Save the service data which P-PRINT or etc. output to paper with a text format.

```
[[[[[ Backup Menu (USB) ]]]]]]]]]]]]
```

```
[1]: Sublog
[4]: ServicePrint
[5]: Netcap
[C]: Return to Main Menu
```

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## Clearing Download File

### [7]: Clear downloaded files

This menu clears the system software stored in the temporary storage area of the HDD.  
This function is used to clear the downloaded file without writing it after downloading the system software in menu [2] or [3].

Operation procedure

- 1) After downloading by menu [2] or [3], press the “Reset” key to execute shutdown sequence, and then turn OFF the main power once the screen display disappears.
- 2) Start the machine in safe mode (while pressing 2 + 8 keys at the same time, turn ON the Main Power Switch).

If the system software is stored in the HDD temporary storage area when starting the machine in safe mode, the system software is deleted. In such a case, the following message is displayed on the touch panel.

“All downloaded file is deleted.”

- 3) Turn OFF the Main Power Switch.
- 4) Remove the USB memory storage device.

## Download Menu 2

### [8]: Download Menu 2

[1]: Service Mode Password Clear

```
[[[[[ download Menu 2nd (USB) ]]]]]]
```

```
[1]: Service Mode Password Clear
[C]: Return to Main Menu
```

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## Other Menu

### [9]: Other Menu

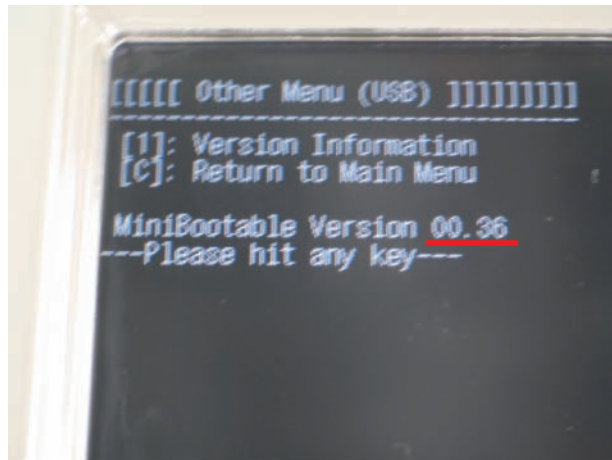
This mode displays other menu.

#### Operation procedure

- 1) Enter download mode.
- 2) Connect the USB memory storage device to the USB port.
- 3) Press the key on the Control Panel.  
[9] -> [0]: To display other menu/Any key other than [0] key: To return to the menu screen.

### [1]: Version Information

This mode displays the version of download mode.



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Press any key to return to the main menu.

## Troubleshooting

### Error Code: E753-0001

#### Cause

In the case of an error during writing process of the system software or in the case of writing the system software of the option that is not installed, an error is determined to display E753-0001.

#### Remedy

The result of writing process is displayed at the upper side of E753-0001 error display. Be sure to check the system software with the error (error or NG) displayed. Check if the target option is properly installed and see if the software to download is for the correct target option, and then execute downloading again.

#### Upgrading by SST

Be sure to use Assist mode as a general rule because the system software of the non-connecting option is not to be downloaded in Assist mode.

In Single mode, it is available to download the system software of the option that is not installed.

In the case of downloading the Finisher's system software, make the download mode of the Host Machine in normal mode and connect to SST, and then download just the system software of the Finisher with the version information displayed at the right side of the SST screen.

In the case that Super G3FAX Board – AE1 is not installed or in the case of download mode in safe mode, G3CCB/G3CCM is not displayed on the list of downloadable system software.

#### NOTE:

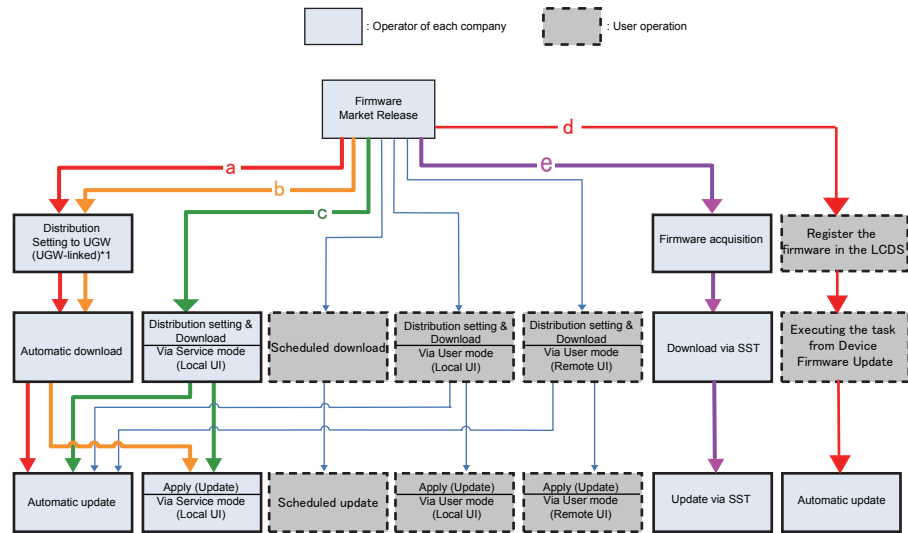
Image Reader has 2 types of system software: RCOND and RCONS. Downloading both RCOND and RCONS results in writing of only the system software that complies with the Image Reader installed in the Host Machine. When downloading the system software that does not comply with the Image Reader installed in the Host Machine, it results in skipping of writing process (it will not be an error).

# Version Upgrade via CDS

## Overview

Among the 4 methods in which service technicians provide firmware install services, the following 3 methods are available using Updater functions.

- a. UGW-linked Download and Update (Full-remote Update)
- b. UGW-linked Download (Remote Distribution Update)
- c. Manual Download and Update (On-site Update from Service Mode)
- d. Local CDS Download and Update (iW EMC + DFU Plug-in)
- e. Update via SST



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\*1: Schedules for UGW-linked distribution are maintained on CDS.

**NOTE:**

- See User Manual of the device for how to connect the device to the external network.
- When needed, perform the communication test before actual download to check if the communication with the distribution server is normal.



## ■ Preparation

### ● Overview of Preparation

The following should be prepared before using Updater.

- For updating of firmware

Service Mode	COPIER > FUNCTION > INSTALL	COPIER > OPTION > FNC-SW				
	CDS-CTL		CDS-UGW	CDS-FIRM	LOCLFIRM	LCDSFLG
Installation Method	Setting Sales Company's HQ	Network Settings	Enabling UGW Link	Enabling [Update Firmware] Button of User Mode	Enabling [Manual Update] Button of User Mode (Remote UI)	Enabling [Local CDS]
UGW-linked Download and Update	Yes	Yes	Yes	-	-	-
UGW-linked Download	Yes	Yes	Yes	-	-	-
Manual Download and Update	Yes	Yes	-	-	-	-
Manual Download and Update via Local UI	Yes	Yes	-	Yes	-	-
Manual Download and Update via Remote UI	Yes	Yes	-	Yes	-	-
Special Download and Update via Remote UI	Yes	-	-	-	Yes	-
Scheduled update via Local CDS	-	-	-	Yes	-	Yes

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- For Install of Application

Installation Method	Network Settings	Enabling [Install Application/Options] Button of User Mode
LMS-linked Installation	Yes	-
LMA-linked installation via Local UI	Yes	Yes
LMS-linked installation via Remote UI	Yes	Yes

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### ● Setting Sales Company's HQ

When using devices input in the markets listed below, the default setting of Sales Company's HQ should be changed before obtaining firmware distributed from CDS. Unless the setting is changed properly, the desired firmware may not be able to be selected.

Market	Default Setting of Sales Company's HQ	Setting of Sales Company's HQ after Change
Canada	US	CA
Latin America	US/SG	LA
Hong Kong	SG	HK

T-6-16

Go to the following screen to change the setting of Sales Company's HQ.

Service Technician	Setting of Device Service Mode (Level 1)	COPIER > FUNCTION > INSTALL > CDS-CTL
--------------------	--	---------------------------------------

#### NOTE:

The list below shows the setting of Sales Company's HQ for CDS-CTS by market. Check and adhere to the appropriate setting for your market.

<List of Sales Company's HQ and the settings for CDS-CTL>

Japan = JP	China = CN
USA = US	Hong Kong = HK
Singapore = SG	Australia = AU
Europe = NL	Canada = CA
Korea = KR	Latin America = LA

## ● Network Settings

### 1.Connecting to External Network

The method of connecting to external network is similar to a normal network connection method. Refer to user manual of the device for details.

#### NOTE:

- See User Manual for how to connect the device to the external network.
- Before using UGW link or User mode, see the sections below to prepare as required.  
"Enabling UGW Link"  
"Enabling [Update Firmware] Button of User Mode"  
"Enabling [Install Application/Options] Button of User Mode"

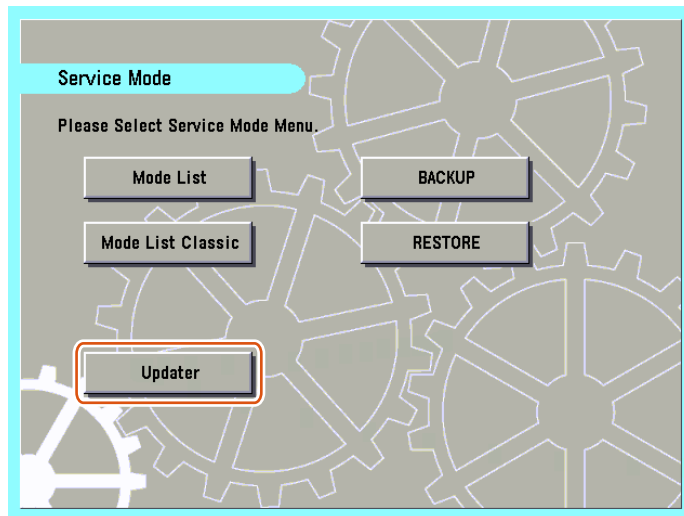
#### NOTE:

"External Network" here means the network connecting the device to CDS via Internet.

### 2.Confirming URL Setting of Distribution Server

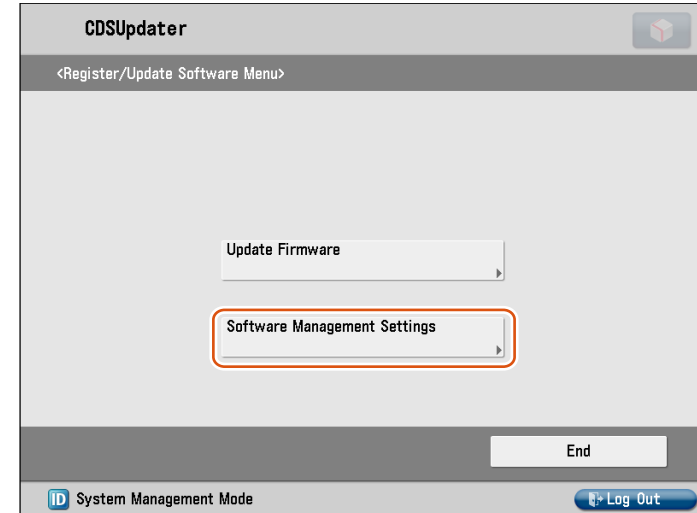
This section describes how to confirm the URL setting of the distribution server.

1. Start [Service Mode] at Level 1.
2. Press [Updater] button.



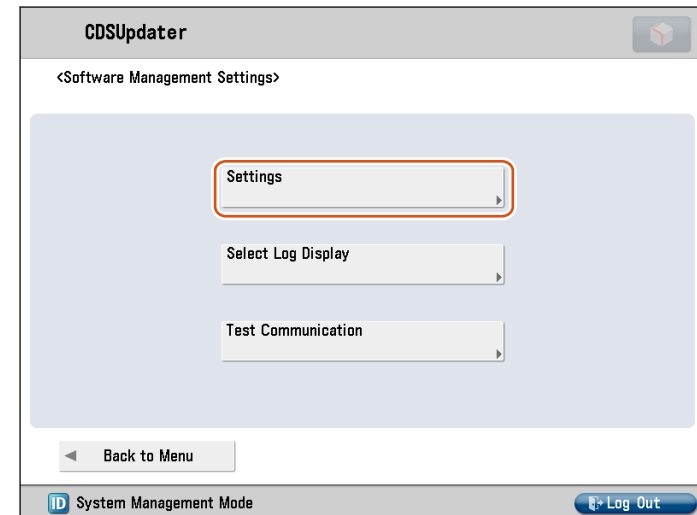
F-6-94

3. Press [Software Management Settings] button.



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4. Press [Settings] button.

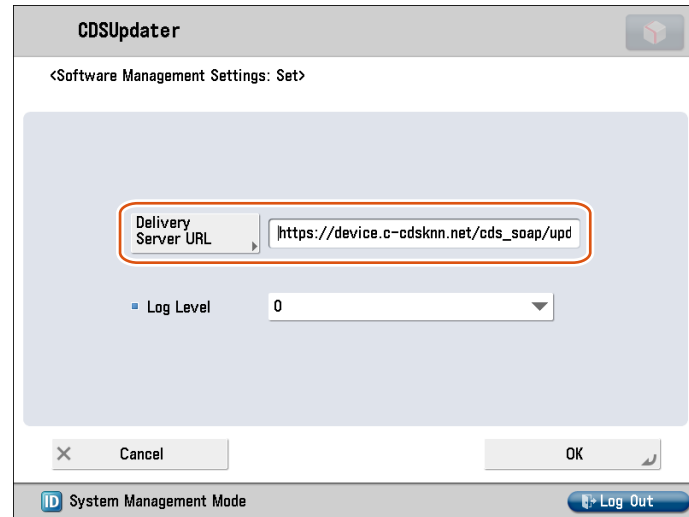


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5. Ensure to enter "https://device.c-cdsknn.net/cds\_soap/updaterif" in the field beside the [Delivery Server URL] button.

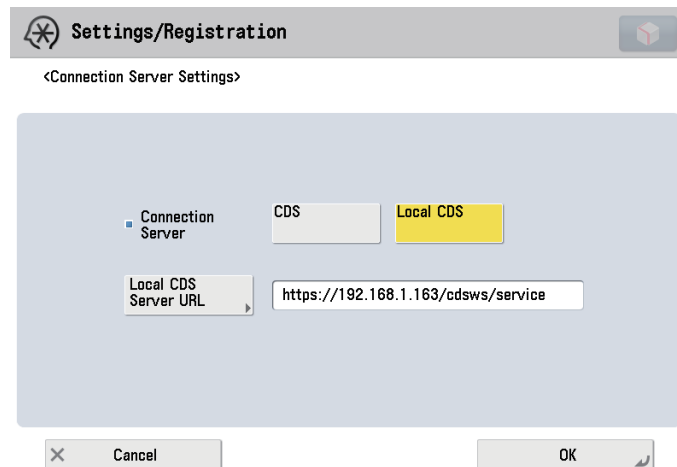
If the URL is not entered or a wrong URL is entered in the field, click [Delivery Server URL] button to show the virtual keypad. Check the URL and enter the correct one.

#### Delivery Server CDS



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#### Delivery Server Local CDS



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#### Note:

For the URL of the L-CDS server, enter the address beginning with "https://" specified in L-CDS. If the port number has not been specified, 443 is internally added as the port number.

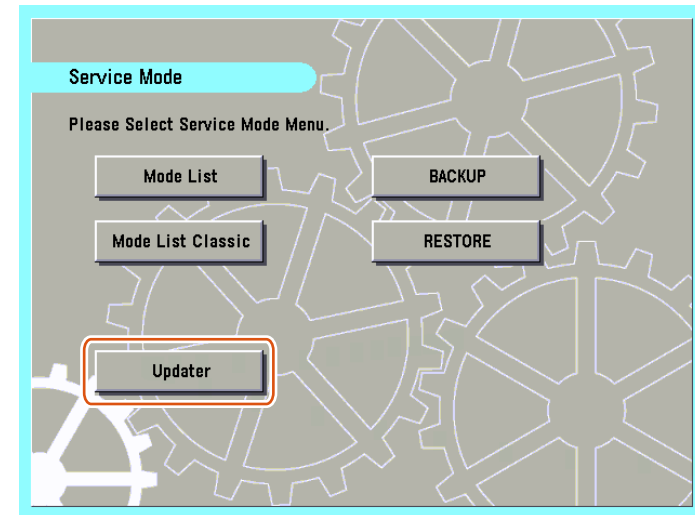
To display the button of the local CDS, execute Settings/Registration > Management Settings > License/Other > Register/Update Software. It is not displayed in service mode.

6. Press [OK] to set the entered items. Now the URL of the distribution server is successfully set.

#### 3.Communication Test

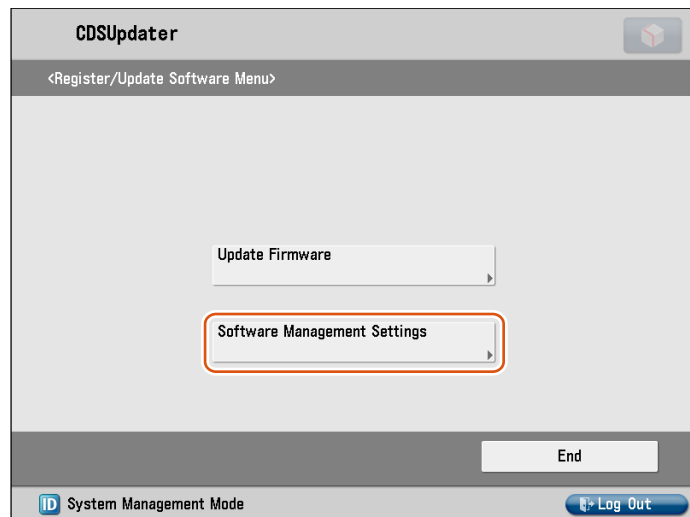
This section describes how to check if the communication is normally done to the distribution server and/or the file server.

1. Start [Service Mode] at Level 1.
2. Press [Updater] button.



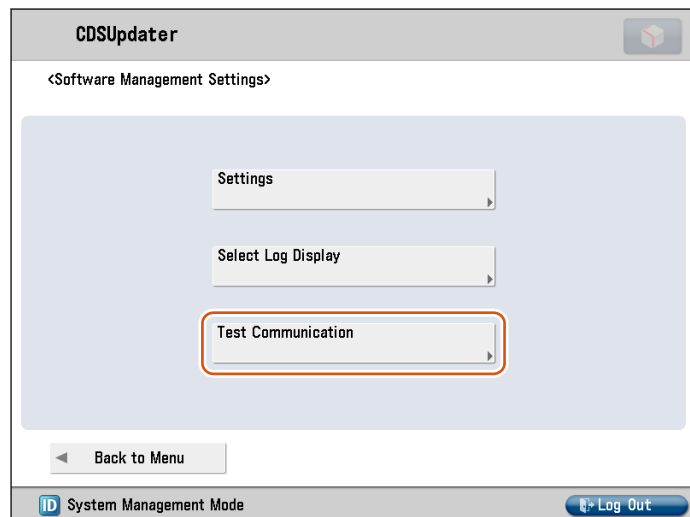
F-6-99

3. Press [Software Management Settings] button.



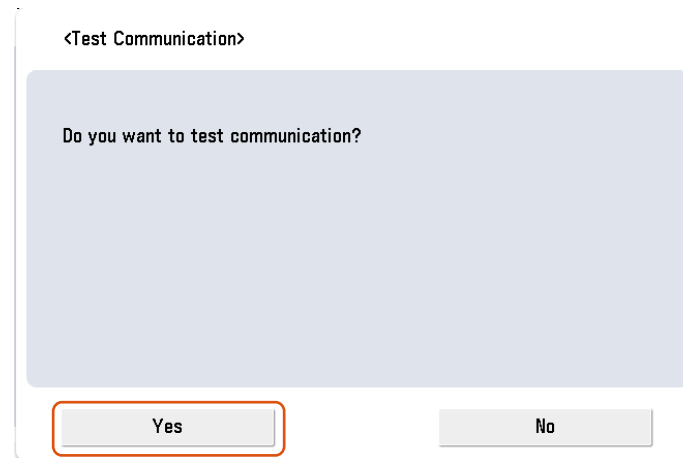
F-6-100

4. Press [Test Communication] button.



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5. Press [Yes] button.

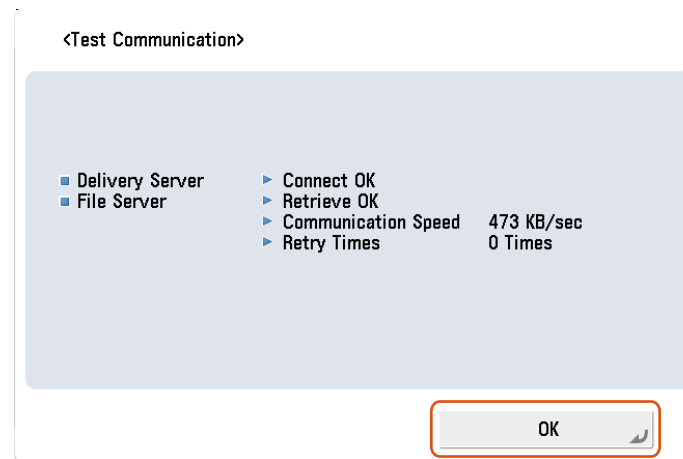


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Obtain the download file information for communication test from the distribution server (to execute the communication test to the distribution server).

Using the download file information for communication test, the contents for test are downloaded from the file server (for the communication test to the file server).

6. Upon the communication test completed, the communication test result screen is shown. Press [OK] button to exit this operation.



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## ● Enabling UGW Link

When installing the firmware in the method of “UGW-linked Download and Update” or “UGW-linked Download”, the following should be set before actually using UGW link.

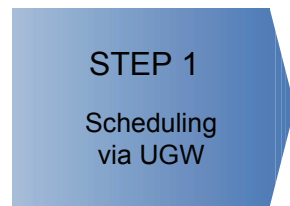
Service Technician	Setting of Device Service Mode (Level 1)	COPIER > OPTION > FNC-SW > CDS-UGW (0 -> 1)
	Setting of UGW WebPortal	In [Customer Management] screen, set [Do not distribute firmware] to [Distribute firmware].
Sales Company's HQ	Setting of Authorities on UGW WebPortal	See "Analysis>Firmware Distribution Information" to grant the appropriate authorities to each account.

### NOTE:

- See “imageWARE Remote Operator’s Manual / e-Maintenance Business Operation Manual” for how to operate UGW WebPortal.
- [Distribute Firmware] should be set on [Customer Management] screen for staff in charge of setting for [Enter customer information] or [Command for firmware distribution] in order to allow them to select the desired device on [Firmware Distribution Information] screen.
- When using the Device Firmware Update Plug-in and Local CDS, it is necessary to disable "UGW linkage".

### a. UGW-linked Download and Update (Full-remote Update)

See the figure below for the operational flow of “UGW-linked Download and Update”.



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#### STEP1: Scheduling via UGW

The firmware distribution schedule to the certain device should be set on UGW. See “UGW-linked Download and Update” in chapter 5 of Operation Manual of Content Delivery System V1.0 for Firmware Distribution for details.

The device checks the schedule concerned every 12 hours on UGW. This allows the device to register the firmware distribution setting, enabling automatic firmware download and update.

#### CAUTION:

[Devices without Wait for EOJ (end of job) Function]

- Firmware update will delete print jobs in the queue. Ensure to notify users of this before you start updating. It is recommended to perform firmware update during non-business hours.

[Devices with Wait for EOJ Function]

- Firmware update will not be triggered when any of the following jobs remains in the queue.
  - Print
  - Scan
  - Fax (except I-FAX; this function is enabled for I-FAX only during Print/Scan operation)

See Chapter 1 “Limitations and Cautions” of this manual for more detailed information.

#### NOTE:

To contacts registered for E-mail notification on UGW, the E-mail is sent from UGW upon completing firmware update.

### b. UGW-linked Download (Remote Distribution Update)

See the figure below for the operational flow of “UGW-linked download”.



F-6-105

#### STEP 1: Scheduling via UGW

The firmware distribution schedule to the certain device should be set on UGW. See “UGW-linked Download” in Operation Manual of Content Delivery System (for Firmware Distribution) for details.

#### NOTE:

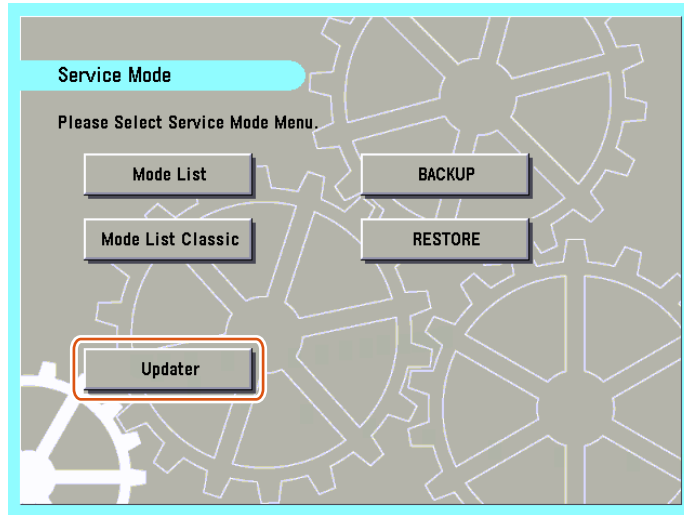
The firmware downloaded by scheduling via UGW can be checked/deleted from User mode, but cannot be updated. If a user download the other firmware, the firmware downloaded with "UGW-linked Download" is overwritten.

#### STEP 2: Update using Updater

The firmware downloaded on the device can be updated using Updater functions.

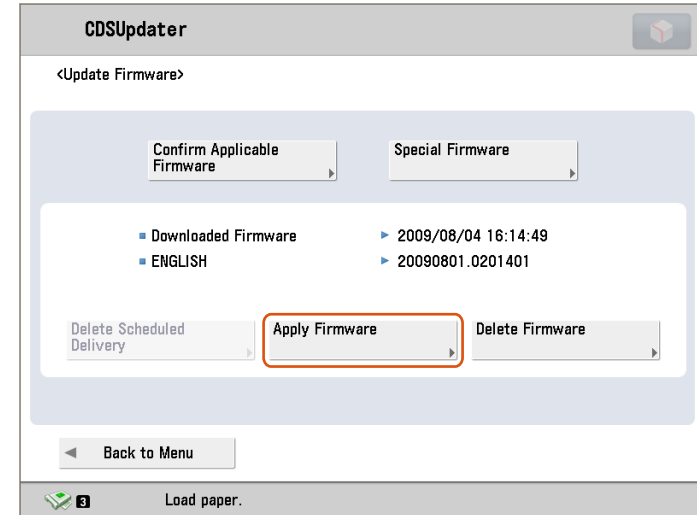
1. Start [Service Mode] at Level 1.

2. Press [Updater] button.



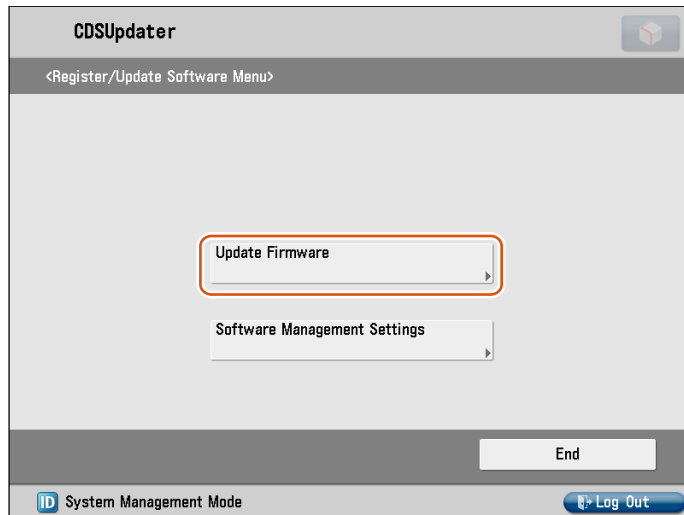
F-6-106

4. Press [Apply Firmware] button.



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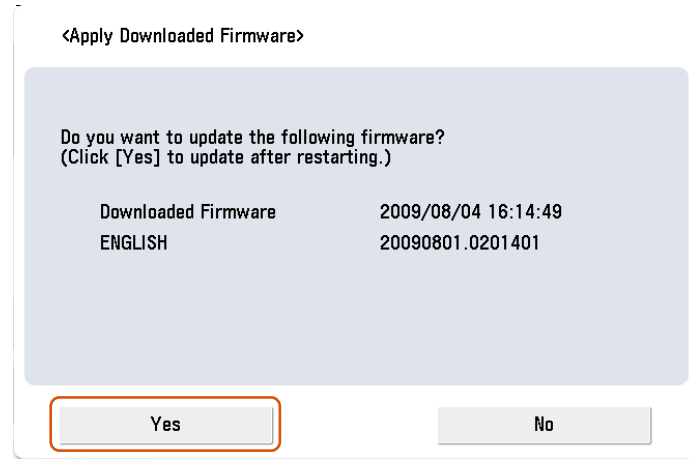
3. Press [Update Firmware] button.



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5. Confirm the downloaded firmware and press [Yes] button.



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6. The firmware is applied to the device. The device is automatically restarted when the firmware is successfully applied.

7. When the device is restarted, confirm the version of the firmware.

- 1). Press [Check Counter Key] button on the control panel.
- 2). Press [Check Device Configuration] button.
- 3). Confirm if the updated firmware version corresponds to [Controller Version].

Now the firmware is successfully updated in the method of "Manual Download and Update".

**CAUTION:**

[Devices without Wait for EOJ (end of job) Function]

- Firmware update will delete print jobs in the queue. Ensure to notify users of this before you start updating. It is recommended to perform firmware update during non-business hours.

[Devices with Wait for EOJ Function]

- Firmware update will not be triggered when any of the following jobs remains in the queue.

- Print
- Scan
- Fax (except I-FAX; this function is enabled for I-FAX only during Print/Scan operation)

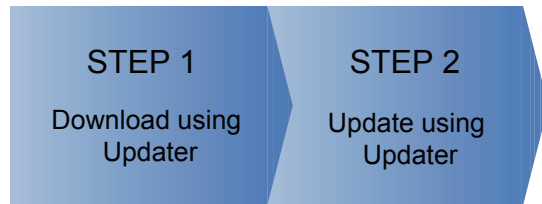
See Chapter 1 "Limitations and Cautions" of this manual for more detailed information.

**NOTE:**

To contacts registered for E-mail notification on UGW, the E-mail is sent from UGW upon completing firmware update.

## c. Manual Download and Update (On-site Update from Service Mode)

The figure below shows the operational flow of “Manual Download and Update”.



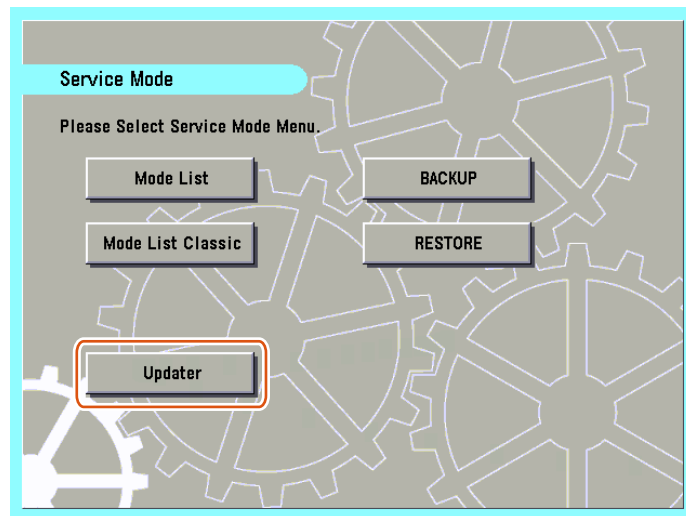
F-6-110

### STEP 1: Download using Updater

The firmware can be downloaded from CDS to the device using Updater.

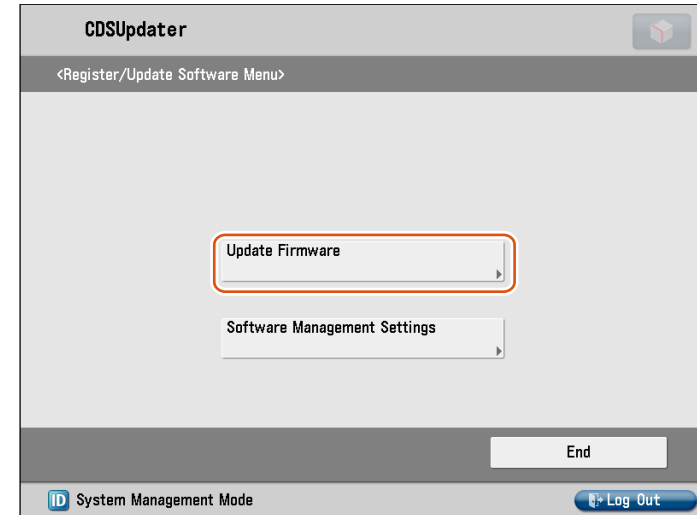
1. Start [Service Mode] at Level 1.

2. Press [Updater] button.



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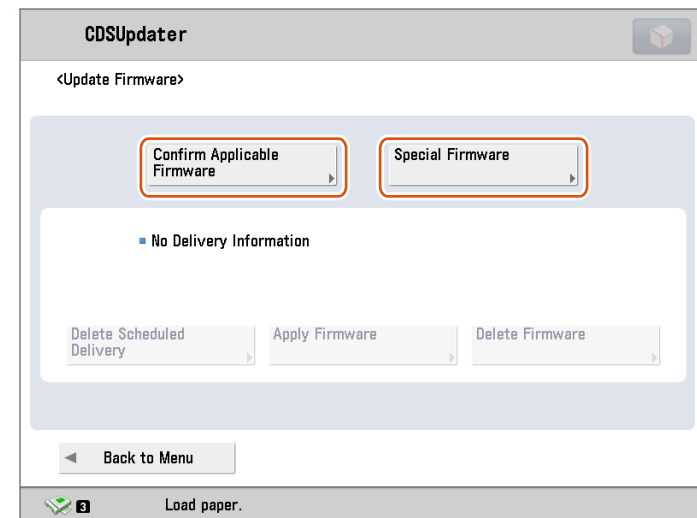
3. Press [Update Firmware] button.



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4. Confirm the firmware to be updated in either of the following 2 ways.

- To update to the official edition, press [Confirm Applicable Firmware] button and go to Step 6.
- To update to the individual response edition, press [Special Firmware] and go to Step 5.



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5. [Special Firmware] screen is shown as below. Enter the fields and press [OK] button.

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- [Retrieval ID]:  
Enter numeric up to 8 characters.
- [Password]:  
Enter numeric up to 8 characters.

6. [New Firmware] screen is shown as below. Check the contents and press [Next] button.

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- [Version]:  
The current firmware version is shown.
- [Applicable Firmware]:  
Select the firmware applicable to the device from the dropdown list.
- [Additional Languages]:  
If there are any additional languages, they are displayed.  
More than 1 language can be selected, and it is possible to add another language when upgrading the firmware.  
Up to 8 languages can be added, including Japanese and English. The languages already registered in the device are always selected, and SST is used to delete an unnecessary language from the device.
- [Release Note]:  
If any release note is published, the contents are shown here.

**NOTE:**

To update to the individual response edition, the firmware corresponding to the ID and password that you input is displayed in [Applicable Firmware].

7. [Delivery Settings] screen is shown as below. Enter the fields and press [OK] button.

The screenshot shows the 'CDSUpdater' application in 'System Management Mode'. The 'Delivery Settings' screen contains the following elements:

- Delivery Time:** A section with 'Now' and 'Set Time' buttons, and a numeric keypad for entering a date and time in 'yyyy/mm/dd hh:mm:ss' format. A note states 'You can use numeric keys.'
- Timing to Apply:** A section with 'Auto' and 'Manual' buttons.
- Deliver Acquisitions:** A section with 'On' and 'Off' buttons.
- E-Mail:** A text input field for entering an email address.
- Comments:** A text input field for entering a comment.
- Disclaimer:** A note at the bottom of the form: 'If you consent that your email address is transferred to Canon Inc. in Japan to receive notices, please register.'
- Navigation:** 'Cancel', 'Back', and 'OK' buttons at the bottom. The 'OK' button is highlighted with a red box.
- Footer:** 'ID System Management Mode' and a 'Log Out' button.

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- [Delivery Time]:
  - Press either [Now] or [Set Time] button.
    - [Now]:
      - The firmware is downloaded immediately after distribution schedule is set.
    - [Set Time]:
      - Be sure to specify the date (within 30 days) and time. The firmware is downloaded on the specified date and time.
      - Enter the date and time using the numeric keypad in the format of "yyyy/mm/dd hh:mm:ss"
- [Timing to Apply]:
  - Press either [Auto] or [Manual] button.
    - [Auto]:
      - The firmware is applied automatically upon firmware downloaded.
    - [Manual]:
      - The firmware is automatically downloaded. Go to [Apply Firmware] to set up for updating the downloaded firmware.
- [Updated Module Only]:
  - Press either [On] or [Off] button.
    - [On]:
      - Only difference between the current and new firmware is downloaded.
    - [Off]:
      - The firmware to be applied is wholly downloaded.

[E-mail]:

- E-mails concerning update statuses are sent from the device to the contact registered here.
- Enter the E-mail address of the service technician in charge.
- Enter 1-byte alphanumeric or symbols up to 64 characters.
- [Comments]:
  - Enter the comment in 1-byte alphanumeric or symbols up to 128 characters.
  - Enter the comment to be automatically included in E-mail. Model Name in the comment will be helpful to identify the device relevant to the E-mail.

NOTE:

[Timing to Apply]

- For firmware versions with no remote update permission, [Auto] cannot be selected in [Timing to Apply]

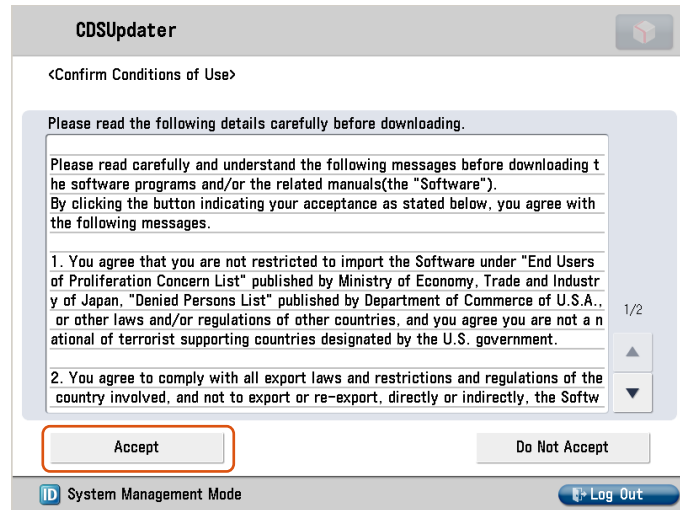
[Updated Module Only]

- For firmware versions with difference-only delivery disabled, only [OFF] can be selected in [Updated Module Only].

[E-mail]

- To send E-mails to multiple destinations, each E-mail address should be delimited with comma (,) or semi-colon (;).
- For E-mail addresses entered in this field, a notification E-mail is sent at the following timing.
  - Distribution Set
  - Distribution Started
  - Distribution Finished
  - Update Started
  - Update Finished
  - Error Occurred

8. Confirm Export Criteria screen is shown as below. Check the contents and press [Accept] button.



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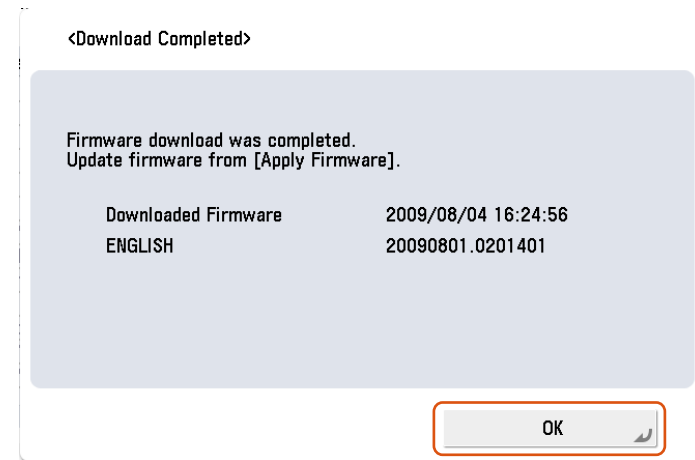
9. One of the screens below is shown according to the setting.

- When Distribution Time and Timing to Apply of Distribution Setting are set to [Now] and [Auto], respectively:  
Firmware is downloaded and updated automatically to the device. The device is automatically restarted upon update completed. Now STEP 1 is successfully completed.



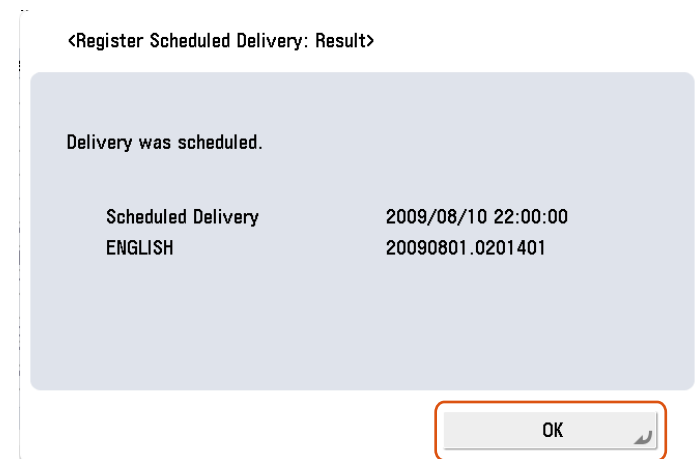
F-6-118

- 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-6-119

- 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-6-120

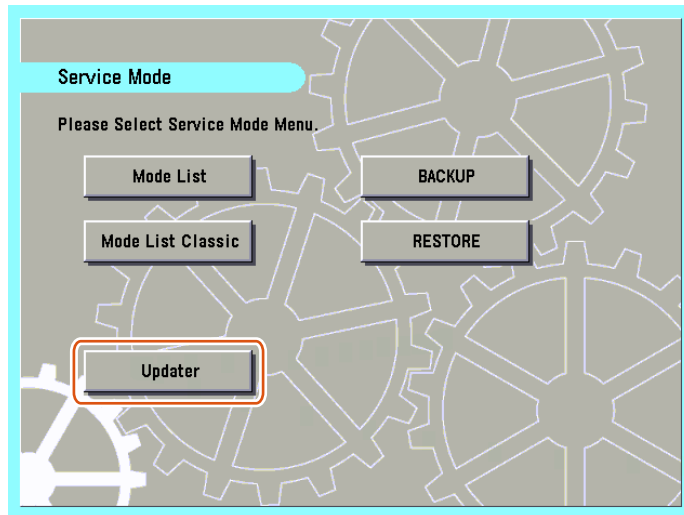
**STEP 2: Update using Updater**

The firmware downloaded to the device can be updated using Updater functions.

When Timing to Apply is set to [Auto] in Distribution Setting in STEP 1, the firmware is updated automatically. Only when Timing to Apply is set to [Manual], follow the steps below to update the firmware.

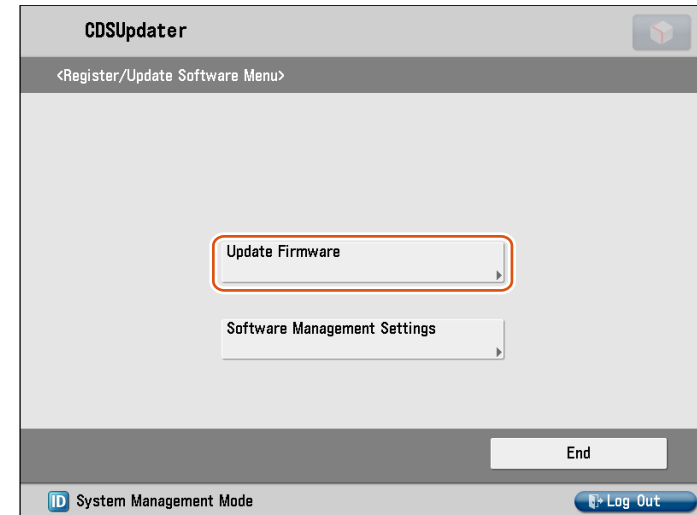
1. Start [Service Mode] at Level 1.

2. Press [Updater] button.



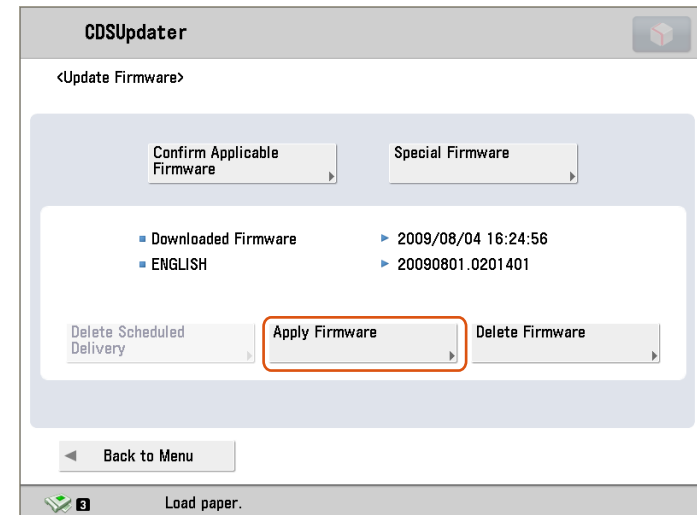
F-6-121

3. Press [Update Firmware] button.



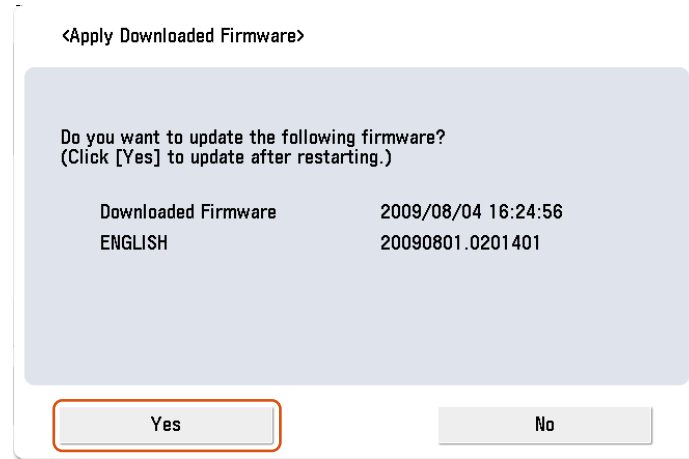
F-6-122

4. Press [Apply Firmware] button.



F-6-123

5. Confirm the downloaded firmware and press [Yes] button.



F-6-124

6. The firmware is applied to the device. The device is automatically restarted when the firmware is successfully applied.

7. When the device is restarted, confirm the version of the firmware.

- 1). Press [Check Counter Key] button on the control panel.
- 2). Press [Check Device Configuration] button.
- 3). Confirm if the updated firmware version corresponds to [Controller Version].

Now the firmware is successfully updated in the method of "Manual Download and Update".

**CAUTION:**

[Devices without Wait for EOJ (end of job) Function]

- Firmware update will delete print jobs in the queue. Ensure to notify users of this before you start updating. It is recommended to perform firmware update during non-business hours.

[Devices with Wait for EOJ Function]

- Firmware update will not be triggered when any of the following jobs remains in the queue.

- Print
- Scan
- Fax (except I-FAX; this function is enabled for I-FAX only during Print/Scan operation)

See Chapter 1 "Limitations and Cautions" of this manual for more detailed information.



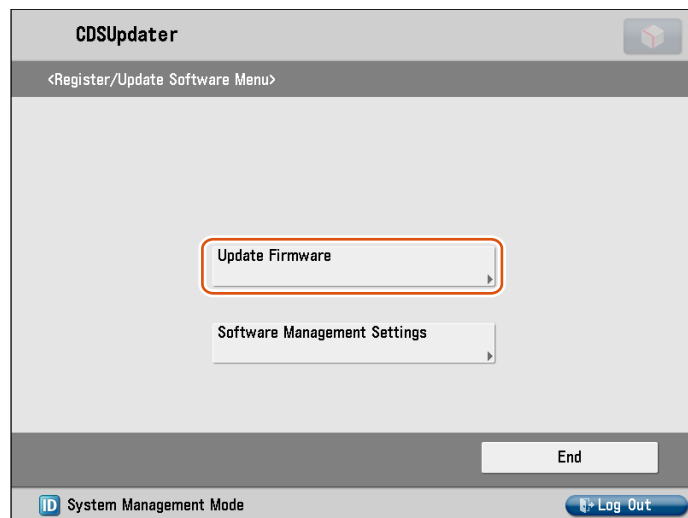
## Deleting Firmware Distribution Schedule

This section describes how to delete firmware distribution schedule set by Updater.

1. Start [Service Mode] at Level 1.

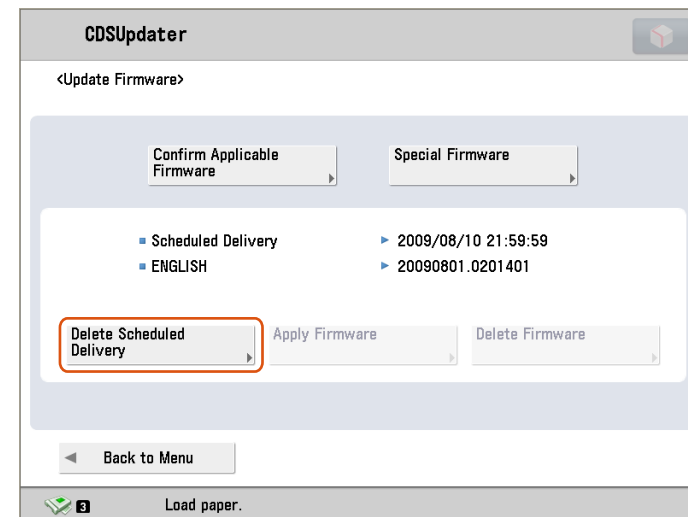
2. Press [Updater] button.

3. Press [Update Firmware] button.



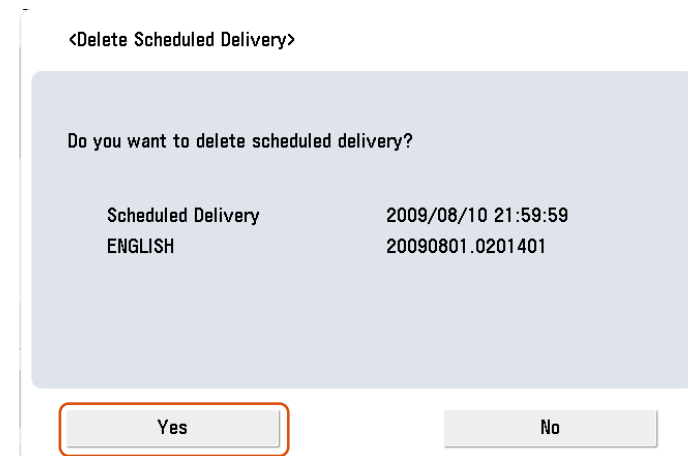
F-6-125

4. Press [Delete Scheduled Delivery] button.



F-6-126

5. Confirm the contents of the distribution schedule and press [Yes] button.



F-6-127

6. Confirm the result of deletion shown on the screen and press [OK] button. Now the firmware distribution schedule is successfully deleted.

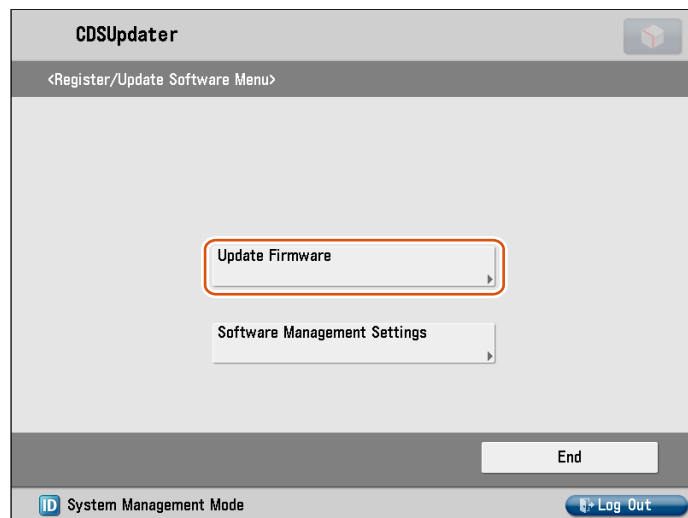
## Updating Downloaded Firmware (Applying Firmware)

This section describes how to update the downloaded firmware.

1. Start [Service Mode] at Level 1.

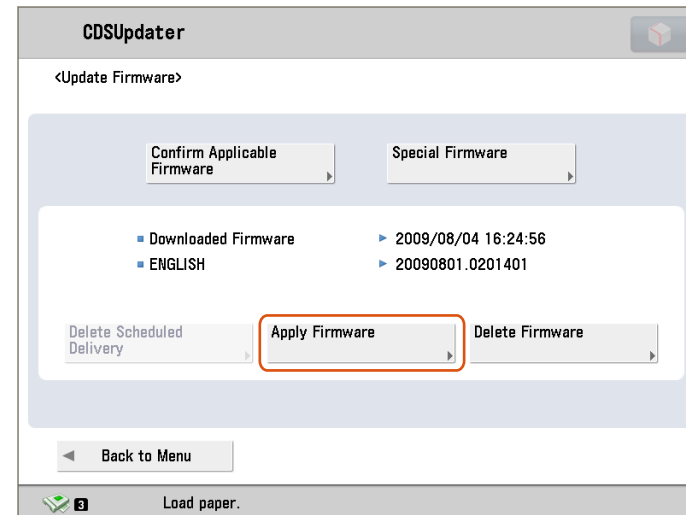
2. Press [Updater] button.

3. Press [Update Firmware] button.



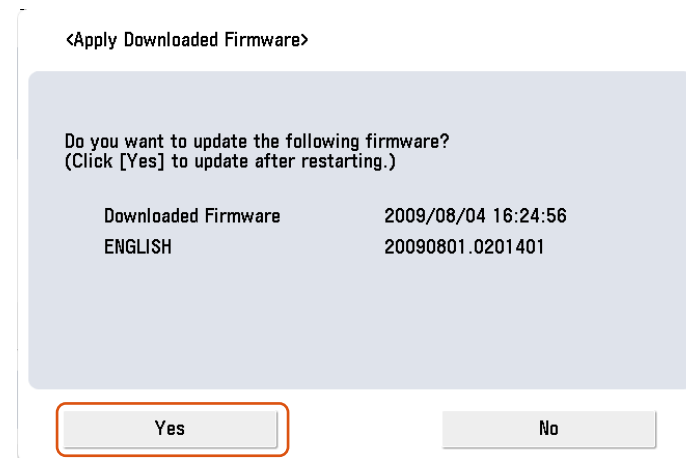
F-6-128

4. Press [Apply Firmware] button.



F-6-129

5. Confirm the downloaded firmware and press [Yes] button.



F-6-130

6. The firmware is applied to the device. The device is automatically restarted when the firmware is successfully applied.

7. When the device is restarted, confirm the version of the firmware.

- 1). Press [Check Counter Key] button on the control panel.
- 2). Press [Check Device Configuration] button.

3). Confirm if the updated firmware version corresponds to [Controller Version].

Now the firmware is successfully updated in the method.

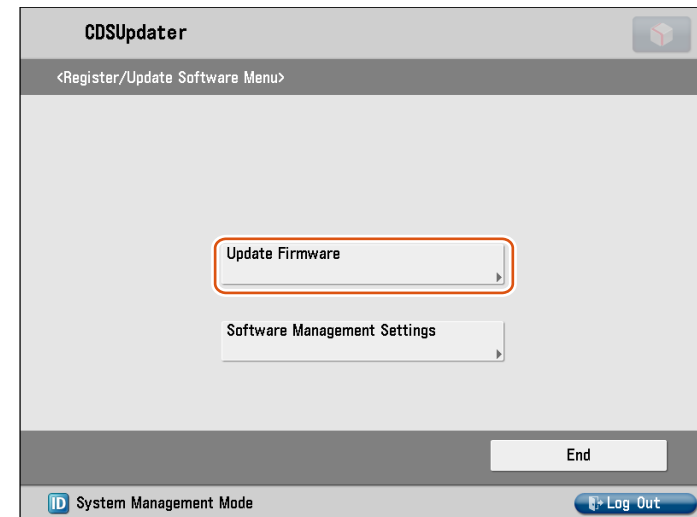
## ■ Deleting Downloaded Firmware

This section describes how to delete the downloaded firmware using Updater.

1. Start [Service Mode] at Level 1.

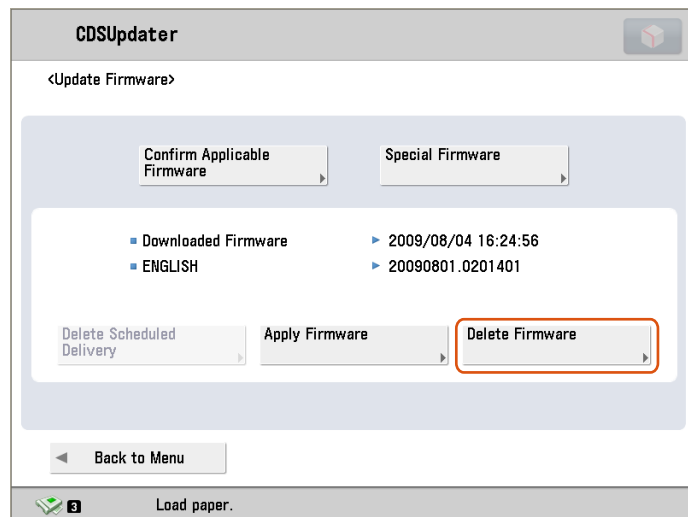
2. Press [Updater] button.

3. Press [Update Firmware] button.



F-6-131

4. Press [Delete Firmware] button.



F-6-132

5. Confirm the downloaded firmware to be deleted and press [Yes] button.



F-6-133

6. Confirm the result of deletion and press [OK] button. Now the downloaded firmware is successfully deleted.

## Troubleshooting on Firmware Installation

### No.1

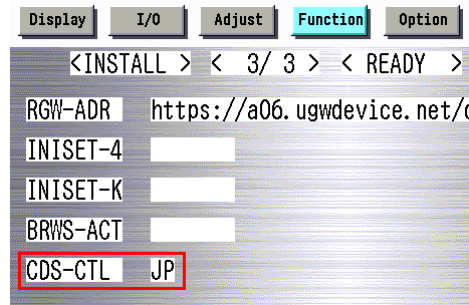
**Symptom:** I can't find the firmware to be updated using Updater.

**Cause:** Preparation has not been properly done.

**Action:** Confirm the setting of Sales Company's HQ below.

Setting of Device [SERVICE MODE] (Level1)

COPIER > FUNCTION > INSTALL > CDS-CTL



F-6-134

**Cause:** The version currently in use is not available for update.

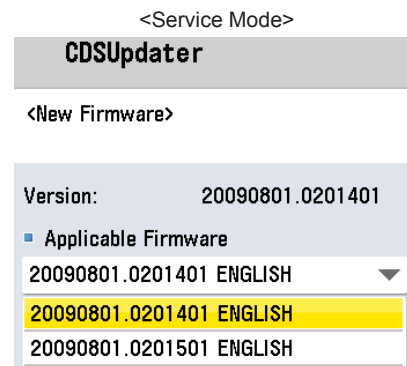
**Action:** Download the release note from CDS separately to upgrade to the version available for update.

**Cause:** You try to download firmware from User mode. You can download only the latest version of firmware from User mode.

**Action:** Download from Service mode.



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### No.2

**Symptom:** Firmware download is aborted during operation using Updater functions.

**Cause:** The network cable is disconnected or the power went off due to blackout and the like.

**Action:** Retry download. Firmware under download is cancelled upon aborted.

### No.3

**Symptom:** Firmware update is aborted during operation using Updater functions and the device cannot be started.

**Cause:** The power went off due to blackout and the like.

**Action:** Service technicians should follow the steps below via SST.

1. Press [2] and [8] buttons at a time to start the device.

1) Turn on the power and hold down [2] and [8] buttons at a time on the control panel.

2) [Download Mode] is shown on Local UI.

If the operation above does not trigger the download mode, BOOT (Flash Memory, service parts) should be replaced (takes up to 1 minute for rewriting).

If the operation above successfully triggers the download mode, go to the next steps below.

2. Via SST, format the HDD of BOOT Dev only.

3. Via SST, install the firmware in the device.

### No.4

**Symptom:** Firmware has not been downloaded according to the distribution schedule.

**Cause:** Other firmware distribution schedule is set. Since only 1 distribution schedule is held, the registered schedule may be overridden by the new firmware distribution schedule.

**Action:** Once the schedule is overridden, the firmware cannot be downloaded. Distribution should be rescheduled for the firmware.

**Cause:** At the scheduled distribution date and time, the firmware registered was not found on CDS.

**Action:** Distribution should be rescheduled for the firmware.

**Cause:** After distribution is scheduled, device is updated to other version of firmware via SST. (Status of the firmware in the device is changed.)

**Action:** Distribution should be rescheduled for the firmware.

**Cause:** The power of the device was off at scheduled date and time.

**Action:** Distribution should be rescheduled for the firmware.

Cause: The network between the updater and the CDS server has stopped.

Remedy: Conduct a communication test and check the state of network.

There are some cases where the network is stopped only at night, during which update is performed. If the communication test ended in success, check the state of network during the period when update is scheduled.

#### No.5

**Symptom:** The firmware presumed to be downloaded to the device cannot be found.

Cause: Since only 1 firmware can be held on the device, the firmware previously downloaded was overridden by the newly downloaded one.

Action: Retry the firmware download.

## Information required for Reports

### Information required for Service Technicians to Obtain on Site

- Update Logs
- System Logs (Log Level: 4)

### Information to Report

- Symptom occurred
- Location of the device
- Date and Time that symptom occurred
- Steps taken for reproduction
- Firmware / Application you tried to install
- Occurrence frequency
- Model dependency (if the same symptom occurred in other models)
- Dependency on firmware/MEAP application/system option
- Conditions of symptom occurrence
  - Model
  - Firmware version installed on the device
  - List of MEAP applications installed on the device
  - Network setting information of the device
  - Service mode setting information

Setting of device service mode (Level 1)	COPIER > FUNCTION > INSTALL > CDS-CTL
	COPIER > OPTION > FNC-SW > CDS-UGW
	COPIER > OPTION > FNC-SW > CDS-FIRM
	COPIER > OPTION > FNC-SW > CDS-MEAP
	COPIER > OPTION > FNC-SW > LOCLFIRM
	COPIER > OPTION > FNC-SW > CDS-LVUP

\* As many as the items listed above should be obtained on site. More information provided will be helpful for investigation.

## Debug Logs

### Obtaining Log Files

Updater log files can be obtained by copy & paste from remote UI.

This procedure is shown below.

1. Check that the “CDS-MEAP” or “CDS-FIRM” is enabled in the service mode. If they are not enabled, change the value to “1” and then restart the device.

Service mode (Level1) > Mode List

- COPIER > OPTION > FNC-SW > CDS-MEAP: 1
- COPIER > OPTION > FNC-SW > CDS-FIRM: 1

2. Log in the remote UI (URL: http://<device’s IP address or host name>) using the system administrator right.

3. From “Display Logs/Communication Test” screen, obtain System Logs (log level 4) and Update Logs by copy & paste.

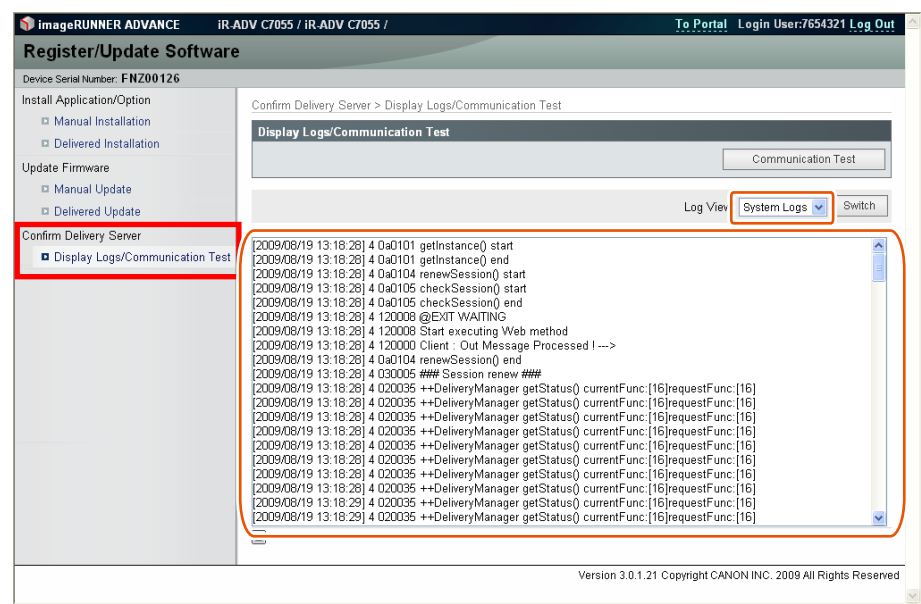
Top page (Remote UI) > [Settings/Registration] > [Management Settings] > [License/ Others] > [Register/Update Software] > “Display Logs/Communication Test”

**NOTE:**

- See "Setting Log Level" in chapter 2 for details of changing Log Level

4. If the value of CDS-MEAP or CDS-FIRM was changed in the service mode, return to the original value and then restart the device to enable this setting.

Obtaining the log files is completed.



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## Error Messages

Error messages displayed in LUI on a device are shown below. As to error codes, see the next list.

No.	Messages	Timing of display	Cause	Remedy
1	An error occurred with the delivery server. Contact your sales representative. Error Code: [xxx]	In communicating with the delivery server.	System error occurred in server.	Obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
2	Delivery server is stopped. Wait a while and then try to perform the operation again. Check the following URL for details. <Stopped Delivery Server URL>	In communicating with the delivery server.	Delivery server stopped.	Check the delivery server stop information. After the delivery server starts, perform the operation from this application. When the delivery server stop information is not available, contact the sales company's Support Department.
3	Failed to connect to delivery server. Check the delivery server and network.	In communicating with the delivery server.	Communication error due to incorrect settings of CDS URL. 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 "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
4	Download was stopped because an error occurred with the file server. Check the network.	At the time of file download	Communication error to the delivery server occurred.	Check if the network environment is correct to solve the cause of the error occurrence. If the network environment of the device is correct, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
5	Downloaded files are invalid. Check the network.	At the time of file download	The received file is broken.	After checking the network environment of the device, re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
6	Failed to retrieve information of special firmware. Check the retrieval ID and password.	Acquisition of applicable firmware information	No information exists about firmware for special firmware retrieval ID or Password is invalid.	Enter the correct firmware ID or Password applicable to the firmware information. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
7	Scheduled delivery information of firmware does not exist. Check it because it may already have been deleted.	Acquisition of applicable firmware information	Delivery information with specified delivery ID does not exist.	Register the delivery schedule again. If this occurs at the time of canceling file download, deleting downloaded firmware or deleting scheduled delivery, no remedy is required.
8	Failed to apply firmware.	Firmware application error	Error due to the application (NLM)	Obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.

No.	Messages	Timing of display	Cause	Remedy
9	Delivery Server : Connect Failed File Server : Retrieve Failed Error Code: [xxxx]	Communication test, etc. (communication test result dialogue)	In the communication test, failed to connect to the delivery server.	Check the network environment of the device, and re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			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 "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			ID and Password required for proxy to connect to the internet are not configured in device.	Set the user environment to make the access to the following domain available. <a href="https://device.cdsknn.net/">https://device.cdsknn.net/</a> <a href="http://cdsknn.net.edgesuite.net/">http://cdsknn.net.edgesuite.net/</a> If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			The access to the network is limited.	Contact Field Support Group in the sale company. After confirmation that the delivery server has been restored, restart the communication test. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company again.
10	Delivery Server : Connect OK File Server : Retrieve Failed Error Code: [XXXX]	Delivery Server : Connect OK File Server : Retrieve Failed Error Code: [XXXX]	Due to no return of data for the communication test, time-out (in HTTP communication, no response for 1min) occurred. After that, retried but failed to connect to server.	Check the network environment of the device and re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			The network cable was disconnected during data download in the communication test.	Reconnect the network cable and then restart the communication test. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			The file server stopped during data download in the communication test.	Contact the sales company's Support Department. After confirmation that the delivery server has been restored, restart the communication test. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company again.
			Hash value in the communication test file is incorrect.	Check the network environment and re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.

No.	Messages	Timing of display	Cause	Remedy
11	An error occurred. Error Code: [xxx]	communication test, etc. (main screen)	The max value (space/file) was exceeded and new log was not accepted. Normally an old log file is deleted before the max value (space/file) is exceeded, but error may occur due to other element (e.g. I/O error).	Check if the log file exceeded the max value. <Update log> Max space: 128KB/file Max file number: 4  <System log> Max space: 512KB/file Max file number: 4  If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			Notice of version information (main screen)	Failed to acquire version information of device due to no CDS registration of firmware version of device.
		At the time of notifying version information, failed to connect to the delivery server.	Check if the network environment is correct to solve the cause of the error occurrence. If the network environment of the device is correct, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.	
		No return of notifying version information	Upgrade via CDS" under "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-connect the network cable and re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.	
		Failed to send notice of version information since the main power was turned OFF and then ON during the sending.	Re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.	
		Server stopped at the time of sending notice of version information.	Check the network environment of the device and re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.	
		An internal error occurred at the time of sending notice of version information.	Obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.	

No.	Messages	Timing of display	Cause	Remedy
11	An error occurred. Error Code: [xxx]	UGW linkage (main screen)	UGW linkage was turned ON when eRDS was OFF.	For a device using eRDS, turn ON the eRDS. For a device not using eRDS, turn OFF the UGW linkage. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			An internal error occurred at the time of acquiring delivery information.	Re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
		On-site (error dialogue)	An internal error occurred at the time of acquiring applicable firmware information.	Re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			An internal error occurred at the time of sending approval information.	Re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			An internal error occurred at the time of delivery order	Re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
		Immediate download (error dialogue)	An internal error occurred at the time of requesting firmware delivery information.	Re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			During the download, all space in the storage disk was occupied. (DiskFull)	After adding vacant space of the storage disk, re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			At the end of receipt, an internal error occurred.	Re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
		Manual update (error dialogue)	At the update start, an internal error occurred.	Re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
		Automatic update (error dialogue)	At the update start, an internal error occurred.	Re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
		Deletion of downloaded firmware	At the time of notifying cancellation, an internal error occurred.	Re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.

No.	Messages	Timing of display	Cause	Remedy
12	An error occurred. Check the Update Firmware screen.	UGW linkage (main screen)	eRDS sent an order but Updater failed to connect to server.	Conduct a communication test to analyze the cause of the error. After solving the cause, resend the order from the eRDS. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			Delivery server stopped.	Contact the sales company's Support Department. After confirming restoration of the delivery server, re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			Scheduled date and time acquired from the delivery server was before current time (15 or more min had passed.)	Do the delivery setting from UGW again. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			Scheduled data and time acquired from the delivery server did not exist.	Do the delivery setting from UGW again. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
		Immediate download (main screen)	At the time of immediate download, turned OFF and then ON the power of device main body.	Re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
		Manual update (main screen) Automatic update (main screen)	Updated version was different from the ordered version.	Re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			After the update, failed to connect to the delivery server.	Check the network environment and re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			After the update, delivery server stopped.	Contact the sales company's Support Department. After confirming restoration of the delivery server, re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			After the update, the network cable was disconnected.	Re-connect the network cable and re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			After the update, server returned an error.	Obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
	After the update, an internal error occurred.	If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.		

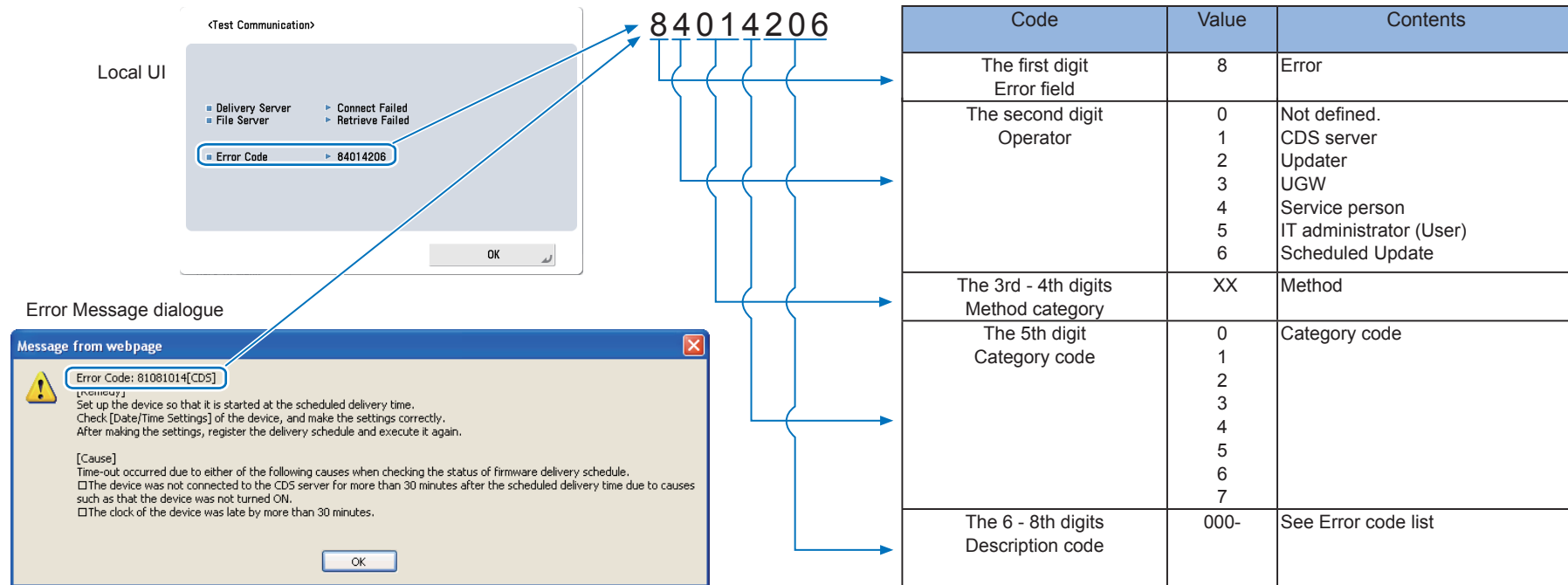
No.	Messages	Timing of display	Cause	Remedy
13	Delivery Error Error Code: [xxx]	UGW linkage (Update Firmware screen)	eRDS sent an order but Updater failed to connect to the server.	Conduct a communication test to analyze the cause of the error. After solving the cause, resend the order from the eRDS. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			The delivery server stopped.	Contact the sales company's Support Department. After confirming restoration of the delivery server, re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			The scheduled data and time acquired from delivery server does not exist.	Do the delivery setting from UGW again. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
14	Delivery Error Delivery Time Delivery Firmware Label Delivery Firmware version Error Code: [ xxx ]	UGW linkage (Update Firmware screen)  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 "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			At the time of immediate download, turned OFF and then ON the power of device main body.	Re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
15	Applicable firmware is not registered.	On-site (error dialogue)	At the user site, no latest firmware exists.	This means the current firmware is the latest, so this error has no impact. But when the latest firmware to be retrieved must exist e.g. released new firmware information has been notified, contact Field Support Group in the sales company.
			No applicable firmware exists on CDS, so the service person can't select any applicable firmware.	Contact the sales company's Support Department.
16	Restart failed. Turn the main power OFF and ON.	Manual update (error dialogue)	An error occurred at the time of the device restart.	After turning OFF and then ON the main power of the device, re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
		Automatic update (error dialogue)	An error occurred at the time of the device restart.	After turning OFF and then ON the main power of the device, re-execute the job. If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
17	Specify [E-Mail Address] with up to 64 characters.	At the time of periodical update setting	The specified E-mail address exceeded 64 characters.	Specify E-mail address within 64 characters.
18	The following characters cannot be used for the [E-Mail Address]: . ; " ( ) [ ] < > \	At the time of periodical update setting	The E-mail address was including the characters which could not be used.	Do not specify E-mail address with characters which cannot be used.
19	Specify [Comments] with up to 128 characters.	At the time of periodical update setting	Comments exceeded 128 characters.	Specify comments within 128 characters.
20	The [Delivery Server URL] is incorrect.	In setting with the deliver server URL.	The specified deliver server URL is wrong.	Enter the right URL( <a href="https://device.c-cdsknn.net/cds_soap/updaterif">https://device.c-cdsknn.net/cds_soap/updaterif</a> )

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## Error Code

The following shows the error codes displayed on CDS error dialogs and the Control Panel of the device (local UI) and explanation of those error codes.

### How to read an error code



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## List of Error Codes Likely to Be Displayed

In the list shown below, error codes which are likely to be displayed are classified into two groups:

- Error codes caused by the CDS server (error codes starting with "81")
- Error codes caused by the device (error codes starting with "82" to "86")

When an error code is displayed, check this list first. If it is not in this list, see "Error Code".

### Error codes caused by the CDS server (error codes starting with "81")

Error Code (hex number)	Description	Remedy
Error codes starting with "81": CDS server		
81021008	As to the device serial number in the data entry items, there is no applicable device code product	Check registration of LMS. (CINC)
81040002	In a string type of a data entry item, digit number and/or character type is/are set against the regulations 81040002 is displayed in the following cases: <ul style="list-style-type: none"> <li>• The number of digits of the registration ID or password is not 8.</li> <li>• The registration ID or password includes characters other than single-byte numeric characters.</li> </ul>	When 81040002 is displayed: Enter the correct ID and password for Special Firmware. (User)
81041012	Device is "Not applicable to CDS" (Firmware distribution) * It occurs only when a device that can access CDS is managed.	Register the device as a CDS device.
81060002	In a string type of a data entry item, digit number and/or character type is/are set against the regulations 81060002 is displayed in the following cases: <ul style="list-style-type: none"> <li>• 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.</li> <li>• The character string of Firmware Group Version (firmGroupVersion) includes characters other than numeric values.</li> <li>• The number of digits of E-mail Address (mailAddress) is larger than 128.</li> <li>• Characters other than single-byte alphanumeric characters and symbols are used for E-mail Address (mailAddress).</li> <li>• An invalid e-mail address was input (The domain name is missing, .(dot) was input instead of , (comma), etc.)</li> </ul>	When 81060002 is displayed due to an error in Firm Type, Firmware Version, or Firmware Group Version, register the correct firmware again.(CINC)  When 81060002 is displayed due to an invalid e-mail address, register the correct e-mail address. (User)
81081014	When confirmation of the firmware distribution settings ended in time-out. CDS was not accessed within 30 minutes after the distribution time. The device has been turned OFF, the network has been disconnected, etc.	Search the applicable firmware again, and perform distribution of the firmware.
81091001	81091001 is displayed in the following cases: <ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> </ul>	If distribution of the firmware is necessary, search the applicable firmware again, and perform distribution of the firmware.
8106100A	The delivery status is Applying After the firmware was updated and when an update completion notification has not been sent to CDS, distribution of the firmware was attempted again before update time-out is processed in CDS.	After 2 hours and 30 minutes have passed since the failed attempt to distribute the firmware, search the applicable firmware again, and perform distribution of the firmware.

Error Code (hex number)	Description	Remedy
8108100D	The delivery status is Distributing/Distributed/Applying/Finished/Failed 8108100D: When the distribution status was not correct, schedule information was checked with CDS. (CDS has not been notified of the status change due to a network	Search the applicable firmware again, and perform distribution of the firmware.
810A1015	When firmware distribution time-out occurs. A reception completion notification was not sent to CDS within 24 hours after the start of the distribution. The device has been turned OFF, the network has been disconnected, etc.	Search the applicable firmware again, and perform distribution of the firmware.
810B1010	The delivery status is New/Waiting to Distribute/Distributing/Applying/Finished/Failed 810B1010: An update start notification was sent to CDS with an invalid status. (The CDS server failed to receive the status change due to a network error, etc.)	Search the applicable firmware again, and perform distribution of the firmware.
810C1016	Firmware update time-out occurred. An update completion notification had not been sent to CDS even after 2 hours since the start of the update.	Check the device to see if the update has been completed. When the update has ended in failure, execute the operation again if there is no problem with the device.

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### ● Error codes caused by the device (error codes starting with "82" to "86")

Error Code (hex number)	Description	Remedy
Error codes starting with "82": Updater		
82001106	Another job existed immediately before the firmware update processing.	Start the operation again after terminating the job of the device
82005202	Failed to connect to the server	Check the network environment of the device (check for any problem in the DNS server), and start the operation again.
82005203	Failed to find the server	Check the network environment of the device (the proxy settings, etc.), and start the operation again.
82005204	An input/output error occurred during the connecting process to the server	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.
82005205	Failed to read a HTTP response	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.
82005206	Error in a HTTP response	Check the network environment.
82005300	Codes other than the following "3xx" definition	Check that no problem is found in the proxy settings and network environment.
82005304	Failed to receive the data	Check the network environment of the device, and start the operation again.
82005308	Invalid hash code of the download file	Check the network environment of the device, and start the operation again.
82005309	The proxy authentication method is not supported, or access to the CDS file server is not permitted.	Check the proxy authentication method being used, change the setting to use a supported proxy authentication, and then start the operation again. Check that access to the following URL is permitted. <ul style="list-style-type: none"> <li>device.c-cdsknn.net (protocol: https)</li> <li>cdsknn.net.edgesuite.net (protocol: http)</li> </ul>
82007502	The scheduled distribution had not been executed even after a certain period of time due to the power of the device being OFF at the scheduled time or other reasons.	Scheduled deliveries not executed within the defined period of time are abandoned, so register a scheduled delivery again. When setting the date and time of the scheduled delivery, be sure to designate a time when the device is ON.
82095204	An input/output error occurred during the connecting process to the server	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.
82095206	Error in a HTTP response	Check the network environment.

Error Code (hex number)	Description	Remedy
82095300	Codes other than the following "3xx" definition	Check that no problem is found in the proxy settings and network environment.
82095309	The proxy authentication method is not supported, or access to the CDS file server is not permitted.	Check the proxy authentication method being used, change the setting to use a supported proxy authentication, and then start the operation again. Check that access to the following URL is permitted. <ul style="list-style-type: none"> <li>device.c-cdsknn.net (protocol: https)</li> <li>cdsknn.net.edgesuite.net (protocol: http)</li> </ul>
Error codes starting with "84": Service person		
84001106	Another job existed immediately before the firmware update processing.	Start the operation again after terminating the job of the device
84005202	Failed to connect to the server	Check the network environment of the device (check for any problem in the DNS server), and start the operation again.
84005203	Failed to find the server	Check the network environment of the device (the proxy settings, etc.), and start the operation again.
84005204	An input/output error occurred during the connecting process to the server	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.
84005205	Failed to read a HTTP response	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.
84005206	Error in a HTTP response	Check the network environment.
84005300	Codes other than the following "3xx" definition	Check that no problem is found in the proxy settings and network environment.
84005304	Failed to receive the data	Check the network environment of the device, and start the operation again.
84005308	Invalid hash code of the download file	Check the network environment of the device, and start the operation again.
84005309	The proxy authentication method is not supported, or access to the CDS file server is not permitted.	Check the proxy authentication method being used, change the setting to use a supported proxy authentication, and then start the operation again. Check that access to the following URL is permitted. <ul style="list-style-type: none"> <li>device.c-cdsknn.net (protocol: https)</li> <li>cdsknn.net.edgesuite.net (protocol: http)</li> </ul>
84095203	Failed to find the server	Check the network environment of the device (the proxy settings, etc.), and start the operation again.
84095204	An input/output error occurred during the connecting process to the server	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.
84095205	Failed to read a HTTP response	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.
84095206	Error in a HTTP response	Check the network environment.
84095300	Codes other than the following "3xx" definition	Check that no problem is found in the proxy settings and network environment.
84095309	The proxy authentication method is not supported, or access to the CDS file server is not permitted.	Check the proxy authentication method being used, change the setting to use a supported proxy authentication, and then start the operation again. Check that access to the following URL is permitted. <ul style="list-style-type: none"> <li>device.c-cdsknn.net (protocol: https)</li> <li>cdsknn.net.edgesuite.net (protocol: http)</li> </ul>
Error codes starting with "85" :IT administrator (User)		
85001106	Another job existed immediately before the firmware update processing.	Start the operation again after terminating the job of the device
85005203	Failed to find the server	Check the network environment of the device (the proxy settings, etc.), and start the operation again.
85005204	An input/output error occurred during the connecting process to the server	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.

Error Code (hex number)	Description	Remedy
85005206	Error in a HTTP response	Check the network environment.
85005300	Codes other than the following "3xx" definition	Check that no problem is found in the proxy settings and network environment.
85005308	Invalid hash code of the download file	Check the network environment of the device, and start the operation again.
85005309	The proxy authentication method is not supported, or access to the CDS file server is not permitted.	Check the proxy authentication method being used, change the setting to use a supported proxy authentication, and then start the operation again. Check that access to the following URL is permitted. <ul style="list-style-type: none"> <li>device.c-cdsknn.net (protocol: https)</li> <li>cdsknn.net.edgesuite.net (protocol: http)</li> </ul>
85095203	Failed to find the server	Check the network environment of the device (the proxy settings, etc.), and start the operation again.
85095204	An input/output error occurred during the connecting process to the server	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.
85095206	Error in a HTTP response	Check the network environment.
85095300	Codes other than the following "3xx" definition	Check that no problem is found in the proxy settings and network environment.
850C1104	Session time-out excluding after application inquiry (after issuing delivery ID)	Start the operation again from the beginning
Error codes starting with "86": Scheduled Update		
86001106	Another job existed immediately before the firmware update processing.	Start the operation again after terminating the job of the device
86005203	Failed to find the server	Check the network environment of the device (the proxy settings, etc.), and start the operation again.
86005204	An input/output error occurred during the connecting process to the server	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.
86005205	Failed to read a HTTP response	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.
86005206	Error in a HTTP response	Check the network environment.
86005300	Codes other than the following "3xx" definition	Check that no problem is found in the proxy settings and network environment.
86005304	Failed to receive the data	Check the network environment of the device, and start the operation again.
86005305	Failed to receive the data	Check that no problem is found in the HDD. When this error occurs again, contact Support Group of sales companies.
86005308	Invalid hash code of the download file	Check the network environment of the device, and start the operation again.
86005309	The proxy authentication method is not supported, or access to the CDS file server is not permitted.	Check the proxy authentication method being used, change the setting to use a supported proxy authentication, and then start the operation again. Check that access to the following URL is permitted. <ul style="list-style-type: none"> <li>device.c-cdsknn.net (protocol: https)</li> <li>cdsknn.net.edgesuite.net (protocol: http)</li> </ul>
86095203	Failed to find the server	Check the network environment of the device (the proxy settings, etc.), and start the operation again.
86095204	An input/output error occurred during the connecting process to the server	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.
86095300	Codes other than the following "3xx" definition	Check that no problem is found in the proxy settings and network environment.

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## Error Code

The error code list is shown below. Remedy are error codes of "-", and for all the error codes out of the list, contact Field Support Group in the sales company.

Error Code (hex number)					Description	Remedy	Cause of error					
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category	The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	Local CDS server	UP DATER	CDS file server	Network	
8	Error											
8	0	Not defined.										
8	1	CDS server										
8	1	x	x	Relating method code								
8	1	x	x	0	Not categorized							
8	1	x	x	0	001	No value is set in a mandatory data entry item	Contact the support department of the sales company.	Yes	-	Yes	-	-
8	1	x	x	0	002	In a string type of a data entry item, digit number and/or character type is/are set against the regulations 81040002 is displayed in the following cases: <ul style="list-style-type: none"> <li>The number of digits of the registration ID or password is not 8.</li> <li>The registration ID or password includes characters other than single-byte numeric characters.</li> </ul> 81060002 is displayed in the following cases: <ul style="list-style-type: none"> <li>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.</li> <li>The character string of Firmware Group Version (firmGroupVersion) includes characters other than numeric values.</li> <li>The number of digits of E-mail Address (mailAddress) is larger than 128.</li> <li>Characters other than single-byte alphanumeric characters and symbols are used for E-mail Address (mailAddress).</li> <li>An invalid e-mail address was input (The domain name is missing, . (dot) was input instead of , (comma), etc.)</li> </ul>	When 81040002 is displayed: <ul style="list-style-type: none"> <li>Enter the correct ID and password for Special Firmware. (User)</li> </ul> When 81060002 is displayed due to an error in Firm Type, Firmware Version, or Firmware Group Version: <ul style="list-style-type: none"> <li>Register the correct firmware again. (CINC)</li> </ul> When 81060002 is displayed due to an invalid e-mail address: - Register the correct e-mail address. (User)	Yes	-	Yes	-	-
8	1	x	x	0	003	In an data entry item, the value is set against the regulations (E.g. the set value is other than "Operator: 4. Service person, 5. User")	Contact the support department of the sales company.	Yes	-	Yes	-	-
8	1	x	x	0	004	No applicable delivery information exists	Contact the support department of the sales company.	Yes	-	-	-	-

Error Code (hex number)					Description	Remedy	Cause of error					
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category	The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	Local CDS server	UP DATER	CDS file server	Network	
8	1	x	x	1	Operation							
8	1	x	x	1	001	<p>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)</p> <p>81071001 is displayed in the following cases:</p> <ul style="list-style-type: none"> <li>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.)</li> </ul> <p>81091001 is displayed in the following cases:</p> <ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>When the remote update setting for the firmware to be updated was disabled after distribution schedule was registered using auto update.</li> </ul>	If distribution of the firmware is necessary, search the applicable firmware again, and perform distribution of the firmware.	Yes	-	Yes	-	-
8	1	x	x	1	002	In a notice of delivery-allowed information, an install-set was release to the market, but the market release was stopped during the delivery	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	003	No mail template file exists	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	004	The device serial number in the data entry item differs from that in delivery information	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	005	User is selected as Operator in the data entry items and the retrieval type is other than the latest	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	006	The retrieval type in the data entry item is special and registration ID and individual Password are not set (* Operator did not enter registration ID and individual Password)	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	007	The retrieval type in the data entry item is special and Operator is not Service person	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	008	As to the device serial number in the data entry items, there is no applicable device code product	Check registration of LMS. (CINC)	Yes	-	-	-	-
8	1	x	x	1	009	The retrieval type in the data entry items is special and there are no basic-set applicable to the registration ID and Password (* When wrong registration ID or Password was entered by an operator)	Enter correct ID and the password.	Yes	-	-	-	-

Error Code (hex number)					Description	Remedy	Cause of error					
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category	The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	Local CDS server	UP DATER	CDS file server	Network	
8	1	x	x	1	00A	The delivery status is Applying After the firmware was updated and when an update completion notification has not been sent to CDS, distribution of the firmware was attempted again before update time-out is processed in CDS.	After 2 hours and 30 minutes have passed since the failed attempt to distribute the firmware, search the applicable firmware again, and perform distribution of the firmware.	Yes	-	-	-	-
8	1	x	x	1	00B	No approval information exists about EULA or the export criteria when the delivery is determined	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	00C	The delivery status is Distributing/Distributed/Applying/Finished/Failed When the distribution status was not correct, distribution information was obtained from CDS. (CDS has not been notified of the status change due to a network failure, etc.)	Search the applicable firmware again, and perform distribution of the firmware.	Yes	-	-	-	-
8	1	x	x	1	00D	The delivery status is Distributing/Distributed/Applying/Finished/Failed 8108100D: When the distribution status was not correct, schedule information was checked with CDS. (CDS has not been notified of the status change due to a network	Search the applicable firmware again, and perform distribution of the firmware.	Yes	-	-	-	-
8	1	x	x	1	00E	The delivery status is New/Waiting to Distribute/Distributed/Applying/Finished/Failed	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	00F	The delivery code is other than Distributing. (Firmware distribution)	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	010	The delivery status is New/Waiting to Distribute/Distributing/Applying/Finished/Failed 810B1010: An update start notification was sent to CDS with an invalid status. (The CDS server failed to receive the status change due to a network error, etc.)	Search the applicable firmware again, and perform distribution of the firmware.	Yes	-	-	-	-
8	1	x	x	1	011	The delivery status is Distributing/Distributed/Applying/Finished/Failed	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	012	Device is "Not applicable to CDS" (Firmware distribution) * It occurs only when a device that can access CDS is managed.	Register the device as a CDS device.	Yes	-	-	-	-
8	1	x	x	1	013	When the specified distribution time was within the time frame of CDS distribution stop. (Firmware distribution)	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	014	When confirmation of the firmware distribution settings ended in time-out. CDS was not accessed within 30 minutes after the distribution time. The device has been turned OFF, the network has been disconnected, etc.	Search the applicable firmware again, and perform distribution of the firmware.	Yes	-	-	-	-
8	1	x	x	1	015	When firmware distribution time-out occurs. A reception completion notification was not sent to CDS within 24 hours after the start of the distribution. The device has been turned OFF, the network has been disconnected, etc.	Search the applicable firmware again, and perform distribution of the firmware.	Yes	-	-	-	-



Error Code (hex number)					Description	Remedy	Cause of error					
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category	The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	Local CDS server	UP DATER	CDS file server	Network	
8	1	x	x	1	016	Firmware update time-out occurred. An update completion notification had not been sent to CDS even after 2 hours since the start of the update.	Check the device to see if the update has been completed. When the update has ended in failure, execute the operation again if there is no problem with the device.	Yes	-	-	-	-
8	1	x	x	1	017	When the firmware distribution information notification showed an error in processing the distribution information.	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	018	When the firmware distribution information notification showed an error in processing the scheduled update information.	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	019	When the status of the scheduled update information is "Set", "Finished", or "Failed".	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	020	When the status of the scheduled update information is "Waiting to Transmit" or "New".	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	021	When the status of the scheduled update information is "Set".	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	022	The scheduled update setting information differs between the input information and the distribution information.	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	023	When the distribution status is "Cancel".	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	I/O							
8	1	x	x	2	001	The specified license access number does not exist in LMS	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	002	The specified license access number has been deauthorized	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	003	The package product of the entered license access number doesn't include MEAP application/System Option	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	004	The sales company for the MEAP application isn't identical with the sale company for the package product	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	005	The number of licenses to be issued will exceed the limit number allowed to register	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	006	As for System Option for the same function, the license keys were issued more than the defined number of times for the same device serial number	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	007	No device product exists applicable to the optional product	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	008	No product exists applicable to the device serial number	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	009	The product of the entered license access number cannot be used with this device because the settings of the sales company are incorrect	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	00A	No product linked to the license access number is registered in CDS for delivery	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	00B	Although the product linked to the license access number is registered in CDS for delivery, the delivery is stopped now	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	00C	No existence of optional product applicable to the device serial number.	Contact the support department of the sales company.	Yes	-	-	-	-

Error Code (hex number)					Description	Remedy	Cause of error					
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category	The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	Local CDS server	UP DATER	CDS file server	Network	
8	1	x	x	2	00D	The license access number has been registered for another device	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	00E	For the device product applicable to the device serial number, no available software (MEAP application, System Option) exists	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	010	LMS system error * In support of multi-manifest, when the MFP/SFP section value shows any value other than 0 or 1, LMS returns an error code "-215" to CDS.	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	011	LMS system error * In the case of failure in collection of manifest in support of multi-manifest, LMS returns an error code "-999" to CDS.	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	012	License cannot be issued for the upgrade product. Since the configuration has been changed in the upgrade product, there are no applications and options for which a license can be issued.	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	013	Not registered in CSA CSA associated with the license access number does not include any products associated with the group ID.	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	F		L-CDS						
8	1	x	x	F	000	Unclassified	Contact the support department of the sales company.	-	Yes	-	-	-
8	1	x	x	F	001	Communication test information not registered Download file information for communication test does not exist.	Contact the support department of the sales company.	-	Yes	-	-	-
8	1	x	x	F	003	Firmware information not registered Firmware information corresponding to the target device serial number does not exist.	Contact the support department of the sales company.	-	Yes	-	-	-
8	1	x	x	F	007	Invalid firmware version The firmware version at the time of registration of the distribution schedule differs from the current firmware version.	Contact the support department of the sales company.	-	Yes	-	-	-
8	1	x	x	F	008	Invalid firmware information Firmware information to be distributed does not exist.	Contact the support department of the sales company.	-	Yes	-	-	-
8	1	x	x	F	009	Forcible termination Distribution information is forcibly terminated from the server UI.	Contact the support department of the sales company.	-	Yes	-	-	-
8	1	x	x	F	00F	Invalid distribution status Distribution status of the server is in a condition where a requested method from the client cannot be accepted.	Contact the support department of the sales company.	-	Yes	-	-	-
8	1	x	x	F	010	Invalid parameter Requested parameter from the client is not correct.	Contact the support department of the sales company.	-	Yes	-	-	-
8	1	x	x	F	011	Version information not registered Version information corresponding to the specified serial number has not been registered.	Contact the support department of the sales company.	-	Yes	-	-	-
8	1	x	x	F	012	Distribution time-out Distribution has not been completed even after a certain period of time from the start of the distribution.	Contact the support department of the sales company.	-	Yes	-	-	-

Error Code (hex number)					Description	Remedy	Cause of error					
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category	The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	Local CDS server	UP DATER	CDS file server	Network	
8	1	x	x	F	013	Unable to judge the necessity of distribution Version information from a device has not been registered in the local CDS. Since the local CDS does not know the version information of the device, it cannot respond to the distribution request from updater. As a result of that, an error occurred when the request has been made.	Contact the support department of the sales company.	-	Yes	-	-	-
8	1	x	x	F	FFE	DB error General error to access DB.	Contact the support department of the sales company.	-	Yes	-	-	-
8	1	x	x	F	FFF	DB error Internal error other than error to access DB (file I/O, etc.).	Contact the support department of the sales company.	-	Yes	-	-	-
8	2~6											
8	2~6	x	x	Relating method code								
8	2~6	x	x	0	Not cartelized							
8	2~6	x	x	0	000	Not defined	Normally not indicated					
8	2~6	x	x	0	100	Unknown error	Normally not indicated					
8	2~6	x	x	1	Operation							
8	2~6	x	x	1	001	Processing exclusively	Start the operation again after terminating other Updater operations being executed simultaneously	-	-	Yes	-	-
8	2~6	x	x	1	002	Stopped	Restart the device, and start the operation again.	-	-	Yes	-	-
8	2~6	x	x	1	101	Failed to process preparation for use	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	1	102	Failed to process use end	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	1	103	Time out during restart of readiness preparation	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	1	104	Session time-out excluding after application inquiry (after issuing delivery ID)	Start the operation again from the beginning	-	-	Yes	-	-
8	2~6	x	x	1	105	CDS URL is not set	Set CDS URL	-	-	Yes	-	-
8	2~6	x	x	1	106	Another job existed immediately before the firmware update processing.	Start the operation again after terminating the job of the device	-	-	Yes	-	-
8	2~6	x	x	1	201	Specifying of an iR option for a model that does not support iR options	Contact the support department of the sales company.	Yes	-	-	-	-
8	2~6	x	x	1	202	Specifying of scheduled update for a model that does not support scheduled update	Contact the support department of the sales company.	Yes	-	-	-	-
8	2~6	x	x	1	203	Firmware processing for a model that does not support firmware processing	Contact the support department of the sales company.	Yes	-	-	-	-
8	2~6	x	x	1	204	L-CDS update process for a model that does not support L-CDS	Contact the support department of the sales company.	-	Yes	-	-	-
8	2~6	x	x	1	301	Security Token verification error	Contact the support department of the sales company.	-	-	-	-	Yes
8	2~6	x	x	1	302	Privilege check error	Perform the authentication as a correct user.	-	-	-	-	Yes
8	2~6	x	x	1	303	Parameter error	Contact the support department of the sales company.	-	-	-	-	Yes

Error Code (hex number)					Description	Remedy	Cause of error					
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category	The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	Local CDS server	UP DATER	CDS file server	Network	
8	2~6	x	x	1	304	There is no distribution information from the server.	Contact the support department of the sales company.	-	-	-	-	-
8	2~6	x	x	1	305	Version notification is not required.	Contact the support department of the sales company.	-	-	-	-	-
8	2~6	x	x	1	306	Connection server information mismatch error	Check the connection server settings.	-	-	-	-	Yes
8	2~6	x	x	2	I/O							
8	2~6	x	x	2	1xx	An internal error about file operation	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	2	2xx	An internal error about XML file operation	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	2	301	Failed to output the license file	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	2	400	Codes other than the following "4xx" definition	Contact the support department of the sales company.	-	-	-	-	-
8	2~6	x	x	2	401	Failure in creation of an auto shutdown stop file	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	2	402	Failure in deletion of the auto shutdown stop file	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	3	Device							
8	2~6	x	x	3	1xx	An internal error in CPCA	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	3	2xx	An internal error in IMI	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	3	3xx	An internal error in SMS	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	3	4xx	An internal error in NLM	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	3	5xx	Configuration Service property setting error	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	3	6xx	An internal error related to APL_CDS partition	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	3	7xx	DCM-related service error	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	4	SOAP communication							
8	2~6	x		4	101	The processing thread stopped	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	4	102	Processing SOAP communication now	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	4	103	The function type is not matched	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	4	104	An invalid SOAP response error	Check the network environment. When this problem recurs, contact the support department of the sales company.	Yes	-	-	-	-
8	2~6	x	x	4	201	An internal error about application information	Contact the support department of the sales company.	-	-	Yes	-	-

Error Code (hex number)					Description	Remedy	Cause of error					
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category	The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	Local CDS server	UP DATER	CDS file server	Network	
8	2~6	x	x	4	202	config.xml is NOT FOUND	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	4	203	type.xml is NOT FOUND	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	4	204	An error in binding type.xml	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	4	205	An error in creating a service tab	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	4	206	A runtime error in performing the web method	Contact the support department of the sales company.	-	-	Yes	-	Yes
8	2~6	x	x	4	207	An unknown host error in performing the web method	<ul style="list-style-type: none"> <li>Check the network environment of the device and start the operation again</li> <li>Check if the URL settings of the CDS server are correct, and start the operation again after resetting</li> </ul>	Yes	-	Yes	-	Yes
8	2~6	x	x	4	301	The delivery server is stopped	Contact the support department of the sales company.	Yes	-	-	-	-
8	2~6	x	x	4	302	<p>&lt;In the case of scheduled update&gt; 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.</p> <p>&lt;In the case of distribution executed by specifying the date and time&gt; 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.</p>	<p>&lt;In the case of scheduled update&gt; Specify the distribution settings again, making sure that the distribution server maintenance time and the scheduled update time do not overlap.</p> <p>&lt;In the case of distribution executed by specifying the date and time&gt; 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.</p>	Yes	-	Yes	-	-
8	2~6	x	x	5	HTTP communication							
8	2~6	x	x	5	101	Specified Hash Algorithm is unknown	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	5	102	Download file URL is invalid	Check the URL setting of CDS server, reset the setting, and then start the operation again.	-	-	Yes	-	-
8	2~6	x	x	5	103	No network cable connection (device side)	Check the network environment of the device, and start the operation again.	-	-	Yes	-	-
8	2~6	x	x	5	201	Invalid HTTP request	Contact the support department of the sales company.	-	-	Yes	Yes	Yes
8	2~6	x	x	5	202	Failed to connect to the server	Check the network environment of the device (check for any problem in the DNS server), and start the operation again.	-	-	Yes	Yes	Yes

Error Code (hex number)					Description	Remedy	Cause of error					
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category	The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	Local CDS server	UP DATER	CDS file server	Network	
8	2~6	x	x	5	203	Failed to find the server	Check the network environment of the device (the proxy settings, etc.), and start the operation again.	-	-	Yes	Yes	Yes
8	2~6	x	x	5	204	An input/output error occurred during the connecting process to the server	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.	-	-	Yes	Yes	Yes
8	2~6	x	x	5	205	Failed to read a HTTP response	Check the network environment.	-	-	Yes	Yes	Yes
8	2~6	x	x	5	206	Error in a HTTP response	Contact the support department of the sales company.	-	-	Yes	Yes	Yes
8	2~6	x	x	5	207	Generation of secure socket failed.	Contact the support department of the sales company.	-	-	Yes	Yes	Yes
8	2~6	x	x	5	208	Certificate check error	Contact the support department of the sales company.	-	-	Yes	Yes	Yes
8	2~6	x	x	5	209	Connection time-out	Contact the support department of the sales company.	-	-	Yes	-	Yes
8	2~6	x	x	5	300	Codes other than the following "3xx" definition	Check that no problem is found in the proxy settings and network environment.	Yes	-	Yes	Yes	Yes
8	2~6	x	x	5	301	Failed to retrieve the data stream	Contact the support department of the sales company.	-	-	Yes	-	Yes
8	2~6	x	x	5	302	Failed to create the file object for receipt	Contact the support department of the sales company.	-	-	Yes	-	Yes
8	2~6	x	x	5	303	Failed to create the data stream of the file for receipt	Contact the support department of the sales company.	-	-	Yes	-	Yes
8	2~6	x	x	5	304	Failed to receive the data	Check the network environment of the device, and start the operation again.	-	-	Yes	Yes	Yes
8	2~6	x	x	5	305	An error about reserving the file data for receipt	Check that no problem is found in the HDD. When this error occurs again, contact Support Group of sales companies.	-	-	Yes	-	-
8	2~6	x	x	5	306	Failed to close the data stream	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	5	307	Failed to close the file data for receipt	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	5	308	Invalid hash code of the download file	Check the network environment of the device, and start the operation again.	Yes	-	Yes	Yes	Yes
8	2~6	x	x	5	309	The proxy authentication method is not supported, or access to the CDS file server is not permitted.	Check the proxy authentication method being used, change the setting to use a supported proxy authentication, and then start the operation again. Check that access to the following URL is permitted. • device.c-cdsknn.net (protocol: https) • cdsknn.net.edgesuite.net (protocol: http)	-	-	Yes	-	Yes

Error Code (hex number)					Description	Remedy	Cause of error					
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category	The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	Local CDS server	UP DATER	CDS file server	Network	
8	2~6	x	x	6	Socket communication							
8	2~6	x	x	6	101	Failed to connect the eRDS	Contact the support department of the sales company.	-	-	Yes	-	Yes
8	2~6	x	x	6	102	No response from eRDS	Contact the support department of the sales company.	-	-	Yes	-	Yes
8	2~6	x	x	6	103	No notice of start from the eRDS	Contact the support department of the sales company.	-	-	Yes	-	Yes
8	2~6	x	x	6	104	Error of socket reading	Contact the support department of the sales company.	-	-	Yes	-	Yes
8	2~6	x	x	6	105	Socket communication time-out	Contact the support department of the sales company.	-	-	Yes	-	Yes
8	2~6	x	x	7	Other internal codes							
8	2~6	x	x	7	002	One of installation, start or authorization failed (When installation or authorization failed, it is regarded as an error) *	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	7	03x	An internal error in processing the installation	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	7	1xx	An error by using invalid API	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	7	2xx	An internal error in SMS	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	7	301	No existence of delivery ID	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	7	302	Invalid delivery ID	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	7	303	The updated firmware information is not identical with the firmware information after activation of the Updater	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	7	304	The process of firmware download is incomplete It occurs when the power of the device is turned OFF during download.	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	7	305	The update process is incomplete The power was turned OFF after completion of download and before start of update processing.	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	7	306	The installment process is incomplete	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	7	401	Failed to retrieve delivery information	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	7	501	Failed to execute the delivery process	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	7	502	The scheduled distribution had not been executed even after a certain period of time due to the power of the device being OFF at the scheduled time or other reasons.	Scheduled deliveries not executed within the defined period of time are abandoned, so register a scheduled delivery again. When setting the date and time of the scheduled delivery, be sure to designate a time when the device is ON	-	-	Yes	-	-



Error Code (hex number)					Description	Remedy	Cause of error					
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category	The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	Local CDS server	UP DATER	CDS file server	Network	
8	2~6	x	x	A	Internal Module							
8	2~6	x	x	A	xxx	Communication error in the internal module	Contact the support department of the sales company.	-	-	Yes	-	-
8	x											
8	x	x	x									
8	x	x	x	1	I/O							
8	x	x	x	1	200	An error occurred in the CDS server.	Contact the support department of the sales company.	-	-	Yes	-	-
8	x	x	x	1	201			Yes	-	-	-	-
8	x	x	x	1	202			Yes	-	-	-	-
8	x	x	x	1	203			Yes	-	-	-	-
8	x	x	x	3	Device							
8	x	x	x	3	303	Restart of the device failed.	Restart the device, and perform the operation again.	-	-	Yes	-	-
8	x	x	x	3	304		When this problem recurs, obtain the Updater log, and contact the support department of the sales company.	-	-	Yes	-	-
8	x	x	x	3	401	Application of the firmware failed.	Obtain the Updater log, and contact the support department of the sales company.	-	-	Yes	-	-
8	x	x	x	3	402			-	-	Yes	-	-
8	x	x	x	3	403			-	-	Yes	-	-
8	x	x	x	3	404			-	-	Yes	-	-
8	x	x	x	3	405			-	-	Yes	-	-
8	x	x	x	3	406			-	-	Yes	-	-
8	x	x	x	3	407	Restart of the device failed.	Restart the device, and perform the operation again.	-	-	Yes	-	-
							When this problem recurs, obtain the Updater log, and contact the support department of the sales company.					
8	x	x	x	3	409	Application of the firmware failed.	Obtain the Updater log, and contact the support department of the sales company.	-	-	Yes	-	-
8	x	x	x	4	SOAP communication							
8	x	x	x	4	104	An error occurred in the CDS server.	Contact the support department of the sales company.	Yes	-	-	-	-
8	x	x	x	4	207	An error occurred in the CDS server due to an unknown host error at execution of Web method.	Check the network environment of the device, and then check that the URL setting of the CDS server is correct, and perform the operation again.	Yes	-	Yes	Yes	Yes

Error Code (hex number)					Description	Remedy	Cause of error				
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category	The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	Local CDS server	UP DATER	CDS file server	Network
8	x	x	x	5	HTTP communication						
8	x	x	x	5	101	Download was canceled due to an error that occurred in the file server. Check the network environment. When there is no problem with the network environment, collect the Updater log, and contact the support department of the sales company.	-	-	Yes	-	-
8	x	x	x	5	201		-	-	Yes	Yes	Yes
8	x	x	x	5	202		-	-	Yes	Yes	Yes
8	x	x	x	5	203		-	-	Yes	Yes	Yes
8	x	x	x	5	204		-	-	Yes	Yes	Yes
8	x	x	x	5	205		-	-	Yes	Yes	Yes
8	x	x	x	5	206		-	-	Yes	Yes	Yes
8	x	x	x	5	300		-	-	Yes	-	Yes
8	x	x	x	5	301		-	-	Yes	-	Yes
8	x	x	x	5	302		-	-	Yes	-	Yes
8	x	x	x	5	303		-	-	Yes	-	Yes
8	x	x	x	5	304		-	-	Yes	Yes	Yes
8	x	x	x	5	305		-	-	Yes	-	-
8	x	x	x	5	306		-	-	Yes	-	-
8	x	x	x	5	307		-	-	Yes	-	-
8	x	x	x	5	309		-	-	Yes	-	Yes
8	x	x	x	5	308	An error occurred in the CDS server due to an invalid hash code of download file. Check the network environment, and perform the operation again. When there is no problem with the network environment, collect the Updater log, and contact the support department of the sales company.	-	-	Yes	Yes	Yes

\* Not displayed on a device UI

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## ■ Error Codes When Using the UGW-linked Function

Codes displayed as eRDS errors when the UGW-linked function is used

Error Code (hex number)					Description	Remedy	Cause of error			
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category	The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	UP DATER	CDS file server	Network
8	Error									
	x									
		x	x							
				0	Unclassified					
				000	An unexpected error occurred in the device.	Restart the device, and perform the operation again. When this problem recurs, the firmware of the device needs to be reinstalled (upgraded).	-	Yes	-	-
				002	A time-out error occurred due to no response from Updater within the specified time (3 seconds).	Obtain the sublog, and contact the support department of the sales company.	-	Yes	-	-
				101	Processing in the device (event processing) failed. Restart the device, and perform the operation again.	Restart the device, and perform the operation again. When this problem recurs, the firmware of the device needs to be reinstalled (upgraded).	-	Yes	-	-
				303	Queue could not be sent due to failure of processing in the device (event processing).	Restart the device, and perform the operation again. When this problem recurs, the firmware of the device needs to be reinstalled (upgraded).	-	Yes	-	-
				304	An error occurred in control of synchronization or interruption processing between processes being handled in parallel.	Wait for a while, and perform a communication test again.	-	Yes	-	-
				706	Communication with Updater failed.	Restart the device, and perform the operation again after checking that Updater has been started.	-	Yes	-	-
				707		When this problem recurs, obtain the sublog, and contact the support department of the sales company.	-	Yes	-	-
				708			-	Yes	-	-
				709	At the time of firmware update, the Tracking ID ordered by UGW and the one to which the Updater responded did not match.	Obtain the sublog, and contact the support department of the sales company.	-	Yes	-	-

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## ■ Error Codes Not Included in the Error Code List and Remedy for Them

### ● Scenes Where an Error Occurs

When an error code not included in the error code list is displayed, one of the errors shown in the following scenes may have occurred.

#### Scenes Where an Error Occurs

Scenes Where an Error Occurs	Content
Communication test, etc. (main screen)	Log could not be written due to maximum value (capacity/the number of files) being exceeded.
Version information notification (main screen)	Retrieval of device version information ended in failure because the firmware version of the device was not registered in CDS.
	Connection to the delivery server failed at the time of notification of version information.
	The network cable was disconnected during notification of version information.
	Notification of version information ended in failure because the device was restarted during notification of version information.
UGW linkage (main screen)	UGW linkage was turned ON while eRDS was OFF.
On-site (error dialog)	An internal error occurred when obtaining the applicable firmware information.
Immediate download (error dialog)	An internal error occurred at the time of request of firmware delivery information.
	Free space in the storage destination disk ran out during download. (DiskFull)
Manual/auto update (error dialog)	An internal error occurred at start of update.
Deletion of downloaded firmware	An internal error occurred at the time of cancellation notification.

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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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## 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:

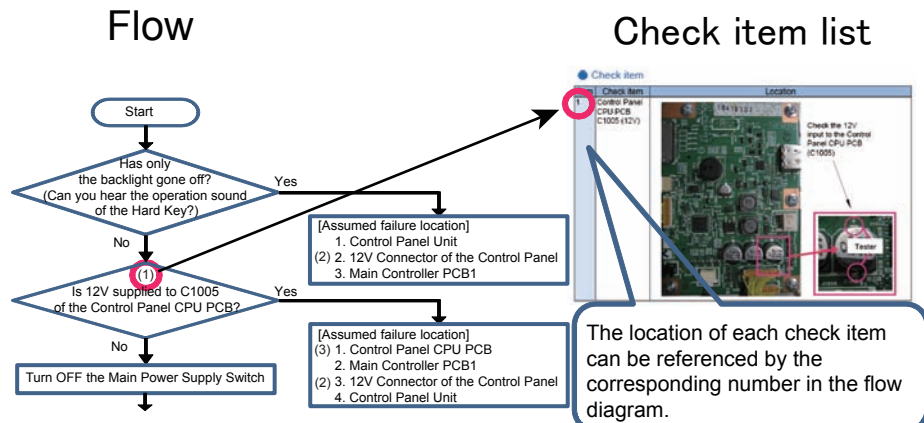
- How to use a tester
- Roles of the All-night Power Supply (3.3V) and Non-all-night Power Supply (12V)
- How to back up data (HDD and Main Controller)

#### ⚠ CAUTION:

AC power supply is always supplied to the AC Driver 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.



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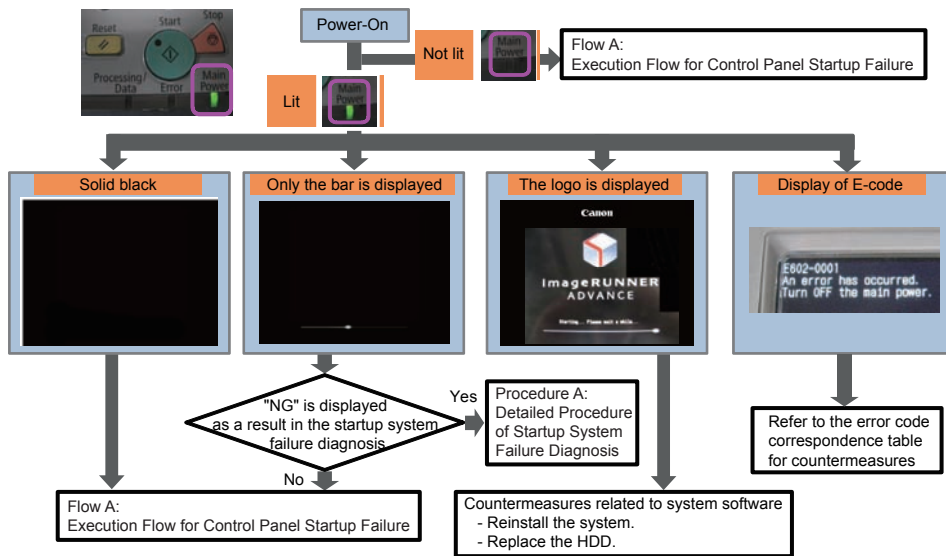
## Startup Failure Analysis Policy

Startup Failure Analysis Policy describes troubleshooting related to "Execution Flow for Control Panel Startup Failure" for the All-night Power Supply (3.3V) and 12V Power Supply. 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 (All-night Power Supply 3.3V system)
- Rotation noise of the motor at warm-up rotation and activation of the Control Panel Backlight (12V system)

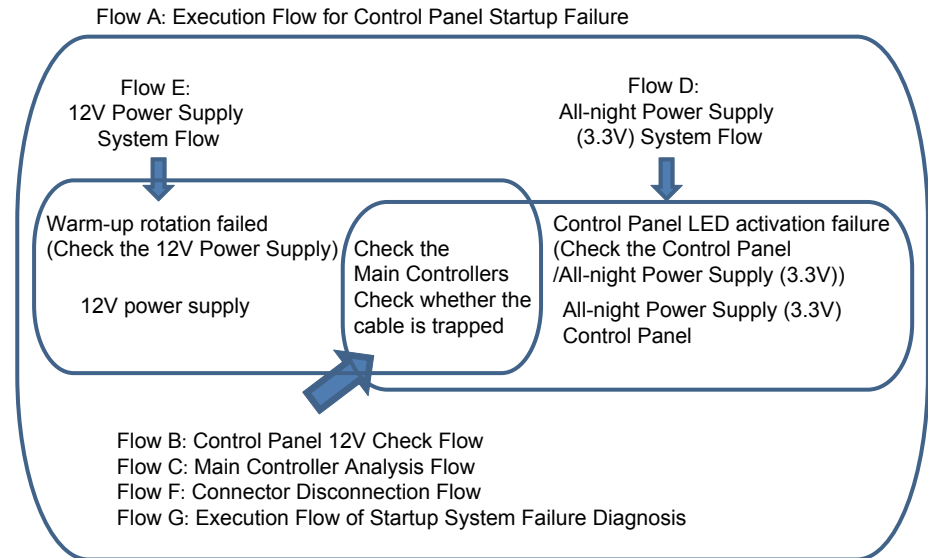


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### Memo:

- It may take about 5 minutes or more to display E 602-0001.

Structure overview of each flow



F-6-141

## Flow A: Execution Flow for Control Panel Startup Failure

### Status Check

If nothing is displayed on the Control Panel 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 Main Power LED is ON, the All-night Power Supply (3.3V) is being supplied.

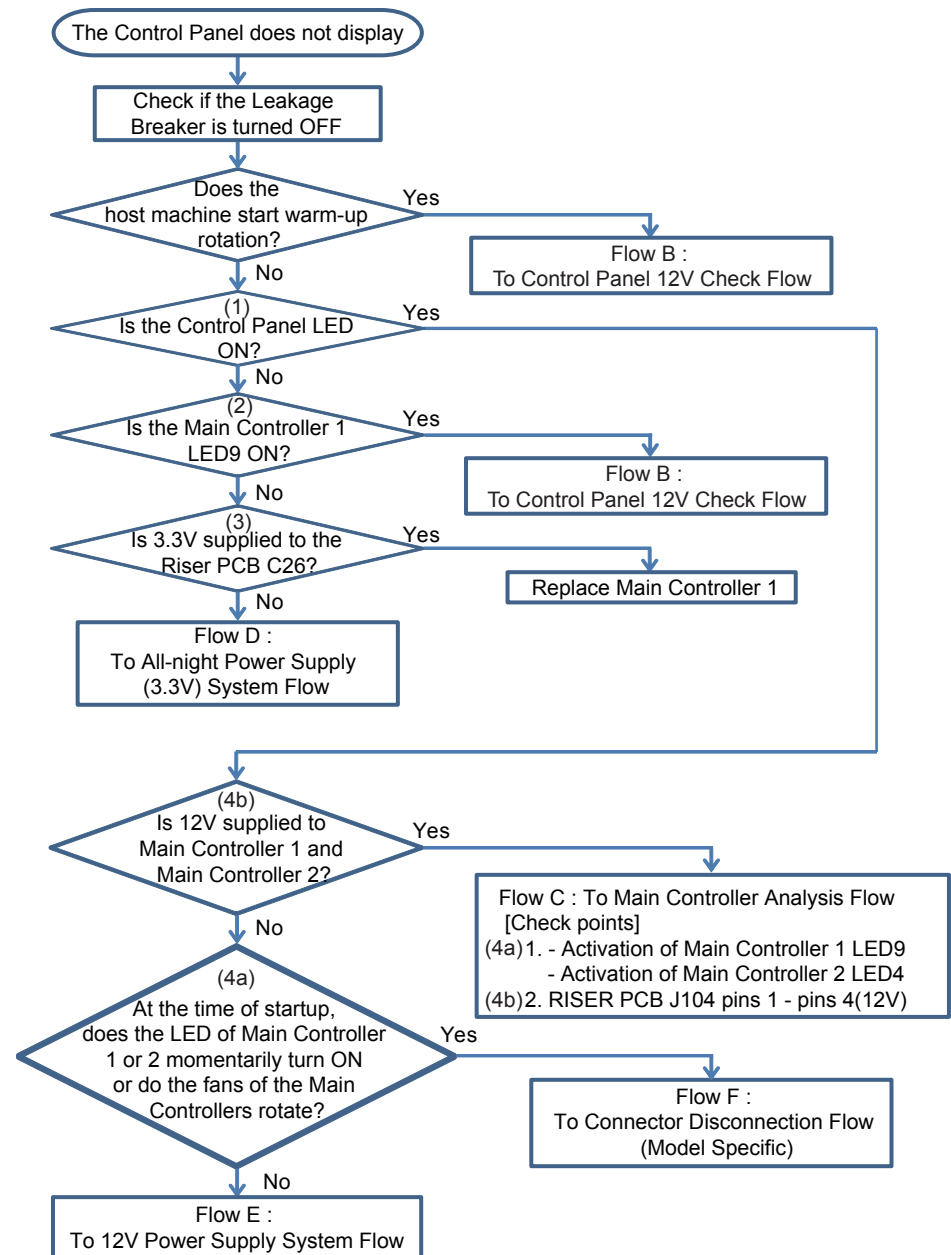
If the 12V Power Supply is activated, the Control Panel Backlight can be activated.

If the power-on signal (3.3V) is supplied to the 12V Power Supply, the 12V can still activate the Control Panel Backlight.

If the power-on signal is blocked, the 12V Power Supply stops supplying power.

If the Main Controller LED is momentarily activated or the fan momentarily rotates and then stops after the Main Power SW is turned ON, the overcurrent protection may be active and stopping the supply of power.

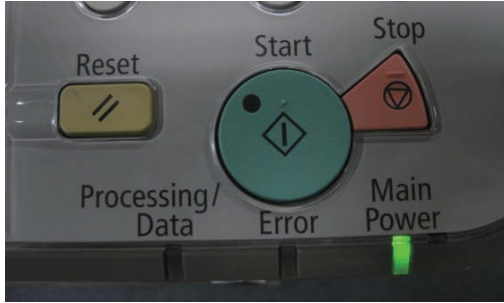
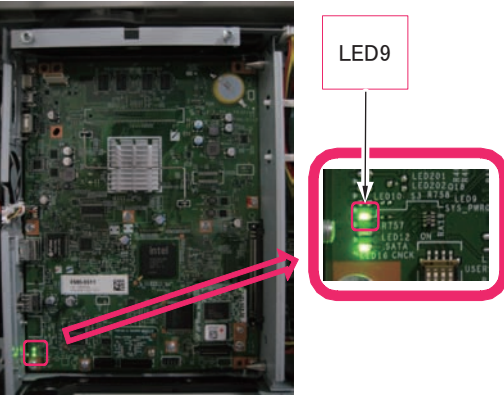
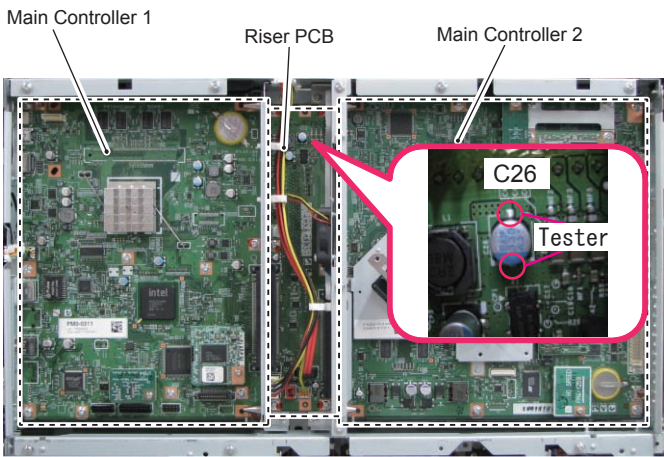
Consult this flow when checking the 3.3V and 12V power supplies and identifying the location of the failure in "Execution Flow for Control Panel Startup Failure" described below.

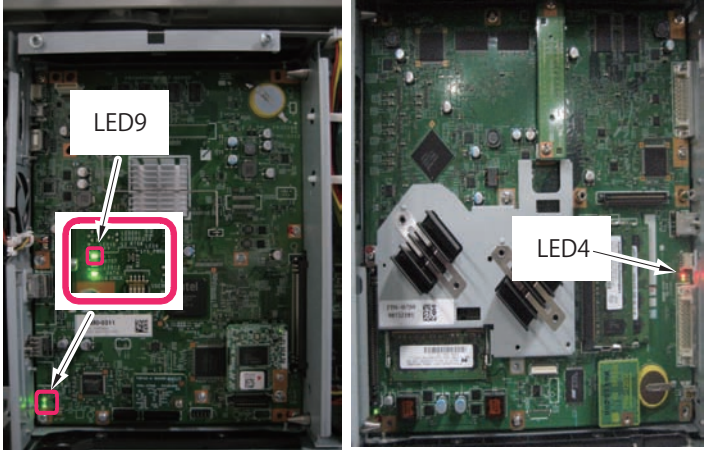
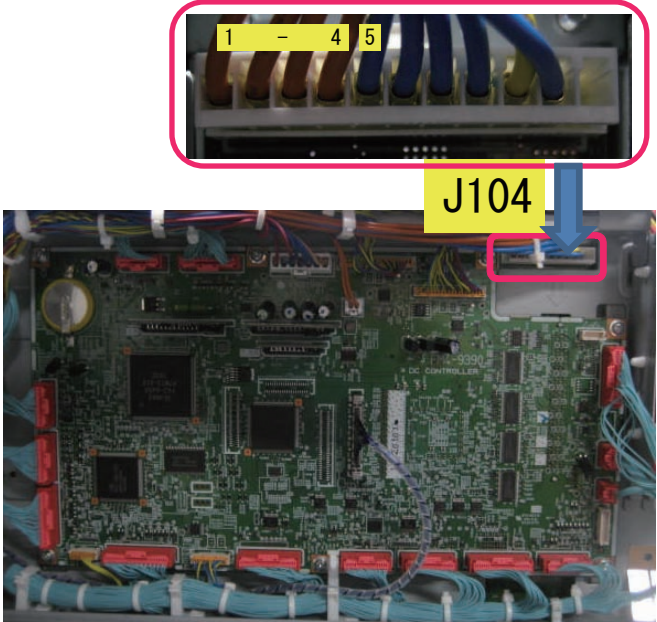


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● Check item

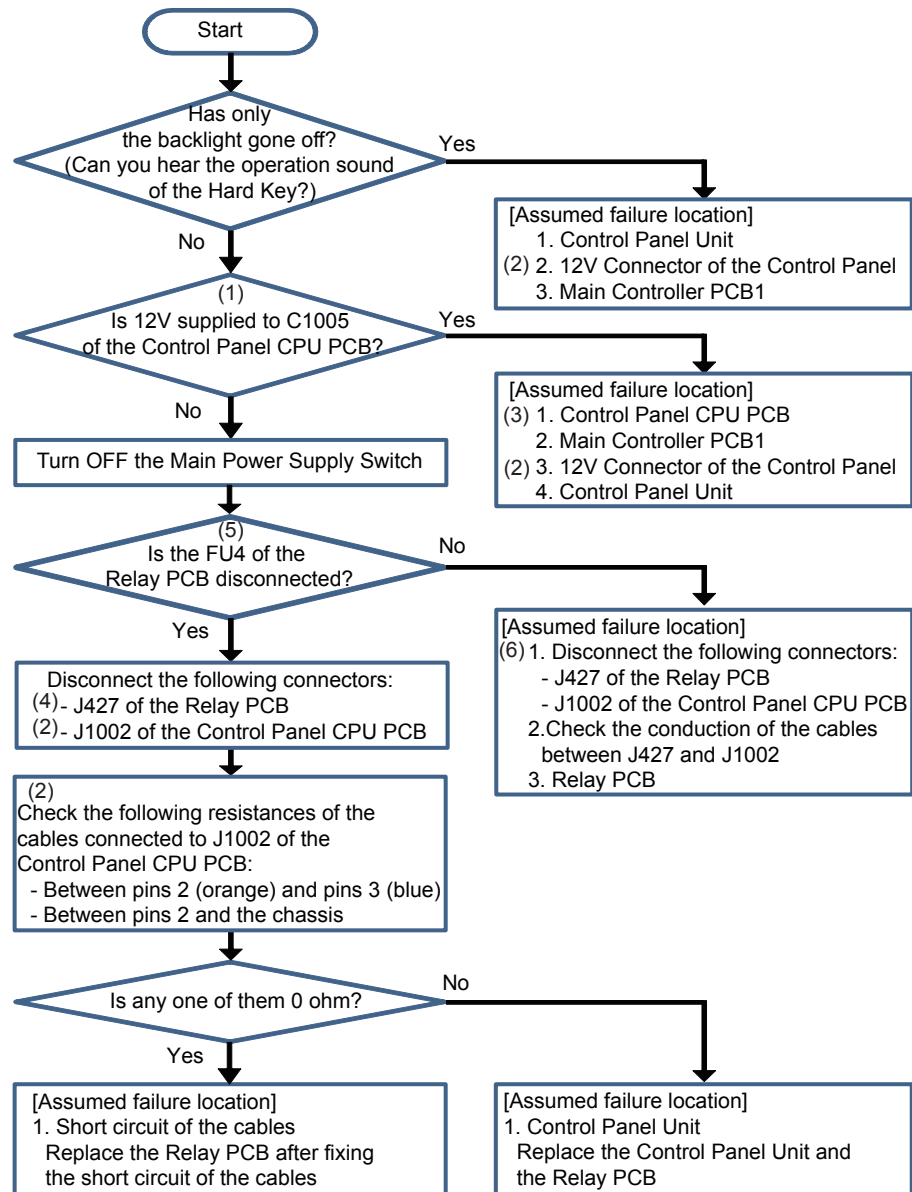
Item	Check item	Location
(1)	Control Panel LED	
(2)	Main Controller PCB1: LED9	
(3)	RISER PCB C26(3.3V)	

Item	Check item	Location
(4a)	Main Controller PCB1: LED9 Main Controller PCB2: LED4	
(4b)	Check each of the pins 1 through 4 (12V) of J104 on the Riser PCB * e.g. pins 1(12V) and pins 5(GND)	

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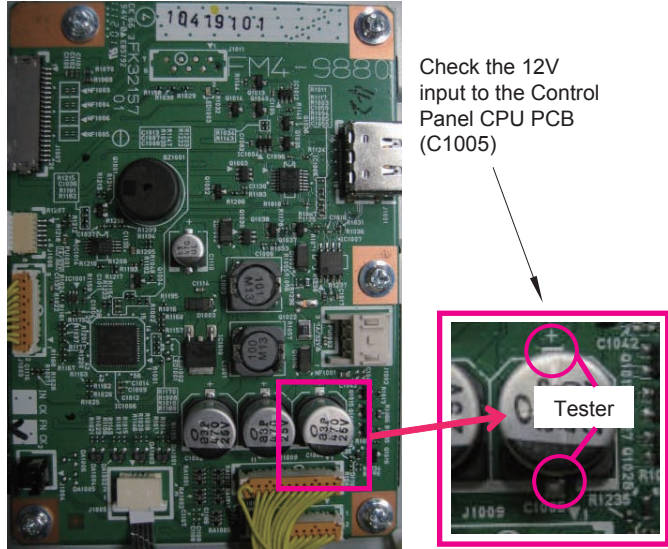
## Flow B: Control Panel 12V Check Flow

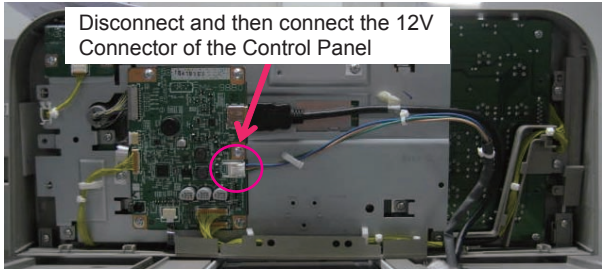
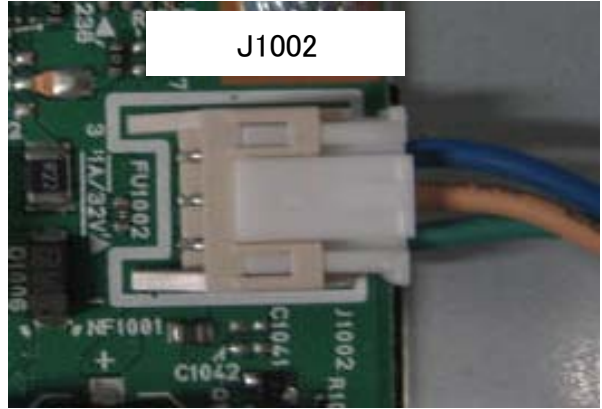
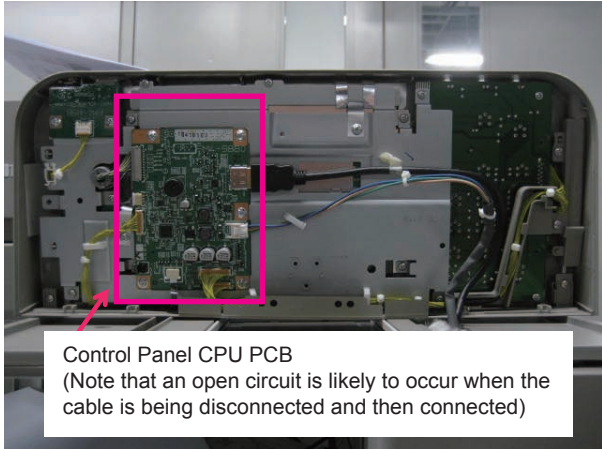
### Control Panel 12V Check Flow

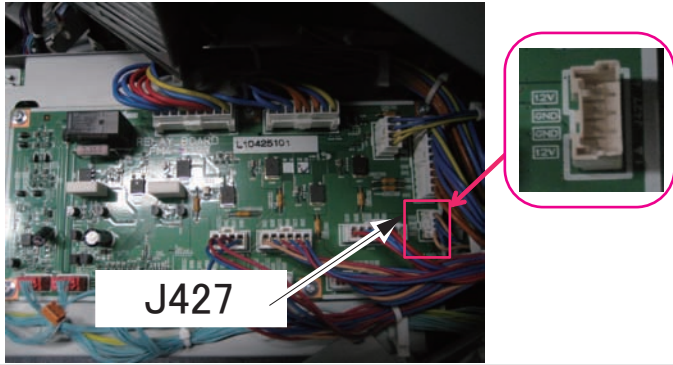
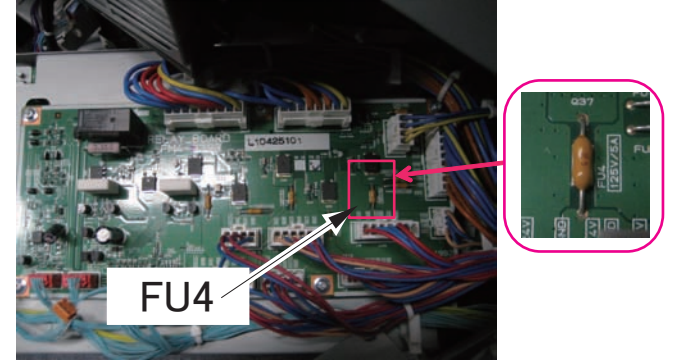


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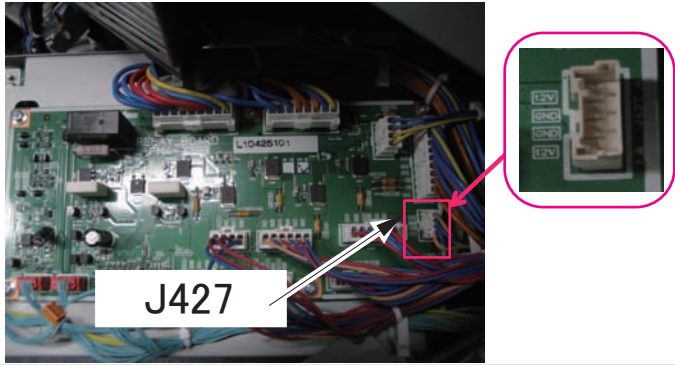
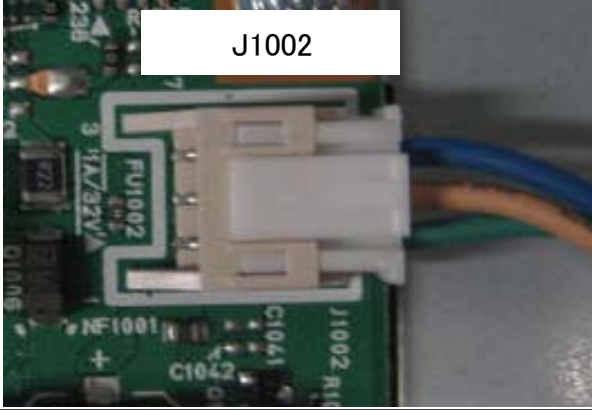
### Check item

Item	Check item	Location
(1)	Control Panel CPU PCB C1005 (12V)	

Item	Check item	Location
(2)	Disconnect and then connect the 12V Power Supply Connector of the Control Panel	 <p>Disconnect and then connect the 12V Connector of the Control Panel</p>
		 <p>J1002</p>
(3)	Control Panel CPU PCB	 <p>Control Panel CPU PCB (Note that an open circuit is likely to occur when the cable is being disconnected and then connected)</p>

Item	Check item	Location
(4)	Relay PCB J427	 <p>J427</p>
(5)	Disconnect J427 of the Relay PCB and check the following resistance: Relay PCB FU4 Normal value: 0 ohm	 <p>FU4</p>



Item	Check item	Location
(6)	Relay PCB J427	 <p>The image shows a green printed circuit board (PCB) with various components. A white arrow points to a connector labeled 'J427'. A pink callout box provides a magnified view of the connector, showing four pins labeled '12V', 'GND', '12V', and 'GND'.</p>
	Control Panel CPU PCB J1002	 <p>A close-up photograph of a white connector labeled 'J1002' on a green PCB. The connector has four pins. Text on the PCB includes 'FU1002', '3 1A/32V', 'C1041', 'C1042', and 'J1002 R11'.</p>
<p>Check the cables between J427 of the Relay PCB and J1002 of the Control Panel CPU PCB.</p> <ol style="list-style-type: none"> <li>1. Disconnect the connectors of J427 and J1002.</li> <li>2. Check if power is distributed between all pins of J427 connector and all the corresponding pins of J1002 connector. Normal value: 0 ohm</li> </ol>		

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## Flow C: Main Controller Analysis Flow

### Status Check

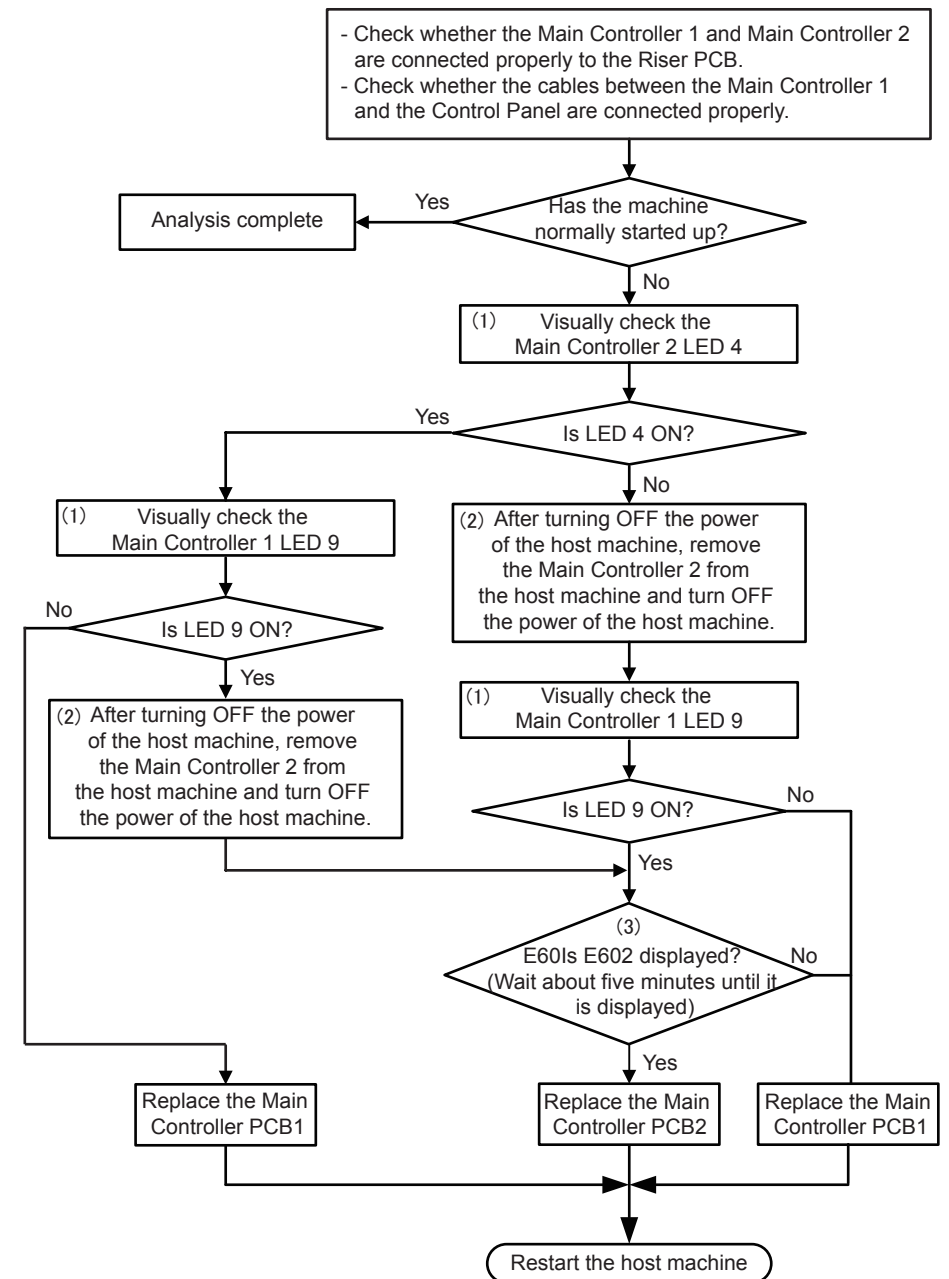
If the Main Controller 1 LED 9 and Main Controller 2 LED 4 cannot be turned ON, identify the location of the failure according to the flow.

### Flow for narrowing down troubles

#### Pre-check items

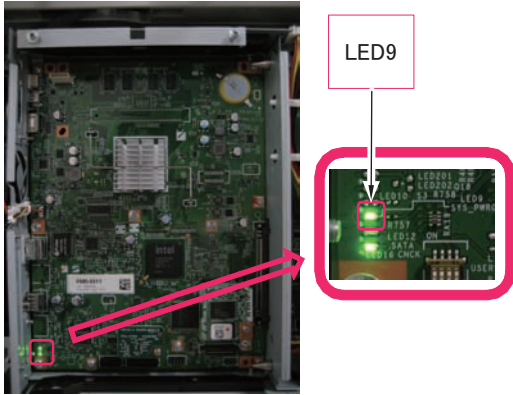
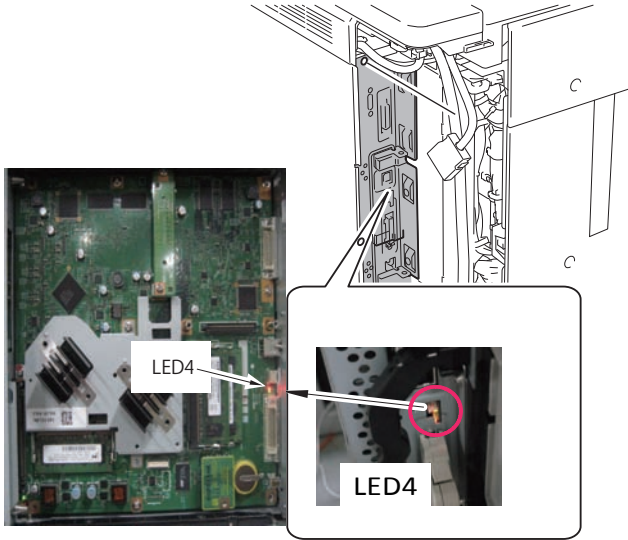
- Check whether the Main Controller 1 and Main Controller 2 are connected properly to the Riser PCB.
- Check whether the cables between the Main Controller 1 and the Control Panel are connected properly.

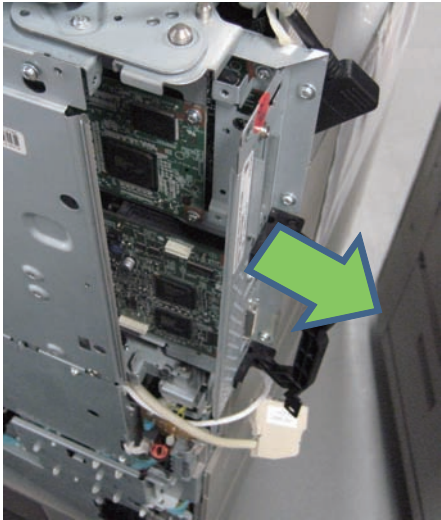
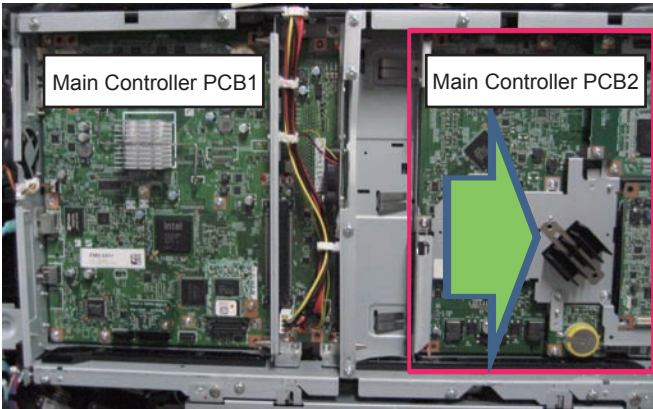
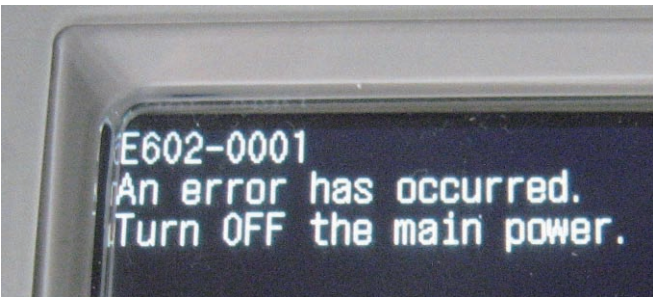
If the Control Panel is not turned ON even after these checks, try identifying the location of the failure through the following procedure.



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## Check item

Item	Check item	Location
(1)	Check the Main Controller 1 LED 9 activation	
	Check the Main Controller 2 LED 4 activation	
<p>You can check the activation of LED 4 (orange) through the hole of the connector for Main Controller 2.</p>		

Item	Check item	Location
(2)	Remove the Main Controller 2	
		
(3)	Display of E-code	

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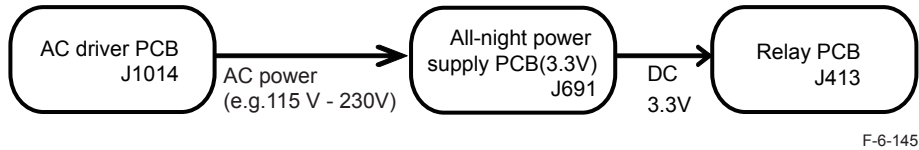
## Flow D: All-night Power Supply (3.3V) System Flow

### Status Check

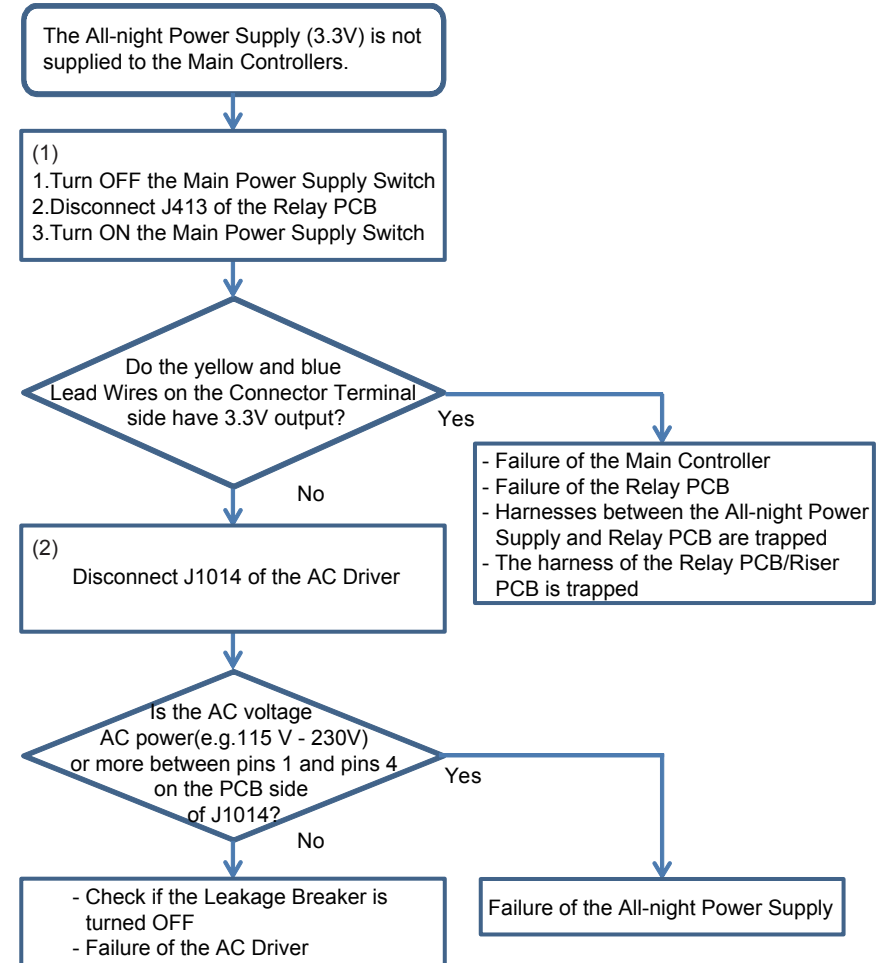
Disconnect J413 of the Relay PCB and, if 3.3V is not supplied to the yellow and blue Lead Wires, identify the location of the failure according to the flow.

### Flow for narrowing down troubles

The following diagram shows the 3.3V power supply route.

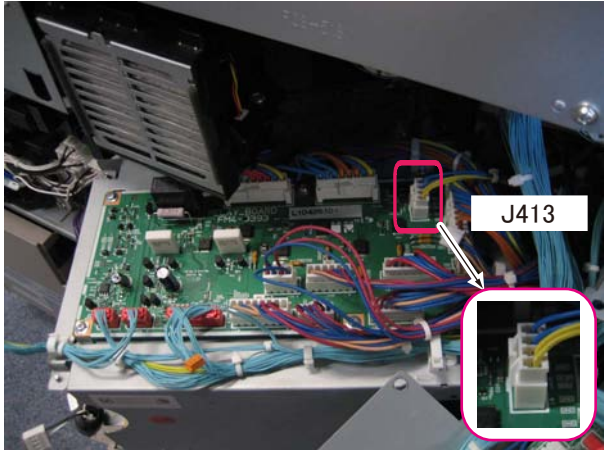
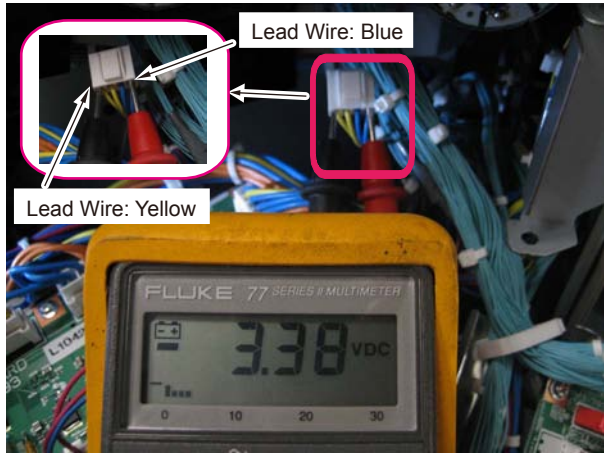


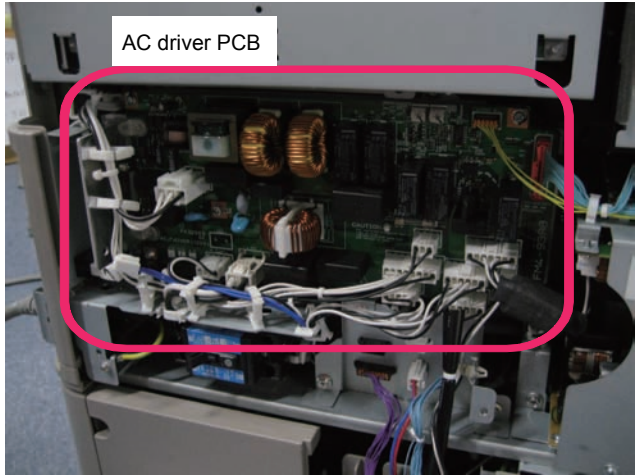
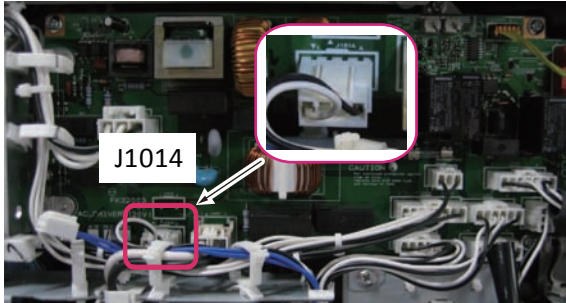
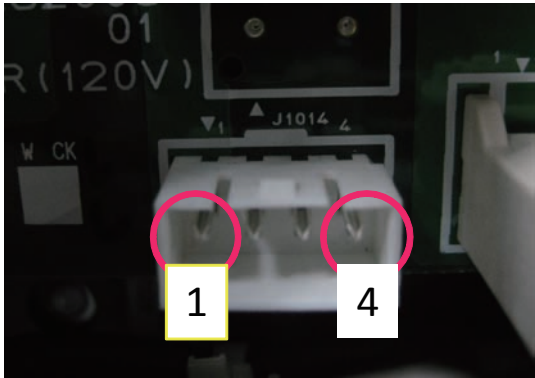
Identify the cause in the following flow:





### ● Check item

Item	Check item	Location
(1)	Relay PCB J413	
	Check the pins 1 and 2 (yellow) and pins 3 and 4 (blue) on the cable side, respectively. e.g. pins 1 (yellow) and pins 4 (blue)	
	J413 is the connector to input 3.3V from the 3.3V All-night Power Supply to the Relay PCB. Normal value: 3.3V	

Item	Check item	Location
(2)	AC driver PCB	
	AC driver PCB J1014	
	PCB side of J1014 Between pins 1 and pins 4 Normal value: AC power (e.g. 115 V - 230 V)	
	J1014 is the connector to supply AC from the AC Driver PCB to the All-night Power Supply. Check whether the pin on the AC Driver PCB has output. Normal value: AC power(e.g. 115 V - 230 V)	

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## Flow E: 12V Power Supply System Flow

### Status Check

If 12V is not output to the orange and blue Lead Wires of the 12V Power Supply Connector, identify the location of the failure according to the flow.

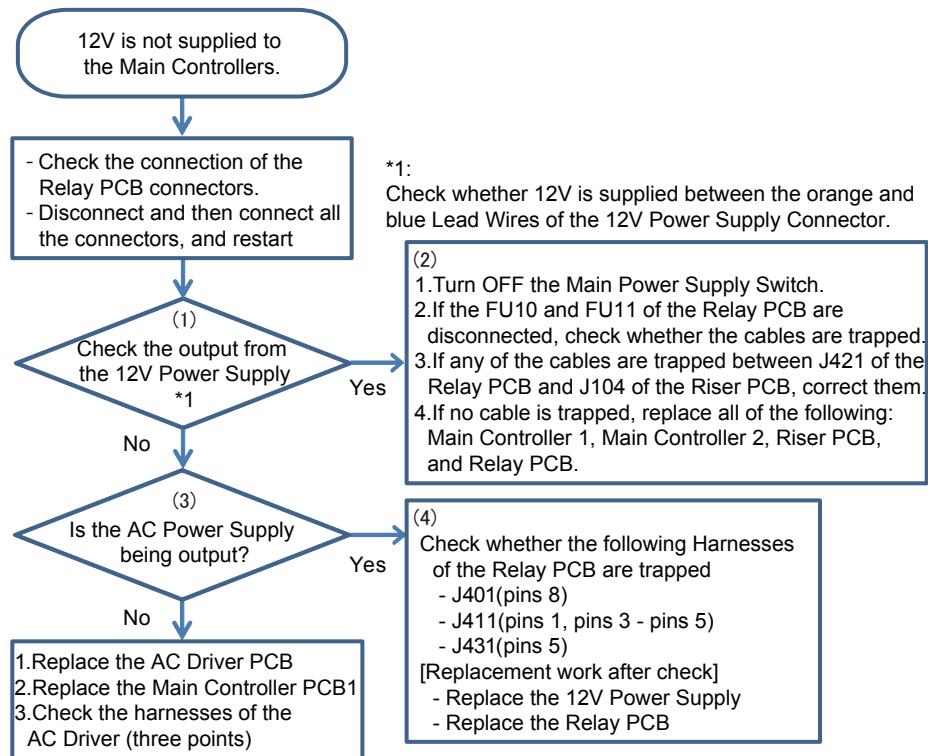
### Flow for narrowing down troubles

#### Description

To check the output of the 12V Power Supply, check the following two points.

- Check the output from the 12V Power Supply
- Check the output from the AC Power Supply

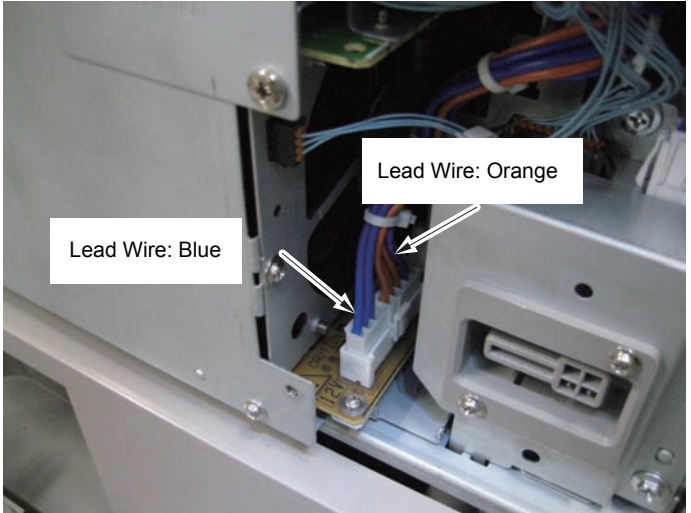
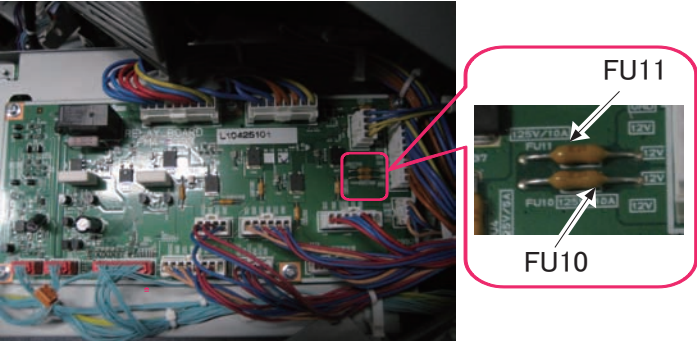
### 12V Power Supply System Flow



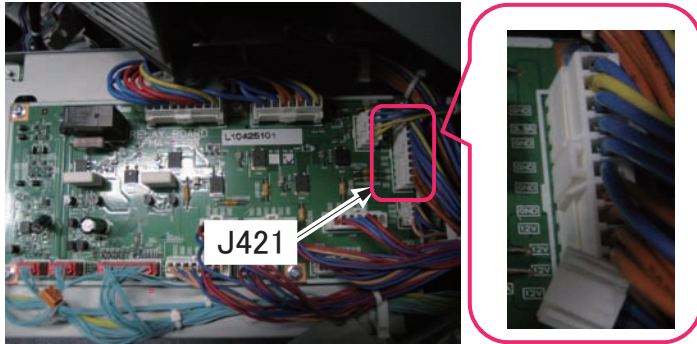
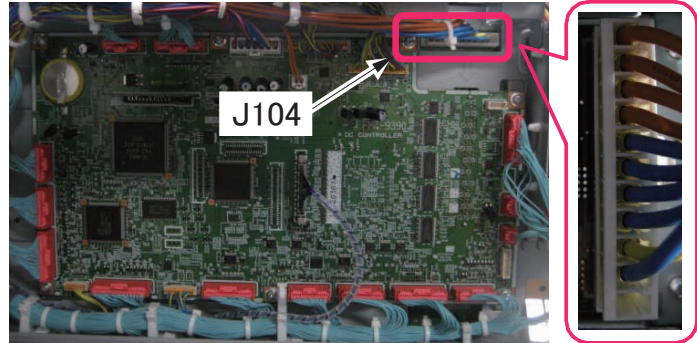
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### Check item

Check the output from the 12V Power Supply

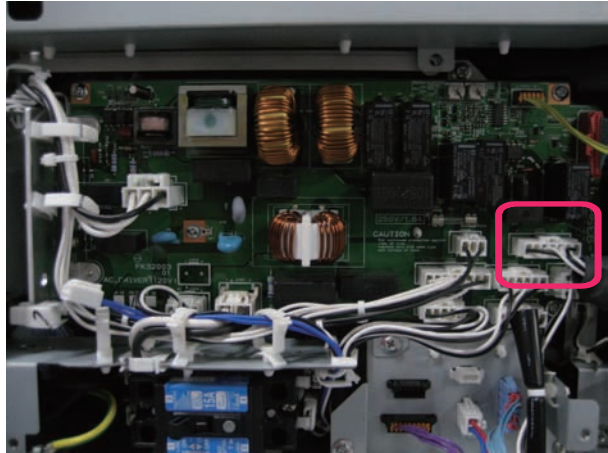
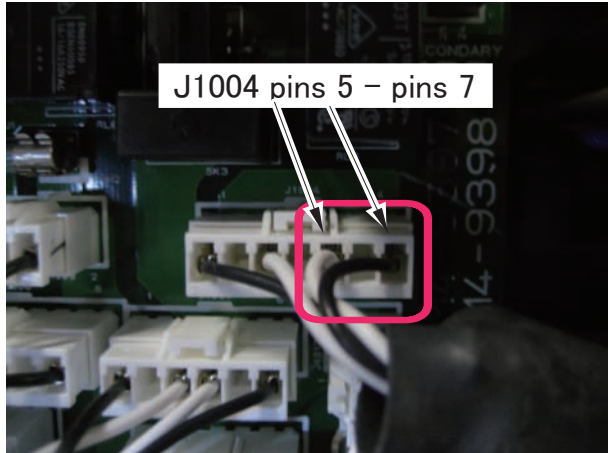
Item	Check item	Location
(1)	12V Power Supply Connector on the cable side Lead Wire: Orange Lead Wire: Blue  Normal value: 12V	
		Orange Lead Wire (+12V) and blue Lead Wire > Normal value: 12V
(2)	Disconnect J421 of the Relay PCB and check the following resistance: Relay PCB FU10 FU11	

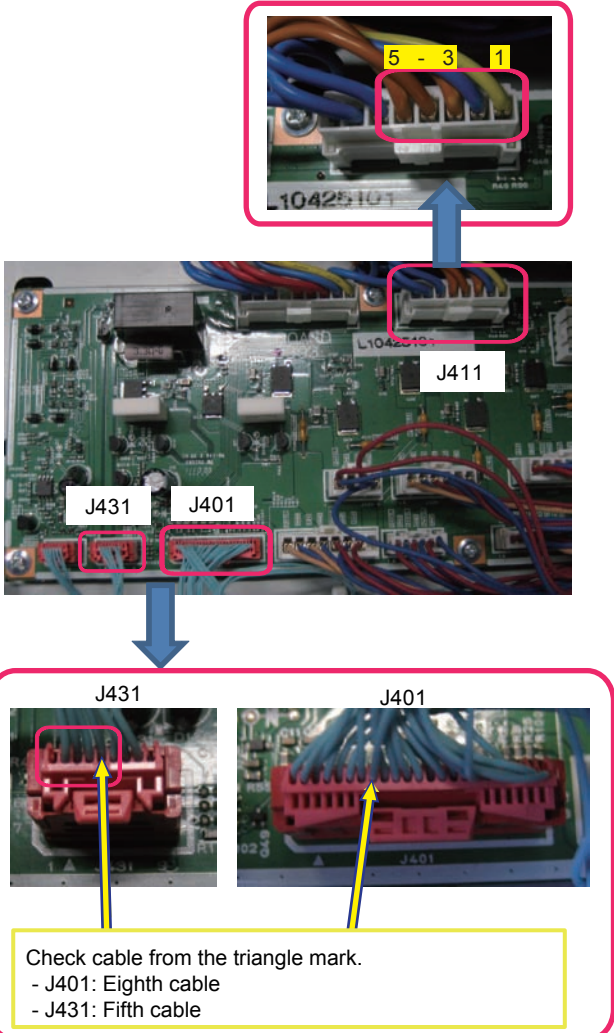


Item	Check item	Location
(2)	Relay PCB J421	
	Riser PCB J104	
<p>Check for any trapped cables and short circuit between J421 of the Relay PCB and J104 of the Riser PCB.</p> <ol style="list-style-type: none"> <li>1. Disconnect the connectors of J421 and J104.</li> <li>2. Check if power is distributed between all pins of J421 connector and all the corresponding pins of J104 connector. Normal value: 0 ohm &lt;In case FU10 or FU11 on the Relay PCB is blown out&gt;</li> <li>3. Check for any trapped cables and short circuit between pin 1 of J421 connector and all the pins of J104 connector (except for the corresponding one), as well as between pin 1 of J421 and the chassis. Normal value: <math>\infty</math> ohm</li> <li>4. Check the rest of the pins of J421 connector in the same manner as step 3.</li> </ol>		

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Check the output from the AC Power Supply

Item	Check item	Location
(3)	AC driver pins 5 - pins 7 Normal value: AC power (e.g. 115 V - 230 V)	 
		AC driver pins 5 - pins 7 (Normal value: AC power(e.g. 115 V - 230 V))

Item	Check item	Location
(4)	J401 J411 J431	 <p>Check cable from the triangle mark. - J401: Eighth cable - J431: Fifth cable</p>
<p>Check whether the cables are trapped</p> <ul style="list-style-type: none"> <li>• J401(pins 8)</li> <li>• J411(pins 1,pins 3 - pins 5))</li> <li>• J431(pins 5)</li> </ul>		

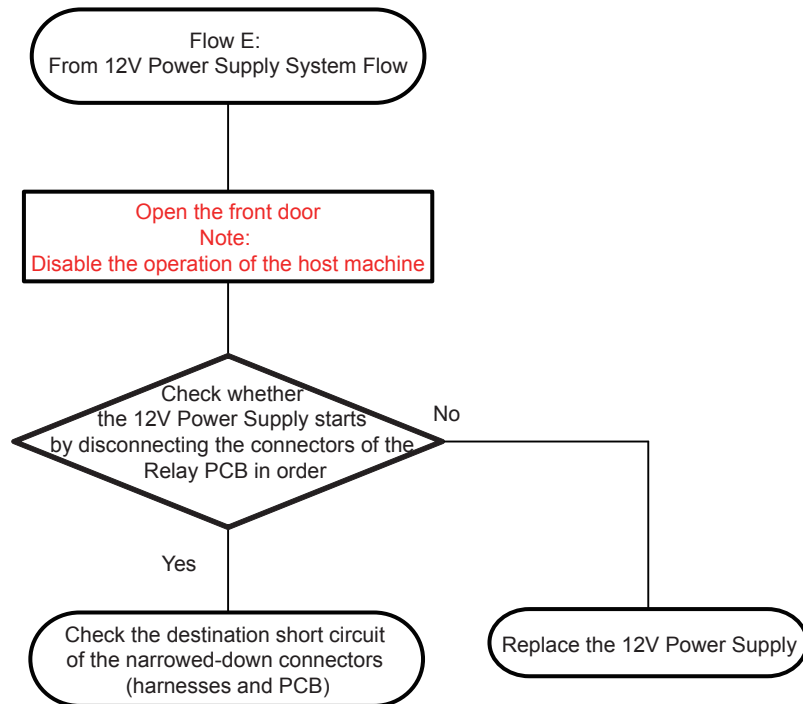
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## Flow F: Connector Disconnection Flow

### Status Check

At the time of startup, the LEDs of Main Controller 1 and 2 turn ON and the Main Controller Fan rotates, but it stops immediately.

### Flow for narrowing down troubles



\* e.g.

If 12V starts when the DC Controller connector is disconnected

Disconnect the connector of the DC Controller PCB in order and identify the location of failure

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### Check item

1. If the problem remains unsolved even after checking the short circuit of the harnesses, disconnect the following connector one by one and repeat the following procedure to check whether the symptoms change.

1-a. Open the front door. (Disable the operation of the host machine)

1-b. Check whether the 12V Power Supply starts by disconnecting the appropriate connectors of the Relay PCB.

J422	DC Controller
J423	HansoDriver PCB
J424	DrumDriver PCB
J425	High voltage PCB
J426	Reader ADF Unit
J427	UI, USB Device Port

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1-c. If 12V Power Supply does not start even if disconnecting and connecting the connector, replace the 12V Power Supply.

2. Check the destination short circuit of the narrowed-down connectors (harnesses and PCB). e.g.

If 12V starts when the DC Controller connector is disconnected, disconnect the connector of the DC Controller PCB in order and identify the problem.

## Reference: Activation conditions of the Control Panel Backlight

### Description

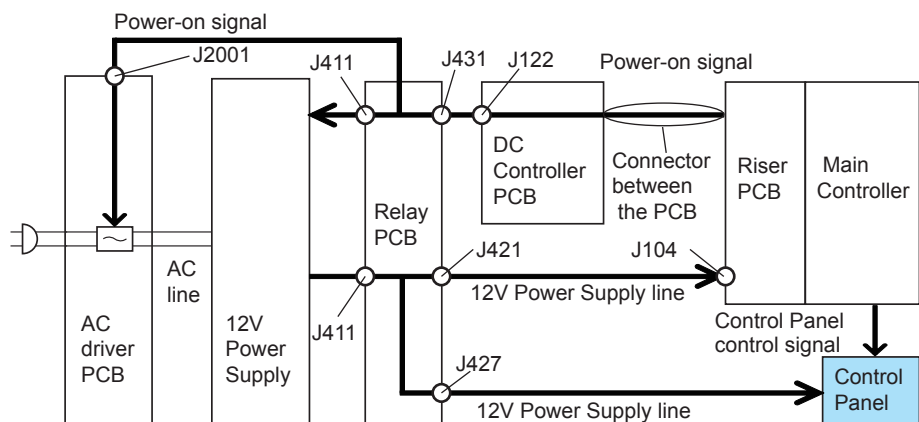
Following are the details of conditions when the Control Panel Backlight is activated:

### Field Remedy

The Control Panel Backlight is turned ON when 12V power is supplied from the Relay PCB.

The details on the route to supply 12V power are as follows:

- The Control Panel Backlight is turned ON when 12V power is supplied. The 12V power is supplied through the following route:  
AC Driver PCB > 12V Power Supply PCB > Relay PCB > Control Panel
- The power-on signal (which keeps the supply of 12V power) is sent through the following route:  
Main Controller 2 > Main Controller 1 > Riser PCB > DC Controller > Relay PCB > 12V Power Supply
- The 12V Power Supply receives its power supply from the AC Driver PCB and the power-on signal (which keeps the supply of AC power) is sent through the following route:  
Main Controller PCB2 > Main Controller PCB1 > RISER PCB > DC Controller PCB > Relay PCB > AC driver PCB



F-6-149

### Reference:

When the power-on signal is blocked, the power supply stops even if the Power Supply Unit is operating properly.

The power-on signal is output at 1 to 3V.

## Flow G: Execution Flow of Startup System Failure Diagnosis

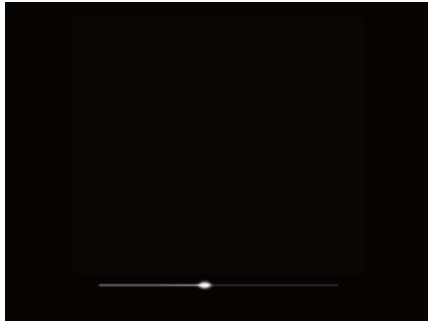
### Status Check

If startup does not complete properly with only the Control Panel bar displayed, identify the location of the failure according to the flow.

### Flow for narrowing down troubles

#### Description

The workflow of the Controller system failure diagnosis to be executed when only the Control Panel bar is displayed.

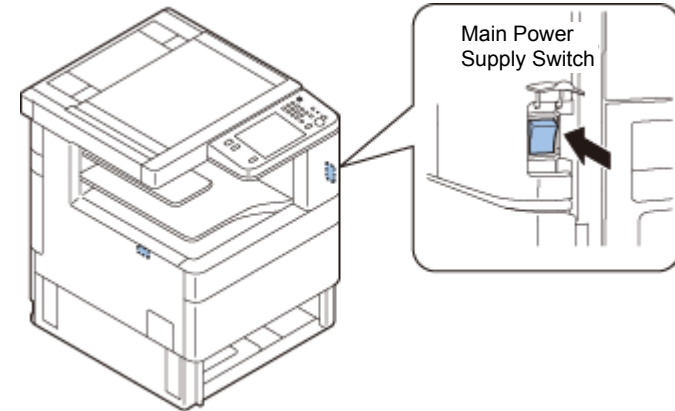


F-6-150

### Check item

#### Startup Method

1. Turn ON the Main Power Supply Switch while pressing the numeric keys '2' and '4' simultaneously.



F-6-151

2. Keep pressing the numeric keys until the following screen appears on the Control Panel. (approx. 20 seconds)



F-6-152



## Procedure A: Detailed Procedure of Startup System Failure Diagnosis

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 Main Controller PCB1
  - Replace the HDD.
  - Replace the Main Controller PCB2
  
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 HDD.
  - Replace the Main Controller PCB1
  - Replace the Main Controller PCB2

## 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 1/2 and other related PCBs (child PCBs such as SDRAM or TPM mounted in the Main Controller PCB 1/2).

PCBs and units diagnosed by each tool are as follow:

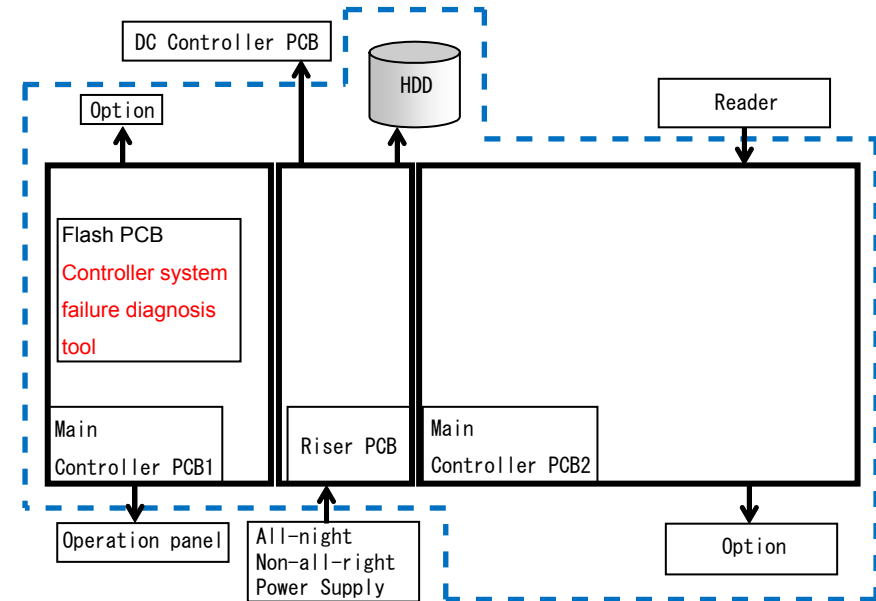
#### Controller System Error Diagnosis Tool

- Main Controller PCB 1 side <Main Controller PCB 1, SDRAM, TPM PCB>
- Main Controller PCB 2 side <Main Controller PCB 2, SDRAM (M0\*, M1), SDRAM (P), Memory PCB, Open I/F PCB (option)>
- Rizer PCB / HDD

\* SDRAM (M0) is an option.

#### Overview

Error diagnosis tools are installed in this machine, and stored in the locations shown below.



F-6-153

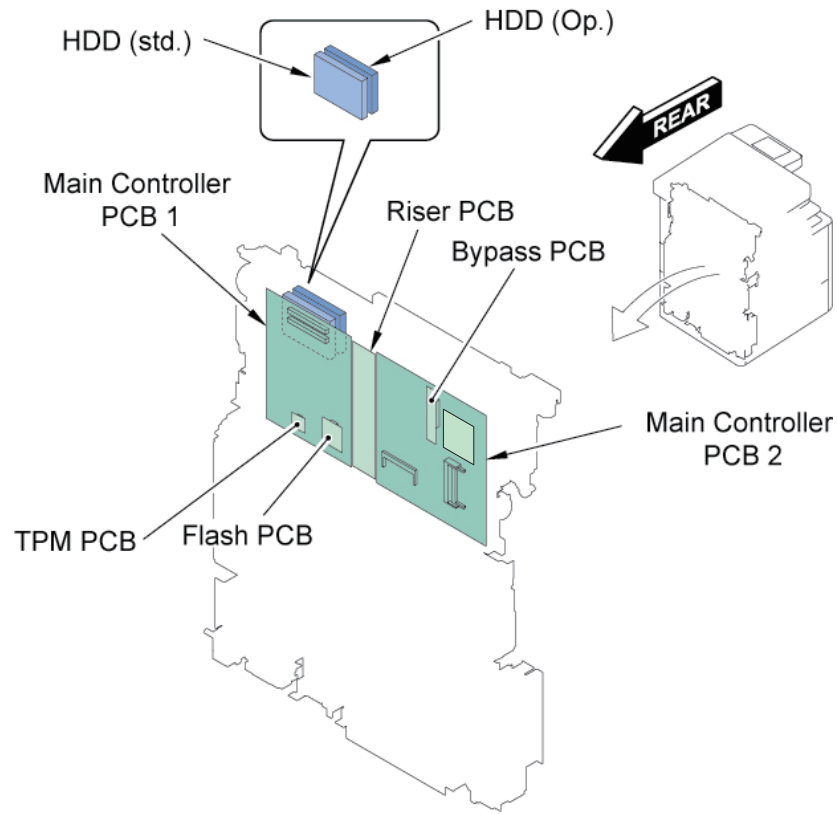
Controller System Error Diagnosis Tool covers the components shown in the blue frame (dotted line).

#### Controller System Error Diagnosis Tool

This tool automatically checks the Main Controller PCB 1/2, child PCBs mounted on the Main Controller PCB 1/2, and HDD, and display the result on the Control Panel.

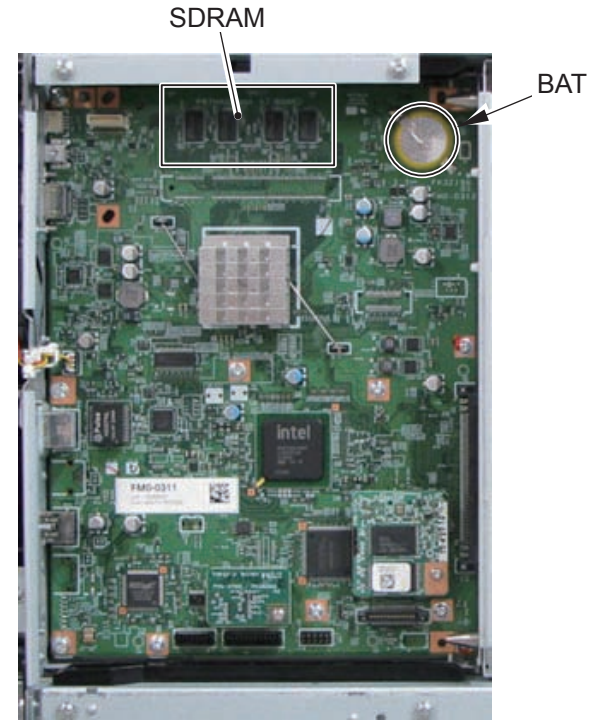
● Layout Drawing

Layout Drawing of PCBs Subject to Diagnosis



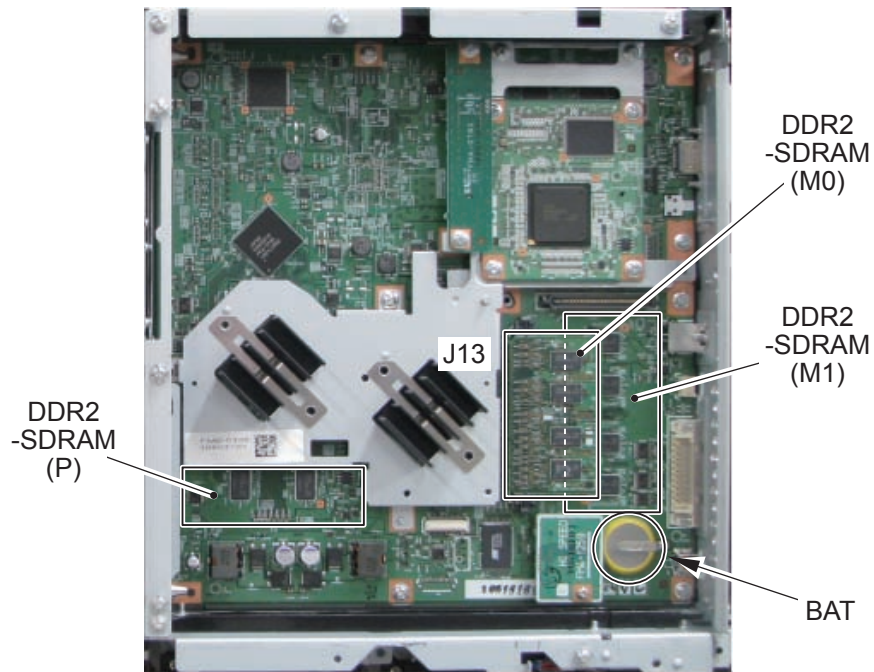
F-6-154

Main Controller PCB 1



Main Controller PCB 2

F-6-155

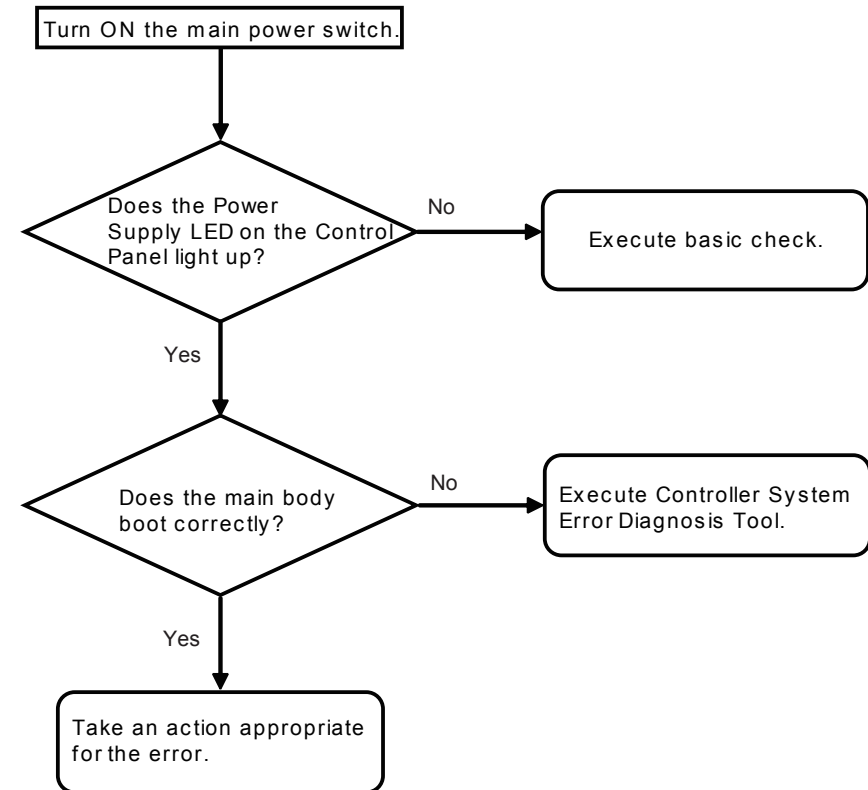


F-6-156

## Basic Flowchart

### Basic Check Items

Check all of the items shown below.



F-6-157

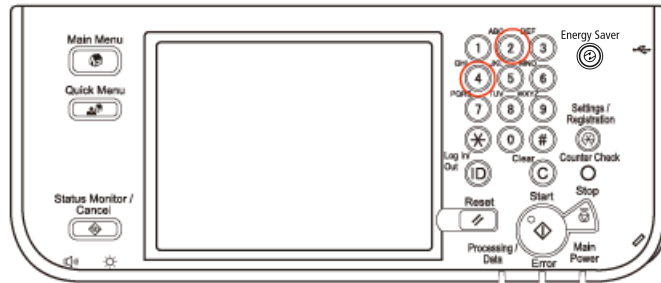
### Basic Check Items

1. Check if the Leakage Breaker is turned OFF.
2. Check if the Power Supply Plug is disconnected.
3. Check if the Connection Cable between the Main Controller PCB 1 and Control Panel is disconnected.
4. Check if the Connection Main Controller PCB 1 and Main Controller PCB 2 definitely?
5. Check if the Connection An All-night Power Supply. Change Non-all-night Power Supply if not recovered.

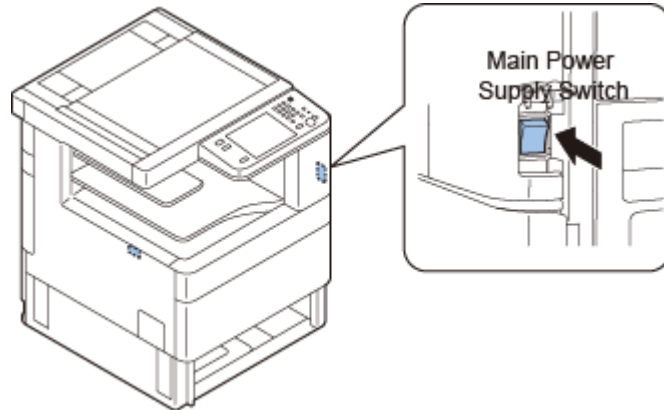
## Controller System Error Diagnosis

### Boot Method

- 1) Turn ON the Main Power Supply Switch while pressing the numeric keys '2' and '4' simultaneously.

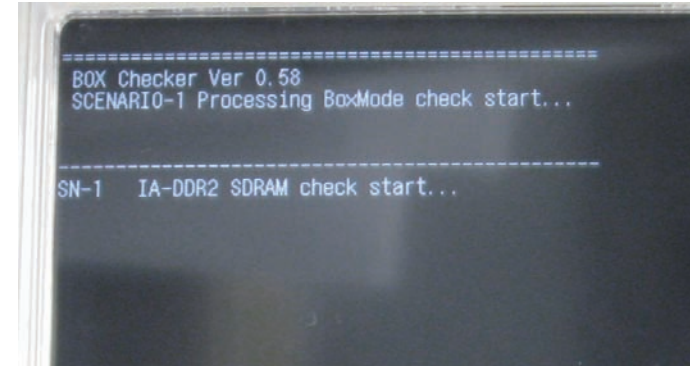


F-6-158



F-6-159

- 2) Keep pressing the numeric keys (for approx. 20 seconds) until the following screen appears on the Control Panel.



F-6-160

#### NOTE:

When this tool is not installed correctly, the following regular screen is displayed. In this case, perform the following remedy.

Turn OFF the Main Power Supply Switch again, and execute step 1 and 2 shown above.

If this tool still does not boot, it means that BCT is deleted. So, install BCT. If BCT is not installed correctly, "--.--" is displayed in Service Mode (COPIER > DISPLAY > VERSION > BCT) in the main body.

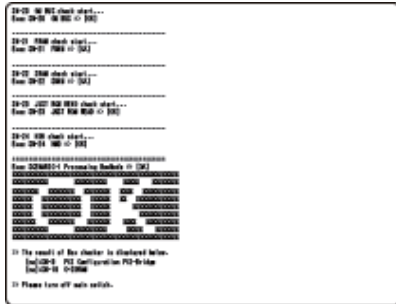


F-6-161

## ● Diagnosis Time

Diagnosis is completed in approx. 3 minutes.  
The result is displayed on the Control Panel.

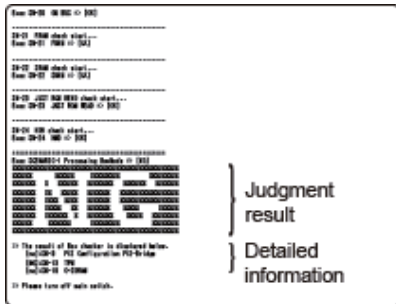
### <When the diagnosis result is normal>



F-6-162

### <When an error is detected by diagnosis>

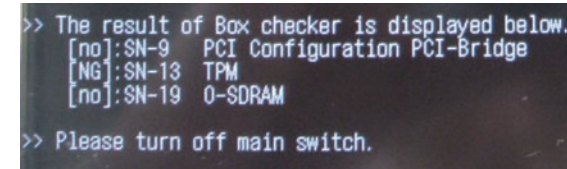
Detailed information is displayed under the judgment result. In detailed information, the name of the test where an error was detected is indicated.



F-6-163

<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.



F-6-164

[no] means that optional PCBs are not mounted.

When [no] is displayed although an optional PCB is mounted, it means that an error has been occurring.

[NG] means that an error occurred to PCBs mounted as standard.

<Controller System Error Diagnosis Table>

The error locations are identified according to the following table.

Test Name	Description	Assumed Error Location	Remedy	Error Code
SN-1 IA-DDR2 SDRAM	Check an error between the Main Controller PCB 1 and SDRAM on the Main Controller PCB 1	<ul style="list-style-type: none"> <li>Main Controller PCB 1</li> <li>SDRAM on Main Controller PCB 1</li> </ul>	1. Replace the Main Controller PCB 1.	-
SN-2 SM BUS IA DIMM1	Check an SM bus error in SDRAM (outside) on the Main Controller PCB 1	<ul style="list-style-type: none"> <li>Main Controller PCB 1</li> <li>SDRAM (outside) on Main Controller PCB 1</li> </ul>	1. Replace the Main Controller PCB 1.	-
SN-4 SM BUS IA Clock Gen	Check an SM bus error in Clock Generator on the Main Controller PCB 1	<ul style="list-style-type: none"> <li>Main Controller PCB 1</li> </ul>	1. Replace the Main Controller PCB 1.	-
SN-5 SM BUS SOC DIMM1	Check an SM bus error in the Main Controller PCB 1 and the Main Controller PCB 2	<ul style="list-style-type: none"> <li>Main Controller PCB 1</li> <li>Main Controller PCB 2</li> <li>SDRAM on Main Controller PCB 2</li> </ul>	1. Check the connection of the Main Controller PCB 1, and the Main Controller PCB 2. 2. Check the installation of SDRAM (M1) on the Main Controller PCB 2. 3. Replace SDRAM (M1) on the Main Controller PCB 2. 4. Replace the Main Controller PCB 2. 5. Replace the Main Controller PCB 1.	-
SN-6 PCI Config Maestro	Check a PCI bus error in the Main Controller PCB 1 and the Main Controller PCB 2	<ul style="list-style-type: none"> <li>Main Controller PCB 1</li> <li>Main Controller PCB 2</li> <li>SDRAM on Main Controller PCB 2</li> </ul>	1. Check the connection of the Main Controller PCB 1, and the Main Controller PCB 2. 2. Replace the Main Controller PCB 1. 3. Replace the Main Controller PCB 2.	-
SN-7 PCI Config LANC	Check a LAN chip error on the Main Controller PCB 1	<ul style="list-style-type: none"> <li>Main Controller PCB 1</li> </ul>	1. Replace the Main Controller PCB 1.	-
SN-8 PCI Config PCI-Bridge	Check a PCI bus error between the Main Controller PCB 1	<ul style="list-style-type: none"> <li>Main Controller PCB 1</li> </ul>	1. Check the installation between the Main Controller PCB 1. 2. Replace the Main Controller PCB 1.	-
SN-9 CPLD	Check failure of CPLD chip on the Main Controller PCB 1	<ul style="list-style-type: none"> <li>Main Controller PCB 1</li> </ul>	1. Replace the Main Controller PCB 1.	-
SN-10 LANC SPI	Check failure of LANC SPI on the Main Controller PCB 1	<ul style="list-style-type: none"> <li>Main Controller PCB 1</li> </ul>	1. Replace the Main Controller PCB 1.	-

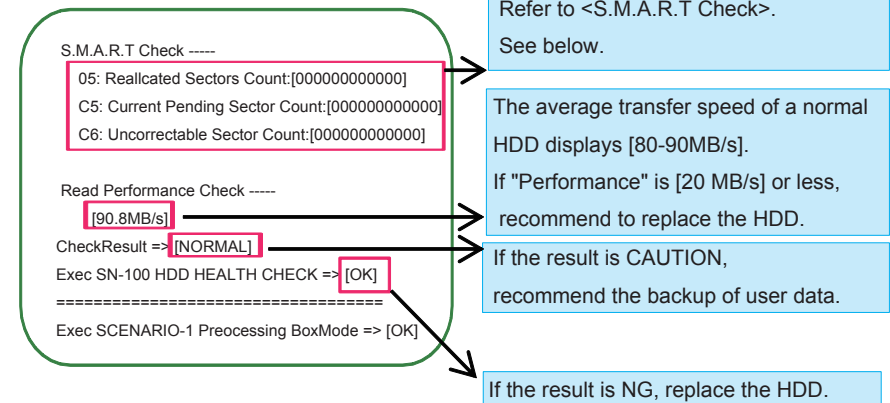
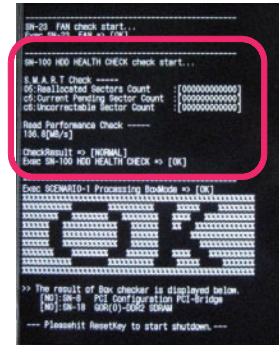
Test Name	Description	Assumed Error Location	Remedy	Error Code
SN-11 RTC CHECK	Check failure of RTC on the Main Controller PCB 1	<ul style="list-style-type: none"> <li>Main Controller PCB 1</li> </ul>	1. Replace the Main Controller PCB 1.	-
SN-12 TPM	Check failure of the TPM PCB on the Main Controller PCB 1 * TPM PCB is not installed in products for China. So, the diagnosis results NG.	<ul style="list-style-type: none"> <li>Main Controller PCB 1</li> <li>TPM PCB</li> </ul>	1. Check the installation of the TPM PCB. 2. Replace the TPM PCB. 3. Replace the Main Controller PCB 1.	E746
SN-13 DDR2 SDRAM	Check an error between SDRAMs on the Main Controller PCB 2	<ul style="list-style-type: none"> <li>Main Controller PCB 2</li> <li>SDRAM (M0) on Main Controller PCB 2</li> </ul>	1. Check the installation of SDRAM (M0) on the Main Controller PCB 2. 2. Replace SDRAM (M0) on the Main Controller PCB 2. 3. Replace the Main Controller PCB 2.	-
SN-14 FLASH ROM	Check failure of CPU ROM (IC60) on the Main Controller PCB 2	<ul style="list-style-type: none"> <li>Main Controller PCB 2</li> </ul>	1. Replace the Main Controller PCB 2.	-
SN-15 P-DDR2 SDRAM	Check an error between the Main Controller PCB 2 and SDRAM (P) on the Main Controller PCB 2	<ul style="list-style-type: none"> <li>Main Controller PCB 2</li> <li>SDRAM (P)</li> <li>Open I/F PCB</li> <li>Bypass board</li> </ul>	1. Check the connection of the bypass board /Open I/F board. 2. Replace the Main Controller PCB 2.	E747 E748
SN-16 GOR(R)-DDR2 SDRAM	Check failure of Rchip SDRAM on the Main Controller PCB 2	<ul style="list-style-type: none"> <li>Main Controller PCB 2</li> <li>Open I/F PCB</li> <li>Bypass board</li> </ul>	1. Check the connection of the bypass board /Open I/F board. 2. Replace the Main Controller PCB 2.	E747 E748
SN-17 S-SDRAM	Check failure of Schip SDRAM on the Main Controller PCB 2	<ul style="list-style-type: none"> <li>Main Controller PCB 2</li> </ul>	1. Replace the Main Controller PCB 2.	E747 E748 E732
SN-18 GOR-DDR2 SDRAM	Check failure of Ochip SDRAM on the Open I/F PCB	<ul style="list-style-type: none"> <li>Main Controller PCB 2</li> <li>Open I/F PCB</li> </ul>	1. Check the installation of the Open I/F PCB. 2. Replace the Open I/F PCB. 3. Replace the Main Controller PCB 2.  Supplementary Information: If the Open I/F PCB is not installed, [no] is displayed for the diagnosis result.	E747 E748
SN-19 GU BUS	Check a GUBUS error on the Main Controller PCB 2	<ul style="list-style-type: none"> <li>Main Controller PCB 2</li> <li>Open I/F PCB</li> <li>Bypass PCB</li> </ul>	1. Check the installation of the Open I/F PCB or the Bypass I/F PCB on the Main Controller PCB 2. 2. Replace the Open I/F PCB or the Bypass I/F PCB on the Main Controller PCB 2. 3. Replace the Main Controller PCB 2.	E747 E748



Test Name	Description	Assumed Error Location	Remedy	Error Code
SN-20 FRAM	Check failure between the Main Controller PCB 2 and the Memory PCB	<ul style="list-style-type: none"> <li>Main Controller PCB 2</li> <li>Memory PCB</li> </ul>	<ol style="list-style-type: none"> <li>Check the installation of the Memory PCB on the Main Controller PCB 2.</li> <li>Replace the Memory PCB on the Main Controller PCB 2.</li> <li>Replace the Main Controller PCB 2.</li> </ol>	E355
SN-21 SRAM	Check failure of SDRAM and battery exhaustion on the Main Controller PCB 2	Main Controller PCB 2	1. Replace the Main Controller PCB 2.	E246 E350 E355
SN-22 JUST ROM READ	Check ROM READ on the Main Controller PCB 2	Main Controller PCB 2	1. Replace the Main Controller PCB 2.	-
SN-23 HDD	Check an HDD I/F error	<ul style="list-style-type: none"> <li>Main Controller PCB 2</li> <li>HDD Cable</li> <li>HDD</li> </ul>	<ol style="list-style-type: none"> <li>Check the cable connection of the HDD.</li> <li>Check the connection between the Main Controller PCB 2 and the Main Controller PCB 1.</li> <li>Replace the HDD.</li> </ol>	-
SN-24 S-SRI	Check an SRI bus	<ul style="list-style-type: none"> <li>Main Controller PCB 2</li> <li>Image processing sub PCB</li> </ul>	<ol style="list-style-type: none"> <li>Check the Image processing sub PCB connection</li> <li>Replace the Image processing sub PCB</li> <li>Replace the Main Controller PCB 2.</li> </ol>	
SN-25 FAN1	Check FAN1	<ul style="list-style-type: none"> <li>Main Controller PCB 1</li> <li>Riser PCB</li> </ul>	<ol style="list-style-type: none"> <li>Check the connection of the Fun connector(J15) on Main Controller 1.</li> <li>Check the connection of the Fun connector(J109/J110) on Riser PCB.</li> </ol>	
SN-100	HDD S.M.A.R.T information collection and performance check (Refer to the display example shown below.)	HDD	<ul style="list-style-type: none"> <li>If the result(S.M.A.R.T Check) is not [0], recommend the backup of user data.</li> <li>If "Performance" is [20 MB/s] or less, recommend to replace the HDD.</li> <li>If the result(CheckResult) is CAUTION, recommend the backup of user data.</li> <li>If the result(Exec SN-100 HDD HEALTHCHECK) is NG, replace the HDD.</li> </ul>	

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Display HDD S.M.A.R.T



F-6-165

<S.M.A.R.T Check>

S.M.A.R.T Check	Explanation	Countermeasure
05: Reallocated Sectors Count:[000000000000]	Count of reallocated sectors.	If the result is not [000000000000], recommend the backup of user data.
C5: Current Pending Sector Count:[000000000000]	Current count of unstable sectors (waiting for remapping).	If the result is not [000000000000], recommend the backup of user data.
C6: Uncorrectable Sector Count:[000000000000]	Quantity of uncorrectable errors.	<ul style="list-style-type: none"> <li>If the result is not [000000000000], recommend the backup of user data and replace the HDD.</li> <li>* Alarm 31-0008 may occur in the main body.</li> </ul>

T-6-32

**Note:**

Correspondence at the HDD Data Encryption & Mirroring 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

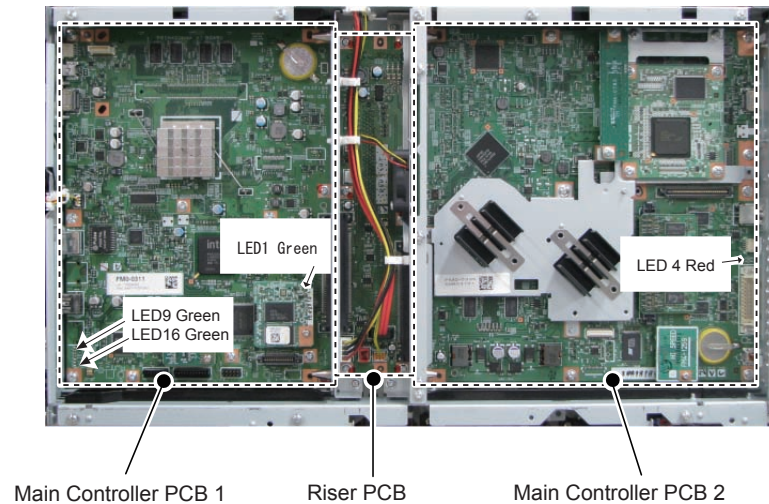
### <Controller System Error Diagnosis>

- Regarding the diagnosis for the test names (SN-1, 2, 7, 15, 21, 24), if an error occurs in the diagnosis under the test names, this diagnosis tool will not boot.
- When no PCBs are installed on the Main Controller PCB 1/2, the following judgment results are displayed.
  - Standard PCB: [NG]
  - Optional PCB: [OK]However, [no] is displayed in detailed error information for optional PCBs.

## Operation Check of the Main Controller LEDs

You may be able to determine the remedies against Main Controller-related troubles by checking the lighting status of LEDs on the PCB.

### Location of LEDs



F-6-166

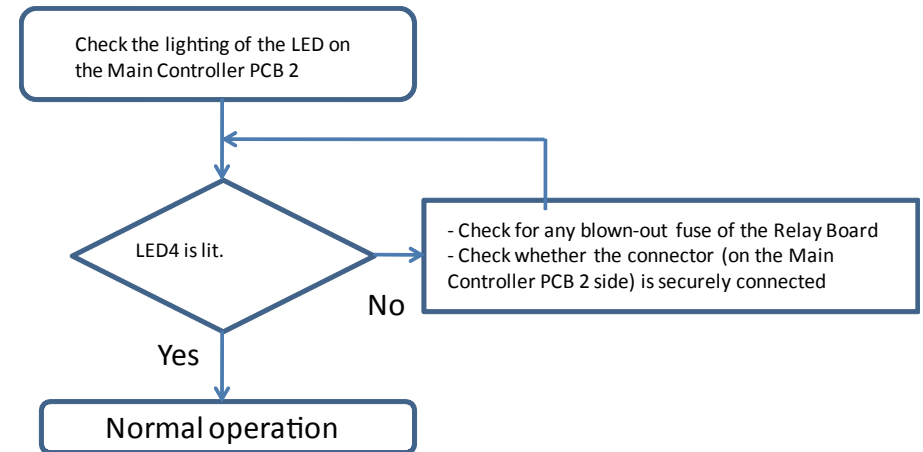
### Preconditions

Check whether the Main Controller PCB 1 and the Main Controller PCB 2 are properly inserted.

Check whether the connectors are securely connected. LEDs are not lit when the contactation is poor. (Power-on is not possible)

When the LED of the Control Panel main power is not lit, check the connection of cables (such as UI Cable).

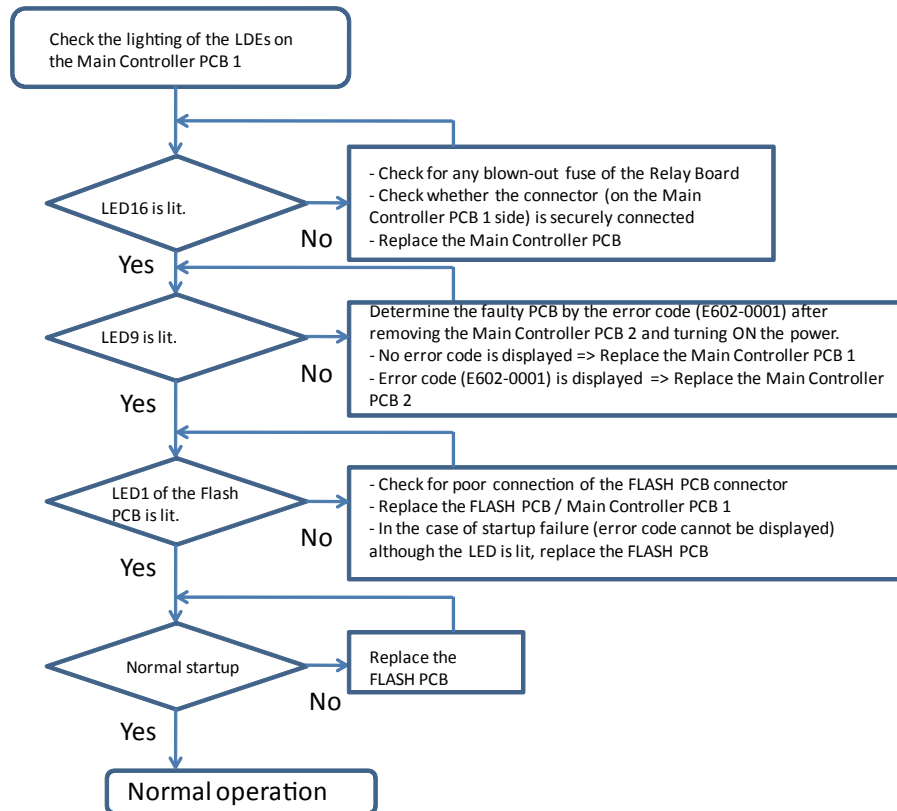
### Checking the lighting of the LED4 RED on the Main Controller 2



F-6-167

## Check the lighting of the LDEs on the Main Controller PCB 1

- Main Controller PCB 1 - LED9, LED16
- Flash PCB - LED1



F-6-168

## Debug log

### Scope of Application

#### Purpose

When the Canon quality-appointed staff determines the need for an analysis of debug log by the R&D department, we ask the field to collect log for an investigation to determine the cause.

### Overview

#### Function Overview

Debug log is an integrated log for failure analysis that gathers logs prepared by the software modules in the device for debug purpose.

In the case of a field failure that is hard to be reproduced, this measure is intended to improve efficiency in failure analysis and reduce the time for failure support by collecting debug log at the user site (which was created immediately after the failure) and sending it to the R&D. When the Canon quality-appointed staff determines the need for an analysis of firmware debug log by the R&D department, we ask the field to collect log for an investigation to determine the cause.

#### Effective Instances of Collecting Debug Log

- The error occurs only at the customer site and cannot be reproduced by the sales company or the Canon staff who is in charge of quality follow-up.
- When the error frequency is low.
- When the error is suspected of links with firmware rather than a mechanical/electrical failure.

\* Collection of Sublog is not necessary when the reproduction procedure is identified and the error can be reproduced by the sales company HQ or the Canon staff who is in charge of quality follow-up.

### Types of Logs

There are continuous logs, event logs, and manual logs.

Type	Collecting method	Size of logs	Setting
Event log	Automatically recorded in accordance with the conditions specified in DEBUG-1.	Less than 500MB	Service mode Lev2: COPIER > FUNCTION > SYSTEM > DEBUG-1 > 3 (default) 3: Exception + E code + Reboot Make movement same as 3 even if you change setting of it.
Manual log	Perform the following procedure. 1. Hold down the [Counter] button (10 seconds or longer). 2. Press 1 on the numeric keypad. 3. Press 2 on the numeric keypad. 4. Press 3 on the numeric keypad. While logs are being obtained, the screen is locked. It takes approx. 3 minutes before obtaining the logs is completed and the user can work on the screen.		n/a

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### Conditions of Log Collection

- Logs can be collected on a PCB-by-PCB basis. (SUBLOG, SUBLOG\_RCON, SUBLOG\_DCON)

Location	File name	Automatic collection		Manual collection
		Logs generated while the host machine is being operated.	Event log When an event has occurred	Manual log
Main Controller	SUBLOG	Yes	Yes	Yes
Reader Controller	SUBLOG_RCON	No	Yes	Yes
DC Controller	SUBLOG_DCON	No	Yes	Yes

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### Collection of Logs

Connect SST or a USB memory device,  
and select COPIER > FUNCTION > SYSTEM > DOWNLOAD > OK to collect logs.



### ● When the data is sent to the USB memory device

A folder of the year, month, day, hour, and minute is created in the USB memory device. The log file is saved in the folder.

Example: Folder 201205241821

SUBLOG_DCON.TXT	89 KB
SUBLOG_DCON01.TXT	89 KB
SUBLOG_RCON.TXT	47 KB
SUBLOG_RCON01.TXT	47 KB
SUBLOG00_0104_0524130499.Z	1,841 KB
SUBLOG00_0105_0524131010.Z	472 KB
SUBLOG00_0106_0524132088.Z	72 KB
SUBLOG00_XX00_0524130499.Z	1,841 KB
SUBLOG01_0034_0524130499.Z	1 KB
SUBLOG01_0035_0524132088.Z	1 KB
SUBLOG02_0001_0524130499.Z	30 KB
SUBLOG02_0002_0524132088.Z	163 KB
SUBLOG04_0034_0524130499.Z	2 KB
SUBLOG04_0035_0524132088.Z	1 KB
SUBLOG05_0034_0524130499.Z	1 KB
SUBLOG05_0035_0524132088.Z	1 KB
SUBLOG06_0034_0524130499.Z	5 KB
SUBLOG06_0035_0524132088.Z	1 KB
SUBLOG07_0034_0524130499.Z	2 KB
SUBLOG07_0035_0524132088.Z	1 KB
SUBLOGLUT.TXT	64 KB

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### ■ Uploading Data by SST

The following shows a method to collect a log by connecting a PC with SST (Ver. 4.63 or later) running to the machine.

### ■ Preconditions:

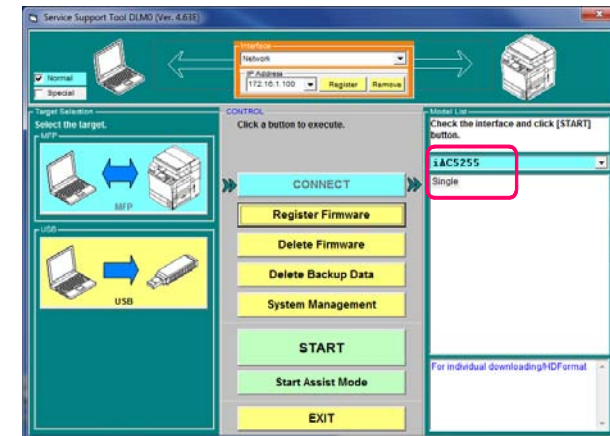
In addition to continuous logs, obtained manual logs (holding down the counter + 1, 2, and 3 keys) and event logs (DEBUG-1) are stored in the machine.

A PC where SST is running is connected to the machine, and the machine is in download mode.

Note:

Executing a log collection by SST deletes logs in the machine.

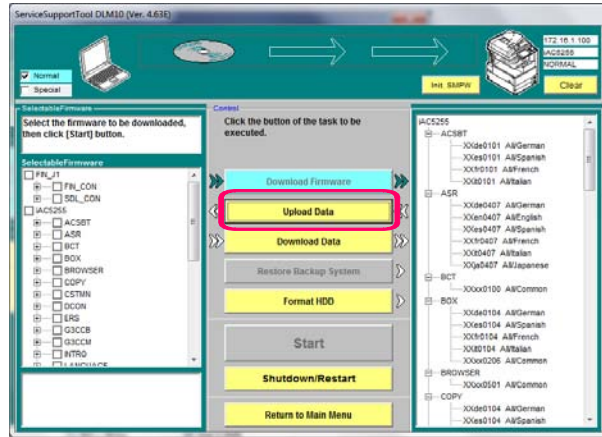
1. Start SST (Ver. 4.63 or later) and select iRC5051 from Model List. Press the Start button.



F-6-174



2. Press the Upload Data button.



F-6-175

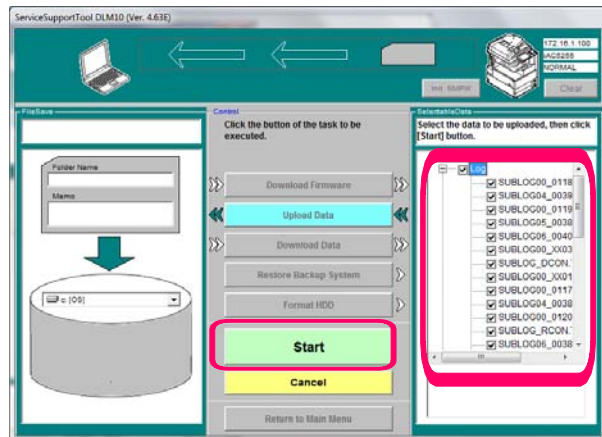
3. Select the data to be uploaded, then click [Start] button.

When there is no log in the machine, it results in blank option items for "data to upload".  
When the file name is longer than the frame, it displays that it is a log in the comment column just below.

It is displayed as "log" in the figure below.

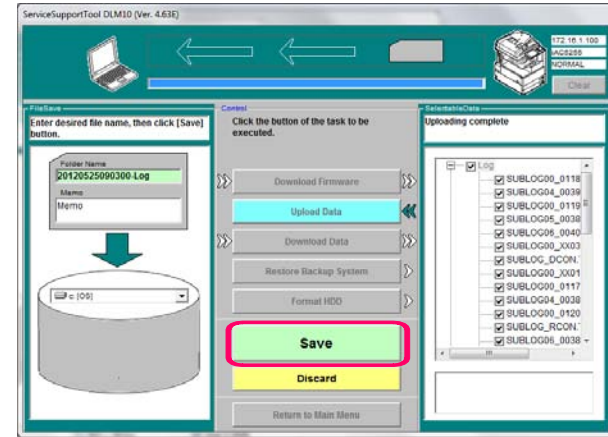
Note:

The log is not stored when You cancel it before pushing the Start button.  
It is deleted from the main body.



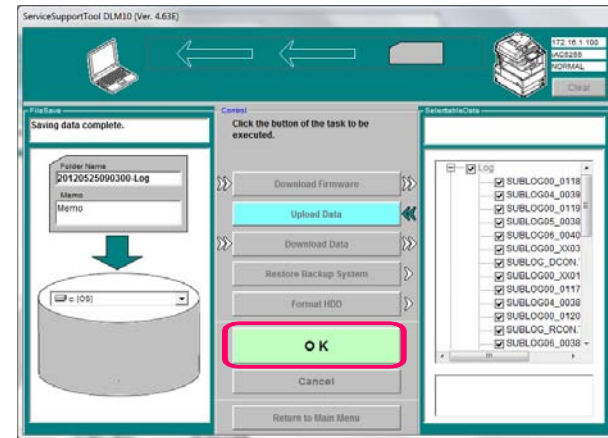
F-6-176

4. Press the "Save" button.



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5. Check that the data storage is completed and click the "OK" button.





















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6. Check that the log is stored in the specified location in the PC.

In the initial setting:

Windows(C:) > ServData > iAxxxx(Model) > JWH00003(Serial number) > 20120524192934-Log(yymmddhhmm)

 SUBLOG00_0107_0524133128.Z	537 KB
 SUBLOG00_0108_0524135388.Z	211 KB
 SUBLOG00_0109_0524135657.Z	459 KB
 SUBLOG00_0110_0524154811.Z	449 KB
 SUBLOG00_0111_0524164947.Z	513 KB
 SUBLOG00_0112_0524172420.Z	460 KB
 SUBLOG00_0113_0524184522.Z	455 KB
 SUBLOG00_0114_0524191388.Z	134 KB
 SUBLOG01_0036_0524135388.Z	1 KB
 SUBLOG01_0037_0524191388.Z	1 KB
 SUBLOG02_0000_0524185645.Z	442 KB
 SUBLOG02_0001_0524191388.Z	49 KB
 SUBLOG02_0003_0524135388.Z	120 KB
 SUBLOG02_0004_0524162625.Z	445 KB
 SUBLOG04_0036_0524135388.Z	2 KB
 SUBLOG04_0037_0524191388.Z	2 KB
 SUBLOG05_0036_0524135388.Z	1 KB
 SUBLOG05_0037_0524191388.Z	1 KB
 SUBLOG06_0036_0524135388.Z	9 KB
 SUBLOG06_0037_0524191388.Z	9 KB
 SUBLOG07_0036_0524135388.Z	2 KB
 SUBLOG07_0037_0524191388.Z	2 KB

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**NOTE:**

- If the obtained log file name contains "SHT", it means that the log was recorded at the time of shutdown.

Example:

SUBLOG00\_0001\_0918140788SHT.TXT

When checking the occurrence date and time with the user, if the performed operations include turning OFF the power, use the file name "SHT" as a clue for identifying the date and time.

- If the number of seconds is expressed as "99 + three-digit number", the number shows the cause which triggered the log acquisition (e.g. acquisition due to an error code E[three-digit number]).

Example:

When an error code E747 occurred  
SUBLOG00\_0001\_0918140799747.TXT

When checking the occurrence date and time with the user, if an error code has occurred, use E[three-digit number] as a clue for identifying the date and time.

## Network Packet Capture

### Overview

The network capture function is an embedded function of the machine. The network data sent to and received from the machine can be collected (captured) without using any special equipment.

Until now, in the case of network failures that could not be solved at the first visit, the service technician collected packet at the second visit to solve it.

By providing this function, investigation to determine the cause is available before the second visit to take some measures. Also, service technicians can reproduce the symptoms of network failure and collect network packet to bring it back to the office.

The network capture data can be collected using SST/USB memory.

There is no need to prepare dedicated equipments (PC, HUB, cable, packet capture software, etc.) that have been needed before.

The following effects can be expected thanks to the embedded feature.

- The packet in customer environment can be collected by remote operation.
- Packet collection can be continued when the symptom is not reproduced during the visit.
- For network failures on iR-ADV collaboration (a function to communicate between machines across a network), packet collection for both sides becomes easy.

#### Caution:

The network capture function may fail to collect a part of packet in a high-loaded network environment.

The network capture function of the machine is more prone to failures in collecting packet than when using a PC to do so.

When collecting packet due to trouble of print data, etc., a case is assumed in which it is impossible to judge whether it is a failure in the print data or a failure in collecting packet.

To check whether packet is failed to be collected by the network capture function of the machine, there may be a case where user is requested to collect packet using a PC.

### Overall flow

- 1) Enable network capture
- 2) Start the network capture function
- 3) Overwrite function
- 4) Encryption function
- 5) Start/stop network capture
- 6) Stop the network capture function
- 7) Disable network capture

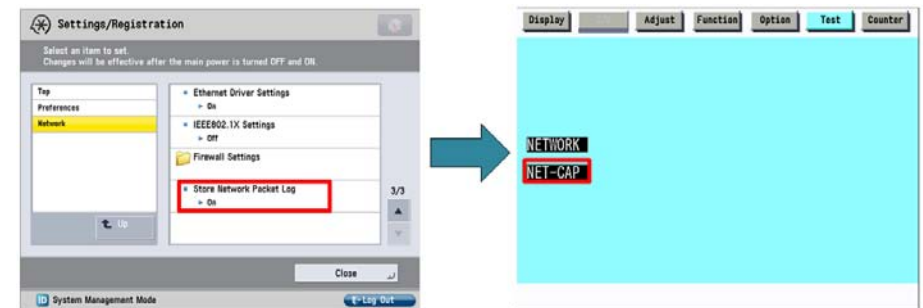
### Embedded Network Packet Capture Collection

#### Enable network capture

To enable this function, the following 2 steps need to be executed.

- Enabling the license of network capture
- Enabling user mode > Network > Store Network Packet Log

Because this function is able to acquire the customer information such as print data, it is not standard function. You make it valid as free license option after obtaining permission from the customer. Then it displays "OFF/ON" in the user mode, you obtain permission from the customer again and let the customer change it to ON.



F-6-182

Changing it to "ON" in user mode, it is displayed in Service Mode.

## Start the network capture function

Select the following: Service Mode(level 2) Copier > Test > NET-CAP > CAPOFFON > "1".

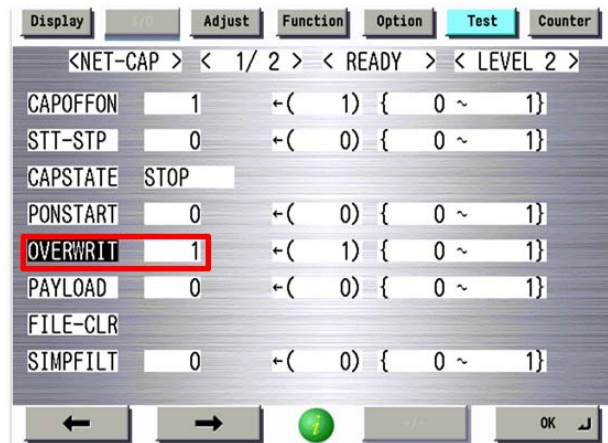


F-6-183

\*1: ON (enabled) The capture function is available.

## Overwrite function

Select the following: Service Mode(Level 2) Copier > Test > NET-CAP > OVERWRIT > 1



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### Note:

When the HDD space becomes full after starting the capture, the oldest file is deleted and the captured data continues to be saved; therefore, it is necessary to set "1: Overwrite" in advance.

The following shows the machine behavior when the HDD space reaches full.

### When the overwriting setting is ON

- The oldest packet file is deleted. The oldest file is determined by the last update time of the file (not by the date and time attached to the file).
- When the HDD space reaches full during packet collection, the oldest file is deleted to continue collecting packet data to the currently-stored file.
- CAPSTATE of capturing continues to be "RUNNING".

### When the overwriting setting is OFF

- Capturing is stopped.
- CAPSTATE of capturing becomes "HDDFULL". Note that STT-STP remains as start state (1). Capturing is started again by changing the value from STT-STP (0) to STT-STP (1).
- If the HDDFULL state is cleared when starting capturing again, capturing is started.
- CAPSTATE of capturing becomes "RUNNING".
- If the HDDFULL state is not cleared, starting data capturing results in an error.
- CAPSTATE of capturing remains as "HDDFULL".
- When a command of stopping data capturing is given during the "HDDFULL" state, CAPSTATE of capturing remains as "STOP".

## Encryption function

Select the following: Service Mode(Level 2) Copier > Test > NET-CAP > ENCDATA >2.

0: Data is encrypted at data extraction (factory setting value).

1: Data is not encrypted at data extraction.

2: Two types of files (one in encrypted format and another in clear text format) are extracted at data extraction.





F-6-185

**Note:**

When collecting data using SST, the above service mode setting is not reflected and both files in encrypted format and clear text format are always collected.

When the encryption setting is enabled, the extension of the extracted packet data is XXX.can.

When the encryption setting is disabled, the extension of the extracted packet data is XXX.cap.

This setting applies only when using USB memory for data extraction.

This setting is ignored when using SST for data collection because both files in encrypted format and clear text format are extracted.

**Start/stop network capture**

- 1) Select the following: Service Mode(Level 2) Copier > Test > NET-CAP > STT-STP > 1.
- 2) To stop capturing, set "0".



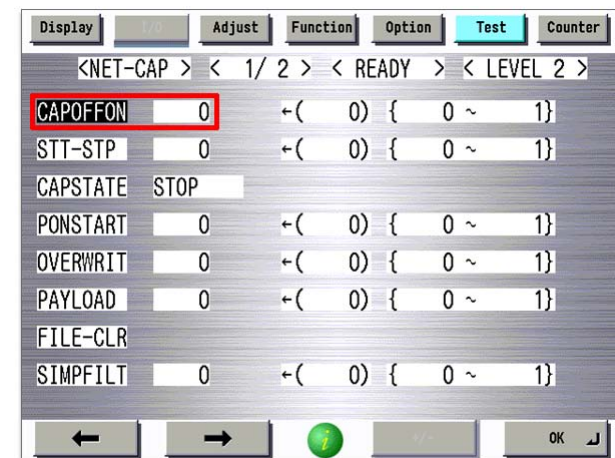
F-6-186

"RUNNING" is displayed for the item CAPSTATE during packet collection.

"STOP" is displayed at the time of shipment or at completion of packet collection, and "HDDFULL" is displayed when 1GB of data (the upper limit for packet collection) is collected.

**Stop the network capture function**

Select the following: Service Mode(Level 2) Copier > Test > NET-CAP > CAPOFFON > 0.



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**Caution:**

Be sure to stop the network capture function after collecting network packet capture data.

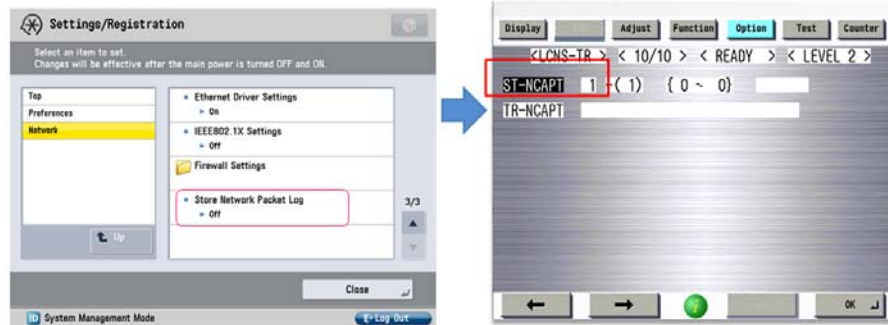
0: OFF (disabled) The capture function is not available. At the time of shipment.

1: ON (enabled) The capture function is available.

### ● Disable network capture

1) Select the following in user mode: Network > Store Network Packet Log > OFF.

2) Select the following: Service Mode(Lv2) Copier > Option > LCNS-TR > ST-NCAPT > 0, and click OK.



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**Caution:**

Be sure to disable the network capture function once analysis of network failure is complete. It is required to disable and transfer the license; however, the further step, LMS license transfer, is not required.

## ■ Other functions

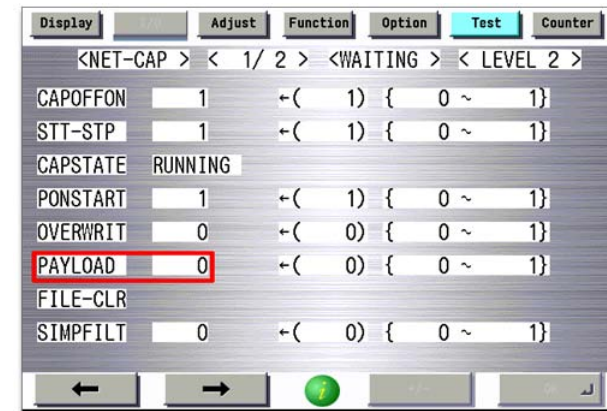
### ● Payload discard function

Payload is customer data. Data is collected including payload by default. To prevent leak of customers' information or large volume of network packet, the network packet can be collected while payload is discarded.

Service Mode(Level 2) Copier>Test>NET-CAP>PAYLOAD

0: Payload is not discarded (factory setting value)

1: Payload is discarded



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### ● Filter function

Filtering setting is available.

Service Mode(Level 2) Copier > Test > NET-CAP > SIMPFLT

0: Filtering is performed. All the data is collected (factory default setting).

1: Only the packet data where the machine's MAC address is included in the destination address or sender's address of Ether header is captured.



F-6-190

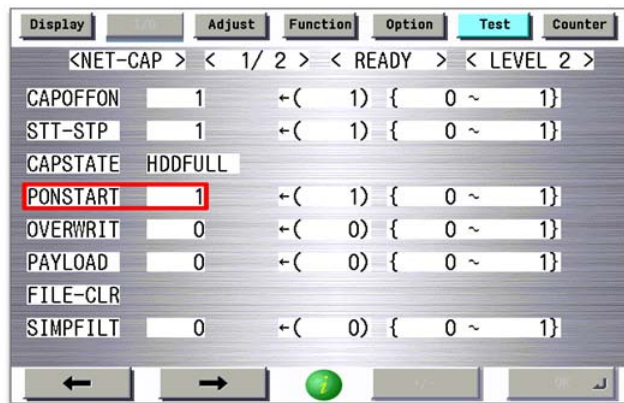
### Collection function at startup

Setting this service mode automatically starts collecting packet data if the condition of network capture operation is satisfied when the main power of the host machine is turned ON. Completion of packet data collection needs to be executed manually.

Service Mode(Level 2) Copier > Test > NET-CAP > PONSTART

0: Data is not automatically collected at startup (factory setting value).

1: Data is automatically collected at startup.

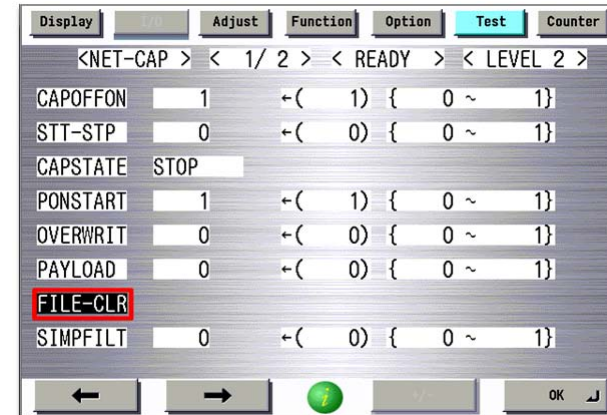


F-6-191

### Delete files

Delete all the network capture data stored on the HDD.

Select Service Mode(level 2) Copier > Test > NET-CAP > FILE-CLR, and then click the OK button.



F-6-192

## SST Network Packet File Collection

### Overview

- Collect the network capture data that has been stored in the machine using SST.
- It is possible to use files in clear text format for in-house analysis by using free software, such as Wireshark. Note that only Canon Inc. can analyze encrypted files. In the case of failure in solving problems, send encrypted files to Canon Inc.
- When using SST for collecting data, the setting of encryption function in Service Mode(level 2) Copier > Test > NET-CAP > ENCDATA is disabled and files in clear text format/encrypted format can be always collected.

### Preparation

PC with SST (V4.62 or later) registered

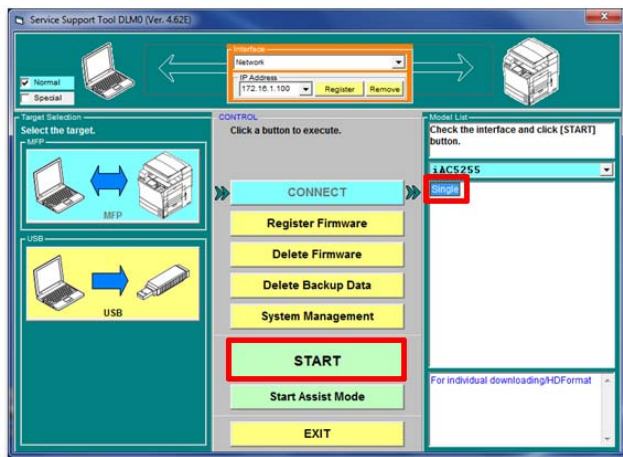
(The system software of the corresponding model must have been registered with SST.)

### Overflow

- 1) Connect the machine to SST
- 2) Upload data
- 3) Collect the network capture data

### Starting the Machine and SST

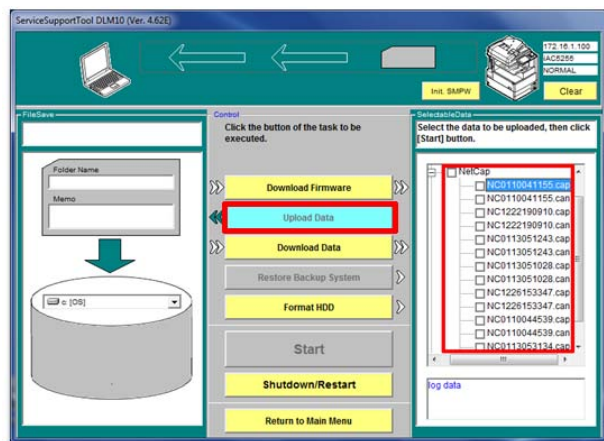
- 1) Start the machine using the 2 and 8 keys, and connect SST in Single mode.
- 2) Click the "Start" button.
- 3) Select a model to connect and "Single", check the network settings, and then click the "Start" button.



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### Upload data

- 1) Click the [Upload Data] button on SST.
- 2) When a list of packet files stored in the device appears, select target data files to upload.



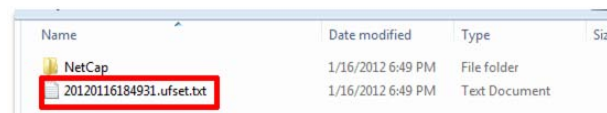
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#### Note:

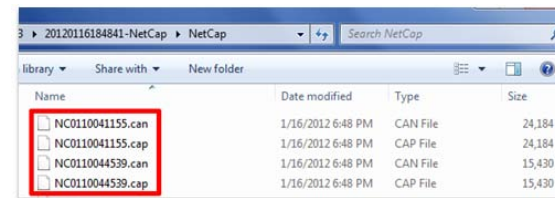
When using SST to collect data, you can select both files in encrypted format and clear text format.

### Collect the network capture data

- 1) In the case of the default installation destination for SST, click the folder with the name of the serial number of the machine stored in C drive > ServData > target model (e.g.: iAC5255) on the PC.
- 2) Three types of files are collected; a file in clear text format (xxx.cap), a file in encrypted format (xxx.can), and a list of collected network capture files (ufset.txt).



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- 3) Use free software to analyze the collected network packet capture data in clear text format (xxx.cap).

#### Note:

When the analysis work fails, send the file in encrypted format (xxx.can) to Canon Inc.

## ■ USB Network Packet File Collection

### ● Overview

- Collect the network capture data that has been stored in the machine using a USB memory.
- It is possible to use files in clear text format for in-house analysis by using free software, such as Wireshark. Note that only Canon Inc. can analyze encrypted files. In the case of failure in solving problems, send encrypted files to Canon Inc.

### ● Preparation

USB memory

Store in advance the system software of the machine to connect to.

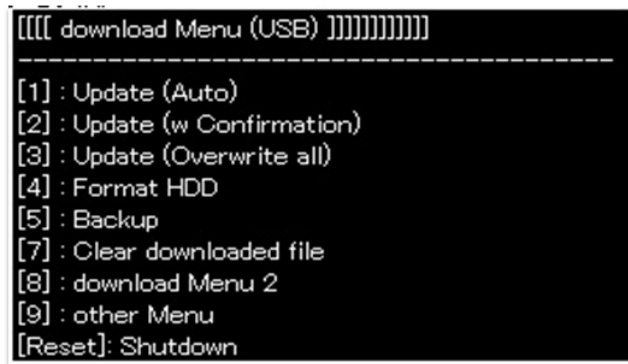
For the system software, it is fine to store just one of the system software of the machine (LANG, etc). There is no need to store the full set.

### ● Overall flow

- 1) Enter download mode
- 2) Select Backup
- 3) Transfer the network capture data
- 4) Collect the network capture data

### ● Enter Download Mode

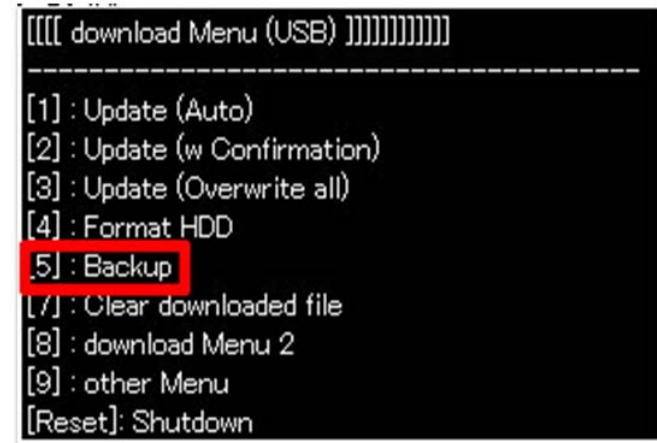
- 1) Connect the USB memory to the USB port.
- 2) Select COPIER > FUNCTION > SYSTEM > DOWNLOAD, and then press [OK].
- 3) When the machine recognizes the USB memory, download Menu (USB) appears on the Control Panel.



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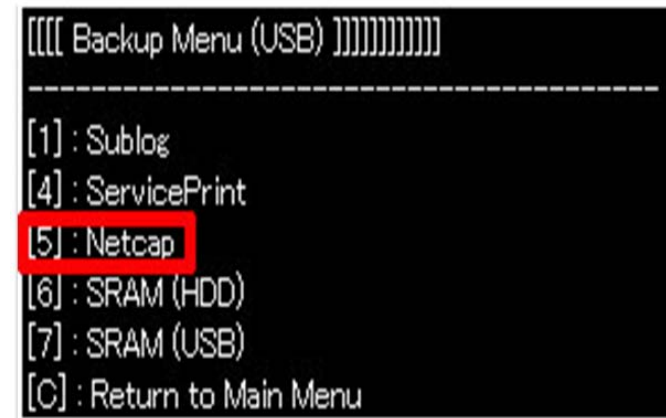
### ● Select Backup

- 1) When Download Menu (USB) appears, select [5]: Backup.



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- 2) Select - (OK): 0.
- 3) When Backup Menu (USB) appears, select [5]: Netcap.



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- 4) Select - (OK): 0.



## ● Transfer the network capture data

1) Store all the network capture data stored in the machine on the USB memory.

```
[NC1212010345.can] OK.
+ 'NC1212010345.can' was saved on 'USB-H device'
Complete /dev/sdb1::/iAC5255/NC201112220754/NC1212010345.can
[NC1130090215.can] OK.
+ 'NC1130090215.can' was saved on 'USB-H device'
Complete /dev/sdb1::/iAC5255/NC201112220754/NC1130090215.can
[NC1212055720.can] OK.
+ 'NC1212055720.can' was saved on 'USB-H device'
Complete /dev/sdb1::/iAC5255/NC201112220754/NC1212055720.can
[NC1212024106.can] OK.
+ 'NC1212024106.can' was saved on 'USB-H device'
Complete /dev/sdb1::/iAC5255/NC201112220754/NC1212024106.can
---Please hit any key---
```

F-6-200

- 2) When “---Please hit any key---” appears, press any key.
- 3) Press the [C] key to return to the download Menu (HDD).
- 4) Press the [Reset] key to shut down the machine.

## ● Collect the network capture data

- 1) Check that the network capture files are stored on the USB memory.
- 2) Two types of files are collected; a file in clear text format (xxx.cap) and a file in encrypted format (xxx.can).

Name	Date modified	Type
NC0110041155.can	1/20/2012 2:37 PM	CAN File
NC0110041155.cap	1/20/2012 2:37 PM	CAP File
NC0110044539.can	1/20/2012 2:37 PM	CAN File
NC0110044539.cap	1/20/2012 2:37 PM	CAP File
NC0113051028.can	1/20/2012 2:37 PM	CAN File
NC0113051028.cap	1/20/2012 2:37 PM	CAP File
NC0113051243.can	1/20/2012 2:37 PM	CAN File
NC0113051243.cap	1/20/2012 2:37 PM	CAP File
NC0113053134.can	1/20/2012 2:37 PM	CAN File
NC0113053134.cap	1/20/2012 2:37 PM	CAP File
NC1222190910.can	1/20/2012 2:37 PM	CAN File
NC1222190910.cap	1/20/2012 2:37 PM	CAP File
NC1226153347.can	1/20/2012 2:37 PM	CAN File
NC1226153347.cap	1/20/2012 2:37 PM	CAP File

F-6-201

- 3) Use free software to analyze the collected network packet capture data in clear text format (xxx.cap).

### Note:

When the analysis work fails, send the file in encrypted format (xxx.can) to Canon Inc.

## Embedded RDS Troubleshooting

### No.1

**Symptom:** A communication test (COM-TEST) results NG!

**Cause:** Initial settings or network conditions is incomplete.

**Remedy 1:** Check and take actions mentioned below.

#### 1) Check network connections

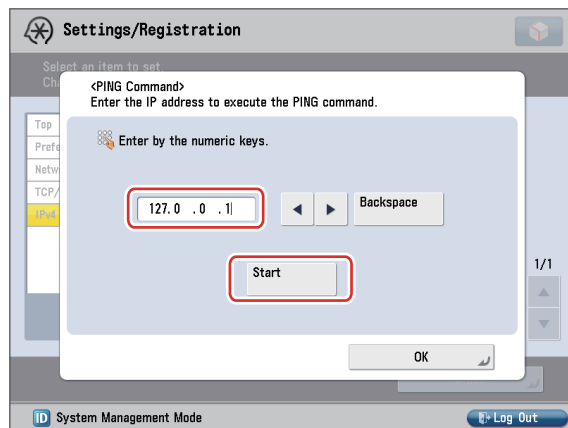
Is the status indicator LED for the HUB port to which this machine is connected ON?

YES: Proceed to Step 2).

NO: Check that the network cable is properly connected.

#### 2) Confirm loop back address (\* In case of IPv4 )

Select [Settings/Registration (User Mode)] > [Preferences] > [Network] > [TCP/IP Settings] > [IPv4 Settings] > [PING Command], enter "127.0.0.1", and touch the [Start] button.

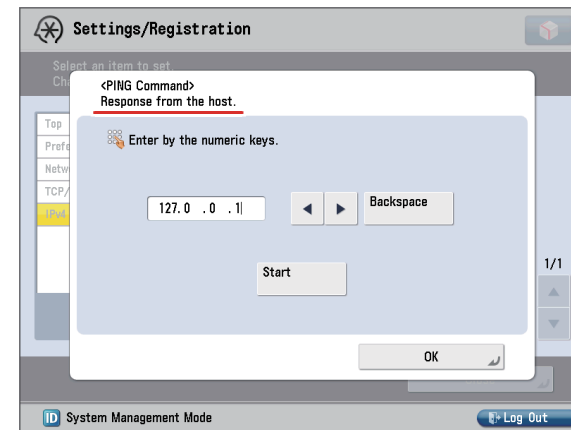


F-6-202

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.



F-6-203

#### 3) Confirmation from another PC connected to same network.

Request the user to ping this machine from a PC connected to same network.

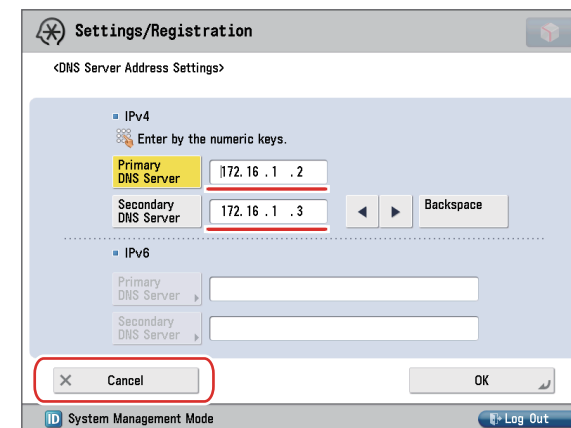
Does this machine respond?

YES: Proceed to Step 4).

NO: Confirm the details of this machine's IP address and subnet mask settings.

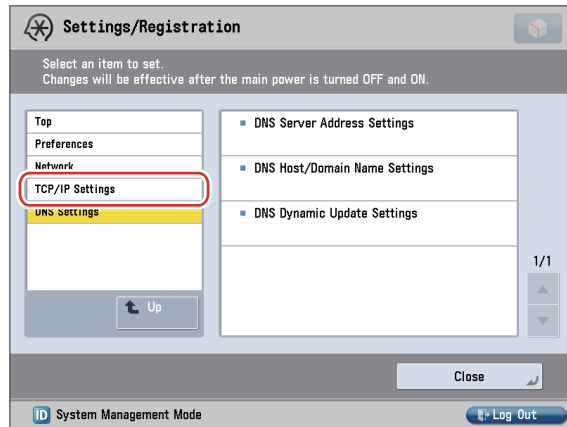
#### 4) Confirm DNS connection

(a) Select [Settings/Registration (User Mode)] > [Preferences] > [Network] > [TCP/IP Settings] > [DNS Settings] > [DNS Server Address Settings], write down the primary and secondary addresses of the DNS server, and touch the [Cancel] button.



F-6-204

(b) Select [TCP/IP Settings] from breadcrumbs of the left columns, and then Touch it.



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(c) Select [TCP/IP Settings] > [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."?

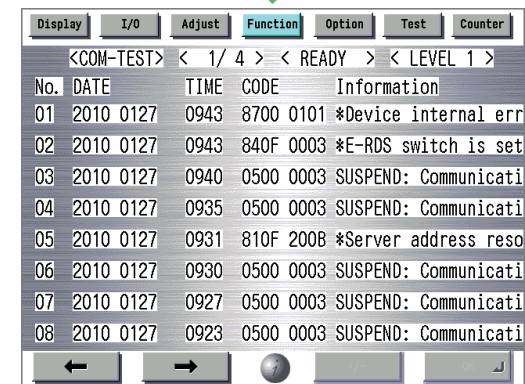
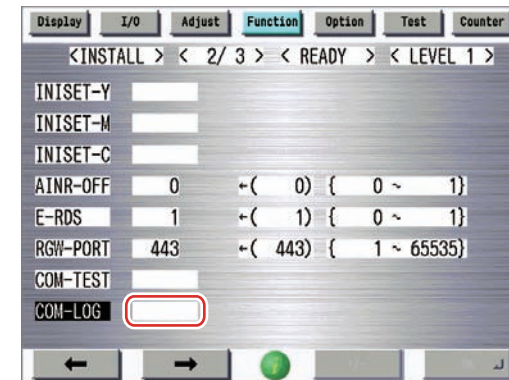
YES: Proceed to Remedy 2.

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 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 log list screen is displayed.



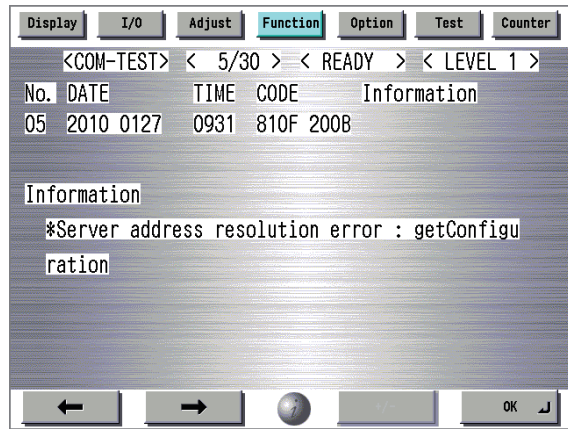
F-6-206

**NOTE:**

- Only the initial part of error information is displayed in the communication 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 log detailed screen is displayed as shown in the figure below. (Example: No. 05)



F-6-207

**NOTE:**

- A detailed description of the error appears below 'Information'. (Max 128 characters)
- Touch the [OK] button to return to the log 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 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**

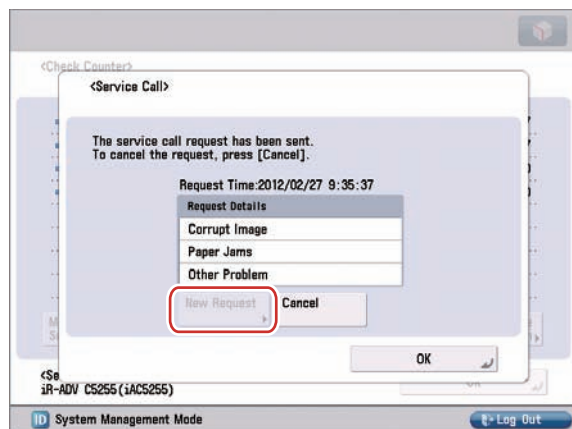
**Symptom:** The display indicates that the service browser is enabled (BRWS-STs: 1), but the service browser fails to be activated.

**Cause:** The main power switch of this machine has not been turned OFF and then ON. ON/OFF of the service browser is enabled after reboot.

**Remedy:** Turn OFF and then ON the main power of this machine.

## No.8

Symptom: A service call request cannot be made because the [New Request] button is grayed out.



F-6-208

Cause: There has been already a service call request.

Remedy: Perform either of the following remedy works:

- Touch the [Cancel] button to cancel the service call request that has been made.
- A service technician performs a complete processing for the service call request that has been made.

## No.9

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.10

Symptom: A service call request is failed, and a message "Could not send the service call request" is displayed.

Cause: A communication test with UGW has not been performed, or a communication test result is NG!

Remedy: Perform a communication test, and check that the test with UGW finishes successfully.

## No.11

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•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	Reference
Error code	This code is displayed when an error occurs on the machine.	p. 7-4
Jam code	This code is displayed when a jam occurs inside the machine.	p. 7-98
Alarm code	This code is displayed when a function of the machine is malfunctioned.	p. 7-112

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- 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.

Device	JAM	ERR	ALARM
imageRUNNER ADVANCE C5255/C5250/C5240/C5235	00	Main Controller = 00 Printer engine = 05	Others of listed below
Color Image Reader Unit - F1 Duplex Color Image Reader Unit - E1	01	04	02
Paper Deck Unit-B2	00	05	04
Cassette Feeding Unit-AD2	00	05	-
Buffer Pass Unit-G1	00	05	-
Staple Finisher-J1 / Booklet Finisher-J1	02	05	61,62
Inner Finisher-E1	02	05	-
External 2 Hole Puncher-B2	02	05	65

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#### Pickup position code

When jam occurs, pickup location is indicated with the following 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 (Cassette Feeding Unit-AD1)	03
Cassette 4 (Cassette Feeding Unit-AD1)	04
Multi-purpose Tray	05
Paper Deck Unit	06
Duplex (At duplex printing, jam occurs after paper passes through the Duplex Paper Sensor (PS38).)	F0

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#### Pickup size

When a jam occurs, a paper size is displayed. (The row displaying "SIZE" on the jam screen refers to the paper size.)

Due to the limitation of displayable number of characters, some paper size names are omitted. The following is the list of displayed row of texts and corresponding paper sizes.

\* The following is based on the display specification and not all paper sizes can actually be used.

Display	Paper Size	Display	Paper Size
A0	A0	LDR	LEDGER
A1	A1	LDRFB	LEDGERFULLBLEED
A2	A2	LGL	LEGAL
A3	A3	LTR	LETTER
A3FB	A3FULLBLEED	EXE	EXECUTIVE
A4	A4	STMT	STATEMENT
A5	A5	10x8	10x8
A6	A6	12x18	12x18
A7	A7	13x19	13x19
I-B0	ISOB0	15x11	15x11
I-B1	ISOB1	17x22	17x22
I-B2	ISOB2	18x24	18x24
I-B3	ISOB3	A-FLS	Australian-FOOLSCAP
I-B4	ISOB4	ALGL	Argentina-LEGAL
I-B5	ISOB5	ALTR	Argentina-LETTER
I-B6	ISOB6	OFI	OFICIO
I-B7	ISOB7	A-OFI	Argentina-OFICIO

Display	Paper Size	Display	Paper Size
I-C0	ISOC0	B-OFI	Bolivia-OFICIO
I-C1	ISOC1	E-OFI	Ecuador-OFICIO
I-C2	ISOC2	M-OFI	Mexico-OFICIO
I-C3	ISOC3	KLGL	Korea-LEGAL
I-C4	ISOC4	GLGL	Government-LEGAL
I-C5	ISOC5	GLTR	Government-LETTER
I-C6	ISOC6	IND-LGL	India-LEGAL
I-C7	ISOC7	COM10	COM10
I-SRA3	SRA3	DL	DL
J-B0	JISB0	E_C2	Nagagata 2
J-B1	JISB1	E_C3	Nagagata 3
J-B2	JISB2	E_C4	Nagagata 4
J-B3	JISB3	E_C5	Nagagata 5
J-B4	JISB4	E-K2	Kakugata 2
J-B5	JISB5	E_K3	Kakugata 3
J-B6	JISB6	E_K4	Kakugata 4
J-B7	JISB7	E_K5	Kakugata 5
K16	K16	E_K6	Kakugata 6
K8	K8	E_K7	Kakugata 7
ND-PCD	Newdry Postcard	E_K8	Kakugata 8
OTHER	OTHER	E_Y1	Yougata 1
PCARD	Postcard	E-Y2	Yougata 2
PCARD4	4 on 1 Postcard	E_Y3	Yougata 3
F4A	F4A	E-Y4	Yougata 4
F4B	F4B	E_Y5	Yougata 5
FLSC	FOOLCAP	E_Y6	Yougata 6
FOLIO	FOLIO	E_Y7	Yougata 7
FREE	FREE SIZE	EVLP_YN3	Yougatanaga 3
ICARD	INDEXCARD	E-B5	B5 Envelope
USER	Custom	E-C5	C5 Envelope
		MONA	MONARCH
		EVLP	Unknown size envelope

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## Points to Note When Clearing MN-CON

- Execution of clearing MN-COM deletes all data in Forwarding Settings, Settings/Registration (Preferences), Adjustment/Maintenance, Function Settings, Set Destination, Management Settings, TPM Settings, etc. Before execution of this operation, ask user to back up the data and get approval for this operation.
- When clearing MN-CON while any login application other than Default Authentication is, error such as not displayed login screen occurred. In this case, access SMS once and switch login application to Default Authentication to recover to the normal status.

## Points to Note When Clearing HDD

As a remedy for error codes (E602-XXXX, E611-0000), HDD partition is selected and the target partition may be cleared.

When clearing partition, be sure to check which data will be deleted by referring Detail of HDD partition 10-52 and explain to the user before starting work.

## Reorganization of E602 Detail Code

With the existing models, partition number and detail code are not matched. To simplify the detail code, following reorganization has been made.

Meaning of detail code "XXYY"

XX: Same as the partition number It has reorganized to make it the same as the number to be entered when performing HD-CHK.

YY: Indication of machine state: at startup or during operation When an error occurs at startup, 01 is indicated. When an error occurs during operation, 11 is indicated.

XX		YY	
CHK-TYPE	Partition	On start up : 01	During start up : 11
01	FSTDEV	0101	1101
02	IMG_MNG	0102	1102
03	FSTCDEV	0103	1103
04	THUMDEV	0104	1104
05	APL_GEN	0105	1105
06	TMP_GEN	0106	1106
07	TMP_FAX	0107	1107
08	TMP_PSS	0108	1108
09	PDLDEV	0109	1109
10	BOOTDEV	0110	1110
11	APL_MEAP	0111	1111
12	APL_SEND	0112	1112
13	APL_KEEP	0113	1113
14	APL_LOG	0114	1114
15	CRBDEV	0115	1115
16	APL_CDS	0116	1116
FF	Undefined	01FF	11FF

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Detail codes have been reorganized into 43 types as the total (34 types of detail codes mentioned above and 9 types of exceptional detail codes).

## Error Code

 Error Code Details

E code	Detailed code	Occurance area	Items	Description
E001	0000	05	Title	Abnormal high temperature in Main Thermistor 1, 2
			Description	Main Thermistor 1, 2 (TH1) detects 260 deg C or more for 0.2 sec.
			Remedy	<p>1. Go through the following: DISPLAY &gt; ANALOG &gt; FIX-C, or DISPLAY &gt; ANALOG &gt; FIX-E; if it's less than 260 deg C, go through the following to clear the error: COPIER&gt;FUNCTION&gt;CLEAR&gt;ERR; and then turn OFF/ ON the power.</p> <p>If it's 260 deg C or more, do not turn on the power before replacing the Film Unit.</p> <p>2. Replace the Film Unit.</p> <p>3. Replace the Shutter Unit.</p> <p>4. Replace the DC Controller PCB (UN1).</p> <p>NOTE: After performing the above remedy work, go through the following to clear the error: COPIER &gt; FUNCTION &gt; CLEAR &gt; ERR.</p>
E001	0001	05	Title	Abnormal high temperature in Sub Thermistor 1, 2
			Description	Sub Thermistor 1, 2 (TH1) detects 275 deg C or more for 0.2 sec.
			Remedy	<p>1. Go through the following: DISPLAY &gt; ANALOG &gt; FIX-E2 or DISPLAY &gt; ANALOG &gt; FIX-E3; if it's less than 275 deg C, go through the following to clear the error: COPIER &gt; FUNCTION &gt; CLEAR &gt; ERR; and then turn OFF and then ON the power.</p> <p>If it's 275 deg C or more, do not turn on the power before replacing the Film Unit.</p> <p>2. Replace the Film Unit.</p> <p>3. Replace the Shutter Unit.</p> <p>4. Go through the following to check drive of FM5 and FM6: COPIER &gt; FUNCTION &gt; PART-CHK &gt; FAN; if not working properly, replace the fan.</p> <p>5. Replace the DC Controller PCB (UN1).</p> <p>NOTE: After performing the above remedy work, go through the following to clear the error: COPIER &gt; FUNCTION &gt; CLEAR &gt; ERR.</p>

E code	Detailed code	Occurance area	Items	Description
E001	0003	05	Title	High temperature error detected by hardware
			Description	Hardware detects abnormal high temperature of the Thermistor (Main Thermistor 1: 264 deg C, Main Thermistor 2: 265 deg C, Sub Thermistor 1, 2: 280 deg C) for 400 msec consecutively.
			Remedy	<p>1. If the detected temperature of the Thermistor is less than the abnormal high temperature specified for Thermistor, go through the following to clear the error: COPIER &gt; FUNCTION &gt; CLEAR &gt; ERR; and then turn OFF and then ON the power.</p> <p>If it's at abnormally high temperature, do not turn on the power before replacing the Film Unit.</p> <p>2. Replace the Film Unit.</p> <p>3. Replace the Shutter Unit.</p> <p>4. Go through the following to check drive of FM5 and FM6: COPIER &gt; FUNCTION &gt; PART-CHK &gt; FAN; if the not working properly, replace the fan.</p> <p>5. Replace the DC Controller PCB (UN1).</p> <p>NOTE: After performing the above remedy work, go through the following to clear the error: COPIER &gt; FUNCTION &gt; CLEAR &gt; ERR.</p>
E003	0000	05	Title	Error detected when the Heater is ON
			Description	After the Heater was turned ON, Main Thermistor 2, Sub Thermistor 1 or Sub Thermistor 2 detects 21 deg C or more and 50 deg C or less for 3 sec.
			Remedy	<p>1. Go through the following to clear the error: COPIER &gt; FUNCTION &gt; CLEAR &gt; ERR; and then turn OFF and then ON the power.</p> <p>2. Check connection of the Connectors (Thermistor Connector and AC Connector).</p> <p>3. Replace the Film Unit.</p> <p>4. Replace the Shutter Unit.</p> <p>5. Replace the DC Controller PCB (UN1).</p> <p>NOTE: After performing the above remedy work, go through the following to clear the error: COPIER &gt; FUNCTION &gt; CLEAR &gt; ERR.</p>

E code	Detailed code	Occurance area	Items	Description
E003	0001	05	Title	Abnormal detection during paper feeding
			Description	During print control, Sub Thermistor detects 70 deg C or less from the target temperature for 5 sec.
			Remedy	<ol style="list-style-type: none"> <li>1. Go through the following to clear the error: COPIER &gt; FUNCTION &gt; CLEAR &gt; ERR; and then turn OFF and then ON the power.</li> <li>2. Check for open circuit inside the Fixing Assembly and any disconnection of the connector.</li> <li>3. Replace the Film Unit.</li> <li>4. Replace the Shutter Unit.</li> <li>5. Replace the DC Controller PCB (UN1).</li> </ol> <p>NOTE: After performing the above remedy work, go through the following to clear the error: COPIER &gt; FUNCTION &gt; CLEAR &gt; ERR.</p>
E003	0002	05	Title	Abnormal low temperature when the Heater is ON (disconnection detected)
			Description	After the Heater was turned ON, any of the Thermistors detects 20 deg C or less for 3 sec.
			Remedy	<ol style="list-style-type: none"> <li>1. Go through the following to clear the error: COPIER &gt; FUNCTION &gt; CLEAR &gt; ERR; and then turn OFF and then ON the power.</li> <li>2. Check connection of the Connectors (Thermistor Connector and AC Connector).</li> <li>3. Replace the Film Unit.</li> <li>4. Replace the Shutter Unit.</li> <li>5. Replace the DC Controller PCB (UN1).</li> </ol> <p>NOTE: After performing the above remedy work, go through the following to clear the error: COPIER &gt; FUNCTION &gt; CLEAR &gt; ERR.</p>
E003	0004	05	Title	Timeout at start-up
			Description	After the start-up control was started, the start-up control is not completed although 60 sec has passed.
			Remedy	<ol style="list-style-type: none"> <li>1. Check connection of the Connectors (Thermistor Connector and AC Connector).</li> <li>2. Replace the Film Unit</li> <li>3. Replace the Shutter Unit.</li> <li>4. Replace the DC Controller PCB (UN1)</li> </ol> <p>NOTE: After performing the above remedy work, go through the following to clear the error: COPIER &gt; FUNCTION &gt; CLEAR &gt; ERR.</p>

E code	Detailed code	Occurance area	Items	Description
E004	0000	05	Title	Thermistor disconnection detection error
			Description	Signal name, FUSER_CNCTX, detects disconnection for 500 msec or longer.
			Remedy	<ol style="list-style-type: none"> <li>1. Check if the Fixing Assembly is installed.</li> <li>2. Check connection of the connectors in Fixing Assembly.</li> <li>3. Check connection of DC Controller PCB (UN1) Connector.</li> <li>4. Replace the Film Unit.</li> <li>5. Replace the Shutter Unit.</li> <li>6. Replace the DC Controller PCB (UN1).</li> </ol>
E004	0001	05	Title	Error in detection of welding with fixing relay
			Description	Welding of fixing relay on the AC Driver PCB
			Remedy	<ol style="list-style-type: none"> <li>1. Replace the AC Driver PCB (replacement is necessary due to welding of the relay).</li> </ol> <p>Other fixing-related error occurs (highly possible of E001)</p> <ol style="list-style-type: none"> <li>2. Perform the remedy for the error occurred.</li> </ol>
E009	0000	05	Title	Error in engagement
			Description	Unable to detect ON with the Fixing Pressure Sensor although 5 seconds have passed.
			Remedy	<ol style="list-style-type: none"> <li>1. Turn OFF and then ON the power.</li> <li>2. Remove and then reinstall the Fixing Assembly.</li> <li>3. Go through the following to move M21: COPIER &gt; FUNCTION &gt; PART-CHK &gt; MTR.</li> </ol> <p>If the motor rotates properly:</p> <ol style="list-style-type: none"> <li>4-1. Replace the Fixing Drive Assembly.</li> <li>5-1. Replace the DC Controller PCB (UN1).</li> </ol> <p>If the motor does not work properly:</p> <ol style="list-style-type: none"> <li>4-2. Identify and replace the faulty gear.</li> <li>5-2. Replace the Motor.</li> </ol>
E009	0001	05	Title	Error in disengagement
			Description	Unable to detect OFF with the Fixing Pressure Sensor although 5 seconds have passed.
			Remedy	<ol style="list-style-type: none"> <li>1. Turn OFF and then ON the power.</li> <li>2. Remove and then reinstall the Fixing Assembly.</li> <li>3. Go through the following to move M21: COPIER &gt; FUNCTION &gt; PART-CHK &gt; MTR.</li> </ol> <p>If the motor rotates properly:</p> <ol style="list-style-type: none"> <li>4-1. Replace the Fixing Drive Assembly.</li> <li>5-1. Replace the DC Controller PCB (UN1).</li> </ol> <p>If the motor does not work properly:</p> <ol style="list-style-type: none"> <li>4-2. Identify and replace the faulty gear.</li> <li>5-2. Replace the Motor.</li> </ol>



E code	Detailed code	Occurance area	Items	Description
E009	0002	05	Title	Pressure error (it is highly possible that grease is scattered on the surface of the cam.)
			Description	Unable to detect stopping of the cam at the specified position even if pressure is applied 10 times.
			Remedy	Clean the scattered grease and excess grease on the gear at the rear side of the host machine. Procedure is as follows.  <ol style="list-style-type: none"> <li>1. Remove the Fixing Assembly.</li> <li>2. Remove the Gear Cover at the rear side of the host machine, and remove the Pressure Release Stopper and the Pressure Release Support Plate (so that the gear is easily cleaned).</li> <li>3. Wipe off the scattered grease around the Pressure Release Cam and the Pressure Plate with lint-free paper moistened with alcohol.</li> <li>4. Wipe off the excess grease on the side of the gear and the shaft.</li> </ol>
E012	0101	05	Title	Y Drum Encoder 1 and 2 signal error
			Description	Y Drum Encoder 1 and 2 signal error (It was detected that the motor was rotating, but not the encoders.)
			Remedy	<ol style="list-style-type: none"> <li>1. Check connection of drum encoder sensor 1 and 2 (UN31, UN32).</li> <li>2. Check that the drum encoder sensor Wheel is properly installed.</li> <li>3. Check connection of the Drum Driver PCB (UN4).</li> <li>4. Manually turn the Rotor of the Drum Motor counterclockwise and check that the drum encoder sensor Wheel rotates. -&gt; If the wheel does not rotate, replace the Drum Drive Unit.</li> <li>5. Take out the drum encoder sensor to clean the Sensor and the Wheel.</li> <li>6. Replace the drum encoder sensor.</li> <li>7. Replace the Drum Driver PCB (UN4).</li> </ol>
E012	0102	05	Title	Faulty signal with Y drum encoder sensor 1
			Description	The signal was not detected for 100 msec or more.
			Remedy	<ol style="list-style-type: none"> <li>1. Check connection of drum encoder sensor 1.</li> <li>2. Take out drum encoder sensor 1 (UN31) to clean the Sensor.</li> <li>3. Replace drum encoder sensor 1.</li> <li>4. Check if the harness of the drum encoder sensor is faulty (replace the harness if it's disconnected).</li> <li>5. Replace the Drum Driver PCB (UN4).</li> </ol>

E code	Detailed code	Occurance area	Items	Description
E012	0103	05	Title	Faulty signal with Y drum encoder sensor 2
			Description	The signal was not detected for 100 msec or more.
			Remedy	<ol style="list-style-type: none"> <li>1. Check connection of drum encoder sensor 2 (UN32).</li> <li>2. Take out drum encoder sensor 2 to clean the Sensor.</li> <li>3. Replace drum encoder sensor 2.</li> <li>4. Check if the harness of the drum encoder sensor is faulty (replace the harness if it's disconnected).</li> <li>5. Replace the Drum Driver PCB (UN4).</li> </ol>
E012	0104	05	Title	Failure in Y drum encoder sensor Wheel
			Description	Failure is detected with the Y drum encoder sensor Wheel
			Remedy	<ol style="list-style-type: none"> <li>1. Take out the drum encoder sensor to clean the Sensor (UN31, UN32) and the Wheel.</li> <li>2. Replace the drum encoder sensor Wheel.</li> <li>3. Replace the drum encoder sensor.</li> <li>4. Replace the Drum Driver PCB (UN4).</li> </ol>
E012	0105	05	Title	Failure in Y Drum Motor Control
			Description	Unstable rotation of the Y Drum Motor
			Remedy	<ol style="list-style-type: none"> <li>1. Check if the Drum is installed.</li> <li>2. Take out the drum encoder sensor (UN31, UN32) to clean the Sensor and the Wheel.</li> <li>3. Remove the Process Unit and then install (reinstall) the Process Unit.</li> <li>4. Replace the Drum Unit.</li> <li>5. Replace the Drum Driver PCB (UN4).</li> </ol>
E012	0106	05	Title	Failure in rotation of Y Drum Motor
			Description	The Y Drum Motor is not rotating at the specified speed/is stopped.
			Remedy	<ol style="list-style-type: none"> <li>1. Check connection of the connector with the Y Drum Motor (M1).</li> <li>2. Check connection of the connector with Drum Driver PCB (UN4).</li> <li>3. Check the ITB (to see if the ITB is displaced/damaged. Refer to E075 if the ITB is displaced).</li> <li>4. Replace the ITB Cleaning Blade.</li> <li>5. Replace the Drum Driver PCB (UN4).</li> </ol>

E code	Detailed code	Occurance area	Items	Description
E012	0201	05	Title	M Drum Encoder 1 and 2 signal error
			Description	M Drum Encoder 1 and 2 signal error (It was detected that the motor was rotating, but not the encoders.)
			Remedy	1. Check connection of drum encoder sensor 1 and 2 (UN33, UN34). 2. Check that the drum encoder sensor Wheel is properly installed. 3. Check connection of the Drum Driver PCB (UN4). 4. Manually turn the Rotor of the Drum Motor counterclockwise and check that the drum encoder sensor Wheel rotates. -> If the wheel does not rotate, replace the Drum Drive Unit. 5. Take out the drum encoder sensor to clean the Sensor and the Wheel. 6. Replace the drum encoder sensor. 7. Replace the Drum Driver PCB (UN4).
E012	0202	05	Title	Faulty signal with M drum encoder sensor 1
			Description	The signal was not detected for 100 msec or more.
			Remedy	1. Check connection of drum encoder sensor 1. 2. Take out drum encoder sensor 1 (UN33) to clean the Sensor. 3. Replace drum encoder sensor 1. 4. Check if the harness of the drum encoder sensor is faulty (replace the harness if it's disconnected). 5. Replace the Drum Driver PCB (UN4).
E012	0203	05	Title	Faulty signal with M drum encoder sensor 2
			Description	The signal was not detected for 100 msec or more.
			Remedy	1. Check connection of drum encoder sensor 2 (UN34). 2. Take out drum encoder sensor 2 to clean the Sensor. 3. Replace drum encoder sensor 2. 4. Check if the harness of the drum encoder sensor is faulty (replace the harness if it's disconnected). 5. Replace the Drum Driver PCB (UN4).
E012	0204	05	Title	Failure in M drum encoder sensor Wheel
			Description	Failure is detected with the M drum encoder sensor Wheel
			Remedy	1. Take out the drum encoder sensor to clean the Sensor (UN33, UN34) and the Wheel. 2. Replace the drum encoder sensor Wheel. 3. Replace the drum encoder sensor. 4. Replace the Drum Driver PCB (UN4).

E code	Detailed code	Occurance area	Items	Description
E012	0205	05	Title	Failure in M Drum Motor Control
			Description	Unstable rotation of the M Drum Motor
			Remedy	1. Check if the Drum is installed. 2. Take out the drum encoder sensor (UN33, UN34) to clean the Sensor and the Wheel. 3. Remove the Process Unit and then install (reinstall) the Process Unit. 4. Replace the Drum Unit. 5. Replace the Drum Driver PCB (UN4).
E012	0206	05	Title	Failure in rotation of M Drum Motor
			Description	The M Drum Motor is not rotating at the specified speed/ is stopped.
			Remedy	1. Check connection of the connector with the M Drum Motor (M2). 2. Check connection of the connector with Drum Driver PCB (UN4). 3. Check the ITB (to see if the ITB is displaced/damaged. Refer to E075 if the ITB is displaced). 4. Replace the ITB Cleaning Blade. 5. Replace the Drum Driver PCB (UN4).
E012	0301	05	Title	C Drum Encoder 1 and 2 signal error
			Description	C Drum Encoder 1 and 2 signal error (It was detected that the motor was rotating, but not the encoders.)
			Remedy	1. Check connection of drum encoder sensor 1 and 2 (UN35, UN36). 2. Check that the drum encoder sensor Wheel is properly installed. 3. Check connection of the Drum Driver PCB (UN4). 4. Manually turn the Rotor of the Drum Motor counterclockwise and check that the drum encoder sensor Wheel rotates. -> If the wheel does not rotate, replace the Drum Drive Unit. 5. Take out the drum encoder sensor to clean the Sensor and the Wheel. 6. Replace the drum encoder sensor. 7. Replace the Drum Driver PCB (UN4).
E012	0302	05	Title	Faulty signal with C drum encoder sensor 1
			Description	The signal was not detected for 100 msec or more.
			Remedy	1. Check connection of drum encoder sensor 1. 2. Take out drum encoder sensor 1 (UN35) to clean the Sensor. 3. Replace drum encoder sensor 1. 4. Check if the harness of the drum encoder sensor is faulty (replace the harness if it's disconnected). 5. Replace the Drum Driver PCB (UN4).

E code	Detailed code	Occurance area	Items	Description
E012	0303	05	Title	Faulty signal with C drum encoder sensor 2
			Description	The signal was not detected for 100 msec or more.
			Remedy	1. Check connection of drum encoder sensor 2 (UN36). 2. Take out drum encoder sensor 2 to clean the Sensor. 3. Replace drum encoder sensor 2. 4. Check if the harness of the drum encoder sensor is faulty (replace the harness if it's disconnected). 5. Replace the Drum Driver PCB (UN4).
E012	0304	05	Title	Failure in C drum encoder sensor Wheel
			Description	Failure is detected with the C drum encoder sensor Wheel
			Remedy	1. Take out the drum encoder sensor to clean the Sensor (UN35, UN36) and the Wheel. 2. Replace the drum encoder sensor Wheel. 3. Replace the drum encoder sensor. 4. Replace the Drum Driver PCB (UN4).
E012	0305	05	Title	Failure in C Drum Motor Control
			Description	Unstable rotation of the C Drum Motor
			Remedy	1. Check if the Drum is installed. 2. Take out the drum encoder sensor (UN35, UN36) to clean the Sensor and the Wheel. 3. Remove the Process Unit and then install (reinstall) the Process Unit. 4. Replace the Drum Unit. 5. Replace the Drum Driver PCB (UN4).
E012	0306	05	Title	Failure in rotation of C Drum Motor
			Description	The C Drum Motor is not rotating at the specified speed/is stopped.
			Remedy	1. Check connection of the connector with the C Drum Motor (M3). 2. Check connection of the connector with Drum Driver PCB (UN4). 3. Check the ITB (to see if the ITB is displaced/damaged. Refer to E075 if the ITB is displaced). 4. Replace the ITB Cleaning Blade. 5. Replace the Drum Driver PCB (UN4).

E code	Detailed code	Occurance area	Items	Description
E012	0401	05	Title	Bk Drum Encoder 1 and 2 signal error
			Description	Bk Drum Encoder 1 and 2 signal error (It was detected that the motor was rotating, but not the encoders.)
			Remedy	1. Check connection of drum encoder sensor 1 and 2 (UN37, UN38). 2. Check that the drum encoder sensor Wheel is properly installed. 3. Check connection of the Drum Driver PCB (UN4). 4. Manually turn the Rotor of the Drum Motor counterclockwise and check that the drum encoder sensor Wheel rotates. -> If the wheel does not rotate, replace the Drum Drive Unit. 5. Take out the drum encoder sensor to clean the Sensor and the Wheel. 6. Replace the drum encoder sensor. 7. Replace the Drum Driver PCB (UN4).
E012	0402	05	Title	Faulty signal with Bk drum encoder sensor 1
			Description	The signal was not detected for 100 msec or more.
			Remedy	1. Check connection of drum encoder sensor 1. 2. Take out drum encoder sensor 1 (UN37) to clean the Sensor. 3. Replace drum encoder sensor 1. 4. Check if the harness of the drum encoder sensor is faulty (replace the harness if it's disconnected). 5. Replace the Drum Driver PCB (UN4).
E012	0403	05	Title	Faulty signal with Bk drum encoder sensor 2
			Description	The signal was not detected for 100 msec or more.
			Remedy	1. Check connection of drum encoder sensor 2 (UN38). 2. Take out drum encoder sensor 2 to clean the Sensor. 3. Replace drum encoder sensor 2. 4. Check if the harness of the drum encoder sensor is faulty (replace the harness if it's disconnected). 5. Replace the Drum Driver PCB (UN4).
E012	0404	05	Title	Failure in Bk drum encoder sensor Wheel
			Description	Failure is detected with the Bk drum encoder sensor Wheel
			Remedy	1. Take out the drum encoder sensor to clean the Sensor (UN37, UN38) and the Wheel. 2. Replace the drum encoder sensor Wheel. 3. Replace the drum encoder sensor. 4. Replace the Drum Driver PCB (UN4).

E code	Detailed code	Occurance area	Items	Description
E012	0405	05	Title	Failure in Bk Drum Motor Control
			Description	Unstable rotation of the Bk Drum Motor
			Remedy	1. Check if the Drum is installed. 2. Take out the drum encoder sensor (UN37, UN38) to clean the Sensor and the Wheel. 3. Remove the Process Unit and then install (reinstall) the Process Unit. 4. Replace the Drum Unit. 5. Replace the Drum Driver PCB (UN4).
E012	0406	05	Title	Failure in rotation of Bk Drum Motor
			Description	The Bk Drum Motor is not rotating at the specified speed/is stopped.
			Remedy	1. Check connection of the connector with the Drum Motor (M4). 2. Check connection of the connector with Drum Driver PCB (UN4). 3. Check the ITB (to see if the ITB is displaced/damaged. Refer to E075 if the ITB is displaced). 4. Replace the ITB Cleaning Blade. 5. Replace the Drum Driver PCB (UN4).
E012	1000	05	Title	Failure in rotation when ITB Motor is driven.
			Description	The ITB Motor is not rotating at the specified speed/is stopped.
			Remedy	1. Check connection of the connector with the ITB Motor (M13). 2. Check connection of the connector with the ITB Unit. 3. Check connection of the connector with the Drum Driver PCB (UN4). 4. Check the ITB (to see if the ITB is displaced or damaged. Refer to E075 if the ITB is displaced). 5. Replace the ITB Cleaning Blade. 6. Replace the Drum Driver PCB (UN4).
E012	1001	05	Title	Failure is detected before ITB motor is driven.
			Description	LOCK signal is detected Low before the ITB Motor is driven.
			Remedy	1. Check the cable connected to the ITB Motor. 2. Check the cable connected to the Drum Driver PCB (UN4).

E code	Detailed code	Occurance area	Items	Description
E012	2000	05	Title	Failure in rotation of Drum Motors (in all colors) and ITB Motor
			Description	Faulty rotation with all of the Motors at the same time (based on the assumption that all of the motors fail to rotate)
			Remedy	1. Check the connector on the Drum Driver PCB (UN4). 2. Check the connector on the Relay Board (UN5). 3. Check the Interlock Switch. 4. Check the Drum Driver Harness.
E012	3000	05	Title	Failure in drum encoder sensors (in all colors)
			Description	The drum encoder sensors are faulty (in all colors) at the same time.
			Remedy	1. Check the connector on the Drum Driver PCB (UN4). 2. FU3 is disconnected on the Drum Driver PCB (UN4) -> Check the harness & replace the Drum Driver PCB (UN4).
E012	3001	05	Title	Failure in control of Drum Motors in all colors
			Description	Controls of the Drum Motors (in all colors) are faulty at the same time.
			Remedy	Check the Process Unit (to see if it's properly installed). Check the Drum Unit (to see if it's properly installed).
E012	3002	05	Title	Failure in rotation of Drum Motor (in all colors) (M1,M2,M3,M4)
			Description	All of the Drum Motors are not rotating at the specified speed/are stopped.
			Remedy	Check the connector on the Drum Driver PCB (UN4).
E013	0001	05	Title	Error in Recycle Toner Stirring Motor
			Description	The motor failed to rotate at the specified speed.
			Remedy	1. Check disconnection of the Recycle Toner Stirring Motor (M26). 2. Check toner level in the Recycle Toner container (replace the Recycle Toner container if the toner level is too much). 3. Replace the Recycle Toner Stirring Motor. 4. Replace the Pickup Feed Driver PCB (UN2). 5. Replace the DC Controller PCB (UN1).
E014	0001	05	Title	Error in Fixing Motor
			Description	The motor failed to rotate at the specified speed.
			Remedy	1. Check the Fixing Assembly. 2. Remove and then install the Fixing Assembly. 3. Replace the Film Unit. 4. Replace the Fixing Motor. 5. Replace the DC Controller PCB (UN1).

E code	Detailed code	Occurance area	Items	Description
E020	0011	05	Title	Error in Y Developing Assembly
			Description	Patch level is higher than the target upper limit although the patch level was minimized at the time of patch initialization.
			Remedy	Go through the following: DISPLAY > P-LED-DA; perform cleaning first If P-LED-DA is 3F or more.  1. Check installation of the Developing Assembly and the Drum. 2. Clean the Patch Sensor (UN47,UN48,UN49) Window. 3. Replace the Patch Sensor. 4. Replace the Drum.
E020	0012	05	Title	Error in M Developing Assembly
			Description	Patch level is higher than the target upper limit although the patch level was minimized at the time of patch initialization.
			Remedy	Go through the following: DISPLAY > P-LED-DA; perform cleaning first If P-LED-DA is 3F or more.  1. Check installation of the Developing Assembly and the Drum. 2. Clean the Patch Sensor (UN47,UN48,UN49) Window. 3. Replace the Patch Sensor. 4. Replace the Drum.
E020	0013	05	Title	Error in C Developing Assembly
			Description	Patch level is higher than the target upper limit although the patch level was minimized at the time of patch initialization.
			Remedy	Go through the following: DISPLAY > P-LED-DA; perform cleaning first If P-LED-DA is 3F or more.  1. Check installation of the Developing Assembly and the Drum. 2. Clean the Patch Sensor (UN47,UN48,UN49) Window. 3. Replace the Patch Sensor. 4. Replace the Drum.

E code	Detailed code	Occurance area	Items	Description
E020	0014	05	Title	Error in Bk Developing Assembly
			Description	Patch level is higher than the target upper limit although the patch level was minimized at the time of patch initialization.
			Remedy	Go through the following: DISPLAY > P-LED-DA; perform cleaning first If P-LED-DA is 3F or more.  1. Check installation of the Developing Assembly and the Drum. 2. Clean the Patch Sensor (UN47,UN48,UN49) Window. 3. Replace the Patch Sensor. 4. Replace the Drum.
E020	0021	05	Title	Error in Y Developing Assembly
			Description	Patch level is lower than the target lower limit although the patch level was maximized at the time of patch initialization.
			Remedy	Go through the following: DISPLAY > P-LED-DA; perform cleaning first if P-LED-DA is 3F or more. If the Patch Sensor (UN47, UN48,UN49) value shows 1-digit, check that the Developing Assembly is installed, and then perform remedy from "3".  1. Check installation of the Developing Assembly and the Drum. 2. Clean the Patch Sensor Window. 3. Replace the Patch Sensor. 4. Replace the Drum.
E020	0022	05	Title	Error in M Developing Assembly
			Description	Patch level is lower than the target lower limit although the patch level was maximized at the time of patch initialization.
			Remedy	Go through the following: DISPLAY > P-LED-DA; perform cleaning first if P-LED-DA is 3F or more. If the Patch Sensor (UN47, UN48,UN49) value shows 1-digit, check that the Developing Assembly is installed, and then perform remedy from "3".  1. Check installation of the Developing Assembly and the Drum. 2. Clean the Patch Sensor Window. 3. Replace the Patch Sensor. 4. Replace the Drum.

E code	Detailed code	Occurance area	Items	Description
E020	0023	05	Title	Error in C Developing Assembly
			Description	Patch level is lower than the target lower limit although the patch level was maximized at the time of patch initialization.
			Remedy	Go through the following: DISPLAY > P-LED-DA; perform cleaning first if P-LED-DA is 3F or more. If the Patch Sensor (UN47, UN48,UN49) value shows 1-digit, check that the Developing Assembly is installed, and then perform remedy from "3".  1. Check installation of the Developing Assembly and the Drum. 2. Clean the Patch Sensor Window. 3. Replace the Patch Sensor. 4. Replace the Drum.
E020	0024	05	Title	Error in Bk Developing Assembly
			Description	Patch level is lower than the target lower limit although the patch level was maximized at the time of patch initialization.
			Remedy	Go through the following: DISPLAY > P-LED-DA; perform cleaning first if P-LED-DA is 3F or more. If the Patch Sensor (UN47, UN48,UN49) value shows 1-digit, check that the Developing Assembly is installed, and then perform remedy from "3".  1. Check installation of the Developing Assembly and the Drum. 2. Clean the Patch Sensor Window. 3. Replace the Patch Sensor. 4. Replace the Drum.
E020	0101	05	Title	Error in Y Developing Assembly
			Description	The value is higher than the upper limit for the patch.
			Remedy	Go through the following: DISPLAY > P-LED-DA; perform cleaning first If P-LED-DA is 3F or more.  1. Check installation of the Developing Assembly and the Drum. 2. Clean the Patch Sensor (UN47,UN48,UN49) Window. 3. Check if the patch sensor is disconnected. 4. Replace the Patch Sensor. 5. Replace the Drum.

E code	Detailed code	Occurance area	Items	Description
E020	0102	05	Title	Error in M Developing Assembly
			Description	The value is higher than the upper limit for the patch.
			Remedy	Go through the following: DISPLAY > P-LED-DA; perform cleaning first If P-LED-DA is 3F or more.  1. Check installation of the Developing Assembly and the Drum. 2. Clean the Patch Sensor (UN47,UN48,UN49) Window. 3. Check if the patch sensor is disconnected. 4. Replace the Patch Sensor. 5. Replace the Drum.
E020	0103	05	Title	Error in C Developing Assembly
			Description	The value is higher than the upper limit for the patch.
			Remedy	Go through the following: DISPLAY > P-LED-DA; perform cleaning first If P-LED-DA is 3F or more.  1. Check installation of the Developing Assembly and the Drum. 2. Clean the Patch Sensor (UN47,UN48,UN49) Window. 3. Check if the patch sensor is disconnected. 4. Replace the Patch Sensor. 5. Replace the Drum.
E020	0104	05	Title	Error in Bk Developing Assembly
			Description	The value is higher than the upper limit for the patch.
			Remedy	Go through the following: DISPLAY > P-LED-DA; perform cleaning first If P-LED-DA is 3F or more.  1. Check installation of the Developing Assembly and the Drum. 2. Clean the Patch Sensor (UN47,UN48,UN49) Window. 3. Check if the patch sensor is disconnected. 4. Replace the Patch Sensor. 5. Replace the Drum.
E020	0130	05	Title	Error in Y Developing Assembly
			Description	The average of ATR reference value was lower than the specified value at the time of ATR Sensor initialization.
			Remedy	1. Check short-circuit of the ATR Sensor (TS5) Harness. 2. Replace the Developing Assembly.
E020	0131	05	Title	Error in Y Developing Assembly
			Description	The average of ATR reference value was higher than the specified value at the time of ATR Sensor initialization.
			Remedy	1. Check if the ATR Sensor (TS5) Connector is properly connected. 2. Check short-circuit of the ATR Sensor Harness. 3. Replace the Developing Assembly.



E code	Detailed code	Occurance area	Items	Description
E020	0140	05	Title	Error in Y Developing Assembly
			Description	Unable to adjust the control voltage at the time of ATR initialization: less than the specified value (3.2V).
			Remedy	1. Check if the ATR Sensor (TS5) Connector is properly connected. 2. Check short-circuit of the ATR Sensor Harness. 3. Replace the Developing Assembly.
E020	0141	05	Title	Error in Y Developing Assembly
			Description	Unable to adjust the control voltage at the time of ATR initialization: exceeds the specified value (6.8V).
			Remedy	1. Check short-circuit of the ATR Sensor (TS5) Harness. 2. Replace the Developing Assembly.
E020	0190	05	Title	Error in Y Developing Assembly
			Description	Error in signal lower limit with ATR sampling detected value
			Remedy	1. Check if the ATR Sensor Connector is disconnected. 2. Check short-circuit of the ATR Sensor (TS5) Harness. 3. Replace the Developing Assembly.
E020	0191	05	Title	Error in Y Developing Assembly
			Description	Error in signal upper limit with ATR sampling detected value
			Remedy	1. Check toner leak from the Toner Buffer Unit. 2. Check toner level in the Toner Container. 3. Replace the Developing Assembly. 4. Check short-circuit of the harness with the Toner Buffer Supply Sensor (PS1).
E020	01B0	05	Title	Error in Y Developing Assembly
			Description	TD ratio lower limit error at the time of print sequence (Large amount of toner in the Developing Assembly)
			Remedy	Go through the following: DISPLAY > DENS > DENS-Y; if DENS-Y is slightly higher than 5.0%, output 10 sheets of solid image with the color causing the error (to reduce T/D ratio). See the Service Mode again to see if the problem is improved. Remedy is complete if it's improved. If not, perform the following remedy work.  1. Check if the ATR Sensor (TS5) Connector is disconnected. 2. Check short-circuit of the ATR Sensor Harness. 3. Replace the Developing Assembly.

E code	Detailed code	Occurance area	Items	Description
E020	01B1	05	Title	Error in Y Developing Assembly
			Description	TD ratio upper limit error at the time of print sequence (Small amount of toner in the Developing Assembly)
			Remedy	1. Output 10 sheets of white (blank) sheets (to increase T/D ratio). 2. Check toner leak from the Toner Buffer Unit. 3. Check toner level in the Toner Container. 4. Replace the Developing Assembly. 5. Check short-circuit of the harness of the Toner supply sensor (PS1).
E020	0201	05	Title	Error in Y Developing Assembly
			Description	The value is lower than the lower limit for the patch.
			Remedy	Go through the following: DISPLAY > P-LED-DA; perform cleaning first if P-LED-DA is 3F or more. If the Patch Sensor (UN47,UN48,UN49) value shows 1-digit, perform remedy from "3". If the supply area of the Developing Assembly is badly soiled, toner can be leaked.  1. Check installation of the Developing Assembly and the Drum. 2. Clean the Patch Sensor Window. 3. Check if the patch sensor is disconnected. 4. Replace the Patch Sensor. 5. Replace the Drum. 6. Check toner leak from the Toner Buffer Unit. 7. Check toner level in the Toner Container. 8. Check short-circuit of the harness of the Toner Supply Sensor (PS1).



E code	Detailed code	Occurance area	Items	Description
E020	0202	05	Title	Error in M Developing Assembly
			Description	The value is lower than the lower limit for the patch.
			Remedy	Go through the following: DISPLAY > P-LED-DA; perform cleaning first if P-LED-DA is 3F or more. If the Patch Sensor (UN47,UN48,UN49) value shows 1-digit, perform remedy from "3". If the supply area of the Developing Assembly is badly soiled, toner can be leaked.  1. Check installation of the Developing Assembly and the Drum. 2. Clean the Patch Sensor Window. 3. Check if the patch sensor is disconnected. 4. Replace the Patch Sensor. 5. Replace the Drum. 6. Check toner leak from the Toner Buffer Unit. 7. Check toner level in the Toner Container. 8. Check short-circuit of the harness of the Toner Supply Sensor (PS2).
E020	0203	05	Title	Error in C Developing Assembly
			Description	The value is lower than the lower limit for the patch.
			Remedy	Go through the following: DISPLAY > P-LED-DA; perform cleaning first if P-LED-DA is 3F or more. If the Patch Sensor (UN47,UN48,UN49) value shows 1-digit, perform remedy from "3". If the supply area of the Developing Assembly is badly soiled, toner can be leaked.  1. Check installation of the Developing Assembly and the Drum. 2. Clean the Patch Sensor Window. 3. Check if the patch sensor is disconnected. 4. Replace the Patch Sensor. 5. Replace the Drum. 6. Check toner leak from the Toner Buffer Unit. 7. Check toner level in the Toner Container. 8. Check short-circuit of the harness of the Toner Supply Sensor (PS3).

E code	Detailed code	Occurance area	Items	Description
E020	0204	05	Title	Error in Bk Developing Assembly
			Description	The value is lower than the lower limit for the patch.
			Remedy	Go through the following: DISPLAY > P-LED-DA; perform cleaning first if P-LED-DA is 3F or more. If the Patch Sensor (UN47,UN48,UN49) value shows 1-digit, perform remedy from "3". If the supply area of the Developing Assembly is badly soiled, toner can be leaked.  1. Check installation of the Developing Assembly and the Drum. 2. Clean the Patch Sensor Window. 3. Check if the patch sensor is disconnected. 4. Replace the Patch Sensor. 5. Replace the Drum. 6. Check toner leak from the Toner Buffer Unit. 7. Check toner level in the Toner Container. 8. Check short-circuit of the harness of the Toner Supply Sensor (PS4).
E020	0230	05	Title	Error in M Developing Assembly
			Description	The average of ATR reference value was lower than the specified value at the time of ATR Sensor initialization.
			Remedy	1. Check short-circuit of the ATR Sensor (TS6) Harness. 2. Replace the Developing Assembly.
E020	0231	05	Title	Error in M Developing Assembly
			Description	The average of ATR reference value was higher than the specified value at the time of ATR Sensor initialization.
			Remedy	1. Check if the ATR Sensor (TS6) Connector is properly connected. 2. Check short-circuit of the ATR Sensor Harness. 3. Replace the Developing Assembly.
E020	0240	05	Title	Error in M Developing Assembly
			Description	Unable to adjust the control voltage at the time of ATR initialization: less than the specified value (3.2V).
			Remedy	1. Check if the ATR Sensor (TS6) Connector is properly connected. 2. Check short-circuit of the ATR Sensor Harness. 3. Replace the Developing Assembly.
E020	0241	05	Title	Error in M Developing Assembly
			Description	Unable to adjust the control voltage at the time of ATR initialization: exceeds the specified value (6.8V).
			Remedy	1. Check short-circuit of the ATR Sensor (TS6) Harness. 2. Replace the Developing Assembly.

E code	Detailed code	Occurance area	Items	Description
E020	0290	05	Title	Error in M Developing Assembly
			Description	Error in signal lower limit with ATR sampling detected value
			Remedy	1. Check if the ATR Sensor Connector is disconnected. 2. Check short-circuit of the ATR Sensor (TS6) Harness. 3. Replace the Developing Assembly.
E020	0291	05	Title	Error in M Developing Assembly
			Description	Error in signal upper limit with ATR sampling detected value
			Remedy	1. Check toner leak from the Toner Buffer Unit. 2. Check toner level in the Toner Container. 3. Replace the Developing Assembly. 4. Check short-circuit of the harness with the Toner Buffer Supply Sensor (PS2).
E020	02B0	05	Title	Error in M Developing Assembly
			Description	TD ratio lower limit error at the time of print sequence (Large amount of toner in the Developing Assembly)
			Remedy	Go through the following: DISPLAY > DENS > DENS-M; if DENS-M is slightly higher than 5.0%, output 10 sheets of solid image with the color causing the error (to reduce T/D ratio). See the Service Mode again to see if the problem is improved. Remedy is complete if it's improved. If not, perform the following remedy work.  1. Check if the ATR Sensor (TS6) Connector is disconnected. 2. Check short-circuit of the ATR Sensor Harness. 3. Replace the Developing Assembly.
E020	02B1	05	Title	Error in M Developing Assembly
			Description	TD ratio upper limit error at the time of print sequence (Small amount of toner in the Developing Assembly)
			Remedy	1. Output 10 sheets of white (blank) sheets (to increase T/D ratio). 2. Check toner leak from the Toner Buffer Unit. 3. Check toner level in the Toner Container. 4. Replace the Developing Assembly. 5. Check short-circuit of the harness of the Toner supply sensor (PS2).
E020	0330	05	Title	Error in C Developing Assembly
			Description	The average of ATR reference value was lower than the specified value at the time of ATR Sensor initialization.
			Remedy	1. Check short-circuit of the ATR Sensor (TS7) Harness. 2. Replace the Developing Assembly.

E code	Detailed code	Occurance area	Items	Description
E020	0331	05	Title	Error in C Developing Assembly
			Description	The average of ATR reference value was higher than the specified value at the time of ATR Sensor initialization.
			Remedy	1. Check if the ATR Sensor (TS7) Connector is properly connected. 2. Check short-circuit of the ATR Sensor Harness. 3. Replace the Developing Assembly.
E020	0340	05	Title	Error in C Developing Assembly
			Description	Unable to adjust the control voltage at the time of ATR initialization: less than the specified value (3.2V).
			Remedy	1. Check if the ATR Sensor (TS7) Connector is properly connected. 2. Check short-circuit of the ATR Sensor Harness. 3. Replace the Developing Assembly.
E020	0341	05	Title	Error in C Developing Assembly
			Description	Unable to adjust the control voltage at the time of ATR initialization: exceeds the specified value (6.8V).
			Remedy	1. Check short-circuit of the ATR Sensor (TS7) Harness. 2. Replace the Developing Assembly.
E020	0390	05	Title	Error in C Developing Assembly
			Description	Error in signal lower limit with ATR sampling detected value
			Remedy	1. Check if the ATR Sensor Connector is disconnected. 2. Check short-circuit of the ATR Sensor (TS7) Harness. 3. Replace the Developing Assembly.
E020	0391	05	Title	Error in C Developing Assembly
			Description	Error in signal upper limit with ATR sampling detected value
			Remedy	1. Check toner leak from the Toner Buffer Unit. 2. Check toner level in the Toner Container. 3. Replace the Developing Assembly. 4. Check short-circuit of the harness with the Toner Buffer Supply Sensor (PS3).

E code	Detailed code	Occurance area	Items	Description
E020	03B0	05	Title	Error in C Developing Assembly
			Description	TD ratio lower limit error at the time of print sequence (Large amount of toner in the Developing Assembly)
			Remedy	Go through the following: DISPLAY > DENS > DENS-C; if DENS-C is slightly higher than 5.0%, output 10 sheets of solid image with the color causing the error (to reduce T/D ratio). See the Service Mode again to see if the problem is improved. Remedy is complete if it's improved. If not, perform the following remedy work.  1. Check if the ATR Sensor (TS7) Connector is disconnected. 2. Check short-circuit of the ATR Sensor Harness. 3. Replace the Developing Assembly.
E020	03B1	05	Title	Error in C Developing Assembly
			Description	TD ratio upper limit error at the time of print sequence (Small amount of toner in the Developing Assembly)
			Remedy	1. Output 10 sheets of white (blank) sheets (to increase T/D ratio). 2. Check toner leak from the Toner Buffer Unit. 3. Check toner level in the Toner Container. 4. Replace the Developing Assembly. 5. Check short-circuit of the harness of the Toner supply sensor (PS3).
E020	0430	05	Title	Error in Bk Developing Assembly
			Description	The average of ATR reference value was lower than the specified value at the time of ATR Sensor initialization.
			Remedy	1. Check short-circuit of the ATR Sensor (TS8) Harness. 2. Replace the Developing Assembly.
E020	0431	05	Title	Error in Bk Developing Assembly
			Description	The average of ATR reference value was higher than the specified value at the time of ATR Sensor initialization.
			Remedy	1. Check if the ATR Sensor (TS8) Connector is properly connected. 2. Check short-circuit of the ATR Sensor Harness. 3. Replace the Developing Assembly.
E020	0440	05	Title	Error in Bk Developing Assembly
			Description	Unable to adjust the control voltage at the time of ATR initialization: less than the specified value (3.2V).
			Remedy	1. Check if the ATR Sensor (TS8) Connector is properly connected. 2. Check short-circuit of the ATR Sensor Harness. 3. Replace the Developing Assembly.

E code	Detailed code	Occurance area	Items	Description
E020	0441	05	Title	Error in Bk Developing Assembly
			Description	Unable to adjust the control voltage at the time of ATR initialization: exceeds the specified value (6.8V).
			Remedy	1. Check short-circuit of the ATR Sensor (TS8) Harness. 2. Replace the Developing Assembly.
E020	0490	05	Title	Error in Bk Developing Assembly
			Description	Error in signal lower limit with ATR sampling detected value
			Remedy	1. Check if the ATR Sensor Connector is disconnected. 2. Check short-circuit of the ATR Sensor (TS8) Harness. 3. Replace the Developing Assembly.
E020	0491	05	Title	Error in Bk Developing Assembly
			Description	Error in signal upper limit with ATR sampling detected value
			Remedy	1. Check toner leak from the Toner Buffer Unit. 2. Check toner level in the Toner Container. 3. Replace the Developing Assembly. 4. Check short-circuit of the harness with the Toner Buffer Supply Sensor (PS4).
E020	04B0	05	Title	Error in Bk Developing Assembly
			Description	TD ratio lower limit error at the time of print sequence (Large amount of toner in the Developing Assembly)
			Remedy	Go through the following: DISPLAY > DENS > DENS-K; if DENS-K is slightly higher than 5.0%, output 10 sheets of solid image with the color causing the error (to reduce T/D ratio). See the Service Mode again to see if the problem is improved. Remedy is complete if it's improved. If not, perform the following remedy work.  1. Check if the ATR Sensor (TS8) Connector is disconnected. 2. Check short-circuit of the ATR Sensor Harness. 3. Replace the Developing Assembly.
E020	04B1	05	Title	Error in Bk Developing Assembly
			Description	TD ratio upper limit error at the time of print sequence (Small amount of toner in the Developing Assembly)
			Remedy	1. Output 10 sheets of white (blank) sheets (to increase T/D ratio). 2. Check toner leak from the Toner Buffer Unit. 3. Check toner level in the Toner Container. 4. Replace the Developing Assembly. 5. Check short-circuit of the harness of the Toner supply sensor (PS4).

E code	Detailed code	Occurance area	Items	Description
E021	0100	05	Title	Error in Y Developing Motor
			Description	The motor failed to rotate at the specified speed.
			Remedy	1. Check the load applied to the Developing Assembly (turn the gear with your hand to check if the load is appropriate. If the load is too much, replace the Developing Assembly). 2. Select the following in Service Mode: COPIER > FUNCTION > PART-CHK > MTR; and turn M5 to check the drive of the Developing Motor. If it's not rotating properly, check the harness (to see if the harness is caught, disconnected or physically removed). 3. (If the above measures do not solve the problem,) replace the Drum Driver PCB (UN4).
E021	0200	05	Title	Error in M Developing Motor
			Description	The motor failed to rotate at the specified speed.
			Remedy	1. Check the load applied to the Developing Assembly (turn the gear with your hand to check if the load is appropriate. If the load is too much, replace the Developing Assembly). 2. Select the following in Service Mode: COPIER > FUNCTION > PART-CHK > MTR; and turn M6 to check the drive of the Developing Motor. If it's not rotating properly, check the harness (to see if the harness is caught, disconnected or physically removed). 3. (If the above measures do not solve the problem,) replace the Drum Driver PCB (UN4).
E021	0300	05	Title	Error in C Developing Motor
			Description	The motor failed to rotate at the specified speed.
			Remedy	1. Check the load applied to the Developing Assembly (turn the gear with your hand to check if the load is appropriate. If the load is too much, replace the Developing Assembly). 2. Select the following in Service Mode: COPIER > FUNCTION > PART-CHK > MTR; and turn M7 to check the drive of the Developing Motor. If it's not rotating properly, check the harness (to see if the harness is caught, disconnected or physically removed). 3. (If the above measures do not solve the problem,) replace the Drum Driver PCB (UN4).

E code	Detailed code	Occurance area	Items	Description
E021	0400	05	Title	Error in Bk Developing Motor
			Description	The motor failed to rotate at the specified speed.
			Remedy	1. Check the load applied to the Developing Assembly (turn the gear with your hand to check if the load is appropriate. If the load is too much, replace the Developing Assembly). 2. Select the following in Service Mode: COPIER > FUNCTION > PART-CHK > MTR; and turn M8 to check the drive of the Developing Motor. If it's not rotating properly, check the harness (to see if the harness is caught, disconnected or physically removed). 3. (If the above measures do not solve the problem,) replace the Drum Driver PCB (UN4).
E025	0100	05	Title	Error in lock of the Y Toner Container Motor
			Description	The Y Toner Container Motor is detected to be locked / lock detection.
			Remedy	1. Use the attached tool to manually rotate the Main Drive Unit to check the operation (by comparing with other color, etc.) If the manual rotating operation results in NG, perform the following because it's due to mechanical overload. If there is no problem, go to step 5. 2. Remove the Delivery Tray to check the position of the projection attached at the back of the gear in the Hopper Assembly. Compare with the gear that works properly. If the position of the projection is displaced, check the following. Check the lever to open/close the Toner Small Cover (to see if the operation is smooth, no damage with the lever, the lever works OK (no wrong move to up/down). If the lever is faulty, replace the lever. 3. Remove the Main Drive Unit to check the unit (to see damage, etc.) If it's results in NG, replace the Main Drive Unit. 4. Manually turn the gear on the cam in the hopper unit to check the rotation. If it's results in NG, replace the Set-on Hopper Unit. 5. (If the above measures do not solve the problem) Replace the Toner Container Motor (M9). Replace the Drum Driver PCB (UN4).

E code	Detailed code	Occurance area	Items	Description
E025	0110	05	Title	Timeout error in detection of Y Toner Bottle Seal/Release Sensor
			Description	Failure in detection about the changes of ON => OFF => ON with the sensor when the cap of the Y Toner Container was sealed/released.
			Remedy	<p>1. Use the attached tool to manually rotate the Main Drive Unit to check the operation.</p> <p>2. If the Main Drive Unit side failed to rotate, check the drive (to see damage of the gear, etc.) If it's results in NG, replace the Main Drive Unit.</p> <p>3. If the Main Drive Unit side failed to rotate while the Drive rotates, turn the Set-on Hopper Unit to check the rotating operation. If it's results in NG, replace the Set-on Hopper Unit.</p> <p>4. If both the Main Drive Unit and the Set-on Hooper Unit rotates together once the Main Drive Unit is manually rotated while sealing/releasing of the container works properly, check the sensor harness (to see if the harness is caught, disconnected or physically removed).</p> <p>5. Replace the sensor which has been checked in step 4.</p> <p>6. (If the above measures do not solve the problem,) Replace the Drum Driver PCB (UN4).</p> <p>NOTE: When checking the operation after performing the remedy, go through the following to clear the error: COPIER&gt;FUNCTION&gt;CLEAR&gt;ERR; then, turn OFF and then ON the power. After performing the remedy, perform the toner replacement operation (from toner removal to reset/recovery) from the Control Panel at least once, and check that the replacement operation can be performed normally.</p>
E025	0120	05	Title	Y Mismatched phase
			Description	Set-on Unit detects opening of the Y Toner Container as well as the Small Door.
			Remedy	<p>1. Check if the Small Door can be closed.</p> <p>2. Close the Small Door and turn OFF and then ON the power to check recovery.</p> <p>3. Check the installation of the Open/Close Sensor of the Small Door (to see if it's installed at the correct position).</p> <p>4. Check the Sensor Harness (to see if the harness is caught, disconnected or physically removed).</p> <p>5. (If the above measures do not solve the problem,) Replace the Drum Driver PCB (UN4).</p>

E code	Detailed code	Occurance area	Items	Description
E025	01A0	05	Title	Error in Y Toner Container Cam HP Sensor (PS5)
			Description	Unable to detect the change in the Toner Container Cam HP Sensor status (ON -> OFF) when opening the Toner Cap so that open and close status of the Toner Cap cannot be judged.
			Remedy	<p>Identify the cause of the error whether it is due to mechanical problem to open/close the Toner Cap or problem at the Toner Container Cam HP Sensor side.</p> <p>1. Check if the Toner Container Cam HP Sensor is soiled and the installation of the sensor.</p> <p>2. Rotate the Set-on Drive Shaft a little with the attached tool, and check the service mode (COPIER&gt; I/O&gt; DCON&gt; P024 bit4) to see that the output value of the sensor is changed. Since it is difficult to check the screen while rotating it, repeat the operation to rotate it a little and check the screen until the value is changed. If it is normal, the output value of the sensor is changed when opening/closing the Toner Cap. Even if it is normal, be sure to perform step 4 and later steps.</p> <p>2-1. If there is an error in rotation of the Set-on Drive Shaft, check the drive system such as gears. If it is damaged, replace the Set-on Drive Unit and then perform step 4 and later steps.</p> <p>2-2. When the Set-on Drive Unit is not driven although the Set-on Drive Shaft rotates, check if it is driven by removing the Hopper Unit. If it is not driven, replace the Hopper Unit and then perform step 4 and later steps.</p> <p>2-3. When the output value of the sensor is not changed although the Set-on Drive Unit is driven, check the Sensor Harness (to see if the harness is caught, disconnected or physically removed). If there is no problem, replace the sensor. After checking the output value in step 2, perform step 4 and later steps.</p> <p>3. If the problem is not solved by replacing the foregoing parts, replace the Drum Driver PCB (UN4) and then perform step 4 and later steps.</p> <p>4. Clear the error in service mode (COPIER&gt; FUNCTION&gt; CLEAR&gt; ERR), and then turn OFF and then ON the main power.</p> <p>5. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/Maintenance&gt; Replace Specified Toner), and check that toner replacement can be performed normally.</p>

E code	Detailed code	Occurance area	Items	Description
E025	01B0	05	Title	Error in Y Toner Container Cam HP Sensor (PS5)
			Description	Unable to detect the change in the Toner Container Cam HP Sensor status (OFF -> ON) when closing the Toner Cap so that open and close status of the Toner Cap cannot be judged.
			Remedy	<p>Identify the cause of the error whether it is due to mechanical problem to open/close the Toner Cap or problem at the Toner Container Cam HP Sensor side.</p> <p>1. Check if the Toner Container Cam HP Sensor is soiled and the installation of the sensor.</p> <p>2. Rotate the Set-on Drive Shaft a little with the attached tool, and check the service mode (COPIER&gt; I/O&gt; DCON&gt; P024 bit4) to see that the output value of the sensor is changed.</p> <p>Since it is difficult to check the screen while rotating it, repeat the operation to rotate it a little and check the screen until the value is changed.</p> <p>If it is normal, the output value of the sensor is changed when opening/closing the Toner Cap. Even if it is normal, be sure to perform step 4 and later steps.</p> <p>2-1. If there is an error in rotation of the Set-on Drive Shaft, check the drive system such as gears.</p> <p>If it is damaged, replace the Set-on Drive Unit and then perform step 4 and later steps.</p> <p>2-2. When the Set-on Drive Unit is not driven although the Set-on Drive Shaft rotates, check if it is driven by removing the Hopper Unit.</p> <p>If it is not driven, replace the Hopper Unit and then perform step 4 and later steps.</p> <p>2-3. When the output value of the sensor is not changed although the Set-on Drive Unit is driven, check the Sensor Harness (to see if the harness is caught, disconnected or physically removed).</p> <p>If there is no problem, replace the sensor. After checking the output value in step 2, perform step 4 and later steps.</p> <p>3. If the problem is not solved by replacing the foregoing parts, replace the Drum Driver PCB (UN4) and then perform step 4 and later steps.</p> <p>4. Clear the error in service mode (COPIER&gt; FUNCTION&gt; CLEAR&gt; ERR), and then turn OFF and then ON the main power.</p> <p>5. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/Maintenance&gt; Replace Specified Toner), and check that toner replacement can be performed normally.</p>

E code	Detailed code	Occurance area	Items	Description
E025	01C0	05	Title	Error in Cover Sensor (PS13) in Y Toner Container
			Description	Unable to detect opening of the Toner Container Inner Cover when removing the Toner Container.
			Remedy	<p>Identify the cause of the error whether it is due to link mechanism to open the Toner Container Inner Cover or problem at the Toner Container Inner Cover Sensor side.</p> <p>1. Perform the user mode (Adjustment/Maintenance&gt; Replace Specified Toner) to check if the Toner Container Inner Cover opens normally (damage, slide of shaft area, etc.).</p> <p>2. Check if the Toner Container Inner Cover Sensor is soiled and the installation of the sensor.</p> <p>3. Check the service mode (COPIER&gt; I/O&gt; DCON&gt; P024 bit8) to see that the output value of the Toner Container Inner Cover Sensor is changed normally when opening/closing the Toner Container Inner Cover.</p> <p>If it is normal, the value becomes 0 by rotating the Set-on Drive Shaft with the attached tool and opening the Toner Container Inner Cover. When closing the Toner Container Inner Cover by hand, it becomes 1.</p> <p>3-1. When the Toner Container Inner Cover is not opened although the Set-on Drive Shaft rotates, check the drive system from upstream (Set-on Drive Unit -&gt; Hopper Unit -&gt; Bottle Base Unit -&gt; Toner Container Inner Cover Unit). If it is damaged, replace the damaged part and then perform step 5 and later steps.</p> <p>3-2. When the output value is not changed normally although the Toner Container Inner Cover can be opened/closed, check the Sensor Harness (to see if the harness is caught, disconnected or physically removed, *including the Relay Connector).</p> <p>If there is no problem, replace the sensor. After checking the output value in step 3, perform step 5 and later steps.</p> <p>4. If the problem is not solved by replacing the foregoing part, replace the Drum Driver PCB (UN4) and then perform step 5 and later steps.</p> <p>5. Clear the error in service mode (COPIER&gt; FUNCTION&gt; CLEAR&gt; ERR), and then turn OFF and then ON the main power.</p> <p>6. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/Maintenance&gt; Replace Specified Toner), and check that toner replacement can be performed normally.</p>



E code	Detailed code	Occurance area	Items	Description
E025	0200	05	Title	Error in lock of the M Toner Container Motor
			Description	The M Toner Container Motor is detected to be locked / lock detection.
			Remedy	<p>1. Use the attached tool to manually rotate the Main Drive Unit to check the operation (by comparing with other color, etc.) If the manual rotating operation results in NG, perform the following because it's due to mechanical overload. If there is no problem, go to step 5.</p> <p>2. Remove the Delivery Tray to check the position of the projection attached at the back of the gear in the Hopper Assembly. Compare with the gear that works properly. If the position of the projection is displaced, check the following. Check the lever to open/close the Toner Small Cover (to see if the operation is smooth, no damage with the lever, the lever works OK (no wrong move to up/down). If the lever is faulty, replace the lever.</p> <p>3. Remove the Main Drive Unit to check the unit (to see damage, etc.) If it's results in NG, replace the Main Drive Unit.</p> <p>4. Manually turn the gear on the cam in the hopper unit to check the rotation. If it's results in NG, replace the Set-on Hopper Unit.</p> <p>5. (If the above measures do not solve the problem) Replace the Toner Container Motor (M10). Replace the Drum Driver PCB (UN4).</p>

E code	Detailed code	Occurance area	Items	Description
E025	0210	05	Title	Timeout error in detection of M Toner Bottle Seal/Release Sensor
			Description	Failure in detection about the changes of ON => OFF => ON with the sensor when the cap of the M Toner Container was sealed/released.
			Remedy	<p>1. Use the attached tool to manually rotate the Main Drive Unit to check the operation. 2. If the Main Drive Unit side failed to rotate, check the drive (to see damage of the gear, etc.) If it's results in NG, replace the Main Drive Unit. 3. If the Main Drive Unit side failed to rotate while the Drive rotates, turn the Set-on Hopper Unit to check the rotating operation. If it's results in NG, replace the Set-on Hopper Unit. 4. If both the Main Drive Unit and the Set-on Hooper Unit rotates together once the Main Drive Unit is manually rotated while sealing/releasing of the container works properly, check the sensor harness (to see if the harness is caught, disconnected or physically removed). 5. Replace the sensor which has been checked in step 4. 6. (If the above measures do not solve the problem.) Replace the Drum Driver PCB (UN4).</p> <p>NOTE: When checking the operation after performing the remedy, go through the following to clear the error: COPIER&gt;FUNCTION&gt;CLEAR&gt;ERR; then, turn OFF and then ON the power. After performing the remedy, perform the toner replacement operation (from toner removal to reset/recovery) from the Control Panel at least once, and check that the replacement operation can be performed normally.</p>
E025	0220	05	Title	M Mismatched phase
			Description	Set-on Unit detects opening of the M Toner Container as well as the Small Door.
			Remedy	<p>1. Check if the Small Door can be closed. 2. Close the Small Door and turn OFF and then ON the power to check recovery. 3. Check the installation of the Open/Close Sensor of the Small Door (to see if it's installed at the correct position). 4. Check the Sensor Harness (to see if the harness is caught, disconnected or physically removed). 5. (If the above measures do not solve the problem.) Replace the Drum Driver PCB (UN4).</p>



E code	Detailed code	Occurance area	Items	Description
E025	02A0	05	Title	Error in M Toner Container Cam HP Sensor (PS6)
			Description	Unable to detect the change in the Toner Container Cam HP Sensor status (ON -> OFF) when opening the Toner Cap so that open and close status of the Toner Cap cannot be judged.
			Remedy	<p>Identify the cause of the error whether it is due to mechanical problem to open/close the Toner Cap or problem at the Toner Container Cam HP Sensor side.</p> <p>1. Check if the Toner Container Cam HP Sensor is soiled and the installation of the sensor.</p> <p>2. Rotate the Set-on Drive Shaft a little with the attached tool, and check the service mode (COPIER&gt; I/O&gt; DCON&gt; P024 bit5) to see that the output value of the sensor is changed.</p> <p>Since it is difficult to check the screen while rotating it, repeat the operation to rotate it a little and check the screen until the value is changed.</p> <p>If it is normal, the output value of the sensor is changed when opening/closing the Toner Cap. Even if it is normal, be sure to perform step 4 and later steps.</p> <p>2-1. If there is an error in rotation of the Set-on Drive Shaft, check the drive system such as gears.</p> <p>If it is damaged, replace the Set-on Drive Unit and then perform step 4 and later steps.</p> <p>2-2. When the Set-on Drive Unit is not driven although the Set-on Drive Shaft rotates, check if it is driven by removing the Hopper Unit.</p> <p>If it is not driven, replace the Hopper Unit and then perform step 4 and later steps.</p> <p>2-3. When the output value of the sensor is not changed although the Set-on Drive Unit is driven, check the Sensor Harness (to see if the harness is caught, disconnected or physically removed).</p> <p>If there is no problem, replace the sensor. After checking the output value in step 2, perform step 4 and later steps.</p> <p>3. If the problem is not solved by replacing the foregoing parts, replace the Drum Driver PCB (UN4) and then perform step 4 and later steps.</p> <p>4. Clear the error in service mode (COPIER&gt; FUNCTION&gt; CLEAR&gt; ERR), and then turn OFF and then ON the main power.</p> <p>5. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/Maintenance&gt; Replace Specified Toner), and check that toner replacement can be performed normally.</p>

E code	Detailed code	Occurance area	Items	Description
E025	02B0	05	Title	Error in M Toner Container Cam HP Sensor (PS6)
			Description	Unable to detect the change in the Toner Container Cam HP Sensor status (OFF -> ON) when closing the Toner Cap so that open and close status of the Toner Cap cannot be judged.
			Remedy	<p>Identify the cause of the error whether it is due to mechanical problem to open/close the Toner Cap or problem at the Toner Container Cam HP Sensor side.</p> <p>1. Check if the Toner Container Cam HP Sensor is soiled and the installation of the sensor.</p> <p>2. Rotate the Set-on Drive Shaft a little with the attached tool, and check the service mode (COPIER&gt; I/O&gt; DCON&gt; P024 bit5) to see that the output value of the sensor is changed.</p> <p>Since it is difficult to check the screen while rotating it, repeat the operation to rotate it a little and check the screen until the value is changed.</p> <p>If it is normal, the output value of the sensor is changed when opening/closing the Toner Cap. Even if it is normal, be sure to perform step 4 and later steps.</p> <p>2-1. If there is an error in rotation of the Set-on Drive Shaft, check the drive system such as gears.</p> <p>If it is damaged, replace the Set-on Drive Unit and then perform step 4 and later steps.</p> <p>2-2. When the Set-on Drive Unit is not driven although the Set-on Drive Shaft rotates, check if it is driven by removing the Hopper Unit.</p> <p>If it is not driven, replace the Hopper Unit and then perform step 4 and later steps.</p> <p>2-3. When the output value of the sensor is not changed although the Set-on Drive Unit is driven, check the Sensor Harness (to see if the harness is caught, disconnected or physically removed).</p> <p>If there is no problem, replace the sensor. After checking the output value in step 2, perform step 4 and later steps.</p> <p>3. If the problem is not solved by replacing the foregoing parts, replace the Drum Driver PCB (UN4) and then perform step 4 and later steps.</p> <p>4. Clear the error in service mode (COPIER&gt; FUNCTION&gt; CLEAR&gt; ERR), and then turn OFF and then ON the main power.</p> <p>5. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/Maintenance&gt; Replace Specified Toner), and check that toner replacement can be performed normally.</p>

E code	Detailed code	Occurance area	Items	Description
E025	02C0	05	Title	Error in Cover Sensor (PS14) in M Toner Container
			Description	Unable to detect opening of the Toner Container Inner Cover when removing the Toner Container.
			Remedy	<p>Identify the cause of the error whether it is due to link mechanism to open the Toner Container Inner Cover or problem at the Toner Container Inner Cover Sensor side.</p> <ol style="list-style-type: none"> <li>1. Perform the user mode (Adjustment/Maintenance&gt; Replace Specified Toner) to check if the Toner Container Inner Cover opens normally (damage, slide of shaft area, etc.).</li> <li>2. Check if the Toner Container Inner Cover Sensor is soiled and the installation of the sensor.</li> <li>3. Check the service mode (COPIER&gt; I/O&gt; DCON&gt; P024 bit9) to see that the output value of the Toner Container Inner Cover Sensor is changed normally when opening/closing the Toner Container Inner Cover. If it is normal, the value becomes 0 by rotating the Set-on Drive Shaft with the attached tool and opening the Toner Container Inner Cover. When closing the Toner Container Inner Cover by hand, it becomes 1.</li> </ol> <p>3-1. When the Toner Container Inner Cover is not opened although the Set-on Drive Shaft rotates, check the drive system from upstream (Set-on Drive Unit -&gt; Hopper Unit -&gt; Bottle Base Unit -&gt; Toner Container Inner Cover Unit). If it is damaged, replace the damaged part and then perform step 5 and later steps.</p> <p>3-2. When the output value is not changed normally although the Toner Container Inner Cover can be opened/closed, check the Sensor Harness (to see if the harness is caught, disconnected or physically removed, *including the Relay Connector). If there is no problem, replace the sensor. After checking the output value in step 3, perform step 5 and later steps.</p> <ol style="list-style-type: none"> <li>4. If the problem is not solved by replacing the foregoing parts, replace the Drum Driver PCB (UN4) and then perform step 5 and later steps.</li> <li>5. Clear the error in service mode (COPIER&gt; FUNCTION&gt; CLEAR&gt; ERR), and then turn OFF and then ON the main power.</li> <li>6. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/Maintenance&gt; Replace Specified Toner), and check that toner replacement can be performed normally.</li> </ol>

E code	Detailed code	Occurance area	Items	Description
E025	0300	05	Title	Error in lock of the C Toner Container Motor
			Description	The C Toner Container Motor is detected to be locked / lock detection.
			Remedy	<ol style="list-style-type: none"> <li>1. Use the attached tool to manually rotate the Main Drive Unit to check the operation (by comparing with other color, etc.) If the manual rotating operation results in NG, perform the following because it's due to mechanical overload. If there is no problem, go to step 5.</li> <li>2. Remove the Delivery Tray to check the position of the projection attached at the back of the gear in the Hopper Assembly. Compare with the gear that works properly. If the position of the projection is displaced, check the following. Check the lever to open/close the Toner Small Cover (to see if the operation is smooth, no damage with the lever, the lever works OK (no wrong move to up/down). If the lever is faulty, replace the lever.</li> <li>3. Remove the Main Drive Unit to check the unit (to see damage, etc.) If it's results in NG, replace the Main Drive Unit.</li> <li>4. Manually turn the gear on the cam in the hopper unit to check the rotation. If it's results in NG, replace the Set-on Hopper Unit.</li> <li>5. (If the above measures do not solve the problem) Replace the Toner Container Motor (M11). Replace the Drum Driver PCB (UN4).</li> </ol>

E code	Detailed code	Occurance area	Items	Description
E025	0310	05	Title	Timeout error in detection of C Toner Bottle Seal/Release Sensor
			Description	Failure in detection about the changes of ON => OFF => ON with the sensor when the cap of the C Toner Container was sealed/released.
			Remedy	<p>1. Use the attached tool to manually rotate the Main Drive Unit to check the operation.</p> <p>2. If the Main Drive Unit side failed to rotate, check the drive (to see damage of the gear, etc.) If it's results in NG, replace the Main Drive Unit.</p> <p>3. If the Main Drive Unit side failed to rotate while the Drive rotates, turn the Set-on Hopper Unit to check the rotating operation. If it's results in NG, replace the Set-on Hopper Unit.</p> <p>4. If both the Main Drive Unit and the Set-on Hooper Unit rotates together once the Main Drive Unit is manually rotated while sealing/releasing of the container works properly, check the sensor harness (to see if the harness is caught, disconnected or physically removed).</p> <p>5. Replace the sensor which has been checked in step 4.</p> <p>6. (If the above measures do not solve the problem,) Replace the Drum Driver PCB (UN4).</p> <p>NOTE: When checking the operation after performing the remedy, go through the following to clear the error: COPIER&gt;FUNCTION&gt;CLEAR&gt;ERR; then, turn OFF and then ON the power. After performing the remedy, perform the toner replacement operation (from toner removal to reset/recovery) from the Control Panel at least once, and check that the replacement operation can be performed normally.</p>
E025	0320	05	Title	C Mismatched phase
			Description	Set-on Unit detects opening of the C Toner Container as well as the Small Door.
			Remedy	<p>1. Check if the Small Door can be closed.</p> <p>2. Close the Small Door and turn OFF and then ON the power to check recovery.</p> <p>3. Check the installation of the Open/Close Sensor of the Small Door (to see if it's installed at the correct position).</p> <p>4. Check the Sensor Harness (to see if the harness is caught, disconnected or physically removed).</p> <p>5. (If the above measures do not solve the problem,) Replace the Drum Driver PCB (UN4).</p>

E code	Detailed code	Occurance area	Items	Description
E025	03A0	05	Title	Error in C Toner Container Cam HP Sensor (PS7)
			Description	Unable to detect the change in the Toner Container Cam HP Sensor status (ON -> OFF) when opening the Toner Cap so that open and close status of the Toner Cap cannot be judged.
			Remedy	<p>Identify the cause of the error whether it is due to mechanical problem to open/close the Toner Cap or problem at the Toner Container Cam HP Sensor side.</p> <p>1. Check if the Toner Container Cam HP Sensor is soiled and the installation of the sensor.</p> <p>2. Rotate the Set-on Drive Shaft a little with the attached tool, and check the service mode (COPIER&gt; I/O&gt; DCON&gt; P024 bit6) to see that the output value of the sensor is changed.</p> <p>Since it is difficult to check the screen while rotating it, repeat the operation to rotate it a little and check the screen until the value is changed.</p> <p>If it is normal, the output value of the sensor is changed when opening/closing the Toner Cap. Even if it is normal, be sure to perform step 4 and later steps.</p> <p>2-1. If there is an error in rotation of the Set-on Drive Shaft, check the drive system such as gears.</p> <p>If it is damaged, replace the Set-on Drive Unit and then perform step 4 and later steps.</p> <p>2-2. When the Set-on Drive Unit is not driven although the Set-on Drive Shaft rotates, check if it is driven by removing the Hopper Unit.</p> <p>If it is not driven, replace the Hopper Unit and then perform step 4 and later steps.</p> <p>2-3. When the output value of the sensor is not changed although the Set-on Drive Unit is driven, check the Sensor Harness (to see if the harness is caught, disconnected or physically removed).</p> <p>If there is no problem, replace the sensor. After checking the output value in step 2, perform step 4 and later steps.</p> <p>3. If the problem is not solved by replacing the foregoing parts, replace the Drum Driver PCB (UN4) and then perform step 4 and later steps.</p> <p>4. Clear the error in service mode (COPIER&gt; FUNCTION&gt; CLEAR&gt; ERR), and then turn OFF and then ON the main power.</p> <p>5. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/Maintenance&gt; Replace Specified Toner), and check that toner replacement can be performed normally.</p>

E code	Detailed code	Occurance area	Items	Description
E025	03B0	05	Title	Error in C Toner Container Cam HP Sensor (PS7)
			Description	Unable to detect the change in the Toner Container Cam HP Sensor status (OFF -> ON) when closing the Toner Cap so that open and close status of the Toner Cap cannot be judged.
			Remedy	<p>Identify the cause of the error whether it is due to mechanical problem to open/close the Toner Cap or problem at the Toner Container Cam HP Sensor side.</p> <p>1. Check if the Toner Container Cam HP Sensor is soiled and the installation of the sensor.</p> <p>2. Rotate the Set-on Drive Shaft a little with the attached tool, and check the service mode (COPIER&gt; I/O&gt; DCON&gt; P024 bit6) to see that the output value of the sensor is changed.</p> <p>Since it is difficult to check the screen while rotating it, repeat the operation to rotate it a little and check the screen until the value is changed.</p> <p>If it is normal, the output value of the sensor is changed when opening/closing the Toner Cap. Even if it is normal, be sure to perform step 4 and later steps.</p> <p>2-1. If there is an error in rotation of the Set-on Drive Shaft, check the drive system such as gears.</p> <p>If it is damaged, replace the Set-on Drive Unit and then perform step 4 and later steps.</p> <p>2-2. When the Set-on Drive Unit is not driven although the Set-on Drive Shaft rotates, check if it is driven by removing the Hopper Unit.</p> <p>If it is not driven, replace the Hopper Unit and then perform step 4 and later steps.</p> <p>2-3. When the output value of the sensor is not changed although the Set-on Drive Unit is driven, check the Sensor Harness (to see if the harness is caught, disconnected or physically removed).</p> <p>If there is no problem, replace the sensor. After checking the output value in step 2, perform step 4 and later steps.</p> <p>3. If the problem is not solved by replacing the foregoing parts, replace the Drum Driver PCB (UN4) and then perform step 4 and later steps.</p> <p>4. Clear the error in service mode (COPIER&gt; FUNCTION&gt; CLEAR&gt; ERR), and then turn OFF and then ON the main power.</p> <p>5. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/Maintenance&gt; Replace Specified Toner), and check that toner replacement can be performed normally.</p>

E code	Detailed code	Occurance area	Items	Description
E025	03C0	05	Title	Error in Cover Sensor (PS15) in C Toner Container
			Description	Unable to detect opening of the Toner Container Inner Cover when removing the Toner Container.
			Remedy	<p>Identify the cause of the error whether it is due to link mechanism to open the Toner Container Inner Cover or problem at the Toner Container Inner Cover Sensor side.</p> <p>1. Perform the user mode (Adjustment/Maintenance&gt; Replace Specified Toner) to check if the Toner Container Inner Cover opens normally (damage, slide of shaft area, etc.).</p> <p>2. Check if the Toner Container Inner Cover Sensor is soiled and the installation of the sensor.</p> <p>3. Check the service mode (COPIER&gt; I/O&gt; DCON&gt; P024 bit10) to see that the output value of the Toner Container Inner Cover Sensor is changed normally when opening/closing the Toner Container Inner Cover.</p> <p>If it is normal, the value becomes 0 by rotating the Set-on Drive Shaft with the attached tool and opening the Toner Container Inner Cover. When closing the Toner Container Inner Cover by hand, it becomes 1.</p> <p>3-1. When the Toner Container Inner Cover is not opened although the Set-on Drive Shaft rotates, check the drive system from upstream (Set-on Drive Unit -&gt; Hopper Unit -&gt; Bottle Base Unit -&gt; Toner Container Inner Cover Unit). If it is damaged, replace the damaged part and then perform step 5 and later steps.</p> <p>3-2. When the output value is not changed normally although the Toner Container Inner Cover can be opened/closed, check the Sensor Harness (to see if the harness is caught, disconnected or physically removed, *including the Relay Connector).</p> <p>If there is no problem, replace the sensor. After checking the output value in step 3, perform step 5 and later steps.</p> <p>4. If the problem is not solved by replacing the foregoing parts, replace the Drum Driver PCB (UN4) and then perform step 5 and later steps.</p> <p>5. Clear the error in service mode (COPIER&gt; FUNCTION&gt; CLEAR&gt; ERR), and then turn OFF and then ON the main power.</p> <p>6. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/Maintenance&gt; Replace Specified Toner), and check that toner replacement can be performed normally.</p>

E code	Detailed code	Occurance area	Items	Description
E025	0400	05	Title	Error in lock of the Bk Toner Container Motor
			Description	The Bk Toner Container Motor is detected to be locked / lock detection.
			Remedy	<p>1. Use the attached tool to manually rotate the Main Drive Unit to check the operation (by comparing with other color, etc.) If the manual rotating operation results in NG, perform the following because it's due to mechanical overload. If there is no problem, go to step 5.</p> <p>2. Remove the Delivery Tray to check the position of the projection attached at the back of the gear in the Hopper Assembly. Compare with the gear that works properly. If the position of the projection is displaced, check the following. Check the lever to open/close the Toner Small Cover (to see if the operation is smooth, no damage with the lever, the lever works OK (no wrong move to up/down). If the lever is faulty, replace the lever.</p> <p>3. Remove the Main Drive Unit to check the unit (to see damage, etc.) If it's results in NG, replace the Main Drive Unit.</p> <p>4. Manually turn the gear on the cam in the hopper unit to check the rotation. If it's results in NG, replace the Set-on Hopper Unit.</p> <p>5. (If the above measures do not solve the problem) Replace the Toner Container Motor (M12). Replace the Drum Driver PCB (UN4).</p>

E code	Detailed code	Occurance area	Items	Description
E025	0410	05	Title	Timeout error in detection of Bk Toner Bottle Seal/Release Sensor
			Description	Failure in detection about the changes of ON => OFF => ON with the sensor when the cap of the Bk Toner Container was sealed/released.
			Remedy	<p>1. Use the attached tool to manually rotate the Main Drive Unit to check the operation. 2. If the Main Drive Unit side failed to rotate, check the drive (to see damage of the gear, etc.) If it's results in NG, replace the Main Drive Unit. 3. If the Main Drive Unit side failed to rotate while the Drive rotates, turn the Set-on Hopper Unit to check the rotating operation. If it's results in NG, replace the Set-on Hopper Unit. 4. If both the Main Drive Unit and the Set-on Hooper Unit rotates together once the Main Drive Unit is manually rotated while sealing/releasing of the container works properly, check the sensor harness (to see if the harness is caught, disconnected or physically removed). 5. Replace the sensor which has been checked in step 4. 6. (If the above measures do not solve the problem.) Replace the Drum Driver PCB (UN4).</p> <p>NOTE: When checking the operation after performing the remedy, go through the following to clear the error: COPIER&gt;FUNCTION&gt;CLEAR&gt;ERR; then, turn OFF and then ON the power. After performing the remedy, perform the toner replacement operation (from toner removal to reset/recovery) from the Control Panel at least once, and check that the replacement operation can be performed normally.</p>
E025	0420	05	Title	Bk Mismatched phase
			Description	Set-on Unit detects opening of the Bk Toner Container as well as the Small Door.
			Remedy	<p>1. Check if the Small Door can be closed. 2. Close the Small Door and turn OFF and then ON the power to check recovery. 3. Check the installation of the Open/Close Sensor of the Small Door (to see if it's installed at the correct position). 4. Check the Sensor Harness (to see if the harness is caught, disconnected or physically removed). 5. (If the above measures do not solve the problem.) Replace the Drum Driver PCB (UN4).</p>

E code	Detailed code	Occurance area	Items	Description
E025	04A0	05	Title	Error in Bk Toner Container Cam HP Sensor (PS8)
			Description	Unable to detect the change in the Toner Container Cam HP Sensor status (ON -> OFF) when opening the Toner Cap so that open and close status of the Toner Cap cannot be judged.
			Remedy	<p>Identify the cause of the error whether it is due to mechanical problem to open/close the Toner Cap or problem at the Toner Container Cam HP Sensor side.</p> <p>1. Check if the Toner Container Cam HP Sensor is soiled and the installation of the sensor.</p> <p>2. Rotate the Set-on Drive Shaft a little with the attached tool, and check the service mode (COPIER&gt; I/O&gt; DCON&gt; P024 bit7) to see that the output value of the sensor is changed.</p> <p>Since it is difficult to check the screen while rotating it, repeat the operation to rotate it a little and check the screen until the value is changed.</p> <p>If it is normal, the output value of the sensor is changed when opening/closing the Toner Cap. Even if it is normal, be sure to perform step 4 and later steps.</p> <p>2-1. If there is an error in rotation of the Set-on Drive Shaft, check the drive system such as gears.</p> <p>If it is damaged, replace the Set-on Drive Unit and then perform step 4 and later steps.</p> <p>2-2. When the Set-on Drive Unit is not driven although the Set-on Drive Shaft rotates, check if it is driven by removing the Hopper Unit.</p> <p>If it is not driven, replace the Hopper Unit and then perform step 4 and later steps.</p> <p>2-3. When the output value of the sensor is not changed although the Set-on Drive Unit is driven, check the Sensor Harness (to see if the harness is caught, disconnected or physically removed).</p> <p>If there is no problem, replace the sensor. After checking the output value in step 2, perform step 4 and later steps.</p> <p>3. If the problem is not solved by replacing the foregoing parts, replace the Drum Driver PCB (UN4) and then perform step 4 and later steps.</p> <p>4. Clear the error in service mode (COPIER&gt; FUNCTION&gt; CLEAR&gt; ERR), and then turn OFF and then ON the main power.</p> <p>5. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/Maintenance&gt; Replace Specified Toner), and check that toner replacement can be performed normally.</p>

E code	Detailed code	Occurance area	Items	Description
E025	04B0	05	Title	Error in Bk Toner Container Cam HP Sensor (PS8)
			Description	Unable to detect the change in the Toner Container Cam HP Sensor status (OFF -> ON) when closing the Toner Cap so that open and close status of the Toner Cap cannot be judged.
			Remedy	<p>Identify the cause of the error whether it is due to mechanical problem to open/close the Toner Cap or problem at the Toner Container Cam HP Sensor side.</p> <p>1. Check if the Toner Container Cam HP Sensor is soiled and the installation of the sensor.</p> <p>2. Rotate the Set-on Drive Shaft a little with the attached tool, and check the service mode (COPIER&gt; I/O&gt; DCON&gt; P024 bit7) to see that the output value of the sensor is changed.</p> <p>Since it is difficult to check the screen while rotating it, repeat the operation to rotate it a little and check the screen until the value is changed.</p> <p>If it is normal, the output value of the sensor is changed when opening/closing the Toner Cap. Even if it is normal, be sure to perform step 4 and later steps.</p> <p>2-1. If there is an error in rotation of the Set-on Drive Shaft, check the drive system such as gears.</p> <p>If it is damaged, replace the Set-on Drive Unit and then perform step 4 and later steps.</p> <p>2-2. When the Set-on Drive Unit is not driven although the Set-on Drive Shaft rotates, check if it is driven by removing the Hopper Unit.</p> <p>If it is not driven, replace the Hopper Unit and then perform step 4 and later steps.</p> <p>2-3. When the output value of the sensor is not changed although the Set-on Drive Unit is driven, check the Sensor Harness (to see if the harness is caught, disconnected or physically removed).</p> <p>If there is no problem, replace the sensor. After checking the output value in step 2, perform step 4 and later steps.</p> <p>3. If the problem is not solved by replacing the foregoing parts, replace the Drum Driver PCB (UN4) and then perform step 4 and later steps.</p> <p>4. Clear the error in service mode (COPIER&gt; FUNCTION&gt; CLEAR&gt; ERR), and then turn OFF and then ON the main power.</p> <p>5. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/Maintenance&gt; Replace Specified Toner), and check that toner replacement can be performed normally.</p>



E code	Detailed code	Occurance area	Items	Description
E025	04C0	05	Title	Error in Cover Sensor (PS16) in Bk Toner Container
			Description	Unable to detect opening of the Toner Container Inner Cover when removing the Toner Container.
			Remedy	<p>Identify the cause of the error whether it is due to link mechanism to open the Toner Container Inner Cover or problem at the Toner Container Inner Cover Sensor side.</p> <ol style="list-style-type: none"> <li>1. Perform the user mode (Adjustment/Maintenance&gt; Replace Specified Toner) to check if the Toner Container Inner Cover opens normally (damage, slide of shaft area, etc.).</li> <li>2. Check if the Toner Container Inner Cover Sensor is soiled and the installation of the sensor.</li> <li>3. Check the service mode (COPIER&gt; I/O&gt; DCON&gt; P024 bit11) to see that the output value of the Toner Container Inner Cover Sensor is changed normally when opening/closing the Toner Container Inner Cover.</li> </ol> <p>If it is normal, the value becomes 0 by rotating the Set-on Drive Shaft with the attached tool and opening the Toner Container Inner Cover. When closing the Toner Container Inner Cover by hand, it becomes 1.</p> <p>3-1. When the Toner Container Inner Cover is not opened although the Set-on Drive Shaft rotates, check the drive system from upstream (Set-on Drive Unit -&gt; Hopper Unit -&gt; Bottle Base Unit -&gt; Toner Container Inner Cover Unit). If it is damaged, replace the damaged part and then perform step 5 and later steps.</p> <p>3-2. When the output value is not changed normally although the Toner Container Inner Cover can be opened/closed, check the Sensor Harness (to see if the harness is caught, disconnected or physically removed, *including the Relay Connector).</p> <p>If there is no problem, replace the sensor. After checking the output value in step 3, perform step 5 and later steps.</p> <p>4. If the problem is not solved by replacing the foregoing parts, replace the Drum Driver PCB (UN4) and then perform step 5 and later steps.</p> <p>5. Clear the error in service mode (COPIER&gt; FUNCTION&gt; CLEAR&gt; ERR), and then turn OFF and then ON the main power.</p> <p>6. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/Maintenance&gt; Replace Specified Toner), and check that toner replacement can be performed normally.</p>

E code	Detailed code	Occurance area	Items	Description
E027	0100	05	Title	Error in supply with Y Developing Assembly
			Description	Failure in detection about the changes of ON => OFF => ON with the sensor which detects a full rotation of the supply screw within the specified period of time.
			Remedy	<ol style="list-style-type: none"> <li>1. Check the damage of the Developing Coupling. If it's damaged, replace the Developing Assembly.</li> <li>2. Check the damage of the coupling (with the Developing Assembly) at the Host Machine side. If it's damaged, remove the Main Drive Unit to replace the coupling.</li> <li>3. Turn the motor as a single unit while the Drum/ Developing Assembly is removed to check rotation of the Main Drive Unit. If it does not rotate, replace the Motor. If the above measures do not solve the problem, replace the Drum Driver PCB (UN4). If there still remains the problem, replace the Main Drive Unit.</li> <li>4. Remove the Hopper Unit and manually turn the Supply Input Gear to check rotation. If it's results in NG, replace the Hopper Unit.</li> </ol>
E027	0200	05	Title	Error in supply with M Developing Assembly
			Description	Failure in detection about the changes of ON => OFF => ON with the sensor which detects a full rotation of the supply screw within the specified period of time.
			Remedy	<ol style="list-style-type: none"> <li>1. Check the damage of the Developing Coupling. If it's damaged, replace the Developing Assembly.</li> <li>2. Check the damage of the coupling (with the Developing Assembly) at the Host Machine side. If it's damaged, remove the Main Drive Unit to replace the coupling.</li> <li>3. Turn the motor as a single unit while the Drum/ Developing Assembly is removed to check rotation of the Main Drive Unit. If it does not rotate, replace the Motor. If the above measures do not solve the problem, replace the Drum Driver PCB (UN4). If there still remains the problem, replace the Main Drive Unit.</li> <li>4. Remove the Hopper Unit and manually turn the Supply Input Gear to check rotation. If it's results in NG, replace the Hopper Unit.</li> </ol>



E code	Detailed code	Occurance area	Items	Description
E027	0300	05	Title	Error in supply with C Developing Assembly
			Description	Failure in detection about the changes of ON => OFF => ON with the sensor which detects a full rotation of the supply screw within the specified period of time.
			Remedy	1. Check the damage of the Developing Coupling. If it's damaged, replace the Developing Assembly. 2. Check the damage of the coupling (with the Developing Assembly) at the Host Machine side. If it's damaged, remove the Main Drive Unit to replace the coupling. 3. Turn the motor as a single unit while the Drum/ Developing Assembly is removed to check rotation of the Main Drive Unit. If it does not rotate, replace the Motor. If the above measures do not solve the problem, replace the Drum Driver PCB (UN4). If there still remains the problem, replace the Main Drive Unit. 4. Remove the Hopper Unit and manually turn the Supply Input Gear to check rotation. If it's results in NG, replace the Hopper Unit.
E027	0400	05	Title	Error in supply with Bk Developing Assembly
			Description	Failure in detection about the changes of ON => OFF => ON with the sensor which detects a full rotation of the supply screw within the specified period of time.
			Remedy	1. Check the damage of the Developing Coupling. If it's damaged, replace the Developing Assembly. 2. Check the damage of the coupling (with the Developing Assembly) at the Host Machine side. If it's damaged, remove the Main Drive Unit to replace the coupling. 3. Turn the motor as a single unit while the Drum/ Developing Assembly is removed to check rotation of the Main Drive Unit. If it does not rotate, replace the Motor. If the above measures do not solve the problem, replace the Drum Driver PCB (UN4). If there still remains the problem, replace the Main Drive Unit. 4. Remove the Hopper Unit and manually turn the Supply Input Gear to check rotation. If it's results in NG, replace the Hopper Unit.

E code	Detailed code	Occurance area	Items	Description
E029	0003	05	Title	ITB light intensity error
			Description	The reflected value from ITB was lower than the lower limit when adjusting the light intensity of patch LED.
			Remedy	1. Check if the cable of the Registration Shutter Solenoid (SL1) is open circuit. 2. Check if the cable of the Patch Sensor (Front, Rear) (UN47, 48) is open circuit. 3. Check the installation of the ITB Unit. 4. Replace the Patch Sensor Unit. 5. Replace the Registration Shutter Solenoid (SL1).
E045	0000	05	Title	Error in Transparency Sensor
			Description	When the power is ON or the door is closed, the light failed to be back although there is no paper.
			Remedy	1. Check installation or soil of the Transparency Sensor (UN51) and the prism. 2. Check the Sensor Harness (to see if the harness is caught, disconnected or physically removed). 3. Replace the Transparency Sensor. 4. Replace the Pickup Feed Driver PCB (UN2).
E061	0001	05	Title	Abnormal current run to the Y Drum
			Description	Abnormal current run to the Y Drum (small current level or no drum is found)
			Remedy	1. Check installation of the Drum Unit. 2. Check if there is failure in grounding contact at the Drum Unit side (such as loosened screw which secures the plate at the contact point). 3. Check if there is failure in grounding contact with the Drum at Process Unit side. 4. Replace the Drum Unit. 5. Replace the Pre-exposure LED PCB (UN23,UN24).
E061	00E0	05	Title	Abnormal current run to the Y Drum
			Description	The change in current level for Y Drum film thickness detection is too much compared to the previous time.
			Remedy	1. Check with the Host Machine which generates an error to check if a wrong cartridge (which is different from the initialized cartridge) is installed. 2. Check if there is failure in grounding contact at the Drum Unit side (such as loosened screw which secures the plate at the contact point) 3. Check if there is failure in grounding contact with the Drum at Process Unit side. 4. Replace the Drum Unit. 5. Replace the Pre-exposure LED PCB (UN23,UN24).

E code	Detailed code	Occurance area	Items	Description
E061	01F0	05	Title	Abnormal current run to the Y Drum
			Description	Abnormal initial current level at the time of initialization of the Y Drum film thickness (large current level)
			Remedy	<ol style="list-style-type: none"> <li>1. Check installation of the Drum Unit.</li> <li>2. Check if there is failure in grounding contact at the Drum Unit side (such as loosened screw which secures the plate at the contact point).</li> <li>3. Check if there is failure in grounding contact with the Drum at the Process Unit side.</li> <li>4. Forced initialization in Service Mode: COPIER &gt; FUNCTION &gt; DPC &gt; DRMRSETY: execution of the color causing the error.</li> <li>5. Replace the Drum Unit.</li> <li>6. Check the primary transfer voltage value (if it's not appropriate, turn OFF and then ON the main power to forcibly execute the ATVC control).</li> </ol>
E061	01F1	05	Title	Abnormal current run to the Y Drum
			Description	Abnormal initial current level at the time of initialization of the Y Drum film thickness (small current level)
			Remedy	<ol style="list-style-type: none"> <li>1. Check installation of the Drum Unit.</li> <li>2. Check if there is failure in grounding contact at the Drum Unit side (such as loosened screw which secures the plate at the contact point).</li> <li>3. Check if there is failure in grounding contact with the Drum at Process Unit side.</li> <li>4. Forced initialization in Service Mode: COPIER &gt; FUNCTION &gt; DPC &gt; DRMRSETY: execution of the color causing the error)</li> <li>5. Replace the Drum Unit.</li> <li>6. Replace the Pre-exposure LED PCB (UN23,UN24).</li> </ol>
E061	0101	05	Title	Abnormal current run to the M Drum
			Description	Abnormal current run to the M Drum (small current level or no drum is found)
			Remedy	<ol style="list-style-type: none"> <li>1. Check installation of the Drum Unit.</li> <li>2. Check if there is failure in grounding contact at the Drum Unit side (such as loosened screw which secures the plate at the contact point).</li> <li>3. Check if there is failure in grounding contact with the Drum at Process Unit side.</li> <li>4. Replace the Drum Unit.</li> <li>5. Replace the Pre-exposure LED PCB (UN25,UN26).</li> </ol>

E code	Detailed code	Occurance area	Items	Description
E061	01E0	05	Title	Abnormal current run to the M Drum
			Description	The change in current level for M Drum film thickness detection is too much compared to the previous time.
			Remedy	<ol style="list-style-type: none"> <li>1. Check with the Host Machine which generates an error to check if a wrong cartridge (which is different from the initialized cartridge) is installed.</li> <li>2. Check if there is failure in grounding contact at the Drum Unit side (such as loosened screw which secures the plate at the contact point)</li> <li>3. Check if there is failure in grounding contact with the Drum at Process Unit side.</li> <li>4. Replace the Drum Unit.</li> <li>5. Replace the Pre-exposure LED PCB (UN25,UN26).</li> </ol>
E061	02F0	05	Title	Abnormal current run to the M Drum
			Description	Abnormal initial current level at the time of initialization of the M Drum film thickness (large current level)
			Remedy	<ol style="list-style-type: none"> <li>1. Check installation of the Drum Unit.</li> <li>2. Check if there is failure in grounding contact at the Drum Unit side (such as loosened screw which secures the plate at the contact point).</li> <li>3. Check if there is failure in grounding contact with the Drum at the Process Unit side.</li> <li>4. Forced initialization in Service Mode: COPIER &gt; FUNCTION &gt; DPC &gt; DRMRSETM: execution of the color causing the error.</li> <li>5. Replace the Drum Unit.</li> <li>6. Check the primary transfer voltage value (if it's not appropriate, turn OFF and then ON the main power to forcibly execute the ATVC control).</li> </ol>
E061	02F1	05	Title	Abnormal current run to the M Drum
			Description	Abnormal initial current level at the time of initialization of the M Drum film thickness (small current level)
			Remedy	<ol style="list-style-type: none"> <li>1. Check installation of the Drum Unit.</li> <li>2. Check if there is failure in grounding contact at the Drum Unit side (such as loosened screw which secures the plate at the contact point).</li> <li>3. Check if there is failure in grounding contact with the Drum at Process Unit side.</li> <li>4. Forced initialization in Service Mode: COPIER &gt; FUNCTION &gt; DPC &gt; DRMRSETM: execution of the color causing the error)</li> <li>5. Replace the Drum Unit.</li> <li>6. Replace the Pre-exposure LED PCB (UN25,UN26).</li> </ol>

E code	Detailed code	Occurance area	Items	Description
E061	0201	05	Title	Abnormal current run to the C Drum
			Description	Abnormal current run to the C Drum (small current level or no drum is found)
			Remedy	<ol style="list-style-type: none"> <li>1. Check installation of the Drum Unit.</li> <li>2. Check if there is failure in grounding contact at the Drum Unit side (such as loosened screw which secures the plate at the contact point).</li> <li>3. Check if there is failure in grounding contact with the Drum at Process Unit side.</li> <li>4. Replace the Drum Unit.</li> <li>5. Replace the Pre-exposure LED PCB (UN27,UN28).</li> </ol>
E061	02E0	05	Title	Abnormal current run to the C Drum
			Description	The change in current level for C Drum film thickness detection is too much compared to the previous time.
			Remedy	<ol style="list-style-type: none"> <li>1. Check with the Host Machine which generates an error to check if a wrong cartridge (which is different from the initialized cartridge) is installed.</li> <li>2. Check if there is failure in grounding contact at the Drum Unit side (such as loosened screw which secures the plate at the contact point)</li> <li>3. Check if there is failure in grounding contact with the Drum at Process Unit side.</li> <li>4. Replace the Drum Unit.</li> <li>5. Replace the Pre-exposure LED PCB (UN27,UN28).</li> </ol>
E061	03F0	05	Title	Abnormal current run to the C Drum
			Description	Abnormal initial current level at the time of initialization of the C Drum film thickness (large current level)
			Remedy	<ol style="list-style-type: none"> <li>1. Check installation of the Drum Unit.</li> <li>2. Check if there is failure in grounding contact at the Drum Unit side (such as loosened screw which secures the plate at the contact point).</li> <li>3. Check if there is failure in grounding contact with the Drum at the Process Unit side.</li> <li>4. Forced initialization in Service Mode: COPIER &gt; FUNCTION &gt; DPC &gt; DRMRSETC: execution of the color causing the error.</li> <li>5. Replace the Drum Unit.</li> <li>6. Check the primary transfer voltage value (if it's not appropriate, turn OFF and then ON the main power to forcibly execute the ATVC control).</li> </ol>

E code	Detailed code	Occurance area	Items	Description
E061	03F1	05	Title	Abnormal current run to the C Drum
			Description	Abnormal initial current level at the time of initialization of the C Drum film thickness (small current level)
			Remedy	<ol style="list-style-type: none"> <li>1. Check installation of the Drum Unit.</li> <li>2. Check if there is failure in grounding contact at the Drum Unit side (such as loosened screw which secures the plate at the contact point).</li> <li>3. Check if there is failure in grounding contact with the Drum at Process Unit side.</li> <li>4. Forced initialization in Service Mode: COPIER &gt; FUNCTION &gt; DPC &gt; DRMRSETC: execution of the color causing the error)</li> <li>5. Replace the Drum Unit.</li> <li>6. Replace the Pre-exposure LED PCB (UN27,UN28).</li> </ol>
E061	0301	05	Title	Abnormal current run to the Bk Drum
			Description	Abnormal current run to the Bk Drum (small current level or no drum is found)
			Remedy	<ol style="list-style-type: none"> <li>1. Check installation of the Drum Unit.</li> <li>2. Check if there is failure in grounding contact at the Drum Unit side (such as loosened screw which secures the plate at the contact point).</li> <li>3. Check if there is failure in grounding contact with the Drum at Process Unit side.</li> <li>4. Replace the Drum Unit.</li> <li>5. Replace the Pre-exposure LED PCB (UN29,UN30).</li> </ol>
E061	03E0	05	Title	Abnormal current run to the Bk Drum
			Description	The change in current level for Bk Drum film thickness detection is too much compared to the previous time.
			Remedy	<ol style="list-style-type: none"> <li>1. Check with the Host Machine which generates an error to check if a wrong cartridge (which is different from the initialized cartridge) is installed.</li> <li>2. Check if there is failure in grounding contact at the Drum Unit side (such as loosened screw which secures the plate at the contact point)</li> <li>3. Check if there is failure in grounding contact with the Drum at Process Unit side.</li> <li>4. Replace the Drum Unit.</li> <li>5. Replace the Pre-exposure LED PCB (UN29,UN30).</li> </ol>

E code	Detailed code	Occurance area	Items	Description
E061	04F0	05	Title	Abnormal current run to the Bk Drum
			Description	Abnormal initial current level at the time of initialization of the Bk Drum film thickness (large current level)
			Remedy	1. Check installation of the Drum Unit. 2. Check if there is failure in grounding contact at the Drum Unit side (such as loosened screw which secures the plate at the contact point). 3. Check if there is failure in grounding contact with the Drum at the Process Unit side. 4. Forced initialization in Service Mode: COPIER > FUNCTION > DPC > DRMRSETK: execution of the color causing the error. 5. Replace the Drum Unit. 6. Check the primary transfer voltage value (if it's not appropriate, turn OFF and then ON the main power to forcibly execute the ATVC control).
E061	04F1	05	Title	Abnormal current run to the Bk Drum
			Description	Abnormal initial current level at the time of initialization of the Bk Drum film thickness (small current level)
			Remedy	1. Check installation of the Drum Unit. 2. Check if there is failure in grounding contact at the Drum Unit side (such as loosened screw which secures the plate at the contact point). 3. Check if there is failure in grounding contact with the Drum at Process Unit side. 4. Forced initialization in Service Mode: COPIER > FUNCTION > DPC > DRMRSETK: execution of the color causing the error) 5. Replace the Drum Unit. 6. Replace the Pre-exposure LED PCB (UN29,UN30).
E074	0001	05	Title	Error in disengagement operation
			Description	Primary Transfer Detachment Sensor 1 failed to be detected for 2 sec at the time of disengagement operation
			Remedy	1. Check if the ITB Connector is physically removed. 2. Replace the Primary Transfer Detachment Motor (M15) and its Drive Assembly (the gear, Drive Shaft, Mounting Plate, etc.).
E074	0002	05	Title	Error in engagement operation
			Description	Primary Transfer Detachment Sensor 2 failed to be detected for 2 sec at the time of engagement operation
			Remedy	1. Check if the ITB Connector is physically removed. 2. Replace the Primary Transfer Detachment Motor (M15) and its Drive Assembly (the gear, Drive Shaft, Mounting Plate, etc.).

E code	Detailed code	Occurance area	Items	Description
E074	0003	05	Title	Error in Sensor
			Description	Both Primary Transfer Detachment Sensor 1 and 2 (PS22,PS23) are detected at the time of engagement/disengagement operation
			Remedy	1. Check connection of the connector with the ITB Unit. 2. Replace the Primary Transfer Detachment Sensor 1 and 2 (PS22,PS23)
E075	0002	05	Title	Timeout error in searching ITB steering HP
			Description	Unable to detect change (Low -> High or High -> Low) of ITB Steering Sensor Signal although 10 sec has passed.
			Remedy	1. Check if the ITB Connector is physically removed. 2. Check if the cable of the ITB Unit is open circuit (including the inside of the ITB Unit). 3. Replace the ITB Displacement Control Motor (M14) and its Drive Assembly (the gear, Drive Shaft, Mounting Plate, etc.). 4. Replace the DC Controller PCB (UN1).
E075	0003	05	Title	Error in full displacement of ITB (rear)
			Description	ITB Displacement Sensor detects full displacement position at the rear.
			Remedy	1. Correct the displacement of the ITB. 1-1. Place paper and remove the ITB Unit. 1-2. Lift the front left side up (where the Cleaner and Motor are located) and hold the ITB Unit as if to twist it. 1-3. Turn the Motor counterclockwise as if to make 2 to 3 rounds of the ITB. 1-4. As the ITB is getting closer to the center, align the edge of the ITB with the marking line. 2. Execute COPIER> FUNCTION> MISC-P> ITB-INIT. If the value displayed in COPIER> DISPLAY> MISC> ITB-POS is out of the range of appropriate reference values, perform ITB alignment adjustment. 3. Replace the ITB Unit.  NOTE: This symptom is likely to occur if the machine is not installed on the level (the left-rear is higher). Check if the machine is installed on the level. If this symptom still occurs, replace the ITB Unit.

E code	Detailed code	Occurance area	Items	Description
E075	0004	05	Title	Error in combination of ITB Displacement Sensors
			Description	Failed to determine position due to combination of the ITB Displacement Sensors (PS25 - PS28) (faulty sensor)
			Remedy	1. Check if the ITB Connector is physically removed. 2. Check if the cable of the ITB Unit is open circuit (including the inside of the ITB Unit). 3. Replace the ITB Displacement Control Motor (M14) and its Drive Assembly (the gear, Drive Shaft, Mounting Plate, etc.). 4. Replace the DC Controller PCB (UN1).
E075	0005	05	Title	Error/failure in searching ITB steering HP
			Description	Failed to detect correct HP position although the change (Low -> High or High -> Low) of the ITB Steering Sensor Signal can be detected (execute retry twice)
			Remedy	1. Check if the ITB Connector is physically removed. 2. Check if the cable of the ITB Unit is open circuit (including the inside of the ITB Unit). 3. Replace the ITB Displacement Control Motor (M14) and its Drive Assembly (the gear, Drive Shaft, Mounting Plate, etc.). 4. Replace the DC Controller PCB (UN1).
E075	0006	05	Title	Timeout error in searching ITB equilibrium position
			Description	The equilibrium position could not be found although 11 minutes have passed when searching ITB equilibrium position.
			Remedy	1. Turn OFF and then ON the power. 2. Replace the Secondary Transfer Inner Roller. 3. Replace the ITB Unit.
E075	0007	05	Title	Interruption error in searching ITB equilibrium position
			Description	Door open was detected while executing COPIER>FUNCTION>MISC-P>ITB-INIT.
			Remedy	After turning OFF and then ON the power, execute COPIER>FUNCTION>MISC-P>ITB-INIT, and check that "OK" is displayed.

E code	Detailed code	Occurance area	Items	Description
E075	0103	05	Title	Error in full displacement of ITB (front)
			Description	ITB Displacement Sensor detects full displacement position at the front.
			Remedy	1. Correct the displacement of the ITB. 1-1. Place paper and remove the ITB Unit. 1-2. Lift the rear left side up (where the cleaner is located; opposite to the motor) and hold the ITB Unit as if to twist it. 1-3. Turn the Motor counterclockwise as if to make 2 to 3 rounds of the ITB. 1-4. As the ITB is getting closer to the center, align the edge of the ITB with the marking line. 2. Execute COPIER> FUNCTION> MISC-P> ITB-INIT. If the value displayed in COPIER> DISPLAY> MISC> ITB-POS is out of the range of appropriate reference values, perform ITB alignment adjustment. 3. Replace the ITB Unit.  NOTE: This symptom is likely to occur if the machine is not installed on the level (the left-front is higher). Check if the machine is installed on the level. If this symptom still occurs, replace the ITB Unit.
E100	0100	05	Title	BD error of YM-side Scanner
			Description	Failure in detection of BD signal even though the specified period of time has passed when Laser Scanner Unit 1 (YM laser) is started or making prints.
			Remedy	1. Turn OFF and then ON the power. 2. Check the connector of Laser Scanner Unit 1 3. Replace Laser Scanner Unit 1.
E100	0300	05	Title	BD error of CBk-side Scanner
			Description	Failure in detection of BD signal even though the specified period of time has passed when Laser Scanner Unit 2 (CBk laser) is started or making prints.
			Remedy	1. Turn OFF and then ON the power. 2. Check the connector of Laser Scanner Unit 2. 3. Replace Laser Scanner Unit 2.
E100	B000	05	Title	BD cycle error
			Description	When the BD cycle count value is not within the specified range.
			Remedy	1. Turn OFF and then ON the power. 2. Check connection of harness on the Laser Scanner Unit. 3. Replace the Laser Scanner Unit. 4. Replace the DC Controller PCB (UN1). 5. Replace the harness.

E code	Detailed code	Occurance area	Items	Description
E102	0101	05	Title	Faulty EEPROM of YM-side Scanner
			Description	In the case of an error in reading EEPROM in the Laser Driver (YM) or in the case of a wrong Laser Scanner Unit which does not match with the Host Machine.
			Remedy	1. Turn OFF and then ON the power. 2. Check the connector of the Laser Scanner Unit 1. 3. Replace the Laser Scanner Unit 1.
E102	0301	05	Title	Faulty EEPROM of CBk-side Scanner
			Remedy	1. Turn OFF and then ON the power. 2. Check the connector of the Laser Scanner Unit 2. 3. Replace the Laser Scanner Unit 2.
E103	0001	05	Title	With the Laser Scanners at YM side and CBk side, the laser driver IDs were different
			Description	The model IDs were different between the YM side and CBk side when reading the model ID from EEPROM. (Detection is performed only with iR-ADV C5255, and C5250.)
			Remedy	Check the parts number of the Laser Scanner Unit. Replace the Laser Scanner Unit to make the following combinations. YM side: For iR-ADV C5255 and C5250, CBk side: For iR-ADV C5255 and C5250 (recommended) YM side: For iR-ADV C5051 and C5045, CBk side: For iR-ADV C5051 and C5045 (operates normally but not recommended)
E112	0000	05	Title	Error in Dustproof Shutter
			Description	Failed to be at HP when it's open (when the Job is started).
			Remedy	1. Check installation of the Dustproof Shutter Drive. 2. Check if the connector of the Laser Shutter Sensor (PS29) or the Laser Shutter Motor (M28) is removed (disconnected). 3. Check the status of Sensor Flag. 4. Replace the HP Sensor, Replace the Laser Shutter Motor (M28).

E code	Detailed code	Occurance area	Items	Description
E112	0001	05	Title	Error in Dustproof Shutter
			Description	Failure to be back to the HP although the specified period of time has passed when closing.
			Remedy	1. Check installation of the Dustproof Shutter Drive. 2. Check if the connector of the Laser Shutter Sensor (PS29) or the Laser Shutter Motor (M28) is removed (disconnected). 3. Check the status of Sensor Flag. 4. Replace the HP Sensor, Replace the Laser Shutter Motor (M28).
E112	0002	05	Title	Error in Dustproof Shutter
			Description	Failed to move from the HP when opening (the Job is started)
			Remedy	1. Check installation of the Dustproof Shutter Drive. 2. Check if the connector of the Laser Shutter Sensor (PS29) or the Laser Shutter Motor (M28) is removed (disconnected). 3. Check the status of Sensor Flag. 4. Replace the HP Sensor, Replace the Laser Shutter Motor (M28).
E193	0001	05	Title	Error in IMG2
			Description	Failure of LSI timing adjustment circuit on the DC Controller PCB.
			Remedy	1. Turn OFF and then ON the power. 2. Replace the DC Controller PCB (UN2).
E197	0000	05	Title	Error in communication of HOB DMA mode
			Description	Communication failure between CPU and LSI on the DC Controller.
			Remedy	1. Turn OFF and then ON the power. 2. Replace the DC Controller PCB (UN1).
E197	0001	05	Title	Error in communication of HOB single-shot mode
			Description	Communication failure between CPU and LSI on the DC Controller PCB (UN1).
			Remedy	1. Turn OFF and then ON the power. 2. Replace the DC Controller PCB (UN1).
E197	0002	05	Title	Error in communication of HOB single-shot mode
			Description	Communication failure between CPU and LSI on the DC Controller PCB (UN1).
			Remedy	1. Turn OFF and then ON the power. 2. Replace the DC Controller PCB (UN1).
E197	0003	05	Title	Timeout error in HOB single-shot mode
			Description	Communication failure between CPU and LSI on the DC Controller PCB (UN1).
			Remedy	1. Turn OFF and then ON the power. 2. Replace the DC Controller PCB (UN1).



E code	Detailed code	Occurance area	Items	Description
E197	0080	05	Title	Timeout error in EHOB transmission-waiting
			Description	Communication failure between the DC Controller PCB (UN1) and Laser Scanner Unit.
			Remedy	1. Turn OFF and then ON the power. 2. Check connection of harness on the target color side (YM/CK). 3. Replace the DC Controller PCB (UN1). 4. Replace the Laser Scanner Unit. 5. Replace the harness on the target color side (YM/CK).
E197	0081	05	Title	Timeout error in EHOB reception-waiting
			Description	Communication failure between the DC Controller PCB (UN1) and Laser Scanner Unit.
			Remedy	1. Turn OFF and then ON the power. 2. Check connection of harness on the target color side (YM/CK). 3. Replace the DC Controller PCB (UN1). 4. Replace the Laser Scanner Unit. 5. Replace the harness on the target color side (YM/CK).
E197	00A0	05	Title	Timeout error in HOB transmission-waiting
			Description	Communication failure between CPU and LSI on the DC Controller PCB (UN1).
			Remedy	1. Turn OFF and then ON the power. 2. Replace the DC Controller PCB (UN1).
E197	00B0	05	Title	Timeout error in HOB reception-waiting
			Description	Communication failure between CPU and LSI on the DC Controller PCB (UN1).
			Remedy	1. Turn OFF and then ON the power. 2. Replace the DC Controller PCB (UN1).
E197	00E0	05	Title	Timeout error in the Motor stop signal interruption reception
			Description	Communication error between CPU and LSI on the DC Controller PCB
			Remedy	1. Turn OFF and then ON the power. 2. Replace the DC Controller PCB (UN1).
E197	0100	05	Title	Error in communication of HOB DMA mode
			Description	Communication failure between CPU and LSI on the DC Controller.
			Remedy	1. Turn OFF and then ON the power. 2. Replace the DC Controller PCB (UN1).
E197	0101	05	Title	Error in communication of HOB single-shot mode
			Description	Communication failure between CPU and LSI on the DC Controller PCB (UN1).
			Remedy	1. Turn OFF and then ON the power. 2. Replace the DC Controller PCB (UN1).

E code	Detailed code	Occurance area	Items	Description
E197	0102	05	Title	Error in communication of HOB single-shot mode
			Description	Communication failure between CPU and LSI on the DC Controller PCB (UN1).
			Remedy	1. Turn OFF and then ON the power. 2. Replace the DC Controller PCB (UN1).
E197	0103	05	Title	Timeout error in HOB single-shot mode
			Description	Communication failure between CPU and LSI on the DC Controller PCB (UN1).
			Remedy	1. Turn OFF and then ON the power. 2. Replace the DC Controller PCB (UN1).
E197	0180	05	Title	Timeout error in EHOB transmission-waiting
			Description	Communication failure between the DC Controller PCB (UN1) and Laser Scanner Unit.
			Remedy	1. Turn OFF and then ON the power. 2. Check connection of harness on the target color side (YM/CK). 3. Replace the DC Controller PCB (UN1). 4. Replace the Laser Scanner Unit. 5. Replace the harness on the target color side (YM/CK).
E197	0181	05	Title	Timeout error in EHOB reception-waiting
			Description	Communication failure between the DC Controller PCB (UN1) and Laser Scanner Unit.
			Remedy	1. Turn OFF and then ON the power. 2. Check connection of harness on the target color side (YM/CK). 3. Replace the DC Controller PCB (UN1). 4. Replace the Laser Scanner Unit. 5. Replace the harness on the target color side (YM/CK).
E197	01A0	05	Title	Timeout error in HOB transmission-waiting
			Description	Communication failure between CPU and LSI on the DC Controller PCB (UN1).
			Remedy	1. Turn OFF and then ON the power. 2. Replace the DC Controller PCB (UN1).
E197	01B0	05	Title	Timeout error in HOB reception-waiting
			Description	Communication failure between CPU and LSI on the DC Controller PCB (UN1).
			Remedy	1. Turn OFF and then ON the power. 2. Replace the DC Controller PCB (UN1).
E197	0200	05	Title	Error in communication of HOB DMA mode
			Description	Communication failure between CPU and LSI on the DC Controller.
			Remedy	1. Turn OFF and then ON the power. 2. Replace the DC Controller PCB (UN1).



E code	Detailed code	Occurance area	Items	Description
E197	0201	05	Title	Error in communication of HOB single-shot mode
			Description	Communication failure between CPU and LSI on the DC Controller PCB (UN1).
			Remedy	1. Turn OFF and then ON the power. 2. Replace the DC Controller PCB (UN1).
E197	0202	05	Title	Error in communication of HOB single-shot mode
			Description	Communication failure between CPU and LSI on the DC Controller PCB (UN1).
			Remedy	1. Turn OFF and then ON the power. 2. Replace the DC Controller PCB (UN1).
E197	0203	05	Title	Timeout error in HOB single-shot mode
			Description	Communication failure between CPU and LSI on the DC Controller PCB (UN1).
			Remedy	1. Turn OFF and then ON the power. 2. Replace the DC Controller PCB (UN1).
E197	0280	05	Title	Timeout error in EHOB transmission-waiting
			Description	Communication failure between the DC Controller PCB (UN1) and Laser Scanner Unit.
			Remedy	1. Turn OFF and then ON the power. 2. Check connection of harness on the target color side (YM/CK). 3. Replace the DC Controller PCB (UN1). 4. Replace the Laser Scanner Unit. 5. Replace the harness on the target color side (YM/CK).
E197	0281	05	Title	Timeout error in EHOB reception-waiting
			Description	Communication failure between the DC Controller PCB (UN1) and Laser Scanner Unit.
			Remedy	1. Turn OFF and then ON the power. 2. Check connection of harness on the target color side (YM/CK). 3. Replace the DC Controller PCB (UN1). 4. Replace the Laser Scanner Unit. 5. Replace the harness on the target color side (YM/CK).
E197	02A0	05	Title	Timeout error in HOB transmission-waiting
			Description	Communication failure between CPU and LSI on the DC Controller PCB (UN1).
			Remedy	1. Turn OFF and then ON the power. 2. Replace the DC Controller PCB (UN1).
E197	02B0	05	Title	Timeout error in HOB reception-waiting
			Description	Communication failure between CPU and LSI on the DC Controller PCB (UN1).
			Remedy	1. Turn OFF and then ON the power. 2. Replace the DC Controller PCB (UN1).

E code	Detailed code	Occurance area	Items	Description
E197	1001	05	Title	Feed Driver PCB disconnection
			Description	Feed Driver PCB disconnection detection
			Remedy	1. Disconnect and then connect the connectors (J103 and J107) on the DC Controller PCB (UN1). 2. Disconnect and then connect the connectors (J251 and J253) on the Feed Driver PCB (UN2). 3. Check that 3.3V power is supplied to the Feed Driver PCB (UN2). 4. Replace the Feed Driver PCB (UN2). 5. Replace the DC Controller PCB (UN1).
E197	1002	05	Title	Drum Driver PCB disconnection
			Description	Drum Driver PCB disconnection detection
			Remedy	1. Disconnect and then connect the connectors (J107 and J109) on the DC Controller PCB (UN1). 2. Disconnect and then connect the connectors (J311 and J313) on the Drum Driver PCB (UN4). 3. Check that 3.3V power is supplied to the Drum Driver PCB (UN4). 4. Replace the Drum Driver PCB (UN4). 5. Replace the DC Controller PCB (UN1).
E197	1003	05	Title	Cassette Feed Driver PCB disconnection
			Description	Cassette Feed Driver PCB disconnection detection
			Remedy	1. Disconnect and then connect the connectors (J103 and J106) on the DC Controller PCB (UN1). 2. Disconnect and then connect the connectors (J201 and J202) on the Cassette Feed Driver PCB (UN3). 3. Check that 3.3V power is supplied to the Cassette Feed Driver PCB (UN3). 4. Replace the Cassette Feed Driver PCB (UN3). 5. Replace the DC Controller PCB (UN1).
E197	1004	05	Title	High Voltage PCB disconnection
			Description	High Voltage PCB disconnection detection
			Remedy	1. Disconnect and then connect the connector (J110) on the DC Controller PCB (UN1). 2. Disconnect and then connect the connectors (J653 and 654) on the HVT1 PCB (UN16). 3. Check that 3.3V power is supplied to the HVT1 PCB (UN16). 4. Replace the HVT1 PCB (UN16). 5. Replace the DC Controller PCB (UN1).

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E code	Detailed code	Occurance area	Items	Description
E202	0001	04	Title	Scanner HP error
			Description	Scanner Unit error when moving to the left side for HP check operation
			Remedy	1. Turn OFF and then ON the power. 2. Check the drive of Scanner Motor. (Open the DF Unit to check the operation of Motor.) 3. Check the flag position of Scanner Home Position Sensor and Scanner Unit. 4. Replace the Reader Controller PCB.
E202	0002	04	Title	Scanner HP error
			Description	Scanner Unit error when moving to the right side for HP check operation
			Remedy	1. Turn OFF and then ON the power. 2. Check the drive of Scanner Motor. (Open the DF Unit to check the operation of Motor.) 3. Check the flag position of Scanner Home Position Sensor and Scanner Unit. 4. Replace the Reader Controller PCB.
E202	0003	04	Title	Scanner HP error
			Description	An error in the Scanner Unit (Paper Front) position was detected when reading of a job was started.
			Remedy	1. Connector disconnection/open circuit of the Scanner Unit HP Sensor (PS2) -> Connect the connector/Replace the harness. 2. Replace the Scanner Unit HP Sensor. 3. Replace the Scanner Motor (M1). 4. Replace the Reader Controller PCB (PCB1).
E202	0101	04	Title	Back Side Scanning Glass HP error (This error occurs on Duplex Color Image Reader Unit-B1 only)
			Description	Back Side Scanning Glass error when moving to the left side for HP check operation
			Remedy	1. Turn OFF and then ON the power. 2. Check the drive of Lead Motor (M3). (Set the service mode: FEEDER > FUNCTION > MTR-CHK > 7. Then, set FEEDER > FUNCTION > MTR-ON.) 3. Check the flag position of Back Side Scanning Glass HP Sensor (PS12) and Scanner Unit. 4. Replace the Reader Controller PCB.

E code	Detailed code	Occurance area	Items	Description
E202	0102	04	Title	Back Side Scanning Glass HP error (This error occurs on Duplex Color Image Reader Unit-B1 only)
			Description	Back Side Scanning Glass error when moving to the right side for HP check operation
			Remedy	1. Turn OFF and then ON the power. 2. Check the drive of Lead Motor (M3). (Set the service mode: FEEDER > FUNCTION > MTR-CHK > 7. Then, set FEEDER > FUNCTION > MTR-ON.) 3. Check the flag position of Back Side Scanning Glass HP Sensor (PS12) and Scanner Unit. 4. Replace the Reader Controller PCB.
E227	0001	04	Title	Power supply (24V) error
			Description	24V port error when the power is turned ON
			Remedy	1. Turn OFF and then ON the power. 2. Check the connection between Reader and Printer, and check that the Cable is not open-circuit. 3. Check the 24V port of the Reader Controller PCB and DF Driver PCB. 4. Check the power supply and Relay PCB on the Printer side. 5. Replace the Reader Controller PCB and DF Driver PCB.
E227	0002	04	Title	Power supply (24V) error
			Description	24V port error when a job is started
			Remedy	1. Turn OFF and then ON the power. 2. Check the connection between Reader and Printer, and check that the Cable is not open-circuit. 3. Check the 24V port of the Reader Controller PCB and DF Driver PCB. 4. Check the power supply and Relay PCB on the Printer side. 5. Replace the Reader Controller PCB and DF Driver PCB.
E227	0003	04	Title	Power supply (24V) error
			Description	24V port error when a job is ended
			Remedy	1. Turn OFF and then ON the power. 2. Check the connection between Reader and Printer, and check that the Cable is not open-circuit. 3. Check the 24V port of the Reader Controller PCB and DF Driver PCB. 4. Check the power supply and Relay PCB on the Printer side. 5. Replace the Reader Controller PCB and DF Driver PCB.

E code	Detailed code	Occurance area	Items	Description
E227	0004	04	Title	Power supply (24V) error
			Description	24V port error when loading
			Remedy	1. Turn OFF and then ON the power. 2. Check the connection between Reader and Printer, and check that the Cable is not open-circuit. 3. Check the 24V port of the Reader Controller PCB and DF Driver PCB. 4. Check the power supply and Relay PCB on the Printer side. 5. Replace the Reader Controller PCB and DF Driver PCB.
E227	0101	04	Title	Power supply (24V) error
			Description	24V port error when the power of DF Unit is turned ON
			Remedy	1. Turn OFF and then ON the power. 2. Check the connection between Reader and Printer, and check that the Cable is not open-circuit. 3. Check the 24V port of the Reader Controller PCB and DF Driver PCB. 4. Check the power supply and Relay PCB on the Printer side. 5. Replace the Reader Controller PCB and DF Driver PCB.
E227	0102	04	Title	Power supply (24V) error
			Description	24V port error when a job is started in the DF Unit
			Remedy	1. Turn OFF and then ON the power. 2. Check the connection between Reader and Printer, and check that the Cable is not open-circuit. 3. Check the 24V port of the Reader Controller PCB and DF Driver PCB. 4. Check the power supply and Relay PCB on the Printer side. 5. Replace the Reader Controller PCB and DF Driver PCB.
E227	0103	04	Title	Power supply (24V) error
			Description	24V port error when a job is ended in the DF Unit
			Remedy	1. Turn OFF and then ON the power. 2. Check the connection between Reader and Printer, and check that the Cable is not open-circuit. 3. Check the 24V port of the Reader Controller PCB and DF Driver PCB. 4. Check the power supply and Relay PCB on the Printer side. 5. Replace the Reader Controller PCB and DF Driver PCB.

E code	Detailed code	Occurance area	Items	Description
E240	0000	05	Title	Error in communication data
			Description	When communication data error between the controller and DC Controller PCB is detected.
			Remedy	Check connection of the connector. Check connection of the Sub PCB in the Controller Box. Check connection and replace the DC Controller PCB (UN1)/Main Controller PCB.
E240	0004	05	Title	Error in controller communication
			Description	No response after 1.5 minutes has passed since the print request from the Main Controller to the DC Controller.
			Remedy	Check connection of the connector. Check connection of the Sub PCB in the Controller Box. Check connection and replace the DC Controller PCB (UN1)/Main Controller PCB 1.
E240	0005	05	Title	Timeout error in Dhalf request
			Description	No response after 1.5 minutes has passed since the auto adjustment request from the Main Controller to the DC Controller.
			Remedy	Check connection of the connector. Check connection of the Sub PCB in the Controller Box. Check connection and replace the DC Controller PCB (UN1)/Main Controller PCB 1.
E246	0001	05	Title	System error
			Description	System error
			Remedy	Contact the service company office
E246	0002	05	Title	System error
			Description	System error
			Remedy	Contact the service company office
E246	0003	05	Title	System error
			Description	System error
			Remedy	Contact the service company office
E246	0005	05	Title	System error
			Description	System error
			Remedy	Contact the service company office
E247	0001	05	Title	System error
			Description	System error
			Remedy	Contact the service company office
E248	0001	04	Title	EEPROM error
			Description	Failure of power-on at EEPROM for the reader controller PCB (PCB1)
			Remedy	1. Turn OFF and then ON the power. 2. Check the connection between Reader and Printer, and check that the Cable is not open-circuit. 3. Replace the Reader Controller PCB.

E code	Detailed code	Occurance area	Items	Description
E248	0002	04	Title	EEPROM error
			Description	Failure of writing at EEPROM for the reader controller PCB (PCB1)
			Remedy	1. Turn OFF and then ON the power. 2. Check the connection between Reader and Printer, and check that the Cable is not open-circuit. 3. Replace the Reader Controller PCB.
E248	0003	04	Title	EEPROM error
			Description	Failure of reading after writing at EEPROM for the reader controller PCB (PCB1)
			Remedy	1. Turn OFF and then ON the power. 2. Check the connection between Reader and Printer, and check that the Cable is not open-circuit. 3. Replace the Reader Controller PCB.
E270	0001	04	Title	Scanner Unit (Paper Front) VSYNC signal error
			Description	Due to the VSYNC error in the Scanner Unit PCB (Paper Front) which communicates with Reader Controller PCB, VSYNC signal is not sent appropriately, so the image error occurs or the operation stops abnormally.
			Remedy	1. Turn OFF and then ON the power. 2. Check the connection between Reader Controller PCB and Scanner Unit PCB (Paper Front), and check that the Cable is not open-circuit. 3. Check the connection between Reader and Printer, and check that the Cable is not open-circuit. 4. Replace the Reader Controller PCB. 5. Replace the Scanner Unit (Paper Front).
E270	0002	04	Title	DDI HSYNC error
			Description	Due to the DDI hardware HSYNC signal error, VSYNC signal is not sent appropriately, so the image error occurs or the operation stops abnormally.
			Remedy	1. Turn OFF and then ON the power. 2. Check the connection between Reader and Printer, and check that the Cable is not open-circuit. 3. Replace the DDI-S Cable between Reader and Printer. 4. Replace the Reader Controller PCB.

E code	Detailed code	Occurance area	Items	Description
E270	0101	04	Title	Scanner Unit (Paper Back) VSYNC signal error (This error occurs on Duplex Color Image Reader Unit-B1 only)
			Description	Due to the VSYNC error in the Scanner Unit PCB (Paper Back) which communicates with Reader Controller PCB, VSYNC signal is not sent appropriately, so the image error occurs or the operation stops abnormally.
			Remedy	1. Turn OFF and then ON the power. 2. Check the connection between Reader Controller PCB and Scanner Unit PCB (Paper Back), and check that the Cable is not open-circuit. 3. Check the connection between Reader and Printer, and check that the Cable is not open-circuit. 4. Replace the Reader Controller PCB. 5. Replace the Scanner Unit (Paper Back).
E280	0001	04	Title	Communication error between Reader Controller PCB and Scanner Unit (Paper Front)
			Description	Within specified time, communication between Reader Controller PCB and Scanner Unit (Paper Front) cannot be made.
			Remedy	1. Turn OFF and then ON the power. 2. Check the connection between Reader Controller PCB and Scanner Unit PCB (Paper Front), and check that the Cable is not open-circuit. 3. Check the connection between Reader and Printer, and check that the Cable is not open-circuit. 4. Replace the Reader Controller PCB. 5. Replace the Scanner Unit (Paper Front).
E280	0002	04	Title	Communication error between Reader Controller PCB and Scanner Unit (Paper Front)
			Description	Disconnection of the cable between the Reader Controller PCB and the Scanner Unit (Paper Front) was detected.
			Remedy	1. Check the connection between Reader Controller PCB and Scanner Unit PCB (Paper Front), and check that the Cable is not open-circuit. 2. Check the connection between Reader and Printer, and check that the Cable is not open-circuit.

E code	Detailed code	Occurance area	Items	Description
E280	0101	04	Title	Communication error between Reader Controller PCB and Scanner Unit (Paper Back) (This error occurs on Duplex Color Image Reader Unit-B1 only)
			Description	Within specified time, communication between Reader Controller PCB and Scanner Unit (Paper Back) cannot be made.
			Remedy	1. Turn OFF and then ON the power. 2. Check the connection between Reader Controller PCB and Scanner Unit PCB (Paper Back), and check that the Cable is not open-circuit. 3. Check the connection between Reader and Printer, and check that the Cable is not open-circuit. 4. Replace the Reader Controller PCB. 5. Replace the Scanner Unit (Paper Back).
E280	0102	04	Title	Communication error between Reader Controller PCB and Scanner Unit (Paper Back) (This error occurs on Duplex Color Image Reader Unit-B1 only)
			Description	Disconnection of the cable between the Reader Controller PCB and the Scanner Unit (Paper Back) was detected.
			Remedy	1. Check the connection between Reader Controller PCB and Scanner Unit PCB (Paper Back), and check that the Cable is not open-circuit. 2. Check the connection between Reader and Printer, and check that the Cable is not open-circuit.
E301	0001	04	Title	Reading light intensity error
			Description	The light intensity was at the reference level or below at paper front shading.
			Remedy	1. Execute the service mode (COPIER > FUNCTION > MISC-R > SCANLAMP) and check that the LED of the Scanner Unit (Paper Front) is lit. 2. Check the connection between Scanner Unit (Paper Front) and LED, and check that the Cable is not open-circuit. 3. Check the connection between Reader Controller PCB and Scanner Unit (Paper Front), and check that the Cable is not open-circuit.

E code	Detailed code	Occurance area	Items	Description
E301	0002	04	Title	Reading light intensity error
			Description	The light intensity was at the reference level or below at paper back shading.
			Remedy	1. Check that the LED of the Scanner Unit (Paper Back) is lit. 2. Check the connection between Scanner Unit (Paper Back) and LED, and check that the Cable is not open-circuit. 3. Check the connection between Reader Controller PCB and Scanner Unit (Paper Back), and check that the Cable is not open-circuit.
E302	0001	04	Title	Error in paper front white shading
			Description	Error in shading RAM access The shading value is out of the specified range.
			Remedy	1. Check that the LED of the Scanner Unit (Paper Front) is lit. 2. Check the connection between Scanner Unit (Paper Front) and LED, and check that the Cable is not open-circuit. 3. Check the connection between Reader Controller PCB and Scanner Unit (Paper Front), and check that the Cable is not open-circuit. 4. Check the condition of Shading White Plate of the Stream Read Glass (Paper Front) (scratches, dust, soil, etc.). 5. Check if Scanner Unit (Paper Front) detects HP correctly. (If it does not detect correctly, the Scanner Unit reaches to the end when DF is opened.) 6. Replace the Scanner Unit (Paper Front). 7. Replace the Reader Controller PCB.
E302	0002	04	Title	Error in paper front black shading
			Description	Error in shading RAM access The shading value is out of the specified range.
			Remedy	1. Check that the LED of the Scanner Unit (Paper Front) is lit. 2. Check the connection between Scanner Unit (Paper Front) and LED, and check that the Cable is not open-circuit. 3. Check the condition of Shading White Plate of the Stream Read Glass (Paper Front) (scratches, dust, soil, etc.). 4. Check if Scanner Unit (Paper Front) detects HP correctly. (If it does not detect correctly, the Scanner Unit reaches to the end when DF is opened.) 5. Replace the Scanner Unit (Paper Front). 6. Replace the Reader Controller PCB.

E code	Detailed code	Occurance area	Items	Description
E302	0101	04	Title	Error in paper back white shading
			Description	Error in shading RAM access The shading value is out of the specified range.
			Remedy	1. Check that the LED of the Scanner Unit (Paper Back) is lit. 2. Check the connection between Scanner Unit (Paper Back) and LED, and check that the Cable is not open-circuit. 3. Check the connection between Reader Controller PCB and Scanner Unit PCB (Paper Back), and check that the Cable is not open-circuit. 4. Check the condition of Shading White Plate of the Scanner Glass (Paper Back) (scratches, dust, soil, etc.). 5. Check if Scanner Unit (Paper Back) detects HP correctly. 6. Replace the Scanner Unit (Paper Back). 7. Replace the Reader Controller PCB.
E302	0102	04	Title	Error in paper back black shading
			Description	Error in shading RAM access The shading value is out of the specified range.
			Remedy	1. Check that the LED of the Scanner Unit (Paper Back) is lit. 2. Check the connection between Scanner Unit (Paper Back) and LED, and check that the Cable is not open-circuit. 3. Check the condition of Shading White Plate of the Scanner Glass (Paper Back) (scratches, dust, soil, etc.). 4. Check if Scanner Unit (Paper Back) detects HP correctly. 5. Replace the Scanner Unit (Paper Back). 6. Replace the Reader Controller PCB.
E315	000E	05	Title	Image process device error
			Description	Software error of image process device was detected.
			Remedy	1. Disconnect and then connect the connector on the Main Controller PCB 2 (including SDRAM). 2. Replace the SDRAM. 3. Replace the HDD. 4. Replace the Main Controller PCB 2.
E350	0000	05	Title	System error
			Description	System error
			Remedy	Contact the service company office
E350	0001	05	Title	System error
			Description	System error
			Remedy	Contact the service company office

E code	Detailed code	Occurance area	Items	Description
E350	0002	05	Title	System error
			Description	System error
			Remedy	Contact the service company office
E350	0003	05	Title	System error
			Description	System error
			Remedy	Contact the service company office
E350	3000	05	Title	System error
			Description	System error
			Remedy	Contact the service company office
E351	0000	00	Title	Main Controller PCB 2 communication error
			Description	Main Controller PCB 2 communication error.
			Remedy	1. Disconnect and then connect the connector of the Main Controller PCB 2. 2. Replace the Main Controller PCB 2.
E354	0001	05	Title	System error
			Description	System error
			Remedy	Contact the service company office
E354	0002	05	Title	System error
			Description	System error
			Remedy	Contact the service company office
E355	0001	05	Title	System error
			Description	System error
			Remedy	Contact the service company office
E355	0002	05	Title	System error
			Description	System error
			Remedy	Contact the service company office
E355	0003	05	Title	System error
			Description	System error
			Remedy	Contact the service company office
E355	0004	05	Title	System error
			Description	System error
			Remedy	Contact the service company office
E400	0001	04	Title	Communication error between Reader Controller PCB and DF Unit
			Description	Communication checksum error between Reader Controller PCB and DF Unit
			Remedy	1. Turn OFF and then ON the power. 2. Check the connection between Reader Controller PCB and DF Driver PCB (Signal Cable and Power Supply Cable), and check that the Cables are not open-circuit. 3. Replace the Cable between Reader Controller PCB and DF Driver PCB. 4. Replace the Reader Controller PCB. 5. Replace the DF Driver PCB.



E code	Detailed code	Occurance area	Items	Description
E400	0002	04	Title	Communication error between Reader Controller PCB and DF Unit
			Description	Communication error between Reader Controller PCB and DF Unit
			Remedy	1. Turn OFF and then ON the power. 2. Check the connection between Reader Controller PCB and DF Driver PCB (Signal Cable and Power Supply Cable), and check that the Cables are not open-circuit. 3. Replace the Cable between Reader Controller PCB and DF Driver PCB. 4. Replace the Reader Controller PCB. 5. Replace the DF Driver PCB.
E400	0003	04	Title	Disconnection of the Flat Cable between the Reader Controller PCB and DF Driver PCB
			Description	Connection of the Flat Cable between the Reader Controller PCB and DF Driver PCB could not be detected.
			Remedy	1. Turn OFF and then ON the power. 2. Check the connection between Reader Controller PCB and DF Driver PCB (Signal Cable and Power Supply Cable), and check that the Cables are not open-circuit. 3. Replace the cable between Reader Controller PCB and DF Driver PCB. 4. Replace the Reader Controller PCB. 5. Replace the DF PCB.
E412	0005	04	Title	Failure in the drive of the DF Drive Cooling Fan
			Description	The DF Cooling Fan was not driven.
			Remedy	1. Disconnect and then connect the connector. 2. Check if the cable is open circuit. 3. Replace the fan. 4. Replace the DF Driver PCB.
E412	0006	04	Title	DF Cooling Fan kept rotating
			Description	The DF Cooling Fan is not stopped. (Signal is still being sent.)
			Remedy	1. Disconnect and then connect the connector. 2. Check if the cable is open circuit. 3. Replace the fan. 4. Replace the DF Driver PCB.

E code	Detailed code	Occurance area	Items	Description
E401	0001	04	Title	Pickup error
			Description	Pickup Unit is not returned to the home position.
			Remedy	1. Check that Pickup Unit Lifter HP Sensor flag moves smoothly. 2. Check the connection between DF Driver PCB and Pickup Unit Lifter HP Sensor, and check that the Cable is not open-circuit. 3. Check the operation of Pickup Motor. (Set the service mode: FEEDER > FUNCTION > MTR-CHK > 9. Then, set FEEDER > FUNCTION > MTR-ON.) 4. Replace the DF Driver PCB.
E401	0002	04	Title	Pickup error
			Description	Pickup Unit does not move from the home position.
			Remedy	1. Check that Pickup Unit Lifter HP Sensor flag moves smoothly. 2. Check the connection between DF Driver PCB and Pickup Unit Lifter HP Sensor, and check that the Cable is not open-circuit. 3. Check the operation of Pickup Motor. (Set the service mode: FEEDER > FUNCTION > MTR-CHK > 9. Then, set FEEDER > FUNCTION > MTR-ON.) 4. Replace the DF Driver PCB.
E407	0001	04	Title	Tray Lifter Motor error
			Description	Tray HP Sensor does not detect ON or OFF within specified time.
			Remedy	1. Check that after Lifter is lifted fully, it is located in the correct position. (Check the engagement with the Gear.) 2. Check the connection between Tray HP Sensor and DF Driver PCB, and check that the Cable is not open-circuit. 3. Check the operation of Tray Lifter Motor. 4. Replace the DF Driver PCB. 5. Replace the Tray Lifter Motor.
E407	0002	04	Title	Tray Lifter Motor error
			Description	Paper Face Detection Sensor when Lifter is being lifted does not become ON within specified time.
			Remedy	1. Check that after Lifter is lifted fully, it is located in the correct position. (Check the engagement with the Gear.) 2. Check the Tray Lifter Motor, and also check whether shifting operation is performed normally. 3. Check the connection between Paper Face Detection Sensor and DF Driver PCB, and check that the Cable is not open-circuit. 4. Replace the DF Driver PCB. 5. Replace the Tray Lifter Motor.



E code	Detailed code	Occurance area	Items	Description
E413	0001	04	Title	DF Disengagement Motor error
			Description	Lead Roller 1 disengagement error
			Remedy	1. Open the ADF Front Cover, and then check the operation of active Disengagement Motor. 2. Check the physical position of Disengaging HP Sensor and its flag. 3. Check that the Cable of Disengaging HP Sensor is not open-circuit. 4. Replace the DF Driver PCB.
E413	0002	04	Title	DF Disengagement Motor error
			Description	Lead Roller 1 disengagement error
			Remedy	1. Open the ADF Front Cover, and then check the operation of active Disengagement Motor. 2. Check the physical position of Disengaging HP Sensor and its flag. 3. Check that the Cable of Disengaging HP Sensor is not open-circuit. 4. Replace the DF Driver PCB.
E413	0011	04	Title	DF Disengagement Motor error
			Description	Lead Roller 2 disengagement error
			Remedy	1. Open the ADF Front Cover, and then check the operation of active Disengagement Motor. 2. Check the physical position of Disengaging HP Sensor and its flag. 3. Check that the Cable of Disengaging HP Sensor is not open-circuit. 4. Replace the DF Driver PCB.
E413	0012	04	Title	DF Disengagement Motor error
			Description	Lead Roller 2 disengagement error
			Remedy	1. Open the ADF Front Cover, and then check the operation of active Disengagement Motor. 2. Check the physical position of Disengaging HP Sensor and its flag. 3. Check that the Cable of Disengaging HP Sensor is not open-circuit. 4. Replace the DF Driver PCB.
E423	0001	04	Title	DF Unit SDRAM error (This error occurs on Duplex Color Image Reader Unit-B1 only)
			Description	SDRAM access error
			Remedy	1. Turn OFF and then ON the power. 2. Check the connection between Reader and Controller, and check that the Cable is not open-circuit. 3. Replace the Reader Controller PCB.

E code	Detailed code	Occurance area	Items	Description
E423	0002	04	Title	DF Unit SDRAM error (This error occurs on Duplex Color Image Reader Unit-B1 only)
			Description	SDRAM Verify error
			Remedy	1. Turn OFF and then ON the power. 2. Check the connection between Reader and Controller, and check that the Cable is not open-circuit. 3. Replace the Reader Controller PCB.
E490	0001	04	Title	Different DF model
			Description	Installed DF is not the supported DF.
			Remedy	1. Using the service mode, check if the installed DF model is the same model which was set in the service mode. 2. Check the connection between Reader Controller PCB and DF Driver PCB, and check that the Cable is not open-circuit. 3. Replace the DF Driver PCB. 4. Replace the Reader Controller PCB.
E500	0000	05	Title	Communication error
			Description	Communication between the controller of the connected device and the Finisher Controller is suspended.
			Remedy	1. The finisher controller PCB is faulty. 2. The host machine DC Controller PCB (UN1) is faulty.
E500	0001	05	Title	Communication error
			Description	Communication between the controller of the connected device and the Finisher Controller is suspended.
			Remedy	1. The finisher controller PCB is faulty. 2. The host machine DC Controller PCB (UN1) is faulty.
E503	0002	05	Title	Communication error
			Description	Communication between the Saddle Controller and the Finisher Controller is suspended.
			Remedy	1. The wiring between the finisher controller PCB and saddle controller PCB is faulty. 2. The finisher controller PCB is faulty. 3. The saddle stitcher controller PCB is faulty.
E503	0003	05	Title	Communication error
			Description	Communication between the Punch Controller and the Finisher Controller is suspended.
			Remedy	1. The wiring between the finisher controller PCB and host machine DC Controller PCB (UN1) is faulty. 2. The punch controller PCB is faulty. 3. The finisher controller PCB is faulty. 4. The host machine DC Controller PCB (UN1) is faulty.
E505	0001	05	Title	EEPROM error
			Description	The checksum for the finisher controller EEPROM data has an error.
			Remedy	Failure of Finisher Controller PCB.

E code	Detailed code	Occurance area	Items	Description
E505	0002	05	Title	EEPROM error
			Description	The checksum for the punch controller EEPROM data has an error.
			Remedy	1. Failure of Punch Controller PCB.
E509	0001	05	Title	The combination error of the host machine and finisher
			Description	The unconformed finisher is equipped with the host machine.
			Remedy	1. The miss-combination of the host machine and finisher 2. The finisher controller PCB is fault. 3. The host machine controller PCB is faulty.
E514	8001	05	Title	Rear end assist home position error
			Description	The stapler does not leave the rear end assist home position when the rear end assist motor has been driven for 3 seconds.
			Remedy	1. The rear end assist home position sensor (PI109) is faulty. 2. The wiring between the finisher controller PCB and rear end assist motor is faulty. 3. The end assist mechanism is faulty. 4. The rear end assist motor (M109) is faulty. 5. The finisher controller PCB is faulty.
E514	8002	05	Title	Rear end assist home position error
			Description	The stapler does not return to the rear end assist home position when the rear end assist motor has been driven for 3 seconds.
			Remedy	1. The rear end assist home position sensor (PI109) is faulty. 2. The wiring between the finisher controller PCB and rear end assist motor is faulty. 3. The end assist mechanism is faulty. 4. The rear end assist motor (M109) is faulty. 5. The finisher controller PCB is faulty.
E519	0002	05	Title	Gear change home position error
			Description	The gear change home position sensor does not turn ON when the gear change motor has been driven for 387 pulses.
			Remedy	1. The gear change home position sensor (PI117) is faulty. 2. The wiring between the finisher controller PCB and gear change motor is faulty. 3. The gear change mechanism is faulty. 4. The gear change motor (M110) is faulty. 5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E519	8001	05	Title	Gear change home position error
			Description	The gear change home position sensor does not turn OFF when the gear change motor has been driven for 387 pulses.
			Remedy	1. The gear change home position sensor (PI117) is faulty. 2. The wiring between the finisher controller PCB and gear change motor is faulty. 3. The gear change mechanism is faulty. 4. The gear change motor (M110) is faulty. 5. The finisher controller PCB is faulty.
E520	0001	05	Title	Shift Motor fails to move from HP
			Description	At initial rotation, when the Motor rotates for specified period of time and cannot move from HP, it is detected as an error if the same symptom occurs again after the first retry.
			Remedy	1. Check if the Motor (M4) Connector is physically removed. 2. Check if the Motor failure occurs. 3. Check if the Shift Roller HP Sensor (S2) Connector is physically removed. 4. Check if the Shift Roller HP Sensor (S2) failure occurs.
E520	0002	05	Title	Shift Motor fails to return to HP
			Description	At initial rotation, when the Motor rotates for specified period of time and cannot return to HP, it is detected as an error if the same symptom occurs again after the first retry.
			Remedy	1. Check if the Motor (M4) Connector is physically removed. 2. Check if the Motor failure occurs. 3. Check if the Shift Roller HP Sensor (S2) Connector is physically removed. 4. Check if the Shift Roller HP Sensor (S2) failure occurs.
E530	8001	05	Title	Front aligning plate home position error
			Description	The aligning plate does not leave the aligningplate front home position sensor when thealignment plate front motor has been driven for 4 seconds.
			Remedy	1. The front aligning plate home position sensor (PI106) is faulty. 2. The wiring between the finisher controller PCB and front aligning plate motor is faulty. 3. The front aligning plate is faulty. 4. The front aligning plate motor (M103) is faulty. 5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E530	8002	05	Title	Front aligning plate home position error
			Description	The aligning plate does not return to aligning plate front home position sensor when the alignment plate front motor has been driven for 4 seconds.
			Remedy	1. The front aligning plate home position sensor (PI106) is faulty. 2. The wiring between the finisher controller PCB and front aligning plate motor is faulty. 3. The front aligning plate is faulty. 4. The front aligning plate motor (M103) is faulty. 5. The finisher controller PCB is faulty.
E531	8001	05	Title	Staple home position error
			Description	Stapler fails to move from the staple home position although the Staple Motor is driven for a specified period of time.
			Remedy	1. The wiring between the finisher controller PCB and stapler is faulty. 2. The stapler is faulty. 3. The finisher controller PCB is faulty.
E531	8002	05	Title	Staple home position error
			Description	Stapler fails to move from the staple home position although the Staple Motor is driven for a specified period of time.
			Remedy	1. The wiring between the finisher controller PCB and stapler is faulty. 2. The stapler is faulty. 3. The finisher controller PCB is faulty.
E532	0001	05	Title	STP Move Motor fails to return to HP
			Description	At initial rotation, when the Motor rotates for specified period of time and cannot return to HP, it is detected as an error if the same symptom occurs again after the first retry.
			Remedy	1. Check if the Motor (M1) Connector is physically removed. 2. Check if the Motor failure occurs. 3. Check if the Stapler Move HP Sensor (S10) Connector is physically removed. 4. Check if the Stapler Move HP Sensor (S10) failure occurs.

E code	Detailed code	Occurance area	Items	Description
E532	0002	05	Title	STP Move Motor fails to move from HP
			Description	At initial rotation, when the Motor rotates for specified period of time and cannot move from HP, it is detected as an error if the same symptom occurs again after the first retry.
			Remedy	1. Check if the Motor (M1) Connector is physically removed. 2. Check if the Motor failure occurs. 3. Check if the Stapler Move HP Sensor (S10) Connector is physically removed. 4. Check if the Stapler Move HP Sensor (S10) failure occurs.
E532	8001	05	Title	Stapler shift home position error
			Description	The stapler does not leave the stapler shifhome position when the stapler shift motor hasbeen driven for 5 seconds.
			Remedy	1. The stapler drive home position sensor (PI110) is faulty. 2. The wiring between the finisher controller PCB and stapler shift motor is faulty. 3. The stapler shift base is faulty. 4. The stapler shift motor (M105) is faulty. 5. The finisher controller PCB is faulty.
E532	8002	05	Title	Stapler shift home position error
			Description	The stapler does not return to the stapler shift home position when the stapler shift motor has been driven for 20 seconds.
			Remedy	1. The stapler drive home position sensor (PI110) is faulty. 2. The wiring between the finisher controller PCB and stapler shift motor is faulty. 3. The stapler shift base is faulty. 4. The stapler shift motor (M105) is faulty. 5. The finisher controller PCB is faulty.
E535	8001	05	Title	Swing home position error
			Description	The stapler does not leave the swing home position when the swing motor has been driven for 3 seconds.
			Remedy	1. The swing home position sensor (PI105) is faulty. 2. The wiring between the finisher controller PCB and swing motor is faulty. 3. The swing mechanism is faulty. 4. The swing motor (M106) is faulty. 5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E535	8002	05	Title	Swing home position error
			Description	The stapler does not return to the swing home position when the swing motor has been driven for 3 seconds.
			Remedy	1. The swing home position sensor (PI105) is faulty. 2. The wiring between the finisher controller PCB and swing motor is faulty. 3. The swing mechanism is faulty. 4. The swing motor (M106) is faulty. 5. The finisher controller PCB is faulty.
E537	8001	05	Title	Rear aligning plate home position error
			Description	The aligning plate does not leave the aligning plate rear home position sensor when the alignment plate rear motor has been driven for 4 seconds.
			Remedy	1. The aligning plate rear home position sensor (PI107) is faulty. 2. The wiring between the finisher controller PCB and aligning plate rear motor is faulty. 3. The rear aligning plate is faulty. 4. The rear aligning plate motor (M104) is faulty. 5. The finisher controller PCB is faulty.
E537	8002	05	Title	Rear aligning plate home position error
			Description	The aligning plate does not return to aligning plate rear home position sensor when the alignment plate rear motor has been driven for 4 seconds.
			Remedy	1. The aligning plate rear home position sensor (PI107) is faulty. 2. The wiring between the finisher controller PCB and aligning plate rear motor is faulty. 3. The rear aligning plate is faulty. 4. The rear aligning plate motor (M104) is faulty. 5. The finisher controller PCB is faulty.
E540	0001	05	Title	Tray Lift Motor timeout error
			Description	Unable to complete the operation even after the specified period of time during initial rotation. When the Motor remains in the same area for the specified period of time and the same symptom occurs again after the first retry, it is detected as an error.
			Remedy	1. Check if the Motor (M11) Connector is physically removed. 2. Check if the Motor failure occurs. 3. Check if the Stack Tray Clock Sensor (S14) Connector is physically removed. 4. Check if the Stack Tray Clock Sensor (S14) failure occurs.

E code	Detailed code	Occurance area	Items	Description
E540	0005	05	Title	Tray Lift Motor clock error
			Description	At initial rotation, when the Tray Lift Motor rotates and clock input is not detected within the specified period of time, it is detected as an error if the same symptom occurs again after the first retry.
			Remedy	1. Check if the Motor (M11) Connector is physically removed. 2. Check if the Motor failure occurs. 3. Check if the Stack Tray Clock Sensor (S14) Connector is physically removed. 4. Check if the Stack Tray Clock Sensor (S14) failure occurs.
E540	8001	05	Title	Tray 1 time out error
			Description	If the tray does not return to home position when the tray 1 shift motor is driven for 25 seconds. If the tray does not move to other area when tray 1 shift motor is driven for 5 seconds.
			Remedy	1. The tray 1 shift area sensor PCB is faulty. 2. The wiring between the finisher controller PCB and tray 1 shift motor is faulty. 3. The tray up/down mechanism is faulty. 4. The tray 1 shift motor (M107) is faulty. 5. The finisher controller PCB is faulty.
E540	8002	05	Title	Tray 1 shift area error
			Description	The dangerous area is reached before the tray 1 paper surface sensor detects paper surface during the paper surface detection operation. A discontinuous area is detected during tray operation.
			Remedy	1. The tray 1 shift area sensor PCB is faulty. 2. The wiring between the finisher controller PCB and tray 1 shift motor is faulty. 3. The tray up/down mechanism is faulty. 4. The tray 1 shift motor (M107) is faulty. 5. The finisher controller PCB is faulty.
E540	8003	05	Title	Swing guide switch/Staple safety switch error
			Description	The swing guide switch or staple safety switch is activated while the tray is operating.
			Remedy	1. The tray 1 shift area sensor PCB is faulty. 2. The wiring between the finisher controller PCB and tray 1 shift motor is faulty. 3. The tray up/down mechanism is faulty. 4. The tray 1 shift motor (M107) is faulty. 5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E540	8004	05	Title	The tray 1 shift motor clock error
			Description	The FG input cannot be detected when the tray 1 shift motor has been driven for 0.2 second.
			Remedy	1. The tray 1 shift area sensor PCB is faulty. 2. The wiring between the finisher controller PCB and tray 1 shift motor is faulty. 3. The tray up/down mechanism is faulty. 4. The tray 1 shift motor (M107) is faulty. 5. The finisher controller PCB is faulty.
E540	8005	05	Title	The tray 1 shift motor speed error
			Description	The lock detection signal turns OFF 150 ms after the lock detection signal turned ON.
			Remedy	1. The tray 1 shift area sensor PCB is faulty. 2. The wiring between the finisher controller PCB and tray 1 shift motor is faulty. 3. The tray up/down mechanism is faulty. 4. The tray 1 shift motor (M107) is faulty. 5. The finisher controller PCB is faulty.
E540	8006	05	Title	The tray 1 shift motor acceleration error
			Description	The lock detection signal does not turn ON when the tray 1 shift motor has been driven for 1 second.
			Remedy	1. The tray 1 shift area sensor PCB is faulty. 2. The wiring between the finisher controller PCB and tray 1 shift motor is faulty. 3. The tray up/down mechanism is faulty. 4. The tray 1 shift motor (M107) is faulty. 5. The finisher controller PCB is faulty.
E540	8007	05	Title	The tray 1 shift motor error
			Description	The lock detection signal does not turn OFF when the tray 1 shift motor is at a stop.
			Remedy	1. The tray 1 shift area sensor PCB is faulty. 2. The wiring between the finisher controller PCB and tray 1 shift motor is faulty. 3. The tray up/down mechanism is faulty. 4. The tray 1 shift motor (M107) is faulty. 5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E542	0001	05	Title	Additional Tray Lift Motor timeout error
			Description	Unable to complete the operation even after the specified period of time during initial rotation. When the Motor remains in the same area for the specified period of time and the same symptom occurs again after the first retry, it is detected as an error.
			Remedy	1. Check if the Motor (M12) Connector is physically removed. 2. Check if the Motor failure occurs. 3. Check if the Additional Tray Clock Sensor (S23) Connector is physically removed. 4. Check if the Additional Tray Clock Sensor (S23) failure occurs.
E542	0005	05	Title	Additional Tray Lift Motor clock error
			Description	At initial rotation, when the Tray Lift Motor rotates and clock signal is not detected within the specified period of time, it is detected as an error if the same symptom occurs again after the first retry.
			Remedy	1. Check if the Motor (M12) Connector is physically removed. 2. Check if the Motor failure occurs. 3. Check if the Additional Tray Clock Sensor (S23) Connector is physically removed. 4. Check if the Additional Tray Clock Sensor (S23) failure occurs.
E542	8001	05	Title	Tray 2 time out error
			Description	If the tray does not return to home position when the tray 1 shift motor is driven for 25 seconds. If the tray does not move to other area when tray 2 shift motor is driven for 5 seconds.
			Remedy	1. The Tray 2 shift area sensor PCB is faulty. 2. The wiring between the finisher controller PCB and tray 2 shift motor is faulty. 3. The tray up/down mechanism is faulty. 4. The Tray 2 shift motor (M105) is faulty. 5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E542	8002	05	Title	Tray 2 shift area error
			Description	The upper limit area is reached before the tray 2 paper surface sensor 1 detects the paper surface during paper surface detection operation. A discontinuous area is detected during tray operation. During evacuation operation, arrival at the area beyond the tray 2 paper surface sensor 2 is detected before this sensor detects paper surface.
			Remedy	1. The tray 2 shift area sensor PCB is faulty. 2. The wiring between the finisher controller PCB and tray 2 shift motor is faulty. 3. The tray up/down mechanism is faulty. 4. The tray 2 shift motor (M105) is faulty. 5. The finisher controller PCB is faulty.
E542	8004	05	Title	The tray 2 shift motor clock error
			Description	The FG input cannot be detected when the tray 2 shift motor has been driven for 0.2 second.
			Remedy	1. The Tray 2 shift area sensor PCB is faulty. 2. The wiring between the finisher controller PCB and tray 2 shift motor is faulty. 3. The tray up/down mechanism is faulty. 4. The Tray 2 shift motor (M105) is faulty. 5. The finisher controller PCB is faulty.
E542	8005	05	Title	The tray 2 shift motor speed error
			Description	The lock detection signal turns OFF 150 ms after the lock detection signal turned ON.
			Remedy	1. The tray 2 shift area sensor PCB is faulty. 2. The wiring between the finisher controller PCB and tray 2 shift motor is faulty. 3. The tray up/down mechanism is faulty. 4. The tray 2 shift motor (M105) is faulty. 5. The finisher controller PCB is faulty.
E542	8006	05	Title	The tray 2 shift motor acceleration error
			Description	The lock detection signal does not turn ON when the tray 2 shift motor has been driven for 1 second.
			Remedy	1. The tray 2 shift area sensor PCB is faulty. 2. The wiring between the finisher controller PCB and tray 2 shift motor is faulty. 3. The tray up/down mechanism is faulty. 4. The tray 2 shift motor (M105) is faulty. 5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E542	8007	05	Title	The tray 2 shift motor error
			Description	The lock detection signal does not turn OFF when the tray 2 shift motor is at a stop.
			Remedy	1. The tray 2 shift area sensor PCB is faulty. 2. The wiring between the finisher controller PCB and tray 2 shift motor is faulty. 3. The tray up/down mechanism is faulty. 4. The tray 2 shift motor (M105) is faulty. 5. The finisher controller PCB is faulty.
E567	0001	05	Title	Shift Roller Release Motor fails to move from HP
			Description	At initial rotation, when the Motor rotates for specified period of time and cannot move from HP, it is detected as an error if the same symptom occurs again after the first retry.
			Remedy	1. Check if the Motor (M5) Connector is physically removed. 2. Check if the Motor failure occurs. 3. Check if the Shift Roller Release Sensor (S3) Connector is physically removed. 4. Check if the Shift Roller Release Sensor (S3) failure occurs.
E567	0002	05	Title	Shift Roller Release Motor fails to return to HP
			Description	At initial rotation, when the Motor rotates for specified period of time and cannot return to HP, it is detected as an error if the same symptom occurs again after the first retry.
			Remedy	1. Check if the Motor (M5) Connector is physically removed. 2. Check if the Motor failure occurs. 3. Check if the Shift Roller Release Sensor (S3) Connector is physically removed. 4. Check if the Shift Roller Release Sensor (S3) failure occurs.
E56F	0001	05	Title	Entrance Roller Release/Stopper HP Motor fails to move from HP
			Description	At initial rotation, when the Motor rotates for specified period of time and cannot move from HP, it is detected as an error if the same symptom occurs again after the first retry.
			Remedy	1. Check if the Motor (M6) Connector is physically removed. 2. Check if the Motor failure occurs. 3. Check if the Entrance Roller Release/Stopper HP Sensor (S5) Connector is physically removed. 4. Check if the Entrance Roller Release/Stopper HP Sensor (S5) failure occurs.



E code	Detailed code	Occurance area	Items	Description
E56F	0002	05	Title	Entrance Roller Release/Stopper HP Motor fails to return to HP
			Description	At initial rotation, when the Motor rotates for specified period of time and cannot return to HP, it is detected as an error if the same symptom occurs again after the first retry.
			Remedy	1. Check if the Motor (M6) Connector is physically removed. 2. Check if the Motor failure occurs. 3. Check if the Entrance Roller Release/Stopper HP Sensor (S5) Connector is physically removed. 4. Check if the Entrance Roller Release/Stopper HP Sensor (S5) failure occurs.
E571	0001	05	Title	Gripper Open/Close Motor fails to move from HP
			Description	At initial rotation, when the Motor rotates for specified period of time and cannot move from HP, it is detected as an error if the same symptom occurs again after the first retry.
			Remedy	1. Check if the Motor (M7) Connector is physically removed. 2. Check if the Motor failure occurs. 3. Check if the Gripper Arm HP Sensor (S13) Connector is physically removed. 4. Check if the Gripper Unit HP Sensor (S7) failure occurs.
E571	0002	05	Title	Gripper Open/Close Motor fails to return to HP
			Description	At initial rotation, when the Motor rotates for specified period of time and cannot return to HP, it is detected as an error if the same symptom occurs again after the first retry.
			Remedy	1. Check if the Motor (M7) Connector is physically removed. 2. Check if the Motor failure occurs. 3. Check if the Gripper Arm HP Sensor (S13) Connector is physically removed. 4. Check if the Gripper Unit HP Sensor (S7) failure occurs.

E code	Detailed code	Occurance area	Items	Description
E575	0001	05	Title	Gripper Unit Move Motor fails to move from HP
			Description	At initial rotation, when the Motor rotates for specified period of time and cannot move from HP, it is detected as an error if the same symptom occurs again after the first retry.
			Remedy	1. Check if the Motor (M2) Connector is physically removed. 2. Check if the Motor failure occurs. 3. Check if the Gripper Unit HP Sensor (S7) Connector is physically removed. 4. Check if the Gripper Unit HP Sensor (S7) failure occurs.
E575	0002	05	Title	Gripper Unit Move Motor fails to return to HP
			Description	At initial rotation, when the Motor rotates for specified period of time and cannot return to HP, it is detected as an error if the same symptom occurs again after the first retry.
			Assumed cause	1. Check if the Motor (M2) Connector is physically removed. 2. Check if the Motor failure occurs. 3. Check if the Gripper Unit HP Sensor (S7) Connector is physically removed. 4. Check if the Gripper Unit HP Sensor (S7) failure occurs.
E584	0002	05	Title	Shutter home position error
			Description	The stapler does not return to the shutter home position when the stack ejection motor has been driven for 3 seconds.
			Remedy	1. The shutter home position sensor (PI113) is faulty. 2. The shutter mechanism is faulty. 3. The stack ejection motor (M102), shutter clutch (CL101), and stack ejection lower roller clutch (CL102) is faulty. 4. The finisher controller PCB is faulty.
E584	8001	05	Title	Shutter home position error
			Description	The stapler does not leave the shutter home position when the stack ejection motor has been driven for 30 seconds.
			Remedy	1. The shutter home position sensor (PI113) is faulty. 2. The wiring between the finisher controller PCB and stack ejection motor, and between the finisher controller PCB and shutter clutch is faulty. 3. The shutter mechanism is faulty. 4. The stack ejection motor (M102), shutter clutch (CL101), and stack ejection lower roller clutch (CL102) is faulty. 5. The finisher controller PCB is faulty.



E code	Detailed code	Occurance area	Items	Description
E590	8001	05	Title	Punch home position error
			Description	The puncher does not detect the punch home position sensor when the puncher motor has been driven for 20 msec.
			Remedy	1. The punch home position sensor (PI63) and punch motor clock sensor (PI62) is faulty. 2. The wiring between the punch controller PCB and sensor is faulty. 3. The punch mechanism is faulty. 4. The punch controller PCB is faulty. 5. The finisher controller PCB is faulty.
E590	8002	05	Title	Punch home position error
			Description	After the motor has been stopped at time of punch motor initialization, the puncher does not detect punch home position sensor.
			Remedy	1. The punch home position sensor (PI63) and punch motor clock sensor (PI62) is faulty. 2. The wiring between the punch controller PCB and sensor is faulty. 3. The punch mechanism is faulty. 4. The punch controller PCB is faulty. 5. The finisher controller PCB is faulty.
E591	8001	05	Title	Punch scrap empty error
			Description	The voltage of the light received is 2.5 V or less even when the light emitting duty of the scrap full detector sensor has been increased to 66% or more.
			Remedy	1. The wiring between the scrap full detector PCB and punch controller PCB is faulty. 2. The scrap full detector PCB is faulty. 3. The punch controller PCB is faulty. 4. The finisher controller PCB is faulty.
E591	8002	05	Title	Punch scrap full detection error
			Description	The voltage of the light received is 2.0 V or more even when the light emitting duty of the scrap full detector sensor has been decreased to 0%.
			Remedy	1. The scrap full detector PCB is faulty. 2. The punch controller PCB is faulty. 3. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E592	8001	05	Title	Trailing edge sensor error
			Description	The voltage of the light received is 3.0 V or less even when the light emitting duty of the trailing edge sensor (LED5,PTR5) has been increased to 66% or more.
			Remedy	1. The wiring between the LED PCB/photosensor PCB and punch controller PCB is faulty. 2. The LED PCB and photosensor PCB is faulty. 3. The punch controller PCB is faulty. 4. The finisher controller PCB is faulty.
E592	8002	05	Title	Trailing edge sensor error
			Description	The voltage of the light received is 2.0 V or more even when the light emitting duty of the trailing edge sensor has been decreased to 0%.
			Remedy	1. The LED PCB and photosensor PCB is faulty. 2. The punch controller PCB is faulty. 3. The finisher controller PCB is faulty.
E592	8003	05	Title	Horizontal registration sensor 1 error
			Description	The voltage of the light received is 2.5 V or less even when the light emitting duty of the horizontal registration sensor 1 (LED1,PTR1) has been increased to 66% or more.
			Remedy	1. The wiring between the LED PCB/photosensor PCB and punch controller PCB is faulty. 2. The LED PCB and photosensor PCB is faulty. 3. The punch controller PCB is faulty. 4. The finisher controller PCB is faulty.
E592	8004	05	Title	Horizontal registration sensor 1 error
			Description	The voltage of the light received is 2.0 V or more even when the light emitting duty of the horizontal registration sensor 1 (LED1,PTR1) has been decreased to 0%.
			Remedy	1. The LED PCB and photosensor PCB is faulty. 2. The punch controller PCB is faulty. 3. The finisher controller PCB is faulty.
E592	8005	05	Title	Horizontal registration sensor 2 error
			Description	The voltage of the light received is 2.5 V or less even when the light emitting duty of the horizontal registration sensor 2 (LED2,PTR2) has been increased to 66% or more.
			Remedy	1. The wiring between the LED PCB/photosensor PCB and punch controller PCB is faulty. 2. The LED PCB and photosensor PCB is faulty. 3. The punch controller PCB is faulty. 4. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E592	8006	05	Title	Horizontal registration sensor 2 error
			Description	The voltage of the light received is 2.0 V or more even when the light emitting duty of the horizontal registration sensor 2 (LED2,PTR2) has been decreased to 0%.
			Remedy	1. The LED PCB and photosensor PCB is faulty. 2. The punch controller PCB is faulty. 3. The finisher controller PCB is faulty.
E592	8007	05	Title	Horizontal registration sensor 3 error
			Description	The voltage of the light received is 2.5 V or less even when the light emitting duty of the horizontal registration sensor 3 (LED3,PTR3) has been increased to 66% or more.
			Remedy	1. The wiring between the LED PCB/photosensor PCB and punch controller PCB is faulty. 2. The LED PCB and photosensor PCB is faulty. 3. The punch controller PCB is faulty. 4. The finisher controller PCB is faulty.
E592	8008	05	Title	Horizontal registration sensor 3 error
			Description	The voltage of the light received is 2.0 V or more even when the light emitting duty of the horizontal registration sensor 3 (LED3,PTR3) has been decreased to 0%.
			Remedy	1. The LED PCB and photosensor PCB is faulty. 2. The punch controller PCB is faulty. 3. The finisher controller PCB is faulty.
E592	8009	05	Title	Horizontal registration sensor 4 error
			Description	The voltage of the light received is 2.5 V or less even when the light emitting duty of the horizontal registration sensor 4 (LED4,PTR4) has been increased to 66% or more.
			Remedy	1. The wiring between the LED PCB/photosensor PCB and punch controller PCB is faulty. 2. The LED PCB and photosensor PCB is faulty. 3. The punch controller PCB is faulty. 4. The finisher controller PCB is faulty.
E592	800A	05	Title	Horizontal registration sensor 4 error
			Description	The voltage of the light received is 2.0 V or more even when the light emitting duty of the horizontal registration sensor 4 (LED4,PTR4) has been decreased to 0%.
			Remedy	1. The LED PCB and photosensor PCB is faulty. 2. The punch controller PCB is faulty. 3. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E593	8001	05	Title	Horizontal registration home position error
			Description	At time of horizontal registration motor initialization, the punch slide unit does not leave the horizontal home position sensor even when it has been driven for 9 mm.
			Remedy	1. The horizontal registration home position (PI61) is faulty. 2. The wiring between the punch controller PCB and sensor is faulty. 3. The horizontal registration mechanism is faulty. 4. The horizontal registration motor (M62) is faulty. 5. The punch controller PCB is faulty. 6. The finisher controller PCB is faulty.
E593	8002	05	Title	Horizontal registration home position error
			Description	At time of horizontal registration motor initialization, the punch slide unit does not return to the horizontal registration home position sensor even when the unit has been driven for 37 mm.
			Remedy	1. The horizontal registration home position (PI61) is faulty. 2. The wiring between the punch controller PCB and sensor is faulty. 3. The horizontal registration mechanism is faulty. 4. The horizontal registration motor (M62) is faulty. 5. The punch controller PCB is faulty. 6. The finisher controller PCB is faulty.
E5F0	8001	05	Title	Paper positioning plate home position error
			Description	The paper positioning plate home position sensor does not turn ON when the paper positioning plate motor has been driven for 1500 pulses.
			Remedy	1. The paper positioning plate home position sensor (PI7) is faulty. 2. The positioning plate drive mechanism is faulty. 3. The paper positioning plate motor (M4) is faulty. 4. The saddle stitcher controller PCB is faulty.
E5F0	8002	05	Title	Paper positioning plate home position error
			Description	The paper positioning plate home position sensor does not turn OFF when the paper positioning plate motor has been driven for 300 pulses.
			Remedy	1. The paper positioning plate home position sensor (PI7) is faulty. 2. Open circuit of the Harness between Finisher Controller PCB and Stack Delivery Motor & between Finisher Controller PCB and Shutter Open/Close Clutch 3. The positioning plate drive mechanism is faulty. 4. The paper positioning plate motor (M4) is faulty. 5. The saddle stitcher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E5F1	8001	05	Title	Paper folding motor lock error
			Description	The feed speed of the paper fold roller reaches 5 mm/sec or less.
			Remedy	1. The paper folding motor clock sensor (PI4) and paper folding home position sensor (PI21) is faulty. 2. The paper folding roller drive mechanism is faulty. 3. The paper folding motor (M2) is faulty. 4. The saddle stitcher controller PCB is faulty.
E5F1	8002	05	Title	Paper positioning plate home position error
			Description	The status of Paper Fold Home Position Sensor does not change although the Paper Fold Motor is driven for a specified period of time.
			Remedy	1. The paper folding motor clock sensor (PI4) and paper folding home position sensor (PI21) is faulty. 2. The paper folding roller drive mechanism is faulty. 3. The paper folding motor (M2) is faulty. 4. The saddle stitcher controller PCB is faulty.
E5F2	8001	05	Title	Guide home position error
			Description	The guide home position sensor does not turn ON when the guide motor has been driven for 700 pulses.
			Remedy	1. The guide home position sensor (PI13) is faulty. 2. The guide plate drive mechanism is faulty. 3. The guide Motor (M3) is faulty. 4. The saddle stitcher controller PCB is faulty.
E5F2	8002	05	Title	Guide home position error
			Description	The guide home position sensor does not turn OFF when the guide motor has been driven for 50 pulses.
			Remedy	1. The guide home position sensor (PI13) is faulty. 2. The guide plate drive mechanism is faulty. 3. The guide Motor (M3) is faulty. 4. The saddle stitcher controller PCB is faulty.
E5F3	8001	05	Title	Aligning plate home position error
			Description	The aligning plate home position sensor does not turn ON when the aligning plate motor has been driven for 500 pulses.
			Remedy	1. The aligning plate home position sensor (PI5) is faulty. 2. The aligning plate drive mechanism is faulty. 3. The aligning motor (M5) is faulty. 4. The saddle stitcher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E5F3	8002	05	Title	Aligning plate home position error
			Description	The aligning plate home position sensor does not turn OFF when the aligning plate motor has been driven for 50 pulses.
			Remedy	1. The aligning plate home position sensor (PI5) is faulty. 2. The aligning plate drive mechanism is faulty. 3. The aligning motor (M5) is faulty. 4. The saddle stitcher controller PCB is faulty.
E5F4	8001	05	Title	Stitcher (rear) home position error
			Description	The stitching home position sensor does not turn ON when the stitch motor (rear) has been driven backward for 0.5 sec.
			Remedy	1. The stitcher home position sensor (rear) (SW5) is faulty. 2. The stitcher (rear) is faulty. 3. The saddle stitcher controller PCB is faulty.
E5F4	8002	05	Title	Stitcher (rear) home position error
			Description	The stitching home position sensor does not turn OFF when the stitch motor (rear) has been driven forward for 0.5 sec.
			Remedy	1. The stitcher home position sensor (rear) (SW5) is faulty. 2. The stitcher (rear) is faulty. 3. The saddle stitcher controller PCB is faulty.
E5F5	8001	05	Title	Stitcher (front) home position error
			Description	The stitching home position sensor does not turn ON when the stitch motor (front) has been driven forward for 0.5 sec.
			Remedy	1. The stitcher home position sensor (front) (SW7) is faulty. 2. The stitcher (front) is faulty. 3. The saddle stitcher controller PCB is faulty.
E5F5	8002	05	Title	Stitcher (front) home position error
			Description	The stitching home position sensor does not turn OFF when the stitch motor (front) has been driven backward for 0.5 sec.
			Remedy	1. The stitcher home position sensor (front) (SW7) is faulty. 2. The stitcher (front) is faulty. 3. The saddle stitcher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E5F6	8001	05	Title	Paper pushing plate home position error
			Description	The paper pushing plate home position sensor does not turn ON when the paper pushing plate motor has been driven for 0.5 sec.
			Remedy	1. The paper pushing plate home position sensor (PI14), paper pushing plate top position sensor (PI15), and paper pushing plate motor clock sensor (PI1) is faulty. 2. The paper pushing plate drive mechanism is faulty. 3. The paper pushing plate motor (M8) is faulty. 4. The saddle stitcher controller PCB is faulty.
E5F6	8002	05	Title	Paper pushing plate home position error
			Description	The paper pushing plate home position sensor does not turn OFF when the paper pushing plate motor has been driven for 150 ms.
			Remedy	1. The paper pushing plate home position sensor (PI14), paper pushing plate top position sensor (PI15), and paper pushing plate motor clock sensor (PI1) is faulty. 2. The paper pushing plate drive mechanism is faulty. 3. The paper pushing plate motor (M8) is faulty. 4. The saddle stitcher controller PCB is faulty.
E5F6	8003	05	Title	Paper pushing plate motor clock error
			Description	The number of pulses detected by the paper pushing plate motor clock sensor is 6 pulses or less.
			Remedy	1. The paper pushing plate home position sensor (PI14), paper pushing plate top position sensor (PI15), and paper pushing plate motor clock sensor (PI1) is faulty. 2. The paper pushing plate drive mechanism is faulty. 3. The paper pushing plate motor (M8) is faulty. 4. The saddle stitcher controller PCB is faulty.
E5F6	8004	05	Title	Pushing position error
			Description	The paper pushing plate leading edge position sensor does not turn ON when the paper pushing plate motor has been driven for 0.1 sec.
			Remedy	1. The paper pushing plate home position sensor (PI14), paper pushing plate top position sensor (PI15), and paper pushing plate motor clock sensor (PI1) is faulty. 2. The paper pushing plate drive mechanism is faulty. 3. The paper pushing plate motor (M8) is faulty. 4. The saddle stitcher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E5F6	8005	05	Title	Pushing position error
			Description	The paper pushing plate leading edge position sensor does not turn OFF when the paper pushing plate motor has been driven for 0.5 sec.
			Remedy	1. The paper pushing plate home position sensor (PI14), paper pushing plate top position sensor (PI15), and paper pushing plate motor clock sensor (PI1) is faulty. 2. The paper pushing plate drive mechanism is faulty. 3. The paper pushing plate motor (M8) is faulty. 4. The saddle stitcher controller PCB is faulty.

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E code	Detailed code	Occurance area	Items	Description
E602	0001	00	Title	Error in HDD
			Description	HDD failed to be recognized. Startup partition (BOOTDEV) failed to be found at startup.
			Remedy	<p>1. Turn OFF the main switch and check connection of HDD cable, and then turn ON the main switch.</p> <p>2. If the Encryption Board has been installed, there may be an Encryption Board failure. In this case, disconnect the signal cable connecting to the Encryption Board and directly connect to the HDD. (It cannot be connected from the back side. Open the Main Controller Cover, and connect by going over the Main Controller PCB 1.) After connecting, power on by the safe mode. If the machine starts normally, replace the Encryption Board as the Encryption Board had failed.</p> <p>3. Be sure that HDD spins stably (no problem in drive sound) and 5V/12V power is supplied when the main power is turned ON. (If the drive sound is abnormal, replace the HDD.)</p> <p>4. Replace the HDD and reinstall the system. (In the case of using a USB memory device, insert a USB memory device where the system software has been registered to the slot of the host machine, and then execute main menu [3]: Upgrade (Overwrite all).)</p> <p>5. Replace the Main Controller PCB 1.</p>
E602	0002	00	Title	Error in HDD
			Description	There is no system for the main CPU
			Remedy	<p>1. Start in Safe Mode, then perform overall format using SST or USB memory and reinstall the system, and then turn OFF and then ON the Main Switch. (Prepare the USB memory which system software was registered. Insert the USB memory to the equipment. Execute [3]: Upgrade (Overwrite All) in the main menu.)</p> <p>2. If the above measures do not solve the problem, it can be caused by failure with HDD; therefore, replace the HDD and reinstall the system.</p>

E code	Detailed code	Occurance area	Items	Description
E602	0003	00	Title	Error in HDD
			Description	WriteAbort was detected with BootDevice
			Remedy	<p>1. Execute detection and recovery of WriteAbortSector &lt;In the case of display of B/W E-code&gt;</p> <p>1-1. Perform the following steps because Service Mode is not available.</p> <p>1-2. Turn OFF the power. Then, while pressing 1+9 keys, turn ON the power. WriteAbortSector recovery routine is automatically started which makes the screen black.</p> <p>1-3. After a while, progress is displayed because the process takes time (40 to 50 min.). The process is complete when the screen turns white.</p> <p>&lt;In the case of official display of wrench-mark&gt;</p> <p>1-1. Set as follows: CHK-TYPE=0; and execute HD-CHECK (40 to 50 min.), and then turn OFF and then ON the main switch.</p> <p>2. If the above measures do not solve the problem, start up in Safe Mode to perform overall format using SST or USB memory and reinstall the system, and then turn OFF and then ON the main switch.</p> <p>3. If no improvement is found despite the above measures, it can be caused by failure with HDD; therefore, replace the HDD and reinstall the system.</p>

E code	Detailed code	Occurance area	Items	Description
E602	0006	00	Title	Error in HDD
			Description	There is no system for the sub CPU
			Remedy	<p>Reinstall the system software. For details, see "Chapter 6: Upgrading".</p> <p>For your reference, the method using USB memory is described below.</p> <ol style="list-style-type: none"> <li>1. Prepare the USB memory which system software was registered.</li> <li>2. Execute the following service mode: COPIER&gt;FUNCTION&gt;SYSTEM&gt;DOWNLOAD to enter the download mode. (When it is not operated normally, start the safe mode.)</li> <li>3. Insert the USB memory to the equipment.</li> <li>4. Execute [3]: Upgrade (Overwrite All) in the main menu. (Be sure to download SYSTEM, LANGUAGE and RUI.)</li> <li>5. System software is downloaded and the machine restarts automatically. At this time, if the machine restarts with the safe mode, E753 might occurs. Check the log. In case of the system software of the options which are not connected, turn OFF and then ON the power supply to restore. (For details, see the description for E753.)</li> </ol> <p>If the measures above do not solve the problem, replace the HDD and download the system software with the foregoing method.</p>
E602	0007	00	Title	Error in HDD
			Description	There is no ICCProfile
			Remedy	<ol style="list-style-type: none"> <li>1. Start up in Safe Mode and reinstall the system using SST; and then turn OFF and then ON the main power switch.</li> <li>2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.</li> </ol>
E602	0009	00	Title	Error in HDD
			Description	There is no Font file in /BOOTDEV/BOOT
			Remedy	<ol style="list-style-type: none"> <li>1. Start up in Safe Mode and reinstall the system using SST; and then turn OFF and then ON the main power switch.</li> <li>2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.</li> </ol>

E code	Detailed code	Occurance area	Items	Description
E602	0010	00		Error in HDD
				There is no Chinese, Korean, and Taiwan font files
				<ol style="list-style-type: none"> <li>1. Start up in Safe Mode and reinstall the system using SST; and then turn OFF and then ON the main power switch.</li> <li>2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.</li> </ol>
E602	0011	00		Error in HDD
				There is no Chinese, Korean, and Taiwan font files
				<ol style="list-style-type: none"> <li>1. Start up in Safe Mode and reinstall the system using SST; and then turn OFF and then ON the main power switch.</li> <li>2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.</li> </ol>
E602	0012	00	Title	Error in HDD
			Description	There is no file in which the Web browser refers to
			Remedy	<ol style="list-style-type: none"> <li>1. Start up in Safe Mode and reinstall the Web browser using SST, and then turn OFF and then ON the main power switch.</li> <li>2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.</li> </ol>

E code	Detailed code	Occurance area	Items	Description
E602	0101	00	Title	Error in HDD
			Description	Error in storage area of image data (Inbox, etc.) (at startup)
			Remedy	<p>When the problem is not solved by turning OFF and then ON the power, ask the followings to user.</p> <p>A. Preferring to give priority on recovery time although data is deleted</p> <p>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)</p> <p>Case A</p> <ol style="list-style-type: none"> <li>1. Enter CHK-TYPE=1, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)</li> <li>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.</li> <li>4. Replace the HDD.</li> </ol> <p>Case B</p> <ol style="list-style-type: none"> <li>1. Try to recover the corresponding file/partition. -&gt; Enter CHK-TYPE=1, execute HD-CHECK, and then turn OFF and then ON the power.</li> <li>2. Back up necessary data.</li> <li>3. Enter CHK-TYPE=1, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.</li> <li>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.</li> <li>6. Replace the HDD.</li> </ol> <p>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.</p>

E code	Detailed code	Occurance area	Items	Description
E602	0111	00	Title	Error in HDD
			Description	Error in storage area of image data (Inbox, etc.) (after startup)
			Remedy	<p>When the problem is not solved by turning OFF and then ON the power, ask the followings to user.</p> <p>A. Preferring to give priority on recovery time although data is deleted</p> <p>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)</p> <p>Case A</p> <ol style="list-style-type: none"> <li>1. Enter CHK-TYPE=1, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)</li> <li>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.</li> <li>4. Replace the HDD.</li> </ol> <p>Case B</p> <ol style="list-style-type: none"> <li>1. Try to recover the corresponding file/partition. -&gt; Enter CHK-TYPE=1, execute HD-CHECK, and then turn OFF and then ON the power.</li> <li>2. Back up necessary data.</li> <li>3. Enter CHK-TYPE=1, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.</li> <li>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.</li> <li>6. Replace the HDD.</li> </ol> <p>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.</p>



E code	Detailed code	Occurance area	Items	Description
E602	0201	00	Title	Error in HDD
			Description	Error in management data area of image (at startup)
			Remedy	<p>When the problem is not solved by turning OFF and then ON the power, ask the followings to user.</p> <p>A. Preferring to give priority on recovery time although data is deleted</p> <p>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)</p> <p>Case A</p> <ol style="list-style-type: none"> <li>1. Enter CHK-TYPE=2, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)</li> <li>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.</li> <li>4. Replace the HDD.</li> </ol> <p>Case B</p> <ol style="list-style-type: none"> <li>1. Try to recover the corresponding file/partition. -&gt; Enter CHK-TYPE=2, execute HD-CHECK, and then turn OFF and then ON the power.</li> <li>2. Back up necessary data.</li> <li>3. Enter CHK-TYPE=2, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.</li> <li>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.</li> <li>6. Replace the HDD.</li> </ol> <p>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.</p>

E code	Detailed code	Occurance area	Items	Description
E602	0211	00	Title	Error in HDD
			Description	Error in management data area of image (after startup)
			Remedy	<p>When the problem is not solved by turning OFF and then ON the power, ask the followings to user.</p> <p>A. Preferring to give priority on recovery time although data is deleted</p> <p>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)</p> <p>Case A</p> <ol style="list-style-type: none"> <li>1. Enter CHK-TYPE=2, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)</li> <li>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.</li> <li>4. Replace the HDD.</li> </ol> <p>Case B</p> <ol style="list-style-type: none"> <li>1. Try to recover the corresponding file/partition. -&gt; Enter CHK-TYPE=2, execute HD-CHECK, and then turn OFF and then ON the power.</li> <li>2. Back up necessary data.</li> <li>3. Enter CHK-TYPE=2, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.</li> <li>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.</li> <li>6. Replace the HDD.</li> </ol> <p>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.</p>

E code	Detailed code	Occurance area	Items	Description
E602	0301	00	Title	Error in HDD
			Description	Storage area of image data (temporary data) (at startup)
			Remedy	<p>When the problem is not solved by turning OFF and then ON the power, ask the followings to user.</p> <p>A. Preferring to give priority on recovery time although data is deleted</p> <p>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)</p> <p>Case A</p> <ol style="list-style-type: none"> <li>1. Enter CHK-TYPE=3, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)</li> <li>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.</li> <li>4. Replace the HDD.</li> </ol> <p>Case B</p> <ol style="list-style-type: none"> <li>1. Try to recover the corresponding file/partition. -&gt; Enter CHK-TYPE=3, execute HD-CHECK, and then turn OFF and then ON the power.</li> <li>2. Back up necessary data.</li> <li>3. Enter CHK-TYPE=3, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.</li> <li>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.</li> <li>6. Replace the HDD.</li> </ol> <p>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.</p>

E code	Detailed code	Occurance area	Items	Description
E602	0311	00	Title	Error in HDD
			Description	Storage area of image data (temporary data) (after startup)
			Remedy	<p>When the problem is not solved by turning OFF and then ON the power, ask the followings to user.</p> <p>A. Preferring to give priority on recovery time although data is deleted</p> <p>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)</p> <p>Case A</p> <ol style="list-style-type: none"> <li>1. Enter CHK-TYPE=3, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)</li> <li>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.</li> <li>4. Replace the HDD.</li> </ol> <p>Case B</p> <ol style="list-style-type: none"> <li>1. Try to recover the corresponding file/partition. -&gt; Enter CHK-TYPE=3, execute HD-CHECK, and then turn OFF and then ON the power.</li> <li>2. Back up necessary data.</li> <li>3. Enter CHK-TYPE=3, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.</li> <li>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.</li> <li>6. Replace the HDD.</li> </ol> <p>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.</p>

E code	Detailed code	Occurance area	Items	Description
E602	0401	00	Title	Error in HDD
			Description	Error in thumbnail area (at startup)
			Remedy	<p>When the problem is not solved by turning OFF and then ON the power, ask the followings to user.</p> <p>A. Preferring to give priority on recovery time although data is deleted</p> <p>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)</p> <p>Case A</p> <ol style="list-style-type: none"> <li>1. Enter CHK-TYPE=4, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)</li> <li>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.</li> <li>4. Replace the HDD.</li> </ol> <p>Case B</p> <ol style="list-style-type: none"> <li>1. Try to recover the corresponding file/partition. -&gt; Enter CHK-TYPE=4, execute HD-CHECK, and then turn OFF and then ON the power.</li> <li>2. Back up necessary data.</li> <li>3. Enter CHK-TYPE=4, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.</li> <li>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.</li> <li>6. Replace the HDD.</li> </ol> <p>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.</p>

E code	Detailed code	Occurance area	Items	Description
E602	0411	00	Title	Error in HDD
			Description	Error in thumbnail area (after startup)
			Remedy	<p>When the problem is not solved by turning OFF and then ON the power, ask the followings to user.</p> <p>A. Preferring to give priority on recovery time although data is deleted</p> <p>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)</p> <p>Case A</p> <ol style="list-style-type: none"> <li>1. Enter CHK-TYPE=4, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)</li> <li>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.</li> <li>4. Replace the HDD.</li> </ol> <p>Case B</p> <ol style="list-style-type: none"> <li>1. Try to recover the corresponding file/partition. -&gt; Enter CHK-TYPE=4, execute HD-CHECK, and then turn OFF and then ON the power.</li> <li>2. Back up necessary data.</li> <li>3. Enter CHK-TYPE=4, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.</li> <li>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.</li> <li>6. Replace the HDD.</li> </ol> <p>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.</p>

E code	Detailed code	Occurance area	Items	Description
E602	0501	00	Title	Error in HDD
			Description	Error in storage area of universal data (at startup)
			Remedy	<p>When the problem is not solved by turning OFF and then ON the power, ask the followings to user.</p> <p>A. Preferring to give priority on recovery time although data is deleted</p> <p>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)</p> <p>Case A</p> <ol style="list-style-type: none"> <li>1. Enter CHK-TYPE=5, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)</li> <li>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.</li> <li>4. Replace the HDD.</li> </ol> <p>Case B</p> <ol style="list-style-type: none"> <li>1. Try to recover the corresponding file/partition. -&gt; Enter CHK-TYPE=5, execute HD-CHECK, and then turn OFF and then ON the power.</li> <li>2. Back up necessary data.</li> <li>3. Enter CHK-TYPE=5, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.</li> <li>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.</li> <li>6. Replace the HDD.</li> </ol> <p>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.</p>

E code	Detailed code	Occurance area	Items	Description
E602	0511	00	Title	Error in HDD
			Description	Error in storage area of universal data (after startup)
			Remedy	<p>When the problem is not solved by turning OFF and then ON the power, ask the followings to user.</p> <p>A. Preferring to give priority on recovery time although data is deleted</p> <p>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)</p> <p>Case A</p> <ol style="list-style-type: none"> <li>1. Enter CHK-TYPE=5, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)</li> <li>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.</li> <li>4. Replace the HDD.</li> </ol> <p>Case B</p> <ol style="list-style-type: none"> <li>1. Try to recover the corresponding file/partition. -&gt; Enter CHK-TYPE=5, execute HD-CHECK, and then turn OFF and then ON the power.</li> <li>2. Back up necessary data.</li> <li>3. Enter CHK-TYPE=5, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.</li> <li>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.</li> <li>6. Replace the HDD.</li> </ol> <p>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.</p>

E code	Detailed code	Occurance area	Items	Description
E602	0601	00	Title	Error in HDD
			Description	Error in storage area of universal data (temporary data) (at startup)
			Remedy	<p>When the problem is not solved by turning OFF and then ON the power, ask the followings to user.</p> <p>A. Preferring to give priority on recovery time although data is deleted</p> <p>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)</p> <p>Case A</p> <ol style="list-style-type: none"> <li>1. Enter CHK-TYPE=6, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)</li> <li>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.</li> <li>4. Replace the HDD.</li> </ol> <p>Case B</p> <ol style="list-style-type: none"> <li>1. Try to recover the corresponding file/partition. -&gt; Enter CHK-TYPE=6, execute HD-CHECK, and then turn OFF and then ON the power.</li> <li>2. Back up necessary data.</li> <li>3. Enter CHK-TYPE=6, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.</li> <li>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.</li> <li>6. Replace the HDD.</li> </ol> <p>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.</p>

E code	Detailed code	Occurance area	Items	Description
E602	0611	00	Title	Error in HDD
			Description	Error in storage area of universal data (temporary data) (after startup)
			Remedy	<p>When the problem is not solved by turning OFF and then ON the power, ask the followings to user.</p> <p>A. Preferring to give priority on recovery time although data is deleted</p> <p>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)</p> <p>Case A</p> <ol style="list-style-type: none"> <li>1. Enter CHK-TYPE=6, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)</li> <li>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.</li> <li>4. Replace the HDD.</li> </ol> <p>Case B</p> <ol style="list-style-type: none"> <li>1. Try to recover the corresponding file/partition. -&gt; Enter CHK-TYPE=6, execute HD-CHECK, and then turn OFF and then ON the power.</li> <li>2. Back up necessary data.</li> <li>3. Enter CHK-TYPE=6, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.</li> <li>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.</li> <li>6. Replace the HDD.</li> </ol> <p>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.</p>

E code	Detailed code	Occurance area	Items	Description
E602	0701	00	Title	Error in HDD
			Description	Error in storage area of fax (temporary data) (at startup)
			Remedy	<p>When the problem is not solved by turning OFF and then ON the power, ask the followings to user.</p> <p>A. Preferring to give priority on recovery time although data is deleted</p> <p>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)</p> <p>Case A</p> <ol style="list-style-type: none"> <li>1. Enter CHK-TYPE=7, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)</li> <li>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.</li> <li>4. Replace the HDD.</li> </ol> <p>Case B</p> <ol style="list-style-type: none"> <li>1. Try to recover the corresponding file/partition. -&gt; Enter CHK-TYPE=7, execute HD-CHECK, and then turn OFF and then ON the power.</li> <li>2. Back up necessary data.</li> <li>3. Enter CHK-TYPE=7, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.</li> <li>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.</li> <li>6. Replace the HDD.</li> </ol> <p>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.</p>

E code	Detailed code	Occurance area	Items	Description
E602	0711	00	Title	Error in HDD
			Description	Error in storage area of fax (temporary data) (after startup)
			Remedy	<p>When the problem is not solved by turning OFF and then ON the power, ask the followings to user.</p> <p>A. Preferring to give priority on recovery time although data is deleted</p> <p>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)</p> <p>Case A</p> <ol style="list-style-type: none"> <li>1. Enter CHK-TYPE=7, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)</li> <li>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.</li> <li>4. Replace the HDD.</li> </ol> <p>Case B</p> <ol style="list-style-type: none"> <li>1. Try to recover the corresponding file/partition. -&gt; Enter CHK-TYPE=7, execute HD-CHECK, and then turn OFF and then ON the power.</li> <li>2. Back up necessary data.</li> <li>3. Enter CHK-TYPE=7, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.</li> <li>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.</li> <li>6. Replace the HDD.</li> </ol> <p>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.</p>

E code	Detailed code	Occurance area	Items	Description
E602	0801	00	Title	Error in HDD
			Description	Error in storage area of PSS (temporary data) (at startup)
			Remedy	<p>When the problem is not solved by turning OFF and then ON the power, ask the followings to user.</p> <p>A. Preferring to give priority on recovery time although data is deleted</p> <p>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)</p> <p>Case A</p> <ol style="list-style-type: none"> <li>1. Enter CHK-TYPE=8, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)</li> <li>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.</li> <li>4. Replace the HDD.</li> </ol> <p>Case B</p> <ol style="list-style-type: none"> <li>1. Try to recover the corresponding file/partition. -&gt; Enter CHK-TYPE=8, execute HD-CHECK, and then turn OFF and then ON the power.</li> <li>2. Back up necessary data.</li> <li>3. Enter CHK-TYPE=8, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.</li> <li>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.</li> <li>6. Replace the HDD.</li> </ol> <p>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.</p>

E code	Detailed code	Occurance area	Items	Description
E602	0811	00	Title	Error in HDD
			Description	Error in storage area of PSS (temporary data) (after startup)
			Remedy	<p>When the problem is not solved by turning OFF and then ON the power, ask the followings to user.</p> <p>A. Preferring to give priority on recovery time although data is deleted</p> <p>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)</p> <p>Case A</p> <ol style="list-style-type: none"> <li>1. Enter CHK-TYPE=8, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)</li> <li>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.</li> <li>4. Replace the HDD.</li> </ol> <p>Case B</p> <ol style="list-style-type: none"> <li>1. Try to recover the corresponding file/partition. -&gt; Enter CHK-TYPE=8, execute HD-CHECK, and then turn OFF and then ON the power.</li> <li>2. Back up necessary data.</li> <li>3. Enter CHK-TYPE=8, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.</li> <li>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.</li> <li>6. Replace the HDD.</li> </ol> <p>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.</p>



E code	Detailed code	Occurance area	Items	Description
E602	0901	00	Title	Error in HDD
			Description	Error in storage area of PDL-related file (at startup)
			Remedy	<p>When the problem is not solved by turning OFF and then ON the power, ask the followings to user.</p> <p>A. Preferring to give priority on recovery time although data is deleted</p> <p>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)</p> <p>Case A</p> <ol style="list-style-type: none"> <li>1. Enter CHK-TYPE=9, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)</li> <li>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.</li> <li>4. Replace the HDD.</li> </ol> <p>Case B</p> <ol style="list-style-type: none"> <li>1. Try to recover the corresponding file/partition. -&gt; Enter CHK-TYPE=9, execute HD-CHECK, and then turn OFF and then ON the power.</li> <li>2. Back up necessary data.</li> <li>3. Enter CHK-TYPE=9, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.</li> <li>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.</li> <li>6. Replace the HDD.</li> </ol> <p>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.</p>

E code	Detailed code	Occurance area	Items	Description
E602	0911	00	Title	Error in HDD
			Description	Error in storage area of PDL-related file (after startup)
			Remedy	<p>When the problem is not solved by turning OFF and then ON the power, ask the followings to user.</p> <p>A. Preferring to give priority on recovery time although data is deleted</p> <p>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)</p> <p>Case A</p> <ol style="list-style-type: none"> <li>1. Enter CHK-TYPE=9, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)</li> <li>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.</li> <li>4. Replace the HDD.</li> </ol> <p>Case B</p> <ol style="list-style-type: none"> <li>1. Try to recover the corresponding file/partition. -&gt; Enter CHK-TYPE=9, execute HD-CHECK, and then turn OFF and then ON the power.</li> <li>2. Back up necessary data.</li> <li>3. Enter CHK-TYPE=9, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.</li> <li>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.</li> <li>6. Replace the HDD.</li> </ol> <p>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.</p>
E602	1001	00	Title	Error in HDD
			Description	Error in storage area of firmware (BOOTDEV) (at startup)
			Remedy	<p>If the problem is not solved by turning OFF and then ON the power,</p> <ol style="list-style-type: none"> <li>1. Format the BOOTDEV using SST or USB, and download the firmware.</li> <li>2. Replace the HDD.</li> </ol>

E code	Detailed code	Occurance area	Items	Description
E602	1011	00	Title	Error in HDD
			Description	Error in storage area of firmware (BOOTDEV) (after startup)
			Remedy	If the problem is not solved by turning OFF and then ON the power, 1. Format the BOOTDEV using SST or USB, and download the firmware. 2. Replace the HDD.
E602	1101	00	Title	Error in HDD
			Description	Error in MEAP area (at startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)  Case A 1. Enter CHK-TYPE=11, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD.  Case B 1. Try to recover the corresponding file/partition. -> Enter CHK-TYPE=11, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=11, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	1111	00	Title	Error in HDD
			Description	Error in MEAP area (after startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)  Case A 1. Enter CHK-TYPE=11, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD.  Case B 1. Try to recover the corresponding file/partition. -> Enter CHK-TYPE=11, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=11, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	1201	00	Title	Error in HDD
			Description	Error in Send area (at startup)
			Remedy	If the problem is not solved by turning OFF and then ON the power, 1. Try to recover the corresponding file/partition. -> Enter CHK-TYPE=12, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Format the all using SST or USB, and download the firmware. 4. Replace the HDD.
E602	1211	00	Title	Error in HDD
			Description	Error in Send area (after startup)
			Remedy	If the problem is not solved by turning OFF and then ON the power, 1. Try to recover the corresponding file/partition. -> Enter CHK-TYPE=12, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Format the all using SST or USB, and download the firmware. 4. Replace the HDD.
E602	1301	00	Title	Error in HDD
			Description	Error in MEAP area (at startup)
			Remedy	If the problem is not solved by turning OFF and then ON the power, 1. Try to recover the corresponding file/partition. -> Enter CHK-TYPE=13, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Format the all using SST or USB, and download the firmware. 4. Replace the HDD.
E602	1311	00	Title	Error in HDD
			Description	Error in MEAP area (after startup)
			Remedy	If the problem is not solved by turning OFF and then ON the power, 1. Try to recover the corresponding file/partition. -> Enter CHK-TYPE=13, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Format the all using SST or USB, and download the firmware. 4. Replace the HDD.

E code	Detailed code	Occurance area	Items	Description
E602	1401	00	Title	Error in HDD
			Description	Error in storage area of system log (at startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)  Case A 1. Enter CHK-TYPE=14, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD.  Case B 1. Try to recover the corresponding file/partition. -> Enter CHK-TYPE=14, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=14, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	1411	00	Title	Error in HDD
			Description	Error in storage area of system log (after startup)
			Remedy	<p>When the problem is not solved by turning OFF and then ON the power, ask the followings to user.</p> <p>A. Preferring to give priority on recovery time although data is deleted</p> <p>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)</p> <p>Case A</p> <ol style="list-style-type: none"> <li>1. Enter CHK-TYPE=14, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)</li> <li>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.</li> <li>4. Replace the HDD.</li> </ol> <p>Case B</p> <ol style="list-style-type: none"> <li>1. Try to recover the corresponding file/partition. -&gt; Enter CHK-TYPE=14, execute HD-CHECK, and then turn OFF and then ON the power.</li> <li>2. Back up necessary data.</li> <li>3. Enter CHK-TYPE=14, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.</li> <li>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.</li> <li>6. Replace the HDD.</li> </ol> <p>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.</p>

E code	Detailed code	Occurance area	Items	Description
E602	1501	00	Title	Error in HDD
			Description	Error in Advanced Box area (at startup)
			Remedy	<p>When the problem is not solved by turning OFF and then ON the power, ask the followings to user.</p> <p>A. Preferring to give priority on recovery time although data is deleted</p> <p>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)</p> <p>Case A</p> <ol style="list-style-type: none"> <li>1. Enter CHK-TYPE=15, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)</li> <li>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.</li> <li>4. Replace the HDD.</li> </ol> <p>Case B</p> <ol style="list-style-type: none"> <li>1. Try to recover the corresponding file/partition. -&gt; Enter CHK-TYPE=15, execute HD-CHECK, and then turn OFF and then ON the power.</li> <li>2. Back up necessary data.</li> <li>3. Enter CHK-TYPE=15, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.</li> <li>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.</li> <li>6. Replace the HDD.</li> </ol> <p>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.</p>

E code	Detailed code	Occurance area	Items	Description
E602	1511	00	Title	Error in HDD
			Description	Error in Advanced Box area (after startup)
			Remedy	<p>When the problem is not solved by turning OFF and then ON the power, ask the followings to user.</p> <p>A. Preferring to give priority on recovery time although data is deleted</p> <p>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)</p> <p>Case A</p> <ol style="list-style-type: none"> <li>1. Enter CHK-TYPE=15, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)</li> <li>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.</li> <li>4. Replace the HDD.</li> </ol> <p>Case B</p> <ol style="list-style-type: none"> <li>1. Try to recover the corresponding file/partition. -&gt; Enter CHK-TYPE=15, execute HD-CHECK, and then turn OFF and then ON the power.</li> <li>2. Back up necessary data.</li> <li>3. Enter CHK-TYPE=15, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.</li> <li>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.</li> <li>6. Replace the HDD.</li> </ol> <p>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.</p>

E code	Detailed code	Occurance area	Items	Description
E602	1601	00	Title	Error in HDD
			Description	Error in CDS area (at startup)
			Remedy	<p>When the problem is not solved by turning OFF and then ON the power, ask the followings to user.</p> <p>A. Preferring to give priority on recovery time although data is deleted</p> <p>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)</p> <p>Case A</p> <ol style="list-style-type: none"> <li>1. Enter CHK-TYPE=16, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)</li> <li>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.</li> <li>4. Replace the HDD.</li> </ol> <p>Case B</p> <ol style="list-style-type: none"> <li>1. Try to recover the corresponding file/partition. -&gt; Enter CHK-TYPE=16, execute HD-CHECK, and then turn OFF and then ON the power.</li> <li>2. Back up necessary data.</li> <li>3. Enter CHK-TYPE=16, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.</li> <li>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.</li> <li>6. Replace the HDD.</li> </ol> <p>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.</p>

E code	Detailed code	Occurance area	Items	Description
E602	1611	00	Title	Error in HDD
			Description	Error in CDS area (after startup)
			Remedy	<p>When the problem is not solved by turning OFF and then ON the power, ask the followings to user.</p> <p>A. Preferring to give priority on recovery time although data is deleted</p> <p>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)</p> <p>Case A</p> <ol style="list-style-type: none"> <li>1. Enter CHK-TYPE=16, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)</li> <li>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.</li> <li>4. Replace the HDD.</li> </ol> <p>Case B</p> <ol style="list-style-type: none"> <li>1. Try to recover the corresponding file/partition. -&gt; Enter CHK-TYPE=16, execute HD-CHECK, and then turn OFF and then ON the power.</li> <li>2. Back up necessary data.</li> <li>3. Enter CHK-TYPE=16, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.</li> <li>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)</li> <li>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.</li> <li>6. Replace the HDD.</li> </ol> <p>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.</p>

E code	Detailed code	Occurance area	Items	Description
E602	2000	00	Title	Authentication error between the host machine and the Encryption Board
			Description	Error in combination of the controller, Encryption Board, and HDD
			Remedy	<ol style="list-style-type: none"> <li>1. After checking the connection of the Encryption Board/ removing and then installing the board, turn OFF and then ON the main power.</li> <li>2. Perform key clear and system recovery procedure. <ol style="list-style-type: none"> <li>2-1. Perform key clear using SST. HDD becomes unformatted; thus, perform 2-2. If activating the machine with unformatted disk, E602-0001 will occur.</li> <li>2-2. Format the HDD and reinstall the system using SST.</li> </ol> </li> <li>3. After replacing the Encryption Board, format the HDD and reinstall the system using SST.</li> <li>4. Replace the HDD.</li> </ol>
E602	2001	00	Title	HDD Encryption Board error
			Description	Inconsistency in the Encryption Board operation
			Remedy	<ol style="list-style-type: none"> <li>1. After checking the connection of the Encryption Board/ removing and then installing the board, turn OFF and then ON the main power.</li> <li>2. Perform key clear and system recovery procedure. <ol style="list-style-type: none"> <li>2-1. Perform key clear using SST. HDD becomes unformatted; thus, perform 2-2. If activating the machine with unformatted disk, E602-0001 will occur.</li> <li>2-2. Format the HDD and reinstall the system using SST.</li> </ol> </li> <li>3. After replacing the Encryption Board, format the HDD and reinstall the system using SST.</li> <li>4. Replace the HDD.</li> </ol>
E602	2002	00	Title	HDD Encryption Board error
			Description	Failure of the Encryption Board, others
			Remedy	<ol style="list-style-type: none"> <li>1. After checking the connection of the Encryption Board/ removing and then installing the board, turn OFF and then ON the main power.</li> <li>2. Perform key clear and system recovery procedure. <ol style="list-style-type: none"> <li>2-1. Perform key clear using SST. HDD becomes unformatted; thus, perform 2-2. If activating the machine with unformatted disk, E602-0001 will occur.</li> <li>2-2. Format the HDD and reinstall the system using SST.</li> </ol> </li> <li>3. After replacing the Encryption Board, format the HDD and reinstall the system using SST.</li> <li>4. Replace the HDD.</li> </ol>

E code	Detailed code	Occurance area	Items	Description
E602	4000	00	Title	Error in HDD
			Description	OS was not found.
			Remedy	1. Check the cable and the power connector. 2. If the above measures do not solve the problem, start in Safe Mode to perform overall format using SST or USB memory and reinstall the system, and then turn OFF and then ON the Main Power Switch. 3. If there still remains the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	4001	00	Title	Error in HDD
			Description	OS could not be started.
			Remedy	1. Check the cable and the power connector. 2. If the above measures do not solve the problem, start in Safe Mode to perform overall format using SST or USB memory and reinstall the system, and then turn OFF and then ON the Main Power Switch. 3. If there still remains the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	5001	00	Title	Authentication error between the host machine and the Encryption Board
			Description	Mistake in the procedure for installing the HDD Encryption Board
			Remedy	1. Remove the HDD Encryption Board, and start the machine with only the HDD connected. 2. Execute service mode > COPIER > FUNCTION > INSTALL > HD-CRYP. 3. Install the HDD Encryption Board again.
E602	5002	00	Title	HDD error
			Description	A non-genuine HDD has been detected.
			Remedy	Install a genuine HDD.
E602	FF01	00	Title	Error in HDD
			Description	HDD error (unidentified) (at startup)
			Remedy	1. Turn OFF and then ON the power. 2. Disconnect and then connect the HDD connector. 3. Format the HDD using SST or USB, and download the firmware. 4. Replace the HDD.
E602	FF11	00	Title	Error in HDD
			Description	HDD error (unidentified) (after startup)
			Remedy	1. Turn OFF and then ON the power. 2. Disconnect and then connect the HDD connector. 3. Format the HDD using SST or USB, and download the firmware. 4. Replace the HDD.

E code	Detailed code	Occurance area	Items	Description
E604	0512	00	Title	Faulty/insufficient image memory (Main Controller PCB1)
			Description	No necessary memory at Main Controller PCB 1
			Remedy	Make the Memory capacity at Main Controller PCB 1 as indicated by 0512.
E604	1024	00	Title	Faulty/insufficient image memory (Main Controller PCB1)
			Description	No necessary memory at Main Controller PCB 1
			Remedy	Make the Memory capacity at Main Controller PCB 1 as indicated by 1024.
E604	1536	00	Title	Faulty/insufficient image memory (Main Controller PCB1)
			Description	No necessary memory at Main Controller PCB 1
			Remedy	Make the Memory capacity at Main Controller PCB 1 as indicated by 1536.
E610	0001	00	Title	The Encryption Board does not exist.
			Description	No Encryption Board was detected.
			Remedy	1. Check that the Encryption Board is installed properly. (Perform the installation procedure) 2. Replace the Encryption Board.
E610	0002	00	Title	Error in hardware configuration for encryption operation
			Description	Memory configuration does not meet the requirements for encryption operation.
			Remedy	1. Turn OFF and then ON the main power. 2. Check the cable connection and check that there is no open circuit. 3. Replace the Main Controller PCB 2.
E610	0101	00	Title	Failure of the HDD encryption key (initialization error)
			Description	Initialization of the encryption key storage area ended in failure.
			Remedy	1. Turn OFF and then ON the main power. 2. Check the cable connection and check that there is no open circuit. 3. Replace the Encryption Board.
E610	0102	00	Title	Failure of the HDD encryption key (initialization error)
			Description	Initialization of the encryption processing part ended in failure.
			Remedy	1. Turn OFF and then ON the main power. 2. Check the cable connection and check that there is no open circuit. 3. Replace the Encryption Board.
E610	0201	00	Title	There was no Encryption Board.
			Description	Error in the encryption processing part
			Remedy	1. Turn OFF and then ON the main power. 2. Check the cable connection and check that there is no open circuit. 3. Replace the Encryption Board.



E code	Detailed code	Occurance area	Items	Description
E610	0202	00	Title	There was no Encryption Board.
			Description	Error in the encryption processing part
			Remedy	1. Turn OFF and then ON the main power. 2. Check the cable connection and check that there is no open circuit. 3. Replace the Encryption Board.
E610	0301	00	Title	Encryption key error
			Description	Creation of an encryption key ended in failure.
			Remedy	1. Turn OFF and then ON the main power. 2. Check the cable connection and check that there is no open circuit. 3. Replace the Encryption Board.
E610	0302	00	Title	Encryption key error
			Description	Failure of the encryption key was detected.
			Remedy	CAUTION: Due to this error, contents in HDD are initialized. 1. Turn OFF and then ON the main power. 2. Check the cable connection and check that there is no open circuit. 3. Replace the Main Controller PCB 2.
E610	0401	00	Title	Failure of the HDD encryption key (encryption processing error)
			Description	An error was detected during encryption.
			Remedy	CAUTION: Due to this error, contents in HDD are initialized. 1. Turn OFF and then ON the main power. 2. Check the cable connection and check that there is no open circuit. 3. Replace the Main Controller PCB 2.
E610	0402	00	Title	Failure of the HDD encryption key (encryption processing error)
			Description	An error was detected during encryption.
			Remedy	CAUTION: Due to this error, contents in HDD are initialized. 1. Turn OFF and then ON the main power. 2. Check the cable connection and check that there is no open circuit. 3. Replace the Main Controller PCB 2.

E code	Detailed code	Occurance area	Items	Description
E611	0000	07	Title	Error code to prevent repeated retransmission at power down during fax transmission
			Description	When the power is down during fax transmission, this machine resends the fax at the next power-on. However, the operation (retransmission => rebooting => retransmission) might be repeated due to the damage on SRAM at the power down. To prevent this symptom, this error code is displayed when this operation is repeated in a short term.
			Remedy	1. Execute the following service mode: COPIER> FUNCTION> CLEAR> FCTX-CLR. 2. Turn OFF and then ON the main power.
E613	0512	00	Title	Faulty/insufficient image memory (Main Controller PCB2)
			Description	No necessary memory at Main Controller PCB 2
			Remedy	Make the Memory capacity at Main Controller PCB 2 as indicated by 0512.
E613	1024	00	Title	Faulty/insufficient image memory (Main Controller PCB2)
			Description	No necessary memory at Main Controller PCB 2
			Remedy	Make the Memory capacity at Main Controller PCB 2 as indicated by 1024.
E613	1536	00	Title	Faulty/insufficient image memory (Main Controller PCB2)
			Description	No necessary memory at Main Controller PCB 2
			Remedy	Make the Memory capacity at Main Controller PCB 2 as indicated by 1536.
E615	0001	00	Title	Self test error of encryption module
			Description	A self test of the Ipsec Board was conducted, and an error was detected. The encryption module is broken.
			Remedy	Upgrade the system after HDD format. When this error occurs, normal network communication cannot be guaranteed.
E674	0001	07	Title	Failure in communication of FAX board
			Description	Error is detected for specified number of times in communication with FAX board.
			Remedy	1. Check the connection between FAX Board and Main controller PCB. 2. Replace the FAX Board. 3. Replace the Main Controller PCB. (Main Controller PCB 2 for 1-line Fax Board, and Main Controller PCB 1 for 2-/3-/4-line Fax Board)

E code	Detailed code	Occurance area	Items	Description
E674	0004	07	Title	Failure in communication of FAX board
			Description	Failure in access of the modem IC which is used with OnBoardFax
			Remedy	1. Check the connection between FAX Board and Main controller PCB. 2. Replace the FAX Board. 3. Replace the Main Controller PCB. (Main Controller PCB 2 for 1-line Fax Board, and Main Controller PCB 1 for 2-/3-/4-line Fax Board)
E674	0008	07	Title	Failure in communication of FAX board
			Description	Failure in access of the port IC that is be used with OnBoardFax
			Remedy	1. Check the connection between FAX Board and Main controller PCB. 2. Replace the FAX Board. 3. Replace the Main Controller PCB. (Main Controller PCB 2 for 1-line Fax Board, and Main Controller PCB 1 for 2-/3-/4-line Fax Board)
E674	000C	07	Title	Failure in communication of FAX board
			Description	Failure is detected in access of the modem IC and port IC that are used with OnBoardFax
			Remedy	1. Check the connection between FAX Board and Main controller PCB. 2. Replace the FAX Board. 3. Replace the Main Controller PCB. (Main Controller PCB 2 for 1-line Fax Board, and Main Controller PCB 1 for 2-/3-/4-line Fax Board)
E674	0010	07	Title	Failure in communication of FAX board
			Description	Failure in opening of the timer device to be used with OnBoard Fax
			Remedy	Replace the Main Controller PCB. (Main Controller PCB 2 for 1-line Fax Board, and Main Controller PCB 1 for 2-/3-/4-line Fax Board)
E674	0011	07	Title	Failure in communication of FAX board
			Description	Failure in starting of the timer device which is used with OnBoardFax
			Remedy	Replace the Main Controller PCB. (Main Controller PCB 2 for 1-line Fax Board, and Main Controller PCB 1 for 2-/3-/4-line Fax Board)
E674	0030	07	Title	Failure in communication of FAX board
			Description	Error in checksum of USB-FAX MAINROM
			Remedy	Get in the download mode from the Service Mode when the power is turned ON and execute downloading of USBFAX MAINROM.

E code	Detailed code	Occurance area	Items	Description
E674	0100	07	Title	Failure in communication of FAX board
			Description	Logging was failed after completion of fax communication.
			Remedy	Turn OFF and then ON the power. The logs collected so far are deleted.
E674	0200	07	Title	Failure in communication of FAX board
			Description	An error occurred when accessing the HDD.
			Remedy	1. Turn OFF and then ON the power. 2. Format and upgrade the entire HDD. 3. Replace the HDD. 4. Replace the Main Controller PCB. (Main Controller PCB 2 for 1-line Fax Board, and Main Controller PCB 1 for 2-/3-/4-line Fax Board)
E677	0003	00	Title	Failure in Print Server
			Description	Error is detected at the Mother Board check when print server is started.
			Remedy	1. Check connection of the cable and turn OFF and then ON the power. 2. Reinstall the Print Server (For details, refer to "Service Manual image PASS B2.")
E677	0010	00	Title	Failure in Print Server
			Description	Failure was detected in operation of the CPU fan on the print server.
			Remedy	1. Replace the board of the print server. 2. Reinstall the Print Server (For details, refer to "Service Manual image PASS B2.")
E677	0080	00	Title	Failure in Print Server
			Description	Error is detected at the Mother Board check when print server is started.
			Remedy	1. Check the cable connection and turn OFF and then ON the power. 2. Reenter the job. 3. Reinstall the Print Server (For details, refer to "Service Manual image PASS B2.")

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E code	Detailed code	Occurance area	Items	Description
E710	0001	05	Title	Error in initialization of IPC (Ctrl)
			Description	Failed to be at ready status within 3 sec after IPC chip has been started.
			Remedy	Check the connection between DC Controller PCB and Finisher, and check that the Cable is not open-circuit.
E711	0001	05	Title	Error in IPC communication
			Description	Initial communication error with the Finisher
			Remedy	Check the connector connected to the Finisher.
E713	0001	05	Title	Error in IPC communication
			Description	When receiving retransmission request for 3 times in a row.
			Remedy	Check the connector connected to the Finisher.
E713	0002	05	Title	Error in IPC communication
			Description	When detecting CRC error at transmission.
E713	0004	05	Title	Error in IPC communication
			Description	When not receiving data for more than specified time
E713	0008	05	Title	Error in IPC communication
			Description	When checksum of the received data is not correct.
			Remedy	Check the connector connected to the Finisher.
E713	0010	05	Title	Error in UFDI communication
			Description	Neither ACK nor NAK is returned for specified times in a row.
			Remedy	Check the connector connected to the Finisher.
E713	0011	05	Title	Error in UFDI communication
			Description	NAK is returned for specified times in a row.
			Remedy	Check the connector connected to the Finisher.
E713	0020	05	Title	UFDI communication error
			Description	BCC of the reception data is invalid for specified number of times in a row.
			Remedy	Check the connection of the Connector with Finisher.
E713	0021	05	Title	Error in UFDI communication
			Description	Timeout before the completion of reception for specified times in a row.
			Remedy	Check the connector connected to the Finisher.
E713	0022	05	Title	Error in UFDI communication
			Description	Undefined error for specified times in a row at reception.
			Remedy	Check the connector connected to the Finisher.

E code	Detailed code	Occurance area	Items	Description
E719	0001	00	Title	Error in Coin Vendor.
			Description	Error in starting of the CoinVendor - The Coin Vendor, which should have been connected before the power was turned OFF, is not connected when the power is turned ON.
			Remedy	Check the connection between charging management equipment and machine, and check that the Cable is not open-circuit.  Clear the error while the charging management equipment is connected to operate and when switching to the operation without charging management equipment. (To prevent the misuse by removing the charging management equipment, this error code is displayed.)
E719	0002	00	Title	Error in Coin Vendor.
			Description	Error in IPC when CoinVendor is running. - In the case of disconnection of IPC or an error in which IPC communication failed to be recovered. - When disconnection of the pickup delivery signal is detected. - When illegal connection is detected (short-circuit with Tx and Rx of IPC)
			Remedy	Check the connection between charging management equipment and machine, and check that the Cable is not open-circuit.  Clear the error while the charging management equipment is connected to operate and when switching to the operation without charging management equipment. (To prevent the misuse by removing the charging management equipment, this error code is displayed.)
E719	0003	00	Title	Error in Coin Vendor.
			Description	- In the case of communication error with the coin vendor while obtaining the unit price at start-up.
			Remedy	Check the connection between charging management equipment and machine, and check that the Cable is not open-circuit.  Clear the error while the charging management equipment is connected to operate and when switching to the operation without charging management equipment. (To prevent the misuse by removing the charging management equipment, this error code is displayed.)

E code	Detailed code	Occurance area	Items	Description
E719	0011	00	Title	Error in Coin Vendor.
			Description	Error in starting of NewCardReader - NewCardReader, which should have been connected before the power was turned OFF, is not connected when the power is turned ON.
			Remedy	Check the connection between charging management equipment and machine, and check that the Cable is not open-circuit.  Clear the error while the charging management equipment is connected to operate and when switching to the operation without charging management equipment. (To prevent the misuse by removing the charging management equipment, this error code is displayed.)
E719	0012	00	Title	Error in Coin Vendor.
			Description	Error in IPC when NewCardReader is running. - In the case of disconnection of IPC or an error in which IPC communication failed to be recovered.
			Remedy	Check the connection between charging management equipment and machine, and check that the Cable is not open-circuit.  Clear the error while the charging management equipment is connected to operate and when switching to the operation without charging management equipment. (To prevent the misuse by removing the charging management equipment, this error code is displayed.)
E719	0031	00	Title	Error in serial communication at the start of the New Card Reader
			Description	Failure in communication with the serial New Card Reader at start-up.
			Remedy	- Check if the cable of the serial New Card Reader is disconnected. - Take out the serial New Card Reader. - COPIER > Function > CLEAR > CARD - COPIER > Function > CLEAR > ERR
E719	0032	00	Title	Error in serial communication at the start of the New Card Reader
			Description	Communication failed in the middle of the operation although communication with the serial New Card Reader was successful at start-up.
			Remedy	- Check if the cable of the serial New Card Reader is disconnected.

E code	Detailed code	Occurance area	Items	Description
E720	0001	00	Title	Error due to non-compatible Finisher
			Description	Non-compatible Finisher was connected.
			Remedy	Connect either the Staple Finisher-J1 or Saddle Stitch Finisher-J1.
E730	1001	00	Title	Error in PDL software
			Description	Initialization error.
			Remedy	1. Execute the PDL reset process. 2. Turn OFF and then ON the power.
E730	100A	00	Title	Error in PDL software
			Description	Fatal system error occurs.
			Remedy	1. Execute the PDL reset process. 2. Turn OFF and then ON the power.
E730	A006	00	Title	Error in PDL communication
			Description	PDL fails to respond. No response from PDL due to Controller firmware, not installed, etc.
			Remedy	1. Execute the PDL reset process. 2. Turn OFF and then ON the power. 3. Check the connection of Main Controller PCB 2. 4. Reinstall the controller firmware. 5. Replace the Main Controller PCB 1.
E730	A007	00	Title	Mismatch in PDL version
			Description	Mismatch of version between the control software of the host machine and PDL control software.
			Remedy	Execute overall system format and installation.
E730	B013	00	Title	Error in PDL embedded font
			Description	Font data is corrupted.
			Remedy	1. Turn OFF and then ON the power. 2. Reinstall the system. 3. Execute overall system format and installation.
E730	C000	00	Title	Error in initialization
			Description	An error, such as memory acquisition failure, occurs at initialization.
			Remedy	Execute overall system format and installation. Replace the Main Controller PCB1.
E730	C001	00	Title	Error in HDD access
			Description	An error occurs at HDD access.
			Remedy	Execute overall system format and installation. Replace the HDD. Replace the Main Controller PCB 2. Replace the Main Controller PCB 1.
E731	3000	00	Title	Error in Main Controller PCB 2
			Description	Unable to recognize the SURF Board.
			Remedy	1. Check the connection of the Main Controller PCB 2. 2. Replace the Main Controller PCB 2. 3. Replace the Main Controller PCB 1.

E code	Detailed code	Occurance area	Items	Description
E731	3001	00	Title	Error in Main Controller PCB 2
			Description	Failure of SURF initialization.
			Remedy	1. Check the connection of the Main Controller PCB 2. 2. Replace the Main Controller PCB 2. 3. Replace the Main Controller PCB 1.
E731	3002	00	Title	Error in Main Controller PCB 2
			Description	Failure of SURF initialization.
			Remedy	1. Check the connection of the Main Controller PCB 2. 2. Replace the Main Controller PCB 2. 3. Replace the Main Controller PCB 1.
E731	3015	00	Title	Error in Main Controller PCB 2
			Description	Video data is not transmitted to CL1-G even though there is no problem in the software.
			Remedy	1. Turn OFF and then ON the power. 2. Replace the Main Controller PCB 2. 3. Replace the Main Controller PCB 1.

E code	Detailed code	Occurance area	Items	Description
E732	0001	00	Title	Scanner communication error
			Description	A communication error between the Reader Controller PCB and the Main Controller PCB 2 was detected at standby/scanning.
			Remedy	[Related parts] - Harness between the Main Controller PCB 2 (J3003) and the Reader Controller PCB (PCB1/J109) (Unit of replacement: CABLE, INTERFACE) - Harnesses from the Relay PCB to the Reader Controller PCB 1. Relay PCB (UN5/J426) to Relay Connector (6P) (Unit of replacement: CABLE, DC POWER SUPPLY) 2. Relay Connector (6P) to Reader Controller PCB (PCB1/J101) (Unit of replacement: CABLE, READER POWER SUPPLY) - Main Controller PCB 2 (Unit of replacement: MAIN CONTROLLER PCB ASS'Y, 2) - Reader Controller PCB (PCB1) (Unit of replacement: READER CONTROLLER PCB ASSEMBLY) - Relay PCB (UN5) (Unit of replacement: RELAY PCB ASSEMBLY) [Remedy] 1. Place an original on the Copyboard and make a copy. a. If the error is not reproduced, collect debug log (Sublog) and contact to the sales company without replacing the parts because of the possibility of sequence error. b-1. If "Scanning..." is displayed or the error is reproduced, check (connection and conduction state of)/replace the related harness/cable, connector and parts. b-2. Check that the copy image is output normally. b-3. If the error is not cleared, collect debug log (Sublog) and contact to the sales company. [Reference] - If the cause of the error cannot be identified by analyzing Sublog, it may require investigation separately. - Before replacing the Reader 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> RSRAMBUP - Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> RSRAMRES

E code	Detailed code	Occurance area	Items	Description
E732	0021	00	Title	Scanner communication error
			Description	A communication error between the Reader Controller PCB and the Main Controller PCB 2 was detected at startup/recovery from sleep.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> <li>- Harness between the Main Controller PCB 2 (J3003) and the Reader Controller PCB (PCB1/J109) (Unit of replacement: CABLE, INTERFACE)</li> <li>- Harnesses from the Relay PCB to the Reader Controller PCB</li> </ul> <ol style="list-style-type: none"> <li>1. Relay PCB (UN5/J426) to Relay Connector (6P) (Unit of replacement: CABLE, DC POWER SUPPLY)</li> <li>2. Relay Connector (6P) to Reader Controller PCB (PCB1/J101) (Unit of replacement: CABLE, READER POWER SUPPLY)</li> </ol> <ul style="list-style-type: none"> <li>- Main Controller PCB 2 (Unit of replacement: MAIN CONTROLLER PCB ASS'Y, 2)</li> <li>- Reader Controller PCB (PCB1) (Unit of replacement: READER CONTROLLER PCB ASSEMBLY)</li> <li>- Relay PCB (UN5) (Unit of replacement: RELAY PCB ASSEMBLY)</li> </ul> <p>[Remedy]</p> <ol style="list-style-type: none"> <li>1. Check (connection and conduction state of)/replace the related harness/cable, connector and parts.</li> <li>2. If the error is not cleared, collect debug log (Sublog) and contact to the sales company.</li> </ol> <p>[Reference]</p> <ul style="list-style-type: none"> <li>- If the cause of the error cannot be identified by analyzing Sublog, it may require investigation separately.</li> <li>- Before replacing the Reader 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.</li> <li>- Backup: COPIER (LEVEL2)&gt; FUNCTION&gt; SYSTEM&gt; RSRAMBUP</li> <li>- Restoration: COPIER (LEVEL2)&gt; FUNCTION&gt; SYSTEM&gt; RSRAMRES</li> </ul>

E code	Detailed code	Occurance area	Items	Description
E732	0022	00	Title	Scanner communication error
			Description	A communication error between the Reader Controller PCB and the Main Controller PCB 2 was detected at startup/recovery from sleep.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> <li>- Harness between the Main Controller PCB 2 (J3003) and the Reader Controller PCB (PCB1/J109) (Unit of replacement: CABLE, INTERFACE)</li> <li>- Harnesses from the Relay PCB to the Reader Controller PCB</li> </ul> <ol style="list-style-type: none"> <li>1. Relay PCB (UN5/J426) to Relay Connector (6P) (Unit of replacement: CABLE, DC POWER SUPPLY)</li> <li>2. Relay Connector (6P) to Reader Controller PCB (PCB1/J101) (Unit of replacement: CABLE, READER POWER SUPPLY)</li> </ol> <ul style="list-style-type: none"> <li>- Main Controller PCB 2 (Unit of replacement: MAIN CONTROLLER PCB ASS'Y, 2)</li> <li>- Reader Controller PCB (PCB1) (Unit of replacement: READER CONTROLLER PCB ASSEMBLY)</li> <li>- Relay PCB (UN5) (Unit of replacement: RELAY PCB ASSEMBLY)</li> </ul> <p>[Remedy]</p> <ol style="list-style-type: none"> <li>1. Check (connection and conduction state of)/replace the related harness/cable, connector and parts.</li> <li>2. If the error is not cleared, collect debug log (Sublog) and contact to the sales company.</li> </ol> <p>[Reference]</p> <ul style="list-style-type: none"> <li>- If the cause of the error cannot be identified by analyzing Sublog, it may require investigation separately.</li> <li>- Before replacing the Reader 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.</li> <li>- Backup: COPIER (LEVEL2)&gt; FUNCTION&gt; SYSTEM&gt; RSRAMBUP</li> <li>- Restoration: COPIER (LEVEL2)&gt; FUNCTION&gt; SYSTEM&gt; RSRAMRES</li> </ul>
E732	0023	00	Title	Scanner communication error
			Description	A communication error between the Reader Controller PCB and the Main Controller PCB 2 was detected at startup/recovery from sleep.



E code	Detailed code	Occurance area	Items	Description
E732	0023	00	Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> <li>- Harness between the Main Controller PCB 2 (J3003) and the Reader Controller PCB (PCB1/J109) (Unit of replacement: CABLE, INTERFACE)</li> <li>- Main Controller PCB 2 (Unit of replacement: MAIN CONTROLLER PCB ASS'Y, 2)</li> <li>- Reader Controller PCB (PCB1) (Unit of replacement: READER CONTROLLER PCB ASSEMBLY)</li> <li>- Harnesses from the Relay PCB to the Reader Controller PCB</li> </ul> <ol style="list-style-type: none"> <li>1. Relay PCB (UN5/J426) to Relay Connector (6P) (Unit of replacement: CABLE, DC POWER SUPPLY)</li> <li>2. Relay Connector (6P) to Reader Controller PCB (PCB1/J101) (Unit of replacement: CABLE, READER POWER SUPPLY)</li> </ol> <ul style="list-style-type: none"> <li>- Relay PCB (UN5) (Unit of replacement: RELAY PCB ASSEMBLY)</li> </ul> <p>[Remedy]</p> <ol style="list-style-type: none"> <li>1. Check if the Reader/ADF operates when turning ON the power. <ol style="list-style-type: none"> <li>a. If it operates, (there is a possibility of communication error) <ul style="list-style-type: none"> <li>Check (connection and conduction state of)/replace the harness/cable, connector and parts related to communication.</li> <li>- Harness between the Main Controller PCB 2 and the Reader Controller PCB, Main Controller PCB 2, Reader Controller PCB</li> </ul> </li> <li>b. If it does not operate, (there is a possibility that power is not supplied) <ul style="list-style-type: none"> <li>Check (connection and conduction state of)/replace the harness/cable, connector and parts related to power supply.</li> <li>- Harnesses from the Relay PCB to the Reader Controller PCB, Relay PCB, Reader Controller PCB</li> </ul> </li> </ol> </li> <li>2. If the error is not cleared, collect debug log (Sublog) and contact to the sales company.</li> </ol> <p>[Reference]</p> <ul style="list-style-type: none"> <li>- If the cause of the error cannot be identified by analyzing Sublog, it may require investigation separately.</li> <li>- Before replacing the Reader 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.</li> <li>- Backup: COPIER (LEVEL2)&gt; FUNCTION&gt; SYSTEM&gt; RSRAMBUP</li> <li>- Restoration: COPIER (LEVEL2)&gt; FUNCTION&gt; SYSTEM&gt; RSRAMRES</li> </ul>

E code	Detailed code	Occurance area	Items	Description
E732	0F01	00	Title	Scanner communication error
			Description	Communication error that can be recovered by reboot (An error not displayed on LUI but recorded in the error log) If it is detected again after reboot, E732-0001 is generated.
			Remedy	It is not necessary to perform a remedy because the machine is automatically rebooted.
E732	0F20	00	Title	Scanner communication error
			Description	Communication error that can be recovered by reboot (An error not displayed on LUI but recorded in the error log) If it is detected again after reboot, E732-0020 is generated.
			Remedy	It is not necessary to perform a remedy because the machine is automatically rebooted.
E732	0F21	00	Title	Scanner communication error
			Description	Communication error that can be recovered by reboot (An error not displayed on LUI but recorded in the error log) If it is detected again after reboot, E732-0021 is generated.
			Remedy	It is not necessary to perform a remedy because the machine is automatically rebooted.
E732	0F22	00	Title	Scanner communication error
			Description	Communication error that can be recovered by reboot (An error not displayed on LUI but recorded in the error log) If it is detected again after reboot, E732-0022 is generated.
			Remedy	It is not necessary to perform a remedy because the machine is automatically rebooted.
E732	0F23	00	Title	Scanner communication error
			Description	Communication error that can be recovered by reboot (An error not displayed on LUI but recorded in the error log) If it is detected again after reboot, E732-0023 is generated.
			Remedy	It is not necessary to perform a remedy because the machine is automatically rebooted.
E732	8888	00	Title	ADF detection error
			Description	ADF which was different from the one set in service mode was detected.
			Remedy	<ol style="list-style-type: none"> <li>1. Select COPIER&gt; OPTION&gt; CUSTOM&gt; SCANTYPE, and change the setting to the setting of ADF currently installed. Then, turn OFF and then ON the main power.</li> <li>2. If the error is not cleared, collect debug log (Sublog) and contact to the sales company.</li> </ol> <p>[Reference]</p> <p>If the cause of the error cannot be identified by analyzing Sublog, it may require investigation separately.</p>



E code	Detailed code	Occurance area	Items	Description
E733	0000	00	Title	Printer communication error
			Description	A communication error between the DC Controller PCB and the Main Controller PCB 2 was detected at startup.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> <li>- Harness between the Riser PCB (J102) and the DC Controller PCB (UN1) (Unit of replacement: Flat Cable)</li> <li>- Harness between the DC Controller PCB (UN1/J129) and the Relay PCB (UN5/J422) (Unit of replacement: DC POWER CABLE ASSEMBLY)</li> <li>- DC Controller PCB (UN1) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY)</li> <li>- Main Controller PCB 2 (Unit of replacement: MAIN CONTROLLER PCB ASS'Y, 2)</li> <li>- Relay PCB (UN5) (Unit of replacement: RELAY PCB ASSEMBLY)</li> </ul> <p>[Remedy]</p> <ol style="list-style-type: none"> <li>1. Check if the LED on the DC Controller PCB is lit/flashing when turning ON the power. <ol style="list-style-type: none"> <li>a. If the LED is lit/flashing, (it is highly possible that signal is not detected normally between the DC Controller and the Main Controller) Check (connection and conduction state of)/replace the harness/cable, connector and parts related to communication. <ul style="list-style-type: none"> <li>- Harness between the Riser PCB and the DC Controller PCB, DC Controller PCB, Main Controller PCB 2</li> </ul> </li> <li>b. If the LED is not lit/flashing, (it is highly possible that power is not supplied to the DC Controller) Check (connection and conduction state of)/replace the harness/cable, connector and parts related to power supply. <ul style="list-style-type: none"> <li>- Harness between the DC Controller PCB and the Relay PCB, DC Controller PCB, Relay PCB</li> </ul> </li> </ol> </li> <li>2. If the error is not cleared, collect debug log (Sublog) and contact to the sales company because of the possibility of sequence error.</li> </ol> <p>[Reference]</p> <ul style="list-style-type: none"> <li>- If the cause of the error cannot be identified by analyzing Sublog, it may require investigation separately.</li> <li>- 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.</li> <li>- Backup: COPIER (LEVEL2)&gt; FUNCTION&gt; SYSTEM&gt; - DSRAMBUP</li> <li>- Restoration: COPIER (LEVEL2)&gt; FUNCTION&gt; SYSTEM&gt; DSRAMRES</li> </ul>

E code	Detailed code	Occurance area	Items	Description
E733	0001	00	Title	Printer communication error
			Description	A communication error between the DC Controller PCB and the Main Controller PCB 2 was detected.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> <li>- Harness between the Riser PCB (J102) and the DC Controller PCB (UN1) (Unit of replacement: Flat Cable)</li> <li>- DC Controller PCB (UN1) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY)</li> <li>- Main Controller PCB 2 (Unit of replacement: MAIN CONTROLLER PCB ASS'Y, 2)</li> </ul> <p>[Remedy]</p> <ol style="list-style-type: none"> <li>1. Disconnect and then connect the connector of the harness.</li> <li>2. Check that the copy image is output normally.</li> <li>3. If the error is not cleared, check (connection and conduction state of)/replace the related harness/cable, connector and parts.</li> <li>4. Check that the copy image is output normally.</li> <li>5. If the error is not cleared, collect debug log (Sublog) and contact to the sales company because of the possibility of sequence error.</li> </ol> <p>[Reference]</p> <ul style="list-style-type: none"> <li>- If the cause of the error cannot be identified by analyzing Sublog, it may require investigation separately.</li> <li>- 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.</li> <li>- Backup: COPIER (LEVEL2)&gt; FUNCTION&gt; SYSTEM&gt; DSRAMBUP</li> <li>- Restoration: COPIER (LEVEL2)&gt; FUNCTION&gt; SYSTEM&gt; DSRAMRES</li> </ul>

E code	Detailed code	Occurance area	Items	Description
E733	0002	00	Title	Printer communication error
			Description	A communication error between the DC Controller PCB and the Main Controller PCB 2 was detected.
			Remedy	[Related parts] - Harness between the Riser PCB (J102) and the DC Controller PCB (UN1) (Unit of replacement: Flat Cable) - DC Controller PCB (UN1) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) - Main Controller PCB 2 (Unit of replacement: MAIN CONTROLLER PCB ASS'Y, 2) [Remedy] 1. Disconnect and then connect the connector of the harness. 2. Check that the copy image is output normally. 3. If the error is not cleared, check (connection and conduction state of)/replace the related harness/cable, connector and parts. 4. Check that the copy image is output normally. 5. If the error is not cleared, collect debug log (Sublog) and contact to the sales company because of the possibility of sequence error. [Reference] - If the cause of the error cannot be identified by analyzing Sublog, it may require investigation separately. - 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
E733	0F00	00	Title	Printer communication error
			Description	Communication error that can be recovered by reboot (An error not displayed on LUI but recorded in the error log) If it is detected again after reboot, E733-0000 is generated.
			Remedy	It is not necessary to perform a remedy because the machine is automatically rebooted.
E733	0F01	00	Title	Printer communication error
			Description	Communication error that can be recovered by reboot (An error not displayed on LUI but recorded in the error log) If it is detected again after reboot, E733-0001 is generated.
			Remedy	It is not necessary to perform a remedy because the machine is automatically rebooted.

E code	Detailed code	Occurance area	Items	Description
E733	0F02	00	Title	Printer communication error
			Description	Communication error that can be recovered by reboot (An error not displayed on LUI but recorded in the error log) If it is detected again after reboot, E733-0002 is generated.
			Remedy	It is not necessary to perform a remedy because the machine is automatically rebooted.
E740	0002	00	Title	Failure in Ethernet Board
			Description	Incorrect MAC address
			Remedy	Replace the LAN card.
E740	0003	00	Title	Failure in Ethernet Board
			Description	Incorrect MAC address
			Remedy	Replace the LAN card.
E744	0001	00	Title	Failure in language file
			Description	Mismatched version between the HDD and the Bootable
			Remedy	Reinstall the correct language file using SST or USB memory reinstall the entire software.
E744	0002	00	Title	Failure in language file
			Description	Oversized language file in HDD
			Remedy	Format the HDD and reinstall the software because there can be more than necessary language files.
E744	0003	00	Title	Failure in language file
			Description	Unable to find the language which should be switched and described in Config.txt in the HDD.
			Remedy	Reinstall the software.
E744	0004	00	Title	Failure in language file
			Description	Unable to switch to the language in the HDD.
			Remedy	Reinstall the software.
E744	2000	00	Title	Controller firmware mismatch
			Description	Invalid controller firmware was detected.
			Remedy	This error normally does not occur. This error occurs when using the HDD which was used with another model. Replace the HDD with the one which was originally installed or a new one for the model.

E code	Detailed code	Occurance area	Items	Description
E744	4000	05	Title	Model information mismatch
			Description	Mismatch of model information between the Main Controller PCB 1 and the DC Controller is detected.
			Remedy	This error occurs only when replacing the DC Controller. By returning the original PCB, this error can be recovered. (If other error code is displayed, see the corresponding error code.) If it is not recovered, replace the DC Controller to a new one.  DC Controller PCB does not have model information at the time of shipment. Model information is written when installing the PCB to the host machine. Therefore, the DC Controller PCB which was installed to imageRUNNER ADVANCE C5250 can be installed only to imageRUNNER ADVANCE C5250.
E746	0011	00	Title	Voice Board error
			Description	Because both the voice composition board and the composition recognition board are inserted.
			Remedy	Insert only 1 board of the appropriate voice board.
E746	0021	00	Title	Image Analysis Board error
			Description	Self-check NG of Image Analysis Board (PCB used for PCAM)
			Remedy	1. Replace the Image Analysis Board (PCB used for PCAM) 2. Remove the Image Analysis Board and go to the following service mode: COPIER>OPTION>LCNS-TR>ST-JBLK (Lv2). Change the value of ST-JBLK from 1 to 0, and turn OFF and then ON the main power.
E746	0022	00	Title	Image Analysis Board error
			Description	Different version of Image Analysis Board (PCB used for PCAM)
			Remedy	1. Update the firmware of the Option Board. 2. Remove the Image Analysis Board and go to the following service mode: COPIER>OPTION>LCNS-TR>ST-JBLK (Lv2). Change the value of ST-JBLK from 1 to 0, and turn OFF and then ON the main power.

E code	Detailed code	Occurance area	Items	Description
E746	0023	00	Title	Image Analysis Board error
			Description	No response from Image Analysis Board (PCB used for PCAM)
			Remedy	1. Check to see if the Option Board is properly inserted. 2. Turn OFF and then ON the power. 3. If the above measure does not solve the problem, replace the Option Board. 4. Remove the Image Analysis Board and go to the following service mode: COPIER>OPTION>LCNS-TR>ST-JBLK (Lv2). Change the value of ST-JBLK from 1 to 0, and turn OFF and then ON the main power.
E746	0024	00	Title	Image Analysis Board error
			Description	Failure in behavior of Image Analysis Board (PCB used for PCAM)
			Remedy	1. Turn OFF and then ON the power. 2. If the above measure does not solve the problem, replace the Option Board. 3. Remove the Image Analysis Board and go to the following service mode: COPIER>OPTION>LCNS-TR>ST-JBLK (Lv2). Change the value of ST-JBLK from 1 to 0, and turn OFF and then ON the main power.
E746	0031	00	Title	TPM error
			Description	Error in hardware
			Remedy	Replace the TPM chip.
E746	0032	00	Title	TPM error
			Description	Mismatched data in TPM
			Remedy	Format the system. Format the HDD using SST or USB memory, and download the system software. For details, see "Chapter 6: Upgrading". For your reference, the method using USB memory is described below. 1. Prepare the USB memory which system software was registered. 2. Execute the following service mode: COPIER>FUNCTION>SYSTEM>DOWNLOAD to enter the download mode. 3. Insert the USB memory to the equipment. 4. Execute [4]: Format HDD in the main menu. 5. After formatting is completed, the machine reboots automatically and starts with the download mode. 6. Execute [1]: Upgrade (Auto) in the main menu. 7. System software is downloaded and the machine restarts automatically.

E code	Detailed code	Occurance area	Items	Description
E746	0033	00	Title	TPM error
			Description	Error that can be recovered
			Remedy	When the TPM key was backed up, it can be restored. 1. Connect the USB memory which stores the TPM key. 2. Go to Management Settings > Data Management > TPM Settings, and then click "Restore TPM Key". 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.  When the TPM key was not backed up: Formatting the system is required.
E746	0034	00	Title	TPM auto recovery error
			Description	The error occurs when clearing HDD while TPM setting is ON.
			Remedy	It is recovered by turning OFF and then ON the power.
E746	0035	00	Title	TPM version error
			Description	TPM which cannot be used in this machine was installed.
			Remedy	Install the supported TPM.
E747	0000	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	001E	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)

E code	Detailed code	Occurance area	Items	Description
E747	0119	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	011A	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	011B	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	0219	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	021A	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)













E code	Detailed code	Occurance area	Items	Description
E747	1117	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	1200	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	1201	00	Title	PDL rendering error
			Description	Image processing IC error.
			Remedy	Turn OFF and then ON the power (Send the data to Inc. because the error code will be displayed again if printing the data with which the error was displayed.) 2. Replace the Main Controller PCB 2.
E747	1202	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	1203	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)

E code	Detailed code	Occurance area	Items	Description
E747	1204	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	1205	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	1206	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	1207	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	1208	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)



E code	Detailed code	Occurance area	Items	Description
E747	221A	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	221B	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	221C	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	221D	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	221E	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)

E code	Detailed code	Occurance area	Items	Description
E747	221F	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	3C00	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	3D00	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	3F00	00	Title	Undetected error of the Image Process Chip P
			Description	Undetected error of the Image Process Chip P
			Remedy	Replace the Main Controller PCB 2
E747	6000	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)











E code	Detailed code	Occurance area	Items	Description
E747	711F	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	721F	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	741E	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	741F	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	751B	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)

E code	Detailed code	Occurance area	Items	Description
E747	751C	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	751F	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	7C00	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	7D00	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	7F00	00	Title	Undetected error of the Image Process Chip R
			Description	Undetected error of the Image Process Chip R
			Remedy	Replace the Main Controller PCB 2



E code	Detailed code	Occurance area	Items	Description
E747	851D	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	851F	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	951A	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	951B	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	9C00	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)

E code	Detailed code	Occurance area	Items	Description
E747	9F00	00	Title	Detection shows that Sub Board O failed to be installed
			Description	Detection shows that Sub Board O failed to be installed
			Remedy	Check contact of the Sub Board O and the cable, or replace -> Replace the Main Controller PCB 2
E747	BF00	00	Title	Detection shows that Sub Board O failed to be installed
			Description	Detection shows that Sub Board O failed to be installed
			Remedy	Check contact of the Sub Board O and the cable, or replace -> Replace the Main Controller PCB 2
E747	C000	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	C519	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	C51A	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	C51B	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of Scan/I/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)

E code	Detailed code	Occurance area	Items	Description
E747	C51C	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of ScanI/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	C51D	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of ScanI/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	C51F	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of ScanI/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	C701	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of ScanI/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	C706	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of ScanI/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)

E code	Detailed code	Occurance area	Items	Description
E747	DC00	00	Title	Error in Main Controller PCB2
			Description	Error in Main Controller PCB2
			Remedy	1. Check contact of ScanI/F cable. Check contact of the Bypass PCB or Open I/F PCB. Check contact of SDRAM at Main Controller PCB2. 2. Replace the Bypass PCB or Open I/F PCB 3. Replace the SDRAM at Main Controller PCB2 4. Replace the Main Controller PCB2 5. Replace the HDD (replace the new encryption board)
E747	DF00	00	Title	Undetected error of Image Process Chip S
			Description	Undetected error of Image Process Chip S
			Remedy	Check contact of ScanI/F cable --> Replace --> Replace the Main Controller PCB 2
E747	FF00	00	Title	A wrong Sub Board was detected
			Description	A wrong Sub Board was detected
			Remedy	Check contact of ScanI/F cable --> Replace Check contact of the Sub Board O and the cable --> Replace Replace the Main Controller PCB 2
E747	FF01	00	Title	Connection failure with DDR-SDRAM (P)/inappropriate memory size
			Description	Connection failure with DDR-SDRAM (P)/inappropriate memory size
			Remedy	Replace the DDR-SDRAM (P)
E748	2010	00	Title	Error in Flash PCB
			Description	Unable to find the IPL (startup program).
			Remedy	Contact to the sales companies.
E748	2011	00	Title	Error in Flash PCB
			Description	Unable to find the kernel.
			Remedy	Contact to the sales companies.
E748	2012	00	Title	Error in Flash PCB
			Description	Unable to mount the Linux system at starting service mode, or there is no system start script.
			Remedy	Contact to the sales companies.
E748	2021	00	Title	Error in access of Main Controller PCB 2
			Description	Necessary H/W on the Main Controller PCB 2 is not found.
			Remedy	1. Clean the terminal of the Main Controller PCB 2, and disconnect and then connect it. 2. Clean the terminal of the Main Controller PCB 1, and disconnect and then connect it. 3. Replace the Main Controller PCB 2.

E code	Detailed code	Occurance area	Items	Description
E748	2022	00	Title	Error in access of Main Controller PCB 2
			Description	Necessary H/W on the Main Controller PCB 2 is not found.
			Remedy	1. Remove and then insert the Main Controller PCB 1 and the Main Controller PCB 2 . 2. Replace the Main Controller PCB 1 and the Main Controller PCB 2.
E748	2023	00	Title	Error in access of Main Controller PCB 2
			Description	Unable to initialize the memory DDR2-SDRAM on the Main Controller PCB 2.
			Remedy	1. Clean the terminal of the DDR2-SDRAM , and disconnect and then connect it. 2. Replace the DDR2-SDRAM.
E748	2024	00	Title	Error in access of Main Controller PCB 2
			Description	CPU on the Main Controller PCB 2 fails to complete the initialization.
			Remedy	1. Clean the terminal of DDR2-SDRAM, and remove and then install the DDR2-SDRAM. 2. Check power state of Main Controller PCB 2 and check around the connector. 3. Check power state of the Riser PCB and check around the connector. 4. Replace the Main Controller PCB 2. 5. Replace the Riser PCB. 6. Replace the Main Controller PCB 1.
E748	2025	00	Title	Error in access of Main Controller PCB 2
			Description	Disconnection of the Bypass PCB was detected.
			Remedy	Remove and then install the Bypass PCB.
E748	2026	00	Title	Error in access of Main Controller PCB 2
			Description	Disconnection of the Image Processing Sub PCB was detected.
			Remedy	Remove and then install the Image Processing Sub PCB.
E748	9000	00	Title	System error
			Description	System error
			Remedy	Contact to the sales companies.

E code	Detailed code	Occurance area	Items	Description
E749	0006	00	Title	Restart direction due to configuration change.
			Description	The option such as the Finisher and Paper Deck was installed or removed when all of following conditions were met and the machine configuration is changed when the main power switch is turned ON. - Settings/Registration > Preferences > Timer/Energy Settings > Quick Startup at Power-on > ON  - The Main Power Switch is turned OFF - The power plug of the machine is connected to the output. - The breaker is ON
			Remedy	It is recovered by turning OFF and then ON the main power.  CAUTION This machine provides power to some PCBs even when in the main power OFF status. The power supply is not completely OFF by just turning OFF the main power switch and therefore, the machine is unable to detect a configuration change. When disconnecting and then connecting a connector, always disconnect the power plug or turn the breaker OFF. Refer to the Service Manual > Chapter 2 > External and Controls > Quick Startup for details.
E753	0001	00	Title	Download Error
			Description	System Software Update Error Error occurs when updating system software of uninstalled options
			Remedy	1. Check the log to find where the download error has been occurred. FIN_XX Staple Finisher-XX/Booklet Finisher-XX IFN_XX Inner Finisher-XX G3CCB Super G3 FAX Board G3CCM Super G3 FAX Board When any of the above system software is displayed, check if the target option has been installed. When the target option has not been installed: Turn OFF and then ON the main power supply to restore (since there is no system software to be updated.). When the target option has been installed: Check if the accessory is correctly installed and if the target system software to be downloaded is for the installed option. Then download the appropriate system software again.



E code	Detailed code	Occurance area	Items	Description
E760	0001	00	Title	Main Controller PCB 2 internal error
			Description	Main Controller PCB 2 internal error
			Remedy	1. Turn OFF and then ON the power. 2. Remove and then reinstall the Main Controller PCB 2. 3. Disconnect and then connect the connector connected to the Main Controller PCB 2. 4. Replace the Main Controller PCB 2.
E804	0000	00	Title	Error in Power Supply Fan
			Description	Lock of the Power Supply Fan was detected
			Remedy	1. Check power distribution to the Fan. 2. Replace the Fan.
E805	0000	05	Title	Error in Fixing Heat Exhaust Fan 2
			Description	1. After the power of the Host Machine has been turned ON, rotation of the Fixing Heat Exhaust Fan 2 (FM2) was detected before turning ON the fan. 2. There is no rotation signal while the Fixing Heat Exhaust Fan 2 (FM2) is rotating.
			Remedy	1. Check the Fixing Heat Exhaust Fan 2 (FM2) harness (to see if the harness is caught, disconnected or physically removed). 2. Check the fuse of the Pickup Feed Driver PCB (UN2). 3. Replace the Pickup Feed Driver PCB (UN2). 4. Replace the Fixing Heat Exhaust Fan 2 (FM2).
E805	0001	05	Title	Error in Fixing Heat Exhaust Fan 1
			Description	1. After the power of the Host Machine has been turned ON, rotation of the Fixing Heat Exhaust Fan 1 (FM1) was detected before turning ON the fan. 2. There is no rotation signal while the Fixing Heat Exhaust Fan 1 (FM1) is rotating.
			Remedy	1. Check the Fixing Heat Exhaust Fan 1 (FM1) harness (to see if the harness is caught, disconnected or physically removed). 2. Replace the Feed Driver PCB. 3. Replace the Fixing Heat Exhaust Fan 1 (FM1).
E806	0000	05	Title	Error in Delivery fan 1
			Description	1. Failure in the Connect signal when the fan was turned OFF. 2. Failure detected while the fan is rotating.
			Remedy	1. Check the fan harness (to see if the harness is caught, disconnected or physically removed). 2. Replace the Pickup Feed Driver PCB (UN2). 3. Replace the Delivery Fan (FM7).

E code	Detailed code	Occurance area	Items	Description
E806	0001	05	Title	Error in Delivery fan 2
			Description	1. After the power of the Host Machine has been turned ON, rotation of the fan was detected before turning ON the fan. 2. There is no rotation signal while the fan is rotating.
			Remedy	1. Check the fan harness (to see if the harness is caught, disconnected or physically removed). 2. Replace the Pickup Feed Driver PCB (UN2). 3. Replace the Delivery Fan 2 (FM9).
E806	0002	05	Title	Error in Secondary Transfer Exhaust Fan
			Description	1. After the power of the Host Machine has been turned ON, rotation of the fan was detected before turning ON the fan. 2. There is no rotation signal while the fan is rotating.
			Remedy	1. Check the fan harness (to see if the harness is caught, disconnected or physically removed). 2. Replace the Pickup Feed Driver PCB (UN2). 3. Replace the Secondary Transfer Exhaust Fan (FM8).
E807	0000	05	Title	Error in Process cartridge fan (rear)
			Description	1. After the power of the Host Machine has been turned ON, rotation of the fan was detected before turning ON the fan. 2. There is no rotation signal while the fan is rotating.
			Remedy	1. Check the fan harness (to see if the harness is caught, disconnected or physically removed). 2. Replace the Relay Board. 3. Replace the fan.
E807	0001	05	Title	Error in Process cartridge fan (front)
			Description	1. After the power of the Host Machine has been turned ON, rotation of the fan was detected before turning ON the fan. 2. There is no rotation signal while the fan is rotating.
			Remedy	1. Check the fan harness (to see if the harness is caught, disconnected or physically removed). 2. Replace the Cassette Feed Driver PCB (UN3). 3. Replace the fan.
E808	0000	05	Title	Error in Zero Cross
			Description	Zero Cross failed to be detected for 50ms or more while the fixing relay was ON.
			Remedy	1. Replace the AC Driver (UN6). 2. Check the cycle of the input voltage (failure in power-peripheral area of the customer. Ask the customer to perform the power supply work).

E code	Detailed code	Occurance area	Items	Description
E811	0000	05	Title	Fuse cutoff error in Process Cartridge
			Description	Fuse cannot be cut off (disconnect) although it is tried to be cut off.
			Remedy	1. Turn OFF and then ON the power. 2. Check the resistance value of the Fuse on Drum. 3. Replace the Drum.
E811	0001	05	Title	Error in 24V of the drum new/old detection.
			Description	Error in 24V of the drum new/old detection.
			Remedy	1. Check the FUSE_5 on the Pickup Feed Driver PCB (UN2). 2. Replace the Pickup Feed Driver PCB (UN2).
E840	0000	05	Title	Error in shutter for Fixing Edge Cooling Fan (if the HP failed to be detected when the error occurred).
			Description	Failed to detect that the fan shutter has moved to the specified position when moving the fan shutter from anywhere other than the HP.
			Remedy	1. Check the harness of the Shutter Motor (M27), the Shutter HP Sensor (PS31) and the Shutter Position Sensor (PS32) (to see if the harness is caught, disconnected or physically removed). 2. Replace the Pickup Feed Driver PCB (UN2). 3. Replace the Shutter Motor, the Shutter HP Sensor or the Shutter Position Sensor.
E880	0001	00	Title	Error in Controller Fan
			Description	Fan lock of the Controller CPU cooling fan was detected
			Remedy	Check if the connector is connected. If the connection was found OK, replace the Controller Fan 3 (FM13).
E880	0003	00	Title	Error in Controller Fan
			Description	Riser PCB Fan was detected to be locked.
			Remedy	Check if the connector is connected. If the connection was found OK, replace the Controller Fan 1 (FM11).
E880	0005	00	Title	Error in Controller Fan
			Description	Fan lock of the HDD Cooling Fan was detected
			Remedy	Check if the connector is connected. If the connection is OK, replace the HDD Cooling Fan (FM14).

E code	Detailed code	Occurance area	Items	Description
E881	0001	00	Title	CPU abnormal temperature rising error
			Description	It was detected that CPU was 100 deg C or more.
			Remedy	When it is detected that the temperature of the CPU is 100 deg C or more, forcible shutdown is executed. After that, the error is recorded in the error log.  If the error occurred during a service visit and then occurred again: Replace the Main Controller PCB 1.  - If the error does not occur during a service visit but is found in the log: 1. Check the space behind the host machine. If the space behind the host machine is less than 10 cm, ask the user to secure enough space. 2. Clean the inlet on the rear of the host machine. Remove dust.
E890	0000	05	Title	Environment Sensor 1 error
			Description	A communication error between the Environment Sensor 1 and DC Controller PCB was detected.
			Remedy	1. Disconnect and then connect the connector of the Environment Sensor 1 (UN22). 2. Disconnect and then connect the connector (J104) on the DC Controller PCB. 3. Replace the Environment Sensor 1 (UN22). 4. Replace the DC Controller PCB.
E890	0001	05	Title	Environment Sensor 2 error
			Description	The Environment Sensor 2 detected the value higher than the specified value.
			Remedy	1. Disconnect and then connect the connector of the Environment Sensor 2 (UN50). 2. Disconnect and then connect the connector (J104) on the DC Controller PCB. 3. Check if the cable of the Environment Sensor 2 (UN50) is open circuit. 4. Replace the Environment Sensor 2 (UN50). 5. Replace the DC Controller PCB.



E code	Detailed code	Occurance area	Items	Description
E890	0002	05	Title	Environment Sensor 2 error
			Description	The Environment Sensor 2 detected the value lower than the specified value.
			Remedy	1. Disconnect and then connect the connector of the Environment Sensor 2 (UN50). 2. Disconnect and then connect the connector (J104) on the DC Controller PCB. 3. Check if the cable of the Environment Sensor 2 (UN50) is open circuit. 4. Replace the Environment Sensor 2 (UN50). 5. Replace the DC Controller PCB.
E996	0071	04	Title	Frequent error avoidance jam (ADF)
			Description	Frequent error avoidance jam (ADF)
			Remedy	Depending on the setting of JM-ERR-R in service mode, "010071" jam is displayed as an error. Collect log and contact to the sales companies. To cancel the setting, select COPIER> OPTION> FNC-SW> JM-ERR-R, and set JM-ERR-R to 0.
E996	0CA1	05	Title	Frequent error avoidance jam (PRINTER)
			Description	Error avoidance jam (PRINTER)
			Remedy	Make "000CA1" jam to be displayed as an error by setting JM-ERR-D in service mode. Collect log and contact to the sales companies. To cancel the setting, select COPIER> OPTION> FNC-SW> JM-ERR-D, and set JM-ERR-D to 0.
E996	0CA2	05	Title	Frequent error avoidance jam (PRINTER)
			Description	Error avoidance jam (PRINTER)
			Remedy	Make "000CA2" jam to be displayed as an error by setting JM-ERR-D in service mode. Collect log and contact to the sales companies. To cancel the setting, select COPIER> OPTION> FNC-SW> JM-ERR-D, and set JM-ERR-D to 0.
E996	0CA3	05	Title	Frequent error avoidance jam (PRINTER)
			Description	Error avoidance jam (PRINTER)
			Remedy	Make "000CA3" jam to be displayed as an error by setting JM-ERR-D in service mode. Collect log and contact to the sales companies. To cancel the setting, select COPIER> OPTION> FNC-SW> JM-ERR-D, and set JM-ERR-D to 0.
E996	0CAF	05	Title	Frequent error avoidance jam (PRINTER)
			Description	Error avoidance jam (PRINTER)
			Remedy	Make "000CAF" jam to be displayed as an error by setting JM-ERR-D in service mode. Collect log and contact to the sales companies. To cancel the setting, select COPIER> OPTION> FNC-SW> JM-ERR-D, and set JM-ERR-D to 0.

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## 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"> <li>- Remaining paper at the upstream of the target sensor</li> <li>- Soiling on the target sensor</li> <li>- Displacement of the target sensor position</li> <li>- Failure of the target sensor</li> <li>- Soiling (grease)/deterioration/failure of a drive motor located upstream of the target sensor</li> <li>- Soiling (paper dust)/deterioration/failure of a drive roller located upstream of the target sensor</li> </ul>
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"> <li>- Remaining paper near the target sensor</li> <li>- Soiling on the target sensor</li> <li>- Displacement of the target sensor position</li> <li>- Failure of the target sensor</li> <li>- Soiling (grease)/deterioration/failure of a drive motor located upstream of the target sensor</li> <li>- Soiling (paper dust)/deterioration/failure of a drive roller located upstream of the target sensor</li> </ul>
Door open	A door open jam occurs when a sensor detected door open during printing operation.	<ul style="list-style-type: none"> <li>- Door open during printing</li> </ul>
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"> <li>- Opening/closing of the door</li> <li>- Turning OFF and then ON the power</li> <li>- 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)</li> </ul>
Power-on	A power-on jam occurs when a sensor detected ON state at power-on.	<ul style="list-style-type: none"> <li>- Remaining paper in the machine</li> <li>- Soiling on the target sensor</li> <li>- Failure of the target sensor</li> <li>- Foreign matter on the target sensor (paper dust, paper lint)</li> </ul>

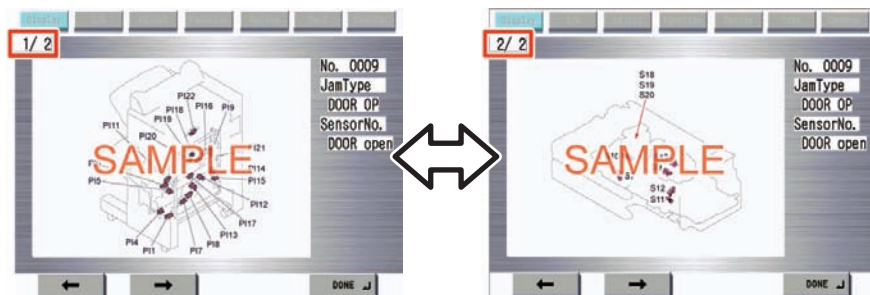
Type	Overview of detection	Check items (in arbitrary order)
Error avoidance	An error avoidance jam occurs when an error in the machine (excluding parts failure) was detected. Printing operation is suspended to avoid error occurrence by error code; therefore, parts failure is not the cause of the jam. 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"> <li>- Opening/closing of the door after jam removal</li> <li>- Turning OFF and then ON the power after jam removal</li> </ul>
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"> <li>- Difference in paper size</li> <li>- Wrong paper size setting</li> <li>- Error in the Document Size Sensor (soiling/displacement/failure of the sensor)</li> <li>- 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)</li> </ul>
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"> <li>- Difference in paper type</li> <li>- Wrong paper type setting</li> <li>- Error in the Transparency Sensor (soiling/displacement/failure of the sensor)</li> <li>- Soiling on the Reflection Plate of the Transparency Sensor</li> </ul>

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## Jam screen display specification

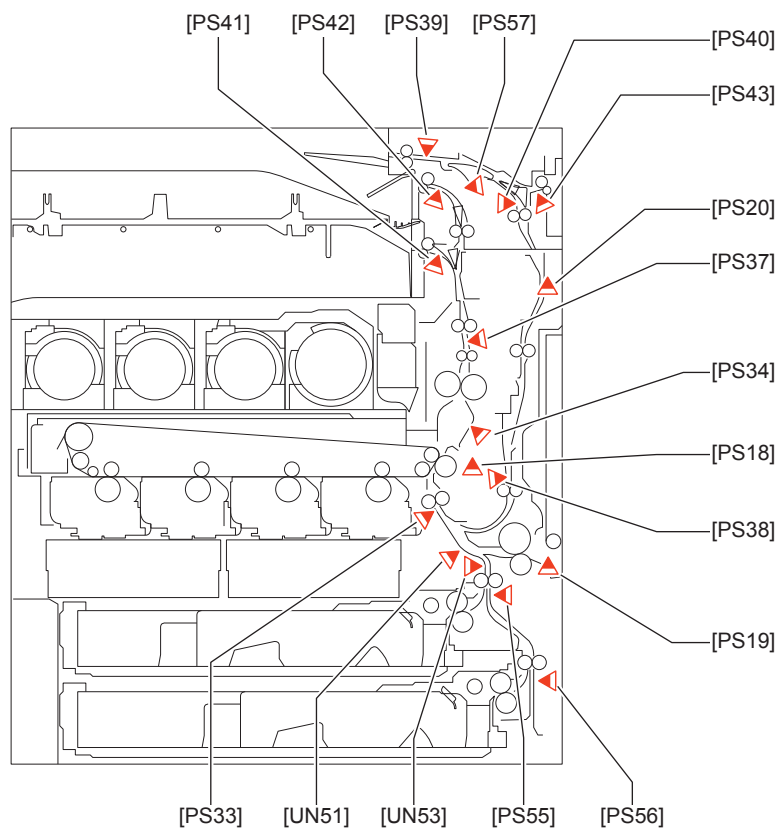
Due to one jam code being used for multiple options, the illustration for the different option may be displayed on the jam screen.

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.

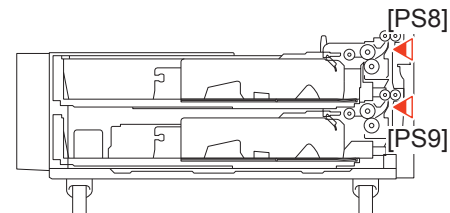


F-7-1

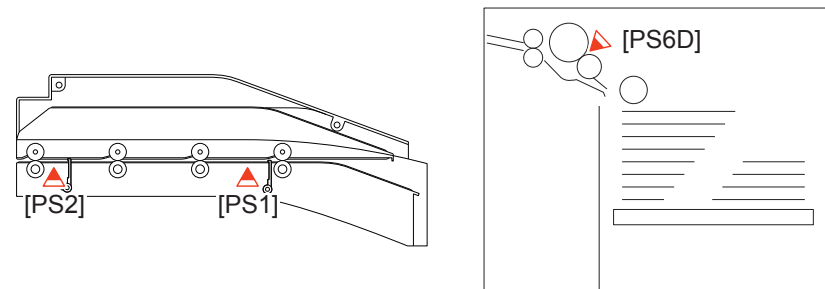
# image RUNNER ADVANCE C5255/C5250/C5240/C5235



F-7-2



F-7-3



F-7-4

## Jam Code

ACC ID	Jam Code	Type	Sensor Name	Sensor ID	I/O		
					Address	bit	Remarks
00	0B00	Door open	Front door sensor	PS18	P009	10	0: DOOR_OPEN
			Right lower door sensor	PS19	P014	11	0: DOOR_OPEN
			Right door sensor	PS20	P009	5	0: DOOR_OPEN
00	0A01	Power-on	Cassette 1 pre-registration sensor	PS55	P013	12	1:paper
00	0102	Delay	Cassette 2 pre-registration sensor	PS56	P013	8	1:paper
00	0202	Stationary	Cassette 2 pre-registration sensor	PS56	P013	8	1:paper
00	0A02	Power-on	Cassette 2 pre-registration sensor	PS56	P013	8	1:paper
00	0103	Delay	Cassette 3 pre-registration sensor	PS8	P017	12	1:paper
00	0203	Stationary	Cassette 3 pre-registration sensor	PS8	P017	12	1:paper
00	0A03	Power-on	Cassette 3 pre-registration sensor	PS8	P017	12	1:paper
00	0104	Delay	Cassette 4 pre-registration sensor	PS9	P017	8	1:paper
00	0204	Stationary	Cassette 4 pre-registration sensor	PS9	P017	8	1:paper
00	0A04	Power-on	Cassette 4 pre-registration sensor	PS9	P017	8	1:paper
00	0105	Delay	Registration sensor	PS33	P009	9	1:paper
00	0205	Stationary	Registration sensor	PS33	P009	9	1:paper
00	0A05	Power-on	Registration sensor	PS33	P009	9	1:paper
00	0106	Delay	Fixing inlet sensor	PS34	P013	3	1:paper
00	0206	Stationary	Fixing inlet sensor	PS34	P013	3	1:paper
00	0A06	Power-on	Fixing inlet sensor	PS34	P013	3	1:paper
00	0107	Delay	Inner delivery sensor	PS37	P009	4	1:paper
00	0207	Stationary	Inner delivery sensor	PS37	P009	4	1:paper
00	0A07	Power-on	Inner delivery sensor	PS37	P009	4	1:paper
00	0108	Delay	First delivery sensor	PS41	P009	12	1:paper
00	0208	Stationary	First delivery sensor	PS41	P009	12	1:paper
00	0A08	Power-on	First delivery sensor	PS41	P009	12	1:paper
00	0109	Delay	Second delivery sensor	PS42	P005	13	1:paper
00	0209	Stationary	Second delivery sensor	PS42	P005	13	1:paper
00	0A09	Power-on	Second delivery sensor	PS42	P005	13	1:paper
00	010A	Delay	Reverse sensor	PS39	P005	14	1:paper
00	020A	Stationary	Reverse sensor	PS39	P005	14	1:paper

ACC ID	Jam Code	Type	Sensor Name	Sensor ID	I/O		
					Address	bit	Remarks
00	0A0A	Power-on	Reverse sensor	PS39	P005	14	1:paper
00	010B	Delay	Third delivery sensor	PS43	P004	11	1:paper
00	020B	Stationary	Third delivery sensor	PS43	P004	11	1:paper
00	020B	Power-on	Third delivery sensor	PS43	P004	11	1:paper
00	010C	Delay	Duplex inlet sensor	PS40	P004	10	1:paper
00	020C	Stationary	Duplex inlet sensor	PS40	P004	10	1:paper
00	0A0C	Power-on	Duplex inlet sensor	PS40	P004	10	1:paper
00	010D	Delay	Duplex paper sensor	PS38	P013	6	1:paper
00	020D	Stationary	Duplex paper sensor	PS38	P013	6	1:paper
00	0A0D	Power-on	Duplex paper sensor	PS38	P013	6	1:paper
00	010F	Delay	Deck pickup sensor	PS6D	P029	3	1:paper
00	020F	Stationary	Deck pickup sensor	PS6D	P029	3	1:paper
00	0A0F	Power-on	Deck pickup sensor	PS6D	P029	3	1:paper
00	0111	Delay	Buffer path entrance sensor	PS1	P030	0	1:paper
00	0211	Stationary	Buffer path entrance sensor	PS1	P030	0	1:paper
00	0A11	Power-on	Buffer path entrance sensor	PS1	P030	0	1:paper
00	0112	Delay	Buffer pass exit sensor	PS2	P030	2	1:paper
00	0212	Stationary	Buffer pass exit sensor	PS2	P030	2	1:paper
00	0A12	Power-on	Buffer pass exit sensor	PS2	P030	2	1:paper
00	0113	Delay	Vertical path sensor	UN53	P009	8	1:paper
00	0213	Stationary	Vertical path sensor	UN53	P009	8	1:paper
00	0110	Delay	Pre-reverse sensor	PS57	P004	12	1:paper
00	0210	Stationary	Pre-reverse sensor	PS57	P004	12	1:paper
00	0A10	Power-on	Pre-reverse sensor	PS57	P004	12	1:paper
00	0D91	Size error	Different media length	-	-	-	-
00	0D92	Different media	Transparency sensor	UN51	P009	7	1:paper
00	0D93	Different media	Transparency sensor	UN51	P009	7	1:paper
00	0CA1	Sequence	-	-	-	-	-
00	0CA2	Sequence	-	-	-	-	-
00	0CA3	Sequence	-	-	-	-	-
00	0CAF	Sequence	-	-	-	-	-
00	0CF1	Error avoidance	-	-	-	-	-

T-7-11

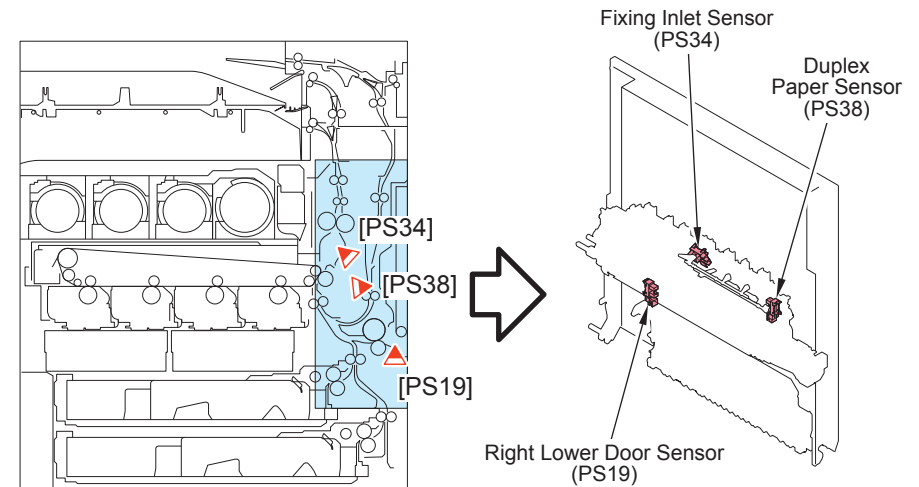
## Detailed Jam Codes

ACC ID	Jam Code	Type	Sensor Name	Sensor ID	I/O		
					Address	bit	Remarks
00	0106	Delay	Fixing inlet sensor	PS34	P013	3	1:paper
Overview of detection			This jam occurs when the Fixing Inlet Sensor (PS34) was not turned ON although the specified period of time had passed since the start of the detection by the Registration Sensor (PS33).				
Check items (in arbitrary order)			<ul style="list-style-type: none"> <li>- Remaining paper at the upstream of the Fixing Inlet Sensor (PS34)</li> <li>- Fixing Inlet Sensor (PS34), Registration Sensor (PS33)</li> <li>- Registration Roller, Secondary Transfer Roller, Fixing Roller</li> <li>- Fixing Motor (M21), Registration Motor (M19)</li> </ul>				
00	0206	Stationary	Fixing inlet sensor	PS34	P013	3	1:paper
Overview of detection			This jam occurs when the Reverse Sensor (PS39) was not turned OFF although the specified period of time had passed after the sensor was turned ON.				
Check items (in arbitrary order)			<ul style="list-style-type: none"> <li>- Remaining paper near the Fixing Inlet Sensor (PS34)</li> <li>- Fixing Inlet Sensor (PS34)</li> <li>- Fixing Roller</li> <li>- Fixing Motor (M21)</li> </ul>				
00	0A06	Power-on	Fixing inlet sensor	PS34	P013	3	1:paper
Overview of detection			This jam occurs when the Fixing Inlet Sensor (PS34) detected ON state at power-on.				
Check items (in arbitrary order)			<ul style="list-style-type: none"> <li>- Remaining paper near the Fixing Inlet Sensor (PS34)</li> <li>- Check of the Fixing Inlet Sensor (PS34)</li> </ul>				

T-7-12

\* If a jam occurs near fixing area, paper feeding is stopped by stopping the Fixing Motor (M21) immediately with brake to prevent fixing paper wrapping jam.

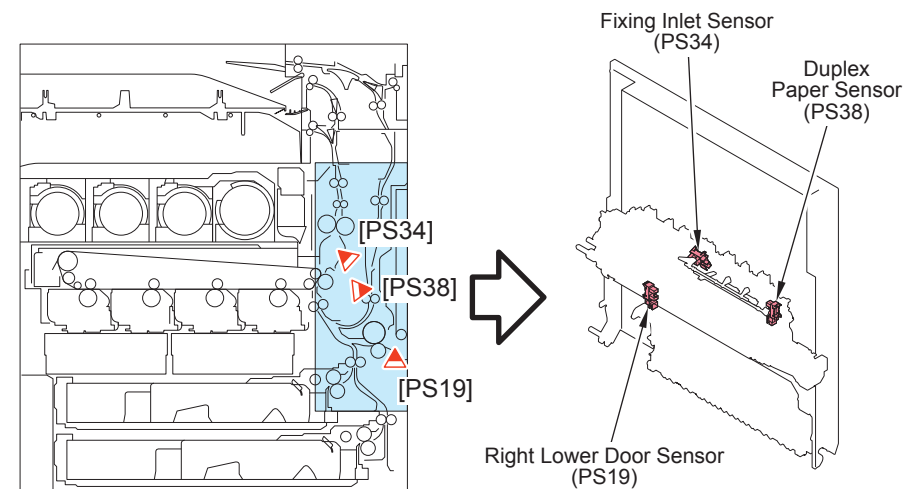
By doing so, it makes the trailing edge of paper visible on the feed path and enables paper removal. When the jams described above occurs, check the area near the Fixing Assembly.



F-7-5

ACC ID	Jam Code	Type	Sensor Name	Sensor ID	I/O		
					Address	bit	Remarks
00	0B00	Door open	Right lower door sensor	PS19	P014	11	0: DOOR_OPEN
00	010D	Delay	Duplex paper sensor	PS38	P013	6	1:paper
00	020D	Stationary	Duplex paper sensor	PS38	P013	6	1:paper
00	0A0D	Power-on	Duplex paper sensor	PS38	P013	6	1:paper

T-7-13



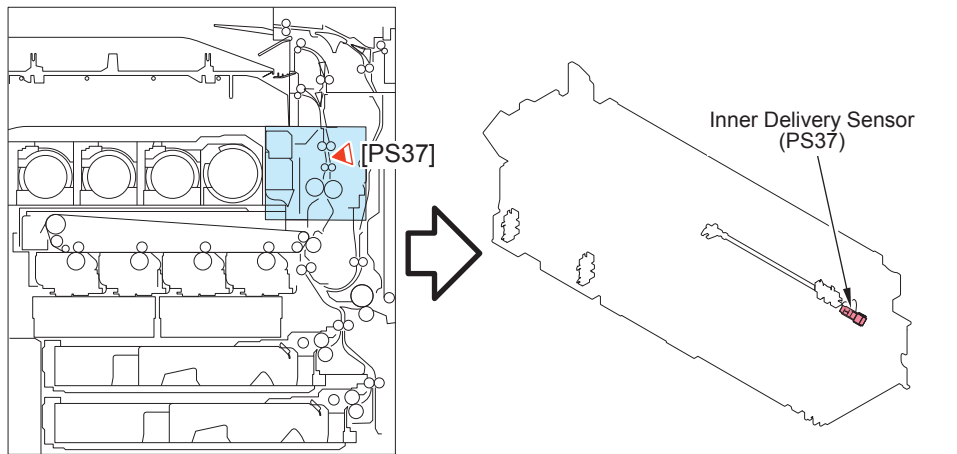
F-7-6

ACC ID	Jam Code	Type	Sensor Name	Sensor ID	I/O		
					Address	bit	Remarks
00	0107	Delay	Inner delivery sensor	PS37	P009	4	1:paper
00	0207	Stationary	Inner delivery sensor	PS37	P009	4	1:paper
00	0A07	Power-on	Inner delivery sensor	PS37	P009	4	1:paper

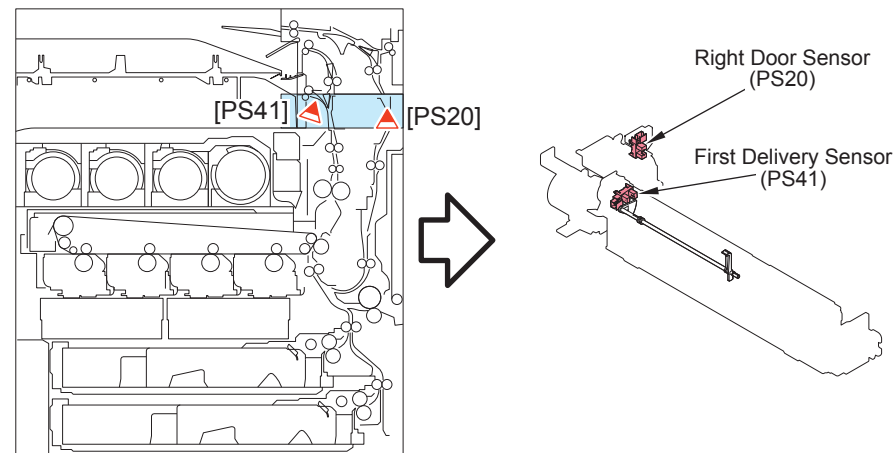
T-7-14

ACC ID	Jam Code	Type	Sensor Name	Sensor ID	I/O		
					Address	bit	Remarks
00	0B00	Door open	Right door sensor	PS20	P009	5	0: DOOR_ OPEN
00	0108	Delay	First delivery sensor	PS41	P009	12	1:paper
00	0208	Stationary	First delivery sensor	PS41	P009	12	1:paper
00	0A08	Power-on	First delivery sensor	PS41	P009	12	1:paper

T-7-15



F-7-7



F-7-8

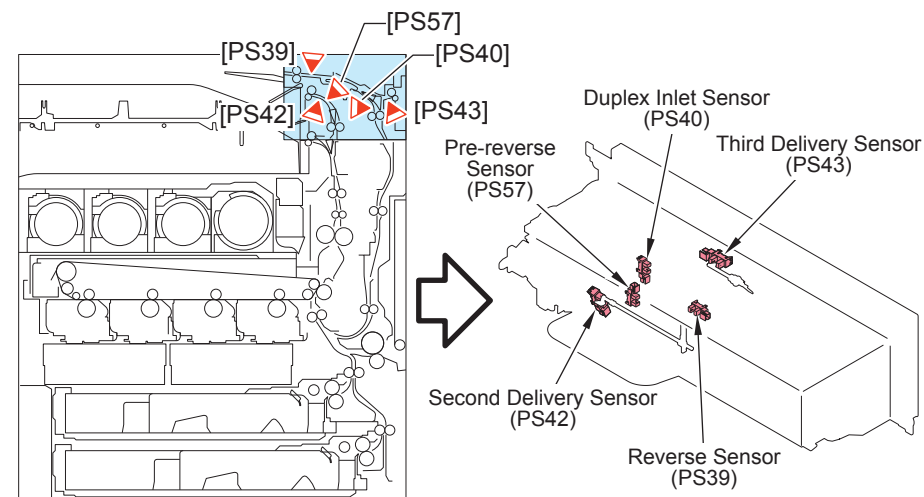


ACC ID	Jam Code	Type	Sensor Name	Sensor ID	I/O		
					Address	bit	Remarks
00	010A	Delay	Reverse sensor	PS39	P005	14	1:paper
Overview of detection			This jam occurs when the Reverse Sensor (PS39) was not turned ON although the specified period of time had passed since the start of the detection by the Pre-reverse Sensor (PS57).				
Check items (in arbitrary order)			<ul style="list-style-type: none"> <li>- Remaining paper at the upstream of the Reverse Sensor (PS39)</li> <li>- Reverse Sensor (PS39)</li> <li>- Pre-reverse Sensor (PS57)</li> <li>- Reverse Roller</li> <li>- Reverse Roller Motor (M24)</li> </ul>				
00	020A	Stationary	Reverse sensor	PS39	P005	14	1:paper
Overview of detection			This jam occurs when the Reverse Sensor (PS39) was not turned OFF although the specified period of time had passed after the sensor was turned ON.				
Check items (in arbitrary order)			<ul style="list-style-type: none"> <li>- Remaining paper near the Reverse Sensor (PS39)</li> <li>- Reverse Sensor (PS39)</li> <li>- Reverse Roller</li> <li>- Reverse Roller Motor (M24)</li> </ul>				
00	0A0A	Power-on	Reverse sensor	PS39	P005	14	1:paper
Overview of detection			This jam occurs when the Reverse Sensor (PS39) detected ON state at power-on.				
Check items (in arbitrary order)			<ul style="list-style-type: none"> <li>- Remaining paper near the Reverse Sensor (PS39)</li> <li>- Check of the Reverse Sensor (PS39)</li> </ul>				

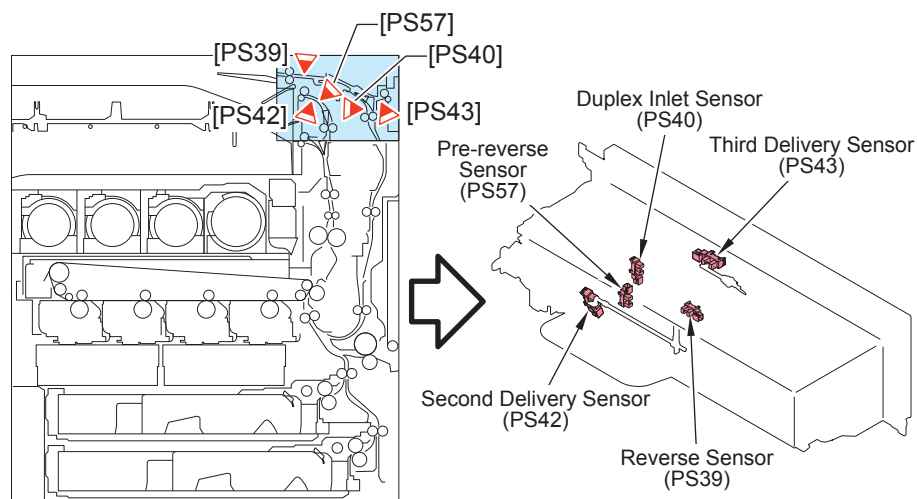
T-7-16

ACC ID	Jam Code	Type	Sensor Name	Sensor ID	I/O		
					Address	bit	Remarks
00	010C	Delay	Duplex inlet sensor	PS40	P004	10	1:paper
00	020C	Stationary	Duplex inlet sensor	PS40	P004	10	1:paper
00	0A0C	Power-on	Duplex inlet sensor	PS40	P004	10	1:paper
00	0109	Delay	Second delivery sensor	PS42	P005	13	1:paper
00	0209	Stationary	Second delivery sensor	PS42	P005	13	1:paper
00	0A09	Power-on	Second delivery sensor	PS42	P005	13	1:paper
00	010B	Delay	Third delivery sensor	PS43	P004	11	1:paper
00	020B	Stationary	Third delivery sensor	PS43	P004	11	1:paper
00	0A0B	Power-on	Third delivery sensor	PS43	P004	11	1:paper
00	0110	Delay	Pre-reverse sensor	PS57	P004	12	1:paper
00	0210	Stationary	Pre-reverse sensor	PS57	P004	12	1:paper
00	0A10	Power-on	Pre-reverse sensor	PS57	P004	12	1:paper

T-7-17



F-7-10



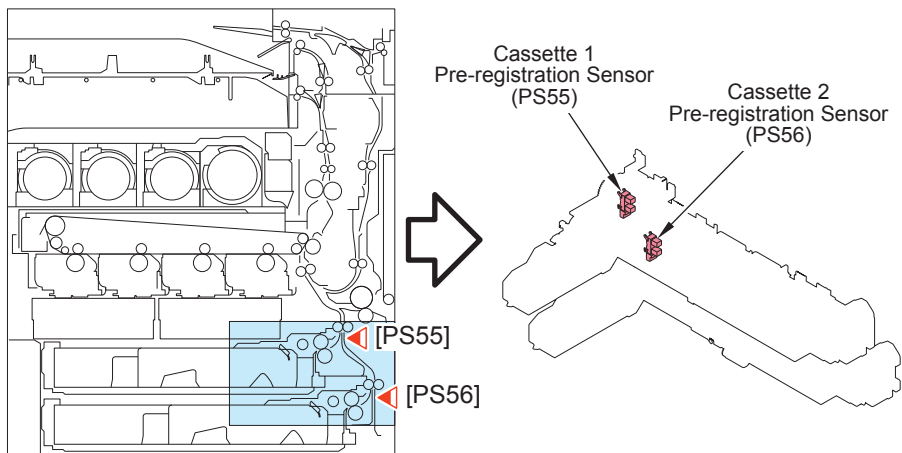
F-7-9

ACC ID	Jam Code	Type	Sensor Name	Sensor ID	I/O		
					Address	bit	Remarks
00	0A01	Power-on	Cassette 1 pre-registration sensor	PS55	P013	12	1:paper
00	0102	Delay	Cassette 2 pre-registration sensor	PS56	P013	8	1:paper
00	0202	Stationary	Cassette 2 pre-registration sensor	PS56	P013	8	1:paper
00	0A02	Power-on	Cassette 2 pre-registration sensor	PS56	P013	8	1:paper

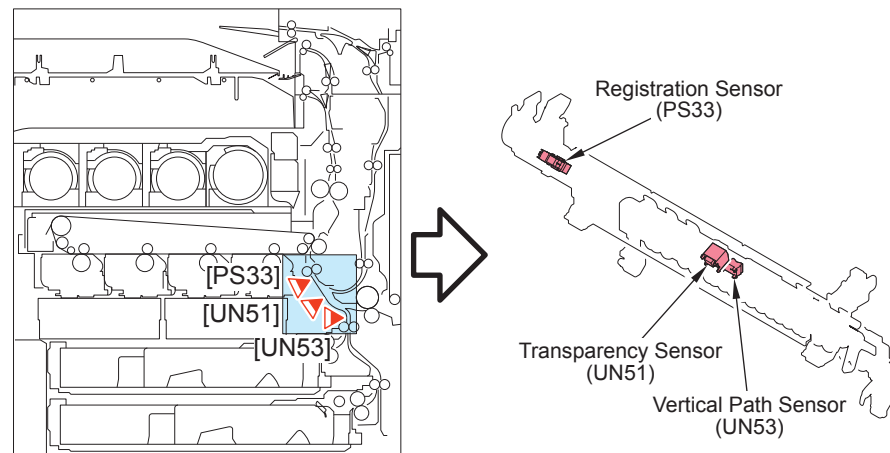
T-7-18

ACC ID	Jam Code	Type	Sensor Name	Sensor ID	I/O		
					Address	bit	Remarks
00	0105	Delay	Registration sensor	PS33	P009	9	1:paper
00	0205	Stationary	Registration sensor	PS33	P009	9	1:paper
00	0A05	Power-on	Registration sensor	PS33	P009	9	1:paper
00	0D92	Different media	Transparency sensor	UN51	P009	7	1:paper
00	0D93	Different media	Transparency sensor	UN51	P009	7	1:paper
00	0113	Delay	Vertical path sensor	UN53	P009	8	1:paper
00	0213	Stationary	Vertical path sensor	UN53	P009	8	1:paper

T-7-19



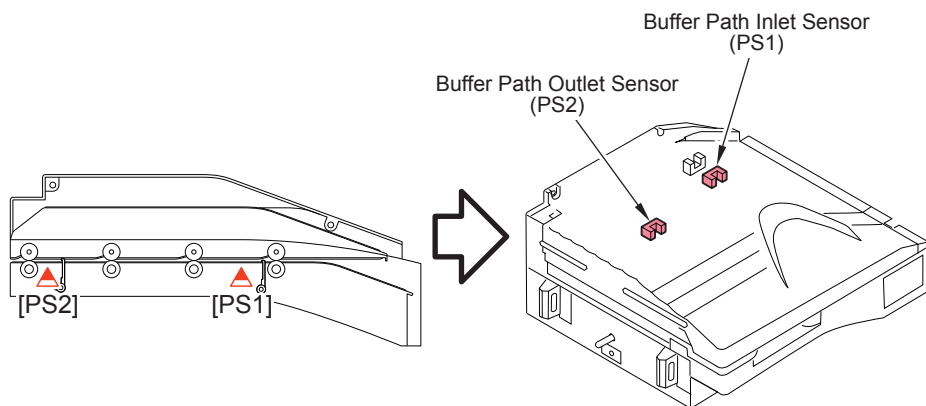
F-7-11



F-7-12

ACC ID	Jam Code	Type	Sensor Name	Sensor ID	I/O		
					Address	bit	Remarks
00	0111	Delay	Buffer path entrance sensor	PS1	P030	0	1:paper
00	0211	Stationary	Buffer path entrance sensor	PS1	P030	0	1:paper
00	0A11	Power-on	Buffer path entrance sensor	PS1	P030	0	1:paper
00	0112	Delay	Buffer pass exit sensor	PS2	P030	2	1:paper
00	0212	Stationary	Buffer pass exit sensor	PS2	P030	2	1:paper
00	0A12	Power-on	Buffer pass exit sensor	PS2	P030	2	1:paper

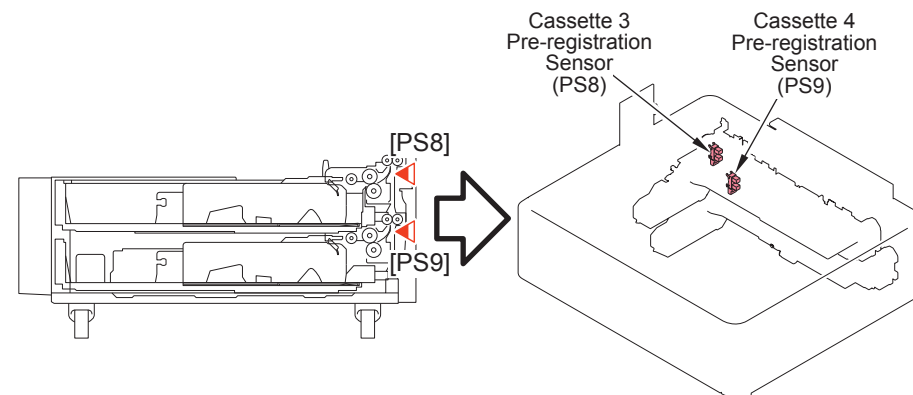
T-7-20



F-7-13

ACC ID	Jam Code	Type	Sensor Name	Sensor ID	I/O		
					Address	bit	Remarks
00	0103	Delay	Cassette 3 pre-registration sensor	PS8	P017	12	1:paper
00	0203	Stationary	Cassette 3 pre-registration sensor	PS8	P017	12	1:paper
00	0A03	Power-on	Cassette 3 pre-registration sensor	PS8	P017	12	1:paper
00	0104	Delay	Cassette 4 pre-registration sensor	PS9	P017	8	1:paper
00	0204	Stationary	Cassette 4 pre-registration sensor	PS9	P017	8	1:paper
00	0A04	Power-on	Cassette 4 pre-registration sensor	PS9	P017	8	1:paper

T-7-21



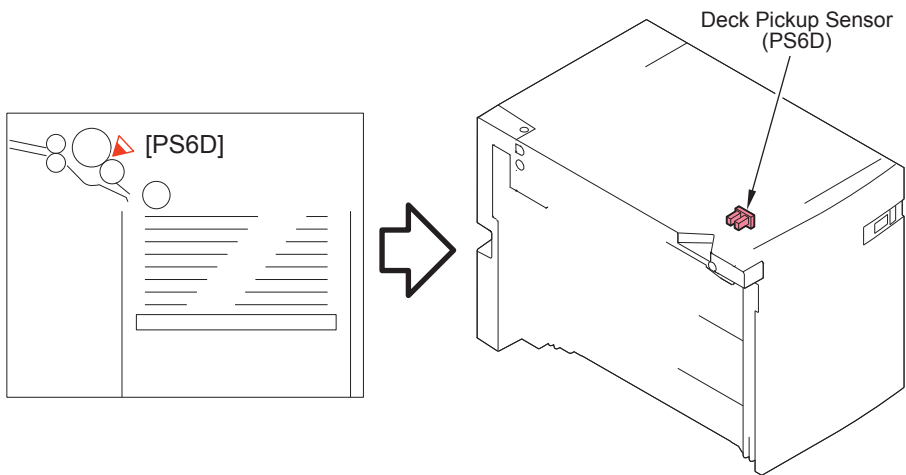
F-7-14

ACC ID	Jam Code	Type	Sensor Name	Sensor ID	I/O		
					Address	bit	Remarks
00	010F	Delay	Deck pickup sensor	PS6D	P029	3	1:paper
00	020F	Stationary	Deck pickup sensor	PS6D	P029	3	1:paper
00	0A0F	Power-on	Deck pickup sensor	PS6D	P029	3	1:paper

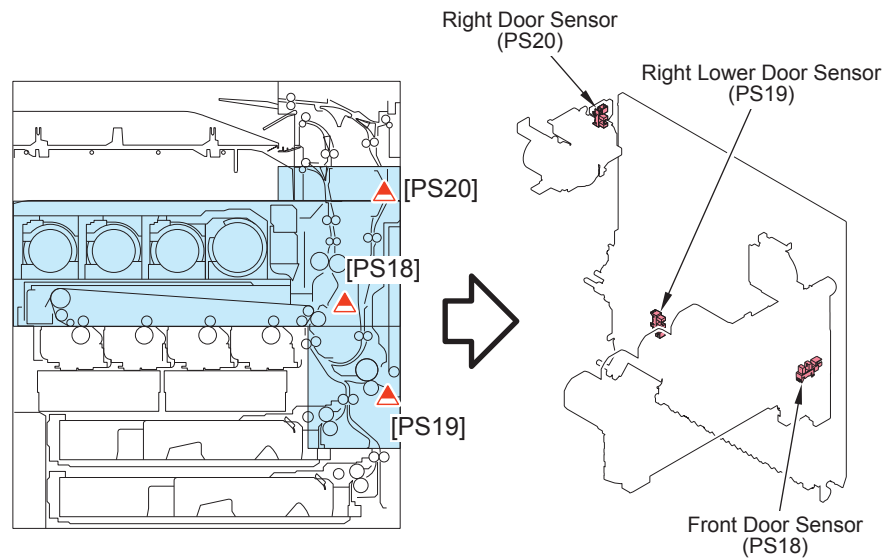
T-7-22

ACC ID	Jam Code	Type	Sensor Name	Sensor ID	I/O		
					Address	bit	Remarks
00	0B00	Door open	Front door sensor	PS18	P009	10	0: DOOR_OPEN
			Right lower door sensor	PS19	P014	11	0: DOOR_OPEN
			Right door sensor	PS20	P009	5	0: DOOR_OPEN

T-7-23



F-7-15



F-7-16

ACC ID	Jam Code	Type	Sensor Name	Sensor ID	I/O		
					Address	bit	Remarks
00	0D91	Size error	-	-	-	-	-

T-7-24

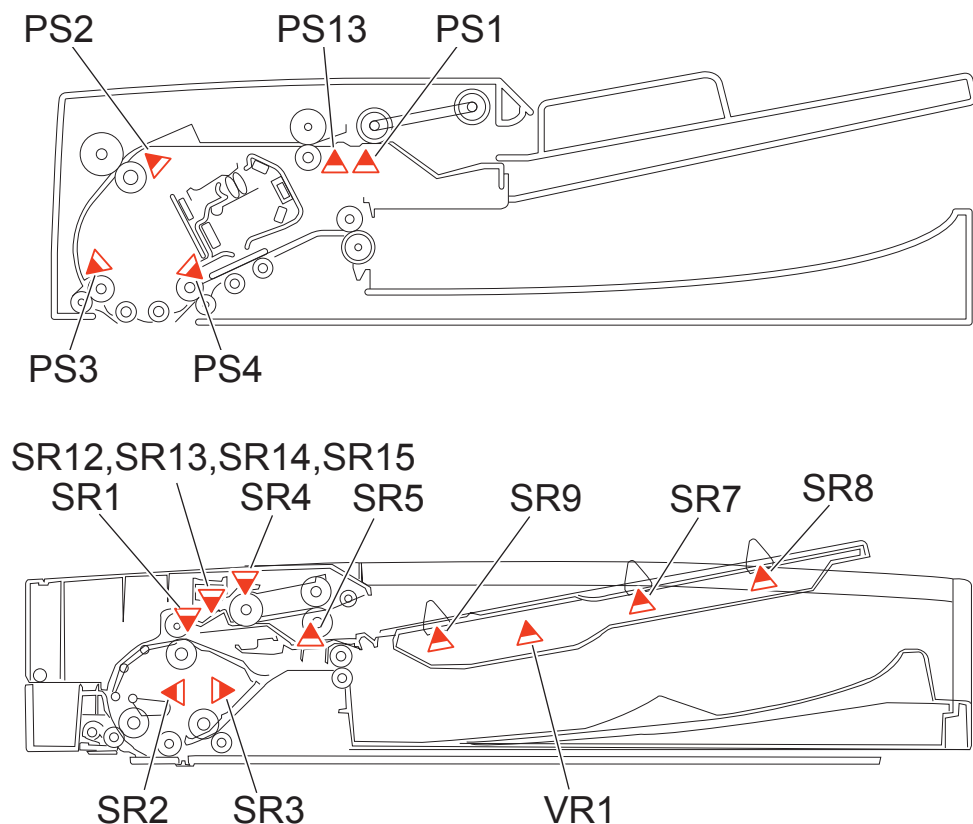
ACC ID	Jam Code	Type	Sensor Name	Sensor ID	I/O		
					Address	bit	Remarks
00	0CA1	Sequence	-	-	-	-	-
00	0CA2	Sequence	-	-	-	-	-
00	0CA3	Sequence	-	-	-	-	-
00	0CAF	Sequence	-	-	-	-	-

T-7-25

ACC ID	Jam Code	Type	Sensor Name	Sensor ID	I/O		
					Address	bit	Remarks
00	0CF1	Error avoidance	-	-	-	-	-

T-7-26

## Duplex Color Image Reader Unit-E1 / Color Image Reader Unit-F1



F-7-17

Duplex Color Image Reader Unit-E1

ACC ID	Jam Code	Type	Sensor Name	Sensor ID
01	0001	delay	Post-separation sensor 3	PS1
01	0002	Stationary	Post-separation sensor 3	PS1
01	0042	Stationary	Post-separation sensor 3 (2nd sheet)	PS1
01	0003	delay	Delivery sensor	PS13
01	0043	delay	Delivery sensor (2nd sheet)	PS13
01	0004	Stationary	Delivery sensor	PS13
01	0044	Stationary	Delivery sensor (2nd sheet)	PS13
01	0005	delay	Registration sensor	PS2
01	0045	delay	Registration sensor (2nd sheet)	PS2
01	0006	Stationary	Registration sensor	PS2
01	0046	Stationary	Registration sensor (2nd sheet)	PS2
01	0007	delay	Read sensor 1	PS3
01	0047	delay	Read sensor 1 (2nd sheet)	PS3
01	0008	Stationary	Read sensor 1	PS3
01	0048	Stationary	Read sensor 1 (2nd sheet)	PS3
01	0009	delay	Read sensor 2	PS4
01	0049	delay	Read sensor 2 (2nd sheet)	PS4
01	0010	Stationary	Read sensor 2	PS4
01	0050	Stationary	Read sensor 2 (2nd sheet)	PS4
01	0071	Sequence Error *2	-	-
01	0073	Error *1	-	-
01	0090	ADF open	-	-
01	0091	ADF open	-	-
01	0092	Door open	Cover open/closed sensor	PS9
01	0093	Door open	Cover open/closed sensor	PS9
01	0094	Stationary	-	-
01	0095	Pickup Error	-	-
01	0096	Limited function *3	-	-

T-7-27

## Color Image Reader Unit-F1

ACC ID	Jam Code	Type	Sensor Name	Sensor ID
01	0001	delay	Timing sensor	SR4
01	0002	Stationary	Timing sensor	SR4
01	0042	Stationary	Timing sensor (2nd sheet)	SR4
01	0095	Pickup Error	Timing sensor	SR4
01	0003	delay	Registration sensor	SR1
01	0043	delay	Registration sensor (2nd sheet)	SR1
01	0004	Stationary	Registration sensor	SR1
01	0044	Stationary	Registration sensor (2nd sheet)	SR1
01	0009	delay	Read sensor	SR2
01	0049	delay	Read sensor (2nd sheet)	SR2
01	0010	Stationary	Read sensor	SR2
01	0050	Stationary	Read sensor (2nd sheet)	SR2
01	0013	delay	Delivery reversal sensor	SR3
01	0053	delay	Delivery reversal sensor (2nd sheet)	SR3
01	0014	Stationary	Delivery reversal sensor	SR3
01	0054	Stationary	Delivery reversal sensor (2nd sheet)	SR3
01	0090	Door open	-	-
01	0091	Door open	-	-
01	0092	Door open	Cover open/closed sensor	SR6
01	0093	Door open	Cover open/closed sensor	SR6
01	0094	Power ON	-	-
01	0095	Pickup Error	-	-
01	0096	Limited function *3	-	-
01	0071	Sequence Error *2	-	-
01	0073	Error *1	Release motor HP sensor	SR11

T-7-28

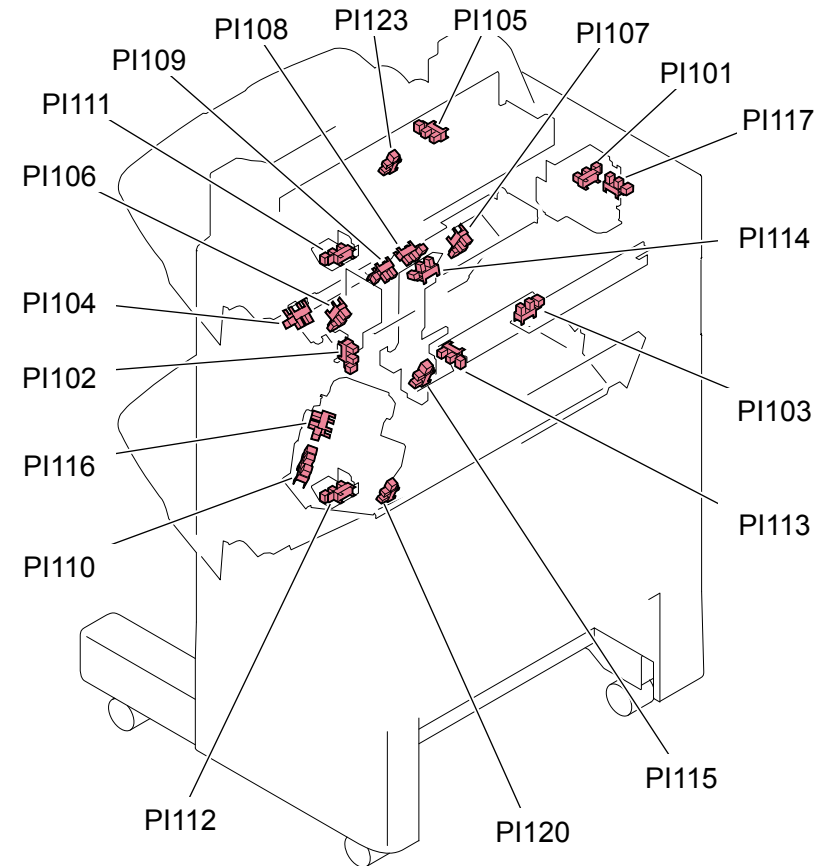
\*1 The state is recovered by opening and closing the Door, or turning OFF and then ON the power supply.

If the same jam is detected regardless of the operation above, the error code is displayed.

\*2: The state is recovered by opening and closing the Door, or turning OFF and then ON the power supply.

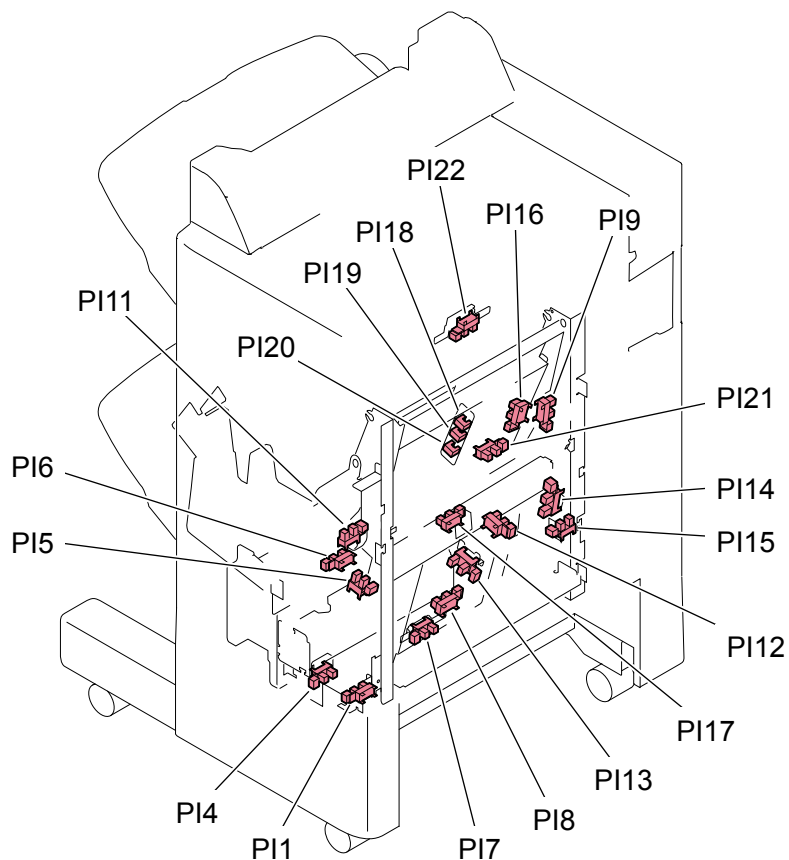
\*3: Jam code generated to prompt a user to remove the original that remains inside the machine when an error occurs during a job and the machine enters limited functions mode.

Troubleshooting using this jam code is not possible.

 Staple Finisher-J1 / Booklet Finisher-J1


F-7-18





F-7-19

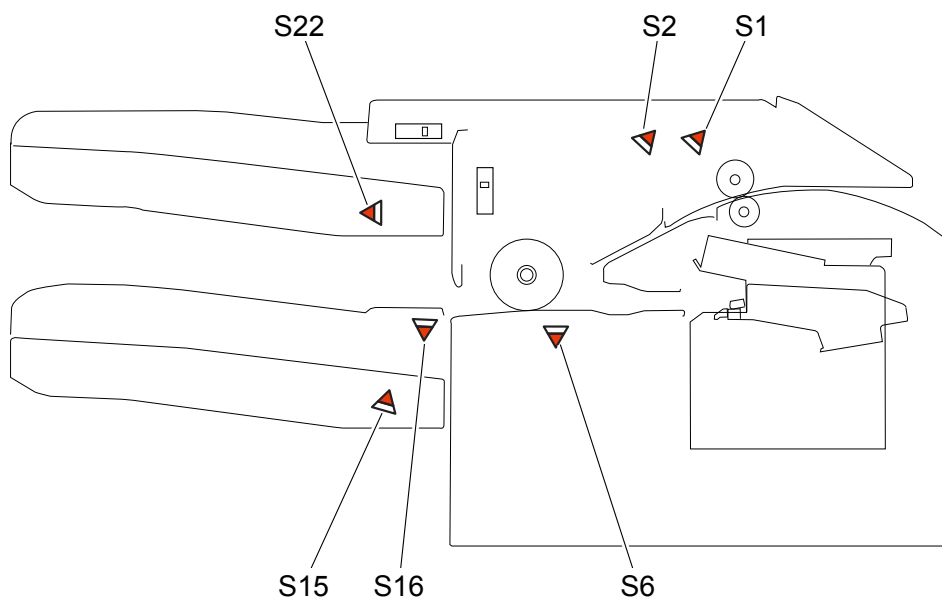
ACC ID	Jam Code	Type	Sensor Name	Sensor ID
02	1200	Early jam	Inlet sensor	PI103
02	110F	Retry error *	-	-
02	1F2F	Retry error *	-	-
02	1F8F	Retry error *	-	-
02	1002	Delay jam	Punch pass sensor	PCB12
02	1400	Door open	-	-
02	1408	Door open	-	-
02	1F88	Door open	-	-
02	1102	Stationary jam	Punch pass sensor	PCB12
02	1F92	Delay jam	Delivery sensor	PI11
02	1F87	POWER ON	Paper pushing plate motor clock sensor, Vertical pat paper sensor, No.1 paper sensor, No.2 paper sensor, No.3 paper sensor, Saddle inlet sensor	PI1, PI17, PI18, PI19, PI20, PI22
02	1001	Delay jam	Inlet sensor	PI103
02	1101	Stationary jam	Inlet sensor	PI103
02	1301	POWER ON	Inlet sensor	PI103
02	1004	Delay jam	Feed path sensor	PI104
02	1104	Stationary jam	Feed path sensor	PI104
02	1304	POWER ON	Feed path sensor	PI104
02	1FA2	stationary jam	Delivery sensor, Vertical path sensor	PI11, PI17
02	1F91	Delay jam	No.1 paper sensor	PI18
02	1FA1	Stationary jam	No.1 paper sensor, No.2 paper sensor, No.3 paper sensor	PI18, PI19, PI20
02	1F93	Delay jam	Saddle inlet sensor	PI22
02	1FA3	Stationary jam	Saddle inlet sensor	PI22
02	1644	error	Side registration HP sensor	PI63
02	1645	POWER ON	Punch pass sensor	PCB12
02	1F86	Staple jam	Saddle staple	SDL STP
02	1500	Staple jam	stapler	STP

T-7-29

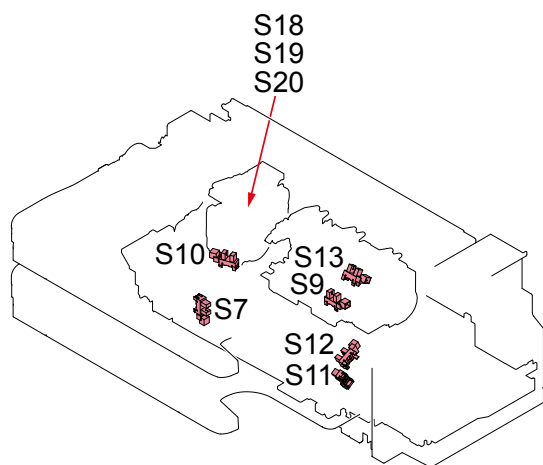
\* The state is recovered by opening and closing the Door, or turning OFF and then ON the power supply.

If the same jam is detected regardless of the operation above, the error code is displayed.

## Inner Finisher-E1



F-7-20



F-7-21

ACC ID	Jam Code	Type	Sensor Name	Sensor ID
02	1C75	Error	Gripper unit HP sensor	S7
02	1C71	Sensor error *	Gripu arm sensor	S13
02	1C20	Sensor error *	Shift roller HP sensor	S2
02	1C67	Sensor error *	Shift roller release sensor	S3
02	1C32	Sensor error *	stapler move HP sensor	S10
02	1C6F	Sensor error *	Entrance roller release /stopper HP sensor	S5
02	1C40	Sensor error *	stack tray clock sensor	S14
02	1C42	Sensor error *	Additional tray clock sensor	S23
02	1001	Delay jam	Entrance sensor	S1
02	1101	Stationary jam	Entrance sensor	S1
02	1701	Early jam	Entrance sensor	S1
02	1102	Stationary jam	Processing tray sensor	S6
02	1300	POWER ON	Entrance sensor,Processing tray sensor	S1,S6
02	1F00	Early jam	Entrance sensor	S1
02	1500	Staple jam	Stapler HP sensor,Stapler edging sensor	S18,S19
02	1400	Door open	Front cover switch	SW1

T-7-30

\* 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.

## Alarm Code

## Alarm Code

Location of Trouble	Alarm Code	Description	Details
00	- 0085	A notice of stat	-
00	- 0246	Error code display (4-digit)	Soft counter PCB cannot write normally.
00	- 0247	Error code display (4-digit)	Soft counter PCB cannot restore data.
02	- 0025	Insufficient Scanner Unit (Paper Front) LED light intensity alarm (Some of the LEDs are OFF. Scanning can be continued.)	In the case that the light intensity is insufficient at LED lighting.
04	- 0008	Optional deck lifter error	-
10	- 0001	No toner (Bk) (RDS creates)	-
10	- 0002	No toner (Cy) (RDS creates)	-
10	- 0003	No toner (M) (RDS creates)	-
10	- 0004	No toner (Ye) (RDS creates)	-
10	- 0017	Toner (Y) prior delivery alarm	-
10	- 0018	Toner (M) prior delivery alarm	-
10	- 0019	Toner (C) prior delivery alarm	-
10	- 0020	Toner (Bk) prior delivery alarm	-
10	- 0022	Patch detection light intensity abnormal change alarm	-
10	- 0100	Toner bottle change notification alarm	-
11	- 0001	Waste toner alarm	Detected waste toner bottle full.
11	- 0010	Near-full state of the Waste Toner Container	Detection of near-full state of the Waste Toner Container
30	- 0002	Charge loss of secondary transfer roller	Charge loss of secondary transfer roller was detected.

Location of Trouble	Alarm Code	Description	Details
31	- 0006	HDD failure when the mirroring function is installed	Movement: HDD failure when the mirroring function is installed Cause: The HDD has a failure when the mirroring function is installed Measures: Check the connection among the following: the HDD that corresponds to the red LED on the LED PCB of the Mirroring Kit, the Mirroring Board and the Main Controller PCB 2. Replace the HDD if it cannot be recovered.
31	- 0008	HDD failure prediction alarm	Movement: HDD failure is expected to occur in a short time due to occurrence of physical error in HDD. It does not occur in the HDD of mirroring configuration. Cause: Error in the S.M.A.R.T. value of HDD Measures: 1. Back up the data stored in HDD. 2. Replace the HDD. 3. Restore the data. S.M.A.R.T. (Self-Monitoring Analysis and Reporting Technology): Self-diagnosis function built in the HDD. The occurrence rate of reading error, reading and writing speed, the total number of Motor start-up and stop times, the total length of power-on time, etc. are monitored.
33	- 0010	Scanner Unit Exhaust Fan (FM1) alarm	The fan rotation signal cannot be detected after 3 seconds have passed since the Scanner Unit Exhaust Fan (FM1) of the Reader is turned ON. Check the connector connection -> Replace the Scanner Unit Exhaust Fan (FM1).
33	- 0011	Fixing cooling fan (front) (FM5) / (rear) (FM6) alarm	Cause: Disconnection of the Fixing Cooling Fans (FM5/6) or Failure of the Fixing Cooling Fans (FM5/6) Measures: Check the connector. -> Replace the Fixing Cooling Fans (FM5/6).
34	- 0003	Auto registration adjustment	Timeout occurred due to unsuccess in reading 10 sets of auto registration pattern. Registration detection sensor failure, Registration detection sensor cleaning member covered the registration detection sensor, or no image drew on the belt.
37	- 0001	For R&D	For R&D
37	- 0002	For R&D	For R&D
37	- 0003	For R&D	For R&D
37	- 0004	For R&D	For R&D
37	- 0005	For R&D	For R&D
37	- 0006	For R&D	For R&D
37	- 0007	For R&D	For R&D

Location of Trouble	Alarm Code	Description	Details
37	- 1000	For R&D	For R&D
37	- 2000	For R&D	For R&D
38	- 0001	For R&D	For R&D
38	- 0002	For R&D	For R&D
50	- 0010	Successive occurrence of separation alarm	Condition unable to separate 1st sheet of original from the ADF occurs 3 times in a row. Check rotation of the Pickup Motor -> Check the life of the Pickup Roller -> Check if paper lint is at the pickup slot.
50	- 0014	Insufficient Scanner Unit (Paper Back) LED light intensity alarm (Some of the LEDs are OFF. Scanning can be continued.)	In the case that the light intensity is insufficient at LED lighting.
61	- 0001	No staple (process tray assembly)	Operation : User message is displayed on controller of main unit. Printing operation is suspended when operating staple job during a print job. Recovery method : Replenish with staples.
62	- 0001	No staple (saddle assembly)	Operation : Print operation is suspended after user message is displayed on controller of main unit. Printing operation is suspended when operating side-staple job during a print job. Recovery method : Replenish with staples.
65	- 0001	Punch dust full	Operation : User message is displayed on controller of main unit. When punching during a print job, operation varies depending on the detection level of the punch dust sensor. Punch dust detection level 1: Continue operation. Punch dust detection level 2: Suspend printing (in case punching operated 1000 times after the level 1 detection) Recovery method : Remove punch dust.
70	- 0001	For R&D	-
70	- 0002	For R&D	-
70	- 0003	For R&D	-
70	- 0004	For R&D	-
70	- 0005	For R&D	-
70	- 0006	For R&D	-
70	- 0007	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	-

Location of Trouble	Alarm Code	Description	Details
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	-
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	-
75	- 0001	For R&D	-
75	- 0002	For R&D	-
75	- 9101	For R&D	-
75	- 9102	For R&D	-
75	- 9103	For R&D	-
75	- 9104	For R&D	-
75	- 9105	For R&D	-
75	- 9106	For R&D	-
75	- 9107	For R&D	-
75	- 9108	For R&D	-
75	- 9109	For R&D	-
75	- 910A	For R&D	-
75	- 910B	For R&D	-
75	- 910C	For R&D	-
75	- 910D	For R&D	-
75	- 910E	For R&D	-
75	- 910F	For R&D	-
75	- 9110	For R&D	-
75	- 9111	For R&D	-
75	- 9112	For R&D	-
75	- 9113	For R&D	-
75	- 9114	For R&D	-
75	- 9115	For R&D	-
75	- 9116	For R&D	-
75	- 9117	For R&D	-
75	- 9118	For R&D	-
75	- 9119	For R&D	-

Location of Trouble	Alarm Code	Description	Details
75	- 911A	For R&D	-
75	- 911B	For R&D	-
75	- 911C	For R&D	-
75	- 911D	For R&D	-
75	- 911E	For R&D	-
75	- 911F	For R&D	-
75	- 9120	For R&D	-
75	- B101	For R&D	-
75	- B102	For R&D	-
75	- B103	For R&D	-
75	- B104	For R&D	-
75	- B105	For R&D	-
75	- B106	For R&D	-
75	- B107	For R&D	-
75	- B108	For R&D	-
75	- B109	For R&D	-
75	- B10A	For R&D	-
75	- B10B	For R&D	-
75	- B10C	For R&D	-
75	- B10D	For R&D	-
75	- B10E	For R&D	-
75	- B10F	For R&D	-
75	- B110	For R&D	-
75	- B111	For R&D	-
75	- B112	For R&D	-
75	- B113	For R&D	-
75	- B114	For R&D	-
75	- B115	For R&D	-
75	- B116	For R&D	-
75	- B117	For R&D	-
75	- B118	For R&D	-
75	- B119	For R&D	-
75	- B11A	For R&D	-
75	- B11B	For R&D	-
75	- B11C	For R&D	-
75	- B11D	For R&D	-
75	- B11E	For R&D	-
75	- B11F	For R&D	-
75	- B120	For R&D	-
76	- 0001	For R&D	-
76	- 0002	Font 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	-

Location of Trouble	Alarm Code	Description	Details
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	-
77	- 0001	For R&D	-
77	- 0002	For R&D	-
77	- 0003	For R&D	-
77	- 0005	For R&D	-
77	- 0006	PDL System memory insufficient	[PCL5] Change the mode of the printer driver (Property > Quality > Advanced Settings... > Graphics Mode > Raster Mode).
78	- 0003	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	-
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	-
82	- 0001	For R&D	-
83	- 0001	Invalid PDF data	Since there is a high possibility that format of the data is not supported, collect the data if possible.
83	- 0002	Invalid PDF data	Since there is a high possibility that format of the data is not supported, collect the data if possible.
83	- 0003	For R&D	-
83	- 0004	For R&D	-

Location of Trouble	Alarm Code	Description	Details
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	- 0006	For R&D	-
83	- 0007	For R&D	-
83	- 0008	For R&D	-
83	- 0009	For R&D	-
83	- 0010	For R&D	-
83	- 0011	For R&D	-
83	- 0012	For R&D	-
83	- 0013	PDF font error	Change the acrobat settings
83	- 0014	For R&D	-
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	- 0018	PDF analysis error	Acrobat -> Optimization of the PDF
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	-
85	- 0001	For R&D	-
85	- 0002	For R&D	-
85	- 0003	For R&D	-
85	- 0004	For R&D	-
85	- 0005	For R&D	-
85	- 0006	For R&D	-
85	- 0007	For R&D	-
85	- 0008	For R&D	-
85	- 0009	For R&D	-
85	- 000A	For R&D	-
85	- 0011	For R&D	-
85	- 0012	For R&D	-
85	- 0013	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 0014	For R&D	-
85	- 0015	For R&D	-
85	- 001A	For R&D	-
85	- 002A	For R&D	-
85	- 0101	For R&D	-
85	- 0102	For R&D	-
85	- 0103	For R&D	-
85	- 0104	For R&D	-
85	- 0105	For R&D	-
85	- 0111	For R&D	-
85	- 0112	For R&D	-
85	- 0113	For R&D	-
85	- 0114	For R&D	-
85	- 0115	For R&D	-
85	- 0201	For R&D	-
85	- 0202	For R&D	-
85	- 0203	For R&D	-
85	- 0204	For R&D	-
85	- 0205	For R&D	-
85	- 0211	For R&D	-
85	- 0212	For R&D	-
85	- 0213	For R&D	-
85	- 0214	For R&D	-
85	- 0215	For R&D	-
85	- 0301	For R&D	-
85	- 0302	For R&D	-
85	- 0303	For R&D	-
85	- 0304	For R&D	-
85	- 0305	For R&D	-
85	- 0311	For R&D	-
85	- 0312	For R&D	-
85	- 0313	For R&D	-
85	- 0314	For R&D	-
85	- 0315	For R&D	-
85	- 0401	For R&D	-
85	- 0402	For R&D	-
85	- 0403	For R&D	-
85	- 0404	For R&D	-
85	- 0405	For R&D	-
85	- 0411	For R&D	-
85	- 0412	For R&D	-
85	- 0413	For R&D	-
85	- 0414	For R&D	-
85	- 0415	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 0501	For R&D	-
85	- 0502	For R&D	-
85	- 0503	For R&D	-
85	- 0504	For R&D	-
85	- 0505	For R&D	-
85	- 0511	For R&D	-
85	- 0512	For R&D	-
85	- 0513	For R&D	-
85	- 0514	For R&D	-
85	- 0515	For R&D	-
85	- 0601	For R&D	-
85	- 0602	For R&D	-
85	- 0603	For R&D	-
85	- 0604	For R&D	-
85	- 0605	For R&D	-
85	- 0611	For R&D	-
85	- 0612	For R&D	-
85	- 0613	For R&D	-
85	- 0614	For R&D	-
85	- 0615	For R&D	-
85	- 0701	For R&D	-
85	- 0702	For R&D	-
85	- 0703	For R&D	-
85	- 0704	For R&D	-
85	- 0705	For R&D	-
85	- 0711	For R&D	-
85	- 0712	For R&D	-
85	- 0713	For R&D	-
85	- 0714	For R&D	-
85	- 0715	For R&D	-
85	- 0801	For R&D	-
85	- 0802	For R&D	-
85	- 0803	For R&D	-
85	- 0804	For R&D	-
85	- 0805	For R&D	-
85	- 0811	For R&D	-
85	- 0812	For R&D	-
85	- 0813	For R&D	-
85	- 0814	For R&D	-
85	- 0815	For R&D	-
85	- 0901	For R&D	-
85	- 0902	For R&D	-
85	- 0903	For R&D	-
85	- 0904	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 0905	For R&D	-
85	- 0911	For R&D	-
85	- 0912	For R&D	-
85	- 0913	For R&D	-
85	- 0914	For R&D	-
85	- 0915	For R&D	-
85	- 0A01	For R&D	-
85	- 0A02	For R&D	-
85	- 0A03	For R&D	-
85	- 0A04	For R&D	-
85	- 0A05	For R&D	-
85	- 0A11	For R&D	-
85	- 0A12	For R&D	-
85	- 0A13	For R&D	-
85	- 0A14	For R&D	-
85	- 0A15	For R&D	-
85	- 0B01	For R&D	-
85	- 0B02	For R&D	-
85	- 0B03	For R&D	-
85	- 0B04	For R&D	-
85	- 0B05	For R&D	-
85	- 0B11	For R&D	-
85	- 0B12	For R&D	-
85	- 0B13	For R&D	-
85	- 0B14	For R&D	-
85	- 0B15	For R&D	-
85	- 0C01	For R&D	-
85	- 0C02	For R&D	-
85	- 0C03	For R&D	-
85	- 0C04	For R&D	-
85	- 0C05	For R&D	-
85	- 0C11	For R&D	-
85	- 0C12	For R&D	-
85	- 0C13	For R&D	-
85	- 0C14	For R&D	-
85	- 0C15	For R&D	-
85	- 0D01	For R&D	-
85	- 0D02	For R&D	-
85	- 0D03	For R&D	-
85	- 0D04	For R&D	-
85	- 0D05	For R&D	-
85	- 0D11	For R&D	-
85	- 0D12	For R&D	-
85	- 0D13	For R&D	-



Location of Trouble	Alarm Code	Description	Details
85	- 0D14	For R&D	-
85	- 0D15	For R&D	-
85	- 0E01	For R&D	-
85	- 0E02	For R&D	-
85	- 0E03	For R&D	-
85	- 0E04	For R&D	-
85	- 0E05	For R&D	-
85	- 0E11	For R&D	-
85	- 0E12	For R&D	-
85	- 0E13	For R&D	-
85	- 0E14	For R&D	-
85	- 0E15	For R&D	-
85	- 0F01	For R&D	-
85	- 0F02	For R&D	-
85	- 0F03	For R&D	-
85	- 0F04	For R&D	-
85	- 0F05	For R&D	-
85	- 0F11	For R&D	-
85	- 0F12	For R&D	-
85	- 0F13	For R&D	-
85	- 0F14	For R&D	-
85	- 0F15	For R&D	-
85	- 1001	For R&D	-
85	- 1002	For R&D	-
85	- 1003	For R&D	-
85	- 1004	For R&D	-
85	- 1005	For R&D	-
85	- 1011	For R&D	-
85	- 1012	For R&D	-
85	- 1013	For R&D	-
85	- 1014	For R&D	-
85	- 1015	For R&D	-
85	- 1101	For R&D	-
85	- 1102	For R&D	-
85	- 1103	For R&D	-
85	- 1104	For R&D	-
85	- 1105	For R&D	-
85	- 1111	For R&D	-
85	- 1112	For R&D	-
85	- 1113	For R&D	-
85	- 1114	For R&D	-
85	- 1115	For R&D	-
85	- 1201	For R&D	-
85	- 1202	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 1203	For R&D	-
85	- 1204	For R&D	-
85	- 1205	For R&D	-
85	- 1211	For R&D	-
85	- 1212	For R&D	-
85	- 1213	For R&D	-
85	- 1214	For R&D	-
85	- 1215	For R&D	-
85	- 1301	For R&D	-
85	- 1302	For R&D	-
85	- 1303	For R&D	-
85	- 1304	For R&D	-
85	- 1305	For R&D	-
85	- 1311	For R&D	-
85	- 1312	For R&D	-
85	- 1313	For R&D	-
85	- 1314	For R&D	-
85	- 1315	For R&D	-
85	- 1401	For R&D	-
85	- 1402	For R&D	-
85	- 1403	For R&D	-
85	- 1404	For R&D	-
85	- 1405	For R&D	-
85	- 1411	For R&D	-
85	- 1412	For R&D	-
85	- 1413	For R&D	-
85	- 1414	For R&D	-
85	- 1415	For R&D	-
85	- 1501	For R&D	-
85	- 1502	For R&D	-
85	- 1503	For R&D	-
85	- 1504	For R&D	-
85	- 1505	For R&D	-
85	- 1511	For R&D	-
85	- 1512	For R&D	-
85	- 1513	For R&D	-
85	- 1514	For R&D	-
85	- 1515	For R&D	-
85	- 1601	For R&D	-
85	- 1602	For R&D	-
85	- 1603	For R&D	-
85	- 1604	For R&D	-
85	- 1605	For R&D	-
85	- 1611	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 1612	For R&D	-
85	- 1613	For R&D	-
85	- 1614	For R&D	-
85	- 1615	For R&D	-
85	- 1701	For R&D	-
85	- 1702	For R&D	-
85	- 1703	For R&D	-
85	- 1704	For R&D	-
85	- 1705	For R&D	-
85	- 1711	For R&D	-
85	- 1712	For R&D	-
85	- 1713	For R&D	-
85	- 1714	For R&D	-
85	- 1715	For R&D	-
85	- 1801	For R&D	-
85	- 1802	For R&D	-
85	- 1803	For R&D	-
85	- 1804	For R&D	-
85	- 1805	For R&D	-
85	- 1811	For R&D	-
85	- 1812	For R&D	-
85	- 1813	For R&D	-
85	- 1814	For R&D	-
85	- 1815	For R&D	-
85	- 1901	For R&D	-
85	- 1902	For R&D	-
85	- 1903	For R&D	-
85	- 1904	For R&D	-
85	- 1905	For R&D	-
85	- 1911	For R&D	-
85	- 1912	For R&D	-
85	- 1913	For R&D	-
85	- 1914	For R&D	-
85	- 1915	For R&D	-
85	- 1A01	For R&D	-
85	- 1A02	For R&D	-
85	- 1A03	For R&D	-
85	- 1A04	For R&D	-
85	- 1A05	For R&D	-
85	- 1A11	For R&D	-
85	- 1A12	For R&D	-
85	- 1A13	For R&D	-
85	- 1A14	For R&D	-
85	- 1A15	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 1B01	For R&D	-
85	- 1B02	For R&D	-
85	- 1B03	For R&D	-
85	- 1B04	For R&D	-
85	- 1B05	For R&D	-
85	- 1B11	For R&D	-
85	- 1B12	For R&D	-
85	- 1B13	For R&D	-
85	- 1B14	For R&D	-
85	- 1B15	For R&D	-
85	- 1C01	For R&D	-
85	- 1C02	For R&D	-
85	- 1C03	For R&D	-
85	- 1C04	For R&D	-
85	- 1C05	For R&D	-
85	- 1C11	For R&D	-
85	- 1C12	For R&D	-
85	- 1C13	For R&D	-
85	- 1C14	For R&D	-
85	- 1C15	For R&D	-
85	- 1D01	For R&D	-
85	- 1D02	For R&D	-
85	- 1D03	For R&D	-
85	- 1D04	For R&D	-
85	- 1D05	For R&D	-
85	- 1D11	For R&D	-
85	- 1D12	For R&D	-
85	- 1D13	For R&D	-
85	- 1D14	For R&D	-
85	- 1D15	For R&D	-
85	- 1E01	For R&D	-
85	- 1E02	For R&D	-
85	- 1E03	For R&D	-
85	- 1E04	For R&D	-
85	- 1E05	For R&D	-
85	- 1E11	For R&D	-
85	- 1E12	For R&D	-
85	- 1E13	For R&D	-
85	- 1E14	For R&D	-
85	- 1E15	For R&D	-
85	- 1F01	For R&D	-
85	- 1F02	For R&D	-
85	- 1F03	For R&D	-
85	- 1F04	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 1F05	For R&D	-
85	- 1F11	For R&D	-
85	- 1F12	For R&D	-
85	- 1F13	For R&D	-
85	- 1F14	For R&D	-
85	- 1F15	For R&D	-
85	- 2001	For R&D	-
85	- 2002	For R&D	-
85	- 2003	For R&D	-
85	- 2004	For R&D	-
85	- 2005	For R&D	-
85	- 2011	For R&D	-
85	- 2012	For R&D	-
85	- 2013	For R&D	-
85	- 2014	For R&D	-
85	- 2015	For R&D	-
85	- 2101	For R&D	-
85	- 2102	For R&D	-
85	- 2103	For R&D	-
85	- 2104	For R&D	-
85	- 2105	For R&D	-
85	- 2111	For R&D	-
85	- 2112	For R&D	-
85	- 2113	For R&D	-
85	- 2114	For R&D	-
85	- 2115	For R&D	-
85	- 2201	For R&D	-
85	- 2202	For R&D	-
85	- 2203	For R&D	-
85	- 2204	For R&D	-
85	- 2205	For R&D	-
85	- 2211	For R&D	-
85	- 2212	For R&D	-
85	- 2213	For R&D	-
85	- 2214	For R&D	-
85	- 2215	For R&D	-
85	- 2301	For R&D	-
85	- 2302	For R&D	-
85	- 2303	For R&D	-
85	- 2304	For R&D	-
85	- 2305	For R&D	-
85	- 2311	For R&D	-
85	- 2312	For R&D	-
85	- 2313	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 2314	For R&D	-
85	- 2315	For R&D	-
85	- 2401	For R&D	-
85	- 2402	For R&D	-
85	- 2403	For R&D	-
85	- 2404	For R&D	-
85	- 2405	For R&D	-
85	- 2411	For R&D	-
85	- 2412	For R&D	-
85	- 2413	For R&D	-
85	- 2414	For R&D	-
85	- 2415	For R&D	-
85	- 2501	For R&D	-
85	- 2502	For R&D	-
85	- 2503	For R&D	-
85	- 2504	For R&D	-
85	- 2505	For R&D	-
85	- 2511	For R&D	-
85	- 2512	For R&D	-
85	- 2513	For R&D	-
85	- 2514	For R&D	-
85	- 2515	For R&D	-
85	- 2601	For R&D	-
85	- 2602	For R&D	-
85	- 2603	For R&D	-
85	- 2604	For R&D	-
85	- 2605	For R&D	-
85	- 2611	For R&D	-
85	- 2612	For R&D	-
85	- 2613	For R&D	-
85	- 2614	For R&D	-
85	- 2615	For R&D	-
85	- 2701	For R&D	-
85	- 2702	For R&D	-
85	- 2703	For R&D	-
85	- 2704	For R&D	-
85	- 2705	For R&D	-
85	- 2711	For R&D	-
85	- 2712	For R&D	-
85	- 2713	For R&D	-
85	- 2714	For R&D	-
85	- 2715	For R&D	-
85	- 2801	For R&D	-
85	- 2802	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 2803	For R&D	-
85	- 2804	For R&D	-
85	- 2805	For R&D	-
85	- 2811	For R&D	-
85	- 2812	For R&D	-
85	- 2813	For R&D	-
85	- 2814	For R&D	-
85	- 2815	For R&D	-
85	- 2901	For R&D	-
85	- 2902	For R&D	-
85	- 2903	For R&D	-
85	- 2904	For R&D	-
85	- 2905	For R&D	-
85	- 2911	For R&D	-
85	- 2912	For R&D	-
85	- 2913	For R&D	-
85	- 2914	For R&D	-
85	- 2915	For R&D	-
85	- 2A01	For R&D	-
85	- 2A02	For R&D	-
85	- 2A03	For R&D	-
85	- 2A04	For R&D	-
85	- 2A05	For R&D	-
85	- 2A11	For R&D	-
85	- 2A12	For R&D	-
85	- 2A13	For R&D	-
85	- 2A14	For R&D	-
85	- 2A15	For R&D	-
85	- 2B01	For R&D	-
85	- 2B02	For R&D	-
85	- 2B03	For R&D	-
85	- 2B04	For R&D	-
85	- 2B05	For R&D	-
85	- 2B11	For R&D	-
85	- 2B12	For R&D	-
85	- 2B13	For R&D	-
85	- 2B14	For R&D	-
85	- 2B15	For R&D	-
85	- 2C01	For R&D	-
85	- 2C02	For R&D	-
85	- 2C03	For R&D	-
85	- 2C04	For R&D	-
85	- 2C05	For R&D	-
85	- 2C11	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 2C12	For R&D	-
85	- 2C13	For R&D	-
85	- 2C14	For R&D	-
85	- 2C15	For R&D	-
85	- 2D01	For R&D	-
85	- 2D02	For R&D	-
85	- 2D03	For R&D	-
85	- 2D04	For R&D	-
85	- 2D05	For R&D	-
85	- 2D11	For R&D	-
85	- 2D12	For R&D	-
85	- 2D13	For R&D	-
85	- 2D14	For R&D	-
85	- 2D15	For R&D	-
85	- 2E01	For R&D	-
85	- 2E02	For R&D	-
85	- 2E03	For R&D	-
85	- 2E04	For R&D	-
85	- 2E05	For R&D	-
85	- 2E11	For R&D	-
85	- 2E12	For R&D	-
85	- 2E13	For R&D	-
85	- 2E14	For R&D	-
85	- 2E15	For R&D	-
85	- 2F01	For R&D	-
85	- 2F02	For R&D	-
85	- 2F03	For R&D	-
85	- 2F04	For R&D	-
85	- 2F05	For R&D	-
85	- 2F11	For R&D	-
85	- 2F12	For R&D	-
85	- 2F13	For R&D	-
85	- 2F14	For R&D	-
85	- 2F15	For R&D	-
85	- 3001	For R&D	-
85	- 3002	For R&D	-
85	- 3003	For R&D	-
85	- 3004	For R&D	-
85	- 3005	For R&D	-
85	- 3011	For R&D	-
85	- 3012	For R&D	-
85	- 3013	For R&D	-
85	- 3014	For R&D	-
85	- 3015	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 3101	For R&D	-
85	- 3102	For R&D	-
85	- 3103	For R&D	-
85	- 3104	For R&D	-
85	- 3105	For R&D	-
85	- 3111	For R&D	-
85	- 3112	For R&D	-
85	- 3113	For R&D	-
85	- 3114	For R&D	-
85	- 3115	For R&D	-
85	- 3201	For R&D	-
85	- 3202	For R&D	-
85	- 3203	For R&D	-
85	- 3204	For R&D	-
85	- 3205	For R&D	-
85	- 3211	For R&D	-
85	- 3212	For R&D	-
85	- 3213	For R&D	-
85	- 3214	For R&D	-
85	- 3215	For R&D	-
85	- 3301	For R&D	-
85	- 3302	For R&D	-
85	- 3303	For R&D	-
85	- 3304	For R&D	-
85	- 3305	For R&D	-
85	- 3311	For R&D	-
85	- 3312	For R&D	-
85	- 3313	For R&D	-
85	- 3314	For R&D	-
85	- 3315	For R&D	-
85	- 3401	For R&D	-
85	- 3402	For R&D	-
85	- 3403	For R&D	-
85	- 3404	For R&D	-
85	- 3405	For R&D	-
85	- 3411	For R&D	-
85	- 3412	For R&D	-
85	- 3413	For R&D	-
85	- 3414	For R&D	-
85	- 3415	For R&D	-
85	- 3501	For R&D	-
85	- 3502	For R&D	-
85	- 3503	For R&D	-
85	- 3504	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 3505	For R&D	-
85	- 3511	For R&D	-
85	- 3512	For R&D	-
85	- 3513	For R&D	-
85	- 3514	For R&D	-
85	- 3515	For R&D	-
85	- 3601	For R&D	-
85	- 3602	For R&D	-
85	- 3603	For R&D	-
85	- 3604	For R&D	-
85	- 3605	For R&D	-
85	- 3611	For R&D	-
85	- 3612	For R&D	-
85	- 3613	For R&D	-
85	- 3614	For R&D	-
85	- 3615	For R&D	-
85	- 3701	For R&D	-
85	- 3702	For R&D	-
85	- 3703	For R&D	-
85	- 3704	For R&D	-
85	- 3705	For R&D	-
85	- 3711	For R&D	-
85	- 3712	For R&D	-
85	- 3713	For R&D	-
85	- 3714	For R&D	-
85	- 3715	For R&D	-
85	- 3801	For R&D	-
85	- 3802	For R&D	-
85	- 3803	For R&D	-
85	- 3804	For R&D	-
85	- 3805	For R&D	-
85	- 3811	For R&D	-
85	- 3812	For R&D	-
85	- 3813	For R&D	-
85	- 3814	For R&D	-
85	- 3815	For R&D	-
85	- 3901	For R&D	-
85	- 3902	For R&D	-
85	- 3903	For R&D	-
85	- 3904	For R&D	-
85	- 3905	For R&D	-
85	- 3911	For R&D	-
85	- 3912	For R&D	-
85	- 3913	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 3914	For R&D	-
85	- 3915	For R&D	-
85	- 3A01	For R&D	-
85	- 3A02	For R&D	-
85	- 3A03	For R&D	-
85	- 3A04	For R&D	-
85	- 3A05	For R&D	-
85	- 3A11	For R&D	-
85	- 3A12	For R&D	-
85	- 3A13	For R&D	-
85	- 3A14	For R&D	-
85	- 3A15	For R&D	-
85	- 3B01	For R&D	-
85	- 3B02	For R&D	-
85	- 3B03	For R&D	-
85	- 3B04	For R&D	-
85	- 3B05	For R&D	-
85	- 3B11	For R&D	-
85	- 3B12	For R&D	-
85	- 3B13	For R&D	-
85	- 3B14	For R&D	-
85	- 3B15	For R&D	-
85	- 3C01	For R&D	-
85	- 3C02	For R&D	-
85	- 3C03	For R&D	-
85	- 3C04	For R&D	-
85	- 3C05	For R&D	-
85	- 3C11	For R&D	-
85	- 3C12	For R&D	-
85	- 3C13	For R&D	-
85	- 3C14	For R&D	-
85	- 3C15	For R&D	-
85	- 3D01	For R&D	-
85	- 3D02	For R&D	-
85	- 3D03	For R&D	-
85	- 3D04	For R&D	-
85	- 3D05	For R&D	-
85	- 3D11	For R&D	-
85	- 3D12	For R&D	-
85	- 3D13	For R&D	-
85	- 3D14	For R&D	-
85	- 3D15	For R&D	-
85	- 3E01	For R&D	-
85	- 3E02	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 3E03	For R&D	-
85	- 3E04	For R&D	-
85	- 3E05	For R&D	-
85	- 3E11	For R&D	-
85	- 3E12	For R&D	-
85	- 3E13	For R&D	-
85	- 3E14	For R&D	-
85	- 3E15	For R&D	-
85	- 3F01	For R&D	-
85	- 3F02	For R&D	-
85	- 3F03	For R&D	-
85	- 3F04	For R&D	-
85	- 3F05	For R&D	-
85	- 3F11	For R&D	-
85	- 3F12	For R&D	-
85	- 3F13	For R&D	-
85	- 3F14	For R&D	-
85	- 3F15	For R&D	-
85	- 4001	For R&D	-
85	- 4002	For R&D	-
85	- 4003	For R&D	-
85	- 4004	For R&D	-
85	- 4005	For R&D	-
85	- 4011	For R&D	-
85	- 4012	For R&D	-
85	- 4013	For R&D	-
85	- 4014	For R&D	-
85	- 4015	For R&D	-
85	- 4101	For R&D	-
85	- 4102	For R&D	-
85	- 4103	For R&D	-
85	- 4104	For R&D	-
85	- 4105	For R&D	-
85	- 4111	For R&D	-
85	- 4112	For R&D	-
85	- 4113	For R&D	-
85	- 4114	For R&D	-
85	- 4115	For R&D	-
85	- 4201	For R&D	-
85	- 4202	For R&D	-
85	- 4203	For R&D	-
85	- 4204	For R&D	-
85	- 4205	For R&D	-
85	- 4211	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 4212	For R&D	-
85	- 4213	For R&D	-
85	- 4214	For R&D	-
85	- 4215	For R&D	-
85	- 4301	For R&D	-
85	- 4302	For R&D	-
85	- 4303	For R&D	-
85	- 4304	For R&D	-
85	- 4305	For R&D	-
85	- 4311	For R&D	-
85	- 4312	For R&D	-
85	- 4313	For R&D	-
85	- 4314	For R&D	-
85	- 4315	For R&D	-
85	- 4401	For R&D	-
85	- 4402	For R&D	-
85	- 4403	For R&D	-
85	- 4404	For R&D	-
85	- 4405	For R&D	-
85	- 4411	For R&D	-
85	- 4412	For R&D	-
85	- 4413	For R&D	-
85	- 4414	For R&D	-
85	- 4415	For R&D	-
85	- 4501	For R&D	-
85	- 4502	For R&D	-
85	- 4503	For R&D	-
85	- 4504	For R&D	-
85	- 4505	For R&D	-
85	- 4511	For R&D	-
85	- 4512	For R&D	-
85	- 4513	For R&D	-
85	- 4514	For R&D	-
85	- 4515	For R&D	-
85	- 4601	For R&D	-
85	- 4602	For R&D	-
85	- 4603	For R&D	-
85	- 4604	For R&D	-
85	- 4605	For R&D	-
85	- 4611	For R&D	-
85	- 4612	For R&D	-
85	- 4613	For R&D	-
85	- 4614	For R&D	-
85	- 4615	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 4701	For R&D	-
85	- 4702	For R&D	-
85	- 4703	For R&D	-
85	- 4704	For R&D	-
85	- 4705	For R&D	-
85	- 4711	For R&D	-
85	- 4712	For R&D	-
85	- 4713	For R&D	-
85	- 4714	For R&D	-
85	- 4715	For R&D	-
85	- 4801	For R&D	-
85	- 4802	For R&D	-
85	- 4803	For R&D	-
85	- 4804	For R&D	-
85	- 4805	For R&D	-
85	- 4811	For R&D	-
85	- 4812	For R&D	-
85	- 4813	For R&D	-
85	- 4814	For R&D	-
85	- 4815	For R&D	-
85	- 4901	For R&D	-
85	- 4902	For R&D	-
85	- 4903	For R&D	-
85	- 4904	For R&D	-
85	- 4905	For R&D	-
85	- 4911	For R&D	-
85	- 4912	For R&D	-
85	- 4913	For R&D	-
85	- 4914	For R&D	-
85	- 4915	For R&D	-
85	- 4A01	For R&D	-
85	- 4A02	For R&D	-
85	- 4A03	For R&D	-
85	- 4A04	For R&D	-
85	- 4A05	For R&D	-
85	- 4A11	For R&D	-
85	- 4A12	For R&D	-
85	- 4A13	For R&D	-
85	- 4A14	For R&D	-
85	- 4A15	For R&D	-
85	- 4B01	For R&D	-
85	- 4B02	For R&D	-
85	- 4B03	For R&D	-
85	- 4B04	For R&D	-



Location of Trouble	Alarm Code	Description	Details
85	- 4B05	For R&D	-
85	- 4B11	For R&D	-
85	- 4B12	For R&D	-
85	- 4B13	For R&D	-
85	- 4B14	For R&D	-
85	- 4B15	For R&D	-
85	- 4C01	For R&D	-
85	- 4C02	For R&D	-
85	- 4C03	For R&D	-
85	- 4C04	For R&D	-
85	- 4C05	For R&D	-
85	- 4C11	For R&D	-
85	- 4C12	For R&D	-
85	- 4C13	For R&D	-
85	- 4C14	For R&D	-
85	- 4C15	For R&D	-
85	- 4D01	For R&D	-
85	- 4D02	For R&D	-
85	- 4D03	For R&D	-
85	- 4D04	For R&D	-
85	- 4D05	For R&D	-
85	- 4D11	For R&D	-
85	- 4D12	For R&D	-
85	- 4D13	For R&D	-
85	- 4D14	For R&D	-
85	- 4D15	For R&D	-
85	- 4E01	For R&D	-
85	- 4E02	For R&D	-
85	- 4E03	For R&D	-
85	- 4E04	For R&D	-
85	- 4E05	For R&D	-
85	- 4E11	For R&D	-
85	- 4E12	For R&D	-
85	- 4E13	For R&D	-
85	- 4E14	For R&D	-
85	- 4E15	For R&D	-
85	- 4F01	For R&D	-
85	- 4F02	For R&D	-
85	- 4F03	For R&D	-
85	- 4F04	For R&D	-
85	- 4F05	For R&D	-
85	- 4F11	For R&D	-
85	- 4F12	For R&D	-
85	- 4F13	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 4F14	For R&D	-
85	- 4F15	For R&D	-
85	- 5001	For R&D	-
85	- 5002	For R&D	-
85	- 5003	For R&D	-
85	- 5004	For R&D	-
85	- 5005	For R&D	-
85	- 5011	For R&D	-
85	- 5012	For R&D	-
85	- 5013	For R&D	-
85	- 5014	For R&D	-
85	- 5015	For R&D	-
85	- 5101	For R&D	-
85	- 5102	For R&D	-
85	- 5103	For R&D	-
85	- 5104	For R&D	-
85	- 5105	For R&D	-
85	- 5111	For R&D	-
85	- 5112	For R&D	-
85	- 5113	For R&D	-
85	- 5114	For R&D	-
85	- 5115	For R&D	-
85	- 5201	For R&D	-
85	- 5202	For R&D	-
85	- 5203	For R&D	-
85	- 5204	For R&D	-
85	- 5205	For R&D	-
85	- 5211	For R&D	-
85	- 5212	For R&D	-
85	- 5213	For R&D	-
85	- 5214	For R&D	-
85	- 5215	For R&D	-
85	- 5301	For R&D	-
85	- 5302	For R&D	-
85	- 5303	For R&D	-
85	- 5304	For R&D	-
85	- 5305	For R&D	-
85	- 5311	For R&D	-
85	- 5312	For R&D	-
85	- 5313	For R&D	-
85	- 5314	For R&D	-
85	- 5315	For R&D	-
85	- 5401	For R&D	-
85	- 5402	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 5403	For R&D	-
85	- 5404	For R&D	-
85	- 5405	For R&D	-
85	- 5411	For R&D	-
85	- 5412	For R&D	-
85	- 5413	For R&D	-
85	- 5414	For R&D	-
85	- 5415	For R&D	-
85	- 5501	For R&D	-
85	- 5502	For R&D	-
85	- 5503	For R&D	-
85	- 5504	For R&D	-
85	- 5505	For R&D	-
85	- 5511	For R&D	-
85	- 5512	For R&D	-
85	- 5513	For R&D	-
85	- 5514	For R&D	-
85	- 5515	For R&D	-
85	- 5601	For R&D	-
85	- 5602	For R&D	-
85	- 5603	For R&D	-
85	- 5604	For R&D	-
85	- 5605	For R&D	-
85	- 5611	For R&D	-
85	- 5612	For R&D	-
85	- 5613	For R&D	-
85	- 5614	For R&D	-
85	- 5615	For R&D	-
85	- 5701	For R&D	-
85	- 5702	For R&D	-
85	- 5703	For R&D	-
85	- 5704	For R&D	-
85	- 5705	For R&D	-
85	- 5711	For R&D	-
85	- 5712	For R&D	-
85	- 5713	For R&D	-
85	- 5714	For R&D	-
85	- 5715	For R&D	-
85	- 5801	For R&D	-
85	- 5802	For R&D	-
85	- 5803	For R&D	-
85	- 5804	For R&D	-
85	- 5805	For R&D	-
85	- 5811	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 5812	For R&D	-
85	- 5813	For R&D	-
85	- 5814	For R&D	-
85	- 5815	For R&D	-
85	- 5901	For R&D	-
85	- 5902	For R&D	-
85	- 5903	For R&D	-
85	- 5904	For R&D	-
85	- 5905	For R&D	-
85	- 5911	For R&D	-
85	- 5912	For R&D	-
85	- 5913	For R&D	-
85	- 5914	For R&D	-
85	- 5915	For R&D	-
85	- 5A01	For R&D	-
85	- 5A02	For R&D	-
85	- 5A03	For R&D	-
85	- 5A04	For R&D	-
85	- 5A05	For R&D	-
85	- 5A11	For R&D	-
85	- 5A12	For R&D	-
85	- 5A13	For R&D	-
85	- 5A14	For R&D	-
85	- 5A15	For R&D	-
85	- 5B01	For R&D	-
85	- 5B02	For R&D	-
85	- 5B03	For R&D	-
85	- 5B04	For R&D	-
85	- 5B05	For R&D	-
85	- 5B11	For R&D	-
85	- 5B12	For R&D	-
85	- 5B13	For R&D	-
85	- 5B14	For R&D	-
85	- 5B15	For R&D	-
85	- 5C01	For R&D	-
85	- 5C02	For R&D	-
85	- 5C03	For R&D	-
85	- 5C04	For R&D	-
85	- 5C05	For R&D	-
85	- 5C11	For R&D	-
85	- 5C12	For R&D	-
85	- 5C13	For R&D	-
85	- 5C14	For R&D	-
85	- 5C15	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 5D01	For R&D	-
85	- 5D02	For R&D	-
85	- 5D03	For R&D	-
85	- 5D04	For R&D	-
85	- 5D05	For R&D	-
85	- 5D11	For R&D	-
85	- 5D12	For R&D	-
85	- 5D13	For R&D	-
85	- 5D14	For R&D	-
85	- 5D15	For R&D	-
85	- 5E01	For R&D	-
85	- 5E02	For R&D	-
85	- 5E03	For R&D	-
85	- 5E04	For R&D	-
85	- 5E05	For R&D	-
85	- 5E11	For R&D	-
85	- 5E12	For R&D	-
85	- 5E13	For R&D	-
85	- 5E14	For R&D	-
85	- 5E15	For R&D	-
85	- 5F01	For R&D	-
85	- 5F02	For R&D	-
85	- 5F03	For R&D	-
85	- 5F04	For R&D	-
85	- 5F05	For R&D	-
85	- 5F11	For R&D	-
85	- 5F12	For R&D	-
85	- 5F13	For R&D	-
85	- 5F14	For R&D	-
85	- 5F15	For R&D	-
85	- 6001	For R&D	-
85	- 6002	For R&D	-
85	- 6003	For R&D	-
85	- 6004	For R&D	-
85	- 6005	For R&D	-
85	- 6011	For R&D	-
85	- 6012	For R&D	-
85	- 6013	For R&D	-
85	- 6014	For R&D	-
85	- 6015	For R&D	-
85	- 6101	For R&D	-
85	- 6102	For R&D	-
85	- 6103	For R&D	-
85	- 6104	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 6105	For R&D	-
85	- 6111	For R&D	-
85	- 6112	For R&D	-
85	- 6113	For R&D	-
85	- 6114	For R&D	-
85	- 6115	For R&D	-
85	- 6201	For R&D	-
85	- 6202	For R&D	-
85	- 6203	For R&D	-
85	- 6204	For R&D	-
85	- 6205	For R&D	-
85	- 6211	For R&D	-
85	- 6212	For R&D	-
85	- 6213	For R&D	-
85	- 6214	For R&D	-
85	- 6215	For R&D	-
85	- 6301	For R&D	-
85	- 6302	For R&D	-
85	- 6303	For R&D	-
85	- 6304	For R&D	-
85	- 6305	For R&D	-
85	- 6311	For R&D	-
85	- 6312	For R&D	-
85	- 6313	For R&D	-
85	- 6314	For R&D	-
85	- 6315	For R&D	-
85	- 6401	For R&D	-
85	- 6402	For R&D	-
85	- 6403	For R&D	-
85	- 6404	For R&D	-
85	- 6405	For R&D	-
85	- 6411	For R&D	-
85	- 6412	For R&D	-
85	- 6413	For R&D	-
85	- 6414	For R&D	-
85	- 6415	For R&D	-
85	- 6501	For R&D	-
85	- 6502	For R&D	-
85	- 6503	For R&D	-
85	- 6504	For R&D	-
85	- 6505	For R&D	-
85	- 6511	For R&D	-
85	- 6512	For R&D	-
85	- 6513	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 6514	For R&D	-
85	- 6515	For R&D	-
85	- 6601	For R&D	-
85	- 6602	For R&D	-
85	- 6603	For R&D	-
85	- 6604	For R&D	-
85	- 6605	For R&D	-
85	- 6611	For R&D	-
85	- 6612	For R&D	-
85	- 6613	For R&D	-
85	- 6614	For R&D	-
85	- 6615	For R&D	-
85	- 6701	For R&D	-
85	- 6702	For R&D	-
85	- 6703	For R&D	-
85	- 6704	For R&D	-
85	- 6705	For R&D	-
85	- 6711	For R&D	-
85	- 6712	For R&D	-
85	- 6713	For R&D	-
85	- 6714	For R&D	-
85	- 6715	For R&D	-
85	- 6801	For R&D	-
85	- 6802	For R&D	-
85	- 6803	For R&D	-
85	- 6804	For R&D	-
85	- 6805	For R&D	-
85	- 6811	For R&D	-
85	- 6812	For R&D	-
85	- 6813	For R&D	-
85	- 6814	For R&D	-
85	- 6815	For R&D	-
85	- 6901	For R&D	-
85	- 6902	For R&D	-
85	- 6903	For R&D	-
85	- 6904	For R&D	-
85	- 6905	For R&D	-
85	- 6911	For R&D	-
85	- 6912	For R&D	-
85	- 6913	For R&D	-
85	- 6914	For R&D	-
85	- 6915	For R&D	-
85	- 6A01	For R&D	-
85	- 6A02	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 6A03	For R&D	-
85	- 6A04	For R&D	-
85	- 6A05	For R&D	-
85	- 6A11	For R&D	-
85	- 6A12	For R&D	-
85	- 6A13	For R&D	-
85	- 6A14	For R&D	-
85	- 6A15	For R&D	-
85	- 6B01	For R&D	-
85	- 6B02	For R&D	-
85	- 6B03	For R&D	-
85	- 6B04	For R&D	-
85	- 6B05	For R&D	-
85	- 6B11	For R&D	-
85	- 6B12	For R&D	-
85	- 6B13	For R&D	-
85	- 6B14	For R&D	-
85	- 6B15	For R&D	-
85	- 6C01	For R&D	-
85	- 6C02	For R&D	-
85	- 6C03	For R&D	-
85	- 6C04	For R&D	-
85	- 6C05	For R&D	-
85	- 6C11	For R&D	-
85	- 6C12	For R&D	-
85	- 6C13	For R&D	-
85	- 6C14	For R&D	-
85	- 6C15	For R&D	-
85	- 6D01	For R&D	-
85	- 6D02	For R&D	-
85	- 6D03	For R&D	-
85	- 6D04	For R&D	-
85	- 6D05	For R&D	-
85	- 6D11	For R&D	-
85	- 6D12	For R&D	-
85	- 6D13	For R&D	-
85	- 6D14	For R&D	-
85	- 6D15	For R&D	-
85	- 6E01	For R&D	-
85	- 6E02	For R&D	-
85	- 6E03	For R&D	-
85	- 6E04	For R&D	-
85	- 6E05	For R&D	-
85	- 6E11	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 6E12	For R&D	-
85	- 6E13	For R&D	-
85	- 6E14	For R&D	-
85	- 6E15	For R&D	-
85	- 6F01	For R&D	-
85	- 6F02	For R&D	-
85	- 6F03	For R&D	-
85	- 6F04	For R&D	-
85	- 6F05	For R&D	-
85	- 6F11	For R&D	-
85	- 6F12	For R&D	-
85	- 6F13	For R&D	-
85	- 6F14	For R&D	-
85	- 6F15	For R&D	-
85	- 7001	For R&D	-
85	- 7002	For R&D	-
85	- 7003	For R&D	-
85	- 7004	For R&D	-
85	- 7005	For R&D	-
85	- 7011	For R&D	-
85	- 7012	For R&D	-
85	- 7013	For R&D	-
85	- 7014	For R&D	-
85	- 7015	For R&D	-
85	- 7101	For R&D	-
85	- 7102	For R&D	-
85	- 7103	For R&D	-
85	- 7104	For R&D	-
85	- 7105	For R&D	-
85	- 7111	For R&D	-
85	- 7112	For R&D	-
85	- 7113	For R&D	-
85	- 7114	For R&D	-
85	- 7115	For R&D	-
85	- 7201	For R&D	-
85	- 7202	For R&D	-
85	- 7203	For R&D	-
85	- 7204	For R&D	-
85	- 7205	For R&D	-
85	- 7211	For R&D	-
85	- 7212	For R&D	-
85	- 7213	For R&D	-
85	- 7214	For R&D	-
85	- 7215	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 7301	For R&D	-
85	- 7302	For R&D	-
85	- 7303	For R&D	-
85	- 7304	For R&D	-
85	- 7305	For R&D	-
85	- 7311	For R&D	-
85	- 7312	For R&D	-
85	- 7313	For R&D	-
85	- 7314	For R&D	-
85	- 7315	For R&D	-
85	- 7401	For R&D	-
85	- 7402	For R&D	-
85	- 7403	For R&D	-
85	- 7404	For R&D	-
85	- 7405	For R&D	-
85	- 7411	For R&D	-
85	- 7412	For R&D	-
85	- 7413	For R&D	-
85	- 7414	For R&D	-
85	- 7415	For R&D	-
85	- 7501	For R&D	-
85	- 7502	For R&D	-
85	- 7503	For R&D	-
85	- 7504	For R&D	-
85	- 7505	For R&D	-
85	- 7511	For R&D	-
85	- 7512	For R&D	-
85	- 7513	For R&D	-
85	- 7514	For R&D	-
85	- 7515	For R&D	-
85	- 7601	For R&D	-
85	- 7602	For R&D	-
85	- 7603	For R&D	-
85	- 7604	For R&D	-
85	- 7605	For R&D	-
85	- 7611	For R&D	-
85	- 7612	For R&D	-
85	- 7613	For R&D	-
85	- 7614	For R&D	-
85	- 7615	For R&D	-
85	- 7701	For R&D	-
85	- 7702	For R&D	-
85	- 7703	For R&D	-
85	- 7704	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 7705	For R&D	-
85	- 7711	For R&D	-
85	- 7712	For R&D	-
85	- 7713	For R&D	-
85	- 7714	For R&D	-
85	- 7715	For R&D	-
85	- 7801	For R&D	-
85	- 7802	For R&D	-
85	- 7803	For R&D	-
85	- 7804	For R&D	-
85	- 7805	For R&D	-
85	- 7811	For R&D	-
85	- 7812	For R&D	-
85	- 7813	For R&D	-
85	- 7814	For R&D	-
85	- 7815	For R&D	-
85	- 7901	For R&D	-
85	- 7902	For R&D	-
85	- 7903	For R&D	-
85	- 7904	For R&D	-
85	- 7905	For R&D	-
85	- 7911	For R&D	-
85	- 7912	For R&D	-
85	- 7913	For R&D	-
85	- 7914	For R&D	-
85	- 7915	For R&D	-
85	- 7A01	For R&D	-
85	- 7A02	For R&D	-
85	- 7A03	For R&D	-
85	- 7A04	For R&D	-
85	- 7A05	For R&D	-
85	- 7A11	For R&D	-
85	- 7A12	For R&D	-
85	- 7A13	For R&D	-
85	- 7A14	For R&D	-
85	- 7A15	For R&D	-
85	- 7B01	For R&D	-
85	- 7B02	For R&D	-
85	- 7B03	For R&D	-
85	- 7B04	For R&D	-
85	- 7B05	For R&D	-
85	- 7B11	For R&D	-
85	- 7B12	For R&D	-
85	- 7B13	For R&D	-

Location of Trouble	Alarm Code	Description	Details
85	- 7B14	For R&D	-
85	- 7B15	For R&D	-
85	- 7C01	For R&D	-
85	- 7C02	For R&D	-
85	- 7C03	For R&D	-
85	- 7C04	For R&D	-
85	- 7C05	For R&D	-
85	- 7C11	For R&D	-
85	- 7C12	For R&D	-
85	- 7C13	For R&D	-
85	- 7C14	For R&D	-
85	- 7C15	For R&D	-
85	- 7D01	For R&D	-
85	- 7D02	For R&D	-
85	- 7D03	For R&D	-
85	- 7D04	For R&D	-
85	- 7D05	For R&D	-
85	- 7D11	For R&D	-
85	- 7D12	For R&D	-
85	- 7D13	For R&D	-
85	- 7D14	For R&D	-
85	- 7D15	For R&D	-
85	- 7E01	For R&D	-
85	- 7E02	For R&D	-
85	- 7E03	For R&D	-
85	- 7E04	For R&D	-
85	- 7E05	For R&D	-
85	- 7E11	For R&D	-
85	- 7E12	For R&D	-
85	- 7E13	For R&D	-
85	- 7E14	For R&D	-
85	- 7E15	For R&D	-
85	- 7F01	For R&D	-
85	- 7F02	For R&D	-
85	- 7F03	For R&D	-
85	- 7F04	For R&D	-
85	- 7F05	For R&D	-
85	- 7F11	For R&D	-
85	- 7F12	For R&D	-
85	- 7F13	For R&D	-
85	- 7F14	For R&D	-
85	- 7F15	For R&D	-

T-7-31



# Service Mode

- Overview
- COPIER
- FEEDER
- SORTER
- BOARD



## Overview

Instructions on how to use service mode items can be found within the service mode itself. The information explains what items have been added or changed from previous models.

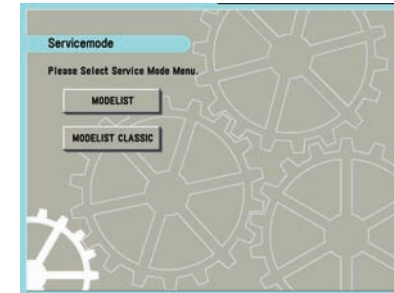
## Points to note when using Service Mode

- When setting or executing in Service Mode, do not open or close the cover and turn off the power while "active" is displayed. This may cause Service Mode to set incorrectly or fail to execute.
- In service mode, it may list "Do not use this at the normal service." in "Points to Note when Using". The followings indicate when this item should be used.
  - The case when a setting value needs to be input on clearing RAM when replacing the PCB (Clearly indicated in the use case)
  - The case when instructed by the service office (due to reasons as having the large negative effects, difficult settings, etc.)
  - The case of performing the individual measure (due to the tender business, etc.)

Do not use in cases that are not mentioned above.

## Service Mode Menu

TOP Screen



F-8-1

"MODELIST"

A brand new additional mode in the host machine. A function that can be used as a reference on how to use each item in Service Mode is installed. The new function, which will be described later, is available in MODELIST Mode.

"MODELIST CLASSIC"

This mode is same as the old machine. The new function, which will be described later, is not available in the MODELIST CLASSIC Mode.

If " MODELIST " or " MODELIST CLASSIC " is pressed, the screen will switch to initial screen for each mode.

## Service mode item explanations

Explanatory texts for the initial window, main items, sub items and minor items can be displayed.

Select the desired initial window, main item, sub item or minor item, then press [i] (Information button) to display an explanatory text (hereafter, service mode contents) on the selected item.

E.g., COPIER > DISPLAY > Version window

1) Press [i]

2) Minor item titles are displayed.

3) Select the desired minor item and press [i]

4) A detailed explanation on the item will be displayed (usage scenarios, instructions, settings range, etc.).

- The service mode contents can be displayed in J/E/F/I/G/S languages.
- Service mode contents, like system software, can be upgraded by SST.

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.

Device classification

Electrical parts classification

1) Press the button. Which button to press, will depend on which electrical parts intended and its device classification. For instance, if the host machine uses paper pass detection sensor, then press the button on the "COPIER" and "P-Sensor" position.

2) Then the selected electrical parts classification's mark, name, port number and 0/1 content will appear.

3) If the "i" button is pressed, the screen displaying the electrical parts array will appear.

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	E804-0003			
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

**TITLE :**  
 Error in primary suction fan  
**Assumed cause:**  
 When an error is detected on the primary suction fan

1 / 1

DONE

F-8-4

ALARM CODE : COPIER > DISPLAY > ERR

No.	DATE	TIME1	TIME2	CODE	DTL	CNTR
09	0308	1345	160	E804-0027		
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

**[Title]**  
 Error in fixing feed motor driver cooling fan  
**[Assumed cause]**  
 When an error is detected on the fixing feed motor driver cooling fan.

1 / 1

DONE

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	<b>FNC-SW</b>	Language, cassette, paper size type, NAVI/DA connection, count-up spec., document size detection, dirt detection level
Display switching/ display timing	<b>DSPLY-SW</b>	UI (User Interface) display related
Image related (fixing)	<b>IMG-FIX</b>	Fixing related
Image related (transfer)	<b>IMG-TR</b>	Primary transfer, secondary transfer, ITB
Image related (developing)	<b>IMG-DEV</b>	Developer related
Image related (laser/ latent image)	<b>IMG-LSR</b>	Laser, latent image related
Image related (reader/ ADF)	<b>IMG-RDR</b>	Reader, ADF image related
Image related (controller, other general items)	<b>IMG-MCON</b>	MN-CON image related, and image related items other than those referred to above.
Image quality/ copy speed	<b>IMG-SPD</b>	Power down sequence
Cleaning	<b>CLEANING</b>	Cleaning of charging unit, drum, transfer roller, ITB, etc.
Environment settings	<b>ENV-SET</b>	Temperature, humidity, environmental heater, condensation, log acquisition
Paper feed (pickup, delivery)	<b>FEED-SW</b>	Stack performance, motor speed adjustment, delivery functions, etc.
Noise reduction	<b>SOUND</b>	Noise related
Network	<b>NETWORK</b>	Network settings, IFAX, SEND, E-RDS, etc.
Customization	<b>CUSTOM</b>	Customization

T-8-1

## Security features

To prevent unauthorized access to Service Mode, Password set is enabled.

### Related service modes

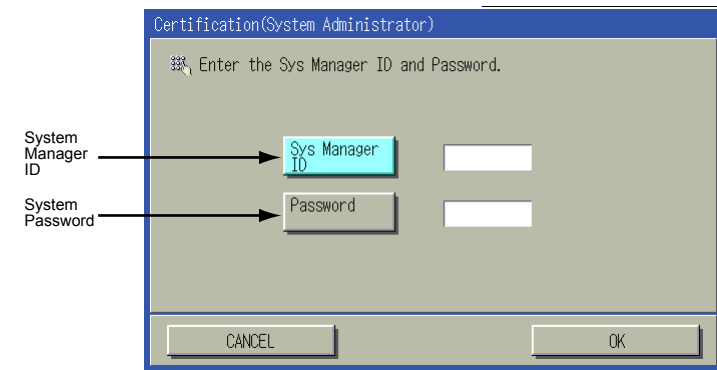
- COPIER > OPTION > FNC-SW > PSWD-SW (Level1)  
Set password type for transition to service mode.  
<Setting range>  
0: No password (default)  
1: Service engineer  
2: System administrator and Service engineer.
- COPIER > OPTION > FNC-SW > SM-PSWD (Level2)  
Password for service engineer for transition to service mode.  
<Setting range>

To reinforce the security, change the password from a default.

\*\*\*\*\* (eight digit numeral) [default: 11111111]

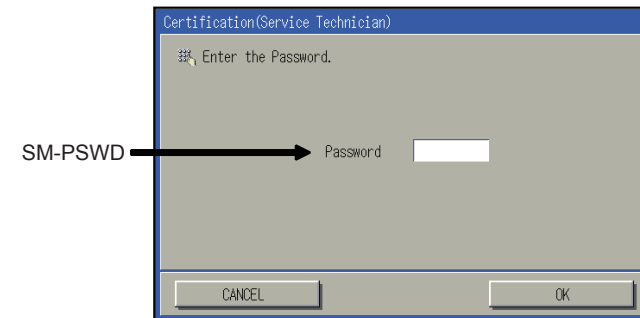
After the above setting, to enter Service Mode, enter password screen will appear.

- 1) Additional Functions > System Settings > System Manager Settings > enter System Manager ID > enter System Password Settings > press OK button.



F-8-6

- 2) After entering the password for service technician (Service mode: COPIER > Option > FNC-SW > SM-PSWD), press OK button.



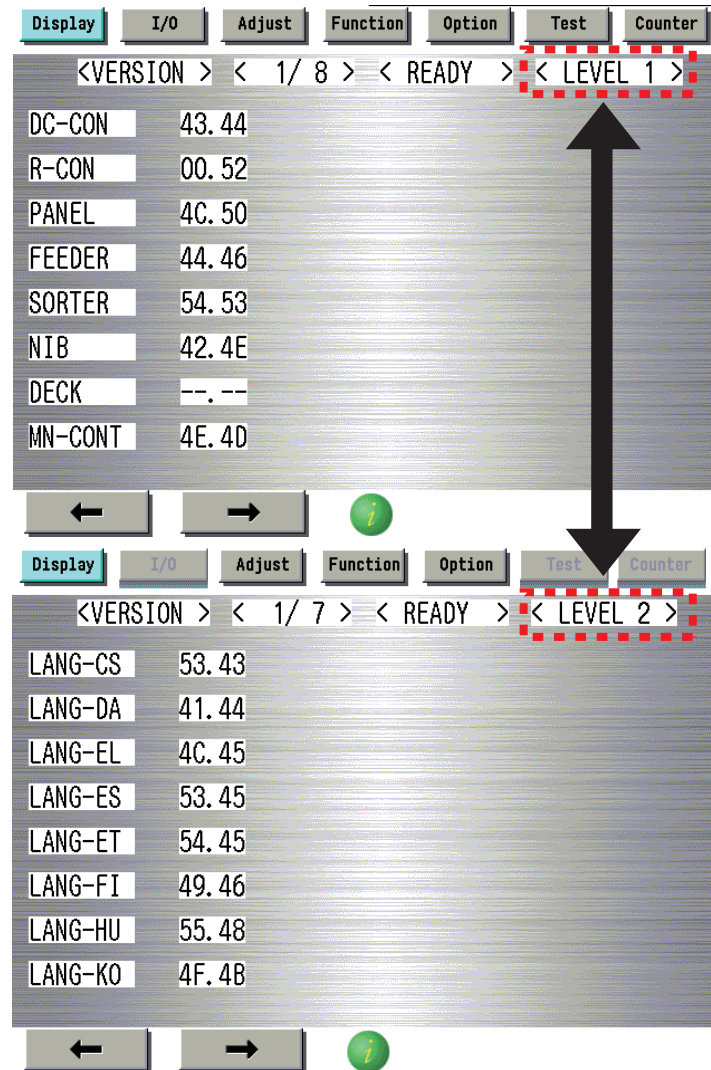
F-8-7

MEMO :  
If Service Engineer's password is forgotten, password function is cancelable by using Service Support Tool (SST).

## Switching Screen (Level 1 < - > 2)

Switching screens between level 1 and 2 has been made easier.

When level 1 screen is displayed, press <LEVEL 1> in the right upper side of the screen, and it will switch to level 2.



F-8-8

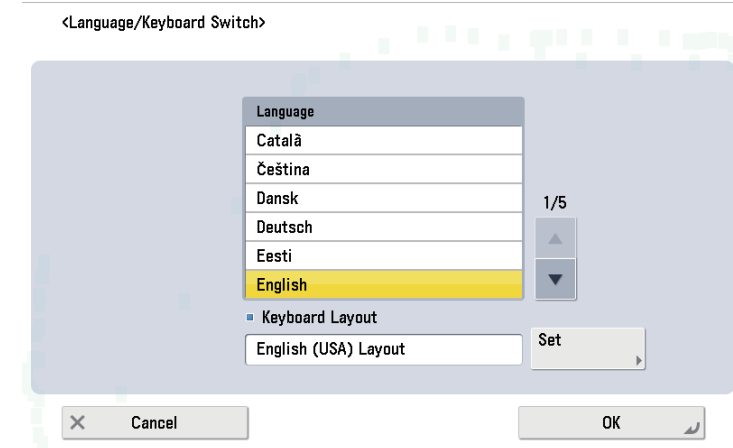
## Language switch

The language of the explanatory text displayed in the Service Mode can be switched by performing the below language switch operation in User Mode

The explanatory text can be displayed by installing the Service Mode Content (SCMNT) in HDD.

Service Mode Content (SCMNT) can be installed and upgraded on SST.

Settings/Registration > Preferences > Display Settings > Language/Keyboard Switch



F-8-9

### MEMO :

If the Service Mode Content (SMCNT) of the concerned language is not installed, English explanatory text will be displayed.

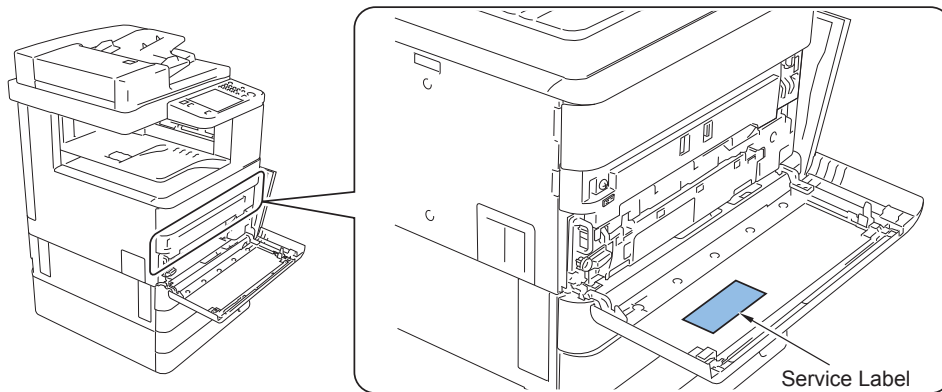
If English-language Service Mode Content (SMCNT) is not installed either, explanatory text can't be displayed.



## Back-up of service mode

In factory setting, adjustments are made for each machine, and adjustment values are written in the service label.

When you replaced the DC controller PCB, or executed the RAM clear function, adjustment values for ADJUST or OPTION return to default. Therefore, when you made adjustments and changed values of the Service Mode in the field, be sure to write down the changed values in the service label. When there is no relevant field in the service label, write down the values in a blank field.



F-8-10

## 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.

#### NOTE:

- While an error is occurring, data of service print cannot be create.
- When connecting a USB device that operates on an external power supply, the machine needs to be started with the USB device ON. A USB device connected after starting the machine cannot be recognized.

### 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 user mode 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

T-8-2

## How to Move Service Print Files to a USB Memory Device

### Preparation

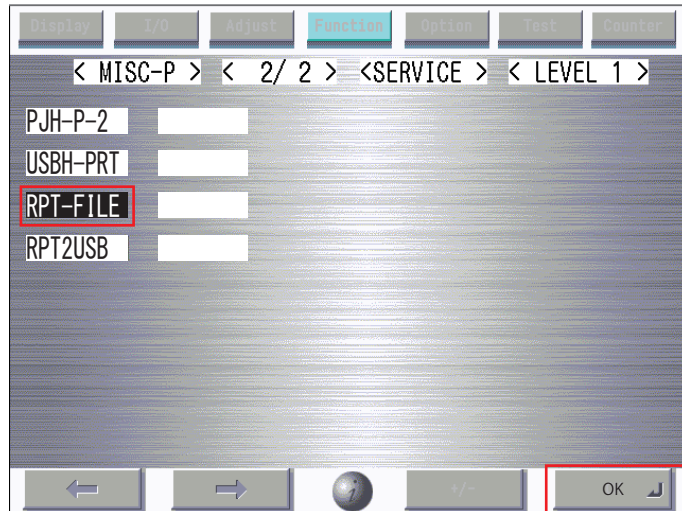
- PC with SST running,  
or
- USB memory device  
FAT32 format file system, with no password locks. To display the USB menu, the firmware of the corresponding model needs to have been registered.

### 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.
3. Using SST or USB memory device to collect the report file  
Transfer the report data which was collected from the machine to the USB memory device.

### operation

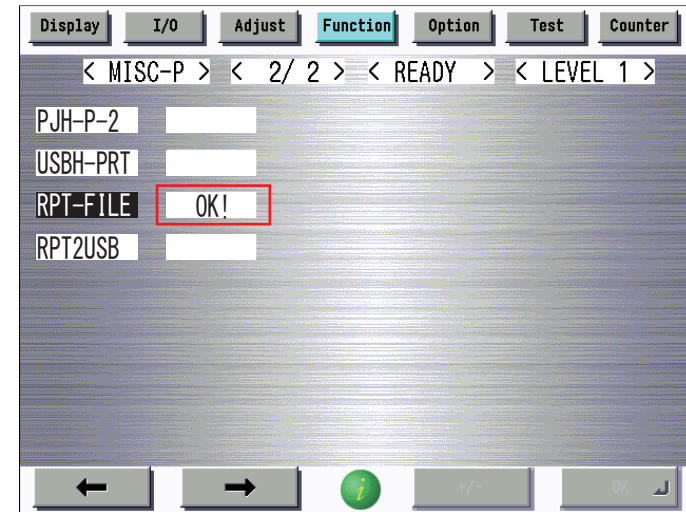
1. Select service mode (Level 1) > Copier > Function > MISC-P > RPT-FILE; and then press "OK".



F-8-11

2. Generating report file

After the "ACTIVE" blinks for 3 to 4 minutes, generation of a report file is complete as "OK!" is displayed.



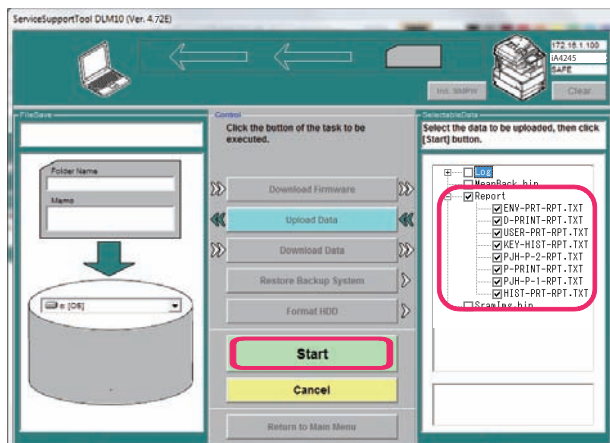
F-8-12

3. Enter download mode.
4. Connect the USB memory storage device to the USB port.



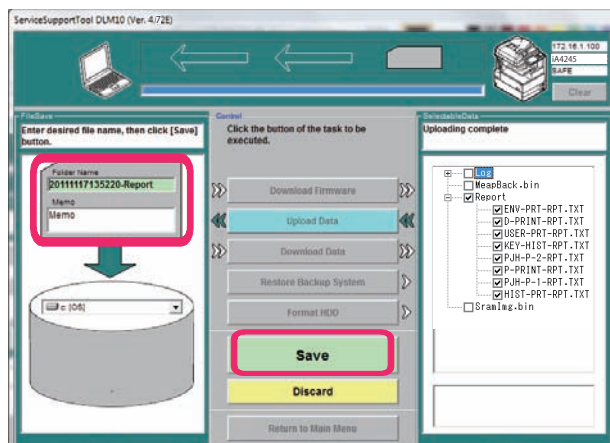


4) Select 'Report', and click [Start].



F-8-17

5) Select the name of the Folder to store and, as necessary, a brief description; then, click [Save].



F-8-18

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 firmware version of Reader Controller PCB.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
PANEL		Dis of Control Panel CPU PCB ROM version
Lv.1	Details	To display the ROM version of Control Panel CPU PCB.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ECO		Display of ECO-ID PCB ROM version
Lv.1	Details	To display the ROM version of ECO-ID PCB.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
FEEDER		[Not used]
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		Dis 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
OP-CON		Display of Option Controller PCB ROM ver
Lv.1	Details	To display the ROM version of Option Controller PCB.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
MN-CONT		Display of MNCON firmware version
Lv.1	Details	To display the firmware version of Main Controller PCB.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
RUI		Display of remote UI version
Lv.1	Details	To display the version of remote UI.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
PUNCH		Display of Puncher Unit version
Lv.1	Details	To display the version of Puncher Unit.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-EN		Display of English language file version
Lv.1	Details	To display the version of English language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-FR		Display of French language file version
Lv.1	Details	To display the version of French language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-DE		Display of German language file version
Lv.1	Details	To display the version of German language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-IT		Display of Italian language file version
Lv.1	Details	To display the version of Italian language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-JP		Display of Japanese language file ver
Lv.1	Details	To display the version of Japanese language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-CS		Display of Czech language file version
Lv.2	Details	To display the version of Czech language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-DA		Display of Danish language file version
Lv.2	Details	To display the version of Danish language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
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

COPIER > DISPLAY > VERSION		
LANG-ES		Display of Spanish language file version
Lv.2	Details	To display the version of Spanish language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-ET		Display of Estonian language file ver
Lv.2	Details	To display the version of Estonian language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-FI		Display of Finnish language file version
Lv.2	Details	To display the version of Finnish language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-HU		Display of Hungarian language file ver
Lv.2	Details	To display the version of Hungarian language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-KO		Display of Korean language file version
Lv.2	Details	To display the version of Korean language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-NL		Display of Dutch language file version
Lv.2	Details	To display the version of Dutch language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-NO		Display of Norwegian language file ver
Lv.2	Details	To display the version of Norwegian language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-PL		Display of Polish language file version
Lv.2	Details	To display the version of Polish language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-PT		Display of Portuguese language file ver
Lv.2	Details	To display the version of Portuguese language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-RU		Display of Russian language file version
Lv.2	Details	To display the version of Russian language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
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

COPIER > DISPLAY > VERSION		
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		Dis 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		Dis of Chinese language file ver: smpl
Lv.2	Details	To display the version of Chinese language file (simplified).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ECO-ID		Display of ECO-ID code
Lv.2	Details	To display the ECO-ID code.
	Use case	When upgrading the firmware
	Display/adj/set range	ASCII character string (12 digits)
GDI-UFR		Display of GDI-UFR function version
Lv.1	Details	To display the version of GDI-UFR function.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-BU		Display of Bulgarian language file ver
Lv.2	Details	To display the version of Bulgarian language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-CR		Display of Croatian language file ver
Lv.2	Details	To display the version of Croatian language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-RM		Display of Romanian language file ver
Lv.2	Details	To display the version of Romanian language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-SK		Display of Slovak language file version
Lv.2	Details	To display the version of Slovak language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-TK		Display of Turkish language file version
Lv.2	Details	To display the version of Turkish language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEAP		Display of MEAP contents version
Lv.1	Details	To display the version of MEAP contents in HDD.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
OCR-CN		Display of Chinese OCR: simplified
Lv.1	Details	To display the version of Chinese OCR (simplified). “--.--” is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
OCR-JP		Display of Japanese OCR version
Lv.1	Details	To display the version of Japanese OCR. “--.--” is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
OCR-KR		Display of Korean OCR version
Lv.1	Details	To display the version of Korean OCR. “--.--” is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
OCR-TW		Display of Chinese OCR ver: traditional
Lv.1	Details	“--.--” is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOOTROM		Display of BOOTROM version
Lv.1	Details	To display the version of BOOTROM.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
TTS-JA		Dis of Japanese voice dictionary version
Lv.1	Details	To display the version of Japanese voice dictionary. “--.--” is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
TTS-EN		Dis of English voice dictionary version
Lv.1	Details	To display the version of English voice dictionary. “--.--” is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
TTS-IT		Dis of Italian voice dictionary version
Lv.1	Details	To display the version of Italian voice dictionary. “--.--” is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
TTS-FR		Dis of French voice dictionary version
Lv.1	Details	To display the version of French voice dictionary. “--.--” is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
TTS-ES		Dis of Spanish voice dictionary version
Lv.1	Details	To display the version of Spanish voice dictionary. “--.--” is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
TTS-DE		Dis of German voice dictionary version
Lv.1	Details	To display the version of German voice dictionary. “--.--” is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
WEB-BRWS		Display of Web browser version
Lv.1	Details	To display the version of Web browser. “--.--” is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HELP		Display of Easy NAVI version
Lv.1	Details	To display the version of “Easy NAVI” file. Version should be displayed for Easy NAVI function because it is an external file.
	Use case	When upgrading the firmware
	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
WEBDAV		Display of WebDAV version
Lv.1	Details	To display the version of “WebDAV” file. “--.--” is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
TIMESTAMP		Display of timestamp version
Lv.1	Details	To display the version of “Time Stamp” file. “--.--” is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ASR-JA		Dis of Japanese ASR dictionary version
Lv.1	Details	To display the version of Japanese automatic speech recognition dictionary. “--.--” is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99



COPIER > DISPLAY > VERSION		
ASR-EN		Dis of English ASR dictionary version
Lv.1	Details	To display the version of English automatic speech recognition dictionary. “--.--” is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-JA		Dis of Japanese media information ver
Lv.2	Details	To display the version of Japanese media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-EN		Dis of English media information version
Lv.2	Details	To display the version of English media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-DE		Dis of German media information version
Lv.2	Details	To display the version of German media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-IT		Dis of Italian media information version
Lv.2	Details	To display the version of Italian media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-FR		Dis of French media information version
Lv.2	Details	To display the version of French media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-ZH		Dis of Chinese media info ver: smpl
Lv.2	Details	To display the version of Chinese media information (simplified).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-SK		Dis of Slovak media information version
Lv.2	Details	To display the version of Slovak media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-TK		Dis of Turkish media information version
Lv.2	Details	To display the version of Turkish media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-CS		Dis of Czech media information version
Lv.2	Details	To display the version of Czech media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
MEDIA-EL		Dis of Greek media information version
Lv.2	Details	To display the version of Greek media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-ES		Dis of Spanish media information version
Lv.2	Details	To display the version of Spanish media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-ET		Dis of Estonian media information ver
Lv.2	Details	To display the version of Estonian media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-FI		Dis of Finnish media information version
Lv.2	Details	To display the version of Finnish media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-HU		Dis of Hungarian media information ver
Lv.2	Details	To display the version of Hungarian media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-KO		Dis of Korean media information version
Lv.2	Details	To display the version of Korean media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-NL		Dis of Dutch media information version
Lv.2	Details	To display the version of Dutch media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-NO		Dis of Norwegian media information ver
Lv.2	Details	To display the version of Norwegian media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-PL		Dis of Polish media information version
Lv.2	Details	To display the version of Polish media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-PT		Dis of Portuguese media information ver
Lv.2	Details	To display the version of Portuguese media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-RU		Dis of Russian media information version
Lv.2	Details	To display the version of Russian media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
MEDIA-SL		Dis of Slovenian media information ver
Lv.2	Details	To display the version of Slovenian media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-SV		Dis of Swedish media information version
Lv.2	Details	To display the version of Swedish media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-TW		Dis of Chinese media info version:trad
Lv.2	Details	To display the version of Chinese media information (traditional).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-BU		Dis of Bulgarian media information ver
Lv.2	Details	To display the version of Bulgarian media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-CR		Dis of Croatian media information ver
Lv.2	Details	To display the version of Croatian media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-RM		Dis of Romanian media information ver
Lv.2	Details	To display the version of Romanian media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-CA		Dis of Catalan media information version
Lv.2	Details	To display the version of Catalan media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ECO2		[Not used]
FAX1		Display of 1-line FAX PCB ROM version
Lv.1	Details	To display the ROM version of 1-line FAX PCB. "NULL" is displayed if the PCB is not connected.
	Use case	When upgrading the firmware
	Display/adj/set range	ASCII character string (12 digits)
FAX2/3/4		Dis of 2/3/4-line FAX PCB ROM version
Lv.1	Details	To display the ROM version of 2/3/4-line FAX PCB. "NULL" is displayed if the PCB is not connected.
	Use case	When upgrading the firmware
	Display/adj/set range	ASCII character string (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

COPIER > DISPLAY > VERSION		
SYSTEM		Dis of Linux kernel/tool/driver/file ver
Lv.1	Details	To display the version of Linux kernel/tool/driver/file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99, 00.01 to 99.99, 00.01 to 99.99, 00.01 to 99.99
ROOT		Display of ROOT version
Lv.1	Details	To display the ROOT version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
S-LNG-JP		Dis of service mode Japanese file ver
Lv.1	Details	To display the version of Japanese language file in service mode.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
S-LNG-EN		Dis of service mode English file version
Lv.1	Details	To display the version of English language file in service mode.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
S-LNG-FR		Dis of service mode French file version
Lv.1	Details	To display the version of French language file in service mode.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
S-LNG-IT		Dis of service mode Italian file version
Lv.1	Details	To display the version of Italian language file in service mode.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
S-LNG-GR		Dis of service mode German file version
Lv.1	Details	To display the version of German language file in service mode.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
S-LNG-SP		Dis of service mode Spanish file version
Lv.1	Details	To display the version of Spanish language file in service mode.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
UI-RES		Display of UI resource file version
Lv.1	Details	To display the UIRES version. UIRES consists of the resource file which is necessary to display the native screen (top screen and software keyboard screen) of UI.
	Use case	When checking the version at the time of downloading UIRES to MFP
	Display/adj/set range	00.01 to 99.99
COPY-AP		Display of COPY (JAVA UI) version
Lv.1	Details	To display the version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99



COPIER > DISPLAY > VERSION		
SEND-AP		Display of SEND (JAVA UI) version
Lv.1	Details	To display the version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-AP		Display of BOX (JAVA UI) version
Lv.1	Details	To display the version of BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
RPTL-AP		Display of RUI portal version
Lv.1	Details	To display the RUI portal version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-AP		Dis of useful func introduce appli ver
Lv.1	Details	To display the version of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
TSP-JLK		Dis of Image Data Analyzer PCB version
Lv.1	Details	To display the version of Image Data Analyzer PCB.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-FR		Dis of COPY appli French file version
Lv.1	Details	To display the French language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-IT		Dis 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		Dis 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		Dis 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

COPIER > DISPLAY > VERSION		
COPY-ZH		Dis 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		Dis 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		Dis 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		Dis 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		Dis 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		Dis of COPY appli Greek file version
Lv.2	Details	To display the Greek language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-ET		Dis 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		Dis 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		Dis of COPY appli Hungarian file version
Lv.2	Details	To display the Hungarian language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
COPY-NL		Dis 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		Dis of COPY appli Norwegian file version
Lv.2	Details	To display the Norwegian language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-PL		Dis 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		Dis 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		Dis 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		Dis of COPY appli Slovenian file version
Lv.2	Details	To display the Slovenian language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-SV		Dis 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		Dis 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		Dis of COPY appli Bulgarian file version
Lv.2	Details	To display the Bulgarian language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
COPY-CR		Dis 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		Dis 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		Dis 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		Dis 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		Dis 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		Dis of COPY appli Thai file version
Lv.2	Details	To display the Thai language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-VN		Dis of COPY appli Vietnamese file ver
Lv.2	Details	To display the Vietnamese language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-FR		Dis 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		Dis 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

COPIER > DISPLAY > VERSION		
SEND-DE		Dis of SEND appli German file version
Lv.1	Details	To display the German language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-ES		Dis 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		Dis SEND appli Chinese file ver: simpl
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		Dis 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		Dis 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		Dis 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		Dis 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		Dis 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		Dis 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

COPIER > DISPLAY > VERSION		
SEND-FI		Dis of SEND appli Finnish file version
Lv.2	Details	To display the Finnish language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-HU		Dis of SEND appli Hungarian file version
Lv.2	Details	To display the Hungarian language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-NL		Dis 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		Dis of SEND appli Norwegian file version
Lv.2	Details	To display the Norwegian language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-PL		Dis 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		Dis 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		Dis 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		Dis of SEND appli Slovenian file version
Lv.2	Details	To display the Slovenian language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-SV		Dis 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

COPIER > DISPLAY > VERSION		
SEND-ID	Dis of SEND appli Indonesian file ver	
Lv.2	Details	To display the Indonesian language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-BU	Dis of SEND appli Bulgarian file version	
Lv.2	Details	To display the Bulgarian language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-CR	Dis 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	Dis 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	Dis 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	Dis 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	Dis 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	Dis 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	Dis 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

COPIER > DISPLAY > VERSION		
INTRO-FR	Dis of useful func intro French file ver	
Lv.1	Details	To display the version of French language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-IT	Dis useful func intro Italian file ver	
Lv.1	Details	To display the version of Italian language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-DE	Dis of useful func intro German file ver	
Lv.1	Details	To display the version of German language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-ES	Dis useful func intro Spanish file ver	
Lv.1	Details	To display the version of Spanish language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-ZH	Useful func intro Chinese file ver: smpl	
Lv.2	Details	To display the version of simplified Chinese language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-TW	Useful func intro Chinese file ver: trad	
Lv.2	Details	To display the version of traditional Chinese language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-KO	Dis of useful func intro Korean file ver	
Lv.2	Details	To display the version of Korean language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-CS	Dis of useful func intro Czech file ver	
Lv.2	Details	To display the version of Czech language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-DA	Dis of useful func intro Danish file ver	
Lv.2	Details	To display the version of Danish language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
INTRO-EL		Dis of useful func into 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		Dis useful func into 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		Dis useful func into 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		Dis useful func into 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		Dis of useful func into Dutch file ver
Lv.2	Details	To display the version of Dutch language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-NO		Dis useful func into 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		Dis of useful func into 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		Dis useful func into Portuguese file ver
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		Dis useful func into 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

COPIER > DISPLAY > VERSION		
INTRO-SL		Dis useful func into 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		Dis useful func into 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		Dis of useful func into 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		Dis useful func into 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		Dis useful func into Croatian file ver
Lv.2	Details	To display the version of Croatian language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-RM		Dis useful func into 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		Dis of useful func into 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		Dis useful func into 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		Dis useful func into 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

COPIER > DISPLAY > VERSION		
INTRO-TH		Dis useful func intro Thai file version
Lv.2	Details	To display the version of Thai language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-VN		Useful func intro Vietnamese file ver
Lv.2	Details	To display the version of Vietnamese language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-FR		Dis of custom menu French file version
Lv.1	Details	To display the version of French language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-IT		Dis of custom menu Italian file version
Lv.1	Details	To display the version of Italian language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-DE		Dis of custom menu German file version
Lv.1	Details	To display the version of German language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-ES		Dis of custom menu Spanish file version
Lv.1	Details	To display the version of Spanish language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-ZH		Dis custom menu Chinese file ver: smpl
Lv.2	Details	To display the version of simplified Chinese language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-TW		Dis of custom menu Chinese file ver:trad
Lv.2	Details	To display the version of traditional Chinese language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-KO		Dis of custom menu Korean file version
Lv.2	Details	To display the version of Korean language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
CSTMN-CS		Dis of custom menu Czech file version
Lv.2	Details	To display the version of Czech language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-DA		Dis of custom menu Danish file version
Lv.2	Details	To display the version of Danish language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-EL		Dis of custom menu Greek file version
Lv.2	Details	To display the version of Greek language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-ET		Dis of custom menu Estonian file version
Lv.2	Details	To display the version of Estonian language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-FI		Dis of custom menu Finnish file version
Lv.2	Details	To display the version of Finnish language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-HU		Dis of custom menu Hungarian file ver
Lv.2	Details	To display the version of Hungarian language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-NL		Dis of custom menu Dutch file version
Lv.2	Details	To display the version of Dutch language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-NO		Dis of custom menu Norwegian file ver
Lv.2	Details	To display the version of Norwegian language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-PL		Dis of custom menu Polish file version
Lv.2	Details	To display the version of Polish language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99



COPIER > DISPLAY > VERSION		
CSTMN-PT		Dis of custom menu Portuguese file ver
Lv.2	Details	To display the version of Portuguese language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-RU		Dis of custom menu Russian file version
Lv.2	Details	To display the version of Russian language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-SL		Dis of custom menu Slovenian file ver
Lv.2	Details	To display the version of Slovenian language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-SV		Dis of custom menu Swedish file version
Lv.2	Details	To display the version of Swedish language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-ID		Dis of custom menu Indonesian file ver
Lv.2	Details	To display the version of Indonesian language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-BU		Dis of custom menu Bulgarian file ver
Lv.2	Details	To display the version of Bulgarian language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-CR		Dis of custom menu Croatian file version
Lv.2	Details	To display the version of Croatian language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-RM		Dis of custom menu Romanian file version
Lv.2	Details	To display the version of Romanian language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-SK		Dis of custom menu Slovak file version
Lv.2	Details	To display the version of Slovak language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

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CSTMN-TK		Dis of custom menu Turkish file version
Lv.2	Details	To display the version of Turkish language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-CA		Dis of custom menu Catalan file version
Lv.2	Details	To display the version of Catalan language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-TH		Dis of custom menu Thai file version
Lv.2	Details	To display the version of Thai language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-VN		Dis of custom menu Vietnamese file ver
Lv.2	Details	To display the version of Vietnamese language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-FR		Dis of accessibility French file version
Lv.1	Details	To display the version of French language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-IT		Dis 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		Dis of accessibility German file version
Lv.1	Details	To display the version of German language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-ES		Dis 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		Dis 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



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ACSBT-TW		Dis 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		Dis of accessibility Korean file version
Lv.2	Details	To display the version of Korean language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-CS		Dis 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
ACSBT-DA		Dis of accessibility Danish file version
Lv.2	Details	To display the version of Danish language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-EL		Dis 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		Dis 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		Dis 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		Dis 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		Dis 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

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ACSBT-NO		Dis 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		Dis of accessibility Polish file version
Lv.2	Details	To display the version of Polish language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-PT		Dis of 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
ACSBT-RU		Dis 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		Dis 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		Dis 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		Dis of 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		Dis 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		Dis 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

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ACSBT-RM		Dis 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		Dis of 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		Dis 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
ACSBT-CA		Dis 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		Dis 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		Dis of accessibility Vietnamese file ver
Lv.2	Details	To display the version of Vietnamese language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ERS-FR		Display of ERS French file version
Lv.1	Details	To display the version of French language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
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
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

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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
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
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
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
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
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
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
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
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
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

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ERS-NL		Display of ERS Dutch file version
Lv.2	Details	To display the version of Dutch language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
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
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
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
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
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
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
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
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
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

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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
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
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
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
ERS-TH		Display of ERS Thai file version
Lv.2	Details	To display the version of Thai language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ERS-VN		Display of ERS Vietnamese file version
Lv.2	Details	To display the version of Vietnamese language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-FR		Display of UAC French file version
Lv.1	Details	To display the version of French language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-IT		Display of UAC Italian file version
Lv.1	Details	To display the version of Italian language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-DE		Display of UAC German file version
Lv.1	Details	To display the version of German language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-ES		Display of UAC Spanish file version
Lv.1	Details	To display the version of Spanish language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

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NLS-ZH		Display of UAC Chinese file ver:smpl
Lv.2	Details	To display the version of simplified Chinese language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-TW		Display of UAC Chinese file ver:trad
Lv.2	Details	To display the version of traditional Chinese language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-KO		Display of UAC Korean file version
Lv.2	Details	To display the version of Korean language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-CS		Display of UAC Czech file version
Lv.2	Details	To display the version of Czech language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-DA		Display of UAC Danish file version
Lv.2	Details	To display the version of Danish language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-EL		Display of UAC Greek file version
Lv.2	Details	To display the version of Greek language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-ET		Display of UAC Estonian file version
Lv.2	Details	To display the version of Estonian language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-FI		Display of UAC Finnish file version
Lv.2	Details	To display the version of Finnish language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-HU		Display of UAC Hungarian file version
Lv.2	Details	To display the version of Hungarian language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-NL		Display of UAC Dutch file version
Lv.2	Details	To display the version of Dutch language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

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NLS-NO		Display of UAC Norwegian file version
Lv.2	Details	To display the version of Norwegian language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-PL		Display of UAC Polish file version
Lv.2	Details	To display the version of Polish language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-PT		Display of UAC Portuguese file ver
Lv.2	Details	To display the version of Portuguese language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-RU		Display of UAC Russian file version
Lv.2	Details	To display the version of Russian language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-SL		Display of UAC Slovenian file version
Lv.2	Details	To display the version of Slovenian language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-SV		Display of UAC Swedish file version
Lv.2	Details	To display the version of Swedish language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-ID		Display of UAC Indonesian file ver
Lv.2	Details	To display the version of Indonesian language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-BU		Display of UAC Bulgarian file version
Lv.2	Details	To display the version of Bulgarian language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-CR		Display of UAC Croatian file version
Lv.2	Details	To display the version of Croatian language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-RM		Display of UAC Romanian file version
Lv.2	Details	To display the version of Romanian language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

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NLS-SK		Display of UAC Slovak file version
Lv.2	Details	To display the version of Slovak language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-TK		Display of UAC Turkish file version
Lv.2	Details	To display the version of Turkish language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-CA		Display of UAC Catalan file version
Lv.2	Details	To display the version of Catalan language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BCT		Display of self diagnosis tool version
Lv.1	Details	To display the version of self diagnosis tool.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ASR-ES		Dis of Spanish ASR dictionary version
Lv.1	Details	To display the version of Spanish automatic speech recognition dictionary. “--.--” is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ASR-FR		Dis of French ASR dictionary version
Lv.1	Details	To display the version of French automatic speech recognition dictionary. “--.--” is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ASR-IT		Dis of Italian ASR dictionary version
Lv.1	Details	To display the version of Italian automatic speech recognition dictionary. “--.--” is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ASR-DE		Dis of German ASR dictionary version
Lv.1	Details	To display the version of German automatic speech recognition dictionary. “--.--” is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-TH		Display of Thai language file version
Lv.2	Details	To display the version of Thai language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

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LANG-VN		Display of Vietnamese language file ver
Lv.2	Details	To display the version of Vietnamese language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-FR		Display of BOX appli French file version
Lv.1	Details	To display the version of French language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-IT		Dis 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		Dis 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		Dis 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		Dis 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
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



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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	Dis 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	Dis 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	Dis 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	Dis 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
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

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BOX-RU	Dis 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	Dis 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	Dis 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	Dis 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	Dis 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	Dis 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
BOX-TK	Dis 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

COPIER > DISPLAY > VERSION		
BOX-CA		Dis 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		Dis 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		Dis of BOX appli Vietnamese file version
Lv.2	Details	To display the version of Vietnamese language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
WSDS-AP		Display of WSD-SCAN (JAVA UI) version
Lv.1	Details	To display the version of WSD-SCAN application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-TH		Display of UAC Thai file version
Lv.2	Details	To display the version of Thai language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-VN		Display of UAC Vietnamese file version
Lv.2	Details	To display the version of Vietnamese language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
RPTL-CS		Display of RUI portal version
Lv.2	Details	To display the RUI portal version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99

COPIER > DISPLAY > VERSION		
RPTL-DA		Display of RUI portal version
Lv.2	Details	To display the RUI portal version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-EL		Display of RUI portal version
Lv.2	Details	To display the RUI portal version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-ET		Display of RUI portal version
Lv.2	Details	To display the RUI portal version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-FI		Display of RUI portal version
Lv.2	Details	To display the RUI portal version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-HU		Display of RUI portal version
Lv.2	Details	To display the RUI portal version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-NL		Display of RUI portal version
Lv.2	Details	To display the RUI portal version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-NO		Display of RUI portal version
Lv.2	Details	To display the RUI portal version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-PL		Display of RUI portal version
Lv.2	Details	To display the RUI portal version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-PT		Display of RUI portal version
Lv.2	Details	To display the RUI portal version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-RU		Display of RUI portal version
Lv.2	Details	To display the RUI portal version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-SL		Display of RUI portal version
Lv.2	Details	To display the RUI portal version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99



COPIER > DISPLAY > VERSION		
RPTL-SV		Display of RUI portal version
Lv.2	Details	To display the RUI portal version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-ID		Display of RUI portal version
Lv.2	Details	To display the RUI portal version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-BU		Display of RUI portal version
Lv.2	Details	To display the RUI portal version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-CR		Display of RUI portal version
Lv.2	Details	To display the RUI portal version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-RM		Display of RUI portal version
Lv.2	Details	To display the RUI portal version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-SK		Display of RUI portal version
Lv.2	Details	To display the RUI portal version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-TK		Display of RUI portal version
Lv.2	Details	To display the RUI portal version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-CA		Display of RUI portal version
Lv.2	Details	To display the RUI portal version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-TH		Display of RUI portal version
Lv.2	Details	To display the RUI portal version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-VN		Display of RUI portal version
Lv.2	Details	To display the RUI portal version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99

T-8-3

## USER

COPIER > DISPLAY > USER	
SPDTYPE	Dis of Ctrlr Board engine speed type
Lv.1	Details
	To display the engine speed type (ppm) of Controller Board.
	Use case
	When checking the engine speed type of Controller Board
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
	0 to 2 0: OFF (Only at the time of factory shipment, not connected to the UGW server), 1: ON (Available), 2: OFF (Not available)
	Related service mode
	COPIER> FUNCTION> INSTALL> BRWS-ACT

T-8-4

## 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 connected, 1: Connected
SORTER	
Connect state of Finisher-related option	
Lv.1	Details
	To display the connecting state of Finisher-related options.
	Use case
	When checking the connection of Finisher-related options
	Display/adj/set range
	Left column (connecting state of Finisher-related options): 1 to 5 1: Without Saddle 2: With Saddle, without Folding Unit 3: With Saddle and Inserter, without Folding Unit 4: With Saddle and Folding Unit, without Inserter 5: With Saddle, Inserter and Folding Unit Right column (connecting state of Finisher-belonged Inserter): 0 to 4 0: no hole, 1: 2-hole, 2: 2/3-hole, 3: 4-hole, 4: 4-hole (SW)
DECK	
Dis of Paper Deck connection state	
Lv.1	Details
	To display the connection state of the Paper Deck.
	Use case
	When checking the connection between the machine and the Paper Decks
	Display/adj/set range
	0 to 5 0: Not connected, 1: Connected, 2 to 4: Not used, 5: Multi-purpose Tray only
CARD	
Dis of connection state of Card Reader	
Lv.1	Details
	To display the connecting state of Card Reader.
	Use case
	When checking the connection between the machine and the Card Reader
	Display/adj/set range
	0 to 1 0: No card is inserted while the Card Reader is connected. (Copy is not available.) 1: Card Reader is not connected, or card is inserted while the Card Reader is connected. (Copy is available.)
RAM	
Display of MNCON PCB memory capacity	
Lv.1	Details
	To display the memory capacity of the Main Controller PCB.
	Use case
	When checking the memory capacity of the machine
	Display/adj/set range
	Numeric value
	Unit
	MB
COINROBO	
Dis of Coin Manager connection state	
Lv.1	Details
	To display the connecting state of the Coin Manager.
	Use case
	When checking the connection between the machine and the Coin Manager
	Display/adj/set range
	0 to 1 0: Not connected, 1: Connected

COPIER > DISPLAY > ACC-STS		
NIB		Display of Network PCB connection state
Lv.1	Details	To display the connection state of the Network PCB.
	Use case	When checking the connection between the machine and the Network PCB
	Display/adj/set range	0 to 3 0: Not connected, 1: Ethernet PCB connected, 2: Token Ring PCB connected, 3: Ethernet PCB + Token Ring PCB connected
NETWARE		Install state dis of NetWare firmware
Lv.1	Details	To display the installation state of NetWare firmware.
	Use case	When checking whether NetWare firmware is installed to the machine
	Display/adj/set range	0 to 1 0: Not installed, 1: Installed
SEND		Display of SEND support PCB existence
Lv.1	Details	To display whether there is a PCB to support SEND function. SEND function can be used only when the PCB is mounted.
	Use case	When checking the connection between the machine and the PCB that supports SEND function
	Display/adj/set range	0 to 1 0: Not installed, 1: Installed
HDD		Display of HDD model name
Lv.1	Details	To display the model name of HDD.
	Use case	When checking the model name of HDD used on the machine
	Display/adj/set range	Character string
PCI1		Display of PCI1-connected PCB name
Lv.1	Details	To display the name of the PCB that is connected to PCI1.
	Use case	When checking the name of the PCB that is connected to PCI1
	Display/adj/set range	-: No PCB connected Voice Board: Voice PCB 3DES Board: Encryption PCB 1Gbit-Board: Giga Ethernet PCB
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

COPIER > DISPLAY > ACC-STS		
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
	Unit	MB

T-8-5

## 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 2 that detects the outside air.
	Use case	When checking the temperature outside the machine
	Display/adj/set range	0 to 50
	Unit	deg C
	Appropriate target value	20 to 27
HUM		Display of outside humidity
Lv.1	Details	To display the humidity outside the machine. This is measured by the Environment Sensor 2 that detects the outside air.
	Use case	When checking the humidity outside the machine
	Display/adj/set range	0 to 100
	Unit	%
	Appropriate target value	30 to 70
ABS-HUM		Display of outside moisture amount
Lv.1	Details	To display the absolute moisture content outside the machine. This is measured by the Environment Sensor 2 that detects the outside air.
	Use case	When checking the moisture content outside the machine
	Display/adj/set range	0 to 100
	Unit	g/m3
	Appropriate target value	0 to 22
FIX-C		Display of Fixing Film temperature
Lv.1	Details	To display the center temperature of the Fixing Film detected by the Main Thermistor 2.
	Use case	When checking the temperature of Fixing Film
	Display/adj/set range	0 to 300
	Unit	deg C
FIX-E		Dis of Fixing Heater center temperature
Lv.1	Details	To display the center temperature of the Fixing Heater detected by the Main Thermistor 1.
	Use case	When checking the temperature at the center of Fixing Heater
	Display/adj/set range	0 to 300
	Unit	deg C
FIX-E2		Dis of Fixing Heater front edge temp
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
	Display/adj/set range	0 to 300
	Unit	deg C

COPIER > DISPLAY > ANALOG		
TEMP2		Display of inside temperature
Lv.1	Details	To display the temperature inside the machine measured by the Environment Sensor 1.
	Use case	When checking the temperature inside the machine
	Display/adj/set range	0 to 100
	Unit	deg C
	Appropriate target value	20 to 27
HUM2		Display of inside humidity
Lv.1	Details	To display the humidity inside the machine measured by the Environment Sensor 1.
	Use case	When checking the humidity inside the machine
	Display/adj/set range	0 to 100
	Unit	%
	Appropriate target value	30 to 70
FIX-E3		Dis of Fixing Heater rear edge temp
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
	Display/adj/set range	0 to 300
	Unit	deg C

T-8-6

## ■ CST-ST5

COPIER > DISPLAY > CST-ST5	
WIDTH-MF	Dis of Multi-purpose Tray ppr width size
Lv.2	Details
	To display the paper width size set on the Multi-purpose Tray.
	Use case
	When checking the paper width side set on the Multi-purpose Tray
	Display/adj/set range
	Numeric value
	Unit
	mm

T-8-7

## ■ HV-ST5

COPIER > DISPLAY > HV-ST5	
1ATVC-Y	Dis of primary transfer current (Y)
Lv.2	Details
	To display the decuple value of the current flow to the Primary Transfer Roller (Y) by the primary transfer ATVC control. When the two values are out of the target value range (50 to 700), clear the log information for the appropriate control (COPIER> FUNCTION> CLEAR> 1TR-CLR). If the two values are both small, the Primary Transfer Roller may have reached the end of life.
	Use case
	When estimating the life of Primary Transfer Roller based on the displayed value
	Display/adj/set range
	0 to 900
	Unit
	uA
	Appropriate target value
	50 to 700
	Related service mode
	COPIER> FUNCTION> CLEAR> 1TR-CLR
1ATVC-M	Dis of primary transfer current (M)
Lv.2	Details
	To display the decuple value of the current flow to the Primary Transfer Roller (M) by the primary transfer ATVC control. When the two values are out of the target value range (50 to 700), clear the log information for the appropriate control (COPIER> FUNCTION> CLEAR> 1TR-CLR). If the two values are both small, the Primary Transfer Roller may have reached the end of life.
	Use case
	When estimating the life of Primary Transfer Roller based on the displayed value
	Display/adj/set range
	0 to 900
	Unit
	uA
	Appropriate target value
	50 to 700
	Related service mode
	COPIER> FUNCTION> CLEAR> 1TR-CLR
1ATVC-C	Dis of primary transfer current (C)
Lv.2	Details
	To display the decuple value of the current flow to the Primary Transfer Roller (C) by the primary transfer ATVC control. When the two values are out of the target value range (50 to 700), clear the log information for the appropriate control (COPIER> FUNCTION> CLEAR> 1TR-CLR). If the two values are both small, the Primary Transfer Roller may have reached the end of life.
	Use case
	When estimating the life of Primary Transfer Roller based on the displayed value
	Display/adj/set range
	0 to 900
	Unit
	uA
	Appropriate target value
	50 to 700
	Related service mode
	COPIER> FUNCTION> CLEAR> 1TR-CLR

COPIER > DISPLAY > HV-STS	
1ATVC-K4	Dis pmry trns current(Bk): full clr mod
Lv.2	Details
	To display the decuple value of the current flown to the Primary Transfer Roller (Bk) by the primary transfer ATVC control in full color mode. When the two values are out of the target value range (50 to 700), clear the log information for the appropriate control (COPIER> FUNCTION> CLEAR> 1TR-CLR). If the two values are both small, the Primary Transfer Roller may have reached the end of life.
	Use case
	When estimating the life of Primary Transfer Roller based on the displayed value
	Display/adj/set range
	0 to 900
	Unit
	uA
	Appropriate target value
	50 to 700
	Related service mode
	COPIER> FUNCTION> CLEAR> 1TR-CLR
2ATVC	Dis secondary transfer ATVC tgt current
Lv.2	Details
	To display the decuple value of the voltage flown to the Secondary Transfer Outer Roller derived from the secondary transfer ATVC control. As the usage of the Secondary Transfer Outer Roller is extended, the value decreases. When the two values are out of the target value range (50 to 700), clear the log information for the appropriate control (COPIER> FUNCTION> CLEAR> 2TR-CLR). If the two values are both small, the Secondary Transfer Roller may have reached the end of life.
	Use case
	When identifying the cause at the occurrence of an image failure
	Display/adj/set range
	0 to 900
	Unit
	uA
	Appropriate target value
	50 to 700
	Related service mode
	COPIER> FUNCTION> CLEAR> 2TR-CLR
THCK-Y	Display of Y Drum abrasion level
Lv.1	Details
	To display the Y Photosensitive Drum abrasion level calculated from the drum film thickness detection results. The drum film thickness detection results are reflected to the controls of charging, development and transfer.
	Use case
	- When checking the validity of the setting values for transfer and development - When checking the change in the drum film thickness against the Drum Cartridge life
	Display/adj/set range
	0 to 20
	Unit
	um
	Appropriate target value
	0 to 15

COPIER > DISPLAY > HV-STS	
THCK-M	Display of M Drum abrasion level
Lv.1	Details
	To display the M Photosensitive Drum abrasion level calculated from the drum film thickness detection results. The drum film thickness detection results are reflected to the controls of charging, development and transfer.
	Use case
	- When checking the validity of the setting values for transfer and development - When checking the change in the drum film thickness against the Drum Cartridge life
	Display/adj/set range
	0 to 20
	Unit
	um
	Appropriate target value
	0 to 15
THCK-C	Display of C Drum abrasion level
Lv.1	Details
	To display the C Photosensitive Drum abrasion level calculated from the drum film thickness detection results. The drum film thickness detection results are reflected to the controls of charging, development and transfer.
	Use case
	- When checking the validity of the setting values for transfer and development - When checking the change in the drum film thickness against the Drum Cartridge life
	Display/adj/set range
	0 to 20
	Unit
	um
	Appropriate target value
	0 to 15

T-8-8

 CCD

COPIER > DISPLAY > CCD	
TARGET-B	Shading target value (B)
Lv.2	<p>Details</p> <p>To display the shading target value of Blue. Continuous display of 0 (minimum) or FFFF (maximum) is considered a failure of the Reader Controller PCB. 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.</p> <p>Use case</p> <ul style="list-style-type: none"> <li>- When replacing the Reader Controller PCB</li> <li>- At scanned image failure</li> </ul> <p>Display/adj/set range</p> <p>0 to FFFF</p> <p>Appropriate target value</p> <p>512 to 2047</p>
TARGET-G	Shading target value (G)
Lv.2	<p>Details</p> <p>To display the target value of Green. Continuous display of 0 (minimum) or FFFF (maximum) is considered a failure of the Reader 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.</p> <p>Use case</p> <ul style="list-style-type: none"> <li>- When replacing the Reader Controller PCB</li> <li>- At scanned image failure</li> </ul> <p>Display/adj/set range</p> <p>0 to FFFF</p> <p>Appropriate target value</p> <p>512 to 2047</p>
TARGET-R	Shading target value (R)
Lv.2	<p>Details</p> <p>To display the shading target value of Red. Continuous display of 0 (minimum) or FFFF (maximum) is considered a failure of the Reader Controller PCB. 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.</p> <p>Use case</p> <ul style="list-style-type: none"> <li>- When replacing the Reader Controller PCB</li> <li>- At scanned image failure</li> </ul> <p>Display/adj/set range</p> <p>0 to FFFF</p> <p>Appropriate target value</p> <p>512 to 2047</p>
GAIN-OB	Gain level of Img Sensor odd bit(B): frt
Lv.2	<p>Details</p> <p>To display the Blue gain level adjustment value in odd-numbered bit on CMOS Sensor of Scanner Unit (paper front). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB. 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.</p> <p>Use case</p> <ul style="list-style-type: none"> <li>- When replacing the Reader Controller PCB</li> <li>- At scanned image failure</li> </ul> <p>Display/adj/set range</p> <p>0 to 143</p> <p>Appropriate target value</p> <p>0 to 143</p>

COPIER > DISPLAY > CCD	
GAIN-OG	Gain level of Img Sensor odd bit(G): frt
Lv.2	<p>Details</p> <p>To display the Green gain level adjustment value in odd-numbered bit on CMOS Sensor of Scanner Unit (paper front). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB. 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.</p> <p>Use case</p> <ul style="list-style-type: none"> <li>- When replacing the Reader Controller PCB</li> <li>- At scanned image failure</li> </ul> <p>Display/adj/set range</p> <p>0 to 143</p> <p>Appropriate target value</p> <p>0 to 143</p>
GAIN-OR	Gain level of Img Sensor odd bit(R): frt
Lv.2	<p>Details</p> <p>To display the Red gain level adjustment value in odd-numbered bit on CMOS Sensor of Scanner Unit (paper front). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB. 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.</p> <p>Use case</p> <ul style="list-style-type: none"> <li>- When replacing the Reader Controller PCB</li> <li>- At scanned image failure</li> </ul> <p>Display/adj/set range</p> <p>0 to 143</p> <p>Appropriate target value</p> <p>0 to 143</p>
GAIN-EB	Gain level of Img Sensor even bit(B): frt
Lv.2	<p>Details</p> <p>To display the Blue gain level adjustment value in even-numbered bit on CMOS Sensor of Scanner Unit (paper front). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB. 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.</p> <p>Use case</p> <ul style="list-style-type: none"> <li>- When replacing the Reader Controller PCB</li> <li>- At scanned image failure</li> </ul> <p>Display/adj/set range</p> <p>0 to 143</p> <p>Appropriate target value</p> <p>0 to 143</p>



COPIER > DISPLAY > CCD		
GAIN-EG		Gain level of Img Sensor even bit(G):frt
Lv.2	Details	To display the Green gain level adjustment value in even-numbered bit on CMOS Sensor of Scanner Unit (paper front). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB. 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	- When replacing the Reader Controller PCB - At scanned image failure
	Display/adj/set range	0 to 143
	Appropriate target value	0 to 143
	GAIN-ER	
Lv.2	Details	To display the Red gain level adjustment value in even-numbered bit on CMOS Sensor of Scanner Unit (paper front). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB. 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	- When replacing the Reader Controller PCB - At scanned image failure
	Display/adj/set range	0 to 143
	Appropriate target value	0 to 143
	LAMP-BW	
Lv.2	Details	To display the LED light intensity adjustment value of Scanner Unit (paper front) in B&W scanning mode.
	Use case	When image failure occurs at front side scanning in black mode
	Display/adj/set range	55 to 275
	Appropriate target value	100 to 275
	LAMP-CL	
Lv.2	Details	To display the LED light intensity adjustment value of Scanner Unit (paper front) in color scanning mode.
	Use case	When image failure occurs at front side scanning in color mode
	Display/adj/set range	55 to 275
	Appropriate target value	100 to 275
	LAMP2-BW	
Lv.2	Details	To display the LED light intensity adjustment value of Scanner Unit (paper back) in B&W scanning mode.
	Use case	When image failure occurs at back side scanning in black mode.
	Display/adj/set range	55 to 275
	Appropriate target value	100 to 275

COPIER > DISPLAY > CCD		
LAMP2-CL		Scan Lamp intensity adj VL(color): back
Lv.2	Details	To display the LED light intensity adjustment value of Scanner Unit (paper back) in color scanning mode.
	Use case	When image failure occurs at back side scanning in color mode
	Display/adj/set range	55 to 275
	Appropriate target value	100 to 275
	OFST-BW	
Lv.2	Details	To display the CMOS Sensor offset value at B&W scanning.
	Use case	When image failure occurs at front side scanning in black mode
	Display/adj/set range	0 to 116
	Appropriate target value	0 to 116
	OFST-CL	
Lv.2	Details	To display the CMOS Sensor offset value at color scanning.
	Use case	When image failure occurs at front side scanning in color mode
	Display/adj/set range	0 to 116
	Appropriate target value	0 to 116
	OFST2-BW	
Lv.2	Details	To display the CMOS Sensor offset value at B&W scanning.
	Use case	When image failure occurs at back side scanning in black mode.
	Display/adj/set range	0 to 116
	Appropriate target value	0 to 116
	GAIN-BW1	
Lv.2	Details	To display the CMOS Sensor B&W gain level adjustment value 1 of Scanner Unit (paper front).
	Use case	When image failure occurs at front side scanning in black mode
	Display/adj/set range	0 to 143
	Appropriate target value	0 to 143
	GAIN-BW2	
Lv.2	Details	To display the CMOS Sensor B&W gain level adjustment value 2 of Scanner Unit (paper front).
	Use case	When image failure occurs at front side scanning in black mode
	Display/adj/set range	0 to 143
	Appropriate target value	0 to 143
	GAIN-BW3	
Lv.2	Details	To display the CMOS Sensor B&W gain level adjustment value 3 of Scanner Unit (paper front).
	Use case	When image failure occurs at front side scanning in black mode
	Display/adj/set range	0 to 143
	Appropriate target value	0 to 143
	GAIN-BW4	
Lv.2	Details	To display the CMOS Sensor B&W gain level adjustment value 4 of Scanner Unit (paper front).
	Use case	When image failure occurs at front side scanning in black mode
	Display/adj/set range	0 to 143
	Appropriate target value	0 to 143

COPIER > DISPLAY > CCD		
GAIN2BW1		Img Sensor gain level adj VL1(B&W): Back
Lv.2	Details	To display the CMOS Sensor B&W gain level adjustment value 1 of Scanner Unit (paper back).
	Use case	When image failure occurs at back side scanning in black mode.
	Display/adj/set range	0 to 143
	Appropriate target value	0 to 143
GAIN2BW2		Img Sensor gain level adj VL2(B&W): Back
Lv.2	Details	To display the CMOS Sensor B&W gain level adjustment value 2 of Scanner Unit (paper back).
	Use case	When image failure occurs at back side scanning in black mode.
	Display/adj/set range	0 to 143
	Appropriate target value	0 to 143
GAIN2BW3		Img Sensor gain level adj VL3(B&W): Back
Lv.2	Details	To display the CMOS Sensor B&W gain level adjustment value 3 of Scanner Unit (paper back).
	Use case	When image failure occurs at back side scanning in black mode.
	Display/adj/set range	0 to 143
	Appropriate target value	0 to 143
GAIN2BW4		Img Sensor gain level adj VL4(B&W): Back
Lv.2	Details	To display the CMOS Sensor B&W gain level adjustment value 4 of Scanner Unit (paper back).
	Use case	When image failure occurs at back side scanning in black mode.
	Display/adj/set range	0 to 143
	Appropriate target value	0 to 143
GAIN2-OR		Gain level of Img Sensor odd bit(R): bck
Lv.2	Details	To display the Red gain level adjustment value in odd-numbered bit on CMOS Sensor of Scanner Unit (paper back). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB.
	Use case	- When replacing the Reader Controller PCB - At scanned image failure
	Display/adj/set range	0 to 143
	Appropriate target value	0 to 143
GAIN2-OG		Gain level of Img Sensor odd bit(G): bck
Lv.2	Details	To display the Green gain level adjustment value in odd-numbered bit on CMOS Sensor of Scanner Unit (paper back). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB.
	Use case	- When replacing the Reader Controller PCB - At scanned image failure
	Display/adj/set range	0 to 143
	Appropriate target value	0 to 143

COPIER > DISPLAY > CCD		
GAIN2-OB		Gain level of Img Sensor odd bit(B): bck
Lv.2	Details	To display the Blue gain level adjustment value in odd-numbered bit on CMOS Sensor of Scanner Unit (paper back). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB.
	Use case	- When replacing the Reader Controller PCB - At scanned image failure
	Display/adj/set range	0 to 143
	Appropriate target value	0 to 143
GAIN2-ER		Gain level of Img Sensor even bit(R):bck
Lv.2	Details	To display the Red gain level adjustment value in even-numbered bit on CMOS Sensor of Scanner Unit (paper back). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB.
	Use case	- When replacing the Reader Controller PCB - At scanned image failure
	Display/adj/set range	0 to 143
	Appropriate target value	0 to 143
GAIN2-EG		Gain level of Img Sensor even bit(G):bck
Lv.2	Details	To display the Green gain level adjustment value in even-numbered bit on CMOS Sensor of Scanner Unit (paper back). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB.
	Use case	- When replacing the Reader Controller PCB - At scanned image failure
	Display/adj/set range	0 to 143
	Appropriate target value	0 to 143
GAIN2-EB		Gain level of Img Sensor even bit(B):bck
Lv.2	Details	To display the Blue gain level adjustment value in even-numbered bit on CMOS Sensor of Scanner Unit (paper back). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB.
	Use case	- When replacing the Reader Controller PCB - At scanned image failure
	Display/adj/set range	0 to 143
	Appropriate target value	0 to 143
OFST2-CL		Img Sensor offset value (color) [Back]
Lv.2	Details	To display the CMOS Sensor offset value at color scanning.
	Use case	When image failure occurs at back side scanning in color mode
	Display/adj/set range	0 to 116
	Appropriate target value	0 to 116

T-8-9

## DPOT

COPIER > DISPLAY > DPOT		
2TR-PPR	Dis of sec trns ATVC ppr allotted voltg	
Lv.2	Details	To display the paper allotted voltage set by the latest secondary transfer Full ATVC control. The appropriate range may be exceeded due to wrong media setting.
	Use case	When an inquiry is received from the quality evaluation division
	Display/adj/set range	0 to 5000
	Unit	V
2TR-BASE	Dis of sec transfer ATVC base voltage	
Lv.2	Details	To display the base voltage set by the latest secondary transfer Full ATVC control. The appropriate range may be exceeded due to wrong media setting.
	Use case	When an inquiry is received from the quality evaluation division
	Display/adj/set range	0 to 6000
	Unit	V
1TR-DC-Y	Dis of primary transfer voltage (Y)	
Lv.2	Details	To display the voltage lastly applied to the Primary Transfer Roller (Y).
	Use case	When transfer failure occurs due to the primary transfer
	Display/adj/set range	0 to 3000
	Unit	V
1TR-DC-M	Dis of primary transfer voltage (M)	
Lv.2	Details	To display the voltage lastly applied to the Primary Transfer Roller (M).
	Use case	When transfer failure occurs due to the primary transfer
	Display/adj/set range	0 to 3000
	Unit	V
1TR-DC-C	Dis of primary transfer voltage (C)	
Lv.2	Details	To display the voltage lastly applied to the Primary Transfer Roller (C).
	Use case	When transfer failure occurs due to the primary transfer
	Display/adj/set range	0 to 3000
	Unit	V
1TR-DC-K	Dis of primary transfer voltage (Bk)	
Lv.2	Details	To display the voltage lastly applied to the Primary Transfer Roller (Bk).
	Use case	When transfer failure occurs due to the primary transfer
	Display/adj/set range	0 to 3000
	Unit	V
Appropriate target value	300 to 4000	

COPIER > DISPLAY > DPOT		
CHG-AC-Y	Display of primary charging AC bias (Y)	
Lv.2	Details	To display the primary charging AC bias lastly applied to the Primary Charging Roller (Y).
	Use case	When an image failure occurs due to charging failure
	Display/adj/set range	0 to 3000
	Unit	V
Appropriate target value	300 to 3000	
CHG-AC-M	Display of primary charging AC bias (M)	
Lv.2	Details	To display the primary charging AC bias lastly applied to the Primary Charging Roller (M).
	Use case	When an image failure occurs due to charging failure
	Display/adj/set range	0 to 3000
	Unit	V
Appropriate target value	1200 to 2500	
CHG-AC-C	Display of primary charging AC bias (C)	
Lv.2	Details	To display the primary charging AC bias lastly applied to the Primary Charging Roller (C).
	Use case	When an image failure occurs due to charging failure
	Display/adj/set range	0 to 3000
	Unit	V
Appropriate target value	1200 to 2500	
CHG-AC-K	Display of primary charging AC bias (Bk)	
Lv.2	Details	To display the primary charging AC bias lastly applied to the Primary Charging Roller (Bk).
	Use case	When an image failure occurs due to charging failure
	Display/adj/set range	0 to 3000
	Unit	V
Appropriate target value	1200 to 2500	
LPWR-Y	Display of laser power (Y)	
Lv.2	Details	To display Y laser power determined by D-max control. FF display with low image density is considered that the Photosensitive Drum may be near the end of life.
	Use case	When the image density is low
	Display/adj/set range	00 to FF (hexadecimal)
	Appropriate target value	60 to FF
LPWR-M	Display of laser power (M)	
Lv.2	Details	To display M laser power determined by D-max control. FF display with low image density is considered that the Photosensitive Drum may be near the end of life.
	Use case	When the image density is low
	Display/adj/set range	00 to FF (hexadecimal)
	Appropriate target value	60 to FF

COPIER > DISPLAY > DPOT		
LPWR-C		Display of laser power (C)
Lv.2	Details	To display C laser power determined by D-max control. FF display with low image density is considered that the Photosensitive Drum may be near the end of life.
	Use case	When the image density is low
	Display/adj/set range	00 to FF (hexadecimal)
	Appropriate target value	60 to FF
LPWR-K		Display of laser power (Bk)
Lv.2	Details	To display Bk laser power determined by D-max control. FF display with low image density is considered that the Photosensitive Drum may be near the end of life.
	Use case	When the image density is low
	Display/adj/set range	00 to FF (hexadecimal)
	Appropriate target value	60 to FF
PVCONT-Y		Dis of target patch contrast potntl (Y)
Lv.2	Details	To display the target Y patch contrast potential. Check the target patch contrast potential to check whether the toner supply control is properly executed at image density failure. Investigate the other possible factors if the value is within the defined range.
	Use case	- When analyzing the cause of the image density failure - When analyzing the cause of a problem
	Display/adj/set range	0 to 255
	Unit	V
	Appropriate target value	20 to 120
PVCONT-M		Dis of target patch contrast potntl (M)
Lv.2	Details	To display the target M patch contrast potential. Check the target patch contrast potential to check whether the toner supply control is properly executed at image density failure. Investigate the other possible factors if the value is within the defined range.
	Use case	- When analyzing the cause of the image density failure - When analyzing the cause of a problem
	Display/adj/set range	0 to 255
	Unit	V
	Appropriate target value	20 to 120

COPIER > DISPLAY > DPOT		
PVCONT-C		Dis of target patch contrast potntl (C)
Lv.2	Details	To display the target C patch contrast potential. Check the target patch contrast potential to check whether the toner supply control is properly executed at image density failure. Investigate the other possible factors if the value is within the defined range.
	Use case	- When analyzing the cause of the image density failure - When analyzing the cause of a problem
	Display/adj/set range	0 to 255
	Unit	V
	Appropriate target value	20 to 120
PVCONT-K		Dis of target patch contrast potntl (Bk)
Lv.2	Details	To display the target Bk patch contrast potential. Check the target patch contrast potential to check whether the toner supply control is properly executed at image density failure. Investigate the other possible factors if the value is within the defined range.
	Use case	- When analyzing the cause of the image density failure - When analyzing the cause of a problem
	Display/adj/set range	0 to 255
	Unit	V
	Appropriate target value	20 to 120
VRATE-Y		Display of D-max Y-color Vd gain value
Lv.1	Details	To display the gain value for the Y Vd set by D-max PASCAL/D-max control against the environment table value.
	Use case	When the image density is not appropriate
	Display/adj/set range	-100 to 100
	Unit	%
VRATE-M		Display of D-max M-color Vd gain value
Lv.1	Details	To display the gain value for the M Vd set by D-max PASCAL/D-max control against the environment table value.
	Use case	When the image density is not appropriate
	Display/adj/set range	-100 to 100
	Unit	%
VRATE-C		Display of D-max C-color Vd gain value
Lv.1	Details	To display the gain value for the C Vd set by D-max PASCAL/D-max control against the environment table value.
	Use case	When the image density is not appropriate
	Display/adj/set range	-100 to 100
	Unit	%
VRATE-K		Display of D-max Bk-color Vd gain value
Lv.1	Details	To display the gain value for the Bk Vd set by D-max PASCAL/D-max control against the environment table value.
	Use case	When the image density is not appropriate
	Display/adj/set range	-100 to 100
	Unit	%

COPIER > DISPLAY > DPOT		
LPGAIN-Y	Dis of Y-color laser power gain value	
Lv.2	Details	To display the gain value of Y laser power by D-max control.
	Use case	When checking D-max control results
	Display/adj/set range	-100 to 100
	Unit	%
	Appropriate target value	0
	Related service mode	COPIER> DISPLAY> DPOT> LPGAIN-M, LPGAIN-C
LPGAIN-M	Dis of M-color laser power gain value	
Lv.2	Details	To display gain value of M laser power by D-max control.
	Use case	When checking D-max control results
	Display/adj/set range	-100 to 100
	Unit	%
	Appropriate target value	0
	Related service mode	COPIER> DISPLAY> DPOT> LPGAIN-Y, LPGAIN-C
LPGAIN-C	Dis of C-color laser power gain value	
Lv.2	Details	To display gain value of C laser power by D-max control.
	Use case	When checking D-max control results
	Display/adj/set range	-100 to 100
	Unit	%
	Appropriate target value	0
	Related service mode	COPIER> DISPLAY> DPOT> LPGAIN-Y, LPGAIN-M

T-8-10



## DENS

COPIER > DISPLAY > DENS		
DENS-Y		
Dis of Y developer density change ratio		
Lv.1	Details	To display the difference between Y-color developer density and the target value in % (percentage). Intolerable difference will trigger E020. This may be caused by deterioration of the developer, failure/disconnection of the ATR Sensor or error in toner supply system. The value is updated upon print operation after power-on.
	Use case	- When the density varies dramatically - When the density is unstable even after gradation correction
	Display/adj/set range	-7 to 7
	Unit	%
	Appropriate target value	-4.5 to 4.5
	Related service mode	COPIER> DISPLAY> DENS> SGNL-Y
DENS-M		
Dis of M developer density change ratio		
Lv.1	Details	To display difference between M-color developer density and the target value in % (percentage). Intolerable difference will trigger E020. This may be caused by deterioration of the developer, failure/disconnection of the ATR Sensor or error in toner supply system. The value is updated upon print operation after power-on.
	Use case	- When the density varies dramatically - When the density is unstable even after gradation correction
	Display/adj/set range	-7 to 7
	Unit	%
	Appropriate target value	-4.5 to 4.5
	Related service mode	COPIER> DISPLAY> DENS> SGNL-M
DENS-C		
Dis of C developer density change ratio		
Lv.1	Details	To display difference between C-color developer density and the target value in % (percentage). Intolerable difference will trigger E020. This may be caused by deterioration of the developer, failure/disconnection of the ATR Sensor or error in toner supply system. The value is updated upon print operation after power-on.
	Use case	- When the density varies dramatically - When the density is unstable even after gradation correction
	Display/adj/set range	-7 to 7
	Unit	%
	Appropriate target value	-4.5 to 4.5
	Related service mode	COPIER> DISPLAY> DENS> SGNL-C

COPIER > DISPLAY > DENS		
DENS-K		
Dis of Bk developer density change ratio		
Lv.1	Details	To display difference between Bk-color developer density and the target value in % (percentage). Intolerable difference will trigger E020. This may be caused by deterioration of the developer, failure/disconnection of the ATR Sensor or error in toner supply system. The value is updated upon print operation after power-on.
	Use case	- When the density varies dramatically - When the density is unstable even after gradation correction
	Display/adj/set range	-7 to 7
	Unit	%
	Appropriate target value	-4.5 to 4.5
	Related service mode	COPIER> DISPLAY> DENS> SGNL-K
DENS-S-Y		
Dis of ATR control patch density (Y)		
Lv.2	Details	To display Y patch image density created by ATR control.
	Use case	When analyzing the cause of a problem
	Display/adj/set range	0 to 1023
	Appropriate target value	300 to 700
DENS-S-M		
Dis of ATR control patch density (M)		
Lv.2	Details	To display M patch image density created by ATR control.
	Use case	When analyzing the cause of a problem
	Display/adj/set range	0 to 1023
	Appropriate target value	300 to 700
DENS-S-C		
Dis of ATR control patch density (C)		
Lv.2	Details	To display C patch image density created by ATR control.
	Use case	When analyzing the cause of a problem
	Display/adj/set range	0 to 1023
	Appropriate target value	300 to 700
DENS-S-K		
Dis of ATR control patch density (Bk)		
Lv.2	Details	To display Bk patch image density created by ATR control.
	Use case	When analyzing the cause of a problem
	Display/adj/set range	0 to 1023
	Appropriate target value	300 to 700
D-Y-TRGT		
Dis of ATR ctrl Y patch target density		
Lv.2	Details	To display the target density for Y patch image created by ATR control.
	Use case	When analyzing the cause of a problem
	Display/adj/set range	0 to 1023
	Appropriate target value	300 to 700
D-M-TRGT		
Dis of ATR ctrl M patch target density		
Lv.2	Details	To display the target density for M patch image created by ATR control.
	Use case	When analyzing the cause of a problem
	Display/adj/set range	0 to 1023
	Appropriate target value	300 to 700

COPIER > DISPLAY > DENS		
D-C-TRGT		Dis of ATR ctrl C patch target density
Lv.2	Details	To display the target density for C patch image created by ATR control.
	Use case	When analyzing the cause of a problem
	Display/adj/set range	0 to 1023
	Appropriate target value	300 to 700
REF-Y		Dis of Y developer density target value
Lv.1	Details	To display the developer density target value for the ATR Sensor (Y).
	Use case	When analyzing the cause of a problem
	Display/adj/set range	0 to 255
	Appropriate target value	20 to 230
REF-M		Dis of M developer density target value
Lv.1	Details	To display the developer density target value for the ATR Sensor (M).
	Use case	When analyzing the cause of a problem
	Display/adj/set range	0 to 255
	Appropriate target value	20 to 230
REF-C		Dis of C developer density target value
Lv.1	Details	To display the developer density target value for the ATR Sensor (C).
	Use case	When analyzing the cause of a problem
	Display/adj/set range	0 to 255
	Appropriate target value	20 to 230
REF-K		Dis of Bk developer density target value
Lv.1	Details	To display the developer density target value for the ATR Sensor (Bk).
	Use case	When analyzing the cause of a problem
	Display/adj/set range	0 to 255
	Appropriate target value	20 to 230
SGNL-Y		Display of Y-color developer density
Lv.1	Details	To display the measured value of Y-color developer density. The density is measured with the ATR Sensor (Y) for each job. The value is updated upon print operation after power-on.
	Use case	When analyzing the cause of a problem
	Display/adj/set range	0 to 255
	Appropriate target value	20 to 230
	Related service mode	COPIER> DISPLAY> DENS> DENS-Y
SGNL-M		Display of M-color developer density
Lv.1	Details	To display the measured value of M-color developer density. The density is measured with the ATR Sensor (M) for each job. The value is updated upon print operation after power-on.
	Use case	When analyzing the cause of a problem
	Display/adj/set range	0 to 255
	Appropriate target value	20 to 230
	Related service mode	COPIER> DISPLAY> DENS> DENS-M

COPIER > DISPLAY > DENS		
SGNL-C		Display of C-color developer density
Lv.1	Details	To display the measured value of C-color developer density. The density is measured with the ATR Sensor (C) for each job. The value is updated upon print operation after power-on.
	Use case	When analyzing the cause of a problem
	Display/adj/set range	0 to 255
	Appropriate target value	20 to 230
	Related service mode	COPIER> DISPLAY> DENS> DENS-C
SGNL-K		Display of Bk-color developer density
Lv.1	Details	To display the measured value of Bk-color developer density. The density is measured with the ATR Sensor (Bk) for each job. The value is updated upon print operation after power-on.
	Use case	When analyzing the cause of a problem
	Display/adj/set range	0 to 255
	Appropriate target value	20 to 230
	Related service mode	COPIER> DISPLAY> DENS> DENS-K
P-SENS-P		Dis base intnsty at ATR ctrl (P-wave)
Lv.2	Details	To display the light intensity (P-wave) reflected from the background (ITB) at ATR control. Intolerable values may be caused by Patch Sensor disconnection, LED failure, soiled Sensor surface, Shutter failure, Registration Patch Shutter Open/Close Solenoid failure, insufficient ITB cleaning, etc.
	Use case	When checking the failure of Patch Sensor/ITB at low density, fogging deterioration or E020 display
	Display/adj/set range	0 to 1023
	Appropriate target value	400 to 1000
	Related service mode	COPIER> DISPLAY> DENS> P-SENS-S
	DEV-DC-Y	
Lv.2	Details	To display the latest Y developing DC voltage Vdc.
	Use case	- When image failure occurs due to carrier adherence - When fogging occurs - When fogging is deteriorated
	Display/adj/set range	-800 to -200
	Unit	V
	Appropriate target value	-800 to -200
	DEV-DC-M	
Lv.2	Details	To display the latest M developing DC voltage Vdc.
	Use case	- When image failure occurs due to carrier adherence - When fogging occurs - When fogging is deteriorated
	Display/adj/set range	-800 to -200
	Unit	V
	Appropriate target value	-800 to -200



COPIER > DISPLAY > DENS		
DEV-DC-C	Dis of developing DC voltage (C)	
Lv.2	Details	To display the latest C developing DC voltage Vdc.
	Use case	- When image failure occurs due to carrier adherence - When fogging occurs - When fogging is deteriorated
	Display/adj/set range	-800 to -200
	Unit	V
	Appropriate target value	-800 to -200
DEV-DC-K	Dis of developing DC voltage (Bk)	
Lv.2	Details	To display the latest Bk developing DC voltage Vdc.
	Use case	- When image failure occurs due to carrier adherence - When fogging occurs - When fogging is deteriorated
	Display/adj/set range	-800 to -200
	Unit	V
	Appropriate target value	-800 to -200
CHG-DC-Y	Dis of primary charging DC voltage (Y)	
Lv.2	Details	To display the latest primary charging DC voltage of Y color.
	Use case	At low density/occurrence of fogging
	Display/adj/set range	0 to 1500
	Unit	V
	Appropriate target value	400 to 900
CHG-DC-M	Dis of primary charging DC voltage (M)	
Lv.2	Details	To display the latest primary charging DC voltage of M color.
	Use case	At low density/occurrence of fogging
	Display/adj/set range	0 to 1500
	Unit	V
	Appropriate target value	400 to 900
CHG-DC-C	Dis of primary charging DC voltage (C)	
Lv.2	Details	To display the latest primary charging DC voltage of C color.
	Use case	At low density/occurrence of fogging
	Display/adj/set range	0 to 1500
	Unit	V
	Appropriate target value	400 to 900
CHG-DC-K	Dis of primary charging DC voltage (Bk)	
Lv.2	Details	To display the latest primary charging DC voltage of Bk color.
	Use case	At low density/occurrence of fogging
	Display/adj/set range	0 to 1500
	Unit	V
	Appropriate target value	400 to 900
D-K-TRGT	Dis of ATR ctrl Bk patch target density	
Lv.2	Details	To display the Bk patch image target density created by ATR control.
	Use case	When analyzing the cause of a problem
	Display/adj/set range	340 to 640
	Appropriate target value	340 to 640

COPIER > DISPLAY > DENS		
D-CRNT-P	Dis of ATR ctrl dark current (P-wave)	
Lv.2	Details	To display the dark current value (P-wave) measured at ATR control.
	Use case	When checking the Patch Sensor
	Display/adj/set range	0 to 1023
	Appropriate target value	less than 100
D-CRNT-S	Dis of ATR ctrl dark current (S-wave)	
Lv.2	Details	To display the dark current value (S-wave) measured at ATR control.
	Use case	When checking the Patch Sensor
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 409
P-SENS-S	Dis base intnsty at ATR ctrl (S-wave)	
Lv.2	Details	To display the light intensity (S-wave) reflected from the background (ITB) at ATR control.
	Use case	When checking ITB failure at low density or fogging deterioration
	Display/adj/set range	0 to 1023
	Appropriate target value	10 to 400
	Related service mode	COPIER> DISPLAY> DENS> P-SENS-P
DENS-Y-H	Dis of ATR ctrl Y-clr TD ratio history	
Lv.2	Details	To display the latest 8 Y-toner density log data (TD ratio) detected by the ATR Sensor at ATR control. 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 toner density in the Developing Assembly at low density or fogging deterioration
	Display/adj/set range	0 to 255
	Appropriate target value	20 to 230
DENS-M-H	Dis of ATR ctrl M-clr TD ratio history	
Lv.2	Details	To display the latest 8 M-toner density log data (TD ratio) detected by the ATR Sensor at ATR control. 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 toner density in the Developing Assembly at low density or fogging deterioration
	Display/adj/set range	0 to 255
	Appropriate target value	20 to 230

COPIER > DISPLAY > DENS		
DENS-C-H		Dis of ATR ctrl C-clr TD ratio history
Lv.2	Details	To display the latest 8 C-toner density log data (TD ratio) detected by the ATR Sensor at ATR control. 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 toner density in the Developing Assembly at low density or fogging deterioration
	Display/adj/set range	0 to 255
	Appropriate target value	20 to 230
DS-S-Y-H		Dis of Y-clr patch image density history
Lv.2	Details	To display the latest 8 Y-patch image density log data. It is the reference for judging the cause at E020 occurrence, etc. Sharp change in values may indicate the failure in Patch Sensor, Shutter or laser, whereas gradual change may indicate failure in toner supply system. This is particularly caused by Patch Sensor.
	Use case	When analyzing the cause of E020
	Display/adj/set range	0 to 1023
	Appropriate target value	200 to 900
DS-S-M-H		Dis of M-clr patch image density history
Lv.2	Details	To display the latest 8 M-patch image density log data. It is the reference for judging the cause at E020 occurrence, etc. Sharp change in values may indicate the failure in Patch Sensor, Shutter or laser, whereas gradual change may indicate failure in toner supply system. This is particularly caused by Patch Sensor.
	Use case	When analyzing the cause of E020
	Display/adj/set range	0 to 1023
	Appropriate target value	200 to 900
DS-S-C-H		Dis of C-clr patch image density history
Lv.2	Details	To display the latest 8 C-patch image density log data. It is the reference for judging the cause at E020 occurrence, etc. Sharp change in values may indicate the failure in Patch Sensor, Shutter or laser, whereas gradual change may indicate failure in toner supply system. This is particularly caused by Patch Sensor.
	Use case	When analyzing the cause of E020
	Display/adj/set range	0 to 1023
	Appropriate target value	200 to 900

COPIER > DISPLAY > DENS		
DS-S-K-H		Dis Bk-clr patch image density history
Lv.2	Details	To display the latest 8 Bk-patch image density log data. It is the reference for judging the cause at E020 occurrence, etc. Sharp change in values may indicate the failure in Patch Sensor, Shutter or laser, whereas gradual change may indicate failure in toner supply system. This is particularly caused by Patch Sensor.
	Use case	When analyzing the cause of E020
	Display/adj/set range	0 to 1023
	Appropriate target value	200 to 900
P-LED-DA		Dis of Patch Sensor LED light intensity
Lv.2	Details	To display the Patch Sensor LED light intensity. The soiled Sensor window or soiled ITB (ITB cleaning failure) is suspected if the background light intensity (P-wave) is too low even with sufficient LED light intensity and PT-LPADJ execution will not correct the problem.
	Use case	When checking the Patch Sensor
	Related service mode	COPIER> DISPLAY> DENS> P-SENS-P
SPL-LG-Y		Display of Y toner supply history
Lv.2	Details	To display the latest 8 Y-toner supply log data. Each data represents the number of toner blocks supplied per paper.
	Use case	When checking toner supply status at E020 occurrence, low density or fogging deterioration
	Display/adj/set range	0 to 4
	Appropriate target value	0 to 4
SPL-LG-M		Display of M toner supply history
Lv.2	Details	To display the latest 8 M-toner supply log data. Each data represents the number of toner blocks supplied per paper.
	Use case	When checking toner supply status at E020 occurrence, low density or fogging deterioration
	Display/adj/set range	0 to 4
	Appropriate target value	0 to 4
SPL-LG-C		Display of C toner supply history
Lv.2	Details	To display the latest 8 C-toner supply log data. Each data represents the number of toner blocks supplied per paper.
	Use case	When checking toner supply status at E020 occurrence, low density or fogging deterioration
	Display/adj/set range	0 to 4
	Appropriate target value	0 to 4

COPIER > DISPLAY > DENS		
DENS-K-H		Dis of ATR ctrl Bk-clr TD ratio history
Lv.2	Details	To display the latest 8 Bk-toner density log data (TD ratio) detected by the ATR Sensor at ATR control. Sharp change in values may indicate ATR Sensor disconnection/failure, whereas gradual change in values may indicate failure in toner supply system.
	Use case	When checking toner density in the Developing Assembly at low density or fogging deterioration
	Display/adj/set range	0 to 255
	Appropriate target value	80 to 200
SPL-LG-K		Display of Bk toner supply history
Lv.2	Details	To display the latest 8 Bk-toner supply log data. Each data represents the number of toner blocks supplied per paper.
	Use case	When checking the toner supply status at low density or fogging deterioration
	Display/adj/set range	0 to 10
	Appropriate target value	0 to 5

T-8-11

## ■ MISC

COPIER > DISPLAY > MISC		
ENV-TR		Dis of secondary transfer environment
Lv.1	Details	To display environment (moisture content) classification used for secondary transfer ATVC control. 1: Low humidity, 2: Normal humidity, 3: High humidity
	Use case	When adjusting the secondary transfer ATVC paper allotted voltage
	Display/adj/set range	1 to 3
	Appropriate target value	1 to 3
LPOWER-Y		Display of laser light intensity (Y)
Lv.2	Details	To display the Y laser intensity in real-time.
	Use case	When analyzing the cause of the image density failure
	Appropriate target value	50 to FF
LPOWER-M		Display of laser light intensity (M)
Lv.2	Details	To display the M laser intensity in real-time.
	Use case	When analyzing the cause of the image density failure
	Appropriate target value	50 to FF
LPOWER-C		Display of laser light intensity (C)
Lv.2	Details	To display the C laser intensity in real-time.
	Use case	When analyzing the cause of the image density failure
	Appropriate target value	50 to FF
LPOWER-K		Display of laser light intensity (Bk)
Lv.2	Details	To display the Bk laser intensity in real-time.
	Use case	When analyzing the cause of the image density failure
	Appropriate target value	50 to FF
ITB-POS		Dis of ITB steering reference position
Lv.1	Details	To display the steering reference position of ITB.
	Use case	When replacing the Secondary Transfer Inner Roller
	Display/adj/set range	-580 to 580
	Unit	pulse
	Appropriate target value	-350 to 350
ITB-POS2		Dspl ITB steering ref position: Color mode
Lv.1	Details	To display the steering reference position of ITB (color mode).
	Use case	When replacing the Secondary Transfer Inner Roller
	Display/adj/set range	-580 to 580
	Unit	pulse
	Appropriate target value	-350 to 350
ITB-POS2		COPIER> FUNCTION> MISC-P> ITB-INIT COPIER> DISPLAY> MISC> ITB-POS2
ITB-POS2		COPIER> FUNCTION> MISC-P> ITB-INIT COPIER> DISPLAY> MISC> ITB-POS

T-8-12

## HT-C

COPIER > DISPLAY > HT-C		
TGT-A-Y Dis of ARCDAT screen A Y-color target VL		
Lv.2	Details	To display the Y-patch target value of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-A-M Dis of ARCDAT screen A M-color target VL		
Lv.2	Details	To display the M-patch target value of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-A-C Dis of ARCDAT screen A C-color target VL		
Lv.2	Details	To display the C-patch target value of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-A-K Dis of ARCDAT screen A Bk-clr target VL		
Lv.2	Details	To display the Bk-patch target value of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-B-Y Dis of ARCDAT screen B Y-color target VL		
Lv.2	Details	To display the Y-patch target value of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700

COPIER > DISPLAY > HT-C		
TGT-B-M Dis of ARCDAT screen B M-color target VL		
Lv.2	Details	To display the M-patch target value of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-B-C Dis of ARCDAT screen B C-color target VL		
Lv.2	Details	To display the C-patch target value of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-B-K Dis of ARCDAT screen B Bk-clr target VL		
Lv.2	Details	To display the Bk-patch target value of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-C-Y Dis of ARCDAT screen C Y-color target VL		
Lv.2	Details	To display the Y-patch target value of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-C-M Dis of ARCDAT screen C M-color target VL		
Lv.2	Details	To display the M-patch target value of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700

COPIER > DISPLAY > HT-C		
TGT-C-C		Dis of ARCDAT screen C C-color target VL
Lv.2	Details	To display the C-patch target value of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-C-K		Dis of ARCDAT screen C Bk-clr target VL
Lv.2	Details	To display the Bk-patch target value of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
SUM-A-Y		Dis ARCDAT screen A Y-color ctrl differ
Lv.2	Details	To display Y-patch control difference of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-A-M		Dis ARCDAT screen A M-color ctrl differ
Lv.2	Details	To display M-patch control difference of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-A-C		Dis ARCDAT screen A C-color ctrl differ
Lv.2	Details	To display C-patch control difference of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023

COPIER > DISPLAY > HT-C		
SUM-A-K		Dis ARCDAT screen A Bk-color ctrl differ
Lv.2	Details	To display Bk-patch control difference of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-B-Y		Dis ARCDAT screen B Y-color ctrl differ
Lv.2	Details	To display Y-patch control difference of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-B-M		Dis ARCDAT screen B M-color ctrl differ
Lv.2	Details	To display M-patch control difference of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-B-C		Dis ARCDAT screen B C-color ctrl differ
Lv.2	Details	To display C-patch control difference of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-B-K		Dis ARCDAT screen B Bk-color ctrl differ
Lv.2	Details	To display Bk-patch control difference of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023



COPIER > DISPLAY > HT-C		
SUM-C-Y		Dis ARCDAT screen C Y-color ctrl differ
Lv.2	Details	To display Y-patch control difference of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-C-M		Dis ARCDAT screen C M-color ctrl differ
Lv.2	Details	To display M-patch control difference of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-C-C		Dis ARCDAT screen C C-color ctrl differ
Lv.2	Details	To display C-patch control difference of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-C-K		Dis ARCDAT screen C Bk-color ctrl differ
Lv.2	Details	To display Bk-patch control difference of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SGNL-A-Y		Dis ARCDAT screen A Y-patch current VL
Lv.2	Details	To display the current Y-patch value of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGNL-A-M		Dis ARCDAT screen A M-patch current VL
Lv.2	Details	To display the current M-patch value of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023

COPIER > DISPLAY > HT-C		
SGNL-A-C		Dis ARCDAT screen A C-patch current VL
Lv.2	Details	To display the current C-patch value of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGNL-A-K		Dis ARCDAT screen A Bk-patch current VL
Lv.2	Details	To display the current Bk-patch value of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGNL-B-Y		Dis ARCDAT screen B Y-patch current VL
Lv.2	Details	To display the current Y-patch value of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGNL-B-M		Dis ARCDAT screen B M-patch current VL
Lv.2	Details	To display the current M-patch value of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGNL-B-C		Dis ARCDAT screen B C-patch current VL
Lv.2	Details	To display the current C-patch value of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGNL-B-K		Dis ARCDAT screen B Bk-patch current VL
Lv.2	Details	To display the current Bk-patch value of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGNL-C-Y		Dis ARCDAT screen C Y-patch current VL
Lv.2	Details	To display the current Y-patch value of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023

COPIER > DISPLAY > HT-C		
SGNL-C-M		Dis ARCDAT screen C M-patch current VL
Lv.2	Details	To display the current M-patch value of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGNL-C-K		Dis ARCDAT screen C Bk-patch current VL
Lv.2	Details	To display the current Bk-patch value of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGNL-C-C		Dis ARCDAT screen C C-patch current VL
Lv.2	Details	To display the current C-patch value of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
DLTA-A-Y		Dis of ARCDAT screen A Y-density differ
Lv.2	Details	To display the difference between the Y-patch target value and the current value of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLTA-A-M		Dis of ARCDAT screen A M-density differ
Lv.2	Details	To display the difference between the M-patch target value and the current value of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLTA-A-C		Dis of ARCDAT screen A C-density differ
Lv.2	Details	To display the difference between the C-patch target value and the current value of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023

COPIER > DISPLAY > HT-C		
DLTA-A-K		Dis of ARCDAT screen A Bk-density differ
Lv.2	Details	To display the difference between the Bk-patch target value and the current value of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLTA-B-Y		Dis of ARCDAT screen B Y-density differ
Lv.2	Details	To display the difference between the Y-patch target value and the current value of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLTA-B-M		Dis of ARCDAT screen B M-density differ
Lv.2	Details	To display the difference between the M-patch target value and the current value of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLTA-B-C		Dis of ARCDAT screen B C-density differ
Lv.2	Details	To display the difference between the C-patch target value and the current value of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLTA-B-K		Dis of ARCDAT screen B Bk-density differ
Lv.2	Details	To display the difference between the Bk-patch target value and the current value of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023



COPIER > DISPLAY > HT-C		
DLTA-C-Y		Dis of ARCDAT screen C Y-density differ
Lv.2	Details	To display the difference between the Y-patch target value and the current value of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLTA-C-M		Dis of ARCDAT screen C M-density differ
Lv.2	Details	To display the difference between the M-patch target value and the current value of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLTA-C-C		Dis of ARCDAT screen C C-density differ
Lv.2	Details	To display the difference between the C-patch target value and the current value of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLTA-C-K		Dis of ARCDAT screen C Bk-density differ
Lv.2	Details	To display the difference between the Bk-patch target value and the current value of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
TGT-A-Y2		ARCDAT scrn A Y-color target VL(1/2 SPD)
Lv.2	Details	To display the Y-patch target value of screen A in ARCDAT control at 1/2 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700

COPIER > DISPLAY > HT-C		
TGT-A-M2		ARCDAT scrn A M-color target VL(1/2 SPD)
Lv.2	Details	To display the M-patch target value of screen A in ARCDAT control at 1/2 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-A-C2		ARCDAT scrn A C-color target VL(1/2 SPD)
Lv.2	Details	To display the C-patch target value of screen A in ARCDAT control at 1/2 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-A-K2		ARCDAT scrn A Bk-clr target VL(1/2 SPD)
Lv.2	Details	To display the Bk-patch target value of screen A in ARCDAT control at 1/2 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-A-Y3		ARCDAT scrn A Y-color target VL(1/3 SPD)
Lv.2	Details	To display the Y-patch target value of screen A in ARCDAT control at 1/3 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-A-M3		ARCDAT scrn A M-color target VL(1/3 SPD)
Lv.2	Details	To display the M-patch target value of screen A in ARCDAT control at 1/3 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-A-C3		ARCDAT scrn A C-color target VL(1/3 SPD)
Lv.2	Details	To display the C-patch target value of screen A in ARCDAT control at 1/3 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-A-K3		ARCDAT scrn A Bk-clr target VL(1/3 SPD)
Lv.2	Details	To display the Bk-patch target value of screen A in ARCDAT control at 1/3 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700

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TGT-B-Y3		ARCDAT scrn B Y-color target VL(1/3 SPD)
Lv.2	Details	To display the Y-patch target value of screen B in ARCDAT control at 1/3 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-B-M3		ARCDAT scrn B M-color target VL(1/3 SPD)
Lv.2	Details	To display the M-patch target value of screen B in ARCDAT control at 1/3 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-B-C3		ARCDAT scrn B C-color target VL(1/3 SPD)
Lv.2	Details	To display the C-patch target value of screen B in ARCDAT control at 1/3 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-B-K3		ARCDAT scrn B Bk-clr target VL(1/3 SPD)
Lv.2	Details	To display the Bk-patch target value of screen B in ARCDAT control at 1/3 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-B-Y2		ARCDAT scrn B Y-color target VL(1/2 SPD)
Lv.2	Details	To display the Y-patch target value of screen B in ARCDAT control at 1/2 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-B-M2		ARCDAT scrn B M-color target VL(1/2 SPD)
Lv.2	Details	To display the M-patch target value of screen B in ARCDAT control at 1/2 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-B-C2		ARCDAT scrn B C-color target VL(1/2 SPD)
Lv.2	Details	To display the C-patch target value of screen B in ARCDAT control at 1/2 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700

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TGT-B-K2		ARCDAT scrn B Bk-clr target VL(1/2 SPD)
Lv.2	Details	To display the Bk-patch target value of screen B in ARCDAT control at 1/2 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-C-Y2		ARCDAT scrn C Y-color target VL(1/2 SPD)
Lv.2	Details	To display the Y-patch target value of screen C in ARCDAT control at 1/2 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-C-M2		ARCDAT scrn C M-color target VL(1/2 SPD)
Lv.2	Details	To display the M-patch target value of screen C in ARCDAT control at 1/2 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-C-C2		ARCDAT scrn C C-color target VL(1/2 SPD)
Lv.2	Details	To display the C-patch target value of screen C in ARCDAT control at 1/2 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-C-K2		ARCDAT scrn C Bk-clr target VL(1/2 SPD)
Lv.2	Details	To display the Bk-patch target value of screen C in ARCDAT control at 1/2 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-C-Y3		ARCDAT scrn C Y-color target VL(1/3 SPD)
Lv.2	Details	To display the Y-patch target value of screen C in ARCDAT control at 1/3 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-C-M3		ARCDAT scrn C M-color target VL(1/3 SPD)
Lv.2	Details	To display the M-patch target value of screen C in ARCDAT control at 1/3 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700

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TGT-C-C3		ARCDAT scrn C C-color target VL(1/3 SPD)
Lv.2	Details	To display the C-patch target value of screen C in ARCDAT control at 1/3 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-C-K3		ARCDAT scrn C Bk-clr target VL(1/3 SPD)
Lv.2	Details	To display the Bk-patch target value of screen C in ARCDAT control at 1/3 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
SUM-A-Y2		ARCDAT scrnA Y-clr ctrl differ (1/2 SPD)
Lv.2	Details	To display Y-patch control difference of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-A-M2		ARCDAT scrnA M-clr ctrl differ (1/2 SPD)
Lv.2	Details	To display M-patch control difference of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-A-C2		ARCDAT scrnA C-clr ctrl differ (1/2 SPD)
Lv.2	Details	To display C-patch control difference of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023

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SUM-A-K2		ARCDAT scrnA Bk-clr ctrl differ(1/2 SPD)
Lv.2	Details	To display Bk-patch control difference of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-B-Y2		ARCDAT scrnB Y-clr ctrl differ (1/2 SPD)
Lv.2	Details	To display Y-patch control difference of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-B-M2		ARCDAT scrnB M-clr ctrl differ (1/2 SPD)
Lv.2	Details	To display M-patch control difference of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-B-C2		ARCDAT scrnB C-clr ctrl differ (1/2 SPD)
Lv.2	Details	To display C-patch control difference of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-B-K2		ARCDAT scrnB Bk-clr ctrl differ(1/2 SPD)
Lv.2	Details	To display Bk-patch control difference of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023

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SUM-C-Y2		ARCDAT scrnC Y-clr ctrl differ (1/2 SPD)
Lv.2	Details	To display Y-patch control difference of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-C-M2		ARCDAT scrnC M-clr ctrl differ (1/2 SPD)
Lv.2	Details	To display M-patch control difference of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-C-C2		ARCDAT scrnC C-clr ctrl differ (1/2 SPD)
Lv.2	Details	To display C-patch control difference of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-C-K2		ARCDAT scrnC Bk-clr ctrl differ(1/2 SPD)
Lv.2	Details	To display Bk-patch control difference of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-A-Y2		ARCDAT scrn A Y-density differ (1/2 SPD)
Lv.2	Details	To display the difference between the Y-patch target value and the current value of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023

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DLT-A-M2		ARCDAT scrn A M-density differ (1/2 SPD)
Lv.2	Details	To display the difference between the M-patch target value and the current value of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-A-C2		ARCDAT scrn A C-density differ (1/2 SPD)
Lv.2	Details	To display the difference between the C-patch target value and the current value of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-A-K2		ARCDAT scrn A Bk-density differ(1/2 SPD)
Lv.2	Details	To display the difference between the Bk-patch target value and the current value of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-B-Y2		ARCDAT scrn B Y-density differ (1/2 SPD)
Lv.2	Details	To display the difference between the Y-patch target value and the current value of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-B-M2		ARCDAT scrn B M-density differ (1/2 SPD)
Lv.2	Details	To display the difference between the M-patch target value and the current value of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023

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DLT-B-C2		ARCDAT scrn B C-density differ (1/2 SPD)
Lv.2	Details	To display the difference between the C-patch target value and the current value of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-B-K2		ARCDAT scrn B Bk-density differ(1/2 SPD)
Lv.2	Details	To display the difference between the Bk-patch target value and the current value of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-C-Y2		ARCDAT scrn C Y-density differ (1/2 SPD)
Lv.2	Details	To display the difference between the Y-patch target value and the current value of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-C-M2		ARCDAT scrn C M-density differ (1/2 SPD)
Lv.2	Details	To display the difference between the M-patch target value and the current value of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-C-C2		ARCDAT scrn C C-density differ (1/2 SPD)
Lv.2	Details	To display the difference between the C-patch target value and the current value of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023

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DLT-C-K2		ARCDAT scrn C Bk-density differ(1/2 SPD)
Lv.2	Details	To display the difference between Bk-patch target value and the current value of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SGL-A-Y2		ARCDAT scrnA Y-patch current VL(1/2 SPD)
Lv.2	Details	To display the current Y-patch value of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-A-M2		ARCDAT scrnA M-patch current VL(1/2 SPD)
Lv.2	Details	To display the current M-patch value of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-A-C2		ARCDAT scrnA C-patch current VL(1/2 SPD)
Lv.2	Details	To display the current C-patch value of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-A-K2		ARCDAT scrnA Bk-patch current VL(1/2SPD)
Lv.2	Details	To display the current Bk-patch value of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-B-Y2		ARCDAT scrnB Y-patch current VL(1/2 SPD)
Lv.2	Details	To display the current Y-patch value of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023



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SGL-B-M2		ARCDAT scrnB M-patch current VL(1/2 SPD)
Lv.2	Details	To display the current M-patch value of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-B-C2		ARCDAT scrnB C-patch current VL(1/2 SPD)
Lv.2	Details	To display the current C-patch value of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-B-K2		ARCDAT scrnB Bk-patch current VL(1/2SPD)
Lv.2	Details	To display the current Bk-patch value of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-C-Y2		ARCDAT scrnC Y-patch current VL(1/2 SPD)
Lv.2	Details	To display the current Y-patch value of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-C-M2		ARCDAT scrnC M-patch current VL(1/2 SPD)
Lv.2	Details	To display the current M-patch value of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-C-C2		ARCDAT scrnC C-patch current VL(1/2 SPD)
Lv.2	Details	To display the current C-patch value of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023

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SGL-C-K2		ARCDAT scrnC Bk-patch current VL(1/2SPD)
Lv.2	Details	To display the current Bk-patch value of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SUM-A-Y3		ARCDAT scrnA Y-clr ctrl differ (1/3 SPD)
Lv.2	Details	To display Y-patch control difference of screen A in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-A-M3		ARCDAT scrnA M-clr ctrl differ (1/3 SPD)
Lv.2	Details	To display M-patch control difference of screen A in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-A-C3		ARCDAT scrnA C-clr ctrl differ (1/3 SPD)
Lv.2	Details	To display C-patch control difference of screen A in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-A-K3		ARCDAT scrnA Bk-clr ctrl differ(1/3 SPD)
Lv.2	Details	To display Bk-patch control difference of screen A in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023

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SUM-B-Y3		ARCDAT scrnB Y-clr ctrl differ (1/3 SPD)
Lv.2	Details	To display Y-patch control difference of screen B in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-B-M3		ARCDAT scrnB M-clr ctrl differ (1/3 SPD)
Lv.2	Details	To display M-patch control difference of screen B in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-B-C3		ARCDAT scrnB C-clr ctrl differ (1/3 SPD)
Lv.2	Details	To display C-patch control difference of screen B in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-B-K3		ARCDAT scrnB Bk-clr ctrl differ(1/3 SPD)
Lv.2	Details	To display Bk-patch control difference of screen B in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-C-Y3		ARCDAT scrnC Y-clr ctrl differ (1/3 SPD)
Lv.2	Details	To display Y-patch control difference of screen C in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023

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SUM-C-M3		ARCDAT scrnC M-clr ctrl differ (1/3 SPD)
Lv.2	Details	To display M-patch control difference of screen C in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-C-C3		ARCDAT scrnC C-clr ctrl differ (1/3 SPD)
Lv.2	Details	To display C-patch control difference of screen C in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-C-K3		ARCDAT scrnC Bk-clr ctrl differ(1/3 SPD)
Lv.2	Details	To display Bk-patch control difference of screen C in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-A-Y3		ARCDAT scrn A Y-density differ (1/3 SPD)
Lv.2	Details	To display the difference between the Y-patch target value and the current value of screen A in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-A-M3		ARCDAT scrn A M-density differ (1/3 SPD)
Lv.2	Details	To display the difference between the M-patch target value and the current value of screen A in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023



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DLT-A-C3		ARCDAT scrn A C-density differ (1/3 SPD)
Lv.2	Details	To display the difference between the C-patch target value and the current value of screen A in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-A-K3		ARCDAT scrn A Bk-density differ(1/3 SPD)
Lv.2	Details	To display the difference between the Bk-patch target value and the current value of screen A in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-B-Y3		ARCDAT scrn B Y-density differ (1/3 SPD)
Lv.2	Details	To display the difference between the Y-patch target value and the current value of screen B in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-B-M3		ARCDAT scrn B M-density differ (1/3 SPD)
Lv.2	Details	To display the difference between the M-patch target value and the current value of screen B in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-B-C3		ARCDAT scrn B C-density differ (1/3 SPD)
Lv.2	Details	To display the difference between the C-patch target value and the current value of screen B in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023

COPIER > DISPLAY > HT-C		
DLT-B-K3		ARCDAT scrn B Bk-density differ(1/3 SPD)
Lv.2	Details	To display the difference between the Bk-patch target value and the current value of screen B in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-C-Y3		ARCDAT scrn C Y-density differ (1/3 SPD)
Lv.2	Details	To display the difference between the Y-patch target value and the current value of screen C in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-C-M3		ARCDAT scrn C M-density differ (1/3 SPD)
Lv.2	Details	To display the difference between the M-patch target value and the current value of screen C in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-C-C3		ARCDAT scrn C C-density differ (1/3 SPD)
Lv.2	Details	To display the difference between the C-patch target value and the current value of screen C in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-C-K3		ARCDAT scrn C Bk-density differ(1/3 SPD)
Lv.2	Details	To display the difference between the Bk-patch target value and the current value of screen C in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023

COPIER > DISPLAY > HT-C		
SGL-A-Y3		ARCDAT scrnA Y-patch current VL(1/3 SPD)
Lv.2	Details	To display the current Y-patch value of screen A in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-A-M3		ARCDAT scrnA M-patch current VL(1/3 SPD)
Lv.2	Details	To display the current M-patch value of screen A in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-A-C3		ARCDAT scrnA C-patch current VL(1/3 SPD)
Lv.2	Details	To display the current C-patch value of screen A in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-A-K3		ARCDAT scrnA Bk-patch current VL(1/3SPD)
Lv.2	Details	To display the current Bk-patch value of screen A in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-B-Y3		ARCDAT scrnB Y-patch current VL(1/3 SPD)
Lv.2	Details	To display the current Y-patch value of screen B in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-B-M3		ARCDAT scrnB M-patch current VL(1/3 SPD)
Lv.2	Details	To display the current M-patch value of screen B in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023

COPIER > DISPLAY > HT-C		
SGL-B-C3		ARCDAT scrnB C-patch current VL(1/3 SPD)
Lv.2	Details	To display the current C-patch value of screen B in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-B-K3		ARCDAT scrnB Bk-patch current VL(1/3SPD)
Lv.2	Details	To display the current Bk-patch value of screen B in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-C-Y3		ARCDAT scrnC Y-patch current VL(1/3 SPD)
Lv.2	Details	To display the current Y-patch value of screen C in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-C-M3		ARCDAT scrnC M-patch current VL(1/3 SPD)
Lv.2	Details	To display the current M-patch value of screen C in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-C-C3		ARCDAT scrnC C-patch current VL(1/3 SPD)
Lv.2	Details	To display the current C-patch value of screen C in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-C-K3		ARCDAT scrnC Bk-patch current VL(1/3SPD)
Lv.2	Details	To display the current Bk-patch value of screen C in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023

T-8-13



## Main Device (DCON > P004 to 030)

Address	bit	Name	Mark	Remarks
P004	15	-	-	-
	14	Delivery fan 1	FM7	0:connect
	13	ITB displacement sensor 5	PS58	1:ON
	12	Pre-reverse sensor	PS57	1:paper
	11	Third delivery sensor	PS43	1:paper
	10	Duplex inlet sensor	PS40	1:paper
	9	Primary transfer disengagement sensor 1	PS22	1:release
	8	Primary transfer disengagement sensor 2	PS23	1:contact
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P005	15	-	-	-
	14	Reverse sensor	PS39	1:paper
	13	Second delivery sensor	PS42	1:paper
	12	ITB steering sensor	PS24	1:ON
	11	ITB displacement sensor 1	PS25	1:ON
	10	ITB displacement sensor 2	PS26	1:ON
	9	ITB displacement sensor 3	PS27	1:ON
	8	ITB displacement sensor 4	PS28	1:ON
	7	Third delivery motor	M25	1:enable
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	First delivery flapper solenoid	SL5	1:ON
1	Second delivery flapper solenoid	SL6	1:ON	
0	Multi-purpose tray lifting solenoid	SL4	1:ON	

Address	bit	Name	Mark	Remarks
P006	15	Third delivery flapper solenoid	SL7	1:ON
	14	-	-	-
	13	-	-	-
	12	Fixing motor	M21	0:ON
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	Patch sensor (front)	UN47	1:LED_ON
	7	-	-	-
	6	-	-	-
	5	Patch sensor (rear)	UN48	1:LED_ON
	4	Patch sensor (center)	UN49	1:LED_ON
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	Fixing heat exhaust fan 1,2	FM1,2	1:ON
P007	15	Fixing heat exhaust fan 1,2_half speed	FM1,2	1:half speed
	14	Fixing cooling fan (front),(rear)	FM5,6	1:ON
	13	Secondary transfer exhaust fan	FM8	1:ON
	12	Secondary transfer exhaust fan_half speed	FM8	1:half speed
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	Fixing shutter motor	M27	1:enable
	4	-	-	-
	3	-	-	-
	2	-	-	-
1	Y pre-exposure LED PCB (front),(rear)	UN23,24	1:ON	
0	Bk pre-exposure LED PCB (front),(rear)	UN29,30	1:ON	

Address	bit	Name	Mark	Remarks
P008	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	Waste toner Box	UN21	1:FULL
	7	Waste toner Box	UN21	1:bottle
	6	-	-	-
	5	-	-	-
	4	New/old detection fuse (Bk)	UN59	0:NEW
	3	New/old detection fuse (C)	UN58	0:NEW
	2	New/old detection fuse (M)	UN57	0:NEW
	1	New/old detection fuse (Y)	UN56	0:NEW
	0	-	-	-
P009	15	-	-	-
	14	Second delivery tray full sensor	PS45	0:full
	13	First delivery tray full sensor	PS44	0:full
	12	First delivery sensor	PS41	1:paper
	11	-	-	-
	10	Front door sensor	PS18	0:DOOR_OPEN
	9	Registration sensor	PS33	1:paper
	8	Vertical path sensor	UN53	1:paper
	7	Transparency sensor	UN51	1:paper
	6	Second & third delivery door sensor	PS21	0:DOOR_OPEN
	5	Right door sensor	PS20	0:DOOR_OPEN
	4	Inner delivery sensor	PS37	1:paper
	3	Fixing shutter position sensor	PS32	1:ON(lightproof)
	2	Fixing shutter HP sensor	PS31	1:ON(lightproof)
	1	Fixing pressure sensor	PS30	1:engage
	0	-	-	-

Address	bit	Name	Mark	Remarks
P010	15	Delivery fan 2 _ON	FM9	1:ON
	14	Delivery fan 2 _half speed ON	FM9	1:half speed
	13	-	-	-
	12	Transparency sensor LED _ON	UN51	0:LED_ON
	11	Waste toner sensor LED _ON	UN21	1:LED_ON
	10	-	-	-
	9	-	-	-
	8	Waste toner stirring motor	M26	1:ON
	7	C pre-exposure LED PCB (front),(rear)	UN27,28	1:ON
	6	M pre-exposure LED PCB (front),(rear)	UN25,26	1:ON
	5	Multi-purpose tray pickup clutch	CL1	1:ON
	4	-	-	-
	3	Reverse roller motor	M24	1:enable
	2	-	-	-
	1	-	-	-
	0	-	-	-
P011	15	First & Second delivery motor	M23	1:enable
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	Registration motor	M19	1:enable
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Multi-purpose motor	M18	1:enable
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	Multi-purpose feed motor	M20	1:enable
	2	-	-	-
	1	-	-	-
	0	-	-	-

Address	bit	Name	Mark	Remarks
P012	15	Cassette 1 size switch	SW7	0:detect
	14	Cassette 1 size switch	SW7	0:detect
	13	Cassette 1 size switch	SW7	0:detect
	12	Cassette 1 size switch	SW7	0:detect
	11	Cassette 1 size switch	SW6	0:detect
	10	Cassette 1 size switch	SW6	0:detect
	9	Cassette 1 size switch	SW6	0:detect
	8	Cassette 1 size switch	SW6	0:detect
	7	Cassette 2 size switch	SW9	0:detect
	6	Cassette 2 size switch	SW9	0:detect
	5	Cassette 2 size switch	SW9	0:detect
	4	Cassette 2 size switch	SW9	0:detect
	3	Cassette 2 size switch	SW8	0:detect
	2	Cassette 2 size switch	SW8	0:detect
	1	Cassette 2 size switch	SW8	0:detect
	0	Cassette 2 size switch	SW8	0:detect
P013	15	Cassette 1 paper sensor	PS49	0:paper
	14	Cassette 1 paper level sensor A	PS51	0:paper
	13	Cassette 1 paper level sensor B	PS52	0:paper
	12	Cassette 1 pre-registration sensor	PS55	1:paper
	11	Cassette 2 paper sensor	PS50	0:paper
	10	Cassette 2 paper level sensor A	PS53	0:paper
	9	Cassette 2 paper level sensor B	PS54	0:paper
	8	Cassette 2 pre-registration sensor	PS56	1:paper
	7	Multi-purpose tray paper sensor	PS47	1:paper
	6	Duplex paper sensor	PS38	1:paper
	5	Fixing arch sensor 1	PS35	1:ON
	4	Fixing arch sensor 2	PS36	1:ON
	3	Fixing inlet sensor	PS34	1:paper
	2	-	-	-
1	-	-	-	
0	-	-	-	

Address	bit	Name	Mark	Remarks
P014	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	Right lower door sensor	PS19	0:DOOR_OPEN
	10	-	-	-
	9	-	-	-
	8	Laser shutter sensor	PS29	1:lightproof
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
1	Cassette 1 pickup motor	M16	1:enable	
0	-	-	-	
P015	15	-	-	-
	14	-	-	-
	13	Cassette 2 pickup motor	M17	1:enable
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
4	-	-	-	
3	Process cartridge fan (front)	FM10	1:ON	
2	Process cartridge fan (front)	FM10	1:half speed	
1	Cassette 2 pickup solenoid	SL3	1:ON	
0	Cassette 1 pickup solenoid	SL2	1:ON	

Address	bit	Name	Mark	Remarks
P016	15	Cassette 3 size switch		0:detect
	14	Cassette 3 size switch		0:detect
	13	Cassette 3 size switch		0:detect
	12	Cassette 3 size switch		0:detect
	11	Cassette 3 size switch		0:detect
	10	Cassette 3 size switch		0:detect
	9	Cassette 3 size switch		0:detect
	8	Cassette 3 size switch		0:detect
	7	Cassette 4 size switch		0:detect
	6	Cassette 4 size switch		0:detect
	5	Cassette 4 size switch		0:detect
	4	Cassette 4 size switch		0:detect
	3	Cassette 4 size switch		0:detect
	2	Cassette 4 size switch		0:detect
	1	Cassette 4 size switch		0:detect
	0	Cassette 4 size switch		0:detect
P017	15	Cassette 3 paper sensor		0:paper
	14	Cassette 3 paper level sensor A		0:paper
	13	Cassette 3 paper level sensor B		0:paper
	12	Cassette 3 pre-registration sensor		1:paper
	11	Cassette 4 paper sensor		0:paper
	10	Cassette 4 paper level sensor A		0:paper
	9	Cassette 4 paper level sensor B		0:paper
	8	Cassette 4 pre-registration sensor		1:paper
	7	Cassette pedestal right lower door sensor		0:DOOR_OPEN
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-

Address	bit	Name	Mark	Remarks
P018	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	Cassette 4 pickup solenoid		1:ON
	0	Cassette 3 pickup solenoid		1:ON
P019	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-

Address	bit	Name	Mark	Remarks
P020	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P021	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-

Address	bit	Name	Mark	Remarks
P022	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P023	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-



Address	bit	Name	Mark	Remarks
P024	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	Toner container outer cover sensor	PS17	1:close
	11	Toner container inner cover sensor (Bk)	PS16	1:close
	10	Toner container inner cover sensor (C)	PS15	1:close
	9	Toner container inner cover sensor (M)	PS14	1:close
	8	Toner container inner cover sensor (Y)	PS13	1:close
	7	Toner container cam HP sensor (Bk)	PS8	1:HP
	6	Toner container cam HP sensor (C)	PS7	1:HP
	5	Toner container cam HP sensor (M)	PS6	1:HP
	4	Toner container cam HP sensor (Y)	PS5	1:HP
	3	Piezo sensor (Bk)	TS4	1:toner
	2	Piezo sensor (C)	TS3	1:toner
	1	Piezo sensor (M)	TS2	1:toner
	0	Piezo sensor (Y)	TS1	1:toner
P025	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-

Address	bit	Name	Mark	Remarks
P026	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	Primary transfer separation motor	M15	1:enable
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	ITB displacement control motor	M14	1:enable
	0	-	-	-
P027	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	Buffer pass motor	M3	1:ON

Address	bit	Name	Mark	Remarks
P028	15	Deck open solenoid	SL2D	1:ON
	14	-	-	-
	13	Deck lifter motor	M2D	1:ON
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	Deck pickup clutch	CL2D	1:ON
	8	Deck open solenoid	SL2D	1:ON
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	Deck main motor	M1D	1:ON
P029	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	Deck lifter lower limit sensing switch	SW2D	0:lowerlimit
	11	Deck lifter upper limit sensor	PS3D	0:upperlimit
	10	Deck lifter position sensor	PS4D	0:paper
	9	Deck feed sensor	PS1D	0:paper
	8	-	-	-
	7	Deck open sensing switch	SW1D	1:OPEN
	6	Deck pickup roller release solenoid	SL1D	1:release
	5	-	-	-
	4	-	-	-
	3	Deck pickup sensor	PS6D	1:paper
	2	Deck paper-out sensor	PS2D	1:nopaper
1	-	-	-	
0	-	-	-	

Address	bit	Name	Mark	Remarks
P030	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	Buffer path delivery sensor	PS2	1:paper
1	Buffer path open/close sensor	PS3	1:paper	
0	Buffer path entrance sensor	PS1	1:paper	

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## ■ Reader (RCON > P002, 005)

Address	bit	Name	Mark	Remarks
P002	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	Original size sensor 1 / 2	CF1 / CF2	1:LED ON
P005	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	ADF cooling fan	FM1	1:ON
	2	DADF open/closed sensor 2	PS3	0:OPEN 1:CLOSE
	1	DADF open/closed sensor 1	PS1	0:OPEN 1:CLOSE
	0	-	-	-

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## ■ Duplex Color Image Reader Unit-E1 (RCON > P001, P006, FEEDER > P001 to 008)

### ● RCON

Address	bit	Name	Mark	Remarks
P001	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	ADF Delivery original sensor	PS12	1:HP
	0	-	-	-
P006	7	-	-	-
	6	Loop sensor	PS13	0:paper
	5	-	-	-
	4	-	-	-
	3	Post-separation sensor	PS1	1:paper
	2	Lead sensor 2	PS4	0:paper
	1	Lead sensor 1	PS3	0:paper
	0	Registration sensor	PS2	1:paper

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### ● FEEDER

Address	bit	Name	Mark	Remarks
P001	7	Original size sensor 4	PCB2	0:paper
	6	Original size sensor 3	PCB2	0:paper
	5	Original size sensor 2	PCB2	0:paper
	4	Original size sensor 1	PCB2	0:paper
	3	LTR-R/ LGL identification sensor	PS8	0:LTRR 1:LGL
	2	AB/ Inch identification sensor	PS7	0:LTRR,LGL,STMT 1:A4R,A5
	1	Delivery original sensor	PS11	1:paper
	0	Original sensor	PS10	0:paper
P002	7	Cover open/closed sensor	PS9	0:OPEN
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-

Address	bit	Name	Mark	Remarks
P003	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	Registration motor	M2	1:ON
P004	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	Read motor	M3	1:ON
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	Separation motor	M1	1:ON
P005	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P006	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	Read motor cooling fan	FM2	1:ON
	1	-	-	-
	0	-	-	-
P007	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	Scanner unit cooling fan	FM3	1:ON
	0	-	-	-

Address	bit	Name	Mark	Remarks
P008	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	ADF pickup clutch	CL1	1:ON
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-

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## ■ Color Image Reader Unit-F1 (RCON > P006, FEEDER > P001 to 007)

### ● RCON

Address	bit	Name	Mark	Remarks
P006	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	Read sensor	SR2	1:paper
	0	Registration sensor	SR1	1:paper

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### ● FEEDER

Address	bit	Name	Mark	Remarks
P001	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	Timing sensor	SR4	1:paper
	1	Last document detection sensor	SR9	1:paper
	0	A4R/LTRR identification sensor	SR10	1:A4R 0:LTRR
P002	7	Document length sensor 2	SR8	1:paper
	6	Document length sensor 1	SR7	1:paper
	5	-	-	-
	4	Release motor HP sensor	SR11	1:HP
	3	Delivery reversal sensor	SR3	1:paper
	2	Document width sensor 4	SR15	1:paper
	1	Document width sensor 3	SR14	1:paper
	0	Document width sensor 2	SR13	1:paper
P003	7	Document width sensor 1	SR12	1:paper
	6	-	-	-
	5	Cover open/closed sensor	SR6	0:OPEN
	4	Document set sensor	SR5	0:paper
	3	-	-	-
	2	Stamp solenoid	SL2	1:ON
	1	-	-	-
	0	-	-	-

Address	bit	Name	Mark	Remarks
P004	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P005	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P006	7	Release motor	M2	1:ON
	6	-	-	-
	5	-	-	-
	4	Registration clutch	CL2	1:ON
	3	-	-	-
	2	Pickup clutch	CL1	1:ON
	1	-	-	-
	0	Fan	FM1	1:ON
P007	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	ADF motor	M1	1:ON
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-

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### Inner Finisher-E1(SORTER>P001 to P014)

Address	bit	Name	Mark	Remarks
P001	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Entrance sensor	S1	0:ON1:OFF
	6	Gripper unit HP sensor	S7	0:ON1:OFF
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
	P002	15	-	-
14		-	-	-
13		-	-	-
12		-	-	-
11		-	-	-
10		-	-	-
9		-	-	-
8		-	-	-
7		Gripper unit move motor_CW	M2	0:CW1:CCW
6		-	-	-
5		Paper lever drive solenoid	SOL1	0:OFF1:ON
4		-	-	-
3	Shift motor	M4	0:OFF1:ON	
2	shift roller release motor	M5	0:OFF1:ON	
1	stopper motor	M6	0:OFF1:ON	
0	Gripper open/close motor	M7	0:OFF1:ON	

Address	bit	Name	Mark	Remarks
P003	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Feed motor_CW	M3	0:CW1:CCW
	6	Feed motor_clock	M3	1:output
	5	-	-	-
	4	STPmove motor_clock	M1	1:output
	3	STPmove motor_PWM	M1	0:OFF1:ON
	2	Feed motor_PWM	M3	0:OFF1:ON
	1	-	-	-
	0	Gripper unit move motor_PWM	M2	0:OFF1:ON
	P004	15	-	-
14		-	-	-
13		-	-	-
12		-	-	-
11		-	-	-
10		-	-	-
9		-	-	-
8		-	-	-
7		-	-	-
6		-	-	-
5		-	-	-
4		-	-	-
3	Additional tray clock sensor	S23	0:ON1:OFF	
2	stack tray clock sensor	S14	0:ON1:OFF	
1	stapler move HP sensor	S10	0:ON1:OFF	
0	stapler HP sensor	S18	0:ON1:OFF	

Address	bit	Name	Mark	Remarks
P005	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	Entrance roller release /stopper HP sensor	S5	0:ON1:OFF
	4	-	-	-
	3	Shift roller release sensor	S3	0:ON1:OFF
2	Shift roller HP sensor	S2	0:ON1:OFF	
1	-	-	-	
0	-	-	-	
P006	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Additional tray upper/lower limit sensor	S21	0:OFF1:ON
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
2	-	-	-	
1	-	-	-	
0	-	-	-	

Address	bit	Name	Mark	Remarks
P007	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
2	-	-	-	
1	-	-	-	
0	Additional tray paper sensor	S22	0:ON1:OFF	
P008	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
2	-	-	-	
1	-	-	-	
0	-	-	-	



Address	bit	Name	Mark	Remarks
P009	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P010	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	stack tray paper sensor	S15	0:nopaper1:paper
	2	-	-	-
	1	stack tray middle sensor	S16	1:mid/lowlevel
	0	-	-	-

Address	bit	Name	Mark	Remarks
P011	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Processing tray sensor	S6	0:nopaper1:paper
	6	Stapler safety switch	SW2	0:OFF1:ON
	5	Fan2	M9	0:OFF1:ON
	4	-	-	-
	3	Fan1	M8	0:OFF1:ON
	2	-	-	-
	1	-	-	-
	0	-	-	-
P012	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	paper surface sensor2	S12	0:OFF1:ON
	4	paper surface sensor1	S11	0:OFF1:ON
	3	stapler edging sensor	S19	0:OFF1:ON
	2	stapler sensor	S20	0:ON1:OFF
	1	Gripper stapler connection sensor	S9	0:OFF1:ON
	0	Front cover switch	SW1	0:OFF1:ON

Address	bit	Name	Mark	Remarks
P013	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P014	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	stapler motor	M10	0::ENABLE1:DISABLE
	6	-	-	-
	5	-	-	-
	4	Tray lift motor	M11	0::ENABLE1:DISABLE
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-

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### ■ Staple Finisher-J1/Booklet Finisher-J1(SORTER>P001, P007 to P031)

Address	bit	Name	Mark	Remarks
P001	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Tray 2 paper surface sensor 2	PI120	0:paper1:nopaper
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	Front cover sensor	PI102	0:CLOSE1:OPEN
	2	-	-	-
	1	-	-	-
	0	-	-	-
P007	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	Tray 1 shift motor_lock	M107	0:OFF1:lock
	2	-	-	-
	1	-	-	-
	0	Front cover sensor	PI102	0:CLOSE1:OPEN

Address	bit	Name	Mark	Remarks
P008	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	Inlet sensor	PI103	0:paper1:nopaper
	3	Swing guide home position sensor	PI105	1:HP
P009	2	-	-	-
	1	-	-	-
	0	-	-	-
	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Tray 1 paper surface sensor	PI111	0:paper1:nopaper
	6	-	-	-
5	-	-	-	
4	-	-	-	
3	-	-	-	
2	-	-	-	
1	Tray 2 shift motor_lock	M108	0:OFF1:lock	
0	Tray 1 paper sensor	PI112	0:paper1:nopaper	

Address	bit	Name	Mark	Remarks
P010	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
P011	2	-	-	-
	1	-	-	-
	0	-	-	-
	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
5	-	-	-	
4	-	-	-	
3	-	-	-	
2	-	-	-	
1	-	-	-	
0	-	-	-	

Address	bit	Name	Mark	Remarks
P012	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Swing height sensor	PI123	0:CLOSE1:OPEN
	6	Gear change home position sensor	PI117	0:HP
	5	Upper cover sensor	PI101	0:CLOSE1:OPEN
	4	Rear end assist guide home position sensor	PI109	0:HP
	3	Processing Tray sensor	PI108	0:paper1:nopaper
	2	Rear aligning plate home position sensor	PI107	0:HP
	1	Front aligning plate home position sensor	PI106	0:HP
	0	-	-	-
P013	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Tray 2 shift motor	M108	0:OFF1:ON
	6	Tray 2 shift motor_CW	M108	0:CW1:CCW
	5	Inlet roller separation solenoid	SL101	0:OFF1:ON
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	Entrance feed motor_I1	M101	[P013>1:P013>0][0:0]:Low, [0:1]:MID,[1:0]:High,[1:1]:Max
	0	Entrance feed motor_I0	M101	

Address	bit	Name	Mark	Remarks
P014	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Tray 1 shift motor_enable	M107	0:standby1:enable
	6	Tray 1 shift motor_CW	M107	0:CW1:CCW
	5	Tray 1 shift motor	M107	0:OFF1:ON
	4	Rear end assist motor_enable	M109	0:standby1:enable
	3	Rear end assist motor_enable_I1	M109	[P014>3:P014>2][0:0]:Low, [0:1]:MID,[1:0]:High,[1:1]:Max
	2	Rear end assist motor_enable_I0	M109	
	1	Rear end assist motor_enable_CW	M109	0:CW1:CCW
	0	-	-	-
P015	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	Stapler shift motor_enable	M105	0:standby1:enable
	4	-	-	-
	3	-	-	-
	2	Stack ejection motor_CW	M102	0:CW1:CCW
	1	Swing motor_ampere	M106	0:High1:Low
	0	Swing motor_CW	M106	0:CW1:CCW

Address	bit	Name	Mark	Remarks
P016	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	Rear aligning plate motor	M104	0:CW1:CCW
	5	-	-	-
	4	Rear aligning plate motor	M104	0:High1:Low
	3	-	-	-
P017	2	Front aligning plate motor_ ampere	M103	0:High1:Low
	1	Front aligning plate motor_CW	M103	0:CW1:CCW
	0	-	-	-
	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Tray 2 paper surface sensor 1	PI115	0:paper1:nopaper
	6	Tray 1 paper surface sensor	PI114	0:paper1:nopaper
	5	Shutter home position sensor	PI113	0:HP
	4	Stapler shift home position sensor	PI110	0:HP
3	Stapler alignment interference sensor	PI116	0:Interference	
2	-	-	-	
1	-	-	-	
0	-	-	-	

Address	bit	Name	Mark	Remarks
P018	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Stapler shift motor_CW	M105	0:CCW1:CW
	6	Buffer roller separation solenoid	SL102	0:OFF1:ON
	5	Shutter clutch	CL101	0:OFF1:ON
P019	4	Stack ejection lower roller clutch	CL102	0:OFF1:ON
	3	Buffer rear end holding solenoid	SL104	0:OFF1:ON
	2	1st delivery roller separation solenoid	SL103	0:OFF1:ON
	1	Stapler shift motor_I1	M105	[P018>1:P018>0][0:0]:Low, [0:1]:MID,[1:0]:High,[1:1]:Max
	0	Stapler shift motor_I0	M105	
	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
10	-	-	-	
9	-	-	-	
8	-	-	-	
7	-	-	-	
6	Feed path sensor	PI104	0:paper1:nopaper	
5	-	-	-	
4	-	-	-	
3	Stitcher HP sensor (rear)	SW5	1:HP	
2	Stitcher HP sensor (front)	SW7	1:HP	
1	-	-	-	
0	-	-	-	

Address	bit	Name	Mark	Remarks
P020	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Alignment plate home position sensor	PI5	1:HP
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	Vertical pat paper sensor	PI17	0:nopaper1:paper
1	-	-	-	
P021	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
1	Paper pushing plate top position sensor	PI15	0:edge	
0	Paper pushing plate home position sensor	PI14	1:HP	

Address	bit	Name	Mark	Remarks
P022	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	Feed motor_CW	M1	0:CCW1:CW
P023	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
5	-	-	-	
4	-	-	-	
3	-	-	-	
2	-	-	-	
1	-	-	-	
0	-	-	-	

Address	bit	Name	Mark	Remarks
P024	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	No.2 paper deflecting solenoid	SL2	0:OFF1:ON
	4	No.1 paper deflecting solenoid	SL1	0:OFF1:ON
	3	Saddle inlet solenoid	SL5	0:OFF1:ON
	2	Paper folding home position sensor	PI21	0:OFF1:ON
	1	-	-	-
	0	-	-	-
P025	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	Feed motor	M1	0:ON1:OFF
	1	-	-	-
	0	-	-	-

Address	bit	Name	Mark	Remarks
P026	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	Stitcher motor (rear)_CW	M6	0:ON1:OFF
	2	-	-	-
	1	Staple sensor (rear)	SW4	0:OFF1:ON
	0	-	-	-
P027	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	Feed plate contact solenoid	SL4	0:OFF1:ON
	5	Paper folding motor_RV	M2	0:OFF1:ON
	4	-	-	-
	3	-	-	-
	2	Paper positioning plate paper sensor	PI8	0:paper1:nopaper
	1	Paper positioning plate home position sensor	PI7	0:HP
	0	Tray paper sensor	PI6	0:paper1:nopaper



Address	bit	Name	Mark	Remarks
P028	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Paper pushing plate motor_EN	M8	0:ON1:OFF
	6	Paper pushing plate motor_FWM	M8	0:OFF1:ON
	5	Paper pushing plate motor_RV	M8	0:OFF1:ON
	4	Paper folding motor_FWD	M2	0:OFF1:ON
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P029	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Stitcher motor (rear)_CCW	M6	0:ON1:OFF
	6	-	-	-
	5	-	-	-
	4	Stitcher motor (front)_CW	M7	0:ON1:OFF
	3	Stitcher motor (front)_CCW	M7	0:ON1:OFF
	2	Staple sensor (front)	SW6	1:enable
	1	-	-	-
	0	-	-	-

Address	bit	Name	Mark	Remarks
P030	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P031	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Saddle inlet sensor	PI22	0:nopaper1:paper
	6	Guide home position sensor	PI13	1:HP
	5	Crescent roller phase sensor	PI12	1:HP
	4	Delivery sensor	PI11	0:paper1:nopaper
	3	Inlet cover sensor	PI9	0:CLOSE1:OPEN
	2	-	-	-
	1	-	-	-
	0	-	-	-

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## External 2 Hole Puncher-B2(SORTER>P013, P032 to P036, P039)

Address	bit	Name	Mark	Remarks
P013	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	Punch feed motor_enable	M63	0:standby1:enable
	3	Punch feed motor_l1	M63	[P013>3:P013>2][0:0]=Low, [0:1]=MID,[1:0]=High,[1:1]=Max
	2	Punch feed motor_l0	M63	
P032	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Punch HP sensor	PI63	0:HP
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
1	-	-	-	
0	-	-	-	

Address	bit	Name	Mark	Remarks
P033	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P034	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Punch motor_CW	M61	0:ON
	6	Punch motor_CCW	M61	0:ON
	5	LED PCB (Rear edge direction)	PCB3	0:nopaper1:paper
	4	Horizontal registration HP sensor	PI61	1:HP
	3	-	-	-
	2	-	-	-
1	-	-	-	
0	-	-	-	

Address	bit	Name	Mark	Remarks
P035	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	Side registration motor_ampere	M62	0:active1:keep
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P036	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	Side registration motor_B	M62	1:ON
1	Side registration motor_A	M62	1:ON	
0	-	-	-	

Address	bit	Name	Mark	Remarks
P037	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Side registration sensor1	PCB2	0:paper
	6	Scrap full detector PCB	PCB4	0:paper
	5	Upper door switch	MSW61	0:OPEN1:CLOSE
	4	Front door switch	MSW62	0:OPEN1:CLOSE
	3	Side registration sensor2	PCB2	0:paper
	2	Side registration sensor3	PCB3	0:paper
	1	Side registration sensor4	PCB3	0:paper
	0	-	-	-

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## 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 leading edge position) in vertical scanning direction. When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. When the non-image width is larger than the standard value, set the smaller value. When out of original area is copied, set the larger value. As the value is incremented by 1, the image position moves to the trailing edge side by 0.1mm.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0
ADJ-Y	Adj of img pstn in book mode: horz scan	
Lv.1	Details	To adjust the image reading start position in horizontal scanning direction. When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. When the non-image width is larger than the standard value, set the smaller value. When out of original area is copied, set the larger value. As the value is incremented by 1, the image position moves to the rear side by 0.1mm.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value (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	mm
	Default value	0

COPIER > ADJUST > ADJ-XY		
ADJ-S	Adjustment of shading position	
Lv.1	Details	To adjust the shading position. When replacing the Reader Controller PCB, enter the backup value. As the value is incremented by 1, the position moves by 0.1mm.
	Use case	When replacing the Reader Controller PCB
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-100 to 100
	Unit	mm
	Default value	0
ADJ-Y-DF	Adj img pstn in DADF mode:horz scan[FrT]	
Lv.1	Details	To adjust the image reading start position in horizontal scanning direction at DADF reading. When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. As the value is incremented by 1, the image position moves to the rear side by 0.1mm.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value (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	mm
	Default value	0
STRD-POS	Adj read pstn in DADF mode: front side	
Lv.1	Details	To adjust the reading position at DADF reading (front side). When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value (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	mm
	Default value	0
	Related service mode	COPIER> FUNCTION> INSTALL> STRD-POS

COPIER > ADJUST > ADJ-XY	
ADJ-X-MG	Fine adj img ratio:book, vert scan [frt]
Lv.1	Details
	To make a fine adjustment of image magnification ratio in vertical scanning direction at copyboard reading. When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. As the value is incremented by 1, the image magnification ratio changes by 0.01%. +: Enlarge -: Reduce
	Use case
	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range
	-50 to 50
	Unit
	%
	Default value
	0
ADJY-DF2	Adj img pstn in DADF mode:horz scan[bck]
Lv.1	Details
	To adjust the image position of back side in horizontal scanning direction at simultaneous duplex reading. When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. As the value is incremented by 1, the image position moves to the rear side by 0.1mm.
	Use case
	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range
	-50 to 50
	Unit
	mm
	Default value
	0
ADJ-Y-MG	Fine adj img ratio:book, horz scan
Lv.1	Details
	To make a fine adjustment of image magnification ratio in horizontal scanning direction at copyboard reading. When replacing the Reader Controller PCB, enter the backup value. As the value is incremented by 1, the image magnification ratio changes by 0.1%. +: Enlarge -: Reduce
	Use case
	When replacing the Reader Controller PCB
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range
	-10 to 10
	Default value
	0

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## ■ CCD

COPIER > ADJUST > CCD	
W-PLT-X	White level data(X) entry of white plate
Lv.1	Details
	When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. When replacing the Copyboard Glass, enter the value of barcode label which is affixed on the glass.
	Use case
	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Copyboard Glass
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	- Do not use this in cases other than those listed above. - After the setting value is changed, write the changed value in the service label.
	Display/adj/set range
	1 to 9999
	Default value
	8271
	Related service mode
	COPIER.> ADJUST> CCD> W-PLT-Y, W-PLT-Z, BW-TGT
W-PLT-Y	White level data(Y) entry of white plate
Lv.1	Details
	When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. When replacing the Copyboard Glass, enter the value of barcode label which is affixed on the glass.
	Use case
	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Copyboard Glass
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	- Do not use this in cases other than those listed above. - After the setting value is changed, write the changed value in the service label.
	Display/adj/set range
	1 to 9999
	Default value
	8735
	Related service mode
	COPIER.> ADJUST> CCD> W-PLT-X, W-PLT-Z, BW-TGT
W-PLT-Z	White level data(Z) entry of white plate
Lv.1	Details
	When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. When replacing the Copyboard Glass, enter the value of barcode label which is affixed on the glass.
	Use case
	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Copyboard Glass
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	- Do not use this in cases other than those listed above. - After the setting value is changed, write the changed value in the service label.
	Display/adj/set range
	1 to 9999
	Default value
	9418
	Related service mode
	COPIER.> ADJUST> CCD> W-PLT-X, W-PLT-Y, BW-TGT

COPIER > ADJUST > CCD		
SH-TRGT		Shading tgt VL(B&W)[Copyboard](D-Reader)
Lv.1	Details	To set the B&W shading target value in copyboard reading mode.
	Use case	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Scanner Unit
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	1 to 2047
	Default value	1126
100-RG		Img Sensr RG color displace crct VL:Frt
Lv.1	Details	To correct the color displacement (R and G lines) in vertical scanning direction due to the Scanner Unit (paper front). When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by +/- key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	-256 to 256
	Unit	line
	Default value	0
100-GB		Img Sensr GB color displace crct VL:Frt
Lv.1	Details	To correct the color displacement (G and B lines) in vertical scanning direction due to the Scanner Unit (paper front). When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by +/- key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	-256 to 256
	Unit	line
	Default value	0

COPIER > ADJUST > CCD		
DFTAR-R		Shading target value (R) [Front side]
Lv.1	Details	When replacing the Reader Controller PCB, enter the value of service label. When replacing the Copyboard Glass/Scanner Unit (paper front), execute COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 and write the value which is automatically set in the service label.
	Use case	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Copyboard Glass/Scanner Unit (paper front)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2047
	Default value	1159
	Related service mode	COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2
DFTAR-G		Shading target value (G) [Front side]
Lv.1	Details	When replacing the Reader Controller PCB, enter the value of service label. When replacing the Copyboard Glass/Scanner Unit (paper front), execute COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 and write the value which is automatically set in the service label.
	Use case	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Copyboard Glass/Scanner Unit (paper front)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2047
	Default value	1189
	Related service mode	COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2
DFTAR-B		Shading target value (B) [Front side]
Lv.1	Details	When replacing the Reader Controller PCB, enter the value of service label. When replacing the Copyboard Glass/Scanner Unit (paper front), execute COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 and write the value which is automatically set in the service label.
	Use case	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Copyboard Glass/Scanner Unit (paper front)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2047
	Default value	1209
	Related service mode	COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2

COPIER > ADJUST > CCD		
MTF2-M1	MTF value 1 setting: horz scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-M2	MTF value 2 setting: horz scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-M3	MTF value 3 setting: horz scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-M4	MTF value 4 setting: horz scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
MTF2-M5	MTF value 5 setting: horz scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-M6	MTF value 6 setting: horz scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-M7	MTF value 7 setting: horz scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-M8	MTF value 8 setting: horz scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC



COPIER > ADJUST > CCD		
MTF2-M9		MTF value 9 setting: horz scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
	MTF2-S1	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
	MTF2-S2	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
	MTF2-S3	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
MTF2-S4		MTF value 4 setting: vert scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
	MTF2-S5	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
	MTF2-S6	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
	MTF2-S7	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
MTF2-S8		MTF value 8 setting: vert scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-S9		MTF value 9 setting: vert scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
100DF2GB		Img Sns GB clr dispcl crct VL:bck,DRead
Lv.2	Details	To correct the color displacement (G and B lines) in vertical scanning direction due to the Scanner Unit (paper back). When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-256 to 256
	Unit	line
	Default value	0
100DF2RG		Img Sns RG clr dispcl crct VL:bck,DRead
Lv.2	Details	To correct the color displacement (R and G lines) in vertical scanning direction due to the Scanner Unit (paper back). When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-256 to 256
	Unit	line
	Default value	0

COPIER > ADJUST > CCD		
DFCH2R2		Complex chart No.2 data (R) [Front side]
Lv.1	Details	To derive the front/back side linearity, set the Red data (for paper front) of No.2 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2550
	Default value	2000
DFCH2R10		Complex chart No.10 data(R) [Front side]
Lv.1	Details	To derive the front/back side linearity, set the Red data (for paper front) of No.10 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2550
	Default value	0
DFCH2B2		Complex chart No.2 data (B) [Front side]
Lv.1	Details	To derive the front/back side linearity, set the Blue data (for paper front) of No.2 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2550
	Default value	2000
DFCH2B10		Complex chart No.10 data(B) [Front side]
Lv.1	Details	To derive the front/back side linearity, set the Blue data (for paper front) of No.10 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2550
	Default value	0
DFCH2G2		Complex chart No.2 data (G) [Front side]
Lv.1	Details	To derive the front/back side linearity, set the Green data (for paper front) of No.2 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2550
	Default value	2000

COPIER > ADJUST > CCD	
DFCH2G10	Complex chart No.10 data(G) [Front side]
Lv.1	Details
	To derive the front/back side linearity, set the Green data (for paper front) of No.10 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case
	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 2550
	Default value
	0
CCD-CHNG	Scanner Unit(ppr frt) rplce flag setting
Lv.1	Details
	To set the calculation mode of MTF filter coefficient that is used at the replacement of Scanner Unit (paper front). When replacing the Scanner Unit (paper front), enter 1. When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.
	Use case
	- When replacing the Scanner Unit (paper front) - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Data at factory shipment is used. 1: Data at factory shipment is not used. (Scanner Unit (paper front) is already replaced.)
	Default value
	0
MTF-M1	MTF value 1 setting: horz scan [Back]
Lv.1	Details
	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case
	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	20 to 80
	Default value
	50
	Related service mode
	COPIER> FUNCTION> CCD> MTF-CLC
MTF-M2	MTF value 2 setting: horz scan [Back]
Lv.1	Details
	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case
	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	20 to 80
	Default value
	50
	Related service mode
	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD	
MTF-M3	MTF value 3 setting: horz scan [Back]
Lv.1	Details
	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case
	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	20 to 80
	Default value
	50
	Related service mode
	COPIER> FUNCTION> CCD> MTF-CLC
MTF-M4	MTF value 4 setting: horz scan [Back]
Lv.1	Details
	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case
	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	20 to 80
	Default value
	50
	Related service mode
	COPIER> FUNCTION> CCD> MTF-CLC
MTF-M5	MTF value 5 setting: horz scan [Back]
Lv.1	Details
	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case
	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	20 to 80
	Default value
	50
	Related service mode
	COPIER> FUNCTION> CCD> MTF-CLC
MTF-M6	MTF value 6 setting: horz scan [Back]
Lv.1	Details
	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case
	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	20 to 80
	Default value
	50
	Related service mode
	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
MTF-M7		MTF value 7 setting: horz scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-M8		MTF value 8 setting: horz scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-M9		MTF value 9 setting: horz scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-S1		MTF value 1 setting: vert scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
MTF-S2		MTF value 2 setting: vert scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-S3		MTF value 3 setting: vert scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-S4		MTF value 4 setting: vert scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-S5		MTF value 5 setting: vert scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
MTF-S6		MTF value 6 setting: vert scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
	MTF-S7	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
	MTF-S8	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
	MTF-S9	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
DFCH-R2		Complex chart No.2 data (R) [Back side]
Lv.1	Details	To derive the front/back side linearity, set the Red data (for paper back) of No.2 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2550
	Default value	2000
	Related service mode	COPIER> ADJUST> CCD> DFCH-R10, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10
	DFCH-R10	
Lv.1	Details	To derive the front/back side linearity, set the Red data (for paper back) of No.10 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2550
	Default value	0
	Related service mode	COPIER> ADJUST> CCD> DFCH-R2, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10
	DFCH-B2	
Lv.1	Details	To derive the front/back side linearity, set the Blue data (for paper back) of No.2 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2550
	Default value	2000
	Related service mode	COPIER> ADJUST> CCD> DFCH-R10, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10
	DFCH-B10	
Lv.1	Details	To derive the front/back side linearity, set the Blue data (for paper back) of No.10 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2550
	Default value	0
	Related service mode	COPIER> ADJUST> CCD> DFCH-R2, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10



COPIER > ADJUST > CCD		
DFCH-G2	Complex chart No.2 data (G) [Back side]	
Lv.1	Details	To derive the front/back side linearity, set the Green data (for paper back) of No.2 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2550
	Default value	2000
	Related service mode	COPIER> ADJUST> CCD> DFCH-R10, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10
	DFCH-G10	Complex chart No.10 data (G) [Back side]
Lv.1	Details	To derive the front/back side linearity, set the Green data (for paper back) of No.10 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2550
	Default value	0
	Related service mode	COPIER> ADJUST> CCD> DFCH-R2, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10
	MTF2-M10	MTF value 10 setting: horz scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
	MTF2-M11	MTF value 11 setting: horz scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
MTF2-M12	MTF value 12 setting: horz scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
	MTF2-S10	MTF value 10 setting: vert scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
	MTF2-S11	MTF value 11 setting: vert scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
	MTF2-S12	MTF value 12 setting: vert scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
MTF-M10	MTF value 10 setting: horz scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
	MTF-M11	MTF value 11 setting: horz scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
	MTF-M12	MTF value 12 setting: horz scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
	MTF-S10	MTF value 10 setting: vert scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
MTF-S11	MTF value 11 setting: vert scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
	MTF-S12	MTF value 12 setting: vert scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	- When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
	DFCH2K2	Complex chart No.2 data (B&W) [Front]
Lv.1	Details	To derive the front/back side linearity, set the B&W data (for paper front) of No.2 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2550
	Default value	2000
	DFCH2K10	Complex chart No.10 data (B&W) [Front]
Lv.1	Details	To derive the front/back side linearity, set the B&W data (for paper front) of No.10 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2550
	Default value	0



COPIER > ADJUST > CCD		
DFCH-K2		Complex chart No.2 data (B&W) [Back]
Lv.1	Details	To derive the front/back side linearity, set the B&W data (for paper back) of No.2 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2550
	Default value	2000
	Related service mode	COPIER> ADJUST> CCD> DFCH-R2, DFCH-R10, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10, DFCH-K10
DFCH-K10		Complex chart No.10 data (B&W) [Back]
Lv.1	Details	To derive the front/back side linearity, set the B&W data (for paper back) of No.10 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2550
	Default value	0
	Related service mode	COPIER> ADJUST> CCD> DFCH-R2, DFCH-R10, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10, DFCH-K2
DFTAR-BW		Shading target value (B&W) [Front side]
Lv.1	Details	When replacing the Reader Controller PCB, enter the value of service label. When replacing the Copyboard Glass/Scanner Unit (paper front), execute COPIER> FUNCTION> CCD> DF-WLVL3, DF-WLVL4 and write the value which is automatically set in the service label.
	Use case	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Copyboard Glass/Scanner Unit (paper front)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	700 to 1400
	Default value	1209
	Related service mode	COPIER> FUNCTION> CCD> DF-WLVL3, DF-WLVL4

COPIER > ADJUST > CCD		
DFTBK-G		Shading target value (G) [Back side]
Lv.1	Details	When replacing the Reader Controller PCB, enter the value of service label. When replacing the Copyboard Glass/Scanner Unit (paper back), execute COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 and write the value which is automatically set in the service label.
	Use case	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Scanner Unit (paper back)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	700 to 1400
	Default value	1136
	Related service mode	COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2
DFTBK-B		Shading target value (B) [Back side]
Lv.1	Details	When replacing the Reader Controller PCB, enter the value of service label. When replacing the Copyboard Glass/Scanner Unit (paper back), execute COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 and write the value which is automatically set in the service label.
	Use case	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Scanner Unit (paper back)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	700 to 1400
	Default value	1126
	Related service mode	COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2
DFTBK-R		Shading target value (R) [Back side]
Lv.1	Details	When replacing the Reader Controller PCB, enter the value of service label. When replacing the Copyboard Glass/Scanner Unit (paper back), execute COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 and write the value which is automatically set in the service label.
	Use case	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Scanner Unit (paper back)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	700 to 1400
	Default value	1156
	Related service mode	COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2

COPIER > ADJUST > CCD		
CCD-CHG2	Scanner Unit(paper back) rpjce flag set	
Lv.1	Details	To set the calculation mode of MTF filter coefficient that is used at the replacement of Scanner Unit (paper back). When replacing the Scanner Unit (paper back), enter 1. When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.
	Use case	- When replacing the Scanner Unit (paper back) - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Data at factory shipment is used. 1: Data at factory shipment is not used. (Scanner Unit (paper back) is already replaced.)
	Default value	0
DFTBK-BW	Shading target value (B&W) [Back side]	
Lv.1	Details	When replacing the Reader Controller PCB, enter the value of service label. When replacing the Copyboard Glass/Scanner Unit (paper back), execute COPIER> FUNCTION> CCD> DF-WLVL3, DF-WLVL4 and write the value which is automatically set in the service label.
	Use case	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Copyboard Glass/Scanner Unit (paper back)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	700 to 1400
	Default value	1126
	Related service mode	COPIER> FUNCTION> CCD> DF-WLVL3, DF-WLVL4

T-8-24

## IMG-REG

COPIER > ADJUST > IMG-REG		
REG-H-Y	Adj Y color write start pstn: horz scan	
Lv.1	Details	To adjust the write start position of Y-color image in the horizontal scanning direction in increments of 1 pixel.
	Use case	When Y-color displacement in the horizontal scanning direction occurs
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-128 to 127
	Unit	pixel
	Default value	0
REG-H-C	Adj C-color write start pstn: horz scan	
Lv.1	Details	To adjust the write start position of C-color image in the horizontal scanning direction in increments of 1 pixel.
	Use case	When C-color displacement in the horizontal scanning direction occurs
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-128 to 127
	Unit	pixel
	Default value	0
REG-H-K	Adj Bk-color write start pstn: horz scan	
Lv.1	Details	To adjust the write start position of Bk-color image in the horizontal scanning direction in increments of 1 pixel.
	Use case	When Bk-color displacement in the horizontal scanning direction occurs
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-128 to 127
	Unit	pixel
	Default value	0
REG-HS-Y	Adj Y color write start pstn: horz scan	
Lv.1	Details	To adjust the write start position of Y-color image in the horizontal scanning direction in increments of 1 pixel 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	Do not use this at the normal service.
	Display/adj/set range	-128 to 127
	Unit	pixel
	Default value	0

COPIER > ADJUST > IMG-REG		
REG-HS-C		Fine adj C write start pstn: horz scan
Lv.1	Details	To adjust the write start position of 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	Do not use this at the normal service.
	Display/adj/set range	-128 to 127
	Unit	pixel
	Default value	0
REG-HS-K		Fine adj Bk write start pstn: horz scan
Lv.1	Details	To adjust the write start position of Bk-color image in the horizontal scanning direction in smaller increments 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	Do not use this at the normal service.
	Display/adj/set range	-128 to 127
	Unit	pixel
	Default value	0
REG-V-Y		Adj Y color write start pstn: vert scan
Lv.1	Details	To adjust the write start position of Y-color image in the vertical scanning direction in increments of 1 pixel.
	Use case	When Y-color displacement in the vertical scanning direction occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	0 to 127
	Unit	line
	Default value	0
REG-V-C		Adj C-color write start pstn: vert scan
Lv.1	Details	To adjust the write start position of C-color image in the vertical scanning direction in increments of 1 pixel.
	Use case	When C-color displacement in the vertical scanning direction occurs
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-128 to 127
	Unit	line
	Default value	0

COPIER > ADJUST > IMG-REG		
REG-V-K		Adj Bk-color write start pstn: vert scan
Lv.1	Details	To adjust the write start position of Bk-color image in the vertical scanning direction in increments of 1 pixel.
	Use case	When Bk-color displacement in the vertical scanning direction occurs
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-128 to 127
	Unit	line
	Default value	0
REG-H-M		Adj M-color write start pstn: horz scan
Lv.1	Details	To adjust the write start position of M-color image in the horizontal scanning direction in increments of 1 pixel.
	Use case	When M-color displacement in the horizontal scanning direction occurs
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-128 to 127
	Unit	pixel
	Default value	0
REG-V-M		Adj M-color write start pstn: vert scan
Lv.1	Details	To adjust the write start position of M-color image in the vertical scanning direction in increments of 1 pixel.
	Use case	When M-color displacement in the vertical scanning direction occurs
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-128 to 127
	Unit	line
	Default value	0
REG-HS-M		Fine adj M write start pstn: horz scan
Lv.1	Details	To adjust the write start position of M-color image in the horizontal scanning direction in smaller increments than 1 pixel.
	Use case	When M-color displacement in the horizontal scanning direction occurs (smaller than 1 pixel)
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-128 to 127
	Unit	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 horizontal scanning direction by increasing/decreasing the number of pixels. 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 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.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-10 to 10
	Unit	%
	Default value	0
MAG-V	Adj of stdrd magnifictn ratio: vert scan	
Lv.1	Details	To adjust the standard magnification ratio in vertical scanning direction by changing the speed of Photosensitive Drum, ITB and Registration Roller.
	Use case	When adjusting the standard magnification 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.
	Caution	- Do not use this at the normal service. - Be sure to perform auto color displacement correction after adjustment.
	Display/adj/set range	-12 to 12
	Unit	%
	Default value	0

T-8-25

## ■ DENS

COPIER > ADJUST > DENS		
SGNL-Y Enter Y toner dens VL: initialization		
Lv.1	Details	To enter the Y toner density value when initializing the Patch Sensor (Center).
	Use case	When checking the value before RAM clear and re-entering it after RAM clear
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1023
	Default value	0
SGNL-M Enter M toner dens VL: initialization		
Lv.1	Details	To enter the M toner density value when initializing the Patch Sensor (Center).
	Use case	When checking the value before RAM clear and re-entering it after RAM clear
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1023
	Default value	0
SGNL-C Enter C toner dens VL: initialization		
Lv.1	Details	To enter the C toner density value when initializing the Patch Sensor (Center).
	Use case	When checking the value before RAM clear and re-entering it after RAM clear
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1023
	Default value	0
REF-Y Y toner dens target VL entry		
Lv.1	Details	To enter the target value of the ATR Sensor (Y) of ATR control after RAM clear.
	Use case	When checking the value before RAM clear and re-entering it after RAM clear
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this at the normal service.
	Display/adj/set range	0 to 255
	Default value	90(RAM clear)

COPIER > ADJUST > DENS		
REF-M M toner dens target VL entry		
Lv.1	Details	To enter the target value of the ATR Sensor (M) of ATR control after RAM clear.
	Use case	When checking the value before RAM clear and re-entering it after RAM clear
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this at the normal service.
	Display/adj/set range	0 to 255
	Default value	90(RAM clear)
REF-C C toner dens target VL entry		
Lv.1	Details	To enter the target value of the ATR Sensor (C) of ATR control after RAM clear.
	Use case	When checking the value before RAM clear and re-entering it after RAM clear
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this at the normal service.
	Display/adj/set range	0 to 255
	Default value	90(RAM clear)
SIGG-Y Adj Y toner dens gain value: ATR control		
Lv.1	Details	To adjust the gain value of the Y toner density target value at ATR control. The Y-color patch level value at the time of ATR-INIT execution is displayed at Drum Unit initialization. When replacing the DC Controller PCB, enter the ATR-INIT value peculiar to each drum unit.
	Use case	- When identifying the cause at the occurrence of an image density failure - When replacing the DC Controller PCB
	Display/adj/set range	0 to 255
	Default value	0
SIGG-M Adj M toner dens gain value: ATR control		
Lv.1	Details	To adjust the gain value of the M toner density target value at ATR control. The M-color patch level value at the time of ATR-INIT execution is displayed at Drum Unit initialization. When replacing the DC Controller PCB, enter the ATR-INIT value peculiar to each drum unit.
	Use case	- When identifying the cause at the occurrence of an image density failure - When replacing the DC Controller PCB
	Display/adj/set range	0 to 255
	Default value	0

COPIER > ADJUST > DENS		
SIGG-C		Adj C toner dens gain value: ATR control
Lv.1	Details	To adjust the gain value of the C toner density target value at ATR control. The C-color patch level value at the time of ATR-INIT execution is displayed at Drum Unit initialization. When replacing the DC Controller PCB, enter the ATR-INIT value peculiar to each drum unit.
	Use case	- When identifying the cause at the occurrence of an image density failure - When replacing the DC Controller PCB
	Display/adj/set range	0 to 255
	Default value	0
SIGG-K		Adj Bk toner dens gain value:ATR control
Lv.1	Details	To adjust the gain value of the Bk toner density target value at ATR control. The Bk-color patch level value at the time of ATR-INIT execution is displayed at Drum Unit initialization. When replacing the DC Controller PCB, enter the ATR-INIT value peculiar to each drum unit.
	Use case	- When identifying the cause at the occurrence of an image density failure - When replacing the DC Controller PCB
	Display/adj/set range	0 to 255
	Default value	0
SGNL-K		Enter Bk toner dens VL: initialization
Lv.1	Details	To enter the Bk toner density value when initializing the Patch Sensor (Center).
	Use case	When checking the value before RAM clear and re-entering it after RAM clear
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1023
	Default value	0
T-SPLY-Y		[Not used]

COPIER > ADJUST > DENS		
T-SPLY-M		[Not used]
T-SPLY-C		[Not used]
T-SPLY-K		[Not used]
DMAX-Y		Adj D-max ctrl Y-color dens target VL
Lv.2	Details	An image failure might occur because the density target value of the D-max control becomes out of the setting table due to environment change. Adjust the offset of the Y-color density target value of D-max control. The offset is reset when D-max control (full adjustment) is executed.
	Use case	When an image failure occurs due to environment change
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	- Do not use this at the normal service. - This is limited for the use of printer model.
	Display/adj/set range	-128 to 128
	Default value	0



COPIER > ADJUST > DENS		
D-MAX-M		Adj D-max ctrl M-color dens target VL
Lv.2	Details	An image failure might occur because the density target value of the D-max control becomes out of the setting table due to environment change. Adjust the offset of the M-color density target value of D-max control. The offset is reset when D-max control (full adjustment) is executed.
	Use case	When an image failure occurs due to environment change
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	- Do not use this at the normal service. - This is limited for the use of printer model.
	Display/adj/set range	-128 to 128
	Default value	0
D-MAX-C		Adj D-max ctrl C-color dens target VL
Lv.2	Details	An image failure might occur because the density target value of the D-max control becomes out of the setting table due to environment change. Adjust the offset of the C-color density target value of D-max control. The offset is reset when D-max control (full adjustment) is executed.
	Use case	When an image failure occurs due to environment change
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	- Do not use this at the normal service. - This is limited for the use of printer model.
	Display/adj/set range	-128 to 128
	Default value	0
P-TG-Y		Adj of ATR control Y-color target value
Lv.2	Details	To adjust the offset of the ATR patch target value for Y. When the target value determined upon initialization is changed, the TD ratio is also changed. Fogging and density increase are alleviated when the value is smaller, and carrier adherence is alleviated when it is larger.
	Use case	When density failures, fogging, carrier adherence, etc. occur
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Make 50 prints of approx. 10% image ratio (e.g. COPIER> TEST> PG> TYPE: 16) 4 times. 4) Execute full adjustment of auto gradation adjustment.
	Caution	Execute the auto gradation adjustment first to increase the density. If you adjust the offset of the target value, fogging might get worse.
	Display/adj/set range	-4 to 4
	Default value	0

COPIER > ADJUST > DENS		
P-TG-M		Adj of ATR control M-color target value
Lv.2	Details	To adjust the offset of the ATR patch target value for M. When the target value determined upon initialization is changed, the TD ratio is also changed. Fogging and density increase are alleviated when the value is smaller, and carrier adherence is alleviated when it is larger.
	Use case	When density failures, fogging, carrier adherence, etc. occur
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Make 50 prints of approx. 10% image ratio (e.g. COPIER> TEST> PG> TYPE: 16) 4 times. 4) Execute full adjustment of auto gradation adjustment.
	Caution	Execute the auto gradation adjustment first to increase the density. If you adjust the offset of the target value, fogging might get worse.
	Display/adj/set range	-4 to 4
	Default value	0
P-TG-C		Adj of ATR control C-color target value
Lv.2	Details	To adjust the offset of the ATR patch target value for C. When the target value determined upon initialization is changed, the TD ratio is also changed. Fogging and density increase are alleviated when the value is smaller, and carrier adherence is alleviated when it is larger.
	Use case	When density failures, fogging, carrier adherence, etc. occur
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Make 50 prints of approx. 10% image ratio (e.g. COPIER> TEST> PG> TYPE: 16) 4 times. 4) Execute full adjustment of auto gradation adjustment.
	Caution	Execute the auto gradation adjustment first to increase the density. If you adjust the offset of the target value, fogging might get worse.
	Display/adj/set range	-4 to 4
	Default value	0



COPIER > ADJUST > DENS	
P-TG-K	Adj of ATR control Bk-color target value
Lv.2	Details
	To adjust the offset of the ATR patch target value for Bk. When the target value determined upon initialization is changed, the TD ratio is also changed. Fogging and density increase are alleviated when the value is smaller, and carrier adherence is alleviated when it is larger.
	Use case
	When density failures, fogging, carrier adherence, etc. occur
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Make 50 prints of approx. 10% image ratio (e.g. COPIER> TEST> PG> TYPE: 16) 4 times. 4) Execute full adjustment of auto gradation adjustment.
	Caution
	Execute the auto gradation adjustment first to increase the density. If you adjust the offset of the target value, fogging might get worse.
	Display/adj/set range
	-4 to 4
	Default value
	0
DMAX-K	Adj D-max ctrl Bk-color dens target VL
Lv.2	Details
	An image failure might occur because the density target value of the D-max control becomes out of the setting table due to environment change. Adjust the offset of the Bk-color density target value of D-max control. The offset is reset when D-max control (full adjustment) is executed.
	Use case
	When any image failure occurs due to environment change
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this at the normal service.
	Display/adj/set range
	-128 to 128
	Default value
	0
P-ALPHA	Adjustment of Patch Sensor alpha value
Lv.1	Details
	To adjust the correction coefficient alpha value of the Patch Sensor. The value multiplied by 1000 is displayed on the screen.
	Use case
	When the Patch Sensor fails to read the density
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	512 to 2047
	Default value
	1200
	Related service mode
	COPIER> FUNCTION> MISC-P> PT-LPADJ

COPIER > ADJUST > DENS	
REF-K	Bk toner dens target VL entry
Lv.2	Details
	To enter the target value of the ATR Sensor (Bk) of ATR control after RAM clear.
	Use case
	When checking the value before RAM clear and re-entering it after RAM clear
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this at the normal service.
	Display/adj/set range
	0 to 255
	Default value
	90(RAM clear)
DMLMT-HY	Adj Y-clr charge DC voltage upper limit
Lv.2	Details
	To adjust the offset of the charging DC voltage upper limit for Y in D-max control.
	Use case
	When a failure occurs due to limiter of D-max control
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute quick adjustment of auto gradation adjustment.
	Caution
	Do not use this at the normal service.
	Display/adj/set range
	-300 to 300
	Unit
	V
	Default value
	0
	Related service mode
	COPIER>ADJUST>DENS>DMLMT-LY
DMLMT-HM	Adj M-clr charge DC voltage upper limit
Lv.2	Details
	To adjust the offset of the charging DC voltage upper limit for M in D-max control.
	Use case
	When a failure occurs due to limiter of D-max control
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute quick adjustment of auto gradation adjustment.
	Caution
	Do not use this at the normal service.
	Display/adj/set range
	-300 to 300
	Unit
	V
	Default value
	0
	Related service mode
	COPIER>ADJUST>DENS>DMLMT-LM
DMLMT-HC	Adj C-clr charge DC voltage upper limit
Lv.2	Details
	To adjust the offset of the charging DC voltage upper limit for C in D-max control.
	Use case
	When a failure occurs due to limiter of D-max control
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute quick adjustment of auto gradation adjustment.
	Caution
	Do not use this at the normal service.
	Display/adj/set range
	-300 to 300
	Unit
	V
	Default value
	0
	Related service mode
	COPIER>ADJUST>DENS>DMLMT-LC

COPIER > ADJUST > DENS		
DMLMT-HK		Adj Bk-clr charge DC voltage upper limit
Lv.2	Details	To adjust the offset of the charging DC voltage upper limit for Bk in D-max control.
	Use case	When a failure occurs due to limiter of D-max control
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute quick adjustment of auto gradation adjustment.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-300 to 300
	Unit	V
	Default value	0
	Related service mode	COPIER>ADJUST>DENS>DMLMT-LK
DMLMT-LY		Adj Y-clr charge DC voltage lower limit
Lv.2	Details	To adjust the offset of the charging DC voltage lower limit for Y in D-max control.
	Use case	When a failure occurs due to limiter of D-max control
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute quick adjustment of auto gradation adjustment.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-300 to 300
	Unit	V
	Default value	0
	Related service mode	COPIER>ADJUST>DENS>DMLMT-HY
DMLMT-LM		Adj M-clr charge DC voltage lower limit
Lv.2	Details	To adjust the offset of the charging DC voltage lower limit for M in D-max control.
	Use case	When a failure occurs due to limiter of D-max control
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute quick adjustment of auto gradation adjustment.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-300 to 300
	Unit	V
	Default value	0
	Related service mode	COPIER>ADJUST>DENS>DMLMT-HM

COPIER > ADJUST > DENS		
DMLMT-LC		Adj C-clr charge DC voltage lower limit
Lv.2	Details	To adjust the offset of the charging DC voltage lower limit for C in D-max control.
	Use case	When a failure occurs due to limiter of D-max control
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute quick adjustment of auto gradation adjustment.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-300 to 300
	Unit	V
	Default value	0
	Related service mode	COPIER>ADJUST>DENS>DMLMT-HC
DMLMT-LK		Adj Bk-clr charge DC voltage lower limit
Lv.2	Details	To adjust the offset of the charging DC voltage lower limit for Bk in D-max control.
	Use case	When a failure occurs due to limiter of D-max control
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute quick adjustment of auto gradation adjustment.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-300 to 300
	Unit	V
	Default value	0
	Related service mode	COPIER>ADJUST>DENS>DMLMT-HK
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 the backup data is cleared by RAM clear, etc.
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	0 to 255
	Unit	V
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 the backup data is cleared by RAM clear, etc.
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	0 to 255
	Unit	V

COPIER > ADJUST > DENS		
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 the backup data is cleared by RAM clear, etc.
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	0 to 255
	Unit	V
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 the backup data is cleared by RAM clear, etc.
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	0 to 255
	Unit	V

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## ■ BLANK

COPIER > ADJUST > BLANK		
BLANK-T		Adjustment of leading edge margin
Lv.1	Details	To adjust the margin on the leading edge of paper. As the value is incremented by 1, the margin is increased toward the center of the paper by 1 pixel (0.0423 mm).
	Use case	- When reducing the margin upon user's request - When enlarging the margin for transfer separation/fixing separation
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	0 to 1000
	Unit	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	- When reducing the margin upon user's request - When enlarging the margin for transfer separation/fixing separation
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1000
	Unit	pixel
	Default value	59
	BLANK-R	
Lv.1	Details	To adjust the margin on the right edge of paper. As the value is incremented by 1, the margin is increased toward the center of the paper by 1 pixel (0.0423 mm).
	Use case	- When reducing the margin upon user's request - When enlarging the margin for transfer separation/fixing separation
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1000
	Unit	pixel
	Default value	59
	BLANK-B	
Lv.1	Details	To adjust the margin on the trailing edge of paper. As the value is incremented by 1, the margin is increased toward the center of the paper by 1 pixel (0.0423 mm).
	Use case	- When reducing the margin upon user's request - When enlarging the margin for transfer separation/fixing separation
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1000
	Unit	pixel
	Default value	59

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## V-CONT

COPIER > ADJUST > V-CONT	
VCONT-Y	Adj of Y-color contrast potential
Lv.2	Details
	To adjust the contrast potential for Y. As the value is incremented by 1, the contrast potential changes by 10V. +: Image becomes darker. -: Image becomes lighter. When the value is too large, paper winds around the Fixing Roller or a transfer failure occurs. In principle, the adjustment of the density should be performed in Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Density Adjustment Mode.
	Use case
	When adjusting the density of D-max control in the case that an image density failure occurs
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by +/- key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute full adjustment of auto gradation adjustment.
	Caution
	Do not use this at the normal service.
	Display/adj/set range
	-20 to 20
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> V-CONT> VCONT-M, VCONT-C, VCONT-K
VCONT-M	Adj of M color contrast potential
Lv.2	Details
	To adjust the contrast potential for M. As the value is incremented by 1, the contrast potential changes by 10V. +: Image becomes darker. -: Image becomes lighter. When the value is too large, paper winds around the Fixing Roller or a transfer failure occurs. In principle, the adjustment of the density should be performed in Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Density Adjustment Mode.
	Use case
	When adjusting the density of D-max control in the case that an image density failure occurs
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by +/- key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute full adjustment of auto gradation adjustment.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-20 to 20
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> V-CONT> VCONT-Y, VCONT-M, VCONT-C

COPIER > ADJUST > V-CONT	
VCONT-C	Adj of C-color contrast potential
Lv.2	Details
	To adjust the contrast potential for C. As the value is incremented by 1, the contrast potential changes by 10V. +: Image becomes darker. -: Image becomes lighter. When the value is too large, paper winds around the Fixing Roller or a transfer failure occurs. In principle, the adjustment of the density should be performed in Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Density Adjustment Mode.
	Use case
	When adjusting the density of D-max control in the case that an image density failure occurs
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by +/- key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute full adjustment of auto gradation adjustment.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-20 to 20
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> V-CONT> VCONT-Y, VCONT-M, VCONT-C
VCONT-K	Adj of Bk-color contrast potential
Lv.2	Details
	To adjust the offset of the contrast potential Vcont for Bk. As the value is incremented by 1, the contrast potential changes by 10V. +: Image becomes darker. -: Image becomes lighter. When the value is too large, paper winds around the Fixing Belt or a transfer failure occurs. In principle, the adjustment of the density should be performed in Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Density Adjustment Mode.
	Use case
	When adjusting the density of D-max control in the case that an image density failure occurs
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by +/- key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute full adjustment of auto gradation adjustment.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-20 to 20
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> V-CONT> VCONT-Y, VCONT-M, VCONT-C

COPIER > ADJUST > V-CONT	
VBACK-Y	Adj Y-color fogging removal potential
Lv.2	Details
	To adjust the offset of the fogging removal potential Vback for Y. A value obtained by adding the adjustment value in Adjustment/ Maintenance> Adjust Image Quality> Correct Color Cast to the fogging removal potential is set as the fogging adjustment value. As the value is incremented by 1, the fogging removal potential changes by 5V. +: Fogging, blanking of image edge, and carrier adherence are alleviated. -: Coarse image, blanking of image edge, and carrier adherence are alleviated.
	Use case
	At the occurrence of Y fogging
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute full adjustment of auto gradation adjustment.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-10 to 10
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> V-CONT> VBACK-M, VBACK-C, VBACK-K
VBACK-M	Adj M-color fogging removal potential
Lv.2	Details
	To adjust the offset of the fogging removal potential Vback for M. A value obtained by adding the adjustment value in Adjustment/ Maintenance> Adjust Image Quality> Correct Color Cast to the fogging removal potential is set as the fogging adjustment value. As the value is incremented by 1, the fogging removal potential changes by 5V. +: Fogging, blanking of image edge, and carrier adherence are alleviated. -: Coarse image, blanking of image edge, and carrier adherence are alleviated.
	Use case
	At the occurrence of M fogging
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute full adjustment of auto gradation adjustment.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-10 to 10
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> V-CONT> VBACK-Y, VBACK-C, VBACK-K

COPIER > ADJUST > V-CONT	
VBACK-C	Adj C-color fogging removal potential
Lv.2	Details
	To adjust the offset of the fogging removal potential Vback for C. A value obtained by adding the adjustment value in Adjustment/ Maintenance> Adjust Image Quality> Correct Color Cast to the fogging removal potential is set as the fogging adjustment value. As the value is incremented by 1, the fogging removal potential changes by 5V. +: Fogging, blanking of image edge, and carrier adherence are alleviated. -: Coarse image, blanking of image edge, and carrier adherence are alleviated.
	Use case
	At the occurrence of C fogging
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute full adjustment of auto gradation adjustment.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-10 to 10
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> V-CONT> VBACK-Y, VBACK-M, VBACK-K
VBACK-K	Adj Bk-color fogging removal potential
Lv.2	Details
	To adjust the offset of the fogging removal potential Vback for Bk. A value obtained by adding the adjustment value in Adjustment/ Maintenance> Adjust Image Quality> Correct Color Cast to the fogging removal potential is set as the fogging adjustment value. As the value is incremented by 1, the fogging removal potential changes by 5V. +: Fogging, blanking of image edge, and carrier adherence are alleviated. -: Coarse image, blanking of image edge, and carrier adherence are alleviated.
	Use case
	At the occurrence of Bk fogging
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute full adjustment of auto gradation adjustment.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-10 to 10
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> V-CONT> VBACK-Y, VBACK-M, VBACK-C COPIER> DISPLAY> DPOT> VBACK-K

COPIER > ADJUST > V-CONT		
PT-VCT-Y	Adj of Y-color target contrast potntl	
Lv.2	Details	To adjust the Y patch target contrast potential for D-max PASCAL control. As the value is incremented by 1, the target contrast potential changes by 1V. +: Potential is increased. -: Potential is decreased.
	Use case	When density failures, fogging, carrier adherence, etc. occur
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Make 50 prints of approx. 10% image ratio (e.g. COPIER> TEST> PG> TYPE: 16) 4 times. 4) Execute full adjustment of auto gradation adjustment.
	Display/adj/set range	-50 to 50
	Unit	V
	Default value	The value differs according to the environment.
	Related service mode	COPIER> ADJUST> V-CONT> PT-VCT-M, PT-VCT-C, PT-VCT-K
PT-VCT-M	Adj of M-color target contrast potntl	
Lv.2	Details	To adjust the M patch target contrast potential for D-max PASCAL control. As the value is incremented by 1, the target contrast potential changes by 1V. +: Potential is increased. -: Potential is decreased.
	Use case	When density failures, fogging, carrier adherence, etc. occur
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Make 50 prints of approx. 10% image ratio (e.g. COPIER> TEST> PG> TYPE: 16) 4 times. 4) Execute full adjustment of auto gradation adjustment.
	Display/adj/set range	-50 to 50
	Unit	V
	Default value	The value differs according to the environment.
	Related service mode	COPIER> ADJUST> V-CONT> PT-VCT-Y, PT-VCT-C, PT-VCT-K

COPIER > ADJUST > V-CONT		
PT-VCT-C	Adj of C-color target contrast potntl	
Lv.2	Details	To adjust the C patch target contrast potential for D-max PASCAL control. As the value is incremented by 1, the target contrast potential changes by 1V. +: Potential is increased. -: Potential is decreased.
	Use case	When density failures, fogging, carrier adherence, etc. occur
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Make 50 prints of approx. 10% image ratio (e.g. COPIER> TEST> PG> TYPE: 16) 4 times. 4) Execute full adjustment of auto gradation adjustment.
	Display/adj/set range	-50 to 50
	Unit	V
	Default value	The value differs according to the environment.
	Related service mode	COPIER> ADJUST> V-CONT> PT-VCT-Y, PT-VCT-M, PT-VCT-K
PT-VCT-K	Adj of Bk-color target contrast potntl	
Lv.2	Details	To adjust the Bk patch target contrast potential for D-max PASCAL control. As the value is incremented by 1, the target contrast potential changes by 1V. +: Potential is increased. -: Potential is decreased.
	Use case	When density failures, fogging, carrier adherence, etc. occur
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Make 50 prints of approx. 10% image ratio (e.g. COPIER> TEST> PG> TYPE: 16) 4 times. 4) Execute full adjustment of auto gradation adjustment.
	Display/adj/set range	-50 to 50
	Unit	V
	Default value	The value differs according to the environment.
	Related service mode	COPIER> ADJUST> V-CONT> PT-VCT-Y, PT-VCT-M, PT-VCT-C

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## PASCAL

COPIER > ADJUST > PASCAL	
OFST-P-Y	Y density adj at test print reading
Lv.1	Details
	To adjust the offset of Y-color test print reading signal at auto gradation adjustment (full adjustment). When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. As the value is larger, the image after adjustment gets darker.
	Use case
	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this at the normal service.
	Display/adj/set range
	-128 to 128
	Default value
	According to the setting at shipment
OFST-P-M	M density adj at test print reading
Lv.1	Details
	To adjust the offset of M-color test print reading signal at auto gradation adjustment (full adjustment). When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. As the value is larger, the image after adjustment gets darker.
	Use case
	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range
	-128 to 128
	Default value
	According to the setting at shipment
OFST-P-C	C density adj at test print reading
Lv.1	Details
	To adjust the offset of C-color test print reading signal at auto gradation adjustment (full adjustment). When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. As the value is larger, the image after adjustment gets darker.
	Use case
	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range
	-128 to 128
	Default value
	According to the setting at shipment

COPIER > ADJUST > PASCAL	
OFST-P-K	Bk density adj at test print reading
Lv.1	Details
	To adjust the offset of Bk-color test print reading signal at auto gradation adjustment (full adjustment). When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. As the value is larger, the image after adjustment gets darker.
	Use case
	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range
	-128 to 128
	Default value
	According to the setting at shipment

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## COLOR

COPIER > ADJUST > COLOR		
ADJ-Y		Y color balance adjustment
Lv.1	Details	To adjust the default value of the color balance for Y when the density of Y varies between machines. As the value is larger, the image gets darker. If the value is too large, a transfer failure and/or a fixing failure occurs.
	Use case	Upon user's request (to alleviate the variation of the density between machines)
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-8 to 8
	Default value	0
	ADJ-M	
Lv.1	Details	To adjust the default value of the color balance for M when the density of M varies between machines. As the value is larger, the image gets darker. If the value is too large, a transfer failure and/or a fixing failure occurs.
	Use case	Upon user's request (to alleviate the variation of the density between machines)
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-8 to 8
	Default value	0
ADJ-C		C-color balance adjustment
Lv.1	Details	To adjust the default value of the color balance for C when the density of C varies between machines. As the value is larger, the image gets darker. If the value is too large, a transfer failure and/or a fixing failure occurs.
	Use case	Upon user's request (to alleviate the variation of the density between machines)
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-8 to 8
	Default value	0

COPIER > ADJUST > COLOR		
ADJ-K		Bk-color balance adjustment
Lv.1	Details	To adjust the default value of the color balance for Bk when the density of Bk varies between machines. As the value is larger, the image gets darker. If the value is too large, a transfer failure and/or a fixing failure occurs.
	Use case	Upon user's request (to alleviate the variation of the density between machines)
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-8 to 8
	Default value	0
OFST-Y		Adj of Y bright area dens&color balance
Lv.1	Details	To adjust the bright area density and color balance of Y. As the value is larger, the image gets darker. Lower the value when the background cannot be read correctly because the density of a document is dark and increase the value when the density of a document is light. Lower the value when removal of the background is not performed correctly and a fogging-like image appears. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case	- When the background of a document cannot be read correctly - When removal of the background cannot be performed correctly and a fogging-like image appears
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	- 32 to 32
	Default value	0

COPIER > ADJUST > COLOR	
OFST-M	Adj of M bright area dens&color balance
Lv.1	<p><b>Details</b></p> <p>To adjust the bright area density and color balance of M. As the value is larger, the image gets darker. Lower the value when the background cannot be read correctly because the density of a document is dark and increase the value when the density of a document is light. Lower the value when removal of the background is not performed correctly and a fogging-like image appears. This setting is linked with Adjustment/Maintenance&gt; Adjust Image Quality&gt; Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.</p> <p><b>Use case</b></p> <p>- 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</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.</p> <p><b>Display/adj/set range</b></p> <p>- 32 to 32</p> <p><b>Default value</b></p> <p>0</p>
OFST-C	Adj of C bright area dens&color balance
Lv.1	<p><b>Details</b></p> <p>To adjust the bright area density and color balance of C. As the value is larger, the image gets darker. Lower the value when the background cannot be read correctly because the density of a document is dark and increase the value when the density of a document is light. Lower the value when removal of the background is not performed correctly and a fogging-like image appears. This setting is linked with Adjustment/Maintenance&gt; Adjust Image Quality&gt; Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.</p> <p><b>Use case</b></p> <p>- 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</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.</p> <p><b>Display/adj/set range</b></p> <p>- 32 to 32</p> <p><b>Default value</b></p> <p>0</p>

COPIER > ADJUST > COLOR	
OFST-K	Adj Bk bright area dens&color balance
Lv.1	<p><b>Details</b></p> <p>To adjust the bright area density and color balance of Bk. As the value is larger, the image gets darker. Lower the value when the background cannot be read correctly because the density of a document is dark and increase the value when the density of a document is light. Lower the value when removal of the background is not performed correctly and a fogging-like image appears. This setting is linked with Adjustment/Maintenance&gt; Adjust Image Quality&gt; Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.</p> <p><b>Use case</b></p> <p>- 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</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.</p> <p><b>Display/adj/set range</b></p> <p>- 32 to 32</p> <p><b>Default value</b></p> <p>0</p>
LD-OFS-Y	Color balance adj of Y low dens area
Lv.2	<p><b>Details</b></p> <p>To adjust the color balance of the low density area of Y. As the value is larger, the image gets darker. This setting is linked with Adjustment/Maintenance&gt; Adjust Image Quality&gt; Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.</p> <p><b>Use case</b></p> <p>Do not use this when the machine is operating correctly.</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.</p> <p><b>Caution</b></p> <p>Do not use this when the machine is operating correctly.</p> <p><b>Display/adj/set range</b></p> <p>-8 to 8</p> <p><b>Default value</b></p> <p>0</p>
LD-OFS-M	Color balance adj of M low dens area
Lv.2	<p><b>Details</b></p> <p>To</p> <p><b>Use case</b></p> <p>Do not use this when the machine is operating correctly.</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.</p> <p><b>Caution</b></p> <p>Do not use this when the machine is operating correctly.</p> <p><b>Display/adj/set range</b></p> <p>-8 to 8</p> <p><b>Default value</b></p> <p>0</p>

COPIER > ADJUST > COLOR	
LD-OFS-C	Color balance adj of C low dens area
Lv.2	Details
	To adjust the color balance of the low density area of C. As the value is larger, the image gets darker. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case
	Do not use this when the machine is operating correctly.
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-8 to 8
	Default value
	0
LD-OFS-K	Color balance adj of Bk low dens area
Lv.2	Details
	To adjust the color balance of the low density area of Bk. As the value is larger, the image gets darker. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case
	Do not use this when the machine is operating correctly.
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-8 to 8
	Default value
	0
MD-OFS-Y	Color balance adj of Y mid dens area
Lv.2	Details
	To adjust the color balance of the medium density area of Y. As the value is larger, the image gets darker. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case
	Do not use this when the machine is operating correctly.
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-8 to 8
	Default value
	0

COPIER > ADJUST > COLOR	
MD-OFS-M	Color balance adj of M mid dens area
Lv.2	Details
	To adjust the color balance of the medium density area of M. As the value is larger, the image gets darker. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case
	Do not use this when the machine is operating correctly.
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-8 to 8
	Default value
	0
MD-OFS-C	Color balance adj of C mid dens area
Lv.2	Details
	To adjust the color balance of the medium density area of C. As the value is larger, the image gets darker. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case
	Do not use this when the machine is operating correctly.
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-8 to 8
	Default value
	0
MD-OFS-K	Color balance adj of Bk mid dens area
Lv.2	Details
	To adjust the color balance of the medium density area of Bk. As the value is larger, the image gets darker. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case
	Do not use this when the machine is operating correctly.
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-8 to 8
	Default value
	0

COPIER > ADJUST > COLOR	
HD-OFS-Y	Color balance adj of Y high dens area
Lv.2	Details
	To adjust the color balance of the high density area of Y. As the value is larger, the image gets darker. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case
	Do not use this when the machine is operating correctly.
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-8 to 8
	Default value
	0
HD-OFS-M	Color balance adj of M high dens area
Lv.2	Details
	To adjust the color balance of the high density area of M. As the value is larger, the image gets darker. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case
	Do not use this when the machine is operating correctly.
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-8 to 8
	Default value
	0
HD-OFS-C	Color balance adj of C high dens area
Lv.2	Details
	To adjust the color balance of the high density area of C. As the value is larger, the image gets darker. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case
	Do not use this when the machine is operating correctly.
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-8 to 8
	Default value
	0

COPIER > ADJUST > COLOR	
HD-OFS-K	Color balance adj of Bk high dens area
Lv.2	Details
	To adjust the color balance of the high density area of Bk. As the value is larger, the image gets darker. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case
	Do not use this when the machine is operating correctly.
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-8 to 8
	Default value
	0
PL-OFS-Y	Clr blnce adj of Y low dens area:PDL
Lv.2	Details
	To adjust the color balance of the low density area of Y at PDL print. As the value is larger, the image gets darker.
	Use case
	Do not use this when the machine is operating correctly.
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-8 to 8
	Default value
	0
PL-OFS-M	Clr blnce adj of M low dens area:PDL
Lv.2	Details
	To adjust the color balance of the low density area of M at PDL print. As the value is larger, the image gets darker.
	Use case
	Do not use this when the machine is operating correctly.
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-8 to 8
	Default value
	0
PL-OFS-C	Clr blnce adj of C low dens area:PDL
Lv.2	Details
	To adjust the color balance of the low density area of C at PDL print. As the value is larger, the image gets darker.
	Use case
	Do not use this when the machine is operating correctly.
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-8 to 8
	Default value
	0

COPIER > ADJUST > COLOR		
PL-OFS-K		Clr blnce adj of Bk low dens area:PDL
Lv.2	Details	To adjust the color balance of the low density area of Bk at PDL print. As the value is larger, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0
PM-OFS-Y		Clr blnce adj of Y mid dens area:PDL
Lv.2	Details	To adjust the color balance of the medium density area of Y at PDL print. As the value is larger, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0
PM-OFS-M		Clr blnce adj of M mid dens area:PDL
Lv.2	Details	To adjust the color balance of the medium density area of M at PDL print. As the value is larger, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0
PM-OFS-C		Clr blnce adj of C mid dens area:PDL
Lv.2	Details	To adjust the color balance of the medium density area of C at PDL print. As the value is larger, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0

COPIER > ADJUST > COLOR		
PM-OFS-K		Clr blnce adj of Bk mid dens area:PDL
Lv.2	Details	To adjust the color balance of the medium density area of Bk at PDL print. As the value is larger, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0
PH-OFS-Y		Clr blnce adj of Y high dens area:PDL
Lv.2	Details	To adjust the color balance of the high density area of Y at PDL print. As the value is larger, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0
PH-OFS-M		Clr blnce adj of M high dens area:PDL
Lv.2	Details	To adjust the color balance of the high density area of M at PDL print. As the value is larger, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0
PH-OFS-C		Clr blnce adj of C high dens area:PDL
Lv.2	Details	To adjust the color balance of the high density area of C at PDL print. As the value is larger, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0

COPIER > ADJUST > COLOR	
PH-OFS-K	Clr blnce adj of Bk high dens area:PDL
Lv.2	Details
	To adjust the color balance of the high density area of Bk at PDL print. As the value is larger, the image gets darker.
	Use case
	Do not use this when the machine is operating correctly.
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-8 to 8
	Default value
	0

T-8-30

## ■ HV-PRI

COPIER > ADJUST > HV-PRI	
DIS-TGY	Discharge crnt ctrl Y tgt crnt:1/1SPD
Lv.2	Details
	To adjust the offset of the target current for Y upon discharging current control for plain paper at 1/1 speed.
	Use case
	When an image failure (sand-like image) occurs
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-10 to 10
	Unit
	uA
	Default value
	0
	Related service mode
	COPIER>ADJUST>HV-PRI>IOFSTAC-Y
DIS-TGM	Discharge crnt ctrl M tgt crnt:1/1SPD
Lv.2	Details
	To adjust the offset of the target current for M upon discharging current control for plain paper at 1/1 speed.
	Use case
	When an image failure (sand-like image) occurs
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-10 to 10
	Unit
	uA
	Default value
	0
	Related service mode
	COPIER>ADJUST>HV-PRI>OFSTAC-M
DIS-TGC	Discharge crnt ctrl C tgt crnt:1/1SPD
Lv.2	Details
	To adjust the offset of the target current for C upon discharging current control for plain paper at 1/1 speed.
	Use case
	When an image failure (sand-like image) occurs
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-10 to 10
	Unit
	uA
	Default value
	0
	Related service mode
	COPIER>ADJUST>HV-PRI>OFSTAC-C



COPIER > ADJUST > HV-PRI		
DIS-TGK	Discharge crnt ctrl Bk tgt crnt:1/1SPD	
Lv.2	Details	To adjust the offset of the target current for Bk upon discharging current control for plain paper at 1/1 speed.
	Use case	When an image failure (sand-like image) occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-10 to 10
	Unit	uA
	Default value	0
	Related service mode	COPIER>ADJUST>HV-PRI>OFSTAC-K
DIS-TGY2	Dischg crnt ctrl Y tgt crnt:1/2,1/3SPD	
Lv.2	Details	To adjust the offset of the target current for Y upon discharging current control for plain paper at 1/2 and 1/3 speed.
	Use case	When an image failure (sand-like image) occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-10 to 10
	Unit	uA
	Default value	0
	Related service mode	COPIER>ADJUST>HV-PRI>OFSTACY2
DIS-TGM2	Dischg crnt ctrl M tgt crnt:1/2,1/3SPD	
Lv.2	Details	To adjust the offset of the target current for M upon discharging current control for plain paper at 1/2 and 1/3 speed.
	Use case	When an image failure (sand-like image) occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-10 to 10
	Unit	uA
	Default value	0
	Related service mode	COPIER>ADJUST>HV-PRI>OFSTACM2

COPIER > ADJUST > HV-PRI		
DIS-TGC2	Dischg crnt ctrl C tgt crnt:1/2,1/3SPD	
Lv.2	Details	To adjust the offset of the target current for C upon discharging current control for plain paper at 1/2 and 1/3 speed.
	Use case	When an image failure (sand-like image) occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-10 to 10
	Unit	uA
	Default value	0
	Related service mode	COPIER>ADJUST>HV-PRI>OFSTACC2
DIS-TGK2	Dischg crnt ctrl Bktgt crnt:1/2,1/3SPD	
Lv.2	Details	To adjust the offset of the target current for Bk upon discharging current control for plain paper at 1/2 and 1/3 speed.
	Use case	When an image failure (sand-like image) occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-10 to 10
	Unit	uA
	Default value	0
	Related service mode	COPIER>ADJUST>HV-PRI>OFSTACK2
OFSTAC-Y	Adj Y charge AC voltage (1/1 speed)	
Lv.1	Details	To adjust the offset of the charge AC voltage for Y. As the value is incremented by 1, the voltage value is increased by 20 Vpp. Decrease the value when image smear occurs, and increase the value when image failure (sand-like image) occurs.
	Use case	<ul style="list-style-type: none"> <li>When image smear occurs</li> <li>When an image failure (sand-like image) occurs</li> </ul>
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	<ul style="list-style-type: none"> <li>Do not use this when the machine is operating correctly.</li> <li>Use OFSTAC-Y only when image failure is not alleviated by making adjustment with DIS-TGY. In this case, be sure to return DIS-TGY to its original setting.</li> <li>If the value is too large, the life of the Photosensitive Drum becomes shorter.</li> </ul>
	Display/adj/set range	-20 to 20
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> HV-PRI> DIS-TGY



COPIER > ADJUST > HV-PRI	
OFSTAC-M	Adj M charge AC voltage (1/1 speed)
Lv.1	Details
	To adjust the offset of the charge AC voltage for M. As the value is incremented by 1, the voltage value is increased by 20 Vpp. Decrease the value when image smear occurs, and increase the value when image failure (sand-like image) occurs.
	Use case
	<ul style="list-style-type: none"> <li>When image smear occurs</li> <li>When an image failure (sand-like image) occurs</li> </ul>
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	<ul style="list-style-type: none"> <li>Do not use this when the machine is operating correctly.</li> <li>Use OFSTAC-M only when image failure is not alleviated by making adjustment with DIS-TGM. In this case, be sure to return DIS-TGM to its original setting.</li> <li>If the value is too large, the life of the Photosensitive Drum becomes shorter.</li> </ul>
	Display/adj/set range
	-20 to 20
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-PRI> DIS-TGM
OFSTAC-C	Adj C charge AC voltage (1/1 speed)
Lv.1	Details
	To adjust the offset of the charge AC voltage for C. As the value is incremented by 1, the voltage value is increased by 20 Vpp. Decrease the value when image smear occurs, and increase the value when image failure (sand-like image) occurs.
	Use case
	<ul style="list-style-type: none"> <li>When image smear occurs</li> <li>When an image failure (sand-like image) occurs</li> </ul>
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	<ul style="list-style-type: none"> <li>Do not use this when the machine is operating correctly.</li> <li>Use OFSTAC-C only when image failure is not alleviated by making adjustment with DIS-TGC. In this case, be sure to return DIS-TGC to its original setting.</li> <li>If the value is too large, the life of the Photosensitive Drum becomes shorter.</li> </ul>
	Display/adj/set range
	-20 to 20
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-PRI> DIS-TGC

COPIER > ADJUST > HV-PRI	
OFSTAC-K	Adj Bk charge AC voltage (1/1 speed)
Lv.1	Details
	To adjust the offset of the charge AC voltage for Bk. As the value is incremented by 1, the voltage value is increased by 20 Vpp. Decrease the value when image smear occurs, and increase the value when image failure (sand-like image) occurs.
	Use case
	<ul style="list-style-type: none"> <li>When image smear occurs</li> <li>When an image failure (sand-like image) occurs</li> </ul>
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	<ul style="list-style-type: none"> <li>Do not use this when the machine is operating correctly.</li> <li>Use OFSTAC-K only when image failure is not alleviated by making adjustment with DIS-TGK. In this case, be sure to return DIS-TGK to its original setting.</li> <li>If the value is too large, the life of the Photosensitive Drum becomes shorter.</li> </ul>
	Display/adj/set range
	-20 to 20
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-PRI> DIS-TGK
OFSTACY2	Adj Y charge AC voltage (1/2 speed)
Lv.1	Details
	To adjust the offset of the charge AC voltage for Y at 1/2 speed. As the value is incremented by 1, the voltage value is increased by 20 Vpp. Decrease the value when image smear occurs, and increase the value when image failure (sand-like image) occurs.
	Use case
	<ul style="list-style-type: none"> <li>When image smear occurs</li> <li>When an image failure (sand-like image) occurs</li> </ul>
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	<ul style="list-style-type: none"> <li>Do not use this when the machine is operating correctly.</li> <li>Use OFSTACY2 only when image failure is not alleviated by making adjustment with DIS-TGY2. In this case, be sure to return DIS-TGY2 to its original setting.</li> </ul>
	Display/adj/set range
	-20 to 20
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-PRI> DIS-TGY2

COPIER > ADJUST > HV-PRI		
OFSTACM2	Adj M charge AC voltage (1/2 speed)	
Lv.1	Details	To adjust the offset of the charge AC voltage for M at 1/2 speed. As the value is incremented by 1, the voltage value is increased by 20 Vpp. Decrease the value when image smear occurs, and increase the value when image failure (sand-like image) occurs.
	Use case	<ul style="list-style-type: none"> <li>When image smear occurs</li> <li>When an image failure (sand-like image) occurs</li> </ul>
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	<ul style="list-style-type: none"> <li>Do not use this when the machine is operating correctly.</li> <li>Use OFSTACM2 only when image failure is not alleviated by making adjustment with DIS-TGM2. In this case, be sure to return DIS-TGM2 to its original setting.</li> </ul>
	Display/adj/set range	-20 to 20
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> HV-PRI> DIS-TGM2
OFSTACC2	Adj C charge AC voltage (1/2 speed)	
Lv.1	Details	To adjust the offset of the charge AC voltage for C at 1/2 speed. As the value is incremented by 1, the voltage value is increased by 20 Vpp. Decrease the value when image smear occurs, and increase the value when image failure (sand-like image) occurs.
	Use case	<ul style="list-style-type: none"> <li>When image smear occurs</li> <li>When an image failure (sand-like image) occurs</li> </ul>
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	<ul style="list-style-type: none"> <li>Do not use this when the machine is operating correctly.</li> <li>Use OFSTACC2 only when image failure is not alleviated by making adjustment with DIS-TGC2. In this case, be sure to return DIS-TGC2 to its original setting.</li> </ul>
	Display/adj/set range	-20 to 20
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> HV-PRI> DIS-TGC2

COPIER > ADJUST > HV-PRI		
OFSTACK2	Adj Bk charge AC voltage (1/2 speed)	
Lv.1	Details	To adjust the offset of the charge AC voltage for Bk at 1/2 speed. As the value is incremented by 1, the voltage value is increased by 20 Vpp. Decrease the value when image smear occurs, and increase the value when image failure (sand-like image) occurs.
	Use case	<ul style="list-style-type: none"> <li>When image smear occurs</li> <li>When an image failure (sand-like image) occurs</li> </ul>
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	<ul style="list-style-type: none"> <li>Do not use this when the machine is operating correctly.</li> <li>Use OFSTACK2 only when image failure is not alleviated by making adjustment with DIS-TGK2. In this case, be sure to return DIS-TGK2 to its original setting.</li> </ul>
	Display/adj/set range	-20 to 20
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> HV-PRI> DIS-TGK2

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## HV-TR

COPIER > ADJUST > HV-TR	
1TR-TGY	Adj of prmry trns ATVC Y target current
Lv.2	Details
	To adjust the target current for the Y-color primary transfer current. Increase the value when low-voltage mottled image occurs with Y-color. Decrease the value when Y-color fogging occurs (especially in the 94 mm portion of the image leading edge).
	Use case
	When an image failure due to the primary transfer occurs
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	-50 to 50
	Unit
	uA
	Default value
	0
1TR-TGM	Adj of prmry trns ATVC M target current
Lv.2	Details
	To adjust the target current for the M-color primary transfer current. Increase the value when low-voltage mottled image occurs with M-color. Decrease the value when M-color fogging occurs (especially in the 94 mm portion of the image leading edge).
	Use case
	When an image failure due to the primary transfer occurs
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	-50 to 50
	Unit
	uA
	Default value
	0
1TR-TGC	Adj of prmry trns ATVC C target current
Lv.2	Details
	To adjust the target current for the C-color primary transfer current. Increase the value when low-voltage mottled image occurs with C-color. Decrease the value when C-color fogging occurs (especially in the 94 mm portion of the image leading edge).
	Use case
	When an image failure due to the primary transfer occurs
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	-50 to 50
	Unit
	uA
	Default value
	0

COPIER > ADJUST > HV-TR	
1TR-TGK1	Pry trns ATVC Bk target current: 1-clr
Lv.2	Details
	To adjust the target current for the Bk-color primary transfer current. Increase the value when low-voltage mottled image occurs with Bk-color. Decrease the value when Bk-color fogging occurs (especially in the 94 mm portion of the image leading edge).
	Use case
	When an image failure due to the primary transfer occurs in black 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
	-50 to 50
	Unit
	uA
	Default value
	0
2TR-N1	Sec trn ATVC ppr allot V:pln1 1st,L-hmdy
Lv.1	Details
	To adjust the paper allotted voltage for the 1st side of plain paper 1 in secondary transfer ATVC control at low humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to conditions
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range
	-128 to 127
	Unit
	V
	Default value
	0
2TR-N2	Sec trn ATVC ppr allot V:pln1 2nd,L-hmdy
Lv.1	Details
	To adjust the paper allotted voltage for the 2nd side of plain paper 1 in secondary transfer ATVC control at low humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to conditions
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range
	-128 to 127
	Unit
	V
	Default value
	0

COPIER > ADJUST > HV-TR	
2TR-P1	Sec trn ATVC ppr allot V: crd 1st,L-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 1st side of postcard in secondary transfer ATVC control at low humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p>
2TR-P2	Sec trn ATVC ppr allot V: crd 2nd,L-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 2nd side of postcard in secondary transfer ATVC control at low humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p>
2TR-H1	Sec trn ATVC ppr allot V:hvy1 1st,L-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 1st side of heavy paper 1 in secondary transfer ATVC control at low humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p>

COPIER > ADJUST > HV-TR	
2TR-H2	Sec trn ATVC ppr allot V:hvy1 2nd,L-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 2nd side of heavy paper 1 in secondary transfer ATVC control at low humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p>
2TR-UH1	Sec trn ATVC ppr allot V:hvy3 1st,L-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 1st side of heavy paper 3 in secondary transfer ATVC control at low humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p>
2TR-UH2	Sec trn ATVC ppr allot V:hvy3 2nd,L-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 2nd side of heavy paper 3 in secondary transfer ATVC control at low humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p>

COPIER > ADJUST > HV-TR	
2TR-N12	Sec trn ATVC ppr allot V:pln1 1st,N-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 1st side of plain paper 1 in secondary transfer ATVC control at normal humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p>
2TR-N22	Sec trn ATVC ppr allot V:pln1 2nd,N-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 2nd side of plain paper 1 in secondary transfer ATVC control at normal humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p>
2TR-H12	Sec trn ATVC ppr allot V:hvy1 1st,N-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 1st side of heavy paper 1 in secondary transfer ATVC control at normal humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p>

COPIER > ADJUST > HV-TR	
2TR-H22	Sec trn ATVC ppr allot V:hvy1 2nd,N-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 2nd side of heavy paper 1 in secondary transfer ATVC control at normal humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p>
2TR-UH12	Sec trn ATVC ppr allot V:hvy3 1st,N-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 1st side of heavy paper 3 in secondary transfer ATVC control at normal humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p>
2TR-UH22	Sec trn ATVC ppr allot V:hvy3 2nd,N-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 2nd side of heavy paper 3 in secondary transfer ATVC control at normal humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p>

COPIER > ADJUST > HV-TR	
2TR-P12	Sec trn ATVC ppr allot V: crd 1st,N-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 1st side of postcard in secondary transfer ATVC control at normal humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by -/+ key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p>
2TR-P22	Sec trn ATVC ppr allot V: crd 2nd,N-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 2nd side of postcard in secondary transfer ATVC control at normal humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by -/+ key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p>
2TR-N13	Sec trn ATVC ppr allot V:pln1 1st,H-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 1st side of plain paper 1 in secondary transfer ATVC control at high humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V).</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by -/+ key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p>

COPIER > ADJUST > HV-TR	
2TR-N23	Sec trn ATVC ppr allot V:pln1 2nd,H-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 2nd side of plain paper 1 in secondary transfer ATVC control at high humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by -/+ key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p>
2TR-H13	Sec trn ATVC ppr allot V:hvy1 1st,H-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 1st side of heavy paper 1 in secondary transfer ATVC control at high humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V).</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by -/+ key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p>
2TR-H23	Sec trn ATVC ppr allot V:hvy1 2nd,H-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 2nd side of heavy paper 1 in secondary transfer ATVC control at high humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by -/+ key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p>



COPIER > ADJUST > HV-TR	
2TR-UH13	Sec trn ATVC ppr allot V:hvy3 1st,H-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 1st side of heavy paper 3 in secondary transfer ATVC control at high humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V).</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p>
2TR-UH23	Sec trn ATVC ppr allot V:hvy3 2nd,H-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 2nd side of heavy paper 3 in secondary transfer ATVC control at high humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p>
2TR-P13	Sec trn ATVC ppr allot V: crd 1st,H-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 1st side of postcard in secondary transfer ATVC control at high humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V).</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p>

COPIER > ADJUST > HV-TR	
2TR-P23	Sec trn ATVC ppr allot V: crd 2nd,H-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 2nd side of postcard in secondary transfer ATVC control at high humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p>
2TR-O1	Sec trn ATVC ppr allot V: transp, L-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for transparency in secondary transfer ATVC control at low humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p>
2TR-O12	Sec trn ATVC ppr allot V: transp, N-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for transparency in secondary transfer ATVC control at normal humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p>



COPIER > ADJUST > HV-TR		
2TR-O13	Sec trn ATVC ppr allot V: transp, H-hmdy	
Lv.1	Details	To adjust the paper allotted voltage for transparency in secondary transfer ATVC control at high humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V).
	Use case	When adjusting the secondary transfer bias according to conditions
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range	-128 to 127
	Unit	V
	Default value	0
2TR-HN2	Sec trn ATVC ppr allot V:pln2 2nd,L-hmdy	
Lv.1	Details	To adjust the paper allotted voltage for the 2nd side of heavy plain paper in secondary transfer ATVC control at low humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.
	Use case	When adjusting the secondary transfer bias according to conditions
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range	-128 to 127
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> HV-TR> 2TR-N2
1TR-TGKT	Pry trns ATVC Bk target current:full clr	
Lv.2	Details	To adjust the target current for the Bk-color primary transfer current. Increase the value when low-voltage mottled image occurs with Bk-color. Decrease the value when Bk-color fogging occurs (especially in the 94 mm portion of the image leading edge).
	Use case	When an image failure due to the primary transfer occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by +/- key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-50 to 50
	Unit	uA
	Default value	0
	Related service mode	COPIER> ADJUST> HV-TR> 1TR-TGY, 1TR-TGM, 1TR-TGC

COPIER > ADJUST > HV-TR		
2TR-T1	Sec trn ATVC ppr allot V:thin 1st,L-hmdy	
Lv.1	Details	To adjust the paper allotted voltage for the 1st side of thin paper in secondary transfer ATVC control at low humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.
	Use case	When adjusting the secondary transfer bias according to conditions
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution	Increase/decrease the value by 1 while checking the symptom each time.
	Display/adj/set range	-128 to 127
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> HV-TR> 2TR-N1
	2TR-T2	Sec trn ATVC ppr allot V:thin 2nd,L-hmdy
	Lv.1	Details
Use case		When adjusting the secondary transfer bias according to conditions
Adj/set/operate method		Enter the setting value (switch negative/positive by +/- key) and press OK key.
Caution		Increase/decrease the value by 1 while checking the symptom each time.
Display/adj/set range		-128 to 127
Unit		V
Default value		0
Related service mode	COPIER> ADJUST> HV-TR> 2TR-N2	

COPIER > ADJUST > HV-TR	
2TR-T12	Sec trn ATVC ppr allot V:thin 1st,N-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 1st side of thin paper in secondary transfer ATVC control at normal humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Caution</b></p> <p>Increase/decrease the value by 1 while checking the symptom each time.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p> <p><b>Related service mode</b></p> <p>COPIER&gt; ADJUST&gt; HV-TR&gt; 2TR-N12</p>
2TR-T22	Sec trn ATVC ppr allot V:thin 2nd,N-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 2nd side of thin paper in secondary transfer ATVC control at normal humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Caution</b></p> <p>Increase/decrease the value by 1 while checking the symptom each time.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p> <p><b>Related service mode</b></p> <p>COPIER&gt; ADJUST&gt; HV-TR&gt; 2TR-N22</p>

COPIER > ADJUST > HV-TR	
2TR-T13	Sec trn ATVC ppr allot V:thin 1st,H-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 1st side of thin paper in secondary transfer ATVC control at high humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V).</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Caution</b></p> <p>Increase/decrease the value by 1 while checking the symptom each time.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p> <p><b>Related service mode</b></p> <p>COPIER&gt; ADJUST&gt; HV-TR&gt; 2TR-N13</p>
2TR-T23	Sec trn ATVC ppr allot V:thin 2nd,H-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 2nd side of thin paper in secondary transfer ATVC control at high humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Caution</b></p> <p>Increase/decrease the value by 1 while checking the symptom each time.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p> <p><b>Related service mode</b></p> <p>COPIER&gt; ADJUST&gt; HV-TR&gt; 2TR-N23</p>

COPIER > ADJUST > HV-TR	
2TR-R1	Sec trn ATVC ppr allotV:rcycl 1st,L-hmdy
Lv.1	Details
	To adjust the paper allotted voltage for the 1st side of recycled paper in secondary transfer ATVC control at low humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to conditions
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-128 to 127
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-N1
2TR-R2	Sec trn ATVC ppr allotV:rcycl 2nd,L-hmdy
Lv.1	Details
	To adjust the paper allotted voltage for the 2nd side of recycled paper in secondary transfer ATVC control at low humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to conditions
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-128 to 127
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-N2

COPIER > ADJUST > HV-TR	
2TR-R12	Sec trn ATVC ppr allotV:rcycl 1st,N-hmdy
Lv.1	Details
	To adjust the paper allotted voltage for the 1st side of recycled paper in secondary transfer ATVC control at normal humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to conditions
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-128 to 127
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-N12
2TR-R22	Sec trn ATVC ppr allotV:rcycl 2nd,N-hmdy
Lv.1	Details
	To adjust the paper allotted voltage for the 2nd side of recycled paper in secondary transfer ATVC control at normal humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to conditions
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-128 to 127
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-N22
2TR-R13	Sec trn ATVC ppr allotV:rcycl 1st,H-hmdy
Lv.1	Details
	To adjust the paper allotted voltage for the 1st side of recycled paper in secondary transfer ATVC control at high humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V).
	Use case
	When adjusting the secondary transfer bias according to conditions
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-128 to 127
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-N13

COPIER > ADJUST > HV-TR	
2TR-R23	Sec trn ATVC ppr allot V:rcycl 2nd,H-hmdy
Lv.1	Details
	To adjust the paper allotted voltage for the 2nd side of recycled paper in secondary transfer ATVC control at high humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to conditions
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-128 to 127
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-N23
2TR-HN1	Sec trn ATVC ppr allot V:pln2 1st,L-hmdy
Lv.1	Details
	To adjust the paper allotted voltage for the 1st side of plain paper 2 in secondary transfer ATVC control at low humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to conditions
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-128 to 127
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-N1

COPIER > ADJUST > HV-TR	
2TR-HN12	Sec trn ATVC ppr allot V:pln2 1st,N-hmdy
Lv.1	Details
	To adjust the paper allotted voltage for the 1st side of plain paper 2 in secondary transfer ATVC control at normal humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to conditions
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-128 to 127
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-N12
2TR-HN22	Sec trn ATVC ppr allot V:pln2 2nd,N-hmdy
Lv.1	Details
	To adjust the paper allotted voltage for the 2nd side of plain paper 2 in secondary transfer ATVC control at normal humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to conditions
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-128 to 127
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-N22
2TR-HN13	Sec trn ATVC ppr allot V:pln2 1st,H-hmdy
Lv.1	Details
	To adjust the paper allotted voltage for the 1st side of plain paper 2 in secondary transfer ATVC control at high humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V).
	Use case
	When adjusting the secondary transfer bias according to conditions
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-128 to 127
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-N13

COPIER > ADJUST > HV-TR	
2TR-HN23	Sec trn ATVC ppr allot V:pln2 2nd,H-hmdy
Lv.1	Details
	To adjust the paper allotted voltage for the 2nd side of plain paper 2 in secondary transfer ATVC control at high humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to conditions
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-128 to 127
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-N23
2TR-SH1	Sec trn ATVC ppr allot V:hvy2 1st,L-hmdy
Lv.1	Details
	To adjust the paper allotted voltage for the 1st side of heavy paper 2 in secondary transfer ATVC control at low humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to conditions
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-128 to 127
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-H1

COPIER > ADJUST > HV-TR	
2TR-SH2	Sec trn ATVC ppr allot V:hvy2 2nd,L-hmdy
Lv.1	Details
	To adjust the paper allotted voltage for the 2nd side of heavy paper 2 in secondary transfer ATVC control at low humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to conditions
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-128 to 127
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-H2
2TR-SH12	Sec trn ATVC ppr allot V:hvy2 1st,N-hmdy
Lv.1	Details
	To adjust the paper allotted voltage for the 1st side of heavy paper 2 in secondary transfer ATVC control at normal humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to conditions
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-128 to 127
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-H12

COPIER > ADJUST > HV-TR	
2TR-SH22	Sec trn ATVC ppr allot V:hvy2 2nd,N-hmdy
Lv.1	Details
	To adjust the paper allotted voltage for the 2nd side of heavy paper 2 in secondary transfer ATVC control at normal humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to conditions
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-128 to 127
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-H22
2TR-SH13	Sec trn ATVC ppr allot V:hvy2 1st,H-hmdy
Lv.1	Details
	To adjust the paper allotted voltage for the 1st side of heavy paper 2 in secondary transfer ATVC control at high humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V).
	Use case
	When adjusting the secondary transfer bias according to conditions
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-128 to 127
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-H13
2TR-E1	Sec trn ATVC ppr allotV:envlp 1st,L-hmdy
Lv.1	Details
	To adjust the paper allotted voltage for the 1st side of an envelope in secondary transfer ATVC control at low humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to conditions
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-128 to 127
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-P1

COPIER > ADJUST > HV-TR	
2TR-E2	Sec trn ATVC ppr allotV:envlp 2nd,L-hmdy
Lv.1	Details
	To adjust the paper allotted voltage for the 2nd side of an envelope in secondary transfer ATVC control at low humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to conditions
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-128 to 127
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-P2
2TR-E12	Sec trn ATVC ppr allotV:envlp 1st,N-hmdy
Lv.1	Details
	To adjust the paper allotted voltage for the 1st side of an envelope in secondary transfer ATVC control at normal humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to conditions
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-128 to 127
	Unit
	V
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-P12



COPIER > ADJUST > HV-TR	
2TR-E22	Sec trn ATVC ppr allotV:envlp 2nd,N-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 2nd side of an envelope in secondary transfer ATVC control at normal humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p> <p><b>Related service mode</b></p> <p>COPIER&gt; ADJUST&gt; HV-TR&gt; 2TR-P22</p>
2TR-E13	Sec trn ATVC ppr allotV:envlp 1st,H-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 1st side of an envelope in secondary transfer ATVC control at high humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V).</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p> <p><b>Related service mode</b></p> <p>COPIER&gt; ADJUST&gt; HV-TR&gt; 2TR-P13</p>
2TR-E23	Sec trn ATVC ppr allotV:envlp 2nd,H-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 2nd side of an envelope in secondary transfer ATVC control at high humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p> <p><b>Related service mode</b></p> <p>COPIER&gt; ADJUST&gt; HV-TR&gt; 2TR-P23</p>

COPIER > ADJUST > HV-TR	
2TR-SH23	Sec trn ATVC ppr allot V:hvy2 2nd,H-hmdy
Lv.1	<p><b>Details</b></p> <p>To adjust the paper allotted voltage for the 2nd side of heavy paper 2 in secondary transfer ATVC control at high humidity. When transfer failure occurs on an image, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>When adjusting the secondary transfer bias according to conditions</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p> <p><b>Related service mode</b></p> <p>COPIER&gt; ADJUST&gt; HV-TR&gt; 2TR-H23</p>
2TR-OFF	Uniform adj sec trn ATVC ppr allot voltg
Lv.1	<p><b>Details</b></p> <p>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, adjust the value in the -30 to 30 (-900 to 900V) range in increments of 10 (30V). When white dots occur on an image, the image failure can be alleviated by adjusting the value in the -100 to -10 (-3000 to -300V) range in increments of 10 (30V). However, if the value is too small, transfer failure occurs.</p> <p><b>Use case</b></p> <p>If similar symptoms occur regardless of the conditions, adjust the secondary transfer bias.</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-128 to 127</p> <p><b>Unit</b></p> <p>V</p> <p><b>Default value</b></p> <p>0</p> <p><b>Related service mode</b></p> <p>COPIER&gt; ADJUST&gt; HV-TR&gt; 2TR-N1</p>
1TR-TGY2	Adj Y Pry Trns ATVC tgt crntt:1/2 speed
Lv.2	<p><b>Details</b></p> <p>To adjust the target current for the Y-color primary transfer current at 1/2 speed. Increase the value when low-voltage mottled image occurs with Y-color. Decrease the value when Y-color fogging occurs (especially in the 95 mm portion of the image leading edge).</p> <p><b>Use case</b></p> <p>When an image failure due to the primary transfer occurs</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value (switch negative/positive by +/- key) and press OK key. 2) Turn OFF/ON the main power switch.</p> <p><b>Display/adj/set range</b></p> <p>-50 to 50</p> <p><b>Unit</b></p> <p>uA</p> <p><b>Default value</b></p> <p>0</p>



COPIER > ADJUST > HV-TR	
1TR-TGM2	Adj M Pry Trns ATVC tgt crnt: 1/2 speed
Lv.2	<p><b>Details</b></p> <p>To adjust the target current for the M-color primary transfer current at 1/2 speed. Increase the value when low-voltage mottled image occurs with M-color. Decrease the value when M-color fogging occurs (especially in the 95 mm portion of the image leading edge).</p> <p><b>Use case</b></p> <p>When an image failure due to the primary transfer occurs</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.</p> <p><b>Display/adj/set range</b></p> <p>-50 to 50</p> <p><b>Unit</b></p> <p>uA</p> <p><b>Default value</b></p> <p>0</p>
1TR-TGC2	Adj C Pry Trns ATVC tgt crnt: 1/2 speed
Lv.2	<p><b>Details</b></p> <p>To adjust the target current for the C-color primary transfer current at 1/2 speed. Increase the value when low-voltage mottled image occurs with C-color. Decrease the value when C-color fogging occurs (especially in the 95 mm portion of the image leading edge).</p> <p><b>Use case</b></p> <p>When an image failure due to the primary transfer occurs</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.</p> <p><b>Display/adj/set range</b></p> <p>-50 to 50</p> <p><b>Unit</b></p> <p>uA</p> <p><b>Default value</b></p> <p>0</p>
1TR-TK12	Bk Pry Trns ATVC tgt crnt: 1-clr, 1/2SPD
Lv.2	<p><b>Details</b></p> <p>To adjust the target current for the Bk-color primary transfer current in single color mode at 1/2 speed. Increase the value when low-voltage mottled image occurs with Bk-color. Decrease the value when Bk-color fogging occurs (especially in the 95 mm portion of the image leading edge).</p> <p><b>Use case</b></p> <p>When an image failure due to the primary transfer occurs</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.</p> <p><b>Display/adj/set range</b></p> <p>-50 to 50</p> <p><b>Unit</b></p> <p>uA</p> <p><b>Default value</b></p> <p>0</p>

COPIER > ADJUST > HV-TR	
1TR-TGY3	Adj Y Pry Trns ATVC tgt crnt: 1/3 speed
Lv.2	<p><b>Details</b></p> <p>To adjust the target current for the Y-color primary transfer current at 1/3 speed. Increase the value when low-voltage mottled image occurs with Y-color. Decrease the value when Y-color fogging occurs (especially in the 95 mm portion of the image leading edge).</p> <p><b>Use case</b></p> <p>When an image failure due to the primary transfer occurs</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.</p> <p><b>Display/adj/set range</b></p> <p>-50 to 50</p> <p><b>Unit</b></p> <p>uA</p> <p><b>Default value</b></p> <p>0</p>
1TR-TGM3	Adj M Pry Trns ATVC tgt crnt: 1/3 speed
Lv.2	<p><b>Details</b></p> <p>To adjust the target current for the M-color primary transfer current at 1/3 speed. Increase the value when low-voltage mottled image occurs with M-color. Decrease the value when M-color fogging occurs (especially in the 95 mm portion of the image leading edge).</p> <p><b>Use case</b></p> <p>When an image failure due to the primary transfer occurs</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.</p> <p><b>Display/adj/set range</b></p> <p>-50 to 50</p> <p><b>Unit</b></p> <p>uA</p> <p><b>Default value</b></p> <p>0</p>
1TR-TGC3	Adj C Pry Trns ATVC tgt crnt: 1/3 speed
Lv.2	<p><b>Details</b></p> <p>To adjust the target current for the C-color primary transfer current at 1/3 speed. Increase the value when low-voltage mottled image occurs with C-color. Decrease the value when C-color fogging occurs (especially in the 95 mm portion of the image leading edge).</p> <p><b>Use case</b></p> <p>When an image failure due to the primary transfer occurs</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.</p> <p><b>Display/adj/set range</b></p> <p>-50 to 50</p> <p><b>Unit</b></p> <p>uA</p> <p><b>Default value</b></p> <p>0</p>

COPIER > ADJUST > HV-TR	
1TR-TK13	Bk Pry Trns ATVC tgt crnt:1-clr, 1/3SPD
Lv.2	Details
	To adjust the target current for the Bk-color primary transfer current in single color mode at 1/3 speed. Increase the value when low-voltage mottled image occurs with Bk-color. Decrease the value when Bk-color fogging occurs (especially in the 95 mm portion of the image leading edge).
	Use case
	When an image failure due to the primary transfer occurs
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	-50 to 50
	Unit
	uA
	Default value
	0
1TR-TK42	Bk PryTrn ATVC tgt crnt:full clr,1/2SPD
Lv.2	Details
	To adjust the target current for the Bk-color primary transfer current in full color mode at 1/2 speed. Increase the value when low-voltage mottled image occurs with Bk-color. Decrease the value when Bk-color fogging occurs (especially in the 95 mm portion of the image leading edge).
	Use case
	When an image failure due to the primary transfer occurs
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	-50 to 50
	Unit
	uA
	Default value
	0
1TR-TK43	Bk PryTrn ATVC tgt crnt:full clr,1/3SPD
Lv.2	Details
	To adjust the target current for the Bk-color primary transfer current in full color mode at 1/3 speed. Increase the value when low-voltage mottled image occurs with Bk-color. Decrease the value when Bk-color fogging occurs (especially in the 95 mm portion of the image leading edge).
	Use case
	When an image failure due to the primary transfer occurs
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	-50 to 50
	Unit
	uA
	Default value
	0

T-8-32

## ■ FEED-ADJ

COPIER > ADJUST > FEED-ADJ	
REGIST	Adj of registration start timing: Plain
Lv.1	Details
	To adjust the timing to turn ON the Registration Motor in the case of plain paper. As the value is incremented by 1, the margin on the leading edge of paper is increased by 0.1 mm. +: Leading edge margin becomes smaller. (An image moves upward.) -: Leading edge margin becomes larger. (An image moves downward.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case
	When replacing the DC Controller PCB/clearing RAM data
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range
	-50 to 50
	Unit
	mm
	Default value
	0
ADJ-C1	Cassette 1 write start pstn in horz scan
Lv.1	Details
	To adjust the image write start position in the horizontal scanning direction when feeding paper from the Cassette 1. (Paper width is 320 mm or smaller.) As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Left margin becomes larger. (An image moves to the right.) -: Left margin becomes smaller. (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case
	When replacing the DC Controller PCB/clearing RAM data
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	If the paper width is larger than 320 mm, execute mechanical adjustment.
	Display/adj/set range
	-50 to 50
	Unit
	mm
	Default value
	0

COPIER > ADJUST > FEED-ADJ		
ADJ-C2		Cassette 2 write start pstn in horz scan
Lv.1	Details	To adjust the image write start position in the horizontal scanning direction when feeding paper from the Cassette 2. (Paper width is 320 mm or smaller.) As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Left margin becomes larger. (An image moves to the right.) -: Left margin becomes smaller. (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the DC Controller PCB/clearing RAM data
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution	If the paper width is larger than 320 mm, execute mechanical adjustment.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0
ADJ-C3		Cassette 3 write start pstn in horz scan
Lv.1	Details	To adjust the image write start position in the horizontal scanning direction when feeding paper from the Cassette 3. (Paper width is 320 mm or smaller.) As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Left margin becomes larger. (An image moves to the right.) -: Left margin becomes smaller. (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the DC Controller PCB/clearing RAM data
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution	If the paper width is larger than 320 mm, execute mechanical adjustment.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0

COPIER > ADJUST > FEED-ADJ		
ADJ-C4		Cassette 4 write start pstn in horz scan
Lv.1	Details	To adjust the image write start position in the horizontal scanning direction when feeding paper from the Cassette 4. (Paper width is 320 mm or smaller.) As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Left margin becomes larger. (An image moves to the right.) -: Left margin becomes smaller. (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the DC Controller PCB/clearing RAM data
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution	If the paper width is larger than 320 mm, execute mechanical adjustment.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0
ADJ-MF		Write start pstn in horz scan: MP tray
Lv.1	Details	To adjust the image write start position in the horizontal scanning direction when feeding paper from the Multi-purpose Tray. (Paper width is 320 mm or smaller.) As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Left margin becomes larger. (An image moves to the right.) -: Left margin becomes smaller. (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the DC Controller PCB/clearing RAM data
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution	If the paper width is larger than 320 mm, execute mechanical adjustment.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0

COPIER > ADJUST > FEED-ADJ	
ADJ-DK	Paper Deck write start pstn in horz scan
Lv.1	<p><b>Details</b></p> <p>To adjust the image write start position in the horizontal scanning direction when feeding paper from the Paper Deck. (Paper width is 320 mm or smaller.) As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Left margin becomes larger. (An image moves to the right.) -: Left margin becomes smaller. (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.</p> <p><b>Use case</b></p> <p>When replacing the DC Controller PCB/clearing RAM data</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Caution</b></p> <p>If the paper width is larger than 320 mm, execute mechanical adjustment.</p> <p><b>Display/adj/set range</b></p> <p>-50 to 50</p> <p><b>Unit</b></p> <p>mm</p> <p><b>Default value</b></p> <p>0</p>
ADJ-C1RE	Write start pstn in horz scan: Cst1,2nd
Lv.1	<p><b>Details</b></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 incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Left margin becomes larger. (An image moves to the right.) -: Left margin becomes smaller. (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.</p> <p><b>Use case</b></p> <p>When replacing the DC Controller PCB/clearing RAM data</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-55 to 55</p> <p><b>Unit</b></p> <p>mm</p> <p><b>Default value</b></p> <p>0</p>

COPIER > ADJUST > FEED-ADJ	
ADJ-C2RE	Write start pstn in horz scan: Cst2,2nd
Lv.1	<p><b>Details</b></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 incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Left margin becomes larger. (An image moves to the right.) -: Left margin becomes smaller. (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.</p> <p><b>Use case</b></p> <p>When replacing the DC Controller PCB/clearing RAM data</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-55 to 55</p> <p><b>Unit</b></p> <p>mm</p> <p><b>Default value</b></p> <p>0</p>
ADJ-C3RE	Write start pstn in horz scan: Cst3,2nd
Lv.1	<p><b>Details</b></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 incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Left margin becomes larger. (An image moves to the right.) -: Left margin becomes smaller. (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.</p> <p><b>Use case</b></p> <p>When replacing the DC Controller PCB/clearing RAM data</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b></p> <p>-55 to 55</p> <p><b>Unit</b></p> <p>mm</p> <p><b>Default value</b></p> <p>0</p>

COPIER > ADJUST > FEED-ADJ	
ADJ-C4RE	Write start pstn in horz scan: Cst4,2nd
Lv.1	Details
	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 incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Left margin becomes larger. (An image moves to the right.) -: Left margin becomes smaller. (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case
	When replacing the DC Controller PCB/clearing RAM data
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-55 to 55
	Unit
	mm
	Default value
	0
ADJ-DKRE	Write start pstn in horz scan:P-Deck,2nd
Lv.1	Details
	To adjust the image write start position on the second side in the horizontal scanning direction when feeding paper from the Paper Deck. As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Left margin becomes larger. (An image moves to the right.) -: Left margin becomes smaller. (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case
	When replacing the DC Controller PCB/clearing RAM data
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-55 to 55
	Unit
	mm
	Default value
	0

COPIER > ADJUST > FEED-ADJ	
ADJ-MFRE	Write start pstn in horz scan:MP Tr, 2nd
Lv.1	Details
	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 incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Left margin becomes larger. (An image moves to the right.) -: Left margin becomes smaller. (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case
	When replacing the DC Controller PCB/clearing RAM data
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-55 to 55
	Unit
	mm
	Default value
	0
REG-THCK	Rgst start timing adj: Heavy, 1/2 speed
Lv.1	Details
	To adjust the leading edge margin by changing the timing to turn ON the Registration Motor when feeding heavy paper. As the value is incremented by 1, the margin on the leading edge of paper is increased by 0.1 mm. +: Leading edge margin becomes smaller. (An image moves upward.) -: Leading edge margin becomes larger. (An image moves downward.)
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-50 to 50
	Unit
	mm
	Default value
	0
REG-OHT	Rgst start timing adj: Transparency
Lv.1	Details
	To adjust the leading edge margin by changing the timing to turn ON the Registration Motor when feeding transparency. As the value is incremented by 1, the margin on the leading edge of paper is increased by 0.1 mm. +: Leading edge margin becomes smaller. (An image moves upward.) -: Leading edge margin becomes larger. (An image moves downward.)
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-50 to 50
	Unit
	mm
	Default value
	0

COPIER > ADJUST > FEED-ADJ	
REG-DUP1	Rgst start timing adj: Plain, 2nd side
Lv.1	<p><b>Details</b></p> <p>To adjust the leading edge margin by changing the timing to turn ON the Registration Motor when feeding the second side of plain paper. As the value is incremented by 1, the margin on the leading edge of paper is increased by 0.1 mm.            +: Leading edge margin becomes smaller. (An image moves upward.)            -: Leading edge margin becomes larger. (An image moves downward.)</p> <p><b>Adj/set/operate method</b> Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b> -50 to 50</p> <p><b>Unit</b> mm</p> <p><b>Default value</b> 0</p>
REG-DUP2	Rgst start timing adj: Heavy, 2nd side
Lv.1	<p><b>Details</b></p> <p>To adjust the leading edge margin by changing the timing to turn ON the Registration Motor when feeding the second side of heavy paper. As the value is incremented by 1, the margin on the leading edge of paper is increased by 0.1 mm.            +: Leading edge margin becomes smaller. (An image moves upward.)            -: Leading edge margin becomes larger. (An image moves downward.)</p> <p><b>Adj/set/operate method</b> Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b> -50 to 50</p> <p><b>Unit</b> mm</p> <p><b>Default value</b> 0</p>
LP-FEED1	Cassette pre-rgst arch amount: Plain
Lv.1	<p><b>Details</b></p> <p>To adjust the arch amount before registration when feeding plain paper from the cassette. As the value is incremented by 1, the pre-registration arch amount changes by 0.5 mm.            +: Increase            -: Decrease</p> <p><b>Use case</b> To adjust the arch amount before registration when feeding plain paper from the cassette.</p> <p><b>Adj/set/operate method</b> Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b> -50 to 50</p> <p><b>Unit</b> mm</p> <p><b>Default value</b> 0</p>

COPIER > ADJUST > FEED-ADJ	
LP-MULT1	MP Tray pre-rgst arch amount: Plain
Lv.1	<p><b>Details</b></p> <p>To adjust the arch amount before registration when feeding plain paper from the Multi-purpose Tray. As the value is incremented by 1, the pre-registration arch amount changes by 0.5 mm.            +: Increase            -: Decrease</p> <p><b>Use case</b> To adjust the arch amount before registration when feeding plain paper from the cassette.</p> <p><b>Adj/set/operate method</b> Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b> -50 to 50</p> <p><b>Unit</b> mm</p> <p><b>Default value</b> 0</p>
LP-DUP1	Duplex pre-rgst arch amount: Plain
Lv.1	<p><b>Details</b></p> <p>To adjust the arch amount before registration when feeding plain paper in duplex mode. As the value is incremented by 1, the pre-registration arch amount changes by 0.5 mm.            +: Increase            -: Decrease</p> <p><b>Use case</b> To adjust the arch amount before registration when feeding plain paper from the cassette.</p> <p><b>Adj/set/operate method</b> Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b> -50 to 50</p> <p><b>Unit</b> mm</p> <p><b>Default value</b> 0</p>
REG-SPD	Speed adjustment of Registration Motor
Lv.1	<p><b>Details</b></p> <p>To adjust 1/1 speed of the Registration Motor. As the value is incremented by 1, the speed is increased by 0.2%.            +: The speed is increased.            -: The speed is decreased.            As the value is reduced, blur image around 40 to 45 mm of the trailing edge is alleviated.</p> <p><b>Use case</b> When blue image occurs around 40 to 45 mm of the trailing edge</p> <p><b>Adj/set/operate method</b> Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p><b>Display/adj/set range</b> -5 to 5</p> <p><b>Unit</b> %</p> <p><b>Default value</b> 0</p>

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## ■ CST-ADJ

COPIER > ADJUST > CST-ADJ		
MF-A4R	Adj of MP Tray A4R paper width	
Lv.1	Details	To adjust the width of A4R paper in the Multi-purpose Tray. When replacing the DC Controller PCB/clearing RAM data, enter the value of service label. When registering a new value, execute COPIER> FUNCTION> CST> A4R.
	Use case	- When replacing the DC Controller PCB/clearing RAM data - When registering a new value
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	0 to 255
	Default value	0
MF-A6R	Adj of MP Tray A6R paper width	
Lv.1	Details	To adjust the width of A6R paper in the Multi-purpose Tray. When replacing the DC Controller PCB/clearing RAM data, enter the value of service label. When registering a new value, execute COPIER> FUNCTION> CST> A6R.
	Use case	- When replacing the DC Controller PCB/clearing RAM data - When registering a new value
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	0 to 255
	Default value	0
MF-A4	Adj of MP Tray A4 paper width	
Lv.1	Details	To adjust the width of A4 paper in the Multi-purpose Tray. When replacing the DC Controller PCB/clearing RAM data, enter the value of service label. When registering a new value, execute COPIER> FUNCTION> CST> A4.
	Use case	- When replacing the DC Controller PCB/clearing RAM data - When registering a new value
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	0 to 255
	Default value	0

T-8-34

## ■ MISC

COPIER > ADJUST > MISC		
SEG-ADJ	Set criteria for text/photo: front side	
Lv.1	Details	To set the judgment level of text/photo original in Text/Photo/Map mode. As the value is larger, the original is more likely judged as a photo document, and as the value is smaller, the original is more likely judged as a text document.
	Use case	When copy image area is judged incorrectly
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this at the normal service. Take necessary action in accordance with the instructions from the QA Center.
	Display/adj/set range	-4 to 4
	Default value	0
K-ADJ	Set criteria for black text: front side	
Lv.1	Details	To set the judgment level of black characters at text processing. As the value is larger, the text tends to be judged as black.
	Use case	When preferring the text to be judged as black
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-3 to 3
	Default value	0
ACS-ADJ	Set criteria for B&W/color in ACS:front	
Lv.1	Details	To set the judgment level of B&W/color original in ACS mode. As the value is increased, the original tends to be detected as a B&W document, and as the value is decreased, the original tends to be detected as a color document.
	Use case	When adjusting the color recognition level in ACS mode
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-3 to 3
	Default value	0
ACS-EN	Set judgment area in ACS mode:front	
Lv.2	Details	To set the judgment area in ACS mode. As the value is larger, the judgment area is widened.
	Use case	When adjusting the judgment area in ACS mode
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-2 to 2
	Default value	1



COPIER > ADJUST > MISC			
ACS-CNT		Set jdgmt pixel count area in ACS:front	
Lv.2	Details	To set the area where the pixel is counted to judge the color presence in ACS mode. As the value is larger, the judgment area is widened.	
	Use case	When adjusting the area where the pixel is counted to judge the color presence in ACS mode	
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.	
	Display/adj/set range	-2 to 2	
	Default value	0	
ACS-EN2		Set ACS mode jdgmt area in DADF mode	
Lv.2	Details	To set the judgment area in ACS mode at DADF reading. As the value is larger, the judgment area is widened.	
	Use case	When adjusting the judgment area in ACS mode at DADF reading	
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.	
	Display/adj/set range	-2 to 2	
	Default value	1	
ACS-CNT2		Set ACS jdgmt pixel count area in DADF	
Lv.2	Details	To set the area where the pixel is counted to judge the color presence in ACS mode at DADF reading. As the value is larger, the judgment area is widened.	
	Use case	When adjusting the area where the pixel is counted to judge the color presence in ACS mode at DADF reading	
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.	
	Display/adj/set range	-2 to 2	
	Default value	0	
REOS-PG		Set Reos processing coeffct at 1200dpi	
Lv.2	Details	To set an optimal processing coefficient for 1200dpi print. Print PG of the type 55 in COPIER> TEST> PG> TYPE, check the images in the 4 areas of this PG, and specify the number of the area in which the character proportion and line width become optimum in the case of PDL1200 dpi setting. After the setting is done, output the vertical and horizontal patterns with 3 dots and 10 spaces, which are the same as the PG above, in 1200 dpi, and confirm that the result is the same as the specified area.	
	Adj/set/operate method	1) Enter the setting value and press OK key. 2) Turn OFF/ON the main power switch.	
	Display/adj/set range	0 to 4	
	Default value	2	
	Related service mode	COPIER> TEST> PG> TYPE	

COPIER > ADJUST > MISC		
SEG-ADJ3		Set criteria for text/photo: back side
Lv.1	Details	To set the judgment level of text/photo original in Text/Photo/Map mode (back side at duplex reading with 1 path). As the value is larger, the original is more likely judged as a photo document, and as the value is smaller, the original is more likely judged as a text document.
	Use case	When adjusting the classification level of text and photo in Text/Photo/Map mode (back side at duplex reading with 1 path)
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-4 to 4
	Default value	0
K-ADJ3		Set Bk text jdgmt stdrd: back side
Lv.1	Details	To set the judgment level of black characters at text processing (back side at duplex reading with 1 path). As the value is increased, the text tends to be detected as black.
	Use case	When preferring the text to be judged as black (back side at duplex reading with 1 path)
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-3 to 3
	Default value	0
ACS-ADJ3		Set criteria for B&W/color in ACS:back
Lv.1	Details	To set the judgment level of B&W/color original in ACS mode (back side at duplex reading with 1 path). As the value is increased, the original tends to be detected as a B&W document, and as the value is decreased, the original tends to be detected as a color document.
	Use case	When adjusting the color recognition level in ACS mode (back side at duplex reading with 1 path)
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-3 to 3
	Default value	0

COPIER > ADJUST > MISC		
ACS-EN3		Set judgment area in ACS mode:back
Lv.2	Details	To set the judgment area in ACS mode (back side at duplex reading with 1 path). As the value is larger, the judgment area is widened.
	Use case	When adjusting the judgment area in ACS mode (back side at duplex reading with 1 path)
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-2 to 2
	Default value	1
ACS-CNT3		Set jdgmt pixel count area in ACS:back
Lv.2	Details	To set the area where the pixel is counted to judge the color presence in ACS mode (back side at duplex reading with 1 path). As the value is larger, the judgment area is widened.
	Use case	When adjusting the area where the pixel is counted to judge the color presence in ACS mode (back side at duplex reading with 1 path)
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-2 to 2
	Default value	0
SH-ADJ		Adjustment of sharpness: front side
Lv.1	Details	To adjust the sharpness of the images which are set in the user mode. - Image to be read in the copyboard reading mode - Image on the first side of a document to be read in the reverse-path duplex stream reading mode - Image on the first side of a document to be read in the 1-path duplex stream reading mode As the value is larger, the image gets sharper. If the value is too large, moire is likely to occur in an output image of COPY and SEND. To match the image quality with that of the second side in the 1-path duplex stream reading mode, decrease the value when moire on the first side is stronger than the second side and increase the value when it is weaker.
	Use case	When moire frequently occurs on images of COPY and SEND output
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-3 to 3
	Default value	0
	Related service mode	COPIER> ADJUST> MISC> SH-ADJ2

COPIER > ADJUST > MISC		
SH-ADJ2		Adjustment of sharpness: back side
Lv.1	Details	To adjust the sharpness of images on the second side of a document, which is set in the user mode, in the 1-path duplex stream reading mode. As the value is larger, the image gets sharper. If the value is too large, moire is likely to occur in an output image of COPY and SEND. To match the image quality with that of the second side in the 1-path duplex stream reading mode, decrease the value when moire on the first side is stronger than the second side, and increase the value when it is weaker.
	Use case	When moire frequently occurs on images of COPY and SEND output
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-3 to 3
	Default value	0
	Related service mode	COPIER> ADJUST> MISC> SH-ADJ

T-8-35

## EXP-LED

COPIER > ADJUST > EXP-LED	
PR-EXP-Y	Setting of Y Pre-exposure LED current
Lv.2	Details
	To set the current of the Pre-exposure LED (Y). Increase the value when taking a measure for drum ghost. Decrease the value when potential is not applied well.
	Use case
	- When drum ghost is significant (drum pitch is not correct) - When potential is not applied well
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this at the normal service.
	Display/adj/set range
	0 to 3 4 to 15: Not used
	Unit
	uA
	Default value
	1
	Related service mode
	COPIER> ADJUST> V-CONT> VBACK-Y
PR-EXP-M	Setting of M Pre-exposure LED current
Lv.2	Details
	To set the current of the Pre-exposure LED (M). Increase the value when taking a measure for drum ghost. Decrease the value when potential is not applied well.
	Use case
	- When drum ghost is significant (drum pitch is not correct) - When potential is not applied well
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this at the normal service.
	Display/adj/set range
	0 to 3 4 to 15: Not used
	Unit
	uA
	Default value
	1
	Related service mode
	COPIER> ADJUST> V-CONT> VBACK-M
PR-EXP-C	Setting of C Pre-exposure LED current
Lv.2	Details
	To set the current of the Pre-exposure LED (C). Increase the value when taking a measure for drum ghost. Decrease the value when potential is not applied well.
	Use case
	- When drum ghost is significant (drum pitch is not correct) - When potential is not applied well
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this at the normal service.
	Display/adj/set range
	0 to 3 4 to 15: Not used
	Unit
	uA
	Default value
	1
	Related service mode
	COPIER> ADJUST> V-CONT> VBACK-C

COPIER > ADJUST > EXP-LED		
PR-EXP-K		Setting of Bk Pre-exposure LED current
Lv.2	Details	To set the current of the Pre-exposure LED (Bk). Increase the value when taking a measure for drum ghost. Decrease the value when potential is not applied well.
	Use case	- When drum ghost is significant (drum pitch is not correct) - When potential is not applied well
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this at the normal service.
	Display/adj/set range	0 to 3 4 to 15: Not used
	Unit	uA
	Default value	1
	Related service mode	COPIER> ADJUST> V-CONT> VBACK-K

T-8-36

# FUNCTION

## INSTALL

COPIER > FUNCTION > INSTALL		
STIR-Y		
Stirring of Y-color developer		
Lv.1	Details	To stir developer in the Y Developing Assembly.
	Use case	- At installation of the machine - When an image failure occurs
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Required time	60 sec(C5255/5250), 90 sec(C5240/5235)
	Related service mode	COPIER> FUNCTION> INSTALL> STIR-M, STIR-C, STIR-K, STIR-4
STIR-M		
Stirring of M-color developer		
Lv.1	Details	To stir developer in the M Developing Assembly.
	Use case	- At installation of the machine - When an image failure occurs
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Required time	60 sec(C5255/5250), 90 sec(C5240/5235)
	Related service mode	COPIER> FUNCTION> INSTALL> STIR-Y, STIR-C, STIR-K, STIR-4
STIR-C		
Stirring of C-color developer		
Lv.1	Details	To stir developer in the C Developing Assembly.
	Use case	- At installation of the machine - When an image failure occurs
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Required time	60 sec(C5255/5250), 90 sec(C5240/5235)
	Related service mode	COPIER> FUNCTION> INSTALL> STIR-Y, STIR-M, STIR-K, STIR-4
STIR-K		
Stirring of Bk-color developer		
Lv.1	Details	To stir developer in the Bk Developing Assembly.
	Use case	- At installation of the machine - When an image failure occurs
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Required time	60 sec(C5255/5250), 90 sec(C5240/5235)
	Related service mode	COPIER> FUNCTION> INSTALL> STIR-Y, STIR-M, STIR-C, STIR-4
STIR-4		
Stirring of all color developer		
Lv.1	Details	To stir developer in the Developing Assemblies of 4 colors (Y/M/C/Bk).
	Use case	- At installation of the machine - When an image failure occurs
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Required time	60 sec(C5255/5250), 90 sec(C5240/5235)
	Related service mode	COPIER> FUNCTION> INSTALL> STIR-Y, STIR-M, STIR-C, STIR-K

COPIER > FUNCTION > INSTALL		
INIT-Y		[Not used]
INIT-M		[Not used]
INIT-C		[Not used]
INIT-K		[Not used]
STRD-POS		
Scan position auto adj in DADF mode		
Lv.1	Details	To adjust the DADF scanning position automatically.
	Use case	At DADF installation/uninstallation
	Adj/set/operate method	1) Close the DADF. 2) Select the item, and then press OK key. The operation automatically stops after the adjustment. 3) Write the value displayed by COPIER>ADJUST>ADJ-XY>STRD-POS in the service label.
	Caution	Write the adjusted value in the service label.
	Display/adj/set range	At normal termination: OK, At abnormal termination: NG
	Required time	10 sec
	Related service mode	COPIER> ADJUST> ADJ-XY> STRD-POS
CARD		
Card number setting		
Lv.1	Details	To set the card number to be used for Card Reader. A series of numbers from the entered number to the number of cards specified by CARD-RNG can be used.
	Use case	- At installation of the Card Reader - After replacing the HDD
	Adj/set/operate method	1) Enter the number, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	The card management information (department ID and password) is initialized.
	Display/adj/set range	1 to 2001
	Default value	0
	Related service mode	COPIER> OPTION> FNC-SW> CARD-RNG (LEVEL2)
KEY		
ON/OFF of management key function		
Lv.1	Details	To set whether to enable or disable the management key function.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0

COPIER > FUNCTION > INSTALL		
INISSET-Y		Exe of Y Dev Ass'y initial install mode
Lv.1	Details	To automatically execute operation necessary for initial installation of the Y Developing Assembly. 1. Idle rotation of the Developing Assembly 2. Initialization of the Toner Density Sensor 3. Secondary transfer ATVC control 4. Patch light intensity correction 5. Background correction 6. Discharge current control 7. Primary transfer ATVC control 8. Initialization of the Patch Sensor 9. Auto registration 10. D-max control 11. D-half control 12. ARCDAT-Lite (creation of target) 13. Cleaning of the Secondary Transfer Roller twice 14. Counter reset of the Developing Assembly
	Use case	When replacing the Y Developing Assembly
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	- When installing the machine or replacing the Developing Assembly of other color, do not use this item.
	Display/adj/set range	During operation: xxx second (remaining time), At normal termination: OK, At abnormal termination: NG
	Required time	155 sec
	Related service mode	COPIER> FUNCTION> INSTALL> INISSET-Y, INISSET-M, INISSET-K, INISSET-4

COPIER > FUNCTION > INSTALL		
INISSET-M		Exe of M Dev Ass'y initial install mode
Lv.1	Details	To automatically execute operation necessary for initial installation of the M Developing Assembly. 1. Idle rotation of the Developing Assembly 2. Initialization of the Toner Density Sensor 3. Secondary transfer ATVC control 4. Patch light intensity correction 5. Background correction 6. Discharge current control 7. Primary transfer ATVC control 8. Initialization of the Patch Sensor 9. Auto registration 10. D-max control 11. D-half control 12. ARCDAT-Lite (creation of target) 13. Cleaning of the Secondary Transfer Roller twice 14. Counter reset of the Developing Assembly
	Use case	When replacing the M Developing Assembly
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	- When installing the machine or replacing the Developing Assembly of other color, do not use this item.
	Display/adj/set range	During operation: xxx second (remaining time), At normal termination: OK, At abnormal termination: NG
	Required time	155 sec
	Related service mode	COPIER> FUNCTION> INSTALL> INISSET-Y, INISSET-M, INISSET-K, INISSET-4

COPIER > FUNCTION > INSTALL	
INISSET-C	Exe of C Dev Ass'y initial install mode
Lv.1	Details
	To automatically execute operation necessary for initial installation of the C Developing Assembly. 1. Idle rotation of the Developing Assembly 2. Initialization of the Toner Density Sensor 3. Secondary transfer ATVC control 4. Patch light intensity correction 5. Background correction 6. Discharge current control 7. Primary transfer ATVC control 8. Initialization of the Patch Sensor 9. Auto registration 10. D-max control 11. D-half control 12. ARCDAT-Lite (creation of target) 13. Cleaning of the Secondary Transfer Roller twice 14. Counter reset of the Developing Assembly
	Use case
	When replacing the C Developing Assembly
	Adj/set/operate method
	Select the item, and then press OK key.
	Caution
	- When installing the machine or replacing the Developing Assembly of other color, do not use this item.
	Display/adj/set range
	During operation: xxx second (remaining time), At normal termination: OK, At abnormal termination: NG
	Required time
	155 sec
	Related service mode
	COPIER> FUNCTION> INSTALL> INISSET-Y, INISSET-M, INISSET-K, INISSET-4
AINR-OFF	[Not used]
E-RDS	Set use/no use of Embedded-RDS function
Lv.1	Details
	To set whether to use the Embedded-RDS function.
	Use case
	When using Embedded-RDS
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	Be sure to use E-RDS, RGW-PORT, COM-TEST, COM-LOG and RGW-ADR as a set.
	Display/adj/set range
	0 to 1 0: Not used, 1: Used (All the counter information is sent.)
	Default value
	0
	Related service mode
	COPIER> FUNCTION> INSTALL> RGW-PORT, COM-TEST, COM-LOG, RGW-ADR

COPIER > FUNCTION > INSTALL	
RGW-PORT	Set port number of Sales Co's server
Lv.1	Details
	To set the port number of the sales company's server to be used for Embedded-RDS.
	Use case
	When using Embedded-RDS
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	Be sure to use E-RDS, RGW-PORT, COM-TEST, COM-LOG and RGW-ADR as a set.
	Display/adj/set range
	1 to 65535
	Default value
	443
	Related service mode
	COPIER> FUNCTION> INSTALL> E-RDS, COM-TEST, COM-LOG, RGW-ADR
COM-TEST	Dis 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
COM-LOG	Dis connect error w/ Sales Co's server
Lv.1	Details
	To display error information when the connection with the sales company's server failed.
	Use case
	When using Embedded-RDS
	Adj/set/operate method
	Display only
	Caution
	Be sure to use E-RDS, RGW-PORT, COM-TEST, COM-LOG and RGW-ADR as a set.
	Display/adj/set range
	Year, date, time, error code, error detail information (maximum 128 characters)
	Related service mode
	COPIER> FUNCTION> INSTALL> E-RDS, RGW-PORT, COM-TEST, RGW-ADR
RGW-ADR	URL setting of Sales Company's server
Lv.1	Details
	To set the URL of the sales company's server to be used for Embedded-RDS.
	Use case
	When using Embedded-RDS
	Adj/set/operate method
	1) Select the URL. 2) Enter the URL, and then press OK key.
	Caution
	- Do not use Shift-JIS character strings. - Be sure to use E-RDS, RGW-PORT, COM-TEST, COM-LOG and RGW-ADR as a set.
	Display/adj/set range
	URL
	Default value
	https://a01.ugwdevice.net/ugw/agentif010
	Related service mode
	COPIER> FUNCTION> INSTALL> E-RDS, RGW-PORT, COM-TEST, COM-LOG



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 Embedded-RDS third-party extended function is available.
	Use case
	When the Embedded-RDS third-party expanded function is available
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	YYYYMMDDHHMM (12 digits) YYYY: Year, MM: Month, DD: Date, HH: Hour, MM: Minute
	Default value
	000000000000
CNT-INTV	Set counter send interval to SC server
Lv.1	Details
	To set the interval of sending counter information to the sales company's server in a unit of one hour. This is displayed only when the Embedded-RDS third-party extended function is available.
	Use case
	- When restarting potential control after execution of COPIER> OPTION> IMG-FIX> PO-CNT - When the D-max control condition is changed
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	1 to 168 (=1 week)
	Unit
	hour
	Default value
	24

COPIER > FUNCTION > INSTALL	
INISSET-4	All color Dev Ass'y initial instal mode
Lv.1	Details
	To automatically execute operation necessary for initial installation of the Developing Assemblies of all colors. 1. Idle rotation of the Developing Assembly 2. Initialization of the Toner Density Sensor 3. Secondary transfer ATVC control 4. Patch light intensity correction 5. Background correction 6. Discharge current control 7. Primary transfer ATVC control 8. Initialization of the Patch Sensor 9. Auto registration 10. D-max control 11. D-half control 12. ARCDAT-Lite (creation of target) 13. Cleaning of the Secondary Transfer Roller twice 14. Counter reset of the Developing Assembly
	Use case
	- At installation - When replacing the Developing Assemblies of all colors
	Adj/set/operate method
	Select the item, and then press OK key.
	Caution
	- Use this item only when replacing Developing Assemblies of 4 colors simultaneously.
	Display/adj/set range
	During operation: xxx second (remaining time), At normal termination: OK, At abnormal termination: NG
	Required time
	155 sec
	Related service mode
	COPIER> FUNCTION> INSTALL> INISSET-Y, INISSET-M, INISSET-C, INISSET-K



COPIER > FUNCTION > INSTALL	
INISSET-K	Exe of Bk Dev Ass'y initial instal mode
Lv.1	<p>Details</p> <p>To automatically execute operation necessary for initial installation of the Bk Developing Assembly.</p> <ol style="list-style-type: none"> <li>1. Idle rotation of the Developing Assembly</li> <li>2. Initialization of the Toner Density Sensor</li> <li>3. Secondary transfer ATVC control</li> <li>4. Patch light intensity correction</li> <li>5. Background correction</li> <li>6. Discharge current control</li> <li>7. Primary transfer ATVC control</li> <li>8. Initialization of the Patch Sensor</li> <li>9. Auto registration</li> <li>10. D-max control</li> <li>11. D-half control</li> <li>12. ARCDAT-Lite (creation of target)</li> <li>13. Cleaning of the Secondary Transfer Roller twice</li> <li>14. Counter reset of the Developing Assembly</li> </ol> <p>Use case</p> <p>When replacing the Bk Developing Assembly</p> <p>Adj/set/operate method</p> <p>Select the item, and then press OK key.</p> <p>Caution</p> <p>- When installing the machine or replacing the Developing Assembly of other color, do not use this item.</p> <p>Display/adj/set range</p> <p>During operation: xxx second (remaining time), At normal termination: OK, At abnormal termination: NG</p> <p>Required time</p> <p>155 sec</p> <p>Related service mode</p> <p>COPIER&gt; FUNCTION&gt; INSTALL&gt; INISSET-Y, INISSET-M, INISSET-C, INISSET-K</p>
BRWS-ACT	ON/OFF of service browser
Lv.1	<p>Details</p> <p>To set ON/OFF of service browser.</p> <p>ON/OFF of service browser switches whenever the main power switch is turned OFF/ON after execution.</p> <p>If connection with the UGW server is successful, "OK!" is displayed. If "NG!" is displayed, execute a communication test using COM-TEST.</p> <p>The setting is enabled after reboot. Whether the service browser is ON or OFF can be checked in COPIER&gt; DISPLAY&gt; USER&gt; BRWS-STSTS (1: ON, 2: OFF).</p> <p>Use case</p> <p>- When using the service browser - At operation check</p> <p>Adj/set/operate method</p> <ol style="list-style-type: none"> <li>1) Select the item, and then press OK key.</li> <li>2) Turn OFF/ON the main power switch.</li> </ol> <p>Caution</p> <p>After execution, turn OFF/ON the main power switch. After reboot, be sure to check the usage status in COPIER&gt; DISPLAY&gt; USER&gt; BRWS-STSTS.</p> <p>Display/adj/set range</p> <p>At normal termination: OK, At abnormal termination: NG</p> <p>Related service mode</p> <p>COPIER&gt; FUNCTION&gt; INSTALL&gt; COM-TEST COPIER&gt; DISPLAY&gt; USER&gt; BRWS-STSTS</p>

COPIER > FUNCTION > INSTALL	
CDS-CTL	Set country/area when using CDS
Lv.1	<p>Details</p> <p>To set country/area to enable CDS.</p> <p>Use case</p> <p>When enabling CDS</p> <p>Display/adj/set range</p> <p>Country/area set in COPIER&gt; OPTION&gt; FNC-SW&gt; CONFIG, CA (Canada), LA (Latin America) and HK (Hong Kong)</p> <p>Default value</p> <p>The value differs according to the location.</p> <p>Related service mode</p> <p>COPIER&gt; OPTION&gt; FNC-SW&gt; CONFIG</p>
HD-CRYP	Exe HDD Encrypt Board ini install mod
Lv.1	<p>Details</p> <p>To automatically execute operation necessary for initial installation of the HDD Encryption Board.</p> <p>By turning OFF the main power switch after execution, the HDD Encryption Board can be installed.</p> <p>Use case</p> <p>At installation of the HDD Encryption Board</p> <p>Adj/set/operate method</p> <p>Select the item, and then press OK key.</p> <p>Display/adj/set range</p> <p>During operation: ACTIVE, When operation finished normally: OK!</p>
RDSHDPOS	Auto adj of Reader shading position
Lv.1	<p>Details</p> <p>To adjust the shading position automatically.</p> <p>Use case</p> <p>When replacing the unit</p> <p>Adj/set/operate method</p> <p>Select the item, and then press OK key.</p> <p>Display/adj/set range</p> <p>-100 to 100</p> <p>Unit</p> <p>mm</p> <p>Default value</p> <p>0</p> <p>Required time</p> <p>10 sec</p>
BIT-SVC	ON/OFF of Web Service for eRDS
Lv.1	<p>Details</p> <p>To set ON/OFF of Web Service for eRDS. When OFF is set, authentication information from eRDS cannot be obtained.</p> <p>Use case</p> <p>Upon user's request</p> <p>Adj/set/operate method</p> <ol style="list-style-type: none"> <li>1) Enter the setting value, and then press OK key.</li> <li>2) Turn OFF/ON the main power switch.</li> </ol> <p>Display/adj/set range</p> <p>0 to 1 0:OFF 1:ON</p> <p>Default value</p> <p>1</p>

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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 - When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Set paper on the Copyboard Glass. 2) Select the item, and then press OK key.
	Caution
	Be sure to execute DF-WLVL2 in a row.
	Display/adj/set range
	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode
	COPIER> FUNCTION> CCD> DF-WLVL2
DF-WLVL2	White level adj in DADF mode: color
Lv.1	Details
	To adjust the white level for DADF scanning automatically by setting the paper which is usually used by the user on the DADF.
	Use case
	- When replacing the Copyboard Glass - When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Set paper on the DADF. 2) Select the item, and then press OK key.
	Caution
	Be sure to execute this item after DF-WLVL1.
	Display/adj/set range
	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode
	COPIER> FUNCTION> CCD> DF-WLVL1 COPIER> ADJUST> CCD> DFTAR-R, DFTAR-G, DFTAR-B, DFTBK-R, DFTBK-G, DFTBK-B
DF-LNR	Deriving of DADF front/back linearity
Lv.1	Details
	To derive the front/back side linearity characteristics in the use of DADF based on the scanning data of the DADF complex chart (No. 2, No. 10).
	Use case
	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Enter the value of the reader's service label. (under COPIER> ADJUST> CCD) DFCH-R2, DFCH-G2, DFCH-B2, DFCH-K2, DFCH-R10, DFCH-G10, DFCH-B10, DFCH-K10, DFCH2R2, DFCH2G2, DFCH2B2, DFCH2K2, DFCH2R10, DFCH2G10, DFCH2B10, DFCH2K10 2) Select the item, and then press OK key.
	Display/adj/set range
	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode
	COPIER> ADJUST> CCD> DFCH-R2, DFCH-G2, DFCH-B2, DFCH-K2, DFCH-R10, DFCH-G10, DFCH-B10, DFCH-K10, DFCH2R2, DFCH2G2, DFCH2B2, DFCH2K2, DFCH2R10, DFCH2G10, DFCH2B10, DFCH2K10

COPIER > FUNCTION > CCD	
MTF-CLC	Deriving of MTF filter coefficient
Lv.1	Details
	To derive the MTF filter coefficient to be set for ASIC based on the MTF value of the DADF complex chart.
	Use case
	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Enter the value of the reader's service label. (under COPIER> ADJUST> CCD) MTF-MXX, SXX, MTR2-MXX, SXX 2) Select the item, and then press OK key.
	Display/adj/set range
	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode
	COPIER> ADJUST> CCD> MTF-M1 to M12, MTF-S1 to S12, MTF2-M1 to M12, MTF2-S1 to S12
DF-WLVL3	White level adj in book mode (B&W)
Lv.1	Details
	To adjust the white level for copyboard scanning automatically by setting the paper which is usually used by the user on the Copyboard Glass.
	Use case
	- When replacing the Copyboard Glass - When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Set paper on the Copyboard Glass. 2) Select the item, and then press OK key.
	Caution
	Be sure to execute DF-WLVL4 in a row.
	Display/adj/set range
	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode
	COPIER> ADJUST> CCD> DFTBK-BW
DF-WLVL4	White level adj in DADF mode (B&W)
Lv.1	Details
	To adjust the white level for DADF scanning automatically by setting the paper which is usually used by the user on the DADF.
	Use case
	- When replacing the Copyboard Glass - When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Set paper on the DADF. 2) Select the item, and then press OK key.
	Caution
	Be sure to execute this item after DF-WLVL3.
	Display/adj/set range
	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode
	COPIER> ADJUST> CCD> DFTAR-R, DFTAR-G, DFTAR-B, DFTBK-BW
BW-TGT	Set of B&W shading target value
Lv.1	Details
	After the white level data (X/Y/Z) for the Standard White Plate is set, read the Standard White Plate and set the black and white shading target value.
	Use case
	When replacing the Copyboard Glass/Scanner Unit
	Adj/set/operate method
	1) Select the item, and then press OK key.
	Caution
	Be sure to execute this item after execution of COPIER> ADJUST> CCD> W-PLT-X, W-PLT-Y, W-PLT-Z.
	Display/adj/set range
	None
	Related service mode
	COPIER> ADJUST> CCD> W-PLT-X, W-PLT-Y, W-PLT-Z, SH-TRGT

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## LASER

COPIER > FUNCTION > LASER		
LD-ADJ-Y	Return Y Skew Crrct Motor to ini pstn	
Lv.2	Details	When Y-color skew volume in vertical scanning direction is larger than estimation, the Image Skew Correction Motor (Y) is locked, and color displacement cannot be corrected even when color displacement correction control is executed. This item places the Image Skew Correction Motor (Y) to the center position in such cases.
	Use case	When replacing the Laser Scanner Unit to identify the failure position
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	After opening and closing the door during operation, execute the service mode again even if "OK!" is displayed.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Required time	10 sec
LD-ADJ-M	Return M Skew Crrct Motor to ini pstn	
Lv.2	Details	When M-color skew volume in vertical scanning direction is larger than estimation, the Image Skew Correction Motor (M) is locked, and color displacement cannot be corrected even when color displacement correction control is executed. This item places the Image Skew Correction Motor (M) to the center position in such cases.
	Use case	When replacing the Laser Scanner Unit to identify the failure position
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	After opening and closing the door during operation, execute the service mode again even if "OK!" is displayed.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Required time	10 sec
LD-ADJ-C	Return C Skew Crrct Motor to ini pstn	
Lv.2	Details	When C-color skew volume in vertical scanning direction is larger than estimation, the Image Skew Correction Motor (C) is locked, and color displacement cannot be corrected even when color displacement correction control is executed. This item places the Image Skew Correction Motor (C) to the center position in such cases.
	Use case	When replacing the Laser Scanner Unit to identify the failure position
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	After opening and closing the door during operation, execute the service mode again even if "OK!" is displayed.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Required time	10 sec

COPIER > FUNCTION > LASER		
LD-ADJ-K	Return Bk Skew Crrct Motor to ini pstn	
Lv.2	Details	When Bk-color skew volume in vertical scanning direction is larger than estimation, the Image Skew Correction Motor (Bk) is locked, and color displacement cannot be corrected even when color displacement correction control is executed. This item places the Image Skew Correction Motor (Bk) to the center position in such cases.
	Use case	When replacing the Laser Scanner Unit to identify the failure position
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	After opening and closing the door during operation, execute the service mode again even if "OK!" is displayed.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Required time	10 sec

T-8-39

## DPC

COPIER > FUNCTION > DPC	
DRMRSETY	Forcible exe of Y Drum replacement mode
Lv.1	Details
	To execute the same operation as warm-up rotation forcibly. At this time, laser power values, etc., that were corrected according to Y drum counter, total charging time, target Vd values for potential control and drum durability are reset.
	Use case
	- When detection of the Drum Unit replacement has failed - When installing a Drum Unit used in other machine for a while as a dummy unit and then using it continuously
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch. When the drum replacement mode is enabled, it becomes disabled automatically after execution.
	Caution
	Be sure to execute this item only when installing a Drum Unit used in other machine for a while as a dummy unit and then using it continuously. Be sure not to execute this item when temporarily using a dummy unit for checking.
	Display/adj/set range
	None
	Required time
	2 min
	Related service mode
	COPIER> FUNCTION> DPC> DRM-RSET, DRMRSETM, DRMRSETC, DRMRSETK
DRMRSETM	Forcible exe of M Drum replacement mode
Lv.1	Details
	To execute the same operation as warm-up rotation forcibly. At this time, laser power values, etc., that were corrected according to M drum counter, total charging time, target Vd values for potential control and drum durability are reset.
	Use case
	- When detection of the Drum Unit replacement has failed - When installing a Drum Unit used in other machine for a while as a dummy unit and then using it continuously
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch. When the drum replacement mode is enabled, it becomes disabled automatically after execution.
	Caution
	Be sure to execute this item only when installing a Drum Unit used in other machine for a while as a dummy unit and then using it continuously. Be sure not to execute this item when temporarily using a dummy unit for checking.
	Display/adj/set range
	None
	Required time
	2 min
	Related service mode
	COPIER> FUNCTION> DPC> DRM-RSET, DRMRSETY, DRMRSETC, DRMRSETK

COPIER > FUNCTION > DPC	
DRMRSETC	Forcible exe of C Drum replacement mode
Lv.1	Details
	To execute the same operation as warm-up rotation forcibly. At this time, laser power values, etc., that were corrected according to C drum counter, total charging time, target Vd values for potential control and drum durability are reset.
	Use case
	- When detection of the Drum Unit replacement has failed - When installing a Drum Unit used in other machine for a while as a dummy unit and then using it continuously
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch. When the drum replacement mode is enabled, it becomes disabled automatically after execution.
	Caution
	Be sure to execute this item only when installing a Drum Unit used in other machine for a while as a dummy unit and then using it continuously. Be sure not to execute this item when temporarily using a dummy unit for checking.
	Display/adj/set range
	None
	Required time
	2 min
	Related service mode
	COPIER> FUNCTION> DPC> DRM-RSET, DRMRSETY, DRMRSETM, DRMRSETK
DRMRSETK	Forcible exe of Bk Drum replacement mode
Lv.1	Details
	To execute the same operation as warm-up rotation forcibly. At this time, laser power values, etc., that were corrected according to Bk drum counter, total charging time, target Vd values for potential control and drum durability are reset.
	Use case
	- When detection of the Drum Unit replacement has failed - When installing a Drum Unit used in other machine for a while as a dummy unit and then using it continuously
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch. When the drum replacement mode is enabled, it becomes disabled automatically after execution.
	Caution
	Be sure to execute this item only when installing a Drum Unit used in other machine for a while as a dummy unit and then using it continuously. Be sure not to execute this item when temporarily using a dummy unit for checking.
	Display/adj/set range
	None
	Required time
	2 min
	Related service mode
	COPIER> FUNCTION> DPC> DRM-RSET, DRMRSETY, DRMRSETM, DRMRSETC

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## ■ CST

COPIER > FUNCTION > CST		
MF-A4R		
Reg Multi-purpose Tray A4R stdrd width		
Lv.1	Details	To register the standard value of A4R paper width (210 mm) on the Multi-purpose Tray. Make a fine adjustment by COPIER> ADJUST> CST-ADJ> MF-A4R.
	Adj/set/operate method	1) Set A4R paper on the Multi-purpose Tray, and set the guide so that it fits the paper width. 2) Select the item, and then press OK key. The value is registered after automatic adjustment.
	Related service mode	COPIER> ADJUST> CST-ADJ> MF-A4R
MF-A6R		
Reg Multi-purpose Tray A6R stdrd width		
Lv.1	Details	To register the standard value of A6R paper width (105 mm) on the Multi-purpose Tray. Make a fine adjustment by COPIER> ADJUST> CST-ADJ> MF-A6R.
	Adj/set/operate method	1) Set A6R paper on the Multi-purpose Tray, and set the guide so that it fits the paper width. 2) Select the item, and then press OK key. The value is registered after automatic adjustment.
	Related service mode	COPIER> ADJUST> CST-ADJ> MF-A6R
MF-A4		
Reg Multi-purpose Tray A4 standard width		
Lv.1	Details	To register the standard value of A4 paper width (297 mm) on the Multi-purpose Tray. Make a fine adjustment by COPIER> ADJUST> CST-ADJ> MF-A4.
	Adj/set/operate method	1) Set A4 paper on the Multi-purpose Tray, and set the guide so that it fits the paper width. 2) Select the item, and then press OK key. The value is registered after automatic adjustment.
	Related service mode	COPIER> ADJUST> CST-ADJ> MF-A4

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## ■ CLEANING

COPIER > FUNCTION > CLEANING		
DEVL-CLN		
Cleaning of Developing Assembly		
Lv.1	Details	To clean the Developing Assembly by forcibly consuming deteriorated toner. Administrator executes the operation.
	Use case	When low density, etc. occurs after operating in a low duty and high humidity environment 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!
2TR-CLN		
Clean of Secondary Transfer Outer Roller		
Lv.1	Details	To execute bias cleaning after transferring toner to the Secondary Transfer Outer Roller. Soil adhered on the Secondary Transfer Outer Roller is removed.
	Use case	- When the backside of the paper is soiled by the Secondary Transfer Outer Roller - When contacting with the Secondary Transfer Outer Roller at the time of jam processing, etc.
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
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 which is a service part when replacing the roller to a new one. Adhesion of substance leaking from the new Secondary Transfer Outer Roller to the ITB can be prevented.
	Use case	When replacing the Secondary Transfer Outer Roller
	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	Check of fixing nip width	
Lv.1	Details	To check whether the fixing nip width is appropriate by printing. If it is not appropriate, a fixing failure may occur.
	Use case	- When replacing the fixing-related parts (Fixing Roller, Pressure Roller) - When a fixing failure occurs
	Adj/set/operate method	1) Set A4/LTR plain paper (75 to 90g/m <sup>2</sup> ) on the Multi-purpose tray. 2) Select the Multi-purpose tray, 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		
Check of LCD Panel dot missing		
Lv.1	Details	To check whether there is a missing dot on the LCD Panel of the Control Panel.
	Use case	When replacing the LCD Panel
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Check that the LCD Panel lights up in the order of white, black, red, green and blue. 3) Press STOP key to terminate checking.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
LED-CHK		
Check of Control Panel LED		
Lv.1	Details	To check whether the LED on the Control Panel lights up.
	Use case	When replacing the LCD Panel
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Check that the LED lights up in the order. 3) Use LED-OFF to terminate checking.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
Related service mode		
COPIER> FUNCTION> PANEL> LED-OFF		
LED-OFF		
Termination of Control Panel LED check		
Lv.1	Details	To terminate the check of LED on the Control Panel.
	Use case	During execution of LED-CHK
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	None
	Related service mode	COPIER> FUNCTION> PANEL> LED-CHK
KEY-CHK		
Check of key input		
Lv.1	Details	To check the key input on the Control Panel.
	Use case	When replacing the LCD Panel
	Adj/set/operate method	1) Select the item and press the key on the Control Panel. 2) Check that the input value is displayed. 3) Cancel the selection to terminate checking.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
TOUCHCHK		
Adj of coordinate pstn of Touch Panel		
Lv.1	Details	To adjust the coordinate position on the Touch Panel of the Control Panel.
	Use case	When replacing the LCD Panel
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Press the nine "+" keys in sequence.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!

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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 6 1: Multi-purpose Tray Pickup Clutch (CL1) 2: Toner Supply Clutch (Y) (CL2) 3: Toner Supply Clutch (M) (CL3) 4: Toner Supply Clutch (C) (CL4) 5: Toner Supply Clutch (Bk) (CL5) 6: Not used
	Default value	0
Related service mode		
COPIER> FUNCTION> PART-CHK> CL-ON		
CL-ON		
Operation check of Clutch		
Lv.1	Details	To start operation check of the Clutch specified by CL. During operation, ON/OFF is repeated with an interval of 3 seconds.
	Use case	When replacing the Clutch/checking the operation
	Adj/set/operate method	1) Drive the ITB and Drum (COPIER> FUNCTION> PART-CHK> MTR > 13) 2) Select the item, and then press OK key. 3) Check the gear of the Transfer Cleaning Assembly.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Required time	1 min
Related service mode		
COPIER> FUNCTION> PART-CHK> CL		
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 10 1: Fixing Heat Exhaust Fan 1 (FM1) 2: Fixing Heat Exhaust Fan 2 (FM2) 3: Not used 4: Process Cartridge Fan (Rear) (FM4) 5: Fixing Cooling Fan (Front) (FM5) 6: Fixing Cooling Fan (Rear) (FM6) 7: Delivery Fan 1 (FM7) 8: Secondary Transfer Exhaust Fan (FM8) 9: Delivery Fan 2 (FM9) 10: Process Cartridge Fan (Front) (FM10)
	Default value	0
Related service mode		
COPIER> FUNCTION> PART-CHK> FAN-ON		



COPIER > FUNCTION > PART-CHK		
FAN-ON	Operation check of Fan	
Lv.1	Details	To start operation check of the Fan specified by FAN.
	Use case	When replacing the Fan/checking the operation
	Adj/set/operate method	Select the item, and then press OK key.
	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 value, and then press OK key.
	Caution	Be sure not to operate M1, M14, and M22 (with *1 and *2 marks) unless it is necessary. Be sure to remove the Toner Container when operating the M9 to M12 Toner Container Rotation Motors. Otherwise, toner may spill in the machine.
	Display/adj/set range	1 to 28 1: Image Skew Correction Motor (Y) (M31) *1 2: Image Skew Correction Motor (M) (M32) 3: Image Skew Correction Motor (C) (M33) 4: Image Skew Correction Motor (Bk) (M34) 5: Developing Motor (Y) (M5) 6: Developing Motor (M) (M6) 7: Developing Motor (C) (M7) 8: Developing Motor (Bk) (M8) 9: Toner Container Motor (Y) (M9) *5 10: Toner Container Motor (M) (M10) *5 11: Toner Container Motor (C) (M11) *5 12: Toner Container Motor (Bk) (M12) *5 13: Drum Motors of all colors (M1 to M4), ITB Motor (M13) *4 14: ITB Displacement Control Motor (M14) *2 15: Primary Transfer Disengagement Motor (M15) *3 16: Cassette 1 Pickup Motor (M16) 17: Cassette 2 Pickup Motor (M17) 18: Multi-purpose Tray Motor (M18) 19: Registration Motor (M19) 20: Duplex Feed Motor (M20) 21: Fixing Motor (M21) *2 22: Not used 23: First & Second Delivery Motor (M23) 24: Reverse Roller Motor (M24) 25: Third Delivery Motor (M25) 26: Waste Toner Stirring Motor (M26) 27: Shutter Motor (M27) *3 28: Laser Shutter Motor (M28) *3 *1: Do not use this because it is the reference for operation of other motors. *2: Do not use this; otherwise, it may cause damage. *3: Installation/uninstallation only. (If it is operated, it may cause damage.) *4: The 5 motors operate simultaneously. *5: Be sure to remove the Toner Container when operating the motors. Otherwise, toner may spill in the machine.
	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. The operation automatically stops after operation of 5 seconds.
	Use case	When replacing the Motor/checking the operation
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	-
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Required time	1 min
	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 9 1: Registration Shutter Solenoid (SL1) 2: Cassette 1 Pickup Solenoid (SL2) 3: Cassette 2 Pickup Solenoid (SL3) 4: Multi-purpose Tray Lifting Solenoid (SL4) 5: First Delivery Flapper Solenoid (SL5) 6: Second Delivery Flapper Solenoid (SL6) 7: Third Delivery Flapper Solenoid (SL7) 8 and 9: Not used
	Default value	0
	Related service mode	COPIER> FUNCTION> PART-CHK> SL-ON
SL-ON	Operation check of solenoid	
Lv.1	Details	To start operation check of the solenoid specified by SL. The operation stops after "ON for 0.5 sec" => "OFF for 10 sec" => "ON for 0.5 sec" => "OFF for 10 sec" => "ON for 0.5 sec".
	Use case	When replacing the Solenoid/checking the operation
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Required time	1 min
	Related service mode	COPIER> FUNCTION> PART-CHK> SL

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## ■ CLEAR

COPIER > FUNCTION > CLEAR		
ERR	Clear of error code	
Lv.1	Details	To clear error codes (E000, E001, E002, E003, E717, E719).
	Use case	At error occurrence
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
DC-CON	RAM clear of DC Controller PCB	
Lv.1	Details	To clear the RAM data of the DC Controller PCB.
	Use case	When clearing RAM data of the DC Controller PCB
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	- Output the service mode setting values by P-PRINT before execution. After execution, enter necessary setting value. - The RAM data is cleared after the main power switch is turned OFF/ON.
	Display/adj/set range	None
	Related service mode	COPIER> FUNCTION> MISC-P> P-PRINT
R-CON	RAM clear of Reader Controller PCB	
Lv.1	Details	To clear the RAM data of the Reader Controller PCB.
	Use case	When clearing RAM data of the Reader Controller PCB
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	- 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.
	Display/adj/set range	None
	Related service mode	COPIER> FUNCTION> MISC-P> P-PRINT
JAM-HIST	Clear of jam log	
Lv.1	Details	To clear the jam log.
	Use case	When clearing the jam log
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	None
ERR-HIST	Clear of error code log	
Lv.1	Details	To clear the error code log.
	Use case	When clearing the error code log
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
PWD-CLR	Clear of system administrator password	
Lv.1	Details	To clear the password of the system administrator set in the user mode.
	Use case	When clearing the password of the system administrator
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	None

COPIER > FUNCTION > CLEAR		
ADRS-BK		Clear of address book
Lv.1	Details	To clear the address book data.
	Use case	When clearing the address book data
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	The address book data is cleared after the main power switch is turned OFF/ON.
	Display/adj/set range	None
CNT-MCON		Clear of Main Controller service counter
Lv.1	Details	To clear the service counter counted by the Main Controller PCB.
	Use case	When clearing the service counter counted by the Main Controller PCB
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	None
	Related service mode	COPIER> COUNTER
CNT-DCON		Clear of DC Controller service counter
Lv.1	Details	To clear the service counter 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!
OPTION		Clear of service mode setting VL(OPTION)
Lv.1	Details	To return the value specified in service mode (OPTION) to the default value (value at the time of RAM clear).
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	- Output the service mode setting values by P-PRINT before execution. After execution, enter necessary setting value. - This item is executed for the data on the Main Controller PCB, DC Controller PCB and Reader Controller PCB.
	Display/adj/set range	None
Related service mode		COPIER> FUNCTION> MISC-P> P-PRINT

COPIER > FUNCTION > CLEAR		
MMI		Clear Settings/Registration setting VL
Lv.1	Details	To clear the Settings/Registration setting values. <ul style="list-style-type: none"> <li>• Preferences (excluding values for Paper Type Management Settings)</li> <li>• Adjustment/Maintenance</li> <li>• Function Settings</li> <li>• Set Destination (excluding Address Lists)</li> <li>• Management Settings (excluding Department ID Management)</li> </ul>
	Use case	When clearing various setting values of Settings/Registration
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	The setting value is cleared after the main power switch is turned OFF/ON.
Display/adj/set range		None
MN-CON		RAM clear of MNCON PCB SRAM Board
Lv.1	Details	To clear the RAM data of the Main Controller PCB SRAM Board. All data on the SRAM Board is initialized.
	Use case	When clearing RAM data of the Main Controller PCB SRAM Board
	Adj/set/operate method	1) Select the item, and then press OK key. The machine is automatically rebooted. 2) Turn OFF/ON the main power switch.
	Caution	- Forwarding Settings, Settings/Registration (Preferences), Adjustment/Maintenance, Function Settings, Set Destination, Management Settings, TPM Settings, etc. are deleted. - Inform the user that all images in Inbox will be deleted and get approval for it. - Since the file management information is initialized, images on the HDD cannot be read. - Output the service mode setting values by P-PRINT before execution. After execution, enter necessary setting value. - The RAM data is cleared after the main power switch is turned OFF/ON. - If MN-CON is executed while a login application other than Default Authentication is activated, any symptom occurs. (e.g. The login screen is not displayed.) In this case, switch the login application to Default Authentication once so that it returns to normal state.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
Related service mode		COPIER> FUNCTION> MISC-P> P-PRINT

COPIER > FUNCTION > CLEAR		
CARD		Clear of card ID-related data
Lv.1	Details	To clear the data related to the card ID (department).
	Use case	When clearing the data related to the card ID
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	The data is cleared after the main power switch is turned OFF/ON.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
CA-KEY		Deletion of CA certificate and key pair
Lv.2	Details	To simultaneously delete the CA certificate and key pair which are additionally registered by the user.
	Use case	When a service person replaces/discards the device
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Check that OK is displayed. 3) Turn OFF/ON the main power switch.
	Caution	- Unless this item is executed at the time of replacement/discard of the device, the CA certificate and key pair which are additionally registered by the user remain in the HDD, which is a problem in terms of security. - Do not execute this item carelessly because the CA certificate and key pair which are additionally registered are deleted. If they are deleted mistakenly, they need to be again registered by the user. If no CA certificate and key pair are additionally registered, the machine condition becomes the same as the one at the time of factory shipment. - When NG is displayed in 2), there is a possibility that deletion was not executed. In this case, surely execute the deletion by initializing the HDD, etc.
	Display/adj/set range	At normal termination: OK, At abnormal termination: NG
ERDS-DAT		Initialization of E-RDS SRAM data
Lv.1	Details	To initialize the SCM value of the Embedded-RDS stored in the SRAM. SCM values are ON/OFF of E-RDS, server's port number, server's SOAP URL, and communication schedule with the server (how often the data is acquired), etc. The value set by COPIER> FUNCTION> INSTALL> E-RDS, RGW-PORT, RGW-ADR, COM-LOG is cleared.
	Use case	When clearing the setting values of RGW-PORT, RGW-ADR, and COM-LOG
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	The method of using the SRAM in E-RDS differs depending on the Bootable version. Therefore, unless the SRAM data is cleared at the time of version upgrade, data inconsistency occurs.
	Display/adj/set range	At normal termination: OK, At abnormal termination: NG
	Related service mode	COPIER> FUNCTION> INSTALL> E-RDS, RGW-PORT, RGW-ADR, COM-LOG

COPIER > FUNCTION > CLEAR		
KEY-CLR		Encrypt key clear of HDD Encrypt Board
Lv.2	Details	To clear the encryption key of the HDD Encryption Board (Security Kit) for replacement. Processing is executed at the time of installation of the Encryption Board, and a new encryption key is generated.
	Use case	When replacing the encryption key for the HDD Encryption Board
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Check that OK is displayed. 3) Turn OFF/ON the main power switch.
	Caution	Since all data in the HDD becomes unavailable when executing this item, be sure to initialize the HDD after turning OFF/ON the main power switch.
	Display/adj/set range	At normal termination: OK, At abnormal termination: NG
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 any cause. 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 user mode so that image position correction control is performed again. If correction error occurs in diagonal direction, use this item in conjunction with COPIER> FUNCTION> LASER> LD-ADJ-Y, LD-ADJ-M, LD-ADJ-C.
	Use case	- When color displacement cannot be corrected by image position correction control - When correction error occurs in diagonal direction
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	None
	Related service mode	COPIER> FUNCTION> LASER> LD-ADJ-Y, LD-ADJ-M, LD-ADJ-C, LD-ADJ-K
	Related user mode	Settings/Registration> 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.

COPIER > FUNCTION > CLEAR		
1TR-CLR		Clear of primary transfer ATVC log
Lv.2	Details	Although primary transfer ATVC control is executed based on the log information, drastic changes in the resistance of the Primary Transfer Roller, etc. may prevent an optimum transfer voltage from being set because the control is not performed properly. When the value (COPIER> DISPLAY> HV-ST5> 1ATVC-Y/M/C/K4) of current flow to the Primary Transfer Roller at ATVC control is out of the appropriate target value range (50 to 700), clear the log information for the appropriate control.
	Use case	- When replacing the Primary Transfer Roller - When the environment (temperature and humidity) changes drastically - When any image failure occurs due to primary transfer
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	None
	Related service mode	COPIER> DISPLAY> HV-ST5> 1ATVC-Y/M/C/K4 COPIER> FUNCTION> CLEAR> 2TR-CLR
	2TR-CLR	
Lv.2	Details	Although secondary transfer ATVC control is executed based on the log information, drastic changes in the resistance of the Secondary Transfer Roller, etc. may prevent an optimum transfer voltage from being set because the control is not performed properly. When the value (COPIER> DISPLAY> HV-ST5> 2ATVC) of current flow to the Secondary Transfer Outer Roller at ATVC control is out of the appropriate target value range (50 to 700), clear the log information for the appropriate control.
	Use case	- When replacing the Secondary Transfer Roller - When the environment (temperature and humidity) changes drastically - When any image failure occurs due to secondary transfer
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	None
	Related service mode	COPIER> DISPLAY> HV-ST5> 2ATVC COPIER> FUNCTION> CLEAR> 1TR-CLR
	JV-CACHE	
Lv.1	Details	To clear the cache information used by JAVA application.
	Use case	When initializing the JAVA application
	Adj/set/operate method	Select the item, and then press OK key.
FCTX-CLR		Clearing fax job information
Lv.1	Details	To clear fax job information stored on SRAM. Use this mode to restore from E611-0001.
	Use case	When E611-0001 occurs
	Adj/set/operate method	Select the item, and then press OK key.

COPIER > FUNCTION > CLEAR		
LANG-CLR		Uninstallation of language files
Lv.2	Details	To uninstall the language files other than Japanese and English files. After execution, the machine automatically enters the download mode.
	Use case	When installing a new language file while there are 7 installed language files
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Select the firmware in which the necessary language is included by SST, and perform downloading.
	Caution	The language files are not uninstalled if a language file is not installed by SST after the execution of this service mode.
	Supplement/memo	Screen is displayed in English after the execution, so switch the language.
FIN-MCON		Clearing Finisher information
Lv.1	Details	To clear the Finisher information which the Main Controller retains. After execution, set the Delivery Tray again in user mode (Settings/Registration> Function Settings> Common> Paper Output Settings> Output Tray Settings).
	Use case	When switching to another type of Finisher in the field
	Adj/set/operate method	Select the item, and then press OK key.
	Related user mode	Settings/Registration> Function Settings> Common> Paper Output Settings> Output Tray Settings

T-8-46



## MISC-R

COPIER > FUNCTION > MISC-R	
SCANLAMP	Light-up check of LED
Lv.1	Details
	To light up the LED for 3 seconds.
	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
	3 sec
1PSCLB-A	DADF 2 faces color differ crct (front)
Lv.1	Details
	To acquire scanning data on the front side in order to correct the color difference between the front and back side at the time of duplex stream reading. A significant color difference may occur between the front and back side of the image scanned on DADF caused by variations in the light source of the lamp and changes in durability. Such a color difference is corrected by executing 1PSCLB-B following 1PSCLB-A.
	Use case
	When a significant color difference occurs between the front and back side caused by variations in the light source of the lamp and changes in durability
	Adj/set/operate method
	1) Set paper on the DADF. 2) Select the item, and then press OK key.
	Caution
	Be sure not to turn OFF/ON the power after OK is displayed by 1PSCLB-A.
	Display/adj/set range
	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode
	COPIER> FUNCTION> MISC-R> 1PSCLB-B
1PSCLB-B	DADF 2 faces color differ crct (back)
Lv.1	Details
	To acquire scanning data on the back side in order to correct the color difference between the front and back side at the time of duplex stream reading. A significant color difference may occur between the front and back side of the image scanned on DADF caused by variations in the light source of the lamp and changes in durability. Such a color difference is corrected by executing 1PSCLB-B following 1PSCLB-A.
	Use case
	When a significant color difference occurs between the front and back side caused by variations in the light source of the lamp and changes in durability
	Adj/set/operate method
	1) Set the document used by 1PSCLB-A on DADF, so that the front side is faced down and the cyan image is placed at the left rear side. 2) Select the item, and then press OK key.
	Caution
	Be sure not to turn OFF/ON the power after OK is displayed by 1PSCLB-A.
	Display/adj/set range
	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode
	COPIER> FUNCTION> MISC-R> 1PSCLB-A

COPIER > FUNCTION > MISC-R	
1PCLBSET	DADF 2 faces color differ crct ref side
Lv.1	Details
	To set which side of the front or back side should be the reference side when correcting a color difference at the time of duplex stream reading. The correction result is reflected after executing the following operation: specify the reference side, execute a series of color difference correction processing, and then turn OFF/ON the power.
	Use case
	Before starting correction of color difference in DADF duplex printing
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	0 to 2 0: N/A, 1: Front side, 2: Back side
	Default value
	0
1PCLBUDR	DADF 2 faces clr differ crct lowr limit
Lv.1	Details
	Colors which do not need to be corrected are sometimes corrected as a result of correction of color difference in duplex stream reading. To keep colors which do not need to be corrected, the correction amount is adjusted so that the effect of correction is weakened. The result is reflected when correction of color difference is executed again after the setting is made. When "1: ON" is specified, unnecessary correction is not executed, but an expected effect may not be obtained for other colors.
	Use case
	If the color difference occurs on the colors which didn't have any difference before correction, adjust the correction amount before executing the color difference correction again.
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	Expected correction result may not be obtained.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	0
1PCLBOVR	DADF 2 faces clr differ crct upr limit
Lv.1	Details
	Excessive correction is sometimes made when correcting color difference in duplex stream reading. To control excessive correction, adjust the correction amount to weaken the effect of correction. The result is reflected when correction of color difference is executed again after the setting is made. When "1: Weak control" or "2: Strong control" is specified, excessive correction is not made, but an expected effect may not be obtained for other colors.
	Use case
	If the color difference occurs on the colors which didn't have any difference before correction, adjust the correction amount before executing the color difference correction again.
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	Expected correction result may not be obtained.
	Display/adj/set range
	0 to 2 0: No control, 1: Weak control, 2: Strong control
	Default value
	0

COPIER > FUNCTION > MISC-R		
SCANLMP2		Light-up check of LED Lamp Unit: back
Lv.1	Details	To light up the LED Lamp Unit for back side, which is placed in the ADF, and check whether there is a missing block or no lighting in LED.
	Use case	When replacing the LED Lamp Unit for back side
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Required time	5 sec
RD-SHPOS		Moving to Reader Scanner Unit fix pstn
Lv.2	Details	To move the Reader Scanner Unit to the position where it is fixed when moving. When moving the Reader after installation, the Reader Scanner Unit may move and get damage. By moving the Scanner Unit to the specified position and securing it in place with a screw before moving, damage can be prevented.
	Use case	When moving the Reader after installation
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	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!
	Required time	a few sec

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## ■ MISC-P

COPIER > FUNCTION > MISC-P		
P-PRINT		Output of service mode setting value
Lv.1	Details	To print the service mode setting value.
	Use case	Before executing the CLEAR service mode, etc.
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Be sure to use A4/LTR size plain paper/recycled paper.
HIST-PRT		Output of jam and error log
Lv.1	Details	To print the jam log and error log.
	Use case	When printing the jam/error log
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Be sure to use A4/LTR size plain paper/recycled paper.
TRS-DATA		Moving memory reception data to Inbox
Lv.2	Details	To move the data received in memory to Inbox.
	Use case	When moving the data received in memory to Inbox
	Adj/set/operate method	Select the item, and then press OK key.
USER-PRT		Output of user mode list
Lv.1	Details	To print the user mode list.
	Use case	When printing the user mode list
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Be sure to use A4/LTR size plain paper/recycled paper.
LBL-PRNT		Output of service label
Lv.1	Details	To print the service label.
	Use case	When printing the service label
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Be sure to use A4/LTR size plain paper/recycled paper.
D-PRINT		Output of service mode (DISPLAY)
Lv.1	Details	To output items displayed by DISPLAY in the service mode . Items output by P-PRINT, LBL-PRNT and HIST-PRT, and ALARM are excluded.
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Be sure to use A4/LTR size plain paper/recycled paper.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
ENV-PRT		Temp&hmdy/surface temp of Fix Roll
Lv.1	Details	To output data of the temperature and humidity inside the machine/ surface temperature of the Fixing Roller as a log.
	Use case	When figuring out the past temperature inside the machine/fixing temperature information at problem analysis
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Be sure to use A4/LTR size plain paper/recycled paper.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!



COPIER > FUNCTION > MISC-P		
PJH-P-1		Detail info of print job log: 100 jobs
Lv.1	Details	To print the print job history for the latest 100 jobs with detailed information. In the case of less than 100 jobs, the history of all print jobs is printed.
	Use case	When printing the print job log with detailed information
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Be sure to use A4/LTR size plain paper/recycled paper.
PJH-P-2		Detail info of print job log: all jobs
Lv.1	Details	To print the history of all print jobs stored in the machine with detailed information (for maximum 5000 jobs). The difference between PJH-P-1 and this item is only the number of jobs printed.
	Use case	When printing the print job log with detailed information
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Be sure to use A4/LTR size plain paper/recycled paper.
AT-IMG-X		Exe image position correction control
Lv.1	Details	To execute a series of image position correction control operation at parts replacement. Normally, image position correction control is executed in specific timing according to the operation status of the printer engine and environment change. This item is linked with Operator Maintenance Mode> Adjustment/Cleaning> Auto Correct Color Mismatch> Maintenance Correct
	Use case	- When removing the Drum Unit - When releasing the ITB pressure
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
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.
	Caution	Be sure to use A4/LTR size plain paper/recycled paper.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
ITB-INIT		Initial adjustment of ITB steering
Lv.1	Details	To make an initial adjustment of the steering reference position of ITB at initial installation or at replacement of ITB-related service parts.
	Use case	- At installation - At replacement of ITB-related service parts
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Be sure to execute this item after closing all covers.
	Display/adj/set range	During operation: ACTIVE, At normal termination: OK!, At abnormal termination: NG
	Related service mode	COPIER> DISPLAY> MISC> ITB-POS

COPIER > FUNCTION > MISC-P		
RPT-FILE		Saving of service report as a file
Lv.1	Details	To save various service reports in HDD as a file. The saved files can be obtained using PC to which SST has been installed or USB memory after starting the machine in download mode.
	Use case	When obtaining the service report as a file instead of printout
	Related service mode	COPIER> FUNCTION> MISC-P> RPT2USB
RPT2USB		Storage of file in HDD to USB memory
Lv.1	Details	To store the report file of service mode saved in HDD to the USB memory. To execute this service mode, it is necessary to generate the report file of service mode.
	Use case	When storing the report file of service mode in HDD to the USB memory
	Adj/set/operate method	Select the item, and then press OK key.
	Related service mode	COPIER> FUNCTION> MISC-P> RPT-FILE
PSCL-PRT		For customization
Lv.1	Use case	For customization

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## SYSTEM

COPIER > FUNCTION > SYSTEM		
DOWNLOAD	Shift to download mode	
Lv.1	Details	To make the machine enter the download mode and wait for a command. Perform downloading by SST or USB.
	Use case	At upgrade
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Perform downloading by SST or USB.
	Caution	Do not turn OFF/ON the power of the device during downloading.
CHK-TYPE	HD-CLEAR/HD-CHECK exe partition No.	
Lv.1	Details	To specify the partition number of the HDD to execute HD-CLEAR/HD-CHECK.
	Use case	When executing HD-CLEAR/HD-CHECK
	Adj/set/operate method	Enter the value, and then press OK key.
	Display/adj/set range	0 to 65535 0: Entire HDD 1,2,3,4: Image data storage area 5: Universal file storage area 6,7,8: Universal file storage area (temporary file) 9: PDL file storage area 10: Program file storage area 11: MEAP application 12: Address book/transfer setting 13: MEAP stored data 14: System log storage area 15: Advanced Box area 16: Delivery server area
	Related service mode	COPIER> FUNCTION> SYSTEM> HD-CLEAR, HD-CHECK
HD-CHECK	Entire HDD check and recovery	
Lv.1	Details	To check the entire HDD and execute recovery processing.
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Be sure to execute this item after CHK-TYPE.
	Display/adj/set range	During operation: %, When operation finished normally: OK!
	Related service mode	COPIER> FUNCTION> SYSTEM> CHK-TYPE
HD-CLEAR	Initialization of specified partition	
Lv.1	Details	To initialize the HDD partition specified by CHK-TYPE.
	Use case	When initializing the HDD partition
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Be sure to execute this item after CHK-TYPE.
	Display/adj/set range	First 2 digits: Progress ratio (%), Returns to "00" at termination Last 2 digits: Result at termination (00: Normally finished, Others: Abnormally finished)
	Related service mode	COPIER> FUNCTION> SYSTEM> CHK-TYPE

COPIER > FUNCTION > SYSTEM		
DEBUG-1	Setting of log type and save timing	
Lv.2	Details	To set the types of logs to be stored and the timing to store logs in the HDD. Logs are used to analyze the cause of a problem.
	Use case	When analyzing the cause of a problem
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Do not use this at the normal service. Change the setting value in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 3 0: Save PLOG at detection of Reboot/Exception 1: Save PLOG at detection of Reboot/Exception/Encode 2: Save SUBLOG at detection of Reboot/Exception/Encode 3: Save SUBLOG in overwrite mode at detection of Reboot/Exception/Encode
	Default value	3
	Related service mode	COPIER> FUNCTION> SYSTEM> DEBUG-2(LEVEL2)
DEBUG-2	Output of log saved on HDD	
Lv.2	Details	To print the PLOG saved in HDD by COPIER> FUNCTION> SYSTEM> DEBUG-1. (A4: Approx. 20 sheets) SUBLOG is not printed. It should be uploaded from SST or USB.
	Use case	When printing PLOG
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode	COPIER> FUNCTION> SYSTEM> DEBUG-1(LEVEL2)
DSRAMBUP	Backup of DC Controller PCB SRAM	
Lv.2	Details	To back up the setting data in SRAM of the DC Controller PCB.
	Use case	When replacing the DC Controller PCB for troubleshooting at the time of problem occurrence
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	During operation, the setting data changes by manual or automatic adjustment. When backup data which has been left for a long period of time is restored, it is overwritten with new setting data and the old data is deleted.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode	COPIER> FUNCTION> SYSTEM> DSRAMRES

COPIER > FUNCTION > SYSTEM		
DSRAMRES		Restore of DC Controller PCB SRAM
Lv.2	Details	To restore the setting data which has been backed up in SRAM of the DC Controller PCB.
	Use case	When replacing the DC Controller PCB for troubleshooting at the time of problem occurrence
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	During operation, the setting data changes by manual or automatic adjustment. When backup data which has been left for a long period of time is restored, it is overwritten with new setting data and the old data is deleted.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode	COPIER> FUNCTION> SYSTEM> DSRAMBUP
RSRAMBUP		Backup of Reader Controller PCB SRAM
Lv.2	Details	To back up the setting data in SRAM of the Reader Controller PCB.
	Use case	When replacing the Reader Controller PCB for troubleshooting at the time of problem occurrence
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	During operation, the setting data changes by manual or automatic adjustment. When backup data which has been left for a long period of time is restored, it is overwritten with new setting data and the old data is deleted.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode	COPIER> FUNCTION> SYSTEM> RSRAMRES
RSRAMRES		Restore of Reader Controller PCB SRAM
Lv.2	Details	To restore the setting data which has been backed up in SRAM of the Reader Controller PCB.
	Use case	When replacing the Reader Controller PCB for troubleshooting at the time of problem occurrence
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	During operation, the setting data changes by manual or automatic adjustment. When backup data which has been left for a long period of time is restored, it is overwritten with new setting data and the old data is deleted.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode	COPIER> FUNCTION> SYSTEM> RSRAMBUP
R-REBOOT		Reboot of host machine: remote
Lv.1	Details	To reboot the host machine by remote control via RUI.
	Use case	When rebooting the host machine by remote control

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COPIER > OPTION > FNC-SW		
MODEL-SZ	Fixed magnifictn & DADF orgnl dtct size	
Lv.1	Details	To set the fixed magnification ratio display and the original detection size with DADF. It is set automatically at the time of installation of the Reader according to the location.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3 0: AB configuration (6R5E) for Japan, 1: Inch configuration (5R4E) for North/Middle/South America, 2: A configuration (3R3E) for Europe, 3: AB/Inch configuration (6R5E) for Asia, Oceania, South America
	Default value	The value differs according to the location.
	SCANSLCT	ON/OFF of scan area calculate function
Lv.2	Details	To set ON/OFF of the function to calculate scanning area from the specified paper size. When the paper size is larger than the original size, selecting ON reduces productivity because the scanning area gets larger.
	Use case	When matching the scanning area with the paper size
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF (calculated from the detected original size) 1: ON (calculated from the specified paper size)
	Default value	0

COPIER > OPTION > FNC-SW		
	DH-SW	ON/OFF of auto adjustment (D-half/D-max)
Lv.2	Details	To set ON/OFF of auto adjustment (D-half/D-max control). D-half/D-max control that is set to OFF is not executed at warm-up rotation/last rotation. The execution interval can be set by DH-TMG (at warm-up rotation) and INTROT-2 (at last rotation).
	Use case	- When D-half/D-max-related failure occurs/when identifying the cause of D-half-related failure - Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to set the value back to 1 after servicing.
	Display/adj/set range	0 to 2 0: D-half OFF, D-max ON 1: D-half ON, D-max ON 2: D-half OFF, D-max OFF
	Default value	1
	Related service mode	COPIER> OPTION> IMG-FIX> DH-TMG COPIER> OPTION> FNC-SW> INTROT-2
	SENS-CNF	Setting of original detection size
Lv.2	Details	To set original detection size according to AB configuration/Inch configuration/A configuration. When replacing the Reader Controller PCB/clearing RAM data, the value becomes 0. Set 1 for Inch configuration/A configuration machine.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: AB configuration, 1: Inch configuration
	Default value	The value differs according to the location.

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 YY: Language (Fixed; e.g. ja: Japanese) ZZ: Location (Fixed; e.g. 00: CANON) AA: Paper size configuration (00: AB configuration, 01: Inch configuration, 02: A configuration, 03: Inch/AB configuration)
	Related service mode	COPIER> OPTION> FNC-SW> MODEL-SZ
W/SCNR	Setting of Reader Unit installation	
Lv.1	Details	To set installation of the Reader Unit. 1 (Installed) is automatically selected once the Reader Unit is detected at the start of the machine.
	Use case	When installing/removing the Reader Unit
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Not installed, 1: Installed
	Default value	According to the setting at shipment

COPIER > OPTION > FNC-SW		
ORG-LGL	Special paper size set in DADF mode: LGL	
Lv.2	Details	To set the size of special paper (LGL configuration) that cannot be recognized in DADF stream reading mode.
	Use case	- Upon user's request - When picking up special paper size original from DADF
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 10 0: LEGAL-R, 1: FOOLSCAP-R, 2: OFICIO-R, 3: FOLIO-R, 4: Australian FOOLSCAP-R, 5: Ecuador OFICIO-R, 6: Bolivia OFICIO-R, 7: Argentine OFICIO-R, 8: Argentine LEGAL-R, 9: Government LEGAL-R, 10: Mexico OFICIO-R
	Default value	0
ORG-LTR	Special paper size set in DADF mode: LTR	
Lv.2	Details	To set the size of special paper (LTR configuration) that cannot be recognized in DADF stream reading mode.
	Use case	- Upon user's request - When picking up special paper size original from DADF
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3 0: LETTER, 1: EXECUTIVE, 2: Argentine LETTER, 3: Government LETTER
	Default value	0
ORG-LTRR	Spcl ppr size set in DADF: LTRR, Reader	
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.
	Caution	Other than Japan
	Display/adj/set range	0 to 3 0: LTR-R, 1: G-LTR-R, 2: A-LTR-R, 3:EXECUTIVE-R
	Default value	0
ORG-LDR	Spcl ppr size set in DADF: LDR, Reader	
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.
	Caution	Other than Japan
	Display/adj/set range	0 to 1 0: LEDGER-R, 1: Argentine LETTER
Default value	0	

COPIER > OPTION > FNC-SW		
ORG-B5	Special paper size set in DADF mode: B5	
Lv.2	Details	To set the size of special paper (B5) that cannot be recognized in DADF stream reading mode.
	Use case	- Upon user's request - When picking up special paper size original from DADF
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: B5, 1: Korean government office paper
	Default value	0
INTROT-1	Ppr intvl/last rotn auto adj exe intvl	
Lv.1	Details	To set paper interval to execute discharge current control and primary transfer ATVC at paper interval/last rotation. As the value is incremented by 1, the interval is increased by 1 sheet.
	Use case	When matching the use environment of the user
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	As the number of sheets is increased (the interval is widened), image failure tends to occur.
	Display/adj/set range	50 to 1000
	Unit	sheet
	Default value	125
INTROT-2	Set of last rotation auto adj exe intvl	
Lv.1	Details	To set the paper interval to execute auto adjustment (patch potential control, D-max control, D-half control) at last rotation. As the value is incremented by 1, the paper interval is increased by 1 sheet.
	Use case	When matching the use environment of the user
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	As the number of sheets is increased (the interval is widened), image failure tends to occur.
	Display/adj/set range	50 to 2000
	Unit	sheet
INTROT-T	[Not used]	

COPIER > OPTION > FNC-SW		
BK-4CSW	ON/OFF simple full color mode:photo mode	
Lv.2	Details	When outputting solid black image with black mode in text/photo printout mode, 3.5 mm uneven pitch may occur. It may occur because the ITB slips due to peripheral speed difference between the ITB and Photosensitive Drum. At this time, to set whether to use simple full color mode to create black by using a small amount of Y, M and C toners. In text/photo/map mode, it is output in black 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
MODELSZ2	Ppr size dtct global support in bookmode	
Lv.2	Details	To set ON/OFF for global support of document size detection in copyboard reading mode.
	Use case	Upon user's request (mixed media original with AB/Inch configuration)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	- Do not use this at the normal service. - The Document Size Sensor (Photo Sensor) is additionally required to correctly detect the original size when the original consists of mixed media (AB/Inch configuration).
	Display/adj/set range	0 to 1 0: Detected with detection size according to location, 1: Detected with AB/Inch mixed media.
Default value	0	
DELV-FAN	ON/OFF of condensation prevention mode	
Lv.2	Details	To set ON/OFF of condensation control mode. By selecting 1, the Process Cartridge Fan (Front) (FM10) is turned OFF when the internal temperature drops to 20 deg C or lower.
	Use case	When condensation occurs
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1



COPIER > OPTION > FNC-SW	
SVM-D-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
FXWRNLVL	Set Fix Film life display threshold VL
Lv.2	Details
	To set the threshold value to display the life of Fixing Film. When COPIER> OPTION> DSPLY-SW> FXMSG-SW (ON/OFF of Fixing Assembly replacement message) is 1 (default: 0), 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
	It is to prevent the occurrence of fixing failure in the case of continuing to use the Fixing Film beyond its life.
	Adj/set/operate method
	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. 2 and 3: Not used
	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
	0
	Related service mode
	COPIER> OPTION> FNC-SW> MODEL-SZ

COPIER > OPTION > FNC-SW	
ORG-A4R	Special paper size set in DADF mode: A4R
Lv.2	Details
	To set the size of special paper (A4R) that cannot be recognized in DADF stream reading mode. When picking up A4R size original from the DADF of the Inch/AB configuration models, the size is converted into the specified size so that an image can be formed properly.
	Use case
	- Upon user's request - When picking up special paper size original from DADF
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: A4R, 1: FOLIO-R
	Default value
	0
PDF-RDCT	PDF reduction set at forwarding
Lv.2	Details
	To set whether to reduce the image for transmission when converting the image received by IFAX into PDF for e-mail/file transmission.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: With the current setting, 1: Image reduction
	Default value
	0
REBOOTSW	Restart setting at E240 error occurrence
Lv.2	Details
	To set whether to reboot in the case of E240 error. In the case of E240 error, the machine is automatically rebooted due to the possibility of continuous operation of the drive system while the spooled print job is cleared. Print job can be obtained if selecting the setting not to reboot.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	- Do not use this at the normal service. - Be sure to get approval from the user by telling the possibility of continuous operation of the drive system in the case of E240 error.
	Display/adj/set range
	0 to 1 0: Rebooted, 1: Not rebooted
	Default value
	0
SJB-UNW	Reserve upper limit of secure print job
Lv.2	Details
	To set the upper limit for the number of reserved jobs in secure print job.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 2 0: 50 jobs, 1: 90 jobs, 2: 100 jobs (Standby on the host side without cancelling jobs)
	Default value
	0



COPIER > OPTION > FNC-SW	
WEBV-SW	ON/OFF of WebDAV function
Lv.2	Details
	To set ON/OFF of WebDAV function. OFF setting can reduce memory use of the machine. In addition, the following WebDAV-related items are hidden in user mode. - Settings/Registration> Set Destination> Register Destinations> File> Protocol> WebDAV - Settings/Registration> Function Settings> Send> Common Settings> Use Divided Chunk Send for WebDAV TX
	Use case
	When reducing memory use of the machine
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: ON, 1: OFF
	Default value
	0
CARD-RNG	Card number setting (department number)
Lv.2	Details
	To set the number of cards (departments) that can be used with the Card Reader.
	Use case
	When setting the number of cards (departments)
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	1 to 1000
	Default value
	1000
COMP-PRT	Img proc memory allocate at job conflict
Lv.2	Details
	When making 2 or more composition prints (page number, number of copies, stamp, date, booklet, watermark), memory for image processing is allotted preferentially to print jobs. Meanwhile, memory for image processing of scan/send and PDL input becomes insufficient depending on the options and document size, and these jobs might be unprocessed until composition prints are finished. If these jobs are interfered each other, image processing can be put forward little by little by allotting memory equally to each job.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Print priority, 1: Equal allocation
	Default value
	0

COPIER > OPTION > FNC-SW	
ARCDT-SW	ON/OFF of ARCDAT control
Lv.1	Details
	To set ON/OFF of ARCDAT control. When "1: OFF" is set, the result of ARCDAT control is not reflected to LUT. When the hue variation occurs in the case of failure value displayed in COPIER> DISPLAY> HT-C, turn OFF the ARCDAT control once and check the hue. If hue variation is alleviated, analyze the cause of ARCDAT control error (developer, Patch Sensor, etc.).
	Use case
	When hue variation occurs
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Be sure to set "0: ON" again when ARCDAT control recovers.
	Display/adj/set range
	0 to 1 0: ON, 1: OFF
	Default value
	0
	Related service mode
	COPIER> DISPLAY> HT-C
SJOB-CL	Set of scan job canceling by logout
Lv.1	Details
	To set whether to cancel the scan job in operation by logout of the user.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	The job with scanning completed cannot be canceled.
	Display/adj/set range
	0 to 1 0: Disabled, 1: Enabled
	Default value
	0
PT-W-SET	[Not used]
DELV-FN2	ON/OFF of Delivery Fan
Lv.2	Details
	To set ON/OFF of the Delivery Fan 2 (FM9) at a 1-sided job.
	Use case
	When the stackability at 1-sided setting is low
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	When ON is set, be sure to receive approval from the user in advance by explaining the following. - Fan noise occurs. - Curl may get worse to a certain extent (especially with moist paper).
	Display/adj/set range
	0 to 2 0: OFF, 1: Half speed, 2: Full speed
	Default value
	0

COPIER > OPTION > FNC-SW		
USB-RCNT	Auto connect set at USB device disconnect	
Lv.2	Details	To set to enable/disable automatic connection when the USB device is disconnected. With the setting to disable automatic connection, USB device cannot be used if disconnecting and then connecting the USB device. To enable connection again, the power needs to be turned OFF/ON. With the setting to enable automatic connection, reconnection is made after disconnecting, and then connecting the USB device.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	With the setting to enable automatic connection, disconnecting of 1 area makes automatic connection of all USB devices if there is USB hub.
	Display/adj/set range	0 to 1 0: No automatic connection, 1: Automatic connection
	Default value	0
UNLMTBND	Over 400 binders print job support set	
Lv.1	Details	To set whether to support print job that exceeds 400 binders. With the setting to support, the machine makes prints by sharing binders according to job attribution. Select "1: Not supported" if the user does not print job* with large quantity of binders.
	Use case	When supporting print job that exceeds 400 binders
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Automatic setting (When the print server is not connected: not supported; When the print server is connected: supported) 1: Not supported
	Default value	0
MIBCOUNT	Scope range set of Charge Counter MIB	
Lv.2	Details	To set the range of counter information that can be obtained as MIB (Management Information Base).
	Adj/set/operate method	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

COPIER > OPTION > FNC-SW		
MEAP-PRI	Setting of MEAP task priority	
Lv.2	Details	Selecting "1: ON" increases MEAP task priority.
	Use case	When improving processing performance of MEAP
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1
CNTR-SW	Init of parts counter 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
W/RAID	Set of HDD Mirroring Kit installation	
Lv.1	Details	To set installation state of HDD Mirroring Kit. Select "1: Installed" when installing the HDD Mirroring Kit. Select "0: Not installed" when removing the HDD Mirroring Kit.
	Use case	When installing/removing HDD Mirroring Kit
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Not installed, 1: Installed
	Default value	0
PSWD-SW	Password type set to enter service mode	
Lv.1	Details	To set the type of password that is required to enter when getting into service mode. 2 types are available: one for "service technician" and the other for "system administrator + service technician". When selecting the type for "system administrator + service technician", enter the password for service technician after the password entry by the user's system administrator.
	Use case	Upon request from the user who concerns security
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2 0: No password, 1: Service technician, 2: System administrator + service technician
	Default value	0

COPIER > OPTION > FNC-SW	
SM-PSWD	Password setting for service technician
Lv.2	Details
	To set password for service technician that is used when getting into service mode.
	Use case
	When password is required to get into service mode
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Be sure to select 1 or 2 for PSWD-SW in advance.
	Display/adj/set range
	1 to 99999999
	Default value
	11111111
	Related service mode
	COPIER> OPTION> FNC-SW> PSWD-SW
RPT2SIDE	Set of report 1-sided/2-sided output
Lv.1	Details
	To set whether to use 1-sided or 2-sided for report output of service mode.
	Use case
	When making 2-sided report output to reduce the number of output pages
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: 1-sided, 1: 2-sided
	Default value
	1
	Related service mode
	COPIER> FUNCTION> MISC-P> P-PRINT
PSCL-MS	Set of auto gradation adjustment: Heavy
Lv.1	Details
	To set at which speed (1/1 speed, 1/2 speed, or 1/3 speed) PASCAL control and D-half control are executed at auto gradation adjustment. When 2 is set, it is executed only for the lastly used speed only. The time required for auto gradation adjustment is short, but switching to another speed takes time. This is suitable for the users who frequently use a specific paper type. When 3 is set, it is executed for all speeds. The time required for auto gradation adjustment is long (approx. 3 minutes), but switching to another speed is quick. This is suitable for the users who use various paper types.
	Use case
	When setting the speed according to the materials used by the user
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	2 to 3 2: Lastly used speed, 3: All speed
	Default value
	2

COPIER > OPTION > FNC-SW	
DMX-DISP	ON/OFF auto grdn adj D-max PASCAL ctrl
Lv.1	Details
	To set whether to execute D-max PASCAL control at full adjustment of auto gradation adjustment. When 0 is set, D-max PASCAL control and PASCAL control are executed. Four A4-size sheets are used for test prints (one for D-max PASCAL control and three for PASCAL control). When 1 is set, PASCAL control (gradation adjustment) only is executed. Three A4-size sheets are used for test prints (for PASCAL control).
	Use case
	When making the setting according to the usage of the user
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: ON, 1: OFF
	Default value
	0
STND-PNL	Not used
INVALPDL	Disabling PDL license
Lv.1	Details
	To disable the registered PDL license. When "1: Disabled" is set, PDL is disabled even if a PDL license is registered. This is set to the machines installed at convenience stores, which do not allow PDL to be used.
	Use case
	When prohibiting the use of PDL
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Registered PDL license is enabled, 1: Disabled
	Default value
	0
IMGCNTPR	Setting of image quality mode
Lv.1	Details
	To set the image quality mode. The counter priority mode is applied when 1 is set, and the image quality priority mode is applied when 0 is set.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Image quality priority mode, 1: Counter priority mode
	Default value
	1

COPIER > OPTION > FNC-SW		
CDS-FIRM		Set to allow firmware update by admin
Lv.1	Details	To set whether to allow the user (administrator) to perform firmware update linked with CDS and collection of log files. When 1 is set, "Deliver Update" is added to remote UI, and "Firmware Update" is added to the Register/Update Software menu of local UI. Log files can be collected from remote UI.
	Use case	When allowing the administrator to update the firmware and collect log files
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use it for purposes other than collecting log files. In Japan, the firmware cannot be updated by user. Be sure to return the value to 0 after use.
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	EUR: 1, Other: 0
CDS-MEAP		Set to allow MEAP installation by admin
Lv.1	Details	To set whether to permit the user (administrator) to install MEAP applications and enable iR options from CDS. When "1: Enabled" is set, Updater can be activated from the user mode.
	Use case	When allowing the administrator to install MEAP applications and enable iR options from CDS
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	1
CDS-UGW		Set to allow firmware update from UGW
Lv.1	Details	To set whether to permit update of the firmware from the UGW server. When "1: Enabled" is set, Updater accepts the operation from the UGW server in cooperation with CDS.
	Use case	When allowing update of the firmware from the UGW server
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0

COPIER > OPTION > FNC-SW		
LOCLFIRM		Set to allow firmware update by file
Lv.1	Details	To set whether to permit the user (administrator) to update the firmware from the remote UI using a local file. This update is executed as a measure for vulnerability in emergency situations.
	Use case	When prohibiting the administrator to update the firmware using a file
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	1
MC-FANSW		Setting of Controller Fan control
Lv.1	Details	To set full speed/half speed to fan control of the Controller Fan 1 and 2. When "1: Full speed" is set, the heat exhaust efficiency is enhanced.
	Use case	- When HDD damage occurs multiple times - When the machine is installed in a high temperature environment in which HDD damage is likely to occur
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Half speed, 1: Full speed
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	0
SDLMTWRN		ON/OFF cpcty warn dspl at E-mail/I-Fax TX
Lv.1	Details	To set whether to display the warning message when sending data that exceeds the upper limit value for the transmission data size via E-mail/I-Fax.
	Use case	For customization
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
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

COPIER > OPTION > FNC-SW		
FAX-INT	Set FAX RX print interruption oprtn mode	
Lv.2	Details	To set the mode performing interruption operation of FAX reception print automatically.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Normal, 1: Interruption operation mode
	Default value	0
PDL-Z-LG	Setting of drawing algorithm	
Lv.1	Details	To switch the drawing algorithm of the iR C series and the iR-ADV C series to obtain output the user expects. When 0 is set, image is output as displayed on the screen by the new algorithm adopted from the iR-ADV C Series. Pseudo outline (boundary for processing divided graphics separately) occurred with the iR C series does not occur. However, when PDL job with special data structure is sent, output the user expects may not be obtained. When 1 is set, the drawing algorithm adopted by the conventional iR C series is used. Output equivalent to that of the iR C Series can be obtained; however, drawing-related phenomenon occurred with the series occurs.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use setting value 2 and 3.
	Display/adj/set range	0 to 3 0: Drawing algorithm of iR-ADV C series, 1: Drawing algorithm of the conventional iR C series, 2, 3: For R&D use
	Default value	0
CDS-LVUP	Set to allow CDS periodical update	
Lv.1	Details	To set whether to allow the user (administrator) to use the periodical update function linked with CDS. When 1 is set, the periodical update function can be used from user mode.
	Use case	When allowing the user to use the periodical update function
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not set 1 in Japan. The firmware cannot be updated by user.
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	The value differs according to the location.

COPIER > OPTION > FNC-SW		
AMSOFFSW	Disabling AMS mode	
Lv.1	Details	Normally, AMS mode is automatically enabled when the following 2 conditions are satisfied. <ul style="list-style-type: none"> <li>AMS license which is an iR option is installed.</li> <li>AMS-supported Login application is activated.</li> </ul> When disabling AMS mode, set 1. For North/Middle/South America and for Europe, the default is 1. When enabling AMS mode, set 0.
	Use case	<ul style="list-style-type: none"> <li>When disabling AMS mode</li> <li>When enabling AMS mode (for North/Middle/South America and for Europe)</li> </ul>
	Adj/set/operate method	1) Check that "ACCESS MANAGEMENT SYSTEM" is displayed in Check Counter > Check Device Configuration. (If it is displayed, it means that AMS mode is enabled.) 2) Enter 1, and then press OK key. 3) Turn OFF/ON the main power switch. 4) Check that "ACCESS MANAGEMENT SYSTEM" is not displayed in Check Counter > Check Device Configuration. (If it is not displayed, it means that AMS mode is disabled.)
	Display/adj/set range	0 to 1 0: AMS mode enabled, 1: AMS mode disabled
	Default value	JP: 0, USA: 1, EUR: 1, AU: 0, CN: 0, KR: 0, TW: 0, ASIA: 0
	Related service mode	COPIER> OPTION> LCNS-TR> ST-AMS
Related user mode	Settings/Registration > Management Settings > License/Other > Use ACCESS MANAGEMENT SYSTEM	
Supplement/memo	AMS: Access Management System When the device is in AMS mode, "ACCESS MANAGEMENT SYSTEM" is displayed in Check Counter > Check Device Configuration.	
UA-OFFSW	ON/OFF of unified auth function	
Lv.1	Details	To set ON/OFF of the Unified Authentication function. Set the value to 0 when not preferring to use the Unified Authentication function because of security concern.
	Use case	Upon user's request (not to use the Unified Authentication function)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: ON, 1: OFF
	Default value	0



COPIER > OPTION > FNC-SW		
MIB-NVTA	RFC-compatible character string MIB write	
Lv.1	Details	As default, MIB object which NVT-ASCII can be written exists in order to link with LUI entry value. This violates RFC order, so a problem like garbled 2-byte characters may occur in the SNMP monitoring system, such as the 3rd vendor's MPS. Whether non-RFC-compatible character strings are written in MIB can be set using this mode. When 1 is set, only the character strings which are strictly compatible with RFC are written. (Writing operation is executed from the SNMP manager.) LUI is not linked.
	Use case	Upon user's request (operation with RFC-compatible system)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3 0: Compatible in a conventional manner, 1: RFC-compatible, 2 to 3: Not used
	Default value	0
MIB-EXT	[Not used]	
SVC-RUI	Enabling of RUI function for servicing	
Lv.1	Details	To set whether to enable the RUI function for servicing (not provided to end users). When 0 is set, the RUI function is disabled. When setting the value other than 0, RUI function is enabled. The value entered becomes password to use the RUI function. The data is cleared after the main power switch is turned OFF/ON.
	Use case	When preferring to use the import function of background image file of main menu
	Adj/set/operate method	Enter the setting value, and then press OK key. The data is cleared after the main power switch is turned OFF/ON.
	Display/adj/set range	0 to 65535
	Default value	0
LCDSFLG	Enabling of local CDS server	
Lv.1	Details	To set whether to use the local CDS server. When CDSFIRM is 1, this setting is enabled.
	Use case	When using the local CDS server
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When CDSFIRM is 1, this setting is enabled.
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
	Related service mode	COPIER > OPTION > FNC-SW > CDSFIRM

COPIER > OPTION > FNC-SW		
BXSHIFT	Setting of binding at 0mm binding margin	
Lv.1	Details	To set whether to judge the job as a job "without binding" when storing a PDL job in Inbox while the binding margin is set to "0". By setting the binding margin to 0 mm while "0" is set, the job is processed as "without binding". "Booklet" in "Options" on the Inbox screen can be also used. When "1" is set, it is judged as "with binding" even the binding margin is 0 mm so "Booklet", which has an exclusive relationship with "binding", cannot be used.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When storing a PDL job in Inbox while 1 is set, "Booklet" in "Options" on the Inbox screen cannot be used.
	Display/adj/set range	0 to 1 0: Without binding, 1: With binding
	Default value	0
SELF-CHK	[Not used]	
HOME-SW	Set screen displayed with Main Menu key	
Lv.1	Details	To set whether to display the main menu screen or the screen registered as the startup screen when pressing Main Menu key.
	Use case	Upon user's request (to change the startup screen)
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Main Menu screen, 1: Screen registered as the startup screen
	Default value	0
NO-LGOUT	Display/hide of logout button	
Lv.1	Details	To set whether to display or hide [Logout] button. When 0 is set, [Logout] button is displayed on the screen, and logout with the ID key is enabled. (Normal) When 1 is set, [Logout] button is not displayed, and logout with the ID key is disabled.
	Use case	Upon user's request (for customization, etc.)
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Display, 1: Hide
	Default value	0

COPIER > OPTION > FNC-SW	
T-DLV-BK	Pre-toner low alarm send timing:Bk toner
Lv.2	<p><b>Details</b></p> <p>To set the remaining toner level to send the pre-toner low alarm. When the toner level in the Bk Toner Bottle reaches the settings value (%), alarm [10-0020 (Bk)] is sent.</p> <p><b>Use case</b></p> <p>When changing the timing to notify the end of life according to the usage status</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value, and then press OK key.</p> <p><b>Caution</b></p> <p>Since toner level is calculated based on the developing supply count, some errors may occur.</p> <p><b>Display/adj/set range</b></p> <p>0 to 40</p> <p><b>Unit</b></p> <p>%</p> <p><b>Default value</b></p> <p>EUR: 5, Other:10</p> <p><b>Related service mode</b></p> <p>COPIER &gt; OPTION &gt; FNC-SW &gt; T-DLV-CL</p>
T-DLV-CL	Pre-toner low alarm send timing:CL toner
Lv.2	<p><b>Details</b></p> <p>To set the remaining toner level to send the pre-toner low alarm. When the toner level in the Y/M/C Toner Bottle reaches the settings value (%), alarm [10-0017 (Y), 0018 (M), 0019 (C)] is sent.</p> <p><b>Use case</b></p> <p>When changing the timing to notify the end of life according to the usage status</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value, and then press OK key.</p> <p><b>Caution</b></p> <p>Since toner level is calculated based on the developing supply count, some errors may occur.</p> <p><b>Display/adj/set range</b></p> <p>0 to 40</p> <p><b>Unit</b></p> <p>%</p> <p><b>Default value</b></p> <p>5</p> <p><b>Related service mode</b></p> <p>COPIER &gt; OPTION &gt; FNC-SW &gt; T-DLV-BK</p>
JM-ERR-D	Handling 0CAX jam as an error: DCON
Lv.2	<p><b>Details</b></p> <p>To display 0CAX jam as the error E996-0CAF. By handling the jam as an error, the machine stops, so that loss of the log can be prevented. Be sure to enable the service mode at the user's site where 0CAX jam occurs. After that, if the error E996-0CAX occurs, the log which has been backed up can be obtained.</p> <p><b>Use case</b></p> <p>When obtaining a log at the occurrence of 0CAX jam</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value, and then press OK key.</p> <p><b>Display/adj/set range</b></p> <p>0: Display as a jam, 1: Display as an error</p> <p><b>Default value</b></p> <p>0</p>

COPIER > OPTION > FNC-SW	
JM-ERR-R	Handling 0071 jam as an error: RCON
Lv.2	<p><b>Details</b></p> <p>To display 0071 jam as the error E996-0071. By handling the jam as an error, the machine stops, so that loss of the log can be prevented. Be sure to enable the service mode at the user's site where 0071 jam occurs. After that, if the error E996-0071 occurs, the log which has been backed up can be obtained.</p> <p><b>Use case</b></p> <p>When obtaining a log at the occurrence of 0071 jam</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value, and then press OK key.</p> <p><b>Display/adj/set range</b></p> <p>0: Display as a jam, 1: Display as an error</p> <p><b>Default value</b></p> <p>0</p> <p><b>Related service mode</b></p> <p>COPIER &gt; OPTION &gt; FNC-SW &gt; JM-ERR-D</p>
B4-USE	ON/OFF of B4 size detection
Lv.2	<p><b>Details</b></p> <p>To set whether to detect B4 size paper with Inch configuration machine. If the Trailing Edge Guide Plate is not set properly when LTR size paper is set in a cassette, the machine may recognize the paper size as B4. Since B4 size paper is rarely used with Inch configuration machine, it is set not to detect B4 size paper. When 0 is set, a pop-up message prompting to set the Trailing Edge Guide Plate properly is displayed if the machine recognizes paper size as B4. When 1 is set, B4 size can be detected. The setting is applied to all cassettes except the Multi-purpose Tray.</p> <p><b>Use case</b></p> <p>When using B4 size paper with Inch configuration machine</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value, and then press OK key.</p> <p><b>Caution</b></p> <p>The setting is enabled only with Inch configuration machine.</p> <p><b>Display/adj/set range</b></p> <p>0 to 1 0: OFF, 1: ON</p> <p><b>Default value</b></p> <p>0</p>
FAX-STR	[For customization]
Lv.1	<b>Use case</b>
LIMFNC-M	[For customization]
Lv.2	<b>Use case</b>

T-8-50



## ■ DSPLY-SW

COPIER > OPTION > DSPLY-SW	
UI-COPY	Display/hide of copy screen
Lv.2	Details
	To set whether to display or hide the copy function.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Hide, 1: Display
	Default value
	1
UI-BOX	Display/hide of Inbox screen
Lv.2	Details
	To set whether to display or hide the Inbox function.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 2 0: No Inbox function (Storing is not available even with PDL to Inbox.) 1: Inbox function is active 2: Inbox function is active (with limitation; Storing is available with PDL to Inbox despite no display on the Control Panel/remote UI)
	Default value
	1
UI-SEND	Display/hide of send screen
Lv.2	Details
	To set whether to display or hide the SEND function.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Hide, 1: Display
	Default value
	1
UI-FAX	Display/hide of FAX screen
Lv.2	Details
	To set whether to display or hide the FAX function.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Hide, 1: Display
	Default value
	1

COPIER > OPTION > DSPLY-SW	
T-LW-LVL	Dspl timing of toner level warning mssg
Lv.2	Details
	To set the threshold value of residual toner in the toner container. When COPIER> OPTION> DSPLY-SW> TNR-WARN = "0" When the residual toner level becomes lower than the threshold, a warning message of "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 message timing to be displayed becomes earlier.
	Use case
	- Upon user's request - At the timing that the service engineer visits to the customer, 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
	5 to 100
	Unit
	%
	Default value
	EUR: 5, Other:10
	Related service mode
	COPIER> OPTION> DSPLY-SW> TNR-WARN
NWERR-SW	OFF/ON of network-related error display
Lv.2	Details
	To set OFF/ON of network-related error message display. When setting "0: OFF" while the machine is not connected to network, the error message "Check the network connection." is not displayed.
	Use case
	When using the machine as a copy machine
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	1: Normal model, 0: Self-copy model
UISW-DSP	ON/OFF of user screen switch display
Lv.2	Details
	To set ON/OFF of the switch to change the standard screen and simple screen for the users.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	0
T-CRG-SW	ON/OFF of Toner Cntner rplce user mode
Lv.2	Details
	To set whether to display or hide the Toner Container replacement screen in user mode.
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	0

COPIER > OPTION > DSPLY-SW	
FXMSG-SW	ON/OFF of Fixing Ass'y rplce message
Lv.2	Details
	To set whether to display the message prompting to replace the Fixing Assembly on the Control Panel when the counter for life judgment reaches the specified value. When FXMSG-SW is 1 (default: 1) and COPIER> OPTION> FNC-SW> FXWRNLVL is 1 (default: 0), the Fixing Assembly life detection is performed. When the Fixing Assembly reaches its life, the Fixing Assembly replacement message "The Fixing Roller needs to be replaced. (Call service rep.)" is displayed.
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	1
	Related service mode
	COPIER> OPTION> FNC-SW> FXWRNLVL
ANIM-SW	[Not used]
UI-PRINT	Display/hide of print job screen
Lv.2	Details
	To set whether to display or hide the print job screen.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Hide, 1: Display
	Default value
	1
IMG-C-ADJ	Dis/hide of img adj item in user mode
Lv.1	Details
	To set whether to display or hide the item relating to image adjustment in user mode. When selecting "1: Display", detailed image adjustment procedure will be displayed only for the duplicated paper specified with the following settings: Preferences> Paper Settings> Paper Type Management Settings.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Hide, 1: Display
	Default value
	0
UI-RSCAN	Display/hide of remote scan screen
Lv.2	Details
	To set whether to display or hide the remote scan screen on the Control Panel.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Hide, 1: Display
	Default value
	1

COPIER > OPTION > DSPLY-SW	
UI-EPRNT	Display/hide of extended print screen
Lv.2	Details
	To set whether to display or hide the extended print screen (print screen for print server).
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Hide, 1: Display
	Default value
	1
UI-WEB	Display/hide of Web browser screen
Lv.2	Details
	To set whether to display or hide the Web browser screen.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Hide, 1: Display
	Default value
	1
UI-HOLD	[Not used]
TNR-WARN	ON/OFF of toner warning display
Lv.1	Details
	To set whether to display the toner error message. When ""0"" is set, the toner alarm is displayed until the toner runs out.
	Use case
	When preferring to hide the alarm until the toner runs out
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Display, 1: Hide
	Default value
	1
	Related service mode
	COPIER> OPTION> DSPLY-SW> T-LW-LVL
RMT-CNSL	ON/OFF of MEAP console screen
Lv.1	Details
	Selecting "1: ON" enables to obtain log for Function Composer on console screen.
	Use case
	When obtaining log for Function Composer
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	0

COPIER > OPTION > DSPLY-SW		
BRWS-FAV		Set of service browser favorite register
Lv.1	Details	To set whether to allow registration of favorites in the browser for service. When 1 is set, favorites in the browser for service can be edited, and any URLs can be accessed.
	Use case	When service engineers edit favorites in the browser for service
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
UI-SBOX		ON/OFF of Advanced Box screen display
Lv.2	Details	To set ON/OFF of the Advanced Box screen on the Control Panel.
	Use case	When not displaying the Advanced Box screen on the Control Panel
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	EUR: 0, Other: 1
UI-MEM		ON/OFF of memory media screen display
Lv.2	Details	To set ON/OFF of the memory media screen display on the Control Panel.
	Use case	When not displaying the memory media screen on the Control Panel
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
UI-NAVI		Dis/hide of Tutorial
Lv.2	Details	To set whether to display or hide "Tutorial" in the main menu.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	1

COPIER > OPTION > DSPLY-SW		
FCOT-DSP		ON/OFF of FCOT priority mode in usermode
Lv.1	Details	To set whether to display "Color/Black Priority for First Print Time" in user mode. When 1 is set, the home position of the Primary Transfer Rollers for Y, M, C can be switched.
	Use case	When setting "Color/Black Priority for First Print Time" in the user mode
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1
	UI-CUSTM	
Lv.2	Details	To set ON/OFF of the custom menu screen display on the Control Panel.
	Use case	When not displaying the custom menu screen on the Control Panel
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1
CNTCNFSW		ON/OFF of Counter Check screen display
Lv.1	Details	To set whether to display the Counter Check screen. When 1 is set, the Counter Check screen can be displayed. The setting value automatically returns to 0 (OFF) when the screen is closed.
	Use case	When checking the counter at servicing
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0

COPIER > OPTION > DSPLY-SW		
SCT-BTN		Set No. of shortcut buttons upper limit
Lv.1	Details	To set an upper limit on the number of shortcut buttons that appear at the top of the Control Panel screen. The settings for shortcut buttons are made in "Setting of Buttons at the Top of the Screen" which is displayed by pressing the advanced menu button on the Main Menu screen.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When 1 is set, the number of shortcut buttons increases from 2 to 4. However, the buttons become smaller in width, and the number of characters that can be displayed decreases. The character strings displayed are specified by the MEAP application allocated to the shortcut button, and may not be fully displayed in some cases. In this case, a measure such as decreasing the number of characters on the MEAP application side needs to be taken.
	Display/adj/set range	0 to 1 0: 2 buttons, 1: 4 buttons
	Default value	0
USER-DSP		Display/hide of login user name
Lv.1	Details	To set whether to display the name of the user who logs in to the machine on the screen of the Control Panel (upper left area).
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2 0: Hide, 1: Display(User define), 2:Display(User name)
	Default value	0
SDTM-DSP		Display/hide of auto shutdown shift time
Lv.1	Details	To set whether to display or hide auto shutdown shift time menu in user mode.
	Use case	Set 1 in Europe, and set 0 in areas other than Europe.
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	Europe: 1, Others: 0

T-8-51

## NETWORK

COPIER > OPTION > NETWORK		
RAW-DATA		Setting of received data print mode
Lv.2	Details	To set print mode for the received image data. This item is used to identify the cause whether it's due to image data or image processing in the case of problem with received image.
	Use case	When a problem with received image occurs
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to set the value back to "0: Normal print operation" after recovering from the trouble.
	Display/adj/set range	0 to 1 0: Normal print operation, 1: Print with original data without image processing
	Default value	0
IFAX-LIM		No. of max print lines at IFAX reception
Lv.2	Details	To set the maximum number of lines for e-mail text to be printed when receiving IFAX. Setting of this item can prevent endless printing of the attached file data in the case of receiving an error e-mail or failure in interpretation of the context. Selecting 0 prints the header/footer in 1 sheet when receiving e-mail text without attached file.
	Use case	When preventing endless print in the case of failure in reception
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 999 0: E-mail text not printed, 999: Unlimited
	Default value	500
SMTPXPEN		Setting of SMTP TX port number
Lv.2	Details	To set SMTP transmission port number.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 65535
	Default value	25
SMTPRXPN		Setting of SMTP reception port number
Lv.2	Details	To set SMTP reception port number.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 65535
	Default value	25

COPIER > OPTION > NETWORK	
POP3PN	Setting of POP3 reception port number
Lv.2	Details
	To set POP3 reception port number.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 65535
	Default value
	110
FTPTXPN	Specification of SEND port (FTP) number
Lv.2	Details
	To specify address port (FTP) number for SEND.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 65535
	Default value
	21
STS-PORT	ON/OFF of TOT sync status comctn port
Lv.2	Details
	To set ON/OFF for Inquiry/Response (sync)-mode status communication port with T.O.T. Select "1: ON" in the case of connecting the PC and the machine with the crossover cable while Service NAVI is used.
	Use case
	When the Service NAVI is used
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	0
	Related service mode
	COPIER> OPTION> NETWORK> CMD-PORT
CMD-PORT	ON/OFF TOTasync command comctn port
Lv.2	Details
	To set ON/OFF for asynchronous command communication port with T.O.T. Select "1: ON" in the case of connecting the PC and the machine with the crossover cable while Service NAVI is used.
	Use case
	When the Service NAVI is used
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	0
	Related service mode
	COPIER> OPTION> NETWORK> STS-PORT

COPIER > OPTION > NETWORK	
NS-CMD5	Limit CRAM-MD5 auth method at SMTP auth
Lv.2	Details
	To restrict use of CRAM-MD5 authentication method at the time of SMTP authentication.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: SMTP server-dependent, 1: Not used
	Default value
	0
NS-GSAPI	Limit GSSAPI auth method at SMTP auth
Lv.2	Details
	To restrict use of GSSAPI authentication method at the time of SMTP authentication.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: SMTP server-dependent, 1: Not used
	Default value
	0
NS-NTLM	Limit NTLM auth method at SMTP auth
Lv.2	Details
	To restrict use of NTLM authentication method at the time of SMTP authentication.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: SMTP server-dependent, 1: Not used
	Default value
	0
NS-PLNWS	Limit plaintext auth at SMTP auth encry
Lv.2	Details
	To restrict use of PLAIN/LOGIN authentication, which is plaintext authentication, at the time of SMTP authentication under the environment where the communication packet is encrypted.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: SMTP server-dependent, 1: Not used
	Default value
	0

COPIER > OPTION > NETWORK	
NS-PLN	Limit plaintext auth at SMTPauth noencyr
Lv.2	Details
	To restrict use of PLAIN/LOGIN authentication, which is plaintext authentication, at the time of SMTP authentication under the environment where the communication packet is not encrypted.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: SMTP server-dependent, 1: Not used
	Default value
	0
NS-LGN	Limit LOGIN authentication at SMTP auth
Lv.2	Details
	To restrict use of LOGIN authentication at the time of SMTP authentication.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: SMTP server-dependent, 1: Not used
	Default value
	0
MEAP-PN	HTTP port No.setting of MEAP application
Lv.2	Details
	To set HTTP port number of MEAP application.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not specify port 8080 when the print server is connected. Otherwise, you cannot browse the device RUI in which MEAP authentication application is running (Port 8080 is reserved for redirection of EFI Controller to the iR side.)
	Display/adj/set range
	0 to 65535
	Default value
	8000
CHNG-STN	Set of TOT status connection port number
Lv.2	Details
	To set the port number for status connection with T.O.T.
	Use case
	When the Service NAVI is used
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	1 to 65535
	Default value
	20010
	Related service mode
	COPIER> OPTION> NETWORK> STS-PORT
CHNG-CMD	Set of TOT command connection port No.
Lv.2	Details
	To set the port number for command connection with T.O.T.
	Use case
	When the Service NAVI is used
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	1 to 65535
	Default value
	20000
	Related service mode
	COPIER> OPTION> NETWORK> CMD-PORT

COPIER > OPTION > NETWORK	
MEAP-SSL	HTTPS port setting of MEAP
Lv.2	Details
	To set the port of HTTPS server in the case of using SSL with HTTP of MEAP.
	Use case
	When setting HTTPS port for MEAP
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 65535
	Default value
	8443
LPD-PORT	Setting of LPD port number
Lv.2	Details
	To set the LPD port number.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	1 to 65535
	Default value
	515
WUEV-SW	Setting of sleep notification execution
Lv.2	Details
	To set whether to notify the sleep mode to the application (imageWARE, etc) on the network when shifting to/recovering from the sleep mode.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Notified, 1: Not notified
	Default value
	0
WUEV-INT	Setting of sleep notification interval
Lv.2	Details
	To set the interval of sleep notification.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	This is active when COPIER> OPTION> NETWORK> WUEV-SW is set to 0: Notified.
	Display/adj/set range
	60 to 65535
	Unit
	sec
	Default value
	600
	Related service mode
	COPIER> OPTION> NETWORK> WUEV-SW
WUEV-POT	Port number setting for sleep notice
Lv.2	Details
	To set port number of the PC to notify the sleep mode.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	This is active when COPIER> OPTION> NETWORK> WUEV-SW is set to 0: Notified.
	Display/adj/set range
	1 to 65535
	Default value
	11427
	Related service mode
	COPIER> OPTION> NETWORK> WUEV-SW



COPIER > OPTION > NETWORK	
WUEV-RTR	Setting of sleep notification range
Lv.2	Details
	To set the number of available routers to the target for sleep notification.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	This is active when COPIER> OPTION> NETWORK> WUEV-SW is set to 0: Notified.
	Display/adj/set range
	0 to 254
	Default value
	3
	Related service mode
	COPIER> OPTION> NETWORK> WUEV-SW
WUEN-LIV	Recovery time setting after sleep notice
Lv.2	Details
	To set the time from the sleep start from network without job assignment until the mode is shifted to the sleep mode.
	Use case
	When setting the startup time after sleep notification
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	1 to 600
	Unit
	sec
	Default value
	15
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 text is less than the number of specified characters. This machine can output blank paper because some senders send e-mail text consisting of linefeed codes only. In such case, specify 2 (number of characters) so that there will be no output of blank paper. In the case of specifying any number other than 0, header/footer is printed/forwarded in 1 sheet only if the e-mail (body) text is less than the specified value while no TIFF file is attached. As the value is incremented by 1, the number of target characters in e-mail body text is increased by 1 character.
	Use case
	When reducing printouts of blank paper due to e-mail received by IFAX
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Be sure to get approval from the user by telling that there will be no print of e-mail (body) text if the number of characters is less than the specified value.
	Display/adj/set range
	0 to 999 0: E-mail text is not ignored.
	Unit
	char
	Default value
	0

COPIER > OPTION > NETWORK	
DNSTRANS	Setting of DNS transfer priority
Lv.1	Details
	To set priority order of the protocol (IPv4/IPv6) to be used for DNS query. In the case of using both IPv6 and IPv4 while the DNS server supports IPv4, it takes time because of timeout when executing DNS query with priority on IPv6. The time can be shortened by placing priority on IPv4.
	Use case
	When it takes time to execute DNS query with priority on IPv6 because the DNS server supports IPv4
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: IPv4, 1: IPv6
	Default value
	1
PROXYRES	Setting of proxy response to Windows
Lv.2	Details
	To set whether to provide proxy response or return the device status when an inquiry is received via Windows while the device is in sleep mode.
	Use case
	When executing status response for query from Windows correctly
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: No proxy response, 1: Proxy response
	Default value
	1
WOLTRANS	Setting of sleep recovery protocol
Lv.1	Details
	To set the protocol for recovery from sleep mode according to the value of WOL (Wake On LAN) trans. Reception of a specific network packet is one of the requirements for the device to recover from sleep mode. When the number of network protocols supported by the device increases, the types of network packets which activate recovery from sleep mode vary. However, there is a possibility that the existing network protocol is actually used. Select the type of network packet which activates recovery from sleep mode according to the environment where the device is used.
	Use case
	When selecting protocol for sleep recovery
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	1 to 3 1: WSD and SNMP, 2: WSD and CPCA, 3: CPCA and SNMP
	Default value
	1



COPIER > OPTION > NETWORK		
802XTOUT		Set of IEEE802.1X authentication timeout
Lv.1	Details	To set timeout value for IEEE802.1X authentication. If the device executes 802.1X authentication, change the wait time for response from the authentication server.
	Use case	When response from the authentication server is slow/fast
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	10 to 120
	Unit	sec
	Default value	30
	IKERETRY	
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
SPDALDEL		Initialization of SPD value
Lv.2	Details	To initialize all the SPD values that are under management. SPD values can be initialized without clearing SRAM.
	Use case	At the time of SPD value mismatch when IPsec Board is added
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
NCONF-SW		ON/OFF of Network Configurator function
Lv.1	Details	To set ON/OFF of Network Configurator function. If the user does not use the function, select OFF to prevent remote attack through network.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1
IKEINTVL		Setting of IKE retry interval
Lv.1	Details	To set retry interval in the case of no response from the communication target at the time of IKE packet transmission.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 10
	Unit	sec
Default value	5	

COPIER > OPTION > NETWORK		
IPSDEBLV		Setting of IPsec debug level
Lv.2	Details	For R&D use
	Use case	For R&D use
	Adj/set/operate method	For R&D use
	Display/adj/set range	For R&D use
SP-LINK		Mode setting at 1W sleep
Lv.1	Details	To set the mode to shift to sleep mode When 0 is set, 10base-T standby is executed, therefore standby power 1W is realized in sleep mode. When 1 is set, like existing models, the machine enters sleep mode after negotiation.
	Use case	When shifting to sleep mode after negotiation
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Shift to sleep mode with 10base-T 1: Shift to sleep mode after negotiation
Default value	0	
AFS-JOB		Set of FAX server job reception port
Lv.1	Details	To set the reception port of the fax server to which a fax client sends jobs.
	Use case	When changing the job reception port of the fax server
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 65535
	Default value	20317
Related service mode		COPIER> OPTION> NETWORK> AFC-EVNT
AFC-EVNT		Set of FAX client event reception port
Lv.1	Details	To set the event notification reception port of a fax client.
	Use case	When changing the event notification reception port of a fax client
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 65535
	Default value	29400
Related service mode		COPIER> OPTION> NETWORK> AFS-JOB

COPIER > OPTION > NETWORK	
ILOGMODE	Setting of Firewall range
Lv.1	<p>Details</p> <p>To set all protocols or TCP/UDP/ICMP unicast as the target of Firewall. When 0 is set, the machine responds to ARP, ICMP multicast and broadcast which have no direct relation, and consequently the number of logs is increased. When 1 is set, the machine filters TCP, UDP and ICMP unicast only.</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 3 0: All protocols support mode 1: TCP/UDP/ICMP unicast support mode 2, 3: Not used</p> <p>Default value</p> <p>0</p>
ILOGKEEP	Setting of IP Filter log time
Lv.1	<p>Details</p> <p>To set the retention time from the log time blocked by IP Filter. When access is made again from a same address which was blocked by IP Filter before, if it is within the retention time from the previous log time, its log is not recorded. If access is frequently made from a same IP address, the log record of the UI might be filled with its logs. If the user considers that a single log for a same IP address is enough, set the longer retention time.</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 48 0: 1 minute (special mode) 1 to 48: 1 hour to 48 hours</p> <p>Default value</p> <p>1</p>
IPTBROAD	Set to allow broad/multicast TX
Lv.1	<p>Details</p> <p>To set whether to send broadcast packets and multicast packets. Transmission of broadcast packets and multicast packets is permitted without specifying an exception address. It is permitted within the device even if it is rejected in the default setting of the IPv4/v6 transmission filter. Set "1: Disabled" when the user does not want to send them.</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 5 0: Enabled, 1: Disabled, 2 to 5: Not used</p> <p>Default value</p> <p>0</p>

COPIER > OPTION > NETWORK	
PFWFTPRT	Setting of IP Filter FTP
Lv.1	<p>Details</p> <p>When FTP SEND is executed using an IP filter by which packets from a specific remote PC are rejected, SYN is returned to the port 113 if the PC supports authentication of the FTP port 113. However, since the IP filter blocks the packets, the block logs are increased and the performance is lowered. When 1 is set, RST is returned to the port 113 without blocking packets.</p> <p>Use case</p> <p>When executing FTP SEND against the OS which supports authentication of the FTP port 113 while the IP filter is enabled</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>0</p>
IPMTU	Setting of MTU size
Lv.1	<p>Details</p> <p>To set MTU size of network packet. This item is used when performing SEND communication between locations connected with Ethernet in a field environment where MTU black hole problem occurs.</p> <p>Use case</p> <p>When MTU black hole problem occur</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Caution</p> <p>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.</p> <p>Display/adj/set range</p> <p>1 to 10 1: 600 bytes, 2: 700 bytes, ..., 9: 1400 bytes, 10: 1500 bytes</p> <p>Unit</p> <p>byte</p> <p>Default value</p> <p>10</p>
DDNSINTV	Set of DDNS periodical update interval
Lv.1	<p>Details</p> <p>DNS registration is executed only once at start-up with the current iR, so the registered contents are deleted in an environment where the DNS server settings are deleted at intervals. To set the interval of DDNS periodical update for not deleting the registered contents.</p> <p>Use case</p> <p>When the DNS server settings are deleted at intervals</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 48 0: No periodical update, 1: 1-hour interval, 2: 2-hour interval, ..., 47: 47-hour interval, 48: 48-hour interval</p> <p>Unit</p> <p>hour</p> <p>Default value</p> <p>24</p>

COPIER > OPTION > NETWORK		
PRCLTYPE		Setting of dedicated protocol type
Lv.2	Details	To switch the type of dedicated protocol.
	Use case	Upon user's request (Assumed to make change from the default value only for customization.)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: TYPE 0 (Compatible in conventional manner), 1: TYPE 1
	Default value	0
VLAN-SW		
		Switch for VLAN participation packets
Lv.2	Details	Switch for sending packets for participating dynamic VLAN at startup. For the packets to be sent, a static IP address is set as the sender.
	Use case	When allowing a device whose IP address has not been decided yet to participate in VLAN by sending packets for participating dynamic VLAN at startup
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	When allowing a device whose IP address has not been decided yet to participate in VLAN by sending packets for participating dynamic VLAN at startup
	Adj/set/operate method	0: Packets for participating in dynamic VLAN are not sent. 1: Packets for participating in dynamic VLAN are sent.
	Default value	0
	Related service mode	COPIER > OPTION > NETWORK > VLAN-PKT
	Supplement/memo	VLAN: Virtual LAN A method for realizing grouping of terminals depending on the HUB, switch connection port, MAC address, protocol, etc.
VLAN-PKT		
		Set of number of VLAN packets to send
Lv.2	Details	To set the number of packets for participating in VLAN to be sent from the Main Controller when the LAN cable is connected or when the device recovers from deep sleep.
	Use case	When setting the number of packets to be sent with the setting made to send packets for participating in VLAN
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	This setting is ignored when the setting is made not to send packets for participating in VLAN (VLAN-SW=0).
	Display/adj/set range	0 to 10 VLAN participation packets of three times as much as the setting value are sent. Example) Setting value 1 3 (=1*3) sets of VLAN participation packet are sent.
	Default value	1
	Related service mode	COPIER > OPTION > NETWORK > VLAN-SW
	Supplement/memo	VLAN: Virtual LAN A method for realizing grouping of terminals depending on the HUB, switch connection port, MAC address, protocol, etc.

COPIER > OPTION > NETWORK		
SSLMODE		Setting of HTTP/HTTPS port open/close
Lv.2	Details	To set whether to open or close HTTP/HTTPS port. When 1 is set 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 UI menu	Preferences> Network> TCP/IP Settings> Use HTTP Management Settings> License/Other> MEAP Settings> SSL Settings
SSLSTRNG		Allow weak encryption algorithm for SSL
Lv.2	Details	To set whether to allow using weak encryption algorithm for SSL. When 1 is set, weak encryption algorithm cannot be used.
	Use case	When prohibiting weak encryption algorithm because of security concern
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Normal mode, 1: Secure mode (Not used TLS_RSA_WITH_RC4_128_SHA, TLS_RSA_WITH_RC4_128_MD5)
	Default value	0
RAWTOUT		Set of reception timeout at printing
Lv.2	Details	To set the duration of time before disconnecting the connection when packet reception is delayed during printing with RAW/LPR setting. If connection is not disconnected after making prints from a Windows PC via network, failure such as unable to make print from other devices occurs. In such case, shorten the timeout time so that connection is disconnected earlier.
	Use case	When failure (unable to make print, etc.) occurs on the network where a Windows PC is connected
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 5 1: 1 minute, 2: 3 minutes, 3: 5 minutes, 4: 10 minutes, 5: 60 minutes
	Unit	min
	Default value	5

T-8-52

## ■ SOUND

COPIER > OPTION > SOUND	
DRM-RTIM	Set Drum line prev sequence exe interval
Lv.2	<p><b>Details</b></p> <p>To set the time interval to rotate the Photosensitive Drum at standby or sleep. The Photosensitive Drum is rotated only for 300 msec at intervals to prevent lines at the drum interval which occurs when the device is not used for a long time. As the value is incremented by 1, the interval is increased by 5 minutes. Increase the value if the user does not mind line at the drum interval or prefers to reduce the frequency of rotation.</p> <p><b>Use case</b></p> <p>When the user does not mind line at the drum interval which occurs when the machine is not used for a long time or prefers to reduce the frequency of rotation</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p><b>Display/adj/set range</b></p> <p>0 to 12 0: Not executed</p> <p><b>Unit</b></p> <p>min</p> <p><b>Default value</b></p> <p>0</p>

T-8-53

## ■ ENV-SET

COPIER > OPTION > ENV-SET	
ENVP-INT	Temp, humid & Fix Film temp log get cycle
Lv.1	<p><b>Details</b></p> <p>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. Obtained log can be displayed by selecting the following: COPIER &gt; DISPLAY &gt; ENVRNT.</p> <p><b>Use case</b></p> <p>At problem analysis</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p><b>Display/adj/set range</b></p> <p>0 to 480</p> <p><b>Unit</b></p> <p>min</p> <p><b>Default value</b></p> <p>60</p> <p><b>Related service mode</b></p> <p>COPIER&gt; DISPLAY&gt; ENVRNT</p>
DRY-CISU	ON/OFF of condensation prevention mode
Lv.1	<p><b>Details</b></p> <p>To set ON/OFF of condensation prevention mode. When droplets appear on the Scanner Unit in DADF mode due to condensation and image failure or E302 occurs, set "1: ON". When 1 is selected, from the next startup, the paper back LED lights for 30 seconds after completion of a job.</p> <p><b>Use case</b></p> <p>When droplets appear on the Scanner Unit due to condensation and image failure or E302 occurs</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p><b>Caution</b></p> <p>This function works only on the one-pass model. It does not work on the reverse model.</p> <p><b>Display/adj/set range</b></p> <p>0 to 1 0: OFF (Normal mode), 1: ON (Condensation prevention mode)</p> <p><b>Default value</b></p> <p>0</p>

T-8-54

## CLEANING

COPIER > OPTION > CLEANING	
OHP-PTH	Set of ITB clean transp threshold value
Lv.2	Details
	<p>To set the number of sheets as the intervals to execute ITB cleaning when feeding transparency.</p> <p>When a large number of transparencies is fed, surface active agent adheres to the ITB, and consequently the transfer efficiency is lowered. To prevent image failure, a patch is formed on the ITB, and surface active agent is removed together with the toner every time after feeding 30 sheets at paper interval and 22 sheets at last rotation.</p> <p>As the value is incremented by 1, the number of sheets at paper interval and last rotation is increased by 1 sheet.</p> <p>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.</p> <p>When the value is increased, downtime and toner consumption can be reduced, but image failure may occur.</p>
	Use case
	When an image failure occurs due to lowering of the transfer efficiency
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	-15 to 15
	Unit
	sheet
	Default value
	0
	Related service mode
	COPIER> FUNCTION> CLEANING> TBLT-CLN

COPIER > OPTION > CLEANING	
ITBB-TMG	Set of drum/ITB cleaning band interval
Lv.1	Details
	To set the intervals at which a band of ATR patches is formed at last rotation as a measure to prevent flipping of the Drum Cleaner. If flipping is concerned, reduce the interval. In addition, use this mode when Bk vertical lines occur in a high temperature and high humidity environment.
	Use case
	- When flipping of the Drum Cleaner occurs (Setting value 2 is recommended.) - When Bk vertical lines occur in a high temperature and high humidity environment (Setting values 6 to 8 are recommended.)
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 10 (The intervals at which a band of ATR patches is formed at last rotation) 0: 140 sheets (Default), 1: Not used, 2: 25 sheets (select this value when taking a measure against flipping of the Drum Cleaner), 3: 10 sheets (enabled only in a high temperature and high humidity environment), 4: 75 sheets, 5: 100 sheets, 6: 5 sheets (enabled only in a high temperature and high humidity environment), 7: 10 sheets (enabled only in a high temperature and high humidity environment), 8: 25 sheets (enabled only in a high temperature and high humidity environment), 9 to 10: Not used
	Unit
	sheet
	Default value
	0
	Related service mode
	The following mode is used to adjust the intervals at which a band of ATR patches is formed at paper interval. COPIER> OPTION> IMG-DEV> PCHINT-1

T-8-55

## FEED-SW

COPIER > OPTION > FEED-SW	
EVL-SPD	
Envelope feeding speed setting	
Lv.1	Details
	To set the envelope feeding speed. 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. By setting to 1/1 speed, adhesion can be prevented, but fixing might be deteriorated in a low humidity environment.
	Use case
	When a glue flap of envelope adheres
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	The fixing is deteriorated by setting 1/1 speed in a low humidity environment.
	Display/adj/set range
	0 to 1 0: 1/2 speed, 1: 1/1 speed
	Default value
	0
EVL-FS	
Setting of fixing speed with envelop	
Lv.2	Details
	To set fixing speed when feeding envelope. As the value is incremented by 1, the fixing speed changes by 0.1%. Decrease the value when fine line displacement occurs on trailing edge of envelop, and increase the value when wrinkles occur.
	Use case
	When fine line displacement or wrinkles occur on trailing edge while feeding envelop
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution
	Be sure to change the value little at a time because when setting an extreme value, phenomenon opposite to fine line displacement or wrinkles occur.
	Display/adj/set range
	-20 to 20
	Unit
	%
	Default value
	0
TFL-RTC	
Set delvry dest at rcvry after tray full	
Lv.1	Details
	To select the delivery destination for a job with multiple pages after recovering the Delivery Tray that reaches the full level. When 0 (default) is set, a job is output from the delivery destination again from which the last job was delivered. When 1 is set, a job is output from the delivery destination which priority is set as high at "Output Tray Settings" in user mode.
	Use case
	When changing the delivery tray
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Output from the tray from which the last job was output. 1: Output from the delivery destination which priority is high among the delivery trays.
	Default value
	0

COPIER > OPTION > FEED-SW	
USZ-FEED	
ON/OFF Job set/ppr source ppr size chck	
Lv.1	Details
	To set whether to check if the paper size set for the job matches the paper size set on the paper source. When 1 is set, papers are picked up without checking even user defined size papers that differ from the job setting size are set on a paper source.
	Use case
	When forcibly picking up papers even the paper size setting differs between a job and a paper source
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	0 to 4 0: ON, 1: OFF, 2: OFF (Multi-purpose Tray only), 3 to 4: Not used
	Default value
	0
MFENV-K2	
Lift Plt press:MP Tr pckup, envlp(Kaku2)	
Lv.1	Details
	To set the Lifting Plate pressure mode when feeding an envelope (Kakugata 2) from the Multi-purpose Tray. When 0 is set, the Lifting Plate applies pressure to the envelope once. When 1 is set, pressure is applied twice and the feeding power is increased.
	Use case
	- At installation - When jams frequently occur
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	When applying pressure twice, jam may occur frequently with Yougata-type envelope.
	Display/adj/set range
	0 to 1 0: Pressure is applied once, 1: Pressure is applied twice
	Default value
	0
MFENV-N3	
Lift Plt press:MP Tr pckup, envlp(Naga3)	
Lv.1	Details
	To set the Lifting Plate pressure mode when feeding an envelope (Nagagata 3) from the Multi-purpose Tray. When 0 is set, the Lifting Plate applies pressure to the envelope once. When 1 is set, pressure is applied twice and the feeding power is increased.
	Use case
	- At installation - When jams frequently occur
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	When applying pressure twice, jam may occur frequently with Yougata-type envelope.
	Display/adj/set range
	0 to 1 0: Pressure is applied once, 1: Pressure is applied twice
	Default value
	0



COPIER > OPTION > FEED-SW	
MFENV-Y3	Lift-P press:MP Tr pckup, envlp(Y-naga3)
Lv.1	<p><b>Details</b></p> <p>To set the Lifting Plate pressure mode when feeding an envelope (Yougatanaga 3) from the Multi-purpose Tray. When 0 is set, the Lifting Plate applies pressure to the envelope once. When 1 is set, pressure is applied twice and the feeding power is increased.</p> <p><b>Use case</b></p> <p>- At installation - When jams frequently occur</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value, and then press OK key.</p> <p><b>Caution</b></p> <p>When applying pressure twice, jam may occur frequently with Yougata-type envelope.</p> <p><b>Display/adj/set range</b></p> <p>0 to 1 0: Pressure is applied once, 1: Pressure is applied twice</p> <p><b>Default value</b></p> <p>0</p>
MFENV-MO	Lift-P press:MP Tr pckup, envlp(Monarch)
Lv.1	<p><b>Details</b></p> <p>To set the Lifting Plate pressure mode when feeding an envelope (Monarch) from the Multi-purpose Tray. When 0 is set, the Lifting Plate applies pressure to the envelope once. When 1 is set, pressure is applied twice and the feeding power is increased.</p> <p><b>Use case</b></p> <p>- At installation - When jams frequently occur</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value, and then press OK key.</p> <p><b>Caution</b></p> <p>When applying pressure twice, jam may occur frequently with Yougata-type envelope.</p> <p><b>Display/adj/set range</b></p> <p>0 to 1 0: Pressure is applied once, 1: Pressure is applied twice</p> <p><b>Default value</b></p> <p>0</p>
MFENV-10	Lift-P press: MP-T pckup, envlp, No.10
Lv.1	<p><b>Details</b></p> <p>To set the Lifting Plate pressure mode when feeding an envelope (No.10 (COM10)) from the Multi-purpose Tray. When 0 is set, the Lifting Plate applies pressure to the envelope once. When 1 is set, pressure is applied twice and the feeding power is increased.</p> <p><b>Use case</b></p> <p>- At installation - When jams frequently occur</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value, and then press OK key.</p> <p><b>Caution</b></p> <p>When applying pressure twice, jam may occur frequently with Yougata-type envelope.</p> <p><b>Display/adj/set range</b></p> <p>0 to 1 0: Pressure is applied once, 1: Pressure is applied twice</p> <p><b>Default value</b></p> <p>0</p>

COPIER > OPTION > FEED-SW	
MFENV-DL	Lift PIt press: MP Tr pckup, envlp (DL)
Lv.1	<p><b>Details</b></p> <p>To set the Lifting Plate pressure mode when feeding an envelope (DL) from the Multi-purpose Tray. When 0 is set, the Lifting Plate applies pressure to the envelope once. When 1 is set, pressure is applied twice and the feeding power is increased.</p> <p><b>Use case</b></p> <p>- At installation - When jams frequently occur</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value, and then press OK key.</p> <p><b>Caution</b></p> <p>When applying pressure twice, jam may occur frequently with Yougata-type envelope.</p> <p><b>Display/adj/set range</b></p> <p>0 to 1 0: Pressure is applied once, 1: Pressure is applied twice</p> <p><b>Default value</b></p> <p>0</p>
MFENV-C5	Lift PIt press: MP Tr pckup, envlp (C5)
Lv.1	<p><b>Details</b></p> <p>To set the Lifting Plate pressure mode when feeding an envelope (C5) from the Multi-purpose Tray. When 0 is set, the Lifting Plate applies pressure to the envelope once. When 1 is set, pressure is applied twice and the feeding power is increased.</p> <p><b>Use case</b></p> <p>- At installation - When jams frequently occur</p> <p><b>Adj/set/operate method</b></p> <p>Enter the setting value, and then press OK key.</p> <p><b>Caution</b></p> <p>When applying pressure twice, jam may occur frequently with Yougata-type envelope.</p> <p><b>Display/adj/set range</b></p> <p>0 to 1 0: Pressure is applied once, 1: Pressure is applied twice</p> <p><b>Default value</b></p> <p>0</p>

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## 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 (width direction is smaller than A4R). As the value is incremented by 1, the temperature is increased by 5 deg C from the initial setting temperature.
	Use case
	When improving hot offset on the edge of paper and productivity
	Adj/set/operate method
	1) Enter the setting value, and then 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: 5 deg C, 2: 10 deg C, 3: 15 deg C, 4: 20 deg C
	Unit
	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 followed by small size paper through the Fixing Assembly. 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 which is the condition to stop idle rotation. As the value is incremented by 1, the temperature is increased by 5 deg C from the initial setting temperature. Temperature is detected by the Sub Thermistor 1 and 2.
	Use case
	When improving hot offset on the edge of paper and productivity
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	-2 to 2 -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: 5 deg C, 2: 10 deg C
	Unit
	deg C
	Default value
	0

COPIER > OPTION > IMG-SPD	
ARC-INT1	Set of ARCDAT interruption interval
Lv.2	Details
	To set the number of sheets as the intervals at which ARCDAT control is executed. When the number of sheets reaches the specified value, ARCDAT control is executed by interrupting an ongoing job. Decrease the value when the density varies dramatically, and increase the value to reduce downtime due to the control. If the value is too small, the productivity is lowered. If the value is too large, the density of image becomes different before and after the interruption. Actual setting value is calculated by dividing the entry value by 0.9 and rounding up after the decimal points. (e.g.: If an entry value is 100, setting value will be 112.)
	Use case
	- When the density varies dramatically - When decreasing downtime
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	5 to 1000
	Unit
	sheet
	Default value
	100
	Related service mode
	COPIER> OPTION> IMG-SPD> ARC-INT2
ARC-INT2	Set ARCDAT exe interval: last rotation
Lv.2	Details
	To set the number of sheets which ARCDAT control is not executed, from the start of a job. ARCDAT control which is supposed to be executed during the specified number of sheets is executed at last rotation of the previous job. Since the number of interruptions during a job is reduced, the productivity is enhanced. However, the number of times of ARCDAT control executed at last rotation might be increased depending on the print conditions. Actual setting value is calculated by dividing the entry value by 0.9 and rounding up after the decimal points. (e.g.: If an entry value is 25, setting value will be 28.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	Do not set a larger value than INTPPR-1.
	Display/adj/set range
	5 to 1000
	Unit
	sheet
	Default value
	25
	Related service mode
	COPIER> OPTION> IMG-DEV> INTPPR-1

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## IMG-RDR

COPIER > OPTION > IMG-RDR		
DFDST-L1	Adj black line crct lvl:ppr intvl, DADF	
Lv.1	Details	To adjust black line correction level with dust detection correction control that is executed at paper interval in DADF mode. Increase the value when black lines appear. As the value is larger, the small dust is more likely detected.
	Use case	- When black line occurs due to dust - Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When the value is too small, black lines may appear on the image.
	Display/adj/set range	0 to 255 0: OFF 1 to 84: Weakest 85 to 169: Weak 170 to 254: Moderate (default) 255: Strong
	Default value	200
	Related service mode	COPIER> OPTION> IMG-RDR> DFDST-L2
DFDST-L2	DADF mode dust dtct level adj: after job	
Lv.1	Details	To adjust dust detection level with dust detection correction control that is executed after the job is completed in DADF mode. Reduce the value in the case of frequent display of cleaning instruction at the time of dust detection. As the value is smaller, the dust is less detected. Increase the value when black lines appear. As the value is larger, the small dust is more likely detected.
	Use case	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	If the value is too large, the cleaning instruction screen may appear too often because even small dust particles that do not appear on the image are detected.
	Display/adj/set range	0 to 255 0: OFF
	Default value	200
	Related service mode	COPIER> OPTION> IMG-RDR> DFDST-L1

COPIER > OPTION > IMG-RDR		
DF2DSTL1	Adj Bk line crct lvl:ppr intvl,bck,DADF	
Lv.1	Details	To adjust the black line correction level with dust detection correction control that is executed by the Scanner Unit (for back side) in DADF mode. Increase the value when black lines appear. As the value is larger, the small dust is more likely detected.
	Use case	- When black line appears due to dust - Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When the value is too small, black lines may appear on the image.
	Display/adj/set range	0 to 255 0:OFF 1 to 84: Weakest 85 to 169: Weak 170 to 254: Moderate (default) 255: Strong
	Default value	200
	Related service mode	COPIER> OPTION> IMG-RDR> DF2DSTL2
DF2DSTL2	Adj DADF dust dtct level at job end:bck	
Lv.1	Details	To adjust dust detection level with dust detection correction control that is executed by the Scanner Unit (for back side) 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, dust is less detected.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	If the value is too large, the cleaning instruction screen may appear too often because even small dust particles that do not appear on the image are detected.
	Display/adj/set range	0 to 255 0:OFF
	Default value	200
	Related service mode	COPIER> OPTION> IMG-RDR> DF2DSTL1

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## IMG-MCON

COPIER > OPTION > IMG-MCON	
PASCAL	
Use/no use of auto gradation adj data	
Lv.1	Details
	To set to use/not to use the gradation adjustment data gamma LUT that is generated by auto gradation adjustment (full/quick adjustment) control. Selection is available as to whether to use gamma LUT at the time of image formation.
	Use case
	When PASCAL-related failure occurs/when identifying the cause of PASCAL-related failure
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 3 0: Initial LUT is used. (Auto gradation adjustment is not used.) 1: Auto gradation adjustment is used. 2 to 3: Not used
	Default value
	1
SCR-SLCT	
Halftone process in Photo Printout mode	
Lv.2	Details
	To set halftone process (error diffusion, screen 2 types) in Photo Printout mode when making a copy. Change the setting if the copy image has a problem with the initial setting (Low screen ruling). Select 0 (error diffusion) in the case of moire (suitable for character reproduction). Select 2 (High screen ruling) in the case of rough dots.
	Use case
	When moire image or rough dots occurs on copy image
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 2 0: Error diffusion, 1: Low screen ruling, 2: High screen ruling
	Default value
	1
TMC-SLCT	
Setting of error diffusion coefficient	
Lv.2	Details
	To set coefficient to be used for error diffusion process. Specify according to the level of granularity and dot stability.
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 2 0: Small granularity/low dot stability 1: Small granularity/low dot stability (color mode), Large granularity/high dot stability (black mode) 2: Large granularity/high dot stability
	Default value
	2

COPIER > OPTION > IMG-MCON	
PRN-FLG	
Select of image area flag (PDL image)	
Lv.2	Details
	To set the image area flag for the image processing which is performed when a PDL image fails to be compressed at a specified compression rate. If an image fails to be compressed at a specified compression rate, the following operations are performed as default: - Processing to prioritize reproduction of text - Replacing Bk-color to black plain color Set 1 when moire occurs or jaggy is significant. Set 2 when not preferring to replace Bk color with single Bk color.
	Use case
	- When moire occurs or jaggy is significant in case of printing an image containing many halftone dots or photos - When avoiding to replace Bk-color with single black color
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	This setting trades off with reproducibility of text.
	Display/adj/set range
	0 to 2 0: High screen ruling, gray compensation LUT 1: Error diffusion, gray compensation LUT 2: High screen ruling, normal LUT
	Default value
	0
SCN-FLG	
Select of image area flag (copy image)	
Lv.2	Details
	To set the image area flag for the image processing which is performed when a scanned image fails to be compressed at a specified compression rate. If an image fails to be compressed at a specified compression rate, processing to prioritize reproduction of text is performed by default. Set 1 when an image contains many halftone photo images. Set 2 when an image contains many printed photos.
	Use case
	When copying an image which contains many halftone dots and photos
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	This setting trades off with reproducibility of text.
	Display/adj/set range
	0 to 2 0: Text 1: Halftone photo image 2: Printed photos
	Default value
	0

COPIER > OPTION > IMG-MCON		
TMIC-BK		ON/OFF of TMIC Bk_LUT end edge correct
Lv.2	Details	To set ON/OFF of the trailing edge adjustment of Bk_LUT for PDL and for copy which are used by TMIC. When the trailing edge adjustment is set to ON, the density of the high density area becomes high, and consequently text and thin lines become clear. While an image becomes clear, the hue of the gradation area of photos, etc. is changed.
	Use case	When thin lines are partly missing or characters are faded
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3 0: ON for PDL, OFF for copy 1: OFF for PDL, OFF for copy 2: ON for PDL, ON for copy 3: OFF for PDL, ON for copy
	Default value	2
DH-MODE		Set ptch data at Dhalf except full crct
Lv.2	Details	To set whether to use the high-density patch data that has been scanned by D-half control of full correction at the time of D-half control other than full correction.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Used, 1: Not used
	Default value	0
DH-TMG		Set auto D-half control exe interval
Lv.2	Details	To set the paper interval to execute auto D-half control. D-half control is executed at the time of last rotation after completion of job with every specified number of sheets. The operation is enabled when the setting value of COPIER> OPTION> FNC-SW> DH-SW is 1: ON.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	500 to 2000
	Unit	sheet
	Default value	1000
	Related service mode	COPIER> OPTION> FNC-SW> DH-SW

COPIER > OPTION > IMG-MCON		
MIX-FLG		Set img processing at img composition
Lv.2	Details	To set the image processing which is performed when an image fails to be compressed at a specified compression rate by the Main Controller upon image composition.
	Use case	When an image processing failure occurs
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3 0: Equivalent to PDL text mode (Black text is reproduced with 4 colors. Error diffused image. The hue of the photo area is more vivid than that of 2.) 1: Equivalent to PDL photo mode (Black text is reproduced with 4 colors. Screen processed image.) 2: Equivalent to scanned text mode (Black text is reproduced with a single Bk color. Error diffused image. The hue of the photo area might be different from that of 0.) 3: Equivalent to scanned photo mode (Black text is reproduced with a single Bk color. Screen processed image.)
	Default value	0
REPORT-Z		Set of image processing at report print
Lv.1	Details	To set the image processing which is performed when printing a report.
	Use case	When there is a request for image improvement
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3 0: Equivalent to PDL text mode (Black text is reproduced with 4 colors. Error diffused image. The hue of the photo area is more vivid than that of 2.) 1: Equivalent to PDL photo mode (Black text is reproduced with 4 colors. Screen processed image.) 2: Equivalent to scanned text mode (Black text is reproduced with a single Bk color. Error diffused image. The hue of the photo area might be different from that of 0.) 3: Equivalent to scanned photo mode (Black text is reproduced with a single Bk color. Screen processed image.)
	Default value	0

COPIER > OPTION > IMG-MCON		
IFXEML-Z	Set img proc at clr iFAX,mail recv print	
Lv.1	Details	To set the image processing which is performed when printing color iFAX or received e-mail.
	Use case	When there is a request for image improvement
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3 0: Equivalent to PDL text mode (Black text is reproduced with 4 colors. Error diffused image. The hue of the photo area is more vivid than that of 2.) 1: Equivalent to PDL photo mode (Black text is reproduced with 4 colors. Screen processed image.) 2: Equivalent to scanned text mode (Black text is reproduced with a single Bk color. Error diffused image. The hue of the photo area might be different from that of 0.) 3: Equivalent to scanned photo mode (Black text is reproduced with a single Bk color. Screen processed image.)
Default value	0	
BMLNKS-Z	Set img proc at BMLinkS reception print	
Lv.1	Details	To set the image processing which is performed when printing received BMLinkS.
	Use case	When there is a request for image improvement
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3 0: Equivalent to PDL text mode (Black text is reproduced with 4 colors. Error diffused image. The hue of the photo area is more vivid than that of 2.) 1: Equivalent to PDL photo mode (Black text is reproduced with 4 colors. Screen processed image.) 2: Equivalent to scanned text mode (Black text is reproduced with a single Bk color. Error diffused image. The hue of the photo area might be different from that of 0.) 3: Equivalent to scanned photo mode (Black text is reproduced with a single Bk color. Screen processed image.)
Default value	0	

COPIER > OPTION > IMG-MCON		
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 Assembly and Fixing Assembly might occur, and paper might wind around the Fixing Assembly.
	Use case	- Upon user's request - When reflecting the color adjustment value to an image precisely
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When 0 is set, toner scattering in the Transfer Assembly and Fixing Assembly might occur, and paper might wind around the Fixing Assembly.
	Display/adj/set range	0 to 1 0: Toner deposit amount is not limited. 1: Toner deposit amount is limited to the specified amount.
Default value	1	
VP-ART	Setting of line art processing	
Lv.2	Details	To set outline processing for line art on scalable PDF. In the outline processing, a binary image outline is extracted in the field which is recognized as line art, and is converted into vector data. Specify whether to convert the binary image outline into vector data or to recognize it as one line (as a thin line). For the thin line, the line width can be specified. Change this value when you want to obtain an output of a wide-width line as one line rather than as an outline (when you want to prioritize edit operation as a line rather than image quality).
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 99
	Default value	1

COPIER > OPTION > IMG-MCON	
VP-TXT	Set of character vectorization process
Lv.2	<p><b>Details</b></p> <p>To set vectorization processing for text on scalable PDF. In the vectorization processing, a binary image outline is extracted in the field which is recognized as text, and is converted into vector data. In regular vectorization, function approximation is not used for small text not to change the image quality. When the value is changed, function approximation processing is executed for small text, which realizes smooth text although the image quality is changed. Change this value when you want to prioritize smoothness in small text.</p> <p><b>Use case</b></p> <p>Upon user's request</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p><b>Display/adj/set range</b></p> <p>0 to 99</p> <p><b>Default value</b></p> <p>1</p>
PASCL-TY	Set of paper type for auto gradation adj
Lv.2	<p><b>Details</b></p> <p>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.</p> <p><b>Use case</b></p> <p>When executing the auto gradation adjustment using a paper other than the recommended paper type</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p><b>Caution</b></p> <p>Do not change the setting in the normal operation.</p> <p><b>Display/adj/set range</b></p> <p>1 to 3 1: CS-814 (Except for USA and Europe. Mainly for Japan) 2: Hammermill (For USA) 3: Mondi (For Europe)</p> <p><b>Default value</b></p> <p>The value differs according to the location.</p>
P-ALPHA	Adjustment of Patch Sensor alpha value
Lv.1	<p><b>Details</b></p> <p>To adjust the correction coefficient alpha value of the Patch Sensor. The value multiplied by 1000 is displayed on the screen. After replacing the Patch Sensor, enter the value "*1/XXXX*" (XXXX: number around 1200) under the barcode of the service label.</p> <p><b>Use case</b></p> <p>When the Patch Sensor fails to read the density</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value. 2) Turn OFF/ON the main power switch.</p> <p><b>Display/adj/set range</b></p> <p>512 to 2047</p> <p><b>Default value</b></p> <p>1200</p>

COPIER > OPTION > IMG-MCON	
AST-SEL	Adj of advanced smoothing effect
Lv.2	<p><b>Details</b></p> <p>To adjust the smoothing effect which is set in the advanced smoothing UI. Set 3 if the effect is not improved by selecting "High" on the UI. Set 0 if too much effect is obtained even though "Low" is set.</p> <p><b>Use case</b></p> <p>When image failures (jaggy, moire) occur</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p><b>Display/adj/set range</b></p> <p>0 to 3</p> <p><b>Default value</b></p> <p>2</p>
REGM-SEL	Adj of fine-line density correction
Lv.2	<p><b>Details</b></p> <p>To adjust the fine line and text density which is set in user mode (fine density correction). Set 4 if density is too low even though +2 is set in user mode and set 0 if density is too high even though -2 is set in user mode.</p> <p><b>Use case</b></p> <p>When line and text adjusted by fine line density adjustment is too dark or too light in the case of 1200 dpi print</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p><b>Display/adj/set range</b></p> <p>0 to 4</p> <p><b>Default value</b></p> <p>2</p>
ERS-SEL	Effective Resolution System Proc mthd
Lv.2	<p><b>Details</b></p> <p>To set the processing method of Effective Resolution System for images and texts. Select one of 1 to 7 when moire (a symptom of hue changing depending on the location) occurs on a patterned image with 1200 dpi.</p> <p><b>Use case</b></p> <p>When moire occurs on a patterned image with 1200 dpi</p> <p><b>Adj/set/operate method</b></p> <p>Enter the value, and then press OK key.</p> <p><b>Display/adj/set range</b></p> <p>0 to 7</p> <p><b>Default value</b></p> <p>0</p>
SCR-SW	Set of low screen ruling dither
Lv.1	<p><b>Details</b></p> <p>To set the dithering method for low screen ruling. When changing the value, confirm the change by setting "1: Low screen ruling" in COPIER&gt; TEST&gt; PG&gt; TXPH.</p> <p><b>Use case</b></p> <p>Upon user's request (Dot dithering is used)</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value, and then press OK key. 2) Execute full adjustment of auto gradation adjustment.</p> <p><b>Display/adj/set range</b></p> <p>0 to 1 0: Line dithering, 1: Dot dithering</p> <p><b>Default value</b></p> <p>0</p> <p><b>Related service mode</b></p> <p>COPIER&gt; TEST&gt; PG&gt; TXPH</p>
PSCL-TBL	Set auto gradation adjustment parameters



COPIER > OPTION > IMG-MCON		
Lv.1	Details	To set the parameters of auto gradation adjustment (full adjustment). When 0 is set, the parameters are optimized for GF-C081 (81 g/m2) standard paper (Canon-recommended paper). When 1 is set, the parameters are optimized for 64 g/m2 paper.
	Use case	When paper arc occurs on 64 g/m2 paper at auto gradation adjustment
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Execute full adjustment of auto gradation adjustment.
	Caution	Be sure to execute auto gradation adjustment (full adjustment) after the setting is done.
	Display/adj/set range	0 to 3 0: Standard paper (81 g/m2), 1: Plain paper (other than 81 g/m2), 2 to 3: Not used
	Default value	0
	BGE-OFS	Fine adj of background adjustment level
Lv.2	Details	To make a fine adjustment of the background adjustment (background removal) level which can be set manually. Break up the adjustment values into smaller ones when user does not satisfy with the default adjustment values.
	Use case	When color fogging occurs on the output image when copying yellowed blank paper as an original
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution	Since the background color is set to be washed out with this mode, not only the background of yellowed blank paper, but also other light colors (light blue, etc.) are washed out.
	Display/adj/set range	-15 to 15
	Default value	0

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## ■ IMG-DEV

COPIER > OPTION > IMG-DEV		
DRM-IDL		Set first idle rotn time in HH Ev
Lv.1	Details	To set the idle rotation time to be performed first time for the day in an HH (high temperature and high humidity) environment.
	Use case	When coarseness occurs on the image first time for the day
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When ON 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
DEVL-VTH		Set toner ejectn image duty threshold VL
Lv.2	Details	To set the threshold value of the image duty, which is the condition to perform the low duty toner ejection sequence. As the value is larger, coarseness is decreased, but productivity is lowered and toner consumption is increased. As the value is smaller, productivity and toner consumption are improved, but coarseness is worsened.
	Use case	While printing low duty (low image ratio) images, - When graininess (coarseness) occurs - When low productivity or high toner consumption is pointed out by the user
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-1 to 2 -1: -1%, 0: 0%, 1: +1%, 2: +2%
	Default value	0
	Related service mode	COPIER> OPTION> IMG-DEV> DEVL-PTH



COPIER > OPTION > IMG-DEV	
INTPPR-1	Set of ARCDAT interruption interval
Lv.2	<p>Details</p> <p>To set the number of sheets as the intervals at which ARCDAT control is executed. When the number of sheets reaches the specified value, ARCDAT control is executed by interrupting an ongoing job. Decrease the value when the density varies dramatically, and increase the value to reduce downtime due to the control. If the value is too small, the productivity is lowered. If the value is too large, the density of image becomes different before and after the interruption. Actual setting value is calculated by dividing the entry value by 0.9 and rounding up after the decimal points. (e.g.: If an entry value is 100, setting value will be 112.)</p> <p>Use case</p> <ul style="list-style-type: none"> <li>- When the density varies dramatically</li> <li>- When decreasing downtime</li> </ul> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Display/adj/set range</p> <p>5 to 1000</p> <p>Unit</p> <p>sheet</p> <p>Default value</p> <p>100</p> <p>Related service mode</p> <p>COPIER&gt; OPTION&gt; IMG-SPD&gt; ARC-INT2</p>
DVTGT-K	Adj of ATR Sensor (Bk) gain value offset
Lv.2	<p>Details</p> <p>To actually correct the TD ratio by setting the offset of the gain value of ATR Sensor (Bk). When the value is increased (TD ratio is increased), uneven density at the screw interval is alleviated, but fogging may occur.</p> <p>Since the target value of TD ratio changes when changing the value, it is necessary to stable TD ratio by forcibly executing toner ejection sequence. The value is returned to 0 at the replacement of the Process 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>Caution</p> <p>After the value is changed, execute the toner ejection sequence.</p> <p>Display/adj/set range</p> <p>-3 to 3</p> <p>Default value</p> <p>0</p>

COPIER > OPTION > IMG-DEV	
DVTGT-Y	Adj of ATR Sensor (Y) gain value offset
Lv.2	<p>Details</p> <p>To actually correct the TD ratio by setting the offset of the gain value of ATR Sensor (Y). When the value is increased (TD ratio is increased), uneven density at the screw interval is alleviated, but fogging may occur. Since the target value of TD ratio changes when changing the value, it is necessary to stable TD ratio by forcibly executing toner ejection sequence. The value is returned to 0 at the replacement of the Process 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>Caution</p> <p>After the value is changed, execute the toner ejection sequence.</p> <p>Display/adj/set range</p> <p>-3 to 3</p> <p>Default value</p> <p>0</p>
DVTGT-M	Adj of ATR Sensor (M) gain value offset
Lv.2	<p>Details</p> <p>To actually correct the TD ratio by setting the offset of the gain value of ATR Sensor (M). When the value is increased (TD ratio is increased), uneven density at the screw interval is alleviated, but fogging may occur. Since the target value of TD ratio changes when changing the value, it is necessary to stable TD ratio by forcibly executing toner ejection sequence. The value is returned to 0 at the replacement of the Process 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>Caution</p> <p>After the value is changed, execute the toner ejection sequence.</p> <p>Display/adj/set range</p> <p>-3 to 3</p> <p>Default value</p> <p>0</p>
DVTGT-C	Adj of ATR Sensor (C) gain value offset
Lv.2	<p>Details</p> <p>To actually correct the TD ratio by setting the offset of the gain value of ATR Sensor (C). When the value is increased (TD ratio is increased), uneven density at the screw interval is alleviated, but fogging may occur. Since the target value of TD ratio changes when changing the value, it is necessary to stable TD ratio by forcibly executing toner ejection sequence. The value is returned to 0 at the replacement of the Process 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>Caution</p> <p>After the value is changed, execute the toner ejection sequence.</p> <p>Display/adj/set range</p> <p>-3 to 3</p> <p>Default value</p> <p>0</p>

COPIER > OPTION > IMG-DEV	
DEVL-PTH	Set toner ejctn ppr intvl threshold VL
Lv.1	<p><b>Details</b></p> <p>To set the threshold value of the interval, which is the condition to perform the low duty toner ejection sequence. As the value is smaller, coarseness is decreased, but productivity is lowered and toner consumption is increased. As the value is larger, productivity and toner consumption are enhanced, but coarseness is worsened.</p> <p><b>Use case</b></p> <p>While printing low duty (low image ratio) images, - When graininess (coarseness) occurs - When low productivity or high toner consumption is pointed out by the user</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p><b>Caution</b></p> <p>Do not use this when the machine is operating correctly.</p> <p><b>Display/adj/set range</b></p> <p>0 to 2 0: 100 sheets, 1: 200 sheets, 2: 300 sheets</p> <p><b>Default value</b></p> <p>0</p> <p><b>Related service mode</b></p> <p>COPIER&gt; OPTION&gt; IMG-DEV&gt; DEVL-VTH</p>
AUTO-DH	ON/OFF of D-max/D-half control
Lv.1	<p><b>Details</b></p> <p>To set ON/OFF of D-max/D-half control at warm-up rotation. 0: D-Max/D-half control is not executed. 1: D-Max/D-Half control is executed only in an HH (high temperature and high humidity) environment. 2: D-Max/D-Half control is executed in all environments.</p> <p><b>Use case</b></p> <p>When image smear occurs in an HH environment</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p><b>Display/adj/set range</b></p> <p>0 to 2 0: OFF, 1: ON (HH environment only), 2: ON (all environments)</p> <p><b>Default value</b></p> <p>1</p>
PCHINT-1	ATR patch ppr interval adj (1st limit)
Lv.2	<p><b>Details</b></p> <p>To adjust the paper interval at which patch detection is performed by paper interval ATR control. Decrease the value when hue variation is large to increase the frequency. Increase the value to reduce downtime.</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p><b>Display/adj/set range</b></p> <p>0 to 5 0: 0 sheets, 1: 100 sheets, 2: 200 sheets ..... 5: 500 sheets</p> <p><b>Unit</b></p> <p>sheet</p> <p><b>Default value</b></p> <p>2</p> <p><b>Related service mode</b></p> <p>To set the intervals at which a band of ATR patches is formed at last rotation COPIER&gt; OPTION&gt; CLEANING&gt; ITBB-TMG</p>

COPIER > OPTION > IMG-DEV	
PCHINT-V	Adj ATR patch VD counter total VL intvl
Lv.2	<p><b>Details</b></p> <p>To adjust the interval of the total video counter value at which patch detection is performed by ATR control. Decrease the value when hue variation is large. Increase the value to reduce downtime.</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p><b>Display/adj/set range</b></p> <p>0 to 5</p> <p><b>Default value</b></p> <p>2</p>
DELV-THY	Setting of image ratio for Y-toner ejctn
Lv.2	<p><b>Details</b></p> <p>To set the threshold value for average image ratio where Y-toner ejection is executed. As the value is incremented by 1, the ratio changes by 1%. When fogging occurs while making a large number of outputs of low duty images, increase the value if 0/1 is set in user mode. If the user does not want too many waste toner when low duty image is output, decrease the value.</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p><b>Display/adj/set range</b></p> <p>0 to 10 0: 0%, 1: 1%, 2: 2%, 3 to 10: Not used</p> <p><b>Default value</b></p> <p>2</p>
DELV-THC	Setting of image ratio for C-toner ejctn
Lv.2	<p><b>Details</b></p> <p>To set the threshold value for average image ratio where C-toner ejection is executed. As the value is incremented by 1, the ratio changes by 1%. When fogging occurs while making a large number of outputs of low duty images, increase the value if 0/1 is set in user mode. If the user does not want too many waste toner when low duty image is output, decrease the value.</p> <p><b>Adj/set/operate method</b></p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p><b>Display/adj/set range</b></p> <p>0 to 10 0: 0%, 1: 1%, 2: 2%, 3 to 10: Not used</p> <p><b>Default value</b></p> <p>2</p>

COPIER > OPTION > IMG-DEV		
DELV-THM	Setting of image ratio for M-toner ejctn	
Lv.2	Details	To set the threshold value for average image ratio where M-toner ejection is executed. As the value is incremented by 1, the ratio changes by 1%. When fogging occurs while making a large number of outputs of low duty images, increase the value if 0/1 is set in user mode. If the user does not want too many waste toner when low duty image is output, decrease the value.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 10 0: 0%, 1: 1%, 2: 2%, 3 to 10: Not used
	Default value	2
DELV-THK	Setting of image ratio for Bk-tonr ejctn	
Lv.2	Details	To set the threshold value for average image ratio where Bk-toner ejection is executed. As the value is incremented by 1, the ratio changes by 1%. When fogging occurs while making a large number of outputs of low duty images, increase the value if 0/1 is set in user mode. If the user does not want too many waste toner when low duty image is output, decrease the value.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 10 0: 0%, 1: 1%, 2: 2%, 3 to 10: Not used
	Default value	2
ADJ-VPP	Adj of developing AC bias Vpp	
Lv.2	Details	To adjust Vpp of the developing AC bias. Ring marks are alleviated when the value is decreased in the - direction, and white spots are alleviated when the value is increased in the + direction.
	Use case	When image failures (ring marks, white spots) occur
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute full adjustment of auto gradation adjustment.
	Caution	When the value is decreased too much in the - direction, density might be lowered.
	Display/adj/set range	-4 to 0
	Default value	0

COPIER > OPTION > IMG-DEV		
PAP-W-EN	Solid image uneven dens prevention mode	
Lv.1	Details	If the developer is supplied unevenly to the Developing Cylinder, uneven density occurs on the solid image. In order to make the developer even, time for the Toner Feed Screw to rotate is secured by widening the interval between images. As the value is larger, the interval between images (interval between sheets) becomes wider. Increase the value when the density is uneven, e.g. when the left edge of a solid image is dark.
	Use case	When uneven density occurs on a solid image
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 10
	Default value	0
PTN-LVL	[Not used]	
DMX-OF-Y	Adjustment of Y-color D-max setting	
Lv.2	Details	To adjust D-max control setting in the case where density of solid area on Y-color image is not appropriate even when auto gradation adjustment is executed. Increase the value when the density is low and decrease the value when the density is high.
	Use case	When density of solid area on an image is not appropriate even performing auto gradation adjustment
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute auto gradation adjustment.
	Caution	Be sure to execute auto gradation adjustment (full adjustment) after the setting is done.
	Display/adj/set range	-3 to 3
	Default value	0
DMX-OF-M	Adjustment of M-color D-max setting	
Lv.2	Details	To adjust D-max control setting in the case where density of solid area on M-color image is not appropriate even when auto gradation adjustment is executed. Increase the value when the density is low and decrease the value when the density is high.
	Use case	When density of solid area on an image is not appropriate even performing auto gradation adjustment
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute auto gradation adjustment.
	Caution	Be sure to execute auto gradation adjustment (full adjustment) after the setting is done.
	Display/adj/set range	-3 to 3
	Default value	0

COPIER > OPTION > IMG-DEV		
DMX-OF-C	Adjustment of C-color D-max setting	
Lv.2	Details	To adjust D-max control setting in the case where density of solid area on C-color image is not appropriate even when auto gradation adjustment is executed. Increase the value when the density is low and decrease the value when the density is high.
	Use case	When density of solid area on an image is not appropriate even performing auto gradation adjustment
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by +/- key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute auto gradation adjustment.
	Caution	Be sure to execute auto gradation adjustment (full adjustment) after the setting is done.
	Display/adj/set range	-3 to 3
	Default value	0
	DMX-OF-K	Adjustment of Bk-color D-max setting
Lv.2	Details	To adjust D-max control setting in the case where density of solid area on Bk-color image is not appropriate even when auto gradation adjustment is executed. Increase the value when the density is low and decrease the value when the density is high.
	Use case	When density of solid area on an image is not appropriate even performing auto gradation adjustment
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by +/- key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute auto gradation adjustment.
	Caution	Be sure to execute auto gradation adjustment (full adjustment) after the setting is done.
	Display/adj/set range	-3 to 3
	Default value	0

T-8-60

## ■ IMG-TR

COPIER > OPTION > IMG-TR		
2TR-RVON	[Not used]	
ITB-TYPE	Setting of ITB thickness	
Lv.2	Details	To set the thickness of the ITB to be used and the Primary Transfer Roller. Setting value of the primary transfer current differs depending on the thickness of ITB and the Primary Transfer Roller.
	Use case	When replacing the ITB
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 2 0: Thick (old belt) 1: Thin (new belt) + old Primary Transfer Roller (16 mm-diameter) 2: Thin (new belt) + new Primary Transfer Roller (175 mm-diameter)
	Default value	2

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## IMG-FIX

COPIER > OPTION > IMG-FIX	
FX-S-TMP	ITOP control temperature: Plain paper
Lv.1	Details
	To set the offset of ITOP control temperature for plain paper (64 to 81 g/m <sup>2</sup> ) at 1/1 speed. As the value is incremented by 1, the control temperature is increased by 5 deg C.
	Use case
	When uneven gloss occurs on the leading edge (94mm) of plain paper
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	-2 to 2 -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: 5 deg C, 2: 10 deg C
	Unit
	deg C
	Default value
	0
TMP-TBL2	Fixing control temperature: Heavy paper 1
Lv.1	Details
	To set the offset of fixing control temperature for heavy paper 1 (106 to 163 g/m <sup>2</sup> ). As the value is incremented by 1, the control temperature is increased by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
	Use case
	When offset/fixing failure occurs on heavy paper 1
	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
	deg C
	Default value
	0
TMP-TBL3	Fixing control temperature: Heavy paper 2
Lv.1	Details
	To set the offset of fixing control temperature for heavy paper 2 (164 to 209 g/m <sup>2</sup> ). As the value is incremented by 1, the control temperature is increased by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
	Use case
	When offset/fixing failure occurs on heavy paper 2
	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
	deg C
	Default value
	0

COPIER > OPTION > IMG-FIX	
TMP-TBL4	Fixing control temperature: Heavy paper 3
Lv.1	Details
	To set the offset of fixing control temperature for heavy paper 3 (210 to 256 g/m <sup>2</sup> ). As the value is incremented by 1, the control temperature is increased by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
	Use case
	When offset/fixing failure occurs on heavy paper 3
	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
	deg C
	Default value
	0
TMP-TBL5	Fixing control temperature: Thin ppr
Lv.1	Details
	To set the offset of fixing control temperature for thin paper (52 to 63 g/m <sup>2</sup> ). As the value is incremented by 1, the control temperature is increased by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
	Use case
	When offset/fixing failure occurs on thin paper
	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
	deg C
	Default value
	0
TMP-TBL6	Fixing control temperature: Envelope
Lv.1	Details
	To set the offset of fixing control temperature for envelope. As the value is incremented by 1, the control temperature is increased by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
	Use case
	When offset/fixing failure occurs on envelope
	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
	deg C
	Default value
	0

COPIER > OPTION > IMG-FIX		
FXS-TMP2		ITOP control temperature: Heavy paper 1
Lv.1	Details	To set the offset of ITOP control temperature for heavy paper 1 (106 to 163 g/m <sup>2</sup> ). As the value is incremented by 1, the control temperature is increased by 5 deg C.
	Use case	When uneven gloss occurs on the leading edge (94mm) of heavy paper 1
	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	deg C
	Default value	0
	FXS-TMP3	
Lv.1	Details	To set the offset of ITOP control temperature for heavy paper 2 (164 to 209 g/m <sup>2</sup> ). As the value is incremented by 1, the control temperature is increased by 5 deg C.
	Use case	When uneven gloss occurs on the leading edge (94mm) of heavy paper 2
	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	deg C
	Default value	0
	FXS-TMP4	
Lv.1	Details	To set the offset of ITOP control temperature for heavy paper 3 (210 to 256 g/m <sup>2</sup> ). As the value is incremented by 1, the control temperature is increased by 5 deg C.
	Use case	When uneven gloss occurs on the leading edge (94mm) of heavy paper 3
	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	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
FXS-TMP5		ITOP control temperature: Thin ppr
Lv.1	Details	To set the offset of ITOP control temperature for thin paper. As the value is incremented by 1, the control temperature is increased by 5 deg C.
	Use case	When uneven gloss occurs on the leading edge (94mm) of thin paper
	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	deg C
	Default value	0
	FXS-TMP6	
Lv.1	Details	To set the offset of ITOP control temperature for envelope. As the value is incremented by 1, the control temperature is increased by 5 deg C.
	Use case	When uneven gloss occurs on the leading edge (94mm) of envelope
	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	deg C
	Default value	0
	FXST2-N2	
Lv.1	Details	To set initial rotation time when plain paper 1/plain paper 2 is fed with a temperature of 18 deg C or lower. Increase the value when a fixing failure occurs.
	Use case	When fixing failure occurs in an LL environment
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 20
	Unit	sec
	Default value	0
	FXST2-UH	
Lv.1	Details	To set initial rotation time when heavy paper 1/2/3 is fed with a temperature of 18 deg C or lower. Increase the value when a fixing failure occurs.
	Use case	When fixing failure occurs in an LL environment
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 30
	Unit	sec
	Default value	0



COPIER > OPTION > IMG-FIX	
FN-ENTMP	Set of Fixing Cooling Fan ON/OFF temp
Lv.1	Details
	To set the ON/OFF temperature of the Fixing Cooling Fan (Front)/(Rear). As the value is incremented by 1, the temperature changes by 5 deg C.
	Use case
	When offset/fixing failure occurs on the edge of small size paper
	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: 5 deg C, 2: 10 deg C, 3: 15 deg C, 4: 20 deg C
	Unit
	deg C
	Default value
	0
FLYING	ON/OFF of flying start temperature ctrl
Lv.2	Details
	To set ON/OFF of 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 Assembly.
	Use case
	When preferring to extend the life of the Fixing Assembly However, selecting 1 does not always extend the life.
	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, FPOT becomes longer.
	Display/adj/set range
	0 to 1 0: ON, 1: OFF
	Default value
	0
TMP-TBL7	Fixing control temperature:Plain paper 2
Lv.1	Details
	To set the offset of fixing control temperature for plain paper 2 (82 to 105 g/m2). As the value is incremented by 1, the control temperature is increased by 5 deg C from the specified value. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
	Use case
	When offset/fixing failure occurs on plain paper 2
	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
	deg C
	Default value
	0

COPIER > OPTION > IMG-FIX	
TMP-TBL8	Fixing control temperature:Transparency
Lv.1	Details
	To set the offset of fixing control temperature for transparency. As the value is incremented by 1, the control temperature is increased by 5 deg C from the specified value. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
	Use case
	When offset/fixing failure occurs on transparency
	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
	deg C
	Default value
	0
TMP-TBL9	Fixing control temperature:Coated paper1
Lv.1	Details
	To set the offset of fixing control temperature for coated paper 1 (106 to 163 g/m2). As the value is incremented by 1, the control temperature is increased by 5 deg C from the specified value. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
	Use case
	When offset/fixing failure occurs on coated paper 1
	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
	deg C
	Default value
	0
TMP-TB10	Fixing control temperature:Coated paper2
Lv.1	Details
	To set the offset of fixing control temperature for coated paper 2 (164 to 220 g/m2). As the value is incremented by 1, the control temperature is increased by 5 deg C from the specified value. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
	Use case
	When offset/fixing failure occurs on coated paper 2
	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
	deg C
	Default value
	0



COPIER > OPTION > IMG-FIX		
FXS-TMP7		ITOP control temperature: Plain paper 2
Lv.1	Details	To set the offset of ITOP control temperature for plain paper 2 (82 to 105 g/m <sup>2</sup> ). As the value is incremented by 1, the control temperature is increased by 5 deg C from the specified value.
	Use case	When uneven gloss occurs on the leading edge (94mm) of plain paper 2
	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	deg C
	Default value	0
FXS-TMP8		ITOP control temperature: Transparency
Lv.1	Details	To set the offset of ITOP control temperature for transparency. As the value is incremented by 1, the control temperature is increased by 5 deg C from the specified value.
	Use case	When uneven gloss occurs on the leading edge (94mm) of transparency
	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	deg C
	Default value	0
FXS-TM10		ITOP control temperature: Coated paper 2
Lv.1	Details	To set the offset of ITOP control temperature for coated paper 2 (164 to 220 g/m <sup>2</sup> ). As the value is incremented by 1, the control temperature is increased by 5 deg C from the specified value.
	Use case	When uneven gloss occurs on the leading edge (94mm) of coated paper 2
	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	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
FXS-TMP9		ITOP control temperature: Coated paper 1
Lv.1	Details	To set the offset of ITOP control temperature for coated paper 1 (106 to 163 g/m <sup>2</sup> ). As the value is incremented by 1, the control temperature is increased by 5 deg C from the specified value.
	Use case	When uneven gloss occurs on the leading edge (94mm) of coated paper 1
	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	deg C
	Default value	0
THIN-LP		Set of fixing arch ctrl with thin paper
Lv.2	Details	To set the arch control method between the secondary transfer and fixing when feeding thin paper (52 g/m <sup>2</sup> ). Normally, the arch control is executed at the point where arch on the trailing edge of paper is small. When 1 is set in the case that an image failure (crepe mark) occurs with thin paper, the control is always executed at the point where the arch on a paper is large while feeding thin paper.
	Use case	When an image failure (crepe mark) occurs with thin paper
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Arch control at the point where arch is small, 1: Arch control to make the arch large with thin paper
	Default value	1
TMP-TB11		Fixing control temperature: Recycled ppr
Lv.1	Details	To set the offset of fixing control temperature for recycled paper (52 to 105 g/m <sup>2</sup> ). As the value is incremented by 1, the control temperature is increased by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
	Use case	When offset/fixing failure occurs on recycled paper
	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 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	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
FXS-TM11	ITOP control temperature:Recycled ppr	
Lv.1	Details	To set the offset of ITOP control temperature for recycled paper (52 to 105 g/m2). As the value is incremented by 1, the control temperature is increased by 5 deg C. Increase the value when a fixing failure occurs on the leading edge of paper, and decrease the value when uneven gloss occurs on the leading edge (94mm).
	Use case	- When a fixing failure occurs on the leading edge of paper - When uneven gloss occurs on the leading edge (94mm)
	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 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	deg C
	Default value	0
FXTBL-SW	Set fixing temp control table: Plain 1	
Lv.2	Details	To set the fixing temperature control table for plain paper 1 (64 to 81 g/m2). When mottled image occurs on the plain paper 1 regardless of appropriate temperature of the Fixing Assembly, set 1. When plain paper 1 is fed, the fixing temperature control table for recycled paper is applied. However, for the fixing control temperature and ITOP control temperature, the offset setting for plain paper 1 (TEMP-TBL and FX-S-TMP) is reflected.
	Use case	When mottle image occurs on the plain paper while the Fixing Assembly is hot, the fixing temperature control table for plain paper 1 is switched to the one for recycled paper.
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: For plain paper 1, 1: For recycled paper
	Default value	0
	Related service mode	COPIER> OPTION> CUSTOM> TEMP-TBL COPIER> OPTION> IMG-FIX> FX-S-TMP

COPIER > OPTION > IMG-FIX		
PLN-LP	Set of fixing arch ctrl with plain paper	
Lv.2	Details	To set the arch control method between the secondary transfer and fixing when feeding plain paper, color paper or recycled paper (52 to 105 g/m2). Normally, the arch control is executed at the point where arch on the trailing edge of paper is small. When 1 is set in the case that an image failure (crepe mark) occurs with plain paper, color paper or recycled paper, the control is always executed at the point where the arch on a paper is large while feeding plain paper, color paper or recycled paper.
	Use case	When an image failure (crepe mark) occurs with plain paper, color paper or recycled paper
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Arch control at the point where arch is small, 1: Arch control to make the arch large with plain paper, color paper or recycled paper
	Default value	0
TRC-LP	Set fixing arch ctrl with tracing paper	
Lv.2	Details	To set the arch control method between the secondary transfer and fixing when feeding tracing paper. Normally, the arch control is executed at the point where arch on the trailing edge of paper is small. When 1 is set in the case that an image failure (crepe mark) occurs with tracing paper, the control is always executed at the point where the arch on a paper is large while feeding tracing paper.
	Use case	When an image failure (crepe mark) occurs with tracing paper
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Arch control at the point where arch is small, 1: Arch control to make the arch large with tracing paper
	Default value	0

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## CUSTOM

COPIER > OPTION > CUSTOM	
TEMP-TBL	Fixing control temperature:Plain paper 1
Lv.1	Details
	To set the offset of fixing control temperature for plain paper 1 (64 to 81 g/m <sup>2</sup> ). As the value is incremented by 1, the control temperature is increased by 5 deg C. Increase the value when a fixing failure occurs. Decrease the value when fixing offset occurs.
	Use case
	When offset/fixing failure occurs on plain paper 1
	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
	deg C
	Default value
	0
SC-L-CNT	Set large paper jdgmt reference at scan
Lv.1	Details
	To set the judgment reference of the scan counter as to which to use B4 or LTR to determine large size. The threshold is determined by the combination with the setting of B4-L-CNT. SC-L-CNT=0, B4-L-CNT=0: paper exceeding B4 is determined as large size, paper with B4 or smaller is determined as small size. SC-L-CNT=0, B4-L-CNT=1: paper with B4 or larger is determined as large size, paper smaller than B4 is determined as small size.
	Use case
	As needed
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: B4 size, 1: LTR size
	Default value
	0
	Related service mode
	COPIER> OPTION> USER> B4-L-CNT
SCANTYPE	Switch of DADF + Reader
Lv.1	Details
	To switch to a different type DADF + Reader Unit.
	Use case
	At installation
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Reverse Duplex DADF + Reader, 1: 1-Path Duplex DADF + Reader
	Default value
	0

COPIER > OPTION > CUSTOM	
ABK-TOOL	Allow access from address book mntc tool
Lv.1	Details
	To set whether to accept import from the address book maintenance tool.
	Use case
	When executing import from the address book maintenance tool
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Disabled, 1: Enabled
	Default value
	0
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 mode 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 mode 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 mode 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 mode 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 mode only when specific instructions are given.
	Display/adj/set range
	00000000 to 11111111
	Default value
	00000000

COPIER > OPTION > CUSTOM		
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 mode only when specific instructions are given.
	Display/adj/set range	00000000 to 11111111
	Default value	00000000
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 mode 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 mode only when specific instructions are given.
	Display/adj/set range	00000000 to 11111111
	Default value	00000000
USEUPTNR	Set Toner Container use-up mode	
Lv.1	Details	To set operation when Toner Container is used up. When the machine is slanted, it is judged that toner in the Toner Container is empty before actual life. When 2 is set, the Toner Container Motor is driven longer than when setting to 1, so toner in the Toner Container can be used up more.
	Use case	Upon user's request
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When high duty image is printed frequently, downtime may occur.
	Display/adj/set range	0 to 2 0: Not used, 1: 50 rotations, 2: 80 rotations
	Default value	1
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, etc.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Use this mode only when specific instructions are given.
	Display/adj/set range	00000000 to 11111111
	Default value	0
RDEV-SP2	RCON device special settings 2	
Lv.2	Details	To execute the device special setting.
	Use case	For customization, etc.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Use this mode only when specific instructions are given.
	Display/adj/set range	00000000 to 11111111
	Default value	0
RDEV-SP3	RCON device special settings 3	
Lv.2	Details	To execute the device special setting.
	Use case	For customization, etc.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Use this mode only when specific instructions are given.
	Display/adj/set range	00000000 to 11111111
	Default value	0
RDEV-SP4	RCON device special settings 4	
Lv.2	Details	To execute the device special setting.
	Use case	For customization, etc.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Use this mode only when specific instructions are given.
	Display/adj/set range	00000000 to 11111111
	Default value	0
RDEV-SP5	RCON device special settings 5	
Lv.2	Details	To execute the device special setting.
	Use case	For customization, etc.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Use this mode only when specific instructions are given.
	Display/adj/set range	00000000 to 11111111
	Default value	0

COPIER > OPTION > CUSTOM	
RDEV-SP6	RCON device special settings 6
Lv.2	Details
	To execute the device special setting.
	Use case
	For customization, etc.
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Use this mode only when specific instructions are given.
	Display/adj/set range
	00000000 to 11111111
	Default value
	0
RDEV-SP7	RCON device special settings 7
Lv.2	Details
	To execute the device special setting.
	Use case
	For customization, etc.
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Use this mode only when specific instructions are given.
	Display/adj/set range
	00000000 to 11111111
	Default value
	0
RDEV-SP8	RCON device special settings 8
Lv.2	Details
	To execute the device special setting.
	Use case
	For customization, etc.
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Use this mode only when specific instructions are given.
	Display/adj/set range
	00000000 to 11111111
	Default value
	0
PSCL-QS	[For customization]
Lv.2	Use case
	For customization, etc.
PAP-TYPE	[For customization]
Lv.2	Use case
	For customization, etc.
RAW-PORT	[For customization]
Lv.2	Use case
	For customization, etc.

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## USER

COPIER > OPTION > USER	
COPY-LIM	
Setting of upper limit for copy	
Lv.1	Details
	To set the upper limit value for copy.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	1 to 9999
	Default value
	999
SLEEP	
ON/OFF of auto sleep function	
Lv.1	Details
	To set ON/OFF of auto sleep function.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	1
SIZE-DET	
ON/OFF of original size detect function	
Lv.2	Details
	To set ON/OFF of original size detection function.
	Use case
	Upon user's request (glare of the Scan Lamp, etc)
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	1
COUNTER1	
Display of software counter 1	
Lv.1	Details
	To display counter type for software counter 1 on the Counter Check screen.
	Use case
	Upon user/dealer's request
	Adj/set/operate method
	N/A (Display only)
	Caution
	Display only. No change is available.
	Display/adj/set range
	0 to 999 0: No registration
	Default value
	The value differs according to the location.
COUNTER2	
Setting of software counter 2	
Lv.1	Details
	To set counter type for software counter 2 on the Counter Check screen.
	Use case
	Upon user/dealer's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 999 0: No registration
	Default value
	The value differs according to the location.

COPIER > OPTION > USER	
COUNTER3	
Setting of software counter 3	
Lv.1	Details
	To set counter type for software counter 3 on the Counter Check screen.
	Use case
	Upon user/dealer's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 999 0: No registration
	Default value
	The value differs according to the location.
COUNTER4	
Setting of software counter 4	
Lv.1	Details
	To set counter type for software counter 4 on the Counter Check screen.
	Use case
	Upon user/dealer's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 999 0: No registration
	Default value
	The value differs according to the location.
COUNTER5	
Setting of software counter 5	
Lv.1	Details
	To set counter type for software counter 5 on the Counter Check screen.
	Use case
	Upon user/dealer's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 999 0: No registration
	Default value
	0
COUNTER6	
Setting of software counter 6	
Lv.1	Details
	To set counter type for software counter 6 on the Counter Check screen.
	Use case
	Upon user/dealer's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 999 0: No registration
	Default value
	0



COPIER > OPTION > USER		
DATE-DSP		Setting of date/time display format
Lv.2	Details	To set date/time display format according to the country or region. After the display format is set with this mode, the order of date is reflected to the followings: Preferences > Timer/Energy Settings > Date/Time Settings, and report output.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2 0: YYMM/DD, 1: DD/MYY, 2: MM/DD/YY
	Default value	The value differs according to the location.
MB-CCV		Control card usage limit for Mail Box
Lv.2	Details	To restrict use of control card for Mail Box.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Unlimited, 1: Limited
	Default value	1
CONTROL		Charge setting of PDL job
Lv.1	Details	To set charge count transmission of PDL job to the connected charge management device (Coin Manager or non-Canon-made control card).
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: No charge, 1: Charge
	Default value	0
B4-L-CNT		Count setting of B4 size
Lv.1	Details	To set B4 count with software counter 1 to 8 as to whether B4 is counted as large size or small size. Selecting 1 counts B4 or larger size paper as large size while paper smaller than B4 size as small size.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Small size, 1: Large size
	Default value	0
	Related service mode	COPIER> OPTION> CUSTOM> SC-L-CNT

COPIER > OPTION > USER		
TRY-STP		Set of suspension at full Finisher Tray
Lv.2	Details	To set whether to suspend or continue output when the full Finisher Tray is detected.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: At detection of full tray, 1: Detection of height only
	Default value	0
MF-LG-ST		Display/hide of long original mode
Lv.2	Details	To set whether to display or hide the [Long Original] button. When 1 is set, [Long Original] button is displayed in Copy> Options screen and the long length paper becomes available.
	Use case	Upon user's request (use of long original or long length paper)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Long length paper is delivered from the Second Delivery Outlet (excluding delivery from the Inner Finisher).
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
CNT-DISP		Display/hide of serial number
Lv.2	Details	To set whether to display or hide the serial number on the Counter Check screen.
	Use case	When setting to display/hide serial number on the Counter Check screen
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Display, 1: Hide
	Default value	0
COPY-JOB		Setting of copy job reservation
Lv.1	Details	To set whether to allow copy job reservation when the Card Reader/Coin Manager is used.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Enabled, 1: Disabled
	Default value	0



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OP-SZ-DT	Orgnl size dtct ON/OFF at copyboard open
Lv.2	Details
	To set ON/OFF of original size detection while the Copyboard is opened. When "0: OFF" is set, enter original size manually from the Control Panel. When "1: ON" is set, original size is detected automatically.
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	0
NW-SCAN	Setting of network scan function usage
Lv.2	Details
	To set whether to allow use of network scan function.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	- Do not change this mode in Japan. - For PS/PCL machines for overseas (outside Japan), fix the setting value as "1: Enabled". For others, permit the use.
	Display/adj/set range
	0 to 1 0: Disabled, 1: Enabled
	Default value
	1
JOB-INVL	Job intvl setting at interruption copy
Lv.2	Details
	To set output interval between jobs at the time of interruption copy. Sorting is difficult after interruption copy because of the continuous output of the next job. Paper interval becomes longer when starting pickup for the next job after the last sheet of the previous job is delivered.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 2 0: Continuous output of the interruption copy and the next job 1: Starting pickup for the next job after the interruption copy is delivered all. 2: Starting pickup for the next job after the previous job is delivered all. (For all jobs)
	Default value
	0

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LGSW-DSP	ON/OFF of "Log display ON/OFF setting"
Lv.2	Details
	[Not used] To set whether to display "Management Settings> Device Management> Display Log" in user mode. When "1: ON" is set, "Display Log" is displayed in the "Device Management" screen. When ON is set, the logs of each job are displayed in "System Status." When "0: OFF" is set, "Display Log" is not displayed in the "Device Management" screen, and the logs of each job are not displayed either.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
TAB-ROT	Set of landscape img rotn at PDL:tab ppr
Lv.1	Details
	To set whether to rotate landscape image by 180 degrees when PDL print is made on tab paper. When "1: Rotated" is set, image is rotated.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Not rotated, 1: Rotated
	Default value
	0
PR-PSESW	Display/hide of output pause button
Lv.1	Details
	To set whether to display or hide [Pause Printing] button on the system status/stop screen.
	Use case
	- Upon user's request - When promptly stopping the print job in operation or under reservation
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Hide, 1: Display
	Default value
	0
IDPRN-SW	Charge target job set of dept mngm cntr
Lv.1	Details
	To set the job type that advances the department management counter.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: PRINT category: Inbox Print, Report Print, Send Local Print, PDL Print COPY category: COPY 1: PRINT category: Report Print, Send Local Print, PDL Print COPY category: COPY, Inbox Print
	Default value
	0

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P-CRG-LF		Set operation at end of Dev Ass'y life
Lv.2	Details	To set the operation at the time when the Developing Assembly reaches the end of its life. When 1 is set, the Developing Assembly that has reached the end of its life cannot be used.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Not stopped, 1: Stopped
	Default value	0
CPRT-DSP		ON/OFF of [Print Charge Log] button
Lv.1	Details	To set whether to display the [Print Charge Log] button to print the charge logs on the charge log screen in user mode. When "1: ON" is set, the button is displayed in Management Settings> Charge Management> Charge Log Screen.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
PCL-COPY		Set of PCL COPIES command control method
Lv.2	Details	To set the binder control method of COPIES command with PCL. Select whether to use the control method of Canon-made PCL or use the same control method of non-Canon-made PCL.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 65535 0: Control method of Canon-made PCL (following the value of COPIES command that is specified for each page to control on a page basis) 1: Control method of non-Canon-made PCL (handling the value of COPIES command, which is specified for page 1 when collating, as bind figure while the value of COPIES command for the next page or later is invalid. Same control applies as Canon-made PCL when not collating) 2 to 65535: For future use
	Default value	0

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CNT-SW		Set default dspl items on charge counter
Lv.1	Details	To set default display items of the charge counter on the Counter Check screen.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Counter 1 - Total 1: 101 Counter 2 - Total (Black 1): 108 Counter 3 - Copy (Full Color + Single Color/1): 232 Counter 4 - Total A (Full Color + Single Color/1): 149 1: Counter 1 - Total 2: 102 Counter 2 - Copy (Full Color + Single Color/2): 231 Counter 3 - Total A (Full Color + Single Color/2): 148 Counter 4 - Copy (Black 2): 222 Counter 5 - Total A (Black 2): 133
	Default value	0
TAB-ACC		ON/OFF of auto cst change for tab ppr
Lv.1	Details	To set to enable/disable auto cassette change when tab paper runs out.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to instruct the user to thoroughly comply the following: - Use tab paper with the same number of tabs. - Set tab paper. Be sure to comply the above; otherwise, proper print is not available and it can cause soiling inside the machine because of toner.
	Display/adj/set range	0 to 1 0: Auto cassette change disabled, 1: Auto cassette change enabled
	Default value	0
BCNT-AST		Set of inbox print charge target job
Lv.1	Details	To set the job type that advances the count in inbox print with NE Controller (ASSIST).
	Use case	When switching the job type that is subject to counting of the inbox print with NE Controller
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: PDL job, 1: Copy job
	Default value	0

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PRJOB-CP	Set count TX at RX/report print
Lv.2	Details
	To set to enable/disable a page-basis count pulse transmission to the charge management device at the time of reception print or report print.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: No transmission, 1: Transmission
	Default value
	0
DFLT-CPY	Setting of color mode for copy
Lv.1	Details
	To set the default color mode for copy operation.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 2 0: Based on Auto/ACS/Printer Driver settings, 1: Color mode, 2: Black mode
	Default value
	EUR: 2, Other: 0
DFLT-BOX	Set of color mode for inbox print
Lv.1	Details
	To set the default color mode for inbox print operation.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 2 0: Based on Auto/ACS/Printer Driver settings, 1: Color mode, 2: Black mode
	Default value
	EUR: 2, Other: 0
DOC-REM	Display/hide of original removal message
Lv.1	Details
	To set whether to display or hide the message to remove original when scanning with DADF without opening/closing DADF after scanning with the Copyboard.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Hide, 1: Display
	Default value
	0

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DPT-ID-7	Password entry set at dept ID reg/auth
Lv.2	Details
	To set whether to enter a password at the time of registration/authentication of department ID. With the setting to require entry, entry of 7-digit password is required beside department ID.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Department ID only, 1: 7-digit (password) entry
	Default value
	0
RUI-RJT	Connct set at invalid auth from remoteUI
Lv.2	Details
	To set whether to disconnect HTTP port when the machine receives invalid authentication from remote UI 3 times.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Continued connection, 1: Disconnected
	Default value
	0
SND-RATE	Set compress ratio at SEND high compress
Lv.2	Details
	To set the compression ratio when the data compression ratio for SEND (transmission) is set to "Compact". As the value is larger, the compression ratio is higher (the file size becomes small).
	Use case
	When making the transmission file size smaller
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	As the value is too large, an image is deteriorated.
	Display/adj/set range
	0 to 2 0: Compression ratio 1/16, 1: Compression ratio 1/20, 2: Compression ratio 1/24
	Default value
	0
FREG-SW	Dspl/hide of MEAP counter free rgst area
Lv.2	Details
	To set whether to display or hide the free register area of MEAP counter for SEND.
	Use case
	At problem analysis
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	- Do not use this at the normal service. - Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range
	0 to 1 0: Hide, 1: Display
	Default value
	0

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IFAX-SZL		Setting of IFAX send size limit
Lv.2	Details	To set for restricting data size at the time of IFAX transmission that does not go through the server. With the setting to restrict the data size, it is to be #830 error in the case of sending data that exceeds the upper limit value. In the case that the data goes through the server, the size of transmission data is always restricted.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Limited, 1: Unlimited (Restriction applies when data goes through the server.)
	Default value	1
IFAX-PGD		Set page split TX at IFax Simple mode TX
Lv.2	Details	To set whether to allow split-data transmission on a page basis in the case that the transmission size in I-Fax Simple mode exceeds the upper limit value.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	In the case to enable split-data transmission, be sure to receive approval from the user in advance by explaining the following: - No guarantee for page order on the reception side - There is a possibility of interruption of other received jobs between pages.
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
MEAPSAFE		Setting of MEAP safe mode
Lv.2	Details	To set safe mode for MEAP platform. MPSF is displayed on the Control Panel in safe mode. In safe mode, MEAP application is stopped while just the system application, which starts with initial state, is activated. This mode enables obtaining log for cause analysis of MEAP failure.
	Use case	Perform system recovery processing when MEAP platform fails to be activated due to resource conflict between MEAP applications, service registration or use order.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Normal mode, 1: Safe mode
	Default value	0

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TRAY-FLL		Set of target tray for tray full notice
Lv.2	Details	To set the tray which is the target of an output tray full notification.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: All trays to which paper can be output, 1: All trays which are specified as the dedicated trays
	Default value	0
PRNT-POS		ON/OFF of all pauses at error job cancel
Lv.2	Details	To set whether to pause the print operation of following jobs when a job is canceled due to an error inside the machine (#037, etc.) except service calls during PDL print.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
AFN-PSWD		Access limit setting to user mode
Lv.2	Details	To set whether to enter a password when accessing to the user mode. When 1 is set, password entry of system administrator is required after pressing Settings/Registration key.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Password is not required, 1: Password is required
	Default value	0
PTJAM-RC		Auto reprint setting at PDL print jam
Lv.2	Details	To set whether to automatically restart printing after clearing jam that occurs with PDL print.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Not automatically reprinted, 1: Automatically reprinted
	Default value	1

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PDL-NCSW	Card mngm setting for PDL print job
Lv.2	Details
	To set to make PDL print job be subject to card management by the Card Reader. With the setting to enable this mode, PDL print is available only when the card ID of the card inserted to the Card Reader matches the department ID.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: PDL print is available with no card inserted. 1: PDL print is available only when the card ID matches the department ID in the case that the card is inserted.
	Default value
	0
SLP-SLCT	Usage setting of network applications
Lv.2	Details
	With the setting to use network-related application, the machine can be recovered through network because it does not shift to sleep mode 1. For this machine to recover from sleep mode 1 through network, a particular packet needs to be received; however, the existing network-related application does not send this packet. With the setting not to use the network-related application, this machine cannot recover from sleep mode 1 through network when it gets into sleep mode 1.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this at the normal service.
	Display/adj/set range
	0 to 1 0: Not used (Shift to sleep mode 1 is available.) 1: Used (Shift to sleep mode 1 is not available.)
	Default value
	0
PS-MODE	Compatible mode setting at PS usage
Lv.2	Details
	To set for compatibility with existing machine regarding image process or print specification with PS print. Selecting 1 enables to have the print result equivalent to that of iR2200/2800/3300 series while selecting 2 enables to have the print result equivalent to that of iR105 series.
	Use case
	At replacement
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 65535 0: No use of compatibility mode with PS 1: Compatible in a conventional manner with PS Type3 halftone command (Forming dither pattern: opposite order) 2 to 65535: Spare
	Default value
	0

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CNCT-RLZ	Setting of connection serialize function
Lv.2	Details
	Connection serialize is a function to assure job grouping function of imageWARE Output Manager Select Edition V1.0. The setting to enable this mode can avoid job rearrangement because the machine does not receive job data from other connection until it completes job data reception from the current connection.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	0
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.
	Caution
	No change is available.
	Display/adj/set range
	0 to 999 0: No registration
	Default value
	0
COUNTER8	Setting of software counter 8
Lv.1	Details
	To set counter type for software counter 8 on the Counter Check screen.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	No change is available.
	Display/adj/set range
	0 to 999 0: No registration
	Default value
	0
2C-CT-SW	Set of color counter at 2-color mode
Lv.2	Details
	To set whether to use the single color counter or full color counter for count-up in 2-color mode.
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Single color counter, 1: Full color counter
	Default value
	JAPAN: 0, Other: 1

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JA-FUNC		ON/OFF of job archive function
Lv.2	Details	To set ON/OFF of job archive function.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Changing this mode is not available in service mode, but reference is available (in service mode). This mode is available only with the MEAP program that supports job archive.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
JA-JOB		Setting of job archive target job
Lv.2	Details	To set the job type subject to job archive. With the job archive function enabled, archive operation is executed when executing the target job.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Changing this mode is not available in service mode, but reference is available (in service mode). This mode is available only with the MEAP program that supports job archive.
	Display/adj/set range	0: N/A, 3: Limited to FAX/IFAX, 0xFFFFFFFF: All jobs
	Default value	0
	Related service mode	COPIER > OPTION > USER > JA-FUNC
JA-RESTR		Setting of job archive limit items
Lv.2	Details	To set restriction items for job archive specification. With job archive function enabled, follow the setting to execute operation to restrict specification.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Changing this mode is not available in service mode, but reference is available (in service mode). This mode is available only with the MEAP program that supports job archive.
	Display/adj/set range	0 to 1 0: OFF, 1: ON 32 specification restrictions with Bit definition Bit0: Function to obtain image file (0: OFF, 1: ON) Bit1: Function to compose form registration (0: OFF, 1: ON) Bit2: Function to edit document (0: OFF, 1: ON)
	Default value	0
	Related service mode	COPIER > OPTION > USER > JA-FUNC

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LDAP-SW		Search condition set for LDAP server
Lv.1	Details	To set the condition to search e-mail address, etc. from LDAP server.
	Use case	When specifying condition to search e-mail address, etc. from LDAP server
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 5 0: Includes the next, 1: Not include the next, 2: Equivalent to the next, 3: Not equivalent to the next, 4: Starts with the next, 5: Finishes with the next
	Default value	4
FROM-OF		Deletion of e-mail sender's address
Lv.1	Details	To set whether to delete the sender's address (From) at the time of e-mail transmission.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Retained, 1: Deleted
	Default value	0
DOM-ADD		Additional entry of e-mail destn domain
Lv.2	Details	To set to automatically add the domain specified in user mode to the sending address (To) entered at the time of e-mail transmission. If specifying "xxx.com" as a domain in user mode in advance, just entering "aaa" enables to display "aaa@xxx.com" when sending e-mail.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Not added, 1: Added
	Default value	0



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FILE-OF	File send prohibition to entered address
Lv.1	Details
	To set to prohibit the file transmission to entered address. File transmission is not available by entering the address because of no "File" display on the transmission screen. The addresses already registered in the Address Book can be selected, but even if a job is sent, it is to be a transmission error. (End code #762 is displayed.)
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	- The addresses already registered in the Address Book can be selected, but it is to be a transmission error. Therefore, be sure to receive approval from the user in advance to delete the address. Set the transmission prohibition after deleting the address. - When #762 is displayed without executing the procedure above, explain the user that it is different from the description in the User's Guide.
	Display/adj/set range
	0 to 1 0: Enabled, 1: Disabled
	Default value
	0
MAIL-OF	Mail send prohibition to entered address
Lv.1	Details
	To set to prohibit the e-mail transmission to entered address. E-mail transmission is not available by entering the address because of no "E-Mail" display on the transmission screen. The addresses already registered in the Address Book can be selected, but even if a job is sent, it is to be a transmission error. (End code #762 is displayed.)
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	- The addresses already registered in the Address Book can be selected, but it is to be a transmission error. Therefore, be sure to receive approval from the user in advance to delete the address. Set the transmission prohibition after deleting the address. - When #762 is displayed without executing the procedure above, explain the user that it is different from the description in the User's Guide.
	Display/adj/set range
	0 to 1 0: Enabled, 1: Disabled
	Default value
	0

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IFAX-OF	IFAX send prohibition to entered address
Lv.1	Details
	To set to prohibit the IFAX transmission to entered address. I-Fax transmission is not available by entering the address because of no "I-Fax" display on the transmission screen. The addresses already registered in the Address Book can be selected, but even if a job is sent, it is to be a transmission error. (End code #762 is displayed.)
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	- The addresses already registered in the Address Book can be selected, but it is to be a transmission error. Therefore, be sure to receive approval from the user in advance to delete the address. Set the transmission prohibition after deleting the address. - When #762 is displayed without executing the procedure above, explain the user that it is different from the description in the User's Guide.
	Display/adj/set range
	0 to 1 0: Enabled, 1: Disabled
	Default value
	0
LDAP-DEF	Initial condtn set of LDAP server search
Lv.1	Details
	To set initial condition for search target attribute that is specified at the time of LDAP server Details search.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 6 0: Name, 1: E-mail, 2: FAX, 3: Organization, 4: Organization unit, 5: No registration 1 (any setting), 6: No registration 2 (any setting)
	Default value
	0
	Related service mode
	COPIER > OPTION > USER > LDAP-SW
JA-DPI	Display of job archive record resolution
Lv.2	Details
	To display the resolution of images for job archives recorded in jobs other than FAX reception and I-Fax reception, etc. Only display is available in service mode. The setting is available only in the MEAP applications which support job archiving.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 3 0: No conversion, 1: 100 x 100 dpi, 2: 200 x 200 dpi, 3: 300 x 300 dpi
	Default value
	3



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JA-COMPR		Dspl job archive record compress ratio
Lv.2	Details	To display the compression ratio of images for job archives recorded in jobs other than FAX reception and I-Fax reception, etc. Only display is available in service mode. The setting is available only in the MEAP applications which support job archiving.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 5 0: No conversion, 1: Compression ratio 1/4, 2: Compression ratio 1/8, 3: Compression ratio 1/16, 4: Compression ratio 1/32, 5: Compression ratio 1/64
	Default value	3
FREE-DSP		Display/hide of charge disable screen
Lv.2	Details	To set whether to display or hide the charge disable screen for switching between charge and no charge. The hardware switch for switching charge/no charge in the Coin Manager enables the mode in which all the services are available for free (store manager mode) by temporarily releasing the charging system. Even without the hardware switch, the mode can be switched with the software switch when it is set to display the charge disable screen in Settings/Registration.
	Use case	When enabling all the services to be provided for free by temporarily releasing the charging system
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
TNRB-SW		Display/hide of Toner Container counter
Lv.2	Details	To set whether to display the Toner Container counter on the Counter Check screen.
	Use case	When not showing the screen to users
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2 0: Hide, 1: Display (Toner Container counter only), 2: Display (Toner Container counter + ejection counter)
	Default value	USA: 2, Other: 0

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JA-FORMT		Display of job archive record format
Lv.2	Details	To display the format of images for job archives recorded in jobs other than FAX reception and IFAX reception, etc. Whether the images processed by Packet JPEG are recorded in Packet JPEG, or converted into Raster JPEG and then recorded is displayed. Only display is available in service mode. The setting is available only in the MEAP applications which support job archiving.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Packet JPEG, 1: Raster JPEG
	Default value	0
HDCR-DSW		Dspl/hide of HDD complete delete ON/OFF
Lv.1	Details	To set whether to display or hide "Hard Disk Data Complete Deletion" in user mode. With this setting, HDD data complete deletion function is available with ON/OFF button on the screen.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	1
BWCL-DSP		Display/hide of clr/B&W selection screen
Lv.2	Details	To set whether to display the color/B&W selection screen to select the default of the color mode.
	Use case	When displaying the color mode default selection screen
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
STPL-MAX		[Not used]

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USBH-DSP		Display/hide of "Use USB Host"
Lv.2	Details	To set whether to display "Preferences> External Interface> USB Settings> Use USB Host". By selecting "1: Display", whether to use USB host on USB Settings screen can be selected.
	Use case	When switching to display or hide "Use USB Host" on USB Settings screen
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
USBM-DSP		Dspl/hide of USB ex-memory device driver
Lv.2	Details	To set whether to display "Preferences> External Interface> USB Settings> Use MEAP Driver for External USB Device". By selecting "0: Hide", the item is not displayed, and the user administrator cannot change the setting of the MEAP driver for the USB external memory device.
	Use case	When prohibiting the user administrator to change the setting of "Use MEAP Driver for USB External Device", set 0 after the specified setting is completed.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	1
USBI-DSP		Dspl/hide of USB input device driver set
Lv.2	Details	To set whether to display "Preferences> External Interface> USB Settings> Use MEAP Driver for USB Input Device". By selecting "0: Hide", the item is not displayed, and the user administrator cannot change the setting of the MEAP driver for the USB input device.
	Use case	When prohibiting the user administrator to change the setting of "Use MEAP Driver for USB Input Device", set 0 after the specified setting is completed.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	1

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CTCHKDSP		Display/hide of Print List
Lv.1	Details	To set whether to display or hide "Print List" on the Counter Check screen. Model name, serial number information, counter check date and counter information can be output as Total Page Count List.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	1
USBR-DSP		Dspl/hide of USB infrared device driver
Lv.2	Details	To set whether to display "Preferences > External Interface > USB Settings > Use MEAP Driver for USB Infrared Device."
	Use case	When prohibiting the user administrator to change the setting of "Use MEAP Driver for USB Infrared Device," set 0 after the specified setting is completed.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
POL-SCAN		Dspl/hide Rights Management Server set
Lv.1	Details	When "1: Display" is set, the Rights Management Server function screen is displayed. While the Rights Management Server function is a standard feature, it is possible to hide if not necessary.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	JAPAN: 1, Other: 0
JA-SBOX		Setting of linking with Advanced Box:SAM
Lv.2	Details	To set the link with Advanced Box when iW SAM is enabled. When 1 is set, linking with Advanced Box is enabled.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0

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JA-DFAX		Setting of direct fax transmission: SAM
Lv.2	Details	To set the direct fax transmission when iW SAM is enabled. When 1 is set, the direct fax transmission is enabled.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
JA-REP		Setting of TX Report with image: SAM
Lv.2	Details	To set the TX Report with image when iW SAM is enabled. When 1 is set, the TX Report with image is enabled.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
JA-FREP		Setting of Fax TX Report with image: SAM
Lv.2	Details	To set the Fax TX Report with image when iW SAM is enabled. When 1 is set, the Fax TX Report with image is enabled.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
JA-BOX		Setting of Inbox document operation: SAM
Lv.2	Details	To set the operation for Inbox document at the time of iW SAM. When 1 is set, the Inbox document can be operated.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
JA-FORM		Setting of image composition: SAM
Lv.2	Details	To set the image composition when iW SAM is enabled. When 1 is set, the image composition is enabled.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
JA-PREV		Setting of preview page deletion: SAM
Lv.2	Details	To set whether a page is deleted from the scan preview screen at the time of iW SAM. When 1 is set, a page is deleted from the scan preview screen.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0

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JA-PULL		Setting of network scan: SAM
Lv.2	Details	To set the network scan when iW SAM is enabled. When 1 is set, the network scan is enabled.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
JA-PDLB		Set of printer driver multi box save: SAM
Lv.2	Details	To set whether a document can be simultaneously saved to multiple Inboxes from the printer driver at the time of iW SAM. When 1 is set, a document can be saved to multiple Inboxes from the printer driver.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
JA-JOBK		Setting of job merge allowance: SAM
Lv.2	Details	To set whether merging jobs is allowed when iW SAM is enabled. When 1 is set, jobs can be merged.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
JA-JDF		Setting of JDF: SAM
Lv.2	Details	To set the use of JDF when iW SAM is enabled. When 1 is set, JDF can be used.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
JA-RUI		Setting of Inbox document access: SAM
Lv.2	Details	To set the Inbox document access from remote UI at the time of iW SAM. When 1 is set, accessing to the Inbox document from remote UI is enabled.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0

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JA-WEB		Setting of Inbox document upload: SAM
Lv.2	Details	To set the Inbox document upload with the Web browser at the time of iW SAM. When 1 is set, uploading of the Inbox document with the Web Browser is enabled.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
CS-ACC		Set paper source switch in color mode
Lv.1	Details	To change "Paper Drawer Auto Selection On/Off" in user mode to switch of paper source in color mode. When 1 is set, the meaning of ON/OFF of "Paper Drawer Auto Selection On/Off" screen changes. ON: Paper sources that can be selected when color mode is other than "B&W" OFF: Paper sources that can be selected when color mode is "B&W"
	Use case	When switching the paper source in color mode
	Display/adj/set range	0 to 1 0: Same as conventional machines, 1: Paper source switch in color mode
	Default value	0
EXP-CRYP		Confidential encrypt ON/OFF:add book expprt
Lv.1	Details	To set whether to encrypt the confidential part (password part) in the Address Book when exporting the address book and device settings via RUI. When 0 is set, the confidential part in the address book is exported without encryption.
	Use case	When there is a need to export password without encryption because of operation and tool
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure not to allow the user to execute export without encryption because of security concern.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1

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SLEEP1SW		Power supply when shifting to SLEEP1
Lv.1	Details	When shifting to SLEEP1 mode, the power stops to be supplied, so it takes time to activate after a job is received. When 1 is set, the power keeps to be supplied even after shifting to SLEEP1 mode, so the activation of job processing becomes earlier.
	Use case	Upon user's request (when job processing after shifting to SLEEP1 is slow)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0

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SMD-EXPT		Setting of export target data: remote UI
Lv.1	Details	To set whether to export "service mode data" from remote UI. When 1 is set, "service mode data" is displayed as the target data of export on remote UI. When installing more than 1 machine at the same time, the same service mode data can be registered.
	Use case	When installing more than 1 machine at the same time
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
SNDSTREN		Set of setting delete aftr scan and send
Lv.2	Details	To set whether to delete the transmission settings except for the address after transmission from the "Scan and Send" screen.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Delete, 1: Retain
	Default value	JP: 1, USA, EUR, AU, CN, KR, TW, ASIA: 0
FAXSTREN		Set of setting delete aftr fax transmit
Lv.2	Details	To set whether to delete the transmission settings except for the address after transmission from the "Fax" screen.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Delete, 1: Retain
	Default value	JP: 1, USA, EUR, AU, CN, KR, TW, ASIA: 0
CNCL-ATH		ON/OFF of auth at secured job stop
Lv.1	Details	To improve the security of secured job by conducting authentication at stopping of a secured job when user authentication is not performed.
	Use case	When changing the operation specification of secured print 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	0

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PRTDP-SW		Delivery side set for 2-sided 1-page job
Lv.1	Details	To set the delivery side for 2-sided jobs of only 1 page.
	Use case	When setting face-down delivery or face-up delivery for 2-sided jobs of 1 page
	Adj/set/operate method	"1) Enter 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
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 is not possible because other people's secured jobs 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	

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SCALL-SW	[Not used]
SCALLCMP	[Not used]

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## CST

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U1-NAME	Dis/hide of ppr name in ppr size groupU1
Lv.2	Details
	To set whether to display or hide paper name at paper size group U1 detection.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Hide, 1: Display
	Default value
	0
U2-NAME	Dis/hide of ppr name in ppr size groupU2
Lv.2	Details
	To set whether to display or hide paper name at paper size group U2 detection.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Hide, 1: Display
	Default value
	0
U3-NAME	Dis/hide of ppr name in ppr size groupU3
Lv.2	Details
	To set whether to display or hide paper name at paper size group U3 detection.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Hide, 1: Display
	Default value
	0
U4-NAME	Dis/hide of ppr name in ppr size groupU4
Lv.2	Details
	To set whether to display or hide paper name at paper size group U4 detection.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Hide, 1: Display
	Default value
	0
CST1-P1	Setting of Cassette 1 paper size
Lv.1	Details
	To set the paper size used in 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
	USA: 1, Other: 0

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CST1-P2	Setting of Cassette 1 paper size
Lv.1	Details
	To set the paper size used in 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: B5, 1: EXEC
	Default value
	USA: 1, Other: 0
CST2-P1	Setting of Cassette 2 paper size
Lv.1	Details
	To set the paper size used in 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
	USA: 1, Other: 0
CST2-P2	Setting of Cassette 2 paper size
Lv.1	Details
	To set the paper size used in 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: B5, 1: EXEC
	Default value
	USA: 1, Other: 0
CST3-P1	Setting of Cassette 3 paper size
Lv.1	Details
	To set the paper size used in 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
	USA: 1, Other: 0
CST3-P2	Setting of Cassette 3 paper size
Lv.1	Details
	To set the paper size used in 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: B5, 1: EXEC
	Default value
	USA: 1, Other: 0
CST4-P1	Setting of Cassette 4 paper size
Lv.1	Details
	To set the paper size used in 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
	USA: 1, Other: 0



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CST4-P2		Setting of Cassette 4 paper size
Lv.1	Details	To set the paper size used in 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: B5, 1: EXEC
	Default value	USA: 1, Other: 0
CST1-U1		Set Cst1 overseas special ppr category 1
Lv.1	Details	To set the overseas special paper category 1 used in 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 43 0: A4-R/LTR-R, 1 to 23: Not used, 24: FLSC, 25: A-FLS, 26: OFI, 27: E-OFI, 28 to 29: Not used, 30: A-LTRR, 31 to 32: Not used, 33: A-LGL, 34: G-LGL, 35: Not used, 36: A-OFI, 37: M-OFI, 38 to 41: Not used, 42: FA4, 43: Not used
	Default value	0
CST1-U2		Set Cst1 overseas special ppr category 2
Lv.1	Details	To set the overseas special paper category 2 used in 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 34 0: 16K-R, 1 to 22: Not used, 23: K-LGL-R, 24 to 31: Not used, 32: G-LTRR, 33 to 34: Not used
	Default value	0
CST1-U3		Set Cst1 overseas special ppr category 3
Lv.1	Details	To set the overseas special paper category 3 used in 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 31 0: B4/B5/LTR/16K, 1 to 21: Not used, 22: K-LGL, 23 to 28: Not used, 29: A-LTR, 30: Not used, 31: G-LTR
	Default value	0
CST1-U4		Set Cst1 overseas special ppr category 4
Lv.1	Details	To set the overseas special paper category 4 used in 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 28 0: LGL, 1 to 27: Not used, 28: B-OFI
	Default value	0

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CST2-U1		Set Cst2 overseas special ppr category 1
Lv.1	Details	To set the overseas special paper category 1 used in 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 43 0: A4-R/LTR-R, 1 to 23: Not used, 24: FLSC, 25: A-FLS, 26: OFI, 27: E-OFI, 28 to 29: Not used, 30: A-LTRR, 31 to 32: Not used, 33: A-LGL, 34: G-LGL, 35: Not used, 36: A-OFI, 37: M-OFI, 38 to 41: Not used, 42: FA4, 43: Not used
	Default value	0
CST2-U2		Set Cst2 overseas special ppr category 2
Lv.1	Details	To set the overseas special paper category 2 used in 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 34 0: 16K-R, 1 to 22: Not used, 23: K-LGL-R, 24 to 31: Not used, 32: G-LTRR, 33 to 34: Not used
	Default value	0
CST2-U3		Set Cst2 overseas special ppr category 3
Lv.1	Details	To set the overseas special paper category 3 used in 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 31 0: B4/B5/LTR/16K, 1 to 21: Not used, 22: K-LGL, 23 to 28: Not used, 29: A-LTR, 30: Not used, 31: G-LTR
	Default value	0
CST2-U4		Set Cst2 overseas special ppr category 4
Lv.1	Details	To set the overseas special paper category 4 used in 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 28 0: LGL, 1 to 27: Not used, 28: B-OFI
	Default value	0
CST3-U1		Set Cst3 overseas special ppr category 1
Lv.1	Details	To set the overseas special paper category 1 used in Cassette 3.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 43 0: A4-R/LTR-R, 1 to 23: Not used, 24: FLSC, 25: A-FLS, 26: OFI, 27: E-OFI, 28 to 29: Not used, 30: A-LTRR, 31 to 32: Not used, 33: A-LGL, 34: G-LGL, 35: Not used, 36: A-OFI, 37: M-OFI, 38 to 41: Not used, 42: FA4, 43: Not used
	Default value	0

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CST3-U2		Set Cst3 overseas special ppr category 2
Lv.1	Details	To set the overseas special paper category 2 used in 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 34 0: 16K-R, 1 to 22: Not used, 23: K-LGL-R, 24 to 31: Not used, 32: G-LTRR, 33 to 34: Not used
	Default value	0
CST3-U3		Set Cst3 overseas special ppr category 3
Lv.1	Details	To set the overseas special paper category 3 used in Cassette 3.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 31 0: B4/B5/LTR/16K, 1 to 21: Not used, 22: K-LGL, 23 to 28: Not used, 29: A-LTR, 30: Not used, 31: G-LTR
	Default value	0
CST3-U4		Set Cst3 overseas special ppr category 4
Lv.1	Details	To set the overseas special paper category 4 used in 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 28 0: LGL, 1 to 27: Not used, 28: B-OFI
	Default value	0
CST4-U1		Set Cst4 overseas special ppr category 1
Lv.1	Details	To set the overseas special paper category 1 used in Cassette 4.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 43 0: A4-R/LTR-R, 1 to 23: Not used, 24: FLSC, 25: A-FLS, 26: OFI, 27: E-OFI, 28 to 29: Not used, 30: A-LTRR, 31 to 32: Not used, 33: A-LGL, 34: G-LGL, 35: Not used, 36: A-OFI, 37: M-OFI, 38 to 41: Not used, 42: FA4, 43: Not used
	Default value	0
CST4-U2		Set Cst4 overseas special ppr category 2
Lv.1	Details	To set the overseas special paper category 2 used in 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 34 0: 16K-R, 1 to 22: Not used, 23: K-LGL-R, 24 to 31: Not used, 32: G-LTRR, 33 to 34: Not used
	Default value	0

COPIER > OPTION > CST		
CST4-U3		Set Cst4 overseas special ppr category 3
Lv.1	Details	To set the overseas special paper category 3 used in Cassette 4.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 31 0: B4/B5/LTR/16K, 1 to 21: Not used, 22: K-LGL, 23 to 28: Not used, 29: A-LTR, 30: Not used, 31: G-LTR
	Default value	0
CST4-U4		Set Cst4 overseas special ppr category 4
Lv.1	Details	To set the overseas special paper category 4 used in 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 28 0: LGL, 1 to 27: Not used, 28: B-OFI
	Default value	0

T-8-66

## 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
	Following items are automatically specified when changing the value to 3 (from 0 to 2) when setting 3. The change will not be returned even if changing back the value to 0 to 2 (from 3) once the mode has been changed. - COPIER> OPTION> USER> CONTROL, AFN-PSWD=1 - COPIER> OPTION> NETWORK> DA-CNCT=1 - COPIER> OPTION> DSPLY-SW> UI-BOX, UI-SEND, UI-FAX=0 - Preferences> Network> TCP/IP Settings> IPv4 Settings> IP Address Range Settings> RX/Print Range: Permit IPv4 Address=ON - Preferences> Network> TCP/IP Settings> IPv6 Settings> IP Address Range Settings> RX/Print Range: Permit IPv6 Address=ON - Preferences> Network > TCP/IP Settings > FTP Print Settings > Use FTP Printing=OFF - Preferences> Network> TCP/IP Settings> IPP Print Settings=ON - Preferences> Network> SMB Server Settings> SMB Printer Settings> Use SMB=ON - Function Settings> Send> E-mail/I-Fax Settings> Communication Settings> SMTP Receive, POP=OFF Following items are automatically specified when changing the value to 4 (from 0 to 2) when setting 4. The change will not be returned even if changing back the value to 0 to 2 (from 4) once the mode has been changed. - COPIER> OPTION> USER> AFN-PSWD=1 - COPIER> OPTION> DSPLY-SW> UI-BOX, UI-SEND, UI-FAX, UI-RSCAN, UI-EPRNT, UI-HOLD=0 - Management Settings> Device Management> Display Log=OFF
	Display/adj/set range
	0 to 7 0: No charge 1: Charge with Coin Manager 2: Charge with remote counter 3: Charge with DA (only in Japan) 4: Charge with this machine itself 5: New SC mode 6: External charge mode 6 7: External charge mode 7
	Default value
	0
	Related service mode
	COPIER> OPTION> USER> CONTROL COPIER> OPTION> NETWORK> DA-CNCT COPIER> OPTION> DSPLY-SW> UI-BOX, UI-SEND, UI-FAX COPIER> OPTION> ACC> PDL-THR

COPIER > OPTION > ACC	
DK-P	Setting of Paper Deck paper size
Lv.1	Details
	To set the paper size used in the Paper Deck.
	Adj/set/operate method
	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: A4, 1: LTR, 2: Not used
	Default value
	0
CARD-SW	Screen set when Coin Manager connected
Lv.1	Details
	To set coin or card that the user is urged to insert on the Control Panel when the Coin Manager is connected.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 3 0: Coin, 1: Card, 2: Coin and card, 3: Card (for customization)
	Default value
	0
SC-TYPE	Set of Coin Manager supported machine
Lv.2	Details
	To set the machine that supports the Coin Manager.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this setting for the machines other than the ones that support the Coin Manager.
	Display/adj/set range
	0 to 1 0: Machine installed in convenience stores, 1: Self-operated copy machine
	Default value
	0
OUT-TRAY	Presence/absence of Third Delivery Tray
Lv.1	Details
	To set whether the Third Delivery Tray is installed or not. When the Third Delivery Tray 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

COPIER > OPTION > ACC	
CC-SPSW	Support setting of control card I/F
Lv.2	Details
	To set support level for control card (CCIV/CCV) interface. To keep processing performance of printer engine, select "1: Priority on speed". To correctly stop the output by the upper limit number of sheets, select "2: Priority on upper limit number of sheets".
	Use case
	Upon user's request (when connecting to the external counter management system using the control card interface)
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	With priority on speed, output cannot be correctly stopped by the upper limit number of sheets. With priority on the upper limit number of sheets, processing performance of the printer engine is decreased depending on pickup location.
	Display/adj/set range
	0 to 2 0: No support, 1: Priority on speed, 2: Priority on upper limit number of sheets
	Default value
	0
UNIT-PRC	Setting of Coin Manager currency unit
Lv.2	Details
	To set currency unit to be handled with Coin Manager
	Use case
	At installation of Coin Manager
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 6 0: Japanese yen, 1: Euro, 2: Pound, 3: Swiss Franc, 4: Dollar, 5: No currency unit (no fractional unit), 6: No currency unit (with fractional unit)
	Default value
	0
IN-TRAY	Presence/absence of Second Delivery Tray
Lv.1	Details
	To set whether the Second Delivery Tray is installed or not. When the Second Delivery Tray 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

COPIER > OPTION > ACC	
DA-PUCT	Set pickup/delivery comctn at DA charge
Lv.2	Details
	When a pickup and delivery notification error occurs due to network failure, etc., the print operation might be done without charging. This is to set the number of sheets that can be picked up after the machine receives Ack single from DA. When the value is decreased, the number of prints to be made without charging is decreased, but the productivity may decrease. When the value is increased, the productivity does not decrease, but the number of prints to be made without charging is increased.
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	As the value is smaller, the number of prints to be made without charging is decreased, but the productivity might be lowered.
	Display/adj/set range
	2 to 10
	Default value
	6
MIN-PRC	Set of Coin Manager minimum price
Lv.1	Details
	To set the minimum amount to be handled with Coin Manager. Enter 10 when specifying 10 Japanese yen as the minimum amount to be handled with the Coin Manager that supports Japanese yen. In the case to specify 1 to 4 (Euro/Pound/Swiss Franc/Dollar) by going through the following: COPIER> OPTION> ACC > UNIT-PRC, entry is in fractional unit. Entry of 50 indicates 50 cents (\$ 0.50).
	Use case
	At installation of Coin Manager
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	This mode is enabled when selecting 4 for the following: COPIER > OPTION > ACC > COIN.
	Display/adj/set range
	0 to 9999
	Default value
	10
	Related service mode
	COPIER> OPTION> ACC> COIN, UNIT-PRC
MAX-PRC	Set of Coin Manager maximum price
Lv.1	Details
	To set the maximum amount to be handled with Coin Manager. Enter 8800 when specifying 8800 Japanese yen as the maximum amount to be handled with the Coin Manager that supports Japanese yen. In the case to specify 1 to 4 (Euro/Pound/Swiss Franc/Dollar) by going through the following: COPIER> OPTION> ACC > UNIT-PRC, entry is in fractional unit. Entry of 50 indicates 50 cents (\$ 0.50).
	Use case
	At installation of Coin Manager
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	This mode is enabled when selecting 4 for the following: COPIER > OPTION > ACC > COIN.
	Display/adj/set range
	0 to 9999
	Default value
	8800
	Related service mode
	COPIER> OPTION> ACC> COIN, UNIT-PRC

COPIER > OPTION > ACC		
MIC-TUN		Manual adj of voice recognize microphone
Lv.1	Details	To manually adjust the voice receiving level (sensitivity) of the connected voice recognition microphone. Microphone sensitivity is automatically tuned in user mode; however, adjust it manually as needed.
	Use case	When the sensitivity of microphone is not improved by auto tuning
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 255
	Default value	128
	SRL-SPSW	
Lv.1	Details	To set the support level of the Serial Interface Kit. To keep processing performance of printer engine, select "1: Priority on speed". To correctly stop the output by the upper limit number of sheets, select "2: Priority on upper limit number of sheets".
	Use case	At installation of Serial Interface Kit
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	With priority on speed, output cannot be correctly stopped by the upper limit number of sheets. With priority on the upper limit number of sheets, processing performance of the printer engine is decreased depending on pickup location.
	Display/adj/set range	0 to 2 0: No support, 1: Priority on speed, 2: Priority on upper limit number of sheets
	Default value	0
CC-EXT		Set of information output at CCV control
Lv.1	Details	To set the information output of large/small paper size and color/B&W at CCV control.
	Use case	When installing a machine which requires the information on large/small paper size and color/B&W
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Not output, 1: Output
	Default value	0

COPIER > OPTION > ACC		
PDL-THR		Norm PDL print set: External charge mode
Lv.2	Details	To set the normal PDL print processing when setting external charge mode 6/7 with COIN. When 0 is set, a job is canceled. When 1 is set, a job is executed.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Cancel, 1: Execute
	Default value	0
	Related service mode	COPIER> OPTION> ACC> COIN
CR-TYPE		[Not used]

T-8-67

## INT-FACE

COPIER > OPTION > INT-FACE	
IMG-CONT	Connection setting of print server
Lv.1	Details
	To set connection with print server.
	Use case
	At installation
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 5 0: Normal mode (Print server not connected), 1, 2: Not used, 3: Print server connected, 4, 5: Not used
	Default value
	0
AP-OPT	[Not used]
AP-ACCNT	[Not used]
AP-CODE	[Not used]
NWCT-TM	Timeout setting of network connection
Lv.2	Details
	To set the time to keep network connection between this machine and the PC application (keep-alive setting). As the value is incremented by 1, the time is increased by 1 minute.
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	1 to 5
	Unit
	min
	Default value
	5
CNT-TYPE	Display of print server connection
Lv.1	Details
	To display an automatically connected print server.
	Use case
	At installation of print server
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	1 to 999
	Default value
	1

T-8-68

## 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
	1
TR-SEND	Trns license key dspl of SEND function
Lv.2	Details
	To display transfer license key to use SEND function when disabling the function with license transfer.
	Use case
	- When replacing the HDD - When replacing the device
	Adj/set/operate method
	1) Select ST-SEND. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-SEND.
	Display/adj/set range
	24 digits
ST-ENPDF	Installation state dspl of encrypted PDF
Lv.2	Details
	To display installation state of encrypted PDF transmission function when disabling the function with license transfer.
	Use case
	When checking whether encrypted PDF transmission function is installed
	Adj/set/operate method
	1) Select ST-ENPDF. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-ENPDF.
	Display/adj/set range
	When operation finished normally: OK!
	Default value
	0
TR-ENPDF	Trns license key dspl of encrypted PDF
Lv.2	Details
	To display transfer license key to use encrypted PDF transmission function when disabling the function with license transfer.
	Use case
	- When replacing the HDD - When replacing the device
	Adj/set/operate method
	1) Select ST-ENPDF. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-ENPDF.
	Caution
	This mode is enabled when SEND function is installed.
	Display/adj/set range
	24 digits



COPIER > OPTION > LCNS-TR		
ST-SPDF	Installation state dspl of searchable PDF	
Lv.2	Details	To display installation state of searchable PDF when disabling the function with license transfer.
	Use case	When checking whether searchable PDF is installed
	Adj/set/operate method	1) Select ST-SPDF. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-SPDF.
	Display/adj/set range	When operation finished normally: OK!
	Default value	0
TR-SPDF	Trns license key dspl of searchable PDF	
Lv.2	Details	To display transfer license key to use searchable PDF when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-SPDF. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-SPDF.
	Caution	This mode is enabled when SEND function is installed.
	Display/adj/set range	24 digits
ST-EXPDF	Instal state dspl of encryPDF+searchbIPDF	
Lv.2	Details	To display installation state of encrypted PDF + searchable PDF when disabling the function with license transfer.
	Use case	When checking whether encrypted PDF + searchable PDF are installed
	Adj/set/operate method	1) Select ST-EXPDF. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-EXPDF.
	Display/adj/set range	When operation finished normally: OK!
	Default value	0
TR-EXPDF	Trns license key of encryPDF+searchbIPDF	
Lv.2	Details	To display transfer license key to use encrypted PDF + searchable PDF when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-EXPDF. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-EXPDF.
	Caution	This mode is enabled when SEND function is installed for Japan.
	Display/adj/set range	24 digits

COPIER > OPTION > LCNS-TR		
ST-PDFDR	Install state dspl of direct print PDF	
Lv.2	Details	To display installation state of direct print PDF function when disabling the function with license transfer.
	Use case	When checking whether direct print PDF function is installed
	Adj/set/operate method	1) Select ST-PDFDR. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-PDFDR.
	Display/adj/set range	When operation finished normally: OK!
	Default value	0
TR-PDFDR	Trns lcns key dspl of direct print PDF	
Lv.2	Details	To display transfer license key to use direct print PDF function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-PDFDR. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-PDFDR.
	Display/adj/set range	24 digits
	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	0
TR-SCR	Trns license key dspl of encry secure pnt	
Lv.2	Details	To display transfer license key to use encrypted secure print when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-SCR. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-SCR.
	Caution	This mode is enabled when there is "3DES+USH-H" Board.
	Display/adj/set range	24 digits
ST-HDCLR	[Not used]	
TR-HDCLR	[Not used]	



COPIER > OPTION > LCNS-TR		
ST-BRDIM	Install state dspl of BarDIMM function	
Lv.2	Details	To display installation state of BarDIMM function when disabling the function with license transfer.
	Use case	When checking whether BarDIMM function is installed
	Adj/set/operate method	1) Select ST-BRDIM. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-BRDIM.
	Display/adj/set range	When operation finished normally: OK!
	Default value	0
TR-BRDIM	Transfer license key dspl of BarDIMM func	
Lv.2	Details	To display transfer license key to use BarDIMM function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-BRDIM. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-BRDIM.
	Display/adj/set range	24 digits
ST-VNC	Install state dspl of Remote Oprtr Soft	
Lv.2	Details	To display installation state of Remote Operators Software when disabling the function with license transfer.
	Use case	When checking whether Remote Operators Software is installed
	Adj/set/operate method	1) Select ST-VNC. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-VNC.
	Display/adj/set range	When operation finished normally: OK!
	Default value	0
TR-VNC	Trns lcns dspl of Remote Operators Softl	
Lv.2	Details	To display transfer license key to use Remote Operators Software when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-VNC. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-VNC.
	Display/adj/set range	24 digits

COPIER > OPTION > LCNS-TR		
ST-WEB	Install state dspl of 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	0
TR-WEB	Trns license key dspl of Web Access Soft	
Lv.2	Details	To display transfer license key to use Web Access Software when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-WEB. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-WEB.
	Display/adj/set range	24 digits
ST-HRPDF	Install state dspl of high compress PDF	
Lv.2	Details	To display installation state of high compression PDF function when disabling the function with license transfer.
	Use case	When checking whether high compression PDF function is installed
	Adj/set/operate method	1) Select ST-HRPDF. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-HRPDF.
	Display/adj/set range	When operation finished normally: OK!
	Default value	1
TR-HRPDF	Trns lcns key dspl of high compress PDF	
Lv.2	Details	To display transfer license key to use high compression PDF function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-HRPDF. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-HRPDF.
	Display/adj/set range	24 digits

COPIER > OPTION > LCNS-TR	
ST-TRSND	Install state dspl of 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
	0
TR-TRSND	Trns lcns key dspl of trial SEND function
Lv.2	Details
	To display transfer license key to use trial SEND function when disabling the function with license transfer.
	Use case
	- When replacing the HDD - When replacing the device
	Adj/set/operate method
	1) Select ST-TRSND. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-TRSND.
	Display/adj/set range
	24 digits
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
	0
TR-WTMRK	Trns license key dspl of secure watermark
Lv.2	Details
	To display transfer license key to use secure watermark function when disabling the function with license transfer.
	Use case
	- When replacing the HDD - When replacing the device
	Adj/set/operate method
	1) Select ST-WTMRK. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-WTMRK.
	Display/adj/set range
	24 digits

COPIER > OPTION > LCNS-TR	
ST-TSPDF	Install state dspl of time stamp PDF: JP
Lv.2	Details
	To display installation state of time stamp PDF transmission function (JP only) when disabling the function with license transfer.
	Use case
	When checking whether time stamp PDF transmission function (JP only) is installed
	Adj/set/operate method
	1) Select ST-TSPDF. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-TSPDF.
	Display/adj/set range
	When operation finished normally: OK!
	Default value
	0
TR-TSPDF	Trns lcns key dspl of time stamp PDF: JP
Lv.2	Details
	To display transfer license key to use time stamp PDF transmission function (JP only) when disabling the function with license transfer.
	Use case
	- When replacing the HDD - When replacing the device
	Adj/set/operate method
	1) Select ST-TSPDF. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-TSPDF.
	Caution
	This mode is enabled when SEND function is installed.
	Display/adj/set range
	24 digits
ST-USPDF	Install state dspl of dglt user sign PDF
Lv.2	Details
	To display installation state of digital user signature PDF transmission function when disabling the function with license transfer.
	Use case
	When checking whether digital user signature PDF transmission function is installed
	Adj/set/operate method
	1) Select ST-USPDF. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-USPDF.
	Display/adj/set range
	When operation finished normally: OK!
	Default value
	0
TR-USPDF	Trns lcns key dspl of dglt user sign PDF
Lv.2	Details
	To display transfer license key to use digital user signature PDF transmission function when disabling the function with license transfer.
	Use case
	- When replacing the HDD - When replacing the device
	Adj/set/operate method
	1) Select ST-USPDF. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-USPDF.
	Caution
	This mode is enabled when SEND function is installed.
	Display/adj/set range
	24 digits

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ST-DVPDF	Install state dspl of device sign PDF	
Lv.2	Details	To display installation state of device signature PDF transmission function when disabling the function with license transfer.
	Use case	When checking whether device signature PDF transmission function is installed
	Adj/set/operate method	1) Select ST-DVPDF. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-DVPDF.
	Display/adj/set range	When operation finished normally: OK!
	Default value	0
TR-DVPDF	Trns lcns key dspl of device sign PDF	
Lv.2	Details	To display transfer license key to use device signature PDF transmission function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-DVPDF. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-DVPDF.
	Caution	This mode is enabled when SEND function is installed.
	Display/adj/set range	24 digits
ST-SCPDF	Install state dspl of Trace & Smooth PDF	
Lv.2	Details	To display installation state of Trace & Smooth PDF when disabling the function with license transfer.
	Use case	When checking whether Trace & Smooth PDF is installed
	Adj/set/operate method	1) Select ST-SCPDF. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-SCPDF.
	Display/adj/set range	When operation finished normally: OK!
	Default value	0
TR-SCPDF	Trns license key dspl of Trace&Smooth PDF	
Lv.2	Details	To display transfer license key to use Trace & Smooth PDF when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-SCPDF. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-SCPDF.
	Caution	This mode is enabled when SEND function is installed.
	Display/adj/set range	24 digits

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ST-AMS	Instal state dspl of Access Mngm System	
Lv.2	Details	To display installation state of Access Management System when disabling the function with license transfer.
	Use case	When checking whether Access Management System is installed
	Adj/set/operate method	1) Select ST-AMS. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-AMS.
	Display/adj/set range	When operation finished normally: OK!
	Default value	0
TR-AMS	Trns license key dis: Access Mngm System	
Lv.2	Details	To display transfer license key to use Access Management System when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-AMS. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-AMS.
	Display/adj/set range	24 digits
ST-ERDS	Instal state dspl of monitor service func	
Lv.2	Details	To display installation state of monitoring service function when disabling the function with license transfer.
	Use case	When checking whether monitoring service function is installed
	Adj/set/operate method	1) Select ST-ERDS. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-ERDS.
	Display/adj/set range	When operation finished normally: OK!
Default value	0	
TR-ERDS	Trn lcns key dspl of monitor service func	
Lv.2	Details	To display transfer license key to use monitoring service function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-ERDS. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-ERDS.
	Display/adj/set range	24 digits

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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	0
TR-PS	Transfer license key dspl of PS function	
Lv.2	Details	To display transfer license key to use PS function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-PS. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-PS.
	Display/adj/set range	24 digits
ST-PCL	Installation state dspl of PCL function	
Lv.2	Details	To display installation state of PCL function when disabling the function with license transfer.
	Use case	When checking whether PCL function is installed
	Adj/set/operate method	1) Select ST-PCL. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-PCL.
	Display/adj/set range	When operation finished normally: OK!
	Default value	0
TR-PCL	Transfer license key dspl of PCL function	
Lv.2	Details	To display transfer license key to use PS function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-PCL. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-PCL.
	Display/adj/set range	24 digits

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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	0
TR-PSLI5	Transfer license key dspl of PS/UFR II	
Lv.2	Details	To display transfer license key to use PS/UFR II function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-PSLI5. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-PSLI5.
	Display/adj/set range	24 digits
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	0
TR-LIPS5	Transfer lcns key dspl of UFR II function	
Lv.2	Details	To display transfer license key to use UFR II function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-LIPS5. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-LIPS5.
	Display/adj/set range	24 digits

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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
	0
TR-LIPS4	Trns license key dspl of LIPS4 func: JP
Lv.2	Details
	To display transfer license key to use LIPS4 function (JP only) when disabling the function with license transfer.
	Use case
	- When replacing the HDD - When replacing the device
	Adj/set/operate method
	1) Select ST-LIPS4. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-LIPS4.
	Display/adj/set range
	24 digits
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
	0
TR-PSPCL	Transfer license key dspl of PS/PCL func
Lv.2	Details
	To display transfer license key to use PS/PCL function when disabling the function with license transfer.
	Use case
	- When replacing the HDD - When replacing the device
	Adj/set/operate method
	1) Select ST-PSPCL. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-PSPCL.
	Display/adj/set range
	24 digits

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ST-PCLUF	Install state dspl of 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
	0
TR-PCLUF	Trns license key dspl of PCL/UFR II func
Lv.2	Details
	To display transfer license key to use PCL/UFR II function when disabling the function with license transfer.
	Use case
	- When replacing the HDD - When replacing the device
	Adj/set/operate method
	1) Select ST-PCLUF. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-PCLUF.
	Display/adj/set range
	24 digits
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
	0
TR-PSLIP	Transfer license key dspl of PS function
Lv.2	Details
	To display transfer license key to use PS function when disabling the function with license transfer.
	Use case
	- When replacing the HDD - When replacing the device
	Adj/set/operate method
	1) Select ST-PSLIP. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-PSLIP.
	Display/adj/set range
	24 digits

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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	0
TR-PSPCU	Trns lcns key dspl of PS/PCL/UFR II func	
Lv.2	Details	To display transfer license key to use PS/PCL/UFR II function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-PSPCU. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-PSPCU.
	Display/adj/set range	24 digits
ST-LXUFR	Install state dspl of UFR II function	
Lv.2	Details	To display installation state of UFR II function when disabling the function with license transfer.
	Use case	When checking whether UFR II function is installed
	Adj/set/operate method	1) Select ST-LXUFR. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-LXUFR.
	Display/adj/set range	When operation finished normally: OK!
	Default value	1
TR-LXUFR	Trns license key dspl of UFR II function	
Lv.2	Details	To display transfer license key to use UFR II function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-LXUFR. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-LXUFR.
	Display/adj/set range	24 digits

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ST-HDCR2	Install state dis: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	0
TR-HDCR2	Trns lcns key dis:HDD Init All Data/Set	
Lv.2	Details	To display transfer license key to use HDD Initialize All Data/Settings when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-HDCR2. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-HDCR2.
	Display/adj/set range	24 digits
ST-JBLK	Install state dspl of Document Scan Lock	
Lv.2	Details	To display installation state of Document Scan Lock when disabling the function with license transfer.
	Use case	When checking whether Document Scan Lock is installed
	Adj/set/operate method	1) Select ST-JBLK. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-JBLK.
	Display/adj/set range	When operation finished normally: OK!
	Default value	0
TR-JBLK	Trns lcns key dspl of Document Scan Lock	
Lv.2	Details	To display transfer license key to use Document Scan Lock when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-JBLK. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-JBLK.
	Display/adj/set range	24 digits



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ST-AFAX	Installation state dspl of remote fax	
Lv.2	Details	To display installation state of remote fax client function when disabling the function with license transfer.
	Use case	When checking whether remote fax client function is installed
	Adj/set/operate method	1) Select ST-AFAX. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-AFAX.
	Display/adj/set range	When operation finished normally: OK!
	Default value	0
TR-AFAX	Transfer license key dspl of remote fax	
Lv.2	Details	To display transfer license key to use remote fax client function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-AFAX. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-AFAX.
	Display/adj/set range	24 digits
ST-REPDF	Install state dis: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	0
TR-REPDF	Trns lcns key dis:reader extensions PDF	
Lv.2	Details	To display transfer license key to use reader extensions PDF function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-REPDF. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-REPDF.
	Display/adj/set range	24 digits

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ST-OOXML	Install state dspl of Office Open XML	
Lv.2	Details	To display installation state of Office Open XML transmission function when disabling the function with license transfer.
	Use case	When checking whether Office Open XML transmission function is installed
	Adj/set/operate method	1) Select ST-OOXML. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-OOXML.
	Display/adj/set range	When operation finished normally: OK!
	Default value	0
TR-OOXML	Trns lcns key dspl of Office Open XML	
Lv.2	Details	To display transfer license key to use Office Open XML when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-OOXML. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-OOXML.
	Display/adj/set range	24 digits
ST-XPS	Install state dspl of direct print XPS	
Lv.2	Details	To display installation state of direct print XPS when disabling the function with license transfer.
	Use case	When checking whether direct print XPS is installed
	Adj/set/operate method	1) Select ST-XPS. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-XPS.
	Display/adj/set range	When operation finished normally: OK!
	Default value	0
TR-XPS	Trns lcns key dspl of direct print XPS	
Lv.2	Details	To display transfer license key to use direct print XPS when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-XPS. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-XPS.
	Display/adj/set range	24 digits



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ST-2600		Inst state dis: scrtly func of IEEE2600.1
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	0
TR-2600		Trns lcns key dis: IEEE2600.1 scrtly func
Lv.2	Details	To display transfer license key to use security function of IEEE2600.1 when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-2600. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-2600.
	Display/adj/set range	24 digits
ST-NCAPT		Install state display of NetCap func
Lv.2	Details	To display installation state of network packet capture function when disabling the function with license transfer.
	Use case	When checking whether network packet capture function is installed
	Adj/set/operate method	1) Select ST-NCAPT. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-NCAPT.
	Display/adj/set range	0: Not installed, 1: Installed When operation finished normally: OK!
	Default value	0
TR-NCAPT		Transfer license key dspl of NetCap func
Lv.2	Details	To display transfer license key to use network packet capture function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-NCAPT. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-NCAPT.
	Display/adj/set range	License key (24 characters)

COPIER > OPTION > LCNS-TR		
ST-OPFNT		Install status display of PCL option font
Lv.2	Details	To display the installation status of PCL option font when transfer is disabled
	Use case	When checking whether PCL option font is installed
	Adj/set/operate method	1) Select ST-OPFNT. 2) Enter 0, and then press OK key. The transfer license key is displayed under ST-OPFNT.
	Display/adj/set range	0: Not installed 1: Installed
	Default value	0
TR-OPFNT		Trns lcns key display of PCL option font
Lv.2	Details	To display transfer license key to use PCL option font function with Policy when transfer is disabled.
	Use case	- When replacing HDD - When replacing the device
	Adj/set/operate method	1) Select TR-OPFNT. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-OPFNT.
	Display/adj/set range	24 digits

T-8-69



COPIER > TEST > PG		
TYPE		Test print
Lv.1	Details	To execute the test print.
	Use case	At problem analysis
	Adj/set/operate method	Enter the setting value, and then press OK key. Test print is executed.
	Caution	Be sure to return the value to 0 after the test print output.
	Display/adj/set range	0 to 100 0: Image from CCD (Normal print) 1 to 3: For R&D use 4: 16 gradations 5: Whole-area halftone image 6: Grid 7 to 9: For R&D use 10: MCYBk horizontal stripes 11: For R&D use 12: YMCKb 64 gradations 13: For R&D use 14: Full color 16 gradations 15 to 100: For R&D use
	Default value	0
TXPH		Setting of test print image mode
Lv.1	Details	To set the image mode at the time of test print output. This mode is enabled for test print only.
	Use case	At problem analysis
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 6 0: Error diffusion 1: Low screen ruling (approx. 133 to 190 lines) 2: High screen ruling (approx. 200 to 268 lines) 3: Copy screen (approx. 220 lines) 4: REOS screen (no screen structure) 5 to 6: Not used
THRU		Image correction table use at test print
Lv.1	Details	To set whether to use the image correction table at the time of test print output.
	Use case	At problem analysis
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Used, 1: Not used

COPIER > TEST > PG		
	DENS-Y	Adj of Y-color density at test print
Lv.1	Details	To adjust Y-color density when performing test print (TYPE=5). As the value is larger, the image gets darker.
	Use case	At test print (TYPE=5)
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 255
	DENS-M	Adj of M-color density at test print
Lv.1	Details	To adjust M-color density when performing test print (TYPE=5). As the value is larger, the image gets darker.
	Use case	At test print (TYPE=5)
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 255
	DENS-C	Adj of C-color density at test print
Lv.1	Details	To adjust C-color density when performing test print (TYPE=5). As the value is larger, the image gets darker.
	Use case	At test print (TYPE=5)
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 255
	DENS-K	Adj of Bk-color density at test print
Lv.1	Details	To adjust Bk-color density when performing test print (TYPE=5). As the value is larger, the image gets darker.
	Use case	At test print (TYPE=5)
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 255
	COLOR-Y	Y-color output setting at test print
Lv.1	Details	To make a setting of Y-color output for test print. The setting is applied to all types. When setting "COLOR-Y" to 1 and other items to "0", a single Y color is output.
	Use case	At test print
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Not output, 1: Output
	COLOR-M	M-color output setting at test print
Lv.1	Details	To make a setting of M-color output for test print. The setting is applied to all types. When setting "COLOR-M" to 1 and other items to "0", a single M color is output.
	Use case	At test print
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Not output, 1: Output

COPIER > TEST > PG		
COLOR-C		C-color output setting at test print
Lv.1	Details	To make a setting of C-color output for test print. The setting is applied to all types. When setting "COLOR-C" to 1 and other items to "0", a single C color is output.
	Use case	At test print
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Not output, 1: Output
COLOR-K		Bk-color output setting at test print
Lv.1	Details	To make a setting of Bk-color output for test print. The setting is applied to all types. When setting "COLOR-K" to 1 and other items to "0", a single Bk color is output.
	Use case	At test print
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Not output, 1: Output
F/M-SW		Setting of PG full color/single color
Lv.1	Details	To set for the output in full color/single color with PG.
	Use case	When separating (identifying) the cause whether it's due to color or monochrome.
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Full color, 1: Single color
PG-PICK		Setting of test print paper source
Lv.1	Details	To set the paper source at the time of test print output.
	Use case	- At problem analysis - At test print output
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	1 to 8 1: Cassette 1, 2: Cassette 2, 3: Cassette 3, 4: Cassette 4, 5: Paper Deck, 6: Multi-purpose Tray, 7 to 8: Not used
2-SIDE		Setting of PG 2-sided mode
Lv.1	Details	To set 1-sided/2-sided print for PG output.
	Use case	At problem analysis
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: 1-sided, 1: 2-sided
	Default value	0

COPIER > TEST > PG		
PG-QTY		Setting of PG output quantity
Lv.1	Details	To set the number of sheets for PG output.
	Use case	At problem analysis
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	1 to 999
	Unit	sheet
	Default value	1
FINISH		Accessory processing function test print
Lv.1	Details	To execute the test print relating to accessory processing function.
	Use case	When checking operation of accessory processing function
	Adj/set/operate method	1) Enter the number of sheets in PG-QTY, and then press OK key. 2) Enter the setting value, and then press OK key. 3) Press Start button. The machine outputs a test print.
	Display/adj/set range	0 to 99 0: N/A 1: Staple (front) *1 2: Staple (2 points) *1 3: Staple (rear) *1 4: Booklet (saddle stitch) *1 5: Z-fold (single sleeve) *1 6: 2-fold *1 7: C-fold *2 8: V-fold *2 9: 4-fold *2 10: Z-fold (out-3-fold) *2 11: Punch (Inner Puncher) *3 12: Multiple-hole punch *4 13: Shift *1 14 to 99: Spare (for future use) *1 Finisher, *2 Multi-folding machine, *3 Inner Puncher, *4 Multiple-hole Puncher
	Default value	0
	Related service mode	COPIER> TEST> PG> PG-QTY

T-8-70

## NETWORK

COPIER > TEST > NETWORK	
PING	Network connection check
Lv.1	To check connection between this machine and TCP/IP network.
Use case	- When checking network connection at the time of installation - At network connection failure
Adj/set/operate method	1) Turn OFF the main power switch. 2) Connect the network cable to this machine, and then turn ON the main power switch. 3) Inform the system administrator at user's site that installation of this machine is complete, and ask for network setting. 4) Ask the system administrator to check the network connection, and check the remote host address of PING transmission target. 5) Select the item and enter the remote host address, and then press OK key and Start key. OK: Connection is normal. Checking procedure is complete. NG: Connection failed. Go to step 6) if the cable connection is OK. In case of cable connection failure, connect again and then go to step 5). 6) Select the item and enter loopback address, and then press OK key and Start key. OK: TCP/IP setting of this machine is normal. Go to step 7) to check NIC. NG: TCP/IP setting of this machine has failure. Go to step 3) to check the setting again. 7) Select the item and enter the local host address, and then press OK key. OK: Network setting of this machine and NIC are normal. Inform the system administrator that the trouble is due to network environment and ask for countermeasure. NG: Connection failure/fault with NIC. Check connection of NIC/ replace NIC.
Display/adj/set range	0.0.0.0 to 255.255.255.255 At normal state: OK, At failure occurrence: NG
BML-DISP	Set System Monitor scrn: BMLinks support
Lv.2	To set whether to only display the device configuration in the System Monitor screen when supporting BMLinks. When 1 is set, the Status and Log are not displayed.
Use case	When supporting BMLinks
Adj/set/operate method	Enter the setting value, and then press OK key.
Display/adj/set range	0 to 1 0: Ordinary System Monitor screen 1: Screen in which only the device configuration is displayed
Default value	0

COPIER > TEST > NETWORK	
IPv6-ADR	Setting of PING send address (IPv6)
Lv.1	To set the IPv6 address to send PING. When PING is sent to this address by COPIER> TEST> NETWORK> PING-IP6, the network connection condition in the IPv6 environment can be checked.
Adj/set/operate method	Enter the setting value, and then press OK key.
Caution	- Enter a consistent character string as an address of IPv6. - Enter an address within 39 characters including hexadecimal numbers (0 to 9, a to f) and a separator (:).
Display/adj/set range	Up to 40 characters including hexadecimal numbers (0 to 9, A to F) and a separator (:)
Related service mode	COPIER> TEST> NETWORK> PING-IP6
PING-IP6	PING transmission to IPv6 address
Lv.1	To send PING to the address specified by IPv6-ADR. The network connection condition in the IPv6 environment can be checked.
Adj/set/operate method	Select the item, and then press OK key.
Related service mode	COPIER> TEST> NETWORK> IPv6-ADR
IPSECPOL	Polling test of IPsec Encryption Board
Lv.1	To execute polling test of IPsec Encryption Board. To check whether a hardware failure has occurred.
Use case	When checking whether a hardware failure has occurred to the IPsec Encryption Board
Adj/set/operate method	Select the item, and then press OK key.
Display/adj/set range	At normal state: OK At failure occurrence: NG (0: The board cannot be recognized. 1: An error occurred to the result.)
IPSECINT	Interrupt test of IPsec Encryption Board
Lv.1	To execute the interrupt test of IPsec Encryption Board. To check whether a hardware failure has occurred.
Use case	When checking whether a hardware failure has occurred to the IPsec Encryption Board
Adj/set/operate method	Select the item, and then press OK key.
Display/adj/set range	At normal state: OK At failure occurrence: NG (0: The board cannot be recognized. 1: An error occurred to the result.)

T-8-71

## NET-CAP

COPIER > TEST > NET-CAP	
CAPOFFON	ON/OFF of NetCap function
Lv.2	Details
	To set ON/OFF of network packet capture function.
	Use case
	When switching ON/OFF of network packet capture function
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	0:OFF 1:ON
	Default value
	0
STT-STP	Start and stop of network packet capture
Lv.2	Details
	To start and stop network packet capture.
	Use case
	When starting and stopping network packet capture
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	0:STOP 1:START
	Default value
	0
CAPSTATE	Status of NetCap function
Lv.2	Details
	To display the status of network packet capture function
	Use case
	When displaying the status of network packet capture function
	Adj/set/operate method
	None
	Display/adj/set range
	None
PONSTART	Start of NetCap function at power-on
Lv.2	Details
	To set whether to enable network packet capture function from power-on.
	Use case
	When switching whether to enable network packet capture function from power-on
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	0 to 1
	Default value
	0
OVERWRIT	Data overwriting control: NetCap function
Lv.2	Details
	To set whether to finish capturing or continue overwriting when HDD becomes full.
	Use case
	When setting whether to finish capturing or continue overwriting when HDD becomes full
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Default value
	1
PAYLOAD	Payload discard: NetCap function
Lv.2	Details
	To set whether to discard payload of captured packet.
	Use case
	When setting whether to discard payload of captured packet
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Default value
	0
FILE-CLR	Deletion of file: NetCap function
Lv.2	Details
	To delete data collected by network packet capture function.
	Use case
	When deleting data collected by network packet capture function
	Adj/set/operate method
	Select the item, and then press OK key.
	Display/adj/set range
	None

COPIER > TEST > NET-CAP	
SIMPFLT	
Settings of packet data filtering	
Lv.2	Details
	To set whether to perform filtering when capturing packet data. When 0 is set, filtering is not performed (All the data are captured.) When 1 is set, packet data is captured only when the receiver's or sender's address coincides with the Mac address of this machine.
	Use case
	At problem analysis (at packet data analysis)
	Display/adj/set range
	0 to 2
	0: Not filtered, 1: Filtered 2: Not used
ENCDATA	
Setting of packet data encryption	
Lv.2	Details
	To set whether to encrypt the packet data when writing the captured packet data to the USB memory.
	Use case
	- At problem analysis (at packet data analysis) - When improving security of written packet data
	Caution
	This setting is enabled only when writing data to the USB memory. Even when the packet data is loaded using SST, the file is specified, therefore the setting is disabled.
	Display/adj/set range
	0 to 2
	0: Encrypted (encrypted file) 1: Not encrypted (plain text file) 2: Encrypted (encrypted file + plain text file)
	Default value
	0

T-8-72




COPIER > COUNTER > TOTAL		
SERVICE1		Service-purposed total counter 1
Lv.1	Details	To count up when the paper is delivered outside the machine. Large size: 1, small size: 1 A blank sheet is not counted.
	Display/adj/set range	0 to 99999999
SERVICE2		Service-purposed total counter 2
Lv.1	Details	To count up when the paper is delivered outside the machine. Large size: 2, small size: 1 A blank sheet is not counted.
	Display/adj/set range	0 to 99999999
COPY		Total copy counter
Lv.1	Details	To count up when the paper is delivered outside the machine. Large size: 1, small size: 1 A blank sheet is not counted.
	Display/adj/set range	0 to 99999999
PDL-PRT		PDL print counter
Lv.1	Details	To count up when the paper is delivered outside the machine according to the charge counter at PDL print. Large size: 1, small size: 1 A blank sheet is not counted.
	Display/adj/set range	0 to 99999999
FAX-PRT		FAX reception print counter
Lv.1	Details	To count up when the paper is delivered outside the machine according to the charge counter at FAX reception. Large size: 1, small size: 1 A blank sheet is not counted.
	Display/adj/set range	0 to 99999999
BOX-PRT		Inbox print counter
Lv.1	Details	To count up when the paper is delivered outside the machine according to the charge counter at Inbox print. Large size: 1, small size: 1 A blank sheet is not counted.
	Display/adj/set range	0 to 99999999
RPT-PRT		Report print counter
Lv.1	Details	To count up when the paper is delivered outside the machine according to the charge counter at report print. Large size: 1, small size: 1 A blank sheet is not counted.
	Display/adj/set range	0 to 99999999

COPIER > COUNTER > TOTAL		
2-SIDE		2-sided copy/print counter
Lv.1	Details	To count up when the paper is delivered outside the machine according to the charge counter at 2-sided copy/print. Large size: 1, small size: 1 A blank sheet is not counted.
	Display/adj/set range	0 to 99999999
SCAN		Scan counter
Lv.1	Details	To count the number of scan operations according to the charge counter when the scanning operation is complete. Large size: 1, small size: 1
	Adj/set/operate method	When the counter is cleared Select the item, and then press Clear key.
	Display/adj/set range	0 to 99999999

T-8-73

## PICK-UP

COPIER > COUNTER > PICK-UP		
C1		Cassette 1 pickup total counter
Lv.1	Details	Large size: 1, Small size: 1
	Unit	Number of sheets
C2		Cassette 2 pickup total counter
Lv.1	Details	Large size: 1, Small size: 1
	Unit	Number of sheets
C3		Cassette 3 pickup total counter
Lv.1	Details	Large size: 1, Small size: 1
	Unit	Number of sheets
C4		Cassette 4 pickup total counter
Lv.1	Details	Large size: 1, Small size: 1
	Unit	Number of sheets
MF		Multi-purpose Tray pickup total counter
Lv.1	Details	Large size: 1, Small size: 1
	Unit	Number of sheets
DK		Deck pickup total counter
Lv.1	Details	Large size: 1, Small size: 1
	Unit	Number of sheets
2-SIDE		2-sided pickup total counter
Lv.1	Details	Large size: 1, Small size: 1
	Unit	Number of sheets

T-8-74

## FEEDER

COPIER > COUNTER > FEEDER		
FEED		DADF original pickup total counter
Lv.1	Use case	When checking the total counter of original pickup by DADF
	Unit	Number of sheets
DFOP-CNT		DADF hinge open/close counter
Lv.1	Use case	When checking the DADF hinge open/close counter
	Unit	Number of times

T-8-75



## ■ JAM

COPIER > COUNTER > JAM		
TOTAL		Printer total jam counter
Lv.1	Use case	When checking the total jam counter of printer
	Unit	Number of times
FEEDER		Feeder total jam counter
Lv.1	Use case	When checking the total jam counter of feeder
	Unit	Number of times
SORTER		Finisher total jam counter
Lv.1	Use case	When checking the total jam counter of finisher
	Unit	Number of times
2-SIDE		Duplex Unit jam counter
Lv.1	Use case	When checking the jam counter of Duplex Unit
	Unit	Number of times
MF		Multi-purpose Tray jam counter
Lv.1	Use case	When checking the jam counter of Multi-purpose Tray
	Unit	Number of times
C1		Right Deck jam counter
Lv.1	Use case	When checking the jam counter of machine's Right Deck
	Unit	Number of times
C2		Left Deck jam counter
Lv.1	Use case	When checking the jam counter of machine's Left Deck
	Unit	Number of times
C3		Cassette 3 pickup jam counter
Lv.1	Use case	When checking the jam counter of machine's Cassette 3
	Unit	Number of times
C4		Cassette 4 pickup jam counter
Lv.1	Use case	When checking the jam counter of machine's Cassette 4
	Unit	Number of times
DK		POD Deck Lite jam counter
Lv.1	Use case	When checking the jam counter of POD Deck Lite
	Unit	Number of times

T-8-76

## ■ MISC

COPIER > COUNTER > MISC		
T-SPLY-Y		Y toner supply counter
Lv.1	Details	Number of Y color toner supply blocks. Counted for every one rotation of Toner Stirring Screw.
	Use case	When checking the usage status of toner
	Unit	Number of blocks
	Default value	0
T-SPLY-M		M toner supply counter
Lv.1	Details	Number of M color toner supply blocks. Counted for every one rotation of Toner Stirring Screw.
	Use case	When checking the usage status of toner
	Unit	Number of blocks
	Default value	0
T-SPLY-C		C toner supply counter
Lv.1	Details	Number of C color toner supply blocks. Counted for every one rotation of Toner Stirring Screw.
	Use case	When checking the usage status of toner
	Unit	Number of blocks
	Default value	0
T-SPLY-K		Bk toner supply counter
Lv.1	Details	Number of Bk color toner supply blocks. Counted for every one rotation of Toner Stirring Screw.
	Use case	When checking the usage status of toner
	Unit	Number of blocks
	Default value	0
ALLPW-ON		Number of DCON PCB power-on times
Lv.1	Details	Number of power-on times (Non-all-night Power Unit). To count up when power is turned ON (Non-all-night Power Unit).
	Use case	When checking the usage status of the product
	Unit	Number of times
HDD-ON		Number of HDD start-up times
Lv.1	Details	To count up at HDD start-up.
	Use case	When checking the usage status of the product
	Unit	Number of times
ST-NDL		Staple needle counter: Fin-A1/C1
Lv.1	Details	To count the use of the staple needle.
	Unit	Number of times
ENT-PTH		Entrance paper path counter: Fin-C1
Lv.1	Details	Entrance paper path counter
	Unit	Number of sheets
TRAY-CHA		Tray change counter: Fin-C1
Lv.1	Details	Tray change counter
	Unit	Number of times
PUNCH		[Not used]

COPIER > COUNTER > MISC		
PUN-CAB		Punch Unit Cable counter: Fin-C1
Lv.1	Details	Punch Unit Cable counter
	Unit	Number of times
PUN-WST		Punch waste counter: Fin-C1
Lv.1	Details	Punch Unit punch waste counter
SADDLE		[Not used]
SDL-STPL		[Not used]
SDL-NDL		Saddle staple needle counter: Fin-C1
Lv.1	Details	To count the use of the Saddle staple needle.
	Unit	Number of times
ESC-PTH		[Not used]
SUC-A-Y		For R&D use
SUC-A-M		For R&D use
SUC-A-C		For R&D use
SUC-A-K		For R&D use
SUC-L-Y		For R&D use
SUC-L-M		For R&D use
SUC-L-C		For R&D use
SUC-L-K		For R&D use

T-8-77

## JOB

COPIER > COUNTER > JOB		
DVPAPLEN		Average paper length of job
Lv.1	Details	Average paper length in the period from when the printer engine starts printing operation to when it stops the operation. Since the printer engine considers small jobs that are executed continuously as a large job, the average paper length affects calculation of the life.
	Display/adj/set range	0 to 99999999
	Unit	mm
DVRUNLEN		Average distance of job
Lv.1	Details	Average running distance in the period from when the printer engine starts printing operation to when it stops the operation. Since the printer engine considers small jobs that are executed continuously as a large job, the average running distance affects calculation of the life.
	Display/adj/set range	0 to 99999999
	Unit	mm

T-8-78

## DRBL-1

COPIER > COUNTER > DRBL-1	
T/S-UNIT	Transfer Separation Guide parts counter
Lv.1	Details Transfer Separation Guide 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
	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
	Use case When checking the consumption level of parts/replacing the parts
	Adj/set/operate method To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution Clear the counter value after replacement.
	Display/adj/set range 0 to 99999999
	Default value 0
TR-BLT	ITB parts counter
Lv.1	Details 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case When checking the consumption level of parts/replacing the parts
	Adj/set/operate method To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution Clear the counter value after replacement.
	Display/adj/set range 0 to 99999999
	Default value 0
2TR-ROLL	Sec Transfer Outer Roller parts counter
Lv.1	Details Secondary Transfer Outer Roller 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case When checking the consumption level of parts/replacing the parts
	Adj/set/operate method To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution Clear the counter value after replacement.
	Display/adj/set range 0 to 99999999
	Default value 0
	Supplement/memo This is commonly used as operator maintenance parts counter.

COPIER > COUNTER > DRBL-1	
PT-DRM	Bk Photosensitive Drum parts counter
Lv.1	Details 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case When checking the consumption level of parts
	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.
	Display/adj/set range 0 to 99999999
	Default value 0
DV-UNT-C	Developing Assembly (C) parts counter
Lv.1	Details 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case When checking the consumption level of parts/replacing the parts
	Adj/set/operate method To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution Clear the counter value after replacement.
	Display/adj/set range 0 to 99999999
DV-UNT-Y	Developing Assembly (Y) parts counter
Lv.1	Details 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case When checking the consumption level of parts/replacing the parts
	Adj/set/operate method To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution Clear the counter value after replacement.
	Display/adj/set range 0 to 99999999
DV-UNT-M	Developing Assembly (M) parts counter
Lv.1	Details 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case When checking the consumption level of parts/replacing the parts
	Adj/set/operate method To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution Clear the counter value after replacement.
	Display/adj/set range 0 to 99999999
DV-UNT-K	Developing Assembly (Bk) parts counter
Lv.1	Details 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case When checking the consumption level of parts/replacing the parts
	Adj/set/operate method To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution Clear the counter value after replacement.
	Display/adj/set range 0 to 99999999
C1-SP-RL	Cassette1 Separation Roller prts counter

COPIER > COUNTER > DRBL-1		
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
	C1-FD-RL Casette1 Feed Roller parts counter	
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
	C2-SP-RL Casette2 Separation Roller prts counter	
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
	C2-FD-RL Casette2 Feed Roller parts counter	
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
	FX-LW-RL Pressure Roller parts counter	
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
	FX-UNIT Fixing Assembly parts counter	
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0

COPIER > COUNTER > DRBL-1		
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
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
	M-FD-RL Multi-purpose Tray Feed Roll prts cntr	
Lv.1	Details	Multi-purpose Tray Feed Roller 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
	FX-LW-RL Pressure Roller parts counter	
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
	FX-UNIT Fixing Assembly parts counter	
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0

COPIER > COUNTER > DRBL-1		
FX-UP-FR	Fixing Film Unit parts counter	
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
FX-LW-BR	Fixing Bearing parts counter	
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
WST-TNR	Waste Toner Container parts counter	
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
TN-FIL1	Toner Filter parts counter	
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0

COPIER > COUNTER > DRBL-1		
PT-DR-Y	Y Photosensitive Drum parts counter	
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts
	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.
	Display/adj/set range	0 to 99999999
	Default value	0
	PT-DR-M	M Photosensitive Drum parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/
	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.
	Display/adj/set range	0 to 99999999
	Default value	0
	PT-DR-C	C Photosensitive Drum parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts
	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.
	Display/adj/set range	0 to 99999999
	Default value	0
	TR-ROLK	Primary Transfer Roller(Bk) parts counter
Lv.1	Details	Due to the engagement/disengagement of the Roller, Bk Roller counter is advanced separately from Y/M/C Roller 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
Related service mode	COPIER> COUNTER> DRBL-1> TR-ROLK	

COPIER > COUNTER > DRBL-1	
TR-ROL	Primary Transfer Roller(Y/M/C) parts counter
Lv.1	Details
	Due to the engagement/disengagement of the Roller, Y/M/C Roller counter is advanced separately from Bk Roller 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case
	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method
	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution
	Clear the counter value after replacement.
	Display/adj/set range
	0 to 99999999
	Default value
	0
	Related service mode
	COPIER> COUNTER> DRBL-1> TR-ROLK

T-8-79

## ■ DRBL-2

COPIER > COUNTER > DRBL-2	
DF-PU-RL	Pickup Roller parts counter: All Reader
Lv.1	Details
	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case
	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method
	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution
	Clear the counter value after replacement.
	Display/adj/set range
	0 to 99999999
	Unit
	Number of sheets
	Default value
	0
	Supplement/memo
	Regardless of the read mode (1-sided/2-sided), the counter is advanced every time a sheet is fed.
DF-SP-PD	Pickup Separation Pad parts cntr: Reader
Lv.1	Details
	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case
	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method
	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution
	Clear the counter value after replacement.
	Display/adj/set range
	0 to 99999999
	Unit
	Number of sheets
	Default value
	0
	Supplement/memo
	Regardless of the read mode (1-sided/2-sided), the counter is advanced every time a sheet is fed.



COPIER > COUNTER > DRBL-2		
LNT-TAP1		Dust-collecting counter: All Reader
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	Number of sheets
	Default value	0
	Supplement/memo	Regardless of the read mode (1-sided/2-sided), the counter is advanced every time a sheet is fed.
LNT-TAP2		Dust-colleting Type E counter: D-Reader
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	Number of sheets
	Default value	0
	Supplement/memo	Regardless of the read mode (1-sided/2-sided), the counter is advanced every time a sheet is fed.
STAMP		Stamp parts counter: All Reader
Lv.1	Details	To display the parts counter and the estimated life of DADF Stamp. 1st line: Number of sheets fed after the previous replacement 2nd line: Estimated life to be entered by operator
	Use case	At replacement
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, and then enter the estimated life.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	Number of sheets
	Default value	0

COPIER > COUNTER > DRBL-2		
DF-HNG-L		Left Hinge parts counter: All Reader
Lv.1	Details	To display the parts counter and the estimated life of DADF Hinge Unit (Left). 1st line: Number of sheets fed after the previous replacement 2nd line: Estimated life to be entered by operator
	Use case	At replacement
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, and then enter the estimated life.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	Number of sheets
	Default value	0
	Supplement/memo	The counter is advanced every time it is opened/closed.
PD-PU-RL		Pickup Roller parts counter: Deck
Lv.1	Details	Pickup Roller (Front/Rear) of Paper Deck/POD Deck Lite/Multi Deck (Upper) 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	Number of sheets
	Default value	0
PD-SP-RL		Separation Roller parts counter: Deck
Lv.1	Details	Separation Roller of Paper Deck/POD Deck Lite/Multi Deck (Upper) 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	Number of sheets
	Default value	0



COPIER > COUNTER > DRBL-2		
PD-FD-RL	Feed Roller parts counter: Deck	
Lv.1	Details	Feed Roller of Paper Deck/POD Deck Lite/Multi Deck (Upper) 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	Number of sheets
	Default value	0
	C3-SP-RL	Cassette3 Separation Roller prts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	Number of sheets
	Default value	0
C3-FD-RL	Cassette3 Feed Roller parts counter	
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
C4-SP-RL	Cassette4 Separation Roller prts counter	
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0

COPIER > COUNTER > DRBL-2		
C4-FD-RL	Cassette4 Feed Roller parts counter	
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
	FIN-STPR	Stapler parts counter: Fin-A1/C1
Lv.1	Details	Stapler Unit 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	Number of times
	Default value	0
SDL-STPL	Saddle Stapler parts counter: Fin-C1	
Lv.1	Details	Saddle Stapler Unit 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	Number of times
	Default value	0
FN-BFFRL	Buffer Roller parts counter: Fin-C1	
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0

COPIER > COUNTER > DRBL-2		
ENT-STC		Inlet Sttc Chg Elim prts cntr: Fin-A1/C1
Lv.1	Details	Inlet Static Charge Eliminator 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
DL-STC		Stack Wall Sttc Elim prts cntr:Fin-A1/C1
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	Number of sheets
Default value	0	
OFST-RL		Offset Roller parts counter: Fin-A1
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	Number of sheets
Default value	0	
RET-RL		Return Roller parts counter: Fin-C1
Lv.1	Details	Paper Return Roller (Front/Rear) 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0

COPIER > COUNTER > DRBL-2		
SWG-STC		Swng Guide Inside Sttc Chg Elim: Fin-C1
Lv.1	Details	Swng Guide Inside Static Charge Eliminator 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
PD-PL-RL		Pullout Roller parts counter: Deck
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	Number of sheets
Default value	0	

T-8-80

## ■ T-CNTR

COPIER > COUNTER > T-CNTR	
YELLOW	For R&D
MAGENTA	For R&D
CYAN	For R&D
BLACK	For R&D

T-8-81

## ■ 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 distribution of video count
	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		Video count Y 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 distribution of video count
	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		Video count M 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 distribution of video count
	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		Video count C 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 distribution of video count
	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		Video count Bk 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 distribution of video count
	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".

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## ■ 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 distribution of video count
	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		Video count Y 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 distribution of video count
	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		Video count M 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 distribution of video count
	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		Video count C 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 distribution of video count
	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		Video count Bk 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 distribution of video count
	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-8-83

## ■ 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	%
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	%
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	%
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	%

T-8-84

## FEEDER

 DISPLAY

FEEDER > DISPLAY	
FEEDSIZE	Dspl of original size detected by DADF
Lv.1 Details	To display the original size detected by DADF.
TRY-WIDE	Distance of Original Width Detect Slider
Lv.1 Details	To display the distance between the Original Width Detection Sliders.
Use case	At original size detection error
Display/adj/set range	0 to approx. 2970
Unit	mm

T-8-85

 ADJUST

FEEDER > ADJUST	
DOCST	Adj of DADF img lead edge margin: front
Lv.1 Details	To adjust the margin at the leading edge of the image for DADF scanning. Execute when the output image after DADF installation is displaced. When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. As the value is incremented by 1, the margin at the leading edge of the image is decreased by 0.1 mm. (The image moves in the direction of the leading edge of the sheet.)
Use case	- When installing DADF - When replacing the Reader Controller PCB/clearing RAM data
Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
Display/adj/set range	-50 to 50
Unit	0.1 mm
Default value	0
LA-SPEED	Fine adj of DADF image magnifictn: front
Lv.1 Details	To adjust the image magnification ratio in vertical scanning direction for DADF scanning. As the value is incremented by 1, the image is reduced by 0.1 % in vertical scanning direction. (The feeding speed increases, and the image is reduced.)
Use case	- When installing DADF - When replacing the Reader Controller PCB/clearing RAM data
Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
Display/adj/set range	-30 to 30
Unit	0.10%
Default value	0
DOCST2	Adj of DADF img lead edge margin: back
Lv.1 Details	To adjust the margin at the leading edge of the image for DADF scanning. Execute when the output image after DADF installation is displaced. When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. As the value is incremented by 1, the margin at the leading edge of the image is decreased by 0.1 mm. (The image moves in the direction of the leading edge of the sheet.)
Use case	- When installing DADF - When replacing the Reader Controller PCB/clearing RAM data
Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
Display/adj/set range	-50 to 50
Unit	0.1 mm
Default value	0

FEEDER > ADJUST		
LA-SPD2		Fine adj of DADF image magnifictn: back
Lv.1	Details	To adjust the image magnification ratio in vertical scanning direction for DADF scanning. As the value is incremented by 1, the image is reduced by 0.01 % in vertical scanning direction. (The feeding speed increases, and the image is reduced.)
	Use case	- When installing DADF - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range	-200 to 200
	Unit	0.01%
	Default value	0
ADJMSCN1		Zoom adj in 2-sided horz scan way: front
Lv.1	Details	To make a fine adjustment of the front side image magnification ratio in horizontal scanning direction at the time of DADF duplex scanning. As the value is incremented by 1, the image is reduced by 0.1 % in horizontal scanning direction.
	Use case	When a displacement occurs to the front/back side image magnification ratio at the time of duplex scanning
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range	-10 to 10
	Unit	0.10%
	Default value	0
ADJMSCN2		Zoom adj in 2-sided horz scan way: back
Lv.1	Details	To make a fine adjustment of the back side image magnification ratio in horizontal scanning direction at the time of DADF duplex scanning. As the value is incremented by 1, the image is reduced by 0.1 % in horizontal scanning direction.
	Use case	When a displacement occurs to the front/back side image magnification ratio at the time of duplex scanning
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range	-10 to 10
	Unit	0.10%
	Default value	0

FEEDER > ADJUST		
ADJSSCN1		Zoom adj in 2-sided vert scan way: front
Lv.1	Details	To make a fine adjustment of the front side image magnification ratio in vertical scanning direction at the time of DADF duplex scanning. As the value is incremented by 1, the image is reduced by 0.1 % in vertical scanning direction.
	Use case	When a displacement occurs to the front/back side image magnification ratio at the time of duplex scanning
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range	-10 to 10
	Unit	0.10%
	Default value	0
ADJSSCN2		Zoom adj in 2-sided vert scan way: back
Lv.1	Details	To make a fine adjustment of the back side image magnification ratio in vertical scanning direction at the time of DADF duplex scanning. As the value is incremented by 1, the image is reduced by 0.1 % in vertical scanning direction.
	Use case	When a displacement occurs to the front/back side image magnification ratio at the time of duplex scanning
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range	-10 to 10
	Unit	0.10%
	Default value	0

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FEEDER > FUNCTION		
MTR-CHK	Specification of DADF Operation Motor	
Lv.1	Details	To specify the DADF Motor to operate. The motor is activated by MTR-ON.
	Use case	At operation check
	Adj/set/operate method	Enter the value, and then press OK key.
	Display/adj/set range	0 to 2 0: Pickup Motor (M1), 1: Registration Motor (M2), 2: Read Motor (M3)
	Related service mode	FEEDER> FUNCTION> MTR-ON
TRY-A4	Adj of DADF Tray width detect ref 1: A4	
Lv.1	Details	To automatically adjust the paper width detection reference point 1 for the DADF Tray. (A4)
	Use case	- When replacing the Original Width Volume (VR) - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	None
TRY-A5R	Adj of DADF Tray width detect ref 2: A5R	
Lv.1	Details	To automatically adjust the paper width detection reference point 2 for the DADF Tray. (A5R)
	Use case	- When replacing the Original Width Volume (VR) - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	None
TRY-LTR	Adj of DADF Tray width detect ref 1: LTR	
Lv.1	Details	To automatically adjust the paper width detection reference point 1 for the DADF Tray. (LTR)
	Use case	- When replacing the Original Width Volume (VR) - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	None
TRY-LTRR	Adj of DADF Tray width detect ref2: LTRR	
Lv.1	Details	To automatically adjust the paper width detection reference point 2 for the DADF Tray. (LTRR)
	Use case	- When replacing the Original Width Volume (VR) - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	None

FEEDER > FUNCTION		
FEED-CHK	Specify DADF individual feed mode	
Lv.1	Details	To specify the feed mode for DADF. Feed operation is activated by FEED-ON.
	Use case	At operation check
	Adj/set/operate method	Enter the value, and then press OK key.
	Display/adj/set range	0 to 3 0: 1-sided pickup/delivery operation 1: Not used 2: 1-sided pickup/delivery operation (with stamp) 3: Not used
	Related service mode	FEEDER> FUNCTION> FEED-ON
CL-ON	Operation check of DADF Clutch	
Lv.1	Details	To start operation check of Pickup Clutch.
	Use case	At operation check
	Adj/set/operate method	1) Select the item, and then press OK key. The unit operates for approximately 5 seconds and automatically stops. 2) Press OK key. The operation check is completed.
	Caution	Be sure to press the OK key again after execution. The operation automatically stops after approximately 5 seconds, but is not completed unless the OK key is pressed (STOP is not displayed).
	Display/adj/set range	None
FAN-CHK	Specification of DADF Operation Fan	
Lv.1	Details	To specify the DADF Fan to operate. The fan is activated by FAN-ON.
	Use case	At operation check
	Adj/set/operate method	Enter the value, and then press OK key.
	Display/adj/set range	0
	Related service mode	FEEDER> FUNCTION> FAN-ON
FAN-ON	Operation check of DADF Fan	
Lv.1	Details	To start operation check of the Fan specified by FAN-CHK.
	Use case	At operation check
	Adj/set/operate method	1) Select the item, and then press OK key. The unit operates for approximately 5 seconds and automatically stops. 2) Press OK key. The operation check is completed.
	Caution	Be sure to press the OK key again after execution. The operation automatically stops after approximately 5 seconds, but is not completed unless the OK key is pressed (STOP is not displayed).
	Display/adj/set range	None
	Related service mode	FEEDER> FUNCTION> FAN-CHK

FEEDER > FUNCTION	
SL-CHK	Specification of DADF Operation Solenoid
Lv.1	Details
	To specify the DADF solenoid to operate. The solenoid is activated by SL-ON.
	Use case
	At operation check
	Adj/set/operate method
	Enter the value, and then press OK key.
	Display/adj/set range
	0
	Related service mode
	FEEDER> FUNCTION> SL-ON
SL-ON	Operation check of DADF Solenoid
Lv.1	Details
	To start operation check of the solenoid specified by SL-CHK.
	Use case
	At operation check
	Adj/set/operate method
	1) Select the item, and then press OK key. The unit operates for approximately 5 seconds and automatically stops. 2) Press OK key. The operation check is completed.
	Caution
	Be sure to press the OK key again after execution. The operation automatically stops after approximately 5 seconds, but is not completed unless the OK key is pressed (STOP is not displayed).
	Display/adj/set range
	None
	Related service mode
	FEEDER> FUNCTION> SL-CHK
MTR-ON	Operation check of Motor
Lv.1	Details
	To start operation check of the motor specified by MTR-CHK.
	Use case
	At operation check
	Adj/set/operate method
	1) Select the item, and then press OK key. The unit operates for approximately 5 seconds and automatically stops. 2) Press OK key. The operation check is completed.
	Caution
	Be sure to press the OK key again after execution. The operation automatically stops after approximately 5 seconds, but is not completed unless the OK key is pressed (STOP is not displayed).
	Display/adj/set range
	None
	Related service mode
	FEEDER> FUNCTION> MTR-CHK
ROLL-CLN	Rotation of DADF Rollers
Lv.1	Details
	To rotate the DADF Rollers for cleaning. Clean the roller with lint-free paper moistened with alcohol while it is rotating.
	Use case
	At roller cleaning
	Adj/set/operate method
	1) Select the item, and then press OK key. 2) Clean the rotating rollers with lint-free paper moistened with alcohol. 3) Press OK key. The rollers stop.
	Display/adj/set range
	None

FEEDER > FUNCTION	
FEED-ON	Operation check of DADF individual feed
Lv.1	Details
	To start operation check of the feed mode specified by FEED-CHK.
	Use case
	At operation check
	Adj/set/operate method
	Select the item, and then press OK key.
	Display/adj/set range
	None
	Related service mode
	FEEDER> FUNCTION> FEED-CHK
CL-CHK	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
	0 to 1 0:Pickup clutch(ADF), 1:Registration clutch(ADF)
	Related service mode
	FEEDER> FUNCTION> CL-ON

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## SORTER

## ADJUST

SORTER > ADJUST		
PNCH-HLE		Adj of punch hole pstn from paper edge
Lv.1	Details	To adjust the length from the paper edge to the punch hole. As the value is incremented by 1, the punch hole moves by 1 mm.
	Use case	Upon user's request
	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 2
	Unit	mm
	Default value	0
STP-F1		Adj A4 front stpl pstn (45 deg): Fin-C1
Lv.1	Details	To adjust the one front staple position on the A4 size paper. As the value is incremented by 1, the staple position moves to the rear side by 0.49mm.
	Use case	When the A4 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	mm
	Default value	0
STP-F2		Adj LTR front stpl pstn (45 deg): Fin-C1
Lv.1	Details	To adjust the one front staple position on the LTR size paper. As the value is incremented by 1, the staple position moves to the rear side by 0.49mm.
	Use case	When the LTR 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	mm
	Default value	0
STP-R1		Adj A4 rear staple pstn (45 deg): Fin-C1
Lv.1	Details	To adjust the one rear staple position on the A4 size paper. As the value is incremented by 1, the staple position moves to the rear side by 0.49mm.
	Use case	When the A4 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	mm
	Default value	0

SORTER > ADJUST		
STP-R2		Adj LTR rear stpl pstn (45 deg): Fin-C1
Lv.1	Details	To adjust the one rear staple position on the LTR size paper. As the value is incremented by 1, the staple position moves to the rear side by 0.49mm.
	Use case	When the LTR 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	mm
	Default value	0
STP-2P		Adj front/rear 2-staple position: Fin-A1
Lv.1	Details	To adjust the front/rear 2-staple position on Finisher. As the value is incremented by 1, the staple position moves by 0.1mm. +: Toward front -: Toward rear
	Use case	When the front/rear 2-staple position is displaced
	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	-25 to 25
	Unit	mm
SDL-STP		Adj Saddle staple position: Fin-C1
Lv.1	Details	To adjust the staple position at the time of saddle stitching. As the value is incremented by 1, the staple position moves downward by 0.5 mm.
	Use case	When the fold position and the staple position are misaligned at the time of 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	mm
	Default value	0
SDL-ALG		Adj Saddle alignment position: Fin-C1
Lv.1	Details	To adjust the shift position of the Alignment Plate at the time of saddle stitching. As the value is incremented by 1, the alignment position moves toward the center of the paper by 0.1mm.
	Use case	When an alignment failure occurs at the time of saddle stitching
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1
	Unit	mm
	Default value	0

SORTER > ADJUST		
ST-ALG1		Adj Stacker A4 size align pstn: Fin-C1
Lv.1	Details	To adjust the A4 size paper alignment position. As the value is incremented by 1, the travel length of the Alignment Plate is increased by 0.42mm.
	Use case	When misalignment occurs in A4 size paper
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range	-10 to 10
	Unit	mm
	Default value	0
ST-ALG2		Adj Stacker LTR size align pstn: Fin-C1
Lv.1	Details	To adjust the LTR size paper alignment position. As the value is incremented by 1, the travel length of the Alignment Plate is increased by 0.42mm.
	Use case	When misalignment occurs in LTR size paper
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range	-10 to 10
	Unit	mm
	Default value	0
STP-F3		Adj A4R frt stpl pstn (<45 deg): Fin-C1
Lv.1	Details	To adjust the one front staple position on the A4R size paper. As the value is incremented by 1, the staple position moves to the rear side by 0.49mm.
	Use case	When misalignment occurs at the front staple position on A4R size paper
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range	-6 to 6
	Unit	mm
	Default value	0
STP-F4		Adj LTRR frt stpl pstn (<45 deg): Fin-C1
Lv.1	Details	To adjust the one front staple position on the LTRR size paper. As the value is incremented by 1, the staple position moves to the rear side by 0.49mm.
	Use case	When misalignment occurs at the front staple position on LTRR size paper
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range	-6 to 6
	Unit	mm
	Default value	0

SORTER > ADJUST		
STP-R3		Adj A4R rear stpl pstn (<45 deg): Fin-C1
Lv.1	Details	To adjust the one rear staple position on the A4R size paper. As the value is incremented by 1, the staple position moves to the rear side by 0.49mm.
	Use case	When misalignment occurs at the rear staple position on A4R size paper
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range	-6 to 6
	Unit	mm
	Default value	0
STP-R4		Adj LTRRL rear stpl pstn(<45 deg):Fin-C1
Lv.1	Details	To adjust the one rear staple position on the LTRR size paper. As the value is incremented by 1, the staple position moves to the rear side by 0.49mm.
	Use case	When misalignment occurs at the rear staple position on LTRR size paper
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range	-6 to 6
	Unit	mm
	Default value	0
SW-UP-RL		Adj of Swing Roller falling pstn: Fin-C1
Lv.1	Details	To adjust the Swing Roller fall position. As the value is incremented by 1, the Swing Roller fall position moves downward by 0.2mm.
	Use case	When paper fails to be transported to the Processing Tray and misalignment occurs
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range	-17 to 33
	Unit	mm
	Default value	0
PUN-V-RG		[Not used]
PRCS-RET		Adj Process Tray return amount: Fin-C1
Lv.1	Details	To adjust the pull-back amount of the paper on the Processing Tray. As the value is incremented by 1, the pull-back amount is decreased by 1.4mm.
	Use case	When the paper is bent in the Processing Tray
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 5
	Unit	mm
	Default value	0

SORTER > ADJUST		
UP-CL		Setting of upward curl prev mode: Fin-C1
Lv.1	Details	Set 1 when upward curl occurs on the paper delivered to the Stack Tray, and paper leaning due to the curl occurs.
	Use case	When upward curl occurs on the paper delivered to the Stack Tray, and paper leaning due to the curl occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
DW-CL		Setting downward curl prev mode: Fin-C1
Lv.1	Details	Set 1 when downward curl occurs on the paper delivered to the Stack Tray, and paper leaning due to the curl occurs.
	Use case	When downward curl occurs on the paper delivered to the Stack Tray, and paper leaning due to the curl occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
THC-CL		Setting heavy ppr curl prev mode:Fin-C1
Lv.1	Details	Set 1 when upward curl occurs on the heavy paper delivered. When 1 is set, the amount of Stack Tray descension for stack delivery increases. The paper surface detection is performed for every sheet, not for every 5 sheets.
	Use case	When upward curl occurs on the heavy paper delivered
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
THC-PUSH		Setting heavy ppr out prev mode:Fin-C1
Lv.1	Details	Set 1 when the already stacked paper is pushed out at the time of heavy paper delivery. When 1 is set, the Stack Tray moves down temporarily before the heavy paper is delivered to the Processing Tray if the leading sheet is heavy paper.
	Use case	When the already stacked paper is pushed out at the time of heavy paper delivery
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0

SORTER > ADJUST		
OFST-STC		Set poor offset stack prev mode:Fin-C1
Lv.1	Details	Set 1 when paper is not appropriately stacked in the small size offset mode. When 1 is set, buffer operation is not performed in the small size offset mode.
	Use case	When paper is not appropriately stacked in the small size offset mode
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
THN-STC		Set poor thin ppr stack prev mode:Fin-C1
Lv.1	Details	Set 1 when thin paper is not appropriately stacked. When 1 is set, the stacking condition of thin paper improves.
	Use case	When thin paper is not appropriately stacked
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
STP-P-CH		Set stpl stack displace prev mode:Fin-C1
Lv.1	Details	Set 1 when the paper on the top is misaligned in the staple delivery mode. When 1 is set, paper stack alignment operation is executed twice immediately before stapling.
	Use case	When the paper on the top is misaligned in the staple delivery mode
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
TRY-NIS		Set tray switch noise reduct mode:Fin-C1
Lv.1	Details	Set 1 when the operation noise after switching the Stack Tray is loud. When 1 is set, the Stack Tray rise operation becomes slow.
	Use case	When the operation noise after switching the Stack Tray is loud
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
TRY-SU		Set tray switching speedup mode: Fin-C1
Lv.1	Details	Set 1 when the Stack Tray switching time is long. When 1 is set, the Stack Tray rise speed becomes fast.
	Use case	When the Stack Tray switching time is long
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0

SORTER > ADJUST		
FIN-NIS		Set tray drive noise reduct mode: Fin-C1
Lv.1	Details	Set 1 when the Finisher operation noise is loud. When 1 is set, the initial Finisher operation is minimized.
	Use case	When the Finisher operation noise is loud
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
1SHT-SHF		Set 1-sheet Offset+Collate: Fin-C1
Lv.1	Details	Set 1 when enabling Offset and Collate for 1-sheet document.
	Use case	When enabling Offset and Collate for 1-sheet document
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
SDL-SWCH		Sddl stack capacity switch mode:Fin-C1
Lv.1	Details	Set 1 when increasing the stacking capacity for saddle stitching. When 1 is set, the stacking capacity increases over the upper limit.
	Use case	When increasing the stacking capacity for perfect binding
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
SDL-ALM		Set sddl full stack alarm mode: Fin-C1
Lv.1	Details	Set 1 when disabling the stack full alarm for saddle stitching.
	Use case	When disabling the stack full alarm for saddle stitching
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: ON, 1: OFF
	Default value	0
SFT-AMT1		Adj Shift Roller front shft amnt: Fin-A1
Lv.1	Details	To adjust the front shift amount of the Shift Roller. As the value is incremented by 1, the Shift Roller moves to the push-on direction by 0.1mm.
	Use case	When the front shift amount of paper is not appropriate
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0

SORTER > ADJUST		
SFT-AMT2		Adj Shift Roller rear shft amnt: Fin-A1
Lv.1	Details	To adjust the rear shift amount of the Shift Roller. As the value is incremented by 1, the Shift Roller moves to the push-on direction by 0.1mm.
	Use case	When the rear shift amount of paper is not appropriate
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0
STP-NTN		Adjustment of A4 staple pitch: Fin-A1
Lv.1	Details	To adjust the staple pitch for 2-point stapling. As the value is incremented by 1, staple pitch is widened by 0.27mm.
	Use case	When staple pitch for 2-point stapling is not appropriate
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range	-8 to 8
	Unit	mm
Default value	0	
INSTP-F1		Adj of front staple position: Fin-A1
Lv.1	Details	To adjust the paper pull-in amount of the Gripper at the time of front 1-point stapling. As the value is incremented by 1, the paper pull-in amount is increased by 0.1mm.
	Use case	When the 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	-50 to 50
	Unit	mm
	Default value	0
INSTP-R1		Adj of rear staple position: Fin-A1
Lv.1	Details	To adjust the paper pull-in amount of the Gripper at the time of rear 1-point stapling. As the value is incremented by 1, the paper pull-in amount is increased by 0.1mm.
	Use case	When the 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	-50 to 50
	Unit	mm
	Default value	0



SORTER > ADJUST		
THN-STCL		Poor stack prev mode: l-ppr, thin paper
Lv.1	Details	To set poor stack prevention mode for large paper and thin paper.
	Use case	When large paper and thin paper are not appropriately stacked
	Adj/set/operate method	Select the item to be highlighted, set the value, and then press OK key.
	Caution	This mode is available only with the External Finisher.
	Display/adj/set range	0 to 1
	Default value	0
CLCT-SB		Adjusting the switchback amount
Lv.1	Details	Adjust the switchback amount when the paper is delivered to the processing tray.
	Use case	When the paper stack fault occurs at the processing tray by influence of the curl amount.
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0
DSTP-F1		Adjusting the front staple position in 2-stapling mode
Lv.1	Details	Adjust the front staple position in the middle 2-stapling mode. Incrementing the value by 1 shifts the front stapling position to the paper edge side by 0.1 mm.
	Use case	When the middle 2-staple position is displaced between the front and rear stapling positions.
	Adj/set/operate method	After inputting value, press the OK key.
	Display/adj/set range	0 to 33
	Default value	0

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 FUNCTION

SORTER > FUNCTION		
FIN-CON		Controller PCB RAM clear: Fin-C1
Lv.1	Details	To execute the RAM clear of Finisher Controller PCB to delete all the adjustment contents and counter information.
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	- Output the service mode setting values by P-PRINT before execution. After execution, enter necessary setting value. - The RAM data is cleared after the main power switch is turned OFF/ON.
	Display/adj/set range	None
	Related service mode	COPIER> FUNCTION> MISC-P> P-PRINT

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**OPTION**

SORTER > OPTION		
BLNK-SW		Set fold pstn margin width: Saddle Fin
Lv.1	Details	To set the margin width of fold position on Saddle Finisher.
	Use case	When changing the margin width of fold position
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Normal, 1: Wider
	Default value	0
BUFF-SW		ON/OFF of buffer operation: Finisher-C1
Lv.1	Details	To set ON/OFF of buffer operation in the Finisher. When misalignment occurs, set 1. When 1 is set, alignment performance is improved, but productivity decreases.
	Use case	When misalignment of paper stack occurs (misalignment of 3 sheets at the lowest part of the stack in case of the side stitch, and 3 sheets at the middle of the stack in case of saddle stitch)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When the buffer operation is set to OFF, productivity decreases.
	Display/adj/set range	0 to 1 0: OFF (Performing buffer operation), 1: ON (Not performing buffer operation)
	Default value	0
PRCS-SP1		Set buffer stack Fd SPD to Process Tray
Lv.1	Details	To set the speed to feed the buffered paper stack to the Process Tray Stopper in collate/staple mode. When 1 is set, the feeding speed becomes fast, so misalignment due to paper return failure is alleviated.
	Use case	When misalignment due to paper return failure occurs in collate/staple 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: 600 mm/s, 1: 700 mm/s
	Default value	1

SORTER > OPTION		
STCR-DWN		Set occasional misalign prev mode: Fin
Lv.1	Details	To set ON/OFF of occasional misalignment prevention mode. When misalignment in feed direction occurs at approx. every 30 sheets for thin/plain paper (105g/m <sup>2</sup> and less), set 1.
	Use case	When misalignment in feed direction occurs for thin/plain paper
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
PRCS-SP3		Set non-buffer stack Fd SPD to Proc Tray
Lv.1	Details	To set the speed to feed the non-buffered paper stack to the Process Tray Stopper in staple mode for thin/plain paper. As the value is incremented by 1, the feeding speed is decelerated by 50 mm/sec.
	Use case	When misalignment due to too much paper return (buckling on the trailing edge) occurs in staple mode for thin/plain paper
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	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 to 8: 450 mm/s
	Default value	0
NSRT-STC		Set poor stack prev mode at non-collate
Lv.1	Details	When the stackability at non-sort delivery is low. With this setting, the stacking performance at non-sort delivery is improved.
	Use case	When the stackability at non-collating is low
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 2 0: Paper is delivered to the Stack Tray in non-sort mode. 1: Deliver 2-sided printed paper via the Processing Tray in non-sort mode. 2: Deliver 1-sided/2-sided printed paper via the Processing Tray in non-sort mode.
	Default value	1

SORTER > OPTION		
THN-TRSW	Set narrow width thin paper delvry dest	
Lv.1	Details	When delivering thin paper (63g/m2 and less) which width direction is 139.6 mm and smaller to the Stacker, delivery stationary jam may occur. When 1 is set, thin paper which width direction is 139.6 mm and smaller is forcibly delivered to the tray of the host machine.
	Use case	When delivery stationary jam occurs at the time of delivering narrow-width thin paper to the First/Second Delivery Tray
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Destination specified on UI, 1: Tray of the host machine
	Default value	0
SWGUP-SW	ON/OFF of the swing unit escape operation	
Lv.1	Details	To set ON/OFF of the swing unit escape operation for the 1st sheet of thin paper
	Use case	When the dog ear appears on the first sheet in the thin paper feeding
	Adj/set/operate method	Enter the setting value and press OK key.
	Display/adj/set range	0 to 1 0: OFF 1: ON
	Default value	0

T-8-90

## BOARD

## OPTION

BOARD > OPTION		
MENU-1	Hide/dis of printer setting menu level 1	
Lv.2	Details	To set whether to display or hide the level 1 of printer setting menu.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
MENU-2	Hide/dis of printer setting menu level 2	
Lv.2	Details	To set whether to display or hide the level 2 of printer setting menu.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
MENU-3	Hide/dis of printer setting menu level 3	
Lv.2	Details	To set whether to display or hide the level 3 of printer setting menu.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
MENU-4	Hide/dis of printer setting menu level 4	
Lv.2	Details	To set whether to display or hide the level 4 of printer setting menu.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	1
SURF-OFF	UFR board function ON/OFF	
Lv.1	Details	To set ON/OFF of the function according to the SURF board connection status.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON

BOARD > OPTION		
TR-DSP	Hide/dis of toner reduction function	
Lv.2	Details	To set whether to display or hide the toner reduction function.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0

T-8-91

# 9

## Installation

- How to Check this Installation Procedure
- Things to do Before Installation
- Points to Note Before Installation
- Combination Table of Accessory Installation
- Checking the Contents
- Unpacking
- Installation Procedure

## How to Check this Installation Procedure

### Description on the parts included in the package

The parts with a diagonal line in the contents list will not be used.

### When Using the Parts Included in the Package

A symbol is described on the illustration in the case of using the parts included in the package of this product.



Packaged Item

F-9-1

### Symbols in the Illustration

The frequently-performed operations are described with symbols in this procedure.

#### Screw



Tighten



Remove

#### Connector



Connect



Disconnect

#### Harness



Secure



Free

#### Claw



Insert



Remove



Push



Plug in



Turn on

#### Checking instruction



Check



Visual Check



Sound Check

F-9-2

## Things to do Before Installation

### Selecting an Installing Location

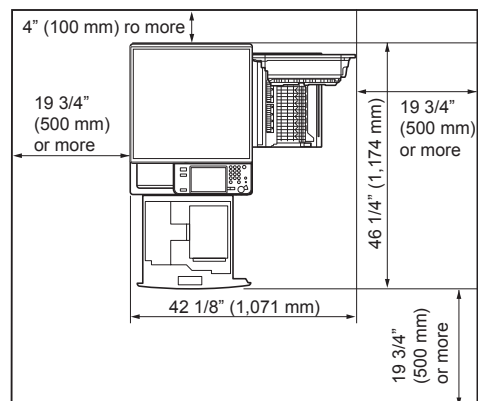
The installing location needs to meet the following conditions:

Thus, it is desirable to go over the planned installing location before bringing the machine to the user's site.

- 1) There must be a power outlet properly grounded and rated as indicated (+, -10%) for exclusive use by the machine.
- 2) Environment of the installation site must be within the range indicated below. Avoid any area near the faucet, the water heater, the humidifier, or the refrigerator.
  - Operation/image assured range: temperature: 15.0 to 30.0 deg C, humidity: 5 to 80%
- 3) Keep the installation site away from the source of fire, a dusty place, or a place generating ammonia gas. In the case of installing this equipment in a place subject to direct sunlight, it is recommended to hang curtains over the window.
- 4) 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..
- 5) The foot of this equipment should be in contact with the floor. This equipment should be kept on the level.

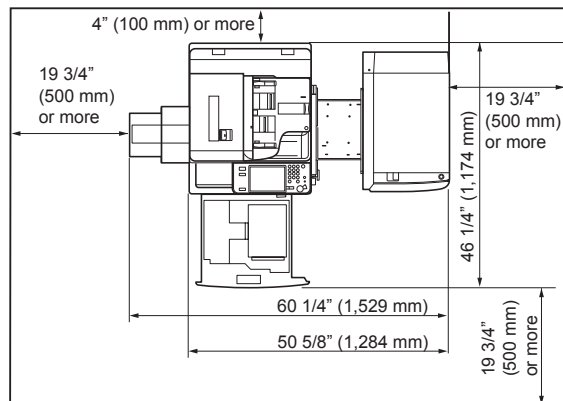
6) The machine must be away from the wall by 100mm or more to secure an enough space to perform machine operation.

- Color Image Reader Unit-F2



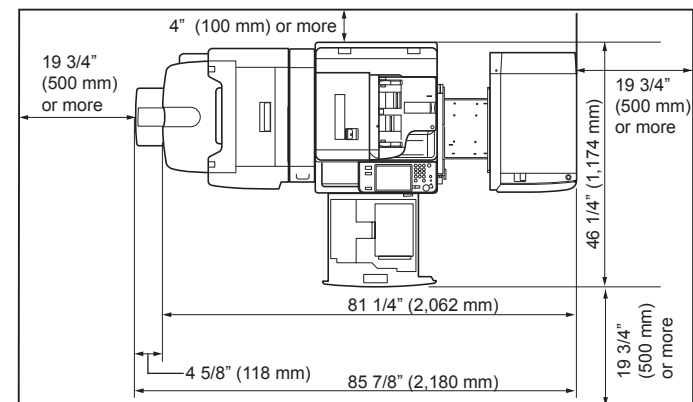
F-9-3

- Duplex Color Image Reader Unit-E1 + Inner Finisher-E1 + Paper Deck Unit-B2



F-9-4

- Duplex Color Image Reader Unit-E1 + External 2/3 Hole Puncher-B2 + Booklet Finisher-J1 + Buffer Pass Unit-G1 + Paper Deck Unit-B2



F-9-5

- 7) Be sure to install this equipment in a well-ventilated place. Do not place this equipment near the air vent in the room.

## Points to Note Before Installation

Take note of the following points when installing this equipment.

- 1) Moving this equipment from a low-temperature place to a warm place can generate condensation, resulting in image fault. Thus, when unpacking this equipment, leave it for 2 hours or more so that the equipment becomes comfortable with the room temperature. (Condensation: formation of liquid drops from water vapor on metal surface, and usually occurs when bringing a metal object from a low-temperature place to a warm place due to rapidly-cooled surrounding moisture vapor.)
- 2) The host machine weighs maximum 134kg. It is recommended to lift it with 4 people or more. However, if there is a standard to handle a heavy load in each sales company, follow it for operation.

Also, make sure to lift the machine with keeping it level at operation.

Because the gravity center is in the rear, lift with care.

## Combination Table of Accessory Installation

### Combination of the Options installing to the Right Side of the Host Machine

#### NOTE:

- The following table shows the combination of accessories that are set at the right side of the host machine.
- When setting the accessories indicated in the table, refer to the table below and check the combination before the setup.

	Utility Tray	Voice Guidance Kit	Voice Operation Kit	Card Reader
Utility Tray	-	no	no	yes
Voice Guidance Kit	no	-	no	yes
Voice Operation Kit	no	no	-	yes
Card Reader	yes	yes	yes	-

yes: Available      no: Unavailable

T-9-1



# Checking the Contents

<input type="checkbox"/> [1] Drum Unit (Bk) X 1 	<input type="checkbox"/> [2] Drum Unit (Color) X 3 	<input type="checkbox"/> [3] Reversal Trail-edge Guide X 1 
<input type="checkbox"/> [4] *1 Right Lower Sub Cover X 1 	<input type="checkbox"/> [5] Size Plate X 2 	<input type="checkbox"/> [6] Light Front Cover X 1 
<input type="checkbox"/> [7] Light Grip Cover X 1 	<input type="checkbox"/> [8] Left Grip Cover X 2 	<input type="checkbox"/> [9] *2 Waste Toner Container X 1 
<input type="checkbox"/> [10] Service Book Case X 1 	<input type="checkbox"/> [11]*3 Power Cable X 1 	<input type="checkbox"/> [12]*4 Environment Heater Cover X 1 

F-9-6

<input type="checkbox"/> [13] ADF Cable Seal X 1 DADF model only 	<input type="checkbox"/> [14] Face Seal X 1 DADF model only 	<input type="checkbox"/> [15] Stamp Cartridge X 1 DADF model only 
<input type="checkbox"/> [16] Hinge Label DADF model only Refer to Chart 	<input type="checkbox"/> [17] Cleaning Position Label DADF model only Refer to Chart 	<input type="checkbox"/> [18] Copy Prohibition Label DADF model only Refer to Chart 
<input type="checkbox"/> [19] Cleaning Procedure Label DADF model only Refer to Chart 	<input type="checkbox"/> [20] Hinge Caution Label DADF model only Refer to Chart 	

F-9-7

Label name	Reverse Duplex Type DADF	1 Path Duplex Type DADF
[16] Hinge Label	3 pc	6 pc
[17] Cleaning Position Label	1 sheet with 6 languages	1 sheet with 6 languages
[18] Copy Prohibition Label	3 pc	3 pc
[19] Cleaning Procedure Label	-	1 sheet with 3 languages
[20] Hinge Caution Label	1 sheet with 3 languages (North America only)	-

Each label is affixed as standard for China.

- \*1 Use only in the case that the cassette pedestal is not installed.
- \*2 Two pieces of it are contained in the package for Europe.
- \*3 The connector has a different shape depending on locations. Other than USA  
Use the correct power code to match the location/area of installation. Make sure not to leave unused power code at the site.
- \*4 Included in the package in Asia general, Korea, and Taiwan regions

**NOTE:**

- The Touch Pen is attached with the Control Panel.
- Remove all the parts in the cassette.
- Only for AUS, the Toner Container is installed on the host machine.

<CD/Guides>

Check the contents against the following

	North America	EUR	AUS	SPL / Taiwan	Korea	China	IND
e-Manual	1	1	1	1	1	1	1
Setup Guide	1	-	1	-	1	1	-
Users Guide	-	1	-	1	-	-	1
Basic Operation Guide	1	-	1	1	1	1	1
Before Using This Machine	1	-	1	1	1	1	1
UFR 2 User Software	1	Except for PCL, PS standard	1	1	1	1	1
PCL User Software	-	PCL standard only	-	-	-	-	-
PS User Software	-	PS standard only	-	-	-	-	-
iW MC CD	-	1	1	1	1	1	1
iW EMC CD	1	-	-	-	-	-	-
Main Unit Warranty	-	-	-	-	1	-	-
AMS KIT Software / Manual CD	1	-	-	-	-	-	-
AMS Introduction Booklet	1	-	-	-	-	-	-
Chinese Certificate	-	-	-	-	-	1	-
Service Log Book	-	-	-	-	-	1	-
HDD-related Option Integration Installation Procedure	-	-	-	-	-	1	-
Chinese Warranty Sheet	-	-	-	-	-	1	-
PANTONE Manual CD	1	1	1	1	1	1	1
Notice for Latest Software	1	Except for PCL, PS standard	1	1	1	1	1
Points to Note When Moving the Machine(Instruction Sheet)	DADF model only	DADF model only	DADF model only	DADF model only	DADF model only	DADF model only	DADF model only

## Unpacking



1) Unpack the host machine.

**NOTE:**

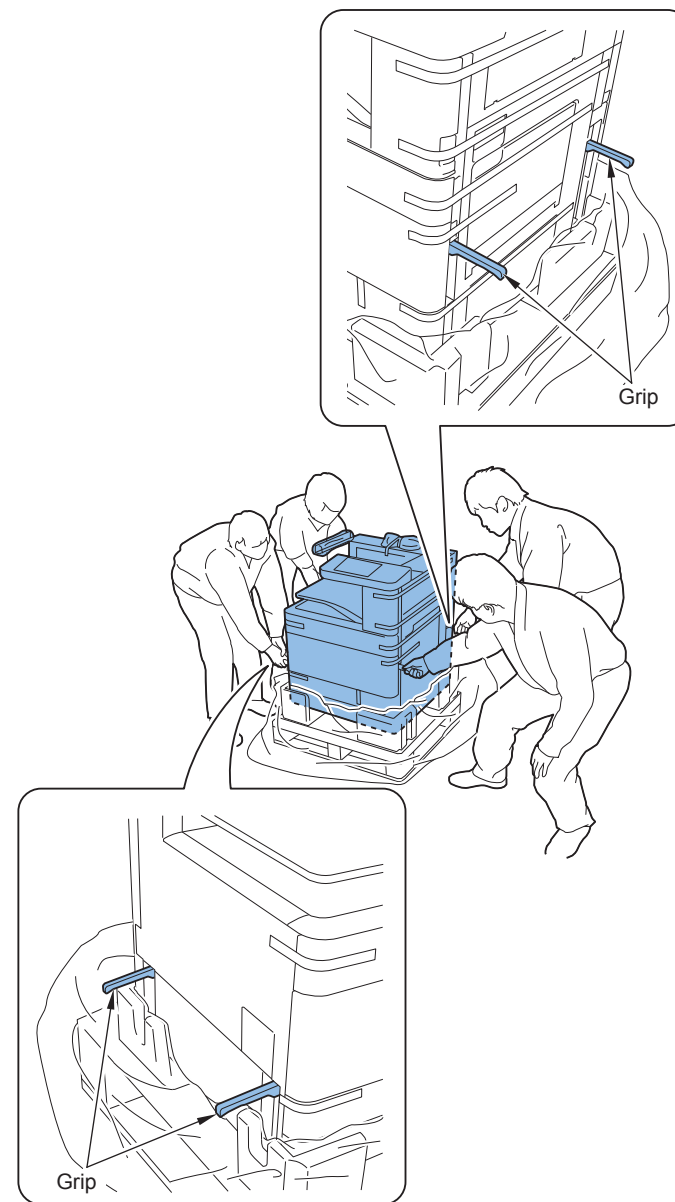
When installing the cassette pedestal, be sure to place the host machine on the cassette pedestal. (See the Installation Procedure of the cassette pedestal)



2) Hold the 4 grips on the left or right to lift the host machine up, and then put down the machine from the skid.

**CAUTION:**

- The host machine weighs maximum 134kg. It is recommended to lift it with 4 people or more. However, if there is a standard to handle a heavy load in each sales company, follow it for operation. Also, make sure to lift the machine with keeping it level at operation.
- Because the gravity center is in the rear, lift with care.

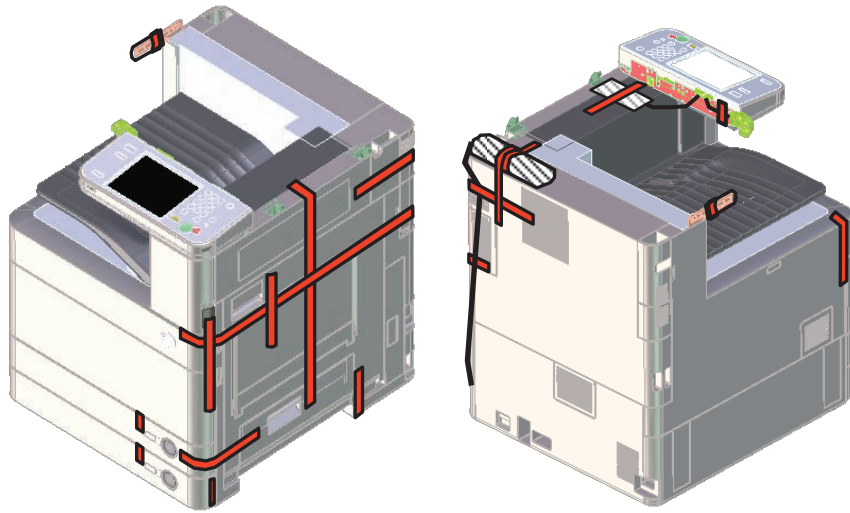


F-9-8

- 3) Remove all the tapes attached to the host machine.

Model without DADF

**CAUTION:**  
Be sure to remove the tapes on the Cassette Unit in later step.



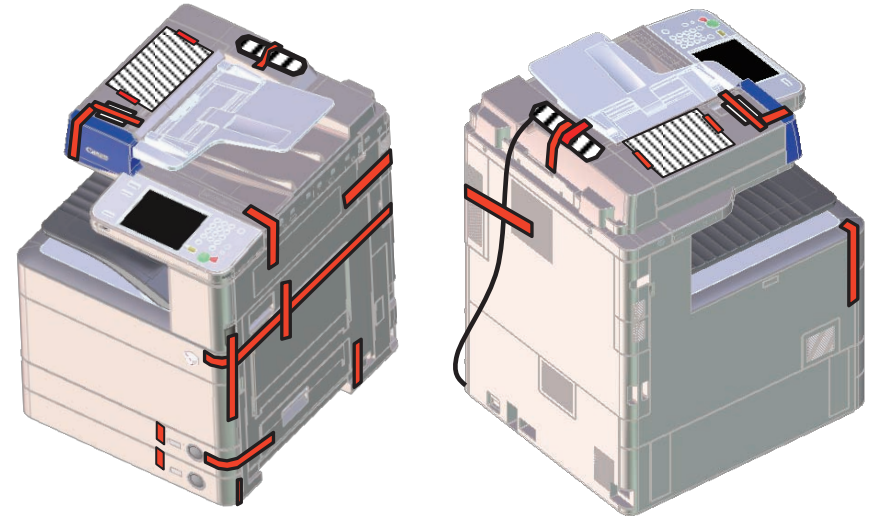
F-9-9

**NOTE:**

- When setting up for the copier model, refer to the "Duplex Color Image Reader Unit-E1, Color Image Reader Unit-F1/F2 installation procedure".
- When setting up for the printer model, refer to the "Printer Cover - C2" stated in this procedure.

Model with DADF

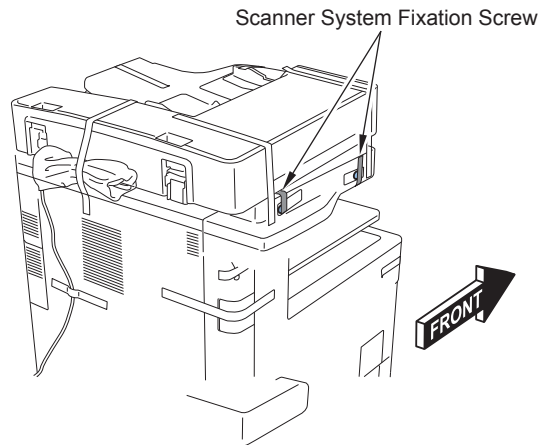
**CAUTION:**  
Be sure to remove the tapes on the Cassette Unit and Reader Unit in later step.



F-9-10

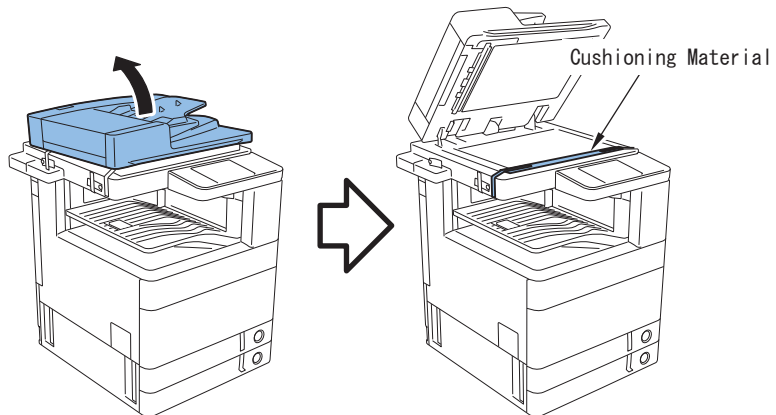
- 4) Remove the tapes on the exterior of the Reader Unit.

**CAUTION:**  
Be sure not to remove the Scanner System Fixation Screw until installation of the scanner is completed.



F-9-11

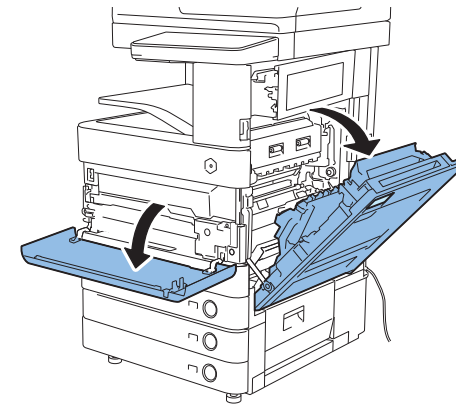
- 5) Open the DADF and remove the cushioning material.



F-9-12

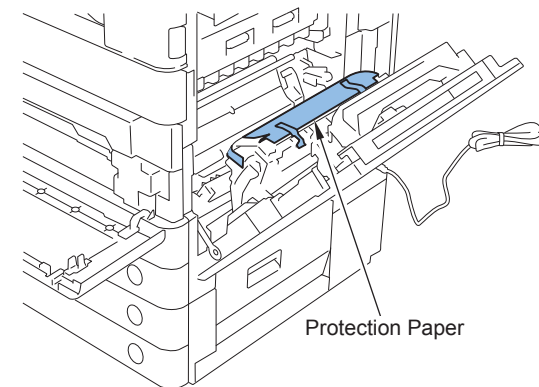
- 6) Close the DADF.

- 7) Pull out the Cassettes 1 and 2, and remove the tapes from them.
- 8) Open the Front Cover and the Right Lower Cover.



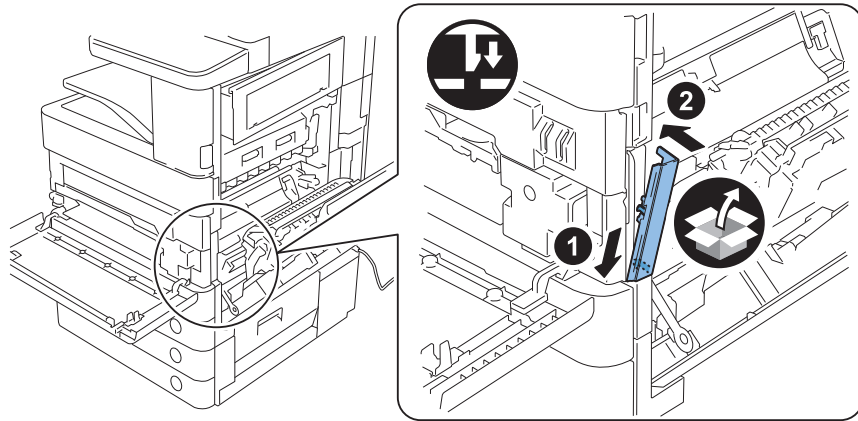
F-9-13

- 9) Peel off the Protection Paper.



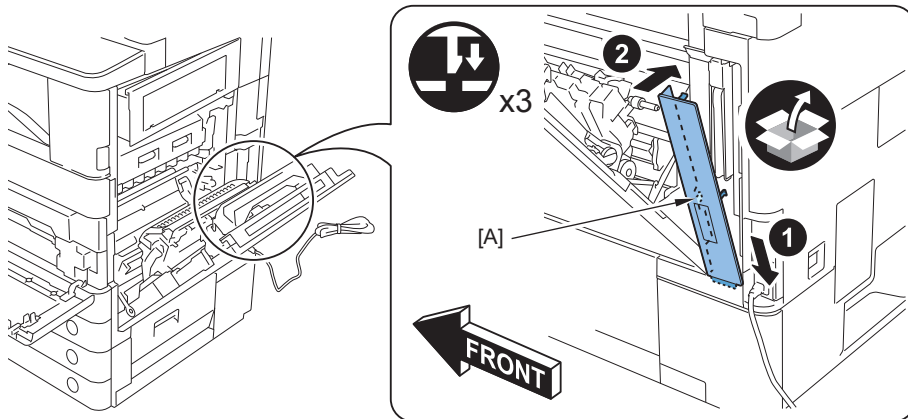
F-9-14

- 10) Insert the protrusion in 1 place. While pushing down [A] claw, insert the claw in 2 places, and install the Right Front Cover 2.



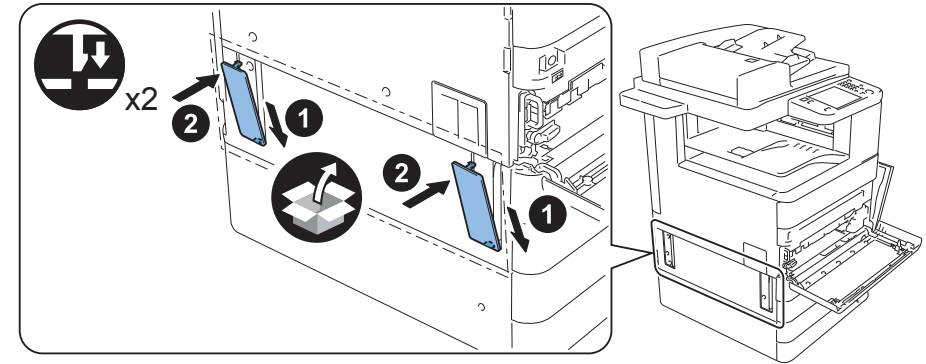
F-9-15

- 11) Insert the protrusion in 1 place. While pushing down [A] claw, insert the claw in 3 places, and install the Right Rear Cover 3.



F-9-16

- 12) Install the 2 Left Handle Covers.
- 1 protrusion each
  - 1 claw each



F-9-17



## Installation Procedure

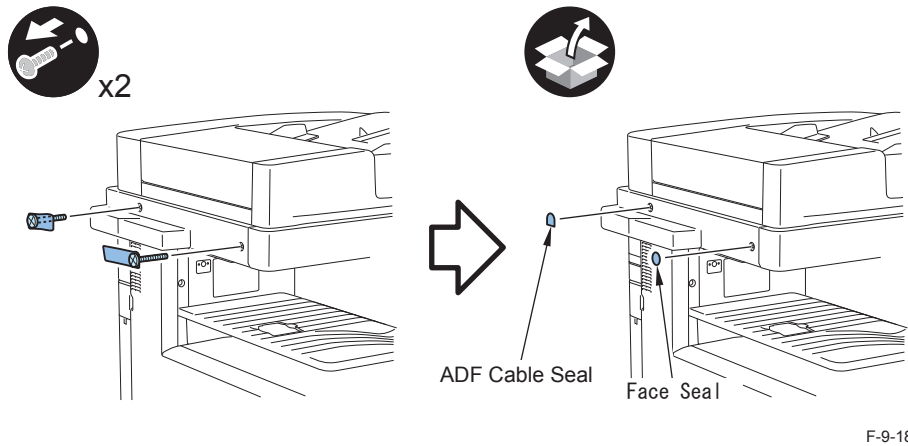
### Installing the Scanner

DADF model only

- 1) Remove the 2 Scanner System Fixation Screws on the left side of the Reader Assembly.
- 2) Affix the below seal.
  - 1 ADF Cable Seal
  - 1 Face Seal

**NOTE:**

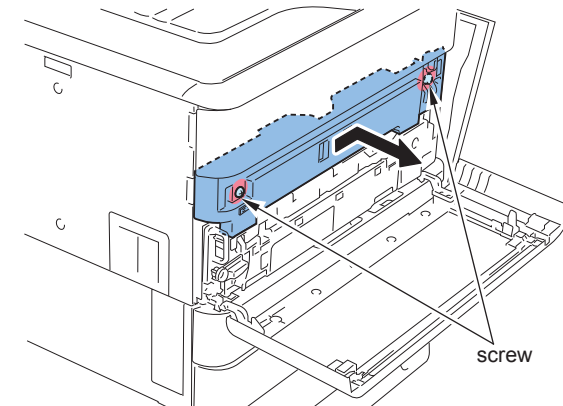
Be sure to keep the Scanner System Fixation Screws in a safe place to use for moving the machine.



F-9-18

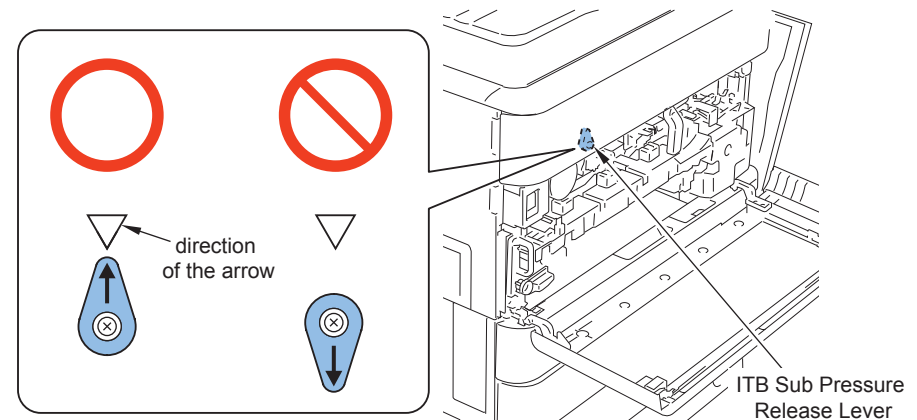
### Installing the Drum Unit

- 1) Remove the ITB Cover.
  - 2 screws (to loosen)



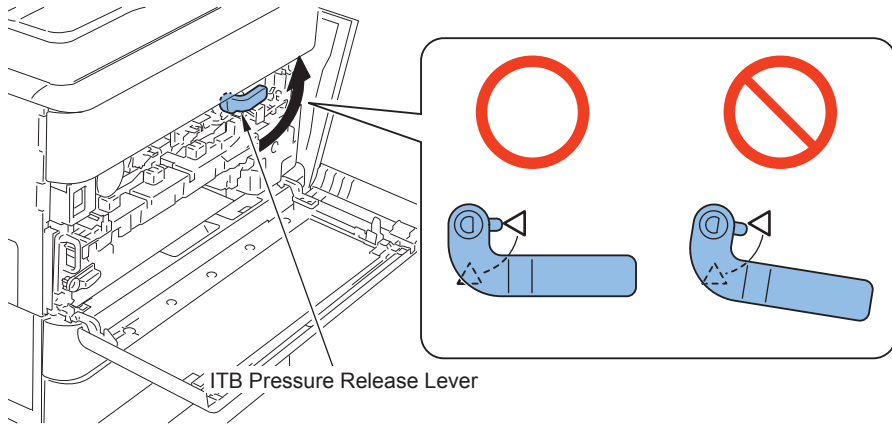
F-9-19

- 2) Check that the ITB Sub Pressure Release Lever is positioned in the direction of the arrow and if not, turn it and adjust the position.



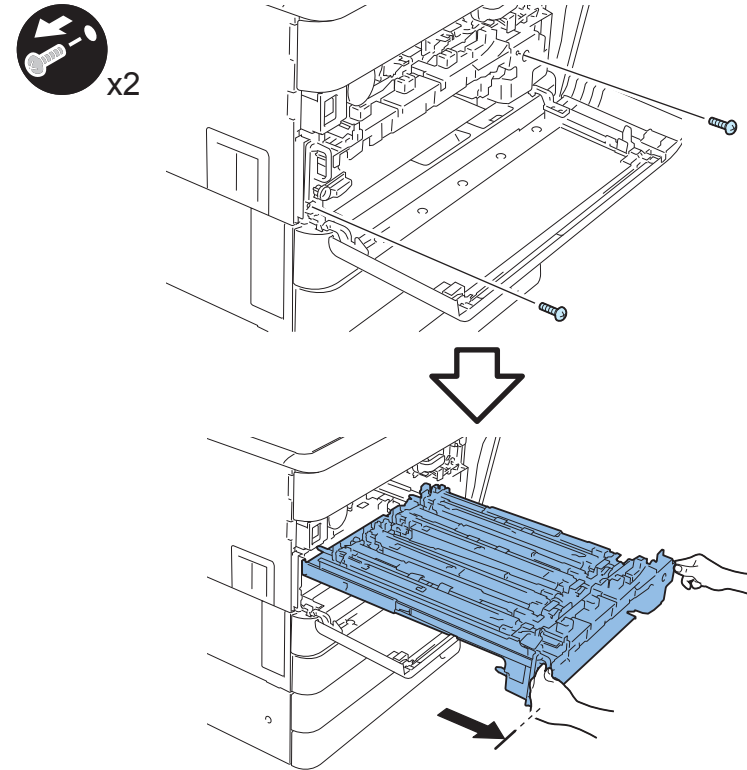
F-9-20

- 3) Turn the ITB Release Lever in the direction of the arrow until the protrusion is aligned with the triangle mark on the plate to release the pressure applied on the ITB.



F-9-21

- 4) Pull out the Process Unit until it stops.

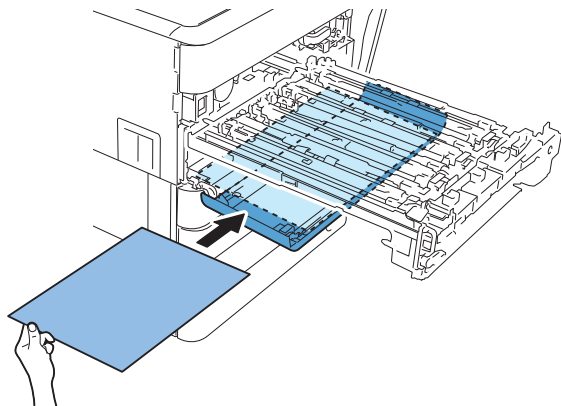


F-9-22

<For India only>



5) Place a sheet of paper on the Front Cover.



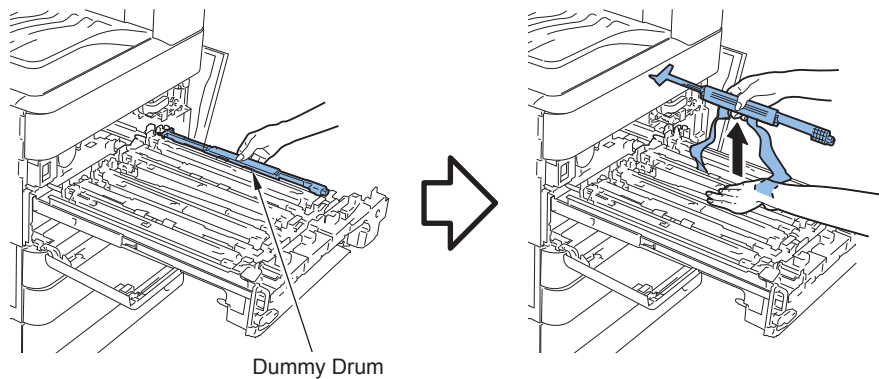
F-9-23



6) Hold the Developing Assembly with one hand. With the other hand, lift the dummy Drum up vertically and slowly to remove it. (If the dummy Drum is removed, the seal can be removed simultaneously.)

**CAUTION:**

- Perform the removal procedure for each color.



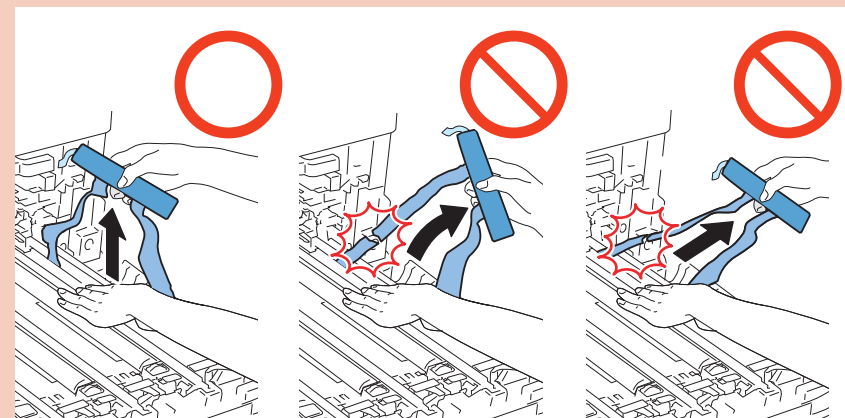
F-9-24

**CAUTION: Points to Note when Removing the Dummy Drum**

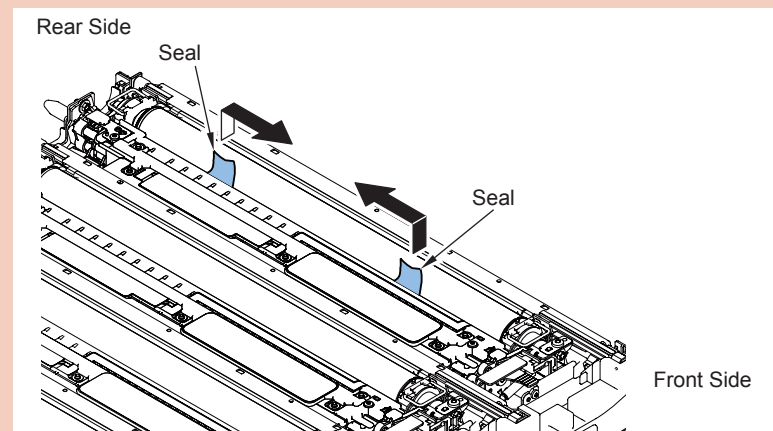
When removing the Dummy Drum, be sure to lift it slowly and vertically.

If lifting it in an oblique direction, the Seal on the Developing Assembly is stressed, and may cause tear of the seal.

If the Developing Seal is torn, remove the torn seal by pulling the end of it in the direction of the arrow. At that time, be careful not to leave the torn seal in the Developing Assembly.



F-9-25

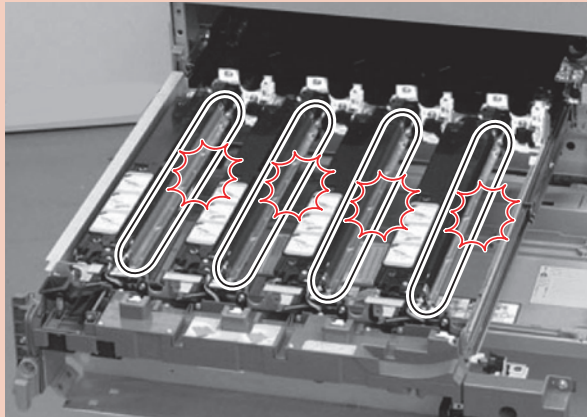


F-9-26

<For India only>

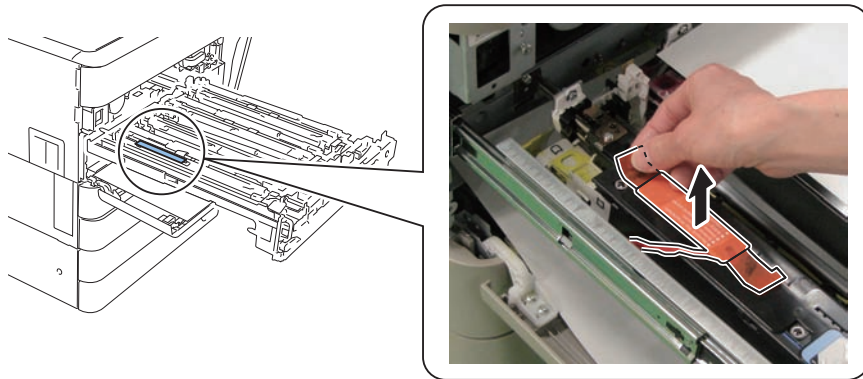
- 
- 7) Remove the tape and tag from the Developing Assembly, and remove the Plastic Film Sheet.

CAUTION:  
Do not touch the sleeve.



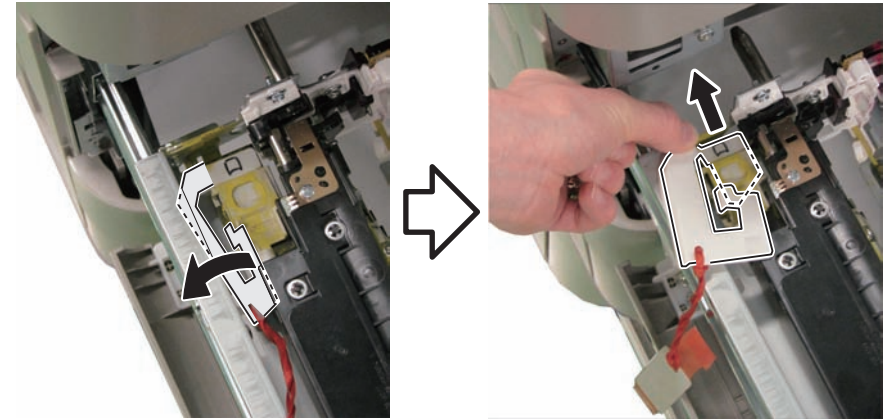
F-9-27

- Remove the tape



F-9-28

- Remove the Plastic Film Sheet.



F-9-29

<For India only>

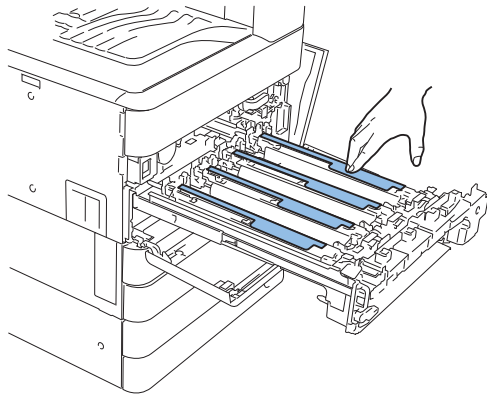
- 
- 8) Remove the paper you placed in step 5).



9) Hold down the top surface of each Developing Assembly after removing Dummy Drums.

**CAUTION:**

Be sure to hold the upper side of each Developing Assembly when removing the seal. Otherwise the cover will be off from its position.



F-9-30

**CAUTION:**

Make sure to use a new Drum Unit.

If a used Drum Unit (with a blown fuse) is used again, toner is incorrectly supplied and this becomes a cause of failure.

**CAUTION:**

Be sure to pay attention to the below in doing the next procedure.

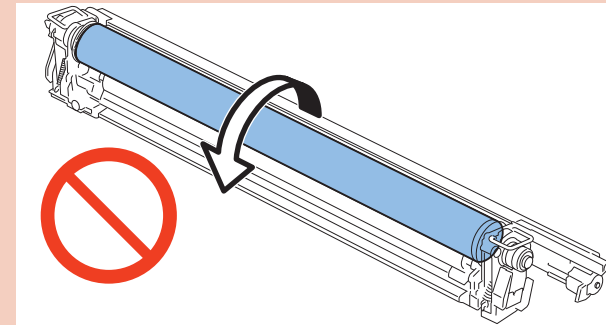
- Do not touch the Drum area.
- Be careful not to hit the cover against the Drum area.
- Do not make the Drum area disposed of light for 5 minutes or more.

**NOTE:**

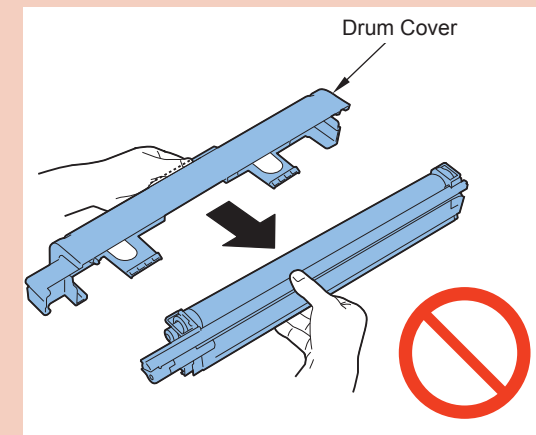
Step 10) to 11) is to install the Drum Unit of each color.

**CAUTION: Points to Note at Drum Installation**

- Be sure not to rotate the Drum counterclockwise while taking it out from the Container Box, removing the Drum Cover and installing to the main body. The Scoop-up Sheet may be flipped, causing toner scattering.
- Be sure not to reinstall the removed Drum Cover; otherwise, the Scoop-up Sheet may be flipped, causing toner scattering.



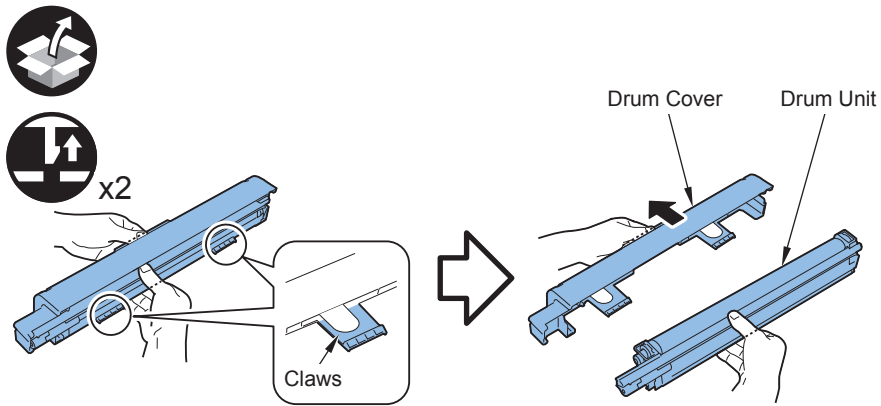
F-9-31



F-9-32

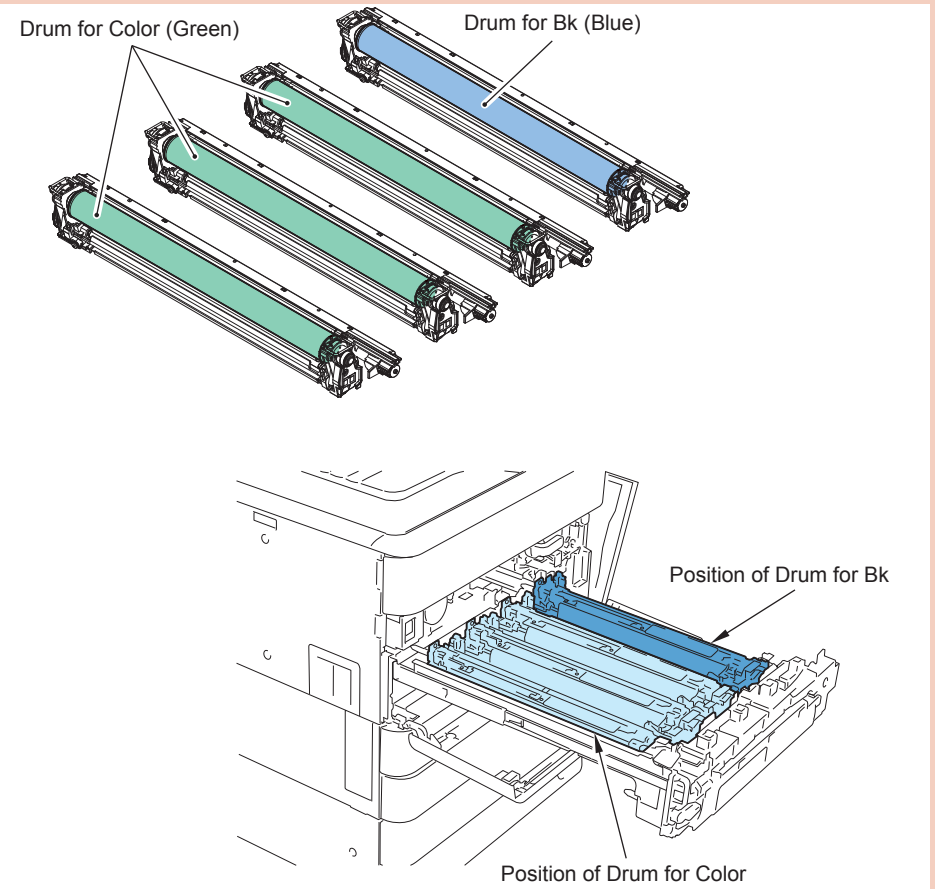
- 10) Unpack the Drum Unit, and remove the cover from the Drum Unit..

**CAUTION:**  
 The joint between the Drum Unit and the cover might be stiff.  
 Proceed with extra care to avoid hitting the Drum area or dropping the Drum Unit when removing the cover from the Drum Unit.



F-9-33

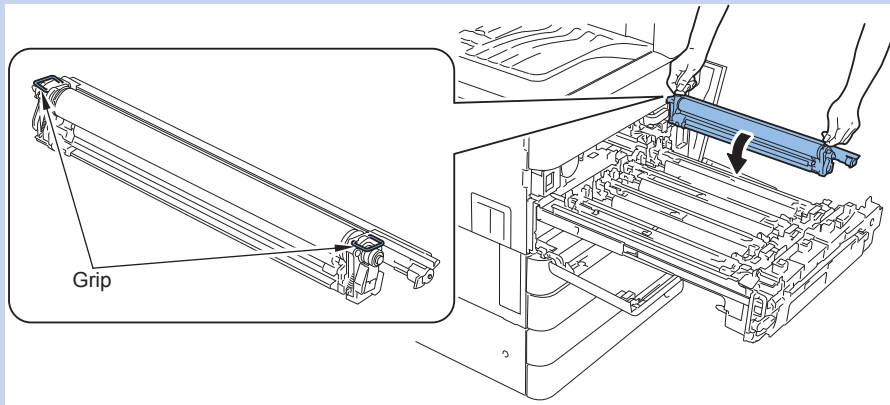
**CAUTION:**  
 Only drum for Bk (blue color) is specified the color. Drums for the 3 colors (green ones), are not specified the color (Y, M, C).



F-9-34

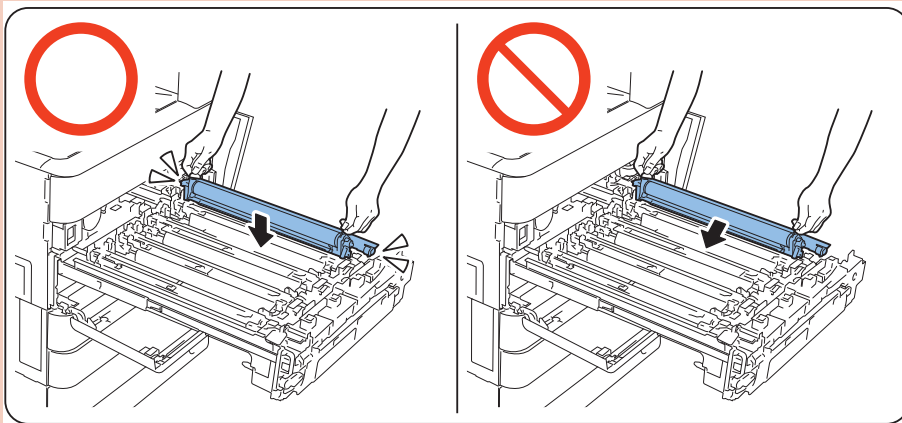


NOTE:  
Hold the handles at right and left of the Drum Unit.



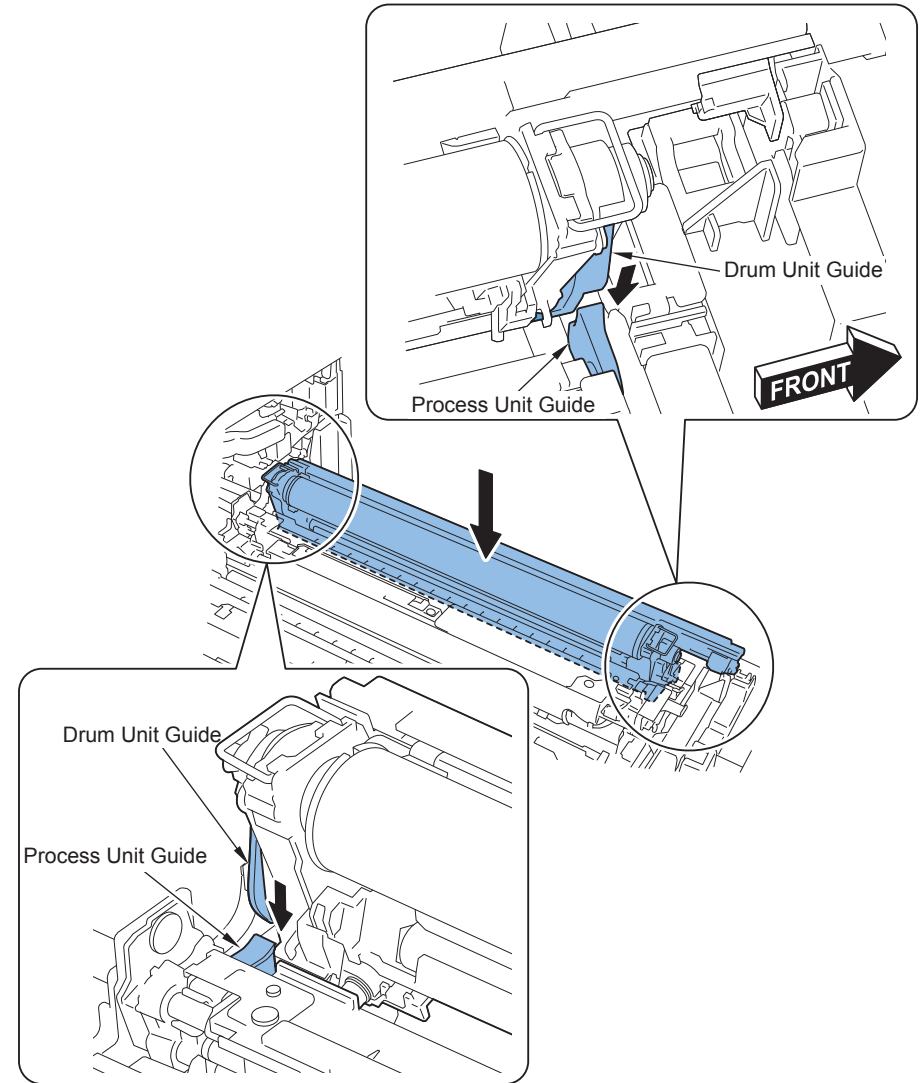
F-9-35

CAUTION:  
If pushing it in the angle, the shutter may break. Thus make sure to install it from just above.



F-9-36

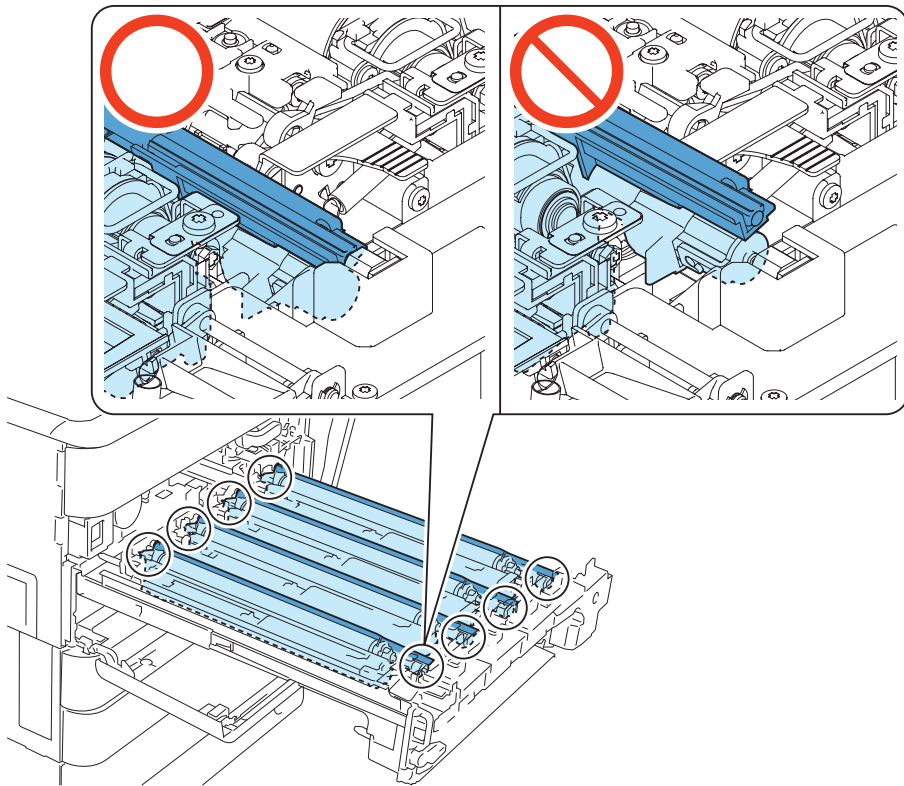
- 11) Fit the guide of the Process Unit to the guide of the Drum Unit to install the Drum Unit.



F-9-37



- 12) Check that the 8 LED light-receiving areas of the Drum Unit are not off from the base.

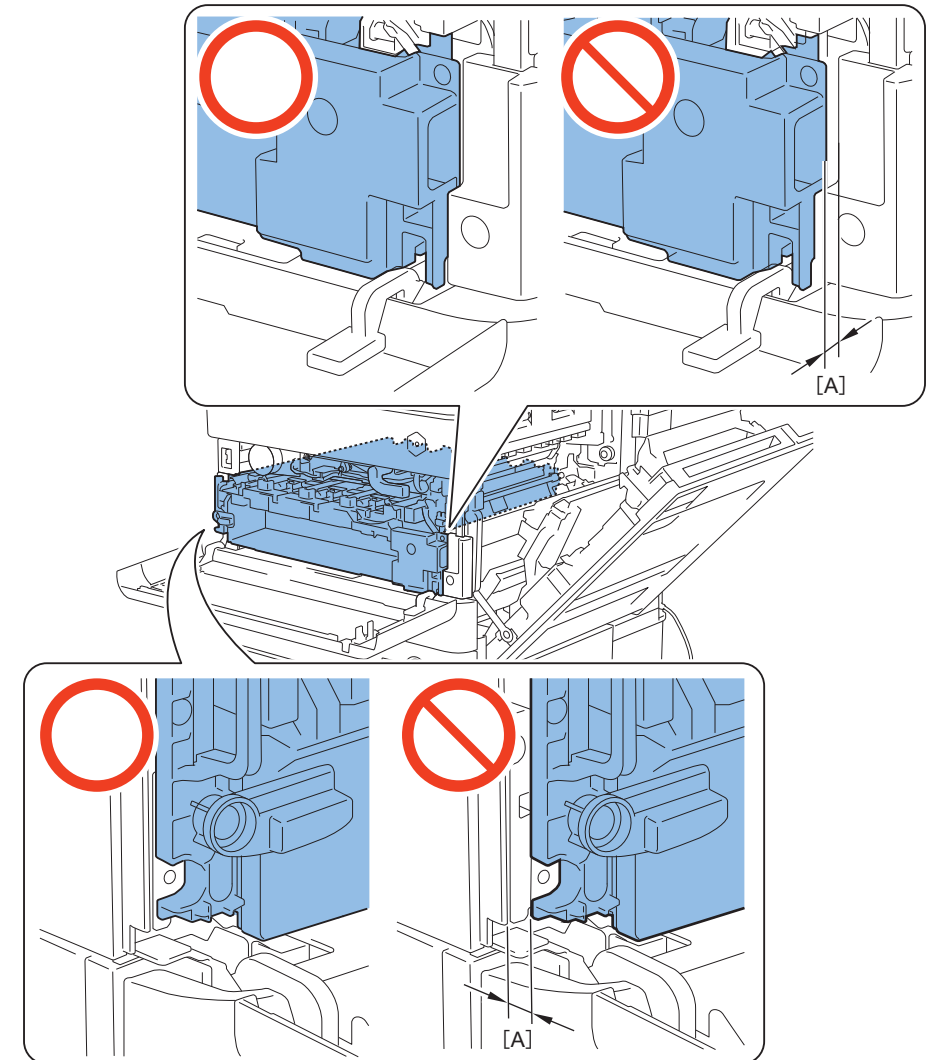


F-9-38

- 13) Put the Process Unit back to the host machine, and secure with the 2 screws.

**CAUTION:**

Check that there is no gap between [A] the host machine and the Process Unit, and then secure with the screw.

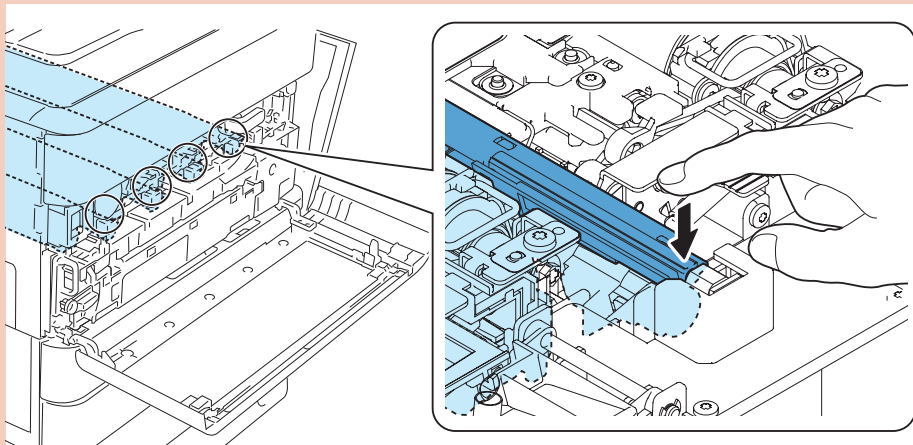


F-9-39

**CAUTION:**

After closing the Process Unit, hold the edge of each Drum Unit from above as described below.

If the Drum Unit is not secured, it may cause the image failure.



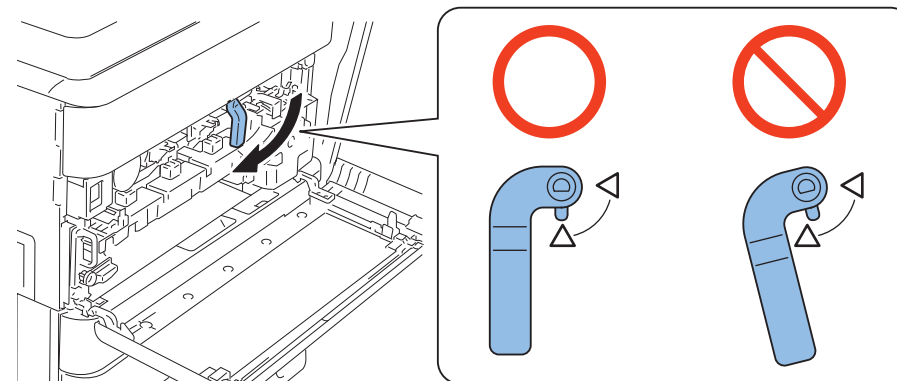
F-9-40



- 14) Turn the ITB Pressure Release Lever in the direction of the arrow, and then fit the projection to the triangle mark on the plate to apply pressure.

**CAUTION:**

When pressuring the ITB Pressure Release Lever, be sure that the Right Lower Cover is opened first before pressuring.



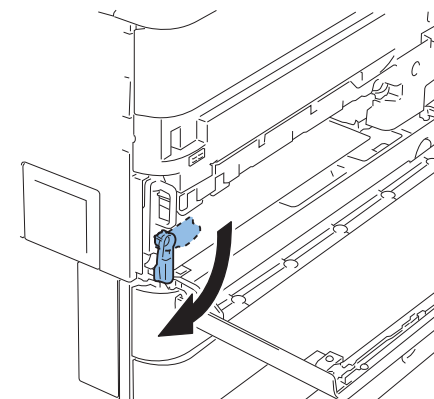
F-9-41



- 15) Install the ITB Cover, and tighten the 2 screws (which have been loosened).

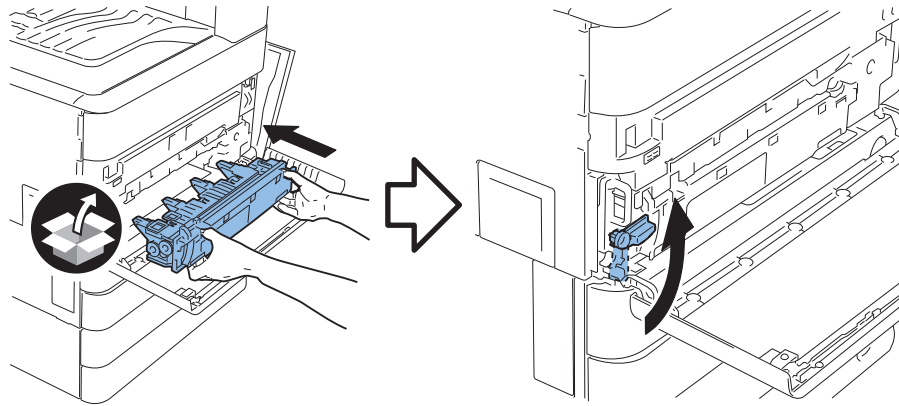


- 16) Release the Waste Toner Lock Lever.



F-9-42

- 17) Set the Waste Toner Container, and then put the Lever back.



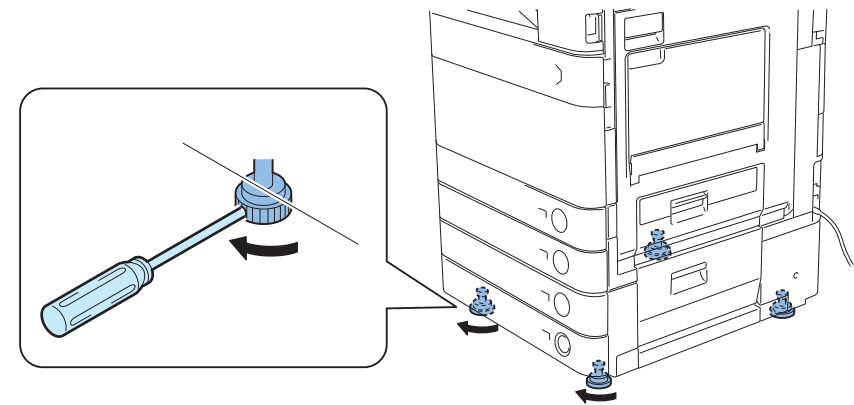
F-9-43

- 18) Close the Right Lower Cover, the Right Upper Cover, and the Front Cover.

## Fixing the Machine in Place

- <In the case that the pedestal is installed>  
1) Move the main body to the installation position, and secure it in place with the 4 adjusters.

**NOTE:**  
Securing of the adjuster is not earthquake resistant.



F-9-44

## Setting the Environment Heater Switch

### CAUTION:

In case that the setting environment is high humidity environment (\*), turn on the Environment Heater Switch.

When the temperature and humidity of the installation environment are high, image smear is likely to occur.

\* This is the case that the value of the absolute water volume outside of the machine is about 12g or more.

Service Mode (Level1) > COPIER > DISPLAY > ANALOG > ABS-HUM

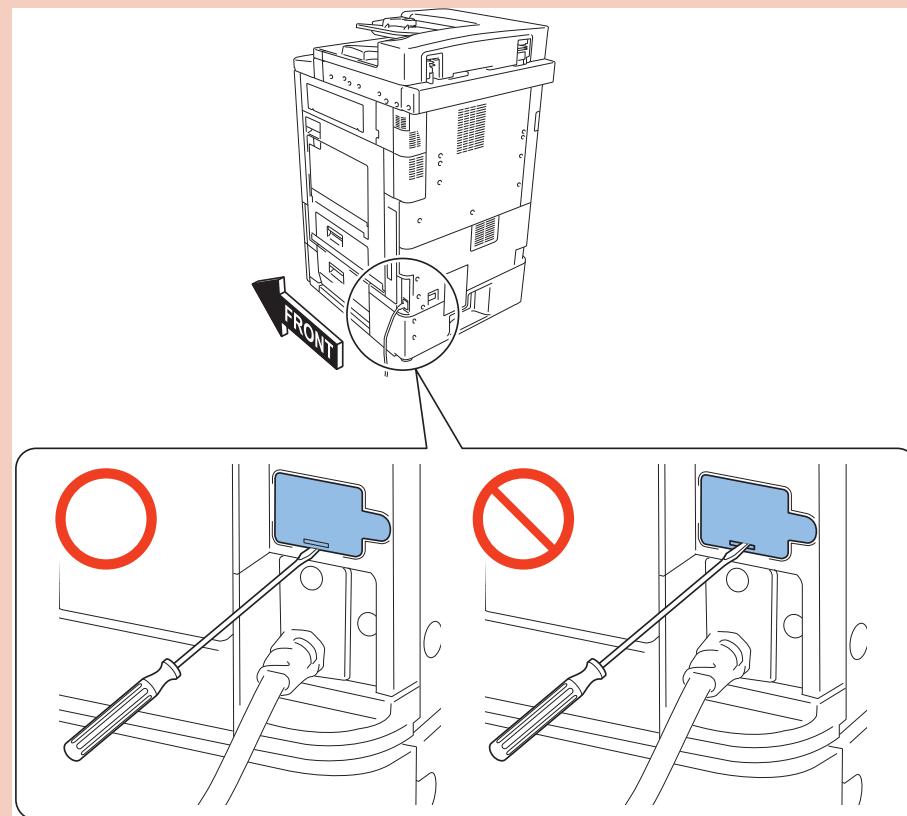
In case the Environment Heater Switch Cover is included in the package, turn the Environment Heater Switch ON and then install the Environment Heater Switch Cover.



1) Remove the Environment Heater Switch Cover.

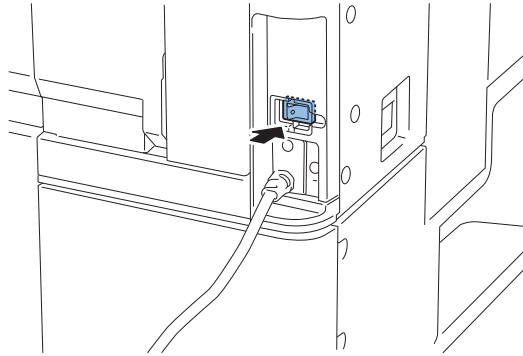
### CAUTION:

When removing the cover, do not insert a screwdriver in the oval hole.



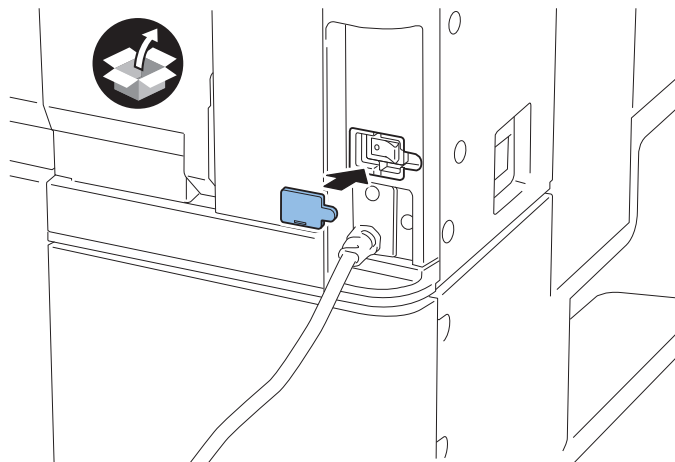
F-9-45

- 2) Turn ON the Environment Heater Switch.



F-9-46

- 3) Install the Environment Heater Switch Cover.



F-9-47

## Turning the Main Power ON / Setting the Toner Container

### NOTE:

Only for AUS and CHINA, the Toner Container is installed on the host machine.

- 
- 1) Connect the power plug of the host machine to the power outlet.
  - 2) Remove the protection sheet on the control panel.
  - 3) Open the switch cover and turn ON the main power switch.

### NOTE:

- When turning ON the main power, drum initialization and developing assembly initialization are automatically executed.
- In case of the host machine with the Toner Container, toner fill is executed in a row.
- Even turning OFF the main power during drum initialization, developing assembly initialization and toner fill, they will be re-executed when turning ON the power again.

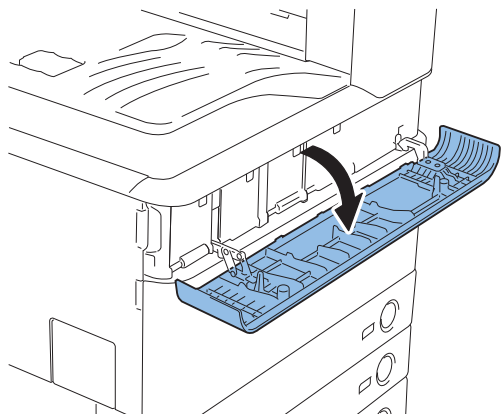
- 4) After activation, follow the instruction in the Control Panel, and press the shut down key in the Control Panel.
- 5) Turn ON the main power switch.
- 6) Enter the following Service Mode, make sure that the setting value is "1".
  - COPIER (Level 1) > OPTION > FNC-SW > W/SCNR
- 7) Set the value of the following Service Mode.
  - COPIER (Level 1) > OPTION > CUSTOM > SCANTYPE
  - Setting Value "0" Color Image Reader Unit-F1/F2
  - Setting Value "1" Duplex Color Image Reader Unit-E1
- 8) Exit the Service Mode.

## NOTE:

- In case of the host machine with the Toner Container, once the machine goes to standby state, drum initialization, developing assembly initialization and toner refill are completed.
- In case of the host machine without the Toner Container, execute the following procedures.



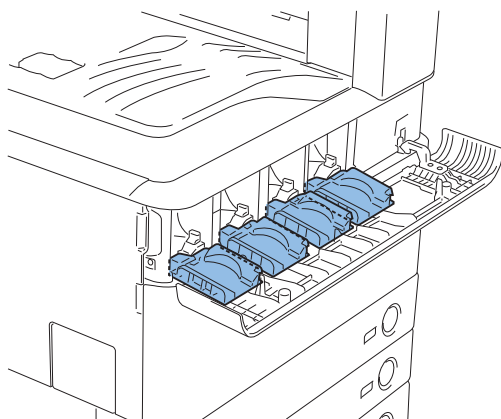
9) Open the Toner Cover.



F-9-48



10) Add check marks to each color displayed on the operation screen, and press [Remove Toner Cartridges] to open the Toner Replacement Cover.



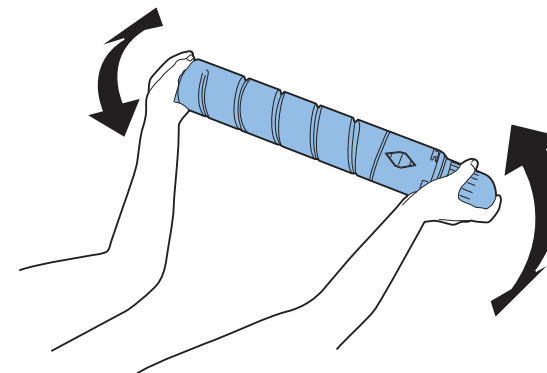
F-9-49

## NOTE:

Step 11) to 13) is to install the Toner Container of each color.



11) Hold the Toner Container as the figure below, and shake it approximately 10 times.



F-9-50



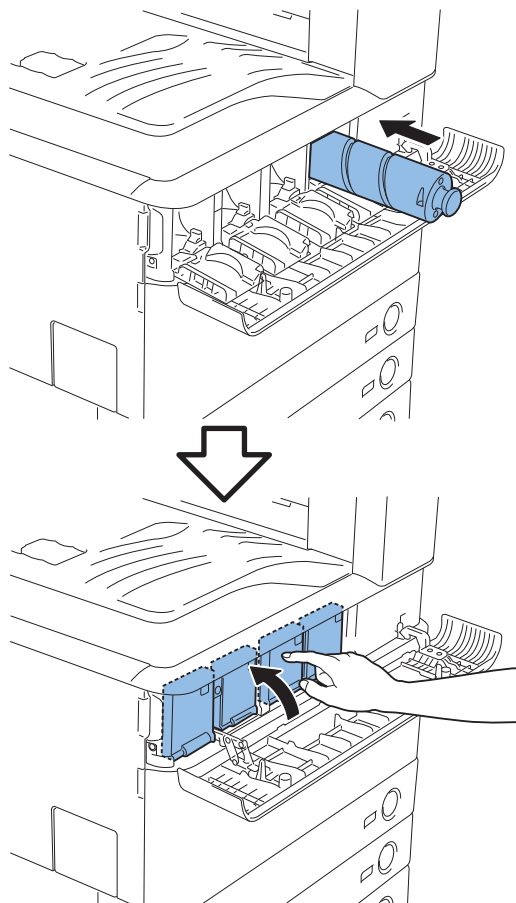
12) Remove the Protection Cap of the Toner Container while rotating it to the direction of the arrow.



F-9-51



13) Insert the Toner Container all the way in, and close the Toner Exchange Cover.



F-9-52



14) Close the Toner Cover.

**NOTE:**

- Toner refill will be executed.
- Once the host machine goes to standby state, drum initialization, developing assembly initialization and toner refill are completed.

## Turning OFF the Main Power Switch



- 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.

## Setting for K Paper (China only)



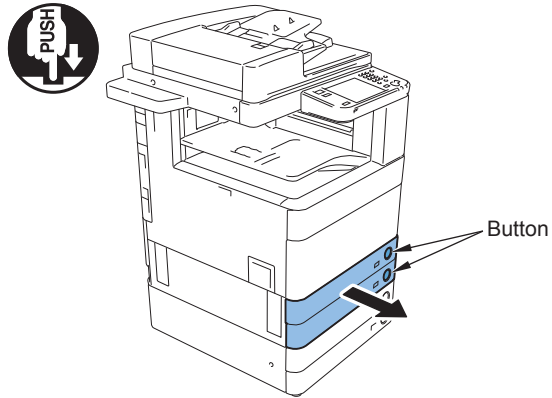
Make the following settings for the use of K paper.

- 1) Enter the service mode (level 2).
- 2) Change from '0' to '1' in COPIER > OPTION > FNC-SW > KSIZE-SW.
- 3) Enter the service mode (level 1).
- 4) Change from '4' to '0' in COPIER > OPTION > FNC-SW > MODEL-SZ.
- 5) Turn OFF/ON the main power switch.



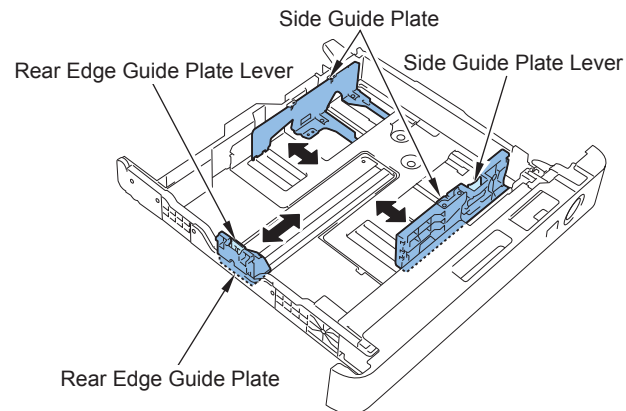
## Cassette Setting

- 1) Press the Cassette Release Button, and pull out the Cassette 1 and 2 toward the front.



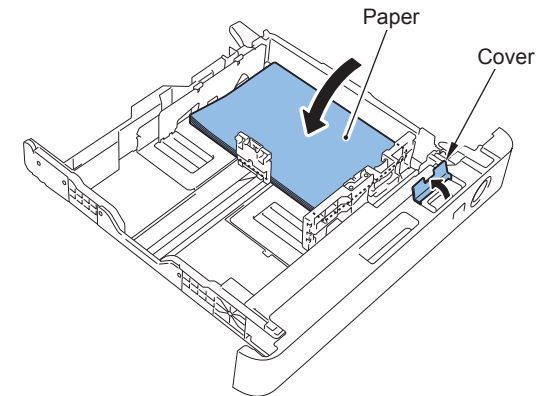
F-9-53

- 2) Hold the Side Guide Plate Lever, and adjust it to the predefined size. At that time, move the Side Guide Plate by referring the size index (label) of the sheet size to be set, and fit it to the slot.
- 3) Hold the Trail Edge Guide Plate Lever, and adjust it to the predefined size. At that time, move the Trail Edge Guide Plate by referring the size index (label) of the sheet size to be set, and fit it to the slot.



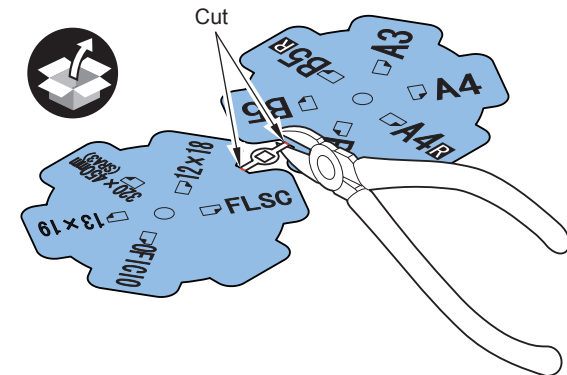
F-9-54

- 4) Set papers.
- 5) Open the cover from which the Size Plate is pushed in.



F-9-55

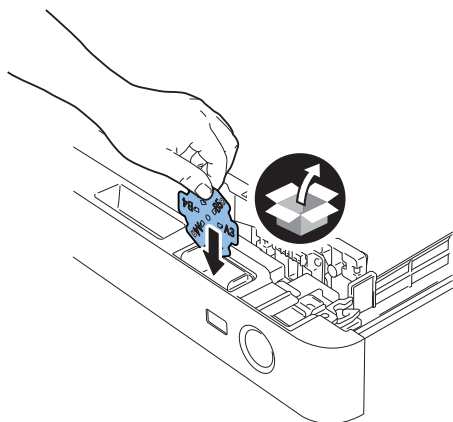
- 6) Cut 2 places of the Size Plate with nippers.



F-9-56



7) Set the Size Plate in accordance with the size being set. (Lump the Size Plates not in use together and store them at the rear.)



F-9-57



8) Close the cover from which the Size Plate is pushed in, and install the cassette.

9) Set the other cassette in the same way.

10) If the cassette pedestal is installed, do the same for the cassette of the cassette pedestal as well.

**NOTE:**

Paper size settings are automatically recognized.

## Checking after the Installation

1) In Service Mode, check the result of Drum Unit initialization.

Make sure that the value of the installed color is [0 to 2].

- Service Mode (Level 1) > COPIER > DISPLAY > HV-ST5 > THCK-Y
- Service Mode (Level 1) > COPIER > DISPLAY > HV-ST5 > THCK-M
- Service Mode (Level 1) > COPIER > DISPLAY > HV-ST5 > THCK-C

**NOTE:**

If an error code [E061-xxxx] is displayed on the screen or the value is not appropriate,

1. Turn OFF the power, refit the Drum Unit and turn On the power again.

2. If the above work does not solve the problem, execute initialization of the Drum Unit for each color in Service Mode.

- Service Mode (Level 1) > COPIER > FUNCTION > DPC > DRMRSETY
- Service Mode (Level 1) > COPIER > FUNCTION > DPC > DRMRSETM
- Service Mode (Level 1) > COPIER > FUNCTION > DPC > DRMRSETC

2) Check the result of initialization of developing toner ratio in Service Mode.

Check that each value is within the range of 32 to 68, and then write down the value on the service label at the rear side of the Front Cover.

- Service Mode (Level 1) > COPIER > ADJUST > DENS > CONT-Y
- Service Mode (Level 1) > COPIER > ADJUST > DENS > CONT-M
- Service Mode (Level 1) > COPIER > ADJUST > DENS > CONT-C
- Service Mode (Level 1) > COPIER > ADJUST > DENS > CONT-K

3) Check the Developing Patch initialization.

Check that each value is within the range of 340 to 640, and then write down the value on the service label at the rear side of the Front Cover.

- Service Mode (Level 1) > COPIER > ADJUST > DENS > SGNL-Y
- Service Mode (Level 1) > COPIER > ADJUST > DENS > SGNL-M
- Service Mode (Level 1) > COPIER > ADJUST > DENS > SGNL-C
- Service Mode (Level 1) > COPIER > ADJUST > DENS > SGNL-K

**NOTE:**

Setting the DADF before executing Auto Adjust Gradation.  
Refer to the "After installation setting" in the "the Duplex Color Image Reader Unit-E1, Color Image Reader Unit-F1/F2 installation procedure".

## Auto Adjust Gradation

Execute auto gradation adjustment the used paper type as needed.

However, when using 2 or more types of paper, it is necessary to execute all the modes corresponding to the types of paper.

**CAUTION:**

When using paper type to which auto gradation adjustment is not executed, image failure or damage on the host machine may occur.

< In the case of imageRUNNER ADVANCE C5240/C5240i/C5235/C5235i >

### In case of Plain Paper

- 1) Clean the glass surface of Copyboard Glass on the host machine.
- 2) Load A3, A4, 11x17 or LTR paper to the cassette. (Refer to the cassette setting.)
- 3) Select [Settings/Registration] > [Adjustment/Maintenance] > [Adjust Image Quality] > [Auto Adjust Gradation] > [Full Adjust].
- 4) Select the pickup source of a test print and press [OK].
- 5) Follow the below UI and perform the operation.

### In case of Heavy

- 1) Clean the glass surface of Copyboard Glass on the host machine.
- 2) Load the heavy paper to the cassette.
- 3) Select [Settings/Registration] > [Adjustment/Maintenance] > [Adjust Image Quality] > [Auto Adjust Gradation] > [Heavy] > [Full Adjust].
- 4) Select the pickup source of a test print and press [OK].
- 5) Follow the below UI and perform the operation.

< In the case of imageRUNNER ADVANCE C5255/C5255i/C5250/C5250i >

### In case of Plain Paper

- 1) Clean the glass surface of Copyboard Glass on the host machine.
- 2) Load A3, A4, 11x17 or LTR paper to the cassette. (Refer to the cassette setting.)
- 3) Select [Settings/Registration] > [Adjustment/Maintenance] > [Adjust Image Quality] > [Auto Adjust Gradation] > [Full Adjust].
- 4) Select the pickup source of a test print and press [OK].
- 5) Follow the below UI and perform the operation.

### In case of Heavy1/Heavy2

- 1) Clean the glass surface of Copyboard Glass on the host machine.
- 2) Load the heavy paper to the cassette.
- 3) Select [Settings/Registration] > [Adjustment/Maintenance] > [Adjust Image Quality] > [Auto Adjust Gradation] > [Heavy1/Heavy2] > [Full Adjust].
- 4) Select the pickup source of a test print and press [OK].
- 5) Follow the below UI and perform the operation.

### In case of Heavy3

- 1) Load the heavy paper to the Multi-purpose Tray.
- 2) Select [Settings/Registration] > [Adjustment/Maintenance] > [Adjust Image Quality] > [Auto Adjust Gradation] > [Heavy3] > [Full Adjust].
- 3) Select the pickup source of a test print and press [OK].
- 4) Follow the below UI and perform the operation.

## Execute the ITB Equilibrium Position Detection

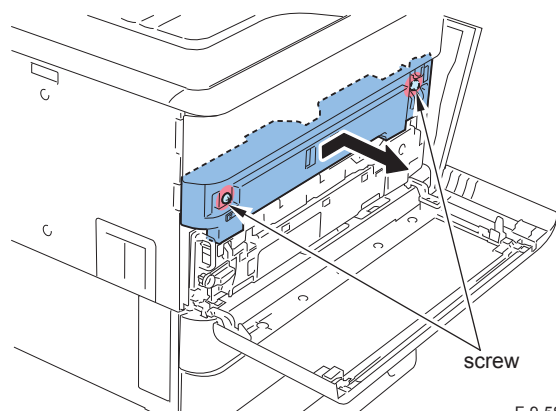
- 
- 1) Check that the main body is in standby state.
  - 2) Execute the ITB Equilibrium Position Detection Service Mode (Level 1).
    - COPIER > FUNCTION > MISC-P > ITB-INIT  
imageRUNNER ADVANCE C5240/C5240i/C5235/C5235i: Approx. 4 to 8 minutes  
imageRUNNER ADVANCE C5255/C5255i/C5250/C5250i: Approx. 3 to 6 minutes
  - 3) Check that the value of the following service mode (Level 1) is "-350 to +350".
    - COPIER > DISPLAY > MISC > ITB-POS
    - COPIER > DISPLAY > MISC > ITB-POS2
  - 4) If the value of service mode is out of range, perform the [ITB Alignment Adjustment].

### NOTE:

Since this product is not affected by the tilt of floor, adjustment of the adjuster height is not valid.  
Therefore, if it is out of the range, perform "ITB alignment adjustment".

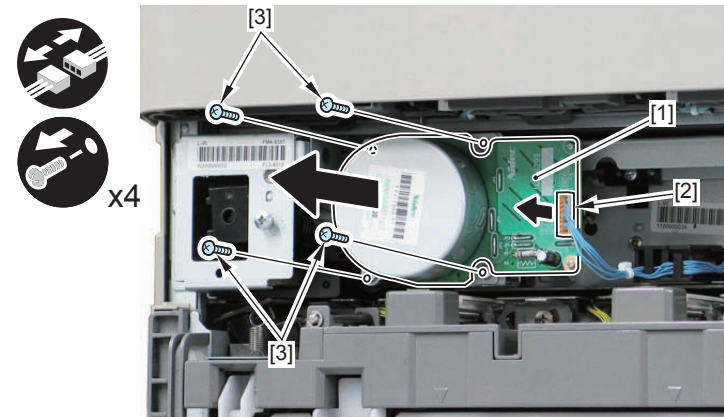
## ITB Alignment Adjustment

- 
- 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.
- 
- 3) Open the Front Cover and remove the ITB Cover.
    - 2 Screws (Loosen)



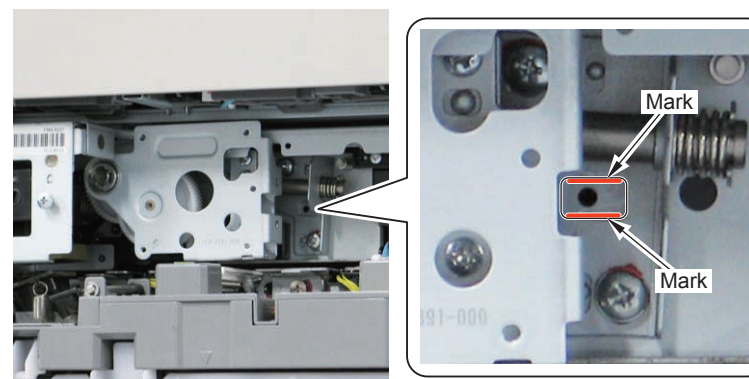
F-9-58

- 
- 4) Remove the ITB Motor [1].
    - 1 Connector [2]
    - 4 Screws [3]



F-9-59

- 
- 5) Put markings as shown in the figure below to use as the reference when correcting the position.

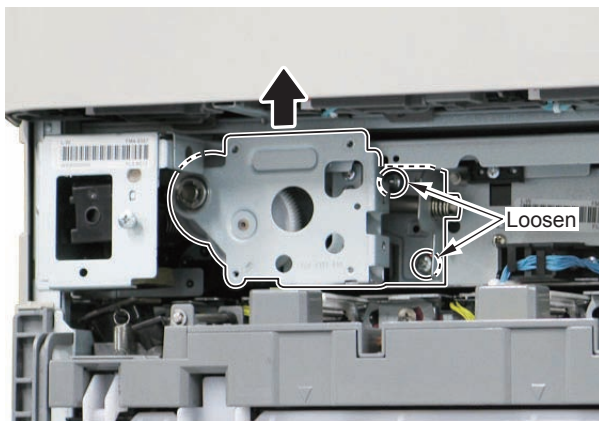


F-9-60

- 6) Loosen 2 screws and move the ITB Motor Support Plate up or down.  
Moving it by 1 mm changes the values of ITB-POS and ITB-POS2 by approx. 200.

<When the values are above +350>

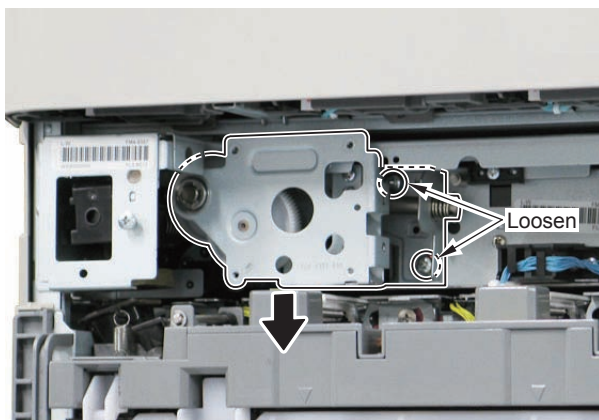
Move the ITB Motor Support Plate up.



F-9-61

<When the values are below -350>

Move the ITB Motor Support Plate down.



F-9-62

- 7) Tighten 2 screws loosened on the previous step.
- 8) Install the ITB Motor. (4 Screws, 1 Connector)
- 9) Install the ITB Cover (2 screws) and close the Front Cover.
- 10) Connect the power plug of the host machine to the power outlet.
- 11) Open the switch cover and turn ON the main power switch.
- 12) Execute the ITB Equilibrium Position Detection Service Mode (Level 1).
- COPIER > FUNCTION > MISC-P > ITB-INIT
  - imageRUNNER ADVANCE C5240/C5240i/C5235/C5235i: Approx. 4 to 8 minutes
  - imageRUNNER ADVANCE C5255/C5255i/C5250/C5250i: Approx. 3 to 6 minutes
- 13) Check that the value of the following service mode (Level 1) is "-350 to +350".
- COPIER > DISPLAY > MISC > ITB-POS
  - COPIER > DISPLAY > MISC > ITB-POS2
- 14) If the value of service mode is out of range, perform the [ITB Alignment Adjustment] again.

## Adjusting Image Position

### NOTE:

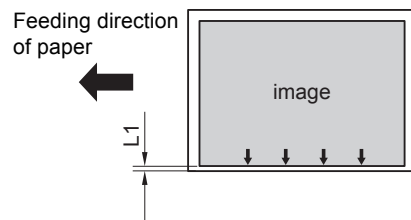
The second side of the 2-sided copy mentioned later means the second side in the image formation order.

With this equipment, the second side in the image formation order at the time of 2-sided copy/print is equivalent to the first side of the original.

### Margin Adjustment (1st side; Mechanical Adjustment)



- 1) Make copies using the Cassette 1 and 2, and check that the left edge margin is 2.5+/- 1.5mm.



F-9-63

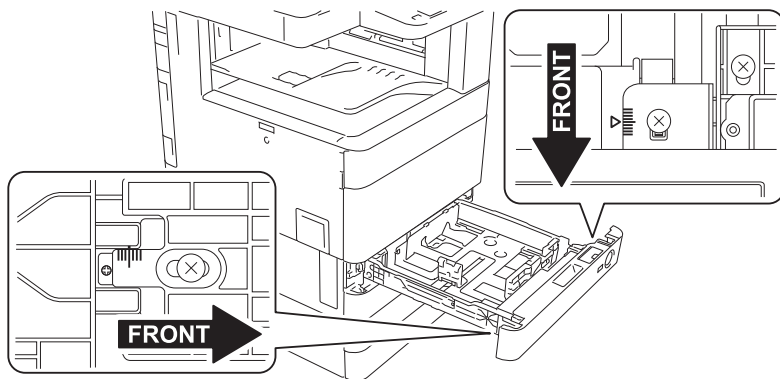


<In Case of Nonstandard>

### NOTE:

Adjustment method is same for both the Cassette 1 and 2.

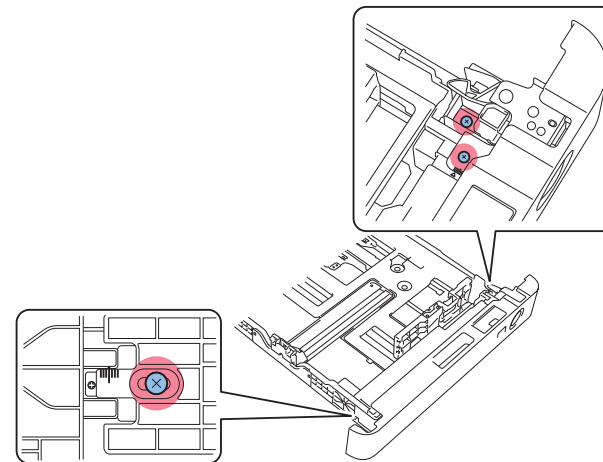
- 2) Pull out the cassette.  
3) Check the 2 scale positions on the adjusting plates.



F-9-64



- 4) Loosen the 3 fixing screws.

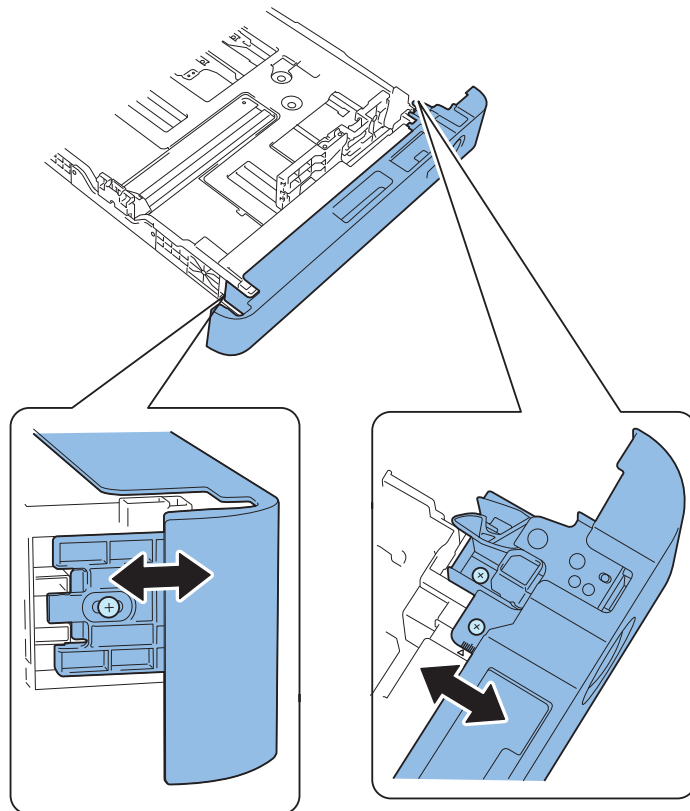


F-9-65



- 5) Move the adjusting plates back and forth by referring the scale checked in the step 3). As moving the adjusting plate toward the rear by 1 scale, the left edge margin becomes 1mm smaller.

NOTE:  
When moving the scale, be sure that the amount of the value to be moved are the same for the 2 points.

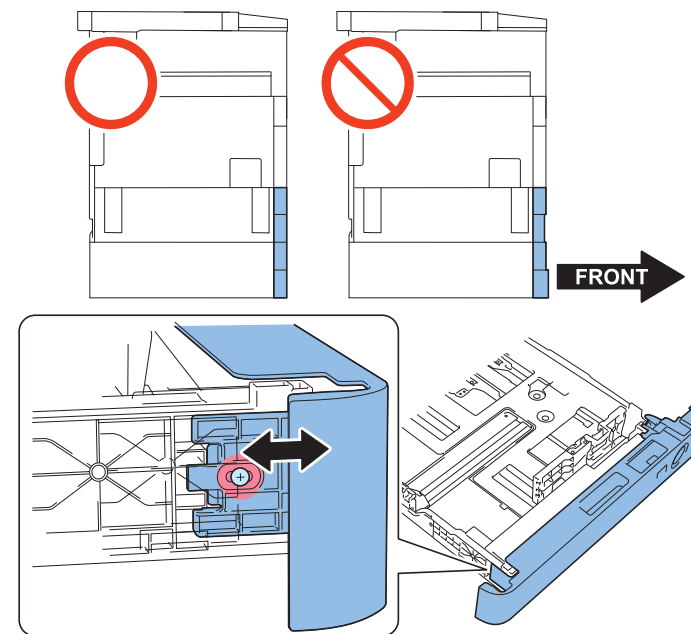


F-9-66

- 6) Tighten the fixing screw.  
7) Return the cassette to its original position.]

□

NOTE:  
When the cassette positions are uneven due to the mechanical adjustment, adjust them by loosening the screw at left side.



F-9-67

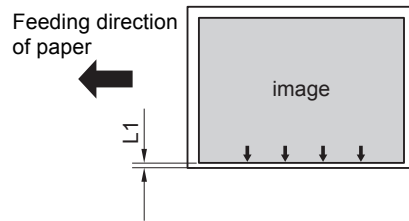
- 8) Make copies using the Cassette 1 and 2, and check that the left edge margin is 2.5+/- 1.5mm.



## Margin Adjustment (2nd side)



1) Make 2-sided copy from cassette 1, and check that the left margin is 2.5 +/- 2.0mm.



F-9-68



2) If the left margin is out of the specification, change the adjustment value for the left margin on the 2nd side in cassette 1.

Service Mode (Level 1) > COPIER > ADJUST > FEED-ADJ > ADJ-C1RE; 1 increment of the value reduces the left margin by 0.1mm

3) As for the adjustment value for side registration on the 2nd side in cassette 2, enter the same value as the adjustment value for the left margin on the 2nd side in cassette 1.

Service Mode (Level 1) > COPIER > ADJUST > FEED-ADJ > ADJ-C2RE

4) To make the setting value effective, turn OFF/ON the main power of the Host Machine.

5) Make 2-sided copy from cassette 2, and check that the left margin is 2.5 +/- 2.0mm.

6) If the margin is out of the specification, change the adjustment value for the left margin on the 2nd side in cassette 2.

Service Mode (Level 1) > COPIER > ADJUST > FEED-ADJ > ADJ-C2RE; 1 increment of the value reduces the left margin by 0.1mm.

7) Write down the new adjustment value on the service label.

- ADJ-C1RE
- ADJ-C2RE

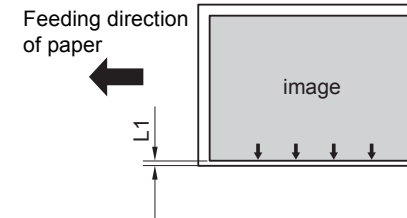
8) Exit from Service Mode.

## Margin Adjustment with Multi Purpose Tray (1st side; mechanical adjustment)



1) Place paper on the Multi Purpose Tray. See the label on manual feed area to place paper.

2) Make copy from the Multi Purpose Tray, and check that the left margin is 2.5 +/- 1.5mm.



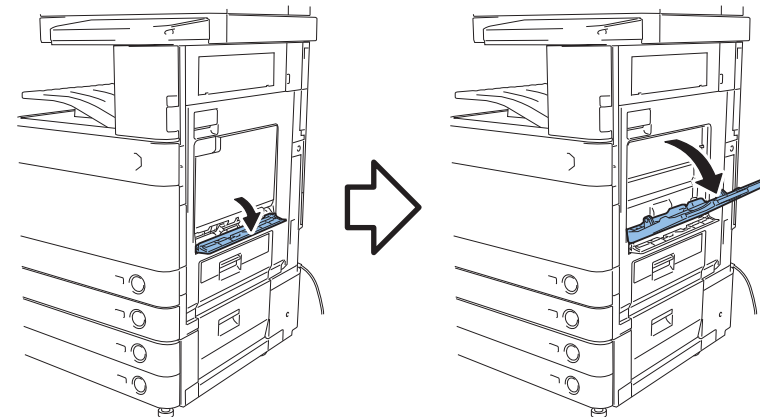
F-9-69



<In the case that the left margin is out of specification>

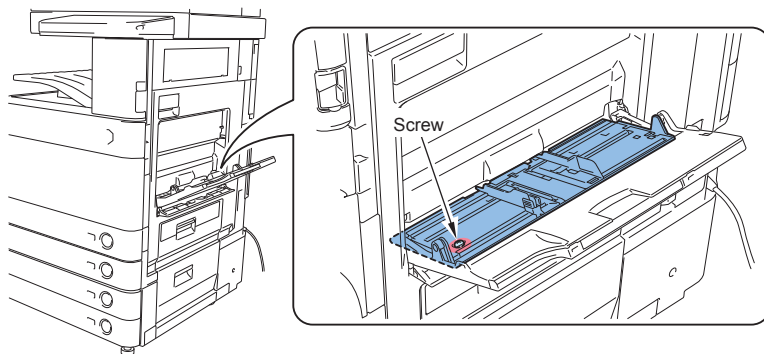
3) Remove paper on the Multi Purpose Tray.

4) Open the Multi Purpose Tray in the condition where the Multi Purpose Tray Sub Cover is opened.



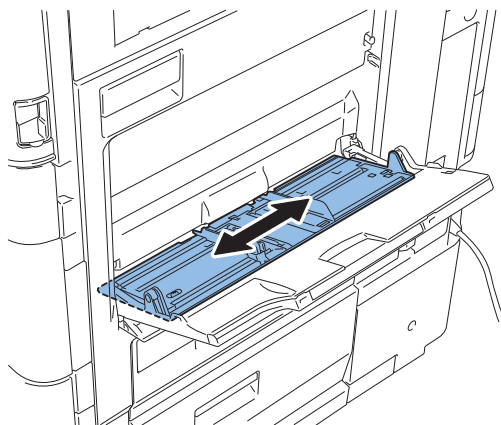
F-9-70

- 5) Loosen the fixing screw for the Multi Purpose Tray Upper Cover.



F-9-71

- 6) Move the Multi Purpose Tray Upper Cover back and forth according to the value confirmed in step 2). Moving the Multi Purpose Tray Upper Cover to the rear of this equipment increases the left margin.



F-9-72

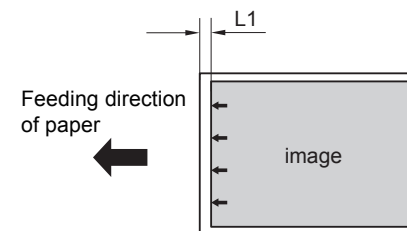
- 7) Tighten the fixing screw for the Multi Purpose Tray Upper Cover.  
8) Place paper on the Multi Purpose Tray.  
9) Make copy from the Multi Purpose Tray, and check that the left margin is 2.5 +/- 1.5mm.

## Margin Adjustment with Multi Purpose Tray (2nd side)

- 1) Make 2-sided copy from the manual feed tray, and check that the left margin on the 2nd side is 2.5 +/- 2.0mm.  
2) If the left margin is out of the specification, change the adjustment value for the left margin on the 2nd side from the Multi Purpose Tray.  
Service Mode (Level 1) > COPIER > ADJUST > FEED-ADJ > ADJ-MFRE ; 1 increment of the value reduces the left margin by 0.1mm.  
3) To make the setting value effective, turn OFF/ON the main power of the Host Machine.  
4) Write down the new adjustment value on the service label.  
ADJ-MFRE

## Lead-edge Margin Adjustment (1st side)

- 1) Make copy from cassette 1, and check that the lead-edge margin is  $L1 = 4.0 + 1.5/-1.0$  mm. If the lead-edge margin is out of the specification, go through the following steps to make adjustment.



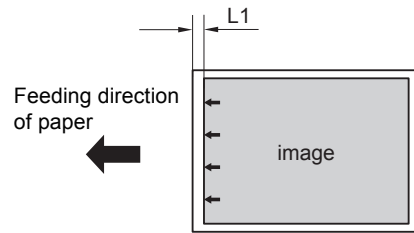
F-9-73

- 2) Select the following in Service Mode (Level 1) : COPIER > ADJUST > FEED-ADJ > REGIST  
3) Change the setting value to make adjustment (1 increment of the setting value reduces the lead-edge margin by 0.1mm)  
4) To make the setting value effective, turn OFF/ON the main power of the Host Machine.  
5) Write down the new adjustment value on the service label.  
• REGIST

## Lead-edge Margin Adjustment (2nd side)



- 1) Make 2-sided copy from cassette 1, and check that the lead-edge margin on the 2nd side is  $L1 = 4.0 + 1.5/-1.0$  mm. If the lead-edge margin is out of the specification, go through the following steps to make adjustment.



F-9-74



- 2) Select the following in Service Mode (Level 1): COPIER > ADJUST > FEED-ADJ > REG-DUP1
- 3) Change the setting value to make adjustment (1 increment of the setting value reduces the lead-edge margin by 0.1mm)
- 4) To make the setting value effective, turn OFF/ON the main power of the Host Machine.
- 5) Write down the new adjustment value on the service label.
- REG-DUP1

## Installing Other Parts

### <Service Book Holder>



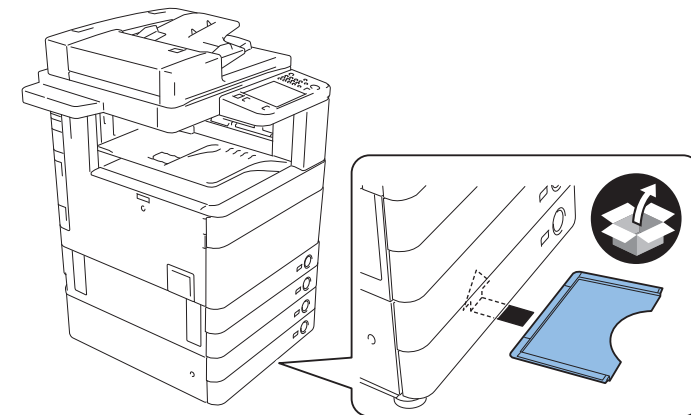
- 1) Remove the double-stick tape detachment paper on the rib area of the Service Book Holder, and attach the Service Book Holder to the Pedestal Bottom Plate.

**CAUTION:** Do not attach the Service Book Case to the following location:

- Inside the machine (inner side of the front cover)
- Anywhere that blocks the louver area
- Anywhere that blocks the grip area

### NOTE:

In the case of machine configuration without the cassette pedestal, attach the Service Book Case to the Left Cover of this main unit.



F-9-75

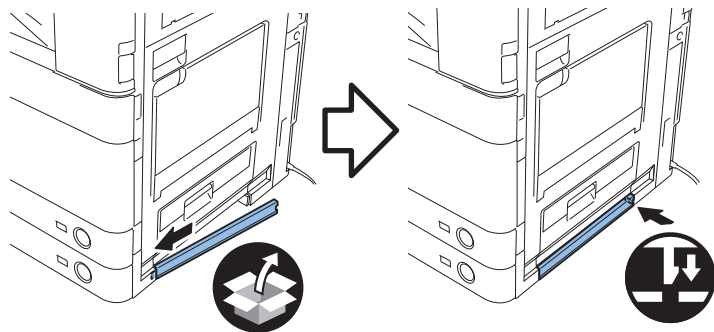
## &lt;Right Lower Sub Cover 1&gt;



1) Install the Right Lower Sub Cover 1.

(Perform this step in the case that the cassette pedestal is not installed)

- 2 claws



F-9-76

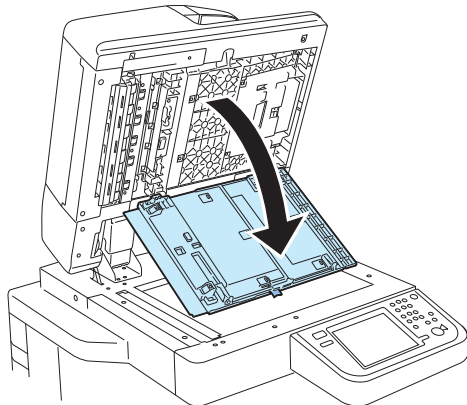
## &lt;Stamp Cartridge&gt;

[In the case of Duplex Color Image Reader Unit-E1]



1) Open the DADF.

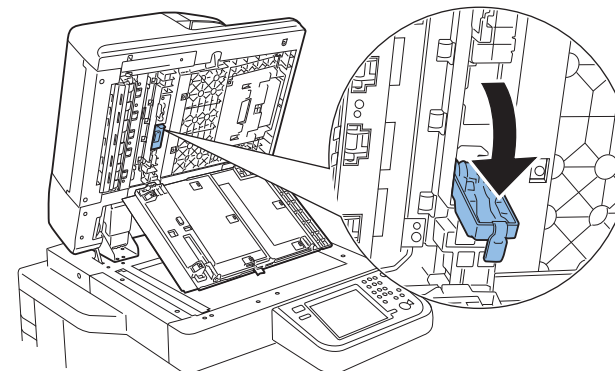
2) Pull the lever at upper area of the DADF, and open the cover of the DADF reading area.



F-9-77



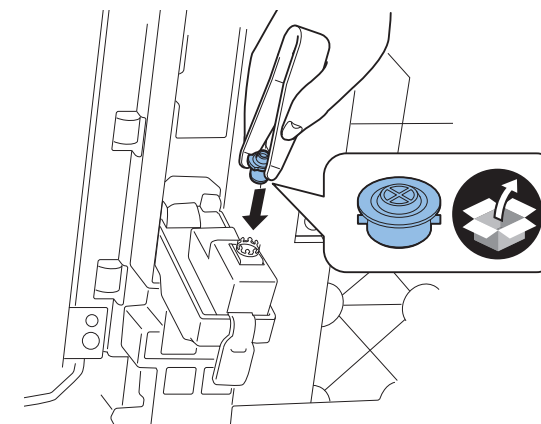
3) Open the Stamp Cover.



F-9-78



4) Using tweezers, install the Stamp Cartridge with its stamp side faces up.



F-9-79



5) Close the Stamp Cover.

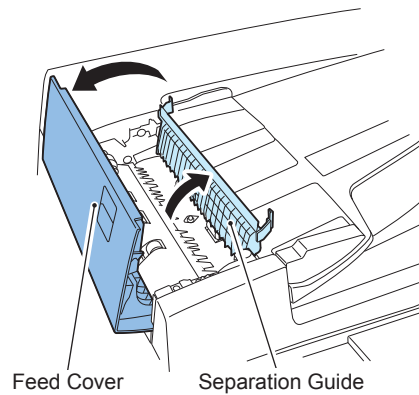
6) Close the cover of the DADF reading area.

7) Close the DADF.

[In the case of Color Image Reader Unit-F1]



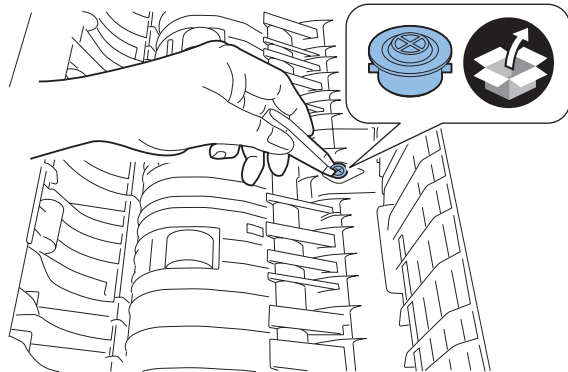
1) Open the Feed Cover and the Separation Guide of the DADF.



F-9-80



2) Using tweezers, install the Stamp Cartridge with its stamp side faces up.



F-9-81



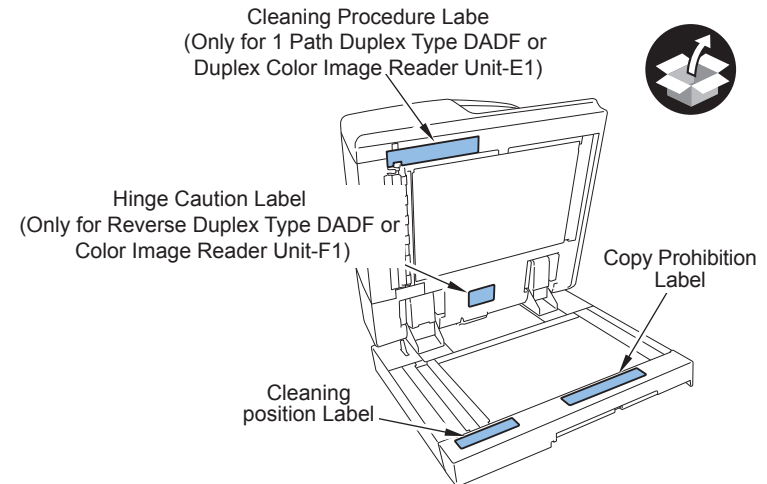
3) Close the Separation Guide and the Feed Cover of the DADF.

< Affixing the Label (DADF model only) >



1) Affix the labels according to the location after removing the existing ones.

- Hinge Label
- Cleaning Position Label
- Copy Prohibition Label
- Cleaning Procedure Label (1 Path Duplex Type DADF)
- Hinge Caution Label (Reverse Duplex Type DADF)



Hinge Label  
(Only for 1 Path Duplex Type DADF or  
Duplex Color Image Reader Unit-E1)

Hinge Label  
(Only for Reverse Duplex Type DADF or  
Color Image Reader Unit-F1)

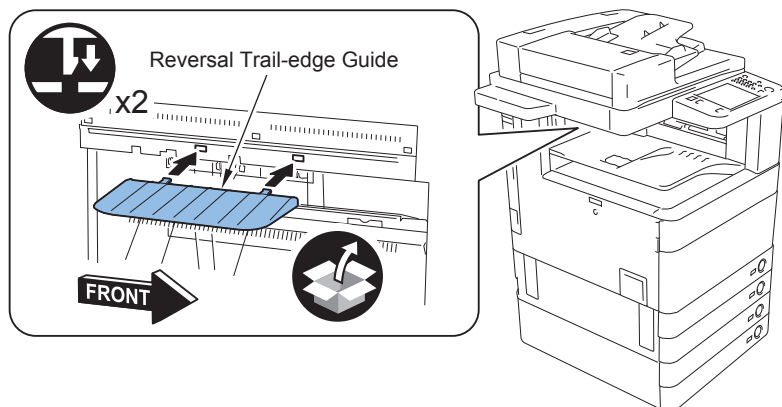
F-9-82

## &lt;Reversal Trail-edge Guide&gt;



1) Install the Reversal Trail-edge Guide to the delivery assembly.

- 2 claws



F-9-83

## Checking Network Connection

### Overview

If the user network environment is TCP/IP, use Ping function to check that the network setting is properly executed.

If the user network environment is IPX/SPX or Apple Talk, skip this procedure.

### Checking Network Connection

#### CAUTION:

Use the network cable of rank 5e or higher. In addition, use of shield type (STP cable) is recommended.

When non-shield type (UTP cable) is used, the surrounding electronic equipments may be interfered via 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 the installation of the host machine is complete, and ask for network connection of the host machine.

#### NOTE:

Network setting cannot be executed unless logging in as an administrator. Factory default password is as follows.

- System administration division ID: 7654321
- System administration password: 7654321

#### CAUTION:

Following setting needs to be ON to perform network setting:

- [Settings/Registration] > [Preferences] > [Network] > [Confirm Network Connection Set. Changes]
- [Settings/Registration] > [Preferences] > [Network] > [TCP/IP Settings] > [IPv4 Settings] > [Use IPv4]

- 4) Turn OFF the main power switch.
- 5) Turn ON the main power switch.

## ■ Ping Operation Procedure

- 1) Select [Settings/Registration] > [Preferences] > [Network] > [TCP/IP Settings] > [IPv4 Settings] > [PING Command].
- 2) Enter IP address with numeric keypad on the control panel and press "Start" key. "Response from the host" is displayed if Ping operation is successful. "No response from the host" is displayed if Ping operation fails.

## ■ Checking with Remote Host Address

You can check whether the network is connected or not by using remote host address to execute Ping.

Remote host address: IP address of PC terminal that is connected to/works with TCP/IP network environment, which connects to this host machine.

- 1) Inform the system administrator to execute checking of network connection using Ping.
- 2) Check the remote host address with the system administrator.
- 3) Enter the remote host address to PING.
  - "Response from the host": The machine is properly connected to the network.
  - "No response from the host": Execute the following troubleshooting because the machine is not connected to the network.

## ● Troubleshooting of Network

### ■ Checking Connection of the Network Cable

Check that the network cable is properly connected to the Ethernet port.

### ■ Ping Operation Procedure

Ask the network administrator at the user's site to note the IP address of the PC that is connected to the network.

Select: [Settings/Registration] > [Preferences] > [Network] > [TCP/IP Settings] > [IPv4 Settings] > [PING Command], and enter the IP address of PC with the numeric keypad, and then press "Execute" key.

If the display shows "Response from the host", the network connection is properly functioning.

If the display shows "No response from the host", go to the next step for another checking.

#### NOTE:

Checking of IP address of PC is available by the procedure below:

On Windows PC, go through the following: Start > Program > Accessory > Command Prompt, and enter ipconfig and press the Enter key. IP address information will be displayed.

### ■ Checking Network Setting of the Host Machine

Check if the IP address specified on the host machine is correct. Select the following: [Settings/Registration] > [Preferences] > [Network] > [TCP/IP Settings] > [IPv4 Settings] > [IP Address Settings], and note the IP address in the IP Address field. Select the following: [Settings/Registration] > [Preferences] > [Network] > [TCP/IP Settings] > [IPv4 Settings] > [PING Command], and enter the IP address. If the display shows "Response from the host", the IP address specified on the host machine is correct. If the display shows "No response from the host", go to the next step for another checking.

#### NOTE:

When entering an address by manual operation, set the Subnet Mask according to the instructions of the user administrator.



## ■ Checking Network Function on the Main Controller

Check with the loopback address:

Select: [Settings/Registration] > [Preferences] > [Network] > [TCP/IP Settings] > [IPv4 Settings] > [PING Command], and enter the IP address "127.0.0.1" with the numeric keypad and press the Execute key.

If the display shows "Response from the host", the network of the main controller is properly functioning.

If the display shows "No response from the host", the network function of the main controller is faulty.

Replace with a main controller that works properly, and the check connection.

## ● Settings to enable "Access Management System" (North/Middle/South America and Europe only)

This setting needs to be made to enable Access Management System.

Upon user's request, make this setting.

Press Counter button, and check that "ACCESS MANAGEMENT SYSTEM" is displayed on [Check Device Configuration] screen. If it is displayed, there is no need to make this setting.

<Checking method>

### CAUTION:

Even if the setting is changed, "ACCESS MANAGEMENT SYSTEM" is not displayed on [Check Device Configuration] screen if SSO-H has not been selected as login service.

- 1) Press Counter button, and check the controller version displayed on [Check Device Configuration] screen.
    - The version is "16XX.XXXX.XXX\*" or earlier: Go to "Setting method in service mode"
    - The version is "1700.XXXX.XXX\*" or later: Go to "Setting method from Settings/Registration"
- \* "XXXX" differs according to the environment.

<Setting method in service mode>

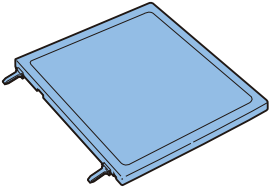
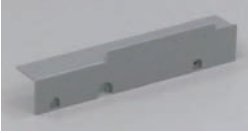
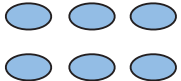


- 1) Enter service mode (Level 1), and set the setting value to "0".
  - COPIER > OPTION > FNC-SW > AMSOFFSW
- 2) Turn OFF and then ON the main power.
- 3) Press Counter button, and then check that "ACCESS MANAGEMENT SYSTEM" is displayed on [Check Device Configuration] screen.

<Setting method from Settings/Registration>

- 1) Select Settings/Registration > [Management Settings] > [License/Other] > [Use ACCESS MANAGEMENT SYSTEM].
- 2) Select [ON], and then press [OK].
- 3) Turn OFF and then ON the main power.
- 4) Press Counter button, and then check that "ACCESS MANAGEMENT SYSTEM" is displayed on [Check Device Configuration] screen.

## Platen Cover Type S

### Checking the Contents

<input type="checkbox"/> [1] Copyboard Cover Unitx1 	<input type="checkbox"/> [2] Reader Controller Cover X 1 	<input type="checkbox"/> [3] Face Seal X 6 
<input type="checkbox"/> [4] ADF Cable Seal X 1 	<input type="checkbox"/> [5] Screw (Binding Round End; M4x8) X 2 	

F-9-84

	When installing to iR-ADV C5255/C5250 (Duplex Color Image Reader Unit)	When installing to iR-ADV C5240/C5235 (Color Image Reader Unit)
Copyboard Cover Unit	Used	Used
Reader Controller Cover	Used	Not used
Face Seal	Use 6 seals	Use 4 seals
ADF Cable Seal	Used	Used
Screw (Binding Round End; M4x8)	Used	Used

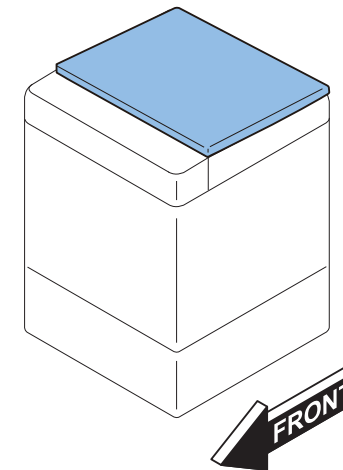
T-9-3

### 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

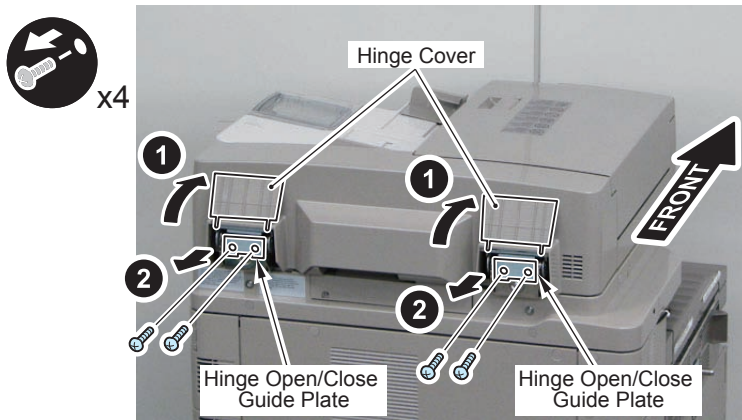


F-9-85

## Installation Procedure

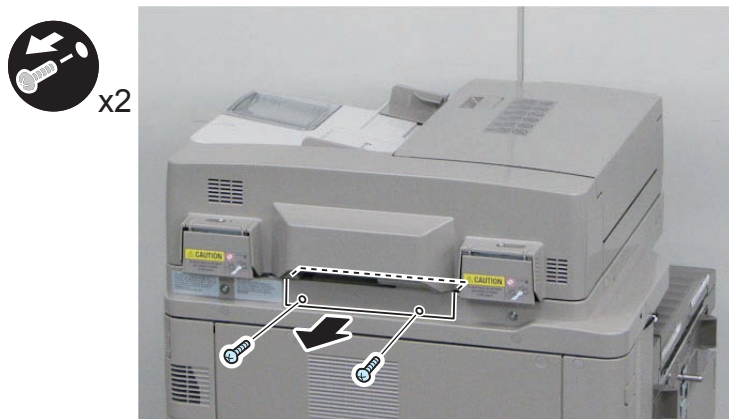
### When installing to iR-ADV C5255/C5250 (Duplex Color Image Reader Unit)

- 1) Open the 2 Hinge Covers, and remove the 2 Hinge Open/Close Guide Plates. (The removed Hinge Open/Close Guide Plates and the screws will not be used.)
- 4 Screws (The removed Screws will not be used.)



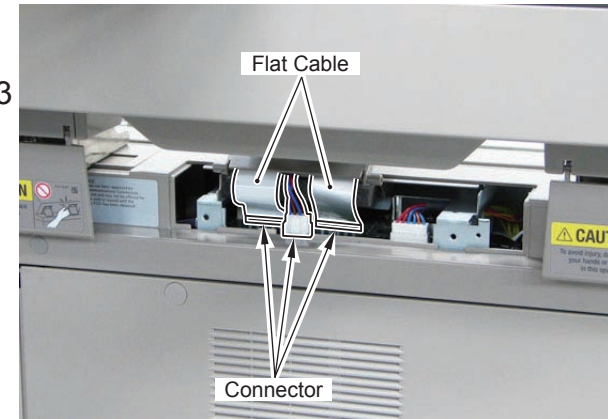
F-9-86

- 2) Remove the Reader Controller Cover. (The removed Reader Controller Cover will not be used.)
- 2 Screws (The removed screws will be used in step 7.)



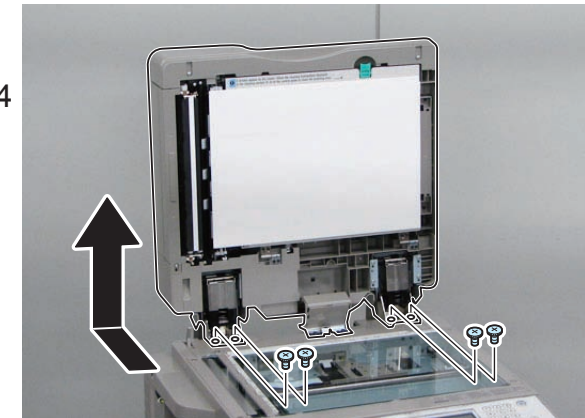
F-9-87

- 3) Disconnect the connector and the 2 connectors of the Flat Cables from the Reader Controller PCB.



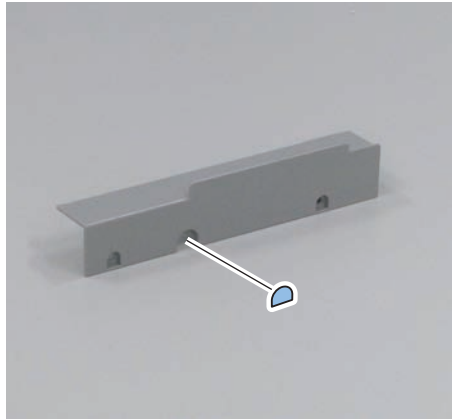
F-9-88

- 4) Open the DADF.
- 5) Remove the DADF.
- 4 Screws (The removed Screws will not be used.)



F-9-89

- 6) Affix the ADF Cable Seal to the Reader Controller Cover included in the package.

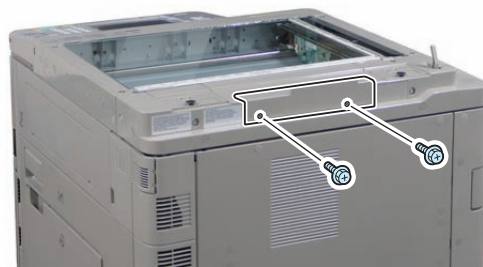


F-9-90

- 7) Install the Reader Controller Cover. (The 2 screws removed in step 2)



x2

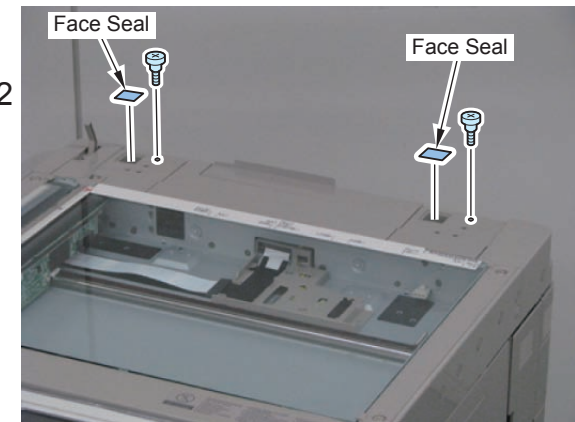


F-9-92

- 8) Remove the 2 Stepped Screws. (The removed Stepped Screws will not be used.)  
9) Remove the 2 Face Seals. (The removed Face Seals will not be used.)



x2

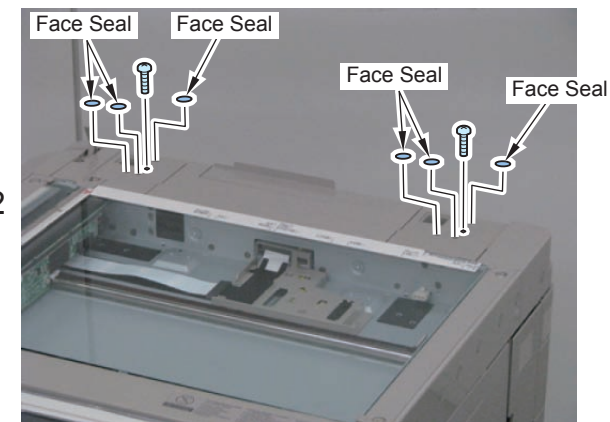


F-9-92

- 10) Tighten the 2 screws (Binding Round End; M4x8).  
11) Affix the 6 Face Seals.

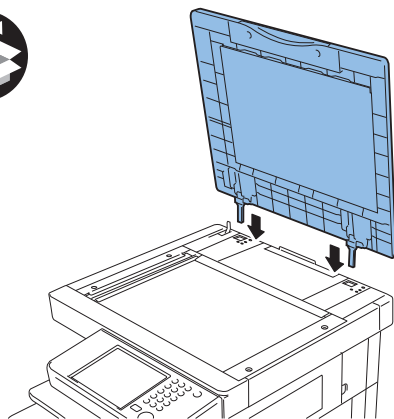


x2



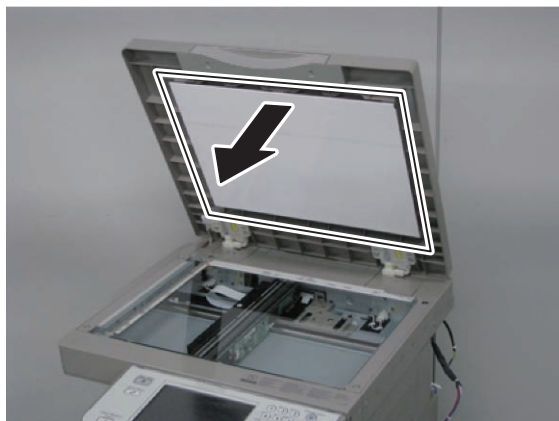
F-9-93

- 12) Install the Copyboard Cover Unit.



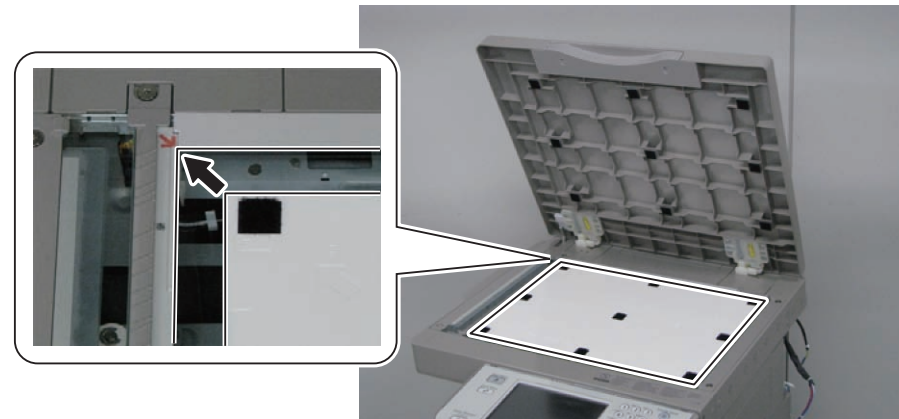
F-9-94

- 13) Remove the White Plate.



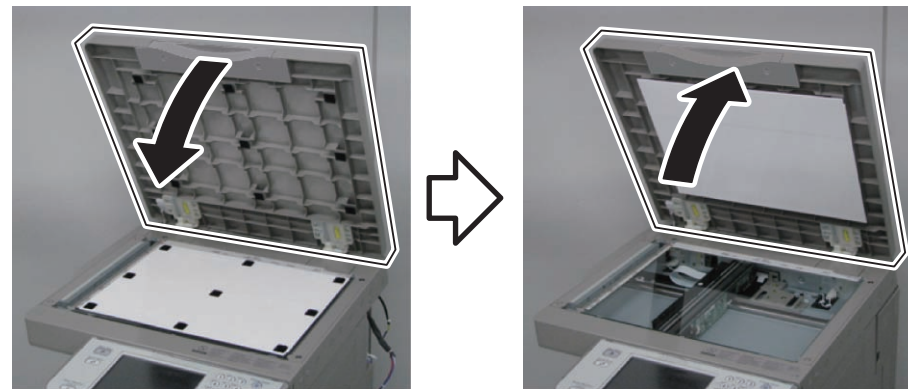
F-9-95

- 14) Place the White Plate on the Copyboard Glass by aligning it with the Index Sheet.



F-9-96

- 15) Close the Copyboard Cover, and then open it again.



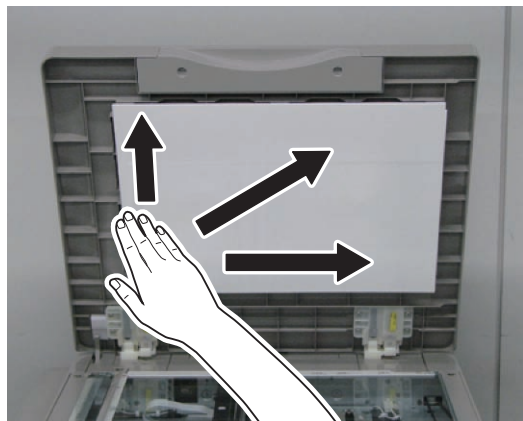
F-9-97



- 16) Press the White Plate upward as shown in the figure below.

**CAUTION:**

If the White Plate is pressed downward, it is placed on the Index Sheet, so be sure to press it upward.

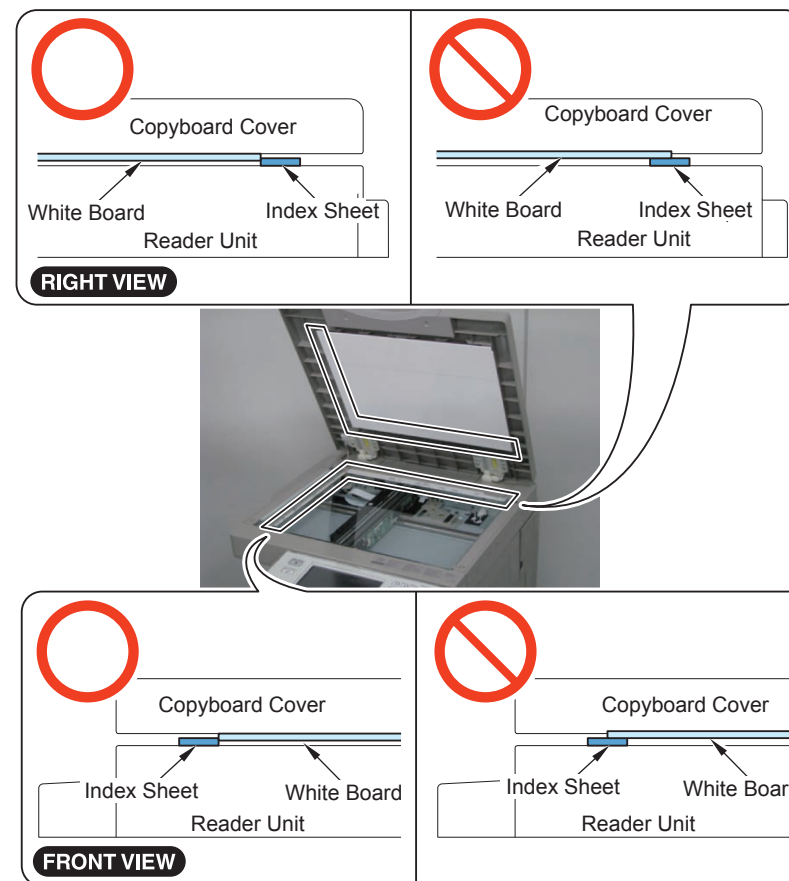


F-9-98

- 17) With the Copyboard Cover closed, check that the White Plate is not placed on the Index Sheet as shown in the figures.

**CAUTION:**

Be sure that there is no gap between the White Plate and the Index Sheet. As a guide, it should be 0.3 mm or less.

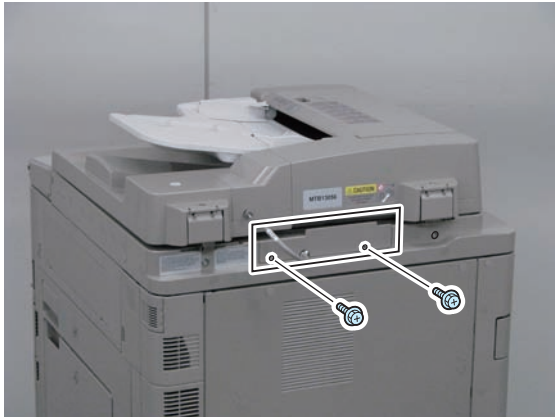


F-9-99

- 18) Connect the power plug of the host machine to the power outlet.
- 19) Turn ON the main power switch.

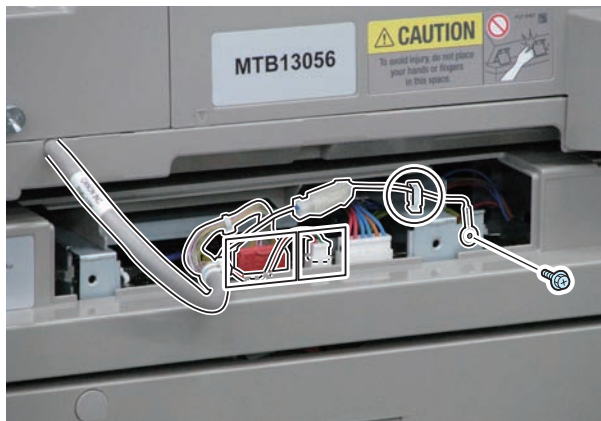
■ When installing to iR-ADV C5240/C5235 (Color Image Reader Unit)

- 1) Remove the Reader Controller Cover.



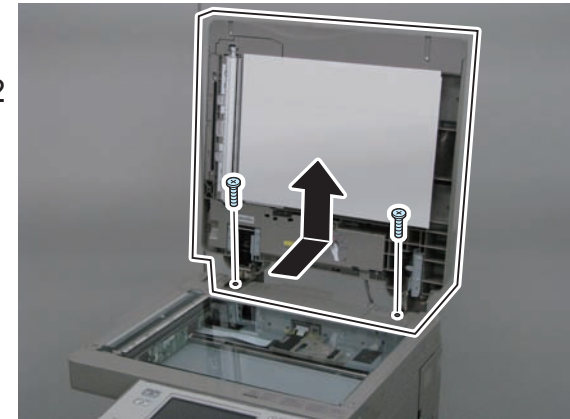
F-9-100

- 2) Disconnect the 2 connectors.
- 3) Disconnect the Grounding Wire.
  - 1 Screw (The removed Screw will not be used.)
  - 1 Wire Saddle



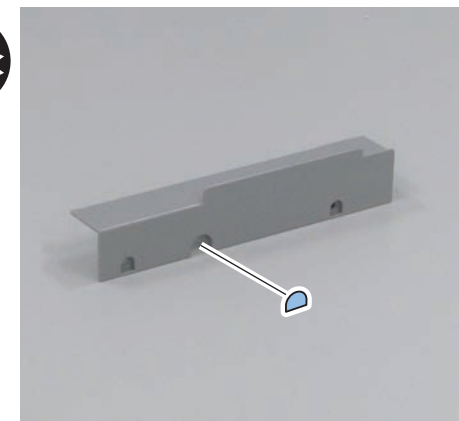
F-9-101

- 4) Open the DADF.
- 5) Remove the DADF.
  - 2 Screws (The removed Screw will not be used.)



F-9-102

- 6) Affix the ADF Cable Seal to the Reader Controller Cover removed in step 1.



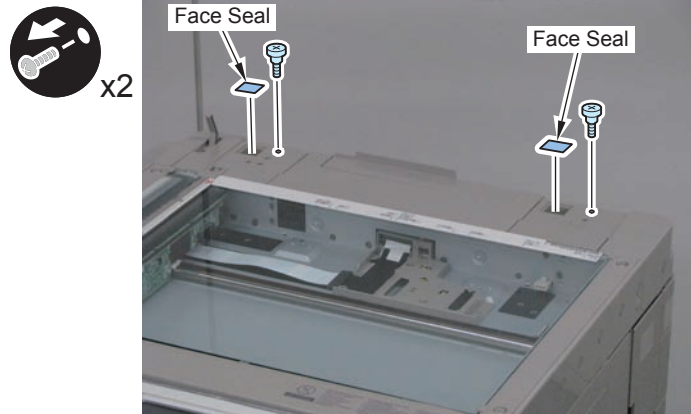
F-9-103



7) Install the Reader Controller Cover removed in step 1. (2 screws)

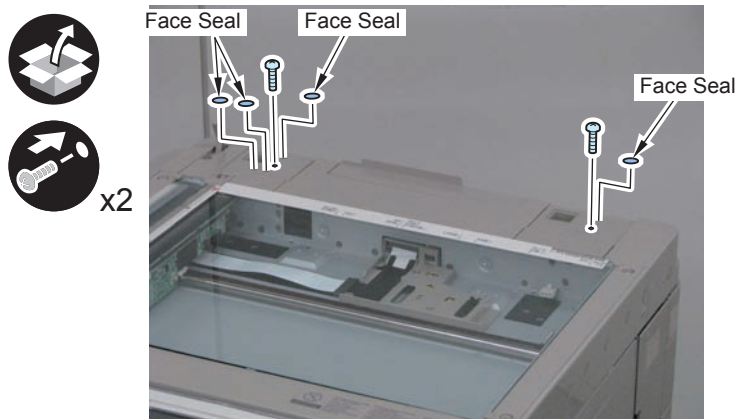
8) Remove the 2 Stepped Screws. (The removed Stepped Screws will not be used.)

9) Remove the 2 Face Seals. (The removed Face Seals will not be used.)



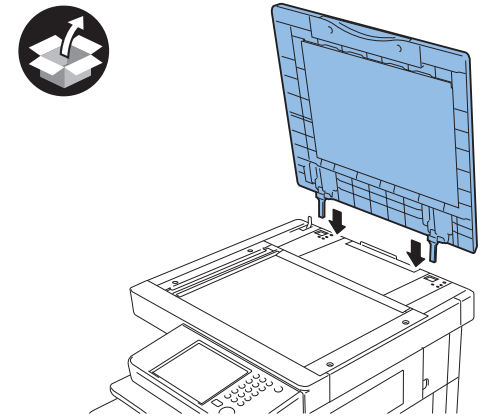
F-9-104

10) Tighten the 2 screws (Binding Round End; M4x8).  
11) Affix the 4 Face Seals.



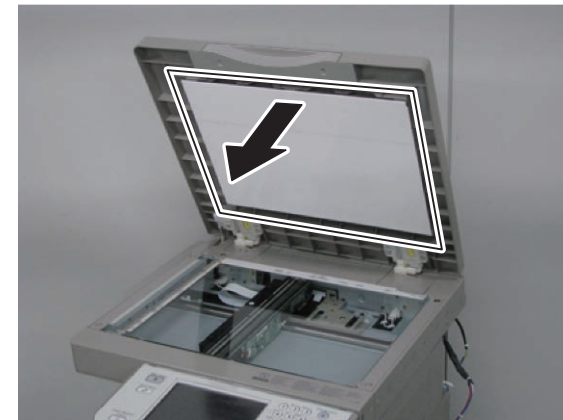
F-9-105

12) Install the Copyboard Cover Unit.



F-9-106

13) Remove the White Plate.



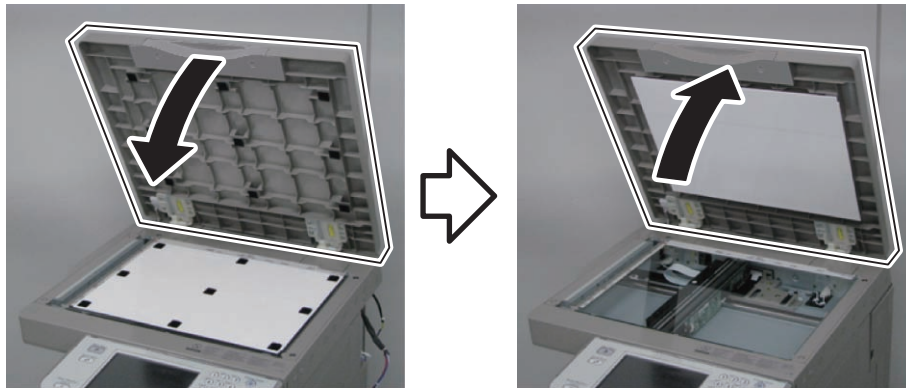
F-9-107

- 14) Place the White Plate on the Copyboard Glass by aligning it with the Index Sheet.



F-9-108

- 15) Close the Copyboard Cover, and then open it again.

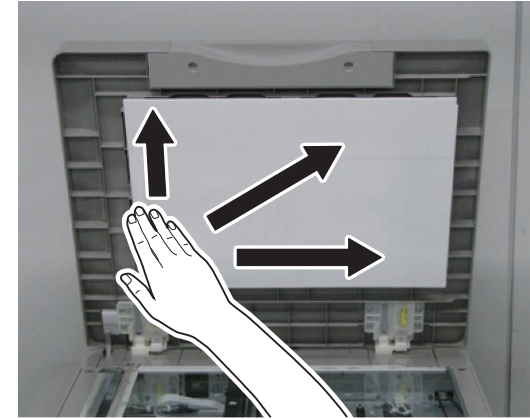


F-9-109

- 16) Press the White Plate upward as shown in the figure below.

**CAUTION:**

If the White Plate is pressed downward, it is placed on the Index Sheet, so be sure to press it upward.

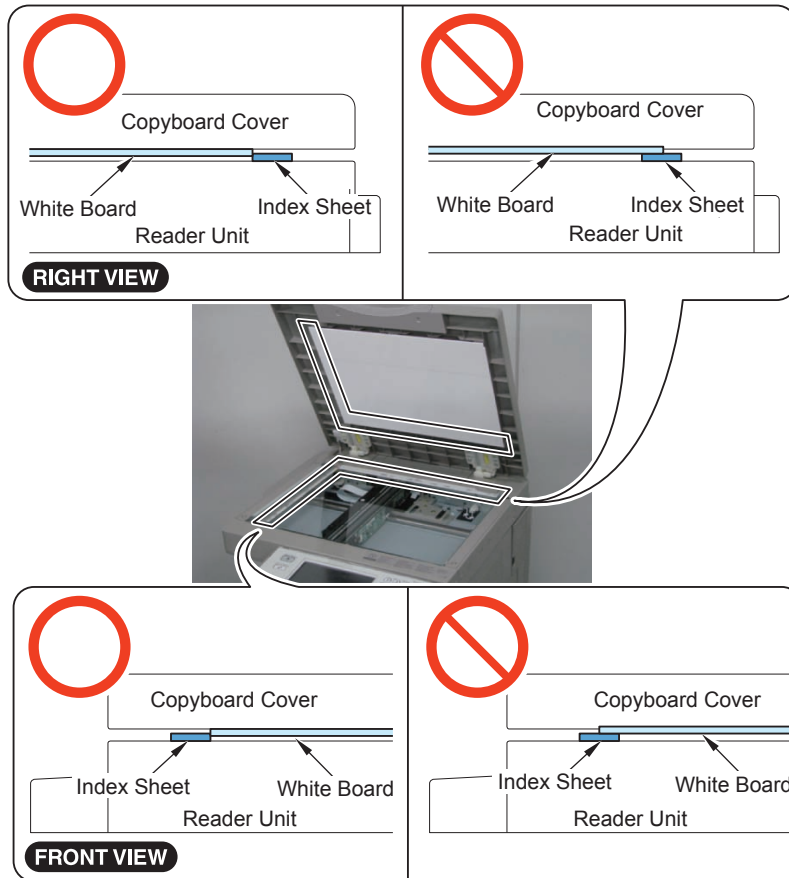


F-9-110

- 17) With the Copyboard Cover closed, check that the White Plate is not placed on the Index Sheet as shown in the figures.

**CAUTION:**

Be sure that there is no gap between the White Plate and the Index Sheet. As a guide, it should be 0.3 mm or less.

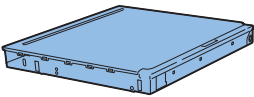
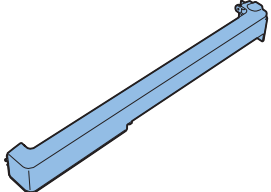
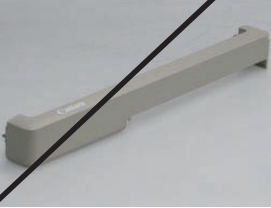
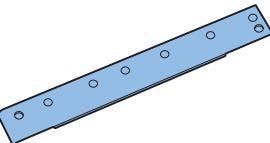
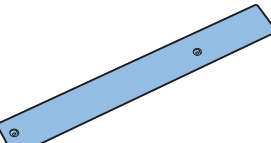
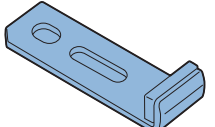
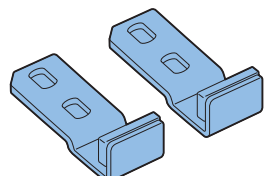
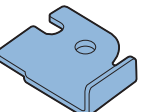
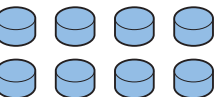





F-9-111

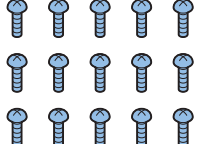
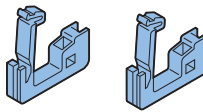



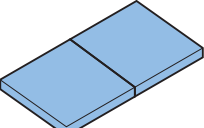

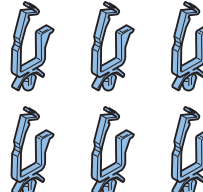
- 18) Connect the power plug of the host machine to the power outlet.
- 19) Turn ON the main power switch.

# Printer Cover-C2

## Checking the Contents

<input type="checkbox"/> [1] Printer Cover Unit X 1 	<input type="checkbox"/> [2] Printer Model Front Cover X 1 	<input type="checkbox"/> [3] Top Front Cover X 1 
<input type="checkbox"/> [4] Top Right Cover X 1 	<input type="checkbox"/> [5] Top Left Cover X 1 	<input type="checkbox"/> [6] Reader Fixing Hook A X 1 
<input type="checkbox"/> [7] Reader Fixing Hook B X 2 	<input type="checkbox"/> [8] Fixing Hook C X 1 	<input type="checkbox"/> [9] Rubber Cap X 8 
<input type="checkbox"/> [10] Stepped Screw (M4) X 1 	<input type="checkbox"/> [11] Screw (Flat Head; M4x6) X 2 	<input type="checkbox"/> [12] Screw (RS Tightening; M3x8.5) X 2 

F-9-112

<input type="checkbox"/> [13] Screw (Binding; M4x8) X 15 	<input type="checkbox"/> [14] Edge Saddle X 2 	<input type="checkbox"/> [15] Reader Joint (Left) X 1 
<input type="checkbox"/> [16] DP Cable Guide X 1 	<input type="checkbox"/> [17] Reader Joint (Right) X 2 	<input type="checkbox"/> [18] Reader Damper X 2 
<input type="checkbox"/> [19] Screw (TP Round End; M3x6) X 5 	<input type="checkbox"/> [20] Wire Saddle X 6 	

F-9-113

## Points to Note before Installation

**CAUTION:** In the case of installing the Printer Cover by removing the Color Image Reader Unit

After installation of the Printer Cover, be sure to change the setting of the following service mode to "0" before turning OFF the power of the host machine. Otherwise, an error may occur when turning ON the power.

- COPIER > OPTION > FNC-SW > W/SCNR

## Points to Note at Installation

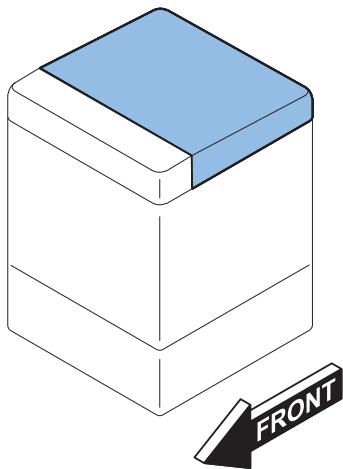
The Top Front Cover, the Left Top Cover and the Right Top Cover are secured to the Printer Cover Unit with tapes.

## Turning Off the Host Machine

Check that the main power is OFF.

- 1) Turning off the Main Power Supply Switch of the Host Machine.
- 2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

## Installation Outline Drawing



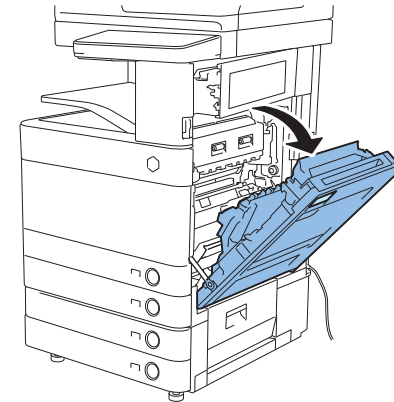
F-9-114

## Removing the Color Image Reader Unit

**NOTE:**

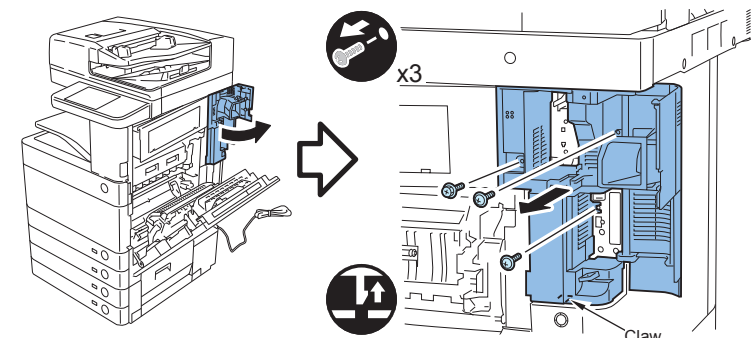
Implement this process when replacing the Color Image Reader with the Printer Cover.

- 1) Open the Right Lower Cover. (The Right Upper Cover opens simultaneously.)



F-9-115

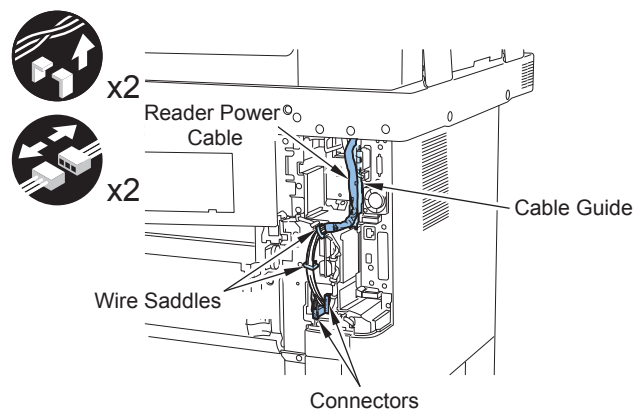
- 2) Open the Right Rear Cover Unit1.
- 3) Remove the Right Rear Cover Unit 1.
  - 1 Screw (RS tight; M4)
  - 2 Screws (TP; M3)
  - 1 Claw



F-9-116

4) Remove the Reader Power Cable.

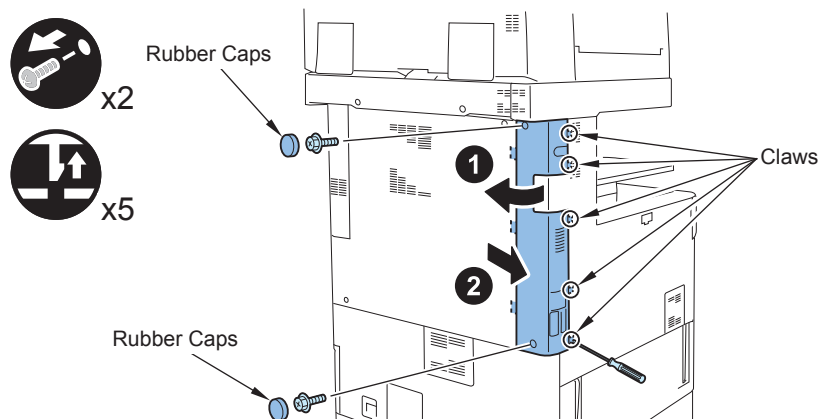
- 2 Connectors
- 2 Wire Saddles
- 1 Cable Guide



F-9-117

5) Remove the Left Rear Cover.

- 2 Rubber Caps
- 2 Screws
- 5 Claws



F-9-118

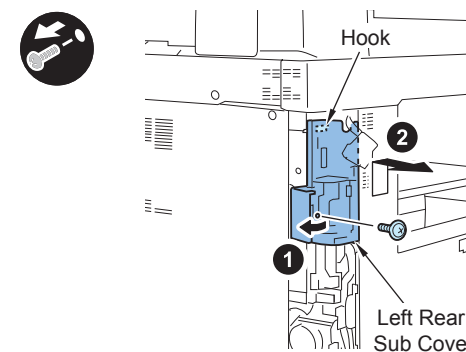
6) Remove the Reader Communication Cable.



F-9-119

7) Remove the Left Rear Sub Cover.

- 1 Screw
- 1 Hook



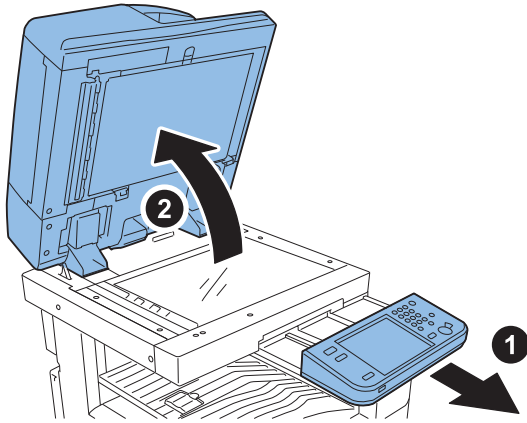
F-9-120

8) Close the Right Lower Cover.

**NOTE:**  
Be sure to keep the Right Upper Cover open.



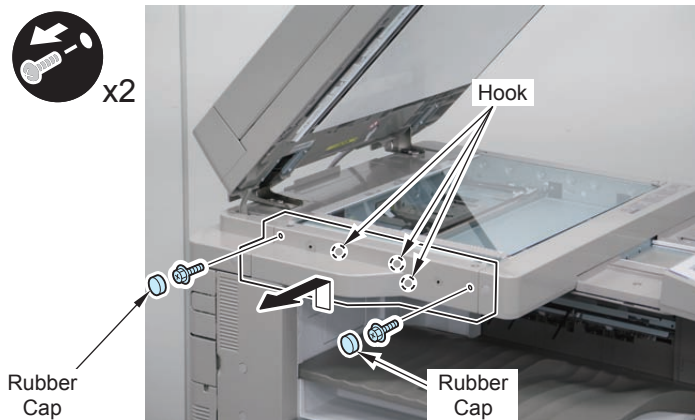
- 9) Move the Control Panel in the direction of the arrow and open DADF.



F-9-121

- 10) Remove the Reader Left Cover.

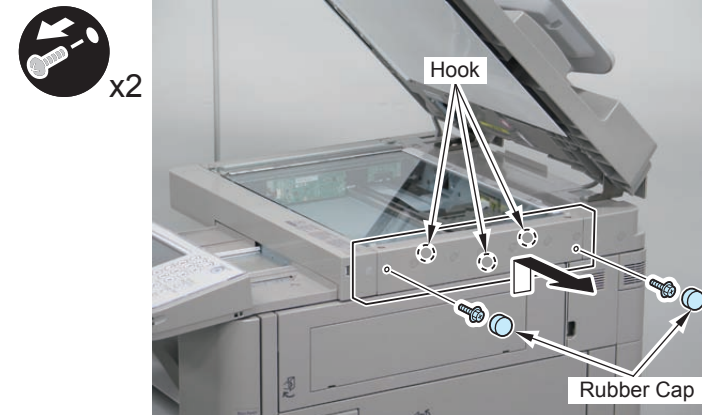
- 2 Rubber Caps
- 2 Screws
- 3 Hooks



F-9-122

- 11) Remove the Reader Right Cover.

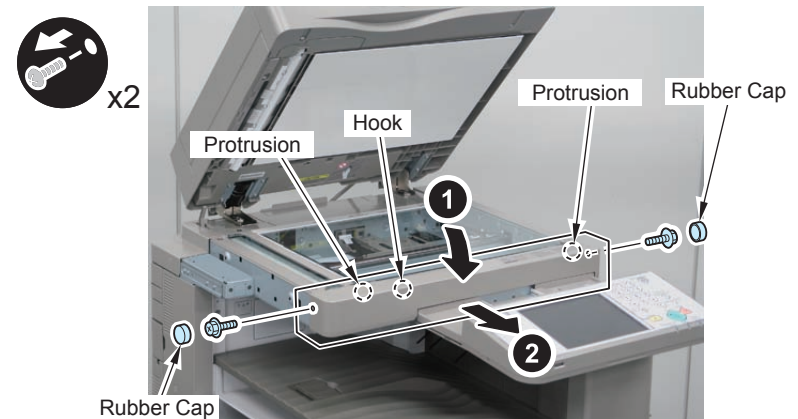
- 2 Rubber Caps
- 2 Screws
- 3 Hooks



F-9-123

- 12) Remove the Reader Front Cover.

- 2 Rubber Caps
- 2 Screws
- 2 Protrusions
- 1 Hook



F-9-124



- 13) Install the 2 Fixation Screws for the Scanner.



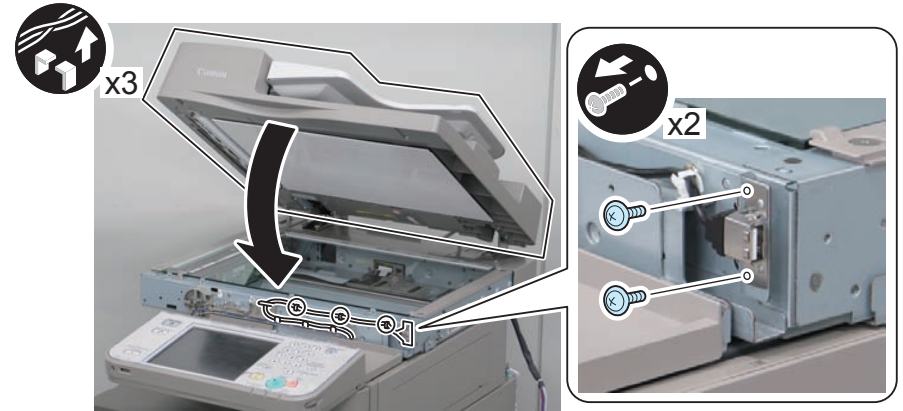
F-9-125

- 14) Free the harness from the cable guide.
  - 2 Wire Saddles



F-9-126

- 15) Free the USB cable from the cable guide and close DADF.
  - 2 Screws
  - 3 Wire Saddles



F-9-127

- 16) Remove the 2 screws securing the front side of the Reader Unit.



F-9-128

- 17) Remove 1 screw each from 2 positions on the Reader Mounting Plate on the right side of the Reader Unit.



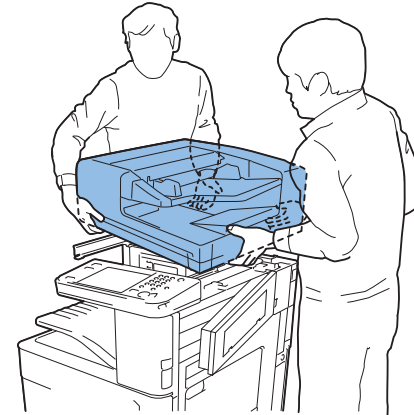
F-9-129

- 18) Remove the 4 screws securing the left side of the Reader Unit.



F-9-130

- 19) Remove the Reader Unit from the machine by 2 or more people.



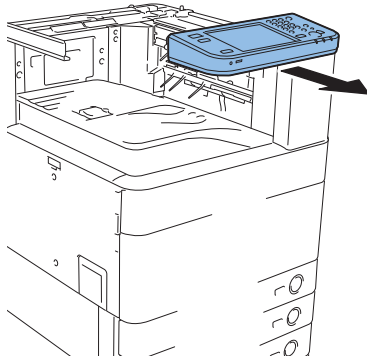
F-9-131

- 20) Close the Right Upper Cover.

## Installation Procedure

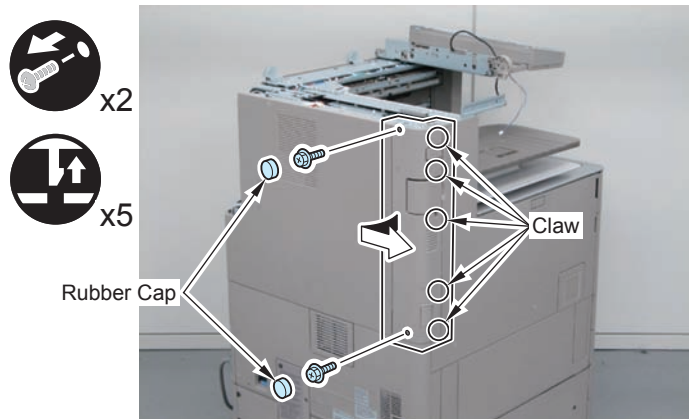
**NOTE:**  
When removing the Color Image Reader and installing the Printer Cover, start the work from step 4 of [Installation Procedure].

- 1) Move the Control Panel in the direction of the arrow.



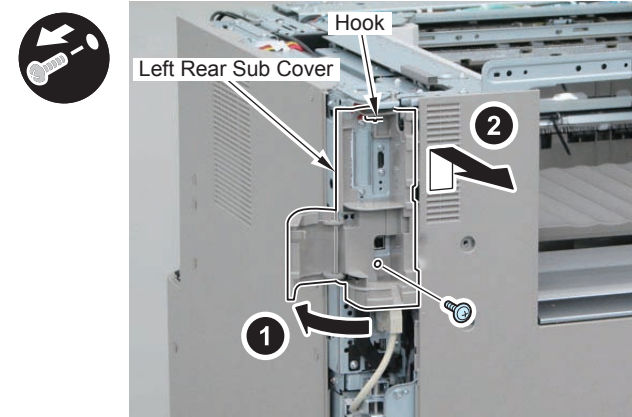
F-9-132

- 2) Remove the Left Rear Cover.
  - 2 Rubber Caps
  - 2 Screws
  - 5 Claws



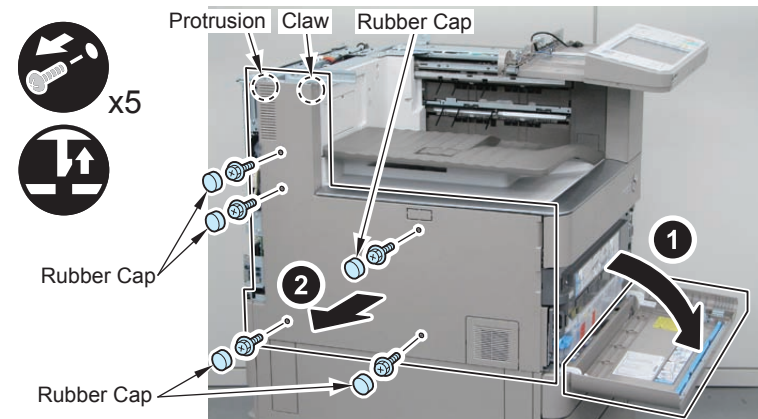
F-9-133

- 3) Remove the Left Rear Sub Cover.
  - 1 Screw
  - 1 Hook



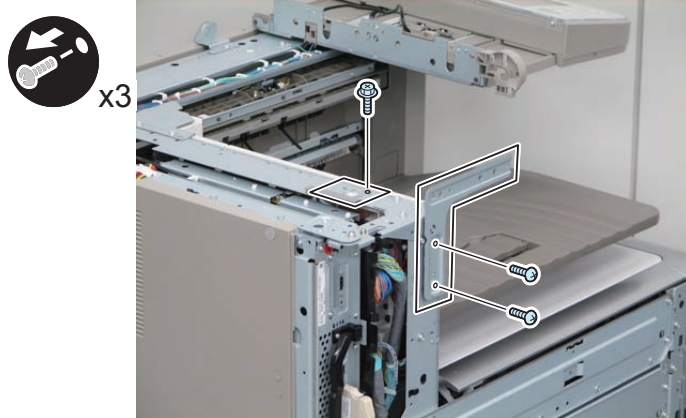
F-9-134

- 4) Open the Front Cover, and remove the Left Upper Cover.
  - 5 Rubber Caps
  - 5 Screws
  - 1 Claw
  - 1 Protrusion



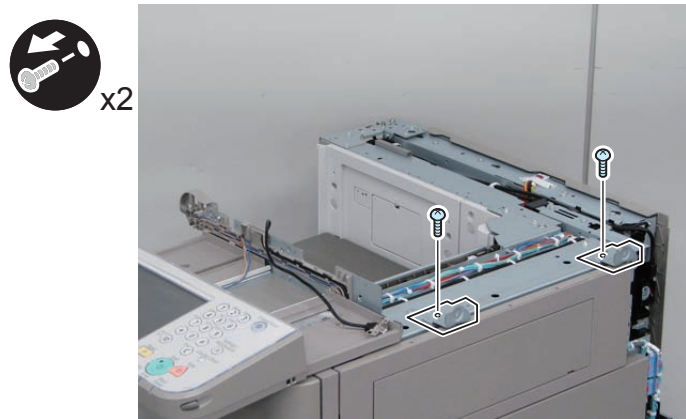
F-9-135

- 5) Remove the joint (left).
- 2 Screws (Binding)
- 6) Remove the Reader Rest Plate.
- 1 Screw (RS Tightening)



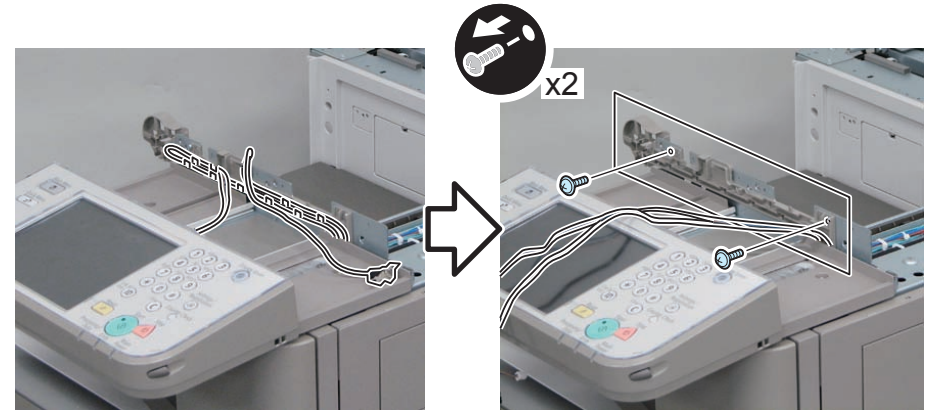
F-9-136

- 7) Remove the 2 Reader Mounting Plates.
- 1 Screw each



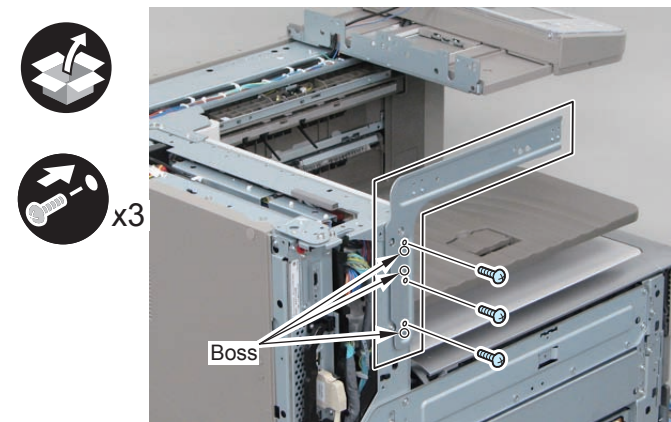
F-9-137

- 8) Remove the Harness Guide.
- 1 Harness
- 1 USB Cable
- 2 Screws



F-9-138

- 9) Install the Reader Joint (Left).
- 3 Bosses
- 3 Screws (Binding; M4x8)

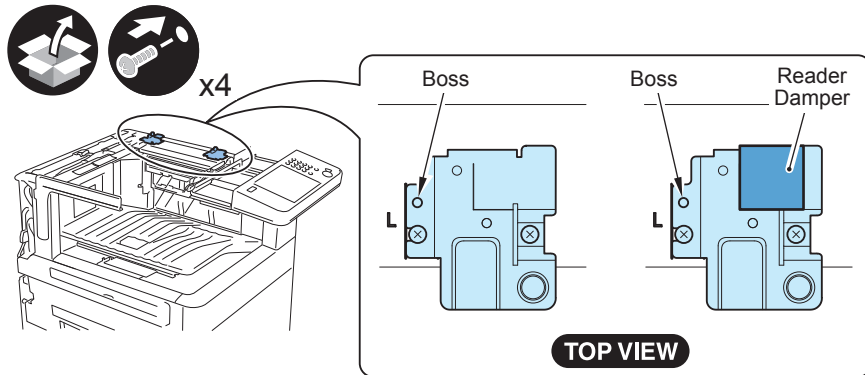


F-9-139



- 10) Install the 2 Reader Joints (Right) by fitting them to the L-mark side.
  - 1 Bosses each
  - 2 Screws (Binding; M4x8) each
- 11) Affix the Reader Damper only on the rear side of the Reader Joint (Right).

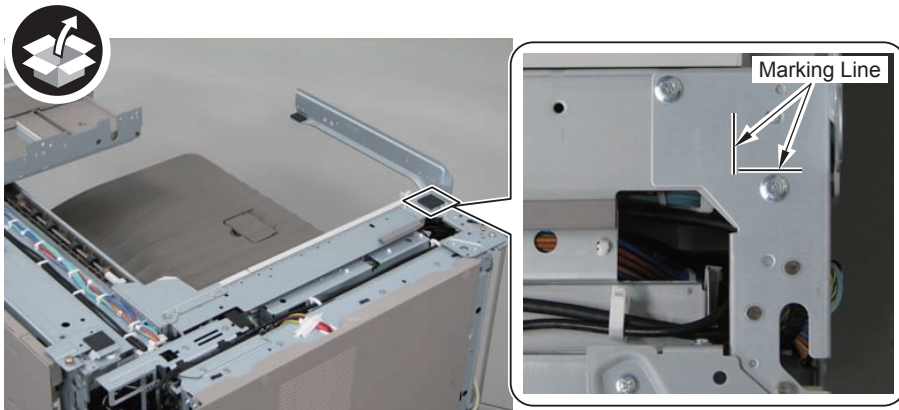
**NOTE:**  
Be sure to align it with the marking lines.



F-9-140

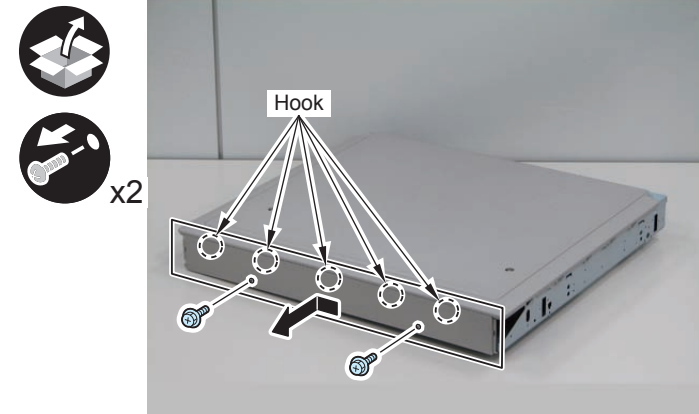
- 12) Affix the Reader Damper to the Hinge Plate on the rear left side of the machine.

**NOTE:**  
Be sure to align it with the marking lines.



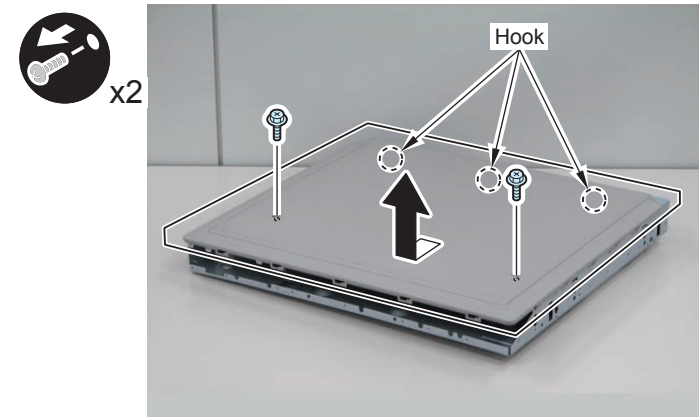
F-9-141

- 13) Remove the Top Rear Cover of the Printer Cover Unit.
  - 2 Screws (The removed screws will be used in step 25.)
  - 5 Hooks



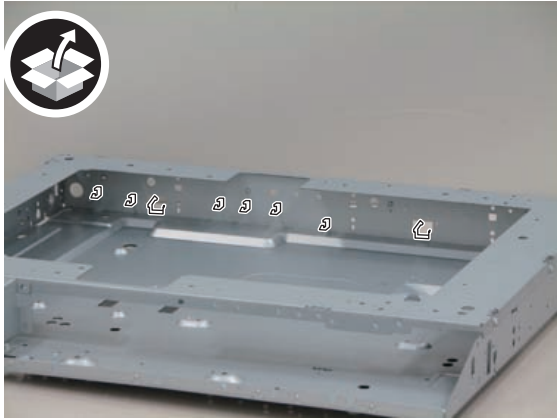
F-9-142

- 14) Remove the Top Cover of the Printer Cover Unit.
  - 2 Screws (The removed screws will be used in step 24.)
  - 3 Hooks



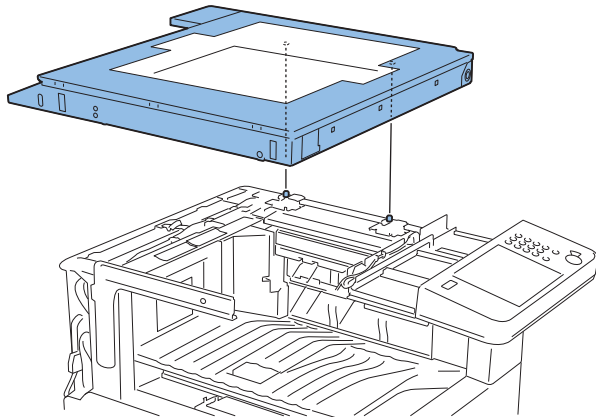
F-9-143

- 15) Install the 2 Edge Saddles to the Reader Frame, and the 6 Wire Saddles to the X marks.



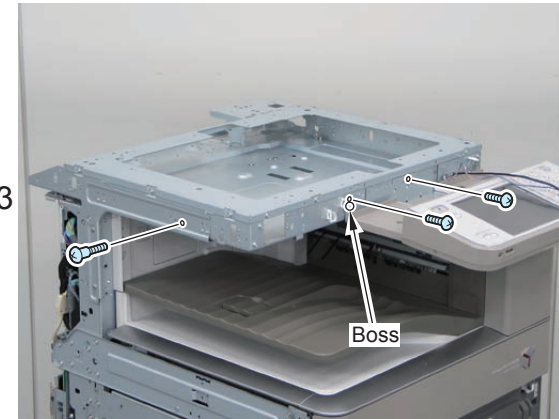
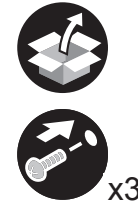
F-9-144

- 16) Place the Printer Cover Unit by aligning with the 2 Positioning Pins of the Reader Joint (Right).



F-9-145

- 17) Secure the front side of the Printer Cover Unit.
- 1 Boss
  - 2 Screws (Binding; M4x8)
- 18) Secure the Left side of the Printer Cover Unit.
- 1 Stepped Screw (M4)



F-9-146

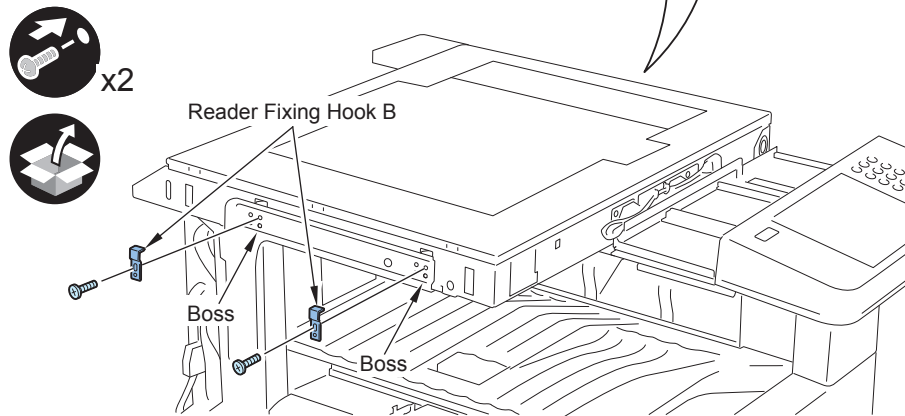
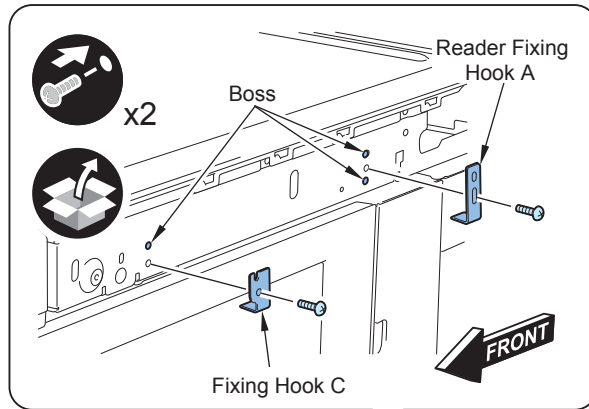
- 19) Install the 2 Reader Fixing Hook B.

- 2 Bosses
- 2 Screws (Flat-head Screw; M4)

- 20) Install the Reader Fixing Hook A and Fixing Hook C.

**NOTE:**  
Push-on the Reader Fixing Hook A up and install.

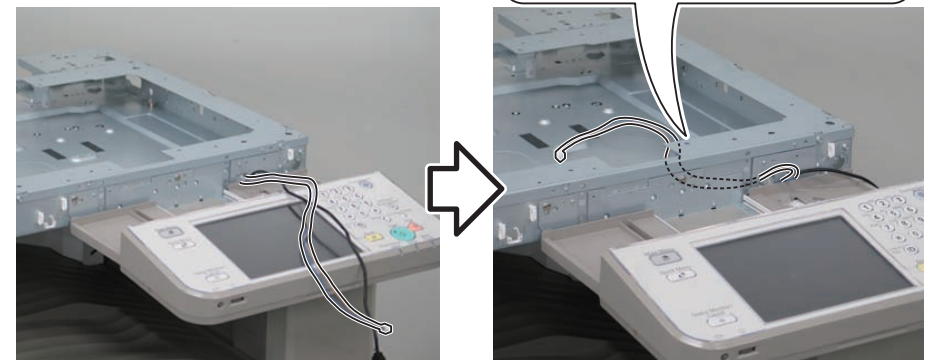
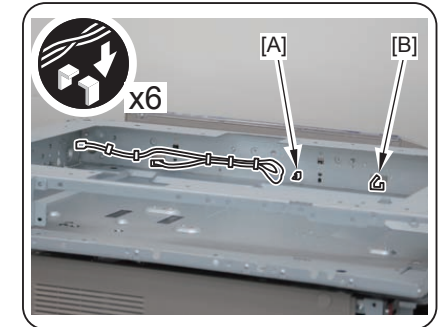
- 3 Bosses
- 2 Screws (Binding; M4x8)



F-9-147

- 21) Fix the harness on the Edge Saddle and the 5 Wire Saddles installed in step 15.

**NOTE:**  
Do not pass it through the Wire Saddle [A] and Edge Saddle [B].

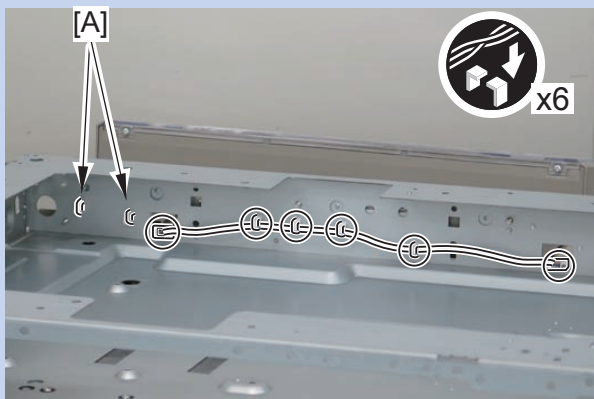


F-9-148



## NOTE:

- When installing the USB Device Port simultaneously, be sure to route the harness as shown in the figure.
- Do not use 2 Wire Saddles [A].

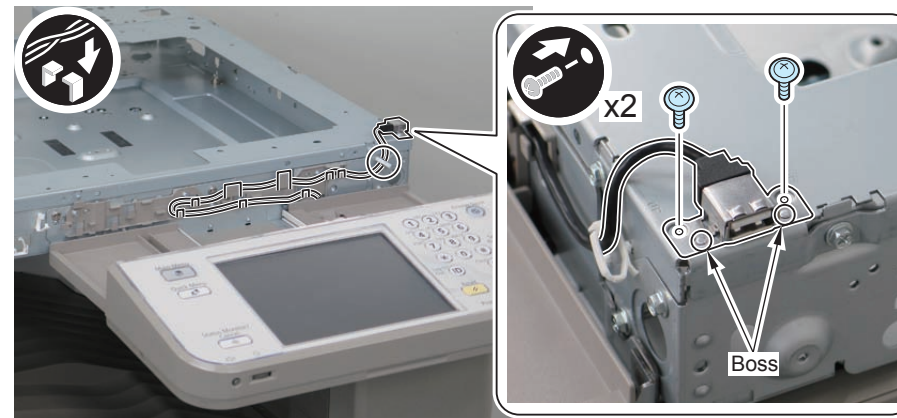


F-9-149



23) Put the USB Cable through the DP Cable Guide.

- 2 Bosses
- 2 Screws (TP; M3x6)
- 1 Wire Saddle

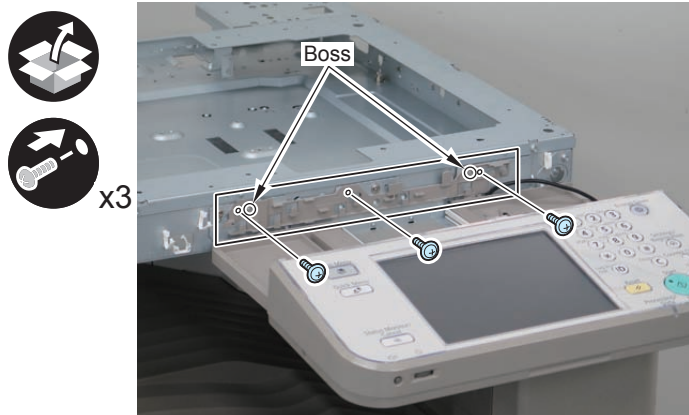


F-9-151



22) Install the DP Cable Guide.

- 2 Bosses
- 3 Screws (TP; M3x6)



F-9-150

## NOTE:

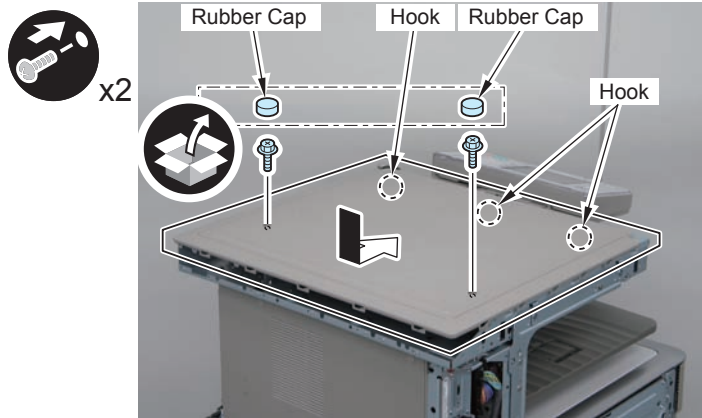
When installing the USB Device Port simultaneously, be sure to route the USB cable as shown in the figure.



F-9-152

□ 24) Install the Top Cover.

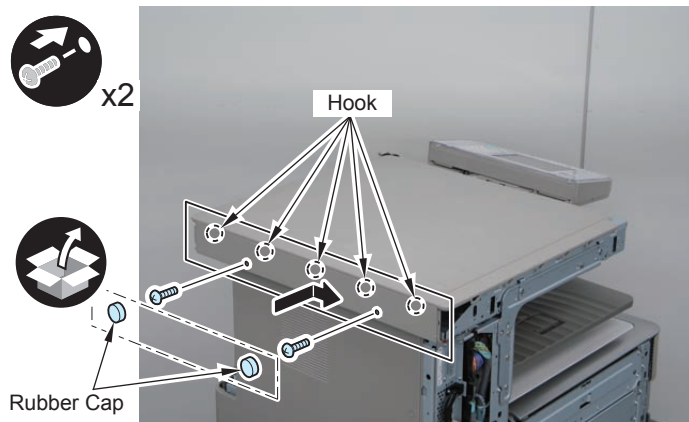
- 3 Hooks
- 2 Screws (The screw removed in step 14)
- 2 Rubber Caps



F-9-153

□ 25) Install the Top Rear Cover.

- 5 Hooks
- 2 Screws (The screw removed in step 13)
- 2 Rubber Caps

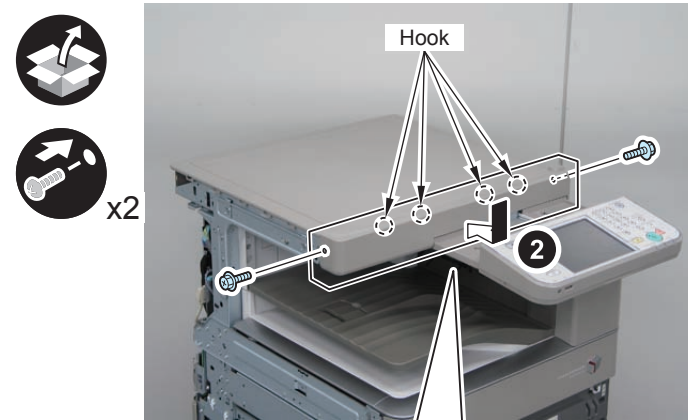


F-9-154

**NOTE:**  
When installing the USB Device Port simultaneously, work from step 9 of [USB Device Port-E1/E2/E3 / Multimedia Reader/Writer-A2] > [Installation Procedure] > [Installing the USB Device Port] > [In case of Printer Cover Unit].

□ 26) Move the Control Panel Base Cover in the direction of the arrow.

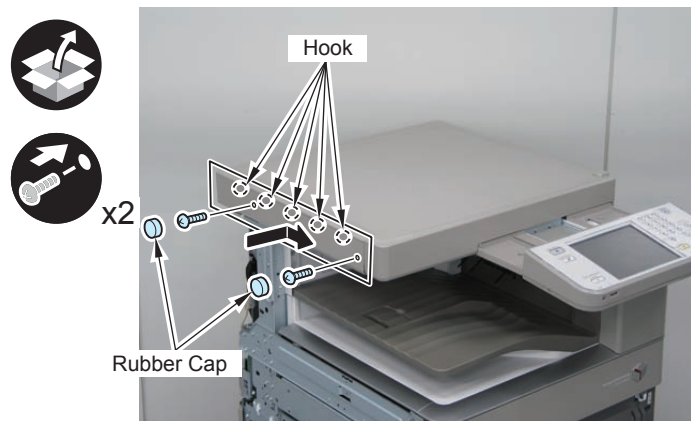
- 1 Screw
- 27) Install the Printer Model Front Cover.
  - 4 Hooks
  - 2 Screws (RS Tightening; M3x8.5)
- 28) Return the Control Panel Base Cover to its original position.
  - 1 Screw



F-9-155

□  
29) Install the Left Top Cover.

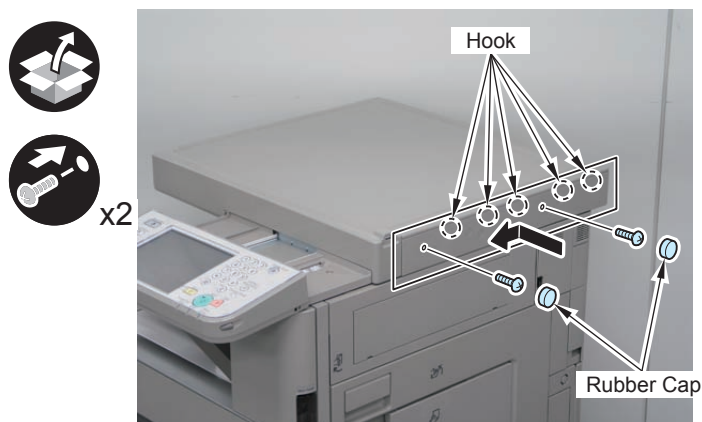
- 5 Hooks
- 2 Screws (Binding; M4x8)
- 2 Rubber Caps



F-9-156

□  
30) Install the Right Top Cover.

- 5 Hooks
- 2 Screws (Binding; M4x8)
- 2 Rubber Caps



F-9-157

□  
31) Return the Control Panel.

32) Return the covers to their original positions.

- Left Upper Cover
- Front Cover (to be closed)
- Left Rear Sub Cover
- Left Rear Cover

## Auto Adjust Gradation

### CAUTION:

- Execute auto gradation adjustment the used paper type as needed.
- However, when using 2 or more types of paper, it is necessary to execute all the modes corresponding to the types of paper.
- When using paper type to which auto gradation adjustment is not executed, image failure or damage on the host machine may occur.



1) Implement the auto gradation adjustment by the following method.

#### [Plain Paper]

- [Settings/Registration] > [Adjustment/Maintenance] > [Adjust Image Quality] > [Auto Adjust Gradation] > [Plain] > [Adjust] > [Start]

#### [Heavy1/Heavy2]

- [Settings/Registration] > [Adjustment/Maintenance] > [Adjust Image Quality] > [Auto Adjust Gradation] > [Heavy1/Heavy2] > [Adjust] > [Start]

#### [Heavy3]

- [Settings/Registration] > [Adjustment/Maintenance] > [Adjust Image Quality] > [Auto Adjust Gradation] > [Heavy3] > [Adjust] > [Start]



2) Execute 1 of following 4 items from following service mode (Level 2).

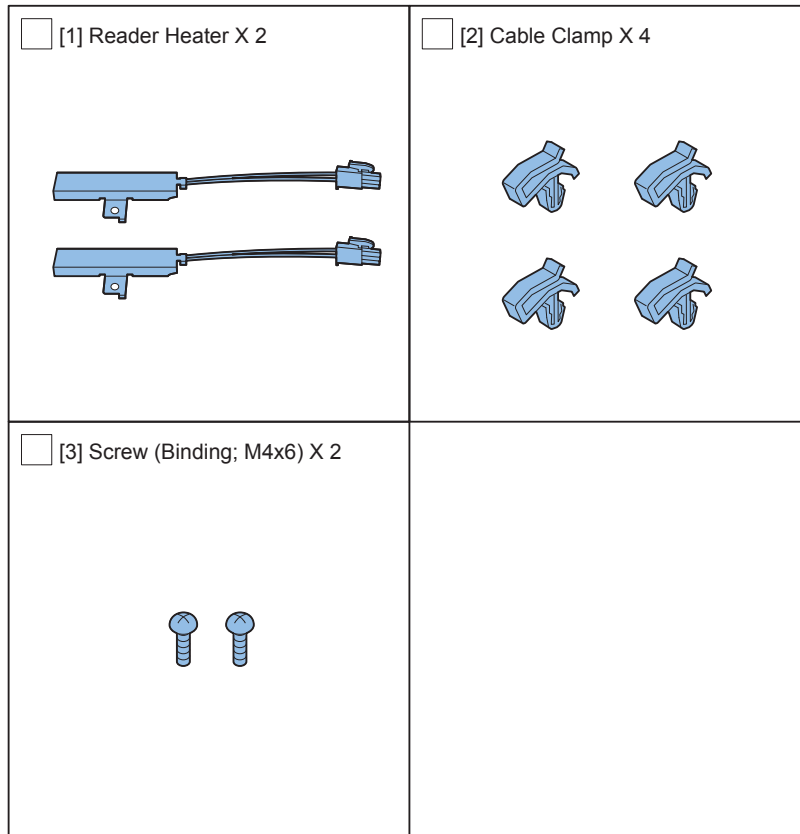
### NOTE:

It is reflected on all modes if executed in any single mode.

- COPIER > FUNCTION > INSTALL > INIT - Y
- COPIER > FUNCTION > INSTALL > INIT - M
- COPIER > FUNCTION > INSTALL > INIT - C
- COPIER > FUNCTION > INSTALL > INIT - K

## Reader Heater Unit-J1

### Checking the Contents



F-9-158

### Check Items when Turning OFF the Main Power

Check that the main power is OFF.

- 1) Turning off the Main Power Supply Switch of the Host Machine.
- 2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

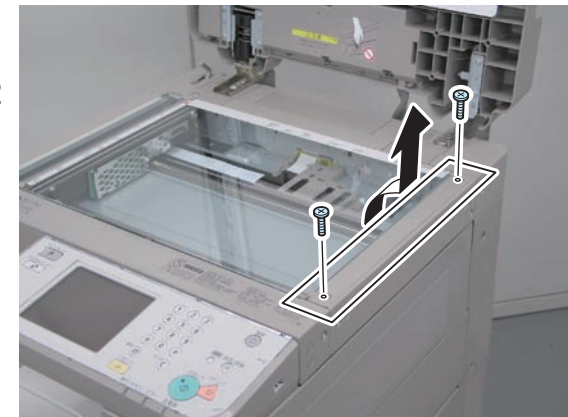
### Installation Outline Drawing



F-9-159

### Installation Procedure

- 1) Open the DADF or Copyboard Cover.
- 2) Remove the Reader right retainer cover.  
2 Screws



F-9-160



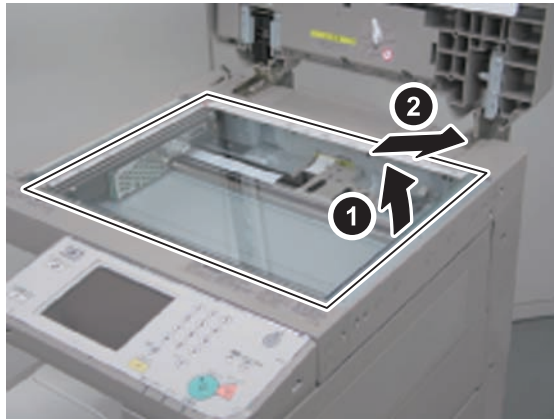
- 3) Remove the copy board glass.

**CAUTION:**

When removing the copyboard glass, be sure not to get your fingers touched with the glass surface or the backside of the white plate. In case the glass is soiled, clean it with lint-free paper.



F-9-161



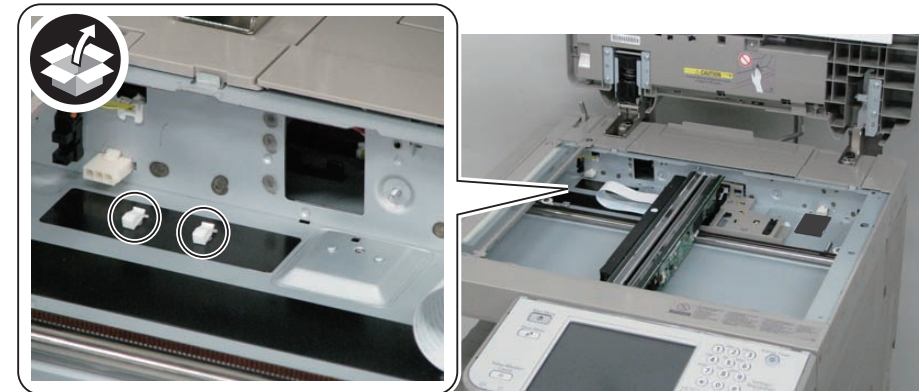
F-9-162

- 4) Pull the rear side of the Drive Belt in the direction of the arrow to move the Scanner Box to the center.



F-9-163

- 5) Install the 2 Cable Clamps in the direction as shown in the figure.

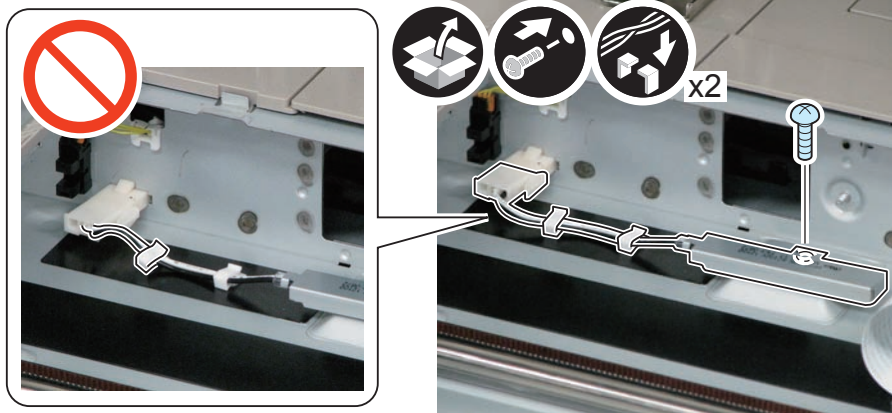


F-9-164

- 
- 6) Install the reader heater.
- 1 Screw (Binding;M4x6)
  - 1 Connector
  - 2 Cable Clamps

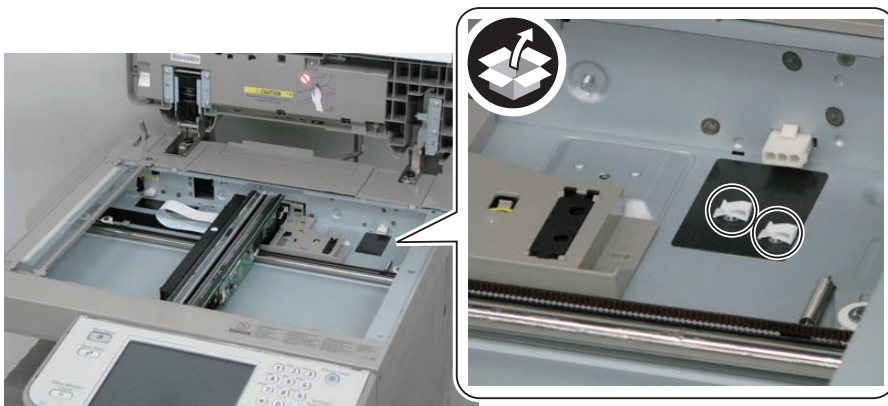
**CAUTION:**

Be sure to hold down the Reader Heater Harness because it may interfere with moving of the Scanner Box if it is not connected properly.



F-9-165

- 
- 7) Install the 2 Cable Clamps in the direction as shown in the figure.

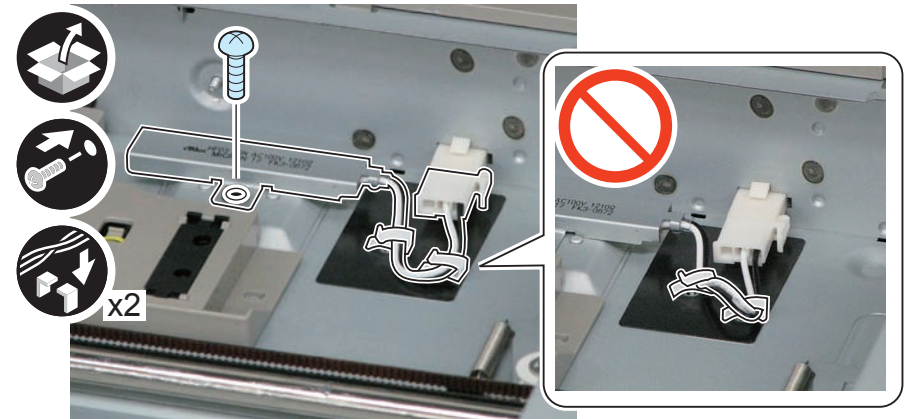


F-9-166

- 
- 8) Install the reader heater.
- 1 Screw (Binding;M4x6)
  - 1 Connector
  - 2 Cable Clamps

**CAUTION:**

Be sure to hold down the Reader Heater Harness because it may interfere with moving of the Scanner Box if it is not connected properly.



F-9-167

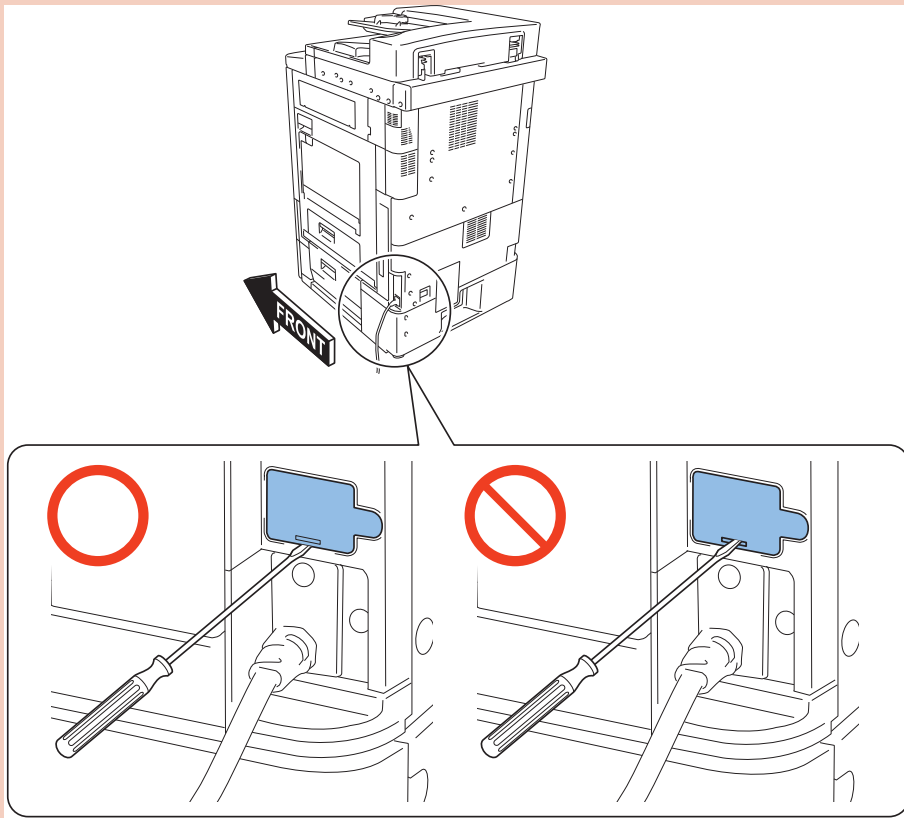
- 
- 9) Install the removed cover.
- copy board glass
  - Reader right retainer cover (2 Screws)
  - DADF or Copyboard Cover



- 10) Remove the Environment Heater Switch Cover, and check that the Environment Heater Switch is ON. When it is OFF, turn it ON.

**CAUTION:**

When removing the cover, do not insert a screwdriver in the oval hole.



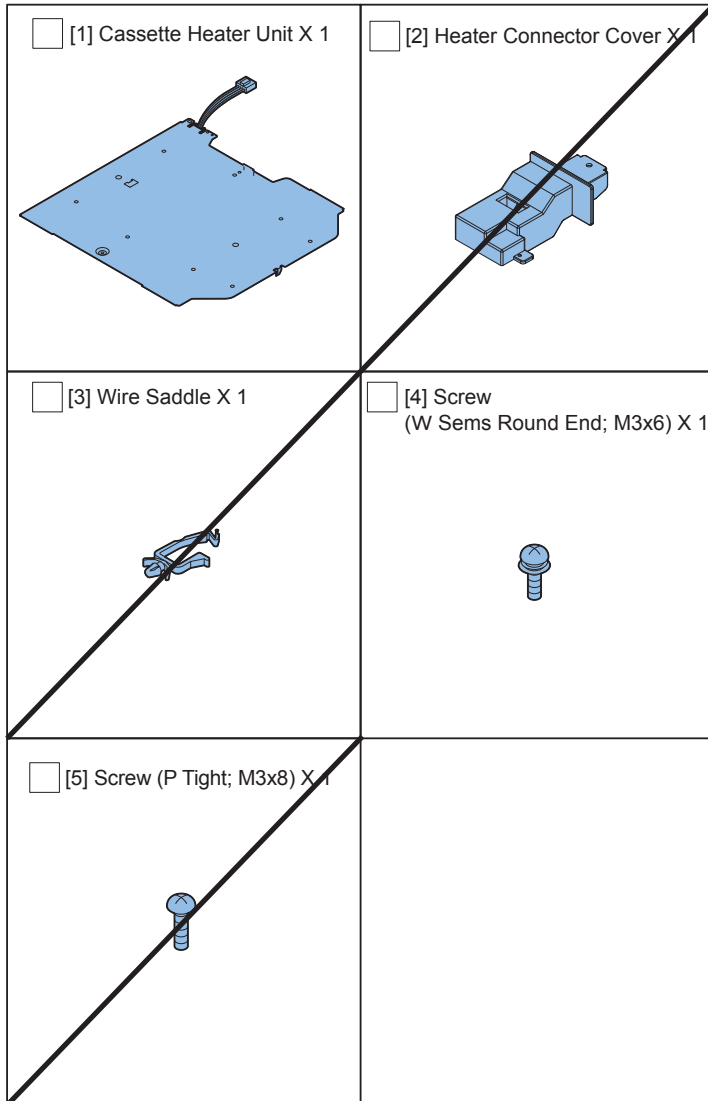
F-9-168

- 11) Install the Environment Heater Switch Cover.

# Cassette Heater Unit-37

## Checking the Contents (ASIA only)

### Cassette Heater Unit-37



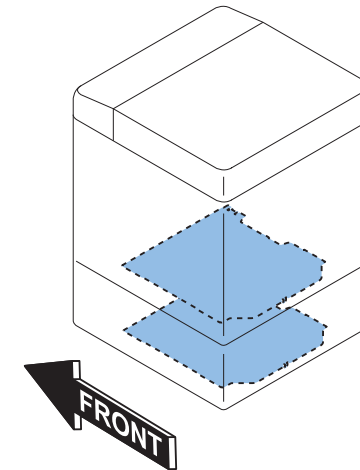
F-9-169

## Check Items when Turning OFF the Main Power

Check that the main power is OFF.

- 1) Turning off the Main Power Supply Switch of the Host Machine.
- 2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

## Installation Outline Drawing



F-9-170

## Installation Procedure

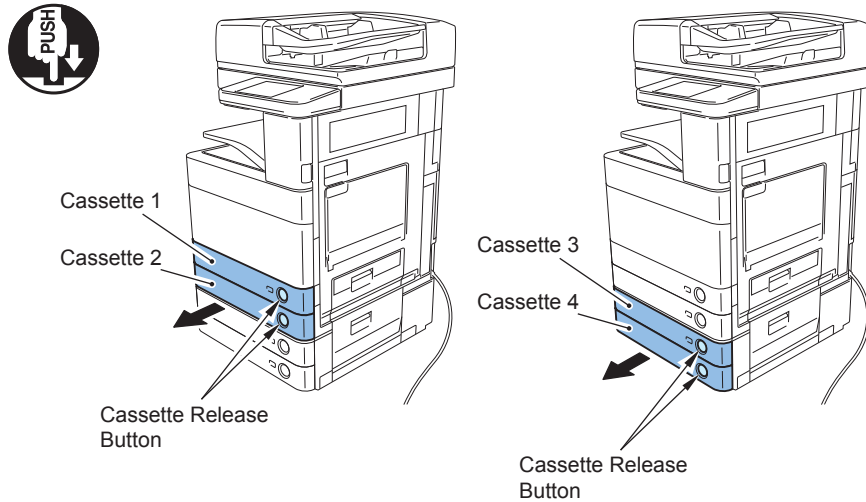
### NOTE:

The installation procedure of this product is not changed either in the host machine or the cassette pedestal.



1) Press the Cassette Release Button to remove the Cassette.

(Host Machine: Cassettes 1 and 2, Cassette pedestal: Cassette 3 and 4)

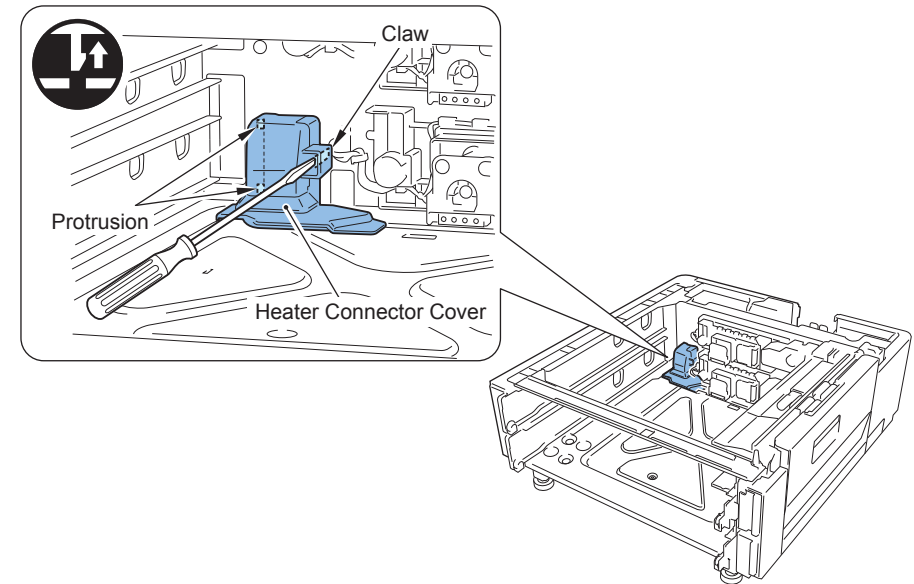


F-9-171



2) Remove the Heater Connector Cover with a flat-blade screwdriver.

- 1 Claw
- 2 Protrusions

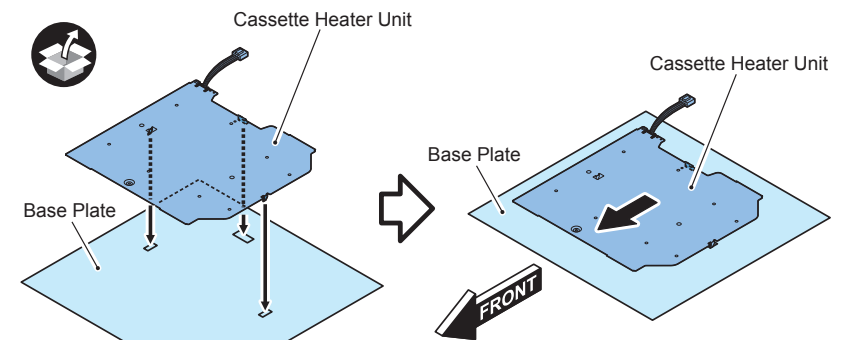


F-9-172

3) Fit the 3 claws of the Cassette Heater Unit into the holes on the Base Plate.

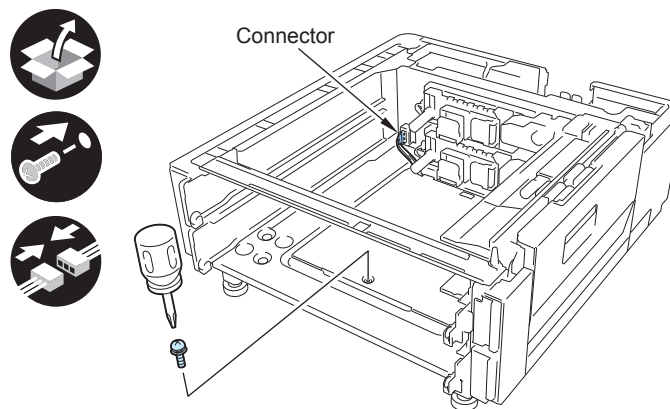
### CAUTION:

Be sure that the claws are fit into the holes of the Base Plate properly.



F-9-173

- 4) Tighten the removed screw (W sems round end; M3x6) with the stubby driver to connect the connector.  
(The figure below shows an example of the Cassette Pedestal. Follow the same step as for the host machine.)



F-9-174

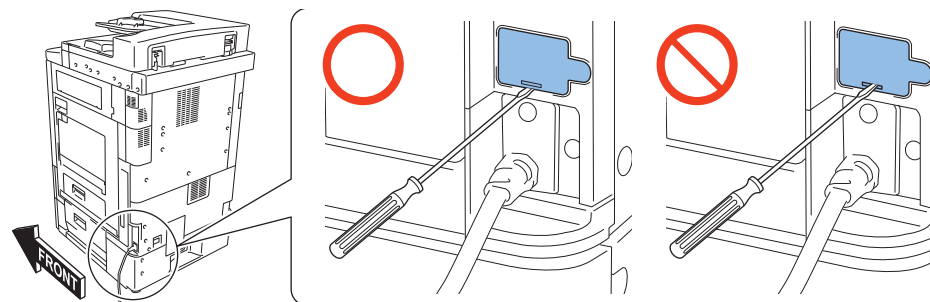
- 5) Install the heater Connector Cover.  
 6) Install the removed Cassettes.

## Checking After the Installation

### CAUTION:

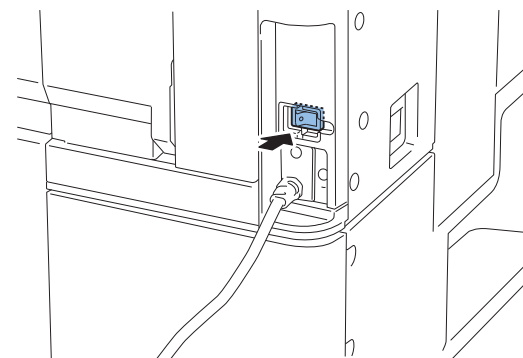
When removing the cover, be sure not to insert a screwdriver in the elongate hole.

- 1) Remove the Environment Heater Switch Cover.



F-9-175

- 2) Check that the Environment Heater Switch is ON.  
 3) Turn ON, if it was OFF.



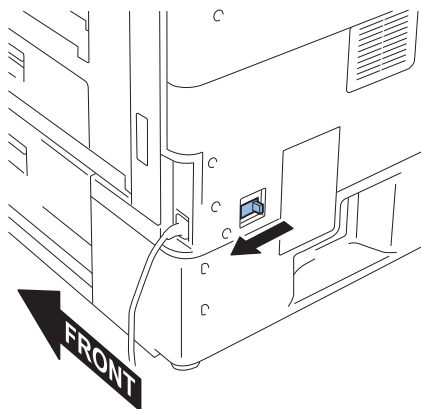
F-9-176

- 4) Install the Environment Heater Switch Cover.



5) Check that the breaker switch in the back of the main unit is ON.

6) Turn ON, if it was OFF.



F-9-177



7) Connect the power plug of the host machine to the power outlet.

## Utility Tray-A2

### Points to Note at Installation

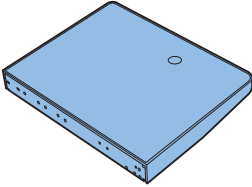
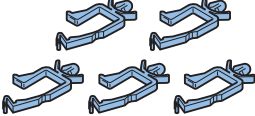
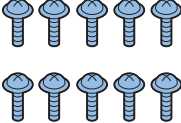



Refer to "Table of Options Combination" when installing this equipment before operation.

Table of Options Combination

	Voice Guidance Kit	Voice Operation Kit	Card Reader
Utility Tray	no	no	yes

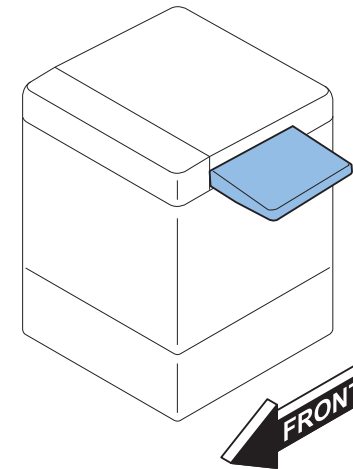
yes: Available      no: Unavailable

### Checking the Contents

<input type="checkbox"/> [1] Utility Tray Unit X 1 	<input type="checkbox"/> [2] Wire Saddle X 5 Use when installing the USB Keyboard 	<input type="checkbox"/> [3] Screw (TP; M4x8 Black) X 10 Use 7 of them 
<input type="checkbox"/> [4] Keyboard Table Plate X 1 	<input type="checkbox"/> [5] Screw (TP; M4x14) X 4 	<input type="checkbox"/> [6] Screw (TP; M4x10) X 2 

F-9-178

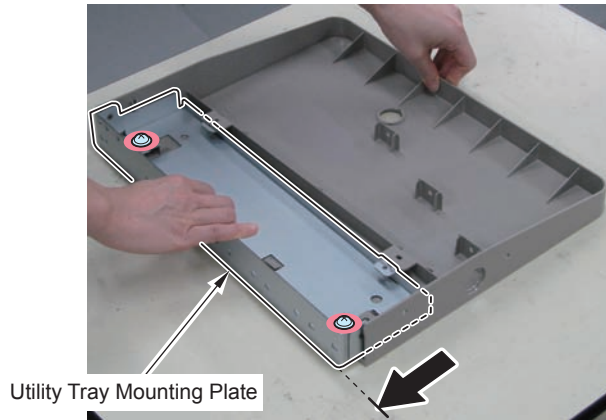
### Installation Outline Drawing



F-9-179

## Installation Procedure

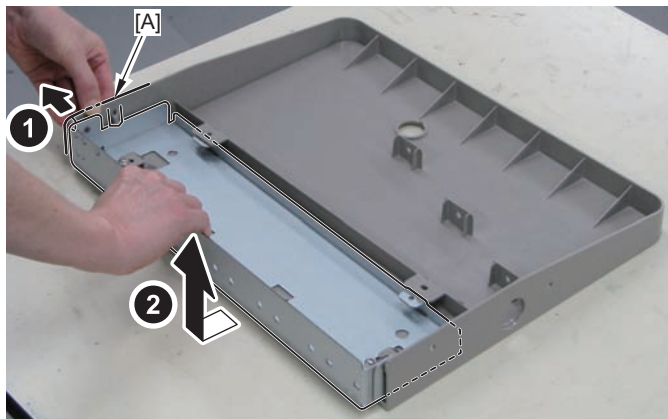
- 1) Remove packing tapes.
- 2) Loosen the 2 screws, and move the Utility Tray Mounting Plate in the direction of the arrow until it stops.



F-9-180

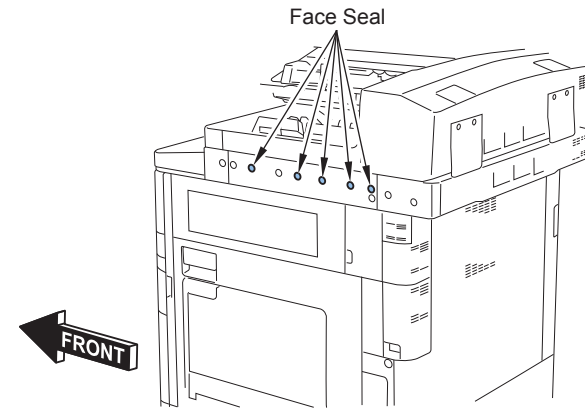
- 3) While pulling the [A] part of the Utility Tray, remove the Utility Tray Mounting Plate.

**CAUTION:**  
To avoid damage, do not pull the [A] part of the Utility Tray too much.



F-9-181

- 4) Remove the 5 Face Seals. (Removed Face Seal will not be used.)

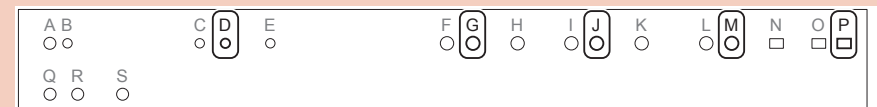


F-9-182

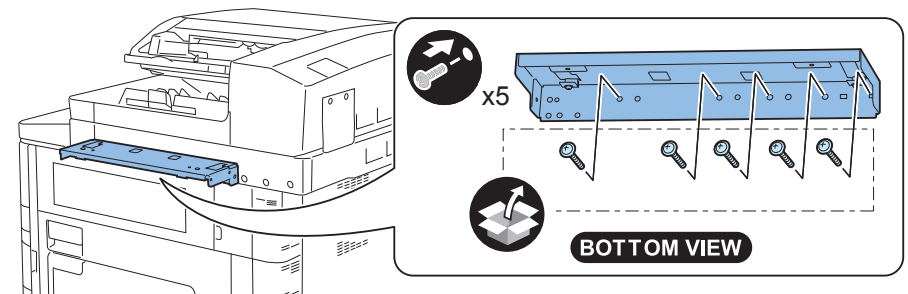
- 5) Install the Utility Tray Mounting Plate.
  - 5 screws (TP; M4x8 Black)

**CAUTION: Points to Note at Installation**

If the holes are marked as shown below, align the holes marked with D, G, J, M and P with the holes in the host machine.



F-9-183

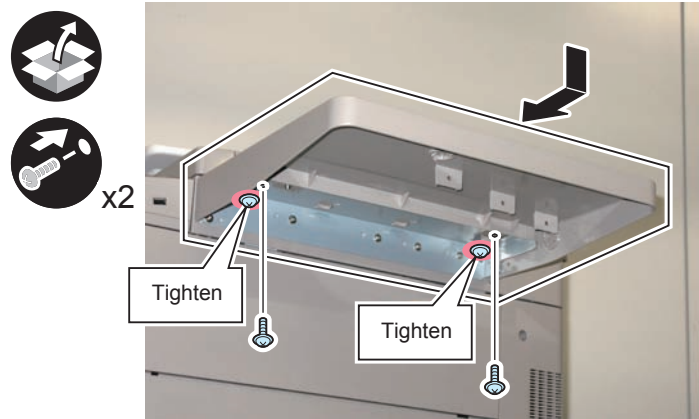


F-9-184



□ 6) Install the Utility Tray.

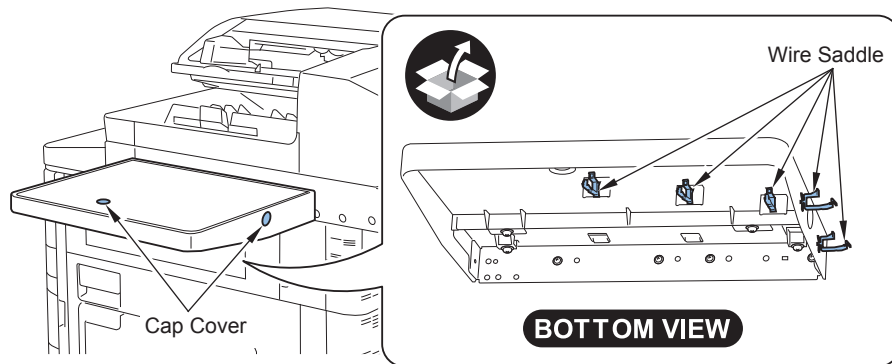
- 2 Screws (TP; M4x8 Black)
- 2 Screws (Tighten the screws loosened in step 2.)



F-9-185

## ● When installing the Keyboard

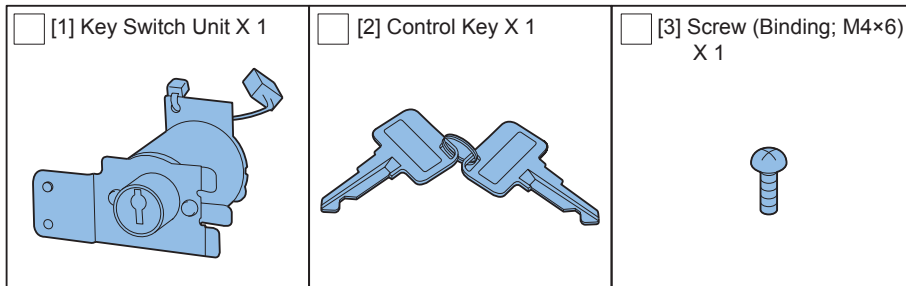
□ 1) Remove the 2 cap covers and install the 5 wire saddles. (The removed Cap Covers will not be used.)



F-9-186

## Key Switch Unit-A2

### Checking the Content



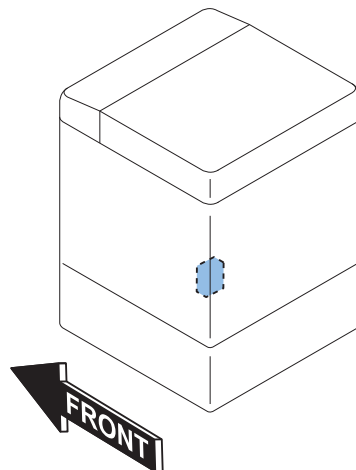
F-9-187

### 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.

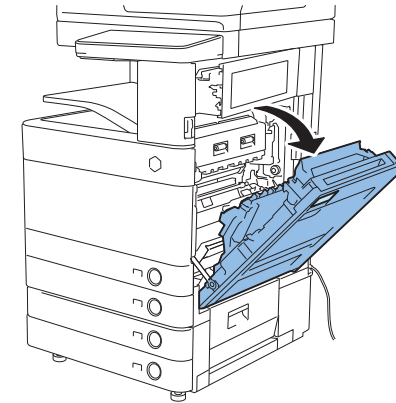
### Installation Outline Drawing



F-9-188

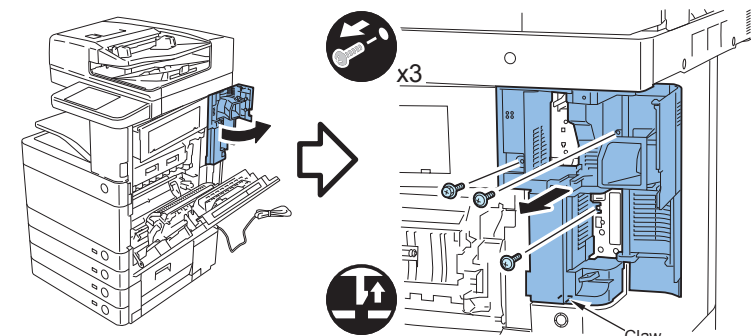
### Installation Procedure

- 1) Open the Right Lower Cover. (The Right Upper Cover opens simultaneously.)



F-9-189

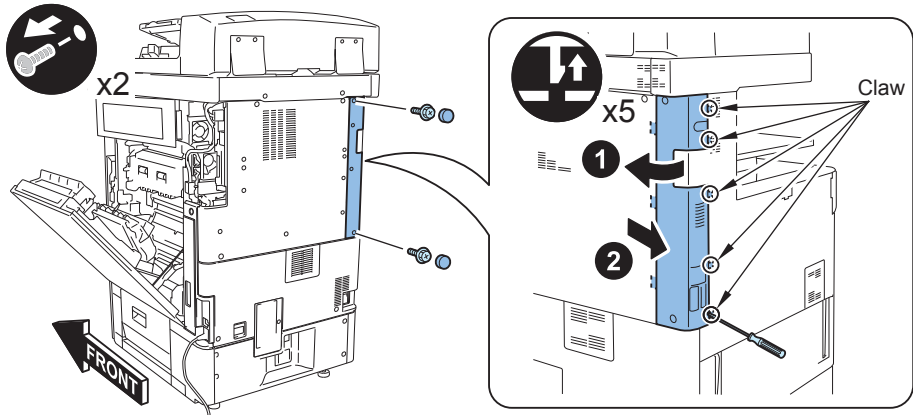
- 2) Open the Right Rear Cover 1.
- 3) Remove the Right Rear Cover 1.
  - 1 Screw (RS Tightening; M4)
  - 2 Screws (TP; M3)
  - 1 Claw



F-9-190

□  
4) Remove the Left Rear Cover.

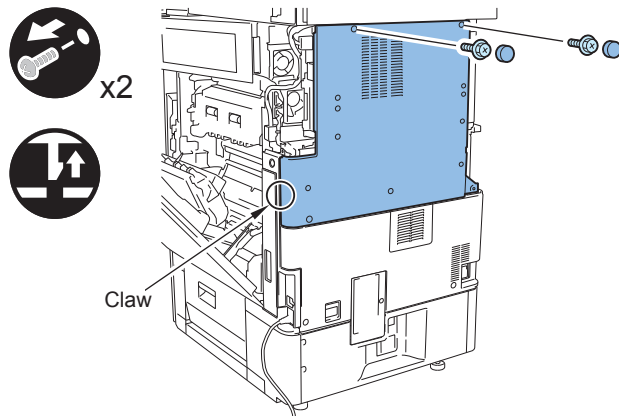
- 2 Rubber caps
- 2 Screws
- 5 Claws



F-9-191

□  
5) Remove the Rear Cover.

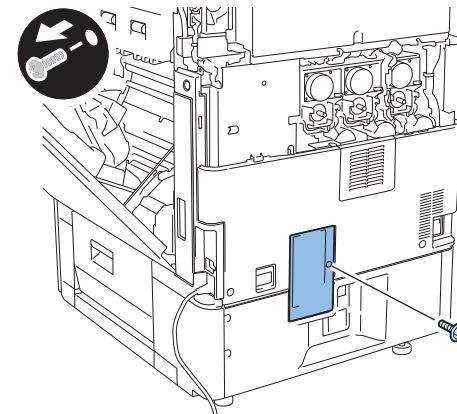
- 2 Rubber caps
- 2 Screws
- 1 Claw



F-9-192

□  
6) Remove the Connector Cover.

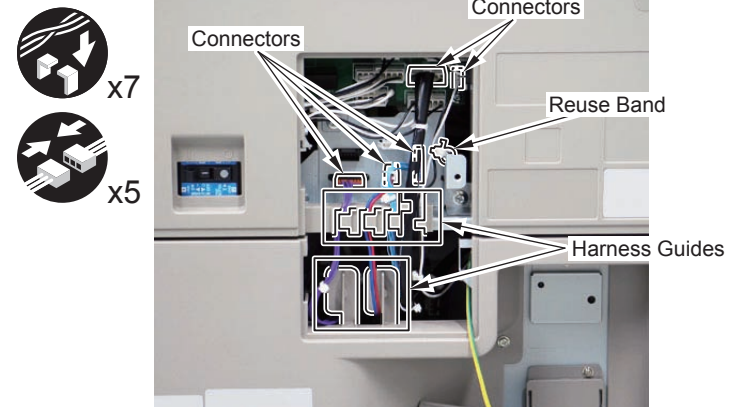
- 1 Screw



F-9-193

□  
7) Remove the 5 connectors of the Cassette Pedestal. (If the Pedestal is not installed, this procedure is not needed.)

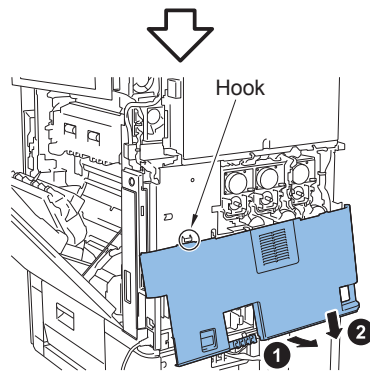
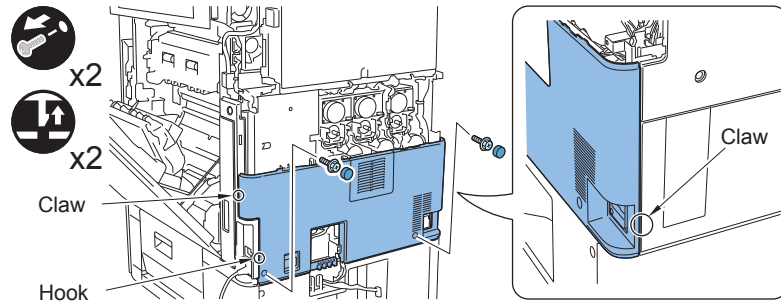
- 6 Harness Guides
- 1 Reuse Band



F-9-194

□  
8) Remove the Rear Lower Cover.

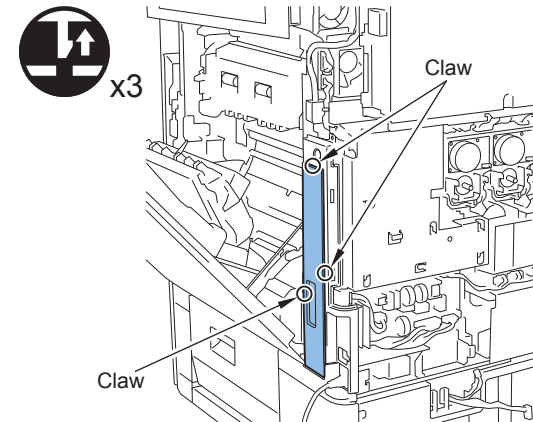
- 2 Rubber caps
- 2 Screws
- 2 Claws
- 2 Hooks



F-9-195

□  
9) Remove the Right Rear Cover 3.

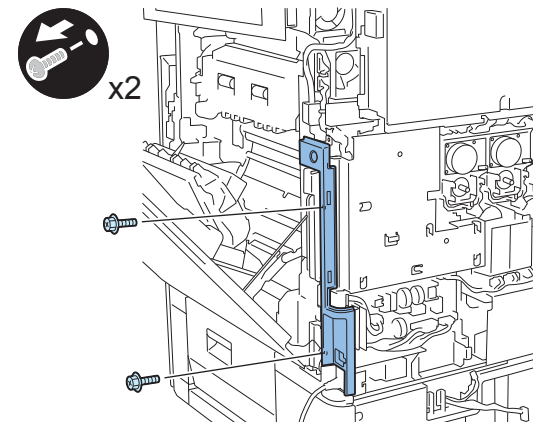
- 3 Claws



F-9-196

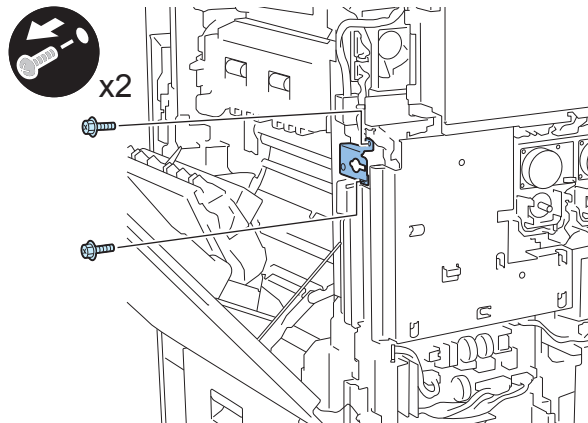
□  
10) Remove the Right Rear Cover 2.

- 2 Screws



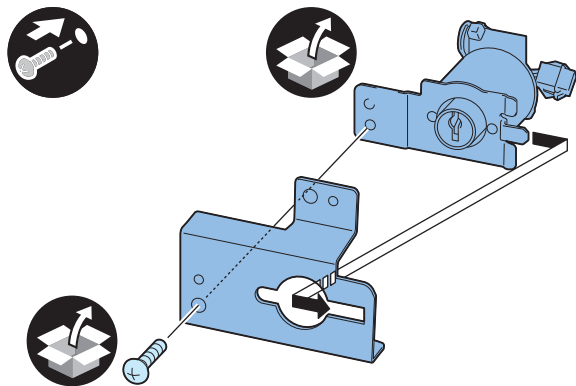
F-9-197

- 11) Remove the Key Switch Bracket.  
• 2 Screws



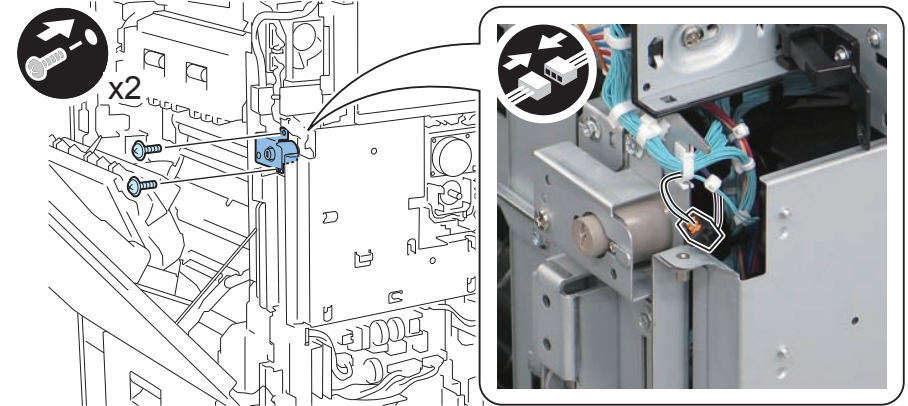
F-9-198

- 12) Install the Key Switch Unit to the Key Switch Bracket.  
• 1 Screw (Binding; M4x6)



F-9-199

- 13) Install the Key Switch Bracket assembled in the previous procedure.  
• 2 Screws (use the screw removed in step 11)  
14) Connect the connector of the host machine with the connector of Key Switch Unit.

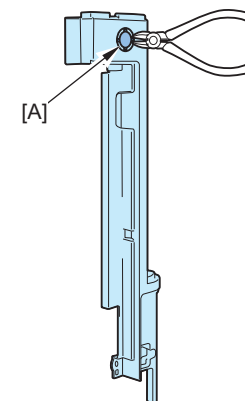


F-9-200

- 15) Cut the [A] part of the removed Right Rear Cover 2 in step 10) with nipper, etc.

**CAUTION:**

Be sure to remove adequately so that there is no burr.



F-9-201



16) Reinstall the removed covers and the connectors.

- Right Rear Cover 2 (2 Screws)
- Right Rear Cover 3
- Rear Lower Cover (2 Screws, 2 Claws)
- Connector of the Cassette Pedestal (1 Reuse Band)
- Connector Cover (1 Screw)
- Rear Cover (2 Screws, 2 Claws)
- Left Rear Cover (2 Screws, 2 Claws)
- Right Rear Cover 1 (3 Screws)
- Right Lower Cover
- Right Upper Cover

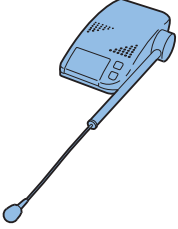
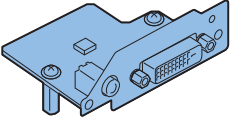
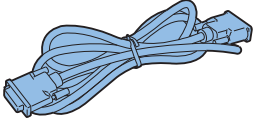
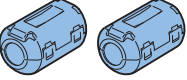

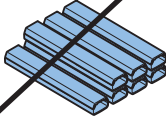
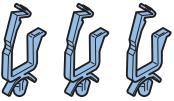




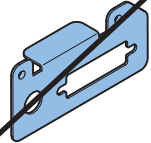
## Checking after installation



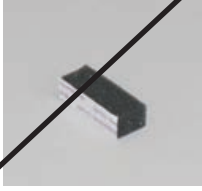

- 1) Connect the power plug of the host machine to the power outlet.
- 2) Turn ON the main power switch.
- 3) Set the following service mode (level 1) value to "1".
  - COPIER > FUNCTION > INSTALL > KEY
- 4) Turn OFF/ON the main power switch.
- 5) Make sure that [Set the control key] is displayed.
- 6) Insert the Control key into the Key Switch Unit and make sure that the machine is ready for copy.

# Voice Operation Kit C2

## Checking the Contents

<input type="checkbox"/> [1] Speaker Unit X 1 	<input type="checkbox"/> [2] Voice Guidance Board Unit X 1 	<input type="checkbox"/> [3] DVI Cable X 1 
<input type="checkbox"/> [4] Ring Core X 2 	<input type="checkbox"/> [5] Ring Core X 1 	<input type="checkbox"/> [6] Cord Guide X 7 
<input type="checkbox"/> [7] Wire Saddle X 3 Use 2 of them 	<input type="checkbox"/> [8] Screw (Binding; M4x20) X 2 	<input type="checkbox"/> [9] Screw (Binding; M4x14) X 2 Use 1 of them 
<input type="checkbox"/> [10] Screw (Binding; M3x14) X 1 	<input type="checkbox"/> [11] Screw (TP; M3x6) X 2 	<input type="checkbox"/> [12] Support Plate X 1 

F-9-202

<input type="checkbox"/> [13] Cable Face Seal X 1 	<input type="checkbox"/> [14] Card Spacer X 1 
--	--

F-9-203

<CD/Guide>

- Voice Guidance Kit Users Guide
- Voice Operation Kit Users Guide
- Voice Operation Quick Reference Guide
- Voice Guidance Guide CD
- Voice Operation Kit Manual CD
- FCC/IC Instruction Sheet



## Points to Note before Installation

### CAUTION:

The Color Image Reader is necessary to operate this equipment.

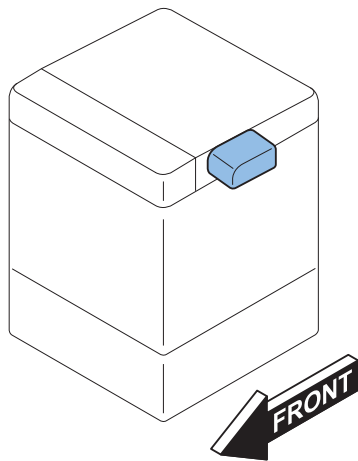
When installing the equipment, see the 'Combination Table of Accessory Installation'.

## Check Items when Turning OFF the Main Power

Check that the main power is OFF.

- 1) Turning off the Main Power Supply Switch of the Host Machine.
- 2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

## Installation Outline Drawing

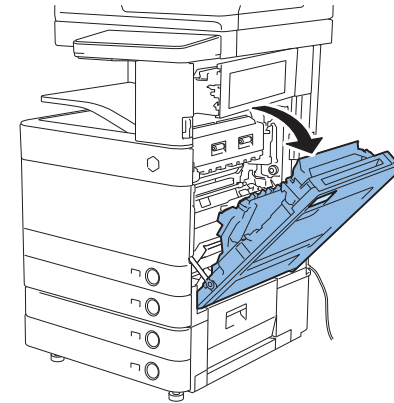


F-9-204

## Installation Procedure



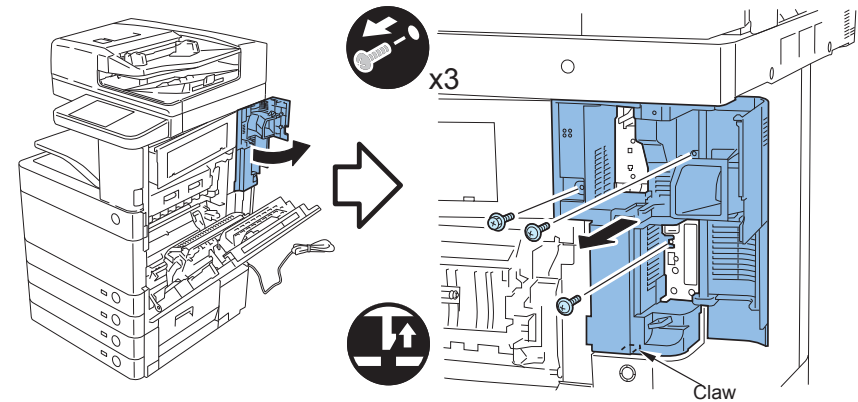
- 1) Open the Right Lower Cover. (The Right Upper Cover opens simultaneously.)



F-9-205



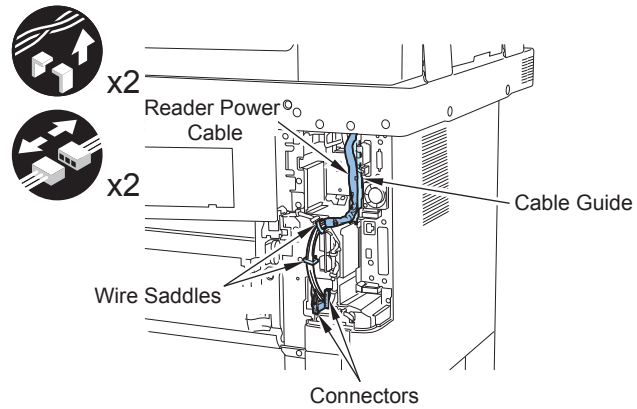
- 2) Open the Right Rear Cover 1.
- 3) Remove the Right Rear Cover 1.
  - 1 Screw (RS Tight; M4)
  - 2 Screws (TP; M3)
  - Claw in 1 place



F-9-206

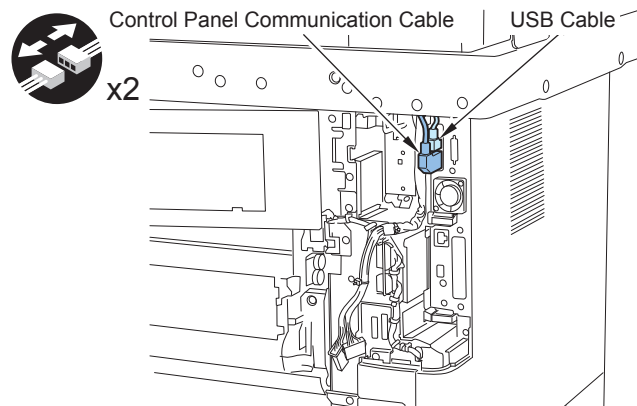
□  
4) If reader is installed, remove the Reader Power Cable.

- 2 Connectors
- 2 wire Saddle
- 1 Cable Guide



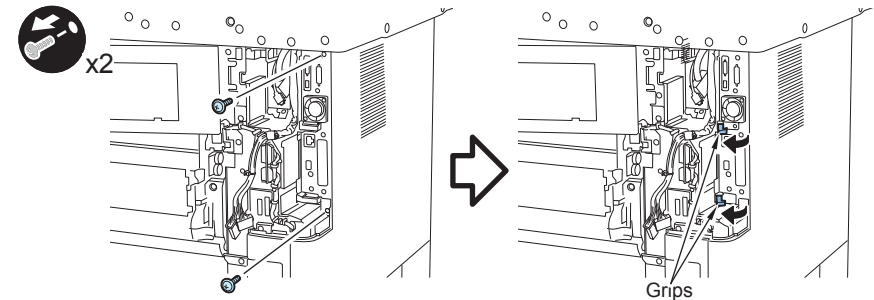
F-9-207

□  
5) Remove the USB Cable and Control Panel Communication Cable.



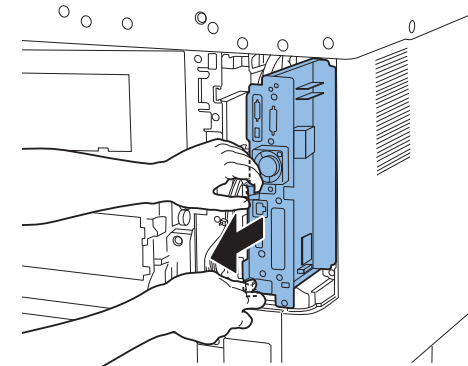
F-9-208

□  
6) Remove the 2 screws, and open the grip in 2 places.



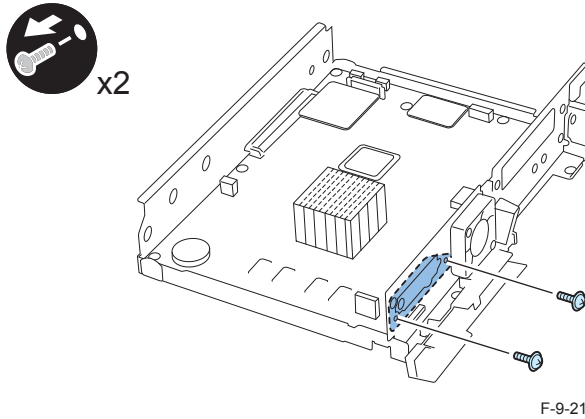
F-9-209

□  
7) Hold the grip in 2 places, remove the Main Controller PCB 1 while avoiding the removed harness.



F-9-210

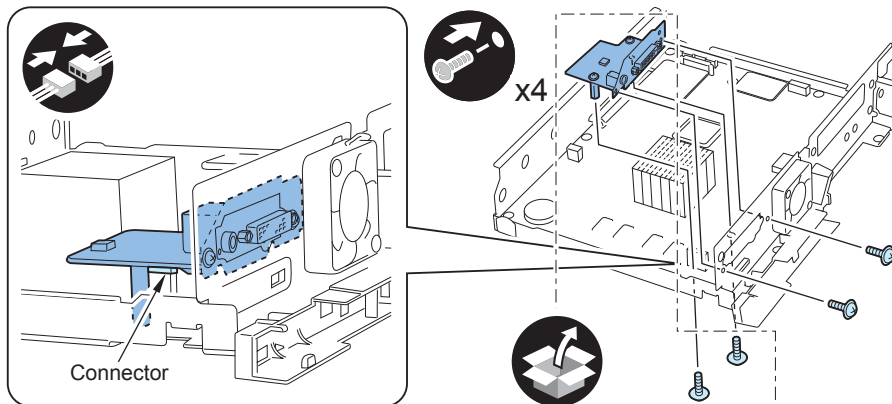
- 8) Remove the Voice Operation Board Support Plate from the Main Controller PCB 1. (Do not use the removed Voice Operation Board Support Plate.)
- 2 Screws (Removed screw will be used in step 9))



F-9-211

- 9) Install the Voice Operation Board Unit in the Main Controller Roller PCB 1.
- 1 Connector
  - 2 screws (2 Screws that removed in step 8))
  - 2 Screws (TP; M3×6)

**NOTE:**  
Make sure that the connector is installed properly.

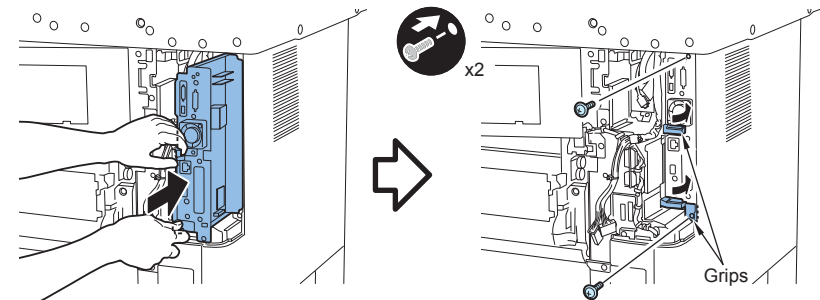


F-9-212

- 10) Install the Main Controller PCB 1 in the Host Machine.

**CAUTION:**

- Lift the handle, insert the Main Controller PCB 1 until it stops, tilt the grip and install the 2 screws.
- Make sure to tilt the grip slowly on both sides simultaneously.
- Check that the Main Controller PCB 1 is installed properly.

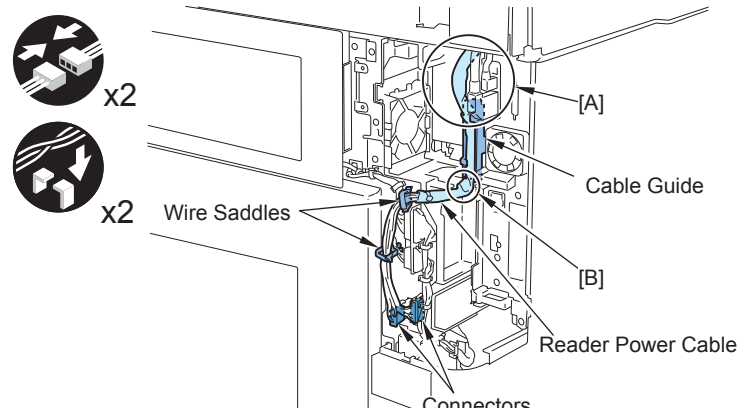


F-9-213

- 11) Install the USB Cable and Control Panel Communication Cable.
- 12) If reader is installed, install the Reader Power Cable.

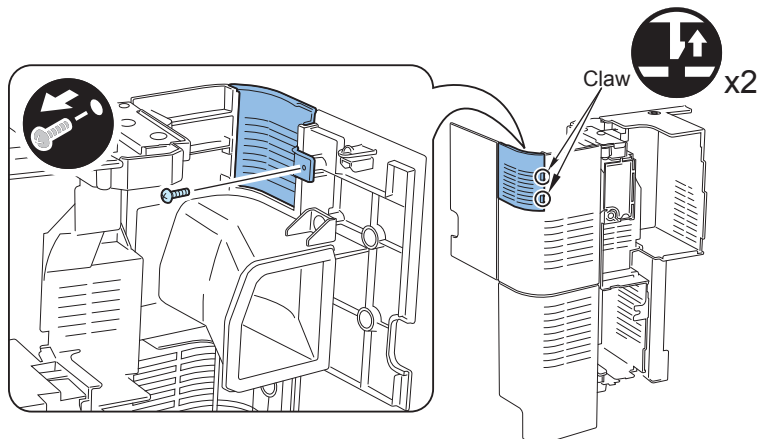
**NOTE:**

- Handle the Reader Power Cable from the connector side and make a slack at [A] part.
- Bend the Reader Power Cable at a right angle on [B] part.



F-9-214

- 13) Remove the small cover installed in the Right Rear Cover 1.
  - 1 Screw
  - Claw in 2 places

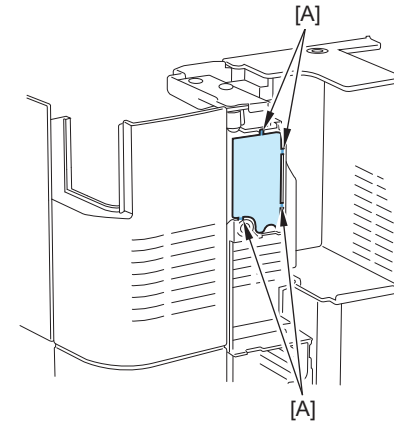


F-9-215

- 14) Cut the [A] part of Right Rear Cover 1 with nipper, etc.

**CAUTION:**

Be sure to remove adequately so that there is no burr.



F-9-216

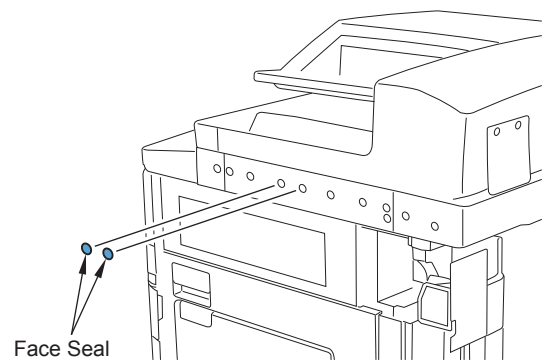
- 15) Install the Right Rear Cover 1. (3 Screws)

**NOTE:**

Do not close the Right Rear Cover 1.

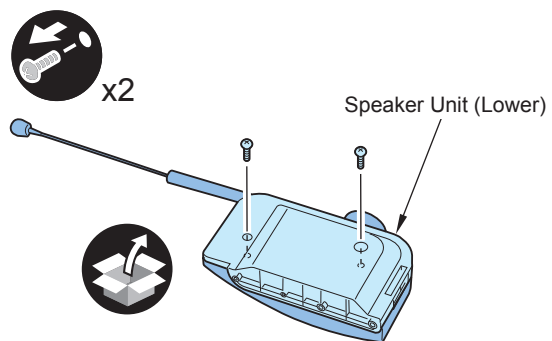
- 16) Close the Right Lower Cover and the Right Upper Cover.

- 17) Remove the Cover Seal from the Reader Right Cover. (Do not use the removed Cover Seal.)



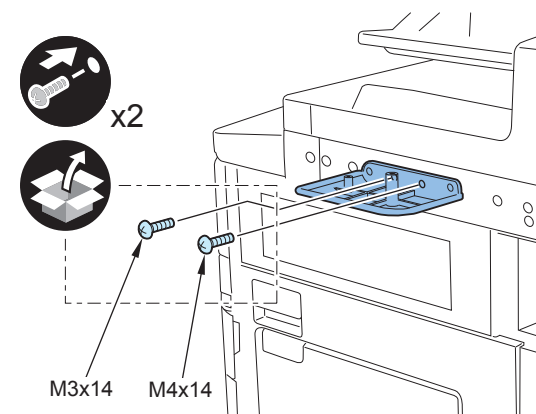
F-9-217

- 18) Remove the Speaker Unit (Lower) from the Speaker Unit.  
 • 2 screws (removed screw will be used in step 20))



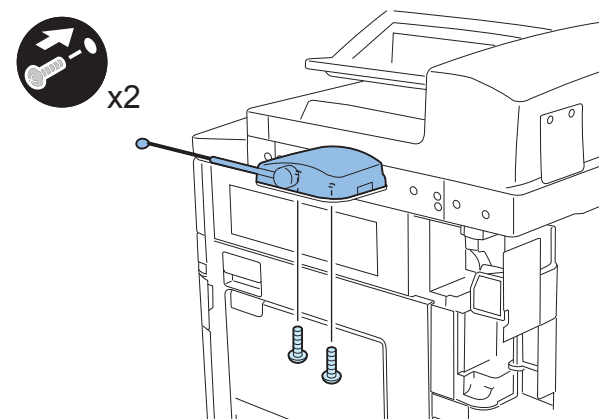
F-9-218

- 19) Install the Speaker Unit (Lower).  
 • 1 Screw (Binding; M3×14)  
 • 1 Screw (Binding; M4×14)



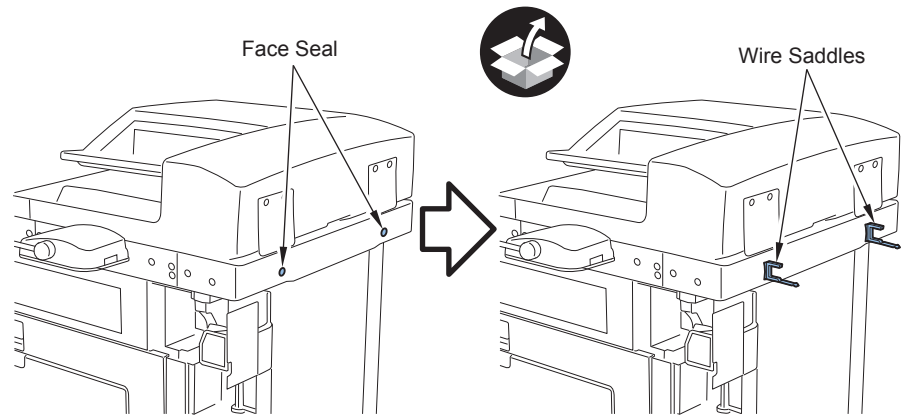
F-9-219

- 20) Install the Speaker Unit (Upper).  
 • 2 screws (screws that removed in step 18))



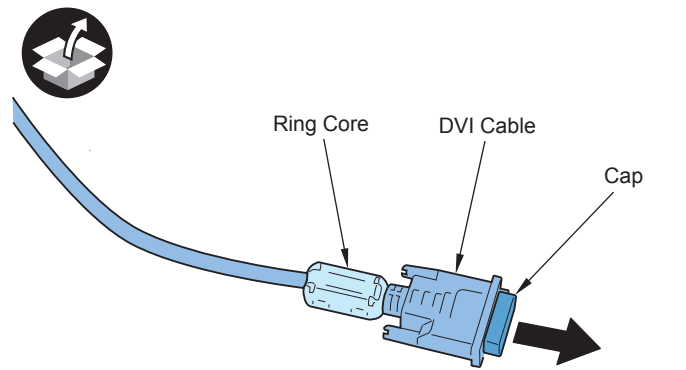
F-9-220

- 21) Peel off the Face Seal, and install the 2 Wire Saddles. (Do not use the removed Cover Seal.)



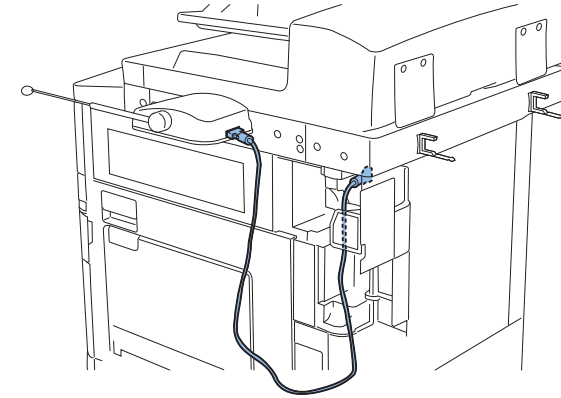
F-9-221

- 22) Install the Ring Core to both sides of the DVI Cable, and remove the cap. (Do not use the removed cap.)



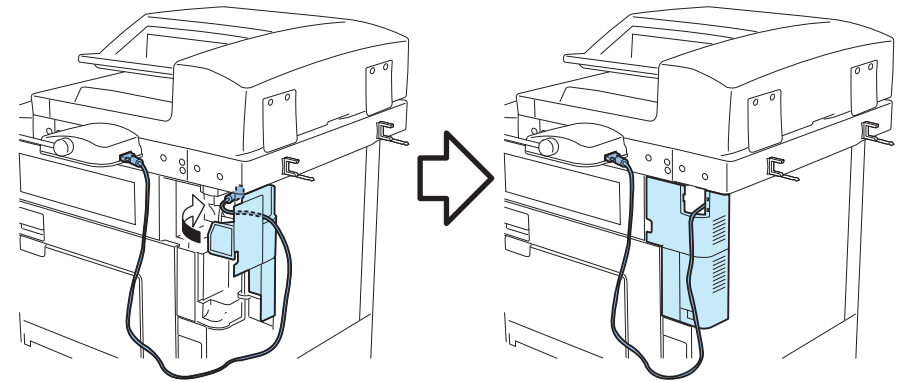
F-9-222

- 23) Connect both sides of the DVI Cable respectively.



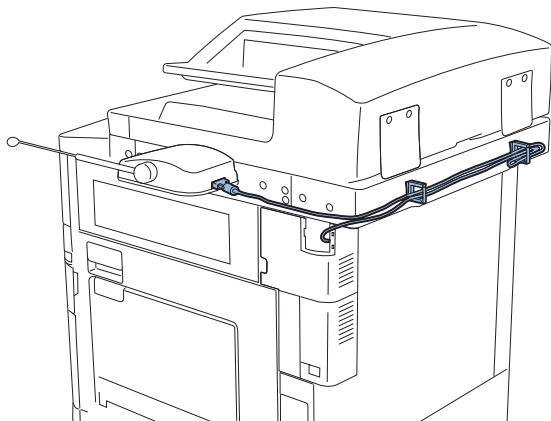
F-9-223

- 24) Pass the DVI Cable through the hole of the Right Rear Cover 1, and close the cover.



F-9-224

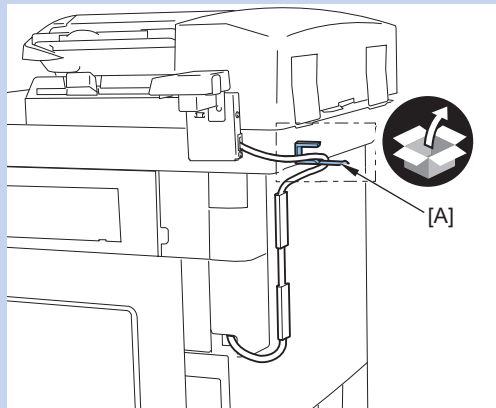
- 25) Fix the DVI Cable to the 2 Wire Saddles



F-9-225

NOTE: When using in combination with the Copy Card Reader

- Secure the Card Reader External Relay Harness in place together with the DVI Cable using the Wire Saddle [A] included in the package of Voice Operation Kit.
- Even when used in combination with the Card Reader, the routing of the cable is same.



F-9-226

## Setting Check

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 power outlet.
  - 2) Open the switch cover and turn ON the main power switch.
  - 3) [Settings/Registration] > [Preferences] > [Accessibility] > [Voice Navigation Settings] > and make sure that [Use Voice Navigation] is [ON].
  - 4) [Settings/Registration] > [Preferences] > [Accessibility] > [Voice Navigation Settings] > [Voice Navigation at Startup] and make sure that [Select Mode at Startup] is set.
  - 5) [Settings/Registration] > [Preferences] > [Accessibility] > [Voice Navigation Settings] > and make sure that [Tune Microphone] is displayed.

## Operation Check

### When using

- 
- 1) Press Reset Key and Voice Recognition Button for 3 secs or more.
  - 2) In the operation screen [Voice Navigation], select one of the following: [Manual+Vocal Mode/Vocal Mode/Manual Mode], and press OK.
  - 3) The display in Panel Screen, if the display in panel screen is boxed with red frame, "Voice Guidance Kit" is available.

NOTE:

If [Manual Mode] is selected in [Voice Navigation], nothing is going to happen even if Voice Recognition Button is pressed.

If "Voice Guidance Kit" doesn't properly operate, check the below.

- Enter Service Mode (Level 1) > COPIER > DISPLAY > VERSION, and check whether languages to be used for TTS-JA/TTS-EN/TTS-IT/TTS-FR/TTS-DE are properly installed.
- Enter Service Mode (Level 1) > COPIER > DISPLAY > VERSION, and check whether ASR-JA/ASR-EN is properly installed.

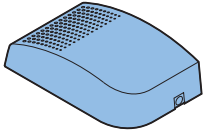
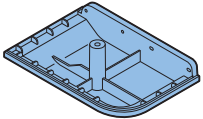
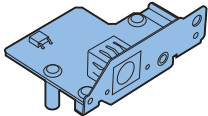
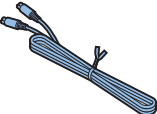
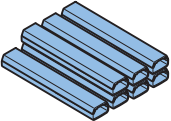
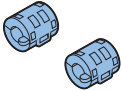


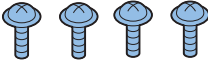

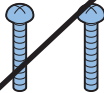

### To stop the use

- 
- 1) Press the Reset Key for 3 secs or more.

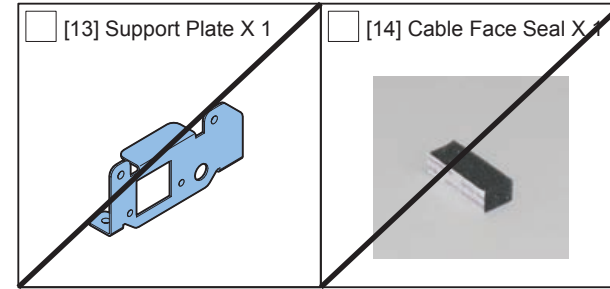


# Voice Guidance Kit-F2

## Checking the Contents

<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 3 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 
<input type="checkbox"/> [10] Screw (Binding; M4x16) X 2 Use 1 of them 	<input type="checkbox"/> [11] Screw (Binding; M4x20) X 2 	<input type="checkbox"/> [12] Card Spacer X 1 

F-9-227



F-9-228

- <CD/GUIDES>
  - Voice Guidance kit Users Guide
  - Voice Guidance Guide CD
  - FCC/IC Instruction Sheet

## Points to Note before Installation

### CAUTION:

The Color Image Reader is necessary to operate this equipment.

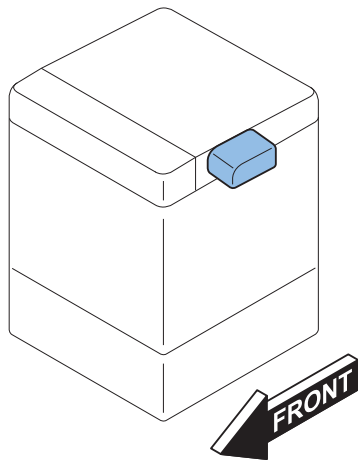
When installing the equipment, see the 'Combination Table of Accessory Installation'.

## Check Items when Turning OFF the Main Power

Check that the main power is OFF.

- 1) Turning off the Main Power Supply Switch of the Host Machine.
- 2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

## Installation Outline Drawing

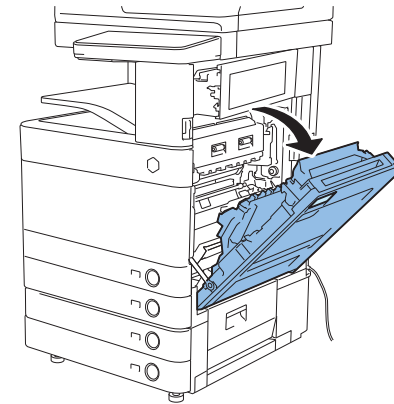


F-9-229

## Installation Procedure



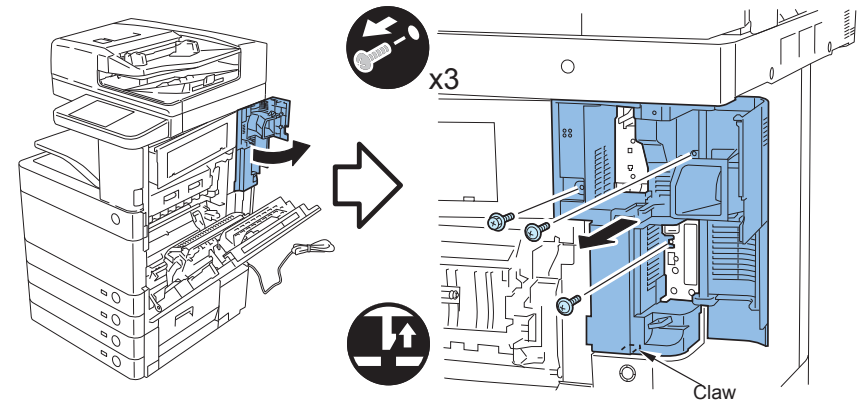
- 1) Open the Right Lower Cover. (The Right Upper Cover opens simultaneously.)



F-9-230



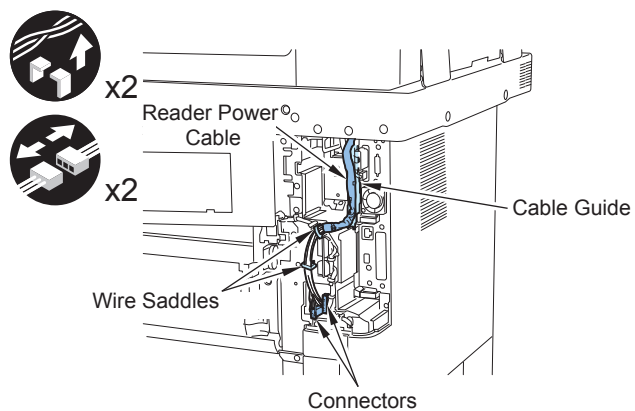
- 2) Open the Right Rear Cover 1.
- 3) Remove the Right Rear Cover 1.
  - 1 Screw (RS Tight; M4)
  - 2 Screws (TP; M3)
  - Claw in 1 place



F-9-231

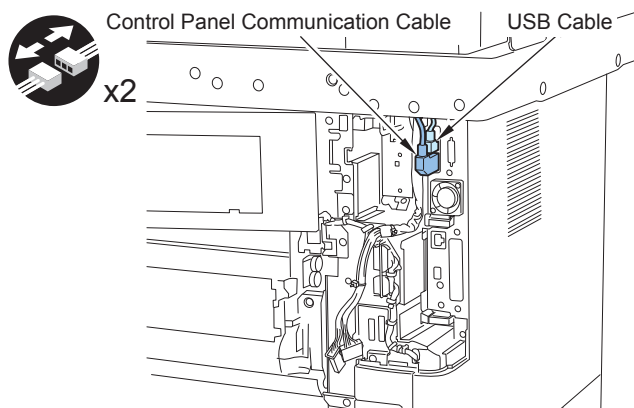
□  
4) If reader is installed, remove the Reader Power Cable.

- 2 Connectors
- 2 wire Saddle
- 1 Cable Guide



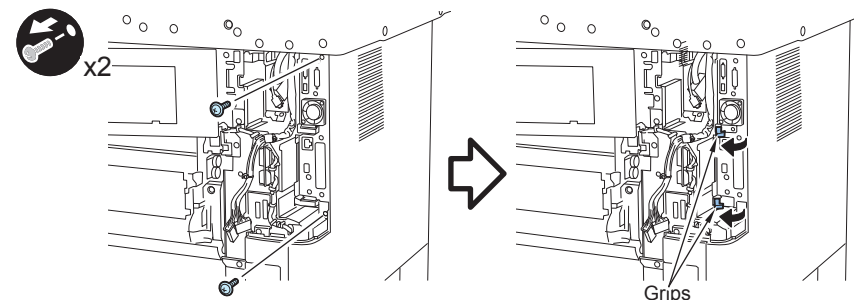
F-9-232

□  
5) Remove the USB Cable and Control Panel Communication Cable.



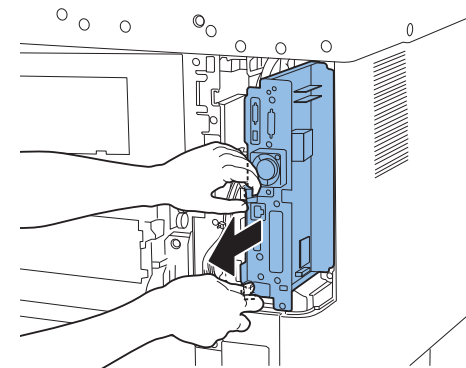
F-9-233

□  
6) Remove the 2 screws, and open the grip in 2 places.



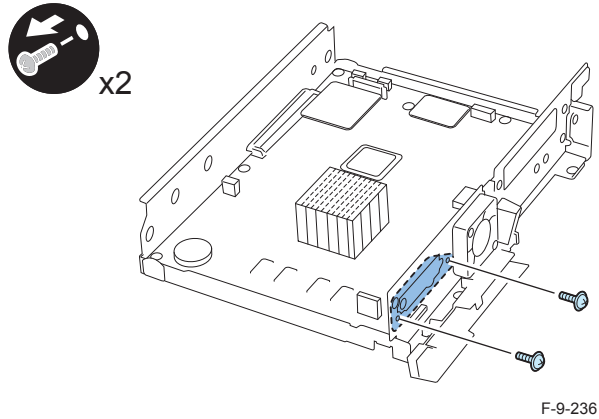
F-9-234

□  
7) Hold the grip in 2 places, remove the Main Controller PCB 1 while avoiding the removed harness.



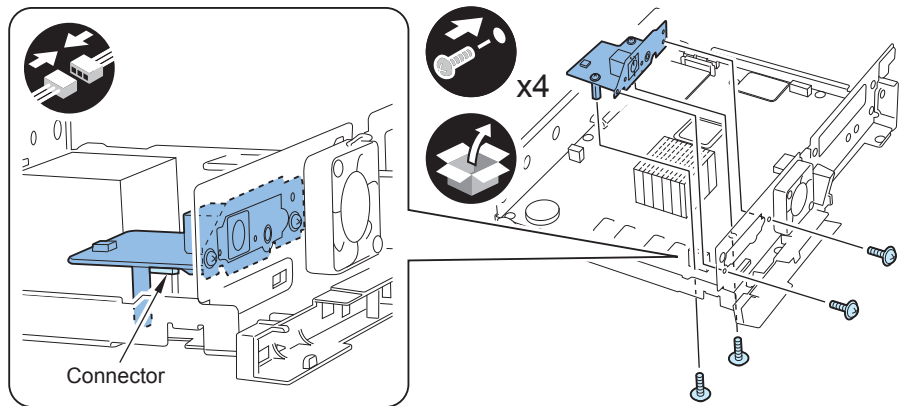
F-9-235

- 8) Remove the Voice Operation Board Support Plate from the Main Controller PCB 1. (Do not use the removed Voice Operation Board Support Plate.)
  - 2 Screws (Do not use the removed 2 Screws.)



- 9) Install the Voice Guidance Board Unit in the Main Controller PCB 1.
  - 1 Connector
  - 4 Screws (TP; M3×6)

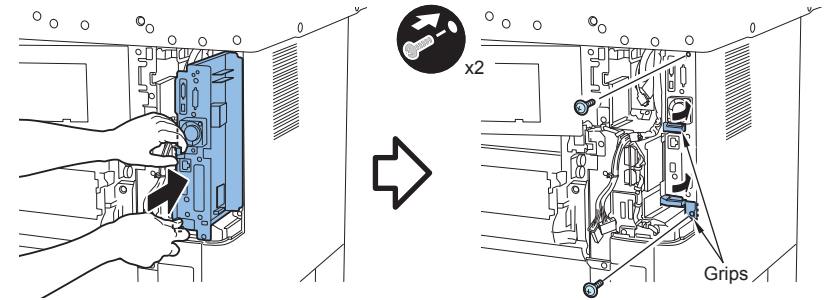
**NOTE:**  
Make sure that the connector is installed properly.



- 10) Install the Main Controller PCB 1 in the Host Machine.

**CAUTION:**

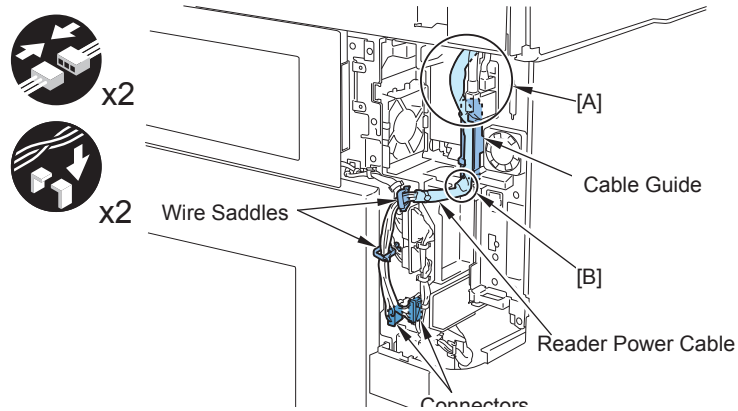
- Lift the handle, insert the Main Controller PCB 1 until it stops, tilt the grip and install the 2 screws.
- Make sure to tilt the grip slowly on both sides simultaneously.
- Check that the Main Controller PCB 1 is installed properly.



- 11) Install the USB Cable and Control Panel Communication Cable.  
 12) If reader is installed, install the Reader Power Cable.

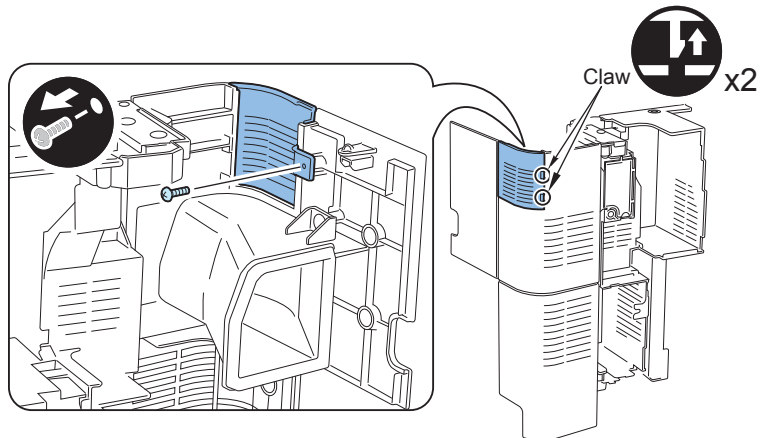
**NOTE:**

- Handle the Reader Power Cable from the connector side and make a slack at [A] part.
- Bend the Reader Power Cable at a right angle on [B] part.



F-9-239

- 13) Remove the small cover installed in the Right Rear Cover 1.  
 • 1 Screw  
 • Claw in 2 places

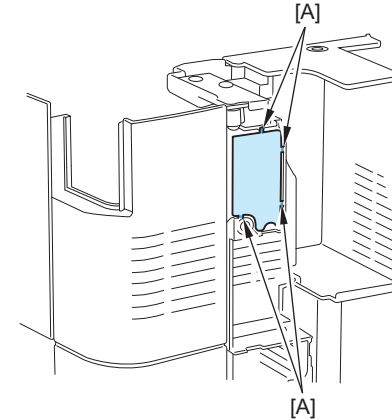


F-9-240

- 14) Cut the [A] part of Right Rear Cover 1 with nipper, etc.

**CAUTION:**

Be sure to remove adequately so that there is no burr.



F-9-241

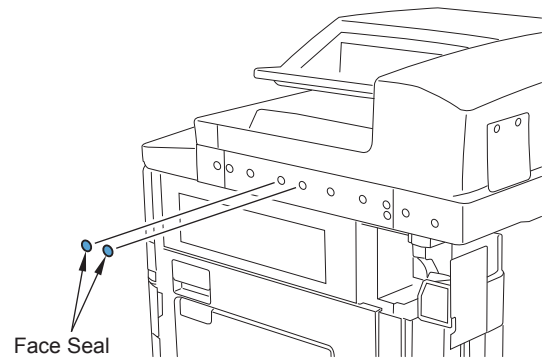
- 15) Install the Right Rear Cover 1. (3 Screws)

**NOTE:**

Do not close the Right Rear Cover 1.

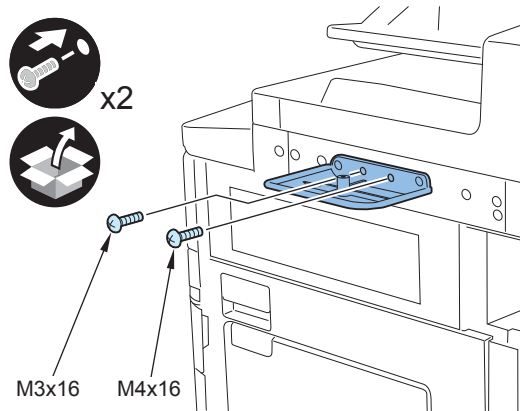
- 16) Close the Right Lower Cover and the Right Upper Cover.

- 17) Remove the Cover Seal from the Reader Right Cover. (Do not use the removed Cover Seal.)



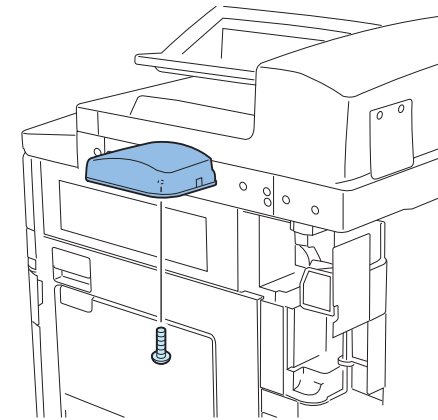
F-9-242

- 18) Install the Speaker Unit (lower).  
• 1 Screw (Binding; M3×16)  
• 1 Screw (Binding; M4×16)



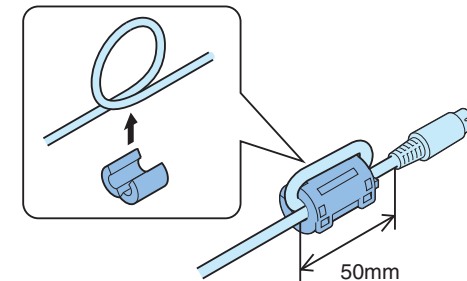
F-9-243

- 19) Install the Speaker Unit (Upper).  
• 1 Screw (Bind; M4x6)



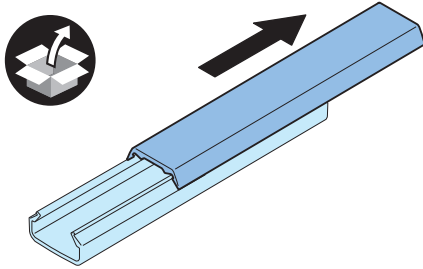
F-9-244

- 20) Install the Ring Core to both sides of the Speaker Cable.



F-9-245

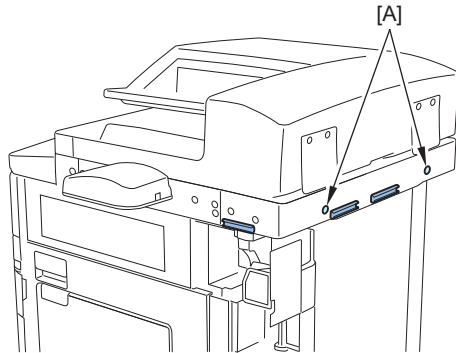
- 21) Remove the cover of the 3 Cord Guides.



F-9-246

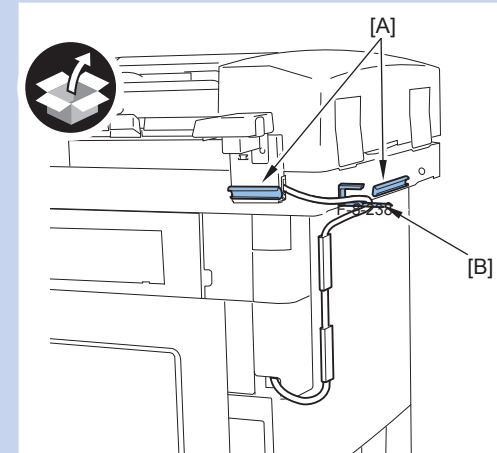
- 22) Peel off the paper liner, and affix them in 3 places in the Cord Guide as shown in the figure.

**NOTE:**  
Do not affix the Cord Guide onto the Face Seals [A].



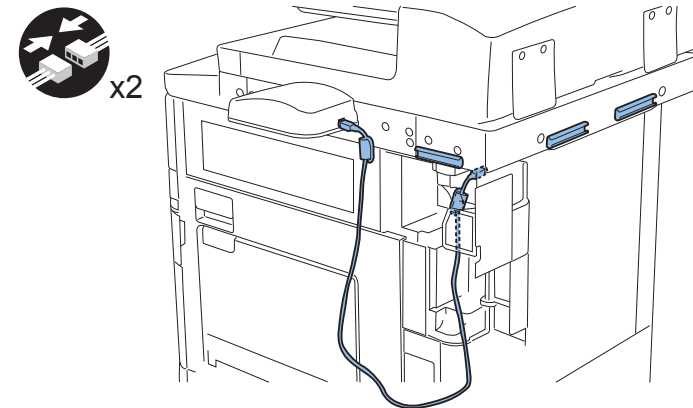
F-9-247

- NOTE:** When using in combination with the Copy Card Reader
- Affix the 2 Cord Guides [A] as shown in the figure, and use the Wire Saddle [B] included in the Card Reader Attachment.
  - Even when used in combination with the Card Reader, the routing of the cable is same.



F-9-248

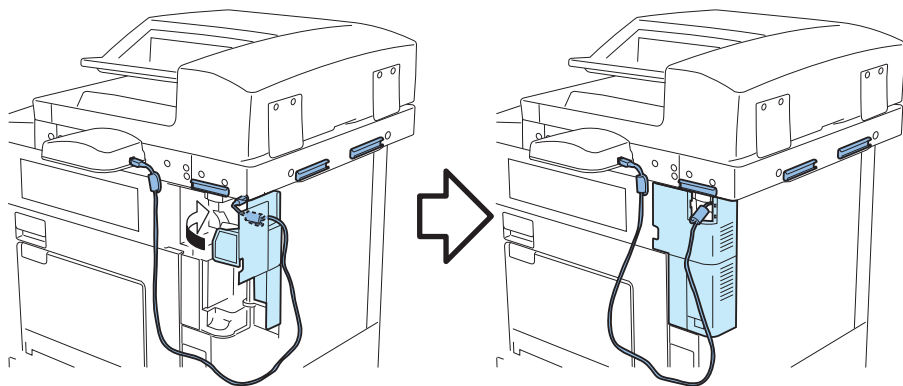
- 23) Connect both sides of the Speaker Cable respectively.



F-9-249

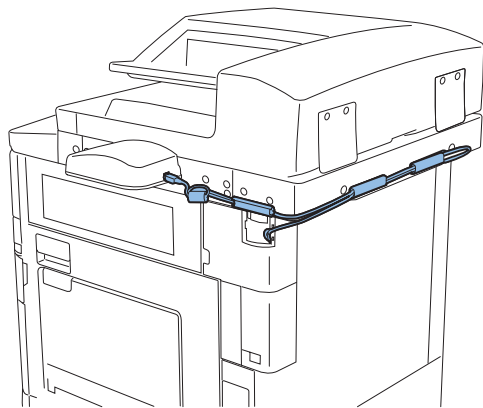


- 24) Pass the Speaker Cable through the hole of the Right Rear Cover 1, and close the cover.



F-9-250

- 25) Pass the Speaker Cable to Cord Guide, and install the 3 Cord Guide covers.



F-9-251

## 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 power outlet.
  - 2) Open the switch cover and turn ON the main power switch.
  - 3) [Settings/Registration] > [Preferences] > [Accessibility] > [Voice Navigation Settings] > and make sure that [Use Voice Navigation] is [ON].
  - 4) [Settings/Registration] > [Preferences] > [Accessibility] > [Voice Navigation Settings] > and make sure that [Voice Guide from Speakers] is displayed.

## Operation Check

### ■ During use

- 
- 1) Press reset key 3 secs or more.
  - 2) Press [Main Menu] in Control Panel.
  - 3) If the display in panel screen is boxed with red frame, "Voice Guidance Kit" is available.

If "Voice Guidance Kit" doesn't properly operate, check the below.

Enter Service Mode (Level 1) > COPIER > DISPLAY > VERSION, and check whether languages to be used for TTS-JA/TTS-EN/TTS-IT/TTS-FR/TTS-DE are properly installed.

### ■ To stop the use

- 
- 1) Press the Reset Key for 3 secs or more.

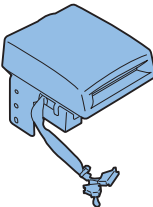


# Copy Card Reader-F1

## Points to Note Before Installation

- When installing the equipment, see the 'Combination Table of Accessory Installation'.
- To install the Copy Card Reader-F1, the Card Reader Mounting Kit-B3 is required.
- The following options cannot be used in combination with each other.
  - Serial Interface Kit
  - Copy Control Interface Kit

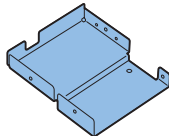
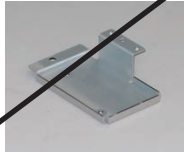
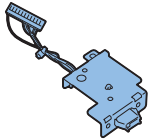
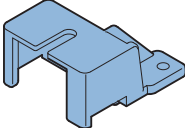
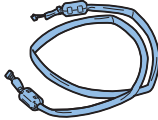
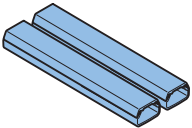






## Checking the Contents

### 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-9-252

### Card Reader Attachment-B3

<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 Mounting Plate (lower) Unit X 1 
<input type="checkbox"/> [4] Card Reader Relay Unit X 1 	<input type="checkbox"/> [5] Connector Cover X 1 	<input type="checkbox"/> [6] Card Reader External Relay Harness X 1 
<input type="checkbox"/> [7] Cord Guide X 2 	<input type="checkbox"/> [8] PCB Spacer X 1 	<input type="checkbox"/> [9] Wire Saddle X 1 
<input type="checkbox"/> [10] Screw (TP; M3x6) X 5 Use 4 of them 	<input type="checkbox"/> [11] Screw (TP; M3x12) X 2 	<input type="checkbox"/> [12] Screw (TP; M4x12) X 2 
<input type="checkbox"/> [13] Screw (Binding; M4x6) X 4 		

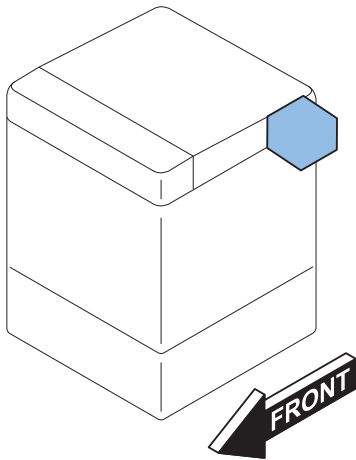
F-9-253

## 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-9-254

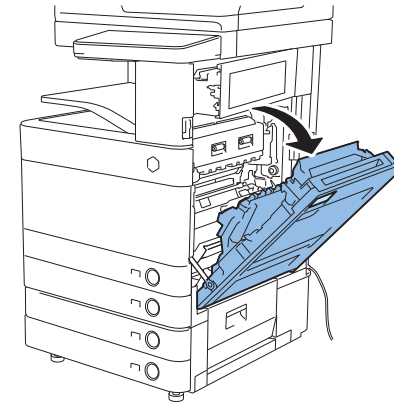
## Installation Procedure

### CAUTION:

After installing the Copy Card Reader-F1, input the card number to be used in service mode (level 1) on this equipment: [COPIER] > [FUNCTION] > [INSTALL] > [CARD]; otherwise the card cannot be recognized even though it is inserted.

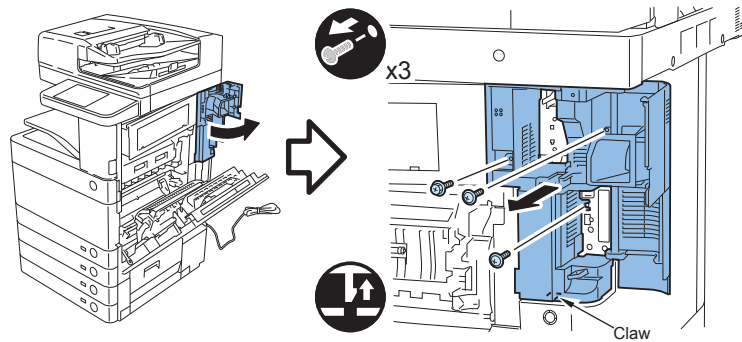


- 1) Open the Right Lower Cover. (The Right Upper Cover opens simultaneously.)



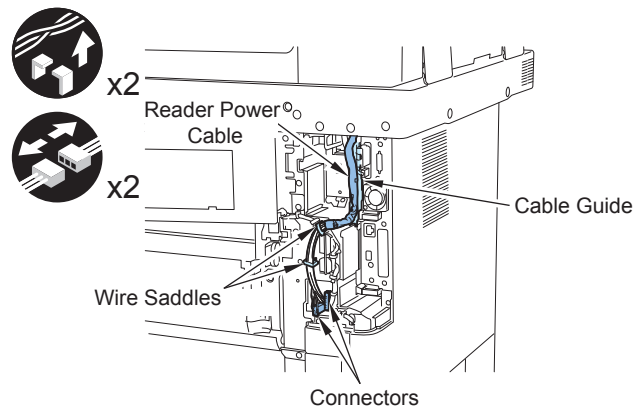
F-9-255

- 
- 2) Open the Right Rear Cover Unit1.
- 3) Remove the Right Rear Cover Unit 1.
- 1 Screw (RS tight; M4)
  - 2 Screws (TP; M3)
  - 1 Claw



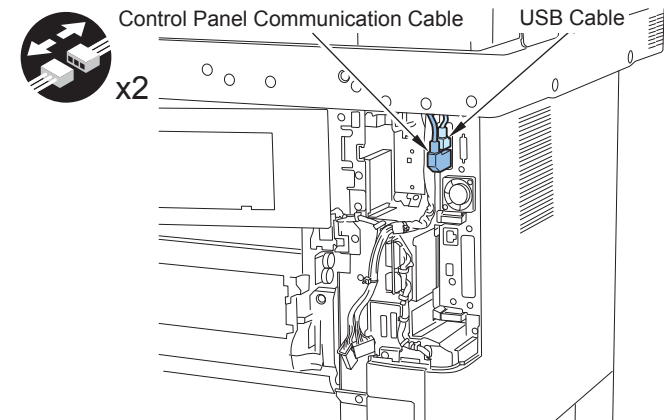
F-9-256

- 
- 4) When the Reader is installed, remove the Reader Power Cable.
- 2 Connectors
  - 2 Wire Saddles
  - 1 Cable Guide



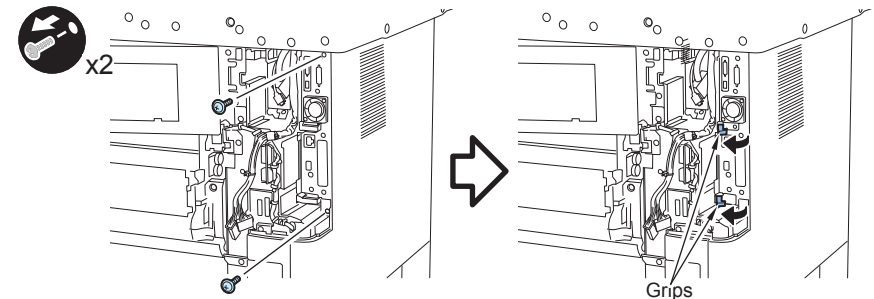
F-9-257

- 
- 5) Remove the USB Cable and the Control Panel Communication Cable.



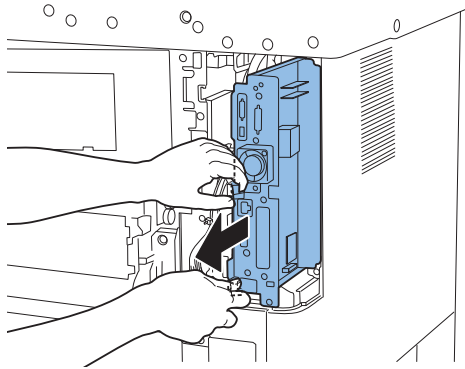
F-9-258

- 
- 6) Remove the 2 screws and open the 2 grips.



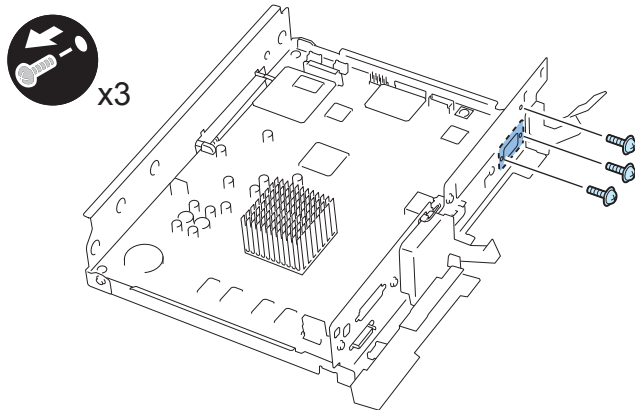
F-9-259

- 7) Hold the 2 grips and remove the Main Controller PCB 1 while avoiding the removed harness.



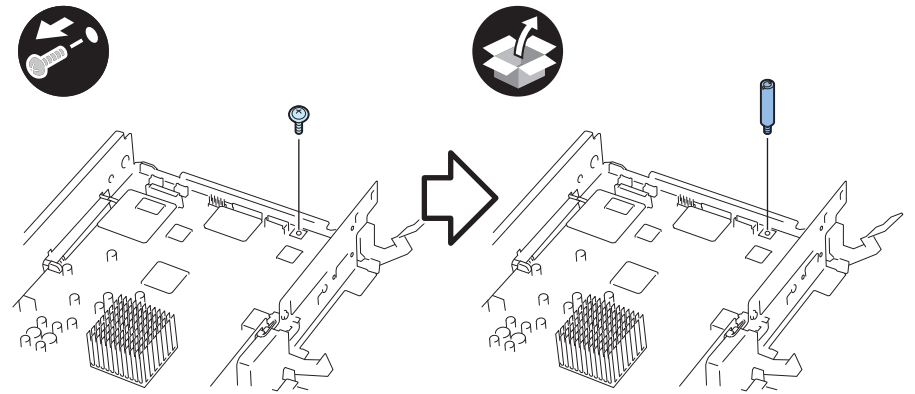
F-9-260

- 8) Remove the 2 screws and the upper screw of Blanking Cover from the Main Controller PCB 1. (Removed screw is used in the procedure 10)



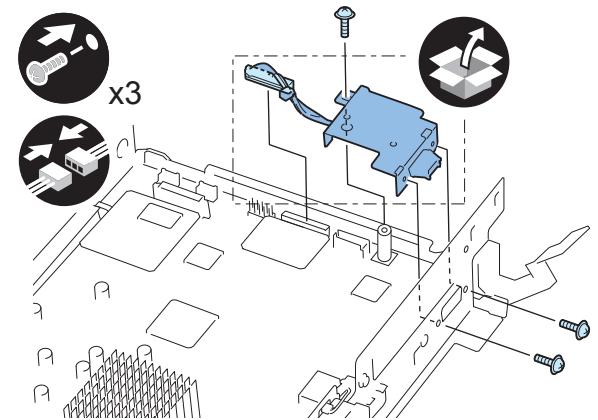
F-9-261

- 9) Remove the screw and reinstall the PCB Spacer. (Removed screw is used in the procedure 12))



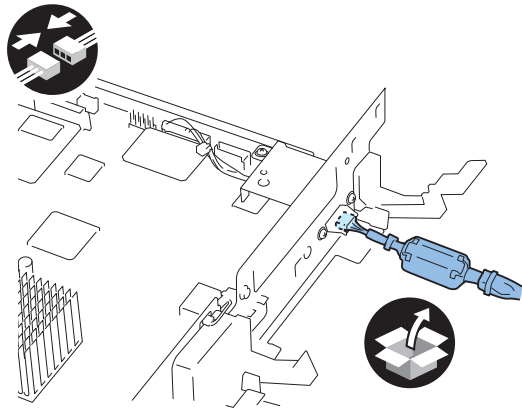
F-9-262

- 10) Install the Card Reader Relay Unit.
- 3 Screws (screws removed in step 8))
  - 1 Connector



F-9-263

- 11) Install the connector of Card Reader External Relay Harness.

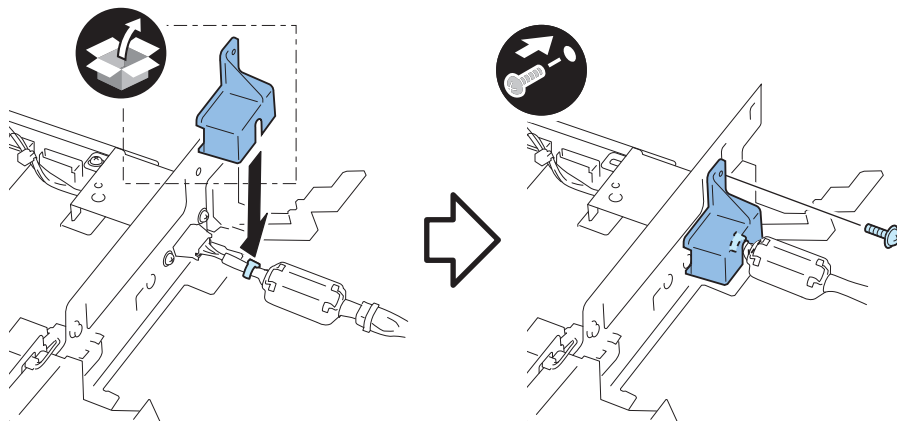


F-9-264

- 12) Install the Connector Cover.  
 • 1 screw (screw removed in step 9))

**CAUTION:**

Install it in the position where the tie-wrap of Card Reader External Relay Harness is inside the Connector Cover..

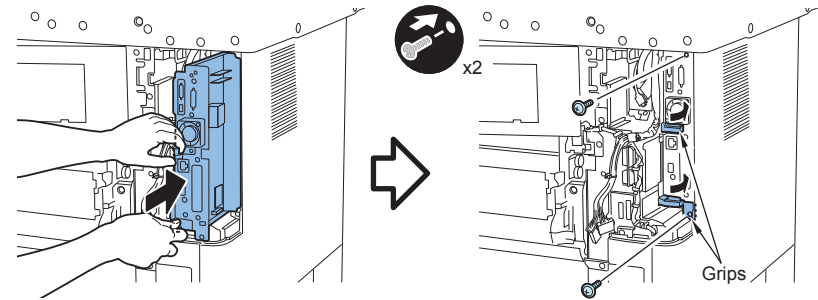


F-9-265

- 13) Install the Main Controller PCB 1 to the host machine.

**CAUTION:**

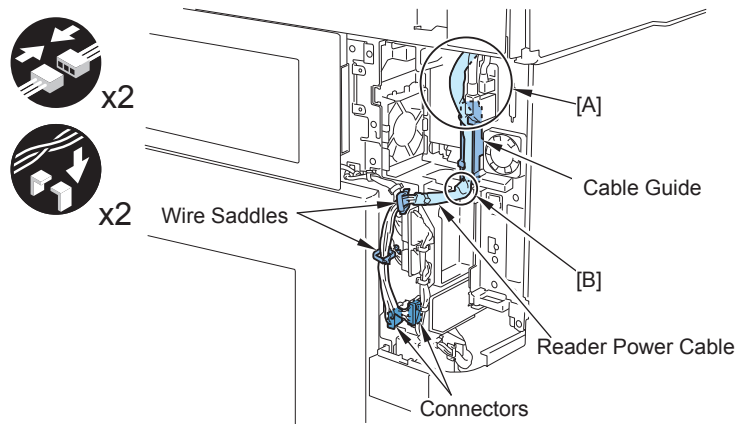
- Lift the handle, insert the Main Controller PCB 1 until it stops, tilt the grip and install the 2 screws.
- Make sure to tilt the grip slowly on both sides simultaneously.
- Check that the Main Controller PCB 1 is installed properly.



F-9-266

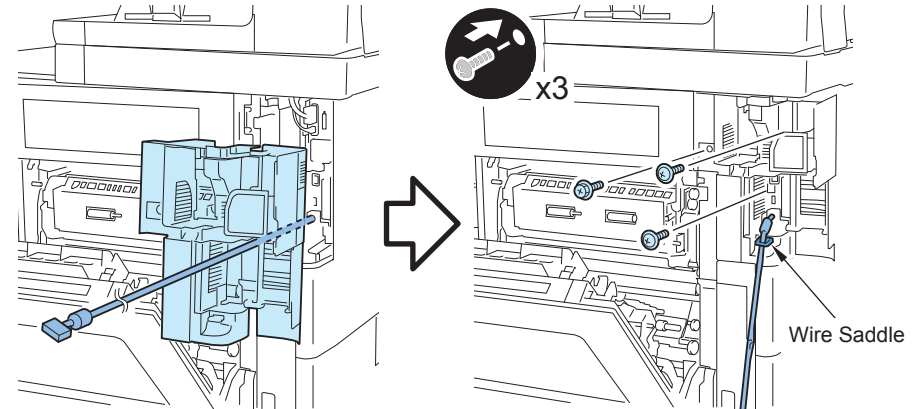
- 14) Install the USB Cable and the Control Panel Communication Cable.  
 15) When the Reader is installed, install the Reader Power Cable..

**NOTE:**  
 Handle the Reader Power Cable from the connector side and make a slack at [A] part.  
 Bend the Reader Power Cable at a right angle on [B] part.



F-9-267

- 16) Pass the Card Reader External Relay Harness through the Right Rear Cover 1 and install it.
- 1 Screws (RS tight; M4)
  - 2 Screws (TP; M3)
  - 1 Claw
  - 1 Wire Saddle



F-9-268

- 17) Close the Right Rear Cover 1, Right Lower Cover and the Right Upper Cover.

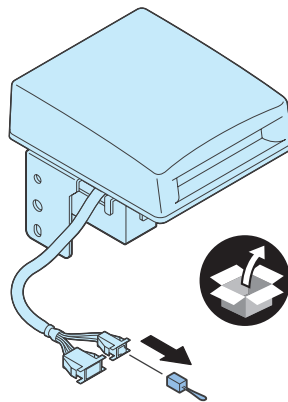


- 18) Remove the Lower Cover of the Card Reader Unit, and change the position of the cable by putting it through the groove shown in the figure below.
- 1 Screws
- 19) Install the Lower Cover of the Card Reader Unit.



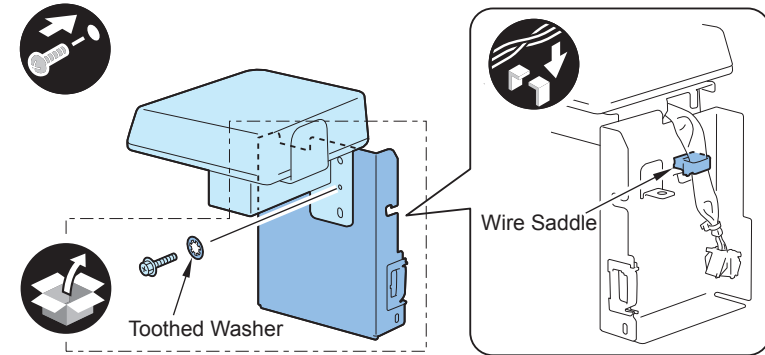
F-9-269

- 20) Remove the Jumper from the connector of Card Reader Unit. (Removed Jumper will not be used.)



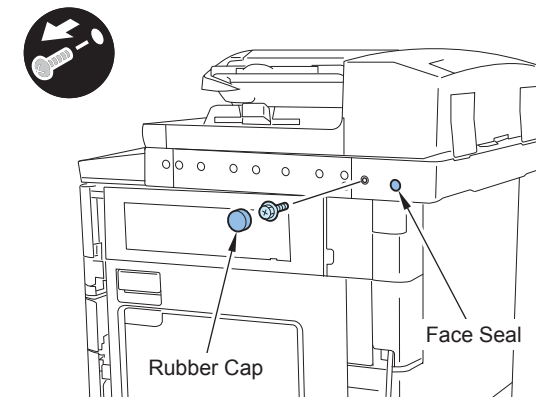
F-9-270

- 21) Install the Card Reader Unit to the Card Reader Mounting Plate (front) Unit.
- 1 Toothed Washer
  - 1 Screw (RS tight; M4x10)
  - 1 Wire saddle



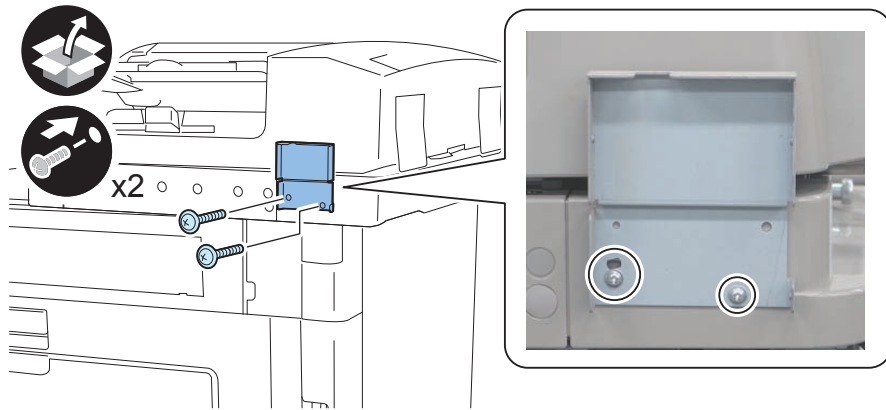
F-9-271

- 22) Remove the Rubber Cap and Screw. (Removed Rubber Cap and Screw will not be used.)
- 23) Remove the Face Seal. (Removed Face Seal will not be used.)



F-9-272

- 24) Install the Card Reader Installation Plate (rear) to the host machine.
- 2 Screws (TP; M3x12)

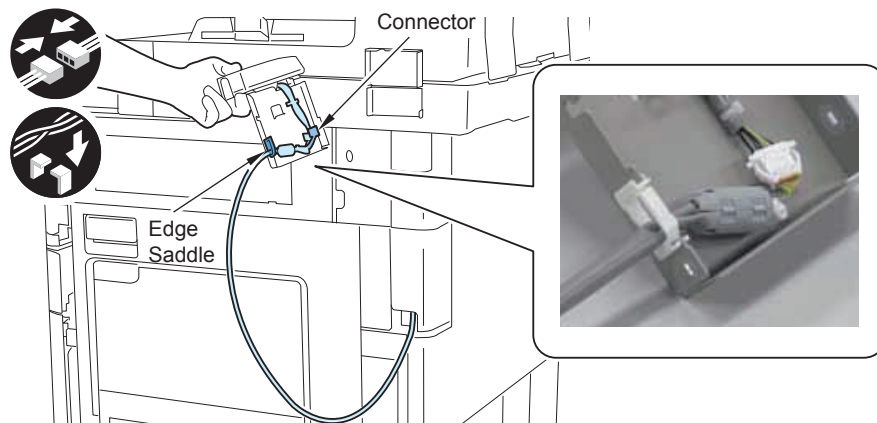


F-9-273

- 25) Connect the Card Reader External Relay Harness to the connector of Card Reader Unit.
- 1 Connector
  - 1 Edge Saddle

**CAUTION:**

Be sure that the core is inside the Edge Saddle.

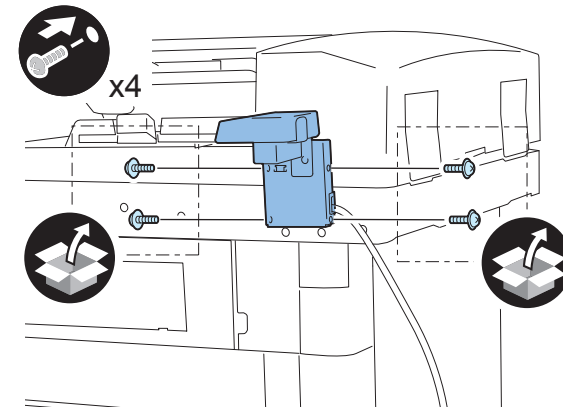


F-9-274

- 26) Install the Card Reader Mounting Plate (front) Unit to the Card Reader Mounting Plate (rear).
- 4 Screws (TP; M3x6)

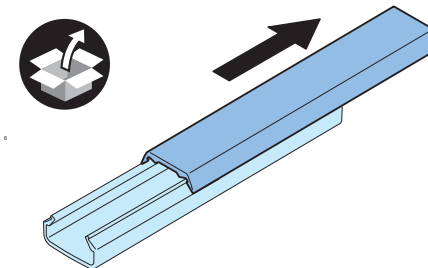
**CAUTION:**

Do not pinch the harness.



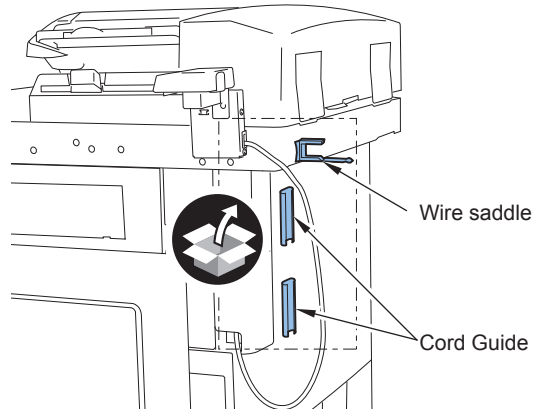
F-9-275

- 27) Remove the 2 covers of Cord Guide.



F-9-276

- 28) Remove the backing paper of Cord Guide and put it in the 2 places indicated in the figure.
- 29) Remove the face seal, and install the wire saddle.



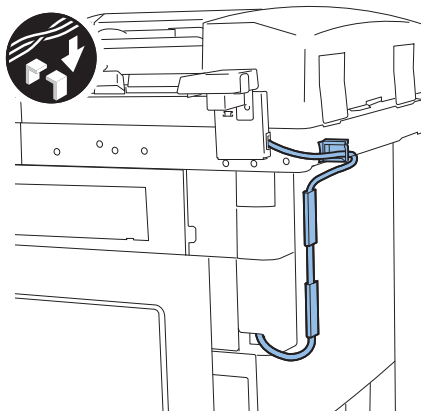
F-9-277

- 30) Put the Card Reader External Relay Harness through the 2 places of Cord Guide and install the cover.
- 31) Fix the Card Reader External Relay Harness with the Wire Saddle.

**NOTE:**

Even when used in combination with following options, the routing of the cable is same.

- Voice Guidance Kit



F-9-278

- 32) Connect the power plug of the host machine to the power outlet.
- 33) Turn ON the main power switch.

## Setting After Installation

- 1) Check that the following service mode value is set to "0".
- Service Mode (level 1) > COPIER > OPTION > ACC > CR-TYPE

**NOTE:**

The number of card (number of department) can be changed if a request arises from a user. Make this setting before the step 3).

- Change the setting value in service mode (level 2) > [COPIER] > [OPTION] > [FNC-SW] > [CARD-RNG].
- To enable the setting value, turn OFF/ON the main power switch.
- After that, go through the procedure from step 2).

- 2) Enter the following Service Mode (level 1).
- 3) Select: [COPIER] > [FUNCTION] > [INSTALL] > [CARD] and enter the card number to be used (1 to 2001).
- Input the minimum card number to be used by a user.
  - 1000 cards from the inputted number can be used.
- 4) To enable the setting value, turn OFF/ON the main power switch.
- 5) Insert the card with the registered card No. and make sure that it is in standby.

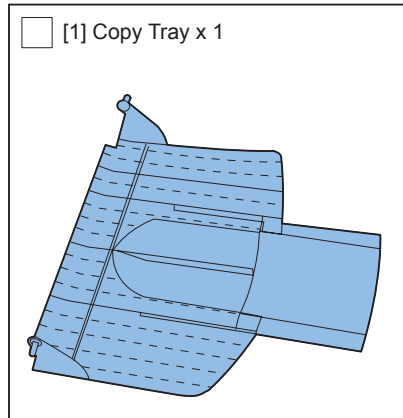
**NOTE:**

After setting, if a request arises from a user and changing the number of card (number of department), make a following setting. In that case, the current counter information by department will be reset.

- Execute in service mode (level 1) > [COPIER] > [FUNCTION] > [CLEAR] > [CARD].
- Specify the value in service mode (level 2) > [COPIER] > [OPTION] > [FNC-SW] > [CARD-RNG].
- After that, go through the procedure from step 2).

## Copy Tray-J1

### ● Checking the Contents



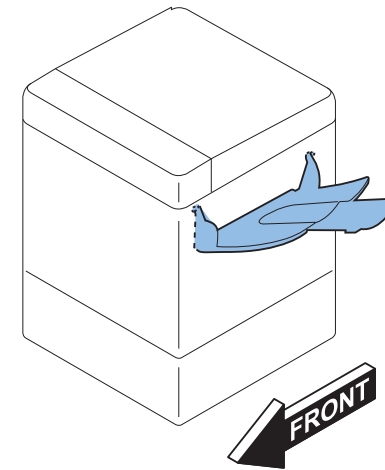
F-9-279

### ● 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

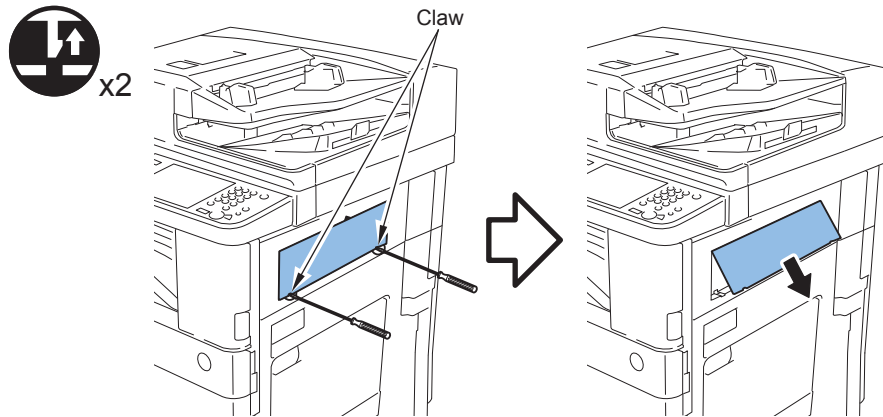


F-9-280

## Installation procedure

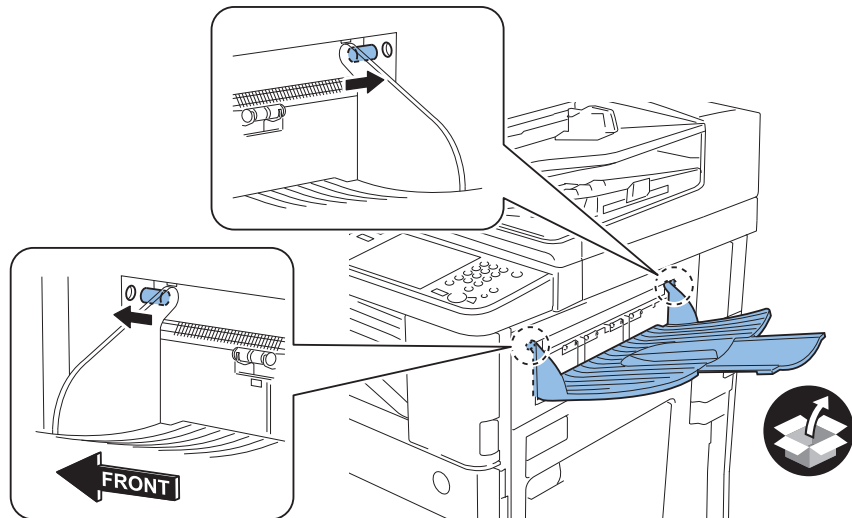
- 1) Remove the Right Delivery Frame Cover with flat-blade screwdriver.

• 2 Claws



- 2) Install the Copy Tray.

• 2 Claws



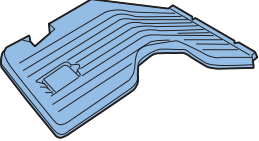


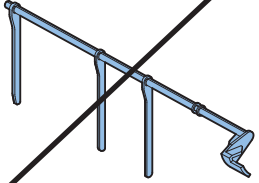
- 3) Connect the power plug of the host machine to the power outlet.
- 4) Turn ON the main power switch.

## Setting after installation

- 1) Enter Service Mode (level 1).
- 2) Select: [COPIER] > [OPTION] > [ACC] > [OUT-TRAY] and register "1".
- 3) Turn OFF/ON the main power switch.
- 4) Select: [Settings/Registration] > [Function Settings] > [Common] > [Paper Output Settings] and check that [Delivery Tray Settings] menu is added.
- 5) Select either tray B or C to copy, and perform test copy.
- 6) Check that the paper is output in the Copy Tray.
- 7) Reset the tray in accordance with the user's request.

## Inner 2-way Tray-F1

### Checking the Contents

<input type="checkbox"/> [1] Inner 2way Tray X 1 	<input type="checkbox"/> [2] Insert pin X 1 	<input type="checkbox"/> [3] Screw (TP; M3x6) X 1 
<input type="checkbox"/> [4] Second Delivery Full Detection Lever X 1 		

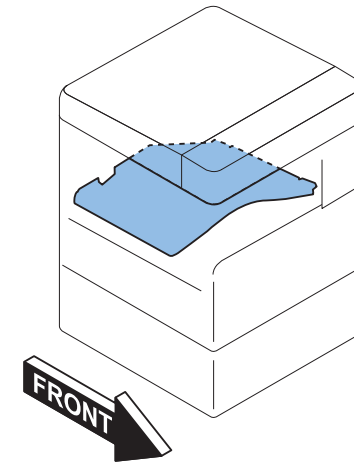
F-9-283

### Turning Off the Main Power Switch

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.

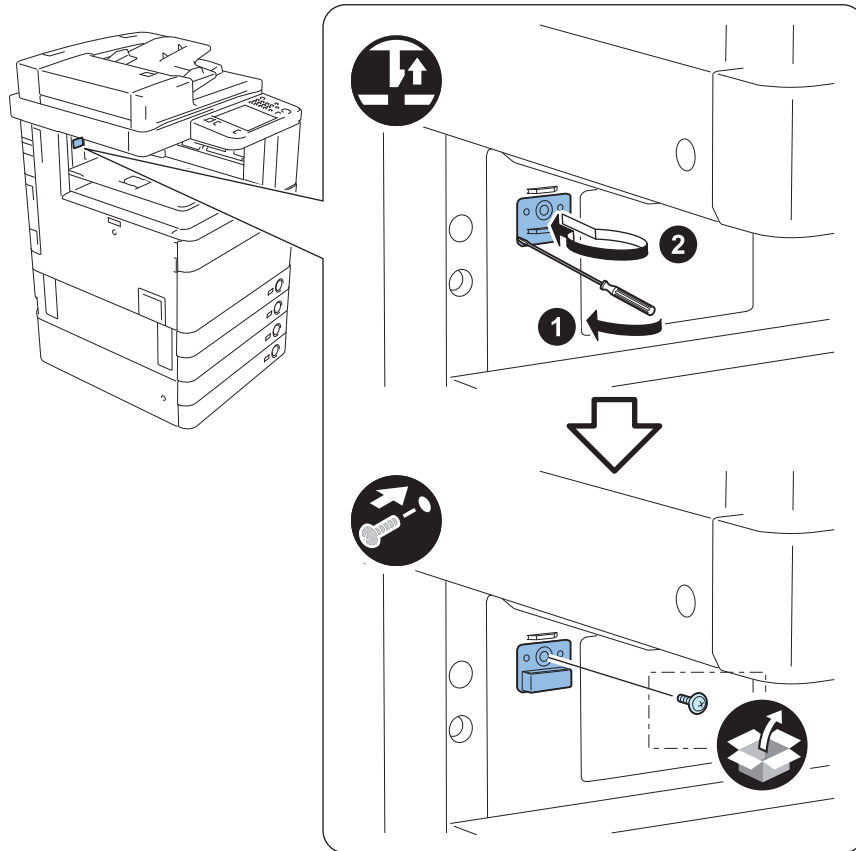
### Installation Outline Drawing



F-9-284

## Installation Procedure

- 
- 1) Remove the Inner 2way Tray Support from the host machine using flat-blade screwdriver.
  - 1 Claw
- 2) Turn over the Inner 2way Tray Support and install to the host machine.
  - 1 Screw (TP; M3x6)



F-9-285

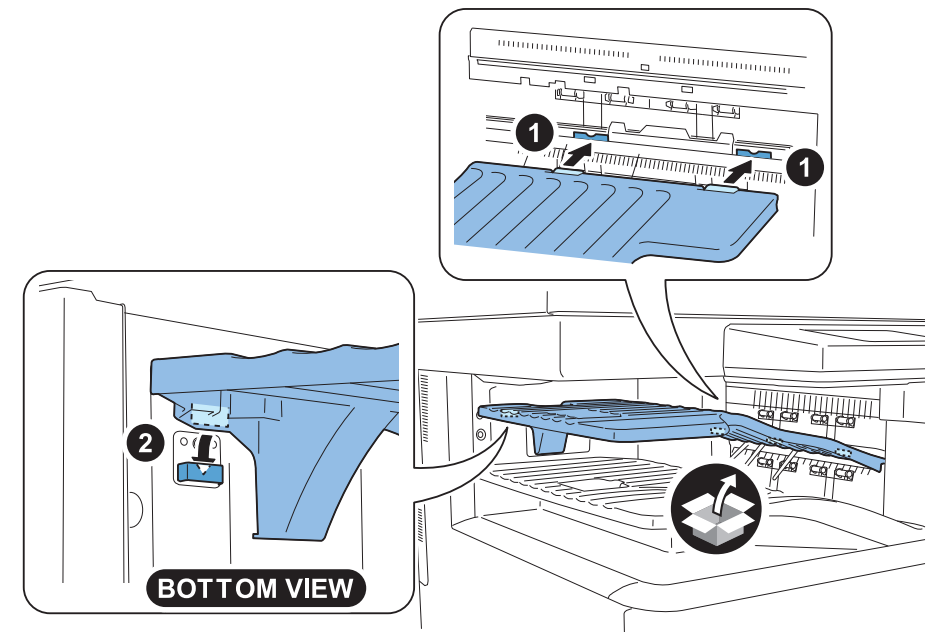
- 
- 3) Insert the Inner 2way Tray to 2 slots of the Delivery Assembly, and hook it to the slot of the Inner 2way Tray Support.

### NOTE:

Insert the Inner 2way Tray to the slot of the Delivery Assembly and hook it to the Second Tray Support so that boss is inserted to the Inner Rear Cover 1.

### CAUTION:

Check that the Inner 2way Tray Unit is inserted to the Inner 2way Tray Support.

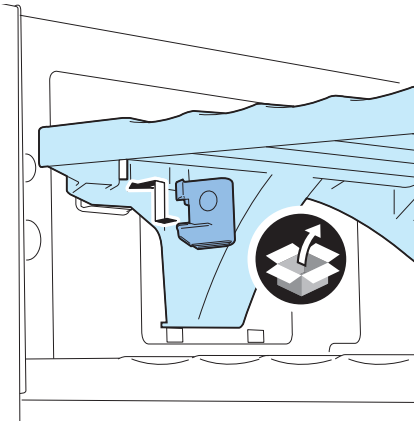


F-9-286





4) Insert the insert pin into the hole of the In Tray, and fix to the Inner 2way Tray Support.



F-9-287



5) Connect the power plug of the host machine to the power outlet.  
6) Turn ON the main power switch.

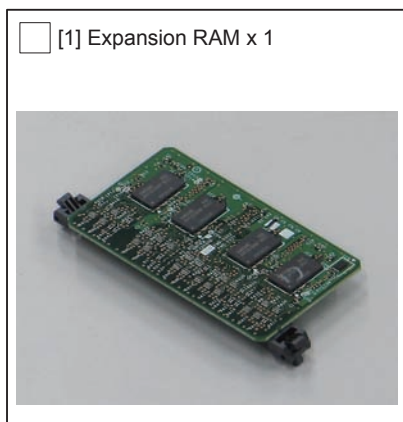
## Setting after installation



- 1) Enter Service Mode (level 1).
- 2) [COPIER] > [OPTION] > [ACC] > [IN-TRAY], and set "1"
- 3) Turn OFF/ON the main power switch.
- 4) [Settings/Registration] > [Function Settings] > [Common] > [Paper Output Settings] > [Output Tray Settings], and check that menu is added.
- 5) Select copy to the Tray B, and perform test copy.
- 6) Check that a copy is delivered to the Inner 2way Tray.
- 7) Set the tray in accordance with user's request.

## Additional Memory Type D (512MB)

### ● Checking the Contents



F-9-288

### ● Pre-Check



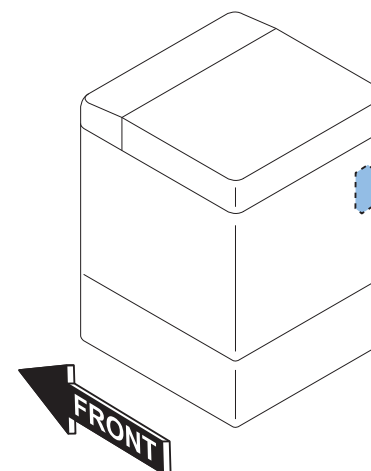
- 1) Check the memory capacity.
  - Service Mode (level 1) > COPIER > DISPLAY > ACC-STTS > RAM
- 2) Exit the service mode.

### ● Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

- 1) Turn OFF the main power switch of the host machine.
- 2) Be sure that display in the Control Panel and the lamp of the main power supply are turned off, then disconnect the power plug.

### ● Installation Outline Drawing

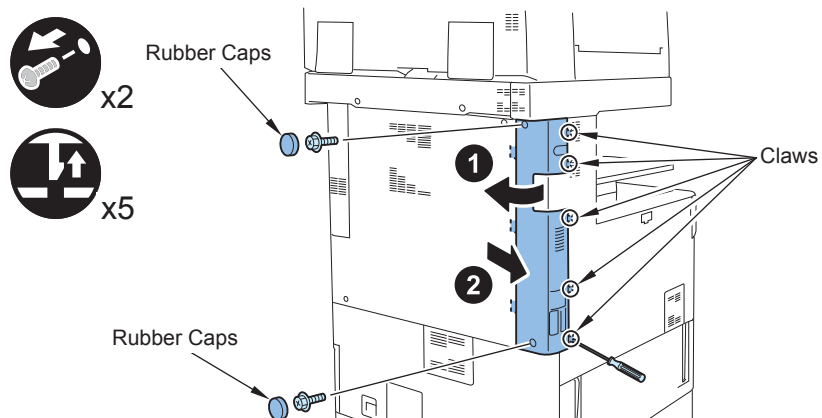


F-9-289

## Installation Procedure

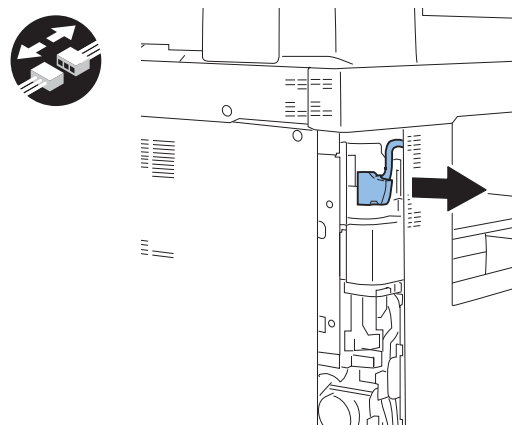
□  
1) Remove the Left Rear Cover.

- 2 Rubber Caps
- 2 Screws
- 5 Claws



F-9-290

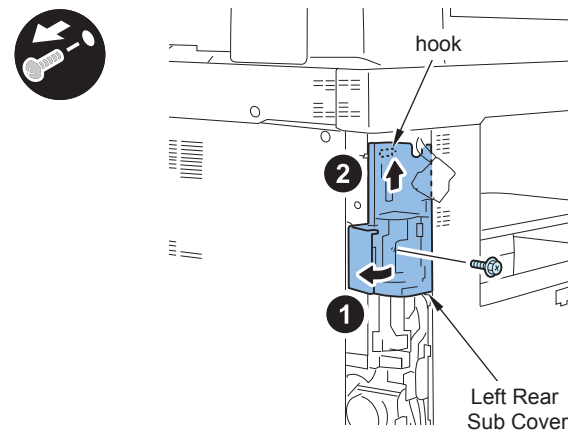
□  
2) If the Reader is installed, remove the Reader Communication Cable.



F-9-291

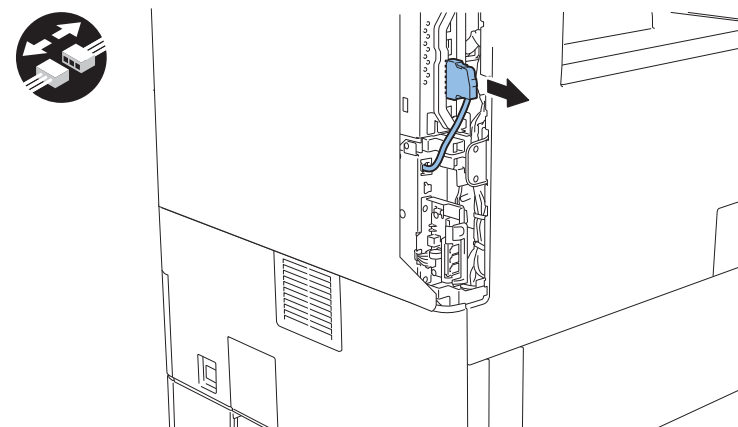
□  
3) Remove the Left Rear Sub Cover.

- 1 Screw
- 1 Hook



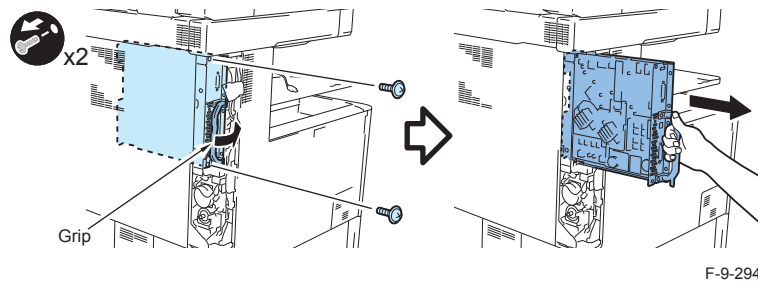
F-9-292

□  
4) If FAX is installed, disconnect the FAX cable.

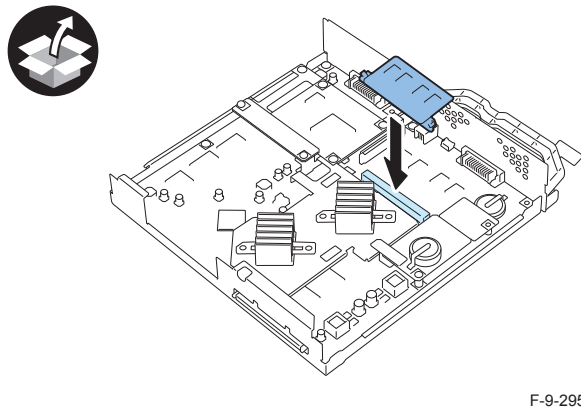


F-9-293

- 5) Hold the grip and remove the Main Controller PCB 2.
- 2 Screws



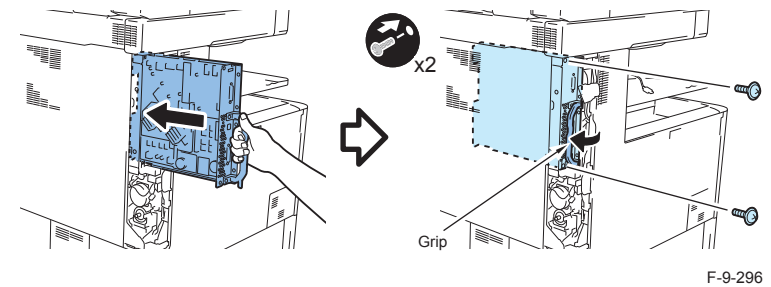
- 6) Install the Expansion RAM.



- 7) Install the Main Controller PCB 2.

**CAUTION:**

- Lift the grip and insert the Main Controller PCB 2. When it touches the end, tilt the grip and install it with 2 screws.
- Make sure to tilt the grip slowly on both sides simultaneously.
- Check that the Main Controller PCB 2 is installed properly.



- 8) Install the removed cover and the cable.
- Connect the FAX cable (If the FAX is installed.)
  - Left Rear Sub Cover (2 Screws)
  - Reader Communication Cable (if the Reader is installed).
  - Left Reader Cover (2 Screws, 2 Rubber Caps)
- 9) Connect the power plug of the host machine to the power outlet.
- 10) Turn ON the main power switch.

## ● Checking after Installation

- 1) After adding the Expansion RAM, check that the memory capacity is increased.
- Service mode (level 1) > COPIER > DISPLAY > ACC-STS > RAM
- 2) Exit the service mode.

## Document Scan Lock Kit-B1


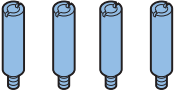
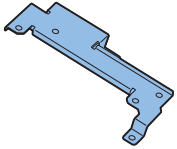
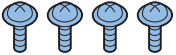

### Points to Note Before Installation

- 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:**

An error occurs when the license is installed before installing the Image Analysis Board, so make sure to install the license after installing the Image Analysis Board.

### Checking the Contents

<input type="checkbox"/> [1] Image Data Analyzer Board x 1 	<input type="checkbox"/> [2] PCB Spacer x 4 Use 2 of them 	<input type="checkbox"/> [3] Image Data Analyzer Board Support Plate x 1 
<input type="checkbox"/> [4] Screw (TP; M3x6) x 4 	<input type="checkbox"/> [5] Screw (Binding; M3x4) x 1 	

F-9-297

<CD/Guides>

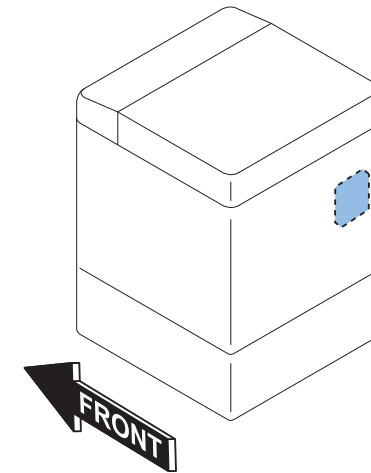
- License Access Number Certificate
- Document Scan Code Analyzer for MEAP CD
- FCC/IC sheet (only for USA/Europe)
- Notice for Delivered Installation sheet

### Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

- 1) Turn OFF the main power switch of the host machine.
- 2) Be sure that display in the Control Panel and the lamp of the main power supply are turned off, then disconnect the power plug.

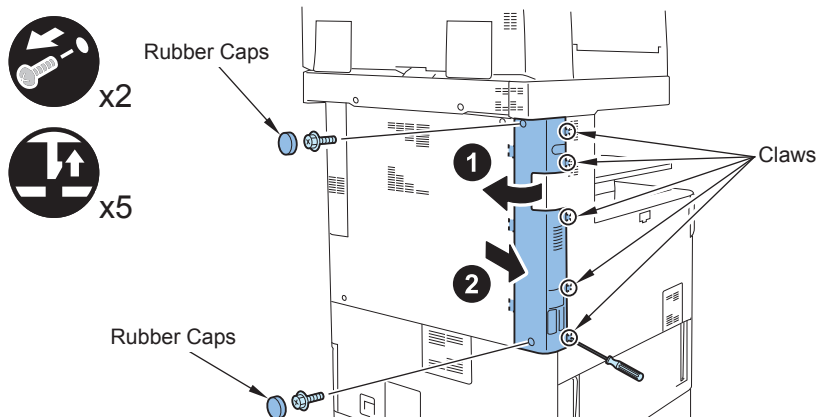
### Installation Outline Drawing



F-9-298

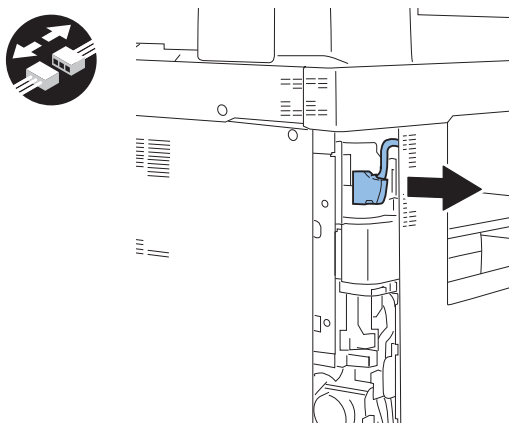
# Installation Procedure

- 1) Remove the Left Rear Cover.
  - 2 Rubber Caps
  - 2 Screws
  - 5 Claws



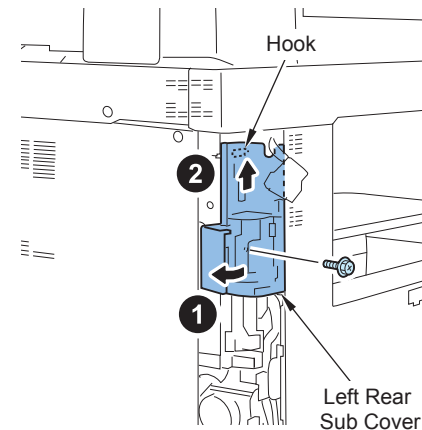
F-9-299

- 2) In the reader is installed, disconnect the Reader Communication Cable.



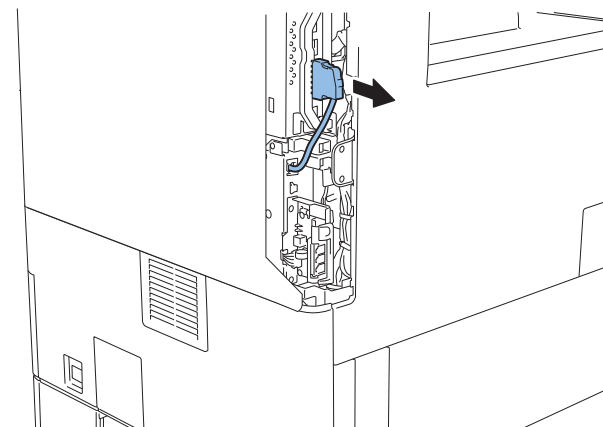
F-9-300

- 3) Remove the Left Rear Sub Cover.
  - 1 Screw
  - 1 Hook



F-9-301

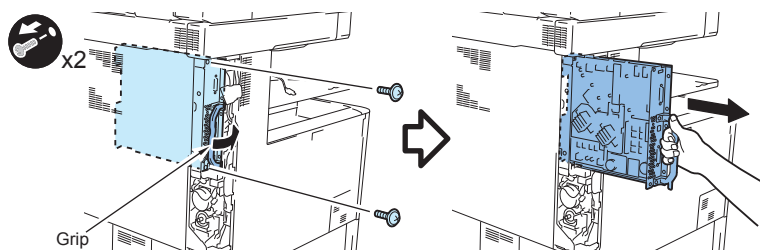
- 4) If FAX is installed, disconnect the FAX cable.



F-9-302

- 5) Hold the grip and remove the Main Controller PCB 2.

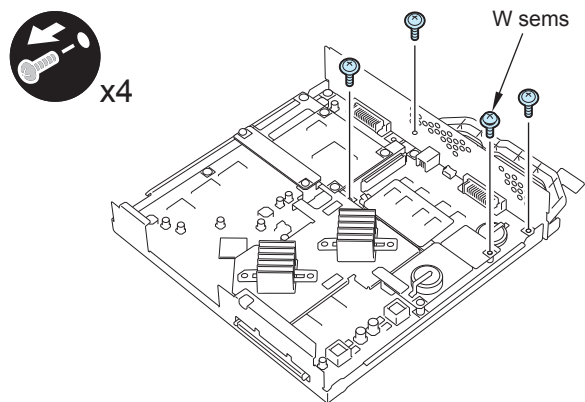
- 2 Screws



F-9-303

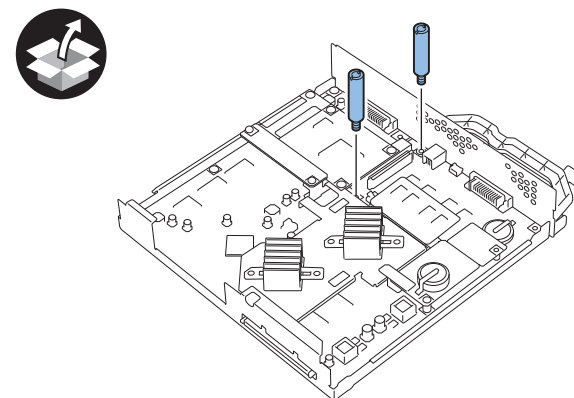
- 6) Remove the 4 Screws.

- 3 Screws (TP; M3) (Removed 2 screws will be used in step 8). Another screw will not be used.)
- 1 Screw (with Washer) (Removed screw is no longer used.)



F-9-304

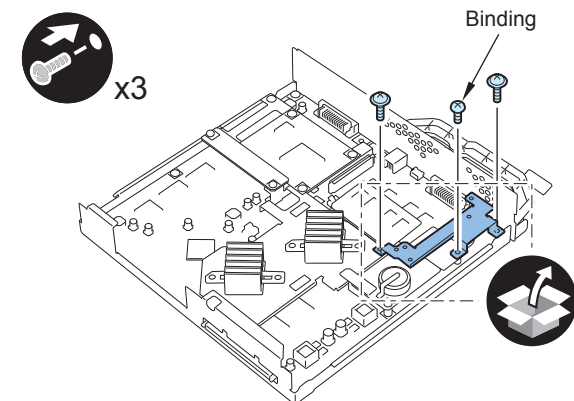
- 7) Install the 2 PCB Spacers.



F-9-305

- 8) Install the Image Data Analyzer Board Support Plate.

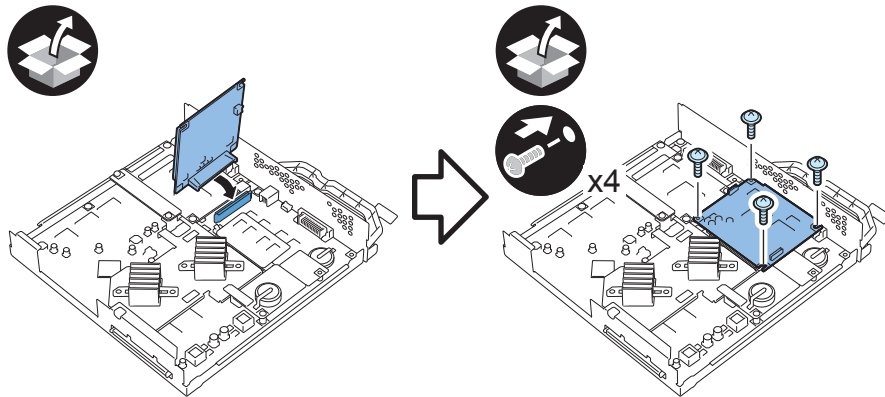
- 2 Screws (TP; M3) (screw removed in step 6)
- 1 Screw (Binding; M3x4)



F-9-306



- 9) Install the Image Data Analyzer Board.
- 4 Screws (TP; M3x6)

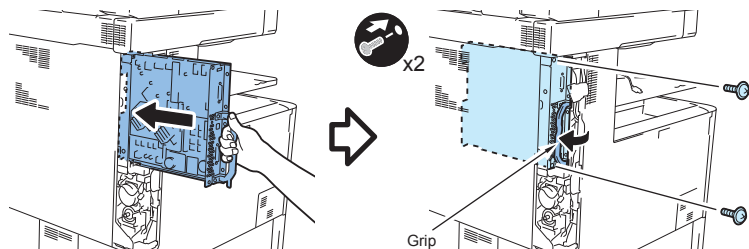


F-9-307

- 10) Install the Main Controller PCB 2.

**CAUTION:**

- Lift the grip and insert the Main Controller PCB 2. When it touches the end, tilt the grip and install it with 2 screws.
- Make sure to tilt the grip slowly on both sides simultaneously.
- Check that the Main Controller PCB 2 is installed properly.



F-9-308

- 11) Install the removed cover and the cable.
- Connect the FAX cable.(If the FAX is installed.)
  - Install the Left Rear Sub Cover. (1 Screw)
  - Install the Reader Communication Cable (if the Reader is installed).
  - Install the Left Reader Cover. (2 Screws, 2 Rubber Caps)

## 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 the counter check key on the control panel.
  - 6) Press "Check Device Configuration" key.
  - 7) Check that "Image Data Analyzer Board" is displayed in option field.

## Serial Interface Kit-K1/K2 / Copy Control Interface Kit-A1

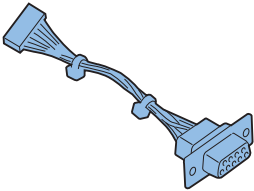
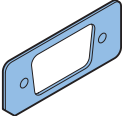

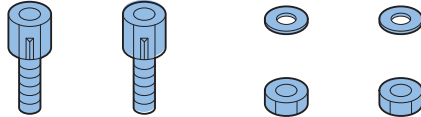
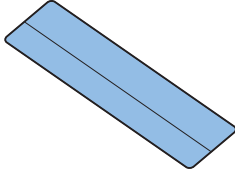
### Points to Note Before Installation

The following options cannot be used in combination with each other.

- Serial Interface Kit
- Copy Control Interface Kit
- Copy Card Reader

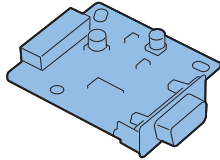
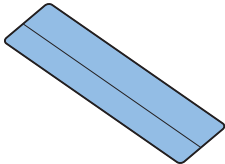
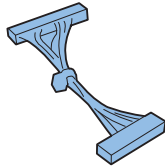
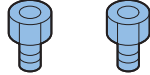



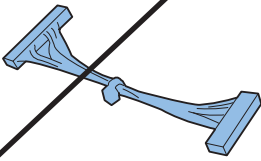

### Checking the Contents

#### Copy Control Interface Kit-A1

<input type="checkbox"/> [1] CC-VI Cable X 1 	<input type="checkbox"/> [2] D-SUB Support Plate X 1 	<input type="checkbox"/> [3] Washer (large) X 2 
<input type="checkbox"/> [4] Hexagonal Screw (Washer (Small) ,Nut) X 2 Do not use a Nut 	<input type="checkbox"/> [5] IA Harness Protection Sheet X 1 	

F-9-309

#### Serial Interface Kit-K1/K2

<input type="checkbox"/> [1] Serial RS Conversion Board X 1 	<input type="checkbox"/> [2] IA Harness Protection Sheet X 1 	<input type="checkbox"/> [3] RS Conversion Cable X 1 
<input type="checkbox"/> [4] Hexagonal Screw X 2 	<input type="checkbox"/> [5] Washer X 2 	<input type="checkbox"/> [6] PCB Spacer X 1 
<input type="checkbox"/> [7] Support Plate X 1 K2 only 	<input type="checkbox"/> [8] RS Conversion Cable (Long) X 1 K2 only 	<input type="checkbox"/> [9] Screw (TP; M3x6) X 3 K2 only 

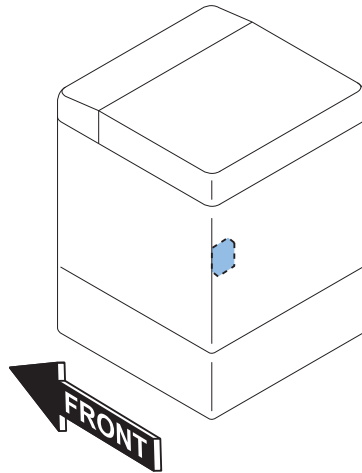
F-9-310

### 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

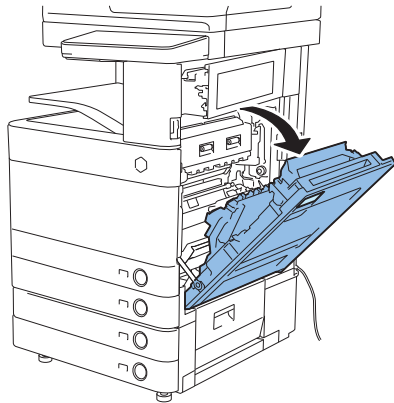


F-9-311

## Installation Procedure

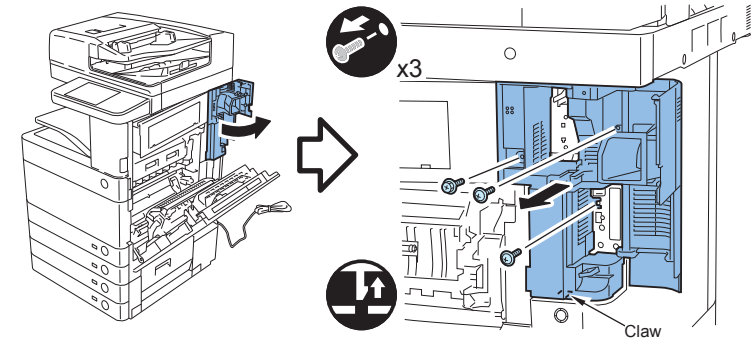
### Preparation

- 1) Open the Right Lower Cover. (The Right Upper Cover opens simultaneously.)



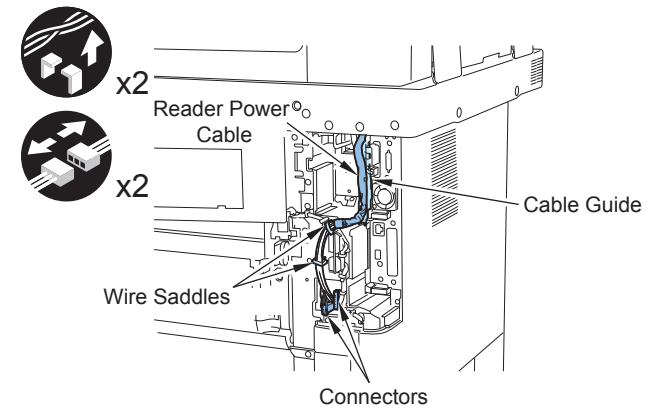
F-9-312

- 2) Open the Right Rear Cover 1.  
3) Remove the Right Rear Cover 1.
- 1 Screw (RS tightening; M4)
  - 2 Screws (TP; M3)
  - 1 Claw



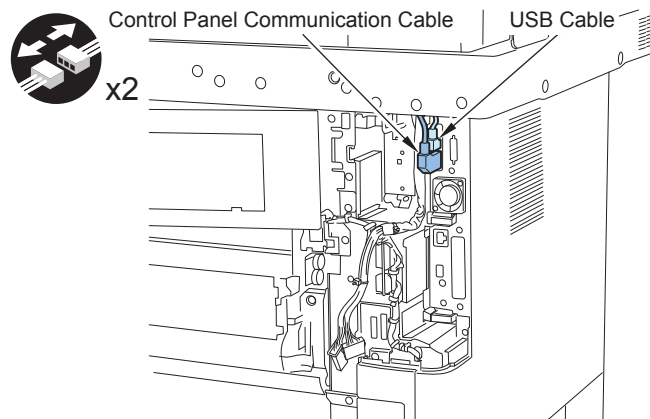
F-9-313

- 4) When the Reader is equipped, remove the Reader Power Supply Cable.
- 2 Connectors
  - 2 Wire Saddles
  - 1 Cable Guide



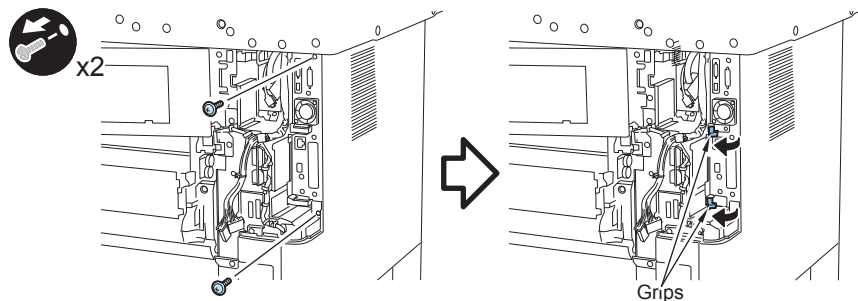
F-9-314

- 5) Disconnect the USB Cable and Control Panel Communication Cable.



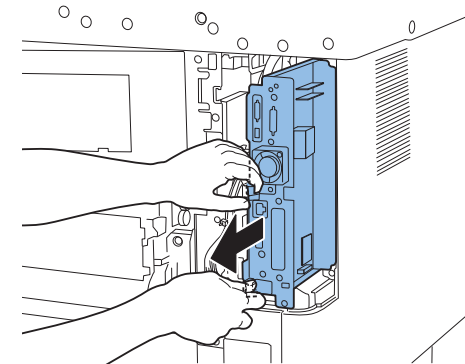
F-9-315

- 6) Remove the 2 screws and open the Grips in 2 areas.



F-9-316

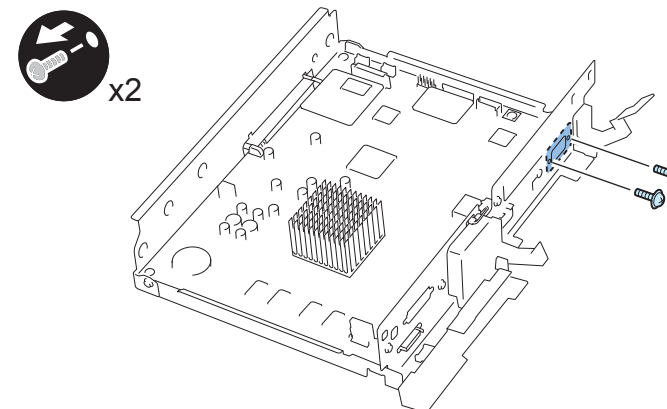
- 7) Hold the 2 Grips. While avoiding the removed harness, remove the Main Controller PCB 1.



F-9-317

### ■ Installing the Serial Interface Kit-K1/K2

- 1) Remove the Face Cover from the Main Controller PCB 1. (Removed Face Cover is not used.)
- 2 Screws (Removed screws are not used.)

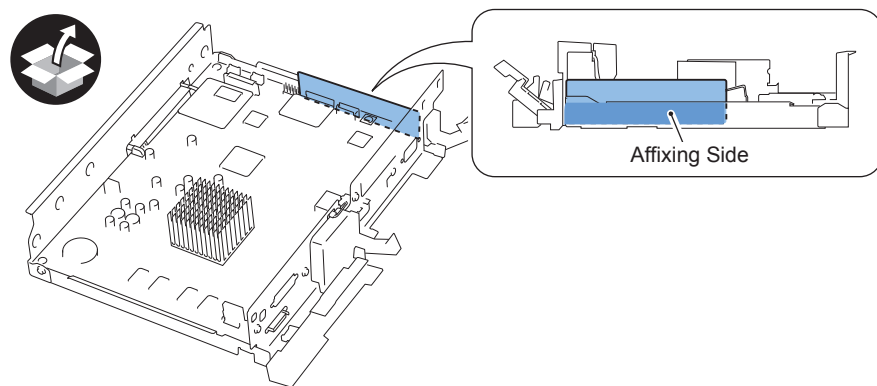


F-9-318

- 
- 2) Clean the affixing side (Controller Box Frame) with lint-free paper moistened with alcohol.
  - 3) Affix the IA Harness Protection Sheet to the Main Controller PCB 1.

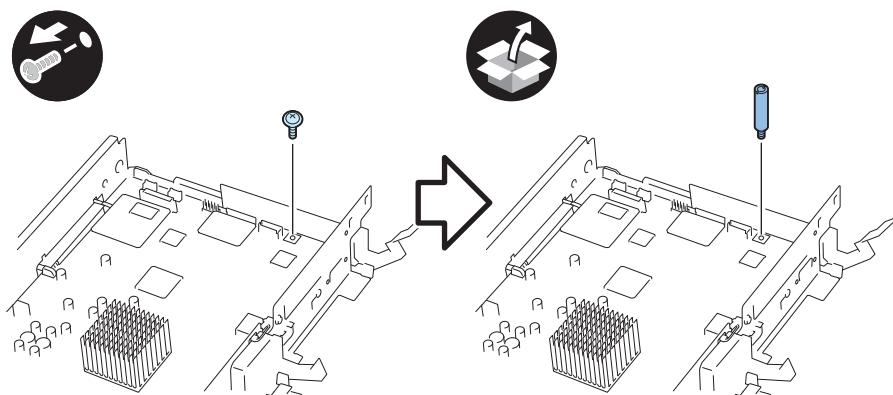
## NOTE:

- Because the working space is limited, use scale, etc. for cleaning.
- After affixing the I Harness Protection Sheet, be sure to press it with scale, etc. to prevent coming off.



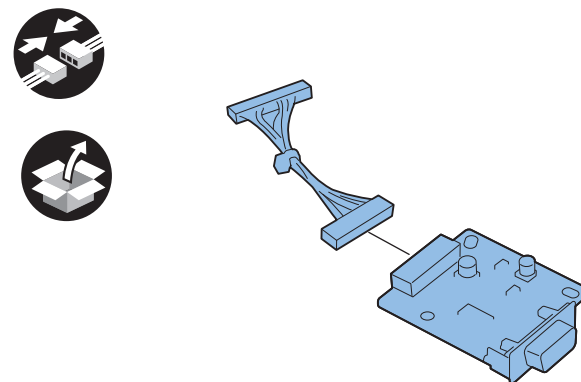
F-9-319

- 
- 4) Remove the 1 screw and install the PCB Spacer. (Removed screw is used in the procedure 6))



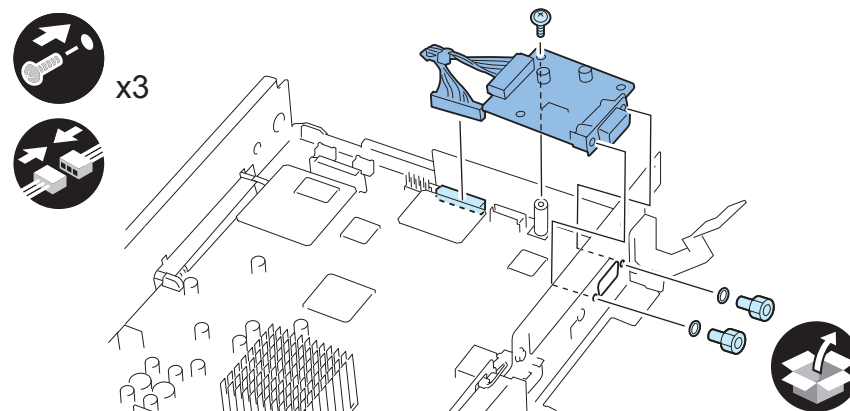
F-9-320

- 
- 5) Connect the RS Conversion Cable to the Serial RS Conversion Board.



F-9-321

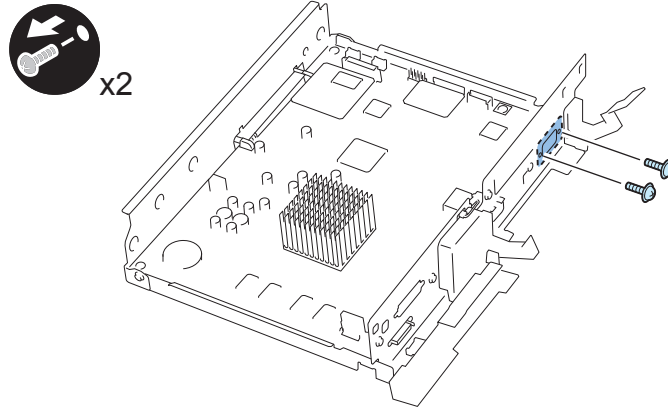
- 
- 6) Install the Serial RS Conversion Board.
    - 1 Screw (which was removed in the procedure 4))
    - 2 Washers
    - 2 Hexagonal Screws
    - 1 Connector



F-9-322

## Installing the Copy Control Interface Kit-A1

- 
- 1) Remove the Face Cover from the Main Controller PCB 1. (Removed Face Cover is not used.)
- 2 Screws (Removed screws are not used.)

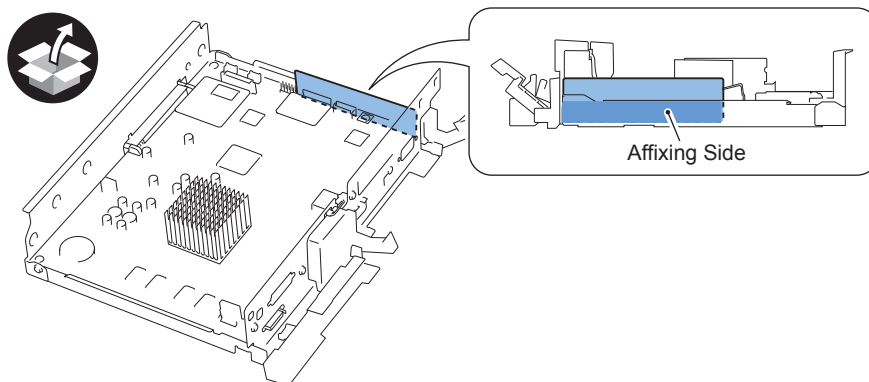


F-9-323

- 
- 2) Clean the affixing side (Controller Box Frame) with lint-free paper moistened with alcohol.
- 3) Affix the IA Harness Protection Sheet to the Main Controller PCB 1.

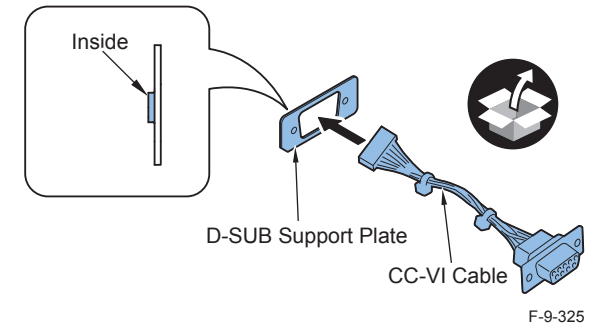
### NOTE:

- Because the working space is limited, use scale, etc. for cleaning.
- After affixing the I Harness Protection Sheet, be sure to press it with scale, etc. to prevent coming off.

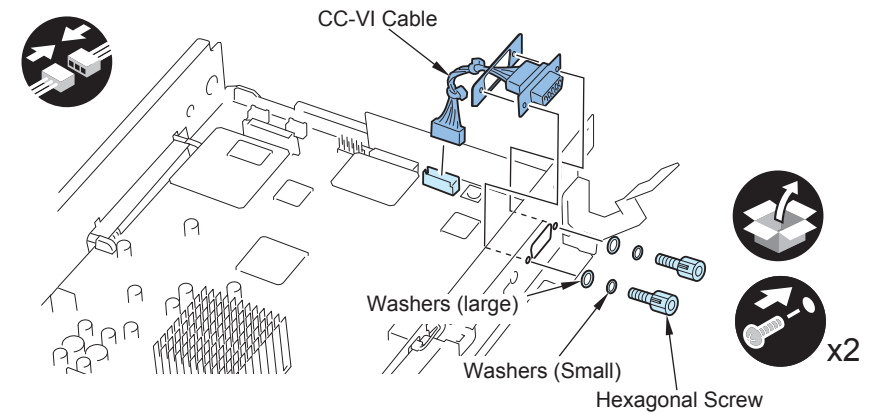


F-9-324

- 
- 4) Put the CC-VI cable through the D-SUB Support Plate.



- 
- 5) Secure the CC-VI cable to the Main Controller PCB 1.
- 2 Hexagonal Screws
  - 2 Washers (small)
  - 2 Washers (large)
  - 1 Connector



F-9-326

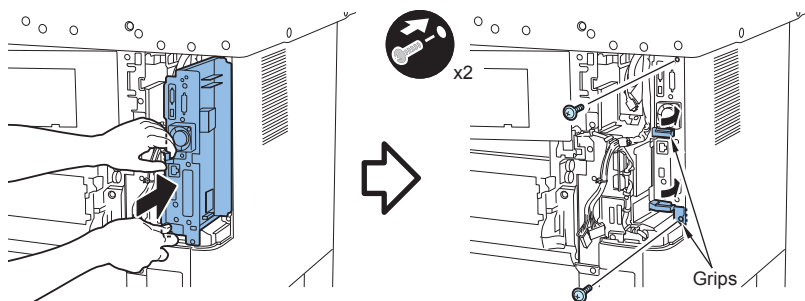
## Procedure after Work



1) Install the Main Controller PCB 1 to the host machine.

### CAUTION:

- Lift the grip and insert the Main Controller PCB 1 and then, after it stops, tilt the grip and install it with 2 screws.
- Make sure to tilt the grip slowly on both sides simultaneously.
- Check that the Main Controller PCB 1 is installed properly.



F-9-327

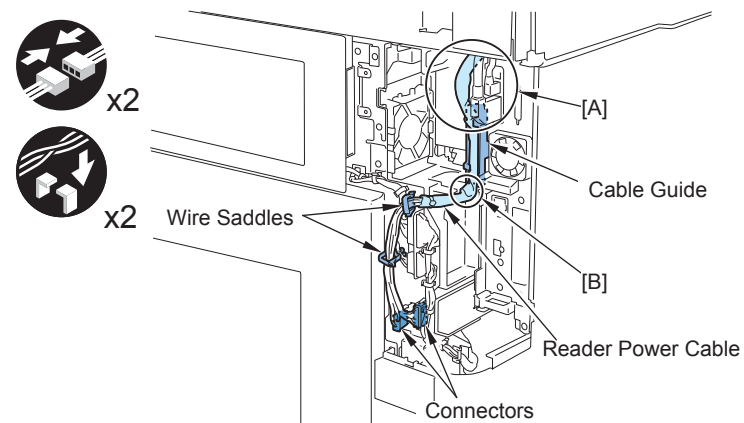


2) Install the USB Cable and the Control Panel Communication Cable.

3) When the Reader is installed, install the Reader Power Cable.

### NOTE:

Handle the Reader Power Cable from the connector side and make a slack at [A] part. Bend the Reader Power Cable at a right angle on [B] part.



F-9-328



4) Install the Right Rear Cover 1 (3 Screws).

5) Close the Right Lower Cover.

6) Close the Right Upper Cover.

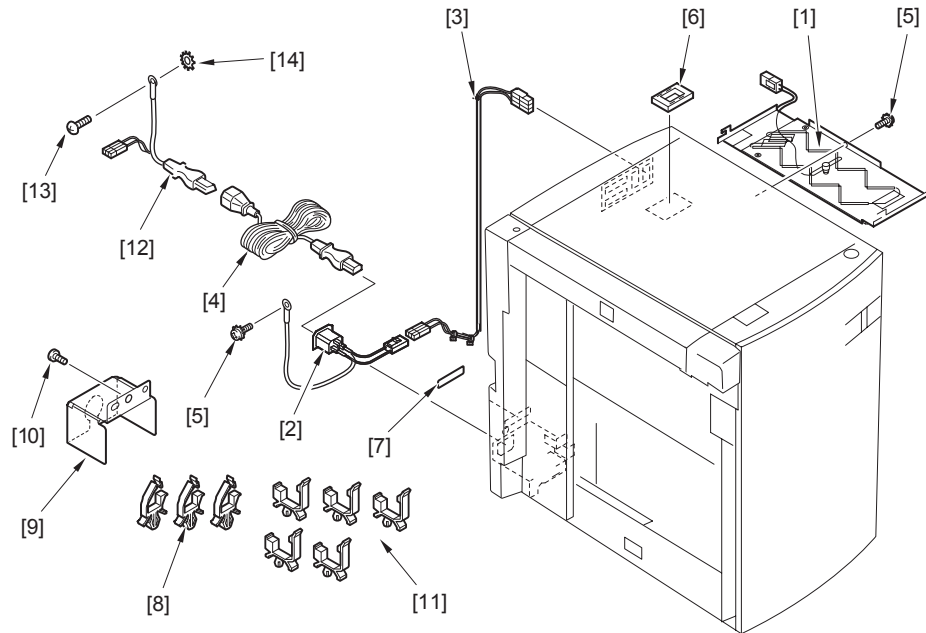
7) Connect the power plug of the host machine to the power outlet.

8) Turn ON the main power switch.



## Paper Deck Heater Unit-C1

### Checking Bundled Components



F-9-329

<input type="checkbox"/>	[1]	Heater unit	1 pc.
<input type="checkbox"/>	[2]	AC input connector	1 pc.
<input type="checkbox"/>	[3]	Relay harness	1 pc.
<input type="checkbox"/>	[4]	AC Cable	1 pc.
<input type="checkbox"/>	[5]	Screw (w/ washer; M4x8)	2 pcs.
<input type="checkbox"/>	[6]	Cable protection bushing	1 pc.
<input type="checkbox"/>	[7]	Power supply label	2 pcs. (*Only 1 pc. is used)
<input type="checkbox"/>	[8]	Wire saddle (white)	3 pcs. (*Only 2 pcs. are used)
<input type="checkbox"/>	[9]	Plug cover	1 pc.
<input type="checkbox"/>	[10]	Screw (Binding; M4x4)	1 pc.
<input type="checkbox"/>	[11]	Wire saddle (black)	5 pcs.
<input type="checkbox"/>	[12]	AC output connector	1 pc.
<input type="checkbox"/>	[13]	Screw (Binding; M4x6)	1 pc.
<input type="checkbox"/>	[14]	Toothed washer	1 pc.

### Product Name

Safety regulations require the product's name to be registered. In some regions where this product is sold, the following name may be registered instead.

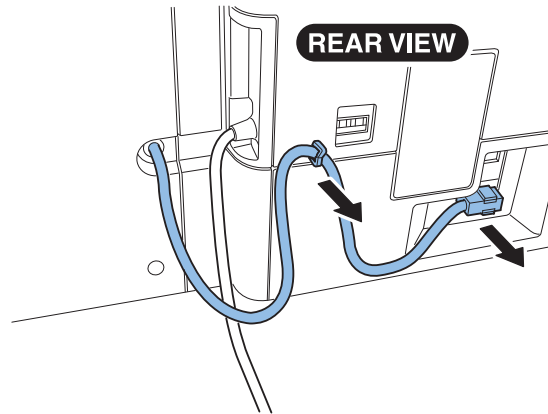
- F246338

### 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 Control Panel Display and Main Power Lamp are both turned OFF, and then disconnect the power plug.

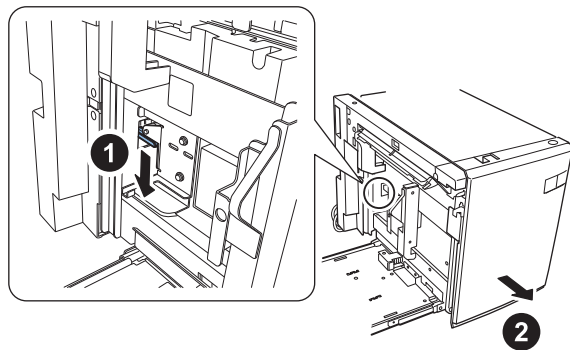
## Installation Procedure

- 
- 1) Release the interface cable from the wire saddle, and then disconnect the paper deck connector from the host machine.



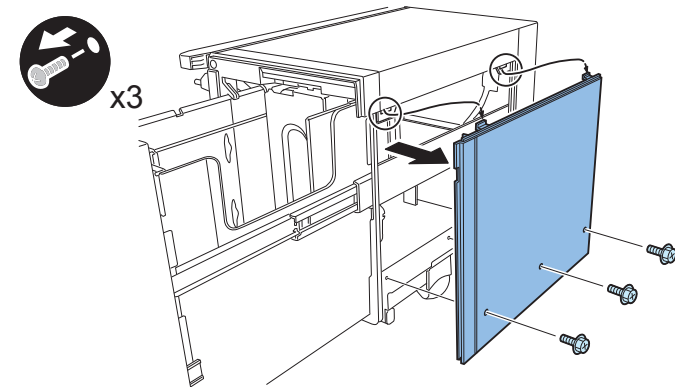
F-9-330

- 
- 2) Release the paper deck from the host machine, and then press down the latch plate of the paper deck to open the compartment.



F-9-331

- 
- 3) Detach the right cover of the paper deck in the direction of the arrow shown.
- 3 Screws

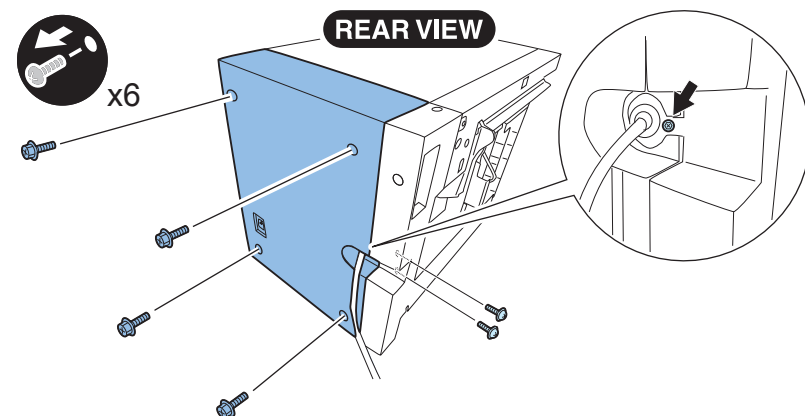


F-9-332

- 
- 4) Detach the rear cover of the paper deck.
- 6 Screws (M4x8: 4 pcs., M3x8: 2 pcs.)

### NOTE:

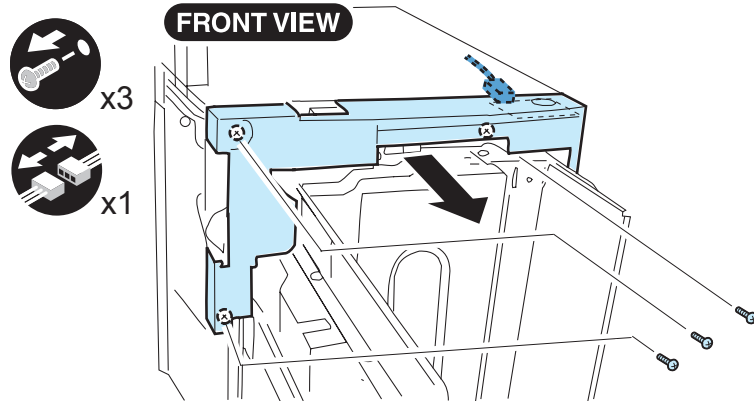
When the rear cover is removed, loosen the screw shown by an arrow in the figure, if it is difficult to remove the rear cover because of contacting to the left rear cover.



F-9-333

- 5) Detach the front upper cover.

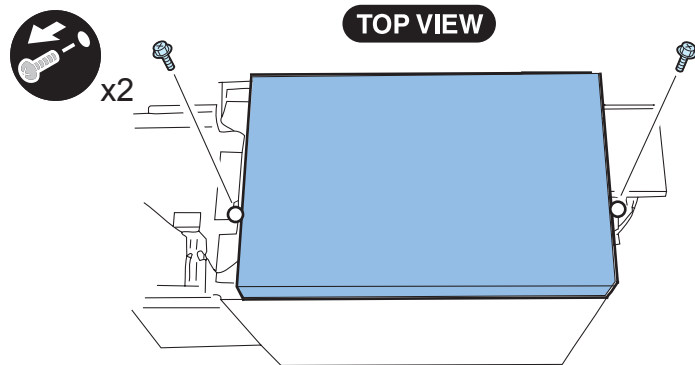
- 3 Screws
- 1 Connector



F-9-334

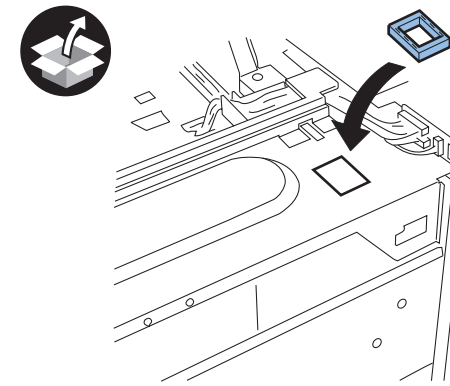
- 6) Detach the top cover.

- 2 Screws



F-9-335

- 7) Attach the supplied cable protection bushing to the hole on the top panel of the paper deck.

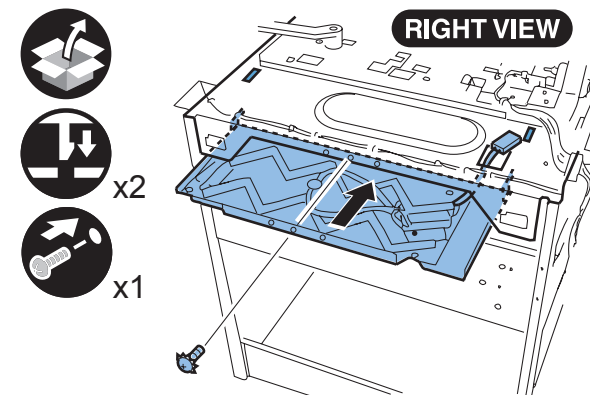


F-9-336

- 8) Place the heater unit under the top panel of the paper deck, and then take the connector out of the hole on the top plate.

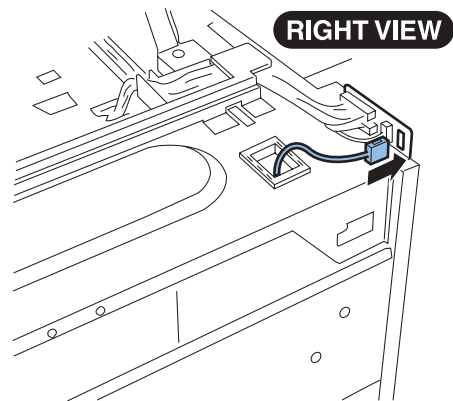
- 9) Insert the 2 hooks of the heater unit into the holes on the top plate of the paper deck, and then secure the heater unit to the main body of the paper deck.

- 1 Screw (w/washer; M4x8)



F-9-337

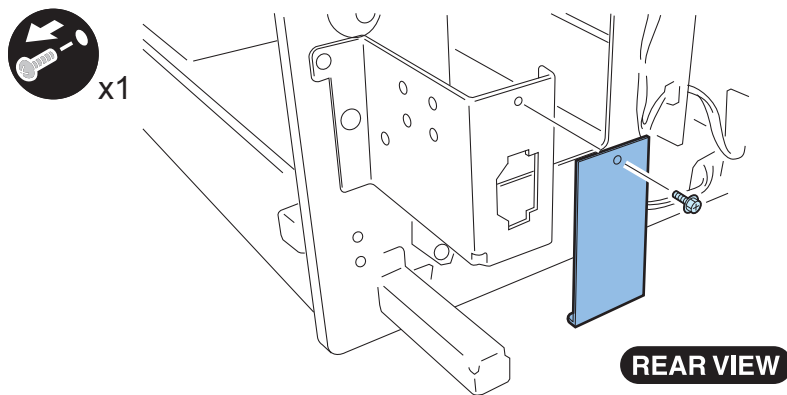
- 10) Attach the heater connector to the panel mount.



F-9-338

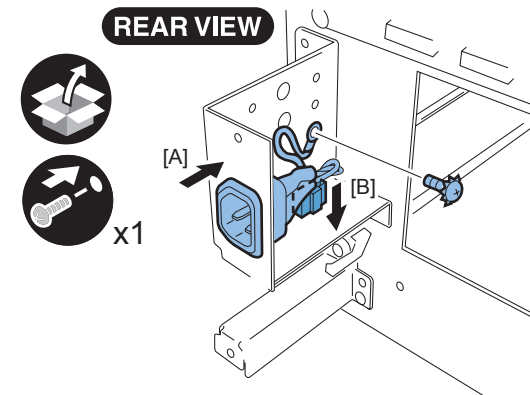
- 11) Remove the blindfold plate from the power cord mount of the paper deck.  
• 1 Screw

**NOTE:**  
Removed screw and blindfold cover are no longer reused.



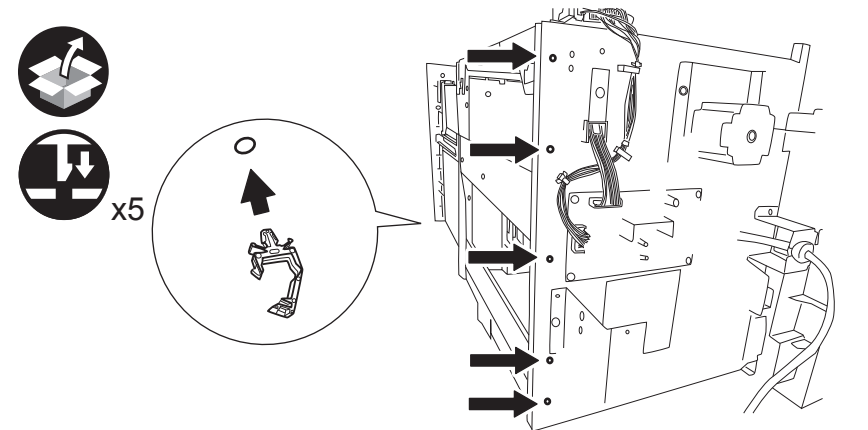
F-9-339

- 12) Install the supplied AC input connector in order of [A] -> [B].



F-9-340

- 13) Attach the 5 wire saddles (black) to the rear side panel of the paper deck as shown.

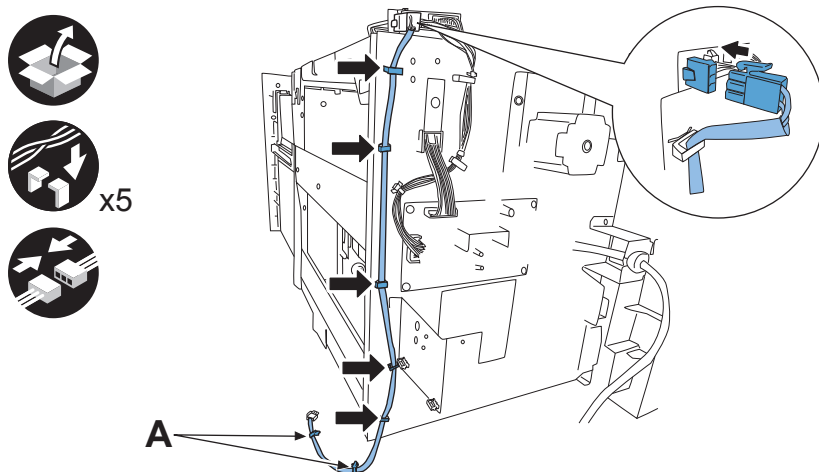


F-9-341

- 14) Put the relay harness in the 5 wire saddles (black), and then attach the connector.

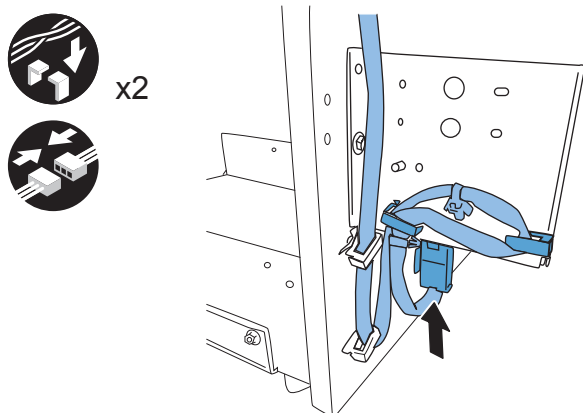
## NOTE:

2 snap-bands (A) equipped with the relay harness are not used.



F-9-342

- 15) Put the relay harness in the 2 wire saddles on the power cord mount, and then connect the connector.



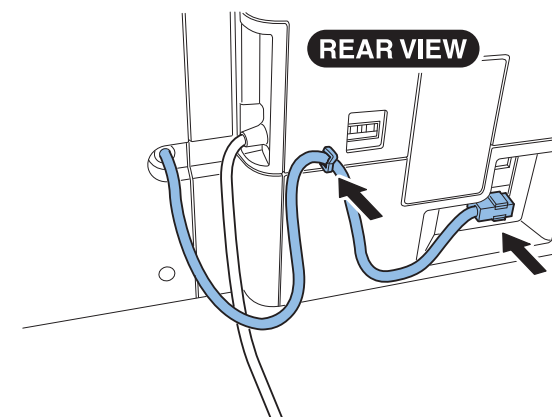
F-9-343

- 16) Reattach the external covers of the paper deck in the following sequence:

- [1] Top cover (2 screws; M4x8)
- [2] Right cover (3 screws; M4x8)
- [3] Rear cover (4 screws; M4x8 and 2 screws; M3x8)
- [4] Front upper cover (1 connector and 2 screws; M4X8)

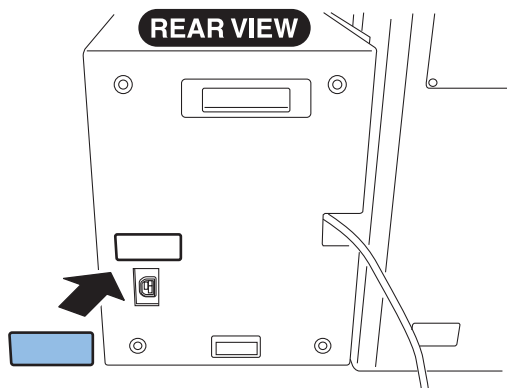
- 17) Manually slide the paper deck to the left to place it aside of the host machine

- 18) Attach reusable band, and then connect the connector of the paper deck to the back of the host machine.



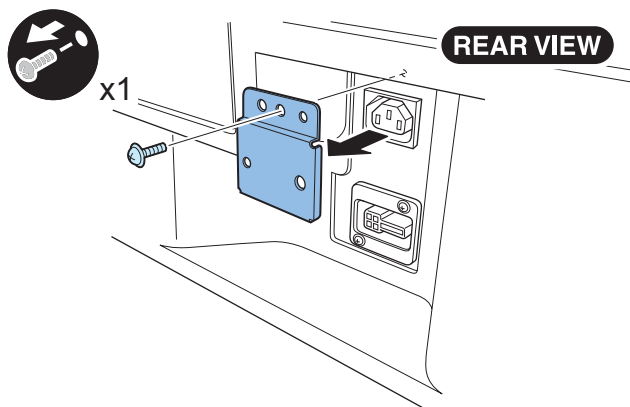
F-9-344

- 19) Stick the power supply label to the rear panel of the paper deck.



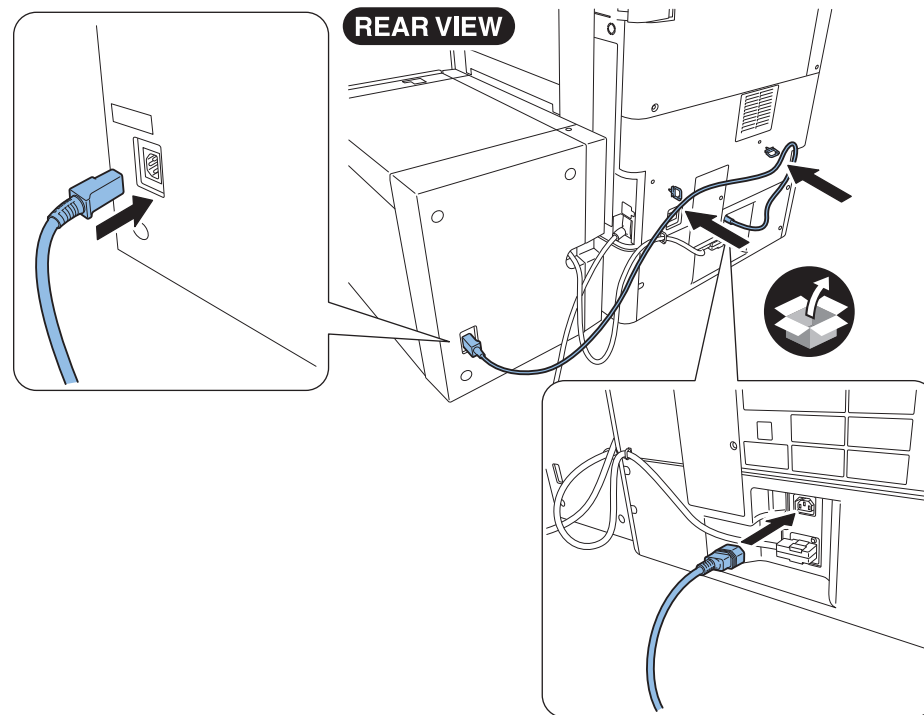
F-9-345

- 20) Remove 1 screw (bind head;M4x4) to detach the plate.



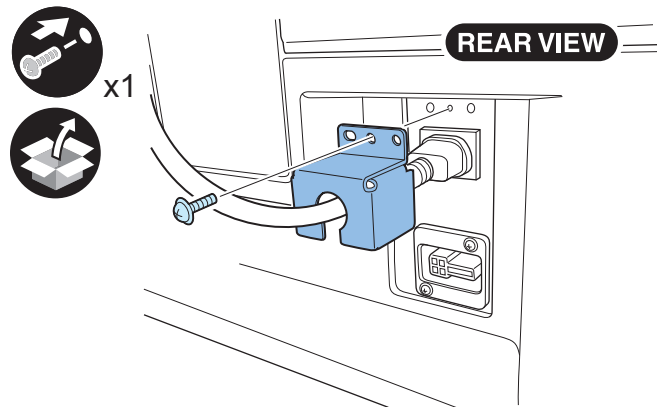
F-9-346

- 21) Attach two wire saddles (white) to the rear panel of the host machine, and then connect the AC cable connector to the power cord mount of the heater. Route the AC cable as shown, and then connect the other connector (plug) to the receptacle on the rear panel of the host machine.



F-9-347

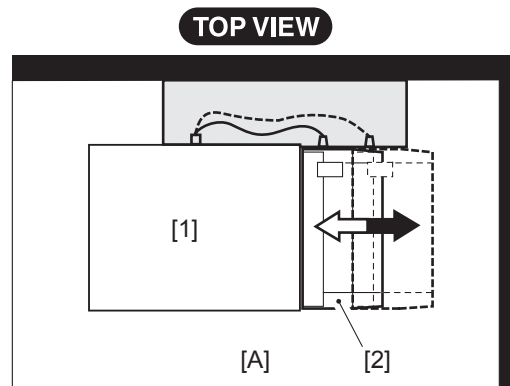
- 22) Fix the supplied plug cover at rear side of the host machine with 1 screw (bind head;M4x4) removed at the step 20.



F-9-348

**!** To ensure smooth connection of the heater power connectors, explain to the user that any obstacle that can prevent the paper deck from opening should not be placed in the hatched area.

[1]: Host machine [2]: Paper deck [A]: Front



F-9-349



## USB Device Port-E1/E2/E3 / Multimedia Reader/Writer-A2/A3

### Points to Note before Installation

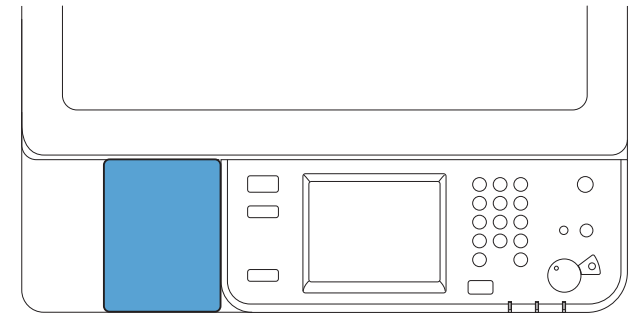
- When installing the Inner Finisher or the Buffer Path simultaneously, be sure to install this equipment first.
- If the Inner Finisher or the Buffer Path is installed, this equipment cannot be installed unless it is removed. For details of installation procedure, refer to the Service Manual.
- Installation procedures for the USB Device Port-E1 and USB Device Port-E2 and USB Device Port-E3 are similar.
- Illustrations and photo for the Image Reader and Printer Cover are mixed but the steps are similar.
- When installing the Multimedia Reader/Writer or Card Reader (sales company's option), the USB Device Port must be installed beforehand.
- The Multimedia Reader/Writer cannot be used in combination with the Card Reader (sales company's option).

### 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.

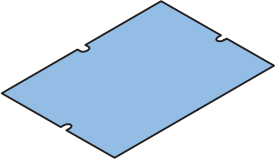
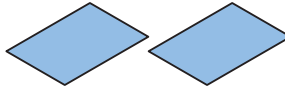
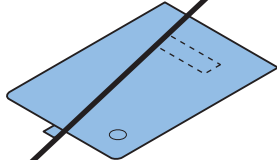
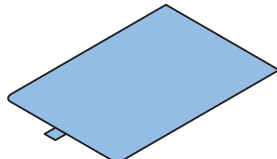
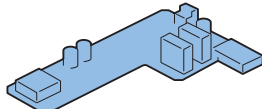

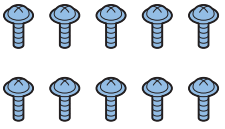
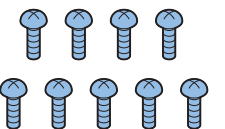
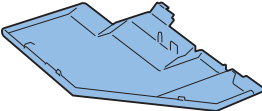
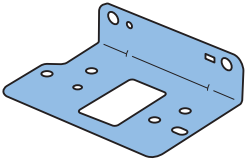
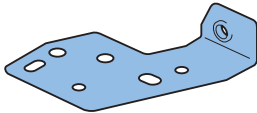
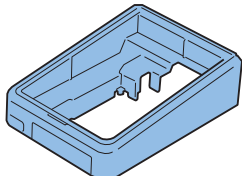
### Installation Outline Drawing




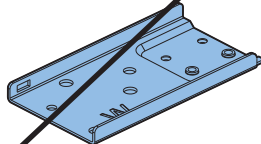
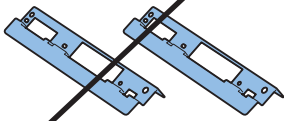
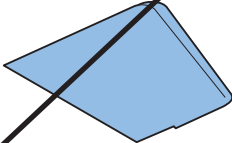
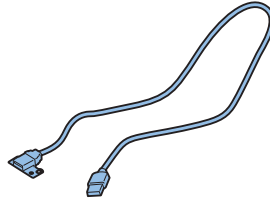
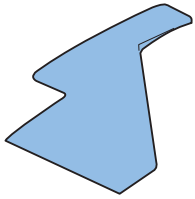
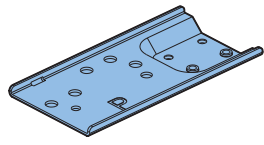





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# Checking the Contents [USB Device Port - E1/E2/E3]

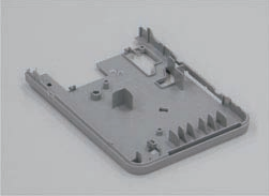




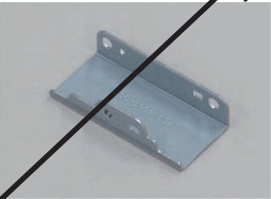


## [In case of Printer Cover Unit]

<input type="checkbox"/> [1] DP Fireproof Sheet X 1 	<input type="checkbox"/> [2] Cushion X 2 Do not use with the Multimedia Reader/Writer-A2 or Card Reader 	<input type="checkbox"/> [3] DP Sheet (for Japan) X 1 
<input type="checkbox"/> [4] DP Sheet (for Europe) X 1 	<input type="checkbox"/> [5] DP Board X 1 	<input type="checkbox"/> [6] Screw (RS tight; M3×8.5) X 1 
<input type="checkbox"/> [7] Screw (TP Round End; M3×6) X 10 Use 8 of them 	<input type="checkbox"/> [8] Screw (Bind; M4×6) X 9 Use 6 of them 	<input type="checkbox"/> [9] DP Bottom Cover X 1 
<input type="checkbox"/> [10] DP Support Plate X 1 	<input type="checkbox"/> [11] DP Mounting Reinforcing Plate X 1 	<input type="checkbox"/> [12] DP Upper Cover Unit X 1 

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<input type="checkbox"/> [13] DP Lower Cover Unit X 1 USB Device Port-E1/E2 Only 	<input type="checkbox"/> [14] DP Mounting Plate W X 1 	<input type="checkbox"/> [15] DP Shield Plate X 2 
<input type="checkbox"/> [16] Paper Feed Sheet W X 1 	<input type="checkbox"/> [17] DP USB Cable X 1 	<input type="checkbox"/> [18] Paper Feed Sheet P X 1 
<input type="checkbox"/> [19] DP Mounting Plate P X 1 	<input type="checkbox"/> [20] USB Cable X 1 	<input type="checkbox"/> [21] DP Mounting Plate B X 1 USB Device Port-E2 Only 
<input type="checkbox"/> [22] DP Support Plate X 1 USB Device Port-E2 Only 	<input type="checkbox"/> [23] DP Cable Guide Unit X 1 USB Device Port-E2 Only 	<input type="checkbox"/> [24] DP Bottom Cover X 1 USB Device Port-E2 Only 

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<input type="checkbox"/> [25] DP Base Cover X 1 USB Device Port-E3 Only 	<input type="checkbox"/> [26] DP Base X 1 USB Device Port-E3 Only 	<input type="checkbox"/> [27] Wire Saddle (Large) X 1 USB Device Port-E3 Only 
<input type="checkbox"/> [28] Wire Saddle (Small) X 1 USB Device Port-E3 Only 	<input type="checkbox"/> [29] DP Base Cover X 1 USB Device Port-E3 Only 	<input type="checkbox"/> [30] DP Support Plate C X 1 USB Device Port-E3 Only 
<input type="checkbox"/> [31] DP Mounting Plate X 1 USB Device Port-E3 Only 	<input type="checkbox"/> [32] Edge Saddle X 1 USB Device Port-E3 Only 	<div style="background-color: black; width: 100%; height: 100%;"></div>

F-9-353

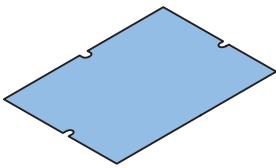
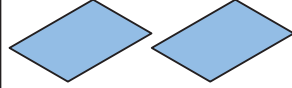
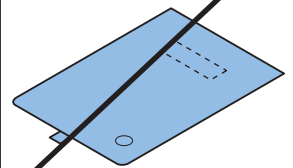
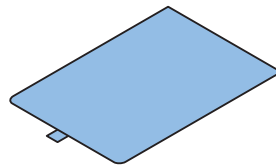
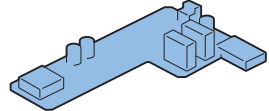

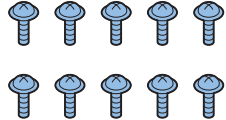
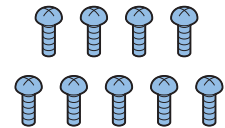
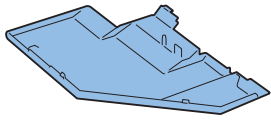
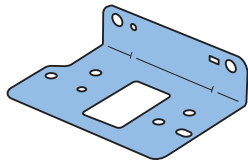
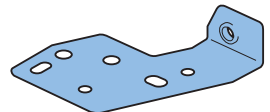
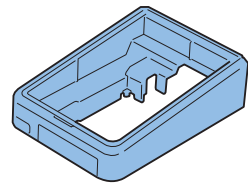
**CAUTION:**

- [13]: Included in the package as a unit in the case of USB Device Port-E1/E2" only.
- [25] [26] [27] [28]: "DP Lower Cover Unit" is divided into 4 parts and included in the package in the case of "USB Device Port-E3" only.


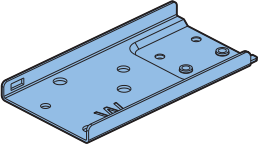
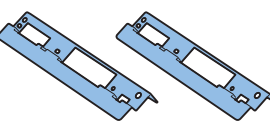
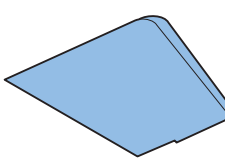
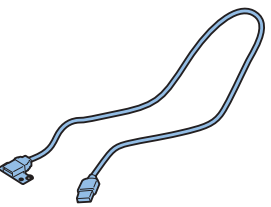
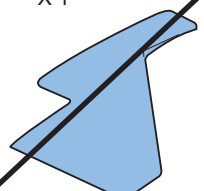
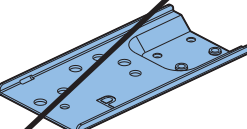
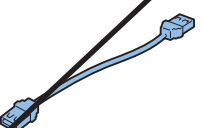


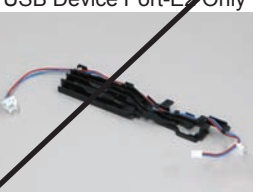
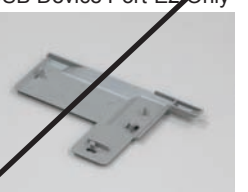
<CD/Guides>

- FCC/IC instruction sheet






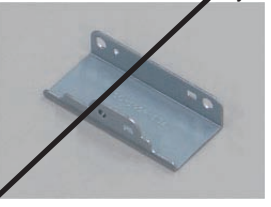


**[In case of DADF]**

<input type="checkbox"/> [1] DP Fireproof Sheet X 1 	<input type="checkbox"/> [2] Cushion X 2 Do not use with the Multimedia Reader/Writer-A2 or Card Reader 	<input type="checkbox"/> [3] DP Sheet (for Japan) X 1 
<input type="checkbox"/> [4] DP Sheet (for Europe) X 1 	<input type="checkbox"/> [5] DP Board X 1 	<input type="checkbox"/> [6] Screw (RS tight; M3x8.5) X 1 
<input type="checkbox"/> [7] Screw (TP Round End; M3x6) X 10 	<input type="checkbox"/> [8] Screw (Bind; M4x6) X 9 	<input type="checkbox"/> [9] DP Bottom Cover X 1 
<input type="checkbox"/> [10] DP Support Plate X 1 	<input type="checkbox"/> [11] DP Mounting Reinforcing Plate X 1 	<input type="checkbox"/> [12] DP Upper Cover Unit X 1 

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<input type="checkbox"/> [13] DP Lower Cover Unit X 1 USB Device Port-E1/E2 Only 	<input type="checkbox"/> [14] DP Mounting Plate W X 1 	<input type="checkbox"/> [15] DP Shield Plate X 2 
<input type="checkbox"/> [16] Paper Feed Sheet W X 1 	<input type="checkbox"/> [17] DP USB Cable X 1 	<input type="checkbox"/> [18] Paper Feed Sheet F X 1 
<input type="checkbox"/> [19] DP Mounting Plate P X 1 	<input type="checkbox"/> [20] USB Cable X 1 	<input type="checkbox"/> [21] DP Mounting Plate B X 1 USB Device Port-E2 Only 
<input type="checkbox"/> [22] DP Support Plate X 1 USB Device Port-E2 Only 	<input type="checkbox"/> [23] DP Cable Guide Unit X 1 USB Device Port-E2 Only 	<input type="checkbox"/> [24] DP Bottom Cover X 1 USB Device Port-E2 Only 

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<input type="checkbox"/> [25] DP Base Cover X 1 USB Device Port-E3 Only 	<input type="checkbox"/> [26] DP Base X 1 USB Device Port-E3 Only 	<input type="checkbox"/> [27] Wire Saddle (Large) X 1 USB Device Port-E3 Only 
<input type="checkbox"/> [28] Wire Saddle (Small) X 1 USB Device Port-E3 Only 	<input type="checkbox"/> [29] DP Base Cover X 1 USB Device Port-E3 Only 	<input type="checkbox"/> [30] DP Support Plate C X 1 USB Device Port-E3 Only 
<input type="checkbox"/> [31] DP Mounting Plate E X 1 USB Device Port-E3 Only 	<input type="checkbox"/> [32] Edge Saddle X 1 USB Device Port-E3 Only 	

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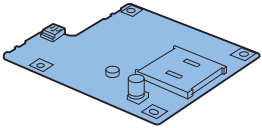
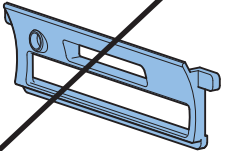
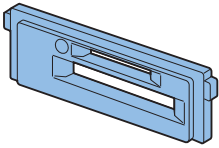
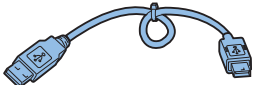
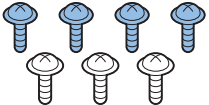

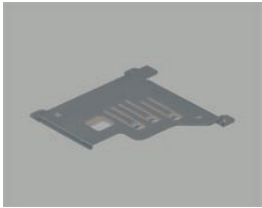
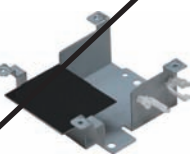

**CAUTION:**

- [13]: Included in the package as a unit in the case of USB Device Port-E1/E2" only.
- [25] [26] [27] [28]: "DP Lower Cover Unit" is divided into 4 parts and included in the package in the case of "USB Device Port-E3" only.

<CD/Guides>

- FCC/IC instruction sheet

## Checking the Contents [Multimedia Reader/Writer-A2/A3]

<input type="checkbox"/> [1] Multimedia Card Slot X 1 	<input type="checkbox"/> [2] Card Slot X 1 	<input type="checkbox"/> [3] Card Slot X 1 
<input type="checkbox"/> [4] USB Cable X 1 	<input type="checkbox"/> [5] Screw (TP; M3x6) X 4 A2 : 4 pcs A3 : 7 pcs (4 pcs used) 	<input type="checkbox"/> [6] Multimedia Label X 1 
<input type="checkbox"/> [7] Slot Holder X 1 	<input type="checkbox"/> [8] Media Reader Mounting Plate Unit X 1 A3 only 	<input type="checkbox"/> [9] Media Reader Cover X 1 A3 only 

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&lt;CD/Guides&gt;

- FCC/IC instruction sheet

## Installation Procedure

### Installing the USB Device Port

[In case of Printer Cover Unit]



- 1) Move the Control Panel in the direction of the arrow.

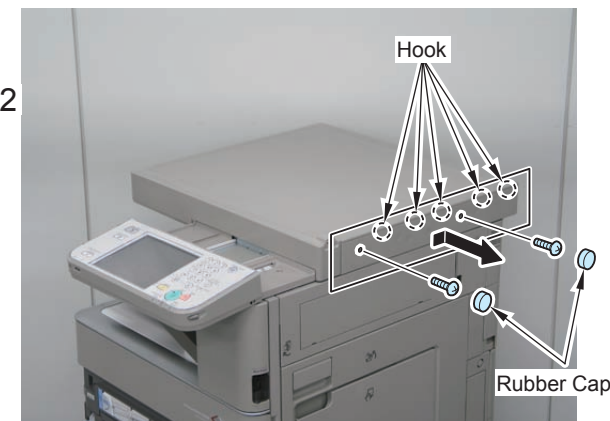


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- 2) Remove the Top Right Cover.

- 2 Rubber Caps
- 2 Screws
- 5 Hooks

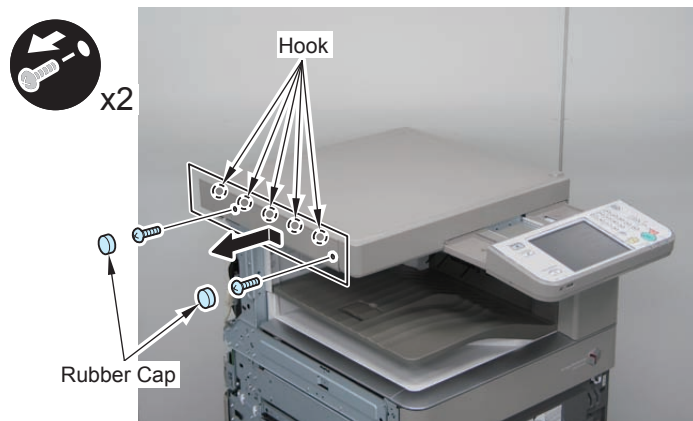


F-9-359



□ 3) Remove the Top Left Cover.

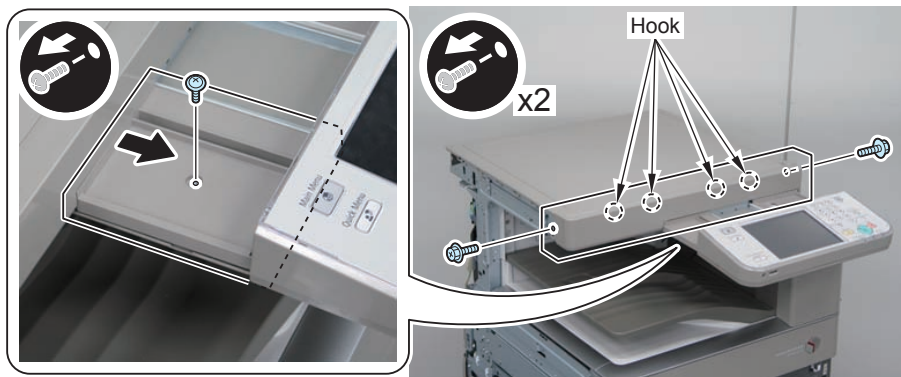
- 2 Rubber Caps
- 2 Screws
- 5 Hooks



F-9-360

□ 4) Move the Control Panel Base Cover, and remove the Printer Model Front Cover.

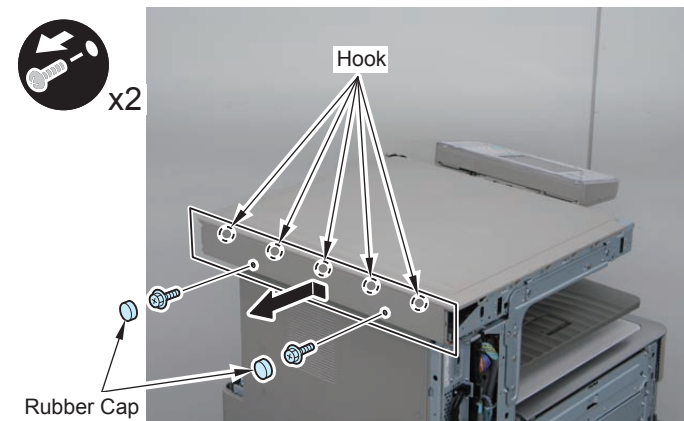
- 1 Screw (TP) on the Control Panel Base Cover
- 2 Screws (RS Tightening)
- 4 Hook



F-9-361

□ 5) Remove the Top Rear Cover.

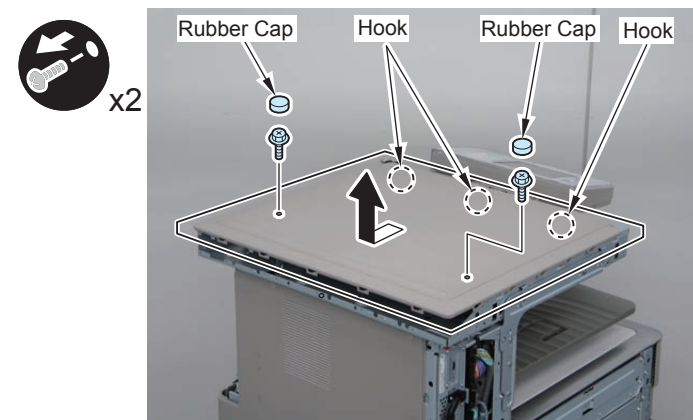
- 2 Rubber Caps
- 2 Screws
- 5 Hooks



F-9-362

□ 6) Remove the Top Cover.

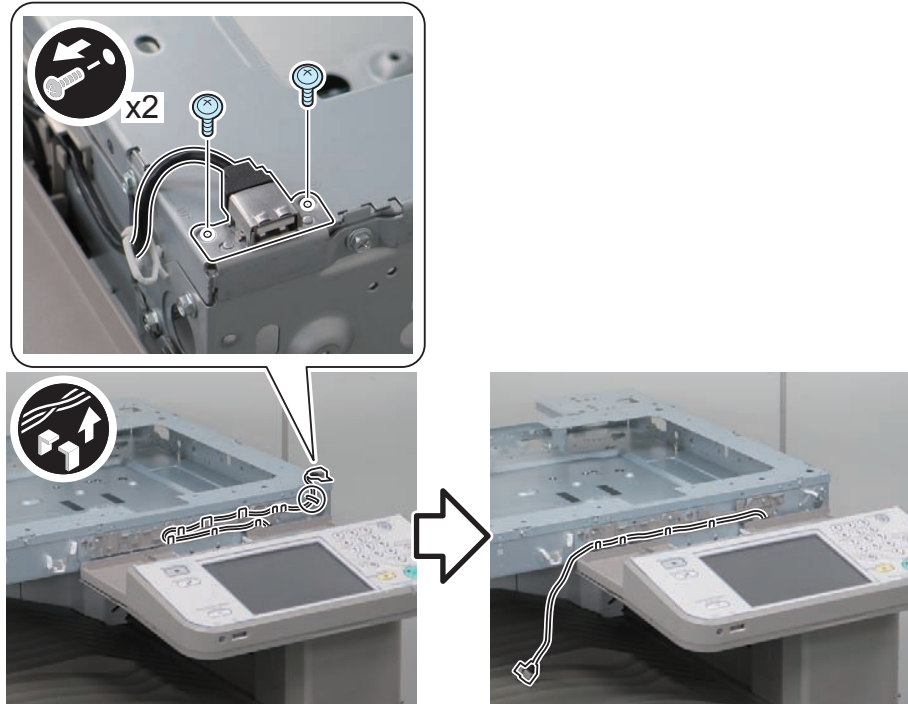
- 2 Rubber Caps
- 2 Screws
- 3 Hooks



F-9-363

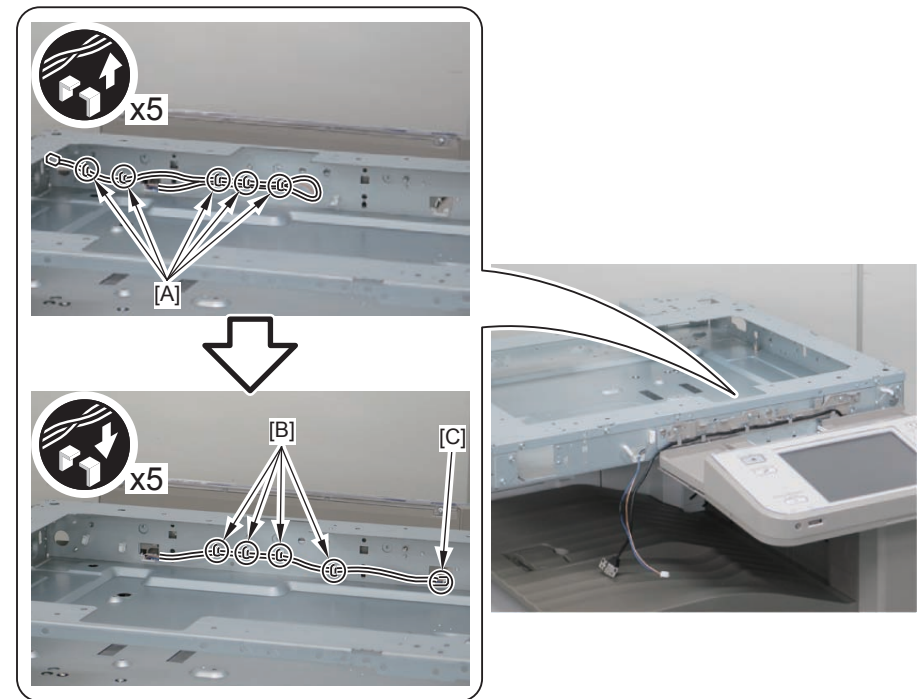
□  
7) Disconnect the USB Cable, and route it as shown in the figure.

- 2 Screws (The removed screws will not be used.)
- 1 Wire Saddle
- DP Cable Guide



F-9-364

□  
8) Remove the Harness from 5 Wire Saddles [A] and then route it around 4 Wire Saddles [B] and 1 Edge Saddle [C].



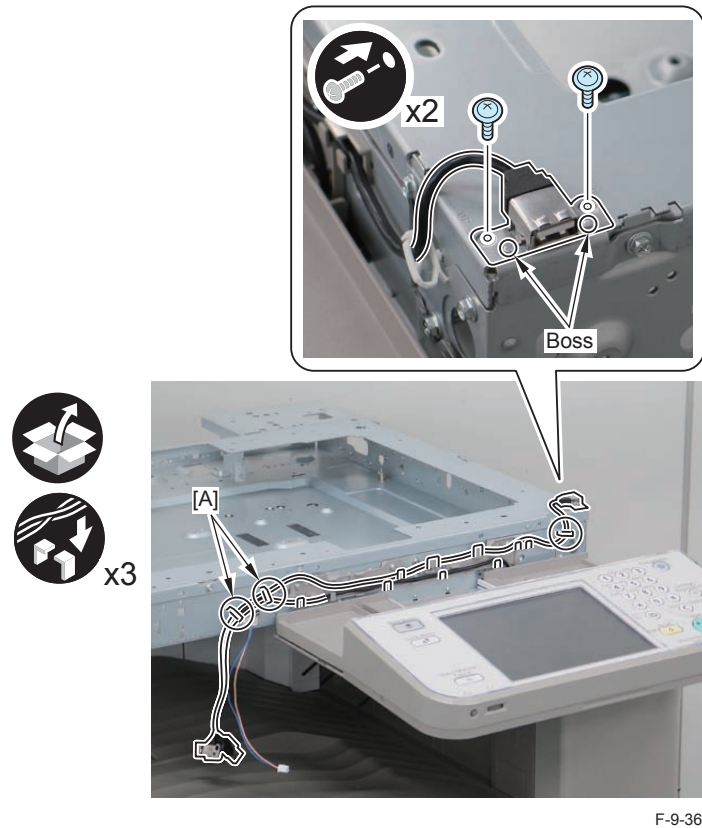
F-9-365



□  
9) Connect the DP USB Cable.

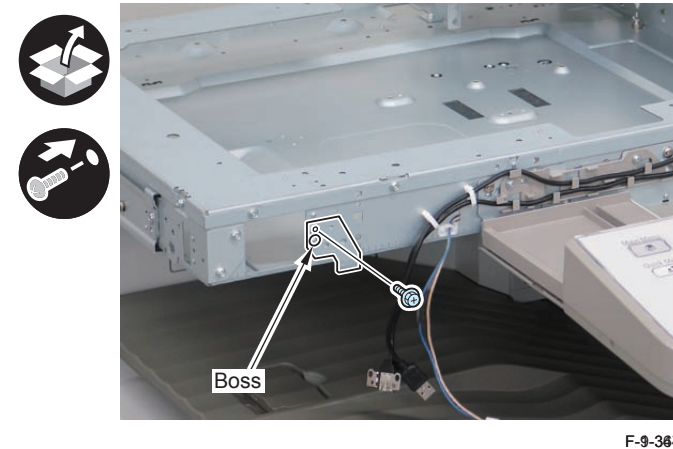
- 2 Bosses
- 2 Screws (TP; M3x6)
- DP Cable Guide
- 3 Wire Saddles

NOTE:  
Secure the 2 USB Cables in place using the 2 Wire Saddles [A].

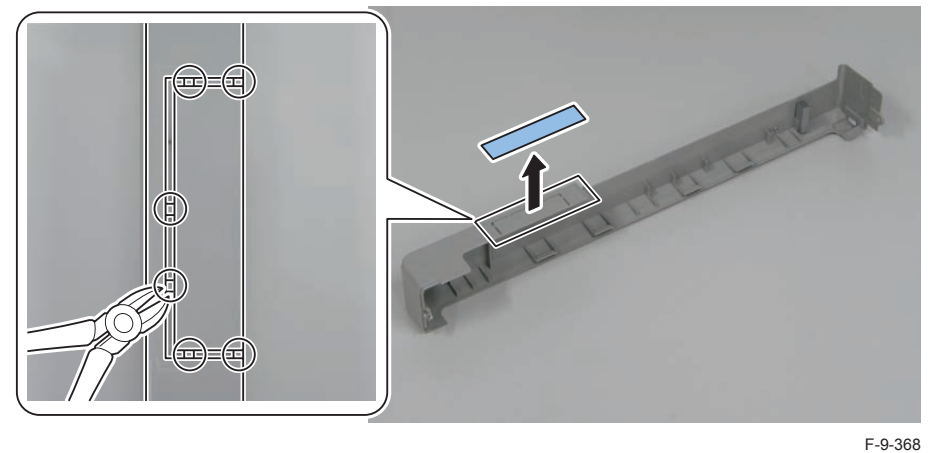


□  
10) Install the DP Mounting Reinforcing Plate.

- 1 Boss
- 1 Screw (RS Tightening; M3x8.5)



- 11) Remove the sheet on the Printer Model Front Cover.  
12) Cut off the Face Cover.

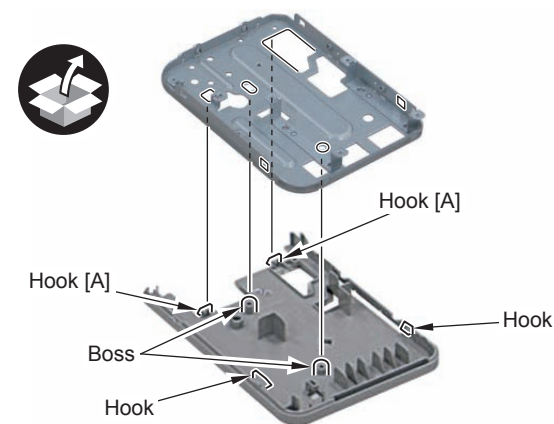


- 13) Install the Top Cover.
- 3 Hooks
  - 2 Screws
  - 2 Rubber Caps
- 14) Install the Top Rear Cover.
- 5 Hooks
  - 2 Screws
  - 2 Rubber Caps
- 15) Install the Printer Model Front Cover. and return the Control Panel Cover to its original position.
- 4 Hooks
  - 2 Screws (RS Tightening)
  - 1 Screw (TP) on the Control Panel Base Cover
- 16) Return the Control Panel.
- 17) Install the Top Left Cover and Top Right Cover.
- 5 Hooks each
  - 2 Screws (Binding) each
  - 2 Rubber Caps each

**NOTE:**  
Steps 18 and 19 apply to "USB Device Port-E3" only.

- 18) Assemble the DP Base and the DB Base Cover.
- 2 Bosses
  - 4 Hooks

**NOTE:**  
Align 2 hooks [A] and bosses (long holes) to the DP Base and then insert them. The installation will be difficult if the positioning holes for bosses are aligned first.



F-9-369

□ 19) Install the Wire Saddle to the DP Lower Cover Unit which was assembled in the previous step.

- Install the Wire Saddle (Small) on the upper side.
- Install the Wire Saddle (Large) on the bottom side.



Wire Saddle (Small)

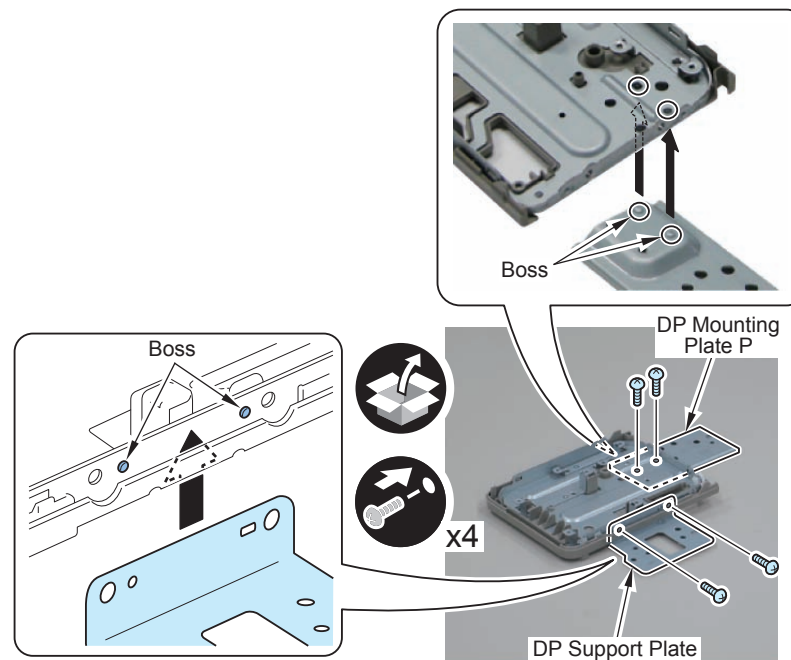


Wire Saddle (Large)

F-9-370

□ 20) Install the DP Support Plate and the DP Mounting Plate P to the DP Lower Cover Unit.

- 2 Bosses each
- 2 Screws (Binding; M4x6) each

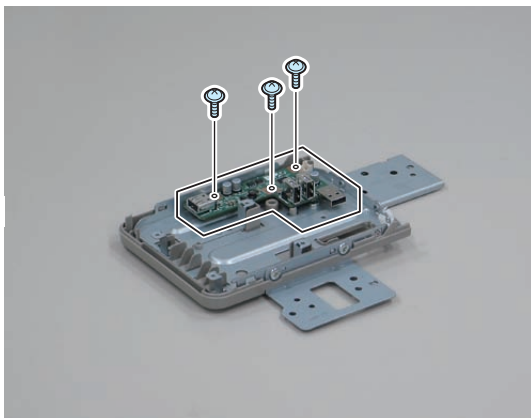


F-9-371

- 21) Install the DP Board.  
 • 3 Screws (TP; M3x6)



x3

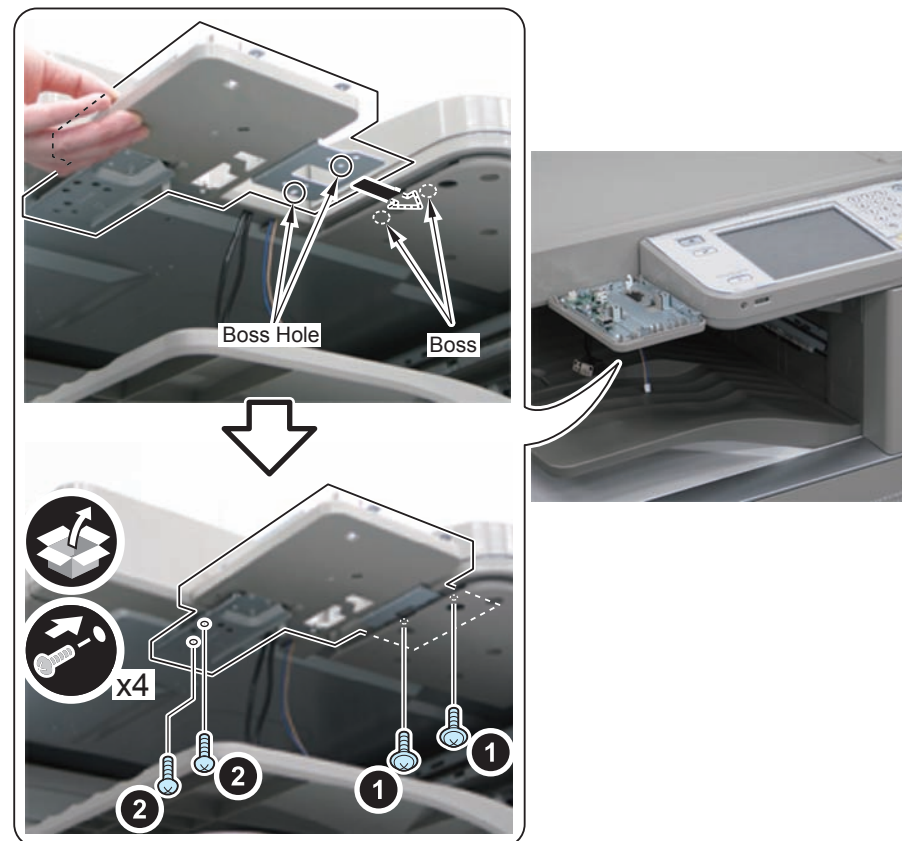


F-9-372

- 22) Insert the DP Support Plate to the Control Panel Unit, and install the DP Lower Cover Unit using a stubby screwdriver.
- 2 Bosses
  - 2 Screws (TP; M3x6)
  - 2 Screws (Binding; M4x6)

**NOTE:**

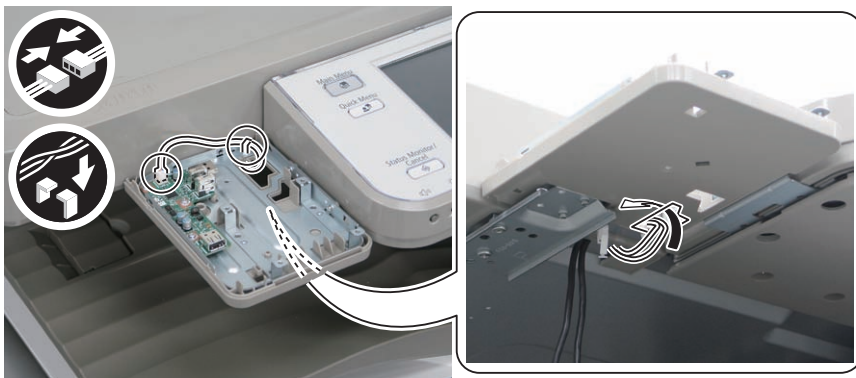
Be sure to tighten the 2 screws (TP; M3x6) on the DP Support Plate first.



F-9-373

- 23) Put and connect the harness through the hole of the DP Lower Cover Unit.
- 1 Wire Saddle (upper side)
  - 1 Connector

**NOTE:**  
Be sure not to pass the harness through the Wire Saddle on the lower side.

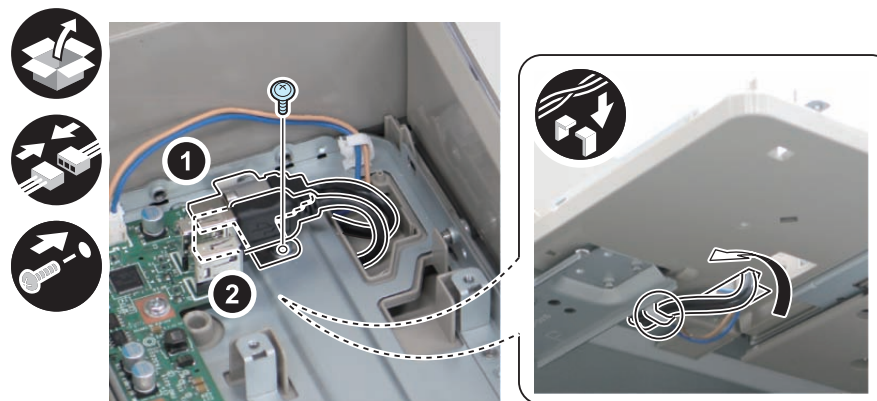


F-9-374

- 24) Put and connect the 2 USB Cables through the hole of the DP Lower Cover Unit.
- 1 Wire Saddle (lower side)
  - 1 USB Cable with the Plate
  - 1 Screw (TP; M3x6)
  - 1 USB Cable

**NOTE:**

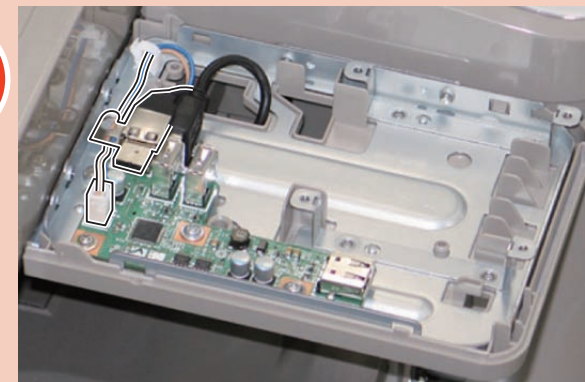
- Be sure not to pass the cables through the Wire Saddle on the upper side.
- Be sure to connect the USB Cable with the Plate first.
- Be sure to USB Cable the other connector next to the USB Cable with the Plate.



F-9-376

**CAUTION:**

Be careful not to trap the harness with the USB Cable with the Plate.



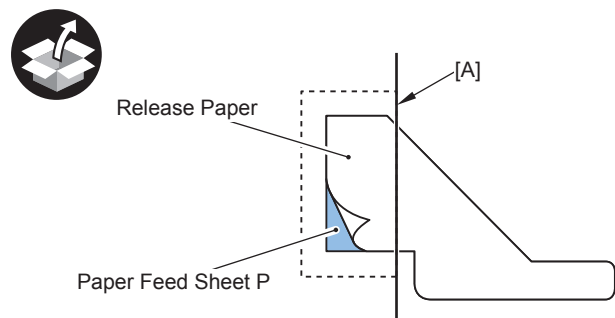
F-9-375



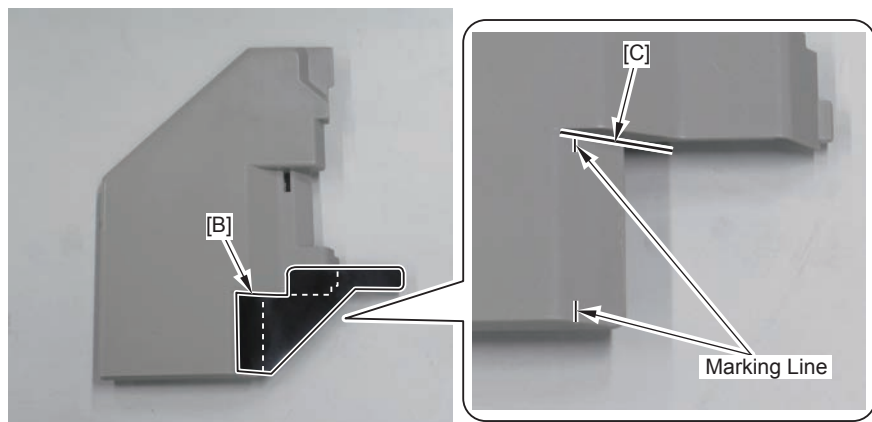
- 25) Peel the release paper for the Paper Feed Sheet P to [A] area and affix to the DP Bottom Cover as shown in the figure.

## NOTE:

- When affixing it, be sure to align it with the marking lines, and push the [B] part against the [C] part.
- Be sure that the Paper Feed Sheet P is on the DP Bottom Cover.

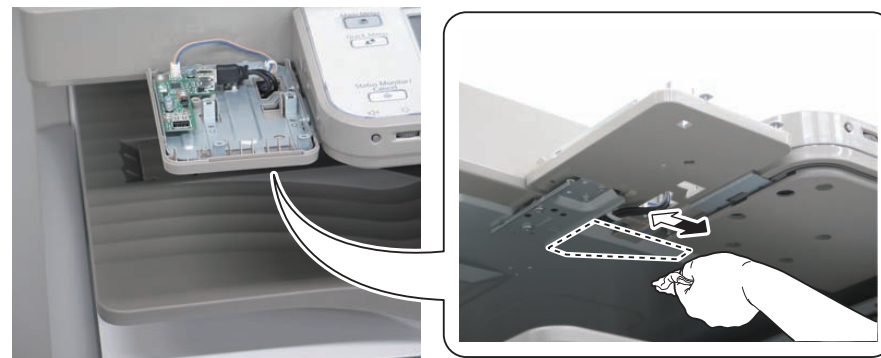


F-9-377



F-9-378

- 26) Check the position to install the DP Bottom Cover and wipe the affixing surface of the Paper Feed Sheet P with alcohol.



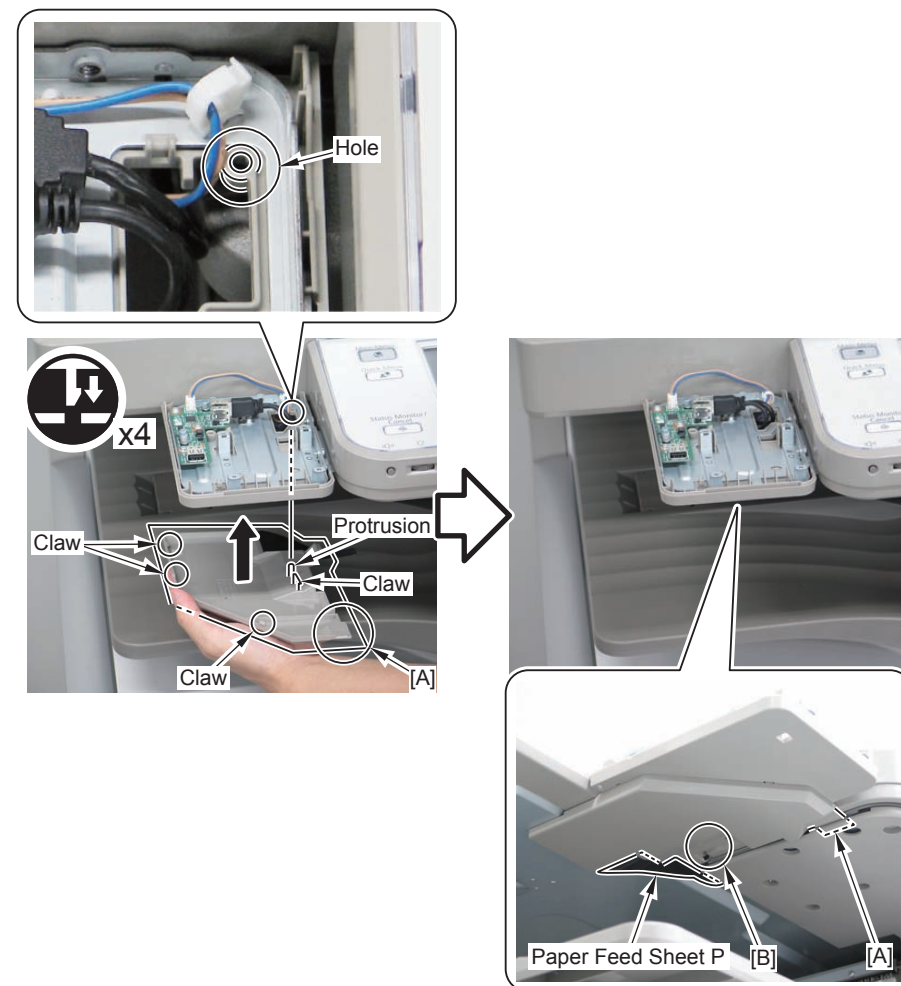
F-9-379

- 27) Insert the protrusion of the DP Bottom Cover and attach the DP Bottom Cover while remove the remaining release paper from Paper Feed Sheet P.

- 4 Claws

**CAUTION:**

- Be sure that the [A] part is inserted into the Control Panel Unit.
- Be careful not to trap cables with the [B] part. Be careful not to trap the harness and the USB Cable with the DP Lower Cover and the DP Bottom Cover.
- Make sure that the Paper Feed Sheet P does not peel off.

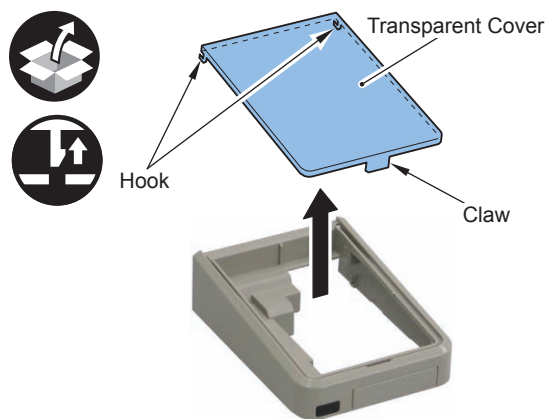


F-9-380



□  
28) Remove the Transparent Cover.

- 1 Claw
- 2 Hooks



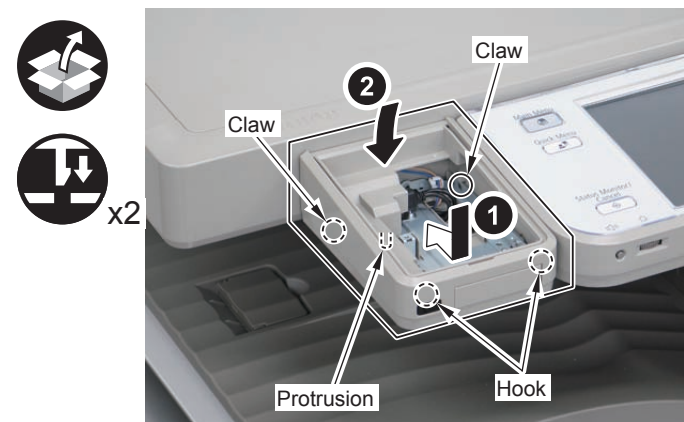
F-9-381

NOTE:

When installing the Multimedia Reader/Writer-A2 simultaneously, be sure to refer to step 3 and later of "Installing the Multimedia Reader/Writer-A2" before installing the DP Upper Cover.

□  
29) Install the DP Upper Cover in the direction of the arrow.

- 1 Protrusion
- 2 Hooks
- 2 Claws



F-9-382

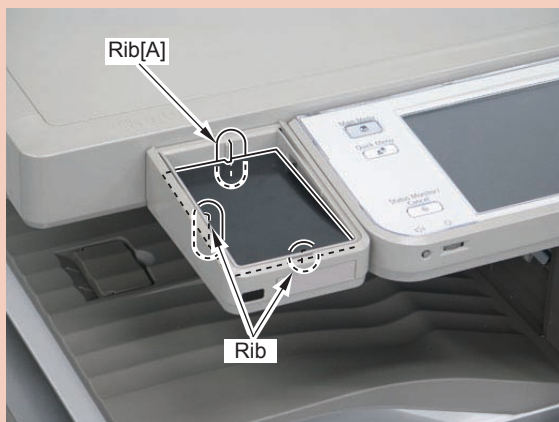
NOTE:

When installing the Card Reader (sales company's option) simultaneously, be sure to refer to step 2 and later of "Installing the Card Reader" after installing the DP Upper Cover.

- 30) Install the following parts.

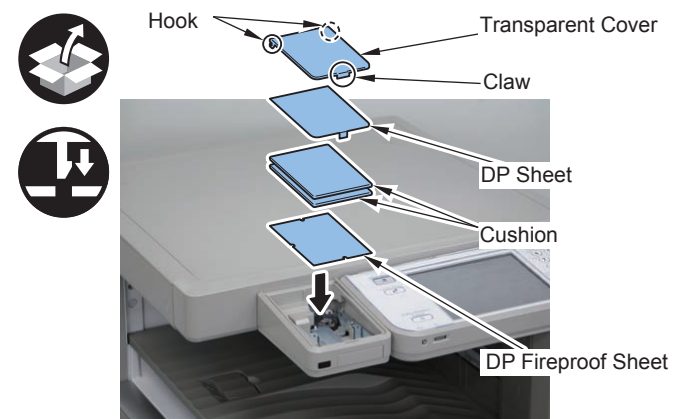
**CAUTION:**

- Be sure to place the DP Fireproof Sheet by aligning the 3 ribs and pushing the sheet against the rib [A] without removing the release sheet of it.
- Turn over the DP Sheet (for Europe) with the plain side up, and install it while folding the bar code part.



F-9-383

- 1 DP Fireproof Sheet
- 2 Cushions
- 1 DP Sheet (for Europe)
- 1 Transparent Cover (2 hooks and 1 claw)



F-9-384

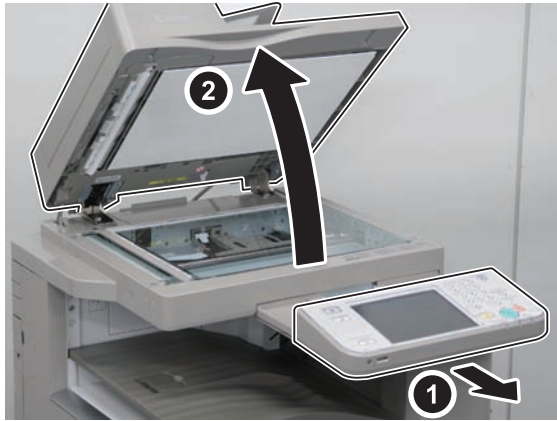
- 31) Remove the Protection Sheet on the Transparent Cover.
- 32) Connect the power plug of the host machine to the power outlet.
- 33) Turn ON the main power switch.
- 34) Connect the memory media to the USB slot and perform the operation check.

**NOTE:**

Refer to the "Operation Check [USB Device Port-E1/E2/E3 / Multimedia Reader/Writer-A2]" to perform the connection check of the memory media.

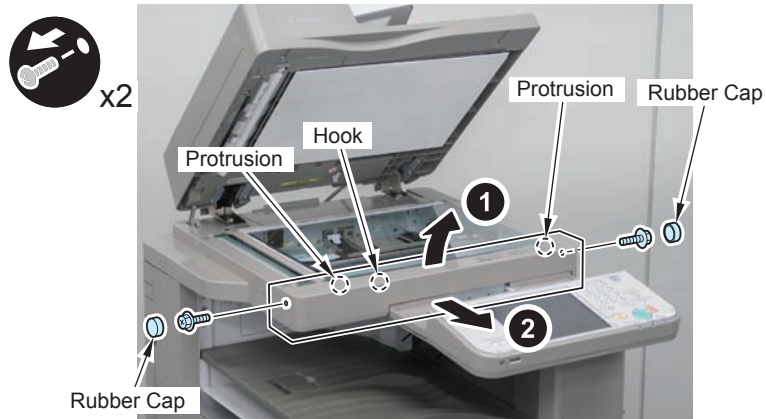
## [In case of DADF]

- 
- 1) Move the Control Panel in the direction of the arrow, and open the DADF.



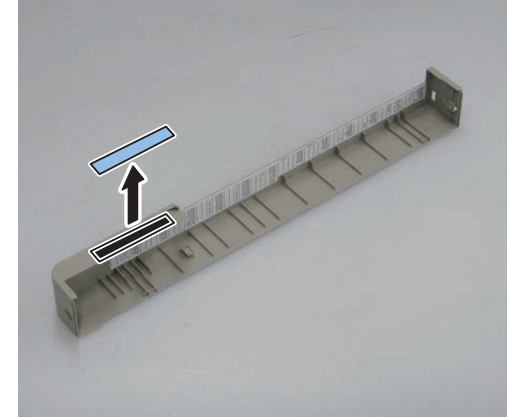
F-9-385

- 
- 2) Remove the Reader Front Cover.
- 2 Rubber Caps
  - 2 Screws
  - 2 Protrusions
  - 1 Hook



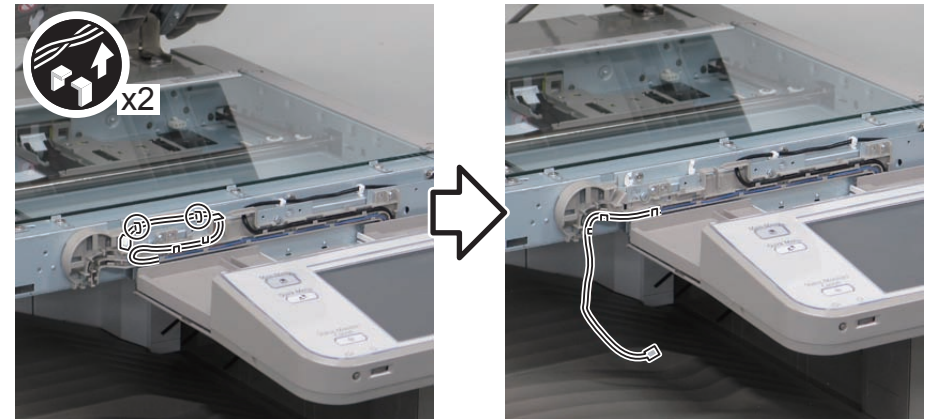
F-9-386

- 
- 3) Remove the Face Sheet. (The removed Face Sheet will not be used.)



F-9-387

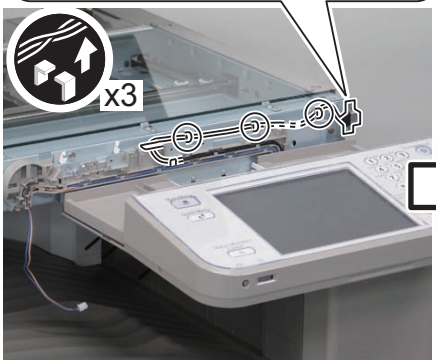
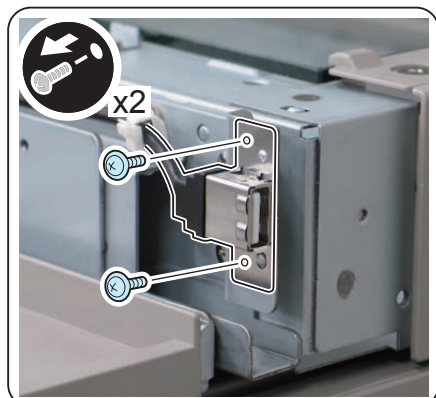
- 
- 4) Route the harness as shown in the figure.
- 2 Wire Saddles



F-9-388

□  
5) Disconnect the USB Cable and route it as shown in the figure.

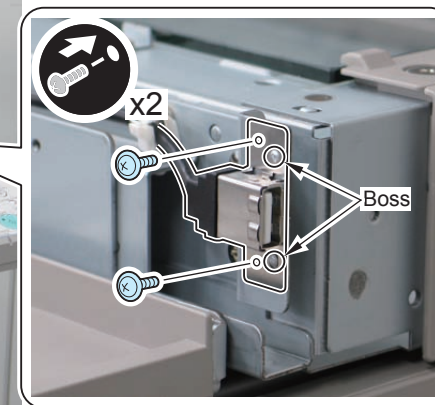
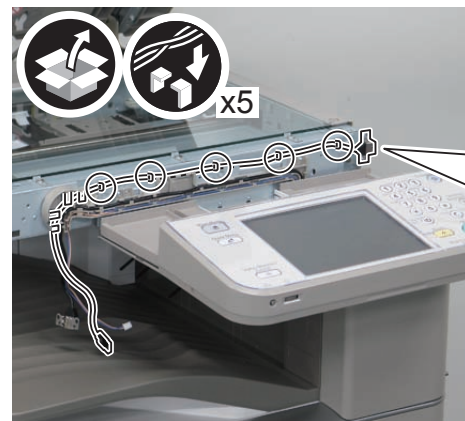
- 2 Screws (The removed screws will be used in later step.)
- 3 Wire Saddles
- DP Cable Guide



F-9-389

□  
6) Connect the DP USB Cable.

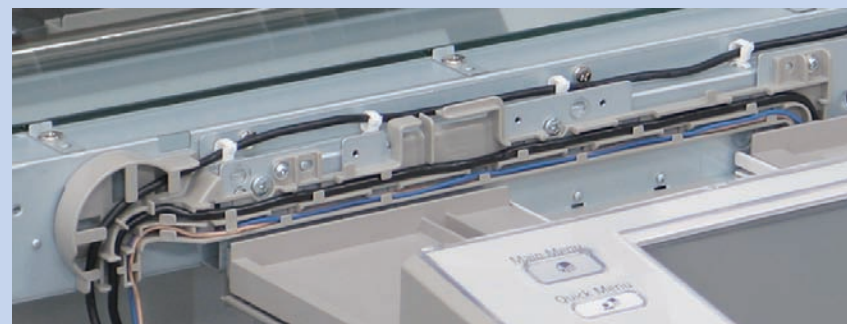
- 2 Bosses
- 2 Screws (The screws removed in previous step.)
- 5 Wire Saddles
- DP Cable Guide



F-9-390

**NOTE:**

Make sure that cables are inside the DP Cable Guide.

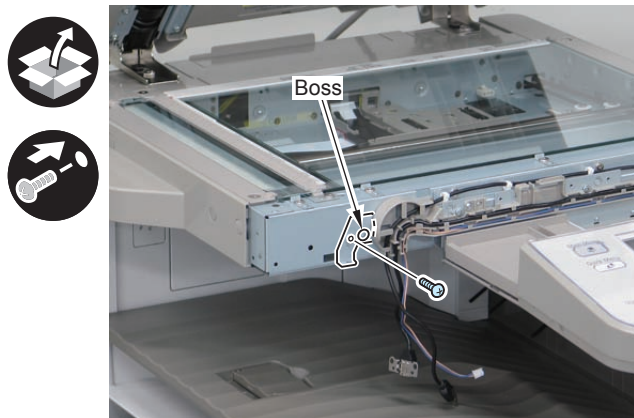


F-9-391



□  
7) Install the DP Mounting Reinforcing Plate.

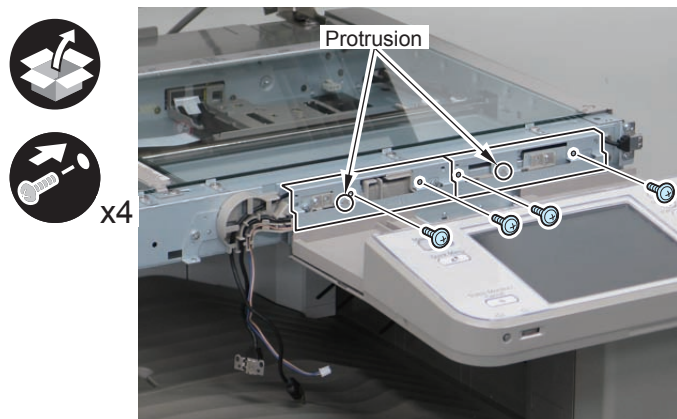
- 1 Boss
- 1 Screw (Binding; M4x6)



F-9-392

□  
8) Install the 2 Shield Plates.

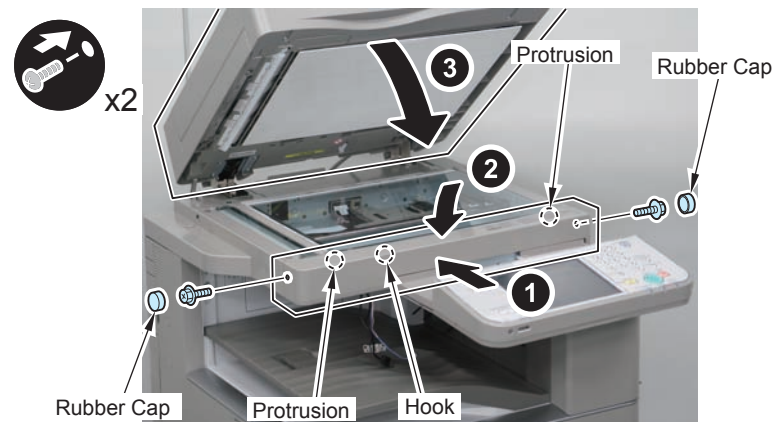
- 1 Protrusion each
- 2 Screws (TP; M3x6) each



F-9-393

□  
9) Install the Reader Front Cover, and close the DADF.

- 1 Hook
- 2 Protrusions
- 2 Screws
- 2 Rubber Caps

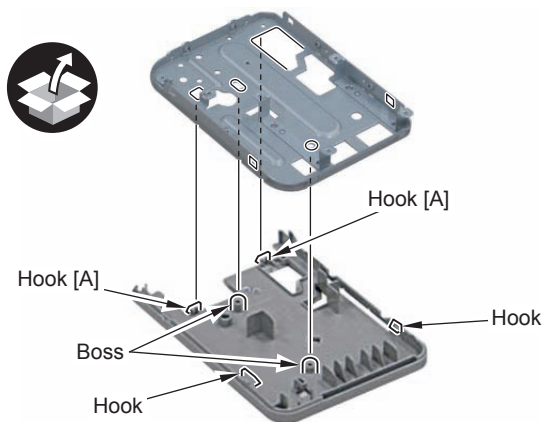


F-9-394

NOTE:  
Steps 10 and 11 apply to "USB Device Port-E3" only.

- 10) Assemble the DP Base and the DB Base Cover.
- 2 Bosses
  - 4 Hooks

NOTE:  
Align 2 hooks [A] and bosses (long holes) to the DP Base and then insert them. The installation will be difficult if the positioning holes for bosses are aligned first.



F-9-395

- 11) Install the Wire Saddle to the DP Lower Cover Unit which was assembled in the previous step.
- Install the Wire Saddle (Small) on the upper side.
  - Install the Wire Saddle (Large) on the bottom side.



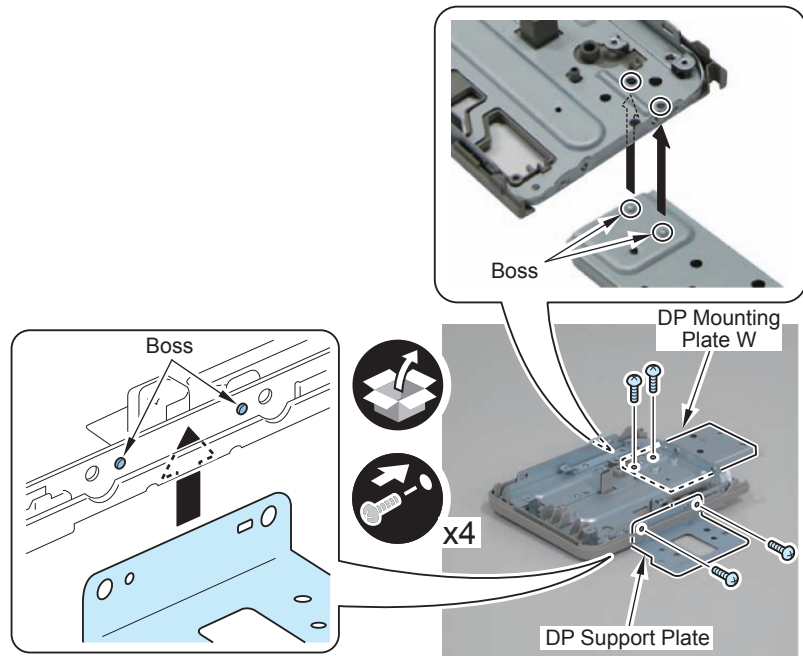
Wire Saddle (Small)



Wire Saddle (Large)

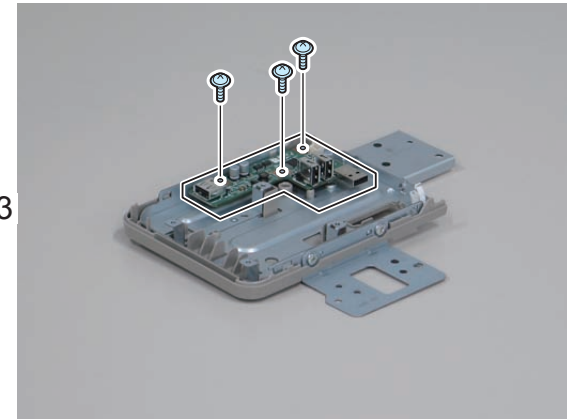
F-9-396

- 12) Install the DP Support Plate and the DP Mounting Plate W to the DP Lower Cover Unit.
- 2 Bosses each
  - 2 Screws (Binding; M4x6) each



F-9-397

- 13) Install the DP PCB.
- 3 Screws (TP; M3x6)



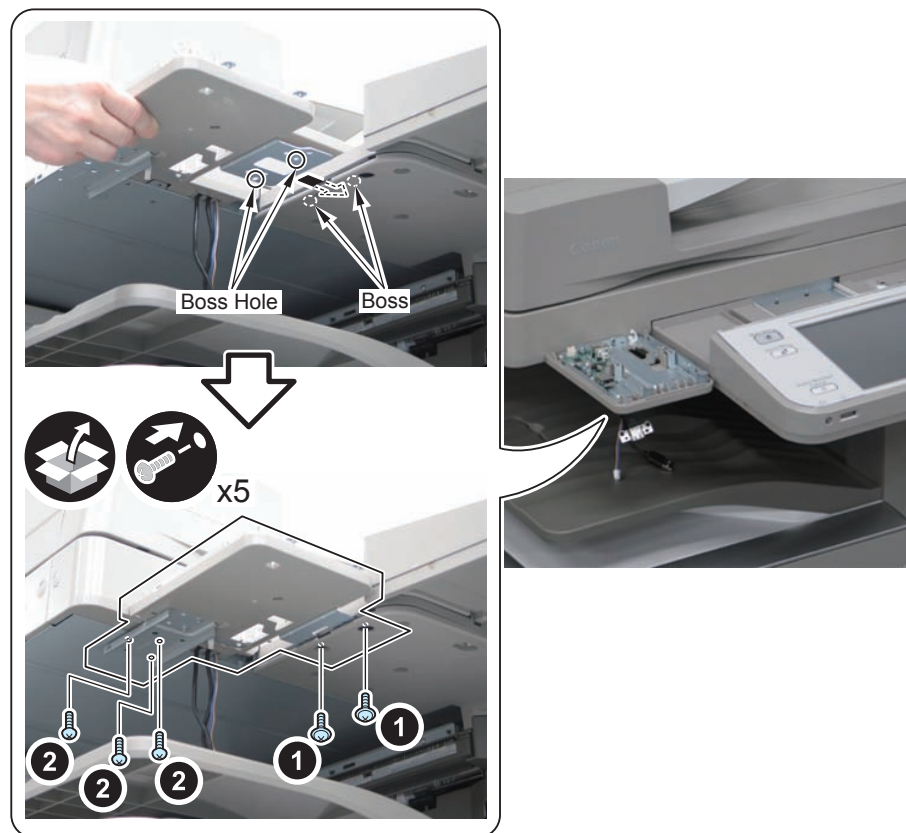
F-9-398



- 14) Insert the DP Support Plate to the Control Panel Unit, and install the DP Lower Cover Unit using a stubby screwdriver.

- 2 Bosses
- 2 Screws (TP; M3x6)
- 3 Screws (Binding; M4x6)

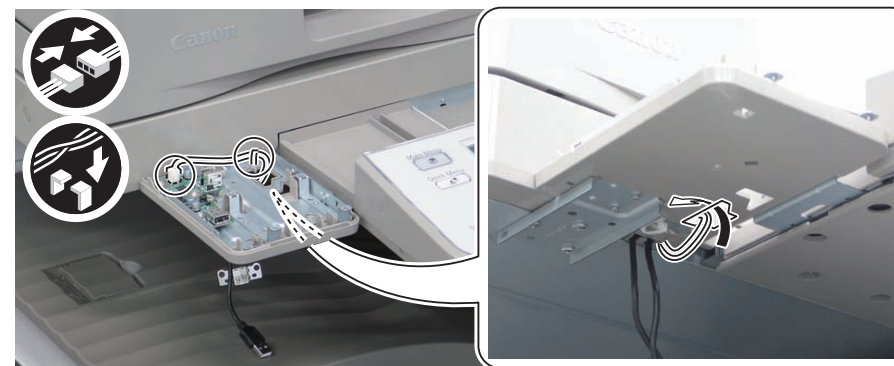
**NOTE:**  
Be sure to tighten the 2 screws (TP; M3x6) on the DP Support Plate first.



F-9-399

- 15) Put and connect the harness through the hole of the DP Lower Cover Unit.
- 1 Wire Saddle (upper side)
  - 1 Connector

**NOTE:**  
Be sure not to pass the harness through the Wire Saddle on the lower side.



F-9-400

□  
16) Put and connect the 2 USB Cables through the hole of the DP Lower Cover Unit.

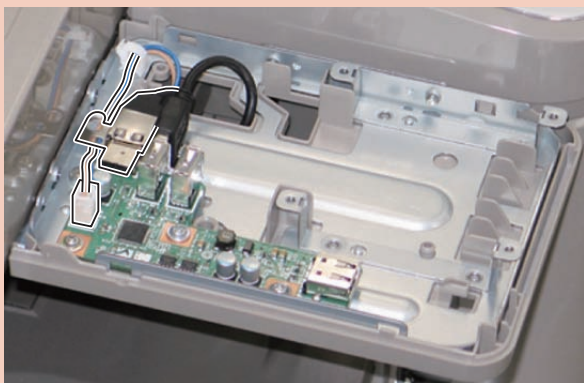
- 1 Wire Saddle (lower side)
- 1 USB Cable with the Plate
- 1 Screw (TP; M3x6)
- 1 USB Cable

**NOTE:**

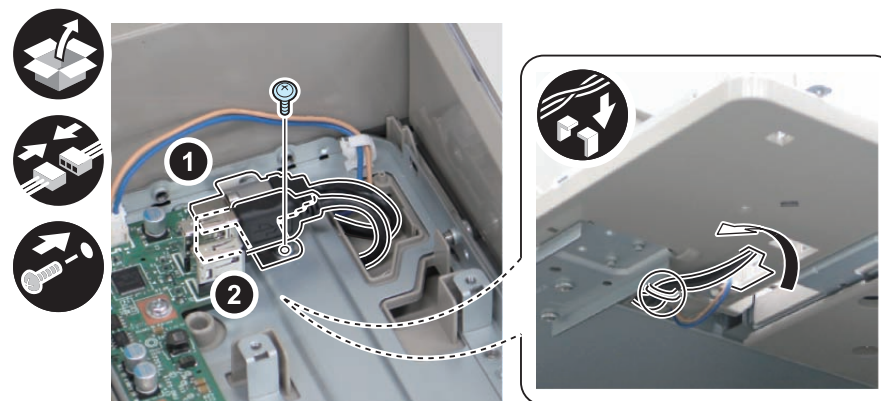
- Be sure not to pass the cables through the Wire Saddle on the upper side.
- Be sure to connect the USB Cable with the Plate first.
- Be sure to USB Cable the other connector next to the USB Cable with the Plate.

**CAUTION:**

Be careful not to trap the harness with the USB Cable with the Plate.



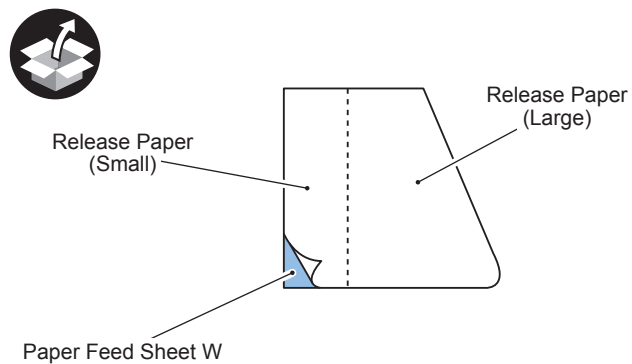
F-9-401



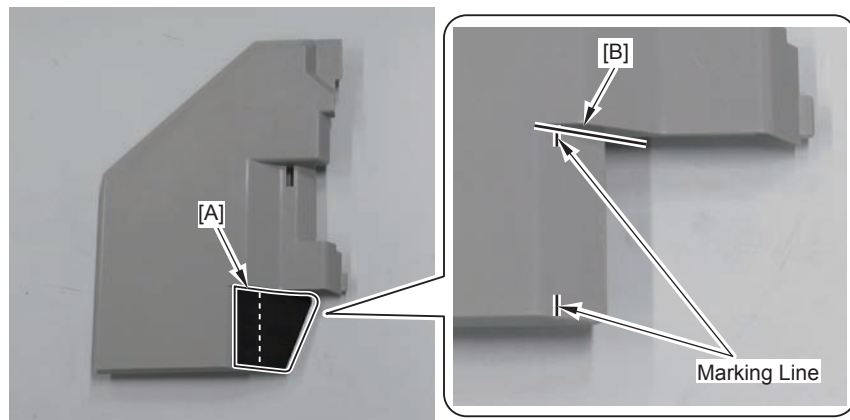
F-9-402

- 17) Remove the release paper (small) on the Paper Feed Sheet W, and affix it to the DP Bottom Cover.

**NOTE:**  
When affixing it, be sure to align it with the marking lines, and push the [A] part against the [B] part.

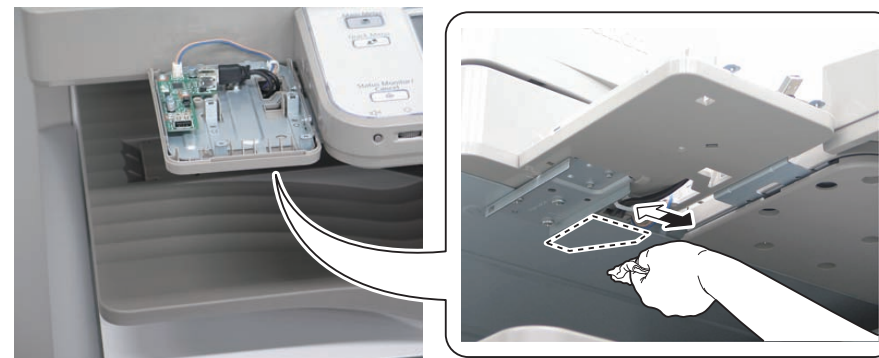


F-9-403



F-9-404

- 18) Check the position to install the DP Bottom Cover and wipe the affixing surface of the Paper Feed Sheet W with alcohol.

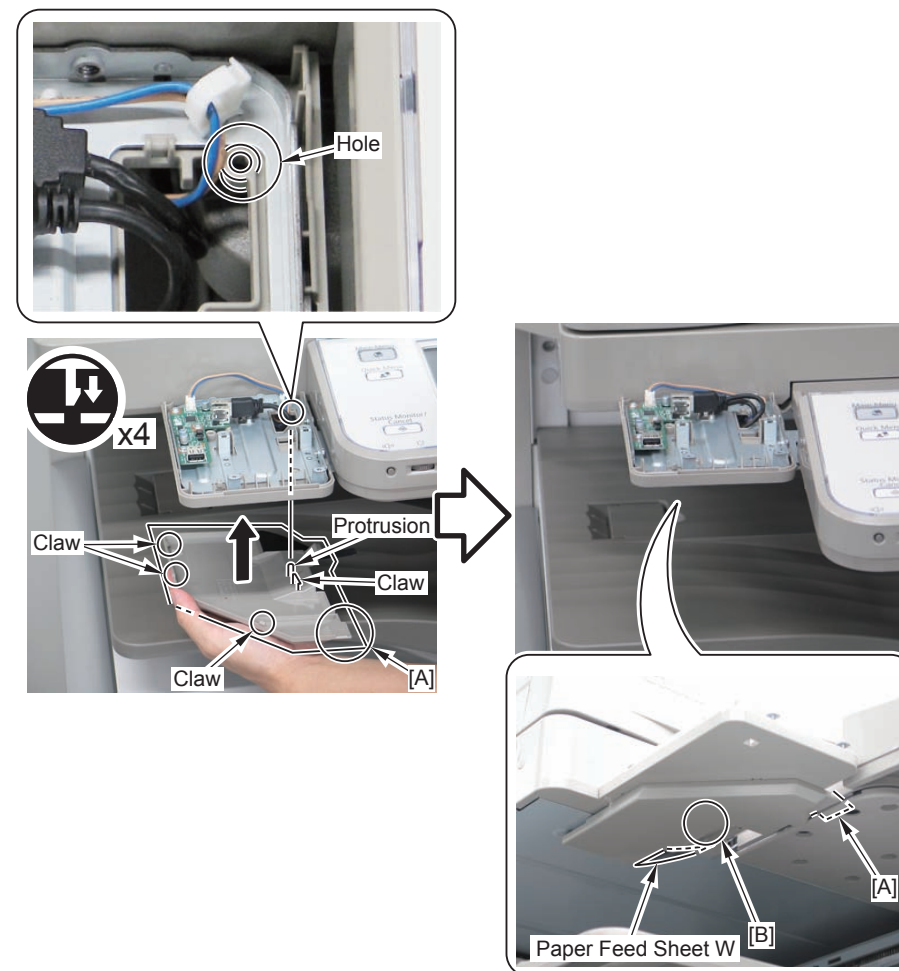


F-9-405

- 19) Fit the protrusion on the DP Bottom Cover into the hole, and install the DP Bottom Cover while removing the release paper (large) of the Paper Feed Sheet W.
- 4 Claws

## CAUTION:

- Be sure that the [A] part is inserted into the Control Panel Unit.
- Be careful not to trap cables with the [B] part. Be careful not to trap the harness and the USB Cable with the DP Lower Cover and the DP Bottom Cover.
- Make sure that the Paper Feed Sheet W does not peel off.

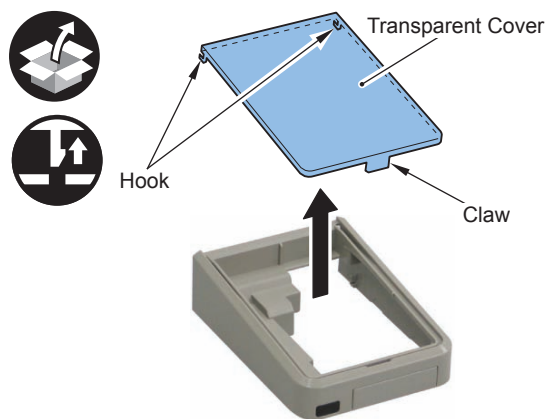


F-9-406

- 20) Return the Control Panel.

□  
21) Remove the Transparent Cover.

- 1 Claw
- 2 Hooks



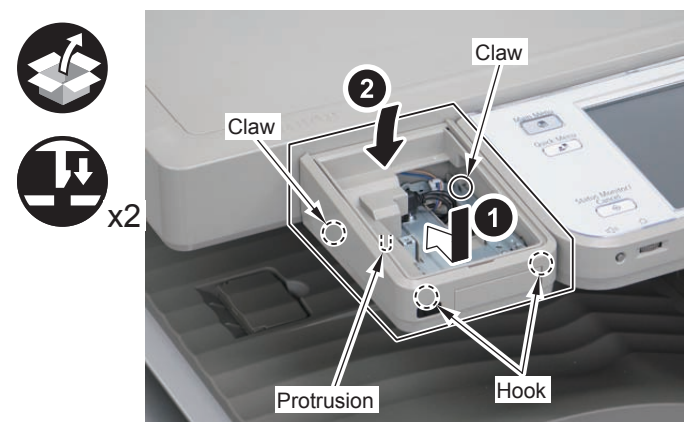
F-9-407

NOTE:

When installing the Multimedia Reader/Writer-A2 simultaneously, be sure to refer to step 3 and later of "Installing the Multimedia Reader/Writer-A2" before installing the DP Upper Cover.

□  
22) Install the DP Upper Cover in the direction of the arrow.

- 1 Protrusion
- 2 Hooks
- 2 Claws



F-9-408

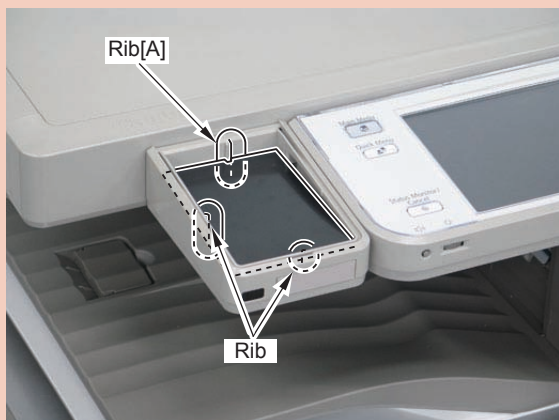
NOTE:

When installing the Card Reader (sales company's option) simultaneously, be sure to refer to step 2 and later of "Installing the Card Reader" after installing the DP Upper Cover.

- 23) Install the following parts.

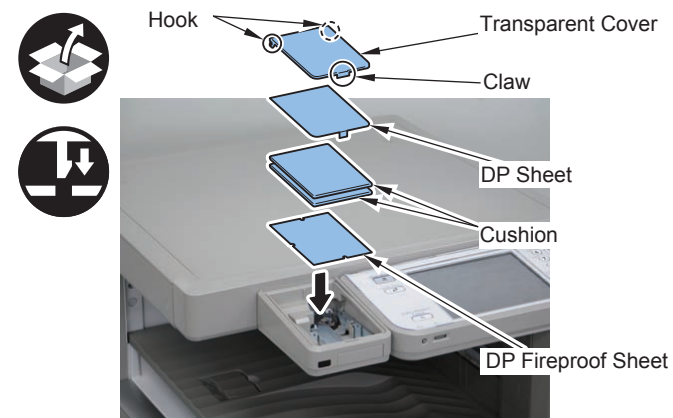
**CAUTION:**

- Be sure to place the DP Fireproof Sheet by aligning the 3 ribs and pushing the sheet against the rib [A] without removing the release sheet of it.
- Turn over the DP Sheet (for Europe) with the plain side up, and install it while folding the bar code part.



F-9-409

- 1 DP Fireproof Sheet
- 2 Cushions
- 1 DP Sheet (for Europe)
- 1 Transparent Cover (2 hooks and 1 claw)



F-9-410

- 24) Remove the Protection Sheet on the Transparent Cover.
- 25) Connect the power plug of the host machine to the power outlet.
- 26) Turn ON the main power switch.
- 27) Connect the memory media to the USB slot and perform the operation check.

**NOTE:**

Refer to the "Operation Check [USB Device Port-E1/E2/E3 / Multimedia Reader/Writer-A2]" to perform the connection check of the memory media.



## ■ Installing the Card Reader

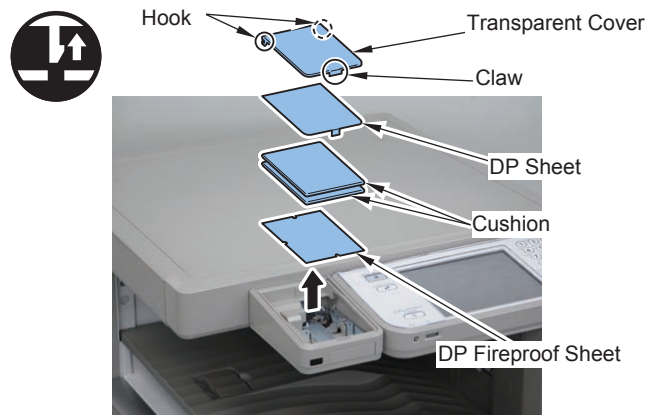
**NOTE:**  
Although the shape of the Card Reader may differ, the procedure is the same.



**NOTE:**  
This step is not necessary when installing simultaneously with the USB Device Port.

1) Remove the following parts.

- 1 Transparent Cover (1 claw and 2 hooks)
- 1 DP Sheet
- 2 Cushions (Do not use the removed Cushions.)
- 1 DP Fireproof Sheet (Do not use the removed DP Fireproof Sheet.)



F-9-411



2) Install the Card Reader and place the cable as shown in the figure.

**NOTE:**  
Work the cable to make sure that the Transparent Cover fits securely in step 3.



F-9-412

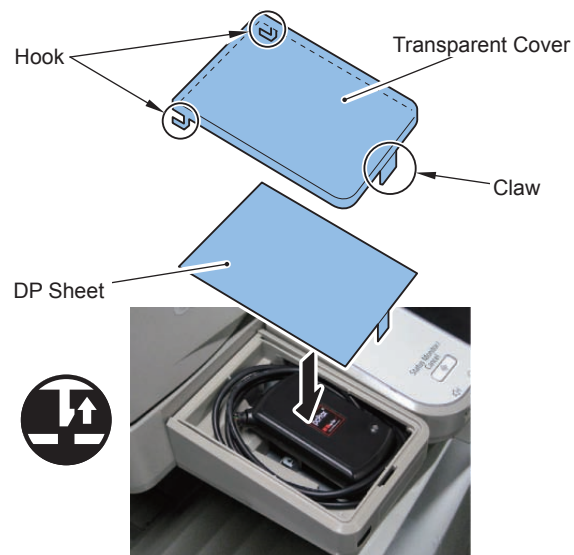


3) Place the Card Reader, and install the DP Sheet (for Europe) and the Transparent Cover.

- 2 Hooks
- 1 Claw

**NOTE:**

- Insert the DP Sheet (for Europe) to the area with the illustration side facing up and bending the bar code area.
- Be sure that the Transparent Cover is installed properly.



F-9-413

4) When installing the USB Device Port simultaneously, remove the Protection Sheet on the Transparent Cover.

- 5) Connect the power plug of the host machine to the power outlet.
- 6) Turn ON the main power switch.

7) If installing simultaneously with the USB Device Port, connect the memory media to the USB slot and perform the operation check.

**NOTE:**

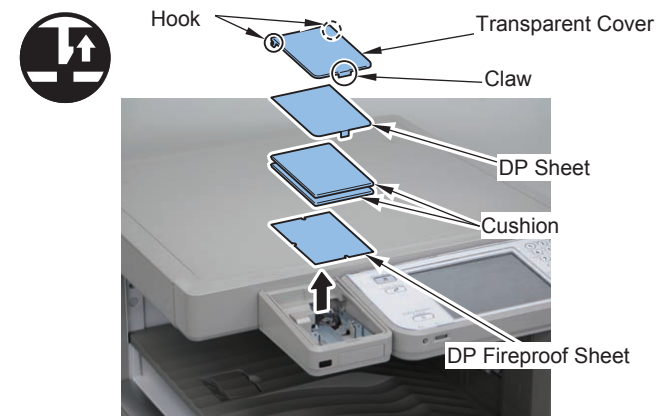
Refer to the "Operation Check [USB Device Port-E1/E2/E3 / Multimedia Reader/Writer-A2]" to perform the connection check of the memory media.

## ■ Installing the Multimedia Reader/Writer-A2

**NOTE:**

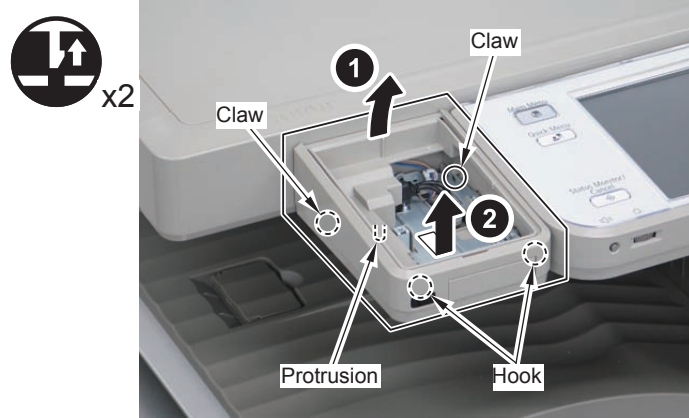
Step 1) and 2) are not necessary when installing simultaneously with the USB Device Port.

- 1) Remove the following parts.
- 1 Transparent Cover (1 claw and 2 hooks)
  - 1 DP Sheet
  - 2 Cushions (Do not use the removed Cushions.)
  - 1 DP Fireproof Sheet



F-9-414

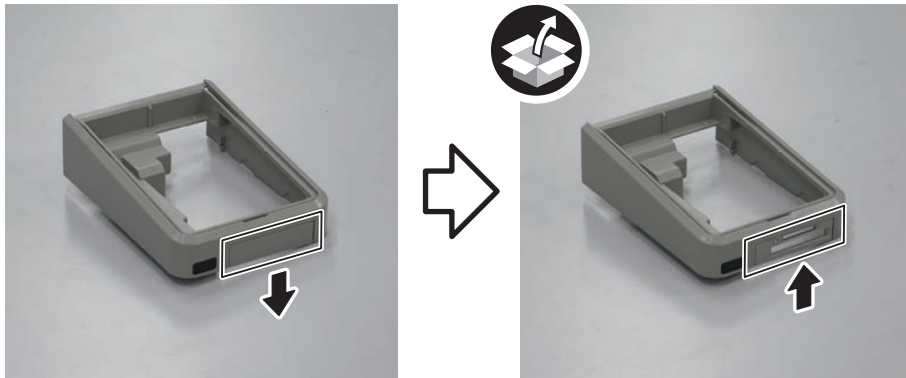
- 2) Remove the DP Upper Cover.
- 2 Claws
- 1 Protrusion
- 2 Hooks



F-9-415

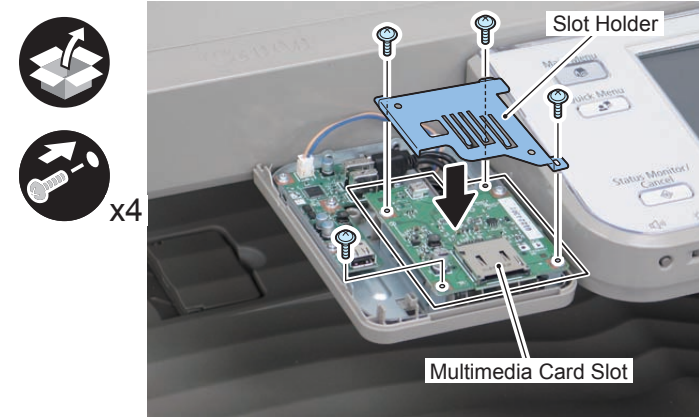
**NOTE:**  
When installing simultaneously with the USB Device Port, start the procedure from step 3.

- 3) Remove the Card Slot (closed) from the DP Upper Cover and attach the Card Slot.



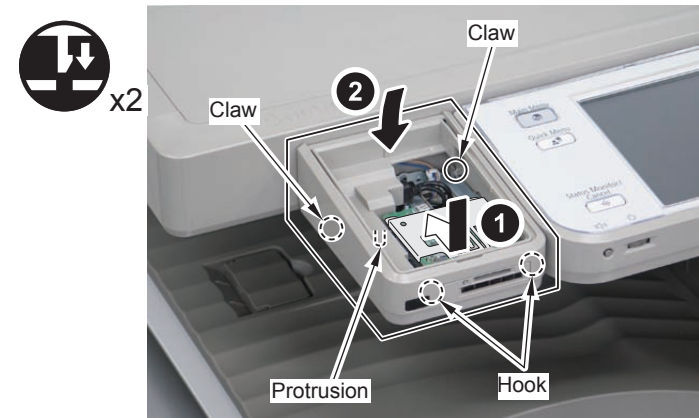
F-9-416

- 4) Install Multimedia Card Slot and Slot Holder together.
- 4 Screws (TP; M3x6)



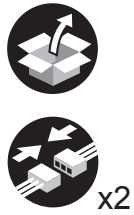
F-9-417

- 5) Install the DP Upper Cover in the direction of the arrow.
- 2 Hooks
- 1 Protrusion
- 2 Claws



F-9-418

- 6) Connect the USB Cable.



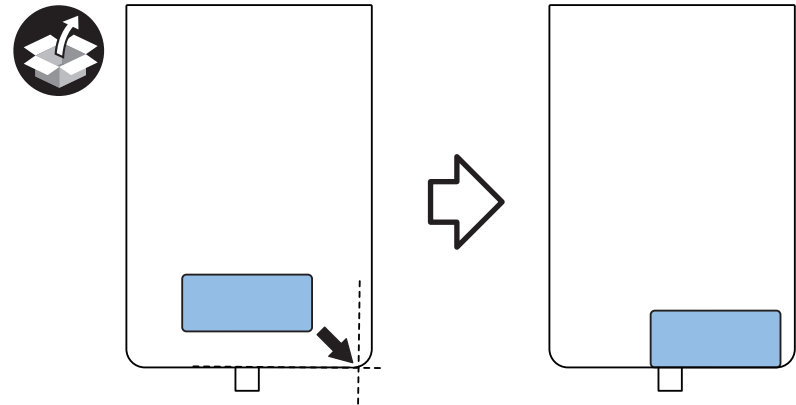
F-9-419

- 7) Remove the release sheet of the DP Fireproof Sheet, and affix the sheet by aligning the 3 ribs and pushing it against the rib [A].



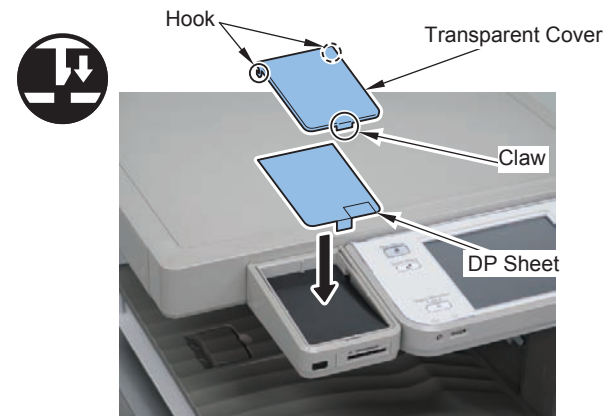
F-9-420

- 8) Affix the Multimedia Label to the back side of the DP Sheet (for Europe) as shown in the figure.



F-9-421

- 9) Install the DP Sheet (for Europe) and the Transparent Cover.
- 2 Hooks
  - 1 Claw



F-9-422

- 10) When installing the USB Device Port simultaneously, remove the Protection Sheet on the Transparent Cover.

- 11) Connect the power plug of the host machine to the power outlet.  
12) Turn ON the main power switch.

- 13) Connect the memory media to the Card Slot of the USB Device Port and perform the operation check.  
14) If installing simultaneously with the USB Device Port, connect the memory media to the USB slot and perform the operation check.

**NOTE:**

Refer to the "Operation Check [USB Device Port-E1/E2/E3 / Multimedia Reader/Writer-A2]" to perform the connection check of the memory media.

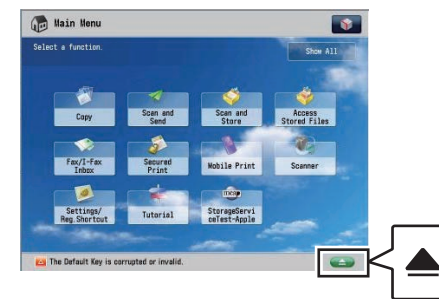
## Operation Check [USB Device Port-E1/E2/E3 / Multimedia Reader/Writer-A2]

**NOTE:**

- Connect a USB memory device to the USB Device Port-E1/E2/E3 and perform the operation check.
- Memory media including SD card, Memory Stick and CF card can be connected to the Multimedia Reader/Writer-A2. Connect one of these 3 memory device and perform the operation check.
- 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.

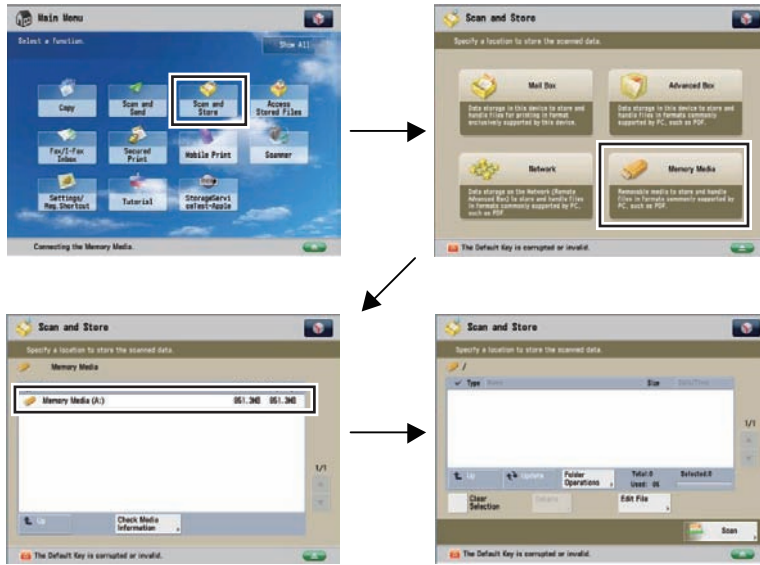
### Writing Check

- 1) Select "1" for the following service mode (Level 2). (Default value "0")  
CPIER > OPTION > DSPLY-SW > UI-MEM
- 2) To make the setting value effective, turn OFF/ON the main power of the Host Machine.
- 3) Mount the Memory Media to the Multimedia Card Reader/Writer. (Check that the Mount Mark is indicated in the bottom right.)



F-9-423

4) Make the following selection: [Scan and Store] > [Memory Media] > [Memory Media (A:)]



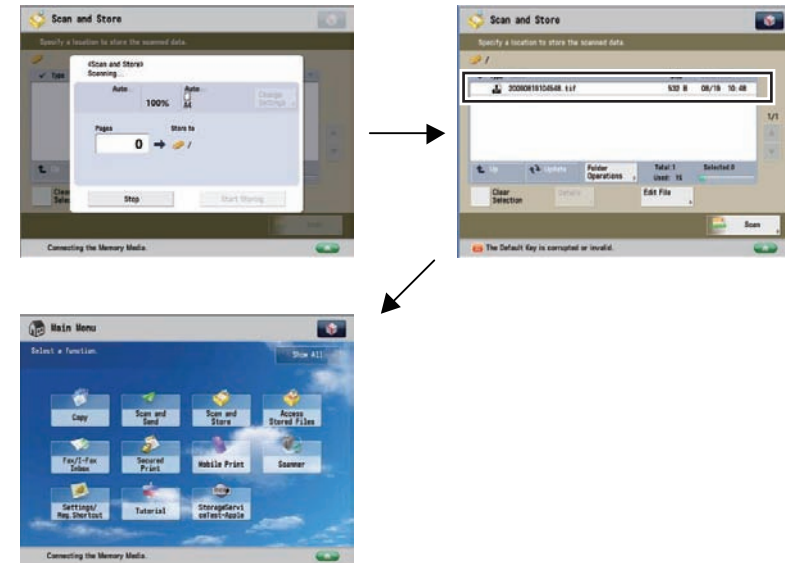
F-9-424

5) Set originals to Copyboard, and press the [Scan] button. Then, press the Start button on the Control Panel.



F-9-425

6) After scanning of the original is completed, press [Start Storing]. Confirm that data is stored in the media and press [Main Menu] on the Control Panel.

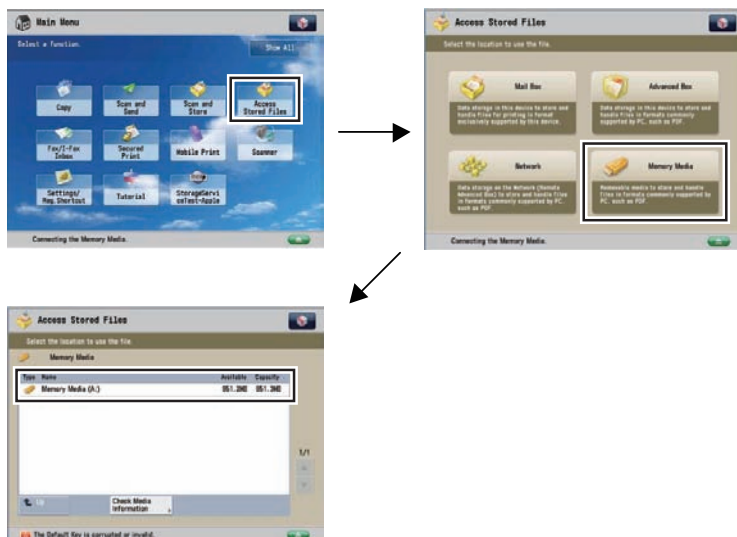


F-9-426



## Reading Check

- 7) Make the following selection from Main Menu: [Access Stored Files] > [Memory Media] > [Memory Media(A:)]



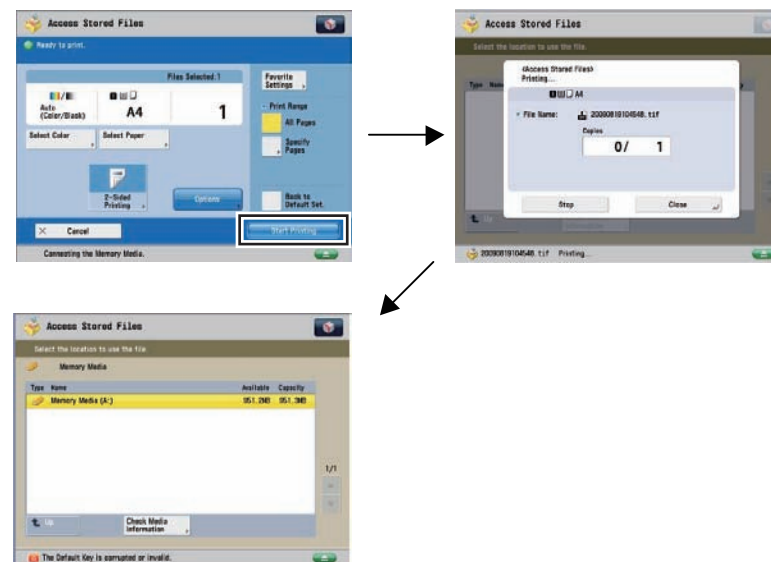
F-9-427

- 8) Select the files stored in step 4) to 6), and then press the [Print] button.



F-9-428

- 9) Press the [Start Printing] button, and print the file. Then check that the file is printed correctly.



F-9-429

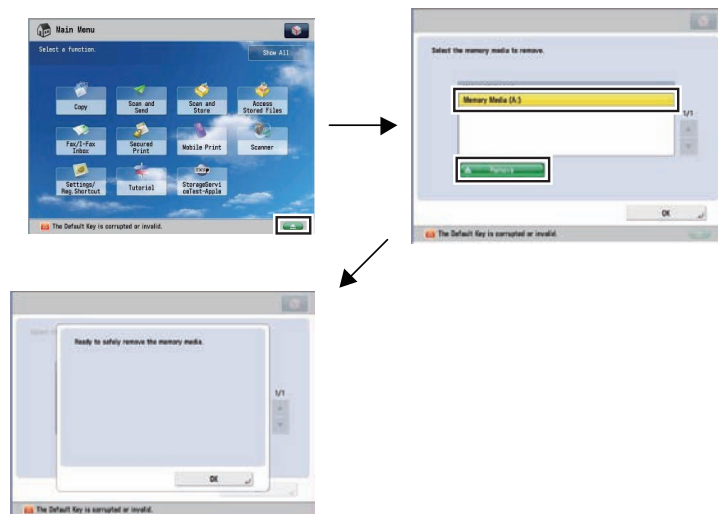
- 10) Press the [Main Menu] button on the Control Panel.



F-9-430

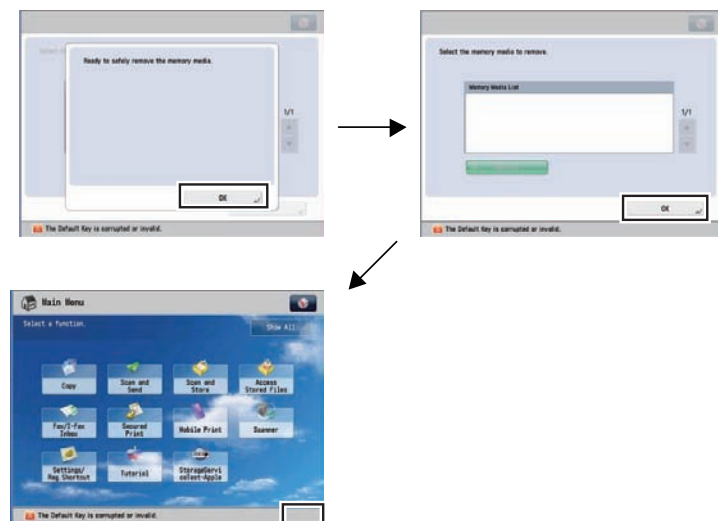
## Memory Media Removal

- 11) Press the [Mount Mark] in the bottom right. Then, select the memory media to be removed, and press the [Remove] button.



F-9-431

- 12) Press the [OK] button. Then, check that the Mount Mark is not indicated in the bottom right on the Main Menu screen.



F-9-432



## Relocating the Machine

If you need to relocate the machine after installation by truck or other means of transportation, be sure to perform the following work in advance:

If you want to move the machine intact with its cassette pedestal, be sure not to use the machine's grips; otherwise, the machine will come off the cassette pedestal as when it is moved over a step. Be sure to lift the cassette pedestal.



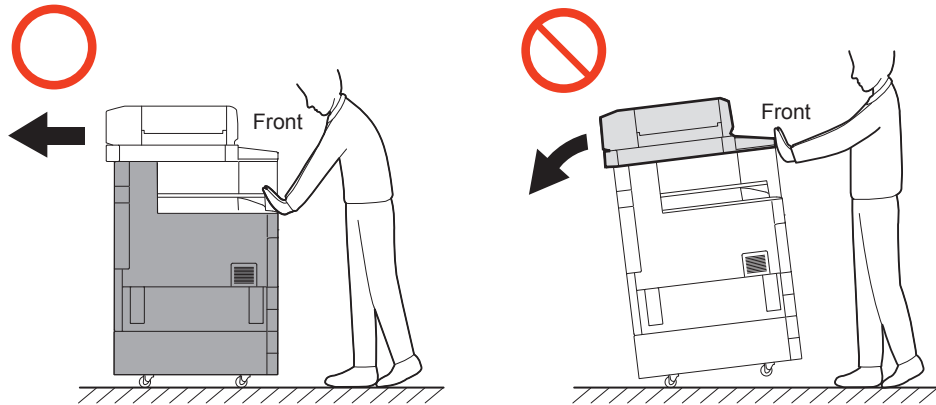
- 1) Turn OFF the main power supply of the main body.
- 2) Unplug the power plug of the main body.
- 3) In the case that the Cassette Pedestal is installed, lift it off from the floor by turning the 4 adjusters on it with a screwdriver.



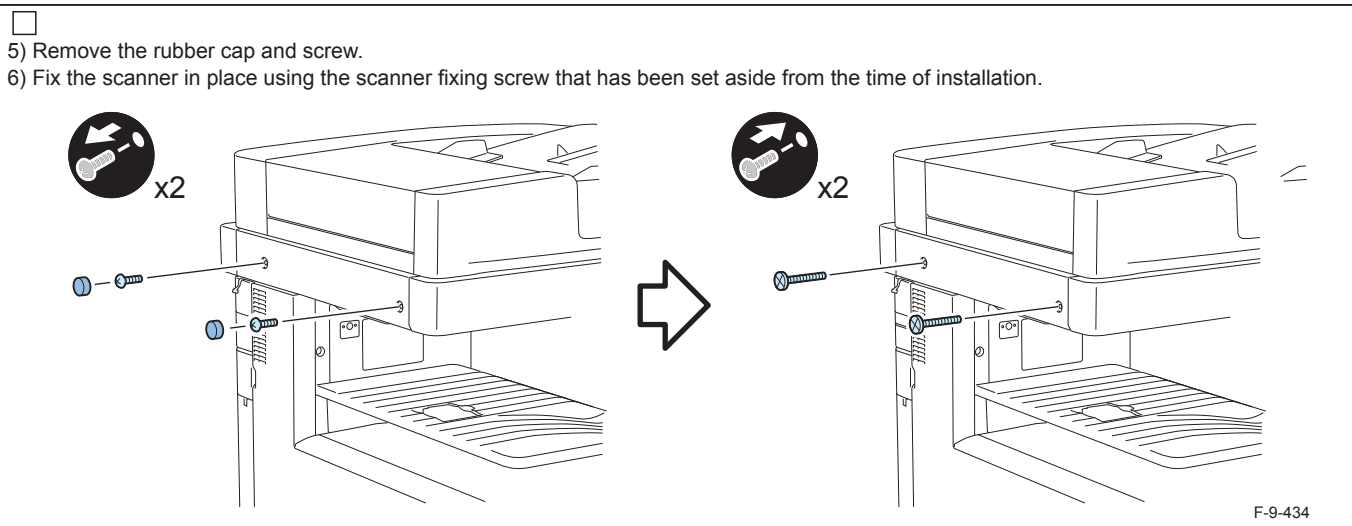
- 4) When moving the machine, be sure to push the position indicated in the figure.

### CAUTION:

Be sure not to push the upper side of the machine strongly from the front side, otherwise it can fall over. (Especially in the case of the carpet floor.)



F-9-433



- 
- 7) Put paper on the copyboard glass.  
8) Remove the Toner Container, Drum Unit, and Developing Assembly.  
9) In the case that the floor surface is either warped or uneven, execute the ITB equilibrium position detection.  
9-1) Check that the main body is in standby state.  
9-2) Execute the ITB Equilibrium Position Detection Service Mode (COPIER > FUNCTION > MISC-P > ITB-INIT) (Level 1). This service mode will take approx. 2 to 3 minutes.

## Combination of HDD Options

HDD When installing the HDD options (5 products indicated below), refer to the pages indicated in the following table.

- 2.5inch/160GB HDD-G1
- 2.5inch/1TB HDD-H1
- Removable HDD Kit-AC1
- HDD Mirroring Kit-D2
- HDD Data Encryption & Mirroring Kit-C1/C7

### CAUTION:

- When using the mirroring function, be sure to install 2 HDDs of the same capacity.
- The system software needs to be installed after replacing the HDD or after installing the HDD Data Encryption & Mirroring Kit.

Reference Pages in the Manual According to Product Combination

Title.	Combination of Product	Reference Pages	Remarks
TYPE-1	Option HDD (1TB)	p. 9-172 to p. 9-175	
TYPE-2	Standard HDD + Removable HDD Kit	p. 9-176 to p. 9-188	
TYPE-3	Option HDD (1TB) + Removable HDD Kit	p. 9-189 to p. 9-202	
TYPE-4	Standard HDD + Option HDD (160GB) + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit	p. 9-203 to p. 9-218	TYPE-4 to 7 correspond to "CASE-1" or "CASE-8" described in "HDD Data Encryption & Mirroring Kit-C Series Installation Procedure" included in HDD Data Encryption & Mirroring Kit.
TYPE-5	2 Option HDDs (1TB) + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit	p. 9-219 to p. 9-235	
TYPE-6	Standard HDD + HDD Data Encryption & Mirroring Kit	p. 9-236 to p. 9-248	
TYPE-7	Option HDD (1TB) + HDD Data Encryption & Mirroring Kit	p. 9-249 to p. 9-264	
TYPE-8	Standard HDD + Option HDD (160GB) + Removable HDD Kit + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit	p. 9-265 to p. 9-287	
TYPE-9	2 Option HDDs (1TB) + Removable HDD Kit + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit	p. 9-288 to p. 9-308	
TYPE-10	Standard HDD + Removable HDD Kit + HDD Data Encryption & Mirroring Kit	p. 9-309 to p. 9-327	
TYPE-11	Option HDD (1TB) + Removable HDD Kit + HDD Data Encryption & Mirroring Kit	p. 9-328 to p. 9-347	

T-9-4

## 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.

### [List of Data to be Deleted]

Data to be Deleted	Availability of Backup
Information registered in the Address Book	Yes
Settings made from the Settings/Registration screen	Yes *1
Forwarding Settings	Yes
License files for MEAP applications	Yes
MEAP applications	No
Data saved using MEAP applications	Yes *2
Favorite Settings registered in the Copy and Mail Box functions	No
Data stored in Mail Boxes or the Advanced Box	Yes *3
Scan modes registered in the Send Function	No
Unsent documents (documents waiting to be sent with the Delayed Send mode)	No
Image forms stored in the Superimpose Image	Yes
MEAP SMS (Service Management Service) password (the password will return to its default password if it was changed)	No
Job logs	No
User authentication information registered in the Local Device Authentication user authentication system of SSO-H (Single Sign-On H)	Yes
Registration information for the Network Place	No
Key Pair and Server Certificate	No
Log information for the IP address/MAC address restriction settings	No
Password that is protected by TPM	Yes *4
Encryption key that is protected by TPM	No
Information for Web browser settings	Yes *5
Quick Menu Information	Yes
User Information of the Advanced Box	Yes

T-9-5

\*1 Can only be backed up using the Remote UI.

\*2 Depending on the MEAP application.

\*3 Only the following items are backed up.

- Mail Box Settings (mail box names, passwords, and auto erase times)
- Files in Mail Box

- Files in Advanced Box
  - Forms registered for the Superimpose Image
- \*4 You may not be able to back up, depending on the type of the password.
- \*5 Only the stored Favorite Settings can be backed up.

[List of Data that can be backed up]

Data that can be backed up	Reference
Address Book	See the "e-Manual > Remote UI".
Settings/Registration settings	
Device Settings (Forwarding Settings, Address List, Favorite Settings)	
Printer Settings	
Paper Information	
Image forms stored in the Superimpose Image	
Quick Menu Information	
User Information of the Advanced Box	
Favorite Settings for Web browser	
License files for MEAP applications	For information on downloading license files, see the "e-Manual > MEAP".
Data saved by MEAP applications	Data saved by MEAP applications may be able to be backed up, depending on the MEAP application. See the documentation included with the MEAP application.
Data stored in Mail Boxes or the Advanced Box	See the e-Manual > Remote UI "Setting the Backup Location for Stored Data".
SSO-H (Single Sign-On H) user authentication information	see the "e-Manual > MEAPI".

T-9-6

**CAUTION: Work to Perform After Installing the Kit**

- When you start using this product, passwords set for Mail Boxes, Confidential Fax Inboxes, and the Memory RX Inbox are erased. Set these passwords again.
- If you have logged on to the machine using a login service, such as SSO-H (Single Sign-On H) before using this product, you must select the login service again using SMS (Service Management Service) after restarting the machine. For more information on using SMS, see the e-Manual > MEAP.

## Making a Backup of the Data (reference only)

The data items that have been backed up may be restored when the 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 (Data to be backed up) in Points to Note About Installation of the Installation Procedure.

### Procedure for Import/Export ALL of User Settings

Following data can be batch exported.

- Address Book
- Settings/Registration settings
- Device Settings (Forwarding Settings, Address List, Favorite Settings)
- Printer Settings
- Paper Information
- Image forms stored in the Superimpose Image
- Quick Menu Information
- User Information of the Advanced Box

- 1) Access the URL given below, and then access Remote UI.  
http://[IP address of the device]/  
If the system administrator ID and password are set, a dialog box to enter the user name and password appears. Enter the system administrator ID in User Name and the password in Password, and then click [Administrator Login].
- 2) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Import/Export ALL] > [Export].
- 3) Select items to export.

**CAUTION:**

When exporting only specific items, this may cause setting information relating to multiple items to lose its relations and cause setting details to be switched. In this case, export all related items simultaneously.

- 4) Enter the password into [Encryption Password] and click on [Start Exporting].
- 5) Click [Check Status].
- 6) Check the batch export result.

## Backup of MEAP Application

When a MEAP application has been installed, the data and license that the MEAP application retains will be deleted. If no MEAP application is installed, there is no need to make a backup. If a MEAP application has a backup function, make a backup of the data peculiar to the MEAP application using this function. With regard to the license, there is a need to stop all applications from SMS (Service Management Service), invalidate the license, and download the invalid license file.

The overview of procedures for stop of MEAP applications, Disabling of the license, and download of an Disabled license file is described below. For more information, see the MEAPSMS Administrator Guide

## Stop of MEAP Applications, Disabling, Download of Disabled License Files and Uninstallation

- 1) Select the URL given below and access SMS.  
http://[IP address of the device]:8000/sms/  
The default password is MeapSmsLogin. If a user has changed the password, ask the user to change the password again after the use of this product is started.

### CAUTION:

The default password is MeapSmsLogin. If a user has changed the password, ask the user to change the password again after the use of this product is started.

- 2) Click [MEAP Application Management].
- 3) Click [Stop] button of the application you want to stop on the MEAP Application Management page.
- 4) Check the status of MEAP Application is [Stop],
- 5) Click on the name of applications to disable.
- 6) Click [License Control], and then click [Disable].
- 7) Click [Yes] in a confirmation window for disabling the license.
- 8) Return to the MEAP Application Management page and click on the appropriate application names.
- 9) Click [License Management] on the Application/License Information page.
- 10) Click [Download].
- 11) Following the instructions on the window, specify the location to save the file. Set a distinctive name for the disabled license file so that you can recognize it for which application. After you download the disabled license file to your PC, click [Delete]. Click [Yes] in a confirmation window for license deletion.

- 12) Return to the MEAP Application Management page, click [Uninstall] button of the application you want to uninstall. Click [Yes] in a confirmation window for uninstallation. If there are several applications, repeat the procedures 1) to 7).
- 13) After the use of this product is started, re-install the application using an application file (jar file) of each application from SMS and the disabled license file (lic file).

## User Authentication Information Registered by SSO-H (Single Sign-ON H)

In the case that the MEAP login application has been changed to SSO-H, there is a need to make a backup of the user authentication information.

- 1) Access the URL given below.  
http://[IP address of the device]:8000/sso/
- 2) Login with the user name and password registered as an administrator in SSO-H.  
The default administrator user name and password are as follows:  
User Name: Administrator  
Password: password
- 3) Click [User Control].
- 4) Put a checkmark to Select All, and then click [Export].
- 5) Leave the file format and character code as defaults and click [Start Export].
- 6) Following the instructions on the window, specify the location to save the file and click [Save].

## Backup of User inbox and Advanced Box document data

### CAUTION: Backup of "Advanced Box"

When setting a SMB server as a backup destination, Advanced Box data saved in a large capacity HDD cannot be backed up. The Advanced Box data backed up from the large capacity HDD cannot be restored to the standard HDD. Depending on the system version of the machine, both backup and restoration might not be performed.

The procedure of backup and restoration of a box document data is described below.

Specify the backup destination of a document data:

- Backup to SMB server  
Select SMB as a backup destination and specify an address, a user name, a password, and a path to the SMB server to which saved data is backed up.

- Backup to USB HDD

Select USB HDD as a backup destination and specify a path to the USB HDD folder to which saved data is backed up.

**CAUTION:** Data which cannot be backed up

If you back up/restore stored data without restarting the machine after changing the language displayed on the touch panel display by pressing [Settings/Registration] > [Preferences] from the control panel of the machine, the stored data may not be backed up/restored properly. For more information on the data that cannot be backed up, see Points to Note for Installation.

**CAUTION:**

If the language setting in the common specification settings (Settings/Registration) is set to ON, 'host address' and 'path to folder' might not be displayed correctly or cannot be referred.

**CAUTION:**

- Regarding the method of inputting characters, see 'Basic Operations' in the e-Manual.
- A host address can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,' 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A path to the folder can be up to 255 characters in 1 byte (127 characters in 2 bytes).
- A user name can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,' 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A password can be up to 7 to 48 characters using the 'alphanumeric character' and 'mark (1 byte)' modes.
- The voice sound symbol and the semi-voice sound symbol entered in the 'Katakana (1 byte)' mode are counted up as one 1-byte character.

**CAUTION:**

- If any of the host IP address, user name, password, or path to the folder is not correctly entered, a backup cannot be made.
- If you select to encrypt the backup data, the backup process may take longer.

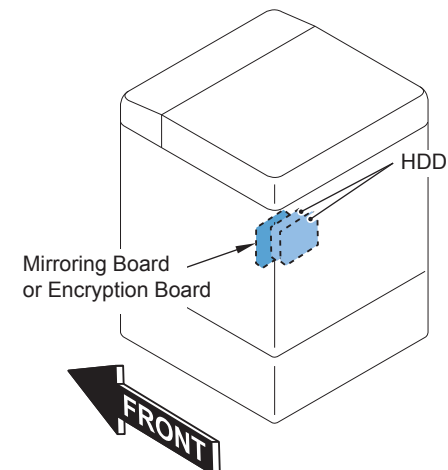
[\[Restoring the backup data of User inbox and Advanced Box document data\]](#)

- 1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Restore].
- 2) Click [Display Backup Data].
- 3) Select the backup data to restore from the list and then click [Execute].

**CAUTION:**

- If you want to restore encrypted backup data, enter the same password used when backing up the data.
- Depending on the settings of the machine, the backup data may not be completely restored, or some documents may be automatically printed.
- Restoration is performed after all of the box data stored in the machine, or documents that are being sent, received, or stored, are erased.

## Installation Outline Drawing



F-9-435

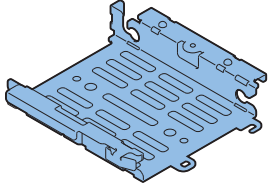
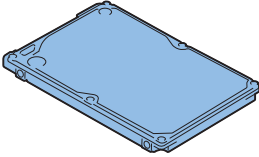
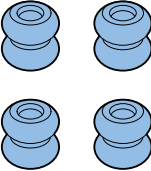
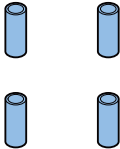
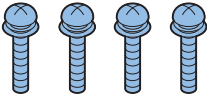

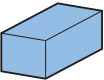
[\[Backup method of User inbox and Advanced Box document data\]](#)

- 1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Backup].
- 2) Select 'All' or 'Changes' for the backup method.
- 3) Click [Execute].

## [TYPE-1]

Option HDD (1TB)

## Checking the Contents

<input type="checkbox"/> [1] HDD Support Pate X 1 	<input type="checkbox"/> [2] HDD X 1 	<input type="checkbox"/> [3] Vibration-prevention Dumper X 4 
<input type="checkbox"/> [4] Spacer X 4 	<input type="checkbox"/> [5] Screw (W sems; M3x14) X 4 	<input type="checkbox"/> [6] Screw (TP;M3x6) X 2 
<input type="checkbox"/> [7] Gasket X 1 		

F-9-436

&lt;CD/Guides&gt;

- Notice for FCC/IC

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

- 1) Turning off the Main Power Supply Switch of the Host Machine.
- 2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

## Installation Procedure

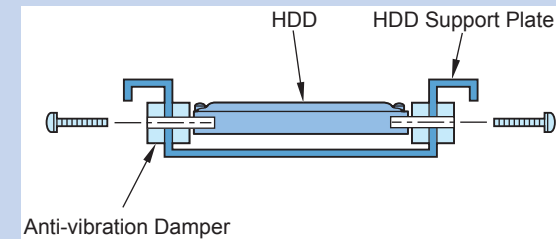


1) Assemble the option HDD (1TB).

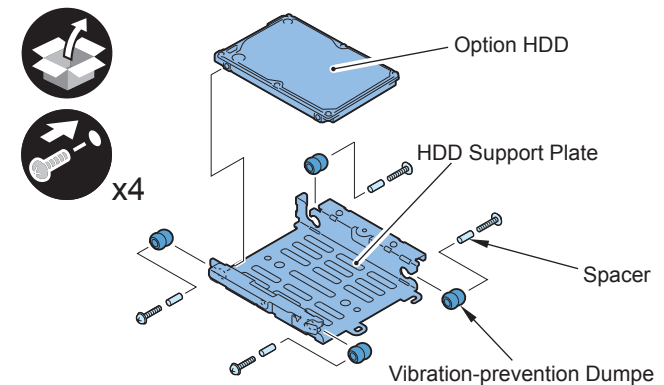
- 1 Option HDD
- 1 HDD Support Pate
- 4 Dust-prevention Dumpers
- 4 Spacers
- 4 Screws (W sems; M3x14)

NOTE:

When tightening the screen, be sure to align the screw holes by lifting the HDD.



F-9-437

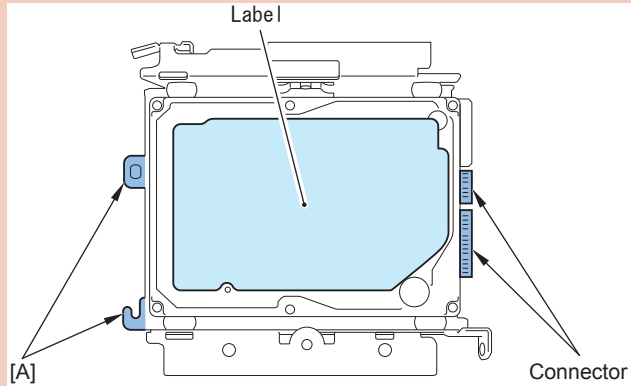


F-9-438



CAUTION:

- Assembling the option HDD, be careful of the installation direction.
- Make sure that the label on the option HDD is facing up.
- Make sure that [A] part of HDD Support Plate is placed at the opposite side of connector.

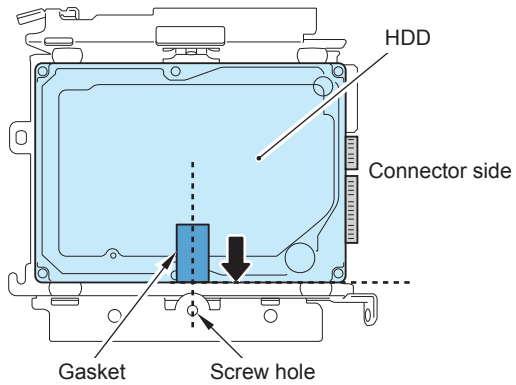


F-9-439

- 2) Affix the gasket to the place shown in the figure below.

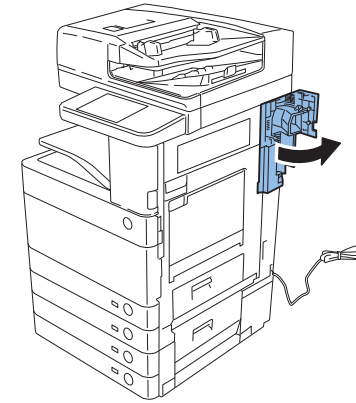
CAUTION:

Be sure to place the gasket in contact with the label-free metal surface of the HDD surface.



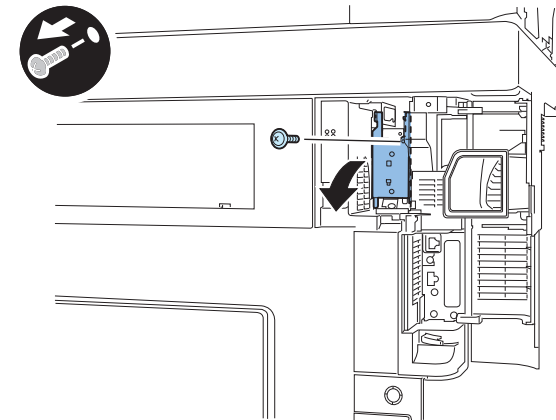
F-9-440

- 3) Open the Right Rear Cover 1.



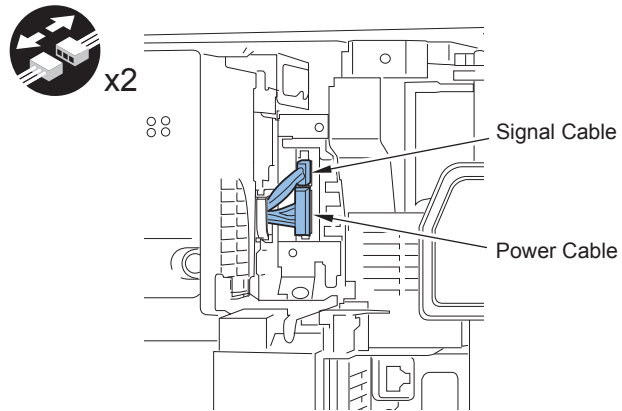
F-9-441

- 4) Open the HDD Lid behind the Right Rear Cover 1.
  - 1 Screw



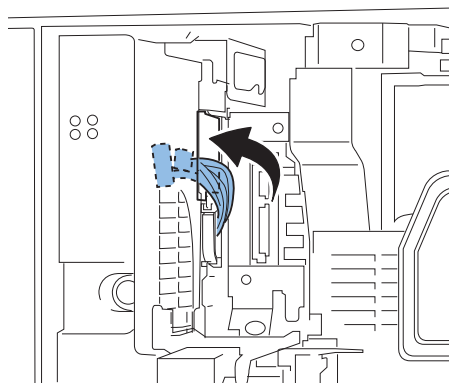
F-9-442

- 5) Remove the Signal Cable and the Power Cable from the HDD.



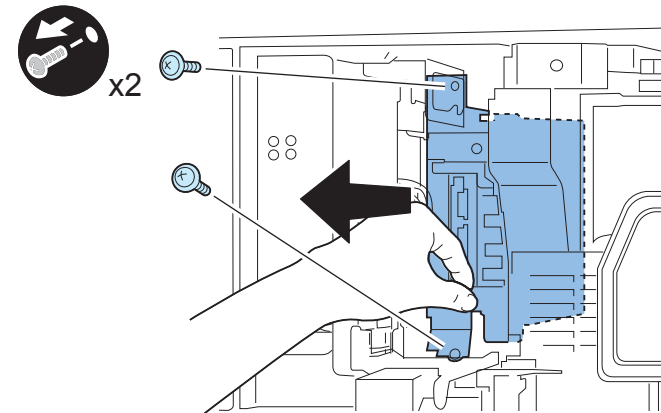
F-9-443

- 6) Put the Signal Cable and the Power Cable aside so that they are not pinched between the Controller Box and the HDD Unit.



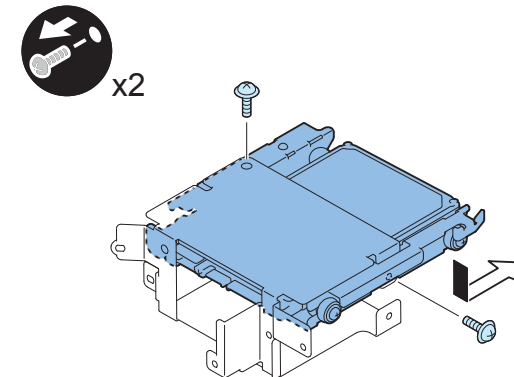
F-9-444

- 7) Remove the HDD Unit by holding it as shown in the figure below.  
• 2 Screws



F-9-445

- 8) Remove the HDD (160GB) installed as standard from the removed HDD Unit. (Removed HDD (160GB) will not be used.)  
• 2 Screws (Removed screw will be used in step 9.)



F-9-446

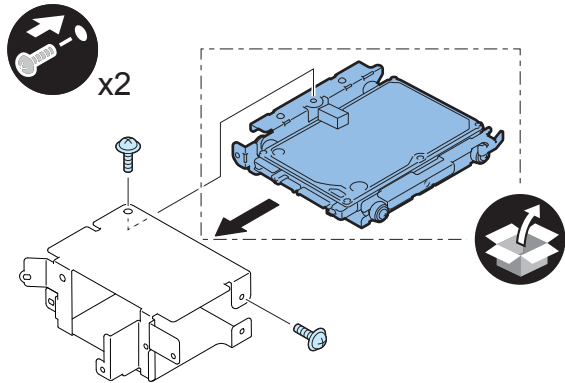


9) Install the Option HDD (1TB).

- 2 Screws (The screw removed in step 8).)

**CAUTION:**

Be sure to prevent the gasket from coming off when installing.



F-9-447



- 10) Install the HDD Unit to the host machine. (2 Screws)
- 11) Install the Signal Cable and the Power Cable to the Option HDD.
- 12) Close the HDD Lid. (1 Screw)
- 13) Close the Right Rear Cover 1.
- 14) Close the Right Lower Cover.
- 15) Close the Right Upper Cover.



- 16) Connect the power plug of the host machine to the power outlet.

## Installing the System Software Using the SST

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product.

It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product.

Details follow.

### 1. Requirements

- 1) PC

Service support tool in the version that supports this host machine must be installed.

- 2) Cross Ethernet Cable

### 2. Preparing for the Installation of the System Software of Host machine

- 1) If both PC and the machine are on, turn them off.
- 2) Connect the PC and the machine using an Ethernet cable.
- 3) Turn on the PC.
- 4) Start up the machine in download mode (safe mode).

### 3. Selecting the System Software

- 1) Set the CD containing the latest system software in the PC on which the SST is used.
- 2) Start up the SST.
- 3) Click Register Firmware.
- 4) Select the drive in which the System Software CD has been set, and click search.
- 5) Click REGISTER.
- 6) Click OK.

### 4. Downloading the System Software

- 1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
- 2) When initialization is completed, the machine is automatically restarted and it enters download mode.
- 3) Select the version to be downloaded and click "Start".
- 4) When download is completed, the machine is automatically restarted.
- 5) When writing of the firmware is completed, the machine is automatically restarted.
- 6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
- 7) Terminate the SST.
- 8) Check the version of the downloaded firmware in service mode.

## Execution of Auto Adjust Gradation


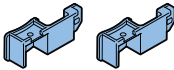
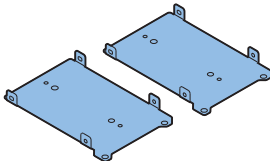
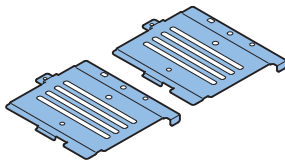
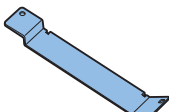
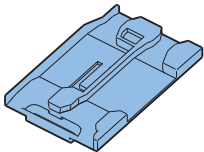
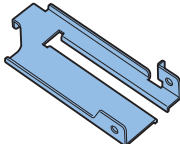

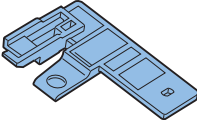
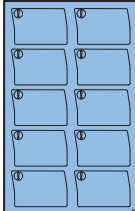
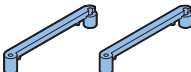
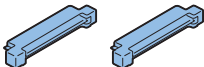
When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.

Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

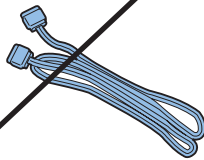
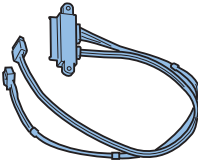
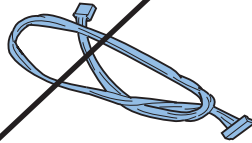
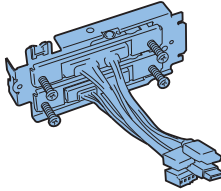
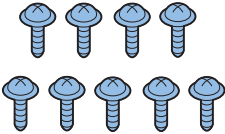
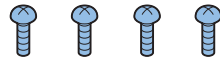
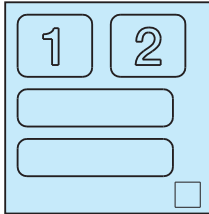
## [TYPE-2]

Standard HDD + Removable HDD Kit

 Checking the Contents

<input type="checkbox"/> [1] Hinge Shaft Stopper X 2 	<input type="checkbox"/> [2] HDD Handle X 2 Use 1 of them 	<input type="checkbox"/> [3] HDD Connector Plate X 2 Use 1 of them 
<input type="checkbox"/> [4] HDD Cover X 2 Use 1 of them 	<input type="checkbox"/> [5] HDD Blanking Plate X 1 	<input type="checkbox"/> [6] HDD Door Guide X 1 
<input type="checkbox"/> [7] HDD Lock Plate X 1 	<input type="checkbox"/> [8] HDD Lock Plate Shaft X 2 	<input type="checkbox"/> [9] HDD Lid Retainer X 1 
<input type="checkbox"/> [10] Shutdown Caution Label X 1 	<input type="checkbox"/> [11] Connector Fixing Block X 2 Use 1 of them 	<input type="checkbox"/> [12] Conversion Connector X 2 Use 1 of them 

F-9-448

<input type="checkbox"/> [13] Signal Cable (660mm ; Red) X 1 FK2-8432 or A: Cont-Sig 	<input type="checkbox"/> [14] IV Cable X 1 FK2-8453 or A: HDD-Pow1, A: HDD-Sig1 	<input type="checkbox"/> [15] Power Cable (650mm) X 1 FK2-8464 or A: Cont-Pow 
<input type="checkbox"/> [16] HDD Drawer Unit x 1 	<input type="checkbox"/> [17] Screw (R round head TP; M3x6) X 9 Use 6 of them 	<input type="checkbox"/> [18] Screw (P Tight; M3x8) X 4 Use 2 of them 
<input type="checkbox"/> [19] R-HDD Label X 1 		

F-9-449

 Check Items when Turning OFF the Main Power

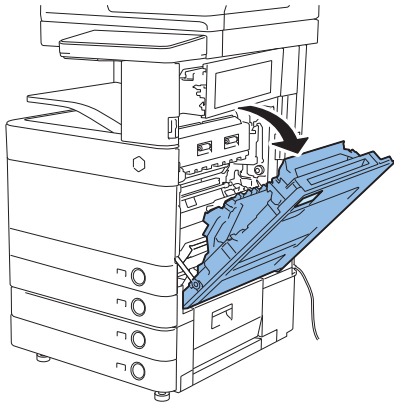
Check that the main power switch is OFF.

- 1) Turning off the Main Power Supply Switch of the Host Machine.
- 2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

## Installation Procedure

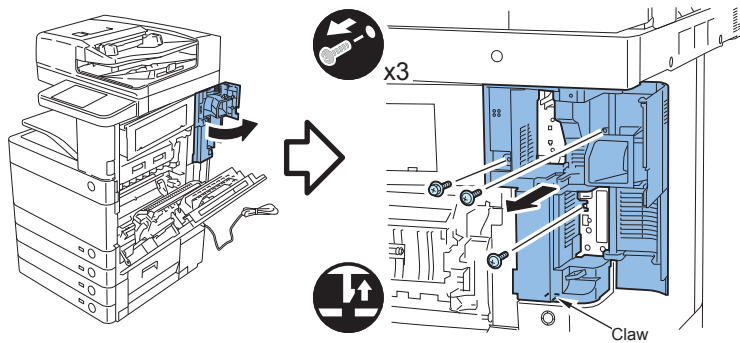
### Removing the HDD Unit, Signal Cable and Power Supply Cable

- 
- 1) Open the Right Lower Cover. (Open the Right Upper Cover simultaneously.)



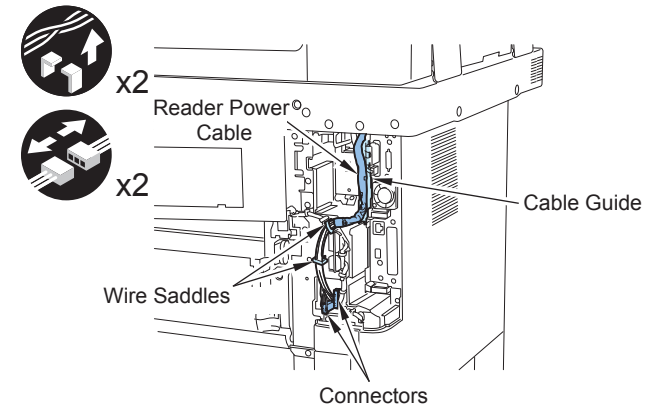
F-9-450

- 
- 2) Open the Right Rear Cover 1.  
3) Remove the Right Rear Cover 1.
- 1 Screw (RS tight; M4)
  - 2 Screws (TP; M3)
  - 1 Claw



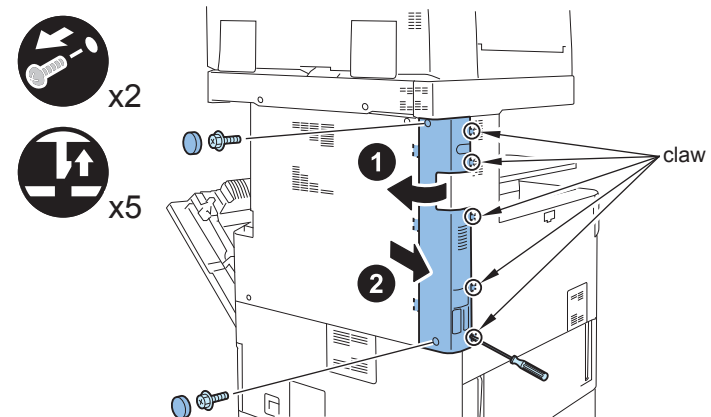
F-9-451

- 
- 4) When the Reader is installed, remove the Reader Power Cable.
- 2 Connectors
  - 2 Wire Saddles
  - 1 Cable Guide



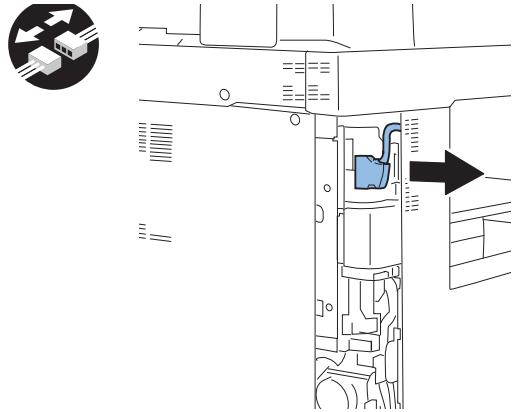
F-9-452

- 
- 5) Remove the Left Rear Cover.
- 2 Rubber Caps
  - 2 Screws
  - 5 Claws



F-9-453

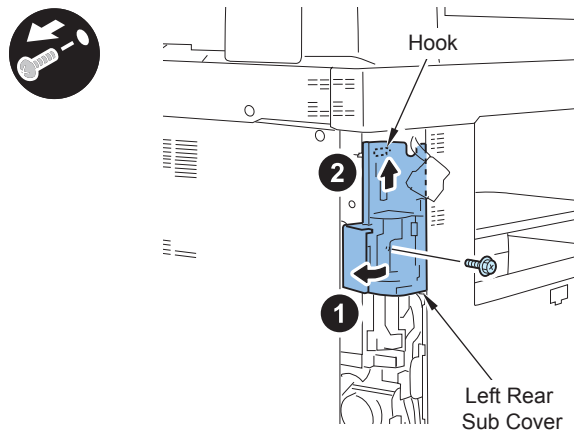
- 6) When the Reader is installed, remove the Reader Communication Cable.



F-9-454

- 7) Remove the Left Rear Sub Cover.

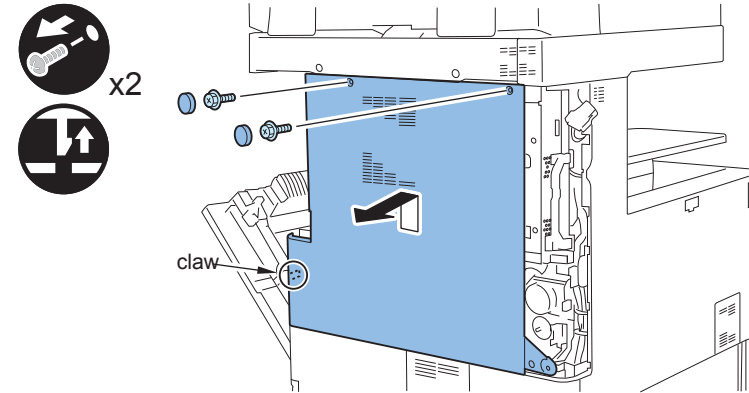
- 1 Screw
- 1 Hook



F-9-455

- 8) Remove the Rear Cover.

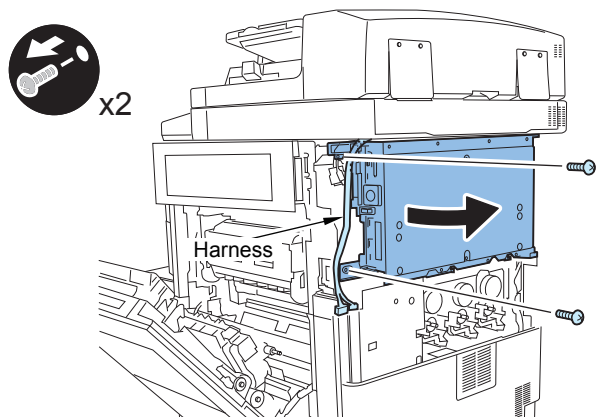
- 2 Rubber Caps
- 2 Screws
- 1 Claw



F-9-456

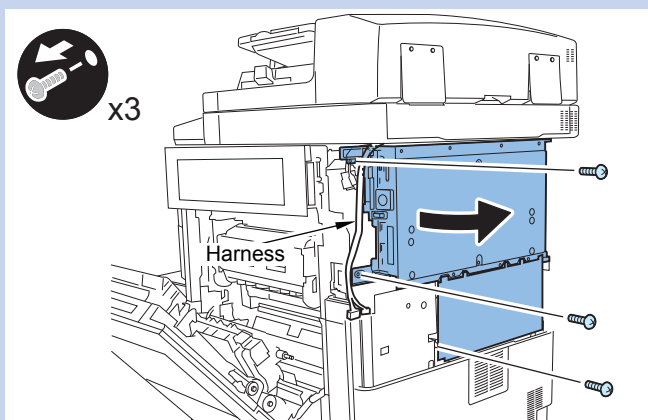
- 9) Open the Controller Box while avoiding the harness.

- 2 Screws



F-9-457

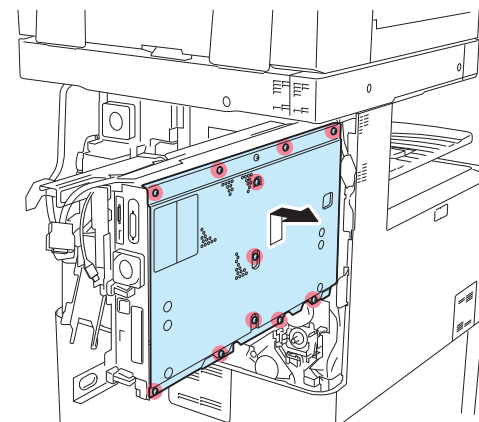
**NOTE:**  
If the FAX Unit has been installed, remove the 3 screws and open the Controller Box with the FAX Unit.



F-9-458

- 10) Remove the Controller Cover.

- 11 Screws (loosen)



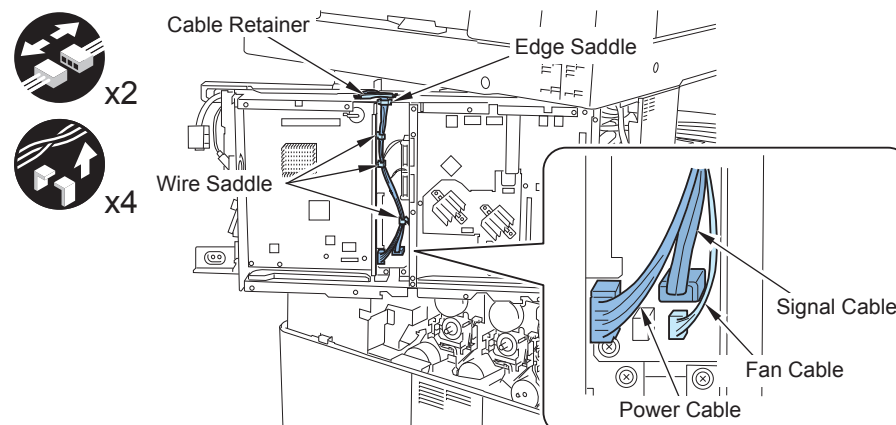
F-9-459

- 11) Remove the Signal Cable and the Power Cable.

**CAUTION:**

Do not remove the Fan Cable.

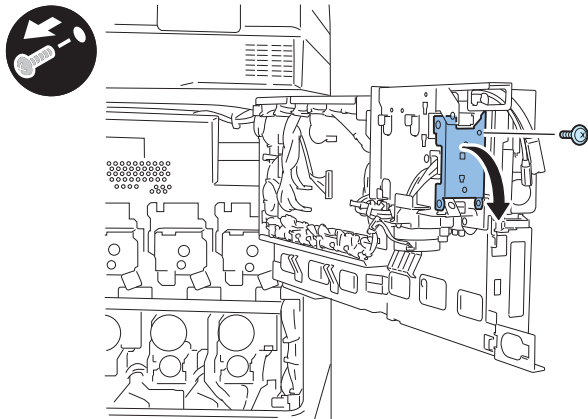
- 1 Edge Saddle
- 3 Wire Saddles
- 1 Cable Retainer



F-9-460

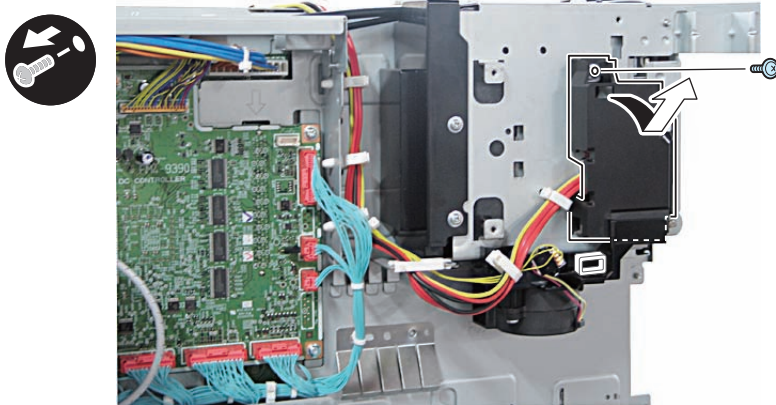


- 12) Open the HDD Lid.  
 • 1 Screw (Removed screw will not be used.)



F-9-461

- 13) When the Cable Cover is installed, remove it. (Removed Cable Cover and screw will not be used.)  
 • 1 Screw

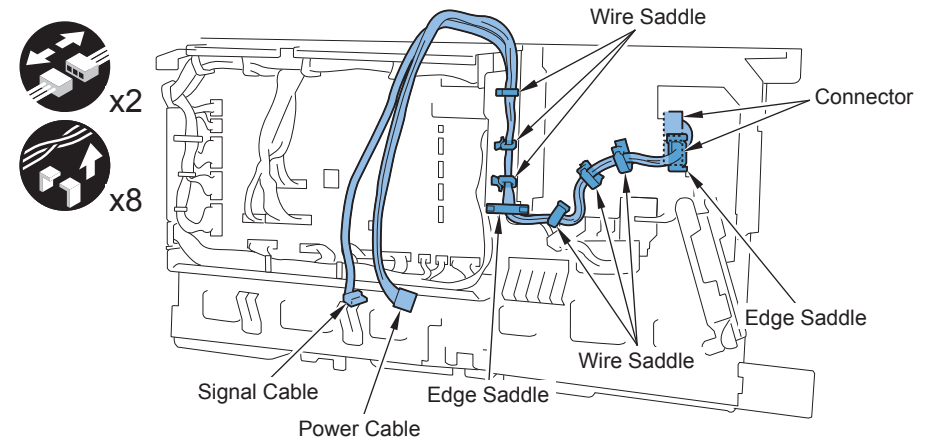


F-9-462

- 14) Remove the Signal Cable and the Power Cable. (Removed Signal Cable and Power Cable will not be used.)

<When the Cable Cover is removed>

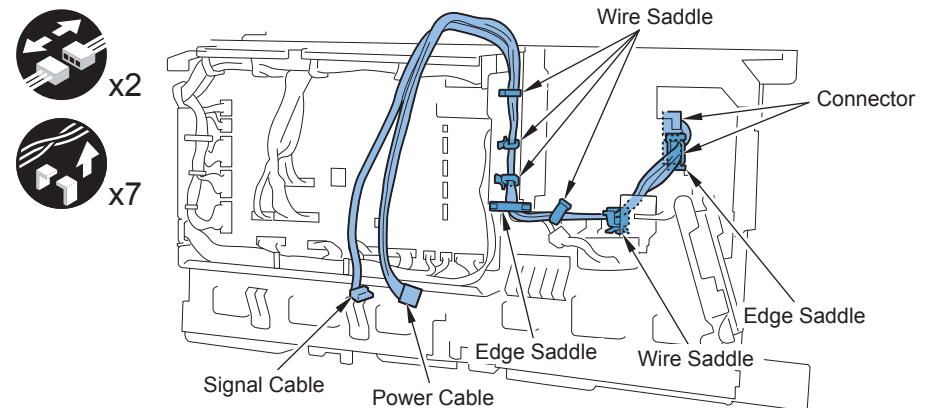
- 2 Edge Saddles
- 6 Wire Saddles
- 2 Connectors



F-9-463

<When the Cable Cover is not removed>

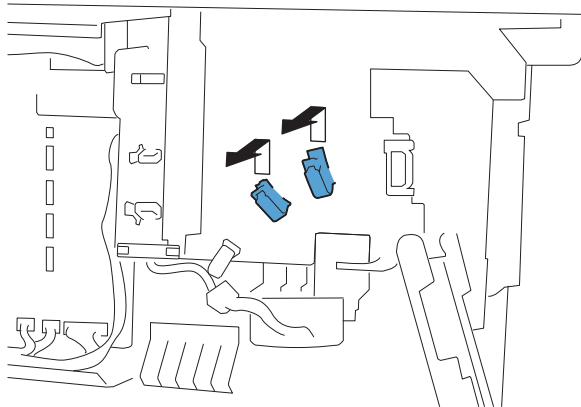
- 2 Edge Saddles
- 5 Wire Saddles
- 2 Connectors



F-9-464

□  
<When the Cable Cover is removed>

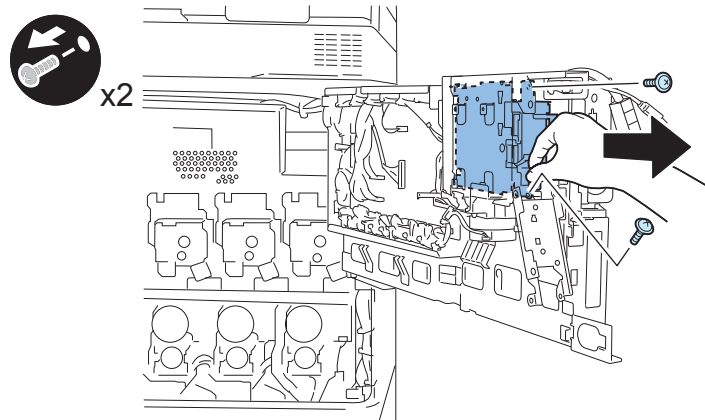
- 15) Remove the 2 Wire Saddles. (Removed wire saddles will not be used.)



F-9-465

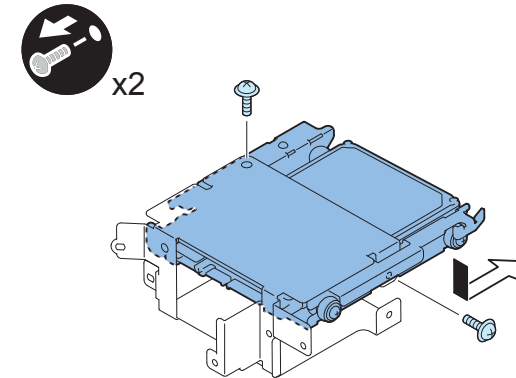
□  
16) Remove the HDD Unit by holding it as shown in the figure below.

- 2 Screws (Removed screw will not be used.)



F-9-466

- 17) Remove the fixed HDD from the removed HDD Unit. (Removed plate and screw will not be used.)
- 2 Screws

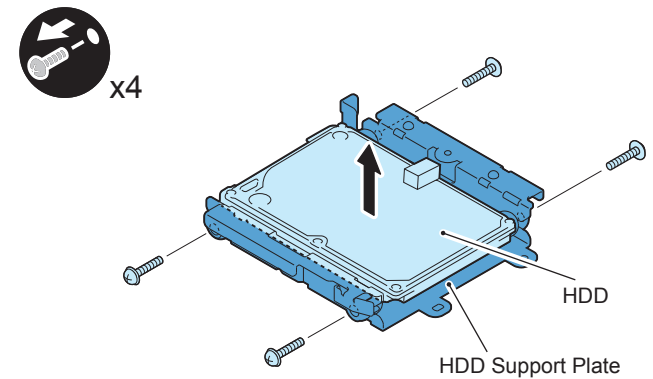


F-9-467

## ■ Assembling and Installing the Removable HDD

□  
1) Remove the HDD from the HDD Support Plate. (Use the installed HDD (160GB) removed in "Removing the HDD Unit, Signal Cable and Power Supply Cable" step 17)

- 4 Screws



F-9-468

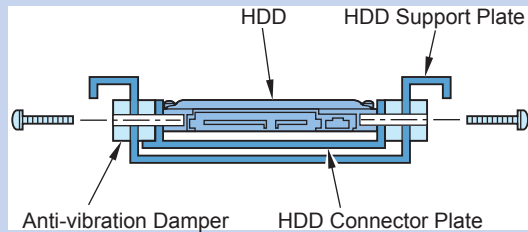


2) Install the HDD Connector Plate first, and then HDD to the HDD Support Plate. (HDD and screw are the ones removed in step 1.)

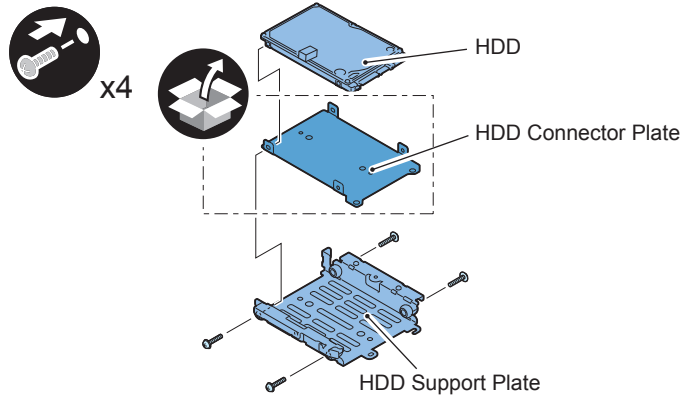
- 4 Screws

**NOTE:**

When tightening the screw, be sure to align the screw holes by lifting the HDD Connector Plate and HDD.



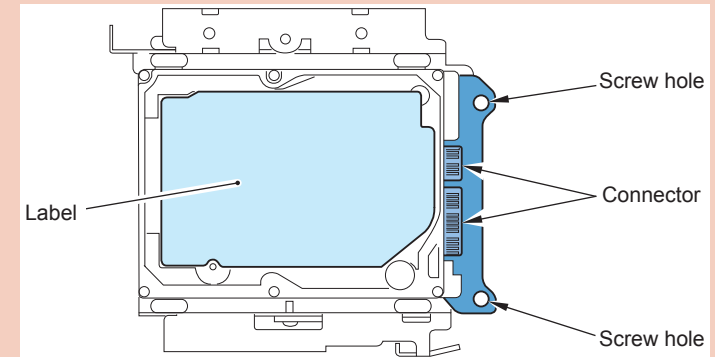
F-9-469



F-9-470

**CAUTION:**

- Assembling the option HDD, be careful of the installation direction.
- Make sure that the label on the option HDD is facing up.
- Install it in the position where the HDD connector is placed in the side with screw hole of HDD Support Plate. (opposite direction compared to the fixed HDD)



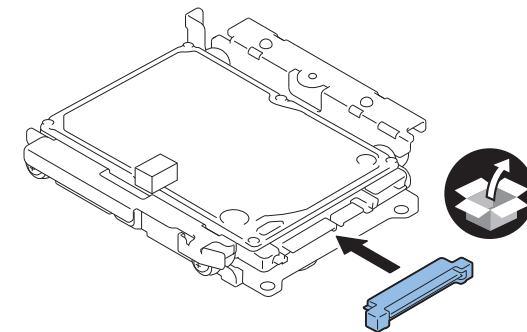
F-9-471



3) Install the Conversion Connector.

**CAUTION:**

Make sure that there is no opening between the Conversion Connector and part of HDD.

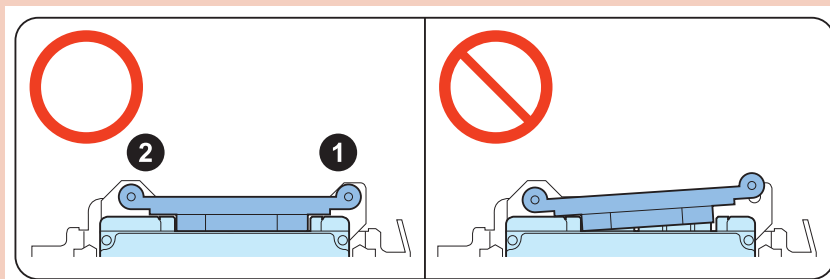


F-9-472

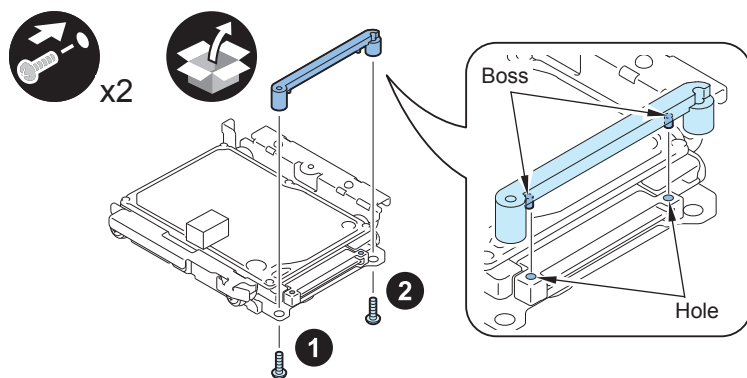
- 
- 4) Fit the 2 bosses of Connector Fixing Block to the hole of Conversion Connector and install it.
- 2 Screws (P Tight; M3x8)

## CAUTION:

- Be sure to firmly hold the Connector Fixation Block when tightening the screws.
- Be sure to follow the correct order to tighten the screws, otherwise the Conversion Connector may not be connected properly, resulting in poor contact.



F-9-473

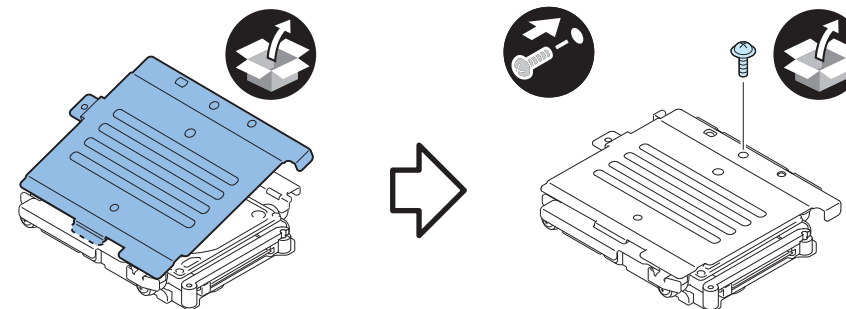


F-9-474

- 
- 5) Install the HDD Cover.
- 1 Claw
  - 1 Screw (TP round end; M3x6)

## CAUTION:

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.

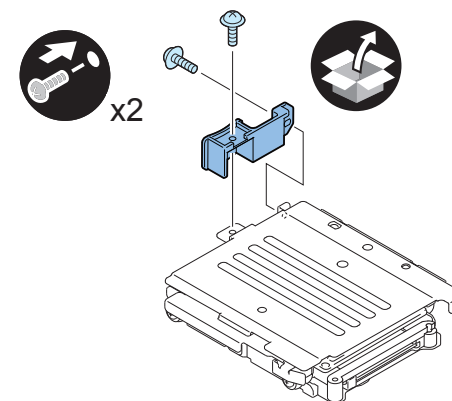


F-9-475

- 
- 6) Install the HDD Handle.
- 2 Screws (TP round end; M3x6)

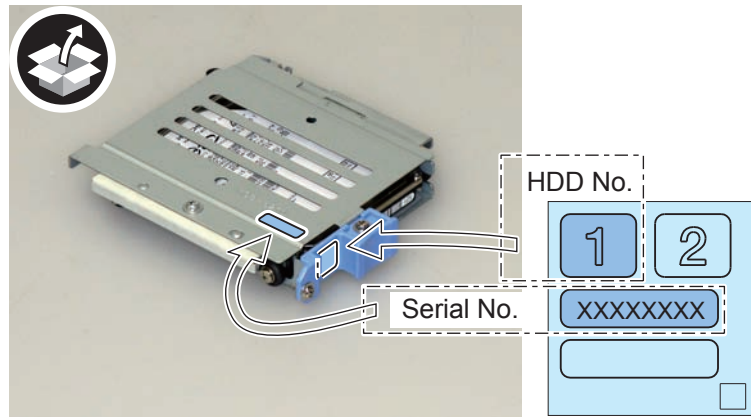
## CAUTION:

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



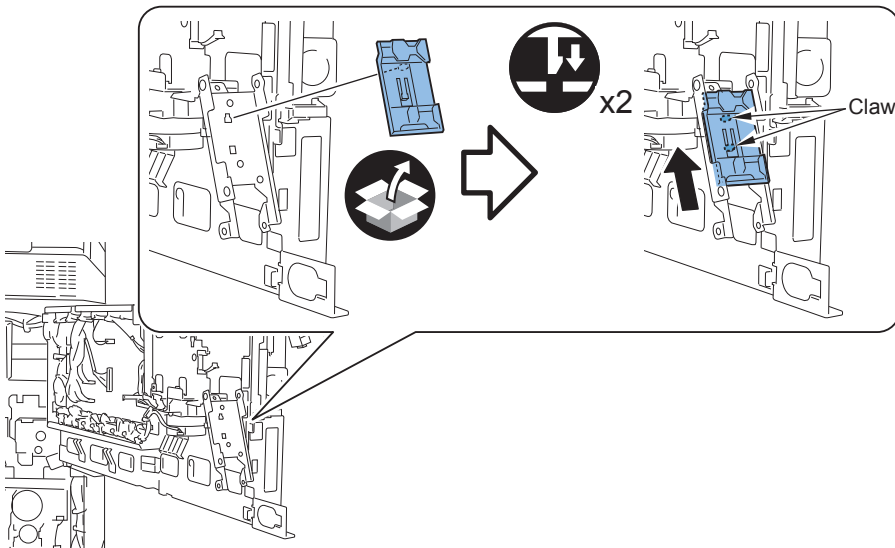
F-9-476

- 
- 7) Affix the HDD No.1 Label to the handle of the Removable HDD.
- 8) Write down the serial number of the host machine to the label for recording the number, and affix it to the area indicated in the figure.



F-9-477

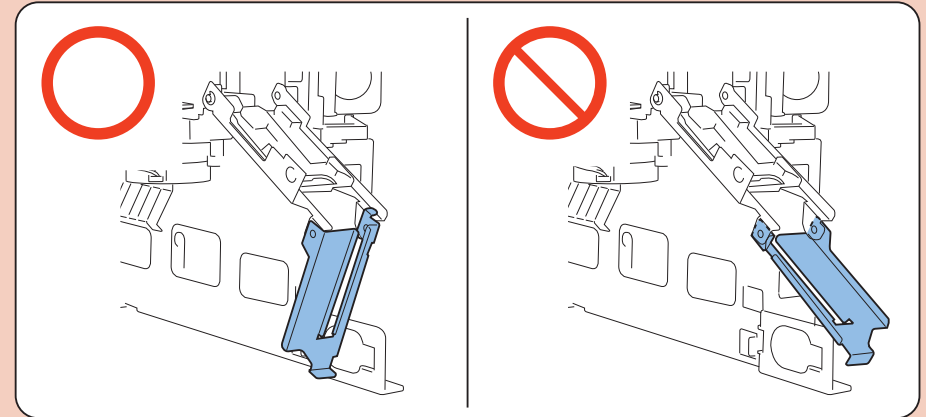
- 
- 9) Install the HDD Door Guide.
- 2 Claws



F-9-478

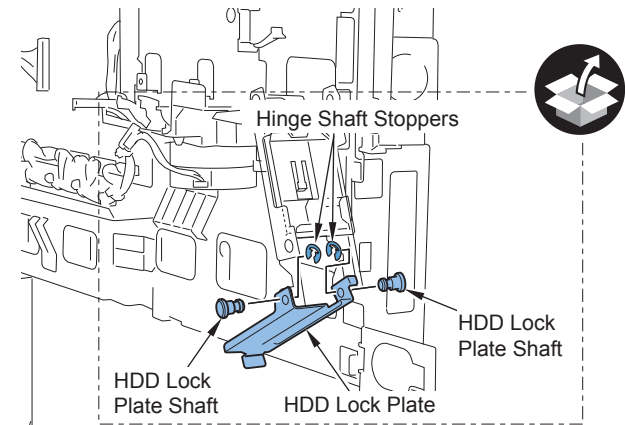
**CAUTION:**

Be careful of the installation direction of HDD Lock Plate.



F-9-479

- 
- 10) Install the HDD Lock Plate.
- 2 HDD Lock Plate Shafts
  - 2 Hinge Shaft Stoppers

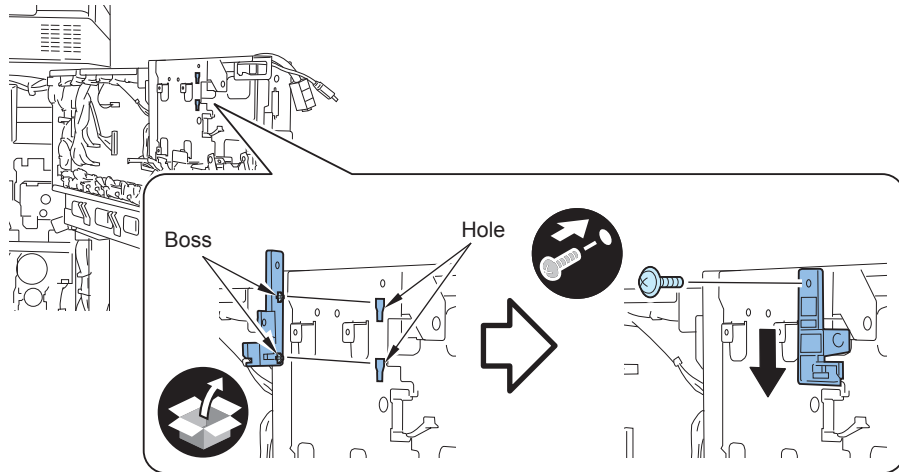


F-9-480

- 11) Adjust the 2 bosses to the hole and install the HDD Lid Retainer.
- 1 Screw (TP round end; M3x6)

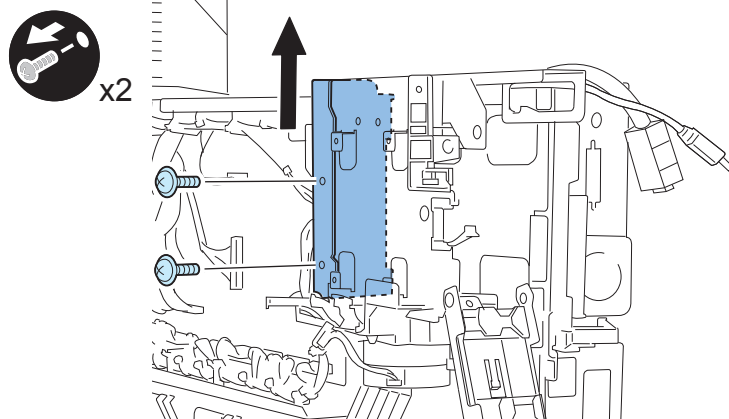
**CAUTION:**

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



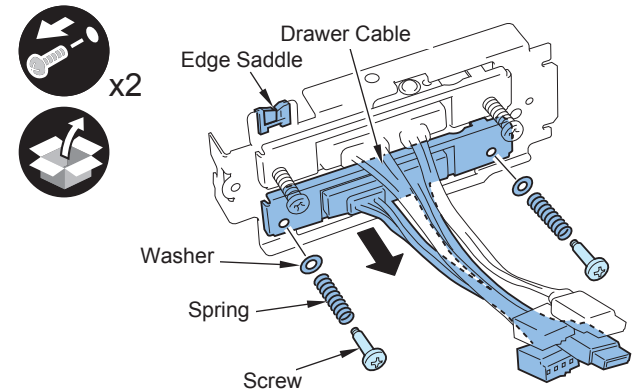
F-9-481

- 12) Remove the HDD Rear Cover. (Removed HDD Rear Cover will not be used.)
- 2 screws (Removed screw will be used in step 17)



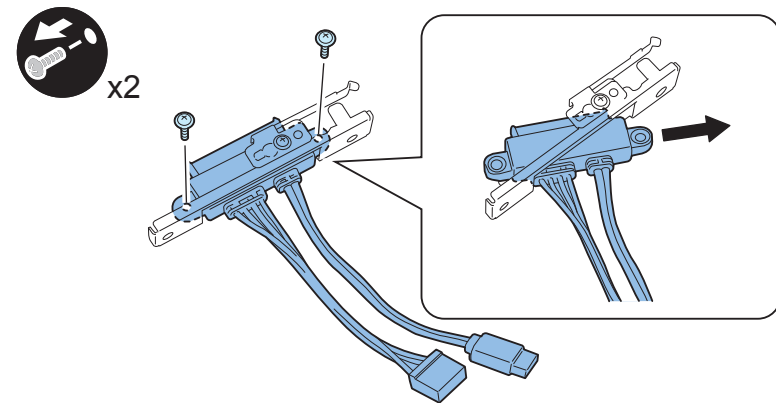
F-9-482

- 13) Place it in the position where the edge saddle of HDD Drawer Unit is facing up, remove the lower Drawer Cable (Slot.2).
- 2 Screws
  - 2 Springs
  - 2 Washers (The removed springs and washers will be used in step 16.)



F-9-483

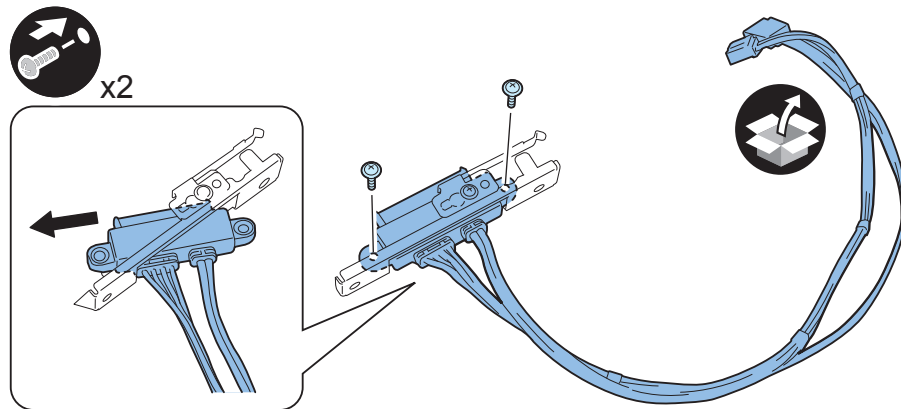
- 14) Remove the Drawer Cable.
- 2 Screws (Removed screw will be used in step 15.)



F-9-484

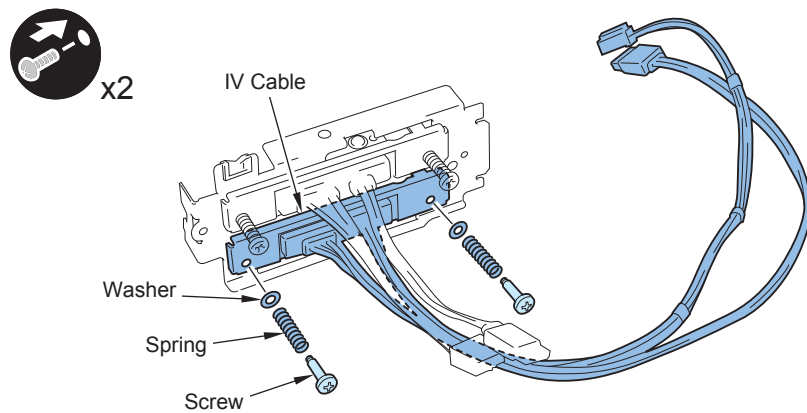


- 15) Install the IV Cable (FK2-8453 or A: HDD-Pow1, A: HDD-Sig1).  
 • 2 Screws (screw removed in step 14))



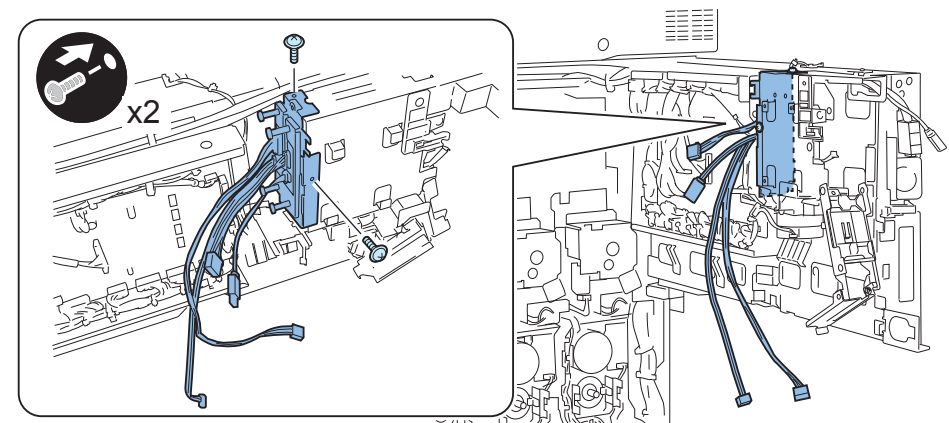
F-9-485

- 16) Install the IV Cable (FK2-8453 or A: HDD-Pow1, A: HDD-Sig1) of HDD Drawer Unit.  
 • 2 Screws  
 • 2 Springs  
 • 2 Washers (Use the parts removed in step 13).)



F-9-486

- 17) Install the HDD Drawer Unit.  
 • 2 Screws (Use the screw removed in step 12))

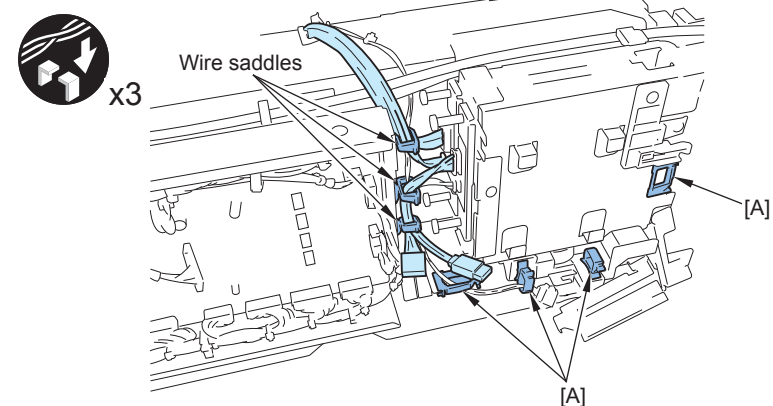


F-9-487

- 18) Fix the cable of the Drawer Unit.  
 • 3 Wire saddles

## NOTE:

- Close the [A] part of unused wire saddle and edge saddle.
- Short Signal Cable and Power Cable will not be used.
- Fix the unused Signal Cable and the Power Cable with the wire saddle.

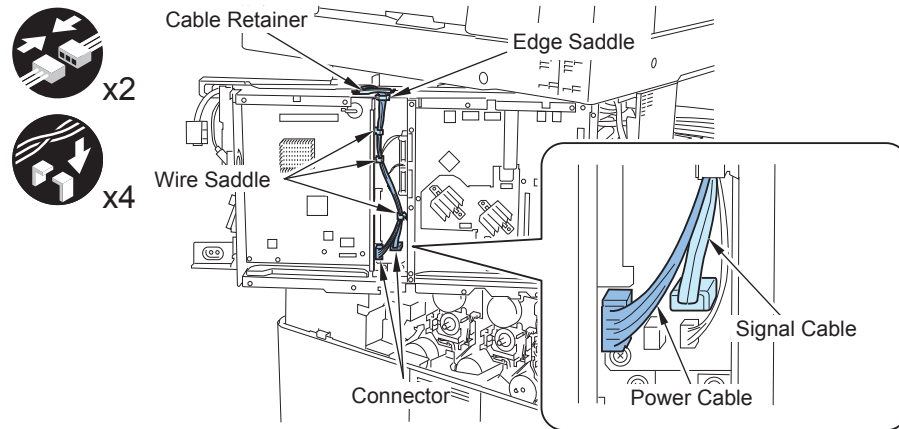


F-9-488



□ 19) Install the IV Cable (FK2-8453 or A: HDD-Pow1, A: HDD-Sig1).

- 1 Edge Saddle
- 3 Wire Saddles
- 2 Connectors
- 1 Cable Retainer



F-9-489

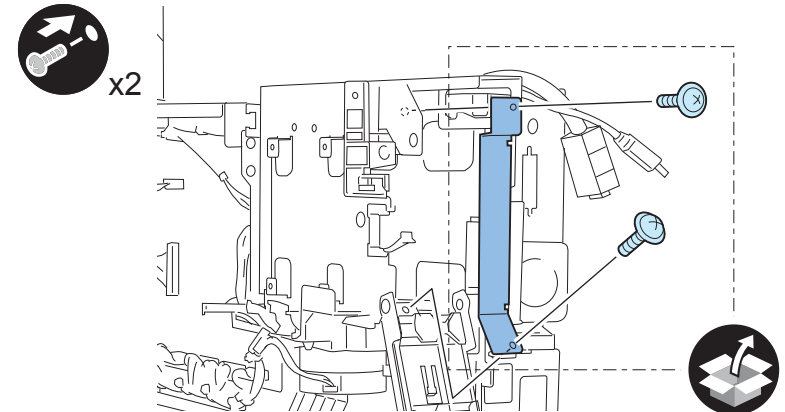
□ 20) Install the Controller Cover. (11 Screws)

□ 21) Install the HDD Blanking Plate to Slot.1 (left side).

- 2 Screws (TP round end; M3x6)

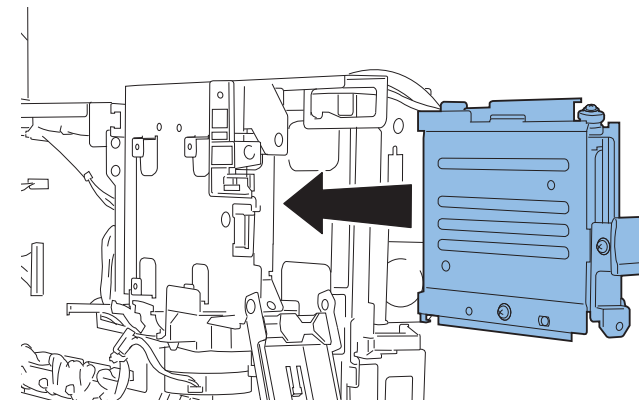
**CAUTION:**

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



F-9-490

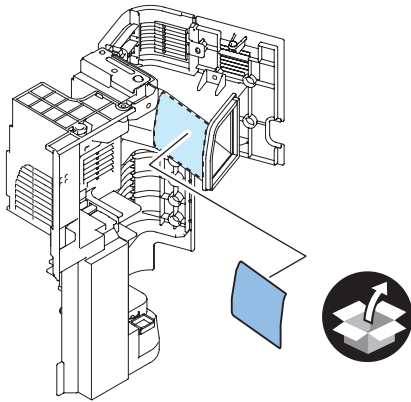
□ 22) Install the HDD to Slot.2 (right side).



F-9-491

- 23) Close the HDD Lid.
- 24) Restore the Controller Box. (2 Screws or 3 Screws)

- 25) Affix the Shutdown Caution Label in the appropriate language on the Right Rear Cover 1.



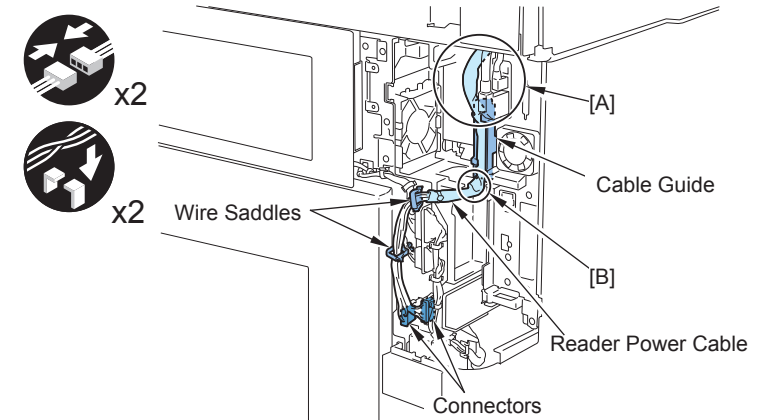
F-9-492

- 26) Install the removed cover and the cable.
  - Rear Cover (2 Screws, 2 Rubber Caps)
  - Left Rear Sub Cover (1 Screw)
  - Reader Communication Cable (when reader is installed)
  - Left Rear Cover (2 Screws, 2 Rubber Caps)

- 27) If Reader is installed, install the Reader Power Cable.

**NOTE:**

Handle the Reader Power Cable from the connector side and make a slack at [A] part. Bend the Reader Power Cable at a right angle on [B] part.



F-9-493

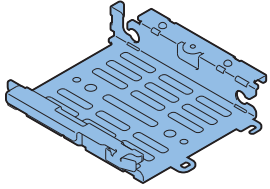
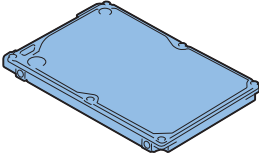
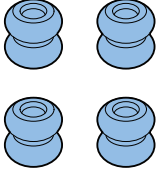
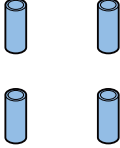
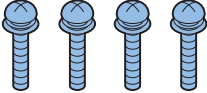

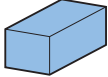
- 28) Install the Right Rear Cover 1. (3 Screws)
- 29) Close the Right Rear Cover 1, Right Lower Cover, and Right Upper Cover.
- 30) Insert the power plug into the socket and turn on the main power of the host machine.

[TYPE-3]

Option HDD (1TB) + Removable HDD Kit

● Checking the Contents

■ Option HDD (1TB)


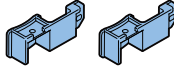
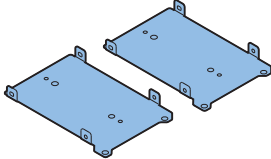
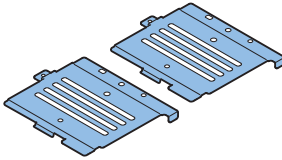
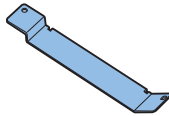
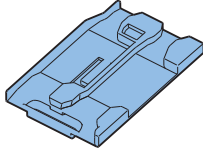
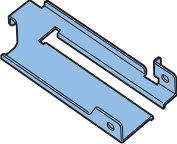

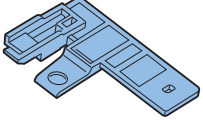
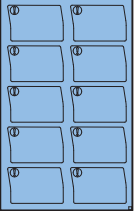
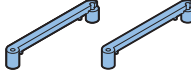
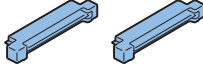
<input type="checkbox"/> [1] HDD Support Pate X 1 	<input type="checkbox"/> [2] HDD X 1 	<input type="checkbox"/> [3] Vibration-prevention Dumper X 4 
<input type="checkbox"/> [4] Spacer X 4 	<input type="checkbox"/> [5] Screw (W sems; M3x14) X 4 	<input type="checkbox"/> [6] Screw (TP;M3x6) X 2 
<input type="checkbox"/> [7] Gasket X 1 		

F-9-494

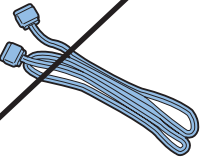
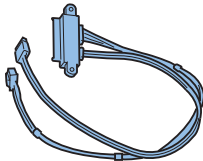
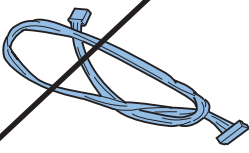
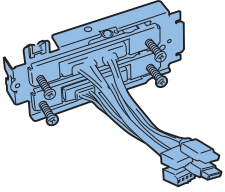
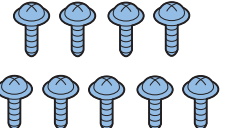
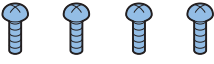
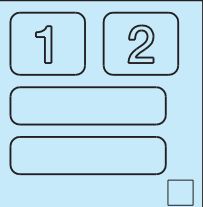
<CD/Guides>

- Notice for FCC/IC

■ Removable HDD Kit

<input type="checkbox"/> [1] Hinge Shaft Stopper X 2 	<input type="checkbox"/> [2] HDD Handle X 2 Use 1 of them 	<input type="checkbox"/> [3] HDD Connector Plate X 2 Use 1 of them 
<input type="checkbox"/> [4] HDD Cover X 2 Use 1 of them 	<input type="checkbox"/> [5] HDD Blanking Plate X 1 	<input type="checkbox"/> [6] HDD Door Guide X 1 
<input type="checkbox"/> [7] HDD Lock Plate X 1 	<input type="checkbox"/> [8] HDD Lock Plate Shaft X 2 	<input type="checkbox"/> [9] HDD Lid Retainer X 1 
<input type="checkbox"/> [10] Shutdown Caution Label X 1 	<input type="checkbox"/> [11] Connector Fixing Block X 2 Use 1 of them 	<input type="checkbox"/> [12] Conversion Connector X 2 Use 1 of them 

F-9-495

<input type="checkbox"/> [13] Signal Cable (660mm ; Red) X 1 FK2-8432 or A: Cont-Sig 	<input type="checkbox"/> [14] IV Cable X 1 FK2-8453 or A: HDD-Pow1, A: HDD-Sig1 	<input type="checkbox"/> [15] Power Cable (650mm) X 1 FK2-8464 or A: Cont-Pow 
<input type="checkbox"/> [16] HDD Drawer Unit x 1 	<input type="checkbox"/> [17] Screw (R round head TP; M3x6) X 9  Use 6 of them 	<input type="checkbox"/> [18] Screw (P Tight; M3x8) X 4  Use 2 of them 
<input type="checkbox"/> [19] R-HDD Label X 1 		

F-9-496

## Check Items when Turning OFF the Main Power

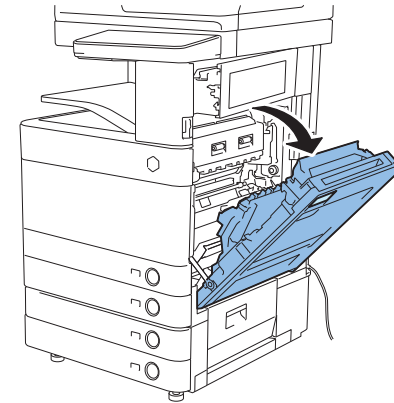
Check that the main power switch is OFF.

- 1) Turning off the Main Power Supply Switch of the Host Machine.
- 2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

## Installation Procedure

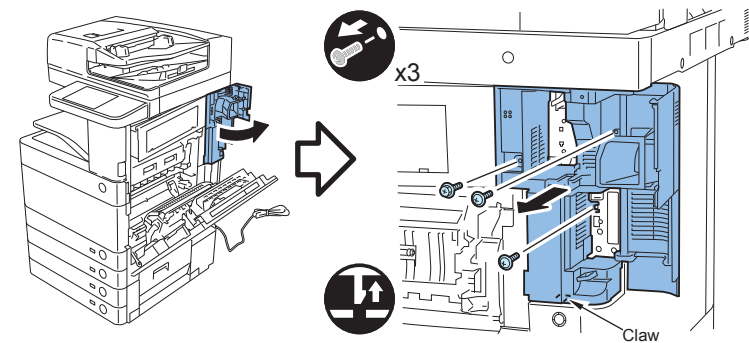
### Removing the HDD Unit, Signal Cable and Power Supply Cable

- 1) Open the Right Lower Cover. (Open the Right Upper Cover simultaneously.)



F-9-497

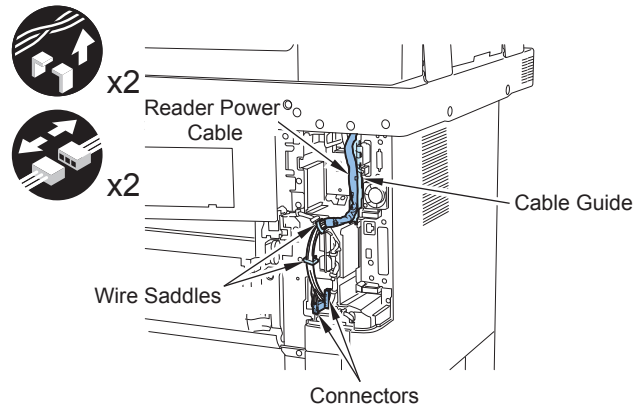
- 2) Open the Right Rear Cover 1.
- 3) Remove the Right Rear Cover 1.
  - 1 screw (RS tight; M4)
  - 2 screws (TP; M3)
  - 1 claw



F-9-498

□  
4) When the Reader is installed, remove the Reader Power Cable.

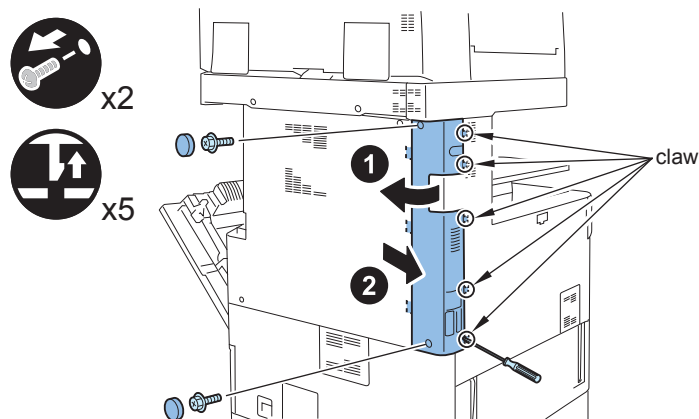
- 2 Connectors
- 2 Wire Saddles
- 1 Cable Guide



F-9-499

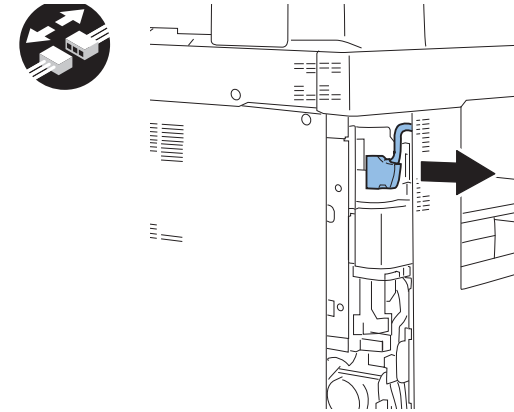
□  
5) Remove the Left Rear Cover.

- 2 Rubber Caps
- 2 Screws
- 5 Claws



F-9-500

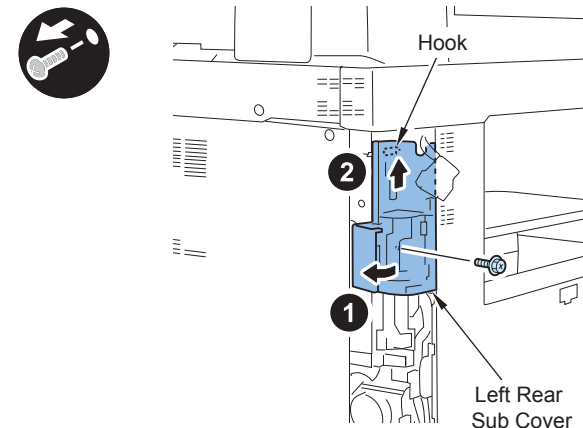
□  
6) When the Reader is installed, remove the Reader Communication Cable.



F-9-501

□  
7) Remove the Left Rear Sub Cover.

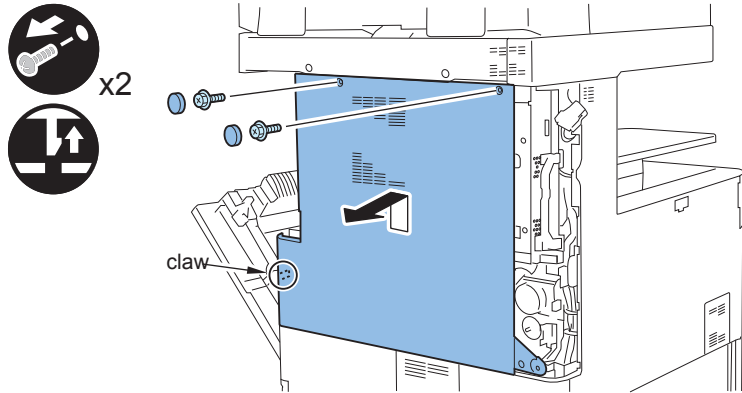
- 1 Screw
- 1 Hook



F-9-502

□ 8) Remove the Rear Cover.

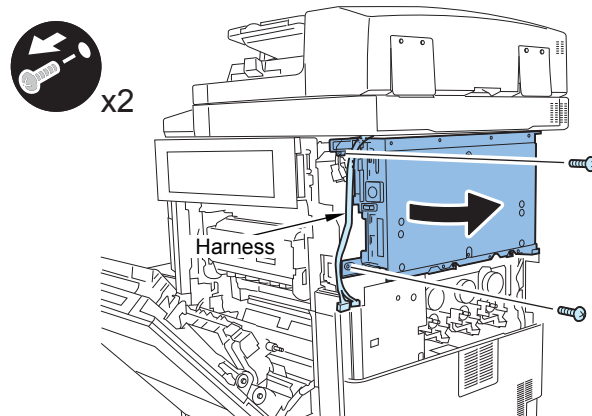
- 2 Rubber Caps
- 2 Screws
- 1 Claw



F-9-503

□ 9) Open the Controller Box while avoiding the harness.

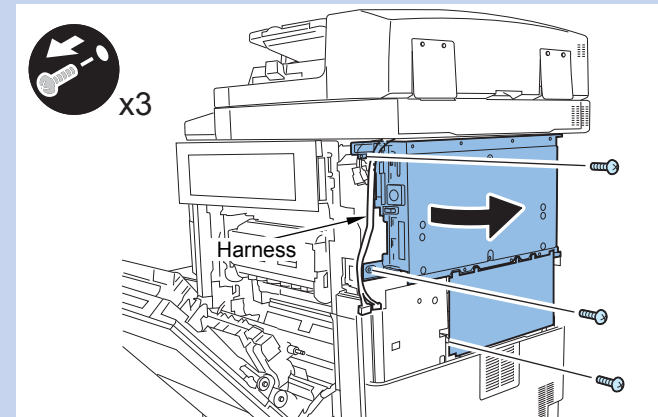
- 2 Screws



F-9-504

NOTE:

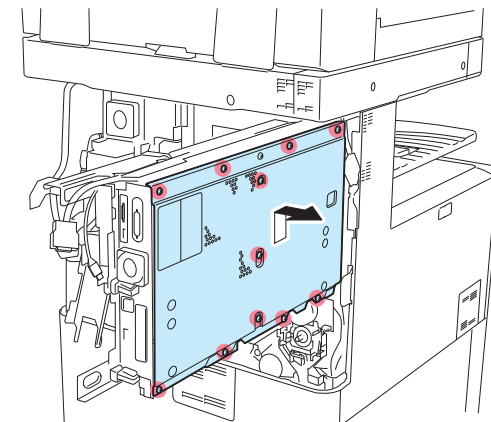
If the FAX Unit has been installed, remove the 3 screws and open the Controller Box with the FAX Unit.



F-9-505

□ 10) Remove the Controller Cover.

- 11 Screws (loosen)



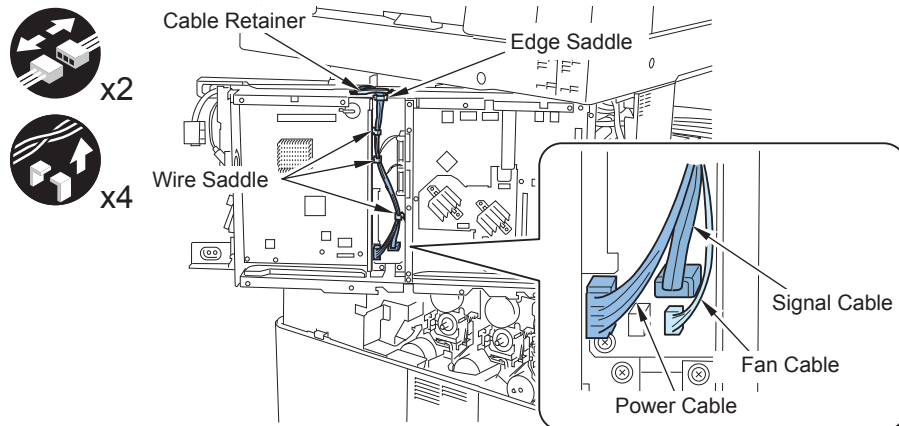
F-9-506

- 11) Remove the Signal Cable and the Power Cable.

**CAUTION:**

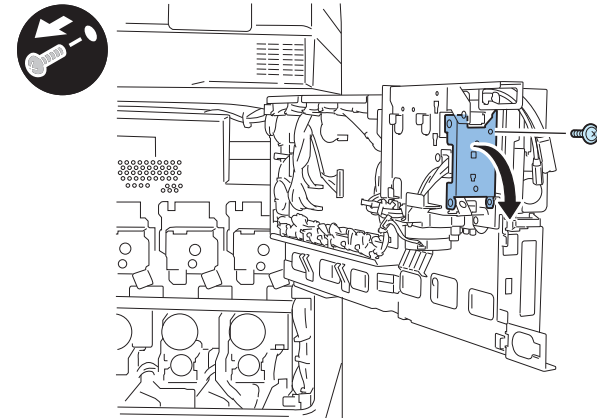
Do not remove the Fan Cable.

- 1 Edge Saddle
- 3 Wire Saddles
- 1 Cable Retainer



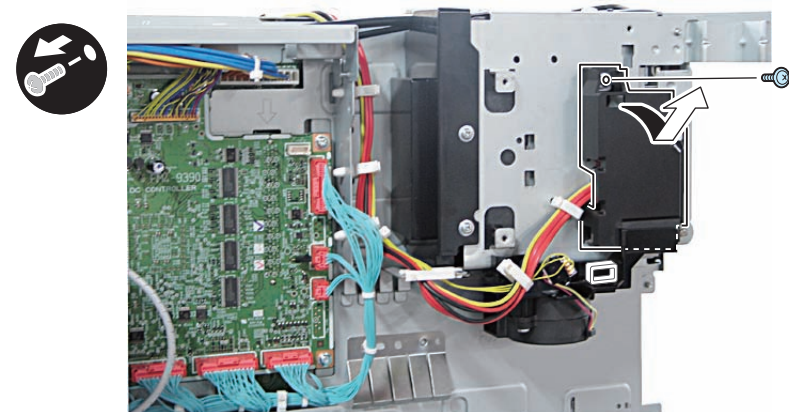
F-9-507

- 12) Open the HDD Lid.
- 1 Screw (Removed screw will not be used.)



F-9-508

- 13) When the Cable Cover is installed, remove it. (Removed Cable Cover and screw will not be used.)
- 1 Screw



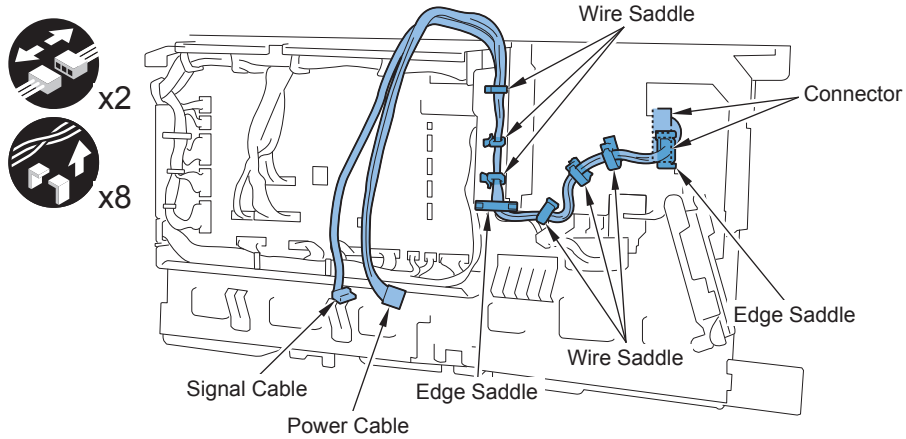
F-9-509



- 14) Remove the Signal Cable and the Power Cable. (Removed Signal Cable and Power Cable will not be used.)

<When the Cable Cover is removed>

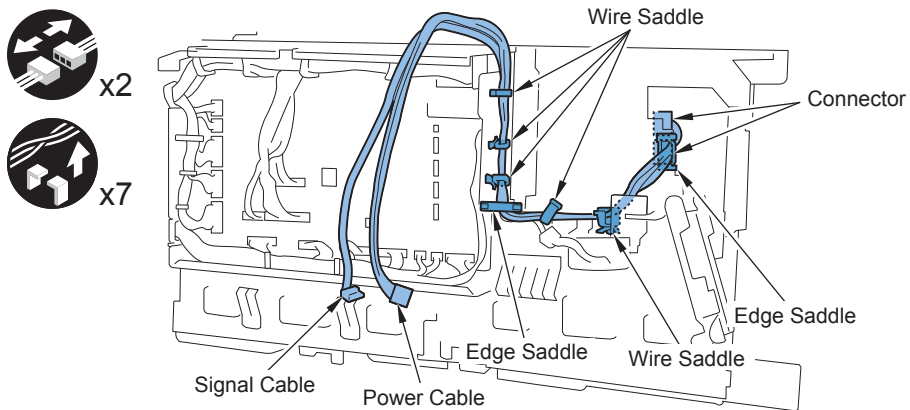
- 2 Edge Saddles
- 6 Wire Saddles
- 2 Connectors



F-9-510

<When the Cable Cover is not removed>

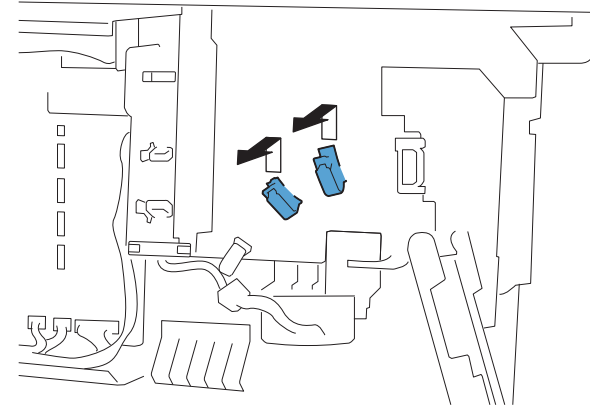
- 2 Edge Saddles
- 5 Wire Saddles
- 2 Connectors



F-9-511

- <When the Cable Cover is removed>

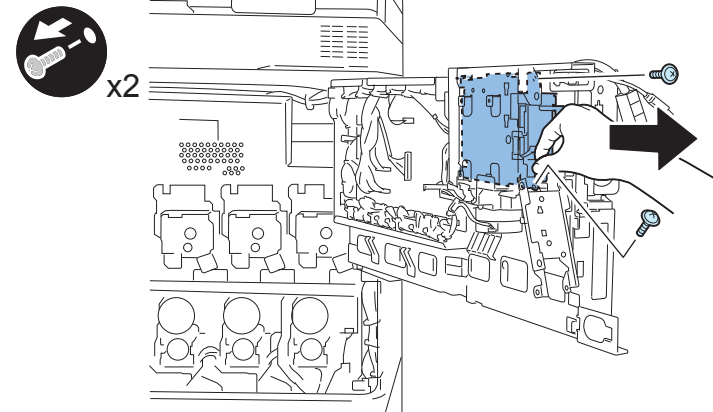
- 15) Remove the 2 Wire Saddles. (Removed wire saddles will not be used.)



F-9-512

- 16) Remove the HDD Unit by holding it as shown in the figure below. (Removed HDD unit will not be used.)

- 2 Screws (Removed screw will not be used.)



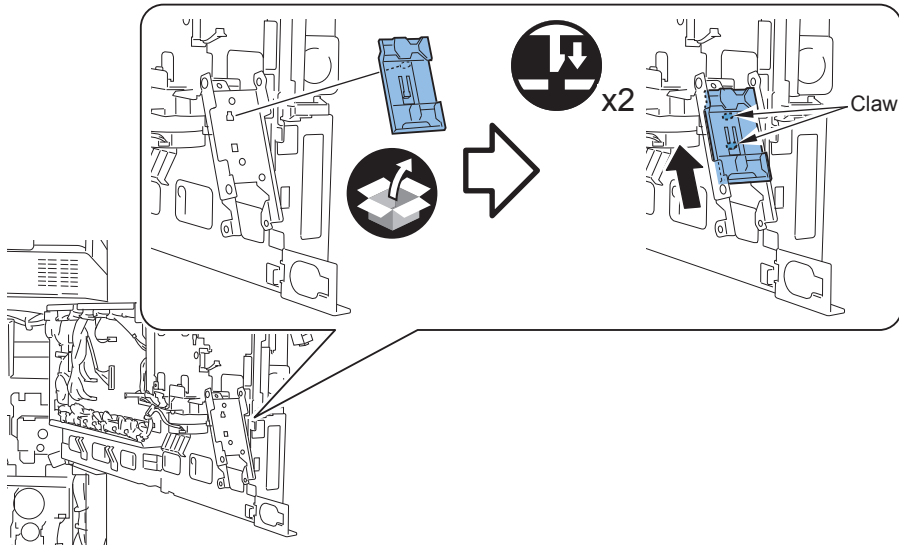
F-9-513

## ■ Installing the Removable HDD Kit



1) Install the HDD Door Guide.

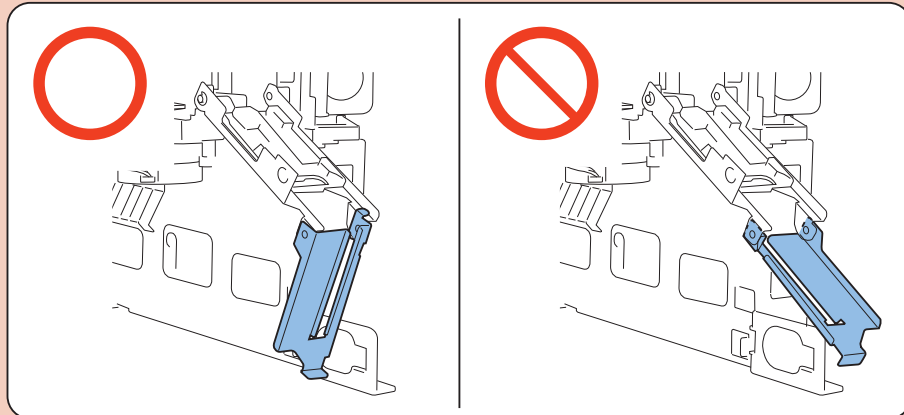
- 2 Claws



F-9-514

### CAUTION:

Be careful of the installation direction of HDD Lock Plate.

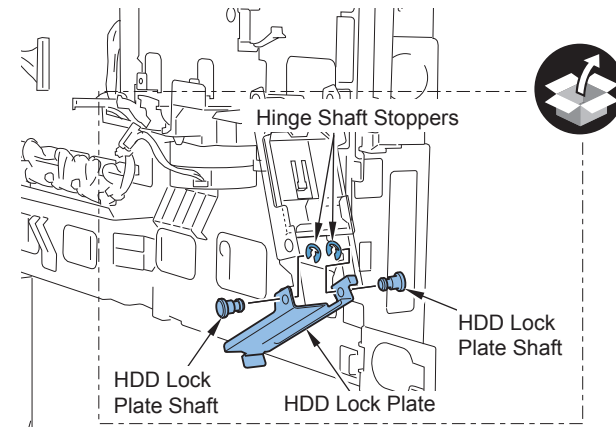


F-9-515



2) Install the HDD Lock Plate.

- 2 HDD Lock Plate Shafts
- 2 Hinge Shaft Stoppers

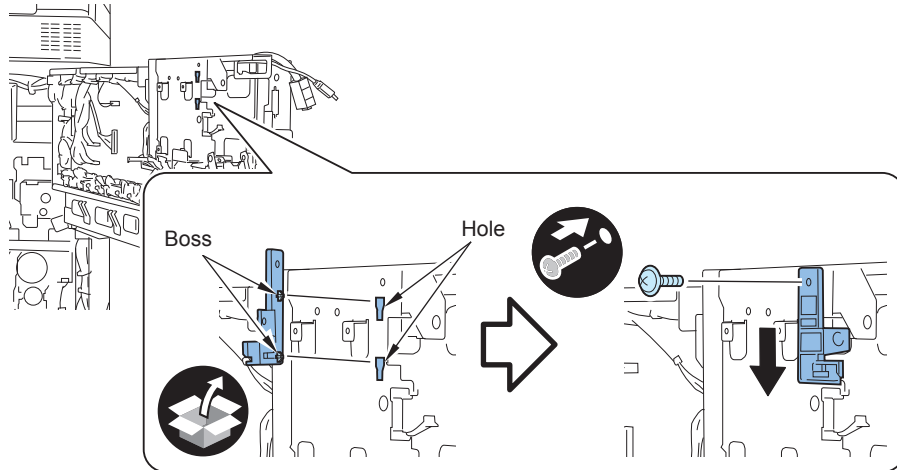


F-9-516

- 
- 3) Adjust the 2 bosses to the hole and install the HDD Lid Retainer.
- 1 Screw (TP round end; M3x6)

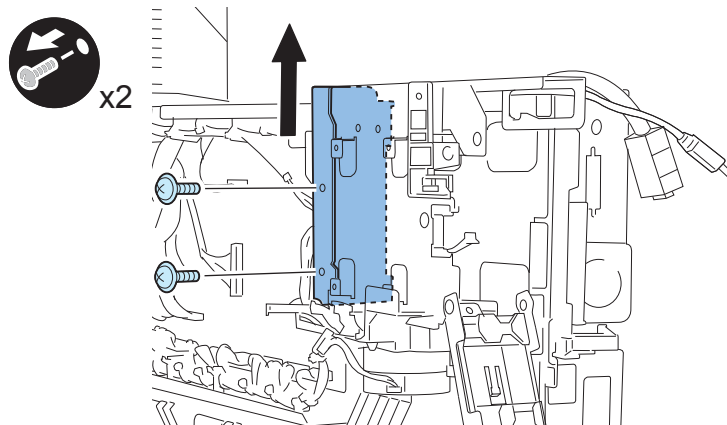
**CAUTION:**

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



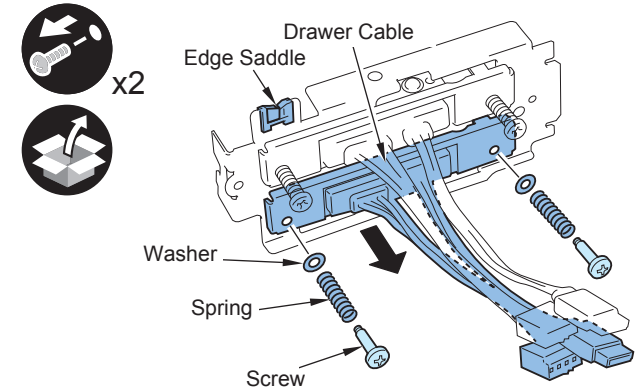
F-9-517

- 
- 4) Remove the HDD Rear Cover. (Removed HDD Rear Cover will not be used.)
- 2 Screws (Removed screw will be used in step 9.)



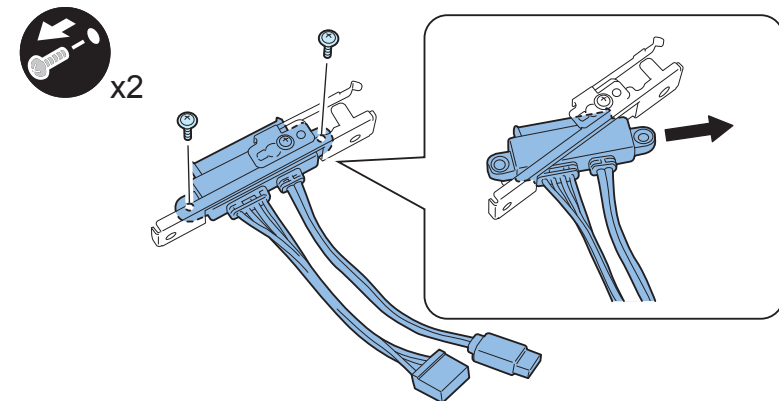
F-9-518

- 
- 5) Place it in the position where the edge saddle of HDD Drawer Unit is facing up, remove the lower Drawer Cable (Slot.2).
- 2 Screws
  - 2 Springs
  - 2 Washers (The removed springs and washers will be used in step 8.)



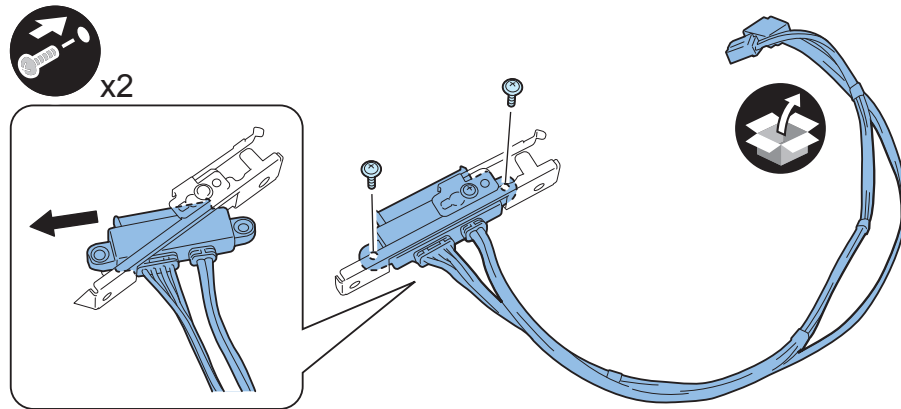
F-9-519

- 
- 6) Remove the Drawer Cable.
- 2 Screws (Removed screw will be used in step 7.)



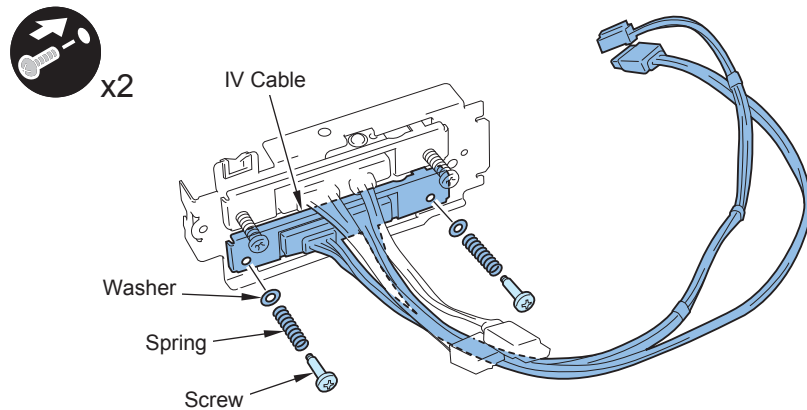
F-9-520

- 7) Install the IV Cable (FK2-8453 or A: HDD-Pow1, A: HDD-Sig1).  
• 2 Screws (screw removed in step 6))



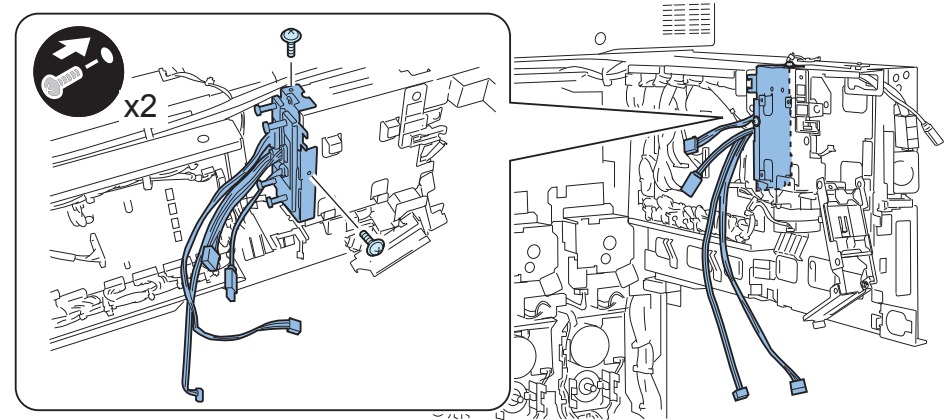
F-9-521

- 8) Install the IV Cable (FK2-8453 or A: HDD-Pow1, A: HDD-Sig1) of HDD Drawer Unit.  
• 2 Screws  
• 2 Springs  
• 2 Washers (Use the parts removed in step 5).)



F-9-522

- 9) Install the HDD Drawer Unit.  
• 2 Screws (Use the screw removed in step 4))

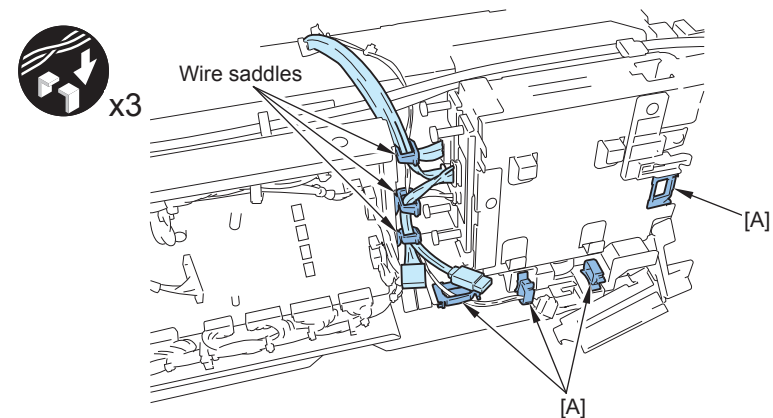


F-9-523

- 10) Fix the cable of the Drawer Unit.  
• 3 Wire Saddles

**NOTE:**

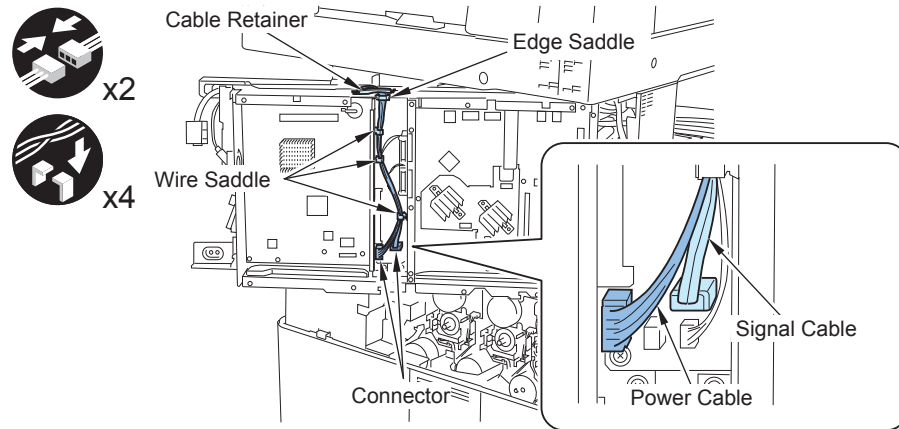
- Close the [A] part of unused wire saddle and edge saddle.
- Short Signal Cable and Power Cable will not be used.
- Fix the unused Signal Cable and the Power Cable with the wire saddle.



F-9-524

□ 11) Install the IV Cable (FK2-8453 or A: HDD-Pow1, A: HDD-Sig1).

- 1 Edge Saddle
- 3 Wire Saddles
- 2 Connectors
- 1 Cable Retainer



F-9-525

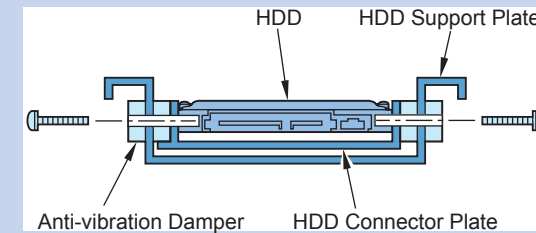
□ 12) Install the Controller Cover. (11 Screws)

## ■ Assembling and Installing the Option HDD

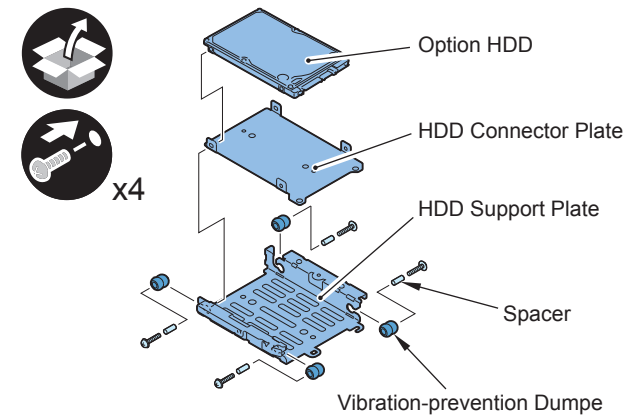
- 1) Assemble the option HDD (1TB).
- 1 Option HDD (enclosed with option HDD)
  - 1 HDD Support Plate (enclosed with option HDD)
  - 1 HDD Connector Plate (enclosed with removable HDD Kit)
  - 4 Vibration-prevention Dumpers (enclosed with option HDD)
  - 4 Spacers (enclosed with option HDD)
  - 4 Screws (W sems; M3x14) (enclosed with option HDD)

### NOTE:

When tightening the screen, be sure to align the screw holes by lifting the HDD Connector Plate and HDD.



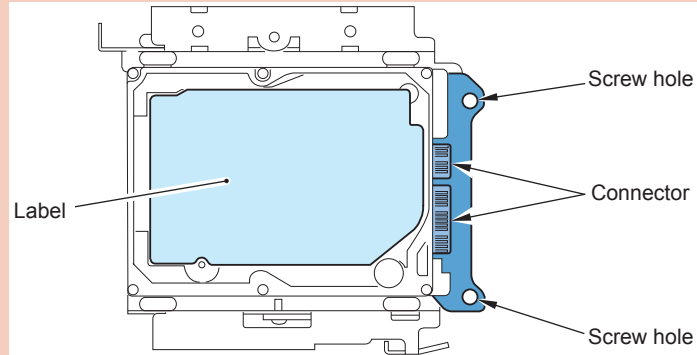
F-9-526



F-9-527

**CAUTION:**

- Assembling the option HDD, be careful of the installation direction.
- Make sure that the label on the option HDD is facing up.
- Install it in the position where the HDD connector is placed in the side with screw hole of HDD Support Plate. (opposite direction compared to the fixed HDD)



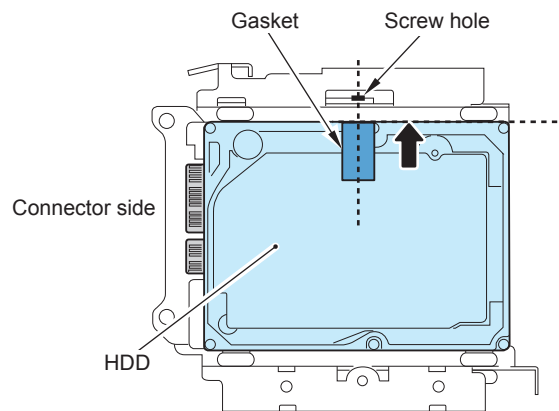
F-9-528



2) Affix the gasket to the place shown in the figure below.

**CAUTION:**

Be sure to place the gasket in contact with the label-free metal surface of the HDD surface.



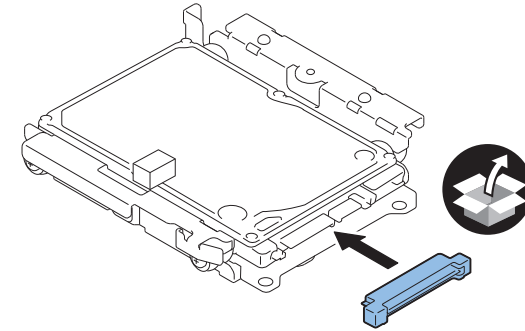
F-9-529



3) Install the Conversion Connector.

**CAUTION:**

Make sure that there is no opening between the Conversion Connector and part of HDD.

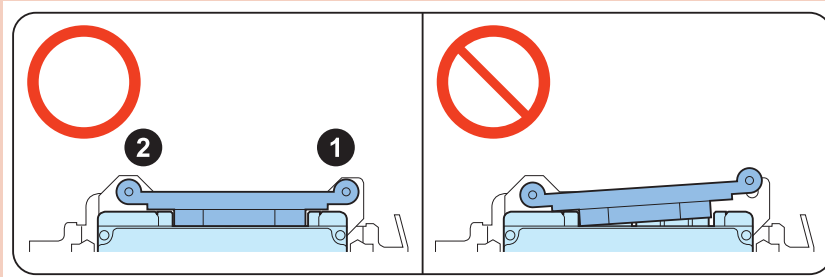


F-9-530

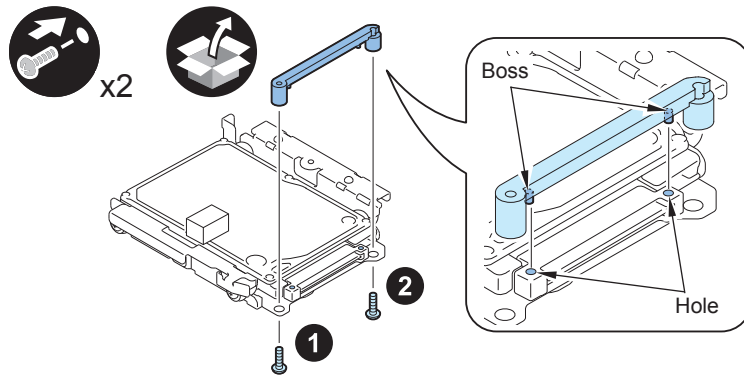
- 
- 4) Fit the 2 bosses of Connector Fixing Block to the hole of Conversion Connector and install it.
- 2 Screws (P Tight; M3x8)

## CAUTION:

- Be sure to firmly hold the Connector Fixation Block when tightening the screws.
- Be sure to follow the correct order to tighten the screws, otherwise the Conversion Connector may not be connected properly, resulting in poor contact.



F-9-531

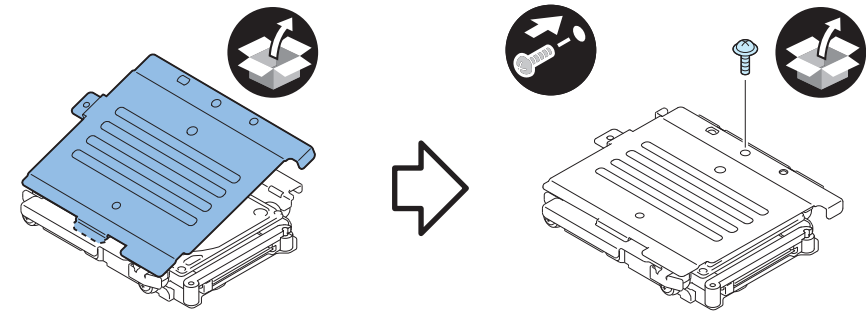


F-9-532

- 
- 5) Install the HDD Cover.
- 1 Claw
  - 1 Screw (TP round end; M3x6)

## CAUTION:

- Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.

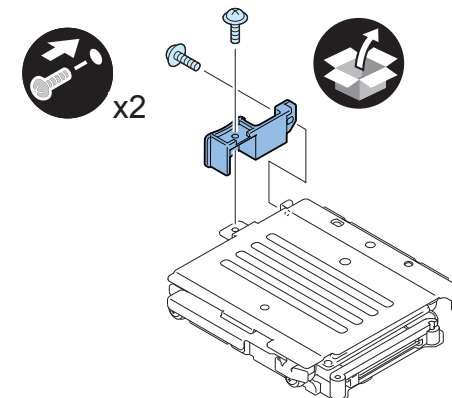


F-9-533

- 
- 6) Install the HDD Handle.
- 2 Screws (TP round end; M3x6)

## CAUTION:

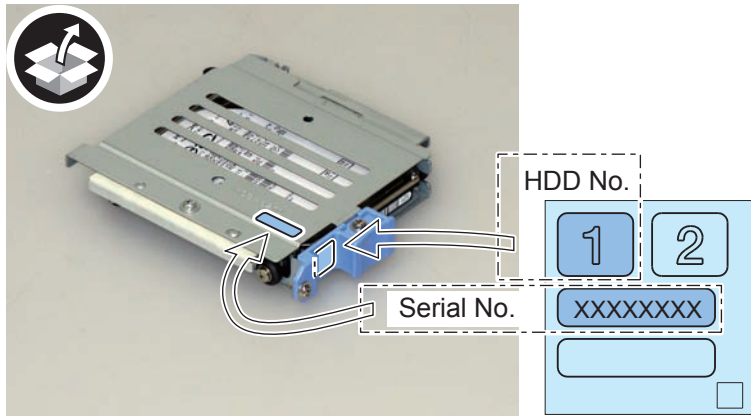
- Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



F-9-534



- 7) Affix the HDD No.1 Label to the handle of the Removable HDD.
- 8) Write down the serial number of the host machine to the label for recording the number, and affix it to the area indicated in the figure.

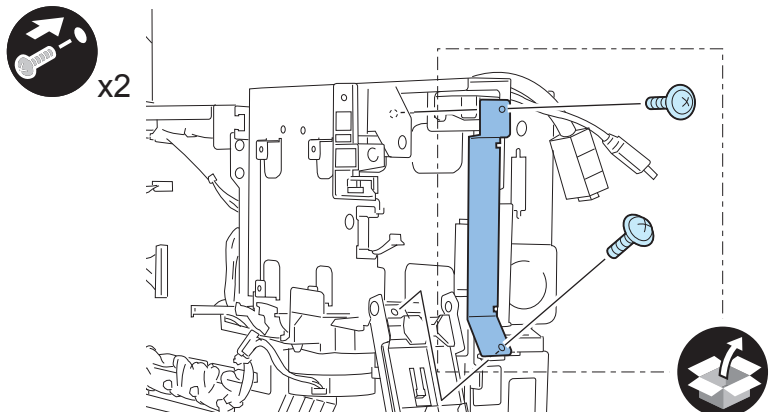


F-9-535

- 9) Install the HDD Blanking Plate to Slot.1 (left side).
- 2 screws (TP round end; M3x6)

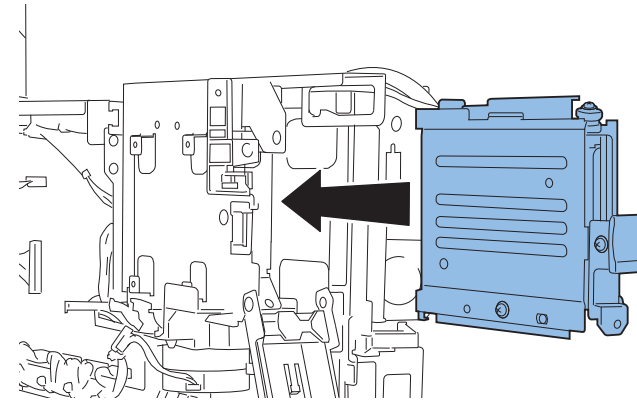
**CAUTION:**

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



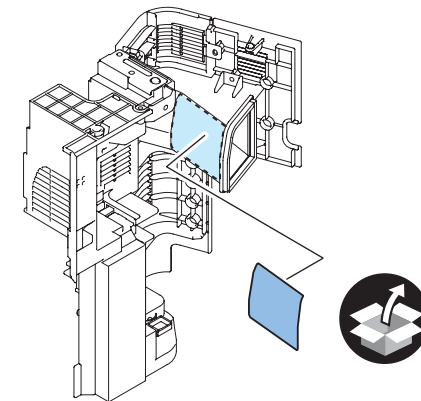
F-9-536

- 10) Install the HDD to Slot.2 (right side).



F-9-537

- 11) Close the HDD Lid.
- 12) Restore the Controller Box. (2 Screws or 3 Screws)
- 13) Affix the Shutdown Caution Label in the appropriate language on the Right Rear Cover 1.

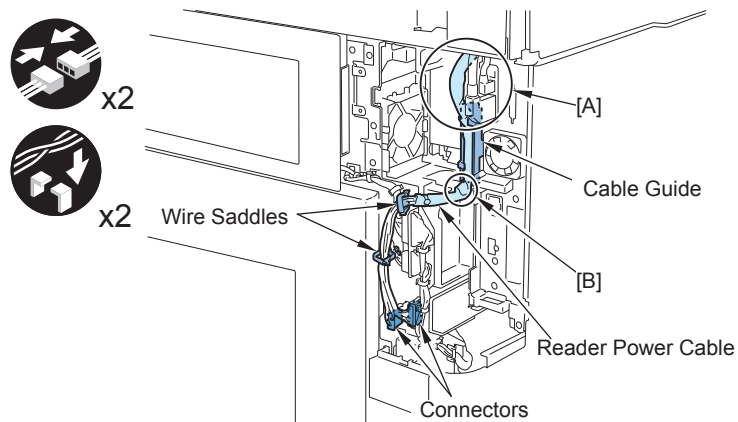


F-9-538

- 14) Install the removed cover and the cable.
- Rear Cover (2 Screws, 2 Rubber Caps)
  - Left Rear Sub Cover (1 Screw)
  - Reader Communication Cable (when reader is installed)
  - Left Rear Cover (2 Screws, 2 Rubber Caps)
- 15) If Reader is installed, install the Reader Power Cable.

**NOTE:**

Handle the Reader Power Cable from the connector side and make a slack at [A] part. Bend the Reader Power Cable at a right angle on [B] part.



F-9-539

- 16) Install the Right Rear Cover 1. (3 Screws)
- 17) Close the Right Rear Cover 1, Right Lower Cover, and Right Upper Cover.
- 18) Connect the power plug of the host machine to the power outlet.

## Installing the System Software Using the SST

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product.

It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product.

Details follow.

### 1. Requirements

#### 1) PC

Service support tool in the version that supports this host machine must be installed.

#### 2) Cross Ethernet Cable

### 2. Preparing for the Installation of the System Software of Host machine

1) If both PC and the machine are on, turn them off.

2) Connect the PC and the machine using an Ethernet cable.

3) Turn on the PC.

4) Start up the machine in download mode (safe mode).

### 3. Selecting the System Software

1) Set the CD containing the latest system software in the PC on which the SST is used.

2) Start up the SST.

3) Click Register Firmware.

4) Select the drive in which the System Software CD has been set, and click search.

5) Click REGISTER.

6) Click OK.

### 4. Downloading the System Software

1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.

2) When initialization is completed, the machine is automatically restarted and it enters download mode.

3) Select the version to be downloaded and click "Start".

4) When download is completed, the machine is automatically restarted.

5) When writing of the firmware is completed, the machine is automatically restarted.

6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.

7) Terminate the SST.

8) Check the version of the downloaded firmware in service mode.

## Execution of Auto Adjust Gradation

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.

Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

## [TYPE-4]

Standard HDD + Option HDD (160GB)

+ HDD Mirroring Kit or HDD Data Encryption &amp; Mirroring Kit

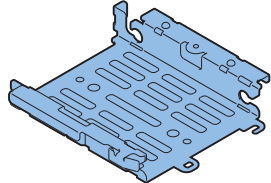
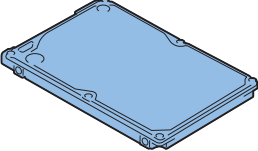
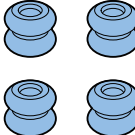
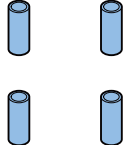
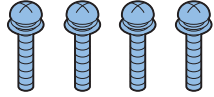

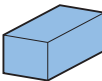
## Points to Note when HDD Data Encryption & Mirroring Kit has been Installed

A security sticker is attached to the kit package to indicate that the package has not been opened. Check to see that the package has not been opened in any way and the sticker is not torn.

If the package appears to have been opened or the sticker is torn, check to make sure that the user has done so intentionally.

## Checking the Contents

### Option HDD (160GB)


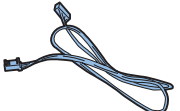
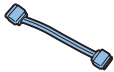
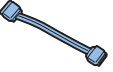

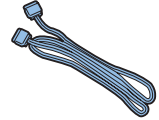





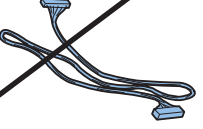

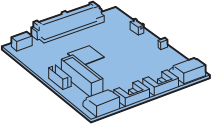
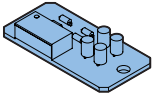
<input type="checkbox"/> [1] HDD Support Pate X 1 	<input type="checkbox"/> [2] HDD X 1 	<input type="checkbox"/> [3] Vibration-prevention Dumper X 4 
<input type="checkbox"/> [4] Spacer X 4 	<input type="checkbox"/> [5] Screw (W sems; M3x14) X 4 	<input type="checkbox"/> [6] Screw (TP;M3x6) X 2 
<input type="checkbox"/> [7] Gasket X 1 		

&lt;CD/Guides&gt;

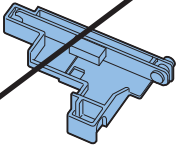
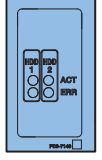

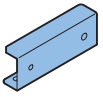
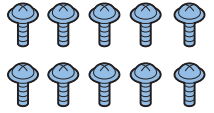

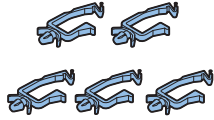


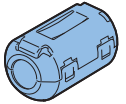
- Notice for FCC/IC

F-9-540

**HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit**

<input type="checkbox"/> [1] LED Cable (1200mm; 7 pin) X 1 FM4-0839 or A: LED-Sig 	<input type="checkbox"/> [2] STS Cable (550mm (Light blue); 5 pin) X 1 FM4-0842 or A: STS-Sig 	<input type="checkbox"/> [3] Signal Cable (80mm; Red) X 1 FK2-8436 or A: HDD-Sig1 
<input type="checkbox"/> [4] Signal Cable (80mm; Blue) X 1 FK2-8438 or A: HDD-Sig2 	<input type="checkbox"/> [5] Power Cable (80mm) X 2 FK2-8461 or A: HDD-Pow1/2 	<input type="checkbox"/> [6] Signal Cable (450mm; Red) X 1 FK2-8435 or A: Cont-Sig 
<input type="checkbox"/> [7] Power Cable (430mm) X 1 FK2-8463 or A: Cont-Pow 	<input type="checkbox"/> [8] Power Cable (430mm) X 1 FK2-8463 or A: HDD-Pow2 	<input type="checkbox"/> [9] Signal Cable (340mm (Red); ) X 1 FK2-8434 or A: HDD-Sig1 
<input type="checkbox"/> [10] Signal Cable (370mm (Blue); ) X 1 FK2-8441 or A: HDD-Sig2 	<input type="checkbox"/> [11] Power Cable (320mm) X 1 FK2-8467 or A: HDD-Pow1 	<input type="checkbox"/> [12] LED Cable (290mm; 7 pin) X 1 FM4-0840 or A: LED-Sig 
<input type="checkbox"/> [13] STS Cable (420mm (Light blue); 5 pin) X 1 FM4-0843 or A: STS-Sig 	<input type="checkbox"/> [14] Mirroring Board or Encryption Board X 1 	<input type="checkbox"/> [15] LED Board (Small) X 1 FK2-7400 or A: LED 

F-9-541

<input type="checkbox"/> [16] LED Board (large) X 1 FK2-8324 or A: LED 	<input type="checkbox"/> [17] LED Label (Small) X 1 	<input type="checkbox"/> [18] LED Label (large) X 1 
<input type="checkbox"/> [19] HDD Connection Plate X 1 	<input type="checkbox"/> [20] Screw (TP; M3x6) X 10 	<input type="checkbox"/> [21] Edge Saddle X 1 
<input type="checkbox"/> [22] Wire saddle (Small) X 5 Use 2 of them 	<input type="checkbox"/> [23] Wire saddle (large) X 1 	<input type="checkbox"/> [24] Wire saddle (Middle) X 1 
<input type="checkbox"/> [25] Ring Core X 1 		

F-9-542

< CD/Guides of HDD Mirroring Kit >

- Mirroring Kit User Document
- Notice for FCC/IC

< CD/Guides of HDD Data Encryption & Mirroring Kit >

- HDD Data Encryption & Mirroring Kit-C1 User Documentation
- HDD Data Encryption Kit Notice
- Installation Procedure
- Noticed for FCC/IC

## Setting Before Turning OFF the Power

### CAUTION:

Be sure to turn OFF the main power after executing this service mode setting.

Turning OFF the main power without executing service mode causes "E602-5001 (procedure error before installing the HDD Encryption Board)" to occur when turning ON the main power after installing the Encryption Board.

When this error occurs, the machine needs to be returned again to the initial state in which no Encryption Board is installed.



- 1) Execute the following service mode (level 1).
  - COPIER > FUNCTION > INSTALL > HD-CRYP

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

- 1) Turning off the Main Power Supply Switch of the Host Machine.
- 2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

## Installation Procedure

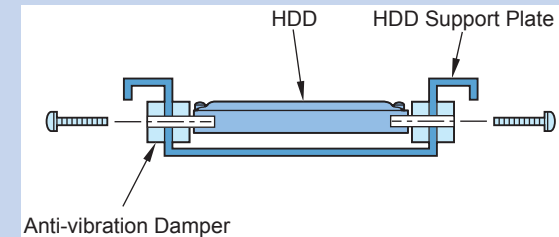
### Assembling the Option HDD



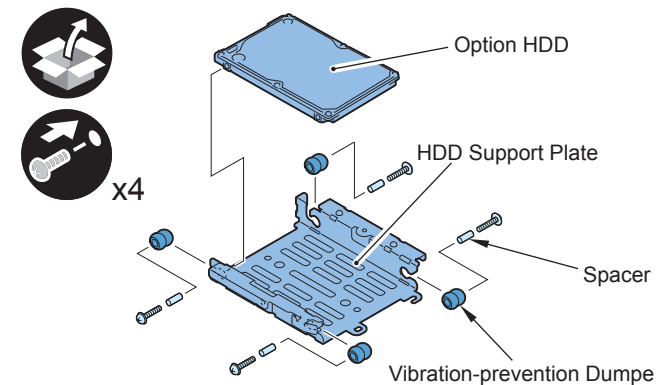
- 1) Assemble the option HDD.
  - 1 Option HDD
  - 1 HDD Support Plate
  - 4 Dust-prevention Dumpers
  - 4 Spacers
  - 4 Screws (W sems; M3x14)

### NOTE:

When tightening the screen, be sure to align the screw holes by lifting the HDD.



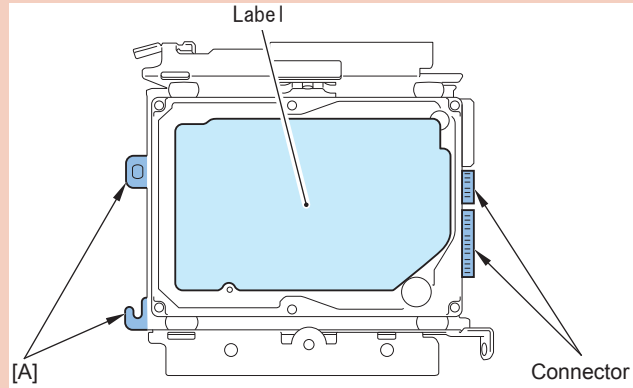
F-9-543



F-9-547

**CAUTION:**

- Assembling the option HDD, be careful of the installation direction.
- Make sure that the label on the option HDD is facing up.
- Make sure that [A] part of HDD Support Plate is placed at the opposite side of connector.



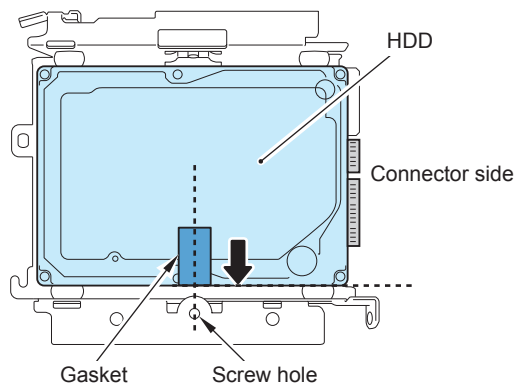
F-9-545



2) Affix the gasket to the place shown in the figure below.

**CAUTION:**

Be sure to place the gasket in contact with the label-free metal surface of the HDD surface.

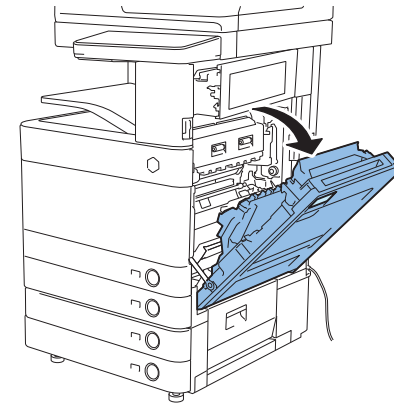


F-9-546

## ■ Removing and Installing the HDD Unit



1) Open the Right Lower Cover. (Open the Right Upper Cover simultaneously.)



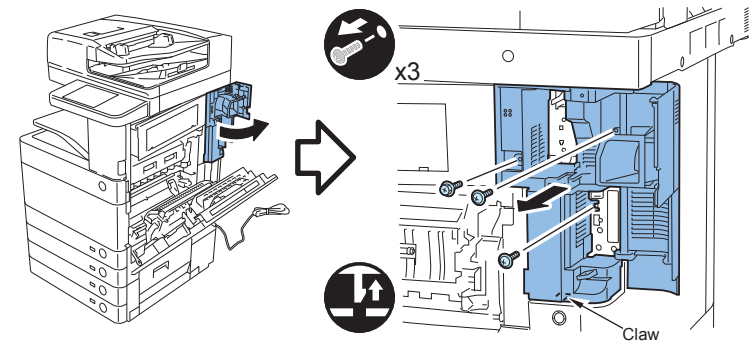
F-9-547



2) Open the Right Rear Cover 1.

3) Remove the Right Rear Cover 1.

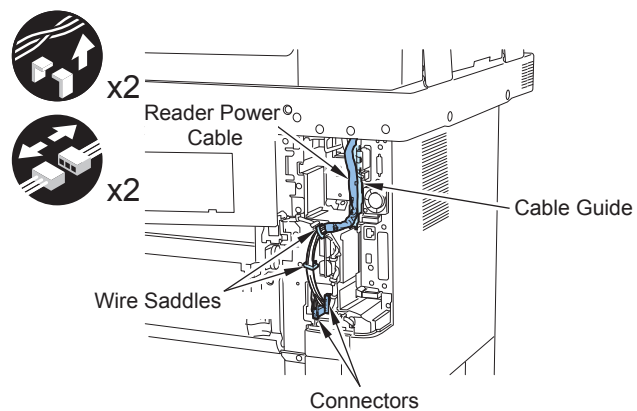
- 1 Screw (RS tight; M4)
- 2 Screws (TP; M3)
- 1 Claw



F-9-548

□  
4) When the Reader is installed, remove the Reader Power Cable.

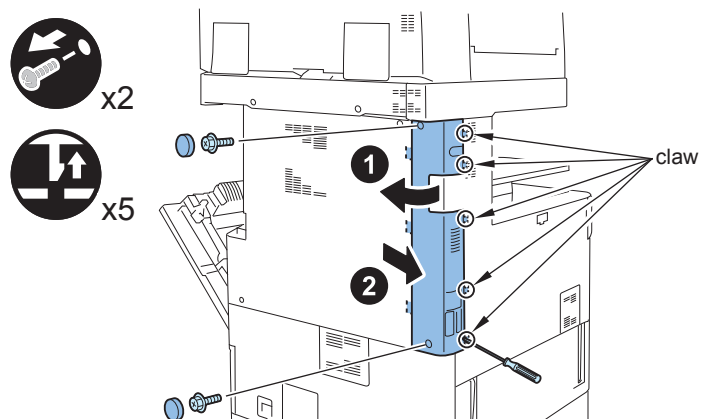
- 2 Connectors
- 2 Wire Saddles
- 1 Cable Guide



F-9-549

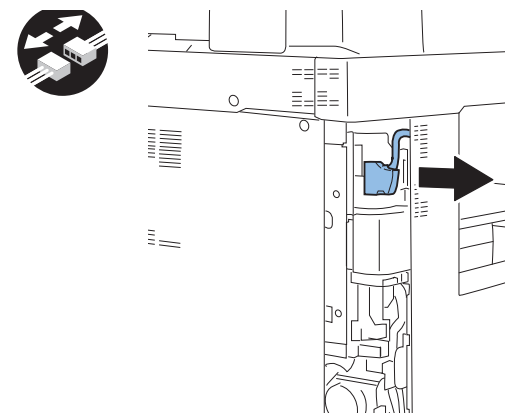
□  
5) Remove the Left Rear Cover.

- 2 Rubber Caps
- 2 Screws
- 5 Claws



F-9-550

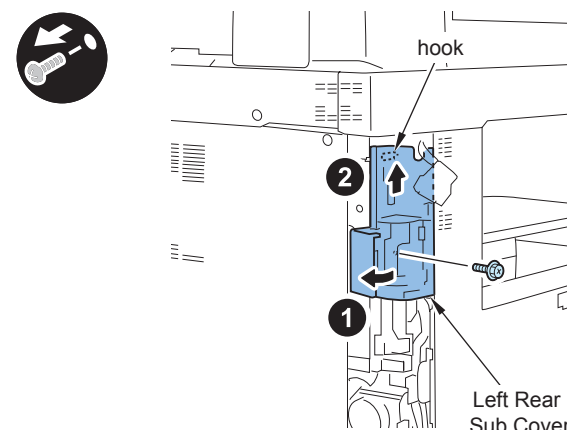
□  
6) When the Reader is installed, remove the Reader Communication Cable.



F-9-551

□  
7) Remove the Left Rear Sub Cover.

- 1 Screw
- 1 Hook

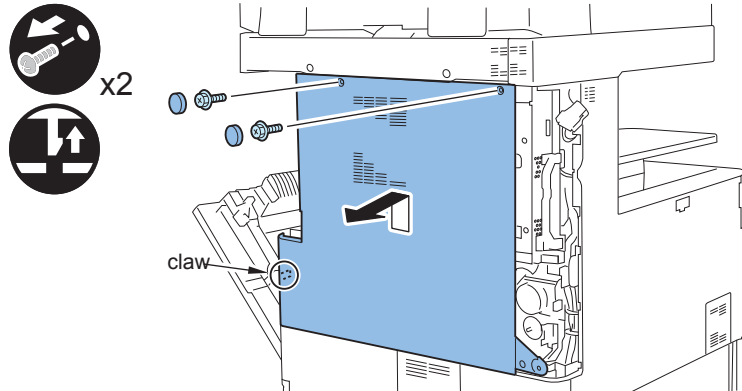


F-9-552



□ 8) Remove the Rear Cover.

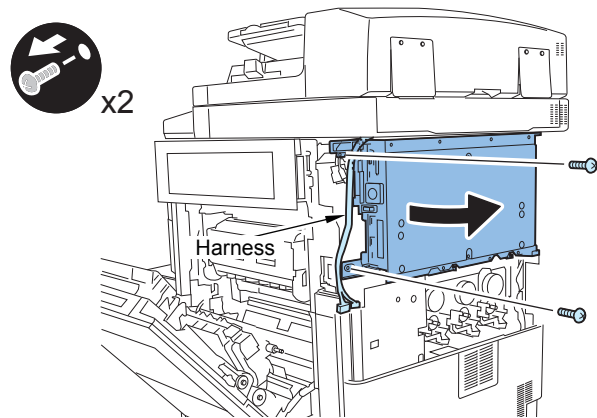
- 2 Rubber Caps
- 2 Screws
- 1 Claw



F-9-553

□ 9) Open the Controller Box while avoiding the harness.

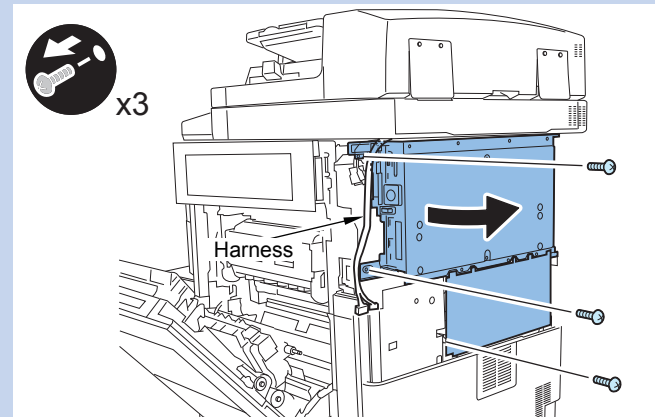
- 2 Screws



F-9-554

NOTE:

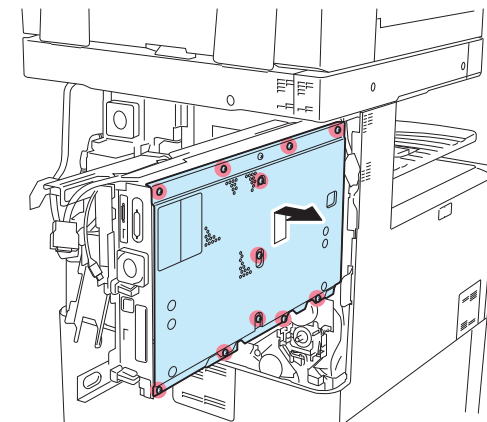
If the FAX Unit has been installed, remove the 3 screws and open the Controller Box with the FAX Unit.



F-9-555

□ 10) Remove the Controller Cover.

- 11 Screws (loosen)



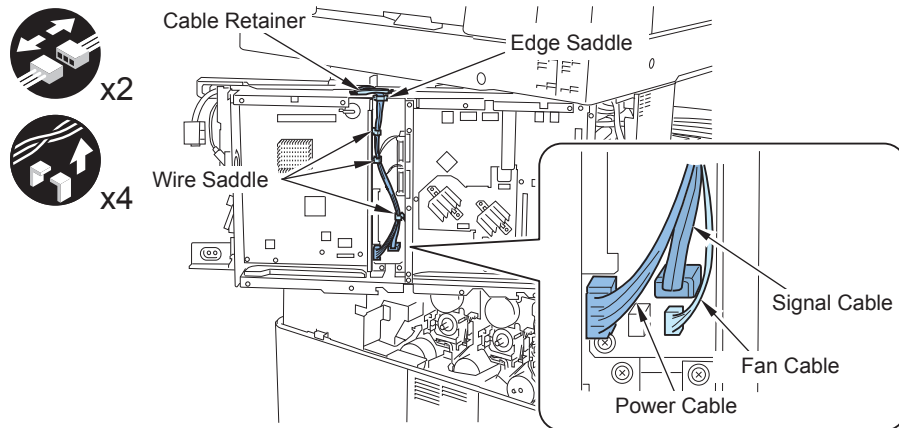
F-9-556

- 11) Remove the Signal Cable and the Power Cable.

**CAUTION:**

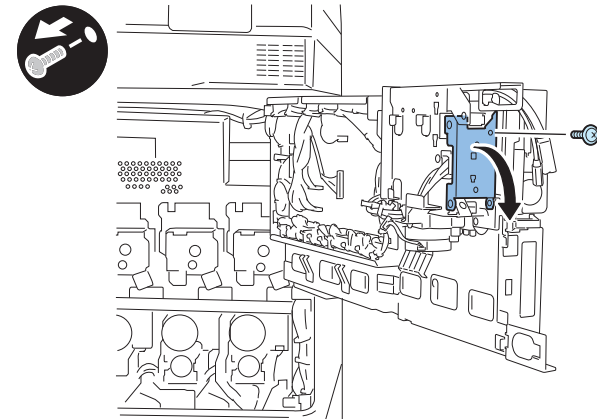
Do not remove the Fan Cable.

- 1 Edge Saddle
- 3 Wire Saddles
- 1 Cable Retainer



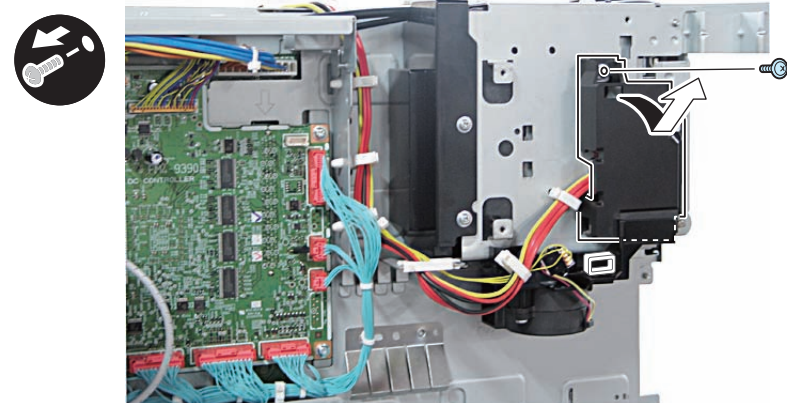
F-9-557

- 12) Open the HDD Lid.
- 1 Screw (Removed screw will not be used.)



F-9-558

- 13) When the Cable Cover is installed, remove it. (Removed Cable Cover and screw will not be used.)
- 1 Screw

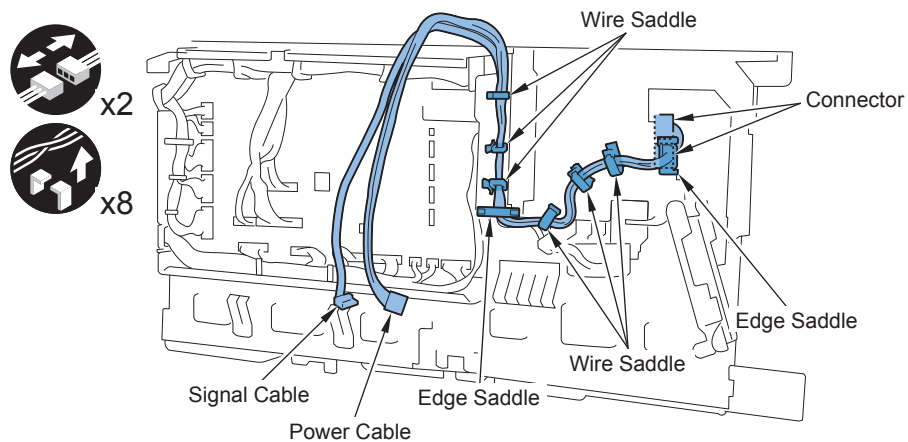


F-9-559

- 14) Remove the Signal Cable and the Power Cable. (Removed Signal Cable and Power Cable will not be used.)

<When the Cable Cover is removed>

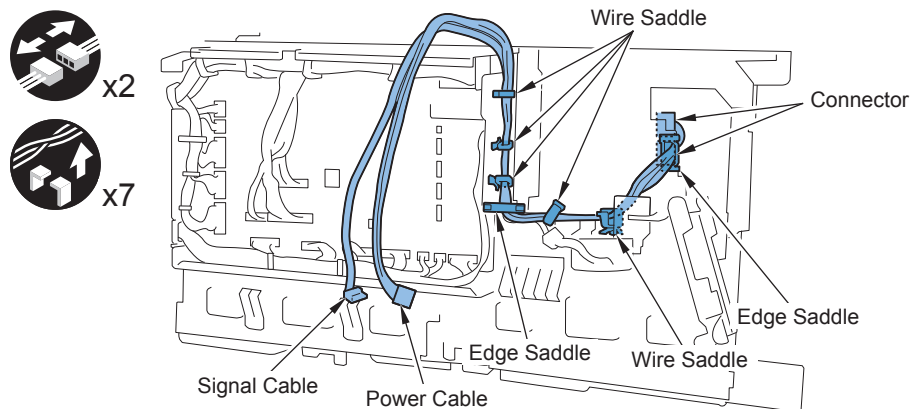
- 2 Edge Saddles
- 6 Wire Saddles
- 2 Connectors



F-9-560

<When the Cable Cover is not removed>

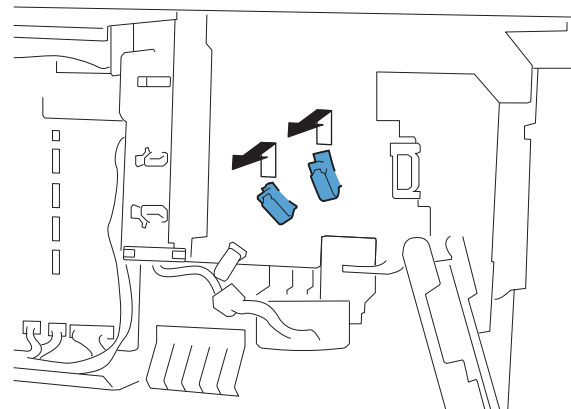
- 2 Edge Saddles
- 5 Wire Saddles
- 2 Connectors



F-9-561

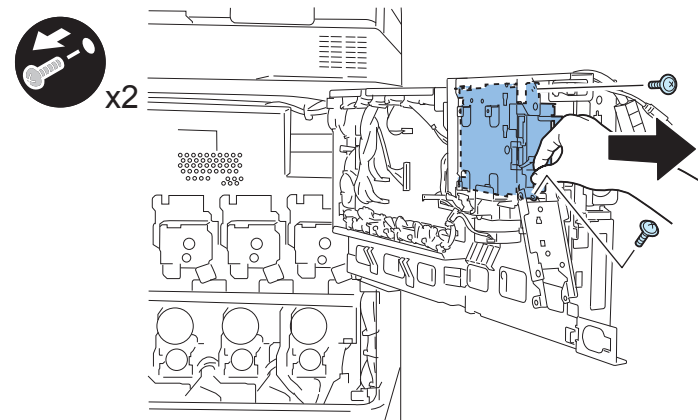
- <When the Cable Cover is removed>

- 15) Remove the 2 Wire Saddles. (Removed wire saddles will not be used.)



F-9-562

- 16) Remove the HDD Unit by holding it as shown in the figure below.
- 2 Screws

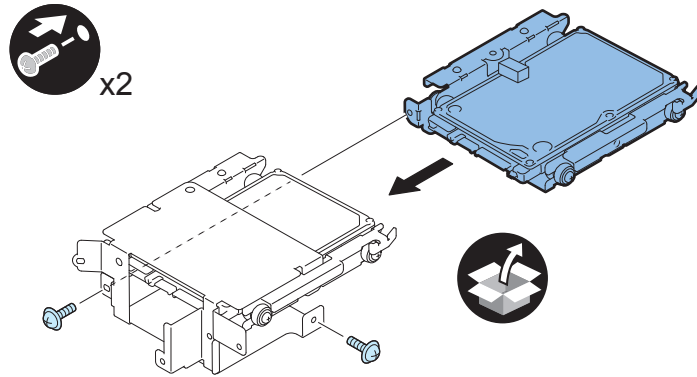


F-9-563

- 17) Install the assembled Option HDD to the removed HDD Unit.
- 2 Screws (TP; M3x6)

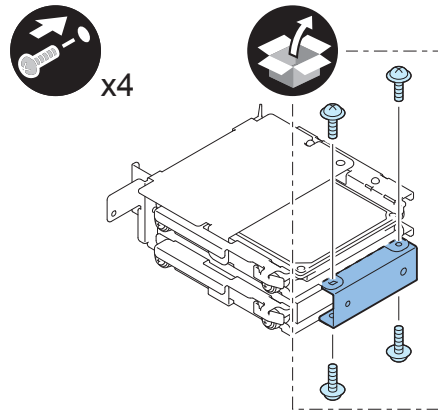
**CAUTION:**

Be sure to prevent the gasket from coming off when installing.



F-9-564

- 18) Install the enclosed HDD Connection Plate to the HDD Mirroring Kit or HDD Encryption Kit.
- 4 Screws (TP; M3x6) (enclosed with HDD Mirroring Kit or HDD Encryption Kit)

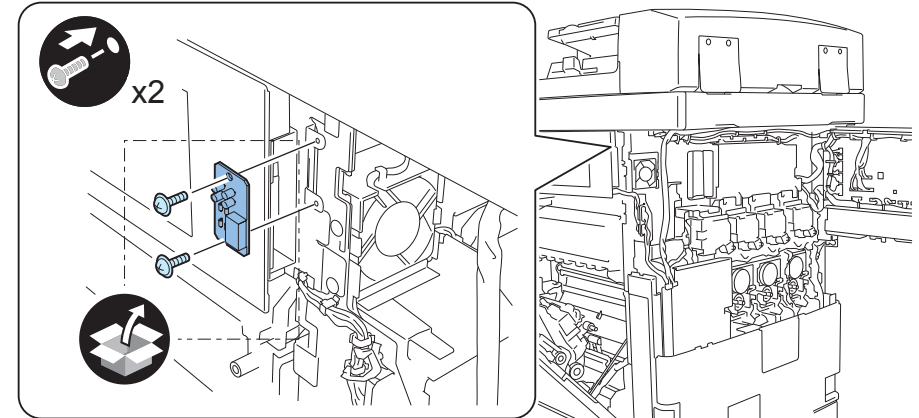


F-9-565

- 19) Install the HDD Unit to the host machine. (2 Screws)

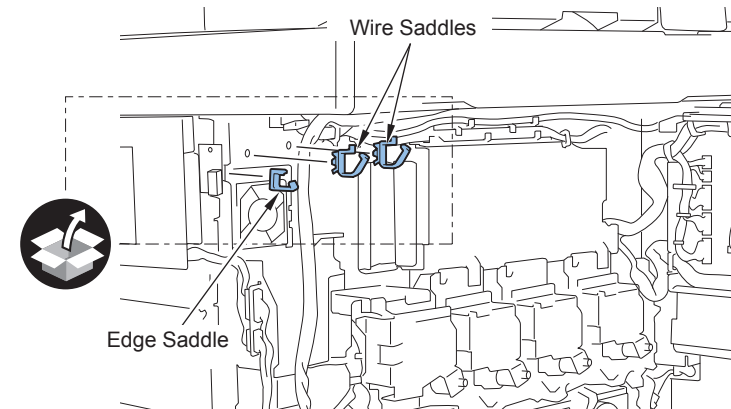
**Installing the LED Board**

- 1) Install the LED Board (small) (FK2-7400 or A: LED).
- 2 Screws (TP; M3x6)



F-9-566

- 2) Install the 2 wire saddles and the edge saddle.



F-9-567

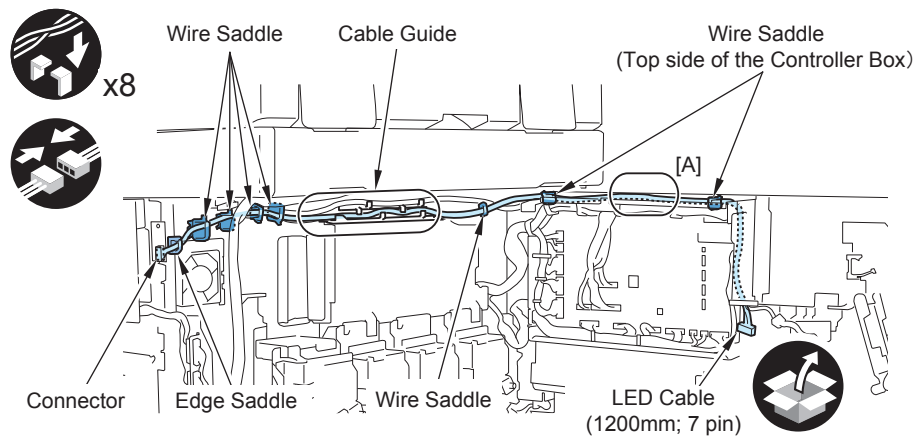


3) Connect the LED Cable (1200 mm; 7-pin) (FM4-0839 or A: LED-Sig).

- 7 Wire Saddles
- 1 Edge Saddle
- 1 Cable Guide
- 1 Connector

**CAUTION:**

- Be sure to tuck the [A] area of the LED cable under the other 2 cables running through the [A] area. This is to prevent the [A] area of the LED cable from being slacked off when closing the Controller Box.



F-9-568

## ■ Installing the Mirroring Board or Encryption Board

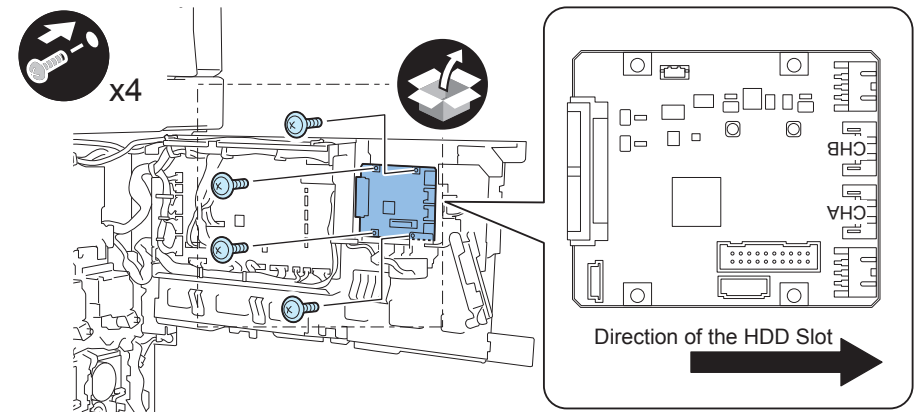


1) Install the Mirroring Board or Encryption Board so that "CHA" and "CHB" are placed in the direction of the HDD slot.

- 4 Screws (TP; M3x6)

**CAUTION:**

Be sure that the direction of installing the Mirroring Board or Encryption Board is opposite to the case when the Removable HDD is installed. If it is installed in a wrong direction, the cables do not reach the board.



F-9-569

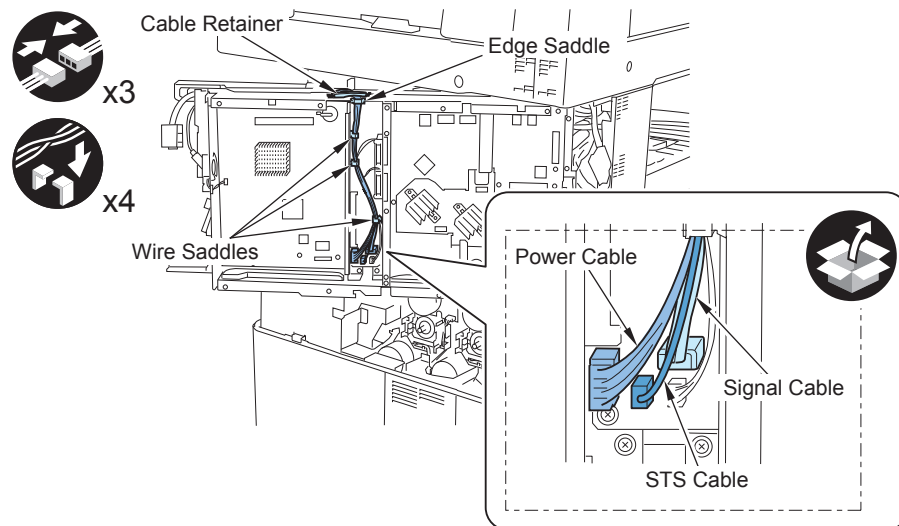


2) Connect the cables to the PCB on the backside.

- Signal Cable (450mm (Red)): FK2-8435 or A: Cont-Sig
- Power Cable (430mm): FK2-8463 or A: Cont-Pow
- STS Cable (550mm (Light blue); 5 Pin): FM4-0842 or A: STS-Sig

3) Fix the cables.

- 3 Wire Saddles
- 1 Edge Saddle
- Cable Retainer



F-9-570



4) Install the Controller Cover. (11 Screws)

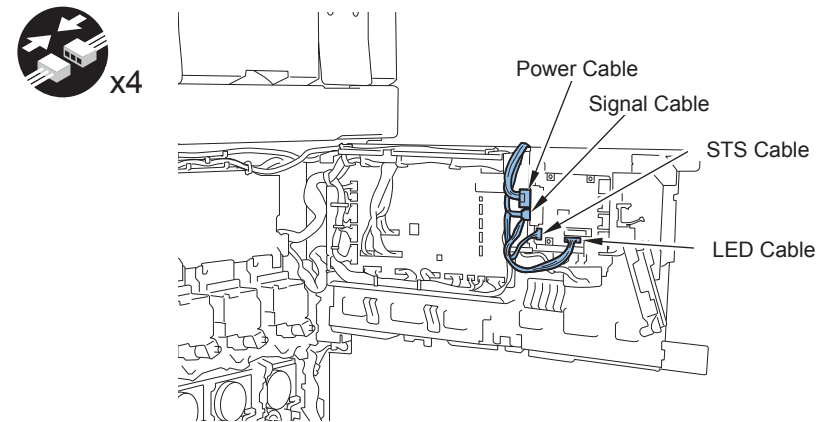


5) Connect the cables to the Mirroring Board or Encryption Board.

- Signal Cable (450mm (Red)): FK2-8435 or A: Cont-Sig
- Power Cable (430mm): FK2-8463 or A: Cont-Pow
- LED Cable (1200 mm; 7-pin): FM4-0839 or A: LED-Sig
- STS Cable (550mm (Light blue); 5 Pin): FM4-0842 or A: STS-Sig

**CAUTION:**

The machine can operate even the STS Cable and the LED Cable are not connected. Therefore, when installing the cables, be sure that they are connected properly.



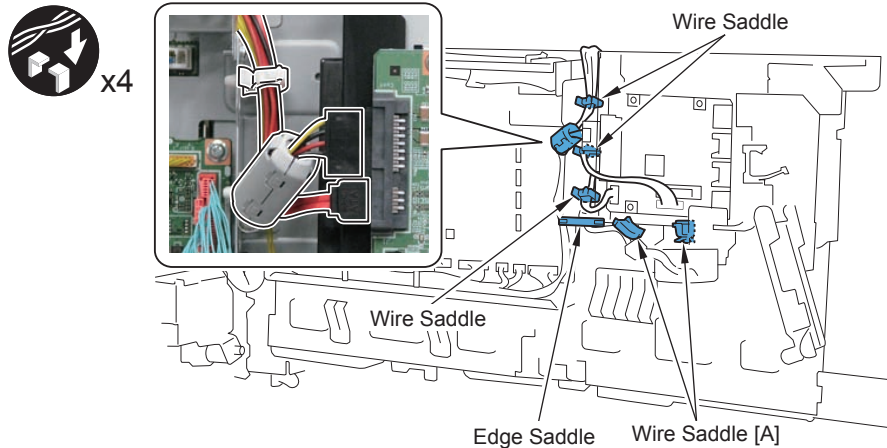
F-9-571



- 
- 6) Install the Ring Core to the Power Supply Cable as shown in the figure.
- 7) Fix the cables.
- 3 Wire Saddles

**NOTE:**

Be sure to close the unused 2 wire saddles [A] and edge saddle.

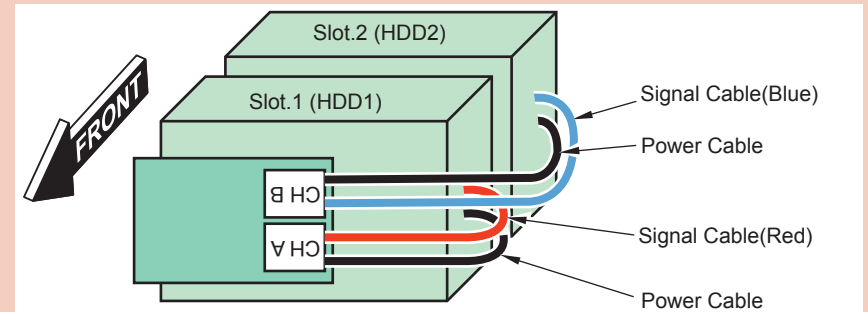


F-9-572

**CAUTION:**

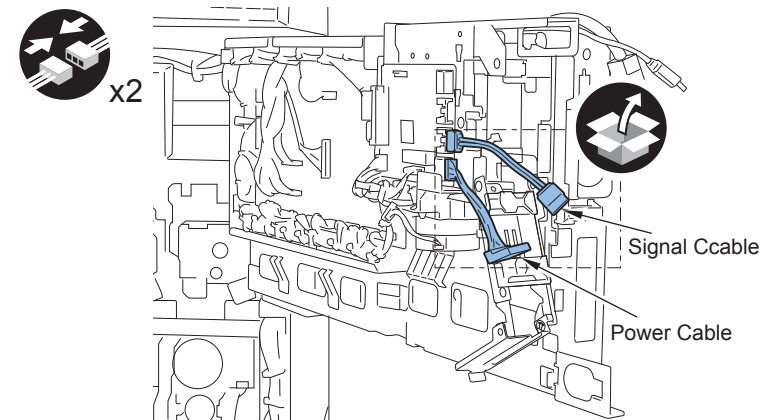
Be sure to acknowledge the following caution before performing the next procedure. Combinations of connection between the HDDs and the Mirroring Board or Encryption Board are shown below.

- Connect Slot 1 to "CHA". (Originally installed HDD)
- Connect Slot 2 to "CHB". (New HDD)



F-9-573

- 
- 8) Connect the Signal Cable (80 mm; Red) (FK2-8436 or A: HDD-Sig1) and the Power Cable (80 mm) (FK2-8461 or A: HDD-Pow1/2) to CHA on the Mirroring Board or Encryption Board.



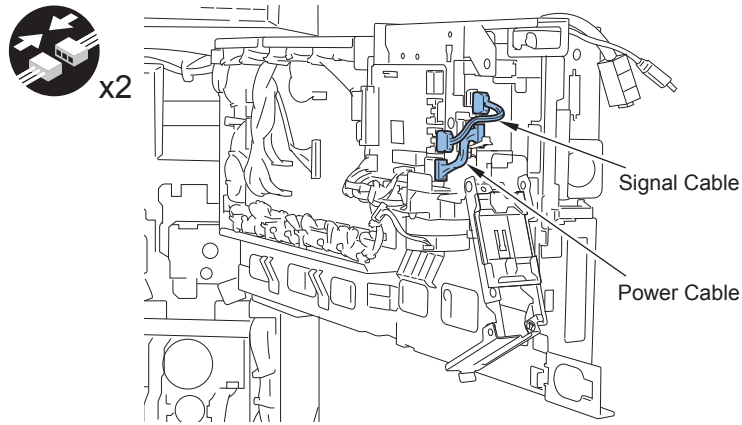
F-9-574



- 9) Connect the Signal Cable (80 mm; Red) (FK2-8436 or A: HDD-Sig1) and the Power Cable (80 mm) (FK2-8461 or A: HDD-Pow1/2) to the first HDD (Slot 1).

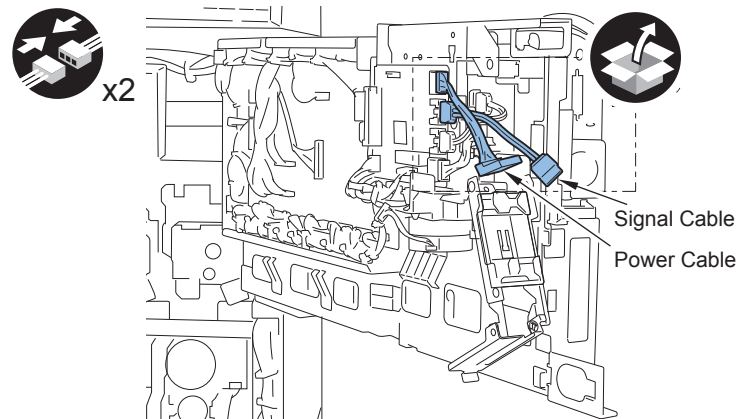
**CAUTION:**

Install the cables to correct positions.



F-9-575

- 10) Connect the Signal Cable (80 mm; Blue) (FK2-8438 or A: HDD-Sig2) and the Power Cable (80 mm) (FK2-8461 or A: HDD-Pow1/2) to CHB on the Mirroring Board or Encryption Board.

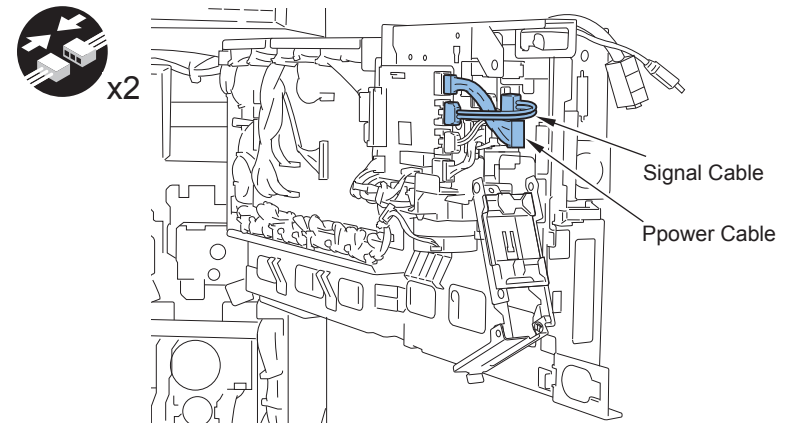


F-9-576

- 11) Connect the Signal Cable (80 mm; Blue) (FK2-8438 or A: HDD-Sig2) and the Power Cable (80 mm) (FK2-8461 or A: HDD-Pow1/2) to the second HDD (Slot 2).

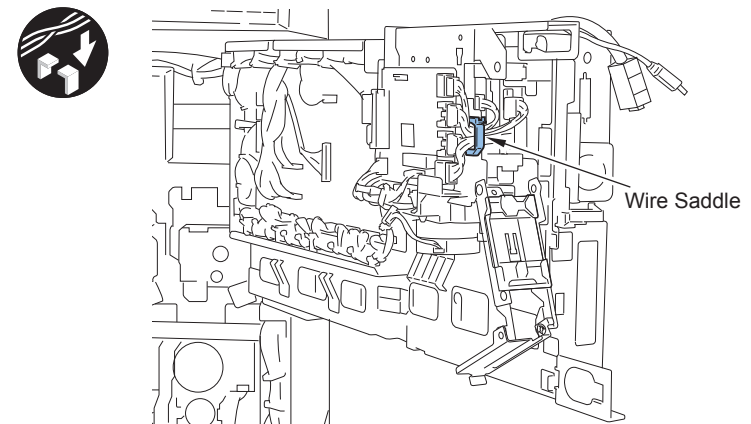
**CAUTION:**

Install the cables to correct positions.



F-9-577

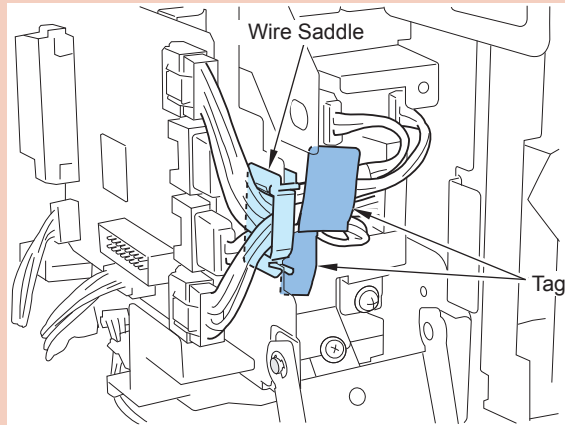
- 12) Fix the cables with the wire saddle.



F-9-578

**CAUTION:**

- Be sure to place the tags on the Power Supply Cable in the position where it is beyond the wire saddle toward the HDD side.
- If returning the Controller Box while placing the cables and tags toward the PCB side, they may interfere the fan on the host machine.



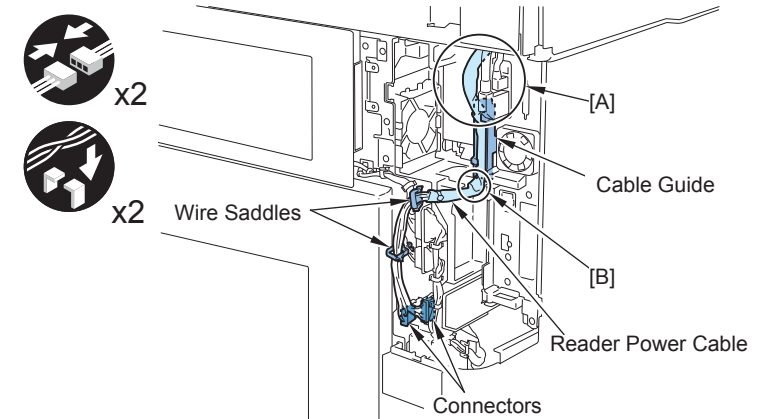
F-9-579

- 13) Close the HDD Lid. (1 Screw)
- 14) Place the Controller Box to the original position. (2 Screws or 3 Screws)
- 15) Install the removed cover and the cable.
  - Rear Cover (2 Screws, 2 Rubber Caps)
  - Left Rear Sub Cover (1 Screw)
  - Reader Communication Cable (when reader is installed)
  - Left Rear Cover (2 Screws, 2 Rubber Caps)

- 16) If Reader is installed, install the Reader Power Cable.

**NOTE:**

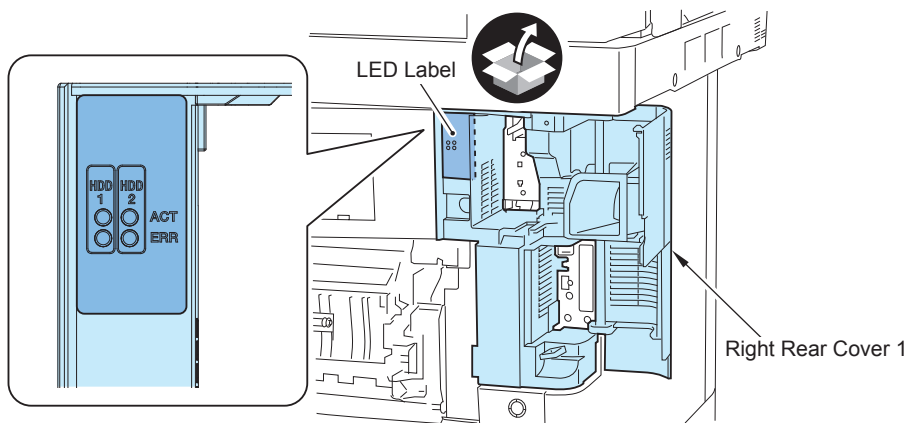
Handle the Reader Power Cable from the connector side and make a slack at [A] part. Bend the Reader Power Cable at a right angle on [B] part.



F-9-580

- 17) Install the Right Rear Cover 1. (3 Screws)

- 18) Affix the LED label so that it fits the edge of the Right Rear Cover 1.



F-9-581

- 19) Close the Right Rear Cover 1, Right Lower Cover, and Right Upper Cover.  
20) Connect the power plug of the host machine to the power outlet.

## Installing the System Software Using the SST (Only when installing HDD Data Encryption & Mirroring Kit)

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product.

It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product.

Details follow.

### 1. Requirements

- 1) PC  
Service support tool in the version that supports this host machine must be installed.
- 2) Cross Ethernet Cable

### 2. Preparing for the Installation of the System Software of Host machine

- 1) If both PC and the machine are on, turn them off.
- 2) Connect the PC and the machine using an Ethernet cable.
- 3) Turn on the PC.
- 4) Start up the machine in download mode (safe mode).

### 3. Selecting the System Software

- 1) Set the CD containing the latest system software in the PC on which the SST is used.
- 2) Start up the SST.
- 3) Click Register Firmware.
- 4) Select the drive in which the System Software CD has been set, and click search.
- 5) Click REGISTER.
- 6) Click OK.

### 4. Downloading the System Software

- 1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
- 2) When initialization is completed, the machine is automatically restarted and it enters download mode.
- 3) Select the version to be downloaded and click "Start".
- 4) When download is completed, the machine is automatically restarted.
- 5) When writing of the firmware is completed, the machine is automatically restarted.
- 6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
- 7) Terminate the SST.
- 8) Check the version of the downloaded firmware in service mode.

## Checking the Security Version (Only when installing HDD Data Encryption & Mirroring Kit)

- 1) Press the Counter key (123 key) on the control panel.
- 2) Press the [Check Device Configuration] key appearing on the control panel.
- 3) Make sure that '2.00' or '2.01' is displayed in 'Canon MFP Security Chip' as version information of the security chip.  
When several Encryption Boards are installed, multiple version information is displayed.

#### CAUTION:

The user will be able to make sure that the encryption board fitted with a security chip of the correct version with CC authentication is functioning normally by referring to the version information indicated for 'Canon MFP Security Chip'.


## Checking the Security Mark (Only when installing HDD Data Encryption & Mirroring Kit)

The user may check the security mark, appearing on the control panel when using the Host machine to make sure that an appropriate level of security is being maintained.

The mark appears when the machine is equipped with an encryption board and the board is operating correctly.

The Users Guide provides the following description in connection with the security mark:

<Confirming the Security Mark>

When the HDD Data Encryption & Mirroring Kit is operating normally, a security mark(  ) is displayed on the lower left corner of a panel screen.

## Setting the Mirroring

- 1) Insert the power plug into the socket and turn on the main power of the host machine.
- 2) Make a setting of mirroring.
  - Specify "1" under "Service Mode > COPIER > OPTION > FNC-SW > W/RAID".
- 3) Turn OFF/ON the main power of the host machine to enable the setting value.
- 4) Make sure that the UI screen is activated correctly.
- 5) Make sure that the LED blinks.
  - HDD1 (Slot 1): The green LED blinks.
  - HDD2 (Slot 2): The green and red LEDs blink.

### CAUTION:

Rebuild process starts after setting "1" for W/RAID. If an error occurs during the rebuild process at the initial installation The hard disk needs to be replaced. (Call service rep.), reexecute the process with the following procedure.

- 1) Check that the lighting red LED is HDD2.
- 2) Select Service Mode > COPIER > OPTION > FNC-SW > W/RAID, and set "0".
- 3) To enable the setting value, turn OFF/ON the Main Power Supply Switch of the host machine.
- 4) Select Service Mode > COPIER > OPTION > FNC-SW > W/RAID, and set "1".
- 5) To enable the setting value, turn OFF/ON the Main Power Supply Switch of the host machine.

The foregoing procedure is limited to the rebuild process at the initial installation.

An error during the rebuild process that is executed during operation is not included in the consideration.

## Reporting to the System Administrator at the End of the Work (Only when installing HDD Data Encryption & Mirroring Kit)

When you have completed all installation work, report to the system administrator for the following:

At the point when installation is completed, make explanations about how to check that the appropriate security function has been added and enabled so that, when the function becomes uncontrolled, the system administrator can immediately detect the problem and request <servicing work when a failure occurs>.

Completion of the Installation Work:

Ask the system administrator to make sure that '2.00' or '2.01' is indicated for 'Canon MFP Security Chip' as the version information of the security chip by referring to the description of Checking the Security Version.

Maintenance of the Security Functions:

Ask the system administrator to check the security mark to make sure that the security functions are maintained each time the machine is started up by referring to the description of Checking the Security Mark.

## Execution of Auto Adjust Gradation (Only when installing HDD Data Encryption & Mirroring Kit)

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.

Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

## [TYPE-5]

2 Option HDDs (1TB) + HDD Mirroring Kit or HDD Data Encryption &amp; Mirroring Kit

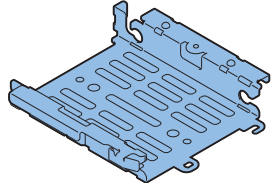
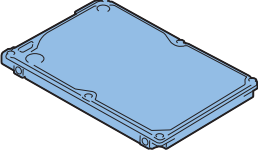
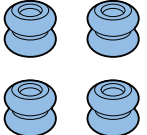
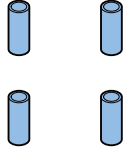
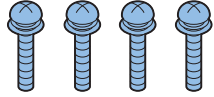

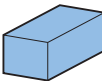
## Points to Note when HDD Data Encryption & Mirroring Kit has been Installed

A security sticker is attached to the kit package to indicate that the package has not been opened. Check to see that the package has not been opened in any way and the sticker is not torn.

If the package appears to have been opened or the sticker is torn, check to make sure that the user has done so intentionally.

## Checking the Contents

### Option HDD (1TB)


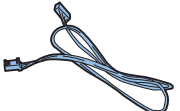

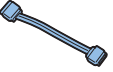

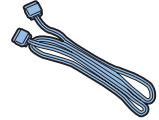





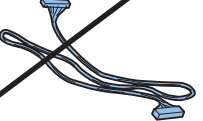
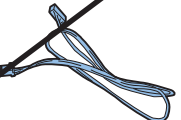
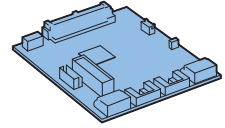
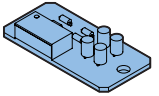
<input type="checkbox"/> [1] HDD Support Pate X 1 	<input type="checkbox"/> [2] HDD X 1 	<input type="checkbox"/> [3] Vibration-prevention Dumper X 4 
<input type="checkbox"/> [4] Spacer X 4 	<input type="checkbox"/> [5] Screw (W sems; M3x14) X 4 	<input type="checkbox"/> [6] Screw (TP;M3x6) X 2 
<input type="checkbox"/> [7] Gasket X 1 		

&lt;CD/Guides&gt;

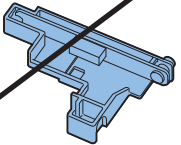
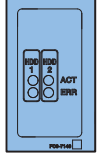

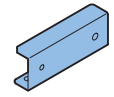
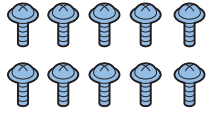

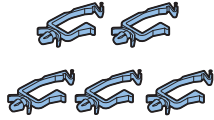
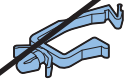

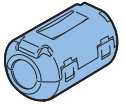
- Notice for FCC/IC

F-9-582

**HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit**

<input type="checkbox"/> [1] LED Cable (1200mm; 7 pin) X 1 FM4-0839 or A: LED-Sig 	<input type="checkbox"/> [2] STS Cable (550mm (Light blue); 5 pin) X 1 FM4-0842 or A: STS-Sig 	<input type="checkbox"/> [3] Signal Cable (80mm; Red) X 1 FK2-8436 or A: HDD-Sig1 
<input type="checkbox"/> [4] Signal Cable (80mm; Blue) X 1 FK2-8438 or A: HDD-Sig2 	<input type="checkbox"/> [5] Power Cable (80mm) X 2 FK2-8461 or A: HDD-Pow1/2 	<input type="checkbox"/> [6] Signal Cable (450mm; Red) X 1 FK2-8435 or A: Cont-Sig 
<input type="checkbox"/> [7] Power Cable (430mm) X 1 FK2-8463 or A: Cont-Pow 	<input type="checkbox"/> [8] Power Cable (430mm) X 1 FK2-8463 or A: HDD-Pow2 	<input type="checkbox"/> [9] Signal Cable (340mm (Red); ) X 1 FK2-8434 or A: HDD-Sig1 
<input type="checkbox"/> [10] Signal Cable (370mm (Blue); ) X 1 FK2-8441 or A: HDD-Sig2 	<input type="checkbox"/> [11] Power Cable (320mm) X 1 FK2-8467 or A: HDD-Pow1 	<input type="checkbox"/> [12] LED Cable (290mm; 7 pin) X 1 FM4-0840 or A: LED-Sig 
<input type="checkbox"/> [13] STS Cable (420mm (Light blue); 5 pin) X 1 FM4-0843 or A: STS-Sig 	<input type="checkbox"/> [14] Mirroring Board or Encryption Board X 1 	<input type="checkbox"/> [15] LED Board (Small) X 1 FK2-7400 or A: LED 

F-9-583

<input type="checkbox"/> [16] LED Board (large) X 1 FK2-8324 or A: LED 	<input type="checkbox"/> [17] LED Label (Small) X 1 	<input type="checkbox"/> [18] LED Label (large) X 1 
<input type="checkbox"/> [19] HDD Connection Plate X 1 	<input type="checkbox"/> [20] Screw (TP; M3x6) X 10 	<input type="checkbox"/> [21] Edge Saddle X 1 
<input type="checkbox"/> [22] Wire saddle (Small) X 5 Use 2 of them 	<input type="checkbox"/> [23] Wire saddle (large) X 1 	<input type="checkbox"/> [24] Wire saddle (Middle) X 1 
<input type="checkbox"/> [25] Ring Core X 1 		

F-9-584

< CD/Guides of HDD Mirroring Kit >

- HDD Mirroring Kit-D1 User Documentation
- Notice for FCC/IC
- China RoHS Notice 3

< CD/Guides of HDD Data Encryption & Mirroring Kit >

- HDD Data Encryption & Mirroring Kit-C1 User Documentation
- HDD Data Encryption Kit Notice
- Installation Procedure
- Noticed for FCC/IC

## Setting Before Turning OFF the Power

### CAUTION:

Be sure to turn OFF the main power after executing this service mode setting.

Turning OFF the main power without executing service mode causes "E602-5001 (procedure error before installing the HDD Encryption Board)" to occur when turning ON the main power after installing the Encryption Board.

When this error occurs, the machine needs to be returned again to the initial state in which no Encryption Board is installed.



- 1) Execute the following service mode (level 1).
  - COPIER > FUNCTION > INSTALL > HD-CRYP

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

- 1) Turning off the Main Power Supply Switch of the Host Machine.
- 2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

## Installation Procedure

### Assembling the Option HDD

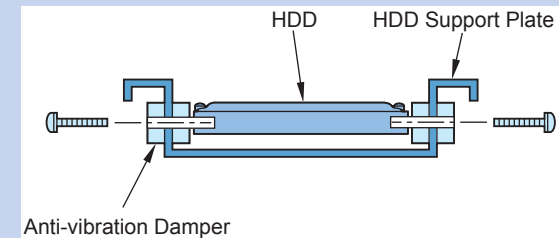


1) Assemble the option HDD (1TB).

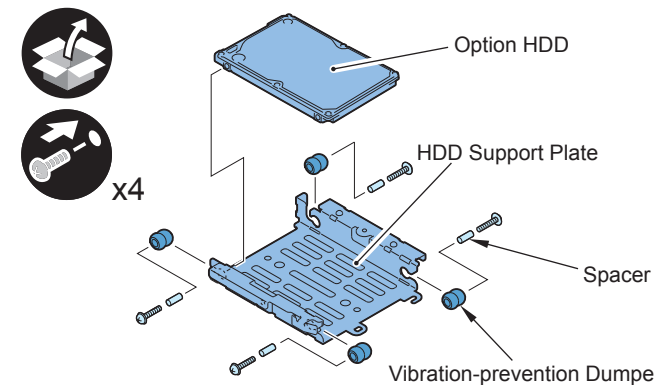
- 1 Option HDD
- 1 HDD Support Plate
- 4 Dust-prevention Dumpers
- 4 Spacers
- 4 Screws (W sems; M3x14)

### NOTE:

When tightening the screen, be sure to align the screw holes by lifting the HDD.



F-9-585

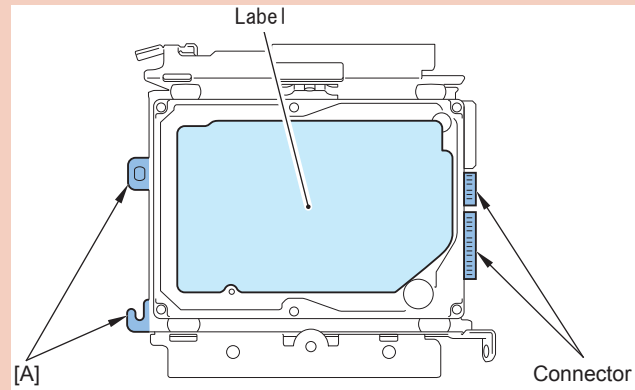


F-9-586



**CAUTION:**

- Assembling the option HDD, be careful of the installation direction.
- Make sure that the label on the option HDD is facing up.
- Make sure that [A] part of HDD Support Plate is placed at the opposite side of connector.



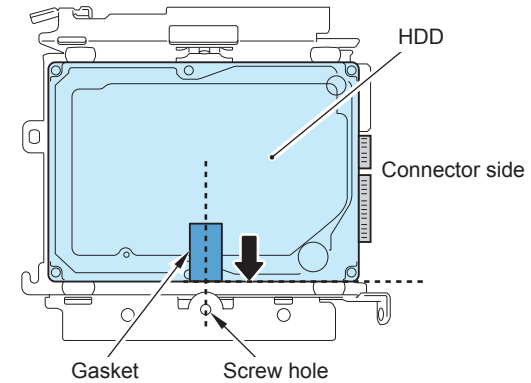
F-9-587



2) Affix the gasket to the place shown in the figure below.

**CAUTION:**

Be sure to place the gasket in contact with the label-free metal surface of the HDD surface.



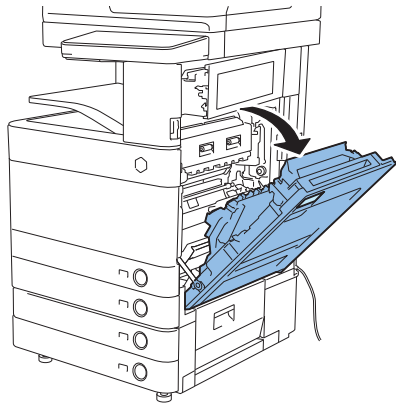
F-9-588



3) Assemble the other Option HDD (1TB) in the same way.

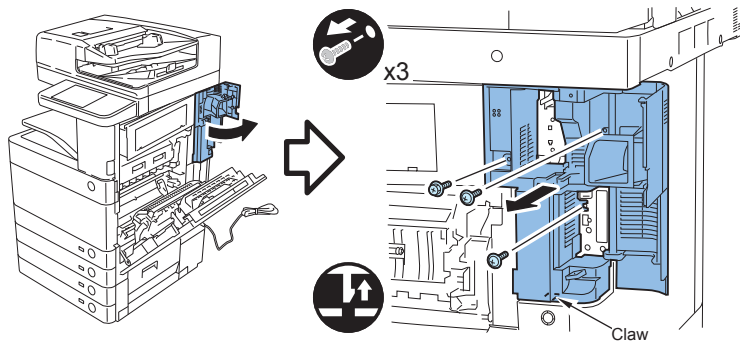
## Removing and Installing the HDD Unit

- 1) Open the Right Lower Cover. (Open the Right Upper Cover simultaneously.)



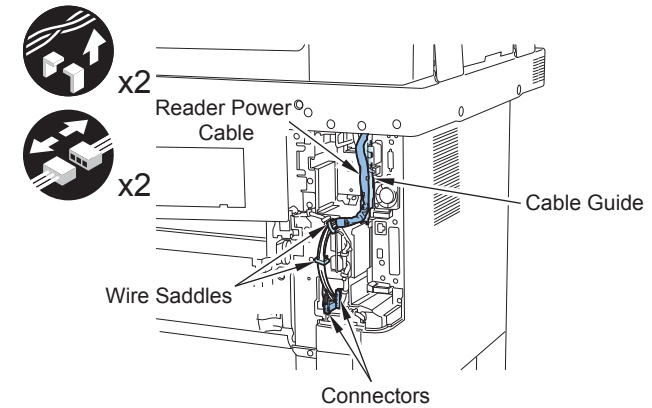
F-9-589

- 2) Open the Right Rear Cover 1.  
3) Remove the Right Rear Cover 1.
- 1 Screw (RS tight; M4)
  - 2 Screws (TP; M3)
  - 1 Claw



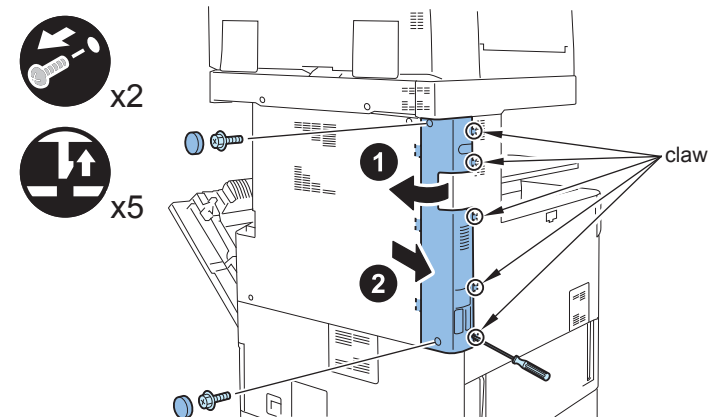
F-9-590

- 4) When the Reader is installed, remove the Reader Power Cable.
- 2 Connectors
  - 2 Wire Saddles
  - 1 Cable Guide



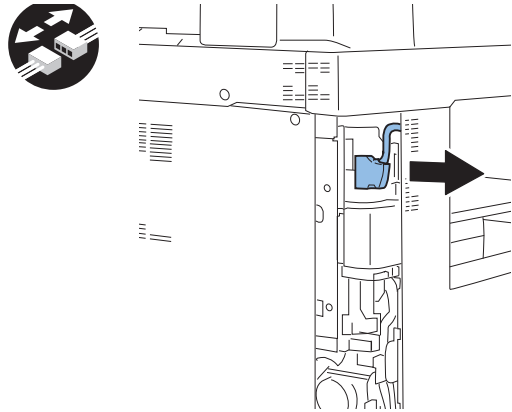
F-9-591

- 5) Remove the Left Rear Cover.
- 2 Rubber Caps
  - 2 Screws
  - 5 Claws



F-9-592

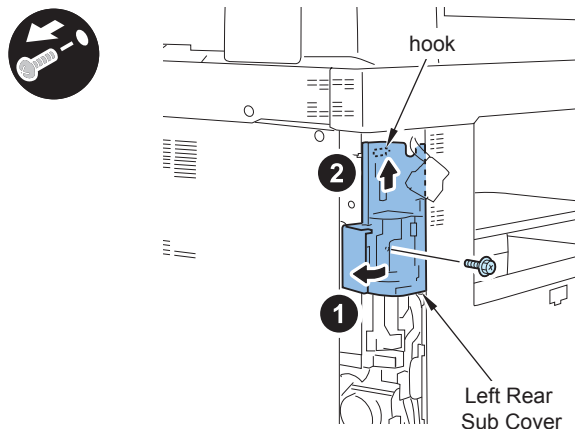
- 6) When the Reader is installed, remove the Reader Communication Cable.



F-9-593

- 7) Remove the Left Rear Sub Cover.

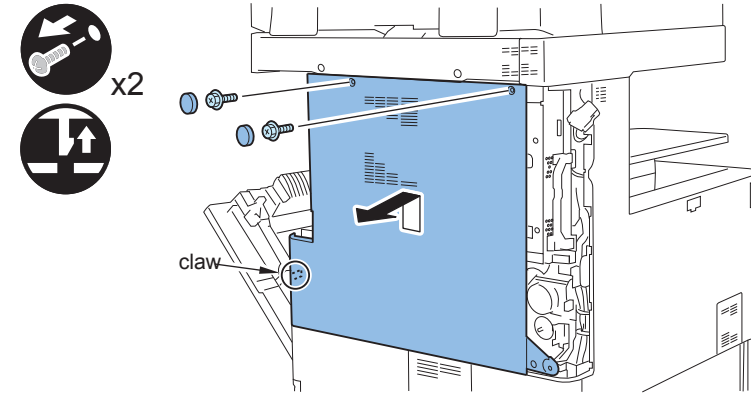
- 1 Screw
- 1 Hook



F-9-594

- 8) Remove the Rear Cover.

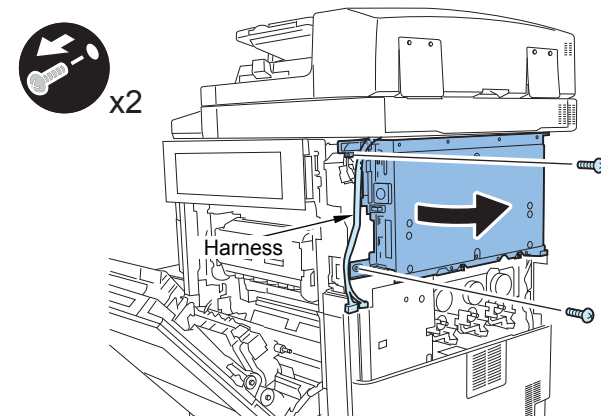
- 2 Rubber Caps
- 2 Screws
- 1 Claw



F-9-595

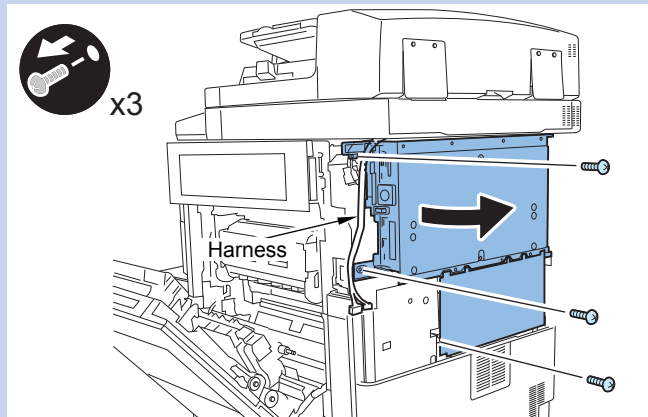
- 9) Open the Controller Box while avoiding the harness.

- 2 Screws



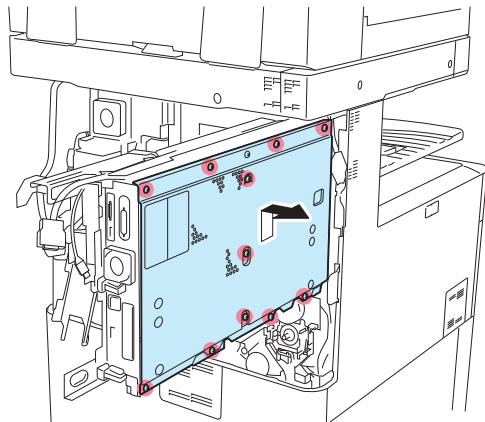
F-9-596

**NOTE:**  
If the FAX Unit has been installed, remove the 3 screws and open the Controller Box with the FAX Unit.



F-9-597

- 10) Remove the Controller Cover.
- 11 Screws (loosen)

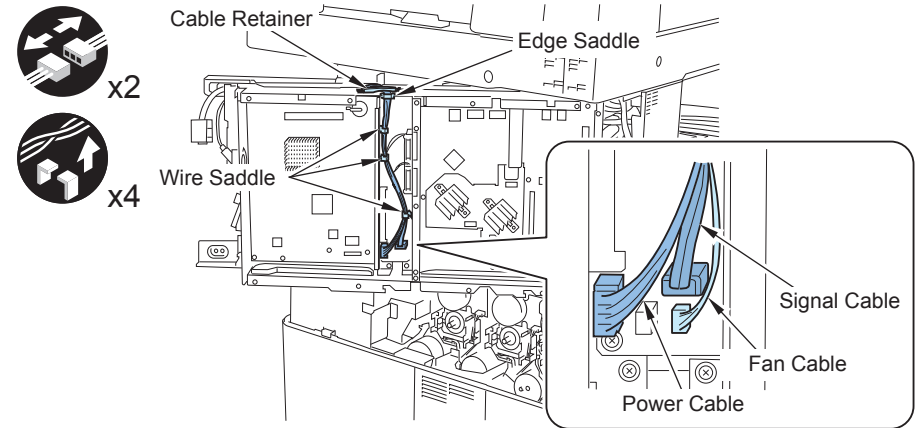


F-9-598

- 11) Remove the Signal Cable and the Power Cable.

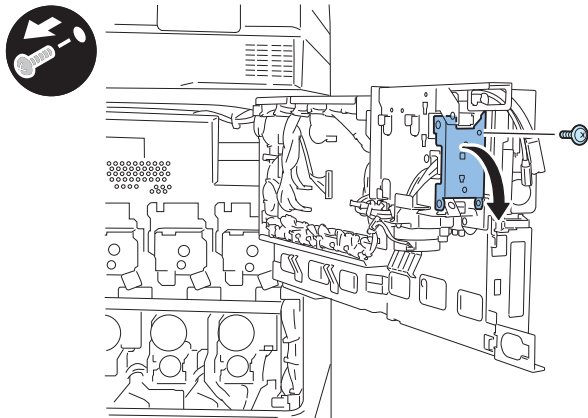
**CAUTION:**  
Do not remove the Fan Cable.

- 1 Edge Saddle
- 3 Wire Saddles
- 1 Cable Retainer



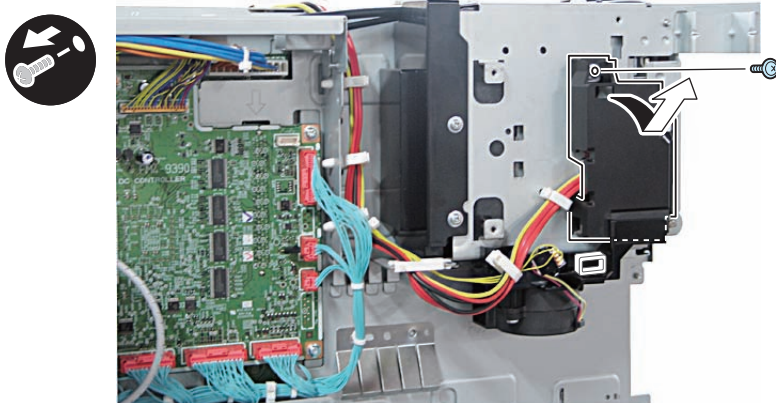
F-9-599

- 12) Open the HDD Lid.  
 • 1 Screw (Removed screw will not be used.)



F-9-600

- 13) When the Cable Cover is installed, remove it. (Removed Cable Cover and screw will not be used.)  
 • 1 Screw

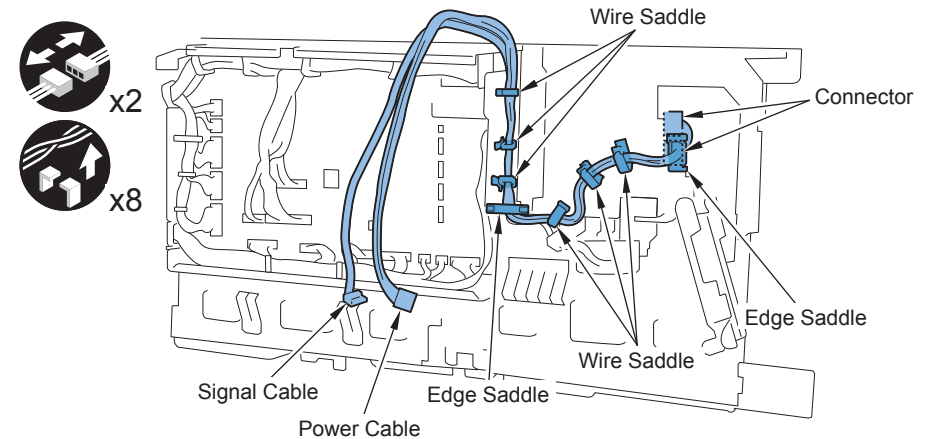


F-9-601

- 14) Remove the Signal Cable and the Power Cable. (Removed Signal Cable and Power Cable will not be used.)

<When the Cable Cover is removed>

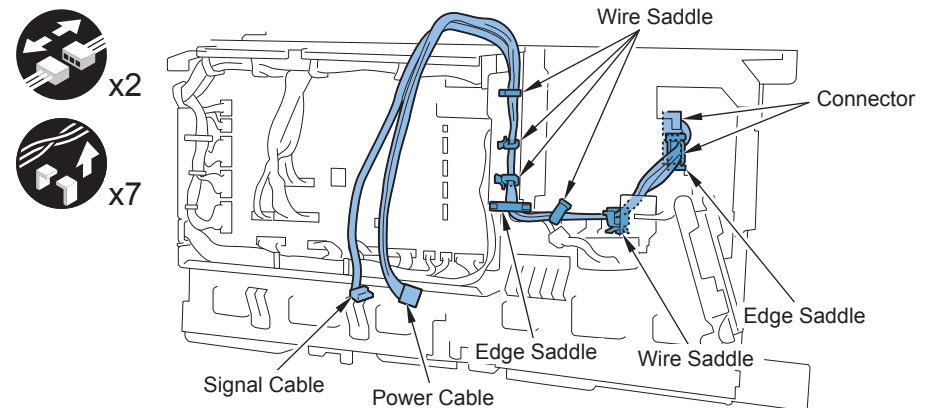
- 2 Edge Saddles
- 6 Wire Saddles
- 2 Connectors



F-9-602

<When the Cable Cover is not removed>

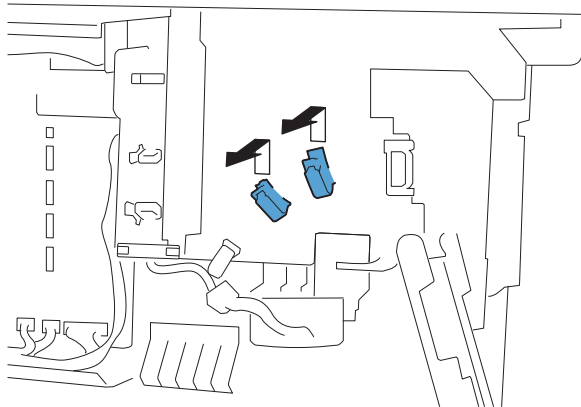
- 2 Edge Saddles
- 5 Wire Saddles
- 2 Connectors



F-9-603

<When the Cable Cover is removed>

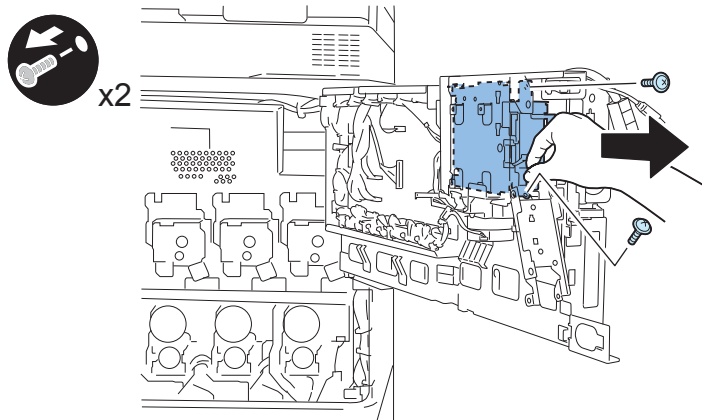
- 15) Remove the 2 Wire Saddles. (Removed wire saddles will not be used.)



F-9-604

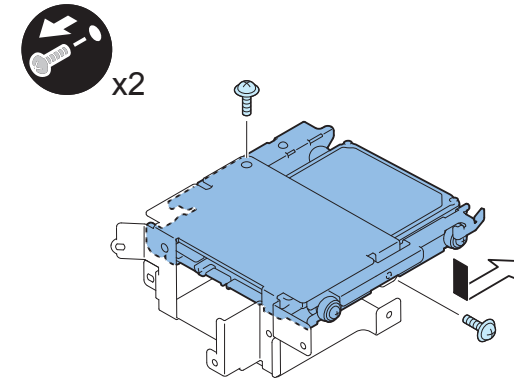
- 16) Remove the HDD Unit by holding it as shown in the figure below.

- 2 Screws



F-9-605

- 17) Remove the HDD (160GB) installed as standard from the removed HDD Unit. (Removed HDD (160GB) will not be used.)
- 2 Screws (Removed screw will be used in step 18.)



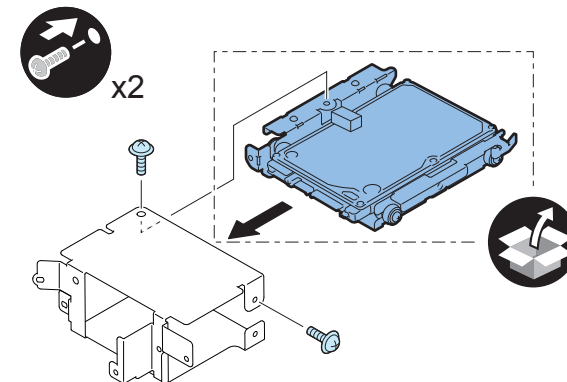
F-9-606

- 18) Install the Option HDD (1TB).

- 2 Screws (The screw removed in step 17.)

**CAUTION:**

Be sure to prevent the gasket from coming off when installing.

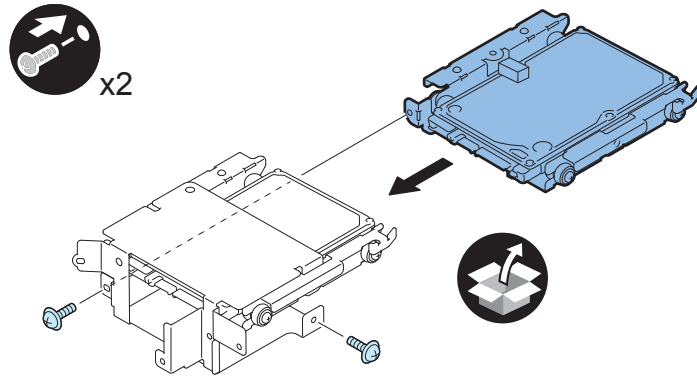


F-9-607

- 19) Install the other Option HDD (1TB).
- 2 Screws (TP; M3x6) (enclosed with option HDD)

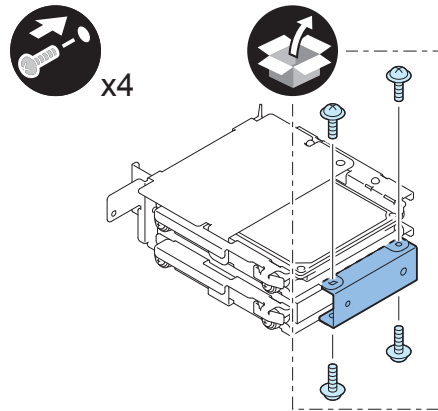
**CAUTION:**

Be sure to prevent the gasket from coming off when installing.



F-9-608

- 20) Install the enclosed HDD Connection Plate to the HDD Mirroring Kit or HDD Encryption Kit.
- 4 Screws (TP; M3x6) (enclosed with HDD Mirroring Kit or HDD Encryption Kit)

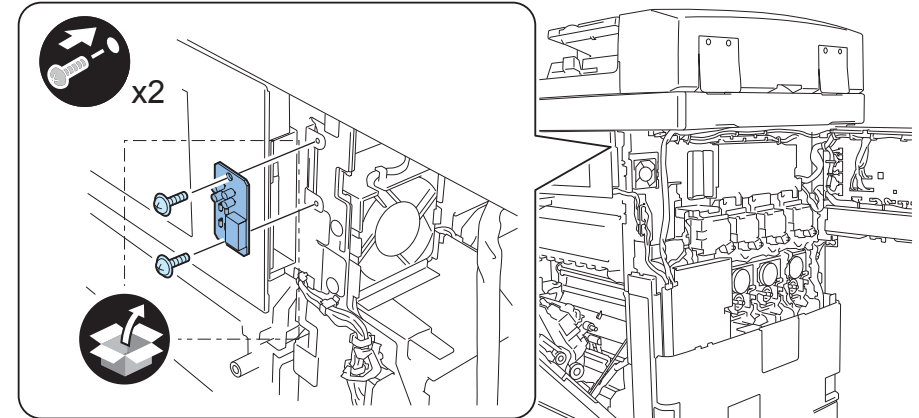


F-9-609

- 21) Install the HDD Unit to the host machine. (2 Screws)

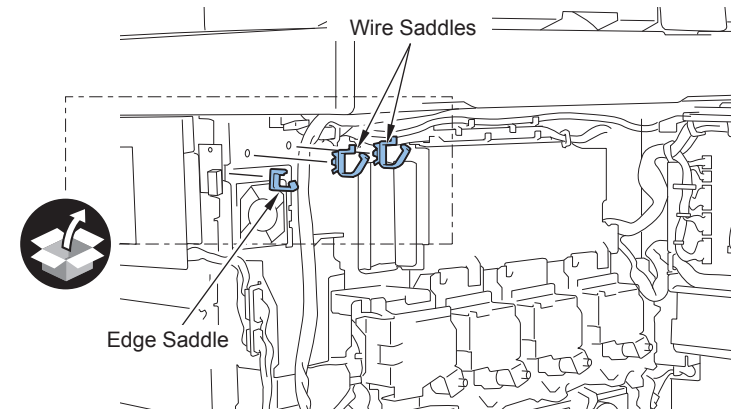
**Installing the LED Board**

- 1) Install the LED Board (small) (FK2-7400 or A: LED).
- 2 Screws (TP; M3x6)



F-9-610

- 2) Install the 2 wire saddles and the edge saddle.



F-9-611



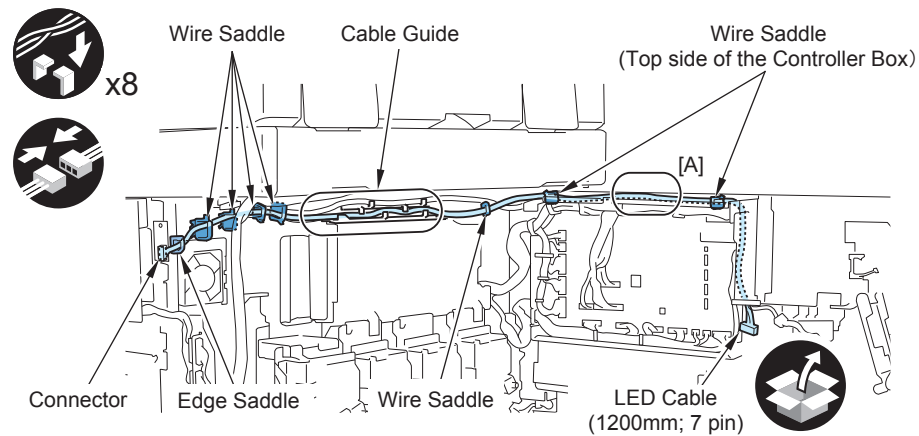


3) Connect the LED Cable (1200 mm; 7-pin) (FM4-0839 or A: LED-Sig).

- 7 Wire Saddles
- 1 Edge Saddle
- 1 Cable Guide
- 1 Connector

**CAUTION:**

- Be sure to tuck the [A] area of the LED cable under the other 2 cables running through the [A] area. This is to prevent the [A] area of the LED cable from being slacked off when closing the Controller Box.



F-9-612

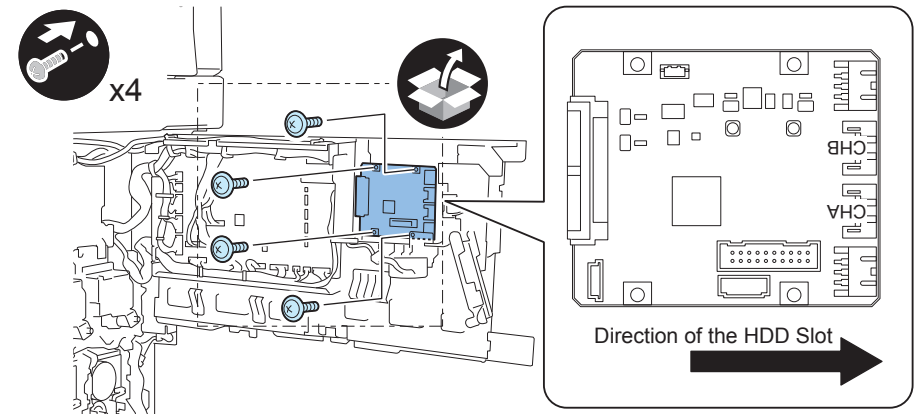
## ■ Installing the Mirroring Board or Encryption Board



- 1) Install the Mirroring Board or Encryption Board so that "CHA" and "CHB" are placed in the direction of the HDD slot.
  - 4 Screws (TP; M3x6)

**CAUTION:**

- Be sure that the direction of installing the Mirroring Board or Encryption Board is opposite to the case when the Removable HDD is installed. If it is installed in a wrong direction, the cables do not reach the board.



F-9-613

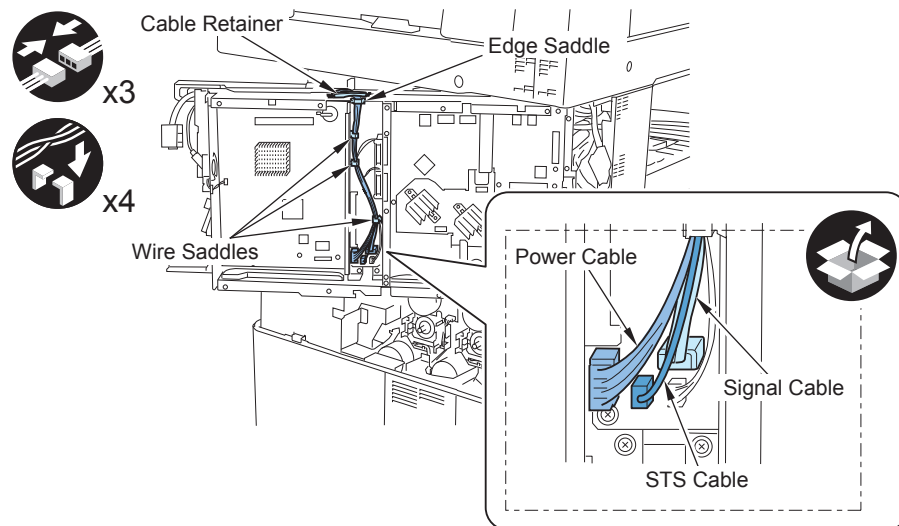


2) Connect the cables to the PCB on the backside.

- Signal Cable (450mm (Red)): FK2-8435 or A: Cont-Sig
- Power Cable (430mm): FK2-8463 or A: Cont-Pow
- STS Cable (550mm (Light blue); 5 Pin): FM4-0842 or A: STS-Sig

3) Fix the cables.

- 3 Wire Saddles
- 1 Edge Saddle
- Cable Retainer



F-9-614



4) Install the Controller Cover. (11 Screws)

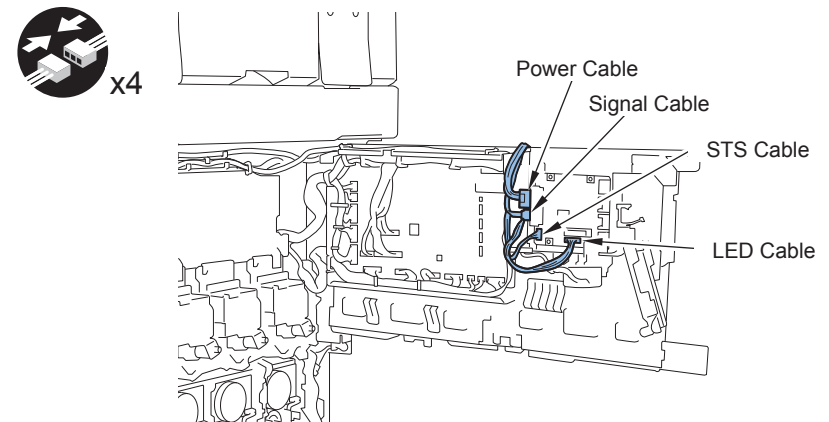


5) Connect the cables to the Mirroring Board or Encryption Board.

- Signal Cable (450mm (Red)): FK2-8435 or A: Cont-Sig
- Power Cable (430mm): FK2-8463 or A: Cont-Pow
- LED Cable (1200 mm; 7-pin): FM4-0839 or A: LED-Sig
- STS Cable (550mm (Light blue); 5 Pin): FM4-0842 or A: STS-Sig

**CAUTION:**

The machine can operate even the STS Cable and the LED Cable are not connected. Therefore, when installing the cables, be sure that they are connected properly.

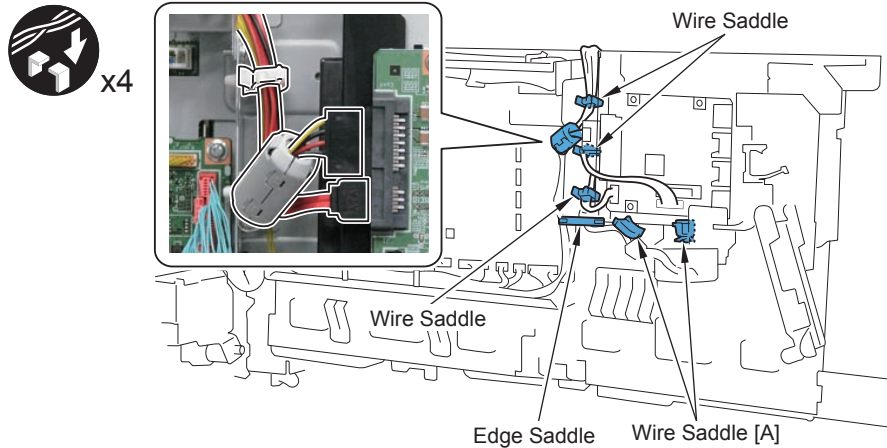


F-9-615

- 
- 6) Install the Ring Core to the Power Supply Cable as shown in the figure.
  - 7) Fix the cables.
    - 3 Wire Saddles

**NOTE:**

Be sure to close the unused 2 wire saddles [A] and edge saddle.

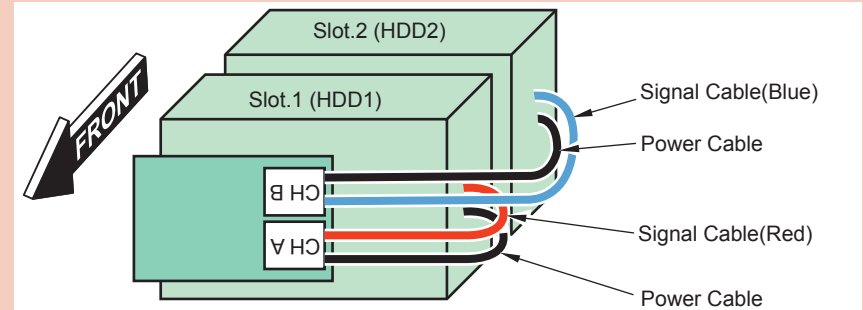


F-9-616

**CAUTION:**

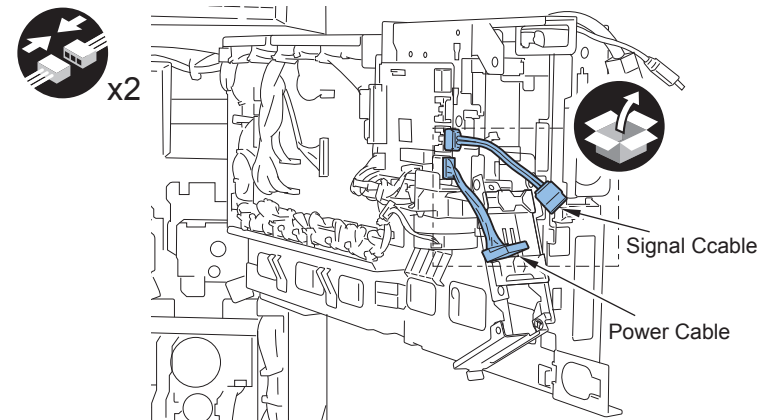
Be sure to acknowledge the following caution before performing the next procedure. Combinations of connection between the HDDs and the Mirroring Board or Encryption Board are shown below.

- Connect Slot 1 to "CHA". (Originally installed HDD)
- Connect Slot 2 to "CHB". (New HDD)



F-9-617

- 
- 8) Connect the Signal Cable (80 mm; Red) (FK2-8436 or A: HDD-Sig1) and the Power Cable (80 mm) (FK2-8461 or A: HDD-Pow1/2) to CHA on the Mirroring Board or Encryption Board.

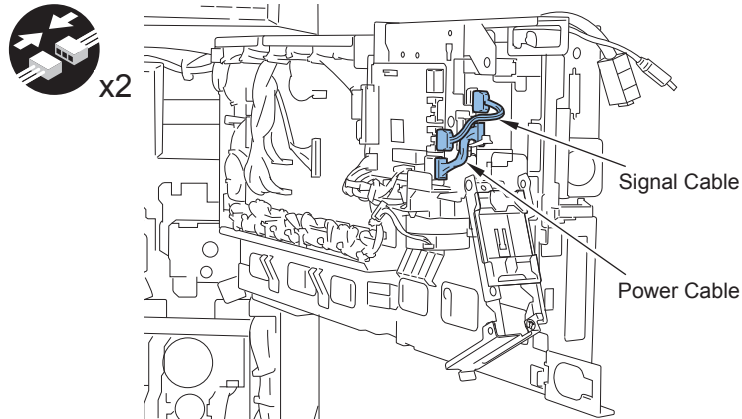


F-9-618

- 9) Connect the Signal Cable (80 mm; Red) (FK2-8436 or A: HDD-Sig1) and the Power Cable (80 mm) (FK2-8461 or A: HDD-Pow1/2) to the first HDD (Slot 1).

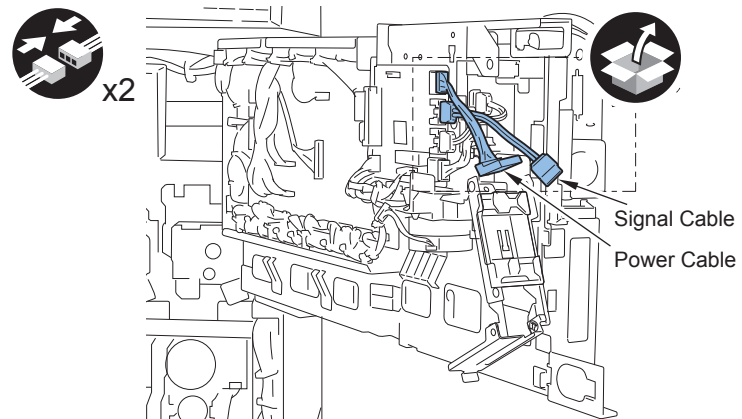
## CAUTION:

Install the cables to correct positions.



F-9-619

- 10) Connect the Signal Cable (80 mm; Blue) (FK2-8438 or A: HDD-Sig2) and the Power Cable (80 mm) (FK2-8461 or A: HDD-Pow1/2) to CHB on the Mirroring Board or Encryption Board.

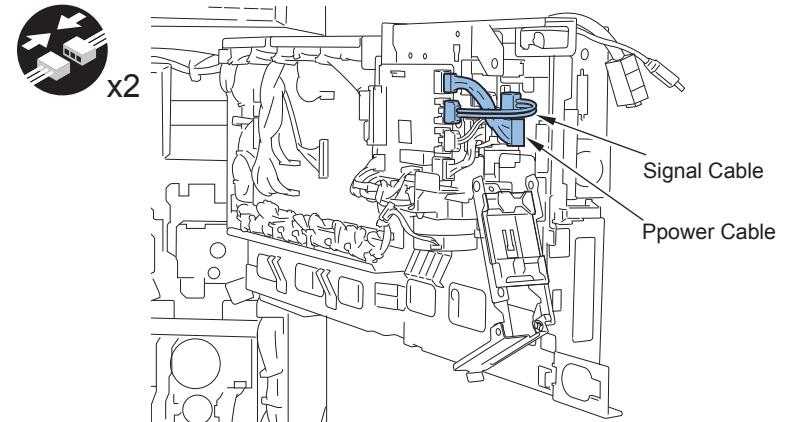


F-9-620

- 11) Connect the Signal Cable (80 mm; Blue) (FK2-8438 or A: HDD-Sig2) and the Power Cable (80 mm) (FK2-8461 or A: HDD-Pow1/2) to the second HDD (Slot 2).

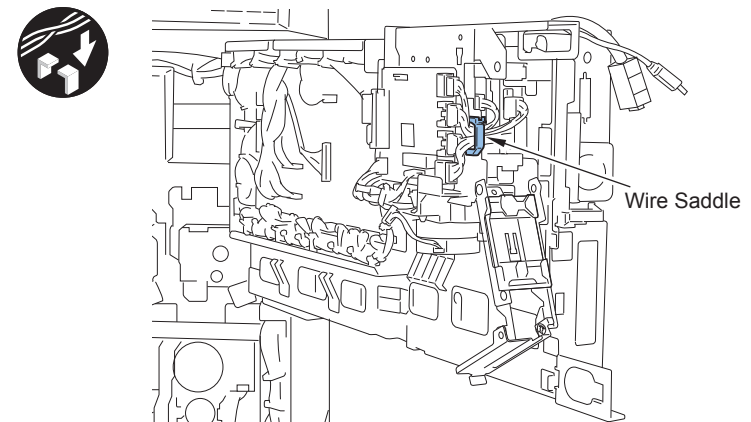
## CAUTION:

Install the cables to correct positions.



F-9-621

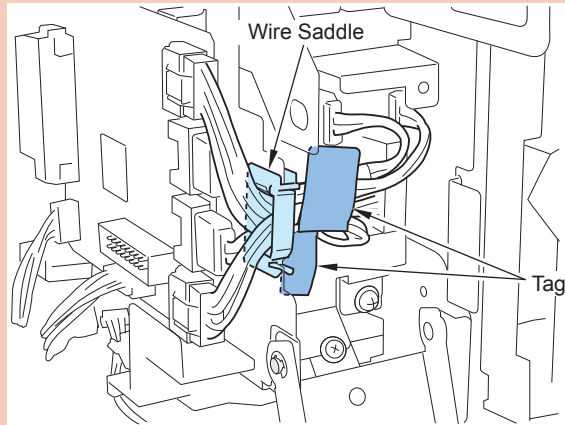
- 12) Fix the cables with the wire saddle.



F-9-622

**CAUTION:**

- Be sure to place the tags on the Power Supply Cable in the position where it is beyond the wire saddle toward the HDD side.
- If returning the Controller Box while placing the cables and tags toward the PCB side, they may interfere the fan on the host machine.



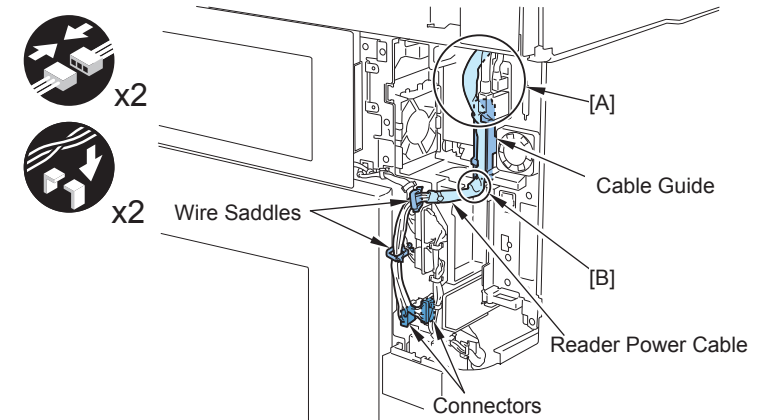
F-9-623

- 13) Close the HDD Lid. (1 Screw)
- 14) Place the Controller Box to the original position. (2 Screws or 3 Screws)
- 15) Install the removed cover and the cable.
  - Rear Cover (2 Screws, 2 Rubber Caps)
  - Left Rear Sub Cover (1 Screw)
  - Reader Communication Cable (when reader is installed)
  - Left Rear Cover (2 Screws, 2 Rubber Caps)

- 16) If Reader is installed, install the Reader Power Cable.

**NOTE:**

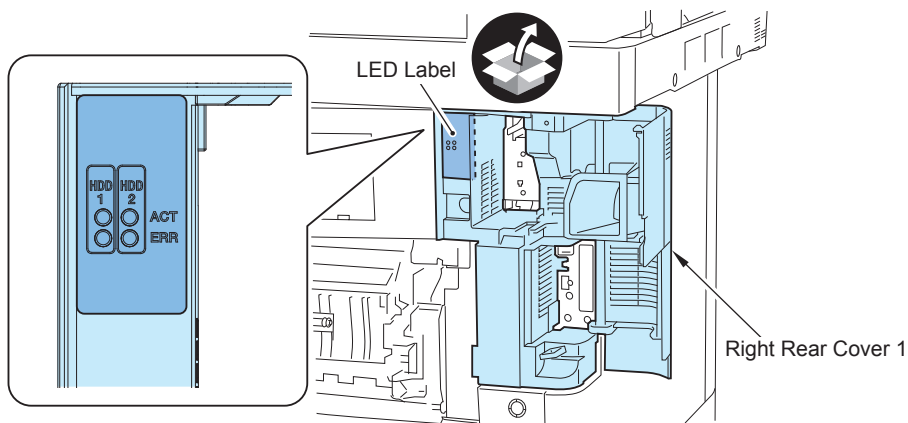
Handle the Reader Power Cable from the connector side and make a slack at [A] part. Bend the Reader Power Cable at a right angle on [B] part.



F-9-624

- 17) Install the Right Rear Cover 1. (3 Screws)

- 18) Affix the LED label so that it fits the edge of the Right Rear Cover 1.



F-9-625

- 19) Close the Right Rear Cover 1, Right Lower Cover, and Right Upper Cover.  
20) Connect the power plug of the host machine to the power outlet.

## Installing the System Software Using the SST

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product.

It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product.

Details follow.

### 1. Requirements

- 1) PC  
Service support tool in the version that supports this host machine must be installed.
- 2) Cross Ethernet Cable

### 2. Preparing for the Installation of the System Software of Host machine

- 1) If both PC and the machine are on, turn them off.
- 2) Connect the PC and the machine using an Ethernet cable.
- 3) Turn on the PC.
- 4) Start up the machine in download mode (safe mode).

### 3. Selecting the System Software

- 1) Set the CD containing the latest system software in the PC on which the SST is used.
- 2) Start up the SST.
- 3) Click Register Firmware.
- 4) Select the drive in which the System Software CD has been set, and click search.
- 5) Click REGISTER.
- 6) Click OK.

### 4. Downloading the System Software

- 1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
- 2) When initialization is completed, the machine is automatically restarted and it enters download mode.
- 3) Select the version to be downloaded and click "Start".
- 4) When download is completed, the machine is automatically restarted.
- 5) When writing of the firmware is completed, the machine is automatically restarted.
- 6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
- 7) Terminate the SST.
- 8) Check the version of the downloaded firmware in service mode.

## Checking the Security Version (Only when installing HDD Data Encryption & Mirroring Kit)

- 1) Press the Counter key (123 key) on the control panel.
- 2) Press the [Check Device Configuration] key appearing on the control panel.
- 3) Make sure that '2.00' or '2.01' is displayed in 'Canon MFP Security Chip' as version information of the security chip.  
When several Encryption Boards are installed, multiple version information is displayed.

#### CAUTION:

The user will be able to make sure that the encryption board fitted with a security chip of the correct version with CC authentication is functioning normally by referring to the version information indicated for 'Canon MFP Security Chip'.


## Checking the Security Mark (Only when installing HDD Data Encryption & Mirroring Kit)

The user may check the security mark, appearing on the control panel when using the Host machine to make sure that an appropriate level of security is being maintained.

The mark appears when the machine is equipped with an encryption board and the board is operating correctly.

The Users Guide provides the following description in connection with the security mark:

<Confirming the Security Mark>

When the HDD Data Encryption & Mirroring Kit is operating normally, a security mark(  ) is displayed on the lower left corner of a panel screen.

## Setting the Mirroring

- 1) Insert the power plug into the socket and turn on the main power of the host machine.
- 2) Make a setting of mirroring.
  - Specify "1" under "Service Mode > COPIER > OPTION > FNC-SW > W/RAID".
- 3) Turn OFF/ON the main power of the host machine to enable the setting value.
- 4) Make sure that the UI screen is activated correctly.
- 5) Make sure that the LED blinks.
  - HDD1 (Slot 1): The green LED blinks.
  - HDD2 (Slot 2): The green and red LEDs blink.

### CAUTION:

Rebuild process starts after setting "1" for W/RAID. If an error occurs during the rebuild process at the initial installation The hard disk needs to be replaced. (Call service rep.), reexecute the process with the following procedure.

- 1) Check that the lighting red LED is HDD2.
- 2) Select Service Mode > COPIER > OPTION > FNC-SW > W/RAID, and set "0".
- 3) To enable the setting value, turn OFF/ON the Main Power Supply Switch of the host machine.
- 4) Select Service Mode > COPIER > OPTION > FNC-SW > W/RAID, and set "1".
- 5) To enable the setting value, turn OFF/ON the Main Power Supply Switch of the host machine.

The foregoing procedure is limited to the rebuild process at the initial installation.

An error during the rebuild process that is executed during operation is not included in the consideration.

## Reporting to the System Administrator at the End of the Work (Only when installing HDD Data Encryption & Mirroring Kit)

When you have completed all installation work, report to the system administrator for the following:

At the point when installation is completed, make explanations about how to check that the appropriate security function has been added and enabled so that, when the function becomes uncontrolled, the system administrator can immediately detect the problem and request <servicing work when a failure occurs>.

Completion of the Installation Work:

Ask the system administrator to make sure that '2.00' or '2.01' is indicated for 'Canon MFP Security Chip' as the version information of the security chip by referring to the description of Checking the Security Version.

Maintenance of the Security Functions:

Ask the system administrator to check the security mark to make sure that the security functions are maintained each time the machine is started up by referring to the description of Checking the Security Mark.

## Execution of Auto Adjust Gradation

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.

Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.



## [TYPE-6]

Standard HDD + HDD Data Encryption &amp; Mirroring Kit


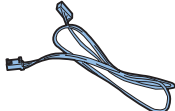
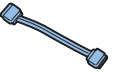
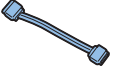

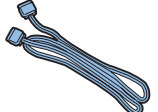



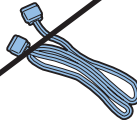

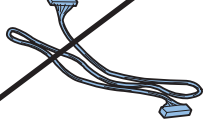
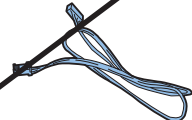
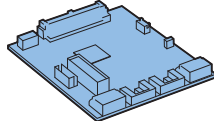
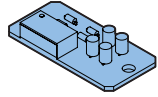
## Points to Note when HDD Data Encryption & Mirroring Kit has been Installed

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.

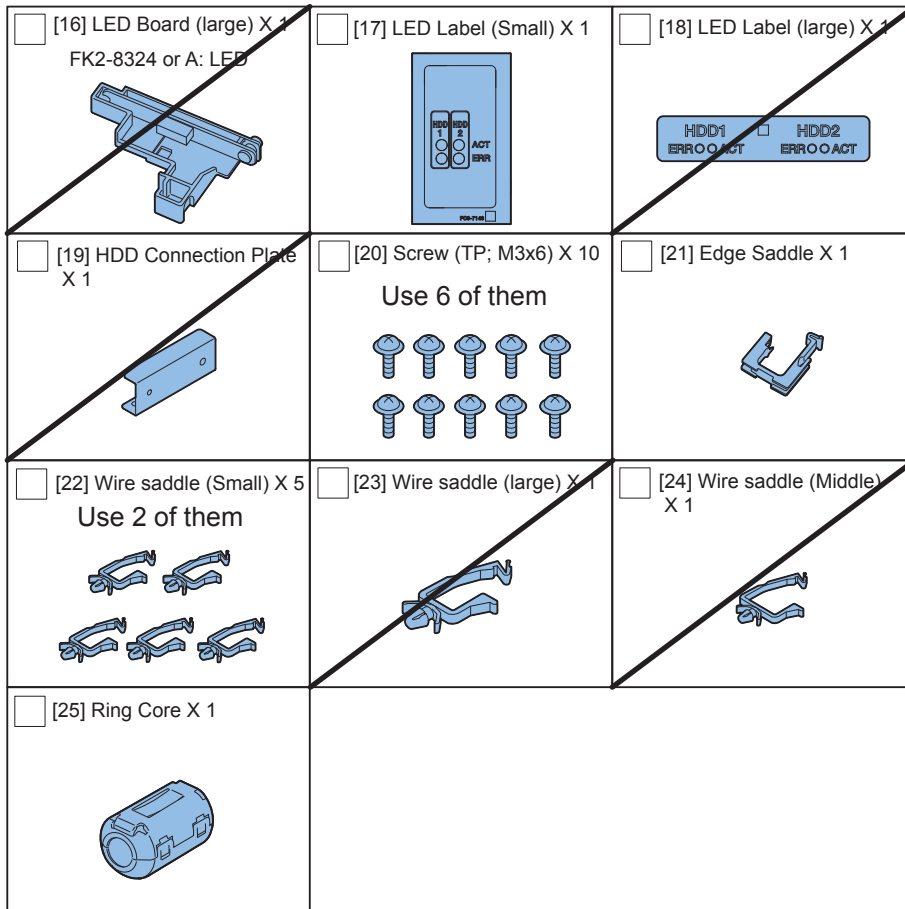
If the package appears to have been opened or the sticker is torn, check to make sure that the user has done so intentionally.

## Checking the Contents

### HDD Data Encryption & Mirroring Kit

<input type="checkbox"/> [1] LED Cable (1200mm; 7 pin) X 1 FM4-0839 or A: LED-Sig 	<input type="checkbox"/> [2] STS Cable (550mm (Light blue); 5 pin) X 1 FM4-0842 or A: STS-Sig 	<input type="checkbox"/> [3] Signal Cable (80mm; Red) X 1 FK2-8436 or A: HDD-Sig1 
<input type="checkbox"/> [4] Signal Cable (80mm; Blue) X 1 FK2-8438 or A: HDD-Sig2 	<input type="checkbox"/> [5] Power Cable (80mm) X 2 FK2-8461 or A: HDD-Pow1/2 	<input type="checkbox"/> [6] Signal Cable (450mm; Red) X 1 FK2-8435 or A: Cont-Sig 
<input type="checkbox"/> [7] Power Cable (430mm) X 1 FK2-8463 or A: Cont-Pow 	<input type="checkbox"/> [8] Power Cable (430mm) X 1 FK2-8463 or A: HDD-Pow2 	<input type="checkbox"/> [9] Signal Cable (340mm (Red); ) X 1 FK2-8434 or A: HDD-Sig1 
<input type="checkbox"/> [10] Signal Cable (370mm (Blue); ) X 1 FK2-8441 or A: HDD-Sig2 	<input type="checkbox"/> [11] Power Cable (320mm) X 1 FK2-8467 or A: HDD-Pow1 	<input type="checkbox"/> [12] LED Cable (290mm; 7 pin) X 1 FM4-0840 or A: LED-Sig 
<input type="checkbox"/> [13] STS Cable (420mm (Light blue); 5 pin) X 1 FM4-0843 or A: STS-Sig 	<input type="checkbox"/> [14] Encryption Board X 1 	<input type="checkbox"/> [15] LED Board (Small) X 1 FK2-7400 or A: LED 

F-9-626



F-9-627

&lt;CD/Guides&gt;

- HDD Data Encryption & Mirroring Kit-C1 User Documentation
- HDD Data Encryption Kit Notice
- Installation Procedure
- Noticed for FCC/IC

## Setting Before Turning OFF the Power

### CAUTION:

Be sure to turn OFF the main power after executing this service mode setting.

Turning OFF the main power without executing service mode causes "E602-5001 (procedure error before installing the HDD Encryption Board)" to occur when turning ON the main power after installing the Encryption Board.

When this error occurs, the machine needs to be returned again to the initial state in which no Encryption Board is installed.



1) Execute the following service mode (level 1).

- COPIER > FUNCTION > INSTALL > HD-CRYP

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

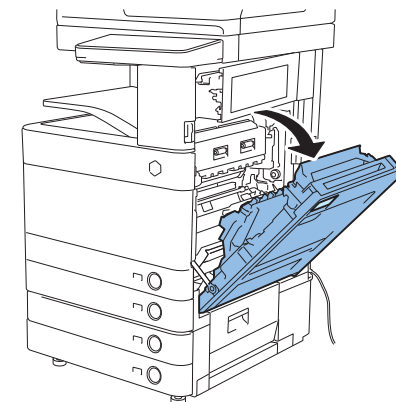
- 1) Turning off the Main Power Supply Switch of the Host Machine.
- 2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

## Installation Procedure

### Removing the Signal Cable and Power Supply Cable

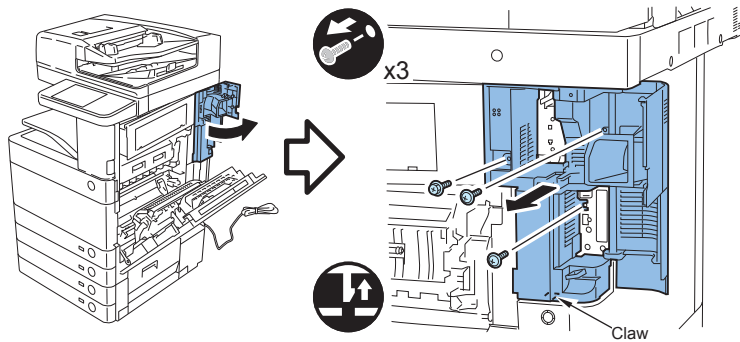


1) Open the Right Lower Cover. (Open the Right Upper Cover simultaneously.)



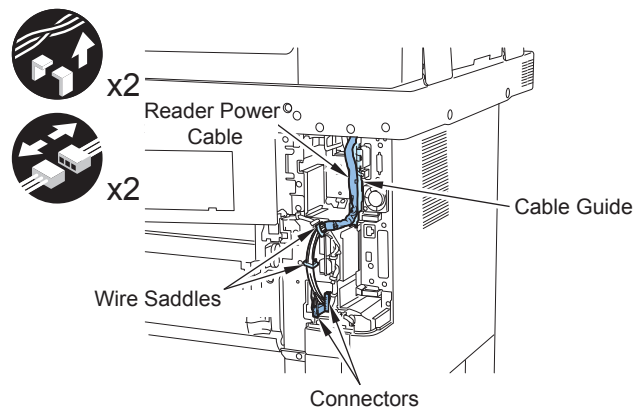
F-9-628

- 
- 2) Open the Right Rear Cover 1.
- 3) Remove the Right Rear Cover 1.
  - 1 Screw (RS tight; M4)
  - 2 Screws (TP; M3)
  - 1 Claw



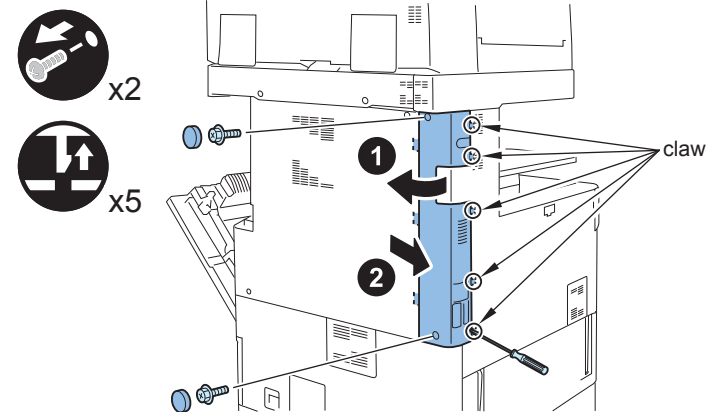
F-9-629

- 
- 4) When the Reader is installed, remove the Reader Power Cable.
  - 2 Connectors
  - 2 Wire Saddles
  - 1 Cable Guide



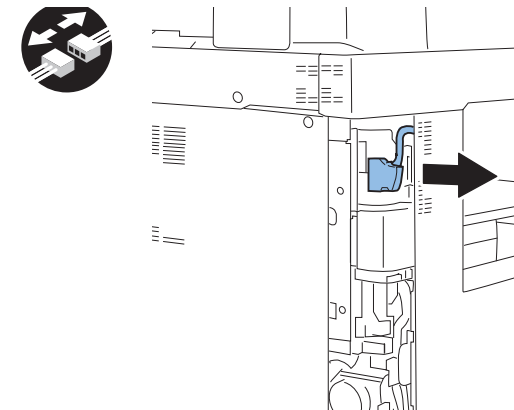
F-9-630

- 
- 5) Remove the Left Rear Cover.
  - 2 Rubber Caps
  - 2 Screws
  - 5 Claws



F-9-631

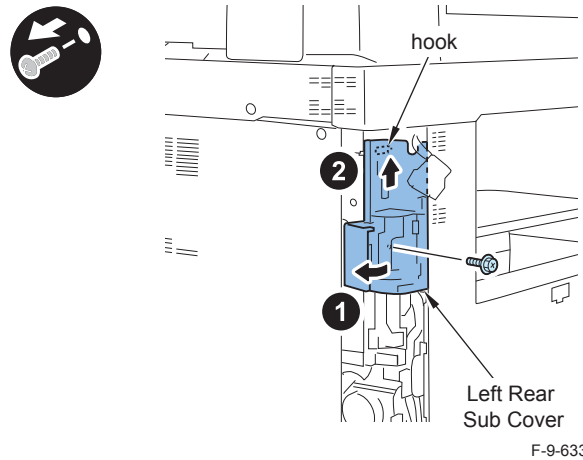
- 
- 6) When the Reader is installed, remove the Reader Communication Cable.



F-9-632

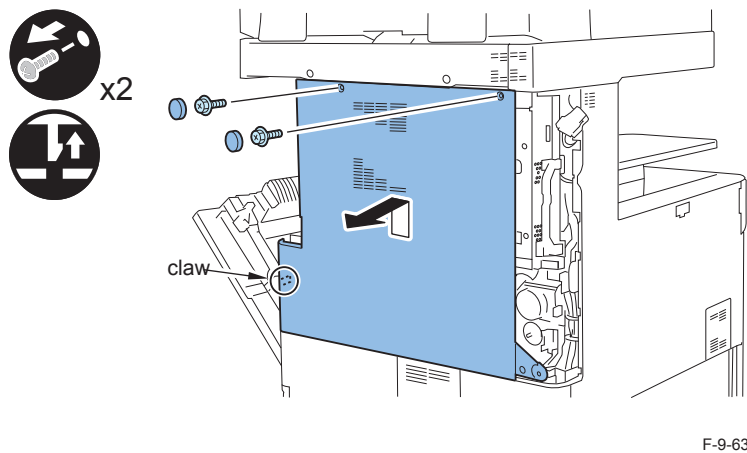
□  
7) Remove the Left Rear Sub Cover.

- 1 Screw
- 1 Hook



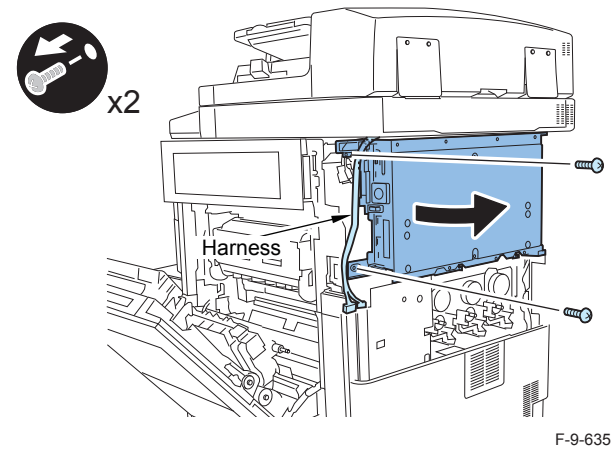
□  
8) Remove the Rear Cover.

- 2 Rubber Caps
- 2 Screws
- 1 Claw



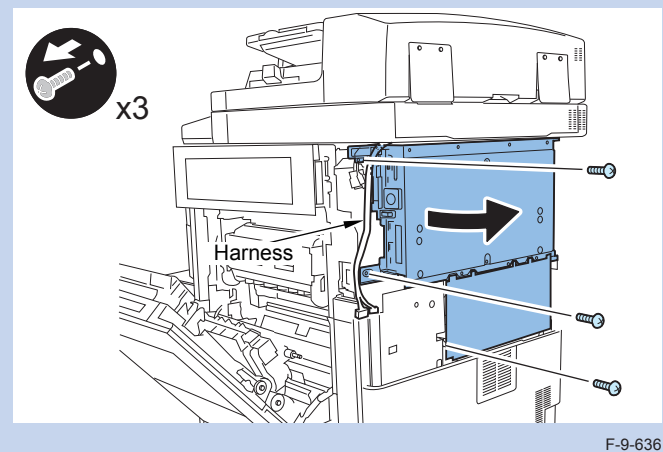
□  
9) Open the Controller Box while avoiding the harness.

- 2 Screws

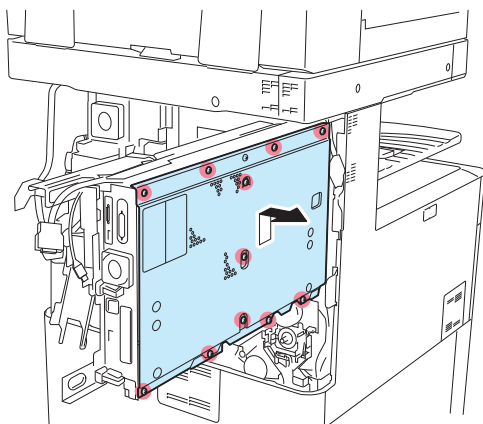


**NOTE:**

If the FAX Unit has been installed, remove the 3 screws and open the Controller Box with the FAX Unit.



- 10) Remove the Controller Cover.
- 11 Screws (loosen)



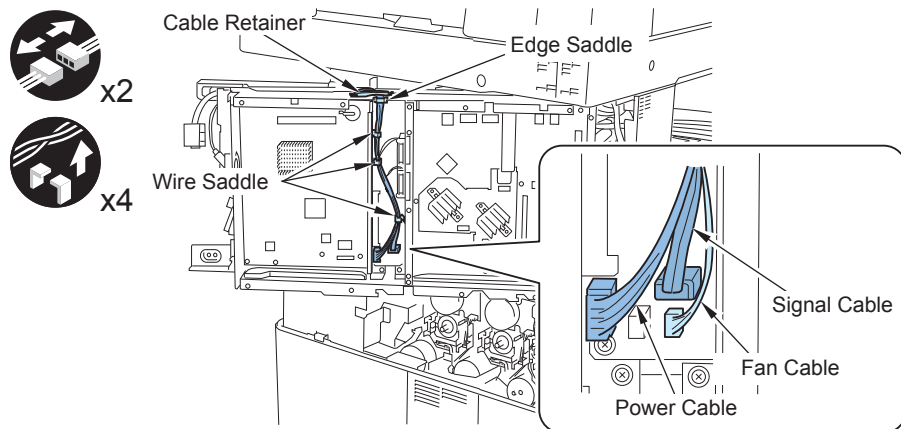
F-9-637

- 11) Remove the Signal Cable and the Power Cable.

**CAUTION:**

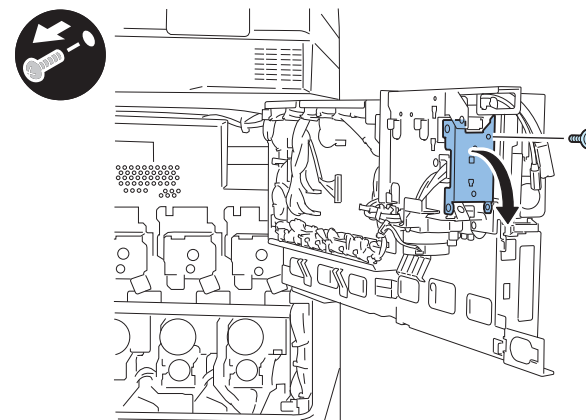
Do not remove the Fan Cable.

- 1 Edge Saddle
- 3 Wire Saddles
- 1 Cable Retainer



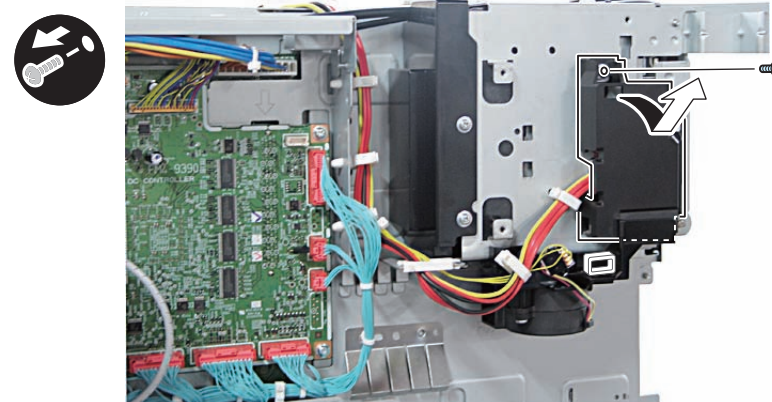
F-9-638

- 12) Open the HDD Lid.
- 1 Screw (Removed screw will not be used.)



F-9-639

- 13) When the Cable Cover is installed, remove it. (Removed Cable Cover and screw will not be used.)
- 1 Screw

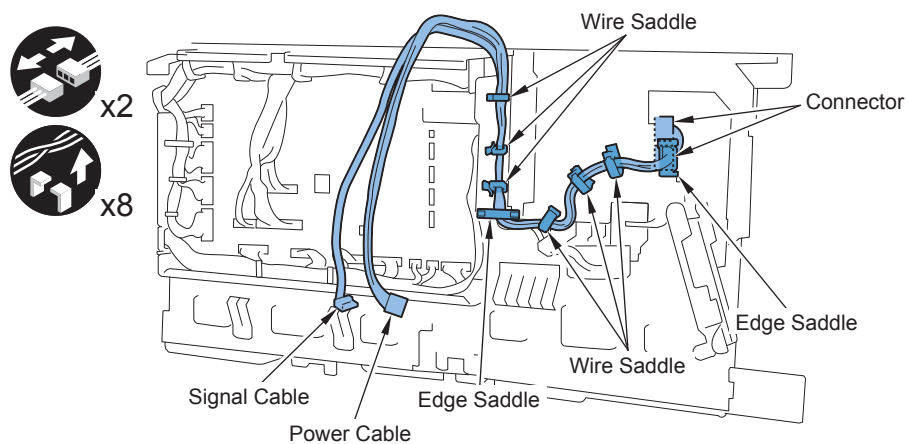


F-9-640

- 14) Remove the Signal Cable and the Power Cable. (Removed Signal Cable and Power Cable will not be used.)

<When the Cable Cover is removed>

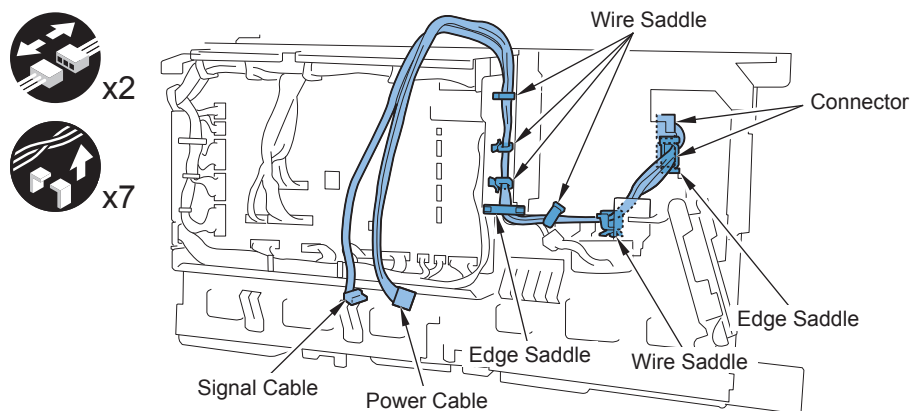
- 2 Edge Saddles
- 6 Wire Saddles
- 2 Connectors



F-9-641

<When the Cable Cover is not removed>

- 2 Edge Saddles
- 5 Wire Saddles
- 2 Connectors

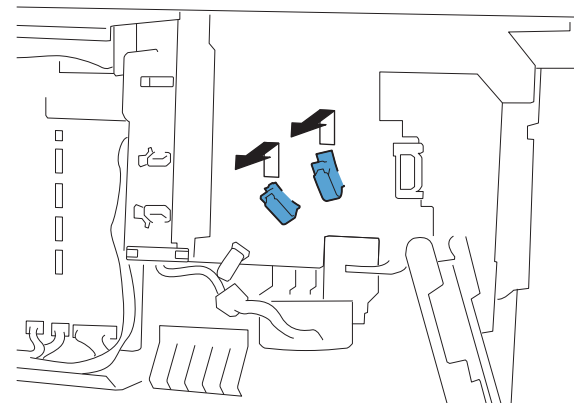


F-9-642

- 15) Remove the 2 Wire Saddles. (Removed wire saddles will not be used.)

<When the Cable Cover is removed>

- 15) Remove the 2 Wire Saddles. (Removed wire saddles will not be used.)



F-9-643

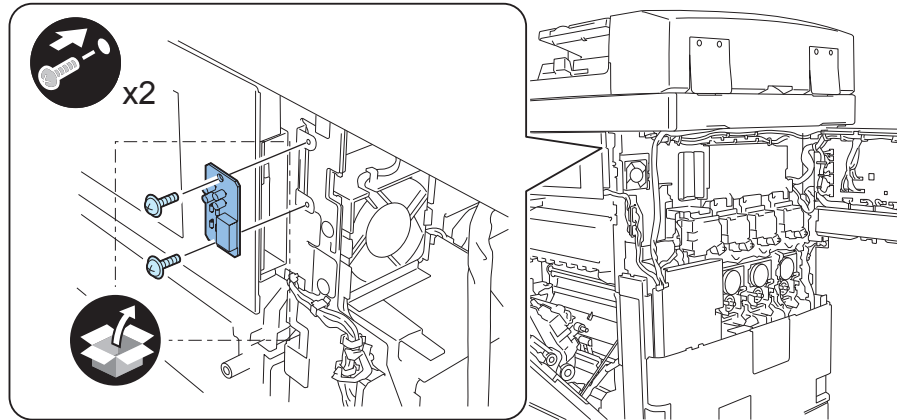


## Installing the LED Board



1) Install the LED Board (small) (FK2-7400 or A: LED).

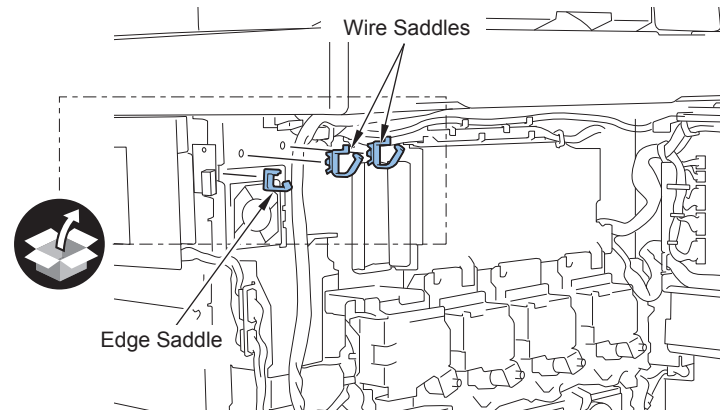
- 2 Screws (TP; M3x6)



F-9-644



2) Install the 2 wire saddles and the edge saddle.



F-9-645

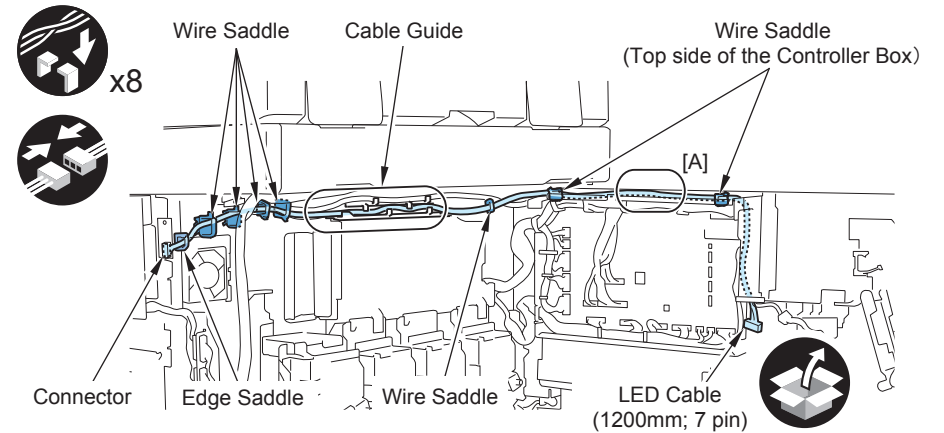


3) Connect the LED Cable (1200 mm; 7-pin) (FM4-0839 or A: LED-Sig).

- 7 Wire Saddles
- 1 Edge Saddle
- 1 Cable Guide
- 1 Connector

### CAUTION:

- Be sure to tuck the [A] area of the LED cable under the other 2 cables running through the [A] area. This is to prevent the [A] area of the LED cable from being slacked off when closing the Controller Box.



F-9-646

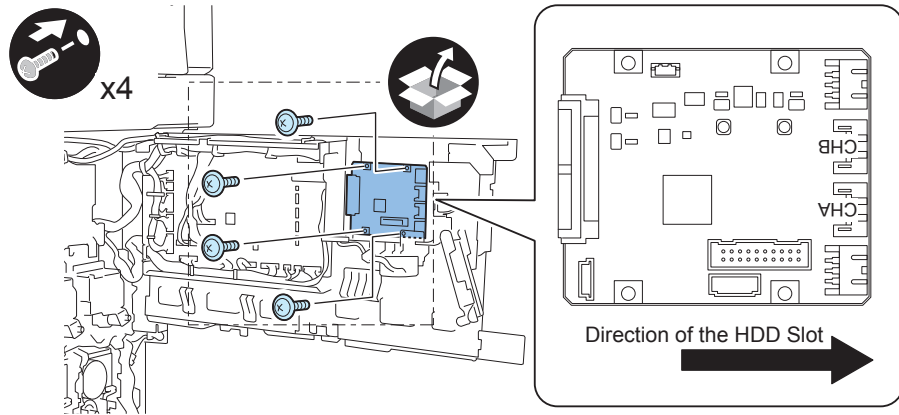


## ■ Installing the Encryption Board

- 
- 1) Install the Encryption Board so that "CHA" and "CHB" are placed in the direction of the HDD slot.
- 4 screws (TP; M3x6)

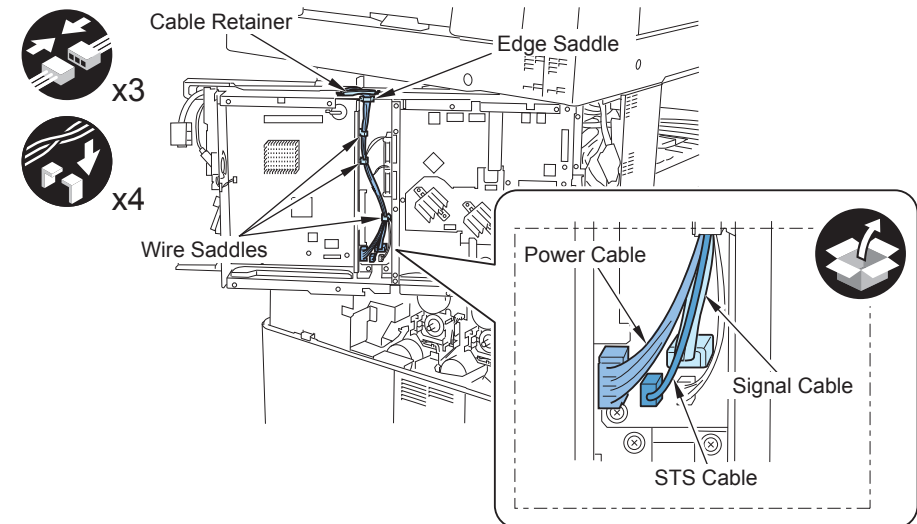
### CAUTION:

Be sure that the direction of installing the Encryption Board is opposite to the case when the Removable HDD is installed. If it is installed in a wrong direction, the cables do not reach the board.



F-9-647

- 
- 2) Connect the cables to the PCB on the backside.
- Signal Cable (450mm (Red)): FK2-8435 or A: Cont-Sig
  - Power Cable (430mm): FK2-8463 or A: Cont-Pow
  - STS Cable (550mm (Light blue); 5 Pin): FM4-0842 or A: STS-Sig
- 3) Fix the cables.
- 3 Wire Saddles
  - 1 Edge Saddle
  - Cable Retainer



F-9-648

- 
- 4) Install the Controller Cover. (11 Screws)

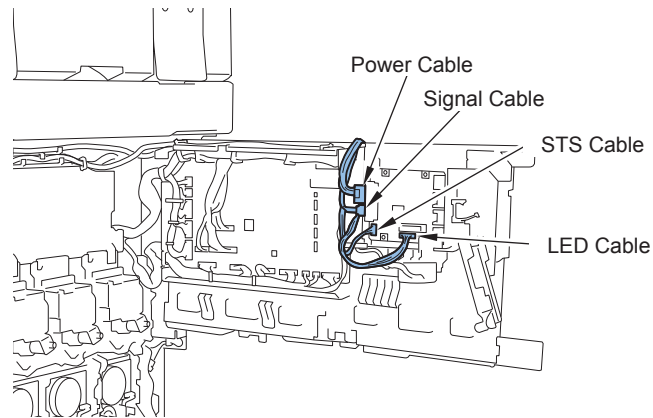


5) Connect the cables to the Encryption Board.

- Signal Cable (450mm (Red)): FK2-8435 or A: Cont-Sig
- Power Cable (430mm): FK2-8463 or A: Cont-Pow
- LED Cable (1200 mm; 7-pin): FM4-0839 or A: LED-Sig
- STS Cable (550mm (Light blue); 5 Pin): FM4-0842 or A: STS-Sig

**CAUTION:**

The machine can operate even the STS Cable and the LED Cable are not connected. Therefore, when installing the cables, be sure that they are connected properly.



F-9-649



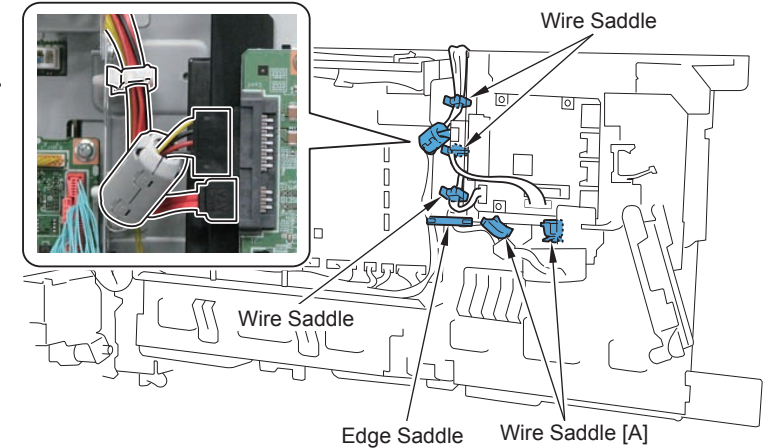
6) Install the Ring Core to the Power Supply Cable as shown in the figure.

7) Fix the cables.

- 3 Wire Saddles

**NOTE:**

Be sure to close the unused 2 wire saddles [A] and edge saddle.



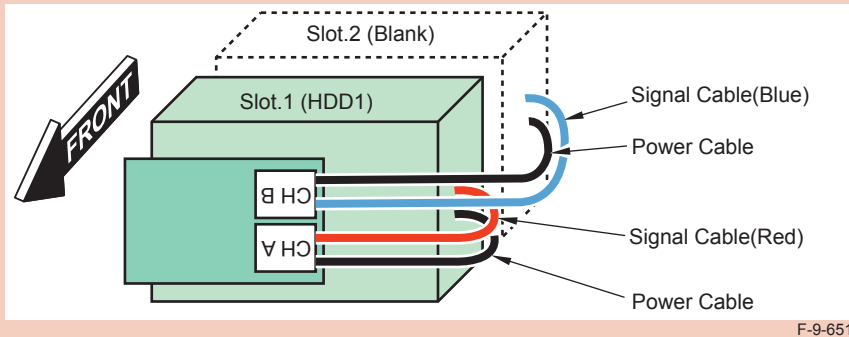
F-9-650

**CAUTION:**

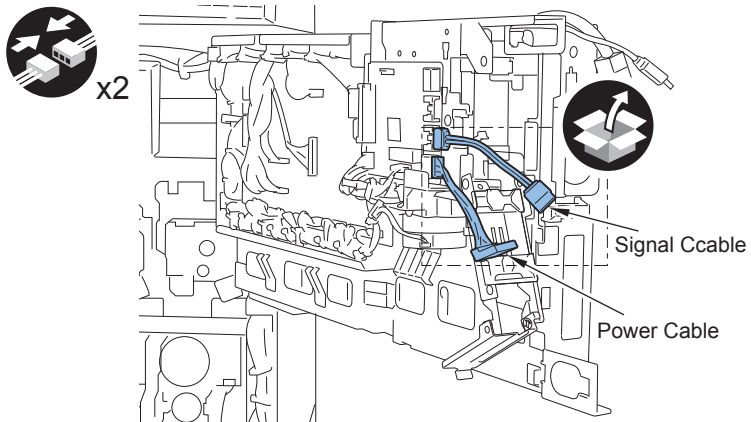
Be sure to acknowledge the following caution before performing the next procedure. Combinations of connection between the HDDs and the Encryption Board are shown below.

Keep Slot 2 in the condition where no HDD is installed, and only connect the cables.

- Connect Slot 1 to "CHA".
- Connect Slot 2 to "CHB".



- 8) Connect the Signal Cable (80 mm; Red) (FK2-8436 or A: HDD-Sig1) and the Power Cable (80 mm) (FK2-8461 or A: HDD-Pow1/2) to CHA on the Encryption Board.

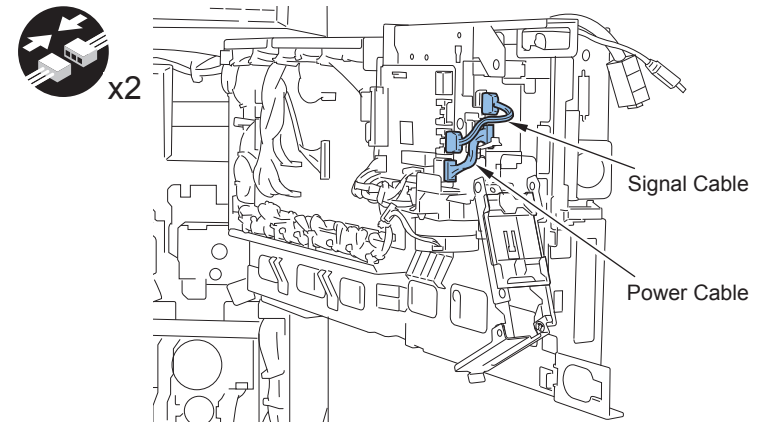


F-9-652

- 9) Connect the Signal Cable (80 mm; Red) (FK2-8436 or A: HDD-Sig1) and the Power Cable (80 mm) (FK2-8461 or A: HDD-Pow1/2) to the first HDD (Slot 1).

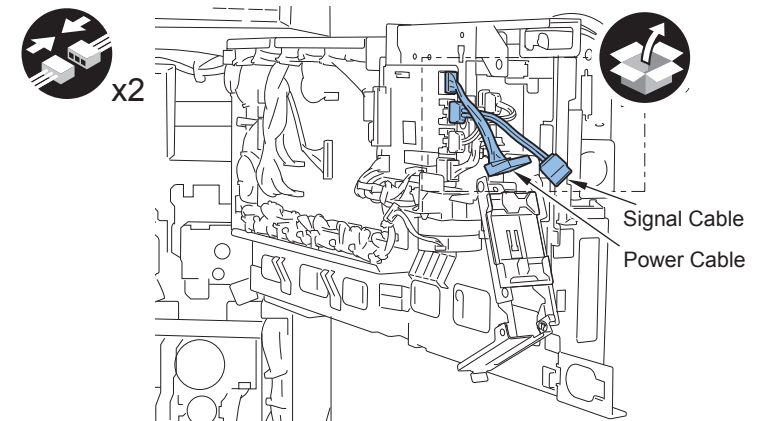
**CAUTION:**

Install the cables to correct positions.



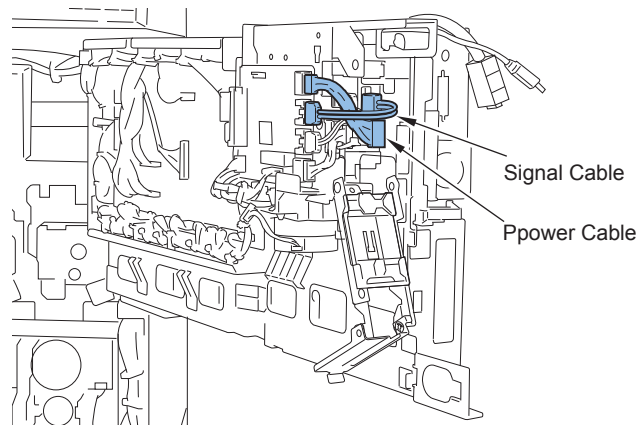
F-9-653

- 10) Connect the Signal Cable (80 mm; Blue) (FK2-8438 or A: HDD-Sig2) and the Power Cable (80 mm) (FK2-8461 or A: HDD-Pow1/2) to CHB on the Encryption Board.



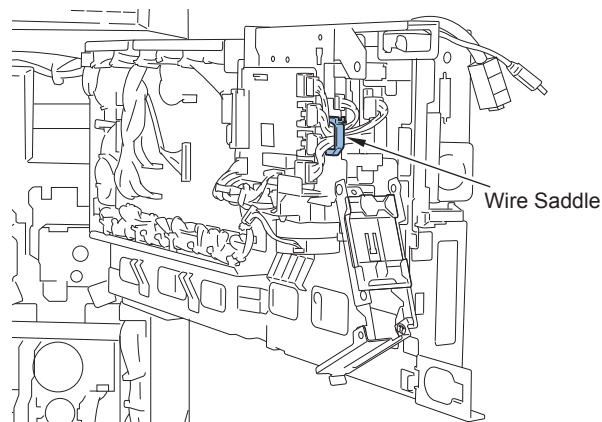
F-9-654

- 11) Place the Signal Cable (80 mm; Blue) (FK2-8438 or A: HDD-Sig2) and the Power Cable (80 mm) (FK2-8461 or A: HDD-Pow1/2) to the empty space of the second HDD (Slot 2).



F-9-655

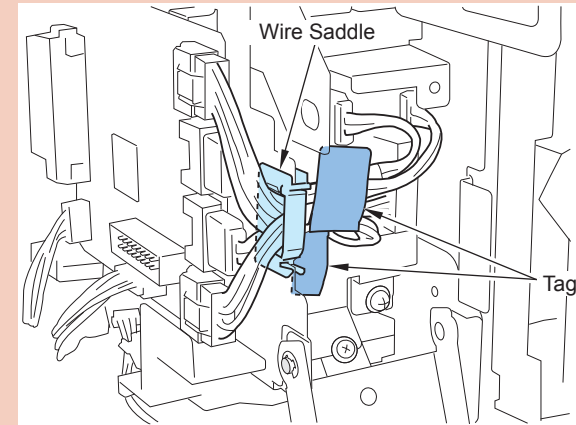
- 12) Fix the cables with the wire saddle.



F-9-656

## CAUTION:

- Be sure to place the tags on the Power Supply Cable in the position where it is beyond the wire saddle toward the HDD side.
- If returning the Controller Box while placing the cables and tags toward the PCB side, they may interfere the fan on the host machine.

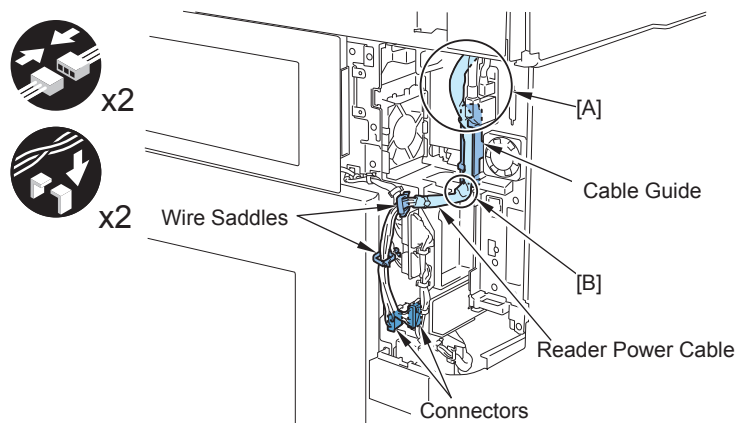


F-9-657

- 13) Close the HDD Lid. (1 Screw)  
14) Place the Controller Box to the original position. (2 Screws or 3 Screws)  
15) Install the removed cover and the cable.
- Rear Cover (2 Screws, 2 Rubber Caps)
  - Left Rear Sub Cover (1 Screw)
  - Reader Communication Cable (when reader is installed)
  - Left Rear Cover (2 Screws, 2 Rubber Caps)
- 16) If Reader is installed, install the Reader Power Cable.

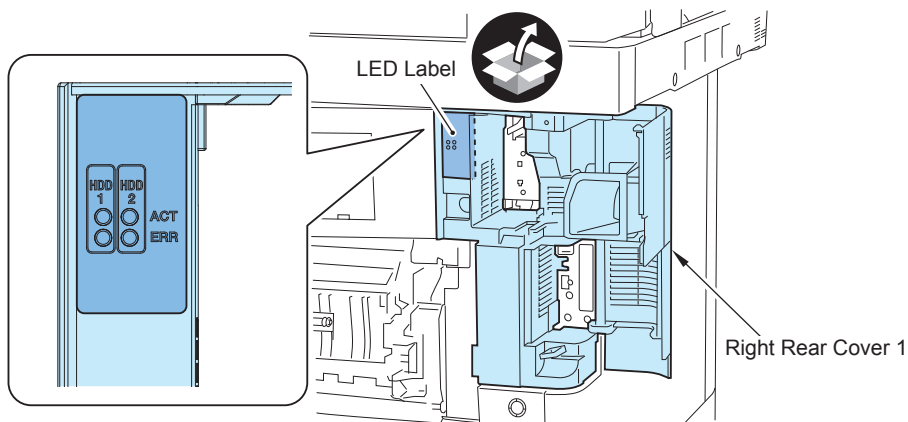
## NOTE:

Handle the Reader Power Cable from the connector side and make a slack at [A] part. Bend the Reader Power Cable at a right angle on [B] part.



F-9-658

- 17) Install the Right Rear Cover 1. (3 Screws)
- 18) Affix the LED label so that it fits the edge of the Right Rear Cover 1.



F-9-659

- 19) Close the Right Rear Cover 1, Right Lower Cover, and Right Upper Cover.
- 20) Connect the power plug of the host machine to the power outlet.

## Installing the System Software Using the SST

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product.

It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product.

Details follow.

### 1. Requirements

- 1) PC
  - Service support tool in the version that supports this host machine must be installed.
- 2) Cross Ethernet Cable

### 2. Preparing for the Installation of the System Software of Host machine

- 1) If both PC and the machine are on, turn them off.
- 2) Connect the PC and the machine using an Ethernet cable.
- 3) Turn on the PC.
- 4) Start up the machine in download mode (safe mode).

### 3. Selecting the System Software

- 1) Set the CD containing the latest system software in the PC on which the SST is used.
- 2) Start up the SST.
- 3) Click Register Firmware.
- 4) Select the drive in which the System Software CD has been set, and click search.
- 5) Click REGISTER.
- 6) Click OK.

### 4. Downloading the System Software

- 1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
- 2) When initialization is completed, the machine is automatically restarted and it enters download mode.
- 3) Select the version to be downloaded and click "Start".
- 4) When download is completed, the machine is automatically restarted.
- 5) When writing of the firmware is completed, the machine is automatically restarted.
- 6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
- 7) Terminate the SST.
- 8) Check the version of the downloaded firmware in service mode.

## Checking the Security Version

- 1) Press the Counter key (123 key) on the control panel.
- 2) Press the [Check Device Configuration] key appearing on the control panel.
- 3) Make sure that '2.00' or '2.01' is displayed in 'Canon MFP Security Chip' as version information of the security chip.

When several Encryption Boards are installed, multiple version information is displayed.

### CAUTION:

The user will be able to make sure that the encryption board fitted with a security chip of the correct version with CC authentication is functioning normally by referring to the version information indicated for 'Canon MFP Security Chip'.


## Checking the Security Mark

The user may check the security mark, appearing on the control panel when using the Host machine to make sure that an appropriate level of security is being maintained.

The mark appears when the machine is equipped with an encryption board and the board is operating correctly.

The Users Guide provides the following description in connection with the security mark:

### <Confirming the Security Mark>

When the HDD Data Encryption & Mirroring Kit is operating normally, a security mark(  ) is displayed on the lower left corner of a panel screen.

## Checking after Installation

- 1) Make sure that the LED blinks.
  - HDD1 (Slot 1): The green LED blinks.

## Reporting to the System Administrator at the End of the Work

When you have completed all installation work, report to the system administrator for the following:

At the point when installation is completed, make explanations about how to check that the appropriate security function has been added and enabled so that, when the function becomes uncontrolled, the system administrator can immediately detect the problem and request <servicing work when a failure occurs>.

### Completion of the Installation Work:

Ask the system administrator to make sure that '2.00' or '2.01' is indicated for 'Canon MFP Security Chip' as the version information of the security chip by referring to the description of Checking the Security Version.

### Maintenance of the Security Functions:

Ask the system administrator to check the security mark to make sure that the security functions are maintained each time the machine is started up by referring to the description of Checking the Security Mark.

## Execution of Auto Adjust Gradation

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.

Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

## [TYPE-7]

Option HDD (1TB) + HDD Data Encryption &amp; Mirroring Kit

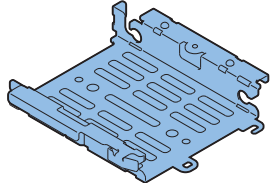
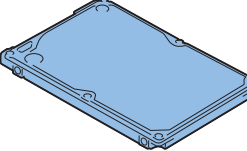
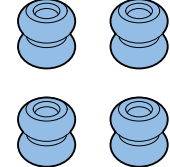
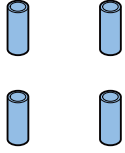
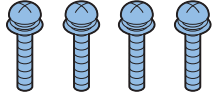

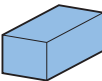
## Points to Note when HDD Data Encryption & Mirroring Kit has been Installed

A security sticker is attached to the kit package to indicate that the package has not been opened. Check to see that the package has not been opened in any way and the sticker is not torn.

If the package appears to have been opened or the sticker is torn, check to make sure that the user has done so intentionally.

## Checking the Contents

### Option HDD (1TB)

<input type="checkbox"/> [1] HDD Support Pate X 1 	<input type="checkbox"/> [2] HDD X 1 	<input type="checkbox"/> [3] Vibration-prevention Dumper X 4 
<input type="checkbox"/> [4] Spacer X 4 	<input type="checkbox"/> [5] Screw (W sems; M3x14) X 4 	<input type="checkbox"/> [6] Screw (TP;M3x6) X 2 
<input type="checkbox"/> [7] Gasket X 1 		


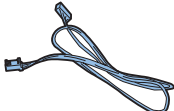



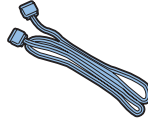


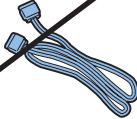


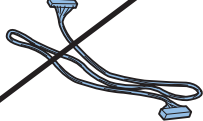

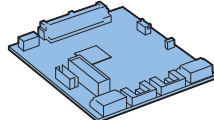
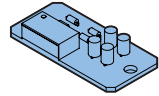
&lt;CD/Guides&gt;

- Notice for FCC/IC

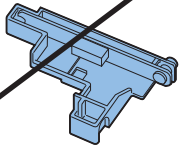
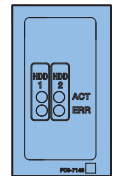

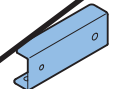
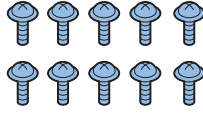

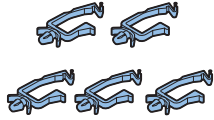


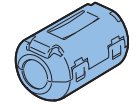
F-9-660



**HDD Data Encryption & Mirroring Kit**

<input type="checkbox"/> [1] LED Cable (1200mm; 7 pin) X 1 FM4-0839 or A: LED-Sig 	<input type="checkbox"/> [2] STS Cable (550mm (Light blue); 5 pin) X 1 FM4-0842 or A: STS-Sig 	<input type="checkbox"/> [3] Signal Cable (80mm; Red) X 1 FK2-8436 or A: HDD-Sig1 
<input type="checkbox"/> [4] Signal Cable (80mm; Blue) X 1 FK2-8438 or A: HDD-Sig2 	<input type="checkbox"/> [5] Power Cable (80mm) X 2 FK2-8461 or A: HDD-Pow1/2 	<input type="checkbox"/> [6] Signal Cable (450mm; Red) X 1 FK2-8435 or A: Cont-Sig 
<input type="checkbox"/> [7] Power Cable (430mm) X 1 FK2-8463 or A: Cont-Pow 	<input type="checkbox"/> [8] Power Cable (430mm) X 1 FK2-8463 or A: HDD-Pow2 	<input type="checkbox"/> [9] Signal Cable (340mm (Red); ) X 1 FK2-8434 or A: HDD-Sig1 
<input type="checkbox"/> [10] Signal Cable (370mm (Blue); ) X 1 FK2-8441 or A: HDD-Sig2 	<input type="checkbox"/> [11] Power Cable (320mm) X 1 FK2-8467 or A: HDD-Pow1 	<input type="checkbox"/> [12] LED Cable (290mm; 7 pin) X 1 FM4-0840 or A: LED-Sig 
<input type="checkbox"/> [13] STS Cable (420mm (Light blue); 5 pin) X 1 FM4-0843 or A: STS-Sig 	<input type="checkbox"/> [14] Encryption Board X 1 	<input type="checkbox"/> [15] LED Board (Small) X 1 FK2-7400 or A: LED 

F-9-661

<input type="checkbox"/> [16] LED Board (large) X 1 FK2-8324 or A: LED 	<input type="checkbox"/> [17] LED Label (Small) X 1 	<input type="checkbox"/> [18] LED Label (large) X 1 
<input type="checkbox"/> [19] HDD Connection Plate X 1 	<input type="checkbox"/> [20] Screw (TP; M3x6) X 10 Use 6 of them 	<input type="checkbox"/> [21] Edge Saddle X 1 
<input type="checkbox"/> [22] Wire saddle (Small) X 5 Use 2 of them 	<input type="checkbox"/> [23] Wire saddle (large) X 1 	<input type="checkbox"/> [24] Wire saddle (Middle) X 1 
<input type="checkbox"/> [25] Ring Core X 1 		

F-9-662

<CD/Guides>

- HDD Data Encryption & Mirroring Kit-C1 User Documentation
- HDD Data Encryption Kit Notice
- Installation Procedure
- Noticed for FCC/IC

## Setting Before Turning OFF the Power

### CAUTION:

Be sure to turn OFF the main power after executing this service mode setting.

Turning OFF the main power without executing service mode causes "E602-5001 (procedure error before installing the HDD Encryption Board)" to occur when turning ON the main power after installing the Encryption Board.

When this error occurs, the machine needs to be returned again to the initial state in which no Encryption Board is installed.



- 1) Execute the following service mode (level 1).
  - COPIER > FUNCTION > INSTALL > HD-CRYP

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

- 1) Turning off the Main Power Supply Switch of the Host Machine.
- 2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

## Installation Procedure

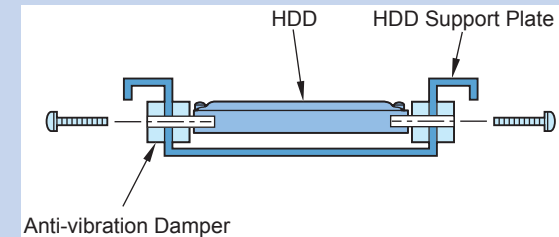
### Assembling and Installing the Option HDD



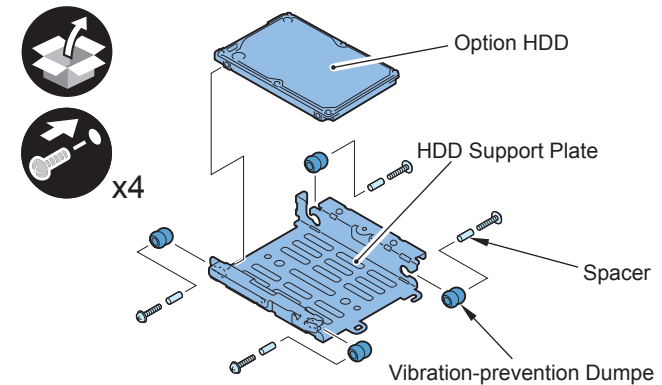
- 1) Assemble the option HDD (1TB).
  - 1 Option HDD
  - 1 HDD Support Plate
  - 4 Dust-prevention Dumpers
  - 4 Spacers
  - 4 Screws (W sems; M3x14)

### NOTE:

When tightening the screen, be sure to align the screw holes by lifting the HDD.



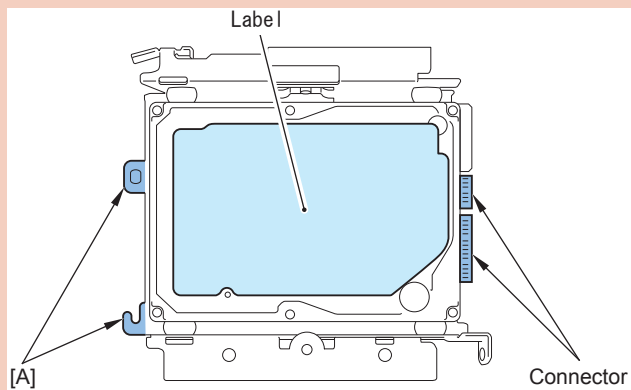
F-9-663



F-9-664

CAUTION:

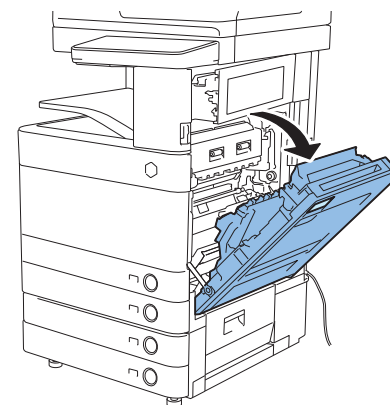
- Assembling the option HDD, be careful of the installation direction.
- Make sure that the label on the option HDD is facing up.
- Make sure that [A] part of HDD Support Plate is placed at the opposite side of connector.



F-9-665

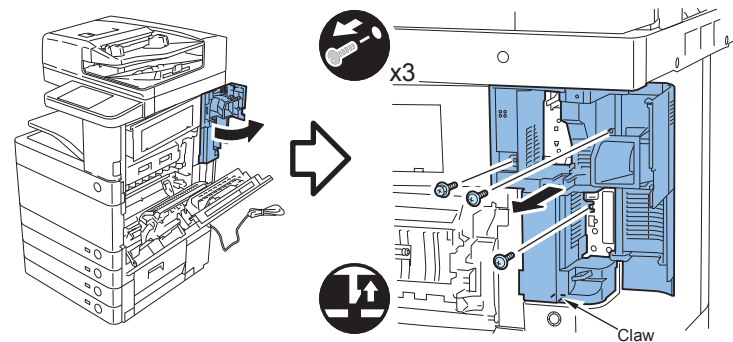
■ Removing and Installing the HDD Unit

- 1) Open the Right Lower Cover. (Open the Right Upper Cover simultaneously.)



F-9-667

- 2) Open the Right Rear Cover 1.
- 3) Remove the Right Rear Cover 1.
  - 1 Screw (RS tight; M4)
  - 2 Screws (TP; M3)
  - 1 Claw

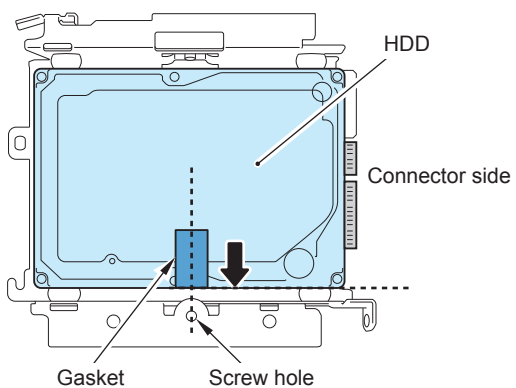


F-9-668

- 2) Affix the gasket to the place shown in the figure below.

CAUTION:

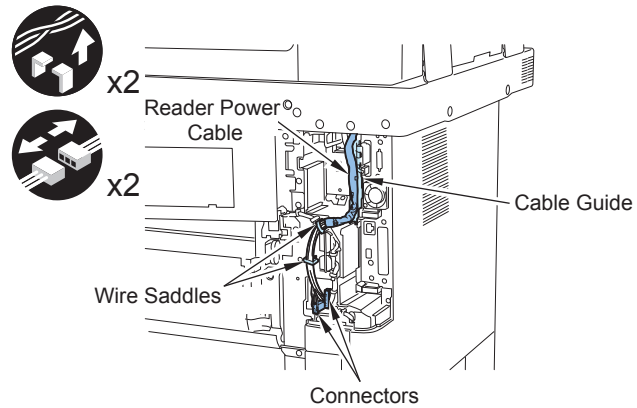
Be sure to place the gasket in contact with the label-free metal surface of the HDD surface.



F-9-666

□  
4) When the Reader is installed, remove the Reader Power Cable.

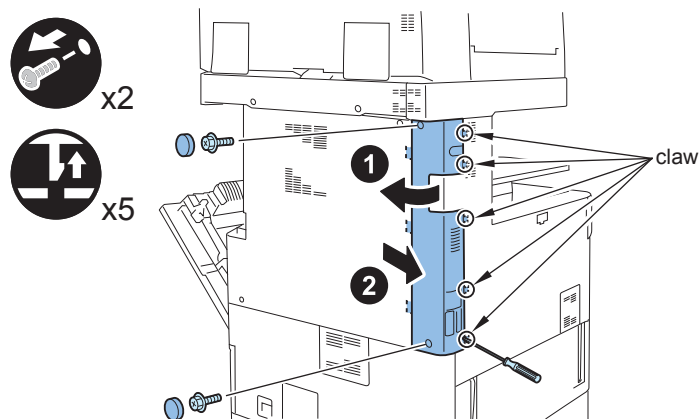
- 2 Connectors
- 2 Wire Saddles
- 1 Cable Guide



F-9-669

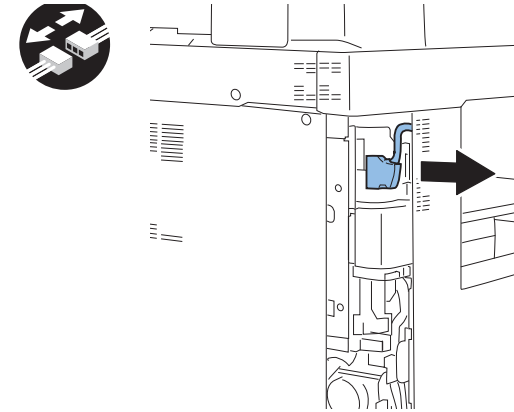
□  
5) Remove the Left Rear Cover.

- 2 Rubber Caps
- 2 Screws
- 5 Claws



F-9-670

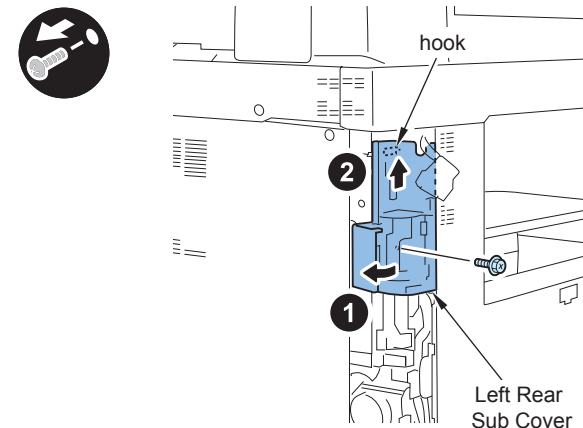
□  
6) When the Reader is installed, remove the Reader Communication Cable.



F-9-671

□  
7) Remove the Left Rear Sub Cover.

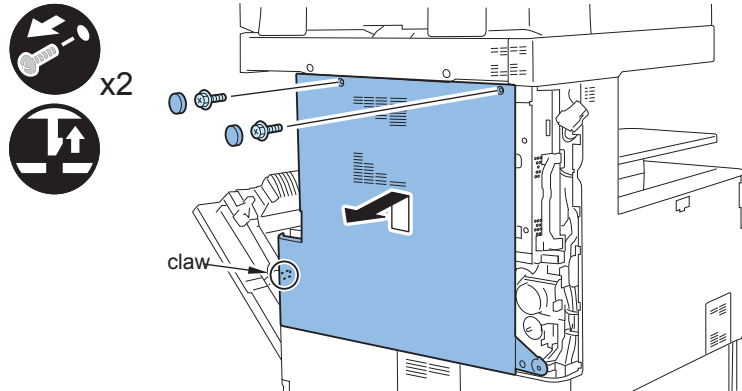
- 1 Screw
- 1 Hook



F-9-672

□ 8) Remove the Rear Cover.

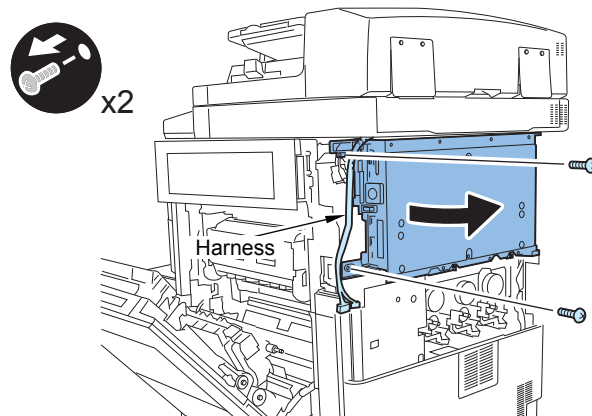
- 2 Rubber Caps
- 2 Screws
- 1 Claw



F-9-673

□ 9) Open the Controller Box while avoiding the harness.

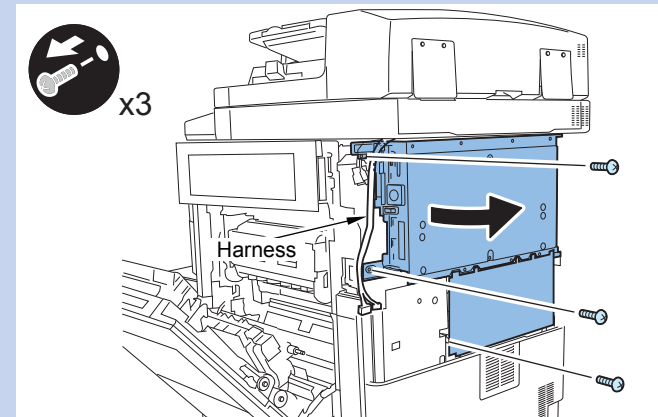
- 2 Screws



F-9-674

NOTE:

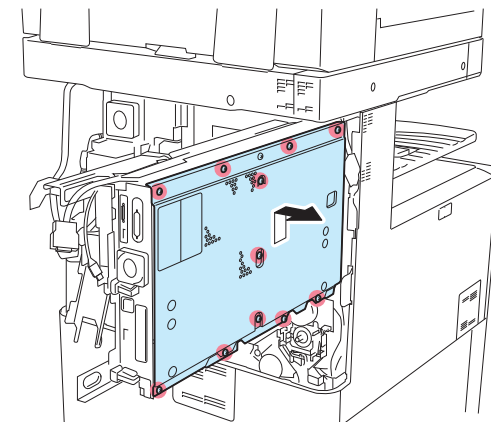
If the FAX Unit has been installed, remove the 3 screws and open the Controller Box with the FAX Unit.



F-9-675

□ 10) Remove the Controller Cover.

- 11 Screws (loosen)



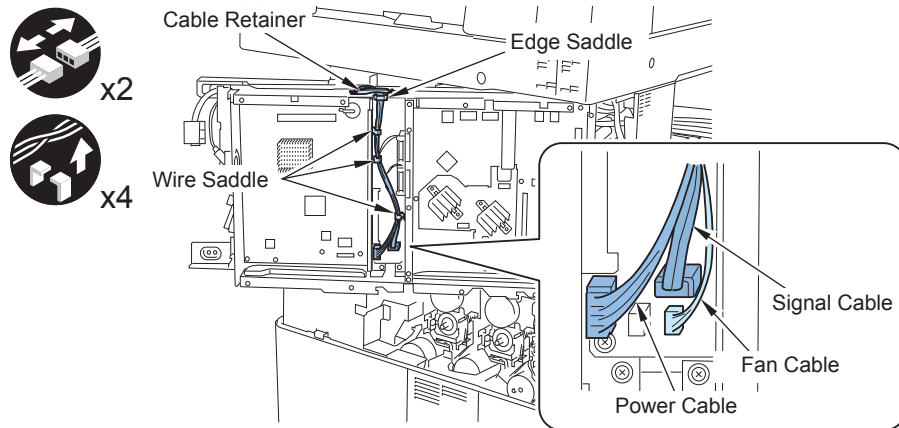
F-9-676

- 11) Remove the Signal Cable and the Power Cable.

**CAUTION:**

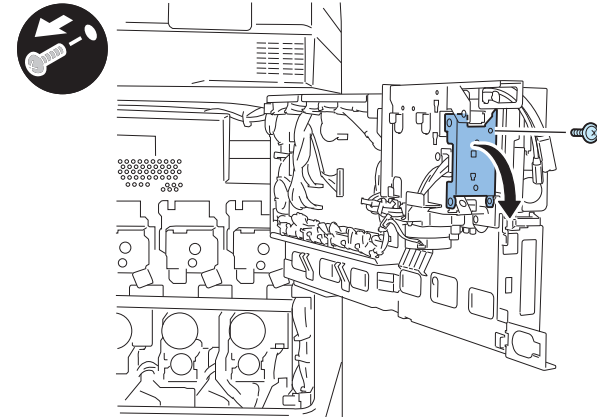
Do not remove the Fan Cable.

- 1 Edge Saddle
- 3 Wire Saddles
- 1 Cable Retainer



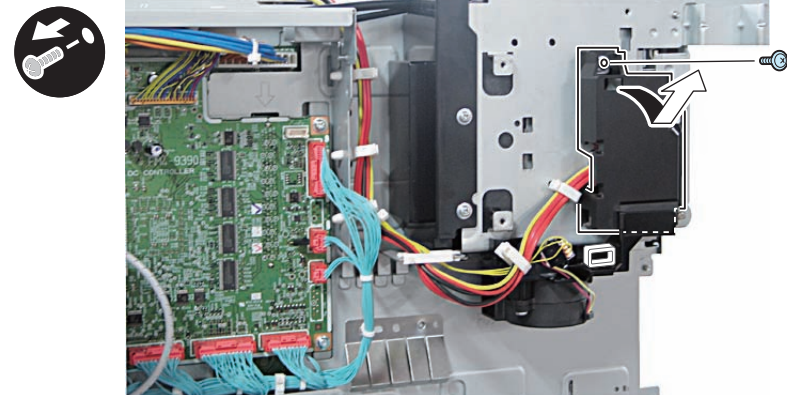
F-9-677

- 12) Open the HDD Lid.
- 1 Screw (Removed screw will not be used.)



F-9-678

- 13) When the Cable Cover is installed, remove it. (Removed Cable Cover and screw will not be used.)
- 1 Screw

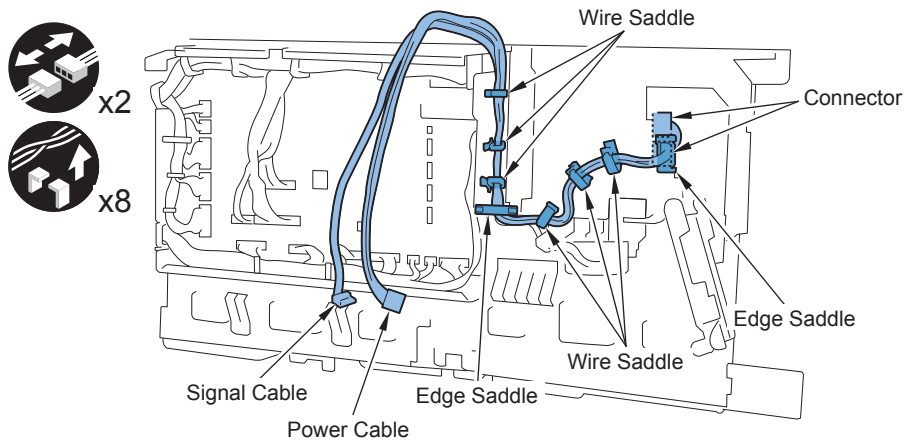


F-9-679

- 14) Remove the Signal Cable and the Power Cable. (Removed Signal Cable and Power Cable will not be used.)

<When the Cable Cover is removed>

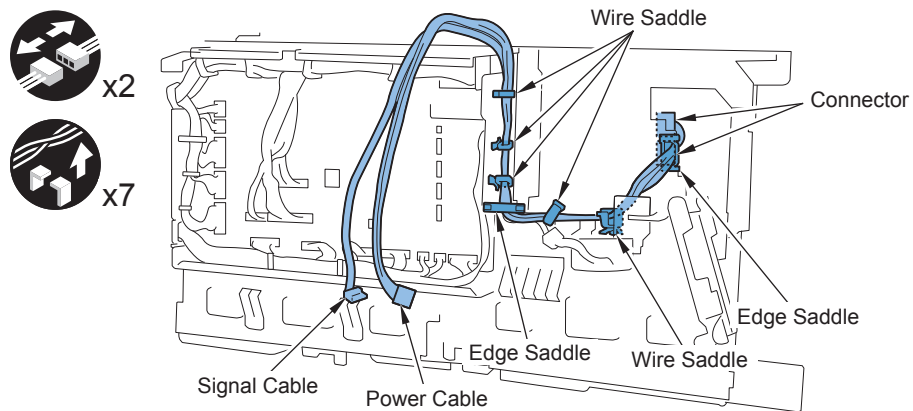
- 2 Edge Saddles
- 6 Wire Saddles
- 2 Connectors



F-9-680

<When the Cable Cover is not removed>

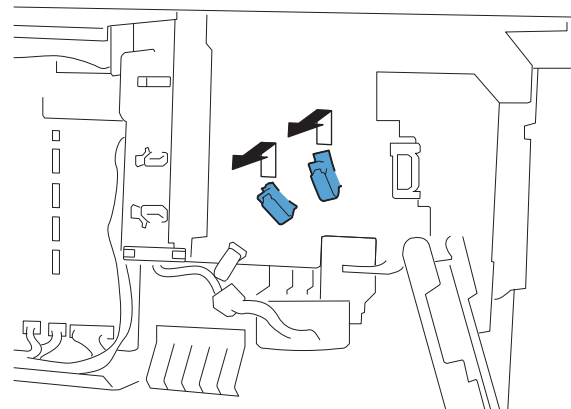
- 2 Edge Saddles
- 5 Wire Saddles
- 2 Connectors



F-9-681

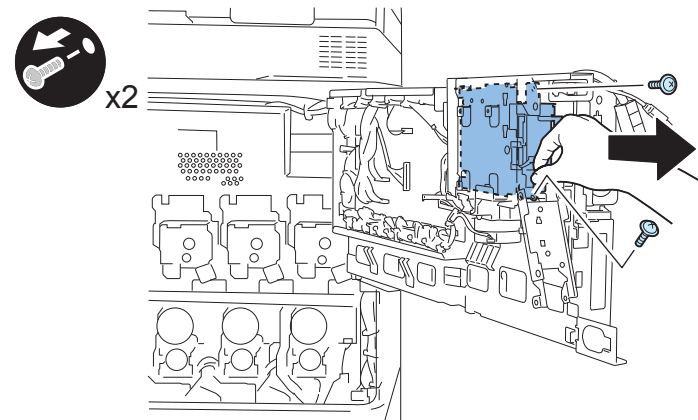
- <When the Cable Cover is removed>

- 15) Remove the 2 Wire Saddles. (Removed wire saddles will not be used.)



F-9-682

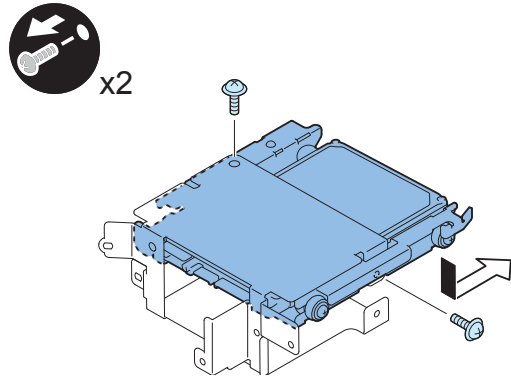
- 16) Remove the HDD Unit by holding it as shown in the figure below.
- 2 Screws



F-9-683



- 17) Remove the HDD (160GB) installed as standard from the removed HDD Unit.  
(Removed HDD (160GB) will not be used.)
- 2 Screws (Removed screw will be used in step 18.)

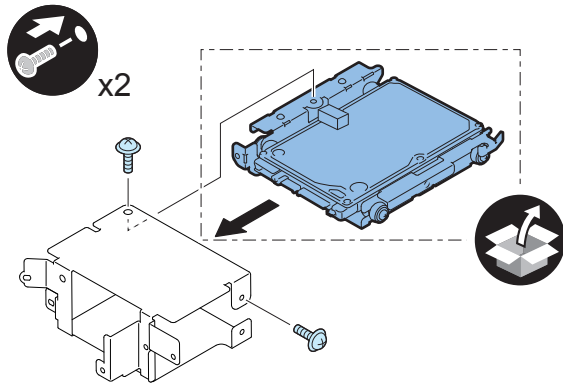


F-9-684

- 18) Install the Option HDD (1TB).
- 2 Screws (The screw removed in step 17.)

**CAUTION:**

Be sure to prevent the gasket from coming off when installing.

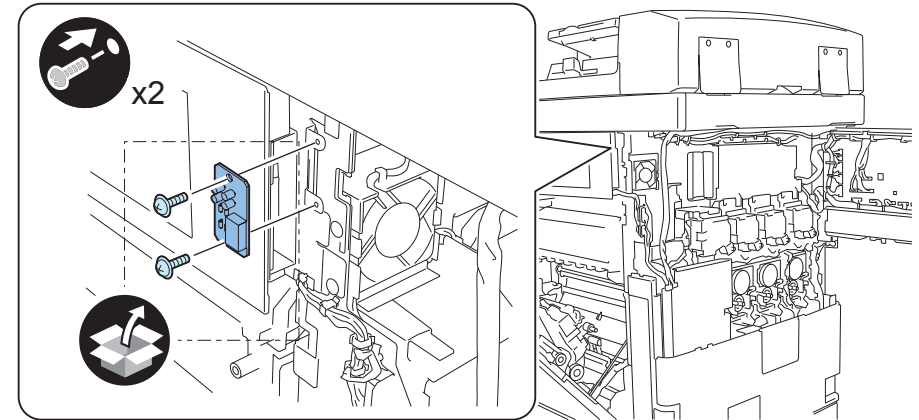


F-9-685

- 19) Install the HDD Unit to the host machine. (2 Screws)

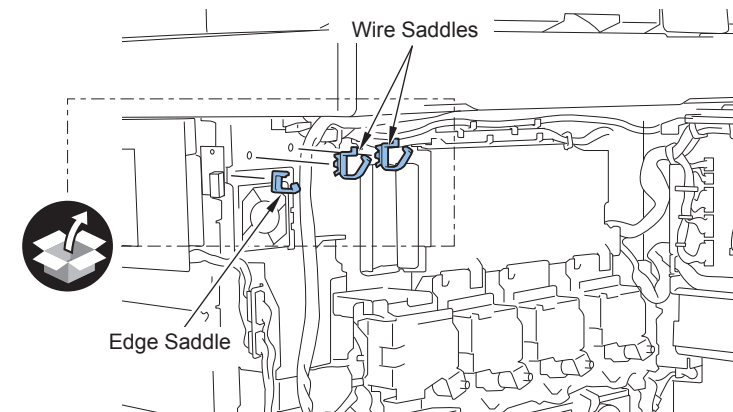
## Installing the LED Board

- 1) Install the LED Board (small) (FK2-7400 or A: LED).
- 2 Screws (TP; M3x6)



F-9-686

- 2) Install the 2 wire saddles and the edge saddle.



F-9-687

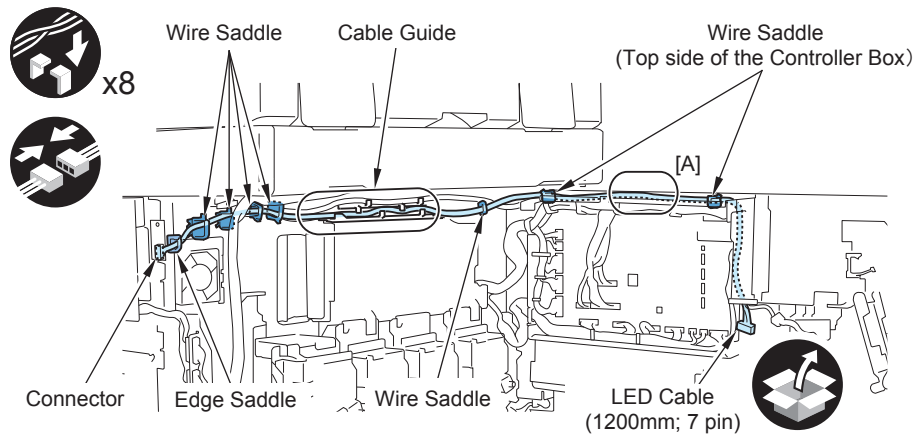


3) Connect the LED Cable (1200 mm; 7-pin) (FM4-0839 or A: LED-Sig).

- 7 Wire Saddles
- 1 Edge Saddle
- 1 Cable Guide
- 1 Connector

**CAUTION:**

- Be sure to tuck the [A] area of the LED cable under the other 2 cables running through the [A] area. This is to prevent the [A] area of the LED cable from being slacked off when closing the Controller Box.



F-9-688

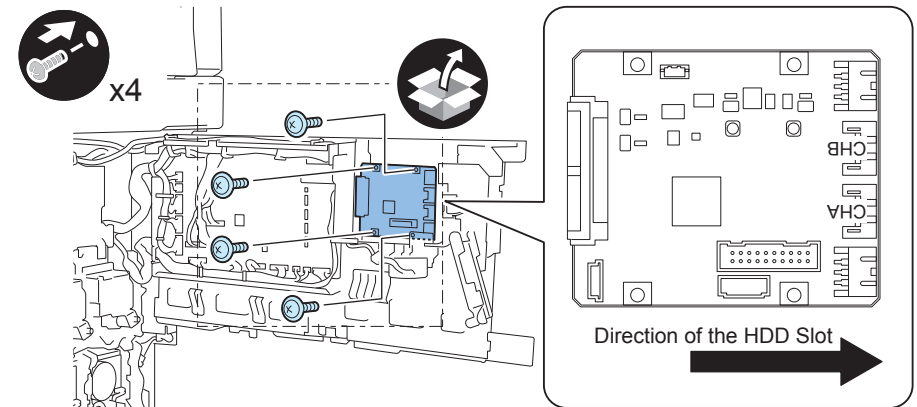
## ■ Installing the Encryption Board



- 1) Install the Encryption Board so that "CHA" and "CHB" are placed in the direction of the HDD slot.
- 4 Screws (TP; M3x6)

**CAUTION:**

- Be sure that the direction of installing the Encryption Board is opposite to the case when the Removable HDD is installed. If it is installed in a wrong direction, the cables do not reach the board.



F-9-689

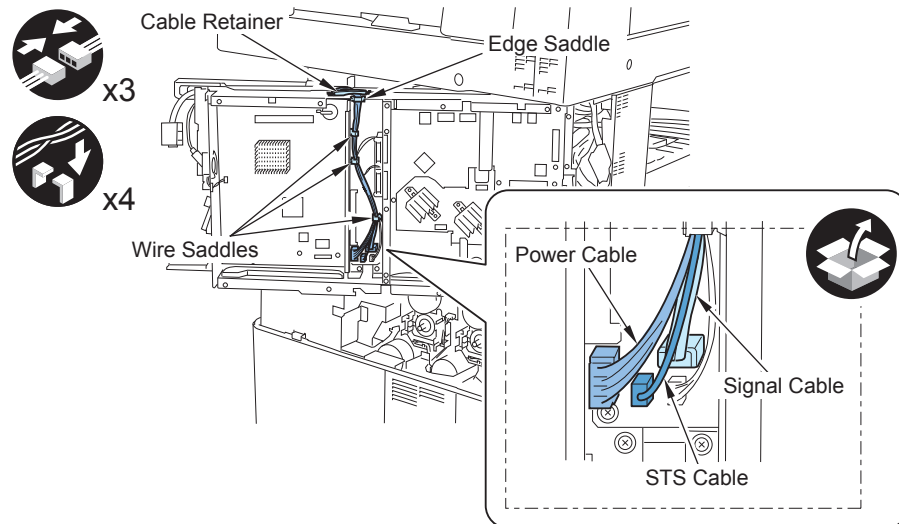


2) Connect the cables to the PCB on the backside.

- Signal Cable (450mm (Red)): FK2-8435 or A: Cont-Sig
- Power Cable (430mm): FK2-8463 or A: Cont-Pow
- STS Cable (550mm (Light blue); 5 Pin): FM4-0842 or A: STS-Sig

3) Fix the cables.

- 3 Wire Saddles
- 1 Edge Saddle
- Cable Retainer



F-9-690



4) Install the Controller Cover.

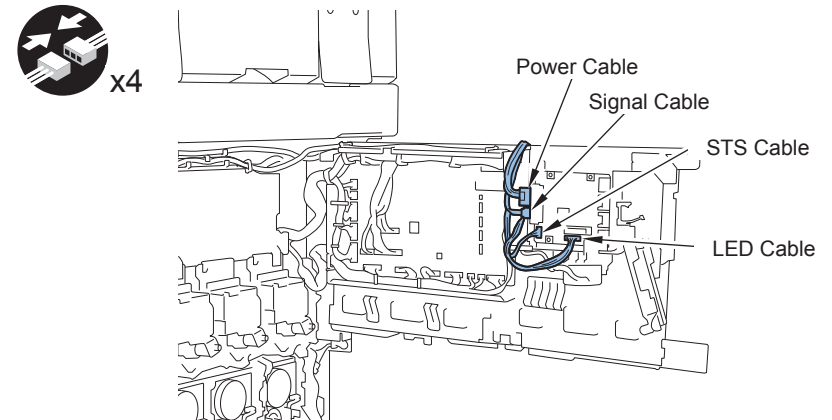


5) Connect the cables to the Encryption Board.

- Signal Cable (450mm (Red)): FK2-8435 or A: Cont-Sig
- Power Cable (430mm): FK2-8463 or A: Cont-Pow
- LED Cable (1200 mm; 7-pin): FM4-0839 or A: LED-Sig
- STS Cable (550mm (Light blue); 5 Pin): FM4-0842 or A: STS-Sig

**CAUTION:**

The machine can operate even the STS Cable and the LED Cable are not connected. Therefore, when installing the cables, be sure that they are connected properly.

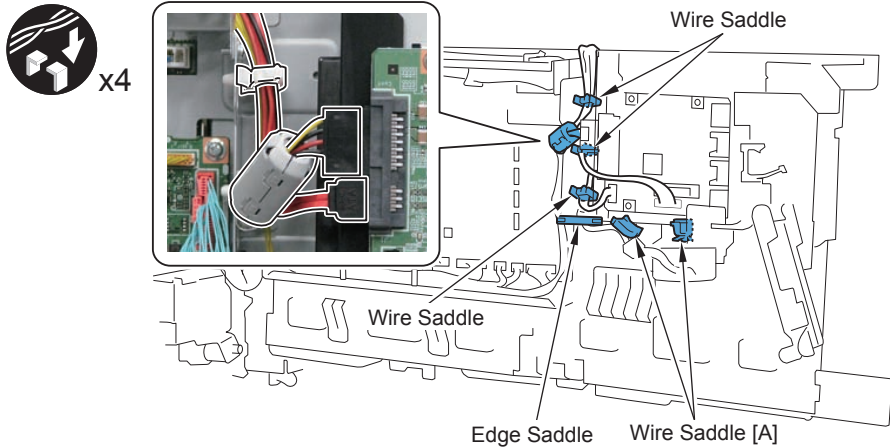


F-9-691

- 
- 6) Install the Ring Core to the Power Supply Cable as shown in the figure.
- 7) Fix the cables.
- 3 Wire Saddles

**NOTE:**

Be sure to close the unused 2 wire saddles [A] and edge saddle.



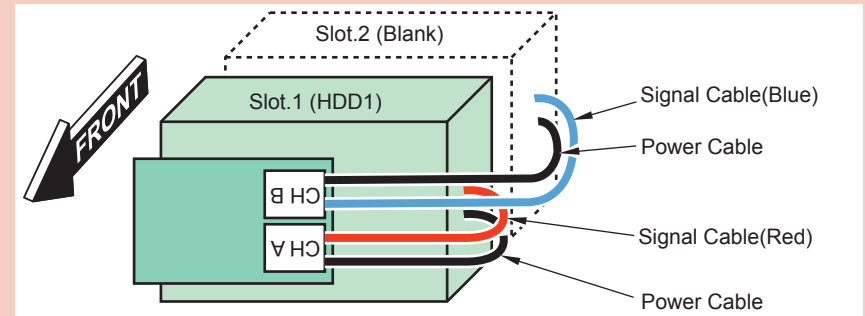
F-9-692

**CAUTION:**

Be sure to acknowledge the following caution before performing the next procedure. Combinations of connection between the HDDs and the Encryption Board are shown below.

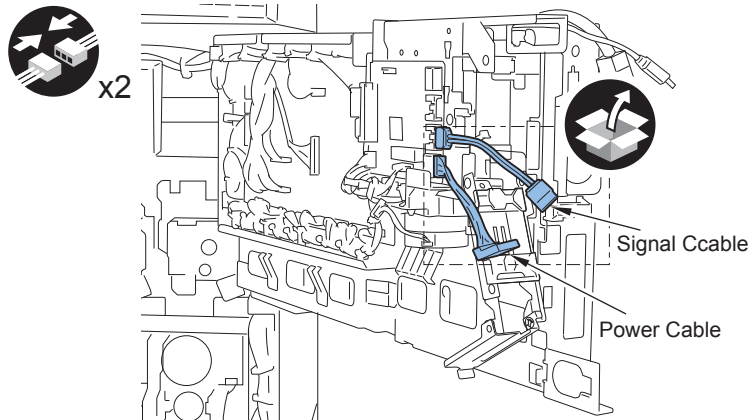
Keep Slot 2 in the condition where no HDD is installed, and only connect the cables.

- Connect Slot 1 to "CHA".
- Connect Slot 2 to "CHB".



F-9-693

- 8) Connect the Signal Cable (80 mm; Red) (FK2-8436 or A: HDD-Sig1) and the Power Cable (80 mm) (FK2-8461 or A: HDD-Pow1/2) to CHA on the Encryption Board.

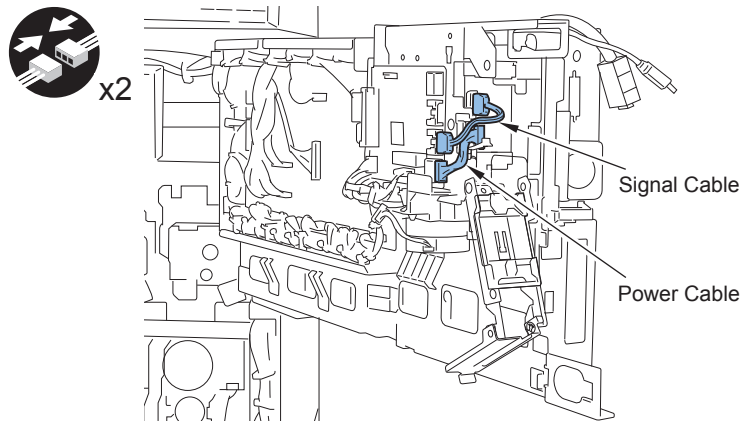


F-9-694

- 9) Connect the Signal Cable (80 mm; Red) (FK2-8436 or A: HDD-Sig1) and the Power Cable (80 mm) (FK2-8461 or A: HDD-Pow1/2) to the first HDD (Slot 1).

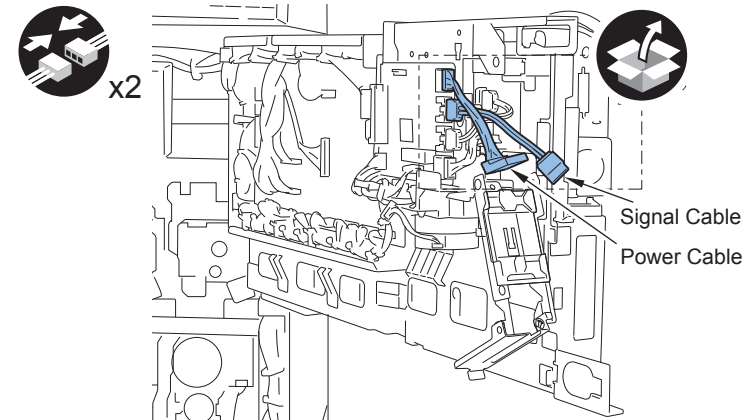
**CAUTION:**

Install the cables to correct positions.



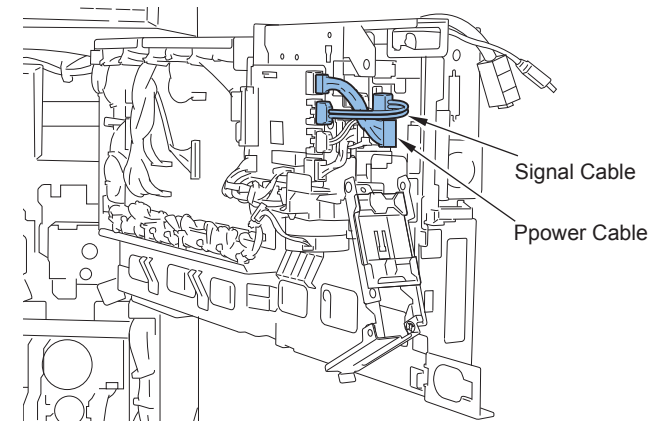
F-9-695

- 10) Connect the Signal Cable (80 mm; Blue) (FK2-8438 or A: HDD-Sig2) and the Power Cable (80 mm) (FK2-8461 or A: HDD-Pow1/2) to CHB on the Encryption Board.



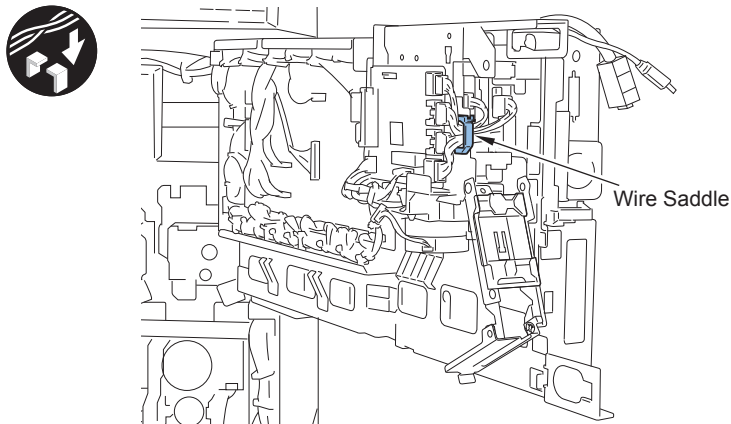
F-9-696

- 11) Place the Signal Cable (80 mm; Blue) (FK2-8438 or A: HDD-Sig2) and the Power Cable (80 mm) (FK2-8461 or A: HDD-Pow1/2) to the empty space of the second HDD (Slot 2).



F-9-697

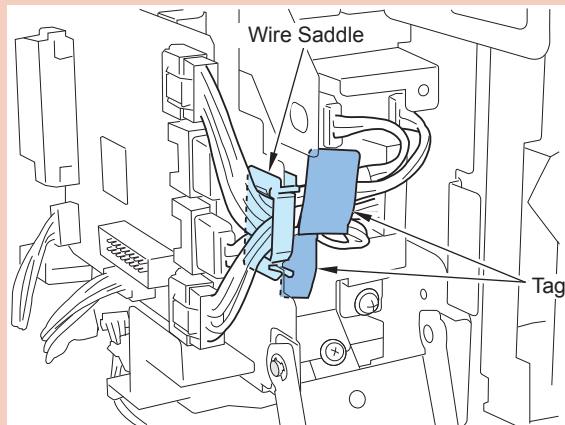
- 12) Fix the cables with the wire saddle.



F-9-698

**CAUTION:**

- Be sure to place the tags on the Power Supply Cable in the position where it is beyond the wire saddle toward the HDD side.
- If returning the Controller Box while placing the cables and tags toward the PCB side, they may interfere the fan on the host machine.

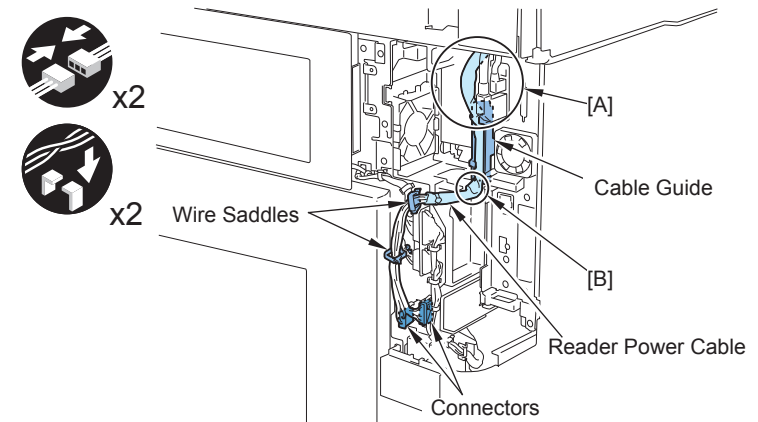


F-9-699

- 13) Close the HDD Lid. (1 Screw)
- 14) Place the Controller Box to the original position. (2 Screws or 3 Screws)
- 15) Install the removed cover and the cable.
- Rear Cover (2 Screws, 2 Rubber Caps)
  - Left Rear Sub Cover (1 Screw)
  - Reader Communication Cable (when reader is installed)
  - Left Rear Cover (2 Screws, 2 Rubber Caps)
- 16) If Reader is installed, install the Reader Power Cable.

**NOTE:**

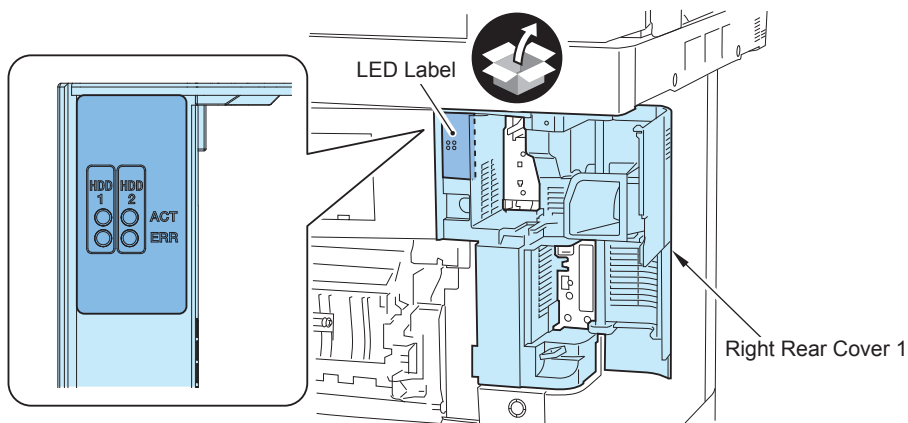
Handle the Reader Power Cable from the connector side and make a slack at [A] part. Bend the Reader Power Cable at a right angle on [B] part.



F-9-700

- 17) Install the Right Rear Cover 1. (3 Screws)

- 18) Affix the LED label so that it fits the edge of the Right Rear Cover 1.



F-9-701

- 19) Close the Right Rear Cover 1, Right Lower Cover, and Right Upper Cover.  
 20) Connect the power plug of the host machine to the power outlet.

## Installing the System Software Using the SST

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product.

It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product.

Details follow.

### 1. Requirements

- 1) PC  
Service support tool in the version that supports this host machine must be installed.
- 2) Cross Ethernet Cable

### 2. Preparing for the Installation of the System Software of Host machine

- 1) If both PC and the machine are on, turn them off.
- 2) Connect the PC and the machine using an Ethernet cable.
- 3) Turn on the PC.
- 4) Start up the machine in download mode (safe mode).

### 3. Selecting the System Software

- 1) Set the CD containing the latest system software in the PC on which the SST is used.
- 2) Start up the SST.
- 3) Click Register Firmware.
- 4) Select the drive in which the System Software CD has been set, and click search.
- 5) Click REGISTER.
- 6) Click OK.

### 4. Downloading the System Software

- 1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
- 2) When initialization is completed, the machine is automatically restarted and it enters download mode.
- 3) Select the version to be downloaded and click "Start".
- 4) When download is completed, the machine is automatically restarted.
- 5) When writing of the firmware is completed, the machine is automatically restarted.
- 6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
- 7) Terminate the SST.
- 8) Check the version of the downloaded firmware in service mode.



## Checking the Security Version

- 1) Press the Counter key (123 key) on the control panel.
- 2) Press the [Check Device Configuration] key appearing on the control panel.
- 3) Make sure that '2.00' or '2.01' is displayed in 'Canon MFP Security Chip' as version information of the security chip.

When several Encryption Boards are installed, multiple version information is displayed.

### CAUTION:

The user will be able to make sure that the encryption board fitted with a security chip of the correct version with CC authentication is functioning normally by referring to the version information indicated for 'Canon MFP Security Chip'.


## Checking the Security Mark

The user may check the security mark, appearing on the control panel when using the Host machine to make sure that an appropriate level of security is being maintained.

The mark appears when the machine is equipped with an encryption board and the board is operating correctly.

The Users Guide provides the following description in connection with the security mark:

### <Confirming the Security Mark>

When the HDD Data Encryption & Mirroring Kit is operating normally, a security mark(  ) is displayed on the lower left corner of a panel screen.

## Checking after Installation

- 1) Make sure that the LED blinks.
  - HDD1 (Slot 1): The green LED blinks.

## Reporting to the System Administrator at the End of the Work

When you have completed all installation work, report to the system administrator for the following:

At the point when installation is completed, make explanations about how to check that the appropriate security function has been added and enabled so that, when the function becomes uncontrolled, the system administrator can immediately detect the problem and request <servicing work when a failure occurs>.

### Completion of the Installation Work:

Ask the system administrator to make sure that '2.00' or '2.01' is indicated for 'Canon MFP Security Chip' as the version information of the security chip by referring to the description of Checking the Security Version.

### Maintenance of the Security Functions:

Ask the system administrator to check the security mark to make sure that the security functions are maintained each time the machine is started up by referring to the description of Checking the Security Mark.

## Execution of Auto Adjust Gradation

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.

Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

## [TYPE-8]

Standard HDD + Option HDD (160GB) + Removable HDD Kit  
+ HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit

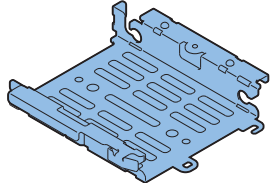
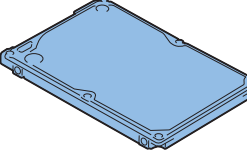
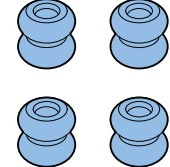
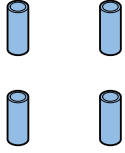
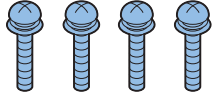

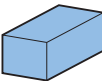
## Points to Note when HDD Data Encryption & Mirroring Kit has been Installed

A security sticker is attached to the kit package to indicate that the package has not been opened. Check to see that the package has not been opened in any way and the sticker is not torn.

If the package appears to have been opened or the sticker is torn, check to make sure that the user has done so intentionally.

## Checking the Contents

### Option HDD (160GB)


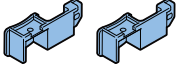
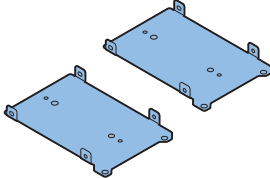
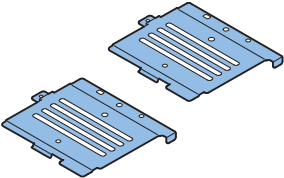
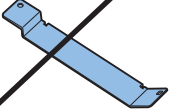
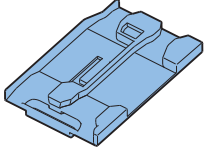
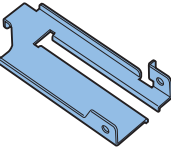

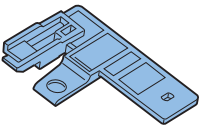
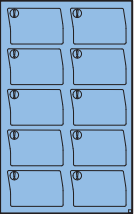
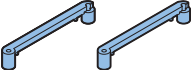
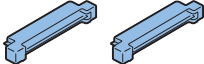
<input type="checkbox"/> [1] HDD Support Pate X 1 	<input type="checkbox"/> [2] HDD X 1 	<input type="checkbox"/> [3] Vibration-prevention Dumper X 4 
<input type="checkbox"/> [4] Spacer X 4 	<input type="checkbox"/> [5] Screw (W sems; M3x14) X 4 	<input type="checkbox"/> [6] Screw (TP;M3x6) X 2 
<input type="checkbox"/> [7] Gasket X 1 		

<CD/Guides>

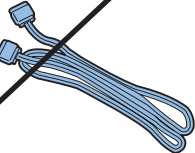
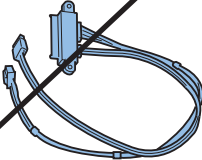
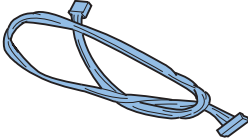
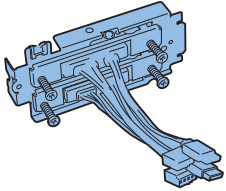
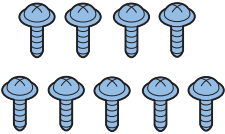
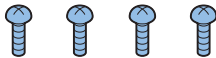
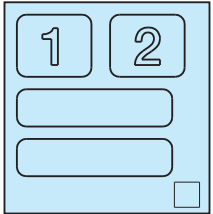
- Notice for FCC/IC

F-9-702

Removable HDD Kit


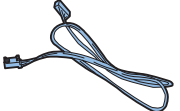



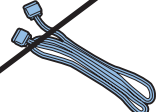







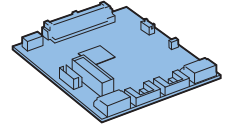
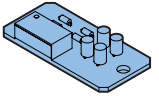
<input type="checkbox"/> [1] Hinge Shaft Stopper X 2 	<input type="checkbox"/> [2] HDD Handle X 2 	<input type="checkbox"/> [3] HDD Connector Plate X 2 
<input type="checkbox"/> [4] HDD Cover X 2 	<input type="checkbox"/> [5] HDD Blanking Plate X 1 	<input type="checkbox"/> [6] HDD Door Guide X 1 
<input type="checkbox"/> [7] HDD Lock Plate X 1 	<input type="checkbox"/> [8] HDD Lock Plate Shaft X 2 	<input type="checkbox"/> [9] HDD Lid Retainer X 1 
<input type="checkbox"/> [10] Shutdown Caution Label X 1 	<input type="checkbox"/> [11] Connector Fixing Block X 2 	<input type="checkbox"/> [12] Conversion Connector X 2 

F-9-703

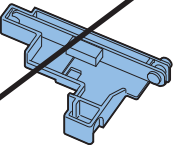


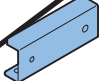
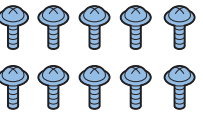




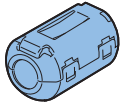
<input type="checkbox"/> [13] Signal Cable (660mm ; Red) X 1 FK2-8432 or A: Cont-Sig 	<input type="checkbox"/> [14] IV Cable X 1 FK2-8453 or A: HDD-Pow1, A: HDD-Sig1 	<input type="checkbox"/> [15] Power Cable (650mm) X 1 FK2-8464 or A: Cont-Pow 
<input type="checkbox"/> [16] HDD Drawer Unit x 1 	<input type="checkbox"/> [17] Screw (R round head TP; M3x6) X 9 <p>Use 7 of them</p> 	<input type="checkbox"/> [18] Screw (P Tight; M3x8) X 4 
<input type="checkbox"/> [19] R-HDD Label X 1 		

F-9-704

**HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit**

<input type="checkbox"/> [1] LED Cable (1200mm; 7 pin) X 1 FM4-0839 or A: LED-Sig 	<input type="checkbox"/> [2] STS Cable (550mm (Light blue); 5 pin) X 1 FM4-0842 or A: STS-Sig 	<input type="checkbox"/> [3] Signal Cable (80mm; Red) X 1 FK2-8436 or A: HDD-Sig1 
<input type="checkbox"/> [4] Signal Cable (80mm; Blue) X 1 FK2-8438 or A: HDD-Sig2 	<input type="checkbox"/> [5] Power Cable (80mm) X 2 FK2-8461 or A: HDD-Pow1/2 	<input type="checkbox"/> [6] Signal Cable (450mm; Red) X 1 FK2-8435 or A: Cont-Sig 
<input type="checkbox"/> [7] Power Cable (430mm) X 1 FK2-8463 or A: Cont-Pow 	<input type="checkbox"/> [8] Power Cable (430mm) X 1 FK2-8463 or A: HDD-Pow2 	<input type="checkbox"/> [9] Signal Cable (340mm (Red); ) X 1 FK2-8434 or A: HDD-Sig1 
<input type="checkbox"/> [10] Signal Cable (370mm (Blue); ) X 1 FK2-8441 or A: HDD-Sig2 	<input type="checkbox"/> [11] Power Cable (320mm) X 1 FK2-8467 or A: HDD-Pow1 	<input type="checkbox"/> [12] LED Cable (290mm; 7 pin) X 1 FM4-0840 or A: LED-Sig 
<input type="checkbox"/> [13] STS Cable (420mm (Light blue); 5 pin) X 1 FM4-0843 or A: STS-Sig 	<input type="checkbox"/> [14] Mirroring Board or Encryption Board X 1 	<input type="checkbox"/> [15] LED Board (Small) X 1 FK2-7400 or A: LED 

F-9-705

<input type="checkbox"/> [16] LED Board (large) X 1 FK2-8324 or A: LED 	<input type="checkbox"/> [17] LED Label (Small) X 1 	<input type="checkbox"/> [18] LED Label (large) X 1 
<input type="checkbox"/> [19] HDD Connection Plate X 1 	<input type="checkbox"/> [20] Screw (TP; M3x6) X 10  Use 6 of them 	<input type="checkbox"/> [21] Edge Saddle X 1 
<input type="checkbox"/> [22] Wire saddle (Small) X 5  Use 4 of them 	<input type="checkbox"/> [23] Wire saddle (large) X 1 	<input type="checkbox"/> [24] Wire saddle (Middle) X 1 
<input type="checkbox"/> [25] Ring Core X 1 		

F-9-706

< CD/Guides of HDD Mirroring Kit >

- HDD Mirroring Kit-D1 User Documentation
- Notice for FCC/IC
- China RoHS Notice 3

< CD/Guides of HDD Data Encryption & Mirroring Kit >

- HDD Data Encryption & Mirroring Kit-C1 User Documentation
- HDD Data Encryption Kit Notice
- Installation Procedure
- Noticed for FCC/IC

## Setting Before Turning OFF the Power

### CAUTION:

Be sure to turn OFF the main power after executing this service mode setting.

Turning OFF the main power without executing service mode causes "E602-5001 (procedure error before installing the HDD Encryption Board)" to occur when turning ON the main power after installing the Encryption Board.

When this error occurs, the machine needs to be returned again to the initial state in which no Encryption Board is installed.



- 1) Execute the following service mode (level 1).
  - COPIER > FUNCTION > INSTALL > HD-CRYP

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

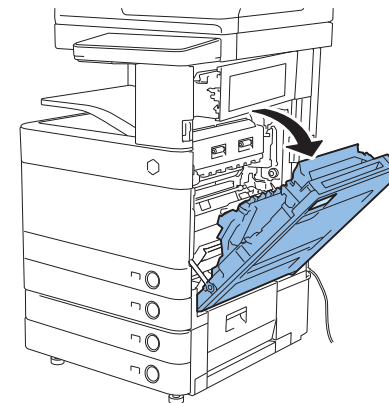
- 1) Turning off the Main Power Supply Switch of the Host Machine.
- 2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

## Installation Procedure

### Removing the HDD Unit, Signal Cable and Power Supply Cable



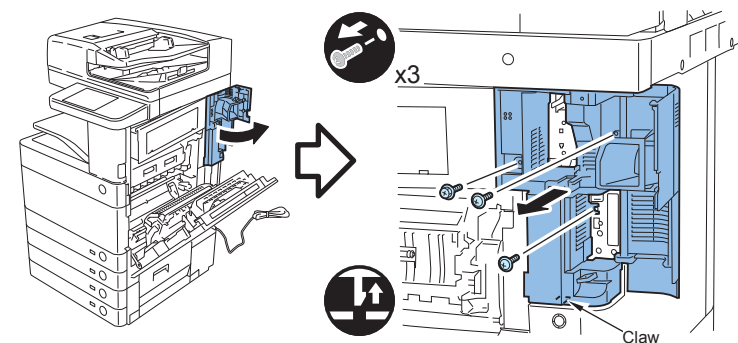
- 1) Open the Right Lower Cover. (Open the Right Upper Cover simultaneously.)



F-9-707



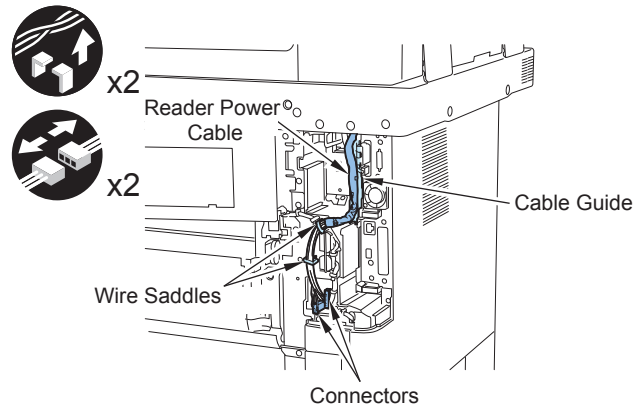
- 2) Open the Right Rear Cover 1.
- 3) Remove the Right Rear Cover 1.
  - 1 Screw (RS tight; M4)
  - 2 Screws (TP; M3)
  - 1 Claw



F-9-708

□  
4) When the Reader is installed, remove the Reader Power Cable.

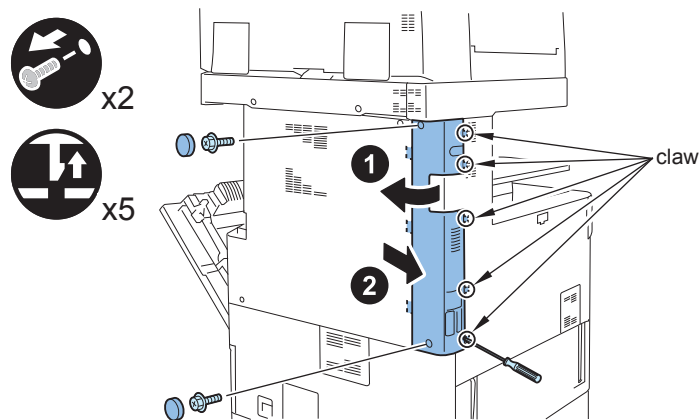
- 2 Connectors
- 2 Wire Saddles
- 1 Cable Guide



F-9-709

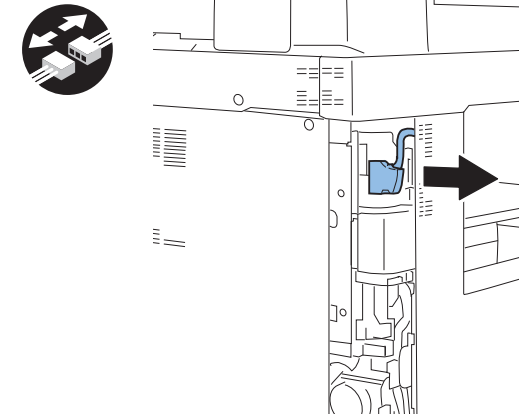
□  
5) Remove the Left Rear Cover.

- 2 Rubber Caps
- 2 Screws
- 5 Claws



F-9-710

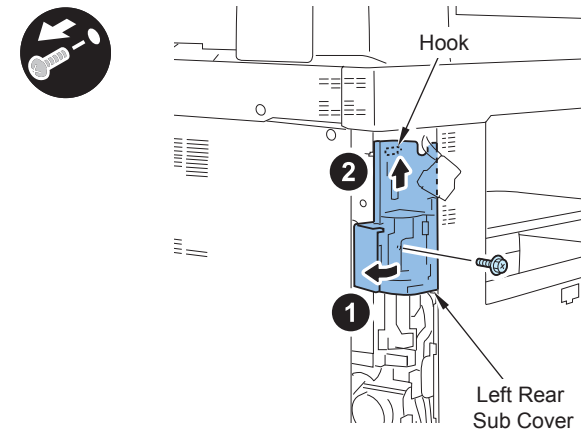
□  
6) When the Reader is installed, remove the Reader Communication Cable.



F-9-711

□  
7) Remove the Left Rear Sub Cover.

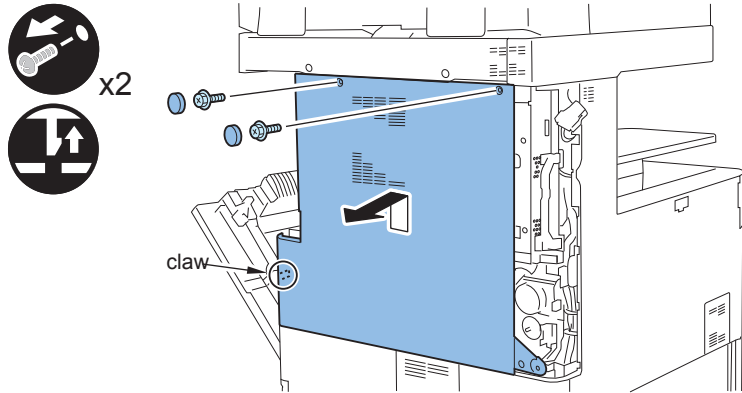
- 1 Screw
- 1 Hook



F-9-712

□  
8) Remove the Rear Cover.

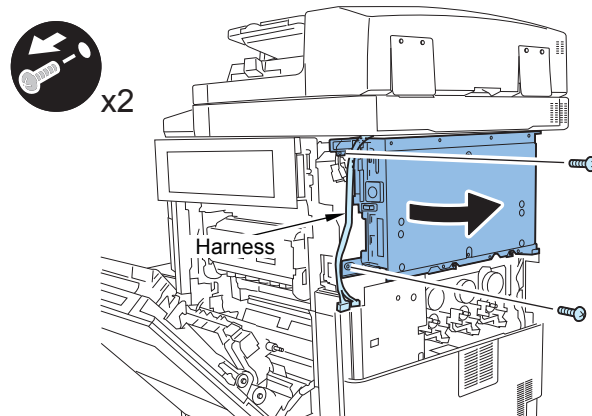
- 2 Rubber Caps
- 2 Screws
- 1 Claw



F-9-713

□  
9) Open the Controller Box while avoiding the harness.

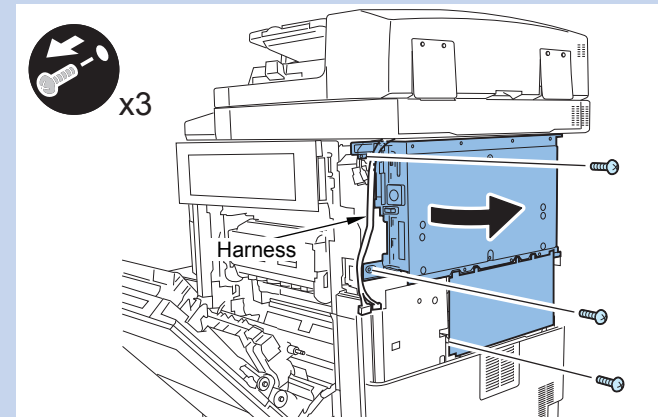
- 2 Screws



F-9-714

NOTE:

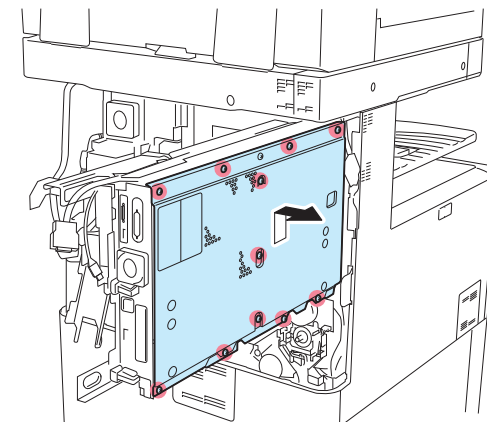
If the FAX Unit has been installed, remove the 3 screws and open the Controller Box with the FAX Unit.



F-9-715

□  
10) Remove the Controller Cover.

- 11 Screws (loosen)



F-9-716

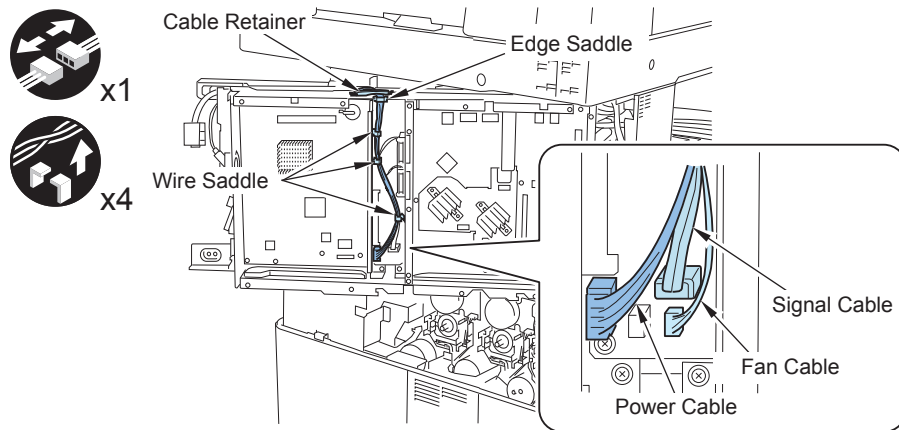


- 11) Remove the Power Cable.

**CAUTION:**

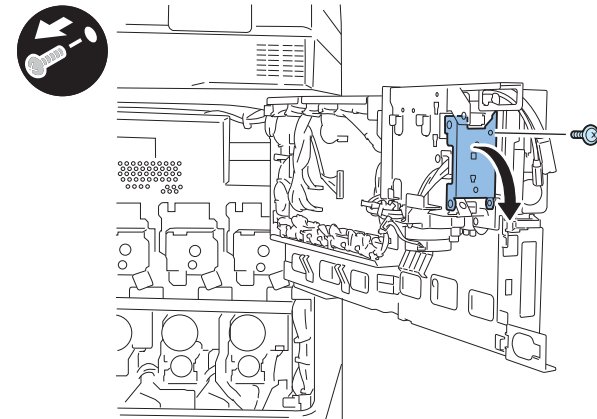
Do not remove the Signal Cable and the Fan Cable.

- 1 Edge Saddle
- 3 Wire Saddles
- 1 Cable Retainer



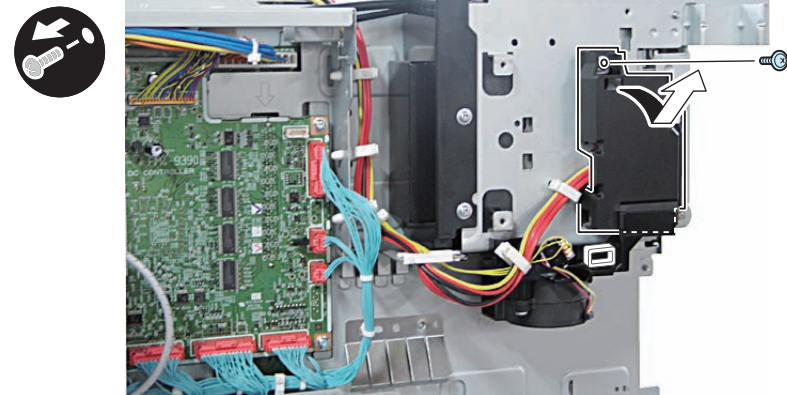
F-9-717

- 12) Open the HDD Lid.
- 1 Screw (Removed screw will not be used.)



F-9-718

- 13) When the Cable Cover is installed, remove it. (Removed Cable Cover and screw will not be used.)
- 1 Screw

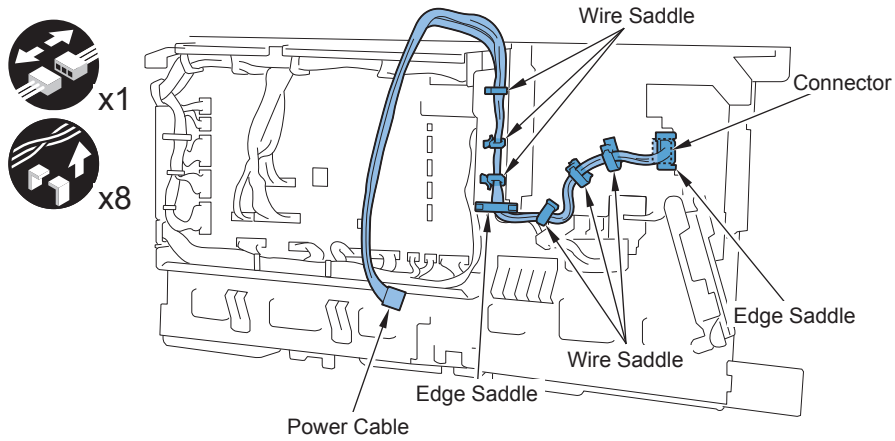


F-9-719

- 14) Remove the Power Cable. (Removed Power Cable will not be used.)

<When the Cable Cover is removed>

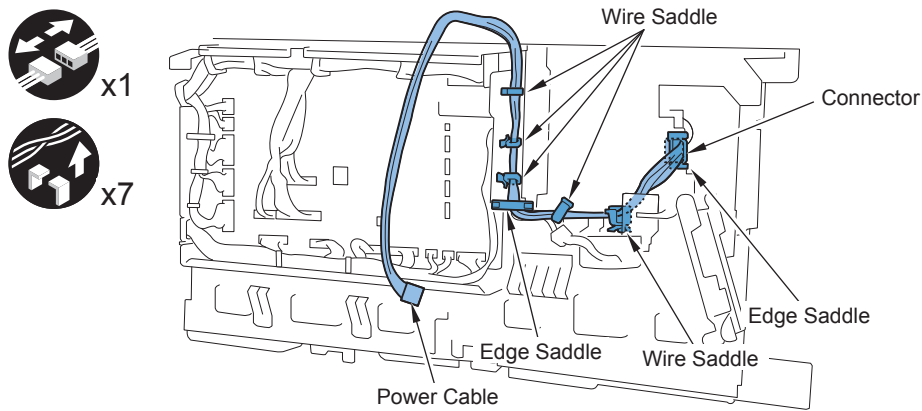
- 2 Edge Saddles
- 6 Wire Saddles
- 1 Connectors



F-9-720

<When the Cable Cover is not installed>

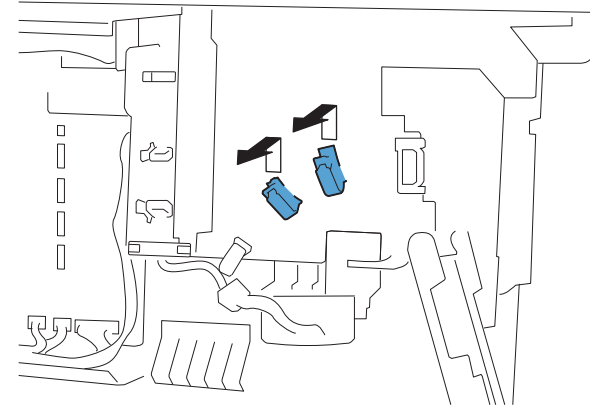
- 2 Edge Saddles
- 5 Wire Saddles
- 1 Connectors



F-9-721

- <When the Cable Cover is removed>

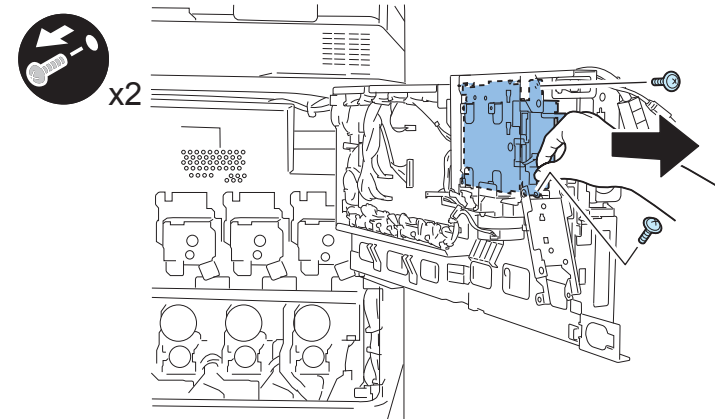
- 15) Remove the 2 Wire Saddles. (Removed wire saddles will not be used.)



F-9-722

- 16) Remove the HDD Unit by holding it as shown in the figure below.

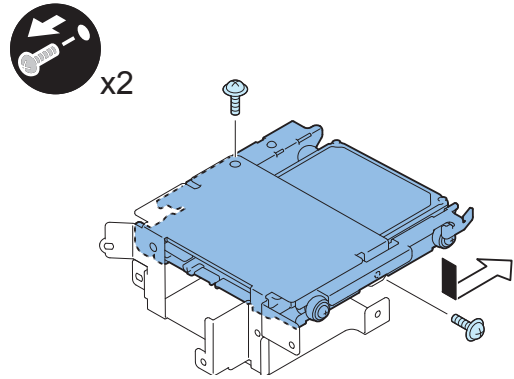
- 2 Screws (Removed screw will not be used.)



F-9-723

- 17) Remove the HDD (160GB) installed as standard from the removed HDD Unit. (The removed HDD Fixation Plate and the screws will not be used. The HDD (160GB) installed as standard will be used in "Disassembling/Assembling and Installing the HDD Removed from the Host Machine (First HDD)" step1.)

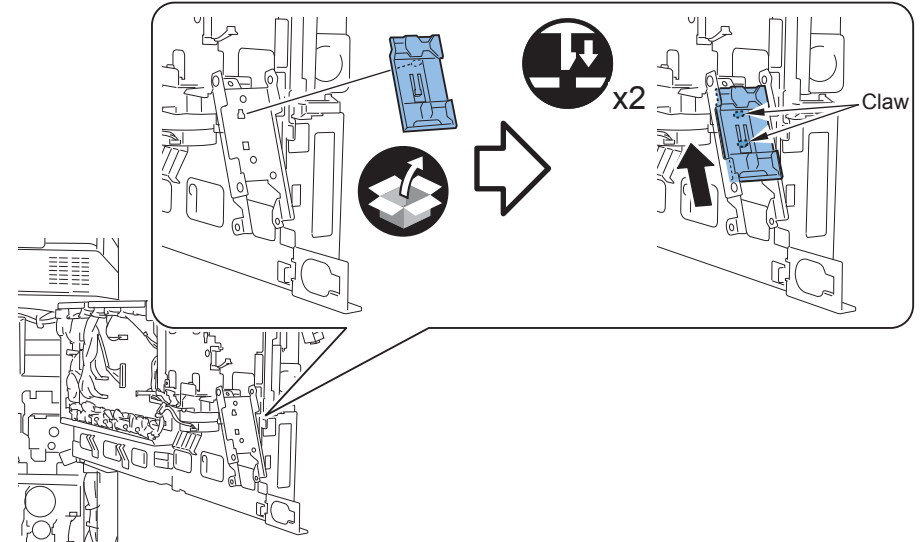
- 2 Screws



F-9-724

## ■ Installing the Removable HDD Kit

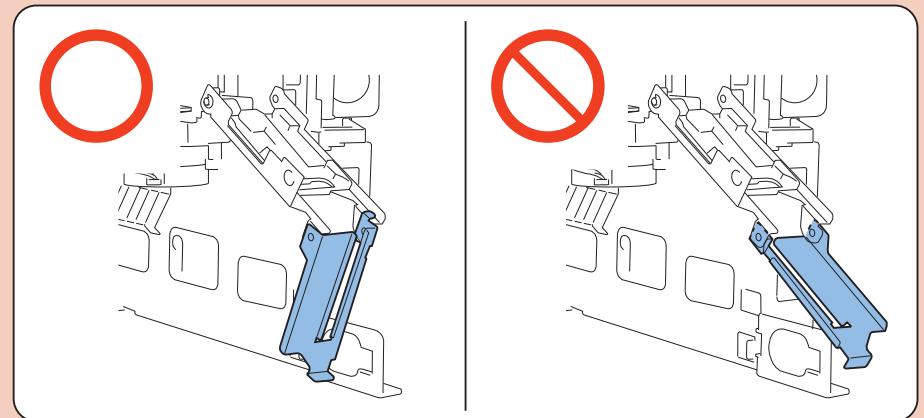
- 1) Install the HDD Door Guide.
- 2 Claws



F-9-725

### CAUTION:

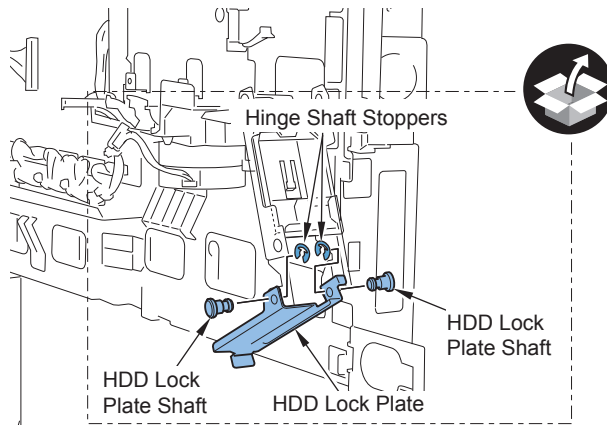
Be careful of the installation direction of HDD Lock Plate.



F-9-726

□ 2) Install the HDD Lock Plate.

- 2 HDD Lock Plate Shafts
- 2 Hinge Shaft Stoppers



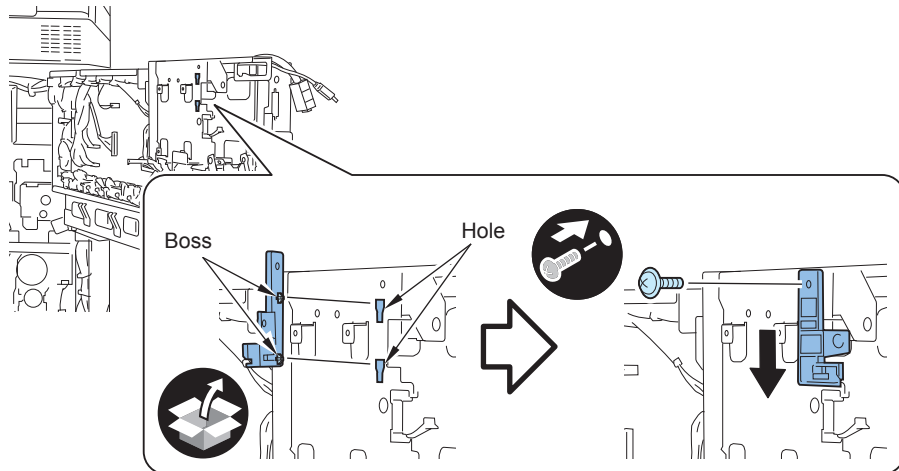
F-9-727

□ 3) Adjust the 2 bosses to the hole and install the HDD Lid Retainer.

- 1 Screw (TP round end; M3x6)

**CAUTION:**

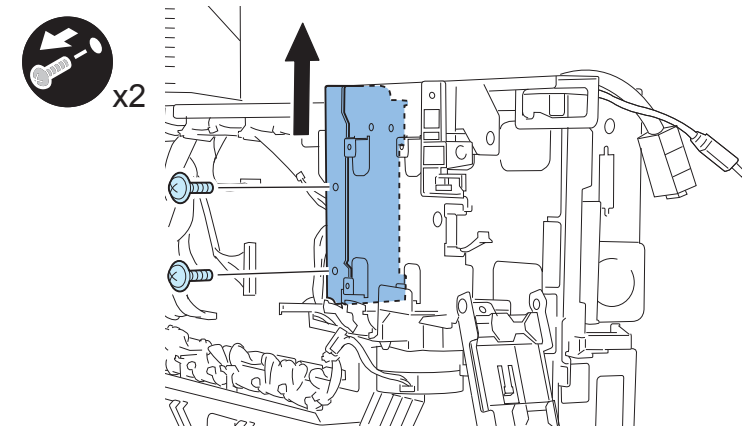
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



F-9-728

□ 4) Remove the HDD Rear Cover. (Removed HDD Rear Cover will not be used.)

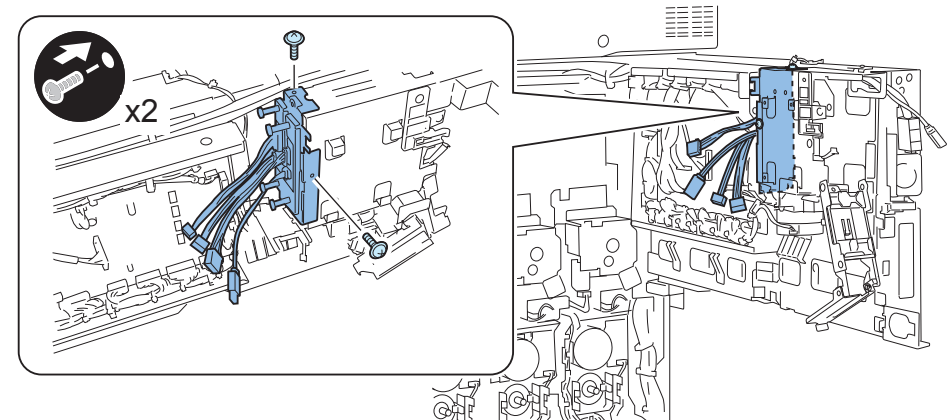
- 2 Screws (Removed screw will be used in step 5)



F-9-729

□ 5) Install the HDD Drawer Unit.

- 2 Screws (Use the screw removed in step 4)



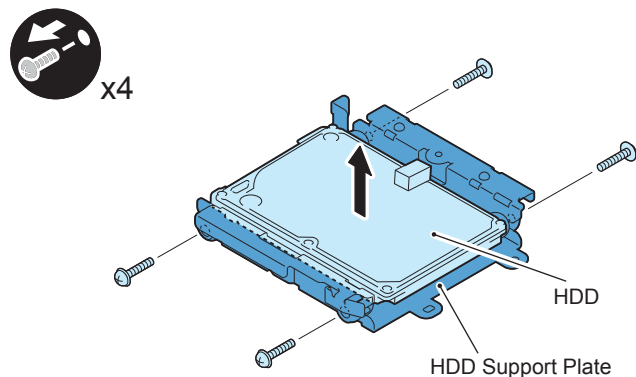
F-9-730

## Disassembling/Assembling and Installing the HDD Removed from the Host Machine (First HDD)



1) Remove the HDD from the HDD Support Plate. (Use the HDD (160GB) removed in "Removing the HDD Unit, Signal Cable and Power Supply Cable" step 17.)

- 4 Screws



F-9-731

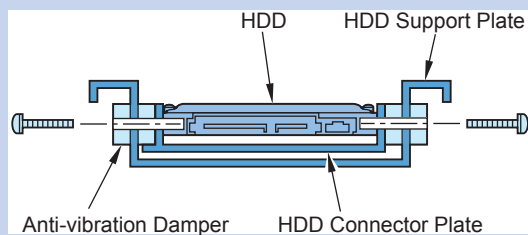


2) Install the HDD Connector Plate first, and then HDD to the HDD Support Plate. (Use the HDD and screws removed in previous step.)

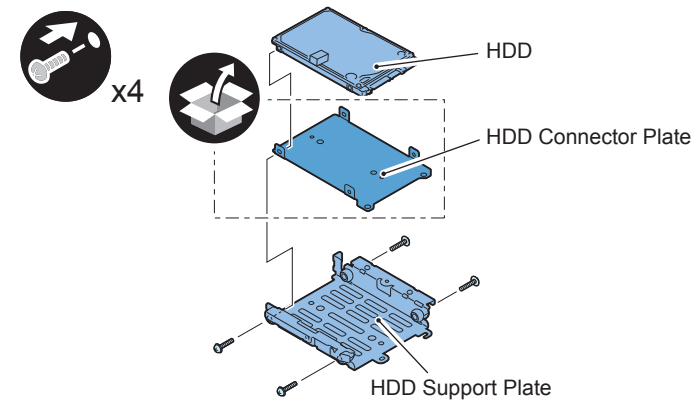
- 4 Screws

### NOTE:

When tightening the screw, be sure to align the screw holes by lifting the HDD Connector Plate and HDD.



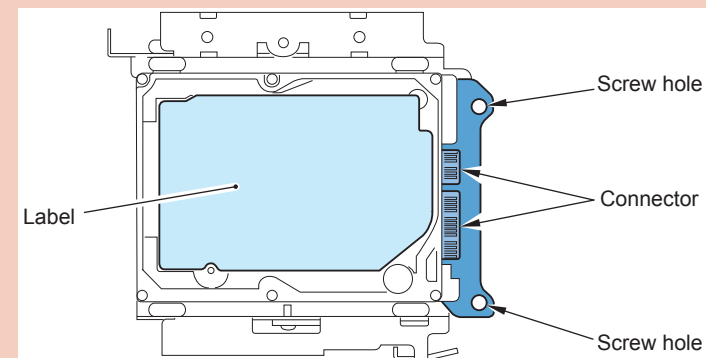
F-9-732



F-9-733

### CAUTION:

- Assembling the option HDD, be careful of the installation direction.
- Make sure that the label on the option HDD is facing up.
- Install it in the position where the HDD connector is placed in the side with screw hole of HDD Support Plate. (opposite direction compared to the fixed HDD)

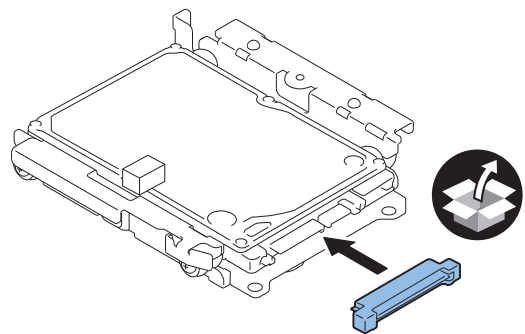


F-9-734

- 3) Install the Conversion Connector.

**CAUTION:**

Make sure that there is no opening between the Conversion Connector and part of HDD.

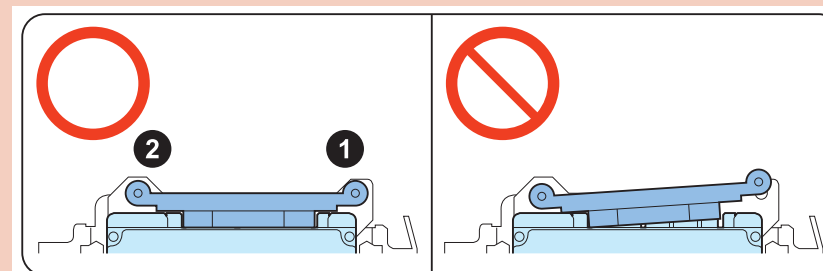


F-9-735

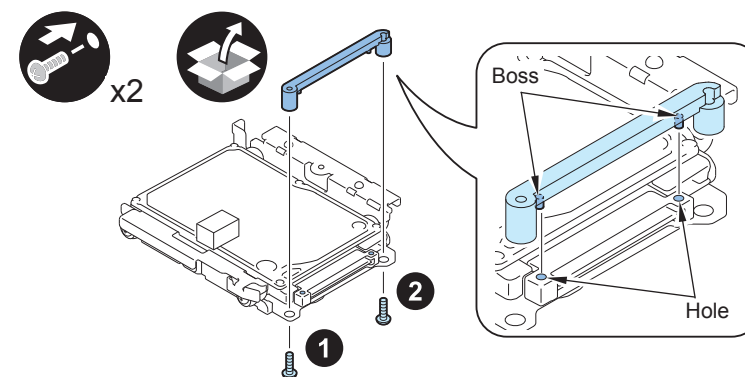
- 4) Fit the 2 bosses of Connector Fixing Block to the hole of Conversion Connector and install it.
- 2 Screws (P Tight; M3x8)

**CAUTION:**

- Be sure to firmly hold the Connector Fixation Block when tightening the screws.
- Be sure to follow the correct order to tighten the screws, otherwise the Conversion Connector may not be connected properly, resulting in poor contact.



F-9-736



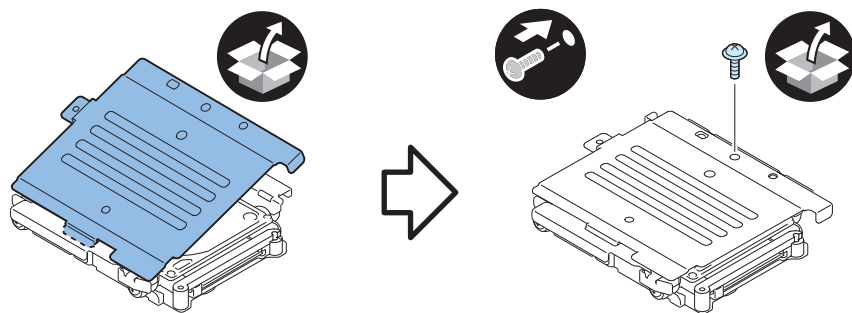
F-9-737

□ 5) Install the HDD Cover.

- 1 Claw
- 1 Screw (TP round end; M3x6)

**CAUTION:**

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



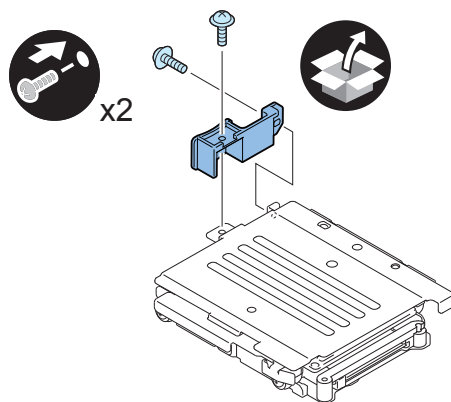
F-9-738

□ 6) Install the HDD Handle.

- 2 Screws (TP round end; M3x6)

**CAUTION:**

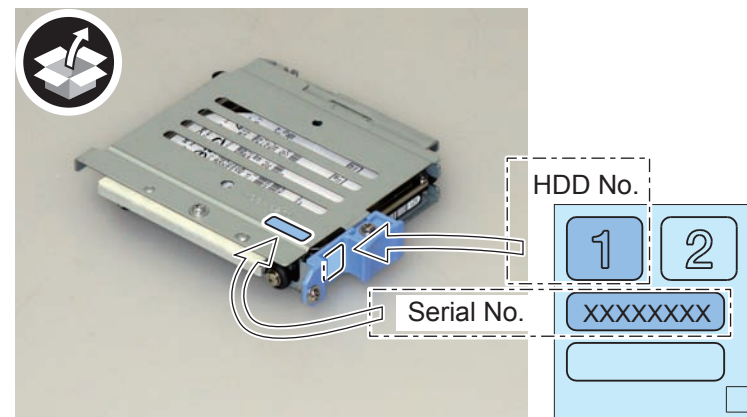
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



F-9-739

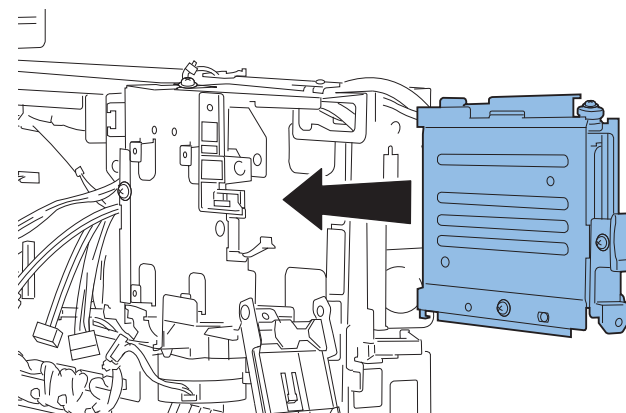
□ 7) Affix the HDD No.1 Label to the handle of the Removable HDD.

- 8) Write down the serial number of the host machine to the label for recording the number, and affix it to the area indicated in the figure.



F-9-740

□ 9) Install the originally installed HDD to Slot.1 (left side).



F-9-741



## Assembling and Installing the Option HDD (Second HDD)

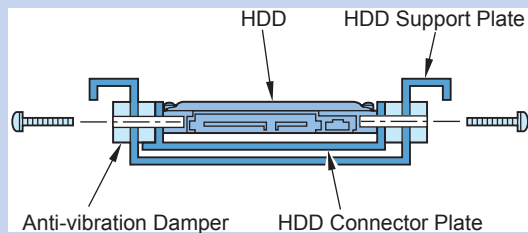


1) Purchase option HDD and assemble the second HDD.

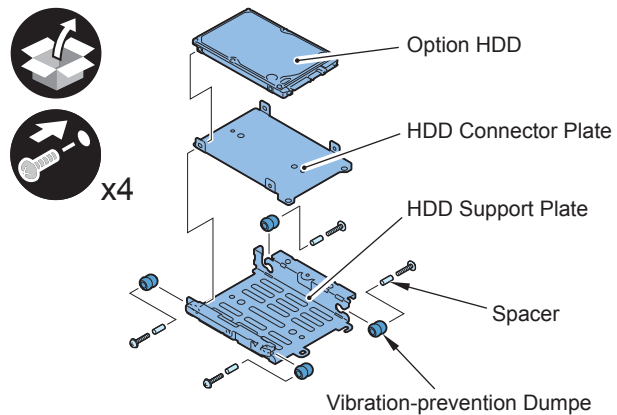
- 1 Option HDD
- 1 HDD Support Plate (enclosed with option HDD)
- 1 HDD Connector Plate (enclosed with removable HDD Kit)
- 4 Vibration-prevention Dumpers (enclosed with option HDD)
- 4 Spacers (enclosed with option HDD)
- 4 Screws (W sems; M3x14) (enclosed with option HDD)

### NOTE:

When tightening the screen, be sure to align the screw holes by lifting the HDD Connector Plate and HDD.



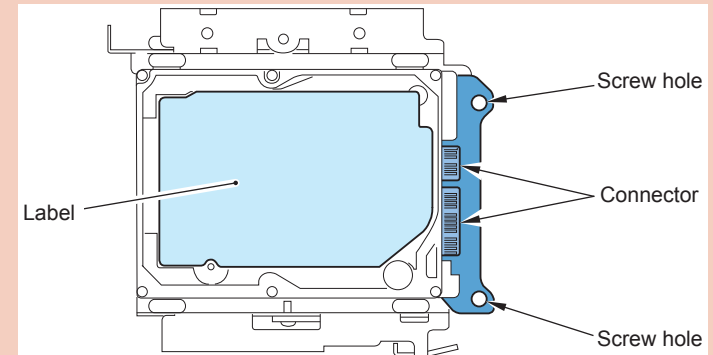
F-9-742



F-9-743

### CAUTION:

- Assembling the option HDD, be careful of the installation direction.
- Make sure that the label on the option HDD is facing up.
- Install it in the position where the HDD connector is placed in the side with screw hole of HDD Support Plate. (opposite direction compared to the fixed HDD)



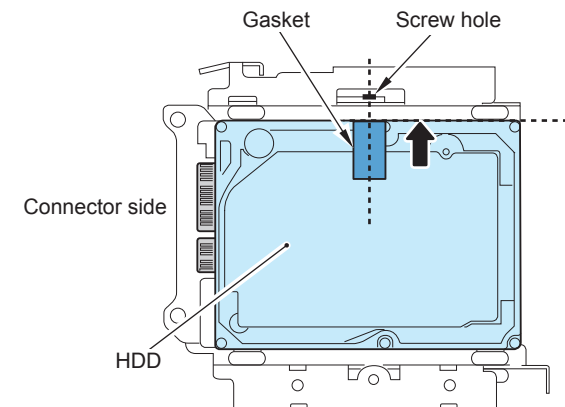
F-9-744



2) Affix the gasket to the place shown in the figure below.

### CAUTION:

Be sure to place the gasket in contact with the label-free metal surface of the HDD surface.

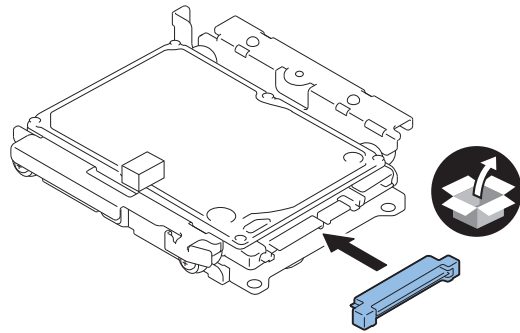


F-9-745

- 3) Install the Conversion Connector.

**CAUTION:**

Make sure that there is no opening between the Conversion Connector and part of HDD.

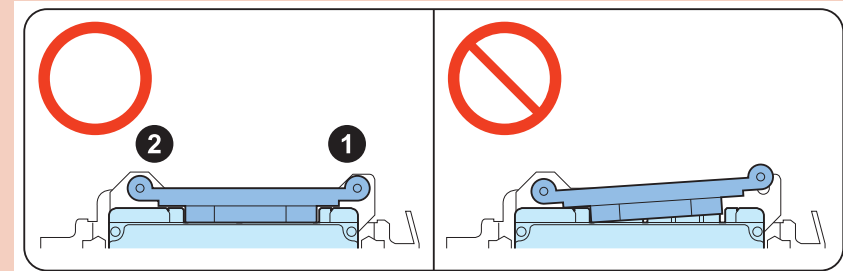


F-9-746

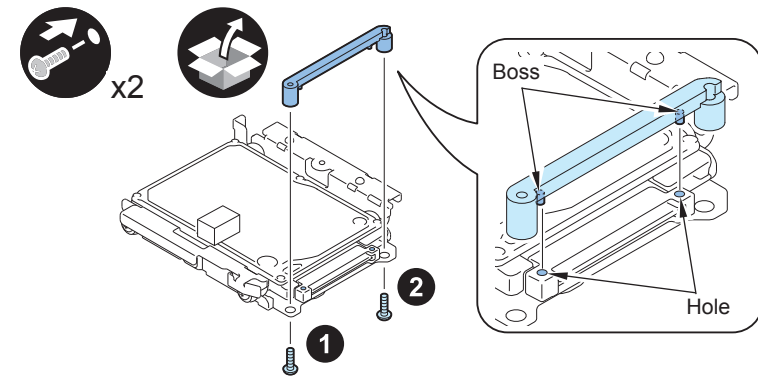
- 4) Fit the 2 bosses of Connector Fixing Block to the hole of Conversion Connector and install it.
- 2 Screws (P Tight; M3x8)

**CAUTION:**

- Be sure to firmly hold the Connector Fixation Block when tightening the screws.
- Be sure to follow the correct order to tighten the screws, otherwise the Conversion Connector may not be connected properly, resulting in poor contact.



F-9-747



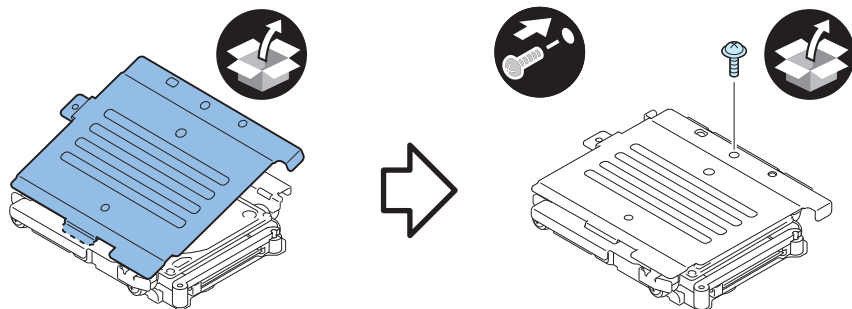
F-9-748

5) Install the HDD Cover.

- 1 Claw
- 1 Screw (TP round end; M3x6)

**CAUTION:**

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



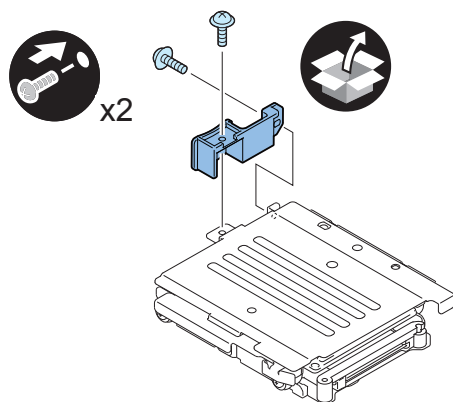
F-9-749

6) Install the HDD Handle.

- 2 Screws (TP round end; M3x6)

**CAUTION:**

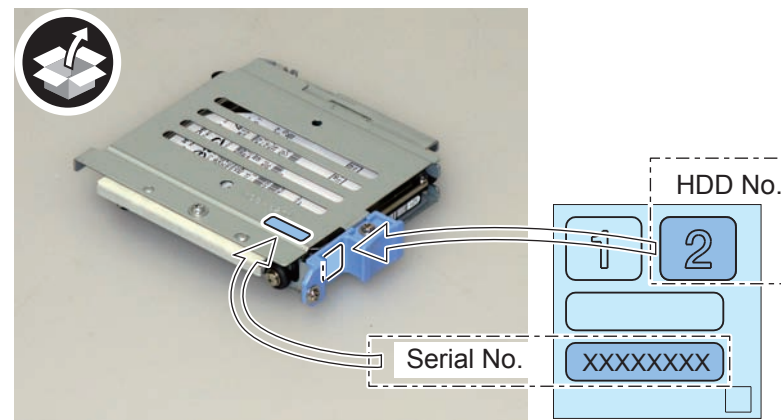
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



F-9-750

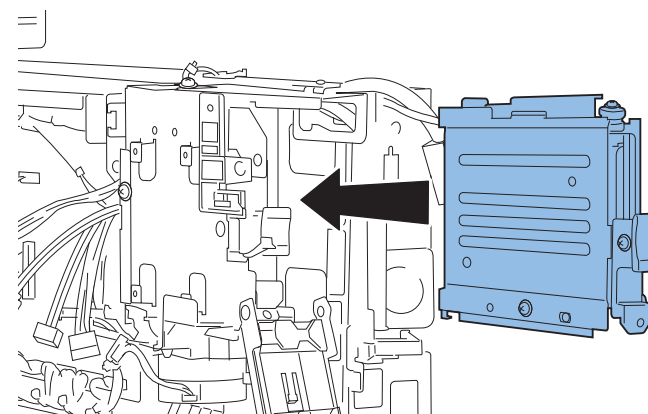
7) Affix the HDD No.2 Label to the handle of the Removable HDD.

- 8) Write down the serial number of the host machine to the label for recording the number, and affix it to the area indicated in the figure.



F-9-751

9) Install the HDD to Slot.2 (right side).



F-9-752

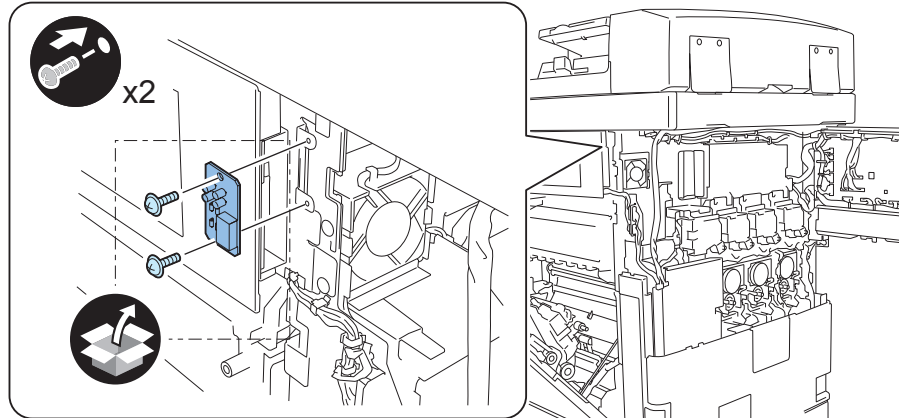
10) Close the Edge Saddle, and close the HDD Cap.

## Installing the LED Board



1) Install the LED Board (small) (FK2-7400 or A: LED).

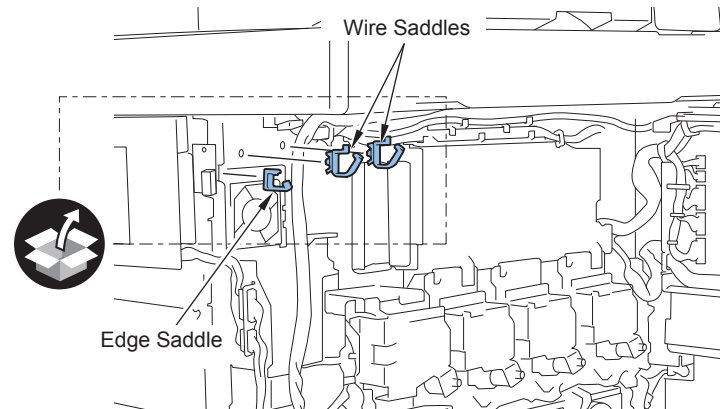
- 2 Screws (TP; M3x6)



F-9-753



2) Install the 2 wire saddles and the edge saddle.



F-9-754

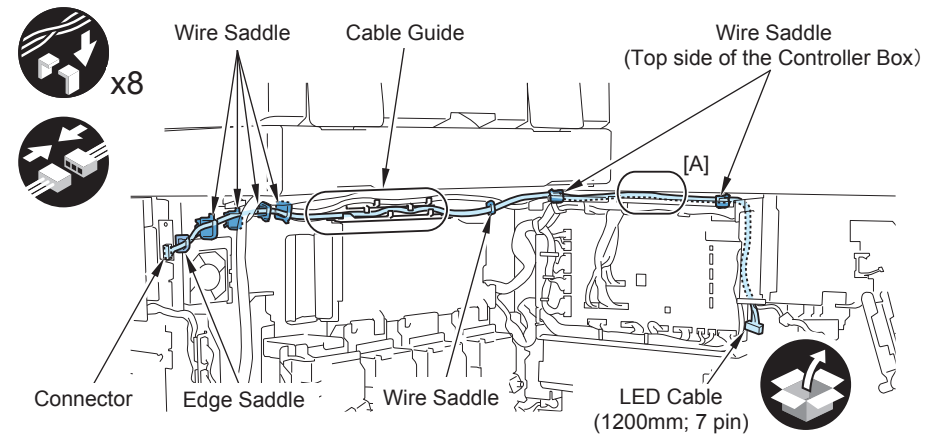


3) Connect the LED Cable (1200 mm; 7-pin) (FM4-0839 or A: LED-Sig).

- 7 Wire Saddles
- 1 Edge Saddle
- 1 Cable Guide
- 1 Connector

### CAUTION:

- Be sure to tuck the [A] area of the LED cable under the other 2 cables running through the [A] area. This is to prevent the [A] area of the LED cable from being slacked off when closing the Controller Box.



F-9-755

## ■ Installing the Mirroring Board or Encryption Board

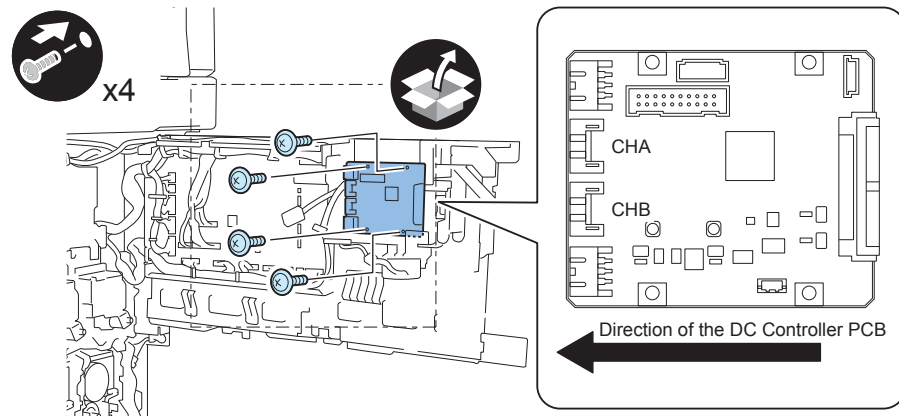


1) Install the Mirroring Board or Encryption Board so that "CHA" and "CHB" are placed in the direction of the DC Controller PCB.

- 4 Screws (TP; M3x6)

### CAUTION:

Be sure that the direction of installing the Mirroring Board or Encryption Board is opposite to the case when the fixed HDD is installed. If it is installed in a wrong direction, the cables do not reach the board.



F-9-756



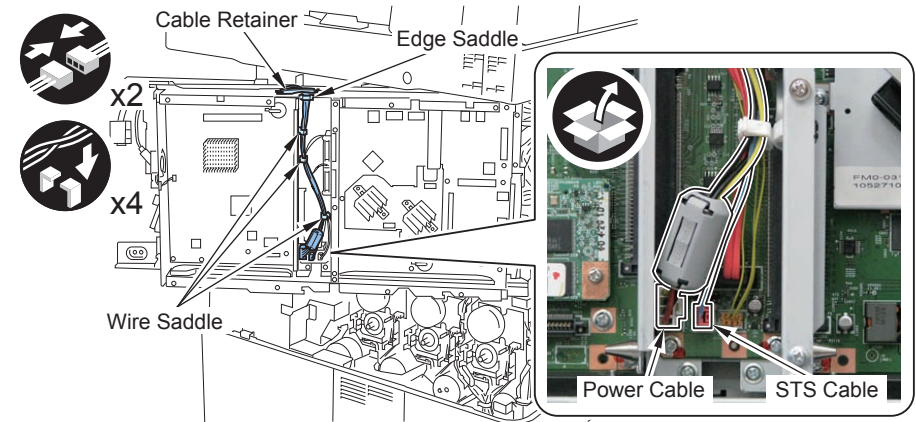
2) Connect the cables to the PCB on the backside.

- Power Cable (650 mm): FK2-8464 or A: Cont-Pow (Included in the Removable HDD Kit)
- STS Cable (550 mm (Light blue); 5-pin): FM4-0842 or A: STS-Sig (Included in the HDD Mirroring Kit or HDD Encryption Kit)

3) Fix the cables.

- 3 Wire Saddles
- 1 Edge Saddle
- Cable Retainer

4) Install the Ring Core to the Power Supply Cable as shown in the figure.

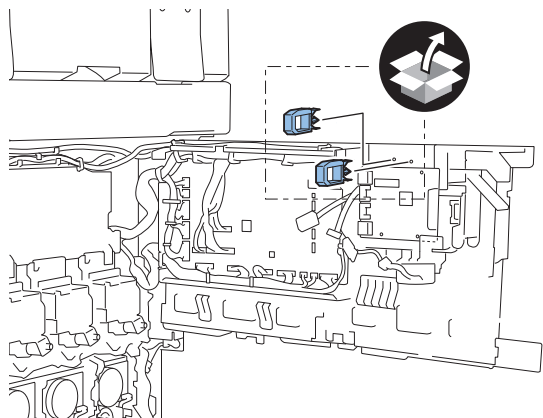


F-9-757



5) Install the Controller Cover. (11 Screws)

- 6) Install the 2 wire saddles.

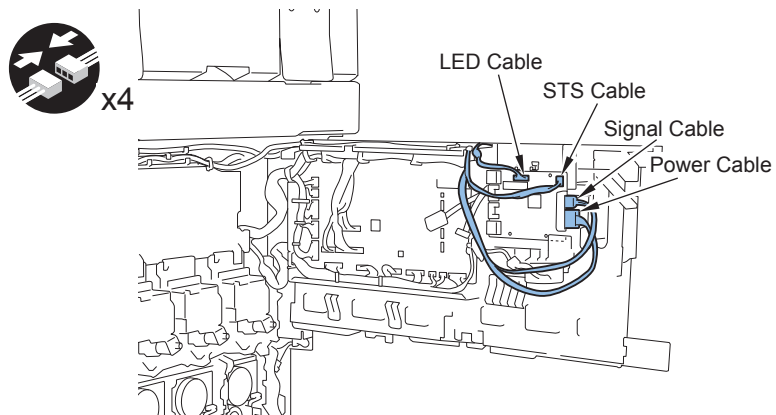


F-9-758

- 7) Connect the cable to the Mirroring Board or Encryption Board.
- Signal Cable (existing cable FK2-8432 or A: Cont-Sig)
  - Power Sable (650mm): FK2-8464 or A: Cont-Pow (Included in the Removable HDD Kit)
  - LED Cable (1200 mm; 7-pin): FM4-0839 or A: LED-Sig
  - STS Cable (550mm (Light blue); 5 Pin): FM4-0842 or A: STS-Sig

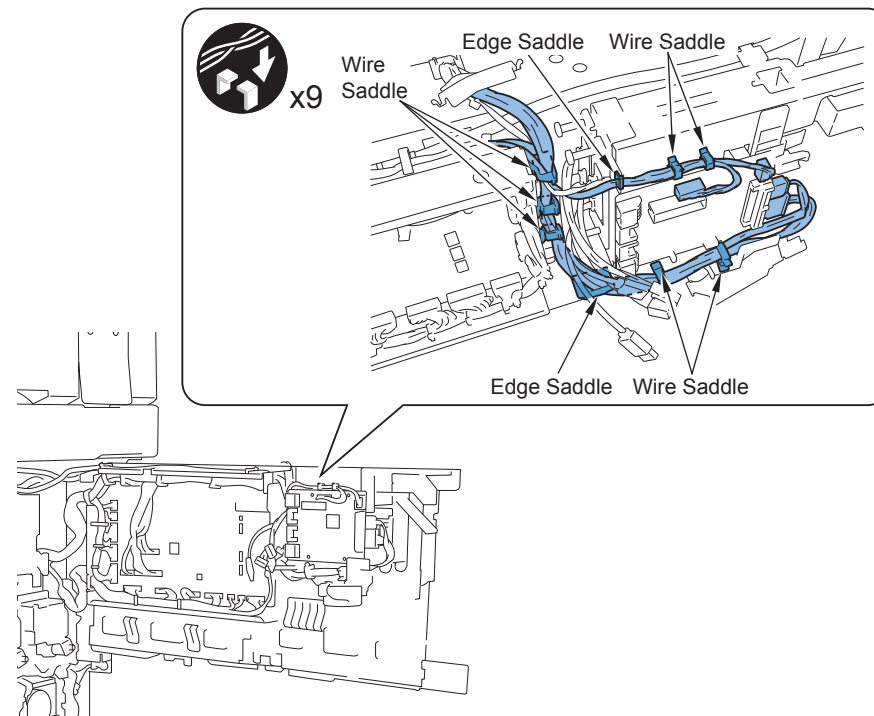
**CAUTION:**

The machine can operate even the STS Cable and the LED Cable are not connected. Therefore, when installing the cables, be sure that they are connected properly.



F-9-759

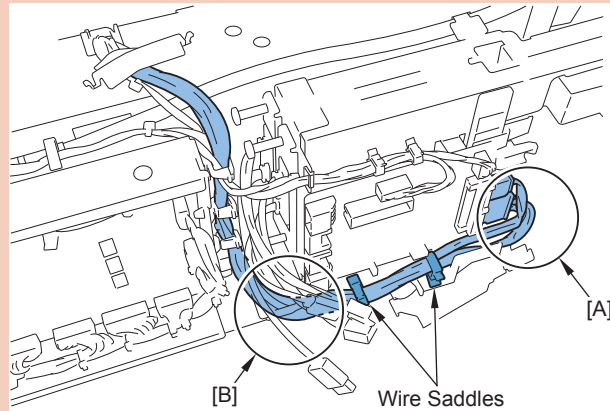
- 8) Fix the cables.
- 7 Wire Saddles
  - 2 Edge Saddles



F-9-760

**CAUTION:**

- When fixing the cables with wire saddles, be sure to take up slack of them at [A] part, and slack off them at [B] part.
- If slacking off the cables at [A] part, they may interfere the fan on the host machine when returning the Controller Box.

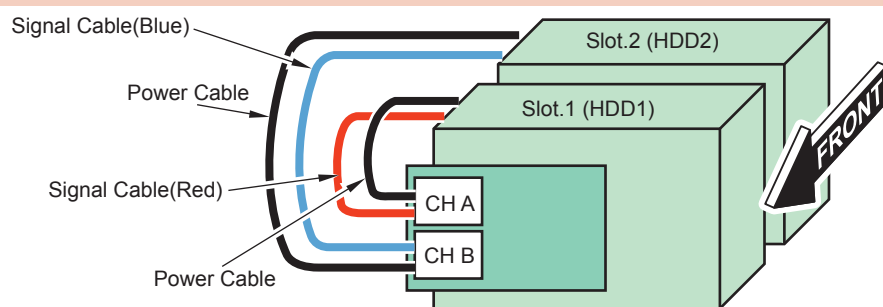


F-9-761

**CAUTION:**

Be sure to acknowledge the following caution before performing the next procedure.  
Combinations of connection between the HDDs and the Mirroring Board or Encryption Board are shown below.

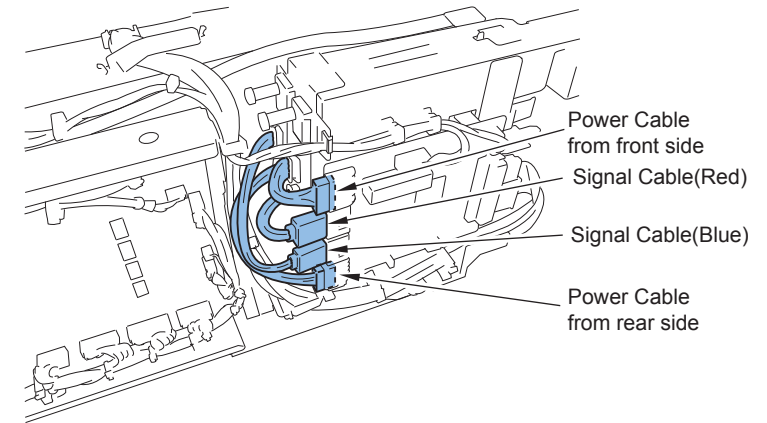
- Connect Slot 1 to "CHA". (Originally installed HDD)
- Connect Slot 2 to "CHB". (New HDD)



F-9-762



9) Connect the cable of the HDD Drawer Unit to the Mirroring Board or Encryption Board.



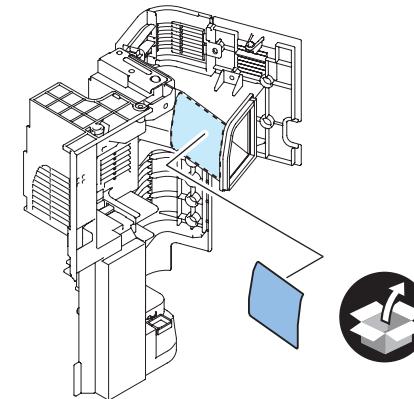
F-9-763



10) Place the Controller Box to the original position. (2 Screws or 3 Screws)



11) Affix the Shutdown Caution Label in the appropriate language on the Right Rear Cover 1. (Included in the Removable HDD Kit).

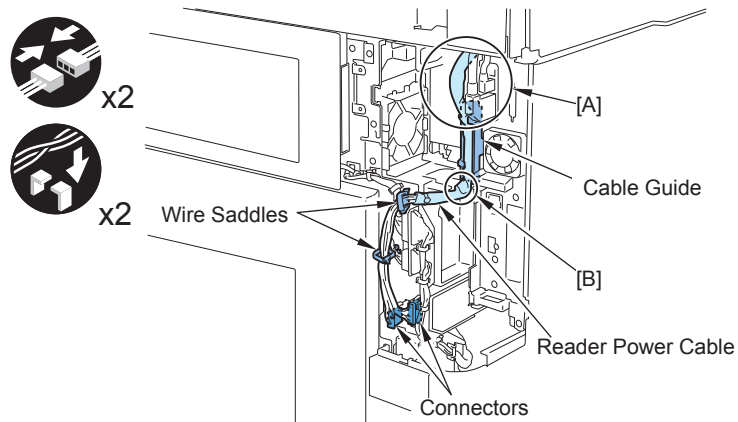


F-9-764



- 12) Install the removed cover and the cable.
- Rear Cover (2 Screws, 2 Rubber Caps)
  - Left Rear Sub Cover (1 Screw)
  - Reader Communication Cable (when reader is installed)
  - Left Rear Cover (2 Screws, 2 Rubber Caps)
- 13) If Reader is installed, install the Reader Power Cable.

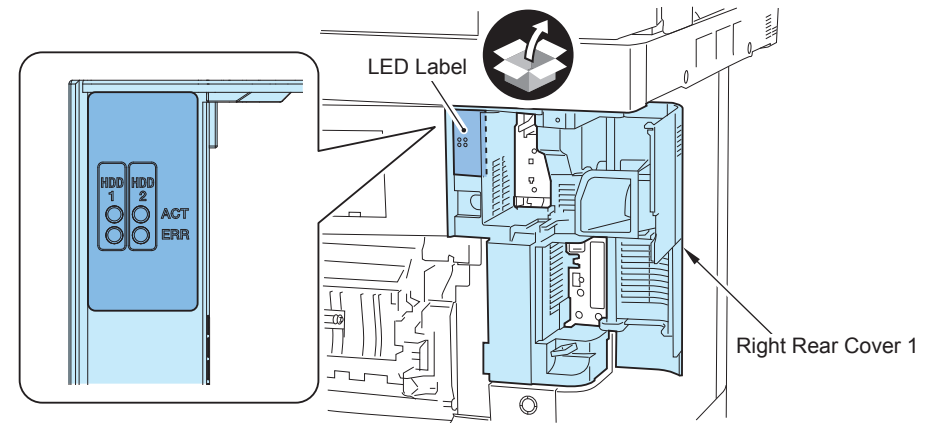
**NOTE:**  
Handle the Reader Power Cable from the connector side and make a slack at [A] part.  
Bend the Reader Power Cable at a right angle on [B] part.



F-9-765

- 14) Install the Right Rear Cover 1. (3 Screws)

- 15) Affix the LED label so that it fits the edge of the Right Rear Cover 1.



F-9-766

- 16) Close the Right Rear Cover 1, Right Lower Cover, and Right Upper Cover.
- 17) Connect the power plug of the host machine to the power outlet.

## Installing the System Software Using the SST (Only when installing HDD Data Encryption & Mirroring Kit)

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product.

It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product.

Details follow.

### 1. Requirements

#### 1) PC

Service support tool in the version that supports this host machine must be installed.

#### 2) Cross Ethernet Cable

### 2. Preparing for the Installation of the System Software of Host machine

- 1) If both PC and the machine are on, turn them off.
- 2) Connect the PC and the machine using an Ethernet cable.
- 3) Turn on the PC.
- 4) Start up the machine in download mode (safe mode).

### 3. Selecting the System Software

- 1) Set the CD containing the latest system software in the PC on which the SST is used.
- 2) Start up the SST.
- 3) Click Register Firmware.
- 4) Select the drive in which the System Software CD has been set, and click search.
- 5) Click REGISTER.
- 6) Click OK.

### 4. Downloading the System Software

- 1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
- 2) When initialization is completed, the machine is automatically restarted and it enters download mode.
- 3) Select the version to be downloaded and click "Start".
- 4) When download is completed, the machine is automatically restarted.
- 5) When writing of the firmware is completed, the machine is automatically restarted.
- 6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
- 7) Terminate the SST.
- 8) Check the version of the downloaded firmware in service mode.

## Checking the Security Version (Only when installing HDD Data Encryption & Mirroring Kit)

- 1) Press the Counter key (123 key) on the control panel.
  - 2) Press the [Check Device Configuration] key appearing on the control panel.
  - 3) Make sure that '2.00' or '2.01' is displayed in 'Canon MFP Security Chip' as version information of the security chip.
- When several Encryption Boards are installed, multiple version information is displayed.

### CAUTION:

The user will be able to make sure that the encryption board fitted with a security chip of the correct version with CC authentication is functioning normally by referring to the version information indicated for 'Canon MFP Security Chip'.


## Checking the Security Mark (Only when installing HDD Data Encryption & Mirroring Kit)

The user may check the security mark, appearing on the control panel when using the Host machine to make sure that an appropriate level of security is being maintained.

The mark appears when the machine is equipped with an encryption board and the board is operating correctly.

The Users Guide provides the following description in connection with the security mark:

<Confirming the Security Mark>

When the HDD Data Encryption & Mirroring Kit is operating normally, a security mark(  ) is displayed on the lower left corner of a panel screen.

## Setting the Mirroring

- 1) Insert the power plug into the socket and turn on the main power of the host machine.
- 2) Make a setting of mirroring.
  - Specify "1" under "Service Mode > COPIER > OPTION > FNC-SW > W/RAID".
- 3) Turn OFF/ON the main power of the host machine to enable the setting value.
- 4) Make sure that the UI screen is activated correctly.
- 5) Make sure that the LED blinks.
  - HDD1 (Slot 1): The green LED blinks.
  - HDD2 (Slot 2): The green and red LEDs blink.

### CAUTION:

Rebuild process starts after setting "1" for W/RAID. If an error occurs during the rebuild process at the initial installation The hard disk needs to be replaced. (Call service rep.), reexecute the process with the following procedure.

- 1) Check that the lighting red LED is HDD2.
- 2) Select Service Mode > COPIER > OPTION > FNC-SW > W/RAID, and set "0".
- 3) To enable the setting value, turn OFF/ON the Main Power Supply Switch of the host machine.
- 4) Select Service Mode > COPIER > OPTION > FNC-SW > W/RAID, and set "1".
- 5) To enable the setting value, turn OFF/ON the Main Power Supply Switch of the host machine.

The foregoing procedure is limited to the rebuild process at the initial installation.

An error during the rebuild process that is executed during operation is not included in the consideration.

## Reporting to the System Administrator at the End of the Work (Only when installing HDD Data Encryption & Mirroring Kit)

When you have completed all installation work, report to the system administrator for the following:

At the point when installation is completed, make explanations about how to check that the appropriate security function has been added and enabled so that, when the function becomes uncontrolled, the system administrator can immediately detect the problem and request <servicing work when a failure occurs>.

### Completion of the Installation Work:

Ask the system administrator to make sure that '2.00' or '2.01' is indicated for 'Canon MFP Security Chip' as the version information of the security chip by referring to the description of Checking the Security Version.

### Maintenance of the Security Functions:

Ask the system administrator to check the security mark to make sure that the security functions are maintained each time the machine is started up by referring to the description of Checking the Security Mark.

## Execution of Auto Adjust Gradation (Only when installing HDD Data Encryption & Mirroring Kit)

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.

Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

## [TYPE-9]

2 Option HDDs (1TB) + Removable HDD Kit  
+ HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit

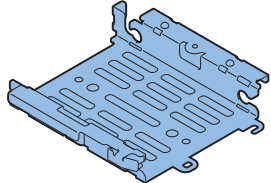
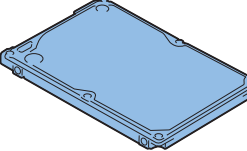
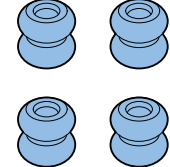
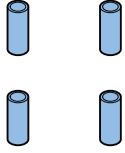
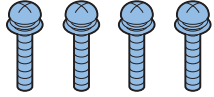

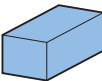
## Points to Note when HDD Data Encryption & Mirroring Kit has been Installed

A security sticker is attached to the kit package to indicate that the package has not been opened. Check to see that the package has not been opened in any way and the sticker is not torn.

If the package appears to have been opened or the sticker is torn, check to make sure that the user has done so intentionally.

## Checking the Contents

### Option HDD (1TB)


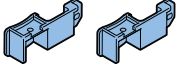
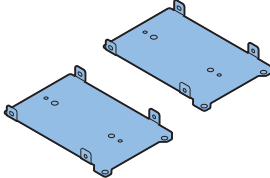
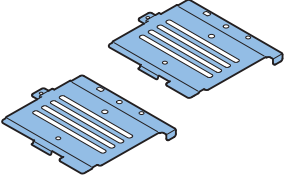
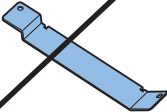
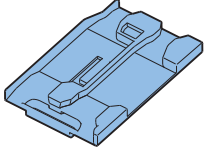
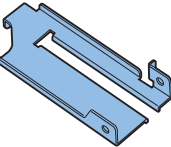

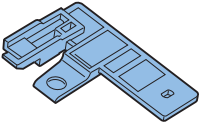
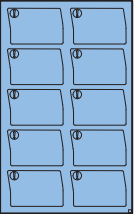
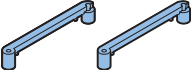
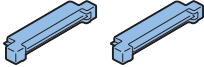
<input type="checkbox"/> [1] HDD Support Pate X 1 	<input type="checkbox"/> [2] HDD X 1 	<input type="checkbox"/> [3] Vibration-prevention Dumper X 4 
<input type="checkbox"/> [4] Spacer X 4 	<input type="checkbox"/> [5] Screw (W sems; M3x14) X 4 	<input type="checkbox"/> [6] Screw (TP;M3x6) X 2 
<input type="checkbox"/> [7] Gasket X 1 		

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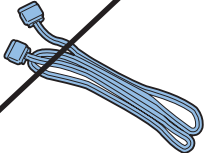
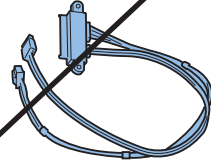
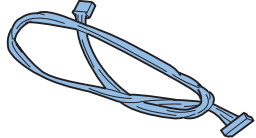
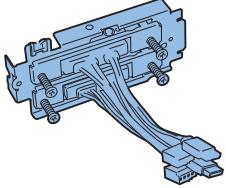
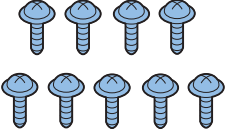
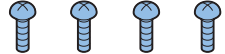
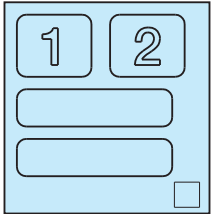
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- Notice for FCC/IC

Removable HDD Kit


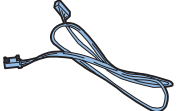



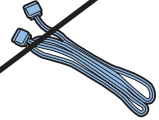







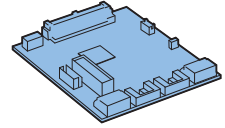
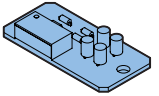
<input type="checkbox"/> [1] Hinge Shaft Stopper X 2 	<input type="checkbox"/> [2] HDD Handle X 2 	<input type="checkbox"/> [3] HDD Connector Plate X 2 
<input type="checkbox"/> [4] HDD Cover X 2 	<input type="checkbox"/> [5] HDD Blanking Plate X 1 	<input type="checkbox"/> [6] HDD Door Guide X 1 
<input type="checkbox"/> [7] HDD Lock Plate X 1 	<input type="checkbox"/> [8] HDD Lock Plate Shaft X 2 	<input type="checkbox"/> [9] HDD Lid Retainer X 1 
<input type="checkbox"/> [10] Shutdown Caution Label X 1 	<input type="checkbox"/> [11] Connector Fixing Block X 2 	<input type="checkbox"/> [12] Conversion Connector X 2 

F-9-768

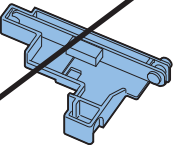


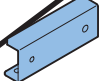
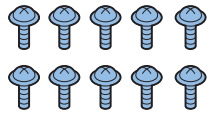

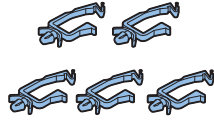


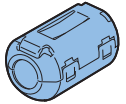
<input type="checkbox"/> [13] Signal Cable (660mm ; Red) X 1 FK2-8432 or A: Cont-Sig 	<input type="checkbox"/> [14] IV Cable X 1 FK2-8453 or A: HDD-Pow1, A: HDD-Sig1 	<input type="checkbox"/> [15] Power Cable (650mm) X 1 FK2-8464 or A: Cont-Pow 
<input type="checkbox"/> [16] HDD Drawer Unit x 1 	<input type="checkbox"/> [17] Screw (R round head TP; M3x6) X 9 Use 7 of them 	<input type="checkbox"/> [18] Screw (P Tight; M3x8) X 4 
<input type="checkbox"/> [19] R-HDD Label X 1 		

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**HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit**

<input type="checkbox"/> [1] LED Cable (1200mm; 7 pin) X 1 FM4-0839 or A: LED-Sig 	<input type="checkbox"/> [2] STS Cable (550mm (Light blue); 5 pin) X 1 FM4-0842 or A: STS-Sig 	<input type="checkbox"/> [3] Signal Cable (80mm; Red) X 1 FK2-8436 or A: HDD-Sig1 
<input type="checkbox"/> [4] Signal Cable (80mm; Blue) X 1 FK2-8438 or A: HDD-Sig2 	<input type="checkbox"/> [5] Power Cable (80mm) X 2 FK2-8461 or A: HDD-Pow1/2 	<input type="checkbox"/> [6] Signal Cable (450mm; Red) X 1 FK2-8435 or A: Cont-Sig 
<input type="checkbox"/> [7] Power Cable (430mm) X 1 FK2-8463 or A: Cont-Pow 	<input type="checkbox"/> [8] Power Cable (430mm) X 1 FK2-8463 or A: HDD-Pow2 	<input type="checkbox"/> [9] Signal Cable (340mm (Red); ) X 1 FK2-8434 or A: HDD-Sig1 
<input type="checkbox"/> [10] Signal Cable (370mm (Blue); ) X 1 FK2-8441 or A: HDD-Sig2 	<input type="checkbox"/> [11] Power Cable (320mm) X 1 FK2-8467 or A: HDD-Pow1 	<input type="checkbox"/> [12] LED Cable (290mm; 7 pin) X 1 FM4-0840 or A: LED-Sig 
<input type="checkbox"/> [13] STS Cable (420mm (Light blue); 5 pin) X 1 FM4-0843 or A: STS-Sig 	<input type="checkbox"/> [14] Mirroring Board or Encryption Board X 1 	<input type="checkbox"/> [15] LED Board (Small) X 1 FK2-7400 or A: LED 

F-9-770

<input type="checkbox"/> [16] LED Board (large) X 1 FK2-8324 or A: LED 	<input type="checkbox"/> [17] LED Label (Small) X 1 	<input type="checkbox"/> [18] LED Label (large) X 1 
<input type="checkbox"/> [19] HDD Connection Plate X 1 	<input type="checkbox"/> [20] Screw (TP; M3x6) X 10  Use 6 of them 	<input type="checkbox"/> [21] Edge Saddle X 1 
<input type="checkbox"/> [22] Wire saddle (Small) X 5  Use 4 of them 	<input type="checkbox"/> [23] Wire saddle (large) X 1 	<input type="checkbox"/> [24] Wire saddle (Middle) X 1 
<input type="checkbox"/> [25] Ring Core X 1 		

F-9-771

< CD/Guides of HDD Mirroring Kit >

- HDD Mirroring Kit-D1 User Documentation
- Notice for FCC/IC
- China RoHS Notice 3

< CD/Guides of HDD Data Encryption & Mirroring Kit >

- HDD Data Encryption & Mirroring Kit-C1 User Documentation
- HDD Data Encryption Kit Notice
- Installation Procedure
- Noticed for FCC/IC

## Setting Before Turning OFF the Power

### CAUTION:

Be sure to turn OFF the main power after executing this service mode setting.

Turning OFF the main power without executing service mode causes "E602-5001 (procedure error before installing the HDD Encryption Board)" to occur when turning ON the main power after installing the Encryption Board.

When this error occurs, the machine needs to be returned again to the initial state in which no Encryption Board is installed.



- 1) Execute the following service mode (level 1).
- COPIER > FUNCTION > INSTALL > HD-CRYP

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

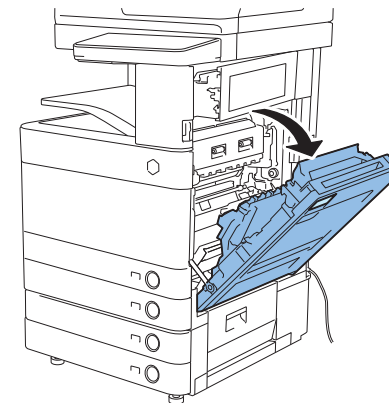
- 1) Turning off the Main Power Supply Switch of the Host Machine.
- 2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

## Installation Procedure

### Removing the HDD Unit, Signal Cable and Power Supply Cable



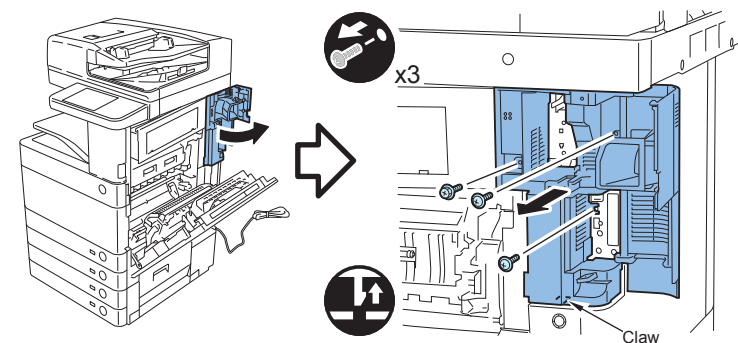
- 1) Open the Right Lower Cover. (Open the Right Upper Cover simultaneously.)



F-9-772



- 2) Open the Right Rear Cover 1.
- 3) Remove the Right Rear Cover 1.
  - 1 Screw (RS tight; M4)
  - 2 Screws (TP; M3)
  - 1 Claw

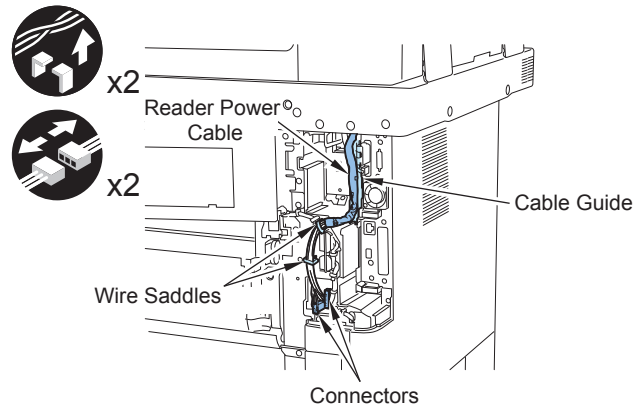


F-9-773



□  
4) When the Reader is installed, remove the Reader Power Cable.

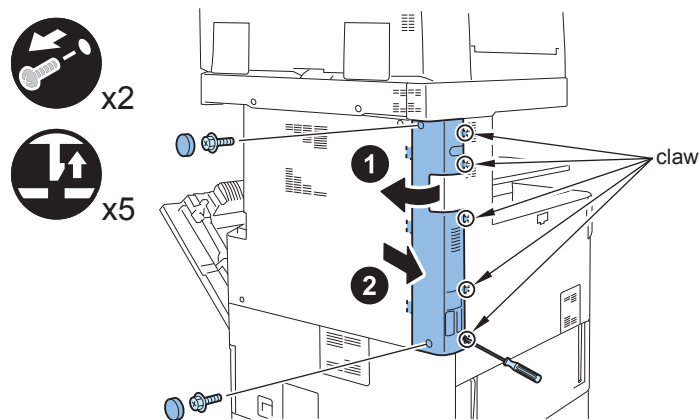
- 2 Connectors
- 2 Wire Saddles
- 1 Cable Guide



F-9-774

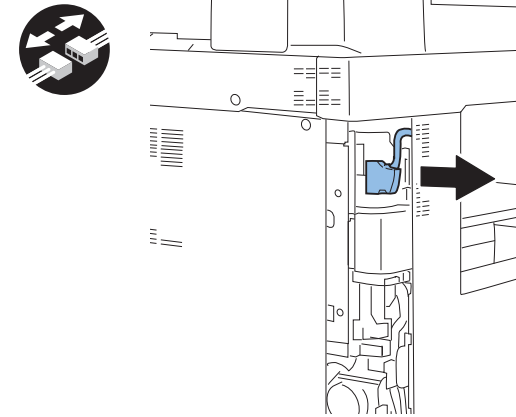
□  
5) Remove the Left Rear Cover.

- 2 Rubber Caps
- 2 Screws
- 5 Claws



F-9-775

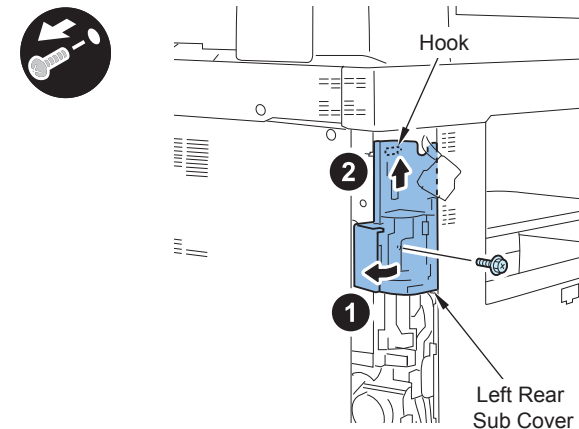
□  
6) When the Reader is installed, remove the Reader Communication Cable.



F-9-776

□  
7) Remove the Left Rear Sub Cover.

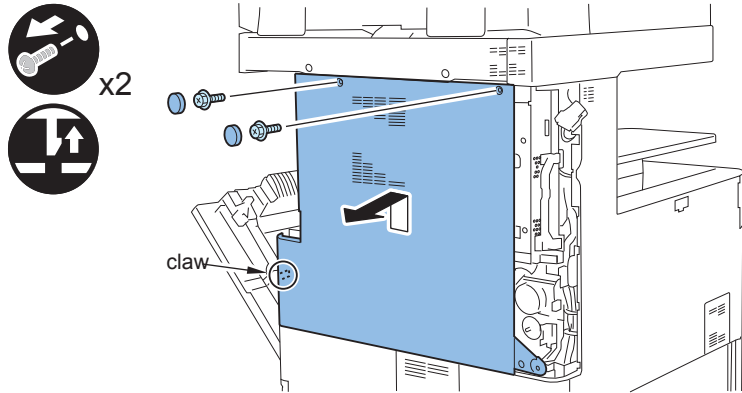
- 1 Screw
- 1 Hook



F-9-777

□ 8) Remove the Rear Cover.

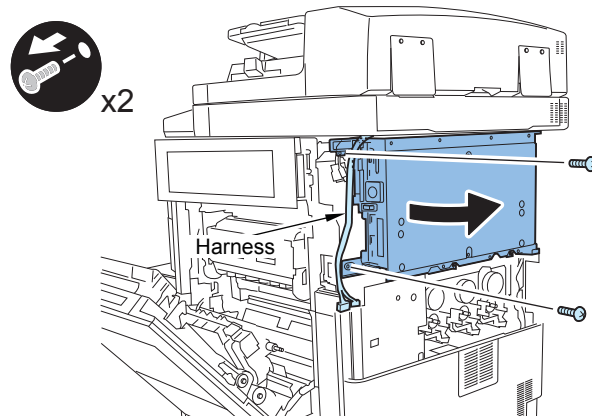
- 2 Rubber Caps
- 2 Screws
- 1 Claw



F-9-778

□ 9) Open the Controller Box while avoiding the harness.

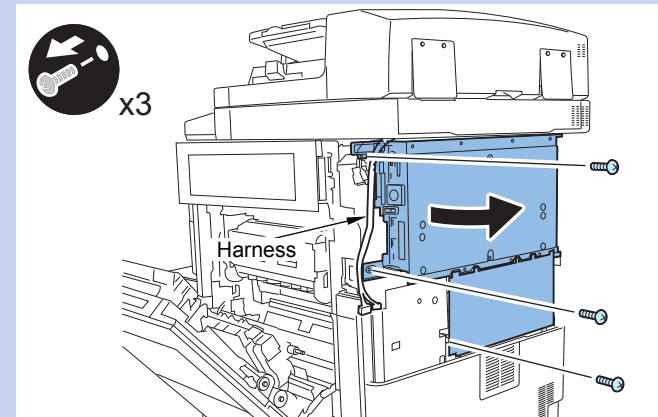
- 2 Screws



F-9-779

NOTE:

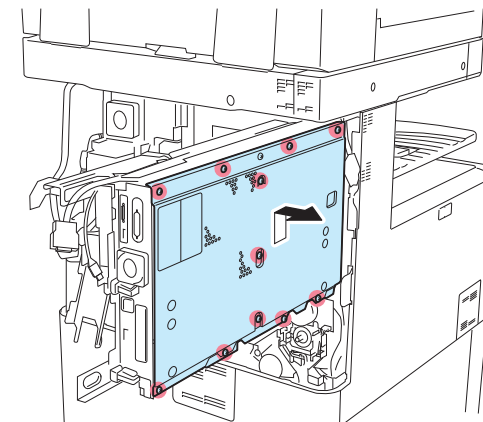
If the FAX Unit has been installed, remove the 3 screws and open the Controller Box with the FAX Unit.



F-9-780

□ 10) Remove the Controller Cover.

- 11 Screws (loosen)



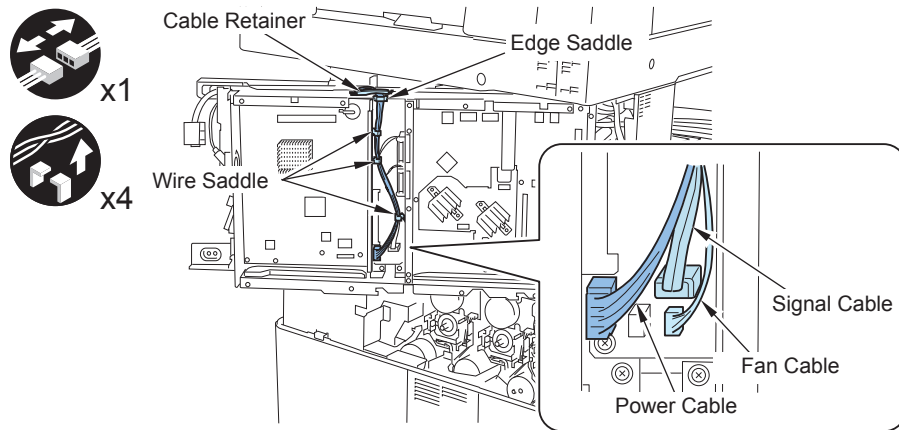
F-9-781

- 11) Remove the Power Cable.

**CAUTION:**

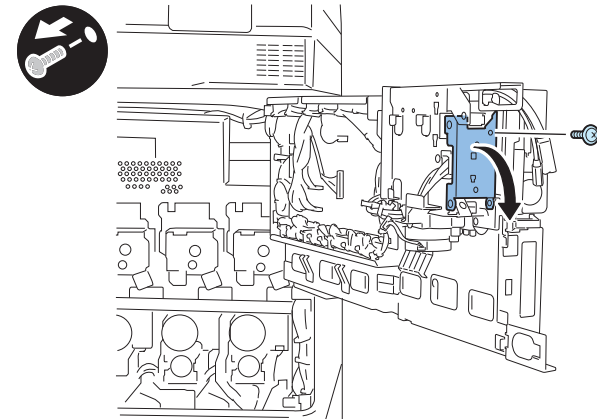
Do not remove the Signal Cable and the Fan Cable.

- 1 Edge Saddle
- 3 Wire Saddles
- 1 Cable Retainer



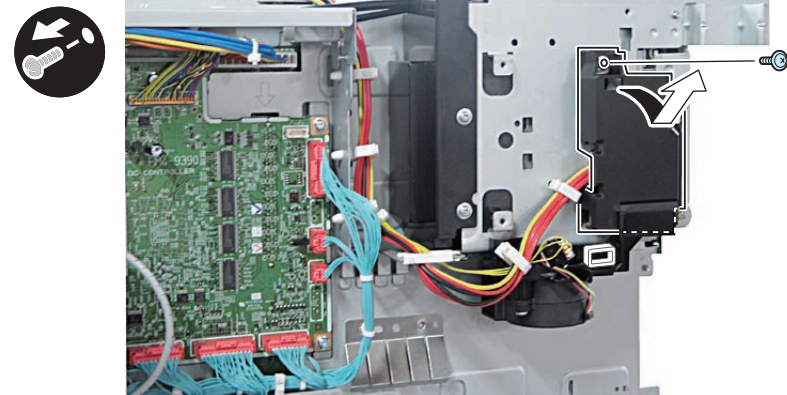
F-9-782

- 12) Open the HDD Lid.
- 1 Screw (Removed screw will not be used.)



F-9-783

- 13) When the Cable Cover is installed, remove it. (Removed Cable Cover and screw will not be used.)
- 1 Screw

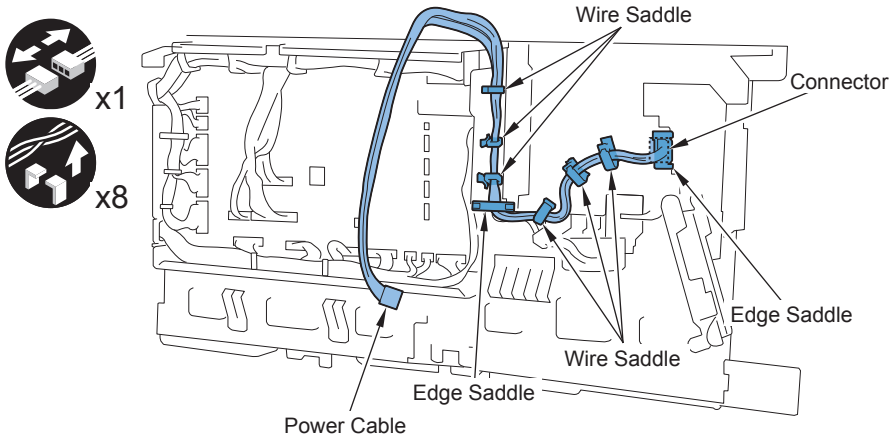


F-9-784

- 14) Remove the Power Cable. (Removed Power Cable will not be used.)

<When the Cable Cover is removed>

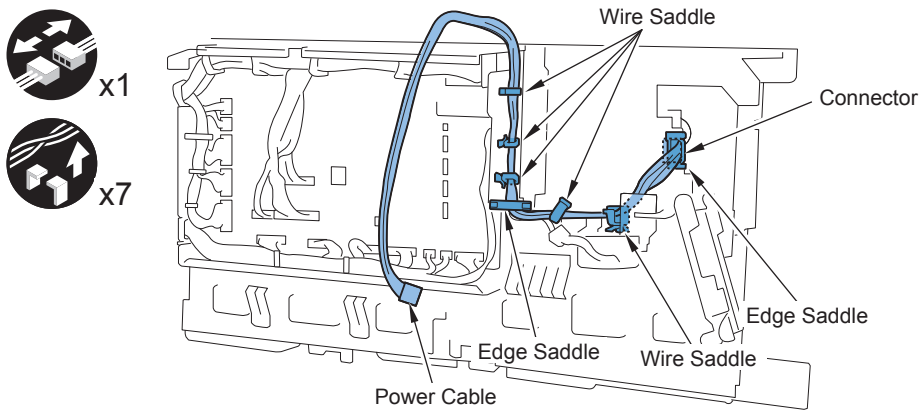
- 2 Edge Saddles
- 6 Wire Saddles
- 1 Connectors



F-9-785

<When the Cable Cover is not installed>

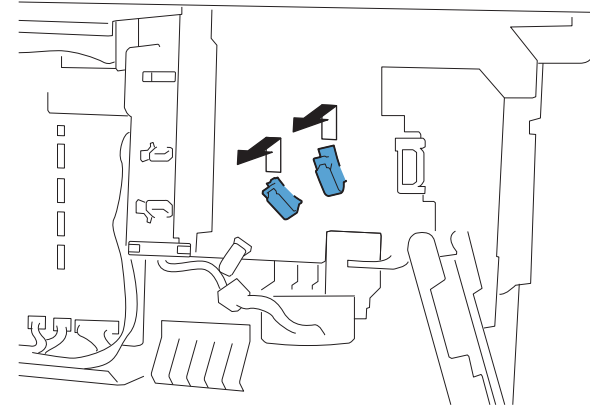
- 2 Edge Saddles
- 5 Wire Saddles
- 1 Connectors



F-9-786

- <When the Cable Cover is removed>

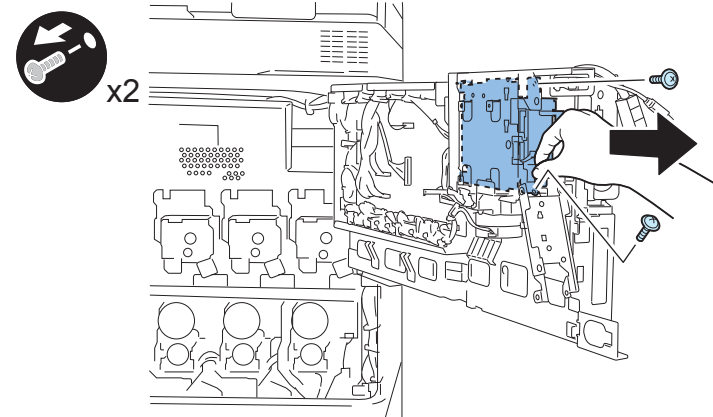
- 15) Remove the 2 Wire Saddles. (Removed wire saddles will not be used.)



F-9-787

- 16) Remove the HDD Unit by holding it as shown in the figure below. (Removed HDD unit will not be used.)

- 2 Screws (Removed screw will not be used.)



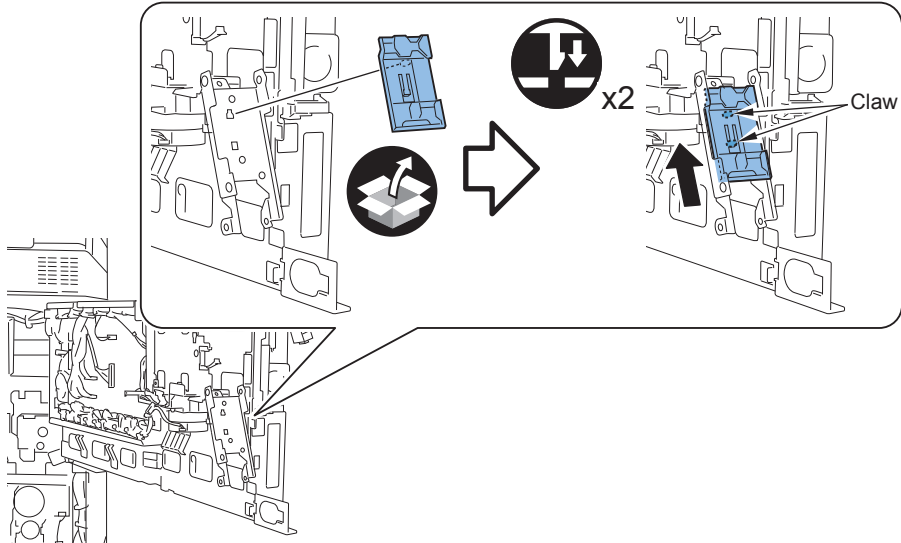
F-9-788

## Installing the Removable HDD Kit



1) Install the HDD Door Guide.

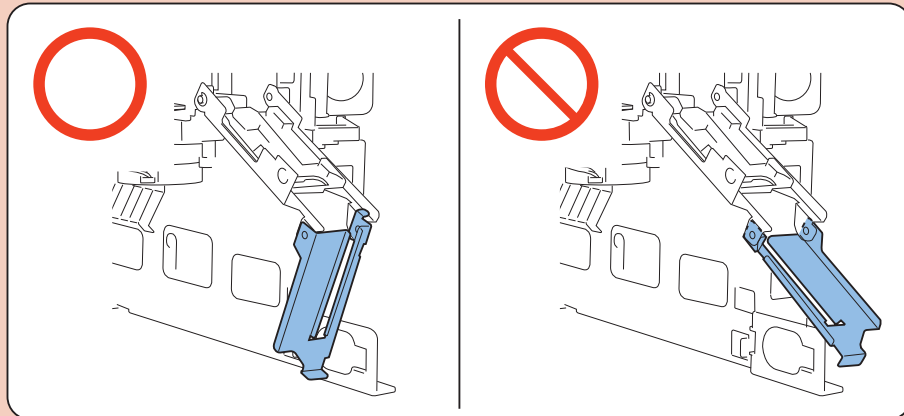
- 2 Claws



F-9-789

### CAUTION:

Be careful of the installation direction of HDD Lock Plate.

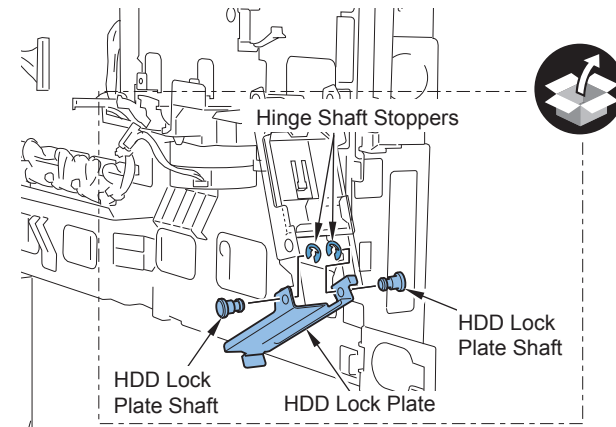


F-9-790



2) Install the HDD Lock Plate.

- 2 HDD Lock Plate Shafts
- 2 Hinge Shaft Stoppers

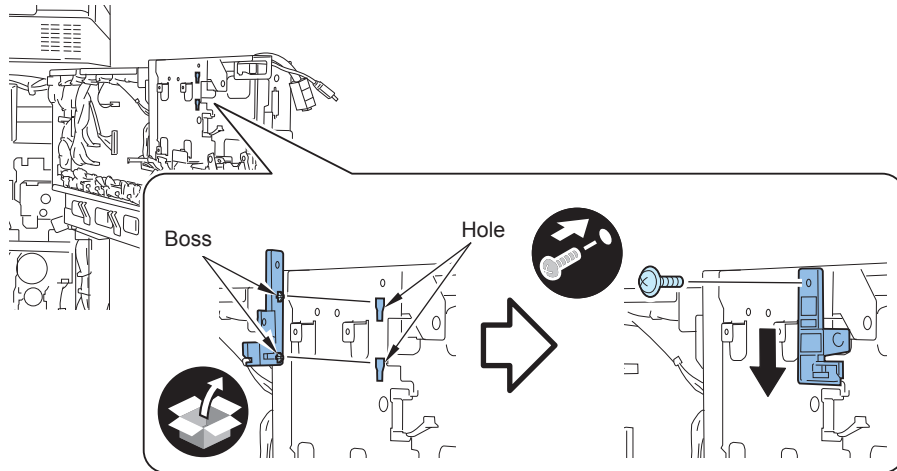


F-9-791

- 
- 3) Adjust the 2 bosses to the hole and install the HDD Lid Retainer.
- 1 Screw (TP round end; M3x6)

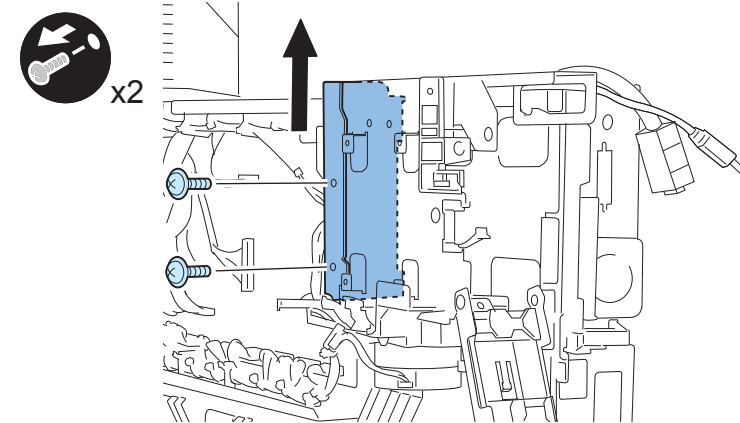
**CAUTION:**

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



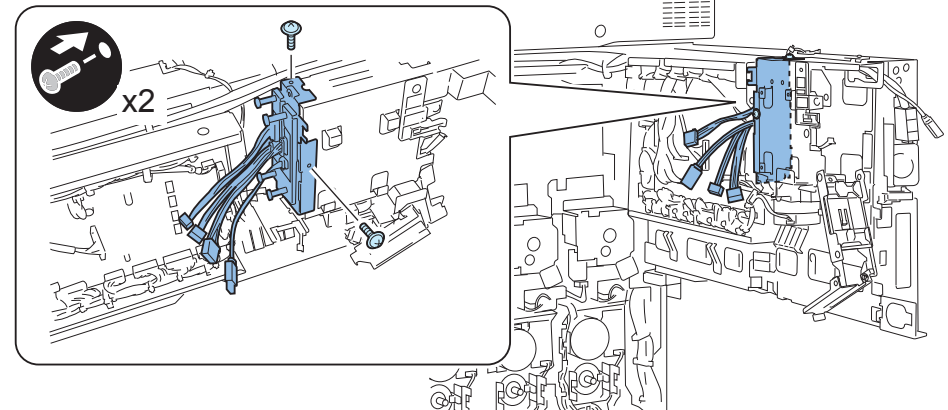
F-9-792

- 
- 4) Remove the HDD Rear Cover. (Removed HDD Rear Cover will not be used.)
- 2 Screws (Removed screw will be used in step 5)



F-9-793

- 
- 5) Install the HDD Drawer Unit.
- 2 Screws (Use the screw removed in step 4)



F-9-794

## Assembling and Installing the Option HDD (First HDD)

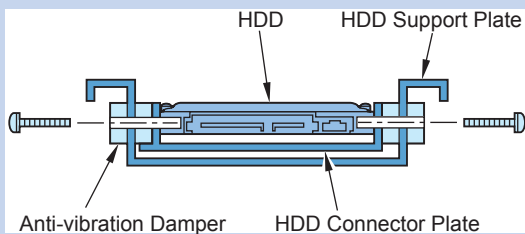


1) Purchase option HDD and assemble the first HDD.

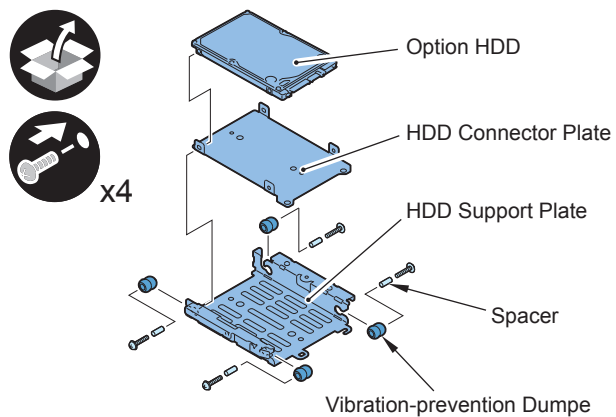
- 1 Option HDD
- 1 HDD Support Plate (enclosed with option HDD)
- 1 HDD Connector Plate (enclosed with removable HDD Kit)
- 4 Vibration-prevention Dumpers (enclosed with option HDD)
- 4 Spacers (enclosed with option HDD)
- 4 Screws (W sems; M3x14) (enclosed with option HDD)

### NOTE:

When tightening the screen, be sure to align the screw holes by lifting the HDD Connector Plate and HDD.



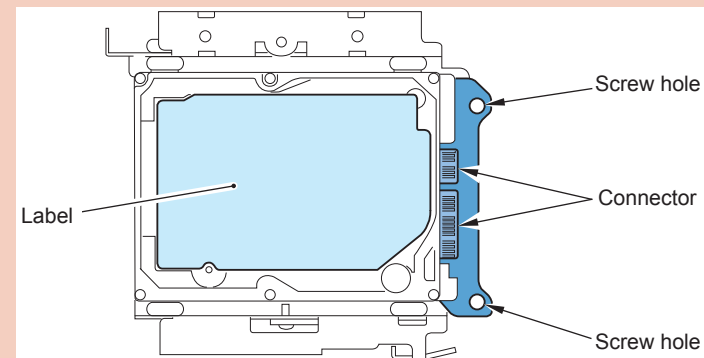
F-9-795



F-9-796

### CAUTION:

- Assembling the option HDD, be careful of the installation direction.
- Make sure that the label on the option HDD is facing up.
- Install it in the position where the HDD connector is placed in the side with screw hole of HDD Support Plate. (opposite direction compared to the fixed HDD)



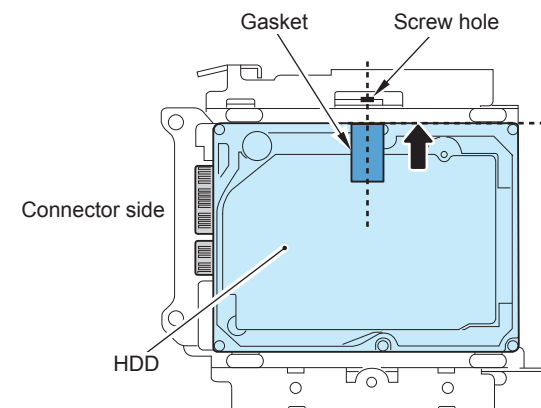
F-9-797



2) Affix the gasket to the place shown in the figure below.

### CAUTION:

Be sure to place the gasket in contact with the label-free metal surface of the HDD surface.



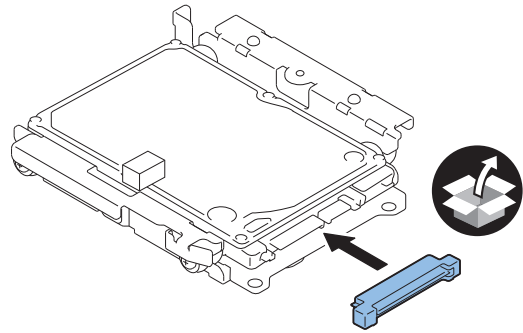
F-9-798



- 3) Install the Conversion Connector.

**CAUTION:**

Make sure that there is no opening between the Conversion Connector and part of HDD.

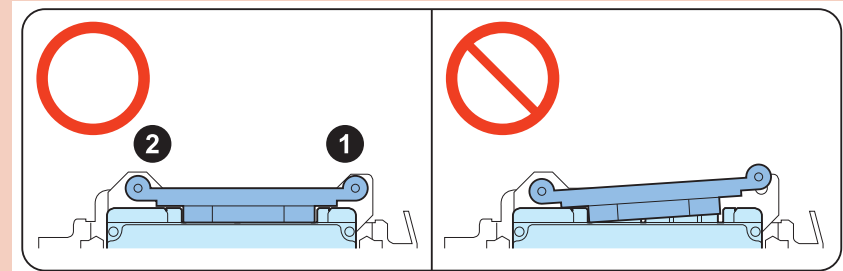


F-9-799

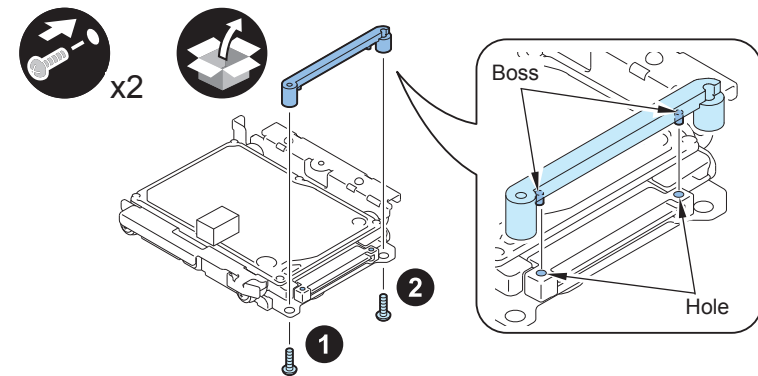
- 4) Fit the 2 bosses of Connector Fixing Block to the hole of Conversion Connector and install it.  
• 2 Screws (P Tight; M3x8)

**CAUTION:**

- Be sure to firmly hold the Connector Fixation Block when tightening the screws.
- Be sure to follow the correct order to tighten the screws, otherwise the Conversion Connector may not be connected properly, resulting in poor contact.



F-9-800



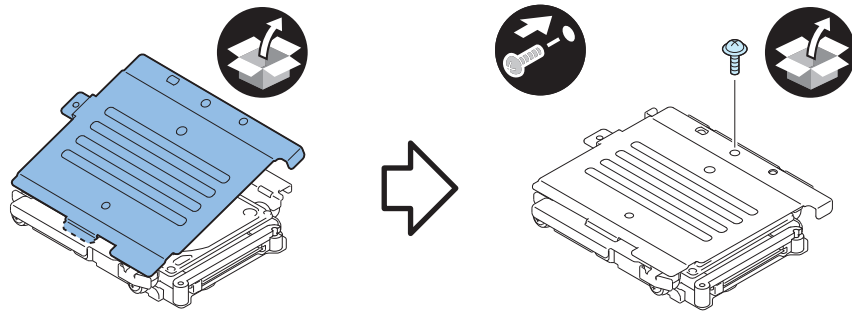
F-9-801

□ 5) Install the HDD Cover.

- 1 Claw
- 1 Screw (TP round end; M3x6)

**CAUTION:**

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.

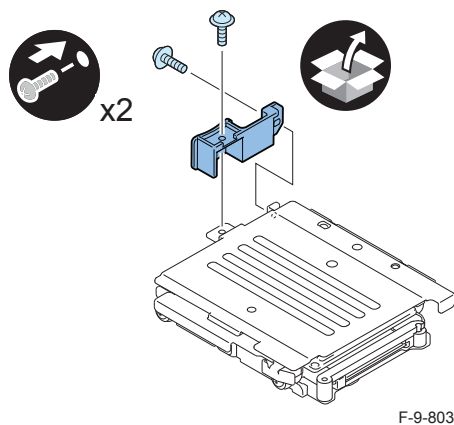


□ 6) Install the HDD Handle.

- 2 Screws (TP round end; M3x6)

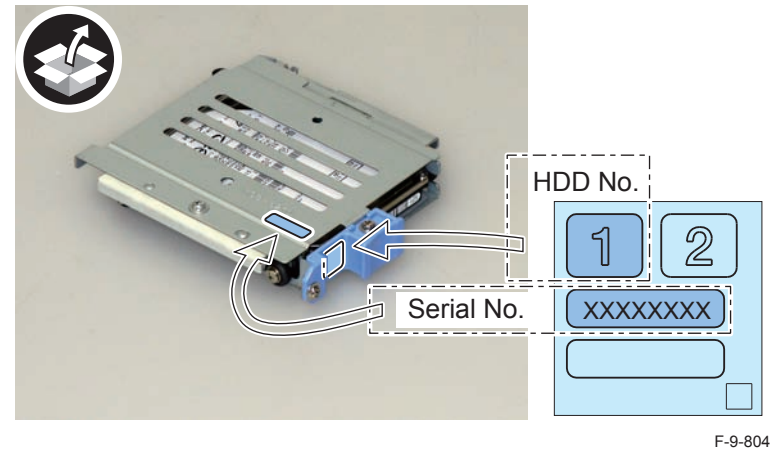
**CAUTION:**

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.

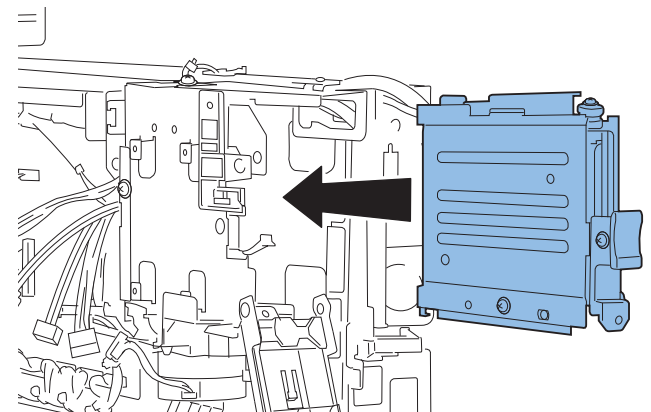


□ 7) Affix the HDD No.1 Label to the handle of the Removable HDD.

- 8) Write down the serial number of the host machine to the label for recording the number, and affix it to the area indicated in the figure.

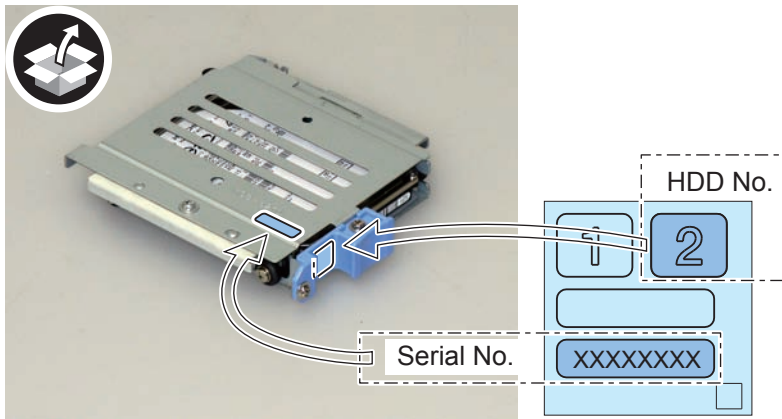


□ 9) Install the originally installed HDD to Slot.1 (left side).



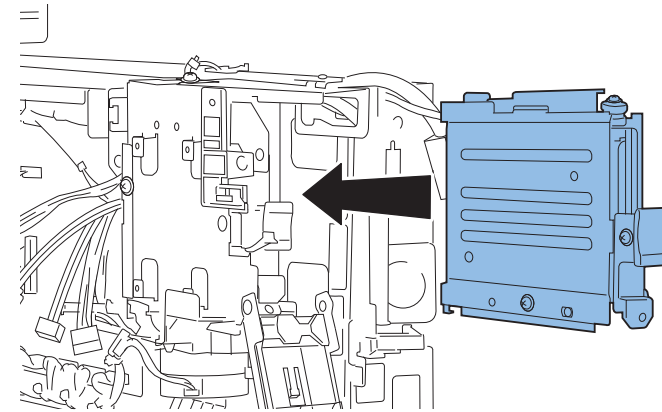
## ■ Assembling and Installing the Option HDD (Second HDD)

- 1) Assemble the second option HDD with same steps of Step 1) to Step 6) from the "Assembling and Installing the Option HDD (First HDD)".
- 2) Affix the HDD No.2 Label to the handle of the Removable HDD.
- 3) Write down the serial number of the host machine to the label for recording the number, and affix it to the area indicated in the figure.



F-9-806

- 4) Install the HDD to Slot.2 (right side).



F-9-807

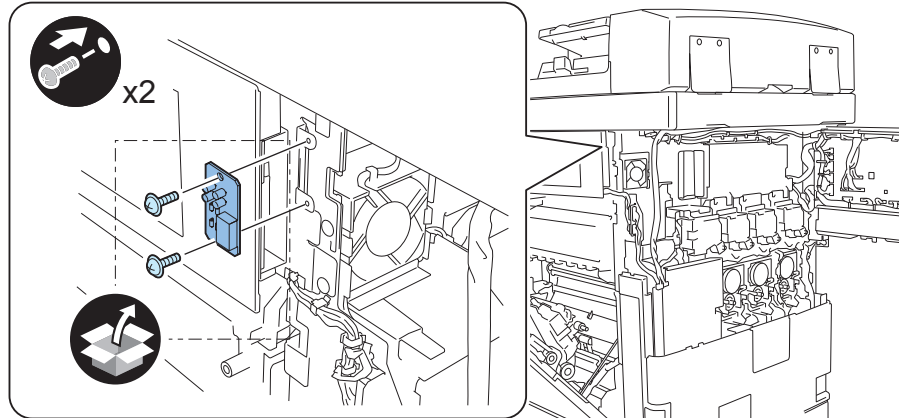
- 5) Close the Edge Saddle, and close the HDD Lid.

## Installing the LED Board



1) Install the LED Board (small) (FK2-7400 or A: LED).

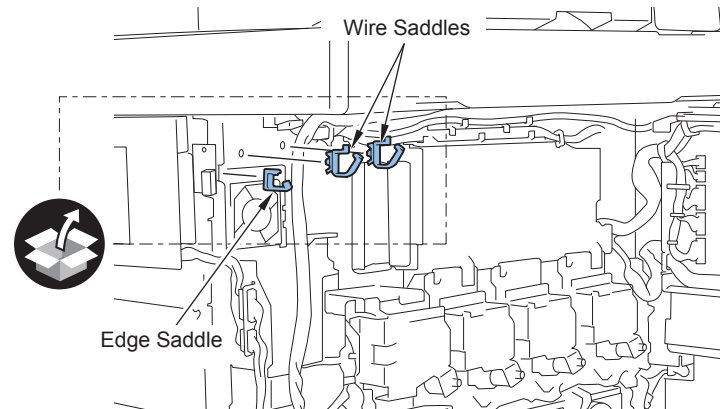
- 2 Screws (TP; M3x6)



F-9-808



2) Install the 2 wire saddles and the edge saddle.



F-9-809

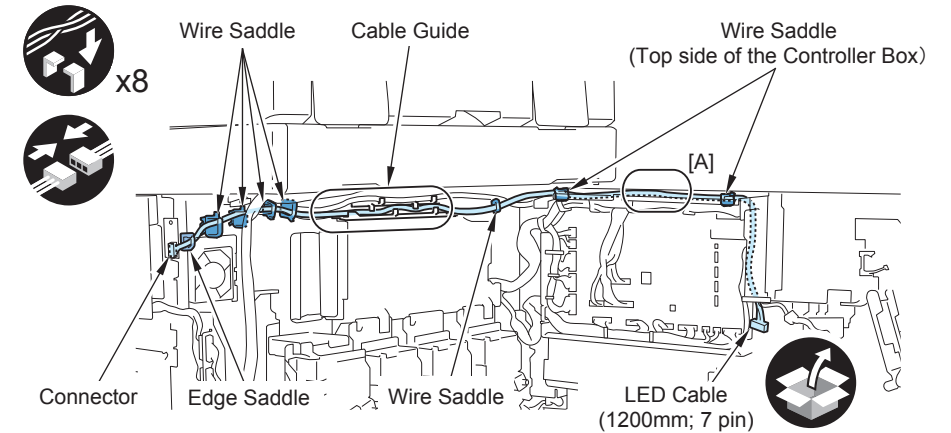


3) Connect the LED Cable (1200 mm; 7-pin) (FM4-0839 or A: LED-Sig).

- 7 Wire Saddles
- 1 Edge Saddle
- 1 Cable Guide
- 1 Connector

### CAUTION:

- Be sure to tuck the [A] area of the LED cable under the other 2 cables running through the [A] area. This is to prevent the [A] area of the LED cable from being slacked off when closing the Controller Box.



F-9-810

## ■ Installing the Mirroring Board or Encryption Board

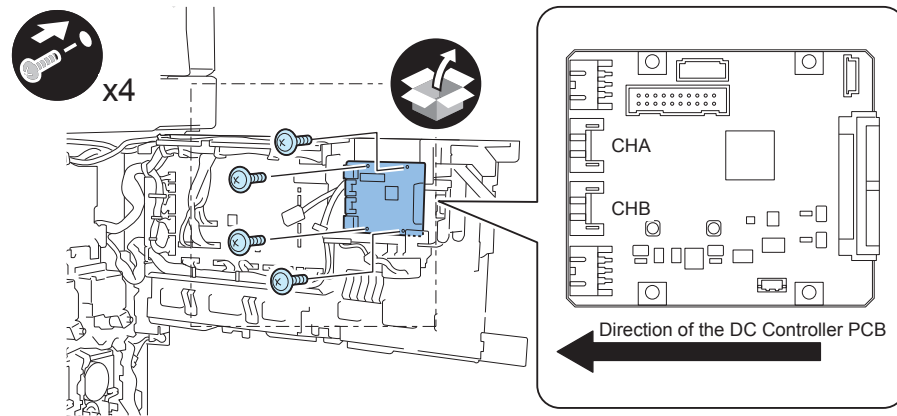


1) Install the Mirroring Board or Encryption Board so that "CHA" and "CHB" are placed in the direction of the DC Controller PCB.

- 4 Screws (TP; M3x6)

### CAUTION:

Be sure that the direction of installing the Mirroring Board or Encryption Board is opposite to the case when the fixed HDD is installed. If it is installed in a wrong direction, the cables do not reach the board.



F-9-811



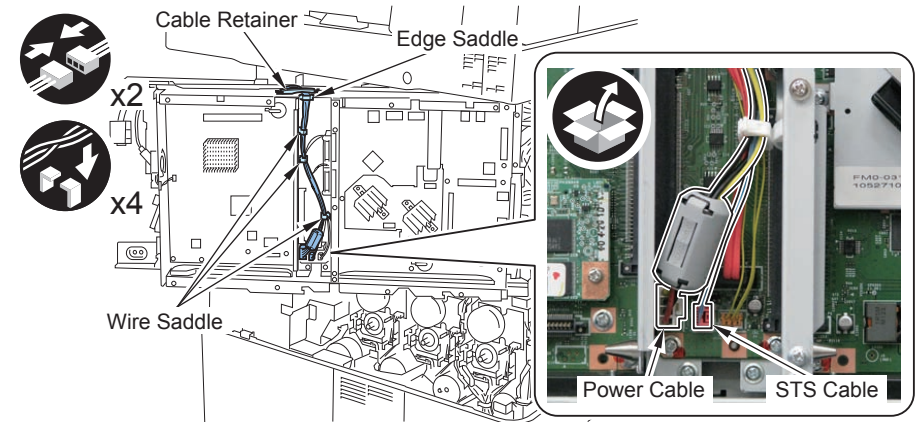
2) Connect the cables to the PCB on the backside.

- Power Cable (650 mm): FK2-8464 or A: Cont-Pow (Included in the Removable HDD Kit)
- STS Cable (550 mm (Light blue); 5-pin): FM4-0842 or A: STS-Sig (Included in the HDD Mirroring Kit or HDD Encryption Kit)

3) Fix the cables.

- 3 Wire Saddles
- 1 Edge Saddle
- Cable Retainer

4) Install the Ring Core to the Power Supply Cable as shown in the figure.

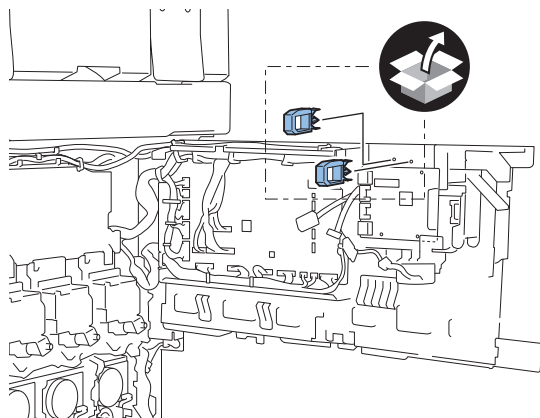


F-9-812



5) Install the Controller Cover. (11 Screws)

- 6) Install the 2 wire saddles.

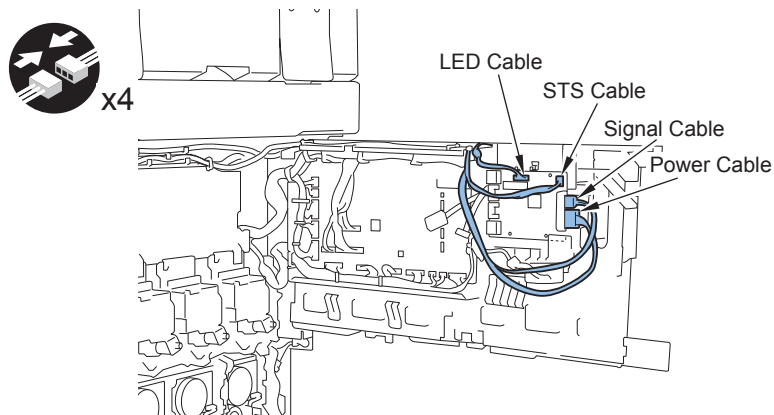


F-9-813

- 7) Connect the cable to the Mirroring Board or Encryption Board.
- Signal Cable (existing cable FK2-8432 or A: Cont-Sig)
  - Power Sable (650mm): FK2-8464 or A: Cont-Pow (Included in the Removable HDD Kit)
  - LED Cable (1200 mm; 7-pin): FM4-0839 or A: LED-Sig
  - STS Cable (550mm (Light blue); 5 Pin): FM4-0842 or A: STS-Sig

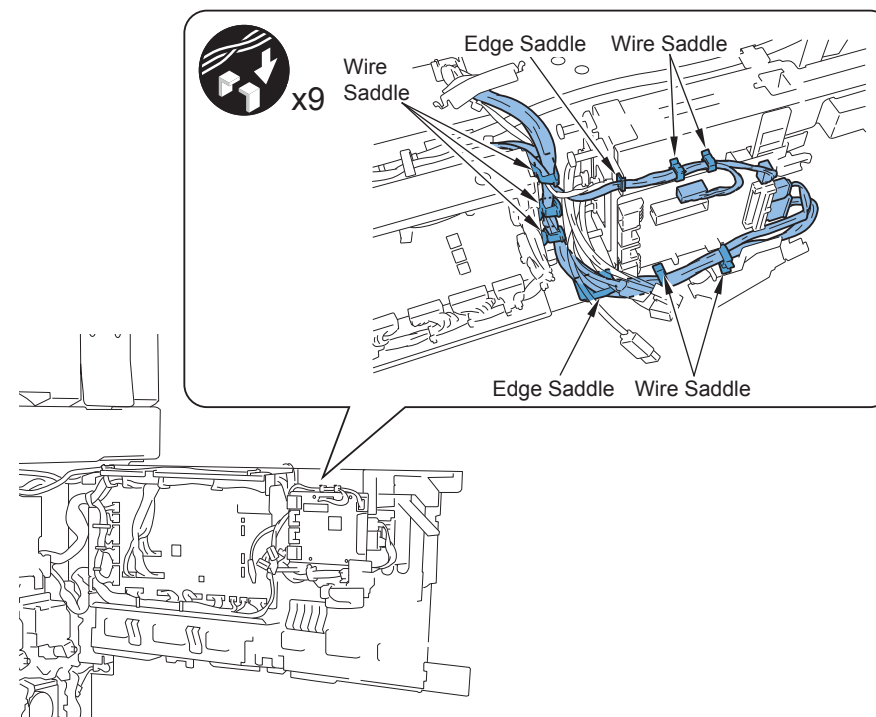
**CAUTION:**

The machine can operate even the STS Cable and the LED Cable are not connected. Therefore, when installing the cables, be sure that they are connected properly.



F-9-814

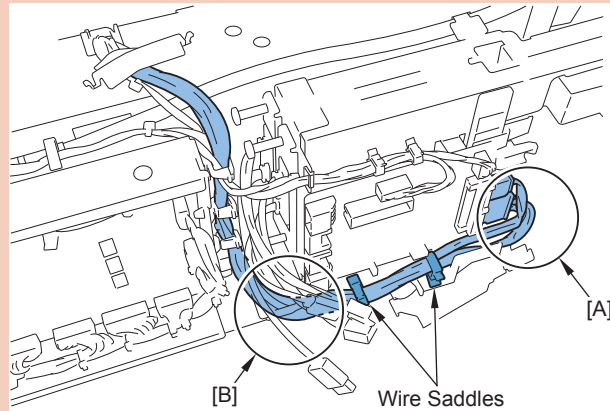
- 8) Fix the cables.
- 7 Wire Saddles
  - 2 Edge Saddles



F-9-815

**CAUTION:**

- When fixing the cables with wire saddles, be sure to take up slack of them at [A] part, and slack off them at [B] part.
- If slacking off the cables at [A] part, they may interfere the fan on the host machine when returning the Controller Box.

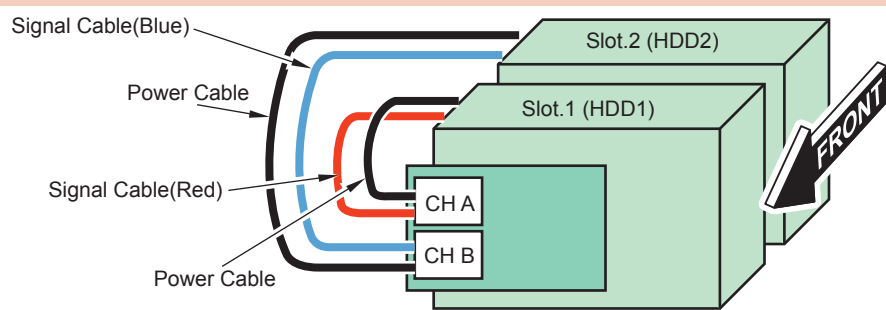


F-9-816

**CAUTION:**

Be sure to acknowledge the following caution before performing the next procedure. Combinations of connection between the HDDs and the Mirroring Board or Encryption Board are shown below.

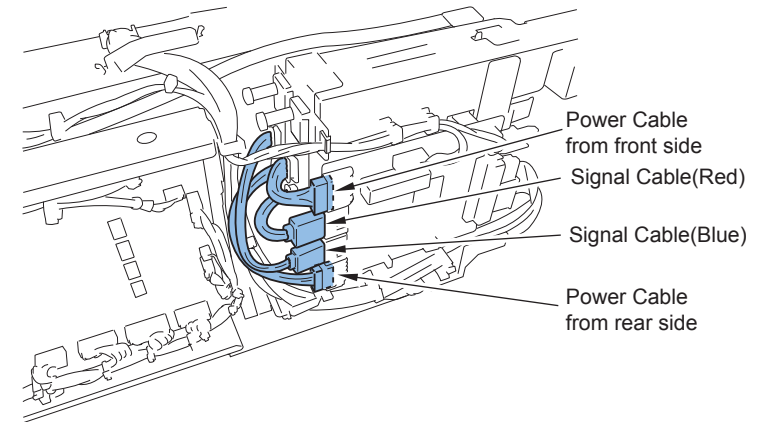
- Connect Slot 1 to "CHA". (Originally installed HDD)
- Connect Slot 2 to "CHB". (New HDD)



F-9-817



9) Connect the cable of the HDD Drawer Unit to the Mirroring Board or Encryption Board.



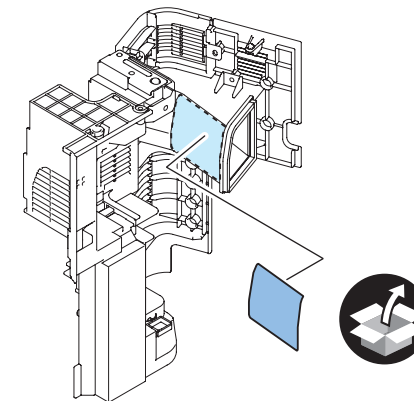
F-9-818



10) Place the Controller Box to the original position. (2 Screws or 3 Screws)



11) Affix the Shutdown Caution Label in the appropriate language on the Right Rear Cover 1. (Included in the Removable HDD Kit).

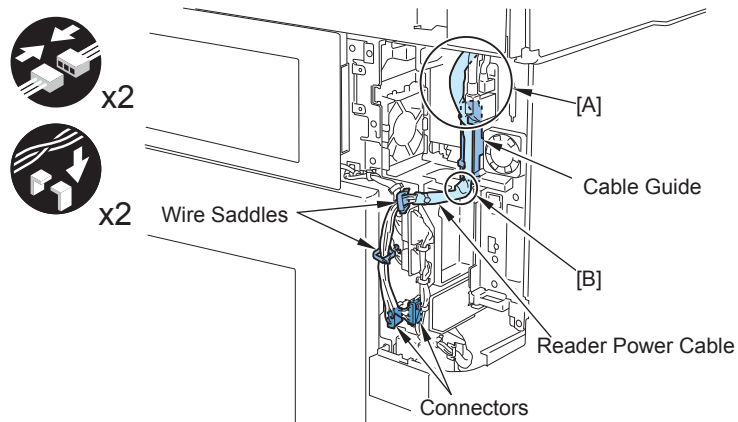


F-9-819



- 12) Install the removed cover and the cable.
- Rear Cover (2 Screws, 2 Rubber Caps)
  - Left Rear Sub Cover (1 Screw)
  - Reader Communication Cable (when reader is installed)
  - Left Rear Cover (2 Screws, 2 Rubber Caps)
- 13) If Reader is installed, install the Reader Power Cable.

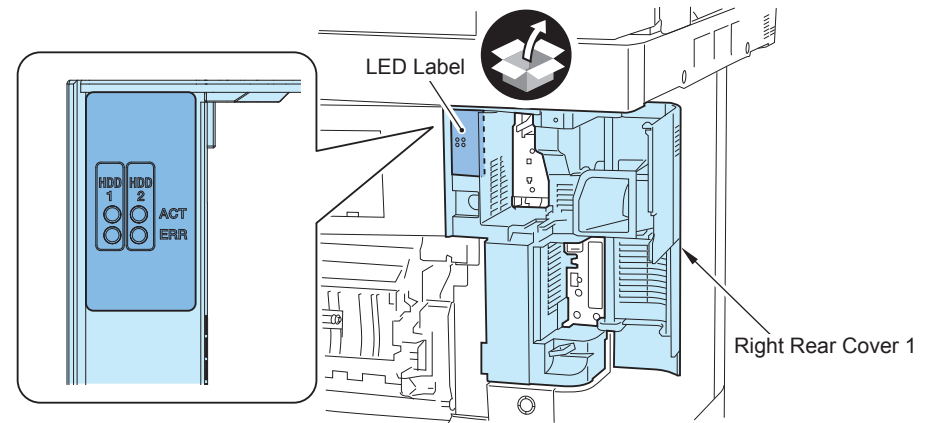
**NOTE:**  
Handle the Reader Power Cable from the connector side and make a slack at [A] part.  
Bend the Reader Power Cable at a right angle on [B] part.



F-9-820

- 14) Install the Right Rear Cover 1. (3 Screws)

- 15) Affix the LED label so that it fits the edge of the Right Rear Cover 1.



F-9-821

- 16) Close the Right Rear Cover 1, Right Lower Cover, and Right Upper Cover.
- 17) Connect the power plug of the host machine to the power outlet.

## Installing the System Software Using the SST

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product.

It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product.

Details follow.

### 1. Requirements

#### 1) PC

Service support tool in the version that supports this host machine must be installed.

#### 2) Cross Ethernet Cable

### 2. Preparing for the Installation of the System Software of Host machine

- 1) If both PC and the machine are on, turn them off.
- 2) Connect the PC and the machine using an Ethernet cable.
- 3) Turn on the PC.
- 4) Start up the machine in download mode (safe mode).

### 3. Selecting the System Software

- 1) Set the CD containing the latest system software in the PC on which the SST is used.
- 2) Start up the SST.
- 3) Click Register Firmware.
- 4) Select the drive in which the System Software CD has been set, and click search.
- 5) Click REGISTER.
- 6) Click OK.

### 4. Downloading the System Software

- 1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
- 2) When initialization is completed, the machine is automatically restarted and it enters download mode.
- 3) Select the version to be downloaded and click "Start".
- 4) When download is completed, the machine is automatically restarted.
- 5) When writing of the firmware is completed, the machine is automatically restarted.
- 6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
- 7) Terminate the SST.
- 8) Check the version of the downloaded firmware in service mode.

## Checking the Security Version (Only when installing HDD Data Encryption & Mirroring Kit)

- 1) Press the Counter key (123 key) on the control panel.
- 2) Press the [Check Device Configuration] key appearing on the control panel.
- 3) Make sure that '2.00' or '2.01' is displayed in 'Canon MFP Security Chip' as version information of the security chip.  
When several Encryption Boards are installed, multiple version information is displayed.

### CAUTION:

The user will be able to make sure that the encryption board fitted with a security chip of the correct version with CC authentication is functioning normally by referring to the version information indicated for 'Canon MFP Security Chip'.


## Checking the Security Mark (Only when installing HDD Data Encryption & Mirroring Kit)

The user may check the security mark, appearing on the control panel when using the Host machine to make sure that an appropriate level of security is being maintained.

The mark appears when the machine is equipped with an encryption board and the board is operating correctly.

The Users Guide provides the following description in connection with the security mark:

<Confirming the Security Mark>

When the HDD Data Encryption & Mirroring Kit is operating normally, a security mark(  ) is displayed on the lower left corner of a panel screen.

## Setting the Mirroring

- 1) Insert the power plug into the socket and turn on the main power of the host machine.
- 2) Make a setting of mirroring.
  - Specify "1" under "Service Mode > COPIER > OPTION > FNC-SW > W/RAID".
- 3) Turn OFF/ON the main power of the host machine to enable the setting value.
- 4) Make sure that the UI screen is activated correctly.
- 5) Make sure that the LED blinks.
  - HDD1 (Slot 1): The green LED blinks.
  - HDD2 (Slot 2): The green and red LEDs blink.

### CAUTION:

Rebuild process starts after setting "1" for W/RAID. If an error occurs during the rebuild process at the initial installation The hard disk needs to be replaced. (Call service rep.), reexecute the process with the following procedure.

- 1) Check that the lighting red LED is HDD2.
- 2) Select Service Mode > COPIER > OPTION > FNC-SW > W/RAID, and set "0".
- 3) To enable the setting value, turn OFF/ON the Main Power Supply Switch of the host machine.
- 4) Select Service Mode > COPIER > OPTION > FNC-SW > W/RAID, and set "1".
- 5) To enable the setting value, turn OFF/ON the Main Power Supply Switch of the host machine.

The foregoing procedure is limited to the rebuild process at the initial installation.

An error during the rebuild process that is executed during operation is not included in the consideration.

## Reporting to the System Administrator at the End of the Work (Only when installing HDD Data Encryption & Mirroring Kit)

When you have completed all installation work, report to the system administrator for the following:

At the point when installation is completed, make explanations about how to check that the appropriate security function has been added and enabled so that, when the function becomes uncontrolled, the system administrator can immediately detect the problem and request <servicing work when a failure occurs>.

### Completion of the Installation Work:

Ask the system administrator to make sure that '2.00' or '2.01' is indicated for 'Canon MFP Security Chip' as the version information of the security chip by referring to the description of Checking the Security Version.

### Maintenance of the Security Functions:

Ask the system administrator to check the security mark to make sure that the security functions are maintained each time the machine is started up by referring to the description of Checking the Security Mark.

## Execution of Auto Adjust Gradation

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.

Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

[TYPE-10]

Standard HDD + Removable HDD Kit + HDD Data Encryption & Mirroring Kit


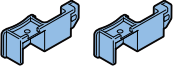
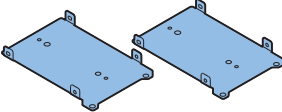
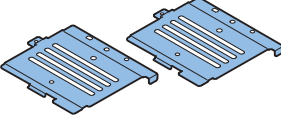
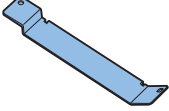
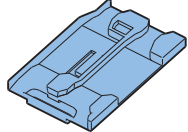
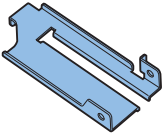

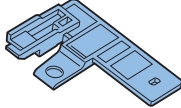
Points to Note when HDD Data Encryption & Mirroring Kit has been Installed

A security sticker is attached to the kit package to indicate that the package has not been opened. Check to see that the package has not been opened in any way and the sticker is not torn.


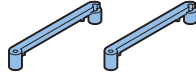
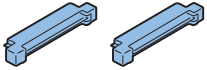
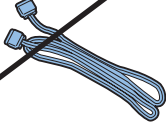
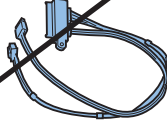
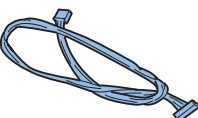
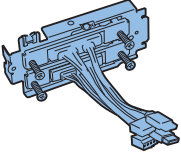
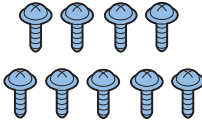
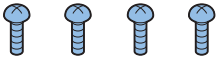
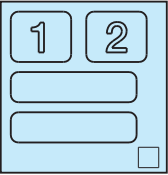
If the package appears to have been opened or the sticker is torn, check to make sure that the user has done so intentionally.

Checking the Contents

Removable HDD Kit


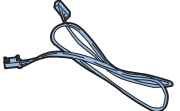



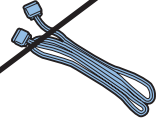






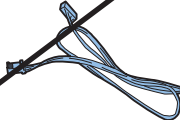
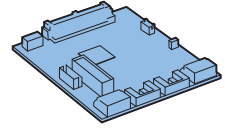
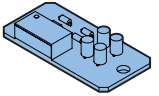
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<input type="checkbox"/> [4] HDD Cover X 2 Use 1 of them 	<input type="checkbox"/> [5] HDD Blanking Plate X 1 	<input type="checkbox"/> [6] HDD Door Guide X 1 
<input type="checkbox"/> [7] HDD Lock Plate X 1 	<input type="checkbox"/> [8] HDD Lock Plate Shaft X 2 	<input type="checkbox"/> [9] HDD Lid Retainer X 1 

F-9-822

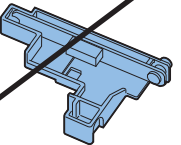


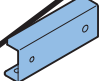
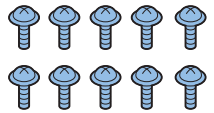

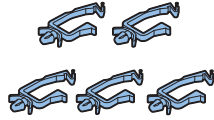


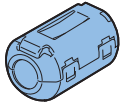
<input type="checkbox"/> [10] Shutdown Caution Label X 1 	<input type="checkbox"/> [11] Connector Fixing Block X 2 Use 1 of them 	<input type="checkbox"/> [12] Conversion Connector X 2 Use 1 of them 
<input type="checkbox"/> [13] Signal Cable (660mm ; Red) X 1 FK2-8432 or A: Cont-Sig 	<input type="checkbox"/> [14] IV Cable X 1 FK2-8453 or A: HDD-Pow1, A: HDD-Sig1 	<input type="checkbox"/> [15] Power Cable (650mm) X 1 FK2-8464 or A: Cont-Pow 
<input type="checkbox"/> [16] HDD Drawer Unit x 1 	<input type="checkbox"/> [17] Screw (R round head TP; M3x6) X 9 Use 6 of them 	<input type="checkbox"/> [18] Screw (P Tight; M3x8) X 4 Use 2 of them 
<input type="checkbox"/> [19] R-HDD Label X 1 		

F-9-823

**HDD Data Encryption & Mirroring Kit**

<input type="checkbox"/> [1] LED Cable (1200mm; 7 pin) X 1 FM4-0839 or A: LED-Sig 	<input type="checkbox"/> [2] STS Cable (550mm (Light blue); 5 pin) X 1 FM4-0842 or A: STS-Sig 	<input type="checkbox"/> [3] Signal Cable (80mm; Red) X 1 FK2-8436 or A: HDD-Sig1 
<input type="checkbox"/> [4] Signal Cable (80mm; Blue) X 1 FK2-8438 or A: HDD-Sig2 	<input type="checkbox"/> [5] Power Cable (80mm) X 2 FK2-8461 or A: HDD-Pow1/2 	<input type="checkbox"/> [6] Signal Cable (450mm; Red) X 1 FK2-8435 or A: Cont-Sig 
<input type="checkbox"/> [7] Power Cable (430mm) X 1 FK2-8463 or A: Cont-Pow 	<input type="checkbox"/> [8] Power Cable (430mm) X 1 FK2-8463 or A: HDD-Pow2 	<input type="checkbox"/> [9] Signal Cable (340mm (Red); ) X 1 FK2-8434 or A: HDD-Sig1 
<input type="checkbox"/> [10] Signal Cable (370mm (Blue); ) X 1 FK2-8441 or A: HDD-Sig2 	<input type="checkbox"/> [11] Power Cable (320mm) X 1 FK2-8467 or A: HDD-Pow1 	<input type="checkbox"/> [12] LED Cable (290mm; 7 pin) X 1 FM4-0840 or A: LED-Sig 
<input type="checkbox"/> [13] STS Cable (420mm (Light blue); 5 pin) X 1 FM4-0843 or A: STS-Sig 	<input type="checkbox"/> [14] Encryption Board X 1 	<input type="checkbox"/> [15] LED Board (Small) X 1 FK2-7400 or A: LED 

F-9-824

<input type="checkbox"/> [16] LED Board (large) X 1 FK2-8324 or A: LED 	<input type="checkbox"/> [17] LED Label (Small) X 1 	<input type="checkbox"/> [18] LED Label (large) X 1 
<input type="checkbox"/> [19] HDD Connection Plate X 1 	<input type="checkbox"/> [20] Screw (TP; M3x6) X 10 Use 6 of them 	<input type="checkbox"/> [21] Edge Saddle X 1 
<input type="checkbox"/> [22] Wire saddle (Small) X 5 Use 4 of them 	<input type="checkbox"/> [23] Wire saddle (large) X 1 	<input type="checkbox"/> [24] Wire saddle (Middle) X 1 
<input type="checkbox"/> [25] Ring Core X 1 		

F-9-825

<CD/Guides>

- HDD Data Encryption & Mirroring Kit-C1 User Documentation
- HDD Data Encryption Kit Notice
- Installation Procedure
- Noticed for FCC/IC

## Setting Before Turning OFF the Power

### CAUTION:

Be sure to turn OFF the main power after executing this service mode setting.

Turning OFF the main power without executing service mode causes "E602-5001 (procedure error before installing the HDD Encryption Board)" to occur when turning ON the main power after installing the Encryption Board.

When this error occurs, the machine needs to be returned again to the initial state in which no Encryption Board is installed.



- 1) Execute the following service mode (level 1).
  - COPIER > FUNCTION > INSTALL > HD-CRYP

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

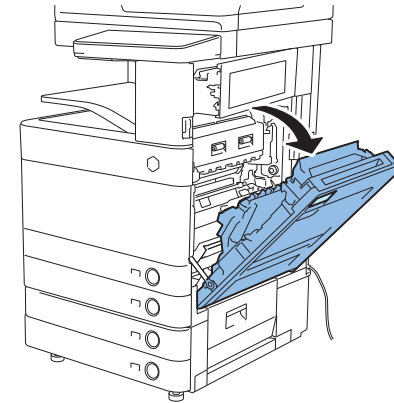
- 1) Turning off the Main Power Supply Switch of the Host Machine.
- 2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

## Installation Procedure

### Removing the Signal Cable and Power Supply Cable



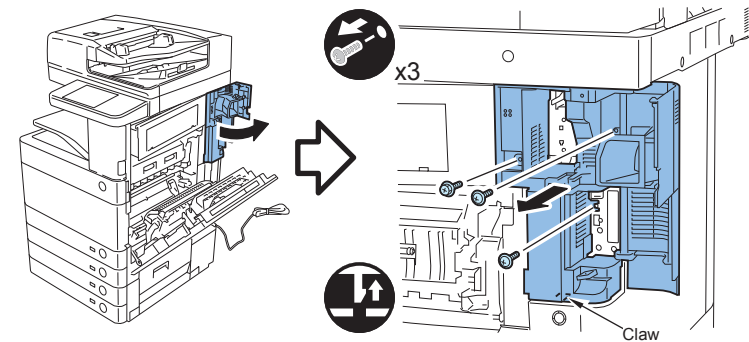
- 1) Open the Right Lower Cover. (Open the Right Upper Cover simultaneously.)



F-9-826



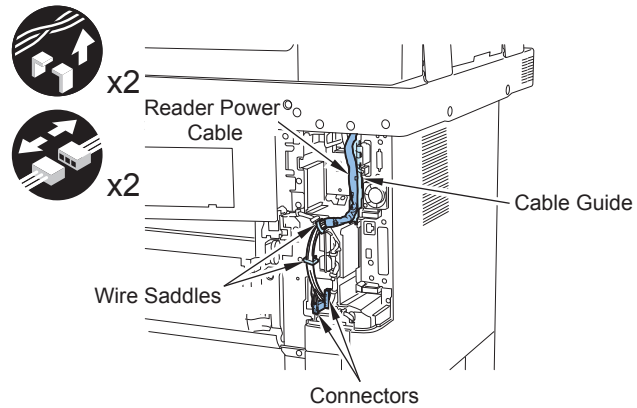
- 2) Open the Right Rear Cover 1.
- 3) Remove the Right Rear Cover 1.
  - 1 Screw (RS tight; M4)
  - 2 Screws (TP; M3)
  - 1 Claw



F-9-827

□  
4) When the Reader is installed, remove the Reader Power Cable.

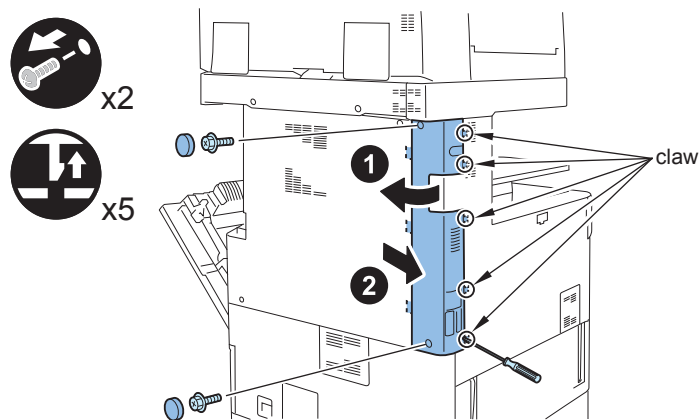
- 2 Connectors
- 2 Wire Saddles
- 1 Cable Guide



F-9-828

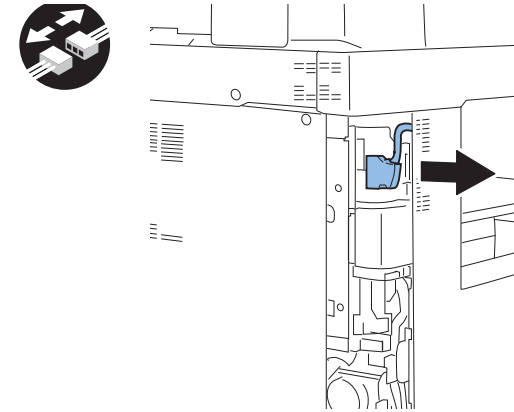
□  
5) Remove the Left Rear Cover.

- 2 Rubber Caps
- 2 Screws
- 5 Claws



F-9-829

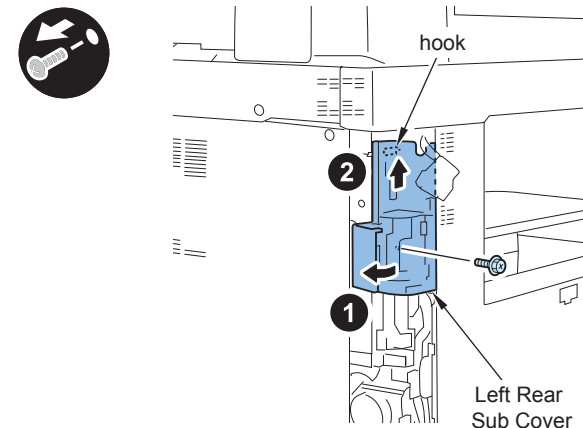
□  
6) When the Reader is installed, remove the Reader Communication Cable.



F-9-830

□  
7) Remove the Left Rear Sub Cover.

- 1 Screw
- 1 Hook

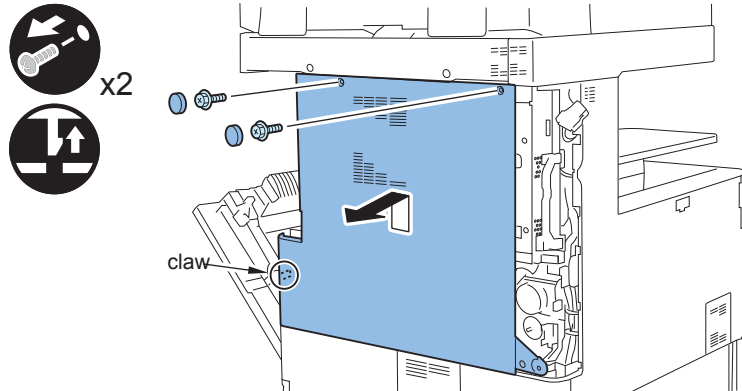


F-9-831



□ 8) Remove the Rear Cover.

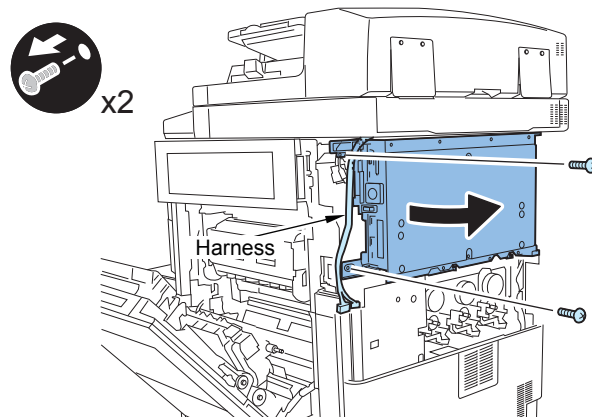
- 2 Rubber Caps
- 2 Screws
- 1 Claw



F-9-832

□ 9) Open the Controller Box while avoiding the harness.

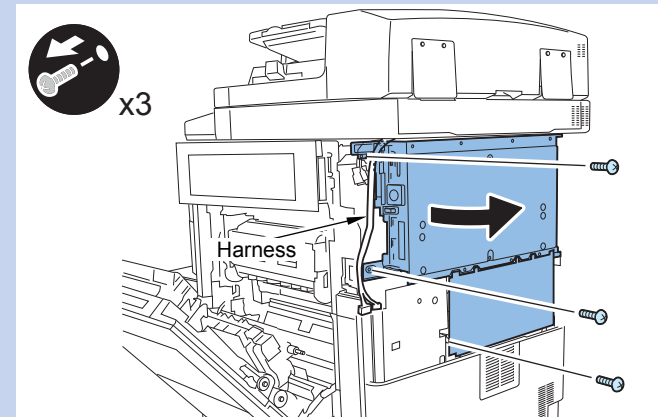
- 2 Screws



F-9-833

NOTE:

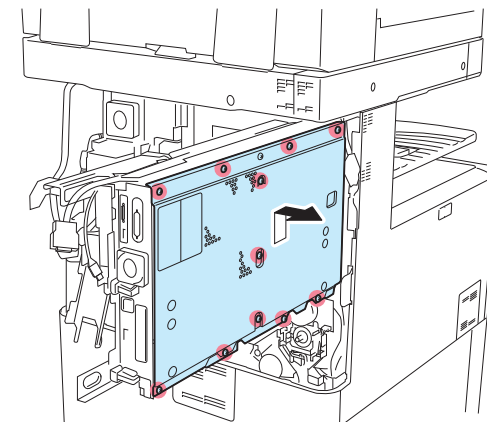
If the FAX Unit has been installed, remove the 3 screws and open the Controller Box with the FAX Unit.



F-9-834

□ 10) Remove the Controller Cover.

- 11 Screws (loosen)



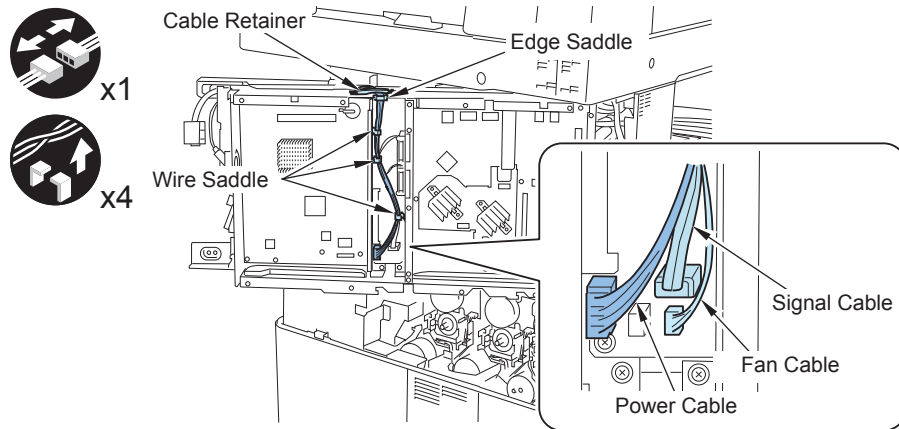
F-9-835

- 11) Remove the Power Cable.

**CAUTION:**

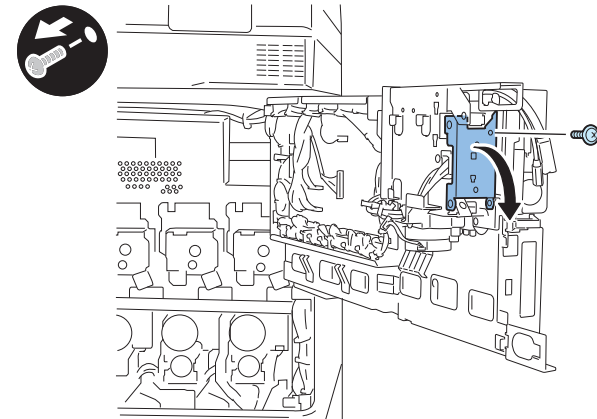
Do not remove the Signal Cable and the Fan Cable.

- 1 Edge Saddle
- 3 Wire Saddles
- 1 Cable Retainer



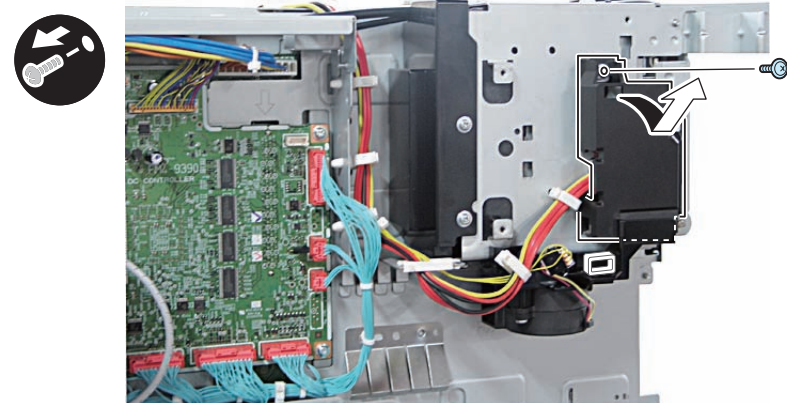
F-9-836

- 12) Open the HDD Lid.
- 1 Screw (Removed screw will not be used.)



F-9-837

- 13) When the Cable Cover is installed, remove it. (Removed Cable Cover and screw will not be used.)
- 1 Screw

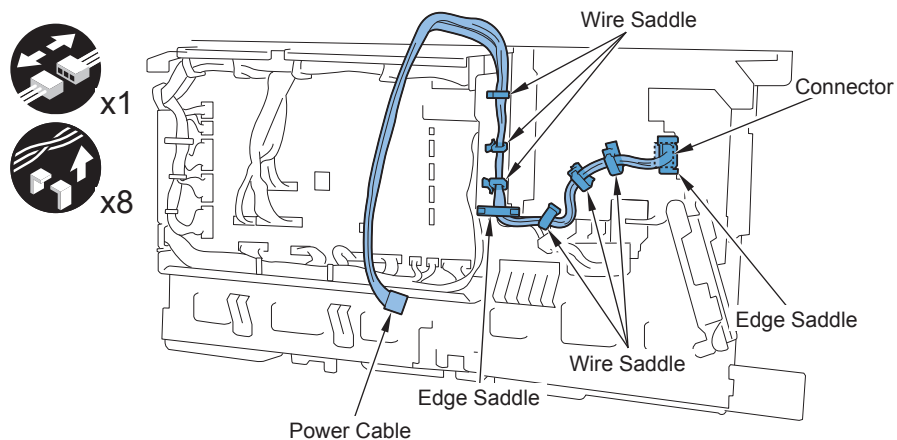


F-9-838

- 14) Remove the Power Cable. (Removed Power Cable will not be used.)

<When the Cable Cover is removed>

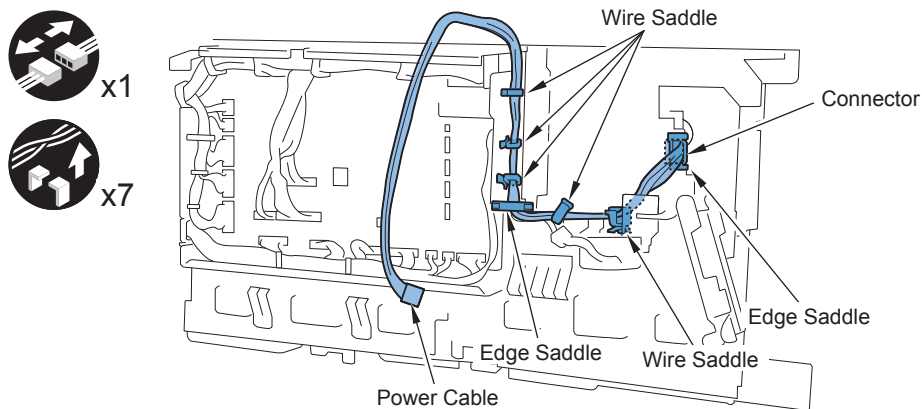
- 2 Edge Saddles
- 6 Wire Saddles
- 1 Connectors



F-9-839

<When the Cable Cover is not installed>

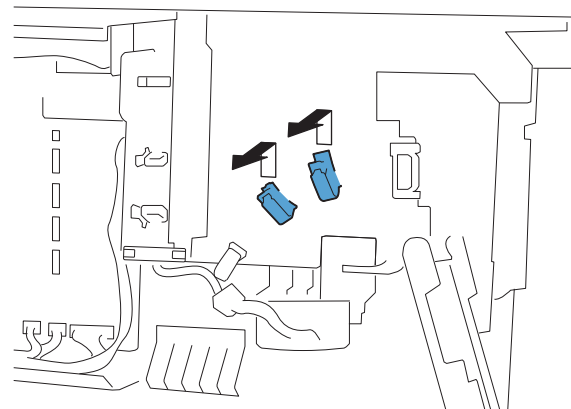
- 2 Edge Saddles
- 5 Wire Saddles
- 1 Connectors



F-9-840

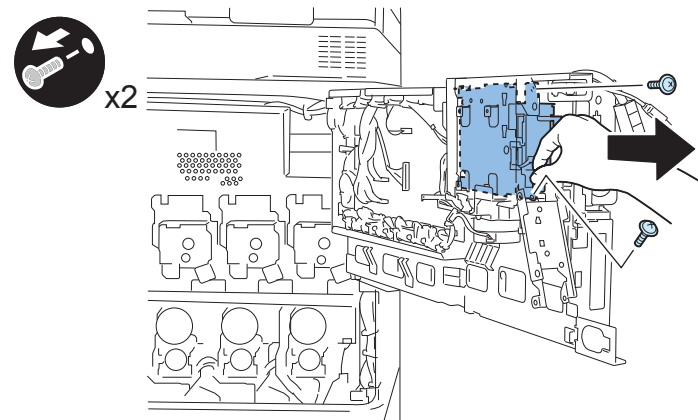
- <When the Cable Cover is removed>

- 15) Remove the 2 Wire Saddles. (Removed wire saddles will not be used.)



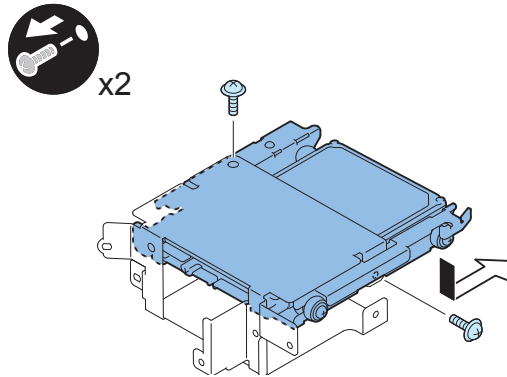
F-9-841

- 16) Remove the HDD Unit by holding it as shown in the figure below.
- 2 Screws (Removed screw will not be used.)



F-9-842

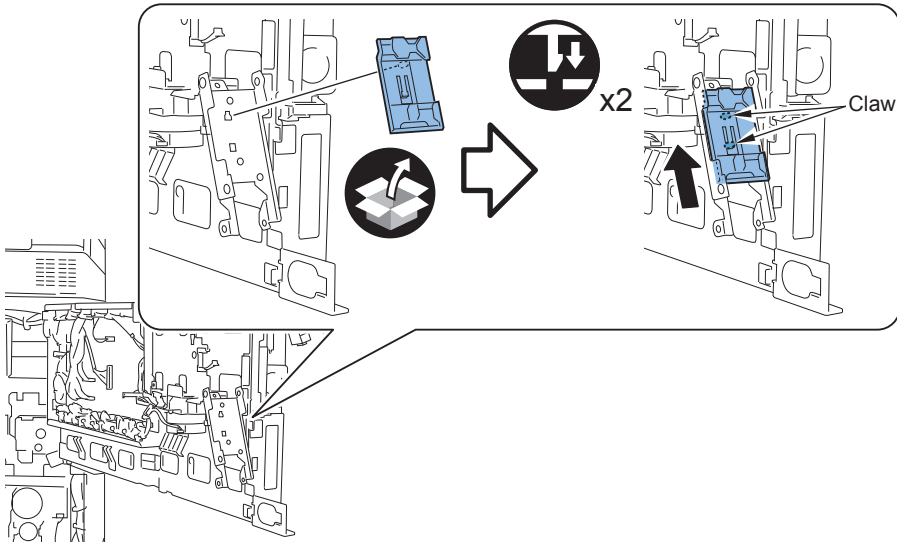
- 17) Remove the HDD (160GB) installed as standard from the removed HDD Unit. (The removed HDD Fixation Plate and the screws will not be used. The HDD (160GB) installed as standard will be used in "Assembling and Installing the Removable HDD" step1.)
- 2 Screws



F-9-843

## ■ Installing the Removable HDD Kit

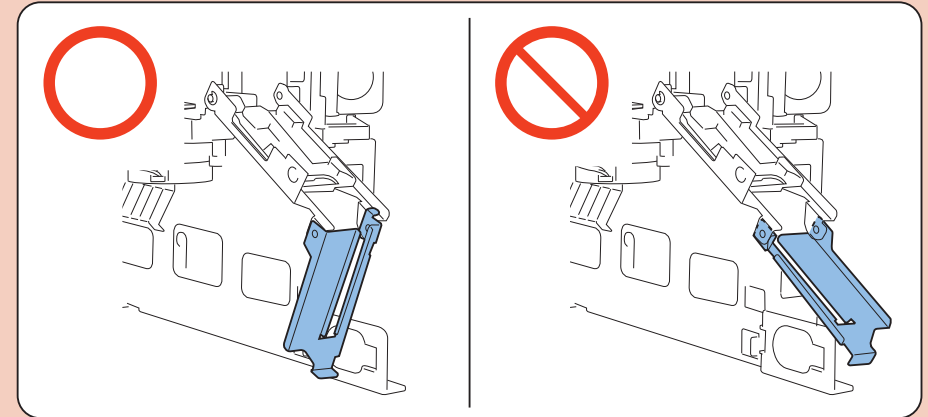
- 1) Install the HDD Door Guide.
- 2 Claws



F-9-844

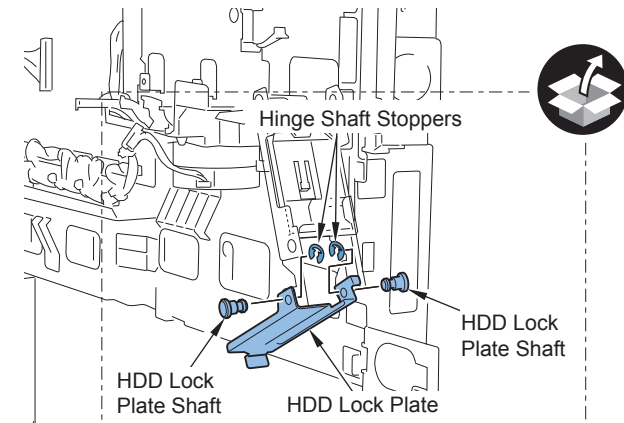
### CAUTION:

Be careful of the installation direction of HDD Lock Plate.



F-9-845

- 2) Install the HDD Lock Plate.
- 2 HDD Lock Plate Shafts
  - 2 Hinge Shaft Stoppers

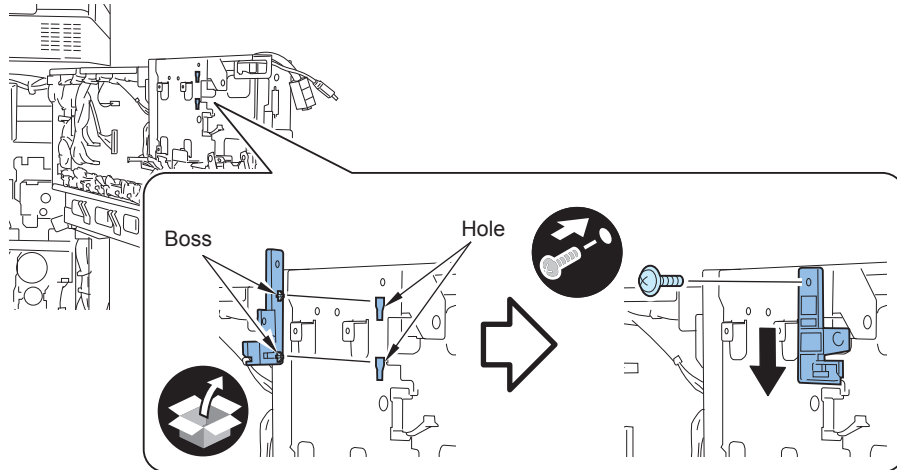


F-9-846

- 
- 3) Adjust the 2 bosses to the hole and install the HDD Lid Retainer.
- 1 Screw (TP round end; M3x6)

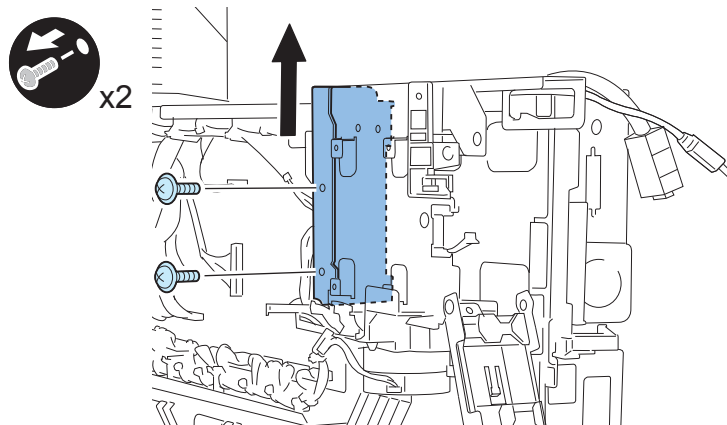
**CAUTION:**

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



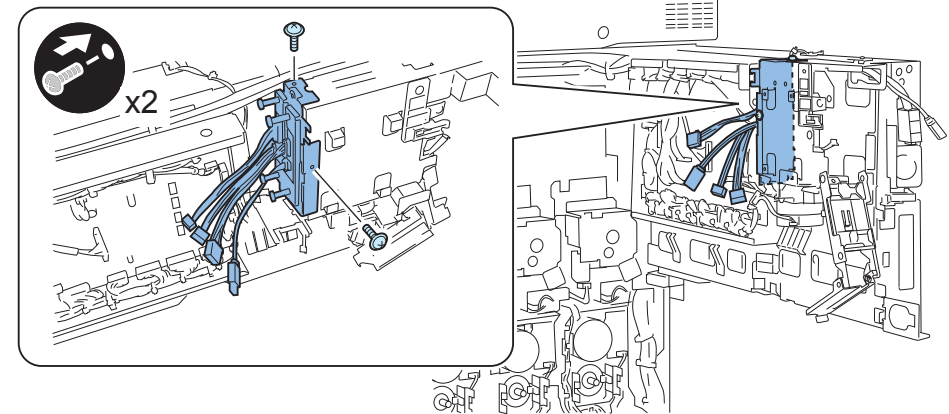
F-9-847

- 
- 4) Remove the HDD Rear Cover. (Removed HDD Rear Cover will not be used.)
- 2 Screws (Removed screw will be used in step 5.)



F-9-848

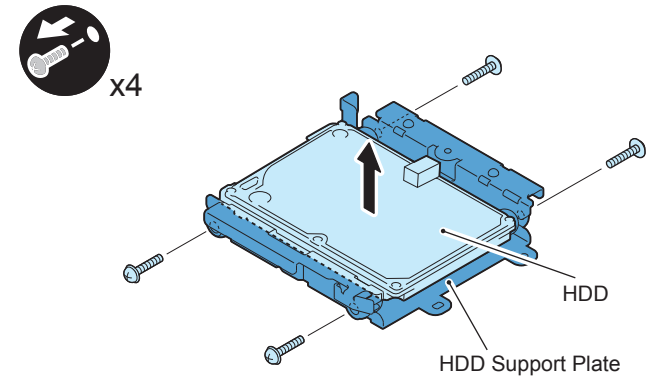
- 
- 5) Install the HDD Drawer Unit.
- 2 Screws (Use the screw removed in step 4)



F-9-849

## ■ Assembling and Installing the Removable HDD

- 
- 1) Remove the HDD from the HDD Support Plate. (Use the installed HDD (160GB) removed in "Removing the Signal Cable and Power Supply Cable" step 17.)
- 4 Screws



F-9-850

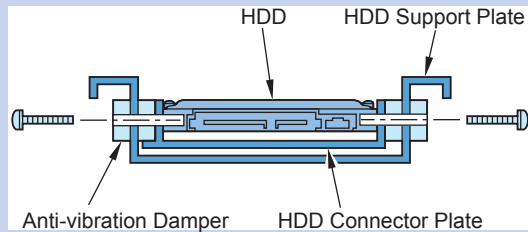


2) Install the HDD Connector Plate first, and then HDD to the HDD Support Plate. (HDD and screw are the ones removed in step 1).)

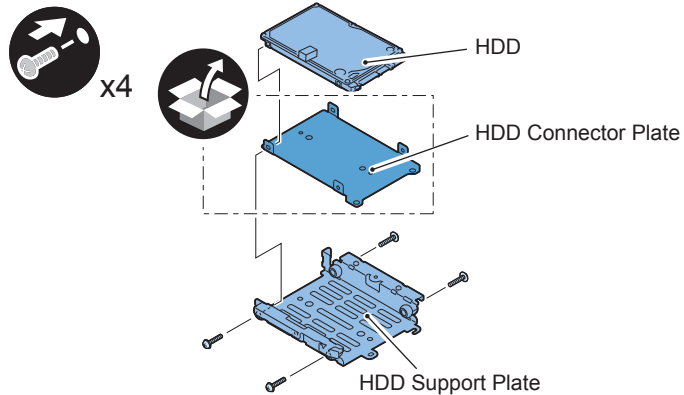
- 4 Screws

**NOTE:**

When tightening the screw, be sure to align the screw holes by lifting the HDD Connector Plate and HDD.



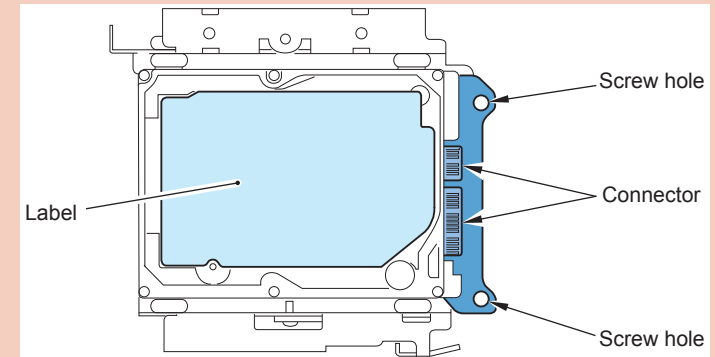
F-9-851



F-9-852

**CAUTION:**

- Assembling the option HDD, be careful of the installation direction.
- Make sure that the label on the option HDD is facing up.
- Install it in the position where the HDD connector is placed in the side with screw hole of HDD Support Plate. (opposite direction compared to the fixed HDD)



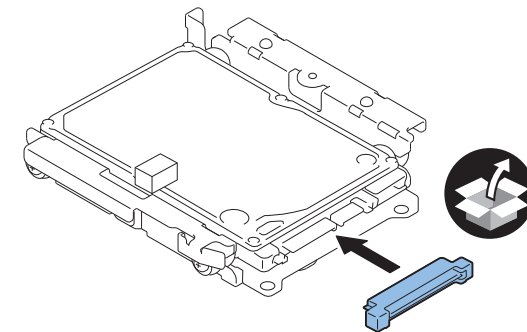
F-9-853



3) Install the Conversion Connector.

**CAUTION:**

Make sure that there is no opening between the Conversion Connector and part of HDD.

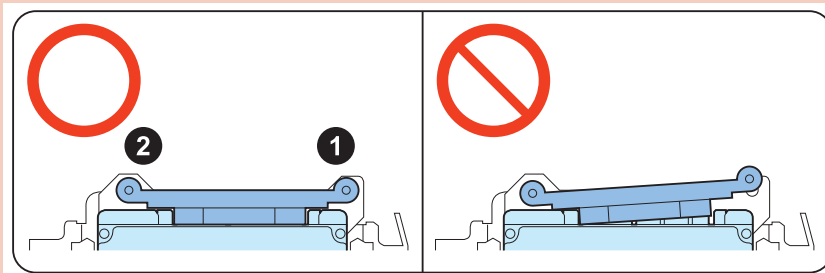


F-9-854

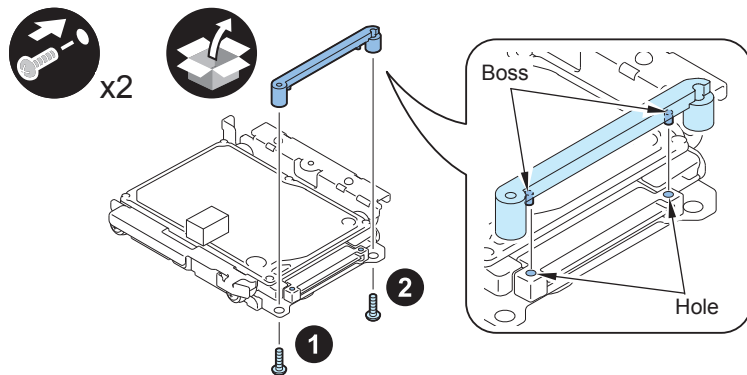
- 
- 4) Fit the 2 bosses of Connector Fixing Block to the hole of Conversion Connector and install it.
- 2 Screws (P Tight; M3x8)

## CAUTION:

- Be sure to firmly hold the Connector Fixation Block when tightening the screws.
- Be sure to follow the correct order to tighten the screws, otherwise the Conversion Connector may not be connected properly, resulting in poor contact.



F-9-855

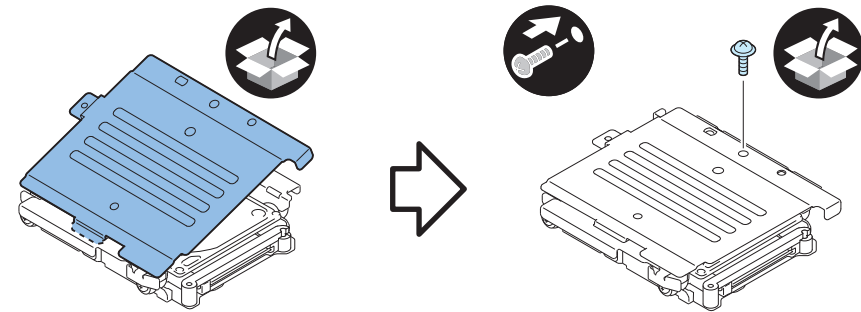


F-9-856

- 
- 5) Install the HDD Cover.
- 1 Claw
  - 1 Screw (TP round end; M3x6)

## CAUTION:

- Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



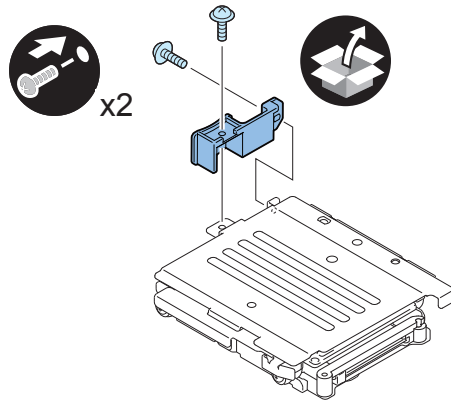
F-9-857



- 6) Install the HDD Handle.
- 2 Screws (TP round end; M3x6)

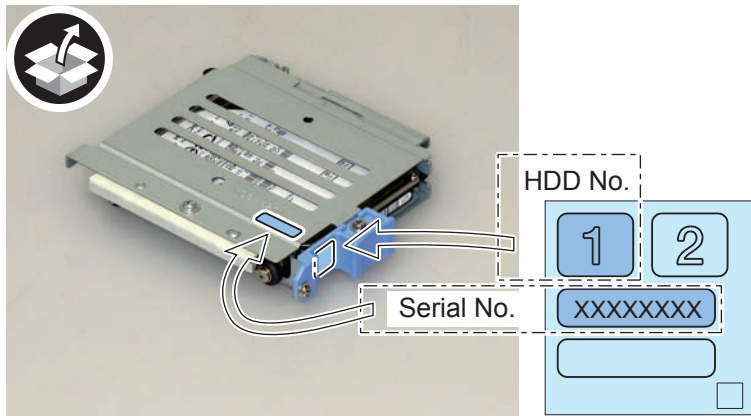
**CAUTION:**

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



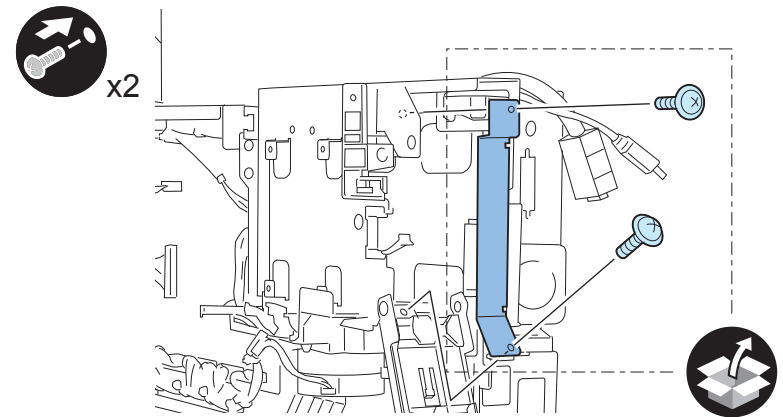
F-9-858

- 7) Affix the HDD No.1 Label to the handle of the Removable HDD.
- 8) Write down the serial number of the host machine to the label for recording the number, and affix it to the area indicated in the figure.



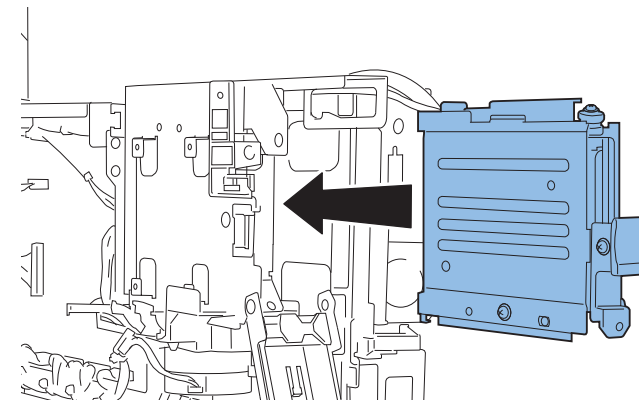
F-9-859

- 9) Install the HDD Blanking Plate to Slot.1 (left side).
- 2 Screws (TP round end; M3X6)



F-9-860

- 10) Install the HDD to Slot.2 (right side).



F-9-861

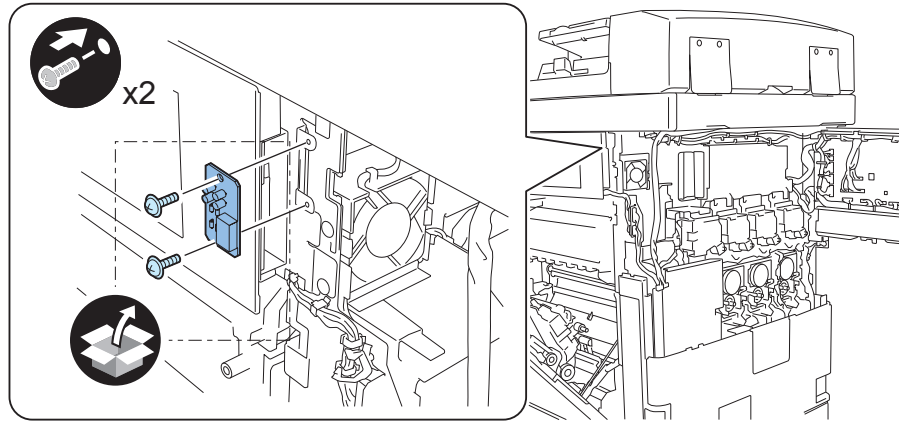
- 11) Close the Edge Saddle, and close the HDD Lid

## Installing the LED Board



1) Install the LED Board (small) (FK2-7400 or A: LED).

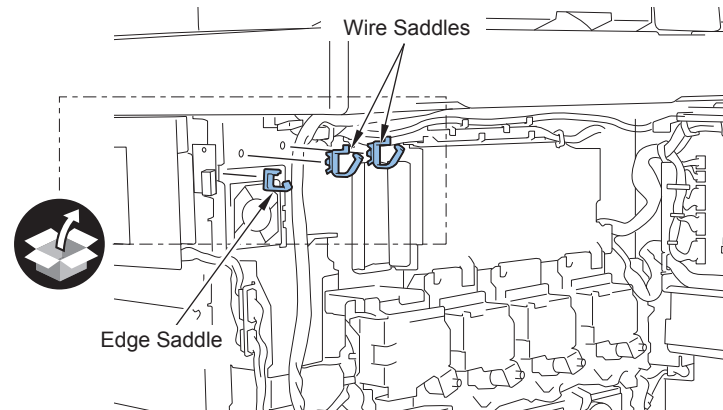
- 2 Screws (TP; M3x6)



F-9-862



2) Install the 2 wire saddles and the edge saddle.



F-9-863

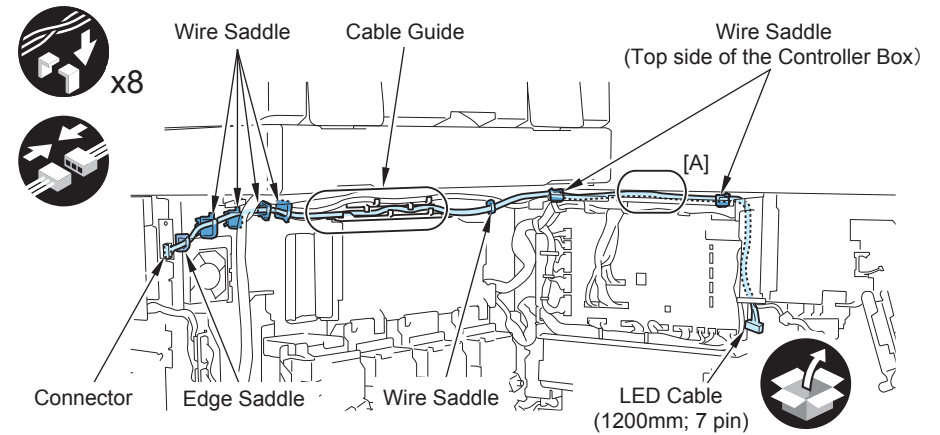


3) Connect the LED Cable (1200 mm; 7-pin) (FM4-0839 or A: LED-Sig).

- 7 Wire Saddles
- 1 Edge Saddle
- 1 Cable Guide
- 1 Connector

### CAUTION:

Be sure to tuck the [A] area of the LED cable under the other 2 cables running through the [A] area. This is to prevent the [A] area of the LED cable from being slacked off when closing the Controller Box.



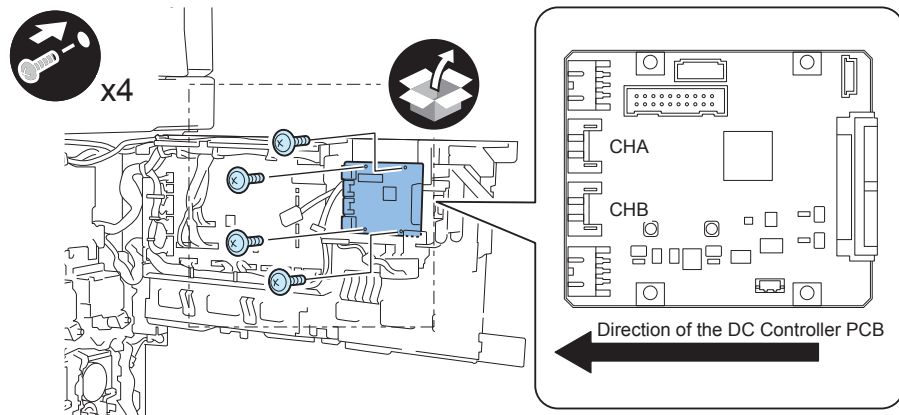
F-9-864

## Installing the Encryption Board

- 1) Install the Encryption Board so that "CHA" and "CHB" are placed in the direction of the DC Controller PCB.
  - 4 Screws (TP; M3x6)

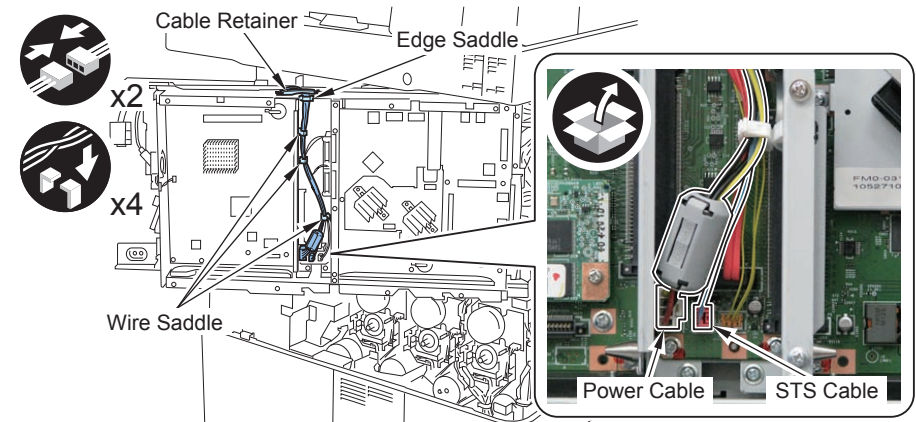
### CAUTION:

Be sure that the direction of installing the Encryption Board is opposite to the case when the fixed HDD is installed. If it is installed in a wrong direction, the cables do not reach the board.



F-9-865

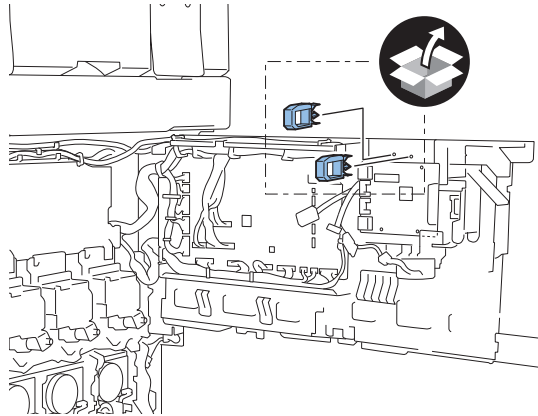
- 2) Connect the cables to the PCB on the backside.
  - Power Cable (650 mm): FK2-8464 or A: Cont-Pow (Included in the Removable HDD Kit)
  - STS Cable (550 mm (Light blue); 5-pin): FM4-0842 or A: STS-Sig (Included in the HDD Encryption Kit)
- 3) Fix the cables.
  - 3 Wire Saddles
  - 1 Edge Saddle
  - Cable Retainer
- 4) Install the Ring Core to the Power Supply Cable as shown in the figure.



F-9-866

- 5) Install the Controller Cover. (11 Screws)

- 6) Install the 2 wire saddles.

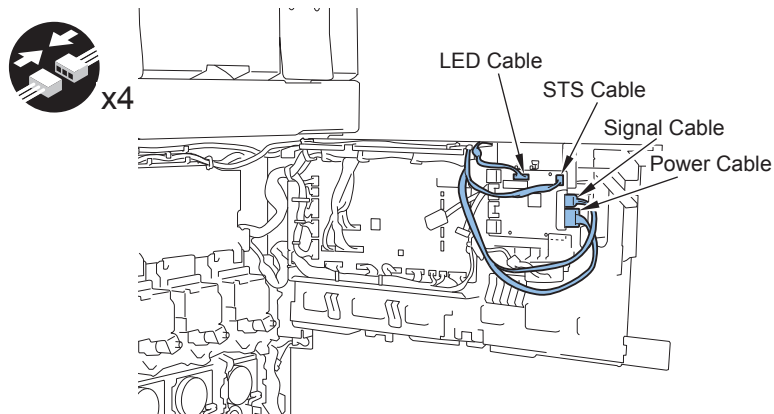


F-9-867

- 7) Connect the cable to the Encryption Board.
- Signal Cable (existing cable FK2-8432 or A: Cont-Sig)
  - Power Sable (650mm): FK2-8464 or A: Cont-Pow (Included in the Removable HDD Kit)
  - LED Cable (1200 mm; 7-pin): FM4-0839 or A: LED-Sig
  - STS Cable (550mm (Light blue); 5 Pin): FM4-0842 or A: STS-Sig

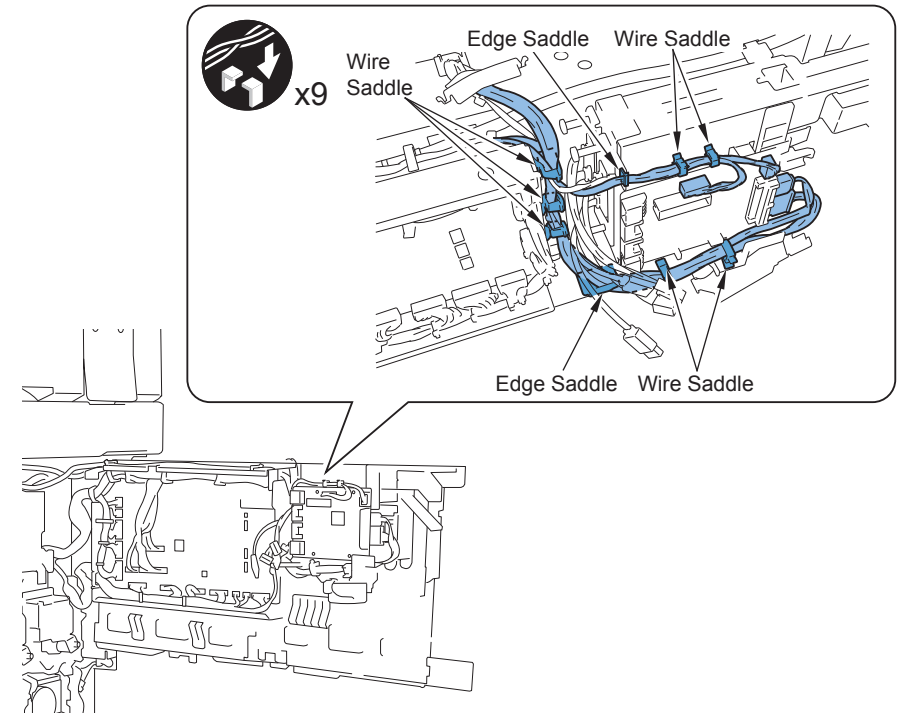
**CAUTION:**

The machine can operate even the STS Cable and the LED Cable are not connected. Therefore, when installing the cables, be sure that they are connected properly.



F-9-868

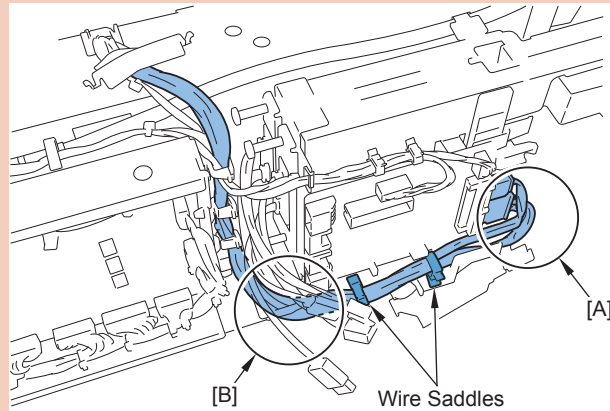
- 8) Fix the cables.
- 7 Wire Saddles
  - 2 Edge Saddles



F-9-869

## CAUTION:

- When fixing the cables with wire saddles, be sure to take up slack of them at [A] part, and slack off them at [B] part.
- If slacking off the cables at [A] part, they may interfere the fan on the host machine when returning the Controller Box.



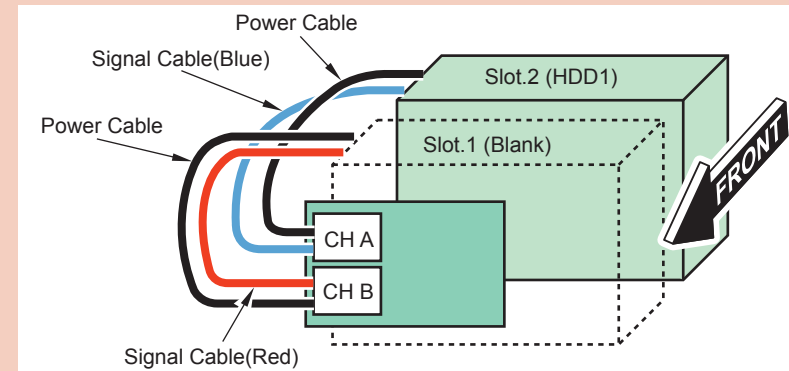
F-9-870

## CAUTION:

Be sure to acknowledge the following caution before performing the next procedure. Combinations of connection between the HDDs and the Encryption Board are shown below.

Keep Slot 1 in the condition where no HDD is installed, and only connect the cables.

- Connect Slot 1 to "CHB".
- Connect Slot 2 to "CHA".



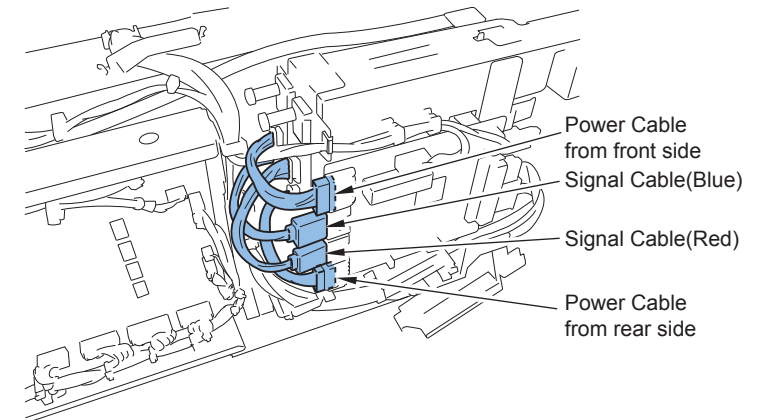
F-9-871



9) Connect the cable of the HDD Drawer Unit to the Encryption Board.

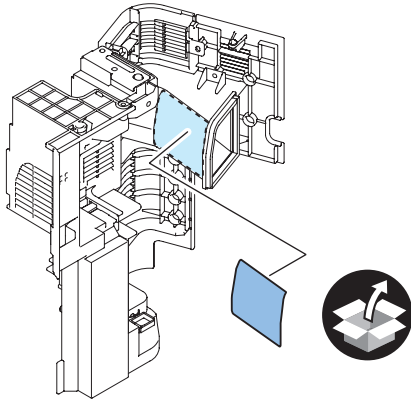


x4



F-9-872

- 10) Place the Controller Box to the original position. (2 Screws or 3 Screws)
- 11) Affix the Shutdown Caution Label in the appropriate language on the Right Rear Cover 1. (Included in the Removable HDD Kit).

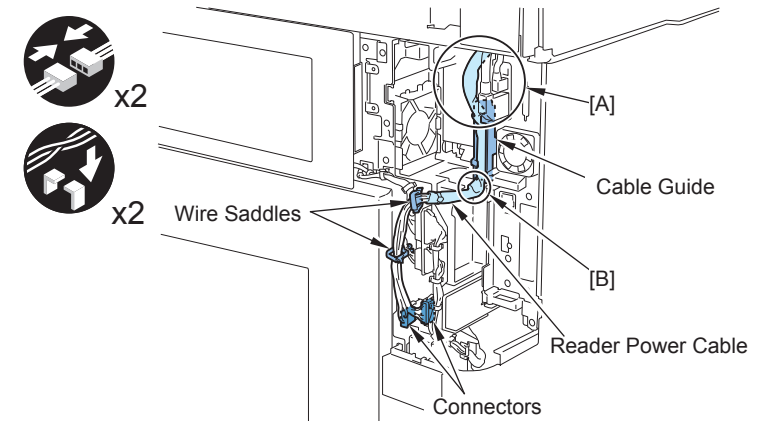


F-9-873

- 12) Install the removed cover and the cable.
- Rear Cover (2 Screws, 2 Rubber Caps)
  - Left Rear Sub Cover (1 Screw)
  - Reader Communication Cable (when reader is installed)
  - Left Rear Cover (2 Screws, 2 Rubber Caps)
- 13) If Reader is installed, install the Reader Power Cable.

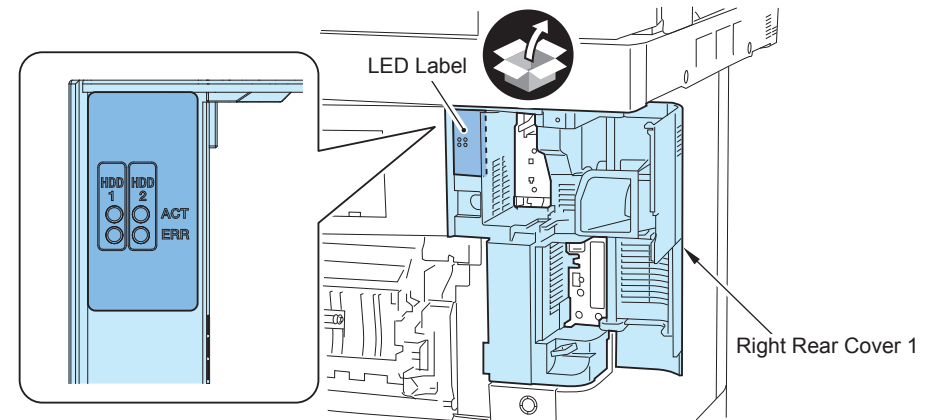
**NOTE:**

Handle the Reader Power Cable from the connector side and make a slack at [A] part. Bend the Reader Power Cable at a right angle on [B] part.



F-9-874

- 14) Install the Right Rear Cover 1. (3 Screws)
- 15) Affix the LED label so that it fits the edge of the Right Rear Cover 1.



F-9-875

- 16) Close the Right Rear Cover 1, Right Lower Cover, and Right Upper Cover.
- 17) Connect the power plug of the host machine to the power outlet.

## Installing the System Software Using the SST

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product.

It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product.

Details follow.

### 1. Requirements

#### 1) PC

Service support tool in the version that supports this host machine must be installed.

#### 2) Cross Ethernet Cable

### 2. Preparing for the Installation of the System Software of Host machine

- 1) If both PC and the machine are on, turn them off.
- 2) Connect the PC and the machine using an Ethernet cable.
- 3) Turn on the PC.
- 4) Start up the machine in download mode (safe mode).

### 3. Selecting the System Software

- 1) Set the CD containing the latest system software in the PC on which the SST is used.
- 2) Start up the SST.
- 3) Click Register Firmware.
- 4) Select the drive in which the System Software CD has been set, and click search.
- 5) Click REGISTER.
- 6) Click OK.

### 4. Downloading the System Software

- 1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
- 2) When initialization is completed, the machine is automatically restarted and it enters download mode.
- 3) Select the version to be downloaded and click "Start".
- 4) When download is completed, the machine is automatically restarted.
- 5) When writing of the firmware is completed, the machine is automatically restarted.
- 6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
- 7) Terminate the SST.
- 8) Check the version of the downloaded firmware in service mode.

## Checking the Security Version

- 1) Press the Counter key (123 key) on the control panel.
  - 2) Press the [Check Device Configuration] key appearing on the control panel.
  - 3) Make sure that '2.00' or '2.01' is displayed in 'Canon MFP Security Chip' as version information of the security chip.
- When several Encryption Boards are installed, multiple version information is displayed.

### CAUTION:

The user will be able to make sure that the encryption board fitted with a security chip of the correct version with CC authentication is functioning normally by referring to the version information indicated for 'Canon MFP Security Chip'.


## Checking the Security Mark

The user may check the security mark, appearing on the control panel when using the Host machine to make sure that an appropriate level of security is being maintained.

The mark appears when the machine is equipped with an encryption board and the board is operating correctly.

The Users Guide provides the following description in connection with the security mark:

### <Confirming the Security Mark>

When the HDD Data Encryption & Mirroring Kit is operating normally, a security mark(  ) is displayed on the lower left corner of a panel screen.

## Checking after Installation

- 1) Make sure that the LED blinks.
  - HDD1 (Slot 2): The green LED blinks.



## Reporting to the System Administrator at the End of the Work

When you have completed all installation work, report to the system administrator for the following:

At the point when installation is completed, make explanations about how to check that the appropriate security function has been added and enabled so that, when the function becomes uncontrolled, the system administrator can immediately detect the problem and request <servicing work when a failure occurs>.

Completion of the Installation Work:

Ask the system administrator to make sure that '2.00' or '2.01' is indicated for 'Canon MFP Security Chip' as the version information of the security chip by referring to the description of Checking the Security Version.

Maintenance of the Security Functions:

Ask the system administrator to check the security mark to make sure that the security functions are maintained each time the machine is started up by referring to the description of Checking the Security Mark.

## Execution of Auto Adjust Gradation

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.

Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

## [TYPE-11]

Option HDD (1TB) + Removable HDD Kit + HDD Data Encryption &amp; Mirroring Kit

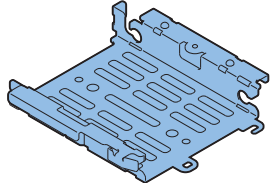
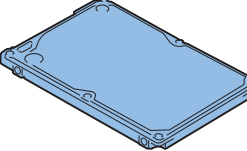
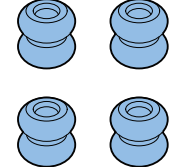
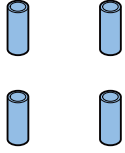
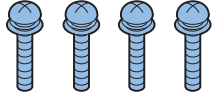

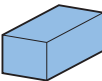
## Points to Note when HDD Data Encryption & Mirroring Kit has been Installed

A security sticker is attached to the kit package to indicate that the package has not been opened. Check to see that the package has not been opened in any way and the sticker is not torn.

If the package appears to have been opened or the sticker is torn, check to make sure that the user has done so intentionally.

## Checking the Contents

### Option HDD (1TB)


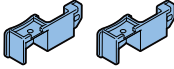
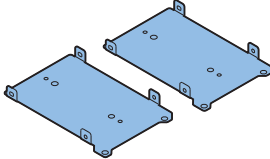
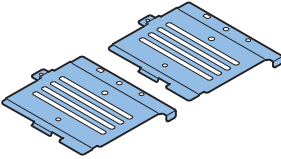
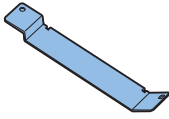
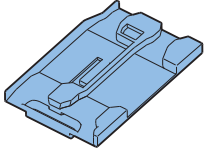
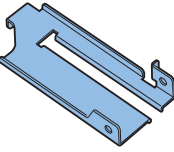

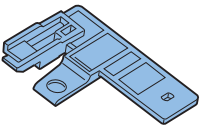
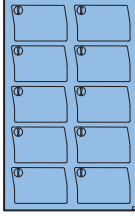
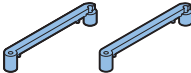
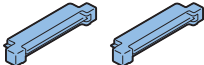
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<input type="checkbox"/> [4] Spacer X 4 	<input type="checkbox"/> [5] Screw (W sems; M3x14) X 4 	<input type="checkbox"/> [6] Screw (TP;M3x6) X 2 
<input type="checkbox"/> [7] Gasket X 1 		

&lt;CD/Guides&gt;

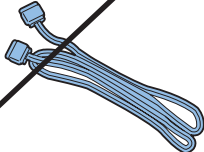
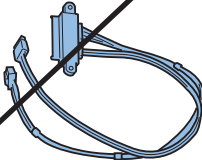
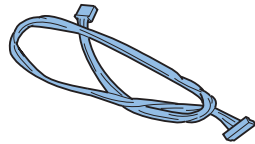
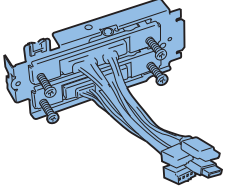
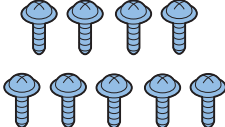
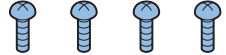
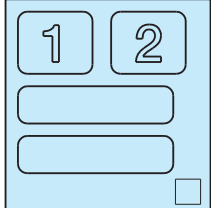
- Notice for FCC/IC

F-9-876

Removable HDD Kit


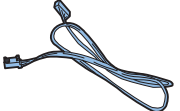



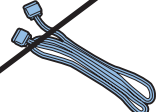







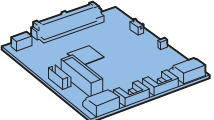
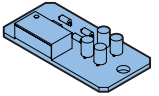
<input type="checkbox"/> [1] Hinge Shaft Stopper X 2  	<input type="checkbox"/> [2] HDD Handle X 2 Use 1 of them  	<input type="checkbox"/> [3] HDD Connector Plate X 2 Use 1 of them  
<input type="checkbox"/> [4] HDD Cover X 2 Use 1 of them  	<input type="checkbox"/> [5] HDD Blanking Plate X 1  	<input type="checkbox"/> [6] HDD Door Guide X 1  
<input type="checkbox"/> [7] HDD Lock Plate X 1  	<input type="checkbox"/> [8] HDD Lock Plate Shaft X 2  	<input type="checkbox"/> [9] HDD Lid Retainer X 1  
<input type="checkbox"/> [10] Shutdown Caution Label X 1  	<input type="checkbox"/> [11] Connector Fixing Block X 2 Use 1 of them  	<input type="checkbox"/> [12] Conversion Connector X 2 Use 1 of them  

F-9-877

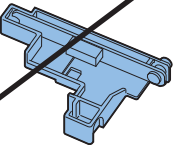


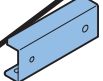
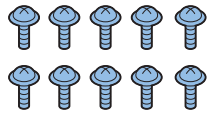

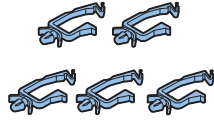


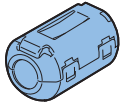
<input type="checkbox"/> [13] Signal Cable (660mm ; Red) X 1 FK2-8432 or A: Cont-Sig  	<input type="checkbox"/> [14] IV Cable X 1 FK2-8453 or A: HDD-Pow1, A: HDD-Sig1  	<input type="checkbox"/> [15] Power Cable (650mm) X 1 FK2-8464 or A: Cont-Pow  
<input type="checkbox"/> [16] HDD Drawer Unit x 1  	<input type="checkbox"/> [17] Screw (R round head TP; M3x6) X 9 Use 6 of them  	<input type="checkbox"/> [18] Screw (P Tight; M3x8) X 4 Use 2 of them  
<input type="checkbox"/> [19] R-HDD Label X 1  		

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**HDD Data Encryption & Mirroring Kit**

<input type="checkbox"/> [1] LED Cable (1200mm; 7 pin) X 1 FM4-0839 or A: LED-Sig 	<input type="checkbox"/> [2] STS Cable (550mm (Light blue); 5 pin) X 1 FM4-0842 or A: STS-Sig 	<input type="checkbox"/> [3] Signal Cable (80mm; Red) X 1 FK2-8436 or A: HDD-Sig1 
<input type="checkbox"/> [4] Signal Cable (80mm; Blue) X 1 FK2-8438 or A: HDD-Sig2 	<input type="checkbox"/> [5] Power Cable (80mm) X 2 FK2-8461 or A: HDD-Pow1/2 	<input type="checkbox"/> [6] Signal Cable (450mm; Red) X 1 FK2-8435 or A: Cont-Sig 
<input type="checkbox"/> [7] Power Cable (430mm) X 1 FK2-8463 or A: Cont-Pow 	<input type="checkbox"/> [8] Power Cable (430mm) X 1 FK2-8463 or A: HDD-Pow2 	<input type="checkbox"/> [9] Signal Cable (340mm (Red); ) X 1 FK2-8434 or A: HDD-Sig1 
<input type="checkbox"/> [10] Signal Cable (370mm (Blue); ) X 1 FK2-8441 or A: HDD-Sig2 	<input type="checkbox"/> [11] Power Cable (320mm) X 1 FK2-8467 or A: HDD-Pow1 	<input type="checkbox"/> [12] LED Cable (290mm; 7 pin) X 1 FM4-0840 or A: LED-Sig 
<input type="checkbox"/> [13] STS Cable (420mm (Light blue); 5 pin) X 1 FM4-0843 or A: STS-Sig 	<input type="checkbox"/> [14] Encryption Board X 1 	<input type="checkbox"/> [15] LED Board (Small) X 1 FK2-7400 or A: LED 

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<input type="checkbox"/> [16] LED Board (large) X 1 FK2-8324 or A: LED 	<input type="checkbox"/> [17] LED Label (Small) X 1 	<input type="checkbox"/> [18] LED Label (large) X 1 
<input type="checkbox"/> [19] HDD Connection Plate X 1 	<input type="checkbox"/> [20] Screw (TP; M3x6) X 10 Use 6 of them 	<input type="checkbox"/> [21] Edge Saddle X 1 
<input type="checkbox"/> [22] Wire saddle (Small) X 5 Use 4 of them 	<input type="checkbox"/> [23] Wire saddle (large) X 1 	<input type="checkbox"/> [24] Wire saddle (Middle) X 1 
<input type="checkbox"/> [25] Ring Core X 1 		

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<CD/Guides>

- HDD Data Encryption & Mirroring Kit-C1 User Documentation
- HDD Data Encryption Kit Notice
- Installation Procedure
- Noticed for FCC/IC

## Setting Before Turning OFF the Power

### CAUTION:

Be sure to turn OFF the main power after executing this service mode setting.

Turning OFF the main power without executing service mode causes "E602-5001 (procedure error before installing the HDD Encryption Board)" to occur when turning ON the main power after installing the Encryption Board.

When this error occurs, the machine needs to be returned again to the initial state in which no Encryption Board is installed.



- 1) Execute the following service mode (level 1).
  - COPIER > FUNCTION > INSTALL > HD-CRYP

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

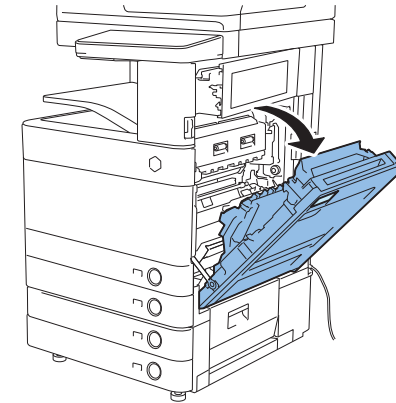
- 1) Turning off the Main Power Supply Switch of the Host Machine.
- 2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

## Installation Procedure

### Removing the Signal Cable and Power Supply Cable



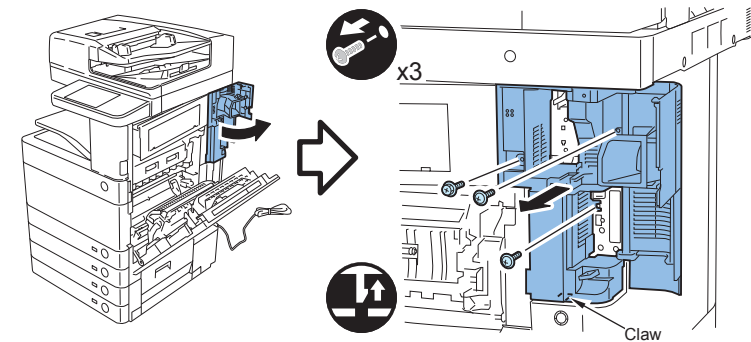
- 1) Open the Right Lower Cover. (Open the Right Upper Cover simultaneously.)



F-9-881



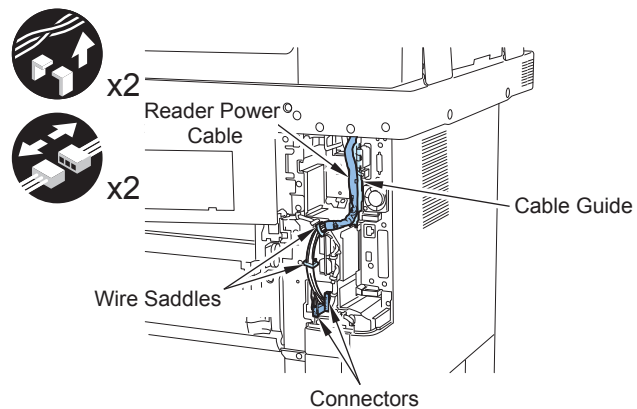
- 2) Open the Right Rear Cover 1.
- 3) Remove the Right Rear Cover 1.
  - 1 Screw (RS tight; M4)
  - 2 Screws (TP; M3)
  - 1 Claw



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□  
4) When the Reader is installed, remove the Reader Power Cable.

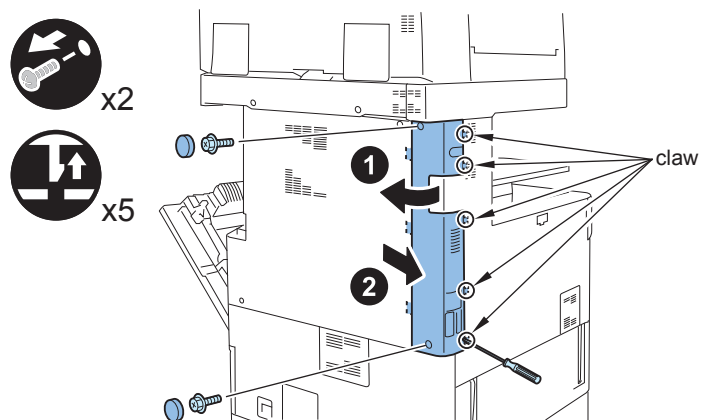
- 2 Connectors
- 2 Wire Saddles
- 1 Cable Guide



F-9-883

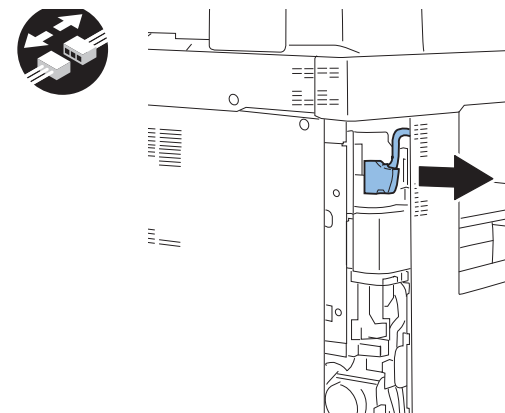
□  
5) Remove the Left Rear Cover.

- 2 Rubber Caps
- 2 Screws
- 5 Claws



F-9-884

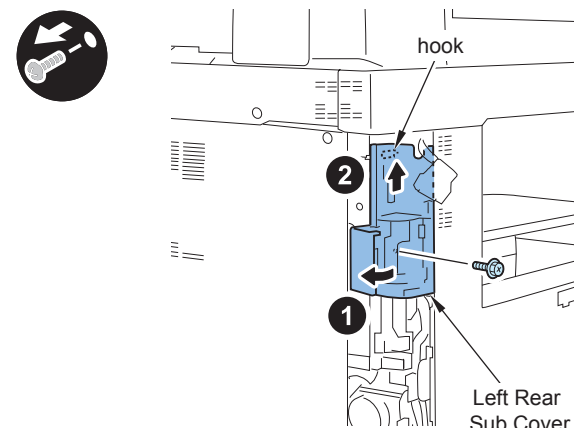
□  
6) When the Reader is installed, remove the Reader Communication Cable.



F-9-885

□  
7) Remove the Left Rear Sub Cover.

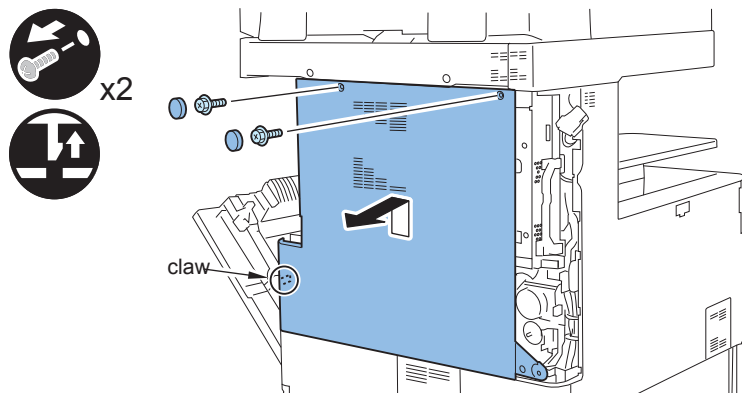
- 1 Screw
- 1 Hook



F-9-886

□ 8) Remove the Rear Cover.

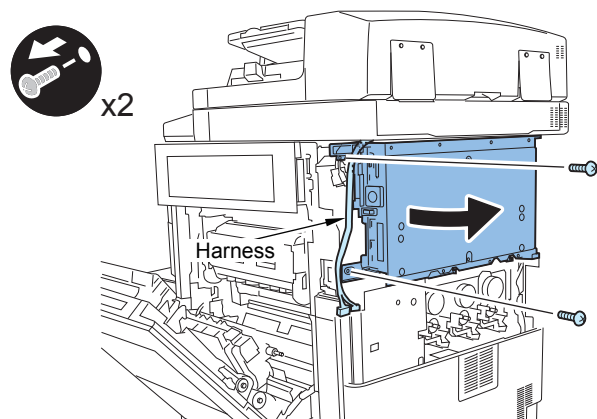
- 2 Rubber Caps
- 2 Screws
- 1 Claw



F-9-887

□ 9) Open the Controller Box while avoiding the harness.

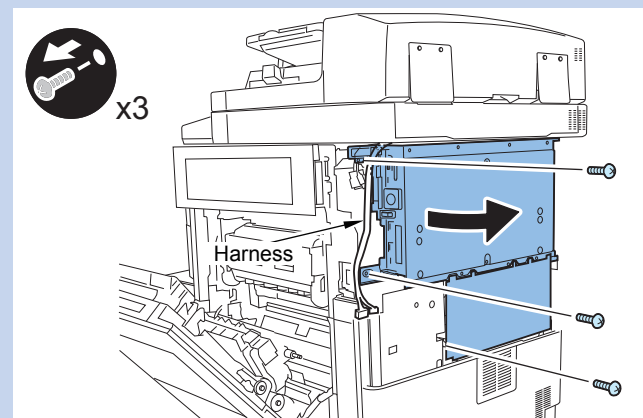
- 2 Screws



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NOTE:

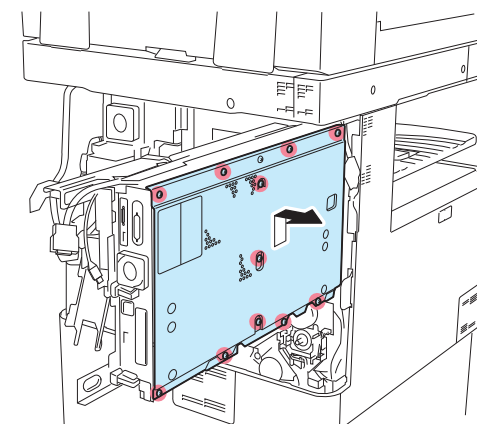
If the FAX Unit has been installed, remove the 3 screws and open the Controller Box with the FAX Unit.



F-9-889

□ 10) Remove the Controller Cover.

- 11 Screws (loosen)



F-9-890

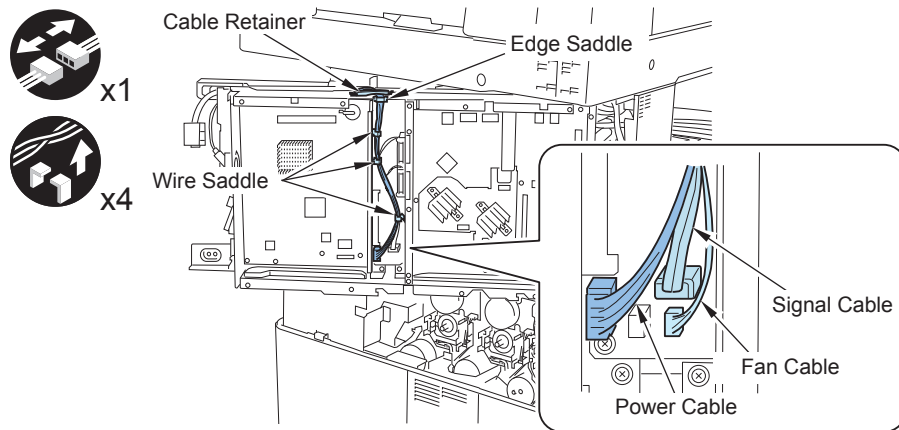


- 11) Remove the Power Cable.

**CAUTION:**

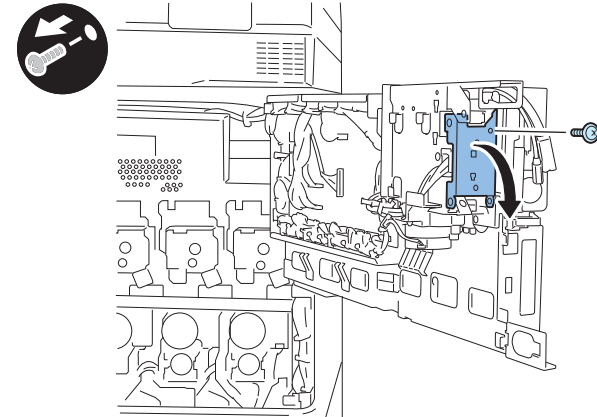
Do not remove the Signal Cable and the Fan Cable.

- 1 Edge Saddle
- 3 Wire Saddles
- 1 Cable Retainer



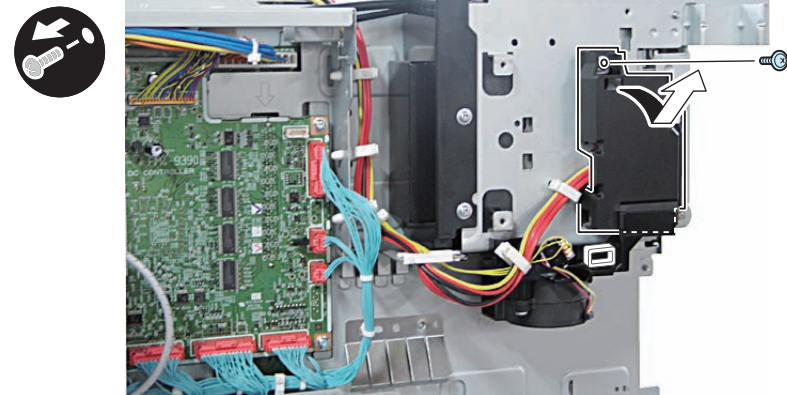
F-9-891

- 12) Open the HDD Lid.
- 1 Screw (Removed screw will not be used.)



F-9-892

- 13) When the Cable Cover is installed, remove it. (Removed Cable Cover and screw will not be used.)
- 1 Screw

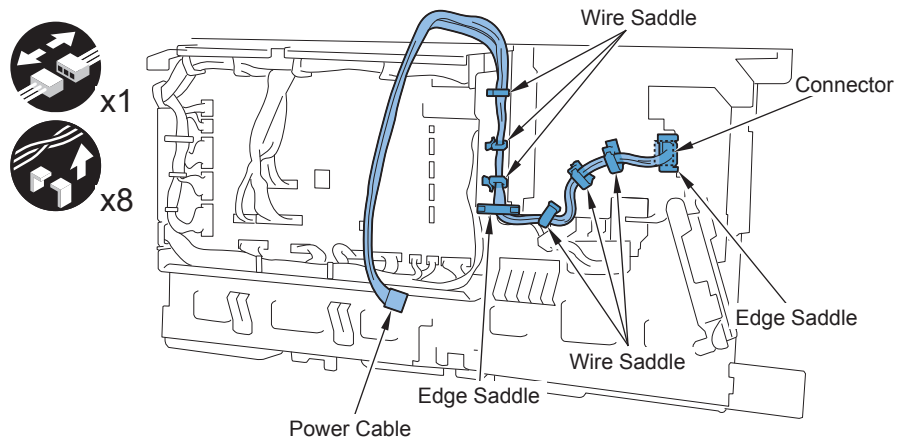


F-9-893

14) Remove the Power Cable. (Removed Power Cable will not be used.)

<When the Cable Cover is removed>

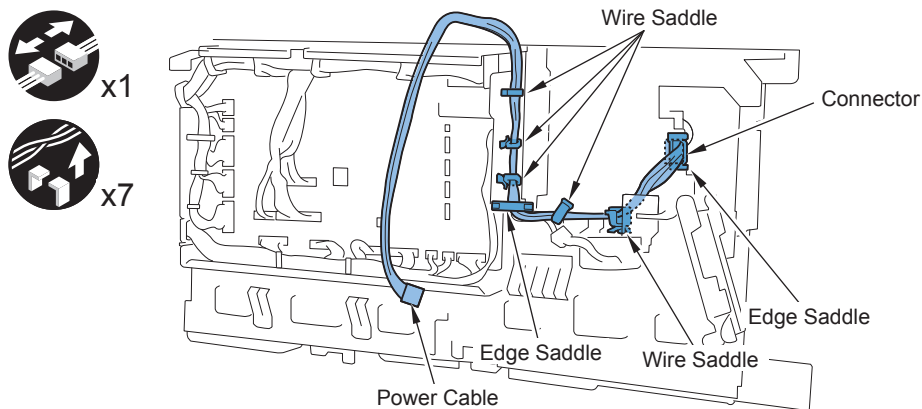
- 2 Edge Saddles
- 6 Wire Saddles
- 1 Connectors



F-9-894

<When the Cable Cover is not installed>

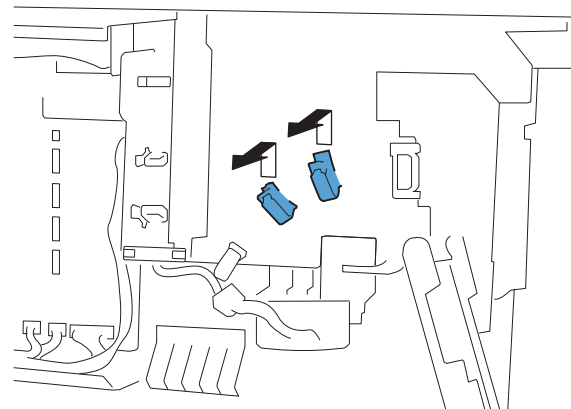
- 2 Edge Saddles
- 5 Wire Saddles
- 1 Connectors



F-9-895

<When the Cable Cover is removed>

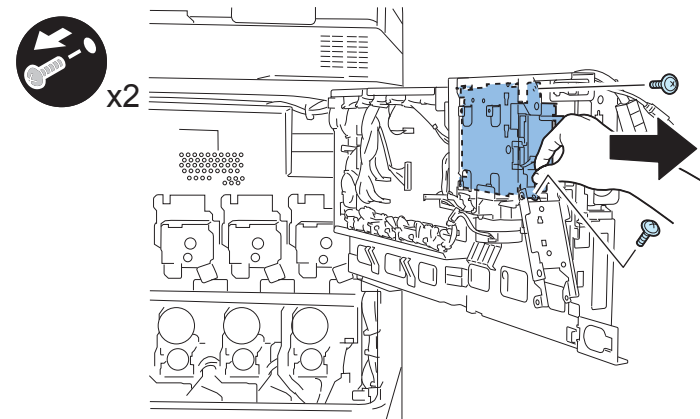
15) Remove the 2 Wire Saddles. (Removed wire saddles will not be used.)



F-9-896

16) Remove the HDD Unit by holding it as shown in the figure below. (Removed HDD unit will not be used.)

- 2 Screws (Removed screw will not be used.)



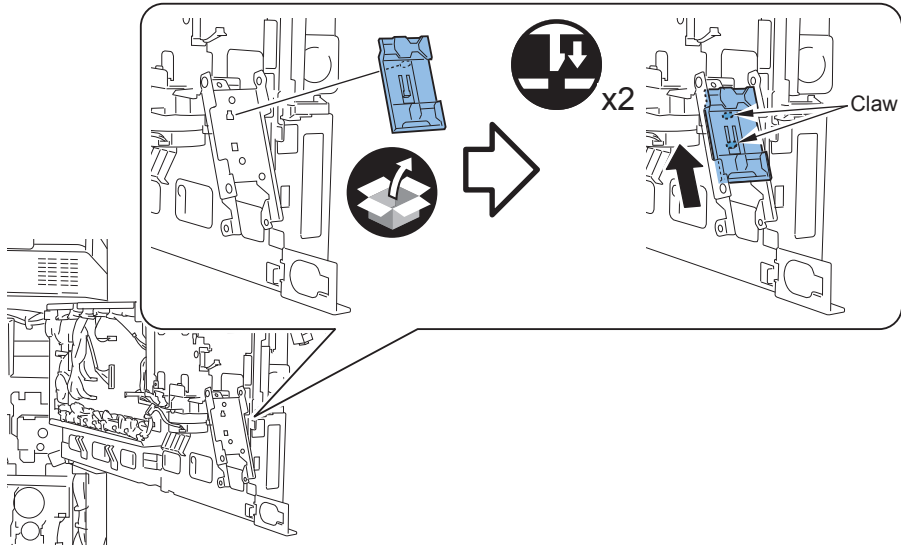
F-9-897

## Installing the Removable HDD Kit



1) Install the HDD Door Guide.

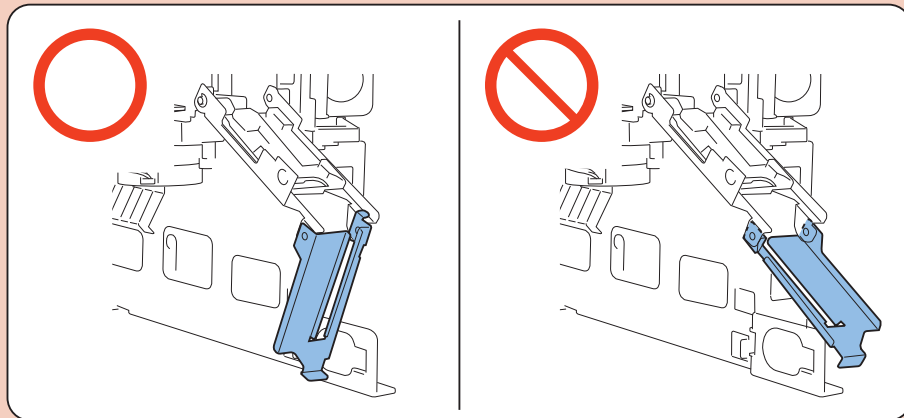
- 2 Claws



F-9-898

### CAUTION:

Be careful of the installation direction of HDD Lock Plate.

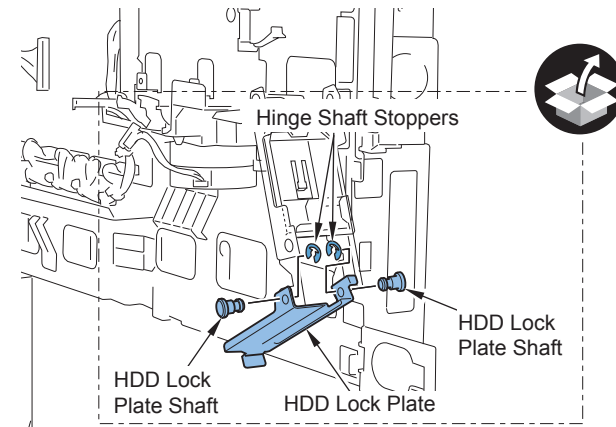


F-9-899



2) Install the HDD Lock Plate.

- 2 HDD Lock Plate Shafts
- 2 Hinge Shaft Stoppers

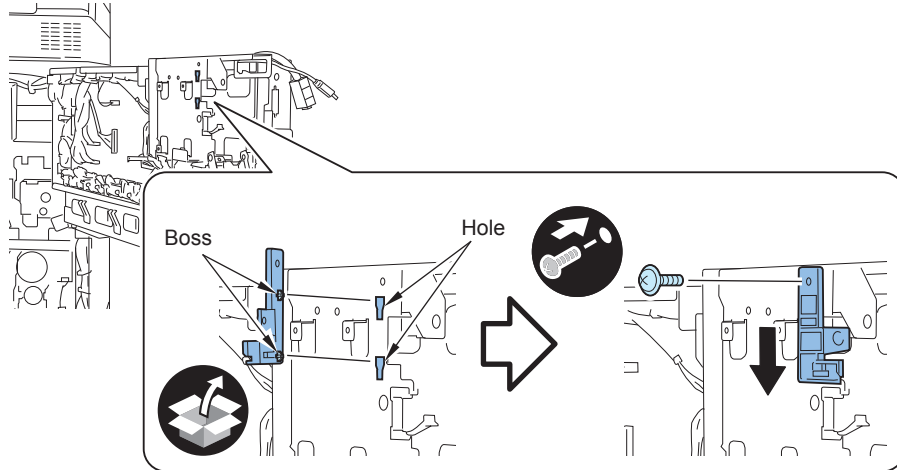


F-9-900

- 
- 3) Adjust the 2 bosses to the hole and install the HDD Lid Retainer.
- 1 Screw (TP round end; M3x6)

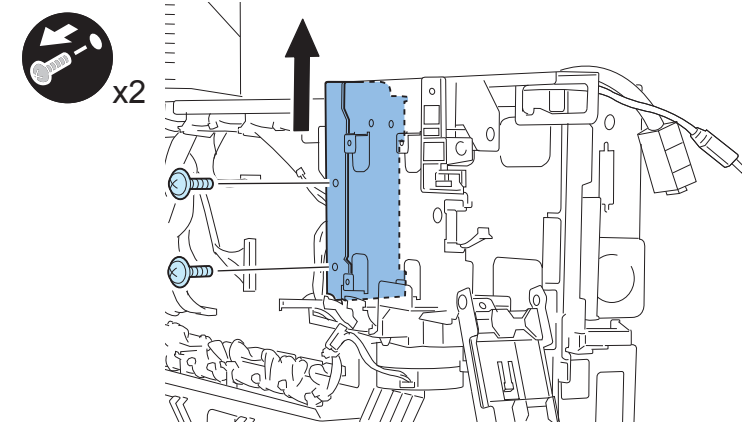
**CAUTION:**

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



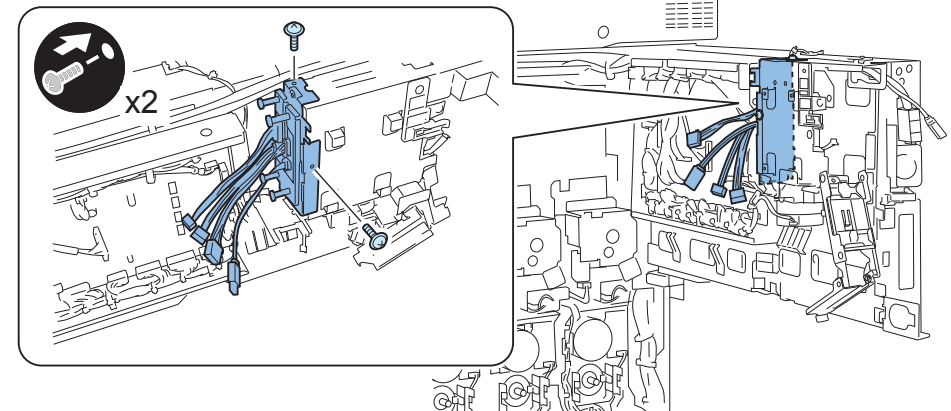
F-9-901

- 
- 4) Remove the HDD Rear Cover. (Removed HDD Rear Cover will not be used.)
- 2 Screws (Removed screw will be used in step 5.)



F-9-902

- 
- 5) Install the HDD Drawer Unit.
- 2 Screws (Use the screw removed in step 4)



F-9-903

## Assembling and Installing the Option HDD

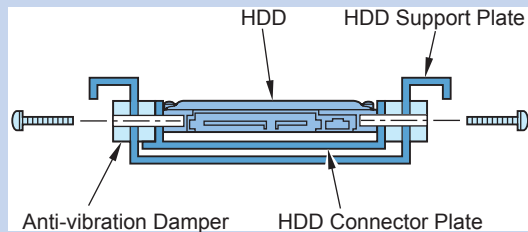


1) Purchase option HDD and assemble the second HDD.

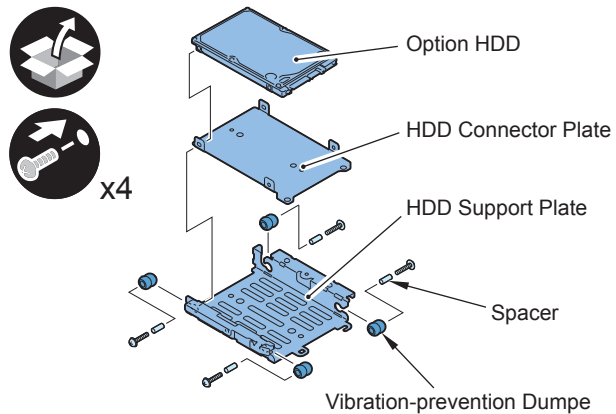
- 1 Option HDD (enclosed with option HDD)
- 1 HDD Support Plate (enclosed with option HDD)
- 1 HDD Connector Plate (enclosed with removable HDD Kit)
- 4 Vibration-prevention Dumpers (enclosed with option HDD)
- 4 Spacers (enclosed with option HDD)
- 4 Screws (W sems; M3x14) (enclosed with option HDD)

### NOTE:

When tightening the screen, be sure to align the screw holes by lifting the HDD Connector Plate and HDD.



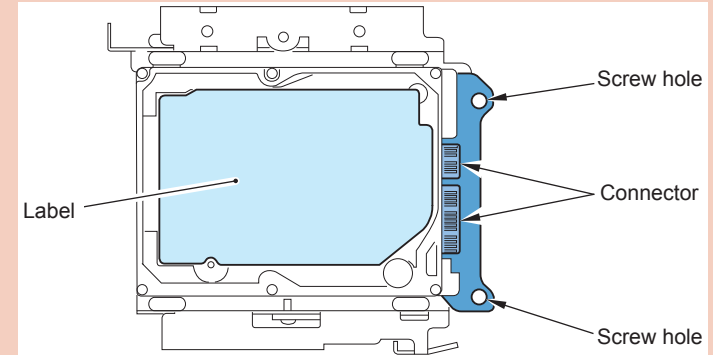
F-9-904



F-9-905

### CAUTION:

- Assembling the option HDD, be careful of the installation direction.
- Make sure that the label on the option HDD is facing up.
- Install it in the position where the HDD connector is placed in the side with screw hole of HDD Support Plate. (opposite direction compared to the fixed HDD)



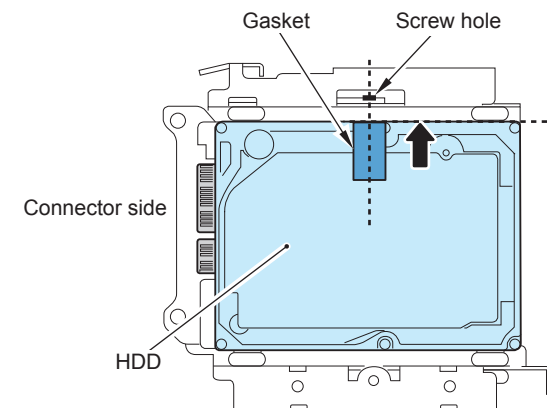
F-9-906



2) Affix the gasket to the place shown in the figure below.

### CAUTION:

Be sure to place the gasket in contact with the label-free metal surface of the HDD surface.

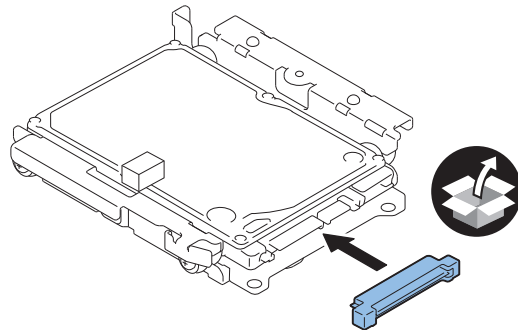


F-9-907

- 3) Install the Conversion Connector.

**CAUTION:**

Make sure that there is no opening between the Conversion Connector and part of HDD.



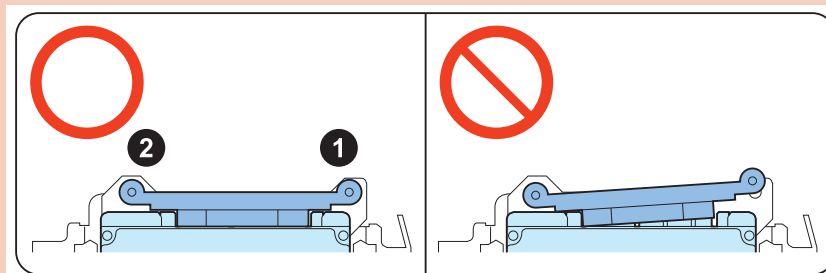
F-9-908

- 4) Fit the 2 bosses of Connector Fixing Block to the hole of Conversion Connector and install it.

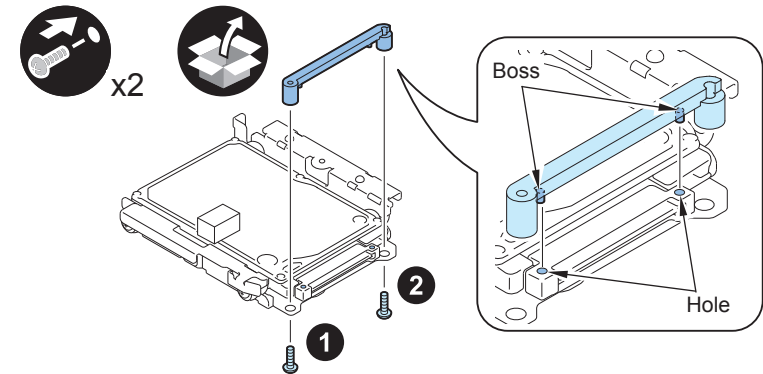
- 2 Screws (P Tight; M3x8)

**CAUTION:**

- Be sure to firmly hold the Connector Fixation Block when tightening the screws.
- Be sure to follow the correct order to tighten the screws, otherwise the Conversion Connector may not be connected properly, resulting in poor contact.



F-9-909



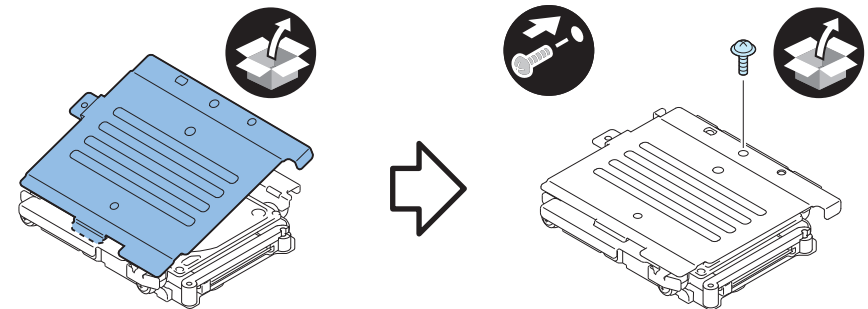
F-9-910

- 5) Install the HDD Cover.

- 1 Claw
- 1 Screw (TP round end; M3x6)

**CAUTION:**

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.

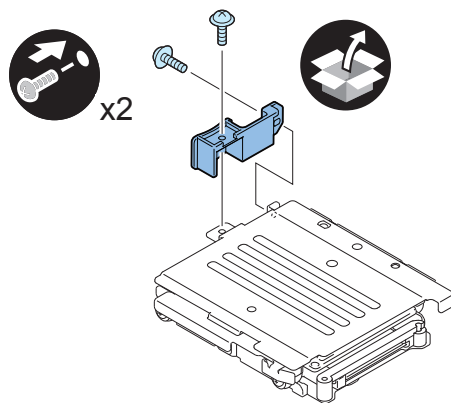


F-9-911

- 6) Install the HDD Handle.
- 2 screws (TP round end; M3X6)

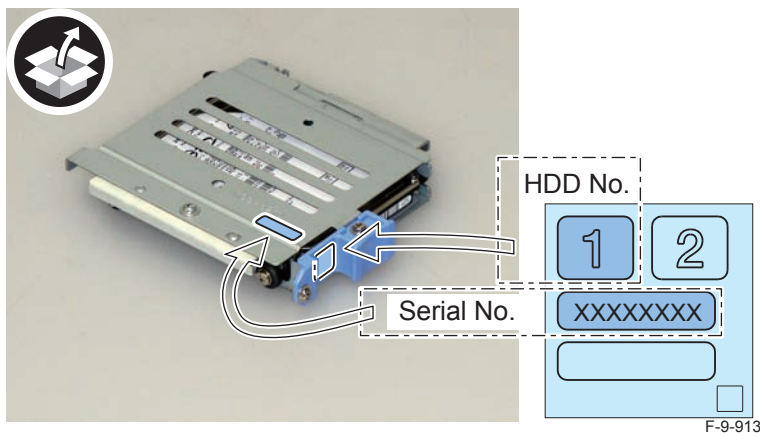
**CAUTION:**

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



F-9-912

- 7) Affix the HDD No.1 Label to the handle of the Removable HDD.
- 8) Write down the serial number of the host machine to the label for recording the number, and affix it to the area indicated in the figure.

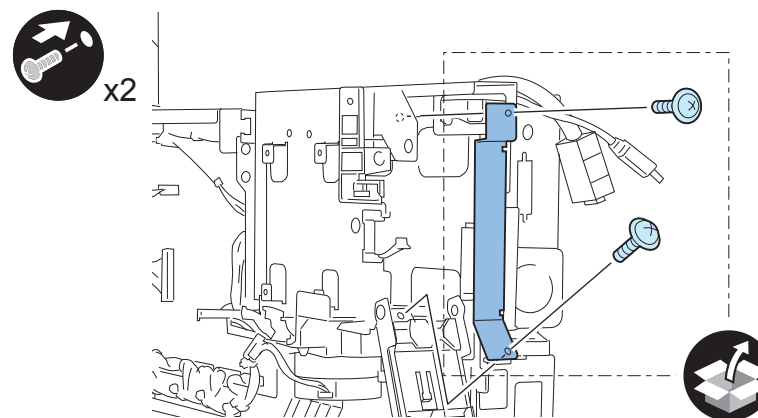


F-9-913

- 9) Install the HDD Blanking Plate to Slot.1 (left side).
- 2 Screws (TP round end; M3x6)

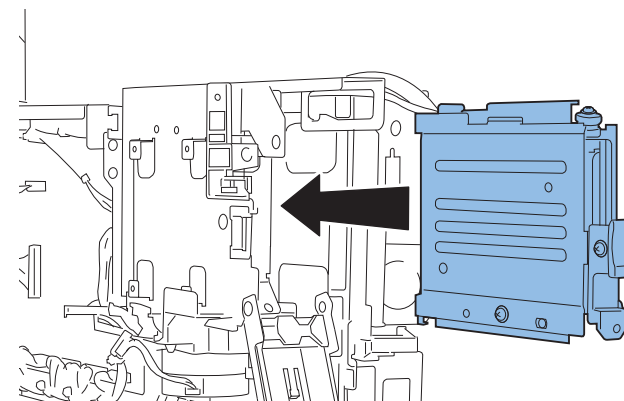
**CAUTION:**

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



F-9-914

- 10) Install the HDD to Slot.2 (right side).



F-9-915

- 11) Close the Edge Saddle, and close the HDD Lid.

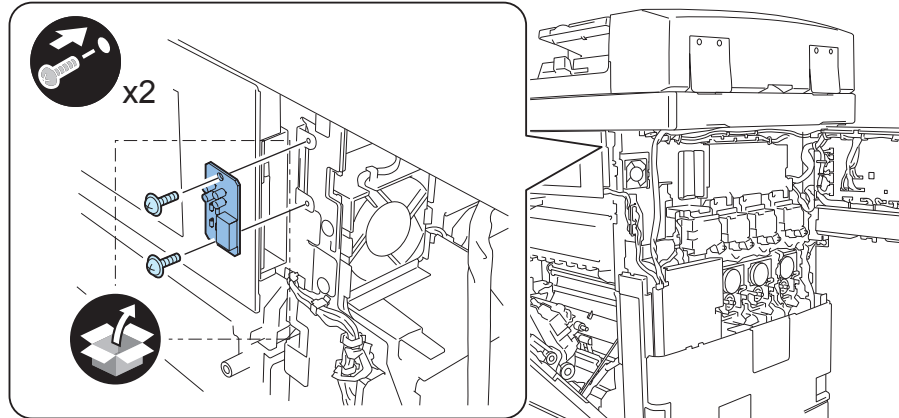


## Installing the LED Board



1) Install the LED Board (small) (FK2-7400 or A: LED).

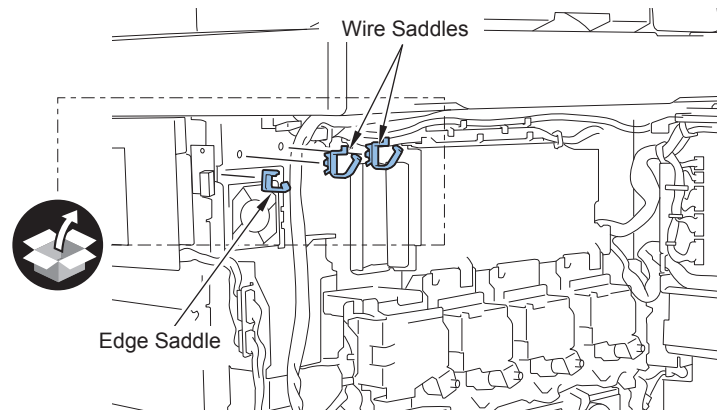
- 2 Screws (TP; M3x6)



F-9-916



2) Install the 2 wire saddles and the edge saddle.



F-9-917

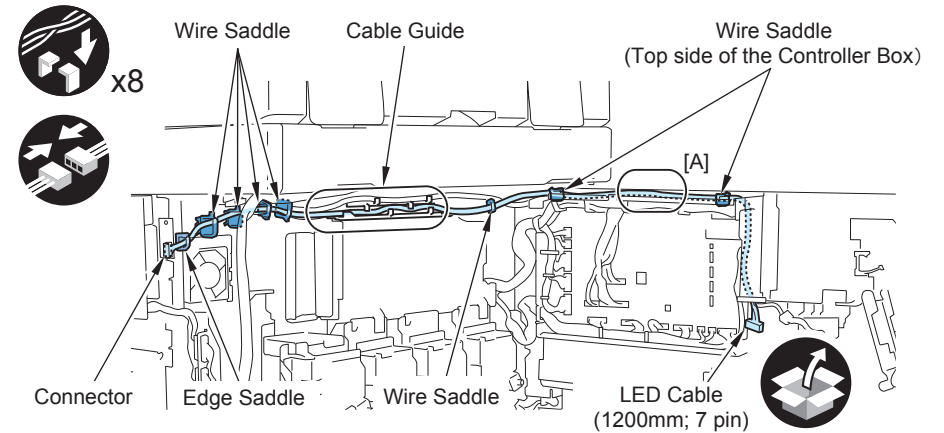


3) Connect the LED Cable (1200 mm; 7-pin) (FM4-0839 or A: LED-Sig).

- 7 Wire Saddles
- 1 Edge Saddle
- 1 Cable Guide
- 1 Connector

### CAUTION:

- Be sure to tuck the [A] area of the LED cable under the other 2 cables running through the [A] area. This is to prevent the [A] area of the LED cable from being slacked off when closing the Controller Box.



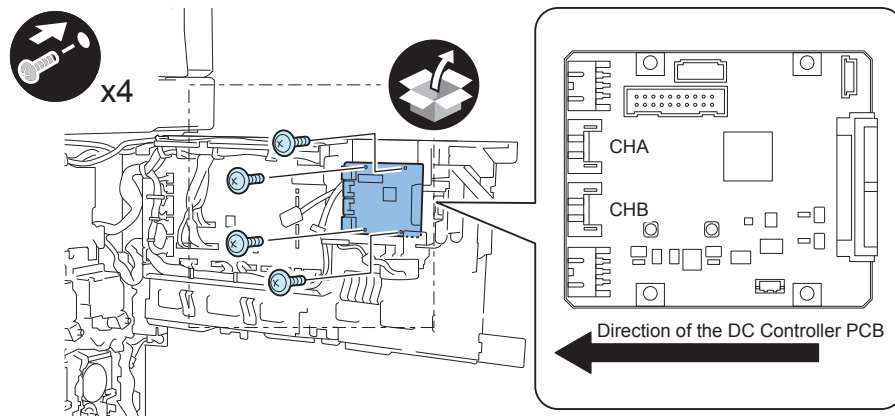
F-9-918

## ■ Installing the Encryption Board

- 
- 1) Install the Encryption Board so that "CHA" and "CHB" are placed in the direction of the DC Controller PCB.
- 4 Screws (TP; M3x6)

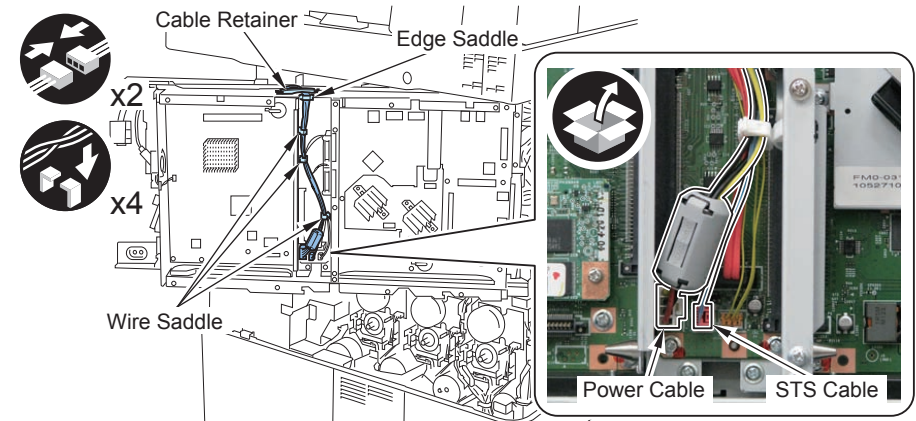
### CAUTION:

Be sure that the direction of installing the Encryption Board is opposite to the case when the fixed HDD is installed. If it is installed in a wrong direction, the cables do not reach the board.



F-9-919

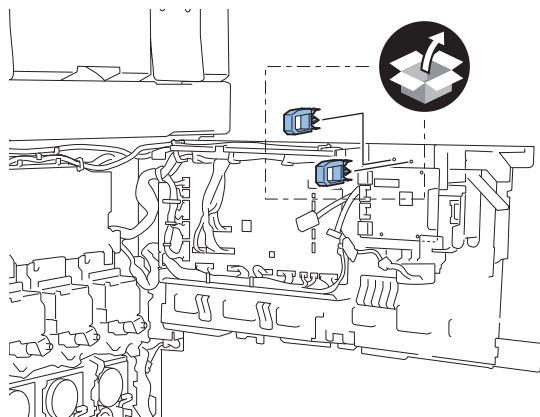
- 
- 2) Connect the cables to the PCB on the backside.
- Power Cable (650 mm): FK2-8464 or A: Cont-Pow (Included in the Removable HDD Kit)
  - STS Cable (550 mm (Light blue); 5-pin): FM4-0842 or A: STS-Sig (Included in the HDD Encryption Kit)
- 3) Fix the cables.
- 3 Wire Saddles
  - 1 Edge Saddle
  - Cable Retainer
- 4) Install the Ring Core to the Power Supply Cable as shown in the figure.



F-9-920

- 
- 5) Install the Controller Cover. (11 Screws)

- 6) Install the 2 wire saddles.

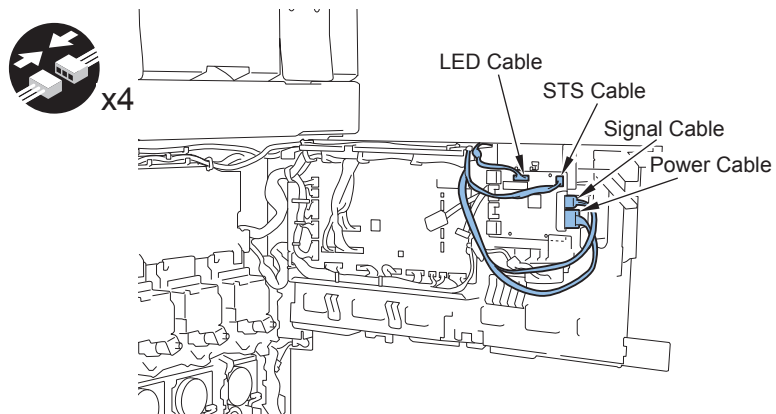


F-9-921

- 7) Connect the cable to the Encryption Board.
- Signal cable (existing cable FK2-8432 or A: Cont-Sig)
  - Power Sable (650mm): FK2-8464 or A: Cont-Pow (Included in the Removable HDD Kit)
  - LED Cable (1200 mm; 7-pin): FM4-0839 or A: LED-Sig
  - STS Cable (550mm (Light blue); 5 Pin): FM4-0842 or A: STS-Sig

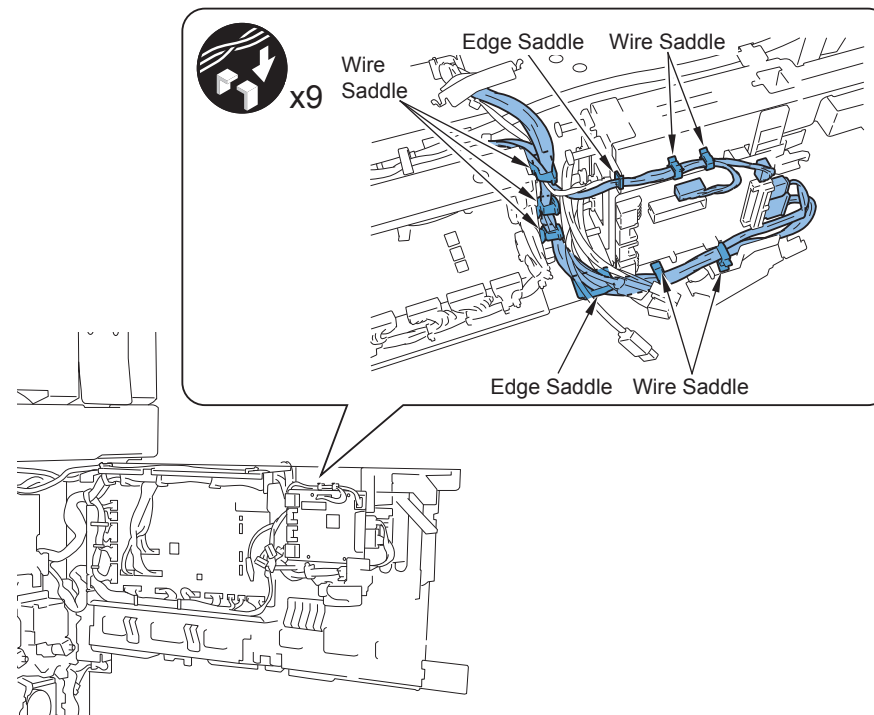
**CAUTION:**

The machine can operate even the STS Cable and the LED Cable are not connected. Therefore, when installing the cables, be sure that they are connected properly.



F-9-922

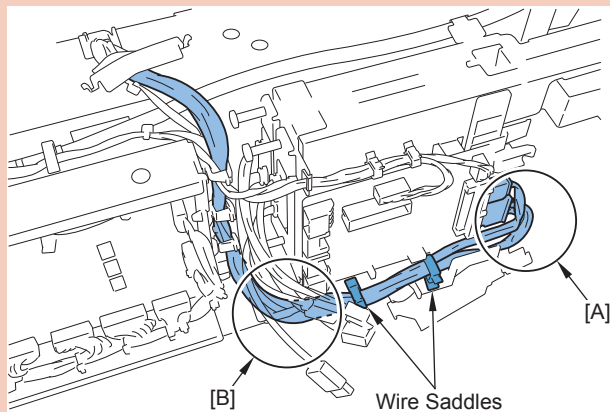
- 8) Fix the cables.
- 7 Wire Saddles
  - 2 Edge Saddles



F-9-923

## CAUTION:

- When fixing the cables with wire saddles, be sure to take up slack of them at [A] part, and slack off them at [B] part.
- If slacking off the cables at [A] part, they may interfere the fan on the host machine when returning the Controller Box.



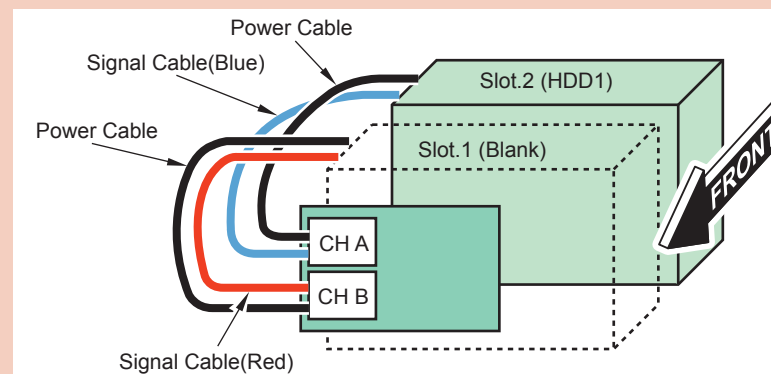
F-9-924

## CAUTION:

Be sure to acknowledge the following caution before performing the next procedure. Combinations of connection between the HDDs and the Encryption Board are shown below.

Keep Slot 1 in the condition where no HDD is installed, and only connect the cables.

- Connect Slot 1 to "CHB".
- Connect Slot 2 to "CHA".



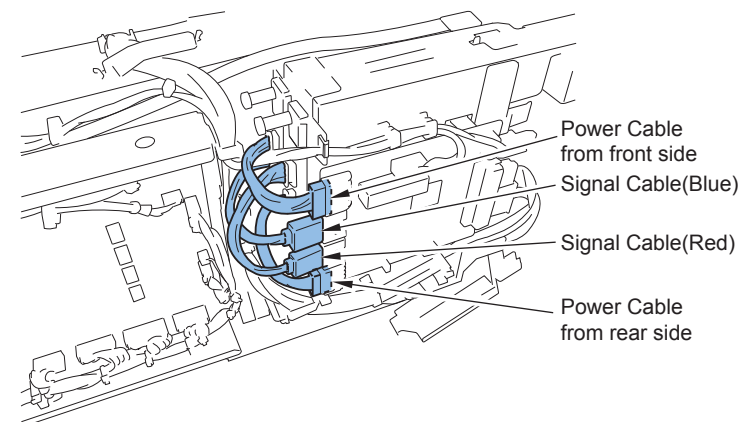
F-9-925



9) Connect the cable of the HDD Drawer Unit to the Encryption Board.

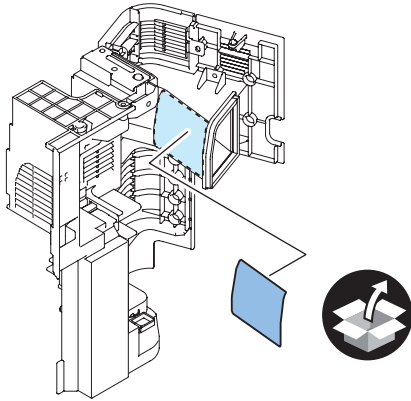


x4



F-9-926

- 10) Place the Controller Box to the original position. (2 Screws or 3 Screws)
- 11) Affix the Shutdown Caution Label in the appropriate language on the Right Rear Cover 1. (Included in the Removable HDD Kit).

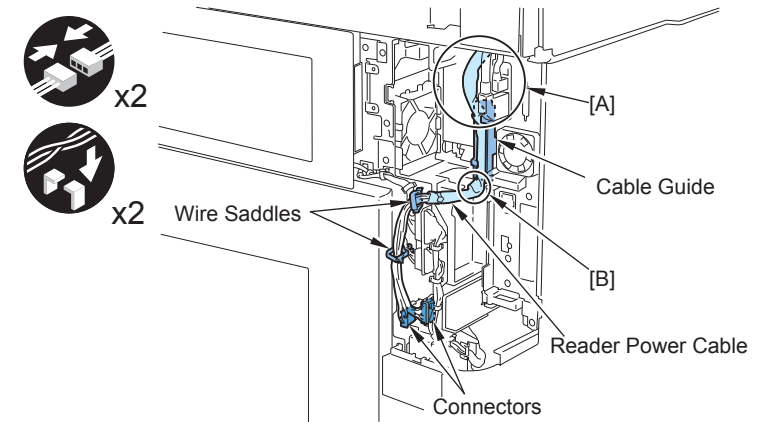


F-9-927

- 12) Install the removed cover and the cable.
- Rear Cover (2 Screws, 2 Rubber Caps)
  - Left Rear Sub Cover (1 Screw)
  - Reader Communication Cable (when reader is installed)
  - Left Rear Cover (2 Screws, 2 Rubber Caps)
- 13) If Reader is installed, install the Reader Power Cable.

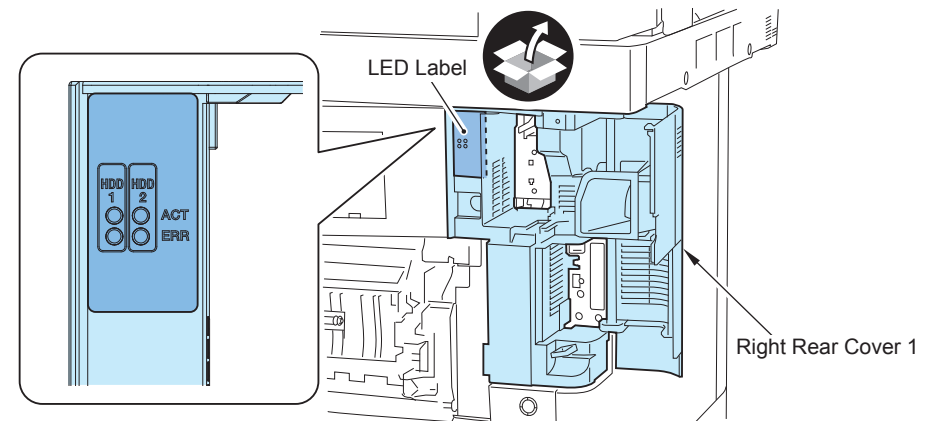
**NOTE:**

Handle the Reader Power Cable from the connector side and make a slack at [A] part. Bend the Reader Power Cable at a right angle on [B] part.



F-9-928

- 14) Install the Right Rear Cover 1. (3 Screws)
- 15) Affix the LED label so that it fits the edge of the Right Rear Cover 1.



F-9-929

- 16) Close the Right Rear Cover 1, Right Lower Cover, and Right Upper Cover.
- 17) Connect the power plug of the host machine to the power outlet.

## Installing the System Software Using the SST

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product.

It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product.

Details follow.

### 1. Requirements

#### 1) PC

Service support tool in the version that supports this host machine must be installed.

#### 2) Cross Ethernet Cable

### 2. Preparing for the Installation of the System Software of Host machine

1) If both PC and the machine are on, turn them off.

2) Connect the PC and the machine using an Ethernet cable.

3) Turn on the PC.

4) Start up the machine in download mode (safe mode).

### 3. Selecting the System Software

1) Set the CD containing the latest system software in the PC on which the SST is used.

2) Start up the SST.

3) Click Register Firmware.

4) Select the drive in which the System Software CD has been set, and click search.

5) Click REGISTER.

6) Click OK.

### 4. Downloading the System Software

1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.

2) When initialization is completed, the machine is automatically restarted and it enters download mode.

3) Select the version to be downloaded and click "Start".

4) When download is completed, the machine is automatically restarted.

5) When writing of the firmware is completed, the machine is automatically restarted.

6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.

7) Terminate the SST.

8) Check the version of the downloaded firmware in service mode.

## Checking the Security Version

1) Press the Counter key (123 key) on the control panel.

2) Press the [Check Device Configuration] key appearing on the control panel.

3) Make sure that '2.00' or '2.01' is displayed in 'Canon MFP Security Chip' as version information of the security chip.

When several Encryption Boards are installed, multiple version information is displayed.

### CAUTION:

The user will be able to make sure that the encryption board fitted with a security chip of the correct version with CC authentication is functioning normally by referring to the version information indicated for 'Canon MFP Security Chip'.


## Checking the Security Mark

The user may check the security mark, appearing on the control panel when using the Host machine to make sure that an appropriate level of security is being maintained.

The mark appears when the machine is equipped with an encryption board and the board is operating correctly.

The Users Guide provides the following description in connection with the security mark:

<Confirming the Security Mark>

When the HDD Data Encryption & Mirroring Kit is operating normally, a security mark(  ) is displayed on the lower left corner of a panel screen.

## Checking after Installation

1) Make sure that the LED blinks.

- HDD1 (Slot 2): The green LED blinks.

## Reporting to the System Administrator at the End of the Work

When you have completed all installation work, report to the system administrator for the following:

At the point when installation is completed, make explanations about how to check that the appropriate security function has been added and enabled so that, when the function becomes uncontrolled, the system administrator can immediately detect the problem and request <servicing work when a failure occurs>.

Completion of the Installation Work:

Ask the system administrator to make sure that '2.00' or '2.01' is indicated for 'Canon MFP Security Chip' as the version information of the security chip by referring to the description of Checking the Security Version.

Maintenance of the Security Functions:

Ask the system administrator to check the security mark to make sure that the security functions are maintained each time the machine is started up by referring to the description of Checking the Security Mark.

## Execution of Auto Adjust Gradation

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.

Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.



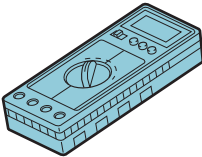
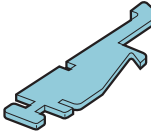
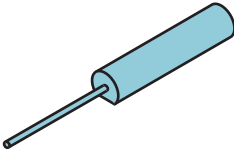
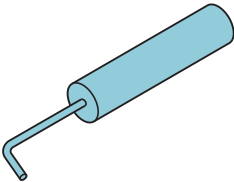
# Appendix


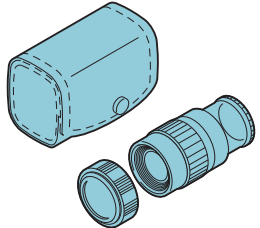
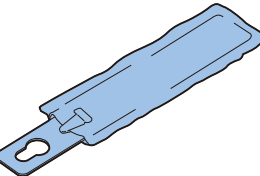
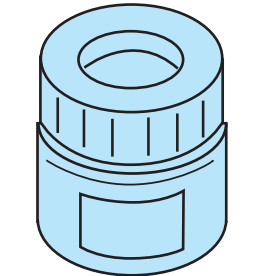
- Service Tools
- General Timing Chart
- General Circuit Diagram  
Signal Input/Output List
- General Circuit Diagram
- List of User Mode
- Backup Data
- Detail of HDD partition
- Soft counter  
specifications
- Removal

## 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.
Door Switch	TKN-0093	A		
Tester extension pin	FY9-3038	A		
Tester extension pin (L-shaped)	FY9-3039	A		Use for electrical checks.

Tool name	Tool No.	Ctgr	Appearance	Remarks
CA-7 test Sheet	FY9-9323	A		Used for adjusting/checking images.
Loupe	CK-0056	B		Used for checking images.
Cleaning tool	-	A		To clean the feed guide- This is not a service tool.- 1 of this are enclosed at shipment of the host machine.
Tospearl 240	FY9-6007-000	B		ITB Cleaning Blade Lubricant.

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

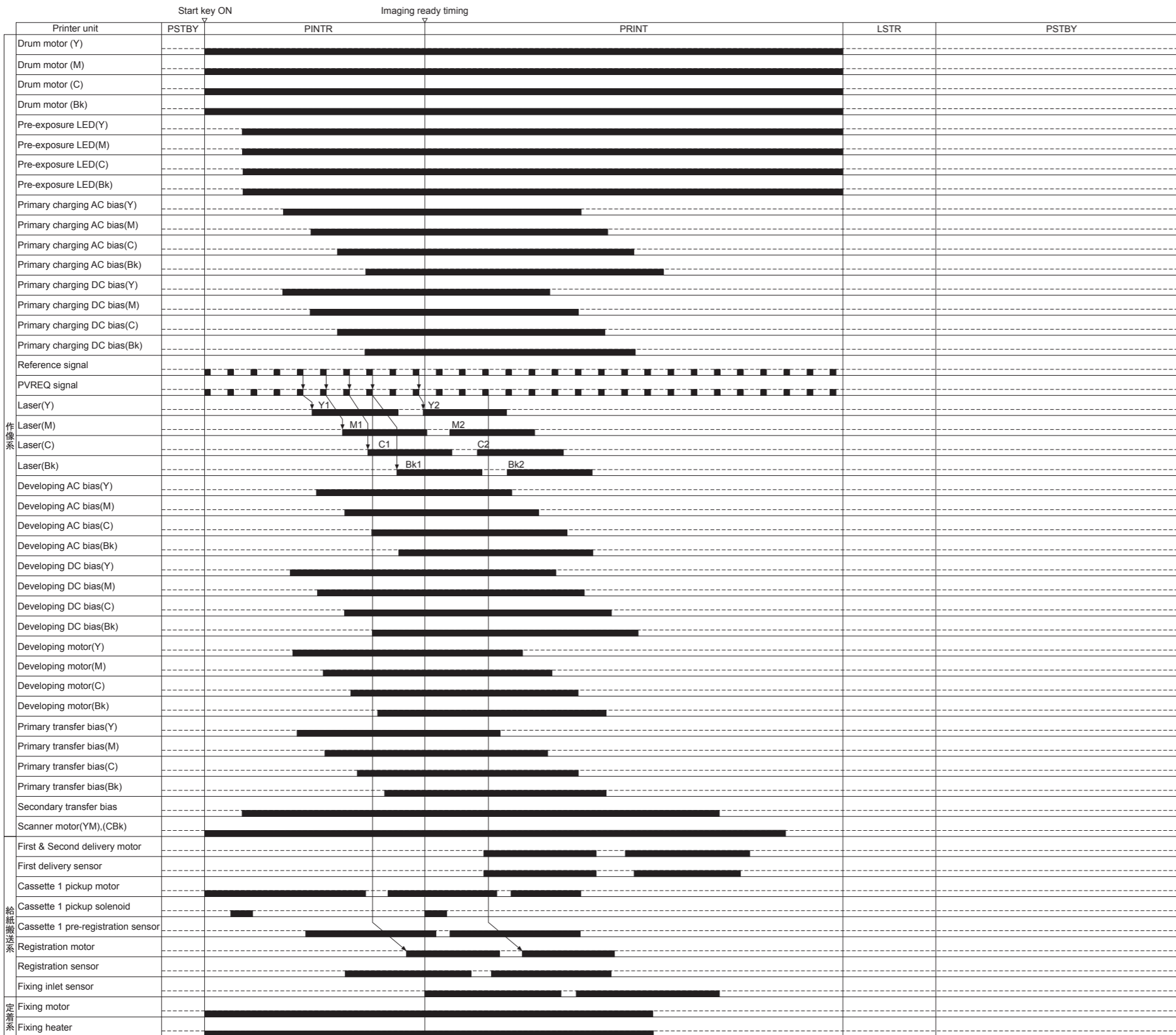
Item	Uses	Composition	Remarks
Alcohol	Cleaning; e.g., glass, plastic, rubber; external covers.	<ul style="list-style-type: none"> <li>Fluoride-family hydrocarbon</li> <li>Alcohol</li> <li>Surface activating</li> <li>Water</li> </ul>	<ul style="list-style-type: none"> <li>Do not bring near fire.</li> <li>Procure locally.</li> <li>Substitute: IPA(isopropy alcohol)</li> </ul>
Heat-resisting grease	Lubrication; e.g., fixing drive areas.	<ul style="list-style-type: none"> <li>Mineral oil-family lithium soap</li> <li>Molybdenum disulfide</li> </ul>	<ul style="list-style-type: none"> <li>MOLYKOTE G-8022</li> <li>Tool No: FY9-6026</li> </ul>
Lubricating oil		Mineral oil (paraffin-family)	<ul style="list-style-type: none"> <li>SUPER LUBE GREASE</li> <li>Tool No: FY9-6005</li> </ul>
Lubricating oil	Lubrication; e.g., drive areas, friction areas.	<ul style="list-style-type: none"> <li>Silicone oil</li> </ul>	<ul style="list-style-type: none"> <li>FLOIL G-5000H GREASE</li> <li>Tool No: FY9-6022</li> </ul>
Lubricating oil (EM-50L)	Lubrication; e.g., gears.	<ul style="list-style-type: none"> <li>Special oil</li> <li>Special solid lubricating agent</li> <li>Lithium soap</li> </ul>	<ul style="list-style-type: none"> <li>Tool No: HY9-0007</li> </ul>
Lubricating oil	Lubrication; e.g., scanner rail.	<ul style="list-style-type: none"> <li>SHC oil</li> </ul>	<ul style="list-style-type: none"> <li>FLOIL G-337</li> <li>Tool No: FY9-6029</li> </ul>
Conducting grease	Lubrication; e.g., edge of secondary transfer outer roller, drum heater sliding area.	<ul style="list-style-type: none"> <li>Fluorine poly wthyl</li> <li>Polytetra fluorune ethylene</li> </ul>	<ul style="list-style-type: none"> <li>Tool No: FY9-6008</li> </ul>
Conducting grease	Lubrication; e.g., edge of secondary transfer inner roller	<ul style="list-style-type: none"> <li>poly-<math>\alpha</math>-olefin</li> </ul>	<ul style="list-style-type: none"> <li>Tool No: FY9-6006</li> </ul>

T-10-2

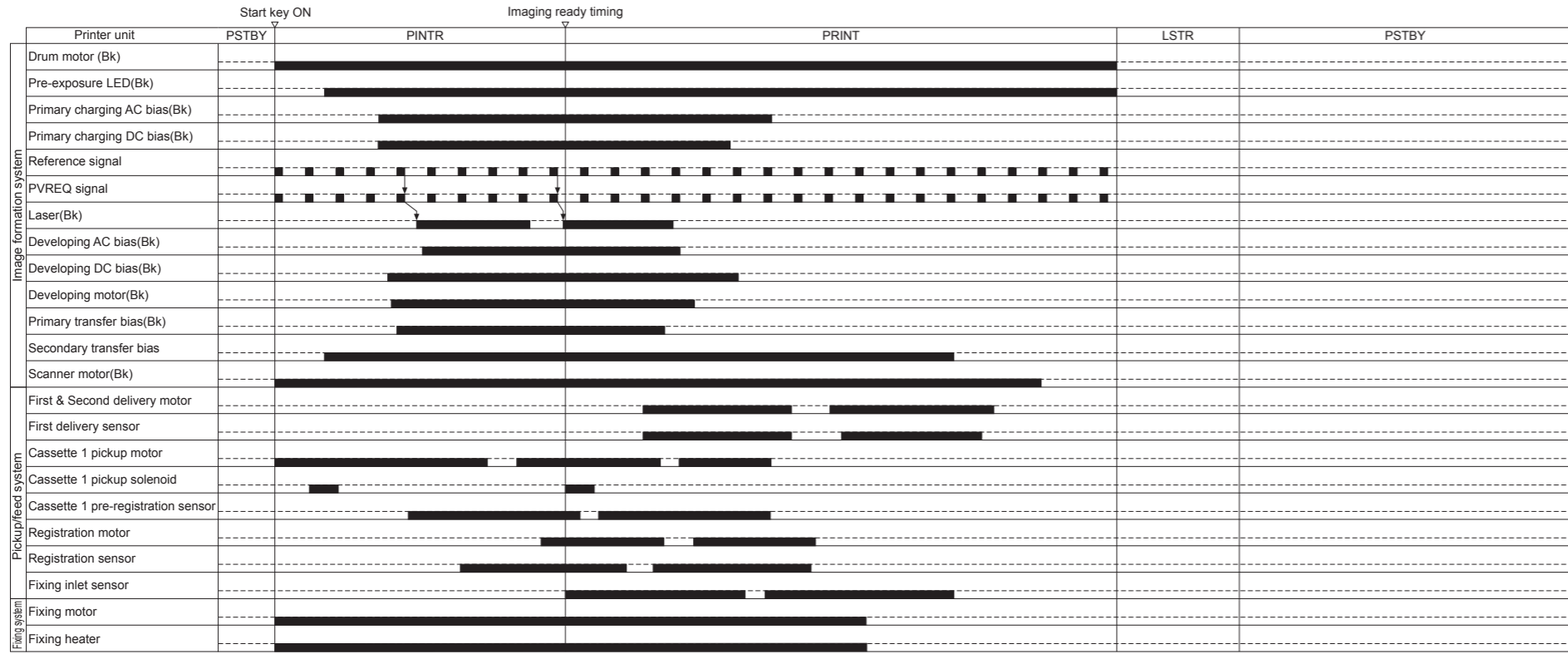
# General Timing Chart

## General Timing Chart

### A4 single-sided 2 prints full color



A4 single-sided 2 prints Bk color



F-10-2

## General Circuit Diagram Signal Input/Output List

Jack. No.	Abbreviated Signal Name	Signal Name
J2001	ZEROX_IN	ZEROX IN
	RELAY2_ON	Relay ON 2
	RELAY1_ON	Relay ON 1
	HEAT2_ON	Heater ON 2
	HEAT1_ON	Heater ON 1
	VINJDG2	
	VINJDG1	
	FSR_CRNT_S	
	CST_HEAT_OFF	cassette Heater OFF
	DRM_RD_HEAT_OFF	Drum and Reader Heater OFF
	SHUTOFF	Shut off
	RMT_SYS	Remote system
	SEESAW	Main switch
	J432	P CRG FAN ON
P CRG FAN LOCK		Process cartridge fan (rear) Lock
DCP FAN ON		Power supply cooling fan ON
DCP FAN LOCK		Power supply cooling fan Lock
J104	I2CSDA	Environment sensor 2
	I2C SCL	Environment sensor 1
	TEMP1	Environment sensor 1 temperature
	PEDE READY	Pedestal ready
	PEDE RESET	Pedestal reset
	PEDE CST2M CLK	Cassette 3 pickup motor clock
	PEDE CST1M CLK	Cassette 4 pickup motor clock
	PEDE EX CLK	Pedestal high speed CLK
	PEDE EX S2M	Pedestal serial slave
	PEDE EX M2S	Pedestal serial master
J106	PEDE DETECT	Pedestal connect
	KYUSHI READY	Cassette feed driver PCB ready
	CPU RESET	CPU reset
	KYUSHI EX CLK	Cassette feed driver PCB high speed clock
	KYUSHI EX S2M	Cassette feed driver PCB serial master
	KYUSHI EX M2S	Cassette feed driver PCB serial slave

Jack. No.	Abbreviated Signal Name	Signal Name
J107	HANSO READY	Pickup feed driver PCB ready
	CPU RESET	CPU reset
	HANSO2 EX CLK	Pickup feed driver PCB high speed clock 2
	HANSO2 EX S2M	Pickup feed driver PCB serial slave 2
	HANSO2 EX M2S	Pickup feed driver PCB serial master 2
	HANSO1 EX CLK	Pickup feed driver PCB high speed clock 1
	HANSO1 EX S2M	Pickup feed driver PCB serial slave 1
	HANSO1 EX M2S	Pickup feed driver PCB serial master 1
	CPU RESET	CPU reset
	ITB YORIM CLK	ITB displacement control motor clock
	RIKANM CLK	Primary transfer separation motor clock
	DRUM READY	Drum driver PCB ready
	J109	DRUM HOB CLK-
DRUM HOB CLK+		Drum driver PCB clock(Differential +)
DRUM HOB M2S+		Drum driver PCB master (Differential +)
DRUM HOB M2S-		Drum driver PCB master (Differential -)
DRUM HOB S2M-		Drum driver PCB slave (Differential -)
DRUM HOB S2M+		Drum driver PCB slave (Differential +)
J110	HV CHG AC PWM C	Primary Charging AC (C) PWM
	HV CHG DC PWM C	Primary Charging DC (C) PWM
	HV DEV AC RMT C	Developing AC (C) remote
	HV DEV DC PWM C	Developing DC (C) remote
	HV CHG AC PWM M	Primary Charging AC (M) PWM
	HV CHG DC PWM M	Primary Charging DC (M) PWM
	HV DEV AC RMT M	Developing AC (M) remote
	HV DEV DC PWM M	Developing DC (M) remote
	HV CHG AC PWM Y	Primary Charging AC (Y) PWM
	HV CHG DC PWM Y	Primary Charging DC (Y) PWM
	HV DEV AC RMT Y	Developing AC (Y) remote
	HV DEV DC PWM Y	Developing DC (Y) remote
	HV1 ANALOG2	HVT 1 PCB analog 2
	HV1 ANALOG1	HVT 1 PCB analog 1
	HVSEL HV1 MUX2	HVT 1 PCB MUX 2
	HVSEL HV1 MUX1	HVT 1 PCB MUX 1
	HVSEL HV1 MUX0	HVT 1 PCB MUX 0
	HV DEV AC PWM M1	Developing AC PWM
HV DEV AC PWM P1	Developing AC PWM	
HV CHG AC CLK1	Primary	
HV DEV AC CLK1	Developing AC clock 1	
HV DEV AC CLK2	Developing AC clock 2	



Jack. No.	Abbreviated Signal Name	Signal Name
J111	HV CHG AC CLK2	Primary Charging AC (Bk) clock 2
	HV CHG AC PWM K	Primary Charging AC (Bk) PWM
	HV CHG DC PWM K	Primary Charging DC (Bk) PWM
	HV DEV AC RMT K	Developing AC (Bk) Remote
	HV DEV AC PWM M2	Developing AC PWM
	HV DEV AC PWM P2	Developing AC PWM
	HV DEV AC CLK3	Developing AC clock 3
	HV DEV AC CLK4	Developing AC clock 4
	HV DEV DC PWM K	Developing DC (bk) PWM
	HV TR1 PWM K	Primary transfer (Bk) PWM
	HV TR1 PWM Y	Primary transfer (Y) PWM
	HV TR1 PWM M	Primary transfer (M) PWM
	HV TR1 PWM C	Primary transfer (C) PWM
	HV2 ANALOG2	HVT 2 PCB analog 2
	HV2 ANALOG1	HVT 2 PCB analog 1
	HVSEL HV2 MUX2	HVT 2 PCB MUX 2
HVSEL HV2 MUX1	HVT 2 PCB MUX 1	
HVSEL HV2 MUX0	HVT 2 PCB MUX 0	
J102	ECO DOUT	ECO-ID degital OUT
	ECO DIN	ECO-ID degital IN
	ECO SCK	ECO-ID 1
	ECO CS	ECO-ID 2
	ECO POW	ECO-ID 3
J103	HANSO CNNT0	Pickup feed driver PCB connect
	DOOR OPEN	Door open
	PATCH CTRL	Patch control
	TNR CTRL K	Bk toner control
	TNR CTRL C	C toner control
	TNR CTRL M	M toner control
	TNR CTRL Y	Y toner control
	PCH P	Patch sensor reflection
	PCH S	Patch sensor diffused reflection
	REG R	Registration sensor (rear)
	REG F	Registration sensor (front)
	TNR ANLG K	Bk toner analog
	TNR ANLG C	C toner analog
	TNR ANLG M	M toner analog
	TNR ANLG Y	Y toner analog
	MULTI SIZE	Multi-purpose size sensor
	OHP ANALOG	Transparency sensor analog

Jack. No.	Abbreviated Signal Name	Signal Name
J112	(+)12V IL HV	12V Interlock for HVT PCB
	HV3 DC CS	HVT 3 PCB DC 1
	HV3 DC VS	HVT 3 PCB DC 2
	HV TR2 REV PWM	Secondary transfer PWM 1
	HV TR2 CV PWM	Secondary transfer PWM 2
	THRM CNNT	Thermistor connect
	MAIN THRM	Main thermistor 1
	SUB THRM1	Main thermistor 2
	SUB THRM2	Sub thermistor 1
	SUB THRM3	Sub thermistor 2
	SEESAW	Main power supply switch
J123	LOOP1 SNS	Fixing arch sensor 1
	LOOP2 SNS	Fixing arch sensor 2
	FUSER ENT SNS	Fixing inlet sensor
J124	FUSERM BRAKE	Fixing motor BRAKE
	FUSERM ON	Fixing motor ON
	FUSERM LOCK	Fixing motor LOCK
	FUSERM GAIN	Fixing motor GAIN
	FUSERM CLK	Fixing motor CLOCK
FUSERM DIR	Fixing motor DIR	
J125	WASTE TNR FG	Recycle toner stirring motor FG
	SHUT SL PWM	Registration shutter solenoid PWM
	EX PAPER FAN PWM	Delivery fan 1 PWM
	PRE EXP LED K PWM	Bk pre-exposure LED PCB PWM
	PRE EXP LED C PWM	C pre-exposure LED PCB PWM
	PRE EXP LED M PWM	M pre-exposure LED PCB PWM
	PRE EXP LED Y PWM	Y pre-exposure LED PCB PWM
	CST1M CLK	Cassette 1 pickup motor clock
	CST2M CLK	Cassette 2 pickup motor clock
	FUEXM CLK	Fixing delivery motor clock
	DUPM CLK	Duplex feed motor clock
	SHUTM CLK	Shutter motor clock
	MULTIM CLK	Multi-purpose motor clock
	REGIM CLK	Registration motor clock
LS SHUTM CLK	Laser shutter motor clock	
HANSO CNNT1	Pickup feed driver PCB connect	

Jack. No.	Abbreviated Signal Name	Signal Name
J126	BUF CHOUHI CLK	Buffer pass serial clock
	BUF CHOUHI TXEND	Buffer pass serial TXEND
	BUF CHOUHI TXD	Buffer pass serial TXD
	BUF CHOUHI RXLOAD	Buffer pass serial RXLOAD
	BUF CHOUHI RXD	Buffer pass serial RXD
	BUF CHOUHI ENB	Buffer pass serial ENB
	UART TXD	Inner finisher serial TXD
	UART RXD	Inner finisher serial RXD
	FIN DL MODE	Finisher download mode
	FIN RESET	Finisher reset
	FIN DL EN	Inner finisher download end
J127	Z3 DETECT	Inner finisher detect
	DECK CHOUHI CLK	Deck serial clock
	DECK CHOUHI TXEND	Deck serial TXEND
	DECK CHOUHI TXD	Deck serial TXD
	DECK CHOUHI RXLOAD	Deck serial RXLOAD
	DECK CHOUHI RXD	Deck serial RXD
	DECK CHOUHI ENB	Deck serial ENB
	UART TXD	Finisher serial TXD
	UART RXD	Finisher serial RXD
	FIN CNNT	Finisher connect
	FIN DL MODE	Finisher download mode
	FIN RESET	Finisher reset
	FIN DL EN	Finisher download end
	J132	KEY
J138	EX12M OUT A	First & Second delivery motor A
	EX12M OUT A*	First & Second delivery motor A*
	EX12M OUT B*	First & Second delivery motor B*
	EX12M OUT B	First & Second delivery motor B
	TURNM OUT A	Reverse roller motor A
	TURNM OUT A*	Reverse roller motor A*
	TURNM OUT B*	Reverse roller motor B*
	TURNM OUT B	Reverse roller motor B
	EX3M OUT A	Third delivery motor A
	EX3M OUT A*	Third delivery motor A*
	EX3M OUT B*	Third delivery motor B*
	EX3M OUT B	Third delivery motor B

Jack. No.	Abbreviated Signal Name	Signal Name
J204	EX PAPER FAN2 ON	Delivery fan 2 ON
	EX PAPER FAN2 LOCK	Delivery fan 2 LOCK
	2 3EX DOOR SNS	Second & third delivery door sensor
	EX1 SNS	First delivery sensor
	EX TRAY1 GULL	First delivery tray full sensor
	FUEXM A	Fixing delivery motor A
	FUEXM A*	Fixing delivery motor A*
	FUEXM B*	Fixing delivery motor B*
	FUEXM B	Fixing delivery motor B
J205	WASTE BOX SET SNS	Recycle toner box detect
	WASTE TNR DET SNS	Recycle toner sensor detect
	WASTE TNR LED ON	Recycle toner sensor LED ON
	WASTE TNRM FG	Recycle toner stirring motor FG
	WASTE TNRM ON	Recycle toner stirring motor ON
	PRE EXP LED K	Bk pre-exposure LED PCB LED ON
	PRE EXP LED C	C pre-exposure LED PCB LED ON
	PRE EXP LED M	M pre-exposure LED PCB LED ON
	PRE EXP LED Y	Y pre-exposure LED PCB LED ON
	PCRG NEW DET Y	New/old detection fuse (Y)
	TNR CTRL Y	ATR sensor (Y) control
	TNR ANLG Y	ATR sensor (Y) analog
	PCRG NEW M	New/old detection fuse (M)
	TNR CTRL M	ATR sensor (M) control
	TNR ANLG M	ATR sensor (M) analog
	PCRG NEW C	New/old detection fuse (C)
	TNR CTRL C	ATR sensor (C) control
	TNR ANLG C	ATR sensor (C) analog
	PCRG NEW BK	New/old detection fuse (Bk)
	TNR CTRL K	ATR sensor (Bk) control
TNR ANLG K	ATR sensor (Bk) analog	
J207	REG F S	Registration sensor (front)
	REGI F LEDON	Patch sensor (front) LED ON
	REGI F GAIN1	Patch sensor (front) gain 1
	REGI F GAIN0	Patch sensor (front) gain 2
	REG R S	Registration sensor (rear)
	REGI R LEDON	Patch sensor (rear) LED ON
	REGI R GAIN1	Patch sensor (rear) gain 1
	REGI R GAIN0	Patch sensor (rear) gain 2
	PATCH LEDON	Patch sensor (center) LED ON
	AD P	AD reflection
	AD S	AD diffused reflection
	PATCH CTRL	Patch sensor (center) control

Jack. No.	Abbreviated Signal Name	Signal Name
J210	EX TRAY2 FULL	Second delivery tray full sensor
	TURN SNS	Reverse sensor
	EX2 SNS	Second delivery sensor ON
	FLAP1 SL	First delivery flapper solenoid ON
	FLAP2 SL	Second delivery flapper solenoid ON
	FLAP3 SL	Third delivery flapper solenoid ON
	EX3 SNS	Third delivery sensor
J212	DUP ENT SNS	Duplex inlet sensor
	FEED DOOR SNS	Right lower door sensor
	MULTI PAPER SNS	Multi-purpose paper sensor
	MULTI SIZE ANALOG	Multi-purpose size sensor
J213	DUP SNS	Duplex paper sensor
	MULTI CL ON	Multi-purpose pickup clutch ON
	MULTIM OUT A	Multi-purpose motor A
	MULTIM OUT A*	Multi-purpose motor A*
	MULTIM OUT B*	Multi-purpose motor B*
	MULTIM OUT B	Multi-purpose motor B
	MULTI AUTO SL	Multi-purpose tray lifting solenoid
	REGIM A	Registration motor A
	REGIM A*	Registration motor A*
	REGIM B	Registration motor B
	REGIM B*	Registration motor B*
	DUPM A	Duplex feed motor A
	DUPM A*	Duplex feed motor A*
	DUPM B	Duplex feed motor B
	DUPM B*	Duplex feed motor B*
	FUSER EX A FAN ON	Fixing heat exhaust fan 1 ON
	FUSER EX A FAN LOCK	Fixing heat exhaust fan 1 LOCK
	FUSER EX B FAN ON	Fixing heat exhaust fan 2 ON
	FUSER EX B FAN LOCK	Fixing heat exhaust fan 2 LOCK
	R DOOR SNS	Right door sensor
J214	LS SHUTM A	Laser shutter motor A
	LS SHUTM A*	Laser shutter motor A*
	LS SHUTM B	Laser shutter motor B
	LS SHUTM B*	Laser shutter motor B*
	PCRG FAN F ON	Process cartridge fan (front) ON
	PCRG FAN F LOCK	Process cartridge fan (front) LOCK
	LS SHUTM HP SNS1	Laser shutter sensor

Jack. No.	Abbreviated Signal Name	Signal Name
J215	CST1M A	Cassette 1 pickup motor A
	CST1M A*	Cassette 1 pickup motor A*
	CST1M B	Cassette 1 pickup motor B
	CST1M B*	Cassette 1 pickup motor B*
	CST2M A	Cassette 2 pickup motor A
	CST2M A*	Cassette 2 pickup motor A*
	CST2M B	Cassette 2 pickup motor B
	CST2M B*	Cassette 2 pickup motor B*
J216	INNER EX SNS	Inner delivery sensor
	FUSER KAIJYO SNS	Fixing pressure sensor
	FM SHUT POS SNS	Shutter position sensor
	FMSHUT HP SNS	Shutter HP sensor
J217	REG SHT SL PWM	Registration shutter solenoid PWM
	OHP LED ON	Transparency sensor LED ON
	OHP ANALOG	Transparency sensor analog
	KYUSHI V PASS SNS	Vertical path sensor
	REGIMAE SNS	Registration sensor
	F DOOR SNS	Front door sensor
	MULTI SFTER SNS	Multi-purpose size sensor
	J218	FM SHUT A
FM SHUT A*		Shutter motor A*
FM SHUT B		Shutter motor B
FM SHUT B*		Shutter motor B*
EX PAPER FAN1 PWM		Delivery fan 1 PWM
COOL F FAN ON		Fixing cooling fan (front) ON
COOL F FAN LOCK		Fixing cooling fan (front) Lock
COOL R FAN ON		Fixing cooling fan (rear) ON
COOL R FAN LOCK		Fixing cooling fan (rear) Lock
2ND TR EX FAN ON		Secondary transfer exhaust fan ON
2ND TR EX FAN LOCK	Secondary transfer exhaust fan Lock	

Jack. No.	Abbreviated Signal Name	Signal Name
J234	CST1 SIZE 0	Cassette 1 size switch A_0
	CST1 SIZE 1	Cassette 1 size switch A_1
	CST1 SIZE 2	Cassette 1 size switch A_2
	CST1 SIZE 3	Cassette 1 size switch A_3
	CST1 SIZE 4	Cassette 1 size switch B_4
	CST1 SIZE 5	Cassette 1 size switch B_5
	CST1 SIZE 6	Cassette 1 size switch B_6
	CST1 SIZE 7	Cassette 1 size switch B_7
	CST2 SIZE 0	Cassette 2 size switch A_0
	CST2 SIZE 1	Cassette 2 size switch A_1
	CST2 SIZE 2	Cassette 2 size switch A_2
	CST2 SIZE 3	Cassette 2 size switch A_3
	CST2 SIZE 4	Cassette 2 size switch B_4
	CST2 SIZE 5	Cassette 2 size switch B_5
	CST2 SIZE 6	Cassette 2 size switch B_6
	CST2 SIZE 7	Cassette 2 size switch B_7
	J235	CST1 PAPER SNS
CST1 LEVEL A SNS		Cassette 1 paper level sensor A
CST1 LEVEL B SNS		Cassette 1 paper level sensor B
CST1 RETRY SNS		Cassette 1 pre-registration sensor
CST1 PICKUP SL		Cassette 1 pickup solenoid
CST2 PAPER SNS		Cassette 2 paper sensor
CST2 LEVEL A SNS		Cassette 2 paper level sensor A
CST2 LEVEL B SNS		Cassette 2 paper level sensor B
CST2 RETRY SNS		Cassette 2 pre-registration sensor
CST2 PICKUP SL	Cassette 2 pickup solenoid	
J237	ITB STR HP SNS	ITB steering sensor
	ITB YORI SNS1	ITB displacement sensor 1
	ITB YORI SNS2	ITB displacement sensor 2
	ITB YORI SNS3	ITB displacement sensor 3
	ITB YORI SNS4	ITB displacement sensor 4
	1TR OFF POSI SNS	Primary transfer detachment sensor 1
	1TR ON POSI SNS	Primary transfer detachment sensor 2
J303	TNR CL ON Y	Toner supply clutch (Y) ON
	TNR CL ON M	Toner supply clutch (M) ON
	TNR CL ON C	Toner supply clutch (C) ON
	TNR CL ON K	Toner supply clutch (Bk) ON

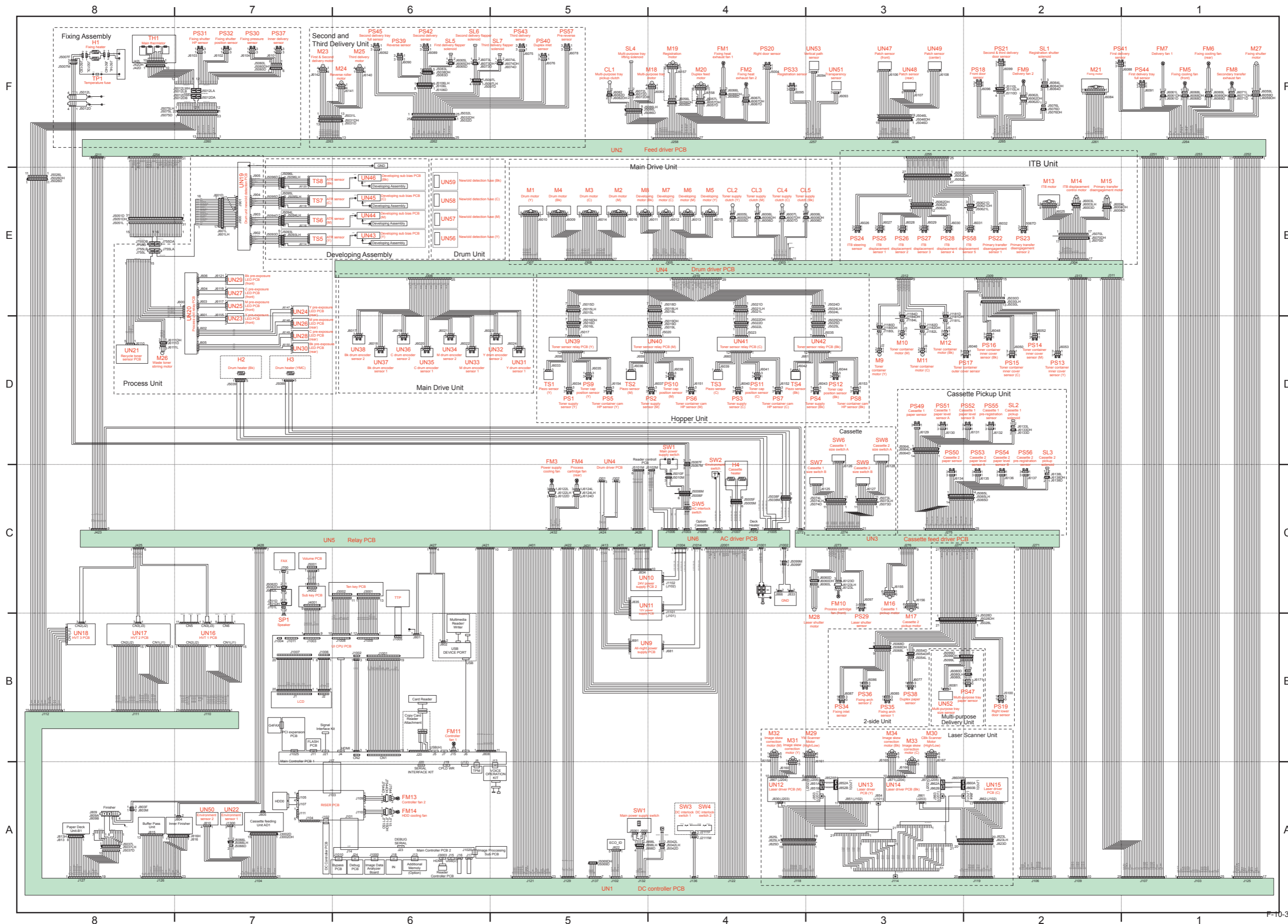
Jack. No.	Abbreviated Signal Name	Signal Name
J304	*ITB MTR BRK	ITB motor Break
	ITB MTR ON	ITB motor ON
	ITB MTR LOCK	ITB motor Lock
	ITB MTR GAIN	ITB motor Gain
	ITB MTR CLK	ITB motor Clock
	ITB MTR FG	ITB motor FG
	YORI A	ITB displacement control motor A
	YORI*A	ITB displacement control motor A*
	YORI B	ITB displacement control motor B
	YORI*B	ITB displacement control motor B*
	1tr A	Primary transfer separation motor A
	1tr*A	Primary transfer separation motor A*
	1tr B	Primary transfer separation motor B
	1tr*B	Primary transfer separation motor B*
J305	*DEV MTR DEC K	Developing motor (Bk) Deceleration
	*DEV MTR ACC K	Developing motor (Bk) Acceleration
	DEV MTR FG K	Developing motor (Bk) FG
	*DEV MTR DEC C	Developing motor (C) Deceleration
	*DEV MTR ACC C	Developing motor (C) Acceleration
	DEV MTR FG C	Developing motor (C) FG
	*DEV MTR DEC M	Developing motor (M) Deceleration
	*DEV MTR ACC M	Developing motor (M) Acceleration
	DEV MTR FG M	Developing motor (M) FG
	*DEV MTR DEC Y	Developing motor (Y) Deceleration
*DEV MTR ACC Y	Developing motor (Y) Acceleration	
DEV MTR FG Y	Developing motor (Y) FG	
J306	DRM ENC K2	Bk drum rotation sensor 2
	DRM ENC K1	Bk drum rotation sensor 1
	DRM ENC C2	C drum rotation sensor 2
	DRM ENC C1	C drum rotation sensor 1
	DRM ENC M2	M drum rotation sensor 2
	DRM ENC M1	M drum rotation sensor 1
	DRM ENC Y2	Y drum rotation sensor 2
	DRM ENC Y1	Y drum rotation sensor 1
J307	DRM MTR DIR Y	Drum Motor (Y) DIR
	DRM MTR ON Y	Drum Motor (Y) ON
	DRM MTR BRK Y	Drum Motor (Y) BREAK
	DRM MTR FG Y	Drum Motor (Y) FG
	DRM MTR PWM Y	Drum Motor (Y) PWM

Jack. No.	Abbreviated Signal Name	Signal Name
J308	DRM MTR DIR K	Drum Motor (Bk) DIR
	DRM MTR ON K	Drum Motor (Bk) ON
	DRM MTR BRK K	Drum Motor (Bk) BREAK
	DRM MTR FG K	Drum Motor (Bk) FG
	DRM MTR PWM K	Drum Motor (Bk) PWM
	DRM MTR DIR C	Drum Motor (C) DIR
	DRM MTR ON C	Drum Motor (C) ON
	DRM MTR BRK C	Drum Motor (C) BREAK
	DRM MTR FG C	Drum Motor (C) FG
	DRM MTR PWM C	Drum Motor (C) PWM
	DRM MTR DIR M	Drum Motor (M) DIR
	DRM MTR ON M	Drum Motor (M) ON
	DRM MTR BRK M	Drum Motor (M) BREAK
	DRM MTR FG M	Drum Motor (M) FG
DRM MTR PWM M	Drum Motor (M) PWM	
J309	TNR FRONT DOOR	Toner container outer cover sensor
	TNR DOOR K	Toner container inner cover sensor (Y)
	TNR DOOR C	Toner container inner cover sensor (M)
	TNR DOOR M	Toner container inner cover sensor (C)
	TNR DOOR Y	Toner container inner cover sensor (Bk)
J310	TNR SNS Y	Piezo sensor (Y)
	TNR COUNT Y	Toner supply sensor (Y)
	TNR BTL OPEN Y	Toner cap position sensor (Y)
	TNR BTL OPEN HP Y	Toner container cam HP sensor (Y)
	TNR SNS M	Piezo sensor (M)
	TNR COUNT M	Toner supply sensor (M)
	TNR BTL OPEN M	Toner cap position sensor (M)
	TNR BTL OPEN HP M	Toner container cam HP sensor (M)
	TNR SNS C	Piezo sensor (C)
	TNR COUNT C	Toner supply sensor (C)
	TNR BTL OPEN C	Toner cap position sensor (C)
	TNR BTL OPEN HP C	Toner container cam HP sensor (C)
	TNR SNS K	Piezo sensor (Bk)
	TNR COUNT K	Toner supply sensor (Bk)
TNR BTL OPEN K	Toner cap position sensor (Bk)	
TNR BTL OPEN HP K	Toner container cam HP sensor (Bk)	
J312	BTL MTR ROT Y CW	Toner container motor (Y) Clockwise
	BTL MTR OPEN Y CCW	Toner container motor (Y) Counter Clockwise
	BTL MTR ROT M CW	Toner container motor (M) Clockwise
	BTL MTR OPEN M CCW	Toner container motor (M) Counter Clockwise
	BTL MTR ROT C CW	Toner container motor (C) Clockwise
	BTL MTR OPEN C CCW	Toner container motor (C) Counter Clockwise
	BTL MTR ROT K CW	Toner container motor (Bk) Clockwise
	BTL MTR OPEN K CCW	Toner container motor (Bk) Counter Clockwise

T-10-3



# General Circuit Diagram



## List of User Mode

### Environment Settings

#### Paper Settings

\* Default Settings

Item	Setting Description	Device Information Delivery Available
Paper Settings	Thin, Plain*, Heavy, Recycled, Color, Pre-punched, Transparency, Tracing, Labels, Tab, Bond, Washi, Envelope, Postcard	No
A5R/STMTR Original Selection	A5R,STMTR*	No
B5/EXEC Original Selection	B5,EXEC*	No
Paper Type Management Settings	Details/Edit • Name, Category, Basis Weight, Type, Finish, Creep (Displacement) Correction Adjustment, Color	Yes
	Duplicate, Delete	No
Specify Multi-Purpose Tray Envelope Type	On,Off*	No
Register Multi-Purpose Tray Defaults	On,Off*	No
Register Custom Size	S1 - S5 Register/Edit, Delete, Register Name	Yes

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#### Display Settings

\* Default Settings

Item	Setting Description	Device Information Delivery Available
Default Screen at Startup	Main Menu*, Quick Menu, Copy, Scan and Send, Send & Fax, Fax, Scan and Store, Access Stored Files, Fax/I-Fax Inbox, Secured Print, Web Browser, Workflow Composer, Remote Scanner, Print Server, Scan Lock Analyzer, Tutorial	No
	Open Status Monitor/Cancel: On, Off*	No
Default Screen (Status Monitor/Cancel)	Default Status Type: Copy/Print*, Send, Receive, Store, Consumables	No
	Status/Log: Job Status*, Log Details: Copy/Print & Job Status > Print, Copy Send & Job Status > Send, Fax Receive & Job Status > Fax, Forward Copy/Print & Log > Copy, Printer, Local Print, RX Print, Print Report Send & Log > Send, Fax Receive & Log > Fax, Forward	No
Copy Screen Display Settings	Regular Copy*, Express Copy	No
Display Fax Function	On*, Off	No
	Enable Fax in Scan and Send Function: On*, Off	No
Store Location Display Settings	Mail Box: On*, Off	No
	Advanced Box/Network: On*, Off	No
	Memory Media: On, Off*	No



Item	Setting Description	Device Information Delivery Available
Language/Keyboard Switch On/Off	On, Off*	No
Language/Keyboard Switch	Language, Keyboard Layout	No
Display Remaining Paper Message	On*, Off	No
No. of Copies/Job Duration Status	On*, Off	No
Display Original Scanning Cleaning Area* <sup>1</sup>	On*, Off	No
Select Paper Screen Priority	Simple*, Detailed	No
mm/Inch Entry Switch	mm, inch*	Yes
ID/User Name Display On/Off	On*, Off	No
Display Remaining Toner Error Message	On, Off*	No
Clear Remaining Toner Error	Delete	No

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## ■ Timer/Energy Settings

\* Default Settings

Item	Setting Description	Device Information Delivery Available
Adjust Time	00: 00 to 23: 59, in one minute increments (00: 00*)	No
Date/Time Settings	Date and Time Setting (12 digit number)	No
	Time Zone: GMT -12: 00 to GMT +12: 00 (GMT -05:00*)	No
	Daylight Saving Time: On, Off*	No
	Start Date (Month, Day, Time) (April, 1st, Sunday, 2:00)* End Date (Month, Day, Time) (October, Final, Sunday, 2:00)*	
Time Format	24 Hour, 12 Hour*	No
Auto Reset Time	0 (Off) to 9 minutes, in one minute increments (2minutes*)	Yes
Function After Auto Reset	Initial Function*, Selected Function	Yes
Auto Sleep Time	5*, 10, 15, 20, 30, 40, 50 min., 1 hour, 90 min., 2, 3, 4 hours	Yes
Restrict Auto Sleep Time	On, Off*	Yes
Sleep Mode Energy Use	Low*, High	Yes
Weekly Timer Settings	Sunday to Saturday, 00: 00 to 23: 59, in one minute increments	Yes
Sleep Mode Exit Time Settings	00: 00 to 23: 59, in one minute increments	Yes

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## Network

If you are configuring the settings for the first time in "Interface Settings," "TCP/IPv4 Settings," "TCP/IPv6 Settings," or "Settings Common to TCP/IPv4 and TCP/IPv6," use the control panel of the machine. After configuring the TCP/IP settings, you can change them using the Remote UI.

In the NetWare or AppleTalk network, the TCP/IP protocol must be used to specify the settings with software other than the control panel of the machine. The setting items are shown below.

- Some items can be set using the Remote UI. Use the control panel of the device to set items which cannot be set using the Remote UI.

\* Default Settings

\*1 Indicates items that appear only when the appropriate optional equipment is attached.

Item	Setting Description	Can be set in Remote UI
User Data List	Print List	Yes
Confirm Network Connection Set. Changes	On, Off*	No
TCP/IP Settings		
IPv4 Settings		
Use IPv4	On*, Off	Yes
IP Address Settings	IP Address:0.0.0.0*	Yes
	Subnet Mask:0.0.0.0*	Yes
	Gateway Address:0.0.0.0*	Yes
	DHCP:On, Off*	Yes
	RARP:On, Off*	Yes
	BOOTP:On, Off*	Yes
PING Command	IP Address:0.0.0.0*	No
IPv6 Settings		
Use IPv6	On, Off*	Yes
Stateless Address Settings	Use Stateless Address:On*, Off	Yes
Manual Address Settings	Use Manual Address:On, Off*	Yes
	Manual Address:IPv6 Address(39characters maximum)	Yes
	Prefix Length:0 to 128(64*)	Yes
	Default Router Address(39 characters maximum)	Yes
Use DHCPv6	On, Off*	Yes
PING Command	IPv6 Address:(39characters maximum)	Yes
Host Name	48 characters maximum	Yes
DNS Settings		
DNS Server Address Settings		
IPv4	Primary DNS Server:IP Address:0.0.0.0*	Yes
	Secondary DNS Server:IP Address:0.0.0.0*	Yes
IPv6	Primary DNS Server:IPv6 Address	Yes
	Secondary DNS Server:IPv6 Address	Yes
DNS Host/Domain Name Settings		
IPv4	Host Name:47 characters maximum	Yes
	Domain Name:47 characters maximum	Yes
IPv6	Use Same Host Name/Domain Name as IPv4:On, Off*	Yes
	Host Name:47 characters maximum	Yes
DNS Dynamic Update Settings		

Item		Setting Description	Can be set in Remote UI
	IPv4	DNS Dynamic Update:On, Off*	Yes
	IPv6	DNS Dynamic Update:On, Off*	Yes
		Register Stateless Address:On, Off*	Yes
		Register Manual Address:On, Off*	Yes
		Register Stateless Address:On, Off:	Yes
WINS Settings			
	WINS Resolution	On, Off*	Yes
	WINS Server Address	IP Address:0.0.0.0*	Yes
	Node Type	Auto Set, display only	No
	Scope ID	63 characters maximum	Yes
LPD Print Settings			
	LPD Print Settings	On*, Off	Yes
	LPD Banner Page* <sup>1</sup>	On, Off*	Yes
RAW Print Settings			
	RAW Print Settings	On*, Off	Yes
	Bidirectional Communication	On, Off*	Yes
SNTP Settings			
	Use SNTP	On, Off*	Yes
	Polling Interval	Interval for performing time synchronization (1 to 48 hours)(24hours*)	Yes
	NTP Server Address	IP address or host name	Yes
	Check NTP Server	-	Yes
FTP Print Settings			
	Use FTP Print	On, Off*	Yes
	User	User name for FTP server login (24 characters maximum) (guest*)	Yes
	Password	Password for FTP server login (24 characters maximum) (7654321*)	Yes
WSD Print Settings			
	Use WSD Print	On*, Off	Yes
	Use WSD Browsing	On*, Off	Yes
	Use Multicast Discovery	On*, Off	Yes
Use FTP PASV Mode			
	Use FTP PASV Mode	On, Off*	Yes
BMLinkS Settings			
	Use BMLinkS	On, Off*	Yes
	Discovery Sending Interval	30 mins*, 1, 3, 6, 12, 24 hrs	Yes
	Location Information	Country / Region	Yes
		Company/Org. Name, Dept. Name, Bldg. Name, Floor No., Block Name	Yes
IPP Print Settings			
	IPP Print Settings	On* Off	Yes
	Use SSL	On, Off*	Yes
	Use Authentication	On, Off*	Yes
	User	User name for FTP server login (24 characters maximum) (guest*)	Yes
	Password	Password for FTP server login (24 characters maximum) (7654321*)	Yes
Multicast Discovery Settings			

Item		Setting Description	Can be set in Remote UI
	Response	On* Off	Yes
	Scope name	Scope name to be used for a multicast discovery (32 characters maximum)	Yes
	Use HTTP	On* Off	Yes
	Use Web DAV Server	On, Off*	Yes
	SSL Settings	Functions using SSL encrypted communications	Yes
Key and Certificate			
	Set as the Default Key	-	Yes
	Certificate Details	Version/Serial Number/Signature Algorithm/Issue Destination/Start Date of Validity/End Date of Validity/Issuer/Public Key/Cert Thumbprint/Certificate	Yes
	Display Use Location	Displays what the key pair is being used for	Yes
Proxy Settings			
	Use proxy	On, Off*	Yes
	Server Address	IP address or FQDN(128 characters maximum)	Yes
	Port Number	1to 65535(80*)	Yes
	Use Proxy within the Same Domain	On, Off*	Yes
Set Authentication			
	Use Proxy Auth.	On, Off*	Yes
	User Name	24 characters maximum	Yes
	Password	24 characters maximum	Yes
	Confirm Dept. ID PIN	On*, Off	Yes
IPSec Settings			
	Use IPSec	On, Off*	Yes
	Receive Non-policy Packets	Allow/Reject	Yes
	Edit		Yes
	Delete		Yes
	Policy On, Off		Yes
Register			
	Policy Name	24 characters maximum	Yes
	Register: Selector Settings	Local Address: All IP Addresses*/IPv4 Address/IPv6 Address/IPv4 Manual Settings/IPv6 Manual Settings	Yes
		Remort Address: All IP Addresses*,All IPv4Address,All IPv6Address,IPv4Manual Settings,IPv6 Manual Settings	Yes
		Port: Specify by Port Number*/Specify by Service Name	Yes
	IKE Settings	IKE mode : Main*/Aggressive	Yes
		Authentication Method : Pre-Shared Key Method*/Digital sig. Method	Yes
		Auth./Encryption Algorithm : Auto*/Manual Settings	Yes
	IPSec Network Settings	Validity : Time(1to65535minuites)(480minuites*)	Yes
		Validity : Size(1to65535 MB)(65535 MB*)	Yes
		PFS : On, Off*	Yes
		Auth./Encryption Algorithm : Auto*/Manual Settings	Yes
		Connect. Mode : Transport, display only	-
NetWare Settings			Yes

Item	Setting Description	Can be set in Remote UI
Use NetWare	On, Off*	Yes
Frame Type	Auto Detect*/Ethernet II/Ethernet 802.2/Ethernet 802.3/Ethernet SNAP	Yes
IPX External Network Number	Auto Set, display only	-
Node Number	Auto Set, display only	-
Print Service	Bindery PServer,R Printer,NDS Pserver*,Nprinter	Yes
Packet Signature	Auto Set, display only	-
Bindery Pserver Settings		
Print Server Name	47 characters maximum	Yes
File Server Name	47 characters maximum	Yes
Print Server Password	20 characters maximum	Yes
Printer Number	0to15(0*)	Yes
Polling Interval	1to15seconds(5seconds*)	Yes
Printer Form	0to255(0*)	Yes
Buffer Size	1to20KB(20KB*)	Yes
Service Mode	Service only currently mounted form/Change forms as needed/Minimize form changes across print queues/Minimize form changes within print queues*	Yes
Rprinter Settings		
Print ServerName	47 characters maximum	Yes
File ServerName	47 characters maximum	Yes
Printer Number	0to15(0*)	Yes
NDS PServer Settings		
Print ServerName	64 characters maximum	Yes
Tree Name	32 characters maximum	Yes
Context	256 characters maximum	Yes
Print Server Password	20 characters maximum	Yes
Printer Number	0to254(0*)	Yes
Polling Interval	1to255seconds(5seconds*)	Yes
Printer Form	0to255(0*)	Yes
Buffer Size	3to20KB(20KB*)	Yes
Service Mode	Service only currently mounted form/Change forms as needed/Minimize form changes across print queues/Minimize form changes within print queues*	Yes
NPrinter Settings		
Print ServerName	64 characters maximum	Yes
Tree Name	32 characters maximum	Yes
Context	256 characters maximum	Yes
Printer Number	0to254(0*)	Yes
AppleTalkSettings		
Use Apple Talk	On, Off*	Yes
Phase	Phase 2(fixing)	-
Service Name	32 characters maximum	Yes
Zone	32 characters maximum	Yes
Print Mode	Both*, Spool, Direct	Yes
SMB Server Settings		
Use SMB Server	On, Off*	Yes

Item	Setting Description	Can be set in Remote UI
ServerName	15 characters maximum(Canon+represents the last six digits of a MAC address)	Yes
Workgroup	15 characters maximum(WORKGROUP*)	Yes
Comment	48 characters maximum	Yes
LM Announce	On, Off*	Yes
SMB Printer Settings		
Use SMB Print	On, Off*	Yes
Printer Name	13 characters maximum(PRINTER)	Yes
SMB Auth. Settings		
Use SMB Authentication	On, Off*	Yes
Authentication Type	NTLMv1*,NTLMv2*	Yes
SNMP Settings		
Get Printer Mgmt Info from Host	On, Off*	Yes
Use SNMPv1	On*, Off	Yes
Dedicated Community Settings		
Dedicated Community	On*, Off	
MIB Access Permission	Read/write, Read Only	
Community Name1Settings		
Community Name1	On*, Off	Yes
MIB Access Permission	Read/Write/Read Only*	Yes
Community Name	Community Name(32 characters maximum)(public*)	Yes
Community Name2 Settings		
Community Name2	On, Off*	Yes
MIB Access Permission	Read/Write/Read Only*	Yes
Community Name	Community Name(32 characters maximum)(public2*)	Yes
Use SNMPv3	On, Off*	Yes
User Settings		
User On, Off	-	Yes
Register	User/MIB Access Permission/Security Settings/Authent.Algorithm/Authent.Password/Encryption Algorithm/Encryption Password	Yes
Details/Edit	User/MIB Access Permission/Security Settings/Authent.Algorithm/Authent.Password/Encryption Algorithm/Encryption Password	Yes
Delete	-	Yes
Context Settings		
Register	Context Name(32 characters maximum)	Yes
Edit	-	Yes
Delete	-	Yes
Dedicated Port Settings		
Dedicated Port Settings	On*, Off	Yes
Use Spool Function		
Use Spool Function	On, Off*	Yes
Startup Settings		
Startup Settings	30 to 300 seconds (30*)	Yes
Ethernet Driver Settings		
Auto Detect	On*, Off	Yes
Communication Mode	Half Duplex*/Full Duplex	Yes

Item	Setting Description	Can be set in Remote UI
Ethernet Type	10 Base-T*,100 Base-TX,1000 Base-T	Yes
MAC Address	Display only	-
IEEE802.1X Settings		
Use IEEE802.1X	On, Off*	Yes
User	Name of the user to be authenticated with IEEE802.1X authentication	Yes
Password	Password of the user to be authenticated with IEEE802.1X authentication	Yes
TLS Settings		
Use TLS	On, Off*	Yes
Key and Certificate		
Set as the Default Key	-	Yes
Certificate Details	Version/Serial Number/Signature Algorithm/Issue Destination/Start Date of Validity/End Date of Validity/Issuer/Public Key/Cert.Thumbprint/Certificate	Yes
Display Use Location	Displays what the key pair is being used for.	Yes
TTLS Settings		
Use TTL	On, Off*	Yes
TTLS Settings	MSCHAPv2*,PAP	Yes
PEAP Settings		
Use PEAP	On, Off*	Yes
Same User Name as Login Name	-	Yes
User Name	24 characters maximum	Yes
Password	24 characters maximum	Yes
Firewall Settings		
IPv4 Address Filter		
Send Filter		Yes
Use Filter	On, Off*	Yes
Default Policy	Allow/Reject	Yes
IPv4 Address	Up to 16 IPv4 addresses can be stored.	Yes
Receive Filter		
Use Filter	On, Off*	Yes
Default Policy	Allow/Reject	Yes
IPv4 Address	Up to 16 IPv4 addresses can be stored.	Yes
IPv6 Address Filter		Yes
Send Filter		
Use Filter	On, Off*	Yes
Default Policy	Allow/Reject	Yes
IPv6Address	Up to 16 IPv4 addresses can be stored.	Yes
RecieveFilter		
Use Filter	On, Off*	Yes
Default Policy	Allow/Reject	Yes
IPv6Address	Up to 16 IPv4 addresses can be stored.	Yes
MACAddressFilter		
Send Filter		



Item		Setting Description	Can be set in Remote UI
	Use Filter	On, Off*	Yes
	Default Policy	Allow/Reject	Yes
	MACAddress	Up to 100 IPv4 addresses can be stored.	Yes
ReceiveFilter			
	Use Filter	On, Off*	Yes
	Default Policy	Allow/Reject	Yes
	MACAddress	Up to 100 IPv4 addresses can be stored.	Yes
	IP Address Block Log	Time, Category, IP Address, Result	Yes

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## External Interface

\* Default Settings

Item		Setting Description	Device Information Delivery Available
USB Settings			
	Use USB Device	On*, Off	Yes
	Use USB Host	On*, Off	Yes
	Use MEAP Driver for USB Device	On, Off*	Yes
	Use MEAP Driver for USB External Drive	On, Off*	Yes

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## Accessibility

\* Default Settings

Item	Setting Description	Device Information Delivery Available
Key Repetition Settings	Standard*, Slightly Slow, Slow	No
Reversed Display (Color)	On, Off*	No

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## Adjustment/Maintenance

### Adjust Image Quality

\* Default Setting

Item	Setting Description	Device Information Delivery Available
Auto Adjust Gradation	Quick Adjust: Press [Start] Full Adjust: Automatic after the machine prints and scans four sets of test pages	No
Correct Density	Copy/Scan and Store (Mail Box), Black Send/Scan and Store (other than Mail Box), Color Send/Scan and Store (Other Than Mail Box)Light, Dark: 1 to 9 levels(5levels*)	No
Correct Shading	Shading Correction: Visual Correction, Shading Correction: Print Server Correction	No
Correct Color Mismatch	Press [Start]	No
Full Color Printing Vividness Settings	Standard, Level 1, Level 2	No
Fine Adjust Zoom	X:- 1.0 % to+ 1.0 %(0.1 % increments)(0%*) Y:- 1.0 % to+ 1.0 %(0.1 % increments)(0%*)	No
Color Balance	Yellow, Magenta, Cyan, Black -8 to +8 (0*)	No
Fine Adjust Density	High (Dark Area), Medium. Low (Light Area) -8 to +8 (0*)	No

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### Adjust Action

\* Default Setting

\*1 Indicates items that appear only when the appropriate optional equipment is attached.

Item	Setting Description	Device Information Delivery Available
Saddle Sticher Staple Repositioning	Press [Start]	No
Change Fold/Stitch Position*	305x457mm / A3, 11x17 / B4, LGL / A4R, LTRR -2.0 mm to +2.0 mm, in 0.25 mm increments(0mm)	No
Adjust Fold Position*	305x457mm / A3, 11x17 / B4, LGL / A4R, LTRR -2.0 mm to +2.0 mm, in 0.25 mm increments(0mm)	No

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### Maintenance

\* Default Setting

Item	Setting Description	Device Information Delivery Available
Clean Inside Main Unit	Press [Start]	No
Clean Feeder* <sup>1</sup>	Press [Start]	No
Original Scanning Area Cleaning Method* <sup>1</sup>	Press [Done]	No

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## Function Settings

### Common

\* Default Settings

\*1 Indicates items that appear only when the appropriate optional equipment is attached.

\*2 Indicates information that is delivered only if the number of output trays in the host machine and client machines is the same.

\*3 Indicates items that cannot be used with the default setting. Also, the Adobe LiveCycle Rights Management ES is necessary. Contact your local authorized Canon dealer.

Item	Setting Description	Device information DeliveryAvailable
Paper Feed Settings		
Paper Drawer Auto Selection On/Off	Copy, Printer, Access Stored File, Receive/Fax, Other	No
Multi-Purpose Tray	On, Off*	No
Other	On*, Off	No
Copy	Consider Paper Type : On*, Off	No
Feed Method Switch	Speed Priority*, Print Side Priority	No
Suspended Job Timeout On,	On, Off* 0 - 999 mins (5*)	Yes
Paper Output Settings		
Output Tray Settings* <sup>1</sup>		
If the Inner 2 Way Tray-F1 Is Attached		
Tray A	Copy*, Mail Box*, Printer, Receive, Fax, Other	No* <sup>3</sup>
Tray B	Copy, Mail Box, Printer*, Receive*, Fax*, Other*	No* <sup>3</sup>
If the Inner 2 Way Tray-F1 and Copy Tray-J1 Are Attached		
Tray A	Copy*, Mail Box*, Printer, Receive, Fax, Other	No* <sup>3</sup>
Tray B	Copy, Mail Box, Printer*, Receive, Fax, Other	No* <sup>3</sup>
Tray C	Copy, Mail Box, Printer, Receive*, Fax*, Other*	No* <sup>3</sup>
If the Inner Finisher-A1 and Inner Finisher Additional Tray- A1 Are Attached		
Tray A	Copy*, Mail Box*, Printer, Receive, Fax, Other	No* <sup>3</sup>
Tray B	Copy, Mail Box, Printer*, Receive*, Fax*, Other*	No* <sup>3</sup>
If the Inner Finisher-A1 and Copy Tray-J1 Are Attached		
Tray A	Copy*, Mail Box*, Printer, Receive, Fax, Other	No* <sup>3</sup>
Tray B	Copy, Mail Box, Printer*, Receive*, Fax*, Other*	No* <sup>3</sup>
If the Inner Finisher-A1, Inner Finisher Additional Tray-A1 and Copy Tray-J1 Are Attached		
Tray A	Copy*, Mail Box*, Printer, Receive, Fax, Other	No* <sup>3</sup>
Tray B	Copy, Mail Box, Printer*, Receive, Fax, Other	No* <sup>3</sup>
Tray C	Copy, Mail Box, Printer, Receive*, Fax*, Other*	No* <sup>3</sup>
If the Staple Finisher-C1 or Booklet Finisher-C1, Buffer Pass Unit-G1, and External 2/3 Hole Puncher-B1 Are Attached		
Tray A	Copy*, Mail Box*, Printer, Receive, Fax, Other	No* <sup>3</sup>
Tray B	Copy, Mail Box, Printer*, Receive, Fax, Other	No* <sup>3</sup>
Tray C	Copy, Mail Box, Printer, Receive*, Fax*, Other*	No* <sup>3</sup>
Tray Home Position	Tray A*,Tray B,Off	No* <sup>3</sup>
Offset Jobs* <sup>1</sup>	On*, Off	Yes
Job Separator Between Jobs	On, Off* Change: Paper Drawer	Yes
Job Separator Between Copies	On, Off* Change: Paper Drawer , Copies: 1 - 9999	No

Item		Setting Description	Device information DeliveryAvailable
	Different Paper Sizes for the Output Tray	On*, Off	No
	Unfinished Tab Paper Forced Output	On, Off*	Yes
Print Settings			
	Print Priority		
	Copy	1*,2,3	Yes
	Printer	1,2*,3	Yes
	Access Stored File, Receive, Fax, Other	1,2,3*	Yes
	Text/Photo Priority When ACS Is Set to Black	Text Priority*, Photo Priority	Yes
Local Print Default Settings			
	Select Paper	All Paper Sources, Auto*	No
	No. of Prints	1 to 9,999 sets(1set*)	No
	Finishing		No
	If No Finisher Is Attached or Only the Inner 2 Way Tray- F1 is Attached	Do Not Collate, Collate (Page Order)*, Rotate Collate,Group (Same Pages), Rotate Group	No
	If the Inner Finisher-A1 Is Attached	Do Not Collate, Collate (Page Order), Offset*, Group(Same Pages), Offset Group, Staple (Corner)	No
	If the Inner Finisher-A1 and Inner Finisher Additional Tray- A1 Are Attached	Do Not Collate, Collate (Page Order), Offset*, Group(Same Pages), Offset Group, Staple (Corner)	No
	If the Staple Finisher-C1 or Booklet Finisher-C1, and Buffer Pass Unit-G1 Are Attached	<ul style="list-style-type: none"> <li>Do Not Collate, Collate (Page Order), Offset*, Group (Same Pages), Offset Group, Staple (Corner: Top Left, Bottom Left, Top Right, Bottom Right), (Double: Left, Right)</li> </ul>	No
	If the Staple Finisher-C1 or Booklet Finisher-C1, Buffer Pass Unit-G1, and External 2/3 Hole Puncher-B1 Are Attached	<ul style="list-style-type: none"> <li>Do Not Collate, Collate (Page Order), Offset*, Group (Same Pages), Offset Group, Staple (Corner: Top Left, Bottom Left, Top Right, Bottom Right), (Double: Left, Right), Hole Punch</li> </ul>	No
	2-Sided Printing	On, Off* Book Type, Calendar Type	No
	Delete File After Printing	On, Off*	No
	Merge and Print	On, Off*	No
Output Report Default Settings			
	2-Sided Printing	On, Off*	Yes
	Register Form	Register, Delete, Check Print, Details	No
	Superimpose Image Quality Priority	Auto*, Original Priority, Form Priority	Yes
	Register Characters for Page No./Watermark	Register,Edit, Delete	Yes
	Copy Set Numbering Option Settings	On, Off*	Yes
	Number Option ON		
	ID/User Name	On, Off*	Yes
	Date	On, Off*	Yes
	Text	On, Off*	Yes
	Alignment Settings	Align Left*, Align Center, Align Right	Yes
Secure Watermark/Document Scan Lock* <sup>1</sup>			
	Forced Secure Watermark/Doc. Scan Lock		
	Copy	Do Not Set*, Forced Secure Watermark, Forced Document Scan Lock	Yes
	Mail Box	Do Not Set*, Forced Secure Watermark, Forced Document Scan Lock	Yes

Item		Setting Description	Device information DeliveryAvailable
	Printer	Do Not Set*, Forced Secure Watermark, Forced Document Scan Lock	Yes
	Printer Driver Watermark/Doc. Scan Lock	Do Not Set*, Printer Driver Secure Watermark, Printer Driver Document Scan Lock	Yes
	Adjust Background/Character Contrast	Black, Cyan, Magenta, Print Settings, Test Print	No
	Standard Value Settings		No
	Relative Contrast	7 to +7 (Black : -1, Cyan : 0, Magenta : 1)	No
	Standard Contrast	1 to 64 (Black : 8, Cyan : 12, Magenta : 12)	No
	Latent Area Density:	1 to 36 (Black : 5, Cyan : 7, Magenta : 7)	No
	Adjust TL Code	Magenta, Black*	Yes
	Dot Size	1 to 7 (imageRUNNER ADVANCE C5051/C5045 Series > Black: 4*, Magenta: 4*) (imageRUNNER ADVANCE C5035/C5030 Series > Black: 4*, Magenta: 4*)	Yes
	Dot Density	Standard*, Rough	Yes
	Relative Contrast	-7 to +7 (imageRUNNER ADVANCE C5051/C5045 Series > Black: 0*, Magenta: 2*) (imageRUNNER ADVANCE C5035/C5030 Series > Black: 2*, Magenta: 1*)	Yes
	Sample Print	-	No
	Standard Value Settings	1 to 64 (imageRUNNER ADVANCE C5051/C5045 Series > Black: 16*, Magenta: 8*) (imageRUNNER ADVANCE C5035/C5030 Series > Black: 16*, Magenta: 12*)	Yes
	Initialize	-	No
Scan Settings			
	Timing to Raise Feeder Tray* <sup>1</sup>	When Start is pressed*, When Performing from Panel	Yes
	Feeder Jam Recovery Method* <sup>1</sup>	From 1st Page*, From Stopped Original	Yes
	Scanner Noise Settings* <sup>1</sup>	Fast*, Quiet	Yes
	Streak Prevention	On*, Off	Yes
	Black Scan Speed/Image Quality Priority	Speed Priority*, Image Quality Priority	Yes
	LTRR/STMT Original Detection	Distinguish Manually, Use LTRR*, Use STMT	Yes
	Remote Scan Data Compression Ratio	High Ratio, Normal*, Low Ratio	Yes
	Remote Scan Gamma Value	Gamma 1.0, Gamma 1.4, Gamma 1.8*, Gamma 2.2	Yes
	Auto Online	On, Off*	Yes
	Auto Online	On, Off*	Yes
Generate File			
High Compression Image Quality Level			
	Image Level in Text/Photo Mode or Photo Mode	Data Size Priority, Normal, Image Quality Priority	Yes
	Image Level in Text Mode	Data Size Priority, Normal, Image Quality Priority	Yes
OCR (Text Searchable)Settings			
	Smart Scan	On*, Off	Yes
	Num. of Char. for File Name Setting	1 to 24*	Yes
Trace & Smooth Settings			
	Outline Graphics	On, Off	Yes
	Graphics Recognition Level	Normal, Moderate, High	Yes
	Background Image Level	Data Size Priority, Normal, Image Quality Priority	Yes
OOXML Settings			
	Color Image Recognition Level	Do Not Recognize, Normal, High	Yes

Item		Setting Description	Device information DeliveryAvailable
	Color Image Line Width Recognition	On, Off	Yes
	Background Image Level	Data Size Priority, Normal, Image Quality Priority	Yes
	Specify Minimum PDF Version	Do Not Specify*, 1.5, 1.6, 1.7	Yes
	Format PDF to PDF/A	On, Off	Yes
	Optimize PDF for Web	On, Off	Yes
Time Stamp Settings <sup>1</sup>			
Basic Settings			
	Server IP Address	Max 128 characters	No
	Deleting License File	-	No
	Password for License File	4 to 20 alphanumeric characters	No
Restrictions			
	Enter Password to Send	On, Off*	No
	Password	Max 32 characters	No
Rights Management Server Settings <sup>3</sup>			
	Server URL	Max 128 characters	No
	User Name	Max 128 characters	No
	Password	Max 24 characters	No
	Use Password for Each User	On, Off*	No
Document Scan Lock Operational Settings			
	Use Document Scan Lock/Embedded Info.	On, Off*	Yes
	Use Document Scan Lock	On*, Off	Yes
	Multiple Embedded Information Action	Continue Job, Cancel Job*	Yes
	Restrict Options	On*, Off	Yes

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## ■ Copy

\* Default Settings

Item		Setting Description	Device Information Delivery Available
	Register/Edit Favorite Settings	Register/Edit, Delete (M1 to M9), Check Content	No
	Change Default Settings	Register, Initialize	No
Register [Options] Shortcuts			
	Shortcut 1	Finishing*, Unassigned	No
	Shortcut 2	2-Sided*, Unassigned	No
	Shortcut 3	Density* Unassigned	No
	Shortcut 4	Original Type*, Unassigned	No
	Shortcut 5	Unassigned*	No
Set Express Copy Shortcuts			
	Shortcut 1	Unassigned*	No
	Shortcut 2	Unassigned*	No
	Shortcut 3	Unassigned*	No
	Shortcut 4	Unassigned*	No

Item	Setting Description	Device Information Delivery Available
Shortcut 5	Unassigned*	No
Shortcut 6	Unassigned*	No
Auto Collate	On* Off	Yes
Auto Orientation	On* Off	Yes
Select Color Settings for Copy		
Use Auto(Color/Black)	On* Off	Yes
Use Full Color	On* Off	Yes

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## ■ Printer

\* Default Settings

\*1 Indicates items that appear only when the appropriate optional equipment is attached.

Item	Setting Description	Device Information Delivery Available
Print Report		
PCL		
Configuration Page	Print	No
Font List	Print	No
PS		
Configuration Page	Print	No
Font List	Print	No
RGB Test Page	Print	No
CMY Test Page	Print	No
RGB Color Chart	Print	No
CMYK Color Chart	Print	No
Printer Settings	Custom Settings, Utility	Yes
Restricting Printer Jobs	On, Off*	Yes
PDL Selection (Plug-nplay)* <sup>1</sup>	UFR II, PCL5e, PCL5c, PCL6, PS3, FAX	No

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## ■ Send

\* Default Setting

\*1 Indicates items that appear only when the appropriate optional equipment is attached.

\*4 Indicates item that appears only if the Super G3 2nd Line Fax Board is installed in addition to installing the Super G3 FAX Board.

\*5 Indicates item that appears only if the Super G3 3rd/4th Line Fax Board is installed in addition to installing the Super G3 FAX Board.

Item	Setting Description	Device Information Delivery Available
Output Report		
TX/RX User Data List	Print	No
Fax User Data List* <sup>1</sup>	Print	No
Common Settings		



Item	Setting Description	Device Information Delivery Available
Register Favorite Settings Edit Favorite Settings	Register/Edit, Delete (M1 to M18), Check Content	Yes
Show Comment	On, Off*	Yes
Display Confirmation for Favorite Settings	On*, Off	No
Change Default Screen	Standard*, Address Book, One-touch, Favorite Settings	No
Change Default Settings	Register, Initialize	No
Register [Options] Shortcuts		
Shortcut 1	2-Sided*, No Settings	No
Shortcut 2	Different Size Originals*, No Settings	No
TX Report	For Error Only*, On, Off	Yes
Report with TX Image	On*, Off	Yes
Report with Color TX Image	On, Off*	Yes
Communication Activity Report		
Auto Print (100 Transmissions)	On*, Off	Yes
Specify Print Time	On, Off*	Yes
Timer Setting	00 : 00 to 23 : 59(00 : 00*)	Yes
Send/Receive Separate	On, Off*	Yes
TX Terminal ID	Print*, Do Not Print	Yes
	Printing Position: Inside, Outside* Display Destination Unit Name: On*, Off Telephone # Mark* <sup>1</sup> : Fax*, TEL	Yes
Delete Failed TX Jobs	On*, Off	Yes
Retry Times	0 to 5times(3times*)	Yes
Data Compression Ratio	Compact, Normal*, Low Ratio	Yes
YCbCr TX Gamma Value	Gamma 1.0, Gamma 1.4, Gamma 1.8*, Gamma 2.2	Yes
Use Chunked Encoding with WebDAV Sending	On*, Off	Yes
Limit New Destinations		
Fax	On, Off*	Yes
E-mail	On, Off*	Yes
I-Fax	On, Off*	Yes
File	On, Off*	Yes
Always Add Device Signature to Send* <sup>1</sup>	On, Off*	Yes
Restrict File Formats	On, Off*	Yes
E-mail/Ifax Settings		
Register Unit Name	24 characters maximum	No
Communication Settings		
SMTP Receive	On*, Off	Yes
POP	On* Off	Yes
SMTP Server	Server name or IP Address(48characters maximum)	No
E-mail Address	64 characters maximum	No
POP Server	Server name or IP Address(48characters maximum)	No
POP Address	32 characters maximum	No
POP Password	32 characters maximum	No
POP Interval	0* to 99(If the interval is set to '0', the incoming e-mail is not checked automatically.)	No
POP AUTH Method	Standard*/APOP/POP AUTH	Yes

Item		Setting Description	Device Information Delivery Available
	POP Authentication before Sending	On, Off*	No
	SMTP Authentication (SMTP AUTH)	On, Off*	No
	User	User name for SMTP authentication(64 characters maximum)	No
	Password	Password for SMTP authentication(32 characters maximum)	No
	Allow SSL(POP)	On, Off*	No
	Allow SSL(SMTP Send)	On, Off*	No
	Display Auth. Screen When Send	On*, Off	No
	Allow SSL(SMTP Receive)	Always SSL, On, Off*	No
	Maximum Data Size for Sending	0=(Off)/1 to 99 MB(3MB*)	Yes
	Default Subject	40 characters maximum(Attached Image*)	Yes
	Use SMTP Authentication for Each User	On*, Off	No
	Specify Authentication User Dest. to Reply	On, Off*	No
	Set Authorized User Destination to Sender	On*, Off	No
	Allow Sending to Unregistered Destinations	On, Off*	Yes
	Full Mode TX Timeout	1 to 99hours(24hours*)	Yes
	Print MDN/DSN upon Receipt	On, Off*	Yes
	Use Send via Server	On, Off*	Yes
	Allow MDN Not via Server	On*, Off	Yes
	Restrict TX Destination Domain		
	Restrict TX Destination Domains	On, Off*	Yes
	Permitted Domains	Register, Details/Edit, Delete	No
	Autocomplete for Entering E-mail Addresses	On*, Off	Yes
Fax Settings			
	Default Screen	Standard*, Address Book	No
	Change Default Settings	Register, Initialize	No
	Register [Options] Shortcuts		
	Shortcut 1	Density*, No Settings	No
	Shortcut 2	Original Type*, No Settings	No
	Shortcut 3	2-Sided Original*, No Settings	No
	Shortcut 4	Different Size Originals*, No Settings	No
	Register Sender Name (TTI)	01 to 99 : Register/Edit, Delete	No
	Off-Hook Alarm	On*, Off	No
	ECM TX	On*, Off	Yes
	Set Pause Time	1 to 15seconds(2seconds*)	Yes
	Auto Redial	On, Off	Yes
	Redial Times	1 to 15times(2times*)	Yes
	Redial Interval	2 to 99minutes(2minutes*)	Yes
	Redial When TX Error	Error and 1st page*, All pages, Off	Yes
	Check Dial Tone Before Sending	On*, Off	Yes
	Fax TX Report	For Error Only*, On, Off	Yes
	Report with TX Image	On*, Off	Yes
	Fax Activity Report		
	Auto Print (40 Transmissions)	On*, Off	Yes
	Specify Print Time	On, Off*	Yes

Item		Setting Description	Device Information Delivery Available
	Timer Setting	00 : 00 to 23 : 59(00 : 00*)	Yes
	Send/Receive Separate	On, Off*	Yes
Set Line			
	Register User Telephone No.	20 digits maximum	No
	Register Unit Name	24 characters maximum	No
	Select Line Type	Pulse, Tone*	No
	Line (2 to 8)	<ul style="list-style-type: none"> <li>• If the Super G3 FAX Board and Super G3 2nd Line Fax Board are installed:</li> <li>• Line 2</li> </ul>	No
		If the Super G3 FAX Board, Super G3 2nd Line Fax Board, and Super G3 3rd/4th Line Fax Board are installed: <ul style="list-style-type: none"> <li>• Line 2, Line 3, Line 4</li> </ul>	No
	Select TX Line	If the Super G3 FAX Board is installed: <ul style="list-style-type: none"> <li>• Line 1: Priority TX, Prohibit TX*</li> </ul>	No
		If the Super G3 FAX Board and Super G3 2nd Line Fax Board are installed: <ul style="list-style-type: none"> <li>• Line 1: Priority TX, Prohibit TX*</li> <li>• Line 2: Priority TX, Prohibit TX</li> </ul>	No
		If the Super G3 FAX Board, Super G3 2nd Line Fax Board, and Super G3 3rd/4th Line Fax Board are installed: <ul style="list-style-type: none"> <li>• Line 1: Priority TX, Prohibit TX*</li> <li>• Line 2: Priority TX, Prohibit TX</li> <li>• Line 3: Priority TX, Prohibit TX</li> <li>• Line 4: Priority TX, Prohibit TX</li> </ul>	No
	TX Start Speed	33600 bps*,14400 bps,9600 bps,7200 bps,4800 bps,2400 bps	Yes
	FIS Switch	On, Off*	Yes
	PIN Code Access	On, Off*	Yes
	Line1	On, Off*	Yes
	Line2* <sup>8</sup>	On, Off*	Yes
	Line3* <sup>9</sup>	On, Off*	Yes
	Line4* <sup>9</sup>	On, Off*	Yes
	Confirm Entered Fax Numbers	On, Off*	Yes
	Allow Fax Driver TX	On*, Off	Yes
Remote Fax TX Settings			
	Remote Fax Server Address	Host name or the IP address (48 characters maximum)	No
	TX Timeout	1 to 99hours(24hours*)	Yes
	Select TX Line	1 to 4Line(1*)	No
	Select Priority Line	Auto*, Line1,Line2*10,Line3*10,Line4*10	No
Remote Fax Settings			
	Use Remote Fax	On*, Off	Yes

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## Receive/Forward

\* Default Setting

\*1 Indicates items that appear only when the appropriate optional equipment is attached.

\*7 Indicates item that is not delivered as device information.

Receive Type, Details/Edit, Delete, Print List, E-Mail Priority

Item	Setting Description	Device Information Delivery Available
Output Report		
TX/RX User Data List	Print	No
Fax User Data List* <sup>1</sup>	Print	No
Common Settings		
Print on Both Side	On, Off*	Yes
Select Drawer		
SwitchA	On*, Off	Yes
SwitchB	On*, Off	Yes
SwitchC	On*, Off	Yes
SwitchD	On*, Off	Yes
Reduce Fax RX Size	On*, Off	Yes
	On <ul style="list-style-type: none"> <li>Reduction Mode: Auto*, Fixed</li> <li>Reduction %: 75 to 97% (90%*)</li> <li>Reduction Direction: Vertical &amp; Horizontal, Vertical Only*</li> </ul>	Yes
2 On 1 Log	On, Off*	Yes
Received Page Footer	On, Off*	Yes
YCbCr RX Gamma Value	Gamma 1.0, Gamma 1.4, Gamma 1.8*, Gamma 2.2	Yes
Handle Files with Forwarding Errors	Always Print, Store/Print, Off*	Yes
Forwarding Settings	Receive Type, Validate/Invalidate, Register (Registered Forwarding Settings), Forward w/o Conditions, E-Mail Priority, Details/Edit, Delete, Print List	Yes* <sup>1</sup>
Receive Tray Settings		
Set Fax/I-Fax Inbox		
Set/Register Confidential Fax Inboxes	00 to 49	Yes
Register Box Name:	24 characters maximum	Yes
PIN	Seven digits maximum	Yes
URL Send Settings	-	Yes
Initialize	-	No
Memory RX Inbox PIN	Seven digit number	No
Use Fax Memory Lock* <sup>1</sup>	On, Off*	Yes
Use I-Fax Memory Lock	On, Off*	Yes
Memory Lock Start Time	Everyday, Select Days, Off*	Yes
Memory Lock End Time	Everyday, Select Days, Off*	Yes
Divided Data RX Timeout	0 to 99 hours(24hours*)	Yes
Always Send Notice for RX Errors	*On, Off	Yes
Fax Settings* <sup>1</sup>		
ECM RX	*On, Off	Yes

Item	Setting Description	Device Information Delivery Available
Select RX Mode	Auto RX*, Fax/Tel Auto Switch	Yes
	Fax/Tel Auto Switch • Ring Start Time: 0 to 30 sec (8 sec*) • Ring Time: 15 to 300 sec (17 sec*) • F/T Switch Action: End, Receive* • Outgoing Message: On, Off*	Yes
Remote RX	On, Off*	No
	On • Remote RX ID: 00 to 99 (25*)	No
RX Manual/Auto Switch	On, Off*	Yes
	On • F/T Ring Time: 1 to 99 sec (15 sec*)	Yes
Fax RX Report	For Error Only, On, Off*	Yes
Confidential Fax Inbox RX Report	On*, Off	Yes
Receive Start Speed	33600 bps*, 14400 bps, 9600 bps, 7200 bps, 4800 bps, 2400 bps	Yes
Receive Password	20 digits maximum	No
Set Number Display		Yes
Line1 <sup>*1</sup>	On, Off*	Yes
Line2 <sup>*1</sup>	On, Off*	Yes
Line3 <sup>*1</sup>	On, Off*	Yes
Line4 <sup>*1</sup>	On, Off*	Yes

T-10-17

## Store/Access Files

\* Default Setting

Item	Setting Description	Device Information Delivery Available
Common Settings		
Scan and Store Settings		
Register/Edit Favorite Settings	Register/Edit, Delete (Up to 9 Set Keys), Check Content	No
Change Default Settings	Register, Initialize	No
Settings of Access Stored File		
Register/Edit Favorite Settings	Register/Edit, Delete (Up to 9 Set Keys), Check Content	No
Change Default Settings	Register, Initialize	No
Mail Box Settings		
Mail Box Settings		
Mail Box No.	00 to 99	No
Register Box Name	24 characters maximum	Yes
PIN	Seven digits	Yes
Time Until Document Auto Delete	0 (Off), 1, 2, 3*, 6, 12 hours, 1, 2, 3, 7, 30 days	No
URL Send Settings	-	Yes
Print upon Storing from Printer Driver	On, Off*	Yes
Initialize	-	No

Item	Setting Description	Device Information Delivery Available
Settings for All Mail Boxes		
Time Until Document Auto Delete	0 (Off), 1, 2, 3*, 6, 12 hours, 1, 2, 3, 7, 30 days	No
Print upon Storing from Printer Driver	On, Off*	No
Box Security Settings		
Limit Box PIN to 7 Digits/Restrict Access	On, Off*	Yes
Disp. Print When Storing from Printer Driver	On*, Off	Yes
Advanced Box Settings		
Open to Public	By SMB, By WebDAV, Off*	Yes
Allow to Create Personal Space	On*, Off	Yes
WebDAV Server Settings		
Authentication Type	Basic, Off*	Yes
Use SSL	On, Off*	Yes
Delete All Personal Spaces	Delete	No
Initialize Shared Space	Initialize	No
Prohibit Writing from External	On*, Off	Yes
Authentication Management	On, Off*	Yes
File Formats Allowed for Storing	Printable Formats Only, Common Office Formats, All	Yes
Network Settings		
Network Place Settings	Register, Details, Delete	No
Protocol for External Reference		
SMB	On*, Off	No
WebDAB	On*, Off	No
Memory Media Settings		
Use Scan/Print Function		
Use Scan Function	On*, Off	Yes
Use Print Function	On*, Off	Yes

T-10-18

## ■ Encrypted Secure Print

\* Default Setting

\*1 Indicates items that appear only when the appropriate optional equipment is attached.

Item	Setting Description	Device Information Delivery Available
Only Allow Encrypted Print Jobs* <sup>1</sup>	On, Off*	Yes

T-10-19

## Set Destination

### Set Destination

\* Default Setting

\*1 Indicates items that appear only when the appropriate optional equipment is attached.

Item	Setting Description	Device Information Delivery Available
Address List	Address Book 1 to 10, One-touch	No
	Print List: Print	No
Register Destinations	Register New Dest., Details/Edit, Delete, Search by Name	Yes
Register Address List Name	Register Name	Yes
Register One-touch	Register/Edit, Delete	Yes
Change Default Display of Address Book	Local*, LDAP Server, Remote	No
Address Book PIN	Seven digit number	Yes
Manage Address Book Access Number	On, Off*	Yes
Require Password for Exporting Address Book	On*, Off	Yes
Register LDAP Server	Receive Type, Validate/Invalidate, Register, Details/Edit, Delete, Forward w/o Conditions, Print List, E-Mail Priority	No
Auto Search When Using LDAP Server	On* Off	Yes
Acquire Remote Address Book		
Acquire Address Book	On, Off*	Yes
Remote Address Book Server Address	IP Address or Host Name (128 characters maximum)	No
Communication Timeout	15 to 120seconds (30seconds*)	Yes
Fax TX Line Auto Select Adjustment	On*, Off	Yes
Make Remote Address Book Open		
Make Remote Address Book Open	On, Off*	Yes

T-10-20



## Management Settings

### User Management

\* Default Settings

\*1 Indicates items that appear only when the appropriate optional equipment is attached.

Item	Setting Description	Device Information Delivery Available
System Manager Information Settings		
System Manager ID	Seven digit number maximum (7654321*)	Yes
System PIN	Seven digit number maximum (7654321*)	Yes
System Manager	32 characters maximum	Yes
E-Mail Address	64 characters maximum	Yes
Contact Information	32 characters maximum	Yes
Comment	32 characters maximum	Yes
Department ID Management		
Department ID Management	On, Off*	Yes
Register PIN	Register, Edit, Delete, Limit Functions	Yes
Page Totals	Clear, Print List, Clear All Totals, Large2 Count Management	No
Allow Printer Jobs With Unknown IDs	On*, Off	Yes
Allow Remote Scan Jobs With Unknown IDs	On*, Off	Yes
Allow Black Copy/ Mail Box Print Jobs	On, Off*	Yes
Allow Black Printer Jobs	On, Off*	Yes

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### Device Management

\* Default Settings

\*1 Indicates items that appear only when the appropriate optional equipment is attached.

Item	Setting Description	Device Information Delivery Available
Device Information Settings		
Device Name	32 characters maximum	No
Location	32 characters maximum	No
Device Information Delivery Settings		
Register Destinations	Auto Search/Register, Register, Details, Delete, Print List Auto Search/Register <ul style="list-style-type: none"> <li>• List</li> <li>• Select All</li> <li>• Search Depth (Router): 1 to 8</li> <li>• Display Host Name: On, Off</li> <li>• Start Auto Search</li> </ul>	
Set Auto Delivery	Everyday, Specify Days, Off*	
Settings/Registration Value	On, Off* Network Settings: Include, Exclude	

Item		Setting Description	Device Information Delivery Available
	Dept. ID	On, Off*	
	Address Book	On, Off*	
	Web Access Favorites	On, Off*	
	Printer Settings	On, Off*	
	Paper Information	On, Off*	
	Workflow Composer	On, Off*	
Manual Delivery			
	Settings/Registration Value	On, Off* Network Settings: Include,Exclude	
	Dept. ID	On, Off*	
	Address Book	On, Off*	
	Web Access Favorites	On, Off*	
	Printer Settings	On, Off*	
	Paper Information	On, Off*	
	Workflow Composer	On, Off*	
Restrictions for Receiving Device Info.		On*, Off	
Restore Data		Settings/Registration Value,Dept. ID,Address Book,Printer Settings,Paper Information	
Receive Restriction for Each Function			
	Settings/Registration Value	On*, Off	
	Dept. ID	On*, Off	
	Address Book	On*, Off	
	Web Access Favorites	On*, Off	
	Printer Settings	On*, Off	
	Paper Information	On*, Off	
	Workflow Composer	On*, Off	
Communication Log		Details, Print List, Report Settings	
		Report Settings	
		• Auto Print (100 transmissions): On*, Off	
		• Specify Print Time: On, Off*	
		• 00: 00* to 23:59	
		• Separate Report Type: On, Off*	
Limited Functions Mode		On, Off*	No
Limit Functions When Security Key is Off*		Partial Functions*, All Functions	Yes
Confirm Device Signature Certificate		Certificate Details: Certificate	No
Check User Signature Certificate		Certificate Details: Certificate	No
Certificate Settings			
Generate Key			
Generate Network Communication Key			
	Key Name	24 characters maximum	No
	Signature Algorithm	SHA1*, SHA256, SHA384, SHA512	No
	Key Algorithm	RSA,Display only	No
	Key Length(bit)	512*,1024, 2048, 4096	No
	Start Date of Validity	Month, Date, Year (2000/01/01~2037/12/31)	No
	End Date of Validity	Month, Date, Year (2000/01/01~2037/12/31)	No

Item		Setting Description	Device Information Delivery Available
	Country/Region	Country/Region name and code (2 characters maximum)	No
	State	24 characters maximum	No
	City	24 characters maximum	No
	Organization	24 characters maximum	No
	Organization Unit	24 characters maximum	No
	Common Name	IP address or FQDN (41 characters maximum)	No
	Generate/Update Device Signature Key	-	No
Key and Certificate List: Key and Certificate List for this Machine Editing Key Pairs and Server Certificates Confirming a Key Pair and Device Certificate			
	Certificate Details	Version/Serial Number/Signature Algorithm/Issue Destination/Start Date of Validity/End Date of Validity/Issuer/ Public Key/Cert. Thumbprint/Certificate	No
	Delete	-	
	Display Use Location	Displays what the key pair is being used for	No
Certificate Settings: Key and Certificate List: Key and Certificate List for Users*			
	Certificate Details	Version/Serial Number/Signature Algorithm/Issue Destination/Start Date of Validity/End Date of Validity/ Issuer/Public Key/Cert. Thumbprint/Certificate	No
	Delete	-	No
Certificate Settings: CA Certificate List			
	Certificate Details	Version/Serial Number/Signature Algorithm/Issue Destination/Start Date of Validity/End Date of Validity/ Issuer/Public Key/Cert. Thumbprint/Certificate	No
	Delete	-	No
Certificate Settings: Register Key and Certificate			
	Register	Key Name (24 characters maximum) Password (24 characters maximum)	No
	Delete	-	No
Certificate Settings: Register CA Certificate			
	Register	-	No
	Delete	-	No
	Display Asterisks For Confidential Info.	On*, Off	Yes
	Display Status Before Authentication	On*, Off	No
	Display Log	On*, Off	No
		On • Obtain Job Log From Management Software: Permit, Do Not Allow*	No
	Audit Log Retrieval	On, Off*	No
	Format Encryption Method to FIPS 140-2	On, Off*	No

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## License/Other

\* Default Settings

\*1 Indicates items that appear only when the appropriate optional equipment is attached.

Item	Setting Description	Device Information Delivery Available
Register License	24 characters maximum	No
MEAP Settings		
Print System Information	Print	No
Use SSL	On, Off*	No
Remote UI	On*, Off	Yes
Use SSL	On, Off*	No
Use Reference Print	On, Off*	Yes
Delete Message Board Contents	Clear	No
Remote Operation Settings	On, Off* On: Password (Max 8 characters)	No
Register/Update Software		
Install Applications/Options	License Access Number (4 digits at a time.)	No
Software Management Settings		
Select Log Display	Display Update Logs, Display System Logs	No
Test Communication	-	No

T-10-23

## Data Management

\* Default Settings

\*1 Indicates items that appear only when the appropriate optional equipment is attached.

Item	Setting Description	Device Information Delivery Available
HDD Data Complete Deletion*		
Timing of Deletion	During Job*, After Job	No
Deletion Mode	Overwrite Once With 0 (Null) Data*, Overwrite 1 Time With Random Data, Overwrite 3 Times With Random Data, DOD Standard	No
Initialize All Data/Settings	License cannot be reused	No
TPM Settings	Backup TPM Key, Restore TPM Key	No

T-10-24

## Backup Data

## ■ Replace

Data	Location	Replace					
		Replace the HDD / All format	Replace the Main PCB 1	Replace the Main PCB 2	DC Cont-roller PCB	Reader Cont-roller PCB	Replace the TPM PCB
Address List	HDD	Clear	-	-	-	-	-
Forwarding Settings	HDD/SRAM(MCON2)	Clear	-	Clear	-	-	-
Settings / Registration							
Preferences	SRAM(MCON2)	-	-	Clear	-	-	-
Adjustment/Maintenance	SRAM(MCON2)	-	-	Clear	-	-	-
Function Settings	SRAM(MCON2/DCON)	-	-	Clear	Clear	-	-
Set Destination	SRAM(MCON2)	-	-	Clear	-	-	-
Management Settings	SRAM(MCON2)	-	-	Clear	-	-	-
Printer Settings	SRAM(MCON2)	-	-	Clear	-	-	-
Set Paper Information	HDD	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	-	-	-	-	-
Default Settings	HDD	Clear	-	-	-	-	-
Shortcut settings for "Options"	HDD	Clear	-	-	-	-	-
Previous Settings	HDD	Clear	-	-	-	-	-
Setting items for Quick Menu							
Button Size information	HDD	Clear	-	-	-	-	-
Wallpaper Setting	HDD	Clear	-	-	-	-	-
Button information in Quick Menu	HDD	Clear	-	-	-	-	-
Restrict Quick Menu	HDD	Clear	-	-	-	-	-
Setting items for Main Menu							
Button settings in Main Menu	HDD	Clear	-	-	-	-	-
Button settings on the top of the screen	HDD	Clear	-	-	-	-	-
Wallpaper Setting for Main Menu	HDD	Clear	-	-	-	-	-
Other settings for Main Menu	HDD	Clear	-	-	-	-	-
Box settings							
User Box specification settings (Register Box Name, Password, Time until Document Auto Erase, Print uponstoring from the printer driver)	HDD	Clear	-	-	-	-	-
Image data of User Box, Confidential Fax Box, and System Box Image Data	HDD	Clear	-	-	-	-	-
Data File of Advanced Box	HDD	Clear	-	-	-	-	-
Advanced box settings							
Advanced box account	HDD	Clear	-	-	-	-	-
Network place setting information	HDD	Clear	-	-	-	-	-
Box settings							
Image forms stored in the Form Composition mode	HDD	Clear	-	-	-	-	-
Web browser settings							
Web Access setting information	HDD	Clear	-	-	-	-	-
MEAP settings							
MEAP application	HDD	Clear	-	-	-	-	-
License files for MEAP applications	HDD	Clear	-	-	-	-	-
User authentication information registered in the Local Device Authentication user authentication system of SSO-H (Single Sign-On H)	HDD	Clear	-	-	-	-	-
Data saved using MEAP applications	HDD	Clear	-	-	-	-	-
SMS (Service Management Service) password of MEAP	HDD	Clear	-	-	-	-	-
Universal data settings							
Unsent documents (documents waiting to be sent with the Delayed Send mode)	SRAM(MCON2) HDD	Clear	-	-	-	-	-
Job logs	HDD	Clear	-	-	-	-	-
Key Pair and Server Certificate in Certificate Settings in TCP/IP Settings in Network Set-tings in System Settings (from the Additional Functions screen)	HDD	Clear	-	-	-	-	-
Auto Adjust Gradation setting values	HDD(SRAM (MCON2))	-	-	Clear	-	-	-
PS font	HDD	Clear	-	-	-	-	-
Key information to be used for encryption when TPM is OFF	SRAM(MCON2)	Clear *21	-	Clear *22	-	-	-
Key and settings information to be used for encryption when TPM is ON	SRAM(MCON2) HDD TPM Board	Clear *24	-	Clear *25	-	-	Clear
Service Mode							
Service mode setting values (MN-CON)	SRAM(MCON2)	-	-	Clear	-	-	-
Service mode setting values (DC-CON)	SRAM (DC-CON)	-	-	-	Clear	-	-
Service mode setting values (R-CON)	EEPROM (R-CON)	-	-	-	-	Clear	-

Data	Location	Replace					
		Replace the HDD / All format	Replace the Main PCB 1	Replace the Main PCB 2	DC Cont-roller PCB	Reader Cont-roller PCB	Replace the TPM PCB
Audit Log	HDD	Clear	-	-	-	-	-

*21	If the backup key information in the HDD is missing, it is automatically recovered from the key in the SRAM (MCON2). <span style="float: right;">T-10-25</span>
*22	If the key information in the SRAM (MCON2) is missing, it is automatically recovered from the backup key in the HDD.
*21,22	When You change Main PCB 2 and HDD at the same time, the automatic restoration of the key information is not performed.
*24	An error code is displayed when the TPM setting is "ON". After all data/settings are initialized after restart, select "ON" for the TPM setting to enable the TPM setting.
*25	If the TPM key information in the SRAM of the HDD or the Main Controller PCB 2 becomes missing, the key information in the SRAM is automatically recovered from the backup of the common key in the HDD. Then the internal state of TPM setting changes to "ON". Note that the TPM setting needs to be manually changed to "ON" since "OFF" is displayed for UI.

T-10-26

## Delete User function

Data	Location	Delete					
		User function					
		Initialize All Data/Settings	Settings/Registration : Function Settings			Advanced Box Settings >	
		Copy > Change Default Settings > Initialize	Send > Common Settings > Change Default Settings > Initialize	Send > Fax Settings > Change Default Settings > Initialize	Printer Settings > Custom Settings > Initialize	Delete Personal/Shared Space > Delete All	
Address List	HDD	Clear	-	-	-	-	-
Forwarding Settings	HDD/SRAM(MCON2)	Clear	-	-	-	-	-
Settings / Registration							
Preferences	SRAM(MCON2)	Clear	-	-	-	-	-
Adjustment/Maintenance	SRAM(MCON2)	Clear	-	-	-	-	-
Function Settings	SRAM(MCON2/DCON)	Clear	Clear	Clear	Clear	-	-
Set Destination	SRAM(MCON2)	Clear	-	-	-	-	-
Management Settings	SRAM(MCON2)	Clear	-	-	-	-	-
Printer Settings	SRAM(MCON2)	Clear	-	-	-	Clear	-
Set Paper Information	HDD	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	-	-	-	-	-
Default Settings	HDD	Clear	-	-	-	-	-
Shortcut settings for "Options"	HDD	Clear	-	-	-	-	-
Previous Settings	HDD	Clear	-	-	-	-	-
Setting items for Quick Menu							
Button Size information	HDD	Clear	-	-	-	-	-
Wallpaper Setting	HDD	Clear	-	-	-	-	-
Button information in Quick Menu	HDD	Clear	-	-	-	-	-
Restrict Quick Menu	HDD	Clear	-	-	-	-	-
Setting items for Main Menu							
Button settings in Main Menu	HDD	Clear	-	-	-	-	-
Button settings on the top of the screen	HDD	Clear	-	-	-	-	-
Wallpaper Setting for Main Menu	HDD	Clear	-	-	-	-	-
Other settings for Main Menu	HDD	Clear	-	-	-	-	-
Box settings							
User Box specification settings (Register Box Name, Password, Time until Document Auto Erase, Print uponstoring from the printer driver)	HDD	Clear	-	-	-	-	-
Image data of User Box, Confidential Fax Box, and System Box Image Data	HDD	Clear	-	-	-	-	-
Data File of Advanced Box	HDD	Clear	-	-	-	-	Clear
Advanced box settings							
Advanced box account	HDD	Clear	-	-	-	-	-
Network place setting information	HDD	Clear	-	-	-	-	-
Box settings							
Image forms stored in the Form Composition mode	HDD	Clear	-	-	-	-	-
Web browser settings							
Web Access setting information	HDD	Clear	-	-	-	-	-
MEAP settings							
MEAP application	HDD	Clear	-	-	-	-	-
License files for MEAP applications	HDD	Clear	-	-	-	-	-
User authentication information registered in the Local Device Authentication user authentication system of SSO-H (Single Sign-On H)	HDD	Clear	-	-	-	-	-
Data saved using MEAP applications	HDD	Clear	-	-	-	-	-
SMS (Service Management Service) password of MEAP	HDD	Clear *20	-	-	-	-	-
Universal data settings							
Unsent documents (documents waiting to be sent with the Delayed Send mode)	SRAM(MCON2) HDD	Clear	-	-	-	-	-
Job logs	HDD	Clear	-	-	-	-	-
Key Pair and Server Certificate in Certificate Settings in TCP/IP Settings in Network Set-tings in System Settings (from the Additional Functions screen)	HDD	Clear	-	-	-	-	-
Auto Adjust Gradation setting values	HDD(SRAM (MCON2))	Clear	-	-	-	-	-
PS font	HDD	Clear	-	-	-	-	-
Key information to be used for encryption when TPM is OFF	SRAM(MCON2)	Clear	-	-	-	-	-
Key and settings information to be used for encryption when TPM is ON	SRAM(MCON2) HDD TPM Board	Clear *26	-	-	-	-	-
Service Mode							
Service mode setting values (MN-CON)	SRAM(MCON2)	-	-	-	-	-	-
Service mode setting values (DC-CON)	SRAM (DC-CON)	-	-	-	-	-	-
Service mode setting values (R-CON)	EEPROM (R-CON)	-	-	-	-	-	-
Audit Log	HDD	Clear	-	-	-	-	-



*20	Since the password is TPM-encrypted and saved, password backed up after all data/settings have been initialized cannot be restored. When all data/settings have been initialized, initialize the password using a switch license for password initialization. [Reference] Since TPM encryption key is updated when all data/settings are initialized, the password which was backed up cannot be read.
*26	TPM settings becomes "OFF" when all data/settings are initialized.

## Delete Service function

Data	Location	Delete					
		Service function					
		Function > CLEAR > MN-CONT	Function > CLEAR > MMI	Function > CLEAR > DC-CON	Function > CLEAR > R-CON	Function > CLEAR > ADRS-BK	Function > CLEAR > JV-CASHE
Address List	HDD	-	-	-	-	Clear	-
Forwarding Settings	HDD/SRAM(MCON2)	Clear	Clear	-	-	-	-
Settings / Registration							
Preferences	SRAM(MCON2)	Clear	Clear	Clear *2	-	-	-
Adjustment/Maintenance	SRAM(MCON2)	Clear	Clear	-	-	-	-
Function Settings	SRAM(MCON2/DCON)	Clear	Clear	Clear *4	Clear *5	-	-
Set Destination	SRAM(MCON2)	Clear	Clear	-	-	-	-
Management Settings	SRAM(MCON2)	Clear	Clear	-	-	-	-
Printer Settings	SRAM(MCON2)	Clear	Clear	-	-	-	-
Set Paper Information	HDD	-	-	-	-	-	-
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
Default Settings	HDD	-	-	-	-	-	Clear
Shortcut settings for "Options"	HDD	-	-	-	-	-	Clear
Previous Settings	HDD	-	-	-	-	-	Clear
Setting items for Quick Menu							
Button Size information	HDD	-	-	-	-	-	Clear
Wallpaper Setting	HDD	-	-	-	-	-	Clear
Button information in Quick Menu	HDD	-	-	-	-	-	Clear
Restrict Quick Menu	HDD	-	-	-	-	-	Clear
Setting items for Main Menu							
Button settings in Main Menu	HDD	-	Clear	-	-	-	-
Button settings on the top of the screen	HDD	-	Clear	-	-	-	-
Wallpaper Setting for Main Menu	HDD	-	Clear	-	-	-	-
Other settings for Main Menu	HDD	-	Clear	-	-	-	-
Box settings							
User Box specification settings (Register Box Name, Password, Time until Document Auto Erase, Print uponstoring from the printer driver)	HDD	-	-	-	-	-	-
Image data of User Box, Confidential Fax Box, and System Box Image Data	HDD	- *29	-	-	-	-	-
Data File of Advanced Box	HDD	-	-	-	-	-	-
Advanced box settings							
Advanced box account	HDD	-	-	-	-	-	Clear
Network place setting information	HDD	-	-	-	-	-	-
Box settings							
Image forms stored in the Form Composition mode	HDD	-	-	-	-	-	-
Web browser settings							
Web Access setting information	HDD	-	-	-	-	-	-
MEAP settings							
MEAP application	HDD	-	-	-	-	-	Clear
License files for MEAP applications	HDD	-	-	-	-	-	Clear
User authentication information registered in the Local Device Authentication user authentication system of SSO-H (Single Sign-On H)	HDD	-	-	-	-	-	Clear
Data saved using MEAP applications	HDD	-	-	-	-	-	Clear
SMS (Service Management Service) password of MEAP	HDD	-	-	-	-	-	Clear
Universal data settings							
Unsent documents (documents waiting to be sent with the Delayed Send mode)	SRAM(MCON2) HDD	Clear	Clear	-	-	-	-
Job logs	HDD	-	-	-	-	-	-
Key Pair and Server Certificate in Certificate Settings in TCP/IP Settings in Network Set-tings in System Settings (from the Additional Functions screen)	HDD	-	-	-	-	-	-
Auto Adjust Gradation setting values	HDD(SRAM (MCON2))	Clear	-	-	-	-	-
PS font	HDD	-	-	-	-	-	-
Key information to be used for encryption when TPM is OFF	SRAM(MCON2)	Clear *22	-	-	Clear *22	-	-
Key and settings information to be used for encryption when TPM is ON	SRAM(MCON2) HDD TPM Board	Clear *25	-	-	Clear *25	-	-
Service Mode							
Service mode setting values (MN-CON)	SRAM(MCON2)	Clear	Clear	-	-	-	-
Service mode setting values (DC-CON)	SRAM (DC-CON)	-	-	Clear	-	-	-
Service mode setting values (R-CON)	EEPROM (R-CON)	-	-	-	Clear	-	-
Audit Log	HDD	-	-	-	-	-	Clear

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*2	The following items are Deleted. Preferences > Paper Settings > Register Envelope Drawer Preferences > Paper Settings > B5/EXEC Paper Selection Preferences > Paper Settings > A5R/STMTR Paper Selection
*4	The following items are Deleted. Function Settings > Common > Paper Feed Settings > Paper Drawer Auto Selection On/Off Function Settings > Common > Paper Feed Settings > Feed Method Switch
*5	The following items are Deleted. Function Settings > Common > Scan Settings > Scanner Noise Settings Function Settings > Common > Scan Settings > Timing to Raise Feeder Tray Function Settings > Common > Scan Settings > Streak Prevention
*22	If the key information in the SRAM (MCON2) is missing, it is automatically recovered from the backup key in the HDD.
*21,22	When You change Main PCB 2 and HDD at the same time, the automatic restoration of the key information is not performed.
*25	If the TPM key information in the SRAM of the HDD or the Main Controller PCB 2 becomes missing, the key information in the SRAM is automatically recovered from the backup of the common key in the HDD. Then the internal state of TPM setting changes to "ON". Note that the TPM setting needs to be manually changed to "ON" since "OFF" is displayed for UI.
*29	Because clearing MN-CONT changes the memory reception setting to "OFF", the image data saved in the Memory RX Inbox is automatically printed after restart. After a print, it is deleted from a system box.

## Backup by User

Data	Location	Backup by User		
		Yes/No	Method	Location to be stored
Address List	HDD	Yes	Remote UI (block of Export/Import)	PC
Forwarding Settings	HDD/SRAM(MCON2)	Yes	Remote UI (block of Export/Import)	PC
Settings / Registration				
Preferences	SRAM(MCON2)	Yes *3	Remote UI (block of Export/Import)	PC
Adjustment/Maintenance	SRAM(MCON2)	Yes	Remote UI (block of Export/Import)	PC
Function Settings	SRAM(MCON2/DCON)	Yes *6	Remote UI (block of Export/Import)	PC
Set Destination	SRAM(MCON2)	Yes	Remote UI (block of Export/Import)	PC
Management Settings	SRAM(MCON2)	Yes *7	Remote UI (block of Export/Import)	PC
Printer Settings	SRAM(MCON2)	Yes	Remote UI (Export/Import)	PC
Set Paper Information	HDD	Yes	Remote UI (block of Export/Import)	PC
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 *8	Remote UI (block of Export/Import)	PC
Default Settings	HDD	No	-	-
Shortcut settings for "Options"	HDD	No	-	-
Previous Settings	HDD	No	-	-
Setting items for Quick Menu				
Button Size information	HDD	Yes	Remote UI (block of Export/Import)	PC
Wallpaper Setting	HDD	Yes	Remote UI (block of Export/Import)	PC
Button information in Quick Menu	HDD	Yes	Remote UI (block of Export/Import)	PC
Restrict Quick Menu	HDD	Yes	Remote UI (block of Export/Import)	PC
Setting items for Main Menu				
Button settings in Main Menu	HDD	Yes	Remote UI (block of Export/Import)	-
Button settings on the top of the screen	HDD	Yes	Remote UI (block of Export/Import)	-
Wallpaper Setting for Main Menu	HDD	Yes	Remote UI (block of Export/Import)	-
Other settings for Main Menu	HDD	Yes	Remote UI (block of Export/Import)	-
Box settings				
User Box specification settings (Register Box Name, Password, Time until Document Auto Erase, Print uponstoring from the printer driver)	HDD	Yes *13	Remote UI (Bacup/Restore)	PC/USB-HDD
Image data of User Box, Confidential Fax Box, and System Box Image Data	HDD	Yes *13	Remote UI (Bacup/Restore)	PC/USB-HDD
Data File of Advanced Box	HDD	Yes *13 *16	Remote UI (Bacup/Restore)	PC/USB-HDD *15
Advanced box settings				
Advanced box account	HDD	Yes *16	Remote UI (block of Export/Import)	PC
Network place setting information	HDD	Yes	Remote UI (block of Export/Import)	PC
Box settings				
Image forms stored in the Form Composition mode	HDD	Yes *13	Remote UI (block of Export/Import)	PC
Web browser settings				
Web Access setting information	HDD	Yes *18	Remote UI (block of Export/Import)	PC
MEAP settings				
MEAP application	HDD	No	-	-
License files for MEAP applications	HDD	Yes	SMS	PC
User authentication information registered in the Local Device Authentication user authentication system of SSO-H (Single Sign-On H)	HDD	Yes	SSO-H	PC
Data saved using MEAP applications	HDD	Yes *19	-	-
SMS (Service Management Service) password of MEAP	HDD	No	-	-
Universal data settings				
Unsent documents (documents waiting to be sent with the Delayed Send mode)	SRAM(MCON2) HDD	No	-	-
Job logs	HDD	No	-	-
Key Pair and Server Certificate in Certificate Settings in TCP/IP Settings in Network Set-tings in System Settings (from the Additional Functions screen)	HDD	No	-	-
Auto Adjust Gradation setting values	HDD(SRAM (MCON2))	No	-	-
PS font	HDD	No	-	-
Key information to be used for encryption when TPM is OFF	SRAM(MCON2)	No *23	-	-
Key and settings information to be used for encryption when TPM is ON	SRAM(MCON2) HDD TPM Board	Yes *27	Settings/RegistrationManagement Settings > Data Managemnet > TPM Settings	USB memory
Service Mode				
Service mode setting values (MN-CON)	SRAM(MCON2)	Yes	Remote UI (block of Export/Import) COPIER>OPTION>USER>SMD-EXPT > ON Only *28	PC
Service mode setting values (DC-CON)	SRAM (DC-CON)	Yes	-	PC
Service mode setting values (R-CON)	EEPROM (R-CON)	Yes	-	PC
Audit Log	HDD	No	-	-

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*3	An exclusion item: Preferences > Timer/Energy Settings > [Adjust Time]/[Date/Time Settings]
*6	The following data are impossible of backup Function Settings > Common > Print Settings > Register Form Function Settings > Receive/Forward > Common Settings > Set Fax/I-Fax Inbox
*7	The following data are impossible of backup Management Settings > User Management > Department ID Management > Page Totals
*8	Backup is available only "Favorite Settings" in "Scan to Send"
*13	Login System Administrator and do backup.
*15	When the optional high-capacity HDD is installed, backup can be done only to USB-HDD.
*16	When ON is selected for the authentication management of Advanced Box, Advanced Box account needs to be exported in advance and imported at restoration.
*18	Only "favorites of web browser" can be backed improves when You perform individual export of RUI.
*19	Only when MEAP applications have a backup function
*23	No means is available to back up externally.
*27	Backup only against TPM PCB failure is possible. In addition, restoration cannot be done to other machines whose TPM setting is set to "ON".
*28	Backup is possible in SramImg, DSRAMBUP, RSRAMBUP. When You set it in COPIER>OPTION>USER>SMD-EXPT>ON, a backup/restore is possible in Service Mode Settings from the Remote UI. There is a backup button on the TOP page of the service mode. HDD and USB memory can back up Service Mode Settings by backup button. The contents of Settings/Registration become the object of the collective backup. The exclusion item refers to "a list of DCM backup exclusion items".

## Backup by Service

Data	Location	Backup by Service			
		Yes/No		Method	Location to be stored
		Back-up	Re-store		
Address List	HDD	No	Yes *1	USB memory	-
Forwarding Settings	HDD/SRAM(MCON2)	No	Yes *1	USB memory	-
Settings / Registration					
Preferences	SRAM(MCON2)	Yes	Yes *1	SST, Download Menu(HDD/USB)	PC
Adjustment/Maintenance	SRAM(MCON2)	Yes	Yes *1		PC
Function Settings	SRAM(MCON2/DCON)	Yes	Yes *1		PC
Set Destination	SRAM(MCON2)	Yes	Yes *1		PC
Management Settings	SRAM(MCON2)	Yes	Yes *1		PC
Printer Settings	SRAM(MCON2)	Yes	Yes *1		PC
Set Paper Information	HDD	No	No	-	-
Setting items for each menu in Main Menu (Copy, Scan and Send, Fax, Scan and Store, Access Stored Files, Fax/I-Fax Inbox)					
Favorite Settings	HDD	Yes	Yes *9	SST(Meapback)	PC
Default Settings	HDD	Yes	Yes *9 *11	SST(Meapback)	PC
Shortcut settings for "Options"	HDD	Yes	Yes *9	SST(Meapback)	PC
Previous Settings	HDD	Yes	Yes *9	SST(Meapback)	PC
Setting items for Quick Menu					
Button Size information	HDD	Yes	Yes *1 *9	SST(Meapback)	PC
Wallpaper Setting	HDD	Yes	Yes *1 *9	SST(Meapback)	PC
Button information in Quick Menu	HDD	Yes	Yes *1 *9	SST(Meapback)	PC
Restrict Quick Menu	HDD	Yes	Yes *1 *9	SST(Meapback)	PC
Setting items for Main Menu					
Button settings in Main Menu	HDD	Yes	Yes *1	USB memory	-
Button settings on the top of the screen	HDD	Yes	Yes *1	USB memory	-
Wallpaper Setting for Main Menu	HDD	Yes	Yes *1	USB memory	-
Other settings for Main Menu	HDD	Yes	Yes *1	USB memory	-
Box settings					
User Box specification settings (Register Box Name, Password, Time until Document Auto Erase, Print uponstoring from the printer driver)	HDD	No	Yes *1	USB memory	-
Image data of User Box, Confidential Fax Box, and System Box Image Data	HDD	No	Yes *1	USB memory	-
Data File of Advanced Box	HDD	No	Yes	USB memory	-
Advanced box settings					
Advanced box account	HDD	Yes	Yes *1 *9	SST(Meapback),USB memory	PC
Network place setting information	HDD	No	Yes *1	USB memory	-
Box settings					
Image forms stored in the Form Composition mode	HDD	No	No	-	-
Web browser settings					
Web Access setting information	HDD	Yes	Yes *1	SST, Download Menu(HDD/USB)	PC
MEAP settings					
MEAP application	HDD	Yes	Yes	SST(Meapback)	PC
License files for MEAP applications	HDD	Yes	Yes	SST(Meapback)	PC
User authentication information registered in the Local Device Authentication user authentication system of SSO-H (Single Sign-On H)	HDD	Yes	Yes	SST(Meapback)	PC
Data saved using MEAP applications	HDD	Yes	Yes	SST(Meapback)	PC
SMS (Service Management Service) password of MEAP	HDD	Yes	Yes	SST(Meapback)	PC
Universal data settings					
Unsent documents (documents waiting to be sent with the Delayed Send mode)	SRAM(MCON2) HDD	No	No	-	-
Job logs	HDD	No	No	-	-
Key Pair and Server Certificate in Certificate Settings in TCP/IP Settings in Network Set-tings in System Settings (from the Additional Functions screen)	HDD	No	No	-	-
Auto Adjust Gradation setting values	HDD(SRAM (MCON2))	Yes	Yes	SST, Download Menu(HDD/USB)	PC
PS font	HDD	No	No	-	-
Key information to be used for encryption when TPM is OFF	SRAM(MCON2)	No	No	-	-
Key and settings information to be used for encryption when TPM is ON	SRAM(MCON2) HDD TPM Board	No	No	-	-
Service Mode					
Service mode setting values (MN-CON)	SRAM(MCON2)	Yes	Yes	SST, Download Menu (HDD/USB) *29	HDD/ USB
Service mode setting values (DC-CON)	SRAM (DC-CON)	Yes	Yes	COPIER>FUNCTION>SYSTEM>DSRAMBUP	HDD
Service mode setting values (R-CON)	EEPROM (R-CON)	Yes	Yes	COPIER>FUNCTION>SYSTEM>RSRAMBUP	HDD
Audit Log	HDD	Yes	Yes	SST(Meapback)	PC

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*1	If there are the backup data which exported in USB memory, Restore is possible in Download Menu (USB).
*9	If start-up in download mode in safe mode is available in the event of an HDD failure, it is assumed that MEAP applications can be backed up using SST in some cases. In that case, the data can be recovered with the information of the MEAP applications maintained by checking that the machine starts normally after installation of the system after replacement of the HDD, starting the machine in download mode in safe mode, and restoring the backup data.
*11	If there are the backup data which exported in USB memory except a history, Restore is possible in Download Menu (USB).



DCM backup exclusion items

DCM backup exclusion items				
Preferences	Paper Settings	Paper Type Management Settings	Custom Type > Details/Edit > Change	
		Register Envelope Drawer		
		Register Multi-Purpose Tray Defaults		
	Display Settings	Erasing the Remaining Toner Error Message		
	Timer/Energy Settings	Current Time Adjustment		
	Network	Output Report		
		TCP/IP Settings	IP Address Settings (IPv4) > PING Command	
			IP Address Settings (IPv6) > PING Command	
			IPP Print Settings	
			SSL Settings	Confirm Dept. ID PIN
	IPSec settings			
	IEEE802.1X Settings			
	Firewall Settings	IP Address Block Log		
Accessibility	Voice Navigation Settings	Tune Microphone		
Adjustment/ Maintenance	Adjust Image Quality	Auto Adjust Gradation		
		Conect Shading		
		Auto Correct Color Mismatch		
	Adjust Action	Saddle Stitcher Staple Repositioning		
	Change Fold/Stitch Position			
Maintenance				
Function Settings	Common	Paper Feed Settings	Paper Drawer Auto Selection On/Off	
		Print Settings	Local Print Default Settings	
			Form for Superimpose Image	
			Secure Watermark Settings > Adust Background/Character Contrast	
	Printer			
	Send	Output Report	TX/RX User Data List	
		E-Mail/Fax Settings	Fax User Data List	
	Receive/Forward	Communication Settings		
	Store/Access Files	Output Report	Forwarding Settings	
		Common Settings	Settings for All Mail Boxes	
Mail Box Settings		Delete All Personal Spaces		
	Advanced Box Settings			
	Network Settings			
Set Destination	Address Lists			
	Register Destinations			
	Register LDAP Server			
	Auto Serarch when using LDAP Server			
Management Settings	User Management	Department ID Management	Page Totals	
			Print List	
	Device Management	Device Information Delivery Settings	Manual Delivery	
			Resor Data	
			Communication Log	
		Register Destination > Auto Serch/Registor		
		Restrict Receiving Device Information		
	Limit Function when Security key is off			
	Certificate Settings			
	License/Other	Register License		
		MEAP Settings	Print System Information	
			Remote UI On/Off	
	Data Management	Back Up		
Restore		Delete Massage Board Contents		
Back Up/Restore Log				
Initialize All Data/Settings				
	TPM Settings			

## Detail of HDD partition

CHK-TYPE	CHK-TYPE Group	Partition name	Description	HDD Format	
				HD-CLEAR	Using SST or USB memory
1	Four same time	FSTDEV	Image data storage area (Box etc)	enable	Entering SST menu or USB menu • Select "ALL" All partition format same time. • Select "BOOTDEV" Only BOOTDEV is erased.
2		IMG-MNG	Management data of image		
3		FSTCDEV	Image data storage area (for Job archive system)		
4		THUMDEV	Thumbnail		
5	One	APL_GEN	Storage area of universal data (Note: For details, see the following list.)	enable	
6	Three same time	TMP_GEN	Storage area of universal data (temporary file)	enable	
7		TMP_FAX	FAX (temporary file)		
8		TMP_PSS	PSS (temporary file)		
9	One	PDLDEV	PDL-related file storage area (font, registration form, color correction information file for ICCProfile-PDL function)	Enabled	
10	One	BOOTDEV	Firmware storage area (Bootable/MEAP/key/certificate/PDF dictionary/RUI contents/voice dictionary (ICC profile. PS test data.))	Disabled	
11	One	APL_MEAP	MEAP	Enabled	
12	One	APL_SEND	Address book, Setting for Forwarding	Disabled	
13	One	APL_KEEP	MEAP stored data	Disabled	
14	One	APL_LOG	System log storage area	Enabled	
15	One	CRBDEV	Advanced Box area	Enabled	
16	One	APL_CDS	Area for distribution server	Enabled	

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Selecting "CHK-TYPE1" means selecting four partitions.

## APL\_GEN Details of universal data

Category	Data
Settings / Registration	Preferences
	Adjustment/Maintenance
	Function Settings
	Set Destination
	Management Settings
	Printer Settings
	Paper Information Settings
Setting items for each menu in Main Menu	Favorite Settings
	Default Settings
	Shortcut settings for "Options"
	Previous Settings

Category	Data
Setting for Advance Box	User information of Advanced Box
	Registration information of Network Place
Setting for Web Access	Web Access Setting information
Setting for Universal Data	Unsent document (which is set timer transmission or reservation transmission)
	Job log information
	Key and server certificate which are registered in Management Settings>Device Settings>Certificate Setting
	Auto Adjust Gradation setting values
	PS font

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## Soft counter specifications

### Soft counter specifications

The numbers entered for software counters are classified as follows:

No.	Counter Details
000 to 099	Toner bottle
100 to 199	Total
200 to 299	Copy
300 to 399	Print
400 to 499	Copy and print
500 to 599	Scan
600 to 699	Box
700 to 799	Reception print
800 to 899	Report print
900 to 999	Transmission

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Meanings of symbols in tables

- L: Large size (larger than B4 size)
  - S: Small size (smaller than B4 size)
  - S: Small size (smaller than B4 size)
- It can be changed by the service mode (COPIER > OPTION > USER > B4\_L\_CNT) so that the paper larger than B4 size can be counted as large size paper.
- Copy: Local copy
  - Copy A: Local copy + box print
  - Print: PDL print + report print + box print
  - Print A: PDL print + report print
  - Scan: Black and white scan + color scan

No.	Counter Details
071	Toner bottle black
072	Toner bottle yellow
073	Toner bottle magenta
074	Toner bottle cyan
081	Toner bottle black + Remove the toner bottle black
082	Toner bottle yellow + Remove the toner bottle yellow
083	Toner bottle magenta + Remove the toner bottle magenta
084	Toner bottle cyan + Remove the toner bottle cyan
101	Total 1
102	Total 2
103	Total(large)
104	Total (small)
105	Total (full color2)
106	Total (full color2)
108	Total (black and white 1)
109	Total (black and white 2)
110	Total (mono color /large)
111	Total (mono color /small)
112	Total (black and white /large)
113	Total (black and white /small)
114	Total 1(double sided)
115	Total 2(double sided)
116	large (double sided)
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)
201	Copy (Total 1)
202	Copy (Total 2)
203	Copy (large)
204	Copy (small)
205	Copy A (Total 1)
206	Copy A (Total 2)
207	Copy A (large)
208	Copy A (small)
209	Local copy (Total 1)
210	Local copy (Total 2)

No.	Counter Details
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 )
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 )

No.	Counter Details
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)
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)

No.	Counter Details
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)
412	Copy + print (small)
413	Copy + print (2)
414	Copy + print (1)
415	Copy + print (mono color /large)

No.	Counter Details
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 )
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 )

No.	Counter Details
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)
727	Advanced Box Print (Total 1)
728	Advanced Box Print (Total 2)
729	Advanced Box Print(large)
730	Advanced Box Print(small)
731	Advanced Box Print (full color 1)
732	Advanced Box Print (full color 2)
733	Advanced Box Print(black and white 1)
734	Advanced Box Print(black and white 2)
735	Advanced Box Print(full color/large)
736	Advanced Box Print(full color/small)
737	Advanced Box Print(mono color /large)
738	Advanced Box Print(mono color /small)
739	Advanced Box Print(full color /large/double sided)

No.	Counter Details
740	Advanced Box Print(full color /small/double sided)
741	Advanced Box Print(black and white /large/double sided)
742	Advanced Box Print(black and white /small/double sided)
743	Network Print(Total 1)
744	Network Print(Total 2)
745	Network Print(large)
746	Network Print(small)
747	Network Print(full color 1)
748	Network Print(full color 2)
749	Network Print(black and white 1)
750	Network Print(black and white 2)
751	Network Print(full color/large)
752	Network Print(full color/small)
753	Network Print(mono color /large)
754	Network Print(black and white/small)
755	Network Print(full color /large/double sided)
756	Network Print(full color /small/double sided)
757	Network Print(black and white /large/double sided)
758	Network Print(black and white /small/double sided)
759	Mobile Print(Total 1)
760	Mobile Print(Total 2)
761	Mobile Print(large)
762	Mobile Print(small)
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 )

No.	Counter Details
815	Report print (black and white /large )
816	Report print (black and white /small )
821	Report print (full color /large /double sided )
822	Report print (full color /small /double sided )
825	Report print (black and white /large /double sided )
826	Report print (black and white /small /double sided )
915	Transmission scan total 2(color )
916	Transmission scan total 2(black and white)
917	Transmission scan total 3(color )
918	Transmission scan total 3(black and white)
921	Transmission scan total 5(color )
922	Transmission scan total 5(black and white)
929	Transmission scan total 6(color )
930	Transmission scan total 6(black and white)
937	Box scan (color )
938	Box scan (black and white)
939	Remote scan (color )
940	Remote scan (black and white)
945	Transmission scan / E-mail (color )
946	Transmission scan / E-mail (black and white)
959	Media Scan (Color)
960	Media Scan (black and white)
961	Application Scan(Total 1)
962	Application Black and white Scan(Total 1)
963	Application Color Scan(Total 1)
964	SuperBoxLocal Scan (Color)
965	SuperBoxLocal Scan(Black and white)

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## Removal

### Removal

#### Overview

- User data kept by the machine contains address books and inbox documents that users can recognize.
- By using the copy, print, or send function, there is also information left on the HDD of MFPs that is generally not recognizable but can be recovered as documents. (Refer to the illustration on the next page.)
- For security, the user mode is provided to delete data on SRAM and perform overwrite deletion to render user data on HDD unrecoverable.

#### User data delete

- To delete user data, execute Settings/Registration > System Management > Initialize All Data/Settings in user mode. Performing Initialize All Data/Settings returns user mode setting values to their factory defaults.
- Usually, one overwrite is enough. Note that increasing the number of overwrite increases the time required for the deletion operation.

#### Note:

- When you perform Initialize All Data/Settings, license and data of MEAP application are initialized to the state same as when the HDD is replaced. If MEAP application may be used by other users after the machine is removed, disable the MEAP application and uninstall it in advance.
- Performing Initialize All Data/Settings does not delete the license of the system option.
- It takes approx. 30 minutes to delete user data when the standard HDD is installed. (Estimated time)

#### Deletion of Service Mode Settings

The user mode setting values may have been changed at the user's request. In that case, the service mode setting values should be changed back to the default values before removing the machine.

#### Work Procedure

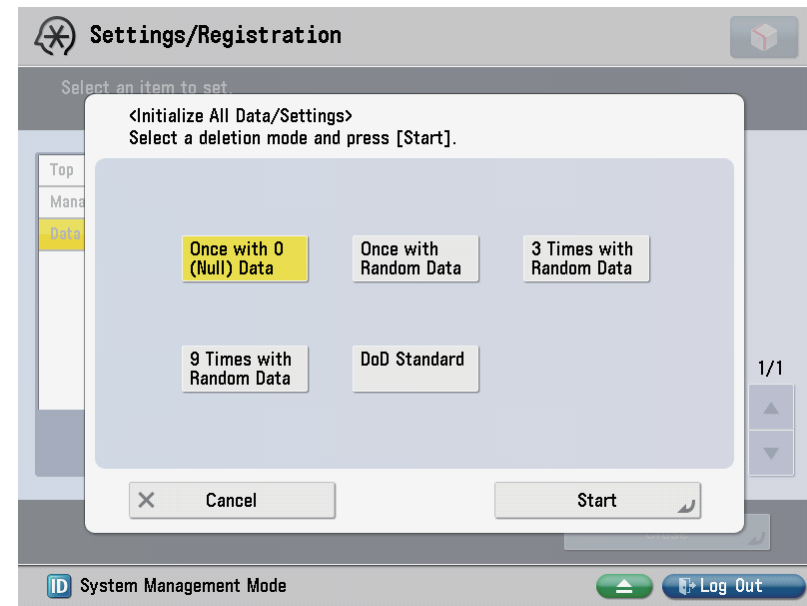
If the user uses MEAP applications, ask the user to uninstall the MEAP applications if necessary.

#### User data delete procedure

Settings/Registration > System Management > Initialize

Select a deletion mode

If the user has not given any instruction on which item in the deletion mode should be used, select the default "Once with 0 (Null) Data".



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#### Note:

- When all the data are initialized, the user data on the HDD and the user data on the SRAM of the Main Controller PCB 2 are deleted. For the items to be deleted, refer to the backup list.
- Performing "Initialize All Data" turns auto gradation adjustment values and TPM settings to OFF. Therefore, to enable normal operation the next time, the operation performed at installation is necessary.
- Performing Initialize All Data/Settings does not delete the license of the system option.

## Report output upon completion of Initialize All Data/Settings

With MN-CONT Ver. 5.29 and later, a report is output after executing Initialize All Data/Settings. Consider using this report to provide to user as a material to inform of work details when executing Initialize All Data/Settings upon user's request.

## Operation after Initialize All Data/Settings

The machine is started normally at restart after Initialize All Data/Settings without displaying the message (Turn OFF the main power supply on the right side of the machine) on the screen to prompt shutdown

The report is output after startup.

```

*****
*** System Information ***
*****

<< Initialize All Data/Settings Report >>

Serial Number          ZZZ99999
Device Name            iR-ADV 8205 (iA8205)

Overwrite Method for Deletion Mode  Once with Random Data (*1)

The following data stored in the device has been completely erased.

- Data stored in the temporary data area
- User generated data
- Settings under Settings/Registration (restored to factory defaults)

```

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- \*1 display following one.
- "Once with 0 (Null) Data"
  - "Once with Random Data"
  - "3 Times with Random Data"
  - "9 Times with Random Data"
  - "DoD Standard"

## Limitations

The language of the report is only English, and cannot be changed.

The report is output without fail (a function to select ON/OFF of report output is not provided).

There is no second output of report when the machine is turned ON without paper.

Only the output of this report remains in the job log.

## ● Deletion of Service Mode Setting Values

Service Mode Lev1 > Function> CLEAR > MN-CONT



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### Note:

When MN-CON clear is executed, the address book on the HDD is not deleted. As for the user data, initialize all the data.