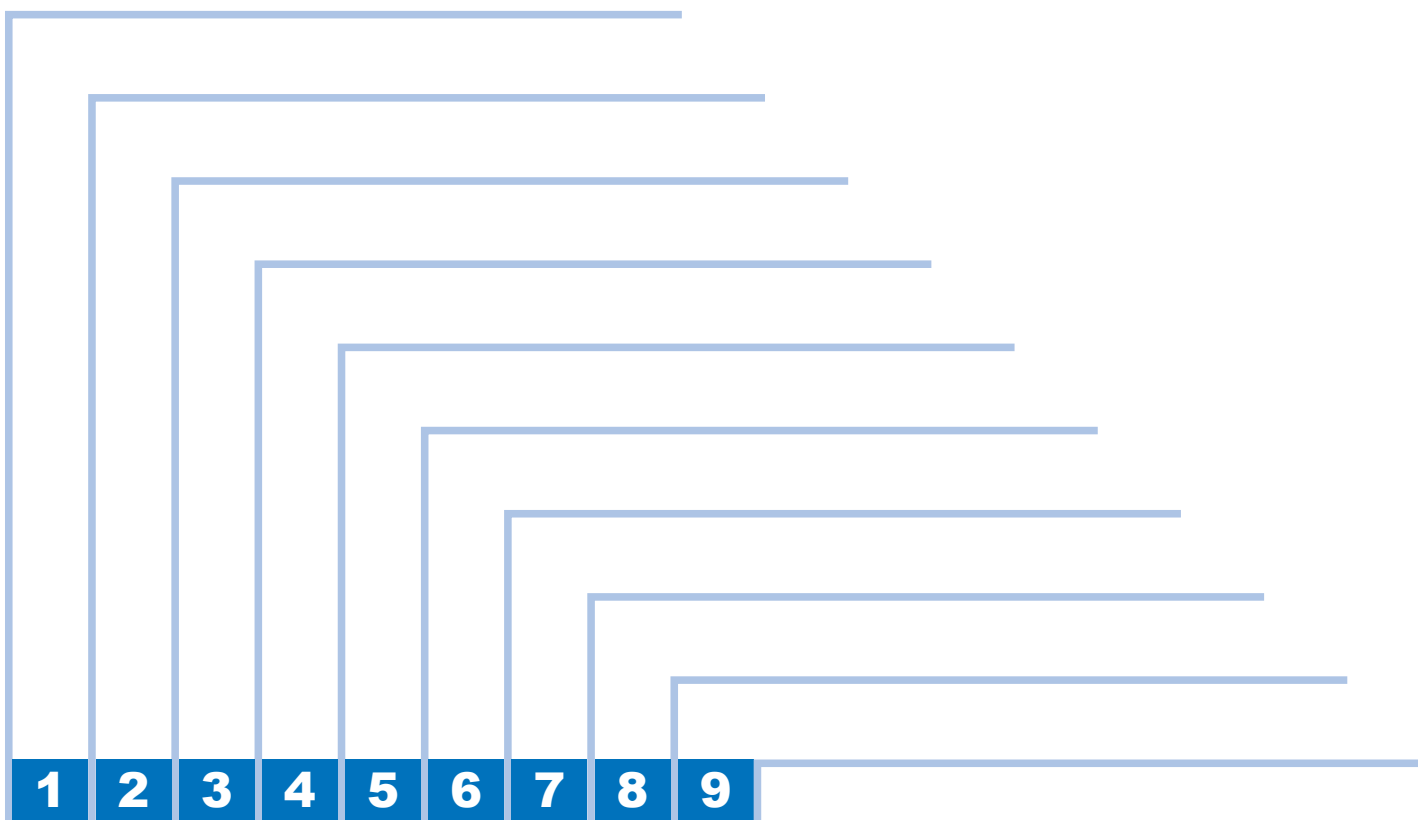


imageRUNNER ADVANCE C5051/C5045/C5035/C5030 Series

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.

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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

- CDRH Act
- Laser Safety
- Handling of Laser System
- Turn power switch ON
- Points to Note About Turning Off the Main Power Switch
- Safety of Toner
- Notes When Handling a Lithium Battery
- Notes Before it Works Serving



imageRUNNER ADVANCE
C5051/5045/5035/5030
Series

CDRH Act

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

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

MANUFACTURED:

THIS PRODUCT CONFORMS WITH DHHS RADIATION
PERFORMANCE STANDARD 21CFR CHAPTER 1
SUBCHAPTER J.

F-0-1



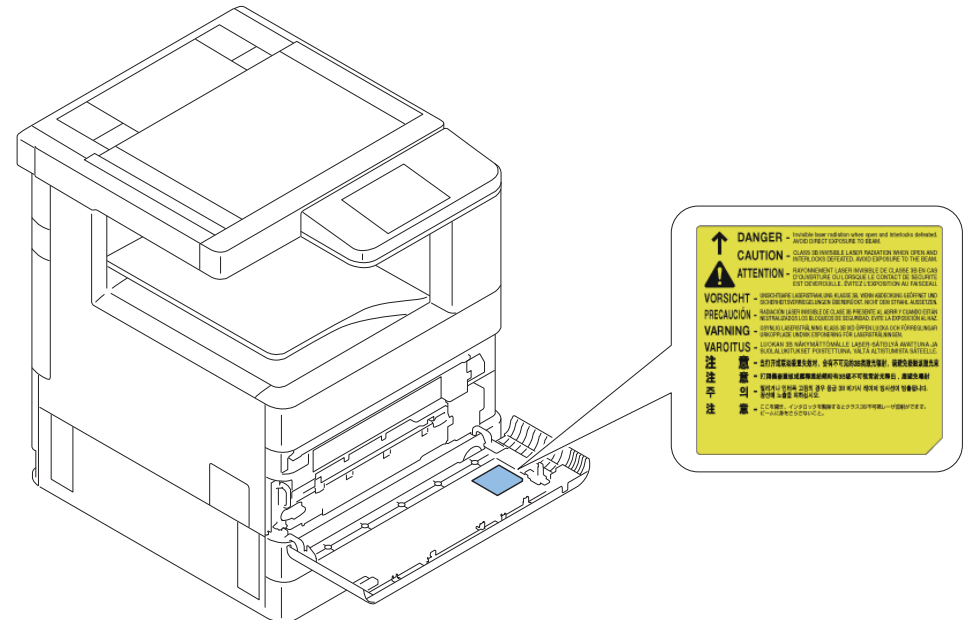
A different description may be used for a different product.

Laser Safety

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

Handling of Laser System

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



F-0-2

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).

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.

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.

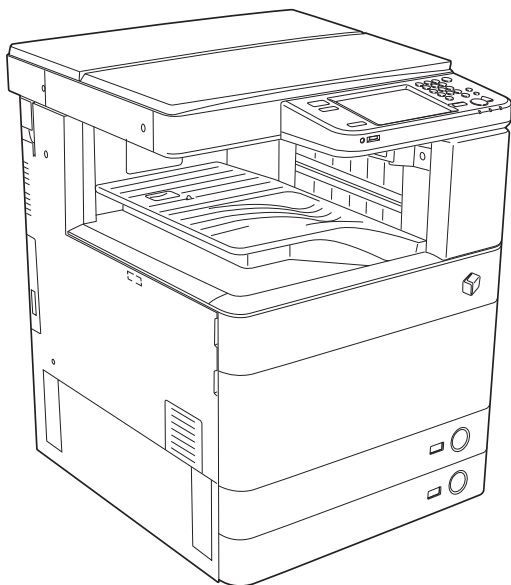


Product Overview

- Product Lineup
- Feature
- Specifications
- Name of Parts

Product Lineup

Host machine



F-1-1

Host machine configuration

Host machine configuration
Printer only

T-1-1

Model type

	C5051	C5045	C5035	C5030
Print Speed (BW / Color)	51 / 51ppm	45 / 45ppm	35 / 35ppm	30 / 30ppm
Positioning	High-speed / high-quality Middle-Office model Target machine : iRC5180 / 4580 / 3880Series		Cost-prioritized Standard-Office model Target machine : iRC3380 / 2880Series, iRC6800Series, iRC3100Series	

T-1-2

imageRUNNER ADVANCE $\frac{C50}{A} \frac{51}{B}$

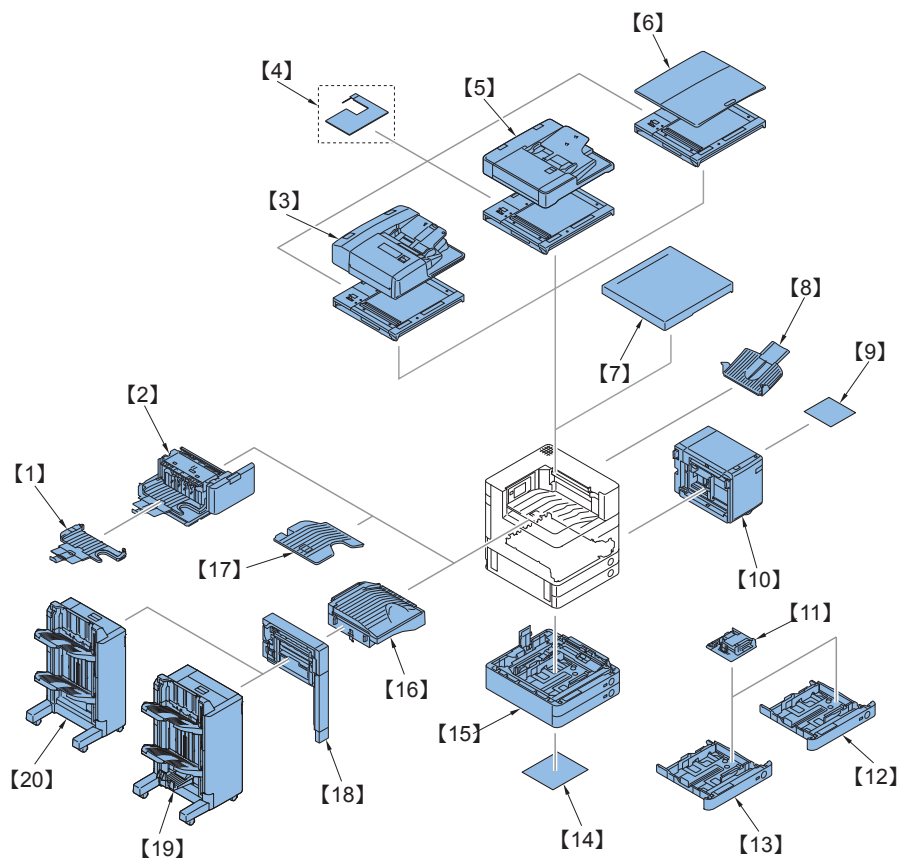
A: Product category (90: Production model, 50 : Office model)

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

F-1-2

Option

Pickup delivery / image reading options

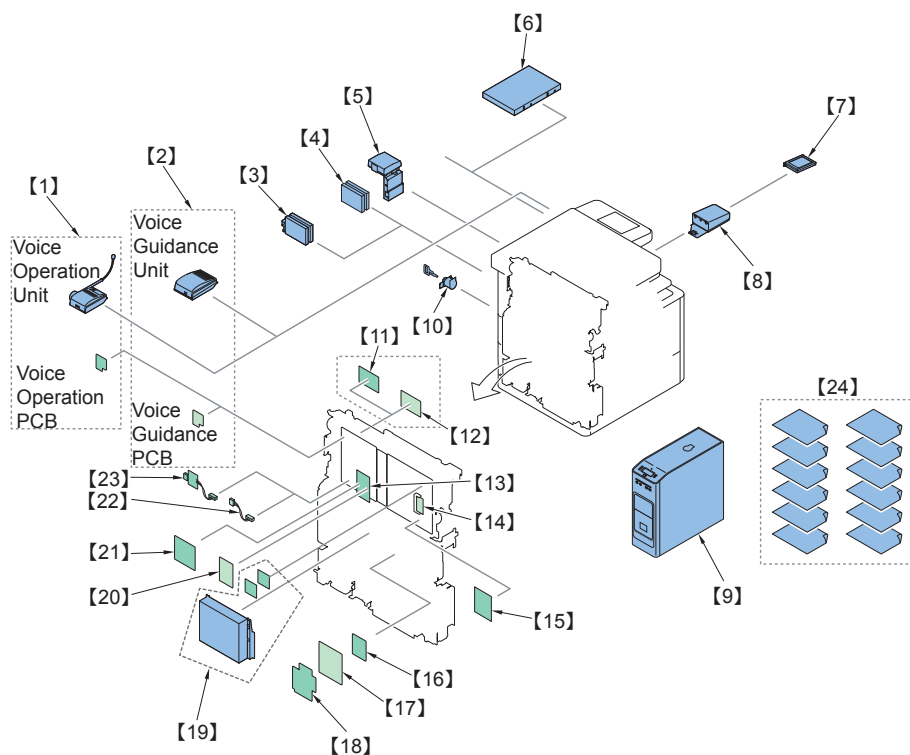


F-1-3

No.	Brand name	Remarks and condition
1	Inner Finisher Additional Tray-A1	-
2	Inner Finisher-A1	Built-in finisher
3	Duplex Color Image Reader Unit-B1	ADF-XD (1 Path Duplex Type DADF) + Reader
4	Reader Heater Kit-G1	For USA,CCI,CLA, this is provided as a service part.
5	Color Image Reader Unit-B1	ADF-SU (Reverse Duplex Type DADF) + Reader
6	Color Image Reader Unit-B2	Copyboard + Reader
7	Printer Cover-C1	-
8	Copy Tray-J1	-
9	Cassette Heater Unit-32	Deck Heater for Paper Deck Unit-B1.
10	Paper Deck Unit-B1	-
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-AD1
15	Cassette Feeding Unit-AD1	-
16	Buffer Pass Unit-G1	-
17	Inner 2Way Tray-F1	For host machine delivery additional tray
18	External 2 Hole Puncher-B1	External 2/3 Hole Puncher-B1(USA,CAN,CLA), External 2/4 Hole Puncher-B1(EUR,FRA,CA), External 4 Hole Puncher-B1(EUR)
19	Booklet Finisher-C1	Buffer Path Unit G1 is required
20	Staple Finisher-C1	Buffer Path Unit G1 is required

T-1-3

Function expanding option



F-1-4

No.	Brand name	Remarks and condition
1	Voice Operation Kit-C1	Note
2	Voice Guidance Kit-F1	Note
3	Removable HDD Kit-AC1	-
4	2.5inch/80GB HDD-C1 2.5inch/250GB HDD-D1	- Only when Mirroring Kit is extended
5	Copy Card Reader-C1/F1 Copy Card Reader Attachment-B1	Note Note
6	Utility Tray-A1	Note
7	Multimedia Reader/Writer-A1	USB device port-B1 is required
8	USB Device Port-B1	-
9	ColorPASS-GX300/PS-GX300	-
10	Key Switch Unit-A2	-
11	HDD Mirroring Kit-D1	-
12	HDD Data Encryption & Mirroring Kit-C1	-
13	Expansion Bus-F1	-

No.	Brand name	Remarks and condition
14	Additional Memory Type B (512MB)	-
15	Image Data Analyzer Board-A1	Document Scan Lock Kit-A1 is required
16	Super G3 FAX Board-AE1	-
17	Super G3 2nd Line Fax Board-AE1	1-line FAX board is required
18	Super G3 3rd/4th Line Fax Board-AE1	1-line FAX board + additional 2nd line FAX Board is required (A European region is excluded.)
19	imagePASS-B1	-
20	IPSec Board-B2	PCI bus expansion kit-F1 is required
21	Wireless LAN Board-B1	-
22	Signal Interface Kit-A1	-
23	Serial Interface Kit-K1	-
24	PCL Printer Kit-AE1	-
	Direct Print Kit (for PDF/XPS)-H1	-
	Barcode Printing Kit-D1	-
	Encrypted Secure Print Software-D1	-
	IMPOSE(Ver2.7) Roman	Number of license: 1, 3, 7
	Universal Send Digital User Signature Kit-C1	-
	Universal Send Advanced Feature Set-D1	-
	Universal Send Security Feature Set-D1	-
	Remote Operators Software Kit-B1	-
	Remote Operators Software Kit-A3	-
	HOTFOLDER VER.2	-
	HDD Data Erase Kit-A1	-
	Remote Fax Kit-A1	-
	PS Printer Kit-AE1	-
	Secure Watermark-A1	-
	Document Scan Lock Kit-A1	-
	ACCESS MANAGEMENT SYSTEM Kit-B1	-
	Web Access Software-H1	-
	iR-ADV Security Kit-A1 for IEEE 2600.1 Common Criteria Certification	-

T-1-4

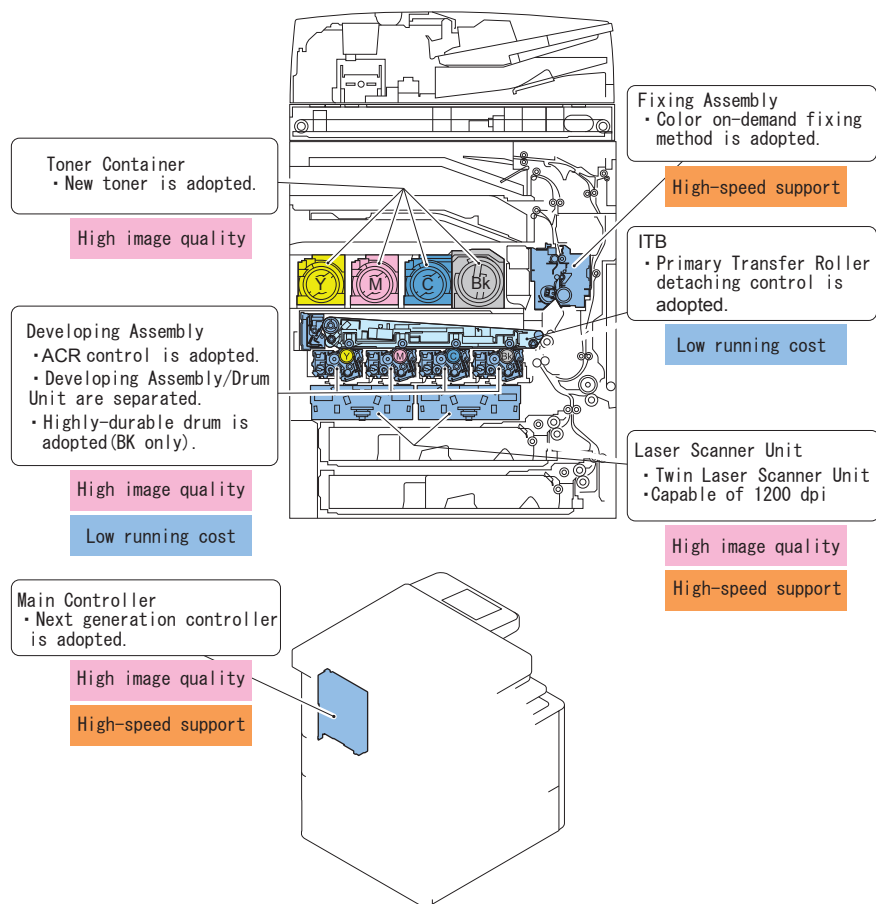
NOTE:

There is a combination restriction when installing No1,2,5 to 6. (Part No5 can be installed with any of those. Other than No5, only one of them can be installed.)

Feature

Product feature

Product feature



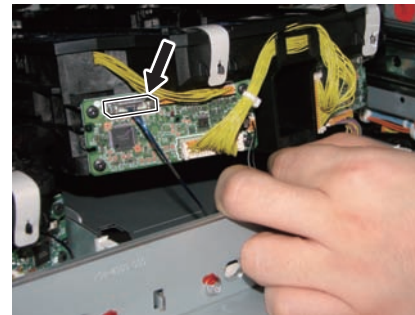
F-1-5

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 C5051/C5045 Series B/W :4.0sec Color : 6.5sec image RUNNER ADVANCE C5035/C5030 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 ²), Recycled paper (64 to 81g/m ²), Color paper, Pre-Punched paper, Bond paper, Plain paper (64 to 105g/m ²), Heavy paper (106 to 209g/m ²), Textured paper, Transparency film, Tab paper, Envelope
Paper type (multi-purpose tray)	Thin paper (52 to 63g/m ²), Recycled paper (64 to 81g/m ²), Color paper, Pre-Punched paper, Bond paper, Plain paper (64 to 105g/m ²), Heavy paper (106 to 256g/m ²), 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 ²), multi-purpose tray pickup: 100 sheet (80g/m ²)
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	80GB (Option 80GB C1/ 250GB D1)
Operation noise	75dB or less (during printing)
Ozone amount	Maximum: 0.01 ppm or less
Power rating	AC120V/20A (image RUNNER ADVANCE C5051/C5045 Series) AC120V/15A (image RUNNER ADVANCE C5035/C5030 Series) AC220-240V/10A
Maximum power consumption	image RUNNER ADVANCE C5051/C5045 Series: 1.8kW or less image RUNNER ADVANCE C5035/C5030 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 801mm (printer only)
Grammage	Approx. 133kg (printer only)

T-1-5

Weight / Size

Product name	Width (mm)	Depth (mm)	Height (mm)	WeightApprox. (Kg)
iR ADVANCE C5051/C5045	620	735	806	153
iR ADVANCE C5035/C5030	620	735	806	170
Duplex Color Image Reader Unit-B1	618	588	251	38.8
Color Image Reader Unit-B1	620	536	207	23
Color Image Reader Unit-B2	620	564	72	13.7
Cassette Feeding Unit-AD1	620	700	251	27.5
Paper Deck Unit-B1	372	603	473	37
Envelope Feeder Attachment-D1	439	307	81	1.2
Inner Finisher-A1	602	540	234	13.5
Staple Finisher-C1	545	656	1071	47
Booklet Finisher-C1	756	656	1071	76
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

T-1-6

Productivity (Print speed)

Size	Mode	Paper type	Paper basis weight(g/ m2)	ImageRUNNER ADVANCE			
				C5051		C5045	
				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	52-81	51.0	31.0	45.0	31.0
			82-105	51.0	31.0	45.0	31.0
		Thick paper	105-163	25.5	15.5	25.5	15.5
			164-209	20.0	15.5	20	15.5
	2-sided	Plain paper	52-81	51.0	31.0	45.0	31.0
			82-105	51.0	31.0	45.0	31.0
		Thick paper	105-163	25.5	15.5	25.5	15.5
			164-209	20.0	15.5	20	15.5
2-sided	Thick paper	210-256	-	-	-	-	

Size	Mode	Paper type	Paper basis weight(g/ m2)	ImageRUNNER ADVANCE			
				C5051		C5045	
				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	52-81	25.5	19.5	25.5	19.5
			82-105	25.5	19.5	25.5	19.5
		Thick paper	105-163	12.5	9.8	12.5	9.8
			164-209	10.0	9.8	10.0	9.8
	2-sided	Plain paper	52-81	25.5	19.5	25.5	19.5
			82-105	25.5	19.5	25.5	19.5
		Thick paper	105-163	12.5	9.8	12.5	9.8
			164-209	10.0	9.8	10.0	9.8
2-sided	Thick paper	210-256	-	-	-	-	

T-1-7

Size	Mode	Paper type	Paper basis weight(g/ m2)	ImageRUNNER ADVANCE				
				C5035		C5030		
				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	52-81	35.0	20.0	30.0	20.0	
			82-105	35.0	20.0	30.0	20.0	
		Thick paper	105-163	17.0	10.0	17.0	10.0	
			164-209	17.0	10.0	17.0	10.0	
	2-sided	Plain paper	52-81	35.0	20.0	30.0	20.0	
			82-105	35.0	20.0	30.0	20.0	
		Thick paper	105-163	17.0	10.0	17.0	10.0	
			164-209	17.0	10.0	17.0	10.0	
2-sided	Thick paper	210-256	-	-	-	-		
		1-sided	Plain paper	52-81	17.5	13.0	17.5	13.0
				82-105	17.5	13.0	17.5	13.0
			Thick paper	105-163	8.5	6.5	8.5	6.5
164-209	8.5			6.5	8.5	6.5		
2-sided	Plain paper	52-81	17.5	13.0	17.5	13.0		
		82-105	17.5	13.0	17.5	13.0		
	Thick paper	105-163	8.5	6.5	8.5	6.5		
		164-209	8.5	6.5	8.5	6.5		
2-sided	Thick paper	210-256	-	-	-	-		

T-1-8

Paper type

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

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

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

T-1-9

Pickup

Paper type(g/ m ²)	Size	Multi- purpose tray	Cassette 1	Cassette 2	Cassette Feeding Unit 1	Cassette Feeding Unit 2	Paper Deck
• Plain 1 (52 to 81) Thin, Recycled, Pre-Punched, Color	A4, LTR	Yes	Yes	Yes	Yes	Yes	Yes
	B4, A4R, A5R, B5, B5R, EXEC, LGL, LTRR, STMTR, 16K, 16KR	Yes	Yes	Yes	Yes	Yes	No
• Plain 2 (82 to 105) Bond	A3, LDR, EXE, 12"№18", 8K	Yes	No	Yes	Yes	Yes	No
	A5, STMT, OFFICIO, E-OFFICIO, B-OFFICIO, M-OFFICIO, A-OFFICIO, A-LTR, A-LTRR, GLTR-R, GLTR, GLGL, AFLS, FLS, Irregular size 1-1, Irregular size 1-2, Irregular size 1-3, Irregular size 1-4, Irregular size 2-1, Irregular size 2-2, Irregular size 2-3, Irregular size 2-4, Irregular size 3-1, Irregular size 3-2, Irregular size 3-3, Irregular size 3-4, Irregular size 4-1, Irregular size 4-2, Irregular size 4-3, Irregular size 4-4, Irregular size 5	Yes	Yes	Yes	Yes	Yes	No
• Heavy 1 (106 to 163) Textured							
• Heavy 2 (164 to 209) Labels, Tab							
	SRA3, EXEC-R	Yes	No	No	No	No	No
Transparency	A4, LTR	Yes	Yes	Yes	Yes	Yes	Yes

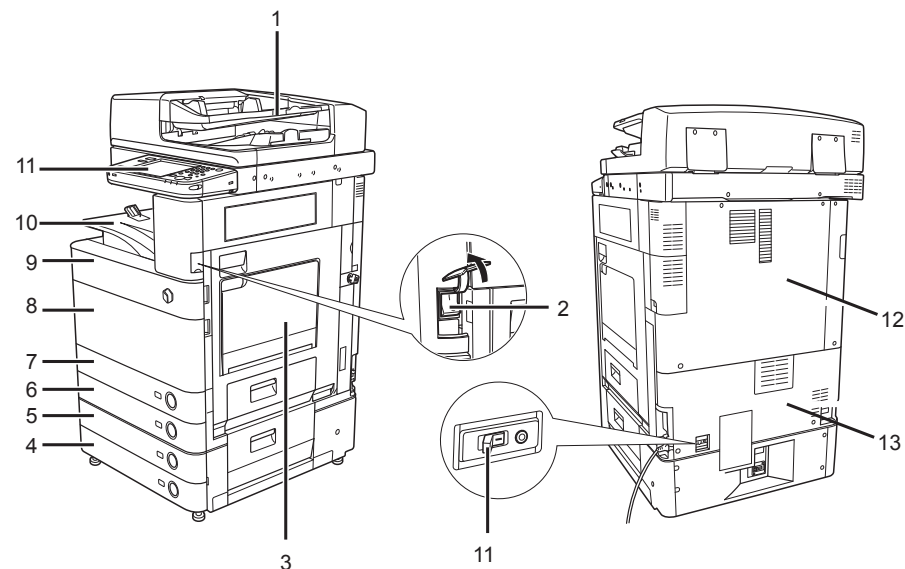
Paper type(g/ m ²)	Size	Multi- purpose tray	Cassette 1	Cassette 2	Cassette Feeding Unit 1	Cassette Feeding Unit 2	Paper Deck
<ul style="list-style-type: none"> Special paper Tracing, Coated, Washi Heavy 3 (210 to 258) 	A4, LTR, B4, A4R, A5R, B5, B5R, EXEC, LGL, LTRR, STMTR, 16K, 16KR, A3, LDR, EXE, 12"№18", 8K, A5, STMT, SRA3, OFFICIO, E-OFFICIO, B-OFFICIO, M-OFFICIO, A-OFFICIO, A-LTR, A-LTRR, GLTR-R, GLTR, GLGL, AFLS, FLS, F4A, Irregular size 1-1, Irregular size 1-2, Irregular size 1-3, Irregular size 1-4, Irregular size 2-1, Irregular size 2-2, Irregular size 2-3, Irregular size 2-4, Irregular size 3-1, Irregular size 3-2, Irregular size 3-3, Irregular size 3-4, Irregular size 4-1, Irregular size 4-2, Irregular size 4-3, Irregular size 4-4, Irregular size 5	Yes	No	No	No	No	No
Postcard	A6 irregular	Yes	No	No	No	No	No
Envelope	COM10, Monarch, ISO-C5, ISO-B5, DL,	Yes	No	Yes*	No	No	No

* When Envelope Feeder Attachment-D1 is installed

T-1-10

Name of Parts

External View



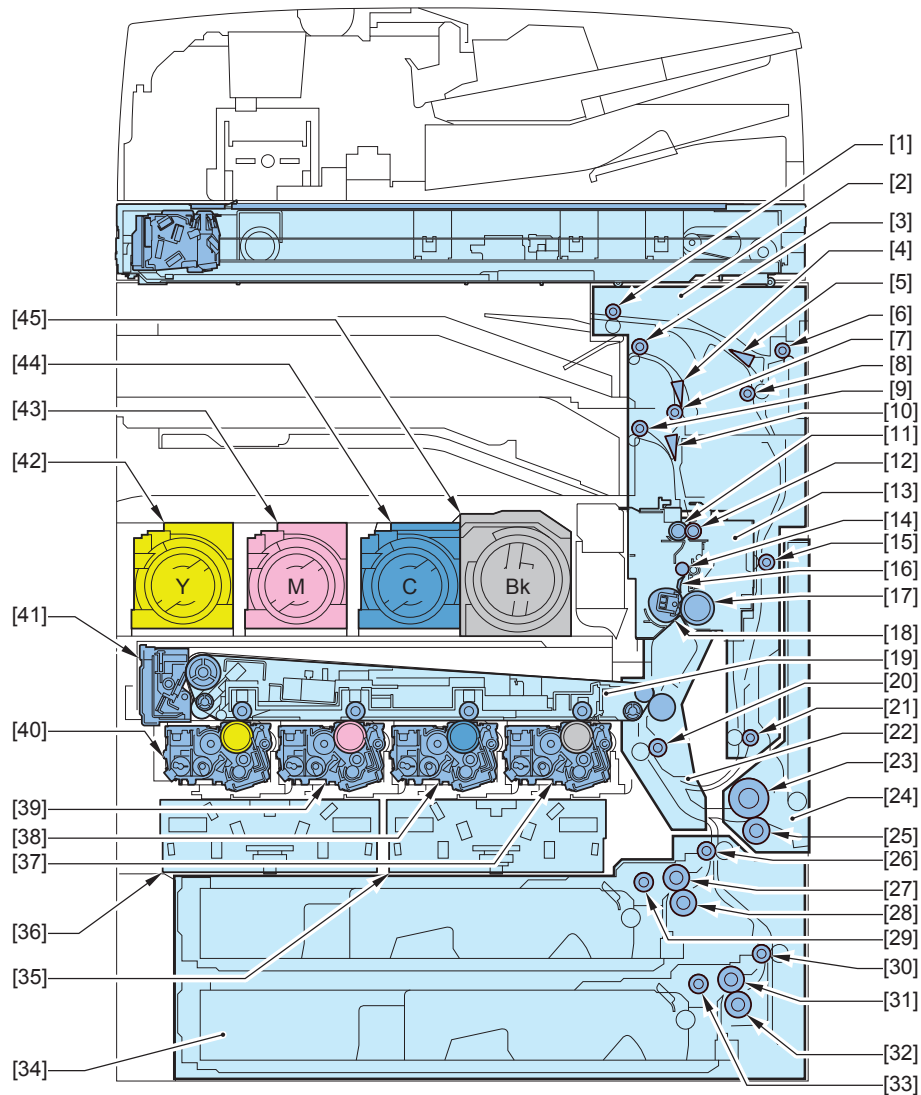
- | | |
|-----------------------|-----------------------|
| [1] DADF | [8] Front Cover |
| [2] Main Power Switch | [9] Front Upper Cover |
| [3] Stack Bypass Tray | [10] Output Tray |
| [4] Paper Drawer4 | [11] Control Panel |
| [5] Paper Drawer3 | [12] Rear Cover |
| [6] Paper Drawer2 | [13] Rear Rower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

F-1-6

* : 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



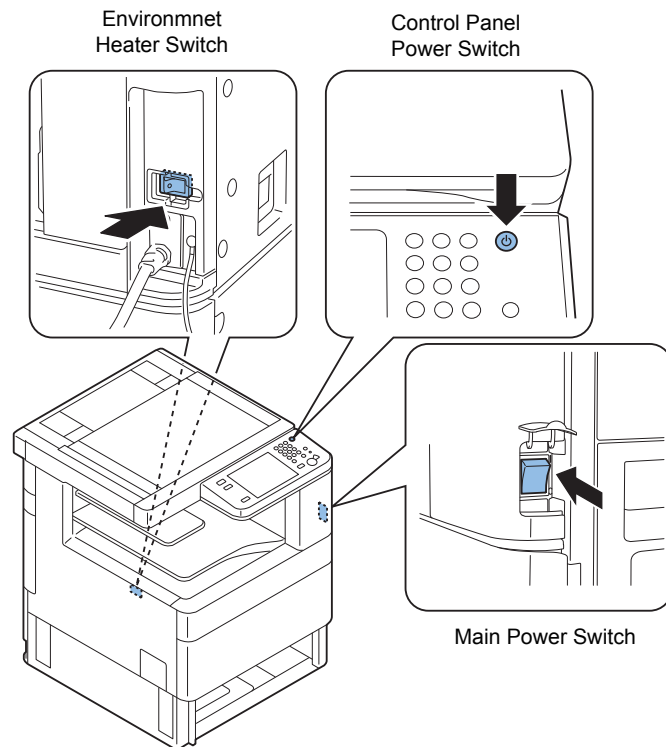
- | | | |
|---|-----------------------------------|--|
| [1] Reversal roller | [16] Fixing separation guide | [31] Cassette 2 feeding roller |
| [2] 2-side delivery / delivery unit | [17] Pressure roller | [32] Cassette 2 separation roller |
| [3] Secondary delivery roller | [18] Film unit | [33] Cassette 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

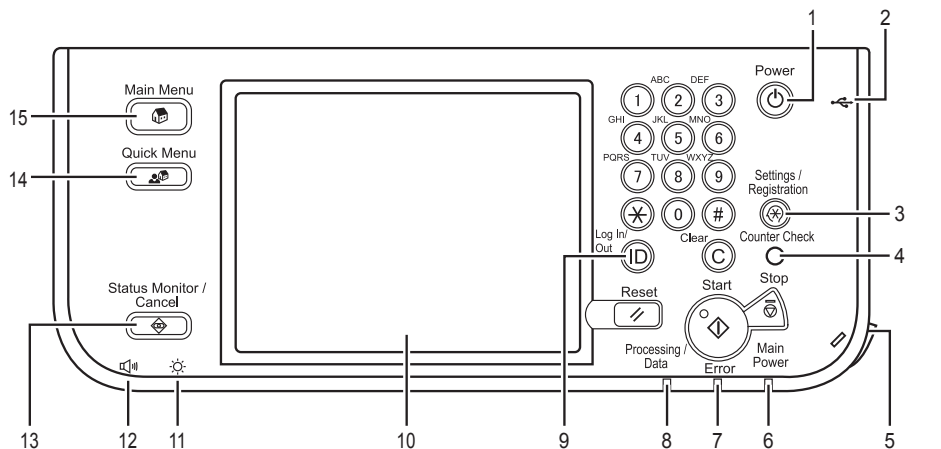
When a problem occurs, the normal shutdown screen may not be displayed regardless of turning OFF the main power switch.

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

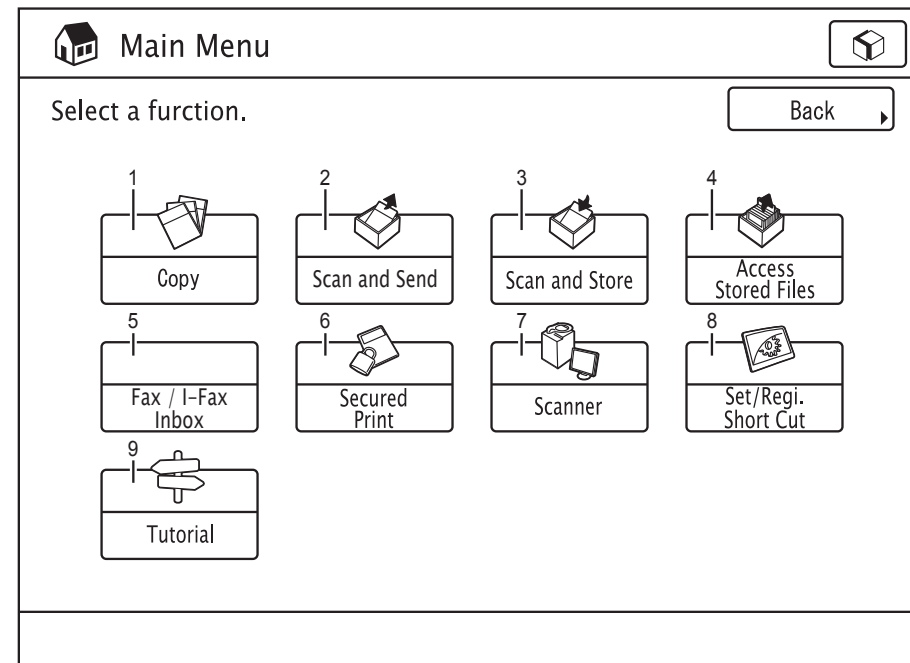


F-1-9

- | | |
|---------------------------------|--|
| [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 | |

Main Menu

iR ADVANCE C5051 / 5045 / 5035 / 5030 Series



F-1-10

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

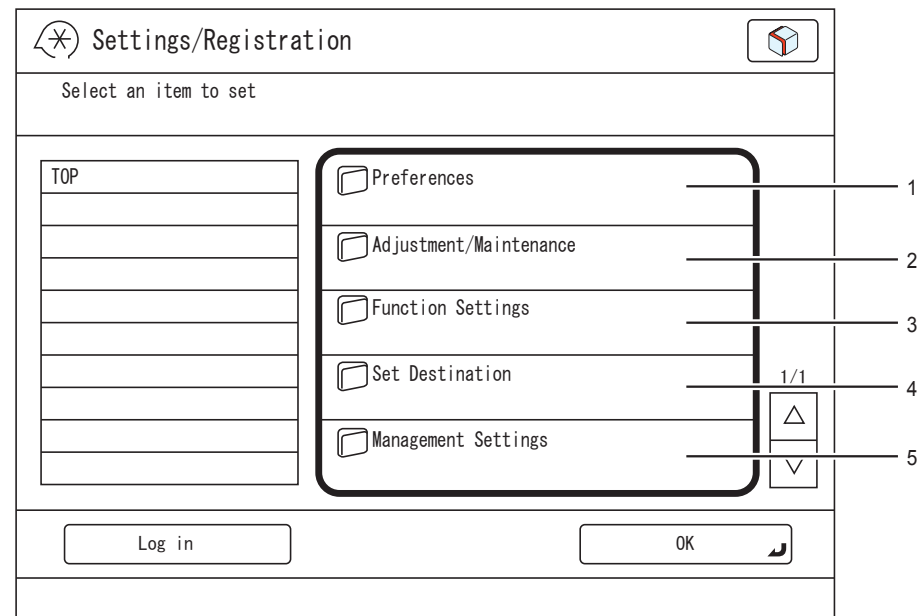
Difference of main menu

iRC 3380 / 2880 Series	iR ADVANCE C5151/5045/5035/5030 Series
Copy	Copy
Send	Scan and Send
Mail BOX	Scan and Store
	Access Stored Files
	Fax / I-Fax Inbox
Menu Change Key	-----
Print Job	Secured Print
Scan	Scanner
-----	Set / Regi. Short Cut
(Help)	Tutorial

T-1-11

Settings / Registration menu

iR ADVANCE C5051 / 5045 / 5035 / 5030 Series



F-1-11

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

Difference of Settings / Registration menu

iRC 3380 / 2880 Series	iR ADVANCE C5151/5045/5035/5030 Series
Common Settings	Preferences
Timer Settings	
Adjustment / Cleaning	Adjustment / Maintenance
System Settings	Set Destination
Report Settings	Function Settings
Copy Settings	
Communication Settings	
Mail Box Settings	
Printer Settings	
Address Book Settings	Management Settings

T-1-12

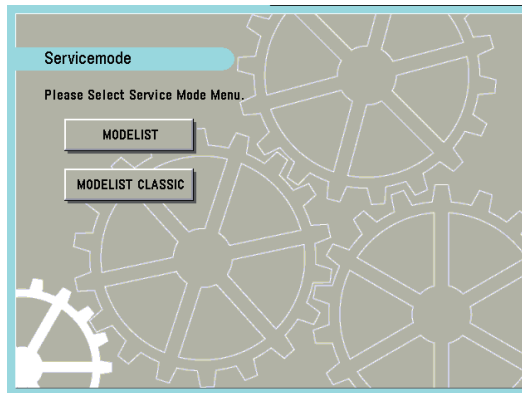
Service Mode

It is possible to browse the usage method of service mode items in service mode.
Following is the changed and added items compared to a conventional machine.

Service mode menu

In the standby condition, press in this order: key -> 2+8 key -> key, and the screen will switch as on the below:

TOP screen



F-1-12

[MODELIST] :

This mode is newly added from this machine.

This mode has the function to browse the usage method of service mode items etc.

New functions described later are available in MODELIST mode.

[MODELIST CLASSIC] :

This is the same mode with a conventional machine.

New functions described later are not available in MODELIST CLASSIC mode.

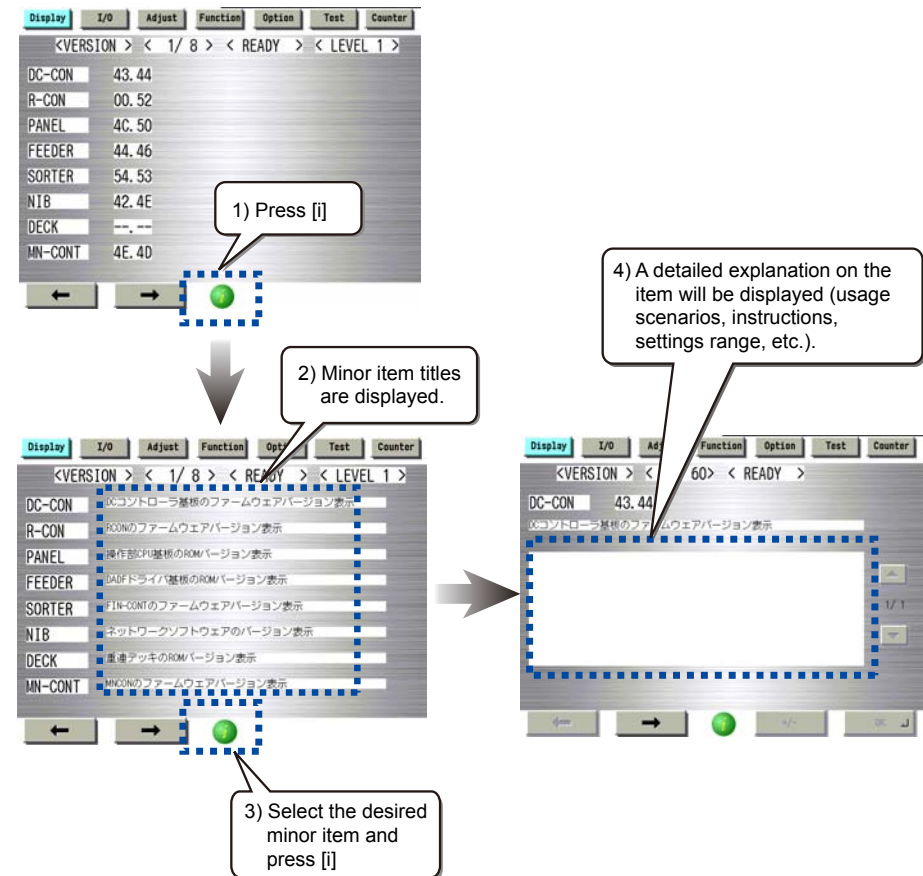
When [MODELIST] or [MODELIST CLASSIC] is pressed, initial screen of each mode is displayed.

Description display of service mode item

Enables to display the description of initial screen, large category, middle category and small category.

Select any from initial screen > large category > middle category > small category, and press [I] (information button) so that the description of selected item (hereinafter called service mode contents) is displayed.

e.g.) COPIER > DISPLAY > Version screen



F-1-13

- Service mode contents can be displayed in J / E / F / I / G / S.
- Alike other system software, service mode contents can be upgrade with SST.

Enhancement of I/O information

This mode is to check the signal input / output status of used electrical parts (sensor / motor / fan etc.).

Searchability for target electrical parts has been improved in COPIER > I / O.

In addition, it is possible to check the signal input / output status on a screen.

Device classification

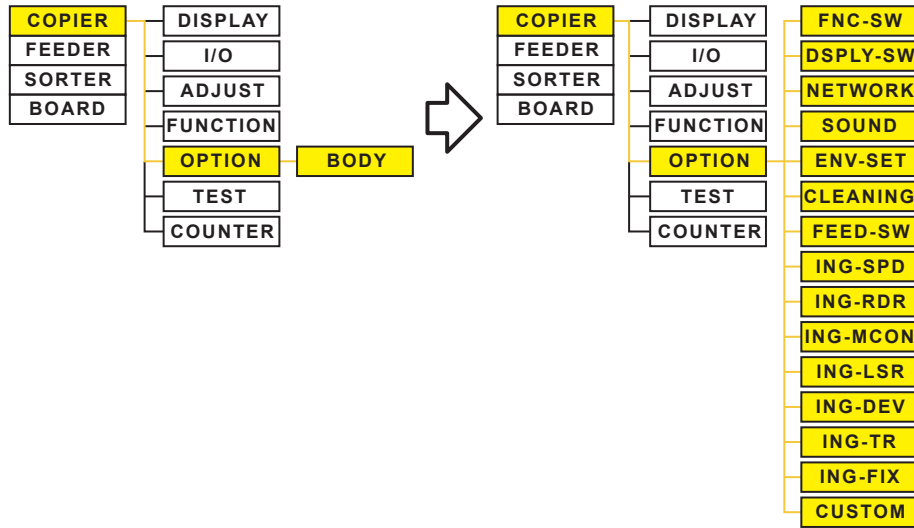
Electrical parts classification

Dcon	Rcon	Feeder	Sorter	Mn-Con	Pd-Con
P001	0000000000000000				
P002	0000000000000000				
P003	0000000000000000				
P004	0000000000000000				

3) If the "I" button is pressed, the screen displaying the electrical parts array will appear.

F-1-14

Subdivide COPIER > OPTION > BODY items



F-1-15

With current machines, it is quite difficult to find out the target item since there are large number of items in COPIER > OPTION > BODY (related to host machine specification). With this machine, all items in BODY are classified into 15 categories by usage to reach a target item.

Middle category classification	Middle category name	Details
Function switch	FNC-SW	Language, cassette, paper type, NAVI / DA connection, count up specification, original size detection, dust detection level
Display switch / display timing	DSPLY-SW	UI display related
Image related (fixing)	IMG-FIX	Fixing related
Image related (transfer)	IMG-TR	Primary transfer, secondary transfer, ITB
Image related (development)	IMG-DEV	Development related
Image related (laser / latent)	IMG-LSR	Laser, latent image related
Image related (reader / ADF)	IMG-RDR	Reader, ADF image related
Image related (controller, others)	IMG-MCON	MN-CON image related and image related items other than above
Image quality / copy speed	IMG-SPD	Down sequence
Cleaning	CLEANING	Cleaning of Charging Assembly / Drum / Transfer Roller / ITB etc.
Environment settings	ENV-SET	Temperature / Humidity, Environment Heater / due condensation / log acquisition

Middle category classification	Middle category name	Details
Feeding (pickup / delivery)	FEED-SW	Stack performance, motor speed fine-adjustment, delivery function etc.
Noise reduction	SOUND	Noise related
Network	NETWORK	Network setting, IFAX, SEND, E-RDS etc.
Individual measure	CUSTOM	For individual measure

T-1-13

Security measure

To prevent illegal access to service mode, a password can be specified.

Related service mode

COPIER > OPTION > FNC-SW > PSWD-SW (level 1)

Password type setting when entering the service mode

<Setting range>

0: No password [Default]

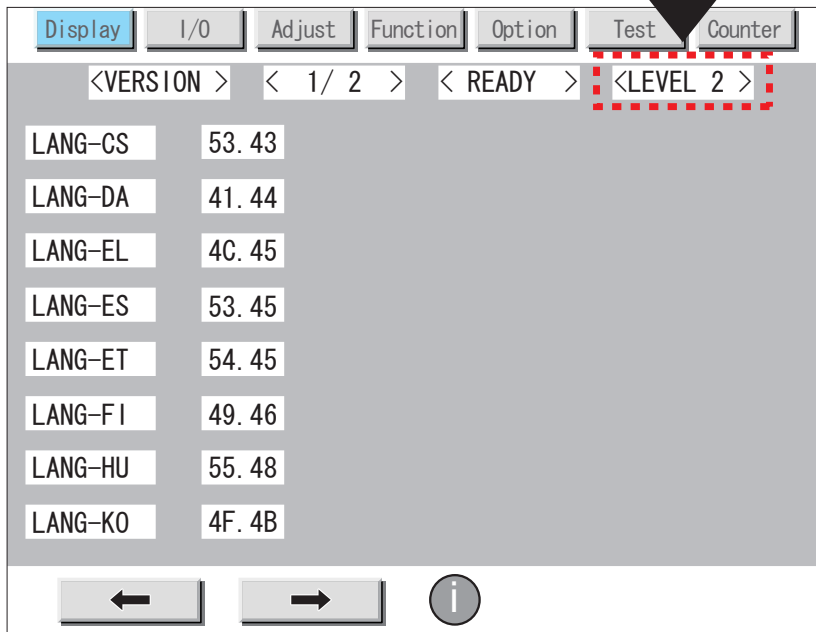
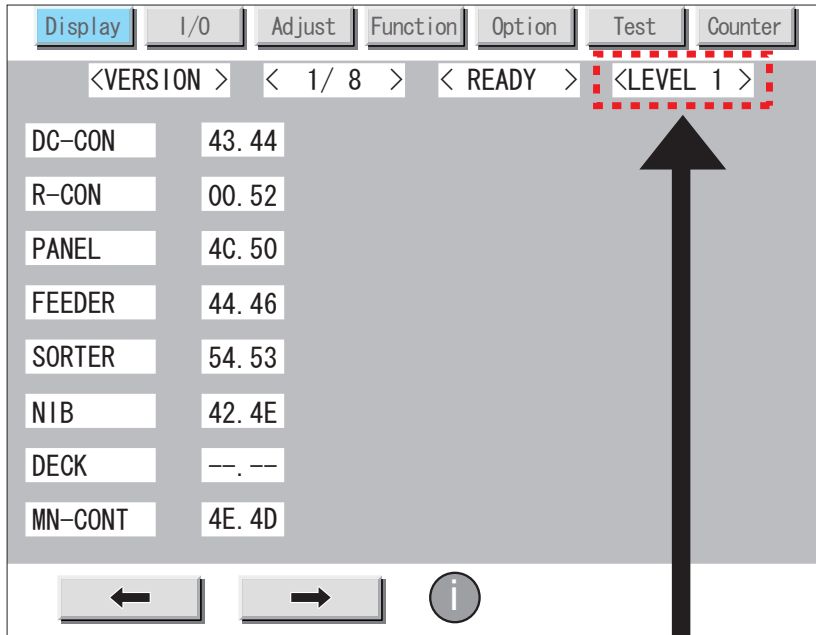
1: Service engineer

2: System administrator + Service engineer

Screen display switch (level1 <-> level2)

Screen can be switched between level 1 screen and level 2 screen.

When the level 1 screen is displayed and <Level 1> on the upper right screen is pressed, a screen is switched to level 2 screen.



F-1-16

2

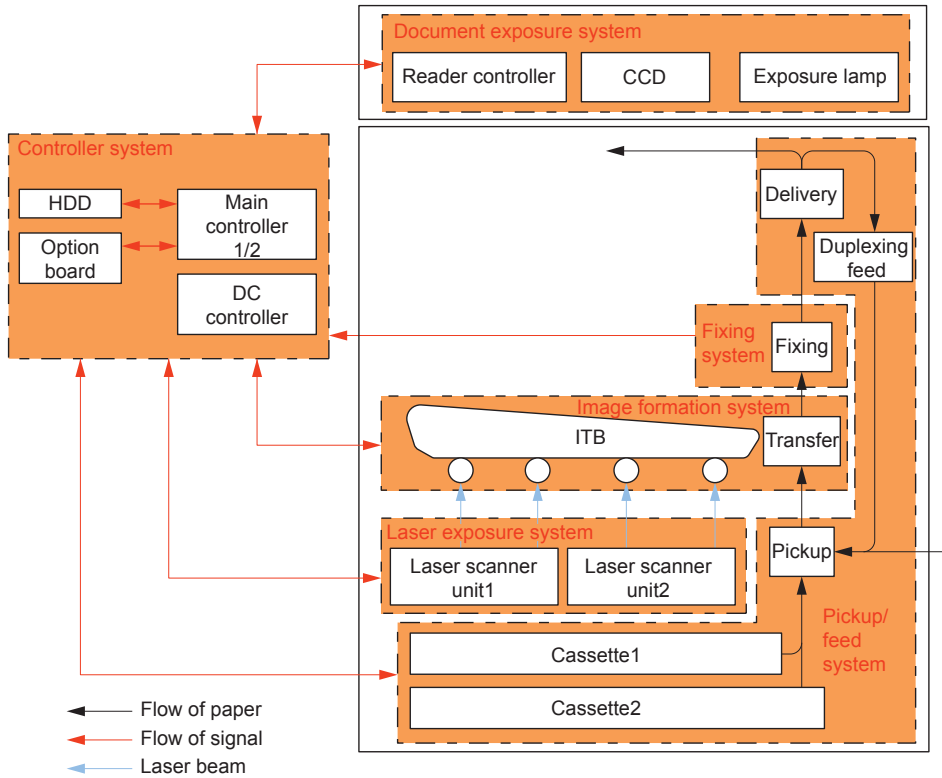
Technology

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

Basic Configuration

Functional Configuration

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

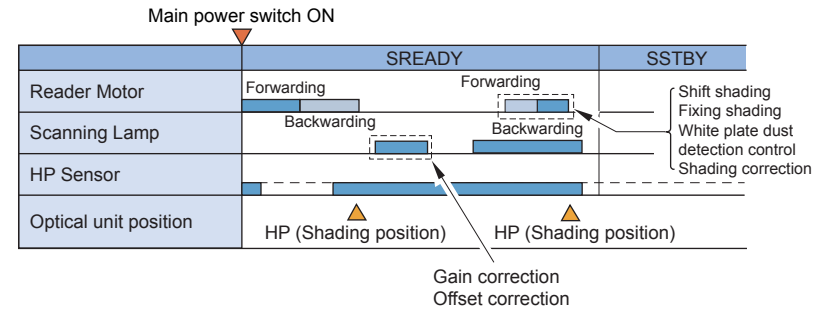


F-2-1

Basic sequence

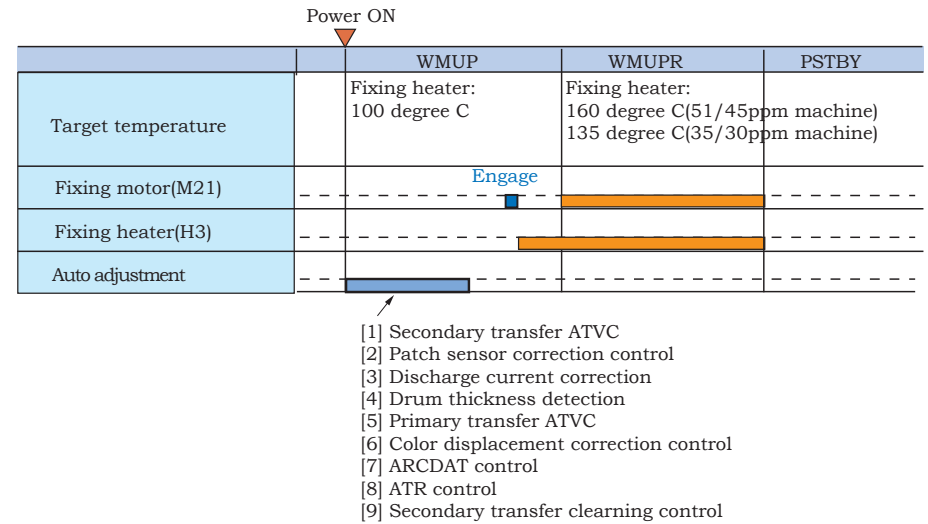
Sequence at Power-On

- Reader



F-2-2

- Printer Unit



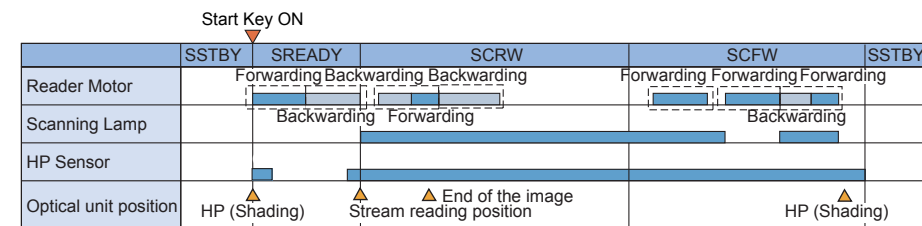
F-2-3

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

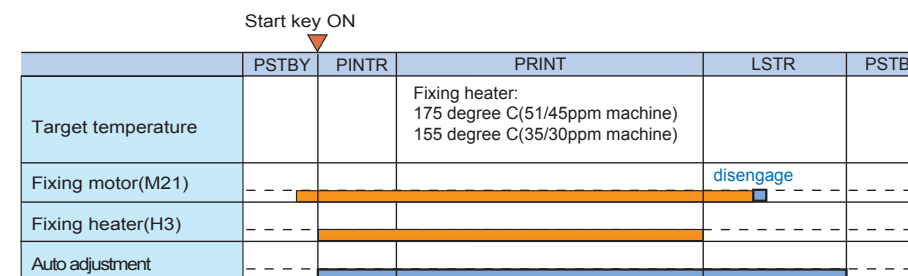
Print sequence

• 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 cleaning
- [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.

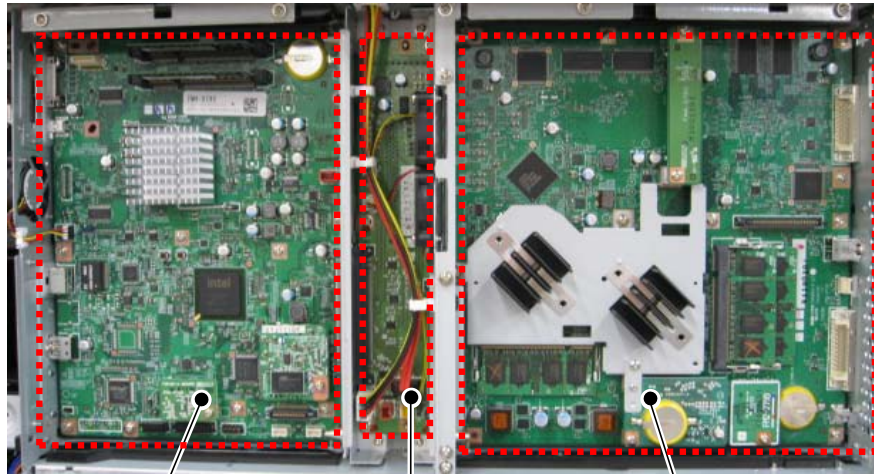
T-2-2

Controller System

Overview

Features

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

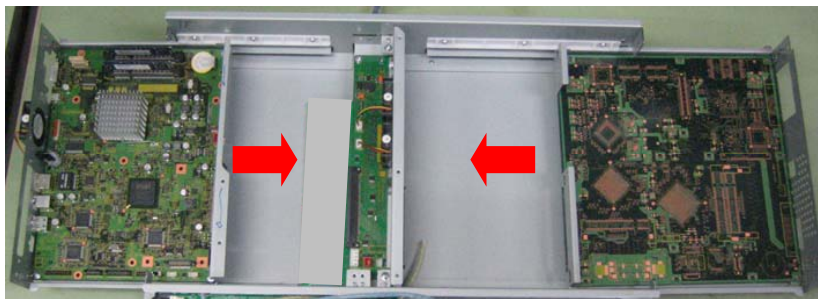


Main Controller PCB 1 Riser PCB Main Controller PCB 2

F-2-6

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

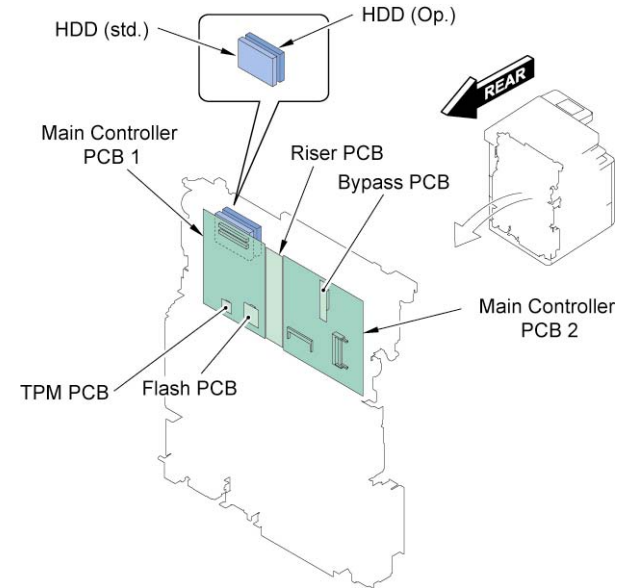
Main controller PCBs 1 and 2 are connected through the riser PCB. This configuration improves installability / removability of the main controller PCBs. (Slot-in / out)



F-2-7

Specifications / configuration

PCBs



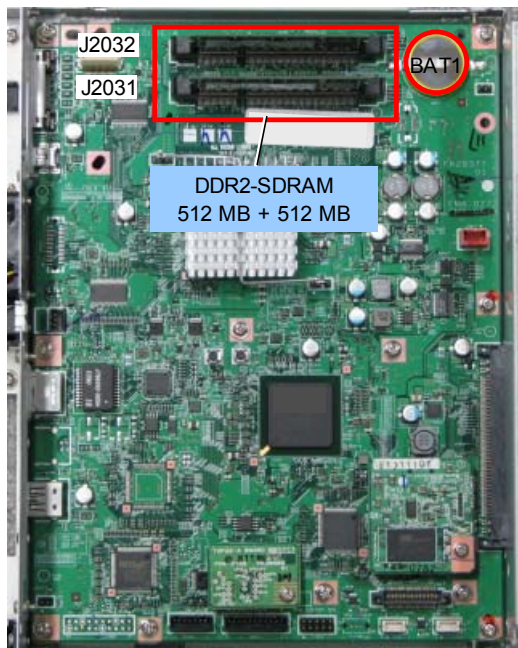
F-2-8

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))
Bypass PCB	Internal bus connection Remove this PCB when using ColorPASS-GX300 (server type) or imagePASS-B1 (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: 80 GB 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 / 80GB HDD-C1, 2.5 inch / 250 GB HDD-D1

T-2-3

● Memory

Main controller PCB 1

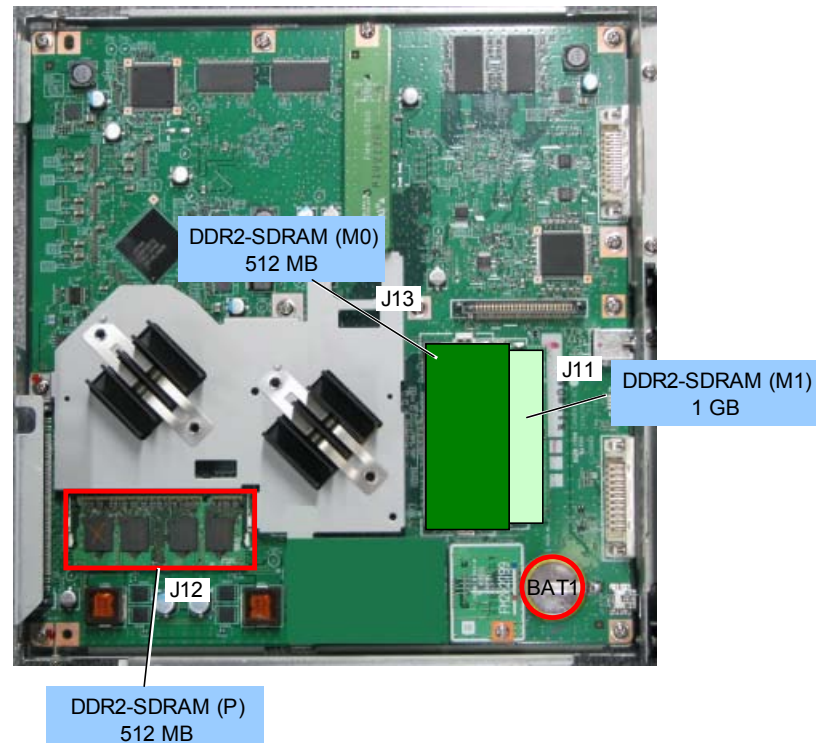


F-2-9

Parts name	Function, specifications, features
DDR2-SDRAM	2 slot / 1GB (standard) J2031: 512 MB J2032: 512 MB Clock frequency: 333 MHz Used for saving image, program data
Lithium battery (BAT1))	For RTC Life: approx. 10 years

T-2-4

Main controller PCB 2



F-2-10

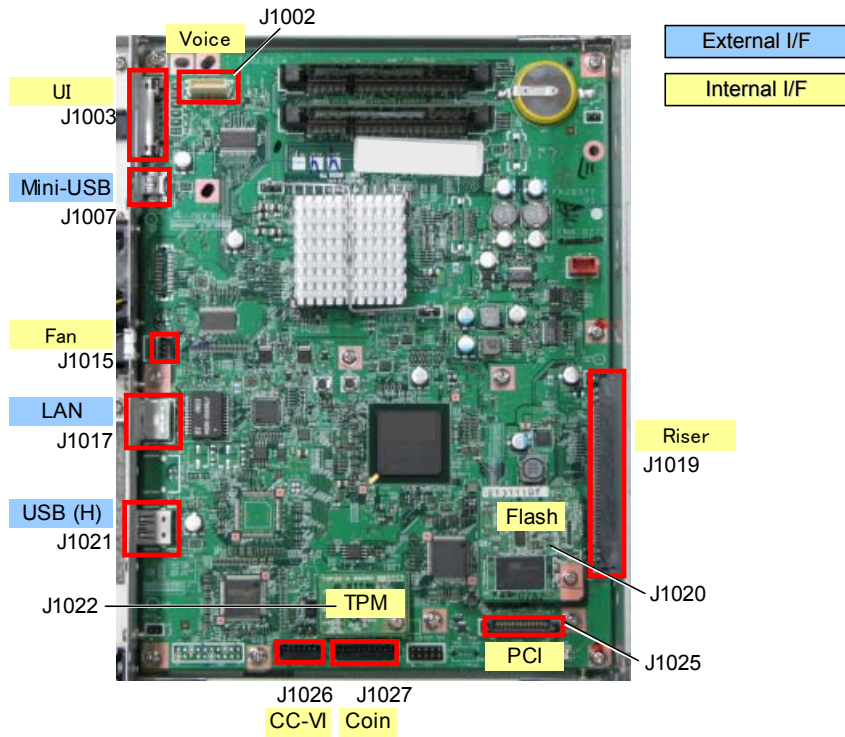
Parts name	Function, specifications, features
DDR2-SDRAM (M1)	1 GB (standard) / clock frequency: 200MHz Rasterizing, rendering, resolution conversion, coding / decoding
DDR2-SDRAM (M0)	512 MB (standard / Op.) / clock frequency: 200MHz Product name: Additional Memory Type B (512MB) Rasterizing, rendering, resolution conversion, coding / decoding To be used when using the following options: PS Printer Kit-AE1, Direct Print Kit (for PDF / XPS)-H1, imagePASS-B1, ColorPASS-GX300
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



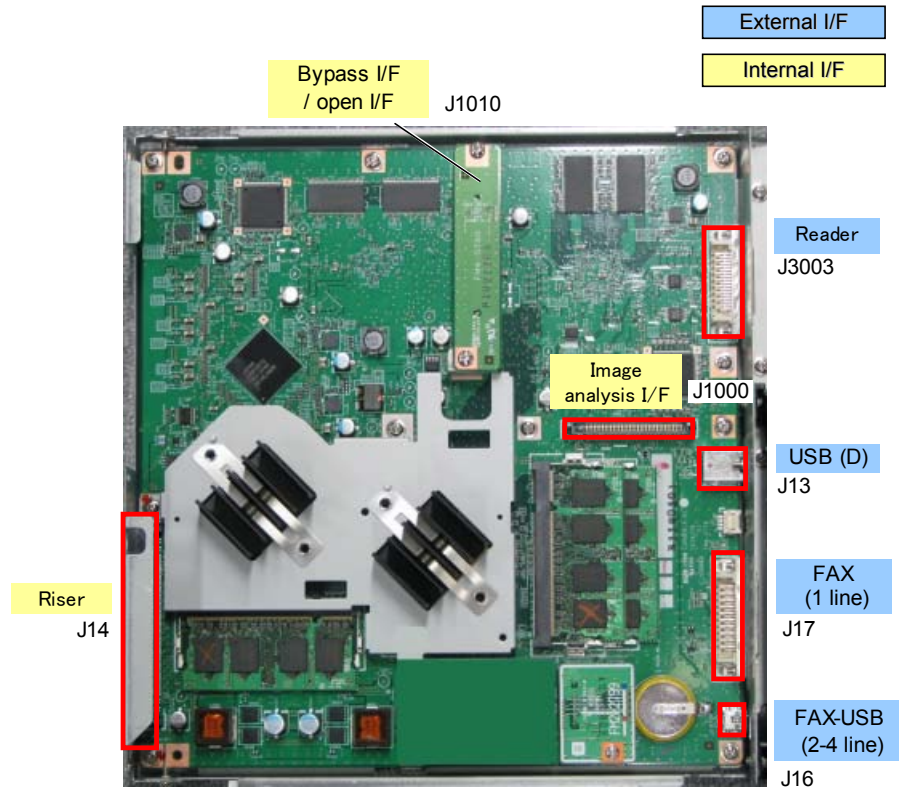
F-2-11

No.	Function, specifications	No.	Function, specifications
J1002	Voice I/F (Op.)	J1020	Flash PCB I/F
J1003	Control panel I/F	J1021	USB I/F (Host) ^{*1} For MEAP, For USB keyboard (Op.)
J1007	Mini-USB I/F (Op.) Connect USB Device Port-B1 USB Device Port-B1 is required when using Mobile Connect Kit-A1 (sold separately).	J1022	TPM PCB I/F
J1015	Fan I/F	J1025	PCI expansion PCB I/F (Op.)
J1017	LAN I/F 1000BASE-T / 100BASE-TX / 10BASE-T Also to be used as I/F for imagePASS-B1 / ColorPASS-GX300 (Op.)	J1026	I/F for control interface kit (Op.)
J1019	Riser PCB I/F	J1027	I/F for card reader, I/F for serial interface kit, I/F for coin manager (all Op.)

T-2-6

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

Main controller PCB 2



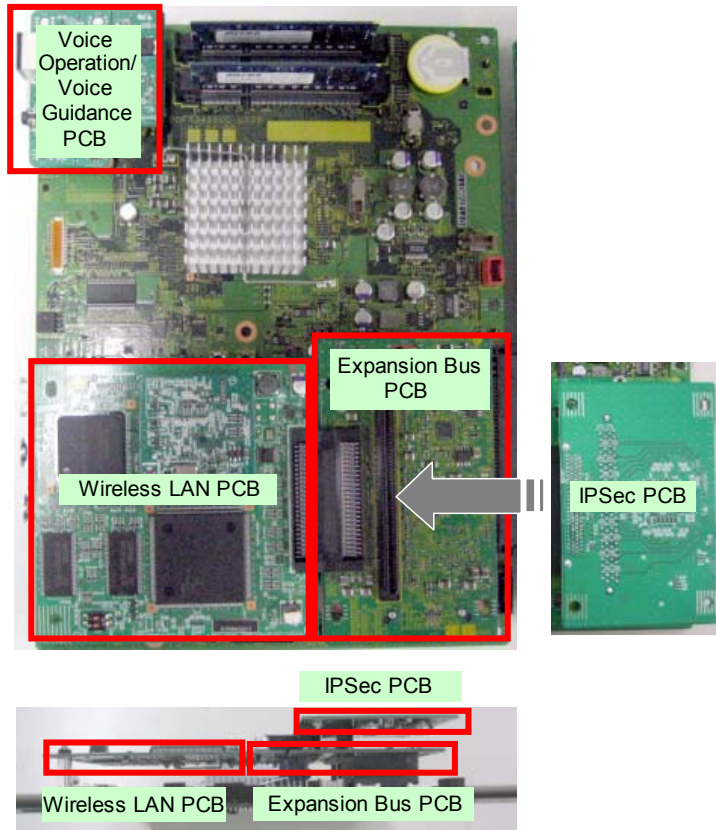
F-2-12

Jack No.	Function, specifications
J14	Riser PCB I/F
J16	Mini-USB I/F for 2 to 4-lines FAX Product name: Advanced G3 2nd Line Fax Board-AE1, Advanced G3 3rd / 4th Line Fax Board-AE1
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

T-2-7

● Function expansion options

Main controller PCB1

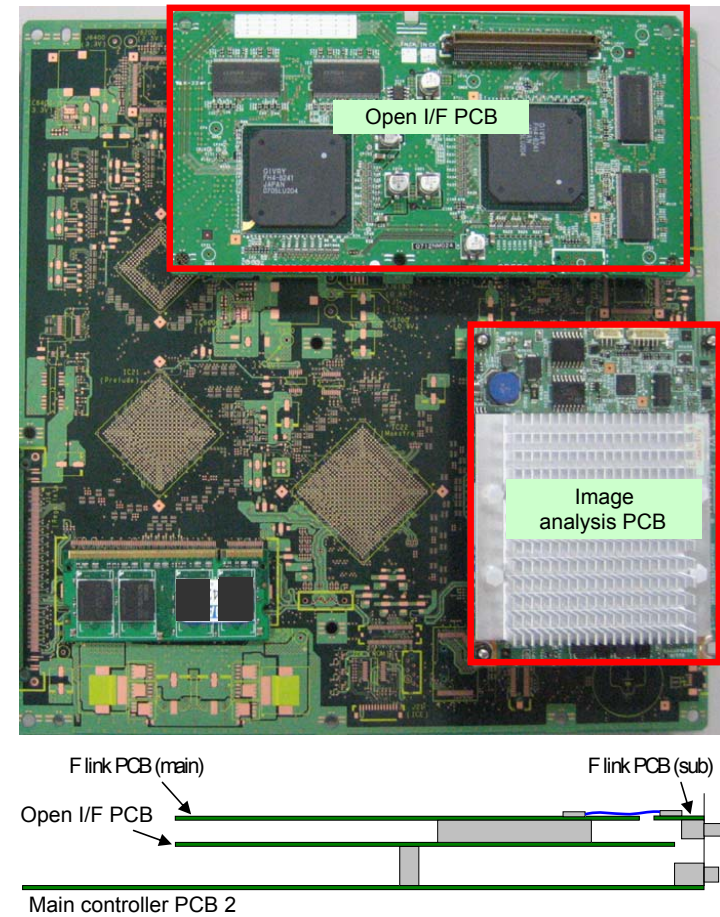


F-2-13

Name	Function, specifications, features
Voice operation PCB Voice guidance PCB	Product name: Voice Operation Kit-C1, Voice Guidance Kit-F1 (only for non-Japanese models)
Expansion Bus PCB	Product name: Expansion Bus -F1 Required when PCI option (Wireless LAN Board-B1, IPsec Board-B2) is installed
Wireless LAN PCB	Product name: Wireless LAN Board-B1 Expansion Bus -F1 is required. Only for non-Japanese models. Parallel use with imagePASS-B1 / ColorPASS-GX300 is NOT available
IPsec PCB	Encryption / composition processing of packet data Product name: IPsec Board -B2 Expansion Bus -F1 is required. Parallel use with imagePASS-B1 / ColorPASS-GX300 is NOT available

T-2-8

Main controller PCB 2



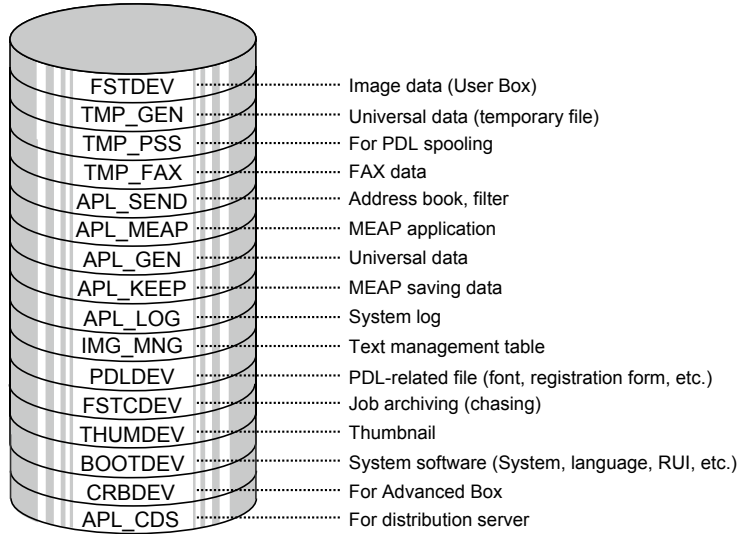
F-2-14

Name	Function, specifications, features
Open I/F PCB	imagePASS-B1 / ColorPASS-GX300
F link PCB (main)	
F link PCB (sub)	
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



- []: 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).

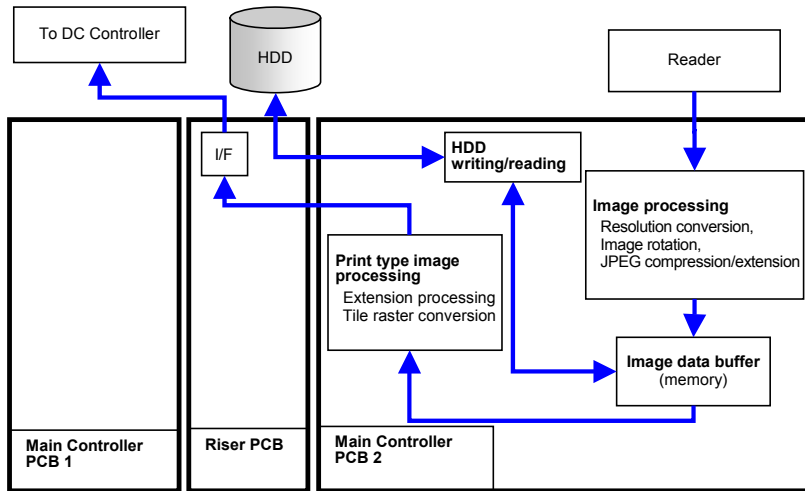
When the main power switch is turned OFF on the main body, Main Controller PCB 1 detects this operation and then the shutdown sequence starts / executes automatically.

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

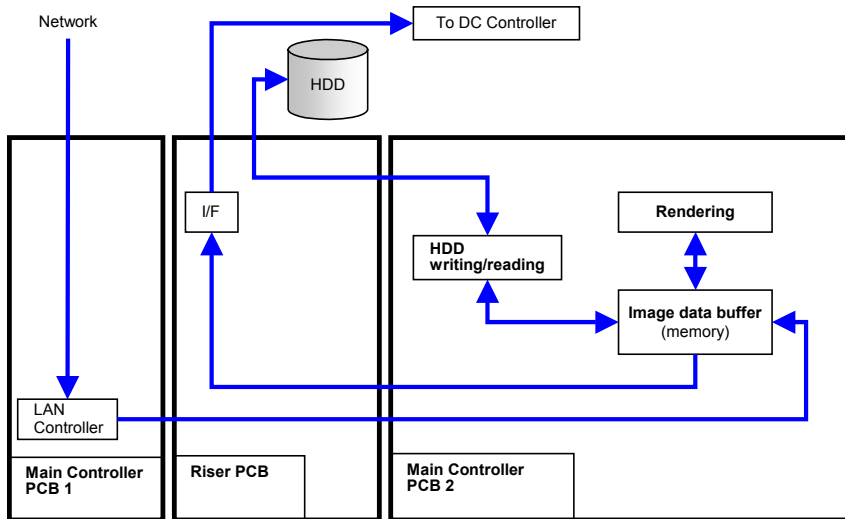
Flow of Image Data

Copy



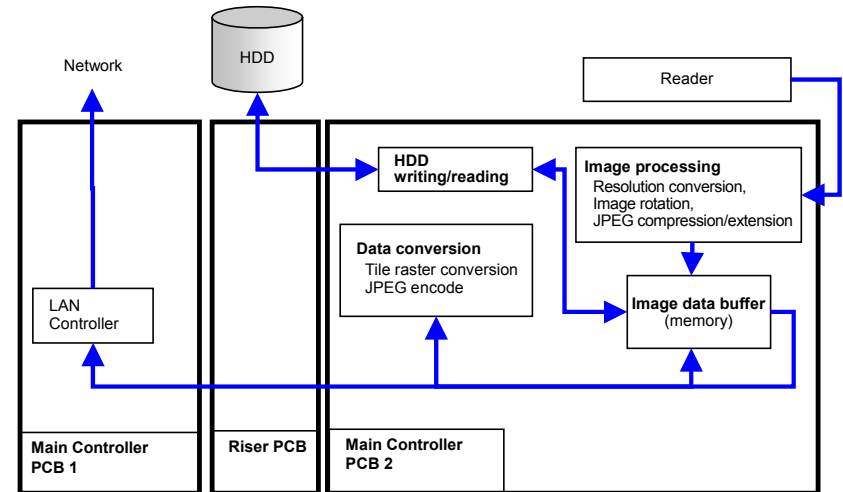
F-2-17

Print



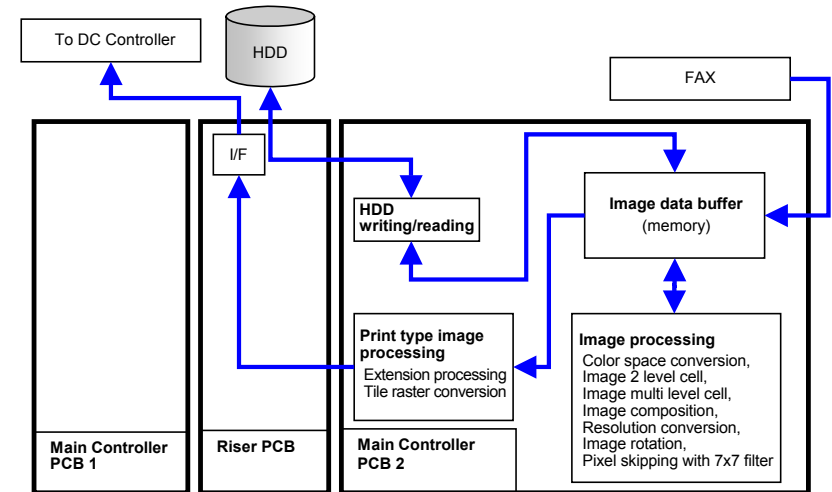
F-2-18

SEND



F-2-19

Box



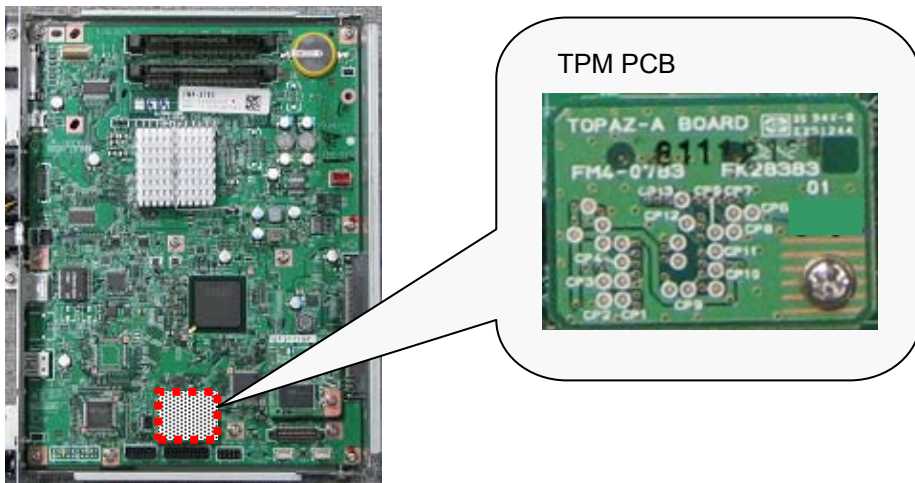
F-2-20

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 PCB 1



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

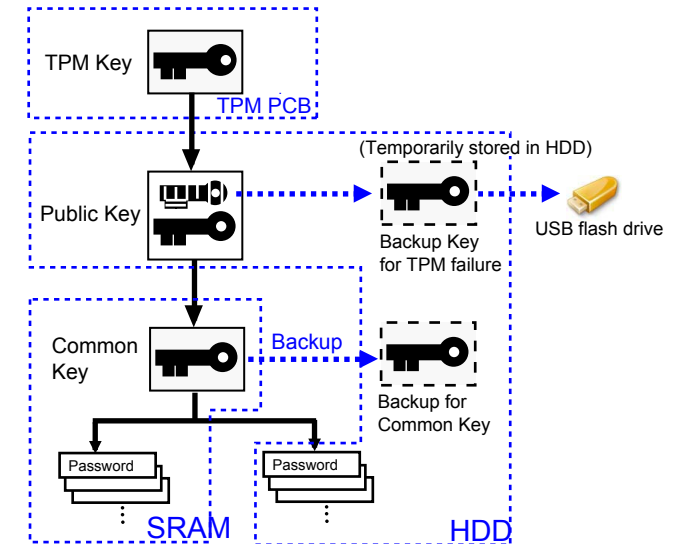
Enable this function in Setting / Registration mode.

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.

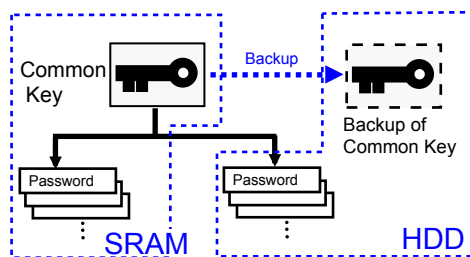
For the backup purpose, the backup key is temporarily stored also in the HDD to be prepared for a TPM failure (only for the initial failure after the TPM setting is ON).

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.

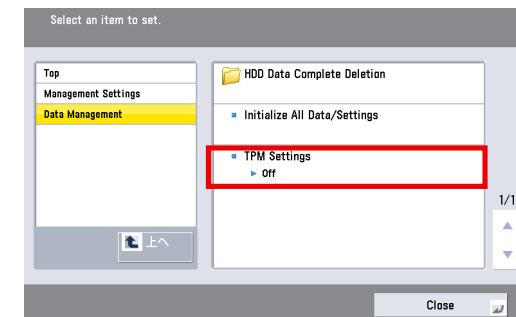
When the key restoration is failed due to the USB flash drive lost or others, “Initialize All Data / Settings” should be executed to reactivate TPM functionality. The security may be undermined if the old Setting / Registration data are maintained as it is.

1. Enable Functionality

MEMO: Setup of “System Management PIN”

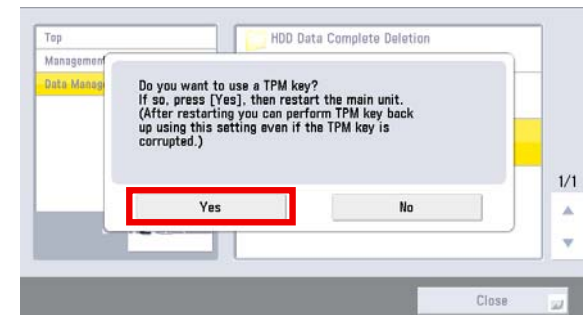
It is recommended for users (administrators) to set the system management PIN before installing TPM. The TPM key is backed up after the TPM setting is set to “ON”. However, the key backup is permitted only once. Unless the key is properly backed up, users other than administrators may illegally obtain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

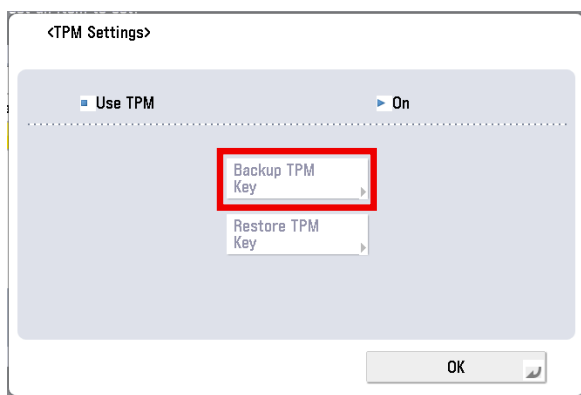
Ensure to insert only one USB flash drive.

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:

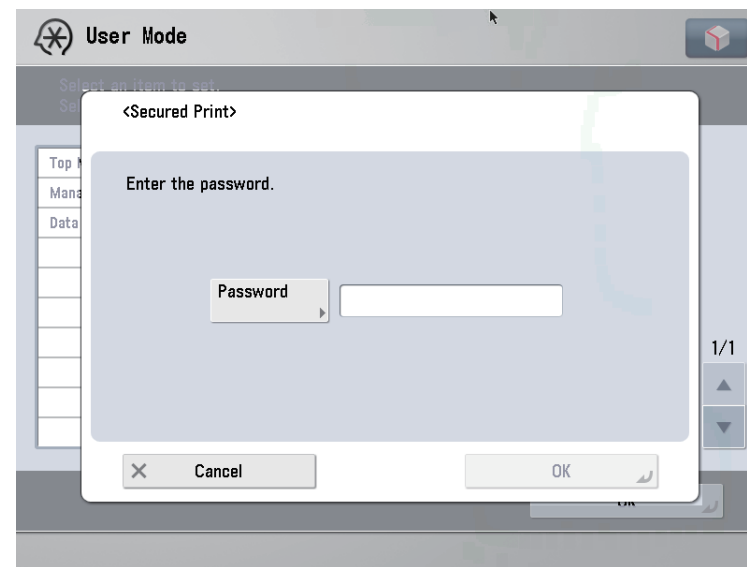
The USB flash drive holds the TPM key backup files by serial number. Thus, backup files for multiple machines can be saved in a USB flash drive.

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



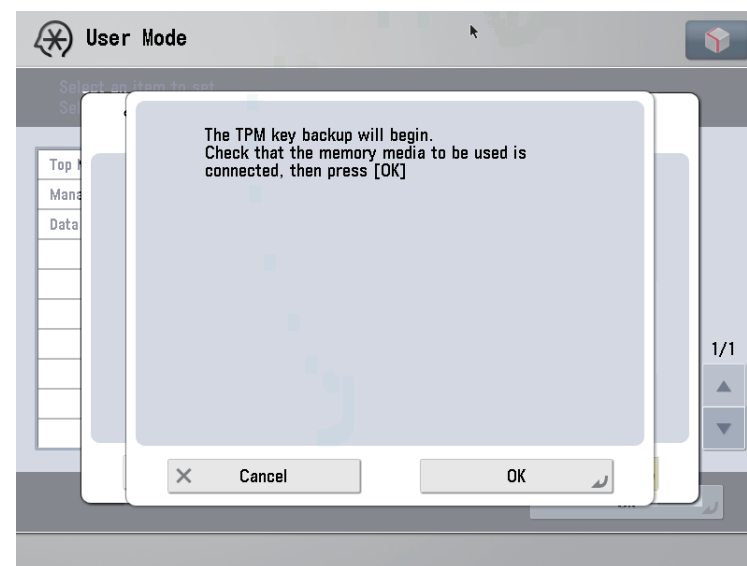
F-2-27

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



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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.

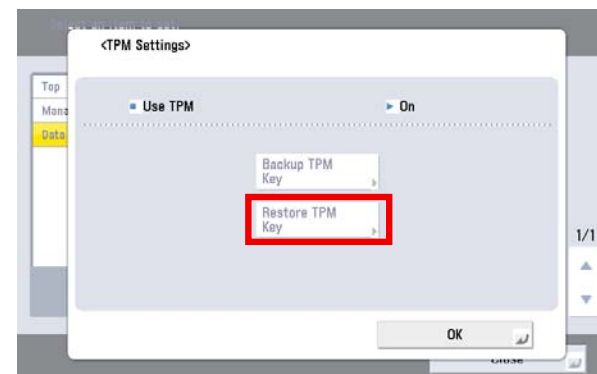
3. Restore of TPM key

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].



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- 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.

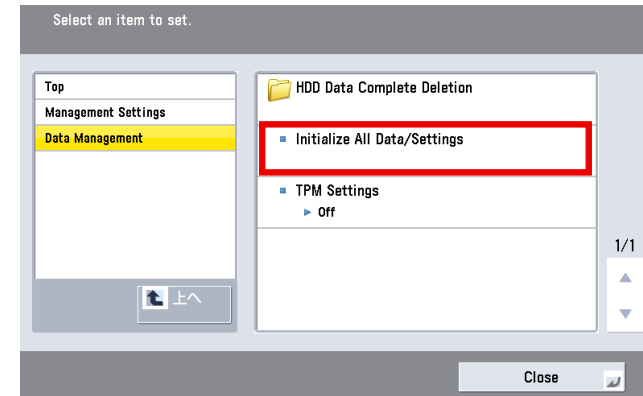
CAUTION: The following may cause failures in restoration.

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].



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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]

Steps of data restoration after recovery

The restoration process triggers Setting/ Registration > Management Setting > Data Management > Import/ Export > Import/ Export Setting/ Registration on the UI.

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

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

T-2-11

*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"

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● 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

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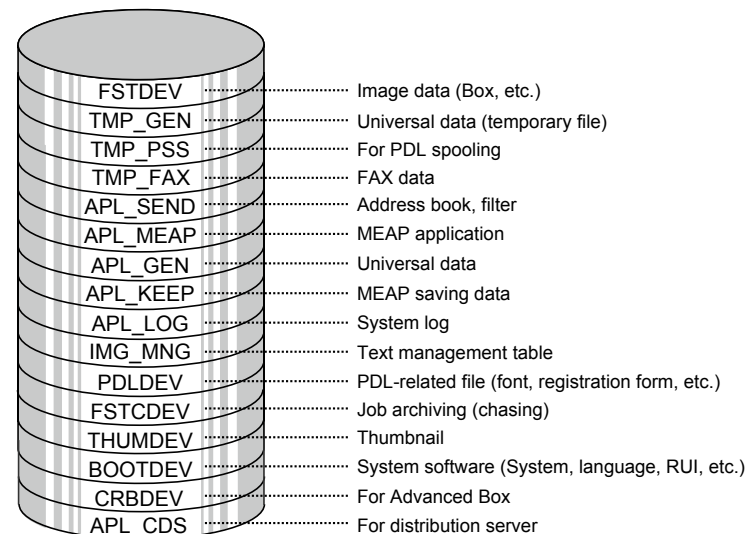
■ High capacity HDD (Option)

The HDD capacity mounted on this machine is 80GB as standard. Mounting a 2.5 inch / 250GB HDD-D1 (option) makes 250GB 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.

9GB: in the case of 80GB HDD capacity

114GB: in the case of 250GB HDD capacity



F-2-32

Although simple calculation says: 250GB - 80GB = 170GB, it requires 20% of snapshot area and the data area to be used for internal processing in the system. Therefore, 114GB can be actually used for text storage area.

HDD mirroring feature (option)

Overview

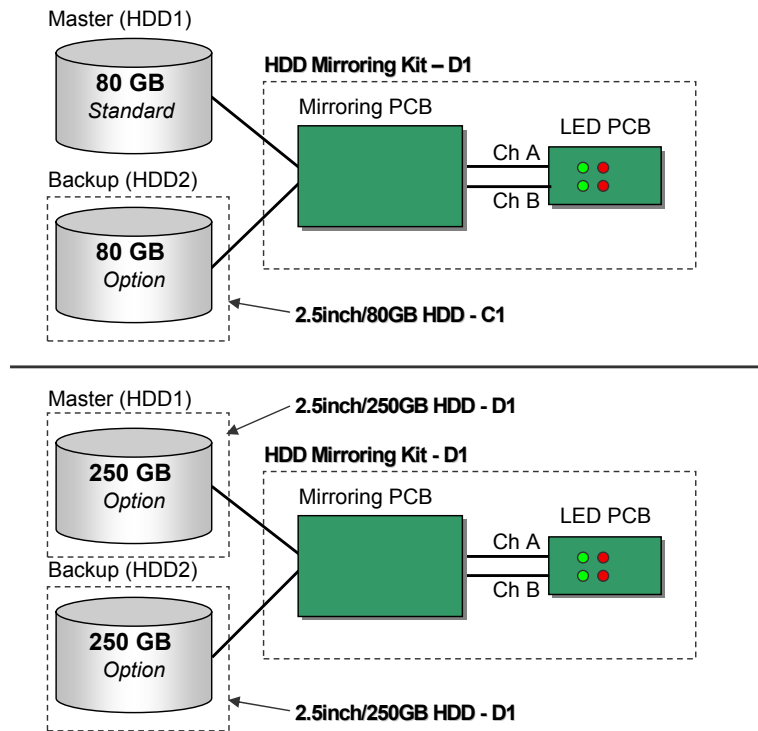
This option enables HDD data mirroring (RAID1).

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 (80GB or 250GB).

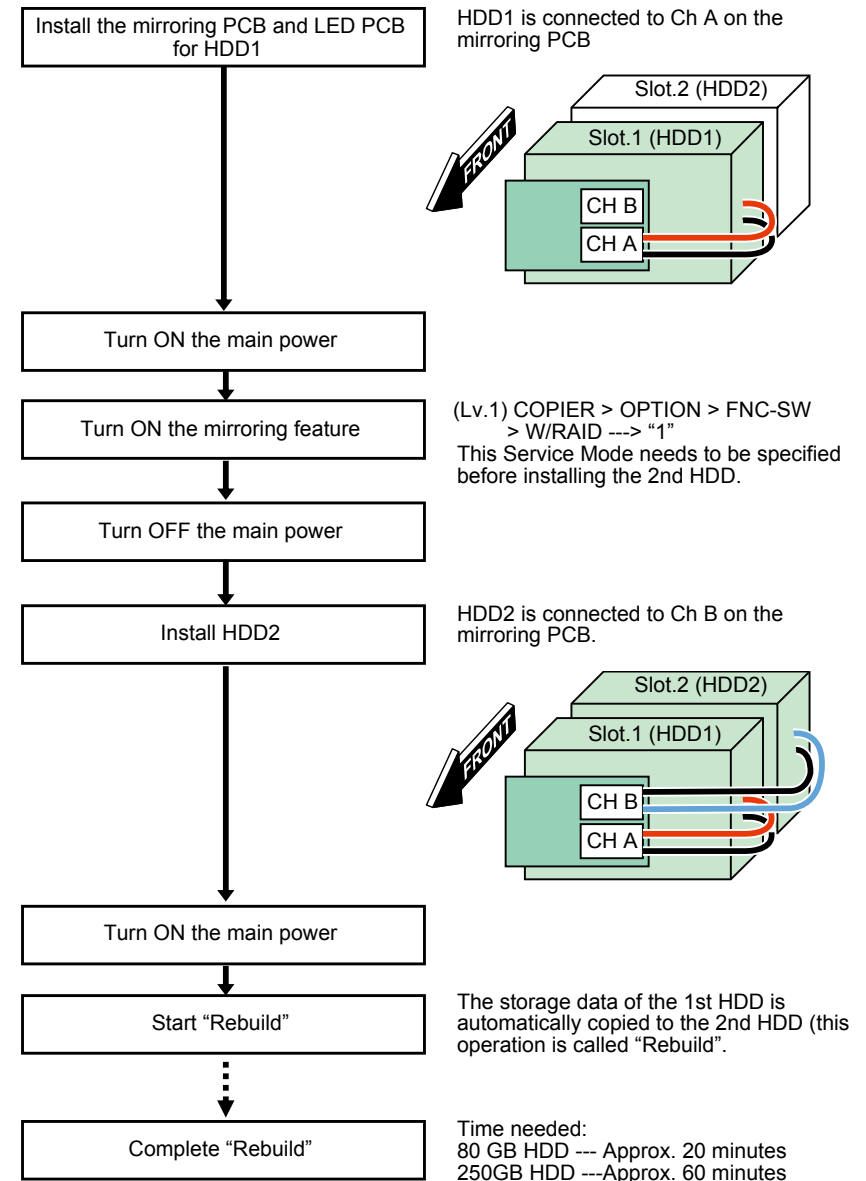
The mirroring PCB controls the reading / writing timing of HDD data.

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%"

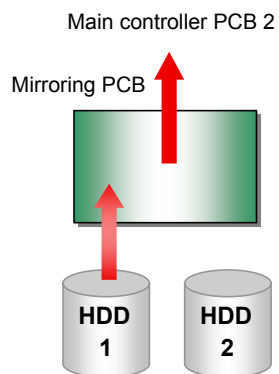
MEMO:

- 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

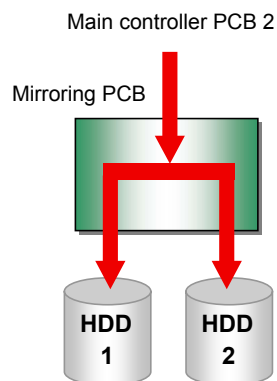
At reading:

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.

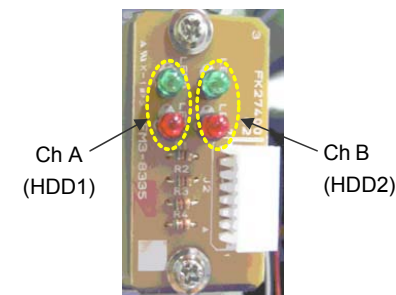
In the case of failure:

- 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.

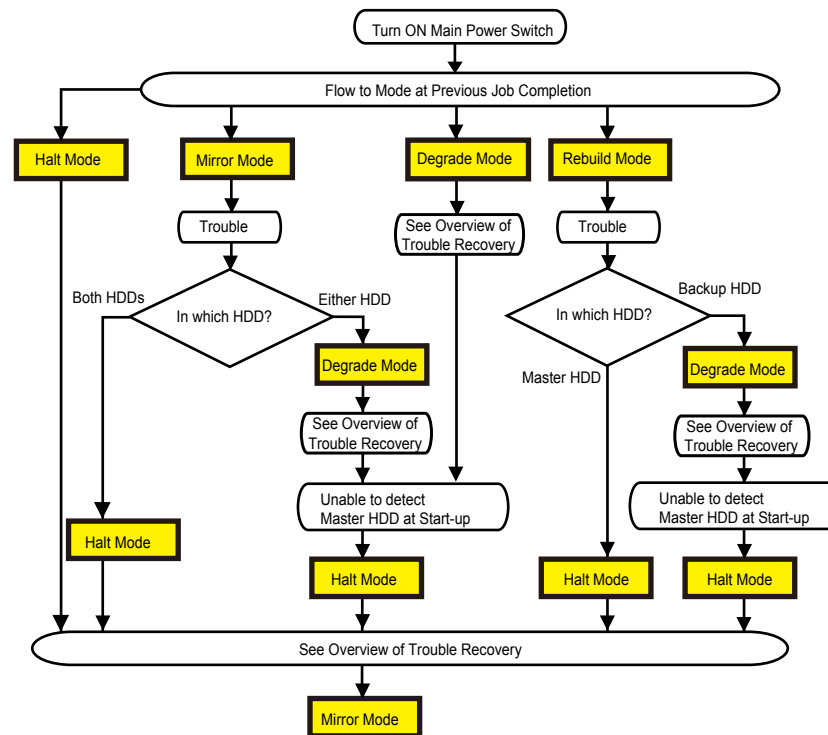
The table below lists descriptions of modes and operational overview.

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)

T-2-16

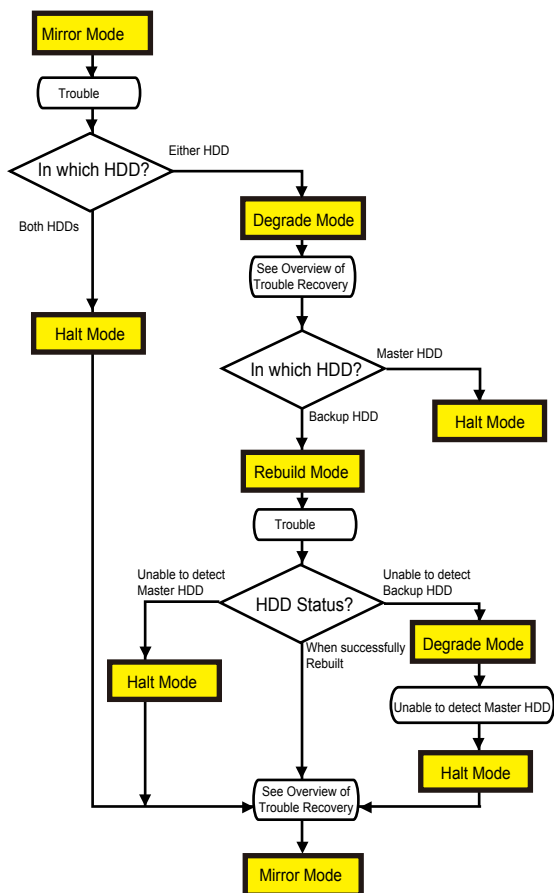
*1: Turn OFF/ ON the power in this mode, the mode returns to the previous mode.

Mode Flow at Start-up



F-2-37

Mode Flow during Operation



F-2-38

● 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)

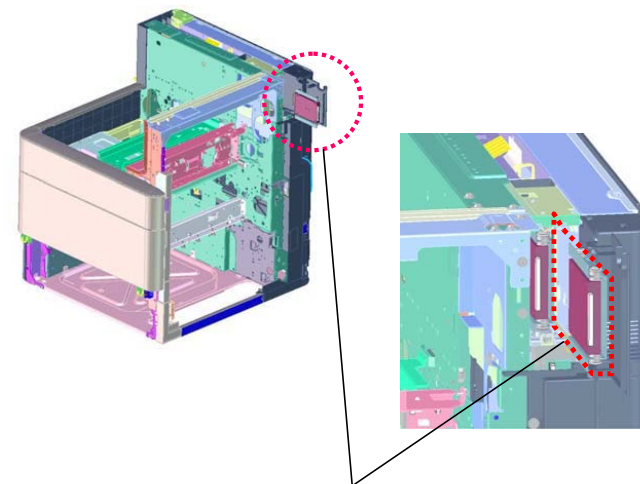
This option enables easier HDD mounting (slot-out/ in) at power-OFF (see *1). In addition, the HDD slot can be locked.

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

F-2-39

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.

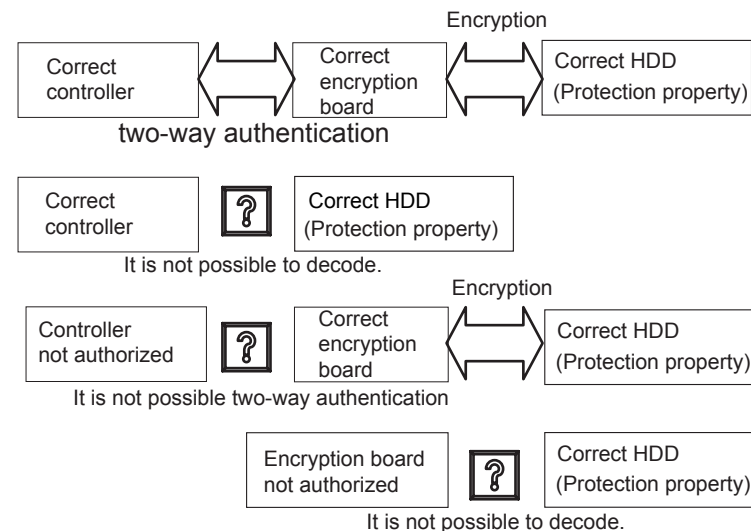
The following shows the statuses for each use case.

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



F-2-40

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

T-2-18

*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.

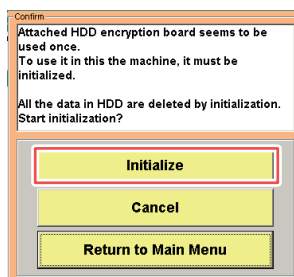
When you start the HDD formatting, the message is automatically shown to confirm whether to initialize the encryption board (Key Clear).

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.

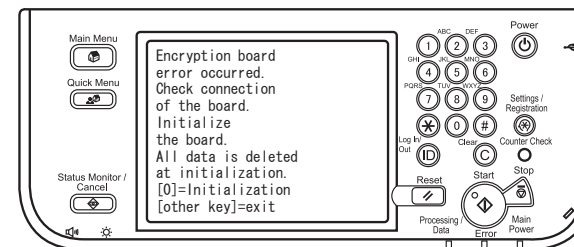


F-2-41

<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.



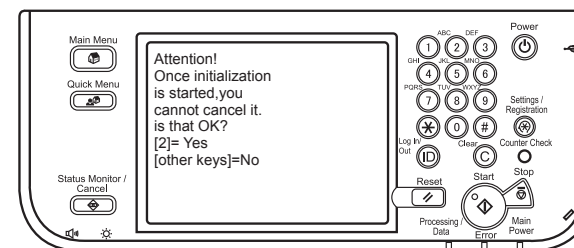
F-2-42

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



F-2-43

● 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		

T-2-19

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).

T-2-20

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)"	
Main Controller PCB 1	Transferring the parts from old PCB to new PCB	
Main Controller PCB 2	Backup of the set/registered data Transferring the parts from old PCB to new PCB Restoring the backup data	
TPM PCB	When TPM setting is "ON":Restoring the TPM key	

T-2-21

Consumables

N/A

Points to note at servicing

N/A

Image Formation System

Overview

Overview

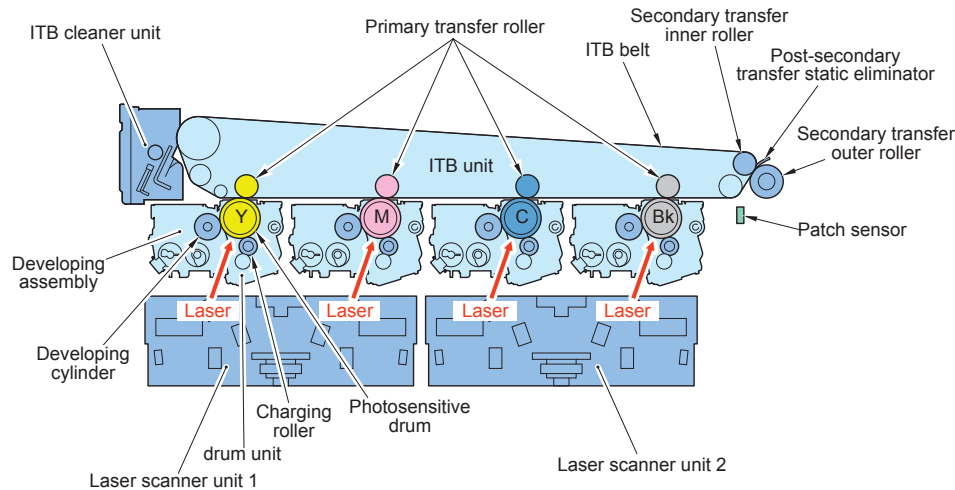
Image formation system of this machine uses the magnetic 2-component jumping developing method for developing and the intermediate transfer method for transfer to create toner image.

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 5051/5045, 2-beam for iR ADVANCE 5035/5030

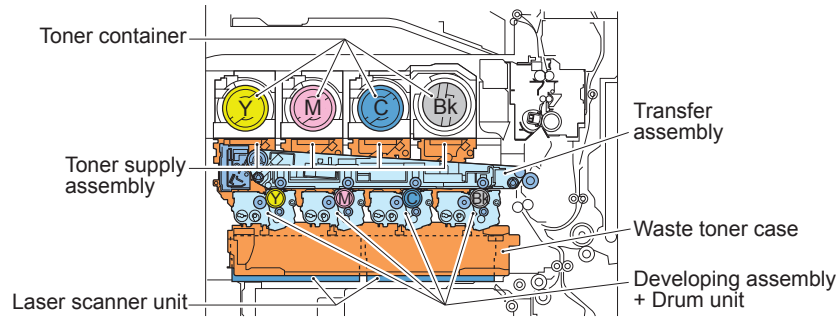
Specifications

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=215mm/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

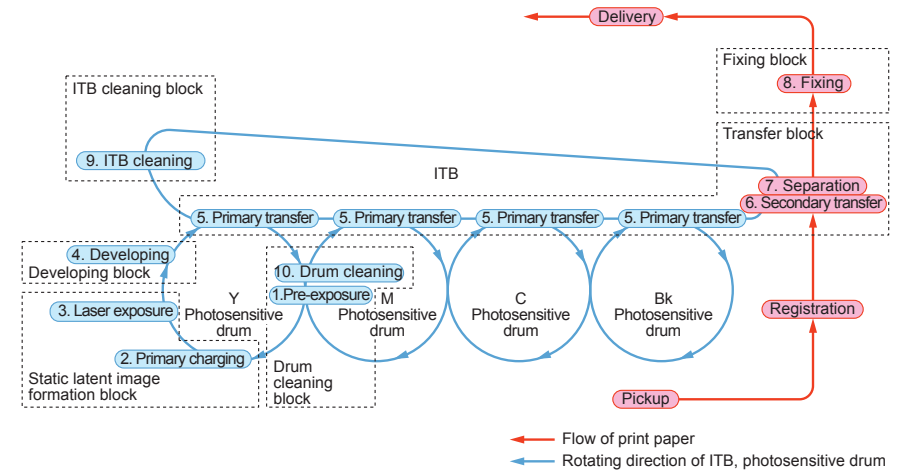
Parts configuration

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

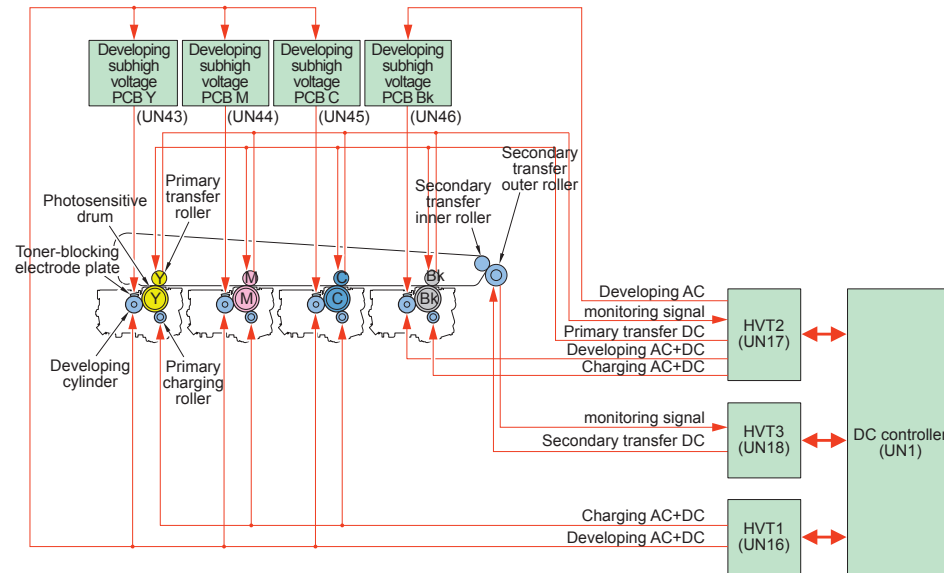
Bias Types

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

Pre-exposure		Image stabilization control	
Pre-exposure control		Drum film thickness detection	
		D-max control	
		D-half control	
		ARCDAT control	
		PASCAL control	
		Color displacement correction control	
		ATVC control	
Primary charging		Toner supply	
Primary charging bias control		Toner cap automatic opening control	
Discharge current control		Toner level detection/toner supply control	
Primary charging cleaning control			
Developing/drum		Waste toner feeding	
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			
Transfer/separation			
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			
Drum cleaning			
Drum cleaning control			

T-2-29

Pre-exposure

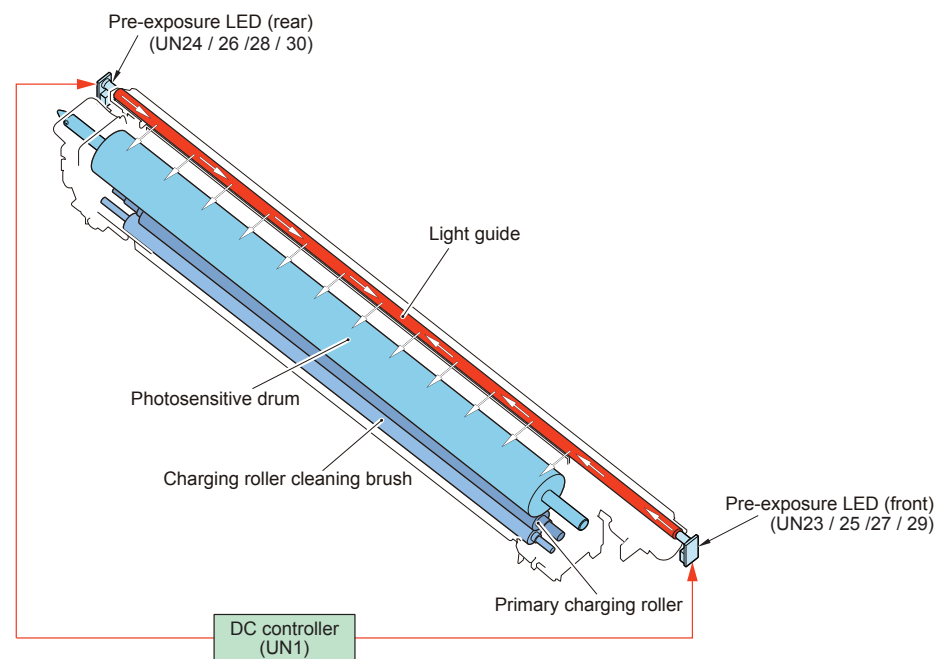
Pre-exposure control

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.



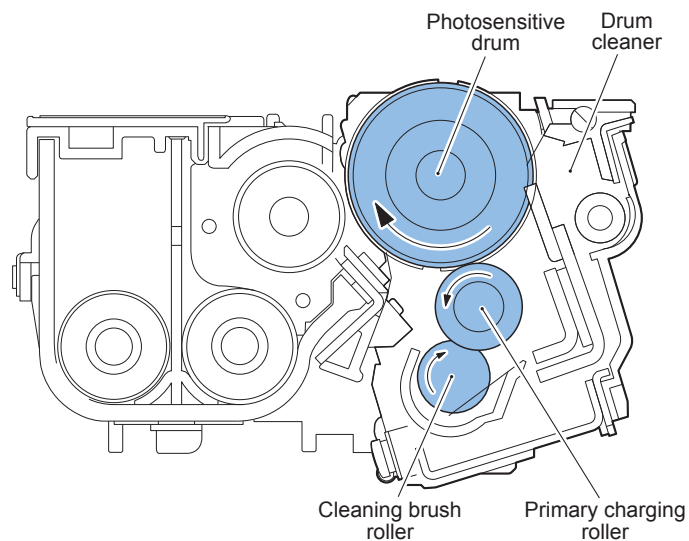
F-2-66

Primary charging

Overview

This machine uses the roller charging method for primary transfer.

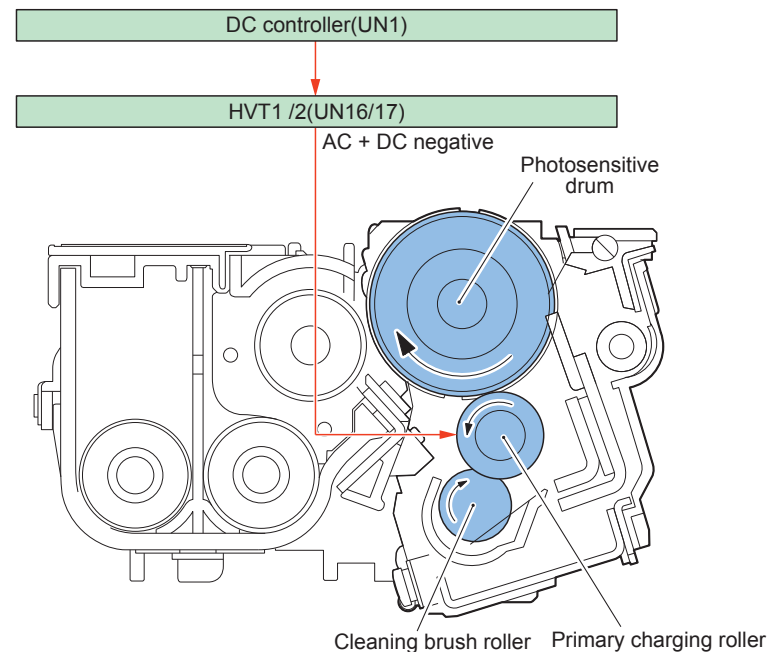
To prevent image fault (white spot/missing image) caused by residual toner, the cleaning brush roller is added to clean the primary charging roller.



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 post-rotation after the total reaches 250 prints (see Note1)

Note1: 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.

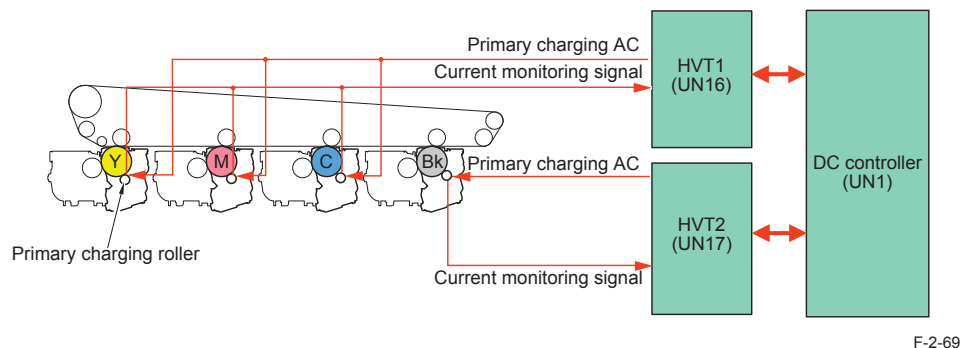
Detection description

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

Execution time
Within 1 second

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)

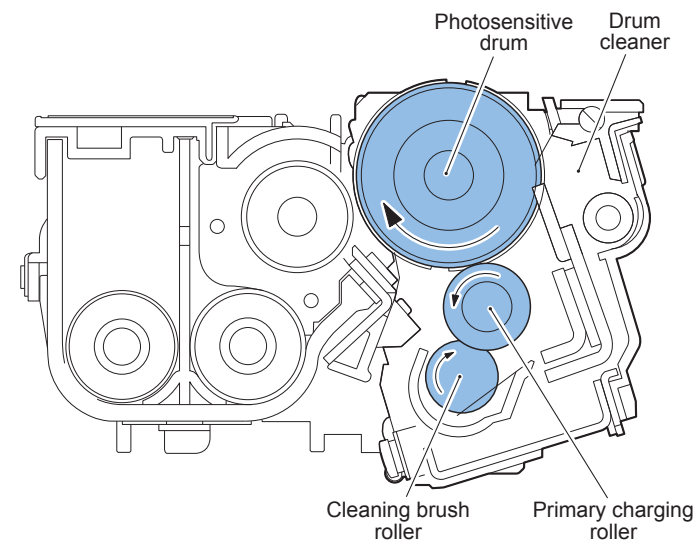
x indicates the corresponding color. (0=Y, 1=M, 2=C, 3=Bk)

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 (white spot/missing image) 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.

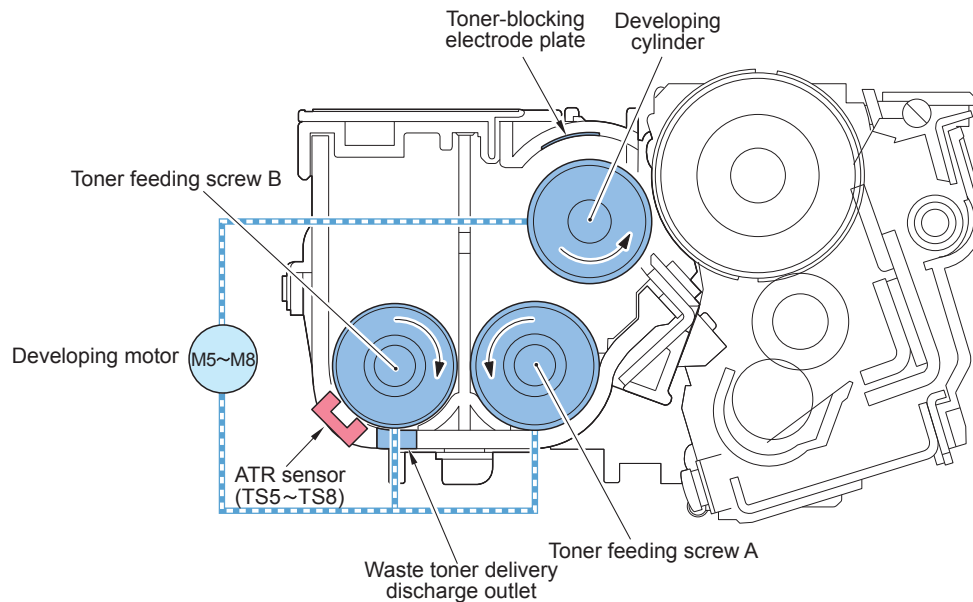
The drive of the brush roller is engaged with the primary charging roller.



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

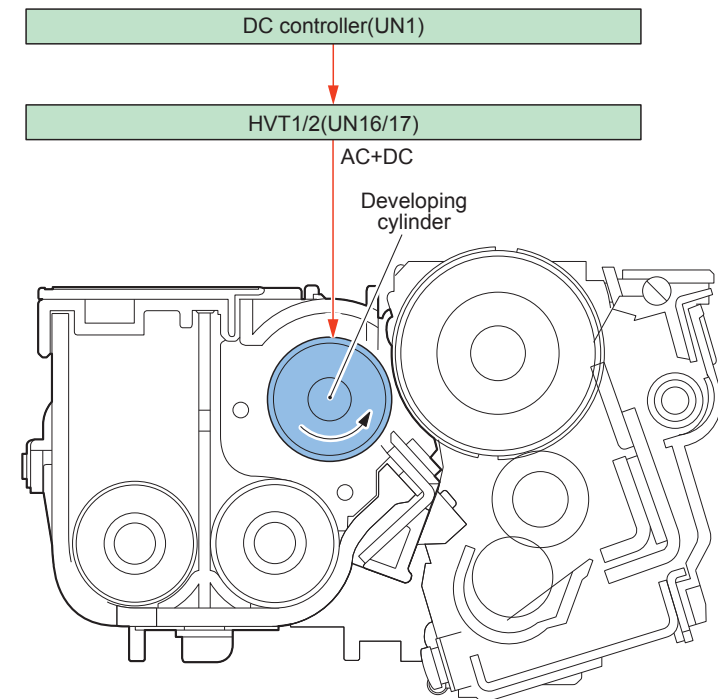
Developing bias control

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

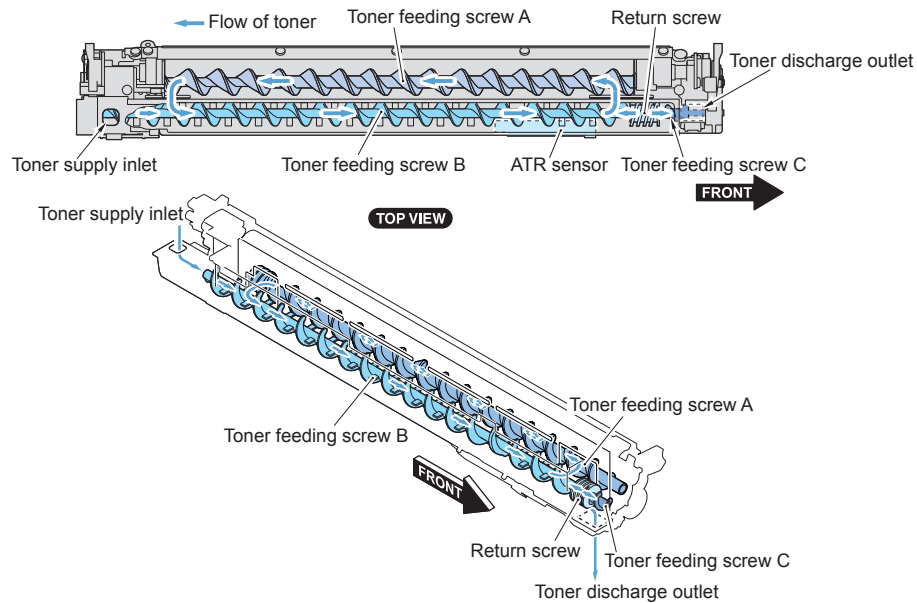
● ACR (Auto Carrier Refresh) control

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.



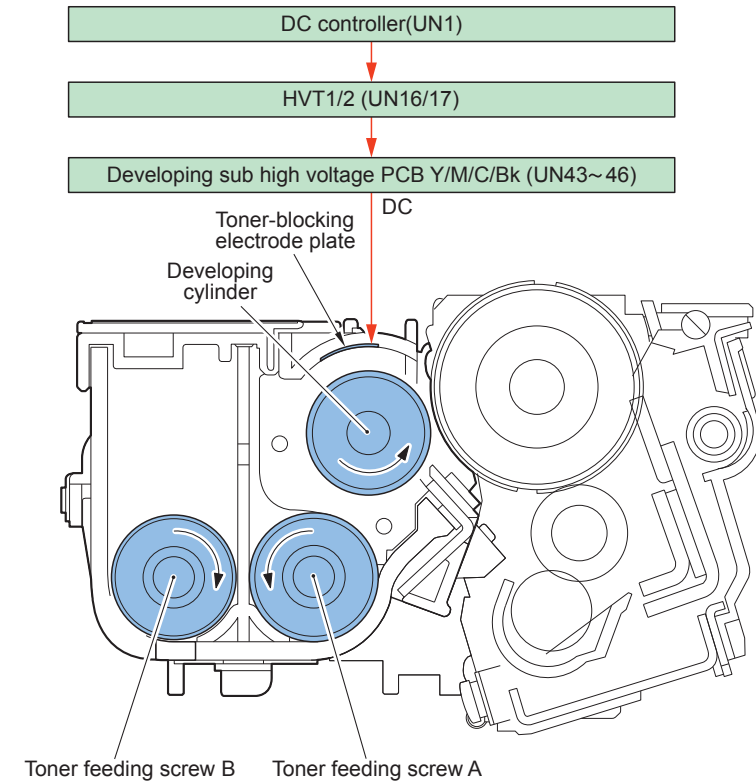
F-2-73

● Toner-blocking bias control

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

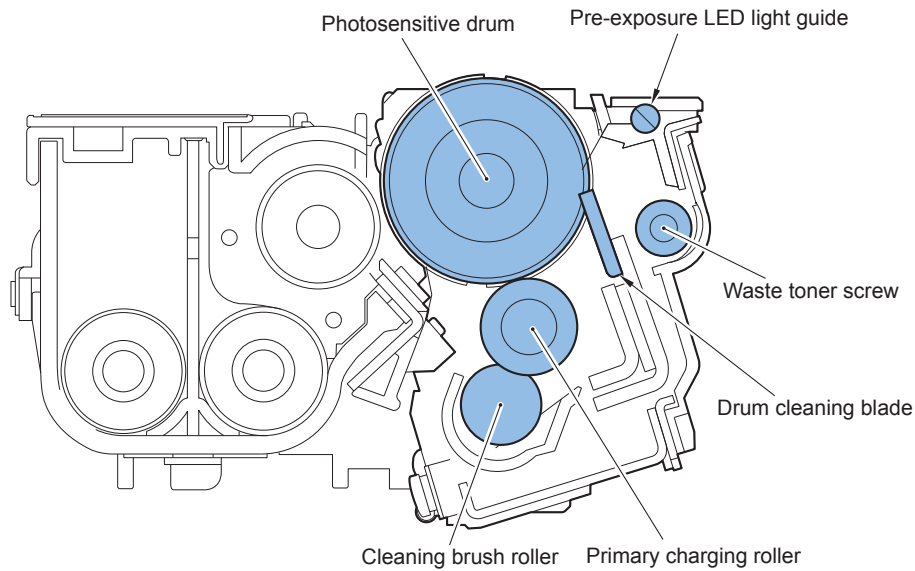
Developing AC bias which has been generated by HVT1 (UN16) is generated to be negative DC bias on the developing sub high voltage PCB (UN43 to 46).

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

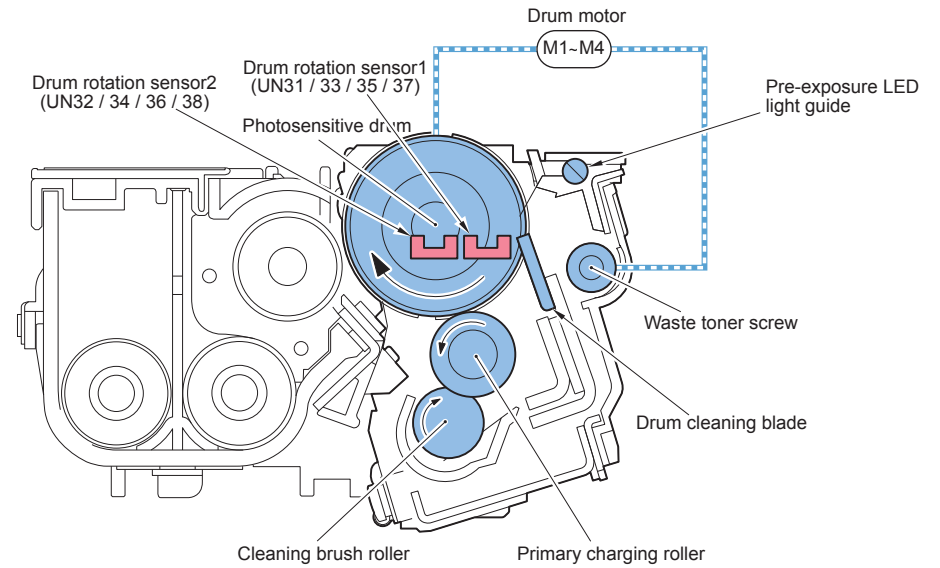


F-2-75

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

To be determined by current monitoring value of the primary charging AC bias

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

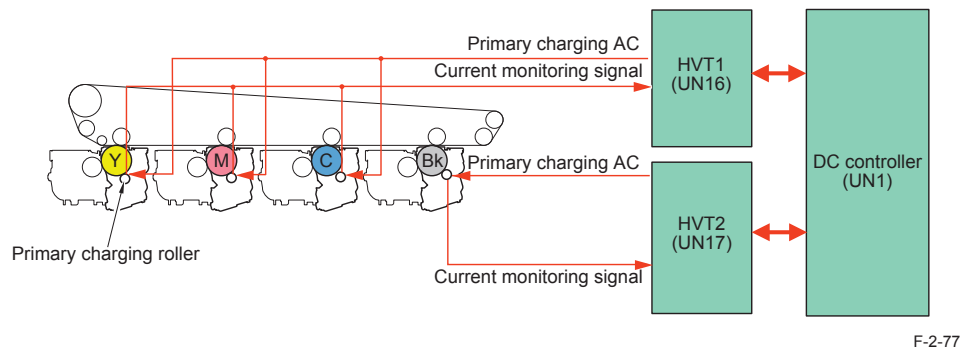
In case that current monitor value is the specified value (1mA) or more: Drum Unit present

Execution timing

Within 1 second

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

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

Detection description

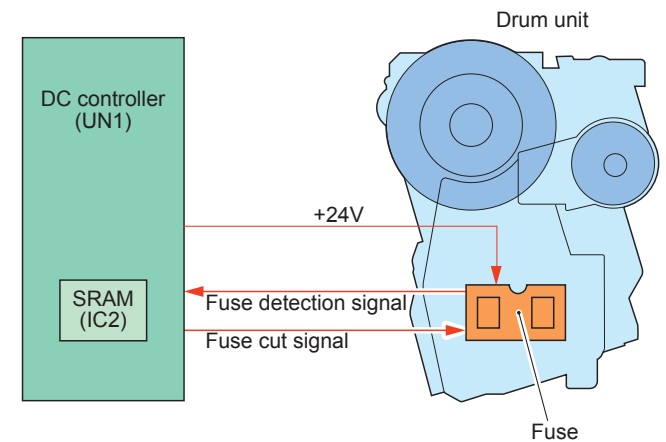
To check state of the fuse that is attached to each drum unit

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.

Related service mode

COPIER > FUNCTION > INSTALL > AINR-OFF (fuse cut extend on new drum unit)

This is to disable the Drum Unit initialization to be executed when a new Drum Unit is inserted. Also, fuse meltdown after Drum Unit initialization will not be executed.

This is used when replacing a Drum Unit temporarily and checking the image to identify a cause of a trouble etc.

0: Initialization is executed when a new one is installed. Fuse meltdown is executed.

[Default]

1: Initialization is not executed when a new one is installed. Fuse melt down is not executed.

Make sure to set this service mode to "1" only when it is necessary at servicing. Be sure to reset this service mode to "0" when service works are completed.

● 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 AC 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

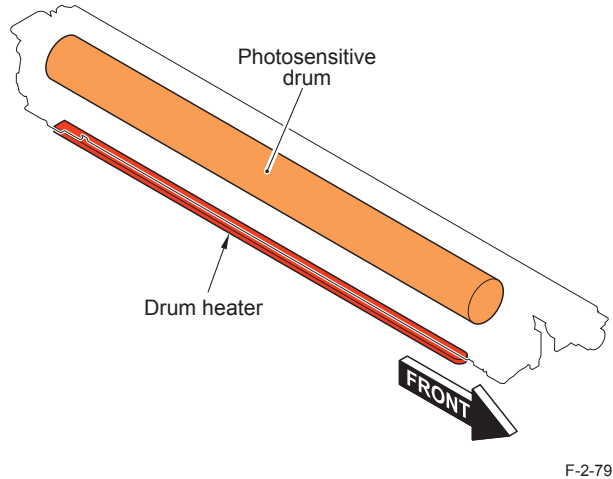
CAUTION: The life data varies according to the image type, paper type, use environment, etc.

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

● 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 works only when the main power switch is turned OFF while the environment switch is turned ON.



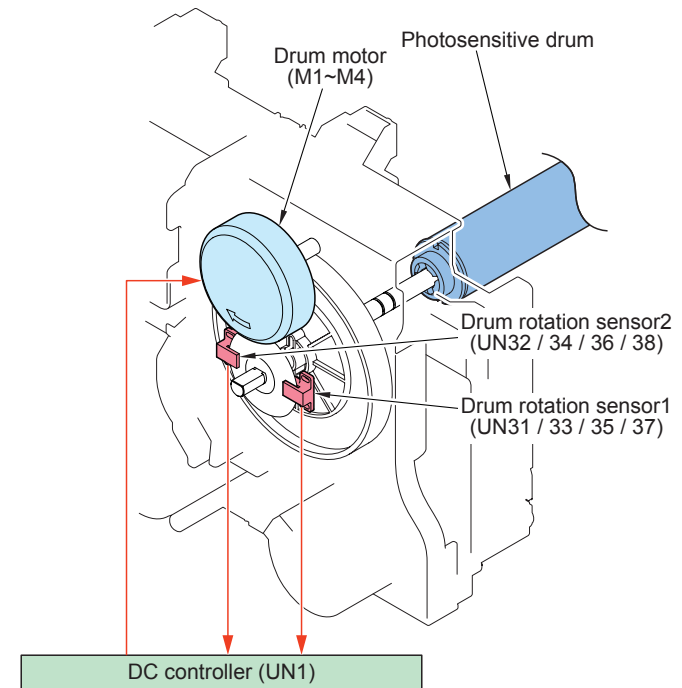
F-2-79

● 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

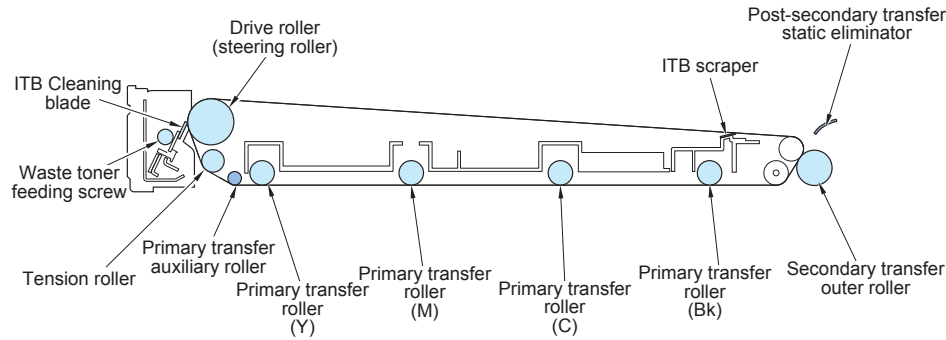
- 1) The drum rotates, driven by the drum motors (M1 to M4).
- 2) There is an encoder on the drum shaft, of which rotation is monitored by the two sensors (Y: UN31/32, M: UN33/34, C: UN35/36, Bk: UN37/38,).
- 3) This sensor counts the drum count based on a pulse, and feeds back the drum rotation speed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



F-2-80

Transfer/separation

Overview



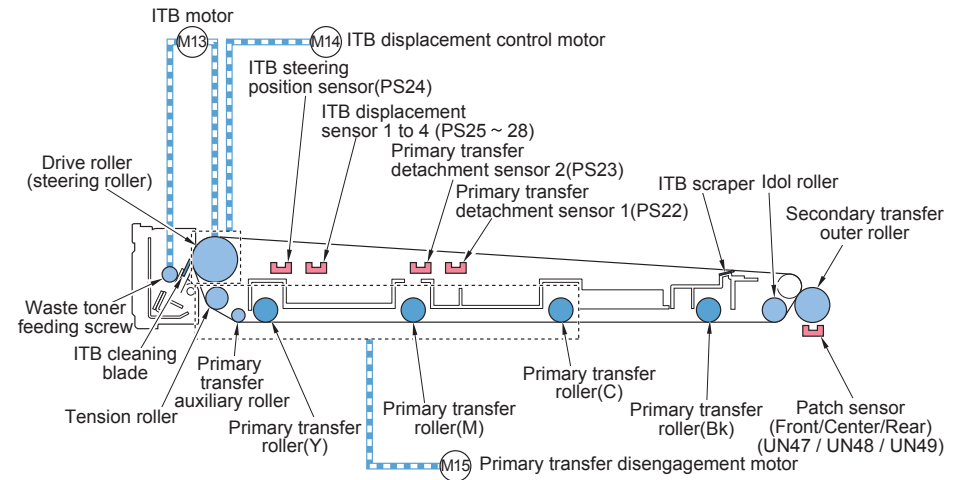
F-2-81

Toner on the photosensitive drum is transferred on paper

Parts name	Function
ITB unit	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	To make the contact surface of Primary Transfer Roller (Y) with the ITB horizontal.
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
Secondary transfer unit	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 tension 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	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
UN54	ITB HP sensor	To detect home position of the ITB

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

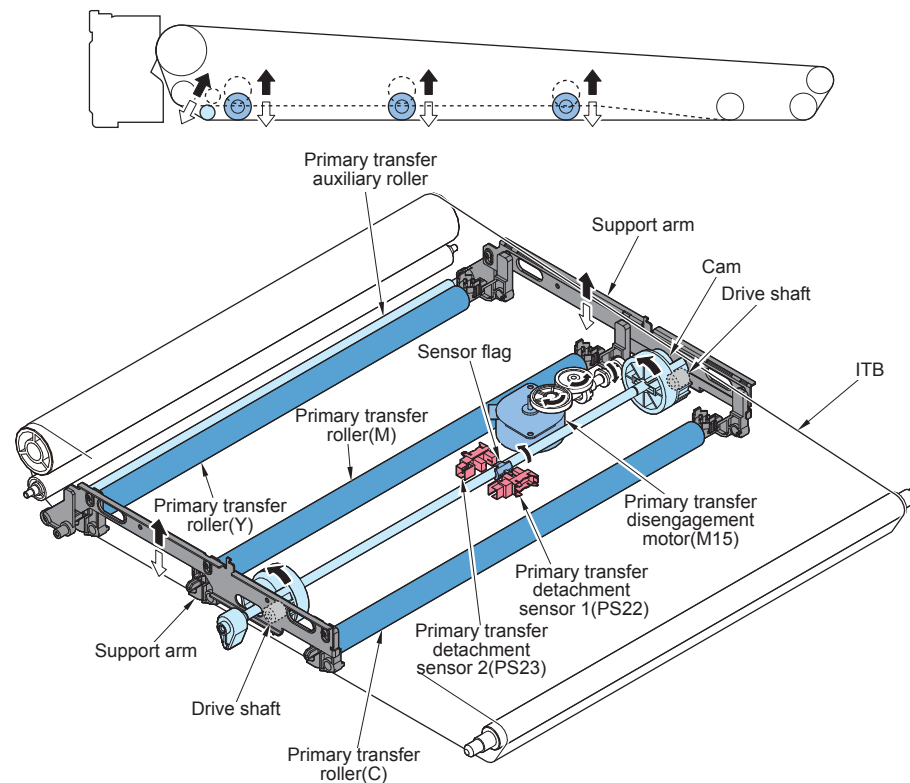
- Roller to be engaged: when making color prints (If 2 and more sheets of Bk continues within a job at Color + Bk mix printing, disengage the Primary Transfer Roller when printing color)
- Roller to be disengaged: anytime other than the above timing

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

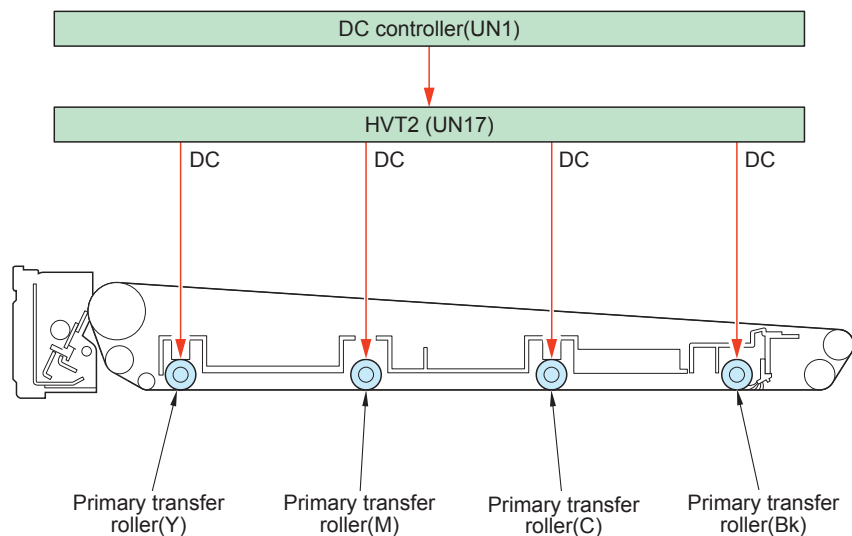
- E074-0001: ITB pressurized operation error
- E074-0002: ITB disengaged operation error
- E074-0003: Breakdown of Primary Transfer Pressure Sensor and Primary Transfer Disengage Sensor.

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)



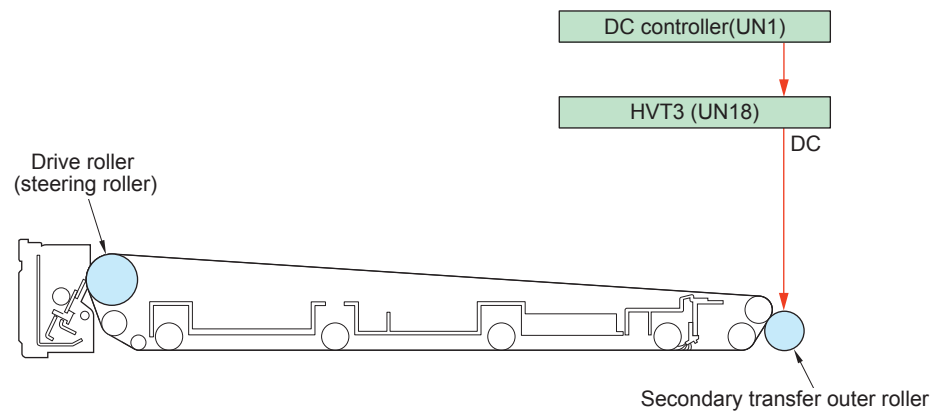
F-2-84

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

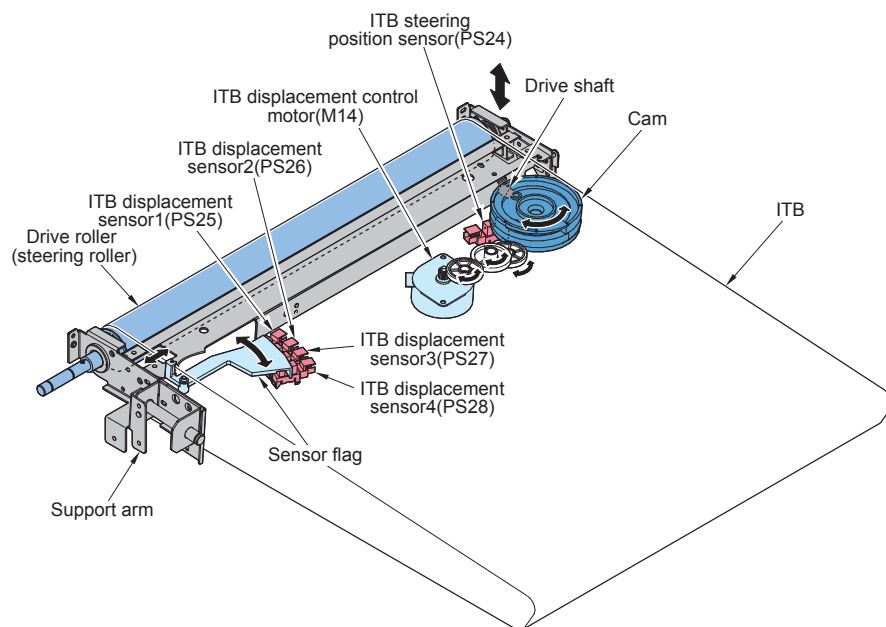
This control prevents damage on the ITB due to displacement of the ITB.

Execution timing

When the ITB is rotated

Control description

- 1) The ITB displacement sensors (PS25 to 28) 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

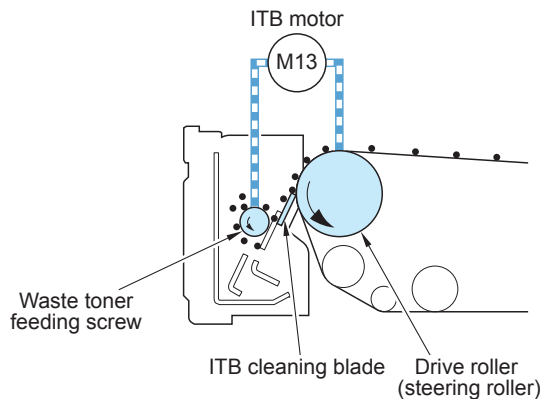
The "ON" state of the sensors above indicates that the light is blocked

● 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.

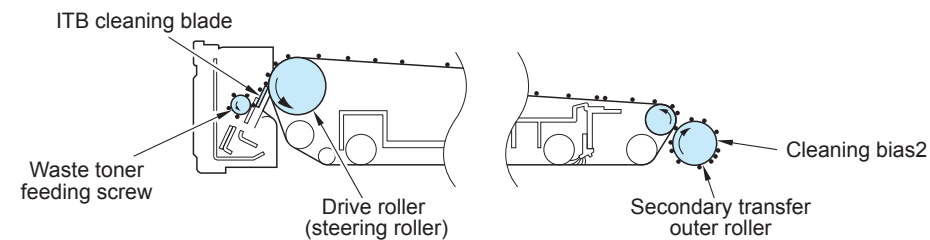
Residual toner on the secondary transfer outer roller is attached to the ITB, and then collected by the ITB cleaning unit.

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

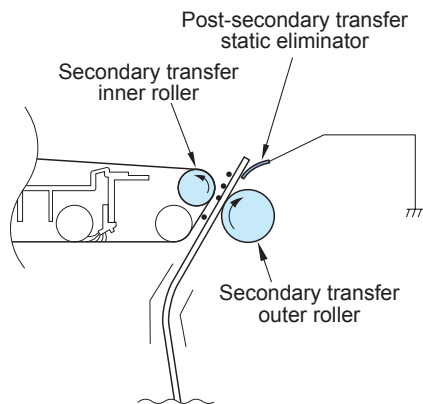
Related Service Mode

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.

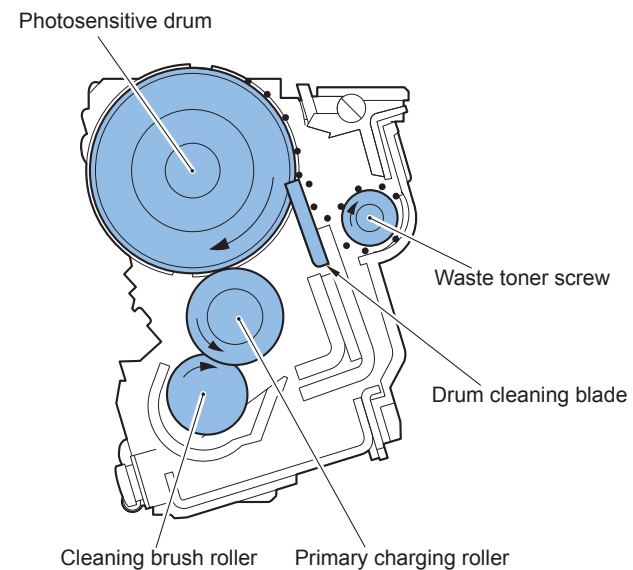
■ Drum cleaning

● 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.

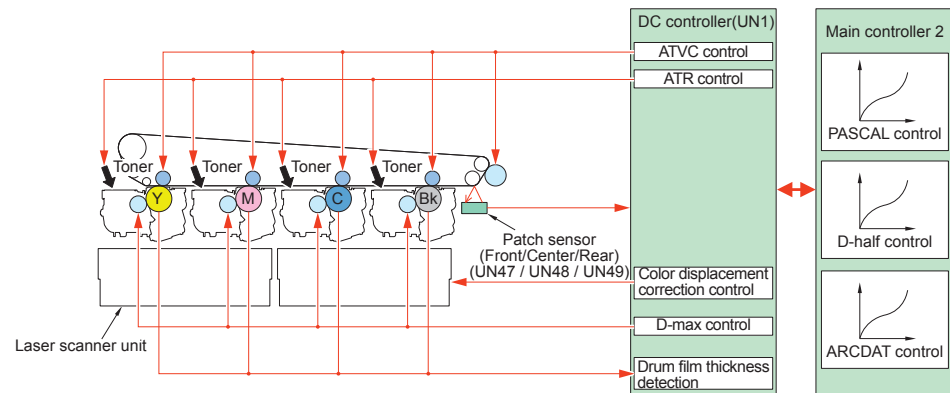


F-2-90

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	○	○	○		○	○	○		○		○
	H/H environment	Model A: approx 46.0 Model B: approx 68.1	○	○	○		○	○	○	○		○	○
At recovery from sleep	Sleep is less than 8 hours	Model A: approx 12.1 Model B: approx 17.6		○			○	○	○				
	Sleep is 8 hours or more	Model A: approx 20.9 Model B: approx 29.5	○	○	○		○	○	○				○
	Sleep is 8 hours or more (in H/H environment)	Model A: approx 46.0 Model B: approx 68.1	○	○	○		○	○	○	○		○	○
At pre-rotation	At normal condition	Model A: approx 1.1 Model B: approx 1.7						○					
	At environment change	Model A: approx 12.1 Model B: approx 17.6		○			○	○	○				○
	Per total of 500 sheets	Model A: approx 2.7 Model B: approx 4.0					○						
At sheet interval	During printing per total of 100 sheets	Model A: approx 8.4 Model B: approx 12.8							○			○	○
	During printing per total of 250 sheets	Model A: approx 3.3 Model B: approx 4.3		○									
	During printing per total of 700 sheets	Model A: approx 11.1 Model B: approx 16.8					○		○			○	○
	During printing per total of 360 sheets (model A) or total of 240 sheets (model B)	Model A: approx 6.1 Model B: approx 9.3							○				○
	During printing per total image ratio 2000%	Model A: approx 2.8 Model B: approx 4.3				○			○				
At post-rotation	After printing per total of 25 sheets	Model A: approx 6.1 Model B: approx 9.3							○				○
	After printing per total of 125 sheets	Model A: approx 11.7 Model B: approx 17.1		○					○			○	○
	After printing per total of 180 sheets (model A) or total of 120 sheets (model B)	Model A: approx 5.0 Model B: approx 7.6											○
	After printing per total image ratio 800%	Model A: approx 2.8 Model B: approx 4.3				○			○				
	After printing per total of 1000 sheets	Model A: approx 42.6 Model B: approx 65.7		○		○	○	○	○	○	○	○	○
	After printing per total of 5000 sheets	Model A: approx 47.6 Model B: approx 72.1	○	○	○	○	○	○	○	○	○	○	○

T-2-38

Model A: imageRUNNER ADVANCE C5051/5045

Model B: imageRUNNER ADVANCE C5035/5030

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

Related service mode

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

COPIER>OPTION>CLEANING>ITBB-TMG (setting of ITB cleaning interval)

● Drum film thickness detection

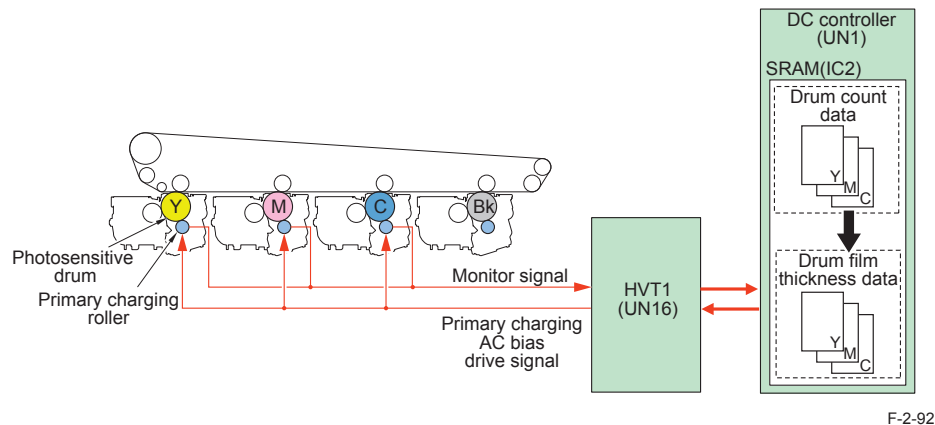
To detect use condition of the photosensitive drum

Execution timing

- 1)When the power is turned ON.
- 2)Every time making print

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.



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

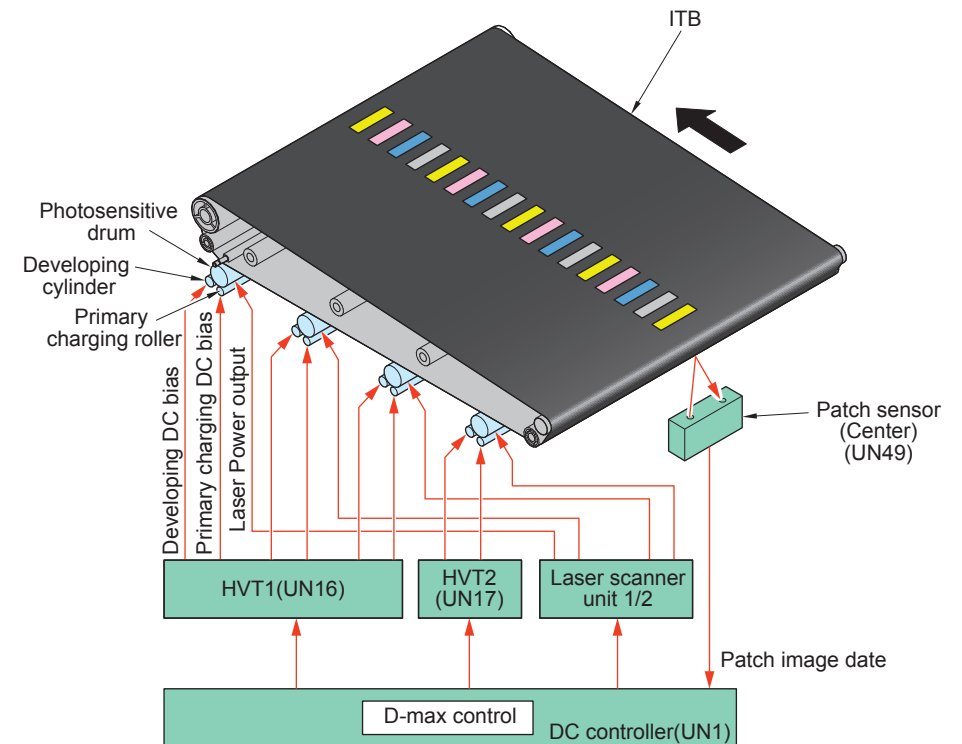
This control determines optimal developing DC bias, primary charging DC bias, laser power output.

Execution timing

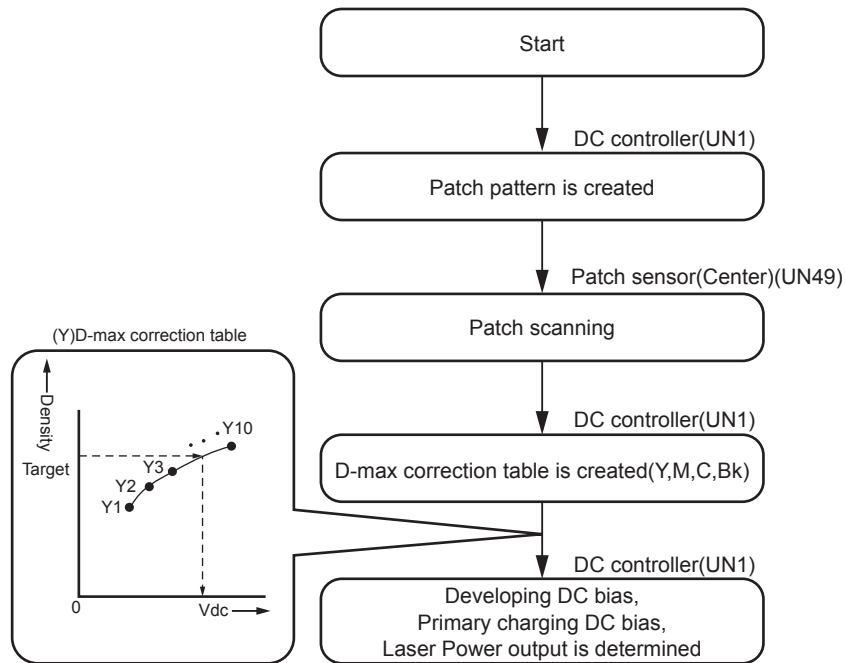
- 1)When replacing a drum unit or developing assembly.
- 2)At every post-rotation after the total reaches 1000 prints.
- 3)Power ON (High temperature and humidity)and corrects the each color developing DC bias, primary charging DC bias, laser power output to realize the target density.

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



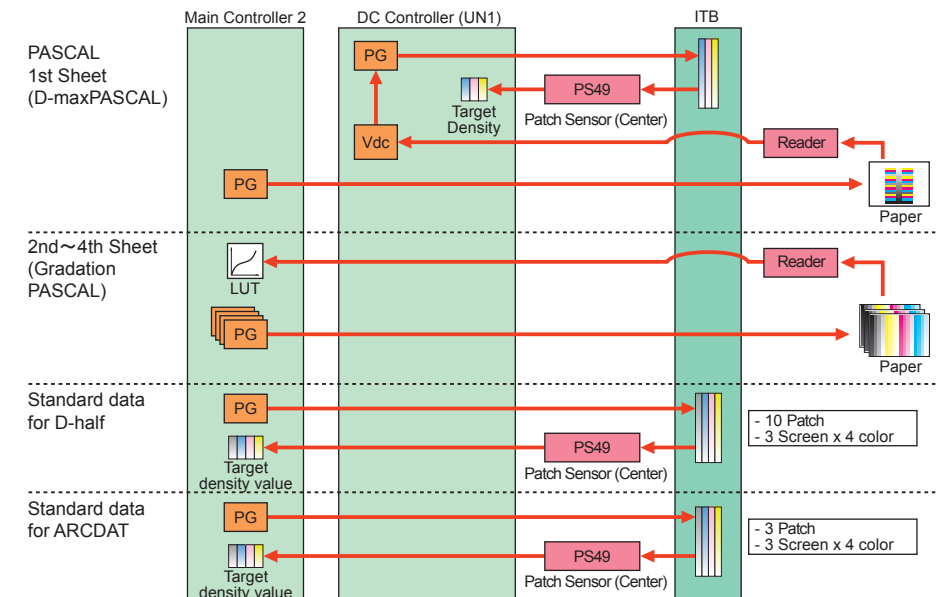
F-2-94

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)

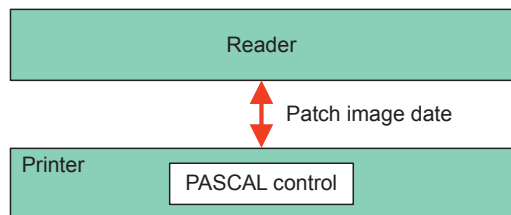
Control description

- 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.

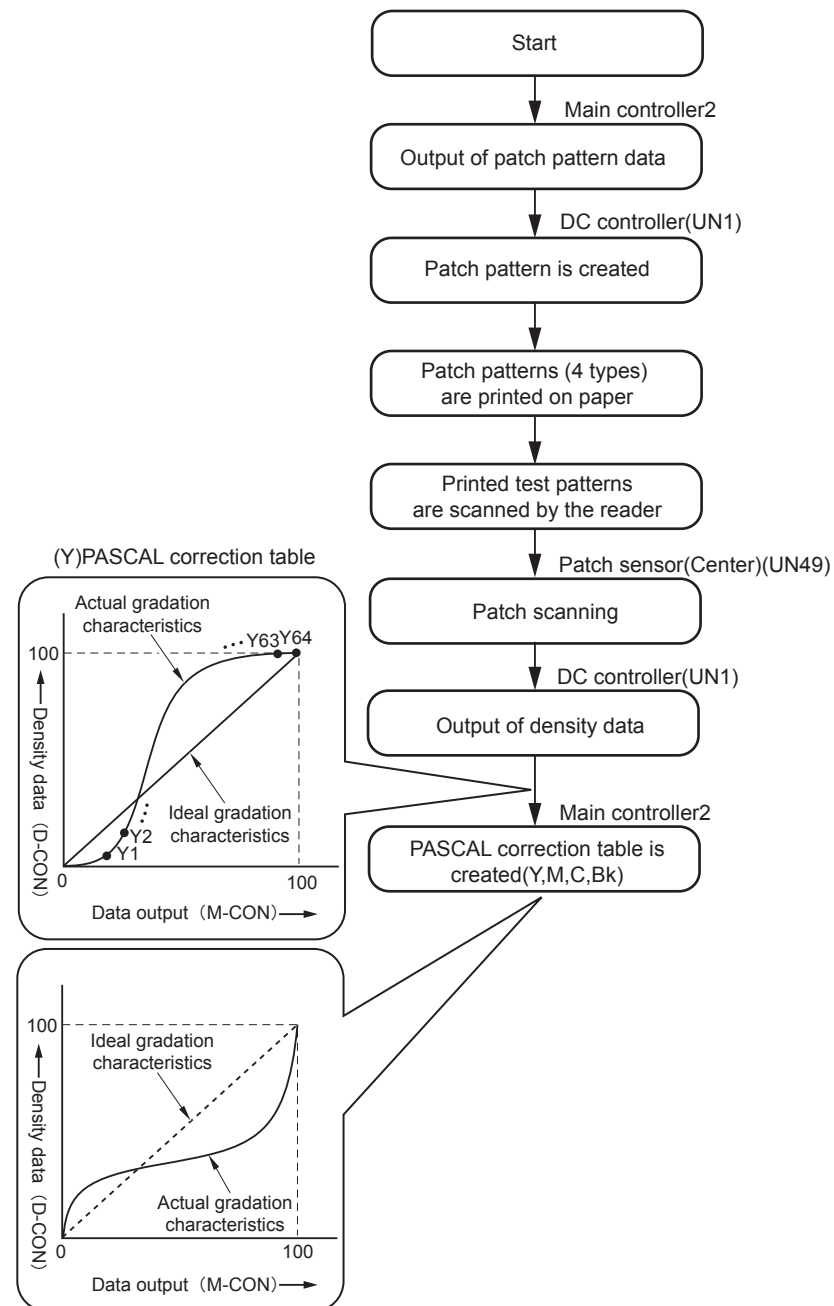
MEMO:

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

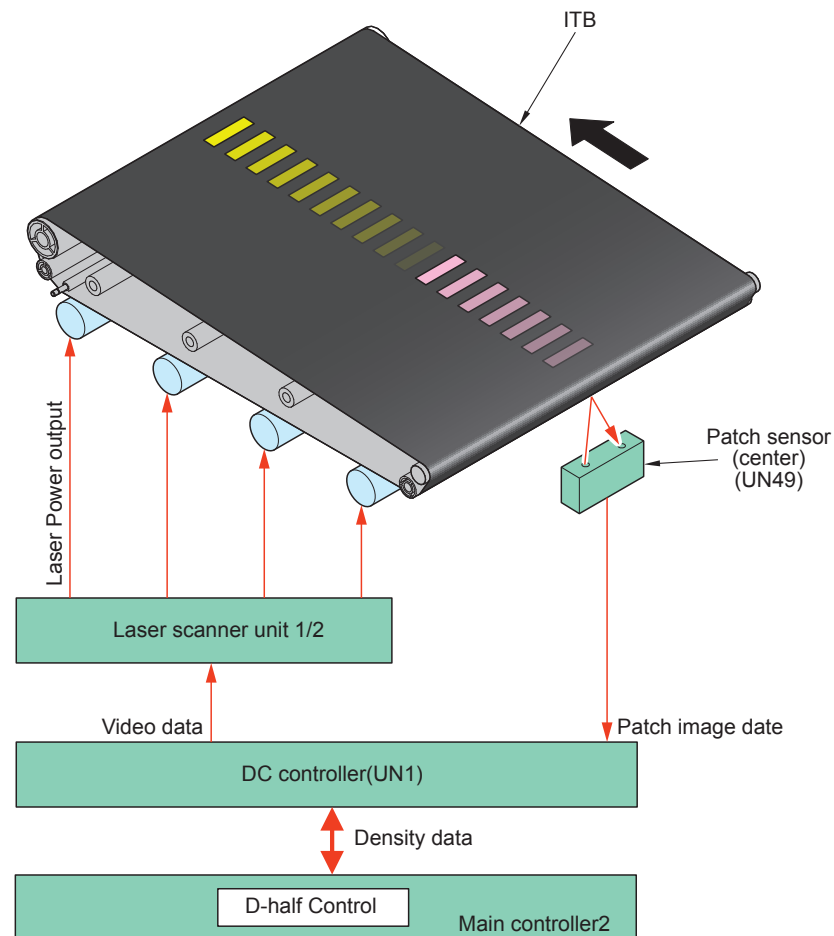
- 1) When replacing a drum unit or developing assembly
- 2) At post-rotation every time the total reaches 1000 prints
- 3) At execution of PASCAL control

Control details

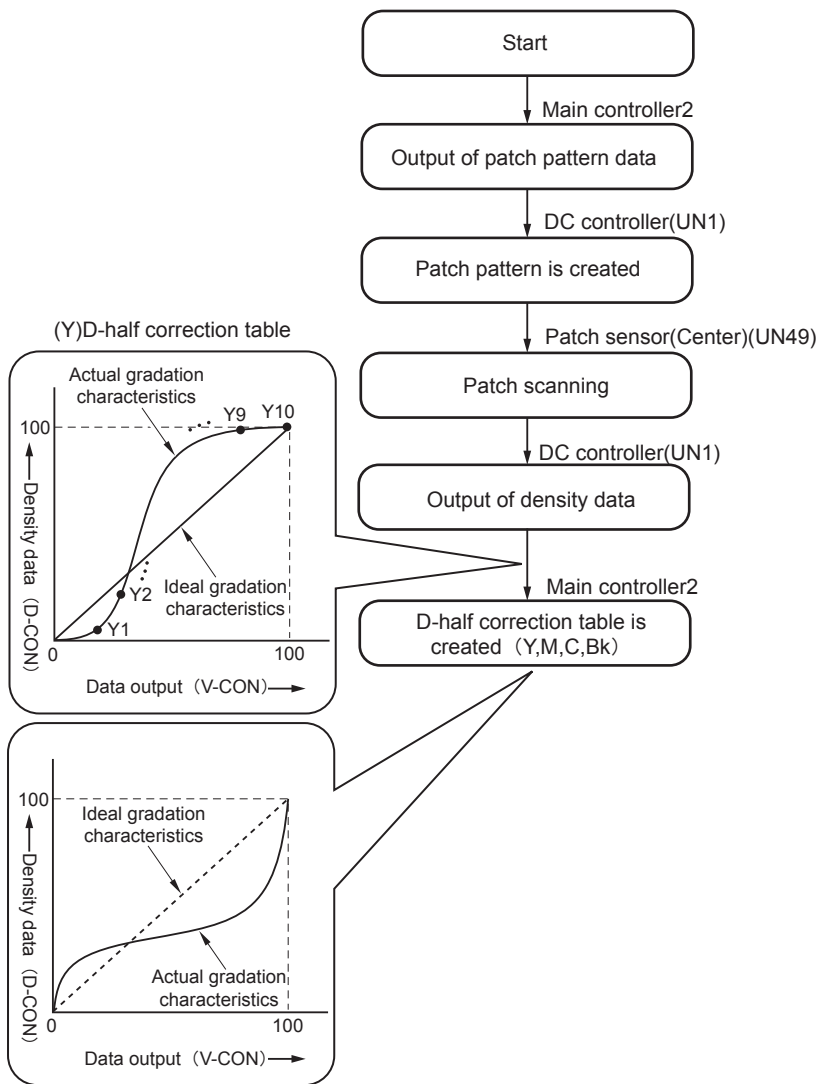
- 1) The Main Controller 2 outputs the patch data of each color (Y, M, C, Bk) to the DC Controller.
- 2) DC Controller creates the patch pattern of each color (Y, M, C, Bk) on the ITB based on this data.
- 3) DC Controller measures the patch pattern with the Patch Sensor (center) (UN49) and returns the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



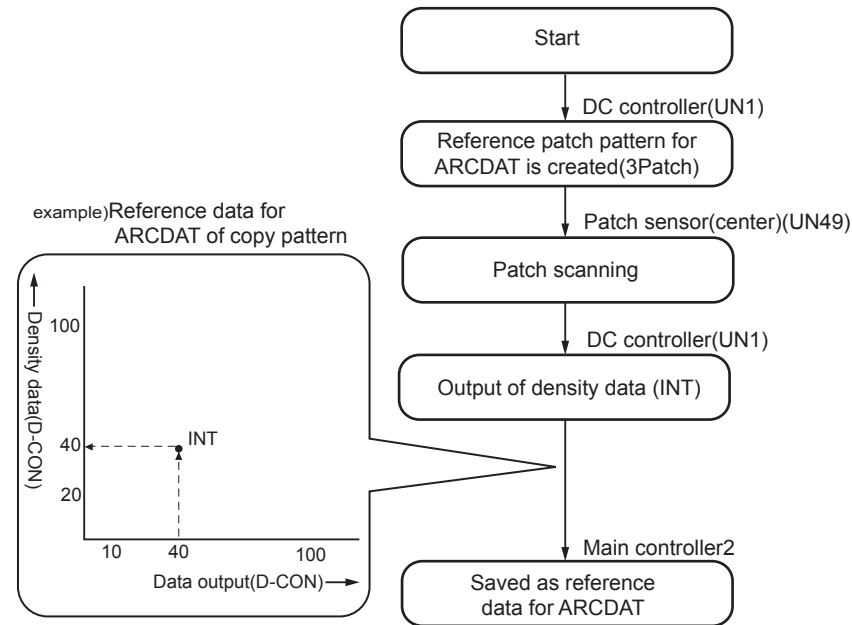
F-2-99

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

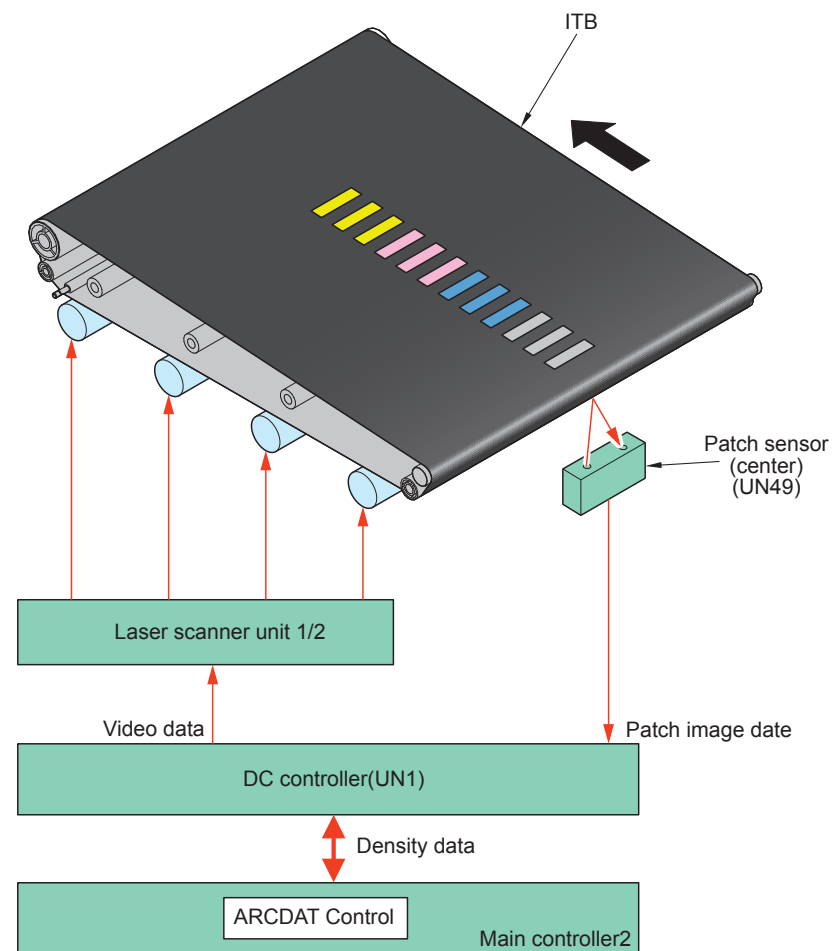
This control obtains ideal gradation characteristics while reducing down time

Execution timing

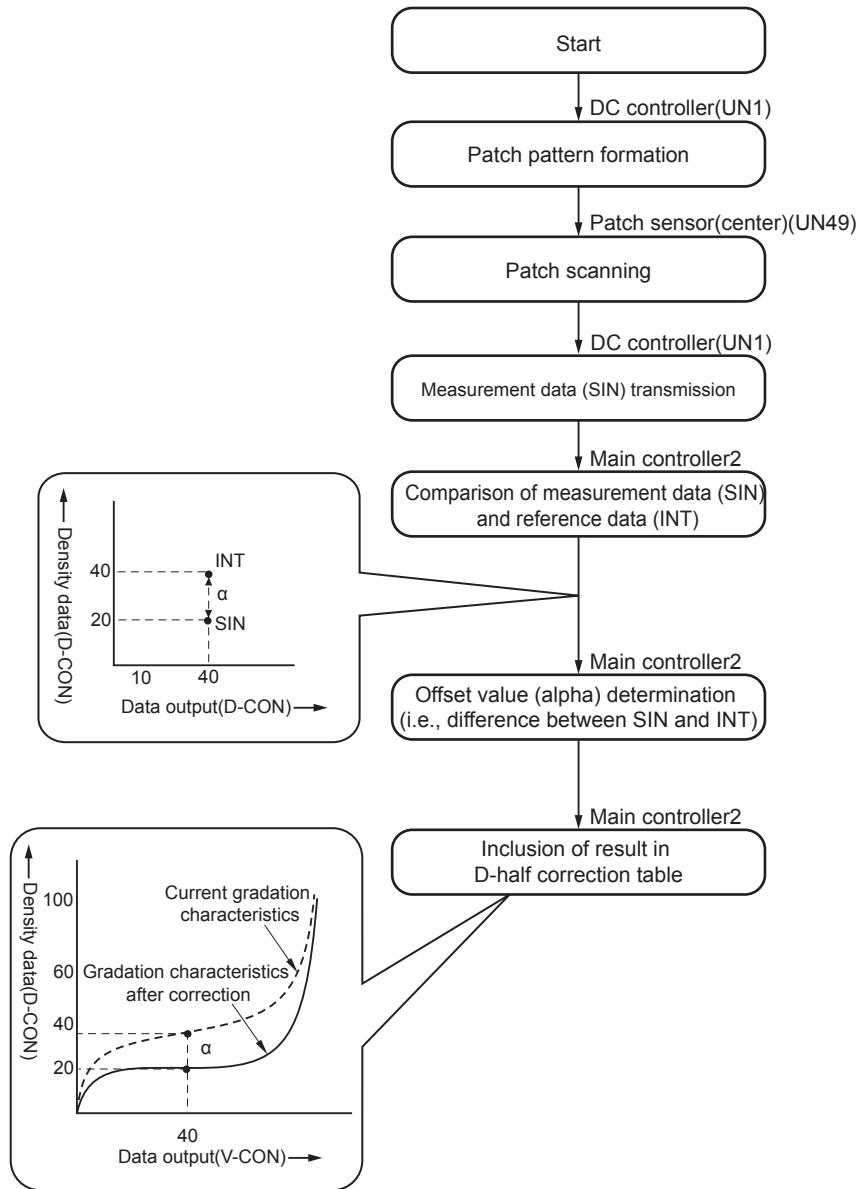
- 1) When replacing a drum unit or developing assembly
- 2) At post-rotation every time the total reaches 25 prints (when continuously making prints, printing is interrupted for every 100 prints to execute this control)

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.



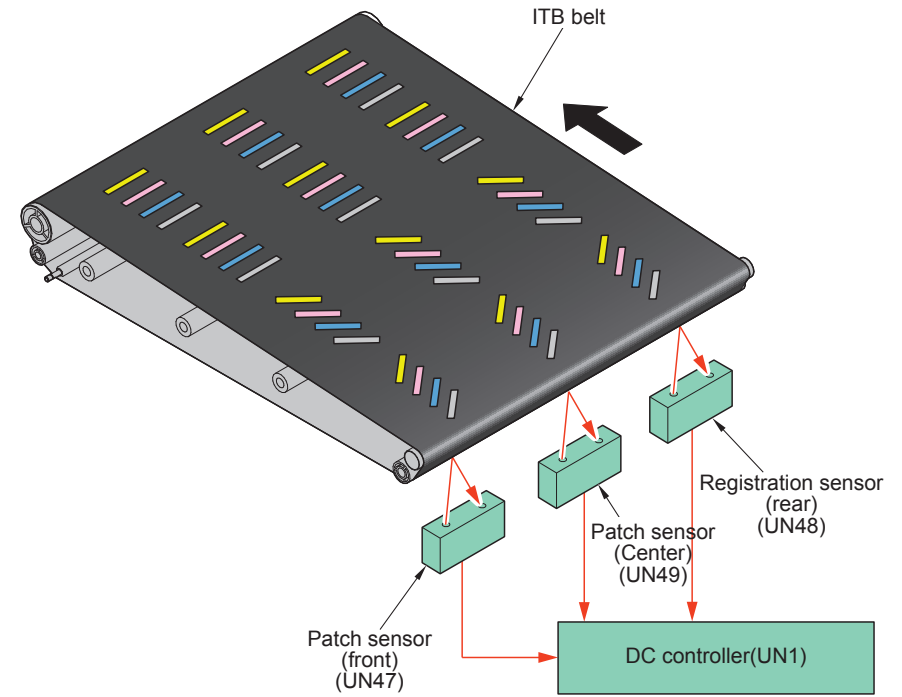
F-2-101



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)

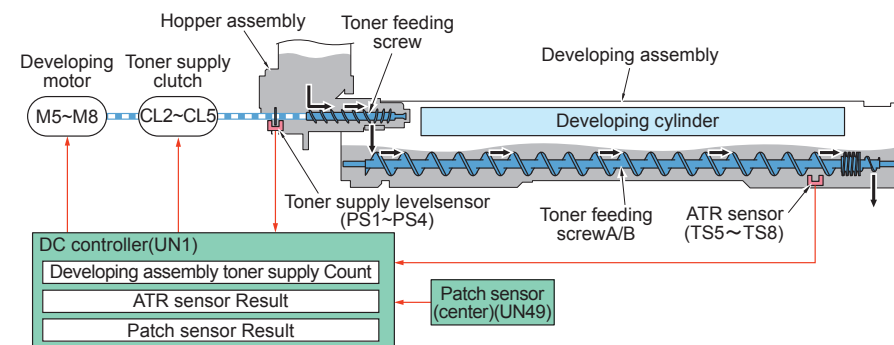
In the case of post-rotation every time the total reaches 150 prints or continuous print, the job is interrupted when the total reaches 250 prints to execute this control (patch sensor)

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)

E020-0081: Error in ITB background light intensity

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 ration 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 post-rotation after the total reaches 500 prints
- 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

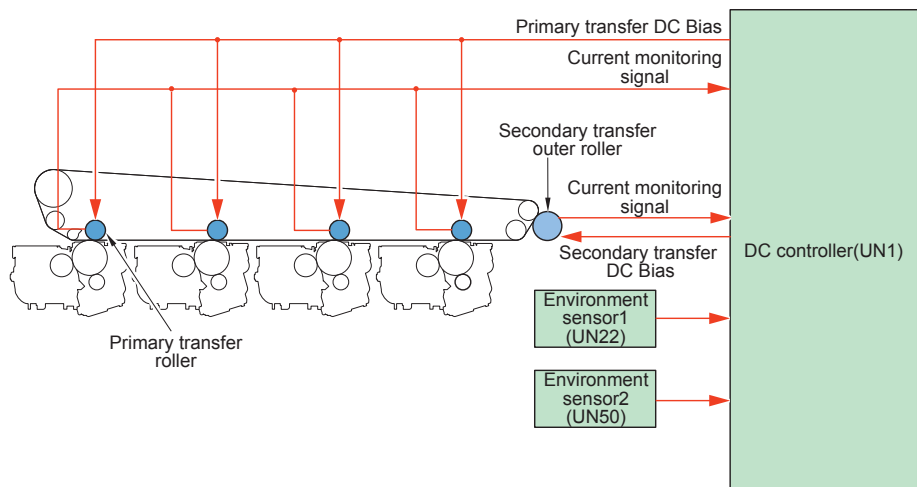
- Secondary transfer ATVC

Execution timing

- 1)When the power is turned ON
- 2)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

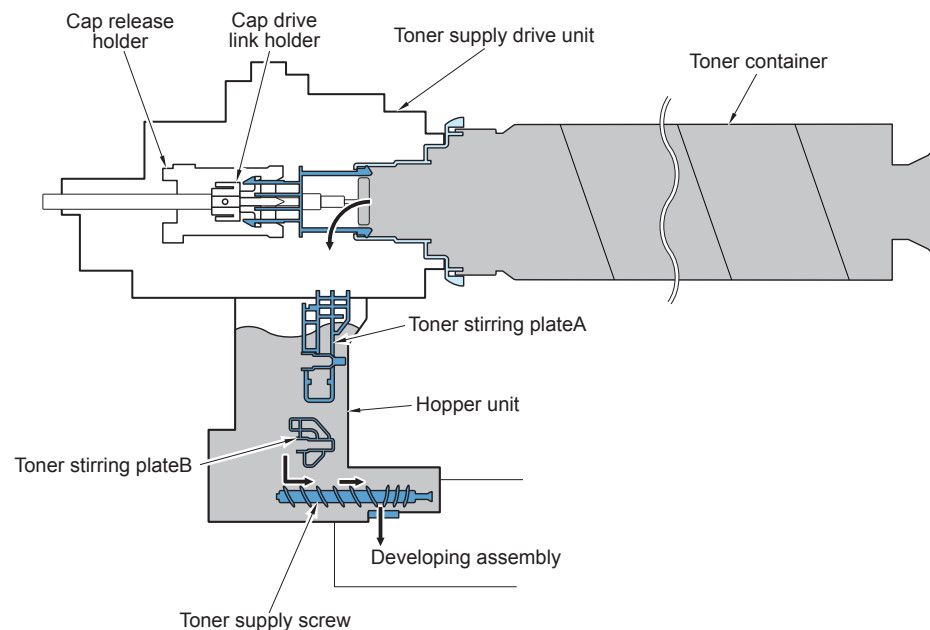


F-2-105

Toner supply assembly

Overview

To supply toner in the toner container to the developing assembly



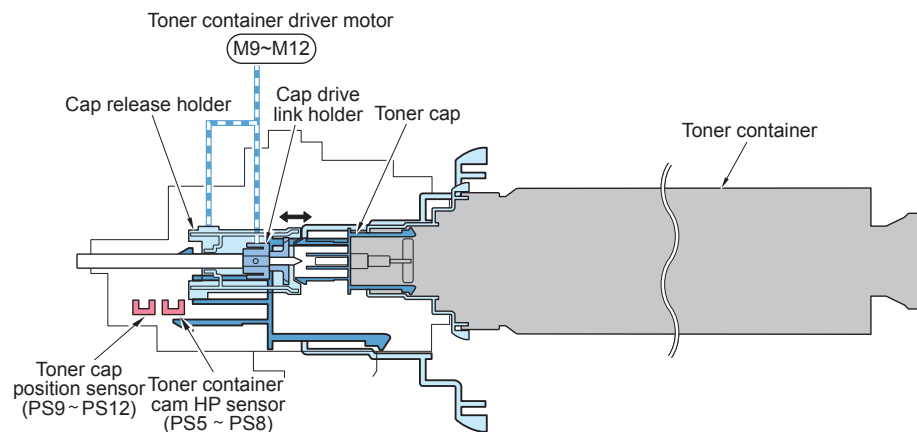
F-2-106

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:

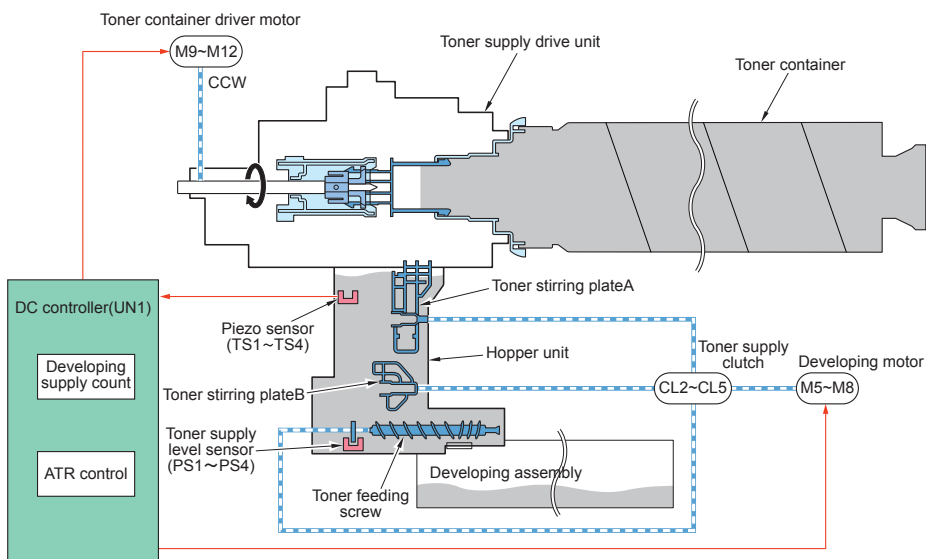
Following shows detection result of toner cap position sensor and the operational relationship with the main unit.

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	Detection timing	Detecting to (location)	Message (machine operation)	Whether Toner Container can be removed
Empty toner warning 1 (Level of toner in the Toner Container is approx. 10%.)*1	Prediction from the Developing Assembly toner supply count (Judged from the number of supplying toner to the Hopper Unit.)	Developing Assembly supply count *2	Please prepare a toner container (continuous print is available)	Disabled
Empty toner warning 2 (Level of toner in the Hopper Unit is approx. 100%.)	When the sensor output result is changed from H to L	Piezo sensor	The toner container can be replaced (continuous print is available)	Enabled
Empty toner (Level of toner in the Hopper Unit is approx. 0%.)	After approx. 1000 sheets are printed from the point that the Developing Assembly toner supply count is started after the empty toner warning 2 (in case of A4 and dot ratio at 5% image for each color)	Developing Assembly supply count *2	Please replace a toner container (the main unit stops the operation)	Enabled

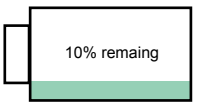
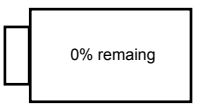
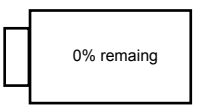
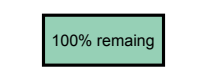
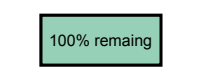
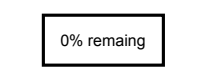
T-2-43

*1: It is 5% for Europe.

*2: Developing Assembly supply count shows the level of toner supplied from the Hopper Unit to the Developing Assembly.

- Transition of Toner Level

The following table shows the transition of toner level (Toner Container, Hopper Unit) according to each detection item.

Detection state Toner level	Empty toner warning 1	Empty toner warning 2	Empty toner
Toner Container			
Hopper Unit			

F-2-109

Supplementary explanation:

When replacing to a new Toner Container after "empty toner warning 2", 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)

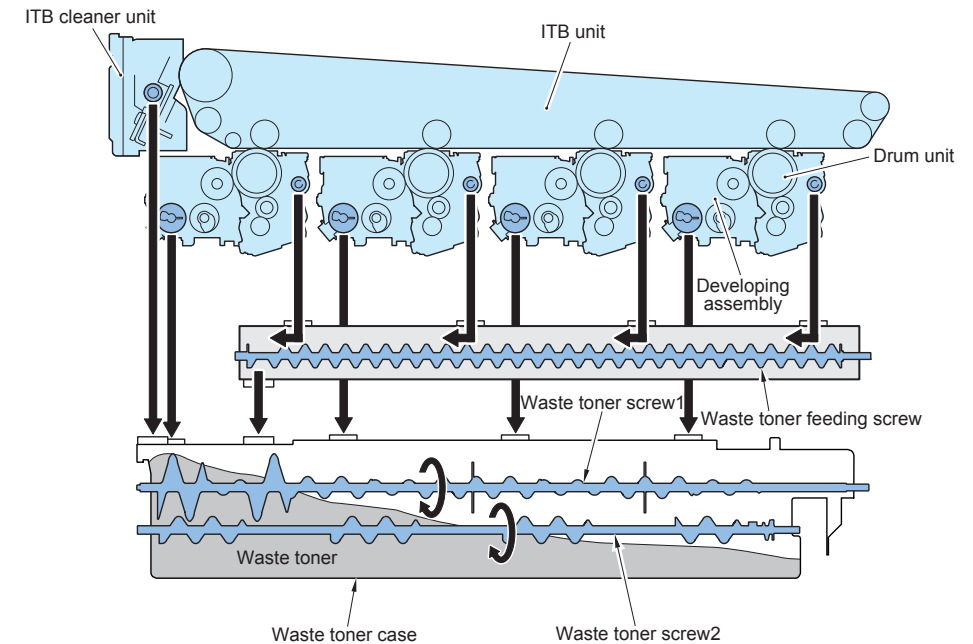
Related service mode

COPIER>OPTION>DSPLY-SW>T-CRG-SW (Toner Container replacement mode display switch)
 COPIER>OPTION>CLEANING>T-LW-LVL (No toner warning display timing changing switch)

Waste toner feeding assembly

Overview

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



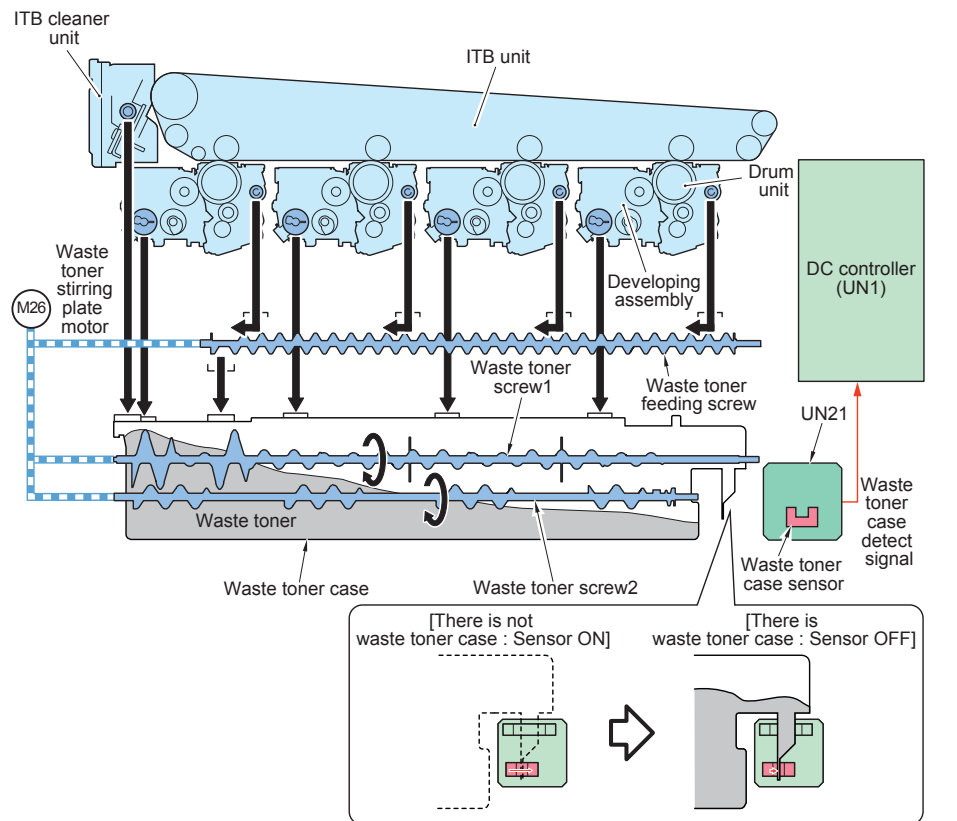
F-2-110

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-2-111

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

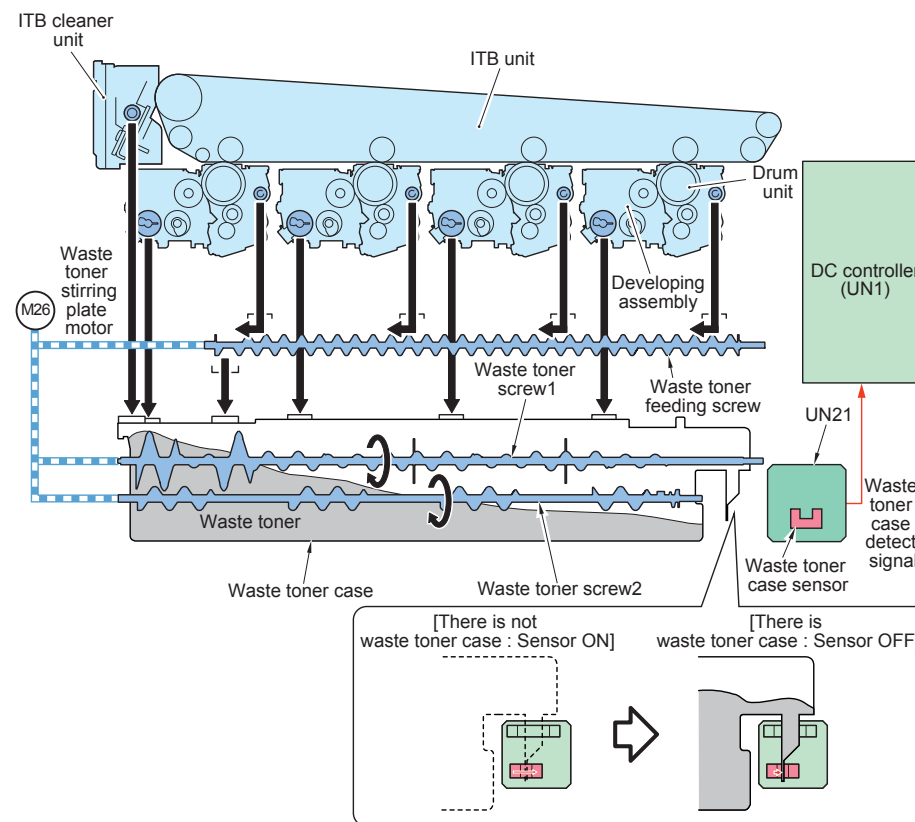
- 1) When the power is turned ON
- 2) When the front cover is open

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.

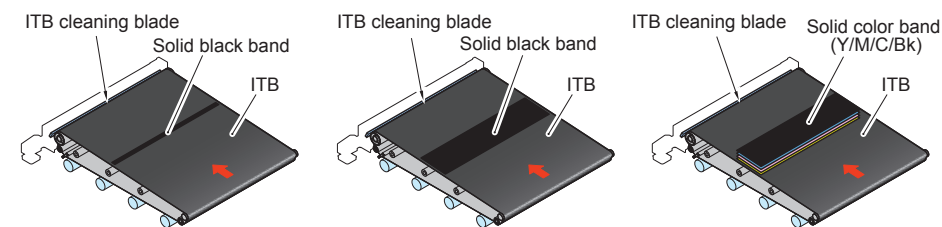
This Shutter has a mechanical mechanism, so when the Waste Toner Case is installed/removed, the Shutter is opened/closed.

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



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

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

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 average image ratio per sheet is 2% or less

Service work

Periodically replaced parts

Not applicable

Consumable parts

No.	Parts name	Parts number	Qty	Estimated life	Remarks
1	ITB	FC8-4400	1	500k	
2	Primary transfer roller	FC8-4401	4	500k	
3	Secondary transfer inner roller	FC8-4402	1	500k	
4	Secondary transfer outer roller	FC8-4876	1	500k	
5	ITB cleaning blade	FM3-6018	1	150k	
6	Transfer separation guide unit	FM3-8893	1	500k	
7	Developing assembly (Y)	FM3-8977	1	500k	imageRUNNER ADVANCE C5051/5045 imageRUNNER ADVANCE C5035/5030
	Developing assembly (M)	FM3-8978	1	500k	
	Developing assembly (C)	FM3-8979	1	500k	
	Developing assembly (Bk)	FM3-8939	1	500k	
8	Developing assembly (Y)	FM3-8973	1	500k	
	Developing assembly (M)	FM3-8974	1	500k	
	Developing assembly (C)	FM3-8975	1	500k	
	Developing assembly (Bk)	FM3-8976	1	500k	
9	Toner filter	FC6-9817	1	100k	

T-2-46

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

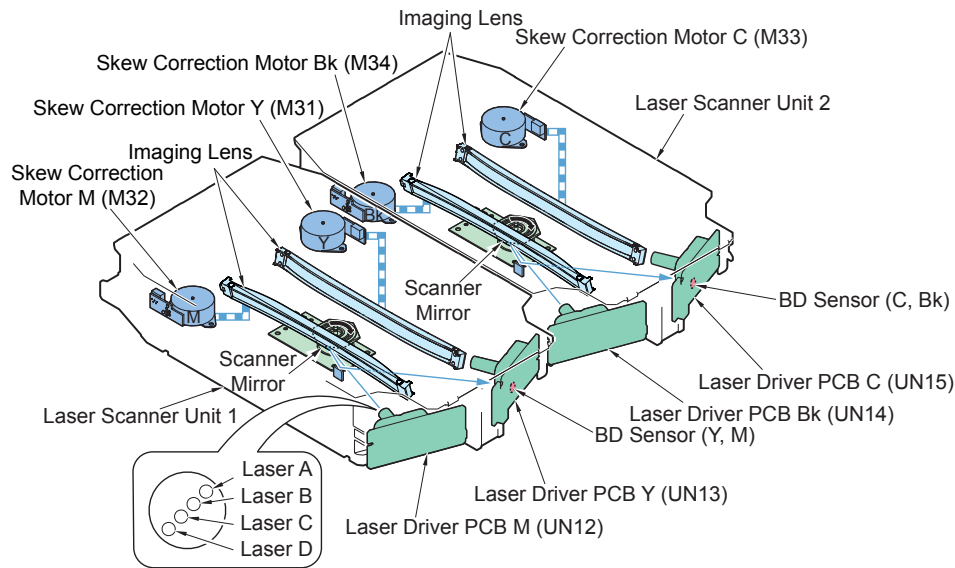
Laser Exposure System

Overview

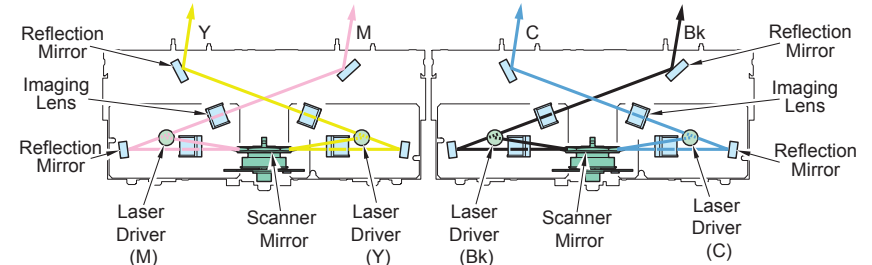
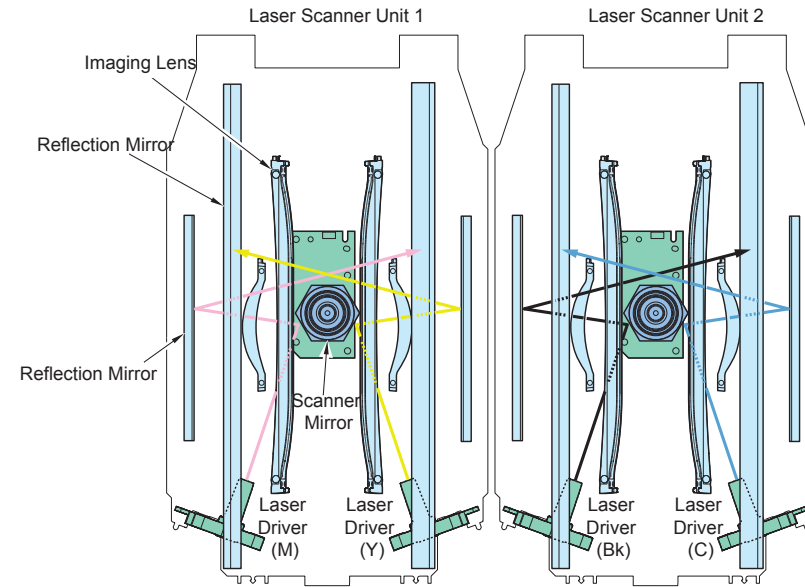
Overview

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 C5051 / C5045 employs 4 beam and C5035 / 5030 employs 2 beam.

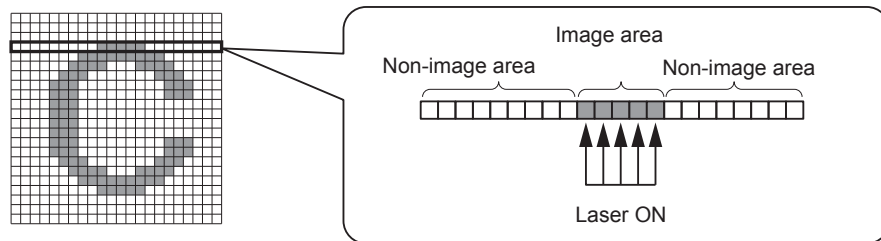


F-2-44



F-2-46

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 C5051 / C5045: 4 beam for each color imageRUNNER ADVANCE C5035 / C5030: 2 beam for each color
Resolution	1200dpi
Motor type	Brushless motor
Number of motor rotation	imageRUNNER ADVANCE C5051 / C5045: Approx. 29100rpm imageRUNNER ADVANCE C5035 / C5030: 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

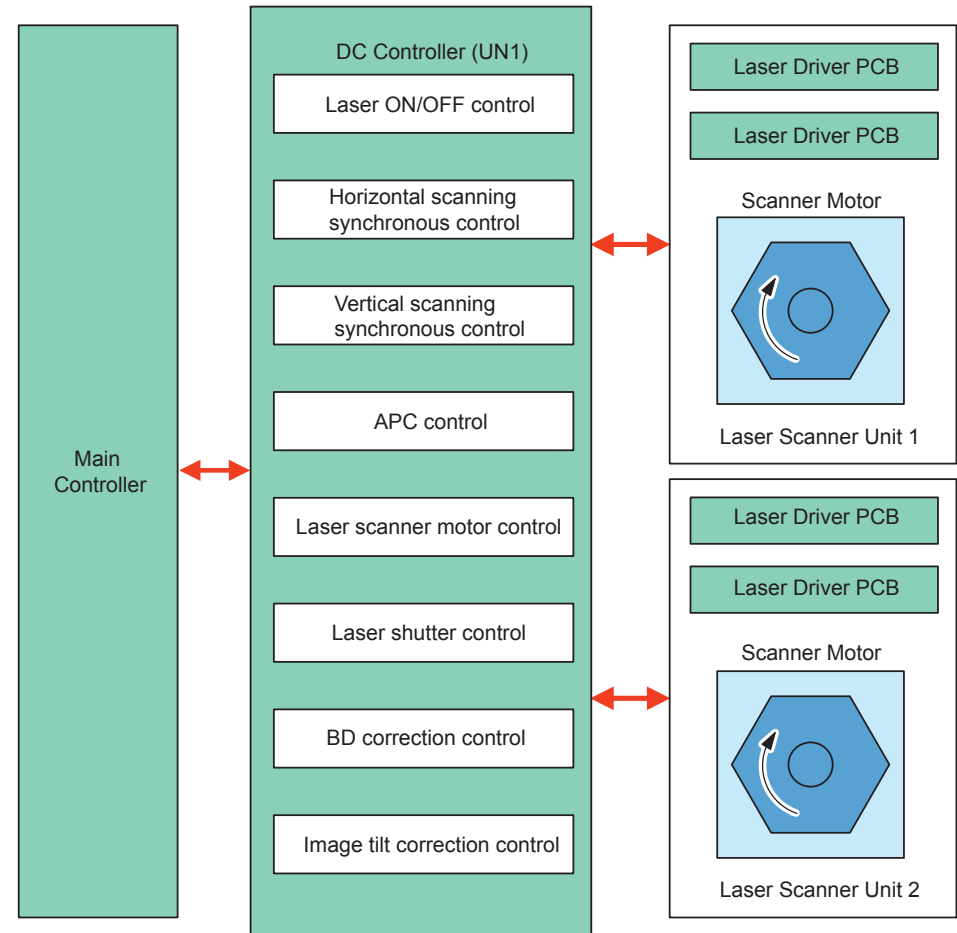
T-2-22

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



F-2-47

Laser ON / OFF control

Purpose

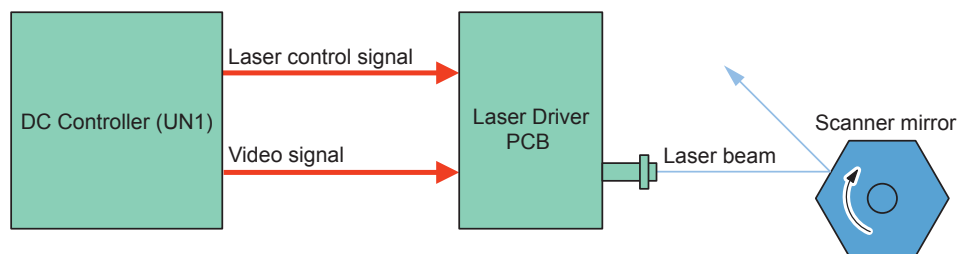
Laser light is turned ON / OFF according to the combination of laser control signals.

Execution timing

After the power ON

Control detail

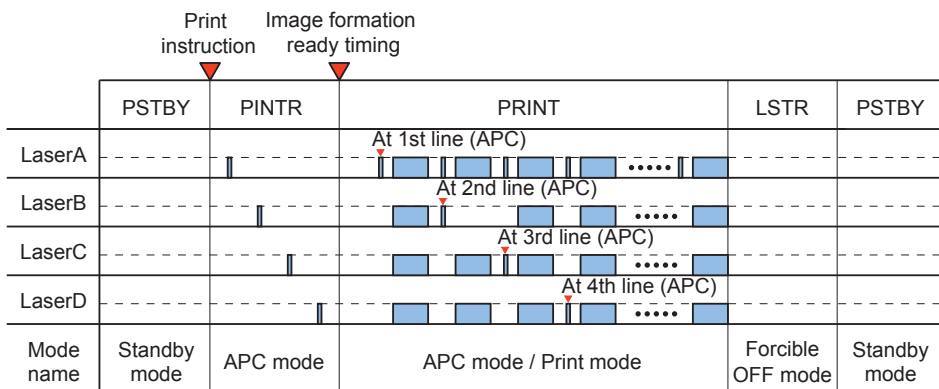
DC Controller switches the 4 modes (forcible OFF mode, APC mode, Print mode and standby mode) according to the laser control signal.



F-2-48

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



F-2-49

Horizontal scanning synchronous control

Purpose

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

Execution timing

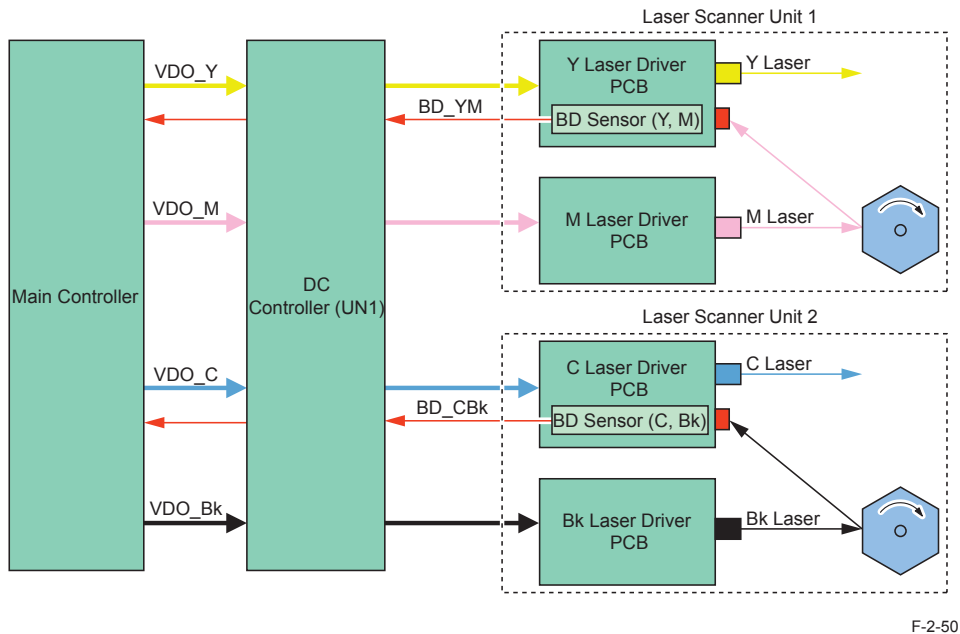
Per 1 line

Execution time

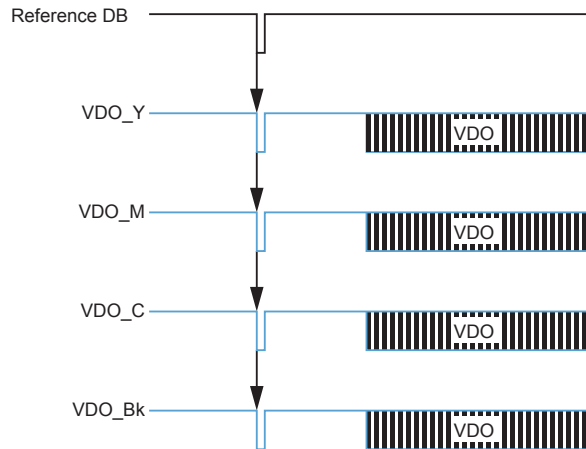
Approx. 7.5μs

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.



F-2-50



F-2-51

Vertical Scanning Synchronous Control

Purpose

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

Execution timing

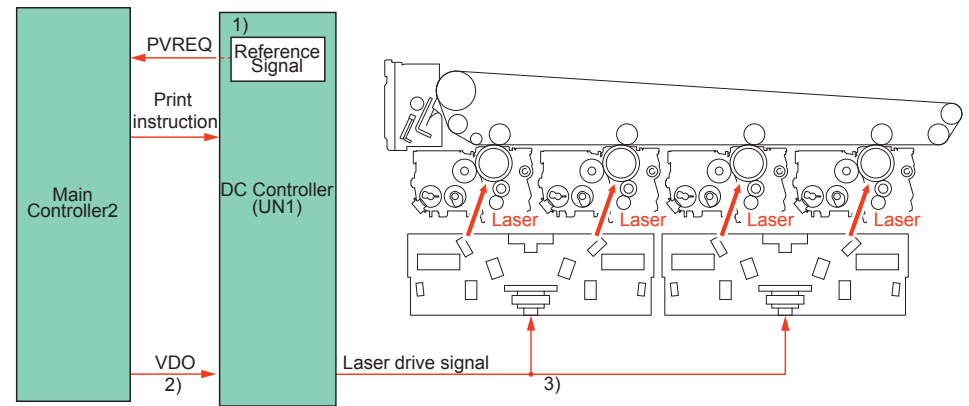
Per printing

Execution time

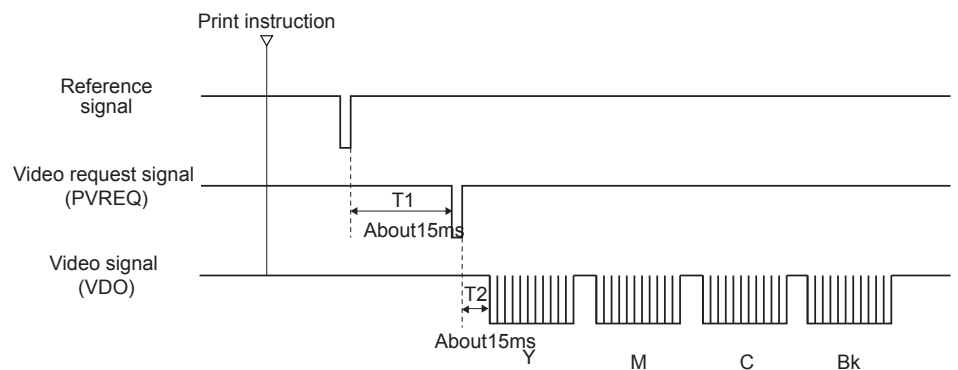
500ms

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.



F-2-52



F-2-53

■ APC (Auto Power Control) control

● Purpose

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

● Execution timing

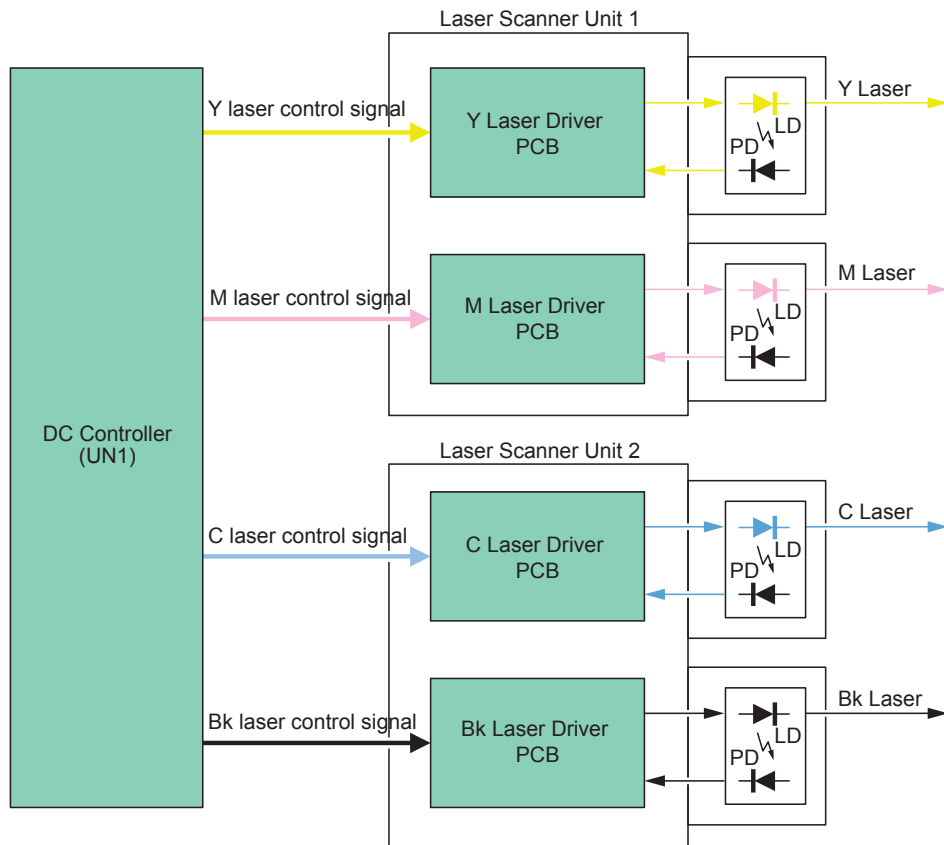
Per each line (before image writing)

● Execution time

Approx. 2 μ 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

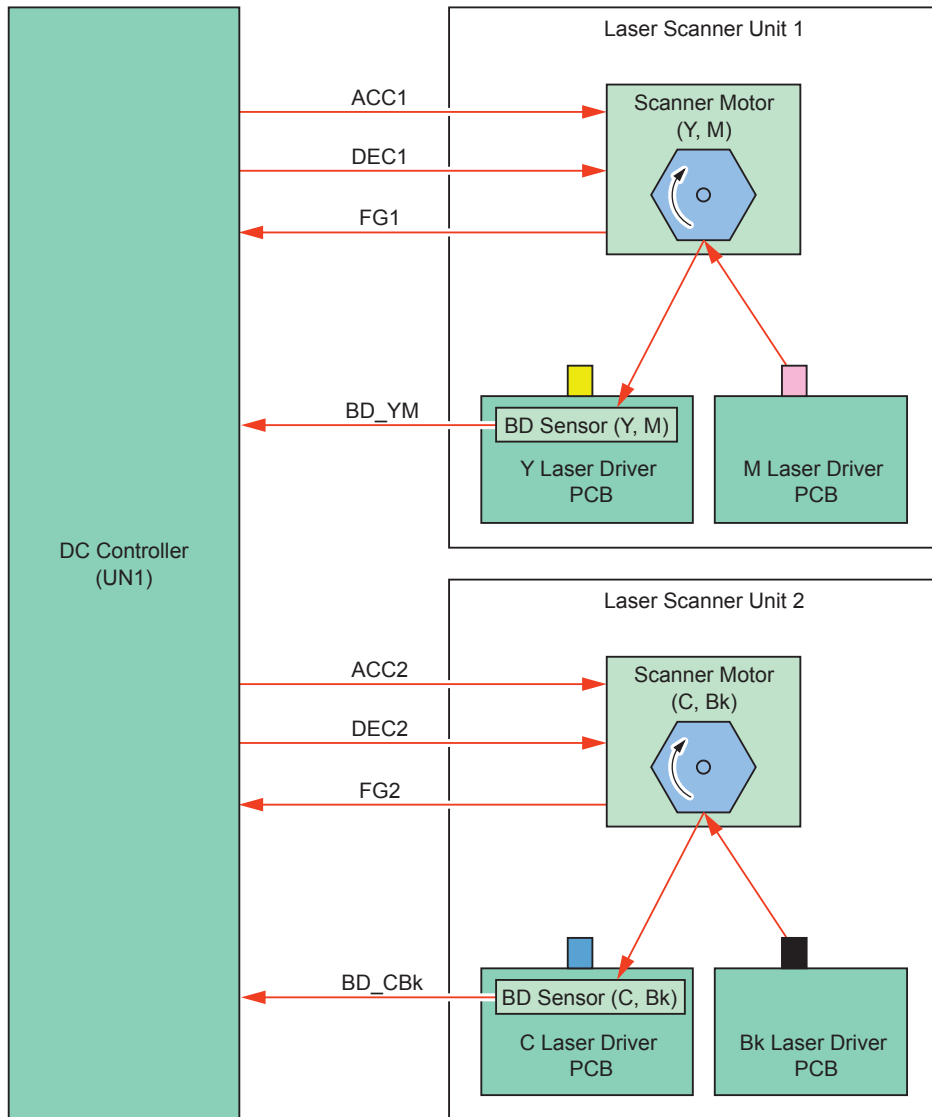
At power-ON, per printing

● 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

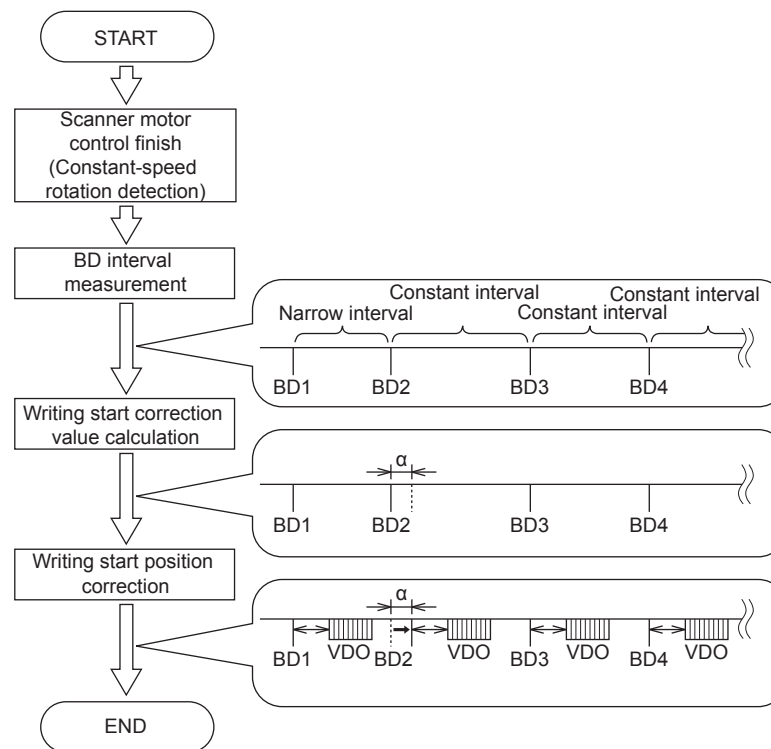
At power-ON, per printing

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

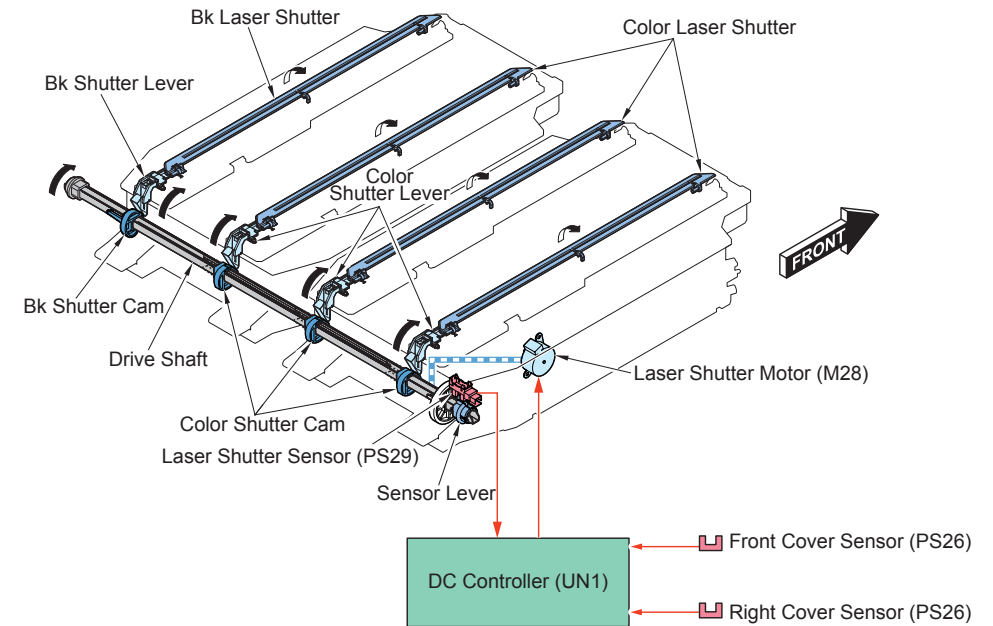
Approx. 3s (at power-ON), approx. 1s (when scanner motor is started or cover is opened)

Control detail

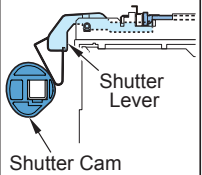
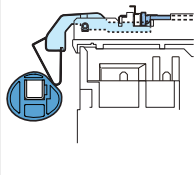
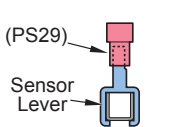
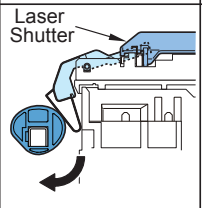
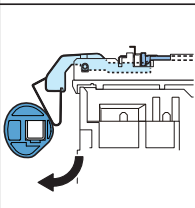
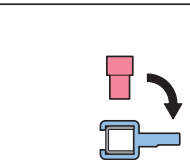
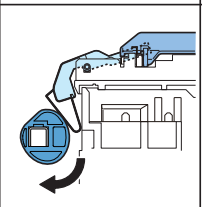
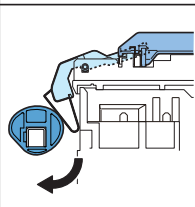
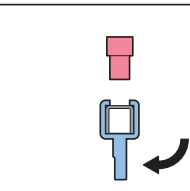
While the Laser Scanner Motor is operating, the Laser Shutter is opened. During other period, the laser shutter is closed.

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)

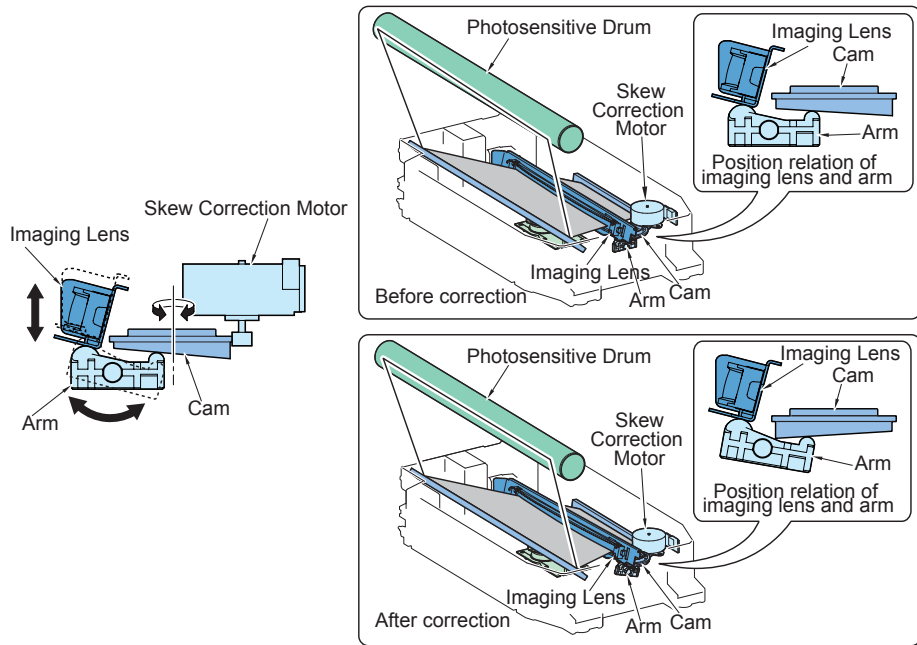
If the Laser Shutter Sensor (PS29) is not in the home position at initial operation.

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

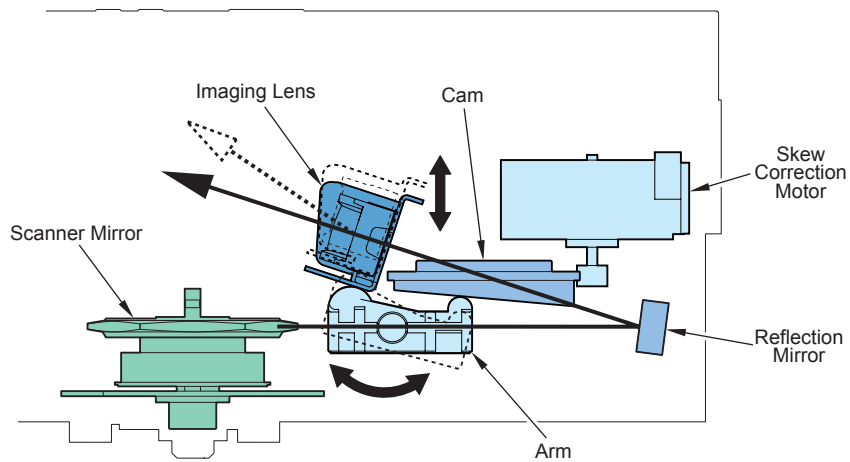
If the Laser Shutter Sensor (PS29) is not in the home position after approx. 10 sec from the shutter close operation.

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

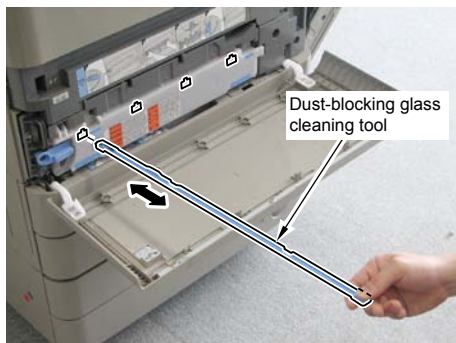
T-2-25

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

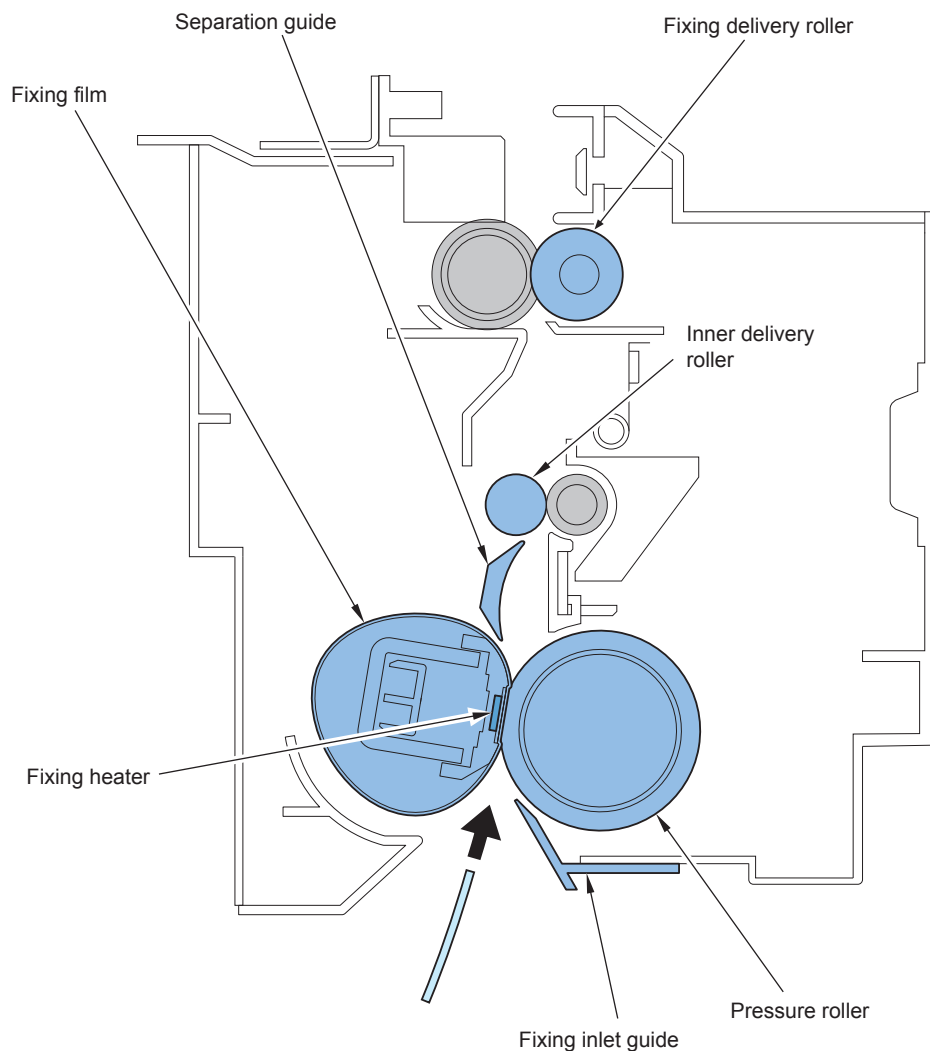
N / A

Fixing System

Overview

Features

This machine introduces the on-demand fixing method.



F-2-114

1. Saving energy

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

2. High speed

51ppm is enabled by introducing a new toner and the film capable of high heat transfer.

3. Supported media

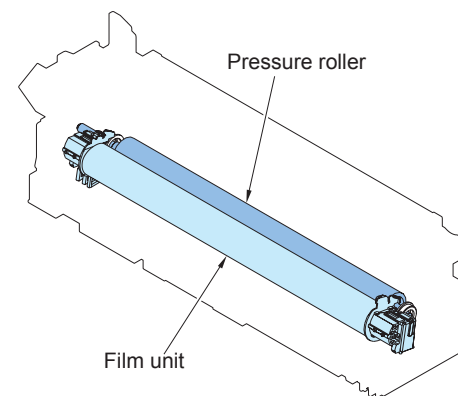
Feeding 52g/m² paper is available due to the modification of film path and Separation Guide, and image quality has been improved as well.

Specifications

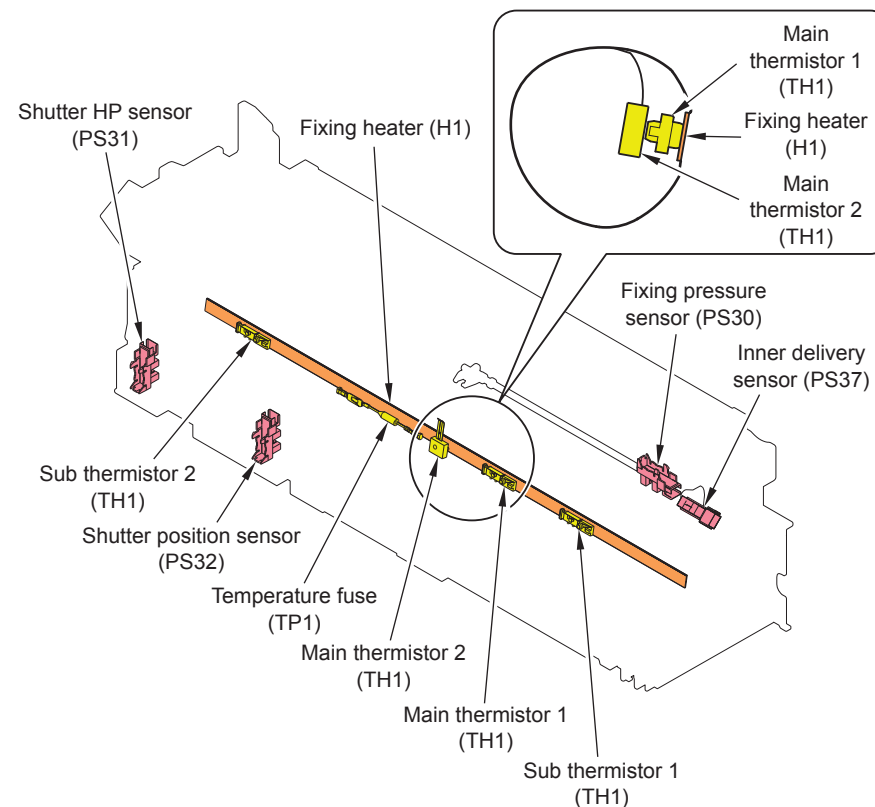
Item	Function/method	
Fixing method	On-demand fixing	
Fixing speed	51 / 45ppm machine	246 mm/s (1/1-speed, plain paper) 123 mm/s (1/2-speed, thick paper) 82 mm/s (1/3-speed, coated paper, transparency)
	35 / 30ppm machine	160 mm/s (1/1-speed, plain paper) 80 mm/s (1/2-speed, thick paper, coated paper, 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 ²)) 51 / 45 ppm machine: 169~180 deg C 35 / 30 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	

T-2-48

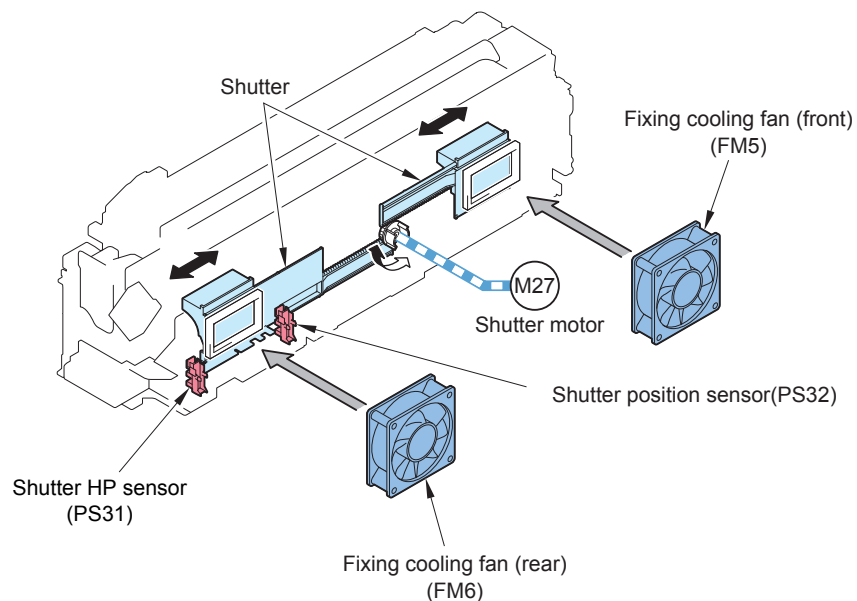
Major parts configuration



F-2-115



F-2-116



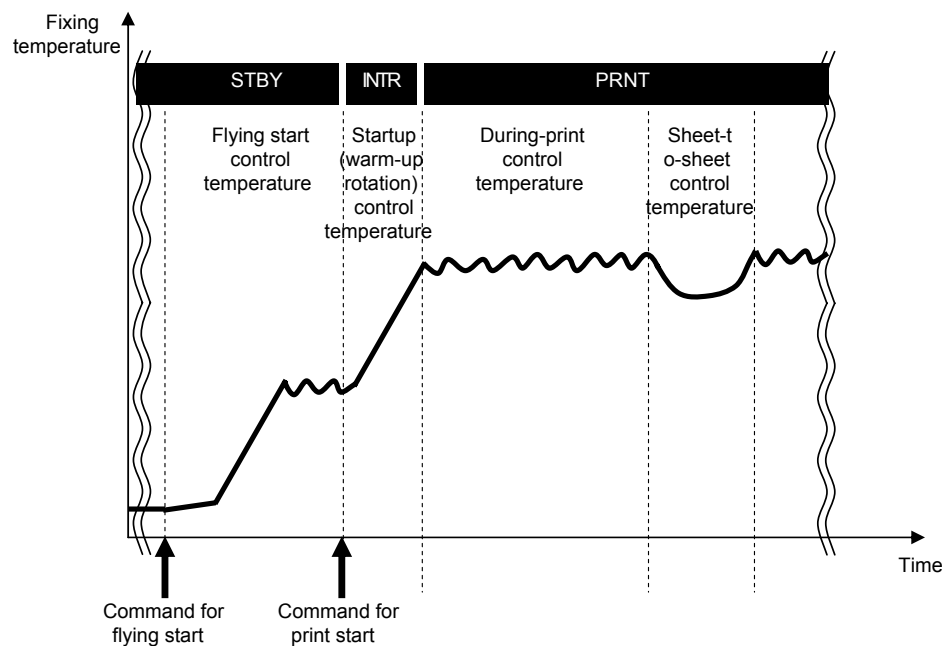
F-2-117

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-2-118

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

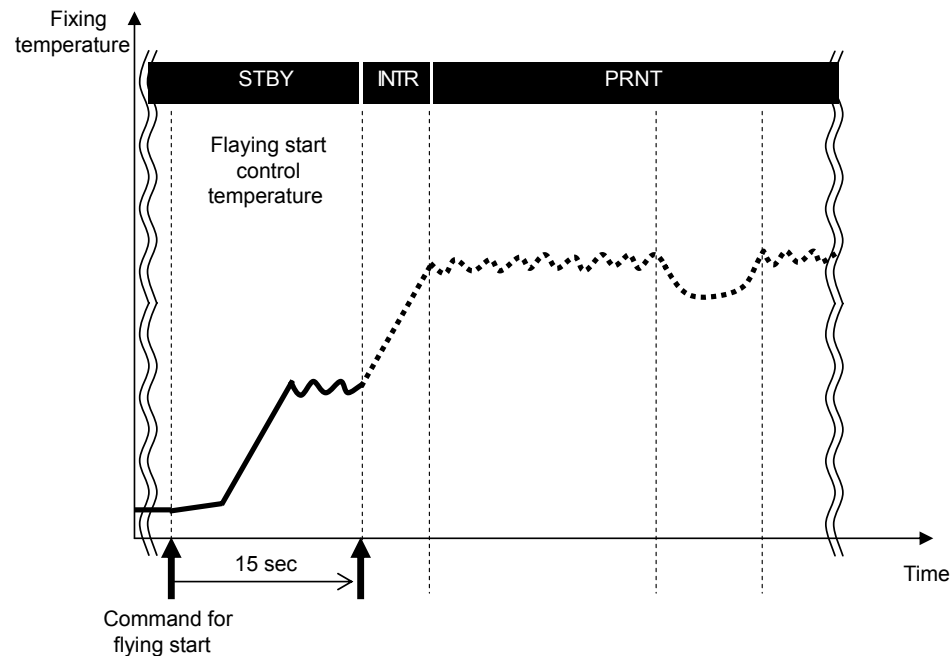
Down sequence control

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-2-119

Flying start temperature control

Purpose:

to reduce print time (FPOT) of the 1st 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

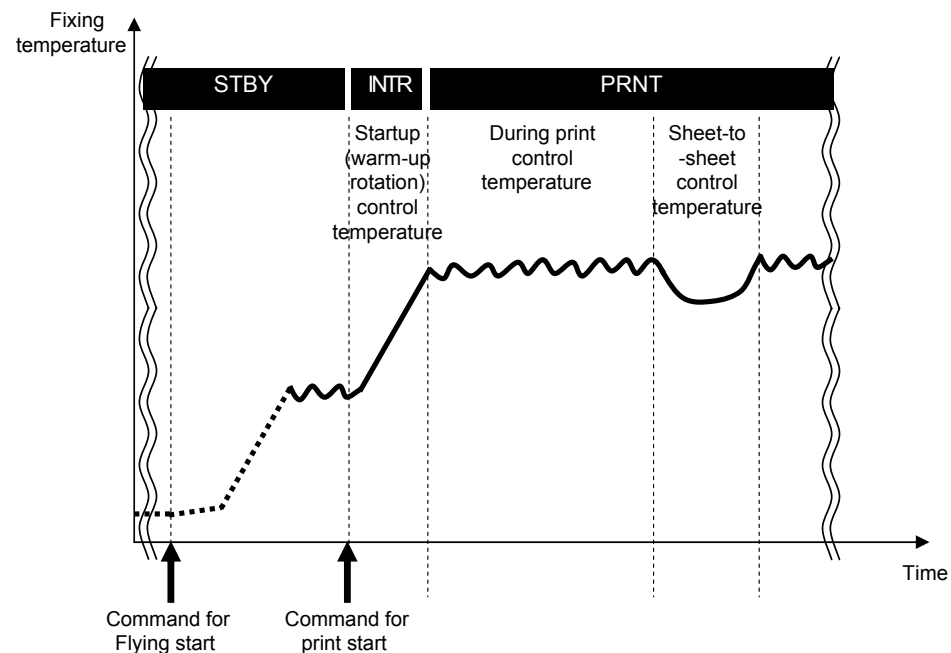
(Lv.2) COPIER > OPTION > IMG-FIX > FLYING
 (To enable/disable Flying start (pre-mature start))

<Setting value>

0: Enable Flying start [default]

1: Disable Flying start

Print temperature control



F-2-120

- 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^{*1}, temperature between sheets is reduced to prevent temperature rise.

Temperature between sheets = target temperature during printing – (30 to 50 deg C)^{*2}

*1:At down sequence

Between the 1st side and the 2nd 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 ²	Speed	Target temperature (deg C)	Print speed (ppm)				
				Paper length in width direction				
				~216.0	216.1 ~431.8	431.9 ~457.2	457.3 ~630.0	
51 / 45 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.	169~180	51	25.5	20	16	
	Thin (52~63)		148~164	51	25.5	20	16	
	Plain 2 (82~105) / Bond (80~90) Except Japan		181~197	51	25.5	20	16	
	Plain 2 (82~105) / Bond (80~90) Japan			181~197	40	20	17	14
	Heavy 1 (106~163) / Label (151~180)	1 / 2-speed 123 mm / sec.	162~179	25.5	12.5	10	8	
	Heavy 2 (164~209) / Embossed(150) / Postcard, 4 on 1 postcard(190) / Tab		166~179	20	10	8	7.5	
	Envelope		149	20	10	8	7.5	
	Coated 1(106~163)	1 / 3-speed 82 mm / sec.	165	17	8.5	7.5	5.5	
	Heavy 3(210~256)		160	17	8.5	7.5	5.5	
	Coated 2 (164~209)		170~172	17	8.5	7.5	5.5	
	Transparency (151~180)		159	17	8.5	7.5	5.5	
	35 / 30 ppm machine	Plain 1(64~81) / Color (64~81) / Recycled (64~81) / Pre-Punched / Tracing paper / Japanese paper (93)	1 / 1-speed 160 mm / sec.	150~163	35	17.5	15	12
Thin (52~63)		135~153		35	17.5	15	12	
Plain 2 (82~105) / Bond (80~90) Except Japan		165~185		35	17.5	15	12	
Coated 1(106~163)		1 / 2-speed 80 mm / sec.	165	17	8.5	7.5	5.5	
Heavy 3(210~256)			160~172	17	8.5	7.5	5.5	
Heavy 1 (106~163) / Label (151~180)			150~167	17	8.5	7.5	5.5	
Heavy 2 (164~209) / Embossed(150) / Postcard, 4 on 1 postcard(190) / Tab			155~170	17	8.5	7.5	5.5	
Coated 2 (164~209)			170	17	8.5	7.5	5.5	
Transparency (151~180)			159	17	8.5	7.5	5.5	
Envelope		149	17	8.5	7.5	5.5		

T-2-50

Related Service Mode

- Display of thermistor detection temperature
(Lv.1) COPIER > DISPLAY > 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 > OPTION > 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)

<Setting value>

- 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 ²	Target temperature (deg C)	Print speed (ppm)
51 / 45 ppm machine	Plain 1(64~81) / Color (64~81) / Recycled (64~81) / Pre-Punched / Tracing paper / Japanese paper (93)	165~180	12~4
	Thin (52~63)	144~164	
	Plain 2 (82~105) / Bond (80~90) Except Japan	175~192	
	Plain 2 (82~105) / Bond (80~90) Japan	175~192	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	145~149	
	Coated 1(106~163)	176~180	6~2
	Heavy 3(210~256)	163~179	
	Coated 2 (164~209)	181~185	
Transparency (151~180)	155~159		
35 / 30 ppm machine	Plain 1(64~81) / Color (64~81) / Recycled (64~81) / Pre-Punched / Tracing paper / Japanese paper (93)	146~163	12~4
	Thin (52~63)	131~153	
	Plain 2 (82~105) / Bond (80~90)	161~185	
	Coated 1(106~163)	176~180	6~2
	Heavy 3(210~256)	163~179	
	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	
	Coated 2 (164~209)	181~185	
	Transparency (151~180)	155~159	
	Envelope	145~149	

T-2-51

Related Service Mode

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

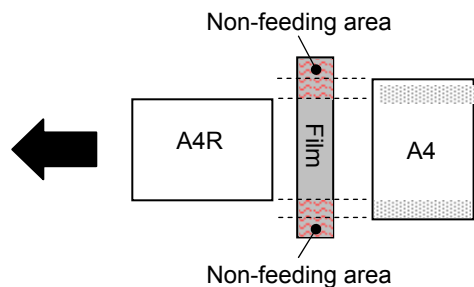
<Setting value>

- 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

- 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-2-121

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*¹ has passed since the preceding paper went through the fixing nip.

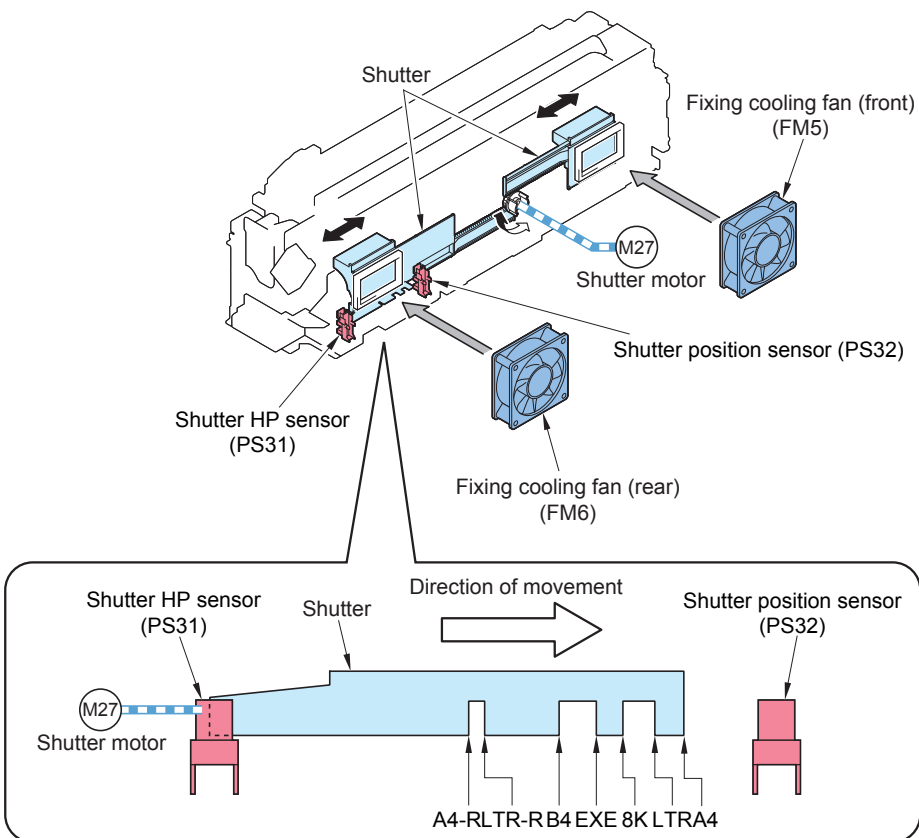
*1: Specified period of time differs whether the fan has cooled the preceding paper or not.

- 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-2-122

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

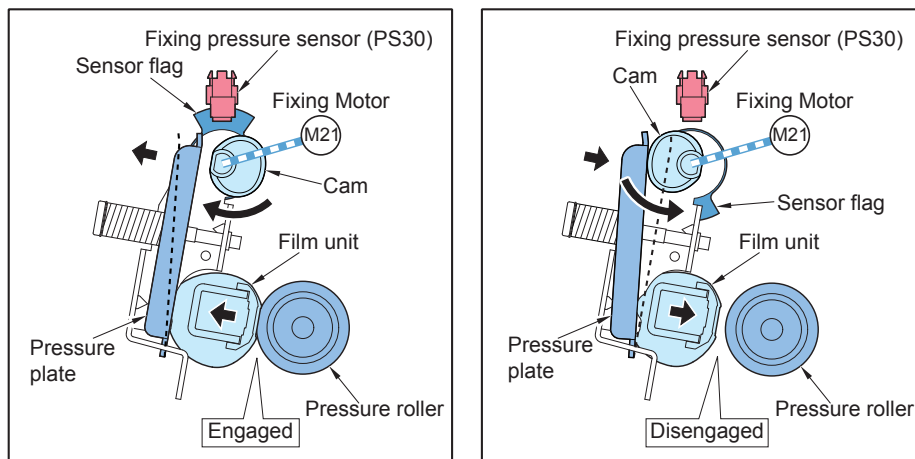
The thermistor connection signal, which is input to the DC controller, detects presence of fixing assembly at warm-up rotation (when the power is turned ON, the cover is open). An error code "E004-0000" is displayed to stop the operation if no fixing assembly is detected.

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

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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-2-123

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

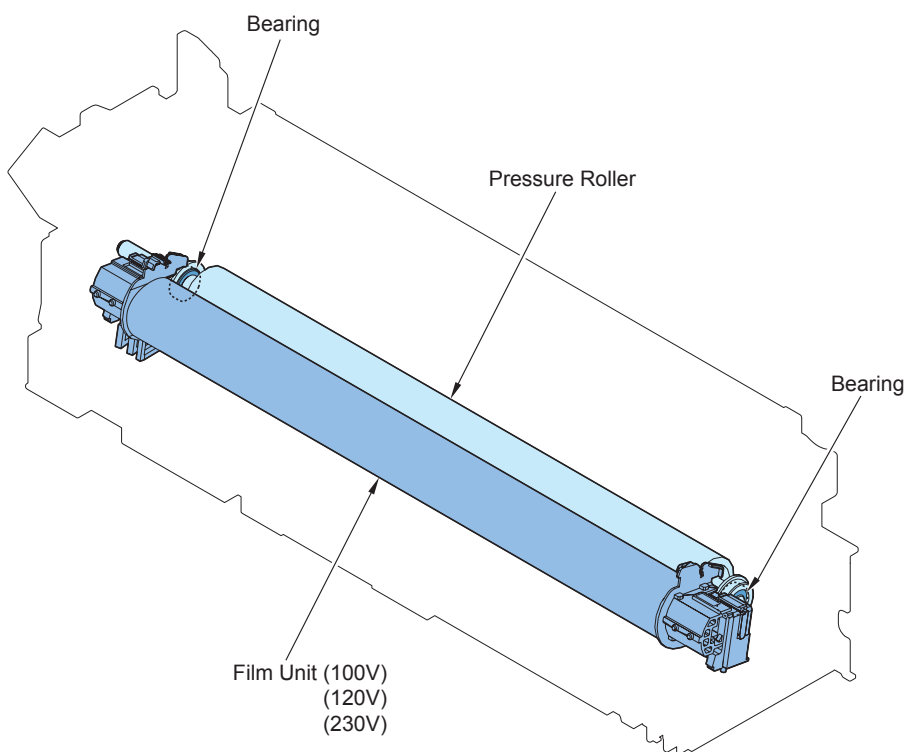
No parts are assigned to be replaced periodically.

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.	

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

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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

Film unit, pressure roller

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

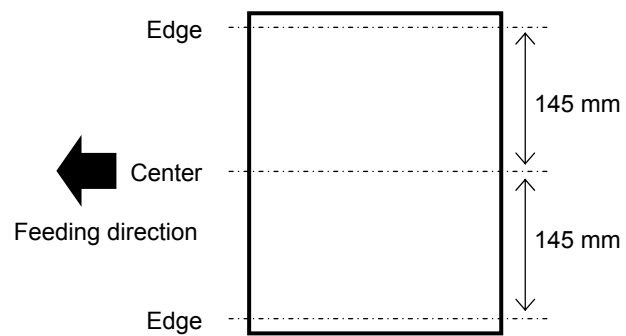
Paper to be used: A4 / LTR size (plain paper, 80 to 105 g/m²)

- 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.
1st side: solid image in Magenta, 2nd side: no image (blank)
The paper is stopped at the nip area when fixing is performed on the 2nd 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



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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 / m² to 256g / m².
- 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.

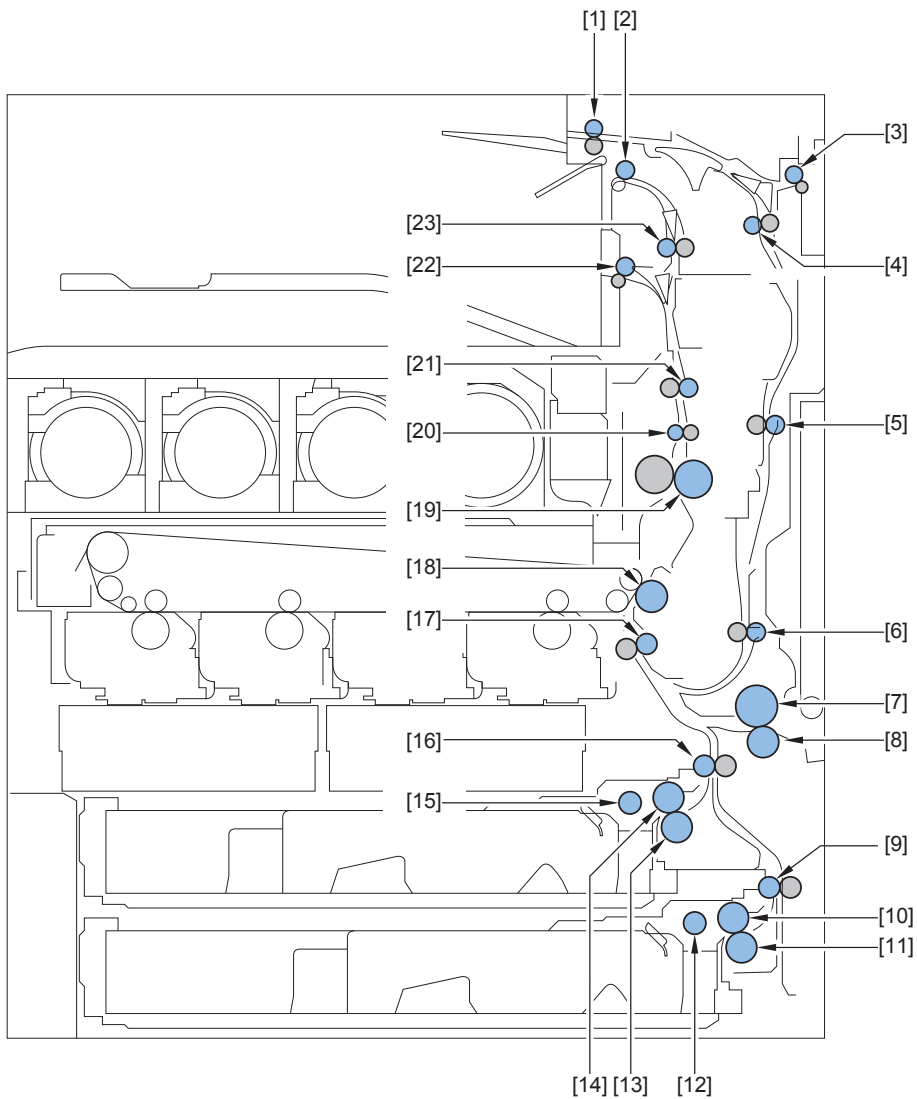
Specification

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 ² paper), 650 sheets (64g / m ² paper)
	Multi-purpose tray	100 sheets (80g / m ² paper), 100 sheets (64g / m ² 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 ²
	Multi-purpose tray	52 to 256g / m ² , For 210g / m ² 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

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Parts Configuration

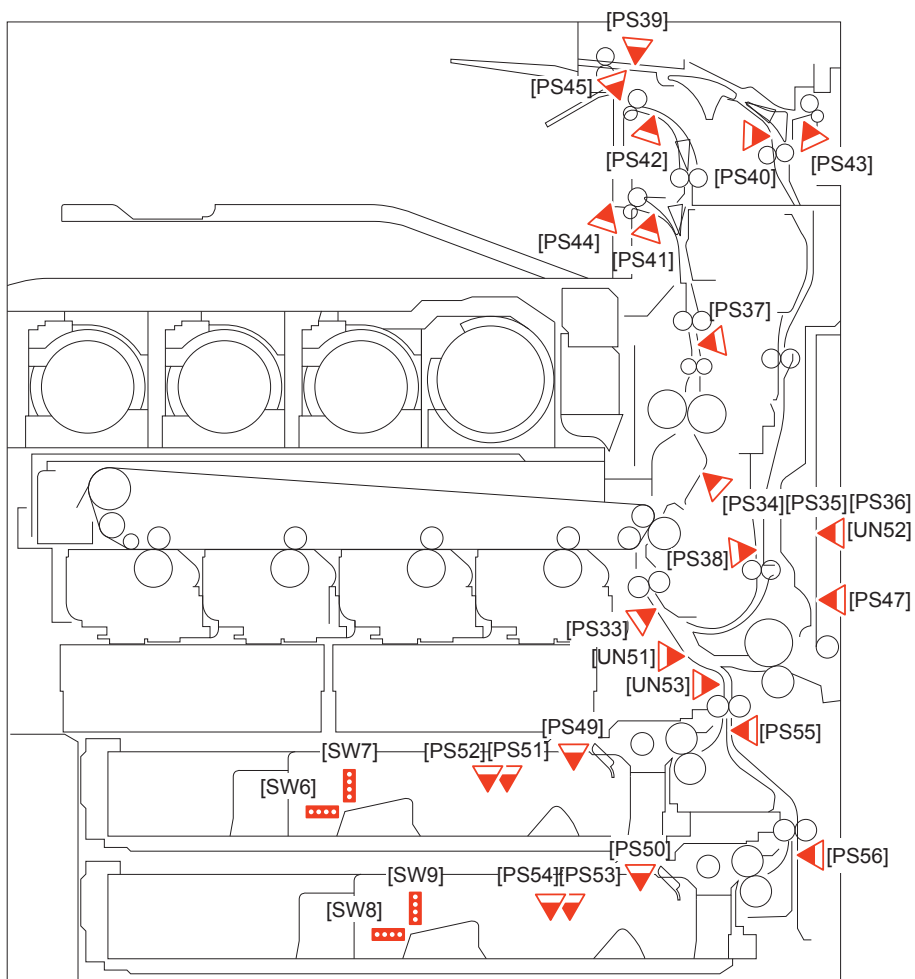
Roller Layout Drawing



- | | |
|---|---|
| [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 |

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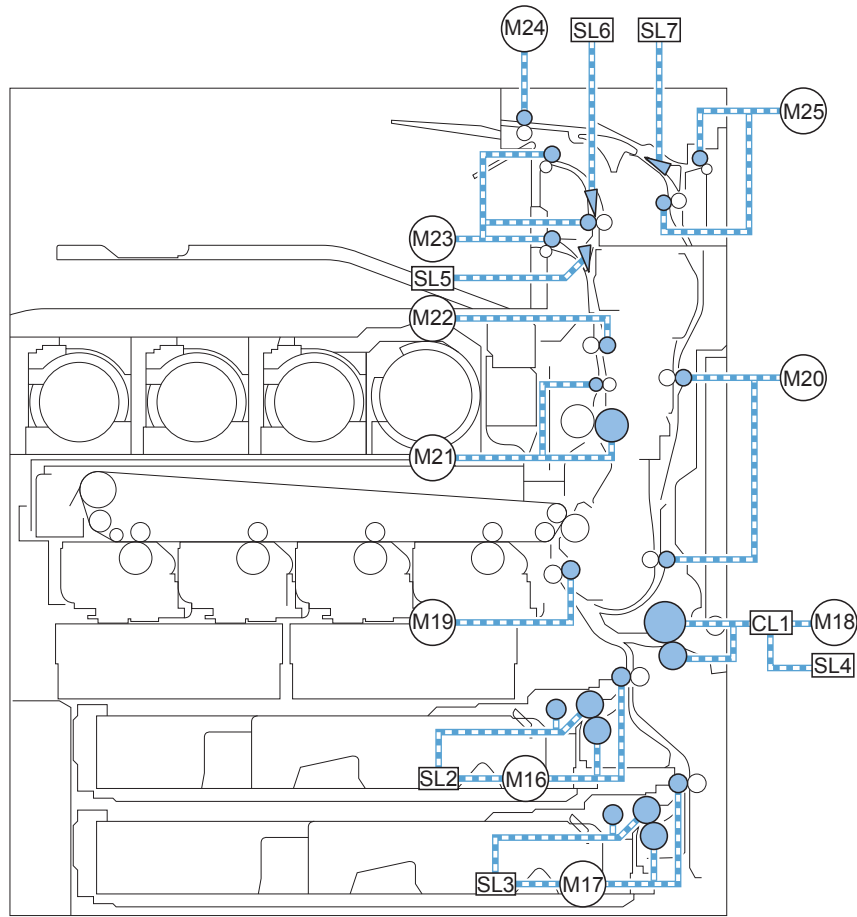
Sensor / Switch Layout Drawing



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

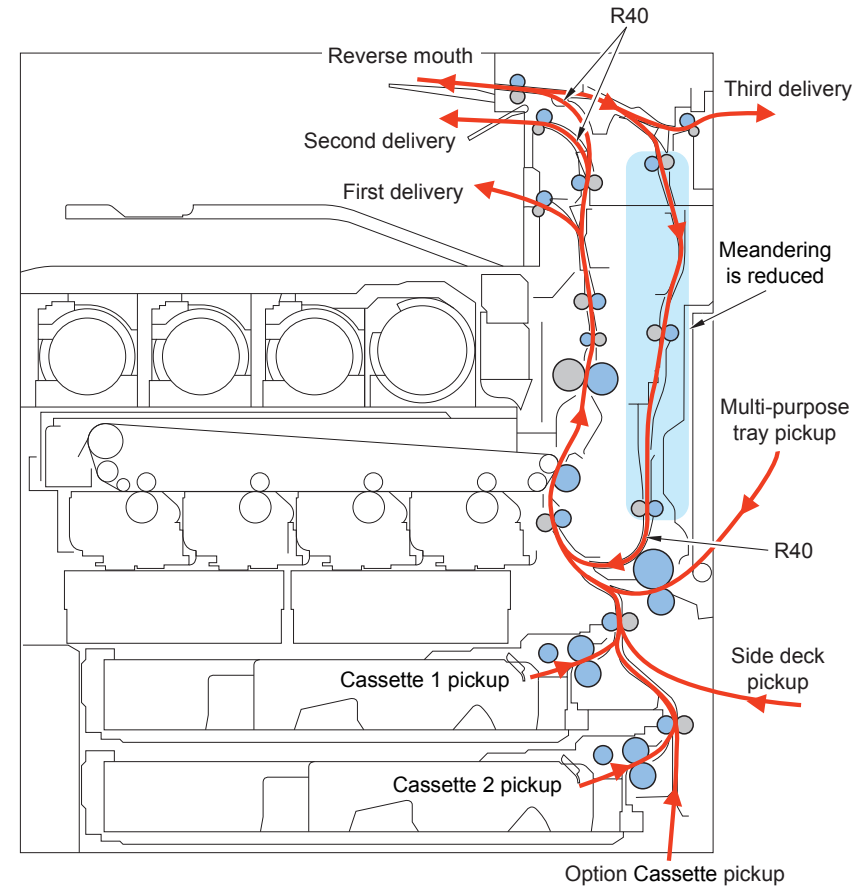
● Load Driving Drawing



F-2-128

- | | | | |
|-----|-------------------------------|-----|----------------------------------|
| M16 | Cassette 1 Pickup Motor | M24 | Reverse Roller Motor |
| M17 | Cassette 1 Pickup Motor | M25 | Third Delivery Motor |
| M18 | Multi-Purpose Tray Motor | SL2 | Cassette 1 Pickup Solenoid |
| M19 | Registration Motor | SL3 | Cassette 2 Pickup Solenoid |
| M20 | 2-Sided Feed Motor | SL5 | First Delivery Flapper Solenoid |
| M21 | Fixing Motor | SL6 | Second Delivery Flapper Solenoid |
| M22 | Fixing Delivery Motor | SL7 | Third Delivery Flapper Solenoid |
| M23 | First / Second Delivery Motor | CL1 | Multi-Purpose Pickup Clutch |

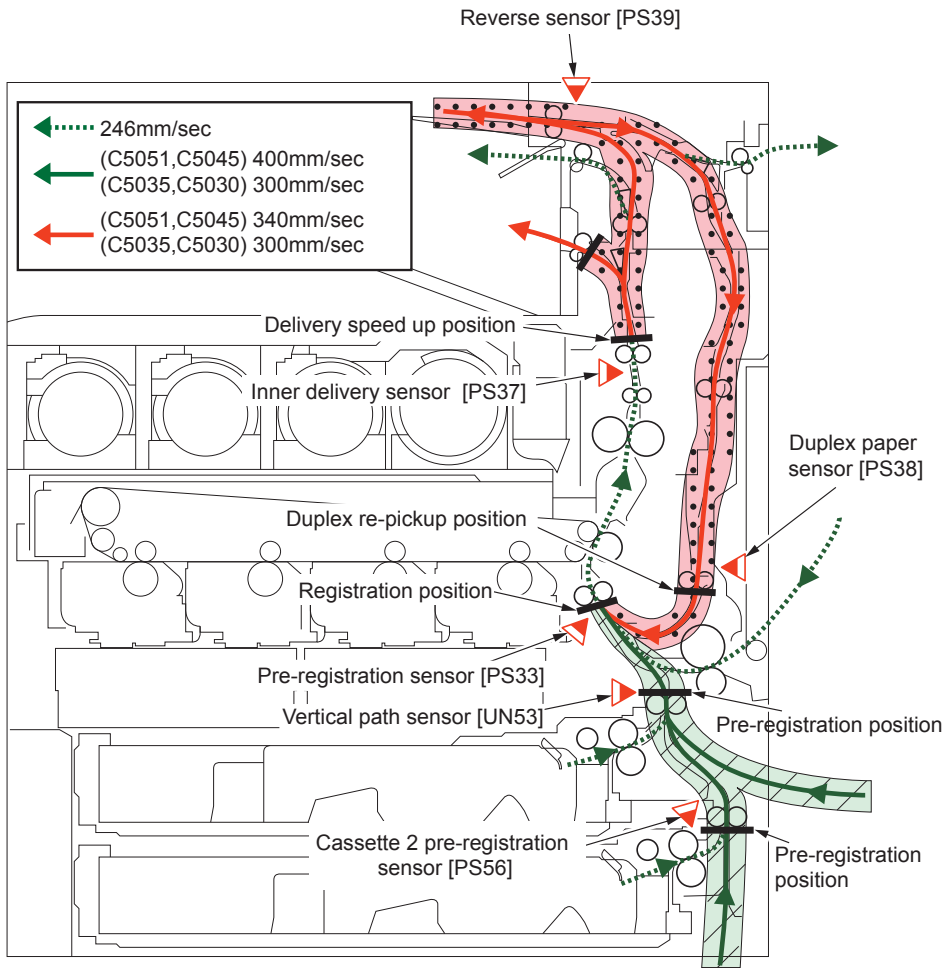
■ Paper Path



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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.

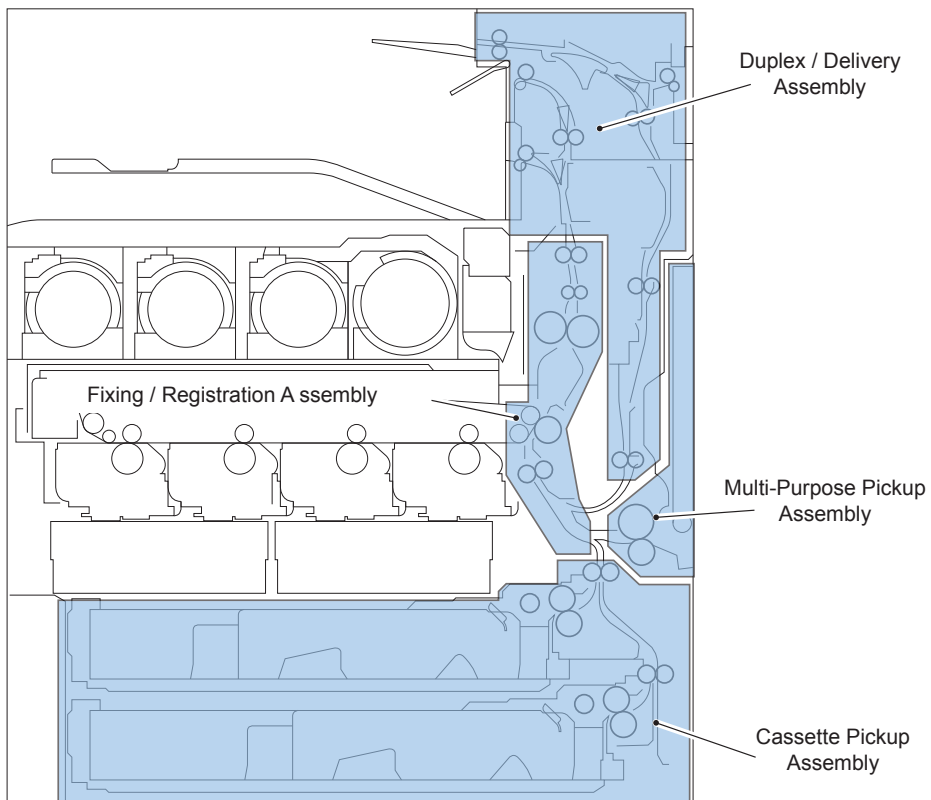
Interval Speed Up



F-2-130

Various Controls

Overview



F-2-131

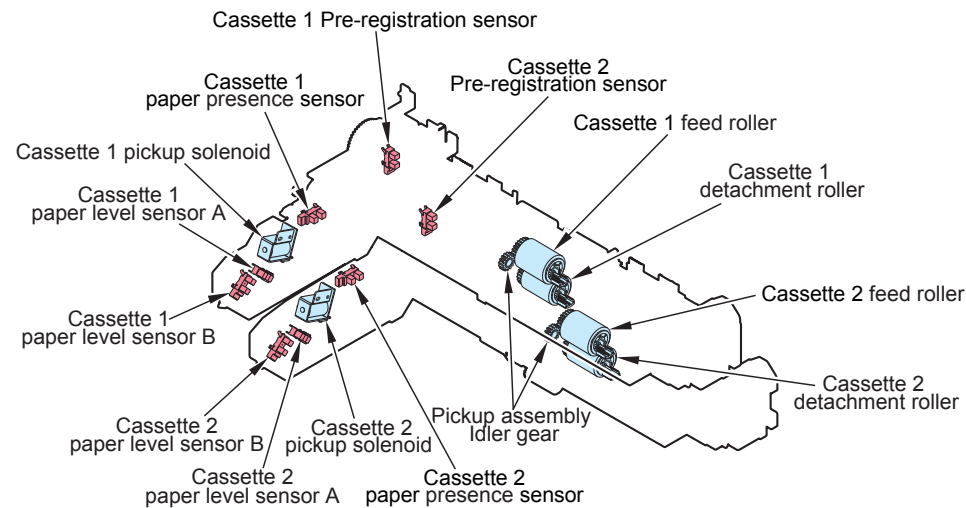
Area	Detection, Control
Cassette Pickup Assembly	Paper Level / Presence Detection
	Paper Size / Cassette Presence Detection
	Pre-Registration Control
Multi-Purpose Pickup Assembly	Paper Presence Detection
	Paper Size Detection
Fixing / Registration Assembly	OHP Control
	Registration Control
	Fixing Arch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

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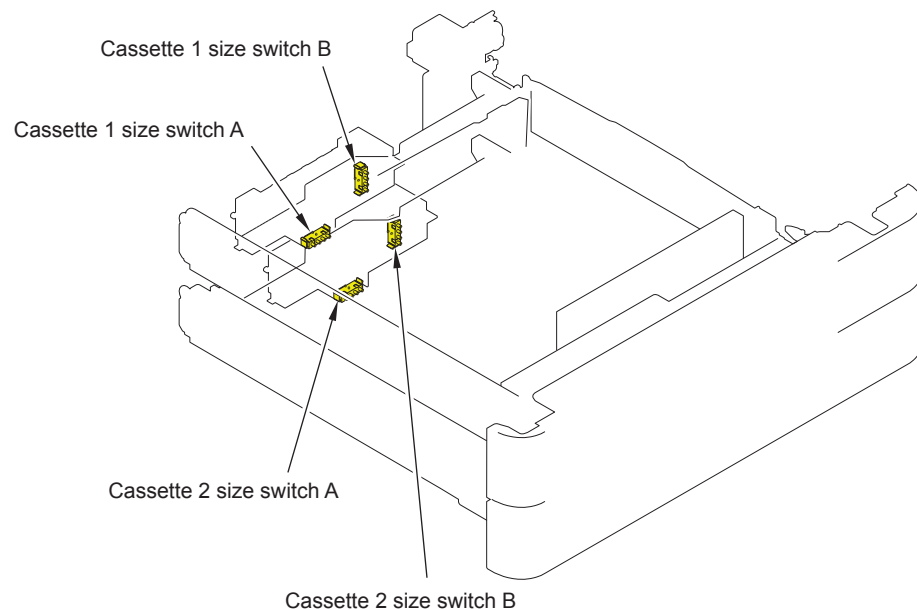
Cassette Pickup Assembly

Overview

Parts Configuration

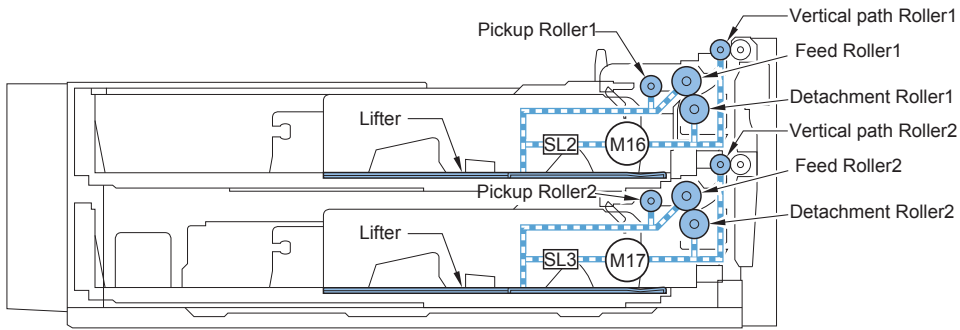


F-2-132



F-2-133

● Drive Configuration



F-2-134

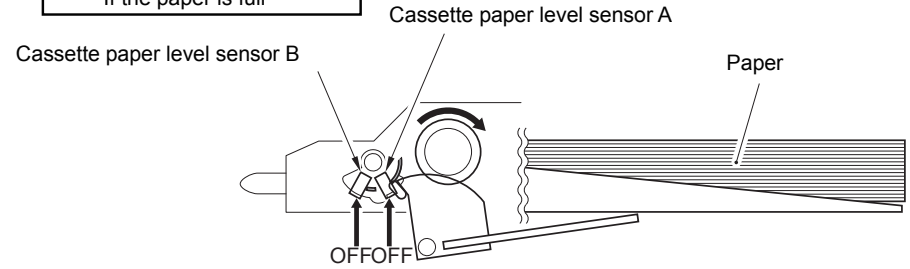
- M16 Cassette 1 Pickup Motor
- M17 Cassette 2 Pickup Motor
- SL2 Cassette 1 Pickup Solenoid
- SL3 Cassette 2 Pickup Solenoid

● Detection

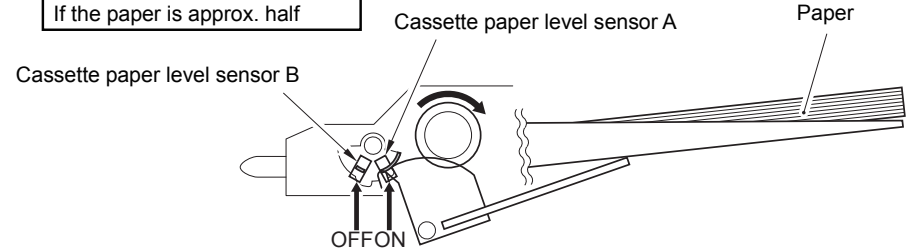
Paper Level / Presence Detection

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

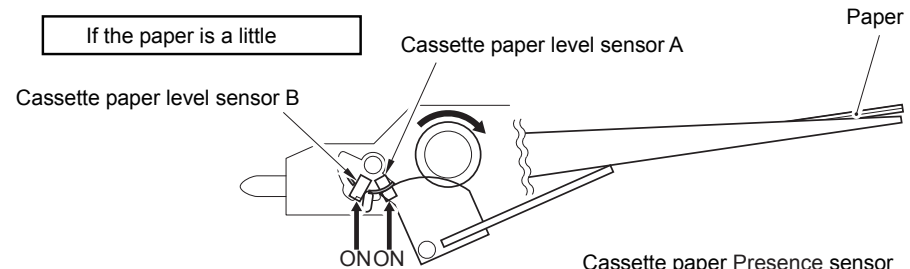
If the paper is full



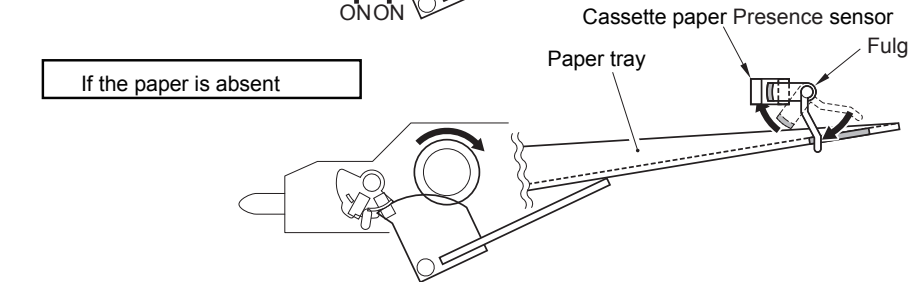
If the paper is approx. half



If the paper is a little



If the paper is absent



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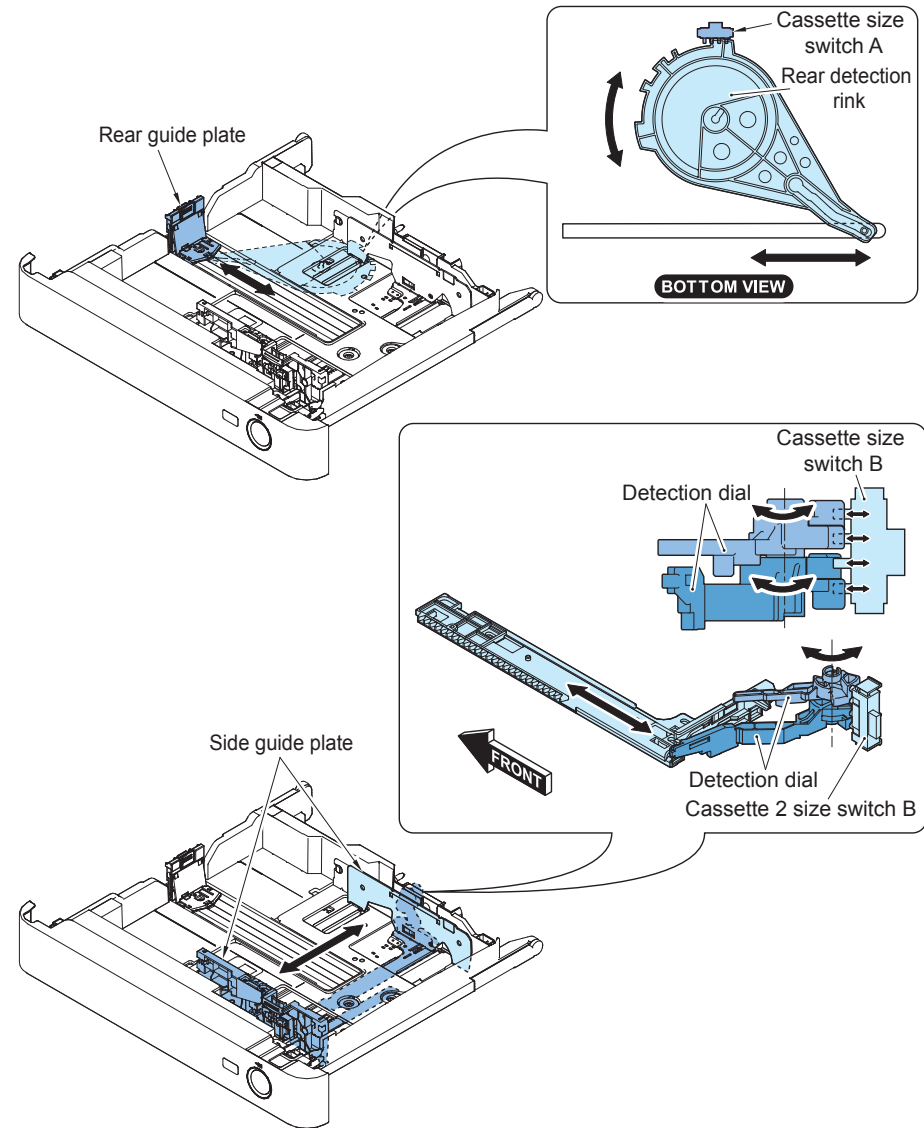
Display	Remaining Level	Sensor		Paper Presence Sensor
		A	B	
	100% to approx. 50% of capacity	OFF	OFF	OFF
	Approx. 50% of capacity to approx. 50 sheets	ON	OFF	OFF
	Approx. 50 sheets or less	ON	ON	OFF
	No paper	-	-	ON

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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.



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	Width	Length	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

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.r
(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-2-62

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-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.

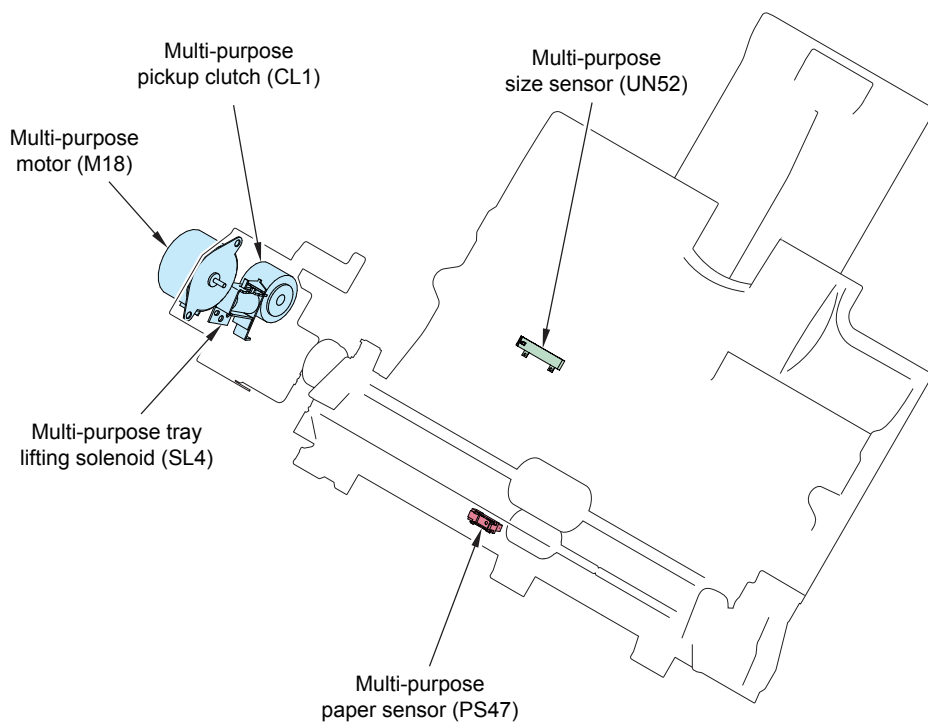
- There is preceding paper.
- The preceding paper has not reached the Registration Sensor.
- Time until the Registration Sensor of preceding paper is turned OFF > / = time until the Registration Sensor of succeeding paper is turned ON

● Cassette Heater Control

Multi-Purpose Tray Pickup Assembly

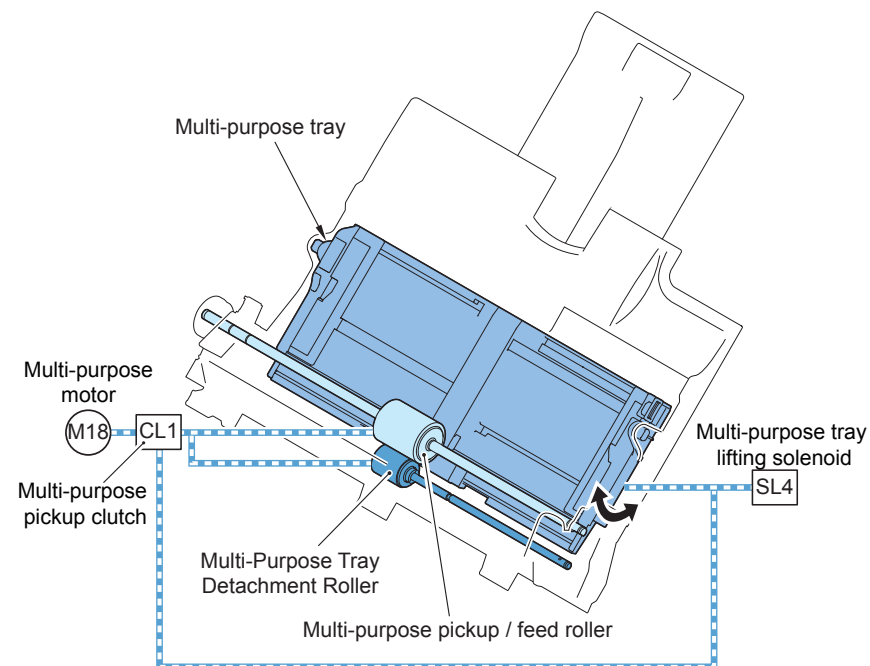
Overview

Parts Configuration



F-2-138

Drive Configuration



F-2-139

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.

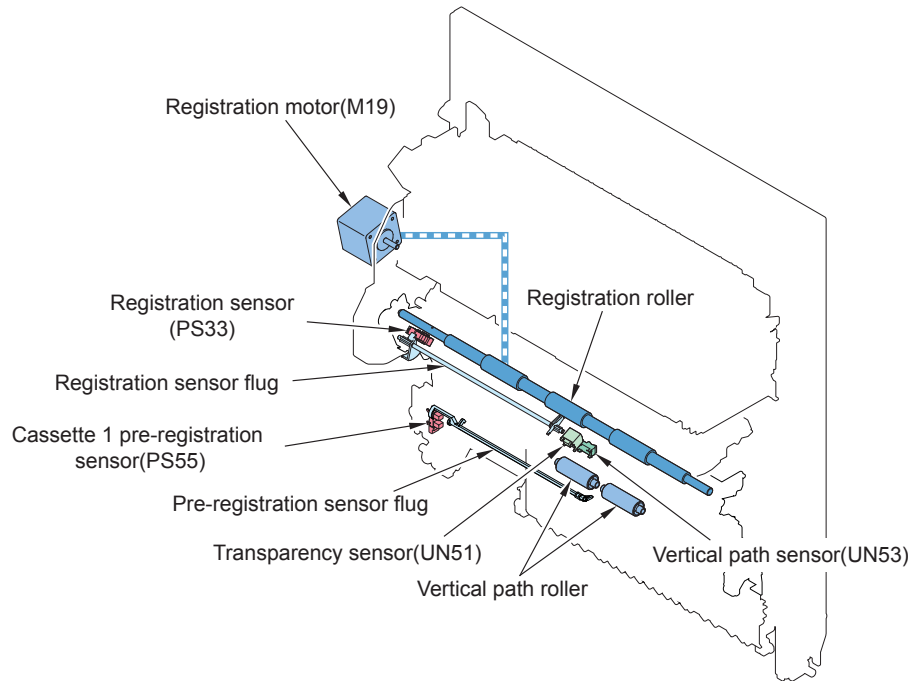
Paper Size Detection

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-2-140

Registration Control

OHP Detection

As the countermeasure for when the paper other than transparency film is fed in transparency mode, OHP sensor is used as white paper detection to identify whether the fed paper is transparency or not. However, since this is not used to identify the transparency for CLC, jam will occur when CLC paper is fed.

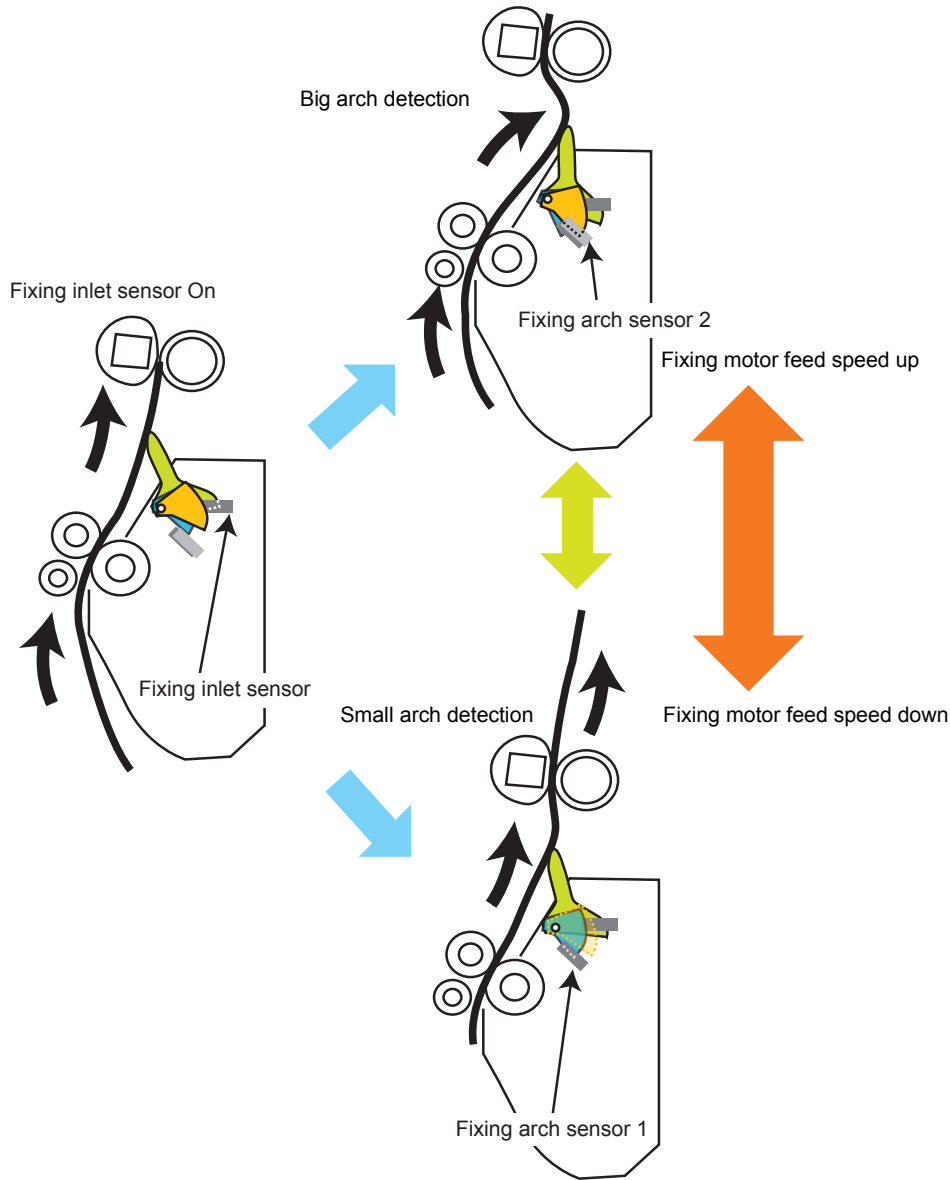
Registration Control

To make the paper straight-enter the transfer assembly, registration control is executed. 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 reduce the noise when the paper enters the Registration Roller, speed is decreased by 200mm / sec upon Registration Sensor ON. However, if the distance with the preceding paper is too far, productivity cannot be satisfied. Moreover, the paper may be late for the image. In such case only, the speed is changed by 246mm / sec when the paper enters the Registration Roller.

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.

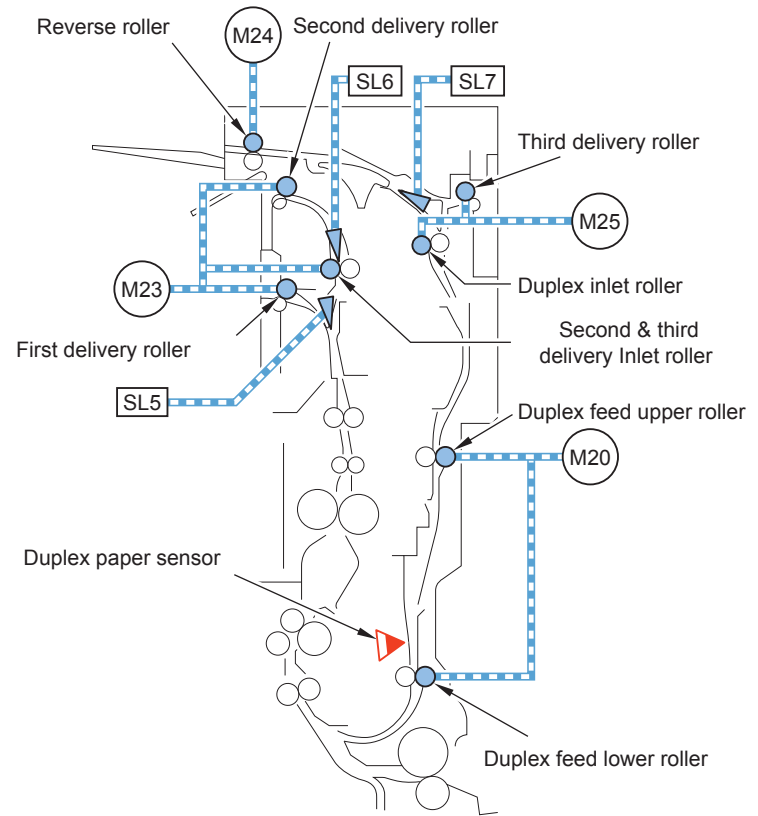


F-2-141

Duplex / Delivery Assembly

Overview

Parts / Drive Configuration



F-2-142

- | | | | |
|-----|-------------------------------|-----|----------------------------------|
| 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 imageRUNNER ADVANCE C5051 / C5045 (300mm / sec on imageRUNNER ADVANCE C5035 / C5030). 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.

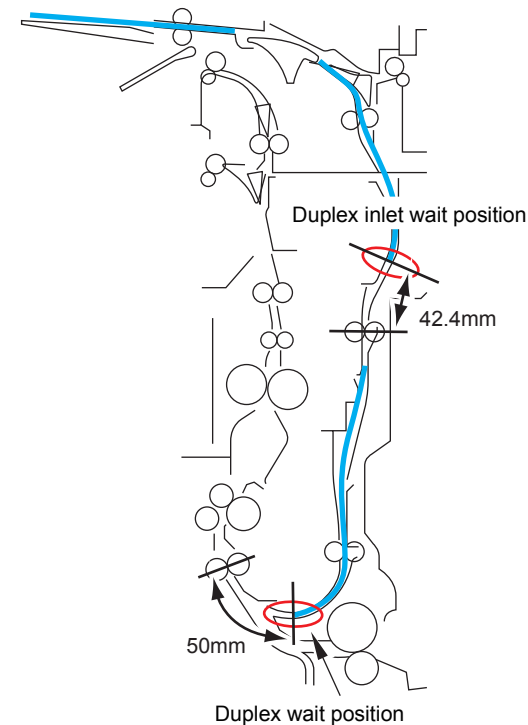
	First / Second Delivery	Third Delivery
Small size (LTR or smaller)	5	3
Middle size (A4R or smaller)	3	3
Large size (larger than A4R)	3	1

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 51 sheets / min speed is achieved.

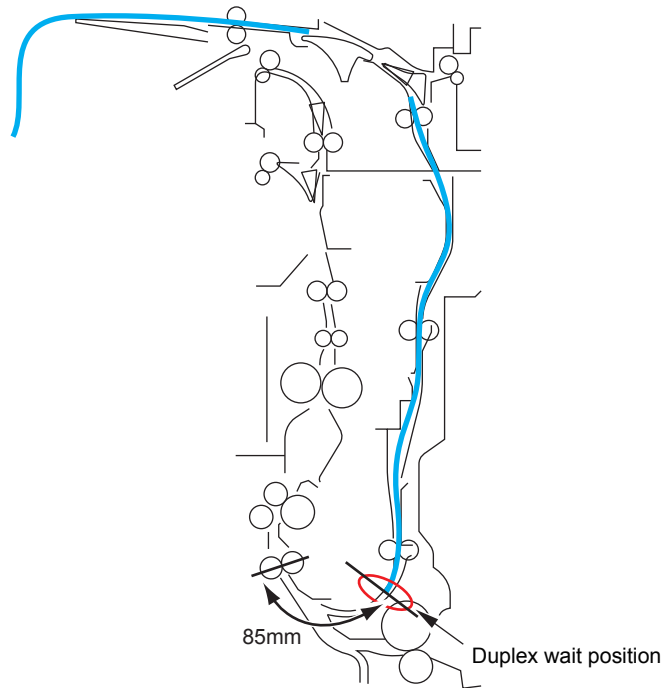
Duplex Wait Control

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



F-2-143

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-2-144

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
XX0D	Duplex paper sensor	PS38	Y	Y	Y	Y	Y	Y

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	120K	-
2	Cassette Detachment Roller	FC6-6661	2	120K	-
3	Multi-Purpose Feed Roller	FB1-8581	1	120K	-
4	Multi-Purpose Tray Detachment Roller	DC6-6661	1	120K	-
5	Pickup Assembly Idler Gear	FU3-0280	2	120K	For Chinese model only

T-2-66

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	

T-2-67

External Auxiliary System

Various Controls

Software Counter

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 (built-in tray, finisher)

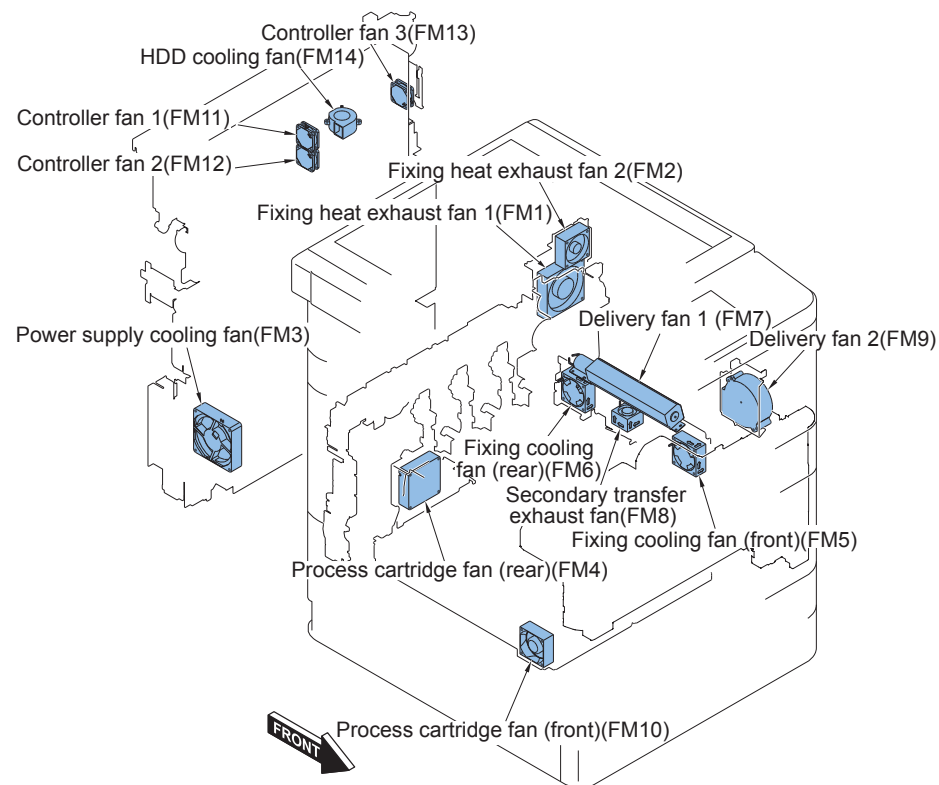
Delivery position		Print mode		
		1-side / 2 nd side of 1-sided		1 st side of 2-sided
		Count-up timing		
1	Host machine	First delivery tray	First Delivery Sensor (PS41)	Duplex Paper Sensor (PS38)
		Second delivery tray	Second Delivery Sensor (PS42)	
		Third delivery tray	Third Delivery Sensor (PS43)	
2	In case finisher is installed.	Finisher Delivery Sensor		

T-2-68

Fan

Overview

Fan Layout



F-2-145

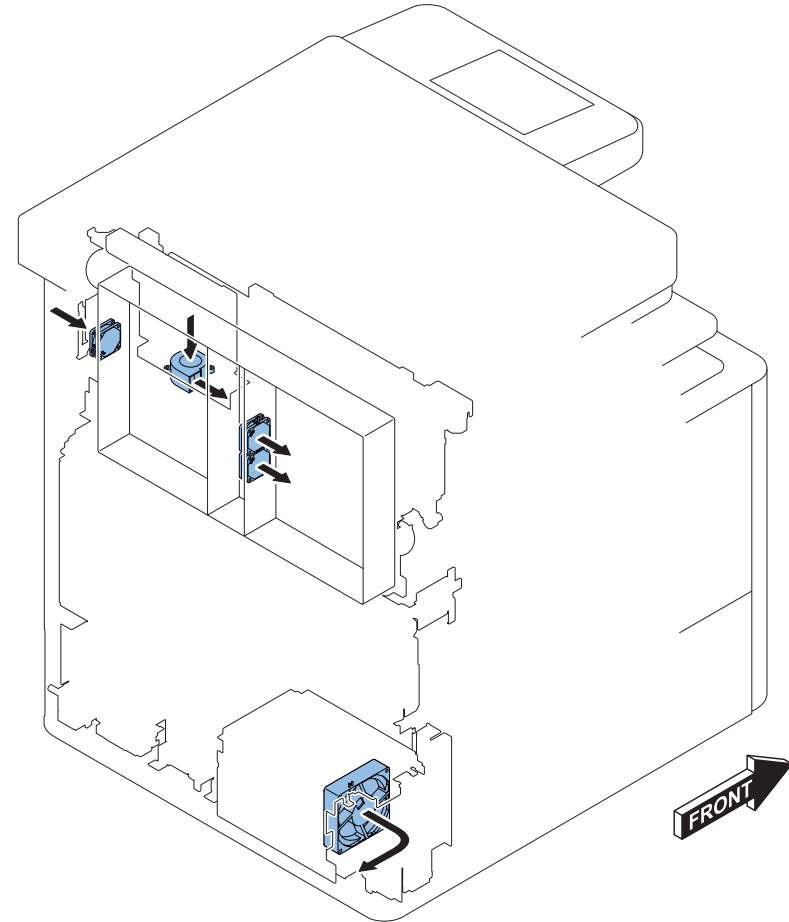
No.	Name	Function	Error code
FM1	Fixing Exhaust Fan 1	Heat exhaustion around Fixing Assembly	E805-0000
FM2	Fixing Exhaust Fan 2	Heat exhaustion around Fixing Assembly	E805-0001
FM3	Power Cooling Fan	Cooling down of Power Supply Assembly	E804
FM4	Process Cartridge Fan (rear)	Heat exhaustion around Process 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	
FM12	Controller Fan 2	Cooling down of Controller	
FM13	Controller Fan 3	Cooling down of Controller	
FM14	HDD Cooling Fan	Cooling down of HDD	

T-2-69

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

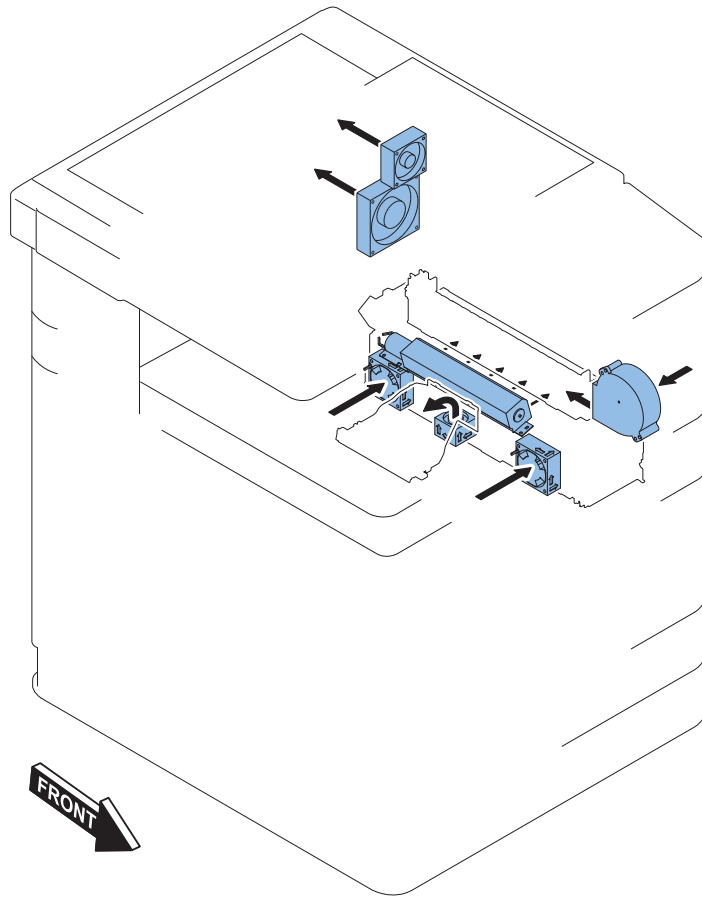
Air Flow

Air flow around the Main Controller and the Power Supply



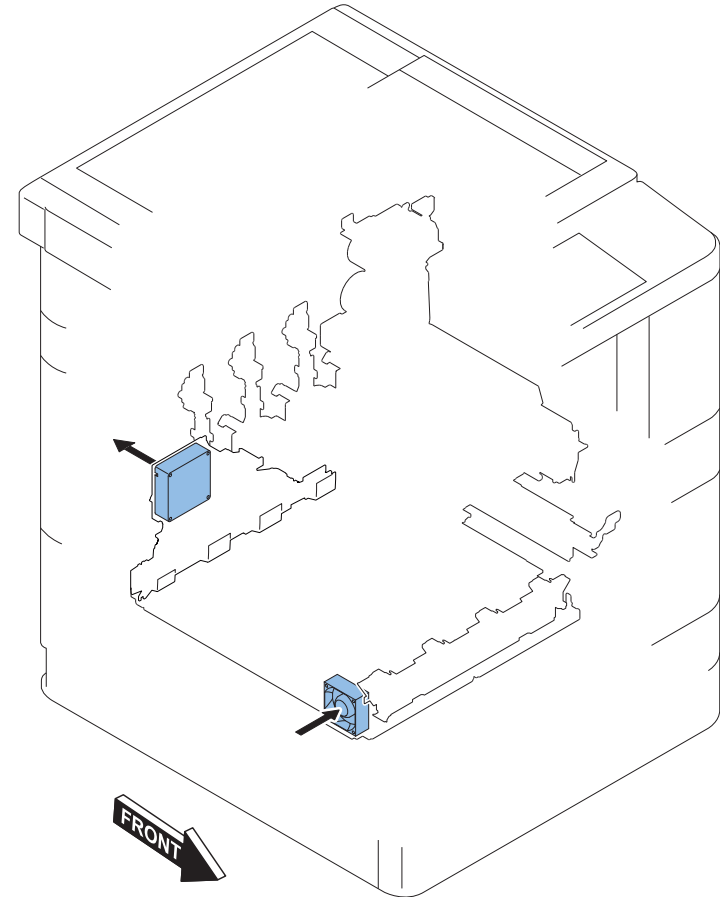
F-2-146

Air flow of fixing system



F-2-147

Air flow around the operation system



F-2-148

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

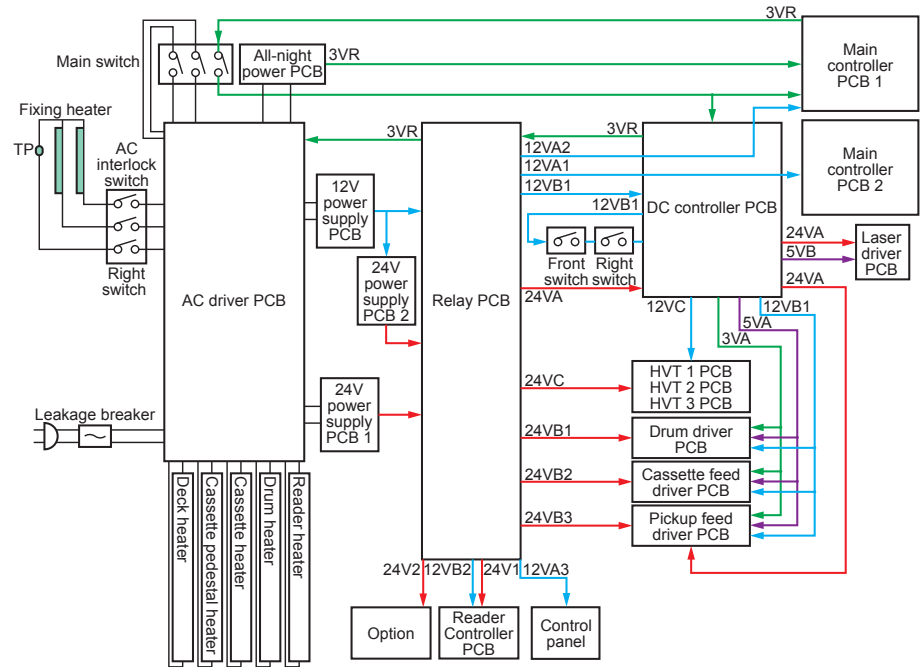
Fan name	Pre rotation	Initial rotation	Stand by	Copy/print 1-	Copy/print 2-	Post rotation	Jam error	Reader	Low power	Sleep
Process Cartridge Fan (front)										
Process Cartridge Fan (rear)										
Fixing Exhaust Fan 1										
Fixing Exhaust Fan 2										
Fixing Cooling Fan (front)										
Fixing Cooling Fan (rear)										
Secondary Transfer Exhaust Fan										
Delivery Fan 1										
Delivery Fan 2										
Power Cooling fan										
Controller Fan 1	Controller Control									
Controller Fan 2	Controller Control									
Controller Fan 3	Controller Control									
HDD Cooling Fan	Controller Control									

■ : Full speed ■ : Half speed

F-2-149

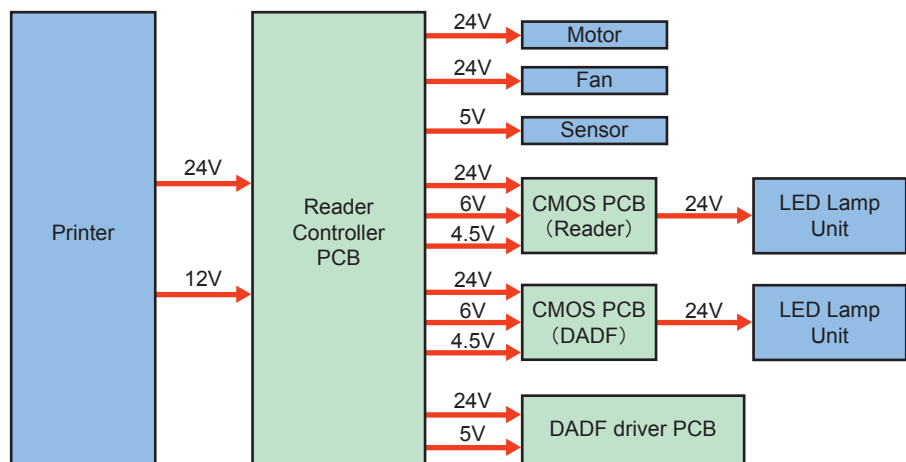
Power Supply Control

Power supply inside the printer



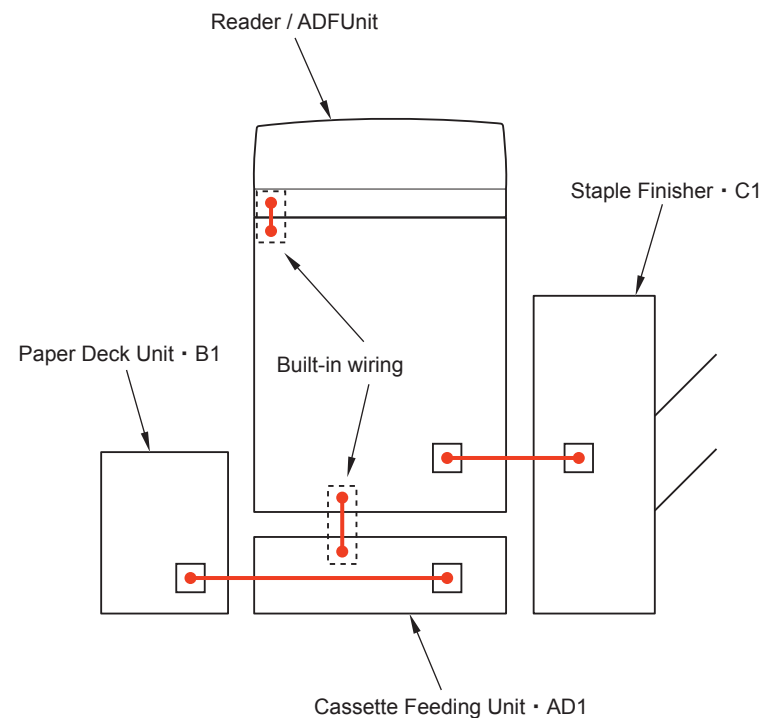
F-2-150

● Power supply of Reader Unit



F-2-151

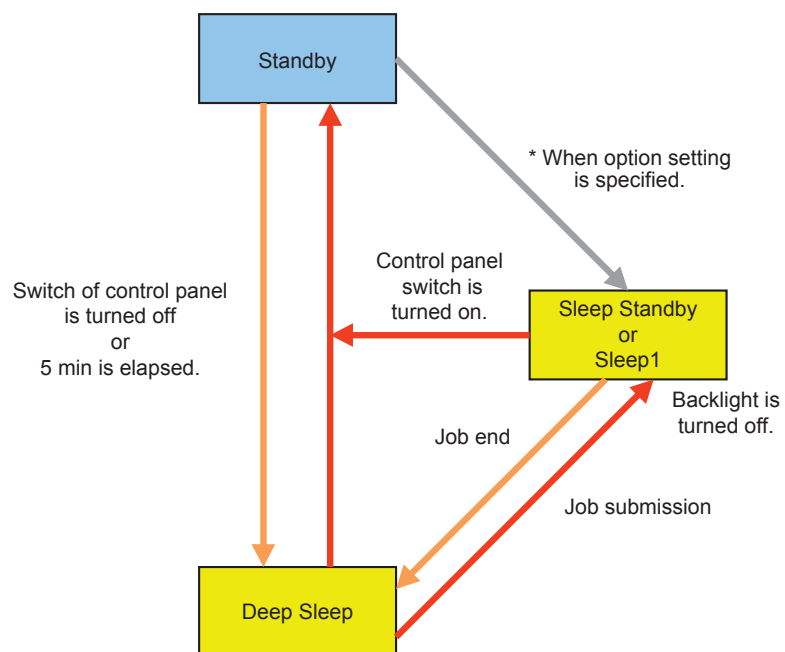
● Power connection with each option



F-2-152

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-2-153

* When options are installed, the machine does not enter Sleep Standby but enters Sleep1 mode.

Standby

In this mode, the machine is either operating or ready to start operation immediately and all power is supplied.

Sleep Standby or Sleep1

Control panel is turned OFF.

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

Deep Sleep

3V for all-night power PCB is only supplied.

- Print job is submitted : The machine moves to Sleep Standby or Sleep1 mode.
- Control panel power switch is pressed : The machine moves to Standby mode..

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)	

T-2-70

Points to note at servicing

N/A

MEAP

Changes

Overview

Functions and specifications which were added in Ver.50.xx or later firmware are introduced here.

SSL Always Enabled

Although SSL setting of the device is disabled, SSL is always enabled when accessing to SMS.

Due to this specification change, URL for accessing to SMS was changed as follows.

Old URL http://< Device IP Address>:8000/sms/
New URL https://< Device IP Address>:8443/sms/

When accessing to the old URL, the new URL is redirected.

Message Display by USB Driver Setting Change

By starting, stopping and uninstalling the MEAP application, driver settings of the USB device may be changed. Due to this setting change, when the device needs to be restarted, a message prompting to restart is displayed.

The screenshot displays the MEAP Application Management interface. At the top, it shows 'Service Management Service' and 'Device Serial Number: ZZZ00424'. The main content area is titled 'MEAP Application Management' and includes a warning message: 'You need to restart the device to have driver settings of the USB device take effect.' Below this is a table of installed applications:

Application Name	Version	Installed on	Status	Start	Uninstall	License
Application A	2.0.0	2010 09/29	Stopped	Start	Uninstall	Unnecessary
Application B	2.0.0	2010 09/29	Stopped	Start	Uninstall	Unnecessary
Application C	2.0.0	2010 09/29	Stopped	Start	Uninstall	Unnecessary

Below the application table is a 'Resource Information' section with a table showing usage for various resources:

Resource Name	Amount Used	Remaining	Percent Used
Storage	29512 KB	1019064 KB	3%
Memory	3584 KB	127488 KB	3%
Threads	33	223	13%
Sockets	33	223	13%
File Descriptors	27	229	11%

The interface also includes a sidebar with navigation options like 'MEAP Application Management', 'System Management', and 'MEAP Application Log Management'. The footer shows 'meap' logo and 'Version 3.0.3.8 Copyright CANON INC. 2010 All Rights Reserved'.

F-2-154

Addition of Functions

3 functions

For the built-in applications in iR-ADV models, 3 functions (services) were added.

These functions support the platform which was reinforced in terms of management. In detail, information which the MEAP applications manage respectively (setting information, user setting information, a bunch of keys, and log) can be managed effectively and collectively. These 3 functions are shown below.

1) MEAP User Preference Service (MEAP Spec Ver 56)

Management service of customized information for each user which MEAP application retains

2) MEAP Application Configuration Service (MEAP Spec Ver 57)

Management service of the application's setting information

3) MEAP Application Log Service (MEAP Spec Ver 58)

Service to collect the application log (debug log and authentication log)

Note:

- Registration method of application data to each service and its usage method are disclosed in MEAP SDK V.4.3. However, as for the authentication log only, they are disclosed in MEAP Login SDK V.3.1.

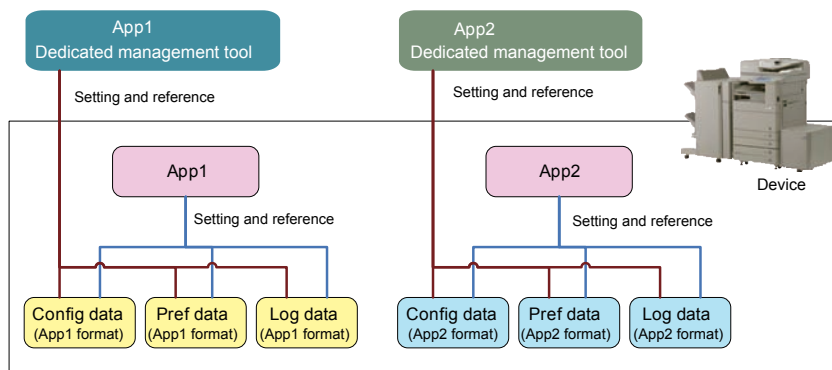
Management service of the application data which was stored in each service is provided.

- iW EMC Plug-in(DAM Plug-in)、RUI、SMS

Differences in MEAP Application Data Management when Using New Functions

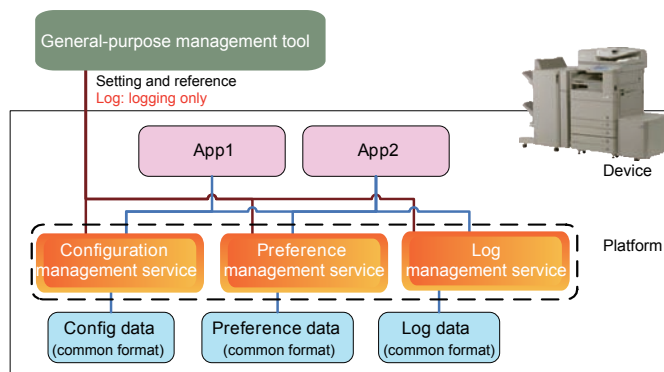
By using the 3 functions which were newly added, MEAP applications can be managed collectively as follows. (Only for MEAP applications which support new functions)

Devices and MEAP applications which do not support new functions



F-2-155

Devices and MEAP applications which support new functions



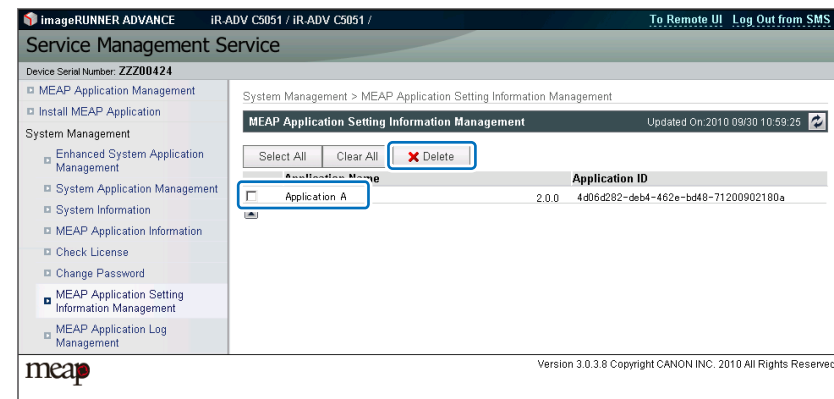
F-2-156

Addition of SMS Functions

Due to the foregoing additional 3 functions, functions for MEAP application were added to SMS.

Management of the MEAP application's setting information

MEAP application's setting information management function which the application data can be deleted was added.

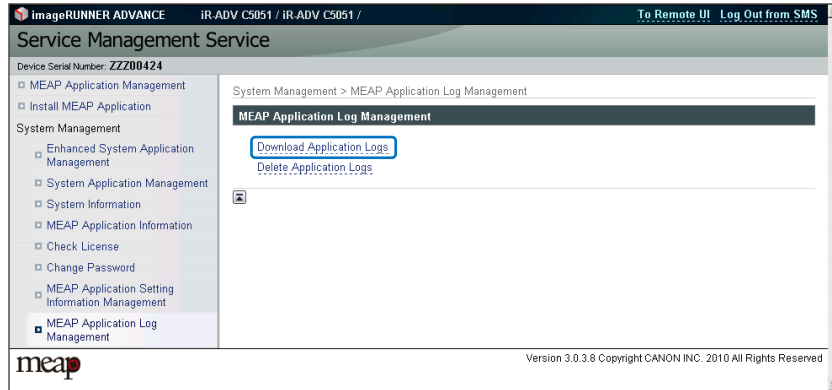


F-2-157

● Log management of MEAP application

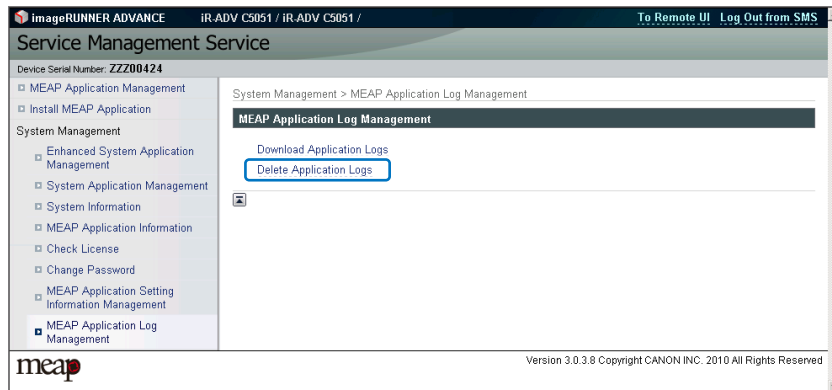
Log management function which the MEAP application log can be downloaded and/or deleted was added.

Screen example: Download of MEAP application log



F-2-158

Screen example: Deletion of MEAP application log



F-2-159

■ Authentication Information Sharing Function

● Sharing the authentication information

Authentication information at login and authentication information for MEAP application were managed separately, so it was very inconvenient because authentication was executed many times.

In the MEAP environment, the unified authentication function which authentication information can be shared even between MEAP applications was added.

Supported MEAP Specifications is Ver.59 and both device and MEAP application need to support this version in order to use this function.

There are 2 types for authentication information sharing: Volatile Credential which the registered information is discarded at logout or shutdown of the device, and Persistent Credential which the registered information is not discarded even at logout.

● Volatile Credential

Volatile Credential is used when sharing the authentication information between applications which log in (authenticate) to the same security domain.

Credential is registered using a login application, so the application which accesses to the security domain used for authentication by login application can use the Credential.

● Persistent Credential

Persistent Credential is used to help entry of authentication information when logging in (authenticating) to a different security domain.

Credential is registered using a general MEAP application, so 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 object	Character strings only User ID/ Password/Domain/Arbitrary character strings
Lifetime	Registration	At login (login application), and at any timing registered by application	At any timing registered by application
	Deletion	Can be used until logout/shutdown.	Can be used until deletion by 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-2-71

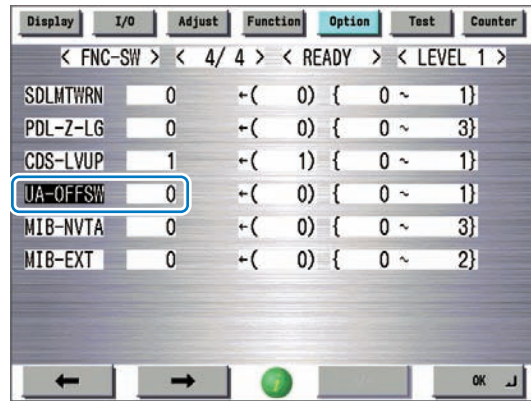
Service mode

For the reason of security, if not preferring to use Volatile Credential, it can be disabled using the service mode. (Persistent Credential cannot be disabled.)

Service switch can be found in the following.

[SERVICE MODE] LEVEL1 > [COPIER] > [Option] > [FNC-SW] > [UA-OFFSW]

Setting value: 0 = Enabled, 1 = Disabled



F-2-160

Function Supporting Deep Sleep Mode

Once the device shifted to the deep sleep mode, the USB device could not be controlled after recovery from the deep sleep mode. For this reason, it was necessary to control the application not to shift to the deep sleep mode.

With this function, the USB device control is enabled after recovery from the deep sleep mode as in the case when the USB device is inserted and removed (occurrence of disconnection/connection event) at recovery from the deep sleep mode.

In addition, this function enables the USB device control after shifting to the deep sleep mode, so the application needs to perform reconnection processing.

This function can be used with the device which MEAP Specifications Ver.54 is supported.

Checking the Operating Environment

Outline

This section lists the requirements on the operating environment for the maintenance.

Note:

- Cookies must be enabled for each session.
- Java Script must be enabled in all environments.
- The required web server functions for each server are built into the MEAP device, so there is no need to configure them separately.

CAUTION:

For the following operations in the combined environment of Windows XP and Internet Explorer 6, Java 2 Runtime Environment Standard Edition 1.5 or later is required.

- User registration / edit in SSO-H local device
- Use of remote login in SSO-H.

SMS

The following system environments are required in order to enable SMS access.

Operating System	Supported browser
Windows 2000 Professional	Microsoft Internet Explorer 6 SP1
Windows XP Professional	Microsoft Internet Explorer 7
Windows Vista SP2	Microsoft Internet Explorer 8
Windows 7	Microsoft Internet Explorer 8
Mac OS X 10.3	Safari 1.3.2
Mac OS X 10.4	Safari 2.0.4
Mac OS X 10.5	Safari 3.1.2
Mac OS X 10.6	Safari 4.0.3

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SSO-H Management

When using SSO-H for the login service, required system environments are different in domain authentication or local device authentication.

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

Note:

- In case either of the following OS is installed in a client computer, Java Runtime Environment should be installed separately.
 - Windows 2000 Professional Japanese version (Service Pack 4 and later)
 - Windows XP Professional Japanese version (Service Pack 1a and later)
 - Windows Server 2003 Japanese version, Windows Server 2003 R2 Japanese version
- Visit the URL of Sun Microsystems (US) to learn how to obtain Java Runtime Environment.
- Accesses via IPv6 communication from a client computer require Java 2 Runtime Environment Standard Edition 1.5 and later.
- If [Internet Option]>[Securities]>[Customizing Levels]>[Run ActiveX controller and Plug-in] is disabled in a computer, Internet Explorer prompts the warning message, "Java Runtime Environment not Installed".
- Use Update 6 or later for Java Runtime Environment 6.

Domain authentication management

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

- The following Windows servers are installed under Active Directory, and DNS server for name resolution.
 - Microsoft Windows 2000 Server SP4
 - Microsoft Windows Server 2003 SP2
 - Microsoft Windows Server 2003 R2 SP2
 - Microsoft Windows Server 2008 SP2
 - Microsoft Windows Server 2008 R2
- Windows 2000/2003 Domain Name System (DNS) access privileges
- Domain controller access privileges

System environments for administrator and ordinary user

Operating System	Supported browser	Java Runtime Environment
Windows 2000 Professional SP4	Microsoft Internet Explorer 6 SP1	Sun Java Runtime Environment 1.4 or later
Windows XP Professional SP3	Microsoft Internet Explorer 7	
Windows Vista SP2	Microsoft Internet Explorer 8	
Windows 7	Microsoft Internet Explorer 8	
Windows Server 2003 SP2	Microsoft Internet Explorer 7	
Windows Server 2003 R2 SP2	Microsoft Internet Explorer 7	
Windows Server 2008 SP2	Microsoft Internet Explorer 8	
Windows Server 2008 R2	Microsoft Internet Explorer 8	
Mac OS X v10.3	Safari 1.3.2	Sun Java Runtime Environment 5.0
Mac OS X v10.4	Safari 2.0.4	
Mac OS X v10.5	Safari 3.1.2	
Mac OS X v10.6	Safari 4.0.3	

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System environments for administrator and ordinary user (when using IPv6 communication)

Operating System	Supported browser	Java Runtime Environment
Windows XP Professional SP3	Microsoft Internet Explorer 7	Sun Java Runtime Environment 1.5 or later
Windows Vista SP2	Microsoft Internet Explorer 8	
Windows 7	Microsoft Internet Explorer 8	
Windows Server 2003 SP2	Microsoft Internet Explorer 7	
Windows Server 2003 R2 SP2	Microsoft Internet Explorer 7	
Windows Server 2008 SP2	Microsoft Internet Explorer 8	
Windows Server 2008 R2	Microsoft Internet Explorer 8	

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Note:

- Visit the URL of Sun Microsystems (US) to learn how to obtain Java Runtime Environment.
- Accesses via IPv6 communication from a client computer require Java 2 Runtime Environment Standard Edition 1.5 and later.
- Use "User Logon Name (Windows 2000 or older)" registered in Active Directory as the user name for domain authentication.
- For domain authentication, set a user name only with 1-byte alphanumeric characters and symbols of - (hyphen), _ (underbar), and % (percent). iR device will reject login with a user name including a forbidden character.
- For domain authentication, the time setting should be synchronized between Active Directory server and the device (as well as the PC to be logged in). If the time is different for 5 minutes or more, a login error is triggered in domain authentication (the setting of allowable time difference can be changed).
- A domain authentication manager should be registered when domain authentication is used. If not registered, setting or management is disabled for some applications. How to register the manager depends on system environments.
 - When not using imageWARE/iW Accounting Manager, a user belonging to "Canon Peripheral Admins" group on Active Directory will be authorized as the domain authentication manager. Follow Active Directory Operation Manual to create "Canon Peripheral Admins" group before registering the manager.

Network ports used

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

T-2-75

Local Device Authentication Management

For user registration / edit in Local Authentication, following system requirements must be satisfied.

System environments for administrator and ordinary user

Operating System	Supported browser	Java Runtime Environment
Windows 2000 Professional SP4	Microsoft Internet Explorer 6 SP1	Sun Java Runtime Environment 1.4 or later
Windows XP Professional SP3	Microsoft Internet Explorer 7	
Windows Vista SP2	Microsoft Internet Explorer 8	
Windows 7	Microsoft Internet Explorer 8	
Windows Server 2003 SP2	Microsoft Internet Explorer 7	
Windows Server 2003 R2 SP2	Microsoft Internet Explorer 7	
Windows Server 2008 SP2	Microsoft Internet Explorer 8	
Windows Server 2008 R2	Microsoft Internet Explorer 8	
Mac OS X v10.3	Safari 1.3.2	Sun Java Runtime Environment 5.0
Mac OS X v10.4	Safari 2.0.4	
Mac OS X v10.5	Safari 3.1.2	
Mac OS X v10.6	Safari 4.0.3	

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System environments for administrator and ordinary user (when using IPv6 communication)

Operating System	Supported browser	Java Runtime Environment
Windows XP Professional SP3	Microsoft Internet Explorer 7	Sun Java Runtime Environment 1.5 or later
Windows Vista SP2	Microsoft Internet Explorer 8	
Windows 7	Microsoft Internet Explorer 8	
Windows Server 2003 SP2	Microsoft Internet Explorer 7	
Windows Server 2003 R2 SP2	Microsoft Internet Explorer 7	
Windows Server 2008 SP2	Microsoft Internet Explorer 8	
Windows Server 2008 R2	Microsoft Internet Explorer 8	

T-2-77

Note:

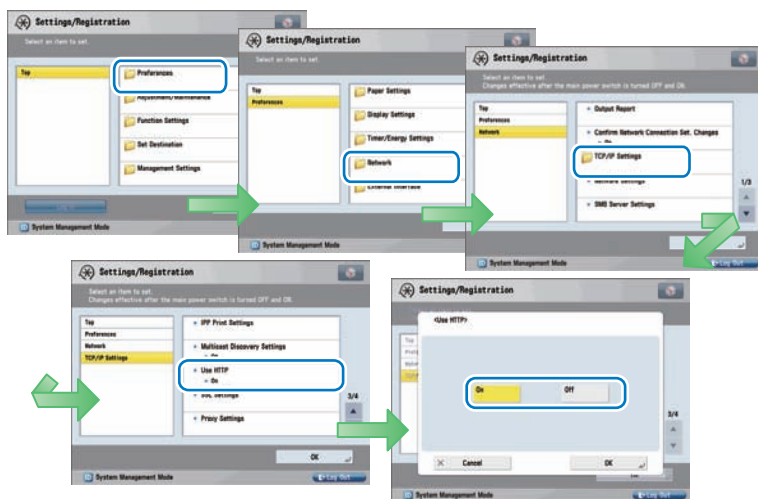
- Visit the URL of Sun Microsystems (US) to learn how to obtain Java Runtime Environment.
- Accesses via IPv6 communication from a client computer require Java 2 Runtime Environment Standard Edition 1.5 and later.

Setting Up the Network

Network configuration process

To support a MEAP-enabled iR device via network (SMS, etc.), set up the network setting on the touch panel of the iR device (this setting is [ON] by default).

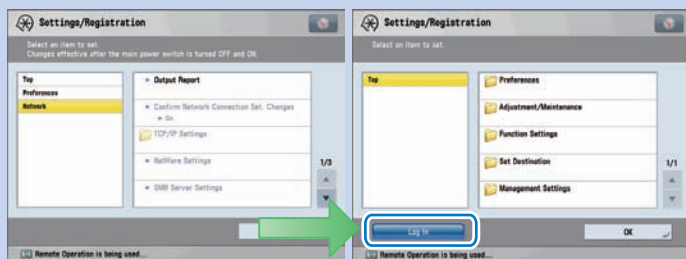
- 1) Press [Settings/Registration] button, select [Preferences] > [Network] > [TCP/IP Settings] > [Use HTTP] and press [On] button.



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Note:

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

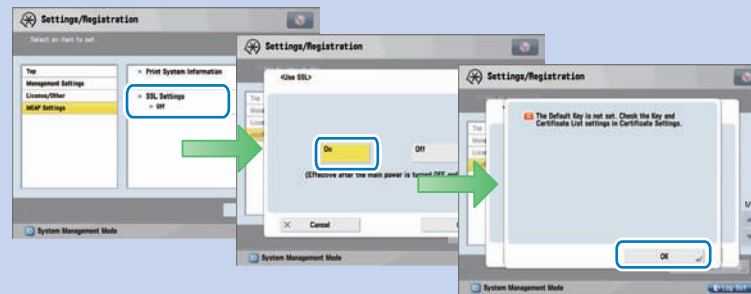


F-2-162

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.



F-2-163

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

CAUTION:

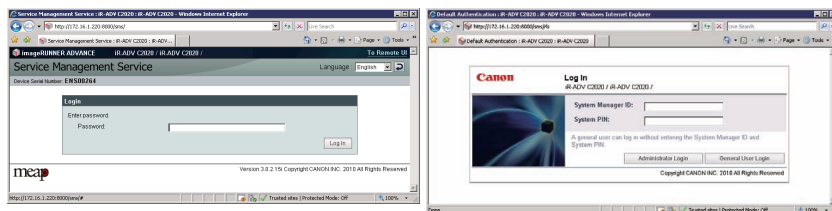
- The setting [Use HTTP] is not actually enabled/disabled until you have restarted the device.
- You cannot make a connection through a proxy server. If a proxy server is in use, enter the IP address of the MEAP device in the Exceptions field for the browser. Open Internet Options dialog of Internet 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.

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-2-164

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

T-2-78

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.

Key Pair and Server Certificate when Using Encrypted SSL Communication

SSL Connection for SMS

SMS is always SSL-connected, so it is required to set a key pair and server certificate as the Default Key. When deleting [Default Key] (pre-installed key pair and server certificate) from the Default Key, SMS cannot be accessed.

When SMS Cannot Be Accessed

If [Default Key] is deleted by mistake or setting [Default Key] is forgotten, URL which SMS can be accessed ([http:// <IP address of the machine> :8443/sms/](http://<IP address of the machine>:8443/sms/)) cannot be accessed.

In this case, perform the following.

1. Try to access from [http:// <IP address of the machine> :8000/sms/](http://<IP address of the machine>:8000/sms/).
2. Check whether to display "HTTP 500 internal server error".
3. When the message is displayed, set a key pair and server certificate required for encrypted SSL communication with the following procedures.
 - 1) Select [Settings/Registration] > [Preferences] > [Network] > [TCP/IP Settings] > [SSL Settings].
 - 2) Select [Key and Certificate].
 - 3) After selecting [Default Key] (pre-installed key pair and server certificate), select [Set as the Default Key].
 - 4) Select [Yes] > [OK].

Note:

- 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: [Management Settings] (Settings/Registration) > [MEAP Settings] > [SSL Settings]: ON/OFF.

Login by Password Authentication

In the SMS login window, enter the password for authentication. Only one password can be registered with SMS. The login procedures are as follows.

1) Access SMS from the browser of a PC on the same network as the MEAP device. The URL is as follows.

URL: https://<MEAP Device IP address>:8443/sms/

Ex.) https://172.16.188.240:8443/sms/

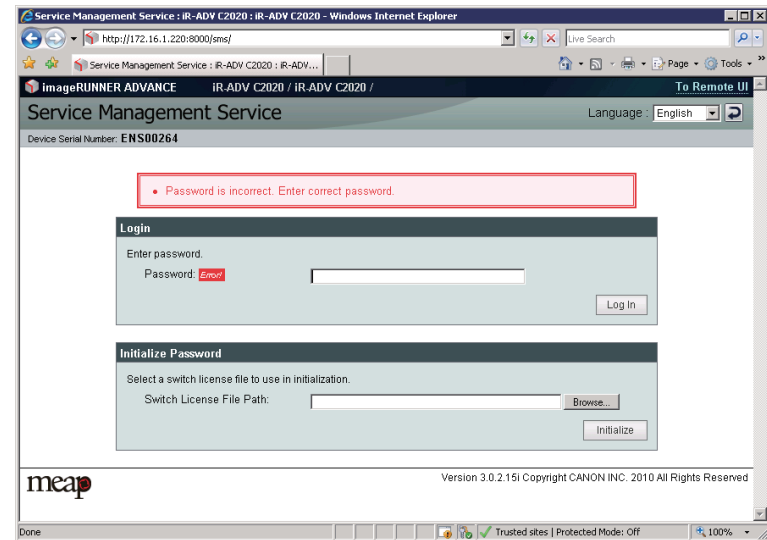
Note:

- 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.

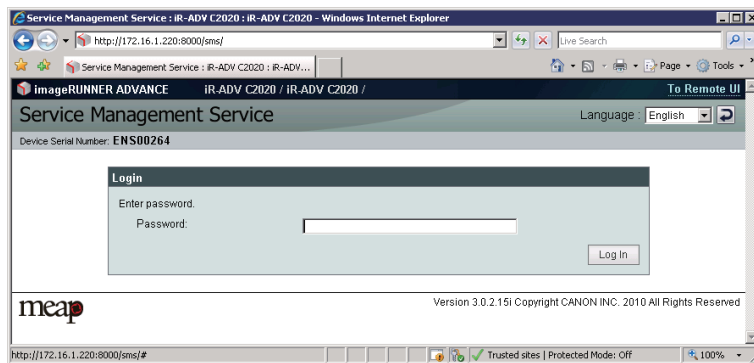
Note:

- The default password is "MeapSmsLogin." (The password is case-sensitive.) When you want to change the display original language, change in the box in the right of the screen.
- This setting is not affect by the setting of the language of the device.

2) 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-2-166



F-2-165

■ Login by 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 domain authentication or local device authentication. The login procedures are as follows.

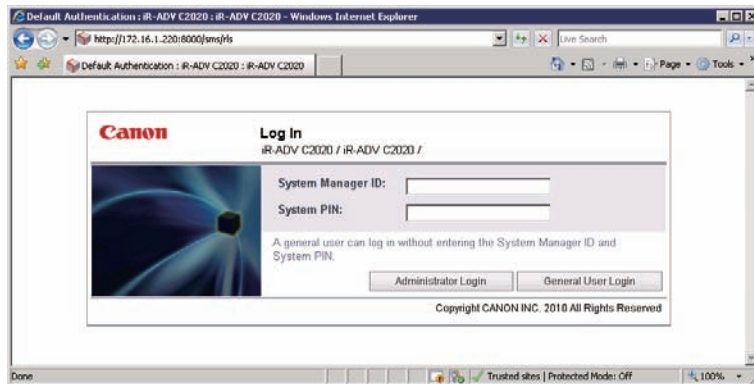
1) Access SMS by RLS Authentication from the PC browser on the same network as the MEAP device.

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.



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Note:

- When the device authentication method used is domain authentication, enter the user name, password and login destination registered with Active Directory 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'. - When using SDL as the login service, enter the user information registered in the device, as per local device authentication.

Note:

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.

- In the case of domain authentication, users belonging to the Canon Peripheral Admins Group.
- For local device authentication, users with Administrator or Device Admin authority.

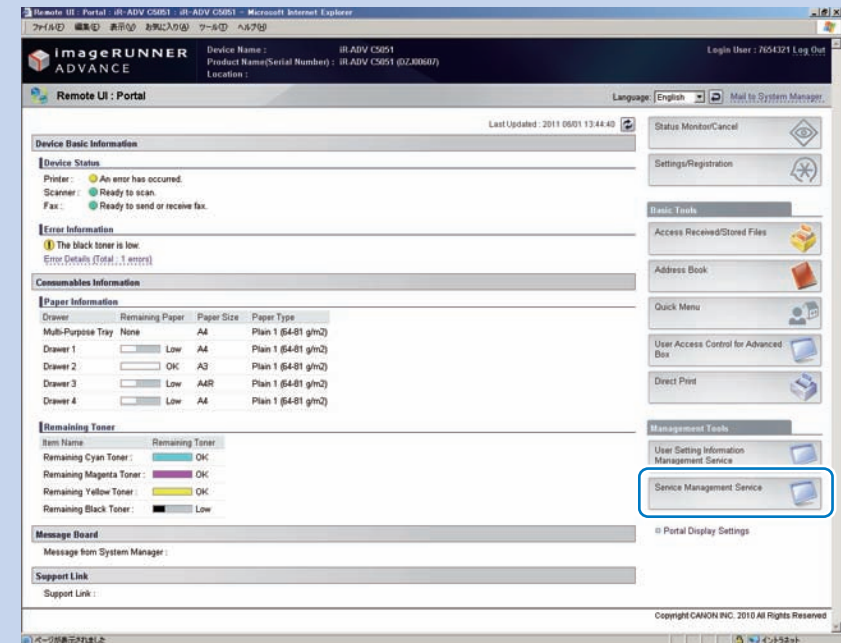
Note:

- SMS Access can be gained also from Remote UI.

Access Remote UI and click on SMS shortcut shown on the lower right of the screen to gain access to SMS.

When only the password authentication is enabled, the password authentication screen is shown.

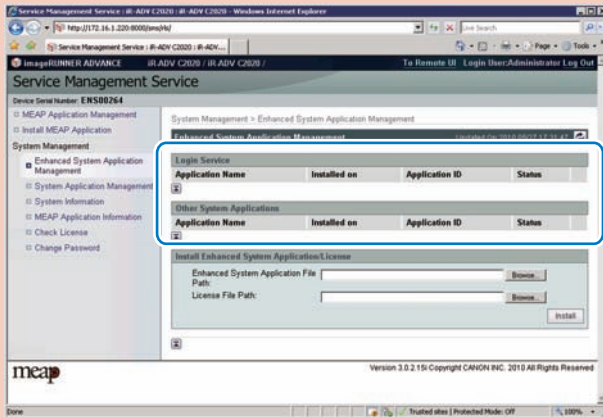
When only the RLS authentication is enabled, no further authentication is needed to access SMS. This is because users have already authorized upon accessing to Remote UI.



F-2-168

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-2-169

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

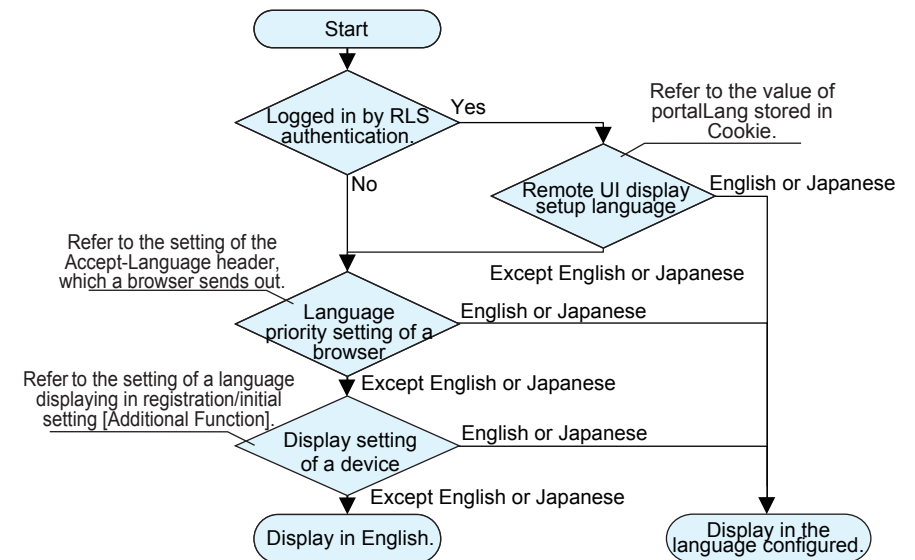
SMS supports English and Japanese. Display language can be changed with selecting by the drop down list on a login page.

The initial display language at the time of accessing SMS depends on the setting.

In former SMS, the language setting of "initial setting/registration (user mode)" was used.

However, when the language setting is other than English or Japanese, it displays in English.

After changed, it will be as follows.



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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.

Setting the method to login to SMS

Outline

The SMS login method settings are done by setting the login Start/ Stop via the other login method. In other words, the password authentication Start/ Stop setting is done by first logging in with RLS authentication, and the RLS authentication Start/ Stop setting is done by first logging in with password authentication. The Start/ Stop combinations of the two login methods are as follows.

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-2-79

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 domain 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

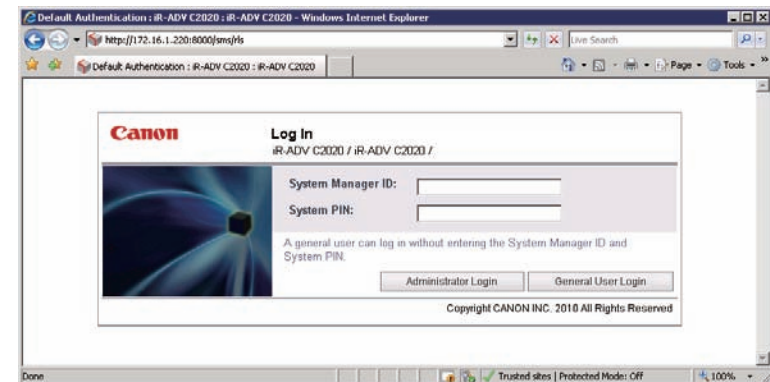
The procedures for changing the password authentication Start/ stop settings are as follows.

- 1) Access SMS 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/>

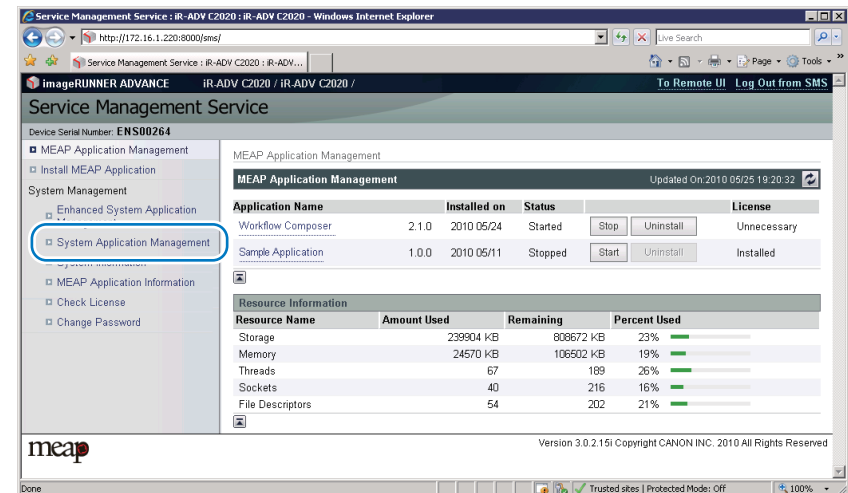
Ex.) <https://172.16.188.240:8443/sms/rls/>

Login screen (In case authentication method is SSO-H)



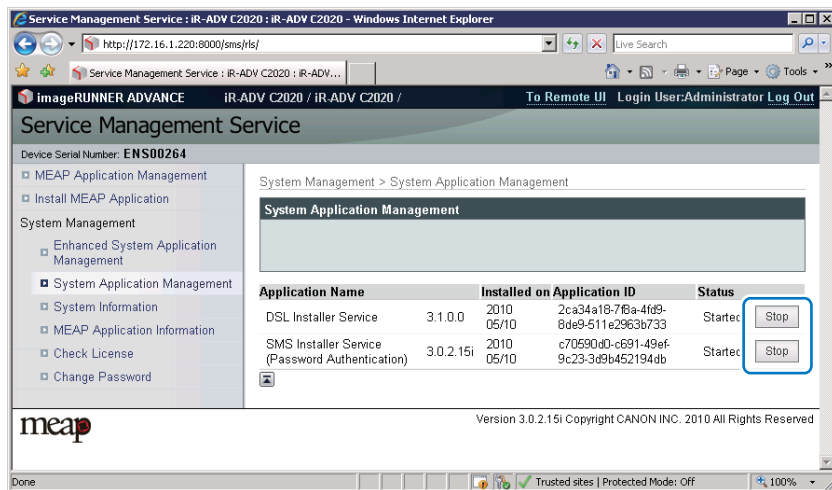
F-2-171

- 2) Select [System Application Management]



F-2-172

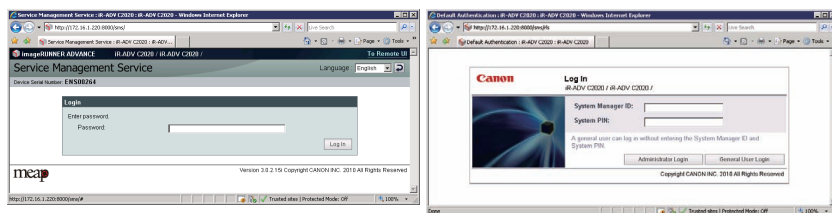
3) Click [Start] or [Stop] button shown in Status field of SMS Installer Service (Password Authentication) to check if the status is changed.



F-2-173

4) 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



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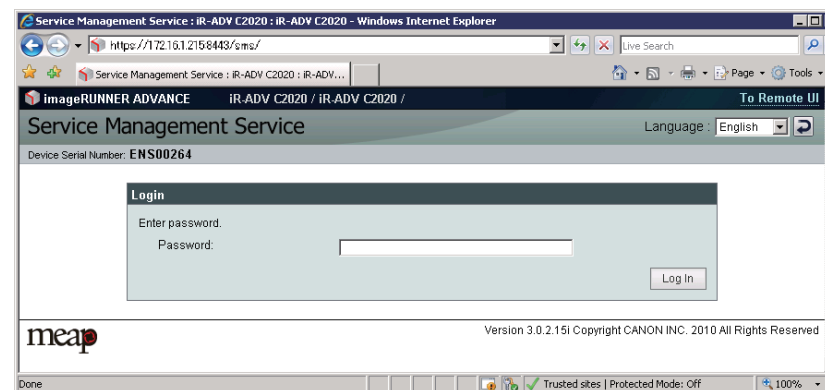
Setting for login by RLS Authentication

The procedures for changing the RLS authentication Start/ Stop settings are as follows.

1) In order to make a setting for Login by RLS Authentication, you need to Login by Password Authentication.

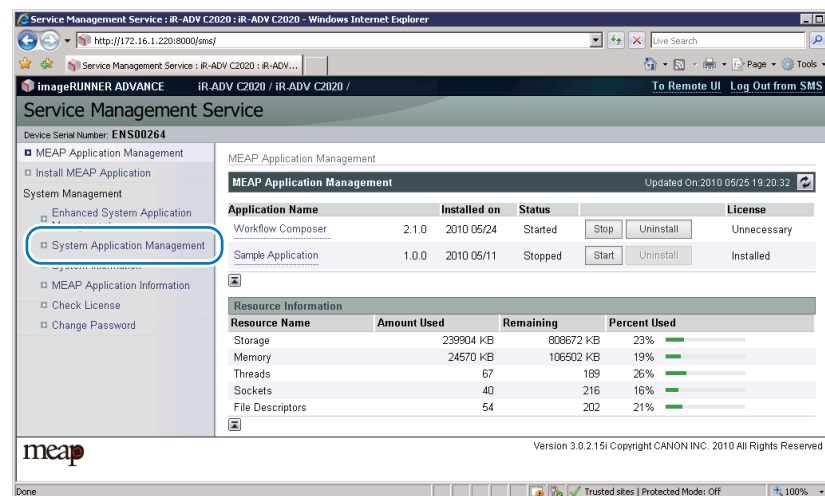
URL: https://<IP address of MEAP device>:8443/sms/rls/
Ex.) https://172.16.188.240:8443/sms/rls

Login screen by Password Authentication



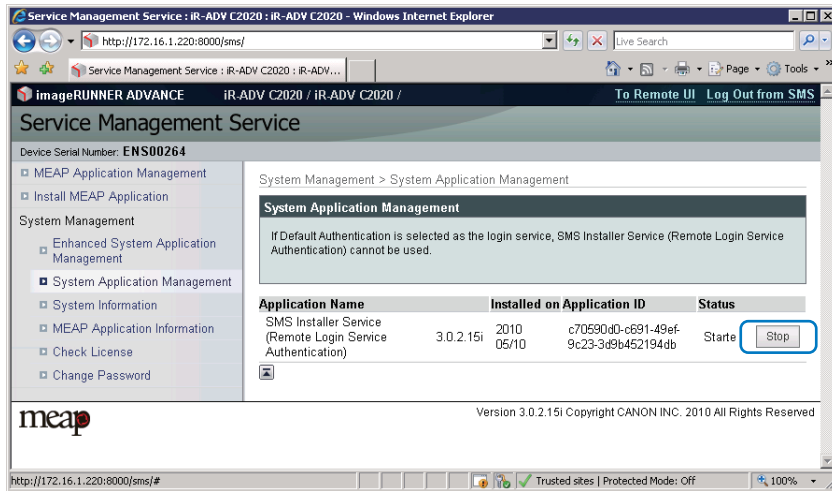
F-2-175

2) Select [System Application Management] on System Management menu.



F-2-176

3) 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.

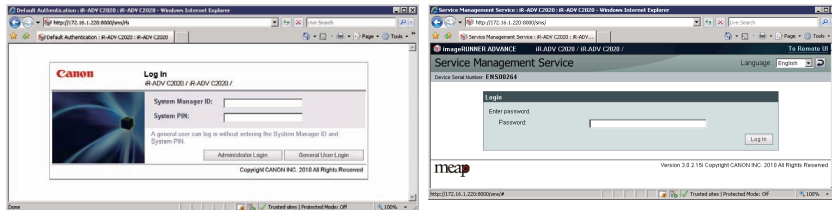


F-2-177

4) 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.

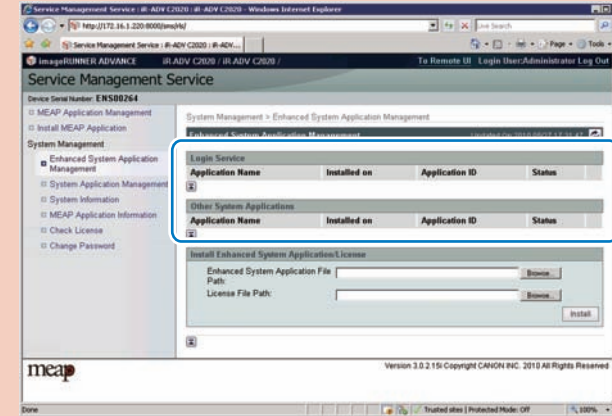
RLS authentication started screen and RLS authentication stopped screen



F-2-178

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-2-179

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.

Checking MEAP Application Management Page

About MEAP Application Management Page

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

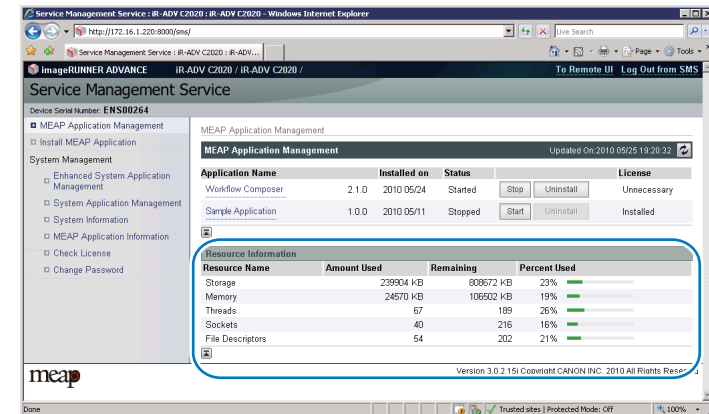
You will not be able to install an application if the size of the remaining storage falls short of the size declared by the application. Moreover, the specifications have been designed so that an application will not be able to start up if there is a shortage of memory for any of the foregoing items (i.e., memory, thread, socket, file descriptor).

Follow the steps below to check the remaining memory:

- 1) Log in to SMS.
- 2) Click [MEAP Application Management].

3) Check [Resource Information] for information of the whole device resources.

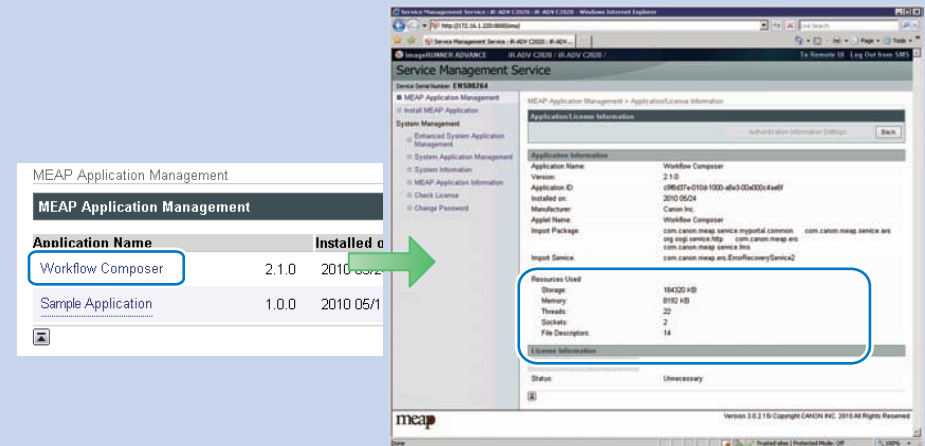
- Amount Used
- Remaining
- Percent Used



F-2-180

Note:

Older iR models show resource information required in each application in List of Application page (corresponding to MEAP Application Management page of this model). When checking the resource information of each application in this model, click on the application name in MEAP Application Management page.

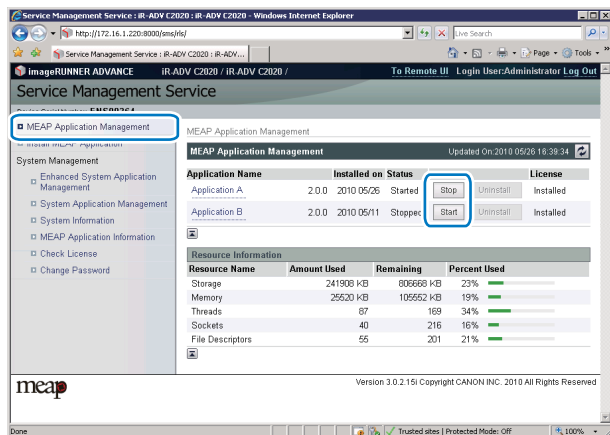


F-2-181

Starting and Stopping a MEAP Application

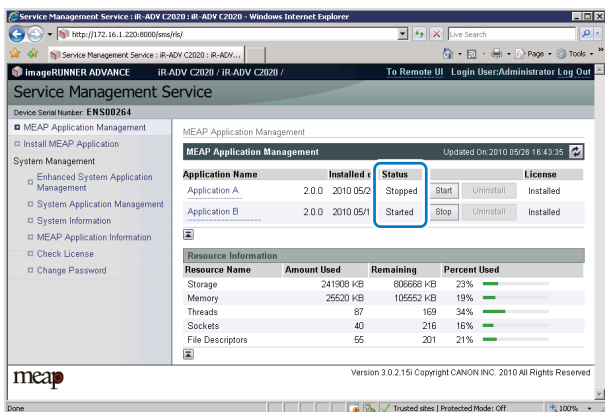
Procedure to start and stop a MEAP application

- 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.



F-2-182

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



F-2-183

Checking the Platform Information

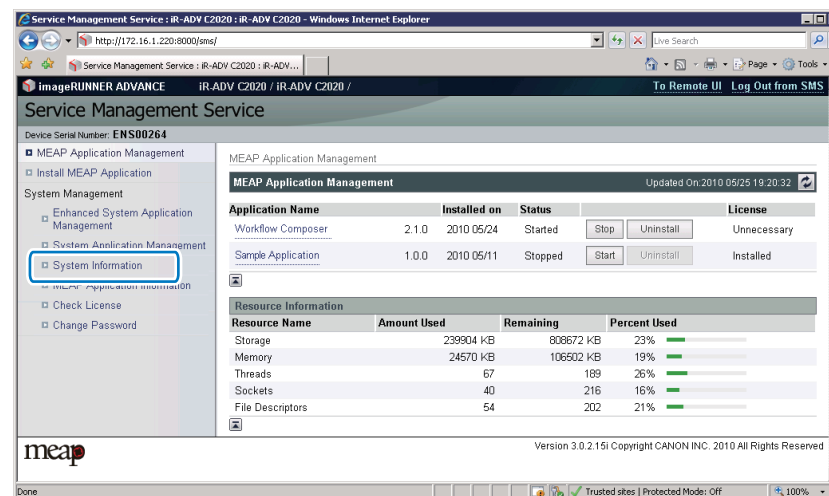
The check procedure of the platform information

This screen allows users to check MEAP-Contents versions, MEAP Specifications for the device and others.

CAUTION:

- Some applications may not be installed to some MEAP devices of specific specifications. (See 'MEAP Specifications').

- 1) Log in to SMS.
- 2) Click [System Management] > [System Info] tab.



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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

MEAP Specification is shown as 'MEAP Specifications' in the screen to check the version on the side of device that supports MEAP (counter confirmation button) and MEAP platform (SMS). On the other hand, in the manifest file of MEAP application, it is shown as 'MeapSpecVersion' (described in the same way in the SDK document)

(Note) 'MEAP Specifications' hereafter in this document.

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, 30,31,32,33,34,35,36,37,38,39,40,41,42,44,4 5,46,47,49,50,51,52,53,54,55,56,57,58,59
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, 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 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

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MEAP Specifications List

Ver	Description
1	MEAP basic function
2	MEAP Spec Version 1 function and SSL/TSL + Proxy
5	MEAP Spec Version 1 function and CPCA V2 + ERS (Error Recovery Service) + New SSL/TSL
6	Reserved
7	MEAP Spec Version 5 function and Compact PDF + OCR PDF (Text Searchable) + USB Host (Buffering of Interrupt Transfer)
9	Reserved
10	MEAP Spec Version 5 function and USB-Host (Exception + Clear Feature + Set Feature+ Hot Plug) + WINS address acquisition using MIB Agent + Timer Service + SSL client authentication
11	MEAP Spec Version 5 function and AMS
13	MEAP Spec Version 5 function and J2ME1.1 Support + Encrypted PDF + Trace and smooth PDF + CTK2.0
14	Device signature PDF
15	IMI + ERS (API addition for IMI) , IPv6, Extended encryption function (AES/RC4)
17	Acquiring images of JBIG format
18	Parsing XML documents (XML parser)
19	Enhancement of IMI function (IMI Version1.2 series)
21	Reserved
25	API to access the HID/Mass Storage class devices.
26	MEAP driver preference function
27	Symbols that can be used with MibAgent added. (symbols for IPv6 address acquisition)
29	IMI API added (IMI version 1.2.1 enabled)
30	Extended address book function. (e-mail/group/i-FAX/file)
31	Integrated ERS function
32	Extended Imaging function (function to generate PDF/OOXML (PowerPoint) with visible signature)
33	Extended function for imageRUNNER / iR ADVANCE series (API for address book/ CTK/ TopMenu)
34	Extended IMI Box function (v1.3.0)
35	Extended SIS function (function to check the network cable status, function to check PS print server unit status)
36	Reserved
37	CLS (Contextual Login Service) Supporting API Added
38	imageRUNNER / iR ADVANCE Series administrative privileges supported
39	MEAP Specifications added according to Jcrypto API Specification Change
40	ImagingAPI (Creation API of Visible Signature PDF) added
41	Reserved
42	Reserved
44	imageRUNNER / iR ADVANCE Series Remote Address Book Supported, RemoteFAX Supported.
45	Addition of API that allows acquisition of the HID installation status
46	Multilingualization of the USB keyboard of the System Driver
47	Addition of API which executes a print order from the MEAP application of the IMI encryption PDF document

Ver	Description
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

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MEAP Application System Information

Outline

Information about an application installed in the device is called MEAP application system information. This information should be obtained for reporting troubles because multiple information items can be collectively confirmed.

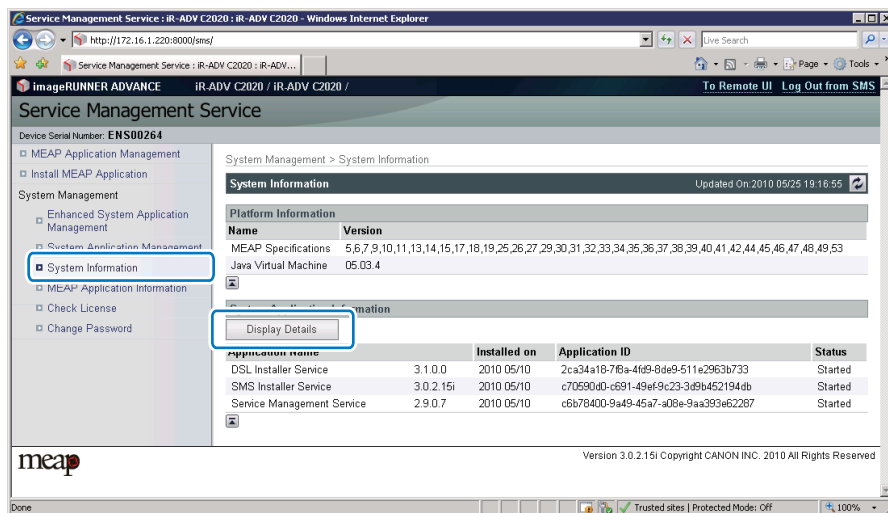
The following sections describe the details of information items. Each item is shown or printed by application.

Note:

The system information shown on the screen and the system information printed in the MEAP device's user mode are exactly the same.

Checking the System Information of a MEAP Application with SMS

- 1) Log in to SMS.
- 2) On System Management menu, click [System Info].
- 3) Click [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.

Printing the System Information of a MEAP Application

MEAP system information can be printed out with iR device for confirmation.

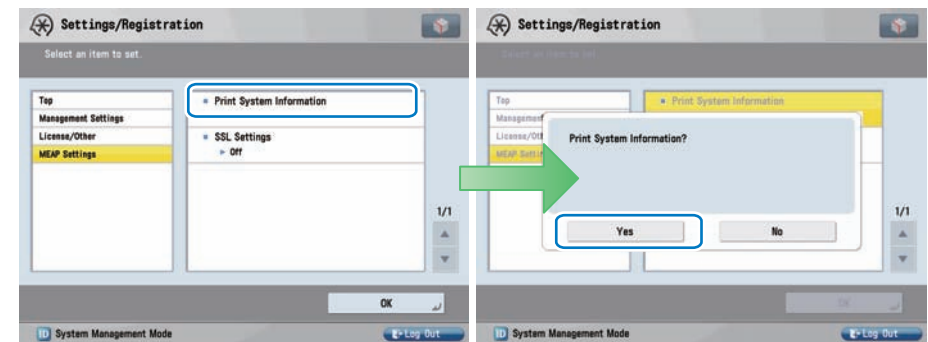
Follow the steps below when confirming information:

- 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.



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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 :

```

● 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.

Installing an Application

Resource

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/ C2025/ C2020 Series	Flash model	220MB	32MB	162	128
	HDD model	1024MB	128MB	256	256

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Note:

- As for memory, check the available resource when starting up the application. For other resources other than memory, check them when installing.
- 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.)

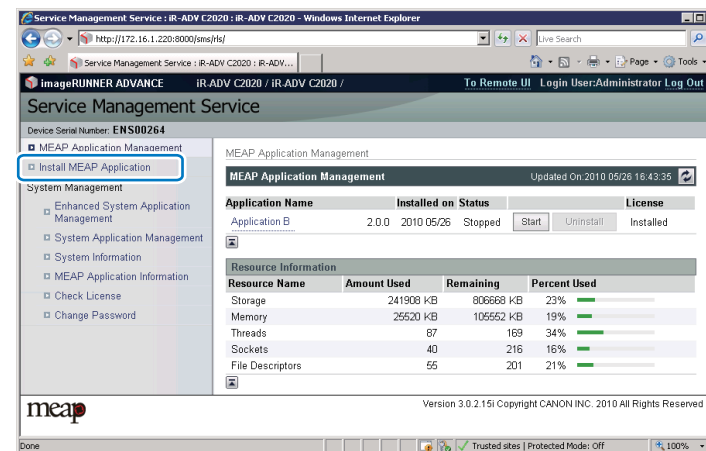
CAUTION:

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/>

Procedure to install applications

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

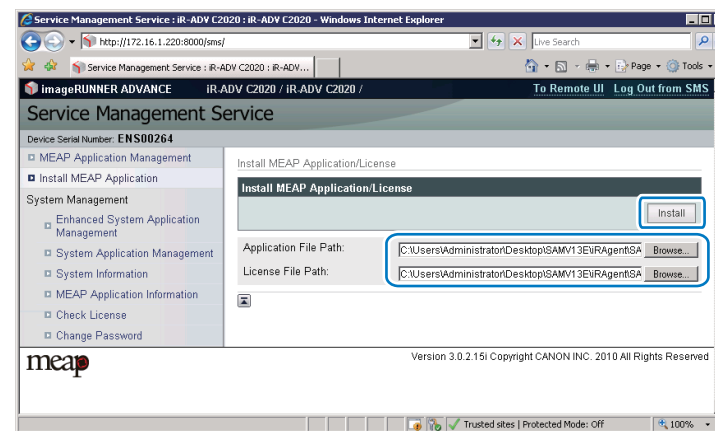


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- 3) Check [Install MEAP Application/License]page appears.
- 4) Click [Browse..] button, and select the application file and the license file of the application; then, click [OK] button.

Note:

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

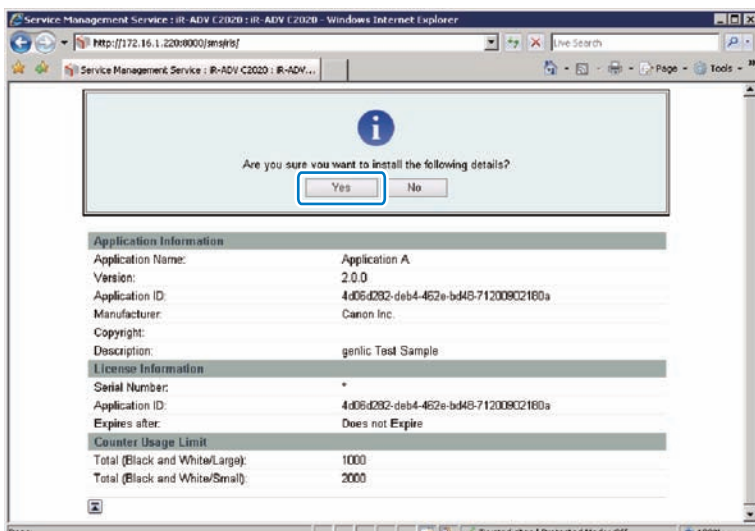


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CAUTION:

- 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 Chapter 0, "Adding a License File." in this manual.
- 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.

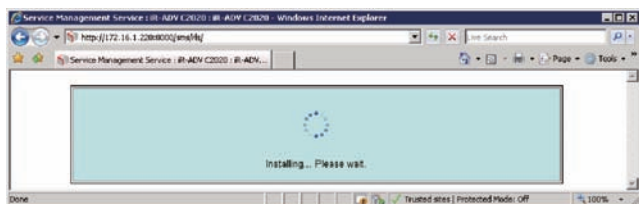
5) Check the contents of the Confirm page; then, click [OK] button.



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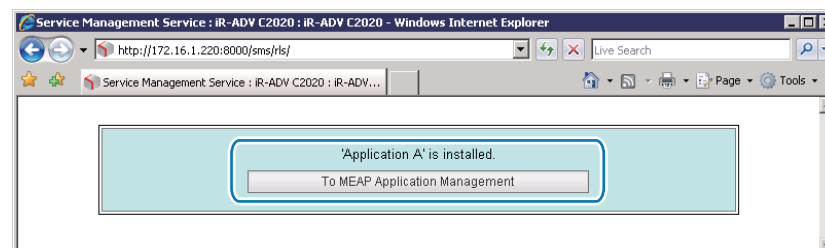
6) Some applications show a screen to indicate the terms of agreement. Read the terms, and click [OK].

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



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



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Note:

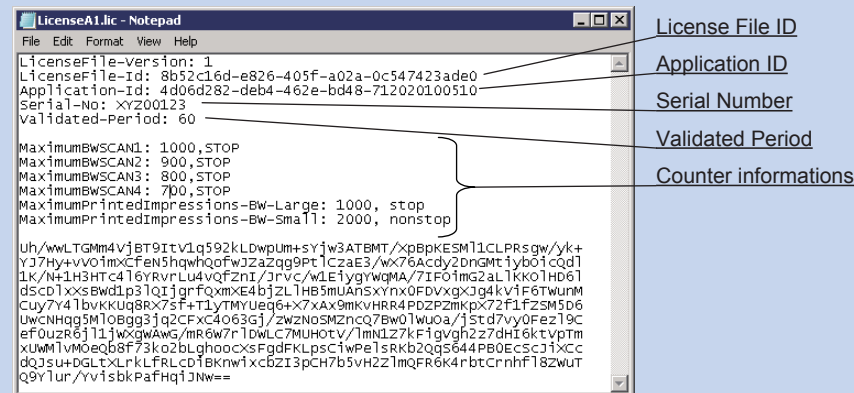
To use the application that you have just installed, you must make sure that the application status is Started.

Note:

The license file is provided in text file format, enabling to view in a text editor. The application ID and device serial number shown in the file allow users to confirm which device to install with the license file.

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

Sample file



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Adding a 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.

Service Management Service

Device Serial Number: ENS00264

MEAP Application Management

MEAP Application Management Updated On: 2010 05/27 12:11:33

Application Name	Installed on	Status	License
Application A	2.0.0 2010 05/26	Started	Installed
Application B	2.0.0 2010 05/11	Started	Installed

Resource Information

Resource Name	Amount Used	Remaining	Percent Used
Storage	241908 KB	806668 KB	23%
Memory	3784 KB	127288 KB	3%
Threads	33	223	13%
Sockets	33	223	13%
File Descriptors	27	229	11%

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- 3) In [Application / License Information] page shown on the screen, click [License Management] button.

Service Management Service

Device Serial Number: ENS00264

MEAP Application Management > Application/License Information

Application License Information

Application Information

Application Name: Application A
Version: 2.0.0
Application ID: 4d36d282-d4b4-462e-b448-71200902180a
Installed on: 2010 05/26
Description: generic Test Sample
Manufacturer: Canon Inc.

Resources Used

Storage: 4 KB
Memory: 100 KB
Threads: 0
Sockets: 0
File Descriptors: 0

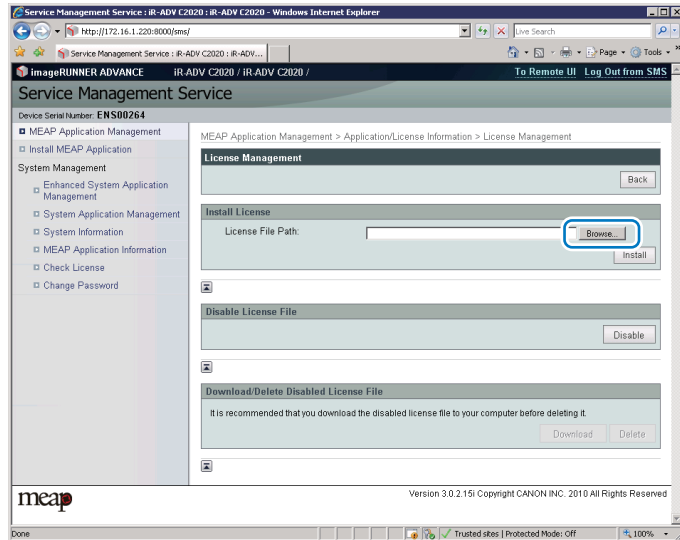
License Management

Status: Installed
Serial Number: ENS00264
Expires after: Does not Expire

Type of Counter	Current Count	Usage Limit
Total (Full Color/Large)	0	

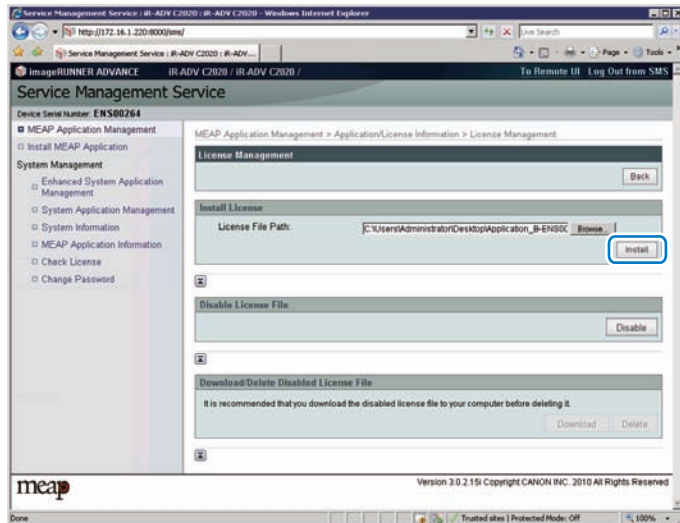
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4) Click [Browse] button, and select the license file you want to install.



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5) Click [Install] button.



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

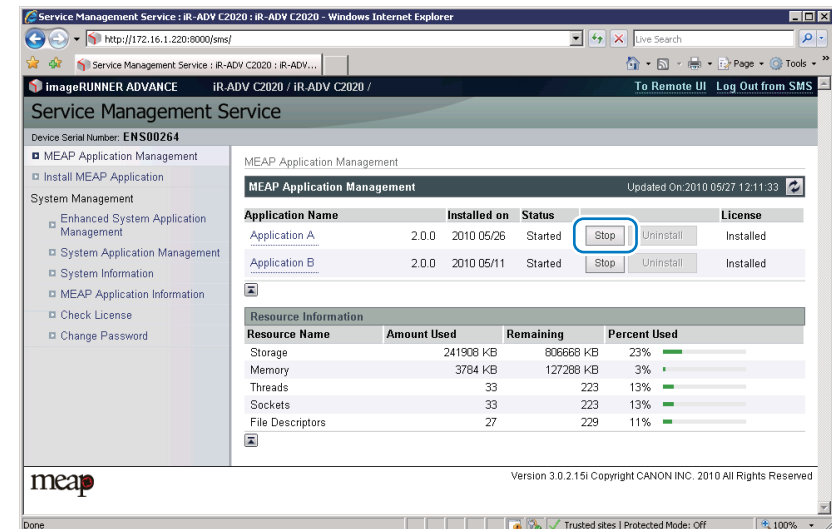
Disabling a License File

Procedure disabling a license file (suspending a license)

CAUTION:

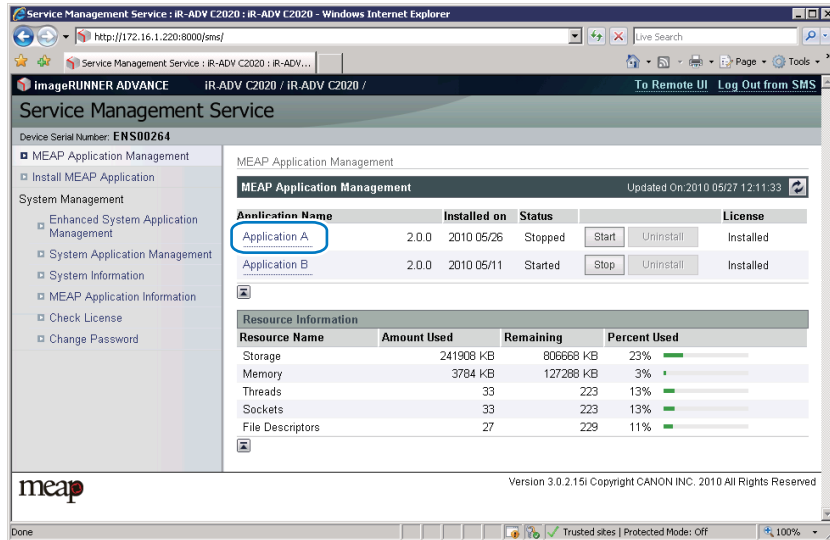
- To invalidate (or suspend) a license, you must first stop the application in question.
- Once suspended, the status of the license will be 'Not Installed', and its application will no longer be available for use.
- You can later restore a suspended license file as long as you are doing so on the same iR, the device with the same device serial number.
- When replacing the device due to lease up or trouble, use the license for forwarding (see Chapter 0, "License for forwarding.").

1) Stop the application you want to uninstall on MEAP Application Management page.



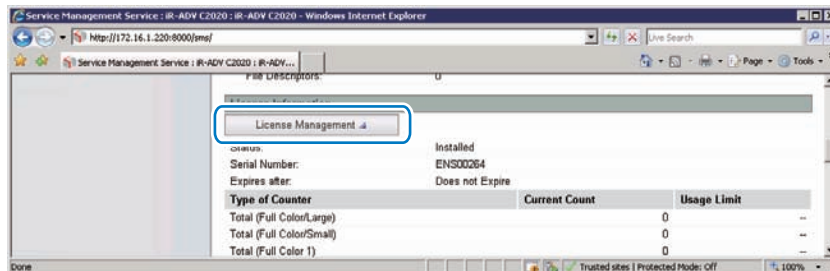
F-2-197

2) Click the name of the application that you want to disable.



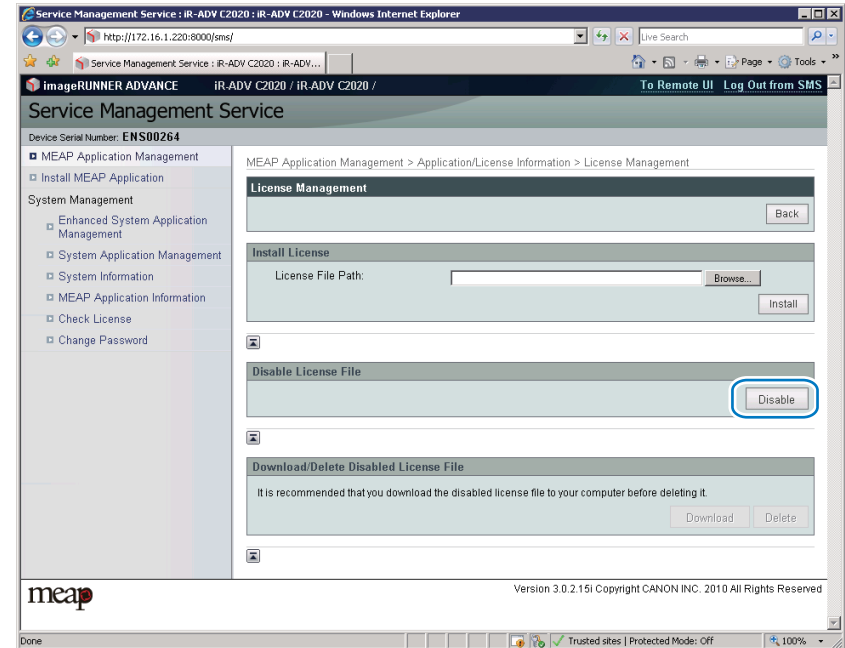
F-2-198

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



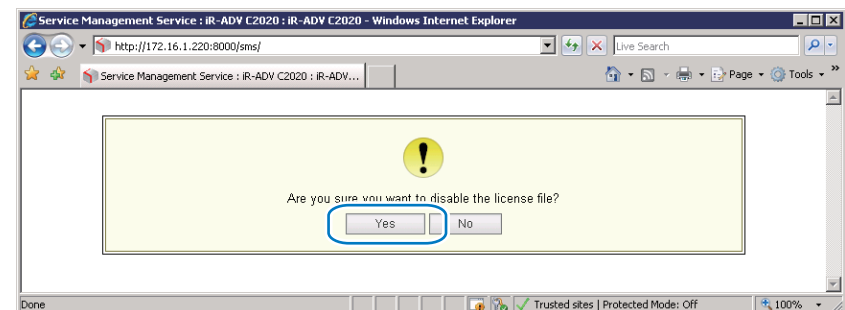
F-2-199

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



F-2-200

5) Click [Yes].



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Downloading / Removing an Invalidated License File

Outline

You must remove the invalidated license file before uninstalling an application. If reinstallation is a possibility, you may download the license file to a PC for storage. To download or delete a license file, first disable it.

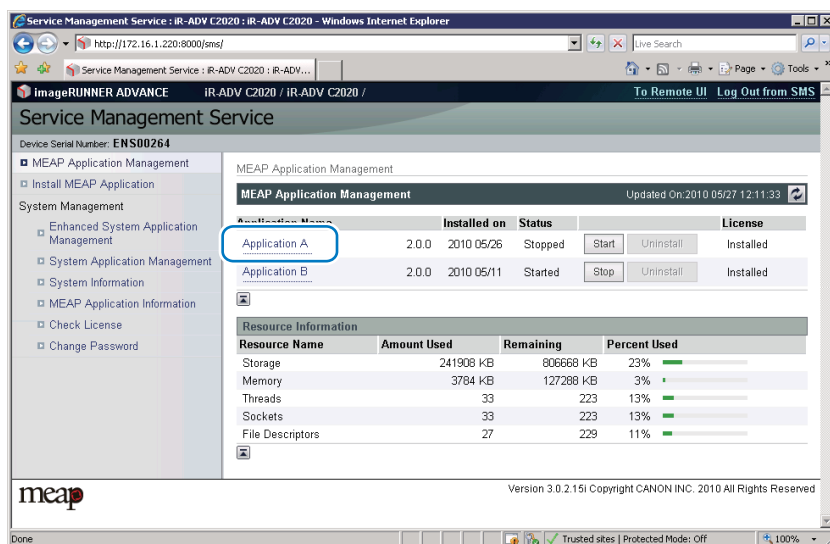
WARNING:

Once you have removed an invalidated license file, you will no longer be able to download it from the MEAP device.

Procedure downloading / removing an invalidated license file

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

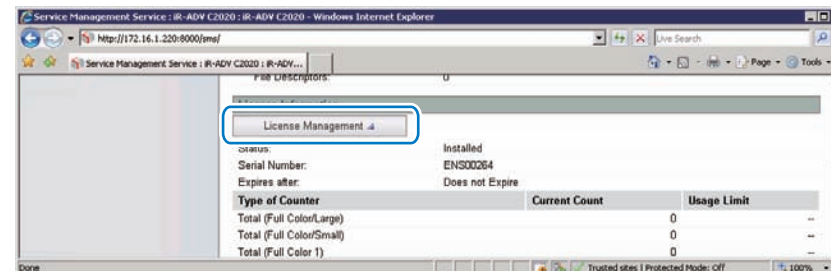
- 1) Login to SMS.
- 2) Application List page appears. On MEAP Application Management page, click the name of the application you want.



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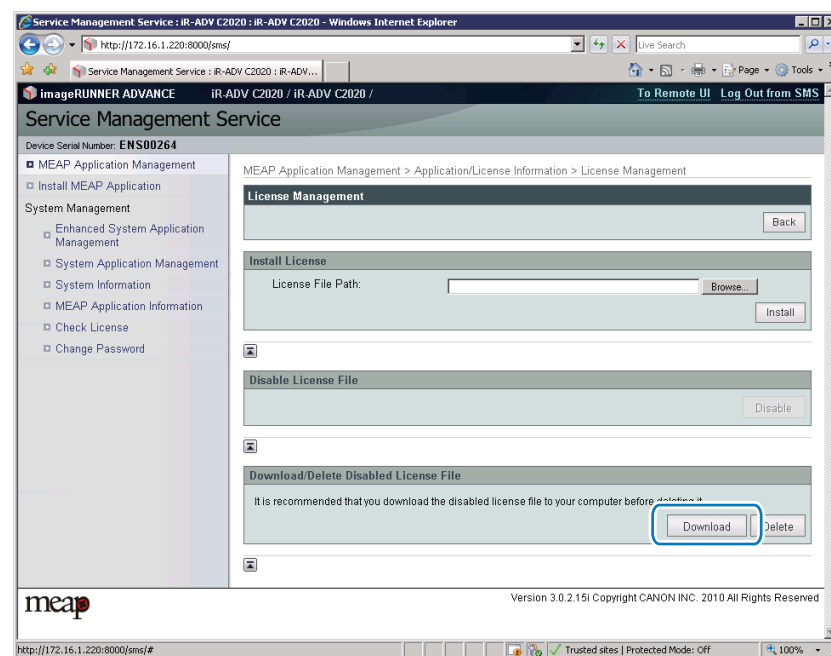
- 3) Check Application/ License Information page appears.

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



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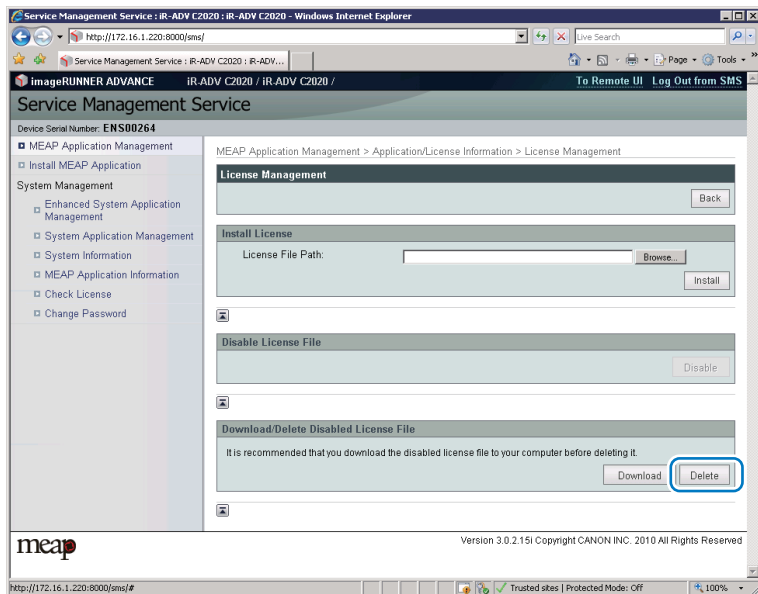
- 5) License Management page appears. To download, click [Download] button.



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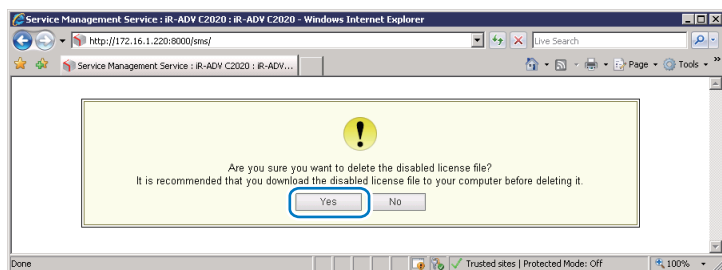
- 6) When you have selected [Download] button, specify where you want to store the file by following the instructions on the screen.

7) To delete, click [Delete] button.



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



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WARNING:

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

Reusable license

Outline

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'.

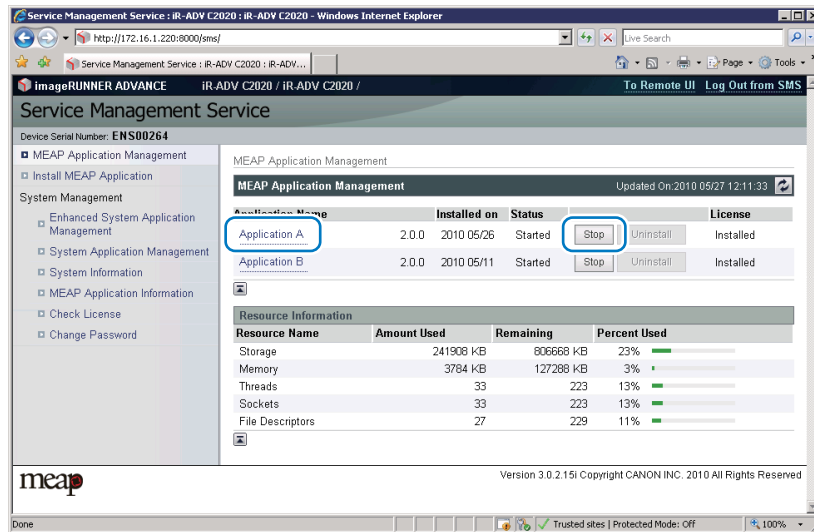
License for forwarding

Outline

When the device is replaced due to lease up or trouble, it is possible to continue using the current license information of MEAP application by forwarding it to a new device. Service engineers are responsible for license transfer as this task requires the SMS hidden page (not open to users).

Procedure to create license for forwarding

1) Log in to SMS, stop the application to be forwarded (see Chapter 0, "Starting and Stopping a MEAP Application." in this manual).



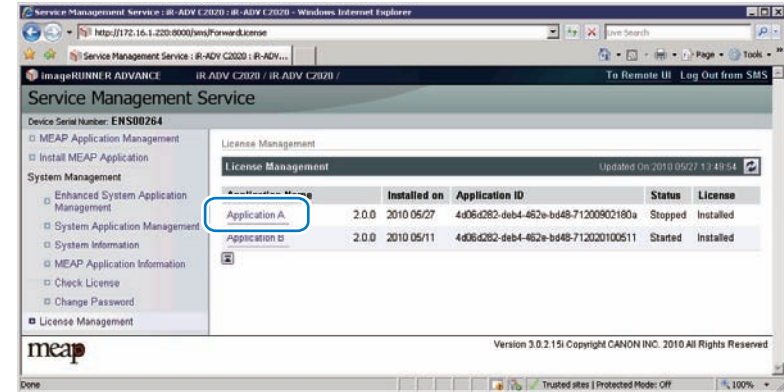
F-2-207

2) Move to the download page of license forwarded for the device as sender ([https:// IP address of device: 8443/sms/ForwardLicense](https://172.16.1.220:8000/sms/ForwardLicense)).



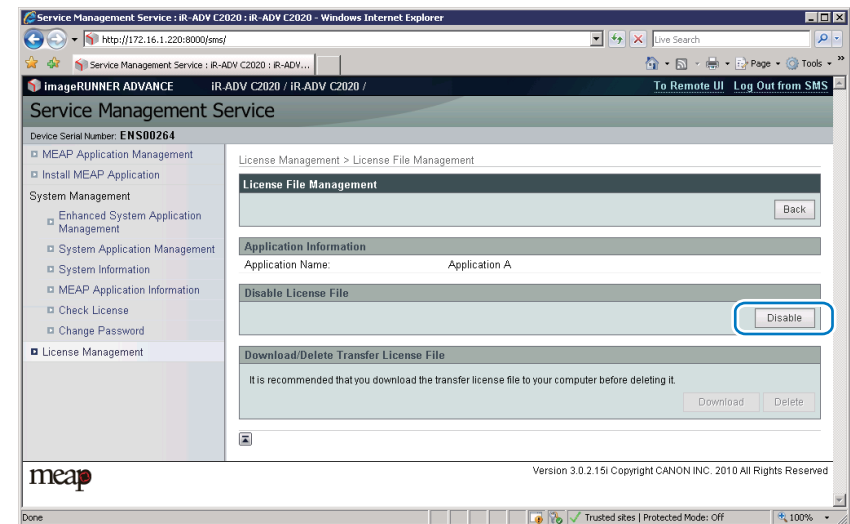
F-2-208

3) Specify the application to be forwarded.



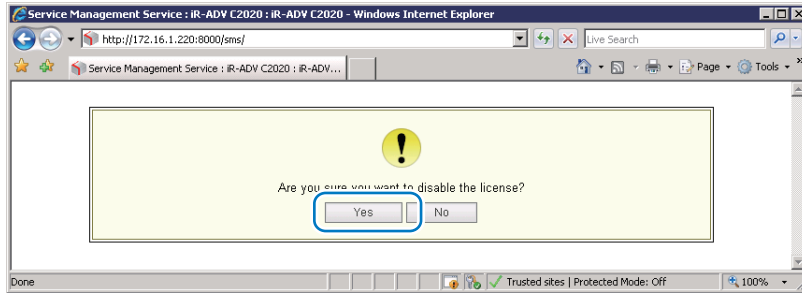
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4) Click [Create] at Create Transfer License File.



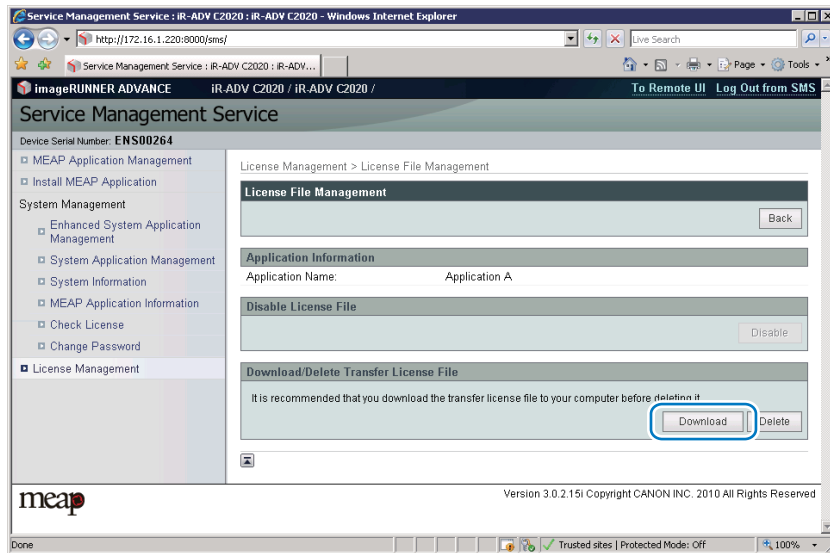
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5) The window to confirm whether to create a transfer license will be displayed. Click [OK].



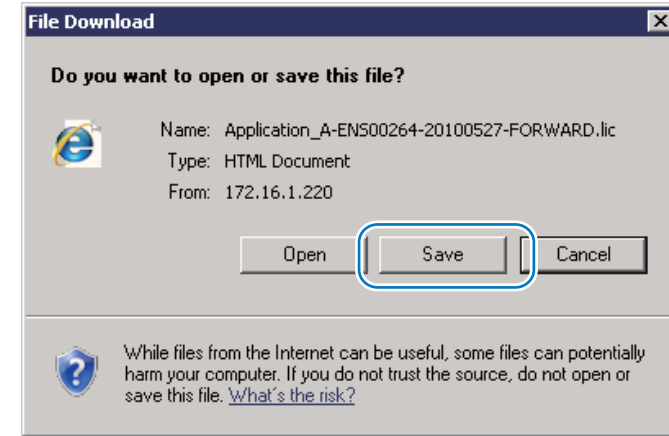
F-2-211

6) Icon of license file for forwarding is displayed in the box of license file downloading. Click [Download].



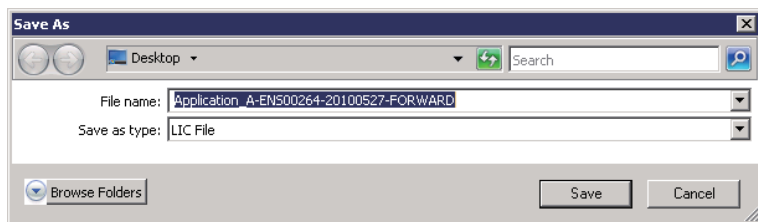
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7) The dialogue [File Download] is displayed. Click [Save].



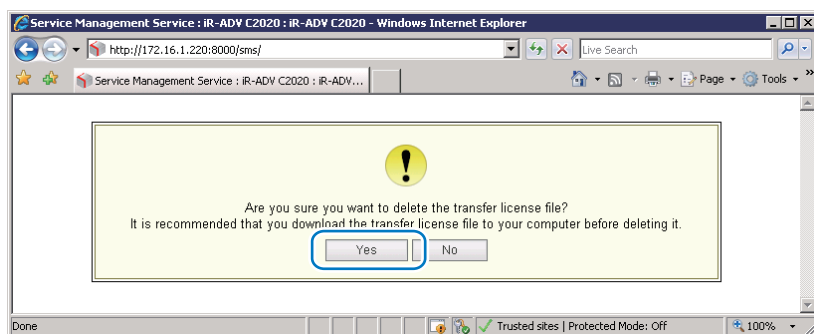
F-2-213

8) Specify the download destination, click [Save].



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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).



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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.

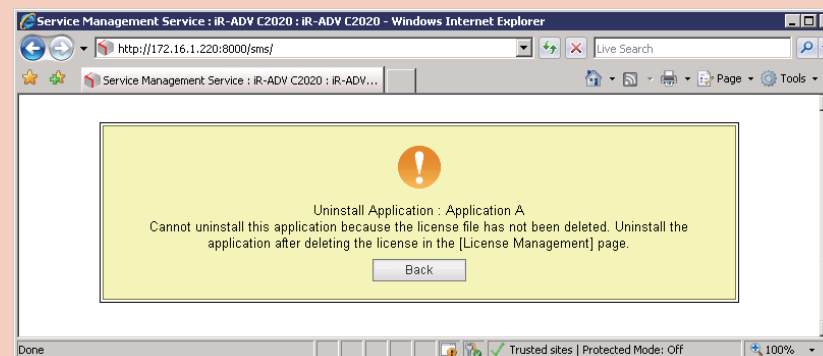
12) Install application using the license for forwarding issued by the sales company.

Uninstalling an Application

Procedure to uninstall an application

CAUTION:

- To uninstall a MEAP application, the license status should be set to “Not Installed” (to be deleted). When a user tries to uninstall an application before deleting the license, the following message is shown. Refer to the sections of “Disabling a License File” and “Downloading / Removing an Invalidated License File” of this manual to delete the license file.

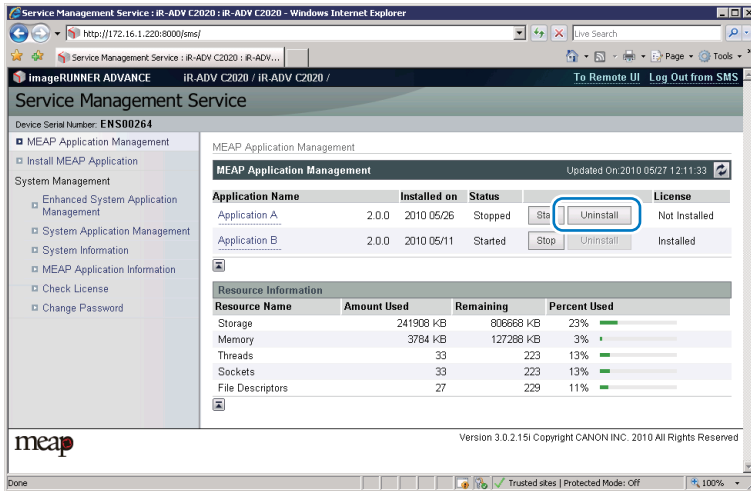


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- Dimmed [Uninstall] button shows that the selected application cannot be removed.
- If the application you are uninstalling is associated with another application, a message will appear to indicate that the package exported by the application will no longer be available. Uninstalling such an application may also disable its associated applications.

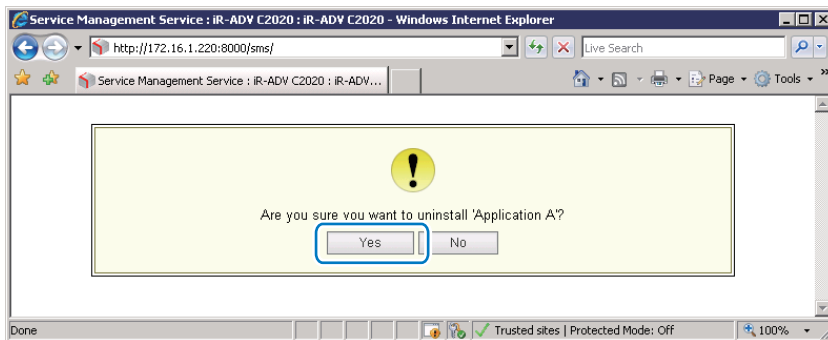
- Log in to SMS to click [MEAP Application Management] on the menu.
- [MEAP Application Management] page is shown.

3) Click [Uninstall] button for the application to be uninstalled.



F-2-217

4) Check the application name to be uninstalled shown on the screen to click [Yes] button. Upon [Yes] button clicked, uninstallation process is started.



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Login Service

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 pre-install applications and those provided on the accessory CD are as follows. Default Authentication is used as the default at the time of shipment from the factory.

CAUTION:

- When the login service is set to SSO-H, Department ID management needs to be [OFF] before changes can be made. To use SSO-H local device authentication and Department ID management at the same time, after allocation of the department ID to the Administrator, switch the authentication method to local device authentication and then turn Department ID management ON.
- To use Department ID management in domain authentication, the option image-WARE accounting manager is required.
- When the setting is SSO-H, the card reader for the option controller card cannot be used.
- When using SSO-H, the clock settings of the server managing the Active Directory and the MEAP device (and the PC used to log in), must be matched. If there is a time difference of greater than five minutes in the clock settings, an error will be generated when login is attempted.
- 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.
- This device does not support SDL, conventional SSO and Security Agent. In addition these are not packaged in Administrator's CD.

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.

- Both the domain authentication and local device authentication login services can be used.
- There is no need to have a separate SA server.
- Login is not via SA, so SSO-H refers directly to DNS for authentication.
- Kerberos and NTLM protocols are supported.
- The following three authentication methods may be selected from.
 - Domain authentication
 - Local device authentication
 - Domain authentication + local authentication

CAUTION:

- 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.

Authentication methods of SSO-H

SSO-H can use multiple authentication methods, and the user can toggle between them from a Web browser. (Refer to the MEAP Authentication System Settings Guide 'User Authentication Method Settings'.)

CAUTION:

The factory shipment setting is 'Domain authentication + local device authentication'. In order to provide increased security, as soon as SSO is used, it is recommended that the administrator's user name and password in local device authentication be changed from the factory shipment settings as soon as possible.

Local device authentication

This is an authentication method that is used for single iR devices. The authenticating users are registered in the iR device's database. User management is performed on the Web application provided by the device, or from the imageWARE Enterprise Management Console/ iW Management Console. The login destination is [This device].

Domain authentication

This is a form of user authentication which operates in collaboration with the domain controller on the Active Directory environment network and, as soon as the iR device is logged into, carries out authentication of the domain on the network. 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.

The function makes use of options iW EMC Accounting Management Plug-in to enable analysis and management of the iR device usage status.

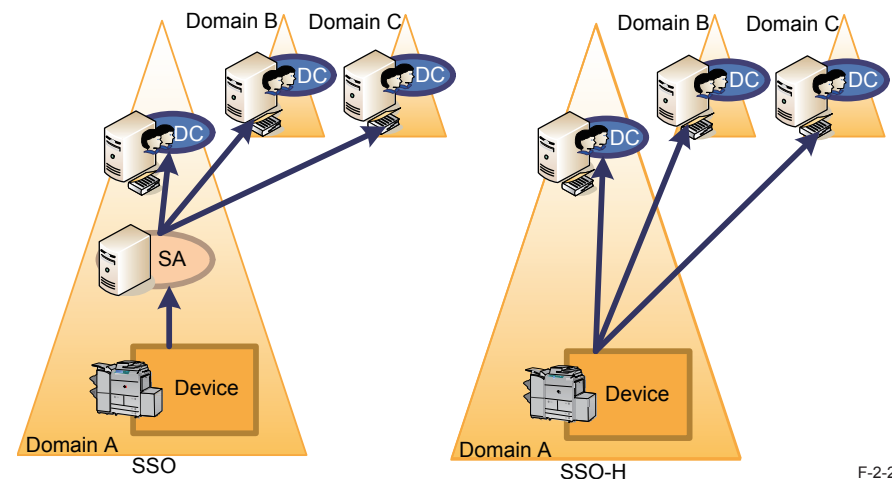
The protocol used is as follows.

- 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.

Differences from conventional SSO

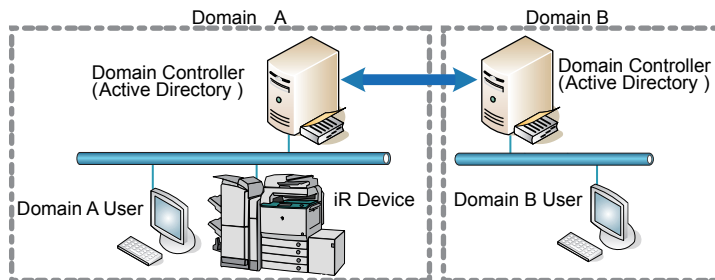


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● Domain authentication + local device authentication

This is a user authentication method that provides both domain authentication and local device authentication functionalities. Principally, domain users who are registered/ managed by the Active Directory are authenticated by domain authentication, and local device authentication can be used when it is necessary to authenticate a temporary user that cannot be added to the Active Directory. Also, should there be any kind of a problem with the domain controller or Security Agent (SSO only), local device authentication can be used in emergency situations, while waiting for normal status to be restored.

In the figure shown below, users belonging to Domain A, which includes the iR device, and users belonging to Domain B, which has a reliable relationship with Domain A, can be authenticated, and users registered with the iR device itself can also be registered. The login destination (domain name or [This device]) is selected by the user upon login.



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CAUTION:

- To run domain authentication and Department ID management at the same time, the options Net Spot Accountant, iW Accounting Manager or iW EMC Accounting Management Plug-in are required. If domain authentication is selected as the authentication method without linkage to these systems, login will be disabled and Department ID management will not come ON. If Department ID management cannot be turned ON when using domain authentication and login is disabled, switch the login service to Default Authentication and turn Department ID management OFF.
- In order to link local device authentication and Department ID management and manage print pages and scan pages per department ID, Department ID management must be set ON. To run local device authentication and Department ID management at the same time, the information registered in local device authentication must match the Department ID management user information (department ID and password).
- In local device authentication the card reader for the option control card cannot be used.

● Linkage with Department ID management when using SSO-H

SSO-H has collaborative linkage with imageWARE/iW Enterprise Management Console Access Management Plug-in, imageWARE/iW Enterprise Management Console Accounting Management Plug-in. Only when used with 'Local device authentication', can department ID/ passwords be allocated to users.

In the event that these are allocated, authentication can be performed even when the main unit's department management is ON. Department ID and department passwords are not allocated to domain users.

When the main unit's department management function is ON, domain users cannot be authenticated.

Note:

With SSO, linkage with imageWARE/iW Enterprise Management Console Accounting Management Plug-in was assumed and department management linkage was enabled even in domain authentication, but with SSO-H, this is now unsupported.

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

SSO provided the automated function conventionally on Security Agent (hereinafter "SA") to authenticate System Manager by allocating IDs set on SA to domain authentication managers (users belonging to Canon Peripheral Admins group). However, SSO-H does not support this function.

■ 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.

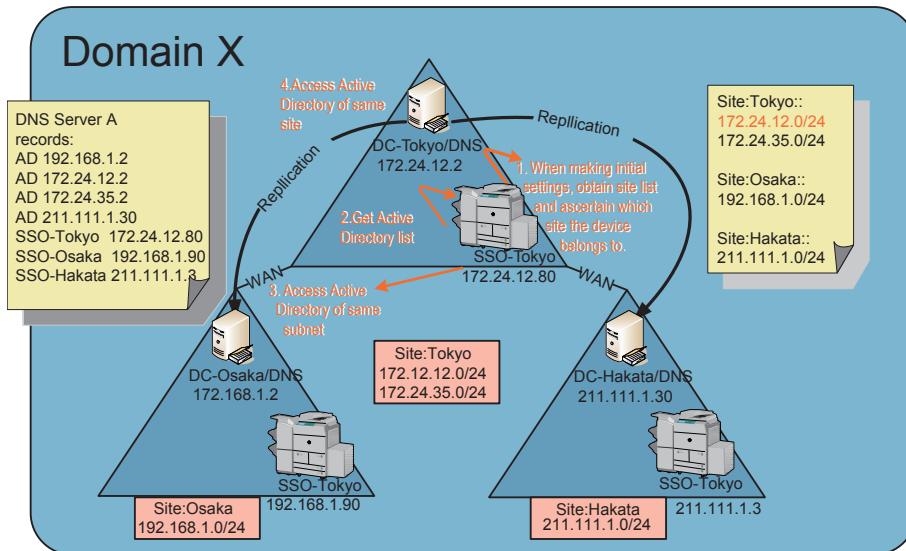
Site internal access mode settings window (DMS)

Access Mode in Sites	
* Effective at the time of domain authentication	
Access Mode in Sites:	<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.
Retrieve Site Information:	<input checked="" 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.
Site Access Range:	<input checked="" 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



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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.

Environment confirmation

Refer to the section of "Checking the Operating Environment" 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	200 domains ("this device" not included)
Supported device	All the MEAP-enabled iR devices (different SSO-H versions are supported depending on machine types)
IPv6	Authentication provided in IPv6 supports AD/KDC/DNS of Windows Server 2008 only)
Memory (KB) / thread (numbers)	3584/33
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
Site access	Supported

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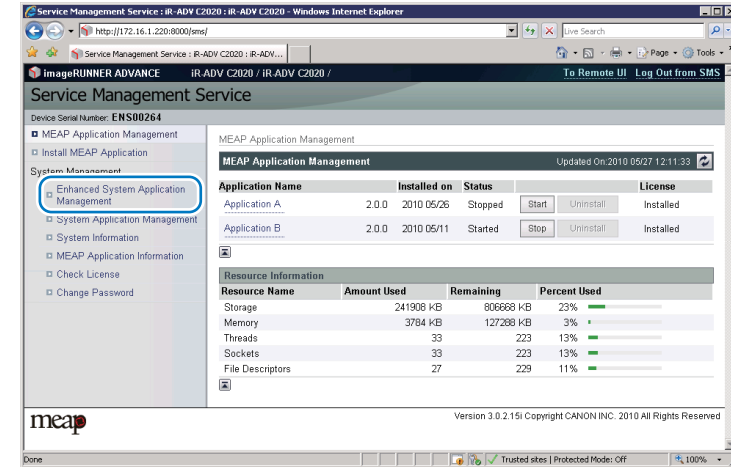
● SSO/SDL handling

Conventional SSO and SDL are not packaged in Administrator's CD of this model. In addition, this model does not support older versions of SSO or SDL released in the past.

● Changing Login Services

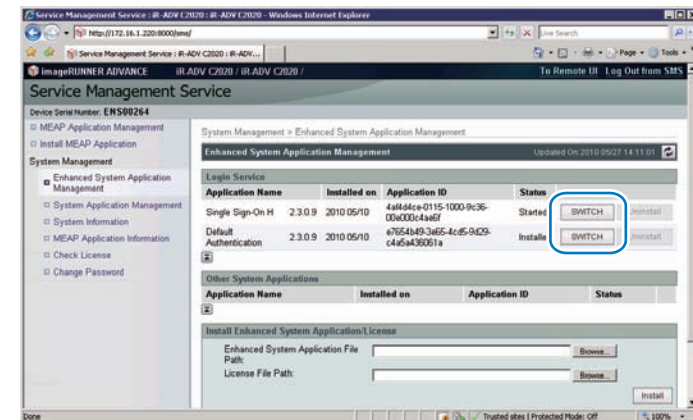
■ Steps to Change Login Services

1) Click [Enhanced System Application Management] on [System Management].



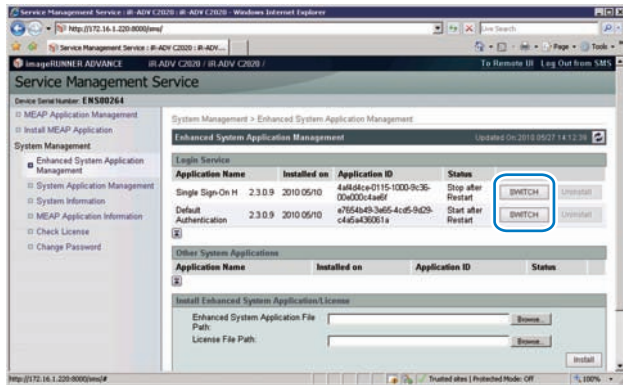
F-2-223

2) A page will appear showing the various selections you can make for the login service. Click [SWITCH] button for the login service to be used.



F-2-224

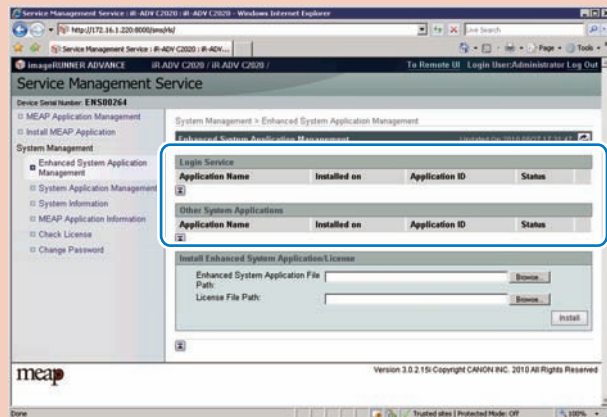
- 3) When login service application you have selected turns to Start after Restart, restart the device.



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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.



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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.

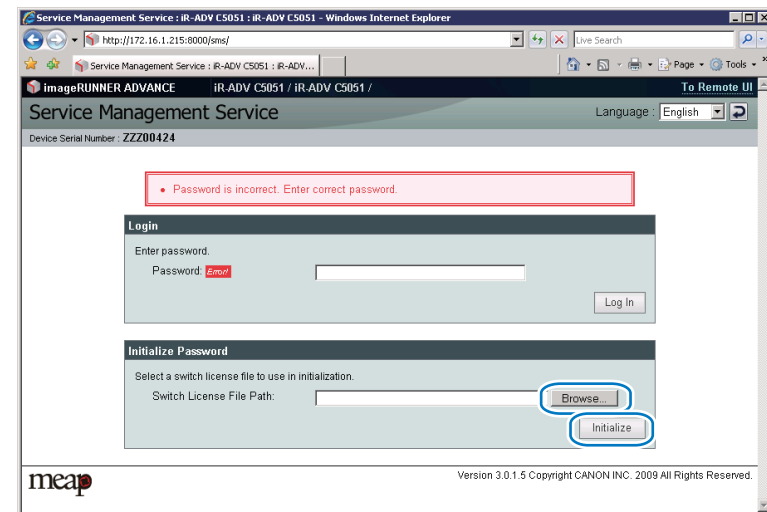
Initializing the Password

Outline

When a user forgets the password to log in to SMS, initialize it to the default value of "MeapSmsLogin" using the switch license for initializing passwords. Follow the steps below:

Procedure to initialize the SMS login password

- 1) Get the switch license for initializing the password.
Request the support of the regional headquarters of the Canon for switch license for initializing the password presenting the device serial number.
- 2) Click [Login] button leaving Password field blank or entering incorrect password. The Return to install Password Settings area appears. Click [Browse..] button and select the switch license file prepared in advance.



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- 3) When you click [Initialize] button, the confirmation message appears. Click [OK] button. Then Login page opens. Enter the default password 'MeapSmsLogin' to log in. The password is case-sensitive.

Note:

If you click [Cancel] button, the Login page opens without initializing the password.

Backup of the MEAP Application Area and Recovery of the Backup Data Using SST

Outline

When replacing or formatting the HDD, the data in the MEAP application area needs to be temporarily saved to your PC.

This chapter describes information on backing up the data in the MEAP application area and recovering the backup data.

In the case of MEAP-installed devices, the application is license-managed, so the application needs to be reinstalled and reconfigured when replacing or formatting the HDD.

In that case, a license for reinstallation needs to be downloaded and the customer data and configuration information need to be recovered, and these procedures pose heavy burdens on the service technician.

The area used for the MEAP application can be easily saved/recovered by using the backup function of SST (Service Support Tool).

This greatly reduces the work burden on the service technician.

Please note that the application cannot be illegally copied because the backup data can be recovered only when the iR device has the same serial number.

WARNING:

You must not perform any other work (including checking operation) until the HDD has been backed up. This arrangement is to prevent a mismatch of MEAP counter readings and the HDD contents, and any fault in operation arising as the result of failure to observe this will not be covered by the guarantee of operation.

Note:

The application that is installed with a reusable license can be reinstalled by using the same license.

Backup Item Automatically Copied

The following data are backed up using SST:

The following data are backed up (saved as Meapbackup.bin) using SST.

- MEAP applications.
- Setup data generated by MEAP applications (Note that image data stored in BOX will not be saved for MEAP applications using BOX function).
- User information data registered for local device authentication in SSO-H
- SMS password

Data backed up using SST in the case of iR-ADV devices

In the case of iR-ADV devices, menus are implemented as MEAP application. Therefore the following items can be also backed up (stored as Meapbackup.bin).

- Setting items of each menu in the main menu (Copy, Scan and Send, Fax, Scan and Store, Access Stored Files, Fax/I-Fax Inbox,).
 - Favorite settings
 - Default settings
 - Settings of option shortcuts
 - Previous settings
- Settings of quick menu
 - Button size information
 - Wallpaper settings
 - Quick menu button information
 - Restrict quick menu use

Requirements for Backup Using the SST

The following conditions must be met for use of the function:

1) Device Firmware Version

Device Firmware Version for SST (Ver4.2x)

	Boot ROM	System	SST
iR-ADV C2030/C2020 series	Boot ROM is not equipped.	Already supported since the 1st version.	The version supporting the corresponding devices.
imageRUNNER ADVANCE series other than iR-ADV C2030/C2020 series	Already supported since the 1st version.	Already supported since the 1st version.	The version supporting the corresponding devices.

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2) SST Version

Version 4.2.x or later. An earlier version will not permit the use of the function. If needed, upgrade the SST.

3) Space for backup

To back up the HDD of the iR, the PC must have approx 1024MB of free space at maximum. Sizes of backup files depend on actual data capacities to be backed up.

Procedure for backing up the MEAP application area using SST

1) Switching Login Service / Backup of Login User Information

If SSO-H is used for the login service, switch to default authentication before backing up the user information. Although SST will back up local device user information, it is recommended to export the user information just in case. For local device user information backup, go to User Management page of SSO-H site and export the data. (The SSO-H login page opens with the URL "https://<device IP address>:8443/sso/").

CAUTION:

- If a HDD of a system that uses SSO-H is formatted without changing the login service to the default authentication, the error message "The login service must be set again with SMS" appears and the system cannot start up when you attempt to restart the system after formatting.
- If this problem occurs, change the login service to SSO-H with SMS. If you cannot access to SMS since you do not have the IP address of the device, start the system with FIXIP mode -hold down the numeric keys 1 and 7 and turn the power switch on. The IP address "172.16.1.100" will be automatically assigned for the device. Then log in to SMS specifying the address.

2) Starting the device in Download Mode

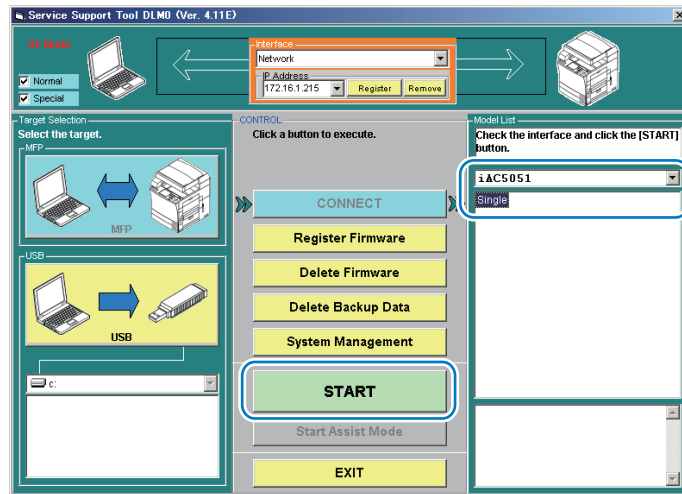
Press [2] and [8] buttons at the same time on the control panel and turn on the main power switch to start the device in Download Mode. Note that SST backup function is enabled only in Download Mode.

3) Connecting the main unit to the PC to start SST

Connect the main unit to the PC with SST installed using the crossing cable and the like to start SST on the PC.

4) Connecting the device using SST

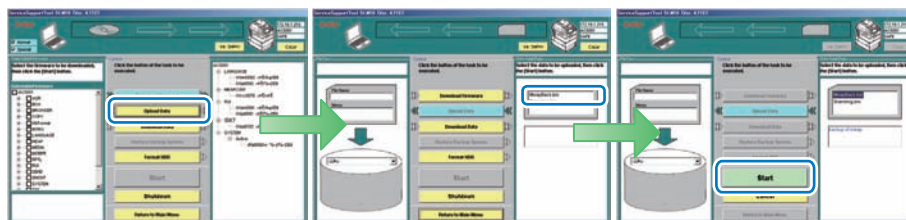
When starting SST, select the target device type as Single and click [Start] button.



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5) Generating backup data to transfer it to the PC (uploading)

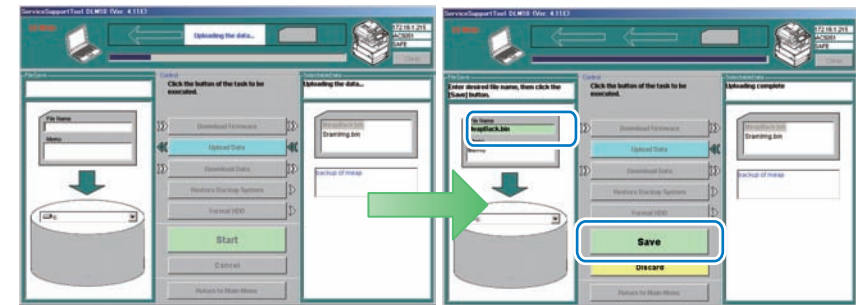
Click [Upload Data] button of SST and select "Meapback.bin" as the item to be backed up to click [Start] button.



F-2-229

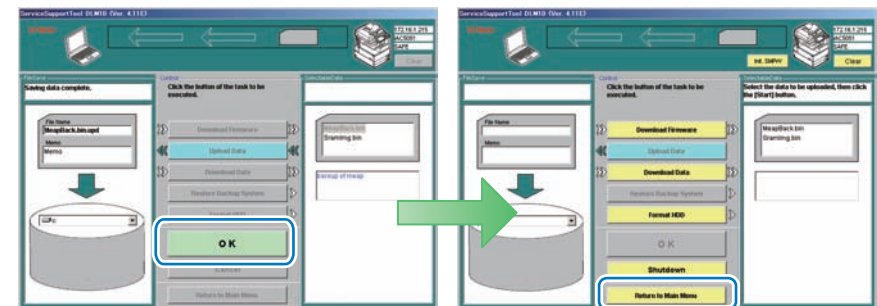
6) Saving backup data

Upon the backup data transferred to the PC, enter an appropriate file name and click [OK] to save the backup data on the PC.



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When the file is successfully saved, click [OK] button, and then click [Return to Menu] button.



F-2-231

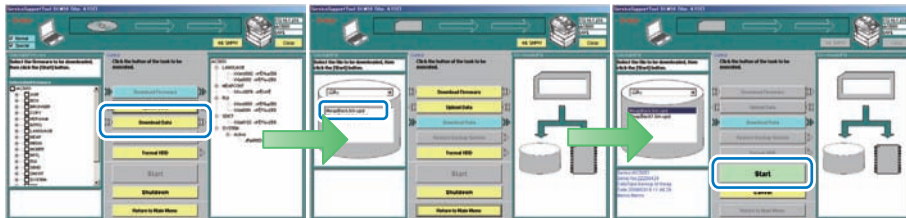
Procedures to Restore Backup Data

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 [Upload 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.



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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.



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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 storage

● Formatting the HDD

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 Formatting the HDD.

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 Formatting the HDD.

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.

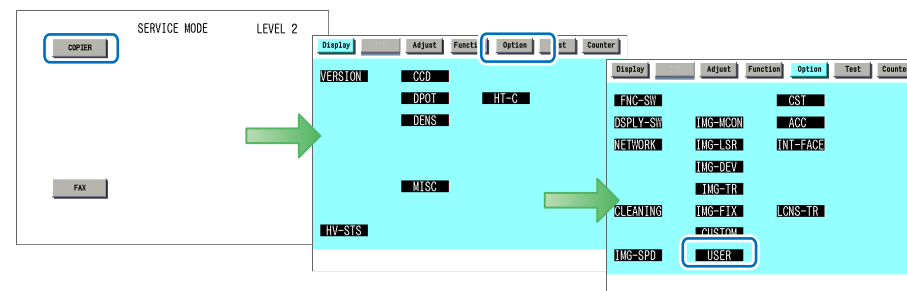
When you have made changes and restart the device, the control panel will indicate 'MPSF' in its lower right corner. The MEAP applications that may have been active before you shut down the equipment will not start up on their own. Make use of safe mode when restoring the system software as when MEAP 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

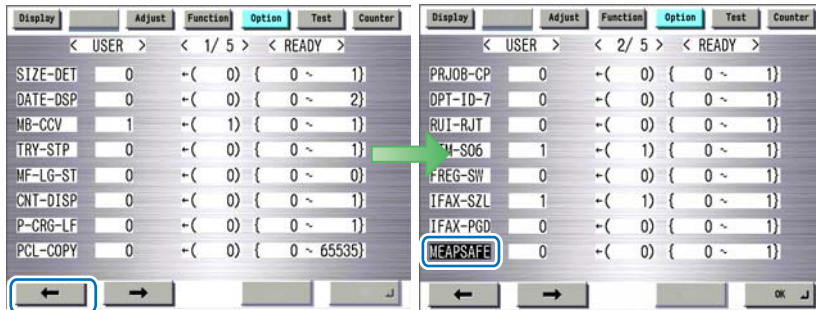
1) Startup [SERVICE MODE] in level 2.

2) Press [COPIER] > [Option] > [USER] buttons.



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- 3) Press ← or → button for several times until [MEAPSAFE] button is shown. Click [MEAPSAFE] button.



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- 4) Press the 1 key on the control panel keypad to change the setting to '1'; then, click [OK] button.



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- 5) Check that the notation 'MPSF' has appeared in the upper left corner of the screen; then, restart the device.



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How to cancel MEAP SAFE mode

If you want to end safe mode, repeat the steps but change '1' to '0' in step -4 and restart the device.

Note:

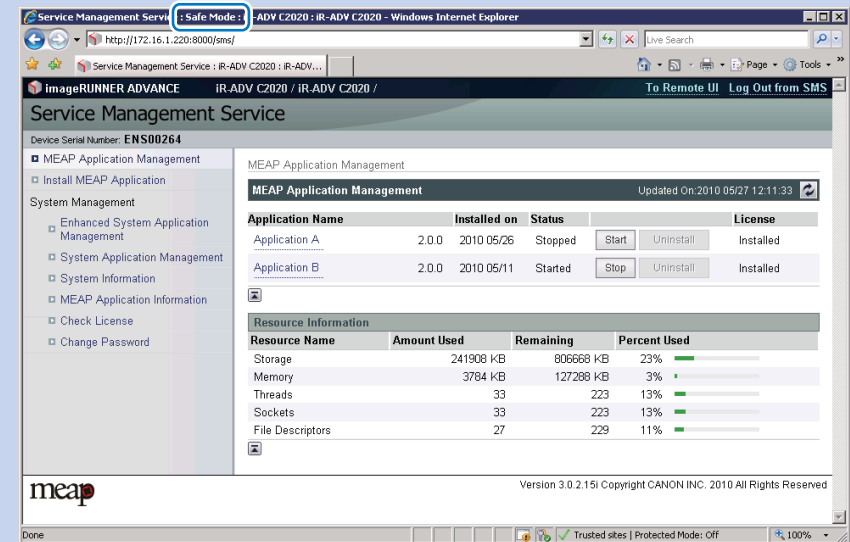
If accessed to SMS in MEAP SAFE mode, the device started mode is shown on the title bar of the browser.

When normally started:

Service Management Service : <Device Name>: <Product Name>

When starting in MEAP SAFE mode:

Service Management Service : <Device Name>:<Product Name>: Safe Mode



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Setting HTTP port for MEAP application (level 2)

Outline

For the ports in which the MEAP application uses, the default is 8000 for the port on HTTP server, and 8443 for the port on HTTPS server. In the case that these ports have already been 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.

HTTP server

Setting value is 0 through 65535 [the value at factory shipment/after clearing RAM: 8000]

Note:

Do not use port number "8080" when PS print server unit is connected. If the port is used, you can not see the page for RUI of the device with MEAP authentication application. (port "8080" is reserved for redirecting from PS print server unit to device.)

HTTPS server

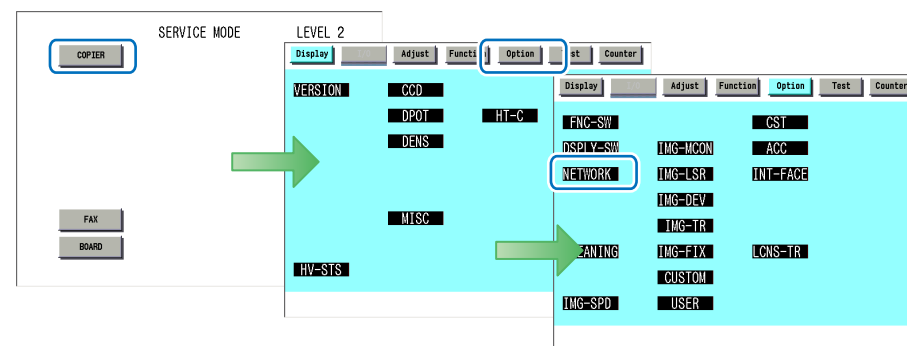
Setting value is 0 through 65535 [the value at factory shipment/after clearing RAM: 8443]

Note:

As for port on HTTPS server, it only applies to the device that supports SSL function.

Port setup procedure of HTTP Server

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



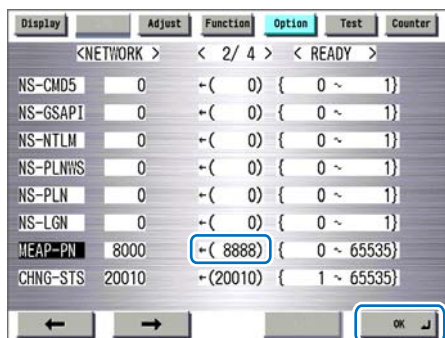
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- 3) Press ← or → button until [MEAP-PN] is shown on the screen. Press [MEAP-PN] button.



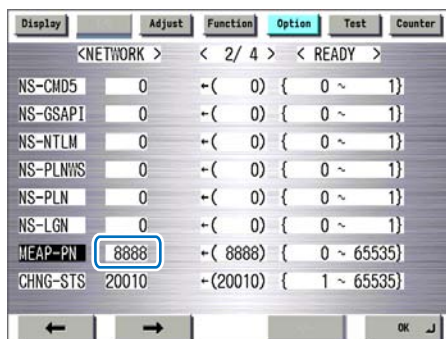
F-2-240

- 4) Press the port number to specify on the 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 turn off the main power, and then, restart the device.



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Port setup procedure of HTTPS Server

- 1) Startup [SERVICE MODE] in level 2.
- 2) Press [COPIER] > [Option] > [NETWORK] buttons.
- 3) Press or button until [MEAP-SSL] is shown on the screen. Press [MEAP-SSL] button.



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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.



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- 5) Check to see that it is reflected in setting field, and turn off the main power, and then, restart the device.



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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):

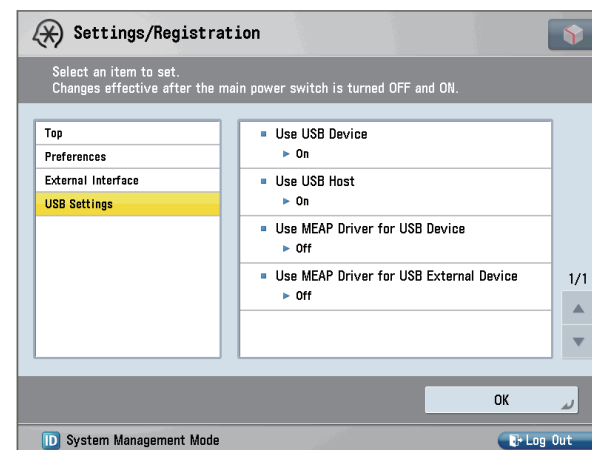
System driver is active by default in iR-ADV series.

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.



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Operating mode settings [Use MEAP driver as USB input device]	Conventional USB keyboard enabled MEAP application	Software keyboard application (System Driver/ MEAP Driver)	System driver supported MEAP application
ON * MEAP driver (conventional compatibility mode)	Can use USB keyboard. Can work only on the conventional applications that support the MEAP application driver.	Cannot use USB keyboards. (Device cannot be detected.)	Cannot use USB keyboards.
OFF (*default) * Native driver	Cannot use USB keyboards. (Device cannot be detected.)	Can use USB keyboards.	Can use USB keyboards. Via software keyboards only.

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Note:
When any settings changes are made, the device must be restarted.

● Setting the USB driver for each USB device (MEAP driver preference registration)

If it is set to use the system driver, the conventional applications that support the MEAP application driver cannot use the USB input device.

Therefore, for the USB drivers used by USB devices/MEAP applications, there is setting function (MEAP driver preference registration) to give priority to the MEAP driver.

If you register the ID of the USB device by using this function, the USB device can use the MEAP driver despite the Additional Function settings.

Using this function requires the conditions below:

- Supported MEAP SpecVer: 26
- Describe the idVendor(VID) and idProduct(PID) of USB device in the manifest or activate/deactivate the VID and PID by calling API from MEAP applications.

The driver setting that is used in a manifest file is reflected in the following timing.

When registering from a manifest file.

- The registration will be enabled when an application is activated and device is restarted.
- The registration will be disabled when an application is stopped and device is restarted.

Note:
You can display/check the used driver setting at “USB device report print” described below regardless of whether it is registered from a manifest file or is registered from API.

Availability for MEAP application of the USB device A (either HID keyboard or Mass Storage) plugged to iR device

Registration status of USB device A	USB Setting [Use MEAP driver for USB input device]	Native application	MEAP application		
			System driver supported application	System driver not supported/ conventional application	Application with VID/PID declared in Manifest for x
Not registered	OFF	YES	YES	NO	
	ON	NO	NO	YES	
Registered	OFF	NO	NO	YES	YES
	ON	NO	NO	YES	YES

YES: USB device available NO: USB device not available

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Availability for MEAP applications of USB devices B and C (either HID keyboard or Mass Storage) plugged to 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

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Specifications for the use of USB keyboards

Characters that could be entered on the software keyboard displayed on the conventional control panel can be entered using a USB connected keyboard.

- When the software keyboard window is displayed, characters can be entered from the USB keyboard (in-line entry not possible).
- When the software keyboard window is not displayed, entered characters will not be remembered.
- The characters, which can be entered from a USB keyboard, is only a character, which can be entered from the software keyboard.
- Even if characters are entered from the USB keyboard, the software keyboard window will not change (the corresponding key does not invert or change color).
- Input from the USB keyboard can be accepted at the same time as input from the software keyboard or numeric keys.
- Since the device supports Plug and Play, the USB keyboard can be disconnected/connected freely. However, do not disconnect and connect during in deep sleep (when in sleep with setting "low" at "the power consumption in sleep"). It is out of an operation guarantee to disconnect and connect the USB keyboard in deep sleep.
- When USB device is attached to 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

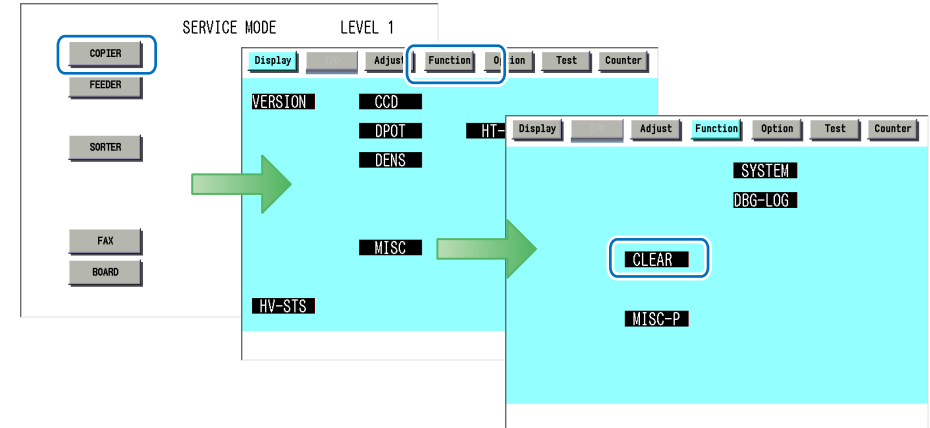
OFF: when using native (main unit functionality) keyboard (factory shipment default)

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.

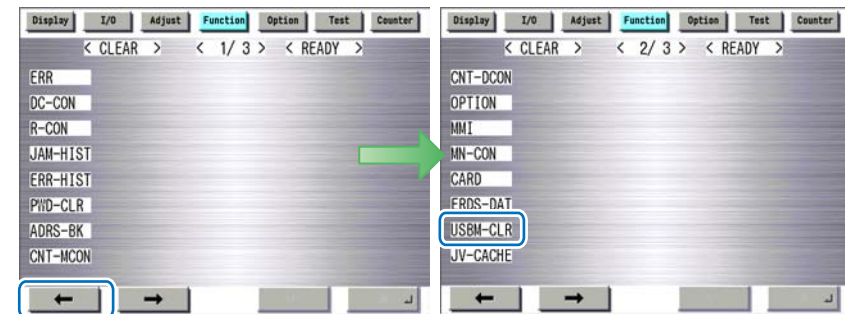
Steps to initialize preference use registration

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



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- 3) Press ← or → button for several times until [USBM-CLR] is shown on the screen. Press [USBM-CLR] button.



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4) Press [OK] button to restart this device.



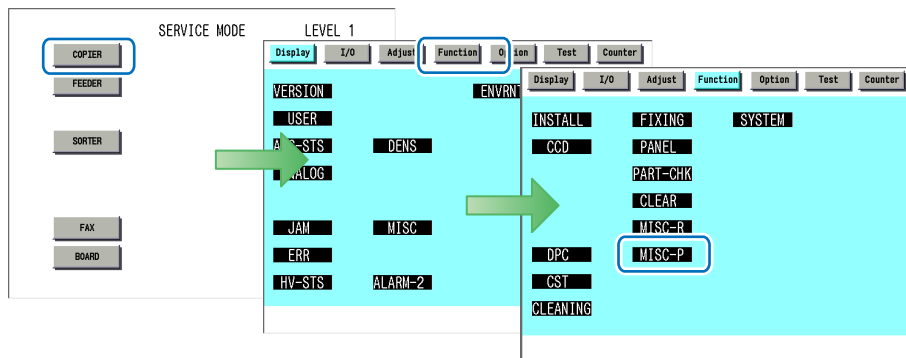
F-2-249

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.

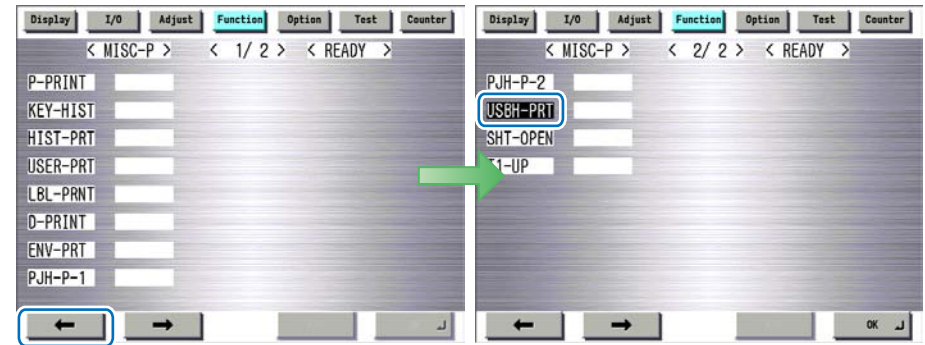
Steps to output the USB Device report print

- 1) Start [SERVICE MODE] in Level 1.
- 2) Press [COPIER] > [Function] > [MISC-P] > buttons.



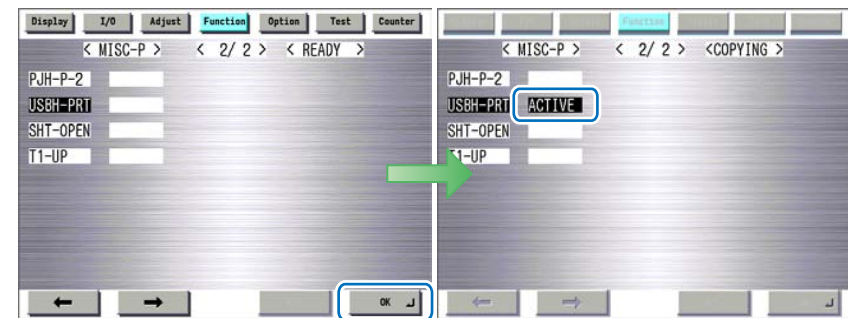
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3) Press ← or → button for several times until [USBH-PRT] is shown. Press [USBH-PRT] button.



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4) When pressing [OK] button, [ACTIVE] blinks on the status field.



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5) When [OK] is shown on the status field, the status print is output. Check the contents of the print.



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Example of output result

```

*****
*** USB Device report print ***
*****

USB device information

T: Bus=05 Lev=01 Prnt=01 Port=01 Cnt=01 Dev#= 4 Spd=480 MxCh= 0
D: Ver=2.00 Cls=00 (>ifc) Sub=00 Prot=00 MxPS=64 #Cfgs= 1
P: Vendor=04bb ProdID=0c2a Rev=bb.03
S: Manufacturer=I-O DATA
S: Product=USB Flash Disk
S: SerialNumber=A0C0470407000073
C:* #Ifs= 1 Cfg#= 1 Atr=80 MxPwr=200mA
I: If#= 0 Alt=0 #EPs=2 Cls=08 (stor.) Sub=06 Prot=50 Driver=sub-storage
E: Ad=81 (I) Atr=02 (Bulk) MxPS=512 IvL=0ms
E: Ad=02 (O) Atr=02 (Bulk) MxPS=512 IvL=31875us

MEAP oreferred device information

AppID=8c72686b-29c2-46c5-a07a-a6c4177a61e3 VID=04A9 PID=2680
AppID=8c72686b-29c2-46c5-a07a-a6c4177a61e3 VID=1234 PID=5678
AppID=8c72686b-29c2-46c5-a07a-a6c4177a61e3 VID=4321 PID=8765

Application ID / Vendor ID / Product ID

```

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● USB device information Content

Display the information of the USB device, which the device recognized.

If not displayed, there may be some fault occurred.

Some of standard optional devices are not displayed on a report.

The details of each item are as follows.

T : Topology

Internal hierarchical structure, which a USB device is connected, is shown. The number of a connected bus, the hierarchical structure and connection speed can be indicated.

D : Device

Information of USB devices is shown.

P : Product

Product information of USB devices is shown. Vendor ID and Product ID can be recognized here.

S : String

The character string embedded in a USB device is shown. A manufacture name and a product name can be recognized here.

C : Configure

The configuration information of a USB device is shown. * mark is to know whether it is active.

I : Interface

The interface information of a USB device is shown. Interface class and the driver to handle can be recognized.

The value and the content of Driver are as follows.

Labeling	Content
usbhid	It is displayed when the USB system driver is assigned to the input device connected.
usb-storage	It is displayed when storage devices (USB memory storage etc.) are connected.
irda-usb IrDA	It is displayed when the dongle is connected.
hub	It is displayed when HUB is connected.
gpusb	It is displayed when the USB driver only for MEAP application is assigned to the input device connected.
gpusbex	It is displayed when a USB device, which specific vendor ID/Product ID are preferentially registered using a manifest and MEAP API, is connected and the USB driver only for MEAP application is assigned.

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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

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 Vendor. Software manufacturer who develops and/or sells applications and tools but does not entire computer systems. Refers application developer in this document.

Terms & Acronyms	Definitions and Explanations
J2ME (Java2 Platform Micro Edition)	Java 2 Platform Micro Edition. One of Java Platforms licensed by Sun Microsystems, Inc. It is applied for MEAP. Other devices such as cellular phones and PDA.
J2RE (Java 2 Runtime Environment)	A set of basic programs to run applications developed in the programming language of Java2. This set includes Java virtual machine providing runtime environment for Java applications among others. Java applets do not require J2RE since these are executed on Web browsers using Java runtime environment provided on browsers. However, standalone Java applications require Java runtime environment such as J2RE for execution. Runtime environments can be downloaded for free of charge from the Web site of Sun Microsystems, the Java developer.
Java	A programming language developed by Sun Microsystems, in the U. S. A. Low dependent on models and OSes and runs on various platforms. Taking advantage of this feature, many applications that runs on web servers uses Java. The MEAP platform uses J2ME - a type of Java.
JavaScript	A script language developed by Netscape Communications, in the U.S. A., runs on web browsers such as Netscape Navigator and Internet Explorer. Allows web designers to create interactive pages with HTML files such as animated buttons and display of timetables.
Java VM (Java Virtual Machine)	JAVA Virtual Machine. The Java byte code interpreter. The Virtual Machine acts as an interpreter for processing the byte code using the native instruction set.
License Access Number	A number issued for accessing license file. The Licensing server requires entries of application ID, expiration date/times information, and the number of access numbers, to issue license access numbers
Licensae File	A software manufacture of a MEAP application provides the users with the license files. Specifies the terms of agreement that a user concludes with the manufacturer. Required for installing a MEAP application.
LMS (License Management System)	The license is required for installing a MEAP application in a MEAPenabled iR device. LMS is the server issuing [License Files] as well as license access numbers.
Login Service	Manages user information of MEAP device. Authenticates users with user names and passwords. Three login services are available for MEAP device - Default Authentication, which provides department ID control, SDL (Simple Device Login) and SSO (Single Sign-On).
Mass Storage class	Mass Storage means a storage device with large capacity, generally secondary storage devices. Mass Storage class means USB class classified in the secondary storage device group.
MEAP (Multifunction Embedded Application Platform)	Multifunctional Embedded Application Platform. Provides an environment for executing application programs on a peripheral device. Uses the Java platform (J2ME - Java 2 platform Micro Edition) to run Java application for MEAP.
MEAP Contents	Required to install an MEAP application to a MEAP device.

Terms & Acronyms	Definitions and Explanations
MEAP Specifications (MEAP Spec Version)	MEAP Spec Version, the term used for the SDK. The version number that shows the APIs of the MEAP platform other than CPCA, such as network and security. The version number is not assigned for each device model. MEAP Application Runs on MEAP platform. Consists of application files (*.jar) and the license file (*.lic).
MEAP-enabled iR device	imageRUNNER (iR) devices with built-in MEAP platform.
MFP (Multi Function Peripheral)	Multi Function Peripheral. Peripheral device that supports more than one function, such as digital copier, printer, scanner, and fax.
OSGi (Open Service Gateway Initiative)	Open Service Gateway Initiative. See " http://www.osgi.org/ ".
Portal Service	The web portal to gain access to a MEAP-enabled device. This service has been integrated in Remote UI top page in iR ADVANCE series.
Protocol	A set of rules applied to data transmission procedures over network. Major communication protocols include: <ul style="list-style-type: none"> • FTP: File Transfer Protocol. This is a communication protocol or protocolimplemented commands to provide file transfer between a host and clients over TCP/IP network. • DHCP: An upward compatible protocol of BOOTP. This communication protocol allocates a dynamic IP address to each client machine upon communication startup on TCP/IP network and collects the allocated IP address when communication is completed. The server allocates one of multiple IP addresses and notifies the setup information to a client. • BOOTP: A communication protocol to automatically load setup information including IP address and a domain name from the server to a client on TCP/IP network. • RARP: A communication protocol to request IP address information via the network adaptor address (MAC address) of a client. • IPP: A communication protocol to execute remote printing between the print server and clients via Internet. • TCP/IP: A standard communication protocol required to access to Internet and other large-scale network.
Proxy Server	Provides functions to store data fetched from remote servers. When a user request to display a web page that has been displayed and stored in the proxy, the proxy server read the stored data but does not access the remote server where the original page is present, for efficient access services. When a proxy server receives a URL from a PC, it searches the file in the cache and sends it to the PC if the requested file is found. If the requested file is not stored in the cache, it accesses the remote server of the URL to acquire the file and, at the same time, stores the acquired file in the cache so that the proxy server can quickly send the file at the next request.
Redistribution module	A built-in module of an application created with SDK. Applications without this module cannot work on MEAP platform.

Terms & Acronyms	Definitions and Explanations
SDK (Software Development Kit)	The kit containing information and tools required for software development.
Service	A functional unit or an application program working on MEAP platform. [Applications] are generally termed [Services] in Java world.
Servlet (Servlet Type Application)	A MEAP application type created in Java. This type of applications is designed to show user interface on the Web browser.
SMS (Service Management Service)	The web-base service to provide user interfaces for application life cycle management.
Socket	A virtual interface of an application for network communication. A user only needs to specify a socket as a unit of an address and a port from an application. This establishes the network connection for data transmission, eliminating complication related to detailed communication procedures.
SSO-H (Single Sign-On H)	Login service providing features of both local device authentication and domain authentication. The former is the method that iR device independently authorizes users; whereas the latter is that iR device links to the domain controller on the network in the Active Directory environment to authorize users.
Thread	A unit for program execution. A multi-task system allowing multiple programs to run concurrently assigns a memory space and other resources independently to each program, providing users with a feel as if only a program is running. At least one thread is generated upon a program generated.
URL (Uniform Resource Locator)	The method to denote Web page locations on Internet and the like. For instance, a URL on the Web is denoted as [http://www.w3.org/default.html]. [http] at the beginning means that an address following this is in a web page on the Internet.
USB	Abbreviation of Universal Serial Bus. This is the interface standard to link between information devices.
USB system driver	The general-purpose driver that control the behavior of the device, there are HID class driver, Mass Storage class driver and so on.

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Option for exclusive individual measure

Display Setting of Copy Icon (level2)

Make a setting as to whether to display/hide the copy screen (copy tab) on the control panel. This is the specification for users who want to customize hiding it on control panel.

Default value

1: display

Setting range, item

0: hide 1: display

Setting Procedure

- 1) Start [SERVICE MODE] in Level 1.
- 2) Press [COPIER] > [Option] > [DSPLY-SW] buttons.
- 3) Press [UI-COPY] button.
- 4) Press either 0 (hide) or 1 (display) on control panel (the numerical value input in the field is displayed), and press [OK] button.
- 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.
- 3) Press [ANIM-SW] button.
- 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.
- 5) Check to see that it is reflected in setting field, and restart the device.

Embedded RDS

Product Overview

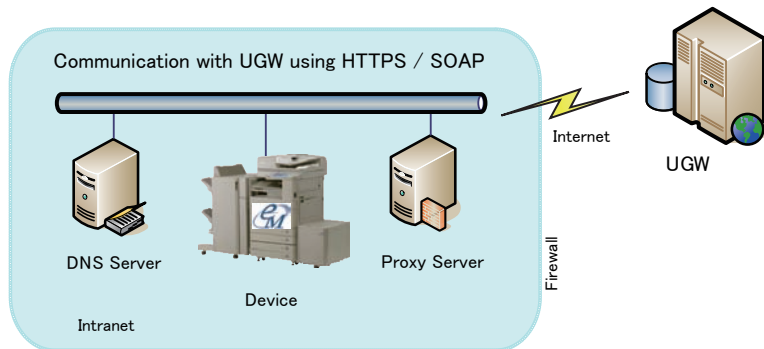
Overview

Embedded RDS (hereafter, referred to as E-RDS, which stands for EMBEDDED-RDS) is a network module embedded with a customer's device and enables e-Maintenance/ imageWARE Remote (Remote Diagnosis System), which can collect and transmit status changes, counter values, error logs, and consumable information such as the toner low/ out of the device to a remote maintenance server called UGW (Universal Gateway Server) via Internet.

The following device information/ status can be monitored.

- Service mode counter (Billing counts)
- Global click counter
- Parts counter
- Mode counter
- Firmware info
- Environment log
- 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 a device 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 persons in charge, and is used for referring to the FAQ contents which is connected to UGW.

To grasp a device of which service browser has been enabled, E-RDS sends browser information to UGW in the following cases.

- When the service browser is enabled in the condition where it had been disabled (OFF)
- When a license for Web Browser option is entered/ transferred

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 - 0x109999, // Development 0x300001 - 0x309999 // High voltage			HV-STC	
			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 the device main unit 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 performing the following service actions, it is necessary to perform initializing E-RDS settings (ERDS-DAT) and communication test (COM-TEST).

Failure to do so will result that the counter transmitting value to the UGW may become unusual.

- RAM clear of MNCON PCB SRAM Board :
[SERVICE MODE] > [COPIER] > [Function] > [CLEAR] > [MN-CON]

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

E-RDS Setup

Confirmation and preparation in advance

To monitor a device 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

Interview the user's system administrator in advance to find out the following information about the network.

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.

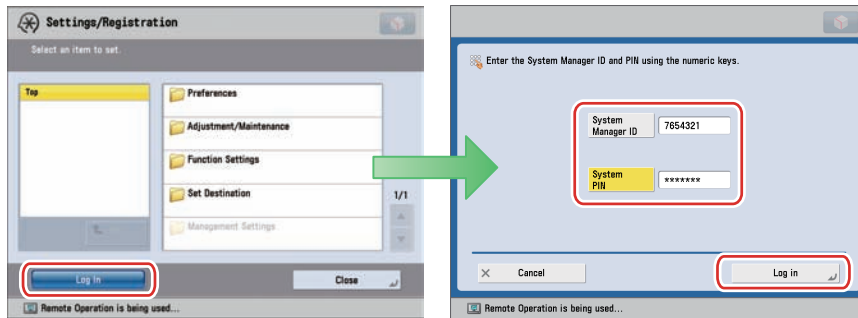
- User name and password required for proxy authentication

(3) Network settings

Based on the results of the information obtained in (2) Advance preparations, make the device network related settings in accordance with the following procedures.

1) Displaying the Settings/ Registration screen

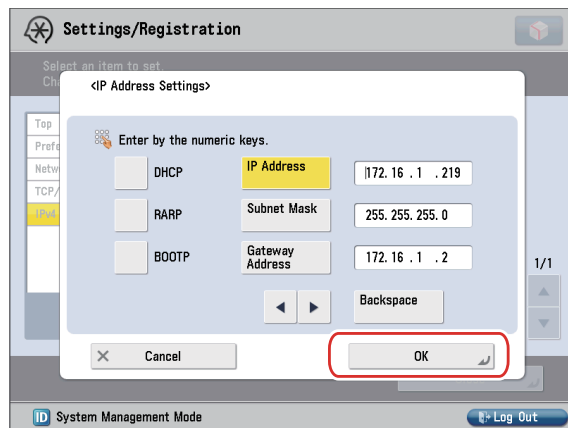
1. Touch the [Settings/Registration (User Mode)] button.
2. When a system management department ID and system management password are set up, touch the [Log In] button and enter the System Management ID and System PIN to perform a log-in.



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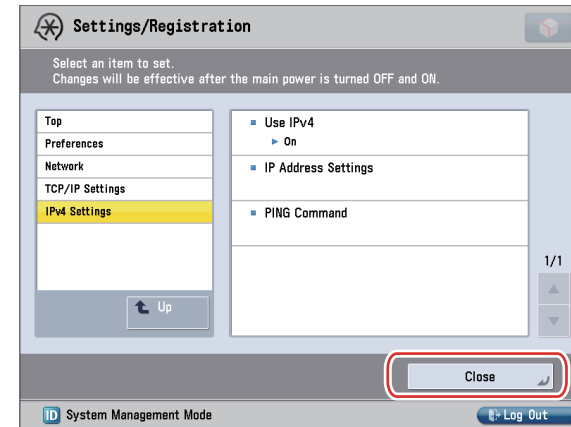
2) Setting IP address-related items

1. Touch the [Preferences] > [Network] > [TCP/IP Settings] > [IPv4 Settings] > [IP Address Settings] buttons.
2. Set the IP address based on the result obtained in “(2) Advance preparations - Information item 1”, and touch the [OK] button.
 - For automatic acquisition, select from [DHCP], [RARP], [BOOTP].
 - For manual setting, set the IP address, subnet mask and gateway address.



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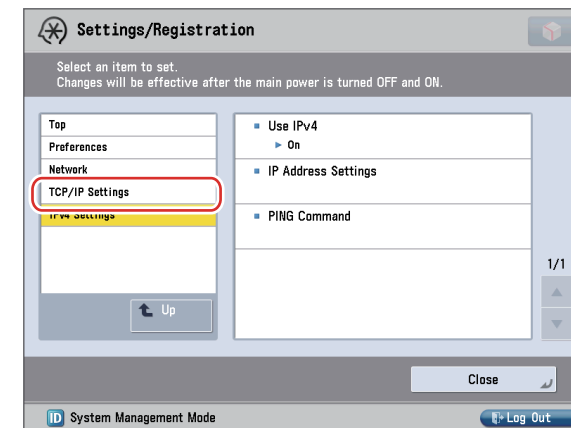
3. When DNS settings and proxy settings are not made, touch the [Close] button to reboot the device.



F-2-258

3) DNS Settings

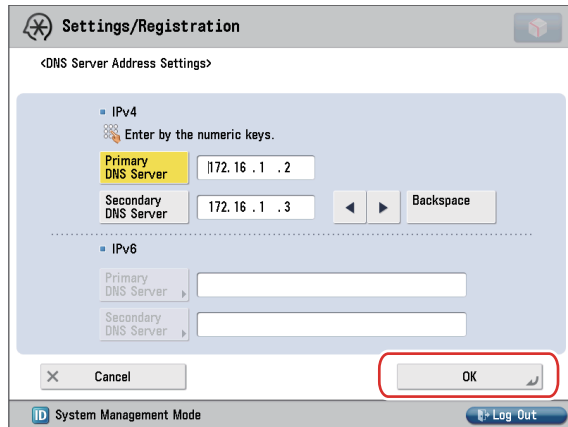
1. Select [TCP/IP Settings] from breadcrumbs of the left columns, and then Touch it.



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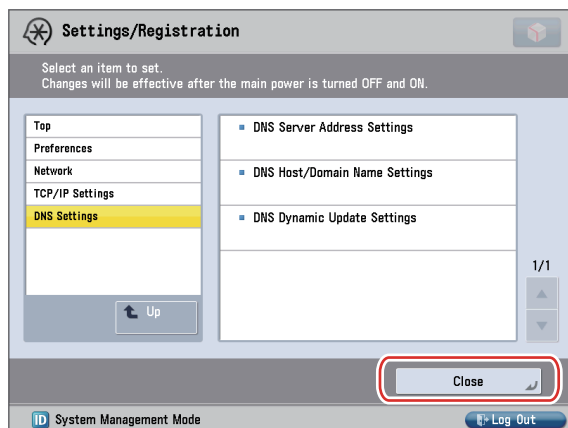
2. Touch the [TCP/IP Settings] > [DNS Settings] > [DNS Server Address Settings] buttons.

3. Set the DNS server address based on the result obtained in “(2) Advance preparations - Information item 2” and touch the [OK] button.
 - Information item 2” and touch the [OK] button.
 - Select [Primary DNS Server] and make settings.
 - When the secondary DNS server is installed, select [Secondary DNS Server] and make settings.



F-2-260

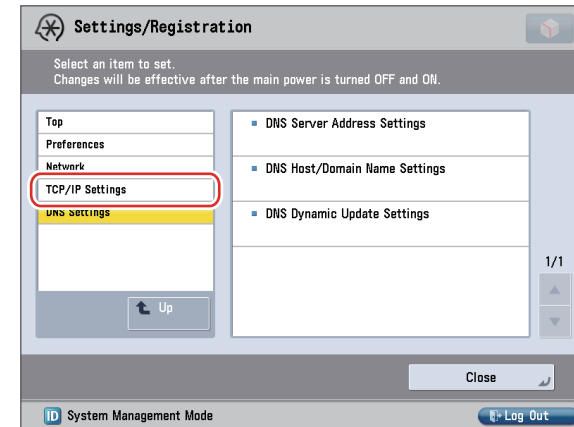
4. When proxy settings are not made, touch the [Close] button to reboot the device.



F-2-261

4) Proxy Settings

1. Select [TCP/IP Settings] from breadcrumbs of the left columns, and then Touch it.

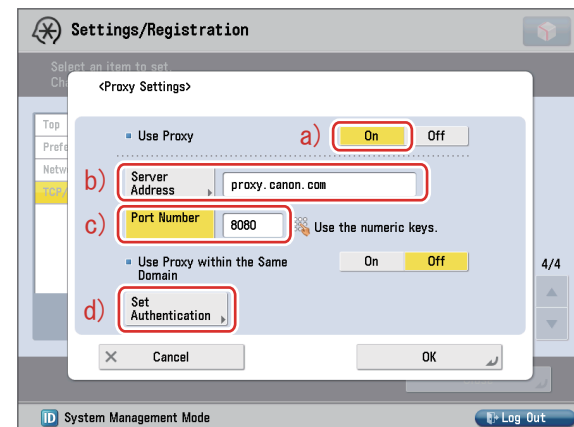


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2. Touch the [TCP/IP Settings] > [Proxy Settings].

3. Set the proxy server based on the result obtained in “(2) Advance preparations - Information item 3”.

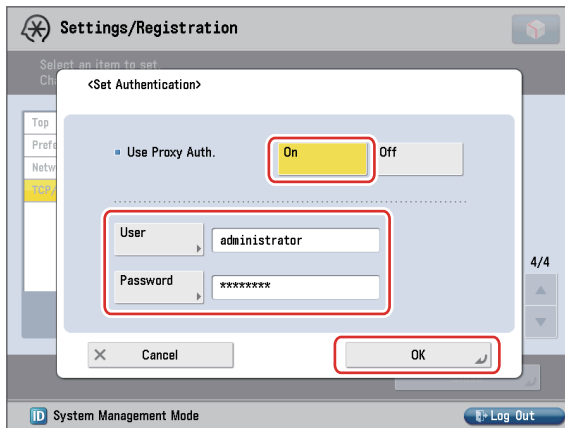
- a) Use Proxy to [On].
- b) Enter the server address.
- c) Enter port Number (Validation: 1 to 65,535).



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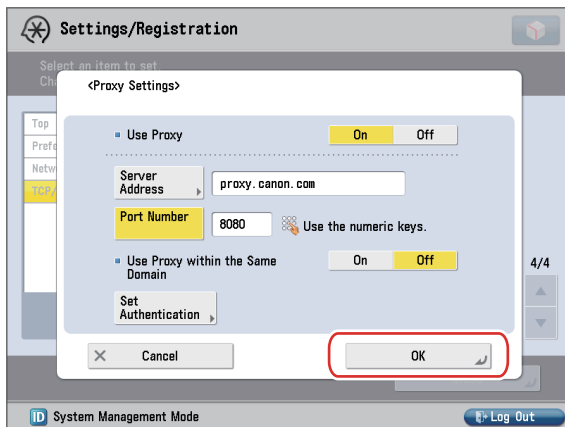
- d) If proxy server authentication is required, Touch [Set Authentication].(see figure above)

- e) Set the following items based on the result obtained in “(2) Advance preparations - Information item 4”.
- Information item 4”.
 - Set Use Proxy Authentication to [On].
 - Enter User name and Password, and touch the [OK] button.



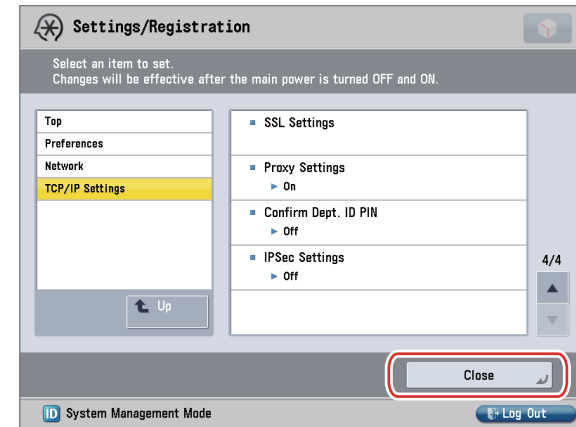
F-2-264

- f) Touch the [OK] button.



F-2-265

4. Touch the [Close] button.



F-2-266

5. Reboot the device.

CAUTION:

When changes are made to the above-mentioned network settings, be sure to reboot the device.

E-RDS-related setting items (service mode)

E-RDS setting items

Item	Description
E-RDS ([Lv.1] COPIER > Function > INSTALL)	<p>Set use/ no use of Embedded-RDS function 0: Function not used / 1: Function used</p> <p>e-Maintenance/ imageWARE Remote system to send device information, counter data, error statuses to the UGW.</p> <p>Note that the operation (such as global click counter, error information, etc.) can be restricted with the server settings. Default : 0 (Function not used)</p>
RGW-ADR ([Lv.1] COPIER > Function > INSTALL)	<p>URL setting of UGW Max 128 characters Default : https://a01.ugwdevice.net/ugw/agentif01</p>
RGW-PORT ([Lv.1] COPIER > Function > INSTALL)	<p>Set port number of UGW Validation : 1 to 65535 Default : 443</p>
COM-TEST ([Lv.1] COPIER > Function > INSTALL)	<p>Execution of a communication test with UGW / Display of the result Perform Communication test with UGW and set "OK!" or "NG!" as the result.</p>
COM-LOG ([Lv.1] COPIER > Function > INSTALL)	<p>Display of detailed information about a communication error with UGW Error information of a connection failure with UGW is displayed. Error occurrence date and time, error code, and detailed error information are displayed. Max 30 latest loggings retained Max 128 characters for Error information.</p>
ERDS-DAT ([Lv.1] COPIER > Function > CLEAR)	<p>Initialization of E-RDS SRAM data SRAM data of E-RDS is initialized and returned to the factory setting value at shipment.</p>
CA-KEY ([Lv.2] COPIER > Function > CLEAR)	<p>Initialization of CA certificate When the power is turned OFF/ ON after execution, the CA certificate in the factory setting is automatically installed.</p>

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SERVICE CALL BUTTON setting items

Item	Description
SCALL-SW ([Lv.1] COPIER > Option > USER)	<p>Display/ hide of Service Call button 0: Hide / 1: Display</p> <p>To set whether to display or hide the Service Call button on the Control Panel. Default : 0 (Hide)</p>
SCALLCMP ([Lv.1] COPIER > Option > USER)	<p>Set of service call completion notice When this item is set, service call completion is notified to UGW and the service call status retained internally is cleared. Default : 0</p>

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SERVICE BROWSER setting items

Item	Description
BRWS-ACT ([Lv.1] COPIER > Function > INSTALL)	<p>Execution of activation/ inactivation of service browsing Browsing info is sent to UGW when OFF (BRWS-ACT=0) is changed to ACTIVE. Setting result is displayed as "OK!" or "NG!".</p>
BRWS-STS ([Lv.1] COPIER > Display > USER)	<p>Display of Service Browser use status 0: OFF / 1: Active / 2: Suspend</p> <p>The status is changed from 0 to 1, from 1 to 2, and from 2 to 1 by execution of BRWS-ACT. Default : 0 (OFF)</p>

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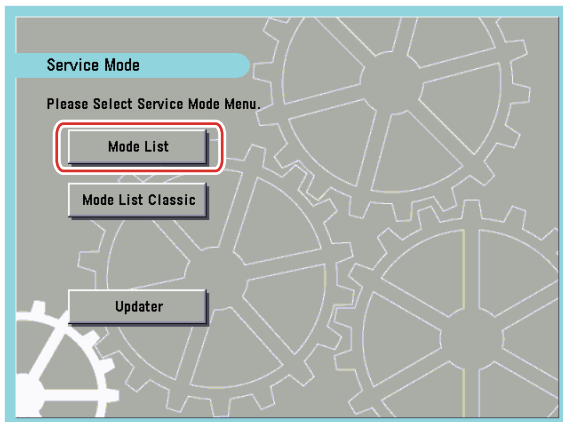
NOTE:

Generally, once service browsing is enabled, it cannot be disabled again.
 To disable service browsing, clear SRAM.

Steps to E-RDS settings

1. Start [Service Mode] at Level 1.

- 1) Press [Settings/Registration (User Mode)] button on the control panel.
- 2) Press [2] and [8] buttons at a time on the control panel.
- 3) Press [Settings/Registration (User Mode)] button on the control panel.
- 4) [Service Mode] screen is shown. Touch the [Mode List] button.



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2. Select [COPIER] > [Function] > [CLEAR] > [ERDS-DAT] and touch the [OK] button.


NOTE:

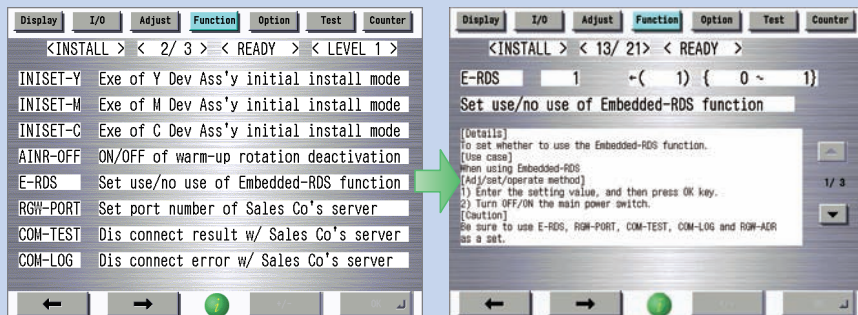
This operation initializes the E-RDS settings to factory setting values.
For the setting values to be initialized, see the section of “Initializing E-RDS settings”.



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NOTE:

When [Mode List] is selected, touching the  button at the center of the lower side of the screen displays explanation of each item or detailed operation guide. In case of [Mode List Classic], this button is not appeared.



3. Perform installation or deletion of the CA certificate if necessary, and reboot the device.
- Installation of the CA certificate: Perform installation from SST.
 - Deletion of the CA certificate: When the following operation is performed, the CA certificate in the factory setting is automatically installed.

(1) Start [Service Mode] at Level 2.

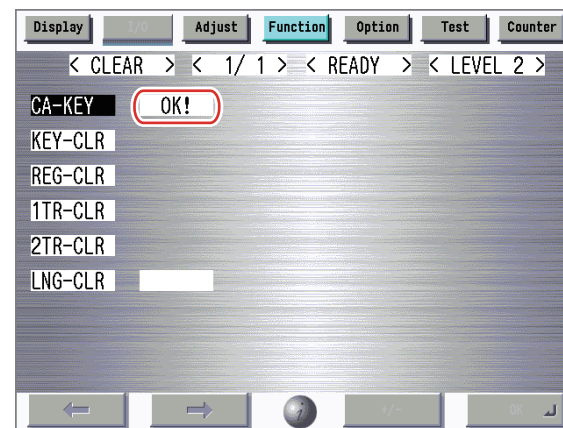
- 1) Press [Settings/Registration (User Mode)] button on the control panel.
- 2) Press [2] and [8] buttons at a time on the control panel.
- 3) Press [Settings/Registration (User Mode)] button on the control panel.
- 4) Touch the [Mode List] button on the [Service Mode] screen.
- 5) Press [Settings/Registration (User Mode)] button on the control panel.
- 6) Press [2] button on the control panel.

(2) Select [COPIER] > [Function] > [CLEAR] > [CA-KEY] and touch the [OK] button.



F-2-269

“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 the device.

4. Activate [SERVICE MODE] in LEVEL 1. (See 1. for the procedure.)

5. Select [COPIER] > [Function] > [INSTALL] > [E-RDS].

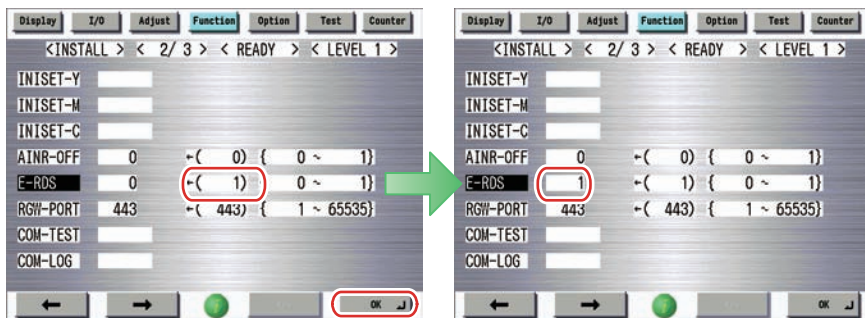


F-2-271

6. Touch the numeric button [1] on the control panel (the setting value is changed to 1) and touch the [OK] button. (The data is reflected to the setting value field.)

NOTE:

This operation enables the communication function with UGW.



F-2-272

CAUTION:

The following settings i.e. RGW-PORT and RGW-ADR in Service mode must not be changed unless there are specific instructions to do so.

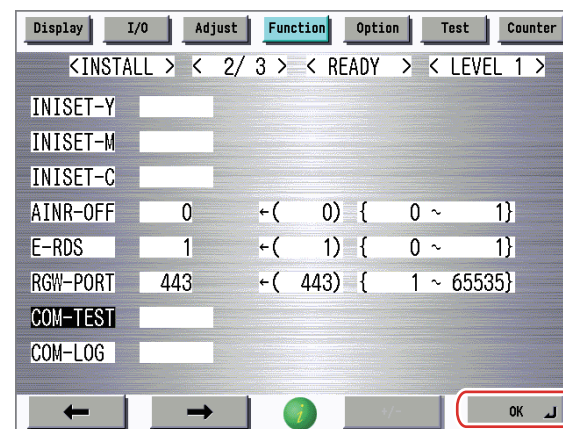
Changing these values will cause error in communication with UGW.



7. Select [COM-TEST] and then touch [OK].

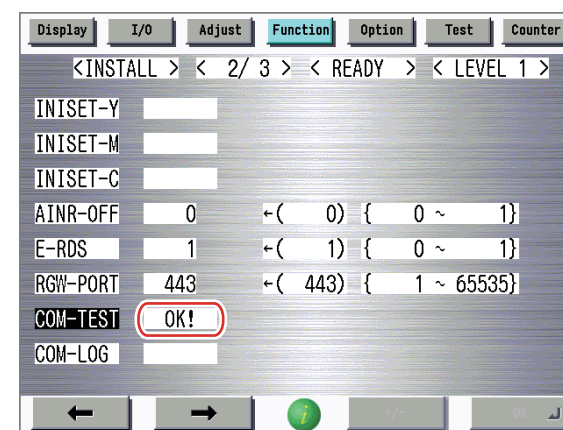
NOTE:

This initiates the communication test between the device and the UGW.



F-2-273

If the communication is successful, "OK!" is displayed. If "NG!" (failed) appears, refer to the "Troubleshooting" and repeat until "OK!" is displayed.



F-2-274

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.

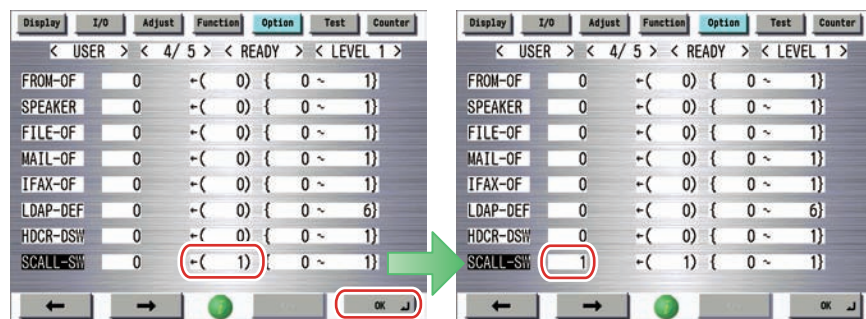
For the procedures, see “Steps to E-RDS settings - step 1.”.

2. Select [COPIER] > [Option] > [USER] > [SCALL-SW].



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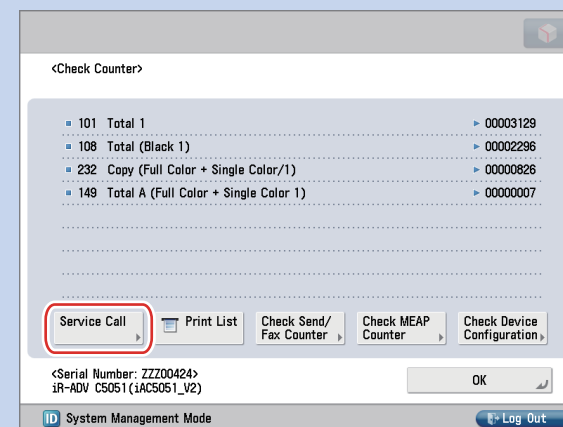
3. Touch the numeric button [1] on the control panel (the setting value is changed to 1) and touch the [OK] button. (The data is reflected to the setting value field.)



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NOTE:

When the function is enabled, the [Service Call] button is displayed on the bottom of the counter check screen (displayed by touching the counter check button).



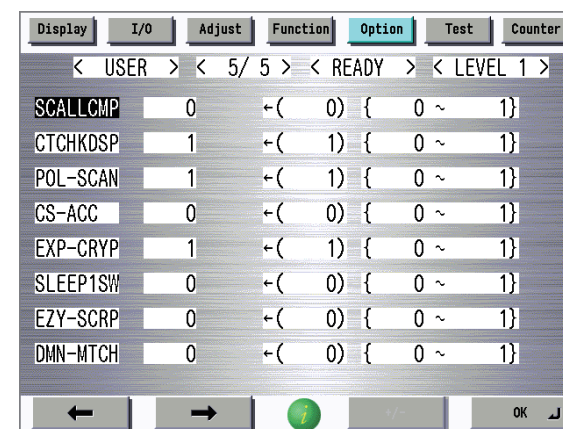
Steps for settings of service call completion

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.

For the procedures, see “Steps to E-RDS settings - step 1.”.

2. Select [COPIER] > [Option] > [USER] > [SCALLCMP].

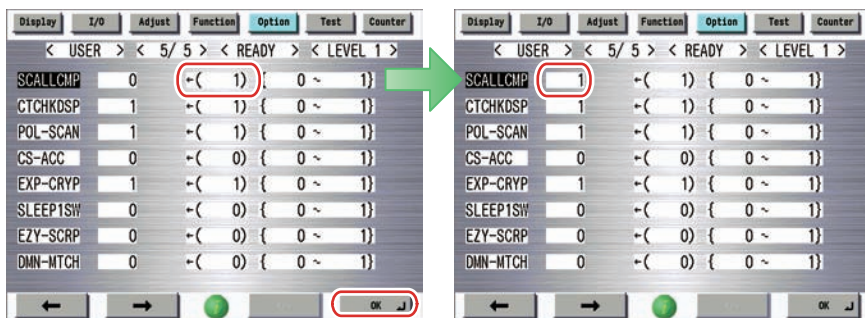


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- Touch the numeric button [1] on the control panel (the setting value is changed to 1) and touch the [OK] button. (The data is reflected to the setting value field.)

NOTE:

E-RDS generates an alarm of service call completion at this timing, and sends the alarm to UGW.

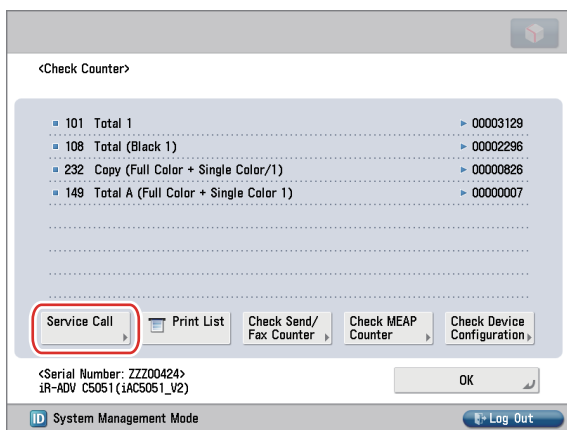


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Steps for service call request

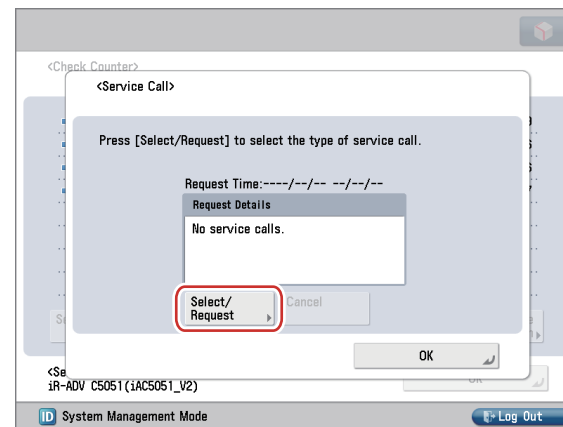
Users should follow the instructions as described below to request a service call.

- Touch the [Counter Check] button on the control panel to display the counter check screen, and touch the [Service Call] button.



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- Touch the [Select/ Request] button.



F-2-280

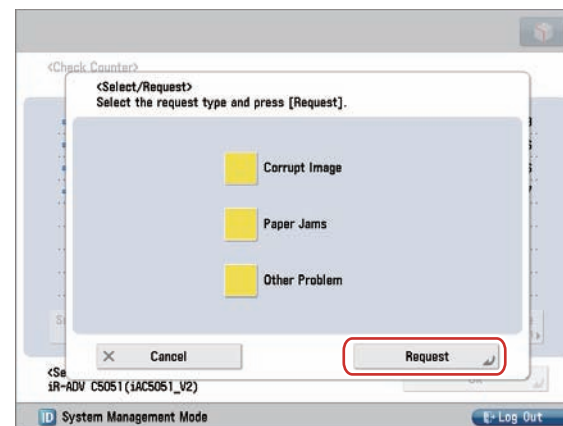
CAUTION:

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 person needs to perform processing for service call completion.

- 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.

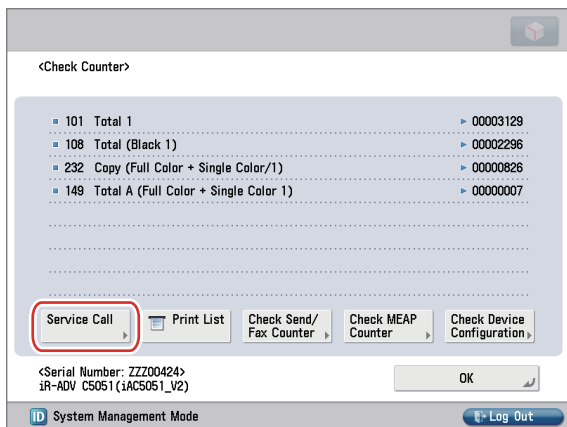


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Steps for service call cancellation

To cancel the service call, follow the instructions as described below.

1. Touch the [Counter Check] button on the control panel to display the counter check screen, and touch the [Service Call] button.



F-2-282

2. Touch the [Cancel] button, and touch the [Yes] button in the check screen.

NOTE:

E-RDS generates an alarm of service call cancellation at this timing, and sends the alarm to UGW.



F-2-283

Steps to Service Browser settings

1. Start [Service Mode] at Level 1.
For the procedures, see "Steps to E-RDS settings - step 1."
2. Select [COPIER] > [Function] > [INSTALL] > [BRWS-ACT] and then touch [OK].

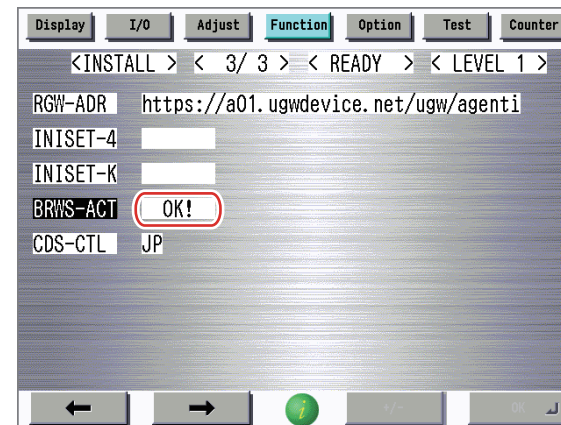
NOTE:

E-RDS sends browser information to UGW at this timing.



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If the connection is established with UGW successfully, "OK!" is displayed. When "NG!" is displayed, perform the steps referring to "Troubleshooting" until connection is established with UGW.



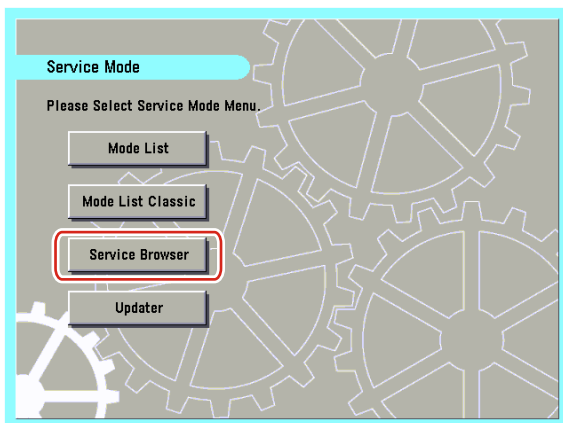
F-2-285

3. Reboot the device.
4. Make sure that "1 (: ACTIVE)" is set under [COPIER] > [Display] > [USER] > [BRWS-ST5].



F-2-286

5. When the above-shown setting values are enabled, [Service Browser] is displayed in the Service Mode screen.



F-2-287

■ Initializing E-RDS settings

It is possible to return E-RDS Settings to factory-shipments value.

● Initialization procedure

1. Start [Service Mode] at Level 1.
For the procedures, see "Steps to E-RDS settings - step 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 250 bytes.

No.3

Q: Does error-retry carry out at the time of a communication error with the UGW?

A: Retry of SOAP communication is performed as follows.

- In the case of an error in SOAP communication (i.e. a trouble at UGW side) at transmission of the alarm code list and the service mode counter (postAlert) due to change of device status, the data failed in transmission equivalent to 3 retries is to be stored in the HDD. In the case of another transmission error (the 4th error), the oldest data of the stored data is deleted and the newly-generated retry data is stored in the HDD.
- In the case of SOAP transmission errors as described below, the unsent (and remaining) data is sent again depending on the storage status of CPCA data:
 - At transmission of a jam log and service mode counter (postJamLog) when the jam log was obtained from the device.
 - At transmission of a service call log and service mode counter (postServiceCallLog) when the service log was obtained from the device.
 - At transmission of an alarm log and service mode counter (postAlarmLog) when the alarm log was obtained from the device.
- In the case of a SOAP transmission error at transmission of a service mode menu list (postServiceModeMenu) due to change of the setting value in the service mode menu, the service mode data is obtained at every retry to be sent.
- In the case of a SOAP transmission error at transmission of browser information (postBrowserInfo) due to change of the license status of the device's web browser option, the browser information is stored in the retry information to send the stored data again.

In the case that the device is rebooted while the retry information is specified, however, another browser information is obtained to be sent.

NOTE:

The retry data will be sent at interval of 5*n minutes. (n: retries, 5, 10, 15 minutes...up to 30 minutes)

No.4

Q: How many log-data can be stored?

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 the device 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 a device 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 the device 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 the device 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 Section counter (Department counter)?

A: No, E-RDS does not support Section 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 the device)	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.)

Transmission timing	Detailed procedure	Transmission information	Error occurs
When the WEB browser option license is entered/transferred *1)	1) When the power is turned ON, check the license condition of the WEB browser option. 2) Send browser information to UGW when the license status is turned ON (from OFF) due to entry of a license or when the license status is turned OFF (from ON) due to license transfer.	Service browser mode: Enabling [Active] or Stopping [Suspend] WEB browser option: [ON] or [OFF] according to the license status	Retransmission is repeated until it finishes successfully.

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*1) Except when the service browser is disabled [OFF]

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 request completion process.

No.13

Q: Is the "Requesting" status cancelled when the device 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: Although the device's been connected with the PS server unit, the data of the e-Maintenance/ imageWARE Remote system is able to pass through to the PS server unit. Therefore the e-Maintenance/ imageWARE Remote system functions normally even if the PS server unit is connected. The screen of IP Address settings is disabled though, the item related to authentication can be enabled.

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

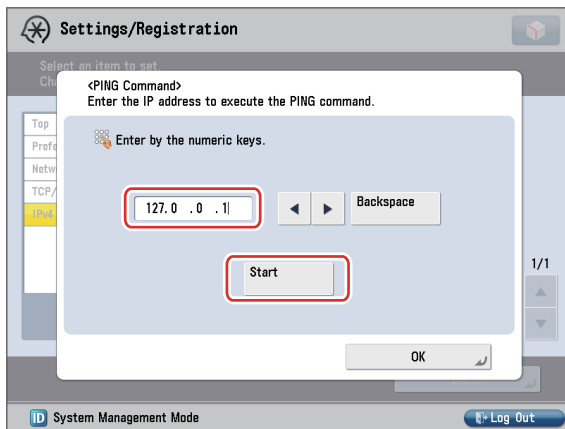
Is the status indicator LED for the HUB port to which the main unit is connected ON?

YES: Proceed to Step 2).

NO: Check that the network cable is properly connected.

2) Confirm loop back address

Select [Settings/Registration (User Mode)] > [Preferences] > [Network] > [TCP/IP Settings] > [IPv4 Settings] > [PING Command], enter "127.0.0.1", and touch the [Start] button.

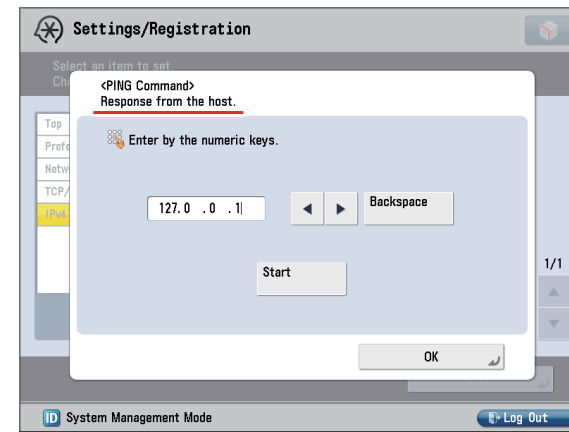


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Does the screen display "Response from the host."? (See the next figure.)

YES: Proceed to Step 3).

NO: There is a possibility that the main unit's network settings are wrong. Check the details of the IPv4 settings once more.



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3) Confirmation from another PC connected to same network.

Request the user to ping the main unit from a PC connected to same network.

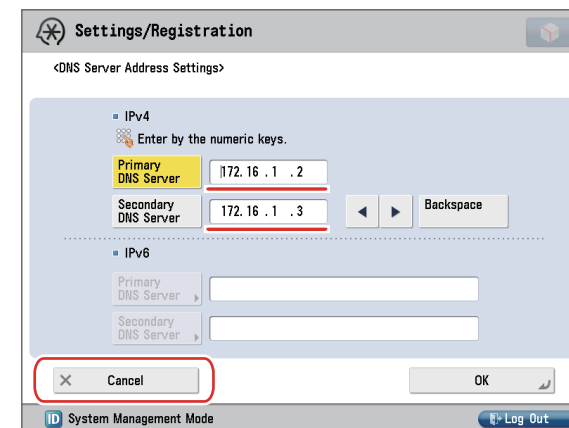
Does the main unit respond?

YES: Proceed to Step 4).

NO: Confirm the details of the main unit's IP address and subnet mask settings.

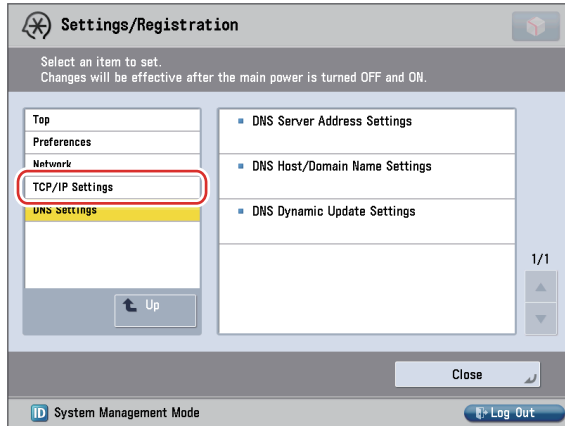
4) Confirm DNS connection

(a) Select [Settings/Registration (User Mode)] > [Preferences] > [Network] > [TCP/IP Settings] > [DNS Settings] > [DNS Server Address Settings], write down the primary and secondary addresses of the DNS server, and touch the [Cancel] button.



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(b) 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 Start.

Does the screen display “Response from the host.”?

YES: Proceed to Remedy 2.

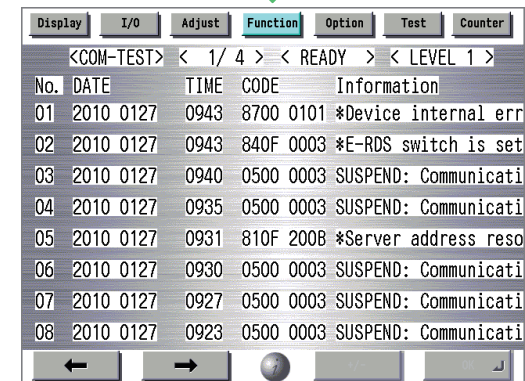
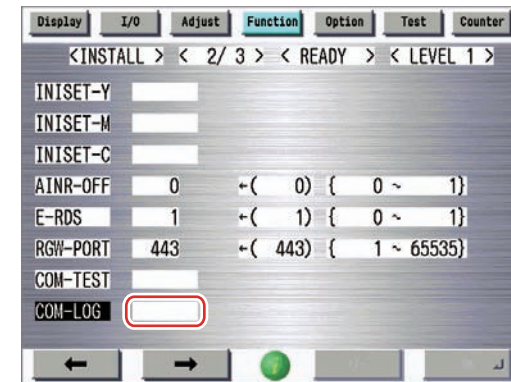
NO: There is a possibility that the DNS server address is wrong. Reconfirm the address with the user’s system administrator.

Remedy 2: Troubleshooting using communication log (COM-LOG)

1) Start [Service Mode] at Level 1.

- 1) Press [Settings/Registration (User Mode)] button on the control panel.
- 2) Press [2] and [8] buttons at a time on the control panel.
- 3) Press [Settings/Registration (User Mode)] button on the control panel.
- 4) [Service Mode] screen is shown. Touch the [Mode List] button.

2) Select [COPIER] > [Function] > [INSTALL] > [COM-LOG] and touch the blank field on the right side. The communication log list screen is displayed.

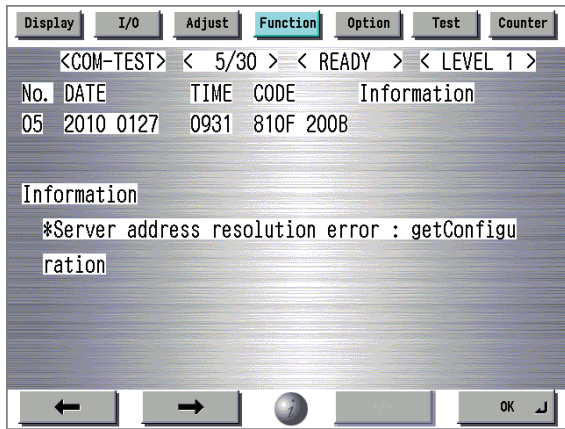


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NOTE:

- 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)



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NOTE:

- A detailed description of the error appears below 'Information'. (Max 128 characters)
- Touch the [OK] button to return to the 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.

Causes: 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 “E-RDS setting items”.

No.3

Symptom: Registration information of an E-RDS is once deleted from the UGW server, and is re-registered after that. If a communication test is not performed, then device information on the UGW becomes invalid.

Causes: When registration of the E-RDS is deleted from the UGW, the status will be changed to that the communication test has not completed because related information has lost from a database.

So, device information will also become invalid if that condition will be left for seven days without performing the communication test.

Remedy: Perform a communication test before becoming the invalidity state.

No.4

Symptom: There was a log, indicating “Device 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 a device 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 server 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: I cannot make a service call request.

Cause: There has been already a service call request.

Remedy: Perform either of the following remedy works:

- Touch the [Cancel] button to cancel the service call request that has been made.
- A service technician performs a complete processing for the service call request that has been made.

No.8

Symptom: Initializing the CA certificate (CA-KEY) results in NG!

Cause: Initialization process of the CA certificate has completed abnormally.

Remedy: Initialize the HDD.

Error code and strings

The following error information is output in the communication error log details display screen. (Here, "a 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	Clear E-RDS
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	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).
4	0xxx 0003	Server schedule is not exist	Blank schedule data have been received from UGW.	Check the device settings status with the UGW administrator.
5	0xxx 0003	Communication test is not performed	Communication test has not completed.	Perform and complete a communication test (COM-TEST).
6	8000 0002 8000 0003 8000 0101 8000 0201 8000 0305 8000 0306 8000 0401 8000 0403 8000 0414 8000 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	8000 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.	Try again after a period of time. If the error persists, check the UGW status with the UGW administrator.

No.	Code	Error strings	Cause	Remedy
8	8300 0306	SRAM version mismatch!	Improper value is written in at the head of the Main Controller PCB 2 SRAM domain of E-RDS.	Turn the device OFF/ ON.
9	8300 0306	SRAM AeRDS version mismatch!	Improper value is written in at the head of the Main Controller PCB 2 SRAM domain of Ae-RDS.	Turn the device OFF/ ON.
10	8xxx 0004	Operation is not supported	Method which E-RDS is not supporting attempted.	Contact help desk
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. And then, 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	Alert filtering error: The number of elements of the list specified by the server is over restriction value.	Specify the number of elements of alert filtering correctly. (Alarm filtering is not supported)
14	8xxx 0222	Server specified list is wrong	Alert filtering error: Unjust value is included in the element of the list specified by the server.	Specify the element of alert filtering with the right value. (Alarm filtering is not supported)
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 Tracking ID notified by Updater differs from the thing of UGW designates.	Contact help desk
17	8xxx 2000	Unknown error	Some other kind of communication error has occurred.	Try again after a period of time. If the error persists, check the UGW status with the UGW administrator.
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 the UGW] *1)	Communication with UGW has been successful, but an error of some sort has prevented UGW from responding.	Try again after a period of time. Check detailed error code (Hexadecimal) and [Error details in UGW] from UGW displayed after the message.
22	8xxx 200A	Server connection error	<ul style="list-style-type: none"> TCP/IP communication fault The IP address of device is not set. 	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"> No route certificate installed in device. Certificate other than that initially registered in the user's operating environment is being used, but has not been registered with the device. 	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"> The route certificate registered with the device has expired. Certificate other than that initially registered in the user's operating environment is being used, but has not been registered with the device. The device time and date is outside of the certificated period. 	Check that the device time and date are correctly set. If the device time and date are correct, upgrade to the latest system software.
30	8xxx 2047	Server response time out	Due to network congestion, etc., the response from UGW does not come within the specified time. (HTTPS level time out)	If this error occurs when the communication test is being run or Service Browser is being set, try again after a period of time.
31	8xxx 2048	Service not found	There is a mistake in the UGW URL, and UGW cannot be accessed. (Path is wrong)	Check that the value of URL of UGW (RGW-ADR) is https://a01.ugwdevice.net/ugw/agentif010.
32	8xxx 2052	URL error	The data which is not URL is inputted into URL field.	Check that the value of URL of UGW (RGW-ADR) is https://a01.ugwdevice.net/ugw/agentif010.
33	8xxx 2063	SOAP Fault	SOAP communication error has occurred.	Check that the value of port number of UGW (RGW-PORT) is 443.
34	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)
35	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) to install firmware, MEAP applications and system options.

Firmware Installation

Updater function enables users to distribute firmware through CDS via Internet. Particularly on e-Maintenance/UGW (called NETEYE in Japan)-enabled devices, firmware can be updated remotely, which effectively slashes costs incurred in field services.

MEAP Application/System Option Installation

By linking devices to CDS and License Management System (providing the function to manage licenses; hereinafter LMS), applications can be installed in devices via Updater, regardless of those not embedded (MEAP application) or embedded (system options) in devices.

Installing Firmware

With link to Updater, service technicians provide firmware install services in the following 3 methods.

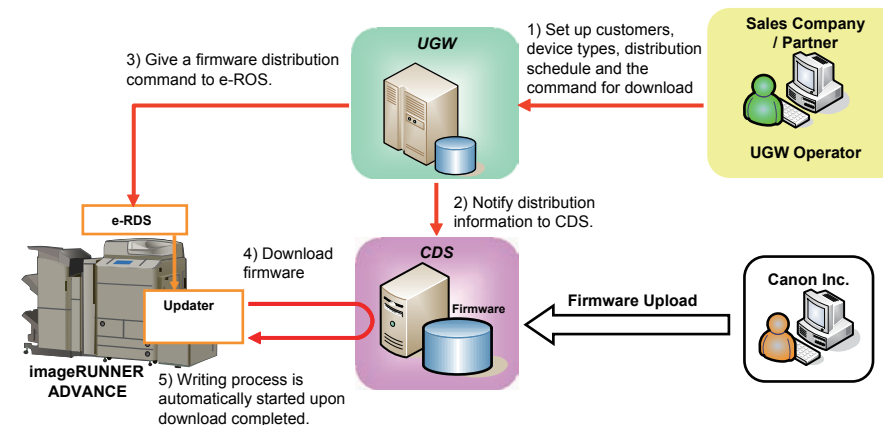
Distribution Method	Download Commanded by:	Update Timing	Downloadable Firmware Versions		
			Previous Ver	Current Ver	Newer Ver
a. UGW-linked Download / Update (Full-remote update)	UGW	Auto	No	Yes	Yes*1
b. UGW-linked Download (Remote Distribution / Update)	UGW	Manual	Yes	Yes	Yes
c. Manual Download / Update (On-site Update via Service mode)	Local UI	Auto	No	Yes	Yes*1
		Manual	Yes	Yes	Yes

*1: You can select the version allowed Remote Update.

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a. UGW-linked Download and Update (Full-Remote Update)

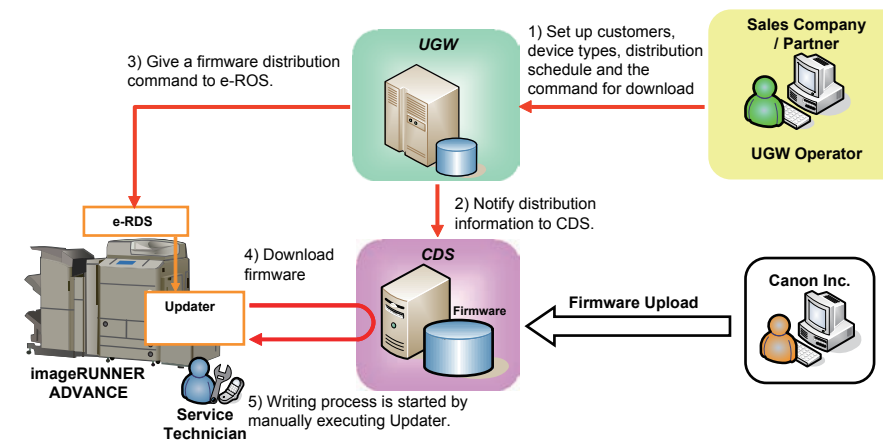
If the device is linked to UGW and the distribution schedule and update setting are registered on UGW in advance, full remote firmware update is available on an imageRUNNER ADVANCE-series device. Upon downloaded from CDS, the firmware is updated on the device.



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b. UGW-linked Download (Remote Distribution / Update)

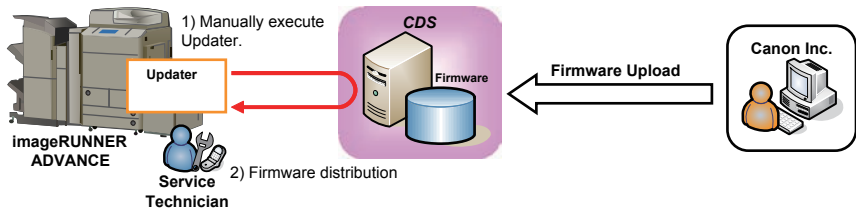
If the device is linked to UGW and the distribution schedule is registered on UGW in advance, firmware can be distributed to an imageRUNNER ADVANCE-series device before a service technician actually visits the customer site. This allows the service technician to update the firmware manually immediately after completing device inspection.



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c. Manual Download and Update (On-site Update via Service Mode)

If an imageRUNNER ADVANCE-series device has connection with the external network, a service technician can gain access to CDS via Service mode to download and update firmware. This allows service technicians to update the firmware as needed on the customer site even without PCs.



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NOTE:
“External network” here means the network connecting the device to CDS via Internet.

NOTE:
Users are able to gain firmware distribution in the following 4 methods by introducing CDS. See User Manual for detailed information.

Distribution Method	Download Commanded by	Update Timing	Downloadable Firmware Versions		
			Previous Ver	Current Ver	Newer Ver
Manual download/update via Local UI	Local UI	Auto	No	No	Yes *1
		Manual	No	No	Yes *1
Manual download/upload via Remote UI	Remote UI	Auto	No	No	Yes *1
		Manual	No	No	Yes *1
Special download/upload via Remote UI	Remote UI	-	Specific version only (Obtain it separately)		
Periodical update via Local UI	Local UI	Auto	No	No	Yes *1

*1: Only the latest version of Remote update-enabled version is downloadable.

Installing MEAP Application/System Option

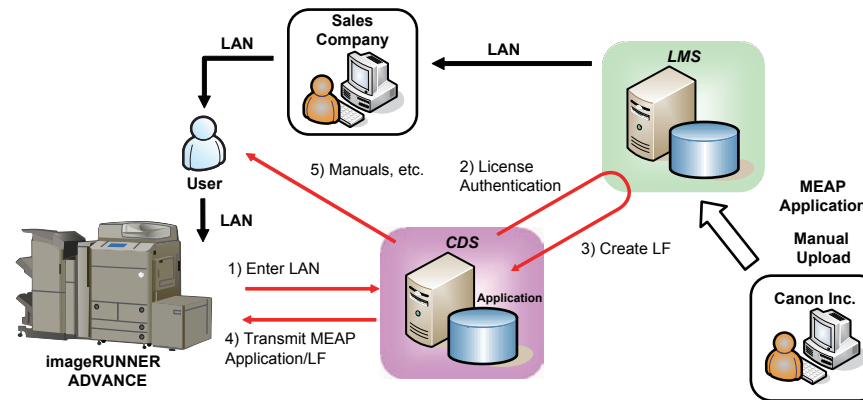
The following is the installation method of MEAP application/system option which is enabled by applying CDS.

a. LMS-linked MEAP Application/System Option Installation

If an imageRUNNER ADVANCE-series device is connected to the external network, user or

service technician can gain access to CDS from User mode to install a MEAP application or a system option.

Installing MEAP Application

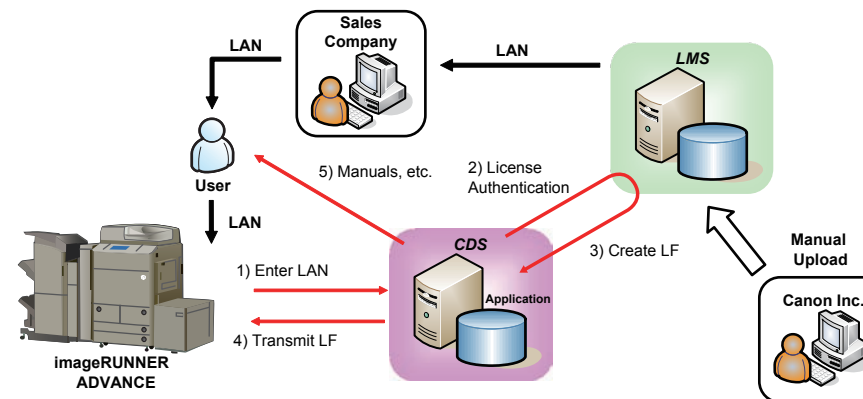


If a customer enters LAN purchased from the sales company to an imageRUNNERADVANCE-series device, MEAP application/LF can be installed.

LAN: License Access Number
LF: License File
(DSN: Device Serial Number, automatically sent to CDS upon LAN entered.)

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Installing System Option



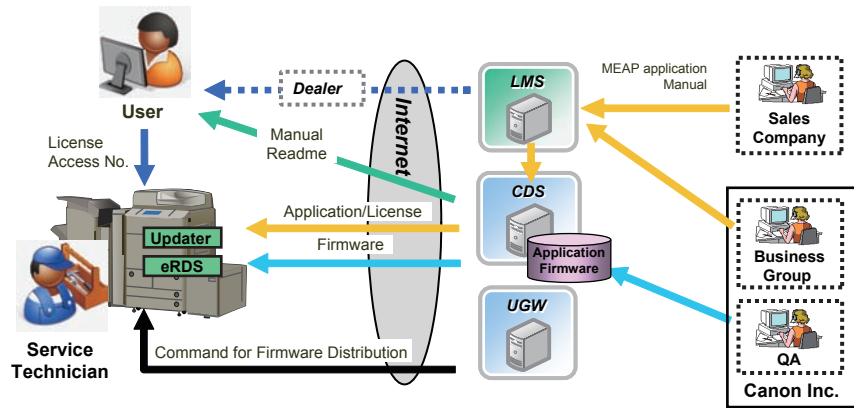
If a customer enters LAN purchased from the sales company to an imageRUNNERADVANCE-series device, a LF can be installed.

LAN: License Access Number
LF: License File
(DSN: Device Serial Number, automatically sent to CDS upon LAN entered.)

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System Configuration

The figure below schematically shows the system configuration.



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List of Functions

The matrix below shows the list of functions provided by Updater.

Category	Function	Service Mode	User Mode	Remote UI	UGW-linked
Firmware	Checking firmware compatibility	Yes	-	-	-
	Checking special firmware	Yes	-	-	-
	Checking latest firmware version	-	Yes	Yes	-
	Registering/deleting firmware distribution schedule	Yes	Yes	Yes	-
	Confirming and downloading firmware	Yes	Yes	Yes	Yes
	Updating downloaded firmware	Yes	Yes	Yes	-
	Cancelling downloaded firmware	Yes	Yes	Yes	-
	Acquiring firmware distribution information registered from UGW	-	-	-	Yes
	Notifying firmware version information	-	-	-	Yes
	Periodical update	-	Yes	-	-
MEAP application/system option	Inquiring license for MEAP application/system option	-	Yes	Yes	-
	Installing MEAP application / system option	-	Yes	Yes	-
System Management	Settings	Yes	-	-	-
	Testing communications	Yes	Yes	Yes	-
	Displaying update logs	Yes	Yes	Yes	-
Internal system error notification	Displaying system logs	Yes	Yes	Yes	-
	Notifying internal system error occurrence to distribution server	Yes	Yes	Yes	Yes

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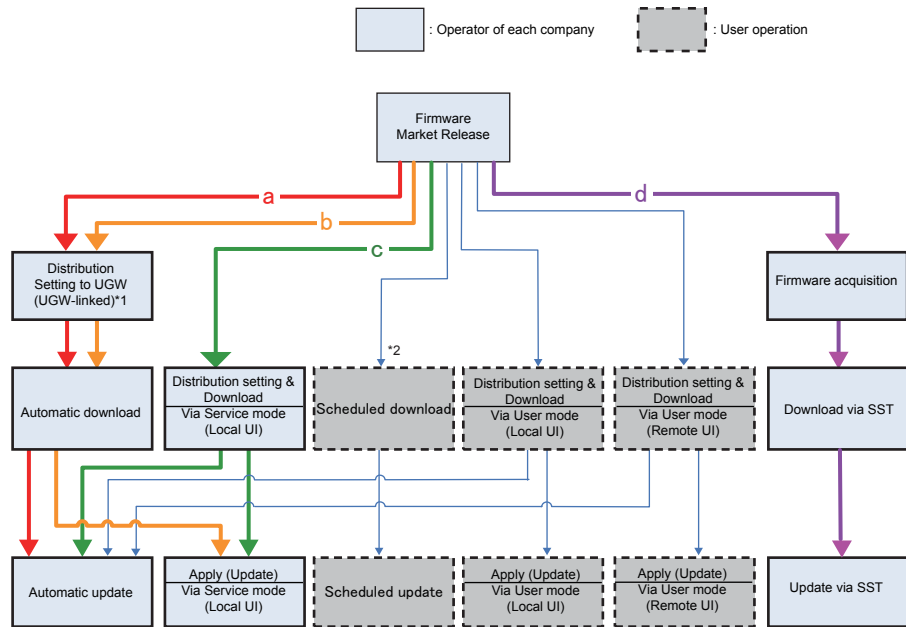
*Functioning supports periodical update with a device after firmware version V50.00.

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: Update via SST



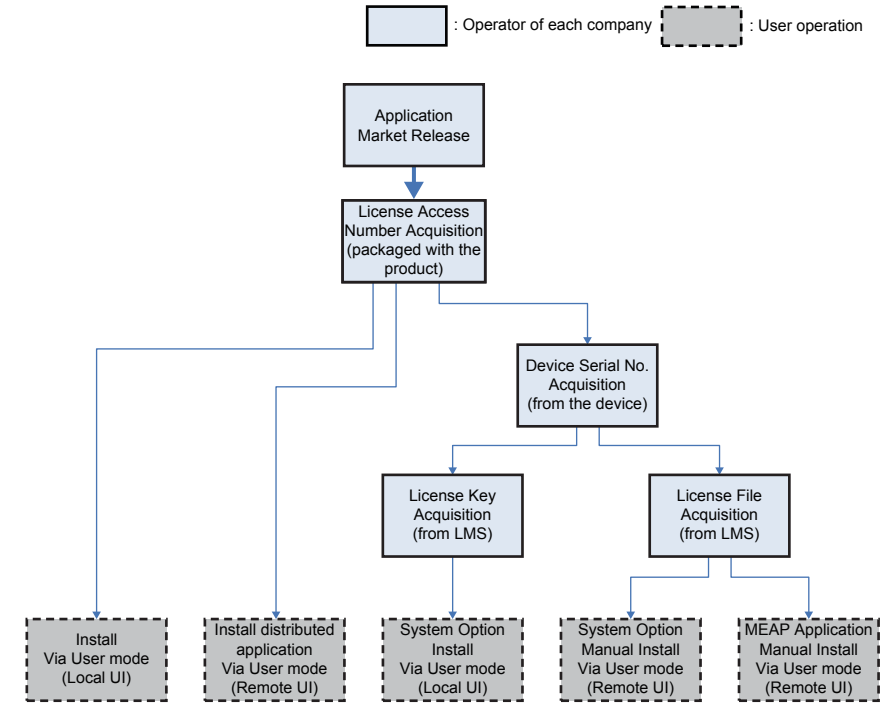
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*1: Schedules for UGW-linked distribution are maintained on CDS.

*2: Functioning supports periodical update with a device after firmware version V50.00.

MEAP Application/System Option Installation Flow

MEAP application/system option installation method using service mode is not provided. Be sure to use the user mode to install.



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Limitations and Cautions

Limitations

Changing Date/Time on Device

When a user changes the date/time setting on the device (including change of the setting according to daylight saving time), the firmware distribution may not be performed as scheduled.

But there is not the problem if it is time adjustment of several minutes with NTP servers.

Change of Setting from Service mode

Any settings from Service mode will be enabled after restarting the device.

Cautions

Concurrent use of Updater functions

Multiple users cannot use Updater functions on a device concurrently by using it together with Remote UI.

Coexistence of Remote UI and other tools

Users logged in SMS (Service Management Service) are unable to use Update functions from Remote UI.

Using Updater function from Remote UI

Upon the following operations done, Updater functions are suspended from Remote UI for certain duration.

- When a user exits Web browser without clicking [Portal] or [Log Out] button in the setting of Remote Login Service via SMS
- When a user exits Web browser without clicking [Portal] button in the setting of not to use Remote Login Service via SMS.
- When a user exits Web browser without clicking [Log out from SMS] or [To Remote UI] button.

Wait for EOJ (end of job) Function

Firmware update will be triggered only after the following jobs are completed.

This is the Updater-specific specification.

Job/Function type	Receiving	Printing	Queued print jobs	Sending	Queued send jobs
COPY	-	Wait for EOJ	Wait for EOJ	-	-
PRINT	Wait for EOJ (end of job)	Wait for EOJ	Wait for EOJ	-	-
FAX	Wait for EOJ	Wait for EOJ	Wait for EOJ	Wait for EOJ	Wait for EOJ
I-FAX Receipt	Cancel processing to trigger update *	Wait for EOJ	Wait for EOJ	Wait for EOJ	Wait for EOJ
Report Print	-	Wait for EOJ	Wait for EOJ	-	-
SEND	-	-	-	Cancel processing to trigger update *	Cancel processing to trigger update *

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*The data are guaranteed even if cut off in the middle of a job. It becomes the recovery object after the device reboot and carry out send / reception again.

Even during transfer, Pull SCAN job processing is cancelled soon after scanning is completed.

Firmware update is cancelled if the jobs are not completed within 10 minutes. If this occurs, the error code, 8x001106, will be returned (different numbers will be shown for x depending on the execution modes).

Firmware update is executed if the jobs stated above are not in the queue.

Follow the shutdown sequence to reboot the device after the firmware is updated.

Caution:

The following firmware versions do not support Wait for EOJ Function.

- iR-ADV V5000 series: V40.17 or earlier
- iR-ADV V7000/9000 series: V40.18 or earlier

For the versions above, triggering firmware update will cancel all COPY/PDL jobs submitted and/or queued. Only jobs with power-off safeguard (Fax/ I-Fax/ Auto-Report Print) are recovered after reboot.

Preparation

Overview of Preparation

The following should be prepared before using Updater.

- For updating of firmware

Installation Method	Setting Sales Company's HQ	Network Settings	Enabling UGW Link	Enabling [Update Firmware] Button of User Mode	Enabling [Manual Update] Button of User Mode (Remote UI)	Enabling [Scheduled Update]
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	Yes	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-2-102

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:

- 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"

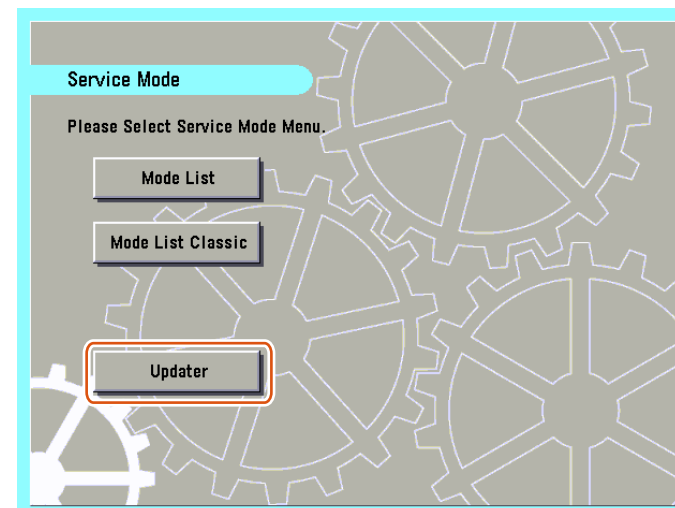
NOTE:

"External Network" here means the network connecting the device to CDS via Internet.

Confirming URL Setting of Distribution Server

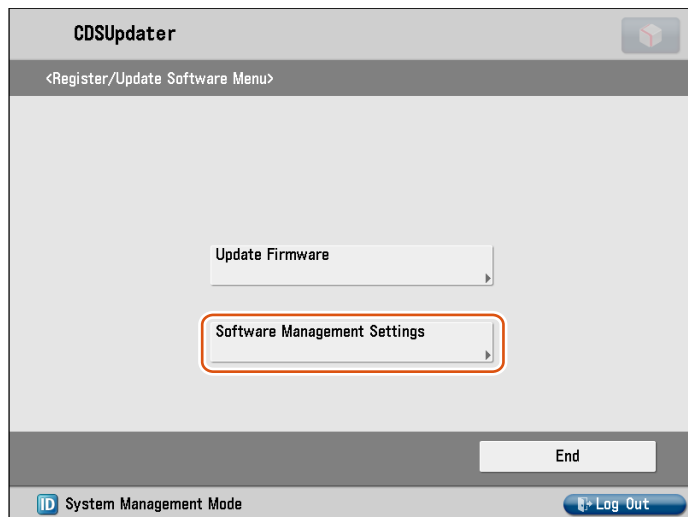
This section describes how to confirm the URL setting of the distribution server.

1. Start [Service Mode] at Level 1.
 - 1). Press [Setting/Registration (User Mode)] button on the control panel.
 - 2). Press [2] and [8] buttons at a time on the control panel.
 - 3). Press [Setting/Registration (User Mode)] button on the control panel.
 - 4). [Service Mode] screen is shown.
2. Press [Updater] button.



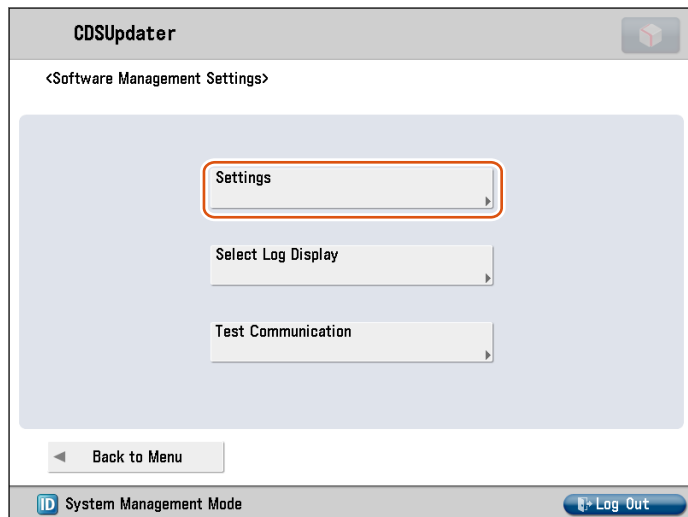
F-2-303

3. Press [Software Management Settings] button.



F-2-304

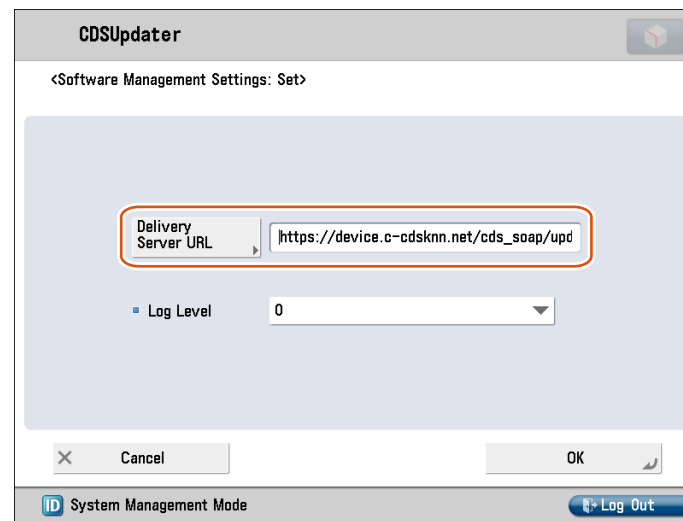
4. Press [Settings] button.



F-2-305

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.



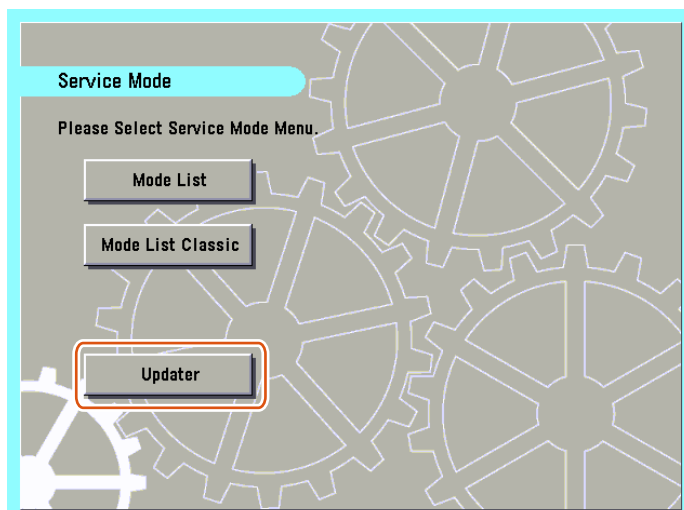
F-2-306

6. Press [OK] to set the entered items. Now the URL of the distribution server is successfully set.

● Communication Test

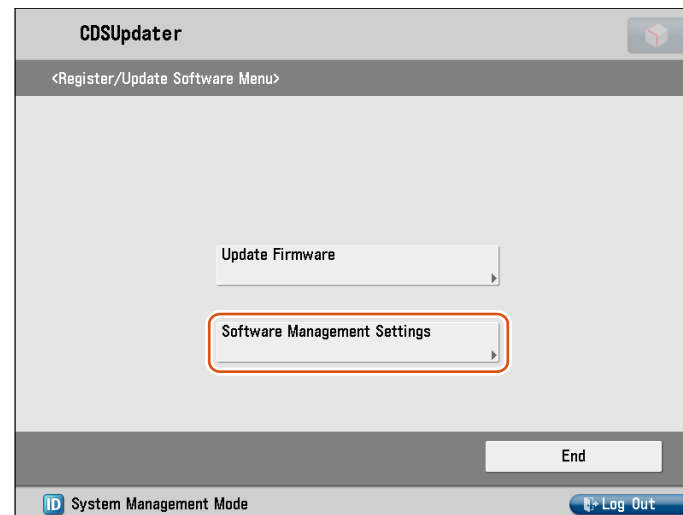
This section describes how to check if the communication is normally done to the distribution server and/or the file server.

1. Start [Service Mode] at Level 1.
 - 1). Press [Setting/Registration (User Mode)] button on the control panel.
 - 2). Press [2] and [8] buttons at a time on the control panel.
 - 3). Press [Setting/Registration (User Mode)] button on the control panel.
 - 4). [Service Mode] screen is shown.
2. Press [Updater] button.



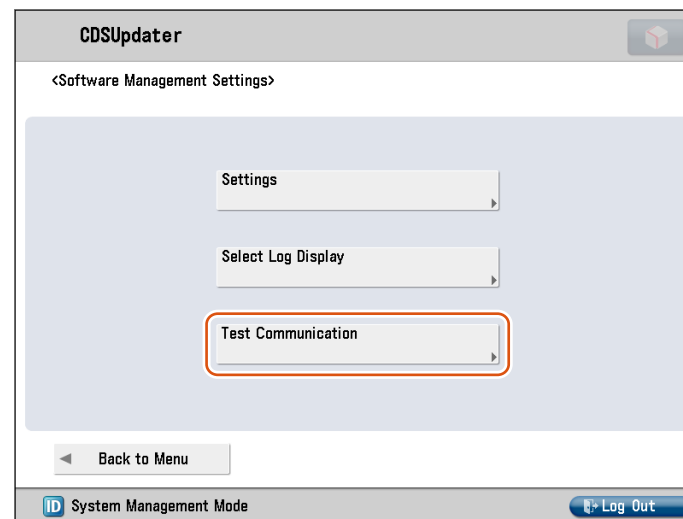
F-2-307

3. Press [Software Management Settings] button.



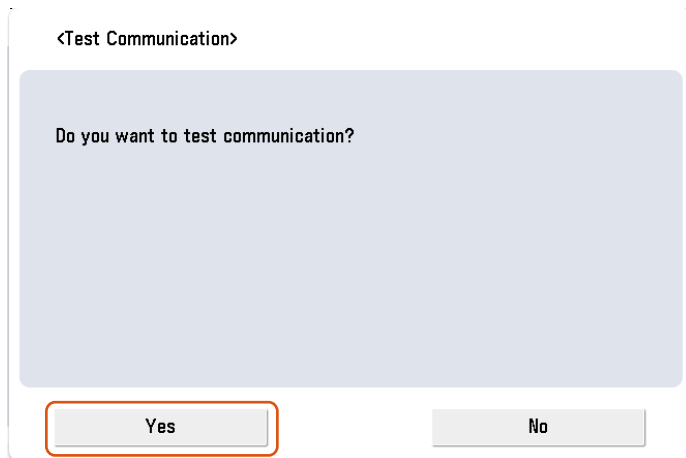
F-2-308

4. Press [Test Communication] button.



F-2-309

5. Press [Yes] button.



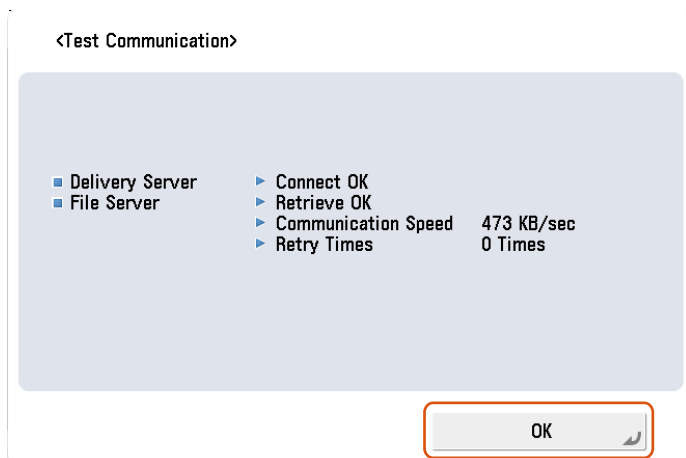
F-2-310

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:

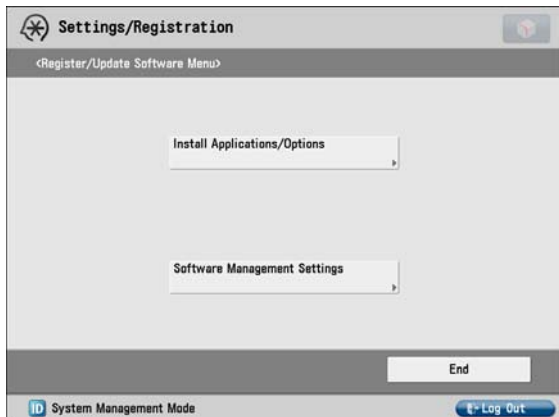
- See “imageWARE Remote Operator’s Manual / e-Maintenance Business Operation Manual” for how to operate UGW WebPortal.
- [Distribute Firmware] should be set on [Customer Management] screen for staff in charge of setting for [Enter customer information] or [Command for firmware distribution] in order 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.

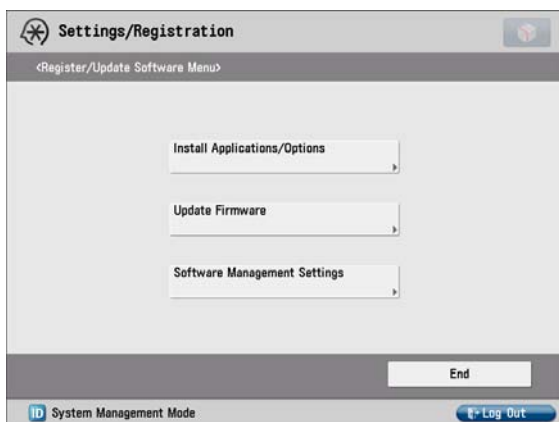
Service Technician	Setting of Device Service Mode (Level 1)	COPIER > OPTION > FNC-SW > CDS-FIRM (0 -> 1)
--------------------	--	--

- User Mode screen for Updater when the setting is not enabled (CDS-FIRM(0)):



F-2-312

- User Mode screen for Updater when the setting is enabled (CDS-FIRM(1)):



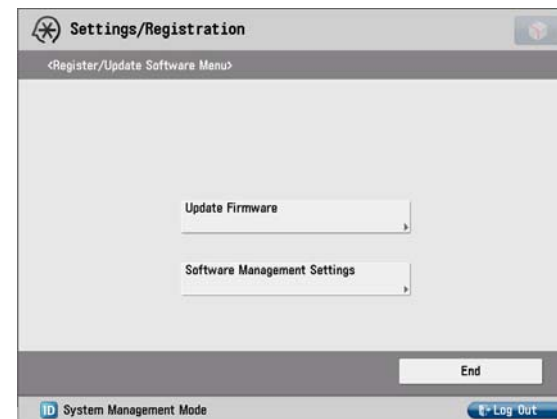
F-2-313

■ 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.

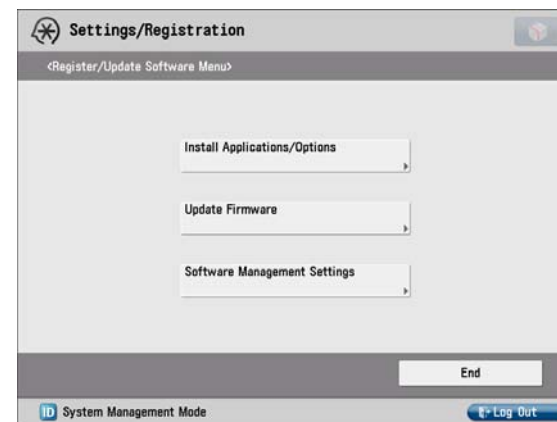
Service Technician	Setting of Device Service Mode (Level 1)	COPIER > OPTION > FNC-SW > CDS-MEAP (0 -> 1)
--------------------	--	--

- User Mode screen of Updater when the setting is not enabled (CDS-MEAP(0)):



F-2-314

- User Mode screen of Updater when the setting is enabled (CDS-MEAP(1)):



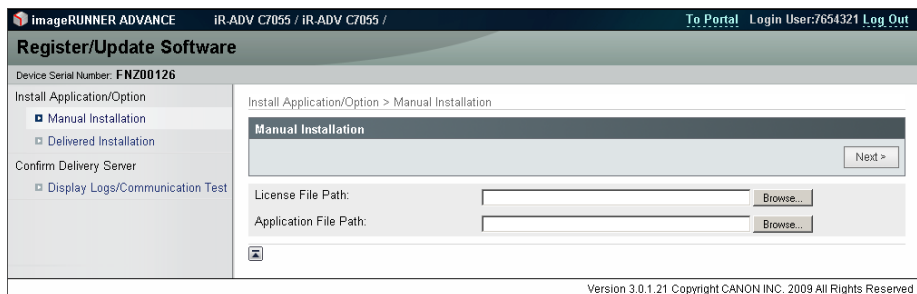
F-2-315

■ 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.

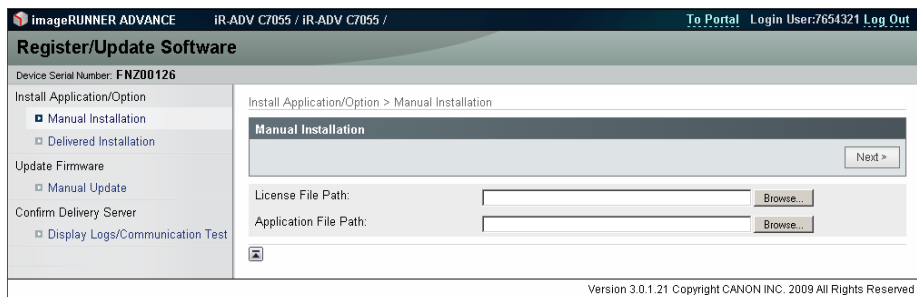
Service Technician	Setting of Device Service Mode (Level 1)	COPIER >OPTION >FNC-SW >LOCLFIRM (0 -> 1)
--------------------	--	---

- Remote UI screen of Updater when the setting is not enabled (LOCLFIRM (0)):



F-2-316

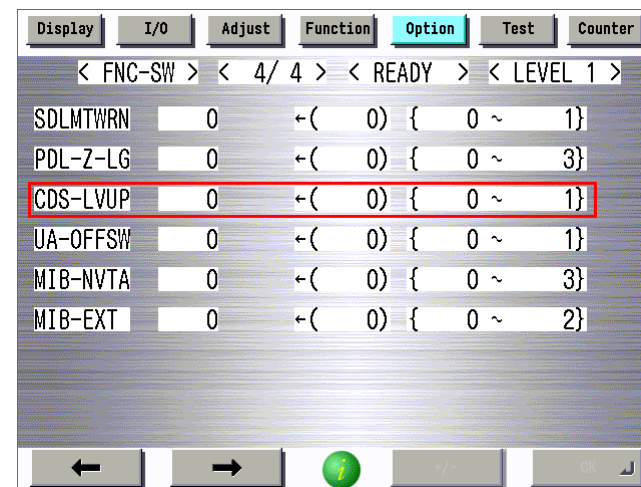
- Remote UI screen of Updater when the setting is enabled (LOCLFIRM (1)):



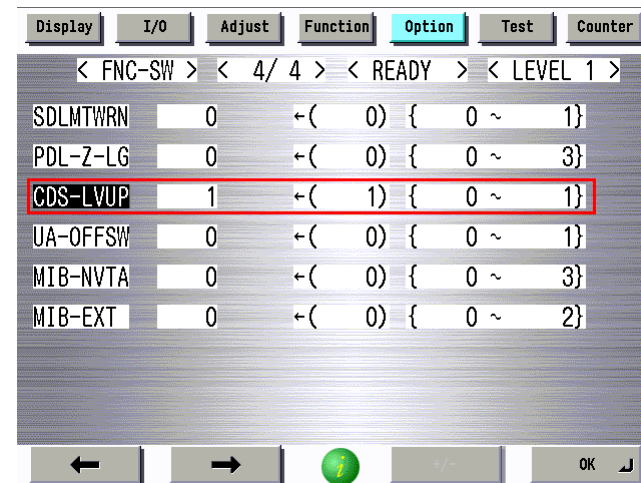
F-2-317

■ Enabling [Scheduled Update] Button of User Mode

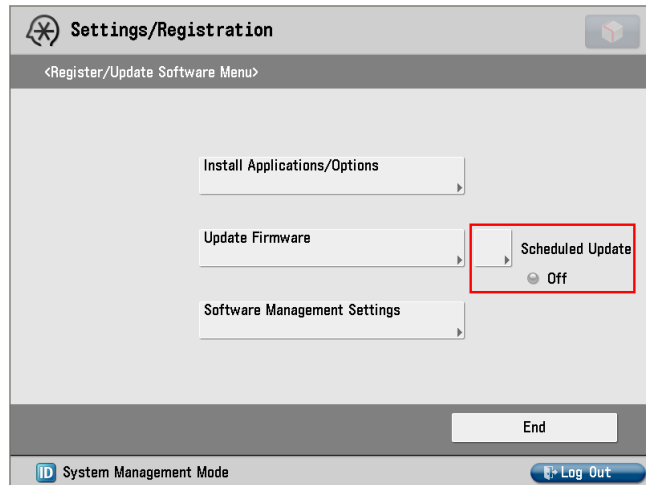
Service Technician	Setting of Device Service Mode (Level 1)	COPIER >OPTION >FNC-SW >CDS-LVUP (0 -> 1)
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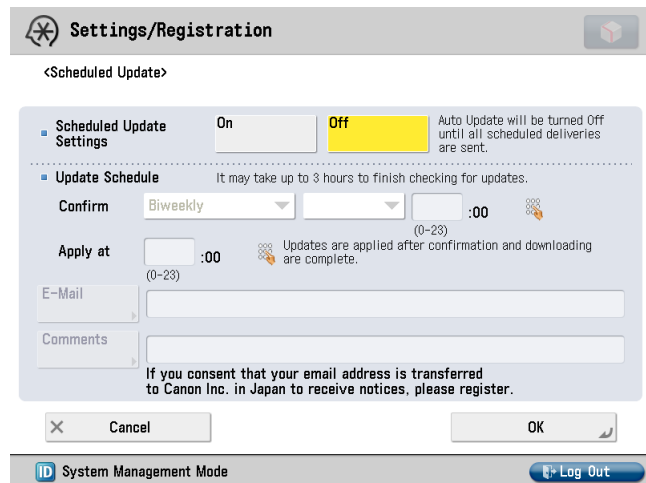
F-2-318



F-2-319



F-2-320



F-2-321

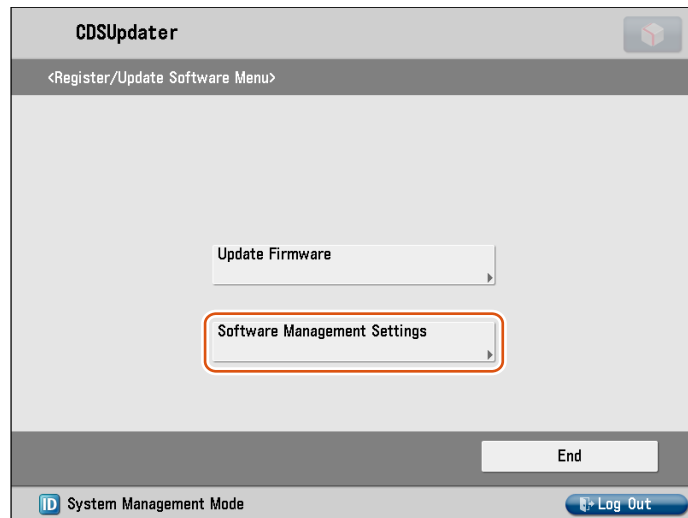
System Management Operations

Various Setting

Setting URL of Distribution Server

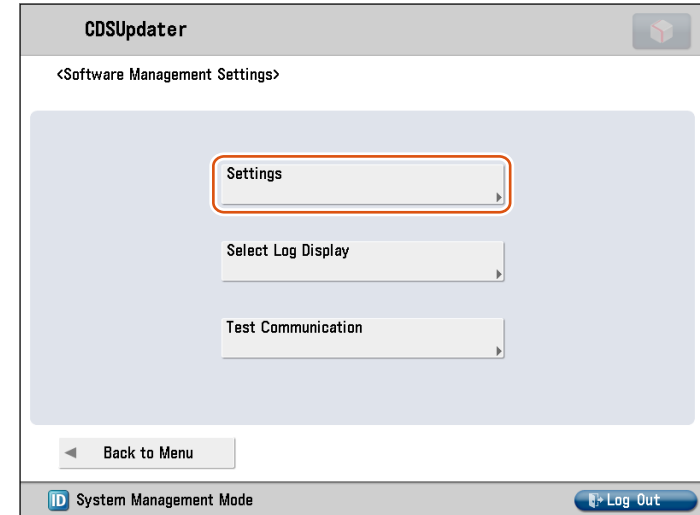
This section describes how to set URL of the distribution server.

1. Start [Service Mode] at Level 1.
 - 1). Press [Setting/Registration (User Mode)] button on the control panel.
 - 2). Press [2] and [8] buttons at a time on the control panel.
 - 3). Press [Setting/Registration (User Mode)] button on the control panel.
 - 4). [Service Mode] screen is shown.
2. Press [Updater] button.
3. Press [Software Management Settings] button.



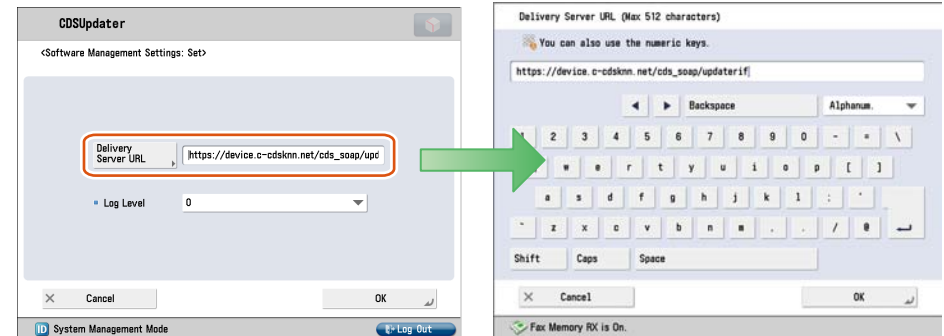
F-2-322

4. Press [Settings] button.



F-2-323

5. Press [Delivery Server URL] to show the virtual keypad. Enter the URL.



F-2-324

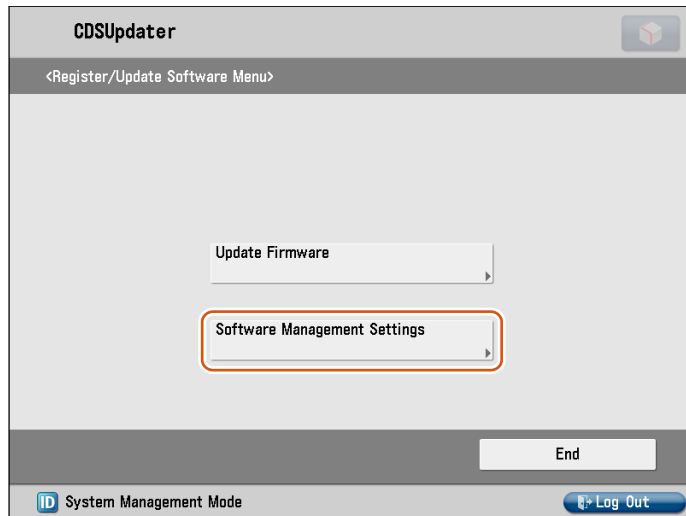
- [Delivery Server URL]:
Enter the "https://device.c-cdsknn.net/cds_soap/updaterif"

6. Press [OK] to set the entered items. Now the URL of the distribution server is successfully set.

● Setting Log Level

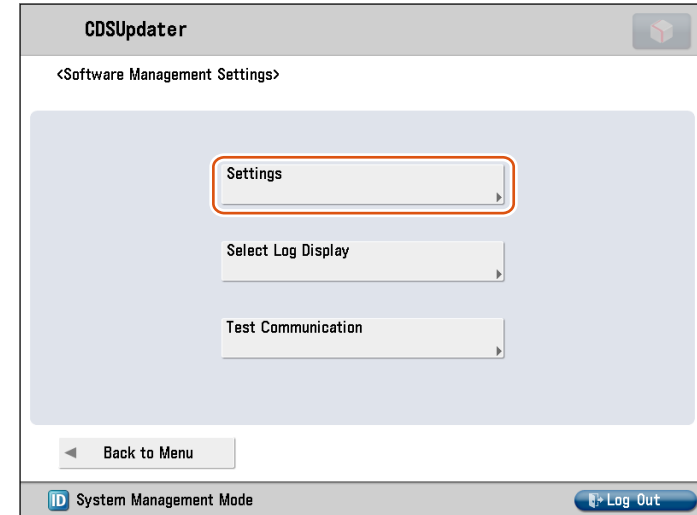
This section describes how to set system log levels.

1. Start [Service Mode] at Level 1.
 - 1). Press [Setting/Registration (User Mode)] button on the control panel.
 - 2). Press [2] and [8] buttons at a time on the control panel.
 - 3). Press [Setting/Registration (User Mode)] button on the control panel.
 - 4). [Service Mode] screen is shown.
2. Press [Updater] button.
3. Press [Software Management Settings] button.



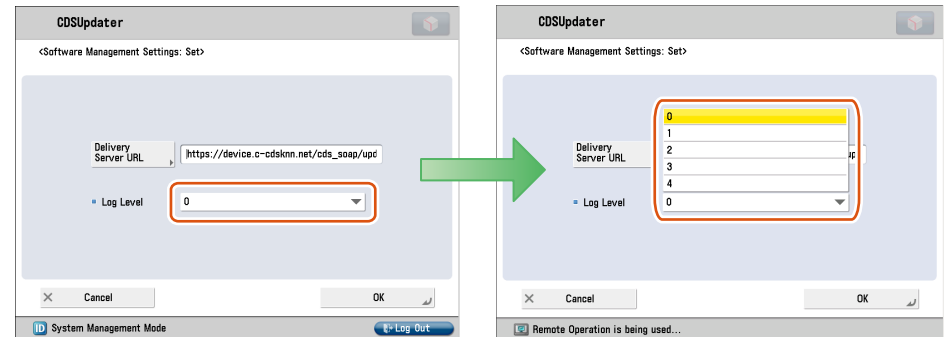
F-2-325

4. Press [Settings] button.



F-2-326

5. Select a log level from [Log Level] dropdown list.



F-2-327

- [Log Level]:
Select one of 5 levels ranging from [0] to [4].
See the table below for log 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

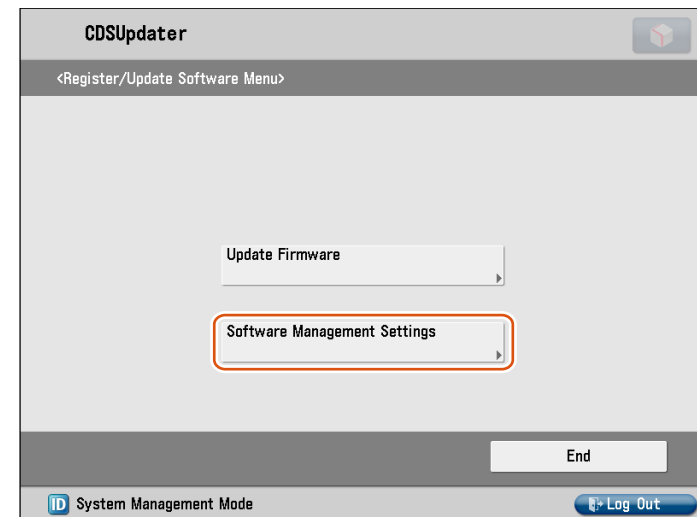
6. Press [OK] button to set the selected log level. Now the log level is successfully set.

■ Displaying Logs

● Update Logs

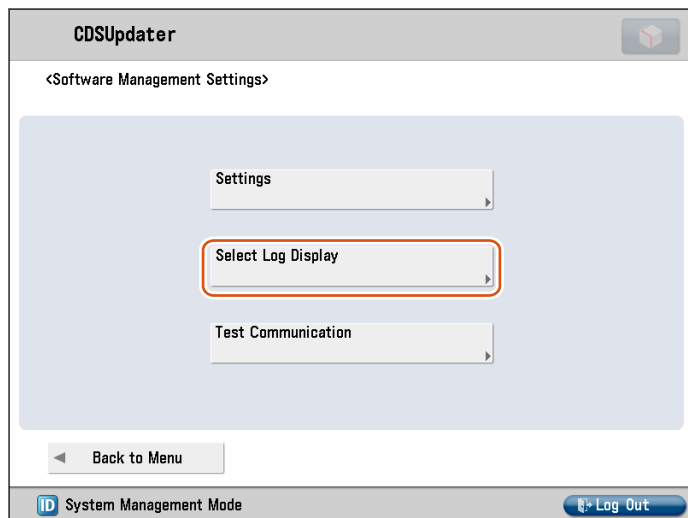
This section describes how to confirm System Option/MEAP Application Installation Logs and Firmware Update Logs.

1. Start [Service Mode] at Level 1.
 - 1). Press [Setting/Registration (User Mode)] button on the control panel.
 - 2). Press [2] and [8] buttons at a time on the control panel.
 - 3). Press [Setting/Registration (User Mode)] button on the control panel.
 - 4). [Service Mode] screen is shown.
2. Press [Updater] button.
3. Press [Software Management Settings] button.



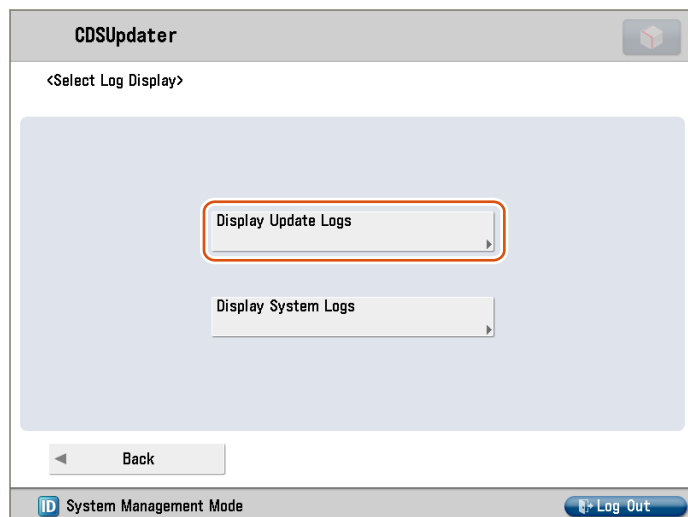
F-2-328

4. Press [Select Log Display] button.



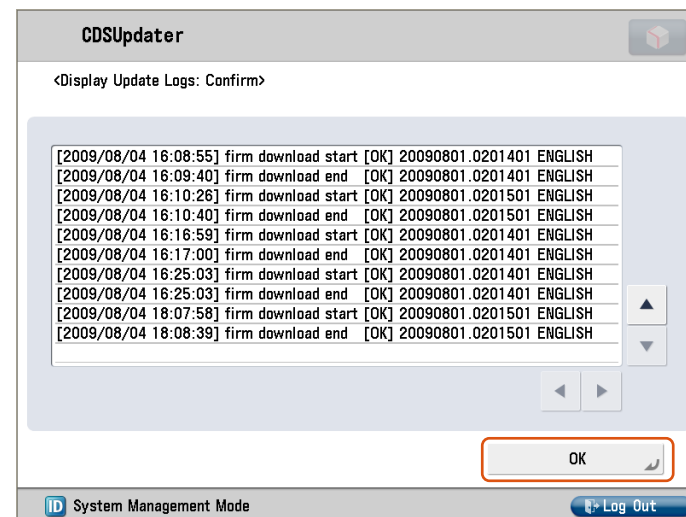
F-2-329

5. Press [Display Update Logs] button.



F-2-330

6. System Option/MEAP Application Installation Logs and Firmware Update Logs are shown.
Press [OK] button to exit this operation.

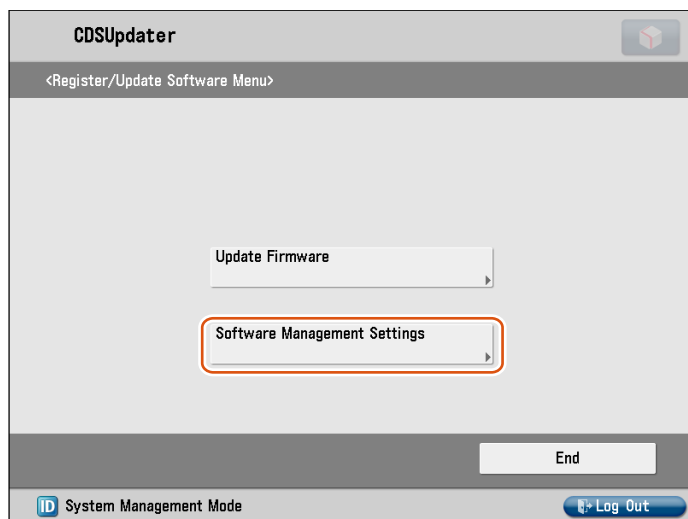


F-2-331

System Logs

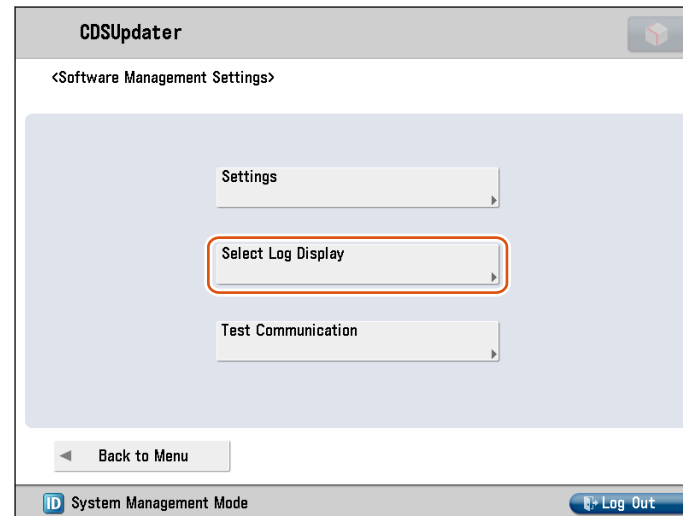
This section describes how to confirm System Logs.

1. Start [Service Mode] at Level 1.
 - 1). Press [Setting/Registration (User Mode)] button on the control panel.
 - 2). Press [2] and [8] buttons at a time on the control panel.
 - 3). Press [Setting/Registration (User Mode)] button on the control panel.
 - 4). [Service Mode] screen is shown.
2. Press [Updater] button.
3. Press [Software Management Settings] button.



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4. Press [Select Log Display] button.



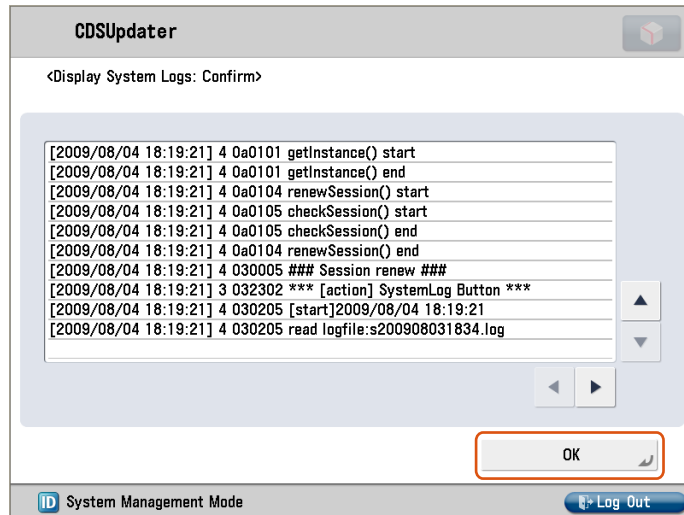
F-2-333

5. Press [Display System Logs] button.



F-2-334

6. Updater internal logs are displayed.
Press [OK] button to exit this operation.



F-2-335

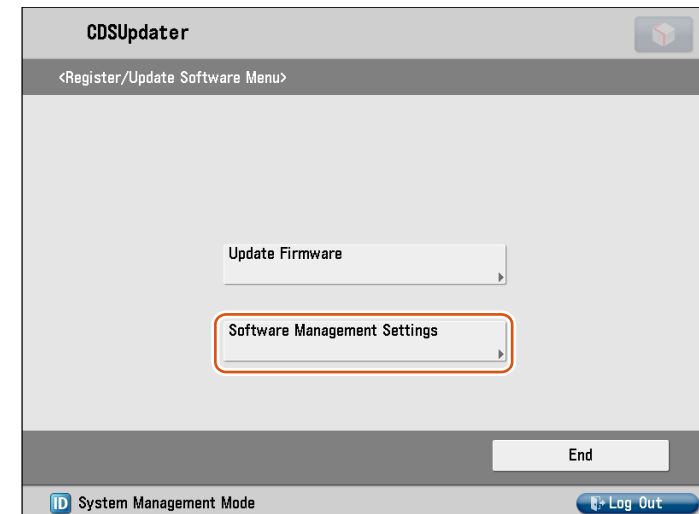
NOTE:

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

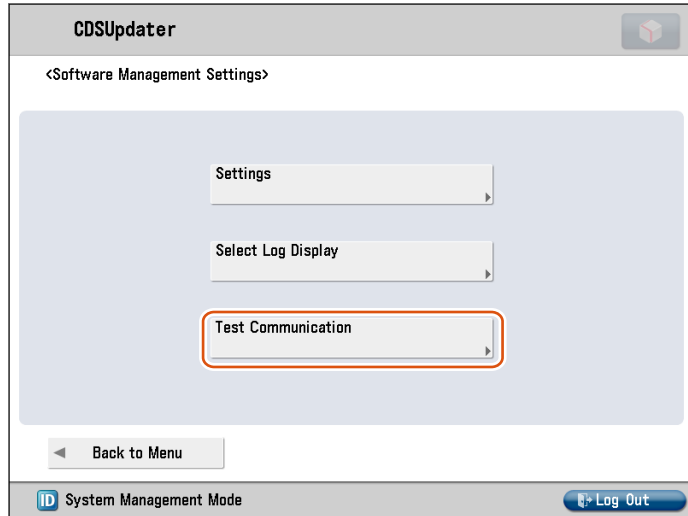
This section describes how to check if the communication is normally done to the distribution server and/or the file server.

1. Start [Service Mode] at Level 1.
 - 1). Press [Setting/Registration (User Mode)] button on the control panel.
 - 2). Press [2] and [8] buttons at a time on the control panel.
 - 3). Press [Setting/Registration (User Mode)] button on the control panel.
 - 4). [Service Mode] screen is shown.
2. Press [Updater] button.
3. Press [Software Management Settings] button.



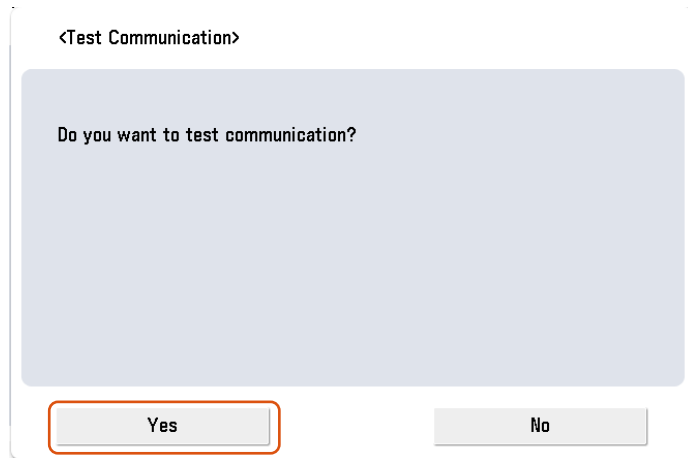
F-2-336

4. Press [Test Communication] button.



F-2-337

5. Press [Yes] button.

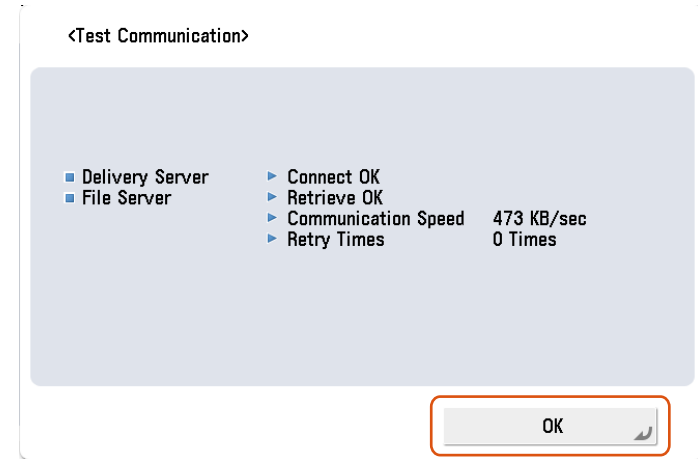


F-2-338

Obtain the download file information for communication test from the distribution server (to execute the communication test to the distribution server).

Using the download file information for communication test, the contents for test are downloaded from the file server (for the communication test to the file server).

6. Upon the communication test completed, the communication test result screen is shown. Press [OK] button to exit this operation.



F-2-339

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

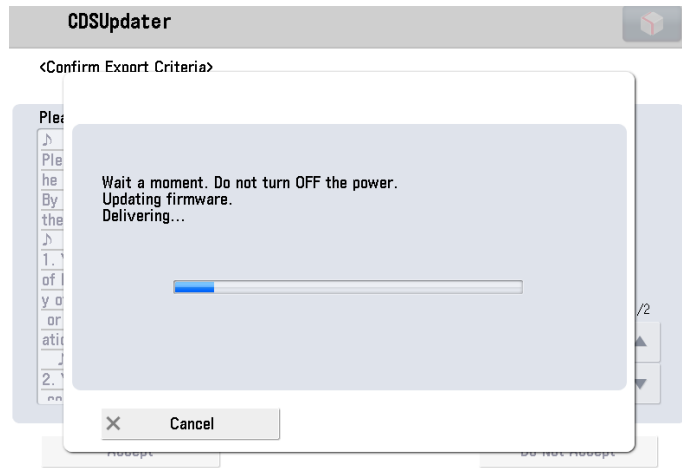
Q: If the device is down during firmware download, is it possible to download the firmware again?

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 Installing MEAP Application/System Option

No.1

Q: What happens if a MEAP application is installed in the system with insufficient HDD free space?

A: An error message is shown. Upon starting installation, the MEAP application checks the required space against free space to judge installation availability.

No.2

Q: Can we cancel the operation during installation of MEAP application?

A: Yes. [Cancel] button is shown.

No.3

Q: Is the device automatically restarted after the system option is enabled?

A: The device is not automatically restarted. Users should restart the device manually.

FAQ on General Matters of Updater

No.1

Q: What preparation is needed in each installation method?

A: See the table below for preparation required in each installation method.

- For updating firmware

Installation Method	Setting Sales Company's HQ	Network Settings	Enabling UGW Link	Enabling [Update Firmware] Button of User Mode	Enabling [Manual Update] Button of User Mode (Remote UI)	Periodical update validation
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	-
Periodical update	Yes	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)
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No.3

Q: Can the communication be cancelled during the communication test?

A: Yes. During the communication test, "Cancel" button is displayed.



Periodical Service

- Consumable Parts and Cleaning Parts

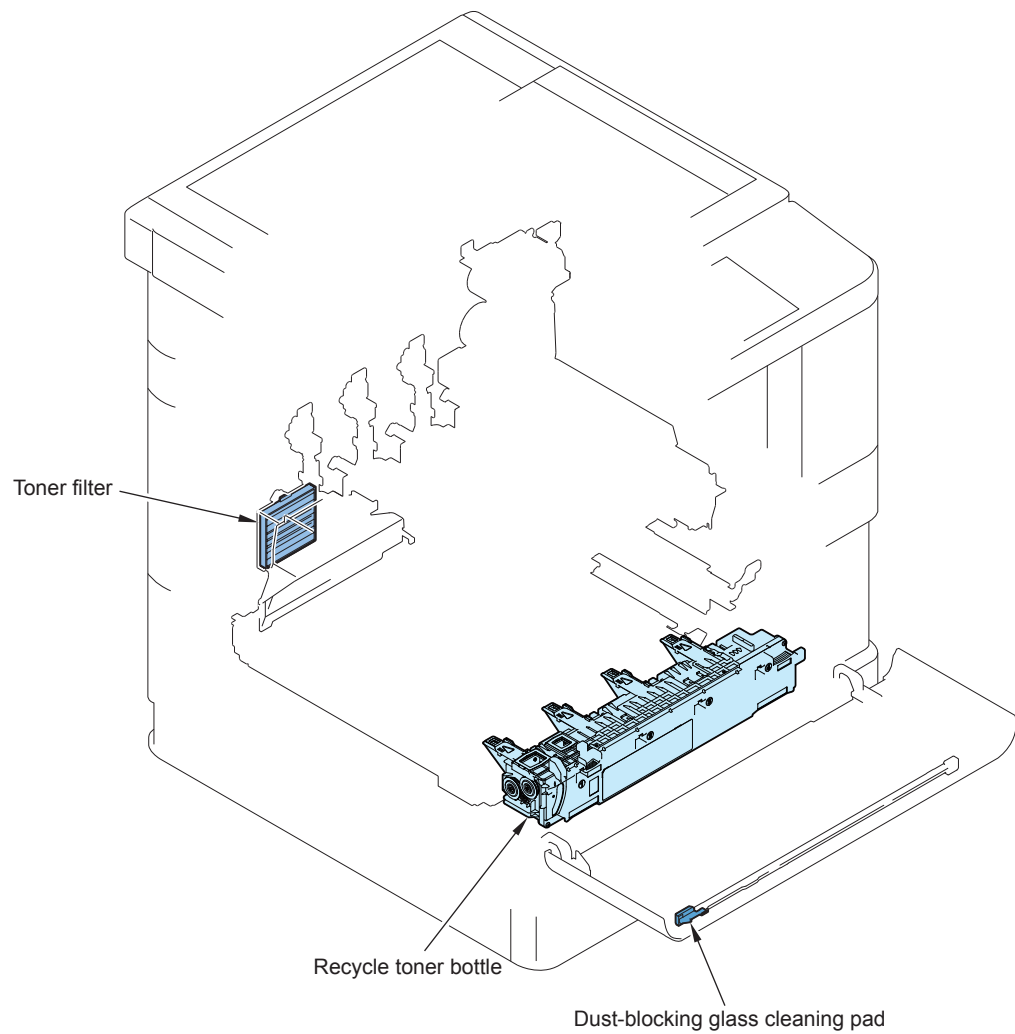
Consumable Parts, Replacement Parts, and Cleaning Parts

●: Replacement Δ: Cleaning ■: Inspection

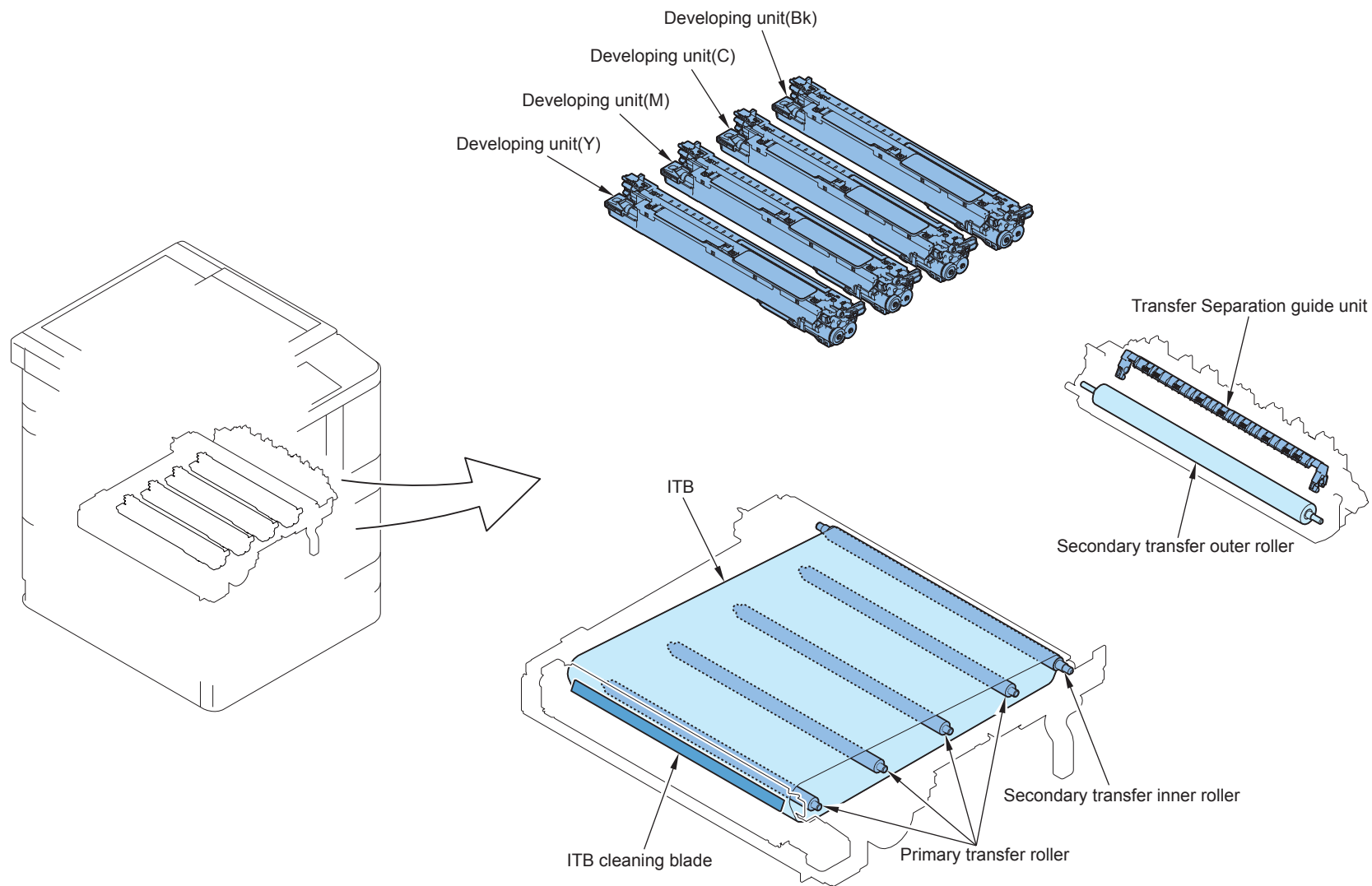
No.	Category	Part Name	Part No	Number	Interval						Counter	Adjustment (Yes/No)	Remark	Reference					
					At installation	20K	50K	100K	120K	150K					300K	500K			
1	Body	Dust-blocking glass	-	1		Δ						-	Cleaning with Dust-blocking glass Cleaning tool						
2		Dust-blocking glass cleaning pad		1						●	-	-	-	Replacing when replace ITB cleaning blade					
3	Process Unit	Developing unit (Y)	FM3-5926	1							●	DRBL-1	DV-UNT-Y	-	For C5051 / C5045				
4		Developing unit (M)	FM3-5941	1								●	DRBL-1	DV-UNT-M	-	For C5051 / C5045			
5		Developing unit (C)	FM3-5942	1								●	DRBL-1	DV-UNT-C	-	For C5051 / C5045			
6		Developing unit (Bk)	FM3-5943	1								●	DRBL-1	DV-UNT-K	-	For C5051 / C5045			
7		Developing unit (Y)	FM3-5973	1								●	DRBL-1	DV-UNT-Y	-	For C5035 / C5030			
8		Developing unit (M)	FM3-5974	1								●	DRBL-1	DV-UNT-M	-	For C5035 / C5030			
9		Developing unit (C)	FM3-5967	1								●	DRBL-1	DV-UNT-C	-	For C5035 / C5030			
10		Developing unit (Bk)	FM3-5968	1								●	DRBL-1	DV-UNT-K	-	For C5035 / C5030			
11	Image Formation System	Primary transfer roller (Color)	FC8-4401	3								●	DRBL-1	TR-ROLC	-				
12		Primary transfer roller (Bk)	FC8-4401	1									●	DRBL-1	TR-ROLK	-			
13		Secondary transfer inner roller	FC8-4402	1									●	-	-	-	Replacing when replace secondary transfer outer roller		
14		Secondary transfer outer roller	FC8-4402	1									●	DRBL-1	2TR-ROLL	-			
15		Transfer separation guide unit	FM3-8893	1									●	DRBL-1	T/S-UNIT	-			
16		ITB (intermediary transfer belt)	FC8-4400	1									●	DRBL-1	TR-BLT	-			
17		Patch sensor	FK2-7316	1			■									-	Cleaning when replace intermediary transfer belt (ITB) Clean with lint-free paper moistened with water 3 times in one direction		
18		ITB cleaning blade	FM3-6018	1										●	DRBL-1	T-CLN-BD	-		
19	Fixing System	Film unit (100V)	FM3-5949	1									●	DRBL-1	FX-UP-FR	-	For 100V		
20		Film unit (120V)	FM3-5950	1										●	DRBL-1	FX-UP-FR	-	For 120V	
21		Film unit (230V)	FM3-5951	1										●	DRBL-1	FX-UP-FR	-	For 230V	
22		Pressure roller	FC8-4906	1										●	DRBL-1	FX-LW-RL	-		
23		Fixing bearing	XG9-0172	2										●	PRDC-1	FX-LW-BR	-		
24		Shutter cover	FC8-5046	1										Δ				Cleaning when replace Film Unit	
25		Fixing separation guide	FC8-5043	1										Δ				Cleaning when replace Film Unit	

No.	Category	Part Name	Part No	Number	Interval						Counter		Adjustment (Yes/No)	Remark	Reference
					At installation	20K	50K	100K	120K	150K					
26	Pickup/ Feeding System	Cassette 1 feeding roller	FC6-7083	1				●			DRBL-1	C1-FD-RL	-		
27		Cassette 2 feeding roller	FC6-7083	1				●			DRBL-1	C2-FD-RL	-		
28		Cassette 1 separation roller	FC6-6661	1				●			DRBL-1	C1-SP-RL	-		
29		Cassette 2 separation roller	FC6-6661	1				●			DRBL-1	C2-SP-RL	-		
30		Multi-Purpose Tray Feed Roller	FB1-8581	1				●			DRBL-1	M-PU-RL	-		
31		Multi-Purpose Tray Separation Roller	FC6-6661	1				●			DRBL-1	M-SP-RL	-		
32		Pickup assembly idler gear	FU3-0280	2				●			-	-	-	For Chinese model only. Replacing when replace feeding roller and separation roller.	
33		First delivery roller	-	1		Δ					-	-	-	If necessary cleaning with alcohol	
34		Second delivery roller	-	1		Δ					-	-	-	If necessary cleaning with alcohol	
35		Third delivery roller	-	1		Δ					-	-	-	If necessary cleaning with alcohol	
36		Registration roller	-	1		Δ					-	-	-	If necessary cleaning with alcohol	
37		Pre-registration guide	-	1		Δ					-	-	-	If necessary cleaning with lint-free paper	
38		Transparency sensor	RH7-7129	1		Δ					-	-	-	Cleaning with lint-free paper	
39		Fixing delivery guide	-	1		Δ					-	-	-	If necessary cleaning with lint-free paper	
40		Post-fixing roller	-	1		■					-	-	-	If necessary cleaning with alcohol	
41		Fixing delivery roller	-	1		■					-	-	-	If necessary cleaning with alcohol	
42		Duplex feed upper roller	-	1		■					-	-	-	If necessary cleaning with alcohol	
43		Duplex feed lower roller	-	1		■					-	-	-	If necessary cleaning with alcohol	
44		Secondary transfer guide	-	1		Δ					-	-	-	Cleaning with lint-free paper	
45		Feeding contact guide	-	1		Δ					-	-	-	Cleaning with lint-free paper	
46		Vertical path sensor	FK2-6470	1		Δ								Cleaning with lint-free paper	
47		Lightproof Sheet	-	1		Δ								Cleaning with lint-free paper	
48		Filter	Toner filter	FC6-9817	1				●			DRBL-1	TN-FIL1	-	
49	-	Recycle toner container	FM3-5945	1		●					DRBL-1	WSR-TNR	-	User maintenance. Reference in A4 size, image ratio 5%	

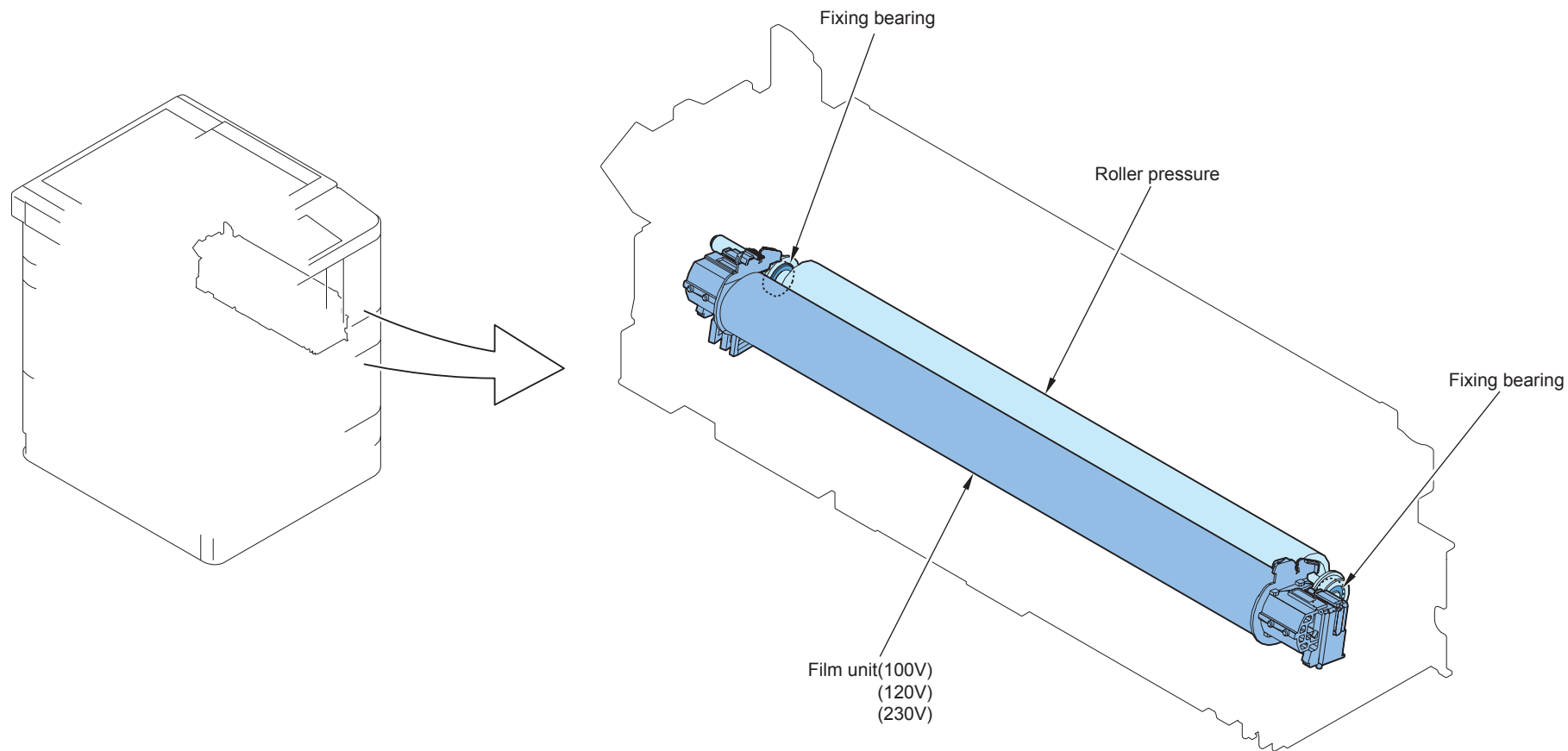
T-3-1



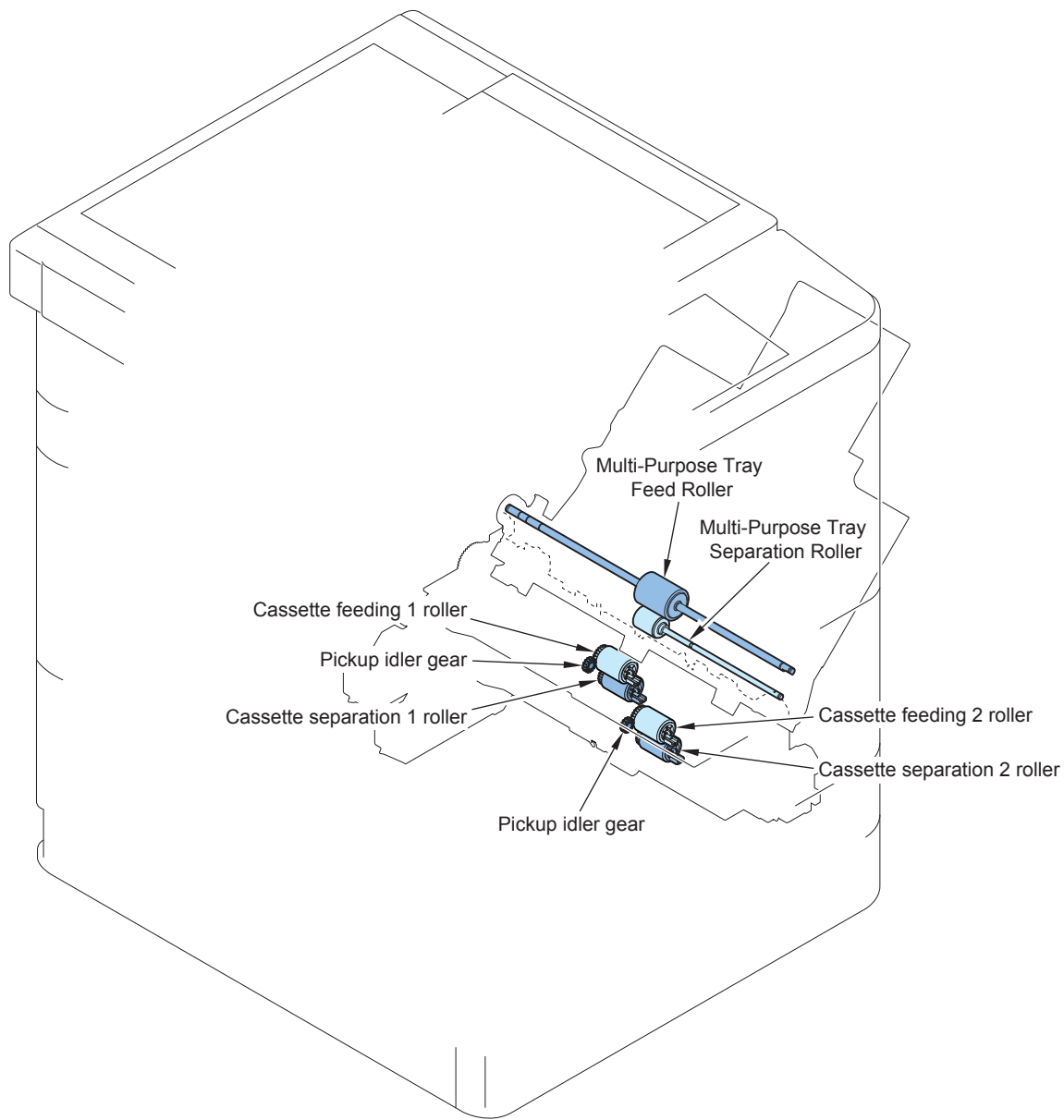
F-3-1



F-3-2

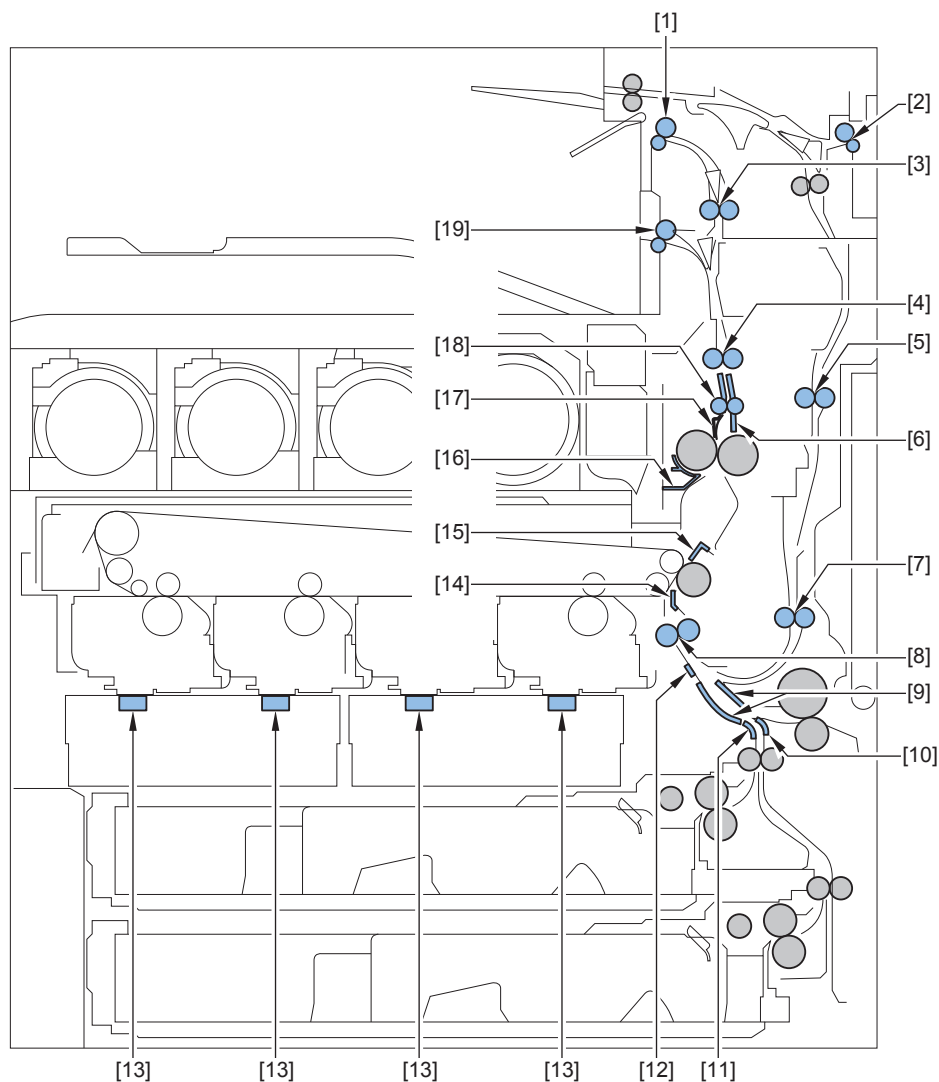


F-3-3



F-3-4

Cleaning Parts



- [1] Second Delivery Roller
- [2] Third Delivery Roller
- [3] Second/Third Delivery Inlet Roller
- [4] Fixing Inner Delivery Roller
- [5] Duplex Feed Upper Roller
- [6] Fixing Delivery Guide Assembly
- [7] Duplex Feed Lower Roller
- [8] Registration Roller
- [9] Pre-registration Guide Assembly
- [10] Lightproof Sheet
- [11] Vertical path sensor
- [12] Transparency Sensor
- [13] Dust-blocking Glass
- [14] Secondary Transfer Guide Assembly
- [15] Feed Contact Point Guide Assembly
- [16] Shutter cover
- [17] Fixing separation guide
- [18] Post-Fixing Roller
- [19] First Delivery Roller

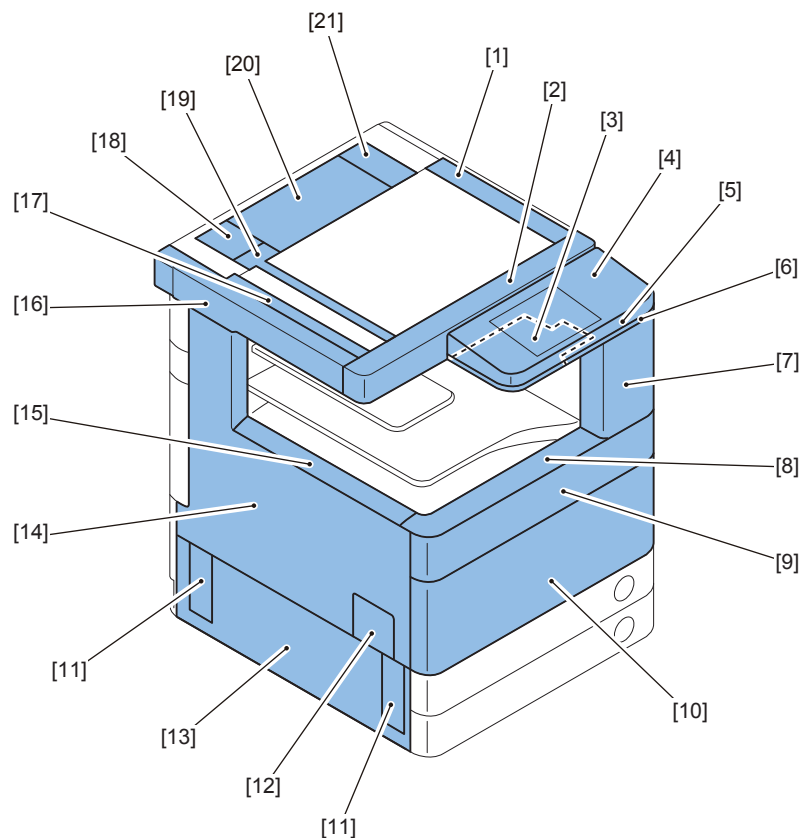
4

Parts Replacement and Cleaning

- Main Controller
- Laser Exposure System
- Image Formation System
- Fixing System
- Pickup Feed System
- Option

List of Parts

List of Cover

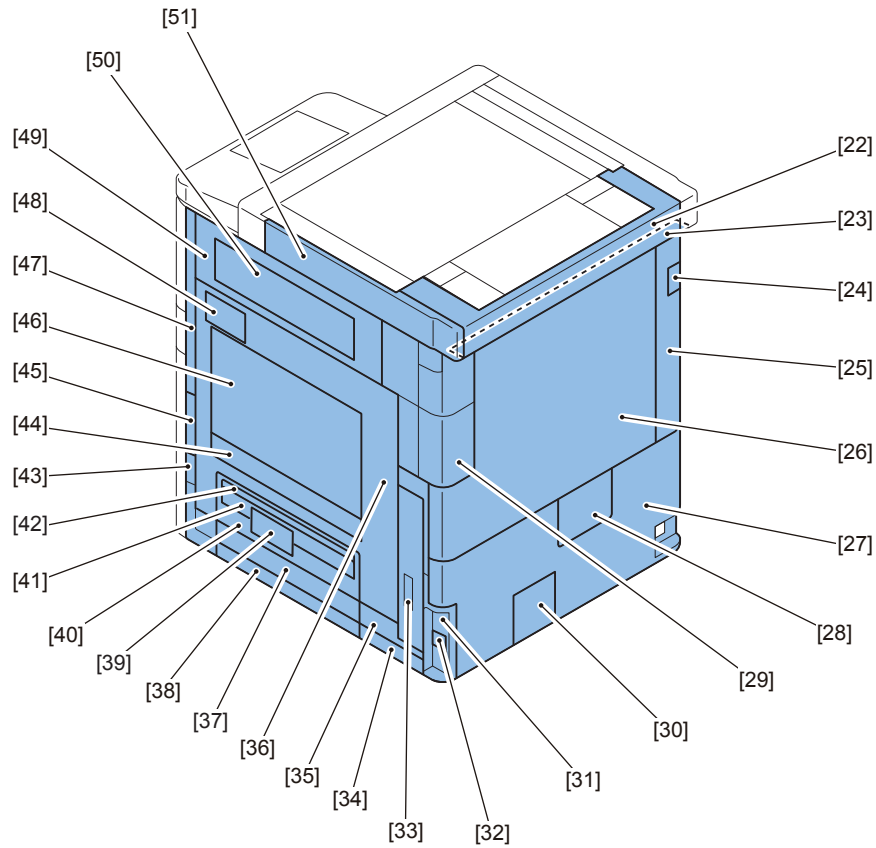


F-4-1

No.	Name	Service Parts No.	Reference
1	Reader right retaining cover	FL2-9815	
2	Reader front cover	FC8-6095 / 6074*	
3	Control panel under cover	FC8-7842	
4	Control panel upper cover	FC8-7818	
5	Control panel side cover 1	FC8-7819	
6	Control panel side cover 2	FC8-7820	
7	Front right cover	FM3-6104	
8	Front upper cover	FM3-6096	
9	Toner replacement cover	FC8-4111	
10	Front cover	FC8-4123	
11	Left grip cover	FC8-4143	
12	Left duct cover	FC8-4140	
13	Left lower cover	FC8-4138	
14	Left upper cover	FC8-4139	
15	Inner bottom cover	FC8-4149	
16	Reader left cover	FC8-6098 / 6077*	
17	Reader left retaining cover	-	
18	DF base left cover	FC8-6115	
19	Jamp base cover	FC8-6120	
20	Reader cable cover	-	
21	DF base right cover	FC8-6114	

T-4-1

* Duplex Color Image Reader Unit-B1 / Color Image Reader Unit-B1

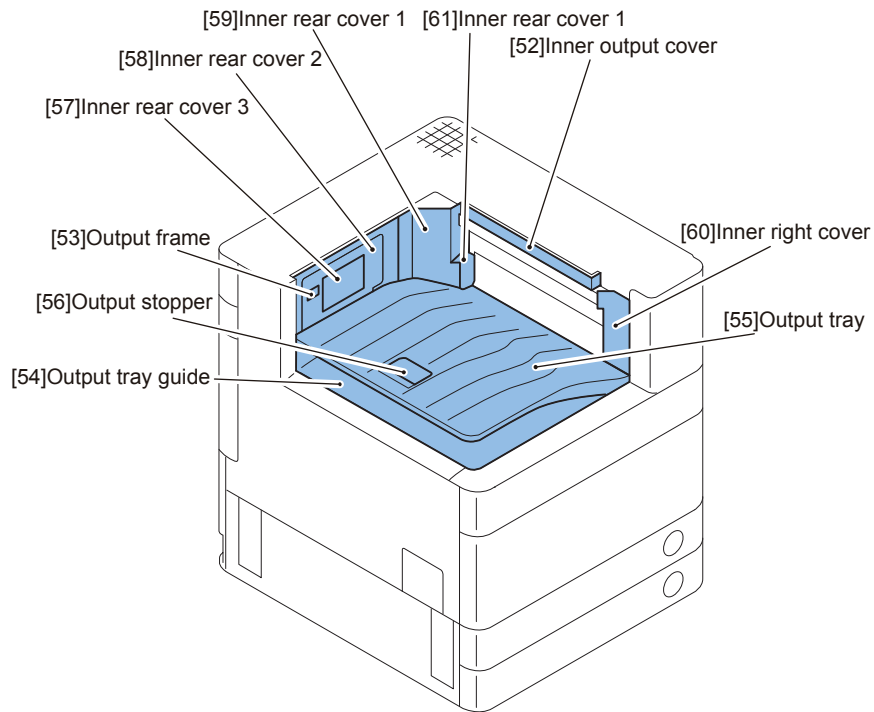


F-4-2

No.	Name	Service Parts No.	Reference
22	Reader rear cover	FL2-9826 / 9827*	
23	Reader rear under cover	FC8-6099 / 6085*	
24	Left rear sub cover	FC8-4142	
25	Left rear cover	FL3-3167	
26	Rear cover	FL3-3166	
27	Rear lower cover	FM3-6105	
28	Filter cover	FC8-4130	
29	Right rear cover 1	FC8-5377	
30	Conector cover	FC8-5200	
31	Right rear cover 2	FC8-4131	
32	Heater switch cover	FC8-4137	
33	Right rear cover 3	FC8-4135	
34	Right lower sub cover 2	FC8-5298	
35	Right lower sub cover 3	FC8-5335	
36	Right lower cover	FC8-4875	
37	casset right upper sub cover 2	-	
38	Right lower sub cover 1	FC8-4922	
39	Casset grip	-	
40	casset right upper cover 2	-	
41	casset right upper sub cover 1	FC8-4861	
42	casset right upper sub cover 3	-	
43	Right front cover 3	FC8-4134	
44	Stack bypass tray sub cover	FC8-5105	
45	Right front cover 2	FC8-4921	
46	Stack bypass tray	FC8-5100	
47	Right front cover 1	FC8-4153	
48	Grip	FC8-4835	
49	Right output frame cover	-	
50	Right upper cover	FL3-1186	
51	Reader right cover	FL2-9818 / 9817*	

T-4-2

* Duplex Color Image Reader Unit-B1 / Color Image Reader Unit-B1



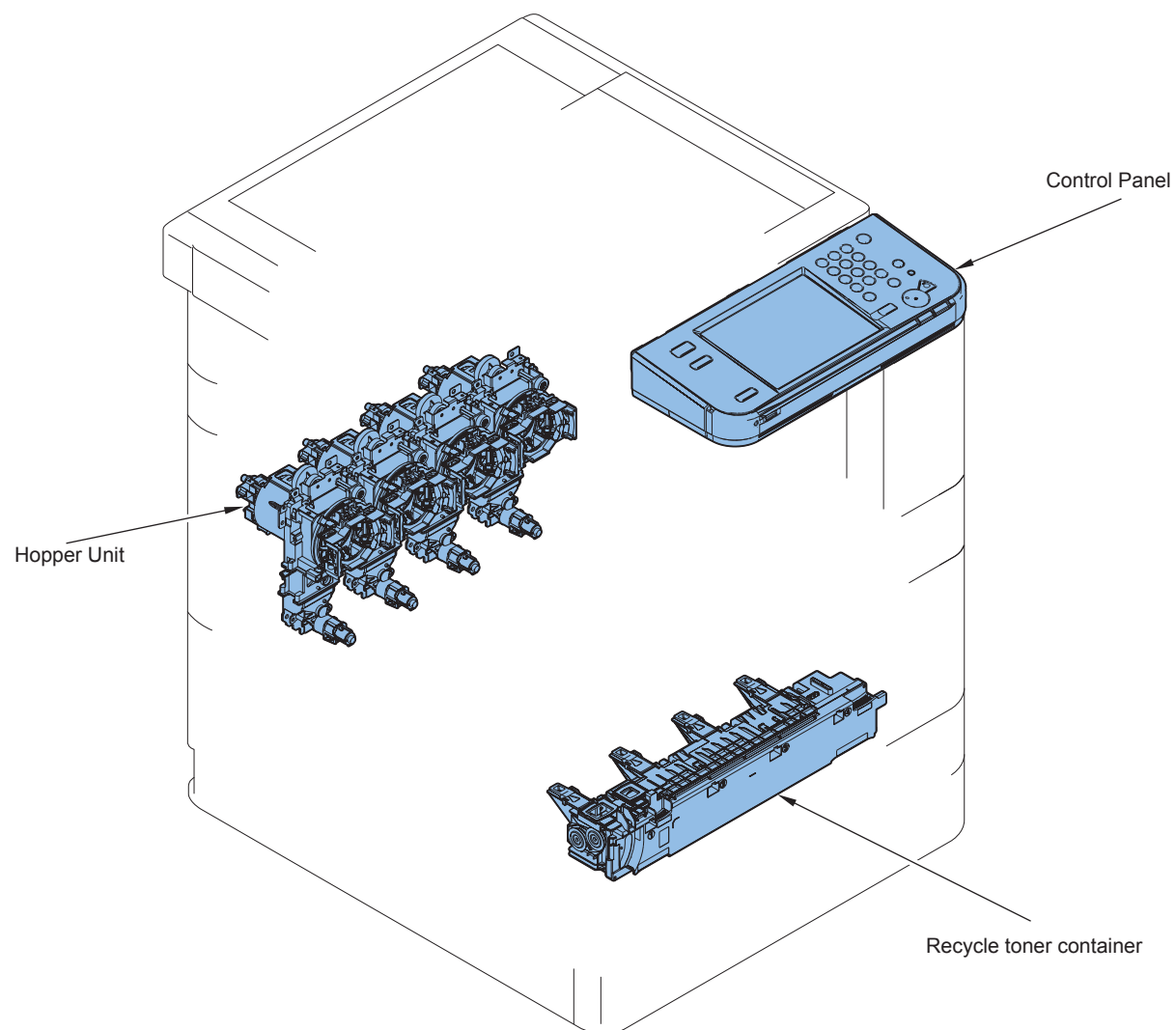
F-4-3

No.	Name	Service Parts No.	Reference
[52]	Inner output cover	-	
[53]	Output frame	FC8-5363	
[54]	Output tray guide	-	
[55]	Output tray	FC8-4144	
[56]	Output stopper	FC8-4766	
[57]	Inner rear cover 3	FC8-4917	
[58]	Inner rear cover 2	FC8-4145	
[59]	Inner rear cover 1	FC8-4915	
[60]	Inner right cover	-	
[61]	Inner output sensor cover	FC8-4916	

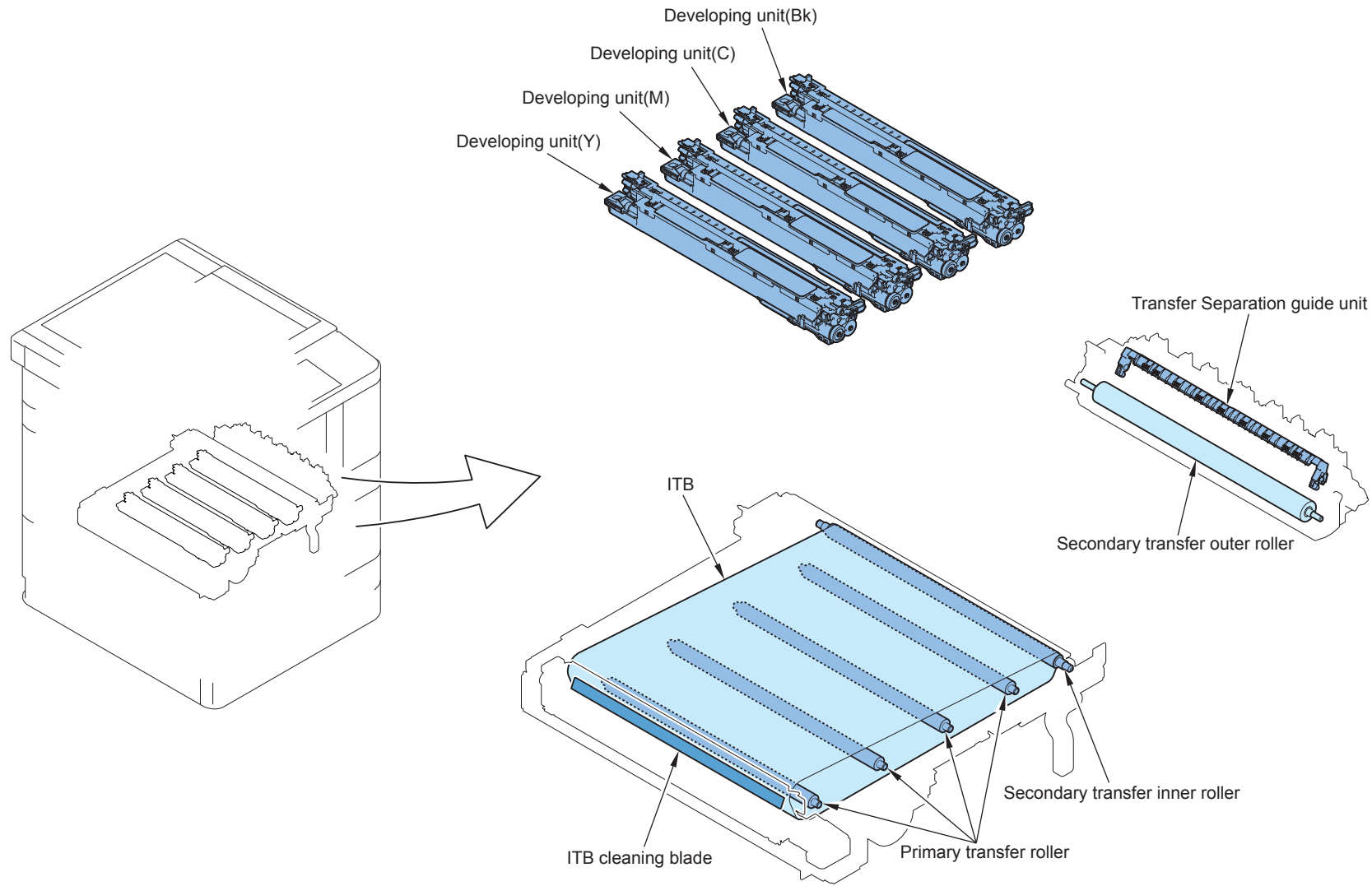
T-4-3

List of Main Unit

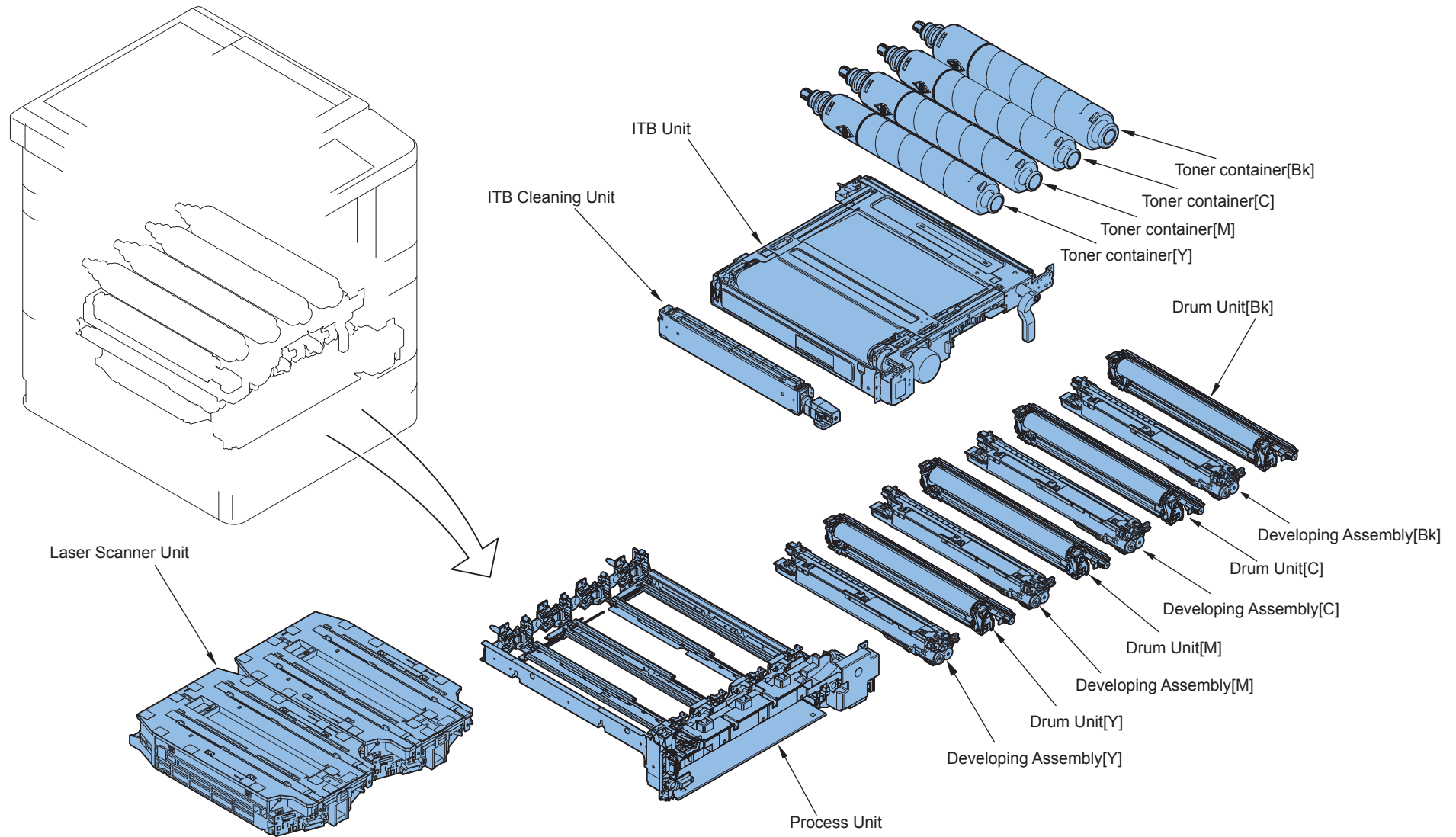
Unit Layout



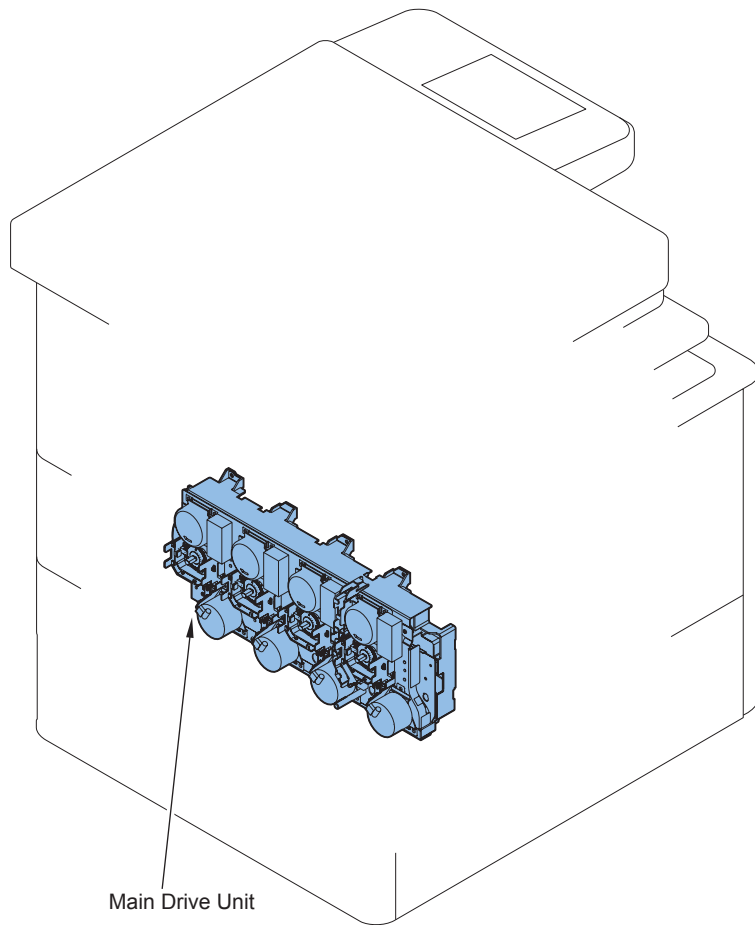
F-4-4



F-4-5



F-4-6

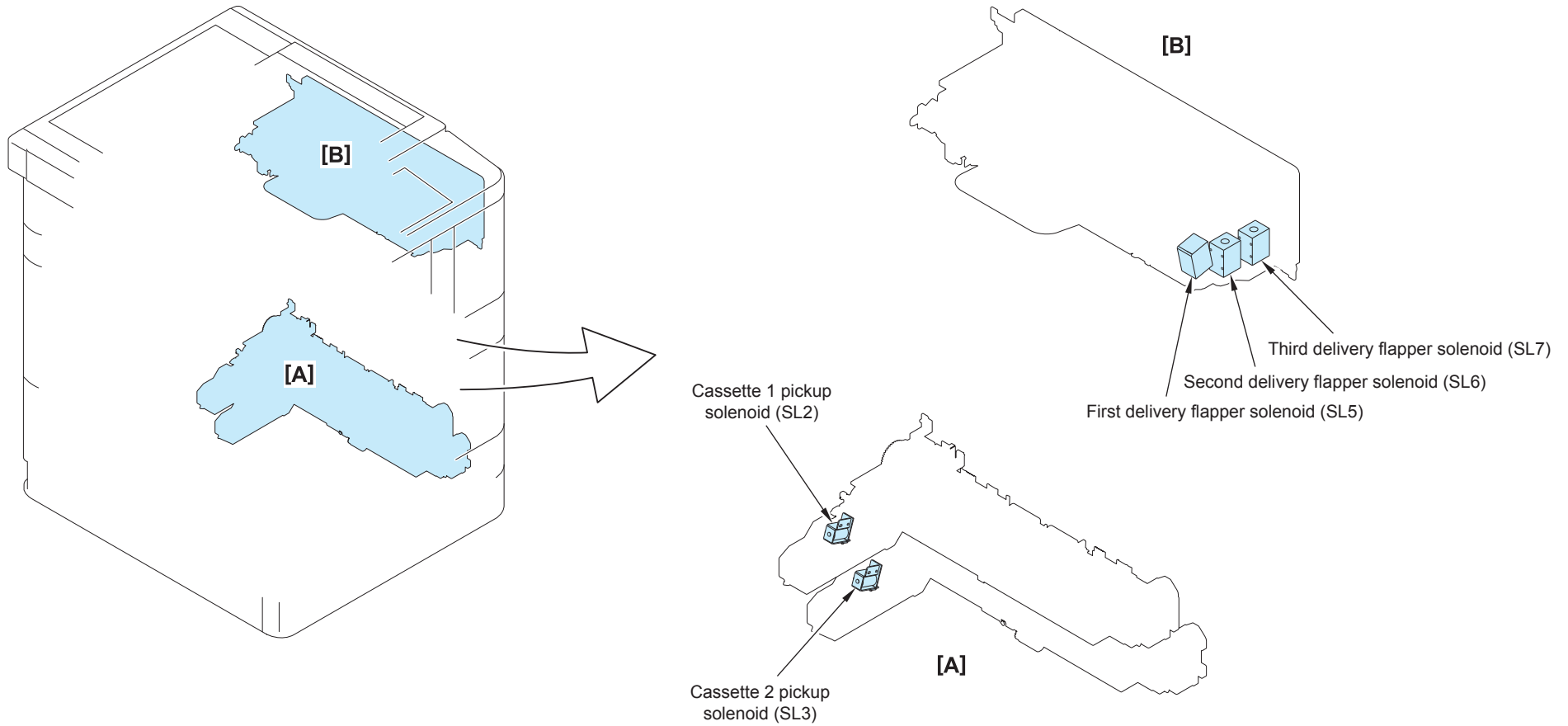


F-4-7

No.	Name	Service Parts No.	Reference
[1]	Control Panel	FM3-7992	
[2]	Recycle toner container	FM3-5945	
[3]	Hopper Unit	NPN	
[4]	Toner container(Y)	NPN	
[5]	Toner container(M)	NPN	
[6]	Toner container(C)	NPN	
[7]	Toner container(Bk)	NPN	
[8]	ITB Unit	NPN	
[9]	ITB Cleaning Unit	FM3-5932	
[10]	Drum Unit (Y)		
[11]	Drum Unit (M)		
[12]	Drum Unit (C)		
[13]	Drum Unit (Bk)		
[14]	Developing Assembly (Y) (C5051/C5045)	FM3-8977	
[15]	Developing Assembly (M) (C5051/C5045)	FM3-8978	
[16]	Developing Assembly (C) (C5051/C5045)	FM3-8979	
[17]	Developing Assembly (Bk) (C5051/C5045)	FM3-8939	
[18]	Developing Assembly (Y) (C5035/C5030)	FM3-8973	
[19]	Developing Assembly (M) (C5035/C5030)	FM3-8974	
[20]	Developing Assembly (C) (C5035/C5030)	FM3-8975	
[21]	Developing Assembly (Bk) (C5035/C5030)	FM3-8976	
[22]	Process Unit	NPN	
[23]	Laser Scanner Unit (C5051/C5045)	FM3-5420	
[24]	Laser Scanner Unit (C5035/C5030)	FM3-5425	
[25]	Second and Third Delivery Unit	FM3-5999	
[26]	Multi-purpose Delivery Unit	FM3-6013	
[27]	First Delivery Unit	FM3-5977	
[28]	Right Door Unit	FM3-6006	
[29]	Fixing Assembly	NPN	
[30]	Cassette 1 Pickup Unit	FM3-5935	
[31]	Cassette 2 Pickup Unit	FM3-9230	
[32]	Cassette 1	NPN	
[33]	Cassette 2	NPN	
[34]	Main Drive Unit	NPN	

T-4-4

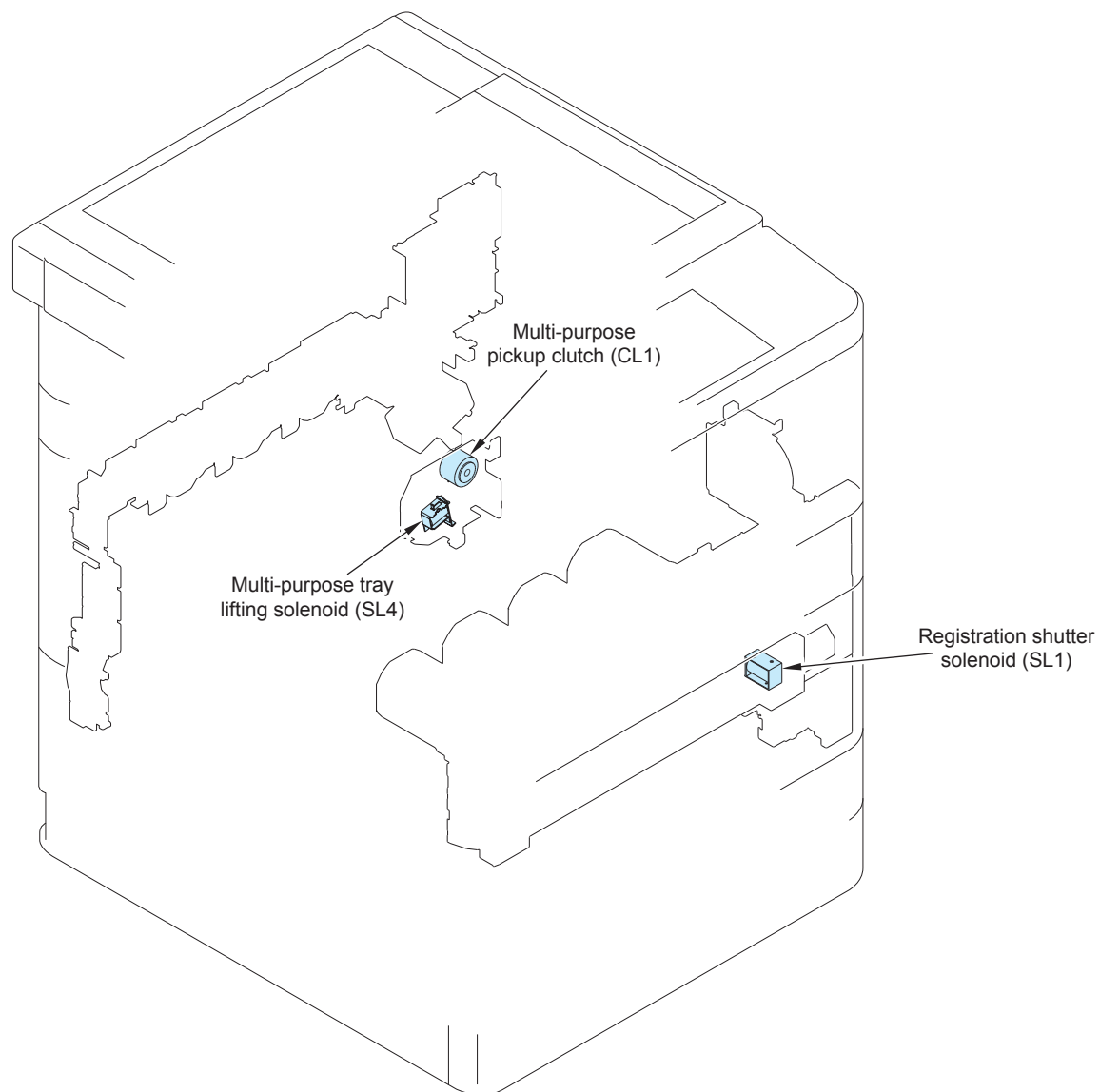
Clutch / Solenoid



F-4-8

No.	Name	Main Unit	Service Parts No.	Reference
SL2	Cassette 1 pickup solenoid	Cassette Pickup Unit	FK2-0408	
SL3	Cassette 2 pickup solenoid	Cassette Pickup Unit	FK2-0408	
SL5	First delivery flapper solenoid	Second and Third Delivery Unit	FL3-4274	
SL6	Second delivery flapper solenoid	Second and Third Delivery Unit	FL3-1169	
SL7	Third delivery flapper solenoid	Second and Third Delivery Unit	FL3-1169	

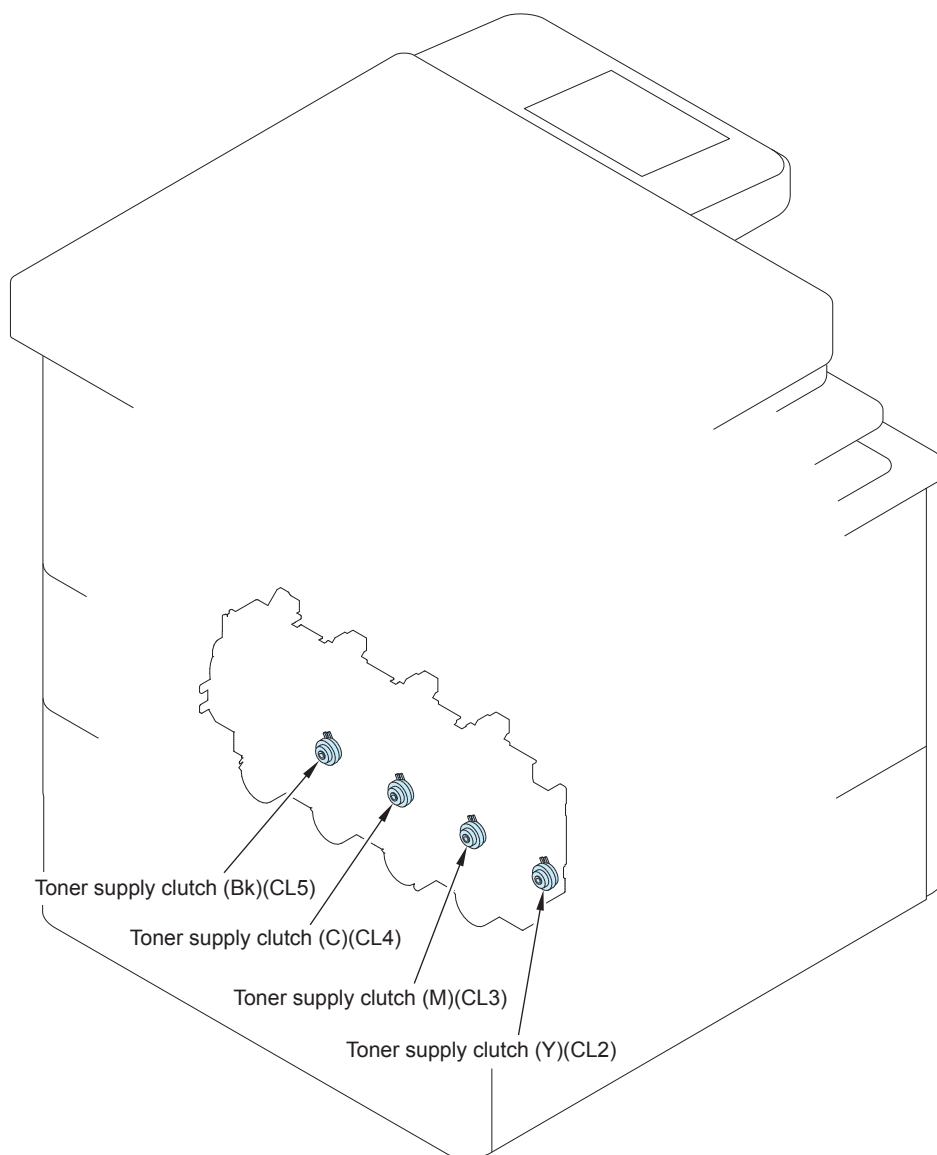
T-4-5



F-4-9

No.	Name	Main Unit	Service parts No.	Reference
CL1	Multi-purpose pickup clutch	Device Parts (rear)	FH6-5076	
SL1	Registration shutter solenoid	Device Parts (rear)	FK2-6871	
SL4	Multi-purpose tray lifting solenoid	Device Parts (rear)	FK2-7310	

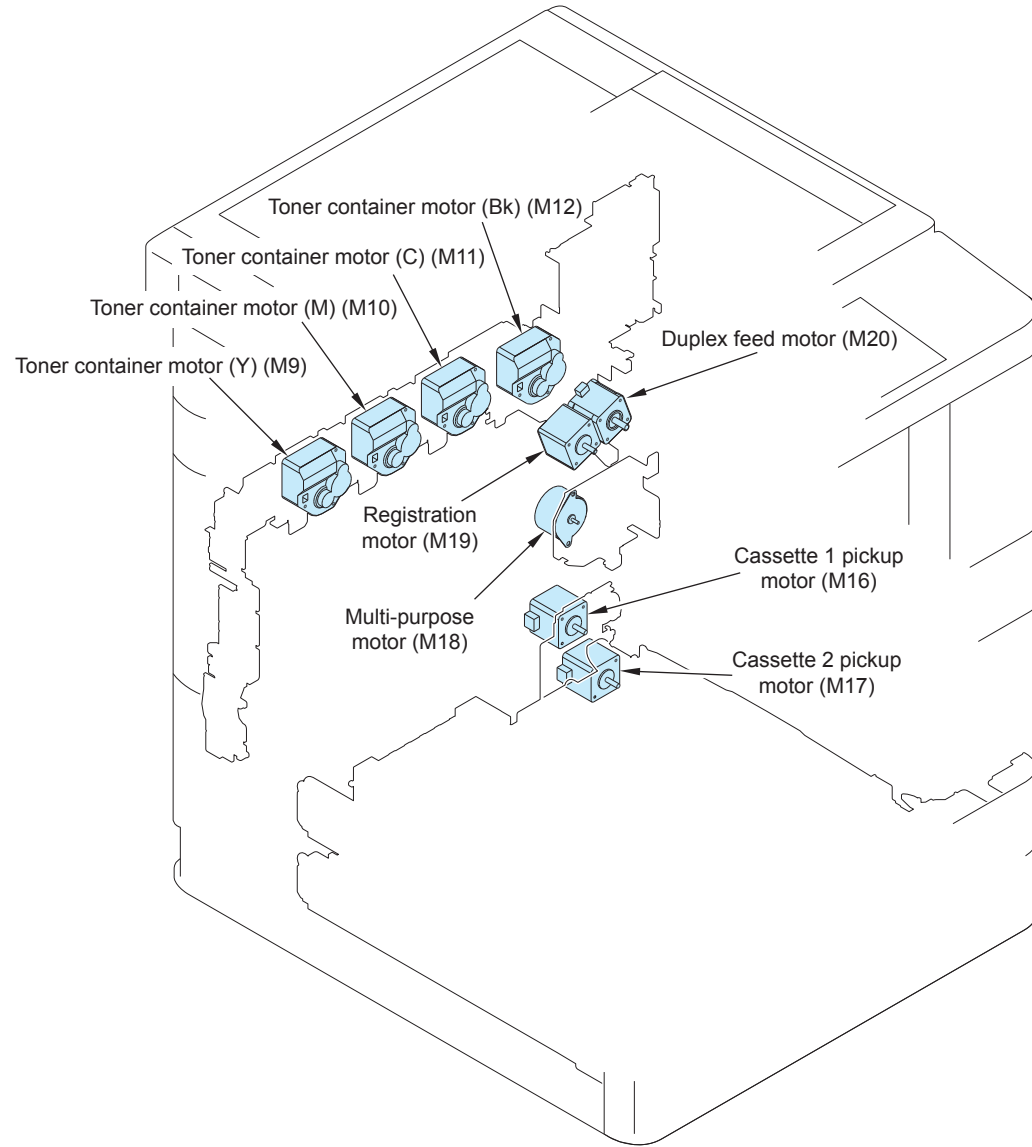
T-4-6



F-4-10

No.	Name	Main Unit	Service parts No.	Reference
CL2	Toner supply clutch (Y)	Main Drive Unit	FK2-7285	
CL3	Toner supply clutch (M)	Main Drive Unit	FK2-7285	
CL4	Toner supply clutch (C)	Main Drive Unit	FK2-7285	
CL5	Toner supply clutch (Bk)	Main Drive Unit	FK2-7285	

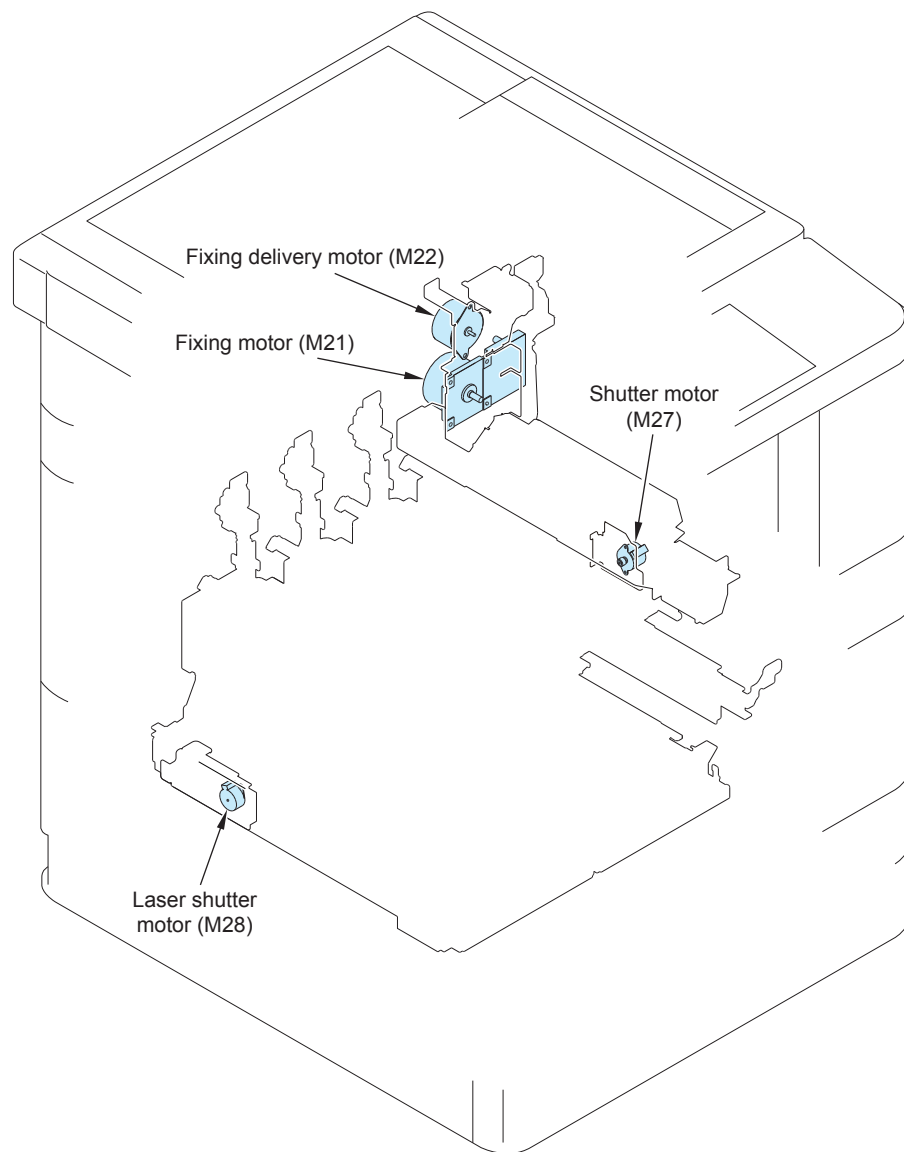
T-4-7



F-4-11

No.	Name	Main Unit	Service parts No.	Reference
M9	Toner container motor (Y)	Device parts (rear)	FK2-7895	
M10	Toner container motor (M)	Device parts (rear)	FK2-7895	
M11	Toner container motor (C)	Device parts (rear)	FK2-7895	
M12	Toner container motor (Bk)	Device parts (rear)	FK2-7895	
M16	Cassette 1 pickup motor	Device parts (rear)	FK2-7326	
M17	Cassette 2 pickup motor	Device parts (rear)	FK2-7326	
M18	Multi-purpose motor	Device parts (rear)	FK2-7304	
M19	Registration motor	Device parts (rear)	FK2-7327	
M20	Duplex feed motor	Device parts (rear)	FK2-7326	

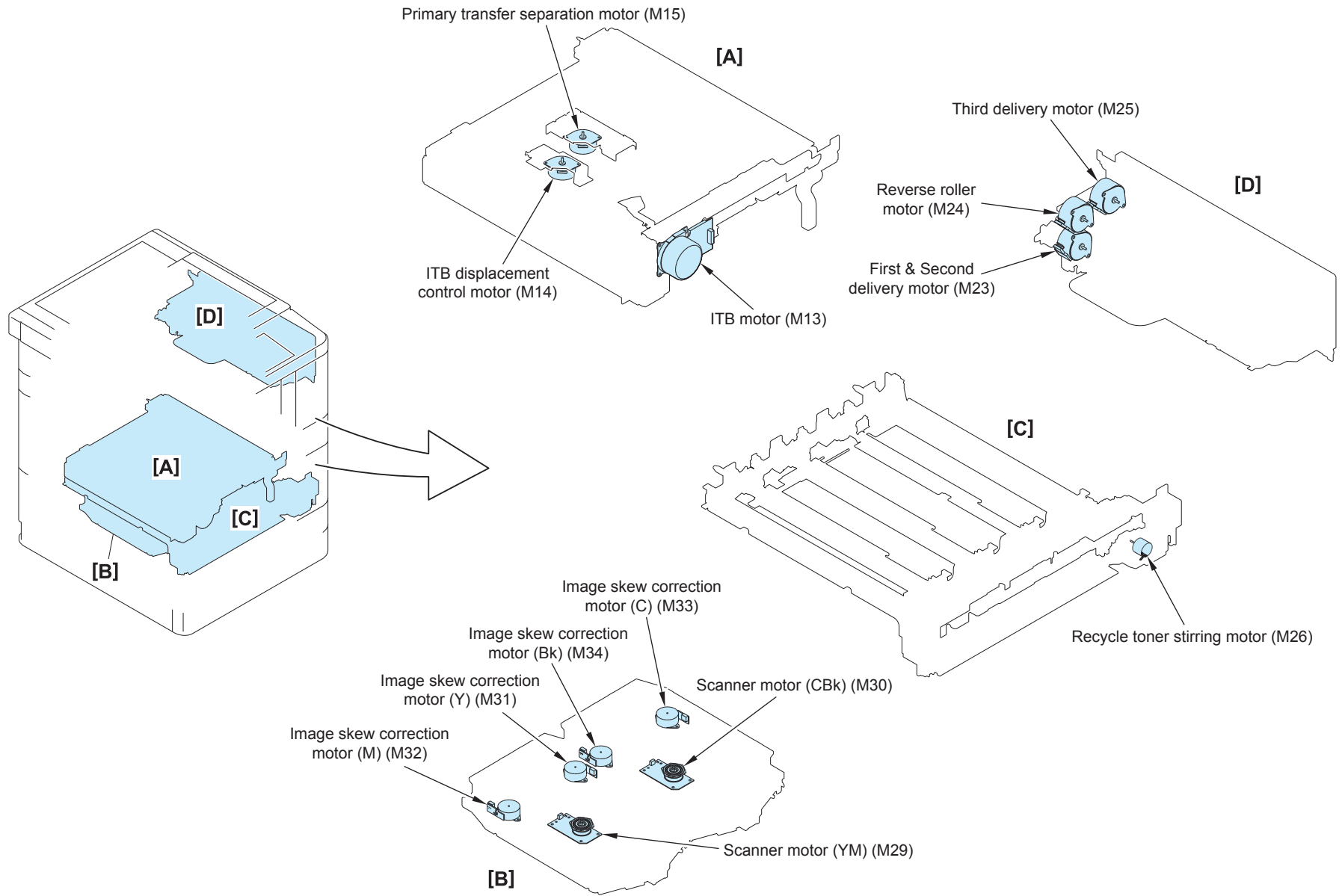
T-4-8



F-4-12

No.	Name	Main Unit	Service parts No.	Reference
M21	Fixing motor	Device parts (center)	FK2-7302	
M22	Fixing delivery motor	Device parts (center)	FK2-7304	
M27	Shutter motor	Device parts (center)	FK2-2069	
M28	Laser shutter motor	Device parts (center)	FK2-2069	

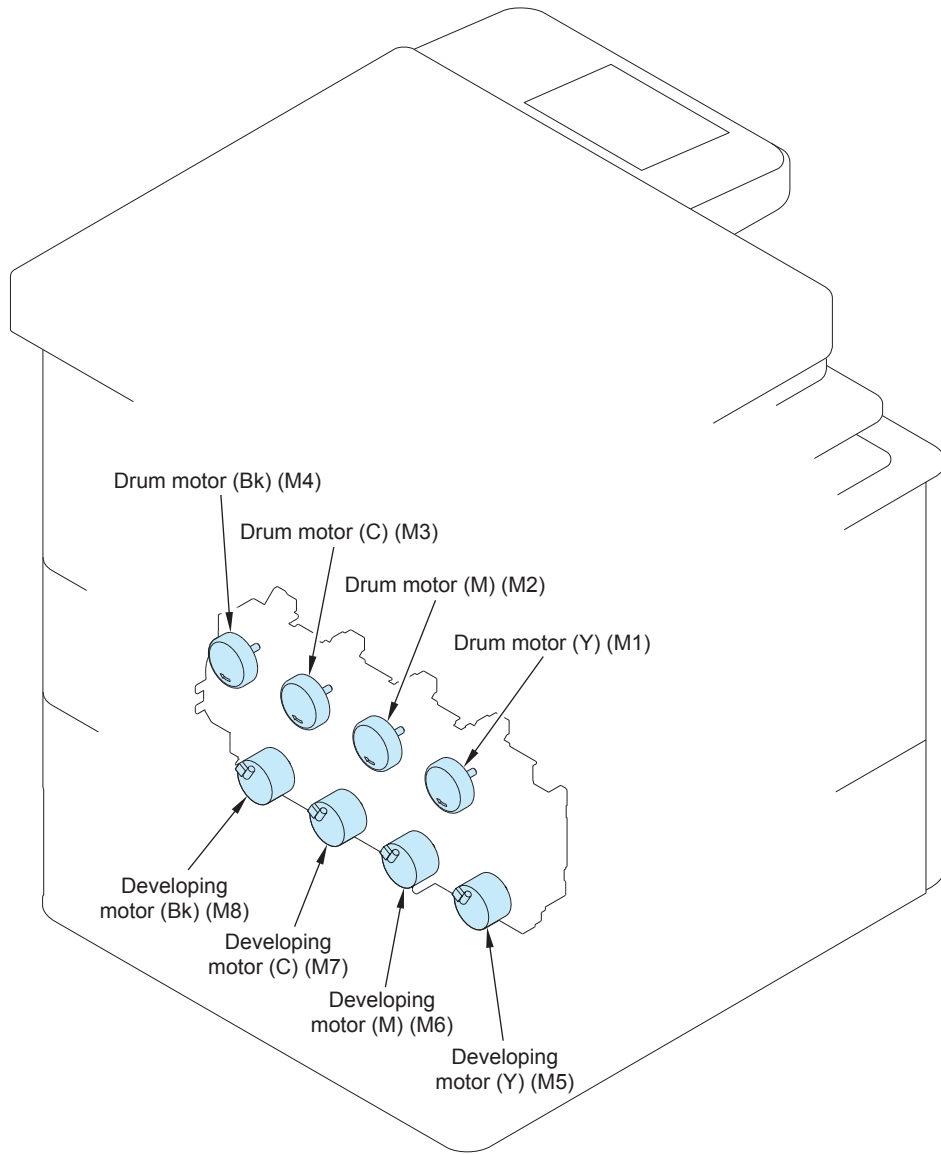
T-4-9



F-4-13

No.	Name	Main Unit	Service parts No.	Reference
M13	ITB motor	ITB Unit	FK2-7300	
M14	ITB displacement control motor	ITB Unit	FK2-7365	
M15	Primary transfer separation motor	ITB Unit	FK2-7365	
M23	First & Second delivery motor	Second and Third Delivery Unit	FK2-7304	
M24	Reverse roller motor	Second and Third Delivery Unit	FK2-7304	
M25	Third delivery motor	Second and Third Delivery Unit	FK2-7304	
M26	Recycle toner stirring motor	Process Unit	FK2-7328	
M29	Scanner motor (YM)	Laser Scanner Unit	-	
M30	Scanner motor (CBk)	Laser Scanner Unit	-	
M31	Image skew correction motor (Y)	Laser Scanner Unit	-	
M32	Image skew correction motor (M)	Laser Scanner Unit	-	
M33	Image skew correction motor (C)	Laser Scanner Unit	-	
M34	Image skew correction motor (Bk)	Laser Scanner Unit	-	

T-4-10

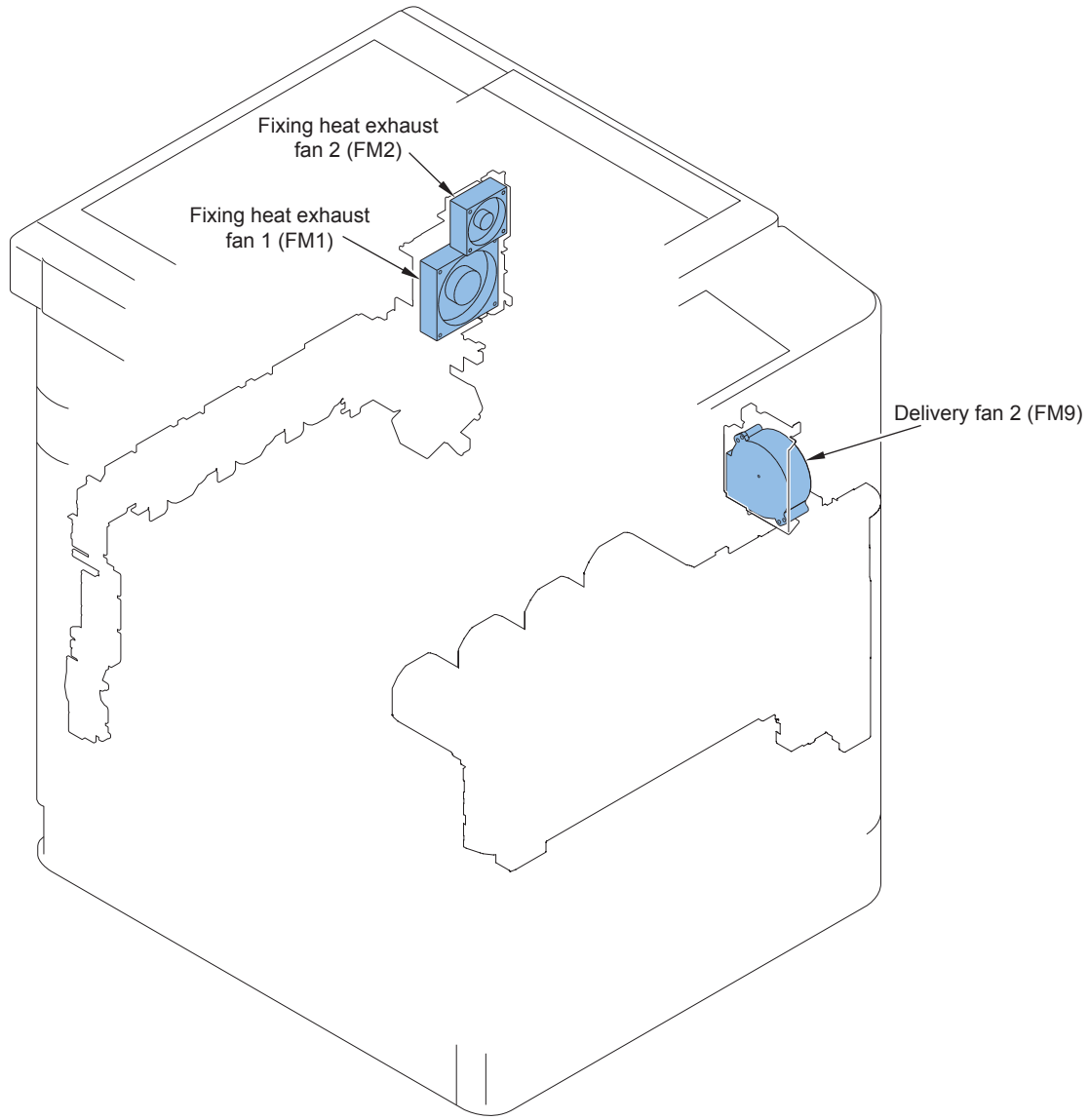


F-4-14

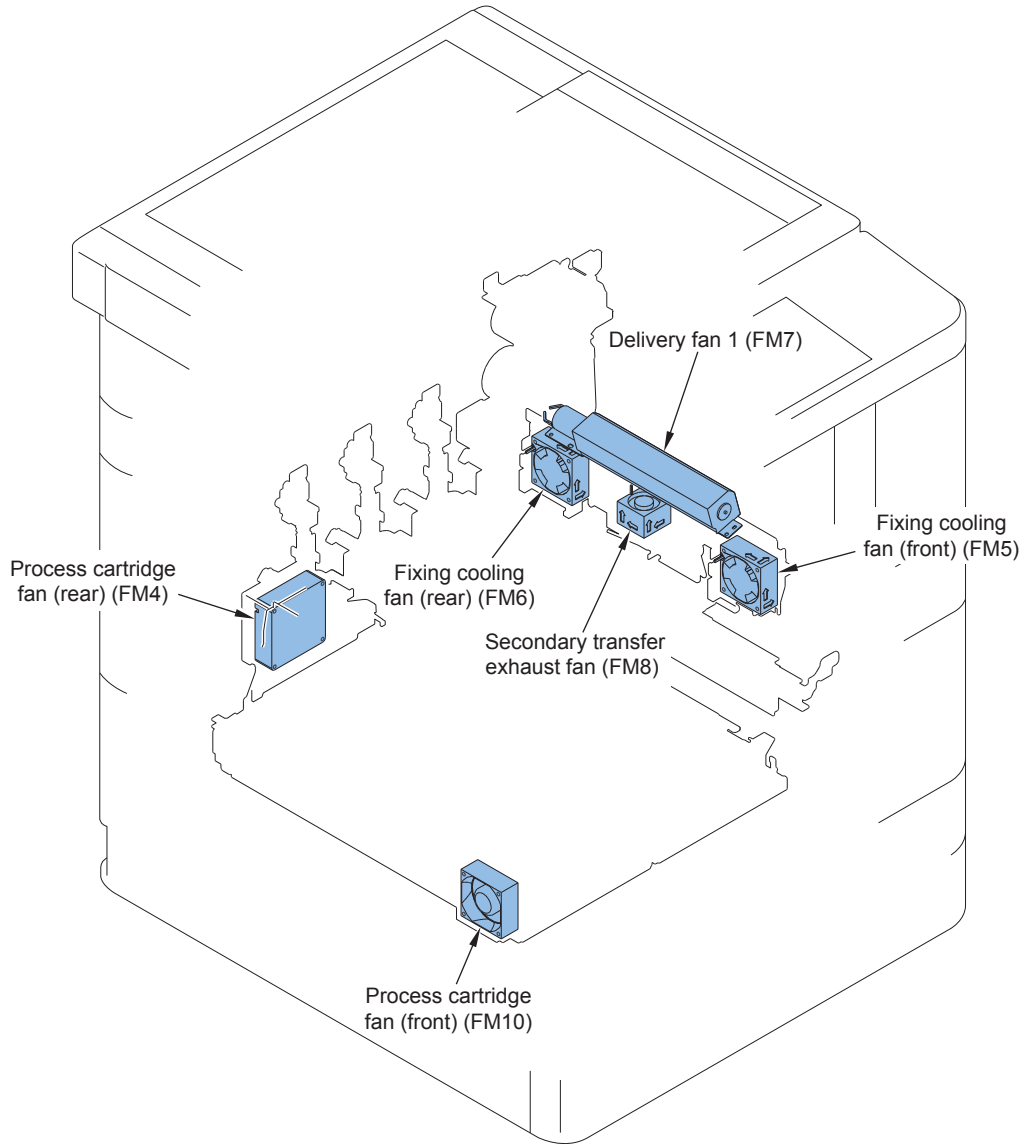
No.	Name	Main Unit	Service parts No.	Reference
M1	Drum motor (Y)	Main Drive Unit	FK2-7298	
M2	Drum motor (M)	Main Drive Unit	FK2-7298	
M3	Drum motor (C)	Main Drive Unit	FK2-7298	
M4	Drum motor (Bk)	Main Drive Unit	FK2-7298	
M5	Developing motor (Y)	Main Drive Unit	FK2-7303	
M6	Developing motor (M)	Main Drive Unit	FK2-7303	
M7	Developing motor (C)	Main Drive Unit	FK2-7303	
M8	Developing motor (Bk)	Main Drive Unit	FK2-7303	

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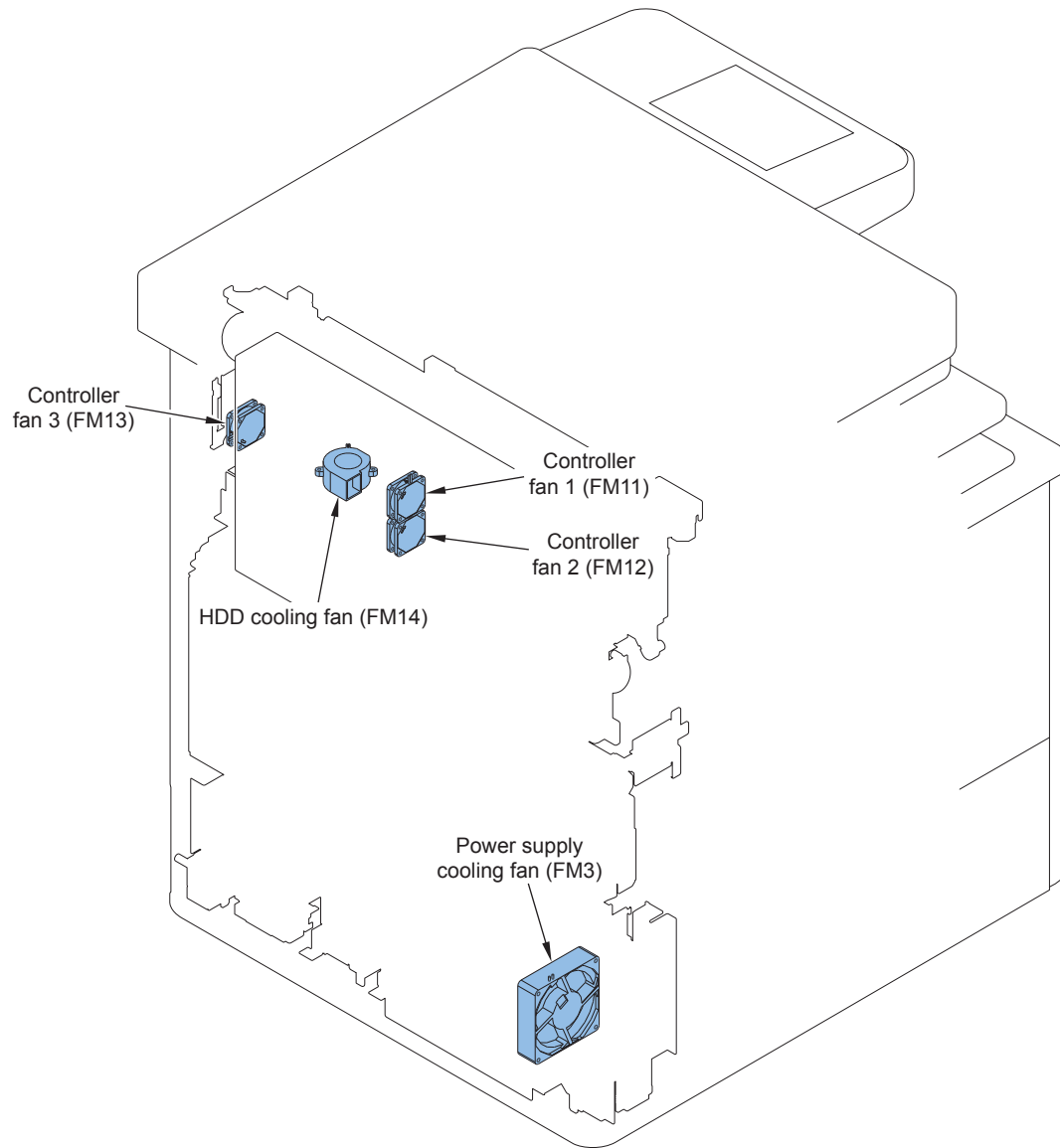
Fan



F-4-15



F-4-16

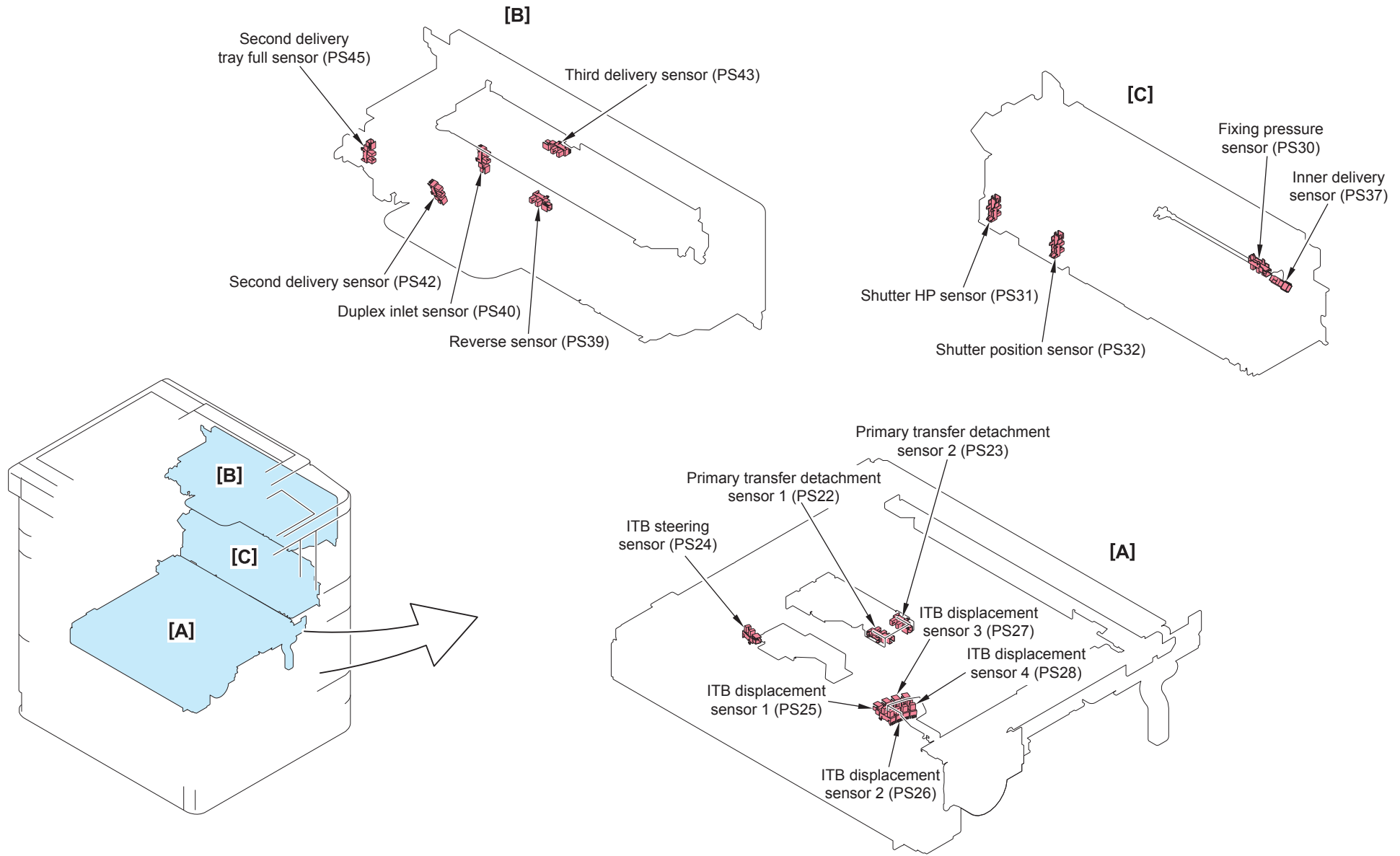


F-4-17

No.	Name	Main Unit	Service parts No.	Reference
FM1	Fixing heat exhaust fan 1	Device parts (rear)	FK2-7286	
FM2	Fixing heat exhaust fan 2	Device parts (rear)	FK2-3679	
FM3	Power supply cooling fan	Electric	FK2-7286	

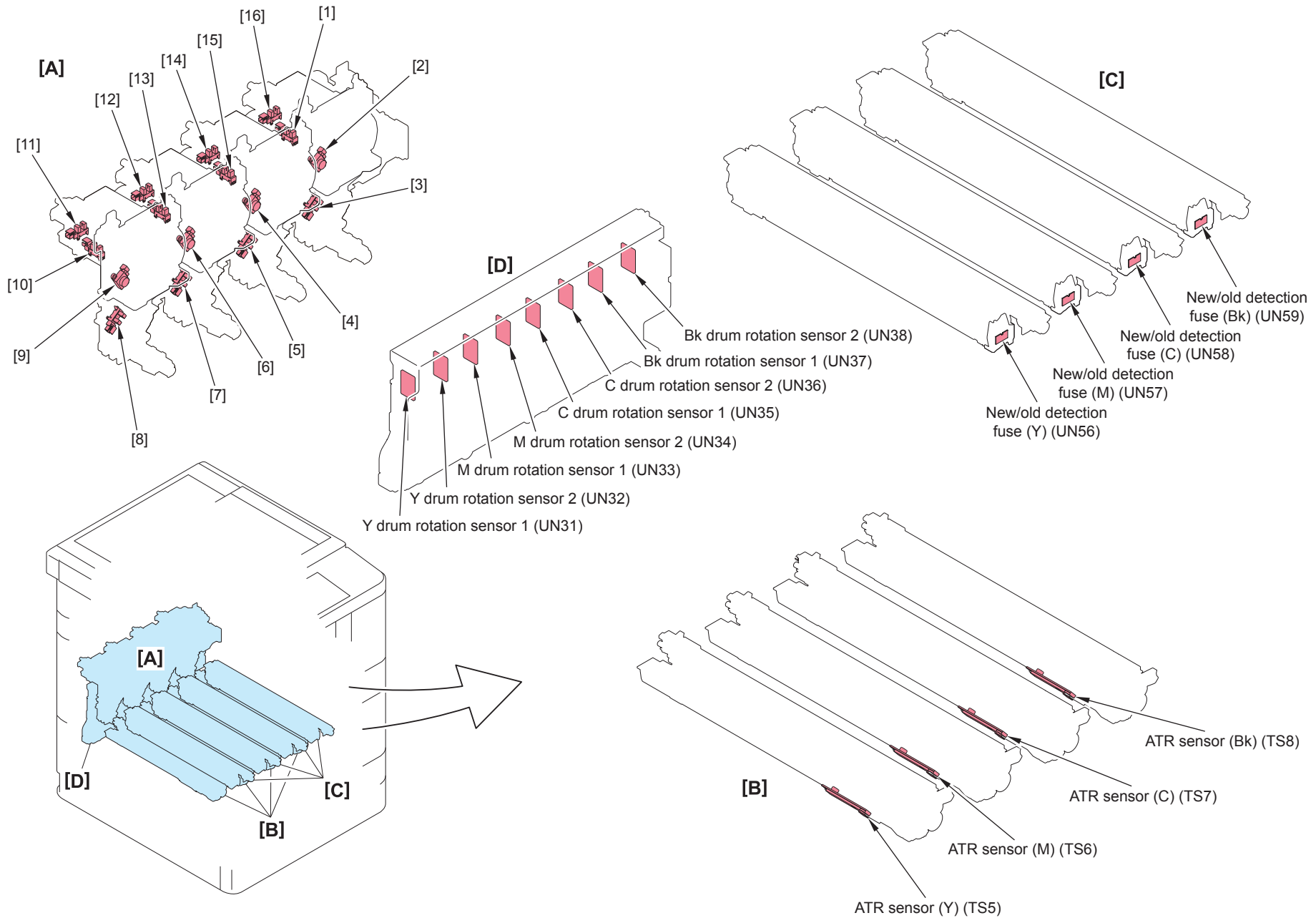
FM4	Process cartridge fan (rear)	Device parts (center)	FK2-0360	
FM5	Fixing cooling fan (front)	Device parts (center)	FK2-3679	
FM6	Fixing cooling fan (rear)	Device parts (center)	FK2-3679	
FM7	Delivery fan 1	Device parts (center)	FK2-7362	
FM8	Secondary transfer exhaust fan	Device parts (center)	FK2-7290	
FM9	Delivery fan 2	Device parts (front)	FK2-7291	
FM10	Process cartridge fan (front)	Device parts (center)	FK2-3679	
FM11	Controller fan 1	Electric	FK2-8372	
FM12	Controller fan 2	Electric	FK2-8372	
FM13	Controller fan 3	Electric	FK2-8372	
FM14	HDD cooling fan	Electric	FK2-7363	

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No.	Name	Main Unit	Service parts No.	Reference
PS22	Primary transfer detachment sensor 1	ITB Unit	WG8-5848	
PS23	Primary transfer detachment sensor 2	ITB Unit	WG8-5848	
PS24	ITB steering sensor	ITB Unit	WG8-5848	
PS25	ITB displacement sensor 1	ITB Unit	WG8-5848	
PS26	ITB displacement sensor 2	ITB Unit	WG8-5848	
PS27	ITB displacement sensor 3	ITB Unit	WG8-5848	
PS28	ITB displacement sensor 4	ITB Unit	WG8-5848	
PS30	Fixing pressure sensor	Fixing Assembly	WG8-5783	
PS31	Shutter HP sensor	Fixing Assembly	WG8-5783	
PS32	Shutter position sensor	Fixing Assembly	WG8-5783	
PS37	Inner delivery sensor	Fixing Assembly	WG8-5783	
PS39	Reverse sensor	Second and Third Delivery Unit	WG8-5848	
PS40	Duplex inlet sensor	Second and Third Delivery Unit	WG8-5848	
PS42	Second delivery sensor	Second and Third Delivery Unit	WG8-5848	
PS43	Third delivery sensor	Second and Third Delivery Unit	WG8-5848	
PS45	Second delivery tray full sensor	Second and Third Delivery Unit	WG8-5848	

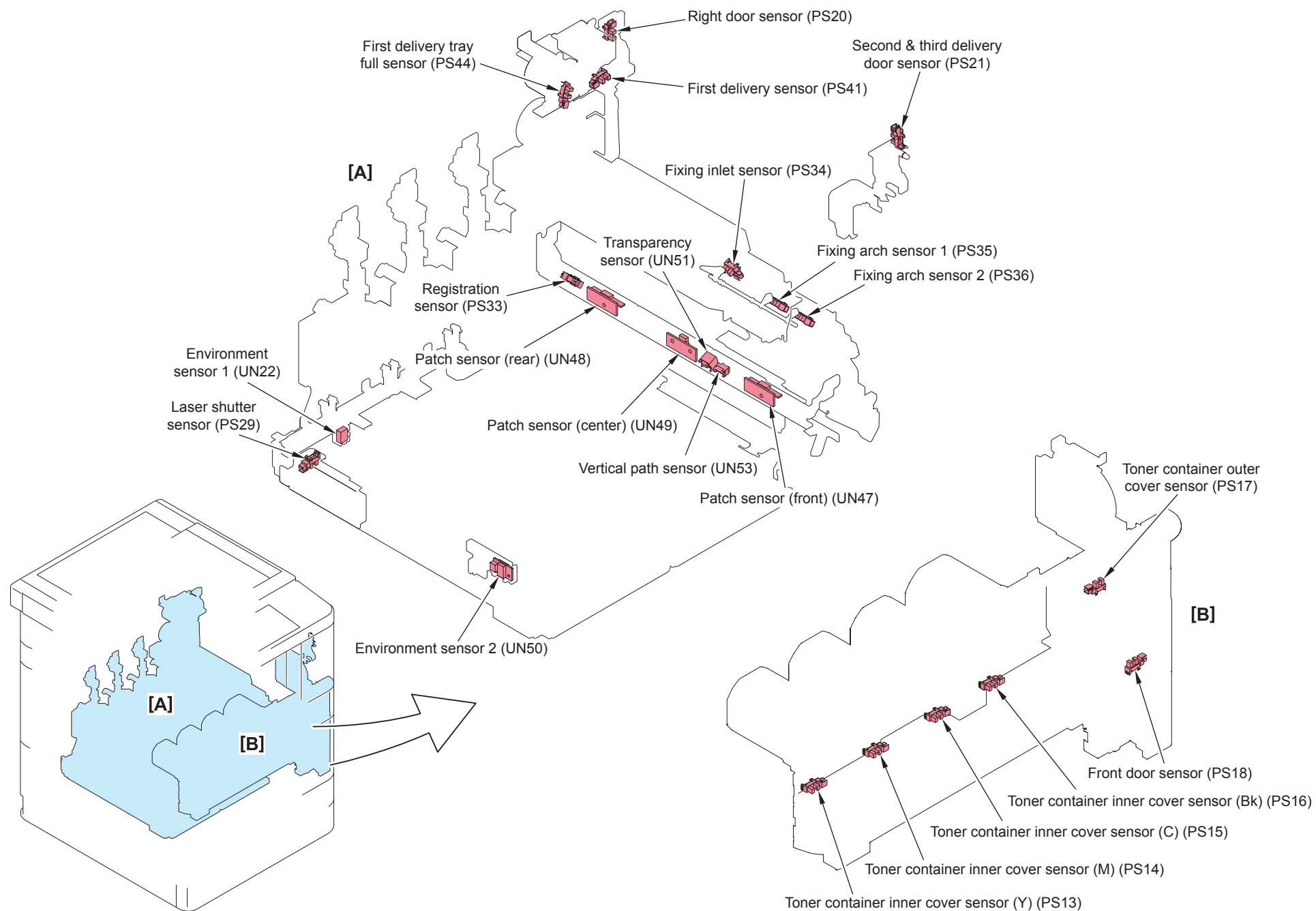
T-4-13



INDEX No.	No.	Name	Main Unit	Service Parts No.	Reference
[1]	PS8	Toner container cam HP sensor (Bk)	Hopper Unit	WG8-5848	
[2]	TS4	Piezo sensor (Bk)	Hopper Unit	-	
[3]	PS4	Toner supply sensor (Bk)	Hopper Unit	WG8-5783	
[4]	TS3	Piezo sensor (C)	Hopper Unit	-	
[5]	PS3	Toner supply sensor (C)	Hopper Unit	WG8-5783	
[6]	TS2	Piezo sensor (M)	Hopper Unit	-	
[7]	PS2	Toner supply sensor (M)	Hopper Unit	WG8-5783	
[8]	PS1	Toner supply sensor (Y)	Hopper Unit	WG8-5783	
[9]	TS1	Piezo sensor (Y)	Hopper Unit	-	
[10]	PS5	Toner container cam HP sensor (Y)	Hopper Unit	WG8-5848	
[11]	PS9	Toner cap position sensor (Y)	Hopper Unit	WG8-5783	
[12]	PS10	Toner cap position sensor (M)	Hopper Unit	WG8-5783	
[13]	PS6	Toner container cam HP sensor (M)	Hopper Unit	WG8-5848	
[14]	PS11	Toner cap position sensor (C)	Hopper Unit	WG8-5783	
[15]	PS7	Toner container cam HP sensor (C)	Hopper Unit	WG8-5848	
[16]	PS12	Toner cap position sensor (Bk)	Hopper Unit	WG8-5783	

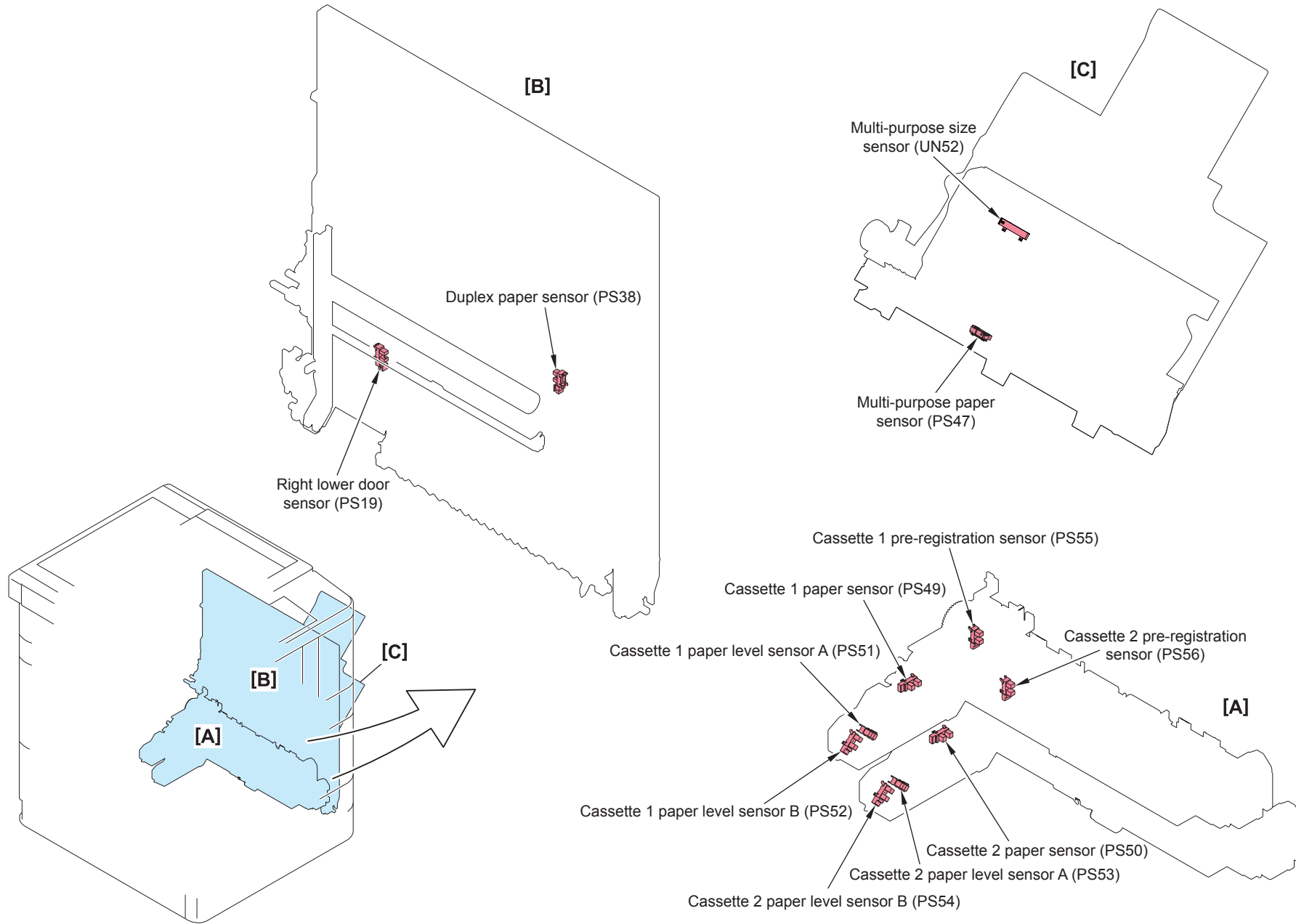
No.	Name	Main Unit	Service parts No.	Reference
TS5	ATR sensor (Y)	Developing Assembly	-	
TS6	ATR sensor (M)	Developing Assembly	-	
TS7	ATR sensor (C)	Developing Assembly	-	
TS8	ATR sensor (Bk)	Developing Assembly	-	
UN31	Y drum rotation sensor 1	Main Drive Unit	FM3-7944	
UN32	Y drum rotation sensor 2	Main Drive Unit	FM3-7944	
UN33	M drum rotation sensor 1	Main Drive Unit	FM3-7944	
UN34	M drum rotation sensor 2	Main Drive Unit	FM3-7944	
UN35	C drum rotation sensor 1	Main Drive Unit	FM3-7944	
UN36	C drum rotation sensor 2	Main Drive Unit	FM3-7944	
UN37	Bk drum rotation sensor 1	Main Drive Unit	FM3-7944	
UN38	Bk drum rotation sensor 2	Main Drive Unit	FM3-7944	
UN56	New/old detection fuse (Y)	Drum Unit	-	
UN57	New/old detection fuse (M)	Drum Unit	-	
UN58	New/old detection fuse (C)	Drum Unit	-	
UN59	New/old detection fuse (Bk)	Drum Unit	-	

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No.	Name	Main Unit	Service parts No.	Reference
PS13	Toner container inner cover sensor (Y)	Device Parts(front)	WG8-5783	
PS14	Toner container inner cover sensor (M)	Device Parts(front)	WG8-5783	
PS15	Toner container inner cover sensor (C)	Device Parts(front)	WG8-5783	
PS16	Toner container inner cover sensor (Bk)	Device Parts(front)	WG8-5783	
PS17	Toner container outer cover sensor	Device Parts(front)	WG8-5848	
PS18	Front door sensor	Device Parts(front)	WG8-5848	
PS20	Right door sensor	Device Parts(center)	WG8-5848	
PS21	Second & third delivery door sensor	Device Parts(center)	WG8-5848	
PS29	Laser shutter sensor	Device Parts(center)	WG8-5783	
PS33	Registration sensor	Device Parts(center)	WG8-5848	
PS35	Fixing arch sensor 1	2-side Unit	WG8-5848	
PS36	Fixing arch sensor 2	2-side Unit	WG8-5848	
PS41	First delivery sensor	Device Parts(center)	WG8-5783	
PS44	First delivery tray full sensor	Device Parts(center)	WG8-5783	
UN22	Environment sensor 1	Device Parts(center)	FM3-7941	
UN47	Patch sensor (front)	Device Parts(center)	FK2-7315	
UN48	Patch sensor (rear)	Device Parts(center)	FK2-7315	
UN49	Patch sensor (center)	Device Parts(center)	-	
UN50	Environment sensor 2	Electric	FM3-6049	
UN51	Transparency sensor	Device Parts(center)	-	
UN53	Vertical path sensor	Device Parts(center)	FK2-6470	

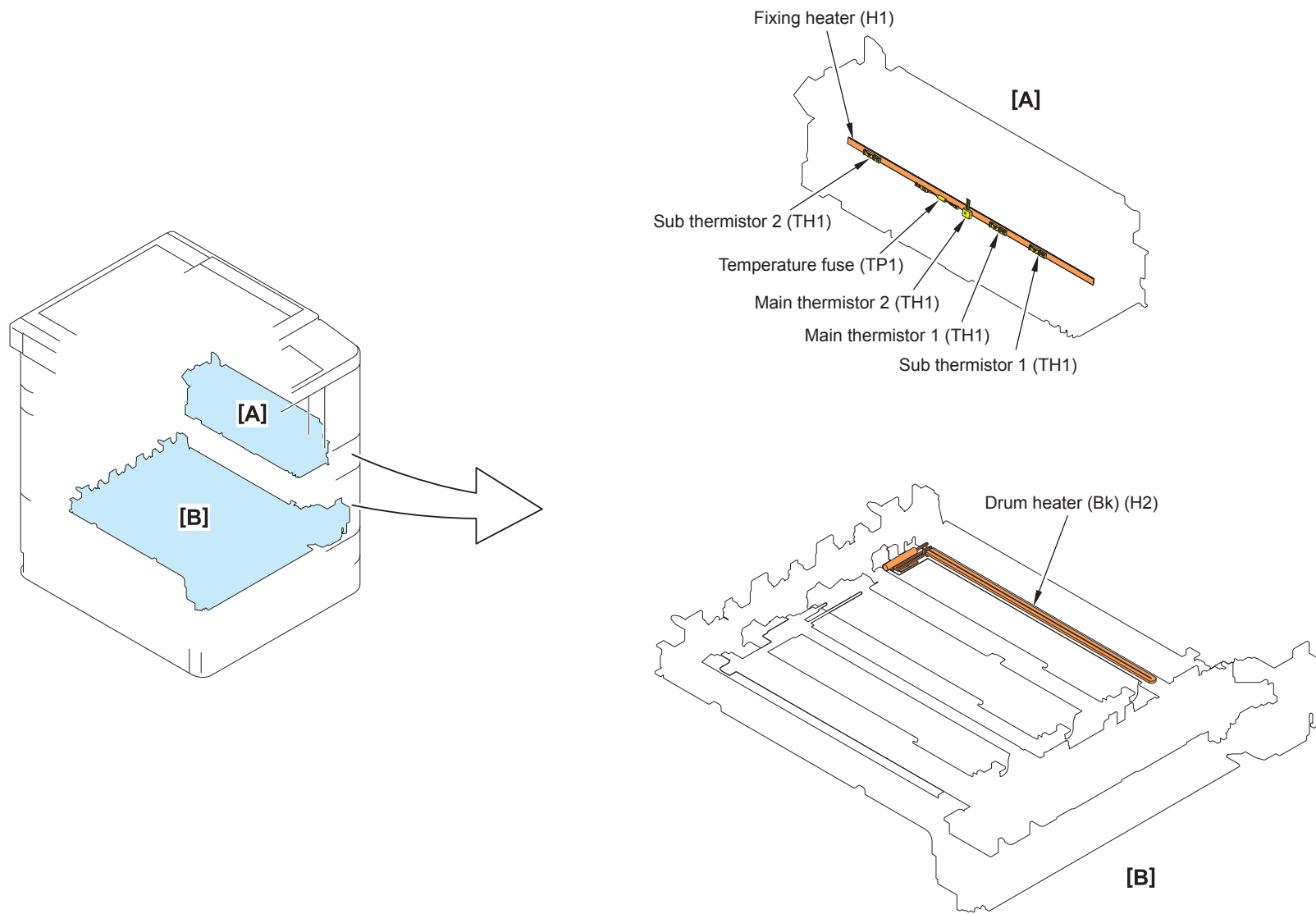
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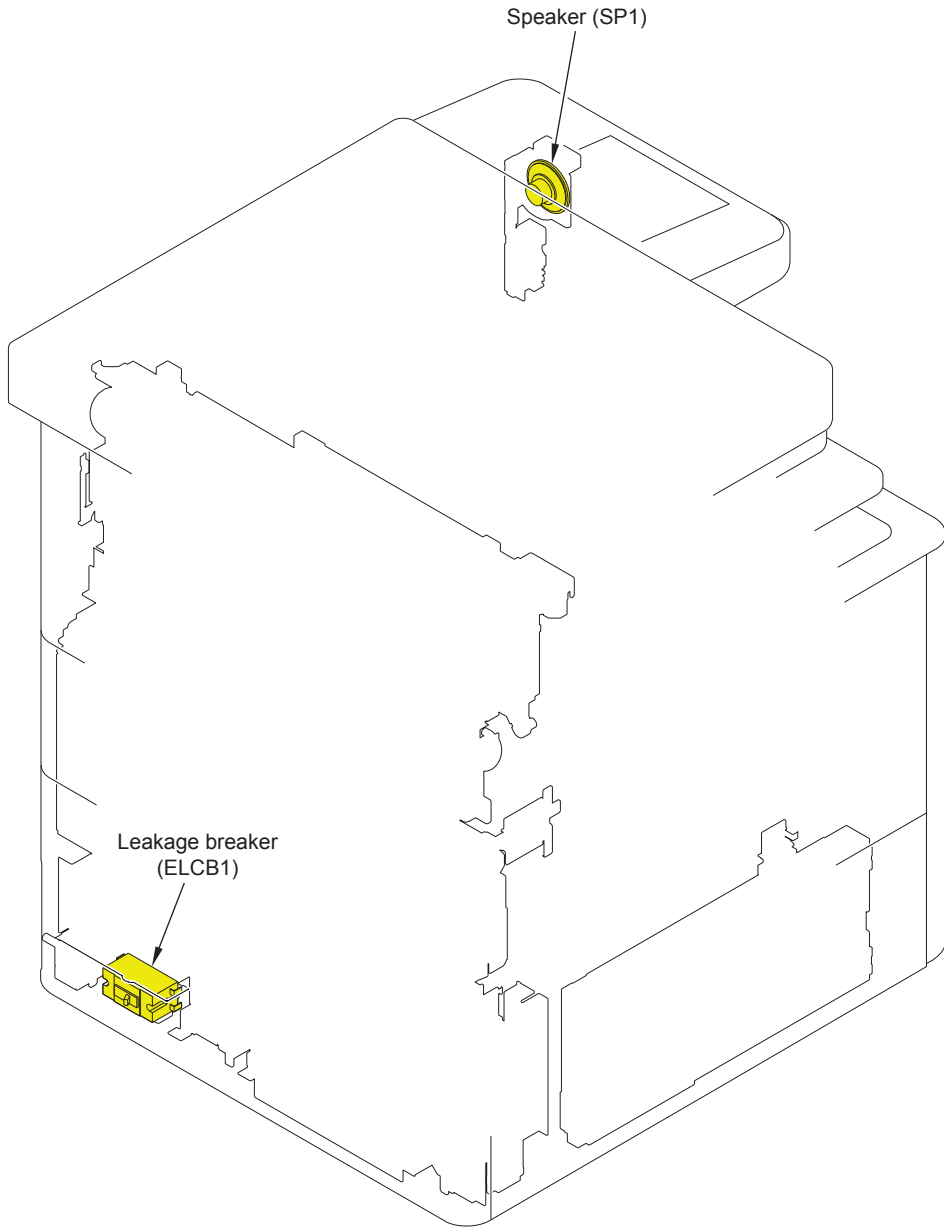
F-4-21

No.	Name	Main Unit	Service parts No.	Reference
PS19	Right lower door sensor	2-side Unit	WG8-5848	
PS38	Duplex paper sensor	2-side Unit	WG8-5848	
PS47	Multi-purpose paper sensor	Multi-purpose Delivery Unit	WG8-5783	
PS49	Cassette 1 paper sensor	Cassette Pickup Unit	FK2-0149	
PS50	Cassette 2 paper sensor	Cassette Pickup Unit	FK2-0149	
PS51	Cassette 1 paper level sensor A	Cassette Pickup Unit	FK2-0149	
PS52	Cassette 1 paper level sensor B	Cassette Pickup Unit	FK2-0149	
PS53	Cassette 2 paper level sensor A	Cassette Pickup Unit	FK2-0149	
PS54	Cassette 2 paper level sensor B	Cassette Pickup Unit	FK2-0149	
PS55	Cassette 1 pre-registration sensor	Cassette Pickup Unit	FK2-0149	
PS56	Cassette 2 pre-registration sensor	Cassette Pickup Unit	FK2-0149	
UN52	Multi-purpose size sensor	Multi-purpose Delivery Unit	FH7-7600	

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 Heater / Other

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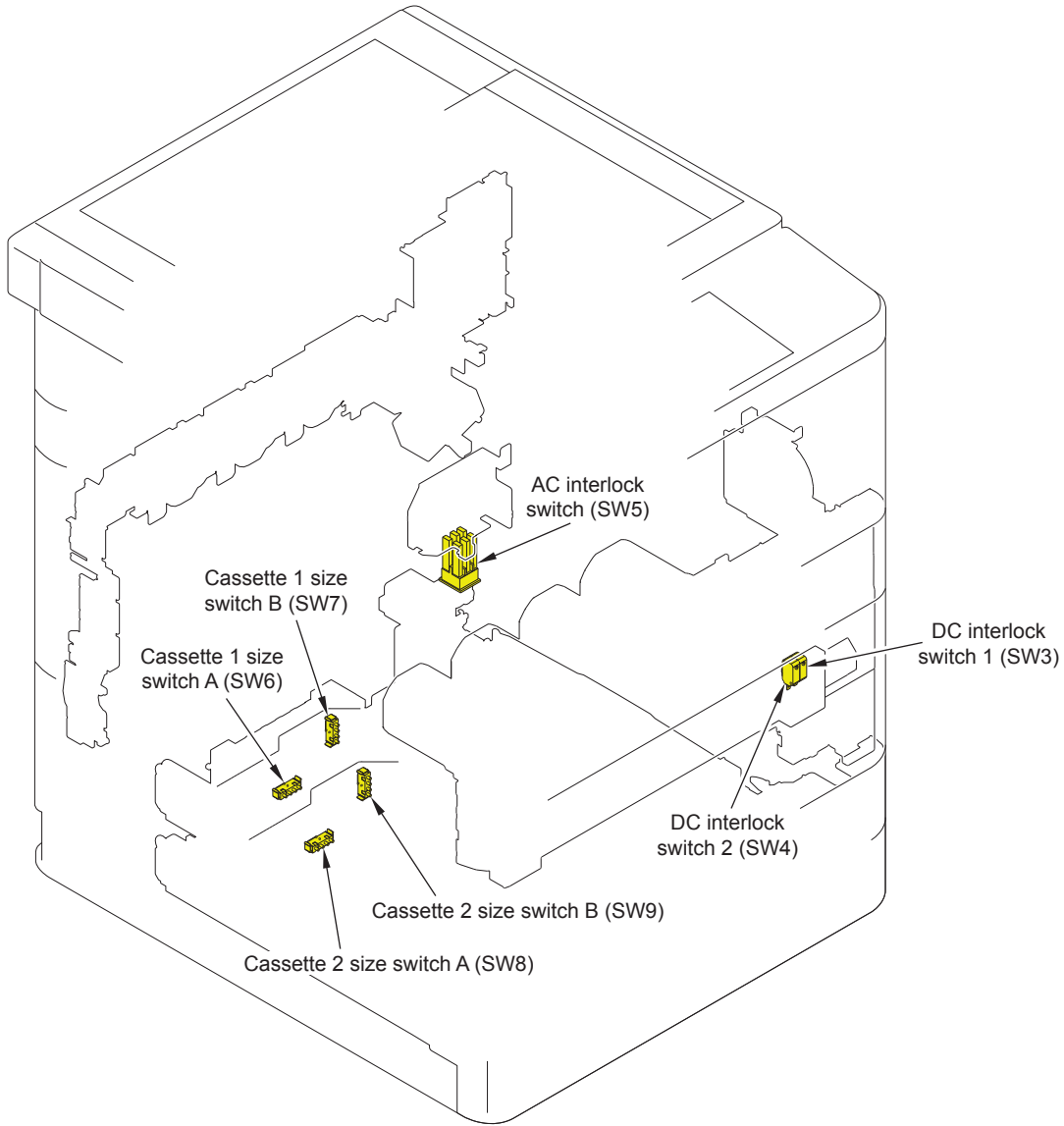


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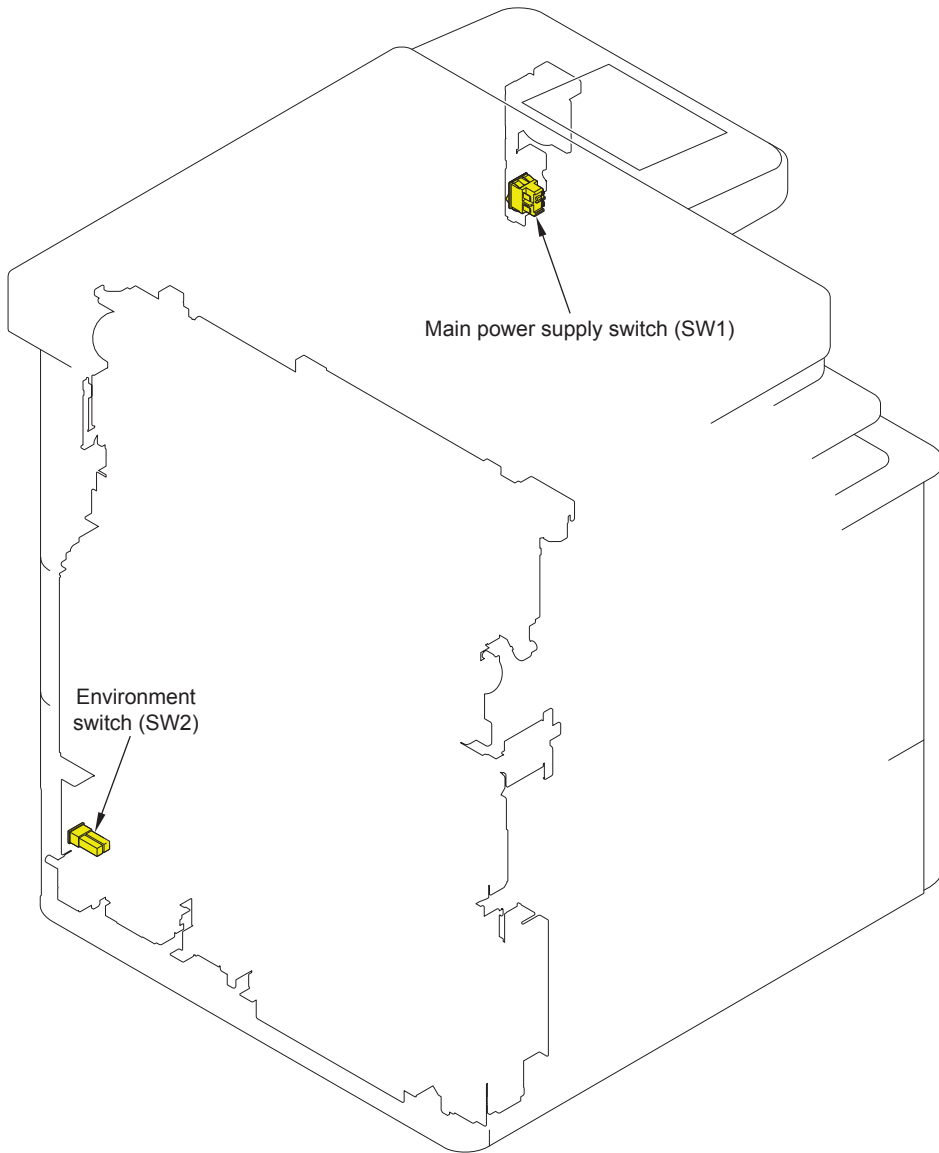
No.	Name	Main Unit	Service parts No.	Reference
ELCB1	Leakage breaker	Electric	FH7-7626 (100/120V) / 7625 (230V)	
H1	Fixing heater	Fixing Assembly	-	
H2	Drum heater (Bk)	Process Unit	FK2-7295 (100/120V) / 7296 (230V)	
SP1	Speaker	Electric	FK2-0428	
TH1	Main thermistor 2	Fixing Assembly	-	
TH1	Main thermistor 1	Fixing Assembly	-	
TH1	Sub thermistor 1	Fixing Assembly	-	
TH1	Sub thermistor 2	Fixing Assembly	-	
TP1	Temperature fuse	Fixing Assembly	-	

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Switch



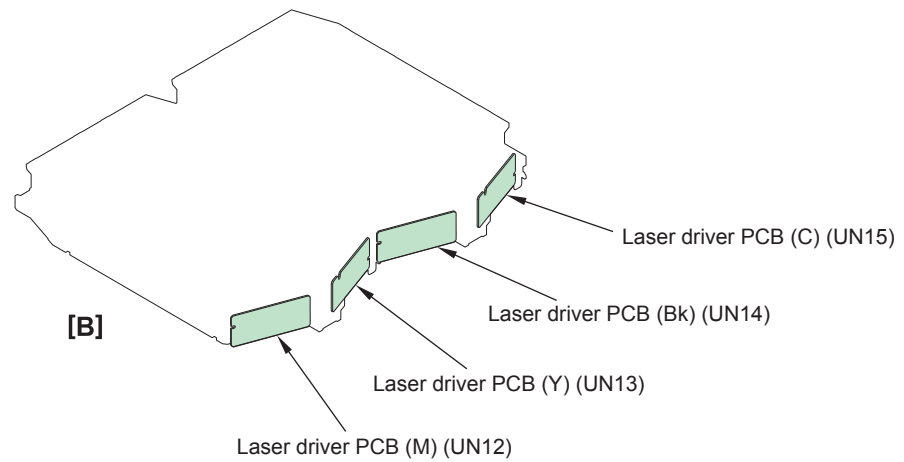
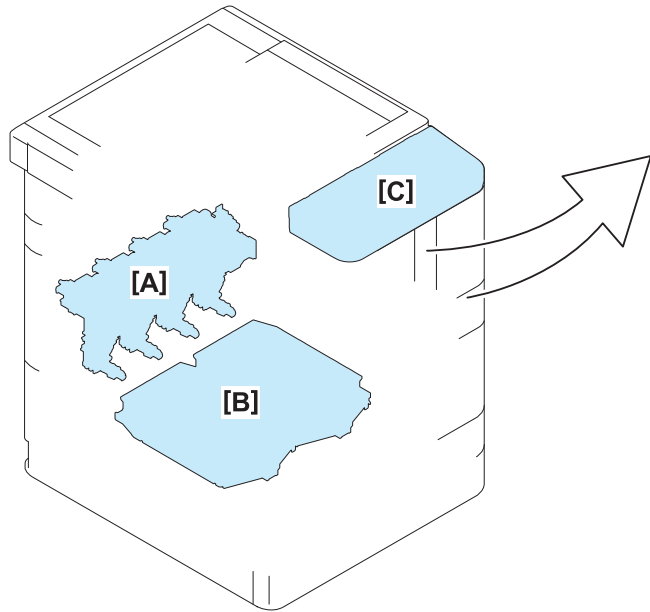
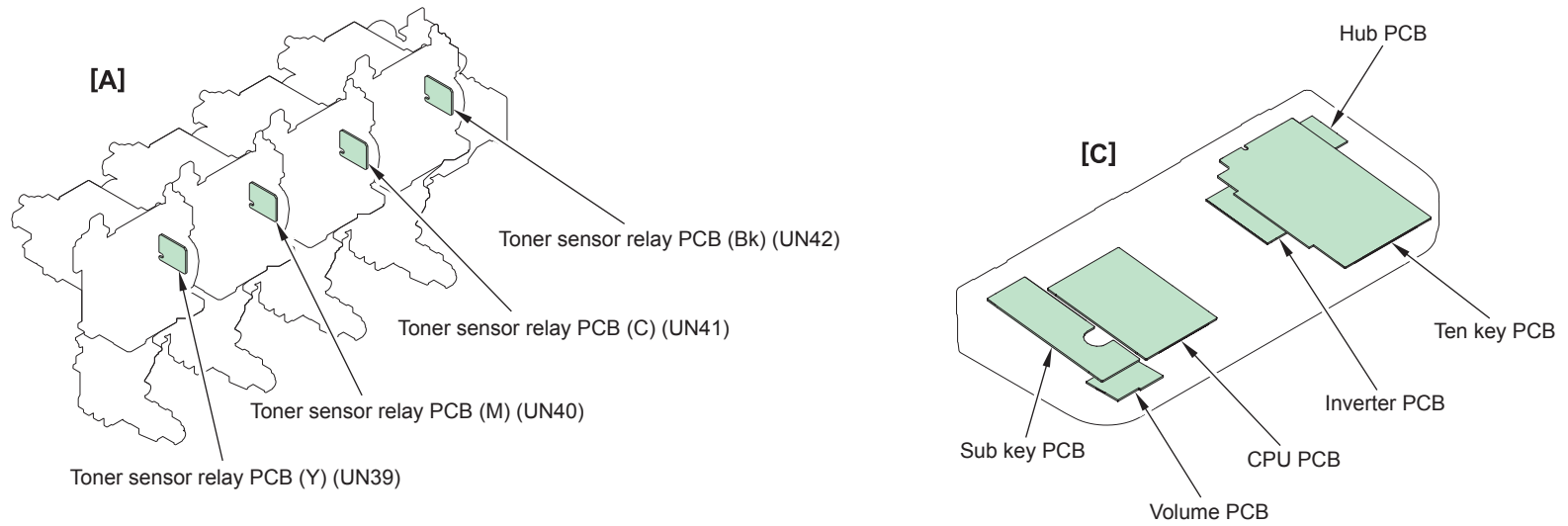
F-4-24



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No.	Name	Main Unit	Service parts No.	Reference
SW1	Main power supply switch	Electric	FM3-7799	
SW2	Environment switch	Electric	FM3-7792	
SW3	DC interlock switch 1	Device Parts (front)	FM3-7808	
SW4	DC interlock switch 2	Device Parts (front)	FM3-7808	
SW5	AC interlock switch	Device Parts (rear)	FM3-7800	
SW6	Cassette 1 size switch A	Cassette	FM3-5933	
SW7	Cassette 1 size switch B	Cassette	FM3-5933	
SW8	Cassette 2 size switch A	Cassette	FM3-5933	
SW9	Cassette 2 size switch B	Cassette	FM3-5933	

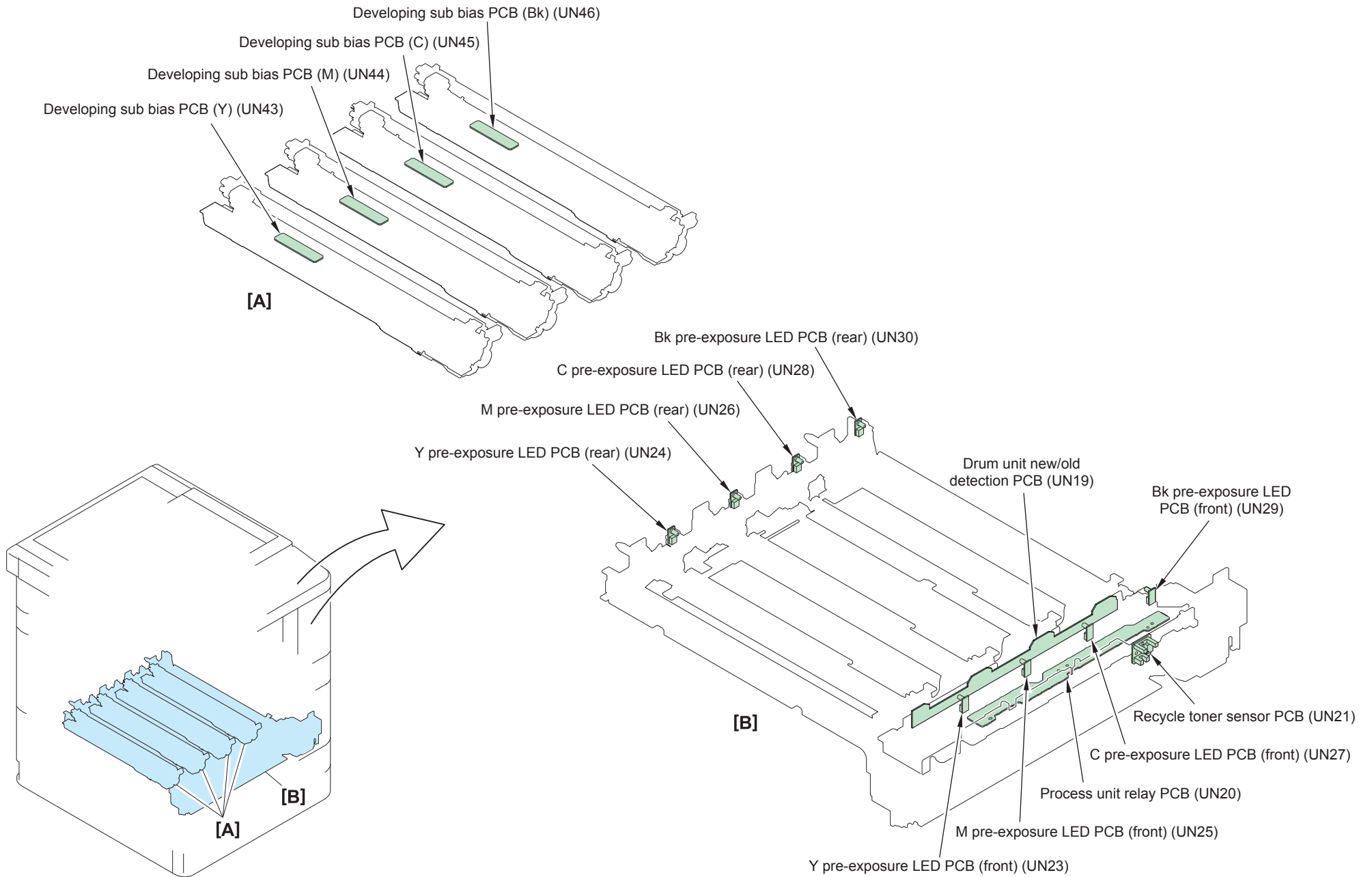
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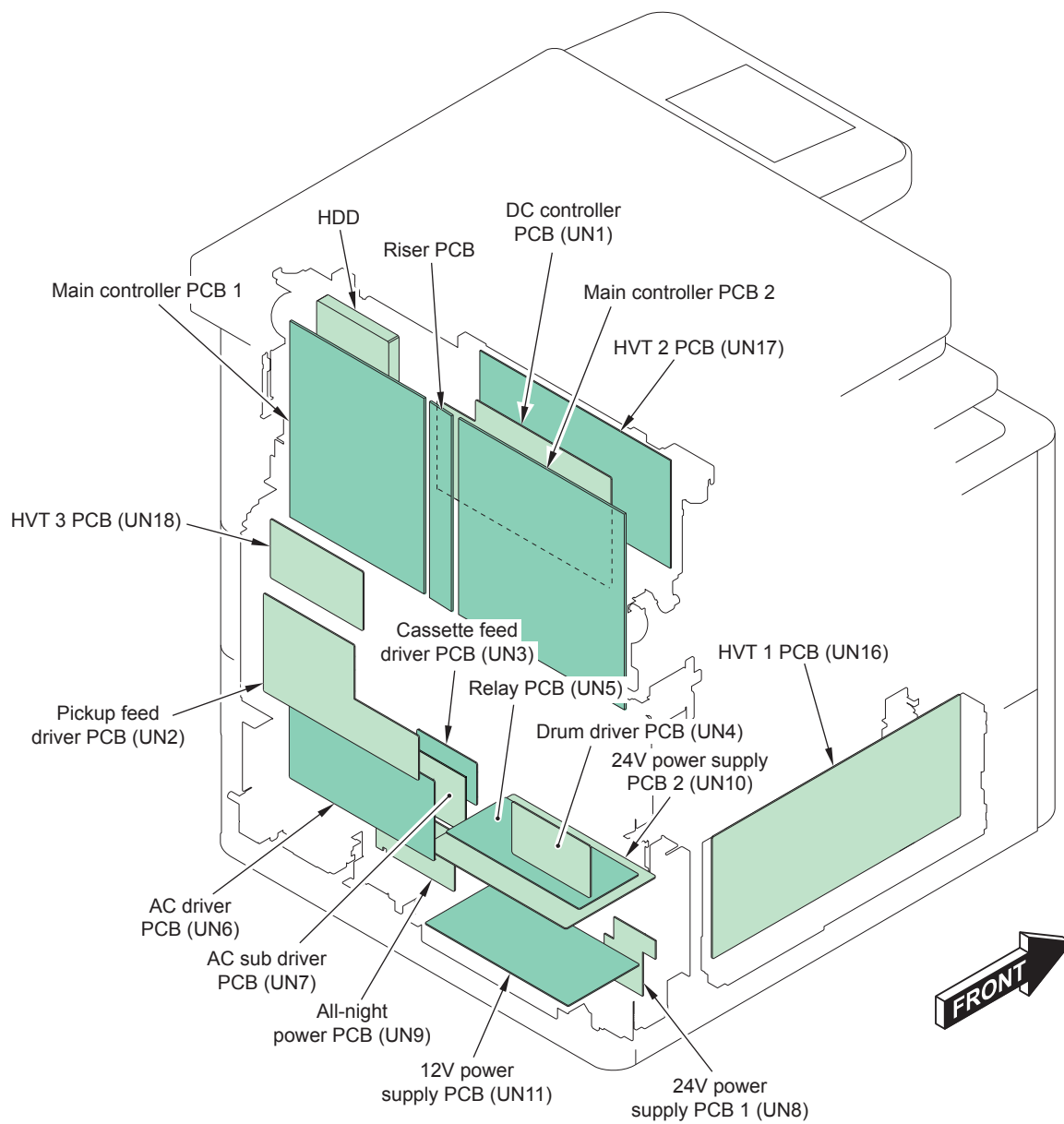
No.	Name	Main Unit	Service parts No.	Reference
C5051/C5045				
UN12	Laser driver PCB (M)	Laser Scanner Unit	FM3-5420	
UN13	Laser driver PCB (Y)	Laser Scanner Unit	FM3-5420	
UN14	Laser driver PCB (Bk)	Laser Scanner Unit	FM3-5420	
UN15	Laser driver PCB (C)	Laser Scanner Unit	FM3-5420	
C5035/C5030				
UN12	Laser driver PCB (M)	Laser Scanner Unit	FM3-5425	
UN13	Laser driver PCB (Y)	Laser Scanner Unit	FM3-5425	
UN14	Laser driver PCB (Bk)	Laser Scanner Unit	FM3-5425	
UN15	Laser driver PCB (C)	Laser Scanner Unit	FM3-5425	
UN39	Toner sensor relay PCB (Y)	Hopper Unit	FM3-7948	
UN40	Toner sensor relay PCB (M)	Hopper Unit	FM3-7948	
UN41	Toner sensor relay PCB (C)	Hopper Unit	FM3-7948	
UN42	Toner sensor relay PCB (Bk)	Hopper Unit	FM3-7948	

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No.	Name	Main Unit	Service parts No.	Reference
UN19	Drum unit new/old detection PCB	Process Unit	FM3-7940	
UN20	Process unit relay PCB	Process Unit	FM3-7938	
UN21	Recycle toner sensor PCB	Process Unit	FM3-7949	
UN23	Y pre-exposure LED PCB (front)	Process Unit	FM3-7945	
UN24	Y pre-exposure LED PCB (rear)	Process Unit	FM3-7945	
UN25	M pre-exposure LED PCB (front)	Process Unit	FM3-7945	
UN26	M pre-exposure LED PCB (rear)	Process Unit	FM3-7945	
UN27	C pre-exposure LED PCB (front)	Process Unit	FM3-7945	
UN28	C pre-exposure LED PCB (rear)	Process Unit	FM3-7945	
UN29	Bk pre-exposure LED PCB (front)	Process Unit	FM3-7945	
UN30	Bk pre-exposure LED PCB (rear)	Process Unit	FM3-7945	
UN43	Developing sub bias PCB (Y)	Developing Assembly	-	
UN44	Developing sub bias PCB (M)	Developing Assembly	-	
UN45	Developing sub bias PCB (C)	Developing Assembly	-	
UN46	Developing sub bias PCB (Bk)	Developing Assembly	-	

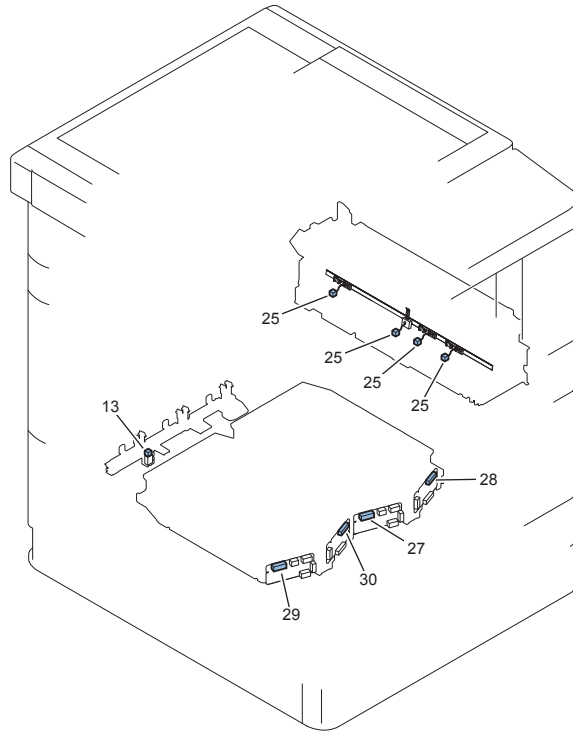
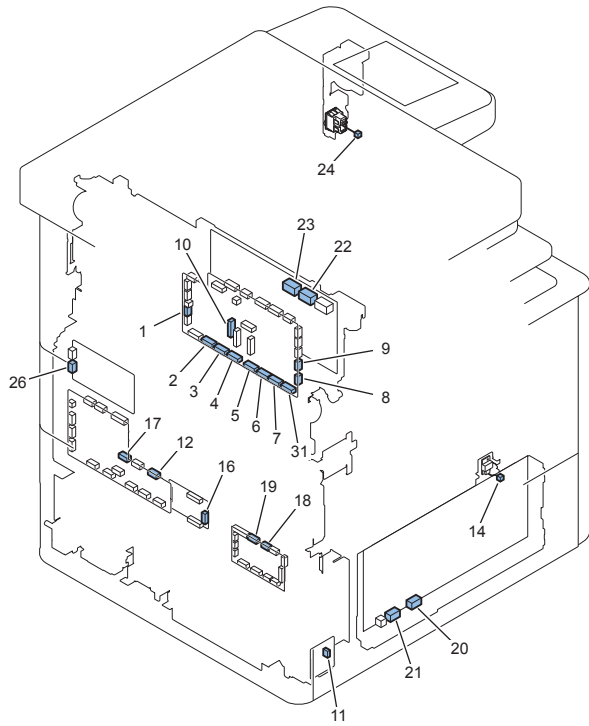
T-4-21



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No.	Name	Main Unit	Service parts No.	Reference
UN1	DC controller PCB	Electric	FM3-7931	
UN2	Pickup feed driver PCB	Electric	FM3-7932	
UN3	Cassette feed driver PCB	Electric	FM3-7933	
UN4	Drum driver PCB	Electric	FM3-7934	
UN5	Relay PCB	Electric	FM3-7935	
UN6	AC driver PCB	Electric	FM3-7936 (C5051/C5045:100V)	
			FM3-7953 (C5051/C5045:120V)	
			FM3-7937 (C5051/C5045/C5035/C5030:100V)	
			FM3-7952 (C5035/C5030:100V)	
			FM3-7954 (C5035/C5030:120V)	
UN7	AC sub driver PCB	Electric	FM3-7950	
UN8	24V power supply PCB 1	Electric	FM3-7955	
UN9	All-night power PCB	Electric	FK2-6324 (100/120V)	
			FK2-6325 (230V)	
UN10	24V power supply PCB 2	Electric	-	
UN11	12V power supply PCB	Electric	-	
UN16	HVT 1 PCB	Electric	FK2-7348	
UN17	HVT 2 PCB	Electric	FM3-6038	
UN18	HVT 3 PCB	Electric	FK2-7350	
-	Main controller PCB 1	Electric	FM4-3830 (C5051)	
			FM4-3831 (C5045)	
			FM4-3832 (C5035)	
			FM4-3833 (C5030)	
-	HDD	Electric	Fk2-8418	
-	Riser PCB	Electric	FM4-0795	
-	Main controller PCB 2	Electric	FM4-0780	

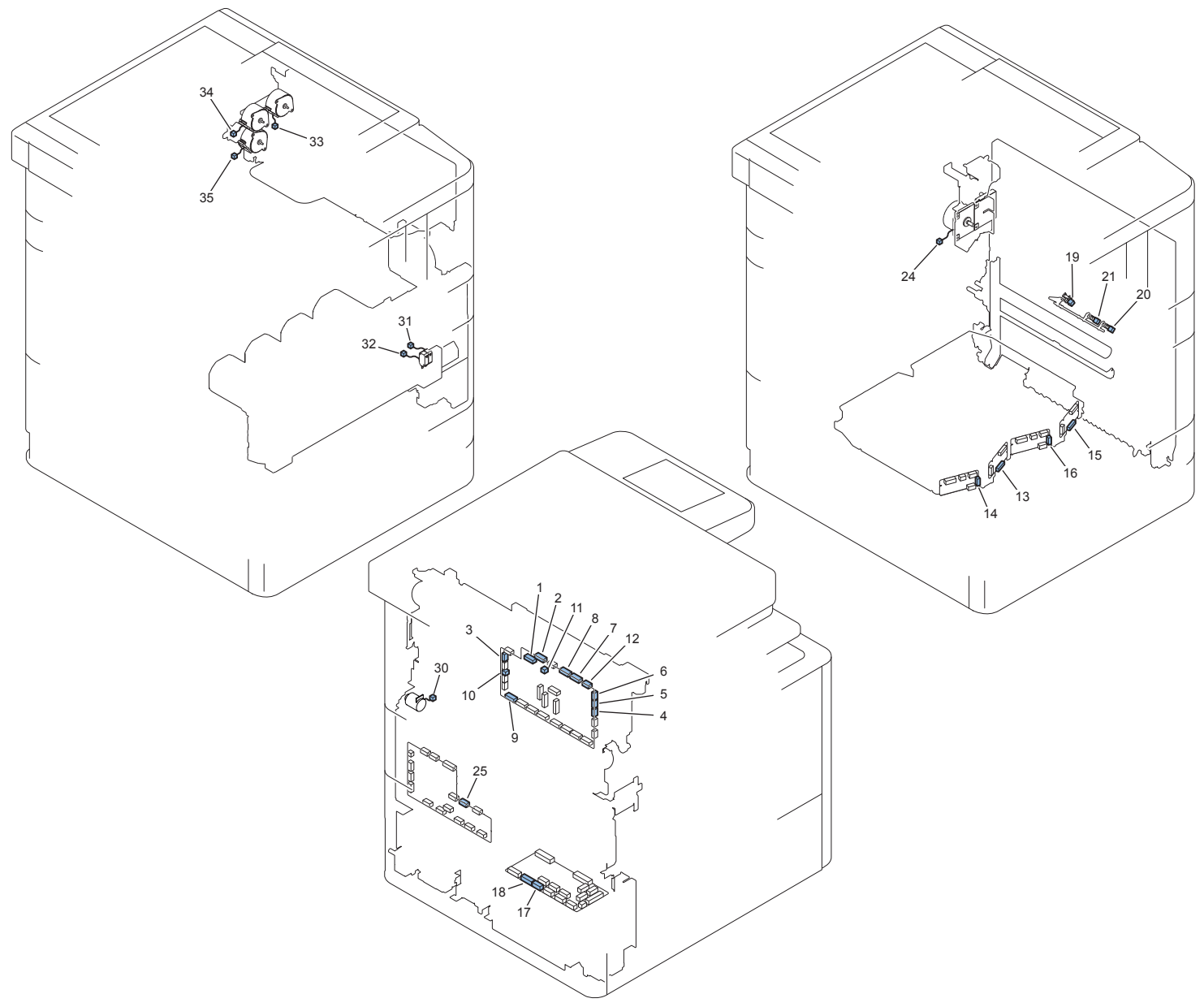
T-4-22



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	J202	UN2	Pickup feed driver PCB
3	J104	UN1	DC controller PCB	J5076	J5066			13	J1300	UN22	Environment sensor 1
3	J104	UN1	DC controller PCB	J5076				14	J810	UN50	Environment sensor 2
3	J104	UN1	DC controller PCB					-	J3002	-	Cassette feeding Unit-AD1
4	J106	UN1	DC controller PCB					16	J231	UN3	Cassette feed driver PCB
5	J107	UN1	DC controller PCB					17	J201	UN2	Pickup feed driver PCB
5	J107	UN1	DC controller PCB					18	J311	UN4	Drum driver PCB
6	J109	UN1	DC controller PCB					19	J313	UN4	Drum driver PCB
7	J110	UN1	DC controller PCB	J5044				20	J654	UN16	HVT 1 PCB
7	J110	UN1	DC controller PCB	J5044				21	J653	UN16	HVT 1 PCB
8	J111	UN1	DC controller PCB					22	J656	UN17	HVT 2 PCB
8	J111	UN1	DC controller PCB					23	J655	UN17	HVT 2 PCB
9	J112	UN1	DC controller PCB	J5026	J5036			24	J5061	SW1	Main power supply switch
9	J112	UN1	DC controller PCB	J5026	J5036	J5075	J5012	25	J42	TH1	Main thermistor 1
9	J112	UN1	DC controller PCB	J5026	J5036	J5075	J5012	25	J42	TH1	Main thermistor 2
9	J112	UN1	DC controller PCB	J5026	J5036	J5075	J5012	25	J42	TH1	Sub thermistor 1
9	J112	UN1	DC controller PCB	J5026	J5036	J5075	J5012	25	J42	TH1	Sub thermistor 2
9	J112	UN1	DC controller PCB					26	J657	UN18	HVT 3 PCB
10	J114	UN1	DC controller PCB					27	J863	UN14	Laser driver PCB (Bk)
10	J114	UN1	DC controller PCB					28	J864	UN15	Laser driver PCB (C)
10	J114	UN1	DC controller PCB					29	J853	UN12	Laser driver PCB (M)
10	J114	UN1	DC controller PCB					30	J854	UN13	Laser driver PCB (Y)

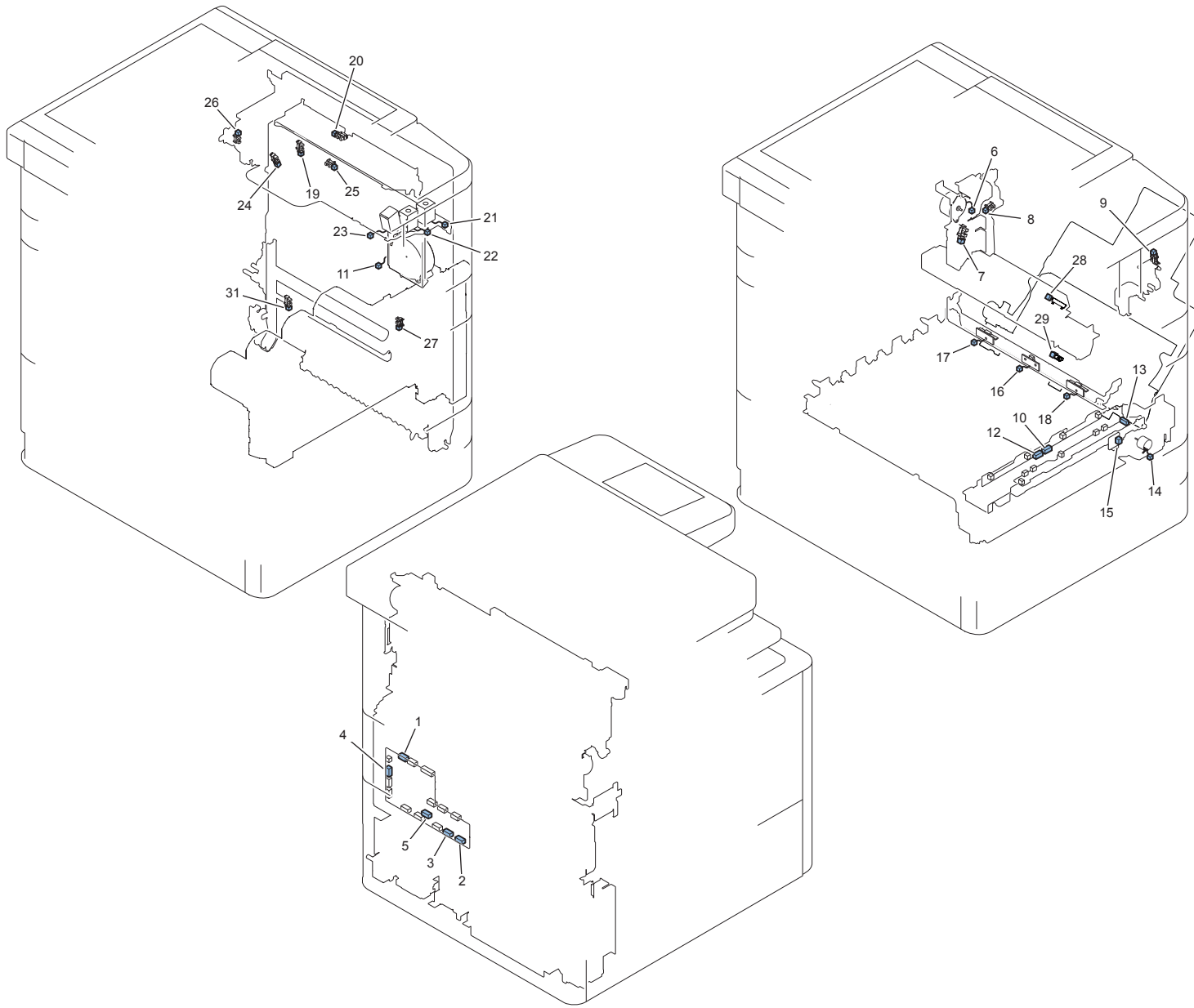
T-4-23



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KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector			KeyNo.	J No.	Symbol	Parts Name
1	J118	UN1	DC controller PCB	J825			13	J102	UN13	Laser driver PCB (Y)
1	J118	UN1	DC controller PCB	J825			14	J203	UN12	Laser driver PCB (M)
2	J119	UN1	DC controller PCB	J823			15	J102	UN15	Laser driver PCB (C)
2	J119	UN1	DC controller PCB	J823			16	J203	UN14	Laser driver PCB (C)
3	J121	UN1	DC controller PCB				17	J401	UN5	Relay PCB
4	J122	UN1	DC controller PCB				18	J402	UN5	Relay PCB
5	J123	UN1	DC controller PCB	J5028	J5068		19	J6087	PS34	Fixing inlet sensor
5	J123	UN1	DC controller PCB	J5028	J5068		20	J6086	PS36	Fixing arch sensor 2
5	J123	UN1	DC controller PCB	J5028	J5068		21	J6085	PS35	Fixing arch sensor 1
6	J124	UN1	DC controller PCB	J5045			24	J6084	M21	Fixing motor
7	J125	UN1	DC controller PCB				25	J203	UN2	Pickup feed driver PCB
8	J126	UN1	DC controller PCB	J5071			-	J815	-	Buffer Pass Unit-G1
8	J126	UN1	DC controller PCB	J5071			-	J816	-	Inner Finisher-A1
9	J127	UN1	DC controller PCB	J5037			-	J809	-	Booklet Finisher-C1/Staple Finisher-C1
9	J127	UN1	DC controller PCB				-	J813	-	Paper Deck Unit-B1
10	J132	UN1	DC controller PCB				30	J5042	-	Key Switch Unit
11	J136	UN1	DC controller PCB	J5053			31	J2111	SW3	DC interlock switch 1
11	J136	UN1	DC controller PCB	J5053			32	J2111	SW4	DC interlock switch 2
12	J138	UN1	DC controller PCB	J5031			33	J6140	M25	Third delivery motor
12	J138	UN1	DC controller PCB	J5031			34	J6141	M24	Reverse roller motor
12	J138	UN1	DC controller PCB	J5031			35	J6142	M23	First & Second delivery motor

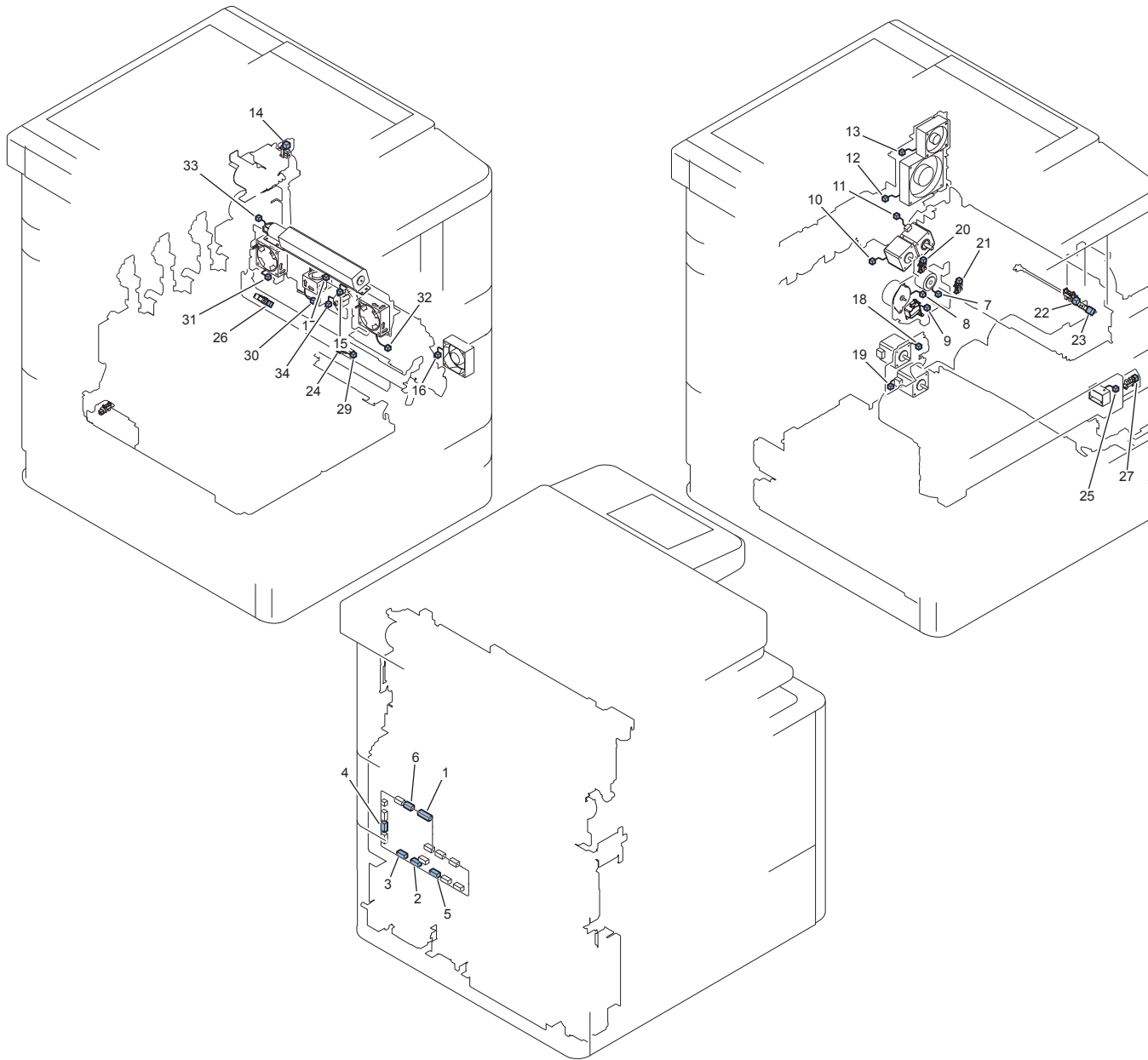
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KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector				KeyNo.	J No.	Symbol	Parts Name
1	J204	UN2	Pickup feed driver PCB	J5003	J5109			6	J6058	M22	Fixing delivery motor
1	J204	UN2	Pickup feed driver PCB	J5003				7	J6091	PS44	First delivery tray full sensor
1	J204	UN2	Pickup feed driver PCB	J5003				8	J6088	PS41	First delivery sensor
1	J204	UN2	Pickup feed driver PCB	J5003	J5110			9	J6099	PS21	Second & third delivery door sensor
1	J204	UN2	Pickup feed driver PCB	J5003				-	J6070	-	-
1	J204	UN2	Pickup feed driver PCB	J5003				11	J6062	FM9	Delivery fan 2
2	J205	UN2	Pickup feed driver PCB	J5050	J5051	J755	J601	12	J900	UN19	Drum unit new/old detection PCB
2	J205	UN2	Pickup feed driver PCB	J5050	J5051	J755	J601	10	J901	UN19	Drum unit new/old detection PCB
2	J205	UN2	Pickup feed driver PCB	J5050	J5051	J755		13	J600	UN20	Process unit relay PCB
2	J205	UN2	Pickup feed driver PCB	J5050	J5051	J755		14	J6111	M26	Waste toner stirring motor
2	J205	UN2	Pickup feed driver PCB	J5050	J5051	J755		15	J6110	UN21	Waste toner sensor PCB
3	J207	UN2	Pickup feed driver PCB	J5048	J5046			16	J6108	UN49	Patch sensor (center)
3	J207	UN2	Pickup feed driver PCB	J5048	J5046			17	J6107	UN48	Patch sensor (rear)
3	J207	UN2	Pickup feed driver PCB	J5048	J5046			18	J6106	UN47	Patch sensor (front)
4	J210	UN2	Pickup feed driver PCB	J5032	J5108			19	J6076	PS40	Duplex inlet sensor
4	J210	UN2	Pickup feed driver PCB	J5032				20	J6075	PS43	Third delivery sensor
4	J210	UN2	Pickup feed driver PCB	J5032	J5097			21	J6074	SL7	Third delivery flapper solenoid
4	J210	UN2	Pickup feed driver PCB	J5032	J5097			22	J6073	SL6	Second delivery flapper solenoid
4	J210	UN2	Pickup feed driver PCB	J5032	J5106	J5083		23	J6065	SL5	First delivery flapper solenoid
4	J210	UN2	Pickup feed driver PCB	J5032	J5106	J5083		24	J6089	PS42	Second delivery sensor
4	J210	UN2	Pickup feed driver PCB	J5032	J5106			25	J6090	PS39	Reverse sensor
4	J210	UN2	Pickup feed driver PCB	J5032				26	J6092	PS45	Second delivery tray full sensor
5	J212	UN2	Pickup feed driver PCB	J5028	J5054			27	J6077	PS38	Duplex paper sensor
5	J212	UN2	Pickup feed driver PCB	J5028	J5099			28	J6081	UN52	Multi-purpose size sensor
5	J212	UN2	Pickup feed driver PCB	J5028	J5099			29	J6171	PS47	Multi-purpose paper sensor
5	J212	UN2	Pickup feed driver PCB	J5028				31	J5100	PS19	Right lower door sensor

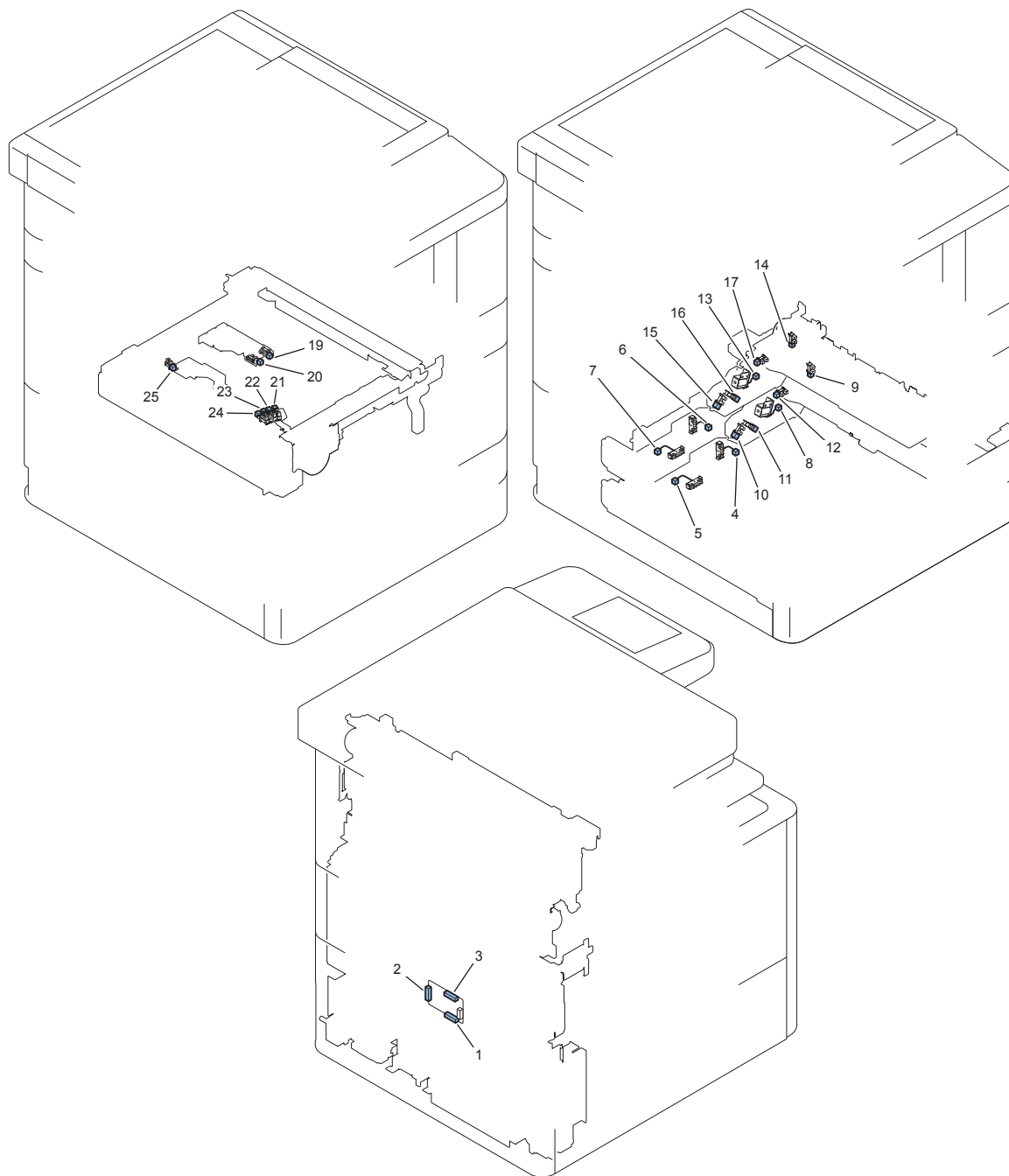
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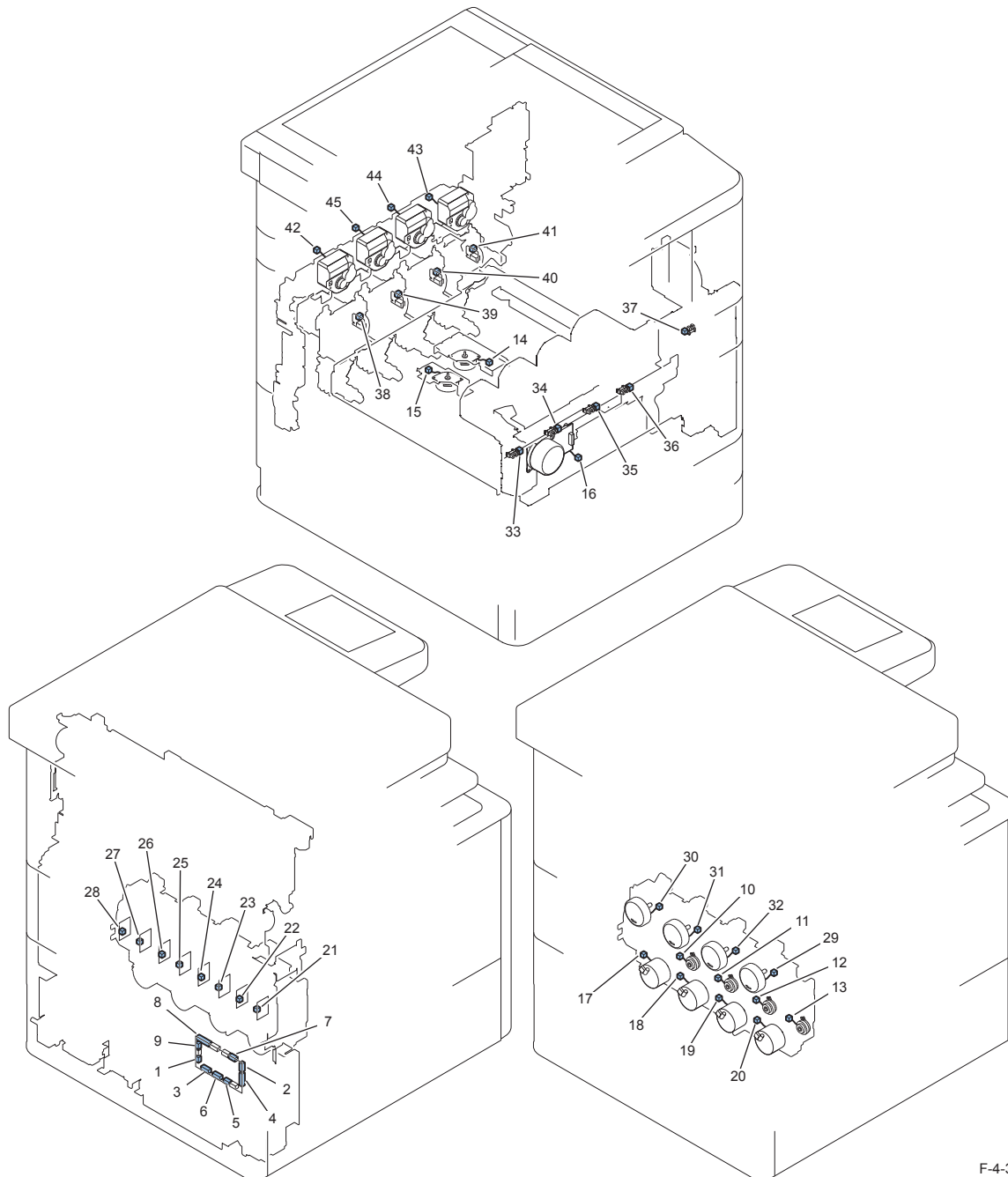
KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector			KeyNo.	J No.	Symbol	Parts Name	
1	J213	UN2	Pickup feed driver PCB	J5086			7	J6082	CL1	Multi-purpose pickup clutch	
1	J213	UN2	Pickup feed driver PCB	J5086			8	J6083	M18	Multi-purpose motor	
1	J213	UN2	Pickup feed driver PCB	J5086			9	J6072	SL4	Bypass tray lifter solenoid	
1	J213	UN2	Pickup feed driver PCB	J6056			10	J6157	M19	Registration motor	
1	J213	UN2	Pickup feed driver PCB	J6057			11	J6158	M20	Duplex feed motor	
1	J213	UN2	Pickup feed driver PCB				12	J6066	FM1	Fixing heat exhaust fan 1	
1	J213	UN2	Pickup feed driver PCB				13	J6067	FM2	Fixing heat exhaust fan 2	
1	J213	UN2	Pickup feed driver PCB				14	J5004	PS20	Right door sensor	
2	J214	UN2	Pickup feed driver PCB	J5049			15	J6060	M28	Laser shutter motor	
2	J214	UN2	Pickup feed driver PCB	J5049			16	J6123	FM10	Process cartridge fan (front)	
2	J214	UN2	Pickup feed driver PCB	J5049			17	J6097	PS29	Laser shutter sensor	
3	J215	UN2	Pickup feed driver PCB				18	J6155	M16	Cassette 1 pickup motor	
3	J215	UN2	Pickup feed driver PCB				19	J6156	M17	Cassette 2 pickup motor	
4	J216	UN2	Pickup feed driver PCB	J5036	J5075	J5012	20	J6103	PS31	Shutter HP sensor	
4	J216	UN2	Pickup feed driver PCB	J5036	J5075	J5012	21	J6102	PS32	Shutter position sensor	
4	J216	UN2	Pickup feed driver PCB	J5036	J5075	J5012	J5060	22	J6104	PS30	Fixing pressure sensor
4	J216	UN2	Pickup feed driver PCB	J5038	J5075	J5012	J5060	23	J6101	PS37	Inner delivery sensor
5	J217	UN2	Pickup feed driver PCB	J5055			-	J5059	-	-	
5	J217	UN2	Pickup feed driver PCB	J5055	J5041		24	J6093	UN51	Transparency sensor	
5	J217	UN2	Pickup feed driver PCB	J5055	J5056		25	J6064	SL1	Registration shutter solenoid	
5	J217	UN2	Pickup feed driver PCB	J5055	J5057		26	J6095	PS33	Registration sensor	
5	J217	UN2	Pickup feed driver PCB	J5055	J5058		27	J6096	PS18	Front door sensor	
5	J217	UN2	Pickup feed driver PCB	J5055	J5114		29	J6094	UN53	Vertical path sensor	
6	J218	UN2	Pickup feed driver PCB	J5034			30	J6071	FM8	Secondary transfer exhaust fan	
6	J218	UN2	Pickup feed driver PCB	J5034			31	J6069	FM6	Fixing cooling fan (rear)	
6	J218	UN2	Pickup feed driver PCB	J5034			32	J6068	FM5	Fixing cooling fan (front)	
6	J218	UN2	Pickup feed driver PCB	J5034			33	J6061	FM7	Delivery fan 1	
6	J218	UN2	Pickup feed driver PCB	J5034			34	J6059	M27	Shutter motor	

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KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector			KeyNo.	J No.	Symbol	Parts Name
1	J234	UN3	Cassette feed driver PCB	J5073			4	J6127	SW9	Cassette 2 size switch B
1	J234	UN3	Cassette feed driver PCB	J5073			5	J6128	SW8	Cassette 2 size switch A
1	J234	UN3	Cassette feed driver PCB	J5074			6	J6125	SW7	Cassette 1 size switch B
1	J234	UN3	Cassette feed driver PCB	J5074			7	J6126	SW6	Cassette 1 size switch A
2	J235	UN3	Cassette feed driver PCB	J5040	J5065		8	J6138	SL3	Cassette 2 pickup solenoid
2	J235	UN3	Cassette feed driver PCB	J5040	J5065		9	J6137	PS56	Cassette 2 pre-registration sensor
2	J235	UN3	Cassette feed driver PCB	J5040	J5065		10	J6136	PS54	Cassette 2 paper level sensor B
2	J235	UN3	Cassette feed driver PCB	J5040	J5065		11	J6135	PS53	Cassette 2 paper level sensor A
2	J235	UN3	Cassette feed driver PCB	J5040	J5065		12	J6134	PS50	Cassette 2 paper sensor
2	J235	UN3	Cassette feed driver PCB	J5040	J5064		13	J6133	SL2	Cassette 1 pickup solenoid
2	J235	UN3	Cassette feed driver PCB	J5040	J5064		14	J6132	PS55	Cassette 1 pre-registration sensor
2	J235	UN3	Cassette feed driver PCB	J5040	J5064		15	J6131	PS52	Cassette 1 paper level sensor B
2	J235	UN3	Cassette feed driver PCB	J5040	J5064		16	J6130	PS51	Cassette 1 paper level sensor A
2	J235	UN3	Cassette feed driver PCB	J5040	J5064		17	J6129	PS49	Cassette 1 paper sensor
3	J237	UN3	Cassette feed driver PCB	J5011	J5052		-	J5067	-	-
3	J237	UN3	Cassette feed driver PCB	J5011	J5052		19	J6032	PS23	Primary transfer detachment sensor 2
3	J237	UN3	Cassette feed driver PCB	J5011	J5052		20	J6031	PS22	Primary transfer detachment sensor 1
3	J237	UN3	Cassette feed driver PCB	J5011	J5052	J5062	21	J6030	PS28	ITB displacement sensor 4
3	J237	UN3	Cassette feed driver PCB	J5011	J5052	J5062	22	J6029	PS27	ITB displacement sensor 3
3	J237	UN3	Cassette feed driver PCB	J5011	J5052	J5062	23	J6028	PS26	ITB displacement sensor 2
3	J237	UN3	Cassette feed driver PCB	J5011	J5052	J5062	24	J6027	PS25	ITB displacement sensor 1
3	J237	UN3	Cassette feed driver PCB	J5011	J5052		25	J6026	PS24	ITB steering sensor

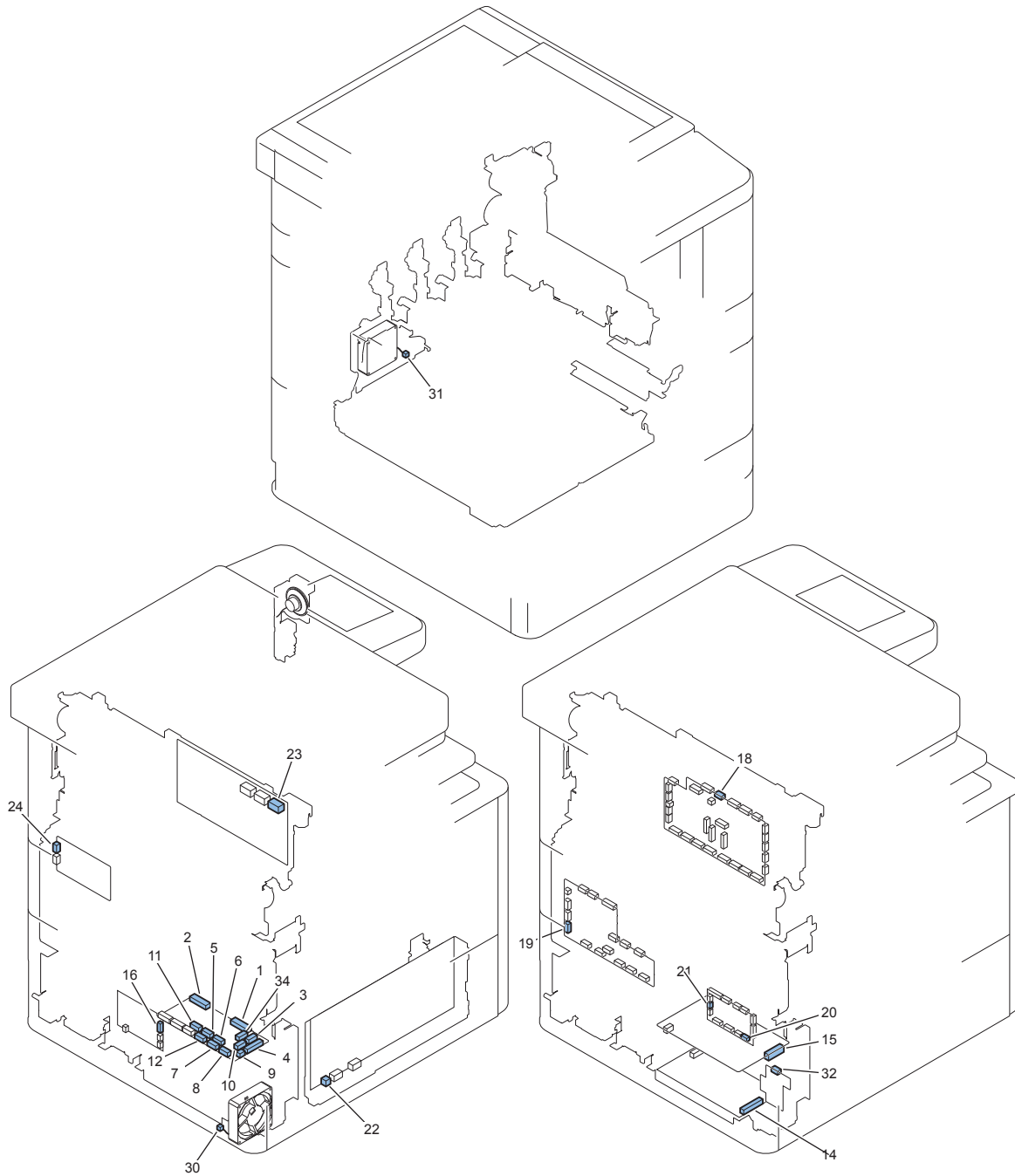
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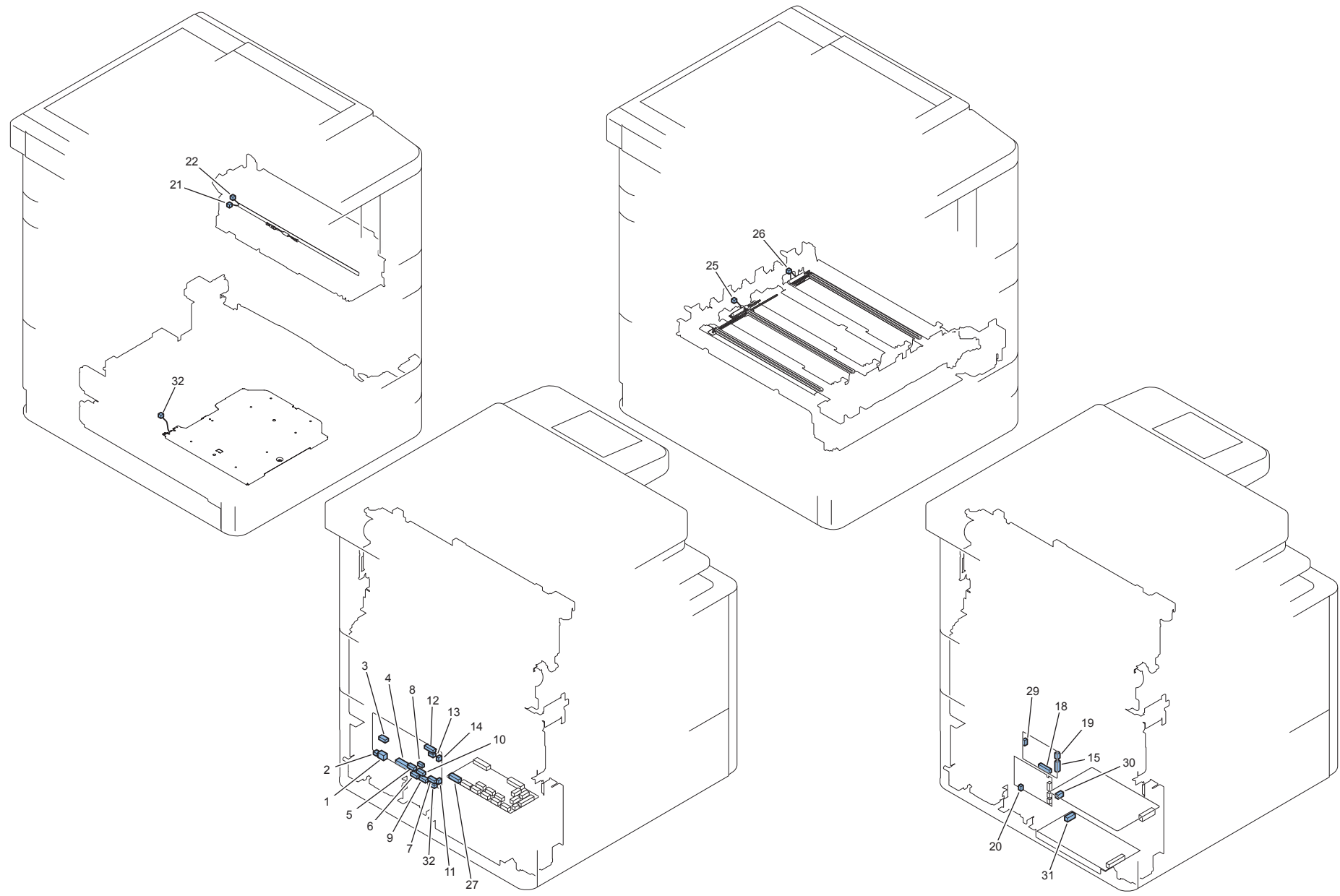
KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector			KeyNo.	J No.	Symbol	Parts Name
1	J303	UN4	Drum driver PCB				10	J6008	CL5	Toner supply clutch (Bk)
1	J303	UN4	Drum driver PCB				11	J6007	CL4	Toner supply clutch (C)
1	J303	UN4	Drum driver PCB				12	J6006	CL3	Toner supply clutch (M)
1	J303	UN4	Drum driver PCB				13	J6005	CL2	Toner supply clutch (Y)
2	J304	UN4	Drum driver PCB	J5078	J5027	J5070	14	J6004	M15	Primary transfer separation motor
2	J304	UN4	Drum driver PCB	J5078	J5027	J5070	15	J6003	M14	ITB displacement control motor
2	J304	UN4	Drum driver PCB	J5078	J5027	J5070	16	J6025	M13	ITB motor
3	J305	UN4	Drum driver PCB				17	J6011	M8	Developing motor (Bk)
3	J305	UN4	Drum driver PCB				18	J6012	M7	Developing motor (C)
3	J305	UN4	Drum driver PCB				19	J6013	M6	Developing motor (M)
3	J305	UN4	Drum driver PCB				20	J6015	M5	Developing motor (Y)
4	J306	UN4	Drum driver PCB				21	J6024	UN31	Y drum rotation sensor 1
4	J306	UN4	Drum driver PCB				22	J6023	UN32	Y drum rotation sensor 2
4	J306	UN4	Drum driver PCB				23	J6022	UN33	M drum rotation sensor 1
4	J306	UN4	Drum driver PCB				24	J6021	UN34	M drum rotation sensor 2
4	J306	UN4	Drum driver PCB				25	J6020	UN35	C drum rotation sensor 1
4	J306	UN4	Drum driver PCB				26	J6019	UN36	C drum rotation sensor 2
4	J306	UN4	Drum driver PCB				27	J6018	UN37	Bk drum rotation sensor 1
4	J306	UN4	Drum driver PCB				28	J6017	UN38	Bk drum rotation sensor 2
5	J307	UN4	Drum driver PCB				29	J6010	M1	Drum motor (Y)
6	J308	UN4	Drum driver PCB				30	J6009	M4	Drum motor (Bk)
6	J308	UN4	Drum driver PCB				31	J6014	M3	Drum motor (C)
6	J308	UN4	Drum driver PCB				32	J6016	M2	Drum motor (M)
7	J309	UN4	Drum driver PCB	J5079	J5029	J5030	33	J6053	PS13	Toner container inner cover sensor (Y)
7	J309	UN4	Drum driver PCB	J5079	J5029	J5030	34	J6052	PS14	Toner container inner cover sensor (M)
7	J309	UN4	Drum driver PCB	J5079	J5029	J5030	35	J6050	PS15	Toner container inner cover sensor (C)
7	J309	UN4	Drum driver PCB	J5079	J5029	J5030	36	J6048	PS16	Toner container inner cover sensor (Bk)
7	J309	UN4	Drum driver PCB	J5079	J5029		37	J6046	PS17	Toner container outer cover sensor
8	J310	UN4	Drum driver PCB	J5015	J5016		38	J5017	UN39	Toner sensor relay PCB (Y)
8	J310	UN4	Drum driver PCB	J5018	J5019		39	J5020	UN40	Toner sensor relay PCB (M)
8	J310	UN4	Drum driver PCB	J5021	J5022		40	J5023	UN41	Toner sensor relay PCB (C)
8	J310	UN4	Drum driver PCB	J5024	J5025		41	J5035	UN42	Toner sensor relay PCB (Bk)
9	J312	UN4	Drum driver PCB	J1180			42	J2	M9	Toner container motor (Y)
9	J312	UN4	Drum driver PCB	J1181			43	J5	M12	Toner container motor (Bk)
9	J312	UN4	Drum driver PCB	J1182			44	J4	M11	Toner container motor (C)
9	J312	UN4	Drum driver PCB	J1184			45	J3	M10	Toner container motor (M)

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KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector				KeyNo.	J No.	Symbol	Parts Name
1	J411	UN5	Relay PCB					14	J835	UN11	12V power supply PCB
2	J412	UN5	Relay PCB					15	J834	UN10	24V power supply PCB2
34	J426	UN5	Relay PCB					-	J5101	-	Reader controll PCB
3	J413	UN5	Relay PCB					16	J691	UN9	All-night power PCB
5	J422	UN5	Relay PCB					18	J129	UN1	DC controller PCB
6	J423	UN5	Relay PCB					19	J211	UN2	Pickup feed driver PCB
7	J424	UN5	Relay PCB					20	J301	UN4	Drum driver PCB
7	J424	UN5	Relay PCB					21	J302	UN4	Drum driver PCB
8	J425	UN5	Relay PCB	J5043				22	J650	UN16	HVT 1 PCB
8	J425	UN5	Relay PCB					23	J651	UN17	HVT 2 PCB
8	J425	UN5	Relay PCB					24	J652	UN18	HVT 3 PCB
9	J427	UN5	Relay PCB	J5081				-	J802	-	USB Device Port-B1
10	J428	UN5	Relay PCB	J5080				-	J804	-	Inner Finisher-A1
10	J428	UN5	Relay PCB					-	J805	-	Cassette feeding Unit-AD1
10	J428	UN5	Relay PCB					-	J803	-	Booklet Finisher-C1/Staple Finisher-C1
11	J432	UN5	Relay PCB					30	J6122	FM3	Power supply cooling fan
11	J432	UN5	Relay PCB					31	J6124	FM4	Process cartridge fan (rear)
12	J451	UN5	Relay PCB					32	J662	UN8	24V power supply PCB1

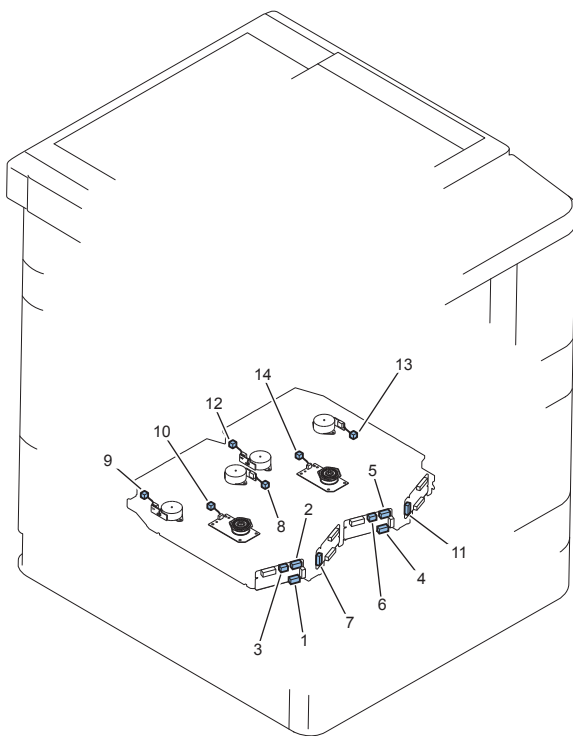
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KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector				KeyNo.	J No.	Symbol	Parts Name
1	J1001	UN6	AC driver PCB					-	-	-	AC in cable
2	J1002	UN6	AC driver PCB					-	J866	-	GND
2	J1002	UN6	AC driver PCB					-	J833	-	GND
3	J1003	UN6	AC driver PCB					-	-	SW5	AC interlock switch
4	J1004	UN6	AC driver PCB					18	J1021	UN7	AC sub driver PCB
4	J1004	UN6	AC driver PCB					19	J1020	UN7	AC sub driver PCB
5	J1005	UN6	AC driver PCB					20	J681	UN9	All-night power PCB
-	-	SW5	AC interlock switch	J5006	J5087	J5012	J5007	21	J5013	H1	Fixing heater
-	-	-	-					22	J5014	H1	Fixing heater
-	-	SW5	AC interlock switch	J5006	J5087	J5012	J5007	-	-	TP1	Temperature fuse
6	J1006	UN6	AC driver PCB	J5006	J5010			-	-	SW1	Main power supply switch
7	J1007	UN6	AC driver PCB					32	J5005	H4	Cassette heater
32	J1008	UN6	AC driver PCB					-	-	-	Cassette Feeding Unit-AD1
8	J1009	UN6	AC driver PCB					-	-	SW2	Environment switch
9	J1010	UN6	AC driver PCB					-	J5102	-	Reader controll PCB
10	J1011	UN6	AC driver PCB	J5038				25	J5088	H3	Drum heater (YMC)
10	J1011	UN6	AC driver PCB					26	J5039	H2	Drum heater (Bk)
11	J1012	UN6	AC driver PCB					-	-	-	Cassette heater unit-31/32
12	J2001	UN6	AC driver PCB					27	J431	UN5	Relay PCB
13	J2002	UN6	AC driver PCB					-	J5002	-	-
14	J2003	UN6	AC driver PCB					29	J2020	UN7	AC sub driver PCB
15	J1022	UN7	AC sub driver PCB	J5077				30	J1102	UN10	24V power supply PCB2
15	J1022	UN7	AC sub driver PCB	J5077				31	J1101	UN11	12V power supply PCB

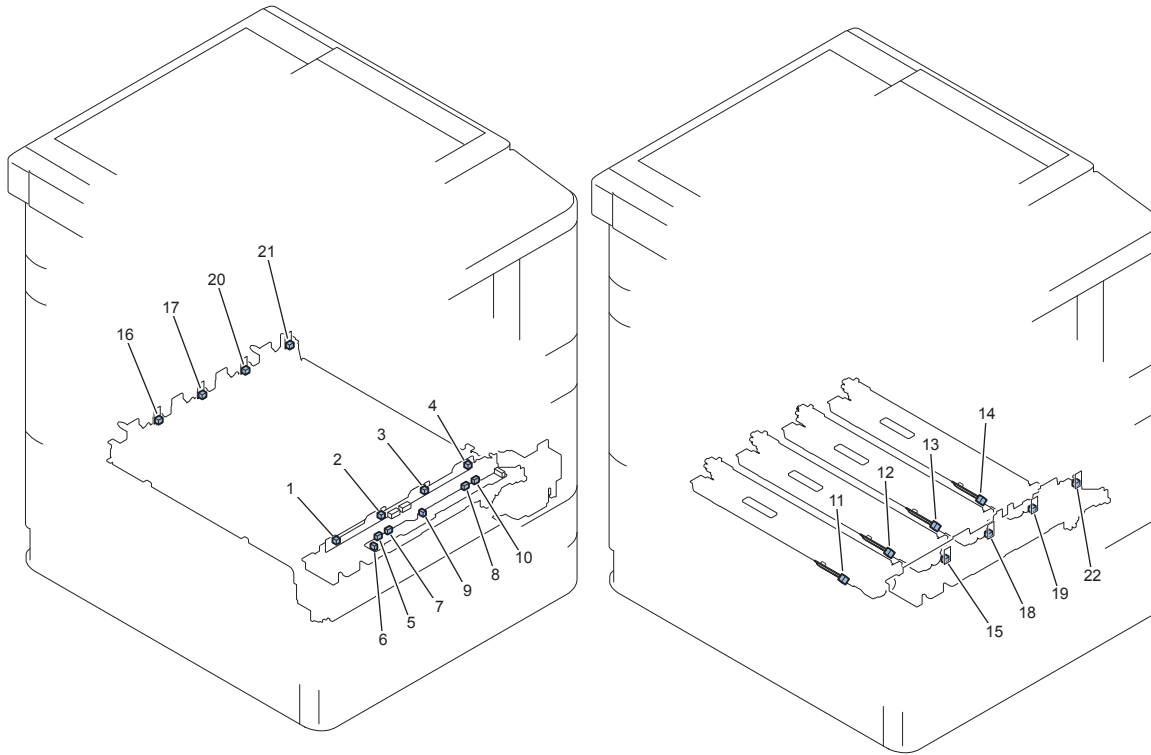
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KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector	KeyNo.	J No.	Symbol	Parts Name
1	J202	UN12	Laser driver PCB (M)		7	J103	UN13	Laser driver PCB (Y)
2	J204	UN12	Laser driver PCB (M)		8	J6159	M32	Image skew correction motor (M)
2	J204	UN12	Laser driver PCB (M)		9	J6160	M31	Image skew correction motor (Y)
3	J205	UN12	Laser driver PCB (M)		10	J6161	M29	Scanner motor (YM)
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	Scanner motor (CBk)

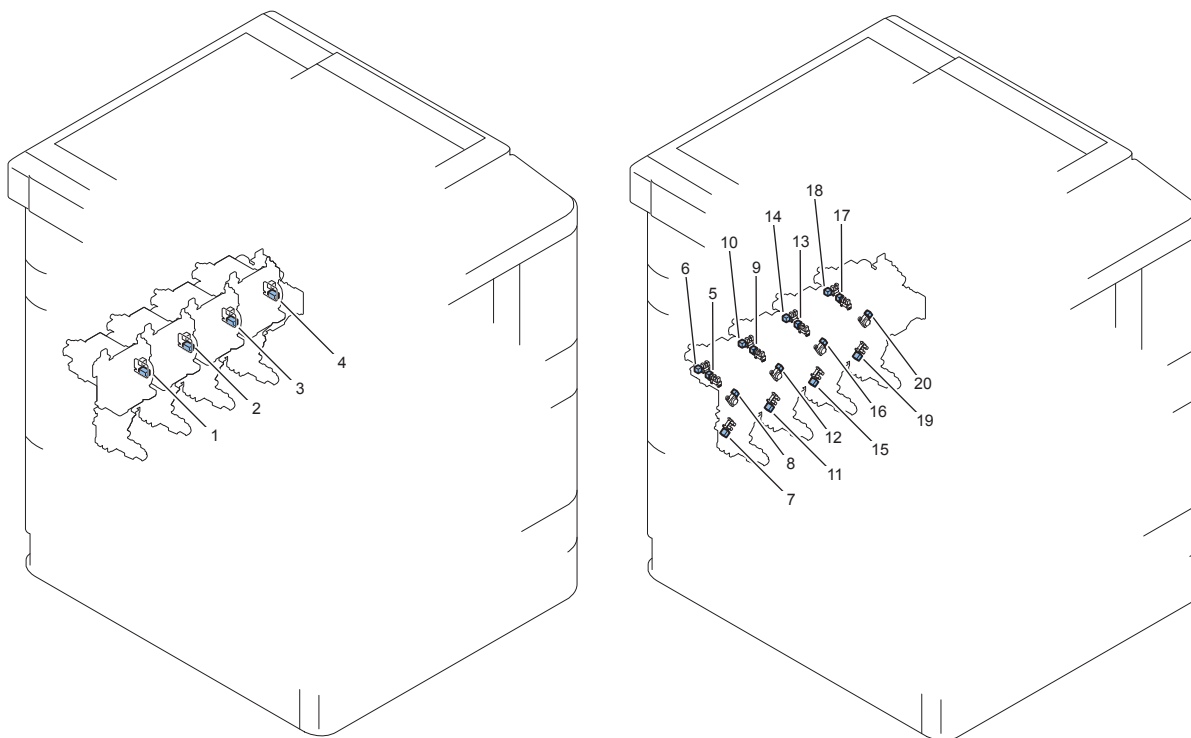
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KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector	KeyNo.	J No.	Symbol	Parts Name
1	J902	UN19	Drum unit new/old detection PCB	J5093	11	J6114	TS5	ATR sensor (Y)
1	J902	UN19	Drum unit new/old detection PCB		11	J5093	UN43	Developing sub bias PCB (Y)
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)

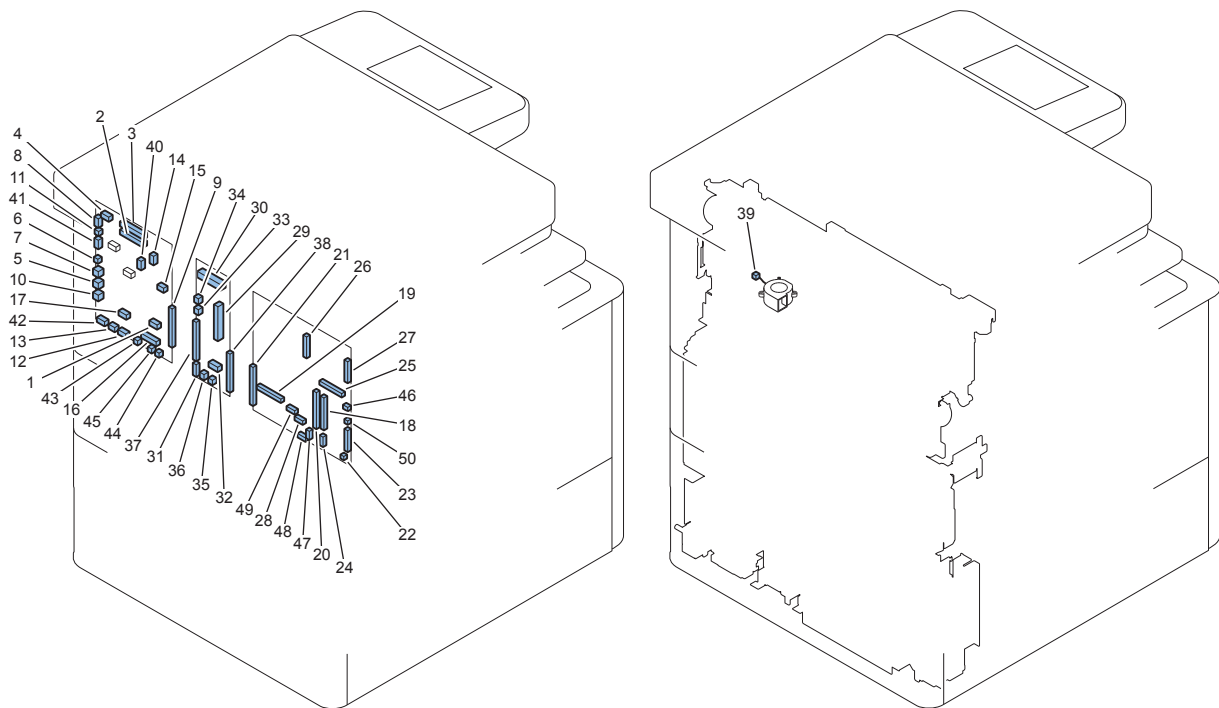
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KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector	KeyNo.	J No.	Symbol	Parts Name
1	J658	UN39	Toner sensor relay PCB (Y)		5	J6154	PS5	Toner container cam HP sensor (Y)
1	J658	UN39	Toner sensor relay PCB (Y)		6	J6035	PS9	Toner cap position sensor (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)

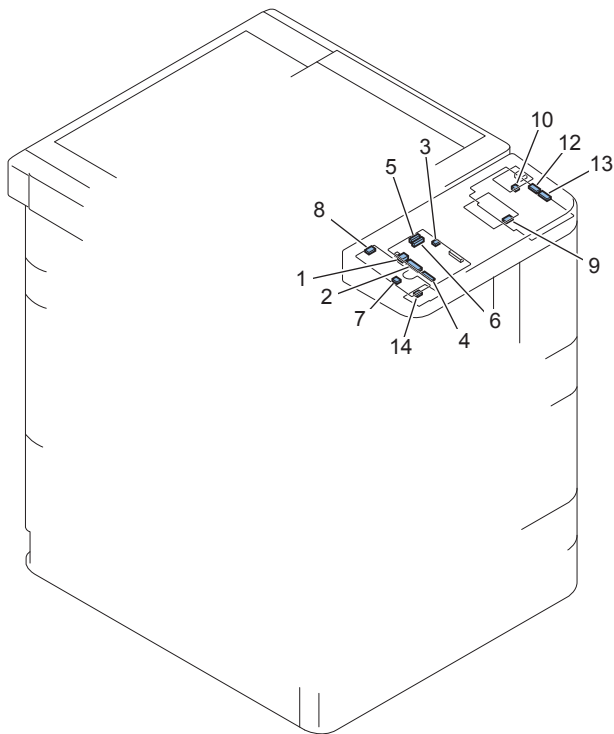
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KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector	KeyNo.	J No.	Symbol	Parts Name
1	J1020	-	Main controller PCB 1		-	-	-	Flash PCB
2	J1004	-	Main controller PCB 1		-	-	-	DDR2-SDRAM (M1)
3	J1000	-	Main controller PCB 1		-	-	-	DDR2-SDRAM (M0)
4	J1002	-	Main controller PCB 1		-	-	-	Voice Operation (Option A)
4	J1002	-	Main controller PCB 1		-	-	-	Voice Guidance (Option B)
5	J1018	-	Main controller PCB 1		-	-	-	USB(D)
6	J1015	-	Main controller PCB 1		-	-	FM13	Controller fan 3
7	J1017	-	Main controller PCB 1		-	-	-	Ethernet
8	J1003	-	Main controller PCB 1		-	-	-	Operation part
9	J1019	-	Main controller PCB 1		37	J103	-	Riser PCB
10	J1021	-	Main controller PCB 1		-	-	-	USB(H)
11	J1007	-	Main controller PCB 1		-	-	-	Device Port Hub (Option)
12	J1027	-	Main controller PCB 1		-	-	-	Card Reader IF kit Card Reader(Option A)
12	J1027	-	Main controller PCB 1		-	-	-	RS Conv (USA only)(Option B)
12	J1027	-	Main controller PCB 1		-	-	-	
13	J1026	-	Main controller PCB 1		-	-	-	CC-VI I/F cable (TBD) (Option)
14	J1006	-	Main controller PCB 1		-	-	-	USB-FLASH (no use)
15	J1013	-	Main controller PCB 1		-	-	-	POSTPONE I/F (dealer only)
16	J1025	-	Main controller PCB 1		-	-	-	YON-RISER(PCI-Bridge) (option)
17	J1022	-	Main controller PCB 1		-	-	-	TPM
18	J11	-	Main controller PCB 2		-	-	-	DDR2-SDRAM (M1)
19	J12	-	Main controller PCB 2		-	-	-	DDR2-SDRAM (M0)
20	J13	-	Main controller PCB 2		-	-	-	DDR2 DIMM (P)
21	J14	-	Main controller PCB 2		38	J101	-	Riser PCB
22	J16	-	Main controller PCB 2		-	-	-	G3 FAX BOX (Option)
23	J17	-	Main controller PCB 2		-	-	-	G3 FAX BOX (Option)
24	J18	-	Main controller PCB 2		-	-	-	FRAM Counter
25	J1000	-	Main controller PCB 2		-	-	-	Image data analyzer PCB
26	J1010	-	Main controller PCB 2		-	-	-	Bypass PCB
26	J1010	-	Main controller PCB 2		-	-	-	EFI controller (option)
27	J3003	-	Main controller PCB 2		-	-	-	Reader controll PCB
28	JJ1xxx	-	Main controller PCB 2		-	-	-	Debug SRAM (debug only)
29	J102	-	Riser PCB		-	-	UN1	DC controller PCB
30	J104	-	Riser PCB		-	-	-	-
31	J105	-	Riser PCB		-	-	-	HDD
32	J107	-	Riser PCB		-	-	-	HDD
33	J108	-	Riser PCB		-	-	FM11	Controller fan 1
34	J109	-	Riser PCB		-	-	FM12	Controller fan 2
35	J110	-	Riser PCB		39	J6174	FM14	HDD cooling fan
36	J111	-	Riser PCB		-	-	-	SATA-Op

T-4-34



F-4-41

KeyNo.	J No.	Symbol	Parts Name	Intermediate Connector	KeyNo.	J No.	Symbol	Parts Name
1	J1002	-	CPU PCB		-		-	Relay PCB
2	J1003	-	CPU PCB		8	J4001	-	Sub key PCB
2	J1003	-	CPU PCB		9	J9001	-	Inverter PCB
3	J1006	-	CPU PCB		10	J2002	-	Hub PCB
4	J1007	-	CPU PCB		11	J1	-	LCD
5	J1008	-	CPU PCB		12	J3002	-	Ten key PCB
6	J1009	-	CPU PCB		13	J3001	-	Ten key PCB
7	J4002	-	Sub key PCB		14	J5001	-	Volume PCB

T-4-35

Main Controller

Removing the HDD

Actions before Replacement

Backup the Settings/Registration data.

1) Execute the following in remote UI.

Management Settings > Data Management > Import/Export

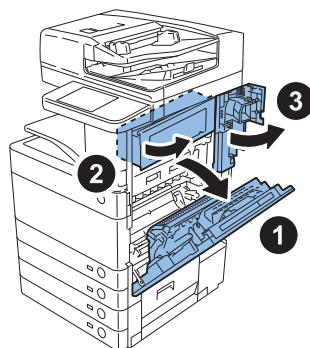
2) Execute the following in service mode.

(The Settings/Registration data values that cannot be backed up by using remote UI are printed out as a list.)

(Lv.1) COPIER > FUNCTION > MISC-P > USER-PRT

Procedure

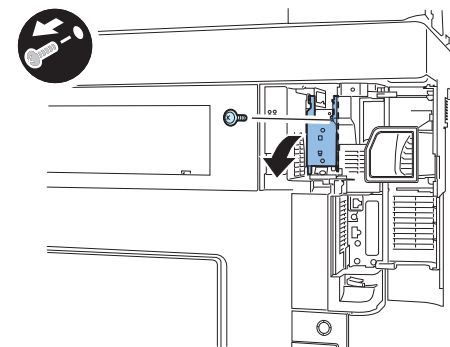
1) Open the Right Lower Cover, Right Upper Cover and the Right Rear Cover 1.



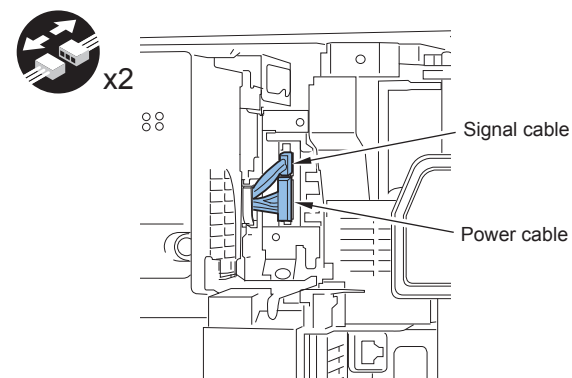
F-4-42

2) Open the HDD Lid.

- 1 screw

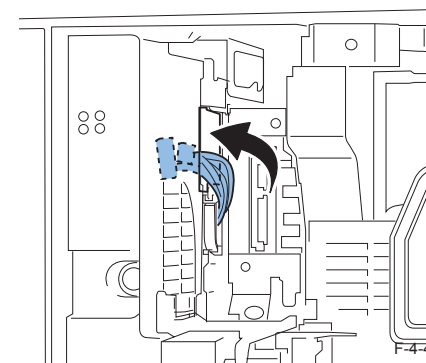


3) Remove the signal cable and the power cable from the HDD. F-4-43



F-4-44

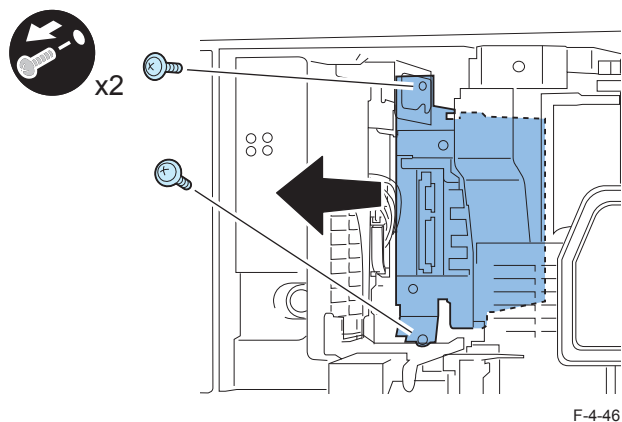
4) Put the removed Signal Cable and the Power Supply Cable into the hole on the Controller Box.



F-4-45

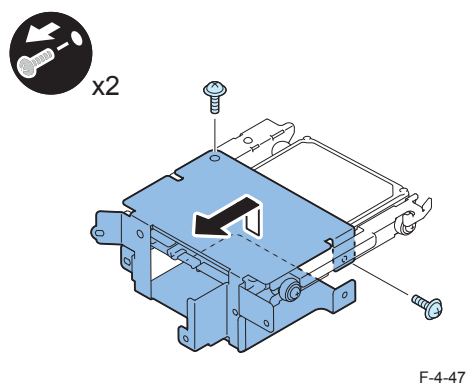
5) Remove the HDD Unit.

- 2 screws



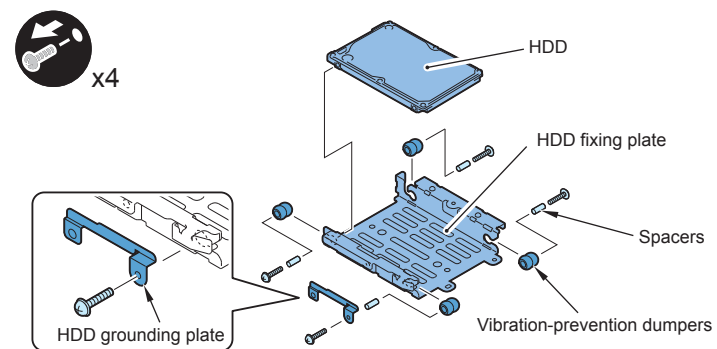
6) Remove the plate.

- 2 screws



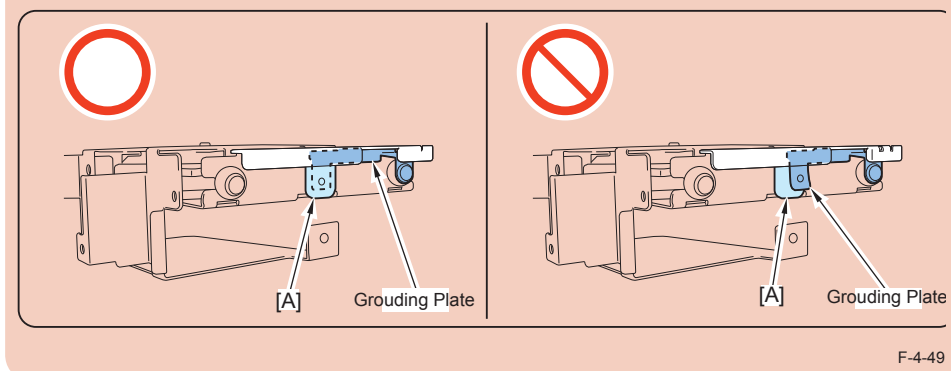
7) Remove the HDD.

- 4 screws
- 1 grounding plate
- 4 spacers
- 4 vibration-prevention dumpers



CAUTION:

At installation, install the grounding plate inside the [A] part of HDD Fixing Plate.



■ Actions after Replacement

- 1) HDD format
 - 1-1) Start with the safe mode. (While pressing 2 and 8 keys simultaneously, turn ON the main power switch.)
 - 1-2) Use SST to format all partitions.
- 2) Downloading system software
 - 2-1) Use SST to download the system software (System, LANG, RUI and others).
- 3) Initializing the key, certificate and CA certificate
(Lv.2) COPIER > FUNCTION > CLEAR > CA-KEY
- 4) Turning OFF and ON the main power switch
- 5) Restoring the backup data
Use the Remote UI.
Management Settings > Data Management > Import/Export
- 6) Resetting/registering the data
While referring to the list of set/registered data which was printed before replacement, reset/register the data.
- 7) When the user generates and adds the encryption key, certificate and/or CA certificate, request the user to generate them again.
- 8) Executing "Auto Adjust Gradation (Full Adjust)" Settings/Registration mode: Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation

● When using the Card Reader and imageWARE Accounting Manager

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

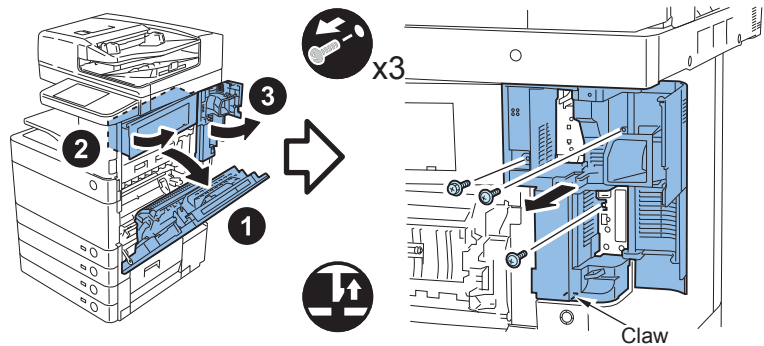
Points to Note when Using the System Software-installed HDD:

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

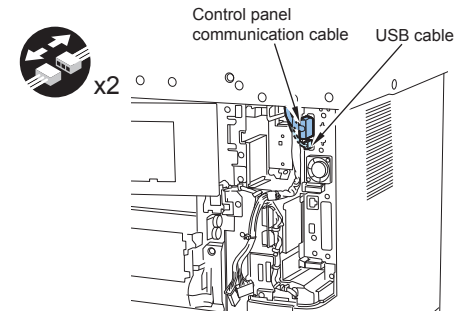
Preparations

- 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



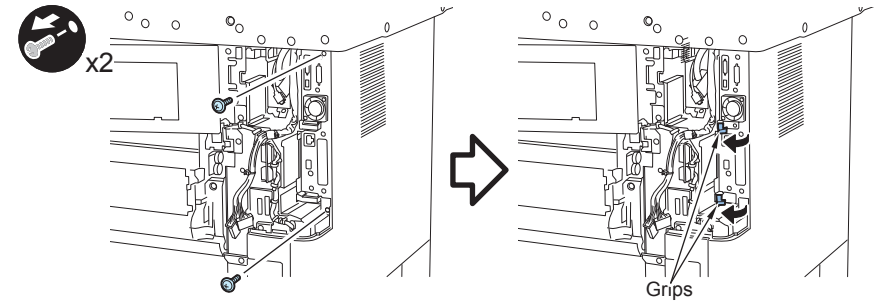
F-4-50

- 2) Remove the USB cable and the control panel communication cable.



F-4-52

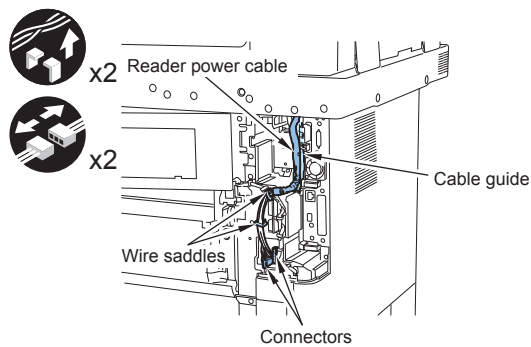
- 3) Remove the 2 screws and lift the grip.



F-4-53

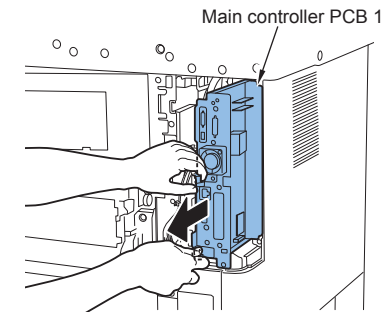
Procedure

- 1) If the Reader is installed, remove the Reader Power Cable.
 - 2 connectors
 - 2 wire saddles
 - 1 cable guide



F-4-51

- 4) Hold the grip and remove the Main Controller PCB 1.

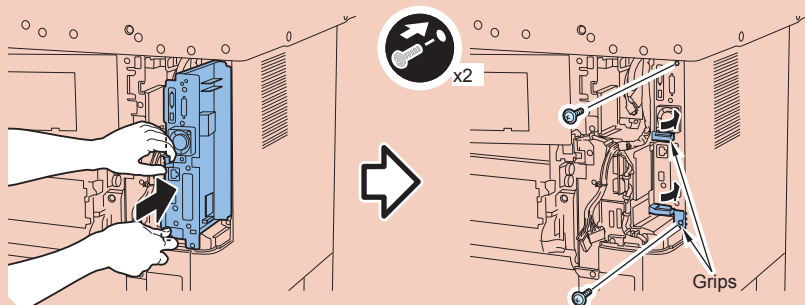


F-4-54

NOTE:
If option PCB is installed, remove it.

CAUTION:

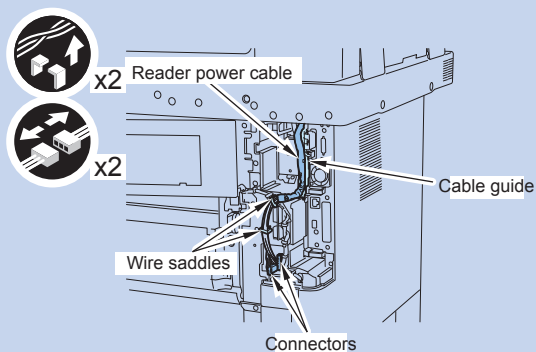
At installation, lift the grip, insert the Main Controller PCB 1 until it stops, then tilt the grip and install it with 2 screws.



F-4-55

NOTE:

- If the Reader Unit is installed, handle the reader power cable from the connector side, make the cable slack in the upper area and install it.



F-4-56

- Make sure that the Main Controller PCB 1 is fixed to the device.

Removing the Main Controller PCB 2

Actions before Replacement

You can evacuate by contents of the SRAM in Main Controller PCB 2 when you use SST.
execute Lev1 COPIER > FUNCTION > SYSTEM > DOWNLOAD > OK
[5] BACKUP

But you cannot use this function when there is HDD Encryption Board.

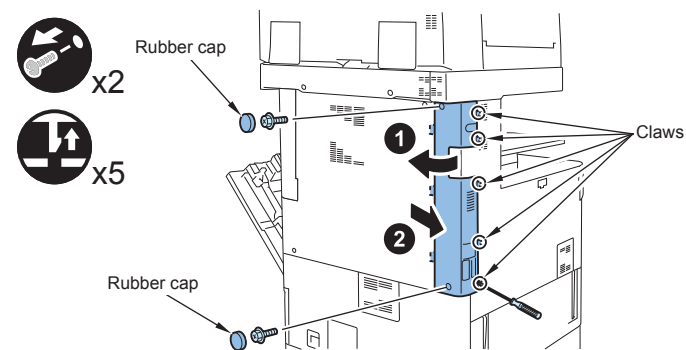
When there is HDD Encryption Board:

- Backup of the set/registered data.
Use the Remote UI.
Management Settings > Data Management > Import/Export
Target data:
- Printing the set/registered data.
Use the service mode.
(Lv.1) COPIER > FUNCTION > MISC-P > USER-PRT
List of the set/registered data which cannot be backed up is printed.

Preparations

Remove the Left Rear Cover and the Left Rear Sub Cover.

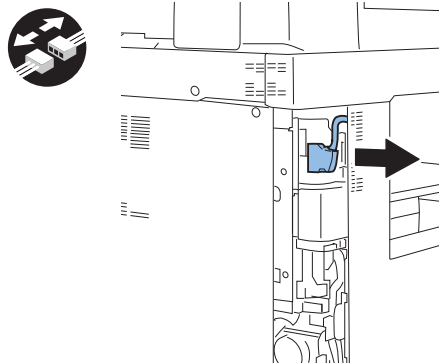
- Remove the Left Rear Cover.
 - 2 rubber caps
 - 2 screws
 - 5 claws



F-4-57

2) If the Reader Unit is installed, remove the reader signal cable.

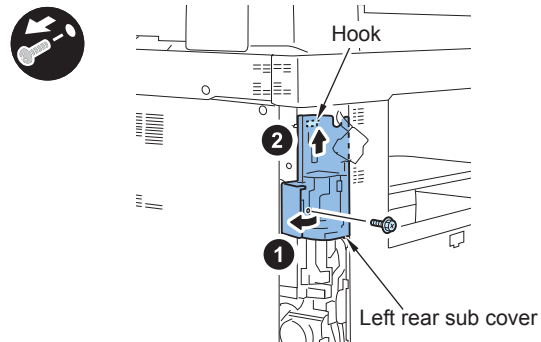
- 1 connector



F-4-58

3) Remove the Left Rear Sub Cover.

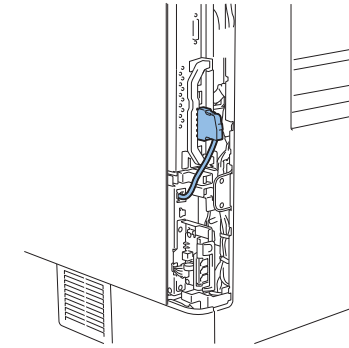
- 1 screw
- 1 hook



F-4-59

Procedure

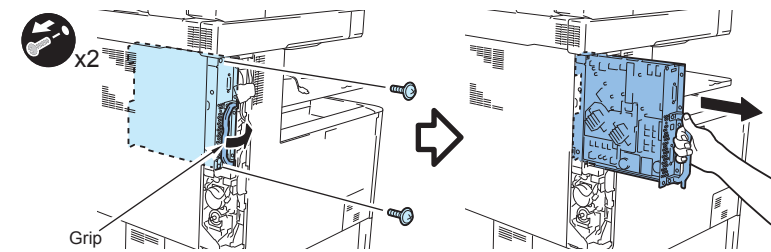
1) If the FAX Unit is installed, remove the connector of communication cable.



F-4-60

2) Hold the grip and remove the Main Controller PCB 2.

- 2 screws

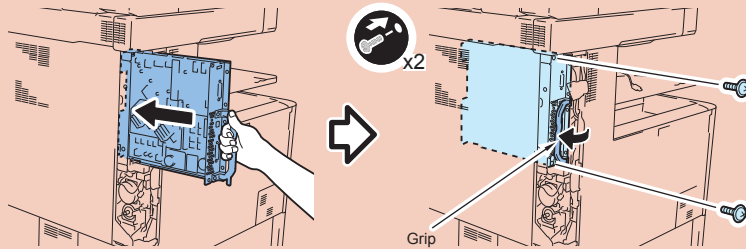


F-4-61

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.

**CAUTION:**

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

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

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

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

Turn ON the power and execute the following service mode to restore the data in SRAM.

If Lev1 COPIER > FUNCTION > SYSTEM > DOWNLOAD > OK > [5] BACKUP has been executed before replacement, execute Lev1 COPIER > FUNCTION > SYSTEM > DOWNLOAD > OK > [8] Download Menu 2 > [2] Restore.

● If the machine has the HDD Encryption Board

1) Execute the following in remote UI to restore the backup data.

Management Settings > Data Management > Import/Export

2) Specify and register the data again.

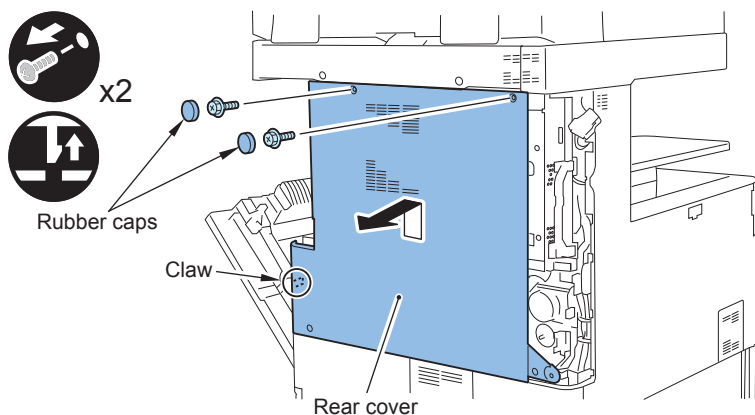
See the list of Settings/Registration data that was printed before replacement, and then specify and register the data once again.

3) When an encryption key/certificate/CA certificate has been generated or added by the user, ask the user to execute reinstallation.

Opening the Controller Box

Preparations

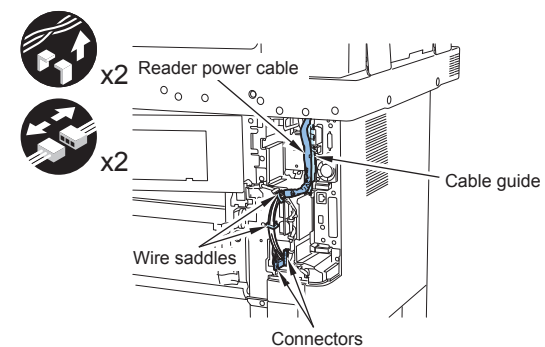
- 1) Open the Right Lower Cover and Right Upper Cover.
- 2) Remove the Right Rear Cover.
- 3) Remove the Left Rear Cover and the Left Rear Sub Cover.
- 4) Remove the Rear Cover.
 - 2 rubber caps
 - 2 screws
 - 1 claw



F-4-62

Procedure

- 1) When the Reader is installed, remove the reader power cable.
 - 2 connectors
 - 2 wire saddles
 - 1 cable guide

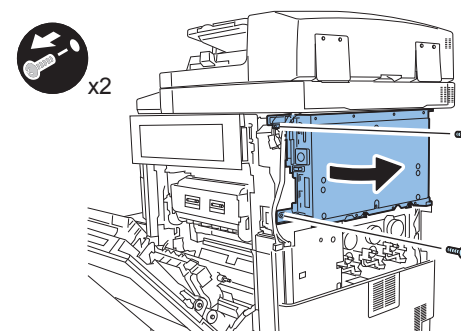


F-4-63

NOTE:

- If the Fax Unit is not installed, refer to step 2-1).
- If the Fax Unit is installed, refer to step 2-2).

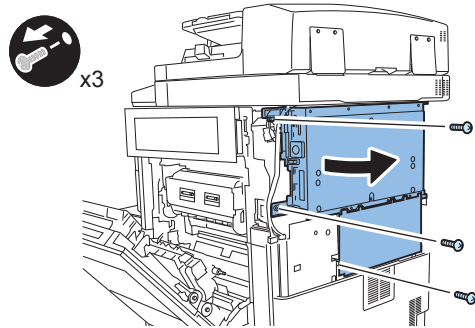
- 2-1) Avoid the harness and open the Controller Box.
 - 2 screws



F-4-64

2-2) Avoid the harness and open the Controller Box and the FAX Unit.

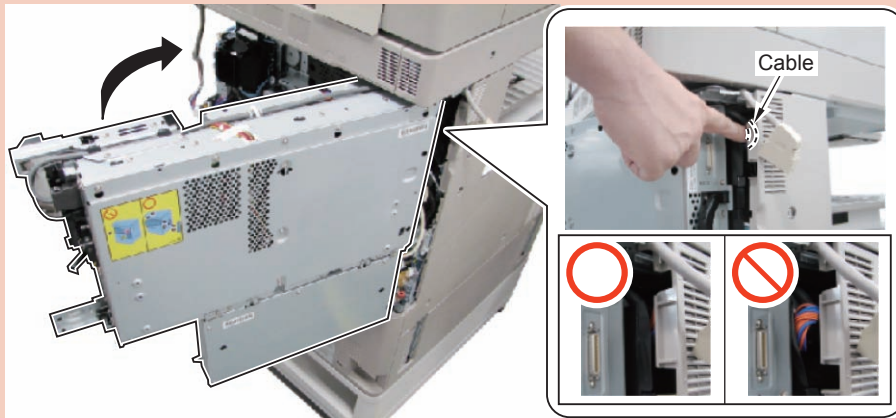
- 3 screws



F-4-65

CAUTION:

Close the Controller Box while pressing the cable with a finger. Check that the cable is stored when closing the box.



F-4-66

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.

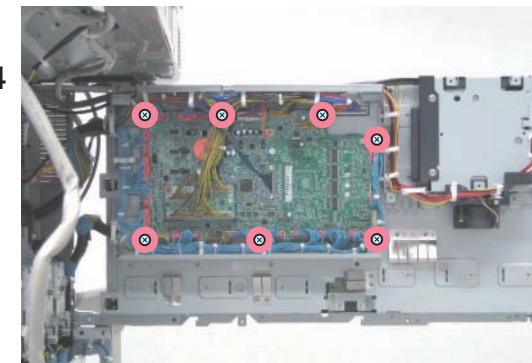
After the above execution is completed, turn OFF the main power supply.

Preparations

- 1) Open the Right Lower Cover and Right Upper Cover.
- 2) Remove the Right Rear Cover.
- 3) Remove the Left Rear Cover and the Left Rear Sub Cover.
- 4) Remove the Rear Cover.
- 5) Open the Controller Box.

Procedure

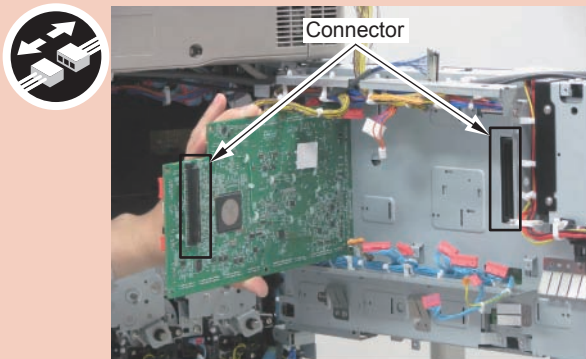
- 1) Remove the DC Controller PCB
 - 24 connectors
 - 7 screws



F-4-67

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.

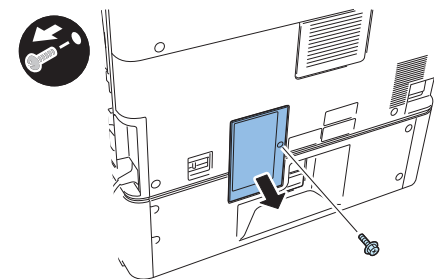
● Removing the Main Power Unit

■ Preparations

- 1) Open the Right Lower Cover and Right Upper Cover.
- 2) Remove the Right Rear Cover.
- 3) Remove the Left Rear Cover and the Left Rear Sub Cover.
- 4) Remove the Rear Cover.

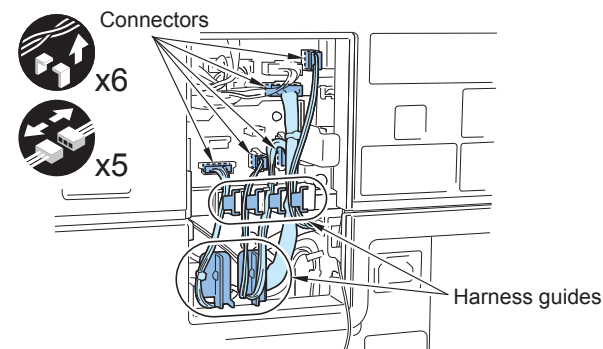
● Remove the Rear Lower Cover.

- 5) Remove the Connector Cover.
 - 1 screw



F-4-68

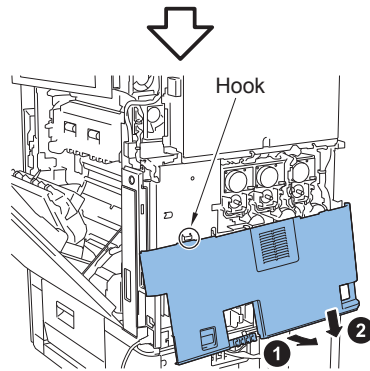
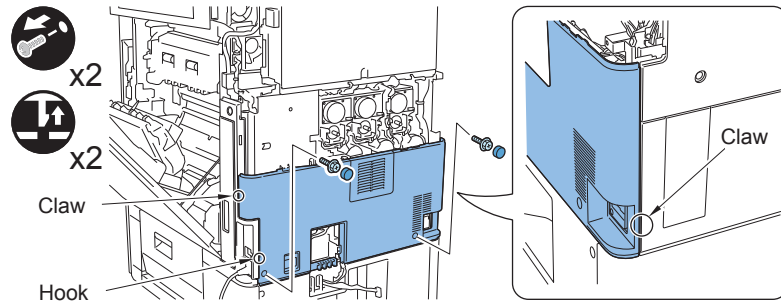
- 6) When the Cassette Pedestal is installed, remove the connector.
 - 6 harness guides
 - 5 connectors



F-4-69

7) Remove the Rear Lower Cover.

- 2 rubber caps
- 2 screws
- 2 claws
- 2 hooks

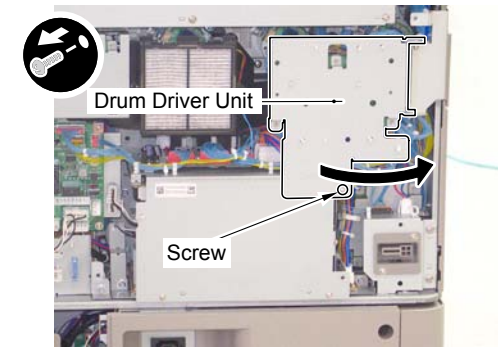


F-4-70

■ Procedure

1) Open the Drum Driver Unit.

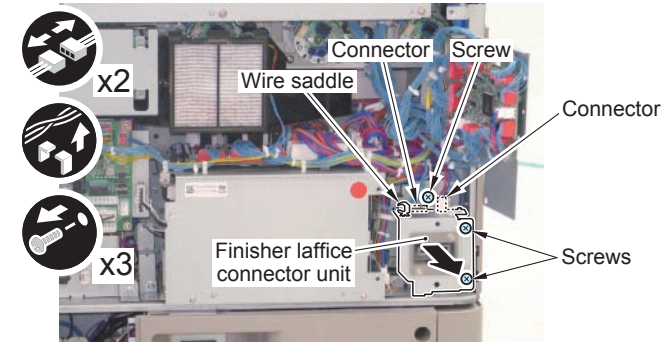
- 1 screw



F-4-71

2) Remove the FIN Lattice Connector Unit.

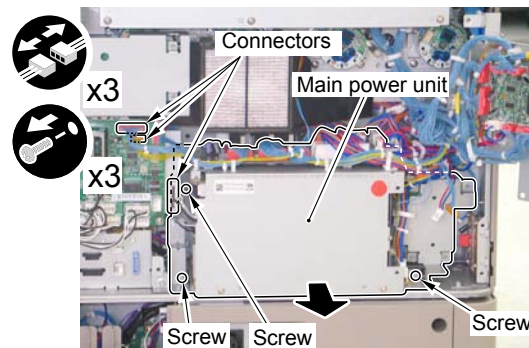
- 2 connectors
- 1 wire saddle
- 3 screws



F-4-72

3) Pull out the Main Power Unit.

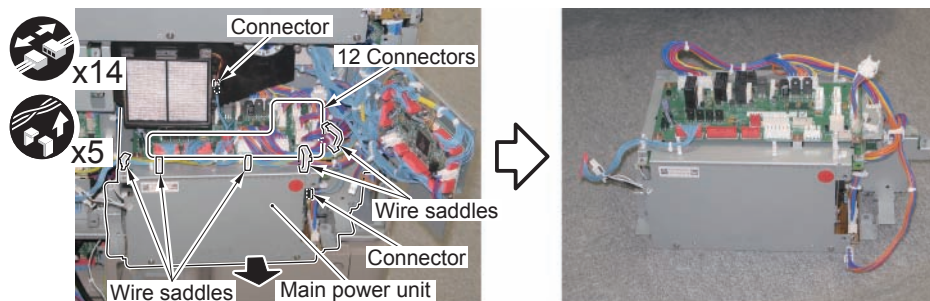
- 3 connectors
- 3 screws



F-4-73

4) Remove the Main Power Unit.

- 14 connectors
- 5 wire saddles



F-4-74

Removing the AC Driver

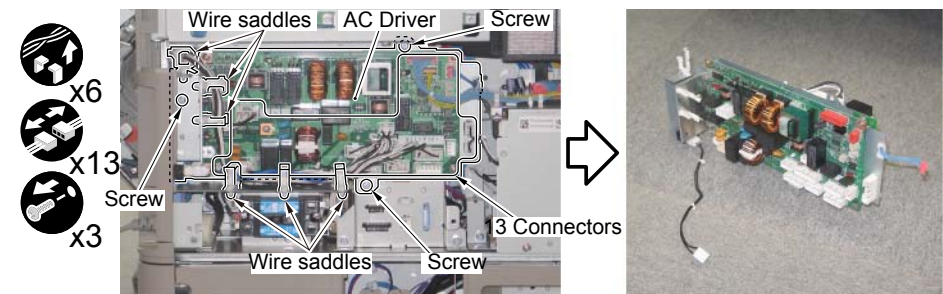
Preparations

- 1) Open the Right Lower Cover and Right Upper Cover.
- 2) Remove the Right Rear Cover.
- 3) Remove the Left Rear Cover and Left Rear Sub Cover.
- 4) Remove the Rear Cover.
- 5) Remove the Rear Lower Cover.

Procedure

- 1) Remove all the connector on the PCB and remove the AC Driver.

- 6 wire saddles
- 13 connectors (12 pieces for overseas model)
- 3 screws

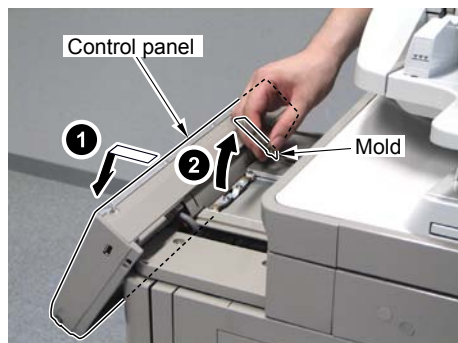


F-4-75

Removing the Control Panel

Procedure

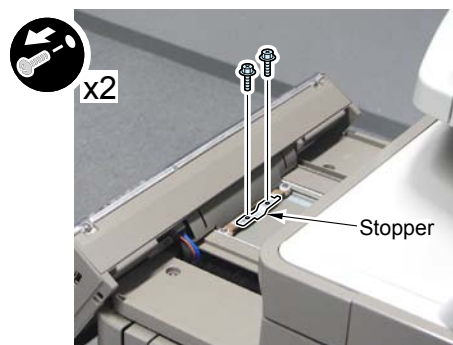
1) Pull out the Control Panel and remove the mold.



F-4-76

2) Remove the stopper.

- 2 screws



F-4-77

3) Stand the Control Panel as indicated.



F-4-78

4) Remove the cover.

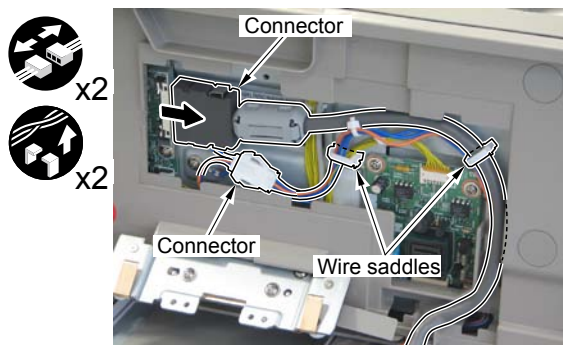
- 1 seal
- 1 screw



F-4-79

5) Remove the cable.

- 2 wire saddles
- 2 connectors



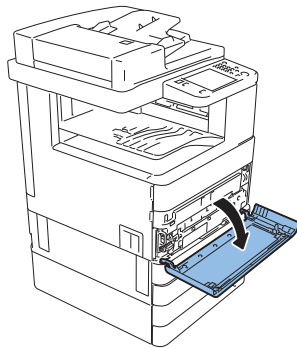
F-4-80

Laser Exposure System

Cleaning the Dust-blocking Glass

Preparations

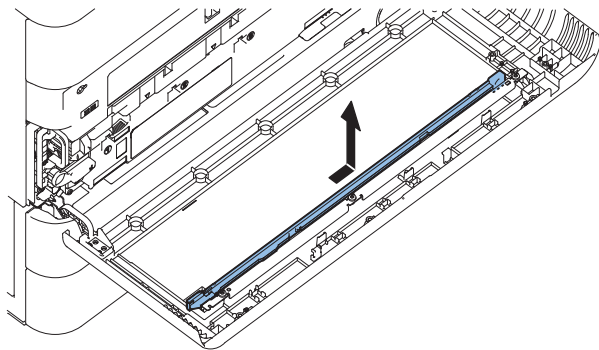
1) Open the Front Cover.



F-4-81

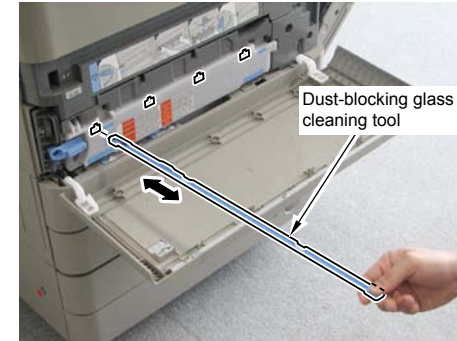
Procedure

1) Remove the Glass Cleaning Tool.



F-4-82

2) Clean the Dust-blocking Glass from the 4 holes of the Waste Toner Container.



F-4-83

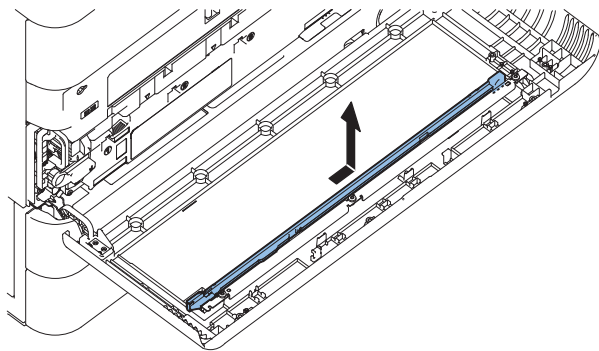
Removing the Dust-blocking Glass Cleaning Pad

Preparations

1) Open the Front Cover.

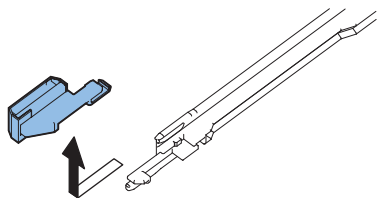
Procedure

1) Remove the Glass Cleaning Tool.



F-4-84

2) Remove the Dust-blocking Glass Cleaning Pad.

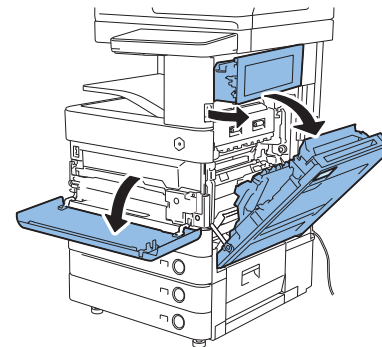


F-4-85

Removing the Laser Scanner Unit

Preparations

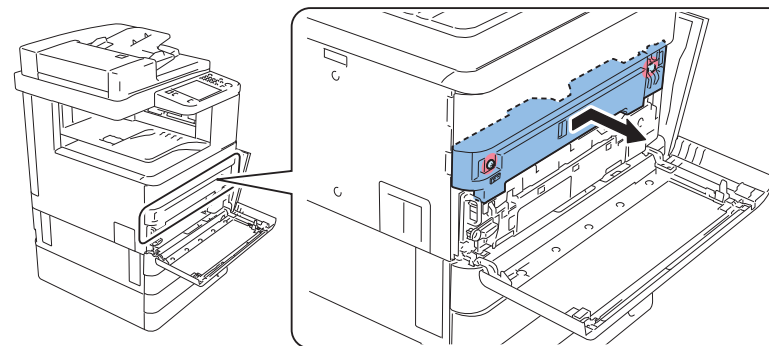
1) Open the Front Cover, Right Lower Cover and Right Upper Cover.



F-4-86

2) Remove the ITB Cover.

- 2 screws (loosen)



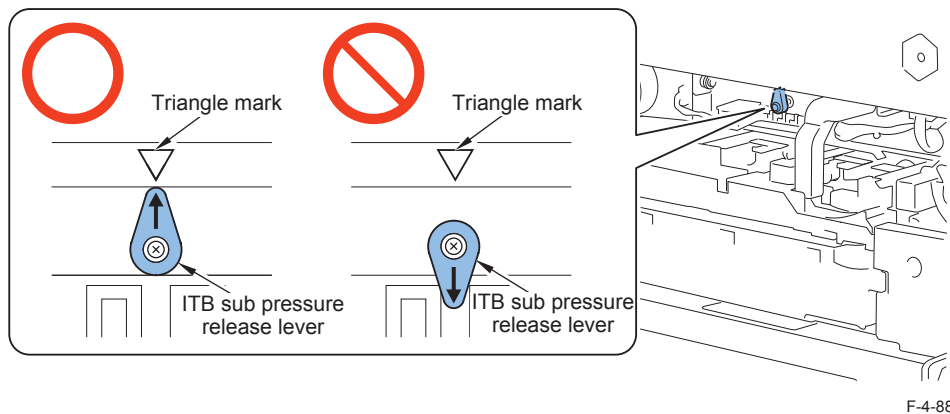
F-4-87

CAUTION:

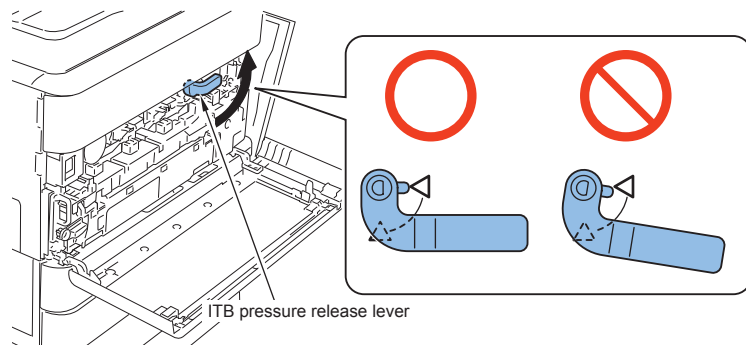
- Do not touch the ITB surface.
- When installing the ITB Cover, be sure to push it to the left. If the pushing is insufficient, the plate is not inserted to the slit of the ITB Cover, which may cause the damage of the sensor.

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.)



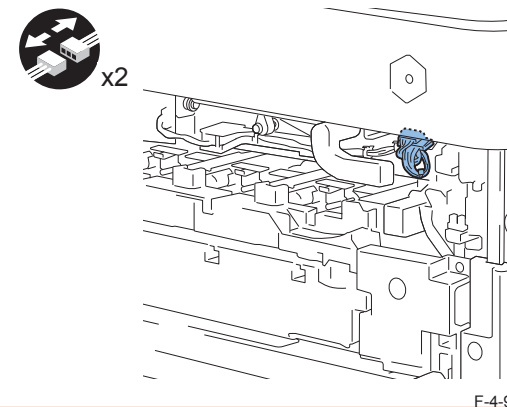
- 4) Turn the ITB Pressure Release Lever in the right direction until the protrusion of grip is aligned with the triangle mark on the plate to release the pressure.



CAUTION:

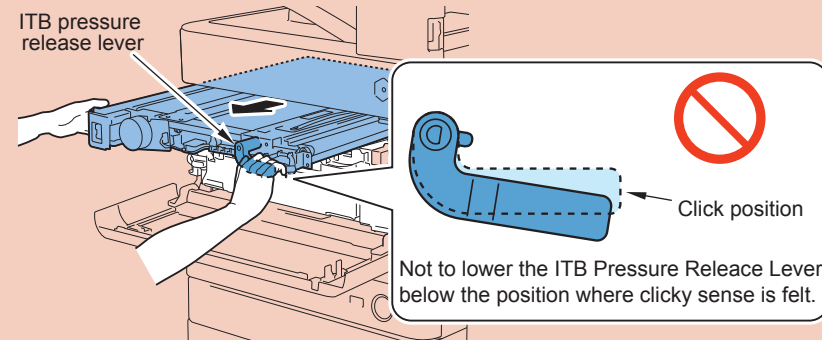
Before operating the ITB Pressure Release Lever, check that the Right Lower Cover is open.

- 5) Remove the 2 connectors.



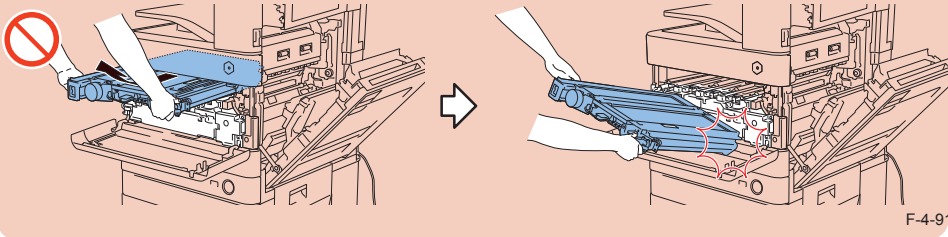
CAUTION:

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.



CAUTION:

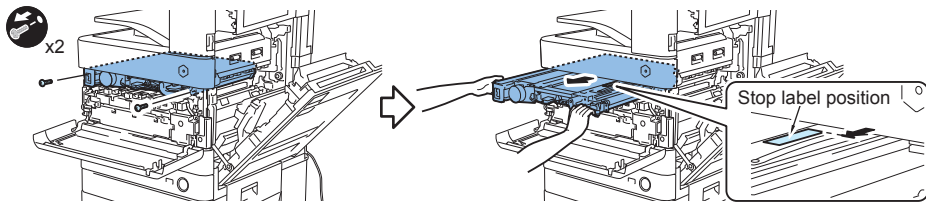
When pulling out the ITB Unit, it may drop because it does not click at stop position if pulled out while lifting it. Thus, be careful of pulling it out.



F-4-91

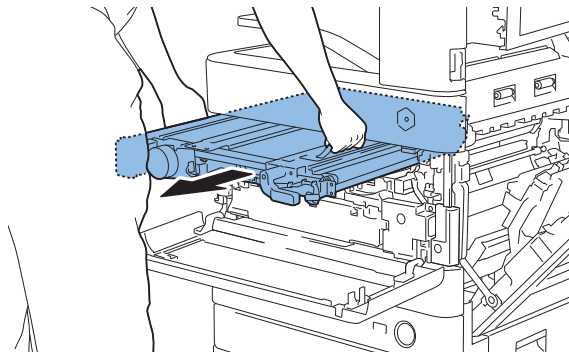
6) Pull out the ITB Unit up to the stop label position flatly.

- 2 screws



F-4-92

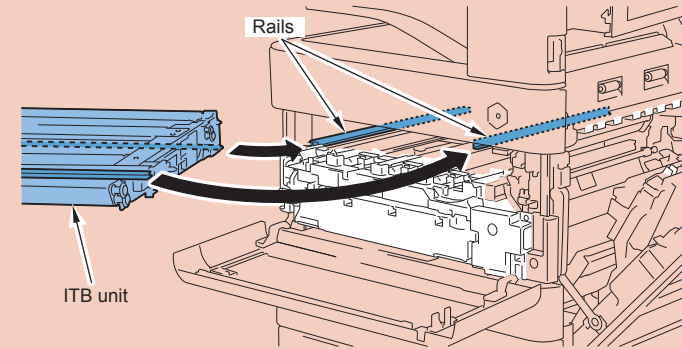
7) Hold the ITB Unit as show in the below figure, and remove in the direction of the arrow.



F-4-93

CAUTION:

When installing the ITB Unit, align the ITB Unit with the 2 positions at the lead edge of rail.



F-4-94

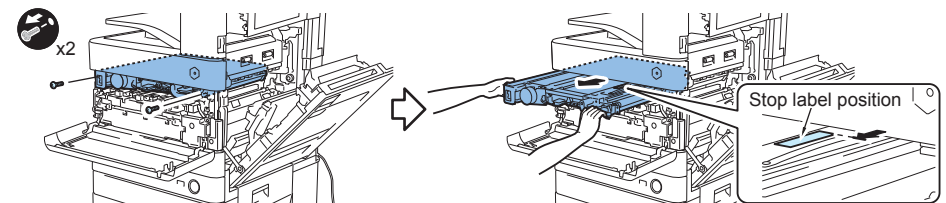
● Removing the Process Unit

CAUTION:

When installing/removing the Process Unit, do not remove the Waste Toner Container.

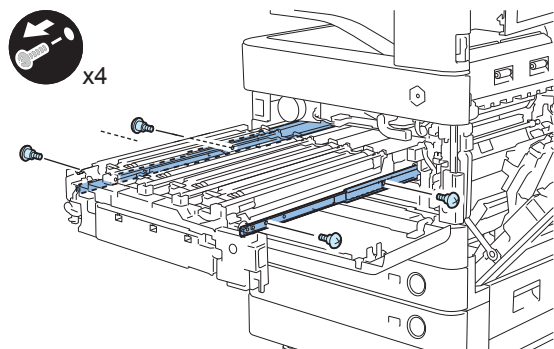
8) Pull out the ITB Unit up to the stop label position flatly.

- 2 screws



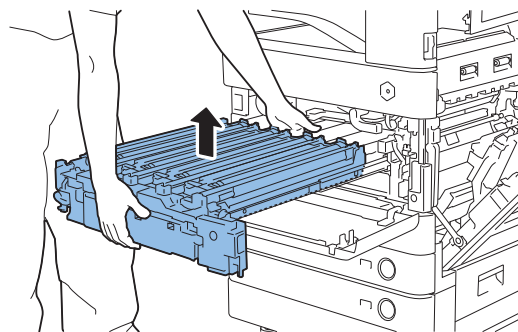
F-4-95

9) Remove the 4 stepped screws fixed on the right and left rails.



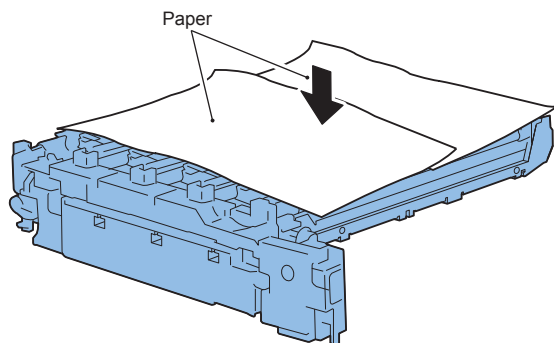
F-4-96

10) Hold the front and rear of Process Unit and remove it flatly.



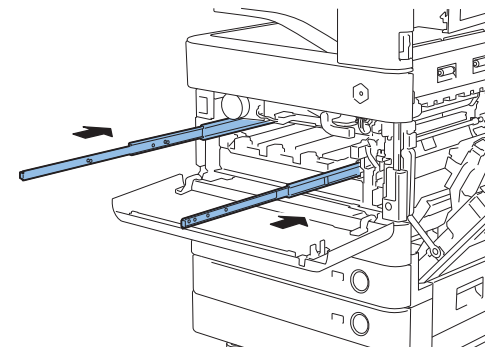
F-4-97

11) Place the paper onto the Process Unit to protect the Drum Unit from the light.



F-4-98

12) Take the 2 rails of Process Unit back to the host machine.



F-4-99

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.

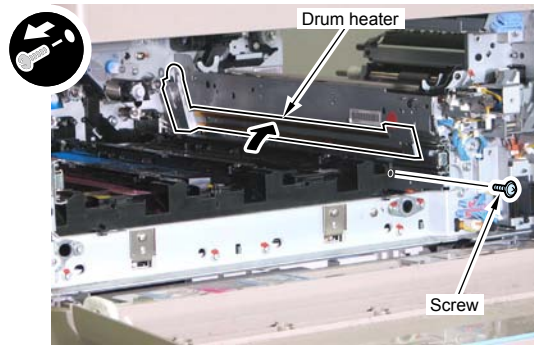
If the unit is installed reversely, the image displacement might occur.

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.

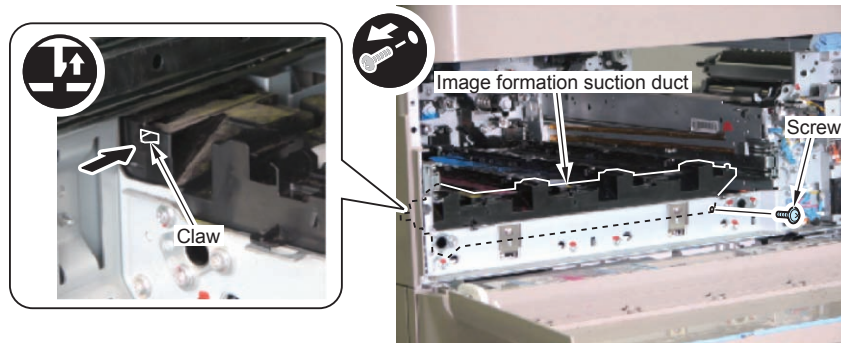
- 1 screw



F-4-100

2) Remove the Image Formation Suction Duct.

- 1 screw
- 1 claw



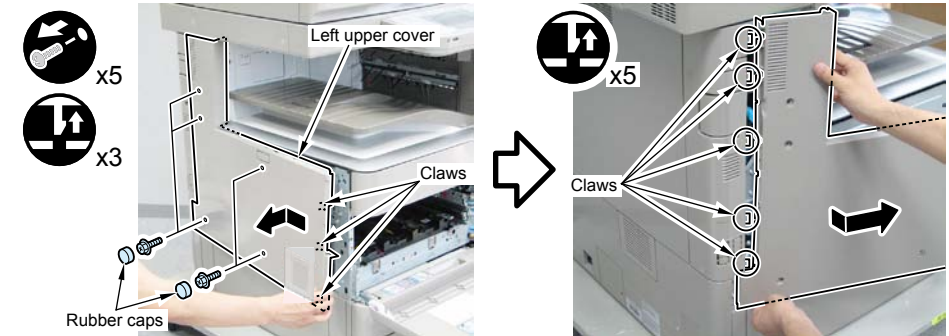
F-4-101

NOTE:

When removing the Laser Scanner Unit 1 (Y/M laser),

3) Remove the Left Upper Cover.

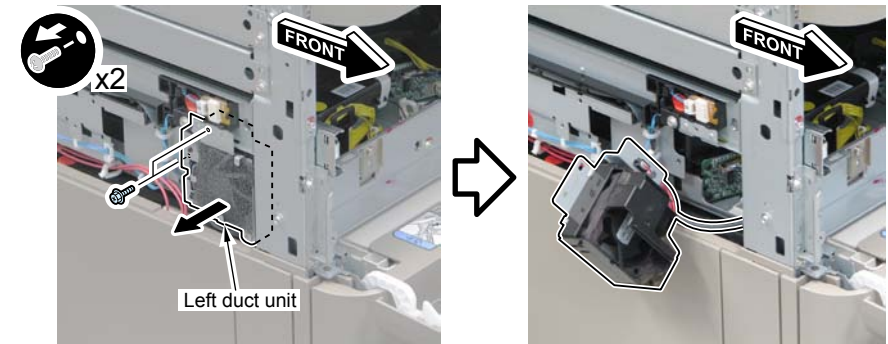
- 5 rubber caps
- 5 screws
- 3 hooks
- 5 claws



F-4-102

4) Remove the Left Duct Unit.

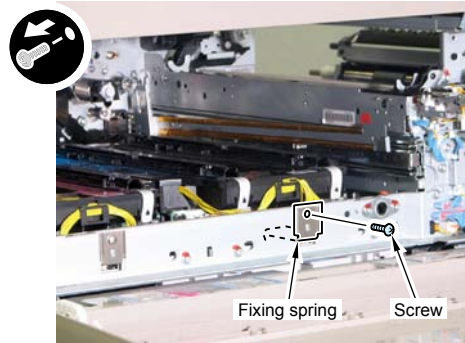
- 2 screws



F-4-103

5) Remove the Scanner Fixing Spring.

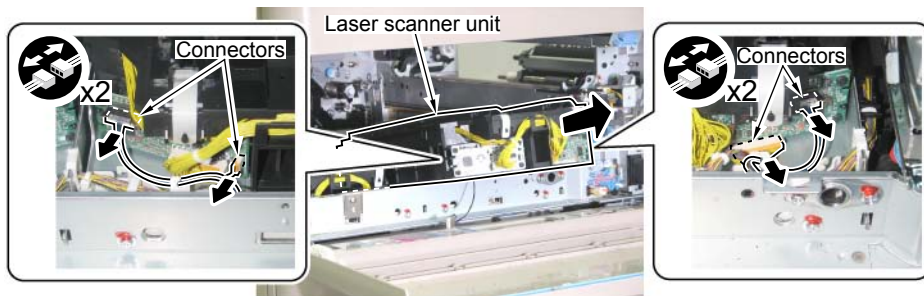
- 1 screw



F-4-104

6) Remove the Laser Scanner Unit.

- 4 connectors



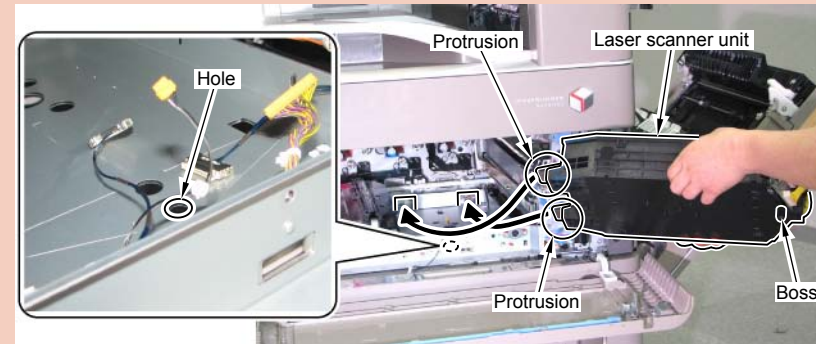
F-4-105

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.



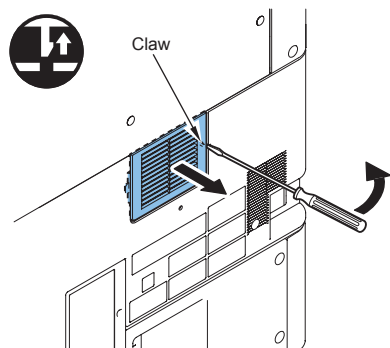
Image Formation System

Removing the Toner Filter

Procedure

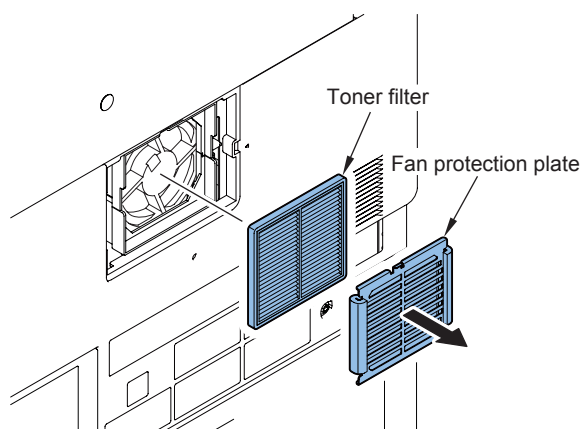
1) Remove the Toner Filter Cover.

- 1 claw



F-4-106

2) Remove the Fan Protection Plate and the Toner Filter.

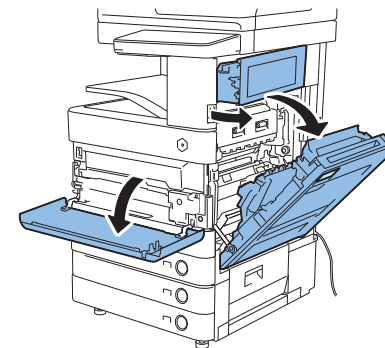


F-4-107

Removing the ITB Unit

Preparations

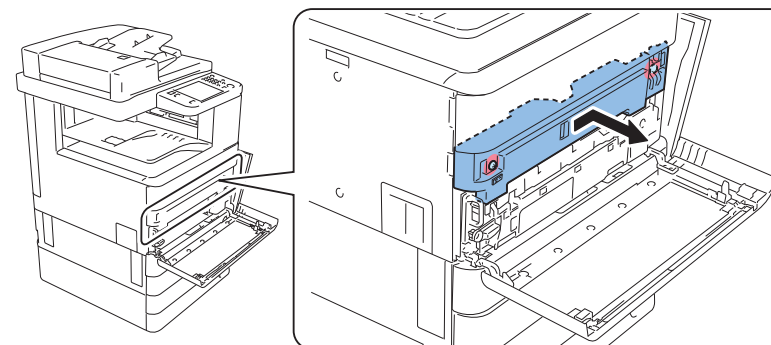
1) Open the Front Cover, Right Lower Cover and Right Upper Cover.



F-4-108

2) Remove the ITB Cover.

- 2 screws (loosen)



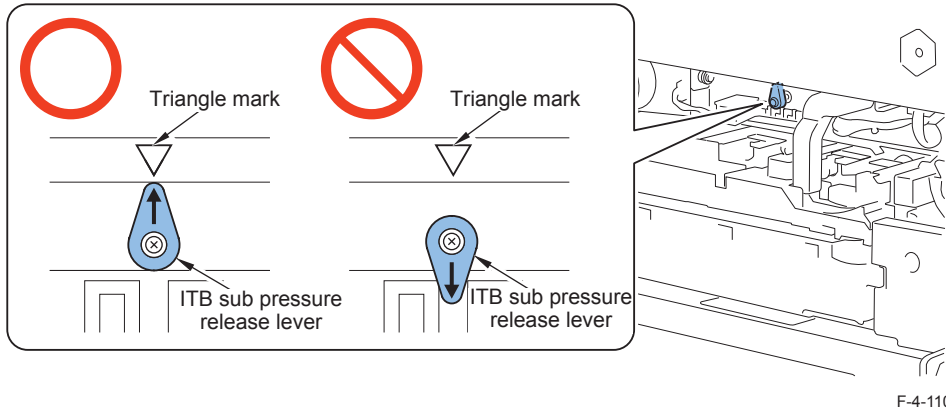
F-4-109

CAUTION:

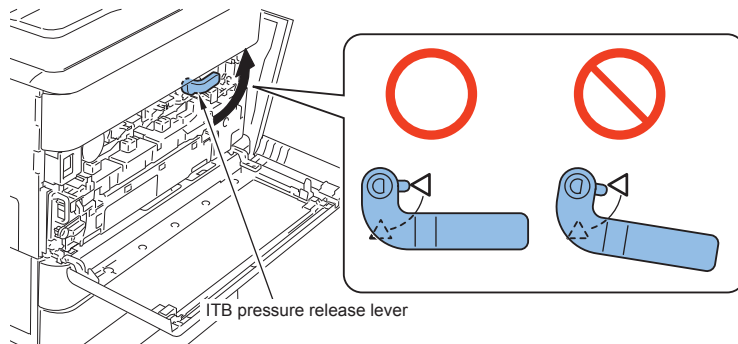
- Do not touch the ITB surface.
- When installing the ITB Cover, be sure to push it to the left. If the pushing is insufficient, the plate is not inserted to the slit of the ITB Cover, which may cause the damage of the sensor.

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.)



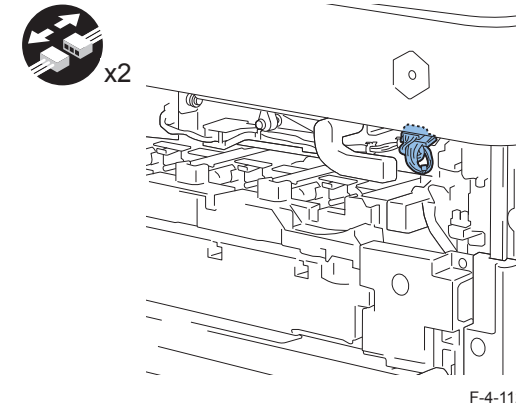
- 2) Turn the ITB Pressure Release Lever in the arrow direction until the protrusion of grip is aligned with the triangle mark on the plate to release the pressure.



CAUTION:

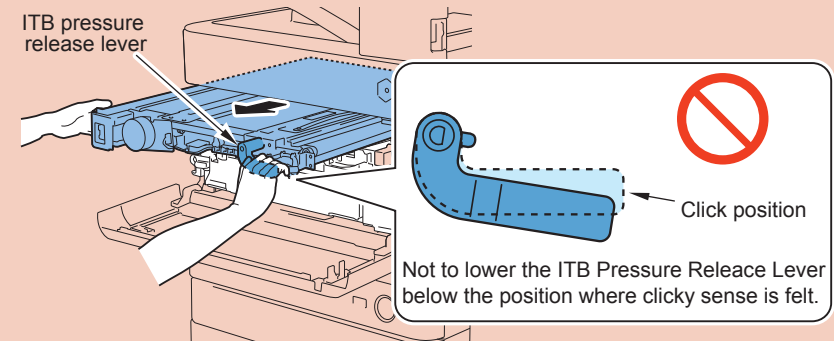
Before operating the ITB Pressure Release Lever, check that the Right Lower Cover is open.

- 3) Remove the 2 connectors.



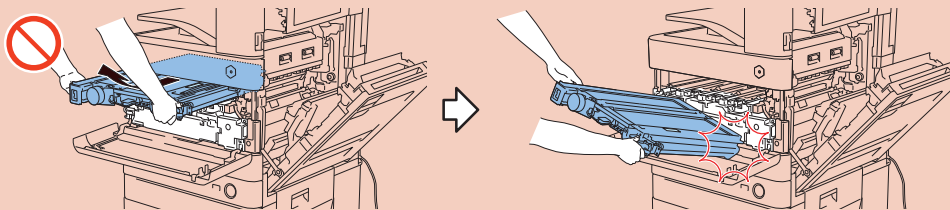
CAUTION:

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.



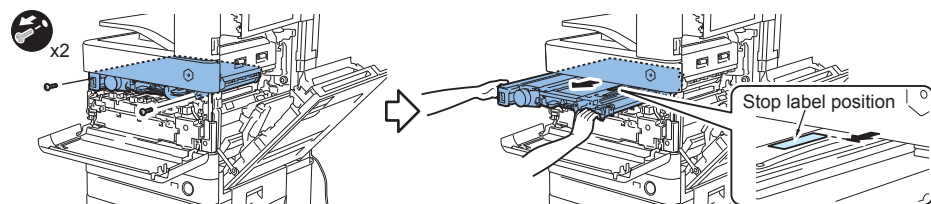
CAUTION:

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.



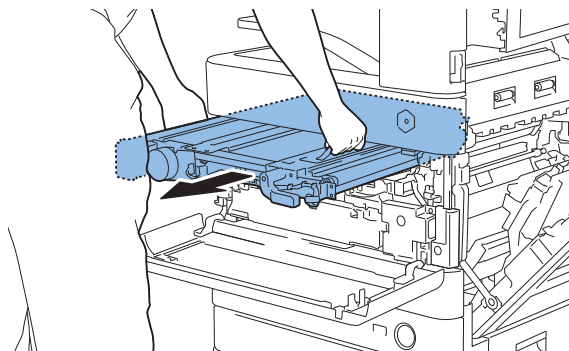
4) Pull out the ITB Unit up to the stop label position flatly.

- 2 screws



F-4-113

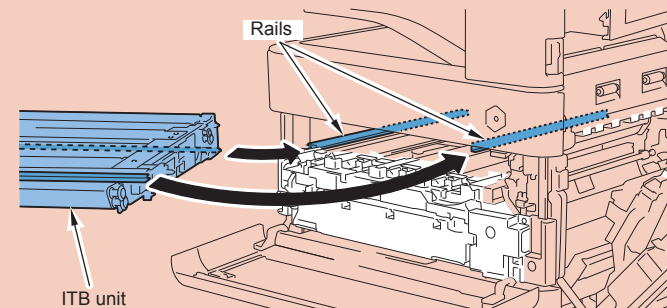
5) Hold the ITB Unit as show in the below figure, and remove in the direction of the arrow.



F-4-114

CAUTION:

When installing the ITB Unit, align the ITB Unit with the 2 positions at the lead edge of rail.



■ 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).
- 3) Execute the ITB equilibrium position detection in service mode. (COPIER>FUNCTION>MISC-P>ITB-INIT) (Level1) Execution of this service mode takes approx. 2 to 3 minutes.

Cleaning the Patch Sensor

Preparations

- 1) Open the Front Cover, Right Lower Cover and Right Upper Cover.
- 2) Remove the ITB Cover.
- 3) Remove the ITB Unit.

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.



F-4-115

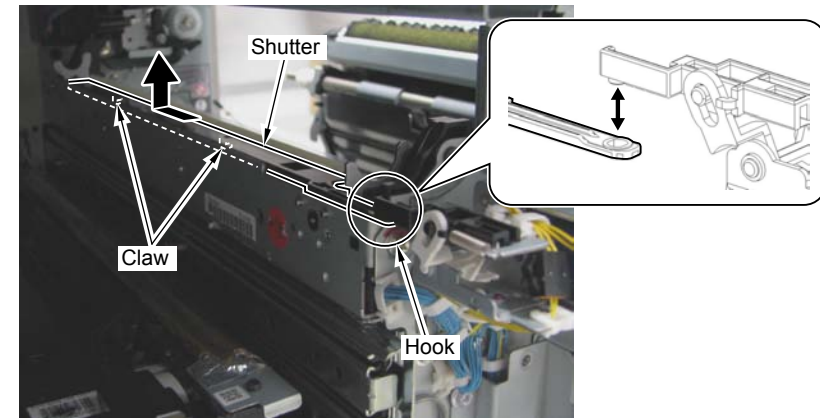
Remove the Patch Sensor (front,center,rear)

Preparations

- 1) Open the Front Cover, Right Lower Cover and Right Upper Cover.
- 2) Remove the ITB Cover.
- 3) Remove the ITB Unit.
- 4) Remove the Process Unit.

Procedure

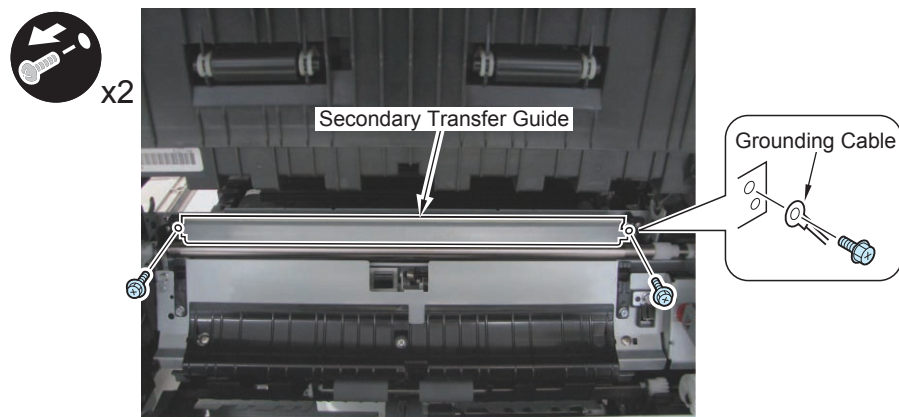
- 1) Release the hook and remove the Shutter of the sensor.
 - 2 Claws



F-4-116

2) Remove the Pre-secondary Transfer Guide. Be sure not to put too much force on the Pre-secondary Transfer Guide when removing it.

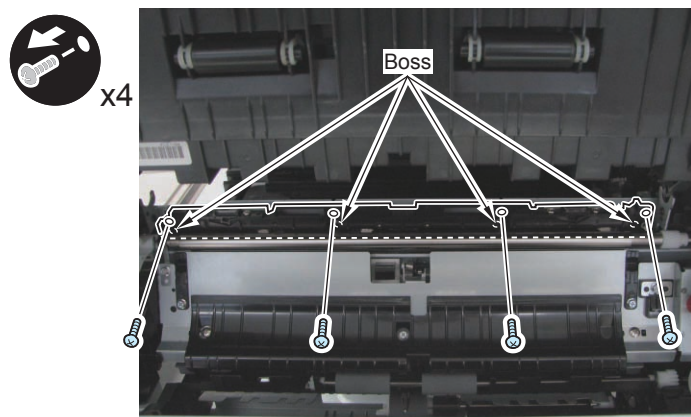
- 2 screws



F-4-117

3) Remove the mold.

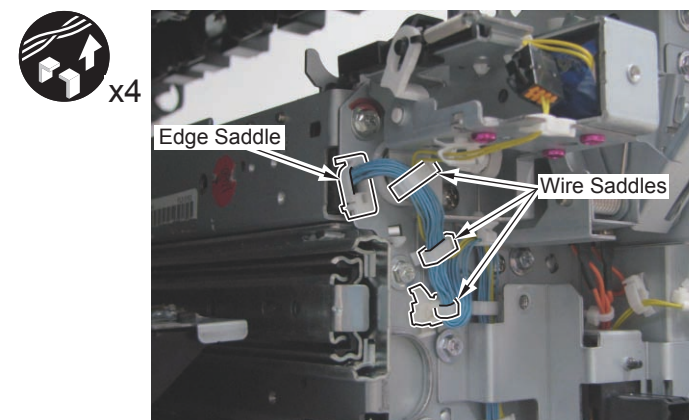
- 4 screws
- 4 bosses



F-4-118

4) Remove the Wire Saddle, Reuse band, and Edge Saddle to make the Sensor Assembly moving freely.

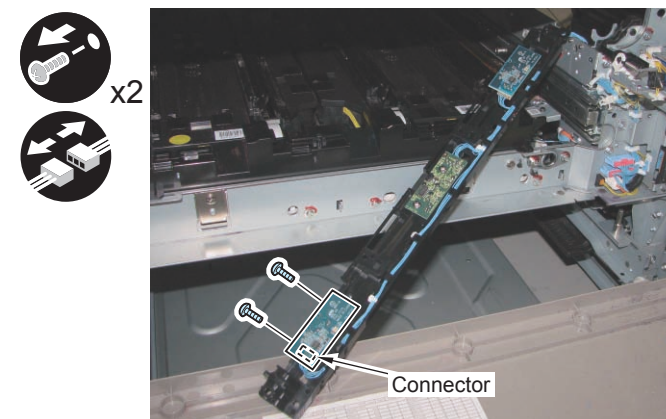
- 2 Wire Saddles
- 1 Reuse Band
- 1 Edge Saddle



F-4-118

5) Remove the sensor desired to be replaced. (Patch Sensor (Rear) as an example)

- 2 Screws
- 1 Connector



F-4-120

Actions after Replacement

When replace the Patch Sensor (center), Initialization of Patch sensor (center) is necessary.
COPIER > OPTION > IMG-MCON > P-ALPHA Input Patch Sensor alpha value

Removing the ITB Cleaning Unit

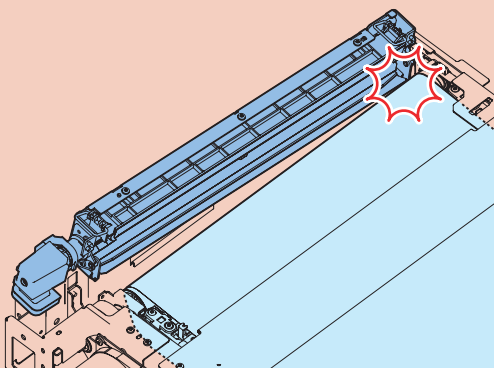
Preparations

- 1) Open the Front Cover, Right Lower Cover and Right Upper Cover.
- 2) Remove the ITB Cover.
- 3) Remove the ITB Unit.

Procedure

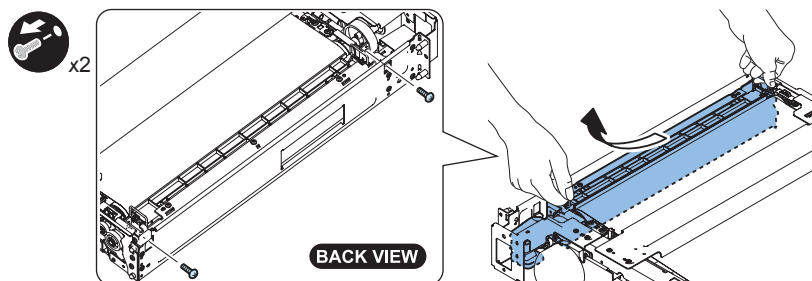
CAUTION:

When removing/installing it, do not contact the ITB Cleaning Unit to the ITB.



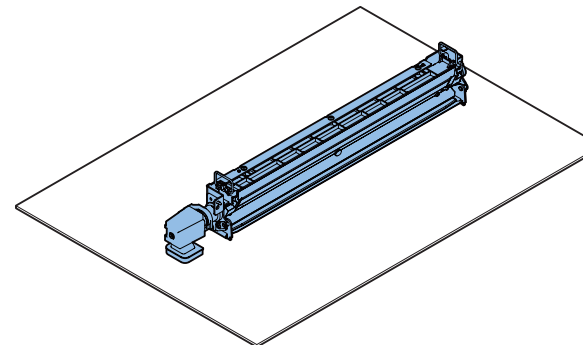
- 1) Hold the left and right grip and remove the ITB Cleaning Unit in the direction of the arrow.

- 2 screws



F-4-121

- 2) Place the removed ITB Cleaning Unit on the paper.



F-4-122

Actions after Replacement

- 1) To execute the ITB Equilibrium Position Detection, make the main body in standby state.
- 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.

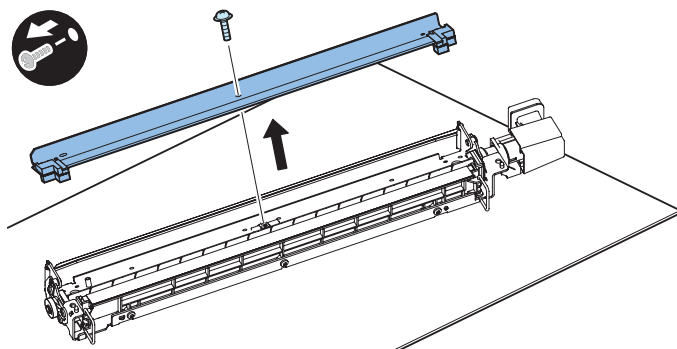
Removing the ITB Cleaning Blade Unit

Preparations

- 1) Open the Front Cover, Right Lower Cover and Right Upper Cover.
- 2) Remove the ITB Cover.
- 3) Remove the ITB Unit.
- 4) Remove the ITB Cleaning Unit.

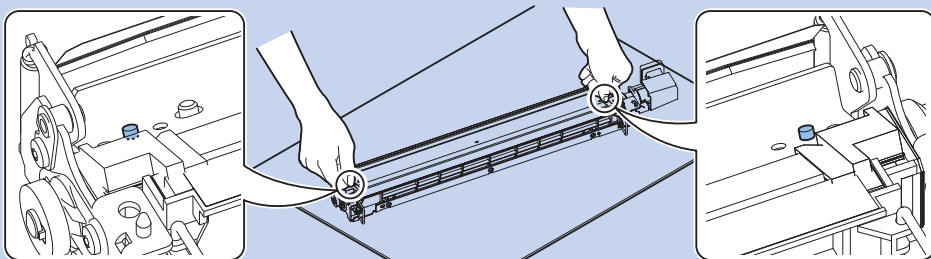
Procedure

- 1) Remove the ITB Cleaning Blade Unit and put it on the paper.
 - 1 screw



F-4-123

NOTE:
Hold the screw area of 2 screws on the ITB Cleaning Blade Unit so that it is easy to remove.



Installing the ITB Cleaning Blade Unit

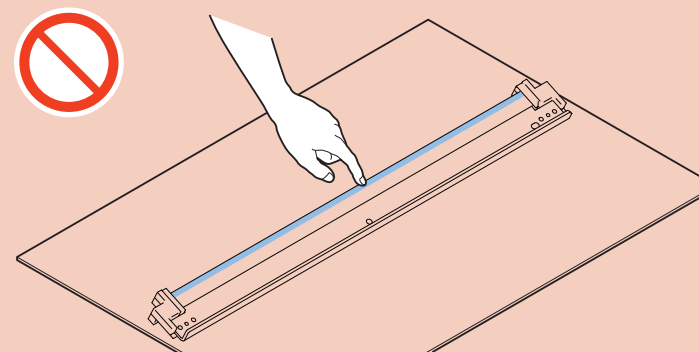
Preparations

- 1) Open the Front Cover, Right Lower Cover and Right Upper Cover.
- 2) Remove the ITB Cover.
- 3) Remove the ITB Unit.
- 4) Remove the ITB Cleaning Unit.
- 5) Removing the ITB Cleaning Blade Unit.

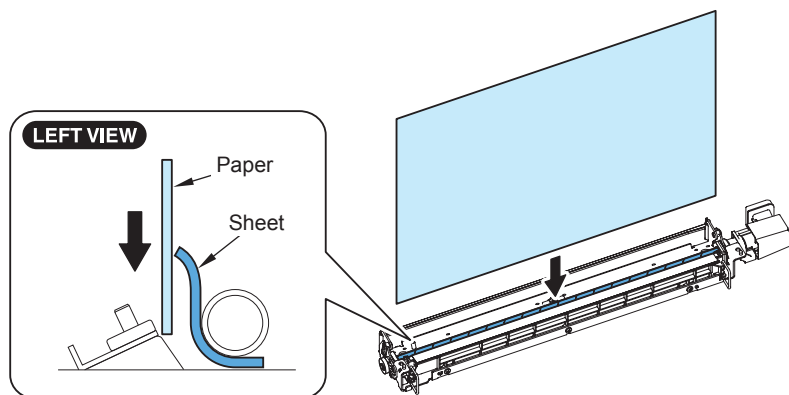
Procedure

CAUTION:

Do not touch the ITB Cleaning Blade.

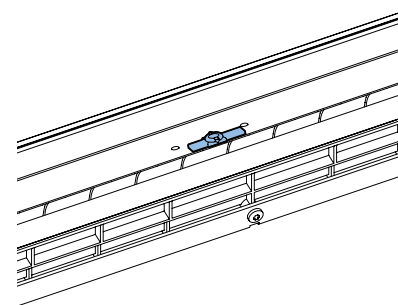


- 1) Insert an A4 size paper between the Blade Unit installation position of the ITB Cleaning Unit and the sheet.

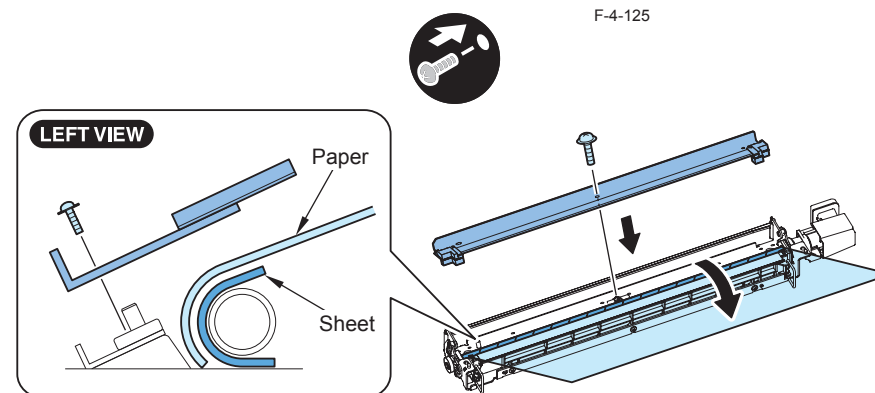


F-4-124

- 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.

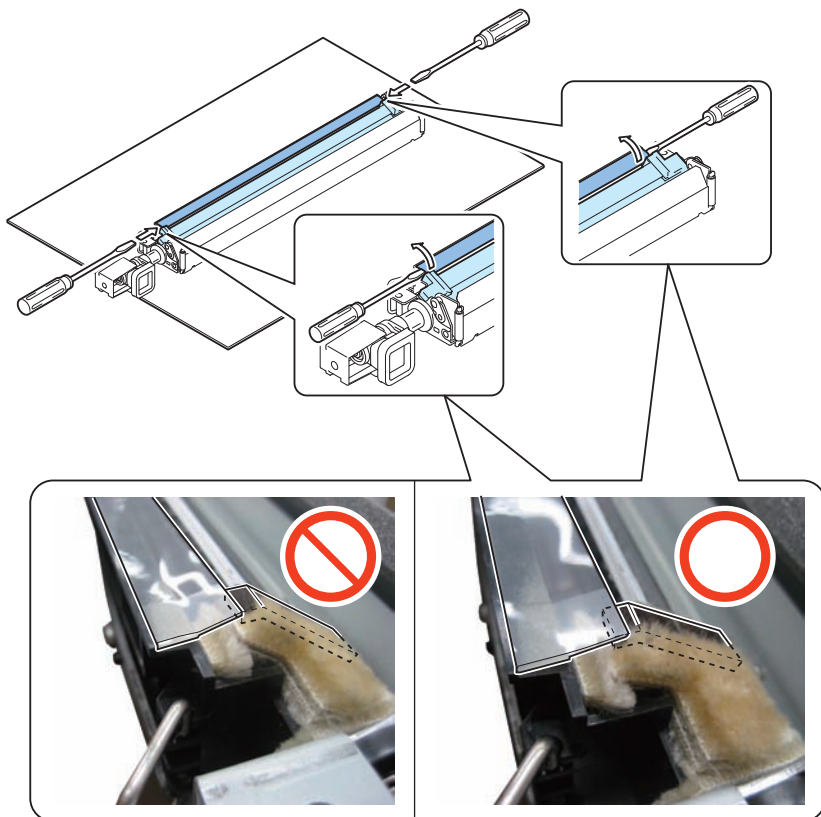


F-4-125



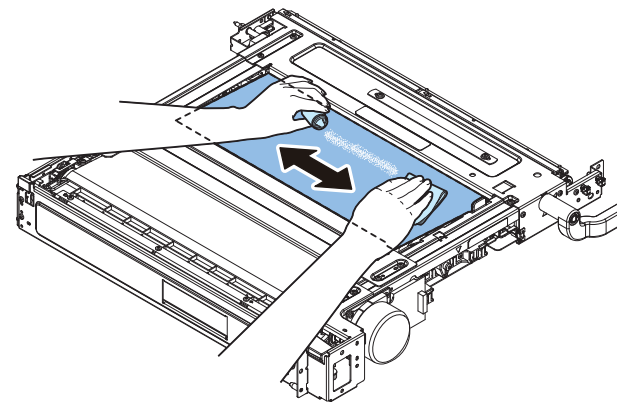
F-4-126

- 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-4-127

- 4) After installing the ITB Cleaning Unit to the ITB Unit, apply tospearl on the whole area indicated in the figure below.



F-4-128

CAUTION:

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.

Actions after Replacement

- 1) To execute the ITB Equilibrium Position Detection, make the main body in standby state.
- 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.

Removing the ITB

Preparations

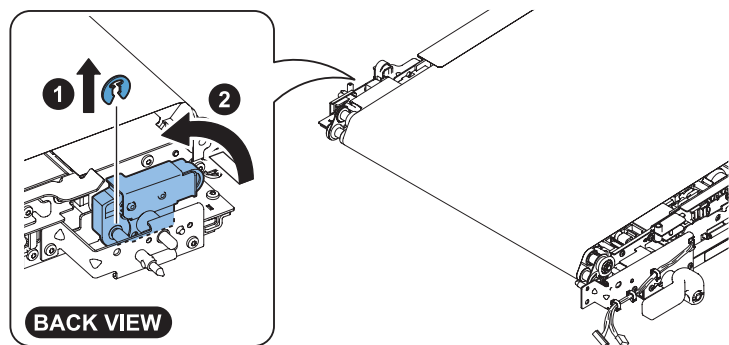
- 1) Upgrade the machine to the following version or later.
MN-CON: Ver.34.05 D-CON: Ver.18.01
- 2) Open the Front Cover, Right Lower Cover and Right Upper Cover.
- 3) Remove the ITB Cover.
- 4) Remove the ITB Unit.
- 5) Remove the ITB Cleaning Unit.

CAUTION:

Do not touch the surface of ITB. (If needed, hold the ITB within 10mm from both edge of the belt.)

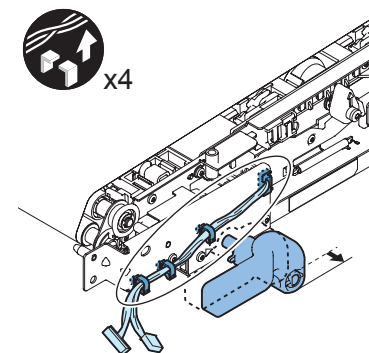
Procedure

- 1) Turn over the ITB Unit.
- 2) Remove the Push Slider.
- 1 stop ring



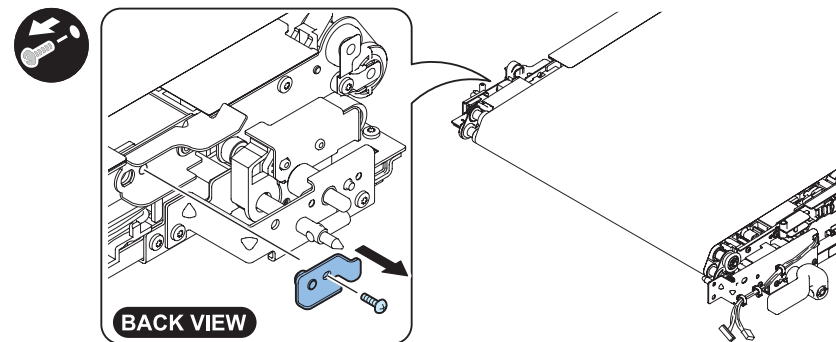
F-4-129

- 3) Pull the ITB Pressure Release Lever to the front.
- 4) Remove the harness.
 - 3 wire saddles
 - 1 edge saddle



F-4-130

- 5) Remove the rear pin.
 - 1 screw



F-4-131

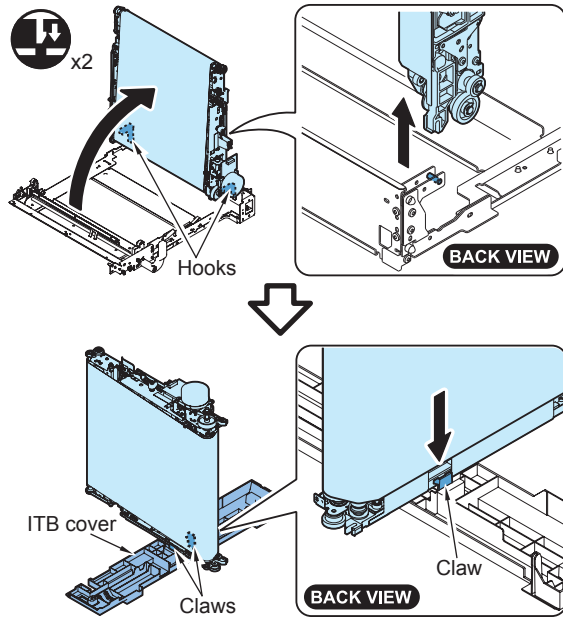
NOTE:
Place the ITB cover upside down on the place where the ITB Unit will be stood.

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.

- 2 claws



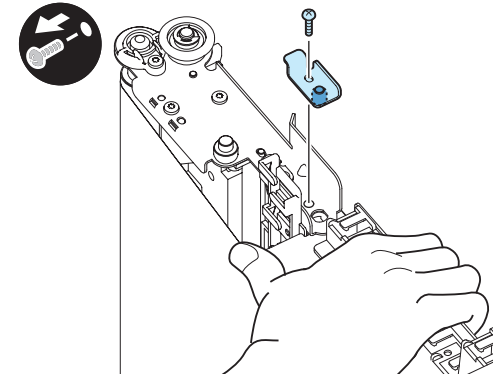
F-4-132

7) Pull out the front pin.

NOTE:

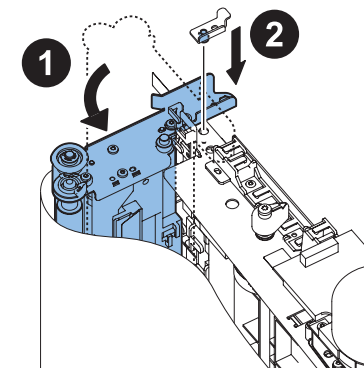
To lock the pressure, pull out the pin while holding the ITB Unit with hand.

- 1 screw



F-4-133

8) Bend the Secondary Transfer Inner Roller Unit by 90 degree and reinstall it with the pin removed in step 7).



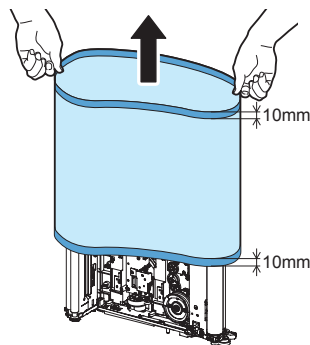
F-4-134

- 9) Insert papers as shown in the figure to prevent the ITB getting damage by the plate when removing the ITB.



F-4-135

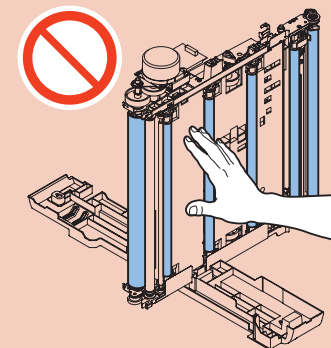
- 10) Hold the ITB within 10mm from the edge and remove it upward.



F-4-136

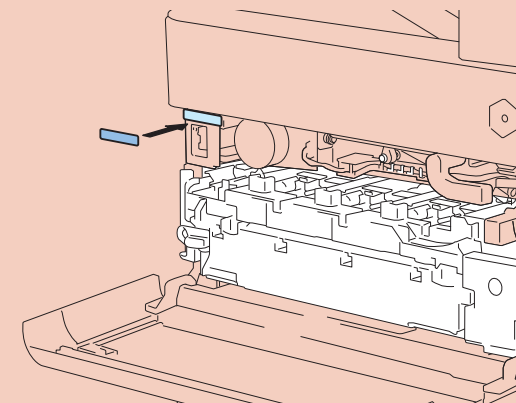
CAUTION:

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 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 "Auto gradation correction".
- 3) Execute the ITB equilibrium position detection in service mode (COPIER > FUNCTION > MISC-P > ITB-INT). This service mode will take approx. 2 to 3 minutes.

● Removing the Primary Transfer Roller (Bk)

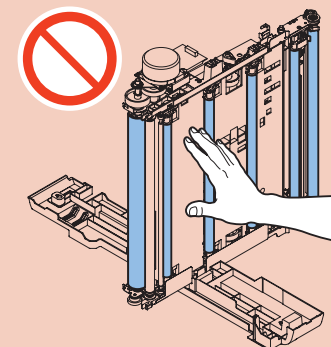
■ Preparations

- 1) Open the Front Cover, Right Lower Cover and Right Upper Cover.
- 2) Remove the ITB Cover.
- 3) Remove the ITB Unit.
- 4) Remove the ITB Cleaning Unit.
- 5) Remove the ITB.

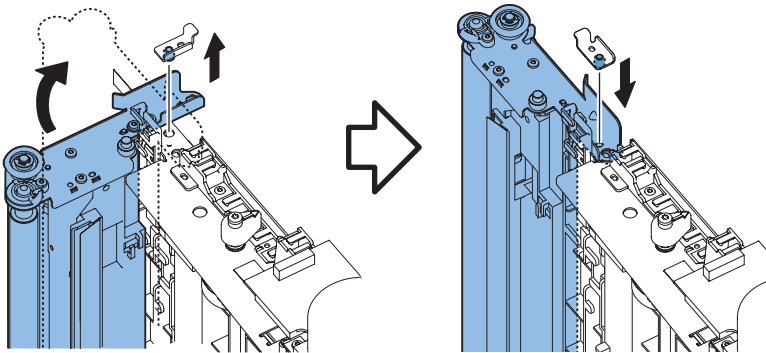
■ Procedure

CAUTION:

Do not touch the surface of Drive Roller, Secondary Transfer Inner Roller and Primary Transfer Roller as it may cause the image failure.



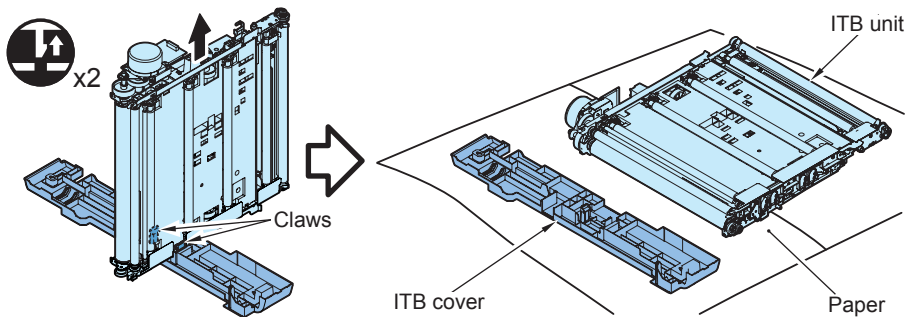
- 1) Pull out the pin, and make the Secondary Transfer Inner Roller Unit straight.
- 2) Install the pin removed in step 1 to the original position.



F-4-137

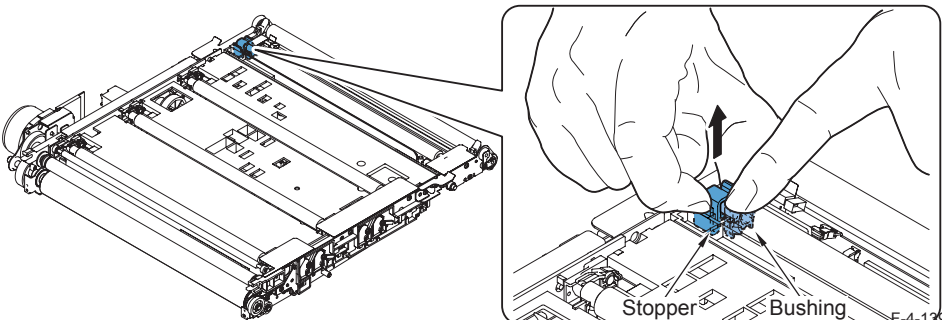
- 3) Remove the ITB Unit from the ITB Cover and place it onto the paper in the position where the roller is placed upside.

- 2 claws



F-4-138

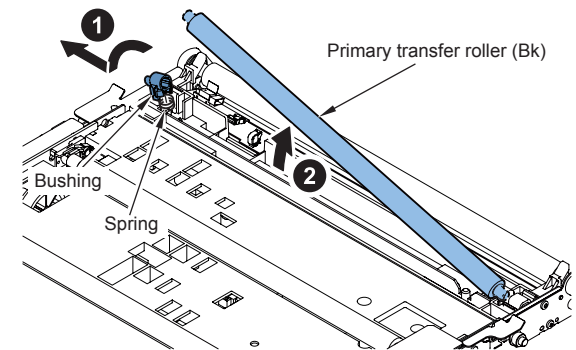
- 4) While holding the front bushing, pinch the claw and remove the Disengagement/Engagement Arm.



F-4-139

- 5) Remove the Primary Transfer Roller (Bk).

- 1 bushing
- 1 spring



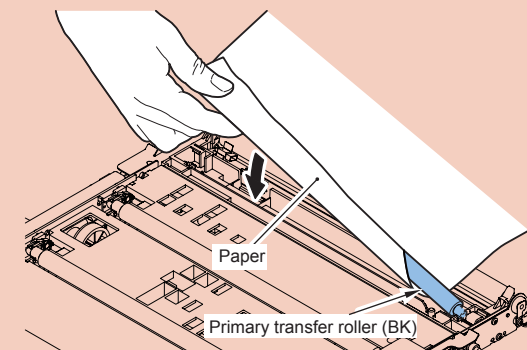
F-4-140

NOTE:

There is no particular direction for the Primary Transfer Roller installation.

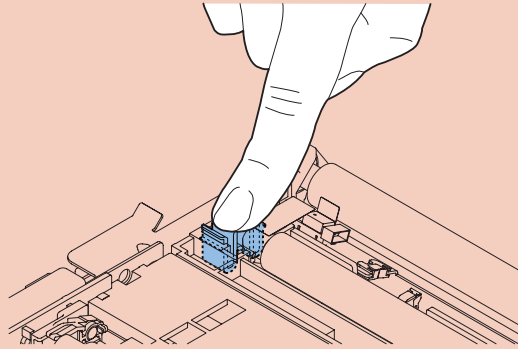
CAUTION:

- Wind paper on the Primary Transfer Roller (Bk) and without touching the surface of the roller.
- Do not touch the roller surface.



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.
- 2) Remove the ITB Cover.
- 3) Remove the ITB Unit.
- 4) Remove the ITB Cleaning Unit.
- 5) Remove the ITB.

■ Procedure

NOTE:

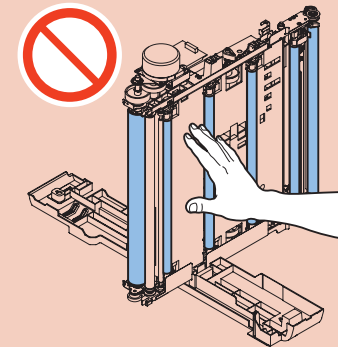
This procedure describes the steps for Primary Transfer Roller (C). Go through the same procedure for M and Y.

■ Actions after Replacement

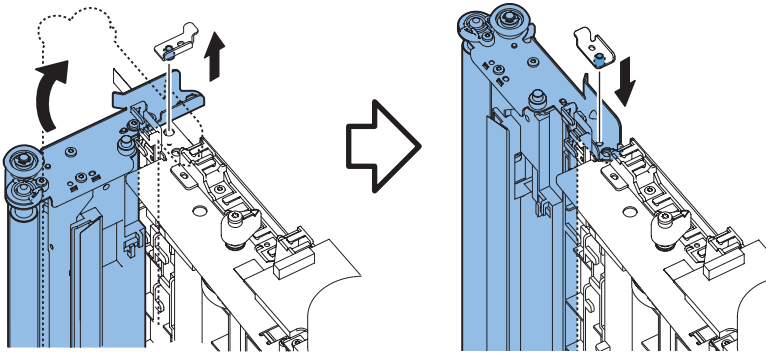
- 1) To execute the ITB Equilibrium Position Detection, make the main body in standby state.
- 2) Execute the ITB Equilibrium Position Detection Service Mode (COPIER>FUNCTION>MISC-P>ITB-INIT) (Level 1). This service mode will take approx. 2 to 3 minutes.

CAUTION:

Do not touch the surface of Drive Roller, Secondary Transfer Inner Roller and Primary Transfer Roller as it may cause the image failure.

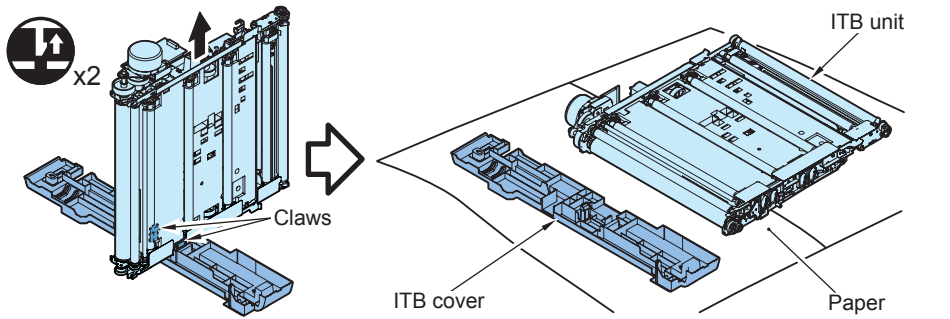


- 1) Pull out the pin, and make the Secondary Transfer Inner Roller Unit straight.
- 2) Install the pin removed in step 1 to the original position



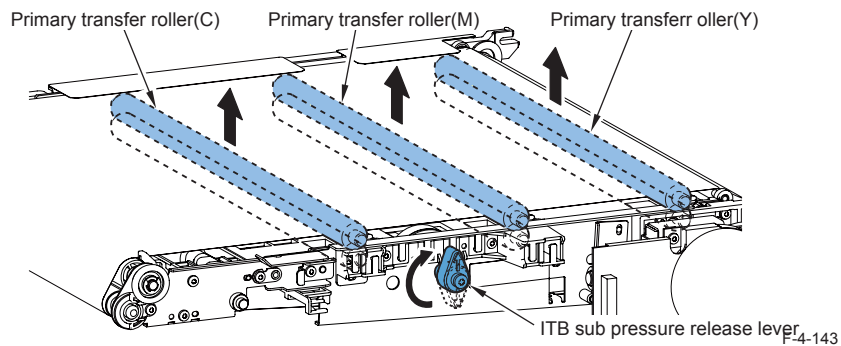
F-4-141

- 3) Remove the ITB Unit from the ITB Cover and place it onto the paper.
 - 2 claws



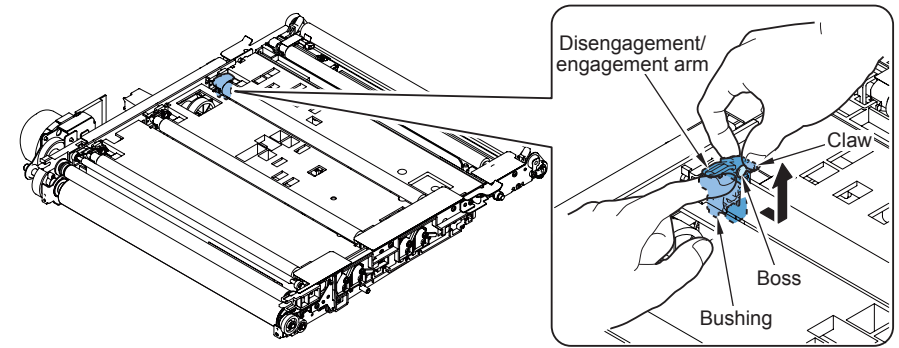
F-4-142

- 4) Turn the ITB Sub Pressure Release Lever to make the Primary Transfer Roller (C,M,Y) lifted.



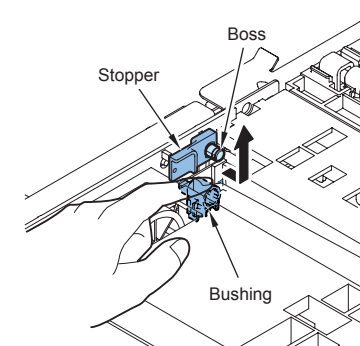
F-4-143

- 5) While holding the front bushing, pinch the claw and remove the Disengagement/Engagement Arm.



F-4-144

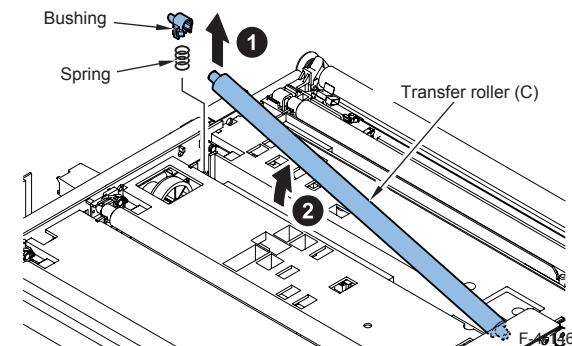
- 6) While holding the bushing, remove the stopper from the boss.



F-4-145

- 7) Remove the Primary Transfer Roller (C).

- 1 bushing
- 1 spring



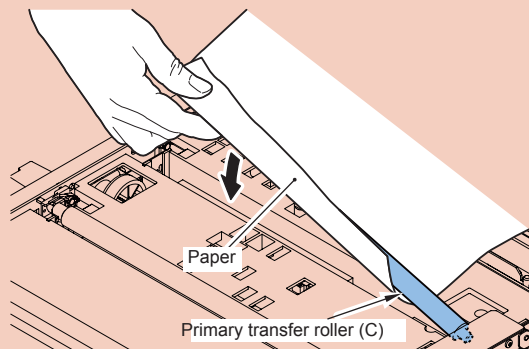
F-4-146

NOTE:

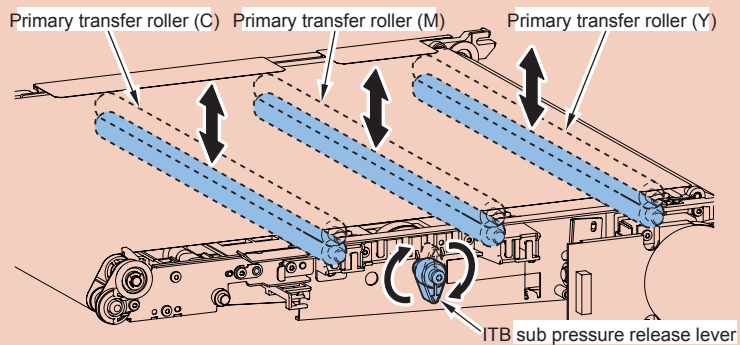
There is no particular direction for the Primary Transfer Roller installation.

CAUTION:

- Wind paper on the Primary Transfer Roller (C) and without touching the surface of the roller.
- Do not touch the roller surface.

**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.

**Actions after Replacement**

- 1) To execute the ITB Equilibrium Position Detection, make the main body in standby state.
- 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.

Removing the Secondary Transfer Inner Roller

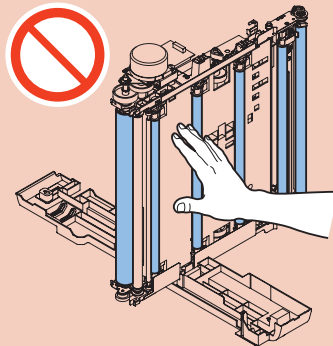
Preparations

- 1) Open the Front Cover, Right Lower Cover and Right Upper Cover.
- 2) Remove the ITB Cover.
- 3) Remove the ITB Unit.
- 4) Remove the ITB Cleaning Unit.
- 5) Remove the ITB.

Procedure

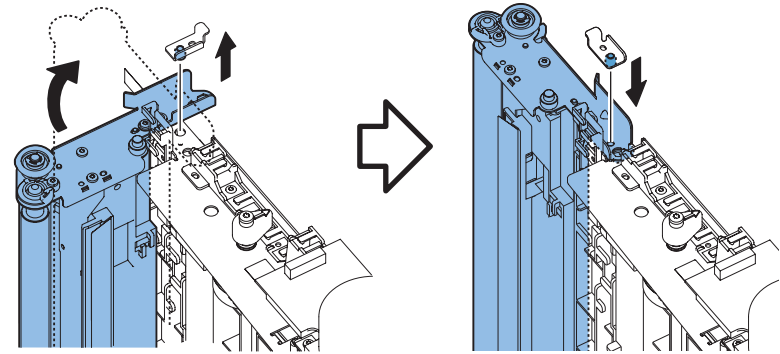
CAUTION:

Do not touch the surface of Drive Roller, Secondary Transfer Inner Roller and Primary Transfer Roller as it may cause the image failure.



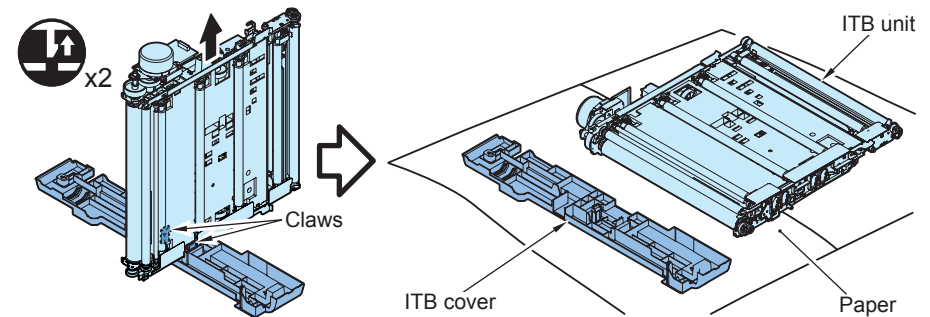
F-4-147

- 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-4-148

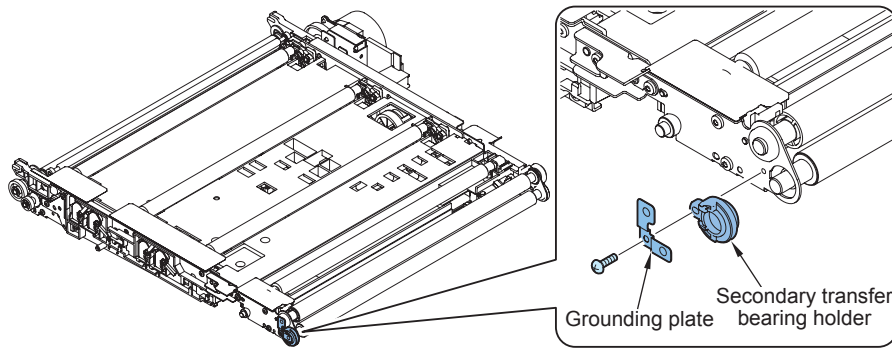
- 3) Remove the ITB Unit from the ITB Cover and place it onto the paper in the position where the roller side faces up.
 - 2 claws



F-4-149

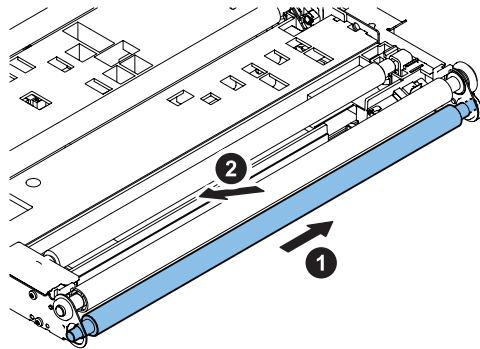
4) Remove the Grounding Plate and the Secondary Transfer Bearing Holder.

- 1 screw



F-4-150

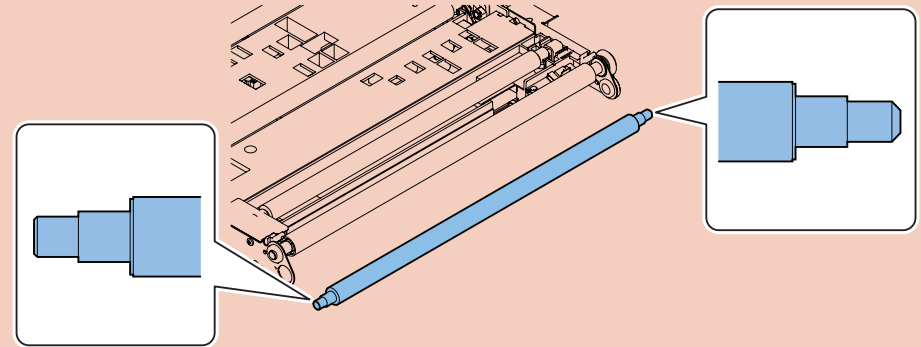
5) Remove the Secondary Transfer Inner Roller.



F-4-151

CAUTION:

Be careful of the installation direction when installing the Secondary Transfer Inner Roller.



■ Actions after Replacement

- 1) To execute the ITB Equilibrium Position Detection, make the main body in standby state.
- 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.

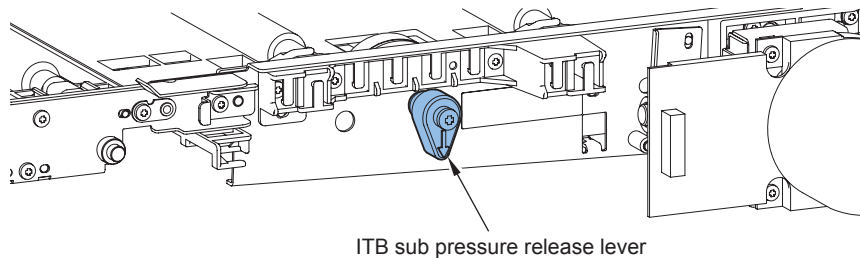
Reinstalling the ITB

Preparations

- 1) Upgrade the machine to the following version or later.
MN-CON: Ver.34.05 D-CON: Ver.18.01
- 2) Open the Front Cover, Right Lower Cover and Right Upper Cover.
- 3) Remove the ITB Cover.
- 4) Remove the ITB Unit.
- 5) Remove the ITB Cleaning Unit.
- 6) Remove the ITB.

Procedure

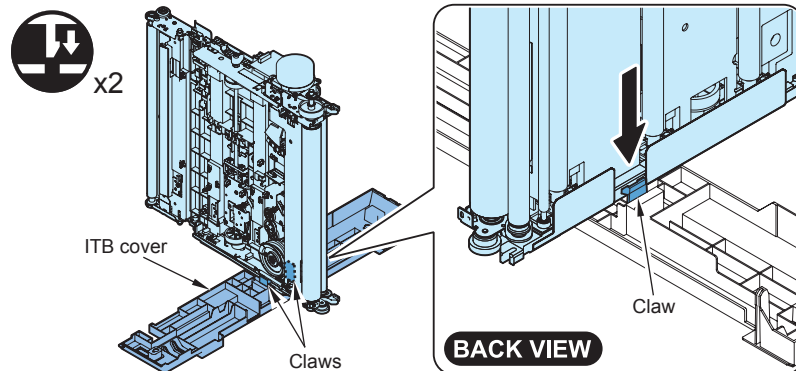
- 1) Check that the ITB Sub Pressure Release Lever is in the below position.



F-4-152

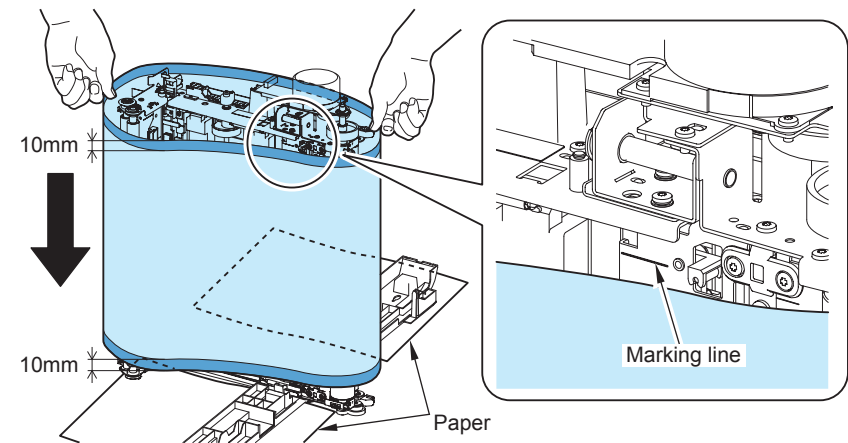
- 2) Stand the ITB Unit on the ITB Cover.

- 2 claws



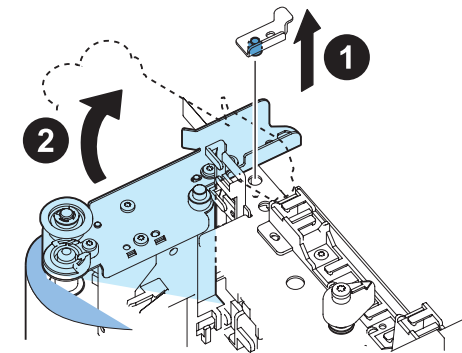
F-4-153

- 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.



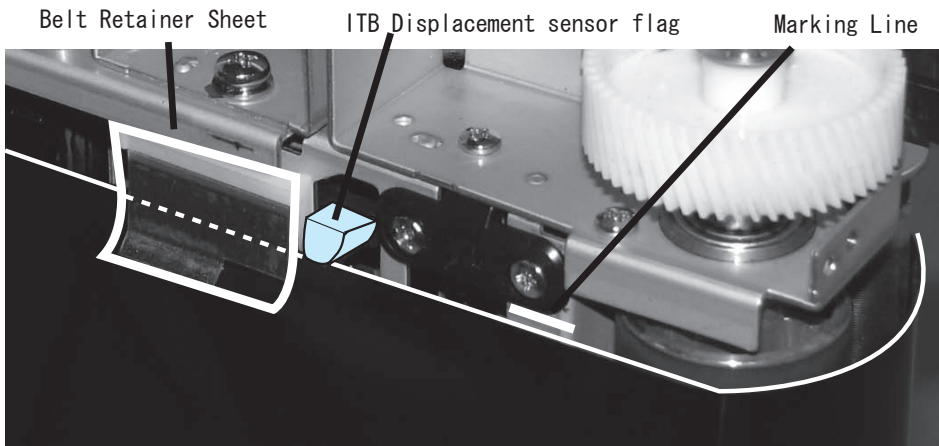
F-4-154

- 5) Remove the pin, and move the Secondary Transfer Inner Roller Unit toward the 2 direction to take up the slack of the belt.



F-4-155

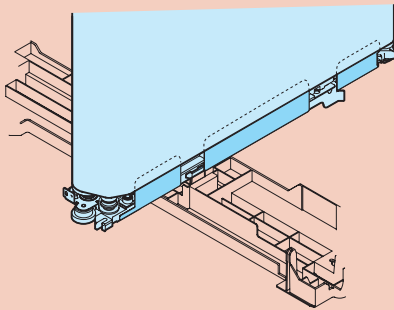
- 6) Put the ITB under the Belt Retainer Sheet (on the left side of the figure), bring the ITB Displacement Sensor Flag into contact with the ITB edge (at the center of the figure), and then, align the marking line (on the right side of the figure) with the position of the ITB.



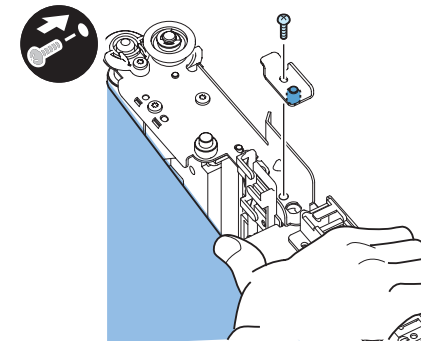
F-4-156

CAUTION:

When installing the ITB, be sure that the Plastic Film on the ITB Unit is inside of the ITB.



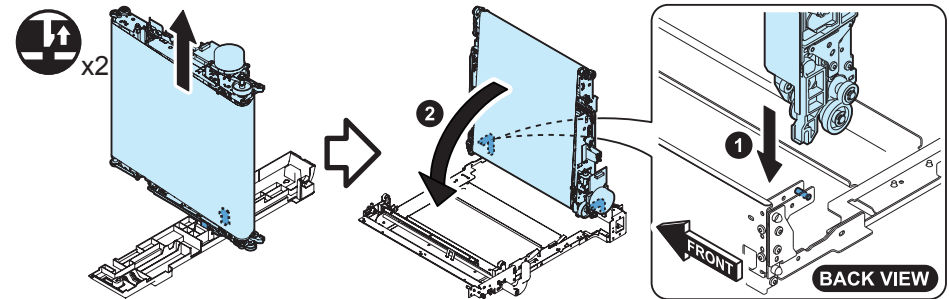
- 7) Return the Secondary Transfer Inner Roller Unit to straight, and then install the pin removed.
- 1 screw



F-4-157

- 8) Remove the ITB Unit from the ITB Cover and install it to the plate.

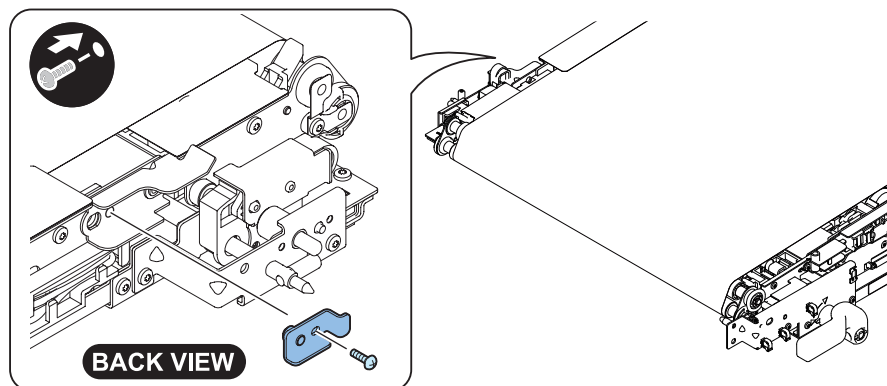
- 2 claws



F-4-158

9) Install the rear pin.

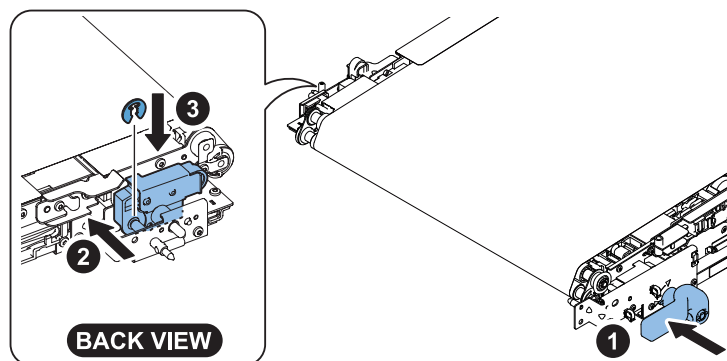
- 1 screw



F-4-159

10) Push the ITB Pressure Release Lever and install the Bush Slider to the boss.

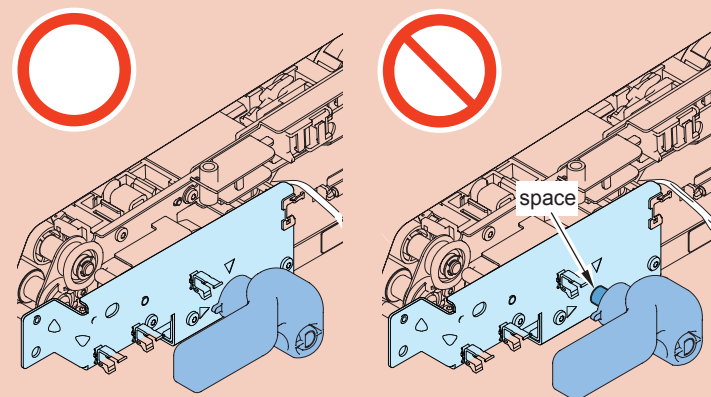
- 1 stop ring



F-4-160

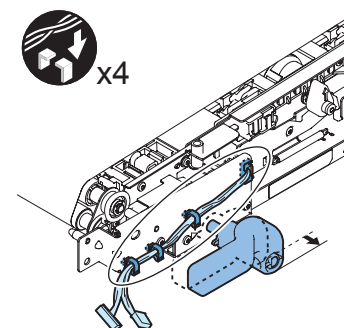
CAUTION:

Make sure that there is no gap between the ITB Pressure Release Lever and the Plate.



11) Install the harness.

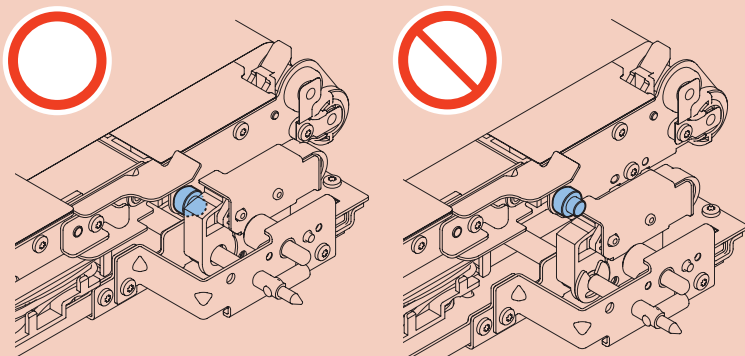
- 1 edge saddle
- 3 wire saddles



F-4-161

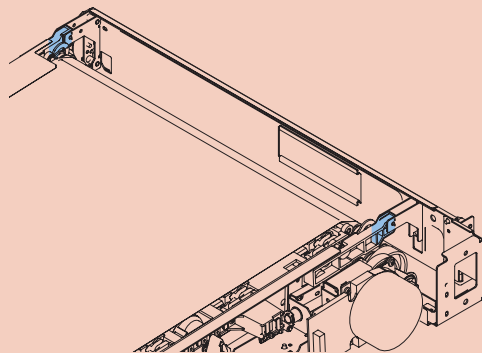
CAUTION:

Make sure that the shaft is fixed to the fixing member.



CAUTION:

Make sure that the hook is fixed to the plate.

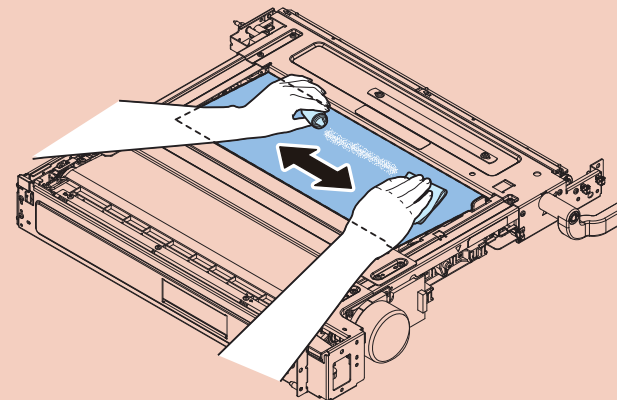


12) Turn over the ITB Unit.

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 tosepearl on the whole area indicated in the figure below.

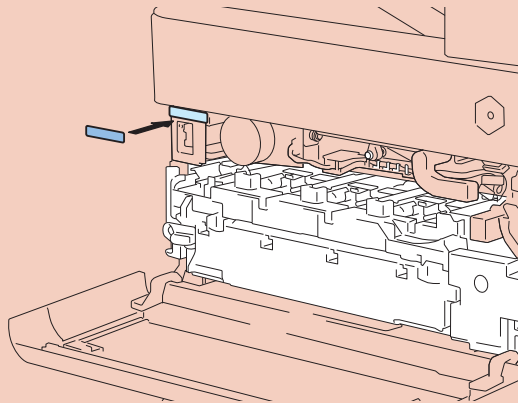


- When applying tosepearl, be careful not to scatter it on inside of the ITB, the Drive Roller and the Secondary Transfer Inner Roller.
- If it is scattered on inside of the ITB, the Drive Roller or the Secondary Transfer Inner Roller, wipe it with lint-free paper moistened with alcohol while rotating 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 "Auto gradation correction".
- 3) Execute the ITB equilibrium position detection in service mode (COPIER > FUNCTION > MISC-P > ITB-INT). This service mode will take approx. 2 to 3 minutes.

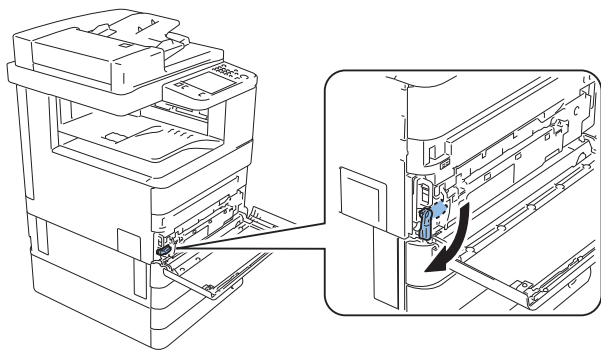
Removing the Recycle Toner Bottle

Preparations

- 1) Open the Front Cover.

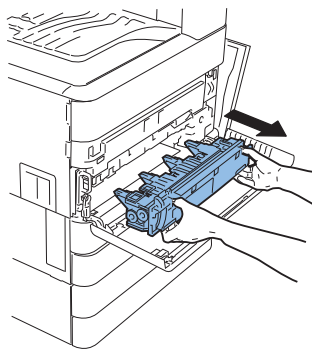
Procedure

- 1) Release the Recycle Toner Bottle Lock Lever.



F-4-162

- 2) Remove the Recycle Toner Bottle.



F-4-163

CAUTION:

Do not tilt the Recycle Toner Bottle.
(Because it may cause misdetection on the Full Detection Sensor.)

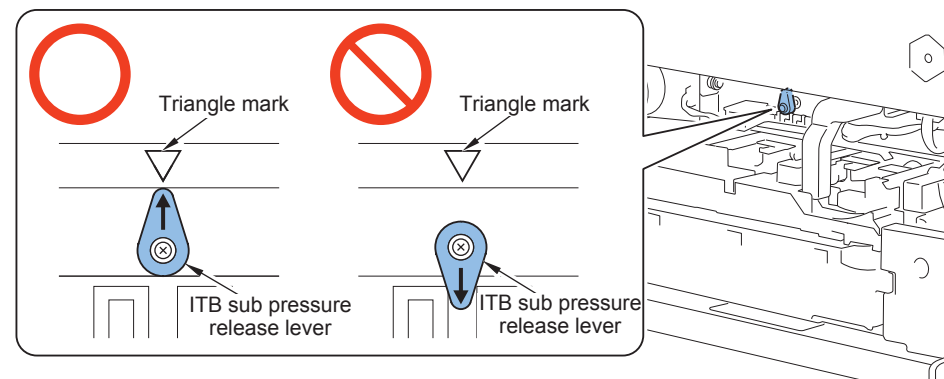
Pulling Out the Process Unit

Preparations

- 1) Open the Right Lower Cover and Right Upper Cover.
- 2) Open the Front Cover.
- 3) Remove the ITB Cover.

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.)

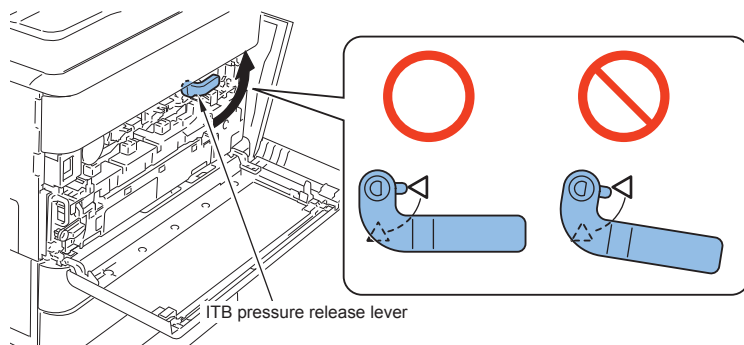


F-4-164

2) Turn the ITB Pressure Release Lever in the right direction and release the pressure.

CAUTION:

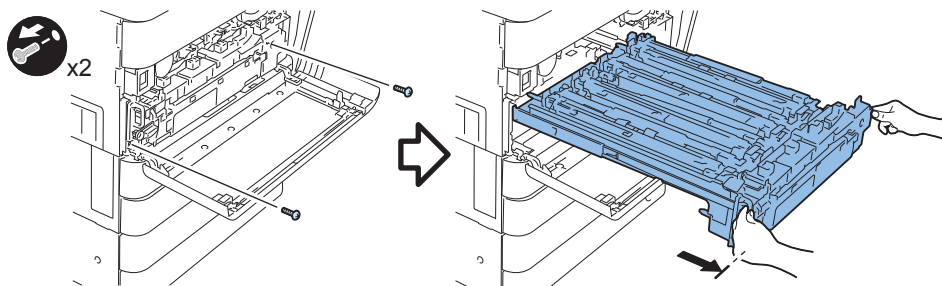
When releasing the pressure of ITB Pressure Release Lever, make sure that the protrusion of grip is aligned with the triangle mark of plate.



F-4-165

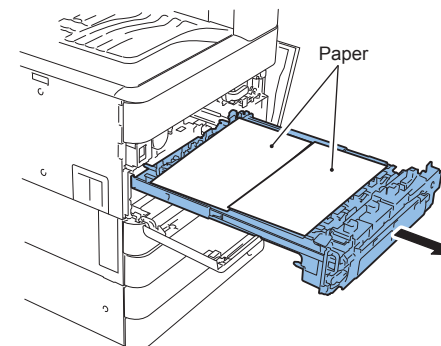
3) Pull out the Process Unit until it stops.

- 2 screws



F-4-166

4) Place the paper onto the Process Unit to protect the Drum Unit from the light.



F-4-167

Removing the Process Unit

Preparations

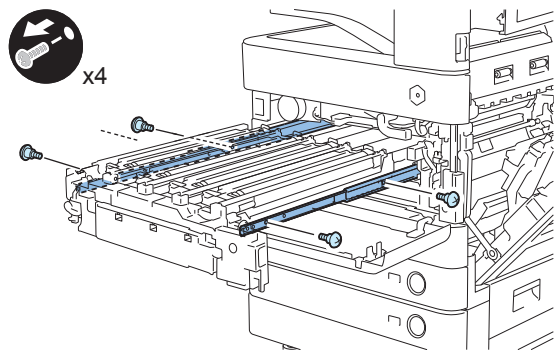
- 1) Open the Front Cover.
- 2) Open the Right Lower Cover and Right Upper Cover.
- 3) Remove the ITB Cover.
- 4) Pull out the Process Unit.

Procedure

CAUTION:

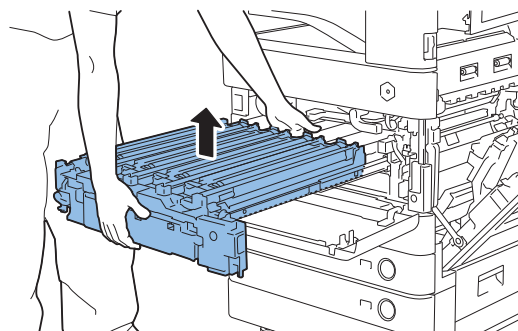
When installing/removing the Process Unit, do not remove the Recycle Toner Bottle.

- 1) Remove the 4 stepped screws fixed on the right and left rails.



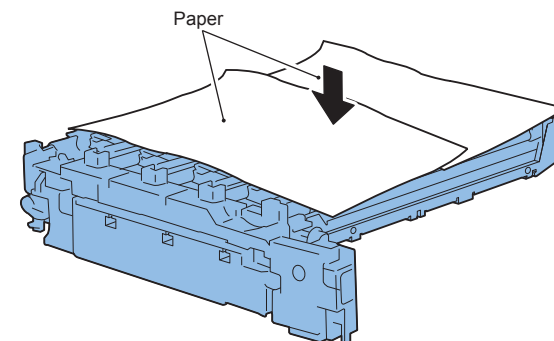
F-4-168

- 2) Hold the front and rear of Process Unit and remove it flatly.



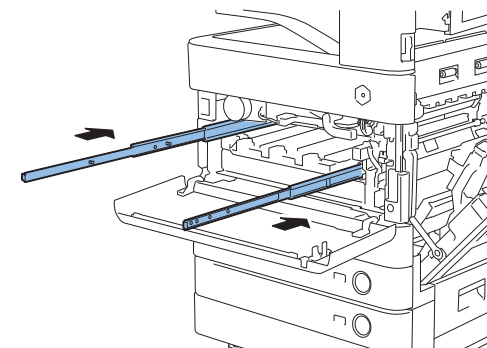
F-4-169

- 3) Place the paper onto the Process Unit to protect the Drum Unit from the light.



F-4-170

- 4) Take the 2 rails of Process Unit back to the host machine.



F-4-171

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.

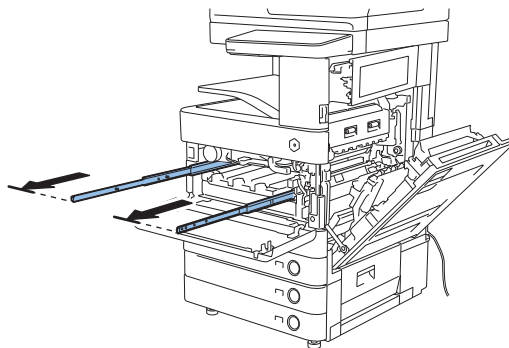
Reinstalling the Process Unit

Preparations

- 1) Open the Right Lower Cover and Right Upper Cover.
- 2) Open the Front Cover.
- 3) Remove the ITB Cover.
- 4) Pull out the Process Unit.
- 5) Remove the Process Unit.

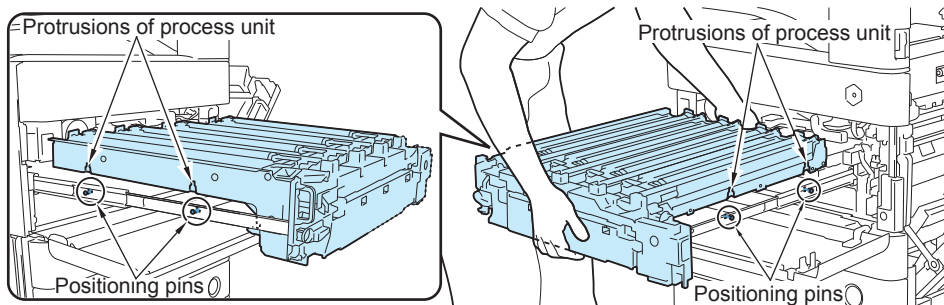
Procedure

- 1) Pull out the 2 rails of Process Unit from the host machine.



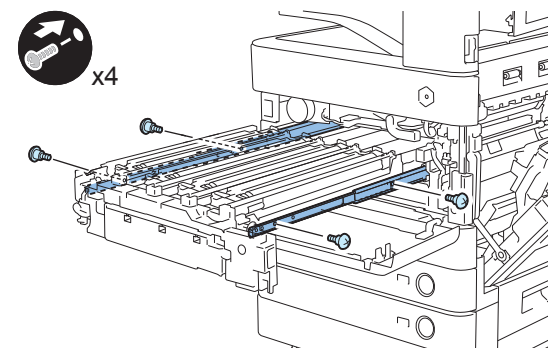
F-4-172

- 2) Align the 4 protrusions of Process Unit with the positioning pin of rail and install it.



F-4-173

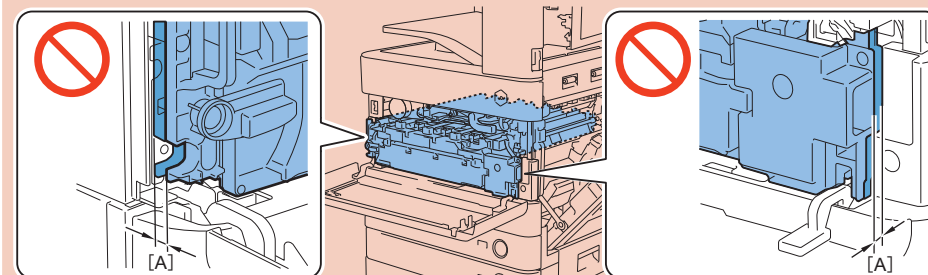
- 3) Install the right and left rails and the Process Unit with 4 stepped screws.



F-4-174

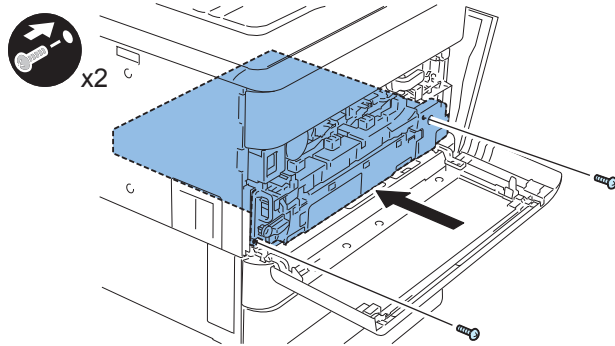
CAUTION:

Make sure that there is no gap [A] between the host machine and the Process Unit and fix it with the screw.



F-4-175

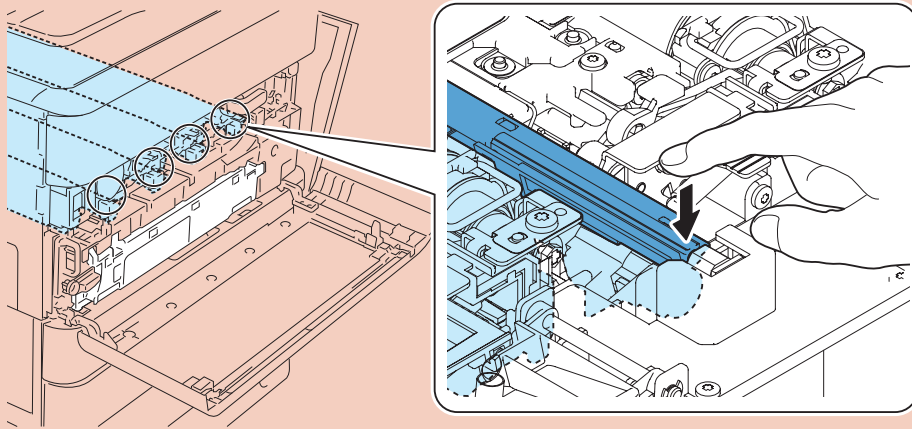
4) Slowly take the Process Unit back to the host machine and fix it with 2 screws.



F-4-176

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.

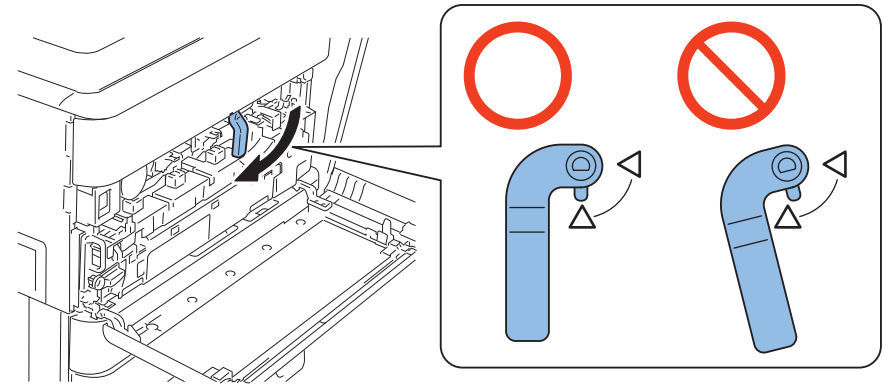


F-4-177

5) Turn the ITB Pressure Release Lever in the left direction to apply the pressure.

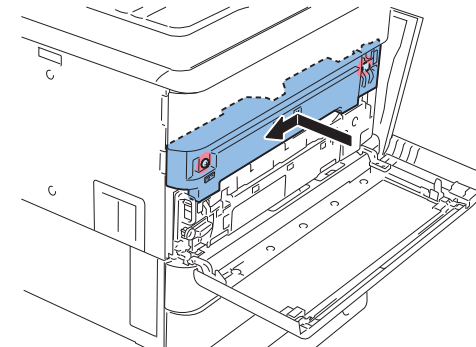
CAUTION:

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-4-178

6) Install the ITB Cover and tighten the 2 loosened screws.



F-4-179

7) Close the Front Cover.

8) Close the Right Upper Cover.

9) Close the Right Lower Cover.

Removing the Drum Unit

Preparations

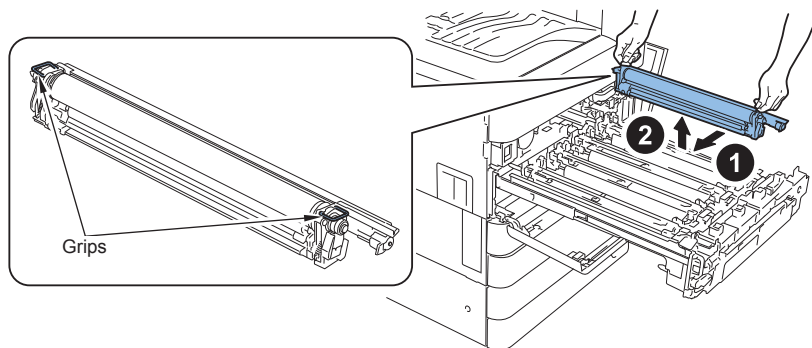
- 1) Open the Right Lower Cover and Right Upper Cover.
- 2) Open the Front Cover.
- 3) Remove the ITB Cover.
- 4) Pull out the Process Unit.

Procedure

CAUTION:

Do not touch the drum surface.

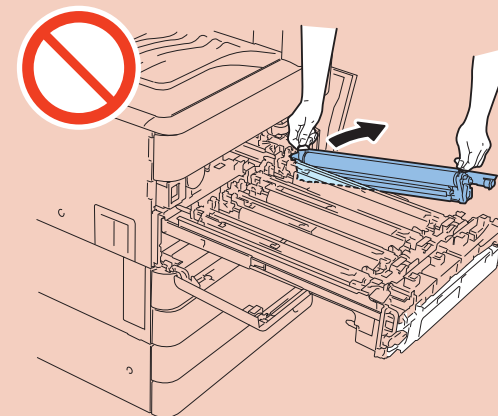
- 1) Hold the grip with both hands, press the Drum Unit against the Developing Assembly and pull it out vertically.



F-4-180

CAUTION:

When removing the Drum Unit, do not pull it out from one handle.



F-4-181

Reinstalling the Drum Unit

Preparations

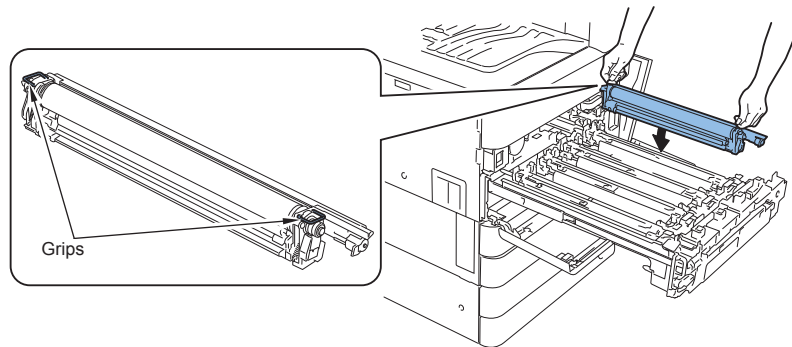
- 1) Open the Front Cover.
- 2) Open the Right Lower Cover and Right Upper Cover.
- 3) Remove the ITB Cover.
- 4) Pull out the Process Unit.
- 5) Remove the Drum Unit.

Procedure

CAUTION:

Do not touch the drum surface.

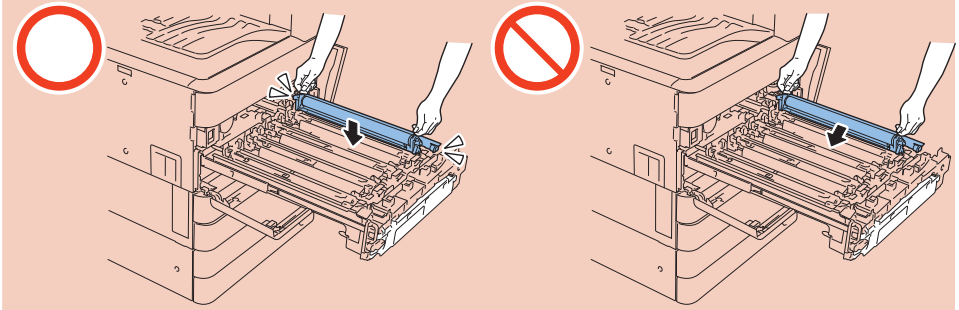
- 1) Hold the grip and install it from the top vertically.



F-4-182

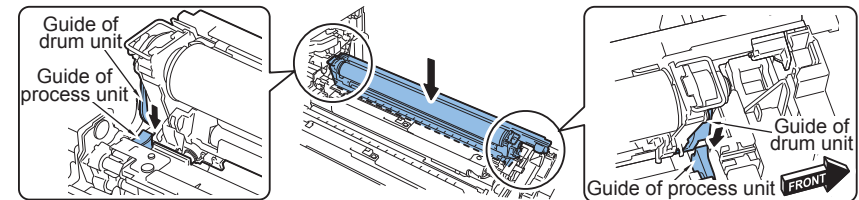
CAUTION:

When installing it at an angle, the shutter may be damaged. Thus, make sure to install it from directly above.



F-4-183

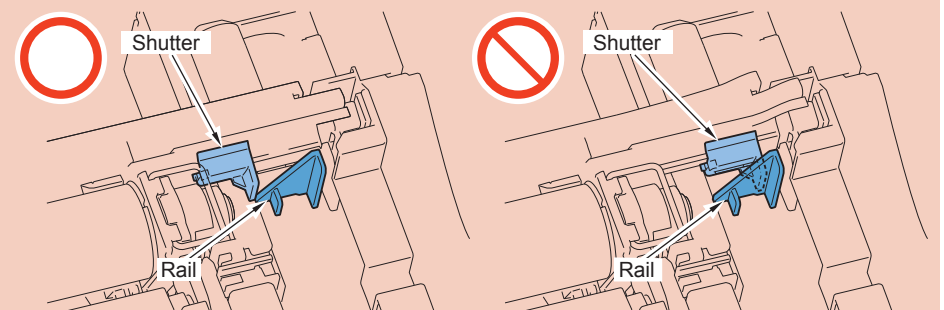
- 2) Align the guide of Process Unit with the guide of Drum Unit and install the Drum Unit.



F-4-184

CAUTION:

Since the rail may be broken, make sure that the shutter is surely slid on the rail.

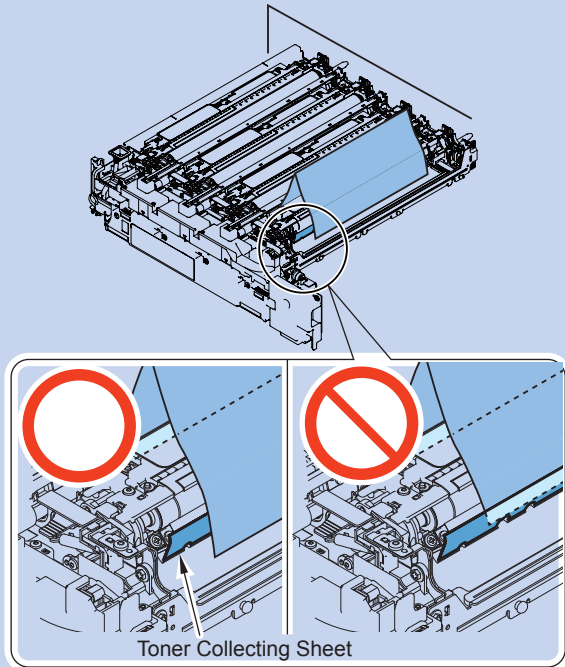


F-4-185

NOTE:

When installing the Drum Unit (Bk) to the host machine, perform the following procedures.

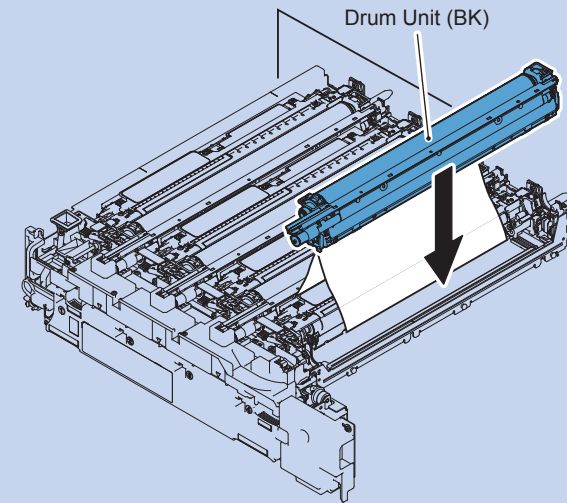
- 2-1) Place the half fold paper included in the packaging box on the Developing Assembly (Bk). Be sure to set the edge of half fold paper over the Toner Collecting Sheet of the Developing Assembly.



F-4-186

NOTE:

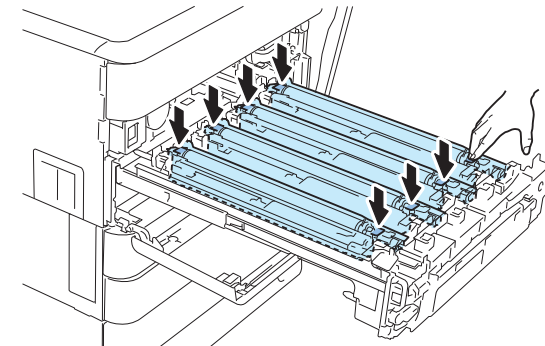
- 2-2) While the paper is set, install the Drum Unit (Bk) to the host machine.



F-4-187

- 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-4-188

Removing the Developing Assembly

Preparations

- 1) Open the Right Lower Cover and Right Upper Cover.
- 2) Open the Front Cover.
- 3) Remove the ITB Cover.
- 4) Pull out the Process Unit.
- 5) Remove the Drum Unit.
- 6) Remove the Recycle Toner Bottle.

Procedure

NOTE:

This procedure describes the removal of Bk Developing Assembly. Go through the same procedure for removing the Y,M,C Developing Assembly.

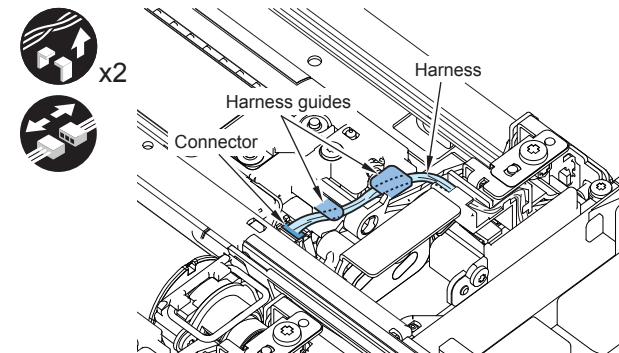
CAUTION:

When installing/removing it, do not touch the Developing Sleeve.

CAUTION:

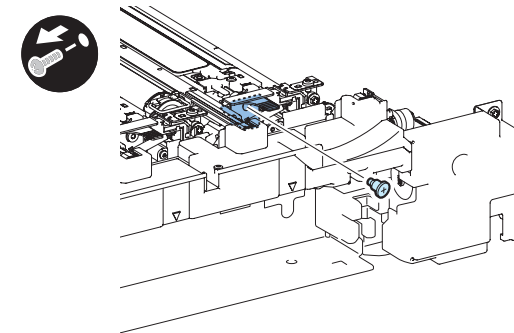
When installing/removing the Developing Assembly, be sure to remove the Recycle Toner Bottle.

- 1) Remove the harness from the 2 harness guides and remove the connector.



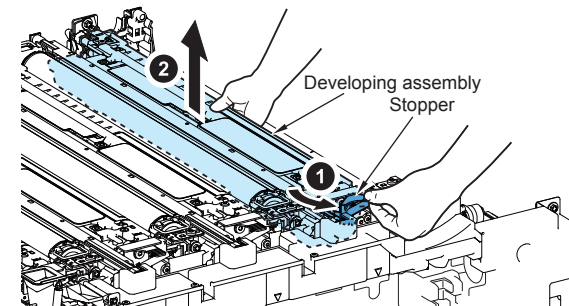
F-4-189

- 2) Remove the stepped screw.



F-4-190

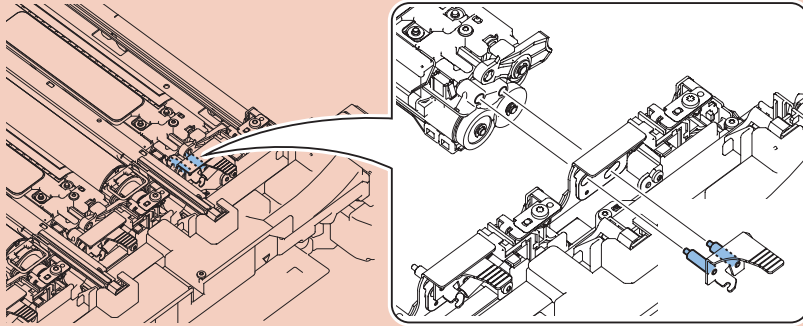
- 3) While pulling out the stopper, remove the Developing Assembly upward.



F-4-191

CAUTION:

Make sure to insert the 2 pins of stopper into the 2 holes of Developing Assembly and install it.



F-4-192

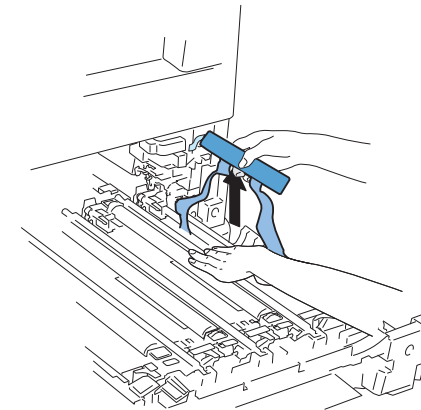
Installing a new Developing Assembly

Preparations

- 1) Open the Right Lower Cover and Right Upper Cover.
- 2) Opening the Front Cover.
- 3) Removing the ITB Cover.
- 4) Pulling out the Process Unit.
- 5) Removing the Drum Unit.
- 6) Removing the Waste Toner Container.

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-4-193

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)

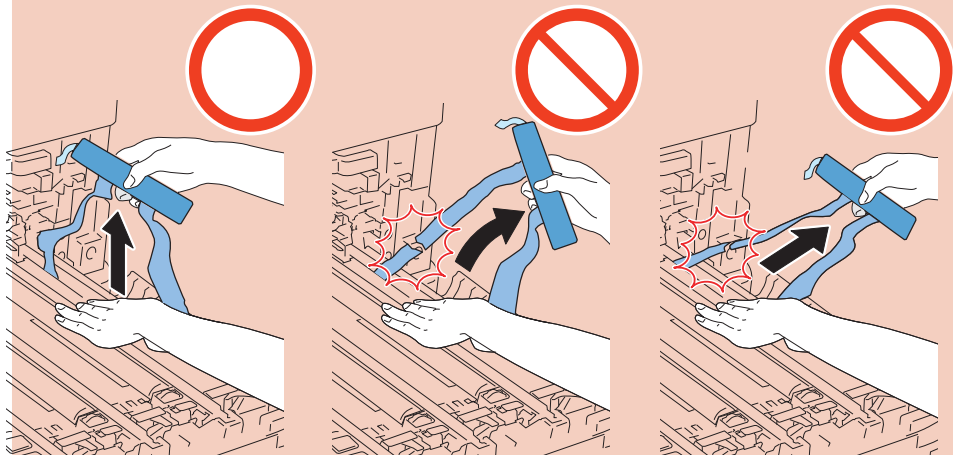
COPIER > FUNCTION > INSTALL > INISET-C Initialization of C Developing Assembly (toner ratio and patch)

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)

CAUTION:

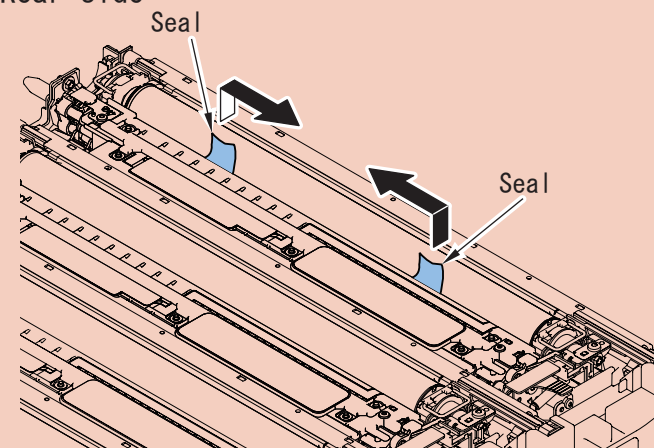
When removing the Seal on the Developing Assembly, be sure to lift it slowly and vertically. If lifting it in an oblique direction, the Seal on the Developing Assembly is stressed, and may cause tear of the seal.



F-4-194

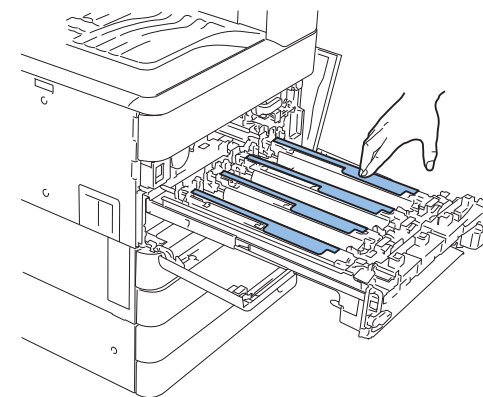
CAUTION:

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-4-195

- 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-4-196

■ 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)

● Removing the Secondary Transfer Outer Roller and Secondary Transfer Separation Guide Unit

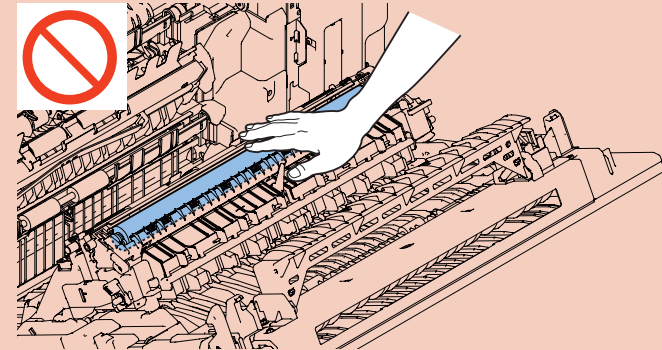
■ Preparations

1) Open the Right Lower Cover and Right Upper Cover.

■ Procedure

CAUTION:

Do not touch the surface of Secondary Transfer Outer Roller.

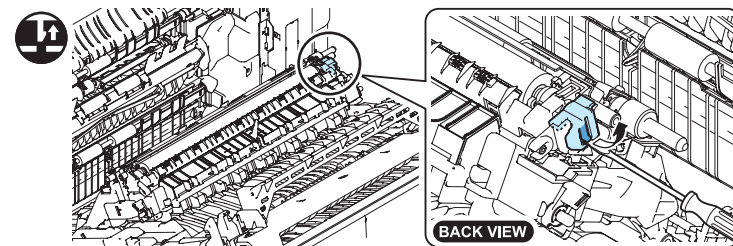


F-4-197

1) Place the paper to put the Secondary Transfer Outer Roller Unit.

2) Remove the rear stopper.

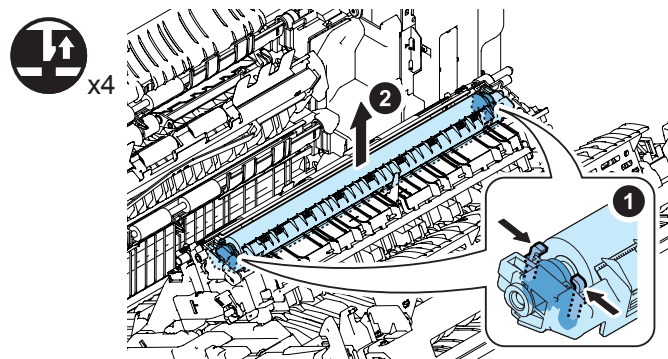
- 1 claw



F-4-198

3) Pinch the claws on both sides of bearing holder and remove the Secondary Transfer Outer Roller Unit.

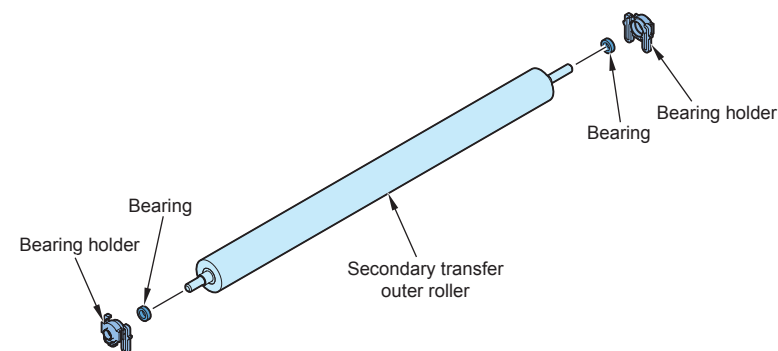
- 4 claws



F-4-199

5) Remove the Secondary Transfer Outer Roller.

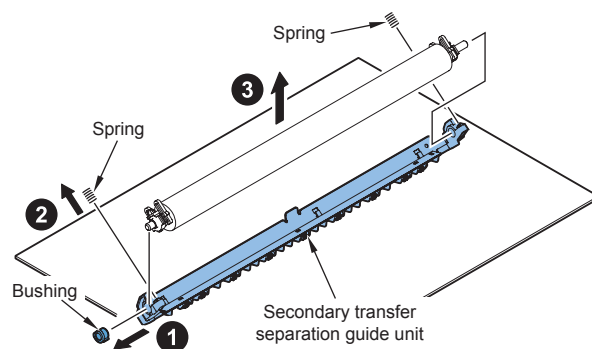
- 2 bearing holders
- 2 bearings



F-4-201

4) Remove the Secondary Transfer Separation Guide Unit.

- 1 bushing
- 2 springs



F-4-200

Reinstalling the Secondary Transfer Outer Roller and Secondary Transfer Separation Guide Unit

Preparations

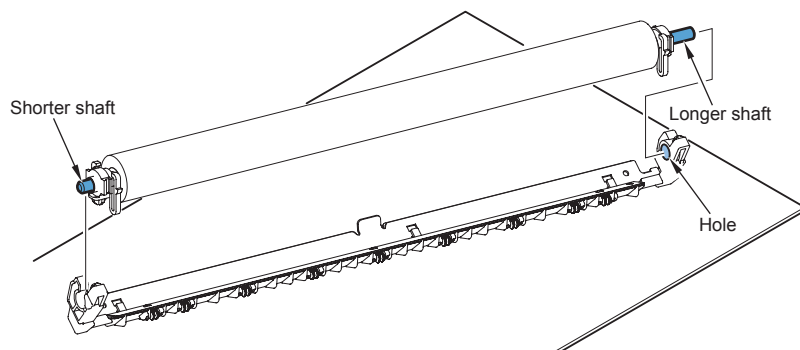
- 1) Open the Right Lower Cover and Right Upper Cover.
- 2) Remove the Secondary Transfer Outer Roller and Secondary Transfer Separation Guide Unit.

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.

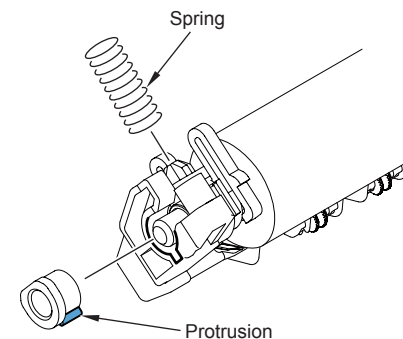


F-4-202

CAUTION:

After installing the Secondary Transfer Outer Roller, make sure that the bearing holder can rotate.

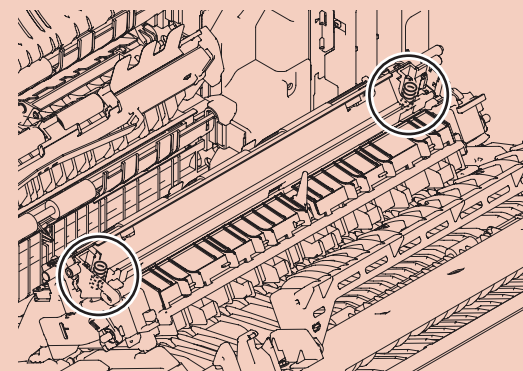
- 2) Fit the protrusion with the groove of the guide and install the bushing.
- 3) Install the spring onto both side of protrusion.



F-4-203

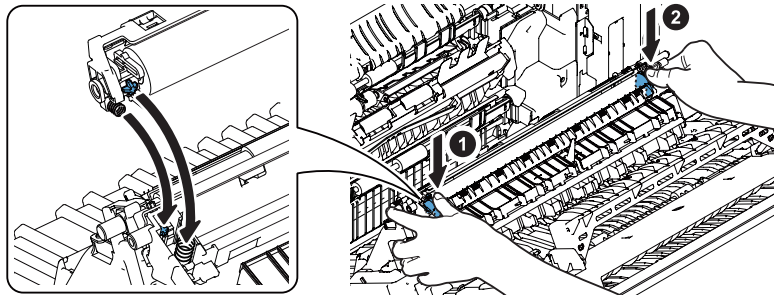
CAUTION:

Make sure that the spring on the Duplex Unit side is not skewed.



F-4-204

- 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-4-205

- 5) Reinstall the rear stopper.

Actions after Replacement

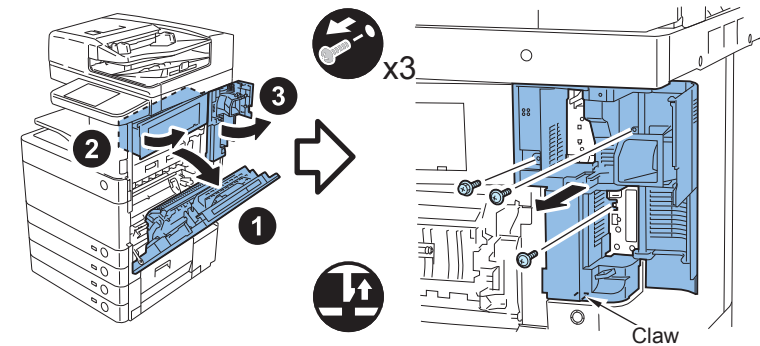
When replacing the Secondary Transfer Outer Roller, execute the service mode.

COPIER > FUNCTION > CLEANING > TNR-COAT

Removing the Toner Bottle manually

Preparations

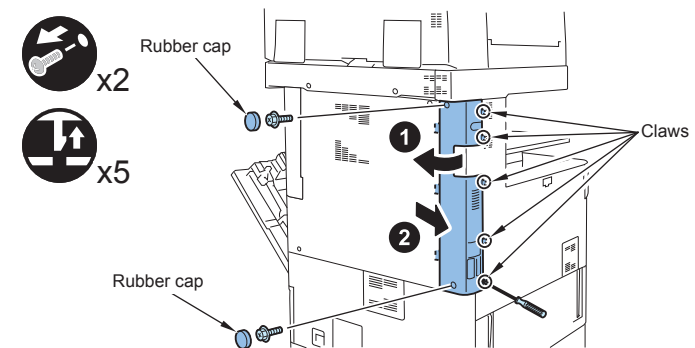
- 1) Open the Right Lower Cover and Right Upper Cover.
- 2) Remove the Right Rear Cover.
 - 1 screw (RS tight; M4)
 - 2 screws (TP; M3)
 - 1 claw



F-4-206

Remove the Left Rear Cover, Left Rear Sub Cover.

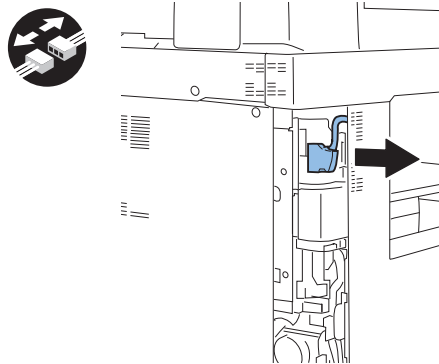
- 3) Remove the Left Rear Cover.
 - 2 rubber caps
 - 2 screws
 - 5 claws



F-4-207

4) If the Reader Unit is installed, remove the reader signal cable.

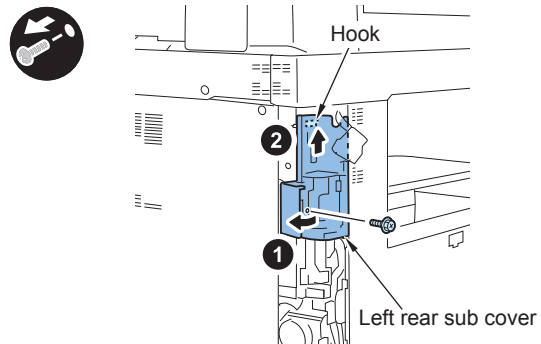
- 1 connector



F-4-208

5) Remove the Left Rear Sub Cover.

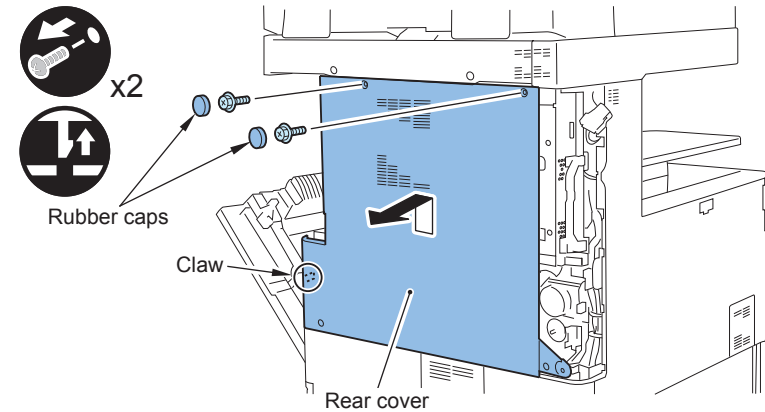
- 1 screw
- 1 hook



F-4-209

6) Remove the Rear Cover.

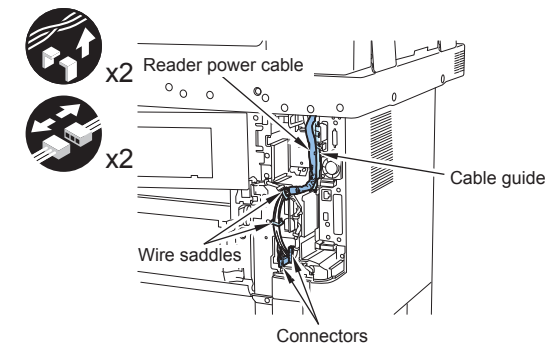
- 3 rubber caps
- 3 screws
- 1 claw



F-4-210

7) When the Reader is installed, remove the reader power cable.

- 2 connectors
- 2 wire saddles
- 1 cable guide



F-4-211

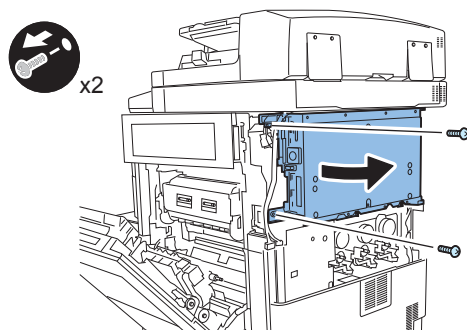
Open the Controller Box

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.

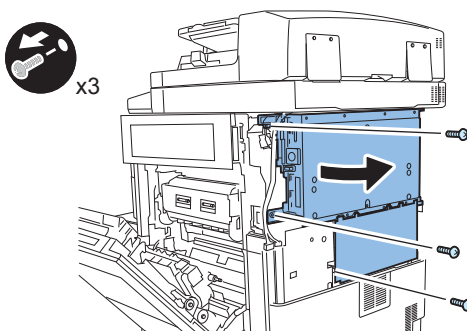
- 2 screws



F-4-212

8-2) Avoid the harness and open the Controller Box and the FAX Unit.

- 3 screws



F-4-213

Procedure

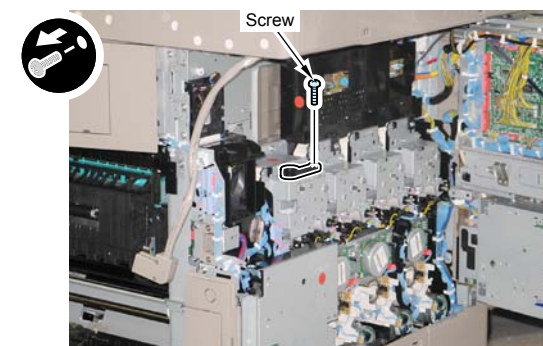
NOTE:

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.

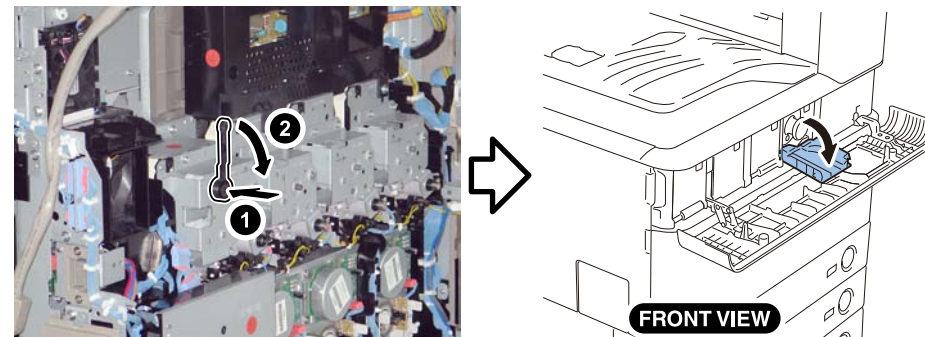
- 1 screw



F-4-214

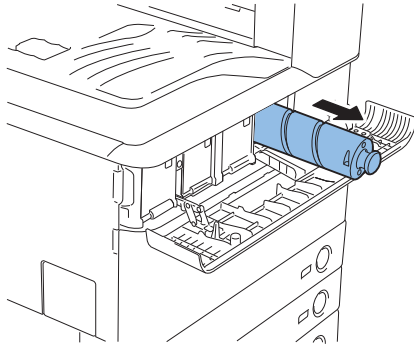
3) Install the handle to the shaft.

4) Turn the handle like ratchet and open the small cover.



F-4-215

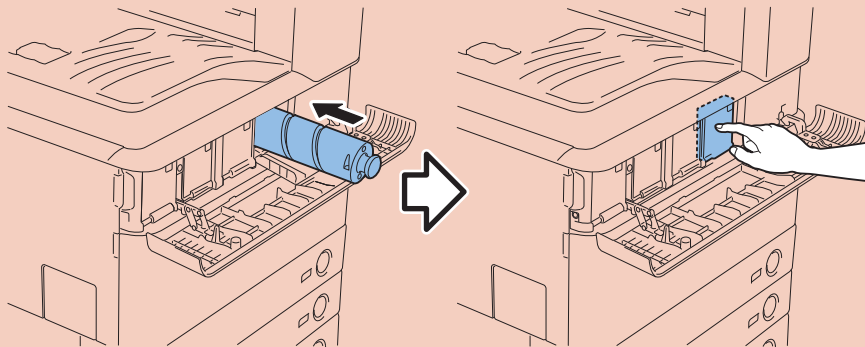
5) Pull out the toner container.



F-4-216

CAUTION:

At installation, make sure to insert the Toner Container all the way in and close the small cover.

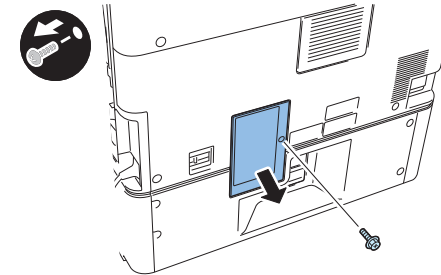


F-4-217

Removing the Main Drive Unit

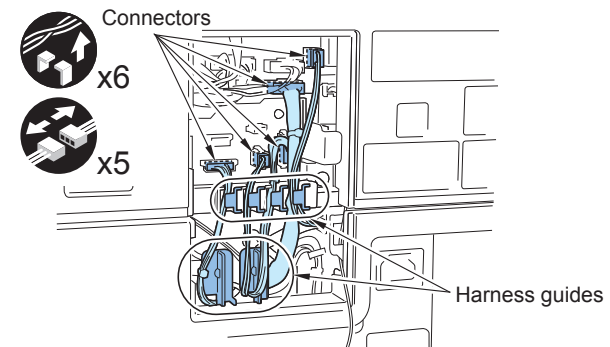
Preparations

- 1) Open the Right Lower Cover and Right Upper Cover.
- 2) Remove the Right Rear Cover.
- 3) Remove the Left Rear Cover and the Left Rear Sub Cover.
- 4) Remove the Connector Cover.
 - 1 screw



F-4-218

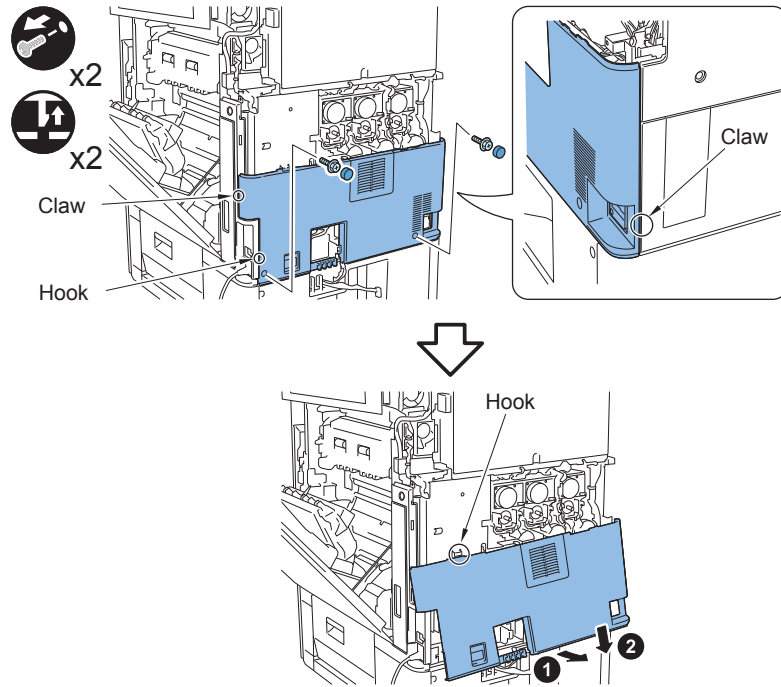
- 5) When the Cassette Pedestal is installed, remove the connector.
 - 5 connectors
 - 6 harness guides



F-4-219

3) Remove the Rear Lower Cover.

- 2 rubber caps
- 2 screws
- 2 claws
- 2 hooks

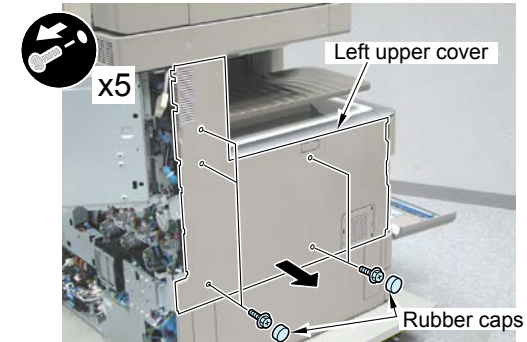


F-4-220

■ Procedure

1) Remove the Left Upper Cover.

- 5 rubber caps
- 5 screws

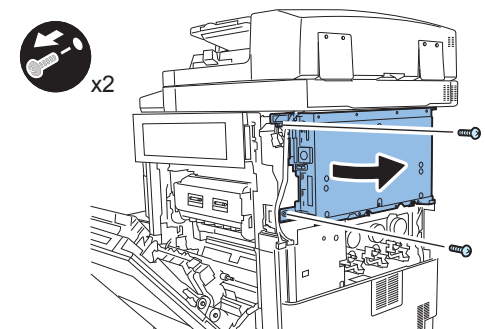


F-4-221

NOTE:
If the Fax Unit is installed, remove it from the host machine.

2) Avoid the harness and open the Controller Box.

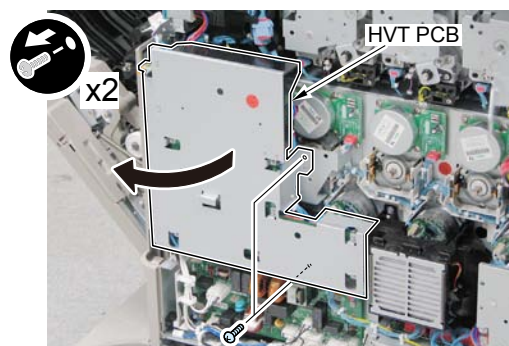
- 2 screws



F-4-222

3) Open the High-voltage PCB.

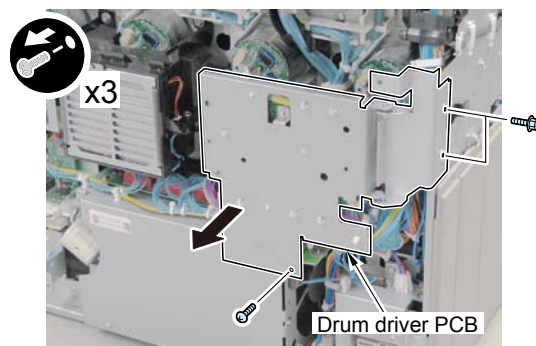
- 2 screws



F-4-223

4) Remove the Drum Driver PCB.

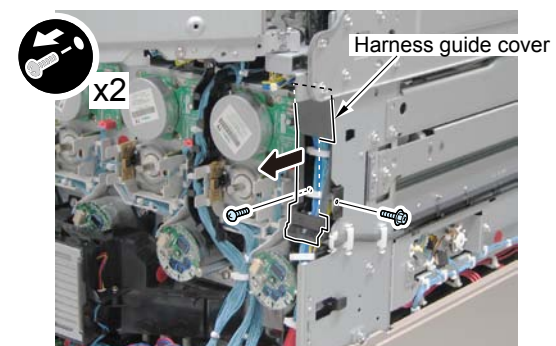
- 3 screws



F-4-224

5) Remove the Harness Guide Cover.

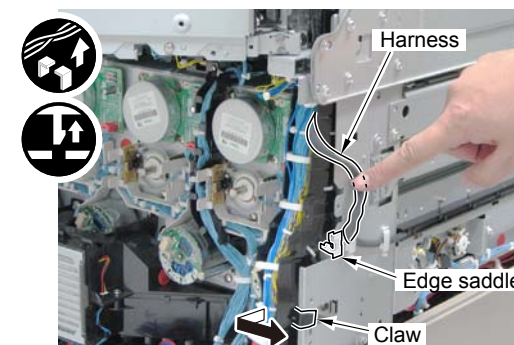
- 2 screws



F-4-225

6) Pull out the harness of Laser Scanner and make a space by hooking the claw of harness guide.

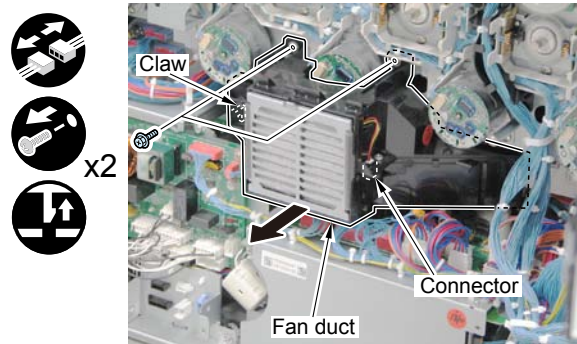
- 1 edge saddle
- 1 claw



F-4-226

7) Remove the Fan Duct 1.

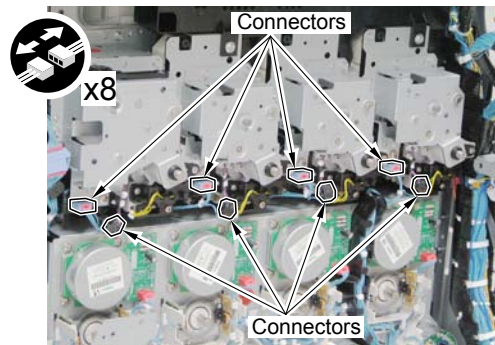
- 2 screws
- 1 connector
- 1 claw



F-4-227

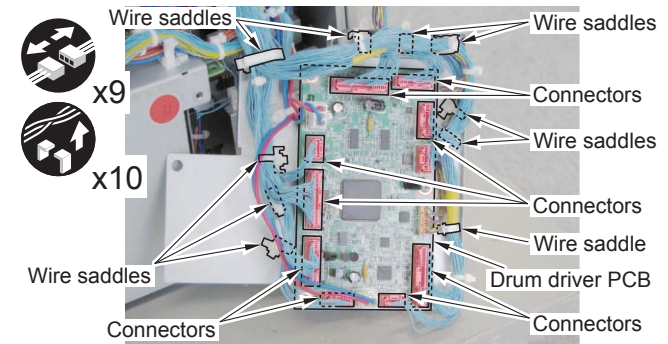
8) Remove the harness of Hopper.

- 8 connectors



F-4-228

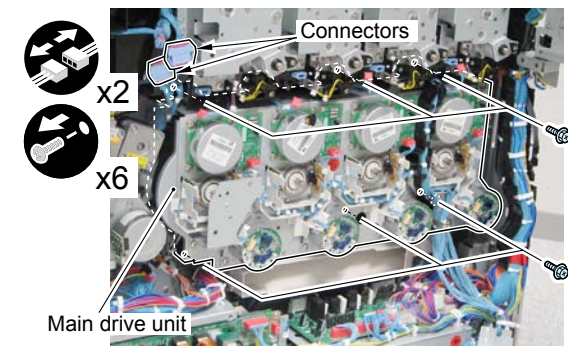
9) Remove the 9 connectors and 10 Wire Saddles from the Drum Driver PCB.



F-4-229

10) Remove the Main Drive Unit.

- 2 connectors
- 6 screws



F-4-230

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.

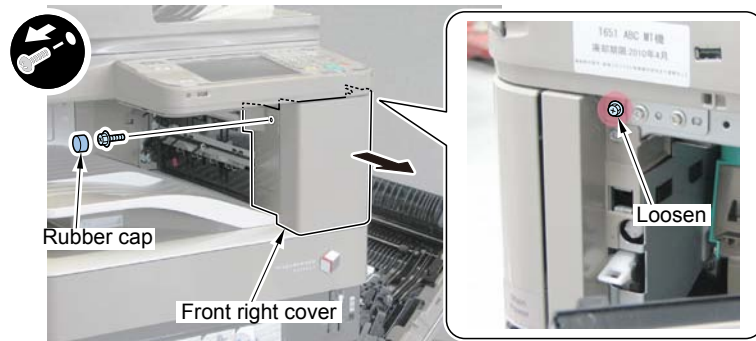
NOTE:

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.
- 6) Remove the ITB Unit.
- 7) Remove the Process Unit.

Procedure

- 1) Remove the Front Right Cover.
 - 1 rubber cap
 - 1 screw (remove)
 - 1 screw (loosen)



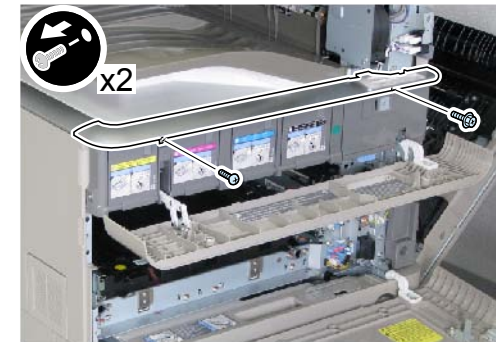
F-4-231

- 2) Remove the Small Plate.
 - 1 screw (P tight)



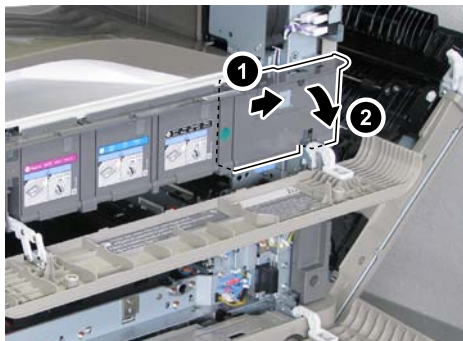
F-4-232

- 3) Remove the Front Upper Cover.
 - 1 screw (P tight)
 - 1 screw (RS)



F-4-233

4) Remove the Front Upper Right Cover.



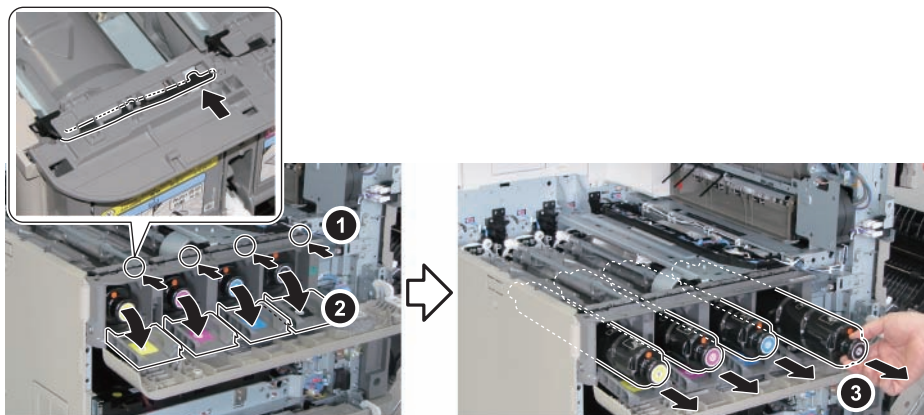
F-4-234

5) Remove the Delivery Tray.



F-4-235

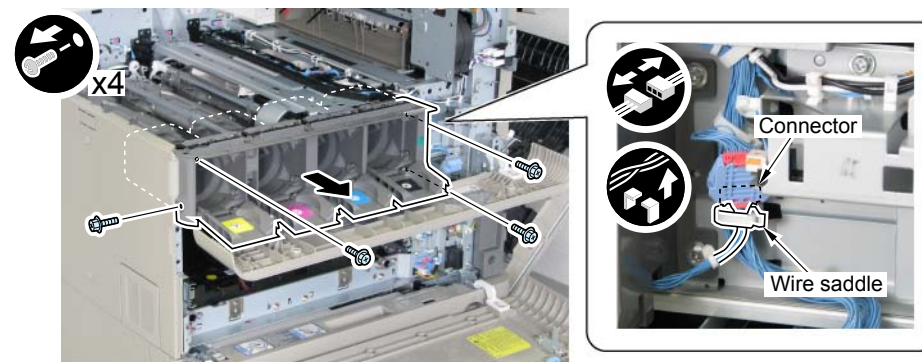
6) Open the 4 Small Covers and remove the 4 Toner Containers.



F-4-236

7) Remove the Toner Container Front Inner Cover.

- 1 connector
- 1 wire saddle
- 4 screws (RS)



F-4-237

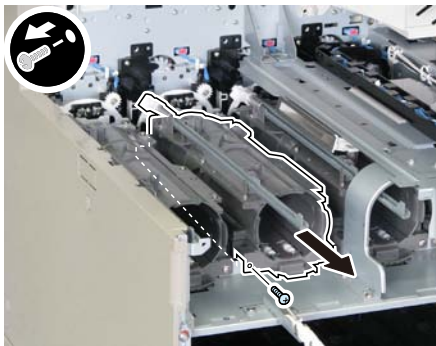
Removing the Hopper (M)

Preparations

- 1) Release the lock of Toner Container. (By service mode)
- 2) Open the Front Cover, the Right Lower Cover and Right Upper Cover.
- 3) Remove the ITB Unit.
- 4) Remove the Process Unit.
- 5) Remove the Color Drum Heater. (When the option is installed)
- 6) Remove the Toner Container Front Inner Cover.

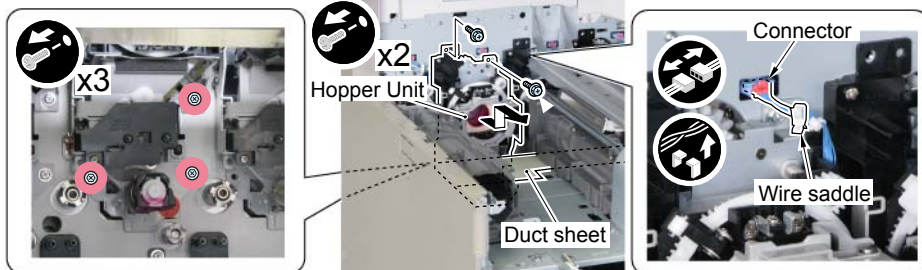
Procedure

- 1) Remove the Toner Tray.
 - 1 screw (M4 binding)



F-4-238

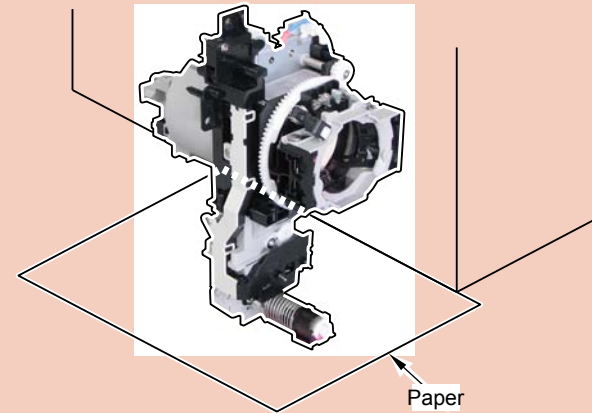
- 2) While avoiding the duct sheet, remove the Hopper Unit.
 - 1 connector
 - 1 wire saddle
 - 5 screws (RS)



F-4-239

CAUTION:

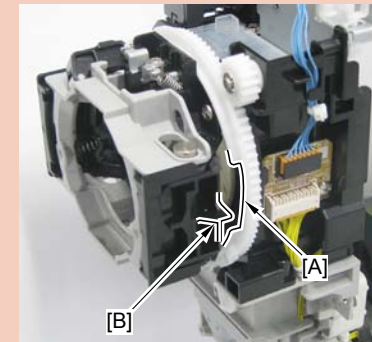
If it is placed sideways, toner may scatter inside the Hopper and it may cause the operation failure. Thus, stand and put the Hopper Unit on the paper.



F-4-240

CAUTION:

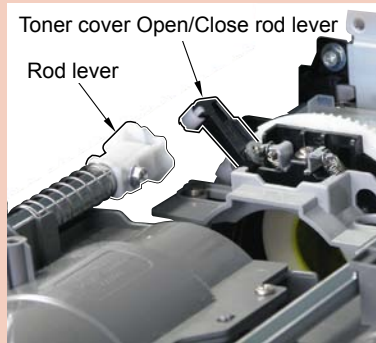
When installing the Hopper, align the cut-off [A] part of Bottle Fixing Ring with the Bottle Fixing Arm [B] and install it to the host machine.



F-4-241

CAUTION:

When installing the Toner Tray, align the Rod Lever with the Toner Cover Open/Close Rod Lever and install it.



F-4-242

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

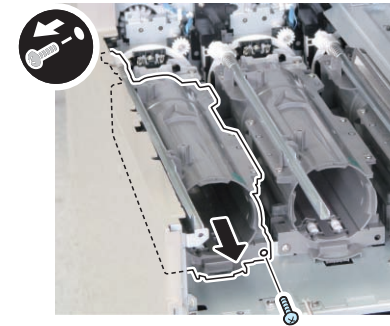
If install the Toner Container before initialization, T/D ratio cannot set the right value.

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.
- 3) Remove the ITB Unit.
- 4) Remove the Process Unit.
- 5) Remove the Color Drum Heater. (When the option is installed)
- 6) Remove the Toner Container Front Inner Cover.

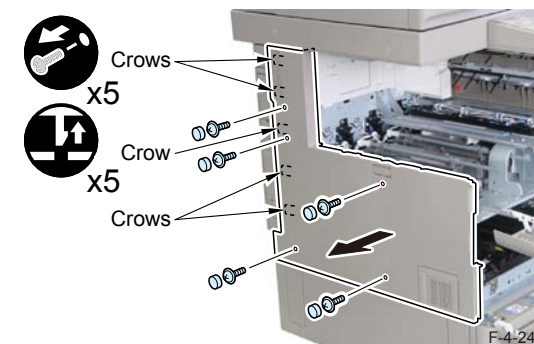
Procedure

- 1) Remove the Toner Tray.
 - 1 screw (M4 binding)



F-4-243

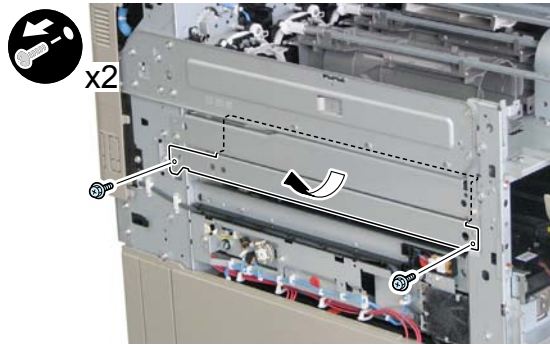
- 2) Remove the Left Cover.
 - 5 rubber caps
 - 5 screws
 - 5 claws



F-4-244

3) Remove the Left Middle Stay.

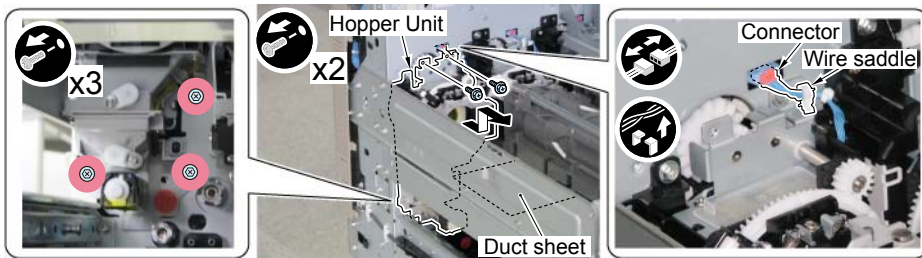
- 2 screws



F-4-245

4) While avoiding the duct sheet, remove the Hopper Unit.

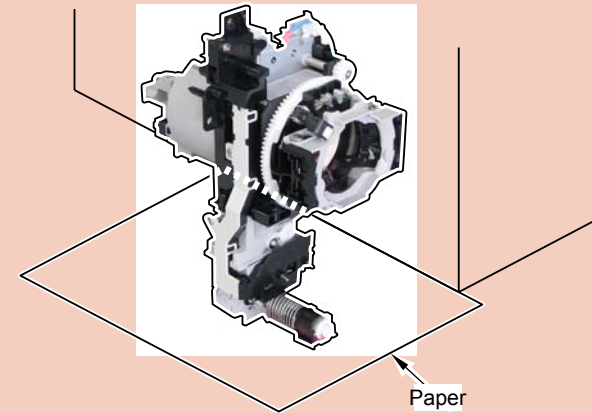
- 1 connector
- 1 wire saddle
- 5 screws (RS)



F-4-246

CAUTION:

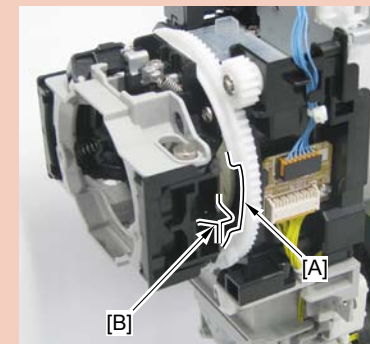
If it is placed sideways, toner may scatter inside the Hopper and it may cause the operation failure. Thus, stand and put the Hopper Unit on the paper.



F-4-247

CAUTION:

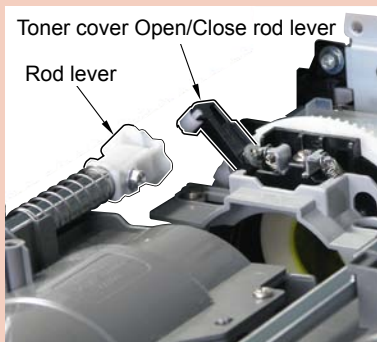
When installing the Hopper, align the cut-off [A] part of Bottle Fixing Ring with the Bottle Fixing Arm [B] and install it to the host machine.



F-4-248

CAUTION:

When installing the Toner Tray, align the Rod Lever with the Toner Cover Open/Close Rod Lever and install it.



F-4-249

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.

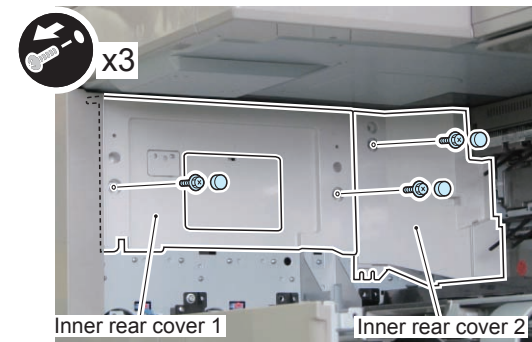
● Removing the Hopper (C)

■ Preparations

- 1) Release the lock of Toner Container. (By service mode)
- 2) Open the Front Cover, the Right Lower Cover and Right Upper Cover.
- 3) Remove the ITB Unit.
- 4) Remove the Process Unit.
- 5) Remove the Color Drum Heater. (When the option is installed)
- 6) Remove the Toner Container Front Inner Cover.

■ Procedure

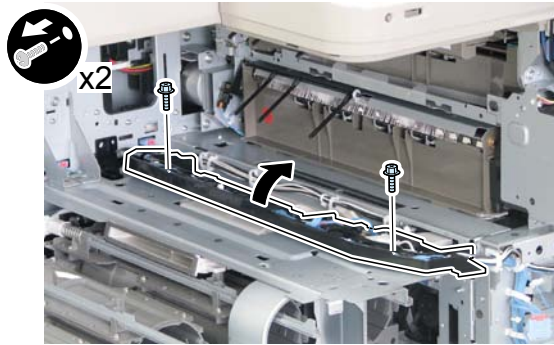
- 1) Remove the Reverse Tray.
- 2) Remove the Inside Rear Cover 1 & 2.
 - 3 caps
 - 3 screws (RS)



F-4-250

3) Remove the Harness Guide.

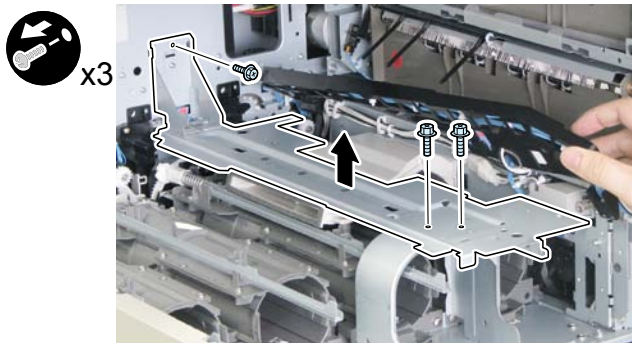
- 2 screws (RS)



F-4-251

4) Remove the Hopper Upper Stay.

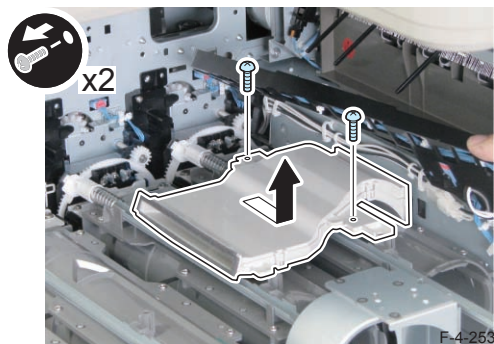
- 3 screws (RS)



F-4-252

5) Remove the Secondary Delivery Duct.

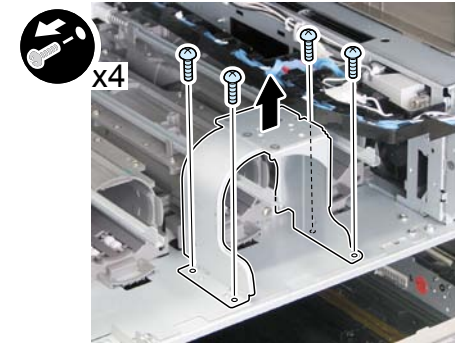
- 2 screws (P tight)



F-4-253

6) Remove the rail Retaining Plate.

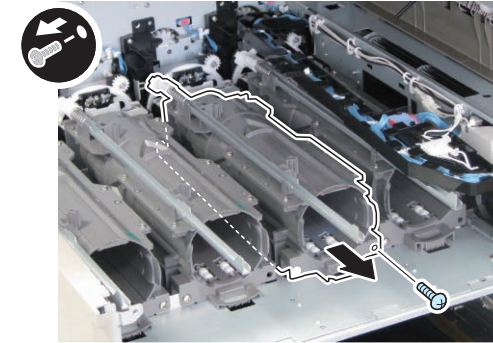
- 4 screws (M4 binding)



F-4-254

7) Remove the Toner Tray.

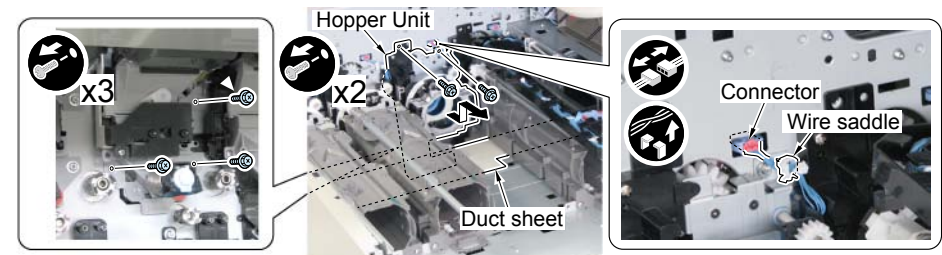
- 1 screw (M4 binding)



F-4-255

8) While avoiding the Duct Sheet, remove the Hopper Unit.

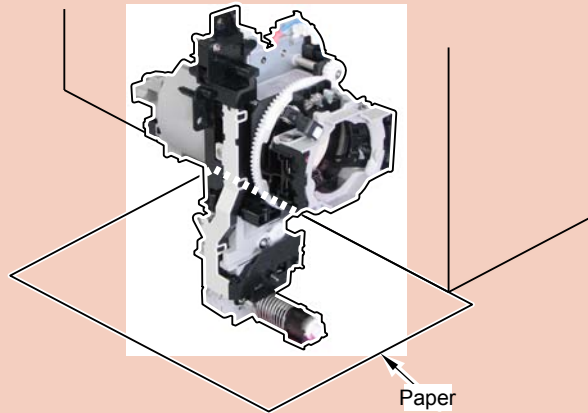
- 1 connector
- 1 wire saddle
- 5 screws (RS)



F-4-256

CAUTION:

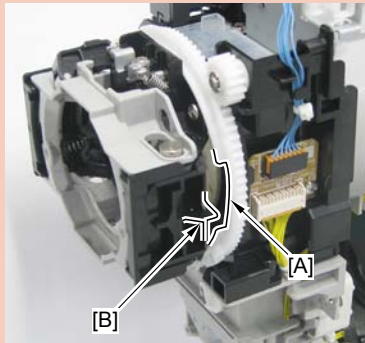
If the Hopper Unit is placed sideways, toner may scatter inside the Hopper and it may cause the operation failure. Thus, stand and put the Hopper Unit on the paper.



F-4-257

CAUTION:

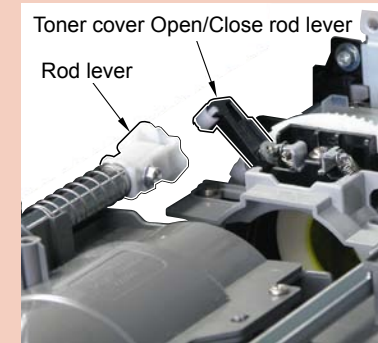
When installing the Hopper, align the cut-off [A] part of Bottle Fixing Ring with the Bottle Fixing Arm [B] and install it to the host machine.



F-4-258

CAUTION:

When installing the Toner Tray, align the Rod Lever with the Toner Cover Open/Close Rod Lever and install it.



F-4-259

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.

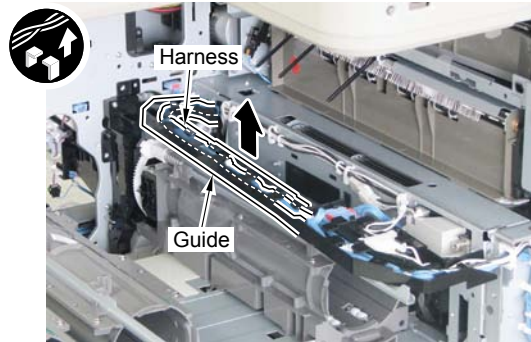
Removing the Hopper (Bk)

Preparations

- 1) Release the lock of Toner Container (By service mode).
- 2) Open the Front Cover, the Right Lower Cover and Right Upper Cover.
- 3) Remove the ITB Unit.
- 4) Remove the Process Unit.
- 5) Remove the Color Drum Heater (When the option is installed).
- 6) Remove the Drum Heater (Bk).
- 7) Remove the Toner Container Front Inner Cover.
- 8) Remove the Hopper (C).

Procedure

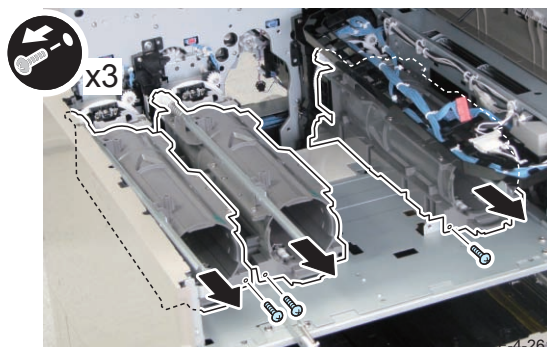
- 1) Remove the Harness from the Fixing Guide.



F-4-260

- 2) Remove all the Toner Trays.

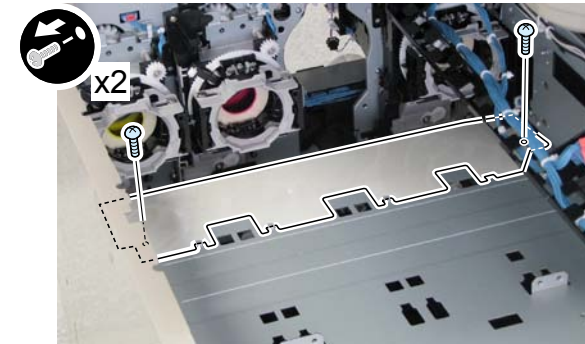
- 3 screws (M4 binding)



F-4-261

- 3) Remove the Duct Sheet.

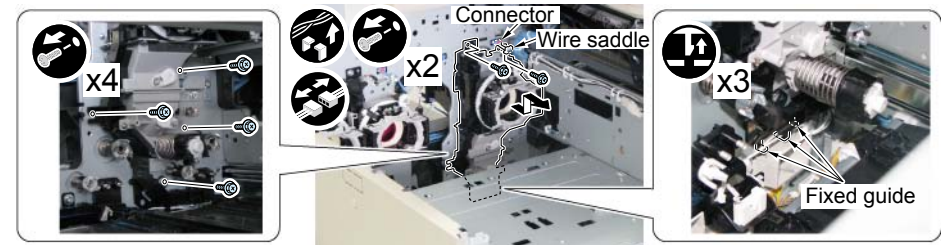
- 2 screws (binding)



F-4-262

- 4) Remove the Hopper Unit.

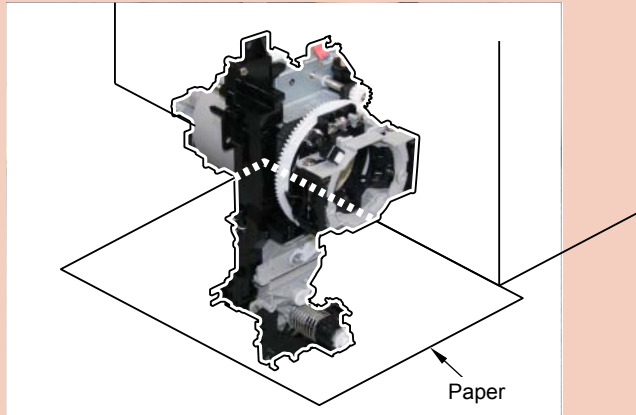
- 1 connector
- 1 wire saddle
- 6 screws (RS)
- 3 fixing guides



F-4-263

CAUTION:

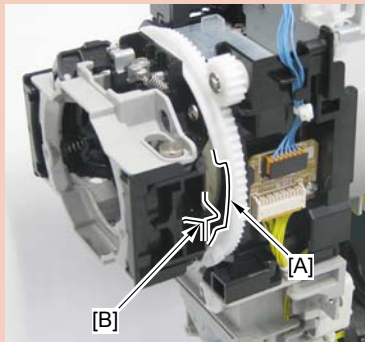
If the Hopper Unit is placed sideways, toner may scatter inside the Hopper and it may cause the operation failure. Thus, stand and put the Hopper Unit on the paper.



F-4-264

CAUTION:

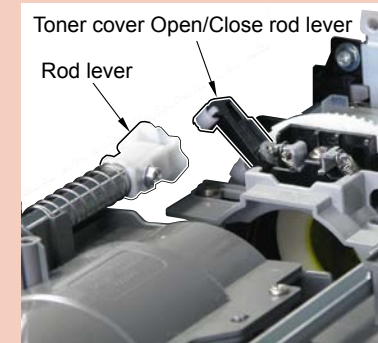
When installing the Hopper, align the cut-off [A] part of Bottle Fixing Ring with the Bottle Fixing Arm [B] and install it to the host machine.



F-4-265

CAUTION:

When installing the Toner Tray, align the Rod Lever with the Toner Cover Open/Close Rod Lever and install it.



F-4-266

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

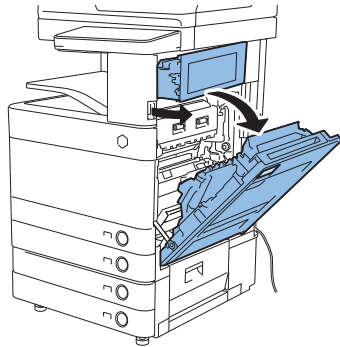
If install the Toner Container before initialization, T/D ratio cannot set the right value.

Fixing System

Removing the Fixing Assembly

Preparations

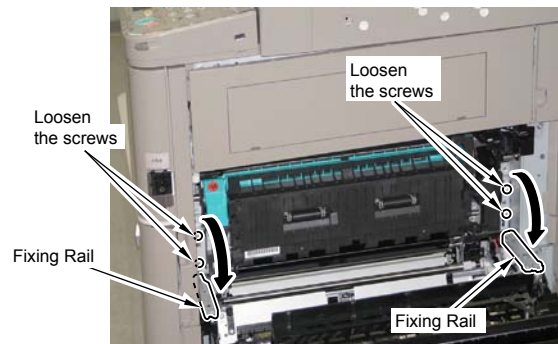
1) Open the Right Lower Cover and Right Upper Cover.



F-4-267

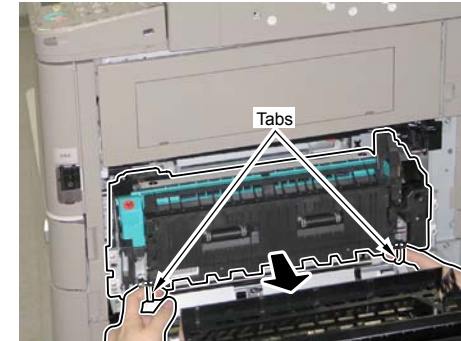
Procedure

1) Open the Fixing Rail and loosen the 4 screws.



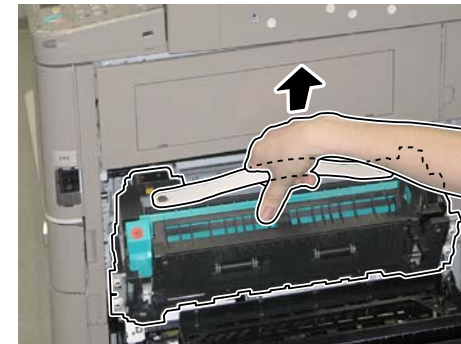
F-4-268

2) Pinch and pull out the tab of Fixing Assembly.



F-4-269

3) Hold the grip and remove the Fixing Assembly.



F-4-270

CAUTION:

- Be sure to insert the Fixing Assembly until it stops at the time of installation.
- In case of the faulty installation of the Fixing Assembly, either E009 or noise may occur.
If so, remove the Fixing Assembly, and install it again

Removing the Film Unit

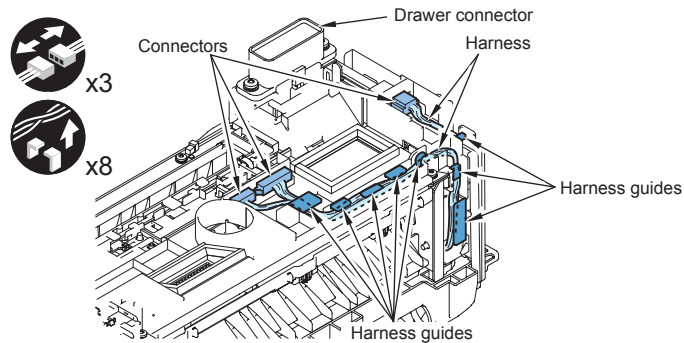
Preparations

- 1) Open the Right Lower Cover and Right Upper Cover.
- 2) Remove the Fixing Unit.

Procedure

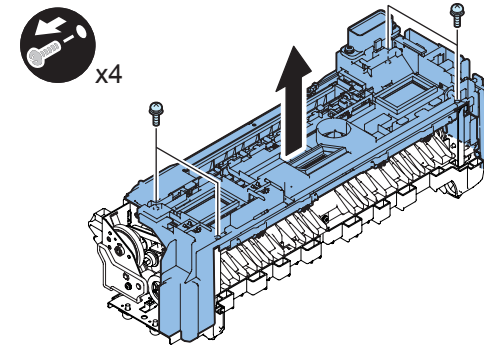
NOTE:
When installing/removing it, do not touch the Film Unit and Pressure Roller.

- 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
 - 6 harness guides



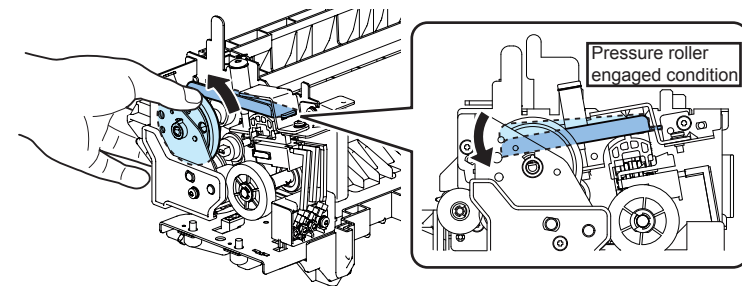
F-4-271

- 3) Remove the Shutter Unit.
 - 4 screws



F-4-272

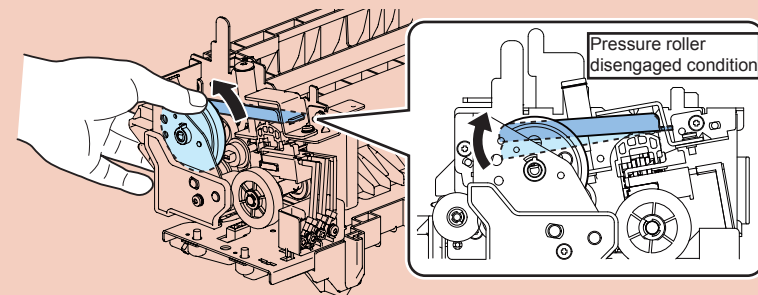
- 4) Turn the pressure gear with hand and make the Pressure Roller engaged condition.



F-4-273

CAUTION:

When keeping the Fixing Assembly for long periods, turn the pressure gear and make the Pressure Roller disengaged condition.



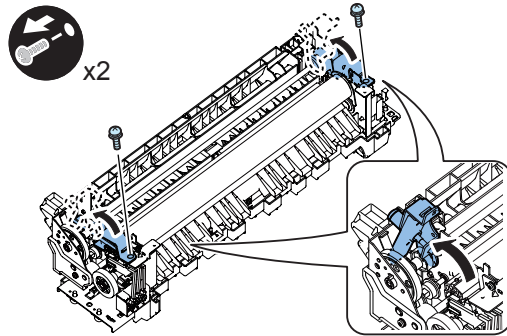
F-4-274

CAUTION:

Do not leave the Pressure Roller engaged for a long time.

5) Open the left and right Pressure Levers.

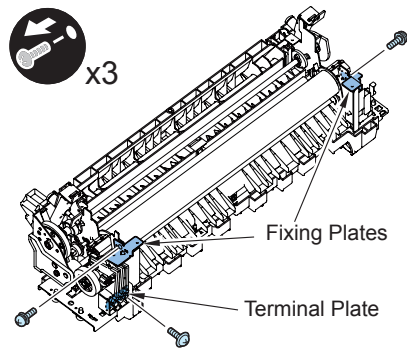
- 2 screws



F-4-275

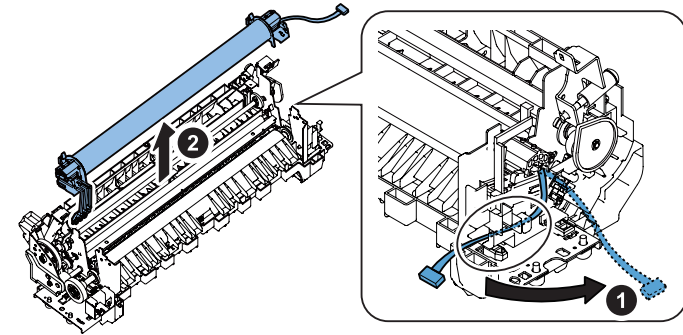
6) Remove the left and right Fixing Plates and the Terminal Plate.

- 3 screws



F-4-276

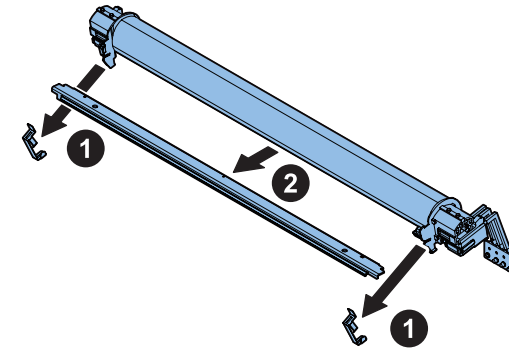
7) Remove the harness from the harness guide and remove the Film Unit.



F-4-277

8) Remove the Separation Guide from the Film Unit.

- 2 leaf springs

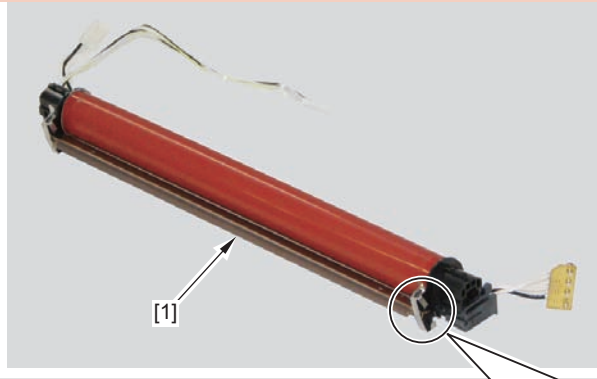
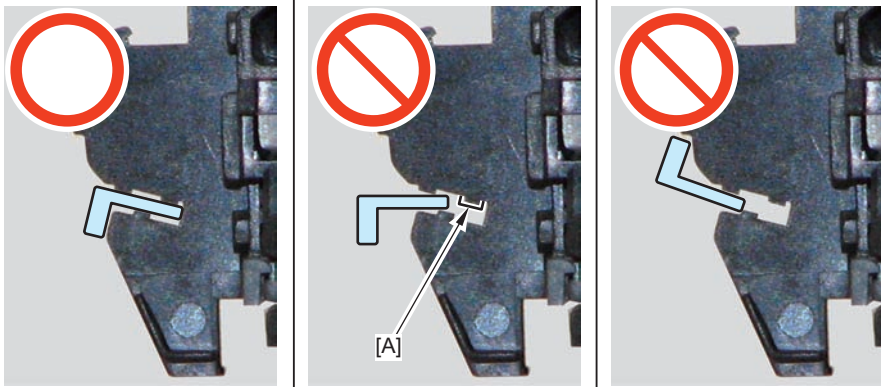


F-4-278

CAUTION:

Point to Note when Installing the Fixing Separation Guide:

Be sure to check that Fixing Separation Guide [1] is installed properly.

**SIDE VIEW**

Example of improper installation:

F-4-279

- 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.

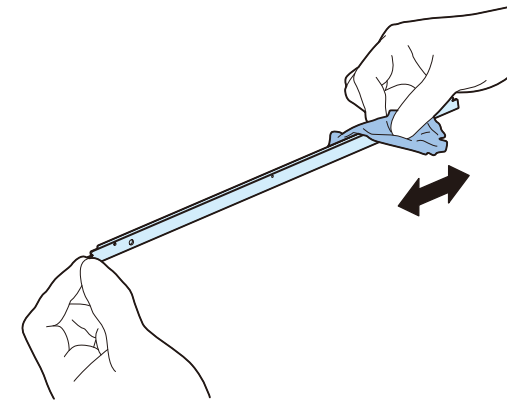
Cleaning the Fixing Separation Guide

Preparations

- 1) Open the Right Lower Cover and Right Upper Cover.
- 2) Remove the Fixing Unit.
- 3) Remove the Film Unit.

Procedure

- 1) Clean the Fixing Separation Guide with lint-free paper moistened with alcohol.



F-4-280

Cleaning the Shutter Cover

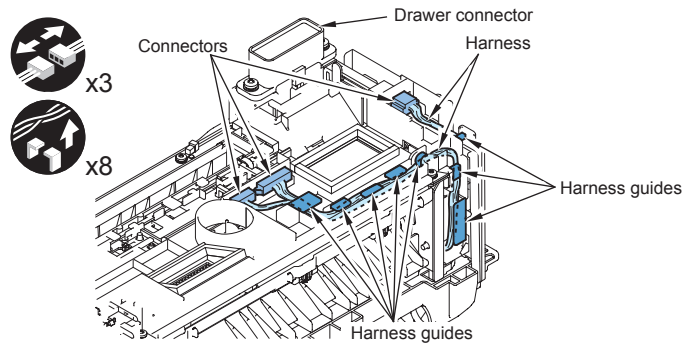
Preparations

- 1) Open the Right Lower Cover and Right Upper Cover.
- 2) Remove the Fixing Unit.

Procedure

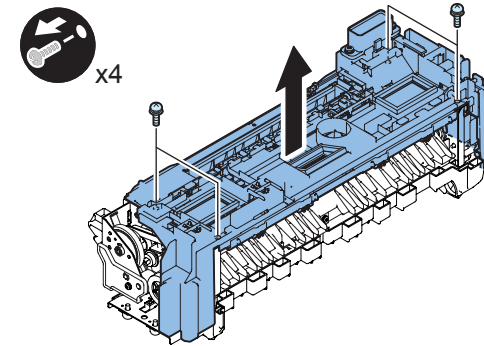
NOTE:
When installing/removing it, do not touch the Film Unit and Pressure Roller.

- 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
 - 6 harness guides



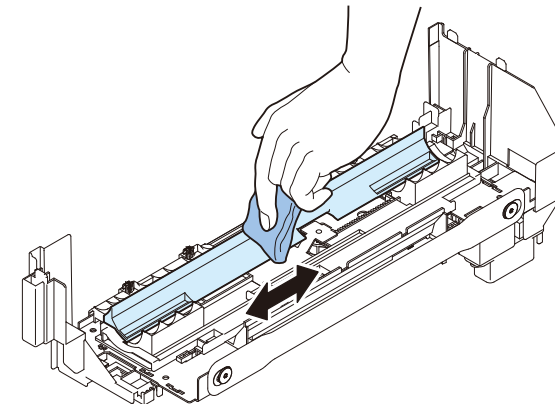
F-4-281

- 3) Remove the Shutter Unit.
 - 4 screws



F-4-282

- 4) Clean the Shutter Cover with lint-free paper moistened with alcohol.



F-4-283

Removing the Pressure Roller and Pressure Roller Bearing

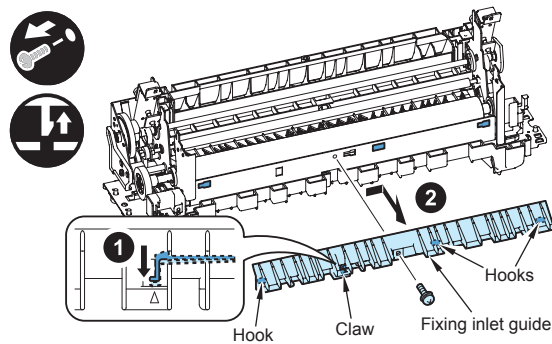
Preparations

- 1) Open the Right Lower Cover and Right Upper Cover.
- 2) Remove the Fixing Unit.
- 3) Remove the Film Unit.

Procedure

NOTE:
When installing/removing it, do not touch the Pressure Roller.

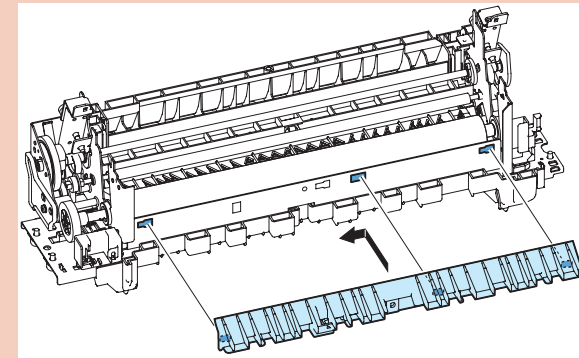
- 1) Remove the Fixing Inlet Guide.
 - 1 claw
 - 1 screw
 - 3 hooks



F-4-284

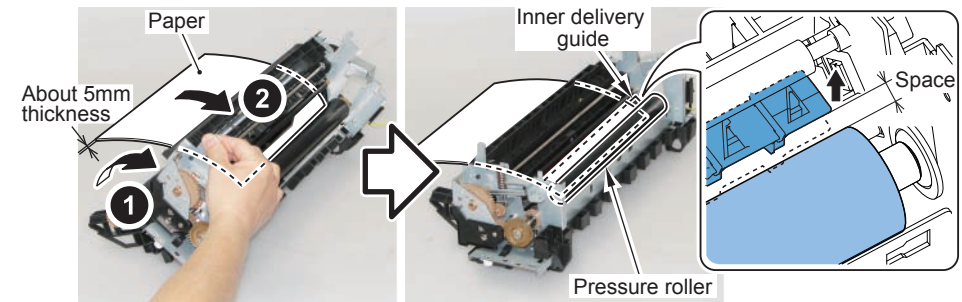
CAUTION:

At installation, install it after fitting the 3 hooks to the notches.



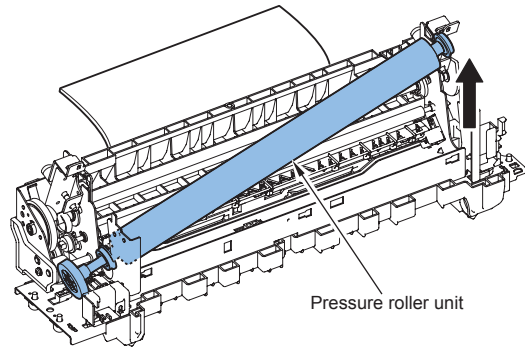
F-4-285

- 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-4-286

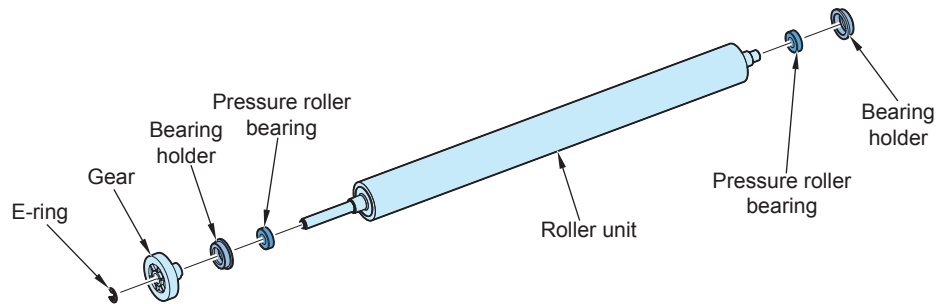
3) Lift the right side and remove the Pressure Roller Unit.



F-4-287

4) Remove the Pressure Roller and the 2 Pressure Roller Bearings from the Pressure Roller Unit.

- 2 bearing holders
- 1 E-ring
- 1 gear



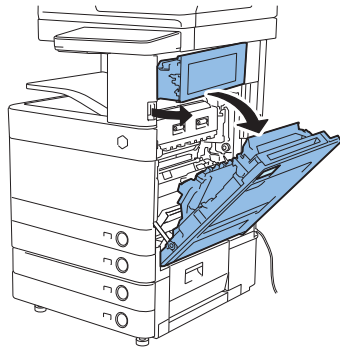
F-4-288

Pickup Feed System

Cleaning the Secondary Transfer Guide

Preparations

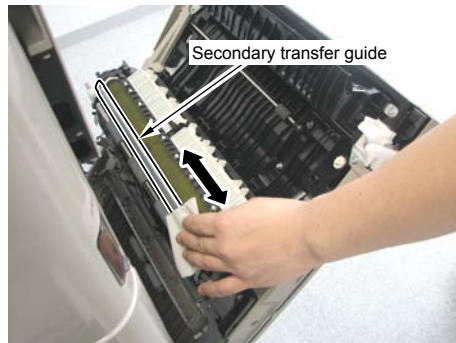
- 1) Open the Right Lower Cover and Right Upper Cover.



F-4-289

Procedure

- 1) Clean the Transfer Guide with the lint-free paper moistened with alcohol.



F-4-290

Cleaning the Feed Contact Point Guide

Preparations

- 1) Open the Right Lower Cover and Right Upper Cover.

Procedure

- 1) Clean the Feed Contact Point Guide with lint-free paper moistened with alcohol.



F-4-291

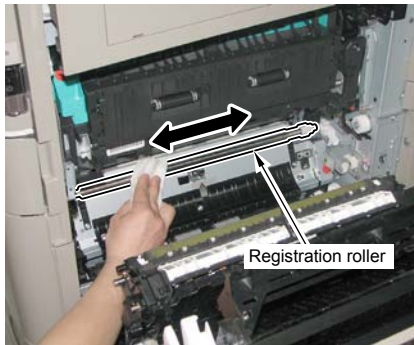
Cleaning the Registration Roller

Preparations

1) Open the Right Lower Cover and Right Upper Cover.

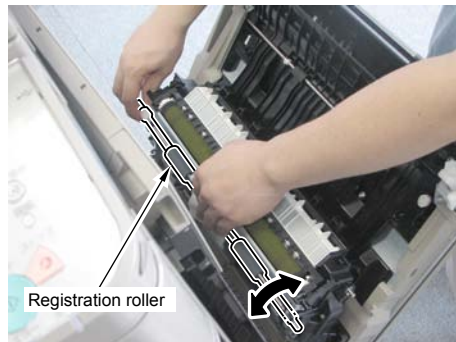
Procedure

1) Clean the Feed Contact Point Guide with lint-free paper moistened with alcohol.



F-4-292

2) Clean the Outer Registration Roller with lint-free paper moistened with alcohol while rotating it.



F-4-293

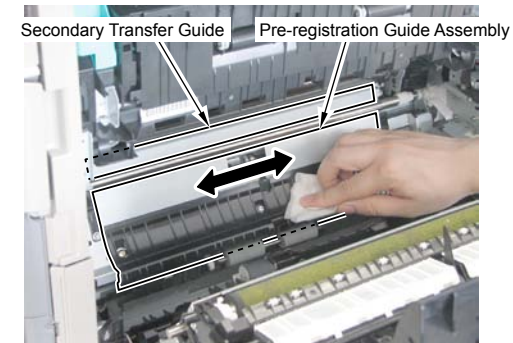
Cleaning the Pre-registration Guide Assembly

Preparations

1) Open the Right Lower Cover and Right Upper Cover.

Procedure

1) Clean the inside of Pre-registration Guide Assembly with lint-free paper moistened with alcohol.



F-4-294

2) Clean the outside of Pre-registration Guide Assembly with lint-free paper moistened with alcohol.



F-4-295

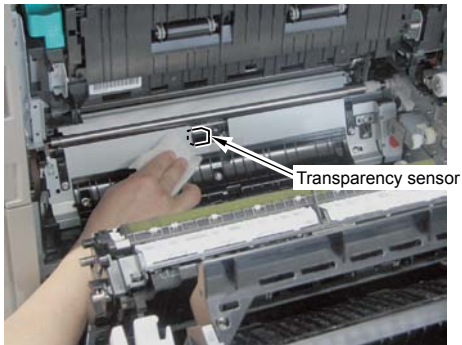
Cleaning the Transparency Sensor

Preparations

1) Open the Right Lower Cover and Right Upper Cover.

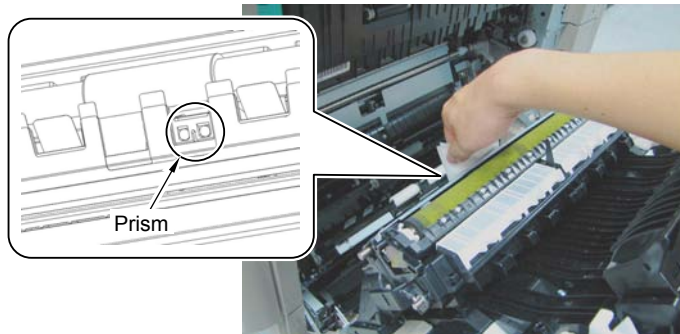
Procedure

1) Clean the Transparency Sensor with lint-free paper moistened with water in one direction.



F-4-296

2) Clean the Prism with lint-free paper.



F-4-297

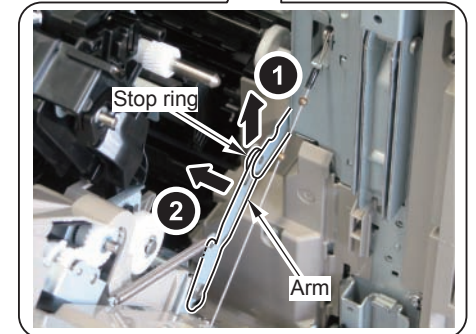
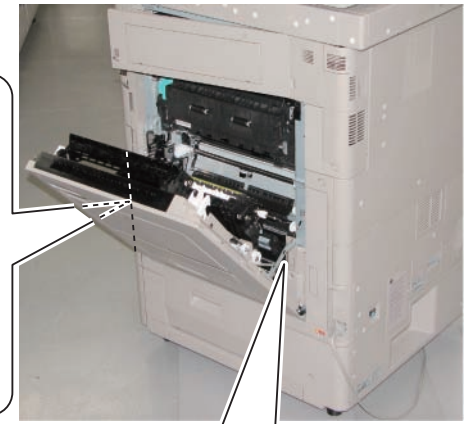
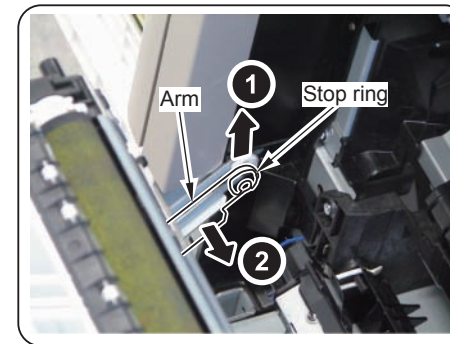
Cleaning the Vertical Path Sensor and the Lightproof Sheet

Preparations

1) Open the Right Lower Cover and Right Upper Cover.

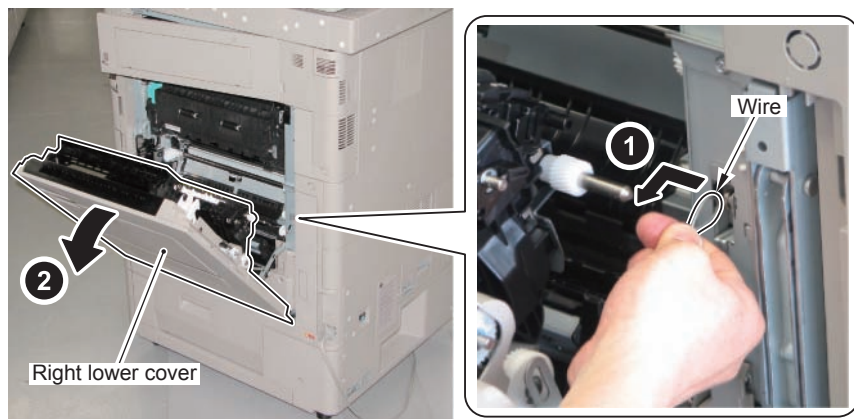
Procedure

1) Remove the front stop ring and separate the arm.



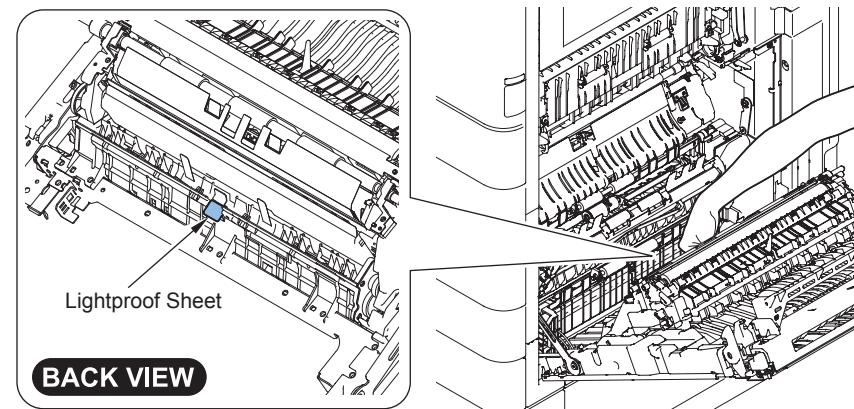
F-4-298

2) Remove the wire from the machine and further open the Right Lower Cover.



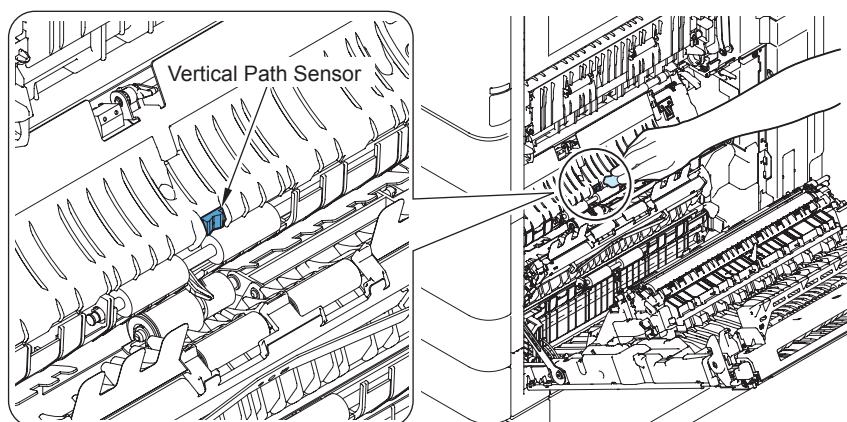
F-4-299

4) Clean the Lightproof Sheet with dry lint-free paper.



F-4-301

3) Clean the Vertical Path Sensor with dry lint-free paper.



F-4-300

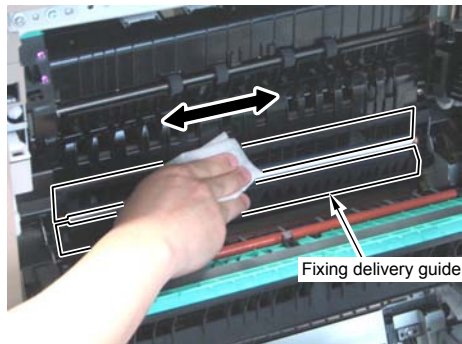
Cleaning the Fixing Delivery Guide Assembly

Preparations

- 1) Open the Right Lower Cover and Right Upper Cover.

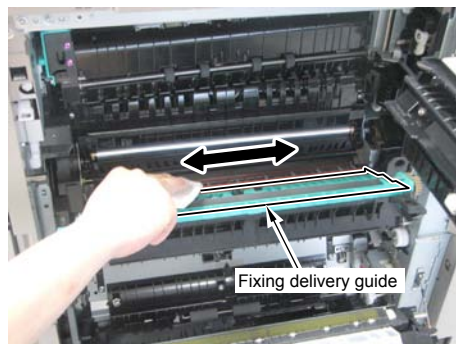
Procedure

- 1) Open the Fixing Delivery Guide.
- 2) Clean the inside of Fixing Delivery Guide Assembly with lint-free paper moistened with alcohol.



F-4-302

- 3) Clean the outside of Fixing Delivery Guide Assembly with lint-free paper moistened with alcohol.



F-4-303

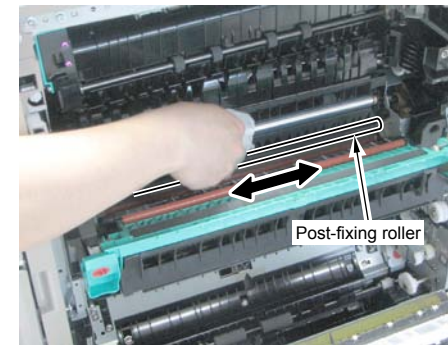
Cleaning the Post-fixing Roller

Preparations

- 1) Open the Right Lower Cover and Right Upper Cover.

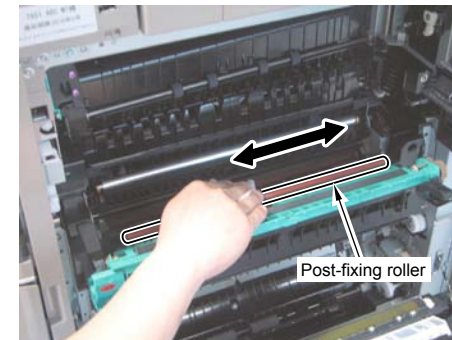
Procedure

- 1) Open the Fixing Delivery Guide.
- 2) Clean the Post-fixing Roller 1 with lint-free paper moistened with alcohol while rotating it.



F-4-304

- 3) Clean the Post-fixing Roller 2 with lint-free paper moistened with alcohol while rotating it.



F-4-305

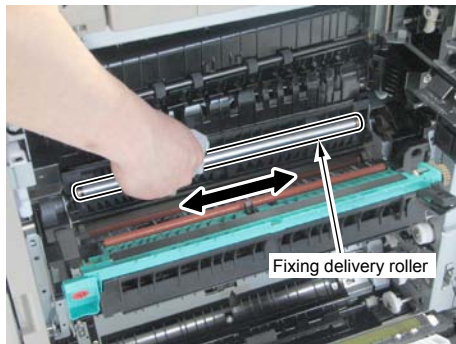
Cleaning the Fixing Delivery Roller

Preparations

1) Open the Right Lower Cover and Right Upper Cover.

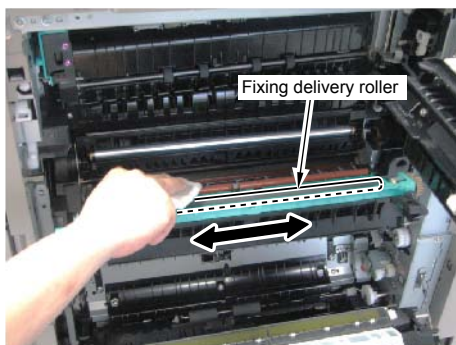
Procedure

- 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-4-306

- 3) Clean the Fixing Delivery Roller 2 with lint-free paper moistened with alcohol while rotating it.



F-4-307

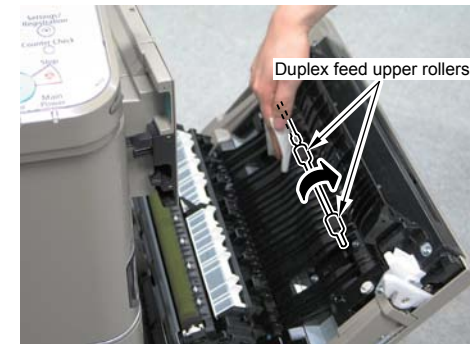
Cleaning the Duplex Feed Upper Roller, Wheel

Preparations

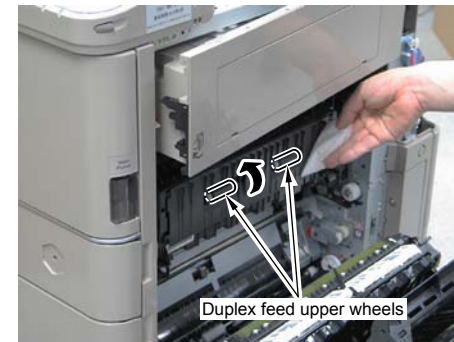
1) Open the Right Lower Cover and Right Upper Cover.

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-4-308



F-4-309

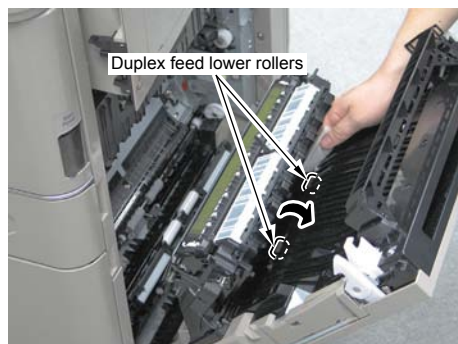
Cleaning the Duplex Feed Lower Roller, Wheel

Preparations

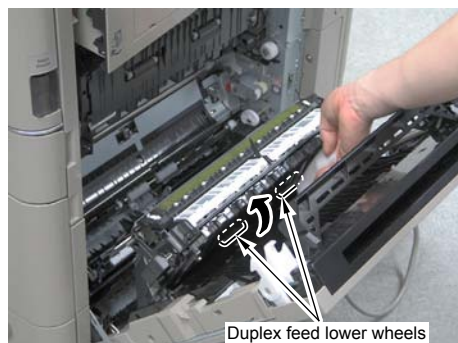
1) Open the Right Lower Cover and Right Upper Cover.

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-4-310



F-4-311

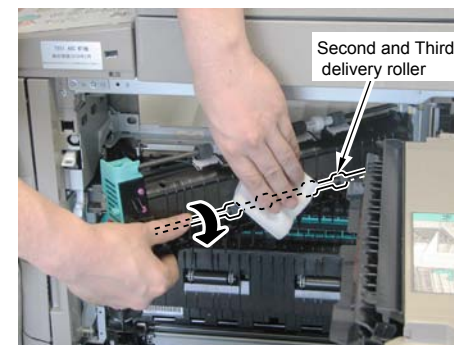
Cleaning the Second and Third Delivery Roller and Wheels, and the First, Second and Third Delivery Rollers

Preparations

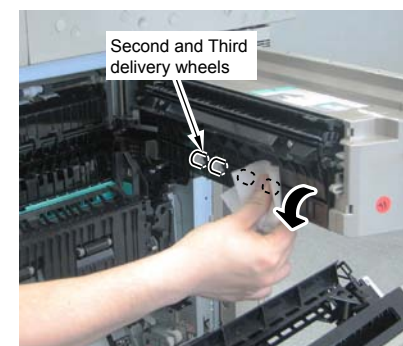
1) Open the Right Lower Cover and Right Upper Cover.

Procedure

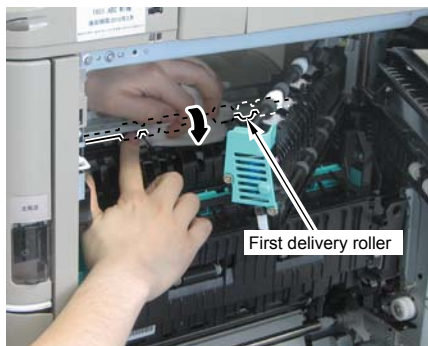
- 1) Clean the the Second and Third Delivery Roller and Wheels, and the First, Second and Third Delivery Rollers with lint-free paper moistened with alcohol.



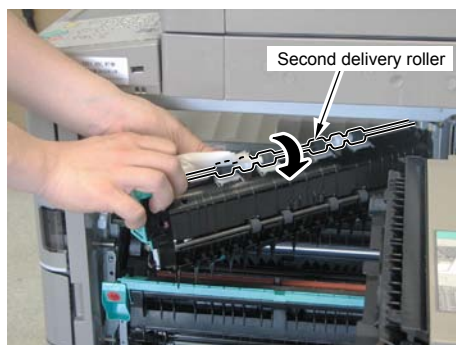
F-4-312



F-4-313



F-4-314



F-4-315

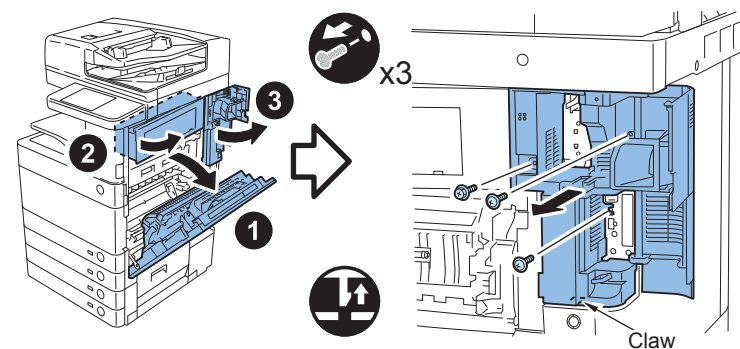


F-4-316

Removing the Second and Third Delivery Unit

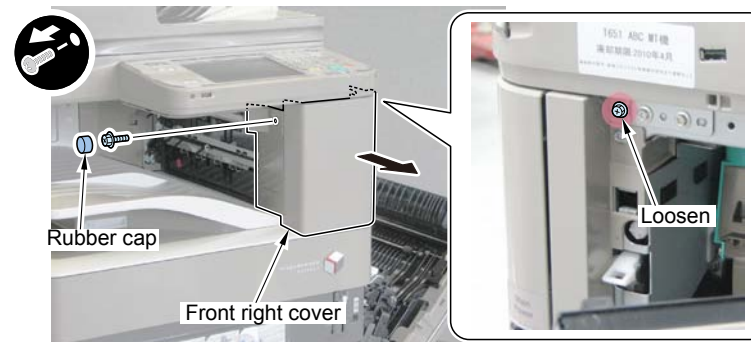
Preparations

- 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-4-317

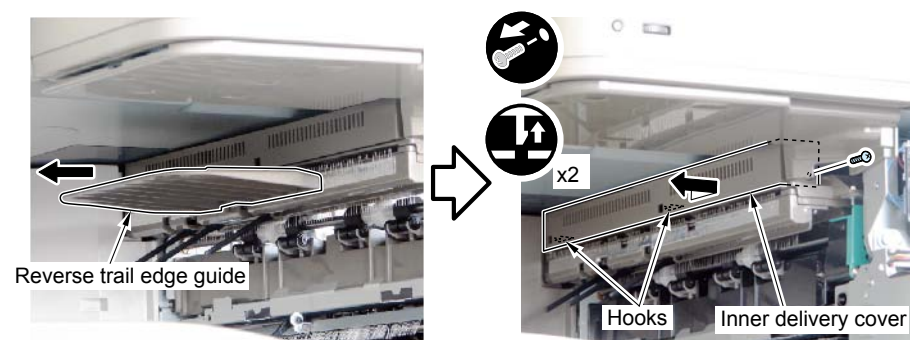
- 3) Remove the Front Right Cover.
 - 1 rubber cap
 - 1 screw (remove)
 - 1 screw (loosen)



F-4-318

4) Remove the Reverse Trail Edge Guide and the Inner Delivery Cover.

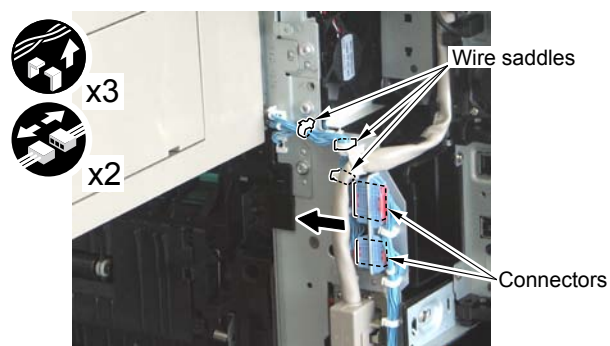
- 1 screw
- 2 hooks



F-4-319

Procedure

1) Remove the 2 connectors and 3 wire saddles.

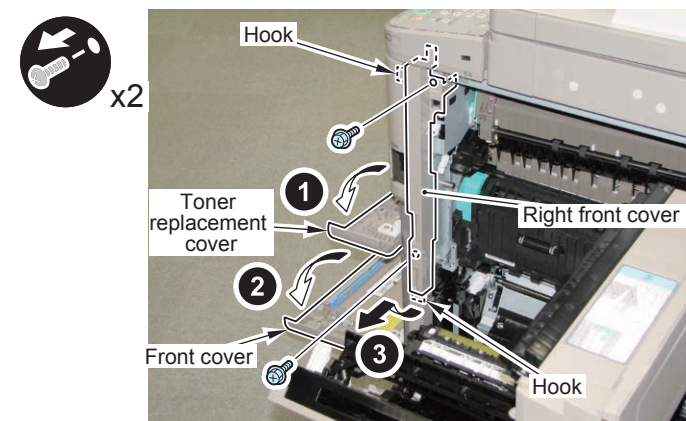


F-4-320

2) Open the Toner Replacement Cover 1 and the Front Cover.

3) Remove the Right Front Cover 1.

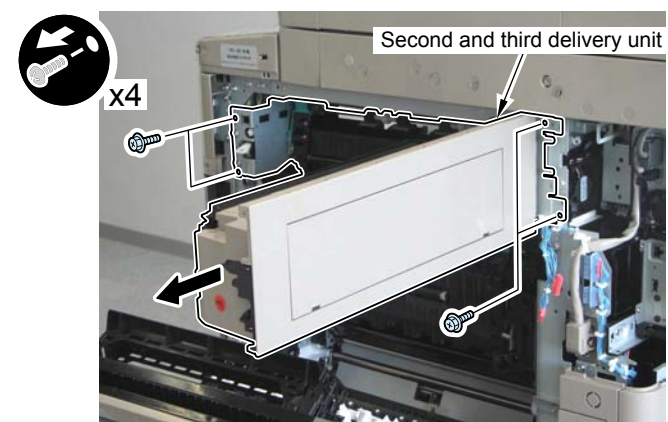
- 2 Screws
- 2 Hooks



F-4-321

4) Remove the Second and Third Delivery Unit.

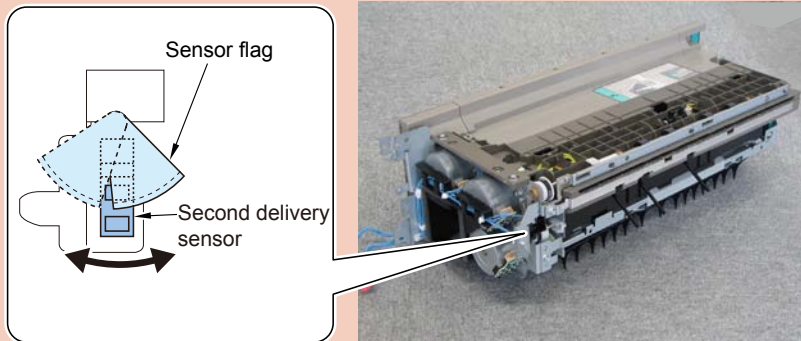
- 4 screws



F-4-322

CAUTION:

After installing the Second and Third Delivery Unit, make sure that the Sensor Flag in 1 place works normally.



F-4-323

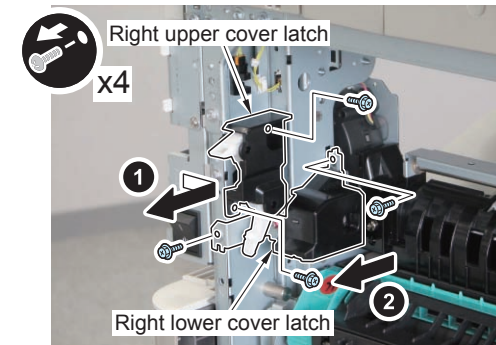
Removing the First Delivery Unit

Preparations

- 1) Open the Right Lower Cover and Right Upper Cover.
- 2) Remove the Right Rear Cover.
- 3) Remove the Front Right Cover.
- 4) Remove the Reverse Trail Edge Guide and the Inner Delivery Cover.
- 5) Remove the Second and Third Delivery Unit.

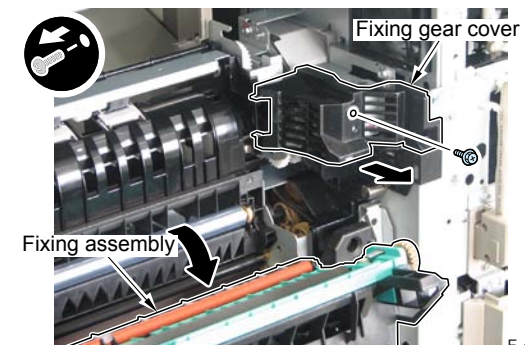
Procedure

- 1) Remove the Right Upper Cover Latch.
 - 2 screws
- 2) Remove the Right Lower Cover Latch.
 - 2 screws



F-4-324

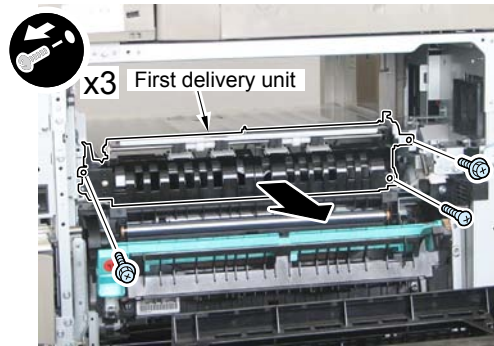
- 3) Open the Fixing Assembly and remove the Fixing Gear Cover.
 - 1 screw



F-4-325

4) Remove the First Delivery Unit.

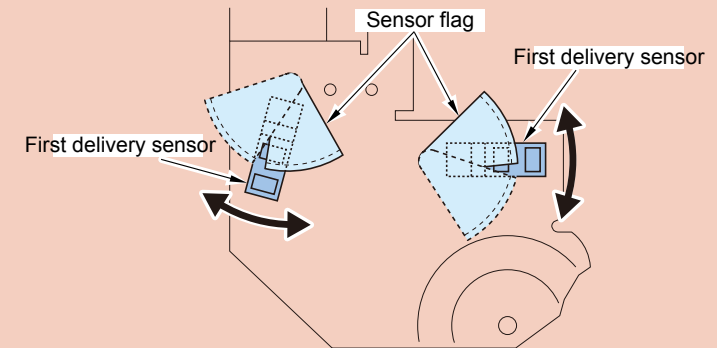
- 2 screws
- 1 stepped screw



F-4-326

CAUTION:

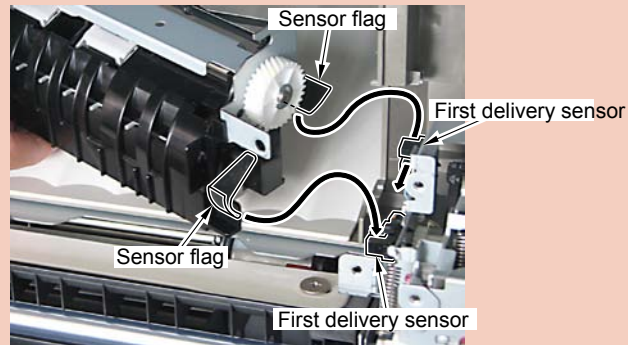
After installing the First Delivery Unit, make sure that the 2 Sensor Flags work normally.



F-4-328

CAUTION:

At installation, align the First Delivery Sensor and the Sensor Flag and install it.



F-4-327

Removing the Duplex Unit

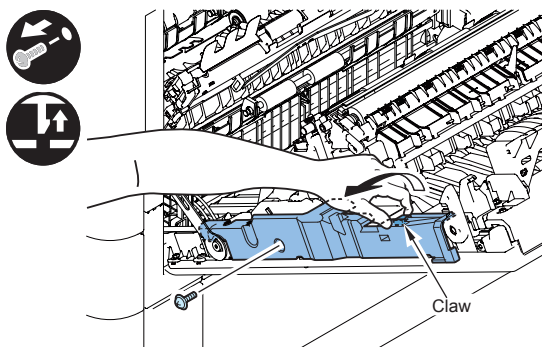
Preparations

1) Open the Right Lower Cover and Right Upper Cover.

Procedure

1) Remove the Front Cover of Right Unit.

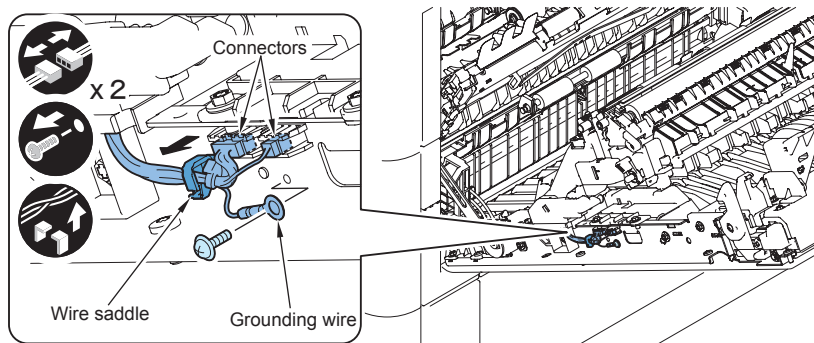
- 1 screw
- 1 claw



F-4-329

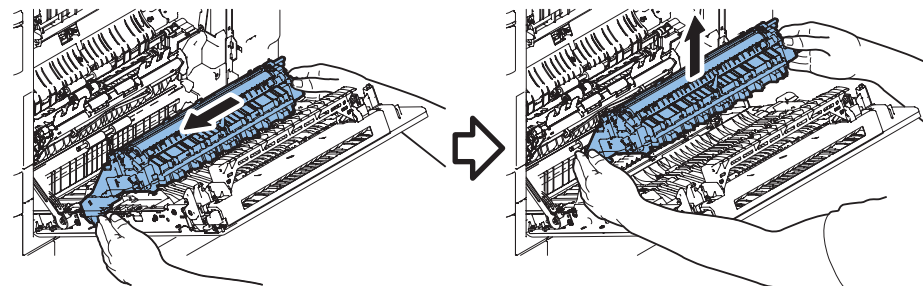
2) Remove the connector and the grounding wire.

- 2 connectors
- 1 screw
- 1 wire saddle



F-4-330

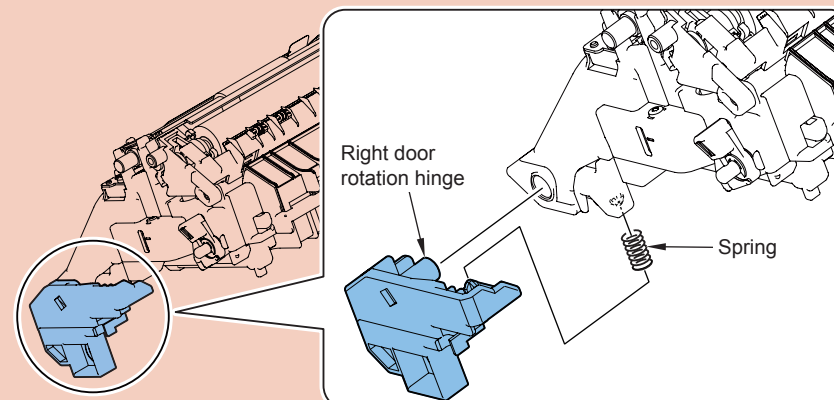
3) Hold the sides of Duplex Unit and remove it.



F-4-331

CAUTION:

When removing the Duplex Unit, note that the Right Door Rotation Hinge and the spring are easily disassembled.



F-4-332

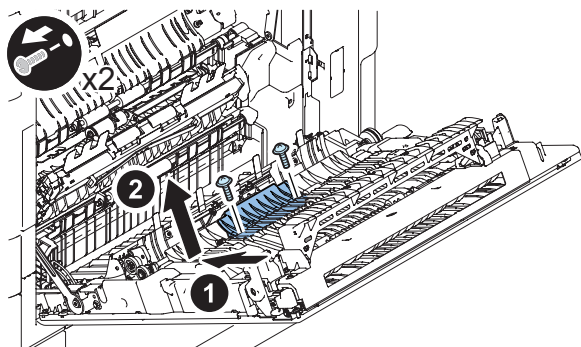
Removing the Multi-purpose Tray Pickup Roller

Preparations

- 1) Open the Right Lower Cover and Right Upper Cover.
- 2) Remove the Duplex Unit.

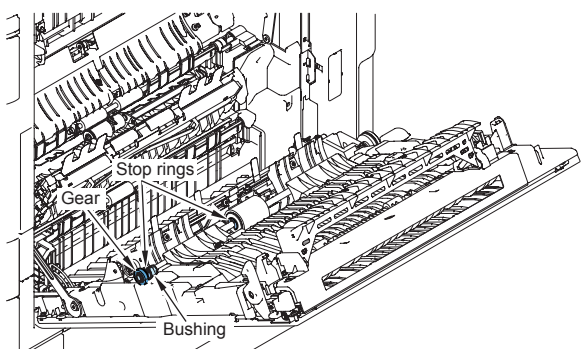
Procedure

- 1) Remove the Both Angle Guide.
 - 2 screws



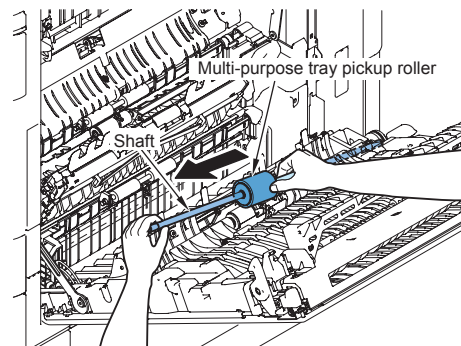
F-4-333

- 2) Remove the gear, 2 stop rings and the bushing.



F-4-334

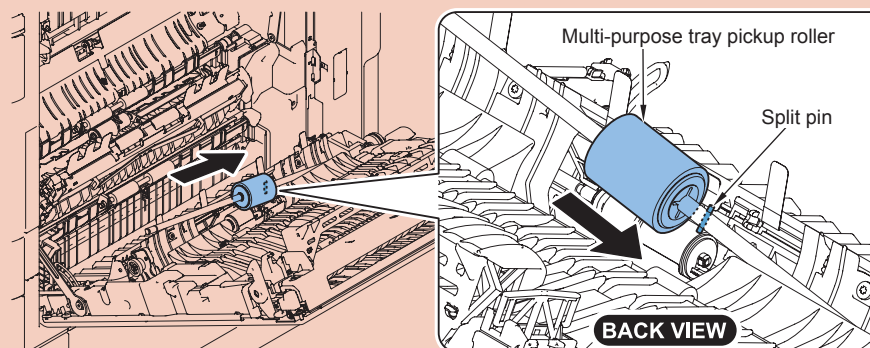
- 3) Tilt the shaft, pull the Multi-purpose Tray Pickup Roller and remove it.



F-4-335

CAUTION:

At installation, be sure to fit the Split Pin into the Multi-purpose Tray Pickup Roller.



F-4-336

Removing the Multi-purpose Tray Separation Roller

Preparations

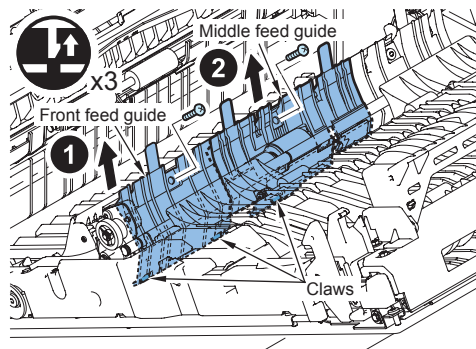
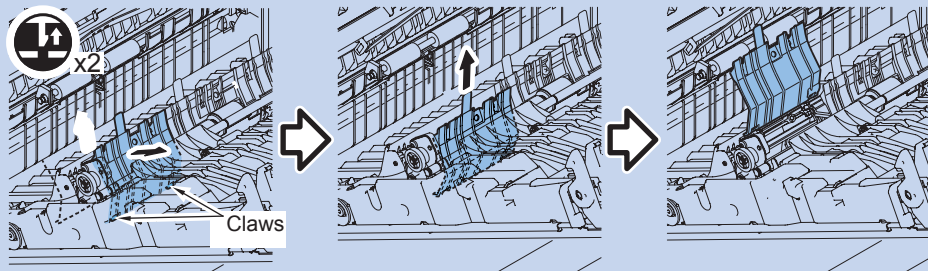
- 1) Open the Right Lower Cover and Right Upper Cover.
- 2) Remove the Duplex Unit.
- 3) Removing the Multi-purpose Tray Pickup Roller.

Procedure

- 1) Remove the Front Feed Guide and the Middle Feed Guide.
 - 2 screws
 - 3 claws

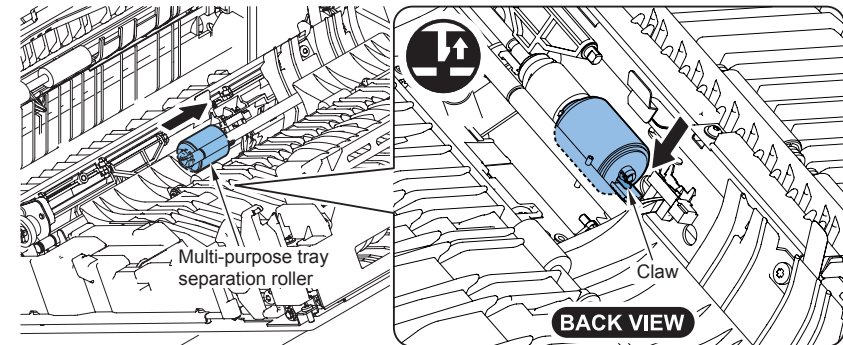
NOTE:

Lift the Front and Middle Feed Guides, push them into the rear, and pull them out toward front.



F-4-337

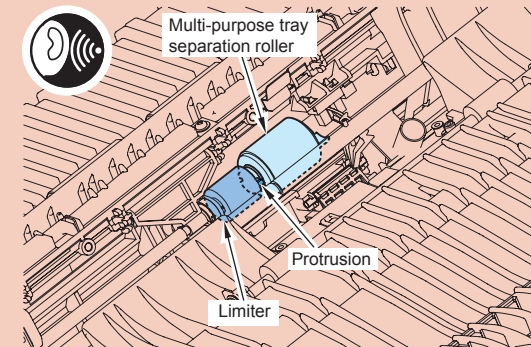
- 2) Remove the Multi-purpose Tray Separation Roller.
 - 1 claw



F-4-338

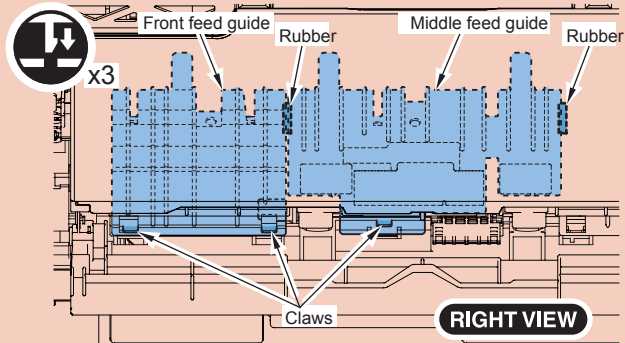
CAUTION:

Align the groove of Multi-purpose Tray Separation Roller with the protrusion of limiter and push it until it clicks.



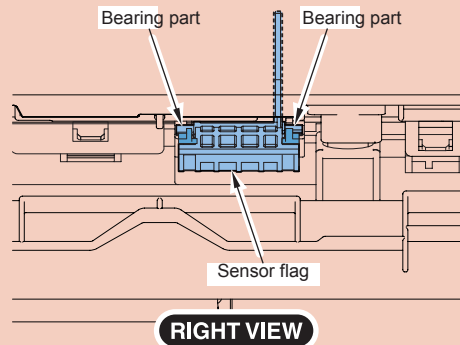
CAUTION:

- Be careful not to remove the 2 rubbers of the Middle Feed Guide when installing.
- Install the Middle Feed Guide and Front Feed Guide in that order.
- Open the Multi-purpose Tray Sub Cover and make sure that the holes of Front and Middle Feed Guide are hooked onto the claw of Multi-purpose Tray Pickup Frame.



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

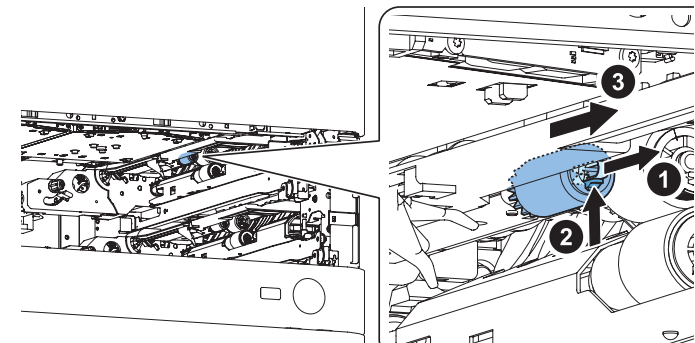
NOTE:

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-4-339

Removing the Feed Roller

Procedure

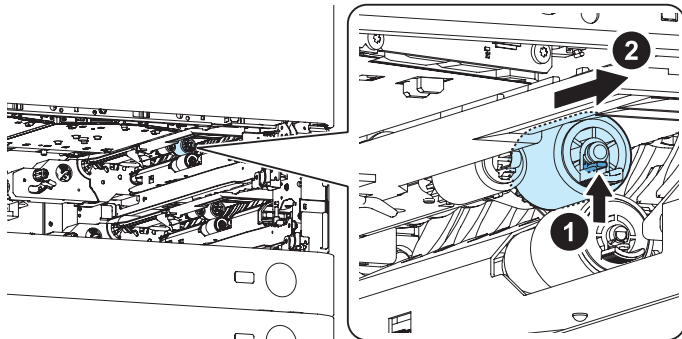
NOTE:

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-4-340

Removing the Separation Roller

Preparations

- 1) Open the Right Lower Cover and Right Upper Cover.

Procedure

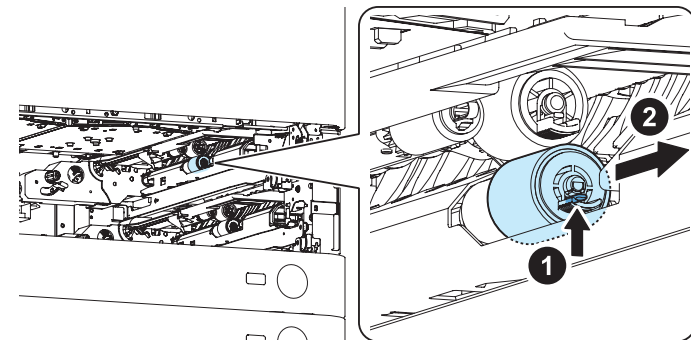
NOTE:

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-4-341

Removing the Pickup Assembly Idler Gear

Preparations

- 1) Remove the Cassette1 and Cassette2.
- 2) Remove the Pickup Roller.
- 3) Remove the Feed Roller.

Procedure

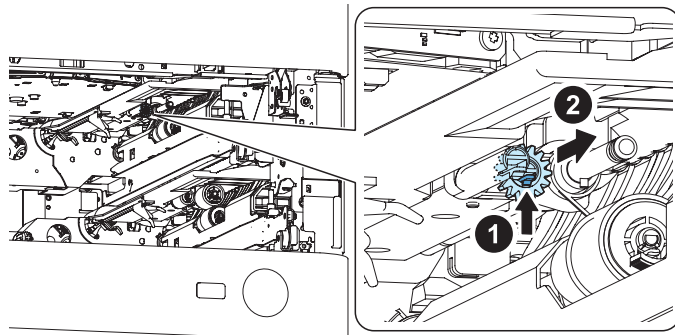
NOTE:

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-4-342

Removing the Right Lower Cover

Preparations

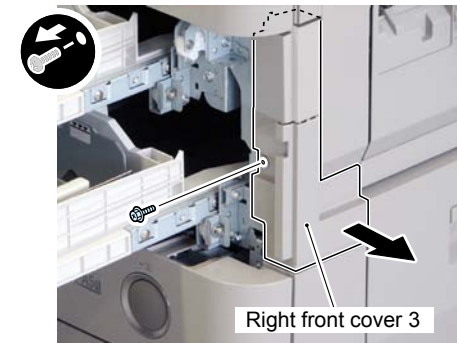
- 1) Pull the Cassette1 and Cassette2.

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).

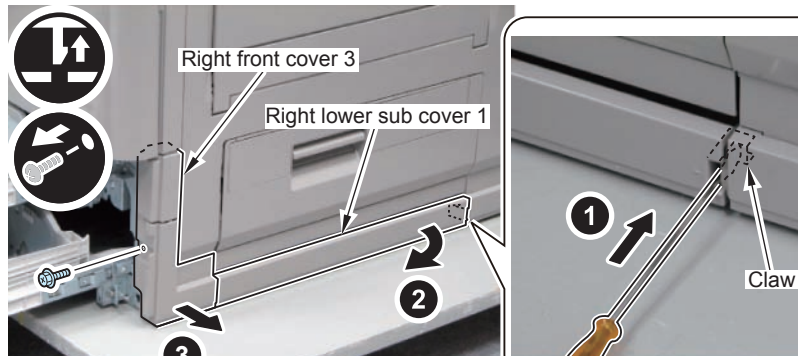
- 1-1) When the Cassette Pedestal is installed, remove the Right Front Cover 3.
 - 1 screw



F-4-343

1-2) When the Cassette Pedestal is not installed, remove the Right Lower Sub Cover 1 and the Right Front Cover 3.

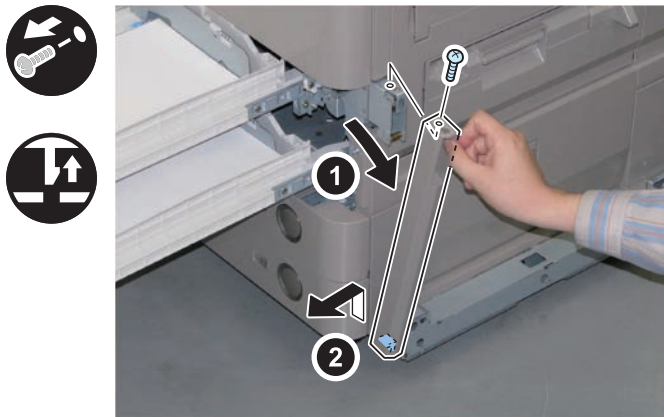
- 1 claw
- 1 screw



F-4-344

1-3) When the side paper deck is installed, remove the side paper deck, remove the Deck Connect Cover.

- 1 screw

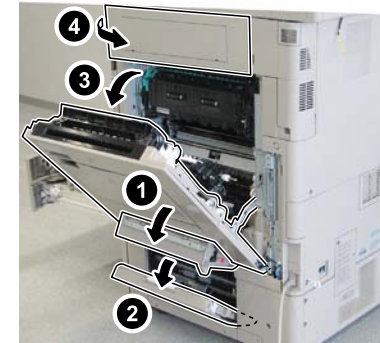


F-4-345

2) Open the Cassette Right Upper Cover.

3) If the Cassette Pedestal is connected, Open the Cassette Right Lower Cover.

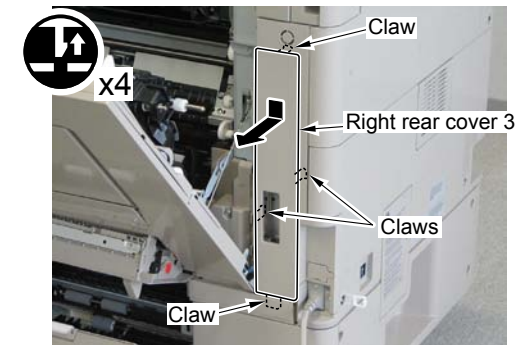
4) Open the Right Upper Cover and the Right Lower Cover.



F-4-346

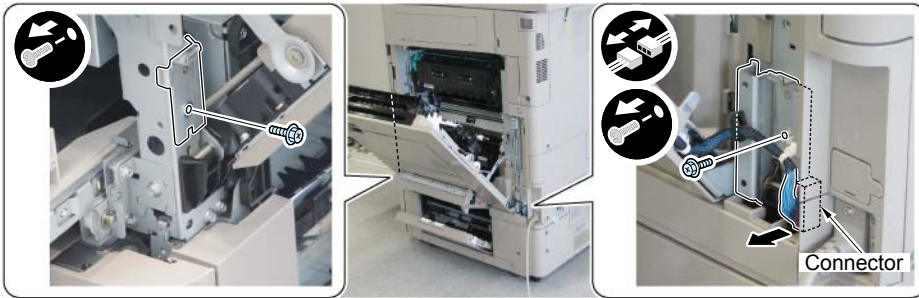
5) Remove the Right Rear Cover 3.

- 3 claws
- 1 hook



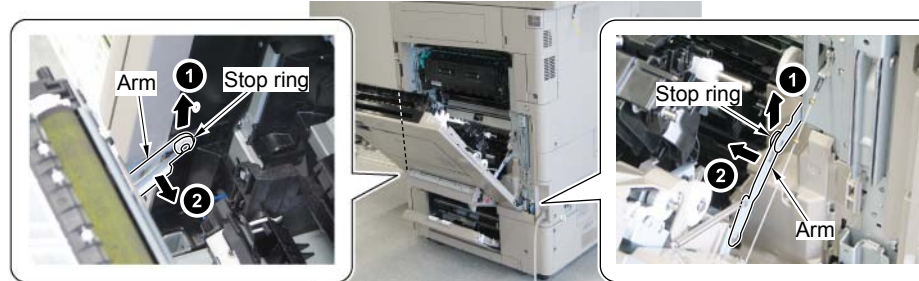
F-4-347

6) Remove the 2 screws and the connector.



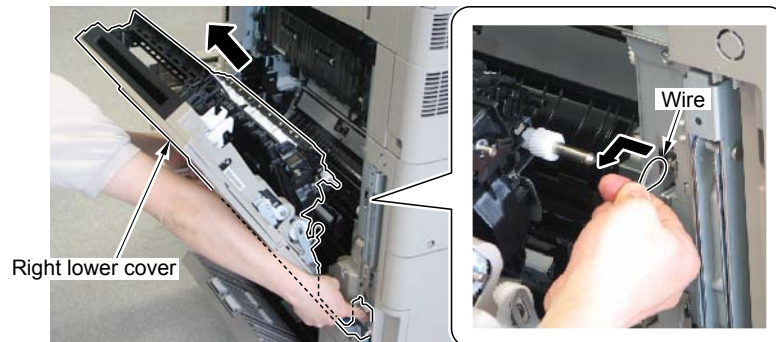
F-4-348

7) Remove the front stop ring and separate the arm.



F-4-349

8) Remove the wire from the host machine and remove the Right Lower Cover.



F-4-350

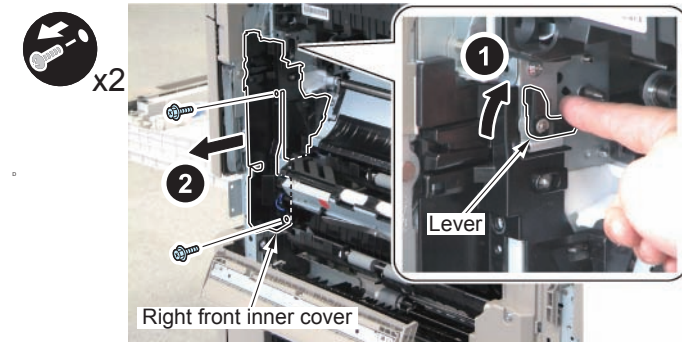
Removing the Cassette 1 Pickup Unit

Preparations

- 1) Pull the Cassette1 and Cassette2.
- 2) Remove the Right Lower Cover.

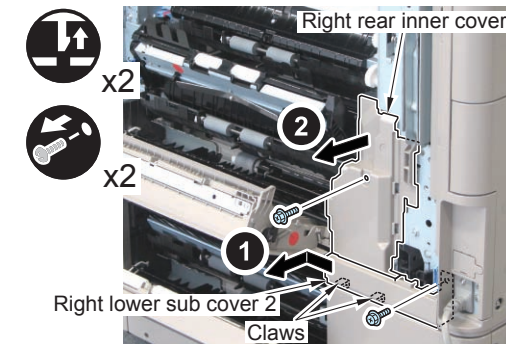
Procedure

- 1) Lift the lever and remove the Right Front Inner Cover.
 - 2 screws



F-4-351

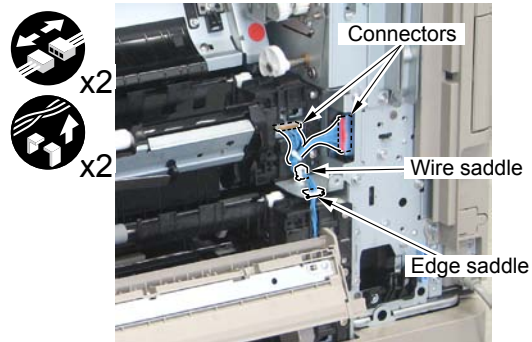
- 2) Remove the Right Lower Sub Cover 2 and remove the Right Rear Inner Cover.
 - 2 screws



F-4-352

3) Remove the Pickup Harness.

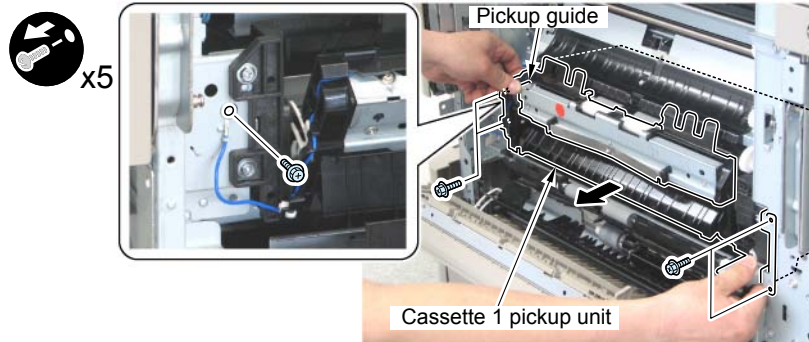
- 1 wire saddle
- 1 edge saddle
- 2 connectors



F-4-353

4) Hold the Pickup Guide and remove the Cassette 1 Pickup Unit.

- 4 screws (RS; M4)
- 1 screw (RS; M3)



F-4-354

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).

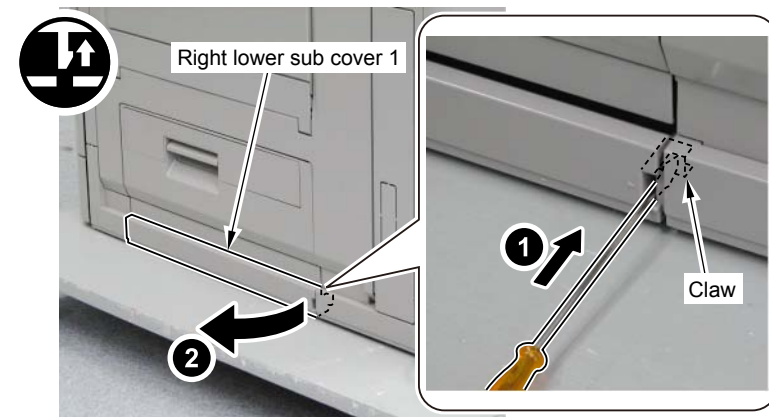
1-1) When the Cassette Pedestal is installed, open the Cassette Right Lower Cover.



F-4-355

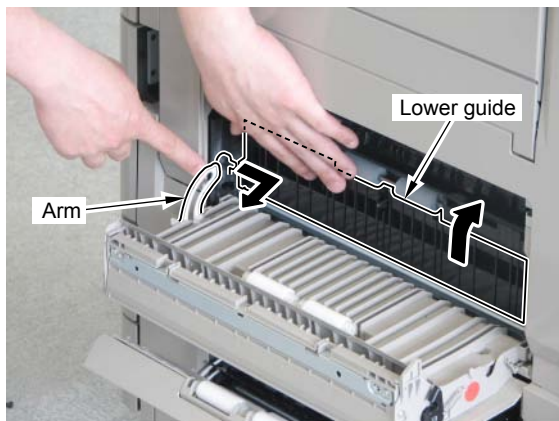
1-2) When the Cassette Pedestal is not installed, remove the Right Lower Sub Cover 1.

- 1 claw



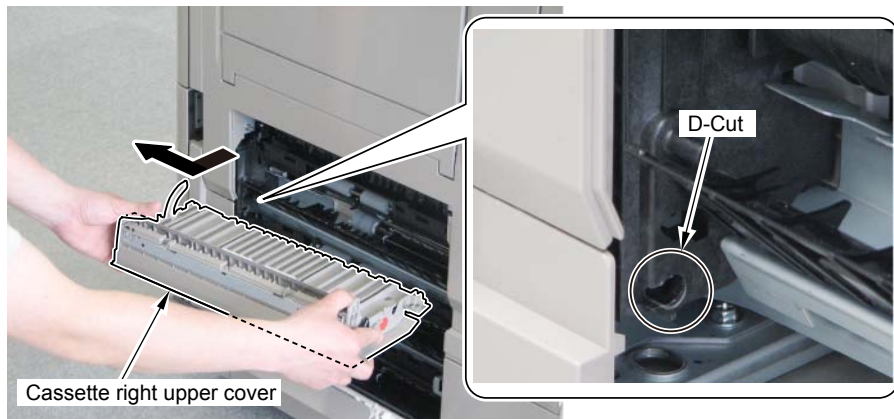
F-4-356

- 2) Open the Cassette Right Upper Cover.
- 3) Lift the Lower Guide and remove the arm.



F-4-357

- 4) Align it with D-cut and remove the Cassette Right Upper Cover.



F-4-358

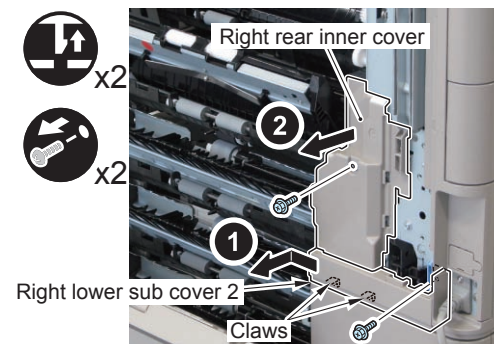
Removing the Cassette 2 Pickup Unit

Preparations

- 1) Pull the Cassette1 and Cassette2.
- 2) Remove the Right Lower Cover.
- 3) Remove the Cassette Right Upper Cover.

Procedure

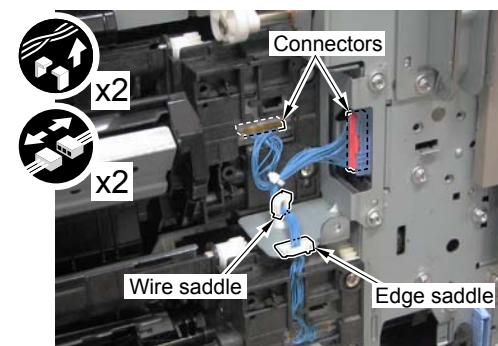
- 1) Remove the Right Lower Sub Cover 2 and remove the Right Rear Inner Cover.
 - 2 screws



F-4-359

- 2) Remove the Pickup Harness.

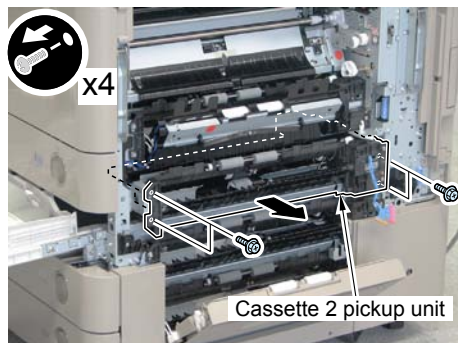
- 1 wire saddle
- 1 edge saddle
- 2 connectors



F-4-360

3) Remove the Cassette 2 Pickup Unit.

- 4 screws



F-4-361

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.
- 3) When removing the Cassette 2 Size Detection Unit, make sure to remove the Cassette 2 Pickup Unit.

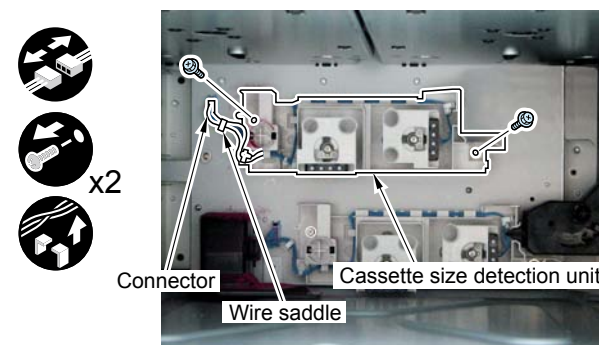
Procedure

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



F-4-362

Option

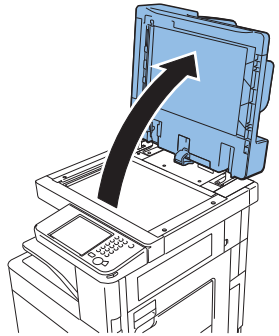
Removing the ADF Unit

Procedure

CAUTION:

When removing the ADF Unit and the Reader Unit from the host machine, remove the ADF Unit first and then, remove the Reader Unit because the accuracy of scanner systems may be deteriorated.

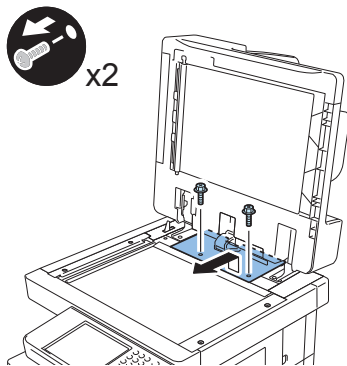
1) Open the ADF.



F-4-363

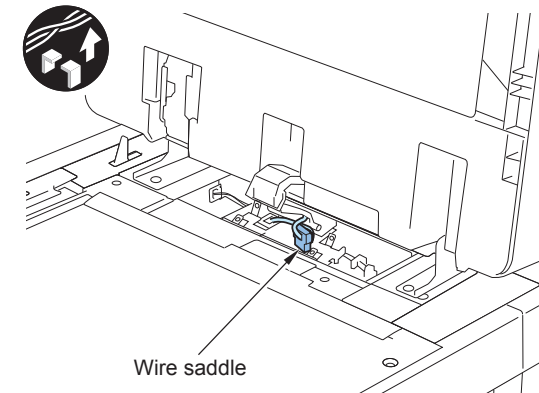
2) Remove the Reader Cable Cover.

- 2 screws



F-4-364

3) Remove the cable from the wire saddle.



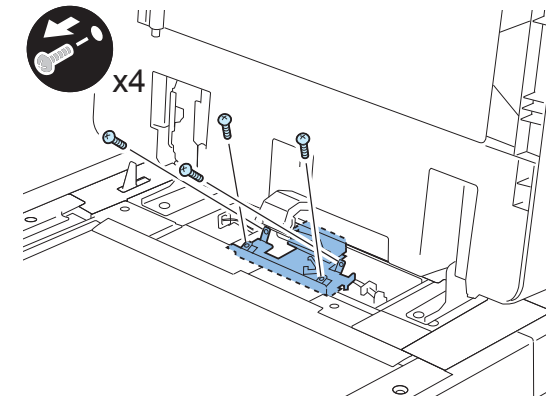
F-4-365

NOTE:

There is no wire saddle in case of Duplex Color Image Reader Unit-B1.

4) Remove the inner plate.

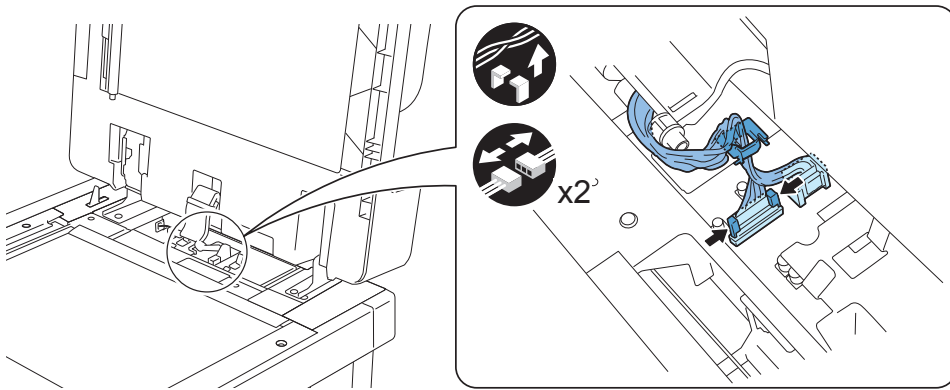
- 4 screws



F-4-366

5) Remove the cable.

- 1 edge saddle
- 2 connectors



F-4-367

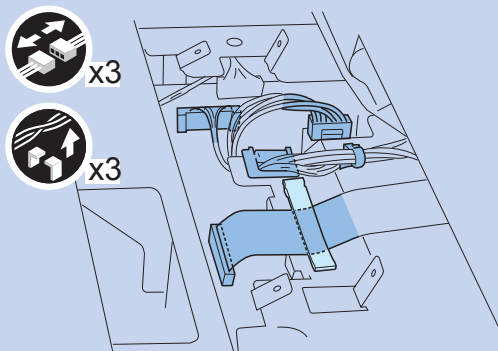
CAUTION:

After removing the cable, close the edge saddle.

NOTE:

Remove the flat cable in case of Duplex Color Image Reader Unit-B1.

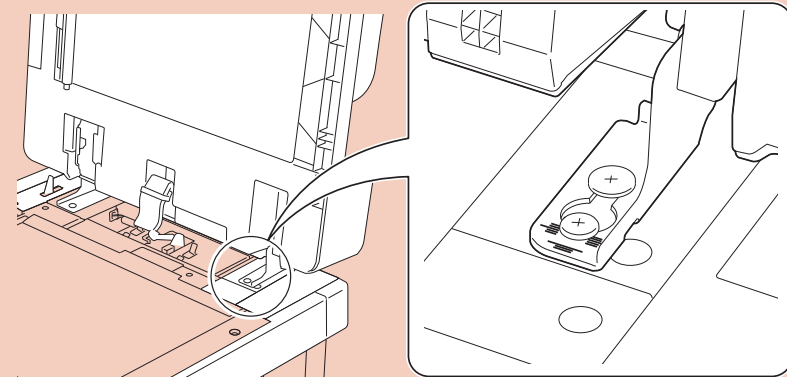
- 1 reuse band
- 1 edge saddle
- 1 harness retainer
- 3 connectors



F-4-368

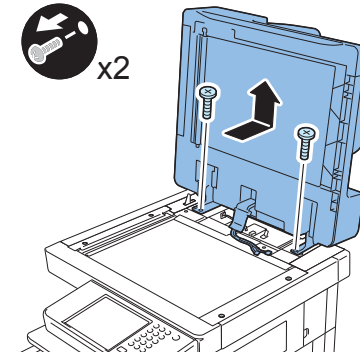
CAUTION:

In case of Color Image Reader Unit-B1/B2, record the position of scale of ADF mounting screw.



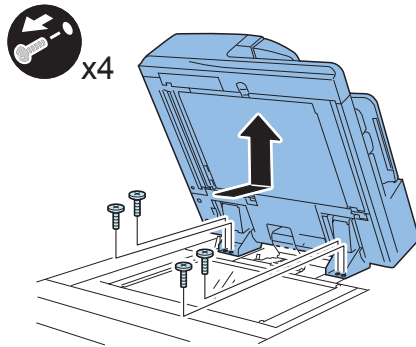
F-4-369

5-1) In case of Color Image Reader Unit-B1/B2, remove the 2 screws.



F-4-370

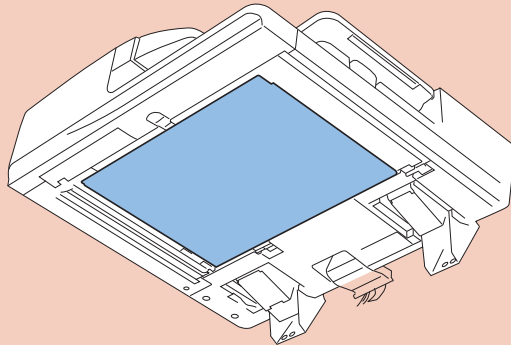
5-2) In case of Duplex Color Image Reader Unit-B1, remove the 4 screws.



F-4-371

CAUTION:

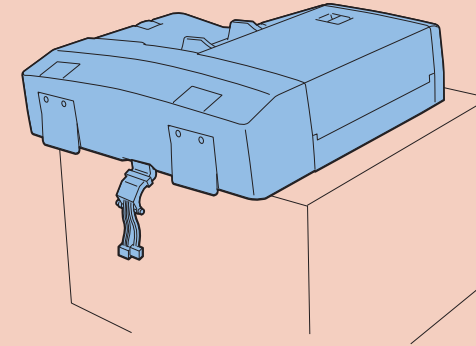
Be sure not to get scratches on the White Sheet on the removed ADF.



F-4-372

CAUTION:

Be careful not to damage the Reader Communication Cable Guide when placing it.



F-4-373

CAUTION:

At installation, install it in the recorded scale position of ADF mounting screw.

CAUTION:

After installation, check/adjust the following items.

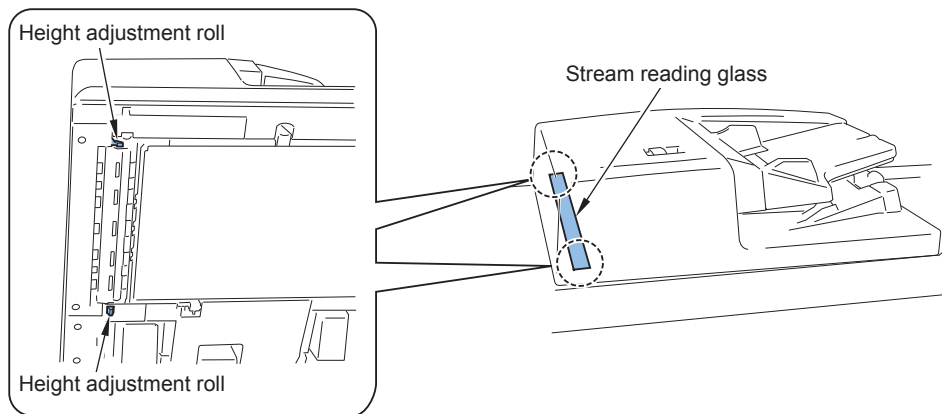
■ Height Adjustment

1. Check the height.

- 1) Close the DADF.
- 2) Check that the 2 height adjustment rolls on the front/rear left come contact with the stream reading glass.

NOTE:

Turning ON the LED helps the check operation.
(Lv.1) COPIER > FUNCTION > MISC-R > SCANLAMP

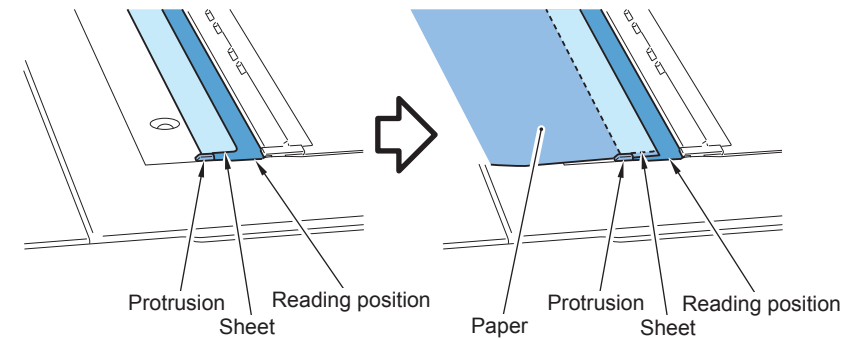


F-4-374

- 3) If not, execute the height adjustment.
If you cannot check it visually, check it by the following method.

a. Checking the height of front height adjustment roll.

- 1) Push the paper (plain paper) to the protrusion of the stream reading glass and set it in the position where the sheet of the stream reading glass is fully covered.

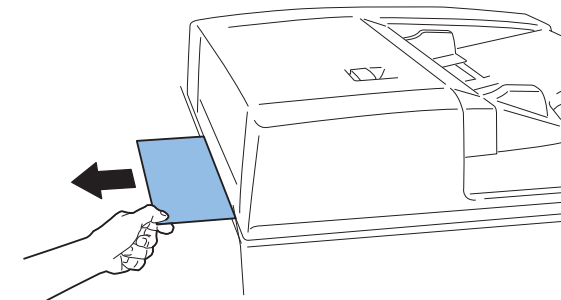


F-4-375

CAUTION:

Do not set it in the position where the original read position is covered by the paper.

- 2) Close the DADF.
- 3) Pull out the paper in the direction of the arrow and check that there is resistance.

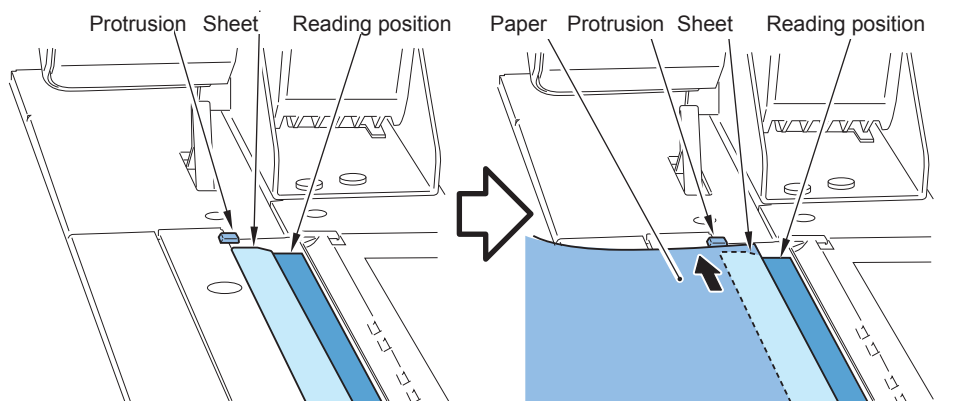


F-4-376

- 4) If there is no resistance, execute the height adjustment.

b. Checking the height of rear height adjustment roll.

- 1) Push the paper (plain paper) to the protrusion of the stream reading glass and set it in the position where the sheet of the stream reading glass is fully covered.

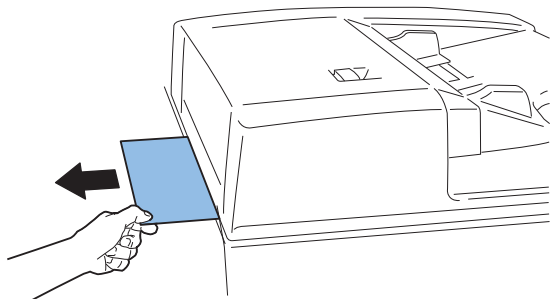


F-4-377

CAUTION:

Do not set it in the position where the original read position is covered by the paper.

- 2) Close the DADF.
- 3) Pull out the paper in the direction of the arrow and check that there is resistance.

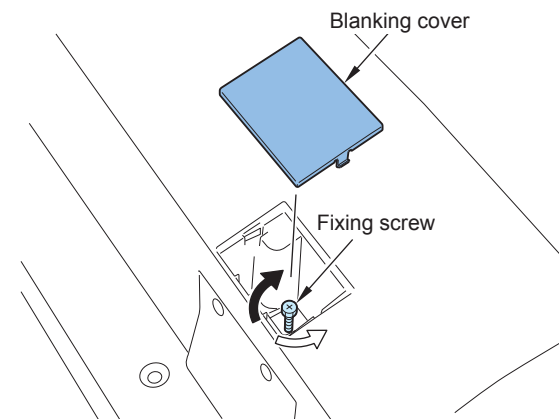


F-4-378

- 4) If there is no resistance, execute the height adjustment.

■ Adjustment procedure

- 1) Rotate the fixing screw on top of the left hinge to adjust it.
To remove the space on the front: rotate it clockwise (black arrow direction)
To remove the space on the rear or both sides: rotate it counterclockwise (white arrow direction)



F-4-379

- 2) Check the height again and make sure that the height is appropriate.

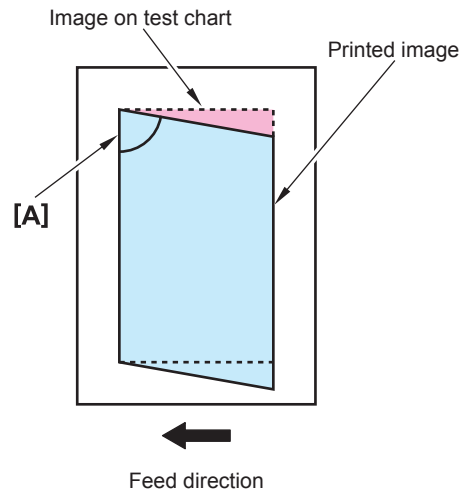
Right Angle Adjustment

NOTE:

There are 2 adjustment methods; for front side reading (reader side scanner unit) and for back side reading (DADF side scanner unit).

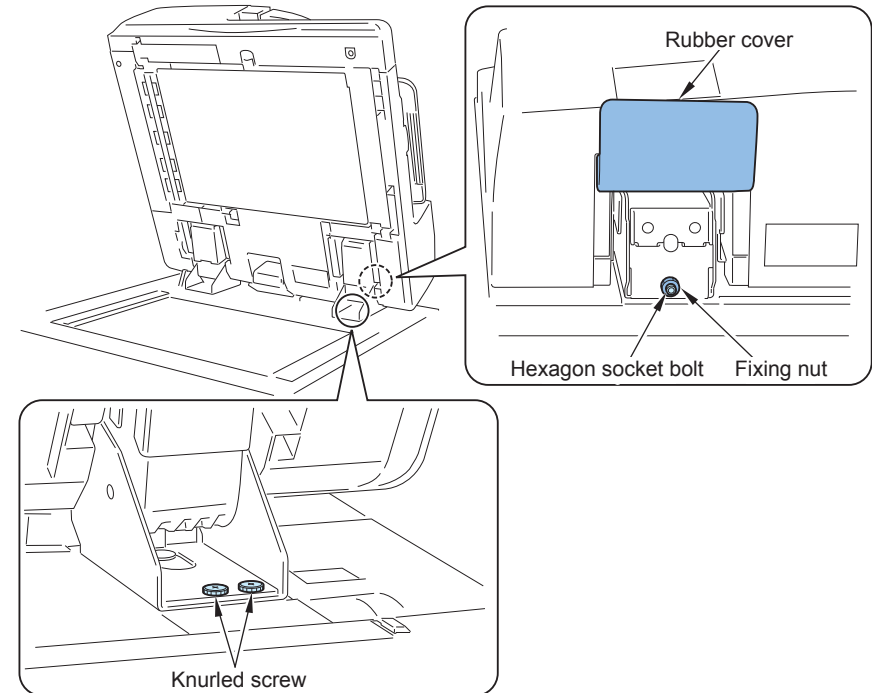
a. Adjustment for front side reading

- 1) Set a test chart to DADF and make a 1-sided print.
- 2) Check the right angle accuracy of angle A on the printed paper. If it is not right angle, make an adjustment.



F-4-380

- 3) Loosen the 2 knurled screws on front of right hinge unit.
- 4) Open the rubber cover on the back of right hinge unit and loosen the screw, and then make an adjustment by the hexagon socket bolt.
 - If A is less than 90 deg, rotate it clockwise.
 - If A is more than 90 deg, rotate it counterclockwise.

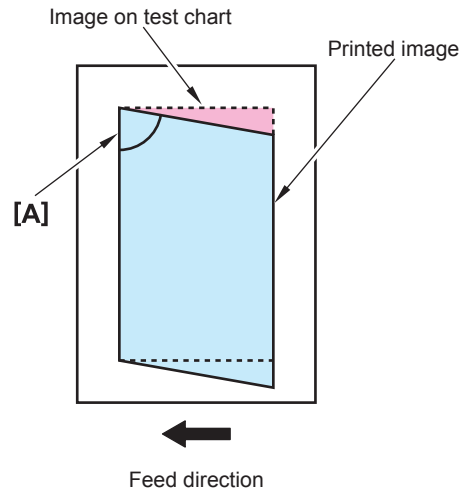


F-4-381

- 5) After adjustment, tighten the fixing nut and 2 knurled screws.
- 6) Printout a test chart again and check that angle A is right angle.

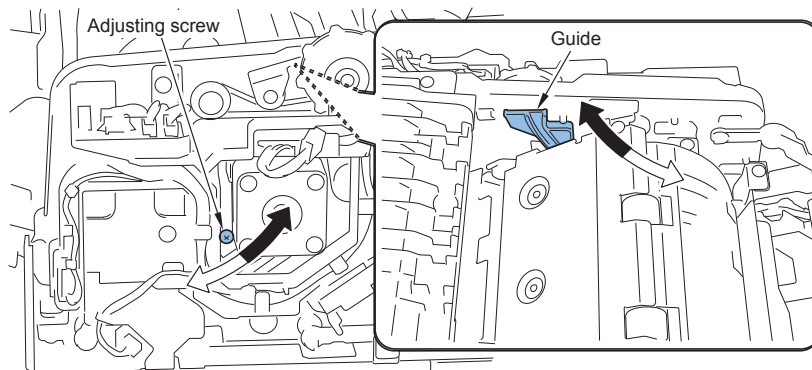
b. Adjustment for back side reading

- 1) Set a test chart to DADF upside down and make a 2-sided print.
- 2) Check the right angle accuracy of angle A on the printed paper. If it is not right angle, make an adjustment.



F-4-382

- 3) Remove the front cover.
- 4) Loosen the adjustment screw.
- 5) Adjust the position of the guide that supports the scanner unit.
 - If A is less than 90 deg, move the guide to right direction (black arrow direction).
 - If A is more than 90 deg, move the guide to left direction (white arrow direction).



F-4-383

- 6) After adjustment, tighten the screw.
- 7) Printout a test chart again and check that it is right angle.

Removing the Reader Unit

Preparations

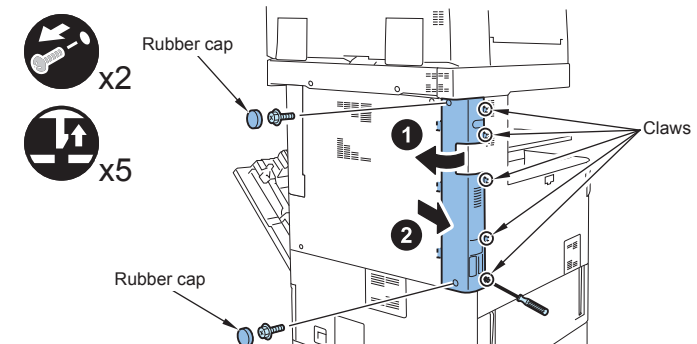
NOTE:

When removing the ADF Unit and the Reader Unit from the host machine, make sure to remove the ADF Unit first and then, remove the Reader Unit since the accuracy of scanner systems may be deteriorated.

Remove the Left Rear Cover and the Left Rear Sub Cover.

- 1) Remove the Left Rear Cover.

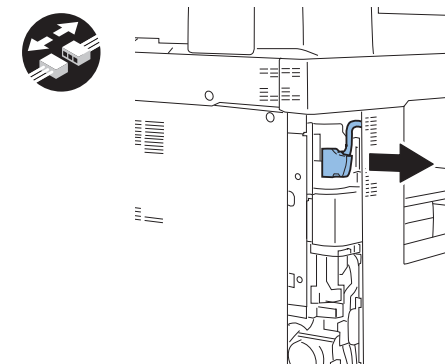
- 2 rubber caps
- 2 screws
- 5 claws



F-4-384

- 2) If the Reader Unit is installed, remove the reader signal cable.

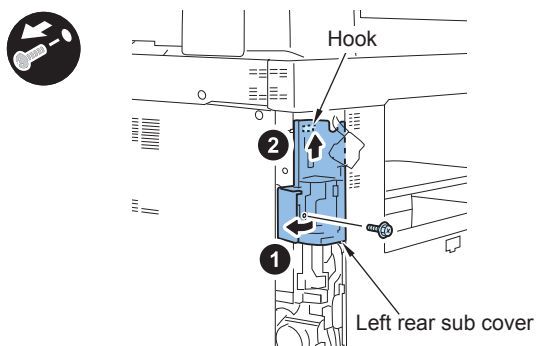
- 1 connector



F-4-385

3) Remove the Left Rear Sub Cover.

- 1 screw
- 1 hook



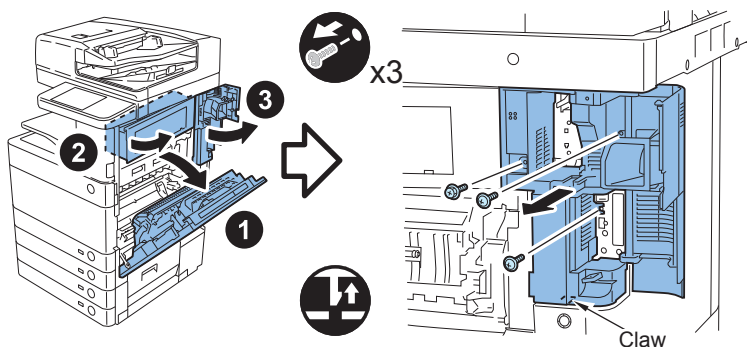
F-4-386

● Remove the Right Rear Cover.

4) Open the Right Lower Cover and Right Upper Cover.

5) Remove the Right Rear Cover.

- 1 screw (RS tight; M4)
- 2 screws (TP; M3)
- 1 claw



F-4-387

● Remove the Reader ADF Unit.

6) Remove the Reader ADF Unit.

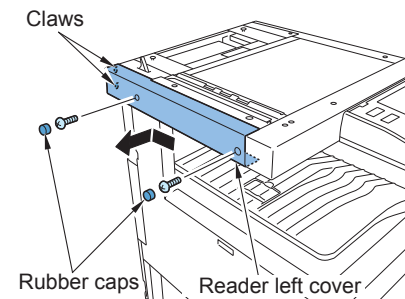
■ Procedure

NOTE:

When removing the ADF Unit and the Reader Unit from the host machine, remove the Reader Unit after removing the ADF Unit. Otherwise, the accuracy of the scanner may be degraded.

1) Remove the Reader Left Cover.

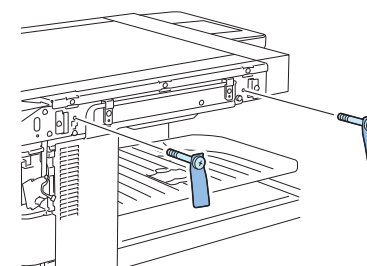
- 2 claws
- 2 screws (binding; M4x8)
- 2 rubber caps



F-4-388

2) Install the fixing screw of scanner system kept at the installation.

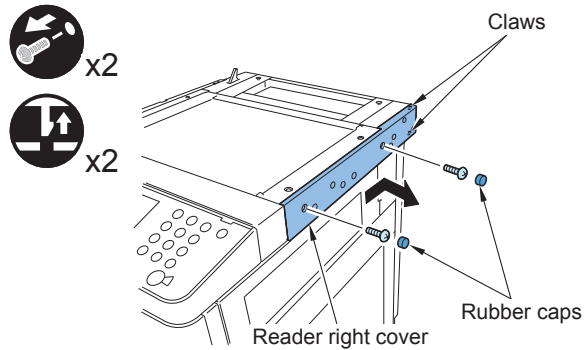
- screw (binding; M4x8)



F-4-389

3) Remove the Reader Right Cover.

- 2 claws
- 2 screws (binding; M4x8)
- 2 rubber caps

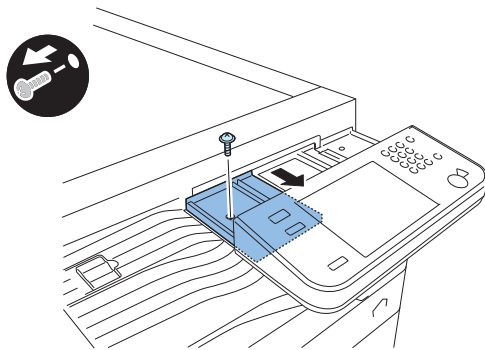


F-4-390

4) Move the Control Panel in the direction of the arrow.

5) Move the Control Panel Base Cover in the direction of the arrow.

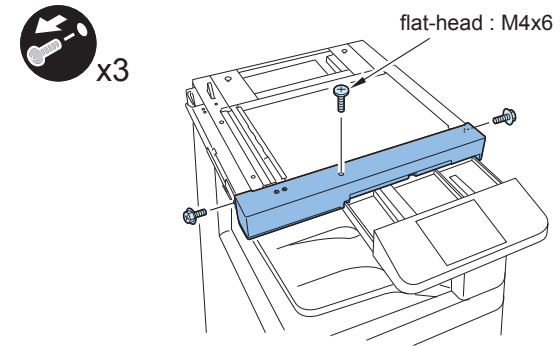
- 1 screw



F-4-391

6) Remove the screw of Reader Front Cover.

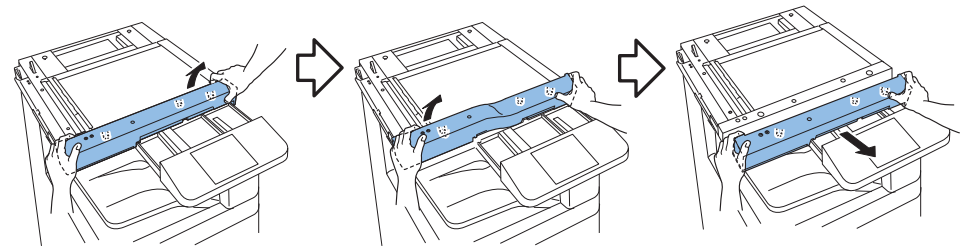
- 2 screws
- 1 screw (flat-head; M4x6) (for Duplex Color Image Reader Unit-B1 only)



F-4-392

7) Remove the Reader Front Cover.

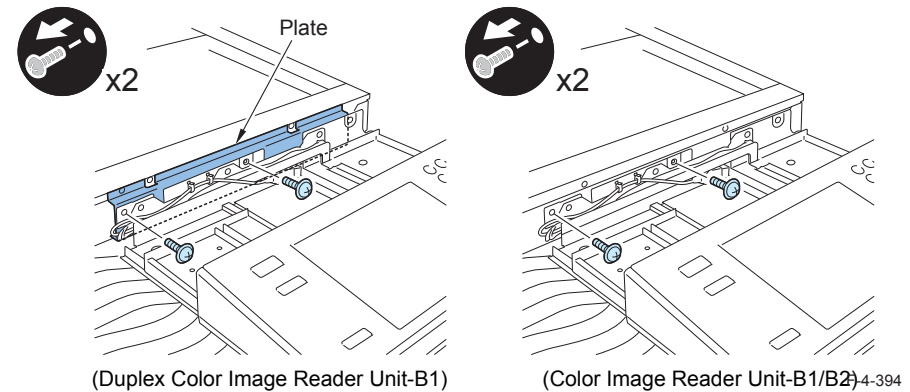
- 3 bosses



F-4-393

8) Remove the front side of Reader Unit with a stubby screwdriver.

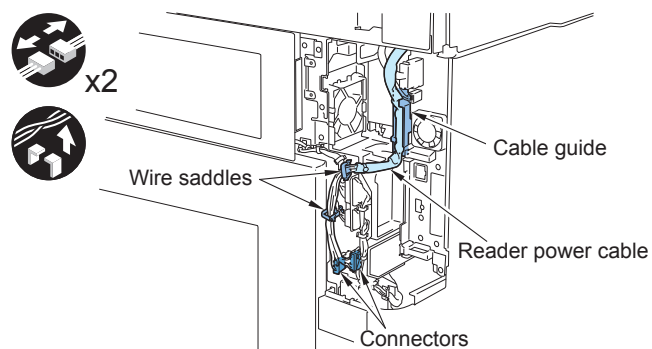
- 2 screws (TP; M4x8)



F-4-394

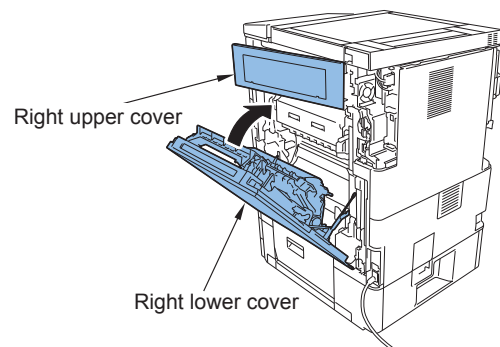
9) Remove the reader power cable.

- 2 connectors
- 2 wire saddles
- 1 cable guide



F-4-395

10) Open the Right Upper Cover and the Right Lower Cover.

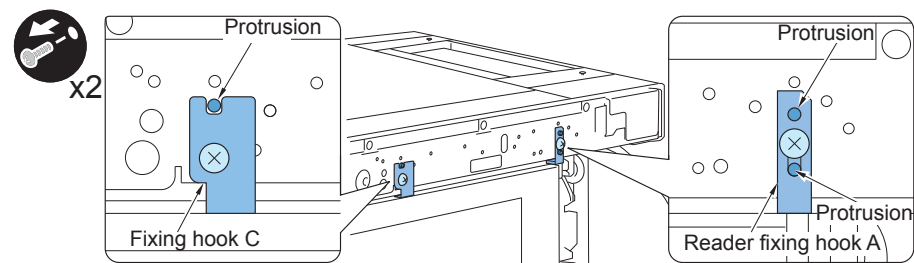


F-4-396

11) Close the Right Lower Cover.

12) Remove the Fixing Hook C and the Reader Fixing Hook A.

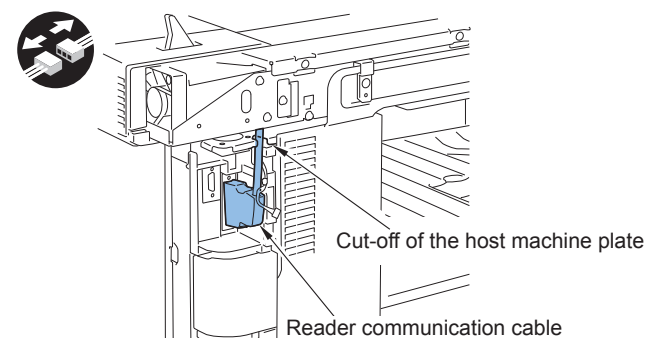
- 2 screws (binding; M4x8)



F-4-397

13) Remove the connector of reader communication cable.

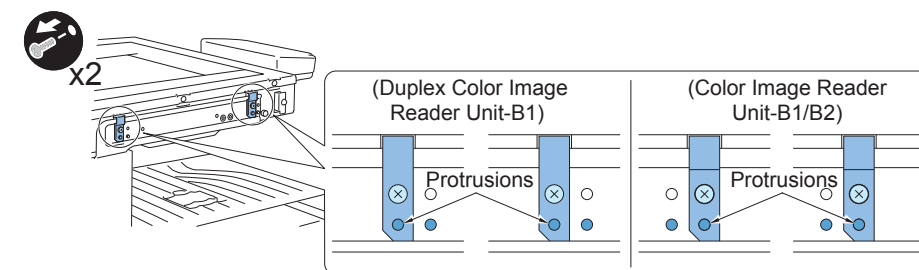
14) Remove the reader communication cable from the cut-off of the host machine plate.



F-4-398

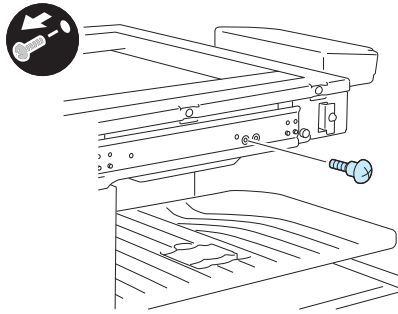
15) Remove the 2 Reader Fixing Hooks B.

- 2 screws (flat-head; M4x6)



F-4-399

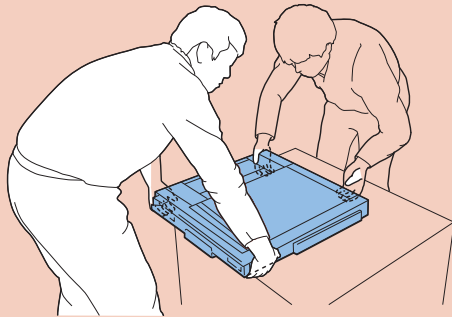
16) Remove the stepped screw.



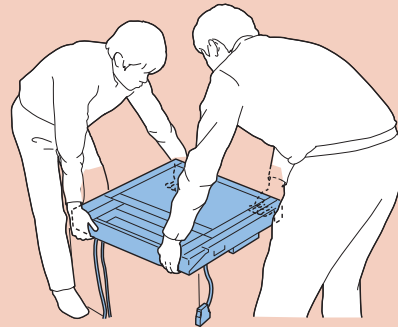
F-4-400

CAUTION:

- Make sure to lift the Reader Unit with 2 people or more. And also, lift it flatly.
- Make sure to place the Reader Unit on the flat surface with preventing the impact on it.
- When placing the Reader Unit, be careful not to get a finger and a cable get caught.



(Front View)

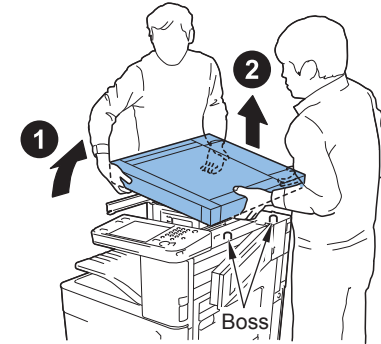


(Back View)

F-4-401

17) Remove the Reader Unit with 2 People or more.

- 2 bosses



F-4-402

Data to be handled by SRAM(with HDD Encryption Board

The kind of data to handle

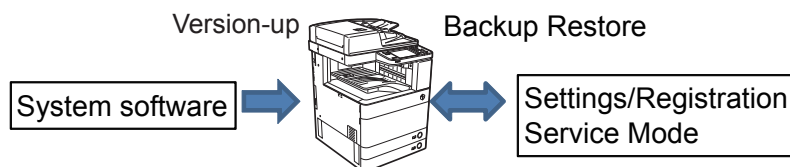
Data to operate this machine is largely divided into 2 categories.

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-4-36

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-4-403

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-4-37

● 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-4-38

● 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-4-39

● 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-4-40

● 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



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) Backup of the set/registered data Use the Remote UI. Management Settings > Data Management > Import/Export Target data:</p> <ul style="list-style-type: none"> • Address List • Forwarding Settings • Settings/Registration • Web Access Favorites • Printer Settings • Paper Information <p>2) Printing the set/registered data Use the service mode. (Lv.1) COPIER > FUNCTION > MISC-P > USER-PRT List of the set/registered data which cannot be backed up is printed."</p>
After Replacing	<p>1) HDD format</p> <ol style="list-style-type: none"> 1-1) Start with the safe mode. (While pressing 2 and 8 keys simultaneously, turn ON the main power switch.) 1-2) Use SST to format all partitions. <p>2) Downloading system software</p> <ol style="list-style-type: none"> 2-1) Use SST to download the system software (System, LANG, RUI and others). <p>3) Initializing the key, certificate and CA certificate (Lv.2) COPIER > FUNCTION > CLEAR > CA-KEY</p> <p>4) Turning OFF and ON the main power switch</p> <p>5) Restoring the backup data Use the Remote UI. Management Settings > Data Management > Import/Export</p> <p>6) Resetting/registering the data While referring to the list of set/registered data which was printed before replacement, reset/register the data.</p> <p>7) When the user generates and adds the encryption key, certificate and/or CA certificate, request the user to generate them again.</p> <p>8) Executing "Auto Adjust Gradation (Full Adjust)" Settings/Registration mode: Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation</p>

When using the Card Reader and imageWARE Accounting Manager	<p>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.)</p> <p>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"> • 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. <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.</p> <p>3) Download the card ID from imageWARE Accounting Manager to the Main Body again.</p> <p>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.</p> <p>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 the System Software-installed HDD	<p>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>

T-5-1

Main controller PCB 1

How to Replace the Parts	Refer to "Removing the Main Controller PCB 1".
Operation at Replacement	<p>Transferring the parts from old PCB to new PCB</p> <ul style="list-style-type: none"> • DDR2-SDRAM (2 pc.) • Flash PCB • TPM PCB <p>Resetting/registering the data is not necessary after Main Controller PCB 1 is replaced.</p>

T-5-2

Main controller PCB 2

How to Replace the Parts	Refer to "Removing the Main Controller PCB 2".
Before Replacing	You can evacuate by contents of the SRAM in Main Controller PCB 2 when you use SST. But you cannot use this function when there is HDD Encryption Board. When there is HDD Encryption Board: 1) Backup of the set/registered data Use the Remote UI. Management Settings > Data Management > Import/Export Target data: <ul style="list-style-type: none"> • Address List • Forwarding Settings • Settings/Registration • Web Access Favorites • Printer Settings • Paper Information 2) Printing the set/registered data Use the service mode. (Lv.1) COPIER > FUNCTION > MISC-P > USER-PRT List of the set/registered data which cannot be backed up is printed
Replacement	Transferring the parts from old PCB to new PCB <ul style="list-style-type: none"> • DDR2-SDRAM (2 pc.) • Memory PCB • Bypass PCB
After Replacing	1) After installing the parts, turn ON the main power switch. 2) Restoring the backup data by SST. When there is HDD Encryption Board: 1) After installing the parts, turn ON the main power switch. 2) Restoring the backup data Use the Remote UI. Management Settings > Data Management > Import/Export 3) Resetting/registering the data While referring to the list of set/registered data which was printed out before replacement, reset/register the data. 4) When the user generates and adds the encryption key, certificate and/or CA certificate, request the user to generate them again.
Prohibited Operation	Do not transfer the following parts to another model (which has a different serial number). If you fail to do so, the Main Body does not activate normally and this might cause to fail the restoration. <ul style="list-style-type: none"> • Main Controller PCB 2 (with Memory PCB installed) • Memory PCB

T-5-3

DC controller PCB

How to Replace the Parts	Refer to "Removing the DC Controller PCB".
Before Replacing	Backup of DC Controller PCB SRAM COPIER > FUNCTION > SYSTEM > DSRAMBUP (LEVEL2) "ACTIVE" is displayed and then "OK!" is displayed about 2 minutes later. Turn OFF the main power when the above work is complete.
After Replacing	Restoration of DC Controller PCB SRAM COPIER > FUNCTION > SYSTEM > DSRAMRES (LEVEL2) "ACTIVE" is displayed at execution and then "OK!" is displayed about 2 minutes later. Restoration is complete.
Prohibited Operation	<ul style="list-style-type: none"> • When replacing the DC Controller PCB, be sure to use a new one. Do not use the DC Controller PCB which was used with another machine.

T-5-4

TPM PCB

How to Replace the Parts	Refer to "Security Function (Encryption Key, Certificate and Protection of Password)"
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* Be sure to perform the installation work by referring to the procedure above.

T-5-5

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 > FUNCTION > INSTALL > INISET-Y Initialization of Y Developing Assembly (toner ratio and patch)</p> <p>COPIER > FUNCTION > INSTALL > INISET-M Initialization of M Developing Assembly (toner ratio and patch)</p> <p>COPIER > FUNCTION > INSTALL > INISET-C Initialization of C Developing Assembly (toner ratio and patch)</p> <p>COPIER > FUNCTION > INSTALL > INISET-K Initialization of Bk Developing Assembly (toner ratio and patch)</p> <p>COPIER > FUNCTION > INSTALL > INISET-4 Initialization of 4-colors Developing Assembly (toner ratio and patch)</p>
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T-5-6

Patch sensor

How to Replace the Parts	Refer to "Removing the Patch Sensor (Front/Center/Rear)".
Adjustment procedure	<p>Initialization of Patch sensor is necessary</p> <p>COPIER > OPTION > IMG-MCON > P-ALPHA Input Patch Sensor alpha value</p>

T-5-7

ITB Unit

How to Replace the Parts	Refer to "Removing the ITB Unit".
Adjustment procedure	<p>After replacement, execute the user mode (Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation).</p> <p>In case that the ITB Unit was removed, install the ITB Unit and execute the ITB equilibrium position detection in service mode.</p> <p>COPIER>FUNCTION>MISC-P>ITB-INIT <Level1></p> <p>This service mode will take approx. 2 to 3 minutes.</p> <p>Remove the ITB Unit when replacing the following parts.</p> <ul style="list-style-type: none"> • ITB Cleaning Unit • ITB • Primary Transfer Roller • Secondary Transfer Inner Roller

T-5-8

ITB

How to Replace the Parts	Refer to "Removing the ITB"
Before Installation	<p>Check that the version of the machine is the following version or later.</p> <p>MN-CON: Ver.34.05 D-CON: Ver.18.01</p> <p>In case of prior version to the foregoing version, upgrade the machine and change the value in the following service mode.</p> <p>Select COPIER>OPTION>IMG-TR>ITB-TYPE, and change the setting from 0 to 1.</p>
Adjustment Procedure	<p>Execute the user mode (Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation).</p> <p>Execute the ITB equilibrium position detection in service mode.</p> <p>COPIER>FUNCTION>MISC-P>ITB-INIT <Level1></p> <p>This service mode will take approx. 2 to 3 minutes.</p>

T-5-9

Secondary Transfer Outer Roller

How to Replace the Parts	Refer to "Removing the Secondary Transfer Outer Roller/Secondary Transfer Separation Guide Unit".
Adjustment Procedure	<p>When replacing the Secondary Transfer Outer Roller, execute the following service mode.</p> <p>COPIER > FUNCTION > CLEANING > TNR-COAT</p>

T-5-10

Hopper Unit

How to Replace the Parts	Refer to "Removing the Hopper (M/Y/C/Bk)".
Adjustment Procedure	<p>When installing the removed Toner Container, do not shake it.</p> <p>When removing the Main Drive Unit simultaneously, install the Main Drive Unit and Hopper Unit in that order.</p> <p>Toner supply failure may occur.</p> <p>In case that the Developing Assembly is replaced simultaneously, execute the following service mode to initialize the Developing Assembly before installing the Toner Container.</p> <p>COPIER > FUNCTION > INSTALL > INISET-X (X: Color changed)</p> <p>If the Toner Container is installed first, TD ratio of the Developing Assembly cannot be set to a correct value.</p>

T-5-11

Pickup Feed System

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-5-12

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-5-13

Example: When setting G-LTR to Cassette 2
COPIER> OPTION> CST> CST2-U3> 31

6

Troubleshooting

- Initial Check
- Test Print
- Troubleshooting items
- Version Upgrade

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.

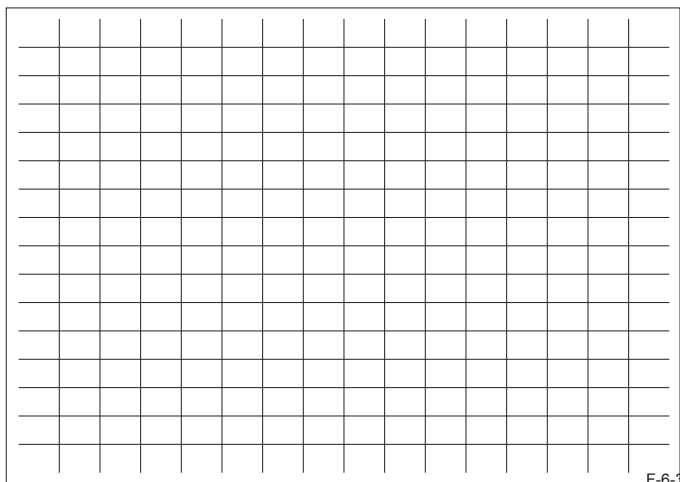
MEMO:

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

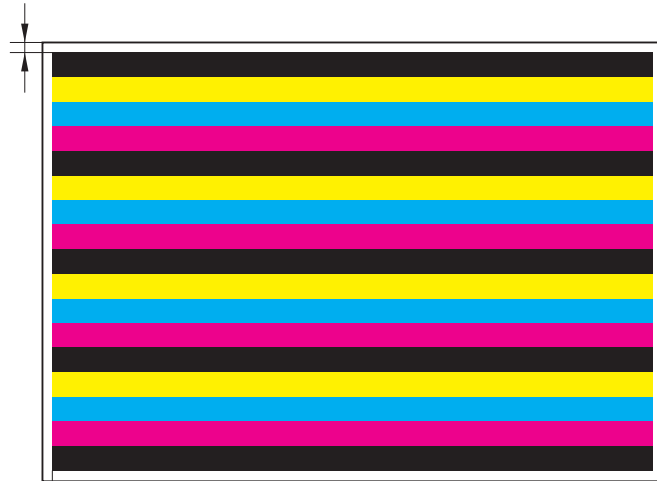
This test print is for mainly checking the color displacement, right angle accuracy and straight line accuracy.

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)

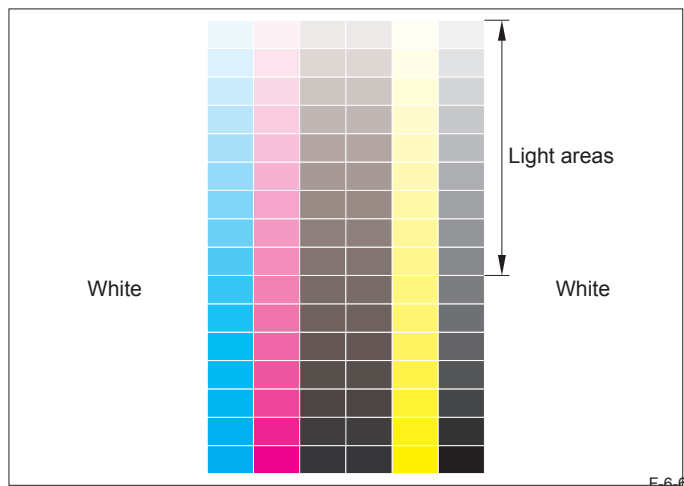


This test print is for mainly checking the gradations of YMCBk single color at one time.

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

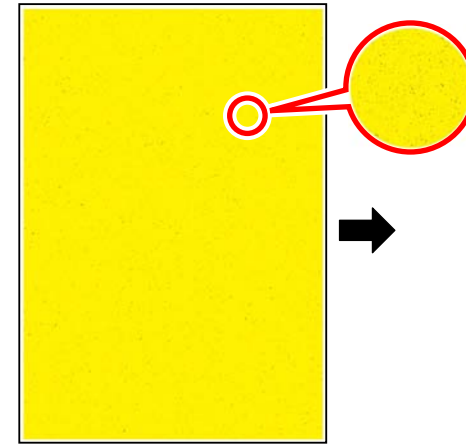
Troubleshooting items list

Category	Item	Reference	
Image failure	Displacement/blur/smear/fogging	Foggy image due to charge failure	6-7
		35mm pitch ghost due to toner deterioration	6-8
		35mm uneven density due to cycle variation of Developing Cylinder	6-9
	Dirt/line	95mm uneven density on paper lead edge	6-9
	Blank image/line	Color spot due to laser exposure failure	6-10
		Secondary transfer blank image	6-11
		Fixing wrinkle due to deterioration of rib on Fixing Inlet Guide	6-12
Soiled image due to the oil attached to the Fixing Separation Guide		6-13	
Operation failure	Noise around the Fixing Film Unit	6-14	
	Process Unit cannot be closed.	6-15	
	Productivity is reduced on paper stack delivery in thin paper mode (52g/m2 to 63g/m2). <Staple Finisher C1/ Saddle Stitch Finisher C1>	6-16	

T-6-9

Image Faults

Image fogging due to the electrostatic charge failure



[Occurrence area]

Between the Primary Charging Roller and the drum

F-6-7

[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>

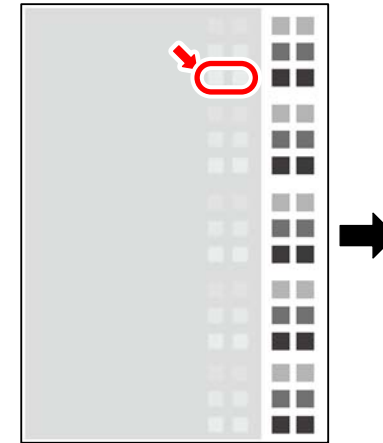
The setting value of the applicable service mode is set to "+2." The setting value is set to +4, If not improved.

[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.

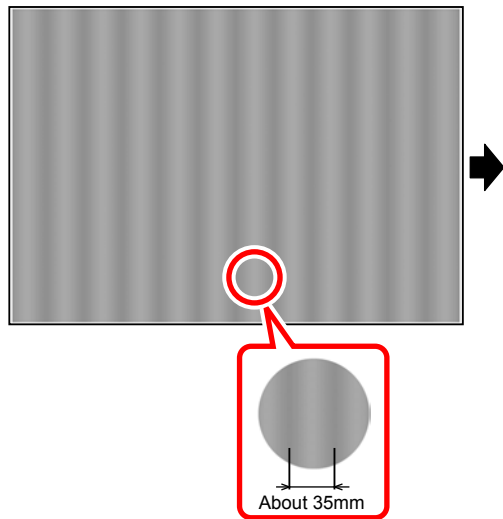
3) Lower the setting value of the applicable service mode by 1 step.

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



[Occurrence area]
Developing cylinder

F-6-9

[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]

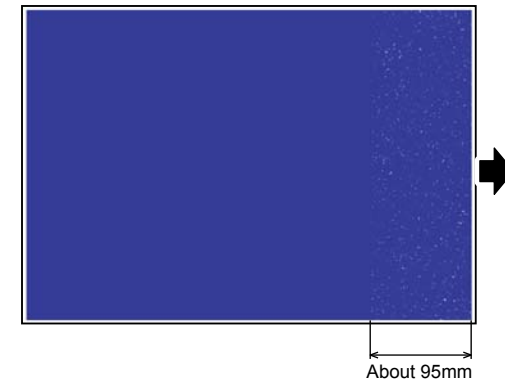
In case that the durable advanced Developing Assembly is used under the high temperature and high humidity environment.

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



[Occurrence area]
Fixing Unit

F-6-10

[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"

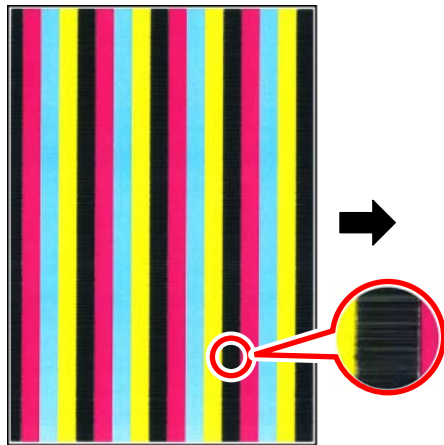
Setting of the ITOP temperature in the plain paper 1 (COPIER>OPTION>IMG-FIX>FX-S-TMP)
<Level1>

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.

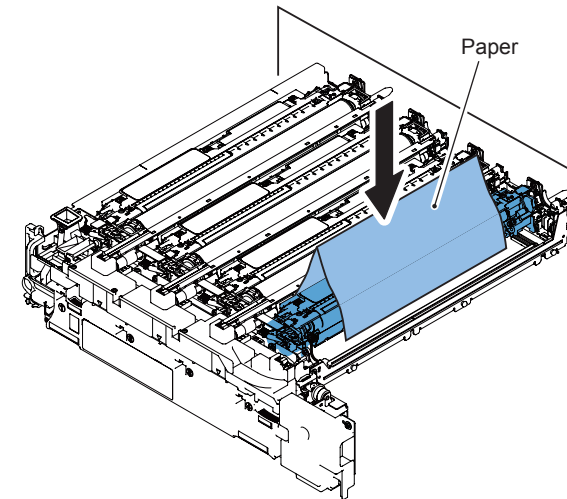
[Occurrence condition]

The installation failure of the drum unit

[Remedy]

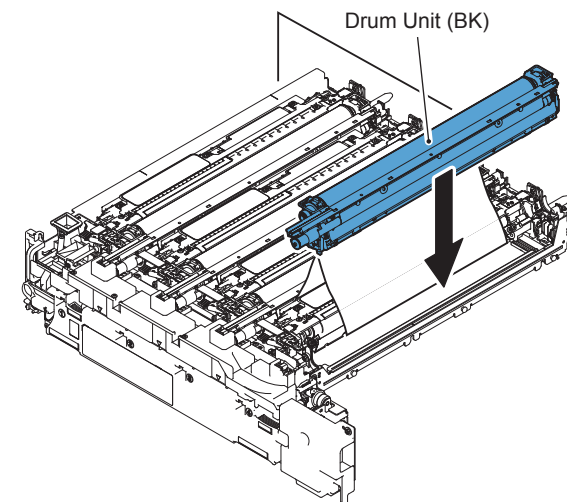
When installing the Drum Unit (Bk) to the host machine, perform the following procedures.

- 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).



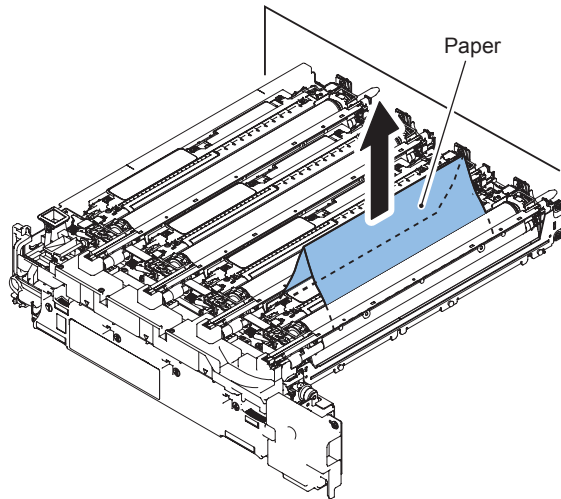
F-6-12

- 4) While the paper is set, install the Drum Unit (Bk) to the host machine.



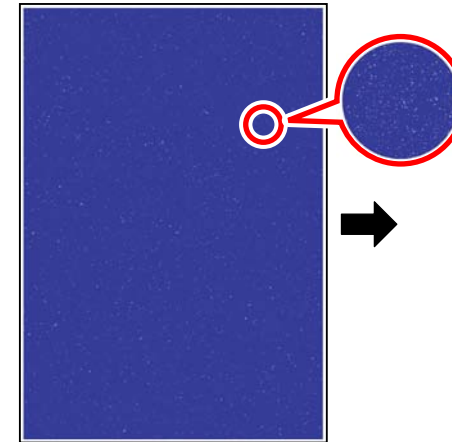
F-6-13

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



[Occurrence area]
Secondary Transfer Outer Roller

F-6-15

[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	-

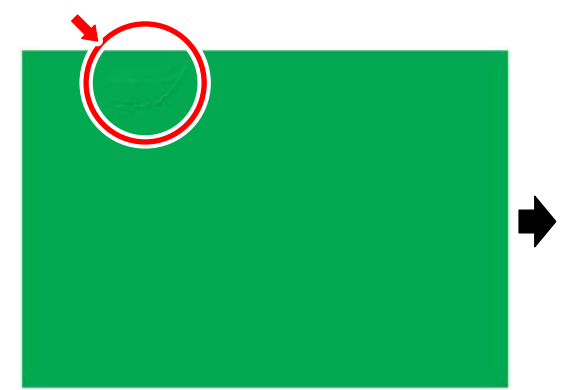
T-6-10

[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]

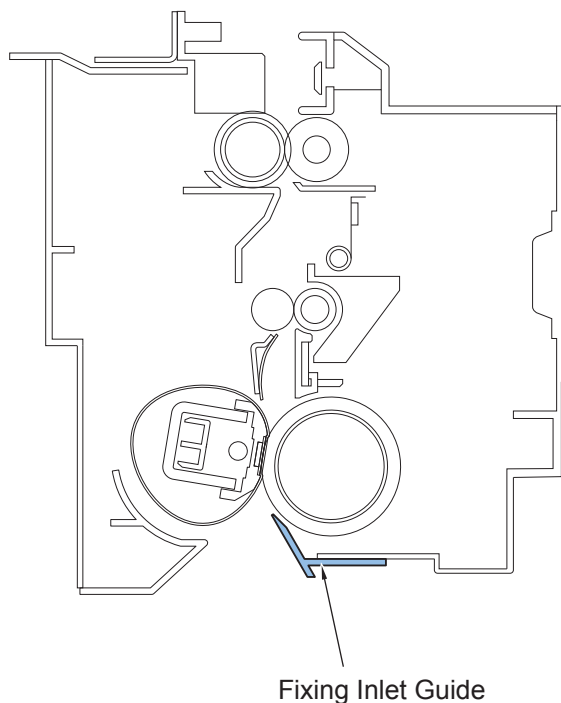
When making 2-sided copies of solid image continuously in high temperature & high humidity environment, rib side on the Fixing Inlet Guide is deteriorated and resin part may be scraped. As a result, when the leading edge of paper enters the Fixing Inlet Guide, it is trapped by the scraped rib and the 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.



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]

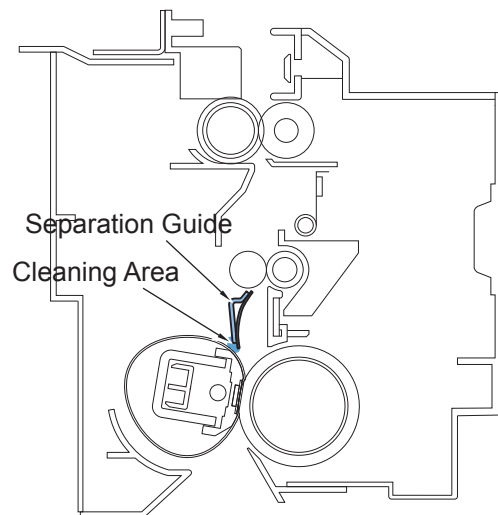
When the paper passes through the Fixing Assembly, oil of fused toner may attach to the leading edge of Fixing Separation Guide and it may accumulate.
At that time, when making 2-sided solid print with 2-colors, curled leading edge of paper on 2nd side may contact with the Delivery Flapper.
Thus, movement 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.

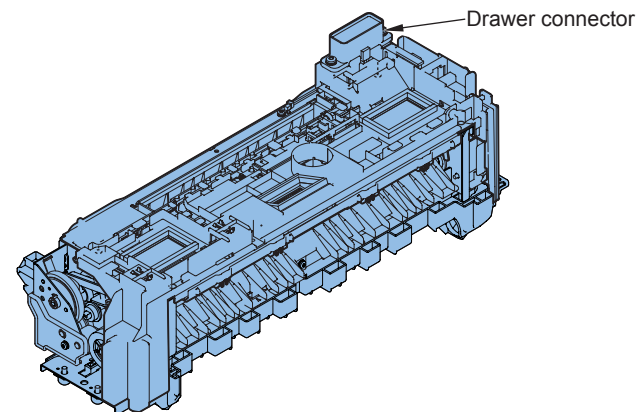
As a result, the Fixing Film contacts with the heater surface when it rotates and noise may be generated.

[Field Remedy]

By pushing the Fixing Film area, grease inside the film circulates and sliding performance will be improved.

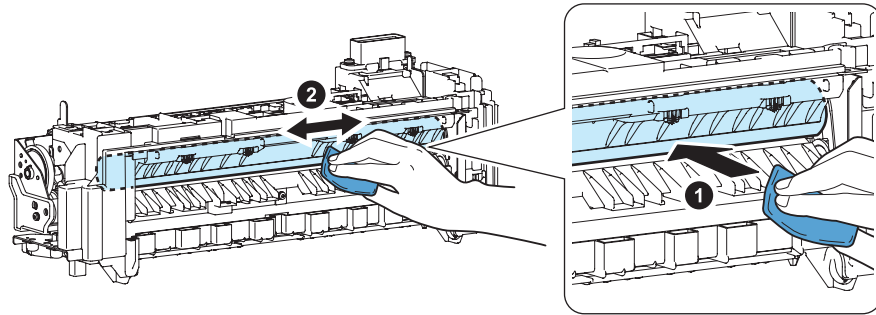
Operation procedure is as below.

- 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).

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")

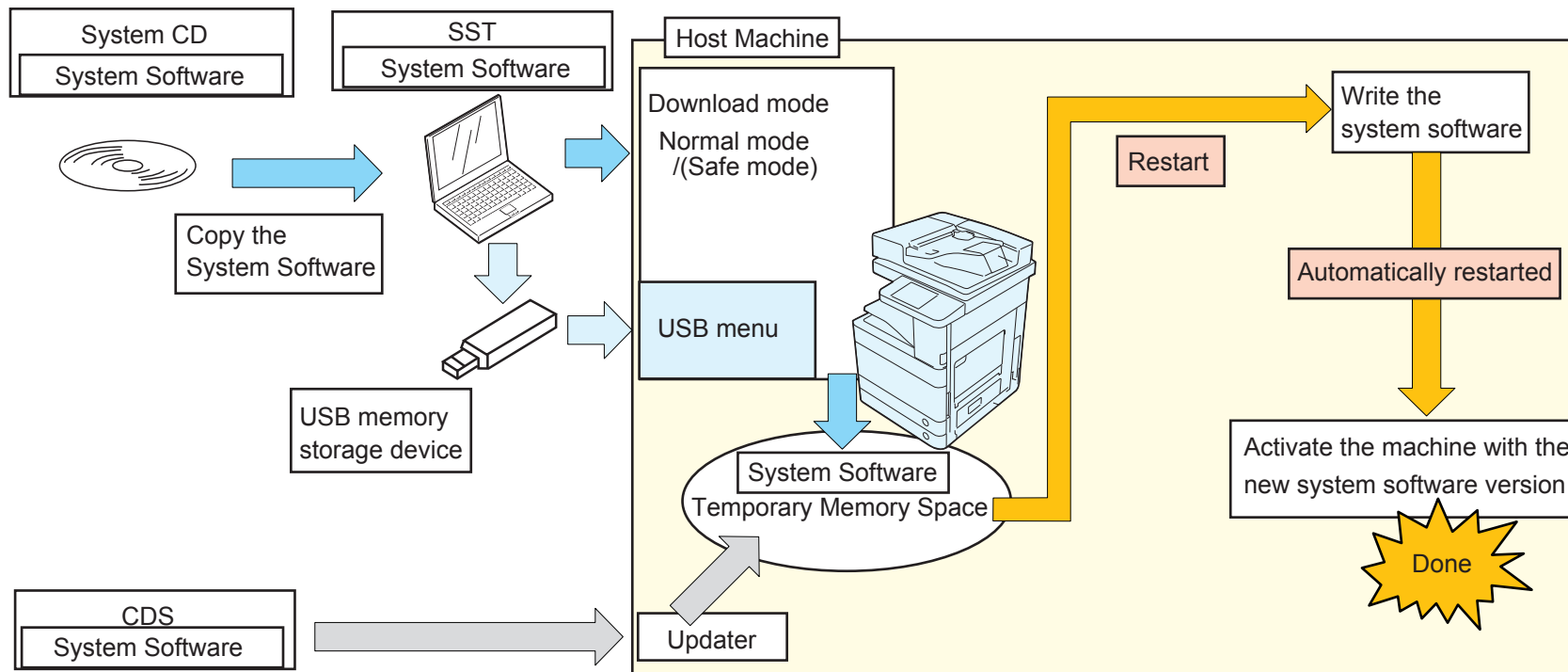
Connect this machine to the PC by the cross cable to download the system software using SST installed in the PC.

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-6-22

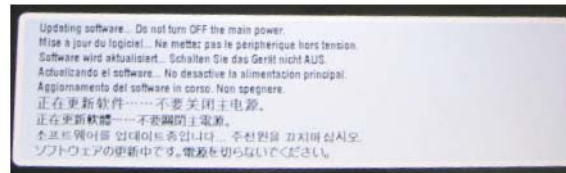
■ Writing System Software

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-6-23

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).

■ 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 Stitch Finisher – C1	Finisher Controller	FIN_C1	FIN_CON	○	○	-	Staple Finisher – C1/Saddle 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

T-6-11

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 :

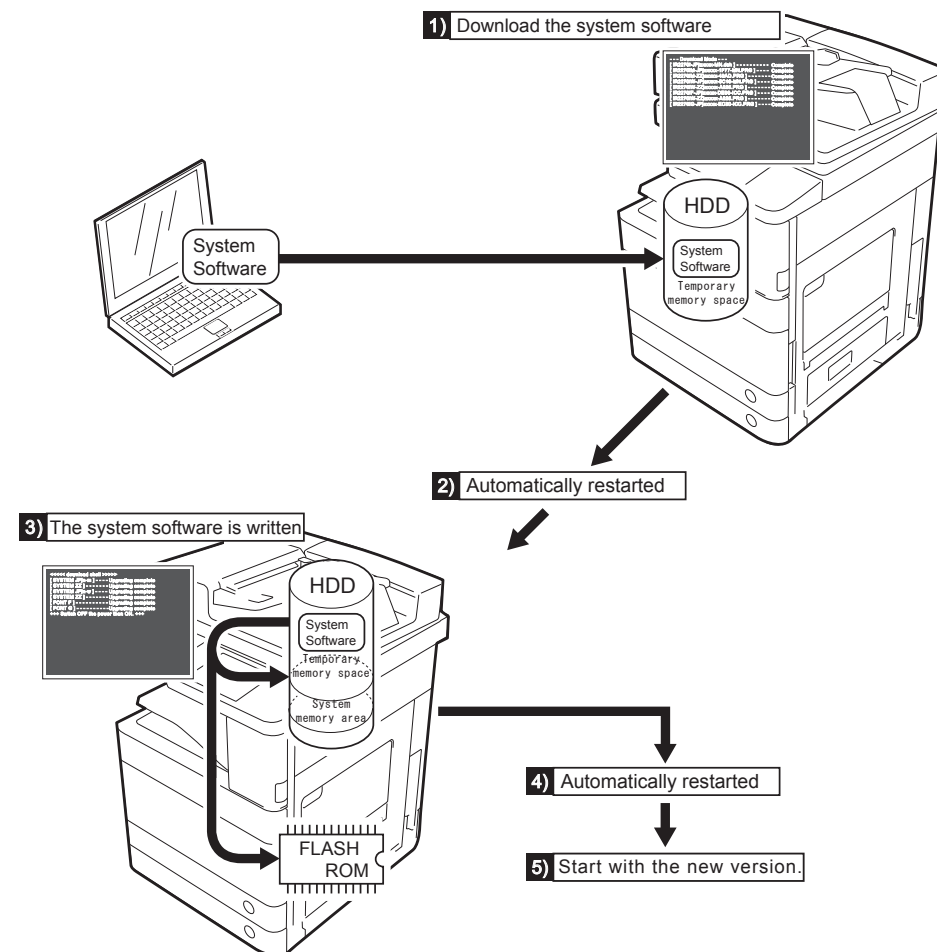
Use Single mode only when any of the following conditions is met.

- 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.

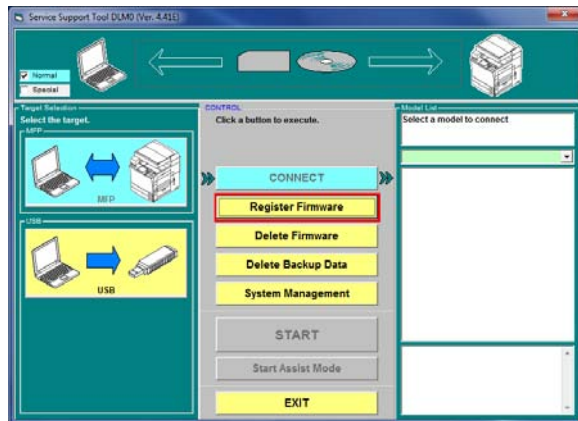
Preparation

Requirements:

- PC with SST Ver.4.41 or later installed
- The system CD for this machine

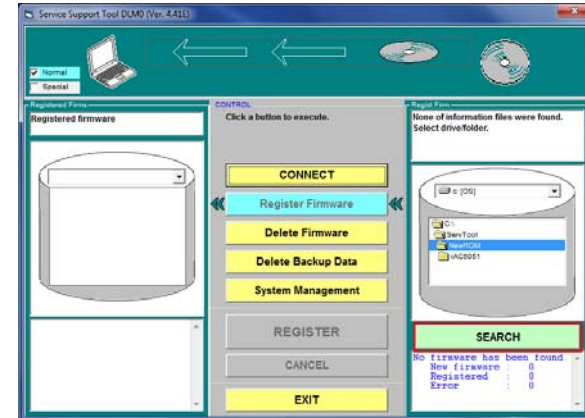
Steps to copy the system software

- 1) Start the PC
- 2) Set the system CD in the PC
- 3) Start SST
- 4) Click "Register Firmware" button.



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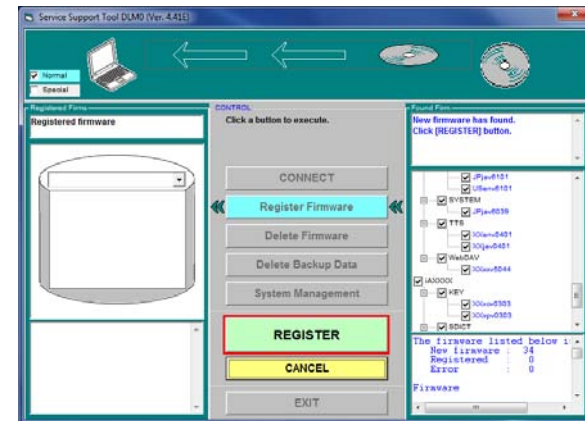
- 5) Select the drive where the system CD is set and click "Search" button.



F-6-27

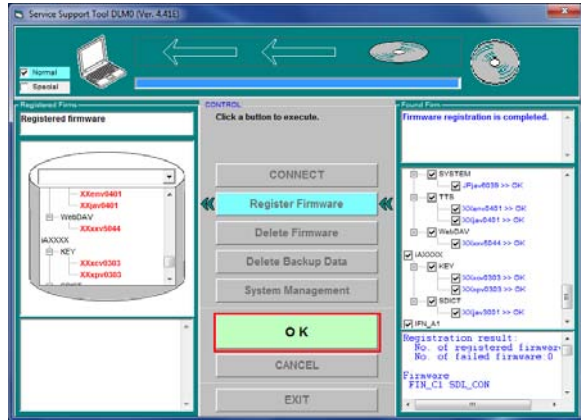
- 6) The system software stored in the system CD is listed.

Uncheck the box(es) for unnecessary folder(s) and/or system software and click "Copy" button.



F-6-28

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

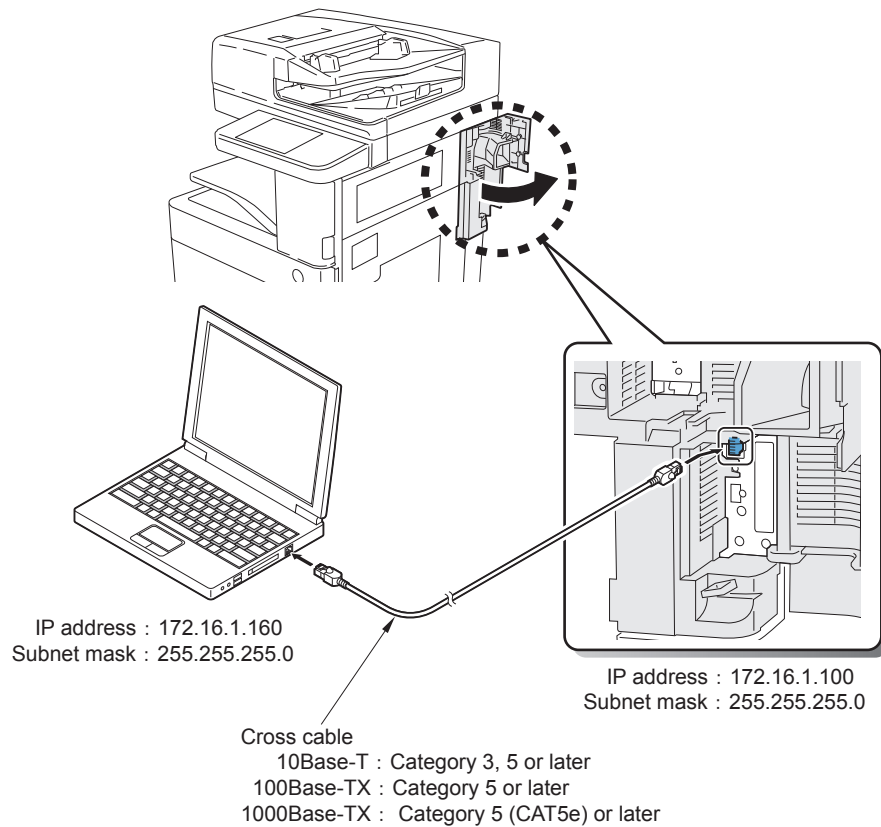
Requirements

- 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.



F-6-30

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:\>
```

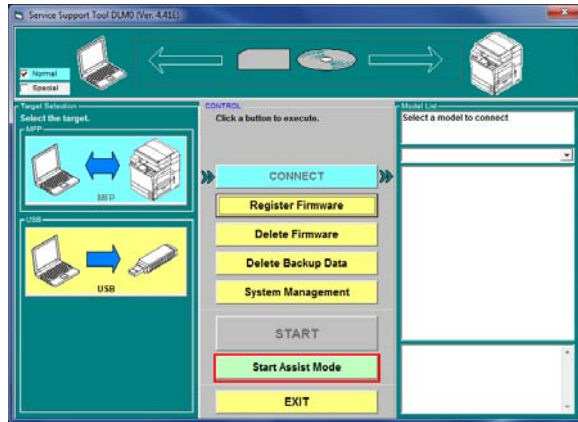
F-6-31

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-6-32

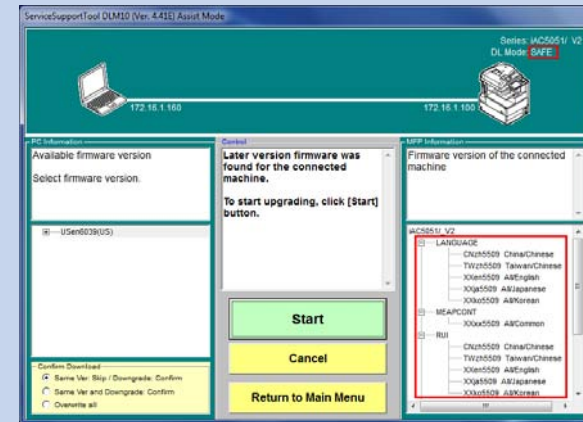
If the upgraded set of the system software is stored in SST, the new set is automatically selected.

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.

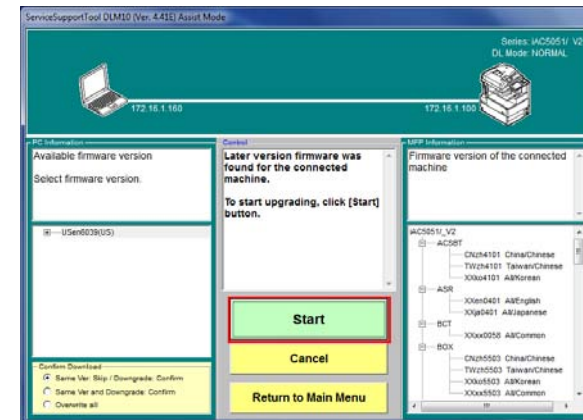
NOTE:

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



F-6-33

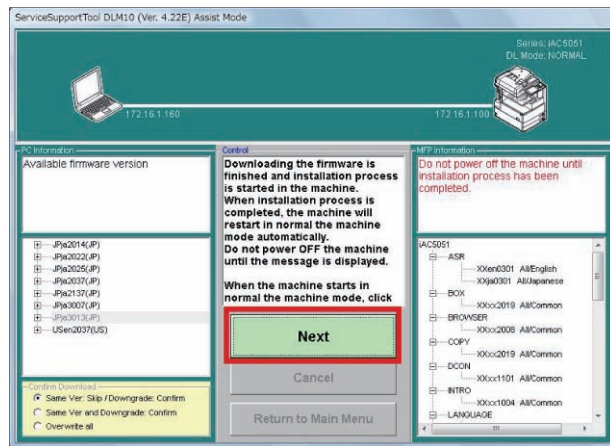
When download is completed, the machine is automatically restarted to initiate the writing process. The machine may repeat restarting several times depending on option configuration. Upon the system software written, the machine is restarted again and the main menu is displayed.

NOTE: Download Confirmation Message Modes

Download is confirmed in any of the three message modes.

- Skip the existing versions and confirm whether to download downgraded versions
Upgraded versions are downloaded without message.
Skip download of the existing versions.
Confirm whether to download downgraded versions.
- Confirm whether to download the existing versions / downgraded versions
Upgraded versions are downloaded without message.
Confirm whether to download and overwrite the existing versions.
Confirm whether to download downgraded versions.
- Overwrite all versions
Regardless of version upgrade or downgrade, all versions of the system software are downloaded without message.
By default, "Skip the existing versions and confirm whether to download downgraded versions" is selected.

5) Click "Next" button.



F-6-34

6) Disconnect the cross cable from the machine.

7) Enter Service mode to check the system software versions.

8) Click "OK" button.

The main menu is displayed.

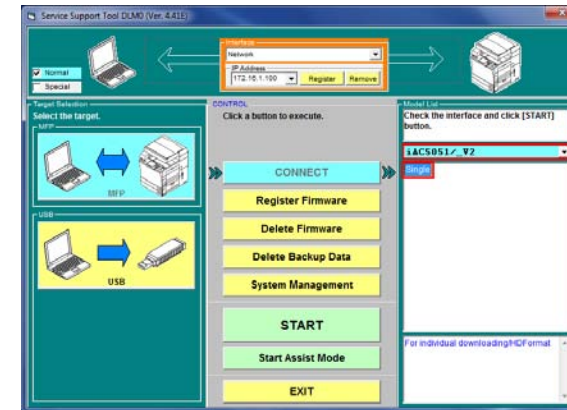
■ Downloading System Software (Single mode)

The following is the sample steps to download DCON (the other components of the system software can be downloaded similarly).

1) Start the machine in an appropriate Download mode.

2) Connect the PC to this machine to start SST.

3) Select the model to be connected and "Single", check the network settings. Click "Start" button.

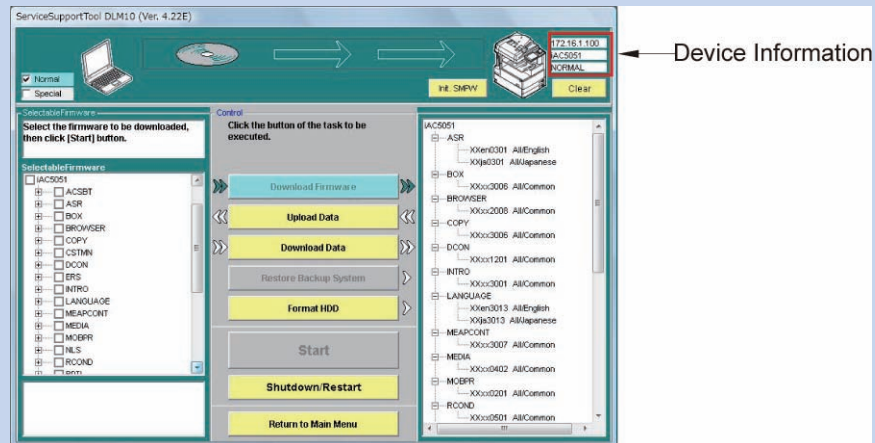


F-6-35

NOTE:

The following device information is shown at the right top of SST screen.

- IP address
- Model name
- Download mode

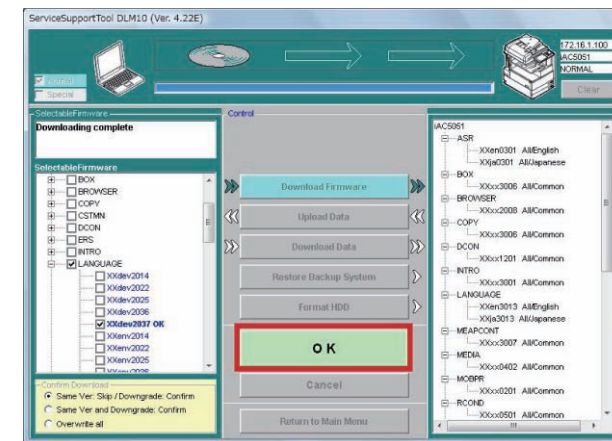
**NOTE:** Download Confirmation Message Modes

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

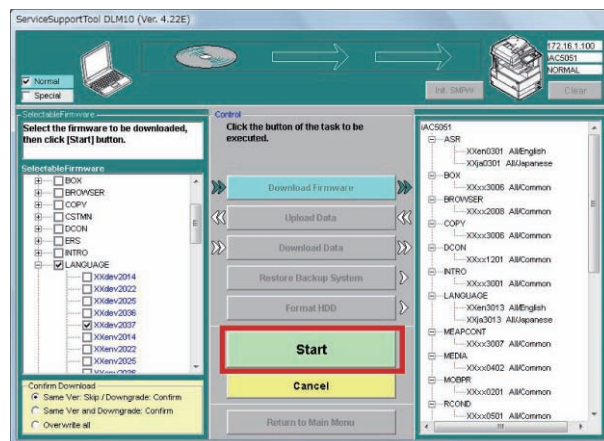
5) When download is completed, click "OK" button.



F-6-37

4) Select the DCON version to be downloaded and click "Start" button.

Multiple files can be selected in this step.



F-6-36

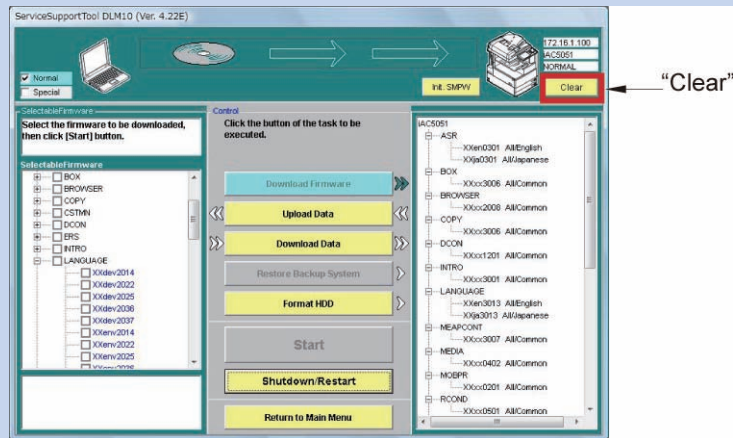
The main menu is displayed.

NOTE:

If it is before restarting the machine, the downloaded system software can be deleted not written on HDD or Flash ROM.

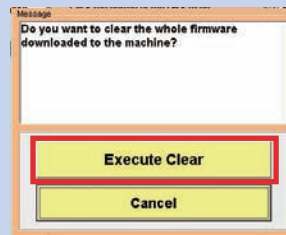
1) Click "Clear" button.

"Clear" button



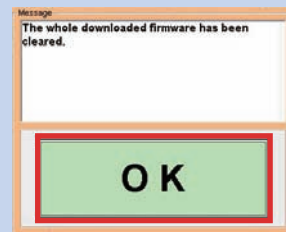
2) Click "Execute Clear" button.

The system software, which is stored in the temporary memory space of HDD, is deleted.

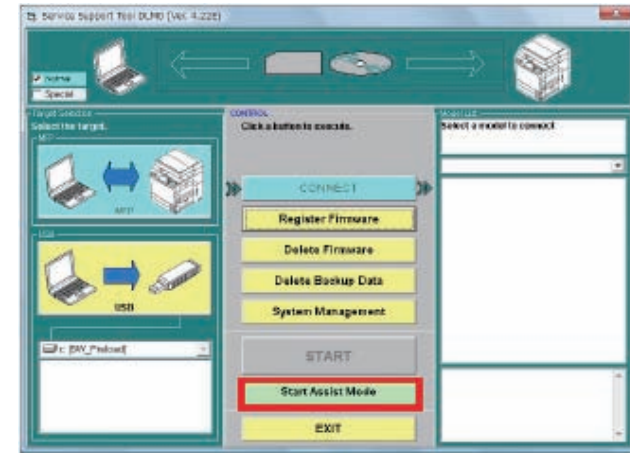


3) Click "OK" button.

Return to the previous screen.

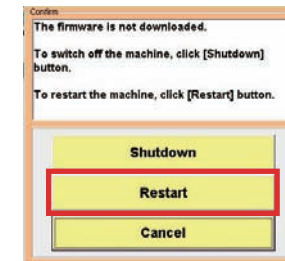


6) Click "Shutdown / Restart" button.



F-6-38

7) Click "Restart" button.



F-6-39

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.

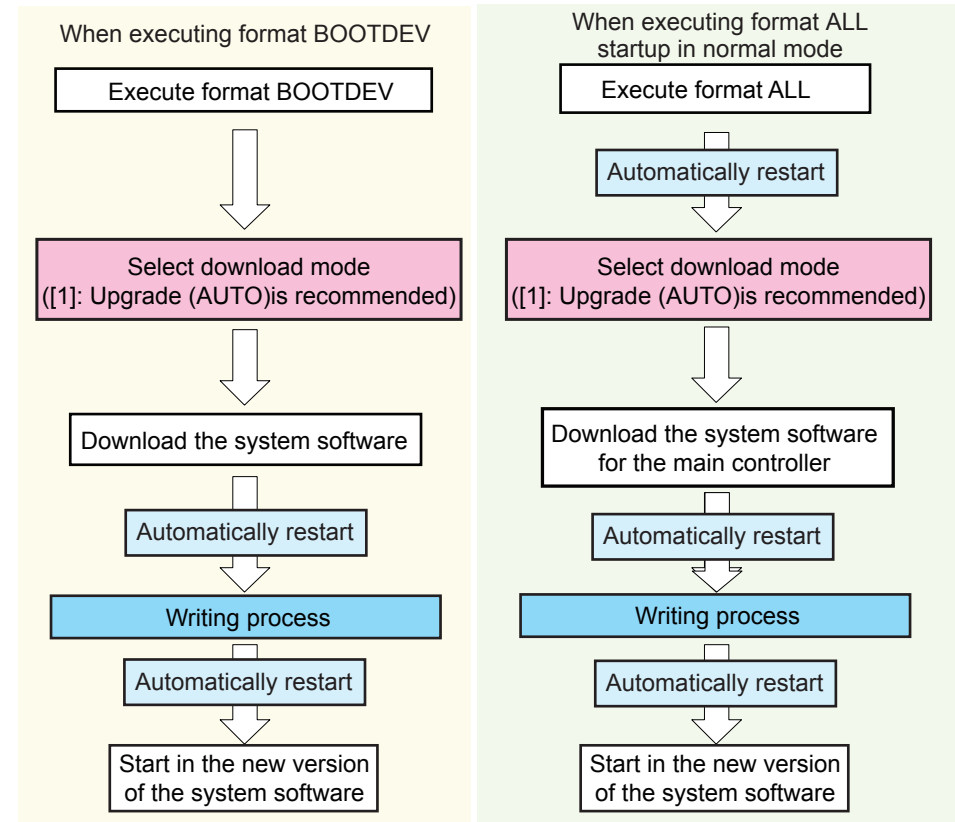
Once Format ALL is executed in your machine, all the user data and MEAP applications held in HDD will be cleared. Ensure to gain an agreement from the user before formatting.

- 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.

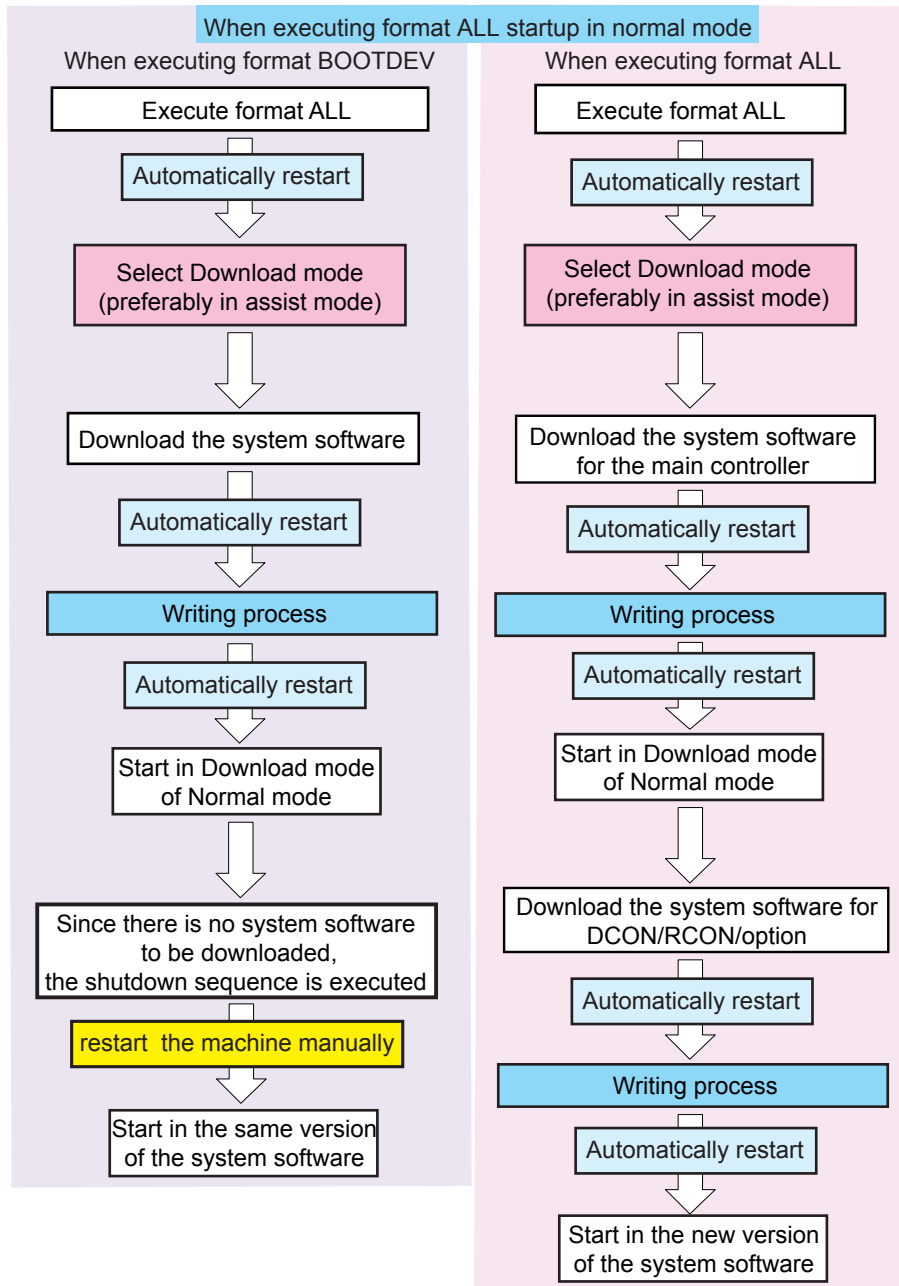
HDD can be formatted only in Single mode.

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.



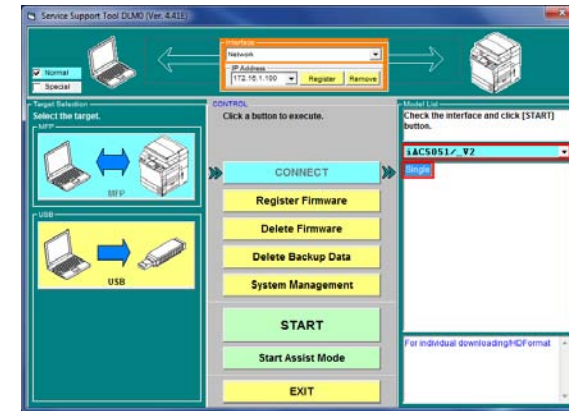
F-6-40



F-6-41

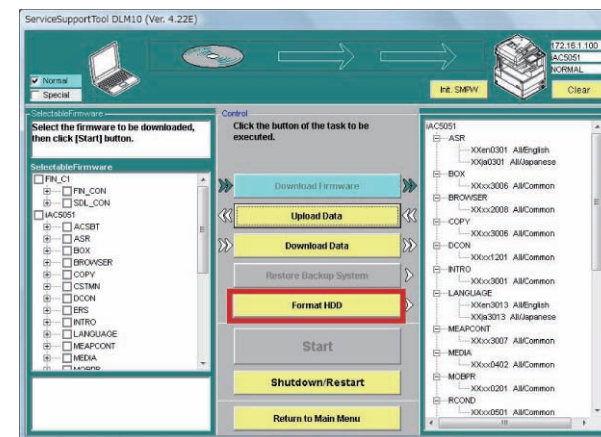
Steps of Formatting

- 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.



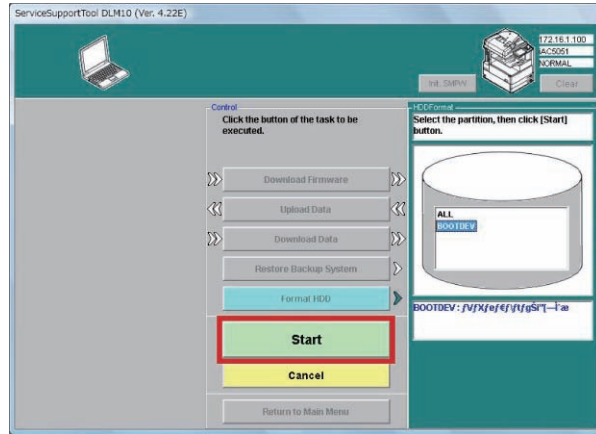
F-6-42

- 4) Click "Format HDD" button



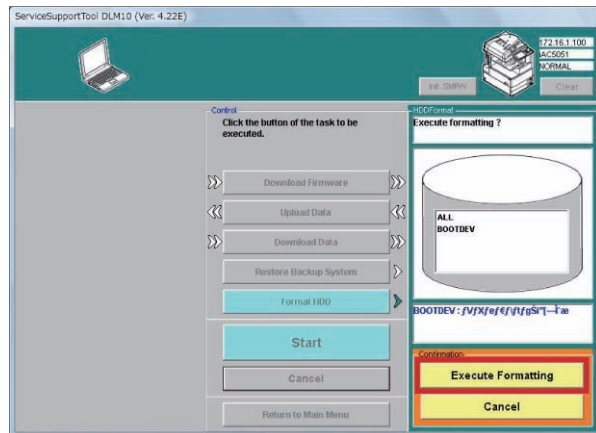
F-6-43

5) Select "BOOTDEV" or "ALL" to click "Start".



F-6-44

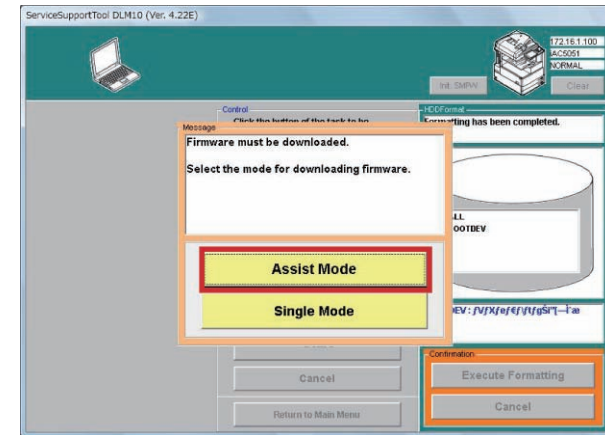
6) Click "Execute Format" button.



F-6-45

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-6-46

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:

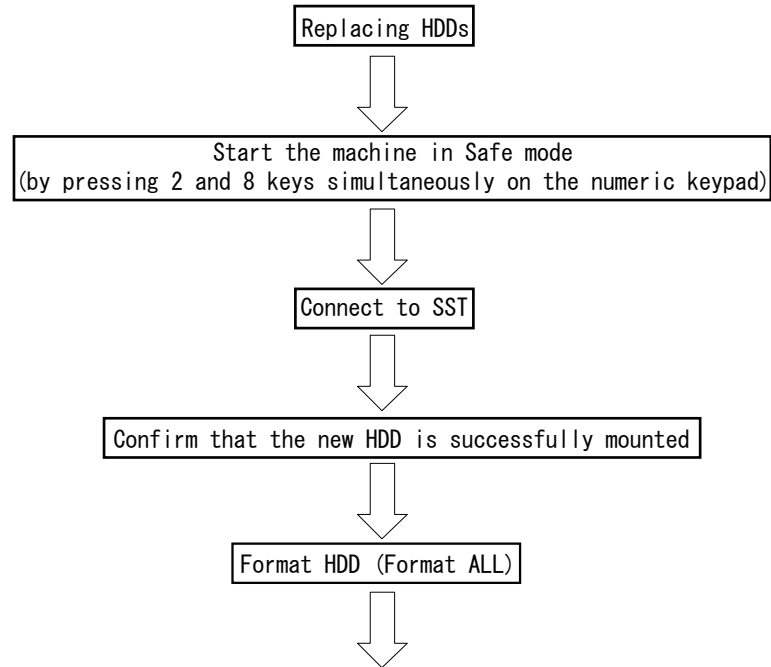
Restarting takes more time after HDD is formatted and the system software is downloaded (to write the downloaded software).

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.

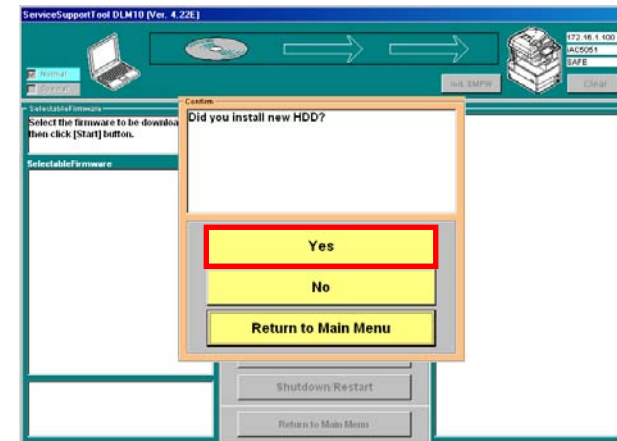
The figure below shows the abbreviated steps.



Follow the steps as described in Format ALL section.

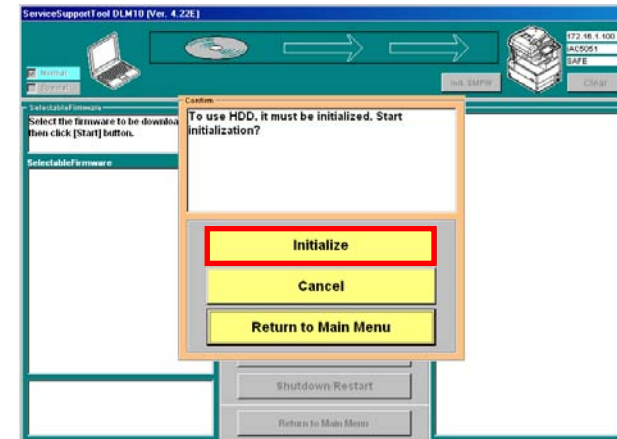
F-6-47

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-6-48

Click "Yes" and the message is shown, confirming whether to format HDD.



F-6-49

Click "Initialize" button to initialize HDD (Format ALL). Follow the steps described in Format ALL section to download the system software.

Backup

Overview

At the time of replacing controller PCBs, the backup function enables to save data held in the PCB to migrate them to the new PCB.

- Backup via SST

Backup data	Downloaded/Uploaded file names
Backup data RAM	SramImg.bin(to be uploaded / downloaded)
MEAP applications	MeapBack.bin(to be uploaded / downloaded)
For investigation in Dev	Sublog.bin((Downloadable))
Service Print	The text file of the contents which You output to paper with a service mode(Downloadable).

T-6-12

- 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.

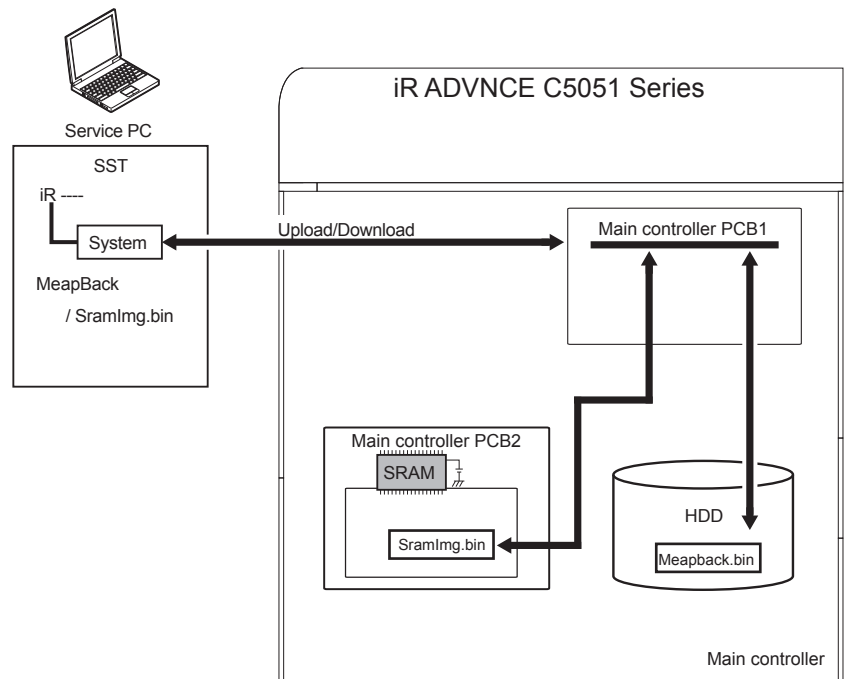
Before replacing the Main Controller PCB 2, upload SramImg.bin. By downloading SramImg.bin after replacement, the new Main Controller PCB 2 inherits the data including Service mode stored in the old PCB

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:

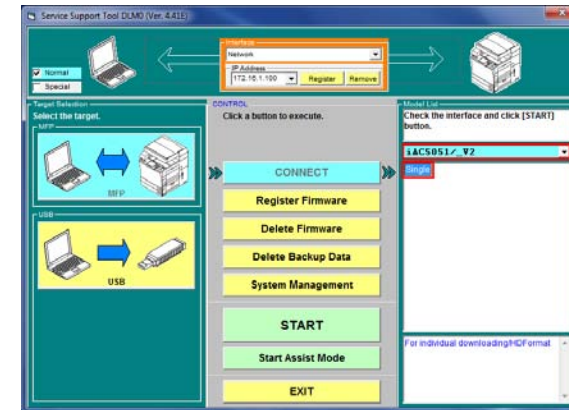
- When the Canon quality-appointed staff determines the need for an analysis of debug log by the R&D department, we ask the field to collect log for an investigation to determine the cause.
- The backup data can be downloaded only on the machine from which the data were uploaded.
- This machine does not use SramRCON and SramDcon



F-6-50

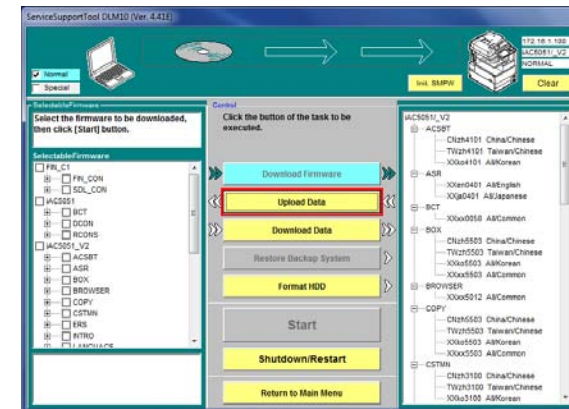
Listed below are the sample steps to upload MeapBack.

- 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".



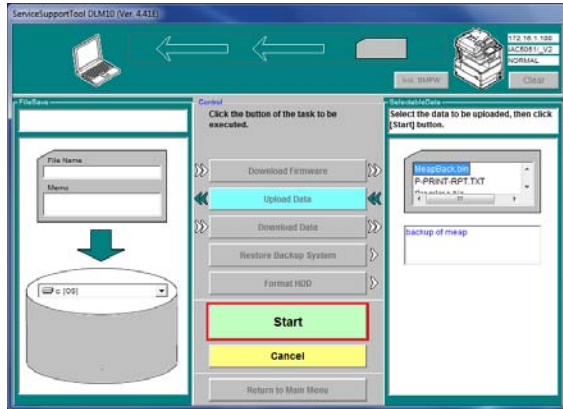
F-6-51

- 4) Click "Upload Data" button.



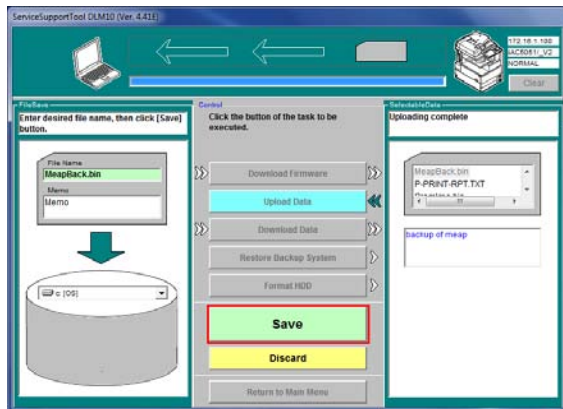
F-6-52

5) Select "MeapBack.bin" to click "Start" button.



F-6-53

6) Enter the file name to be saved and comments when necessary. Click "Save" button.



F-6-54

7) Click "OK" button.

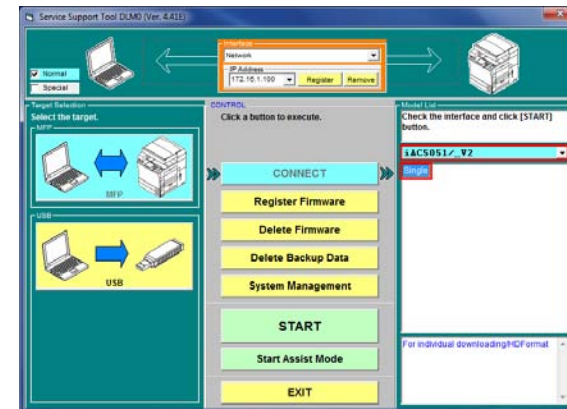
Steps to Download Data

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.

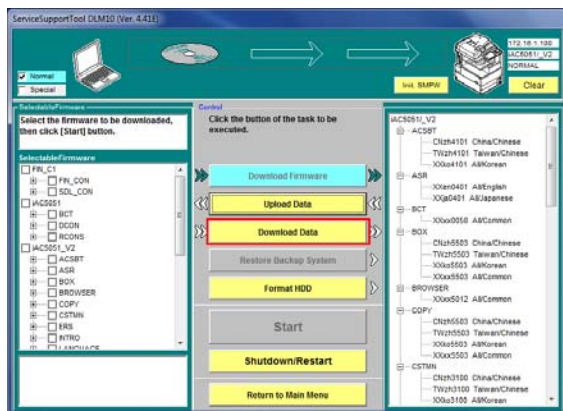
Listed below were the sample steps to download MeapBack.

- 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.



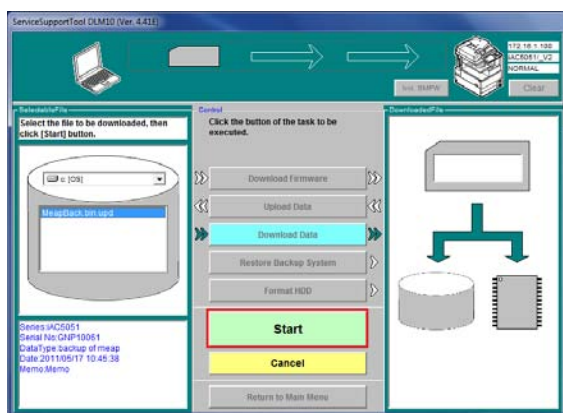
F-6-55

4) Click "Download Data" button.



F-6-56

5) Select the data to be downloaded and click "Start" button.



F-6-57

6) When the data are successfully downloaded, click "OK" button.

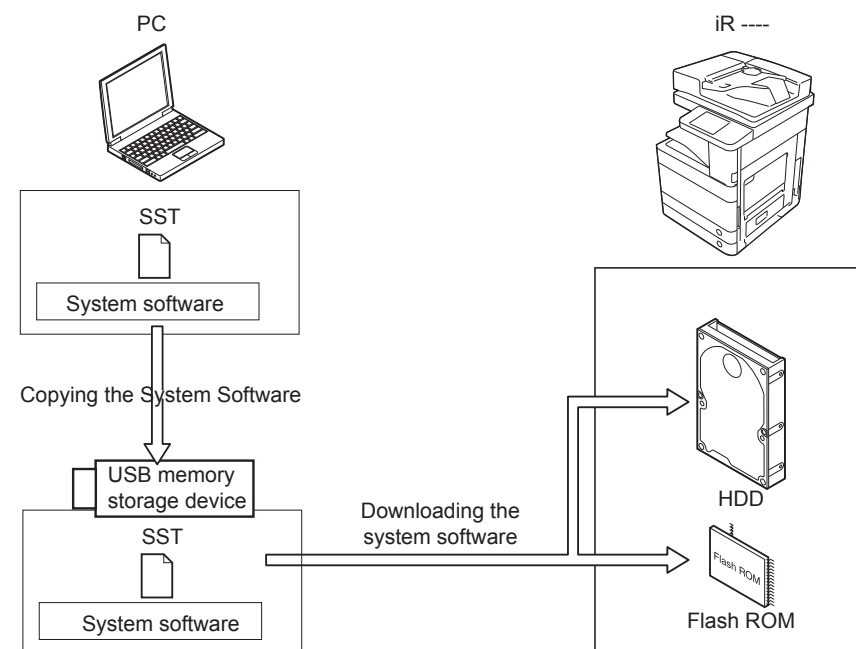
7) Restart the machine

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-6-58

When downloading the system software, enter any of Download modes below.

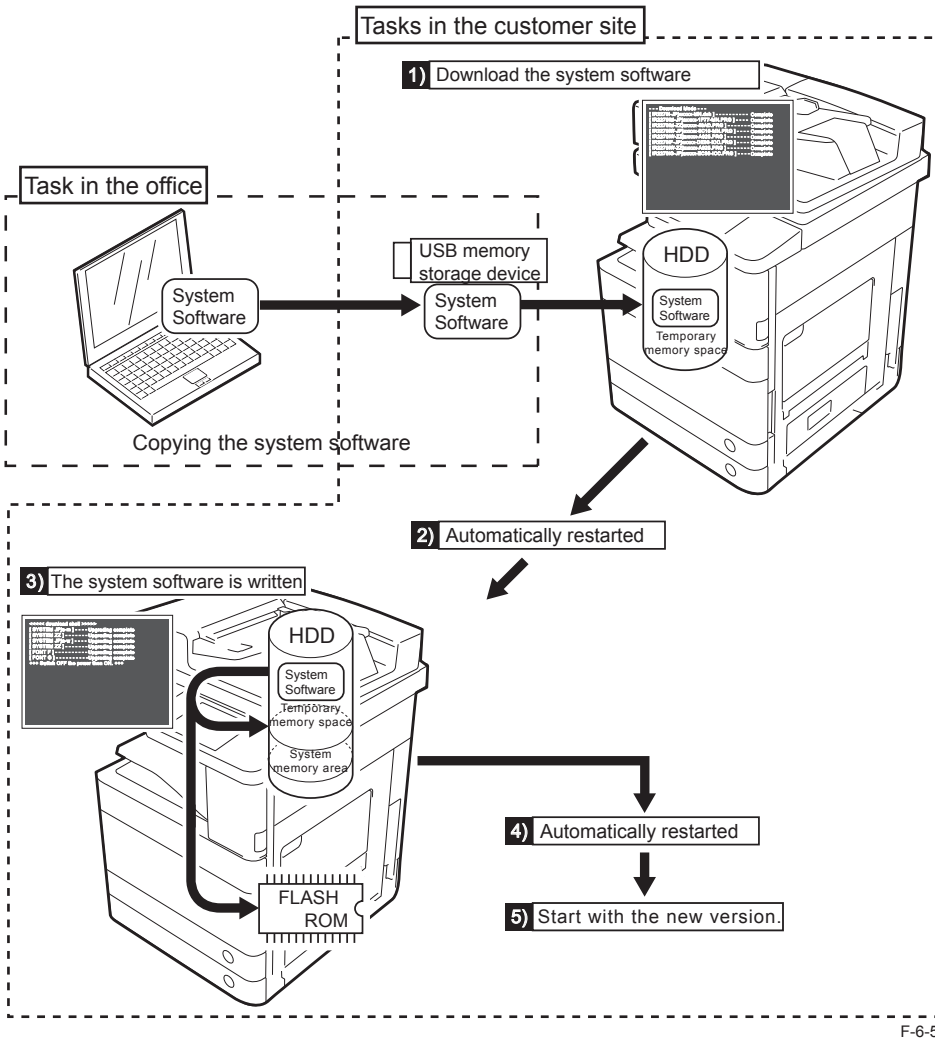
- Normal mode (recommended)
Select COPIER > FUNCTION > SYSTEM > Download in Service mode and press [OK].
- Safe mode (only when any system error occurs or the machine is unable to start normally; turn ON the main power switch by pressing 2 and 8 keys simultaneously on the numeric keypad)

● 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-6-59

■ 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.

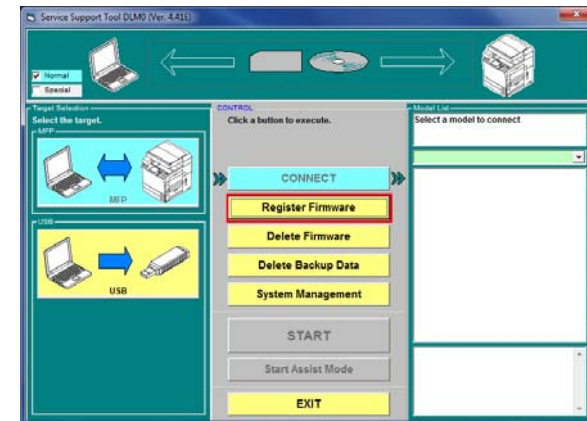
Preparation

Requirements:

- PC with SST Ver. 4.41 or later installed
- The system CD for this machine

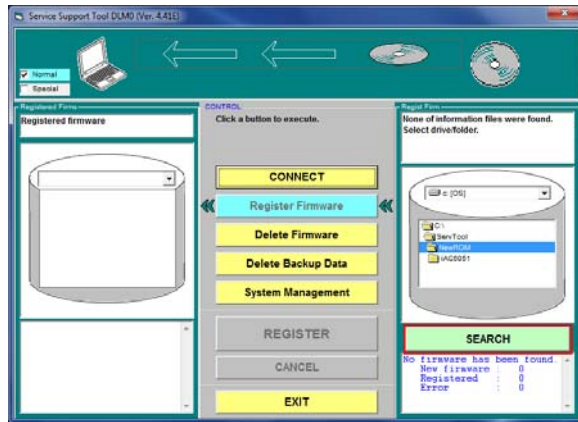
Steps to copy the system software

- 1) Start the PC.
- 2) Set the system CD to the PC.
- 3) Start SST.
- 4) Click "Register Firmware" button.



F-6-60

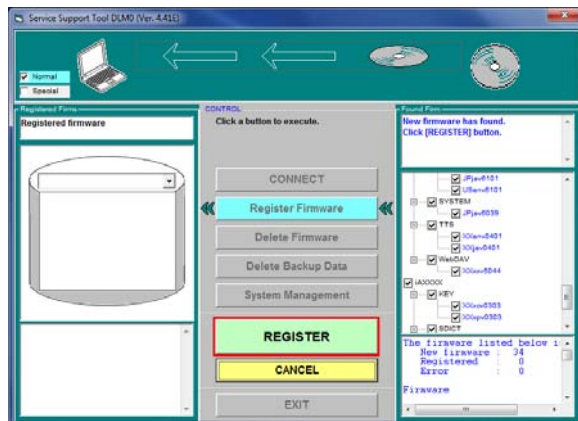
5) Select the drive where the system CD is set and click “Search” button.



F-6-61

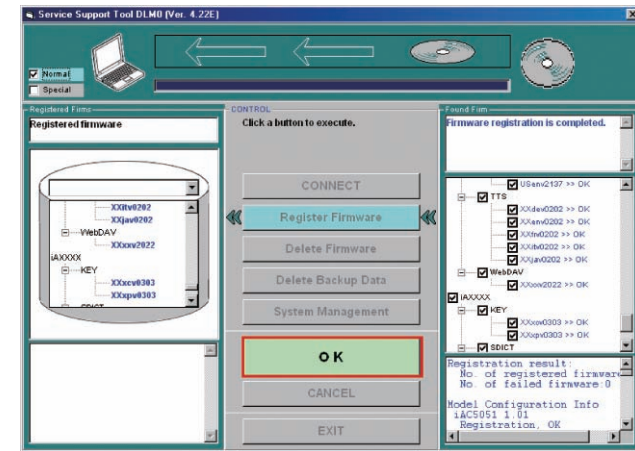
6) The list of the system software components stored in the system CD is shown on the screen.

Uncheck the box(es) of unnecessary folder(s) and/or system software component(s) and click “Copy” button.



F-6-62

7) The message is shown when the system software is copied. Click “OK” button.



F-6-63

● 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).

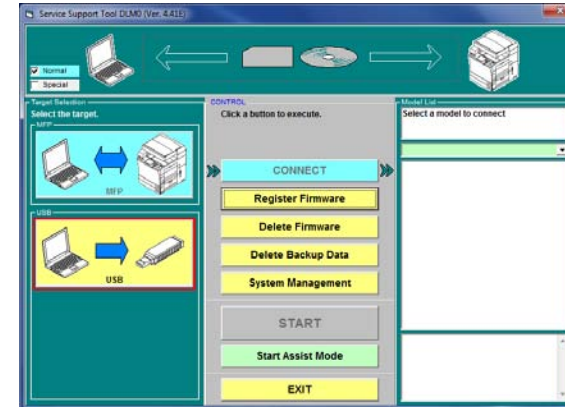
Format: FAT (FAT 16), FAT32 (NTFS and HFS are not supported). The memory is formatted in a partition (multiple partitions are not supported)

Unavailable USB memory: memory that is protected by a password or the encryption technology.

Steps to copy the system software

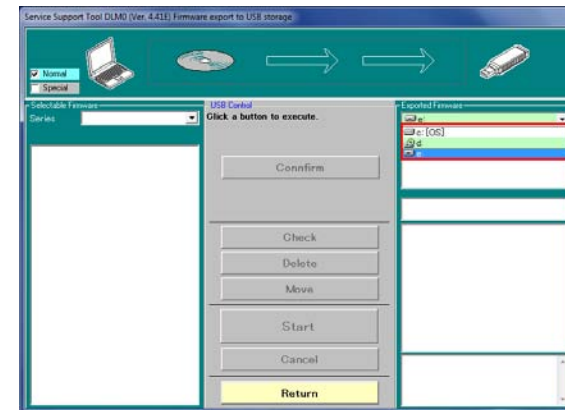
- 1) Start the PC.
- 2) Insert the USB memory storage device storage device to the slot of the PC.
- 3) Start SST.

- 4) Click the USB icon shown in "Select the target" Screen.



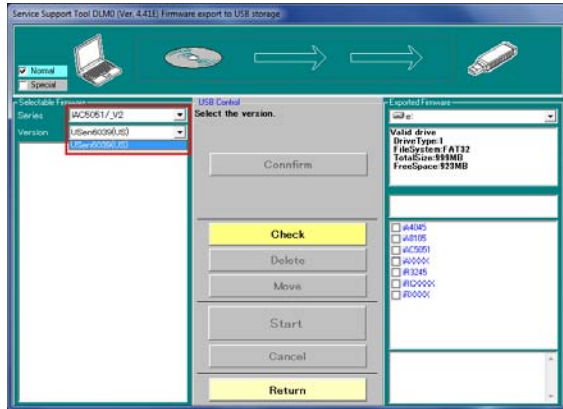
F-6-64

- 5) Select the drive (removable disk) where the USB memory storage device storage device is inserted.



F-6-65

6) Select "Series" and "Version" (the System Version).



F-6-66

NOTE:

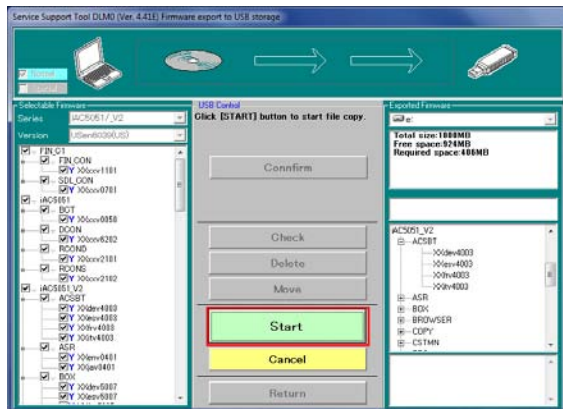
The signs shown in the field of "Firmware registration static" indicate the following:

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.

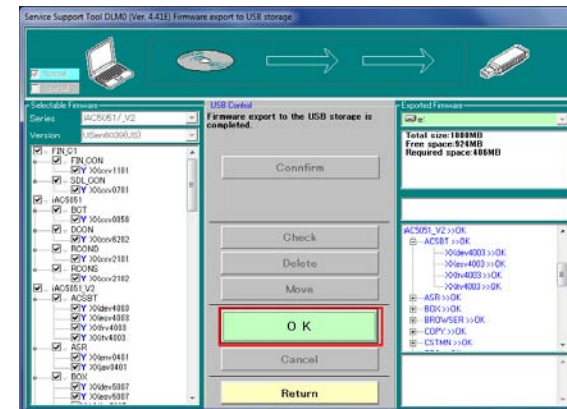


F-6-67

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-6-68

Connection

CAUTION:

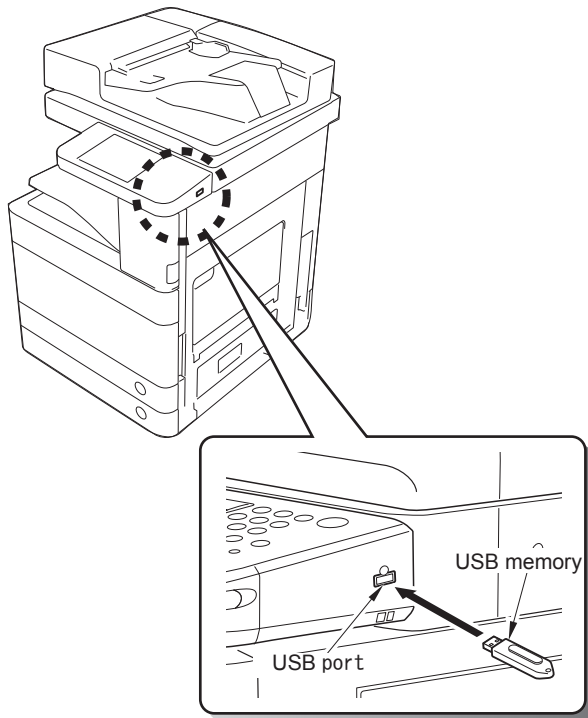
This machine does not communicate with SST once it recognizes a USB memory storage device; therefore, SST and a USB memory storage device cannot be used at the same time.

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-6-69

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-6-70

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-6-71

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.

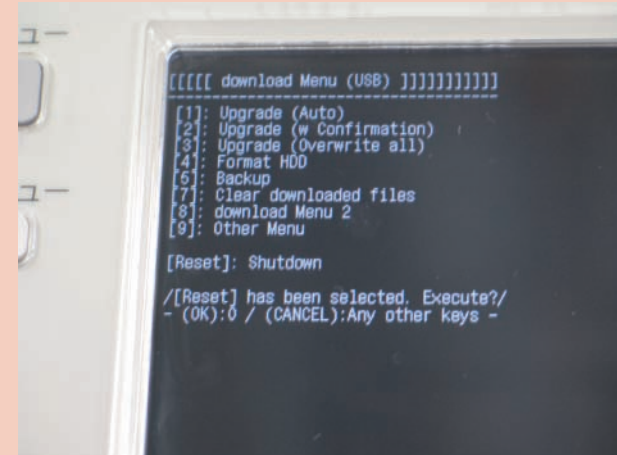
If the machine fails to be started, replace the HDD and then download the system software.

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-6-72

■ 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-6-73

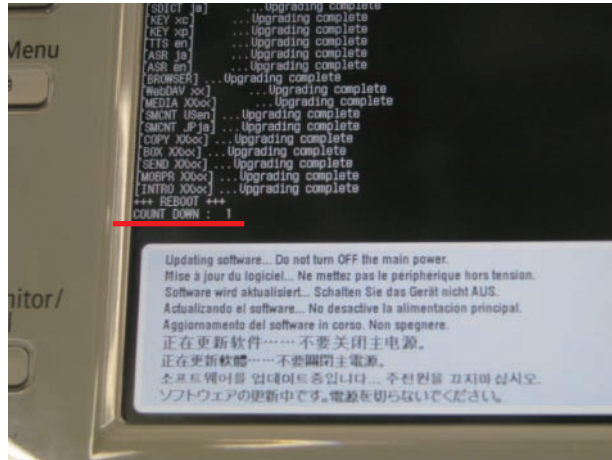
During downloading, download status is displayed on the Control Panel.



F-6-74

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-6-75

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-6-76

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.

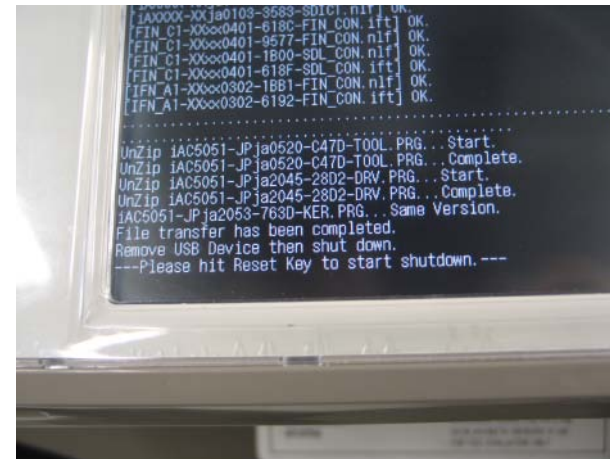
Press the key on the Control Panel.

[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-6-77



F-6-78

- 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.

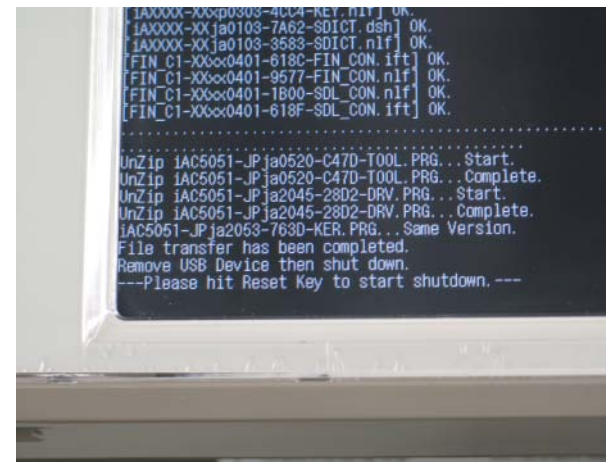
CAUTION:

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.



F-6-80

- 4) Press the "Reset" key.
Shutdown sequence is executed.
- 5) Once the message on the touch panel disappears, turn OFF the Main Power Switch.
- 6) Remove the USB memory storage device.
- 7) 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.

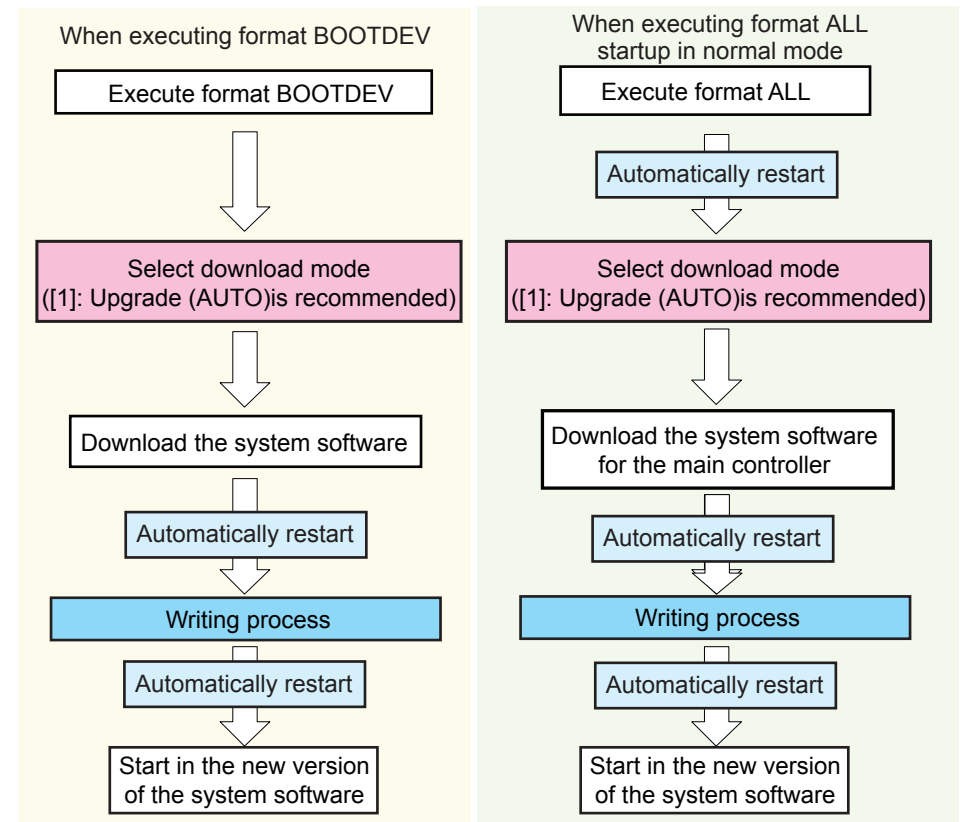
- BOOTDEV: to format the system software storage area on HDD.
 - In the case of normal upgrading by cleaning the storage area of the system software
 - User data will not be deleted.

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.

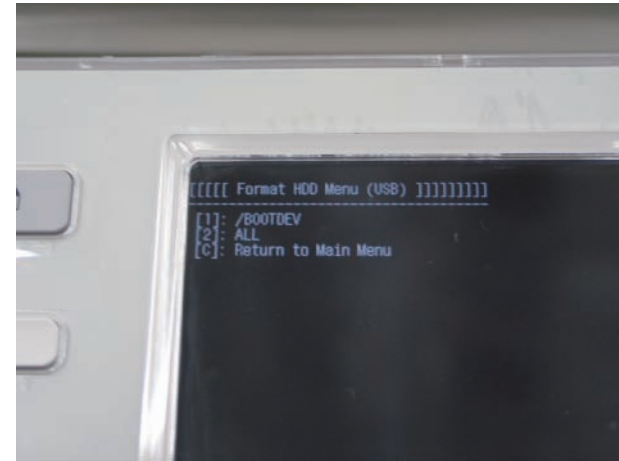
```
[[[[[ download Menu (USB) ]]]]]]]]]]]
```

```
-----
[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 -
```

F-6-82

- 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

F-6-84

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

F-6-85

Other Menu

[9]: Other Menu

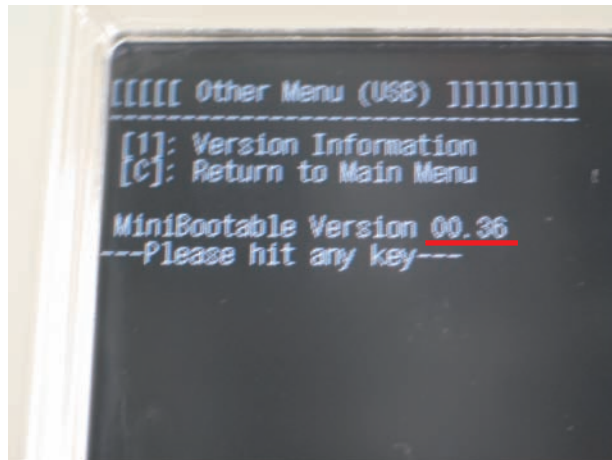
This mode displays other menu.

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:

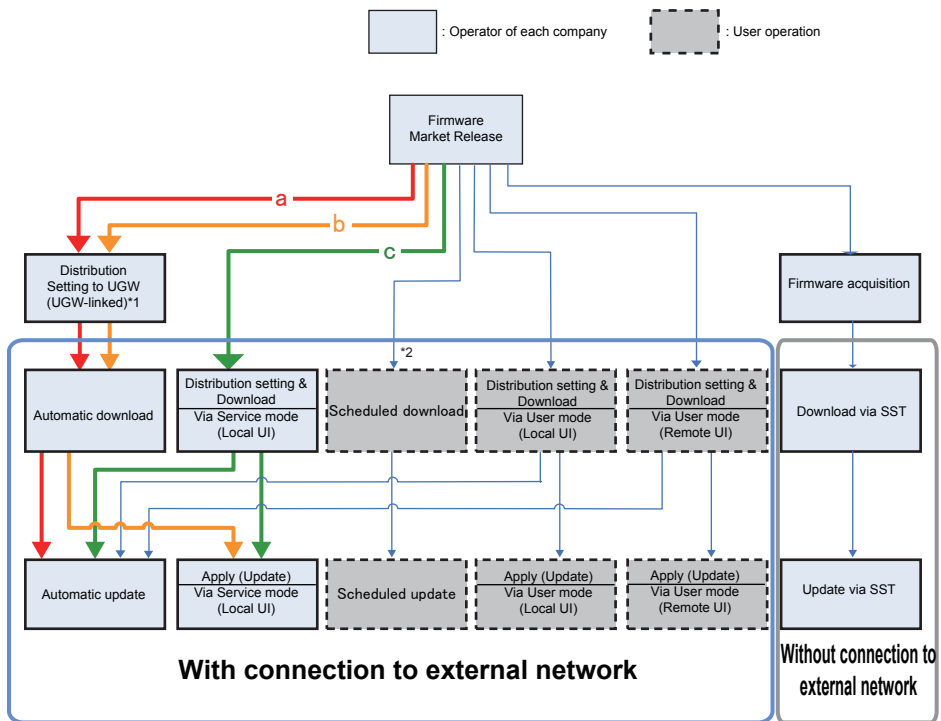
Image Reader has 2 types of system software: RCOND and RCONS. Downloading both RCOND and RCONS results in writing of only the system software that complies with the Image Reader installed in the Host Machine. When downloading the system software that does not comply with the Image Reader installed in 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)



*1: Schedules for UGW-linked distribution are maintained on CDS. F-6-87

*2: Functioning supports periodical update with a device after firmware version V50.00.

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

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 [Scheduled Update]
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	Yes	Yes	-	-	-	Yes

T-6-14

- For Install of Application

Installation Method	Network Settings	Enabling [Install Application/Options] Button of User Mode
LMS-linked Installation	Yes	-
LMA-linked installation via Local UI	Yes	Yes
LMS-linked installation via Remote UI	Yes	Yes

T-6-15

● 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"

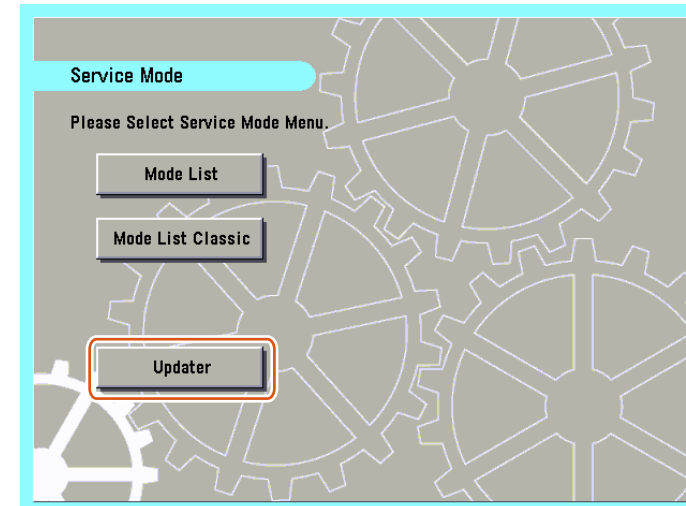
NOTE:

"External Network" here means the network connecting the device to CDS via Internet.

2. Confirming URL Setting of Distribution Server

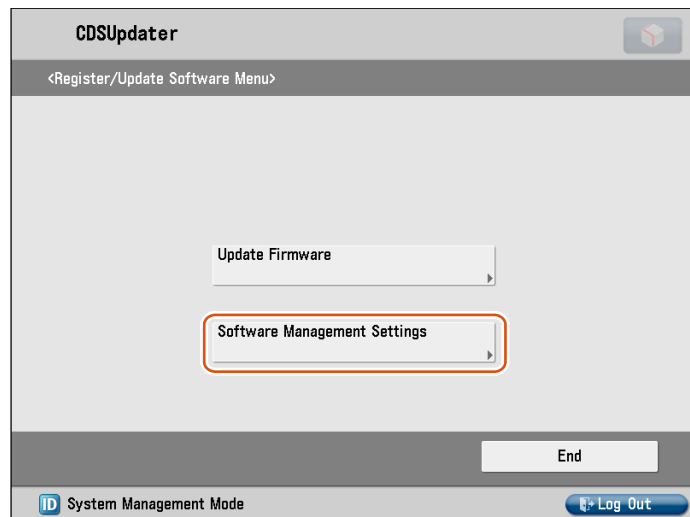
This section describes how to confirm the URL setting of the distribution server.

1. Start [Service Mode] at Level 1.
 - 1). Press [Setting/Registration (User Mode)] button on the control panel.
 - 2). Press [2] and [8] buttons at a time on the control panel.
 - 3). Press [Setting/Registration (User Mode)] button on the control panel.
 - 4). [Service Mode] screen is shown.
2. Press [Updater] button.



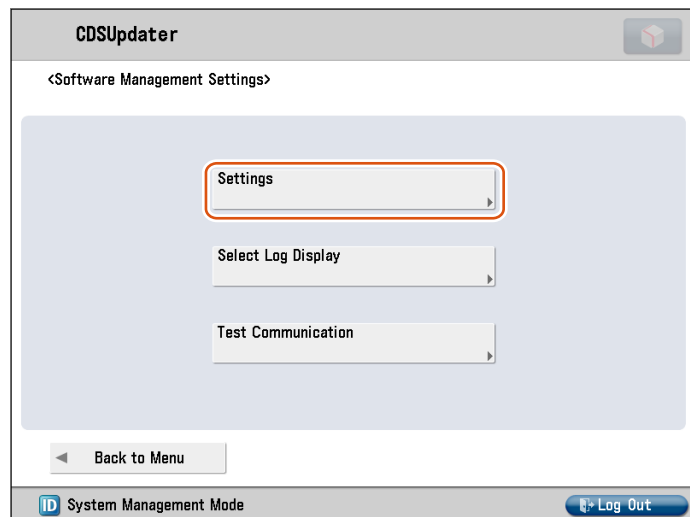
F-6-88

3. Press [Software Management Settings] button.



F-6-89

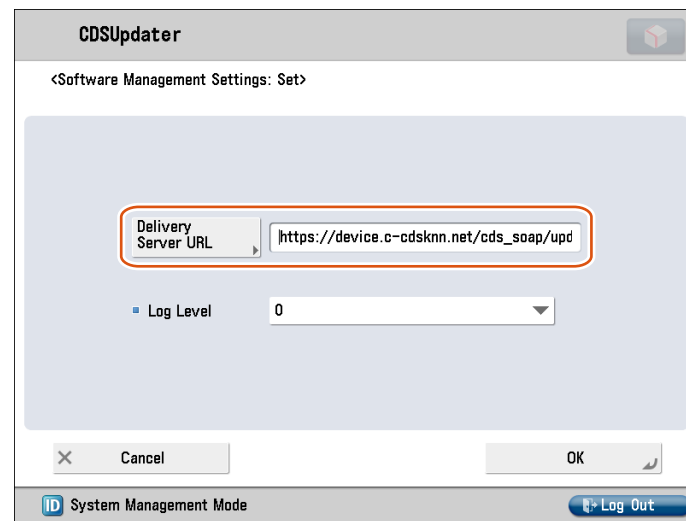
4. Press [Settings] button.



F-6-90

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.



F-6-91

6. Press [OK] to set the entered items. Now the URL of the distribution server is successfully set.

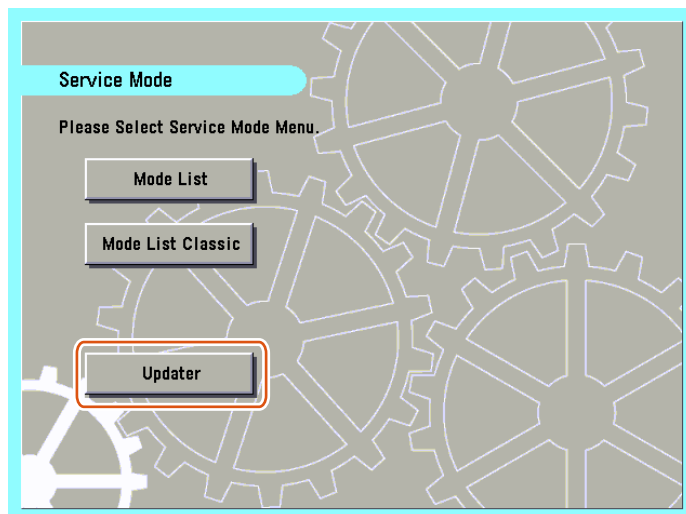
3. Communication Test

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.

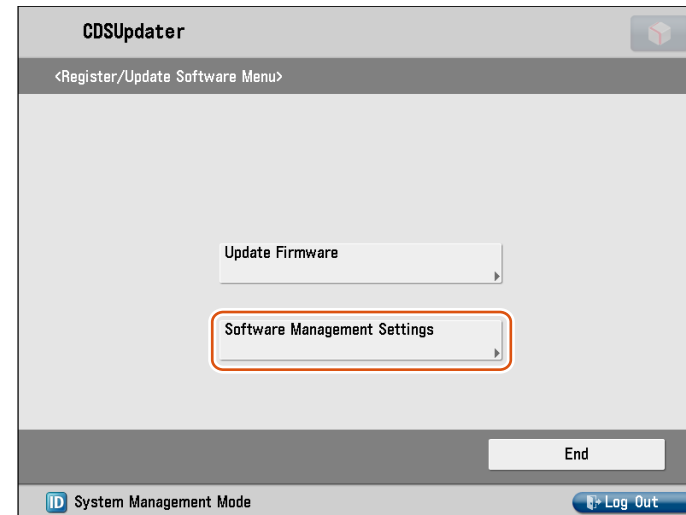
- 1). Press [Setting/Registration (User Mode)] button on the control panel.
- 2). Press [2] and [8] buttons at a time on the control panel.
- 3). Press [Setting/Registration (User Mode)] button on the control panel.
- 4). [Service Mode] screen is shown.

2. Press [Updater] button.



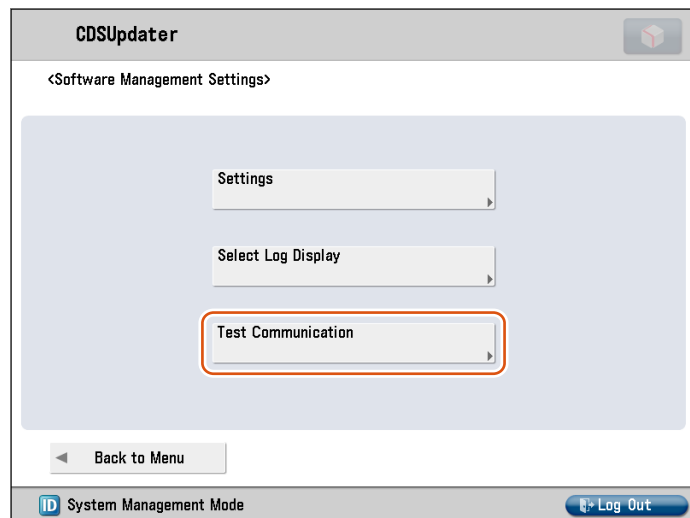
F-6-92

3. Press [Software Management Settings] button.



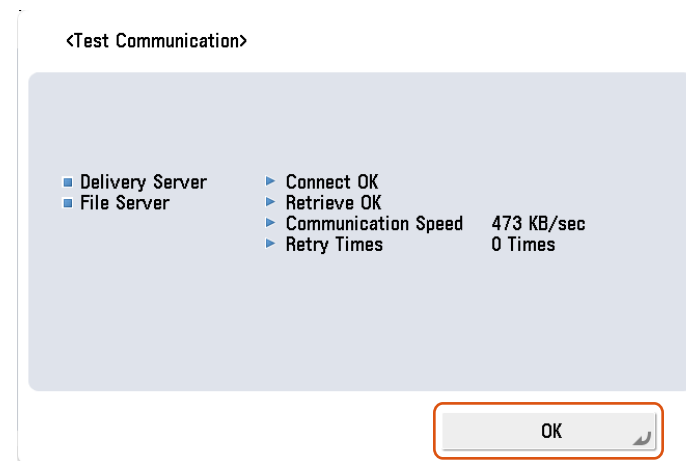
F-6-93

4. Press [Test Communication] button.



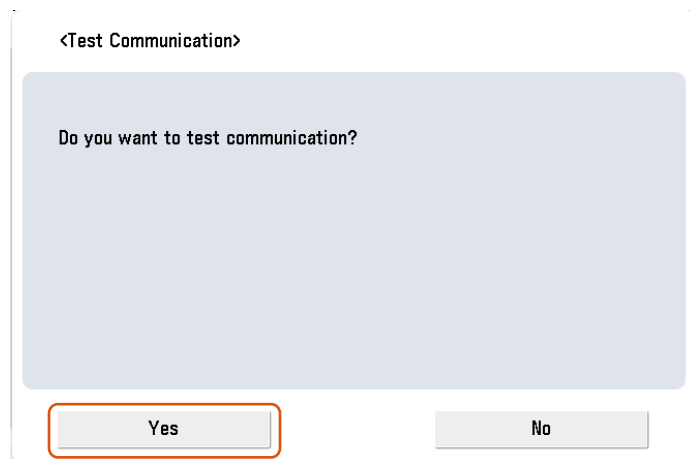
F-6-94

6. Upon the communication test completed, the communication test result screen is shown.
Press [OK] button to exit this operation.



F-6-96

5. Press [Yes] button.



F-6-95

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).

● 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.

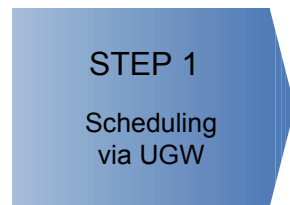
Service Technician	Setting of Device Service Mode (Level 1)	COPIER > OPTION > FNC-SW > CDS-UGW (0 -> 1)
	Setting of UGW WebPortal	In [Customer Management] screen, set [Do not distribute firmware] to [Distribute firmware].
Sales Company's HQ	Setting of Authorities on UGW WebPortal	See "Analysis>Firmware 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.

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)

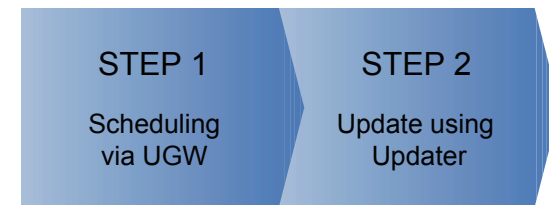
See Chapter 1 “Limitations and Cautions” of this manual for more detailed information.

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-6-98

STEP 1: Scheduling via UGW

The firmware distribution schedule to the certain device should be set on UGW. See “UGW-linked Download” in Operation Manual of Content Delivery System (for Firmware Distribution) for details.

NOTE:

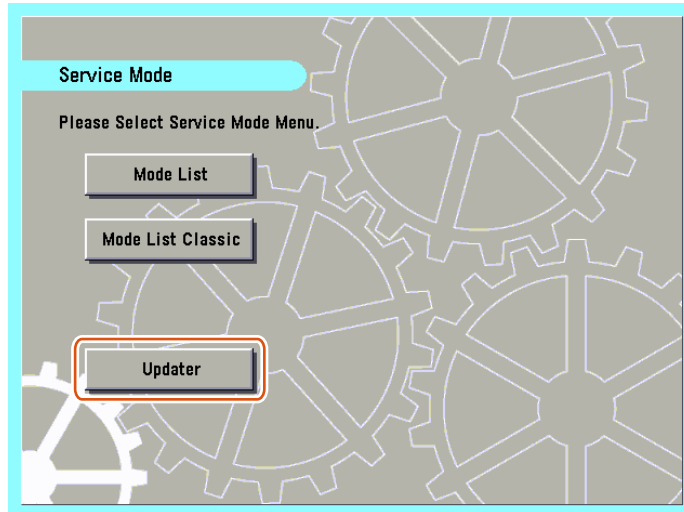
The firmware downloaded by scheduling via UGW can be checked/deleted from User mode, but cannot be updated. If a user download the other firmware, the firmware downloaded with “UGW-linked Download” is overwritten.

STEP 2: Update using Updater

The firmware downloaded on the device can be updated using Updater functions.

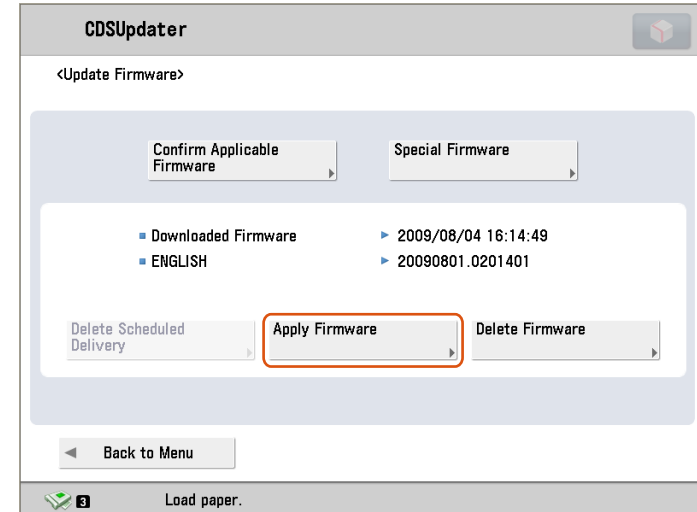
1. Start [Service Mode] at Level 1.
 - 1). Press [Setting/Registration (User mode)] button on the control panel.
 - 2). Press [2] and [8] buttons at a time on the control panel.
 - 3). Press [Setting/Registration (User mode)] button on the control panel.
 - 4). [Service Mode] screen is shown.

2. Press [Updater] button.



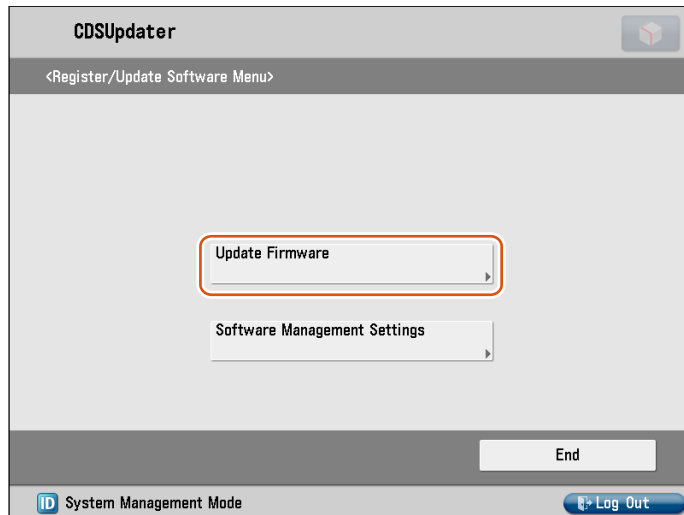
F-6-99

4. Press [Apply Firmware] button.



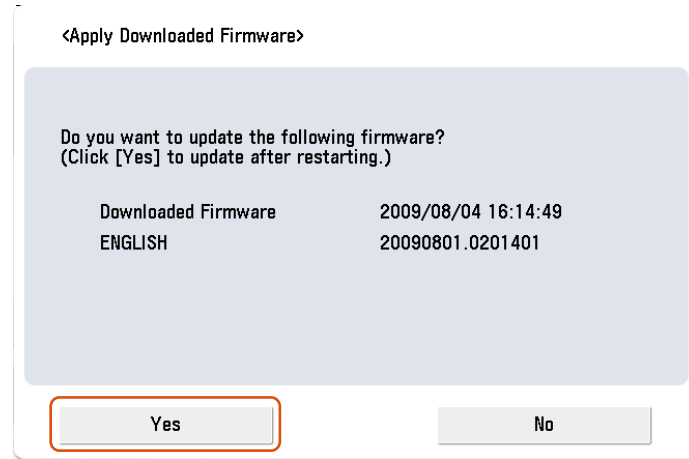
F-6-101

3. Press [Update Firmware] button.



F-6-100

5. Confirm the downloaded firmware and press [Yes] button.



F-6-102

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)

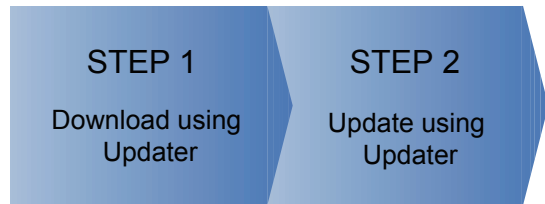
See Chapter 1 "Limitations and Cautions" of this manual for more detailed information.

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-6-103

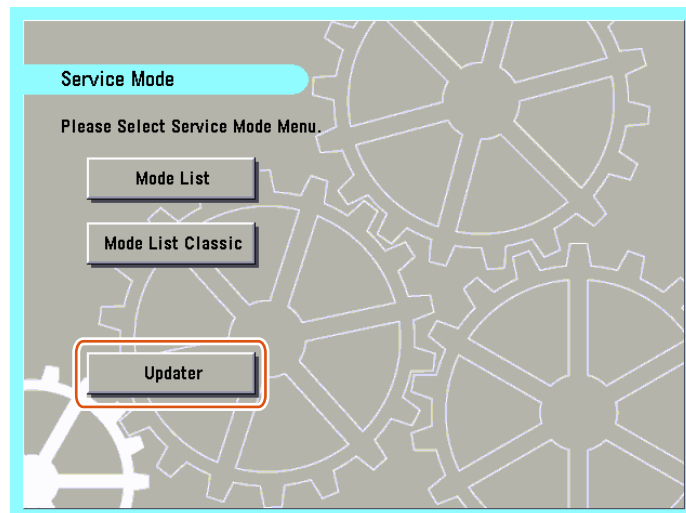
STEP 1: Download using Updater

The firmware can be downloaded from CDS to the device using Updater.

1. Start [Service Mode] at Level 1.

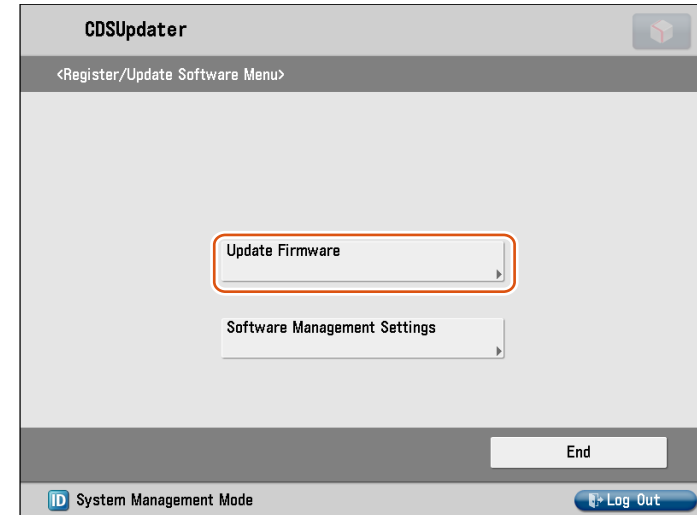
- 1). Press [Setting/Registration (User mode)] button on the control panel.
- 2). Press [2] and [8] buttons at a time on the control panel.
- 3). Press [Setting/Registration (User mode)] on the control panel.
- 4). [Service Mode] screen is shown.

2. Press [Updater] button.



F-6-104

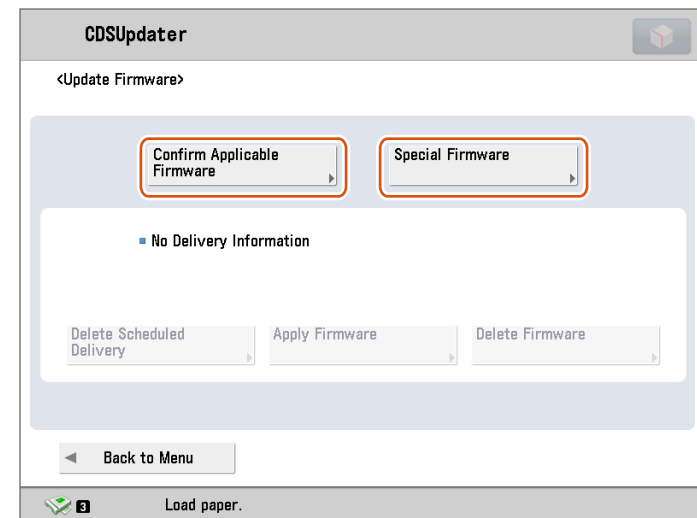
3. Press [Update Firmware] button.



F-6-105

4. Confirm the firmware to be updated in either of the following 2 ways.

- To update to the official edition, press [Confirm Applicable Firmware] button and go to Step 6.
- To update to the individual response edition, press [Special Firmware] and go to Step 5.



F-6-106

5. [Special Firmware] screen is shown as below. Enter the fields and press [OK] button.

F-6-107

- [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.

F-6-108

- [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.
- Comments:** A text input field.
- Disclaimer:** A small text block stating: '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:** 'System Management Mode' and a 'Log Out' button.

F-6-109

- [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]

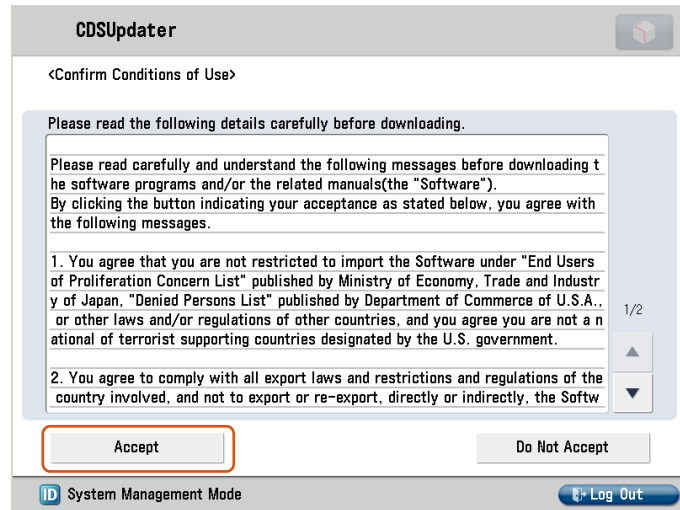
[Updated Module Only]

- 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

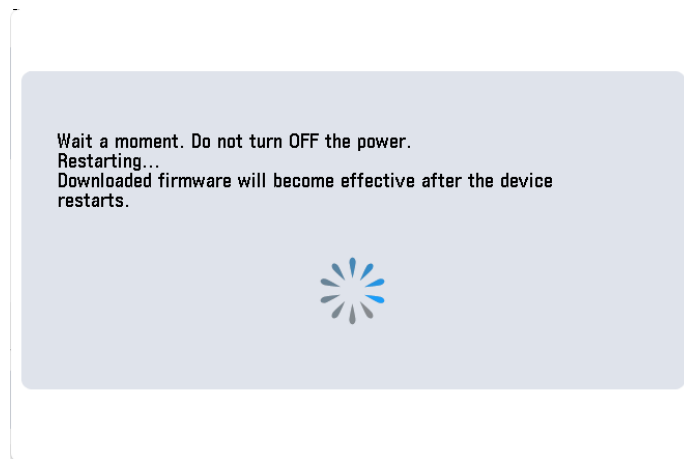
8. Confirm Export Criteria screen is shown as below. Check the contents and press [Accept] button.



F-6-110

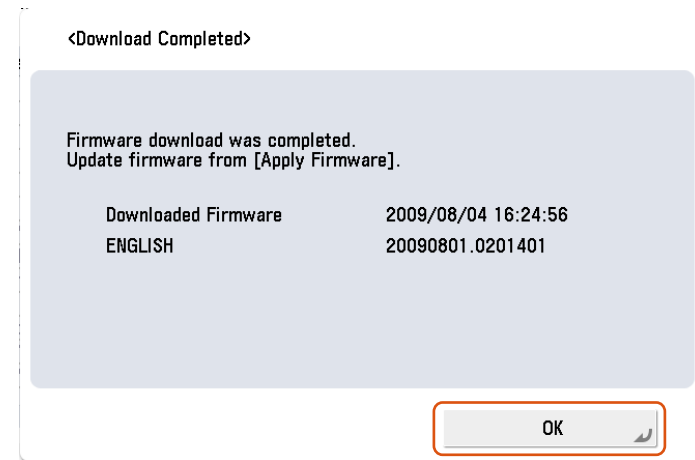
9. One of the screens below is shown according to the setting.

- 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.



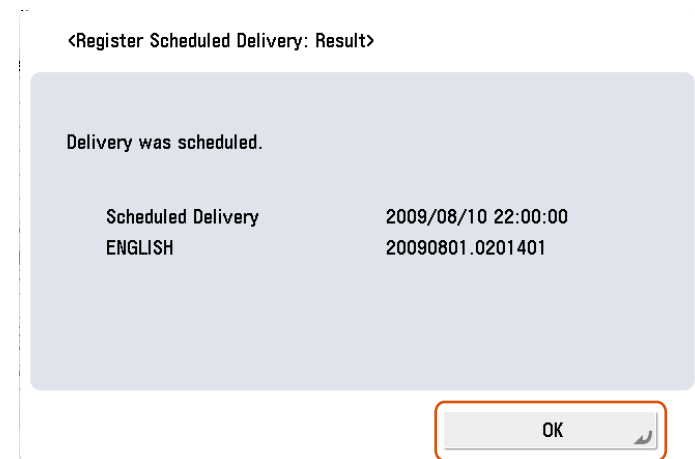
F-6-111

- 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-6-112

- 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.



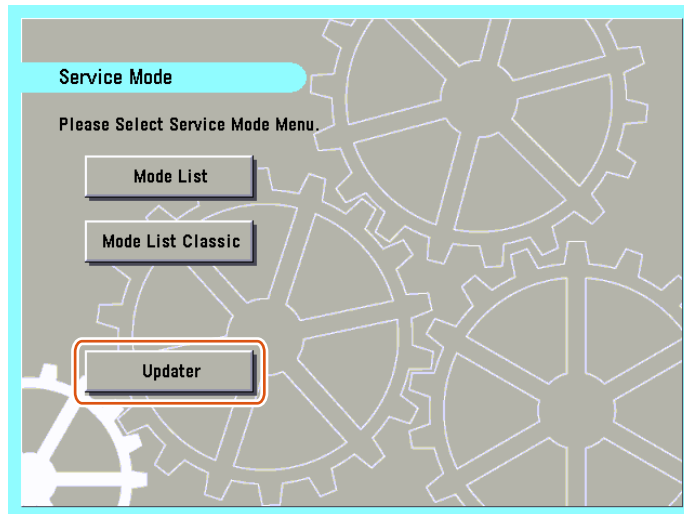
F-6-113

STEP 2: Update using Updater

The firmware downloaded to the device can be updated using Updater functions.

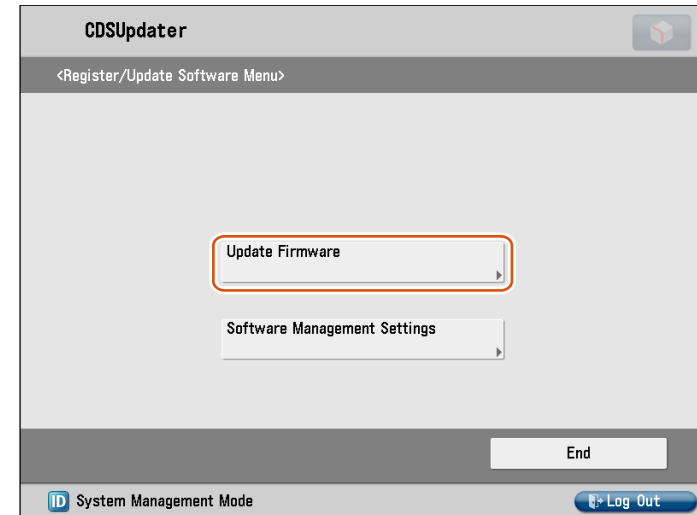
When Timing to Apply is set to [Auto] in Distribution Setting in STEP 1, the firmware is updated automatically. Only when Timing to Apply is set to [Manual], follow the steps below to update the firmware.

1. Start [Service Mode] at Level 1.
 - 1). Press [Setting/Registration (User mode)] button on the control panel.
 - 2). Press [2] and [8] buttons at a time on the control panel.
 - 3). Press [Setting/Registration (User mode)] button on the control panel.
 - 4). [Service Mode] screen is shown.
2. Press [Updater] button.



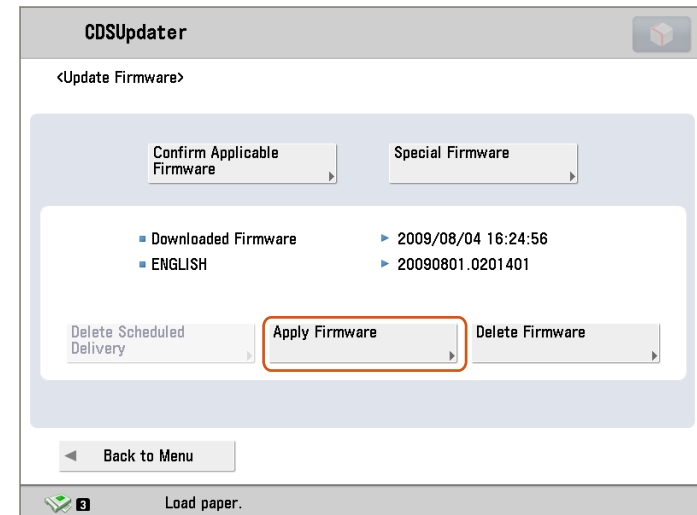
F-6-114

3. Press [Update Firmware] button.



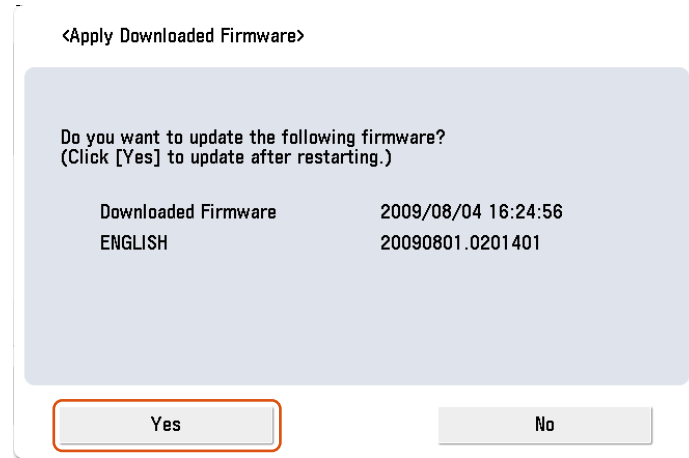
F-6-115

4. Press [Apply Firmware] button.



F-6-116

5. Confirm the downloaded firmware and press [Yes] button.



F-6-117

6. The firmware is applied to the device. The device is automatically restarted when the firmware is successfully applied.

7. When the device is restarted, confirm the version of the firmware.

- 1). Press [Check Counter Key] button on the control panel.
- 2). Press [Check Device Configuration] button.
- 3). Confirm if the updated firmware version corresponds to [Controller Version].

Now the firmware is successfully updated in the method of "Manual Download and Update".

CAUTION:

[Devices without Wait for EOJ (end of job) Function]

- Firmware update will delete print jobs in the queue. Ensure to notify users of this before you start updating. It is recommended to perform firmware update during non-business hours.

[Devices with Wait for EOJ Function]

- Firmware update will not be triggered when any of the following jobs remains in the queue.

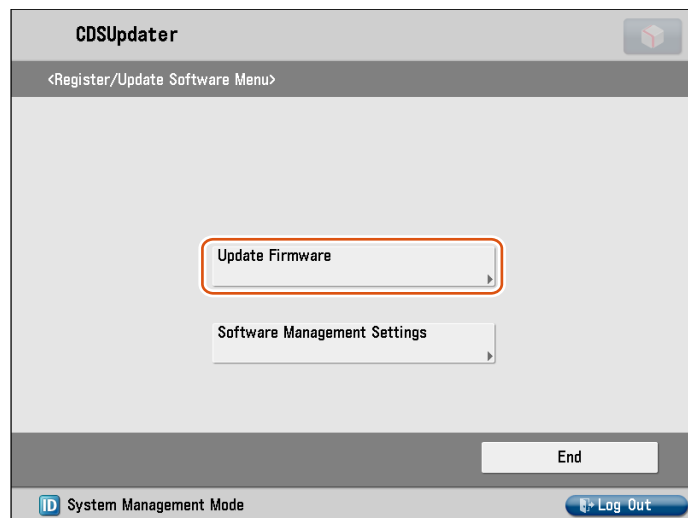
- Print
- Scan
- Fax (except I-FAX; this function is enabled for I-FAX only during Print/Scan operation)

See Chapter 1 "Limitations and Cautions" of this manual for more detailed information.

Deleting Firmware Distribution Schedule

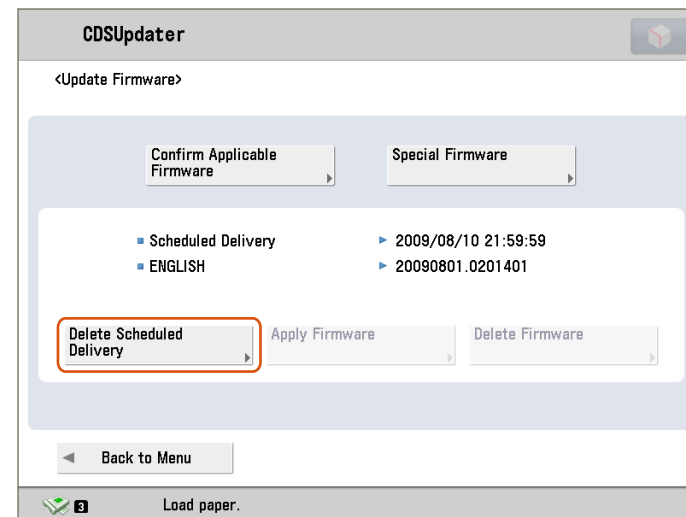
This section describes how to delete firmware distribution schedule set by Updater.

1. Start [Service Mode] at Level 1.
 - 1). Press [Setting/Registration (User Mode)] button on the control panel.
 - 2). Press [2] and [8] button at a time on the control panel.
 - 3). Press [Setting/Registration (User Mode)] button on the control panel.
 - 4). [Service Mode] screen is shown.
2. Press [Updater] button.
3. Press [Update Firmware] button.



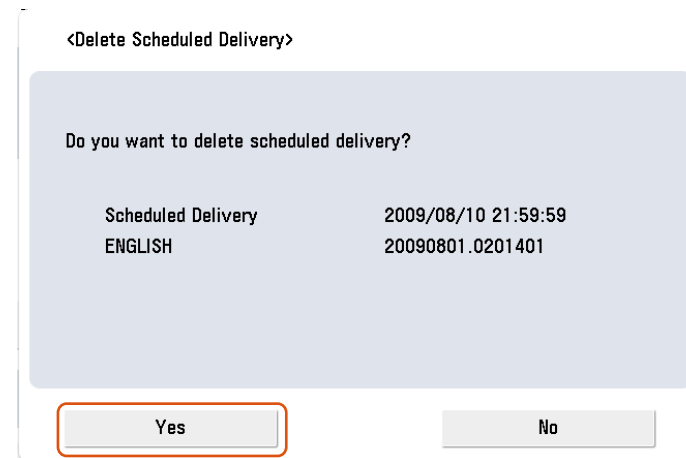
F-6-118

4. Press [Delete Scheduled Delivery] button.



F-6-119

5. Confirm the contents of the distribution schedule and press [Yes] button.



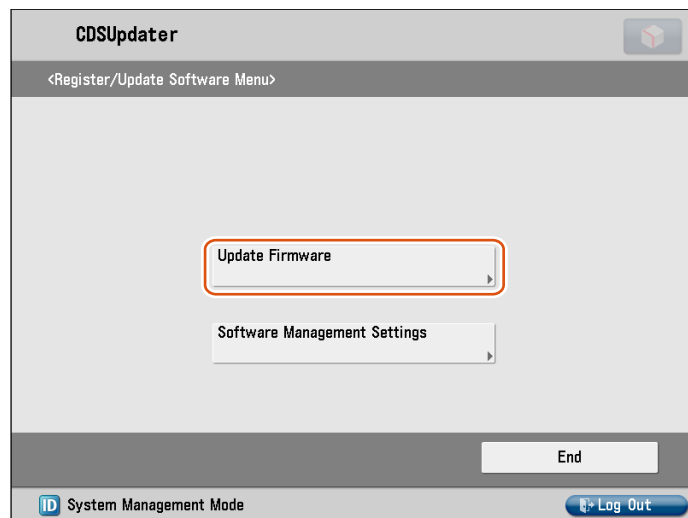
F-6-120

6. Confirm the result of deletion shown on the screen and press [OK] button. Now the firmware distribution schedule is successfully deleted.

Updating Downloaded Firmware (Applying Firmware)

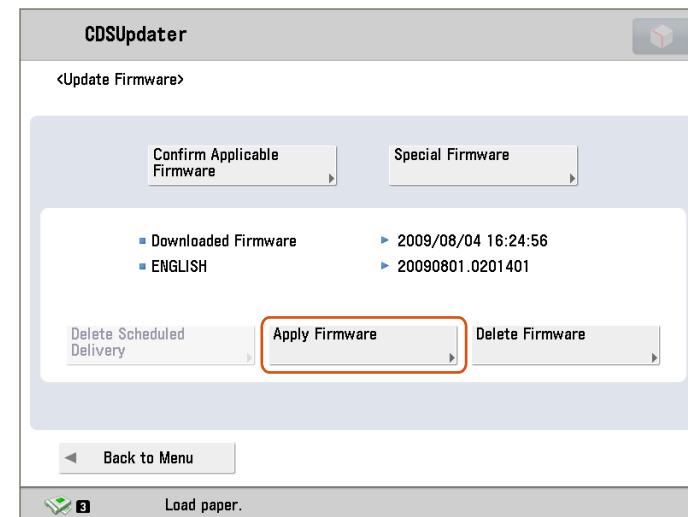
This section describes how to update the downloaded firmware.

1. Start [Service Mode] at Level 1.
 - 1). Press [Setting/Registration (User mode)] button on the control panel.
 - 2). Press [2] and [8] buttons at a time on the control panel.
 - 3). Press [Setting/Registration (User mode)] button on the control panel.
 - 4). [Service Mode] screen is shown.
2. Press [Updater] button.
3. Press [Update Firmware] button.



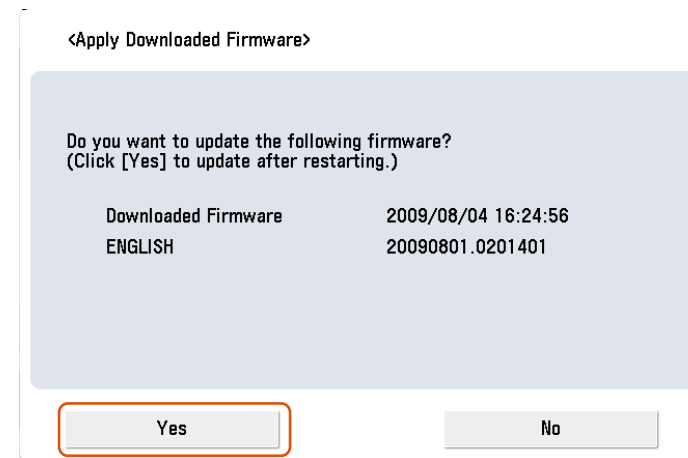
F-6-121

4. Press [Apply Firmware] button.



F-6-122

5. Confirm the downloaded firmware and press [Yes] button.



F-6-123

6. The firmware is applied to the device. The device is automatically restarted when the firmware is successfully applied.
7. When the device is restarted, confirm the version of the firmware.
 - 1). Press [Check Counter Key] button on the control panel.
 - 2). Press [Check Device Configuration] button.

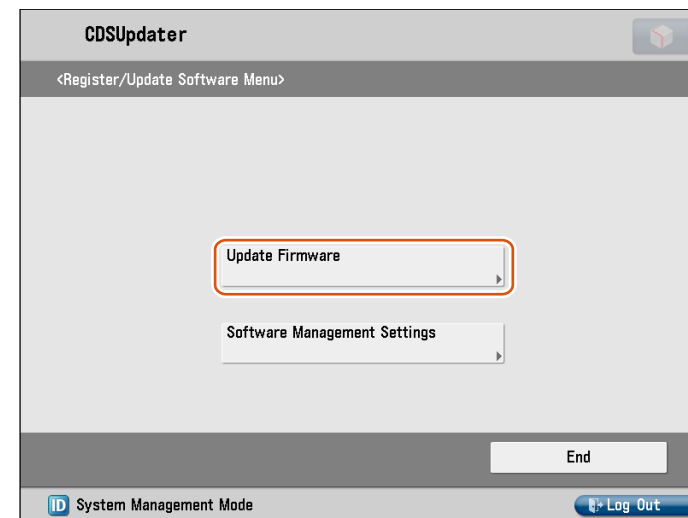
3). Confirm if the updated firmware version corresponds to [Controller Version].

Now the firmware is successfully updated in the method.

■ Deleting Downloaded Firmware

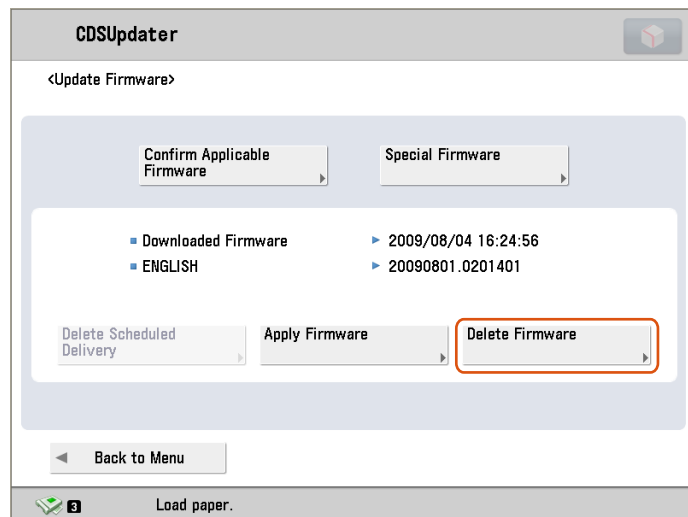
This section describes how to delete the downloaded firmware using Updater.

1. Start [Service Mode] at Level 1.
 - 1). Press [Setting/Registration (User Mode)] button on the control panel.
 - 2). Press [2] and [8] button at a time on the control panel.
 - 3). Press [Setting/Registration (User Mode)] button on the control panel.
 - 4). [Service Mode] screen is shown.
2. Press [Updater] button.
3. Press [Update Firmware] button.



F-6-124

4. Press [Delete Firmware] button.



F-6-125

5. Confirm the downloaded firmware to be deleted and press [Yes] button.



F-6-126

6. Confirm the result of deletion and press [OK] button. Now the downloaded firmware is successfully deleted.

Troubleshooting on Firmware Installation

No.1

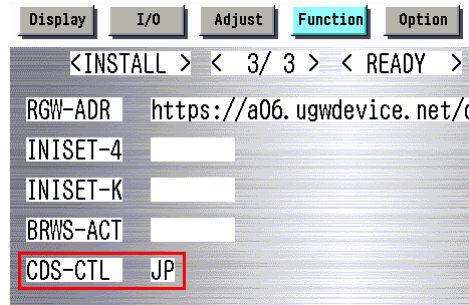
Symptom: I can't find the firmware to be updated using Updater.

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-6-127

Cause: The version currently in use is not available for update.

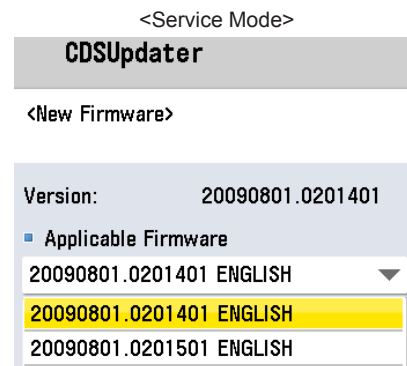
Action: Download the release note from CDS separately to upgrade to the version available for update.

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.



F-6-128



F-6-129

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.

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.

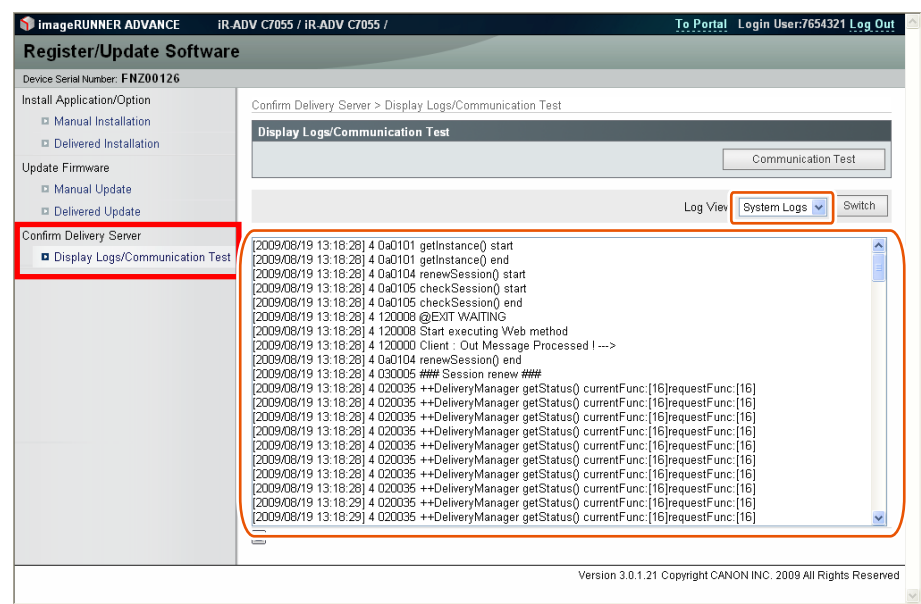
Top page (Remote UI) > [Settings/Registration] > [Management Settings] > [License/Others] > [Register/Update Software] > “Display Logs/Communication Test”

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.



F-6-130

■ 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. https://device.cdsknn.net/ http://cdsknn.net.edgesuite.net/ If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			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(https://device.c-cdsknn.net/cds_soap/updaterif)

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Error Codes

Error Codes displayed on LUI in a device and how to read them.

How to read an error code

Code	Value	Contents
The first digit Error field	8	Error
The second digit Operator	0 1 2 3 4 5	Not defined. CDS server Updater UGW Service person IT administrator (User)
The 3rd - 4th digits Method category	xx	Method
The 5th digit Category code	0 1 2 3 4 5 6 7	Category code
The 6 - 8th digits Description code	000-	See Error code list

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	UP DATER	CDS file server	Network		
8					Error							
	0				Not defined.							
	1				CDS server							
		x	x		Relating method code							
				0	Not categorized							
				0	0	1	No value is set in a mandatory data entry item	-	✓	✓	-	-
				0	0	2	In a string type of a data entry item, digit number and/or character type is/are set against the regulations	-	✓	✓	-	-

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		
				0 0 3	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")		✓	✓	-	-		
				0 0 4	No applicable delivery information exists		✓	-	-	-		
			1	Operation								
				0 0 1	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)		✓	✓	-	-		
				0 0 2	In a notice of delivery-allowed information, an install-set was release to the market, but the market release was stopped during the delivery		✓	-	-	-		
				0 0 3	No mail template file exists		✓	-	-	-		
				0 0 4	The device serial number in the data entry item differs from that in delivery information		✓	-	-	-		
				0 0 5	User is selected as Operator in the data entry items and the retrieval type is other than the latest		✓	-	-	-		
				0 0 6	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)		✓	-	-	-		
				0 0 7	The retrieval type in the data entry item is special and Operator is not Service person		✓	-	-	-		
				0 0 8	As to the device serial number in the data entry items, there is no applicable device code product		✓	-	-	-		
				0 0 9	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)		✓	-	-	-		
				0 0 A	The delivery status is Applying		✓	-	-	-		
				0 0 B	No approval information exists about EULA or the export criteria when the delivery is determined		✓	-	-	-		
				0 0 C	The delivery status is Distributing/Distributed/Applying/Finished/Failed		✓	-	-	-		
				0 0 D	The delivery status is Distributing/Distributed/Applying/Finished/Failed		✓	-	-	-		
				0 0 E	The delivery status is New/Waiting to Distribute/Distributed/Applying/Finished/Failed		✓	-	-	-		
				0 0 F	The delivery code is other than Distributing. (Firmware delivery)		✓	-	-	-		
				0 1 0	The delivery status is New/Waiting to Distribute/Distributing/Applying/Finished/Failed		✓	-	-	-		
				0 1 1	The delivery status is Distributing/Distributed/Applying/Finished/Failed		✓	-	-	-		
				0 1 2	Device is "Not applicable to CDS" (Firmware delivery)		✓	-	-	-		
				0 1 3	The specified delivery time is in the CDS delivery stop time. (Firmware delivery)		✓	-	-	-		

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
				0 1 4	Firmware reservation status confirmation is time out.	-	✓	-	-	-
				0 1 5	Firmware delivery is time out.	-	✓	-	-	-
				0 1 6	The version up of firmware is time out.	-	✓	-	-	-
			2	I/O						
				0 0 1	The specified license access number does not exist in LMS	-	✓	-	-	-
				0 0 2	The specified license access number has been deauthorized	-	✓	-	-	-
				0 0 3	The package product of the entered license access number doesn't include MEAP application/System Option	-	✓	-	-	-
				0 0 4	The sales company for the MEAP application isn't identical with the sale company for the package product	-	✓	-	-	-
				0 0 5	The number of licenses to be issued will exceed the limit number allowed to register	-	✓	-	-	-
				0 0 6	As for System Option for the same function, the license keys were issued more than 101 times for the same device serial number	-	✓	-	-	-
				0 0 7	No device product exists applicable to the optional product	-	✓	-	-	-
				0 0 8	No product exists applicable to the device serial number	-	✓	-	-	-
				0 0 9	The product of the entered license access number cannot be used with this device because the settings of the sales company are incorrect	-	✓	-	-	-
				0 0 A	No product linked to the license access number is registered in CDS for delivery	-	✓	-	-	-
				0 0 B	Although the product linked to the license access number is registered in CDS for delivery, the delivery is stopped now	-	✓	-	-	-
				0 0 C	No existence of optional product applicable to the device serial number.	-	✓	-	-	-
				0 0 D	The license access number has been registered for another device	-	✓	-	-	-
				0 0 E	For the device product applicable to the device serial number, no available software (MEAP application, System Option) exists	-	✓	-	-	-
				0 1 0	LMS system error *In multi-manifesto correspondence, as for "division value of MFP/SFP" 0 or the case except 1, LMS gives back error code "-215" to CDS.	-	✓	-	-	-
				0 1 1	LMS system error *When the acquisition of the manifesto is failure, in multi-manifesto correspondence, LMS puts back error code "-999" to CDS.	-	✓	-	-	-
			2~5							
		x	x		Relating method code					
				0	Not cartelized					
				0 0 0	Not defined					Normally not indicated
				1 0 0	Unknown error					Normally not indicated
			1		Operation					

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
				0 0 1	Processing exclusively	Start the operation again after terminating other Updater operations being executed simultaneously	-	✓	-	-
				1 0 1	Failed to process preparation for use	-	-	✓	-	-
				1 0 2	Failed to process use end	-	-	✓	-	-
				1 0 3	Time out during restart of readiness preparation	-	-	✓	-	-
				1 0 4	Session time-out excluding after application inquiry (after issuing delivery ID)	Start the operation again from the beginning	-	✓	-	-
				1 0 5	CDS URL is not set	Set CDS URL	-	✓	-	-
				1 0 6	There is another job	Start the operation again after terminating the job of the device	-	✓	-	-
			2	I/O						
				1 x x	An internal error about file operation	-	-	✓	-	-
				2 x x	An internal error about XML file operation	-	-	✓	-	-
				3 0 1	Failed to output the license file	-	-	✓	-	-
			3	Device						
				1 x x	An internal error in CPCA	-	-	✓	-	-
				2 x x	An internal error in IMI	-	-	✓	-	-
				3 x x	An internal error in SMS	-	-	✓	-	-
				4 x x	An internal error in NLM	-	-	✓	-	-
				5 x x	An internal error in Property setting	-	-	✓	-	-
			4	SOAP communication						
				1 0 1	The processing thread stopped	-	-	✓	-	-
				1 0 2	Processing SOAP communication now	-	-	✓	-	-
				1 0 3	The function type is not matched	-	-	✓	-	-
				1 0 4	An invalid SOAP response error	-	✓	-	-	-
				2 0 1	An internal error about application information	-	-	✓	-	-
				2 0 2	config.xml is NOT FOUND	-	-	✓	-	-
				2 0 3	type.xml is NOT FOUND	-	-	✓	-	-
				2 0 4	An error in binding type.xml	-	-	✓	-	-
				2 0 5	An error in creating a service tab	-	-	✓	-	-
				2 0 6	A runtime error in performing the web method	-	-	✓	-	✓
				2 0 7	An unknown host error in performing the web method	<ul style="list-style-type: none"> Check the network environment of the device and start the operation again Check if the URL settings of the CDS server are correct, and start the operation again after resetting 	✓	✓	-	✓
				3 0 1	The delivery server is stopped	-	✓	-	-	-
				3 0 2	An error occurrence in the delivery server	-	✓	✓	-	-
			5	HTTP communication						
				1 0 1	Specified Hash Algorithm is unknown	-	-	✓	-	-
				2 0 1	Invalid HTTP request	-	-	✓	✓	✓
				2 0 2	Failed to connect to the server	Check the network environment of the device and start the operation again	-	✓	✓	✓
				2 0 3	Failed to find the server	Check the network environment of the device and start the operation again	-	✓	✓	✓
				2 0 4	An input/output error occurred during the connecting process to the server	-	-	✓	✓	✓
				2 0 5	Failed to read a HTTP response	-	-	✓	✓	✓
				2 0 6	Error in a HTTP response	-	-	✓	✓	✓

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					
				3	0	1	Failed to retrieve the data stream	-	-	✓	-	✓			
				3	0	2	Failed to create the file object for receipt	-	-	✓	-	✓			
				3	0	3	Failed to create the data stream of the file for receipt	-	-	✓	-	✓			
				3	0	4	Failed to receive the data	Check the network environment of the device and start the operation again	-	✓	✓	✓			
				3	0	5	An error about reserving the file data for receipt	-	-	✓	-	-			
				3	0	6	Failed to close the data stream	-	-	✓	-	-			
				3	0	7	Failed to close the file data for receipt	-	-	✓	-	-			
				3	0	8	Invalid hash code of the download file	Check the network environment of the device and start the operation again	✓	✓	✓	✓			
				3	0	9	The proxy authorization method is not applicable	Check the proxy authentication method used, and start the operation again after changing the settings to use the corresponding proxy authentication	-	✓	-	✓			
				6	Socket communication										
				1	0	1	Failed to connect the eRDS	-	-	✓	-	✓			
				1	0	2	No response from eRDS	-	-	✓	-	✓			
				1	0	3	No notice of start from the eRDS	-	-	✓	-	✓			
				1	0	4	Error of socket reading	-	-	✓	-	✓			
				1	0	5	Socket communication time-out	-	-	✓	-	✓			
				7	Other internal codes										
				0	0	2	One of installation, start or authorization failed (When installation or authorization failed, it is regarded as an error) *	-	-	✓	-	-			
				0	3	x	An internal error in processing the installation	-	-	✓	-	-			
				1	x	x	An error by using invalid API	-	-	✓	-	-			
				2	x	x	An internal error in SMS	-	-	✓	-	-			
				3	0	1	No existence of delivery ID	-	-	✓	-	-			
				3	0	2	Invalid delivery ID	-	-	✓	-	-			
				3	0	3	The updated firmware information is not identical with the firmware information after activation of the Updater	-	-	✓	-	-			
				3	0	4	The process of firmware download is incomplete	-	-	✓	-	-			
				3	0	5	The update process is incomplete	-	-	✓	-	-			
				3	0	6	The installment process is incomplete	-	-	✓	-	-			
				4	0	1	Failed to retrieve delivery information	-	-	✓	-	-			
				5	0	1	Failed to execute the delivery process	-	-	✓	-	-			
				5	0	2	The scheduled delivery was not executed within the defined period of time	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	-	✓	-	-			

* Not displayed on a device UI

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Controller Self Diagnosis

Introduction

Operation of the (2 types of) error diagnosis tools added to the main body and remedy for errors are described. These tools can reduce time to determine cause of errors occurred in field and improve the accuracy of specifying error locations.

This manual can be applied when the main body is placed in the following conditions.

- The main body does not boot. (In such a case that the Control Panel is not displayed or the progress bar does not work, etc.)
- An error is suspected to have occurred in the Main Controller PCB 1/2 and other related PCBs (child PCBs such as SDRAM or TPM mounted in the Main Controller PCB 1/2).

PCBs and units diagnosed by each tool are as follow:

Boot System Error Diagnosis Tool

- Main Controller PCB 1 side <Main Controller PCB 1, SDRAM, PCI Expansion PCB (option), FLASH Memory PCB>
- Control Panel
- All-night Power Supply, Non-all-night Power Supply

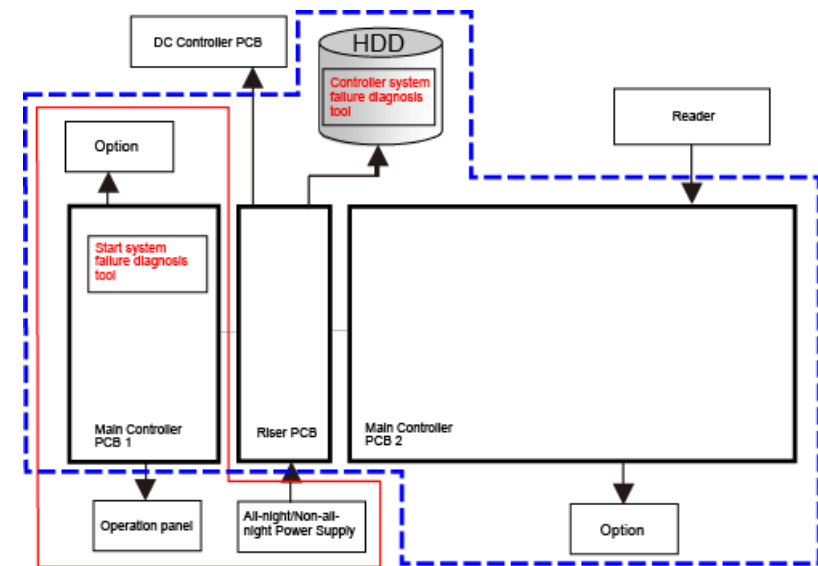
Controller System Error Diagnosis Tool

- Main Controller PCB 1 side <Main Controller PCB 1, SDRAM, TPM PCB, PCI Expansion PCB (option)>
- Main Controller PCB 2 side <Main Controller PCB 2, SDRAM (M0*, M1), SDRAM (P), Memory PCB, Open I/F PCB (option)>
- Rizer PCB / HDD

* SDRAM (M0) is an option.

Overview

Two types of error diagnosis tools are installed in this machine, and stored in the locations shown below.



F-6-131

Boot System Error Diagnosis Tool covers the components shown in the red frame (solid line) in the figure. Controller System Error Diagnosis Tool covers the components shown in the blue frame (dotted line).

Boot System Error Diagnosis Tool

This tool automatically checks the Control Panel, Main Controller PCB 1, All-night Power Supply, and Non-all-night Power Supply, and notifies the result by the number of light-out and blinking interval of the lamp on the Control Panel.

This tool is installed in the ROM of Main Controller PCB 1.

Therefore, regardless the version of MN-CNT, this tool can be used even when an error occurs in child PCBs or when the Controller System Error Diagnosis Tool cannot be booted.

● Controller System Error Diagnosis Tool

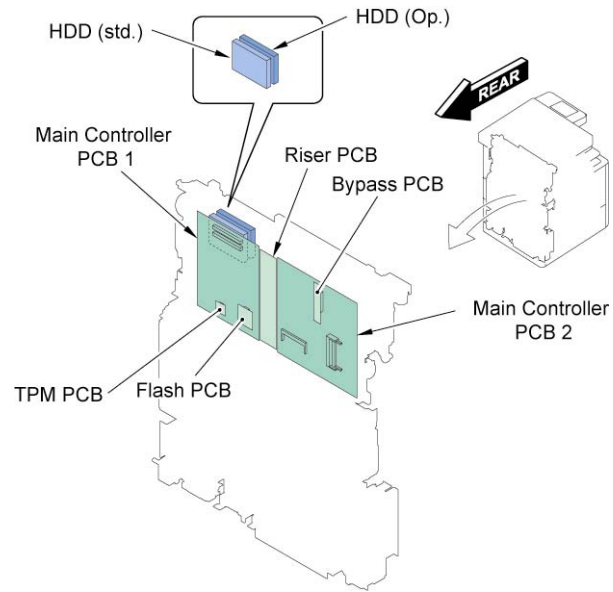
This tool automatically checks the Main Controller PCB 1/2, child PCBs mounted on the Main Controller PCB 1/2, and HDD, and display the result on the Control Panel.

This tool is installed in HDD.

Therefore, this tool cannot be used when an error occurred in HDD or HDD cannot be accessed.

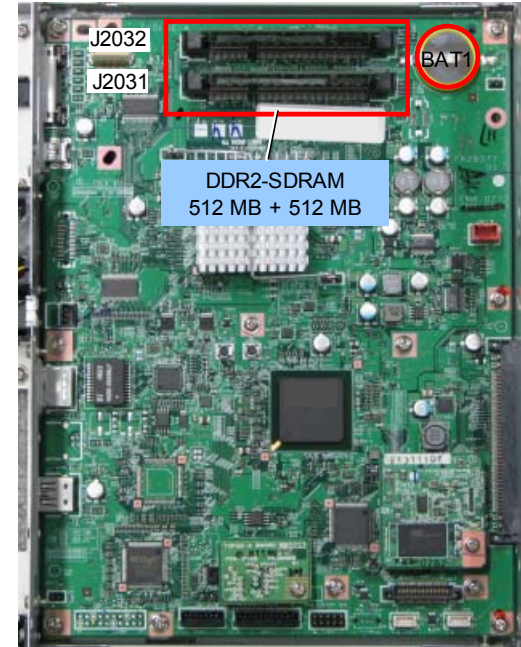
■ Layout Drawing

Layout Drawing of PCBs Subject to Diagnosis



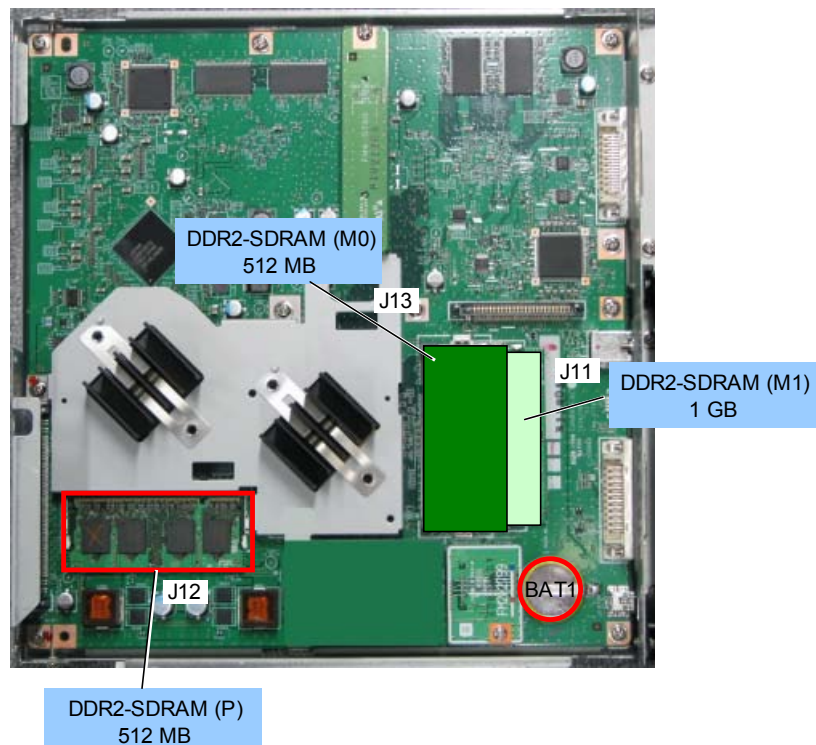
F-6-132

Main Controller PCB 1



F-6-133

Main Controller PCB 2

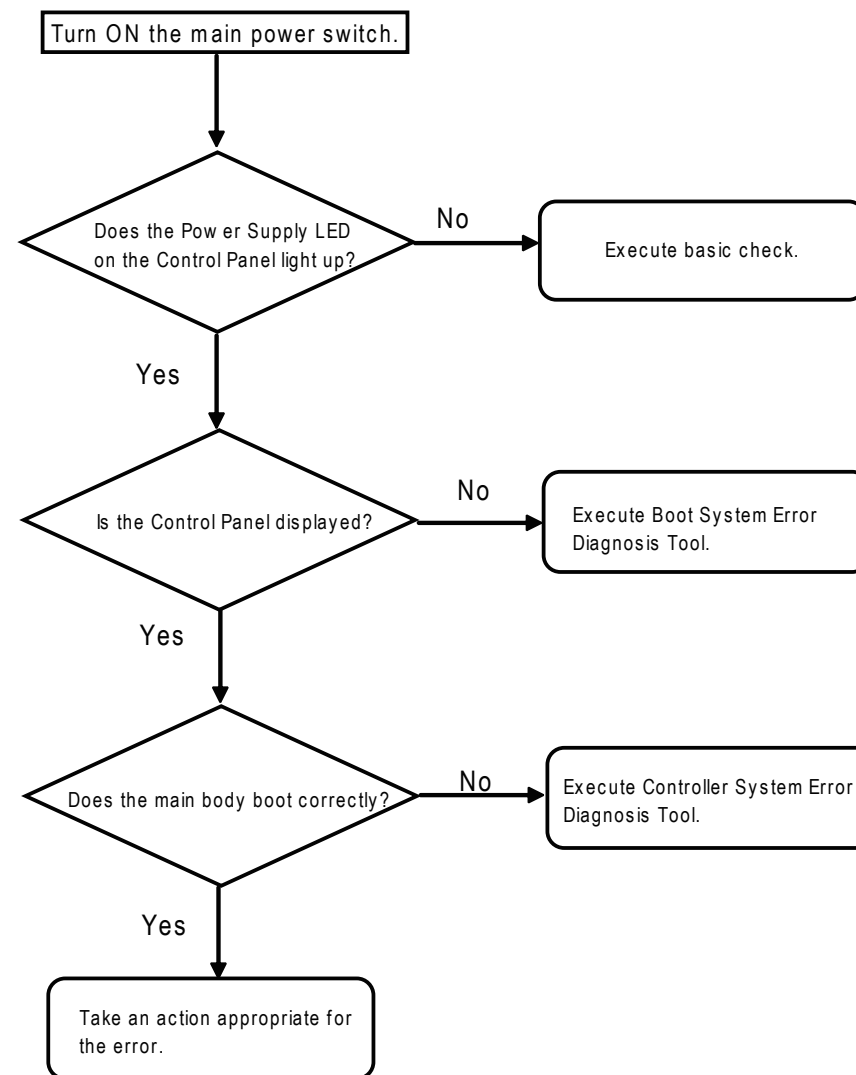


F-6-134

Basic Flowchart

Basic Check Items

Check all of the items shown below.



F-6-135

● 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.

■ Prerequisite

Make sure that the version of MN-Cont of the main body is Ver.30.30 or later.

When the version is old (older than Ver.30.30), although Controller System Error Diagnosis Tool (BCT) (see Memo) is downloaded, it cannot be installed and is discarded.

Therefore, if the version of MN-Cont of the main body is old (older than Ver.30.30), update the version to Ver.30.30 or later using SST (Service Support Tool) or USB memory, and enter the SST download mode again to install BCT.

Caution:

When upgrading of system software, HDD format, or BootDev format is performed, BCT is simultaneously installed with other system software if the MN-Cont version is new (Ver.30.30 or later).

In other words, when the MN-Cont version is new (Ver.30.30 or later), it is not necessary to install BCT again.

However, installation of BCT via CDS is not supported by the current version. (It will be supported in the future.)

NOTE:

BCT stands for Box Checker Test.

When BCT is installed on the main body, version of the installed module can be checked using service mode (COPIER>DISPLAY>VERSION>BCT).

■ Operation

Operations of the two diagnosis tools are explained below.

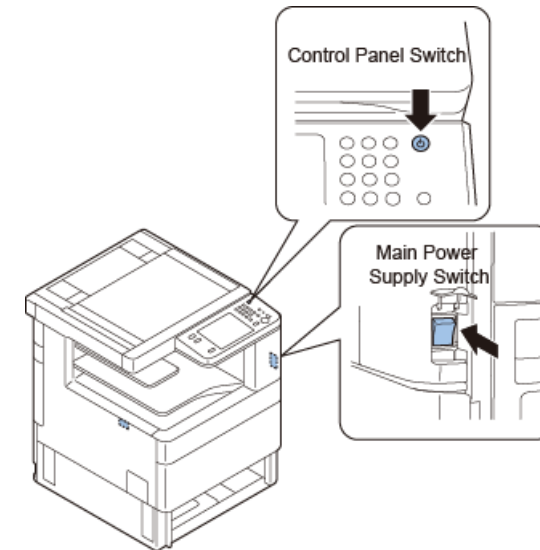
Use each tool according to the following purposes.

- When the main body does not boot (the Control Panel is not displayed): Execute Boot System Error Diagnosis.
- When an error is suspected to have occurred in the Main Controller PCB 1/2 or child PCBs mounted on the Main Controller PCB 1/2: Execute Controller System Error Diagnosis.

■ Boot System Error Diagnosis

● Boot Method

- 1) Turn ON the Main Power Supply Switch while pressing the Control Panel Power Supply Switch.

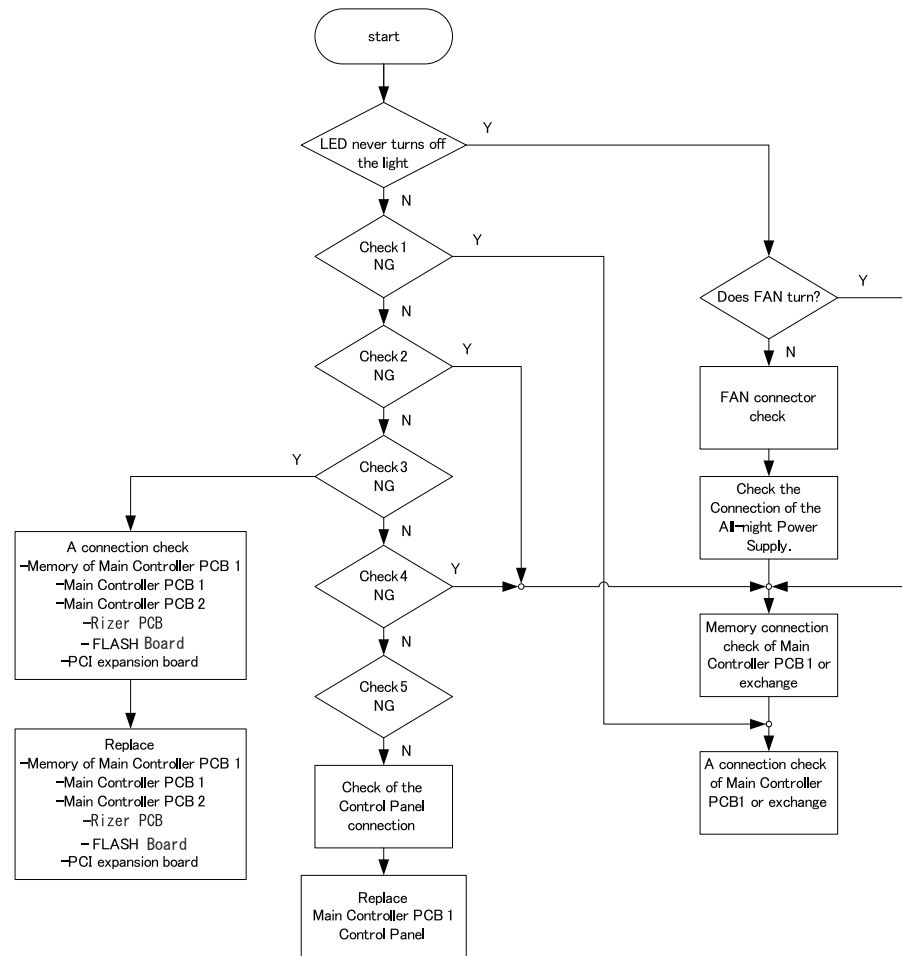


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● Error Diagnosis

<Boot System Error Diagnosis Table>

The error locations are identified according to the following table.



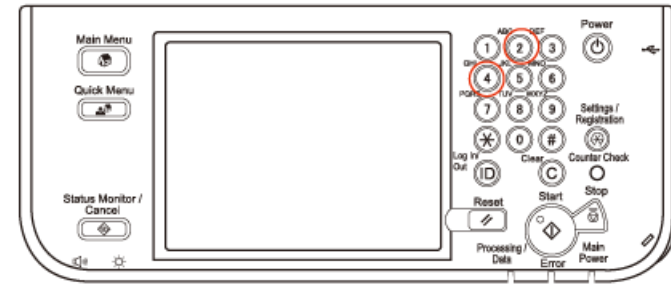
F-6-140

This tool does not perform a boot check for the Flash Memory PCB.

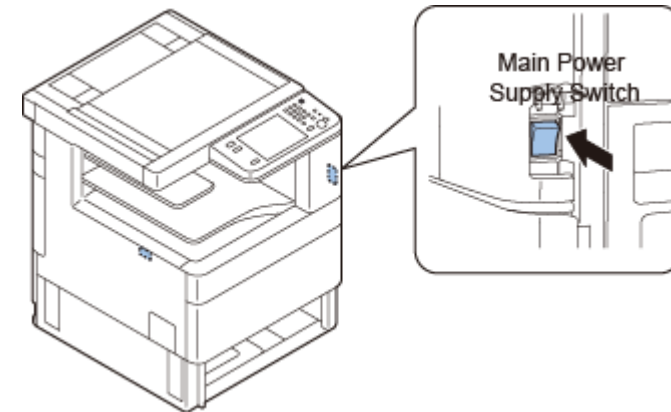
■ Controller System Error Diagnosis

● Boot Method

1) Turn ON the Main Power Supply Switch while pressing the numeric keys '2' and '4' simultaneously.

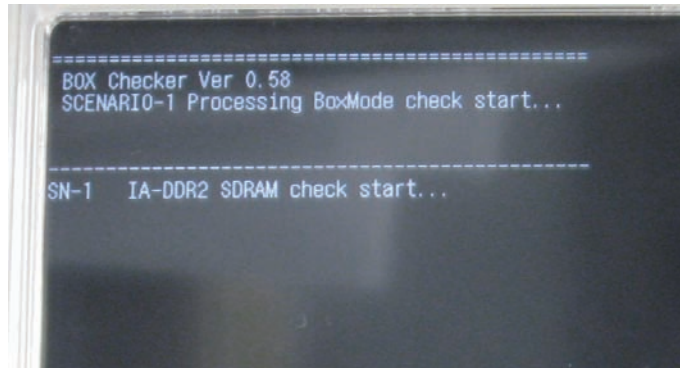


F-6-141



F-6-142

2) Keep pressing the numeric keys (for approx. 20 seconds) until the following screen appears on the Control Panel.



F-6-143

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.

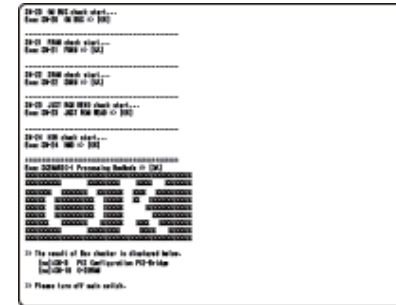


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● Diagnosis Time

Diagnosis is completed in approx. 3 minutes.
The result is displayed on the Control Panel.

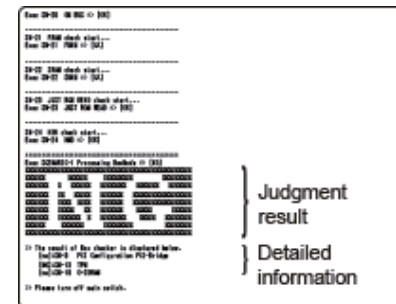
<When the diagnosis result is normal>



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<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-6-146

<How to view the error result>

The following screen is an enlarged view of the detailed information indicated above.

Explanation of the detailed error information is described.

```
>> The result of Box checker is displayed below.
[no]:SN-9   PCI Configuration PCI-Bridge
[NG]:SN-13  TPM
[no]:SN-19  0-SDRAM

>> Please turn off main switch.
```

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[no] means that optional PCBs are not mounted.

When [no] is displayed although an optional PCB is mounted, it means that an error has been occurring.

[NG] means that an error occurred to PCBs mounted as standard.

NOTE:

Once the tool is activated, this machine reboots after approx. 2 minutes.
After completion of the diagnosis, be sure to turn OFF and then ON the main power.
By turning the power OFF, the operation of this tool completes.

<Controller System Error Diagnosis Table>

The error locations are identified according to the following table.

Test Name	Description	Assumed Error Location	Remedy	Error Code
SN-1 IA-SDRAM	Check an error between the Main Controller PCB 1 and SDRAM on the Main Controller PCB 1	Main Controller PCB 1 SDRAM on Main Controller PCB 1	1. Check the installation of SDRAM on the Main Controller PCB. 2. Replace SDRAM on the Main Controller PCB 1. 3. Replace the Main Controller PCB 1.	-
SN-2 SM BUS IA DIMM1	Check an SM bus error in SDRAM (outside) on the Main Controller PCB 1	Main Controller PCB 1 SDRAM (outside) on Main Controller PCB 1	1. Check the installation of SDRAM on the Main Controller PCB. 2. Replace SDRAM (outside) of the Main Controller PCB 1. 3. Replace the Main Controller PCB 1.	-
SN-3 SM BUS IA DIMM2	Check an SM bus error in SDRAM (inside) on the Main Controller PCB 1	Main Controller PCB 1 SDRAM (inside) on Main Controller PCB 1	1. Check the installation of SDRAM on the Main Controller PCB 1. 2. Replace SDRAM (inside) of the Main Controller PCB 1. 3. Replace the Main Controller PCB 1.	-

Test Name	Description	Assumed Error Location	Remedy	Error Code
SN-4 SM BUS IA Clock Gen	Check an SM bus error in Clock Generator on the Main Controller PCB 1	Main Controller PCB 1	1. Replace the Main Controller PCB 1.	-
SN-5 SM BUS SOC DIMM1	Check an SM bus error in the Main Controller PCB 1 and SDRAM (M1) on the Main Controller PCB 2	Main Controller PCB 1 PCI Expansion PCB Main Controller PCB 2 SDRAM (M1) on Main Controller PCB 2	1. Check the connection of the Main Controller PCB 1, and the Main Controller PCB 2. 2. Check the installation of SDRAM (M1) on the Main Controller PCB 2. 3. Replace SDRAM (M1) on the Main Controller PCB 2. 4. Replace the Main Controller PCB 2. 5. Replace the Main Controller PCB 1.	-
SN-6 SM BUS SOC DIMM2	Check an SM bus error in the Main Controller PCB 1 and SDRAM (M0) on the Main Controller PCB 2	Main Controller PCB 1 PCI Expansion PCB Main Controller PCB 2 SDRAM (M0) on Main Controller PCB 2	1. Check the connection of the Main Controller PCB 1, and the Main Controller PCB 2. 2. Check the installation of SDRAM (M0) on the Main Controller PCB 2. 3. Replace SDRAM (M0) on the Main Controller PCB 2. 4. Replace the Main Controller PCB 2. 5. Replace the Main Controller PCB 1. Supplementary Information: If SDRAM (M0) on the Main Controller PCB 2 is not installed, [no] is displayed for the diagnosis result.	-
SN-7 PCI Config Maestro	Check a PCI bus error in the Main Controller PCB 1 and the Main Controller PCB 2	Main Controller PCB 1 PCI Expansion PCB Main Controller PCB 2 SDRAM (M0/M1) on Main Controller PCB 2	1. Check the connection of the Main Controller PCB 1, and the Main Controller PCB 2. 2. Replace the Main Controller PCB 1. 3. Replace the Main Controller PCB 2.	-
SN-8 PCI Config LANC	Check a LAN chip error on the Main Controller PCB 1	Main Controller PCB 1	1. Replace the Main Controller PCB 1.	-

Test Name	Description	Assumed Error Location	Remedy	Error Code
SN-9 PCI Config PCI-Bridge	Check a PCI bus error between the Main Controller PCB 1 and the PCI Expansion PCB	Main Controller PCB 1 PCI Expansion PCB	1. Check the installation between the Main Controller PCB 1 and PCI Expansion PCB. 2. Replace PCI Expansion PCB. 3. Replace the Main Controller PCB 1. Supplementary Information: If the PCI Expansion PCB is not installed, [no] is displayed for the diagnosis result.	-
SN-10 CPLD	Check failure of CPLD chip on the Main Controller PCB 1	Main Controller PCB 1	1. Replace the Main Controller PCB 1.	-
SN-11 LANC SPI	Check failure of LANC SPI on the Main Controller PCB 1	Main Controller PCB 1	1. Replace the Main Controller PCB 1.	-
SN-12 RTC CHECK	Check failure of RTC on the Main Controller PCB 1	Main Controller PCB 1	1. Replace the Main Controller PCB 1.	-
SN-13 TPM	Check failure of the TPM PCB on the Main Controller PCB 1 * TPM PCB is not installed in products for China. So, the diagnosis results NG.	Main Controller PCB 1 TPM PCB	1. Check the installation of the TPM PCB. 2. Replace the TPM PCB. 3. Replace the Main Controller PCB 1.	E746
SN-14 M-SDRAM	Check an error between SDRAMs on the Main Controller PCB 2	Main Controller PCB 2 SDRAM (M0/M1) on Main Controller PCB 2	1. Check the installation of SDRAM (M0, M1) on the Main Controller PCB 2. 2. Replace SDRAM (M0, M1) on the Main Controller PCB 2. 3. Replace the Main Controller PCB 2.	-

Test Name	Description	Assumed Error Location	Remedy	Error Code
SN-15 FLASH ROM	Check failure of CPU ROM (IC60) on the Main Controller PCB 2	Main Controller PCB 2	1. Replace the Main Controller PCB 2.	-
SN-16 P-SDRAM	Check an error between the Main Controller PCB 2 and SDRAM (P) on the Main Controller PCB 2	Main Controller PCB 2 SDRAM (P) Open I/F PCB	1. Check the installation of SDRAM (P) on the Main Controller PCB 2. 2. Replace SDRAM (P) on the Main Controller PCB 2. 3. Replace the Main Controller PCB 2.	E747 E748
SN-17 R-SDRAM	Check failure of Rchip SDRAM on the Main Controller PCB 2	Main Controller PCB 2 Open I/F PCB	1. Replace the Main Controller PCB 2.	E747 E748
SN-18 S-SDRAM	Check failure of Schip SDRAM on the Main Controller PCB 2	Main Controller PCB 2	1. Replace the Main Controller PCB 2.	E747 E748 E732
SN-19 O-SDRAM	Check failure of Ochip SDRAM on the Open I/F PCB	Main Controller PCB 2 Open I/F PCB	1. Check the installation of the Open I/F PCB. 2. Replace the Open I/F PCB. 3. Replace the Main Controller PCB 2. Supplementary Information: If the Open I/F PCB is not installed, [no] is displayed for the diagnosis result.	E747 E748
SN-20 GU BUS	Check a GUBUS error on the Main Controller PCB 2	Main Controller PCB 2 Open I/F PCB Bypass PCB	1. Check the installation of the Open I/F PCB or the Bypass I/F PCB on the Main Controller PCB 2. 2. Replace the Open I/F PCB or the Bypass I/F PCB on the Main Controller PCB 2. 3. Replace the Main Controller PCB 2.	E747 E748

Test Name	Description	Assumed Error Location	Remedy	Error Code
SN-21 FRAM	Check failure between the Main Controller PCB 2 and the Memory PCB	Main Controller PCB 2 Memory PCB	1. Check the installation of the Memory PCB on the Main Controller PCB 2. 2. Replace the Memory PCB on the Main Controller PCB 2. 3. Replace the Main Controller PCB 2.	E355
SN-22 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-23 JUST ROM READ	Check ROM READ on the Main Controller PCB 2	Main Controller PCB 2	1. Replace the Main Controller PCB 2.	-
SN-24 HDD	Check an HDD I/F error	Main Controller PCB 2 PCI Expansion PCB HDD Cable HDD	1. Check the cable connection of the HDD. 2. Check the connection between the Main Controller PCB 2 and the Main Controller PCB 1. 3. Replace the HDD.	-

T-6-19

■ Restrictions

● <Boot System Error Diagnosis>

- If an error cannot be resolved by executing remedy according to the error diagnosis table described above, consider boot failure of the main power supply and take appropriate actions.

● <Controller System Error Diagnosis>

- Regarding the diagnosis for the test names (SN-1, 2, 7, 15, 21, 24), if an error occurs in the diagnosis under the test names, this diagnosis tool will not boot.
- When no PCBs are installed on the Main Controller PCB 1/2, the following judgment results are displayed.

Standard PCB: [NG]

Optional PCB: [OK]

However, [no] is displayed in detailed error information for optional PCBs.

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.
- This is intended to improve efficiency in log collection when a trouble occurs.

Adding Users for Log Collection

Collecting logs previously required operation in service mode.

Automatic Storage:

To set the types of logs to be stored and the timing to store logs in the HDD.

Lev2 COPIER > FUNCTION > SYSTEM > DOWNLOAD > DEBUG-1

Default value:3:

Save SUBLOG in overwrite mode at detection of Reboot/Exception/Encode

The details refer to an item of DEBUG-1.

Manual Storage:

Execute "Counter Key(10 sec. or longer) + 1.2.3" to save the debug log.

Collecting logs:

SST or place USB memory

COPIER > FUNCTION > SYSTEM > DOWNLOAD > OK

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.

With imageRUNNER ADVANCE, Sublog can be saved in the HDD using the standard function of the machine without using the Sublog Board.

The Sublog Board is also assigned as a tool with imageRUNNER ADVANCE. The Sublog Board is required for an error that requires rebooting because the Sublog Board has a battery.

Storing System Information

Storage Method of System Information

Automatic Storage

At the time of shipment, 101 is specified in service mode Lev2: COPIER > FUNCTION > SYSTEM > DEBUG-1 to 3.

Debug log is automatically stored in the case of the following:

Exception + E-code + reboot

The log consists of the number of 10 logs from the latest log extended to the older logs.

Manual Storage

Counter Key + 1.2.3

Execute "Counter Key + 1.2.3" to save the debug log.

Note that the Control Panel is locked during the saving process; therefore, the screen does not change even though you press the OK button on <Check Counter>.

Description of Log to be Collected

The log consists of the number of 10 logs from the latest log extended to the older logs.

Latest log ten are always left.

Logs older than the specified period are overwritten (deleted).

When collecting logs from the machine, the log file in the machine is deleted.



Collecting System Information

Collection Destination

To retrieve debug log to an external location from the device, use a USB memory device, FTP server or SST (Ver. 4.41 or later).

Collection Method

Retrieve debug log from the machine by any of the following methods.

- Make the machine recognize the USB memory device. Select the following in service mode Lev2: COPIER > FUNCTION > SYSTEM > DOWNLOAD; and click OK.
- Start the machine with the 2 and 8 keys and use SST on a PC with the network cable connected to transfer the debug log.
- Start the machine with the 2 and 8 keys and transfer the debug log to a USB memory device that stores the system of the machine.

Method	Storage
Holding down the counter + 1.2.3	Store log to an HDD
SST	The data is collected as a set of operation.
Starting the machine with the 2 and 8 keys and using a USB memory device	The data is collected as a set of operation.

T-6-20

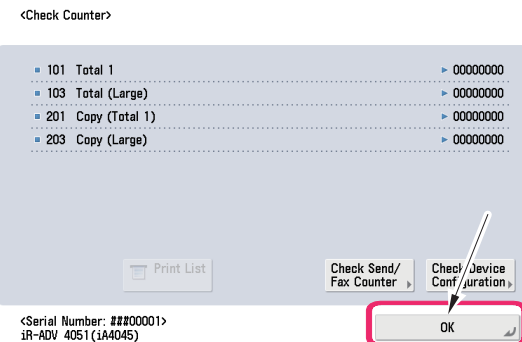
Collecting Debug Log (USB memory device)

NOTE:

When the data is sent to the USB memory device:
USB memory where the system software for this machine has been registered using the SST.

Manual Saving by Holding Down the Counter + 1.2.3

1. Reproduce the error.
2. Hold down the [Counter] button (10 sec. or longer).
3. Press 1 on the numeric keypad.
4. Press 2 on the numeric keypad.
5. Press 3 on the numeric keypad. (UI is locked at this stage) The machine starts generation of the file that was converted from Log data on the HDD into text-based data. The screen does not change even though you press the OK button on the touch panel of the machine. If the screen changes by pressing the OK button, data transfer has been completed.



F-6-149

- Lev1 COPIER > FUNCTION > SYSTEM > DOWNLOAD > OK
[5] Execute [BACKUP].
[1] Execute [Sublog].

When the data is sent to the USB memory device:

The file name is "file name ** + year date time.BIN".

Example:

SUBLOG02_201103290130.BIN

SUBLOG.BIN	9,514 KB
SUBLOG_DCON.BIN	53 KB
SUBLOG_DCON01.BIN	45 KB
SUBLOG_DCON02.BIN	53 KB
SUBLOG_DCON03.BIN	53 KB
SUBLOG_DCON04.BIN	53 KB
SUBLOG_RCON.BIN	59 KB
SUBLOG_RCON01.BIN	59 KB
SUBLOG_RCON02.BIN	59 KB
SUBLOG_RCON03.BIN	59 KB
SUBLOG_RCON04.BIN	59 KB
SUBLOG01_201102150122.BIN	9,593 KB
SUBLOG02_201103290130.BIN	9,320 KB
SUBLOG03_201103290737.BIN	9,433 KB
SUBLOG04_201103290739.BIN	9,514 KB

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Note:

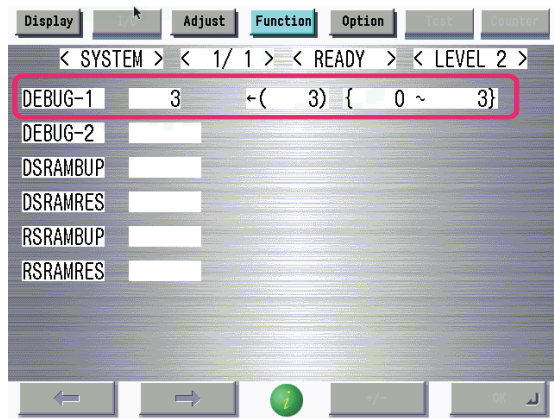
Date to be added to the file name shows the date that the log was transferred.
Display it by time of local Time.

DEBUG-1

Function

Service Mode Lev.2

COPIER > FUNCTION > SYSTEM > DOWNLOAD > DEBUG-1



F-6-151

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 trouble.
	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

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Uploading Data by SST

The following shows a method to collect a log by connecting a PC with SST (Ver. 4.41 or later) running to the machine.

Preconditions:

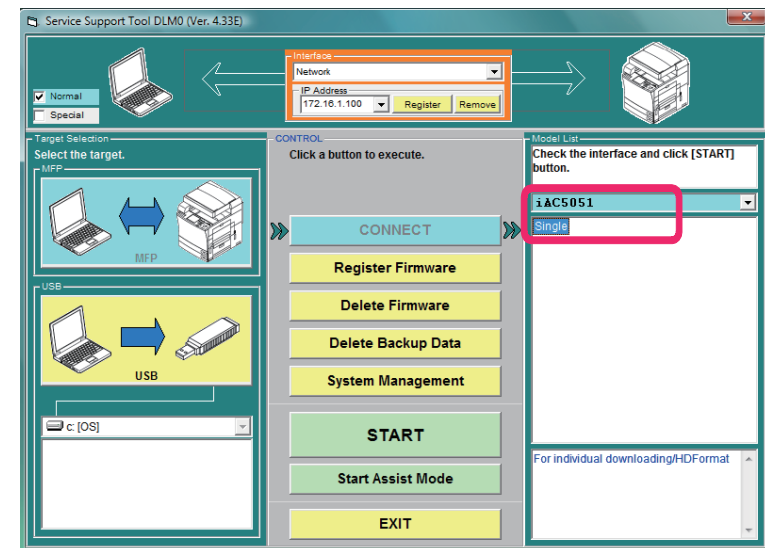
The log is stored in the machine by holding down the counter + 1.2.3 or the automatic log collection function.

A PC with SST running is connected to the machine and the machine is at download mode by starting it with the 2 and 8 keys.

Note:

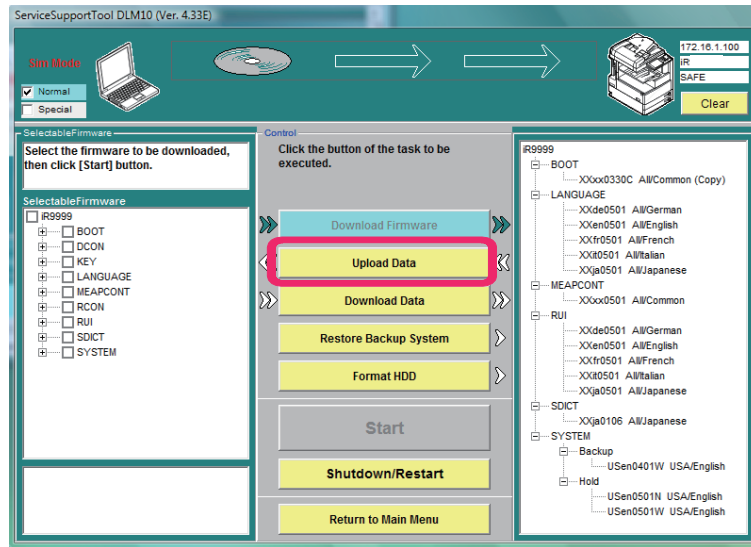
Executing a log collection by SST deletes logs in the machine.

1. Start SST (Ver. 4.41 or later) and select iRC5051 from Model List. Press the Start button.

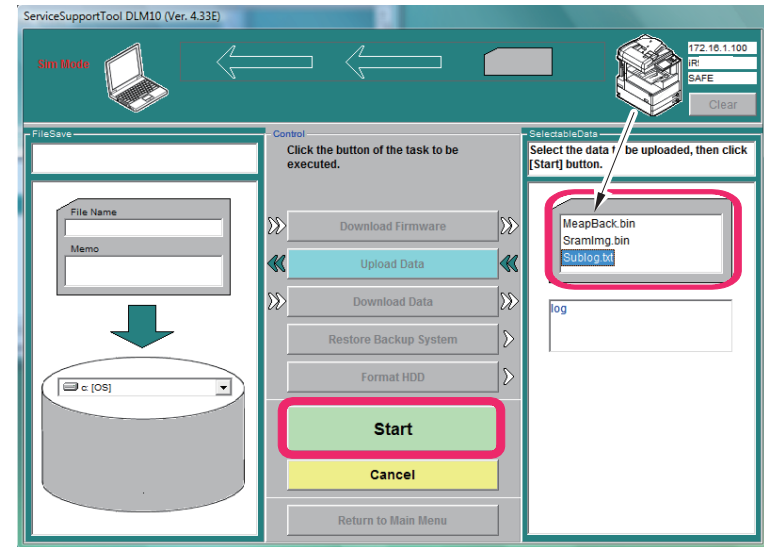


F-6-152

2. Press the Upload Data button.



F-6-153



F-6-154

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.

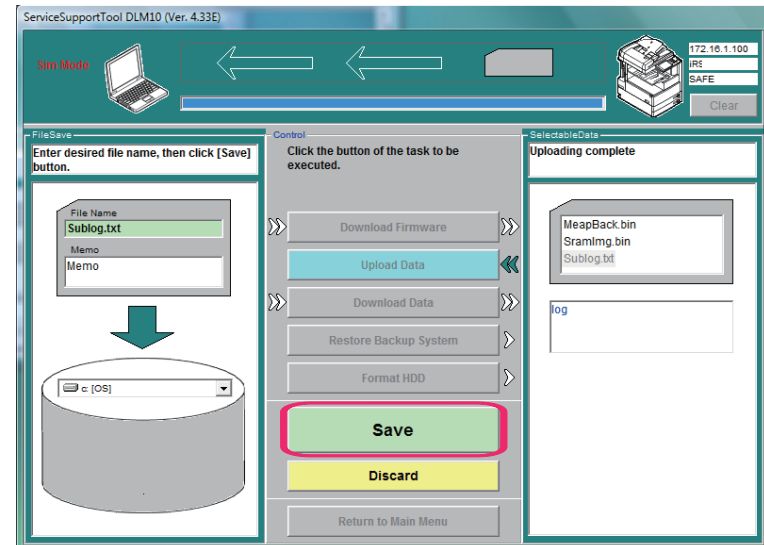
It is displayed as "log" in the figure below.

Note:

The log is not stored when You cancel it before pushing the Start button.

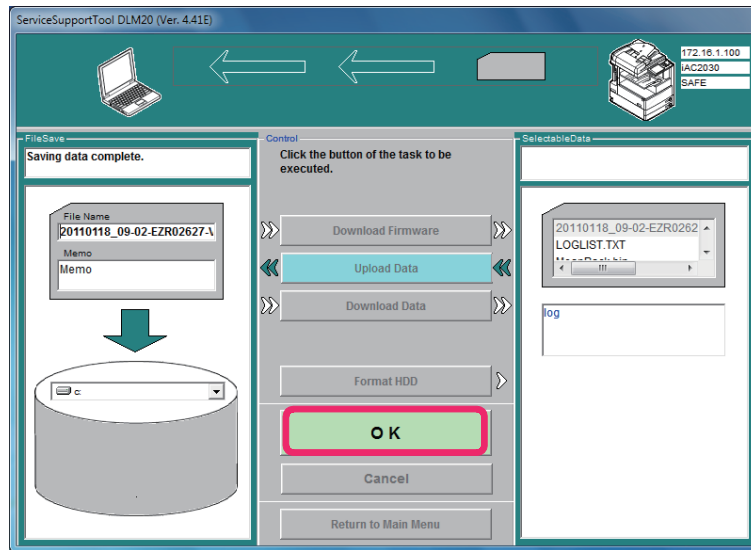
It is deleted from the main body.

4. Press the "Save" button.



F-6-155

5. Check that the data storage is completed and click the "OK" button.



F-6-156

6. Check that the log is stored in the specified location in the PC.

In the initial setting:

Windows(C:) > ServData > iRC5051 > EXR02627 (Serial number)

SUBLOG.BIN.upd	2011/04/13 9:51
SUBLOG.BIN.upd.txt	2011/04/13 9:53

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Error Code

- 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.	
Jam code	This code is displayed when a jam occurs inside the machine.	
Alarm code	This code is displayed when a function of the machine is malfunctioned.	

T-7-1

- Error code notation

An error code is shown in 7-digit [E000XXX] on the display on the operation panel. However, [000] in 2 to 4 digit is not used. Thus, an error code is described as [EXXX] using 5 to 7 digit in the service manual. (e.g.: E012 = E000012)

Location code

Error code, jam code, and alarm code include the location information.

Location information is displayed as 2-digit numbers as follows.

Device	JAM	ERR	ALARM
imageRUNNER ADVANCE C5051/C5045/C5035/C5030	00	Main Controller = 00 Printer engine = 05	Others of listed below
Color Image Reader Unit - B1(Reader+DADF) Duplex Color Image Reader Unit - B1(Reader+DADF)	01	04	02
Paper Deck Unit-B1	00	05	04
Cassette Feeding Unit-AD1	00	05	-
Staple Finisher-C1 / Booklet Finisher-C1	02	05	61,62
Inner Finisher-A1	02	05	-
External 2 Hole Puncher-B1	02	05	65

T-7-2

Location 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-B1	06
Duplex (At duplex printing, jam occurs after paper passes through the Duplex Paper Sensor (PS38).)	F0

T-7-3

■ Points to Note When Clearing MN-CON

- Execution of clearing MN-COM deletes all data in Address Book, Forwarding Settings, Settings/Registration (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 LVIII and explain to the user before starting work.

■ Measures for E747

There are many detail codes in E747. Since these detail codes are for R&D use, remedy to be performed in the field is the same, except for E747-1201 and E747-FF01. Because of that, errors other than the 2 errors mentioned above are described as E747-XXXX, and common remedy is described.

Error Code

Error Code Details

E code	Detail code	Location	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 > ANALOG > FIX-C, or DISPLAY > ANALOG > FIX-E; if it's less than 260 deg C, go through the following to clear the error: COPIER>FUNCTION>CLEAR>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. Replacement of 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 > FUNCTION > CLEAR > 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 > ANALOG > FIX-E2 or DISPLAY > ANALOG > FIX-E3; if it's less than 275 deg C, go through the following to clear the error: COPIER > FUNCTION > CLEAR > 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. Replacement of the Shutter Unit</p> <p>4. Go through the following to check drive of FM5 and FM6: COPIER > FUNCTION > PART-CHK > 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 > FUNCTION > CLEAR > ERR</p>

E code	Detail code	Location	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 > FUNCTION > CLEAR > 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. Replacement of the Shutter Unit</p> <p>4. Go through the following to check drive of FM5 and FM6: COPIER > FUNCTION > PART-CHK > 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 > FUNCTION > CLEAR > 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 20 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 > FUNCTION > CLEAR > 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. Replacement of 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 > FUNCTION > CLEAR > ERR</p>

E code	Detail code	Location	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"> 1. Go through the following to clear the error: COPIER > FUNCTION > CLEAR > ERR; and then turn OFF and then ON the power. 2. Replace the Film Unit 3. Replacement of the Shutter Unit 4. Replace the DC Controller PCB (UN1) <p>NOTE: After performing the above remedy work, go through the following to clear the error: COPIER > FUNCTION > CLEAR > 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"> 1. Go through the following to clear the error: COPIER > FUNCTION > CLEAR > ERR; and then turn OFF and then ON the power. 2. Check connection of the Connectors (Thermistor Connector and AC Connector). 3. Replace the Film Unit 4. Replacement of the Shutter Unit 5. Replace the DC Controller PCB (UN1) <p>NOTE: After performing the above remedy work, go through the following to clear the error: COPIER > FUNCTION > CLEAR > 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"> 1. Check connection of the Connectors (Thermistor Connector and AC Connector). 2. Replace the Film Unit 3. Replacement of the Shutter Unit 4. Replace the DC Controller PCB (UN1) <p>NOTE: After performing the above remedy work, go through the following to clear the error: COPIER > FUNCTION > CLEAR > ERR</p>

E code	Detail code	Location	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"> 1. Check if the Fixing Assembly is installed. 2. Check connection of the connectors in Fixing Assembly. 3. Check connection of DC Controller PCB (UN1) Connector. 4. Replace the Film Unit. 5. Replacement of the Shutter Unit. 6. Replace the DC Controller PCB (UN1).
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"> 1. Replace the AC Driver PCB (replacement is necessary due to welding of the relay). <p>Other fixing-related error occurs (highly possible of E001)</p> <ol style="list-style-type: none"> 2. Perform the remedy for the error occurred.
E009	0000	05	Title	Error in engagement
			Description	Failed to detect ON with the Fixing Pressure Sensor although 3 sec has passed.
			Remedy	<ol style="list-style-type: none"> 1. Turn OFF and then ON the power. 2. Remove and then reinstall the Fixing Assembly. 3. Check the gear. <p>If the gear rotates properly:</p> <ol style="list-style-type: none"> 4-1. Check the connection between the Fixing Assembly and the DC Controller PCB (open circuit or caught cable). 5-1. Replace the DC Controller PCB (UN1). <p>If the gear does not work properly:</p> <ol style="list-style-type: none"> 4-2. Identify and replace the faulty gear. 5-2. Replace the Motor.
E009	0001	05	Title	Error in disengagement
			Description	Failed to detect OFF with the Fixing Pressure Sensor although 3 sec has passed.
			Remedy	<ol style="list-style-type: none"> 1. Turn OFF and then ON the power. 2. Remove and then reinstall the Fixing Assembly. 3. Check the gear. <p>If the gear rotates properly:</p> <ol style="list-style-type: none"> 4-1. Check the connection between the Fixing Assembly and the DC Controller PCB (open circuit or caught cable). 5-1. Replace the DC Controller PCB (UN1). <p>If the gear does not work properly:</p> <ol style="list-style-type: none"> 4-2. Identify and replace the faulty gear. 5-2. Replace the Motor.

E code	Detail code	Location	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. 1. Remove the Fixing Assembly. 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). 3. Wipe off the scattered grease around the Pressure Release Cam and the Pressure Plate with lint-free paper moistened with alcohol. 4. Wipe off the excess grease on the side of the gear and the shaft."
E012	0101	05	Title	Faulty signal with Y Drum Rotation Sensor 1 and 2
			Description	Faulty signal with Y Drum Rotation Sensor 1 and 2
			Remedy	1. Check connection of Drum Rotation Sensor 1 and 2 (UN31, UN32) 2. Check that the Drum Rotation 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 Rotation Sensor Wheel rotates. -> If the wheel does not rotate, replace the Drum Drive Unit. 5. Take out the Drum Rotation Sensor to clean the Sensor and the Wheel. 6. Replace the Drum Rotation Sensor. 7. Replace the Drum Driver PCB (UN4)
E012	0201	05	Title	Faulty signal with M Drum Rotation Sensor 1 and 2
			Description	Faulty signal with M Drum Rotation Sensor 1 and 2
			Remedy	1. Check connection of Drum Rotation Sensor 1 and 2 (UN33, UN34) 2. Check that the Drum Rotation 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 Rotation Sensor Wheel rotates. -> If the wheel does not rotate, replace the Drum Drive Unit. 5. Take out the Drum Rotation Sensor to clean the Sensor and the Wheel. 6. Replace the Drum Rotation Sensor. 7. Replace the Drum Driver PCB (UN4)

E code	Detail code	Location	Items	Description
E012	0301	05	Title	Faulty signal with C Drum Rotation Sensor 1 and 2
			Description	Faulty signal with C Drum Rotation Sensor 1 and 2
			Remedy	1. Check connection of Drum Rotation Sensor 1 and 2 (UN35, UN36) 2. Check that the Drum Rotation 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 Rotation Sensor Wheel rotates. -> If the wheel does not rotate, replace the Drum Drive Unit. 5. Take out the Drum Rotation Sensor to clean the Sensor and the Wheel. 6. Replace the Drum Rotation Sensor. 7. Replace the Drum Driver PCB (UN4)
E012	0401	05	Title	Faulty signal with Bk Drum Rotation Sensor 1 and 2
			Description	Faulty signal with Bk Drum Rotation Sensor 1 and 2
			Remedy	1. Check connection of Drum Rotation Sensor 1 and 2 (UN37, UN38) 2. Check that the Drum Rotation 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 Rotation Sensor Wheel rotates. -> If the wheel does not rotate, replace the Drum Drive Unit. 5. Take out the Drum Rotation Sensor to clean the Sensor and the Wheel. 6. Replace the Drum Rotation Sensor. 7. Replace the Drum Driver PCB (UN4)
E012	0102	05	Title	Faulty signal with Y Drum Rotation Sensor 1
			Description	No detection with the signal for 80msec or more
			Remedy	1. Check connection of Drum Rotation Sensor 1. 2. Take out Drum Rotation Sensor 1 (UN31) to clean the Sensor. 3. Replace Drum Rotation Sensor 1. 4. Check if the harness of the Drum Rotation Sensor is faulty (replace the harness if it's disconnected). 5. Replace the Drum Driver PCB (UN4)

E code	Detail code	Location	Items	Description
E012	0202	05	Title	Faulty signal with M Drum Rotation Sensor 1
			Description	No detection with the signal for 80msec or more
			Remedy	1. Check connection of Drum Rotation Sensor 1. 2. Take out Drum Rotation Sensor 1 (UN33) to clean the Sensor. 3. Replace Drum Rotation Sensor 1. 4. Check if the harness of the Drum Rotation Sensor is faulty (replace the harness if it's disconnected). 5. Replace the Drum Driver PCB (UN4)
E012	0302	05	Title	Faulty signal with C Drum Rotation Sensor 1
			Description	No detection with the signal for 80msec or more
			Remedy	1. Check connection of Drum Rotation Sensor 1. 2. Take out Drum Rotation Sensor 1 (UN35) to clean the Sensor. 3. Replace Drum Rotation Sensor 1. 4. Check if the harness of the Drum Rotation Sensor is faulty (replace the harness if it's disconnected). 5. Replace the Drum Driver PCB (UN4)
E012	0402	05	Title	Faulty signal with Bk Drum Rotation Sensor 1
			Description	No detection with the signal for 80msec or more
			Remedy	1. Check connection of Drum Rotation Sensor 1. 2. Take out Drum Rotation Sensor 1 (UN37) to clean the Sensor. 3. Replace Drum Rotation Sensor 1. 4. Check if the harness of the Drum Rotation Sensor is faulty (replace the harness if it's disconnected). 5. Replace the Drum Driver PCB (UN4)
E012	0103	05	Title	Faulty signal with Y Drum Rotation Sensor 2
			Description	No detection with the signal for 80msec or more
			Remedy	1. Check connection of Drum Rotation Sensor 2 (UN32). 2. Take out Drum Rotation Sensor 2 to clean the Sensor. 3. Replace Drum Rotation Sensor 2. 4. Check if the harness of the Drum Rotation 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 Rotation Sensor 2
			Description	No detection with the signal for 80msec or more
			Remedy	1. Check connection of Drum Rotation Sensor 2 (UN34). 2. Take out Drum Rotation Sensor 2 to clean the Sensor. 3. Replace Drum Rotation Sensor 2. 4. Check if the harness of the Drum Rotation Sensor is faulty (replace the harness if it's disconnected). 5. Replace the Drum Driver PCB (UN4)

E code	Detail code	Location	Items	Description
E012	0303	05	Title	Faulty signal with C Drum Rotation Sensor 2
			Description	No detection with the signal for 80msec or more
			Remedy	1. Check connection of Drum Rotation Sensor 2 (UN36). 2. Take out Drum Rotation Sensor 2 to clean the Sensor. 3. Replace Drum Rotation Sensor 2. 4. Check if the harness of the Drum Rotation 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 Rotation Sensor 2
			Description	No detection with the signal for 80msec or more
			Remedy	1. Check connection of Drum Rotation Sensor 2 (UN38). 2. Take out Drum Rotation Sensor 2 to clean the Sensor. 3. Replace Drum Rotation Sensor 2. 4. Check if the harness of the Drum Rotation Sensor is faulty (replace the harness if it's disconnected). 5. Replace the Drum Driver PCB (UN4)
E012	0104	05	Title	Failure in Y Drum Rotation Sensor Wheel
			Description	Failure is detected with the Y Drum Rotation Sensor Wheel
			Remedy	1. Take out the Drum Rotation Sensor to clean the Sensor (UN31, UN32) and the Wheel. 2. Replace the Drum Rotation Sensor Wheel. 3. Replace the Drum Rotation Sensor. 4. Replace the Drum Driver PCB (UN4)
E012	0204	05	Title	Failure in M Drum Rotation Sensor Wheel
			Description	Failure is detected with the M Drum Rotation Sensor Wheel
			Remedy	1. Take out the Drum Rotation Sensor to clean the Sensor (UN33, UN34) and the Wheel. 2. Replace the Drum Rotation Sensor Wheel. 3. Replace the Drum Rotation Sensor. 4. Replace the Drum Driver PCB (UN4)
E012	0304	05	Title	Failure in C Drum Rotation Sensor Wheel
			Description	Failure is detected with the C Drum Rotation Sensor Wheel
			Remedy	1. Take out the Drum Rotation Sensor to clean the Sensor (UN35, UN36) and the Wheel. 2. Replace the Drum Rotation Sensor Wheel. 3. Replace the Drum Rotation Sensor. 4. Replace the Drum Driver PCB (UN4)
E012	0404	05	Title	Failure in Bk Drum Rotation Sensor Wheel
			Description	Failure is detected with the Bk Drum Rotation Sensor Wheel
			Remedy	1. Take out the Drum Rotation Sensor to clean the Sensor (UN37, UN38) and the Wheel. 2. Replace the Drum Rotation Sensor Wheel. 3. Replace the Drum Rotation Sensor. 4. Replace the Drum Driver PCB (UN4)

E code	Detail code	Location	Items	Description
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"> 1. Check if the Drum is installed. 2. Take out the Drum Rotation Sensor (UN31, UN32) 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	0205	05	Title	Failure in M Drum Motor Control
			Description	Unstable rotation of the M Drum Motor
			Remedy	<ol style="list-style-type: none"> 1. Check if the Drum is installed. 2. Take out the Drum Rotation 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	0305	05	Title	Failure in C Drum Motor Control
			Description	Unstable rotation of the C Drum Motor
			Remedy	<ol style="list-style-type: none"> 1. Check if the Drum is installed. 2. Take out the Drum Rotation 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	0405	05	Title	Failure in Bk Drum Motor Control
			Description	Unstable rotation of the Bk Drum Motor
			Remedy	<ol style="list-style-type: none"> 1. Check if the Drum is installed. 2. Take out the Drum Rotation 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)

E code	Detail code	Location	Items	Description
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"> 1. Check connection of the connector with the Drum Motor (M1) 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	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	<ol style="list-style-type: none"> 1. Check connection of the connector with the 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	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	<ol style="list-style-type: none"> 1. Check connection of the connector with the 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)
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	<ol style="list-style-type: none"> 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)

E code	Detail code	Location	Items	Description
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).
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 Rotation Sensors (in all colors)
			Description	The Drum Rotation 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).

E code	Detail code	Location	Items	Description
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 (M14) 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. Check the gear. If the gear rotates properly: 4. Check the connection between the Fixing Motor and the DC Controller PCB (open circuit or caught cable). 5. Replace the Fixing Motor 6. Replace the DC Controller PCB (UN1). If the gear does not work properly: Replace the gear.
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.

E code	Detail code	Location	Items	Description
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.
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.

E code	Detail code	Location	Items	Description
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.
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.

E code	Detail code	Location	Items	Description
E020	0081	05	Title	Error in ITB background light intensity
			Description	At ITB background correction, average value of the detected light intensity is 120 or less. When it occurs twice in a row, error is displayed.
			Remedy	This error tends to occur when the Patch Sensor window is not opened sufficiently due to damage on the Patch Detection Shutter. Especially, when LV.2 > DISPLAY > DENS > P-LED-DA is 3F, check if the Patch Detection Shutter is damaged or the Patch Sensor window is soiled. 1. Check the installation of the Patch Detection Shutter. 2. Clean the Patch Sensor window. 3. Check the disconnection of the Patch Sensor (UN47, UN48, UN49). 4. Check the installation of the ITB Unit. 5. Replace the Patch Sensor.
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.
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.

E code	Detail code	Location	Items	Description
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	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	Detail code	Location	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	Detail code	Location	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	0130	05	Title	Error in Y Developing Assembly
			Description	The average of ATR reference value is more than the specified value at the time of ATR 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 is less than the specified value at the time of ATR 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.
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.

E code	Detail code	Location	Items	Description
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	Error in upper limit with T/D ratio 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.
E020	01B1	05	Title	Error in Y Developing Assembly
			Description	Error in lower limit with T/D ratio 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	0230	05	Title	Error in M Developing Assembly
			Description	The average of ATR reference value is more than the specified value at the time of ATR initialization.
			Remedy	1. Check short-circuit of the ATR Sensor (TS6) Harness. 2. Replace the Developing Assembly.

E code	Detail code	Location	Items	Description
E020	0231	05	Title	Error in M Developing Assembly
			Description	The average of ATR reference value is less than the specified value at the time of ATR 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.
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	Error in upper limit with T/D ratio 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.

E code	Detail code	Location	Items	Description
E020	02B1	05	Title	Error in M Developing Assembly
			Description	Error in lower limit with T/D ratio 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 is more than the specified value at the time of ATR initialization.
			Remedy	1. Check short-circuit of the ATR Sensor (TS7) Harness. 2. Replace the Developing Assembly.
E020	0331	05	Title	Error in C Developing Assembly
			Description	The average of ATR reference value is less than the specified value at the time of ATR 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.

E code	Detail code	Location	Items	Description
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).
E020	03B0	05	Title	Error in C Developing Assembly
			Description	Error in upper limit with T/D ratio 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	Error in lower limit with T/D ratio 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 is more than the specified value at the time of ATR 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 is less than the specified value at the time of ATR 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.

E code	Detail code	Location	Items	Description
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.
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	Error in upper limit with T/D ratio 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.

E code	Detail code	Location	Items	Description
E020	04B1	05	Title	Error in Bk Developing Assembly
			Description	Error in lower limit with T/D ratio 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).
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	Detail code	Location	Items	Description
E021	0400	05	Title	Error in Bk Developing Motor
			Description	The motor failed to rotate at the specified speed.
			Remedy	<p>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).</p> <p>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).</p> <p>3.(If the above measures do not solve the problem,) replace the Drum Driver PCB (UN4).</p>
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	<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 (M9). Replace the Drum Driver PCB (UN4).</p>

E code	Detail code	Location	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>FUNCTION>CLEAR>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	Detail code	Location	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	Detail code	Location	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.</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>FUNCTION>CLEAR>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.</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	Detail code	Location	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	<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 (M11). Replace the Drum Driver PCB (UN4).</p>

E code	Detail code	Location	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>FUNCTION>CLEAR>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	Detail code	Location	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	Detail code	Location	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.</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>FUNCTION>CLEAR>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.</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	Detail code	Location	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> <ol style="list-style-type: none"> 1. Check if the Toner Container Cam HP Sensor is soiled and the installation of the sensor. 2. Rotate the Set-on Drive Shaft a little with the attached tool, and check the service mode (COPIER> I/O> DCON> 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. 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. 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. 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. 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. 4. Clear the error in service mode (COPIER> FUNCTION> CLEAR> ERR), and then turn OFF and then ON the main power. 5. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/Maintenance> Replace Specified Toner), and check that toner replacement can be performed normally.

E code	Detail code	Location	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> <ol style="list-style-type: none"> 1. Check if the Toner Container Cam HP Sensor is soiled and the installation of the sensor. 2. Rotate the Set-on Drive Shaft a little with the attached tool, and check the service mode (COPIER> I/O> DCON> 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. 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. 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. 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. 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. 4. Clear the error in service mode (COPIER> FUNCTION> CLEAR> ERR), and then turn OFF and then ON the main power. 5. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/Maintenance> Replace Specified Toner), and check that toner replacement can be performed normally.

E code	Detail code	Location	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> <ol style="list-style-type: none"> 1. Perform the user mode (Adjustment/Maintenance> Replace Specified Toner) to check if the Toner Container Inner Cover opens normally (damage, slide of shaft area, etc.). 2. Check if the Toner Container Inner Cover Sensor is soiled and the installation of the sensor. 3. Check the service mode (COPIER> I/O> DCON> 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. 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>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 -> Hopper Unit -> Bottle Base Unit -> 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"> 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. 5. Clear the error in service mode (COPIER> FUNCTION> CLEAR> ERR), and then turn OFF and then ON the main power. 6. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/Maintenance> Replace Specified Toner), and check that toner replacement can be performed normally.

E code	Detail code	Location	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> <ol style="list-style-type: none"> 1. Check if the Toner Container Cam HP Sensor is soiled and the installation of the sensor. 2. Rotate the Set-on Drive Shaft a little with the attached tool, and check the service mode (COPIER> I/O> DCON> P024 bit5) 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>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> <ol style="list-style-type: none"> 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. 4. Clear the error in service mode (COPIER> FUNCTION> CLEAR> ERR), and then turn OFF and then ON the main power. 5. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/Maintenance> Replace Specified Toner), and check that toner replacement can be performed normally.

E code	Detail code	Location	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> <ol style="list-style-type: none"> 1. Check if the Toner Container Cam HP Sensor is soiled and the installation of the sensor. 2. Rotate the Set-on Drive Shaft a little with the attached tool, and check the service mode (COPIER> I/O> DCON> P024 bit5) to see that the output value of the sensor is changed. <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> <ol style="list-style-type: none"> 2-1. If there is an error in rotation of the Set-on Drive Shaft, check the drive system such as gears. <p>If it is damaged, replace the Set-on Drive Unit and then perform step 4 and later steps.</p> <ol style="list-style-type: none"> 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>If it is not driven, replace the Hopper Unit and then perform step 4 and later steps.</p> <ol style="list-style-type: none"> 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>If there is no problem, replace the sensor. After checking the output value in step 2, perform step 4 and later steps.</p> <ol style="list-style-type: none"> 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. 4. Clear the error in service mode (COPIER> FUNCTION> CLEAR> ERR), and then turn OFF and then ON the main power. 5. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/Maintenance> Replace Specified Toner), and check that toner replacement can be performed normally.

E code	Detail code	Location	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"> 1. Perform the user mode (Adjustment/Maintenance> Replace Specified Toner) to check if the Toner Container Inner Cover opens normally (damage, slide of shaft area, etc.). 2. Check if the Toner Container Inner Cover Sensor is soiled and the installation of the sensor. 3. Check the service mode (COPIER> I/O> DCON> 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. <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> <ol style="list-style-type: none"> 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 -> Hopper Unit -> Bottle Base Unit -> Toner Container Inner Cover Unit). <p>If it is damaged, replace the damaged part and then perform step 5 and later steps.</p> <ol style="list-style-type: none"> 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>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"> 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. 5. Clear the error in service mode (COPIER> FUNCTION> CLEAR> ERR), and then turn OFF and then ON the main power. 6. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/Maintenance> Replace Specified Toner), and check that toner replacement can be performed normally.

E code	Detail code	Location	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> <ol style="list-style-type: none"> 1. Check if the Toner Container Cam HP Sensor is soiled and the installation of the sensor. 2. Rotate the Set-on Drive Shaft a little with the attached tool, and check the service mode (COPIER> I/O> DCON> P024 bit6) 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. 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. 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. 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. 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. 4. Clear the error in service mode (COPIER> FUNCTION> CLEAR> ERR), and then turn OFF and then ON the main power. 5. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/Maintenance> Replace Specified Toner), and check that toner replacement can be performed normally.

E code	Detail code	Location	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> <ol style="list-style-type: none"> 1. Check if the Toner Container Cam HP Sensor is soiled and the installation of the sensor. 2. Rotate the Set-on Drive Shaft a little with the attached tool, and check the service mode (COPIER> I/O> DCON> P024 bit6) 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. 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. 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. 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. 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. 4. Clear the error in service mode (COPIER> FUNCTION> CLEAR> ERR), and then turn OFF and then ON the main power. 5. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/Maintenance> Replace Specified Toner), and check that toner replacement can be performed normally.

E code	Detail code	Location	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> <ol style="list-style-type: none"> 1. Perform the user mode (Adjustment/Maintenance> Replace Specified Toner) to check if the Toner Container Inner Cover opens normally (damage, slide of shaft area, etc.). 2. Check if the Toner Container Inner Cover Sensor is soiled and the installation of the sensor. 3. Check the service mode (COPIER> I/O> DCON> 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. 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. 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 -> Hopper Unit -> Bottle Base Unit -> Toner Container Inner Cover Unit). If it is damaged, replace the damaged part and then perform step 5 and later steps. 3-2. When the output value is not changed normally although the Toner 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. 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. 5. Clear the error in service mode (COPIER> FUNCTION> CLEAR> ERR), and then turn OFF and then ON the main power. 6. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/Maintenance> Replace Specified Toner), and check that toner replacement can be performed normally.

E code	Detail code	Location	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> <ol style="list-style-type: none"> 1. Check if the Toner Container Cam HP Sensor is soiled and the installation of the sensor. 2. Rotate the Set-on Drive Shaft a little with the attached tool, and check the service mode (COPIER> I/O> DCON> P024 bit7) 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. 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. 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. 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. 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. 4. Clear the error in service mode (COPIER> FUNCTION> CLEAR> ERR), and then turn OFF and then ON the main power. 5. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/Maintenance> Replace Specified Toner), and check that toner replacement can be performed normally.

E code	Detail code	Location	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> <ol style="list-style-type: none"> 1. Check if the Toner Container Cam HP Sensor is soiled and the installation of the sensor. 2. Rotate the Set-on Drive Shaft a little with the attached tool, and check the service mode (COPIER> I/O> DCON> P024 bit7) to see that the output value of the sensor is changed. <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> <ol style="list-style-type: none"> 2-1. If there is an error in rotation of the Set-on Drive Shaft, check the drive system such as gears. <p>If it is damaged, replace the Set-on Drive Unit and then perform step 4 and later steps.</p> <ol style="list-style-type: none"> 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>If it is not driven, replace the Hopper Unit and then perform step 4 and later steps.</p> <ol style="list-style-type: none"> 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>If there is no problem, replace the sensor. After checking the output value in step 2, perform step 4 and later steps.</p> <ol style="list-style-type: none"> 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. 4. Clear the error in service mode (COPIER> FUNCTION> CLEAR> ERR), and then turn OFF and then ON the main power. 5. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/Maintenance> Replace Specified Toner), and check that toner replacement can be performed normally.

E code	Detail code	Location	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"> 1. Perform the user mode (Adjustment/Maintenance> Replace Specified Toner) to check if the Toner Container Inner Cover opens normally (damage, slide of shaft area, etc.). 2. Check if the Toner Container Inner Cover Sensor is soiled and the installation of the sensor. 3. Check the service mode (COPIER> I/O> DCON> 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. <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> <ol style="list-style-type: none"> 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 -> Hopper Unit -> Bottle Base Unit -> Toner Container Inner Cover Unit). <p>If it is damaged, replace the damaged part and then perform step 5 and later steps.</p> <ol style="list-style-type: none"> 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>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"> 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. 5. Clear the error in service mode (COPIER> FUNCTION> CLEAR> ERR), and then turn OFF and then ON the main power. 6. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/Maintenance> Replace Specified Toner), and check that toner replacement can be performed normally.

E code	Detail code	Location	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	<p>1. Check the damage of the Developing Coupling. If it's damaged, replace the Developing Assembly.</p> <p>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.</p> <p>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.</p> <p>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.</p>
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	<p>1. Check the damage of the Developing Coupling. If it's damaged, replace the Developing Assembly.</p> <p>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.</p> <p>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.</p> <p>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.</p>

E code	Detail code	Location	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	<p>1. Check the damage of the Developing Coupling. If it's damaged, replace the Developing Assembly.</p> <p>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.</p> <p>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.</p> <p>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.</p>
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	<p>1. Check the damage of the Developing Coupling. If it's damaged, replace the Developing Assembly.</p> <p>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.</p> <p>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.</p> <p>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.</p>
E032	0001	05	Title	ASSIST Counter failed to work
			Description	Detection of short-circuit with the Count Pulse Signal
			Remedy	Check the cable (to see if it's disconnected)

E code	Detail code	Location	Items	Description
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	Detail code	Location	Items	Description
E061	00F0	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	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 > DRMRSETY: 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	00F1	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	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 > DRMRSETY: execution of the color causing the error) 5. Replace the Drum Unit. 6. Replace the Pre-exposure LED PCB (UN23,UN24).
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	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 (UN25,UN26).

E code	Detail code	Location	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"> 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 (UN25,UN26).
E061	01F0	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"> 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 > DRMRSETM: 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	01F1	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"> 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 > DRMRSETM: execution of the color causing the error) 5. Replace the Drum Unit. 6. Replace the Pre-exposure LED PCB (UN25,UN26).

E code	Detail code	Location	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"> 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 (UN27,UN28).
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"> 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 (UN27,UN28).
E061	02F0	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"> 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 > DRMRSETC: 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).

E code	Detail code	Location	Items	Description
E061	02F1	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"> 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 > DRMRSETC: execution of the color causing the error) 5. Replace the Drum Unit. 6. Replace the Pre-exposure LED PCB (UN27,UN28).
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"> 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 (UN29,UN30).
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"> 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 (UN29,UN30).

E code	Detail code	Location	Items	Description
E061	03F0	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	<ol style="list-style-type: none"> 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	03F1	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	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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	Detail code	Location	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. (Procedures are shown below.) 2. Replace the ITB. 3. Replace the Secondary Transfer Roller. a) Place paper and remove the ITB Unit. b) Lift the front left side up (where the Cleaner and Motor are located) and hold the ITB Unit as if to twist it. c) Turn the Motor counterclockwise as if to make 2 to 3 rounds of the ITB. d) As the ITB is getting closer to the center, align the edge of the ITB with the marking line. 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, perform steps 2 and 3.

E code	Detail code	Location	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	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. (Procedures are shown below.) 2. Replace the ITB. 3. Replace the Secondary Transfer Roller. a) Place paper and remove the ITB Unit. b) 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. c) Turn the Motor counterclockwise as if to make 2 to 3 rounds of the ITB. d) As the ITB is getting closer to the center, align the edge of the ITB with the marking line. 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, perform steps 2 and 3.

E code	Detail code	Location	Items	Description
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.
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
			Description	In the case of an error in reading EEPROM of the Laser Driver (CBk), in the case of failure in reading the correct information (laser, etc.) from EEPROM, or in the case of a wrong Laser Scanner which does not match with the Host Machine.
			Remedy	1. Turn OFF and then ON the power. 2. Check the connector of Laser Scanner Unit 2. 3. Replace Laser Scanner Unit 2.
E110	0100	05	Title	Error in Polygon Motor of YM-side Scanner (BD lock failed)
			Description	In the case of failure in detecting FG signal although the specified period of time has passed after the Scanner Motor of Laser Scanner Unit 1 (YM laser) was started.
			Remedy	1. Check the connector of Laser Scanner Unit 1. 2. Replace Laser Scanner Unit 1.

E code	Detail code	Location	Items	Description
E110	0300	05	Title	Error in Polygon Motor of CBk-side Scanner (BD lock failed)
			Description	In the case of failure in detecting FG signal although the specified period of time has passed after the Scanner Motor of Laser Scanner Unit 2 (CBk laser) was started.
			Remedy	1. Check the connector of Laser Scanner Unit 2. 2. Replace Laser Scanner Unit 2.
E110	0101	05	Title	Error in Polygon Motor of YM-side Scanner (unreached speed)
			Description	In the case of failure in detecting FG signal while the Scanner Motor of Laser Scanner Unit 1 (YM laser) is stably rotating.
			Remedy	1. Turn OFF and then ON the power. 2. Check the connector of Laser Scanner Unit 1 3. Replace Laser Scanner Unit 1.
E110	0301	05	Title	Error in Polygon Motor of CBk-side Scanner (unreached speed)
			Description	In the case of failure in detecting FG signal while the Scanner Motor of Laser Scanner Unit 2 (CBk laser).
			Remedy	1. Turn OFF and then ON the power. 2. Check the connector of Laser Scanner Unit 2. 3. Replace Laser Scanner Unit 2.
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).
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).

E code	Detail code	Location	Items	Description
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).
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).

E code	Detail code	Location	Items	Description
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	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).
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).

E code	Detail code	Location	Items	Description
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).
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).

E code	Detail code	Location	Items	Description
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).
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).

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E code	Detail Code	Location	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	0101	04	Title	Glass HP error * This error occurs on Duplex Color Image Reader Unit-B1 only.
			Description	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 Glass Shifting Motor. (Set the service mode: FEEDER > FUNCTION > MTR-CHK > 7. Then, set FEEDER > FUNCTION > MTR-ON.) 3. Check the flag position of Scanner Home Position Sensor and Scanner Unit. 4. Replace the Reader Controller PCB.
E202	0102	04	Title	Glass HP error * This error occurs on Duplex Color Image Reader Unit-B1 only.
			Description	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 Glass Shifting Motor. (Set the service mode: FEEDER > FUNCTION > MTR-CHK > 7. Then, set FEEDER > FUNCTION > MTR-ON.) 3. Check the flag position of Scanner Home Position Sensor and Scanner Unit. 4. Replace the Reader Controller PCB.

E code	Detail Code	Location	Items	Description
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.
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.

E code	Detail Code	Location	Items	Description
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.
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	0001	05	Title	3 minutes has passed since the status remained to be waiting for pickup request
			Description	No response after 3 minutes has passed since the pickup request from the Main Controller to the DC Controller during printing.
			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.

E code	Detail Code	Location	Items	Description
E240	0002	05	Title	3 minutes has passed since the status remained to be waiting for image output request
			Description	No response after 3 minutes has passed since the image output request from the Main Controller to the DC Controller during printing.
			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	0003	05	Title	Keep on rotating after the jam (engine bug)
			Description	Engine keeps rotating when jam occurs.
			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	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

E code	Detail Code	Location	Items	Description
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.
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	Detail Code	Location	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	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).

E code	Detail Code	Location	Items	Description
E302	0001	04	Title	Error in paper face 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 PCB (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	0101	04	Title	Error in paper back 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.
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
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

E code	Detail Code	Location	Items	Description
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	Detail Code	Location	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	<ol style="list-style-type: none"> 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.
E401	0001	04	Title	Pickup error
			Description	Pickup Unit is not returned to the home position.
			Remedy	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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.

E code	Detail Code	Location	Items	Description
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	<ol style="list-style-type: none"> 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.
E413	0001	04	Title	DF Disengagement Motor error
			Description	Lead Roller 1 disengagement error
			Remedy	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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.

E code	Detail Code	Location	Items	Description
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.
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.
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.

E code	Detail Code	Location	Items	Description
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.
E503	0004	05	Title	Communication error
			Description	The communication with the inserter or the folder is interrupted.
			Remedy	1. The wiring between the finisher controller PCB and host machine controller PCB is faulty. 2. The finisher controller PCB is faulty. 3. The host machine controller PCB is faulty.
E505	0001	05	Title	EEPROM error
			Description	The checksum for the EEPROM data has an error.
			Remedy	1. Failure of Finisher Controller PCB.
E505	0002	05	Title	EEPROM error
			Description	The checksum for the EEPROM data has an error.
			Remedy	1. An error is detected in the check sum value in EEPROM data on the Punch Controller.
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.

E code	Detail Code	Location	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.
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.
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.

E code	Detail Code	Location	Items	Description
E530	8001	05	Title	Front aligning plate home position error
			Description	The aligning plate does not leave the aligning plate front home position sensor when the alignment plate front motor has been driven for 4 seconds.
			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.
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	0001	05	Title	Stapler 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 (M10) Connector is physically removed. 2. Check if the Motor failure occurs. 3. Check if the Stapler HP Sensor (S18) Connector is physically removed. 4. Check if the Stapler HP Sensor (S18) failure occurs.
E531	0002	05	Title	Stapler 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 (M10) Connector is physically removed. 2. Check if the Motor failure occurs. 3. Check if the Stapler HP Sensor (S18) Connector is physically removed. 4. Check if the Stapler HP Sensor (S18) failure occurs.

E code	Detail Code	Location	Items	Description
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 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	0002	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.
E532	8001	05	Title	Stapler shift home position error
			Description	The stapler does not leave the stapler shift home position when the stapler shift motor has been 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.

E code	Detail Code	Location	Items	Description
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.
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.

E code	Detail Code	Location	Items	Description
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.
E540	0002	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.

E code	Detail Code	Location	Items	Description
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.
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.

E code	Detail Code	Location	Items	Description
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.
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	0002	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.

E code	Detail Code	Location	Items	Description
E542	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 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.
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.

E code	Detail Code	Location	Items	Description
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.
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.

E code	Detail Code	Location	Items	Description
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.
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	Detail Code	Location	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	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.
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.

E code	Detail Code	Location	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	Scrap full detection error
			Description	The voltage of the light received is 3.0 V or less even when the light emitting duty of the scrap full detector sensor has been increased to 66% or more.
			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	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	Detail Code	Location	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	Detail Code	Location	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	Detail Code	Location	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	Detail Code	Location	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.
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.

E code	Detail Code	Location	Items	Description
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.
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.

E code	Detail Code	Location	Items	Description
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.
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	Detail code	Location	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	<ol style="list-style-type: none"> 1. Turn OFF the main switch and check connection of HDD cable, and then turn ON the main switch. 2. Be sure that HDD spins stably (no problem in drive sound) and 5V/12V power is supplied when the main power is turned ON. 3. If the above measures do not solve the problem, replace the HDD and reinstall the system. If there still remains the problem, replace the Main Controller PCB 1.
E602	0002	00	Title	Error in HDD
			Description	There is no system for the main CPU
			Remedy	<ol style="list-style-type: none"> 1. Start in Safe Mode, then perform overall format using SST or USB memory and reinstall the system, and then turn OFF and then ON the Main Switch.(Prepare the USB memory which system software was registered. Insert the USB memory to the equipment. Execute [3]: Upgrade (Overwrite All) in the main menu.) 2. If the above measures do not solve the problem, it can be caused by failure with HDD; therefore, replace the HDD and reinstall the system.
E602	0003	00	Title	Error in HDD
			Description	WriteAbort was detected with BootDevice
			Remedy	<ol style="list-style-type: none"> 1. Execute detection and recovery of WriteAbortSector <In the case of display of B/W E-code> <ol style="list-style-type: none"> 1-1. Perform the following steps because Service Mode is not available. 1-2. Turn OFF the power. Then, while pressing 1+9 keys, turn ON the power. WriteAbortSector recovery routine is automatically started which makes the screen black. 1-3. After a while, progress is displayed because the process takes time (40 to 50 min.). The process is complete when the screen turns white. <In the case of official display of wrench-mark> <ol style="list-style-type: none"> 1-1. Set as follows: CHK-TYPE=0; and execute HD-CHECK (40 to 50 min.), and then turn OFF and then ON the main switch. 2. If the above measures do not solve the problem, start up in Safe Mode to perform overall format using SST or USB memory and reinstall the system, and then turn OFF and then ON the main switch. 3. If no improvement is found despite the above measures, it can be caused by failure with HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	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"> 1. Prepare the USB memory which system software was registered. 2. Execute the following service mode: COPIER>FUNCTION>SYSTEM>DOWNLOAD to enter the download mode. (When it is not operated normally, start the safe mode.) 3. Insert the USB memory to the equipment. 4. Execute [3]: Upgrade (Overwrite All) in the main menu. (Be sure to download SYSTEM, LANGUAGE and RUI.) 5. System software is downloaded and the machine restarts automatically. At this time, if the machine restarts with the safe mode, E753 might occurs. Check the log. In case of the system software of the options which are not connected, turn OFF and then ON the power supply to restore. (For details, see the description for E753.) <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"> 1. Start up in Safe Mode and reinstall the system using SST; and then turn OFF and then ON the main power switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0009	00	Title	Error in HDD
			Description	There is no Font file in /BOOTDEV/BOOT
			Remedy	<ol style="list-style-type: none"> 1. Start up in Safe Mode and reinstall the system using SST; and then turn OFF and then ON the main power switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0012	00	Title	Error in HDD
			Description	There is no file in which the Web browser refers to
			Remedy	<ol style="list-style-type: none"> 1. Start up in Safe Mode and reinstall the Web browser using SST, and then turn OFF and then ON the main power switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	0100	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0101	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0102	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0103	00	Title	Error in HDD
			Description	WriteAbort (at startup)
			Remedy	1. Enter the applicable CHK-TYPE=1 in the partition to execute HDD-CHECK (duration: several minutes to several dozen minutes); and then turn OFF and then ON the power. 2. If the above measures failed to recover the system, enter the applicable CHK-TYPE=1 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the main switch.

E code	Detail code	Location	Items	Description
E602	0104	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0105	00	Title	Error in HDD
			Description	Error in file system
			Remedy	1. Enter the applicable CHK-TYPE=1 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0110	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0112	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	0113	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=1 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=1 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	0114	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0122	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0123	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	0124	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0125	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=1 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=1 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	0200	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0201	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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.

E code	Detail code	Location	Items	Description
E602	0202	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0203	00	Title	Error in HDD
			Description	WriteAbort (at startup)
			Remedy	1. Enter the applicable CHK-TYPE=1 in the partition to execute HDD-CHECK (duration: several minutes to several dozen minutes); and then turn OFF and then ON the power. 2. If the above measures failed to recover the system, enter the applicable CHK-TYPE=1 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the main switch.
E602	0204	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0205	00	Title	Error in HDD
			Description	Error in file system
			Remedy	1. Enter the applicable CHK-TYPE=1 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0210	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	0212	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0213	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=1 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=1 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	0214	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0222	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	0223	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0224	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0225	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=1 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=1 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	0300	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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.

E code	Detail code	Location	Items	Description
E602	0301	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0302	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0303	00	Title	Error in HDD
			Description	WriteAbort (at startup)
			Remedy	1. Enter the applicable CHK-TYPE=1 in the partition to execute HDD-CHECK (duration: several minutes to several dozen minutes); and then turn OFF and then ON the power. 2. If the above measures failed to recover the system, enter the applicable CHK-TYPE=1 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the main switch.
E602	0304	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0305	00	Title	Error in HDD
			Description	Error in file system
			Remedy	1. Enter the applicable CHK-TYPE=1 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	0310	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0312	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0313	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=1 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=1 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	0314	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	0322	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0323	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0324	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0325	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=1 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=1 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 3. If there still remains the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	0400	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0401	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0402	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0403	00	Title	Error in HDD
			Description	WriteAbort (at startup)
			Remedy	1. Enter the applicable CHK-TYPE=1 in the partition to execute HDD-CHECK (duration: several minutes to several dozen minutes); and then turn OFF and then ON the power. 2. If the above measures failed to recover the system, enter the applicable CHK-TYPE=1 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the main switch.

E code	Detail code	Location	Items	Description
E602	0404	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0405	00	Title	Error in HDD
			Description	Error in file system
			Remedy	1. Enter the applicable CHK-TYPE=1 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0410	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0412	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	0413	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=1 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=1 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	0414	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0422	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0423	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	0424	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0425	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=1 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=1 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	0500	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0501	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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.

E code	Detail code	Location	Items	Description
E602	0502	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0503	00	Title	Error in HDD
			Description	WriteAbort (at startup)
			Remedy	1. Enter the applicable CHK-TYPE=11 in the partition to execute HDD-CHECK (duration: several minutes to several dozen minutes); and then turn OFF and then ON the power. 2. If the above measures failed to recover the system, enter the applicable CHK-TYPE=11 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the main switch.
E602	0504	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0505	00	Title	Error in HDD
			Description	Error in file system
			Remedy	1. Enter the applicable CHK-TYPE=11 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0510	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	0512	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0513	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=11 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=11 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	0514	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0522	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	0523	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0524	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0525	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=11 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=11 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	0600	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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.

E code	Detail code	Location	Items	Description
E602	0601	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0602	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0603	00	Title	Error in HDD
			Description	WriteAbort (at startup)
			Remedy	WriteAbort (at startup)
E602	0604	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0605	00	Title	Error in HDD
			Description	Error in file system
			Remedy	1. Enter the applicable CHK-TYPE=2 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	0610	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0612	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0613	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=2 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=2 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	0614	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	0622	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0623	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0624	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0625	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=2 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=2 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 3. If there still remains the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	0700	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0701	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0702	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0703	00	Title	Error in HDD
			Description	WriteAbort (at startup)
			Remedy	1. Enter the applicable CHK-TYPE=2 in the partition to execute HDD-CHECK (duration: several minutes to several dozen minutes); and then turn OFF and then ON the power. 2. If the above measures failed to recover the system, enter the applicable CHK-TYPE=2 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the main switch.

E code	Detail code	Location	Items	Description
E602	0704	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0705	00	Title	Error in HDD
			Description	Error in file system
			Remedy	1. Enter the applicable CHK-TYPE=2 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0710	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0712	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	0713	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=2 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=2 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	0714	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0722	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0723	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	0724	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0725	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=2 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=2 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	0800	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0801	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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.

E code	Detail code	Location	Items	Description
E602	0802	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0803	00	Title	Error in HDD
			Description	WriteAbort (at startup)
			Remedy	1. Enter the applicable CHK-TYPE=2 in the partition to execute HDD-CHECK (duration: several minutes to several dozen minutes); and then turn OFF and then ON the power. 2. If the above measures failed to recover the system, enter the applicable CHK-TYPE=2 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the main switch.
E602	0804	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0805	00	Title	Error in HDD
			Description	Error in file system
			Remedy	1. Enter the applicable CHK-TYPE=2 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0810	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	0812	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0813	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=2 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=2 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	0814	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0822	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	0823	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0824	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0825	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=2 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=2 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	0900	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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.

E code	Detail code	Location	Items	Description
E602	0901	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0902	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0903	00	Title	Error in HDD
			Description	WriteAbort (at startup)
			Remedy	1. Enter the applicable CHK-TYPE=3 in the partition to execute HDD-CHECK (duration: several minutes to several dozen minutes); and then turn OFF and then ON the power. 2. If the above measures failed to recover the system, enter the applicable CHK-TYPE=3 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the main switch.
E602	0904	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	0905	00	Title	Error in HDD
			Description	Error in file system
			Remedy	1. Enter the applicable CHK-TYPE=3 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	0910	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0912	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0913	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=3 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=3 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	0914	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	0922	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0923	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0924	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	0925	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=3 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=3 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 3. If there still remains the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	1000	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	1001	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	1002	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	1003	00	Title	Error in HDD
			Description	WriteAbort (at startup)
			Remedy	Recovery in Boot partition is available only through SST in Safe Mode. 1. Set as follows: CHK-TYPE=4 = 0; and execute HDD-CHECK (duration: several dozen minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, get in Download 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.

E code	Detail code	Location	Items	Description
E602	1004	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	1005	00	Title	Error in HDD
			Description	Error in file system
			Remedy	Recovery in Boot Partition is available only through SST in Safe Mode. 1. 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. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1010	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1012	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	1013	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=4 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=4 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	1014	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1022	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1023	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	1024	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1025	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=4 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=4 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	1100	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	1101	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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.

E code	Detail code	Location	Items	Description
E602	1102	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	1103	00	Title	Error in HDD
			Description	WriteAbort (at startup)
			Remedy	1. Enter the applicable CHK-TYPE=5 in the partition to execute HDD-CHECK (duration: several minutes to several dozen minutes); and then turn OFF and then ON the power. 2. If the above measures failed to recover the system, enter the applicable CHK-TYPE=5 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the main switch.
E602	1104	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	1105	00	Title	Error in HDD
			Description	Error in file system
			Remedy	1. Enter the applicable CHK-TYPE=5 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1110	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	1112	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1113	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=5 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=5 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	1114	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1122	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	1123	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1124	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1125	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=5 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=5 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	1200	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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.

E code	Detail code	Location	Items	Description
E602	1201	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	1202	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	1203	00	Title	Error in HDD
			Description	WriteAbort (at startup)
			Remedy	1. If possible, ask the customer to retrieve the data in the Address Book from the remote UI. 2. Enter the applicable CHK-TYPE=6 in the partition to execute HDD-CHECK (duration: several minutes to several dozen minutes), and then turn OFF and then ON the power. 3. If the above measure failed to recover the system, get in Download 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.
E602	1204	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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.

E code	Detail code	Location	Items	Description
E602	1205	00	Title	Error in HDD
			Description	Error in file system
			Remedy	1. Enter the applicable CHK-TYPE=6 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1210	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1212	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1213	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=6 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=6 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 3. If there still remains the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	1214	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1222	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1223	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1224	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	1225	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=6 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=6 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	1300	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	1301	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	1302	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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.

E code	Detail code	Location	Items	Description
E602	1303	00	Title	Error in HDD
			Description	WriteAbort (at startup)
			Remedy	Recovery in Boot partition is available only through SST in Safe Mode. 1. Set as follows: CHK-TYPE=7 = 0; and execute HDD-CHECK (duration: several dozen minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, get in Download 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.
E602	1304	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	1305	00	Title	Error in HDD
			Description	Error in file system
			Remedy	Recovery in Boot Partition is available only through SST in Safe Mode. 1. 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. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1310	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	1312	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1313	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=7 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=7 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	1314	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1322	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	1323	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1324	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1325	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=7 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=7 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	1400	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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.

E code	Detail code	Location	Items	Description
E602	1401	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	1402	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	1403	00	Title	Error in HDD
			Description	WriteAbort (at startup)
			Remedy	1. Enter the applicable CHK-TYPE=8 in the partition to execute HDD-CHECK (duration: several minutes to several dozen minutes); and then turn OFF and then ON the power. 2. If the above measures failed to recover the system, enter the applicable CHK-TYPE=8 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the main switch.
E602	1404	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	1405	00	Title	Error in HDD
			Description	Error in file system
			Remedy	1. Enter the applicable CHK-TYPE=8 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	1410	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1412	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1413	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=8 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=8 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	1414	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	1422	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1423	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1424	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1425	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=8 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=8 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 3. If there still remains the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	1500	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	1501	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	1502	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	1503	00	Title	Error in HDD
			Description	WriteAbort (at startup)
			Remedy	1. Enter the applicable CHK-TYPE=9 in the partition to execute HDD-CHECK (duration: several minutes to several dozen minutes); and then turn OFF and then ON the power. 2. If the above measures failed to recover the system, enter the applicable CHK-TYPE=9 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the main switch.

E code	Detail code	Location	Items	Description
E602	1504	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	1505	00	Title	Error in HDD
			Description	Error in file system
			Remedy	1. Enter the applicable CHK-TYPE=9 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1510	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1512	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	1513	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=9 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=9 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	1514	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1522	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1523	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	1524	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1525	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=9 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=9 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	1600	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	1601	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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.

E code	Detail code	Location	Items	Description
E602	1602	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	1603	00	Title	Error in HDD
			Description	WriteAbort (at startup)
			Remedy	1. Enter the applicable CHK-TYPE=10 in the partition to execute HDD-CHECK (duration: several minutes to several dozen minutes); and then turn OFF and then ON the power. 2. If the above measures failed to recover the system, enter the applicable CHK-TYPE=10 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the main switch.
E602	1604	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	1605	00	Title	Error in HDD
			Description	Error in file system
			Remedy	1. Enter the applicable CHK-TYPE=10 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1610	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	1612	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1613	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=10 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=10 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	1614	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1622	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	1623	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1624	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	1625	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=10 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=10 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 3. If there still remains the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	2000	00	Title	Error in HDD Encryption Board
			Description	Authentication error between the host machine and the Encryption Board.
			Remedy	1. After checking connection of the Encryption Board, disconnect and connect the connector and, turn OFF and then ON the power. 2. Execute the key clear procedure. * Key clear: system recovery procedure 1. Execute the key clear procedure with SST. --> As a result, the disk becomes unformatted disk. Thus, it is necessary to execute step 2. --> E602-0001 will be indicated if activating the machine with the unformatted disk. 2. Execute HDD format and system reinstallation with SST.
E602	2001	00	Title	Error in HDD Encryption Board
			Description	Mismatch in the Encryption Board operation.
			Remedy	1. Execute the key clear procedure.
E602	2002	00	Title	Error in HDD Encryption Board
			Description	Failure of the Encryption Board.
			Remedy	1. After checking connection of the Encryption Board, disconnect and connect the connector and, turn OFF and then ON the power. 2. Execute the key clear procedure. 3. After replacing the Encryption Board, execute HDD format and system reinstallation with SST. 4. Replace the LAN-BARSAC Board --> replace the Main Controller PCB 1.
E602	4000	00	Title	Error in HDD
			Description	Unable to mount the Linux system.
			Remedy	1. Check the cable and the power connector. 2. If the above measures do not solve the problem, start in Safe Mode to perform overall format using SST or USB memory and reinstall the system, and then turn OFF and then ON the Main Power Switch. 3. If there still remains the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	4001	00	Title	Error in HDD
			Description	No Linux system start script.
			Remedy	1. Check the cable and the power connector. 2. If the above measures do not solve the problem, start in Safe Mode to perform overall format using SST or USB memory and reinstall the system, and then turn OFF and then ON the Main Power Switch. 3. If there still remains the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	FF00	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and power connector. 2. If the above measures do not solve the problem, start in Safe Mode to perform overall format using SST or USB memory and reinstall the system, and then turn OFF and then ON the Main Power Switch. 3. If there still remains the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	FF01	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	FF02	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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.

E code	Detail code	Location	Items	Description
E602	FF03	00	Title	Error in HDD
			Description	WriteAbort (at startup)
			Remedy	1. Set as follows: CHK-TYPE=3 = 0; and execute HDD-CHECK (duration: several dozen minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, execute HDD-CLEAR with CHK-TYPE=3 = 1, 2, 3, 5, and then turn OFF and then ON the power.
E602	FF04	00	Title	Error in HDD
			Description	Failure in contact with HDD
			Remedy	1. Check the cable and 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	FF05	00	Title	Error in HDD
			Description	Error in file system
			Remedy	This is the error which usually does not occur. 1. Execute HDD-CLEAR with CHK-TYPE=3 = 1, 2, 3, 5, and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	FF10	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	FF11	00	Title	Error in HDD
			Description	Failure in HDD connection
			Remedy	This is the error which usually does not occur in Read/Write level. 1. Check the cable and power connector. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	FF12	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	FF13	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=3 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=3 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 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	FF14	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	FF21	00	Title	Error in HDD
			Description	Failure in HDD connection
			Remedy	This is the error which usually does not occur in Read/Write level. 1. Check the cable and power connector. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	Items	Description
E602	FF22	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	FF23	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	FF24	00	Title	Error in HDD
			Description	System error or Packet data error
			Remedy	It's due to data corruption or software bug. 1. Start in Safe Mode to perform overall format with SST and reinstall the system, and then turn OFF and then ON the Main Power Switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	FF25	00	Title	Error in HDD
			Description	WriteAbort
			Remedy	The document data (such as BOX on the HDD) can be damaged. 1. Enter the applicable CHK-TYPE=3 in the partition to perform HDD-CHECK (duration: several minutes to several dozens of minutes), and then turn OFF and then ON the power. 2. If the above measures do not solve the problem, enter the applicable CHK-TYPE=3 in the partition to execute HDD-CLEAR, and then turn OFF and then ON the Main Power Switch. (Use SST to perform reformat/reinstallation in the case of the following: BOOTDEV, BOOTDEV2 and APL_SEND) 3. If there still remains the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detail code	Location	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.
E611	0000	00	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	Classify into the following 3 categories and perform the operation respectively. a. When the System of the main body is ver. 30.30 or later. b. When the System of the main body is between ver. 20.02 and 30.29, and can be upgraded. c. When the System of the main body is ver. 22.01 or earlier, or when it cannot be upgraded immediately.

E code	Detail code	Location	Items	Description
E611	0000	00	Remedy	<p>a. When the System of the main body is ver. 30.30 or later.</p> <p>a-1. Execute service mode > COPIER> FUNCTION > CLEAR > FXTX-CLR. (This service mode can be used only when the System is ver. 30.30 or later)</p> <p>a-2. Turn OFF and then ON the main power switch.</p> <p>a-3. If possible, upgrade to ver. 31.02 or later which modified this error.</p> <p>*The following procedure shows the execution of clearing MN-CON, so refer to [Points to Note When Clearing MN-CON].</p> <p>b. When the System of the main body is between ver. 20.02 and 30.29, and can be upgraded.</p> <p>b-1. Upgrade the System to ver. 30.30 or later (if possible, 31.02 or later).</p> <p>b-2. Execute service mode > COPIER> FUNCTION > CLEAR > FXTX-CLR.</p> <p>b-3. Execute service mode > COPIER> FUNCTION > CLEAR > MN-CON. (Be careful that this step does not exist in procedure a.)</p> <p>b-4. Turn OFF and then ON the main power switch. (Unlike step c, this procedure does not require the execution of clearing HDD.)</p> <p>c. When the System of the main body is ver. 22.01 or earlier, or when it cannot be upgraded immediately.</p> <p>c-1. Execute service mode > COPIER > FUNCTION > CLEAR > MN-CON.</p> <p>c-2. Execute service mode > COPIER > FUNCTION > SYSTEM > CHK-TYPE > 1 > OK > HD-CLEAR. Before executing this service mode, inform users that all images in the Inbox will be deleted and get approval from them.</p> <p>c-3. Execute service mode > COPIER > FUNCTION > SYSTEM > CHK-TYPE > 2 > OK > HD-CLEAR</p> <p>c-4. Turn OFF and then ON the main power switch.</p> <p>[Points to Note When Clearing MN-CON] Execution of clearing MN-CON deletes all data in Address Book, Forwarding Settings, Settings/Registration (Preferences), Adjustment/Maintenance, Function Settings, Set Destination, Management Settings, TPM Settings, etc. Before execution of this operation, ask user to back up the data and get approval for this operation. When clearing MN-CON while any login application other than Default Authentication is, error such as not displayed login screen occurred. In this case, access SMS once and switch login application to Default Authentication to recover to the normal status.</p>

E code	Detail code	Location	Items	Description
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	00	Title	Failure in communication of FAX board
			Description	Error is detected for specified number of times in communication with FAX board.
			Remedy	Note: "Main Controller PCB" in the sentence refers to "Main Controller PCB 2" for 1-line Fax Board or "Main Controller 1" for 2-/3-/4-line Fax Board. 1. Check connection between the FAX board and the Main controller PCB. 2. Replace the Fax board. 3. Replace the Main controller PCB.
E674	0004	00	Title	Failure in communication of FAX board
			Description	Failure in access of the modem IC which is used with OnBoardFax
			Remedy	Note: "Main Controller PCB" in the sentence refers to "Main Controller PCB 2" for 1-line Fax Board or "Main Controller 1" for 2-/3-/4-line Fax Board. 1. Check connection between the FAX board and the Main controller PCB. 2. Replace the Fax board. 3. Replace the Main controller PCB.

E code	Detail code	Location	Items	Description
E674	0008	00	Title	Failure in communication of FAX board
			Description	Failure in access of the port IC that is be used with OnBoardFax
			Remedy	Note: "Main Controller PCB" in the sentence refers to "Main Controller PCB 2" for 1-line Fax Board or "Main Controller 1" for 2-/3-/4-line Fax Board. 1. Check connection between the FAX board and the Main controller PCB. 2. Replace the Fax board. 3. Replace the Main controller PCB.
E674	000C	00	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	Note: "Main Controller PCB" in the sentence refers to "Main Controller PCB 2" for 1-line Fax Board or "Main Controller 1" for 2-/3-/4-line Fax Board. 1. Check connection between the FAX board and the Main controller PCB. 2. Replace the Fax board. 3. Replace the Main controller PCB.
E674	0010	00	Title	Failure in communication of FAX board
			Description	Failure in opening of the timer device to be used with OnBoard Fax
			Remedy	Note: "Main Controller PCB" in the sentence refers to "Main Controller PCB 2" for 1-line Fax Board or "Main Controller 1" for 2-/3-/4-line Fax Board. Replace the Main controller PCB.
E674	0011	00	Title	Failure in communication of FAX board
			Description	Failure in starting of the timer device which is used with OnBoardFax
			Remedy	Note: "Main Controller PCB" in the sentence refers to "Main Controller PCB 2" for 1-line Fax Board or "Main Controller 1" for 2-/3-/4-line Fax Board. Replace the Main controller PCB.
E674	0030	00	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	Detail code	Location	Items	Description
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-A1_B1.")
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
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.

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Ecode	Detail code	Location	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 register of IPC (Ctrl)
			Description	Set 4 errors within 1.5 sec in register IPC chip.
			Remedy	Check the cable.
E711	0002	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.
			Remedy	Check the connector connected to the Finisher.
E713	0004	05	Title	Error in IPC communication
			Description	When not receiving data for more than specified time
			Remedy	Check the connector connected to the Finisher.
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.

Ecode	Detail code	Location	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.)

Ecode	Detail code	Location	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.

Ecode	Detail code	Location	Items	Description
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.

Ecode	Detail code	Location	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.
E732	0001	00	Title	Error in scanner communication
			Description	Error in DDI-S communication
			Remedy	1. Check the connector connecting to the Scanner. 2. Check the power of the Scanner ->whether to perform initialization at start-up? 3. Replace the Rcon, the Scanner Board or the Main controller PCB 2.
E732	9999	00	Title	Error in scanner communication
			Description	When a Scanner is detected for the first time from the Printer Model (not an error).
			Remedy	1. Turn OFF and then ON the power.
E733	0000	00	Title	Error in printer communication
			Description	Communication with the printer failed at start-up.
			Remedy	1. Check the connector connecting to the Printer. 2. Check the power of the Printer -> whether to perform initialization at start-up? 3. Replace the Dcon or the Main controller PCB 2.
E733	0001	00	Title	Error in printer communication
			Description	Error in DDI-P communication
			Remedy	1. Check the connector connecting to the Printer. 2. Check the power of the Printer -> whether to perform initialization at start-up? 3. Replace the Dcon or the Main Controller PCB 2.
E740	0002	00	Title	Failure in Ethernet Board
			Description	Incorrect MAC address
			Remedy	1 Replace the LAN card.
E740	0003	00	Title	Failure in Ethernet Board
			Description	Incorrect MAC address
			Remedy	1 Replace the LAN card.

Ecode	Detail code	Location	Items	Description
E743	0000	00	Title	DDI communication error
			Description	SCI error occurrence, reception data NG, reception timeout, SEQ timeout error
			Remedy	1. Turn OFF and then ON the power. 2. Check the connection of the Cable between Reader and Controller. 3. Check the voltage (+24V and +12V) on the Reader Controller PCB. 4. Replace the DDI-S Cable. 5. Replace the Reader Controller PCB. 6. Replace the Main Controller PCB 2.
E743	0003	00	Title	DDI communication error
			Description	SCI error occurrence, reception data NG, reception timeout, SEQ timeout error
			Remedy	1. Turn OFF and then ON the power. 2. Check the connection of the Cable between Reader and Controller. 3. Check the voltage (+24V and +12V) on the Reader Controller PCB. 4. Replace the DDI-S Cable. 5. Replace the Reader Controller PCB. 6. Replace the Main Controller PCB 2.
E743	0004	00	Title	DDI communication error
			Description	SCI error occurrence, reception data NG, reception timeout, SEQ timeout error
			Remedy	1. Turn OFF and then ON the power. 2. Check the connection of the Cable between Reader and Controller. 3. Check the voltage (+24V and +12V) on the Reader Controller PCB. 4. Replace the DDI-S Cable. 5. Replace the Reader Controller PCB. 6. Replace the Main Controller PCB 2.
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.

Ecode	Detail code	Location	Items	Description
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	Error in engine ID of SoftID
			Description	The engine ID described in SoftID is incorrect
			Remedy	1. Replace the SoftID PCB
E744	4000	00	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 C5045 can be installed only to imageRUNNER ADVANCE C5045.
E746	0011	00	Title	Error in engine ID of SoftID
			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	Error in engine ID of SoftID
			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	Error in engine ID of SoftID
			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.

Ecode	Detail code	Location	Items	Description
E746	0023	00	Title	Error in engine ID of SoftID
			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	Error in engine ID of SoftID
			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	Error in engine ID of SoftID
			Description	Error in hardware
			Remedy	Replace the TPM chip.
E746	0032	00	Title	Error in engine ID of SoftID
			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.

Ecode	Detail code	Location	Items	Description
E746	0033	00	Title	Error in engine ID of SoftID
			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.
E747	1201	00	Title	PDL rendering error
			Description	Image processing IC error.
			Remedy	1. 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	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	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
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	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

Ecode	Detail code	Location	Items	Description
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)
E747	0000	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	001E	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	011B	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)

Ecode	Detail code	Location	Items	Description
E747	DC00	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	DF01	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)
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.
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.

Ecode	Detail code	Location	Items	Description
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	9000	00	Title	System error
			Description	System error
			Remedy	Contact to the sales companies.
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_C1 Staple Finisher-C1/Booklet Finisher-C1 IFN_A1 Inner Finisher-A1 G3CCB Super G3 FAX Board-AE1 G3CCM Super G3 FAX Board-AE1 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.

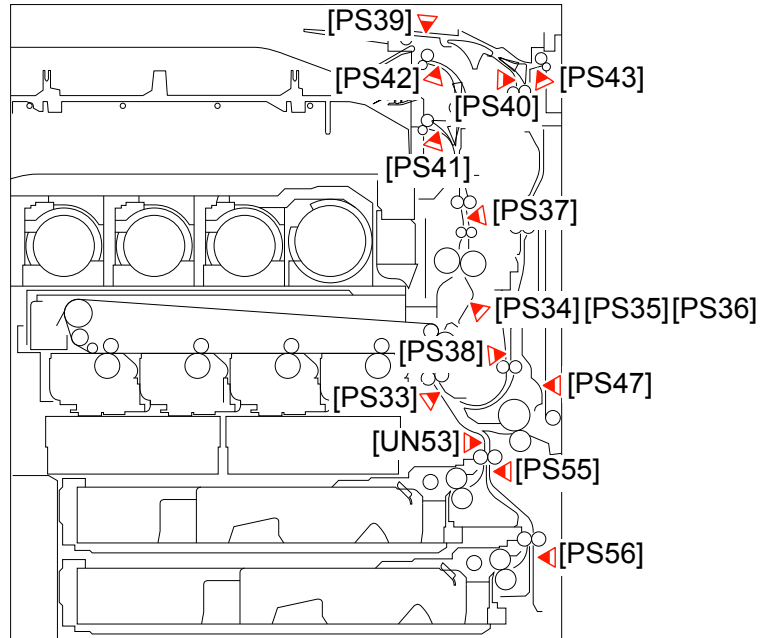
Ecode	Detail code	Location	Items	Description
E760	0001	00	Title	Main Controller PCB 2 internal error
			Description	Main Controller PCB 2 internal error
			Remedy	1. Turn OFF and then ON the power. 2. Remove and then reinstall the Main Controller PCB 2. 3. Disconnect and then connect the connector connected 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 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. 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 1 (FM1).
E805	0001	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. Replace the Feed Driver PCB. 3. Replace the Fixing Heat Exhaust Fan 2 (FM2).
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).

Ecode	Detail code	Location	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 (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 Relay Board. 3. Replace the fan.
E807	0001	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 Pickup Feed Driver PCB (UN2). 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).
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.

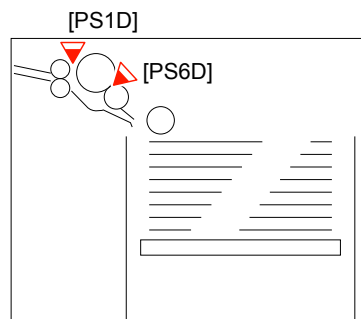
Ecode	Detail code	Location	Items	Description
E811	0001	05	Title	Error in 24V of the drum new/old detection.
			Description	Error in 24V of the drum new/old detection.
			Remedy	1. Check the FUSE_5 on the Pickup Feed Driver PCB (UN2). 2. Replace the Pickup Feed Driver PCB (UN2).
E840	0000	05	Title	Error 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	0004	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 2 (FM12).
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).
E997	B001	00	Title	Error in ITB background light intensity lower limit
			Description	Light intensity of ITB background is lower than the lower limit when adjusting the light intensity of patch LED.
			Remedy	"1. Check if the cable of the Registration Shutter Solenoid is open circuit. 2. Check if the cable of the Patch Sensor is open circuit. 3. Check the installation of the ITB Unit. 4. Replace the Patch Sensor Unit. 5. Replace the Registration Shutter Solenoid."

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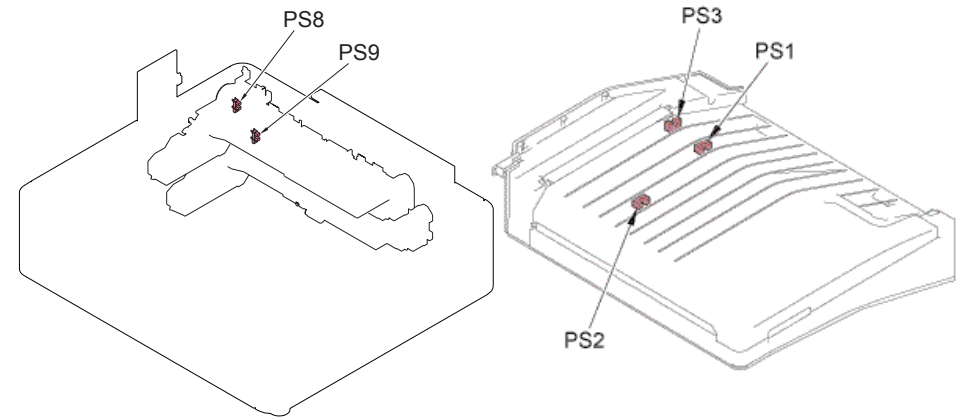
Jam Code

 image RUNNER ADVANCE C5051/C5045/C5035/
C5030


F-7-1



F-7-2



F-7-3

ACC ID	Jam Code	Type	Sensor Name	Sensor ID
00	0B00	Door open	Front door sensor,Right lower door sensor,Right door sensor	PS18,PS19,PS20
00	0B90	Door open	Front door sensor,Right lower door sensor,Right door sensor	PS18,PS19,PS20
00	0105	Delay jam	Registration sensor	PS33
00	0205	Stationary jam	Registration sensor	PS33
00	0A05	POWER ON	Registration sensor	PS33
00	FF05	Sequence jam *2	Registration sensor	PS33
00	0106	Delay jam	Fixing inlet sensor	PS34
00	0206	Stationary jam	Fixing inlet sensor	PS34
00	0A06	POWER ON	Fixing inlet sensor	PS34
00	FF06	Sequence jam *2	Fixing inlet sensor	PS34
00	0107	Delay jam	Inner delivery sensor	PS37
00	0207	Stationary jam	Inner delivery sensor	PS37
00	0A07	POWER ON	Inner delivery sensor	PS37
00	FF07	Sequence jam *2	Inner delivery sensor	PS37
00	010D	Delay jam	Duplex paper sensor	PS38
00	020D	Stationary jam	Duplex paper sensor	PS38
00	0A0D	POWER ON	Duplex paper sensor	PS38
00	FF0D	Sequence jam *2	Duplex paper sensor	PS38
00	010A	Delay jam	Reverse sensor	PS39
00	020A	Stationary jam	Reverse sensor	PS39
00	0A0A	POWER ON	Reverse sensor	PS39
00	FF0A	Sequence jam *2	Reverse sensor	PS39
00	010C	Delay jam	Duplex inlet sensor	PS40
00	020C	Stationary jam	Duplex inlet sensor	PS40
00	0A0C	POWER ON	Duplex inlet sensor	PS40
00	FF0C	Sequence jam *2	Duplex inlet sensor	PS40

ACC ID	Jam Code	Type	Sensor Name	Sensor ID
00	0108	Delay jam	First delivery sensor	PS41
00	0208	Stationary jam	First delivery sensor	PS41
00	0A08	POWER ON	First delivery sensor	PS41
00	FF08	Sequence jam *2	First delivery sensor	PS41
00	0109	Delay jam	Second delivery sensor	PS42
00	0209	Stationary jam	Second delivery sensor	PS42
00	0A09	POWER ON	Second delivery sensor	PS42
00	FF09	Sequence jam *2	Second delivery sensor	PS42
00	010B	Delay jam	Third delivery sensor	PS43
00	020B	Stationary jam	Third delivery sensor	PS43
00	0A0B	POWER ON	Third delivery sensor	PS43
00	FF0B	Sequence jam *2	Third delivery sensor	PS43
00	0A01	POWER ON	Cassette 1 pre-registration sensor	PS55
00	FF01	Sequence jam *2	Cassette 1 pre-registration sensor	PS55
00	0102	Delay jam	Cassette 2 pre-registration sensor	PS56
00	0202	Stationary jam	Cassette 2 pre-registration sensor	PS56
00	0A02	POWER ON	Cassette 2 pre-registration sensor	PS56
00	FF02	Sequence jam *2	Cassette 2 pre-registration sensor	PS56
00	010F	Delay jam	Deck pickup sensor	PS6D
00	0111	Delay jam	Buffer pass entrance sensor	PS1
00	0112	Delay jam	Buffer pass exit sensor	PS2
00	020F	Stationary jam	Deck pickup sensor	PS6D
00	0211	Stationary jam	Buffer pass entrance sensor	PS1
00	0212	Stationary jam	Buffer pass exit sensor	PS2
00	0A0F	POWER ON	Deck pickup sensor	PS6D
00	0A11	POWER ON	Buffer pass entrance sensor	PS1
00	0A12	POWER ON	Buffer pass exit sensor	PS2
00	FF0F	Sequence jam *2	Deck pickup sensor	PS6D
00	FF11	Sequence jam *2	Buffer pass entrance sensor	PS1
00	FF12	Sequence jam *2	Buffer pass exit sensor	PS2
00	0103	Delay jam	Cassette 3 pre-registration sensor	PS8
00	0203	Stationary jam	Cassette 3 pre-registration sensor	PS8
00	0A03	POWER ON	Cassette 3 pre-registration sensor	PS8
00	FF03	Sequence jam *2	Cassette 3 pre-registration sensor	PS8
00	0104	Delay jam	Cassette 4 pre-registration sensor	PS9
00	0204	Stationary jam	Cassette 4 pre-registration sensor	PS9
00	0A04	POWER ON	Cassette 4 pre-registration sensor	PS9
00	FF04	Sequence jam *2	Cassette 4 pre-registration sensor	PS9
00	0CA6	Error *1	Recovered by opening and closing the Door	-
00	0CF1	Error *1	Recovered by opening and closing the Door	-
00	1F01	Sequence jam *2	Recovered by opening and closing the Door	-

ACC ID	Jam Code	Type	Sensor Name	Sensor ID
00	0D91	Different media length	Different media length	-
00	0D92	Incorrect paper	Transparency sensor	UN51
00	0D93	Incorrect paper	Transparency sensor	UN51
00	0113	Delay jam	Vertical path sensor	UN53
00	0213	Stationary jam	Vertical path sensor	UN53
00	FF13	Sequence jam *2	Vertical path sensor	UN53
00	FF90	Sequence jam *3	Communication sequence error with Finisher	-
00	FFXX	Sequence jam *2	Recovered by opening and closing the Door	-

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*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.

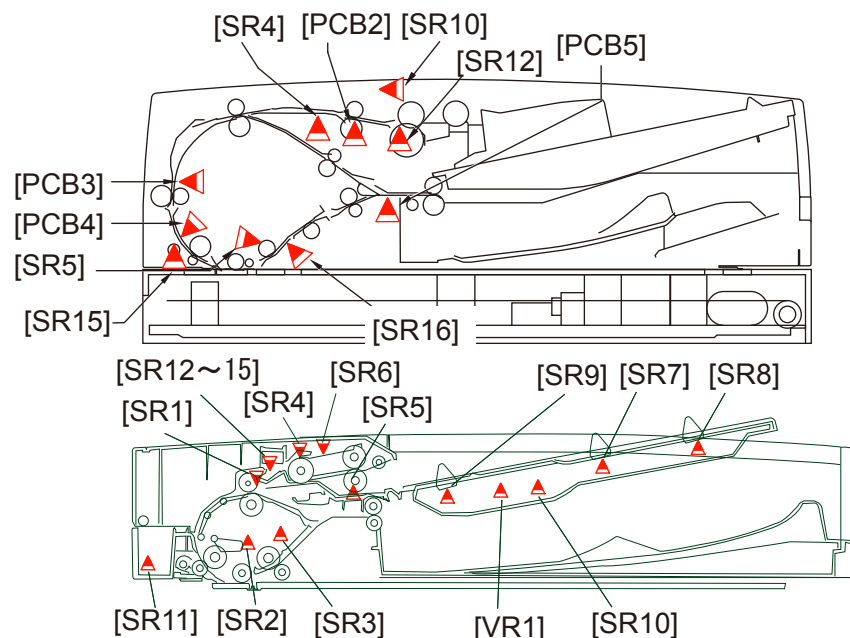
*2: The state is recovered by opening and closing the Door, or turning OFF and then ON the power supply.

If it is not recovered by the above operation, it is considered an error near the target sensor. Disconnect and then connect the connectors around the target sensor, check if the cable is open circuit, and replace the sensor.

*3: The state is recovered by opening and closing the Door, or turning OFF and then ON the power supply.

If it is not recovered by the above operation, operation failure of the Finisher (including error in the harness) is suspected as a cause.

Duplex Color Image Reader Unit-B1 / Color Image Reader Unit-B2



F-7-4

Duplex Color Image Reader Unit-B1

ACC ID	Jam Code	Type	Sensor Name	Sensor ID
01	0001	delay	Post-separation sensor 3	PCB2
01	0002	Stationary	Post-separation sensor 3	PCB2
01	0042	Stationary	Post-separation sensor 3	PCB2
01	0095	Pickup Error	Post-separation sensor 3	PCB2
01	0003	delay	Delivery sensor	SR4
01	0043	delay	Delivery sensor	SR4
01	0004	Stationary	Delivery sensor	SR4
01	0044	Stationary	Delivery sensor	SR4
01	0005	delay	Registration sensor	PCB3
01	0045	delay	Registration sensor	PCB3
01	0006	Stationary	Registration sensor	PCB3
01	0046	Stationary	Registration sensor	PCB3
01	0007	delay	Read sensor 1	PCB4
01	0047	delay	Read sensor 1	PCB4
01	0008	Stationary	Read sensor 1	PCB4

ACC ID	Jam Code	Type	Sensor Name	Sensor ID
01	0048	Stationary	Read sensor 1	PCB4
01	0009	delay	Read sensor 2	SR5
01	0049	delay	Read sensor 2	SR5
01	0010	Stationary	Read sensor 2	SR5
01	0050	Stationary	Read sensor 2	SR5
01	0011	delay	Delivery sensor	PCB5
01	0051	delay	Delivery sensor	PCB5
01	0012	Stationary	Delivery sensor	PCB5
01	0052	Stationary	Delivery sensor	PCB5
01	0090	Door open	-	-
01	0091	Door open	-	-
01	0092	Door open	Cover open/closed sensor	SR10
01	0093	Door open	Cover open/closed sensor	SR10
01	0094	Power ON	-	-
01	0071	Sequence Error	-	-
01	0073	Error	Disengaging home position sensor 1	SR15
01	0074	Error	Disengaging home position sensor 2	SR16
01	0075	Error	Pickup unit lifter home position sensor	SR12

T-7-9

Color Image Reader Unit-B2

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	SR4
01	0095	Pickup Error	Timing sensor	SR4
01	0003	delay	Registration sensor	SR1
01	0043	delay	Registration sensor	SR1
01	0004	Stationary	Registration sensor	SR1
01	0044	Stationary	Registration sensor	SR1
01	0009	delay	Read sensor	SR2
01	0049	delay	Read sensor	SR2
01	0010	Stationary	Read sensor	SR2
01	0050	Stationary	Read sensor	SR2
01	0013	delay	Delivery reversal sensor	SR3
01	0053	delay	Delivery reversal sensor	SR3
01	0014	Stationary	Delivery reversal sensor	SR3
01	0054	Stationary	Delivery reversal sensor	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	-	-

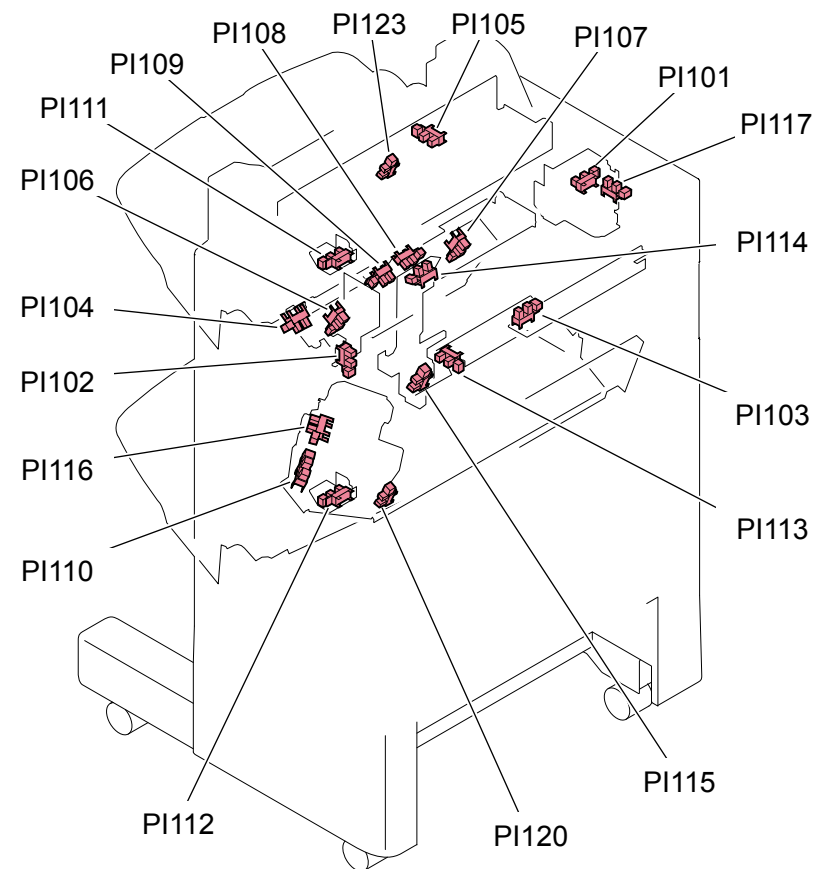
ACC ID	Jam Code	Type	Sensor Name	Sensor ID
01	0071	Sequence Error	-	-
01	0073	Error	Release motor HP sensor	SR11

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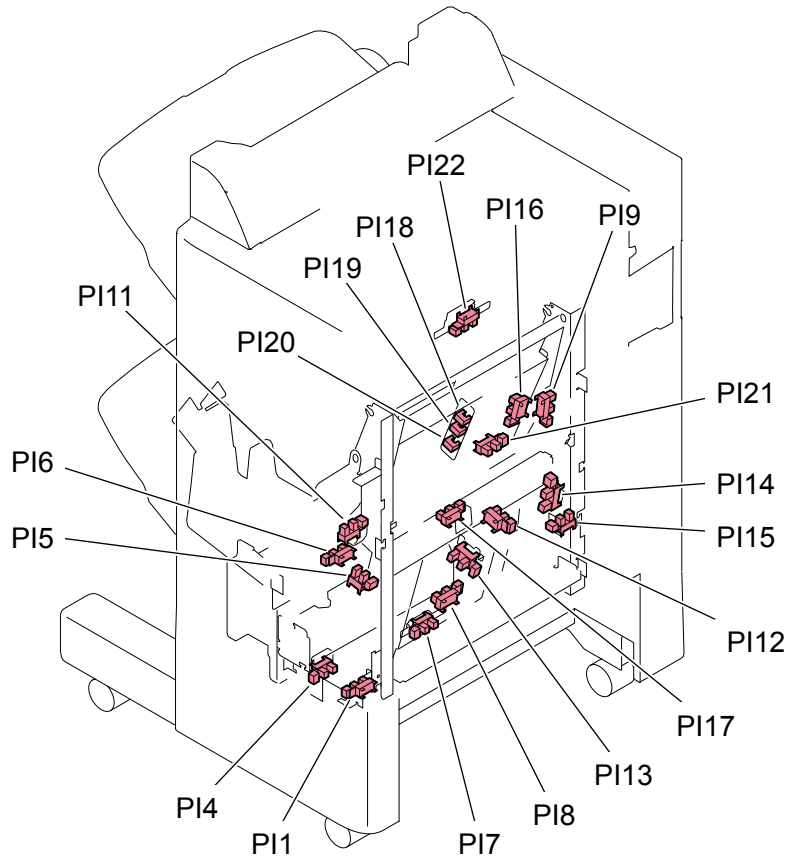
* The state is recovered by opening and closing the Door, or turning OFF and then ON the power supply.

If the same jam is detected regardless of the operation above, the error code is displayed.

Staple Finisher-C1 / Booklet Finisher-C1



F-7-5



F-7-6

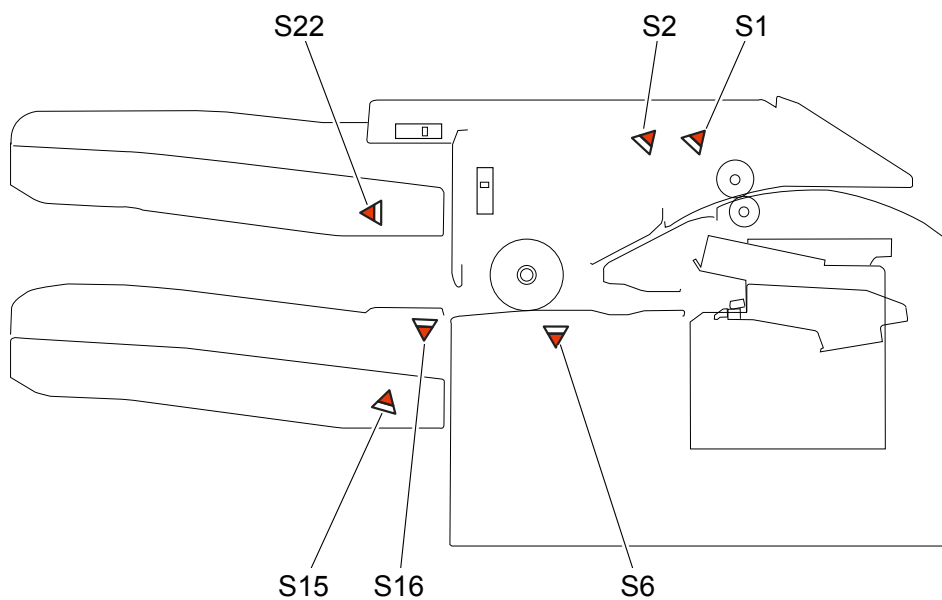
ACC ID	Jam Code	Type	Sensor Name	Sensor ID
02	1200	Early jam	Inlet sensor	PI103
02	110F	Retry error *	-	-
02	1F2F	Retry error *	-	-
02	1F8F	Retry error *	-	-
02	1002	Delay jam	Punch pass sensor	PCB12
02	1400	Door open	-	-
02	1408	Door open	-	-
02	1F88	Door open	-	-
02	1102	Stationary jam	Punch pass sensor	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-7-11

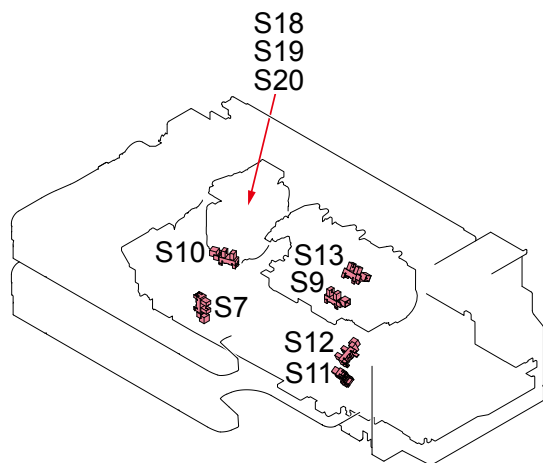
* The state is recovered by opening and closing the Door, or turning OFF and then ON the power supply.

If the same jam is detected regardless of the operation above, the error code is displayed.

Inner Finisher-A1



F-7-7



F-7-8

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

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* 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	- 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	- 0020	Front face DADF dust correction occurs	SET: In case that 'DADF dust correction with the front face roller during DADF paper interval' is enabled.
02	- 0021	Reverse face DADF dust correction occurs	SET: In case that 'DADF dust correction with the reverse face roller during DADF paper interval' is enabled.
02	- 0022	Insufficient LED light intensity error in front scanner	In case the light intensity is insufficient when LED lighting
02	- 0023	Insufficient LED light intensity error in back scanner	In case the light intensity is insufficient when LED lighting
04	- 0008	Optional deck lifter error	-
09	- 0001	Drum life (Y)	-
09	- 0002	Drum life (M)	-
09	- 0003	Drum life (C)	-
09	- 0004	Drum life (K)	-
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)	-
11	- 0001	Waste toner alarm	Detected waste toner bottle full.
11	- 0011	Near-full state of the Waste Toner Container	Detection of near-full state of the Waste Toner Container
31	- 0006	HDD failure when equipped with the mirroring function	HDD failure when equipped with the mirroring function
33	- 0010	Scanner Unit Exhaust Fan (FM3) alarm	The fan rotation signal cannot be detected after 3 seconds have passed since the Scanner Unit Exhaust Fan (FM2) of the Reader is turned ON. Check the connector connection -> Replace the Scanner Unit Exhaust Fan (FM2).

Location of Trouble	Alarm Code	Description	Details
33	- 0011	Fixing exhaust fan alarm	SET: In case the fan abnormality occurred during a job. RESET: In case the fan operates normally during a job
33	- 0022	Read Motor Cooling Fan (FM1) alarm	The fan rotation signal cannot be detected after 3 seconds have passed since the Read Motor Cooling Fan (FM1) is turned ON. Check the connector connection -> Replace the Read Motor Cooling Fan (FM1).
33	- 0023	Scanner Unit (DADF) Cooling Fan (FM3) alarm	The fan rotation signal cannot be detected after 3 seconds have passed since the Scanner Unit (DADF) Cooling Fan (FM3) is turned ON. Check the connector connection -> Replace the Scanner Unit (DADF) Cooling Fan (FM3).
33	- 0025	Scanner Unit (Reader) Cooling Fan (FM1) alarm	The fan rotation signal cannot be detected after 3 seconds have passed since the Scanner Unit (Reader) Cooling Fan (FM1) is turned ON. Check the connector connection -> Replace the Scanner Unit (Reader) Cooling Fan (FM1).
34	- 0002	Auto registration adjustment	Abnormal data occurred on more or equal to 8 out of 10 sets of auto registration pattern. Dirt on the belt and scratches were wrongly detected as a pattern and discrepancy in reading data occurred as the result.
34	- 0003	Auto registration adjustment	Timeout occurred due to unsuccessful 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
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	- 0007	Insufficient light intensity in Post-separation Sensor 3 (PCB2)	Clean the Post-separation Sensor 3 (PCB2) if light intensity is insufficient when adjusting output of the sensor.

Location of Trouble	Alarm Code	Description	Details
50	- 0008	Insufficient light intensity in Read Sensor 1 (PCB4)	Clean the Read Sensor 1 (PCB4) if light intensity is insufficient when adjusting output of the sensor.
50	- 0009	Insufficient light intensity in Delivery Sensor (PCB5)	Clean the Delivery Sensor (PCB5) if light intensity is insufficient when adjusting output of the sensor.
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	- 0013	Insufficient light intensity in Registration Sensor (PCB3)	Clean the Registration Sensor (PCB3) if light intensity is insufficient when adjusting output of the sensor.
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	Memory overflow	-
70	- 0002	Font memory overflow	-
70	- 0003	Micromemory overflow	-
70	- 0004	Image memory overflow	-
70	- 0005	Pattern memory overflow	-
70	- 0006	A hard disk error	-
70	- 0007	Detect operation abnormality for the HDD access request	-
73	- 0004	LIPS	Overflow of work memory for translator
73	- 0006	LIPS	Error in configuration acquisition/management
73	- 0007	LIPS	Memory management error in LIPS

Location of Trouble	Alarm Code	Description	Details
73	- 0008	LIPS	File management error in LIPS
73	- 0009	LIPS	Reception data management error
73	- 0010	LIPS	Page control error
73	- 0011	LIPS	Macro management error
73	- 0012	LIPS	Color management error
73	- 0013	LIPS	Layout control error
73	- 0014	LIPS	Font management error
73	- 0015	LIPS	Letter drawing error
73	- 0016	LIPS	Graphic drawing error
73	- 0017	LIPS	Image drawing error
73	- 0018	LIPS	Display error to LCD
73	- 0019	LIPS	Text mode command error layer error
73	- 0020	LIPS	Vector mode command error layer error
73	- 0021	LIPS	Utility execution control error
73	- 0022	LIPS	Database management error in LIPS
73	- 0023	LIPS	Menu control error in LIPS
73	- 0024	LIPS	Boot error in LIPS
73	- 0025	LIPS	When the graphic library is in use for image processing, if the memory allocation is failed.
73	- 0026	LIPS	Data format error of image mode
75	- 0001	Error occurred in Yukon	-
75	- 0002	Error occurred due to invalid SVG analysis from Yukon	-
75	- 9101	Video transfer error (CLG-O1 Overrun error)	-
75	- 9102	Video transfer error (CLG-O1 VsyncB error)	-
75	- 9103	Video transfer error (CLG-O1 VsyncB, Overrun error)	-
75	- 9104	Video transfer error (CLG-O1 VsyncA error)	-
75	- 9105	Video transfer error (CLG-O1 VsyncA, Overrun error)	-
75	- 9106	Video transfer error (CLG-O1 VsyncA, VsyncB error)	-
75	- 9107	Video transfer error (CLG-O1 VsyncA, VsyncB, Overrun error)	-
75	- 9108	Video transfer error (CLG-O1 HsyncB error)	-

Location of Trouble	Alarm Code	Description	Details
75	- 9109	Video transfer error (CLG-O1 HsyncB, Overrun error)	-
75	- 910A	Video transfer error (CLG-O1 HsyncB, VsyncB error)	-
75	- 910B	Video transfer error (CLG-O1 HsyncB, VsyncB, Overrun error)	-
75	- 910C	Video transfer error (CLG-O1 HsyncB, VsyncA error)	-
75	- 910D	Video transfer error (CLG-O1 HsyncB, VsyncA, Overrun error)	-
75	- 910E	Video transfer error (CLG-O1 HsyncB, VsyncA, VsyncB error)	-
75	- 910F	Video transfer error (CLG-O1 HsyncB, VsyncA, VsyncB, Overrun error)	-
75	- 9110	Video transfer error (CLG-O1 HsyncA error)	-
75	- 9111	Video transfer error (CLG-O1 HsyncA, Overrun error)	-
75	- 9112	Video transfer error (CLG-O1 HsyncA, VsyncB error)	-
75	- 9113	Video transfer error (CLG-O1 HsyncA, VsyncB, Overrun error)	-
75	- 9114	Video transfer error (CLG-O1 HsyncA, VsyncA error)	-
75	- 9115	Video transfer error (CLG-O1 HsyncA, VsyncA, Overrun error)	-
75	- 9116	Video transfer error (CLG-O1 HsyncA, VsyncA, VsyncB error)	-
75	- 9117	Video transfer error (CLG-O1 HsyncA, VsyncA, VsyncB, Overrun error)	-

Location of Trouble	Alarm Code	Description	Details
75	- 9118	Video transfer error (CLG-O1 HsyncA, HsyncB error)	-
75	- 9119	Video transfer error (CLG-O1 HsyncA, HsyncB, Overrun error)	-
75	- 911A	Video transfer error (CLG-O1 HsyncA, HsyncB, VsyncB error)	-
75	- 911B	Video transfer error (CLG-O1 HsyncA, HsyncB, VsyncB, Overrun error)	-
75	- 911C	Video transfer error (CLG-O1 HsyncA, HsyncB, VsyncA error)	-
75	- 911D	Video transfer error (CLG-O1 HsyncA, HsyncB, VsyncA, Overrun error)	-
75	- 911E	Video transfer error (CLG-O1 HsyncA, HsyncB, VsyncA, VsyncB error)	-
75	- 911F	Video transfer error (CLG-O1 HsyncA, HsyncB, VsyncA, VsyncB, Overrun error)	-
75	- 9120	Video transfer error (CLG-O1 timeout error)	-
75	- B101	Video transfer error (CLG-O2 Overrun error)	-
75	- B102	Video transfer error (CLG-O2 VsyncB error)	-
75	- B103	Video transfer error (CLG-O2 VsyncB, Overrun error)	-
75	- B104	Video transfer error (CLG-O2 VsyncA error)	-
75	- B105	Video transfer error (CLG-O2 VsyncA, Overrun error)	-
75	- B106	Video transfer error (CLG-O2 VsyncA, VsyncB error)	-

Location of Trouble	Alarm Code	Description	Details
75	- B107	Video transfer error (CLG-O2 VsyncA, VsyncB, Overrun error)	-
75	- B108	Video transfer error (CLG-O2 HsyncB error)	-
75	- B109	Video transfer error (CLG-O2 HsyncB, Overrun error)	-
75	- B10A	Video transfer error (CLG-O2 HsyncB, VsyncB error)	-
75	- B10B	Video transfer error (CLG-O2 HsyncB, VsyncB, Overrun error)	-
75	- B10C	Video transfer error (CLG-O2 HsyncB, VsyncA error)	-
75	- B10D	Video transfer error (CLG-O2 HsyncB, VsyncA, Overrun error)	-
75	- B10E	Video transfer error (CLG-O2 HsyncB, VsyncA, VsyncB error)	-
75	- B10F	Video transfer error (CLG-O2 HsyncB, VsyncA, VsyncB, Overrun error)	-
75	- B110	Video transfer error (CLG-O2 HsyncA error)	-
75	- B111	Video transfer error (CLG-O2 HsyncA, Overrun error)	-
75	- B112	Video transfer error (CLG-O2 HsyncA, VsyncB error)	-
75	- B113	Video transfer error (CLG-O2 HsyncA, VsyncB, Overrun error)	-
75	- B114	Video transfer error (CLG-O2 HsyncA, VsyncA error)	-
75	- B115	Video transfer error (CLG-O2 HsyncA, VsyncA, Overrun error)	-

Location of Trouble	Alarm Code	Description	Details
75	- B116	Video transfer error (CLG-O2 HsyncA, VsyncA, VsyncB error)	-
75	- B117	Video transfer error (CLG-O2 HsyncA, VsyncA, VsyncB, Overrun error)	-
75	- B118	Video transfer error (CLG-O2 HsyncA, HsyncB error)	-
75	- B119	Video transfer error (CLG-O2 HsyncA, HsyncB, Overrun error)	-
75	- B11A	Video transfer error (CLG-O2 HsyncA, HsyncB, VsyncB error)	-
75	- B11B	Video transfer error (CLG-O2 HsyncA, HsyncB, VsyncB, Overrun error)	-
75	- B11C	Video transfer error (CLG-O2 HsyncA, HsyncB, VsyncA error)	-
75	- B11D	Video transfer error (CLG-O2 HsyncA, HsyncB, VsyncA, Overrun error)	-
75	- B11E	Video transfer error (CLG-O2 HsyncA, HsyncB, VsyncA, VsyncB error)	-
75	- B11F	Video transfer error (CLG-O2 HsyncA, HsyncB, VsyncA, VsyncB, Overrun error)	-
75	- B120	Video transfer error (CLG-O2 timeout error)	-
76	- 0001	Font	No memory for internal font
76	- 0002	Font	Fails to assure the work area to analyze the font that is downloaded at "Resource Download".
76	- 0003	Font	Fails to access the file that stores the font.
76	- 0004	Font	Fails to allocate the FM work memory.
76	- 0005	Font	Fails to analyze the internal font.
76	- 0006	Font	Alignment of font data is wrong.
76	- 0007	Font	Failed to allocate work memory with scaler. There are 3 types depending on where to occur.

Location of Trouble	Alarm Code	Description	Details
76	- 0008	Font	Failed to allocate work memory with scaler. There are 3 types depending on where to occur.
77	- 0001	PDL	Fails to allocate the memory
77	- 0002	PDL	Failure of rendering
77	- 0003	PDL	DGL entry invalid
77	- 0005	PDL	Other errors
77	- 0006	PDL	DLG memory insufficient
78	- 0003	GL	GL entry invalid
78	- 0005	GL	System memory full
79	- 0001	In-house developed PCL	PCL initialization error
79	- 0002	In-house developed PCL	PCL processing error
79	- 0003	In-house developed PCL	Overflow of work memory for translator
79	- 0004	In-house developed PCL	Download overflow
80	- 0001	BDL	Admin error
80	- 0003	BDL	DataArea error
80	- 0010	BDL	Graphics error
80	- 0011	BDL	Char error
80	- 0015	BDL	Print data cannot process this version.
80	- 0016	BDL	Overflow of work memory for translator
80	- 0018	BDL	Syntax error
80	- 0019	BDL	In case of invalid data format in BDL custom mode.
81	- 0001	Imaging	Fails to allocate the memory
81	- 0002	Imaging	Failure of rendering
81	- 0003	Imaging	Overflow of work memory for translator
81	- 0004	Imaging	Imaging initialization error
81	- 0005	Imaging	Imaging processing error
82	- 0001	RIP	H/W Dart hangup by the DisplayList injustice
83	- 0001	CanonPDF	PDF data error
83	- 0002	CanonPDF	PDF compression analysis error
83	- 0003	CanonPDF	PDF page compression error
83	- 0004	CanonPDF	PDF data processing error
83	- 0005	CanonPDF	PDF memory full
83	- 0006	CanonPDF	PDF temporary file error
83	- 0007	CanonPDF	PDF color analysis error
83	- 0008	CanonPDF	PDF data reading error
83	- 0009	CanonPDF	PDF output selection error
83	- 0010	CanonPDF	PDF process file error
83	- 0011	CanonPDF	PDF access error
83	- 0012	CanonPDF	PDF analysis access error
83	- 0013	CanonPDF	PDF font error
83	- 0014	CanonPDF	PDF rendering error
83	- 0015	CanonPDF	PDF data decode error
83	- 0016	CanonPDF	PDF print range error
83	- 0017	CanonPDF	PDF error

Location of Trouble	Alarm Code	Description	Details
83	- 0018	CanonPDF	PDF analysis error Un-supported transparent object exists.
84	- 0001	XPS memory full error	-
84	- 0002	XPS spool full error	-
84	- 0003	XPS print range error	-
84	- 0004	XPS document data error	-
84	- 0005	XPS page data error	-
84	- 0006	XPS image data error	-
84	- 0007	XPS font data error	-
84	- 0008	XPS non-support image error	-
84	- 0009	XPS rendering error	-
85	0001	ScanASIC - Time-out in scan input	-
85	0002	ScanASIC - Encode error at scan input	-
85	0003	ScanASIC - Encode error 2 at scan input	-
85	0004	ScanASIC - VSync error at scan input	-
85	0005	ScanASIC - HSync error at scan input	-
85	0006	LookbackASIC - An occurrence of time-out	-
85	0007	LookbackASIC - An occurrence of illegal packet error	-
85	0008	PrintASIC - An occurrence of illegal packet error	-
85	0009	PrintASIC - An occurrence of process instruction error	-

T-7-13



Service Mode

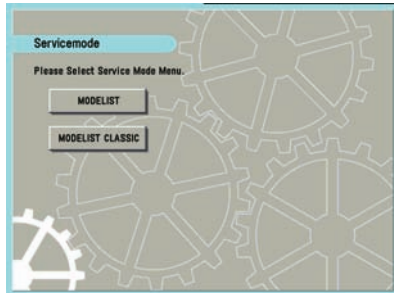
- Overview
- COPIER
- FEEDER
- SORTER
- BOARD

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.

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.

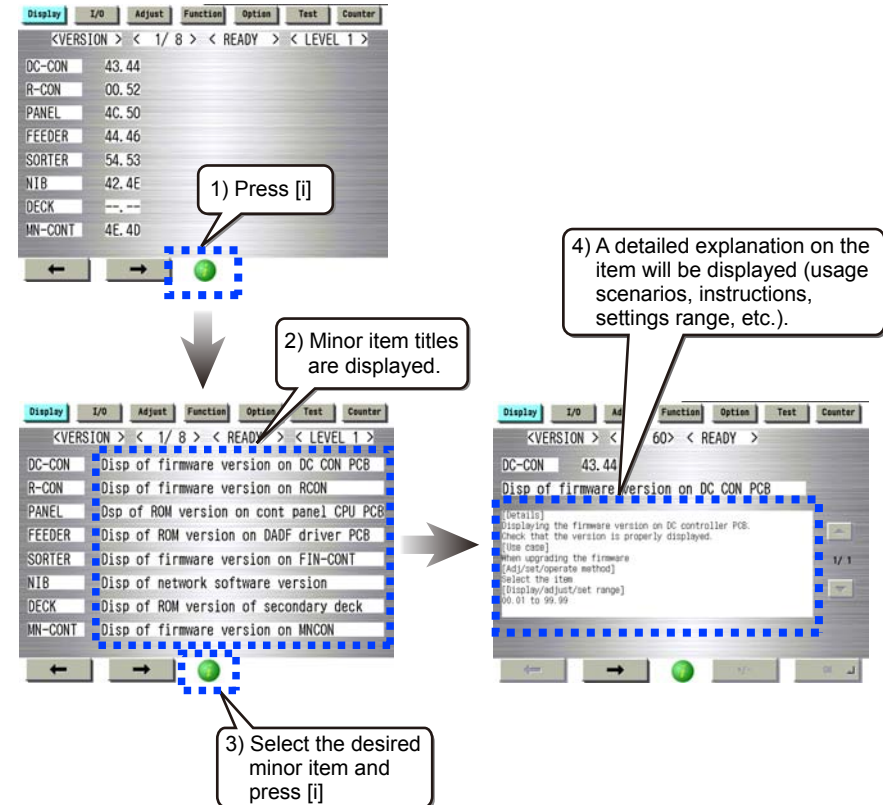
If "MODELIST" or "MODELIST CLASSIC" is pressed, the screen will switch to initial screen for each mode.

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



- The service mode contents can be displayed in J/E/F//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.

DC-CON-P001:5 #0 FNo paper A1:paper
PS10 Fixing inLet sensor
DC-CON-P001:6 #0 FNo paper A1:paper
PS11 Inner delivery sensor
DC-CON-P001:8 #0 FNo paper A1:paper
PS19 Secondary post-transfer sensor
DC-CON-P001:7 #0 FNo paper A1:paper
PS20 Fixing feed lever sensor
DC-CON-P001:8 #0 FNo paper A1:paper
PS24 Front door open sensor (right)
DC-CON-P001:9 #0 FNo paper A1:paper

DC-CON-P001:5 #0 FNo paper A1:paper
PS10 Fixing inLet sensor
DC-CON-P001:6 #0 FNo paper A1:paper
PS11 Inner delivery sensor
DC-CON-P001:8 #0 FNo paper A1:paper
PS19 Secondary post-transfer sensor
DC-CON-P001:7 #0 FNo paper A1:paper
PS20 Fixing feed lever sensor
DC-CON-P001:8 #0 FNo paper A1:paper
PS24 Front door open sensor (right)
DC-CON-P001:9 #0 FNo paper A1:paper

DC-CON-P001:5 #0 FNo paper A1:paper
PS10 Fixing inLet sensor
DC-CON-P001:6 #0 FNo paper A1:paper
PS11 Inner delivery sensor
DC-CON-P001:8 #0 FNo paper A1:paper
PS19 Secondary post-transfer sensor
DC-CON-P001:7 #0 FNo paper A1:paper
PS20 Fixing feed lever sensor
DC-CON-P001:8 #0 FNo paper A1:paper
PS24 Front door open sensor (right)
DC-CON-P001:9 #0 FNo paper A1:paper

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

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.

F-8-5

COPIER > OPTION > BODY, Item Segmentation

On the current machine, there are extremely many items in the COPIER > OPTION > BODY (in related to host machine specification), that it is difficult to reach the intended item.

In order to reach the intended item in shorter time, all items inside the BODY is classified to 15 categories.

Classification	Name	Description
Function switching	FNC-SW	Language, cassette, paper size type, NAVI/DA connection, count-up spec., document size detection, dirt detection level
Display switching/ display timing	DSPLY-SW	UI (User Interface) display related
Image related (fixing)	IMG-FIX	Fixing related
Image related (transfer)	IMG-TR	Primary transfer, secondary transfer, ITB
Image related (developing)	IMG-DEV	Developer related
Image related (laser/ latent image)	IMG-LSR	Laser, latent image related
Image related (reader/ ADF)	IMG-RDR	Reader, ADF image related
Image related (controller, other general items)	IMG-MCON	MN-CON image related, and image related items other than those referred to above.
Image quality/ copy speed	IMG-SPD	Power down sequence
Cleaning	CLEANING	Cleaning of charging unit, drum, transfer roller, ITB, etc.
Environment settings	ENV-SET	Temperature, humidity, environmental heater, condensation, log acquisition
Paper feed (pickup, delivery)	FEED-SW	Stack performance, motor speed adjustment, delivery functions, etc.
Noise reduction	SOUND	Noise related
Network	NETWORK	Network settings, IFAX, SEND, E-RDS, etc.
Customization	CUSTOM	Customization

T-8-1

Security features

To prevent unauthorized access to Service Mode, Password set is enabled.

Related service modes

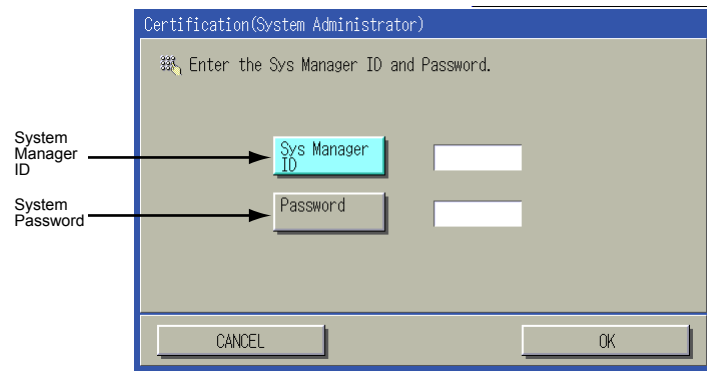
- COPIER > OPTION > FNC-SW > PSWD-SW (Level1)
Set password type for transition to service mode.
<Setting range>
0: No password (default)
1: Service engineer
2: System administrator and Service engineer.
- COPIER > OPTION > FNC-SW > SM-PSWD (Level2)
Password for service engineer for transition to service mode.
<Setting range>

To reinforce the security, change the password from a default.

***** (eight digit numeral) [default: 11111111]

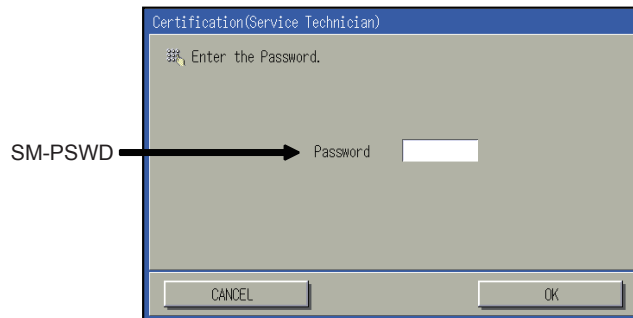
After the above setting, to enter Service Mode, enter password screen will appear.

- 1) Additional Functions > System Settings > System Manager Settings > enter System Manager ID > enter System Password Settings > press OK button.



F-8-6

- 2) After entering the password for service technician (Service mode: COPIER > Option > FNC-SW > SM-PSWD), press OK button.



F-8-7

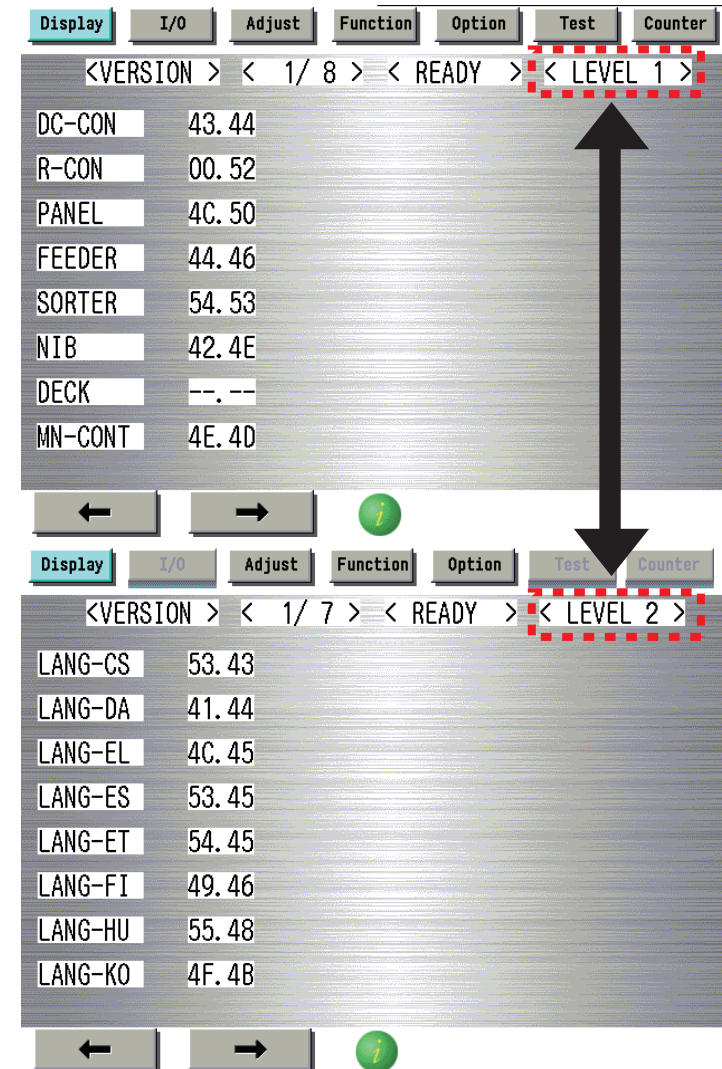
MEMO :

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

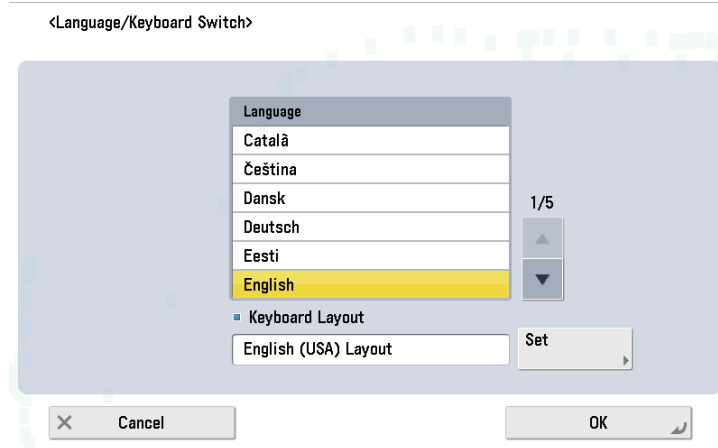
Language switch

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 :

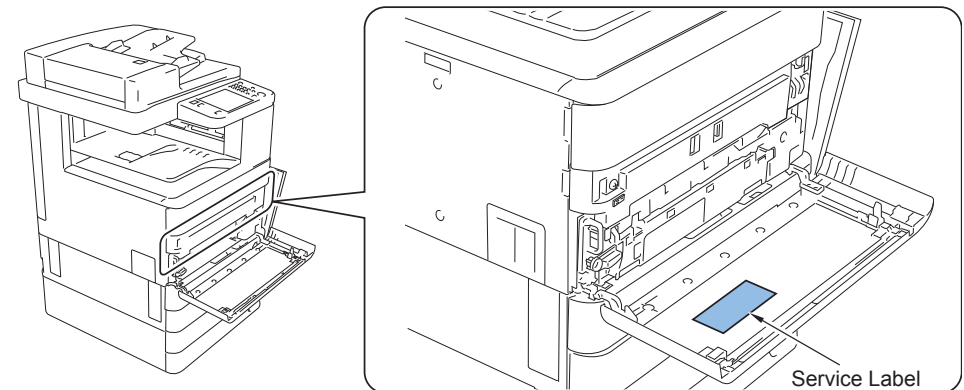
If the Service Mode Content (SMCNT) of the concerned language is not installed, English explanatory text will be displayed.

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

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]
Lv.1	Details	-
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
	Use case	When upgrading the firmware
PS/PCL		Display of UFR function version
Lv.1	Details	To display the UFR function version
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Use case	When upgrading the firmware
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
	Use case	When upgrading the firmware
OP-CON		Display of Option Controller PCB ROM ver
Lv.1	Details	To display the ROM ver of Option Controller PCB.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Use case	When upgrading the firmware

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
	Use case	When upgrading the firmware
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 UFR function version
Lv.1	Details	To display the version of UFR function.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-BU		Display of Bulgarian language file ver
Lv.2	Details	To display the version of Bulgarian language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-CR		Display of Croatian language file ver
Lv.2	Details	To display the version of Croatian language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-RM		Display of Romanian language file ver
Lv.2	Details	To display the version of Romanian language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-SK		Display of Slovak language file version
Lv.2	Details	To display the version of Slovak language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-TK		Display of Turkish language file version
Lv.2	Details	To display the version of Turkish language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
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	To display the version of Chinese OCR (traditional). “--.” 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.
	Use case	When upgrading the firmware
	Caution	Version should be displayed for EASY NAVI function because it is an external file.
	Display/adj/set range	00.01 to 99.99
Supplement/memo		EASY NAVI function is equipped as standard instead of the conventional HELP function.
LANG-CA		Display of Catalan language file version
Lv.2	Details	To display the version of Catalan language file. “--.” is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
WEBDAV		Display of WebDAV version
Lv.1	Details	To display the version of “WebDAV” file. “--.” is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
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
	Supplement/memo	ASR: Automatic Speech Recognition (voice recognition)

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
	Supplement/memo	ASR: Automatic Speech Recognition (voice recognition)
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]
Lv.1	Details	-
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
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
	Adj/set/operate method	N/A (Display only)
	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
MOBPR-AP		Display of mobile print(JAVA UI) version
Lv.1	Details	To display the version of the mobile print 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

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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
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
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

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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
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

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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
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

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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
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

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INTRO-ZH		Useful func intro Chinese file ver: simpl
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
INTRO-EL		Dis of useful func intro Greek file ver
Lv.2	Details	To display the version of Greek language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-ET		Dis useful func intro Estonian file ver
Lv.2	Details	To display the version of Estonian language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-FI		Dis useful func intro Finnish file ver
Lv.2	Details	To display the version of Finnish language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-HU		Dis useful func intro Hungarian file ver
Lv.2	Details	To display the version of Hungarian language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

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INTRO-NL		Dis of useful func intro Dutch file ver
Lv.2	Details	To display the version of Dutch language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-NO		Dis useful func intro Norwegian file ver
Lv.2	Details	To display the version of Norwegian language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-PL		Dis of useful func intro Polish file ver
Lv.2	Details	To display the version of Polish language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-PT		Dis useful func intro Portuguese filever
Lv.2	Details	To display the version of Portuguese language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-RU		Dis useful func intro Russian file ver
Lv.2	Details	To display the version of Russian language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-SL		Dis useful func intro Slovenian file ver
Lv.2	Details	To display the version of Slovenian language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-SV		Dis useful func intro Swedish file ver
Lv.2	Details	To display the version of Swedish language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-ID		Dis of useful func intro Indon file ver
Lv.2	Details	To display the version of Indonesian language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-BU		Dis useful func intro Bulgarian file ver
Lv.2	Details	To display the version of Bulgarian language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

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INTRO-CR		Dis useful func intro Croatian file ver
Lv.2	Details	To display the version of Croatian language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-RM		Dis useful func intro Romanian file ver
Lv.2	Details	To display the version of Romanian language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-SK		Dis of useful func intro Slovak file ver
Lv.2	Details	To display the version of Slovak language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-TK		Dis useful func intro Turkish file ver
Lv.2	Details	To display the version of Turkish language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-CA		Dis useful func intro Catalan file ver
Lv.2	Details	To display the version of Catalan language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
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

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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
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

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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
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

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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
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
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

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ACSBT-ZH		Dis Accessibility Chinese file ver: simpl
Lv.2	Details	To display the version of simplified Chinese language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-TW		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

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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
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

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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
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
ERS-FR		Display of ERS French file version
Lv.1	Details	To display the version of French language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-IT		Display of ERS Italian file version
Lv.1	Details	To display the version of Italian language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-DE		Display of ERS German file version
Lv.1	Details	To display the version of German language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-ES		Display of ERS Spanish file version
Lv.1	Details	To display the version of Spanish language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System

COPIER > DISPLAY > VERSION		
ERS-ZH		Display of ERS Chinese file ver:smpl
Lv.2	Details	To display the version of simplified Chinese language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-TW		Display of ERS Chinese file ver:trad
Lv.2	Details	To display the version of traditional Chinese language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-KO		Display of ERS Korean file version
Lv.2	Details	To display the version of Korean language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-CS		Display of ERS Czech file version
Lv.2	Details	To display the version of Czech language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-DA		Display of ERS Danish file version
Lv.2	Details	To display the version of Danish language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-EL		Display of ERS Greek file version
Lv.2	Details	To display the version of Greek language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-ET		Display of ERS Estonian file version
Lv.2	Details	To display the version of Estonian language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-FI		Display of ERS Finnish file version
Lv.2	Details	To display the version of Finnish language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System

COPIER > DISPLAY > VERSION		
ERS-HU		Display of ERS Hungarian file version
Lv.2	Details	To display the version of Hungarian language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-NL		Display of ERS Dutch file version
Lv.2	Details	To display the version of Dutch language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-NO		Display of ERS Norwegian file version
Lv.2	Details	To display the version of Norwegian language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-PL		Display of ERS Polish file version
Lv.2	Details	To display the version of Polish language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-PT		Display of ERS Portuguese file ver
Lv.2	Details	To display the version of Portuguese language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-RU		Display of ERS Russian file version
Lv.2	Details	To display the version of Russian language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-SL		Display of ERS Slovenian file version
Lv.2	Details	To display the version of Slovenian language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-SV		Display of ERS Swedish file version
Lv.2	Details	To display the version of Swedish language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System

COPIER > DISPLAY > VERSION		
ERS-ID		Display of ERS Indonesian file ver
Lv.2	Details	To display the version of Indonesian language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-BU		Display of ERS Bulgarian file version
Lv.2	Details	To display the version of Bulgarian language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-CR		Display of ERS Croatian file version
Lv.2	Details	To display the version of Croatian language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-RM		Display of ERS Romanian file version
Lv.2	Details	To display the version of Romanian language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-SK		Display of ERS Slovak file version
Lv.2	Details	To display the version of Slovak language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-TK		Display of ERS Turkish file version
Lv.2	Details	To display the version of Turkish language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-CA		Display of ERS Catalan file version
Lv.2	Details	To display the version of Catalan language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
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
	Supplement/memo	UAC: User Access Control

COPIER > DISPLAY > VERSION		
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
	Supplement/memo	UAC: User Access Control
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
	Supplement/memo	UAC: User Access Control
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
	Supplement/memo	UAC: User Access Control
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
	Supplement/memo	UAC: User Access Control
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
	Supplement/memo	UAC: User Access Control
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
	Supplement/memo	UAC: User Access Control
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
	Supplement/memo	UAC: User Access Control
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
	Supplement/memo	UAC: User Access Control

COPIER > DISPLAY > VERSION		
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
	Supplement/memo	UAC: User Access Control
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
	Supplement/memo	UAC: User Access Control
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
	Supplement/memo	UAC: User Access Control
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
	Supplement/memo	UAC: User Access Control
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
	Supplement/memo	UAC: User Access Control
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
	Supplement/memo	UAC: User Access Control
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
	Supplement/memo	UAC: User Access Control
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
	Supplement/memo	UAC: User Access Control

COPIER > DISPLAY > VERSION		
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
	Supplement/memo	UAC: User Access Control
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
	Supplement/memo	UAC: User Access Control
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
	Supplement/memo	UAC: User Access Control
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
	Supplement/memo	UAC: User Access Control
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
	Supplement/memo	UAC: User Access Control
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
	Supplement/memo	UAC: User Access Control
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
	Supplement/memo	UAC: User Access Control
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
	Supplement/memo	UAC: User Access Control

COPIER > DISPLAY > VERSION		
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
	Supplement/memo	UAC: User Access Control
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
	Supplement/memo	UAC: User Access Control
BCT		Display of self diagnosis tool version
Lv.1	Details	To display the version of self diagnosis tool.
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	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
	Supplement/memo	ASR: Automatic Speech Recognition (voice recognition)
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
	Supplement/memo	ASR: Automatic Speech Recognition (voice recognition)
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
	Supplement/memo	ASR: Automatic Speech Recognition (voice recognition)
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
	Supplement/memo	ASR: Automatic Speech Recognition (voice recognition)

COPIER > DISPLAY > VERSION		
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
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

COPIER > DISPLAY > VERSION		
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
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

COPIER > DISPLAY > VERSION		
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
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

■ 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
	Display/adj/set range
	55 to 75
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 operation mode of the 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)
	Default value
	0
	Related service mode
	COPIER> FUNCTION> INSTALL> BRWS-ACT

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■ ACC-ST5

COPIER > DISPLAY > ACC-ST5	
FEEDER	
Display of DADF connection state	
Lv.1	Details
	To display the connecting 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 connecting 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
	Unit
	MB
	Default value
	1024
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-ST5		
NIB		Display of Network PCB connection state
Lv.1	Details	To display the connecting 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		Dis of NetWare firmware install state
Lv.1	Details	To display the installation state of the 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 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 mounted, 1: Mounted
HDD		Display of HDD model name
Lv.1	Details	To display the model name of HDD.
	Use case	When checking the model name of HDD used on the machine
PCI1		Display of PCI1-connected PCB name
Lv.1	Details	To display the name of the PCB that is connected to PCI1.
	Use case	When checking the name of the PCB that is connected to PCI1
	Display/adj/set range	-: No PCB connected Voice Board: Voice PCB 3DES Board: Encryption PCB 1Gbit-Board: Giga Ethernet PCB
PCI2		Display of PCI2-connected PCB name
Lv.1	Details	To display the name of the PCB that is connected to PCI2.
	Use case	When checking name of the PCB that is connected to PCI2
	Display/adj/set range	-: No PCB connected iSLOT: iSLOT Wireless LAN PCB Voice Board: Voice PCB Voice Board R: Voice Recognition PCB (Display is hidden on this machine.) 3DES Board: Encryption PCB 1Gbit-Board: Giga Ethernet PCB

COPIER > DISPLAY > ACC-ST5		
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	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
	Default value	1024

T-8-4

ANALOG

COPIER > DISPLAY > ANALOG		
TEMP		Display of outside temperature
Lv.1	Details	To display the temperature outside the machine. This is measured by the Environment Sensor 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
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	%
ABS-HUM		Display of outside moisture amount
Lv.1	Details	To display the absolute moisture amount outside the machine. This is measured by the Environment Sensor 2 that detects the outside air.
	Use case	When checking the moisture amount outside the machine
	Display/adj/set range	0 to 100
	Unit	g (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 detected by the Environment Sensor 1.
	Use case	When checking the temperature inside the machine
	Display/adj/set range	0 to 100
	Unit	Deg C
HUM2		Display of inside humidity
Lv.1	Details	To display the humidity inside the machine detected by the Environment Sensor 1.
	Use case	When checking the humidity inside the machine
	Display/adj/set range	0 to 100
	Unit	%
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-8-5

■ 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
	Unit	mm

T-8-6

■ 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 appropriate target value range (50 to 700), the appropriate control can be executed by clearing the log information (COPIER> FUNCTION> CLEAR> 1TR-CLR). When both values are smaller, 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	0.1 μ A
	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 appropriate target value range (50 to 700), the appropriate control can be executed by clearing the log information (COPIER> FUNCTION> CLEAR> 1TR-CLR). When both values are smaller, 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	0.1 μ A
	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 appropriate target value range (50 to 700), the appropriate control can be executed by clearing the log information (COPIER> FUNCTION> CLEAR> 1TR-CLR). When both values are smaller, 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	0.1 μ A
	Appropriate target value	50 to 700
	Related service mode	COPIER> FUNCTION> CLEAR> 1TR-CLR

COPIER > DISPLAY > HV-ST5	
1ATVC-K4	Dis prmry 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 at full-color jobs. When the two values are out of the appropriate target value range (50 to 700), the appropriate control can be executed by clearing the log information (COPIER> FUNCTION> CLEAR> 1TR-CLR). When both values are smaller, 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
	0.1 μ A
	Appropriate target value
	50 to 700
	Related service mode
	COPIER> FUNCTION> CLEAR> 1TR-CLR
2ATVC	Dis of Sec Transfer ATVC target current
Lv.2	Details
	To display the decuple value of the current, which is derived by the secondary transfer ATVC control, flown on the Secondary Transfer Outer Roller. As the use of Secondary Transfer Outer Roller is extended, the value is decreased. When the two values are out of the appropriate target value range (50 to 700), the appropriate control can be executed by clearing the log information (COPIER> FUNCTION> CLEAR> 2TR-CLR). When both values are smaller, the Secondary Transfer Roller may have reached the end of life.
	Use case
	When classifying the cause of an image failure
	Display/adj/set range
	0 to 65535
	Unit
	0.1 μ A
	Appropriate target value
	50 to 700
	Related service mode
	COPIER> FUNCTION> CLEAR> 2TR-CLR
THCK-Y	Display of Y Drum abrasion amount
Lv.1	Details
	To display the abrasion amount of Y Photosensitive Drum that is derived by the result of the drum thickness detection. The result of the drum thickness detection is reflected to each control of charging, development and transfer.
	Use case
	- When checking the adequacy of setting value for transfer and development. - When checking the changes of Drum thickness against the life of Drum Cartridge.
	Display/adj/set range
	0 to 20
	Unit
	μ m
	Appropriate target value
	0 to 15

COPIER > DISPLAY > HV-ST5	
THCK-M	Display of M Drum abrasion amount
Lv.1	Details
	To display the abrasion amount of M Photosensitive Drum that is derived by the result of the drum thickness detection. The result of the drum thickness detection is reflected to each control of charging, development and transfer.
	Use case
	- When checking the adequacy of setting value for transfer and development. - When checking the changes of Drum thickness against the life of Drum Cartridge.
	Display/adj/set range
	0 to 20
	Unit
	μ m
	Appropriate target value
	0 to 15
THCK-C	Display of C Drum abrasion amount
Lv.1	Details
	To display the abrasion amount of C Photosensitive Drum that is derived by the result of the drum thickness detection. The result of the drum thickness detection is reflected to each control of charging, development and transfer.
	Use case
	- When checking the adequacy of setting value for transfer and development. - When checking the changes of Drum thickness against the life of Drum Cartridge.
	Display/adj/set range
	0 to 20
	Unit
	μ m
	Appropriate target value
	0 to 15

T-8-7

 CCD

COPIER > DISPLAY > CCD		
TARGET-B	Shading target value (B)	
Lv.2	Details	To display the shading target value of Blue. Continuous display of 0 (minimum) or FFFF (maximum) is considered a failure of the Reader Controller PCB. 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 FFFF
	Appropriate target value	512 to 2047
TARGET-G	Shading target value (G)	
Lv.2	Details	To display the target value of Green. Continuous display of 0 (minimum) or FFFF (maximum) is considered a failure of the Reader Controller PCB. 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 FFFF
	Appropriate target value	512 to 2047
TARGET-R	Shading target value (R)	
Lv.2	Details	To display the shading target value of Red. Continuous display of 0 (minimum) or FFFF (maximum) is considered a failure of the Reader Controller PCB. 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 FFFF
	Appropriate target value	512 to 2047
GAIN-OB	Gain level of Img Sensor odd bit(B): frt	
Lv.2	Details	To display the Blue gain level adjustment value in odd-numbered bit on CMOS Sensor of Scanner Unit (paper front). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB. 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 FFFF
	Appropriate target value	16 to 246

COPIER > DISPLAY > CCD		
GAIN-OG	Gain level of Img Sensor odd bit(G): frt	
Lv.2	Details	To display the Green gain level adjustment value in odd-numbered bit on CMOS Sensor of Scanner Unit (paper front). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB. 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 FFFF
	Appropriate target value	16 to 246
GAIN-OR	Gain level of Img Sensor odd bit(R): frt	
Lv.2	Details	To display the Red gain level adjustment value in odd-numbered bit on CMOS Sensor of Scanner Unit (paper front). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB. 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 FFFF
	Appropriate target value	16 to 246
GAIN-EB	Gain level of Img Sensor even bit(B): frt	
Lv.2	Details	To display the Blue gain level adjustment value in even-numbered bit on CMOS Sensor of Scanner Unit (paper front). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB. 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 FFFF
	Appropriate target value	16 to 246

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 FFFF
	Appropriate target value	16 to 246
	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 FFFF
	Appropriate target value	16 to 246
	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 B&W mode
	Display/adj/set range	20 to 164
	Appropriate target value	20 to 164
	Supplement/memo	LED cannot be replaced individually. Replace the Scanner Unit.
LAMP-CL		Scan Lamp intensity adj VL(color): frt
Lv.2	Details	To display the LED light intensity adjustment value of Scanner Unit (paper front) in color scanning mode.
	Use case	When image failure occurs at front side scanning in color mode
	Display/adj/set range	33 to 164
	Appropriate target value	33 to 164
	Supplement/memo	LED cannot be replaced individually. Replace the Scanner Unit.
LAMP2-BW		Scan Lamp intensity adj VL(B&W): back
Lv.2	Details	To display the LED light intensity adjustment value of Scanner Unit (paper back) in B&W scanning mode.
	Use case	When image failure occurs at back side scanning in B&W mode.
	Display/adj/set range	33 to 164
	Appropriate target value	33 to 164
	Supplement/memo	LED cannot be replaced individually. Replace the Scanner Unit.

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	33 to 164
	Appropriate target value	33 to 164
	Supplement/memo	LED cannot be replaced individually. Replace the Scanner Unit.
OFST-BW		Img Sensor offset value (B&W) [Front]
Lv.2	Details	To display the CMOS Sensor offset value at B&W scanning.
	Use case	When image failure occurs at front side scanning in B&W mode
	Display/adj/set range	1 to 95
	Appropriate target value	1 to 95
	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	1 to 95
	Appropriate target value	1 to 95
	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 B&W mode
	Display/adj/set range	1 to 95
	Appropriate target value	1 to 95
	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 B&W mode
	Display/adj/set range	1 to 47
	Appropriate target value	1 to 47
	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 B&W mode
	Display/adj/set range	1 to 47
	Appropriate target value	1 to 47
	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 B&W mode.
	Display/adj/set range	1 to 47
	Appropriate target value	1 to 47

COPIER > DISPLAY > CCD		
GAIN-BW4		Img Sensor gain level adj VL4(B&W): frt
Lv.2	Details	To display the CMOS Sensor B&W gain level adjustment value 4 of Scanner Unit (paper front).
	Use case	When image failure occurs at front side scanning in B&W mode.
	Display/adj/set range	1 to 47
	Appropriate target value	1 to 47
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 B&W mode.
	Display/adj/set range	1 to 47
	Appropriate target value	1 to 47
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 B&W mode.
	Display/adj/set range	1 to 47
	Appropriate target value	1 to 47
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 B&W mode.
	Display/adj/set range	1 to 47
	Appropriate target value	1 to 47
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 B&W mode.
	Display/adj/set range	1 to 47
	Appropriate target value	1 to 47
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	1 to 47
	Appropriate target value	1 to 47

COPIER > DISPLAY > CCD		
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	1 to 47
	Appropriate target value	1 to 47
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	1 to 47
	Appropriate target value	1 to 47
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	1 to 47
	Appropriate target value	1 to 47
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	1 to 47
	Appropriate target value	1 to 47
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	1 to 47
	Appropriate target value	1 to 47

COPIER > DISPLAY > CCD	
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
	1 to 95
	Appropriate target value
	1 to 95

T-8-8

DPOT

COPIER > DISPLAY > DPOT	
2TR-PPR	Dis of sec trns ATVC ppr allotted voltg
Lv.2	Use case
	When an inquiry is received from the Quality Evaluation Division
2TR-BASE	Dis of sec transfer ATVC base voltage
Lv.2	Use case
	When an inquiry is received from the Quality Evaluation Division
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
	Appropriate target value
	300 to 3000
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
	Appropriate target value
	300 to 3000
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
	Appropriate target value
	300 to 3000
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
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 the charging failure image occurs
	Display/adj/set range
	0 to 3000
	Unit
	Vpp
	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 the charging failure image occurs
	Display/adj/set range
	0 to 3000
	Unit
	Vpp
	Appropriate target value
	1200 to 2500

COPIER > DISPLAY > DPOT		
CHG-AC-C		Display of primary charging AC bias (C)
Lv.2	Details	To display the primary charging AC bias lastly applied to the Primary Charging Roller (C).
	Use case	When the charging failure image occurs
	Display/adj/set range	0 to 3000
	Unit	Vpp
	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 the charging failure image occurs
	Display/adj/set range	0 to 3000
	Unit	Vpp
	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 nearly 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	
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 nearly the end of life.
	Use case	When the image density is low
	Display/adj/set range	00 - FF (hexadecimal)
	Appropriate target value	60 to FF
	LPWR-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 nearly the end of life.
	Use case	When the image density is low
	Display/adj/set range	00 - FF (hexadecimal)
	Appropriate target value	60 to FF
	LPWR-K	
Lv.2	Details	To display Bk laser power determined by potential control. FF display with low image density is considered that the Photosensitive Drum may be nearly the end of life.
	Use case	When the image density is low
	Display/adj/set range	00 - FF (hexadecimal)
	Appropriate target value	60 to FF

COPIER > DISPLAY > DPOT		
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	- At the occurrence of an 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	- At the occurrence of an 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-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	- At the occurrence of an 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	- At the occurrence of an 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		
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-8-9

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 greatly - 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 greatly fluctuates - 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 greatly fluctuates - 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 greatly fluctuates - 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 ATR ctrl base light intnsty (P-wave)
Lv.2	Details	To display the light intensity (P-wave) reflected from the base (ITB) at ATR control. Intolerable values may be caused by Patch Sensor disconnection, LED failure, stain on 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 COPIER> FUNCTION> MISC-P> PT-LPADJ
DEV-DC-Y		Dis of developing DC voltage (Y)
Lv.2	Details	To display the latest Y developing DC voltage Vdc.
	Use case	- When image failure occurs due to carrier adherence - When fogging appears - When fogging is deteriorated
	Display/adj/set range	-800 to -200
	Unit	V
	Appropriate target value	-800 to -200
DEV-DC-M		Dis of developing DC voltage (M)
Lv.2	Details	To display the latest M developing DC voltage Vdc.
	Use case	- When image failure occurs due to carrier adherence - When fogging appears - 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 appears - 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 appears - 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	When low density or fogging occurs
	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	When low density or fogging occurs
	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	When low density or fogging occurs
	Display/adj/set range	0 to 1500
	Unit	V
	Appropriate target value	400 to 900
CHG-DC-K	Dis of Pry charge DC voltg (Bk)& gain VL	
Lv.2	Details	To display the latest output value of primary charging DC voltage (Bk).
	Use case	When low density or fogging occurs
	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	100 or under
	Supplement/memo	Dark current: current flowing when the Patch Sensor LED is OFF.
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
	Supplement/memo	Dark current: current flowing when the Patch Sensor LED is OFF.
P-SENS-S	Dis ATR ctrl base light intnsty (S-wave)	
Lv.2	Details	To display the light intensity (S-wave) reflected from the base (ITB) at ATR control. Intolerable values may be caused by insufficient ITB cleaning, etc.
	Use case	When checking ITB failure at low density or fogging deterioration
	Display/adj/set range	0 to 1023
	Appropriate target value	10 to 400
	Related service mode	COPIER> DISPLAY> DENS> P-SENS-P COPIER> FUNCTION> MISC-P> PT-LPADJ
DENS-Y-H	Dis of ATR ctrl Y-clr T/D ratio history	
Lv.2	Details	To display the latest 8 Y-toner density log data (T/D ratio) detected by the ATR Sensor (Y) 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 T/D ratio history	
Lv.2	Details	To display the latest 8 M-toner density log data (T/D ratio) detected by the ATR Sensor (M) 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 T/D ratio history
Lv.2	<p>Details</p> <p>To display the latest 8 C-toner density log data (T/D ratio) detected by the ATR Sensor (C) 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.</p> <p>Use case</p> <p>When checking toner density in the Developing Assembly at low density or fogging deterioration</p> <p>Display/adj/set range</p> <p>0 to 255</p> <p>Appropriate target value</p> <p>20 to 230</p>
DS-S-Y-H	Dis of Y-clr patch image density history
Lv.2	<p>Details</p> <p>To display the latest 8 Y-patch image density log data. This provides cause judgment basis for 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.</p> <p>Use case</p> <p>When analyzing the cause of E020</p> <p>Display/adj/set range</p> <p>0 to 1023</p> <p>Appropriate target value</p> <p>200 to 900</p>
DS-S-M-H	Dis of M-clr patch image density history
Lv.2	<p>Details</p> <p>To display the latest 8 M-patch image density log data. This provides cause judgment basis for E020 occurrence, etc. Sharp change in values may indicate failure in Patch Sensor, Shutter or laser, whereas gradual change may indicate failure in toner supply system. This is particularly caused by Patch Sensor.</p> <p>Use case</p> <p>When analyzing the cause of E020</p> <p>Display/adj/set range</p> <p>0 to 1023</p> <p>Appropriate target value</p> <p>200 to 900</p>
DS-S-C-H	Dis of C-clr patch image density history
Lv.2	<p>Details</p> <p>To display the latest 8 C-patch image density log data. This provides cause judgment basis for E020 occurrence, etc. Sharp change in values may indicate failure in Patch Sensor, Shutter or laser, whereas gradual change may indicate failure in toner supply system. This is particularly caused by Patch Sensor.</p> <p>Use case</p> <p>When analyzing the cause of E020</p> <p>Display/adj/set range</p> <p>0 to 1023</p> <p>Appropriate target value</p> <p>200 to 900</p>

COPIER > DISPLAY > DENS	
DS-S-K-H	Dis Bk clr patch image density history
Lv.2	<p>Details</p> <p>To display the latest 8 Bk-patch image density log data. This provides cause judgment basis for E020 occurrence, etc. Sharp change in values may indicate failure in Patch Sensor, Shutter or laser, whereas gradual change may indicate failure in toner supply system. This is particularly caused by Patch Sensor.</p> <p>Use case</p> <p>When analyzing the cause of E020</p> <p>Display/adj/set range</p> <p>0 to 1023</p> <p>Appropriate target value</p> <p>200 to 900</p>
P-LED-DA	Dis of Patch Sensor LED light intensity
Lv.2	<p>Details</p> <p>To display the Patch Sensor LED intensity. The stain on Sensor window or soiled ITB (ITB cleaning failure) is suspected if the background light intensity (P-wave) is too low even with sufficient LED intensity and PT-LPADJ execution will not correct the problem.</p> <p>Use case</p> <p>When checking the Patch Sensor</p> <p>Related service mode</p> <p>COPIER> DISPLAY> DENS> P-SENS-P</p>
SPL-LG-Y	Display of Y toner supply history
Lv.2	<p>Details</p> <p>To display the latest 8 Y-toner supply log data. Each data represents the number of toner blocks supplied per paper.</p> <p>Use case</p> <p>When checking toner supply status at E020 occurrence, low density or fogging deterioration</p> <p>Display/adj/set range</p> <p>0 to 4</p> <p>Appropriate target value</p> <p>0 to 4</p>
SPL-LG-M	Display of M toner supply history
Lv.2	<p>Details</p> <p>To display the latest 8 M-toner supply log data. Each data represents the number of toner blocks supplied per paper.</p> <p>Use case</p> <p>When checking toner supply status at E020 occurrence, low density or fogging deterioration</p> <p>Display/adj/set range</p> <p>0 to 4</p> <p>Appropriate target value</p> <p>0 to 4</p>
SPL-LG-C	Display of C toner supply history
Lv.2	<p>Details</p> <p>To display the latest 8 C-toner supply log data. Each data represents the number of toner blocks supplied per paper.</p> <p>Use case</p> <p>When checking toner supply status at E020 occurrence, low density or fogging deterioration</p> <p>Display/adj/set range</p> <p>0 to 4</p> <p>Appropriate target value</p> <p>0 to 4</p>

COPIER > DISPLAY > DENS		
DENS-K-H		Dis of ATR ctrl Bk-clr T/D ratio history
Lv.2	Details	To display the latest 8 Bk-toner density log data (T/D ratio) detected by the ATR Sensor (Bk) at ATR control. Sharp change of values may indicate ATR Sensor disconnection/failure, whereas gradual change 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	
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-8-10

MISC

COPIER > DISPLAY > MISC		
ENV-TR		Dis of secondary transfer environment
Lv.1	Details	To display environment (moisture content) 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
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
	Display/adj/set range	00 to FF
	Unit	Hex. (hexadecimal)
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
	Display/adj/set range	00 to FF
	Unit	Hex. (hexadecimal)
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
	Display/adj/set range	00 to FF
	Unit	Hex. (hexadecimal)
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
	Display/adj/set range	00 to FF
	Unit	Hex. (hexadecimal)
ITB-POS		Dis of ITB steering reference position
Lv.1	Details	To display the steering reference position of ITB.
	Use case	At initial installation (after execution of COPIER> FUNCTION> MISC-P> ITB-INIT)
	Adj/set/operate method	N/A (display only)
	Display/adj/set range	-580 to 580
	Unit	1 pulse
	Appropriate target value	-300 to 450
	Related service mode	COPIER> FUNCTION> MISC-P> ITB-INIT

T-8-11

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 displayed value is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
	Default value	255
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 displayed value is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
	Default value	255
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 displayed value is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
	Default value	255
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 displayed value is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
	Default value	255
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 displayed value is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
	Default value	255

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 displayed value is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
	Default value	255
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 displayed value is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
	Default value	255
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 displayed value is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
	Default value	255
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 displayed value is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
	Default value	255
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 displayed value is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
	Default value	255

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 displayed value is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
	Default value	255
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 displayed value is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
	Default value	255
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 displayed value is not in the tolerable range, execute the auto gradation adjustment (reset target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 displayed value is not in the tolerable range, execute the auto gradation adjustment (reset target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 displayed value is not in the tolerable range, execute the auto gradation adjustment (reset target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0

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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 displayed value is not in the tolerable range, execute the auto gradation adjustment (reset target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 displayed value is not in the tolerable range, execute the auto gradation adjustment (reset target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 displayed value is not in the tolerable range, execute the auto gradation adjustment (reset target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 displayed value is not in the tolerable range, execute the auto gradation adjustment (reset target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 displayed value is not in the tolerable range, execute the auto gradation adjustment (reset target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0

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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 displayed value is not in the tolerable range, execute the auto gradation adjustment (reset target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
	SUM-C-M	
Lv.2	Details	To display M-patch control difference of screen C in ARCDAT control. When hue variation occurs and the displayed value is not in the tolerable range, execute the auto gradation adjustment (reset target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
	SUM-C-C	
Lv.2	Details	To display C-patch control difference of screen C in ARCDAT control. When hue variation occurs and the displayed value is not in the tolerable range, execute the auto gradation adjustment (reset target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
	SUM-C-K	
Lv.2	Details	To display Bk-patch control difference of screen C in ARCDAT control. When hue variation occurs and the displayed value is not in the tolerable range, execute the auto gradation adjustment (reset target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
	SGNL-A-Y	
Lv.2	Details	To display the current Y-patch value of screen A in ARCDAT control. When hue variation occurs or 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
	Default value	0

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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 or 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
	Default value	0
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 or 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
	Default value	0
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 or 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
	Default value	0
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 or 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
	Default value	0
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 or 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
	Default value	0
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 or 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
	Default value	0

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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 or 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
	Default value	0
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 or 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
	Default value	0
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 or 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
	Default value	0
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 or 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
	Default value	0
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 or 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
	Default value	0
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 auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0

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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 auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0

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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 auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0

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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 auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
TGT-A-Y2		ARCDAT scrn A Y-clr 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
TGT-A-M2		ARCDAT scrn A M-clr 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

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TGT-A-C2		ARCDAT scrn A C-clr 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
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

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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
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

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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
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

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TGT-C-K3	ARCDAT scrn C Bk-clr target VL(1/3 SPD)	
Lv.2	Details	To display the Bk-patch target value of screen C in ARCDAT control at 1/3 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
SUM-A-Y2	ARCDAT scrn A Y-clr ctrl differ(1/2 SPD)	
Lv.2	Details	To display Y-patch control difference of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
SUM-A-M2	ARCDAT scrn A M-clr ctrl differ(1/2 SPD)	
Lv.2	Details	To display M-patch control difference of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
SUM-A-C2	ARCDAT scrn A C-clr ctrl differ(1/2 SPD)	
Lv.2	Details	To display C-patch control difference of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
SUM-A-K2	ARCDAT scrn A Bk-clr ctrl differ(1/2 SPD)	
Lv.2	Details	To display Bk-patch control difference of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0

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SUM-B-Y2		ARCDAT scrn B Y-clr ctrl differ(1/2 SPD)
Lv.2	Details	To display Y-patch control difference of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
SUM-B-M2		ARCDAT scrn B M-clr ctrl differ(1/2 SPD)
Lv.2	Details	To display M-patch control difference of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
SUM-B-C2		ARCDAT scrn B C-clr ctrl differ(1/2 SPD)
Lv.2	Details	To display C-patch control difference of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
SUM-B-K2		ARCDAT scrnB Bk-clr ctrl differ(1/2 SPD)
Lv.2	Details	To display Bk-patch control difference of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0

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SUM-C-Y2		ARCDAT scrn C Y-clr ctrl differ(1/2 SPD)
Lv.2	Details	To display Y-patch control difference of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
SUM-C-M2		ARCDAT scrn C M-clr ctrl differ(1/2 SPD)
Lv.2	Details	To display M-patch control difference of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
SUM-C-C2		ARCDAT scrn C C-clr ctrl differ(1/2 SPD)
Lv.2	Details	To display C-patch control difference of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
SUM-C-K2		ARCDAT scrnC Bk-clr ctrl differ(1/2 SPD)
Lv.2	Details	To display Bk-patch control difference of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0

COPIER > DISPLAY > HT-C		
DLT-A-Y2		ARCDAT scrn A Y-density differ (1/2 SPD)
Lv.2	Details	To display the difference between Y-patch target value and the current value of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
DLT-A-M2		ARCDAT scrn A M-density differ (1/2 SPD)
Lv.2	Details	To display the difference between M-patch target value and the current value of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
DLT-A-C2		ARCDAT scrn A C-density differ (1/2 SPD)
Lv.2	Details	To display the difference between C-patch target value and the current value of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
DLT-A-K2		ARCDAT scrn A Bk-density differ(1/2 SPD)
Lv.2	Details	To display the difference between Bk-patch target value and the current value of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0

COPIER > DISPLAY > HT-C		
DLT-B-Y2		ARCDAT scrn B Y-density differ (1/2 SPD)
Lv.2	Details	To display the difference between Y-patch target value and the current value of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
DLT-B-M2		ARCDAT scrn B M-density differ (1/2 SPD)
Lv.2	Details	To display the difference between M-patch target value and the current value of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
DLT-B-C2		ARCDAT scrn B C-density differ (1/2 SPD)
Lv.2	Details	To display the difference between C-patch target value and the current value of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
DLT-B-K2		ARCDAT scrn B Bk-density differ(1/2 SPD)
Lv.2	Details	To display the difference between Bk-patch target value and the current value of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0

COPIER > DISPLAY > HT-C		
DLT-C-Y2		ARCDAT scrn C Y-density differ (1/2 SPD)
Lv.2	Details	To display the difference between Y-patch target value and the current value of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
DLT-C-M2		ARCDAT scrn C M-density differ (1/2 SPD)
Lv.2	Details	To display the difference between M-patch target value and the current value of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
DLT-C-C2		ARCDAT scrn C C-density differ (1/2 SPD)
Lv.2	Details	To display the difference between C-patch target value and the current value of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
DLT-C-K2		ARCDAT scrn C Bk-density differ(1/2 SPD)
Lv.2	Details	To display the difference between Bk-patch target value and the current value of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0

COPIER > DISPLAY > HT-C		
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
	Default value	0
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
	Default value	0
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
	Default value	0
SGL-A-K2		ARCDAT scrnA Bk ptch current VL(1/2 SPD)
Lv.2	Details	To display the current Bk-patch value of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Default value	0
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
	Default value	0

COPIER > DISPLAY > HT-C		
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
	Default value	0
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
	Default value	0
SGL-B-K2		ARCDAT scrnB Bkpatch current VL(1/2 SPD)
Lv.2	Details	To display the current Bk-patch value of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Default value	0
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
	Default value	0
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
	Default value	0

COPIER > DISPLAY > HT-C		
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
	Default value	0
SGL-C-K2		ARCDAT scrnC Bkpatch current VL(1/2 SPD)
Lv.2	Details	To display the current Bk-patch value of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Default value	0
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 auto gradation adjustment (reset target value). If not corrected, check Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset target value). If not corrected, check Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset target value). If not corrected, check Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0

COPIER > DISPLAY > HT-C		
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 auto gradation adjustment (reset target value). If not corrected, check Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset target value). If not corrected, check Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset target value). If not corrected, check Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset target value). If not corrected, check Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset target value). If not corrected, check Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0

COPIER > DISPLAY > HT-C		
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 auto gradation adjustment (reset target value). If not corrected, check Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset target value). If not corrected, check Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset target value). If not corrected, check Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset target value). If not corrected, check Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset target value). If not corrected, check Patch Sensor and replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0

COPIER > DISPLAY > HT-C		
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 auto gradation adjustment (reset target value). If not corrected, check Patch Sensor and replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset target value). If not corrected, check Patch Sensor and replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset target value). If not corrected, check Patch Sensor and replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset target value). If not corrected, check Patch Sensor and replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0

COPIER > DISPLAY > HT-C		
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 auto gradation adjustment (reset target value). If not corrected, check Patch Sensor and replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset target value). If not corrected, check Patch Sensor and replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset target value). If not corrected, check Patch Sensor and replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset target value). If not corrected, check Patch Sensor and replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0

COPIER > DISPLAY > HT-C		
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 auto gradation adjustment (reset target value). If not corrected, check Patch Sensor and replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset target value). If not corrected, check Patch Sensor and replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 auto gradation adjustment (reset target value). If not corrected, check Patch Sensor and replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
	Default value	0
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 Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Default value	0
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 Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Default value	0

COPIER > DISPLAY > HT-C		
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 Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Default value	0
SGL-A-K3		ARCDAT scrnA Bkpatch current VL(1/3 SPD)
Lv.2	Details	To display the current Bk-patch value of screen A in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Default value	0
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 Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Default value	0
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 Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Default value	0
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 Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Default value	0

COPIER > DISPLAY > HT-C		
SGL-B-K3		ARCDAT scrnB Bkpatch current VL(1/3 SPD)
Lv.2	Details	To display the current Bk-patch value of screen B in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Default value	0
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 Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Default value	0
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 Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Default value	0
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 Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Default value	0
SGL-C-K3		ARCDAT scrnC Bkpatch current VL(1/3 SPD)
Lv.2	Details	To display the current Bk-patch value of screen C in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Default value	0

T-8-12



Main Device (DCON > P004 to 029)

Address	bit	Name	Mark	Remarks
P004	15	-	-	-
	14	Delivery fan 1 connect	FM7	0:connect
	13	Multi-purpose paper sensor	PS47	1:paper
	12	Duplex paper sensor	PS38	1:paper
	11	Third delivery sensor	PS43	1:paper
	10	Duplex inlet sensor	PS40	1:paper
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P005	15	-	-	-
	14	-	-	-
	13	Second delivery sensor	PS42	1:paper
	12	Reverse sensor	PS39	1:paper
	11	First delivery sensor	PS41	1:paper
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	M28	0:CW1:CCW
	5	Laser shutter motor_l1	M28	[1:1:10]=(00)0.40A,(01)0.30A(10)0.22A,(11)0.09A
	4	-	M28	
	3	-	-	-
	2	-	SL5	1:ON
	1	-	SL6	1:ON
	0	-	SL4	1:ON

Address	bit	Name	Mark	Remarks
P006	15	Third delivery flapper solenoid	SL7	1:ON
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	FM10	1:halfspeed
	0	-	-	-
P007	15	Fixing heat exhaust fan 1,2_half speed	FM1,FM2	1:halfspeed
	14	Fixing cooling fan (front),(rear)	FM5,FM6	1:ON
	13	Secondary transfer exhaust fan _full speed	FM8	1:fullspeed
	12	Secondary transfer exhaust fan _half speed	FM8	1:halfspeed
	11	Process cartridge fan (front)_full speed	FM10	1:fullspeed
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Fixing delivery motor_l1	M22	[1:1:10]=(00)0.88A,(01)0.62A(10)0.51A,(11)0.09A
	6	-	M22	
	5	-	-	-
	4	-	M27	0:CW=OPEN,1:CCW=CLOSE
	3	Shutter motor_l1	M27	[1:1:10]=(00)0.40A,(01)0.30A(10)0.22A,(11)0.09A
	2	-	M27	
	1	-	-	-
	0	-	FM1,FM2	1:fullspeed

Address	bit	Name	Mark	Remarks
P008	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	UN21	1:bottle
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	UN59	0:new
	3	-	UN58	0:new
	2	-	UN57	0:new
	1	-	UN56	0:new
	0	-	-	-
P009	15	DC interlock switch 1,2	SW3,SW4	1:DOOROPEN
	14	Second delivery tray full sensor	PS45	0:full
	13	First delivery tray full sensor	PS44	0:full
	12	-	-	-
	11	Laser shutter sensor	PS29	1:HP
	10	Front door sensor	PS18	0:DOOROPEN
	9	-	PS33	1:detect
	8	-	UN53	1:detect
	7	-	UN51	1:detect
	6	-	PS21	0:DOOROPEN
	5	-	PS20	0:DOOROPEN
	4	-	PS37	1:paper
	3	-	PS32	1:A4,K8,B4/B5,A4-R 0:LTR/LGL,EXE,LTR-R
	2	-	PS31	1:HP
1	-	PS30	1:engage	
0	-	PS19	0:DOOROPEN	

Address	bit	Name	Mark	Remarks
P010	15	Delivery fan 2_full speed	FM9	1:fullspeed
	14	Delivery fan 2_half speed	FM9	1:halfspeed
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	M26	1:ON
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	CL1	1:ON
	2	-	-	-
	1	Cassette 1 pickup motor_l1	M16	[1:10]=(00)1.01A,(01)0.79A(10)0.51A,(11)0.09A
	0	-	M16	
P011	15	-	-	-
	14	-	-	-
	13	Cassette 2 pickup motor_l1	M17	[1:10]=(00)1.01A,(01)0.79A(10)0.51A,(11)0.09A
	12	Cassette 2 pickup motor_l0	M17	
	11	-	-	-
	10	-	-	-
	9	Registration motor_l1	M19	[1:10]=(00)1.10A,(01)0.84A(10)0.62A,(11)0.09A
	8	-	M19	
	7	-	-	-
	6	-	-	-
	5	Multi-purpose motor_l1	M18	[1:10]=(00)1.10A,(01)0.84A(10)0.62A,(11)0.09A
	4	-	M18	
	3	-	-	-
	2	-	-	-
	1	Multi-purpose feed motor_l1	M20	[1:10]=(00)1.10A,(01)0.84A(10)0.62A,(11)0.09A
	0	-	M20	

Address	bit	Name	Mark	Remarks
P012	15	-	-	-
	14	-	-	-
	13	Fixing arch sensor 2	PS36	1:paper
	12	Fixing arch sensor 1	PS35	1:paper
	11	Fixing inlet sensor	PS34	1:paper
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P013	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-

Address	bit	Name	Mark	Remarks
P014	15	-	-	-
	14	-	-	-
	13	Process cartridge fan (rear)_half speed	FM4	0:halfspeed
	12	-	-	-
	11	Fixing motor_CW	M21	0:CW1:CCW
	10	-	-	-
	9	Fixing motor_ON	M21	
	8	-	-	-
	7	-	-	-
	6	-	-	0:OFF
	5	-	-	1:OFF
	4	-	FM4	0:fullspeed
	3	First & Second delivery motor_I1	M23	[11:10]=(00)1.16A,(01)0.89A(10)0.66A,(11)0.09A
	2	-	M23	
	1	-	-	-
	0	-	-	-
P015	15	Third delivery motor_I1	M25	[11:10]=(00)0.93A,(01)0.74A(10)0.44A,(11)0.09A
	14	Third delivery motor_I0	M25	
	13	-	-	-
	12	-	-	-
	11	Reverse roller motor_I1	M24	[11:10]=(00)0.72A,(01)0.51A(10)0.39A,(11)0.09A
	10	Reverse roller motor_I0	M24	
	9	-	-	-
	8	-	-	-
	7	Reverse roller motor	M24	0:CW1:CCW
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-

Address	bit	Name	Mark	Remarks
P016	15	Cassette 3 size switch B_7	SW2	0:detect
	14	Cassette 3 size switch B_6	SW2	0:detect
	13	Cassette 3 size switch B_5	SW2	0:detect
	12	Cassette 3 size switch B_4	SW2	0:detect
	11	Cassette 3 size switch A_3	SW1	0:detect
	10	Cassette 3 size switch A_2	SW1	0:detect
	9	Cassette 3 size switch A_1	SW1	0:detect
	8	Cassette 3 size switch A_0	SW1	0:detect
	7	Cassette 4 size switch B_7	SW4	0:detect
	6	Cassette 4 size switch B_6	SW4	0:detect
	5	Cassette 4 size switch B_5	SW4	0:detect
	4	Cassette 4 size switch B_4	SW4	0:detect
	3	Cassette 4 size switch A_3	SW3	0:detect
	2	Cassette 4 size switch A_2	SW3	0:detect
	1	Cassette 4 size switch A_1	SW3	0:detect
	0	Cassette 4 size switch A_0	SW3	0:detect
P017	15	Cassette 3 paper sensor	PS2	0:paper
	14	Cassette 3 paper level sensor A	PS4	0:paper
	13	Cassette 3 paper level sensor B	PS5	0:paper
	12	Cassette 3 pre-registration sensor	PS8	1:paper
	11	Cassette 4 paper sensor	PS3	0:paper
	10	Cassette 4 paper level sensor A	PS6	0:paper
	9	Cassette 4 paper level sensor B	PS7	0:paper
	8	Cassette 4 pre-registration sensor	PS9	1:paper
	7	Pedestal right cover sensor	PS1	0:DOOROPEN
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-

Address	bit	Name	Mark	Remarks
P018	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Cassette 3 pickup motor_I1	M1	(11:I0)=(00)1.01A,(01)0.79A (10)0.51A,(11)0.09A
	6	Cassette 3 pickup motor_I0	M1	
	5	Cassette 4 pickup motor_I1	M2	(11:I0)=(00)1.01A,(01)0.79A (10)0.51A,(11)0.09A
	4	Cassette 4 pickup motor_I0	M2	
	3	-	-	-
	2	-	-	-
	1	Cassette 4 pickup solenoid	SL2	1:ON
	0	Cassette 4 pickup solenoid	SL1	1:ON
P019	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	Cassette 3 pickup motor_CW	M1	Hi:CCW/Low:CW
	7	Cassette 4 pickup motor_CW	M2	Hi:CCW/Low:CW
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-

Address	bit	Name	Mark	Remarks
P020	15	Cassette 1 size switch A_7	SW6	0:detect
	14	Cassette 1 size switch A_6	SW6	0:detect
	13	Cassette 1 size switch A_5	SW6	0:detect
	12	Cassette 1 size switch A_4	SW6	0:detect
	11	Cassette 1 size switch B_3	SW7	0:detect
	10	Cassette 1 size switch B_2	SW7	0:detect
	9	Cassette 1 size switch B_2-	SW7	0:detect
	8	Cassette 1 size switch B_2	SW7	0:detect
	7	Cassette 2 size switch A_7	SW8	0:detect
	6	Cassette 2 size switch A_6	SW8	0:detect
	5	Cassette 2 size switch A_5	SW8	0:detect
	4	Cassette 2 size switch A_4	SW8	0:detect
	3	Cassette 2 size switch B_3	SW9	0:detect
	2	Cassette 2 size switch B_2	SW9	0:detect
	1	Cassette 2 size switch B_1	SW9	0:detect
	0	Cassette 2 size switch B_0	SW9	0:detect
P021	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	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-

Address	bit	Name	Mark	Remarks
P022	15	ITB steering sensor	PS24	1:ON
	14	ITB displacement sensor 1	PS25	1:ON
	13	ITB displacement sensor 2	PS26	1:ON
	12	ITB displacement sensor 3	PS27	1:ON
	11	ITB displacement sensor 4	PS28	1:ON
	10	Primary transfer detachment sensor 1	PS22	0:engage
	9	Primary transfer detachment sensor 2	PS23	1:engage
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	Cassette 2 pickup solenoid	SL3	1:ON
	0	Cassette 1 pickup solenoid	SL2	1:ON
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 (M)	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	Primary transfer separation motor_ I1	M15	[I1:I0]=(00)1.06A,(01)0.87A(10)0.69A,(11)0.09A
	6	Primary transfer separation motor_ I0	M15	
	5	-	-	-
	4	Primary transfer separation motor_ CW	M15	0:CW1:CCW
	3	ITB displacement control motor_ I1	M14	[I1:I0]=(00)0.74A,(01)0.66A(10)0.24A,(11)0.09A
	2	ITB displacement control motor_ I0	M14	
	1	-	-	-
	0	ITB displacement control motor_ CW	M14	0:CW1:CCW
P027	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-

Address	bit	Name	Mark	Remarks
P028	15	Deck open solenoid	SL2D	1:ON
	14	Deck lifter motor_lower limit signal	M2D	1:ON
	13	Deck lifter motor	M2D	1:ON
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	Deck pickup clutch	CL2D	1:ON
	8	Deck pickup roller release solenoid	SL1D	1:ON
	7	Deck open indication	LE100D	1:ON
	6	Deck main motor	M1D	1:ON
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P029	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	Deck lifter lower limit sensing switch	SW2D	1:lowerlimit
	11	Deck lifter upper limit sensor	PS3D	1:upperlimit
	10	Deck lifter position sensor	PS4D	1:ON
	9	Deck feed sensor	PS1D	1:paper
	8	-	-	-
	7	Deck open sensor	PS9D	1:CLOSE
	6	Deck open sensing switch	SW1D	0:CLOSE
	5	Deck paper level sensor	PS7D	1:paper
	4	Deck paper-out sensor	PS2D	0:nopaper
	3	Deck pickup sensor	PS6D	1:paper
	2	Deck set sensor	PS5D	1:conect
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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■ Color Image Reader Unit (RCON > P001 to 005)

Address	bit	Name	Mark	Remarks
P001	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P002	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Original size sensor 1	CF1	0:paper
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-

Address	bit	Name	Mark	Remarks
P003	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	Scanner unit cooling fan lock	FM2	1:error
	3	Scanner unit exhaust fan lock	FM1	1:error
	2	DADF open/closed sensor 2	SR3	0:OPEN1:CLOSE
	1	DADF open/closed sensor 1	SR1	0:OPEN1:CLOSE
	0	Original size sensor 2	CF2	0:paper
P004	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Scanner motor_I0	M1	(I0:I1)=(0,0)100%(0,1)75 %(1,0)50%(1,1)25%
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-

Address	bit	Name	Mark	Remarks	
P005	15	-	-	-	
	14	-	-	-	
	13	-	-	-	
	12	-	-	-	
	11	-	-	-	
	10	-	-	-	
	9	-	-	-	
	8	-	-	-	
	7	-	-	-	
	6	-	-	-	
	5	-	-	-	
	4		Scanner motor_derection	M1	0:scan1:backscan
	3		Fan drive	FM2	1:ON
	2		Scanner motor	M1	1:enable
	1		-	-	-
	0		Scanner motor_l1	M1	

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■ Duplex Color Image Reader Unit-B1 (FEEDER > P001 to 007)

Address	bit	Name	Mark	Remarks	
P001	15	-	-	-	
	14	-	-	-	
	13	-	-	-	
	12	-	-	-	
	11	-	-	-	
	10	-	-	-	
	9	-	-	-	
	8	-	-	-	
	7		Paper surface sensor	SR6	1:upperlimit
	6		Tray HP sensor	SR13	1:HP(lowerlimit)
	5		Tray open/closed sensor	SR9	0:OPEN
	4		AB/ Inch identification sensor	SR7	0:LGL(LTRR),A5R1:A4R(A5),STMTR,B6
	3		LTR-R/ LGL identification sensor	SR8	0:A4Randsmaller, 1:LargerthanA4R
	2		Read motor cooling fan lock	FM2	0:error
	1		-	-	-
	0		-	-	-
P002	15	-	-	-	
	14	-	-	-	
	13	-	-	-	
	12	-	-	-	
	11	-	-	-	
	10	-	-	-	
	9	-	-	-	
	8	-	-	-	
	7		Scanner unit cooling fan lock	FM3	0:error
	6		Pickup roller unit lifter HP sensor	SR12	1:HP
	5		Post-separation sensor 1	SR2	0:paper
	4		Post-separation sensor 2	SR3	0:paper
	3		-	-	-
	2		-	-	-
	1		Original sensor	SR1	1:paper
	0		Cover open/closed sensor	SR10	0:OPEN

Address	bit	Name	Mark	Remarks
P003	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Original size sensor 1	SR17	1:paper
	6	Original size sensor 2	SR18	1:paper
	5	Original size sensor 3	SR19	1:paper
	4	Original size sensor 4	SR20	1:paper
	3	Disengaging home position sensor 1	SR15	1:HP
	2	Leading edge position sensor	SR22	1:paper
1	-	-	-	
0	Disengaging home position sensor 2	SR16	1:HP	
P004	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Post-separation sensor 3 (feeder side)	PCB2	0:paper
	6	Delay sensor	SR4	0:paper
	5	Glass shifting home position sensor	SR11	0:HP
	4	-	-	-
	3	Registration sensor	PCB3	0:paper
	2	Read sensor 1	PCB4	0:paper
1	Read sensor 2	SR5	1:paper	
0	Delivery sensor	PCB5	0:paper	

Address	bit	Name	Mark	Remarks
P005	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Disengagement motor 2	M7	1:enable
	6	Disengagement motor 1	M6	1:enable
	5	Tray lifter motor	M8	1:enable
	4	-	-	-
	3	stamp solenoid	-	1:ON
	2	Tray lifter motor_direction	M8	0:down1:up
1	-	-	-	
0	Feed motor_direction	M2	0:nouse1:CW	
P006	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Read motor	M4	1:enable
	6	Registration motor	M3	1:enable
	5	Feed motor	M2	1:enable
	4	Pickup motor_direction	M1	0:nouse1:CW
	3	Pickup roller unit lifter motor_direction	M10	0:nouse1:CW
	2	Read motor cooling fan	FM2	1:ON
1	Glass shift motor_direction	M9	0:HP1:	
0	Glass shift motor	M9	1:enable	

Address	bit	Name	Mark	Remarks
P007	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	Delivery motor_direction	M5	0: CW 1: CCW
	3	Delivery motor	M5	1: enable
	2	-	-	-
	1	Scanner unit cooling fan	FM3	1: ON
	0	Pickup roller unit lifter motor	M10	1: enable

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Color Image Reader Unit-B2 (FEEDER > P001 to 006)

Address	bit	Name	Mark	Remarks
P001	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	A4R/LTRR identification sensor	SR10	0:A4R and smaller, 1: Larger than A4R
	6	Last document detection sensor	SR9	1: paper
	5	Timing sensor	SR4	1: paper
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P002	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Document width sensor2	SR13	1: paper
	6	Document width sensor3	SR14	1: paper
	5	Document width sensor4	SR15	1: paper
	4	Delivery reversal sensor	SR3	1: paper
	3	Release motor HP sensor	SR11	1: HP
	2	-	-	-
1	Document length sensor 1	SR7	1: paper	
0	Document length sensor 2	SR8	1: paper	

Address	bit	Name	Mark	Remarks
P003	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	Document set sensor	SR5	0:papeer
2	Cover open/closed sensor	SR6	1:OPEN	
1	-	-	-	
0	Document width sensor1	SR12	1:paper	
P004	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
0	-	-	-	

Address	bit	Name	Mark	Remarks
P005	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Fan	FM1	1:ON
	6	Pickup clutch	CL2	1:ON
	5	Registration clutch	CL1	1:ON
	4	release motor_I0	M2	(10:11)Ampere large(0,0)->(0,1)->(1,0)->
	3	release motor_I1	M2	(10:11)Ampere large(0,0)->(0,1)->(1,0)->
2	release motor	M2	1:enable	
1	Stamp solenoid	SL2	1:ON	
0	-	-	-	
P006	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	ADF motor_I0	M1	(10:11)Ampere large(0,0)->(0,1)->(1,0)->
	4	ADF motor_I1	M1	(10:11)Ampere large(0,0)->(0,1)->(1,0)->
	3	ADF motor	M1	1:enable
	2	ADF motor_direction	M1	0:separate 1:pickup
	1	-	-	-
0	-	-	-	

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Inner Finisher-A1(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-C1/Booklet Finisher-C1(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]:M ax
	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]:M ax
	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	Stapler alignment interference sensor	PI115	0:paper1:nopaper
	6	Shutter home position sensor	PI114	0:paper1:nopaper
5	Tray 2 paper sensor	PI113	0:HP	
4	Stapler shift home position sensor	PI110	0:HP	
3	Tray 2 paper surface sensor 1	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
	4	Stack ejection lower roller clutch	CL102	0:OFF1:ON
	3	Buffer rear end holding solenoid	SL104	0:OFF1:ON
P019	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	
P019	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-B1(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
P039	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	-	-	-

T-8-19



ADJ-XY

COPIER > ADJUST > ADJ-XY		
ADJ-X	Adj of img pstn in book mode: vert scan	
Lv.1	Details	To adjust the image reading start position (image lead edge position) in vertical scanning direction. When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. When the non-image width is larger than the standard value, set the smaller value. When out of original area is copied, set the larger value. As the value is incremented by 1, the image position moves to the trailing edge side by 0.1mm.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this at the normal service.
	Display/adj/set range	1 to 100
	Unit	0.1 mm
	Default value	29
ADJ-Y	Adj of img pstn in book mode: horz scan	
Lv.1	Details	To adjust the image reading start position in horizontal scanning direction. When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. When the non-image width is larger than the standard value, set the smaller value. When out of original area is copied, set the larger value. As the value is incremented by 1, the image position moves to the rear side by 0.1mm.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	- After the setting value is changed, write the changed value in the service label. - Do not extremely change the value. An error might occur.
	Display/adj/set range	36 to 236
	Unit	0.1 mm
	Default value	116

COPIER > ADJUST > ADJ-XY		
ADJ-Y-DF	Adj img pstn in DADF mode:horz scan[Fr]	
Lv.1	Details	To adjust the image reading start position in horizontal scanning direction at DADF reading. When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. As the value is incremented by 1, the image position moves to the rear side by 0.1mm.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	2 to 202
	Unit	0.1 mm
	Default value	102
STRD-POS	Adj read pstn in DADF mode: front side	
Lv.1	Details	To adjust the reading position at DADF reading (front side). When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	-100 to 100
	Unit	0.1 mm
	Default value	0
	Related service mode	COPIER> FUNCTION> INSTALL> STRD-POS
ADJ-X-MG	Adj img ratio in book mod:vert scan[frt]	
Lv.1	Details	To make a fine adjustment of image magnification in vertical scanning direction at copyboard reading. When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. As the value is incremented by 1, the image magnification changes by 0.01%. +: Enlarge -: Reduce
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by +/- key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	-50 to 50
	Unit	0.01%
	Default value	0

COPIER > ADJUST > ADJ-XY	
ADJY-DF2	Adj img pstn in DADF mod:horiz 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
	56 to 220
	Unit
	0.1 mm
	Default value
	124

T-8-20

■ 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)[book mode]: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 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	0.001 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 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	0.001 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 Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-M2	MTF value 2 setting: horz scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-M3	MTF value 3 setting: horz scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-M4	MTF value 4 setting: horz scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-M5	MTF value 5 setting: horz scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
MTF2-M6	MTF value 6 setting: horz scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-M7	MTF value 7 setting: horz scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-M8	MTF value 8 setting: horz scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-M9	MTF value 9 setting: horz scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-S1	MTF value 1 setting: vert scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
MTF2-S2	MTF value 2 setting: vert scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-S3	MTF value 3 setting: vert scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-S4	MTF value 4 setting: vert scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-S5	MTF value 5 setting: vert scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-S6	MTF value 6 setting: vert scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
MTF2-S7	MTF value 7 setting: vert scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-S8	MTF value 8 setting: vert scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-S9	MTF value 9 setting: vert scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
100DF2GB	Img Sensr GB clr crct VL[bck]: D-Reader	
Lv.2	Details	To correct the color displacement (G and B lines) in vertical scanning direction due to the Scanner Unit (paper back). When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-256 to 256
	Unit	0.001 line
	Default value	0

COPIER > ADJUST > CCD		
100DF2RG	Img Sensr RG clr crct VL[bck]: D-Reader	
Lv.2	Details	To correct the color displacement (R and G lines) in vertical scanning direction due to the Scanner Unit (paper back). When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-256 to 256
	Unit	0.001 line
	Default value	0
DFCH2R2	Complex chart No.2 data (R) [Front side]	
Lv.1	Details	To derive the front/back side linearity, set the Red data (for paper front) of No.2 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2550
	Default value	2000
DFCH2R10	Complex chart No.10 data(R) [Front side]	
Lv.1	Details	To derive the front/back side linearity, set the Red data (for paper front) of No.10 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2550
	Default value	0
DFCH2B2	Complex chart No.2 data (B) [Front side]	
Lv.1	Details	To derive the front/back side linearity, set the Blue data (for paper front) of No.2 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2550
	Default value	2000

COPIER > ADJUST > CCD		
DFCH2B10	Complex chart No.10 data(B) [Front side]	
Lv.1	Details	To derive the front/back side linearity, set the Blue data (for paper front) of No.10 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2550
	Default value	0
DFCH2G2	Complex chart No.2 data (G) [Front side]	
Lv.1	Details	To derive the front/back side linearity, set the Green data (for paper front) of No.2 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2550
	Default value	2000
DFCH2G10	Complex chart No.10 data(G) [Front side]	
Lv.1	Details	To derive the front/back side linearity, set the Green data (for paper front) of No.10 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2550
	Default value	0
CCD-CHNG	Scanner Unit(ppr frt) rplce flag setting	
Lv.1	Details	To set the calculation mode of MTF filter coefficient that is used at the replacement of Scanner Unit (paper front). When replacing the Scanner Unit (paper front), enter 1. When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.
	Use case	- When replacing the Scanner Unit (paper front) - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Data at factory shipment is used. 1: Data at factory shipment is not used. (Scanner Unit (paper front) is already replaced.)
	Default value	0

COPIER > ADJUST > CCD		
MTF-M1	MTF value 1 setting: horz scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-M2	MTF value 2 setting: horz scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-M3	MTF value 3 setting: horz scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-M4	MTF value 4 setting: horz scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-M5	MTF value 5 setting: horz scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
MTF-M6	MTF value 6 setting: horz scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-M7	MTF value 7 setting: horz scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-M8	MTF value 8 setting: horz scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-M9	MTF value 9 setting: horz scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-S1	MTF value 1 setting: vert scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
MTF-S2	MTF value 2 setting: vert scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-S3	MTF value 3 setting: vert scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-S4	MTF value 4 setting: vert scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-S5	MTF value 5 setting: vert scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-S6	MTF value 6 setting: vert scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
MTF-S7	MTF value 7 setting: vert scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-S8	MTF value 8 setting: vert scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-S9	MTF value 9 setting: vert scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
DFCH-R2	Complex chart No.2 data (R) [Back side]	
Lv.1	Details	To derive the front/back side linearity, set the Red data (for paper back) of No.2 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2550
	Default value	2000
	Related service mode	COPIER> ADJUST> CCD> DFCH-R10, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10 COPIER> FUNCTION> CCD> DF-LNR

COPIER > ADJUST > CCD		
DFCH-R10		Complex chart No.10 data (R) [Back side]
Lv.1	Details	To derive the front/back side linearity, set the Red data (for paper back) of No.10 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2550
	Default value	0
	Related service mode	COPIER> ADJUST> CCD> DFCH-R2, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10 COPIER> FUNCTION> CCD> DF-LNR
DFCH-B2		Complex chart No.2 data (B) [Back side]
Lv.1	Details	To derive the front/back side linearity, set the Blue data (for paper back) of No.2 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2550
	Default value	2000
	Related service mode	COPIER> ADJUST> CCD> DFCH-R10, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10 COPIER> FUNCTION> CCD> DF-LNR
DFCH-B10		Complex chart No.10 data (B) [Back side]
Lv.1	Details	To derive the front/back side linearity, set the Blue data (for paper back) of No.10 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2550
	Default value	0
	Related service mode	COPIER> ADJUST> CCD> DFCH-R2, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10 COPIER> FUNCTION> CCD> DF-LNR

COPIER > ADJUST > CCD		
DFCH-G2		Complex chart No.2 data (G) [Back side]
Lv.1	Details	To derive the front/back side linearity, set the Green data (for paper back) of No.2 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2550
	Default value	2000
	Related service mode	COPIER> ADJUST> CCD> DFCH-R10, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10 COPIER> FUNCTION> CCD> DF-LNR
DFCH-G10		Complex chart No.10 data (G) [Back side]
Lv.1	Details	To derive the front/back side linearity, set the Green data (for paper back) of No.10 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2550
	Default value	0
	Related service mode	COPIER> ADJUST> CCD> DFCH-R2, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10 COPIER> FUNCTION> CCD> DF-LNR
MTF2-M10		MTF value 10 setting: horz scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-M11		MTF value 11 setting: horz scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
MTF2-M12	MTF value 12 setting: horz scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-S10	MTF value 10 setting: vert scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-S11	MTF value 11 setting: vert scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-S12	MTF value 12 setting: vert scan [Front]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-M10	MTF value 10 setting: horz scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
MTF-M11	MTF value 11 setting: horz scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-M12	MTF value 12 setting: horz scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-S10	MTF value 10 setting: vert scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-S11	MTF value 11 setting: vert scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-S12	MTF value 12 setting: vert scan [Back]	
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
DFCH2K2	Complex chart No.2 data (B&W) [Front]	
Lv.1	Details	To derive the front/back side linearity, set the B&W data (for paper front) of No.2 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2550
	Default value	2000
DFCH2K10	Complex chart No.10 data (B&W) [Front]	
Lv.1	Details	To derive the front/back side linearity, set the B&W data (for paper front) of No.10 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2550
	Default value	0
DFCH-K2	Complex chart No.2 data (B&W) [Back]	
Lv.1	Details	To derive the front/back side linearity, set the B&W data (for paper back) of No.2 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2550
	Default value	2000
	Related service mode	COPIER> ADJUST> CCD> DFCH-R2, DFCH-R10, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10, DFCH-K10 COPIER> FUNCTION> CCD> DF-LNR
DFCH-K10	Complex chart No.10 data (B&W) [Back]	
Lv.1	Details	To derive the front/back side linearity, set the B&W data (for paper back) of No.10 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2550
	Default value	0
	Related service mode	COPIER> ADJUST> CCD> DFCH-R2, DFCH-R10, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10, DFCH-K2 COPIER> FUNCTION> CCD> DF-LNR

COPIER > ADJUST > CCD		
DFTAR-BW	Shading target value (B&W) [Front side]	
Lv.1	Details	When replacing the Reader Controller PCB, enter the value of service label. When replacing the Copyboard Glass/Scanner Unit (paper front), execute COPIER> FUNCTION> CCD> DF-WLVL3, DF-WLVL4 and write the value which is automatically set in the service label.
	Use case	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Copyboard Glass/Scanner Unit (paper front)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	700 to 1400
	Default value	1209
	Related service mode	COPIER> FUNCTION> CCD> DF-WLVL3, DF-WLVL4
DFTBK-G	Shading target value (G) [Back side]	
Lv.1	Details	When replacing the Reader Controller PCB, enter the value of service label. When replacing the Copyboard Glass/Scanner Unit (paper back), execute COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 and write the value which is automatically set in the service label.
	Use case	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Scanner Unit (paper back)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	700 to 1400
	Default value	1136
	Related service mode	COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2
DFTBK-B	Shading target value (B) [Back side]	
Lv.1	Details	When replacing the Reader Controller PCB, enter the value of service label. When replacing the Copyboard Glass/Scanner Unit (paper back), execute COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 and write the value which is automatically set in the service label.
	Use case	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Scanner Unit (paper back)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	700 to 1400
	Default value	1126
	Related service mode	COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2

COPIER > ADJUST > CCD		
DFTBK-R		Shading target value (R) [Back side]
Lv.1	Details	When replacing the Reader Controller PCB, enter the value of service label. When replacing the Copyboard Glass/Scanner Unit (paper back), execute COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 and write the value which is automatically set in the service label.
	Use case	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Scanner Unit (paper back)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	700 to 1400
	Default value	1156
	Related service mode	COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2
	CCD-CHG2	
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-8-21

■ 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 yellow color image in the horizontal scanning direction in increments of 1 pixel.
	Use case	When yellow 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	1 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 cyan color image in the horizontal scanning direction in increments of 1 pixel.
	Use case	When cyan 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	1 pixel
REG-H-K		Adj Bk color write start pstn: horz scan
Lv.1	Details	To adjust the write start position of black color image in the horizontal scanning direction in increments of 1 pixel.
	Use case	When black 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	1 pixel
REG-HS-Y		Adj Y color write start pstn: horz scan
Lv.1	Details	To adjust the write start position of yellow color image in the horizontal scanning direction in smaller increments than 1 pixel.
	Use case	When yellow 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	1/32 pixel
Default value		0

COPIER > ADJUST > IMG-REG		
REG-HS-C	Adj C color write start pstn: horz scan	
Lv.1	Details	To adjust the write start position of cyan color image in the horizontal scanning direction in smaller increments than 1 pixel.
	Use case	When cyan 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	1/32 pixel
	Default value	0
REG-HS-K	Adj Bk color write start pstn: horz scan	
Lv.1	Details	To adjust the write start position of black color image in the horizontal scanning direction in smaller increments than 1 pixel.
	Use case	When black 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	1/32 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 yellow color image in the vertical scanning direction in increments of 1 pixel.
	Use case	When yellow 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	0 to 127
	Unit	1 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 cyan color image in the vertical scanning direction in increments of 1 pixel.
	Use case	When cyan 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	1 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 black color image in the vertical scanning direction in increments of 1 pixel.
	Use case	When black 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	1 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 magenta color image in the horizontal scanning direction in increments of 1 pixel.
	Use case	When magenta 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	1 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 magenta color image in the vertical scanning direction in increments of 1 pixel.
	Use case	When magenta 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	1 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 magenta color image in the horizontal scanning direction in smaller increments than 1 pixel.
	Use case	When magenta 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	1/32 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	0.1 %
	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	0.087 %
	Default value	0
Related user mode	Adjustment/Maintenance> Adjust Image Quality> Auto Correct Color Mismatch	

T-8-22

DENS

COPIER > ADJUST > DENS		
SGNL-Y		
Y toner dens value entry at initialize		
Lv.1	Details	To enter the Y toner density value of Patch Sensor (Center) at initialization.
	Use case	When checking the value before RAM clear and re-enter 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
	Appropriate target value	480
SGNL-M		
M toner dens value entry at initialize		
Lv.1	Details	To enter the M toner density value of Patch Sensor (Center) at initialization.
	Use case	When checking the value before RAM clear and re-enter 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
	Appropriate target value	480
SGNL-C		
C toner dens value entry at initialize		
Lv.1	Details	To enter the C toner density value of Patch Sensor (Center) at initialization.
	Use case	When checking the value before RAM clear and re-enter 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
	Appropriate target value	480
REF-Y		
Y toner density target value entry		
Lv.1	Details	To enter the ATR Sensor (Y) target value of ATR control after RAM clear.
	Use case	When checking the value before RAM clear and re-enter 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 (at RAM clear). This is changed by initialization.

COPIER > ADJUST > DENS		
REF-M		M toner density target value entry
Lv.1	Details	To enter the ATR Sensor (M) target value of ATR control after RAM clear.
	Use case	When checking the value before RAM clear and re-enter 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 (at RAM clear). This is changed by initialization.
REF-C		C toner density target value entry
Lv.1	Details	To enter the ATR Sensor (C) target value of ATR control after RAM clear.
	Use case	When checking the value before RAM clear and re-enter 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 (at RAM clear). This is changed by initialization.
SIGG-Y		Adj Y toner dens gain VL at ATR control
Lv.1	Details	To adjust the gain value of Y toner density target value at ATR control Y patch level value when ATR-INIT is executed at Drum Unit initialization is displayed. When replacing the DC Controller PCB, enter the ATR-INIT value unique to each Drum Unit.
	Use case	- When identifying the cause in the case that an image density failure occurs - When replacing the DC Controller PCB
	Display/adj/set range	0 to 255
	Default value	0
	SIGG-M	
Lv.1	Details	To adjust the gain value of M toner density target value at ATR control M patch level value when ATR-INIT is executed at Drum Unit initialization is displayed. When replacing the DC Controller PCB, enter the ATR-INIT value unique to each Drum Unit.
	Use case	- When identifying the cause in the case that an image density failure occurs - 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 VL at ATR control
Lv.1	Details	To adjust the gain value of C toner density target value at ATR control C patch level value when ATR-INIT is executed at Drum Unit initialization is displayed. When replacing the DC Controller PCB, enter the ATR-INIT value unique to each Drum Unit.
	Use case	- When identifying the cause in the case that an image density failure occurs - When replacing the DC Controller PCB
	Display/adj/set range	0 to 255
	Default value	0
SIGG-K		Adj Bk toner dens gain VL at ATR control
Lv.1	Details	To adjust the gain value of Bk toner density target value at ATR control Bk patch level value when ATR-INIT is executed at Drum Unit initialization is displayed. When replacing the DC Controller PCB, enter the ATR-INIT value unique to each Drum Unit.
	Use case	- When identifying the cause in the case that an image density failure occurs - When replacing the DC Controller PCB
	Display/adj/set range	0 to 255
	Default value	0
SGNL-K		Bk toner dens value entry at initialize
Lv.1	Details	To enter the Bk toner density value of Patch Sensor (Center) at initialization.
	Use case	When checking the value before RAM clear and re-enter 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
	Appropriate target value	480
T-SPLY-Y		Adjustment of Y toner supply amount
Lv.2	Details	[Not used] To adjust the offset value of Y toner supply amount. When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When E020 occurs frequently
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-3 to 3
	Unit	0.1
	Default value	0

COPIER > ADJUST > DENS		
T-SPLY-M		Adjustment of M toner supply amount
Lv.2	Details	[Not used] To adjust the offset value of M toner supply amount. When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When E020 occurs frequently
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-3 to 3
	Unit	0.1
	Default value	0
T-SPLY-C		Adjustment of C toner supply amount
Lv.2	Details	[Not used] To adjust the offset value of C toner supply amount. When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When E020 occurs frequently
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-3 to 3
	Unit	0.1
	Default value	0
T-SPLY-K		Adjustment of Bk toner supply amount
Lv.2	Details	[Not used] To adjust the offset value of Bk toner supply amount. When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When E020 occurs frequently
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-3 to 3
	Unit	0.1
	Default value	0
DMAX-Y		Adj D-max ctrl Y color dens target VL
Lv.2	Details	An image failure might occur because the density target value of the D-max control becomes out of the setting table due to environment change. Adjust the offset of the yellow density target value of D-max control. The offset is reset when D-max control (Full Adjust) is executed.
	Use case	When any image failure occurs due to environment change
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	- Do not use this at the normal service. - This is limited for the use of printer model.
	Display/adj/set range	-128 to 128
	Default value	0

COPIER > ADJUST > DENS	
DMAX-M	Adj D-max ctrl M color dens target VL
Lv.2	<p>Details</p> <p>An image failure might occur because the density target value of the D-max control becomes out of the setting table due to environment change. Adjust the offset of the magenta density target value of D-max control. The offset is reset when D-max control (Full Adjust) is executed.</p> <p>Use case</p> <p>When any image failure occurs due to environment change</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>- Do not use this at the normal service. - This is limited for the use of printer model.</p> <p>Display/adj/set range</p> <p>-128 to 128</p> <p>Default value</p> <p>0</p>
DMAX-C	Adj D-max ctrl C color dens target VL
Lv.2	<p>Details</p> <p>An image failure might occur because the density target value of the D-max control becomes out of the setting table due to environment change. Adjust the offset of the cyan density target value of D-max control. The offset is reset when D-max control (Full Adjust) is executed.</p> <p>Use case</p> <p>When any image failure occurs due to environment change</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>- Do not use this at the normal service. - This is limited for the use of printer model.</p> <p>Display/adj/set range</p> <p>-128 to 128</p> <p>Default value</p> <p>0</p>
P-TG-Y	Adj of ATR control Y-color target value
Lv.2	<p>Details</p> <p>To adjust the offset of the ATR patch target value for Y. When the target value determined upon initialization is changed, the T/D ratio is also changed. Fogging and density increase are alleviated when the value is smaller, and carrier adherence is alleviated when it is larger.</p> <p>Use case</p> <p>When density failures, fogging, and carrier adherence, etc. occur</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Make 50 prints of approx. 10% image ratio (ex. COPIER> TEST> PG> TYPE: 16) 4 times. 4) Execute Auto Adjust Gradation> Full Adjust.</p> <p>Caution</p> <p>Execute the Auto Adjust Gradation first to increase the density. If you adjust the offset of the target value, fogging might get worse.</p> <p>Display/adj/set range</p> <p>-4 to 4</p> <p>Default value</p> <p>0</p> <p>Related user mode</p> <p>Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation> Full Adjust</p>

COPIER > ADJUST > DENS	
P-TG-M	Adj of ATR control M-color target value
Lv.2	<p>Details</p> <p>To adjust the offset of the ATR patch target value for M. When the target value determined upon initialization is changed, the T/D ratio is also changed. Fogging and density increase are alleviated when the value is smaller, and carrier adherence is alleviated when it is larger.</p> <p>Use case</p> <p>When density failures, fogging, and carrier adherence, etc. occur</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Make 50 prints of approx. 10% image ratio (ex. COPIER> TEST> PG> TYPE: 16) 4 times. 4) Execute Auto Adjust Gradation> Full Adjust.</p> <p>Caution</p> <p>Execute the Auto Adjust Gradation first to increase the density. If you adjust the offset of the target value, fogging might get worse.</p> <p>Display/adj/set range</p> <p>-4 to 4</p> <p>Default value</p> <p>0</p> <p>Related user mode</p> <p>Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation> Full Adjust</p>
P-TG-C	Adj of ATR control C-color target value
Lv.2	<p>Details</p> <p>To adjust the offset of the ATR patch target value for C. When the target value determined upon initialization is changed, the T/D ratio is also changed. Fogging and density increase are alleviated when the value is smaller, and carrier adherence is alleviated when it is larger.</p> <p>Use case</p> <p>When density failures, fogging, and carrier adherence, etc. occur</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Make 50 prints of approx. 10% image ratio (ex. COPIER> TEST> PG> TYPE: 16) 4 times. 4) Execute Auto Adjust Gradation> Full Adjust.</p> <p>Caution</p> <p>Execute the Auto Adjust Gradation first to increase the density. If you adjust the offset of the target value, fogging might get worse.</p> <p>Display/adj/set range</p> <p>-4 to 4</p> <p>Default value</p> <p>0</p> <p>Related user mode</p> <p>Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation> Full Adjust</p>

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 T/D ratio is also changed. Fogging and density increase are alleviated when the value is smaller, and carrier adherence is alleviated when it is larger.
	Use case
	When density failures, fogging, and 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 (ex. COPIER> TEST> PG> TYPE: 16) 4 times. 4) Execute Auto Adjust Gradation> Full Adjust.
	Caution
	Execute the Auto Adjust Gradation 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
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation> Full Adjust
DMAX-K	Adj D-max ctrl Bk color dens target VL
Lv.2	Details
	An image failure 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 black density target value of D-max control. The offset is reset when D-max control (Full Adjust) is executed.
	Use case
	When any image failure occurs due to environment change
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this at the normal service.
	Display/adj/set range
	-128 to 128
	Default value
	0
P-ALPHA	Adjustment of Patch Sensor a value
Lv.1	Details
	To adjust the adjustment coefficient alpha for the patch sensor . The value multiplied by 1000 is displayed in the screen.
	Use case
	When a density reading error of the Patch Sensor 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
	512 to 2047
	Appropriate target value
	1200
	Supplement/memo
	alpha: Ratio of P-wave to S-wave

COPIER > ADJUST > DENS	
REF-K	Bk toner density target value entry
Lv.2	Details
	To enter the ATR Sensor (Bk) target value of ATR control after RAM clear.
	Use case
	When checking the value before RAM clear and re-enter 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 (at RAM clear). This is changed by initialization.
DMLMT-HY	Y toner charging DC voltage upper limit
Lv.2	Details
	To adjust the offset of the charging DC voltage upper limit for Y in D-max control.
	Use case
	When a failure occurs due to limiter of D-max control
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Execute Auto Adjust Gradation > Quick Adjust.
	Caution
	Do not use this at the normal service.
	Display/adj/set range
	-300 to 300
	Unit
	1 V
	Appropriate target value
	-100 to 100
	Default value
	0
	Related service mode
	COPIER> ADJUST> DENS> DMLMT-LY
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Quick Adjust
	Supplement/memo
	Make sure that the lower limit specified in DMLMT-LY and the upper limit specified in DMLMT-HY do not get reversed.
DMLMT-HM	M toner charging DC voltage upper limit
Lv.2	Details
	To adjust the offset of the charging DC voltage upper limit for M in D-max control.
	Use case
	When a failure occurs due to limiter of D-max control
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Execute Auto Adjust Gradation > Quick Adjust.
	Caution
	Do not use this at the normal service.
	Display/adj/set range
	-300 to 300
	Unit
	1 V
	Appropriate target value
	-100 to 100
	Default value
	0
	Related service mode
	COPIER> ADJUST> DENS> DMLMT-LM
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Quick Adjust
	Supplement/memo
	Make sure that the lower limit specified in DMLMT-LM and the upper limit specified in DMLMT-HM do not get reversed.

COPIER > ADJUST > DENS	
DMLMT-HC	C toner charging DC voltage upper limit
Lv.2	Details
	To adjust the offset of the charging DC voltage upper limit for C in D-max control.
	Use case
	When a failure occurs due to limiter of D-max control
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Execute Auto Adjust Gradation > Quick Adjust.
	Caution
	Do not use this at the normal service.
	Display/adj/set range
	-300 to 300
	Unit
	1 V
	Appropriate target value
	-100 to 100
	Default value
	0
	Related service mode
	COPIER> ADJUST> DENS> DMLMT-LC
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Quick Adjust
	Supplement/memo
	Make sure that the lower limit specified in DMLMT-LC and the upper limit specified in DMLMT-HC do not get reversed.
DMLMT-HK	Bk toner charging 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, and then press OK key. 2) Execute Auto Adjust Gradation > Quick Adjust.
	Caution
	Do not use this at the normal service.
	Display/adj/set range
	-300 to 300
	Unit
	1 V
	Appropriate target value
	-100 to 100
	Default value
	0
	Related service mode
	COPIER> ADJUST> DENS> DMLMT-LK
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Quick Adjust
	Supplement/memo
	Make sure that the lower limit specified in DMLMT-LK and the upper limit specified in DMLMT-HK do not get reversed.

COPIER > ADJUST > DENS	
DMLMT-LY	Y toner charging DC voltage lower limit
Lv.2	Details
	To adjust the offset of the charging DC voltage lower limit for Y in D-max control.
	Use case
	When a failure occurs due to limiter of D-max control
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Execute Auto Adjust Gradation > Quick Adjust.
	Caution
	Do not use this at the normal service.
	Display/adj/set range
	-300 to 300
	Unit
	1 V
	Appropriate target value
	-100 to 100
	Default value
	0
	Related service mode
	COPIER> ADJUST> DENS> DMLMT-HY
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Quick Adjust
	Supplement/memo
	Make sure that the upper limit specified in DMLMT-HY and the lower limit specified in DMLMT-LY do not get reversed.
DMLMT-LM	M toner charging DC voltage lower limit
Lv.2	Details
	To adjust the offset of the charging DC voltage lower limit for M in D-max control.
	Use case
	When a failure occurs due to limiter of D-max control
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Execute Auto Adjust Gradation > Quick Adjust.
	Caution
	Do not use this at the normal service.
	Display/adj/set range
	-300 to 300
	Unit
	1 V
	Appropriate target value
	-100 to 100
	Default value
	0
	Related service mode
	COPIER> ADJUST> DENS> DMLMT-HM
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Quick Adjust
	Supplement/memo
	Make sure that the upper limit specified in DMLMT-HM and the lower limit specified in DMLMT-LM do not get reversed.

COPIER > ADJUST > DENS	
DMLMT-LC	C toner charging DC voltage lower limit
Lv.2	Details
	To adjust the offset of the charging DC voltage lower limit for C in D-max control.
	Use case
	When a failure occurs due to limiter of D-max control
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Execute Auto Adjust Gradation > Quick Adjust.
	Caution
	Do not use this at the normal service.
	Display/adj/set range
	-300 to 300
	Unit
	1 V
	Appropriate target value
	-100 to 100
	Default value
	0
	Related service mode
	COPIER> ADJUST> DENS> DMLMT-HC
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Quick Adjust
	Supplement/memo
	Make sure that the upper limit specified in DMLMT-HC and the lower limit specified in DMLMT-LC do not get reversed.
DMLMT-LK	Bk toner charging 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, and then press OK key. 2) Execute Auto Adjust Gradation > Quick Adjust.
	Caution
	Do not use this at the normal service.
	Display/adj/set range
	-300 to 300
	Unit
	1 V
	Appropriate target value
	-100 to 100
	Default value
	0
	Related service mode
	COPIER> ADJUST> DENS> DMLMT-HK
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Quick Adjust
	Supplement/memo
	Make sure that the upper limit specified in DMLMT-HK and the lower limit specified in DMLMT-LK do not get reversed.
CONT-Y	ATR Sensor (Y) control voltage entry
Lv.1	Details
	To enter the density detection control voltage of 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
	0.1 V
	Appropriate target value
	32 to 68

COPIER > ADJUST > DENS	
CONT-M	ATR Sensor (M) control voltage entry
Lv.1	Details
	To enter the density detection control voltage of 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
	0.1 V
	Appropriate target value
	32 to 68
CONT-C	ATR Sensor (C) control voltage entry
Lv.1	Details
	To enter the density detection control voltage of 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
	0.1 V
	Appropriate target value
	32 to 68
CONT-K	ATR Sensor (Bk) control voltage entry
Lv.1	Details
	To enter the density detection control voltage of 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
	0.1 V
	Appropriate target value
	32 to 68

T-8-23

■ 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 (0.0423mm).
	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	1 pixel
	Default value	94
BLANK-L Adjustment of left edge margin		
Lv.1	Details	To adjust the margin on the left edge of paper. As the value is incremented by 1, the margin is increased toward the center of the paper by 1 pixel (0.0423mm).
	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	1 pixel
	Default value	59
BLANK-R Adjustment of right edge margin		
Lv.1	Details	To adjust the margin on the right edge of paper. As the value is incremented by 1, the margin is increased toward the center of the paper by 1 pixel (0.0423mm).
	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	1 pixel
	Default value	59
BLANK-B Adjustment of trailing edge margin		
Lv.1	Details	To adjust the margin on the trailing edge of paper. As the value is incremented by 1, the margin is increased toward the center of the paper by 1 pixel (0.0423mm).
	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	1 pixel
	Default value	59

T-8-24

■ 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 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 Auto Adjust Gradation > Full Adjust.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-20 to 20
	Unit	10 V
	Appropriate target value	-10 to 10
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> VCONT-M, VCONT-C, VCONT-K
	Related user mode	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Full Adjust Adjustment/Maintenance> Adjust Image Quality> Density Adjustment Mode

COPIER > ADJUST > V-CONT	
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 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 Auto Adjust Gradation > Full Adjust.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-20 to 20
	Unit
	10 V
	Appropriate target value
	-10 to 10
	Default value
	0
	Related service mode
	COPIER> ADJUST> V-CONT> VCONT-Y, VCONT-C, VCONT-K
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Full Adjust Adjustment/Maintenance> Adjust Image Quality> Density Adjustment Mode

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 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 Auto Adjust Gradation > Full Adjust.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-20 to 20
	Unit
	10 V
	Appropriate target value
	-10 to 10
	Default value
	0
	Related service mode
	COPIER> ADJUST> V-CONT> VCONT-Y, VCONT-M, VCONT-K
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Full Adjust Adjustment/Maintenance> Adjust Image Quality> Density Adjustment Mode

COPIER > ADJUST > V-CONT	
VCONT-K	Adj of Bk color contrast potential
Lv.2	Details
	To adjust the offset of the contrast potential Vcont for Bk. As the value is incremented by 1, the contrast potential changes by 10V. +: Image becomes darker. -: Image becomes lighter. When the value is too large, paper winds around the Fixing Belt or a transfer failure occurs. In principle, the adjustment of the density should be performed in Adjustment/Maintenance> Adjust Image Quality> Density Adjustment Mode.
	Use case
	When adjusting the density of D-max control in the case that an image density failure occurs
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by +/- key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute Auto Adjust Gradation > Full Adjust.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-20 to 20
	Unit
	10 V
	Appropriate target value
	-10 to 10
	Default value
	0
	Related service mode
	COPIER> ADJUST> V-CONT> VCONT-Y, VCONT-M, VCONT-C
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Full Adjust Adjustment/Maintenance> Adjust Image Quality> Density Adjustment Mode

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 Auto Adjust Gradation > Full Adjust.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-10 to 10
	Unit
	5 V
	Appropriate target value
	-5 to 5
	Default value
	0
	Related service mode
	COPIER> ADJUST> V-CONT> VBACK-M, VBACK-C, VBACK-K
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Full Adjust Adjustment/Maintenance> Adjust Image Quality> Correct Color Cast

COPIER > ADJUST > V-CONT	
VBACK-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 Auto Adjust Gradation > Full Adjust.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-10 to 10
	Unit
	5 V
	Appropriate target value
	-5 to 5
	Default value
	0
	Related service mode
	COPIER> ADJUST> V-CONT> VBACK-Y, VBACK-C, VBACK-K
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Full Adjust Adjustment/Maintenance> Adjust Image Quality> Correct Color Cast

COPIER > ADJUST > V-CONT	
VBACK-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 Auto Adjust Gradation > Full Adjust.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-10 to 10
	Unit
	5 V
	Appropriate target value
	-5 to 5
	Default value
	0
	Related service mode
	COPIER> ADJUST> V-CONT> VBACK-Y, VBACK-M, VBACK-K
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Full Adjust Adjustment/Maintenance> Adjust Image Quality> Correct Color Cast

COPIER > ADJUST > V-CONT		
VBACK-K	Adj Bk color fogging removal potential	
Lv.2	Details	To adjust the offset of the fogging removal potential Vback for Bk. 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 Auto Adjust Gradation > Full Adjust.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-10 to 10
	Unit	5 V
	Appropriate target value	-5 to 5
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> VBACK-Y, VBACK-M, VBACK-C COPIER> DISPLAY> DPOT> VBACK-K
	Related user mode	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Full Adjust Adjustment/Maintenance> Adjust Image Quality> Correct Color Cast
PT-VCT-Y	Adj of Y color target contrast potential	
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 1 V. +: Potential is increased. -: Potential is decreased.
	Use case	When density failures, fogging, and 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) Print 50 sheets of image with approx. 10% image ratio (e.g. COPIER> TEST> PG> TYPE: 16) 4 times. 4) Execute Auto Adjust Gradation > Full Adjust.
	Display/adj/set range	-50 to 50
	Unit	1 V
	Default value	According to the environment condition.
	Related service mode	COPIER> ADJUST> V-CONT> PT-VCT-M, PT-VCT-C, PT-VCT-K

COPIER > ADJUST > V-CONT		
PT-VCT-M	Adj of M color target contrast potential	
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 1 V. +: Potential is increased. -: Potential is decreased.
	Use case	When density failures, fogging, and 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) Print 50 sheets of image with approx. 10% image ratio (e.g. COPIER> TEST> PG> TYPE: 16) 4 times. 4) Execute Auto Adjust Gradation > Full Adjust.
	Display/adj/set range	-50 to 50
	Unit	1 V
	Default value	According to the environment condition.
	Related service mode	COPIER> ADJUST> V-CONT> PT-VCT-Y, PT-VCT-C, PT-VCT-K
PT-VCT-C	Adj of C color target contrast potential	
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 1 V. +: Potential is increased. -: Potential is decreased.
	Use case	When density failures, fogging, and 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) Print 50 sheets of image with approx. 10% image ratio (e.g. COPIER> TEST> PG> TYPE: 16) 4 times. 4) Execute Auto Adjust Gradation > Full Adjust.
	Display/adj/set range	-50 to 50
	Unit	1 V
	Default value	According to the environment condition.
	Related service mode	COPIER> ADJUST> V-CONT> PT-VCT-Y, PT-VCT-M, PT-VCT-K

COPIER > ADJUST > V-CONT	
PT-VCT-K	Adj of Bk clr target contrast potential
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 1 V. +: Potential is increased. -: Potential is decreased.
	Use case
	When density failures, fogging, and 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) Print 50 sheets of image with approx. 10% image ratio (e.g. COPIER> TEST> PG> TYPE: 16) 4 times. 4) Execute Auto Adjust Gradation > Full Adjust.
	Display/adj/set range
	-50 to 50
	Unit
	1 V
	Default value
	According to the environment condition.
	Related service mode
	COPIER> ADJUST> V-CONT> PT-VCT-Y, PT-VCT-M, PT-VCT-C

T-8-25

■ PASCAL

COPIER > ADJUST > PASCAL	
OFST-P-Y	Y density adj at test print reading
Lv.1	Details
	To adjust the offset of Y color test print reading signal at Auto Adjust Gradation (Full Adjust). When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. As the greater value is set, the image after adjustment gets darker.
	Use case
	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this at the normal service.
	Display/adj/set range
	-128 to 128
	Default value
	According to the adjustment value of the Reader at factory shipment
OFST-P-M	M density adj at test print reading
Lv.1	Details
	To adjust the offset of M color test print reading signal at Auto Adjust Gradation (Full Adjust). When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. As the greater value is set, the image after adjustment gets darker.
	Use case
	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range
	-128 to 128
	Default value
	According to the adjustment value of the Reader at factory shipment
OFST-P-C	C density adj at test print reading
Lv.1	Details
	To adjust the offset of C color test print reading signal at Auto Adjust Gradation (Full Adjust). When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. As the greater value is set, the image after adjustment gets darker.
	Use case
	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range
	-128 to 128
	Default value
	According to the adjustment value of the Reader at factory shipment

COPIER > ADJUST > PASCAL	
OFST-P-K	Bk density adj at test print reading
Lv.1	Details
	To adjust the offset of Bk color test print reading signal at Auto Adjust Gradation (Full Adjust). When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. As the greater value is set, the image after adjustment gets darker.
	Use case
	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by +/- key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range
	-128 to 128
	Default value
	According to the adjustment value of the Reader at factory shipment

T-8-26

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 greater value is set, the image gets darker. If the value is too large, a transfer failure and/or a fixing failure occurs.
	Use case
	When alleviating the variation of the density between machines 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.
	Caution
	Do not use this at the normal service.
	Display/adj/set range
	-8 to 8
	Default value
	0
ADJ-M	M color balance adjustment
Lv.1	Details
	To adjust the default value of the color balance for M when the density of M varies between machines. As the greater value is set, the image gets darker. If the value is too large, a transfer failure and/or a fixing failure occurs.
	Use case
	When alleviating the variation of the density between machines 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
	-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 greater value is set, the image gets darker. If the value is too large, a transfer failure and/or a fixing failure occurs.
	Use case
	When alleviating the variation of the density between machines 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
	-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 greater value is set, the image gets darker. If the value is too large, a transfer failure and/or a fixing failure occurs.
	Use case
	When alleviating the variation of the density between machines 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
	-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 greater value is set, 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
	Related user mode
	Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch

COPIER > ADJUST > COLOR	
OFST-M	Adj of M bright area dens&color balance
Lv.1	Details
	To adjust the bright area density and color balance of M. As the greater value is set, 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
	Related user mode
	Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch
OFST-C	Adj of C bright area dens&color balance
Lv.1	Details
	To adjust the bright area density and color balance of C. As the greater value is set, 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
	Related user mode
	Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch

COPIER > ADJUST > COLOR		
OFST-K	Adj Bk bright area dens&color balance	
Lv.1	Details	To adjust the bright area density and color balance of Bk. As the greater value is set, 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
	Related user mode	Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch
LD-OFS-Y	Color balance adj of Y low dens area	
Lv.2	Details	To adjust the color balance of the low density area of Y. As the greater value is set, 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.
	Display/adj/set range	-8 to 8
	Default value	0
	Related user mode	Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch

COPIER > ADJUST > COLOR		
LD-OFS-M	Color balance adj of M low dens area	
Lv.2	Details	To adjust the color balance of the low density area of M. As the greater value is set, 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.
	Display/adj/set range	-8 to 8
	Default value	0
	Related user mode	Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch
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 greater value is set, 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.
	Display/adj/set range	-8 to 8
	Default value	0
	Related user mode	Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch
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 greater value is set, 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.
	Display/adj/set range	-8 to 8
	Default value	0
	Related user mode	Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch

COPIER > ADJUST > COLOR		
MD-OFS-Y	Color balance adj of Y mid dens area	
Lv.2	Details	To adjust the color balance of the intermediate density area of Y. As the greater value is set, 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.
	Display/adj/set range	-8 to 8
	Default value	0
	Related user mode	Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch
MD-OFS-M	Color balance adj of M mid dens area	
Lv.2	Details	To adjust the color balance of the intermediate density area of M. As the greater value is set, 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.
	Display/adj/set range	-8 to 8
	Default value	0
	Related user mode	Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch
MD-OFS-C	Color balance adj of C mid dens area	
Lv.2	Details	To adjust the color balance of the intermediate density area of C. As the greater value is set, 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.
	Display/adj/set range	-8 to 8
	Default value	0
	Related user mode	Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch

COPIER > ADJUST > COLOR		
MD-OFS-K	Color balance adj of Bk mid dens area	
Lv.2	Details	To adjust the color balance of the intermediate density area of Bk. As the greater value is set, 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.
	Display/adj/set range	-8 to 8
	Default value	0
	Related user mode	Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch
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 greater value is set, 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.
	Display/adj/set range	-8 to 8
	Default value	0
	Related user mode	Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch
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 greater value is set, 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.
	Display/adj/set range	-8 to 8
	Default value	0
	Related user mode	Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch

COPIER > ADJUST > COLOR		
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 greater value is set, 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.
	Display/adj/set range	-8 to 8
	Default value	0
	Related user mode	Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch
	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 greater value is set, 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.
	Display/adj/set range	-8 to 8
	Default value	0
	Related user mode	Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch
	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 greater value is set, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-8 to 8
	Default value	0

COPIER > ADJUST > COLOR		
PL-OFS-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 greater value is set, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-8 to 8
	Default value	0
PL-OFS-C	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 greater value is set, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-8 to 8
	Default value	0
PL-OFS-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 greater value is set, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-8 to 8
	Default value	0
PM-OFS-Y	Clr blnce adj of Y mid dens area:PDL	
Lv.2	Details	To adjust the color balance of the intermediate density area of Y at PDL print. As the greater value is set, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-8 to 8
	Default value	0

COPIER > ADJUST > COLOR		
PM-OFS-M		Clr blnce adj of M mid dens area:PDL
Lv.2	Details	To adjust the color balance of the intermediate density area of M at PDL print. As the greater value is set, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-8 to 8
	Default value	0
PM-OFS-C		Clr blnce adj of C mid dens area:PDL
Lv.2	Details	To adjust the color balance of the intermediate density area of C at PDL print. As the greater value is set, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-8 to 8
	Default value	0
PM-OFS-K		Clr blnce adj of Bk mid dens area:PDL
Lv.2	Details	To adjust the color balance of the intermediate density area of Bk at PDL print. As the greater value is set, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-8 to 8
	Default value	0
PH-OFS-Y		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 greater value is set, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-8 to 8
	Default value	0

COPIER > ADJUST > COLOR		
PH-OFS-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 greater value is set, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-8 to 8
	Default value	0
PH-OFS-C		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 greater value is set, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-8 to 8
	Default value	0
PH-OFS-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 greater value is set, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-8 to 8
	Default value	0

T-8-27

HV-PRI

COPIER > ADJUST > HV-PRI	
DIS-TGY	Dischg crmnt ctrl Y tgt crmnt adj:1/1SPD
Lv.2	Details
	To adjust the offset of the Y target current at discharge current control in plain paper (1/1 speed).
	Use case
	When a 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
	5 μ A
	Appropriate target value
	-5 to 5
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-PRI> OFSTAC-Y
	Supplement/memo
	When an image failure occurs, changing DIS-TGY first is recommended. Only if it is not alleviated, change OFSTAC-Y. If OFSTAC-Y is changed, be sure to return DIS-TGY to its original setting (an excessive discharge may occur if both are applied).
DIS-TGM	Dischg crmnt ctrl M tgt crmnt adj:1/1SPD
Lv.2	Details
	To adjust the offset of the M target current at discharge current control in plain paper (1/1 speed).
	Use case
	When a 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
	5 μ A
	Appropriate target value
	-5 to 5
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-PRI> OFSTAC-M
	Supplement/memo
	When an image failure occurs, changing DIS-TGM first is recommended. Only if it is not alleviated, change OFSTAC-M. If OFSTAC-M is changed, be sure to return DIS-TGM to its original setting (an excessive discharge may occur if both are applied).

COPIER > ADJUST > HV-PRI	
DIS-TGC	Dischg crmnt ctrl C tgt crmnt adj:1/1SPD
Lv.2	Details
	To adjust the offset of the C target current at discharge current control in plain paper (1/1 speed).
	Use case
	When a 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
	5 μ A
	Appropriate target value
	-5 to 5
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-PRI> OFSTAC-C
	Supplement/memo
	When an image failure occurs, changing DIS-TGC first is recommended. Only if it is not alleviated, change OFSTAC-C. If OFSTAC-C is changed, be sure to return DIS-TGC to its original setting (an excessive discharge may occur if both are applied).
DIS-TGK	Dischg crmnt ctrl Btgt crmnt adj:1/1SPD
Lv.2	Details
	To adjust the offset of the Bk target current at discharge current control in plain paper (1/1 speed).
	Use case
	When a 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
	5 μ A
	Appropriate target value
	-5 to 5
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-PRI> OFSTAC-K
	Supplement/memo
	When an image failure occurs, changing DIS-TGK first is recommended. Only if it is not alleviated, change OFSTAC-K. If OFSTAC-K is changed, be sure to return DIS-TGK to its original setting (an excessive discharge may occur if both are applied).

COPIER > ADJUST > HV-PRI		
DIS-TGY2	Dischg crmnt ctrl Y tgt adj: 1/2, 1/3SPD	
Lv.2	Details	To adjust the offset of the Y target current at discharge current control in plain paper (1/2, 1/3 speed).
	Use case	When a 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	5 μ A
	Appropriate target value	-5 to 5
	Default value	0
	Related service mode	COPIER> ADJUST> HV-PRI> OFSTACY2
	Supplement/memo	When an image failure occurs, changing DIS-TGY2 first is recommended. Only if it is not alleviated, change OFSTACY2. If OFSTACY2 is changed, be sure to return DIS-TGY2 to its original setting (an excessive discharge may occur if both are applied).
DIS-TGM2	Dischg crmnt ctrl M tgt adj: 1/2, 1/3SPD	
Lv.2	Details	To adjust the offset of the M target current at discharge current control in plain paper (1/2, 1/3 speed).
	Use case	When a 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	5 μ A
	Appropriate target value	-5 to 5
	Default value	0
	Related service mode	COPIER> ADJUST> HV-PRI> OFSTACM2
	Supplement/memo	When an image failure occurs, changing DIS-TGM2 is recommended. Only if it is not alleviated, change OFSTACM2. If OFSTACM2 is changed, be sure to return DIS-TGM2 to its original setting (an excessive discharge may occur if both are applied).

COPIER > ADJUST > HV-PRI		
DIS-TGC2	Dischg crmnt ctrl C tgt adj: 1/2, 1/3SPD	
Lv.2	Details	To adjust the offset of the C target current at discharge current control in plain paper (1/2, 1/3 speed).
	Use case	When a 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	5 μ A
	Appropriate target value	-5 to 5
	Default value	0
	Related service mode	COPIER> ADJUST> HV-PRI> OFSTACC2
	Supplement/memo	When an image failure occurs, changing DIS-TGC2 first is recommended. Only if it is not alleviated, change OFSTACC2. If OFSTACC2 is changed, be sure to return DIS-TGC2 to its original setting (an excessive discharge may occur if both are applied).
DIS-TGK2	Dischg crmnt ctrl Bk tgt adj: 1/2, 1/3SPD	
Lv.2	Details	To adjust the offset of the Bk target current at discharge current control in plain paper (1/2, 1/3 speed).
	Use case	When a 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	5 μ A
	Appropriate target value	-5 to 5
	Default value	0
	Related service mode	COPIER> ADJUST> HV-PRI> OFSTACK2
	Supplement/memo	When an image failure occurs, changing DIS-TGK2 is recommended. Only if it is not alleviated, change OFSTACK2. If OFSTACK2 is changed, be sure to return DIS-TGK2 to its original setting (an excessive discharge may occur if both are applied).

COPIER > ADJUST > HV-PRI	
OFSTAC-Y	Adj of Y clr charge AC current: 1/1SPD
Lv.1	Details
	To adjust the offset of the charge AC current for Y. As the value is incremented by 1, the current value is increased by 20 μ A. Increase the value when the density is low and decrease the value when the density is high or a spotted image occurs.
	Use case
	- At the occurrence of an image density failure - At the occurrence of a spotted image
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	- Do not use this when the machine is operating correctly. - If the value is too large, the life of the Photosensitive Drum becomes shorter.
	Display/adj/set range
	-20 to 20
	Unit
	20 Vpp
	Appropriate target value
	-5 to 5
	Default value
	0
	Required time
	1 minute
	Related service mode
	COPIER> ADJUST> HV-PRI> DIS-TGY
	Supplement/memo
	When an image failure occurs, changing DIS-TGY first is recommended. Only if it is not alleviated, change OFSTAC-Y. If OFSTAC-Y is changed, be sure to return DIS-TGY to its original setting (an excessive discharge may occur if both are applied).
OFSTAC-M	Adj of M clr charge AC current: 1/1SPD
Lv.1	Details
	To adjust the offset of the charge AC current for M. As the value is incremented by 1, the current value is increased by 20 μ A. Increase the value when the density is low and decrease the value when the density is high or a spotted image occurs.
	Use case
	- At the occurrence of an image density failure - At the occurrence of a spotted image
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	- Do not use this when the machine is operating correctly. - If the value is too large, the life of the Photosensitive Drum becomes shorter.
	Display/adj/set range
	-20 to 20
	Unit
	20 Vpp
	Appropriate target value
	-5 to 5
	Default value
	0
	Required time
	1 minute
	Related service mode
	COPIER> ADJUST> HV-PRI> DIS-TGM
	Supplement/memo
	When an image failure occurs, changing DIS-TGM first is recommended. Only if it is not alleviated, change OFSTAC-M. If OFSTAC-M is changed, be sure to return DIS-TGM to its original setting (an excessive discharge may occur if both are applied).

COPIER > ADJUST > HV-PRI	
OFSTAC-C	Adj of C clr charge AC current: 1/1SPD
Lv.1	Details
	To adjust the offset of the charge AC current for C. As the value is incremented by 1, the current value is increased by 20 μ A. Increase the value when the density is low and decrease the value when the density is high or a spotted image occurs.
	Use case
	- At the occurrence of an image density failure - At the occurrence of a spotted image
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	- Do not use this when the machine is operating correctly. - If the value is too large, the life of the Photosensitive Drum becomes shorter.
	Display/adj/set range
	-20 to 20
	Unit
	20 Vpp
	Appropriate target value
	-5 to 5
	Default value
	0
	Required time
	1 minute
	Related service mode
	COPIER> ADJUST> HV-PRI> DIS-TGC
	Supplement/memo
	When an image failure occurs, changing DIS-TGC first is recommended. Only if it is not alleviated, change OFSTAC-C. If OFSTAC-C is changed, be sure to return DIS-TGC to its original setting (an excessive discharge may occur if both are applied).
OFSTAC-K	Adj of Bk clr charge AC current: 1/1SPD
Lv.1	Details
	To adjust the offset of the charge AC current for Bk. As the value is incremented by 1, the current value is increased by 20 μ A. Increase the value when the density is low and decrease the value when the density is high or a spotted image occurs.
	Use case
	- At the occurrence of an image density failure - At the occurrence of a spotted image
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	- Do not use this when the machine is operating correctly. - If the value is too large, the life of the Photosensitive Drum becomes shorter.
	Display/adj/set range
	-20 to 20
	Unit
	20 Vpp
	Appropriate target value
	-5 to 5
	Default value
	0
	Required time
	1 minute
	Related service mode
	COPIER> ADJUST> HV-PRI> DIS-TGK
	Supplement/memo
	When an image failure occurs, changing DIS-TGK first is recommended. Only if it is not alleviated, change OFSTAC-K. If OFSTAC-K is changed, be sure to return DIS-TGK to its original setting (an excessive discharge may occur if both are applied).

COPIER > ADJUST > HV-PRI	
OFSTACY2	Adj of Y clr charge AC current: 1/2SPD
Lv.1	Details
	To adjust the offset of the charge AC current for Y at 1/2 speed. As the value is incremented by 1, the offset is increased by 50 μ A. Increase the value when the density is low and decrease the value when the density is high or a spotted image occurs.
	Use case
	- At the occurrence of an image density failure - At the occurrence of a spotted image
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-20 to 20
	Unit
	20 Vpp
	Appropriate target value
	-5 to 5
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-PRI> DIS-TGY2
	Supplement/memo
	When an image failure occurs, changing DIS-TGY2 first is recommended. Only if it is not alleviated, change OFSTACY2. If OFSTACY2 is changed, be sure to return DIS-TGY2 to its original setting (an excessive discharge may occur if both are applied).
OFSTACM2	Adj of M clr charge AC current: 1/2SPD
Lv.1	Details
	To adjust the offset of the charge AC current for M at 1/2 speed. As the value is incremented by 1, the offset is increased by 50 μ A. Increase the value when the density is low and decrease the value when the density is high or a spotted image occurs.
	Use case
	- At the occurrence of an image density failure - At the occurrence of a spotted image
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-20 to 20
	Unit
	20 Vpp
	Appropriate target value
	-5 to 5
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-PRI> DIS-TGM2
	Supplement/memo
	When an image failure occurs, changing DIS-TGM2 is recommended. Only if it is not alleviated, change OFSTACM2. If OFSTACM2 is changed, be sure to return DIS-TGM2 to its original setting (an excessive discharge may occur if both are applied).

COPIER > ADJUST > HV-PRI	
OFSTACC2	Adj of C clr charge AC current: 1/2SPD
Lv.1	Details
	To adjust the offset of the charge AC current for C at 1/2 speed. As the value is incremented by 1, the offset is increased by 50 μ A. Increase the value when the density is low and decrease the value when the density is high or a spotted image occurs.
	Use case
	- At the occurrence of an image density failure - At the occurrence of a spotted image
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-20 to 20
	Unit
	20 Vpp
	Appropriate target value
	-5 to 5
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-PRI> DIS-TGC2
	Supplement/memo
	When an image failure occurs, changing DIS-TGC2 first is recommended. Only if it is not alleviated, change OFSTACC2. If OFSTACC2 is changed, be sure to return DIS-TGC2 to its original setting (an excessive discharge may occur if both are applied).
OFSTACK2	Adj of Bk clr charge AC current: 1/2SPD
Lv.1	Details
	To adjust the offset of the charge AC current for Bk at 1/2 speed. As the value is incremented by 1, the offset is increased by 50 μ A. Increase the value when the density is low and decrease the value when the density is high or a spotted image occurs.
	Use case
	- At the occurrence of an image density failure - At the occurrence of a spotted image
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-20 to 20
	Unit
	20 Vpp
	Appropriate target value
	-5 to 5
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-PRI> DIS-TGK2
	Supplement/memo
	When an image failure occurs, changing DIS-TGK2 is recommended. Only if it is not alleviated, change OFSTACK2. If OFSTACK2 is changed, be sure to return DIS-TGK2 to its original setting (an excessive discharge may occur if both are applied).

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HV-TR

COPIER > ADJUST > HV-TR	
1TR-TGY	Adj Y Pmry Transfer ATVC 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
	1 μ A
	Appropriate target value
	-10 to 10
	Default value
	0
1TR-TGM	Adj M Pmry Transfer ATVC 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
	1 μ A
	Appropriate target value
	-10 to 10
	Default value
	0
1TR-TGC	Adj C Pmry Transfer ATVC 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
	1 μ A
	Appropriate target value
	-10 to 10
	Default value
	0

COPIER > ADJUST > HV-TR	
1TR-TGK1	Adj Bk Pry Trns ATVC tgt crnt: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
	1 μ A
	Appropriate target value
	-10 to 10
	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0

COPIER > ADJUST > HV-TR		
2TR-P1		Sec trn ATVC ppr allot V:crd 1st, L-hmdy
Lv.1	Details	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case	When adjusting the secondary transfer bias according to the 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	30 V
	Appropriate target value	-100 to 30
	Default value	0
	2TR-P2	
Lv.1	Details	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case	When adjusting the secondary transfer bias according to the 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	30 V
	Appropriate target value	-100 to 30
	Default value	0

COPIER > ADJUST > HV-TR		
2TR-H1		Sec trn ATVC ppr allot V:hvy1 1st,L-hmdy
Lv.1	Details	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case	When adjusting the secondary transfer bias according to the 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	30 V
	Appropriate target value	-100 to 30
	Default value	0
	2TR-H2	
Lv.1	Details	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case	When adjusting the secondary transfer bias according to the 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	30 V
	Appropriate target value	-100 to 30
	Default value	0

COPIER > ADJUST > HV-TR	
2TR-UH1	Sec trn ATVC ppr allot V:hvy3 1st,L-hmdy
Lv.1	Details
	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0
2TR-UH2	Sec trn ATVC ppr allot V:hvy3 2nd,L-hmdy
Lv.1	Details
	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0

COPIER > ADJUST > HV-TR	
2TR-N12	Sec trn ATVC ppr allot V:pln1 1st,N-hmdy
Lv.1	Details
	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0
2TR-N22	Sec trn ATVC ppr allot V:pln1 2nd,N-hmdy
Lv.1	Details
	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0

COPIER > ADJUST > HV-TR	
2TR-H12	Sec trn ATVC ppr allot V:hvy1 1st,N-hmdy
Lv.1	Details
	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0
2TR-H22	Sec trn ATVC ppr allot V:hvy1 2nd,N-hmdy
Lv.1	Details
	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0

COPIER > ADJUST > HV-TR	
2TR-UH12	Sec trn ATVC ppr allot V:hvy3 1st,N-hmdy
Lv.1	Details
	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0
2TR-UH22	Sec trn ATVC ppr allot V:hvy3 2nd,N-hmdy
Lv.1	Details
	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0

COPIER > ADJUST > HV-TR	
2TR-P12	Sec trn ATVC ppr allot V:crd 1st, N-hmdy
Lv.1	<p>Details</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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.</p> <p>Use case</p> <p>When adjusting the secondary transfer bias according to the conditions</p> <p>Adj/set/operate method</p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Display/adj/set range</p> <p>-128 to 127</p> <p>Unit</p> <p>30 V</p> <p>Appropriate target value</p> <p>-100 to 30</p> <p>Default value</p> <p>0</p>
2TR-P22	Sec trn ATVC ppr allot V:crd 2nd, N-hmdy
Lv.1	<p>Details</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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.</p> <p>Use case</p> <p>When adjusting the secondary transfer bias according to the conditions</p> <p>Adj/set/operate method</p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Display/adj/set range</p> <p>-128 to 127</p> <p>Unit</p> <p>30 V</p> <p>Appropriate target value</p> <p>-100 to 30</p> <p>Default value</p> <p>0</p>
2TR-N13	Sec trn ATVC ppr allot V:pln1 1st,H-hmdy
Lv.1	<p>Details</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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V).</p> <p>Use case</p> <p>When adjusting the secondary transfer bias according to the conditions</p> <p>Adj/set/operate method</p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Display/adj/set range</p> <p>-128 to 127</p> <p>Unit</p> <p>30 V</p> <p>Appropriate target value</p> <p>-100 to 30</p> <p>Default value</p> <p>0</p>

COPIER > ADJUST > HV-TR	
2TR-N23	Sec trn ATVC ppr allot V:pln1 2nd,H-hmdy
Lv.1	<p>Details</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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.</p> <p>Use case</p> <p>When adjusting the secondary transfer bias according to the conditions</p> <p>Adj/set/operate method</p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Display/adj/set range</p> <p>-128 to 127</p> <p>Unit</p> <p>30 V</p> <p>Appropriate target value</p> <p>-100 to 30</p> <p>Default value</p> <p>0</p>
2TR-H13	Sec trn ATVC ppr allot V:hvy1 1st,H-hmdy
Lv.1	<p>Details</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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V).</p> <p>Use case</p> <p>When adjusting the secondary transfer bias according to the conditions</p> <p>Adj/set/operate method</p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Display/adj/set range</p> <p>-128 to 127</p> <p>Unit</p> <p>30 V</p> <p>Appropriate target value</p> <p>-100 to 30</p> <p>Default value</p> <p>0</p>
2TR-H23	Sec trn ATVC ppr allot V:hvy1 2nd,H-hmdy
Lv.1	<p>Details</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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.</p> <p>Use case</p> <p>When adjusting the secondary transfer bias according to the conditions</p> <p>Adj/set/operate method</p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Display/adj/set range</p> <p>-128 to 127</p> <p>Unit</p> <p>30 V</p> <p>Appropriate target value</p> <p>-100 to 30</p> <p>Default value</p> <p>0</p>

COPIER > ADJUST > HV-TR		
2TR-UH13		Sec trn ATVC ppr allot V:hvy3 1st,H-hmdy
Lv.1	Details	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V).
	Use case	When adjusting the secondary transfer bias according to the 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	30 V
	Appropriate target value	-100 to 30
	Default value	0
2TR-UH23		Sec trn ATVC ppr allot V:hvy3 2nd,H-hmdy
Lv.1	Details	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case	When adjusting the secondary transfer bias according to the 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	30 V
	Appropriate target value	-100 to 30
	Default value	0
2TR-P13		Sec trn ATVC ppr allot V:crd 1st, H-hmdy
Lv.1	Details	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V).
	Use case	When adjusting the secondary transfer bias according to the 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	30 V
	Appropriate target value	-100 to 30
	Default value	0

COPIER > ADJUST > HV-TR		
2TR-P23		Sec trn ATVC ppr allot V:crd 2nd, H-hmdy
Lv.1	Details	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case	When adjusting the secondary transfer bias according to the 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	30 V
	Appropriate target value	-100 to 30
	Default value	0
2TR-O1		Sec trn ATVC ppr allot V: transp, L-hmdy
Lv.1	Details	To adjust the paper allotted voltage for transparency in secondary transfer ATVC control at low humidity. When transfer failure occurs on an image, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case	When adjusting the secondary transfer bias according to the 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	30 V
	Appropriate target value	-100 to 30
	Default value	0

COPIER > ADJUST > HV-TR	
2TR-O12	Sec trn ATVC ppr allot V: transp, N-hmdy
Lv.1	<p>Details</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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.</p> <p>Use case</p> <p>When adjusting the secondary transfer bias according to the conditions</p> <p>Adj/set/operate method</p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Display/adj/set range</p> <p>-128 to 127</p> <p>Unit</p> <p>30 V</p> <p>Appropriate target value</p> <p>-100 to 30</p> <p>Default value</p> <p>0</p>
2TR-O13	Sec trn ATVC ppr allot V: transp, H-hmdy
Lv.1	<p>Details</p> <p>To adjust the paper allotted voltage for transparency in secondary transfer ATVC control at high humidity. When transfer failure occurs on an image, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V).</p> <p>Use case</p> <p>When adjusting the secondary transfer bias according to the conditions</p> <p>Adj/set/operate method</p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Display/adj/set range</p> <p>-128 to 127</p> <p>Unit</p> <p>30 V</p> <p>Appropriate target value</p> <p>-100 to 30</p> <p>Default value</p> <p>0</p>
2TR-HN2	Sec trn ATVC ppr allot V:pln2 2nd,L-hmdy
Lv.1	<p>Details</p> <p>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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.</p> <p>Use case</p> <p>When adjusting the secondary transfer bias according to the conditions</p> <p>Adj/set/operate method</p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Display/adj/set range</p> <p>-128 to 127</p> <p>Unit</p> <p>30 V</p> <p>Appropriate target value</p> <p>-100 to 30</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>COPIER> ADJUST> HV-TR> 2TR-N2</p>

COPIER > ADJUST > HV-TR	
1TR-TGKT	Adj Bk Pry Trns ATVC tgt crnt: single Bk
Lv.2	<p>Details</p> <p>To adjust the target current for the Bk-color primary transfer current in single Bk color mode. 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>Use case</p> <p>When the image failure due to primary transfer occurs in B&W mode</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value (switch negative/positive by +/- key) and press OK key. 2) Turn OFF/ON the main power switch.</p> <p>Display/adj/set range</p> <p>-50 to 50</p> <p>Unit</p> <p>1 μA</p> <p>Appropriate target value</p> <p>-10 to 10</p> <p>Default value</p> <p>0</p>
2TR-T1	Sec trn ATVC ppr allot V:thin 1st,L-hmdy
Lv.1	<p>Details</p> <p>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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.</p> <p>Use case</p> <p>When adjusting the secondary transfer bias according to the conditions</p> <p>Adj/set/operate method</p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Caution</p> <p>Increase/decrease the value by 1 while checking the symptom each time.</p> <p>Display/adj/set range</p> <p>-128 to 127</p> <p>Unit</p> <p>30 V</p> <p>Appropriate target value</p> <p>-100 to 30</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>COPIER> ADJUST> HV-TR> 2TR-N1</p>

COPIER > ADJUST > HV-TR	
2TR-T2	Sec trn ATVC ppr allot V:thin 2nd,L-hmdy
Lv.1	Details
	To adjust the paper allotted voltage for the 2nd side of thin paper in secondary transfer ATVC control at low humidity. When transfer failure occurs on an image, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-N2
2TR-T12	Sec trn ATVC ppr allot V:thin 1st,N-hmdy
Lv.1	Details
	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-N12

COPIER > ADJUST > HV-TR	
2TR-T22	Sec trn ATVC ppr allot V:thin 2nd,N-hmdy
Lv.1	Details
	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-N22
2TR-T13	Sec trn ATVC ppr allot V:thin 1st,H-hmdy
Lv.1	Details
	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V).
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-N13

COPIER > ADJUST > HV-TR	
2TR-T23	Sec trn ATVC ppr allot V:thin 2nd,H-hmdy
Lv.1	Details
	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-N23
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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-N1

COPIER > ADJUST > HV-TR	
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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-N2
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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-N12

COPIER > ADJUST > HV-TR	
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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V).
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-N13

COPIER > ADJUST > HV-TR	
2TR-R23	Sec trn ATVC ppr allotV: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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-N22

COPIER > ADJUST > HV-TR	
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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V).
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-N13
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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-N23

COPIER > ADJUST > HV-TR	
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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-H1
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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-H2

COPIER > ADJUST > HV-TR	
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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-H12
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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias according to the 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-H22

COPIER > ADJUST > HV-TR		
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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V).
	Use case	When adjusting the secondary transfer bias according to the 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	30 V
	Appropriate target value	-100 to 30
	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case	When adjusting the secondary transfer bias according to the 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	30 V
	Appropriate target value	-100 to 30
	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case	When adjusting the secondary transfer bias according to the 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	30 V
	Appropriate target value	-100 to 30
	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case	When adjusting the secondary transfer bias according to the 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	30 V
	Appropriate target value	-100 to 30
	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	Details	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case	When adjusting the secondary transfer bias according to the 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	30 V
	Appropriate target value	-100 to 30
	Default value	0
	Related service mode	COPIER> ADJUST> HV-TR> 2TR-P22
2TR-E13	Sec trn ATVC ppr allotV:envlp 1st,H-hmdy	
Lv.1	Details	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V).
	Use case	When adjusting the secondary transfer bias according to the 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	30 V
	Appropriate target value	-100 to 30
	Default value	0
	Related service mode	COPIER> ADJUST> HV-TR> 2TR-P13

COPIER > ADJUST > HV-TR		
2TR-E23	Sec trn ATVC ppr allotV:envlp 2nd,H-hmdy	
Lv.1	Details	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case	When adjusting the secondary transfer bias according to the 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	30 V
	Appropriate target value	-100 to 30
	Default value	0
	Related service mode	COPIER> ADJUST> HV-TR> 2TR-P23
2TR-SH23	Sec trn ATVC ppr allot V:hvy2 2nd,H-hmdy	
Lv.1	Details	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, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case	When adjusting the secondary transfer bias according to the 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	30 V
	Appropriate target value	-100 to 30
	Default value	0
	Related service mode	COPIER> ADJUST> HV-TR> 2TR-H23

COPIER > ADJUST > HV-TR	
2TR-OFF	Uniform adj sec trn ATVC ppr allot voltg
Lv.1	Details
	To uniformly adjust paper allotted voltage in secondary transfer ATVC control regardless of paper type, 1st/2nd side or environment. When transfer failure occurs on an image, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (30 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (30 V). If the value is too small, transfer failure occurs.
	Use case
	When adjusting the secondary transfer bias if the same symptom occurs regardless of 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
	30 V
	Appropriate target value
	-100 to 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> 2TR-N1, etc.
1TR-TGY2	Adj Y Pry Trns ATVC tgt crnt:1/2 speed
Lv.2	Details
	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).
	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
	1 μ A
	Appropriate target value
	-10 to 10
	Default value
	0
1TR-TGM2	Adj M Pry Trns ATVC tgt crnt:1/2 speed
Lv.2	Details
	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).
	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
	1 μ A
	Appropriate target value
	-10 to 10
	Default value
	0

COPIER > ADJUST > HV-TR	
1TR-TGC2	Adj C Pry Trns ATVC tgt crnt:1/2 speed
Lv.2	Details
	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).
	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
	1 μ A
	Appropriate target value
	-10 to 10
	Default value
	0
1TR-TK12	Bk Pry Trns ATVC tgt crnt:1-clr, 1/2SPD
Lv.2	Details
	To adjust the target current for the Bk-color primary transfer current in single Bk 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
	1 μ A
	Appropriate target value
	-10 to 10
	Default value
	0
1TR-TGY3	Adj Y Pry Trns ATVC tgt crnt:1/3 speed
Lv.2	Details
	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).
	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
	1 μ A
	Appropriate target value
	-10 to 10
	Default value
	0

COPIER > ADJUST > HV-TR	
1TR-TGM3	Adj M Pry Trns ATVC tgt crnt: 1/3 speed
Lv.2	Details
	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).
	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
	1 μ A
	Appropriate target value
	-10 to 10
	Default value
	0
1TR-TGC3	Adj C Pry Trns ATVC tgt crnt: 1/3 speed
Lv.2	Details
	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).
	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
	1 μ A
	Appropriate target value
	-10 to 10
	Default value
	0
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 Bk 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
	1 μ A
	Appropriate target value
	-10 to 10
	Default value
	0

COPIER > ADJUST > HV-TR	
1TR-TK42	Bk Pry Trns ATVC tgt crnt: 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
	1 μ A
	Appropriate target value
	-10 to 10
	Default value
	0
1TR-TK43	Bk Pry Trns ATVC tgt crnt: 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
	1 μ A
	Appropriate target value
	-10 to 10
	Default value
	0

T-8-29

FEED-ADJ

COPIER > ADJUST > FEED-ADJ		
REGIST	Adj of rgst start timing: Plain paper	
Lv.1	Details	To adjust the timing to turn ON the Registration Motor in the case of plain paper. As the value is incremented by 1, the margin on the leading edge of paper is increased by 0.1 mm. +: Top margin becomes smaller. (An image moves upward.) -: Top margin becomes larger. (An image moves downward.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the DC Controller PCB/clearing RAM data
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	0.1 mm
	Default value	0
ADJ-C1	Cassette1 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 within 320 mm.) As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Left margin becomes larger (An image moves to the right.) -: Left margin becomes smaller (An image moves to the left.) When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the DC Controller PCB/clearing RAM data
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution	If the paper width exceeds 320 mm, execute mechanical adjustment.
	Display/adj/set range	-50 to 50
	Unit	0.1 mm
	Default value	0

COPIER > ADJUST > FEED-ADJ		
ADJ-C2	Cassette2 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 within 320 mm.) As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Left margin becomes larger (An image moves to the right.) -: Left margin becomes smaller (An image moves to the left.) When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the DC Controller PCB/clearing RAM data
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution	If the paper width exceeds 320 mm, execute mechanical adjustment.
	Display/adj/set range	-50 to 50
	Unit	0.1 mm
	Default value	0
ADJ-C3	Cassette 3 write start pstn in horz scan	
Lv.1	Details	To adjust the image write start position in the horizontal scanning direction when feeding paper from the Cassette 3 (paper width is within 320 mm.) As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Left margin becomes larger. (An image moves to the right.) -: Left margin becomes smaller. (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the DC Controller PCB/clearing RAM data
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution	If the paper width exceeds 320 mm, execute mechanical adjustment.
	Display/adj/set range	-50 to 50
	Unit	0.1 mm
	Default value	0

COPIER > ADJUST > FEED-ADJ	
ADJ-C4	Cassette 4 write start pstn in horz scan
Lv.1	<p>Details</p> <p>To adjust the image write start position in the horizontal scanning direction when feeding paper from the Cassette 4 (paper width is within 320 mm.) As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Left margin becomes larger. (An image moves to the right.) -: Left margin becomes smaller. (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.</p> <p>Use case</p> <p>When replacing the DC Controller PCB/clearing RAM data</p> <p>Adj/set/operate method</p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Caution</p> <p>If the paper width exceeds 320 mm, execute mechanical adjustment.</p> <p>Display/adj/set range</p> <p>-50 to 50</p> <p>Unit</p> <p>0.1 mm</p> <p>Default value</p> <p>0</p>
ADJ-MF	Write start pstn in horz scan: MP tray
Lv.1	<p>Details</p> <p>To adjust the image write start position in the horizontal scanning direction when feeding paper from the Multi-purpose Tray (paper width is within 320 mm.) As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Left margin becomes larger. (An image moves to the right.) -: Left margin becomes smaller. (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.</p> <p>Use case</p> <p>When replacing the DC Controller PCB/clearing RAM data</p> <p>Adj/set/operate method</p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Caution</p> <p>If the paper width exceeds 320 mm, execute mechanical adjustment.</p> <p>Display/adj/set range</p> <p>-50 to 50</p> <p>Unit</p> <p>0.1 mm</p> <p>Default value</p> <p>0</p>

COPIER > ADJUST > FEED-ADJ	
ADJ-DK	Write start pstn in horz scan:Ppr Deck
Lv.1	<p>Details</p> <p>To adjust the image write start position in the horizontal scanning direction when feeding paper from the Paper Deck (paper width is within 320 mm.) As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Left margin becomes larger. (An image moves to the right.) -: Left margin becomes smaller. (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.</p> <p>Use case</p> <p>When replacing the DC Controller PCB/clearing RAM data</p> <p>Adj/set/operate method</p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Caution</p> <p>If the paper width exceeds 320 mm, execute mechanical adjustment.</p> <p>Display/adj/set range</p> <p>-50 to 50</p> <p>Unit</p> <p>0.1 mm</p> <p>Default value</p> <p>0</p>
ADJ-C1RE	Write start pstn in horz scan:Cst1 2nd
Lv.1	<p>Details</p> <p>To adjust the image write start position in the horizontal scanning direction for 2nd side 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 Reader Controller PCB/clearing RAM data, enter the value of service label.</p> <p>Use case</p> <p>When replacing the Reader Controller PCB/clearing RAM data</p> <p>Adj/set/operate method</p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Display/adj/set range</p> <p>-55 to 55</p> <p>Unit</p> <p>0.1 mm</p> <p>Default value</p> <p>0</p>
ADJ-C2RE	Write start pstn in horz scan:Cst2 2nd
Lv.1	<p>Details</p> <p>To adjust the image write start position in the horizontal scanning direction for 2nd side 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 Reader Controller PCB/clearing RAM data, enter the value of service label.</p> <p>Use case</p> <p>When replacing the Reader Controller PCB/clearing RAM data</p> <p>Adj/set/operate method</p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Display/adj/set range</p> <p>-55 to 55</p> <p>Unit</p> <p>0.1 mm</p> <p>Default value</p> <p>0</p>

COPIER > ADJUST > FEED-ADJ	
ADJ-C3RE	Write start pstn in horz scan:Cst3 2nd
Lv.1	Details
	To adjust the image write start position in the horizontal scanning direction for 2nd side 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 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
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-55 to 55
	Unit
	0.1 mm
	Default value
	0
ADJ-C4RE	Write start pstn in horz scan:Cst4 2nd
Lv.1	Details
	To adjust the image write start position in the horizontal scanning direction for 2nd side 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 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
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-55 to 55
	Unit
	0.1 mm
	Default value
	0
ADJ-DKRE	Write start pstn in horz scan: Deck 2nd
Lv.1	Details
	To adjust the image write start position in the horizontal scanning direction for 2nd side 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 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
	-55 to 55
	Unit
	0.1 mm
	Default value
	0

COPIER > ADJUST > FEED-ADJ	
ADJ-MFRE	Write start pstn in horz scan:MPTray 2nd
Lv.1	Details
	To adjust the image write start position in the horizontal scanning direction for 2nd side 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 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
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-55 to 55
	Unit
	0.1 mm
	Default value
	0
REG-THCK	Rgst start timing adj: Heavy, 1/2 speed
Lv.1	Details
	To adjust the top margin by changing the timing to turn ON the Registration Motor when feeding heavy paper. As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Top margin becomes smaller. (An image moves upward.) -: Top margin becomes larger. (An image moves downward.)
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-50 to 50
	Unit
	0.1 mm
	Default value
	0
REG-OHT	Rgst start timing adj: Transparency
Lv.1	Details
	To adjust the top 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 left edge of paper is increased by 0.1 mm. +: Top margin becomes smaller. (An image moves upward.) -: Top margin becomes larger. (An image moves downward.)
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-50 to 50
	Unit
	0.1 mm
	Default value
	0

COPIER > ADJUST > FEED-ADJ	
REG-DUP1	Rgst start timing adj: Plain, 2nd side
Lv.1	<p>Details</p> <p>To adjust the top margin by changing the timing to turn ON the Registration Motor when feeding the second side of plain paper. As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Top margin becomes smaller. (An image moves upward.) -: Top margin becomes larger. (An image moves downward.)</p> <p>Adj/set/operate method Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Display/adj/set range -50 to 50</p> <p>Unit 0.1 mm</p> <p>Default value 0</p>
REG-DUP2	Rgst start timing adj: Heavy, 2nd side
Lv.1	<p>Details</p> <p>To adjust the top margin by changing the timing to turn ON the Registration Motor when feeding the second side of heavy paper. As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Top margin becomes smaller. (An image moves upward.) -: Top margin becomes larger. (An image moves downward.)</p> <p>Adj/set/operate method Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Display/adj/set range -50 to 50</p> <p>Unit 0.1 mm</p> <p>Default value 0</p>
LP-FEED1	Cassette pre-rgst arch amount: Plain
Lv.1	<p>Details</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>Adj/set/operate method Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Display/adj/set range -50 to 50</p> <p>Unit 0.5 mm</p> <p>Default value 0</p>

COPIER > ADJUST > FEED-ADJ	
LP-MULT1	MP Tray pre-rgst arch amount: Plain
Lv.1	<p>Details</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>Adj/set/operate method Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Display/adj/set range -50 to 50</p> <p>Unit 0.5 mm</p> <p>Default value 0</p>
LP-DUP1	Duplex pre-rgst arch amount: Plain
Lv.1	<p>Details</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>Adj/set/operate method Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Display/adj/set range -50 to 50</p> <p>Unit 0.5 mm</p> <p>Default value 0</p>
REG-SPD	Speed adjustment of Registration Motor
Lv.1	<p>Details</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%. +: Speed up -: Slow down When the value is decreased, the blurry image at around 40 to 45mm from the image trailing edge is alleviated.</p> <p>Use case When blurry image occurs at around 40 to 45mm from the image trailing edge</p> <p>Adj/set/operate method Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Display/adj/set range -5 to 5</p> <p>Unit 0.20%</p> <p>Default value 0</p>
TBLT-SPD	[Not used]
Lv.1	<p>Details</p> <p>-</p>

T-8-30

■ 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
	Related service mode	COPIER> FUNCTION> CST> A4R
MF-A6R	Adj of MP Tray A6R paper width	
Lv.1	Details	To adjust the width of A6R paper in the Multi-purpose Tray. When replacing the DC Controller PCB/clearing RAM data, enter the value of service label. When registering a new value, execute COPIER> FUNCTION> CST> A6R.
	Use case	- When replacing the DC Controller PCB/clearing RAM data - When registering a new value.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	0 to 255
	Default value	0
	Related service mode	COPIER> FUNCTION> CST> A6R
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
	Related service mode	COPIER> FUNCTION> CST> A4

T-8-31

■ 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 increased, the original tends to be detected as a photo document, and as the value is decreased, the original tends to be detected as a text document.
	Use case	When 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 increased, the text tends to be detected as black.
	Use case	When preferring the text to be judged as black
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-3 to 3
	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 detection 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 side	
Lv.2	Details	To set the judgment area in ACS mode. As the greater value is set, 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 which counts the pixel to judge the color presence in ACS mode. As the greater value is set, the judgment area is widened.
	Use case
	When adjusting the area which counts the pixel 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 greater value is set, 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 which counts the pixel to judge the color presence in ACS mode at DADF reading. As the greater value is set, the judgment area is widen.
	Use case
	When adjusting the area which counts the pixel 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 Reos 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 then 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 text/photo jdgmt stdrd: 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 increased, the original tends to be detected as a photo document, and as the value is decreased, the original tends to be detected as a text document.
	Use case
	When adjusting the classification level of text and photo in Text/Photo/Map mode (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 ACS B&W/color jdgmt stdrd:back side
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 detection 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 of ACS mode jdgmt area: back side
Lv.2	Details
	To set the judgment area in ACS mode (back side at duplex reading with 1 path). As the greater value is set, 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	ACS mode jdgmt pixel count area: back
Lv.2	Details
	To set the area which counts the pixel to judge the color presence in ACS mode (back side at duplex reading with 1 path). As the greater value is set, the judgment area is widen.
	Use case
	When adjusting the area which counts the pixel 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
Lv.1	Details
	To adjust the sharpness of the following 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 greater value is set, 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	Sharpness setting change function
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 greater value is set, 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-8-32

EXP-LED

COPIER > ADJUST > EXP-LED	
PR-EXP-Y	Setting of Y Pre-exposure LED current
Lv.2	Details
	To set the current of Y Pre-exposure LED. 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 15
	Unit
	1/16%
	Appropriate target value
	0 to 3
	Default value
	1
	Related service mode
	COPIER> ADJUST> V-CONT> VBACK-Y
	Supplement/memo
	When PR-EXP-Y is changed, changing VBACK-Y at the same time is recommended. When 2 or higher value is set, set VBACK-Y in the + direction. When 0 is set, VBACK-Y needs not be changed.
PR-EXP-M	Setting of M Pre-exposure LED current
Lv.2	Details
	To set the current of M Pre-exposure LED. 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 15
	Unit
	1/16%
	Appropriate target value
	0 to 3
	Default value
	1
	Related service mode
	COPIER> ADJUST> V-CONT> VBACK-M
	Supplement/memo
	When PR-EXP-M is changed, changing VBACK-M at the same time is recommended. When 2 or higher value is set, set VBACK-M in the + direction. When 0 is set, VBACK-M needs not be changed.

COPIER > ADJUST > EXP-LED	
PR-EXP-C	Setting of C Pre-exposure LED current
Lv.2	Details
	To set the current of C Pre-exposure LED. 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 15
	Unit
	1/16%
	Appropriate target value
	0 to 2
	Default value
	1
	Related service mode
	COPIER> ADJUST> V-CONT> VBACK-C
	Supplement/memo
	When PR-EXP-C is changed, changing VBACK-C at the same time is recommended. When 2 or higher value is set, set VBACK-C in the + direction. When 0 is set, VBACK-C needs not be changed.
PR-EXP-K	Setting of Bk Pre-exposure LED current
Lv.2	Details
	To set the current of Bk Pre-exposure LED. Increase the value when taking a measure for drum ghost. Decrease the value when potential is not applied well.
	Use case
	- When drum ghost is significant (drum pitch is not correct) - When potential is not applied well
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not use this at the normal service.
	Display/adj/set range
	0 to 2
	Unit
	1/16%
	Appropriate target value
	0 to 2
	Default value
	1
	Related service mode
	COPIER> ADJUST> V-CONT> VBACK-K
	Supplement/memo
	When PR-EXP-K is changed, changing VBACK-K at the same time is recommended. When 2 or higher value is set, set VBACK-K in the + direction. When 0 is set, VBACK-K needs not be changed.

T-8-33

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 - At occurrence of an image failure
	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
	Approx. 60 seconds (C5051/5045), Approx. 90 seconds (C5035/5030)
	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 - At occurrence of an image failure
	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
	Approx. 60 seconds (C5051/5045), Approx. 90 seconds (C5035/5030)
	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 - At occurrence of an image failure
	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
	Approx. 60 seconds (C5051/5045), Approx. 90 seconds (C5035/5030)
	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 - At occurrence of an image failure
	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
	Approx. 60 seconds (C5051/5045), Approx. 90 seconds (C5035/5030)
	Related service mode
	COPIER> FUNCTION> INSTALL> STIR-Y, STIR-M, STIR-C, STIR-4

COPIER > FUNCTION > INSTALL	
STIR-4	
Stirring of all color developer	
Lv.1	Details
	To stir developer in the Developing Assemblies of 4 colors (Y/M/C/Bk).
	Use case
	- At installation of the machine - At occurrence of an image failure
	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
	Approx. 60 seconds (C5051/5045), Approx. 90 seconds (C5035/5030)
	Related service mode
	COPIER> FUNCTION> INSTALL> STIR-Y, STIR-M, STIR-C, STIR-K
INIT-Y	
Y toner dens signal initial VL reading	
Lv.2	Details
	[Not used] To read the initial value of Y toner density value (SGNL-Y, REF-Y). After feeding over 100 sheets using a new Toner Container, this mode can reset this Toner Container as a new one.
	Use case
	When a new Toner Container which 100 or more sheets are fed for image failure test, etc. is used as a new one again
	Adj/set/operate method
	Select the item, and then press OK key.
	Display/adj/set range
	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode
	COPIER> ADJUST> DENS> SGNL-Y, REF-Y
INIT-M	
M toner dens signal initial VL reading	
Lv.2	Details
	[Not used] To read the initial value of M toner density value (SGNL-M, REF-M). After feeding over 100 sheets using a new Toner Container, this mode can reset this Toner Container as a new one.
	Use case
	When a new Toner Container which 100 or more sheets are fed for image failure test, etc. is used as a new one again
	Adj/set/operate method
	Select the item, and then press OK key.
	Display/adj/set range
	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode
	COPIER> ADJUST> DENS> SGNL-M, REF-M
INIT-C	
C toner dens signal initial VL reading	
Lv.2	Details
	[Not used] To read the initial value of C toner density value (SGNL-C, REF-C). After feeding over 100 sheets using a new Toner Container, this mode can reset this Toner Container as a new one.
	Use case
	When a new Toner Container which 100 or more sheets are fed for image failure test, etc. is used as a new one again
	Adj/set/operate method
	Select the item, and then press OK key.
	Display/adj/set range
	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode
	COPIER> ADJUST> DENS> SGNL-C, REF-C

COPIER > FUNCTION > INSTALL		
INIT-K		Bk toner dens signal initial VL reading
Lv.2	Details	[Not used] To read the initial value of Bk toner density value (SGNL-K, REF-K). After feeding over 100 sheets using a new Toner Container, this mode can reset this Toner Container as a new one.
	Use case	When a new Toner Container which 100 or more sheets are fed for image failure test, etc. is used as a new one again
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode	COPIER> ADJUST> DENS> SGNL-K, REF-K
	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) Set a paper for stream reading position adjustment, and then 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	Approx. 10 seconds
	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 replacement of the HDD
	Adj/set/operate method	1) Enter the number, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	The card management information (department ID and password) is initialized.
	Display/adj/set range	0 to 2001
	Default value	0
	Related service mode	COPIER> OPTION> FNC-SW> CARD-RNG (Level 2)
	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 (creates the target) 13. Cleaning of the Secondary Transfer Outer 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. . - Execute this item after setting "AINR-OFF" to "1: ON".
	Display/adj/set range	During operation: xxx second (remaining time), At normal termination: OK, At abnormal termination: NG
	Required time	Approx. 155 seconds
	Related service mode	COPIER> FUNCTION> INSTALL> INISSET-M, INISSET-C, INISSET-K, INISSET-4, AINR-OFF

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 (creates the target) 13. Cleaning of the Secondary Transfer Outer 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. . - Execute this item after setting "AINR-OFF" to "1: ON".
	Display/adj/set range
	During operation: xxx second (remaining time), At normal termination: OK, At abnormal termination: NG
	Required time
	Approx. 155 seconds
	Related service mode
	COPIER> FUNCTION> INSTALL> INISSET-Y, INISSET-C, INISSET-K, INISSET-4, AINR-OFF

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 (creates the target) 13. Cleaning of the Secondary Transfer Outer 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. . - Execute this item after setting "AINR-OFF" to "1: ON".
	Display/adj/set range
	During operation: xxx second (remaining time), At normal termination: OK, At abnormal termination: NG
	Required time
	Approx. 155 seconds
	Related service mode
	COPIER> FUNCTION> INSTALL> INISSET-Y, INISSET-M, INISSET-K, INISSET-4, AINR-OFF
	AINR-OFF
	ON/OFF of warm-up rotation deactivation
Lv.1	Details
	To set ON/OFF to disable execution of warm-up rotation. Warm-up rotation can be omitted when turning OFF/ON the power to check the image, etc. after the adjustment of warm-up rotation, etc. This mode is executed when warm-up rotation is not needed.
	Use case
	- At installation - When replacing the Developing Assembly
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Be sure to enable the operation (cancel disabling) before the machine is used by the user. The operation is automatically enabled by executing INISSET-Y/M/C/K/4.
	Display/adj/set range
	0 to 1 0: OFF (Warm-up rotation enabled), 1: ON (Warm-up rotation disabled)
	Default value
	0
	Related service mode
	COPIER> FUNCTION> INSTALL> INISSET-Y, INISSET-M, INISSET-C, INISSET-K, INISSET-4

COPIER > FUNCTION > INSTALL		
E-RDS		Set use/no use of Embedded-RDS function
Lv.1	Details	To set whether to use the Embedded-RDS function.
	Use case	When using Embedded-RDS
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	Be sure to use E-RDS, RGW-PORT, COM-TEST, COM-LOG and RGW-ADR as a set.
	Display/adj/set range	0 to 1 0: Function not used, 1: Function used (All the counter information is sent.)
	Default value	0
	Related service mode	COPIER> FUNCTION> INSTALL> RGW-PORT, COM-TEST, COM-LOG, RGW-ADR
	Supplement/memo	Embedded-RDS: Function to send device information such as the device counter, failure, and consumables etc. to the sales company's server via SOAP protocol
RGW-PORT		Set port number of Sales Co's server
Lv.1	Details	To set the port number of the sales company's server to be used for Embedded-RDS.
	Use case	When using Embedded-RDS
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	Be sure to use E-RDS, RGW-PORT, COM-TEST, COM-LOG and RGW-ADR as a set.
	Display/adj/set range	1 to 65535
	Default value	443
	Related service mode	COPIER> FUNCTION> INSTALL> E-RDS, COM-TEST, COM-LOG, RGW-ADR
	Supplement/memo	Embedded-RDS: Function to send device information such as the device counter, failure, and consumables etc. to the sales company's server via SOAP protocol
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
	Supplement/memo	Embedded-RDS: Function to send device information such as the device counter, failure, and consumables etc. to the sales company's server via SOAP protocol

COPIER > FUNCTION > INSTALL		
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
	Supplement/memo	Embedded-RDS: Function to send device information such as the device counter, failure, and consumables etc. to the sales company's server via SOAP protocol
RGW-ADR		URL setting of Sales Company's server
Lv.1	Details	To set the URL of the sales company's server to be used for Embedded-RDS.
	Use case	When using Embedded-RDS
	Adj/set/operate method	1) Select the URL. 2) Enter the URL, and then press OK key.
	Caution	- Do not use Shift-JIS character strings. - Be sure to use E-RDS, RGW-PORT, COM-TEST, COM-LOG and RGW-ADR as a set.
	Display/adj/set range	URL
	Default value	https://a01.ugwdevice.net/ugw/agentif010
	Related service mode	COPIER> FUNCTION> INSTALL> E-RDS, RGW-PORT, COM-TEST, COM-LOG
	Supplement/memo	Embedded-RDS: Function to send device information such as the device counter, failure, and consumables etc. to the sales company's server via SOAP protocol
CNT-DATE		Set counter send start date to SC server
Lv.1	Details	To set the year, month, date, hour and minute to send counter information to the sales company's server. This is displayed only when the Embedded-RDS third-party extended function is available.
	Use case	When the Embedded-RDS third-party expanded function is available
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	YYYYMMDDHHMM (12 digits) YYYY: Year, MM: Month, DD: Date, HH: Hour, MM: Minute
	Default value	000000000000
	Supplement/memo	Embedded-RDS: Function to send device information such as the device counter, failure, and consumables etc. to the sales company's server via SOAP protocol

COPIER > FUNCTION > INSTALL		
CNT-INTV	Set counter send interval to SC server	
Lv.1	Details	To set the interval of sending counter information to the sales company's server in a unit of one hour. This is displayed only when the Embedded-RDS third-party extended function is available.
	Use case	- When restarting the potential control after executing COPIER> OPTION> IMG-FIX> PO-CNT. - When D-max control conditions are changed
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 168 (= 1 week)
	Unit	1 hour
	Default value	24
	Supplement/memo	Embedded-RDS: Function to send device information such as the device counter, failure, and consumables etc. to the sales company's server via SOAP protocol
INISSET-4	All color Dev Ass'y initial install mode	
Lv.1	Details	To automatically execute operation necessary for initial installation of the Developing Assemblies of 4 colors (Y, M, C, Bk). 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 (creates the target) 13. Cleaning of the Secondary Transfer Outer 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. - Execute this item after setting "AINR-OFF" to "1: ON".
	Display/adj/set range	During operation: xxx second (remaining time), At normal termination: OK, At abnormal termination: NG
	Required time	Approx. 155 seconds
	Related service mode	COPIER> FUNCTION> INSTALL> INISSET-Y, INISSET-M, INISSET-C, INISSET-K, AINR-OFF

COPIER > FUNCTION > INSTALL		
INISSET-K	Exe of Bk Dev Ass'y initial install mode	
Lv.1	Details	To automatically execute operation necessary for initial installation of the Bk 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 (creates the target) 13. Cleaning of the Secondary Transfer Outer Roller (twice) 14. Counter reset of the Developing Assembly
	Use case	When replacing the Bk Developing Assembly
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	- When installing the machine or replacing the Developing Assembly of other color, do not use this item. . - Execute this item after setting "AINR-OFF" to "1: ON".
	Display/adj/set range	During operation: xxx second (remaining time), At normal termination: OK, At abnormal termination: NG
	Required time	Approx. 155 seconds
	Related service mode	COPIER> FUNCTION> INSTALL> INISSET-Y, INISSET-M, INISSET-C, INISSET-4, AINR-OFF
BRWS-ACT	ON/OFF of service browser	
Lv.1	Details	To set ON/OFF of service browser. ON/OFF of service browser switches whenever the main power switch is turned OFF/ON after execution. If connection with the UGW server is successful, "OK!" is displayed. If "NG!" is displayed, execute a communication test using COM-TEST. The setting is enabled after reboot. Whether the service browser is ON or OFF can be checked in COPIER> DISPLAY> USER> BRWS-STTS (1: ON, 2: OFF).
	Use case	- When using the service browser - At operation check
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After execution, turn OFF/ON the main power switch. After reboot, be sure to check the usage status in COPIER> DISPLAY> USER> BRWS-STTS.
	Display/adj/set range	At normal termination: OK!, At abnormal termination: NG!
	Related service mode	COPIER> FUNCTION> INSTALL> COM-TEST COPIER> DISPLAY> USER> BRWS-STTS

COPIER > FUNCTION > INSTALL		
CDS-CTL		Setting of country/area when CDS is used
Lv.1	Details	To set the country/area to enable the CDS.
	Use case	When enabling the CDS
	Display/adj/set range	CA (Canada), LA (Latin America), HK (Hong Kong) and the country/area specified in COPIER> OPTION> FNC-SW> CONFIG.
	Default value	It differs according to the location.
	Related service mode	COPIER> OPTION> FNC-SW> CONFIG
	Supplement/memo	CDS: Contents Delivery System

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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 the operation finished normally: OK!
	Related service mode	COPIER> FUNCTION> CCD> DF-WLVL2 COPIER> ADJUST> CCD> DFTBK-R, DFTBK-G, DFTBK-B
DF-WLVL2		White level adj in DADF mode: color
Lv.1	Details	To adjust the white level for DADF scanning automatically by setting the paper which is usually used by the user on the DADF.
	Use case	- When replacing the Copyboard Glass - When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Set paper on the DADF. 2) Select the item, and then press OK key.
	Caution	Be sure to execute this item after DF-WLVL1.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode	COPIER> FUNCTION> CCD> DF-WLVL1 COPIER> ADJUST> CCD> DFTAR-R, DFTAR-G, DFTAR-B, DFTAR2-R, DFTAR2-G, DFTAR2-B, DFTAR-BW, DFTAR2BW, DFTBK-R, DFTBK-G, DFTBK-B

COPIER > FUNCTION > CCD	
DF-LNR	Deriving of DADF front/back linearity
Lv.1	Details
	To derive the front/back side linearity characteristics in the use of DADF based on the scanning data of the DADF complex chart (No. 2, No. 10).
	Use case
	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Enter the value of the reader's service label. (under COPIER> ADJUST> CCD) DFCH-R2, DFCH-G2, DFCH-B2, DFCH-K2, DFCH-R10, DFCH-G10, DFCH-B10, DFCH-K10, DFCH2R2, DFCH2G2, DFCH2B2, DFCH2K2, DFCH2R10, DFCH2G10, DFCH2B10, DFCH2K10 2) Select the item, and then press OK key.
	Display/adj/set range
	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode
	COPIER> ADJUST> CCD> DFCH-R2, DFCH-G2, DFCH-B2, DFCH-K2, DFCH-R10, DFCH-G10, DFCH-B10, DFCH-K10, DFCH2R2, DFCH2G2, DFCH2B2, DFCH2K2, DFCH2R10, DFCH2G10, DFCH2B10, DFCH2K10
MTF-CLC	Deriving of MTF filter coefficient
Lv.1	Details
	To derive the MTF filter coefficient to be set for ASIC based on the MTF value of the DADF complex chart.
	Use case
	When replacing the Reader Controller PCB/clearing RAM data
	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
	Supplement/memo
	The scanning data of the DADF complex chart is indicated in the label of the Scanner Unit (DADF/Reader).
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

COPIER > FUNCTION > CCD	
DF-WLVL4	White level adj in DADF mode (B&W)
Lv.1	Details
	To adjust the white level for DADF scanning automatically by setting the paper which is usually used by the user on the DADF.
	Use case
	- When replacing the Copyboard Glass - When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method
	1) Set paper on the DADF. 2) Select the item, and then press OK key.
	Caution
	Be sure to execute this item after DF-WLVL3.
	Display/adj/set range
	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode
	COPIER> ADJUST> CCD> DFTAR-R, DFTAR-G, DFTAR-B, DFTAR2-R, DFTAR2-G, DFTAR2-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
	Caution
	Be sure to execute this item after execution of COPIER> ADJUST> CCD> W-PLT-X, W-PLT-Y, W-PLT-Z.
	Display/adj/set range
	1 to 2047
	Related service mode
	COPIER> ADJUST> CCD> W-PLT-X, W-PLT-Y, W-PLT-Z

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LASER

COPIER > FUNCTION > LASER		
LD-ADJ-Y	Restore Y Skew Crrct Motor initial pstn	
Lv.2	Details	When Y-color skew volume in vertical scanning direction is larger than estimation, the 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 seconds
LD-ADJ-M	Restore M Skew Crrct Motor initial pstn	
Lv.2	Details	When M-color skew volume in vertical scanning direction is larger than estimation, the 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 seconds
LD-ADJ-C	Restore C Skew Crrct Motor initial pstn	
Lv.2	Details	When C-color skew volume in vertical scanning direction is larger than estimation, the 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 seconds

COPIER > FUNCTION > LASER		
LD-ADJ-K	Restore Bk Skew Crrct Motor initial 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 seconds

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DPC

COPIER > FUNCTION > DPC	
DRMRSETY	Forcible exe of Y Drum replacement mode
Lv.1	Details
	This item forcibly executes the same operation as warm-up rotation. At this time, laser power values, etc., that were corrected according to Y drum counter, total charging time, target Vd values for potential control and drum durability are reset.
	Use case
	- When detection of the Drum Unit replacement has failed - When 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 not to execute this item when temporarily using a Drum Unit used in other machine for a while as a dummy unit for checking. Execute this item only if the installed Drum Unit will be used continuously.
	Display/adj/set range
	0 to 1 0: Disabled (Not executed), 1: Enabled (Executed)
	Default value
	0
	Required time
	Approx. 2 minutes
	Related service mode
	COPIER> FUNCTION> DPC> DRM-RSET, DRMRSETM, DRMRSETC, DRMRSETK
	Supplement/memo
	If, after changing the Drum Unit, the COPIER> DISPLAY> HV-STS> THCK-Y value is larger than 3 micro m and the COPIER> COUNTER> LF> Y-DRM-LF value is larger than 21%, execute DRMRSEY since detection of Drum Unit replacement may have failed.

COPIER > FUNCTION > DPC	
DRMRSETM	Forcible exe of M Drum replacement mode
Lv.1	Details
	This item forcibly executes the same operation as warm-up rotation. At this time, laser power values, etc., that were corrected according to M drum counter, total charging time, target Vd values for potential control and drum durability are reset.
	Use case
	- When detection of the Drum Unit replacement has failed - When 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 not to execute this item when temporarily using a Drum Unit used in other machine for a while as a dummy unit for checking. Execute this item only if the installed Drum Unit will be used continuously.
	Display/adj/set range
	0 to 1 0: Disabled (Not executed), 1: Enabled (Executed)
	Default value
	0
	Required time
	Approx. 2 minutes
	Related service mode
	COPIER> FUNCTION> DPC> DRM-RSET, DRMRSETY, DRMRSETC, DRMRSETK
	Supplement/memo
	If, after changing the Drum Unit, the COPIER> DISPLAY> HV-STS> THCK-M value is larger than 3 micro m and the COPIER> COUNTER> LF> M-DRM-LF value is larger than 21%, execute DRMRSETM since detection of Drum Unit replacement may have failed.

COPIER > FUNCTION > DPC	
DRMRSETC	Forcible exe of C Drum replacement mode
Lv.1	Details
	This item forcibly executes the same operation as warm-up rotation. At this time, laser power values, etc., that were corrected according to C drum counter, total charging time, target Vd values for potential control and drum durability are reset.
	Use case
	- When detection of the Drum Unit replacement has failed - When 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 not to execute this item when temporarily using a Drum Unit used in other machine for a while as a dummy unit for checking. Execute this item only if the installed Drum Unit will be used continuously.
	Display/adj/set range
	0 to 1 0: Disabled (Not executed), 1: Enabled (Executed)
	Default value
	0
	Required time
	Approx. 2 minutes
	Related service mode
	COPIER> FUNCTION> DPC> DRM-RSET, DRMRSETY, DRMRSETM, DRMRSETK
	Supplement/memo
	If, after changing the Drum Unit, the COPIER> DISPLAY> HV-STS> THCK-C value is larger than 3 micro m and the COPIER> COUNTER> LF> C-DRM-LF value is larger than 21%, execute DRMRSETC since detection of Drum Unit replacement may have failed.

COPIER > FUNCTION > DPC	
DRMRSETK	Forcible exe of Bk Drum replacement mode
Lv.1	Details
	This item forcibly executes the same operation as warm-up rotation. At this time, laser power values, etc., that were corrected according to Bk drum counter, total charging time, target Vd values for potential control and drum durability are reset.
	Use case
	- When detection of the Drum Unit replacement has failed - When 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 not to execute this item when temporarily using a Drum Unit used in other machine for a while as a dummy unit for checking. Execute this item only if the installed Drum Unit will be used continuously.
	Display/adj/set range
	0 to 1 0: Disabled (Not executed), 1: Enabled (Executed)
	Default value
	0
	Required time
	Approx. 2 minutes
	Related service mode
	COPIER> FUNCTION> DPC> DRM-RSET, DRMRSETY, DRMRSETM, DRMRSETC
	Supplement/memo
	If, after changing the Drum Unit, the COPIER> DISPLAY> HV-STS> THCK-K value is larger than 3 micro m and the COPIER> COUNTER> LF> K-DRM-LF value is larger than 21%, execute DRMRSETK since detection of Drum Unit replacement may have failed.

T-8-37

■ CST

COPIER > FUNCTION > CST		
MF-A4R		Reg Multi-purpose Tray A4R stdrd width
Lv.1	Details	To register the standard value of A4R paper width (210mm) on the Multi-purpose Tray. Make a fine adjustment by COPIER> ADJUST> CST-ADJ> MF-A4R.
	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.
	Display/adj/set range	0 to 255
	Default value	0
	Related service mode	COPIER> ADJUST> CST-ADJ> MF-A4R
	MF-A6R	
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.
	Display/adj/set range	0 to 255
	Default value	0
	Related service mode	COPIER> ADJUST> CST-ADJ> MF-A6R
	MF-A4	
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.
	Display/adj/set range	0 to 255
	Default value	0
	Related service mode	COPIER> ADJUST> CST-ADJ> MF-A4

T-8-38

■ CLEANING

COPIER > FUNCTION > CLEANING		
DEVL-CLN		Cleaning of Developing Assembly
Lv.1	Details	To clean the Developing Assembly by forcibly consuming the deteriorated toner. It is executed by the user's system administrator.
	Use case	When light density, etc. occurs after operating the machine in a low duty and high humidity environment for a long period of time
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When the operation finished normally: OK!
2TR-CLN		Clean of Secondary Transfer Outer Roller
Lv.1	Details	To remove soil adhered on the Secondary Transfer Outer Roller by bias cleaning after toner is transferred to the Secondary Transfer Outer Roller.
	Use case	- When the back side of the sheet 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 the operation finished normally: OK!
	Default value	0
TNR-COAT		Exe toner coating mode to Sec Trns Roll
Lv.1	Details	When the Secondary Transfer Outer Roller is replaced as a service part, substances leaking from the new Secondary Transfer Outer Roller may adhere to the ITB. Coat the surface of the Secondary Transfer Outer Roller with Y toner to prevent this from happening.
	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 the operation finished normally: OK!

T-8-39

■ 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 Film, Pressure Roller) - When a fixing failure occurs
	Adj/set/operate method	1) Set A4/LTR plain paper (75 to 90g/m2) on the main unit deck. 2) Select the cassette, and then press OK key. Printing is started, and a sheet is automatically stopped at the fixing nip (10 seconds) and then is automatically delivered. 3) Measure the nip width.
	Display/adj/set range	During operation: ACTIVE, When the operation finished normally: OK!
	Appropriate target value	Center, edge: 7.5 to 10 mm

T-8-40

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.
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) Terminate checking with LED-OFF.
	Related service mode	COPIER> FUNCTION> PANEL> LED-OFF
LED-OFF		
End check of Control Panel LED		
Lv.1	Details	To terminate checking of the LED on the Control Panel.
	Use case	During execution of LED-CHK
	Adj/set/operate method	Select the item, and then press OK key.
	Related service mode	COPIER> FUNCTION> PANEL> LED-CHK
KEY-CHK		
Check of key entry		
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) Release the selection to terminate checking.
TOUCHCHK		
Adj of coordinate pstn of Touch Panel		
Lv.1	Details	To adjust the coordinate position on the Touch Panel of the Control Panel.
	Use case	When replacing the LCD Panel
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Press the 9 "+" in sequence.

T-8-41

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 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 of the clutch specified with 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> MISC-P> MAIN-DRV). 2) Select the item, and then press OK key. 3) Check the gear of the Transfer Cleaning Assembly.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Default value	0
	Required time	Approx. 1 minute
	Related service mode	COPIER> FUNCTION> PART-CHK> CL
Supplement/memo	Remove the Inner Cover so that the Clutch can be checked visually.	
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 minute
	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	Do not operate M1, M14, and M22 (*1, *2 asterisk) unless they are necessary.
	Display/adj/set range	<p>1 to 30</p> <p>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) 10: Toner container motor (M) (M10) 11: Toner container motor (C) (M11) 12: Toner container motor (Bk) (M12) 13: Drum motors for all colors (M1 to M4), ITB motor (M13) *4 14: ITB displacement control motor (M14) *2 15: Primary transfer separation motor (M15) *3 16: Cassette 1 pickup motor (M16) 17: Cassette 2 pickup motor (M17) 18: Multi-purpose motor (M18) 19: Registration motor (M19) 20: Multi-purpose feed motor (M20) 21: Fixing motor (M21) *2 22: Fixing delivery motor (M22) 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 29, 30: Not used</p> <p>*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.</p>
	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	While the Toner Container Drive Motor is active, be sure to remove the Toner Container. Otherwise, toner leakage may occur in the machine.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Required time	1 minute
	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, 9: Not used
	Default value	0
	Related service mode	COPIER> FUNCTION> PART-CHK> SL-ON
	SL-ON	
Lv.1	Details	To start operation check for 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 minute
	Related service mode	COPIER> FUNCTION> PART-CHK> SL

T-8-42

■ 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.
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 the 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	- Before execution of this item, be sure to output the service mode setting values by P-PRINT. After execution, enter necessary setting values. - The RAM data is cleared after the main power switch is turned OFF/ON.
Related service mode	COPIER> FUNCTION> MISC-P> P-PRINT	
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 the RAM data of the Reader Controller PCB
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	- Before execution of this item, be sure to output the service mode setting values by P-PRINT. After execution, enter necessary setting values. - The RAM data is cleared after the main power switch is turned OFF/ON.
	Related service mode	COPIER> FUNCTION> MISC-P> P-PRINT
JAM-HIST		Clear of jam history
Lv.1	Details	To clear the jam history.
	Use case	When clearing the jam history
	Adj/set/operate method	Select the item, and then press OK key.
ERR-HIST		Clear of error code history
Lv.1	Details	To clear the error code history.
	Use case	When clearing the error code history
	Adj/set/operate method	Select the item, and then press OK key.
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.

COPIER > FUNCTION > CLEAR	
ADRS-BK	Clear of address book
Lv.1	Details
	To clear the address book data.
	Use case
	When clearing the address book data
	Adj/set/operate method
	1) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	The address book data is cleared after the main power switch is turned OFF/ON.
CNT-MCON	Clear of Main Controller service counter
Lv.1	Details
	To clear the service counter counted by the Main Controller PCB.
	Use case
	When clearing the service counter counted by the Main Controller PCB
	Adj/set/operate method
	Select the item, and then press OK key.
	Related service mode
	COPIER> COUNTER
	Supplement/memo
	See COUNTER for the target counter.
CNT-DCON	Clear of DC Controller service counter
Lv.1	Details
	To clear the service counter counted by the DC Controller PCB.
	Use case
	When clearing the service counter counted by the DC Controller PCB
	Adj/set/operate method
	Select the item, and then press OK key.
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
	- Before execution of this item, be sure to output the service mode setting values by P-PRINT. After execution, enter necessary setting values. - This item is executed for the data on the Main Controller PCB, DC Controller PCB and Reader Controller PCB.
	Related service mode
	COPIER> FUNCTION> MISC-P> P-PRINT
MMI	Clear of user mode setting value
Lv.1	Details
	To clear the user mode setting values (excluding values for Control Panel, common settings, and FAX). - Common Settings - Timer Settings - Adjustment/Cleaning - Report Settings - System Settings - Copy Settings - Communications Settings - Printer Settings
	Use case
	When clearing various setting values of user mode
	Adj/set/operate method
	1) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	The setting value is cleared after the main power switch is turned OFF/ON.

COPIER > FUNCTION > CLEAR	
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 the 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
	- 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. - Before execution of this item, be sure to output the service mode setting values by P-PRINT. After execution, enter necessary setting values. - The RAM data is cleared after the main power switch is turned OFF/ON.
	Related service mode
	COPIER> FUNCTION> MISC-P> P-PRINT
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 value is cleared after the main power switch is turned OFF/ON.

COPIER > FUNCTION > CLEAR	
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 when it is executed. 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
	Supplement/memo
	- The CA certificate is used in the MEAP application with E-RDS and SSL client connection, and the key pair is used in the SSL function of IPP, RUI and MEAP. - When the main power switch is turned OFF/ON, the CA certificate and key pair which were registered at the time of factory shipment are decompressed from the archive (/BOOTDEV/KCMNG), and become available in the E-RDS/SSL function.
ERDS-DAT	[Not used]
Lv.1	Details
	-
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 replacement 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

COPIER > FUNCTION > CLEAR	
REG-CLR	Clear of image position correction value
Lv.2	Details
	To clear the value when the correction value that is adjusted by image position correction control becomes a faulty value due to some reasons. When color displacement cannot be corrected by image position correction control, clear the correction value and turn OFF/ON the machine or execute "Quick Adjust" in user mode so that image position correction is executed again. When a correction failure occurs in an oblique direction, use "COPIER> FUNCTION> LASER> LD-ADJ-Y, LD-ADJ-M, LD-ADJ-C" at the same time.
	Use case
	- When color displacement cannot be corrected by image position correction control - When a failure occurs in correction in an oblique direction
	Adj/set/operate method
	Select the item, and then press OK key.
	Related service mode
	COPIER> FUNCTION> LASER> LD-ADJ-Y, LD-ADJ-M, LD-ADJ-C, LD-ADJ-K
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Quick Adjust
USBM-CLR	Initialize USB MEAP priority rgst info
Lv.1	Details
	To initialize the registered ID data retained in the OS field by calling the API provided by the OS.
	Use case
	When a failure occurs in USB MEAP priority registration
	Adj/set/operate method
	Select the item, and then press OK key.
1TR-CLR	Primary transfer ATVC log clear
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. When the value (COPIER> DISPLAY> HV-STS> 1ATVC-Y/M/C/K4) of current flown to the Primary Transfer Roller at ATVC control is out of the appropriate target value range (50 to 700), the appropriate control can be executed by clearing the log information.
	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.
	Related service mode
	COPIER> DISPLAY> HV-STS> 1ATVC-Y/M/C/K4 COPIER> FUNCTION> CLEAR> 2TR-CLR

COPIER > FUNCTION > CLEAR		
2TR-CLR		Secondary transfer ATVC log clear
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. When the value (COPIER> DISPLAY> HV-STS> 2ATVC) of current flow to the Secondary Transfer Outer Roller at ATVC control is out of the appropriate target value range (50 to 700), the appropriate control can be executed by clearing the log information.
	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.
	Related service mode	COPIER> DISPLAY> HV-STS> 2ATVC COPIER> FUNCTION> CLEAR> 1TR-CLR
JV-CACHE		Cache clear of JAVA application
Lv.1	Details	To clear the cache information used by JAVA application.
	Use case	When initializing the JAVA application
	Adj/set/operate method	Select the item, and then press OK key.
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.
LANG-CLR		Uninstallation of language files
Lv.2	Details	To uninstall the language files other than English file. When rebooting the machine after execution, language files other than English file are deleted, and language displayed on the screen becomes English.
	Use case	When uninstalling language files
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Reboot the machine.

T-8-43

■ 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 seconds
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 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	<p>Details</p> <p>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.</p> <p>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.</p> <p>Use case</p> <p>Before starting correction of color difference in DADF duplex printing</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 2 0: N/A, 1: Front side, 2: Back side</p> <p>Default value</p> <p>0</p>
1PCLBUDR	DADF 2 faces clr differ crct lowr limit
Lv.1	<p>Details</p> <p>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.</p> <p>When "1: ON" is specified, unnecessary correction is not executed, but an expected effect may not be obtained for other colors.</p> <p>Use case</p> <p>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.</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Caution</p> <p>Expected correction result may not be obtained.</p> <p>Display/adj/set range</p> <p>0 to 1 0: OFF, 1: ON</p> <p>Default value</p> <p>0</p>
1PCLBOVR	DADF 2 faces clr differ crct upr limit
Lv.1	<p>Details</p> <p>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.</p> <p>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.</p> <p>Use case</p> <p>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.</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Caution</p> <p>Expected correction result may not be obtained.</p> <p>Display/adj/set range</p> <p>0 to 2 0: No control, 1: Weak control, 2: Strong control</p>

COPIER > FUNCTION > MISC-R	
CLM-PLTN	Sampling of color copyboard read MTF VL
Lv.1	<p>Details</p> <p>The MTF value for the Reader Unit is sometimes displaced from the factory setting value depending on the condition at transportation/storage. If the machine is installed without correcting the value, it may cause an image failure such as moire. Therefore, it is necessary to readjust the MTF value by reading the MTF adjustment chart at installation.</p> <p>When color copyboard reading is performed, the controller performs sampling of the MTF value. This value is set in COPIER> ADJUST> CCD> MTF2-Mx, MTF2-Sx.</p> <p>Use case</p> <p>At installation</p> <p>Adj/set/operate method</p> <p>1) Set the MTF chart on the copyboard glass. 2) 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> <p>Related service mode</p> <p>COPIER> ADJUST> CCD> MTF2-M1 to 12, MTF2-S1 to 12</p>
BWM-PLTN	Sampling of B&W copyboard read MTF value
Lv.1	<p>Details</p> <p>The MTF value for the Reader Unit is sometimes displaced from the factory setting value depending on the condition at transportation/storage. If the machine is installed without correcting the value, it may cause an image failure such as moire. Therefore, it is necessary to readjust the MTF value by reading the MTF adjustment chart at installation.</p> <p>When B&W copyboard reading is performed, the controller performs sampling of the MTF value. This value is set in COPIER> ADJUST> CCD> MTF2-Mx, MTF2-Sx.</p> <p>Use case</p> <p>At installation</p> <p>Adj/set/operate method</p> <p>1) Set the MTF chart on the copyboard glass. 2) 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> <p>Related service mode</p> <p>COPIER> ADJUST> CCD> MTF2-M1to 12, MTF2-S1 to 12</p>

COPIER > FUNCTION > MISC-R		
CLM-DF1	Sampling of clr front stream read MTF VL	
Lv.1	Details	The MTF value for the Reader Unit is sometimes displaced from the factory setting value depending on the condition at transportation/storage. If the machine is installed without correcting the value, it may cause an image failure such as moire. Therefore, it is necessary to readjust the MTF value by reading the MTF adjustment chart at installation. When color front side stream reading is performed, the controller performs sampling of the MTF value. This value is set in COPIER>ADJUST> CCD> MTF2-Mx, MTF2-Sx.
	Use case	At installation
	Adj/set/operate method	1) Set the MTF chart on the ADF. 2) Select the item, and then press OK key. 3) Perform color front side stream reading with the MTF chart set on the ADF. (CLM-DF1)
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode	COPIER> ADJUST> CCD> MTF2-M1 to 12, MTF2-S1 to 12
BWM-DF1	Sampling of B&W front stream read MTF VL	
Lv.1	Details	The MTF value for the Reader Unit is sometimes displaced from the factory setting value depending on the condition at transportation/storage. If the machine is installed without correcting the value, it may cause an image failure such as moire. Therefore, it is necessary to readjust the MTF value by reading the MTF adjustment chart at installation. When B&W front side stream reading is performed, the controller performs sampling of the MTF value. This value is set in COPIER>ADJUST> CCD> MTF2-Mx, MTF2-Sx.
	Use case	At installation
	Adj/set/operate method	1) Set the MTF chart on the ADF. 2) Select the item, and then press OK key. 3) Perform B&W front side stream reading with the MTF chart set on the ADF. (BWM-DF1)
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode	COPIER> ADJUST> CCD> MTF2-M1 to 12, MTF2-S1 to 12

COPIER > FUNCTION > MISC-R		
CLM-DF2	Sampling color back stream read MTF VL	
Lv.1	Details	The MTF value for the Reader Unit is sometimes displaced from the factory setting value depending on the condition at transportation/storage. If the machine is installed without correcting the value, it may cause an image failure such as moire. Therefore, it is necessary to readjust the MTF value by reading the MTF adjustment chart at installation. When color back side stream reading is performed, the controller performs sampling of the MTF value. The MTF value is set in MTF-Mx, MTF-Sx.
	Use case	At installation
	Adj/set/operate method	1) Perform color back side stream reading with the MTF chart set on the ADF. (CLM-DF2) 2) Set the MTF chart on the ADF. 3) 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 12, MTF-S1 to 12
BWM-DF2	Sampling B&W back stream read MTF value	
Lv.1	Details	The MTF value for the Reader Unit is sometimes displaced from the factory setting value depending on the condition at transportation/storage. If the machine is installed without correcting the value, it may cause an image failure such as moire. Therefore, it is necessary to readjust the MTF value by reading the MTF adjustment chart at installation. When B&W back side stream reading is performed, the controller performs sampling of the MTF value. The MTF value is set in MTF-Mx, MTF-Sx.
	Use case	At installation
	Adj/set/operate method	1) Perform B&W back side stream reading with the MTF chart set on the ADF. (BWM-DF2) 3) Set the MTF chart on the ADF. 4) 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 12, MTF-S1 to 12

COPIER > FUNCTION > MISC-R	
CLPLT-EN	Color copyboard read MTF VL initial set
Lv.1	Details
	To return the MTF value for color copyboard reading to the factory setting value. Since overwriting is performed with the backup data retained in the Reader Controller PCB, the MTF value obtained by sampling of the MTF chart becomes disabled. When CLM-PLTN is executed, the value is automatically set to 1. When the value is set to 0, the value adjusted with CLM-PLTN becomes disabled and returned to the factory setting value.
	Use case
	When returning the MTF value to the initial setting value upon user's request in case that a sufficient quality level cannot be obtained on the front side of a color image even performing a fine adjustment with CLM-TGT after adjusting the MTF value with CLM-PLTN.
	Adj/set/operate method
	Select the item, and then press OK key.
	Caution
	The MTF value obtained by reading the MTF chart becomes disabled.
	Display/adj/set range
	0 to 1 0: Factory setting value, 1: Adjustment value at installation
	Required time
	Approx. 1 minute
	Related service mode
	COPIER> FUNCTION> MISC-R> CLM-PLTN, CLM-TGT COPIER> ADJUST> CCD> MTF2-M1 to 12, MTF2-S1 to 12
BWPLT-EN	B&W copyboard read MTF value initial set
Lv.1	Details
	To return the MTF value for B&W copyboard reading to the factory setting value. Since overwriting is performed with the backup data retained in the Reader Controller PCB, the MTF value obtained by sampling of the MTF chart becomes disabled. When BWM-PLTN is executed, the value is automatically set to 1. When the value is set to 0, the value adjusted with BWM-PLTN becomes disabled and returned to the factory setting value.
	Use case
	When returning the MTF value to the initial setting value upon user's request in case that a sufficient quality level cannot be obtained on the front side of a B&W image even performing a fine adjustment with BWM-TGT after adjusting the MTF value with BWM-PLTN.
	Adj/set/operate method
	Select the item, and then press OK key.
	Caution
	The MTF value obtained by reading the MTF chart becomes disabled.
	Display/adj/set range
	0 to 1 0: Factory setting value, 1: Adjustment value at installation
	Required time
	Approx. 1 minute
	Related service mode
	COPIER> FUNCTION> MISC-R> BWM-PLTN, BWM-TGT COPIER> ADJUST> CCD> MTF2-M1 to 12, MTF2-S1 to 12

COPIER > FUNCTION > MISC-R	
CLDF1-EN	Clr front stream read MTF VL initial set
Lv.1	Details
	To return the MTF value for color front side stream reading to the factory setting value. Since overwriting is performed with the backup data retained in the Reader Controller PCB, the MTF value obtained by sampling of the MTF chart becomes disabled. When CLM-DF1 is executed, the value is automatically set to 1. When the value is set to 0, the value adjusted with CLM-DF1 becomes disabled and returned to the factory setting value.
	Use case
	When returning the MTF value to the initial setting value upon user's request in case that a sufficient quality level cannot be obtained on the front side of a color image even performing a fine adjustment with CLM-TGT after adjusting the MTF value with CLM-DF1.
	Adj/set/operate method
	Select the item, and then press OK key.
	Caution
	The MTF value obtained by reading the MTF chart becomes disabled.
	Display/adj/set range
	0 to 1 0: Factory setting value, 1: Adjustment value at installation
	Required time
	Approx. 1 minute
	Related service mode
	COPIER> FUNCTION> MISC-R> CLM-DF1, CLM-TGT COPIER> ADJUST> CCD> MTF2-M1 to 12, MTF2-S1 to 12
BWDF1-EN	B&W front stream read MTF VL initial set
Lv.1	Details
	To return the MTF value for B&W front side stream reading to the factory setting value. Since overwriting is performed with the backup data retained in the Reader Controller PCB, the MTF value obtained by sampling of the MTF chart becomes disabled. When BWM-DF1 is executed, the value is automatically set to 1. When the value is set to 0, the value adjusted with BWM-DF1 becomes disabled and returned to the factory setting value.
	Use case
	When returning the MTF value to the initial setting value upon user's request in case that a sufficient quality level cannot be obtained on the front side of a B&W image even performing a fine adjustment with BWM-TGT after adjusting the MTF value with BWM-DF1.
	Adj/set/operate method
	Select the item, and then press OK key.
	Caution
	The MTF value obtained by reading the MTF chart becomes disabled.
	Display/adj/set range
	0 to 1 0: Factory setting value, 1: Adjustment value at installation
	Required time
	Approx. 1 minute
	Related service mode
	COPIER> FUNCTION> MISC-R> BWM-DF1, BWM-TGT COPIER> ADJUST> CCD> MTF2-M1 to 12, MTF2-S1 to 12

COPIER > FUNCTION > MISC-R	
CLDF2-EN	Clr back stream read MTF VL initial set
Lv.1	Details
	To return the MTF value for color back side stream reading to the factory setting value. Since overwriting is performed with the backup data retained in the Reader Controller PCB, the MTF value obtained by sampling of the MTF chart becomes disabled. When CLM-DF2 is executed, the value is automatically set to 1. When the value is set to 0, the value adjusted with CLM-DF2 becomes disabled and returned to the factory setting value.
	Use case
	When returning the MTF value to the initial setting value upon user's request in case that a sufficient quality level cannot be obtained on the back side of a color image even performing a fine adjustment with CLM-TGT after adjusting the MTF value with CLM-DF2.
	Adj/set/operate method
	Select the item, and then press OK key.
	Caution
	The MTF value obtained by reading the MTF chart becomes disabled.
	Display/adj/set range
	0 to 1 0: Factory setting value, 1: Adjustment value at installation
	Required time
	Approx. 1 minute
	Related service mode
	COPIER> FUNCTION> MISC-R> CLM-DF2, CLM-TGT COPIER> ADJUST> CCD> MTF-M1 to 12, MTF-S1 to 12
BWDF2-EN	B&W back stream read MTF VL initial set
Lv.1	Details
	To return the MTF value for B&W back side stream reading to the factory setting value. Since overwriting is performed with the backup data retained in the Reader Controller PCB, the MTF value obtained by sampling of the MTF chart becomes disabled. When BWM-DF2 is executed, the value is automatically set to 1. When the value is set to 0, the value adjusted with BWM-DF2 becomes disabled and returned to the factory setting value.
	Use case
	When returning the MTF value to the initial setting value upon user's request in case that a sufficient quality level cannot be obtained on the back side of a B&W image even performing a fine adjustment with BWM-TGT after adjusting the MTF value with BWM-DF2.
	Adj/set/operate method
	Select the item, and then press OK key.
	Caution
	The MTF value obtained by reading the MTF chart becomes disabled.
	Display/adj/set range
	0 to 1 0: Factory setting value, 1: Adjustment value at installation
	Required time
	Approx. 1 minute
	Related service mode
	COPIER> FUNCTION> MISC-R> BWM-DF2, BWM-TGT COPIER> ADJUST> CCD> MTF-M1 to 12, MTF-S1 to 12

COPIER > FUNCTION > MISC-R	
CLM-TGT	Fine adjustment of color MTF value
Lv.1	Details
	To perform the filter processing inside of the Reader Controller so that the MTF value measured by CLM-PLTN/CLM-DF1/CLM-DF2 becomes 55% or lower of the value. When 1 is specified, the MTF correction filter is calculated again, and the MTF value becomes 50% or lower of the value (the image becomes foggy). The backed up MTF filter correction coefficient is updated.
	Use case
	When decreasing the MTF value (to make the image foggy) upon user's request (moire, incorrect judgment)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	0 to 1 0: 55 % 1: 50 % (The image becomes foggy.)
	Default value
	0
	Required time
	Approx. 2 minutes
	Supplement/memo
	The MTF value is set to 65% at the time of shipment.
BWM-TGT	Fine adjustment of B&W MTF value
Lv.1	Details
	To perform the filter processing inside of the Reader Controller so that the MTF value measured by BWM-PLTN/BWM-DF1/BWM-DF2 becomes 55% or lower of the value. When 1 is specified, the MTF correction filter is calculated again, and the MTF value becomes 50% or lower of the value (the image becomes foggy). The backed up MTF filter correction coefficient is updated.
	Use case
	When decreasing the MTF value (to make the image foggy) upon user's request (moire, incorrect judgment)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	0 to 1 0: 55 % 1: 50 % (The image becomes foggy.)
	Default value
	0
	Required time
	Approx. 2 minutes
	Supplement/memo
	The MTF value is set to 65% at the time of shipment.
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
	Approx. 5 seconds

COPIER > FUNCTION > MISC-R		
RD-SHPOS		Shift to fixed pstn of Reader Scan Unit
Lv.2	Details	Scanner Unit on the Reader side is shifted to the fixed position before moving the machine. If the machine is moved after Reader is installed, the Scanner Unit moves and it might cause damage. The damage is prevented by tightening the screws after the Scanner Unit is shifted to the specific position before the machine is moved.
	Use case	When the machine is moved after Reader is installed
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	When the machine is moved after Reader is installed, be sure to shift the Scanner Unit to the specific position to be fixed and then tighten the screws. If the Scanner Unit is not fixed, it might cause damage when the machine is moved.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Required time	a few seconds

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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.
	Required time	Approx. 80 seconds
	Supplement/memo	It takes approximately 15 seconds before printing starts.
KEY-HIST		Output of Ctrl Panel key entry history
Lv.1	Details	To print the key input history on the Control Panel.
	Use case	When printing the key input history on the Control Panel
	Adj/set/operate method	Select the item, and then press OK key.
	Required time	Approx. 15 seconds
HIST-PRT		Output of jam and error history
Lv.1	Details	To print the jam history and error history.
	Use case	When printing the jam/error history
	Adj/set/operate method	Select the item, and then press OK key.
	Required time	Approx. 15 seconds
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.
	Required time	Approx. 15 seconds
	Supplement/memo	It takes approximately 3 seconds before printing starts.
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.
	Required time	Approx. 60 seconds
	Supplement/memo	It takes approximately 15 seconds before printing starts.
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.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Required time	Approx. 45 seconds

COPIER > FUNCTION > MISC-P		
ENV-PRT		Inside temp/hmdy & fix roller temp log
Lv.1	Details	To print the data of temperature and humidity in the machine/temperature of the surface of the Fixing Roller as logs.
	Use case	When grasping information of temperature in the machine/fixing temperature for trouble analysis
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Required time	Approx. 15 seconds
PJH-P-1		Detail info of print job history:100 job
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 history with detailed information
	Adj/set/operate method	Select the item, and then press OK key.
	Supplement/memo	Output the print job history with detailed information which is not displayed/printed in the job history screen under "System Monitor>Print>Log>Printer" and in the report of the print job history.
PJH-P-2		Detail info of print job history:all job
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 history with detailed information
	Adj/set/operate method	Select the item, and then press OK key.
	Supplement/memo	Output the print job history with detailed information which is not displayed/printed in the job history screen under "System Monitor>Print>Log>Printer" and in the report of the print job history.
AT-IMG-X		Exe img pstn crct ctrl
Lv.1	Details	To execute a series of operation of image position correction control at parts replacement. Image position correction control is usually executed by the printer engine at the specified timing according to operating condition and environmental variation.
	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!
	Required time	Approx. 95 seconds
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.

COPIER > FUNCTION > MISC-P		
ITB-INIT		Initial adjustment of ITB Steering
Lv.1	Details	To make initial adjustment of reference position for the ITB Steering at initial installation or replacement of the ITB-related service parts.
	Use case	- At installation - When replacing the ITB-related service parts
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Be sure to close all covers before execution.
	Display/adj/set range	In processing: ACTIVE, At normal termination: OK, At abnormal termination: NG
	Required time	Approx. 1 minute
	Related service mode	COPIER> DISPLAY> MISC> ITB-POS

T-8-45

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.
	Use case
	At upgrade
	Adj/set/operate method
	1) Select the item, and then press OK key. 2) Perform downloading by SST.
	Caution
	Do not turn OFF the power before HOLD is displayed.
	Display/adj/set range
	When waiting for a command: STAND-BY/STNDBY, In communication: CONNECTED, Communication terminated: HOLD
	Supplement/memo
	SST: Service Support Tool
CHK-TYPE	Specify HD-CLEAR/HD-CHECK 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: Image accumulation area 2: Universal file storage area 3: PDL file storage area 4: Program file storage area 5: MEAP application 6: Address book transfer setting 7: MEAP storage data 8: System log storage area 9: Advanced Box area 10: Area for distribution server 11: Universal file storage area
	Related service mode
	COPIER> FUNCTION> SYSTEM> HD-CLEAR, HD-CHECK
	Supplement/memo
	Universal file: Management information of user setting data, various log data, PDL spool data, and image data, etc.
HD-CHECK	Entire HDD check and recovery
Lv.1	Details
	To check the entire HDD and execute recovery processing.
	Adj/set/operate method
	Select the item, and then press OK key.
	Caution
	Be sure to execute this item after CHK-TYPE.
	Display/adj/set range
	0 to 4 0: Sector check of the entire HDD and recovery 1: Image accumulation area 2: Universal file storage area 3: PDL file storage area 4: Program file storage area
	Related service mode
	COPIER> FUNCTION> SYSTEM> CHK-TYPE

COPIER > FUNCTION > SYSTEM	
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
	Top 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
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 trouble.
	Use case
	When analyzing the cause of a trouble
	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 (Level 2)
	Supplement/memo
	PLOG can be printed by COPIER> FUNCTION> SYSTEM> DEBUG-2. SUBLOG cannot be printed. (It should be uploaded from SST/USB.)
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/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 (Level 2)

COPIER > FUNCTION > SYSTEM		
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 trouble 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 by the old setting data and the new data is deleted.
	Related service mode	COPIER> FUNCTION> SYSTEM> DSRAMRES
DSRAMRES		Restore of DC Controller PCB SRAM
Lv.2	Details	To restore the setting data which has been backed up in SRAM of the DC Controller PCB.
	Use case	When replacing the DC Controller PCB for troubleshooting at the time of trouble 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 by the old setting data and the new data is deleted.
	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 trouble 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 by the old setting data and the new data is deleted.
	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 trouble 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.
	Related service mode	COPIER> FUNCTION> SYSTEM> RSRAMBUP
R-REBOOT		Reboot of host machine
Lv.2	Details	To reboot the host machine.
	Use case	When rebooting the host machine by remote control
	Adj/set/operate method	Select the item, and then press OK key.

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COPIER > OPTION > FNC-SW		
MODEL-SZ		Fixed magnifctn & 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 default 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
	DH-SW	ON/OFF of auto D-half control
Lv.2	Details	To set ON/OFF of auto D-half control. Execution interval can be set by COPIER> OPTION> IMG-MCON> DH-TMG.
	Use case	- When D-half-related failure occurs/when identifying the cause of D-half-related failure - Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to set the value back to 1 (ON) after servicing.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1
	Related service mode	COPIER> OPTION> IMG-MCON> DH-TMG

COPIER > OPTION > FNC-SW		
	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/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	It differs according to the location.
	CONFIG	Set country/area/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: United States, GB: England, FR: France, DE: Germany, IT: Italia, 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, SI: Slovenia, GR: Greek, EE: Estonia, RU: Russia, AD: Andorra, AL: Albania, AM: Armenia, AR: Argentine, AT: Austria, BA: Bosnia Herzegovina, BE: Belgium, BG: Bulgaria, BO: Bolivia, BR: Brazil, CA: Canada, CH: Switzerland, CL: Chile, CY: Cyprus, HR: Croatia, ID: Indonesia, IE: Ireland, IL: Israel, IN: India, IS: Iseland, LU: Luxembourg, LV: Latvia, MX: Mexico, MY: Malaysia, NZ: New Zealand, PE: Peru, PH: Philippine, PY: Paraguay, RO: Romania, SK: Slovakia, TH: Thailand, TR: Turkey, UA: Ukraine, UY: Uruguay, VE: Venezuela, VN: Vietnam YY: Language (fixed, e.g. ja: Japanese) ZZ: Location (fixed, e.g. 00: CANON) AA: Paper size configuration (00: AB configuration, 01: Inch configuration, 02: A configuration, 03: Inch/AB configuration)
	Related service mode	COPIER> OPTION> FNC-SW> MODEL-SZ

COPIER > OPTION > FNC-SW		
W/SCNR	Setting of Reader Unit installation	
Lv.1	Details	To set installation of the Reader Unit. 1 (installed) is automatically selected once the Reader Unit is detected at the start of the machine.
	Use case	When installing/removing the Reader Unit
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Not installed, 1: Installed
	Default value	According to the setting at shipment
	ORG-LGL	Special paper size set in DADF mode: LGL
Lv.2	Details	To set the size of special paper (LGL configuration) that cannot be recognized in DADF stream reading mode.
	Use case	- Upon user's request - When picking up special paper size original from DADF
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 10 0: LEGAL-R, 1: FOOLSCAP-R, 2: OFICIO-R, 3: FOLIO-R, 4: Australian FOOLSCAP-R, 5: Ecuador OFICIO-R, 6: Bolivia OFICIO-R, 7: Argentine OFICIO-R, 8: Argentine LEGAL-R, 9: Government LEGAL-R, 10: Mexico OFICIO-R
	Default value	0
	ORG-LTR	Special paper size set in DADF mode: LTR
Lv.2	Details	To set the size of special paper (LTR configuration) that cannot be recognized in DADF stream reading mode.
	Use case	- Upon user's request - When picking up special paper size original from DADF
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3 0: LETTER, 1: EXECUTIVE, 2: Argentine LETTER, 3: Government LETTER
	Default value	0
	ORG-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	For outside Japan only
	Display/adj/set range	0 to 3 0: LTR-R, 1: G-LTR-R, 2: A-LTR-R, 3: EXECUTIVE-R
	Default value	0

COPIER > OPTION > FNC-SW		
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	For outside Japan only
	Display/adj/set range	0 to 1 0: LEDGER-R, 1: Argentine LETTER
	Default value	0
ORG-B5	Special paper size set in DADF mode: B5	
Lv.2	Details	To set the size of special paper (B5) that cannot be recognized in DADF stream reading mode.
	Use case	- Upon user's request - When picking up special paper size original from DADF
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: B5, 1: Korean government office paper
	Default value	0
	INTRROT-1	Set ini/last rotation 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	Increasing the number of sheets (widening the interval) causes higher frequency of image failure.
	Display/adj/set range	50 to 1000
	Unit	1 sheet
	Default value	125

COPIER > OPTION > FNC-SW	
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
	Increasing the number of sheets (widening the interval) causes higher frequency of image failure.
	Display/adj/set range
	50 to 1000
	Unit
	1 sheet
	Default value
	1000
INTROT-T	[Not used]
Lv.1	Details
	-
BK-4CSW	ON/OFF simple full clr mode at photomode
Lv.2	Details
	3.5mm pitch unevenness may occur when printing the solid black image with using B&W mode in Text/Photo Printout Mode. This is because the ITB slips due to the rotation speed difference between the ITB and the Photosensitive Drum. In such a case, set whether to use the simple full color mode that creates black with using a small amount of Y, M and C toner. In Text/Photo/Map Mode, it is printed in B&W 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 document size when the original consists of mixed media (AB/Inch configuration).
	Display/adj/set range
	0 to 1 0: Detected with detection size according to location, 1: Detected with AB/Inch mixed media.
	Default value
	0

COPIER > OPTION > FNC-SW	
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
SVMD-ENT	Setting of entry method to service mode
Lv.2	Details
	To set the way to get in service mode to prevent information leak.
	Use case
	As needed
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: [Settings/Registration] - Pressing [2] and [8] at the same time - [Settings/Registration] 1: [Settings/Registration] - Pressing [4] and [9] at the same time - [Settings/Registration]
	Default value
	0
FXWRNLVL	Set Fixing Film life display thresholdVL
Lv.2	Details
	To set the threshold value to display the life of Fixing Film. This item is enabled when the value at the following is set to "1" (default: 0): COPIER> OPTION> DSPLY-SW> FXMSG-SW (ON/OFF of Fixing Assembly replacement message) The life judgment counter is stored in the DC Controller. It is not possible to change or check the counter value.
	Use case
	To prevent the fixing failure caused by the continuous use of Fixing Film that exceeds the 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: Alarm message not displayed 1: Alarm message displayed when the life judgment counter reaches the specified value 2, 3: Not used
	Default value
	0
	Related service mode
	COPIER> OPTION> DSPLY-SW> FXMSG-SW

COPIER > OPTION > FNC-SW	
BASE-SW	Model switch set from MEAP-Full to Base
Lv.1	Details
	To switch from the MEAP-Full model to the Base model. Switch this mode in the case of restricting the operation of MEAP application for trouble analysis.
	Use case
	When trouble that caused by MEAP application occurs
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Switch from the Base model to the MEAP-Full model is not available.
	Display/adj/set range
	0 to 1 0: OFF (Base model), 1: ON (Full model)
	Default value
	Depending on the setting of option bit (MeapModelBIT).
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
	Supplement/memo
	8K paper: 270 x 390 mm, 16K paper: 270 x 195 mm
ORG-A4R	Special paper size set in DADF mode: A4R
Lv.2	Details
	To set the size of special paper (A4R) that cannot be recognized in DADF stream reading mode. When picking up A4R size original from the DADF of the Inch/AB configuration models, the size is converted into the specified size so that an image can be formed properly.
	Use case
	- Upon user's request - When picking up special paper size original from DADF
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: A4R, 1: FOLIO-R
	Default value
	0
PDF-RDCT	PDF reduction set at forwarding
Lv.2	Details
	To set whether to reduce the image for transmission when converting the image received by IFAX into PDF for e-mail/file transmission.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Following the current setting, 1: Image reduction
	Default value
	0

COPIER > OPTION > FNC-SW	
REBOOTSW	Restart setting at E240 error occurrence
Lv.2	Details
	To set whether to reboot in the case of E240 error. In the case of E240 error, the machine is automatically rebooted due to the possibility of continuous operation of the drive system while the spooled print job is cleared. Print job can be obtained if selecting the setting not to reboot.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	- Do not use this at the normal service. - Be sure to get approval from the user by telling the possibility of continuous operation of the drive system in the case of E240 error.
	Display/adj/set range
	0 to 1 0: Rebooted, 1: Not rebooted
	Default value
	0
	Supplement/memo
	E240 error: Communication error between the Main Controller and the DC Controller.
SJB-UNW	Reserve upper limit of secure print job
Lv.2	Details
	To set the upper limit for the number of reserved jobs in secure print job.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: 50 jobs, 1: 90 jobs
	Default value
	0
WEBV-SW	ON/OFF of WebDAV function
Lv.2	Details
	To set ON/OFF of WebDAV function. OFF setting can reduce memory use of the machine. In addition, the following WebDAV-related items are hidden in user mode. - Settings/Registration> Set Destination> Register Destinations> Register New Dest.> File> Protocol> WebDAV - Settings/Registration> Function Settings> Send> Common Settings> Use Divided Chunk Send for WebDAV TX
	Use case
	When reducing memory use of the machine
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: ON, 1: OFF
	Default value
	0
	Related user mode
	Settings/Registration> Set Destination> Register Destinations> Register New Dest.> File> Protocol> WebDAV Settings/Registration> Function Settings> Send> Common Settings> Use Divided Chunk Send for WebDAV TX
	Supplement/memo
	WebDAV function is equipped as standard with the machine.

COPIER > OPTION > FNC-SW	
CARD-RNG	Card number setting (department number)
Lv.2	Details
	To set the number of cards (departments) that can be used with the Card Reader.
	Use case
	When setting the number of cards (departments)
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1000
	Default value
	1000
COMP-PRT	Img proc memory allocate at job conflict
Lv.2	Details
	When making 2 or more composition prints (page number, number of copies, stamp, date, booklet, watermark), memory for image processing is allotted preferentially to print jobs. Meanwhile, memory for image processing of scan/send and PDL input becomes insufficient depending on the options and document size, and these jobs might be unprocessed until composition prints are finished. If these jobs are interfered each other, image processing can be put forward little by little by allotting memory equally to each job.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Print priority, 1: Equal allocation
	Default value
	0
ARCDT-SW	ON/OFF of ARCDAT control
Lv.1	Details
	To set ON/OFF of ARCDAT control. When "1: OFF" is set, the result of ARCDAT control is not reflected to LUT. When the hue variation occurs in the case of failure value displayed in COPIER> DISPLAY> HT-C, turn OFF the ARCDAT control once and check the hue. If hue variation is alleviated, analyze the cause of ARCDAT control error (developer, Patch Sensor, etc.).
	Use case
	When hue variation occurs
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Make sure to set "0: ON" again when ARCDAT control recovers.
	Display/adj/set range
	0 to 1 0: ON, 1: OFF
	Default value
	0
	Related service mode
	COPIER> DISPLAY> HT-C

COPIER > OPTION > FNC-SW	
SJOB-CL	Set of scan job canceling by logout
Lv.1	Details
	To set whether to cancel the scan job in operation by logout of the user.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	- The job in scanning operation cannot be canceled. - Cancel by logout is kept in the log.
	Display/adj/set range
	0 to 1 0: Disabled, 1: Enabled
	Default value
	0
	Supplement/memo
	Scan job: A job after the scanning operation is completed.
PT-W-SET	[Not used]Set tonr wid at ini rotn:trnsp
Lv.2	Details
	To set the toner band width that is created on the ITB at the initial rotation when feeding the transparency. As the value is incremented by 1, the toner band width is increased by 10mm. When the value is increased, image failure due to Transfer Cleaning Blade bound is reduced when feeding the transparency.
	Use case
	When image failure due to Transfer Cleaning Blade bound occurs on transparency
	Adj/set/operate method
	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
	Unit
	10 mm
	Default value
	5
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, connect again after disconnecting, and then connecting the USB device again.
	Use case
	Upon user'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 print by sharing binders according to job attribution. Select "1: Not supported" if the user does not print job* with large quantity of 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: no support; When the print server is connected: supported) 1: Not supported
	Default value
	0
	Supplement/memo
	* : A job that requires finishing (such as stapling) in one job. Does not apply in the case of executing finishing with multiple sets of output.
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 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 ON increases MEAP task priority.
	Use case
	When improving processing performance of MEAP
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	1
CNTR-SW	Init of parts counter replacement timing
Lv.1	Details
	To return the estimated life of parts counter to the initial value.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter 0, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0: Returned to the initial value
	Default value
	0
W/RAID	Setting of RAID Board installation
Lv.1	Details
	To set installation condition of RAID Board (HDD Mirroring Kit). Select "1: Installed" when installing the RAID Board. Select "0: Not installed" when removing the RAID Board.
	Use case
	When installing/removing RAID Board
	Adj/set/operate method
	1) Enter 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 with PSWD-SW in advance.
	Display/adj/set range
	1 to 99999999
	Default value
	11111111
	Related service mode
	COPIER> OPTION> FNC-SW> PSWD-SW
RPT2SIDE	Set of report 1sided/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
BRWS-FAV	Set of service browser favorite register
Lv.2	Details
	To set whether to allow registration of favorites in the browser for service. When 1 is set, favorites in the browser for service can be edited, and any URLs can be accessed.
	Use case
	When service engineers edit favorites in the browser for service
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Disabled, 1: Enabled
	Default value
	0

COPIER > OPTION > FNC-SW	
PSCL-MS	Set auto gradation adj operation: 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, they are executed for the lastly used speed only. Required time for auto gradation adjustment is short while it takes time to switch to other speed. This is suitable for the users who frequently use a specific paper type. When "3" is set, they are executed for all speeds simultaneously. Required time for auto gradation adjustment is long (approx. 3 minutes) while it is quick to switch to other speed. This is suitable for the users who use various paper types.
	Use case
	When setting the speed according to the materials used by the user
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	2 to 3 2: Lastly used speed, 3: All speeds
	Default value
	2
DMX-DISP	ON/OFF auto grdtn adj D-max PASCAL ctrl
Lv.1	Details
	To set whether to execute D-max PASCAL control at full adjustment of auto gradation adjustment. When "0: ON" 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: OFF" 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	Set of 3-D Control Panel installation
Lv.2	Details
	[Not used] To set whether the 3-D Control Panel is installed. When the 3-D Control Panel is installed, set "1: Installed".
	Use case
	At installation of the 3-D Control Panel
	Adj/set/operate method
	1) Enter 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

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INVALPDL		Disable of 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	0
CDS-FIRM		Set to allow firmware update by admin
Lv.1	Details	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.
	Use case	When allowing the administrator to update the firmware
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	1: Europe, 0: Other than Europe
	Supplement/memo	CDS: Content Delivery System
CDS-MEAP		Set to allow MEAP install by admin
Lv.1	Details	To set whether to permit the user (administrator) to install MEAP applications and enable iR options from CDS. When "1: Enabled" is set, Updater can be activated from the user mode.
	Use case	When allowing the administrator to install MEAP applications and enable iR options from CDS
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	1
	Supplement/memo	CDS: Content Delivery System

COPIER > OPTION > FNC-SW		
CDS-UGW		Set to allow firmware update from UGW
Lv.1	Details	To set whether to permit update of the firmware from the UGW server. When "1: Enabled" is set, Updater accepts the operation from the UGW server in cooperation with CDS.
	Use case	When allowing update of the firmware from the UGW server
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
	Supplement/memo	CDS: Content Delivery System
LOCLFIRM		Set to allow firmware update by file
Lv.1	Details	To set whether to permit the user (administrator) to update the firmware from the remote UI using a local file. This update is executed as a measure for vulnerability in emergency situations.
	Use case	When allowing the administrator to update the firmware using a file
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	1
RSHDW-SW		ON/OFF of remote shutdown
Lv.1	Details	A shared multi-function machine is not likely to be shut down at power failure. Set ON/OFF of the remote shutdown function to prevent accident. When "1: ON" is set, the machine can be shut down from the remote shutdown menu displayed in the remote UI.
	Use case	When preventing an accident at specified power-off time.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
	Supplement/memo	
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 high temperature environment in which HDD damage is likely to occur
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Half speed, 1: Full speed
	Default value	0

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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
BUSI-SW		Setting of customized function
Lv.1	Details	To set the function in accordance with the customized specification.
	Use case	When installing the customized machine
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Standard, 1: Customization
	Default value	0
SDLMTWRN		Cpcty warn dis ON/OFF 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
	Related user mode	Function Settings> Send> E-Mail/I-Fax Settings> Maximum Data Size for Sending
JLK-PWSC		ON/OFF of PCAM password auth doc scan
Lv.2	Details	To set whether to scan the PCAM password authentication document with the MEAP application.
	Use case	When scanning the PCAM password authentication document
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0

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ATUDILOG		ON/OFF of UDI log record
Lv.2	Details	To set ON/OFF of UDI log record mode. UDI log file is normally written in HDD file, but it is deleted at start-up so the UDI log is not recorded. When 1 is set, UDI log is recorded in HDD at job assignment, and is written out with sub log when obtaining it with USB memory (it can be also obtained from SST).
	Use case	When investigation is not possible with only sub log at the time of trouble occurrence
	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 third party other than Canon cannot recover the original document and image from UDI log.
	Display/adj/set range	0 to 2 0: OFF, 1: ON, 2: Not used
	Default value	0
FAX-INT		Set FAX RX print interruption oprtn mode
Lv.2	Details	To set the mode performing interruption operation of FAX reception print automatically.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Normal, 1: Interruption operation mode
	Default value	0
PDL-Z-LG		Setting of draw algorithm
Lv.1	Details	To switch the draw 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 draw algorithm adopted by the conventional iR C Series is used. Output equivalent to that of the iR C Series can be obtained; however, draw-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

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CDS-LVUP		Set to allow CDS periodical update
Lv.1	Details	To set whether to permit periodical update by CDS. When 0 is set, the user administrator/service technician can set the periodical update function from the user mode/service mode. With this setting, Updater performs periodical update.
	Adj/set/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 1 0: Disabled, 1: Enabled
	Default value	The value differs according to the location.
	Supplement/memo	CDS: Content Delivery System
UA-OFFSW		ON/OFF of unified auth function
Lv.1	Details	To set ON/OFF of the Unified Authentication function. Set 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
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
	Supplement/memo	RFC: Document of internet-related technical standards NVT-ASCII: Network Virtual Terminal-ASCII
MIB-EXT		[Not used]
Lv.1	Details	-

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■ DSPLY-SW

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UI-COPY		Display/hide of copy screen
Lv.2	Details	To set whether to display or hide the copy function.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	1
UI-BOX		Display/hide of Inbox screen
Lv.2	Details	To set whether to display or hide the Inbox function.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2 0: No Inbox function (Storing is not available even with PDL to Inbox.) 1: Inbox function is active 2: Inbox function is active (with limitation; Storing is available with PDL to Inbox despite no display on the Control Panel/remote UI)
	Default value	1
	Related user mode	Preferences> Display Settings> Store Location Display Settings> Mail Box The setting value is changed to 2 when turning OFF the foregoing user mode, and the value is changed to 1 when turning ON the mode at power-off/on. As the setting value of this service mode is changed, the setting value of the foregoing user mode is also changed.
UI-SEND		Display/hide of send screen
Lv.2	Details	To set whether to display or hide the SEND function.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	1
UI-FAX		Display/hide of FAX screen
Lv.2	Details	To set whether to display or hide the FAX function.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	1

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T-LW-LVL	Dis timing of toner level warning mssg
Lv.2	Details
	To set the threshold value of residual toner in the hopper. 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. When the value is incremented by 1, the threshold is increased by 1%. As the smaller value is set, 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
	1%
	Default value
	Europe: 5, Other than Europe: 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
	1
T-CRG-SW	ON/OFF of Toner Cntnr rplce user mode
Lv.2	Details
	To set whether to display or hide the Toner Container replacement screen in user mode.
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	0
	Related user mode
	Adjustment/Maintenance> Maintenance> Replace Specified Toner

COPIER > OPTION > DSPLY-SW	
FXMSG-SW	ON/OFF of Fixing Assembly replace mssg
Lv.2	Details
	To set whether to display the message prompting the replacement of Fixing Assembly on the Control Panel when the life judgment counter reaches the specified value. When "1" (default: 0) is set in FXMSG-SW and also "1" (default: 0) is set in COPIER> OPTION> FNC-SW> FXWRNLVL, the life of Fixing Assembly is detected. When the Fixing Assembly reaches the end of life, the Fixing Assembly replacement message: "Prepare new fixing roller. Call service representative." is displayed. When the message is displayed, go through the following procedure. 1) After turning OFF the main power switch, replace the Fixing Film Unit and the Pressure Roller. 2) After turning ON the main power switch, execute COPIER> FUNCTION> CLEAR> CNT-DCON. 3) Turn OFF/ON the main power switch.
	Adj/set/operate method
	1) Enter 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> FNC-SW> FXWRNLVL COPIER> FUNCTION> CLEAR> CNT-DCON
MEAP-DSP	Screen switch set from MEAP to standard
Lv.2	Details
	To set to enable/disable switching from MEAP screen to the standard screen (COPY/SEND/Mail Box screen, etc). (Setting to display/hide the arrow mark on MEAP screen) In the case of an error/jam/alarm, the screen is switched to the standard screen to display warning even if disabling this 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: Enabled, 1: Disabled
	Default value
	0
	Related service mode
	COPIER> OPTION> DSPLY-SW> ANIM-SW
	Supplement/memo
	If disabling the switch with ANIM-SW, the screen will not be switched to the standard screen even in the case of an error/jam/alarm.

COPIER > OPTION > DSPLY-SW	
ANIM-SW	Screen switch set from MEAP to warning
Lv.2	Details
	To set to enable/disable switching from MEAP screen to the error/jam screen. If disabling this mode, the screen will not be switched to the warning screen in the case of an error/jam/alarm, and a message is appeared on the MEAP screen indicating to contact the service person.
	Adj/set/operate method
	1) Enter 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 (No display of warning screen)
	Default value
	0
	Related service mode
	COPIER> OPTION> DSPLY-SW> MEAP-DSP
	Supplement/memo
	If just disabling the switch with MEAP-DSP, the screen is switched to the standard screen in the case of an error/jam/alarm. If disabling the switch with ANIM-SW, the screen will not be switched to the standard screen and a warning is appeared on MEAP screen.
UI-PRINT	Display/hide of print job screen
Lv.2	Details
	To set whether to display or hide the print job screen.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Hide, 1: Display
	Default value
	1
IMGC-ADJ	Dis/hide of img adj item in user mode
Lv.1	Details
	To set whether to display or hide the item relating to image adjustment in user mode. When selecting display setting, detailed image adjustment procedure will be displayed only for the duplicated paper specified with the following settings: Preferences> Paper Settings> Set Paper Type Management.
	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: Hide, 1: Display
	Default value
	0
	Related user mode
	Preferences> Paper Settings> Set Paper Type Management
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]
Lv.2	Details
	-
TNR-WARN	ON/OFF of toner alarm display
Lv.1	Details
	To set whether to display the toner alarm screen. When "1" is set, the toner alarm is not 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: ON, 1: OFF
	Default value
	Other than USA: 0, For USA: 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	
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
	0: Europe, 1: Other than Europe
	Related user mode
	Preferences> Display Settings> Store Location Display Settings> Advanced Box / Network The setting value is changed to 0 when turning OFF the foregoing user mode, and the value is changed to 1 when turning ON the mode at power-off/on. As the setting value of this service mode is changed, the setting value of the foregoing user mode is also changed.
UI-MEM	ON/OFF of memory media screen display
Lv.2	Details
	To set ON/OFF of the memory media screen display on the Control Panel.
	Use case
	When not displaying the memory media screen on the Control Panel
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	0
	Related user mode
	Preferences> Display Settings> Store Location Display Settings> Memory Media The setting value is changed to 0 when turning OFF the foregoing user mode, and the value is changed to 1 when turning ON the mode at power-off/on. As the setting value of this service mode is changed, the setting value of the foregoing user mode is also changed.
UI-NAVI	Dis/hide of introduce to useful features
Lv.2	Details
	To set whether to display or hide "Introduction to Useful Features" 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	
UI-MOBP	Display/hide of mobile print
Lv.2	Details
	To set whether to display or hide "Mobile Print" in the main menu.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Hide, 1: Display
	Default value
	1
FCOT-DSP	ON/OFF of FCOT priority mode in usermode
Lv.1	Details
	To set whether to display "Color/Black Priority for First Print Time" in the user mode. When 1 is set, the home position of the Primary Transfer Rollers for Y, M, C can be switched.
	Use case
	When setting "Color/Black Priority for First Print Time" in the user mode
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	1
	Related user mode
	Adjustment/Maintenance> Adjust Action> Color/Black Priority for First Print Time
UI-CUSTM	ON/OFF of Quick Menu screen display
Lv.2	Details
	To set ON/OFF of the Quick Menu screen on the Control Panel.
	Use case
	When not displaying the Quick Menu screen on the Control Panel
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	1
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

T-8-48

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 trouble with received image.
	Use case
	When received image trouble 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
RMT-LANG	Language setting of remote UI
Lv.2	Details
	To set the language on remote UI.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Switch with +/- key, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	ja/en/de/fr/it/es ja: Japanese, en: English, de: German, fr: French, it: Italian, es: Spanish
IFAX-LIM	No. of max print lines at IFAX reception
Lv.2	Details
	To set the maximum number of lines for e-mail text to be printed when receiving IFAX. Setting of this item can prevent endless printing of the attached file data in the case of receiving an error e-mail or failure in interpretation of the context. Selecting 0 prints the header/footer in 1 sheet when receiving e-mail text without attached file.
	Use case
	When preventing endless print in the case of failure in reception
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 999 0: E-mail text not printed, 999: Unlimited
	Default value
	500
SMTPTXPN	Setting of SMTP TX port number
Lv.2	Details
	To set SMTP transmission port number.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 65535
	Default value
	25

COPIER > OPTION > NETWORK	
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
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 cross cable while Service NAVI is used.
	Use case
	When the Service NAVI is used
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	0
	Related service mode
	COPIER> OPTION> NETWORK> CMD-PORT
	Supplement/memo
	T.O.T: TUIF over TCP. Communication protocol to be used for communication with the built-in application (UI) and the internal application such as COPY/ SEND/ BOX, etc. (Canon's own protocol).

COPIER > OPTION > NETWORK	
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 cross cable while Service NAVI is used.
	Use case
	When the Service NAVI is used
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	0
	Related service mode
	COPIER> OPTION> NETWORK> STS-PORT
	Supplement/memo
	T.O.T: TUIF over TCP. Communication protocol to be used for communication with the built-in application (UI) and the internal application such as COPY/ SEND/ BOX, etc. (Canon's own protocol).
NS-CMD5	Limit CRAM-MD5 auth method at SMTP auth
Lv.2	Details
	To restrict use of CRAM-MD5 authentication method at the time of SMTP authentication.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: SMTP server-dependent, 1: Not used
	Default value
	0
	Supplement/memo
	SMTP authentication: Protocol in which user authentication function is added to SMTP, which is the protocol to be used for e-mail transmission. At the time of e-mail transmission, this protocol executes authentication of the user account and the password between the SMTP server and the user to approve e-mail transmission only when it's authenticated.
NS-GSAPI	Limit GSSAPI auth method at SMTP auth
Lv.2	Details
	To restrict use of GSSAPI authentication method at the time of SMTP authentication.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: SMTP server-dependent, 1: Not used
	Default value
	0
	Supplement/memo
	SMTP authentication: Protocol in which user authentication function is added to SMTP, which is the protocol to be used for e-mail transmission. At the time of e-mail transmission, this protocol executes authentication of the user account and the password between the SMTP server and the user to approve e-mail transmission only when it's authenticated.

COPIER > OPTION > NETWORK	
NS-NTLM	Limit NTLM auth method at SMTP auth
Lv.2	Details
	To restrict use of NTLM authentication method at the time of SMTP authentication.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: SMTP server-dependent, 1: Not used
	Default value
	0
	Supplement/memo
	SMTP authentication: Protocol in which user authentication function is added to SMTP, which is the protocol to be used for e-mail transmission. At the time of e-mail transmission, this protocol executes authentication of the user account and the password between the SMTP server and the user to approve e-mail transmission only when it's authenticated.
NS-PLNWS	Limit clear text auth at SMTP auth encry
Lv.2	Details
	To restrict use of PLAIN/LOGIN authentication, which is clear text, at the time of SMTP authentication under the environment where the communication packet is encrypted.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: SMTP server-dependent, 1: Not used
	Default value
	0
	Supplement/memo
	SMTP authentication: Protocol in which user authentication function is added to SMTP, which is the protocol to be used for e-mail transmission. At the time of e-mail transmission, this protocol executes authentication of the user account and the password between the SMTP server and the user to approve e-mail transmission only when it's authenticated.
NS-PLN	Limit plain txt auth at SMTPauth noency
Lv.2	Details
	To restrict use of PLAIN/LOGIN authentication, which is plain text, at the time of SMTP authentication under the environment where the communication packet is not encrypted.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: SMTP server-dependent, 1: Not used
	Default value
	0
	Supplement/memo
	SMTP authentication: Protocol in which user authentication function is added to SMTP, which is the protocol to be used for e-mail transmission. At the time of e-mail transmission, this protocol executes authentication of the user account and the password between the SMTP server and the user to approve e-mail transmission only when it's authenticated.

COPIER > OPTION > NETWORK	
NS-LGN	Limit LOGIN authentication at SMTP auth
Lv.2	Details
	To restrict use of LOGIN authentication at the time of SMTP authentication.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: SMTP server-dependent, 1: Not used
	Default value
	0
	Supplement/memo
	SMTP authentication: Protocol in which user authentication function is added to SMTP, which is the protocol to be used for e-mail transmission. At the time of e-mail transmission, this protocol executes authentication of the user account and the password between the SMTP server and the user to approve e-mail transmission only when it's authenticated.
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
DA-PORT	Port setting with DA
Lv.2	Details
	To set the communication port when DA is installed. Select ON when DA is installed.
	Use case
	When DA is installed (This mode is used for the Japanese models only and not used with overseas models (outside Japan))
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	When going through the following: COPIER> OPTION> NETWORK> DA-CNCT, and selecting 1 for DA-CNCT, the following item is also ON: COPIER> OPTION> NETWORK> STS-PORT, CMD-PORT, DA-PORT
	Display/adj/set range
	0 to 1 0: OFF, 1: ON (When installed)
	Default value
	0
	Supplement/memo
	DA: Digital Accessory

COPIER > OPTION > NETWORK	
DA-CNCT	Connection setting of WPGW
Lv.2	Details
	To set WPGW connection.
	Use case
	This mode is used for the Japanese models only and not used with overseas models (outside Japan)
	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 > ACC > COIN; and if the setting value for COIN is changed from 0/1/2 to 3 (select DA charge), the value is automatically turns 1.
	Display/adj/set range
	0 to 1 0: OFF, 1:ON
	Default value
	0
	Related service mode
	COPIER> OPTION> ACC> COIN
	Supplement/memo
	WPGW: Workplace Gateway
CHNG-STTS	Set of TOT status connection port number
Lv.2	Details
	To set the port number for status connection with T.O.T.
	Use case
	When the Service NAVI is used
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	1 to 65535
	Default value
	20010
	Related service mode
	COPIER> OPTION> NETWORK> STS-PORT
CHNG-CMD	Set of TOT command connection port No.
Lv.2	Details
	To set the port number for command connection with T.O.T.
	Use case
	When the Service NAVI is used
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	1 to 65535
	Default value
	20000
	Related service mode
	COPIER> OPTION> NETWORK> CMD-PORT
MEAP-SSL	HTTPS port setting of MEAP
Lv.2	Details
	To set the port of HTTPS server in the case of using SSL with HTTP of MEAP.
	Use case
	When specifying the setting of 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

COPIER > OPTION > NETWORK		
LPD-PORT		Setting of LPD port number
Lv.2	Details	To set the LPD port number.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 65535
	Default value	515
	Supplement/memo	LPD port: Network port for TCP/IP communication when making prints through network.
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	1 second
	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	1 second
	Default value	15
DHCP-12		ON/OFF of DHCP-option 12 request
Lv.2	Details	To set ON/OFF of inquiry on the host name (Option 12) which uses Option 55 of DHCP. Selecting OFF can prevent DHCP packet from including Option 12 or Option 81 under the packet-monitoring network environment.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1
	Supplement/memo	DHCP: Dynamic Host Configuration Protocol

COPIER > OPTION > NETWORK	
DHCP-81	ON/OFF IPaddress dynamic chng in DHCP-81
Lv.2	Details
	To set ON/OFF for dynamic change of IP address by Option 81 of DHCP. Selecting OFF can prevent DHCP packet from including Option 12 or Option 81 under the packet-monitoring network environment. Selecting ON enables dynamic change of IP address by Option 81 of DHCP in the case that the dynamic DNS setting is ON in user mode.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Be sure to set ON for the dynamic DNS setting in user mode to enable dynamic change of IP address.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	1
	Supplement/memo
	DHCP: Dynamic Host Configuration Protocol
IFX-CHIG	Set operation by IFAX recv mail content
Lv.1	Details
	To set the number of characters for the IFAX received mail content, so that the 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 consists 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 print 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 (body) text is not ignored.
	Unit
	1 character
	Default value
	0
	Supplement/memo
	1 Japanese Kanji character is calculated as 2 bytes, and the control codes (such as linefeed code, etc) are included in the number of characters.

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. Giving priority on query by IPv4 can shorten the time.
	Use case
	When it takes time to execute DNS query with priority on IPv6 because the DNS server supports IPv4
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: IPv4, 1: IPv6
	Default value
	1
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
	second
	Default value
	30
IKERETRY	Setting of IKE retry times
Lv.1	Details
	To set the number of retries in the case of no response from the communication target at the time of IKE packet transmission.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 3
	Default value
	1
	Supplement/memo
	IKE: Internet Key Exchange
SPDALDEL	Initialization of SPD value
Lv.2	Details
	To initialize all the SPD values that is 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 and then ON the main power supply.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	0
	Supplement/memo
	SPD: Database that manages SA (Security Association). SPD value is managed when IPsec Board is used. Normally, SRAM needs to be cleared in the case of mismatch in SPD value.
NCONF-SW	ON/OFF of Network Configurator function
Lv.1	Details
	To set ON/OFF of Network Configurator function. If the user does not use the function, select OFF to prevent remote attack through network.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	1
	Supplement/memo
	Network Configurator function is a function to be used for communication with NetSpot Device Installer, etc., and the network setting can be changed from the remote.

COPIER > OPTION > NETWORK	
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
	second
	Default value
	5
	Supplement/memo
	IKE: Internet Key Exchange
IPSEBLV	Setting of IPsec debug level
Lv.2	Details
	For R&D use
SP-LINK	Mode setting at 1W sleep
Lv.1	Details
	Switch to execute 10base-T standby as default to realize the standby power 1W in sleep mode.
	Use case
	When shifting to sleep mode after negotiation (same as conventional machines)
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Shift to sleep mode with 10base-T 1: Shift to sleep mode after negotiation
	Default value
	0
AFS-JOB	Set of FAX server job reception port
Lv.1	Details
	To set the reception port of the fax server to which a fax client sends jobs.
	Use case
	When changing the job reception port of the fax server
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 65535
	Default value
	20317
	Related service mode
	COPIER> OPTION> NETWORK> AFC-EVNT
AFC-JOB	Set of FAX client job sending port
Lv.1	Details
	To set the port of a fax client from which jobs are sent to the fax server.
	Use case
	When changing the job sending port of a fax client
	Display/adj/set range
	0 to 65535
	Default value
	20317
	Related service mode
	COPIER> OPTION> NETWORK> AFS-JOB, AFC-EVNT

COPIER > OPTION > NETWORK		
AFC-EVNT		Set of FAX client event reception port
Lv.1	Details	To set the event notification reception port of a fax client.
	Use case	When changing the event notification reception port of a fax client
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 65535
	Default value	29400
	Related service mode	COPIER> OPTION> NETWORK> AFS-JOB
ILOGMODE		Setting of Firewall range
Lv.1	Details	To set all protocols or TCP/UDP/ICMP unicast as the target of Firewall. When 0 is set, the machine responds to ARP, ICMP multicast and broadcast which have no direct relation, and consequently the number of logs is increased. When 1 is set, the machine filters TCP, UDP and ICMP unicast only.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3 0: All protocols support mode 1: TCP/UDP/ICMP unicast support mode 2, 3: Not used
	Default value	0
ILOGKEEP		Setting of IP Filter log time
Lv.1	Details	To set the retention time from the log time blocked by IP Filter. When access is made again from a same address which was blocked by IP Filter before, if it is within the retention time from the previous log time, its log is not recorded. If access is frequently made from a same IP address, the log record of the UI might be filled with its logs. If the user considers that a single log for a same IP address is enough, set the longer retention time.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 48 0: 1 minute (special mode) 1 to 48: 1 hour to 48 hours
	Default value	1

COPIER > OPTION > NETWORK		
IPTBROAD		Set to allow broad/multi cast TX
Lv.1	Details	To set whether to permit transmission of broadcast packets and multicast packets. Transmission of broadcast packets and multicast packets is permitted without specifying an exception address. It is permitted within the device even if it is rejected in the default setting of the IPv4/v6 transmission filter. Set "1: Disabled" when the user does not want to send them.
	Use case	Upon user's request
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 5 0: Enabled, 1: Disabled, 2 to 5: Not used
	Default value	0
PFWFTPRT		Setting of IP Filter FTP
Lv.1	Details	When FTP SEND is executed using an IP filter by which packets from a specific remote PC are rejected, SYN is returned to the port 113 if the PC supports authentication of the FTP port 113. However, since the IP filter blocks the packets, the block logs are increased and the performance is lowered. When 1 is set, RST is returned to the port 113 without blocking packets.
	Use case	When executing FTP SEND against the OS which supports authentication of the FTP port 113 while the IP filter is enabled
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
PRNIPBLK		ON/OFF of IP range setting function
Lv.1	Details	To set ON/OFF of IP range setting function (only at reception and print job). When 1 is set, the following are displayed in the user mode. Preferences> Network > TCP/IP Settings > IPv4 Settings > IP Address Range Settings Preferences> Network > TCP/IP Settings > IPv6 Settings > IP Address Range Settings
	Use case	When using the IP address block function
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
	Related user mode	Preferences> Network > TCP/IP Settings > IPv4 Settings > IP Address Range Settings Preferences> Network > TCP/IP Settings > IPv6 Settings > IP Address Range Settings

COPIER > OPTION > NETWORK		
IPMTU		Setting of MTU size
Lv.1	Details	To set MTU size of network packet. This item is used when performing SEND communication between locations connected with Ethernet in a field environment where MTU black hole problem occurs.
	Use case	When MTU black hole problem occur
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	1 to 10 1: 600 byte, 2: 700 byte, ..., 9: 1400 byte, 10: 1500 byte
	Unit	100 byte
	Default value	10
	DDNSINTV	
Lv.1	Details	DNS registration is executed only once at start-up with the current iR, so the registered contents are deleted in an environment where the DNS server settings are deleted at intervals. To set the interval of DDNS periodical update for not deleting the registered contents.
	Use case	When the DNS server settings are deleted at intervals
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 48 0: No periodical update, 1: 1-hour interval, 2: 2-hour interval, ..., 47: 47-hour interval, 48: 48-hour interval
	Unit	1 hour
	Default value	24

T-8-49

■ SOUND

COPIER > OPTION > SOUND	
DRM-RTIM	Set exe interval drum line prev sequence
Lv.2	<p>Details</p> <p>To set the time interval to rotate the Photosensitive Drum at standby or sleep mode. When a device is left for a long period of time, a drum pitch line occurs. To prevent this, rotate the Photosensitive Drum at the specified interval for 300 msec only. As the value is incremented by 1, the interval is extended by 5 minutes. If users do not care about the drum pitch line or they want to reduce the rotation interval, increase the value.</p> <p>Use case</p> <p>Extend the interval for the users who do not care about the drum pitch line after the machine is left or who want to reduce the number of start-up.</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 12 0: Not executed</p> <p>Unit</p> <p>10 minutes</p> <p>Default value</p> <p>0</p>

T-8-50

■ ENV-SET

COPIER > OPTION > ENV-SET	
ENVP-INT	Temp, humid & Fix Film temp log get cycle
Lv.1	<p>Details</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 > DISPLAY > ENVRNT</p> <p>Use case</p> <p>At trouble analysis</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 480</p> <p>Unit</p> <p>1 minute</p> <p>Default value</p> <p>60</p> <p>Related service mode</p> <p>COPIER> DISPLAY> ENVRNT</p>
DRY-CISU	ON/OFF of condensation prevention mode
Lv.1	<p>Details</p> <p>To set ON/OFF of condensation mode. When droplets are appeared on the Scanner Unit due to condensation and image failure or E225 occurs, set "1: ON". By selecting 1, the Scanner Unit (paper front) stops the fan for 15 seconds and the Scanner Unit (paper back) lights LED for 30 seconds from the next startup.</p> <p>Use case</p> <p>When droplets are appeared on the Scanner Unit due to condensation and image failure or E225 occurs</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p>Display/adj/set range</p> <p>0 to 1 0: OFF (Normal mode), 1: ON (Anti-condensation mode)</p> <p>Default value</p> <p>0</p>

T-8-51

CLEANING

COPIER > OPTION > CLEANING	
OHP-PTH	Set of ITB clean transp threshold value
Lv.2	<p>Details</p> <p>To set the number of sheets for ITB cleaning interval to be executed when feeding transparency. When a large number of transparencies is fed, surface active agent adheres to the ITB, and consequently the transfer efficiency is lowered. To prevent the image failure, patches are created on the ITB and surface active agent is removed together with the toner per 30 sheets at paper interval and per 22 sheets at last rotation. As the value is incremented by 1, the number of sheets for cleaning interval at paper interval and at last rotation is increased by 1 sheet. When using the transparency that tends to cause the adherence of surface active agent, decrease the value so that the image failure can be alleviated. When the value is increased, the downtime and the toner consumption can be reduced; however, image failure may occur.</p> <p>Use case</p> <p>When an image failure occurs due to lowering of the transfer efficiency</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>-15 to 15</p> <p>Unit</p> <p>Number of sheets</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>COPIER> FUNCTION> CLEANING> TBLT-CLN</p>
ITBB-TMG	Set of ITB cleaning band paper interval
Lv.1	<p>Details</p> <p>To set interval at which band of ATR patches is formed as a measure to prevent flipping of ITB cleaner. If flipping occurs, reduce the interval. The interval at which band of ATR patches is formed can also be set by COPIER> OPTION> IMG-DEV> PCHINT-1, but ITBB-TMG has priority.</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 10 0: 200 sheets (value set by PCHINT-1), 1: Not used, 2: 25 sheets, 3: 50 sheets, 4: 75 sheets, 5: 100 sheets, 6 to 10: Not used</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>COPIER> OPTION> IMG-DEV> PCHINT-1</p>

T-8-52

FEED-SW

COPIER > OPTION > FEED-SW	
EVL-SPD	Envelope feeding speed setting
Lv.1	<p>Details</p> <p>To set the envelope feeding speed. By feeding an envelop at 1/2 speed (default) in the case of a high humidity environment, the glue flap may adhere at the time of fixing. As a result of that, the envelop may not be opened. By setting to 1/1 speed, adhesion can be prevented, but fixing might be deteriorated in a low humidity environment.</p> <p>Use case</p> <p>When a glue flap of envelop adheres</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Caution</p> <p>The fixing is deteriorated by setting 1/1 speed in a low humidity environment.</p> <p>Display/adj/set range</p> <p>0 to 1 0: 1/2 speed, 1: 1/1 speed</p> <p>Default value</p> <p>0</p>
EVL-FS	Setting of fixing speed with envelop
Lv.2	<p>Details</p> <p>To set fixing speed when feeding envelop. As the value is incremented by 1, the fixing speed changes by 0.1%. Decrease the value when thin line displacement occurs on trailing edge of envelop, and increase the value when wrinkles occur.</p> <p>Use case</p> <p>When thin line displacement or wrinkles occur on trailing edge while feeding envelop</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Caution</p> <p>Be sure to change the value little at a time because when setting an extreme value, phenomenon opposite to thin line displacement or wrinkles occur.</p> <p>Display/adj/set range</p> <p>-20 to 20</p> <p>Unit</p> <p>0.1 %</p> <p>Default value</p> <p>0</p>
TFL-RTC	Set delvry dest at rcvry after tray full
Lv.1	<p>Details</p> <p>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.</p> <p>Use case</p> <p>When changing the delivery tray</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: 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.</p> <p>Default value</p> <p>0</p> <p>Related user mode</p> <p>Function Settings> Common> Paper Output Settings> Output Tray Settings</p>

COPIER > OPTION > FEED-SW	
USZ-FEED	ON/OFF Job set/Pckup Cst 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 Pickup Cassette. 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 the Pickup Cassette.
	Use case
	When forcibly picking up papers even the paper size setting differs between a job and the Pickup Cassette
	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

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■ IMG-SPD

COPIER > OPTION > IMG-SPD	
FX-D-TMP	Set small ppr down sequence start temp
Lv.1	Details
	To set the temperature to start the down sequence control for the small size paper (smaller than A4R in width direction). As the value is incremented by 1, the temperature is increased by 5 deg C from the initial setting temperature.
	Use case
	When improving the hot offset and the productivity at the paper edge
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	-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
	5 deg C
	Default value
	0
FIX-ROT	Idle rotn end temp after small ppr feed
Lv.1	Details
	When feeding the small size paper following the large size paper on the Fixing Assembly, the temperature at both edges of Fixing Film is higher than the center. To prevent the fixing offset or paper wrinkle, it idles until the temperature becomes the specified value after the small size paper is fed. This item is to set the temperature to finish the idle rotation. As the value is incremented by 1, the temperature is increased by 5 deg C from the initial setting value. The temperature is detected by the Sub Thermistor 1 and 2.
	Use case
	When improving the hot offset and the productivity at the paper edge
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	-2 to 2 -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: 5 deg C, 2: 10 deg C
	Unit
	5 deg C
	Default value
	0

COPIER > OPTION > IMG-SPD	
MXSPDSEL	SPD/Q'ty priority in mixed width:Reader
Lv.1	Details
	To set whether to give priority to speed or image quality when feeding the paper with different width. When "0: Image quality priority" is set, idle rotation is performed at different width mixed print and the number of registration is increased so that the image quality can be maintained while the productivity is reduced. When "1: Speed priority" is set, the productivity does not reduce while skew may occur even same width.
	Use case
	When skew occurs at different width mixed print
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Image quality priority, 1: Speed priority
	Default value
	1

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■ IMG-RDR

COPIER > OPTION > IMG-RDR	
DFDST-L1	DADF mode dust dtct level adj: ppr intvl
Lv.1	Details
	To adjust dust detection level with dust detection correction control that is executed at paper interval in DADF mode. Reduce the value in the case of frequent display of cleaning instruction at the time of dust detection. As the value is smaller, the dust is less detected. Increase the value in the case of black lines. As the value is larger, the small dust is more likely detected.
	Use case
	- When black line occurs due to dust - Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	When increasing the value too much, the cleaning instruction screen may appear too often since even small dust that will not be appeared on the image can be detected. When reducing the value too much, black lines may appear on the image.
	Display/adj/set range
	0 to 255 0: OFF
	Default value
	0
	Supplement/memo
	Black lines can appear on the image if there is dust. With dust detection correction control, the image is corrected to prevent black lines once dust is detected.
DFDST-L2	DADF mode dust dtct level adj: after job
Lv.1	Details
	To adjust dust detection level with dust detection correction control that is executed after the job is completed in DADF mode. Reduce the value in the case of frequent display of cleaning instruction at the time of dust detection. As the value is smaller, the dust is less detected. Increase the value in the case of black lines. As the value is larger, the small dust is more likely detected.
	Use case
	- When black line occurs due to dust - Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	When increasing the value too much, the cleaning instruction screen may appear too often since even small dust that will not be appeared on the image can be detected. When reducing the value too much, black lines may appear on the image.
	Display/adj/set range
	0 to 255 0: OFF
	Default value
	0
	Supplement/memo
	Black lines can appear on the image if there is dust. With dust detection correction control, the image is corrected to prevent black lines once dust is detected.

COPIER > OPTION > IMG-RDR		
DF2DSTL1		DADF dust dtct lvl adj at ppr intvl:bck
Lv.1	Details	To adjust dust detection level with dust detection correction control that is executed at paper interval by the Scanner Unit (paper back) in DADF mode. Reduce the value in the case of frequent display of cleaning instruction at the time of dust detection. As the value is smaller, the dust is less detected. Increase the value in the case of black lines. As the value is larger, the small dust is more likely detected.
	Use case	- When black line occurs due to dust - Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When increasing the value too much, the cleaning instruction screen may appear too often since even small dust that will not be appeared on the image can be detected. When reducing the value too much, black lines may appear on the image.
	Display/adj/set range	1 to 255
	Default value	200
	Supplement/memo	Black lines can appear on the image if there is dust. With dust detection correction control, the image is corrected to prevent black lines once dust is detected.
DF2DSTL2		Adj DADF dust dtct level at job end:bck
Lv.1	Details	To adjust dust detection level with dust detection correction control that is executed by the Scanner Unit (paper back) after the job is completed in DADF mode. Reduce the value in the case of frequent display of cleaning instruction at the time of dust detection. As the value is smaller, the dust is less detected. Increase the value in the case of black lines. As the value is larger, the small dust is more likely detected.
	Use case	- When black line occurs due to dust - Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When increasing the value too much, the cleaning instruction screen may appear too often since even small dust that will not be appeared on the image can be detected. When reducing the value too much, black lines may appear on the image.
	Display/adj/set range	1 to 255
	Default value	200
	Supplement/memo	Black lines can appear on the image if there is dust. With dust detection correction control, the image is corrected to prevent black lines once dust is detected.

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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 Adjust) 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. (Automatic 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: Small granularity/low dot stability 1: Small granularity/low dot stability (color mode), Large granularity/high dot stability (B&W 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	<p>Details</p> <p>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.</p> <p>If an image fails to be compressed at a specified compression rate, the following operations are performed as default:</p> <ul style="list-style-type: none"> - Processing to prioritize reproduction of text - Replacing Bk color to black plain color <p>Set 1 when moire occurs or jaggy is significant. Set 2 when not preferring to replace Bk color with black plain color.</p> <p>Use case</p> <ul style="list-style-type: none"> - 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 black plain color <p>Adj/set/operate method</p> <ol style="list-style-type: none"> 1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch. <p>Caution</p> <p>This setting trades off with reproducibility of text.</p> <p>Display/adj/set range</p> <p>0 to 2 0: High screen ruling, gray compensation LUT 1: Error diffusion, gray compensation LUT 2: High screen ruling, normal LUT</p> <p>Default value</p> <p>0</p>
SCN-FLG	Select of image area flag (copy image)
Lv.2	<p>Details</p> <p>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.</p> <p>If an image fails to be compressed at a specified compression rate, processing to prioritize reproduction of text is performed by default.</p> <p>Set 1 when an image contains many halftone photos. Set 2 when an image contains many printed photos.</p> <p>Use case</p> <p>When copying an image which contains many halftone dots and photos</p> <p>Adj/set/operate method</p> <ol style="list-style-type: none"> 1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch. <p>Caution</p> <p>This setting trades off with reproducibility of text.</p> <p>Display/adj/set range</p> <p>0 to 2 0: Text 1: Halftone photo image 2: Printed photo</p> <p>Default value</p> <p>0</p>

COPIER > OPTION > IMG-MCON	
TMIC-BK	ON/OFF of TMIC Bk_LUT end edge correct
Lv.2	<p>Details</p> <p>To set ON/OFF of the trailing edge adjustment of Bk_LUT for PDL and for copy which are used by TMIC.</p> <p>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.</p> <p>Use case</p> <p>When thin lines are partly missing or characters are faded</p> <p>Adj/set/operate method</p> <ol style="list-style-type: none"> 1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch. <p>Display/adj/set range</p> <p>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</p> <p>Default value</p> <p>2</p>
DH-MODE	Set ptch data at Dhalf except full crct
Lv.2	<p>Details</p> <p>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.</p> <p>Adj/set/operate method</p> <ol style="list-style-type: none"> 1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch. <p>Display/adj/set range</p> <p>0 to 1 0: Used, 1: Not used</p> <p>Default value</p> <p>0</p>
DH-TMG	Set of auto D-half control exe interval
Lv.2	<p>Details</p> <p>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 specified number of sheets.</p> <p>This item is enabled when "1: ON" is set in COPIER> OPTION> FNC-SW> DH-SW.</p> <p>Use case</p> <p>Upon user's request</p> <p>Adj/set/operate method</p> <ol style="list-style-type: none"> 1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch. <p>Display/adj/set range</p> <p>500 to 2000</p> <p>Unit</p> <p>1 sheet</p> <p>Default value</p> <p>1000</p> <p>Related service mode</p> <p>COPIER> OPTION> FNC-SW> DH-SW</p>

COPIER > OPTION > IMG-MCON	
MIX-FLG	Set image composition image processing
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 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 black plain color. Error diffused image. The hue of the photo area might be different from 0.) 3: Equivalent to scanned photo mode (Black text is reproduced with black plain color. Screen processed image.)
	Default value
	0
REPORT-Z	Set of report print image processing
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 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 black plain color. Error diffused image. The hue of the photo area might be different from 0.) 3: Equivalent to scanned photo mode (Black text is reproduced with black plain color. Screen processed image.)
	Default value
	0

COPIER > OPTION > IMG-MCON	
IFXEML-Z	Set clr iFAX,mail rcv print img process
Lv.1	Details
	To set the image processing which is performed when printing color iFAX or received 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 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 black plain color. Error diffused image. The hue of the photo area might be different from 0.) 3: Equivalent to scanned photo mode (Black text is reproduced with black plain color. Screen processed image.)
	Default value
	0
BMLNKS-Z	Set BMLinkS reception print img process
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 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 black plain color. Error diffused image. The hue of the photo area might be different from 0.) 3: Equivalent to scanned photo mode (Black text is reproduced with black plain color. Screen processed image.)
	Default value
	0
	Supplement/memo
	BMLinkS (Business Machine Linkage Service): An integrated network OA device interface

COPIER > OPTION > IMG-MCON	
REDU-CNT	Set toner deposit amount 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 1 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. When COPIER> OPTION> DSPLY-SW> IMG-C-ADJ is set to 1, this setting can be also made in the user mode.
	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 1 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 limited to the specified amount. 1: Toner deposit amount is not limited.
	Default value
	1
	Related service mode
	COPIER> OPTION> DSPLY-SW> IMG-C-ADJ
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Density Adjustment Mode
VP-ART	Setting of line art processing
Lv.2	Details
	To make a setting for 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	Setting of character vectorization
Lv.2	Details
	To make a setting of vector conversion processing for text on scalable PDF. In the vector conversion processing, a binary image outline is extracted in the field which is recognized as text, and is converted into vector data. In regular vector conversion, function approximation is not used for small text because the image quality is not changed. When the value is changed, function approximation processing is executed for small text, which realizes smooth text although the image quality is changed. Change this value when you want to prioritize smoothness in small text.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 99
	Default value
	1
PASCL-TY	Paper setting for auto gradation adj
Lv.2	Details
	Auto gradation adjustment is normally executed with the recommended paper specified for each location. However, if you want to change the paper type, use this setting to change the paper type.
	Use case
	When executing the auto gradation adjustment using a paper other than the recommended paper type
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Do not change the setting in the normal operation.
	Display/adj/set range
	1 to 3 1: CS-814 (Except for USA and EU. Mainly for Japan) 2: Hammermill (For USA) 3: Mondi (For EU)
	Default value
	The value differs according to the location.
P-ALPHA	Adjustment of Patch Sensor alpha value
Lv.1	Details
	To adjust the coefficient alpha value of the Patch Sensor. The value multiplied by 1000 is displayed in the screen. After replacing the Patch Sensor, enter the value "**1/XXXX*" (XXXX: number around 1200) under the barcode of the service label.
	Use case
	When a density reading error of the Patch Sensor 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
	512 to 2047
	Appropriate target value
	1200
	Supplement/memo
	alpha: Ratio of P-wave to S-wave

COPIER > OPTION > IMG-MCON		
AST-SEL	Adj of advanced smoothing effect	
Lv.2	Details	To adjust the smoothing effect which is set in the advanced smoothing UI. Set 3 if no smoothing effect is obtained even though Strong is set in the advanced smoothing UI. Set 0 if too much effect is obtained even though Weak is set in the advanced smoothing UI.
	Use case	When image failures (jaggy, moire) occur
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3
	Default value	2
	Supplement/memo	AST: Advanced Smoothing Technology
REGM-SEL	Adj of fine-line density correction	
Lv.2	Details	To adjust the thin line and text density which is set in user mode (Fine density correction). Set 4 if density is too low even though +2 is set in user mode and set 0 if density is too high even though -2 is set in user mode.
	Use case	When line and text adjusted by thin line density adjustment is too dark or too light in the case of 1200 dpi print
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 4
	Default value	2
	Supplement/memo	REGM-SEL: REos GaMma SElect
SCR-SW	Set of low screen ruling dither	
Lv.1	Details	To set the dithering method for low screen ruling. When changing the value, confirm the change by setting "1: Low screen ruling" in COPIER> TEST> PG> TXPH.
	Use case	Upon user's request (Dot dithering is used)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Execute Auto Adjust Gradation (Full Adjust).
	Display/adj/set range	0 to 1 0: Line dithering, 1: Dot dithering
	Default value	0
	Related service mode	COPIER> TEST> PG> TXPH

COPIER > OPTION > IMG-MCON		
ERS-SEL1	Set 1200 dpi ERS process:PS Expnsn Kit	
Lv.1	Details	To change the ERS processing when the hue of patterned graphics is changed according to phase in the case of making 1200-dpi output with the PS Expansion Kit installed. The processing is changed only for graphics and images, and ERS weighting processing is performed to characters even if the setting is changed. Set 1 when the aforementioned symptom occurs. Set 3 if the proportion of small characters is distorted after 1 is set. Set 5 if the color of graphics is not stabilized after 1 or 3 is set. In this setting, however, a thin line of a single line disappears.
	Use case	When the hue is changed according to phase when making 1200-dpi output
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 7 The following processing are performed to graphics and images respectively: 0: Max skipping, simple skipping 1: ERS (average), simple skipping 2: ERS (average), ERS (average) 3: ERS (weighting), simple skipping 4: ERS (weighting), ERS (weighting) 5: Simple skipping, simple skipping 6, 7: Not used
	Appropriate target value	0
	Default value	0

COPIER > OPTION > IMG-MCON	
ERS-SEL2	Set 1200 dpi ERS process: print server
Lv.1	Details
	To change the ERS processing when the hue of patterned graphics is changed according to phase in the case of making 1200-dpi output through connection to the print server. Set 1 when the aforementioned symptom occurs. Set 3 if the proportion of small characters is distorted after 1 is set. Set 5 if the color of graphics is not stabilized after 1 or 3 is set. In this setting, however, a thin line of a single line disappears.
	Use case
	When the hue is changed according to phase when making 1200-dpi output
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 5 The following processing are performed to characters, graphics, and images respectively: 0: ERS (weighting), Max skipping, simple skipping 1: ERS (average), ERS (average), simple skipping 2: ERS (average), ERS (average), ERS (average) 3: ERS (weighting), ERS (weighting), simple skipping 4: ERS (weighting), ERS (weighting), ERS (weighting) 5: ERS (weighting), simple skipping, simple skipping
	Appropriate target value
	0
	Default value
	0
CL-RDCTN	High compress PDF TX clr reduct mode
Lv.1	Details
	To set whether to execute the color reduction processing mode at high compression PDF (text mode) transmission. Set 1 when image quality is deteriorated at high compression PDF (text mode) transmission. Image quality is improved by executing the color reduction processing mode.
	Use case
	Upon user's request (improvement of image quality)
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	0

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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
	When printing low duty (low image ratio) images, - graininess (coarseness) occurs - 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
INTPPR-1	[Not used]Set Wir cln intvl in ppr intvl
Lv.2	Details
	To set the paper interval for automatic cleaning of the Primary Charging Wire and Pre-transfer Charging Wire.
	Display/adj/set range
	50 to 1000
	Unit
	1 sheet
	Default value
	100

COPIER > OPTION > IMG-DEV	
DVTGT-K	Set ATR Sensr (Bk) gain value offset
Lv.2	<p>Details</p> <p>To actually correct the T/D ratio by setting the offset to the gain value of ATR Sensor (Bk). As the value is increased (increasing the T/D ratio), the screw pitch unevenness is alleviated; however, fogging may occur. If the value is changed, the target value for T/D ratio is also changed so that the toner ejection sequence needs to be forcibly executed to stabilize the T/D ratio. The value returns to 0 when the Process Unit is replaced.</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>When 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> <p>Supplement/memo</p> <p>Toner ejection sequence: 1) Executing the cleaning mode (which takes time) Additional Functions> Adjustment/Maintenance> Maintenance> Clean Inside Main Unit 2) Feeding solid black paper (approx. 10 A4 sheets) Color and density can be set by COPIER> TEST> PG> COLOR-Y/M/C/K, DENS-Y/M/C/K. 5 (whole-area halftone image) can be set by COPIER> TEST> PG> TYPE.</p>
DVTGT-Y	Set ATR Sensr (Y) gain value offset
Lv.2	<p>Details</p> <p>To actually correct the T/D ratio by setting the offset to the gain value of ATR Sensor (Y). As the value is increased (increasing the T/D ratio), the screw pitch unevenness is alleviated; however, fogging may occur. If the value is changed, the target value for T/D ratio is also changed so that the toner ejection sequence needs to be forcibly executed to stabilize the T/D ratio. The value returns to 0 when the Process Unit is replaced.</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>When 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> <p>Supplement/memo</p> <p>Toner ejection sequence: 1) Executing the cleaning mode (which takes time) Additional Functions> Adjustment/Maintenance> Maintenance> Clean Inside Main Unit 2) Feeding solid black paper (approx. 10 A4 sheets) Color and density can be set by COPIER> TEST> PG> COLOR-Y/M/C/K, DENS-Y/M/C/K. 5 (whole-area halftone image) can be set by COPIER> TEST> PG> TYPE.</p>

COPIER > OPTION > IMG-DEV	
DVTGT-M	Set ATR Sensr (M) gain value offset
Lv.2	<p>Details</p> <p>To actually correct the T/D ratio by setting the offset to the gain value of ATR Sensor (M). As the value is increased (increasing the T/D ratio), the screw pitch unevenness is alleviated; however, fogging may occur. If the value is changed, the target value for T/D ratio is also changed so that the toner ejection sequence needs to be forcibly executed to stabilize the T/D ratio. The value returns to 0 when the Process Unit is replaced.</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>When 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> <p>Supplement/memo</p> <p>Toner ejection sequence: 1) Executing the cleaning mode (which takes time) Additional Functions> Adjustment/Maintenance> Maintenance> Clean Inside Main Unit 2) Feeding solid black paper (approx. 10 A4 sheets) Color and density can be set by COPIER> TEST> PG> COLOR-Y/M/C/K, DENS-Y/M/C/K. 5 (whole-area halftone image) can be set by COPIER> TEST> PG> TYPE.</p>
DVTGT-C	Set ATR Sensr (C) gain value offset
Lv.2	<p>Details</p> <p>To actually correct the T/D ratio by setting the offset to the gain value of ATR Sensor (C). As the value is increased (increasing the T/D ratio), the screw pitch unevenness is alleviated; however, fogging may occur. If the value is changed, the target value for T/D ratio is also changed so that the toner ejection sequence needs to be forcibly executed to stabilize the T/D ratio. The value returns to 0 when the Process Unit is replaced.</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>When 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> <p>Supplement/memo</p> <p>Toner ejection sequence: 1) Executing the cleaning mode (which takes time) Additional Functions> Adjustment/Maintenance> Maintenance> Clean Inside Main Unit 2) Feeding solid black paper (approx. 10 A4 sheets) Color and density can be set by COPIER> TEST> PG> COLOR-Y/M/C/K, DENS-Y/M/C/K. 5 (whole-area halftone image) can be set by COPIER> TEST> PG> TYPE.</p>

COPIER > OPTION > IMG-DEV	
DEVL-PTH	Set sheet threshold VL of toner ejection
Lv.1	<p>Details</p> <p>To set the threshold value of time 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>Use case</p> <p>While printing low duty (low image ratio) images, - graininess (coarseness) occurs - low productivity or high toner consumption is pointed out by the user</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>Do not use this when the machine is operating correctly.</p> <p>Display/adj/set range</p> <p>0 to 2 0: 100 sheets, 1: 200 sheets, 2: 300 sheets</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>COPIER> OPTION> IMG-DEV> DEVL-VTH</p>
AUTO-DH	ON/OFF of D-max/D-half control
Lv.1	<p>Details</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>Use case</p> <p>When image smear occurs in a HH environment</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p>Display/adj/set range</p> <p>0 to 2 0: OFF, 1: ON (HH environment only), 2: ON (all environments)</p> <p>Default value</p> <p>0</p>
PCHINT-1	ATR patch ppr interval adj (1st limit)
Lv.2	<p>Details</p> <p>To adjust the paper interval at which patch detection is performed by ATR control. Decrease the value (increase the frequency) when hue variation is large. To reduce the downtime, increase the value. When COPIER> OPTION> CLEANING> ITBB-TMG (that sets the interval at which band of ATR patches is formed as a measure to prevent flipping of ITB cleaner) is simultaneously set, ITBB-TMG has priority.</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 5</p> <p>Unit</p> <p>100 sheets</p> <p>Default value</p> <p>2</p> <p>Related service mode</p> <p>COPIER> OPTION> CLEANING> ITBB-TMG</p>

COPIER > OPTION > IMG-DEV	
PCHINT-V	Adj ATR patch VD counter total VL intvl
Lv.2	<p>Details</p> <p>To adjust the interval of the total video counter value which patch detection is performed by ATR control. If the hue variation is significant, decrease the value. To reduce the downtime, increase the value.</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 5</p> <p>Default value</p> <p>2</p>
DELV-THY	Set of Y toner ejection exe image ratio
Lv.2	<p>Details</p> <p>To set the threshold value of average image ratio to execute Y toner ejection. As the value is incremented by 1, the ratio is increased 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. Decrease the value when users care about the amount of waste toner compared to the low duty image output.</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 10 0: 0%, 1: 1%, 2: 2%, 3 to 10: Not used</p> <p>Default value</p> <p>2</p>
DELV-THC	Set of C toner ejection exe image ratio
Lv.2	<p>Details</p> <p>To set the threshold value of average image ratio to execute C toner ejection. As the value is incremented by 1, the ratio is increased 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. Decrease the value when users care about the amount of waste toner compared to the low duty image output.</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 10 0: 0%, 1: 1%, 2: 2%, 3 to 10: Not used</p> <p>Default value</p> <p>2</p>

COPIER > OPTION > IMG-DEV		
DELV-THM	Set of M toner ejection exe image ratio	
Lv.2	Details	To set the threshold value of average image ratio to execute M toner ejection. As the value is incremented by 1, the ratio is increased 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. Decrease the value when users care about the amount of waste toner compared to the low duty image output.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 10 0: 0%, 1: 1%, 2: 2%, 3 to 10: Not used
	Default value	2
DELV-THK	Set of Bk toner ejection exe image ratio	
Lv.2	Details	To set the threshold value of average image ratio to execute Bk toner ejection. As the value is incremented by 1, the ratio is increased 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. Decrease the value when users care about the amount of waste toner compared to the low duty image output.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 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 Auto Adjust Gradation > Full Adjust.
	Caution	When the value is decreased too much in the - direction, density might be lowered.
	Display/adj/set range	-4 to 0
	Default value	

COPIER > OPTION > IMG-DEV		
PAP-W-EN	Solid image uneven dens reduction mode	
Lv.1	Details	[Not used] If developer to supply to the Developing Cylinder is not even, uneven density occurs on the solid image. To make developer even, enlarge the image interval to secure the rotation time of the Toner Feed Screw. As the value is increased, the image interval (paper interval) is widen. If uneven density is seen, such as darker left edge on the solid image, increase the value.
	Use case	When uneven density occurs on 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]	
Lv.1	Details	-
DMX-OF-Y	Adjustment of Y color D-max setting	
Lv.2	Details	When adjusting D-max control setting in case that density of solid area on yellow color image is not appropriate even performing auto gradation adjustment. 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, and then 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	When adjusting D-max control setting in case that density of solid area on magenta color image is not appropriate even performing auto gradation adjustment. 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, and then 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
	When adjusting D-max control setting in case that density of solid area on cyan color image is not appropriate even performing auto gradation adjustment. 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, and then 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
	When adjusting D-max control setting in case that density of solid area on black color image is not appropriate even performing auto gradation adjustment. 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, and then 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

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■ IMG-TR

COPIER > OPTION > IMG-TR	
2TR-RVON	ON/OFF end edge white spot crct scrn
Lv.2	Details
	To set whether to display the screen to set ON/OFF of the paper trailing edge weak bias in user mode. When 1 is set, trailing edge white spot correction screen is displayed in user mode. If ON is set in this screen, weak bias is applied to the paper trailing edge, and white spots at the trailing edge are alleviated.
	Use case
	Upon user's request (when white spots occur at the trailing edge)
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	0
	Related service mode
	COPIER> OPTION> DSPLY-SW> IMG-ADJ
	Related user mode
	Adjustment/ Maintenance> Adjust Image Quality> Tail End White Patch Correct
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.
	Caution
	After the setting is changed, execute the following procedures. 1) Service mode: COPIER> FUNCTION> MISC-P> INTR-EX 2) User mode: Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation> Full Adjust
	Display/adj/set range
	0 to 2 0: Thick (old belt) 1: Thin (new belt) + old Primary Transfer Roller (16 mm shaft dia.) 2: Thin (new belt) + new Primary Transfer Roller (175 mm shaft dia.)
	Default value
	2
	Related service mode
	COPIER> FUNCTION> MISC-P> INTR-EX
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation> Full Adjust

T-8-58

IMG-FIX

COPIER > OPTION > IMG-FIX	
FX-S-TMP	Setting of ITOP control temp: plain ppr
Lv.1	Details
	To set the offset of ITOP control temperature for plain paper (64 to 81g/m ²) in 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 in the area that is 94mm from the leading edge on 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
	5 deg C
	Default value
	0
TMP-TBL2	Setting of fixing control temp: heavy 1
Lv.1	Details
	To set the offset of fixing control temperature for heavy paper 1 (106 to 163 g/m ²). As the value is increased by 1, the control temperature is increased by 5 deg C. Increase the value when the fixing failure occurs. Decrease the value when the fixing offset occurs.
	Use case
	When the offset or fixing failure occurs on heavy paper 1
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	-2 to 2 -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C
	Unit
	5 deg C
	Default value
	0
TMP-TBL3	Setting of fixing control temp: heavy 2
Lv.1	Details
	To set the offset of fixing control temperature for heavy paper 2 (164 to 209 g/m ²). As the value is increased by 1, the control temperature is increased by 5 deg C. Increase the value when the fixing failure occurs. Decrease the value when the fixing offset occurs.
	Use case
	When the offset or fixing failure occurs on heavy paper 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
	-2 to 2 -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C
	Unit
	5 deg C
	Default value
	0

COPIER > OPTION > IMG-FIX	
TMP-TBL4	Setting of fixing control temp: heavy 3
Lv.1	Details
	To set the offset of fixing control temperature for heavy paper 3 (210 to 256 g/m ²). As the value is increased by 1, the control temperature is increased by 5 deg C. Increase the value when the fixing failure occurs. Decrease the value when the fixing offset occurs.
	Use case
	When the offset or fixing failure occurs on heavy paper 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
	-2 to 2 -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C
	Unit
	5 deg C
	Default value
	0
TMP-TBL5	Setting of fixing control temp: thin ppr
Lv.1	Details
	To set the offset of fixing control temperature for thin paper (52 to 63 g/m ²). As the value is increased by 1, the control temperature is increased by 5 deg C. Increase the value when the fixing failure occurs. Decrease the value when the fixing offset occurs.
	Use case
	When the offset or fixing failure occurs on thin 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
	5 deg C
	Default value
	0
TMP-TBL6	Setting of fixing control temp: envelope
Lv.1	Details
	To set the offset of fixing control temperature for envelope. As the value is increased by 1, the control temperature is increased by 5 deg C. Increase the value when the fixing failure occurs. Decrease the value when the fixing offset occurs.
	Use case
	When the offset or fixing failure occurs on envelope
	Adj/set/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
	5 deg C
	Default value
	0

COPIER > OPTION > IMG-FIX		
FXS-TMP2		Setting of ITOP control temp: heavy 1
Lv.1	Details	To set the offset of ITOP control temperature for heavy paper 1 (106 to 163 g/m ²). As the value is incremented by 1, the control temperature is increased by 5 deg C.
	Use case	When uneven gloss occurs in the area that is 94mm from the leading edge on heavy paper 1
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-2 to 2 -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C
	Unit	5 deg C
	Default value	0
FXS-TMP3		Setting of ITOP control temp: heavy 2
Lv.1	Details	To set the offset of ITOP control temperature for heavy paper 2 (164 to 209 g/m ²). As the value is incremented by 1, the control temperature is increased by 5 deg C.
	Use case	When uneven gloss occurs in the area that is 94mm from the leading edge on heavy paper 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	-2 to 2 -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C
	Unit	5 deg C
	Default value	0
FXS-TMP4		Setting of ITOP control temp: heavy 3
Lv.1	Details	To set the offset of ITOP control temperature for heavy paper 3 (210 to 256 g/m ²). As the value is incremented by 1, the control temperature is increased by 5 deg C.
	Use case	When uneven gloss occurs in the area that is 94mm from the leading edge on heavy paper 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	-2 to 2 -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C
	Unit	5 deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
FXS-TMP5		Setting of ITOP control temp: 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 in the area that is 94mm from the leading edge on thin 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	5 deg C
	Default value	0
FXS-TMP6		Setting of ITOP control temp: envelope
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 in the area that is 94mm from the leading edge on envelope
	Adj/set/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	5 deg C
	Default value	0
FXST2-N2		Set plain paper ITOP standby time: LL ev
Lv.1	Details	To set the time for initial rotation when feeding the plain paper 1/plain paper 2 in 18 deg C or lower temperature. Increase the value when the fixing failure occurs.
	Use case	When a fixing failure occurs in 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	1 second
	Default value	0
FXST2-UH		Set heavy ppr ITOP standby time: LL ev
Lv.1	Details	To set the time for initial rotation when feeding the heavy paper 1/2/3 in 18 deg C or lower temperature. Increase the value when the fixing failure occurs.
	Use case	When a fixing failure occurs in 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	1 second
	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 Fixing Cooling Fan (Front/Rear). As the value is incremented by 1, the temperature is increased by 5 deg C.
	Use case
	When fixing offset/fixing failure occurs at the edge of small size paper
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	-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
	5 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, the flying start temperature control is not executed. This is more life-conscious for Fixing Assembly compared to "0".
	Use case
	When preferring to extend the life of Fixing Assembly. However, setting of "1" does not mean that the life of Fixing Assembly is always extended.
	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 is reduced.
	Display/adj/set range
	0 to 1 0: ON, 1: OFF
	Default value
	0
TMP-TBL7	Fixing control temperature setting: pln2
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. Increase the value when fixing failure occurs. 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, 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
	5 deg C
	Default value
	0

COPIER > OPTION > IMG-FIX	
TMP-TBL8	Fixing control temperature set: transp
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. Increase the value when fixing failure occurs. 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, 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
	5 deg C
	Default value
	0
TMP-TBL9	Fixing control temperature setting:coat1
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. Increase the value when fixing failure occurs. 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, 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
	5 deg C
	Default value
	0
TMP-TB10	Fixing control temperature setting:coat2
Lv.1	Details
	To set the offset of fixing control temperature for coated paper2 (164 to 209 g/m2). As the value is incremented by 1, the control temperature is increased by 5 deg C. Increase the value when fixing failure occurs. 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, 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
	5 deg C
	Default value
	0

COPIER > OPTION > IMG-FIX		
FXS-TMP7		Setting of ITOP control temp: plain ppr2
Lv.1	Details	To set the offset of ITOP control temperature for plain paper 2 (82 to 105 g/m ²). As the value is incremented by 1, the control temperature is increased by 5 deg C.
	Use case	When uneven gloss occurs in the area that is 94mm from the leading edge on plain paper 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	-2 to 2 -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: 5 deg C, 2: 10 deg C
	Unit	5 deg C
	Default value	0
FXS-TMP8		Setting of ITOP control temp: transp
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.
	Use case	When uneven gloss occurs in the area that is 94mm from the leading edge on transparency
	Adj/set/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	5 deg C
	Default value	0
FXS-TM10		Setting of ITOP control temp: coat2
Lv.1	Details	To set the offset of ITOP control temperature for coated paper 2 (164 to 209 g/m ²). As the value is incremented by 1, the control temperature is increased by 5 deg C.
	Use case	When uneven gloss occurs in the area that is 94mm from the leading edge on coated paper 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	-2 to 2 -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: 5 deg C, 2: 10 deg C
	Unit	5 deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
FXS-TMP9		Setting of ITOP control temp: coat1
Lv.1	Details	To set the offset of ITOP control temperature for coated paper 1 (106 to 163 g/m ²). As the value is incremented by 1, the control temperature is increased by 5 deg C.
	Use case	When uneven gloss occurs in the area that is 94mm from the leading edge on coated paper 1
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-2 to 2 -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: 5 deg C, 2: 10 deg C
	Unit	5 deg C
	Default value	0
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 (52g/m ²). 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	0
	TMP-TB11	
Lv.1	Details	To set the offset of fixing control temperature for recycled paper (52 to 105g/m ²). 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 recycled 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	-3 to 2 -3: -15 deg C, -2: -10 deg C, -1: -10 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C
	Unit	5 deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
FXS-TM11	ITOP control temperature:Recycled ppr	
Lv.1	Details	To set the offset of ITOP control temperature for recycled paper (52 to 105g/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. 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, and then 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: -10 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C
	Unit	5 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 81g/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

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CUSTOM

COPIER > OPTION > CUSTOM		
TEMP-TBL	Fixing control temperature setting: pln1	
Lv.1	Details	To set the fixing control temperature for plain paper 1 (64 to 81 g/m2). As the value is incremented by 1, the control temperature is increased by 5 deg C. Increase the value when 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	5 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 ADF+Reader, 1: 1-Path Duplex ADF+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
	Supplement/memo
	Address book maintenance tool: Tool provided from CMJ.
DEV-SP1	Device special settings 1
Lv.2	Details
	To execute the device special settings.
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Change the setting value in accordance with the instructions from the Quality Support Division.
	Display/adj/set range
	00000000 to 11111111
	Unit
	bit
	Default value
	00000000
DEV-SP2	Device special settings 2
Lv.2	Details
	To execute the device special settings.
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Change the setting value in accordance with the instructions from the Quality Support Division.
	Display/adj/set range
	00000000 to 11111111
	Unit
	bit
	Default value
	00000000
DEV-SP3	Device special settings 3
Lv.2	Details
	To execute the device special settings.
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Change the setting value in accordance with the instructions from the Quality Support Division.
	Display/adj/set range
	00000000 to 11111111
	Unit
	bit
	Default value
	00000000
DEV-SP4	Device special settings 4
Lv.2	Details
	To execute the device special settings.
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Change the setting value in accordance with the instructions from the Quality Support Division.
	Display/adj/set range
	00000000 to 11111111
	Unit
	bit
	Default value
	00000000

COPIER > OPTION > CUSTOM	
DEV-SP5	Device special settings 5
Lv.2	Details
	To execute the device special settings.
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Change the setting value in accordance with the instructions from the Quality Support Division.
	Display/adj/set range
	00000000 to 11111111
	Unit
	bit
	Default value
	00000000
DEV-SP6	Device special settings 6
Lv.2	Details
	To execute the device special settings.
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Change the setting value in accordance with the instructions from the Quality Support Division.
	Display/adj/set range
	00000000 to 11111111
	Unit
	bit
	Default value
	00000000
DEV-SP7	Device special settings 7
Lv.2	Details
	To execute the device special settings.
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Change the setting value in accordance with the instructions from the Quality Support Division.
	Display/adj/set range
	00000000 to 11111111
	Unit
	bit
	Default value
	00000000
DEV-SP8	Device special settings 8
Lv.2	Details
	To execute the device special settings.
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Change the setting value in accordance with the instructions from the Quality Support Division.
	Display/adj/set range
	00000000 to 11111111
	Unit
	bit
	Default value
	00000000

COPIER > OPTION > CUSTOM		
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 turns, 2: 80 turns
	Default value	1

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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	
Setting of auto sleep function	
Lv.1	Details
	To set ON/OFF of auto sleep function.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	1
	Supplement/memo
	Transfer time to sleep mode is set in the user mode (Preferences> Timer/Energy Settings> Auto Sleep Time).
SIZE-DET	
ON/OFF of original size detect function	
Lv.2	Details
	To set ON/OFF of original size detection function.
	Use case
	Upon user's request (glare of the scan lamp, etc)
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	1
COUNTER1	
Display of software counter 1	
Lv.1	Details
	To display counter type for software counter 1 on the Counter Check screen.
	Use case
	Upon user/dealer's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Display only. No change is available.
	Display/adj/set range
	0 to 999 0: Not registered
	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: Not registered
	Default value
	The value differs according to the location.

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COUNTER3	
Setting of software counter 3	
Lv.1	Details
	To set counter type for software counter 3 on the Counter Check screen.
	Use case
	Upon user/dealer's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 999 0: Not registered
	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: Not registered
	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: Not registered
	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: Not registered
	Default value
	0

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DATE-DSP		Setting of data/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.
	Related user mode	Preferences > Timer/Energy Settings > Date/Time Settings
MB-CCV		Control card usage limit for Mail Box
Lv.2	Details	To restrict use of control card for Mail Box.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Unlimited, 1: Limited
	Default value	0
CONTROL		Charge setting of PDL job
Lv.1	Details	To set charge count transmission of PDL job to the connecting charging 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

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TRY-STP		Stop setting at finisher tray full
Lv.2	Details	To set to stop/continue output at the time of tray full detection of the Finisher.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter 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 tray full detection, 1: Height detection only
	Default value	0
MF-LG-ST		Dis/hide of long strip 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 strip paper becomes available.
	Use case	Upon user's request. (use of long strip original or long strip 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 strip paper is ejected from Secondary Delivery Mouth (excluding delivery from Inner Finisher).
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
	Related user mode	Copy > Options
CNT-DISP		Display/hide of serial No.
Lv.2	Details	To set whether to display or hide the serial No. on the Counter Check screen.
	Use case	When setting to display/hide serial No. 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 to enable/disable 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 to enable/disable 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 use this mode in Japan. - For PS/PCL machines for overseas (outside Japan), fix the setting value as 1. For others, permit the use.
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
HDCR-DSP		Setting of HDD complete delete method
Lv.2	Details	To set data deletion method of HDD data complete deletion function.
	Use case	When switching the deletion method in HDD data complete deletion mode
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 4 1: 1-time deletion with 0 data, 2: 1-time deletion with random data, 3: 3-time deletion with random data, 4: DOD
	Default value	1
	Supplement/memo	HDD data complete deletion function: a function to completely delete data in HDD by overwriting with 0 (null) data or random data to the file data when logically deleting file on HDD (deleting management information data).

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JOB-INVL		Job intvl setting at interruption copy
Lv.2	Details	To set output interval between jobs at the time of interruption copy. Sorting is difficult after interruption copy because of the continuous output of the next job. Paper interval becomes longer when starting pickup for the next job after the last sheet of the previous job is delivered.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2 0: Continuous output of the interruption copy and the next job 1: Starting pickup for the next job after the interruption copy is delivered all. 2: Starting pickup for the next job after the previous job is delivered all. (For all jobs)
	Default value	0
LGSW-DSP		ON/OFF of "Log display ON/OFF setting"
Lv.2	Details	[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
	Related user mode	Management Settings> Device Management> Display Log
TAB-ROT		Set of landscape img rotn at PDL:tab ppr
Lv.1	Details	To set whether to rotate landscape image by 180 degrees when PDL print is made on tab paper. When "1: Rotated" is set, image is rotated.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Not rotated, 1: Rotated
	Default value	0

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PR-PSESW		Display/hide of output Stop button
Lv.1	Details	To set whether to display or hide [Stop] button on the Status Monitor 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: Box Print, Report Print, Send Local Print, PDL Print COPY category: COPY 1: PRINT category: Report Print, Send Local Print, PDL Print COPY category: COPY, Box Print
	Default value	0
P-CRG-LF		Set of operation at Developing Unit life
Lv.2	Details	To set the operation when Developing Unit reaches its life. When 1 is set, Developing Unit which reached 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: Developing Unit does not stop, 1: Developing Unit stops
	Default value	0
CPRT-DSP		ON/OFF of [Print Charge Log] button
Lv.1	Details	To set whether to display the [Print Charge Log] button to print the charge logs on the charge log screen in user mode. When "1: ON" is set, the button is displayed in Management Settings> Charge Management> Charge Log Screen.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
	Related user mode	

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PCL-COPY		Set of PCL COPIES command control method
Lv.2	Details	To set the binder control method of COPIES command with PCL. Select whether to use the control method of Canon-made PCL or use the same control method of non-Canon-made PCL.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 65535 0: Control method of Canon-made PCL (following the value of COPIES command that is specified for each page to control on a page basis) 1: Control method of non-Canon-made PCL (handling the value of COPIES command, which is specified for page 1 at the time of Collate mode, as bind figure while the value of COPIES command for the next page or later is invalid. Same control applies as Canon-made PCL at the time of Non Sorted mode) 2 to 65535: For future use
	Default value	0
CNT-SW		Set default dis 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 Color1): 149 1: Counter 1 - Total 2: 102 Counter 2 - Copy (Full Color + Single Color/2): 231 Counter 3 - Total A (Full Color + Single Color/2): 148 Counter 4 - Copy (Black 2): 222 Counter 5 - Total A (Black 2): 133
	Default value	0

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TAB-ACC	ON/OFF of auto cassette change: 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 soil inside the machine because of toner.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	0
BCNT-AST	Set of box print charge target job
Lv.1	Details
	To set the job type that advances the count in box print with NE Controller (ASSIST).
	Use case
	When switching the job type that is subject to counting of the box print with NE Controller
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: PDL job, 1: Copy job
	Default value
	0
PRJOB-CP	Set count TX at RX/report print
Lv.2	Details
	To set to enable/disable a page-basis count pulse transmission to the charging management device at the time of reception print or report print.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: No transmission, 1: Transmission
	Default value
	0
	Supplement/memo
	Charging management device: Coin manager, Non-Canon-made control card

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DFLT-CPY	Setting of color mode for copy
Lv.1	Details
	To set the default color mode for copy operation.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 2 0: Based on Auto/ACS/Printer Driver settings, 1: Color mode, 2: B/W mode
	Default value
	Europe: 2, Other than Europe: 0
	Related user mode
	Function Settings> Copy> Select Color Settings for Copy> Use Auto (Color/Black) Selection
DFLT-BOX	Set of color mode for box print
Lv.1	Details
	To set the default color mode for box 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: B/W mode
	Default value
	Europe: 2, Other than Europe: 0
	Related user mode
	Function Settings> Copy> Select Color Settings for Copy> Use Auto (Color/Black) Selection
DOC-REM	Dis/hide of original removal message
Lv.1	Details
	To set whether to display or hide the message to remove original when scanning with DADF without opening/closing DADF after scanning with the copyboard.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Hide, 1: Display
	Default value
	0
DPT-ID-7	Password entry set at dept ID reg/auth
Lv.2	Details
	To set whether to require a password entry at the time of registration/authentication of department ID. With the setting to require entry, entry of 7-digit password is required as well as entry of department ID.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Department ID only, 1: 7-digit (password) entry
	Default value
	0

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RUI-RJT	Connct set at invalid auth from remoteUI
Lv.2	Details
	To set 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 "High Compression". As the value is larger, the compression ratio is higher (the file size becomes small).
	Use case
	When making the transmission file size smaller
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	As the value is too large, an image is deteriorated.
	Display/adj/set range
	0 to 2 0: Compression ratio 1/16, 1: Compression ratio 1/20, 2: Compression ratio 1/24
	Default value
	0
	Related user mode
	Function Settings > Send > Common Settings > Data Compression Ratio
CTM-S06	Set of password delete from export file
Lv.2	Details
	To set to delete password for file transmission address from export file. With the setting to delete password, the password of file transmission target is deleted at the time of export of address book data from remote UI.
	Use case
	- Upon user's request - When avoiding information leak
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Password is retained, 1: Password is deleted.
	Default value
	1

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FREG-SW	Dis/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 trouble analysis
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	- Do not use this at the normal service. - Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range
	0 to 1 0: Hide, 1: Display
	Default value
	0
	Supplement/memo
	Individual count-up (counter advance) of MEAP application is available in the free register area of MEAP counter.
IFAX-SZL	Setting of IFAX send size limit
Lv.2	Details
	To set for restricting data size at the time of IFAX transmission that does not go through the server. With the setting to restrict the data size, there will 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: Not limited (Restriction applies when data goes through the server.)
	Default value
	1
	Related user mode
	Function Settings > Send > E-Mail/I-Fax Settings > Maximum Data Size for Sending
	Supplement/memo
	Specify the upper limit value for transmission data size in user mode.

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IFAX-PGD	Set page split TX at IFAX Simple mode TX
Lv.2	Details
	To set to enable/disable split-data transmission on a page basis in the case that the transmission size in IFAX 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 get approval from the user by explaining the following: - No guarantee for page order on the reception side - There is a possibility of interruption of other received jobs between pages
	Display/adj/set range
	0 to 1 0: Disabled, 1: Enabled
	Default value
	0
	Related user mode
	Function Settings > Send > E-Mail/I-Fax Settings > Maximum Data Size for Sending
	Supplement/memo
	Specify the upper limit value for transmission data size in user mode.
MEAPSAFE	Setting of MEAP safe mode
Lv.2	Details
	To set safe mode for MEAP platform. MPSF is displayed on the Control Panel in safe mode. In safe mode, MEAP application is stopped while just the system application, which starts with initial state, is activated. This mode enables obtaining log for cause analysis of MEAP failure.
	Use case
	Perform system recovery processing when MEAP platform fails to be activated due to resource conflict between MEAP applications, service registration or use order
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Normal mode, 1: Safe mode
	Default value
	0
TRAY-FLL	Set of target tray for tray full notice
Lv.2	Details
	To set the tray which is the target of an output tray full notification.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: All trays to which paper can be output, 1: All trays which are specified as the dedicated trays
	Default value
	0

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PRNT-POS	ON/OFF of all pauses at error job cancel
Lv.2	Details
	To set whether to pause the print operation of following jobs when a job is cancelled 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 to restrict password entry when accessing to the user mode. With this setting is enabled, 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 to automatically restart printing after jam recovery that occurs with PDL print.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: Not automatically reprinted, 1: Automatically reprinted
	Default value
	1
PDL-NCSW	Card mngm setting for PDL print job
Lv.2	Details
	To set to make PDL print job to 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 when the card is inserted.
	Default value
	0

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SLP-SLCT	Usage setting of network applications
Lv.2	<p>Details</p> <p>With the setting to use network-related application, the machine can be recovered through network because it does not move 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.</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>Caution</p> <p>Do not use this at the normal service.</p> <p>Display/adj/set range</p> <p>0 to 1 0: Not used (Shift to sleep mode 1 is available.) 1: Used (Shift to sleep mode 1 is not available.)</p> <p>Default value</p> <p>0</p> <p>Supplement/memo</p> <p>Network-related application: NetSpot Accountant, imageWARE</p>
PS-MODE	Compatible mode setting at PS usage
Lv.2	<p>Details</p> <p>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.</p> <p>Use case</p> <p>At replacement</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p>Display/adj/set range</p> <p>0 to 65535 0: No use of compatibility mode with PS 1: PS Type3 halftone command existing compatibility (Order of growing dither is opposite.) 2 to 65535: Spare</p>

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CNCT-RLZ	Setting of connection serialize function
Lv.2	<p>Details</p> <p>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.</p> <p>Use case</p> <p>Upon user's request</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p>Display/adj/set range</p> <p>0 to 1 0: OFF, 1: ON</p> <p>Default value</p> <p>0</p> <p>Supplement/memo</p> <p>Connection: Connection to be established through network between multiple hosts (PC, etc). Job grouping function: A function of imageWARE Output Manager Select Edition V1.0 to prevent job interruption from other PC by group job (sending multiple jobs in 1 session at job transmission).</p>
COUNTER7	Setting of software counter 7
Lv.1	<p>Details</p> <p>To set counter type for software counter 7 on the Counter Check screen.</p> <p>Use case</p> <p>Upon user's request</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p>Display/adj/set range</p> <p>0 to 999 0: Not registered</p> <p>Default value</p> <p>0</p>
COUNTER8	Setting of software counter 8
Lv.1	<p>Details</p> <p>To set counter type for software counter 8 on the Counter Check screen.</p> <p>Use case</p> <p>Upon user's request</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p>Display/adj/set range</p> <p>0 to 999 0: Not registered</p> <p>Default value</p> <p>0</p>
2C-CT-SW	Set of color counter at 2-color mode
Lv.2	<p>Details</p> <p>To set whether to use the mono color counter or full color counter for count-up in 2-color mode.</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: Mono color counter, 1: Full color counter</p> <p>Default value</p> <p>0 (Japan)/1 (Others)</p>

COPIER > OPTION > USER		
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 only reference is available. This mode can be set 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 only reference is available. This mode can be set 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

COPIER > OPTION > USER		
LDAP-SW		Retrieval condition set for LDAP server
Lv.1	Details	To set the condition to search e-mail address, etc. from LDAP server.
	Use case	When specifying condition to search e-mail address, etc. from LDAP server
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 5 0: Includes the next, 1: Not include the next, 2: Equivalent to the next, 3: Not equivalent to the next, 4: Starts with the next, 5: Finishes with the next
	Default value	4
	Supplement/memo	LDAP (Lightweight Directory Access Protocol): Registering LDAP server enables to search e-mail address, etc. from LDAP server and the result can be registered in the Address Book, etc. Registration is available by the following: Set Destination > Register LDAP Server
FROM-OF		Deletion of 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 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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SPEAKER		Dis/hide to switch speaker/headphone
Lv.1	Details	[Not used] To set whether to display or hide "Voice Guidance from Speaker" on the Voice Mode Setting screen in user mode.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
	Related user mode	Settings/Registration> Preferences> Accessibility> Voice Mode Setting> Voice Guidance from Speaker
	Supplement/memo	"Voice Mode Setting" in user mode is displayed only when the Voice Guidance Kit is installed.
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

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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
IFAX-OF		IFAX send prohibition to entered address
Lv.1	Details	To set to prohibit the IFAX transmission to entered address. IFAX 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

COPIER > OPTION > USER	
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	Dis 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 IFAX 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
JA-COMPR	Dis of 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

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FREE-DSP	Display/hide of charge disable screen
Lv.2	Details
	To set whether to display or hide the Use Charge Management 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 Use Charge Management 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
	Related user mode
	Management Settings > Charge Management > Use Charge Management
TNRB-SW	Setting of Toner Cntner counter display
Lv.2	Details
	To set whether to display or hide 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
	Countries other than USA: 0, USA: 2
CLR-TIM	Set of HDD Encry Kit data delete timing
Lv.2	Details
	To set the timing to completely delete the data when HDD Encryption Kit is used. Selecting 0 may reduce the job processing speed because page data that has been already processed is deleted while the other job is in process, causing overload to CPU and HDD access. Selecting 1 improves the job processing speed because the process is executed after a job is completed.
	Use case
	Upon request to improve the job processing speed
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: During job process, 1: After the job is completed
	Default value
	0

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JA-FORMT	Display of job archive record format
Lv.2	<p>Details</p> <p>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.</p> <p>Use case</p> <p>Upon user's request</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p>Display/adj/set range</p> <p>0 to 1 0: Packet JPEG, 1: Raster JPEG</p> <p>Default value</p> <p>0</p>
HDCR-DSW	Dis/hide of HDD complete delete ON/OFF
Lv.1	<p>Details</p> <p>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.</p> <p>Use case</p> <p>Upon user's request</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p>Display/adj/set range</p> <p>0 to 1 0: Hide, 1: Display</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>COPIER > OPTION > NETWORK > SSH-SW (level 2)</p> <p>Related user mode</p> <p>Management Settings > Data Management > HDD Data Complete Deletion > Hard Disk Data Complete Deletion</p>
SNMP-COA	Inside comty name SNMPaccess limit:admin
Lv.2	<p>Details</p> <p>To restrict SNMP access by the community name (administrator right) that is kept internally. This machine internally retains the community name (administrator right) other than the SNMP community name that is specified in user mode. Canon-made utility software, such as NetSpot, uses this community name. Because of security concern, select 0/1 in the case to restrict SNMP access with the internal community name.</p> <p>Use case</p> <p>When restricting SNTP access with the community name (administrator right) that is retained internally</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p>Display/adj/set range</p> <p>0 to 2 0: OFF, 1: Read only, 2: Read/Write</p> <p>Default value</p> <p>2</p> <p>Related user mode</p> <p>Preferences > Network > SNMP Settings > Community Name 1 Settings</p>

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SNMP-COU	Inside comty name SNMP access limit:user
Lv.2	<p>Details</p> <p>To restrict SNMP access by the community name (user right) that is kept internally. This machine internally retains the community name (user right) other than the SNMP community name that is specified in user mode. Canon-made utility software, such as NetSpot, uses this community name. Because of security concern, select 0/1 in the case to restrict SNMP access with the internal community name.</p> <p>Use case</p> <p>When restricting SNTP access with the community name (user right) that is retained internally</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p>Display/adj/set range</p> <p>0 to 2 0: OFF, 1: Read only, 2: Read/Write</p> <p>Default value</p> <p>2</p> <p>Related user mode</p> <p>Preferences > Network > SNMP Settings > Community Name 2 Settings</p>
BWCL-DSP	ON/OFF of color/B&W selection screen
Lv.2	<p>Details</p> <p>[Not used] To set whether to display the color/B&W selection screen to select the default of the color mode.</p> <p>Use case</p> <p>When displaying the color mode default selection screen</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>
STPL-MAX	Set of max number of sheets for staple
Lv.2	<p>Details</p> <p>To set the maximum number of sheets to be stapled in the Finisher. When "1: 60 sheets" is set, the stapling capacity becomes 60 sheets.</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: 50 sheets, 1: 60 sheets</p> <p>Default value</p> <p>0</p>

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USBK-DSP		ON/OFF user mode item for USB keyboard
Lv.2	Details	[Not Used] To set ON/OFF of "Use MEAP Driver for USB Input Device" display in user mode. When using the USB keyboard, it is necessary to specify either of the followings for USB keyboard. (It is not possible to use the USB keyboard for both.) - Use the keyboard for some MEAP applications which independently support the USB keyboard (including Card Reader of the keyboard emulator type). - Use the keyboard for MEAP applications which do not support the LUI and USB keyboard. When "1: ON" is set, user mode items are enabled, and the settings to use the USB keyboard for the LUI and MEAP applications become available. Meanwhile, there is a possibility that the MEAP applications which support the USB keyboard (including Card Reader of the USB emulation type) might not operate.
	Use case	When using the USB keyboard for the MEAP applications which do not support the LUI and the USB keyboard 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	Do not use this setting except for customization.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
	Related user mode	Preferences> External Interface> USB Settings> Use MEAP Driver for USB Input Device
SCALL-SW		Display/hide of repair request button
Lv.1	Details	[Not used] (For expansion) To set whether to display or hide the repair-request button on the Control Panel.
	Use case	When the sales company supports service by the repair-request button
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0

COPIER > OPTION > USER		
USBH-DSP		Display/hide of USB host usage
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 setting screen can be selected.
	Use case	When switching to display or hide "Use USB Host" on USB setting screen
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
	Related user mode	Preferences > External Interface > USB Settings > Use USB Host
USBM-DSP		Dis/hide of USB ex-memory device driver
Lv.2	Details	To set whether to display "Preferences > External Interface > USB Settings > Use MEAP Driver for USB External Device". By selecting "0: Hide", the item is not displayed, and the user administrator cannot change the setting of the MEAP driver for the USB external memory device.
	Use case	When prohibiting the user administrator to change the setting of "Use MEAP driver for USB external device", set 0 after the specified setting is completed.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	1
	Related user mode	Preferences> External Interface> USB Settings> Use MEAP Driver for USB External Device
USBI-DSP		Dis/hide of USB input device driver set
Lv.2	Details	To set whether to display "Preferences > External Interface > USB Settings > Use MEAP Driver for USB Input Device". By selecting "0: Hide", the item is not displayed, and the user administrator cannot change the setting of the MEAP driver for the USB input device.
	Use case	When prohibiting the user administrator to change the setting of "Use MEAP Driver for USB Input Device", set 0 after the specified setting is completed.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	1
	Related user mode	Preferences > External Interface > USB Settings > Use MEAP Driver for USB Input Device

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CTCHKDSP		Display/hide of counter print
Lv.1	Details	To set whether to display or hide "Print List" on the Counter Check screen. Model name, model number information, counter check date and counter information can be output as a total count management report.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter 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		Dis/hide of USB infrared device driver
Lv.2	Details	To set whether to display "Preferences > External Interface > USB Settings > Use MEAP Driver for USB Infrared Device."
	Use case	When prohibiting the user administrator to change the setting of "Use MEAP Driver for USB Infrared Device," set 0 after the specified setting is completed.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
Related user mode		Preferences > External Interface > USB Settings > Use MEAP Driver for USB Infrared Device
POL-SCAN		Dis/hide of 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	1: Japan, 0: Others
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 to 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 Pickup Cassette switch in color mode
Lv.1	Details	To change "Paper Drawer Auto Selection On/Off" in user mode to switch of Pickup Cassette in color mode. When 1 is set, the meaning of ON/OFF of "Paper Drawer Auto Selection On/Off" screen changes. ON: Pickup Cassette that can be selected when color mode is other than "B&W" OFF: Pickup Cassette that can be selected when color mode is "B&W"
	Use case	When switching the Pickup Cassette in color mode
	Display/adj/set range	0 to 1 0: Same as conventional machines, 1: Pickup Cassette switch in color mode
	Default value	0
	Related user mode	Function Settings > Common > Paper Feed Settings > Paper Drawer Auto Selection On/Off
EXP-CRYP		Confidential encrypt ON/OFF: add book exprt
Lv.1	Details	To set whether to encrypt the confidential part (password part) in the Address Book when exporting the Address Book and device settings via RUI. When 0 is set, the confidential part in the Address Book is exported without encryption.
	Use case	When there is a need to export password without encryption because of operation and tool
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure not to allow the user to execute export without encryption because of security concern.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1

COPIER > OPTION > USER	
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
	1
AUT-SLCT	ON/OFF of secure job auto selection
Lv.1	Details
	To set whether to automatically select all jobs with the same user name in the secure print screen. When user authentication is not conducted, convenience is improved by setting 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.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	0
CNCL-ATH	ON/OFF of auth at secure job stop
Lv.1	Details
	To set whether to conduct authentication when stopping a secure job in the secure print screen. When 0 is set, pressing [Stop] button deletes the secure job immediately. By setting 1 when user authentication is not conducted, the authentication screen is displayed and only the jobs which authentication was succeeded are deleted, so security for the secure job is enhanced.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	0

COPIER > OPTION > USER	
EZY-SCRIP	ON/OFF of secure print simple auth
Lv.1	Details
	To set whether to conduct secure print by simple authentication. When 1 is set, secured print, encryption secured print and inbox print are received, but the normal print jobs are cancelled. If the password "3758211" is entered at job sending, authentication by entering the password on the Control Panel is not required. If the password is not entered at job sending, authentication by entering the password on the Control Panel is necessary at job output. In addition, the following selection is added as auto deletion time of secure job: 10 minutes, 20 minutes, 30 minutes
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	0
DMN-MTCH	ON/OFF of secure print domain judgment
Lv.1	Details
	To set whether to display only the job which matches the domain in the "My Job Status" screen of the secure print. When 1 is set, only the job which matches the user name and domain name is displayed in the "My Job Status" screen, so the job which does not match the domain is not displayed.
	Use case
	Upon user's request
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	1
	Supplement/memo
	In the "My Job Status" screen, the job is displayed when login service is used. Only the job of user who logs in is displayed.

T-8-61

COPIER > OPTION > USER		
SCALLCMP		Set of repair request complete notice
Lv.1	Details	[Not used] (For expansion) With this setting enabled, a notification of repair completion is sent to UGW server to clear the repair-request status that is retained internally.
	Use case	Service technician uses this mode after completing repair
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1
	Default value	0

T-8-62

CST

COPIER > OPTION > CST	
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
ENV1	Setting of Envelope Cassette ENV1 size
Lv.1	Details
	To set the size for Envelope Cassette ENV1.
	Use case
	When specifying the size for Envelope Cassette
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	21 to 25 21: ISO-C5, 22: COM10, 23: MONARCH, 24: DL, 25: ISO-B5
	Default value
	23

COPIER > OPTION > CST	
ENV2	Setting of Envelope Cassette ENV2 size
Lv.1	Details
	To set the size for Envelope Cassette ENV2.
	Use case
	When specifying the size for Envelope Cassette
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	21 to 25 21: ISO-C5, 22: COM10, 23: MONARCH, 24: DL, 25: ISO-B5
	Default value
	22
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, Countries other than USA: 0
	Related user mode
	Preferences> Paper Settings> A5R/STMTR Paper Selection
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, Countries other than USA: 0
	Related user mode
	Preferences> Paper Settings> B5/EXEC Paper Selection
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, Countries other than USA: 0
	Related user mode
	Preferences> Paper Settings> A5R/STMTR Paper Selection
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, Countries other than USA: 0
	Related user mode
	Preferences> Paper Settings> B5/EXEC Paper Selection

COPIER > OPTION > CST		
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, Countries other than USA: 0
	Related user mode	Preferences> Paper Settings> A5R/STMTR Paper Selection
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, Countries other than USA: 0
	Related user mode	Preferences> Paper Settings> B5/EXEC Paper Selection
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, Countries other than USA: 0
	Related user mode	Preferences> Paper Settings> A5R/STMTR Paper Selection
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, Countries other than USA: 0
	Related user mode	Preferences> Paper Settings> B5/EXEC Paper Selection
CST1-U1		Set cst 1 oversea 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, 36: Not used, 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

COPIER > OPTION > CST		
CST1-U2		Set cst 1 oversea 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 cst 1 oversea 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 cst 1 oversea 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
CST2-U1		Set cst 2 oversea 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, 36: Not used, 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 cst 2 oversea 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

COPIER > OPTION > CST		
CST2-U3		Set cst 2 oversea 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 cst 2 oversea 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 cst 3 oversea 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, 36: Not used, 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
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

COPIER > OPTION > CST		
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, 36: Not used, 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
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-8-63

ACC

COPIER > OPTION > ACC	
COIN	Setting of charge management
Lv.1 Details	To set charging 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	In case of setting "3", if "0 to 2" is changed to "3", the following items are automatically set. After making a change, even though "3" is set to "0 to 2" again, they will not be restored. <ul style="list-style-type: none"> - COPIER> OPTION> USER> CONTROL, AFN-PSWD = 1 - COPIER> OPTION> NETWORK> DA-CNCT = 1 - COPIER> OPTION> DSPLY-SW> UI-BOX, UI-SEND, UI-FAX = 0 - 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 RX, POP = OFF In case of setting "4", if "0 to 2" is changed to "4", the following items are automatically set. After making a change, even though "4" is set to "0 to 2" again, they will not be restored. <ul style="list-style-type: none"> - COPIER> OPTION> USER> AFN-PSWD = 1 - COPIER> OPTION> DSPLY-SW> UI-BOX, UI-SEND, UI-FAX, UI-RSCAN, UI-EPRNT, UI-HOLD = 0 - Management Settings>Device Management> Display Log=OFF
Display/adj/set range	0 to 7 0: No charge 1: Charge with Coin Manager 2: Charge with remote counter 3: Charge with DA (only in Japan) 4: Charge with this machine itself 5: New SC mode 6: External charge mode 6 7: External charge mode 7
Default value	0
Related service mode	COPIER> OPTION> USER> CONTROL COPIER> OPTION> NETWORK> DA-CNCT COPIER> OPTION> DSPLY-SW> UI-BOX, UI-SEND, UI-FAX COPIER> OPTION> ACC> PDL-THR

COPIER > OPTION > ACC	
Related user mode	Function Settings > Send > E-Mail/I-Fax Settings > Communication Settings Preferences> Network > TCP/IP Settings > DNS Settings > FTP Print Settings Preferences> Network > TCP/IP Settings > DNS Settings > IPP Print Settings
Supplement/memo	Control card can be used with "0: No charge". DA: Digital Accessory
DK-P	Setting of Paper Deck paper size
Lv.1 Details	To set the paper size used in the Paper Deck.
Adj/set/operate method	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
STPL-LMT	Set Number of sheets for saddle stitch
Lv.2 Details	To set the number of sheets for saddle stitch
Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
Display/adj/set range	0 to 3
Default value	3
SC-TYPE	Set of Coin Manager support 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

COPIER > OPTION > ACC	
OUT-TRAY	Set of Third Delivery Tray installation
Lv.1	Details
	To set whether the Third Delivery Tray is installed. When the Third Delivery Tray is installed, set "1".
	Use case
	When installing the Third 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: Not installed, 1: Installed
	Default value
	0
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
USB-MSK	Limit for USB host using channel
Lv.1	Details
	To set the channel that cannot use the USB host.
	Adj/set/operate method
	0 to 2 0: Not limited, 1: CH 1, 2: Not used
	Display/adj/set range
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	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

COPIER > OPTION > ACC	
IN-TRAY	Set of Second Delivery Tray installation
Lv.1	Details
	To set whether the Second Delivery Tray is installed. When the Second Delivery Tray is installed, set "1".
	Use case
	When installing the Second 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: Not installed, 1: Installed
	Default value
	0
DA-PUCT	Set pickup/delivery comctn at DA charge
Lv.2	Details
	When a pickup and delivery notification error occurs due to network failure, etc., the print operation might be done without charging. This is to set the number of sheets that can be fed 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 might be lowered. When the value is increased, the productivity is not lowered, 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 smaller value is set, the number of prints to be made without charging is decreased, but the productivity might be lowered.
	Display/adj/set range
	2 to 10
	Default value
	6
	Supplement/memo
	DA: Digital Accessory
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
	Unit
	According to the setting value by the following: COPIER> OPTION> ACC> UNIT-PRC.
	Default value
	10
	Related service mode
	COPIER> OPTION> ACC> COIN, UNIT-PRC
	Supplement/memo
	As for the charging amount, it causes an error if specifying the value that is smaller than the minimum currency unit with Settings/Registration mode.

COPIER > OPTION > ACC	
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
	Unit
	According to the setting value by the following: COPIER> OPTION> ACC> UNIT-PRC.
	Default value
	8800
	Related service mode
	COPIER> OPTION> ACC> COIN, UNIT-PRC
	Supplement/memo
	As for charging amount, it causes an error if specifying the value that is larger than the maximum currency unit with Settings/Registration mode.
MIC-TUN	Manual adj of voice recognize microphone
Lv.1	Details
	To manually adjust the sound receiving level (sensitivity) of the connected voice recognition microphone. Microphone sensitivity is automatically tuned in user mode; however, adjust it manually as needed.
	Use case
	When the sensitivity of microphone is not improved by auto tuning
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	0 to 255
	Default value
	128
	Related user mode
	Preferences > Accessibility > Voice Navigation Settings > Tune Microphone

COPIER > OPTION > ACC	
SRL-SPSW	Setting of Serial I/F Kit support
Lv.1	Details
	To set the support level of the Serial Interface Kit. To keep processing performance of printer engine, select "1: Priority on speed". To correctly stop the output by the upper limit number of sheets, select "2: Priority on upper limit number of sheets".
	Use case
	At installation of Serial Interface Kit
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	With priority on speed, output cannot be correctly stopped by the upper limit number of sheets. With priority on the upper limit number of sheets, processing performance of the printer engine is decreased depending on pickup location.
	Display/adj/set range
	0 to 2 0: No support, 1: Priority on speed, 2: Priority on upper limit number of sheets
	Default value
	0
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
PDL-THR	Normal PDL print set in ex-charge mode
Lv.2	Details
	To set the normal PDL print process when the external charge mode 6/7 is set in COIN. As the value is set to "0", a job is canceled and "0" 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

COPIER > OPTION > ACC		
CR-TYPE		Setting of Card Reader
Lv.1	Details	To set the model of the Card Reader. Set 1 in the case of connecting the Card Reader-C1. It operates even 0 is set, but recognition rate decreases.
	Use case	When connecting the Card Reader-C1
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Card Reader-F1, 1: Card Reader-C1
	Default value	0

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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	
Lv.2	Details	To set whether to permit output from the application (PrintMe) equipped with print server.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2 0: Permits the specified account only, 1: Permits, 2: Permits the specified department ID only
	Default value	0
	AP-ACCNT	
Lv.2	Details	To set department ID to the print job from the application (PrintMe) equipped with print server.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 9999999
	Default value	0
	AP-CODE	
Lv.2	Details	To set the pass code for output from print server.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 9999999
	Default value	0
	NWCT-TM	
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	1 minute
	Default value	5
	Supplement/memo	

COPIER > OPTION > INT-FACE		
CNT-TYPE	Connection setting of print server	
Lv.1	Details	To switch print server to be connected. Specify print server with EFI controller ID.
	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 999 443: ColorPASS-GX300, 444: imagePASS-B1
	Default value	1

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■ LCNS-TR

COPIER > OPTION > LCNS-TR		
ST-SEND		Installation state dis of SEND function
Lv.2	Details	To display installation state of SEND function when transfer is disabled.
	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 dis of SEND function
Lv.2	Details	To display transfer license key to use SEND function when transfer is disabled.
	Use case	- When replacing 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 dis of Encryption PDF
Lv.2	Details	To display installation state of Encryption PDF when transfer is disabled.
	Use case	When checking whether Encryption PDF 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!
TR-ENPDF		Trns license key dis of Encryption PDF
Lv.2	Details	To display transfer license key to use Encryption PDF when transfer is disabled.
	Use case	- When replacing 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 dis of Searchable PDF
Lv.2	Details
	To display installation state of Searchable PDF when transfer is disabled.
	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 dis of Searchable PDF
Lv.2	Details
	To display transfer license key to use Searchable PDF when transfer is disabled.
	Use case
	- When replacing 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 of Encry PDF + Searchbl PDF
Lv.2	Details
	To display installation state of Encryption PDF + Searchable PDF when transfer is disabled.
	Use case
	When checking whether Encryption PDF + Searchable PDF is installed
	Adj/set/operate method
	1) Select ST-EXPDF. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-EXPDF.
	Display/adj/set range
	When operation finished normally: OK!
	Default value
	0
TR-EXPDF	Trns lcns key of Encry PDF+Searchbl PDF
Lv.2	Details
	To display transfer license key to use Encryption PDF + Searchable PDF when transfer is disabled.
	Use case
	- When replacing 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 dis of Direct Print PDF
Lv.2	Details
	To display installation state of Direct Print PDF when transfer is disabled.
	Use case
	When checking whether Direct Print PDF 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 dis of Direct Print PDF
Lv.2	Details
	To display transfer license key to use Direct Print PDF when transfer is disabled.
	Use case
	- When replacing 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 dis of Encry Secure Print
Lv.2	Details
	To display installation state of Encrypted Secure Print when transfer is disabled.
	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 dis of Encry Secure Pnt
Lv.2	Details
	To display transfer license key to use Encrypted Secure Print when transfer is disabled.
	Use case
	- When replacing 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]
Lv.2	Details
	-
TR-HDCLR	[Not used]
Lv.2	Details
	-

COPIER > OPTION > LCNS-TR		
ST-BRDIM	Install state dis: PCL Barcode Printing	
Lv.2	Details	To display installation state of Barcode Printing for PCL when transfer is disabled.
	Use case	When checking whether Barcode Printing for PCL 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	Trns lcns key dis: PCL Barcode Printing	
Lv.2	Details	To display transfer license key to use Barcode Printing for PCL when transfer is disabled.
	Use case	- When replacing 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 dis of Remote Oprtr Soft	
Lv.2	Details	To display installation state of Remote Operators Software when transfer is disabled.
	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 dis of Remote Operators Soft	
Lv.2	Details	To display transfer license key to use Remote Operators Software when transfer is disabled.
	Use case	- When replacing 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

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ST-WEB	Install state dis of Web Access Software	
Lv.2	Details	To display installation state of Web Access Software when transfer is disabled.
	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 dis of Web Access Soft	
Lv.2	Details	To display transfer license key to use Web Access Software when transfer is disabled.
	Use case	- When replacing 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 dis of High Compress PDF	
Lv.2	Details	To display installation state of High Compression PDF when transfer is disabled.
	Use case	When checking whether High Compression PDF 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 dis of High Compress PDF	
Lv.2	Details	To display transfer license key to use High Compression PDF when transfer is disabled.
	Use case	- When replacing 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 dis of Trial SEND function	
Lv.2	Details	To display installation state of Trial SEND function when transfer is disabled.
	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 dis of Trial SEND function	
Lv.2	Details	To display transfer license key to use Trial SEND function when transfer is disabled.
	Use case	- When replacing 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 dis of Secure Watermark	
Lv.2	Details	To display installation state of Secure Watermark when transfer is disabled.
	Use case	When checking whether Secure Watermark 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 dis of Secure Watermark	
Lv.2	Details	To display transfer license key to use Secure Watermark when transfer is disabled.
	Use case	- When replacing 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 dis of Time Stamp PDF: JP	
Lv.2	Details	To display installation state of Time Stamp PDF (JP only) when transfer is disabled.
	Use case	When checking whether Time Stamp PDF (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 dis of Time Stamp PDF: JP	
Lv.2	Details	To display transfer license key to use Time Stamp PDF (JP only) when transfer is disabled.
	Use case	- When replacing 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 dis of Dgtl User Sign PDF	
Lv.2	Details	To display installation state of Digital User Signature PDF when transfer is disabled.
	Use case	When checking whether Digital User Signature PDF 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 dis of Dgtl User Sign PDF	
Lv.2	Details	To display transfer license key to use Digital User Signature PDF when transfer is disabled.
	Use case	- When replacing 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

COPIER > OPTION > LCNS-TR		
ST-DVPDF		Install state dis of Device Sign PDF
Lv.2	Details	To display installation state of Device Signature PDF when transfer is disabled.
	Use case	When checking whether Device Signature PDF 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 dis of Device Sign PDF
Lv.2	Details	To display transfer license key to use Device Signature PDF when transfer is disabled.
	Use case	- When replacing 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 dis of Trace & Smooth PDF
Lv.2	Details	To display installation state of Trace & Smooth PDF when transfer is disabled.
	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 lcns key dis of Trace & Smooth PDF
Lv.2	Details	To display transfer license key to use Trace & Smooth PDF when transfer is disabled.
	Use case	- When replacing 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		Install state dis of Access Management System
Lv.2	Details	To display installation state of Access Management System when transfer is disabled.
	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 lcns key dis of Access Management System
Lv.2	Details	To display transfer license key to use Access Management System when transfer is disabled.
	Use case	- When replacing 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	
Lv.2	Details	To display installation state of E-RDS 3rd Party Expansion when transfer is disabled.
	Use case	When checking whether E-RDS 3rd Party Expansion 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
Supplement/memo	E-RDS 3rd Party Expansion: A function to send charge counter to the third party's charge server.	
TR-ERDS		Trns lcns key dis: E-RDS 3rd Pty Expnsn
Lv.2	Details	To display transfer license key to use E-RDS 3rd Party Expansion when transfer is disabled.
	Use case	- When replacing HDD - When replacing the device
	Adj/set/operate method	1) Select ST-ERDS. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-ERDS.
	Display/adj/set range	24 digits
	Supplement/memo	E-RDS 3rd Party Expansion: A function to send charge counter to the third party's charge server.

COPIER > OPTION > LCNS-TR	
ST-PS	Install state display of PS function
Lv.2	Details
	To display installation state of PS function when transfer is disabled.
	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 dis of PS function
Lv.2	Details
	To display transfer license key to use PS function when transfer is disabled.
	Use case
	- When replacing HDD - When replacing the device
	Adj/set/operate method
	1) Select ST-PS. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-PS.
	Display/adj/set range
	24 digits
ST-PCL	Install state display of PCL function
Lv.2	Details
	To display installation state of PCL function when transfer is disabled.
	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 dis of PCL function
Lv.2	Details
	To display transfer license key to use PCL function when transfer is disabled.
	Use case
	- When replacing HDD - When replacing the device
	Adj/set/operate method
	1) Select ST-PCL. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-PCL.
	Display/adj/set range
	24 digits

COPIER > OPTION > LCNS-TR	
ST-PSLI5	Install state dis:PS/LIPS4/LIPS LX: JP
Lv.2	Details
	To display installation state of PS/LIPS4/LIPS LX function (JP only) when transfer is disabled.
	Use case
	When checking whether PS/LIPS4/LIPS LX function (JP only) 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	Trns lcns key dis:PS/LIPS4/LIPS LX: JP
Lv.2	Details
	To display transfer license key to use PS/LIPS4/LIPS LX function (JP only) when transfer is disabled.
	Use case
	- When replacing 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	Install state dis:LIPS LX/LIPS4 func: JP
Lv.2	Details
	To display installation state of LIPS LX/LIPS4 function (JP only) when transfer is disabled.
	Use case
	When checking whether LIPS LX/LIPS4 function (JP only) 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	Trns lcns key dis:LIPS LX/LIPS4 func: JP
Lv.2	Details
	To display transfer license key to use LIPS LX/LIPS4 function (JP only) when transfer is disabled.
	Use case
	- When replacing HDD - When replacing the device
	Adj/set/operate method
	1) Select ST-LIPS5. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-LIPS5.
	Display/adj/set range
	24 digits

COPIER > OPTION > LCNS-TR		
ST-LIPS4		Install state display of LIPS4 func: JP
Lv.2	Details	To display installation state of LIPS4 function (JP only) when transfer is disabled.
	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 dis of LIPS4 func: JP
Lv.2	Details	To display transfer license key to use LIPS4 function (JP only) when transfer is disabled.
	Use case	- When replacing 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 dis of PS/PCL function
Lv.2	Details	To display installation state of PS/PCL function when transfer is disabled.
	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 dis of PS/PCL func
Lv.2	Details	To display transfer license key to use PS/PCL function when transfer is disabled.
	Use case	- When replacing HDD - When replacing the device
	Adj/set/operate method	1) Select ST-PSPCL. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-PSPCL.
	Display/adj/set range	24 digits

COPIER > OPTION > LCNS-TR		
ST-PCLUF		Install state dis of PCL/UFR II function
Lv.2	Details	To display installation state of PCL/UFR II function when transfer is disabled.
	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 dis of PCL/UFR II func
Lv.2	Details	To display transfer license key to use PCL/UFR II function when transfer is disabled.
	Use case	- When replacing 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		Install state dis of PS/LIPS4 func: JP
Lv.2	Details	To display installation state of PS/LIPS4 function (JP only) when transfer is disabled.
	Use case	When checking whether PS/LIPS4 function (JP only) 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		Trns license key dis of PS/LIPS4 func:JP
Lv.2	Details	To display transfer license key to use PS/LIPS4 function (JP only) when transfer is disabled.
	Use case	- When replacing HDD - When replacing the device
	Adj/set/operate method	1) Select ST-PSLIP. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-PSLIP.
	Display/adj/set range	24 digits

COPIER > OPTION > LCNS-TR		
ST-PSPCU		Install state dis of PS/PCL/UFR II func
Lv.2	Details	To display installation state of PS/PCL/UFR II function when transfer is disabled.
	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 dis of PS/PCL/UFR II func
Lv.2	Details	To display transfer license key to use PS/PCL/UFR II function when transfer is disabled.
	Use case	- When replacing 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 dis of UFR II function
Lv.2	Details	To display installation state of UFR II function when transfer is disabled.
	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 dis of UFR II function
Lv.2	Details	To display transfer license key to use UFR II function when transfer is disabled.
	Use case	- When replacing HDD - When replacing the device
	Adj/set/operate method	1) Select ST-LXUFR. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-LXUFR.
	Display/adj/set range	24 digits

COPIER > OPTION > LCNS-TR		
ST-HDCR2		Install state dis:HDD Init All Data/Set
Lv.2	Details	To display installation state of HDD Initialize All Data/Settings when transfer is disabled.
	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 transfer is disabled.
	Use case	- When replacing 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-USB-M		[Not used]
Lv.2	Details	-
TR-USB-M		[Not used]
Lv.2	Details	-
ST-MOBIL		Install state dis of Mobile Link func:JP
Lv.2	Details	To display installation state of Mobile Link function (JP only) when transfer is disabled.
	Use case	When checking whether Mobile Link function (JP only) is installed
	Adj/set/operate method	1) Select ST-MOBIL. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-MOBIL.
	Display/adj/set range	When operation finished normally: OK!
	Default value	0
TR-MOBIL		Trns lcns key dis of Mobile Link func:JP
Lv.2	Details	To display transfer license key to use Mobile Link function (JP only) when transfer is disabled.
	Use case	- When replacing HDD - When replacing the device
	Adj/set/operate method	1) Select ST-MOBIL. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-MOBIL.
	Display/adj/set range	24 digits

COPIER > OPTION > LCNS-TR	
ST-JBLK	Install state dis of Document Scan Lock
Lv.2	Details
	To display installation state of Document Scan Lock when transfer is disabled.
	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 dis of Document Scan Lock
Lv.2	Details
	To display transfer license key to use Document Scan Lock when transfer is disabled.
	Use case
	- When replacing 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
ST-AFAX	Installation state dis of Remote Fax
Lv.2	Details
	To display installation state of Remote Fax when transfer is disabled.
	Use case
	When checking whether Remote Fax 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 dis of Remote Fax
Lv.2	Details
	To display transfer license key to use Remote Fax when transfer is disabled.
	Use case
	- When replacing 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

COPIER > OPTION > LCNS-TR	
ST-REPDF	Install state dis:Reader Extensions PDF
Lv.2	Details
	To display installation state of Reader Extensions PDF when transfer is disabled.
	Use case
	When checking whether Reader Extensions PDF 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 when transfer is disabled.
	Use case
	- When replacing 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
ST-OOXML	Install state dis of Office Open XML
Lv.2	Details
	To display installation state of Office Open XML when transfer is disabled.
	Use case
	When checking whether Office Open XML 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 dis of Office Open XML
Lv.2	Details
	To display transfer license key to use Office Open XML when transfer is disabled.
	Use case
	- When replacing 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

COPIER > OPTION > LCNS-TR		
ST-XPS	Install state dis of Direct Print XPS	
Lv.2	Details	To display installation state of Direct Print XPS when transfer is disabled.
	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 dis of Direct Print XPS	
Lv.2	Details	To display transfer license key to use Direct Print XPS when transfer is disabled.
	Use case	- When replacing 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
ST-2600	Instal state dis: IEEE2600.1 scrtly func	
Lv.2	Details	To display installation state of the IEEE2600.1 security function when transfer is disabled.
	Use case	When checking whether the IEEE2600.1 security function 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	Trn lcns key dis: IEEE2600.1 scrtly func	
Lv.2	Details	To display transfer license key of the IEEE2600.1 security function when transfer is disabled.
	Use case	- When replacing 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

T-8-66



COPIER > TEST > PG		
TYPE		Test print
Lv.1	Details	To execute the test print.
	Use case	At trouble 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: Halftone for all areas 6: Grid 7 to 9: For R&D use 10: MCYBk horizontal line 11: For R&D use 12: YMCKBk 64 gradations 13: For R&D use 14: Full color 16 gradations 15 to 100: For R&D use
	Default value	0
	Required time	Several seconds
	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 trouble 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 screen (approx. 133 to 190 lines) 2: High screen ruling screen (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 trouble 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 increased, the density becomes higher.
	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 increased, the density becomes higher.
	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 increased, the density becomes higher.
	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 increased, the density becomes higher.
	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	
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	
Lv.1	Details	To set for the output in full color/monochrome color with PG.
	Use case	When separating (identifying) the cause whether it's due to color or monochrome.
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Full color, 1: Monochrome color
	PG-PICK	
Lv.1	Details	To set the pickup cassette for test print output.
	Use case	At trouble 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: Cassette1, 2: Cassette2, 3: Cassette3, 4: Cassette4, 5: Paper Deck, 6: Multi-purpose Tray, 7 to 8: Not used
	2-SIDE	
Lv.1	Details	To set 1-sided/2-sided print for PG output.
	Use case	At trouble 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 trouble analysis
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	1 to 999
	Unit	1 sheet
	Default value	1
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 for 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-8-67

NETWORK

COPIER > TEST > NETWORK	
PING	Network connection check
Lv.1	To check connection between this machine and TCP/IP network.
Details	
Use case	- When checking network connection at the time of installation - At network connection failure
Adj/set/operate method	1) Turn OFF the main power switch. 2) Connect the network cable to this machine, and then turn ON the main power switch. 3) Inform the system administrator at user's site that installation of this machine is complete, and ask for network setting. 4) Ask the system administrator to check the network connection, and check the remote host address of PING transmission target. 5) Select the item and enter the remote host address, and then press OK key and Start key. OK: Connection is normal. Checking procedure is complete. NG: Connection failed. Go to step 6) if the cable connection is OK. In case of cable connection failure, connect again and then go to step 5). 6) Select the item and enter loopback address, and then press OK key and Start key. OK: TCP/IP setting of this machine is normal. Go to step 7) to check NIC. NG: TCP/IP setting of this machine has failure. Go to step 3) to check the setting again. 7) Select the item and enter the local host address, and then press OK key. OK: Network setting of this machine and NIC are normal. Inform the system administrator that the trouble is due to network environment and ask for countermeasure. NG: Connection failure/fault with NIC. Check connection of NIC/ replace NIC.
Display/adj/set range	0.0.0.0 to 255.255.255.255 At normal state: OK At failure occurrence: NG
Supplement/memo	- Remote host address: IP address of PC terminal in network. - Loopback address: 127.0.0.1. Checking TCP/IP of this machine is available because the signal is returned before NIC. - NIC: Network interface board - Local host address: IP address of this machine

COPIER > TEST > NETWORK	
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 the setting is switched, the Status and Log are not displayed.
Details	
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
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.
Details	
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 (0-9, a-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.
Details	
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.
Details	
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.)
Required time	Approx. 3 minutes
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.
Details	
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.)
Required time	Approx. 3 minutes


 TOTAL

COPIER > COUNTER > TOTAL		
SERVICE1		Service-purposed total counter 1
Lv.1	Details	To count up when the paper is delivered outside the machine. Large size: 1, small size: 1 A blank sheet is not counted.
	Display/adj/set range	0 to 99999999
SERVICE2		Service-purposed total counter 2
Lv.1	Details	To count up when the paper is delivered outside the machine. Large size: 2, small size: 1 A blank sheet is not counted.
	Display/adj/set range	0 to 99999999
COPY		Total copy counter
Lv.1	Details	To count up when the paper is delivered outside the machine. Large size: 1, small size: 1 A blank sheet is not counted.
	Display/adj/set range	0 to 99999999
PDL-PRT		PDL print counter
Lv.1	Details	To count up when the paper is delivered outside the machine according to the charge counter at PDL print. Large size: 1, small size: 1 A blank sheet is not counted.
	Display/adj/set range	0 to 99999999
FAX-PRT		FAX reception print counter
Lv.1	Details	To count up when the paper is delivered outside the machine according to the charge counter at FAX reception. Large size: 1, small size: 1 A blank sheet is not counted.
	Display/adj/set range	0 to 99999999
BOX-PRT		Inbox print counter
Lv.1	Details	To count up when the paper is delivered outside the machine according to the charge counter at Inbox print. Large size: 1, small size: 1 A blank sheet is not counted.
	Display/adj/set range	0 to 99999999
RPT-PRT		Report print counter
Lv.1	Details	To count up when the paper is delivered outside the machine according to the charge counter at report print. Large size: 1, small size: 1 A blank sheet is not counted.
	Display/adj/set range	0 to 99999999

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-8-69

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-8-70

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-8-71

■ 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-8-72

■ 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]
Lv.1	Details	-

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]
Lv.1	Details	-
SDL-STPL		[Not used]
Lv.1	Details	-
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]
Lv.1	Details	-
SUC-A-Y		For R&D use
Lv.1	Details	-
SUC-A-M		For R&D use
Lv.1	Details	-
SUC-A-C		For R&D use
Lv.1	Details	-
SUC-A-K		For R&D use
Lv.1	Details	-
SUC-L-Y		For R&D use
Lv.2	Details	-
SUC-L-M		For R&D use
Lv.2	Details	-
SUC-L-C		For R&D use
Lv.2	Details	-
SUC-L-K		For R&D use
Lv.2	Details	-

T-8-73

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
	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
	Unit	mm

T-8-74

■ 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/replacing the parts
	Adj/set/operate method
	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution
	Clear the counter value after replacement.
	Display/adj/set range
	0 to 99999999
	Default value
	0
DV-UNT-C	Developing Assembly (C) parts counter
Lv.1	Details
	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case
	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method
	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution
	Clear the counter value after replacement.
	Display/adj/set range
	0 to 99999999
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

COPIER > COUNTER > DRBL-1		
C1-SP-RL	Cassette1 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
C1-FD-RL	Cassette1 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	Cassette2 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	Cassette2 Feed Roller parts counter	
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
M-SP-RL	Multi-purpose Tray Sprtn Roll prts cntr	

COPIER > COUNTER > DRBL-1		
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/replacing the parts	
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.	
	Caution	Clear the counter value after replacement.	
	Display/adj/set range	0 to 99999999	
	Default value	0	
PT-DR-M	M Photosensitive Drum parts counter		
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life	
	Use case	When checking the consumption level of parts/replacing the parts	
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.	
	Caution	Clear the counter value after replacement.	
	Display/adj/set range	0 to 99999999	
	Default value	0	
PT-DR-C	C Photosensitive Drum parts counter		
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life	
	Use case	When checking the consumption level of parts/replacing the parts	
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.	
	Caution	Clear the counter value after replacement.	
	Display/adj/set range	0 to 99999999	
	Default value	0	
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-ROLC	

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

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■ 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.
DF-FD-RL	Feed Roller1 parts 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.

COPIER > COUNTER > DRBL-2		
DF-SP-RL	Separation Roller prts 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.
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.

COPIER > COUNTER > DRBL-2		
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
	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

COPIER > COUNTER > DRBL-2		
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
	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
	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

COPIER > COUNTER > DRBL-2		
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
	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
SORT	Sort path 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

COPIER > COUNTER > DRBL-2		
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
	Unit	Number of sheets
	Default value	0
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
	Unit	Number of sheets
	Default value	0
CENT-STC	Swng Guide Inside Sttc Chg Elim: Fin-A1	
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
	Unit	Number of sheets
	Default value	0

COPIER > COUNTER > DRBL-2		
BACK-ROL	Return Roller parts counter: Fin-A1	
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
	Unit	Number of sheets
	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
	Unit	Number of sheets
	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

T-8-76

■ T-CNTR

COPIER > COUNTER > T-CNTR		
YELLOW		Y Toner Container counter
Lv.1	Details	To count up in the unit of 0.1 Y color Toner Container consumed.
	Use case	When checking the consumption volume of Toner Container
MAGENTA		M Toner Container counter
Lv.1	Details	To count up in the unit of 0.1 M color Toner Container consumed.
	Use case	When checking the consumption volume of Toner Container
CYAN		C Toner Container counter
Lv.1	Details	To count up in the unit of 0.1 C color Toner Container consumed.
	Use case	When checking the consumption volume of Toner Container
BLACK		Bk Toner Container counter
Lv.1	Details	To count up in the unit of 0.1 Bk color Toner Container consumed.
	Use case	When checking the consumption volume of Toner Container

T-8-77

■ V-CNTR

COPIER > COUNTER > V-CNTR		
TOTAL		Video count total counter
Lv.1	Details	To display distribution of total video count for each color. Small size: 1, Large size: 1
	Use case	When checking distribution of video count
YELLOW		Video count Y counter
Lv.1	Details	To display distribution of yellow video count. Small size: 1, Large size: 1
	Use case	When checking distribution of video count
MAGENTA		Video count M counter
Lv.1	Details	To display distribution of magenta video count. Small size: 1, Large size: 1
	Use case	When checking distribution of video count
CYAN		Video count C counter
Lv.1	Details	To display distribution of cyan video count. Small size: 1, Large size: 1
	Use case	When checking distribution of video count
BLACK		Video count Bk counter
Lv.1	Details	To display distribution of black video count. Small size: 1, Large size: 1
	Use case	When checking distribution of video count

T-8-78

■ V2-CNTR

COPIER > COUNTER > V2-CNTR		
TOTAL		Video count total counter
Lv.1	Details	To display distribution of total video count for each color. Small size: 1, Large size: 2
	Use case	When checking distribution of video count
YELLOW		Video count Y counter
Lv.1	Details	To display distribution of yellow video count. Small size: 1, Large size: 2
	Use case	When checking distribution of video count
MAGENTA		Video count M counter
Lv.1	Details	To display distribution of magenta video count. Small size: 1, Large size: 2
	Use case	When checking distribution of video count
CYAN		Video count C counter
Lv.1	Details	To display distribution of cyan video count. Small size: 1, Large size: 2
	Use case	When checking distribution of video count
BLACK		Video count Bk counter
Lv.1	Details	To display distribution of black video count. Small size: 1, Large size: 2
	Use case	When checking distribution of video count

T-8-79

■ 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	%
	Default value	0
M-DRM-LF		Display of Drum Unit (M) life
Lv.1	Details	To display how much the Drum Unit (M) is close to the end of life in % (percentage). When a new part is set, the value becomes 0%.
	Use case	When checking the life of Drum Unit
	Display/adj/set range	0 to 999
	Unit	%
	Default value	0
C-DRM-LF		Display of Drum Unit (C) life
Lv.1	Details	To display how much the Drum Unit (C) is close to the end of life in % (percentage). When a new part is set, the value becomes 0%.
	Use case	When checking the life of Drum Unit
	Display/adj/set range	0 to 999
	Unit	%
	Default value	0
K-DRM-LF		Display of Drum Unit (Bk) life
Lv.1	Details	To display how much the Drum Unit (Bk) is close to the end of life in % (percentage). When a new part is set, the value becomes 0%.
	Use case	When checking the life of Drum Unit
	Display/adj/set range	0 to 999
	Unit	%
	Default value	0

T-8-80

FEEDER

 DISPLAY

FEEDER > DISPLAY		
FEESIZE		Dis of original size detected by DADF
Lv.1	Details	To display the original size detected by DADF.
	Adj/set/operate method	N/A (Display only)
TRY-WIDE		Distance of Original Width Detect Slider
Lv.1	Details	To display the distance between the Original Width Detection Sliders.
	Use case	At original size detection error
	Adj/set/operate method	Check whether the value matching the slide position is displayed when the Original Width Slider is moved to the specified size width position.
	Display/adj/set range	0 to approx. 2970
	Unit	0.1 mm
SPSN-LMN		Dis of Post-sprtn Sensr emission voltage
Lv.1	Details	To display the light-emitting voltage value for the Post-separation Sensor.
	Use case	When jams frequently occur
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	0 to 255
	Appropriate target value	Approx. 113
SPSN-RCV		Dis of Post-sprtn Sensr recv voltage
Lv.1	Details	To display the light-receiving voltage value for the Post-separation Sensor.
	Use case	When jams frequently occur
	Adj/set/operate method	Remove and insert the paper at the sensor position, and check the value at presence/absence of the paper.
	Display/adj/set range	0 to 1023
	Appropriate target value	At the presence of paper: 123 or lower, At the absence of paper: 179 or higher
RDSN-LMN		Dis of Lead Sensor emission voltage
Lv.1	Details	To display the light-emitting voltage value for the Lead Sensor.
	Use case	When jams frequently occur
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	0 to 255
	Appropriate target value	Approx. 113

FEEDER > DISPLAY		
RDSN-RCV		Display of Lead Sensor reception voltage
Lv.1	Details	To display the light-receiving voltage value for the Lead Sensor.
	Use case	When jams frequently occur
	Adj/set/operate method	Remove and insert the paper at the sensor position, and check the value at presence/absence of the paper.
	Display/adj/set range	0 to 1023
	Appropriate target value	At the presence of paper: 123 or lower, At the absence of paper: 179 or higher
DRSN-LMN		Dis of Delivery Sensor emit voltg
Lv.1	Details	To display the light-emitting voltage value for the Delivery Sensor.
	Use case	When jams frequently occur
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	0 to 255
	Appropriate target value	Approx. 113
DRSN-RCV		Dis of Delivery Sensor recv voltg
Lv.1	Details	To display the light-receiving voltage value for the Delivery Sensor.
	Use case	When jams frequently occur
	Adj/set/operate method	Remove and insert the paper at the sensor position, and check the value at presence/absence of the paper.
	Display/adj/set range	0 to 1023
	Appropriate target value	At the presence of paper: 123 or lower, At the absence of paper: 179 or higher

T-8-81



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 dislocated. Enter the value of service label when Reader Controller PCB is replaced/RAM data is cleared. As the value is incremented by 1, the margin at the leading edge of the image is decreased by 0.1mm. (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, and then 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 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, and then 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 dislocated. Enter the value of service label when Reader Controller PCB is replaced/RAM data is cleared. As the value is incremented by 1, the margin at the leading edge of the image is decreased by 0.1mm. (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, and then 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 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, and then press OK key.
	Display/adj/set range	-20 to 20
	Unit	0.10%
	Default value	0
ADJMCSN1		Zoom adj in 2-sided horz scan way: front
Lv.1	Details	To make a fine adjustment of the front side image magnification 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 at the time of duplex scanning
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-10 to 10
	Unit	0.10%
	Default value	0
ADJMCSN2		Zoom adj in 2-sided horz scan way: back
Lv.1	Details	To make a fine adjustment of the back side image magnification 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 at the time of duplex scanning
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-10 to 10
	Unit	0.10%
	Default value	0
ADJSSCN1		Zoom adj in 2-sided vert scan way: front
Lv.1	Details	To make a fine adjustment of the front side image magnification 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 at the time of duplex scanning
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-10 to 10
	Unit	0.10%
	Default value	0

FEEDER > ADJUST		
ADJSSCN2		Zoom adj in 2-sided vert scan way: back
Lv.1	Details	To make a fine adjustment of the back side image magnification 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 at the time of duplex scanning
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-10 to 10
	Unit	0.10%
	Default value	0

T-8-82


FUNCTION

FEEDER > FUNCTION		
SENS-INT		Initialization of DADF Sensors
Lv.1	Details	To initialize DADF Sensors.
	Use case	When replacing Reader Controller PCB / Post-separation Sensor 1 (SR2) / Post-separation Sensor 2 (SR3) / Post-separation Sensor 3 (PCB2) / Registration Sensor (PCB3) / Lead Sensor 1 (PCB4) / Lead Sensor 2 (SR5)
	Adj/set/operate method	Select the item, and then press OK key.
MTR-CHK		Specifying DADF Operation Motor
Lv.1	Details	To specify the DADF Motor to operate. The motor is activated by MTR-ON.
	Use case	At operation check
	Adj/set/operate method	Enter the value, and then press OK key.
	Display/adj/set range	0 to 9 0: Pickup Motor (M1), 1: Feed Motor (M2), 2: Registration Motor (M3), 3: Read Motor (M4), 4: Delivery Motor (M5), 5: Disengagement Motor 1 (M6), 6: Disengagement Motor 2 (M7), 7: Tray Lifter Motor (M8), 8: Glass Shift Motor (M9), 9: Pickup Roller Unit Lifter Motor (M10)
	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.
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.
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.
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.

FEEDER > FUNCTION		
FEED-CHK	Specifying DADF individual feed mode	
Lv.1	Details	To specify the feed mode for DADF. Feed operation is activated by FEED-ON.
	Use case	At operation check
	Adj/set/operate method	Enter the value, and then press OK key.
	Display/adj/set range	0 to 3 0: 1-sided pickup/delivery operation 1: 2-sided pickup/delivery operation 2: 1-sided pickup/delivery operation (with stamp) 3: 2-sided pickup/delivery operation (with stamp)
	Related service mode	FEEDER> FUNCTION> FEED-ON
CL-CHK	Specifying DADF Operation Clutch	
Lv.1	Details	To specify the DADF Clutch to be operated. The Clutch is activated by CL-ON.
	Use case	At operation check
	Adj/set/operate method	Enter the value, and then press OK key.
	Display/adj/set range	0 to 1 0: Clutch (CL1), 1: Clutch (CL2)
	Related service mode	FEEDER> FUNCTION> CL-ON
CL-ON	Operation check of DADF Clutch	
Lv.1	Details	To start operation check for the Clutch specified by CL-CHK.
	Use case	At operation check
	Adj/set/operate method	1) Select the item, and then press OK key. The clutch operates for approximately 5 seconds and automatically stops. 2) Press OK key. The operation check is completed.
	Caution	Press OK key again after execution. It stops automatically after approx. 5 sec; however, it does not finish unless OK key is pressed (STOP screen does not appear.)
	Required time	Approx. 5 seconds
	Related service mode	FEEDER> FUNCTION> CL-CHK
FAN-CHK	Specifying DADF Operation Fan	
Lv.1	Details	To specify the DADF Fan to be operated. The fan is activated by FAN-ON.
	Use case	At operation check
	Adj/set/operate method	Enter the value, and then press OK key.
	Display/adj/set range	0 to 1 0: Motor Driver Cooling Fan (FM1) 1: Read Motor Cooling Fan (FM2)
	Related service mode	FEEDER> FUNCTION>FAN-ON

FEEDER > FUNCTION		
FAN-ON	Operation check of DADF Fan	
Lv.1	Details	To start operation check for 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 fan operates for approximately 5 seconds and automatically stops. 2) Press OK key. The operation check is completed.
	Caution	Press OK key again after execution. It stops automatically after approx. 5 sec; however, it does not finish unless OK key is pressed (STOP screen does not appear.)
	Required time	Approx. 5 seconds
	Related service mode	FEEDER> FUNCTION> FAN-CHK
SL-CHK	Specifying DADF Operation Solenoid	
Lv.1	Details	To specify the DADF solenoid to be operate. The solenoid is activated by SL-ON.
	Use case	At operation check
	Adj/set/operate method	Enter the value, and then press OK key.
	Display/adj/set range	0 to 1 0: Disengagement Solenoid (SL1) 1: Stamp Solenoid (SL2)
	Related service mode	FEEDER> FUNCTION> SL-ON
SL-ON	Operation check of DADF Solenoid	
Lv.1	Details	To start operation check for the solenoid specified by SL-CHK.
	Use case	At operation check
	Adj/set/operate method	1) Select the item, and then press OK key. The unit operates for approximately 5 seconds and automatically stops. 2) Press OK key. The operation check is completed.
	Caution	Be sure to press the OK key again after execution. The operation automatically stops after approximately 5 seconds, but is not completed unless the OK key is pressed (STOP is not displayed).
	Required time	Approx. 5 seconds
	Related service mode	FEEDER> FUNCTION> SL-CHK

FEEDER > FUNCTION		
MTR-ON		Operation check of motor
Lv.1	Details	To start operation check for the motor specified by MTR-CHK.
	Use case	At operation check
	Adj/set/operate method	1) Select the item, and then press OK key. The unit operates for approximately 5 seconds and automatically stops. 2) Press OK key. The operation check is completed.
	Caution	Be sure to press the OK key again after execution. The operation automatically stops after approximately 5 seconds, but is not completed unless the OK key is pressed (STOP is not displayed).
	Required time	Approx. 5 seconds
Related service mode		FEEDER> FUNCTION> MTR-CHK
ROLL-CLN		Rotation of DADF Rollers
Lv.1	Details	To rotate for cleaning the DADF Rollers. Clean the roller by putting the lint-free paper moistened with alcohol while it is rotating.
	Use case	At roller cleaning
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Clean the rotating rollers with lint-free paper moistened with alcohol. 3) Press OK key. The rollers stop.
FEED-ON		Operation check of DADF individual feed
Lv.1	Details	To start operation check for the feed mode specified by FEED-CHK.
	Use case	At operation check
	Adj/set/operate method	Select the item, and then press OK key.
	Related service mode	FEEDER> FUNCTION> FEED-CHK

T-8-83

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) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-4 to 2
	Unit	1 mm
	Default value	0
STP-F1		Adj frt staple pstn (45deg)(A4): 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 0.49 mm.
	Use case	When misalignment occurs at the front staple position on A4R size paper
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-6 to 6
	Unit	0.49 mm
	Appropriate target value	0
	Default value	0
STP-F2		Adj frt staple pstn (45deg)(LTR): 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 0.49 mm.
	Use case	When misalignment occurs at the front staple position on LTR size paper
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-6 to 6
	Unit	0.49 mm
	Appropriate target value	0
	Default value	0

SORTER > ADJUST		
STP-R1		Adj rear staple pstn (45deg)(A4): 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 0.49 mm.
	Use case	When misalignment occurs at the rear staple position on A4 size paper
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-6 to 6
	Unit	0.49 mm
	Appropriate target value	0
	Default value	0
STP-R2		Adj rear staple pstn (45deg)(LTR):Fin-C1
Lv.1	Details	To adjust the one rear staple position on the LTR paper. As the value is incremented by 1, the staple position moves to the rear side by 0.49 mm.
	Use case	When misalignment occurs at the rear staple position on LTR size paper
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-6 to 6
	Unit	0.49 mm
	Appropriate target value	0
	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) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-25 to 25
	Unit	0.1 mm
SDL-STP		Adj of saddle staple position:Fin-C1
Lv.1	Details	To adjust the staple position for saddle stitching.. As the value is incremented by 1, the staple position moves downward by 0.5 mm.
	Use case	When misalignment occurs at the fold position and the staple position for saddle stitching
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-3 to 3
	Unit	0.5 mm
	Appropriate target value	0
	Default value	0

SORTER > ADJUST	
SDL-ALG	Adj of saddle alignment position: Fin-C1
Lv.1	<p>Details To adjust the travel length of the Alignment Plate for saddle stitching. As the value is incremented by 1, the alignment position moves in the push-in direction by 0.5 mm.</p> <p>Use case When misalignment occurs during the saddle stitching</p> <p>Adj/set/operate method Enter the setting value, and then press OK key.</p> <p>Display/adj/set range 0 to 1</p> <p>Unit 0.5 mm</p> <p>Appropriate target value 0</p> <p>Default value 0</p>
ST-ALG1	Adj Stacker A4 size align pstn: Fin-C1
Lv.1	<p>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.</p> <p>Use case When misalignment occurs in A4 size paper</p> <p>Adj/set/operate method Enter the setting value, and then press OK key.</p> <p>Display/adj/set range -10 to 10</p> <p>Unit 0.42 mm</p> <p>Appropriate target value 0</p> <p>Default value 0</p>
ST-ALG2	Adj Stacker LTR size align pstn: Fin-C1
Lv.1	<p>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.</p> <p>Use case When misalignment occurs in LTR size paper</p> <p>Adj/set/operate method Enter the setting value, and then press OK key.</p> <p>Display/adj/set range -10 to 10</p> <p>Unit 0.42 mm</p> <p>Appropriate target value 0</p> <p>Default value 0</p>
STP-F3	Adj A4R frt stpl pstn (<45 deg): Fin-C1
Lv.1	<p>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.</p> <p>Use case When misalignment occurs at the front staple position on A4R size paper</p> <p>Adj/set/operate method Enter the setting value, and then press OK key.</p> <p>Display/adj/set range -6 to 6</p> <p>Unit 0.49 mm</p> <p>Appropriate target value 0</p> <p>Default value 0</p>

SORTER > ADJUST	
STP-F4	Adj LTRR frt stpl pstn (<45 deg): Fin-C1
Lv.1	<p>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.</p> <p>Use case When misalignment occurs at the front staple position on LTRR size paper</p> <p>Adj/set/operate method Enter the setting value, and then press OK key.</p> <p>Display/adj/set range -6 to 6</p> <p>Unit 0.49 mm</p> <p>Appropriate target value 0</p> <p>Default value 0</p>
STP-R3	Adj A4R rear stpl pstn (<45 deg): Fin-C1
Lv.1	<p>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.</p> <p>Use case When misalignment occurs at the rear staple position on A4R size paper</p> <p>Adj/set/operate method Enter the setting value, and then press OK key.</p> <p>Display/adj/set range -6 to 6</p> <p>Unit 0.49 mm</p> <p>Appropriate target value 0</p> <p>Default value 0</p>
STP-R4	Adj LTRR rear stpl pstn (<45 deg): Fin-C1
Lv.1	<p>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.</p> <p>Use case When misalignment occurs at the rear staple position on LTRR size paper</p> <p>Adj/set/operate method Enter the setting value, and then press OK key.</p> <p>Display/adj/set range -6 to 6</p> <p>Unit 0.49 mm</p> <p>Appropriate target value 0</p> <p>Default value 0</p>
SW-UP-RL	Adj of Swing Roller falling pstn: Fin-C1
Lv.1	<p>Details To adjust the Swing Roller down position. As the value is incremented by 1, the Swing Roller down position moves downward by 0.2mm.</p> <p>Use case When paper fails to be transported to the Processing Tray and misalignment occurs</p> <p>Adj/set/operate method Enter the setting value, and then press OK key.</p> <p>Display/adj/set range -17 to 33</p> <p>Unit 0.2 mm</p> <p>Appropriate target value 0</p> <p>Default value 0</p>
PUN-V-RG	[Not used]
Lv.1	Details -

SORTER > ADJUST	
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
	1.4 mm
	Appropriate target value
	0
	Default value
	0
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 papers are not stacked accurately.
	Use case
	When downward curl occurs on the paper delivered to the Stack Tray, and papers are not stacked accurately
	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 at the time of heavy paper delivery. 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 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	
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
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

SORTER > ADJUST		
TRY-NIS		Set tray switch noise reduct mode:Fin-C1
Lv.1	Details	Set 1 when the operation noise at the time of switching the Stack Tray is loud. When 1 is set, the Stack Tray rise operation becomes slow.
	Use case	When the operation noise at the time of 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	
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
	FIN-NIS	
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	
Lv.1	Details	Set 1 when setting Offset and Collate for 1-sheet document.
	Use case	When setting 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	
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 saddle stitching
	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		
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: OFF, 1: ON
	Default value	0
	SFT-AMT1	
Lv.1	Details	To adjust the front shift amount of the Shift Roller. As the value is incremented by 1, the Shift Roller moves toward the guide by 0.1 mm.
	Use case	When the front shift amount of the paper is inappropriate
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 50
	Unit	0.1 mm
	Appropriate target value	0
	Default value	0
SFT-AMT2		Adj shft amnt of Shft Roll(Rear): 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 toward the guide by 0.1 mm.
	Use case	When the rear shift amount of the paper is inappropriate
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-50 to 50
	Unit	0.1 mm
	Appropriate target value	0
	Default value	0
STP-NTN		Adj of Staple Needle pitch (A4): Fin-A1
Lv.1	Details	To adjust the pitch between needles for 2-point stapling. As the value is incremented by 1, the pitch between needles becomes wider by 0.27 mm.
	Use case	When the pitch between needles for 2-point stapling is inappropriate
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-8 to 8
	Unit	0.27 mm
	Appropriate target value	0
	Default value	0

SORTER > ADJUST		
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 0.1 mm.
	Use case	When misalignment occurs at the front staple position
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-50 to 50
	Unit	0.27 mm
	Appropriate target value	0
	Default value	0
	INSTP-R1	
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 0.1 mm.
	Use case	When misalignment occurs at the rear staple position
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-50 to 50
	Unit	0.27 mm
	Appropriate target value	0
	Default value	0

T-8-84


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 the necessary setting values. - RAM clear is executed after the main power is turned OFF/ON.
	Related service mode	COPIER> FUNCTION> MISC-P> P-PRINT

T-8-85

 OPTION

SORTER > OPTION		
BLNK-SW	Set Saddle Finisher fold position margin	
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: Fin-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 - 1 0: OFF (Buffer operation), 1: ON (Buffer NOT operation)
	Default value	0
	Supplement/memo	This setting can be also made with DIP switch of the Finisher. For details, refer to the Service Manual for Finisher.
STCR-DWN	Set occasional misalign prev mode:Fin	
Lv.1	Details	When misalignment in feed direction occurs at approx. every 30 sheets for thin/plain paper (105g/m ² and less), set 1.
	Use case	When misalignment in feed direction occurs occasionally for thin/plain paper
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0

T-8-86

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	0
SURF-OFF	UFR board function ON/OFF	
Lv.1	Details	To set ON/OFF of the function according to the SURF board connection status.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON

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
	Supplement/memo	The toner reduction function is constantly enabled as default. Toner color is limited to 2.1 colors when genuine Canon profile is used, but it may become 2.1 colors or more when a custom profile is used for PS data. Therefore, it is limited to 2.1 colors by the toner reduction function.

T-8-87

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

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

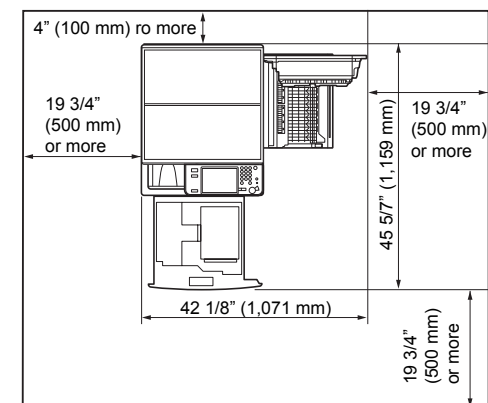
Selecting an Installing Location

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.

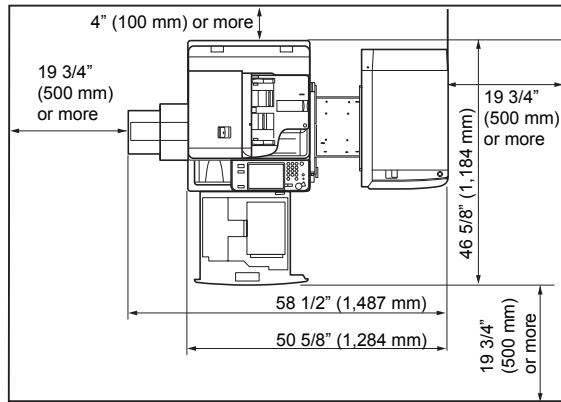
- 1) There must be a power outlet properly grounded and rated as indicated (+, -10%) for exclusive use by the machine.
- 2) Environment of the installation site must be within the range indicated below. Avoid any area near the faucet, the water heater, the humidifier, or the refrigerator.
 - Operation/image 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) Room odor can be bothering when running the machine for a long time in a poorly-ventilated room although the ozone amount generated while running this equipment does not harm human health. Be sure to provide adequate ventilation of the room to keep the work environment comfortable.
- 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-B2



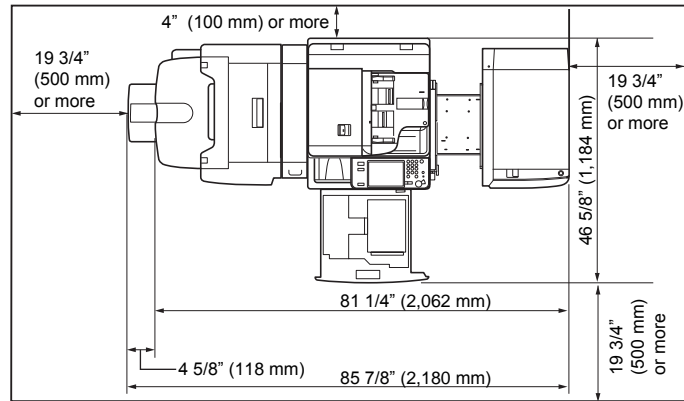
F-9-3

- Duplex Color Image Reader Unit-B1+Inner Finisher-A1+and Paper Deck Unit-B1



F-9-4

- Duplex Color Image Reader Unit-B1+External 2/3 Hole Puncher-B1+Booklet Finisher-C1+Buffer Pass Unit-G1+ Paper Deck Unit-B1



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 plate 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 175kg. 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.
- When installing the USB Device Port-B1, install it before installing the following options.

	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	-

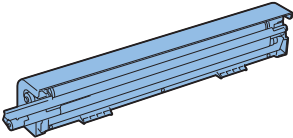
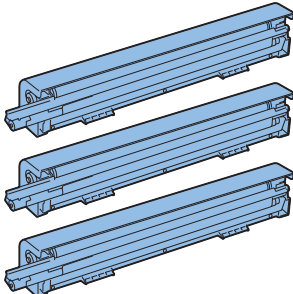
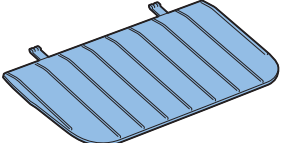
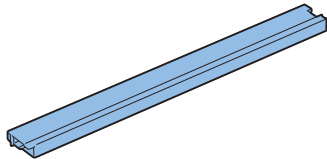
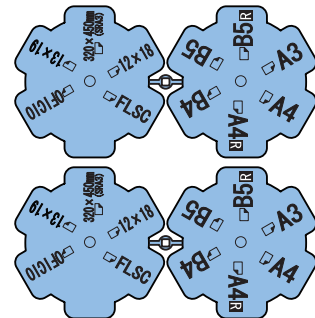
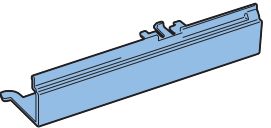
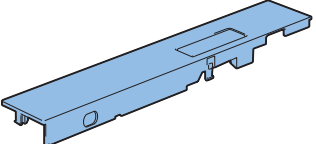
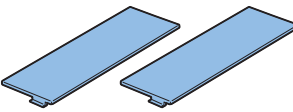
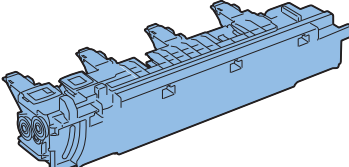
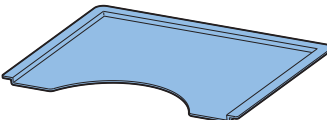
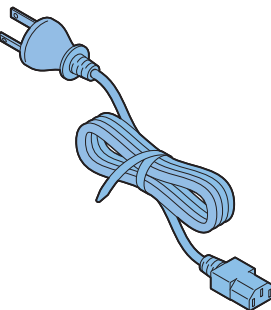
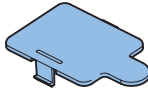
yes: Available no: Unavailable

T-9-1

Checking the Contents

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.

<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"/> *1 [4] 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"/> *2 [9] Waste Toner Container X 1 	<input type="checkbox"/> [10] Service Book Case X 1 
<input type="checkbox"/> *3 [12] Power Cable X 1 	<input type="checkbox"/> *4 [13] Environment Heater Cover X 1 			

*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

F-9-6

<CD/Guides>

Check the contents against the following

	North America	EUR	SPL/Taiwan	AUS	Korea	China
e-Manual	1	3 (UK, FS, IG)	1	1	1	1
Users Guide	-	1	-	-	-	-
Quick Reference	1	-	1	1	1	1
Frequently Asked Questions	1	-	1	1	1	1
Getting Started	1	-	1	1	1	1
Registration for Purchase in USA	1	-	-	-	-	-
Drum Unit Warranty	1	-	-	-	-	-
Installation Check List	1	-	-	-	-	-
Users Guide	-	1	-	-	-	-
MEAP Administration Software CD *1	1	1	1	1	1	1
UFR II User Software CD	1	1 (Only when Merchandise Code ends with "005AA", "005AB".and "005AD".)	1	1	1	1
PCL User Software CD	-	1 (Only when Merchandise Code ends with "005AA", "005AB"and "005AD".)	-	-	-	-
PS User Software CD	-	1 Only when Merchandise Code is "3614B005AB", "3615B005AB", "3614B005AD" and "3615B005AD".	-	-	-	-
Maintenance Guide	1	-	1	1	1	1
How to Use the Manuals	1	5 (UK, FRA, SPA, ITA, GER)	1	1	1	1
AMS Kit	1	-	-	-	-	-
Register/Update Software Administrator Guide *1	1	1	1	1	1	1
Main Unit Warranty	-	-	-	-	1	-
Service Log BOOK	-	-	-	-	-	1
Chinese Warranty Sheet	-	-	-	-	-	1
Guarantee Card	-	-	-	-	-	1
iW MC CD *2	1	1	1	1	1	1
PANTONE Manual CD *2	1	1	1	1	1	1
Blue Angel Notice *2	-	1	-	-	-	-

*1 Supplied with the current machines

T-9-2

*2 Supplied with the Upgraded Machines. Mercury code : 3614B003AE, 3614B004AD, 3614B005AD, 3614B006AE, 3614B007AE, 3614B008AE, 3614B010AE, 3614B011AE, 3615B003AE, 3615B004AD, 3615B005AD, 3615B006AE, 3615B007AE, 3615B008AE, 3615B010AE, 3615B011AE, 3616B003AE, 3616B004AD, 3616B005AD, 3616B006AE, 3616B007AE, 3616B010AE, 3616B011AE, 3616B008AE, 3617B003AE, 3617B004AD, 3617B005AD, 3617B006AE, 3617B007AE, 3617B010AE, 3617B011AE, 3617B008AE

Unpacking



1) Unpack the host machine.

NOTE:

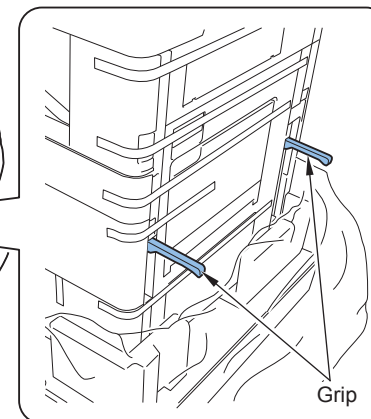
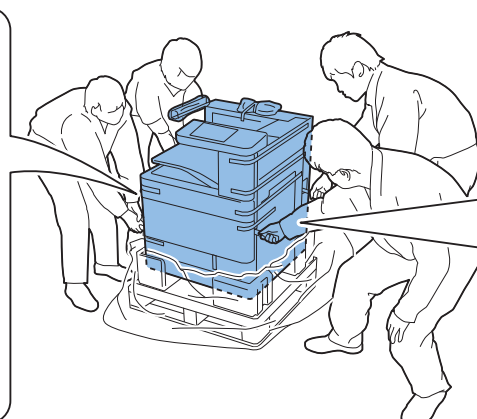
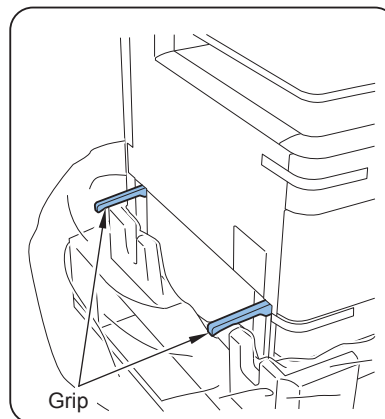
When installing the cassette pedestal, be sure to place the host machine on the cassette pedestal. (See the Installation Procedure of the cassette pedestal)



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 175kg. 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.

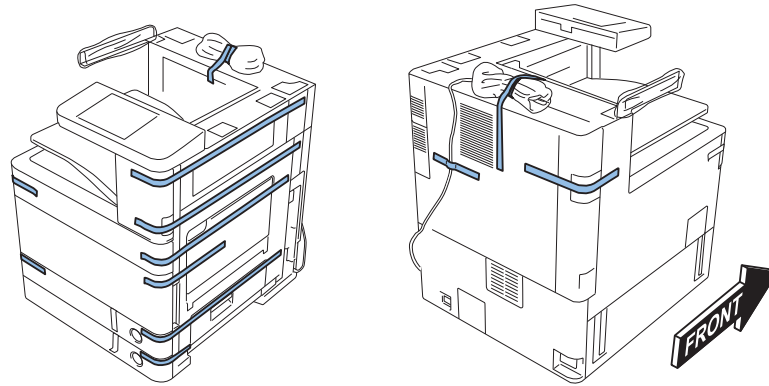


F-9-7

- 3) Remove all the tapes attached to the host machine.

CAUTION:

Tapes on the Cassette area are peeled off in later steps.

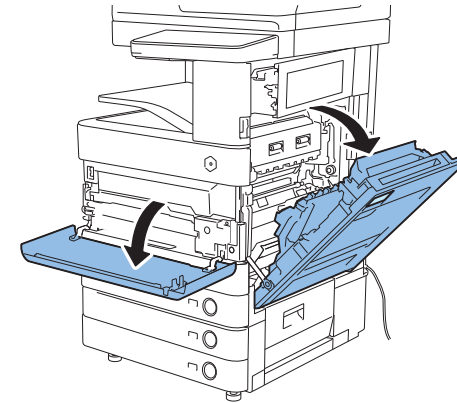


F-9-8

-
- NOTE:**
- When setting up for the copier model, refer to the "Duplex Color Image Reader Unit-B1, Color Image Reader Unit-B1/B2 installation procedure".
 - When setting up for the printer model, refer to the "Printer Cover - C1" stated in this procedure.

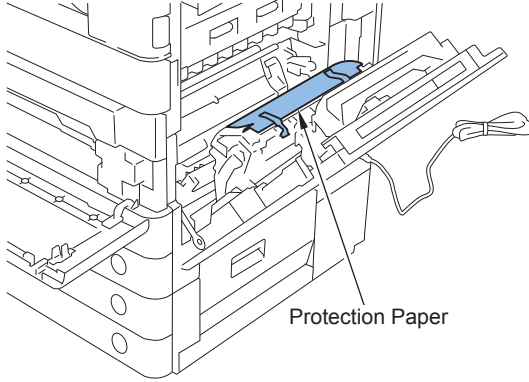
- 4) Pull out the Cassettes 1 and 2, and remove the tapes from them.

- 5) Open the Front Cover and the Right Lower Cover.



F-9-9

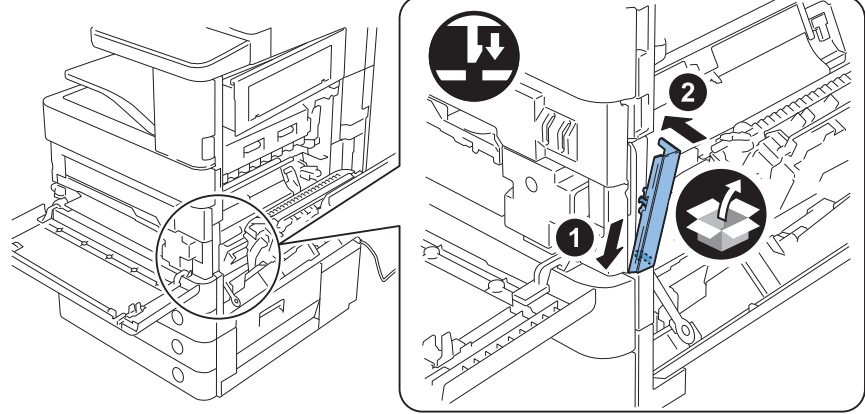
6) Peel off the Protection Paper.



Protection Paper

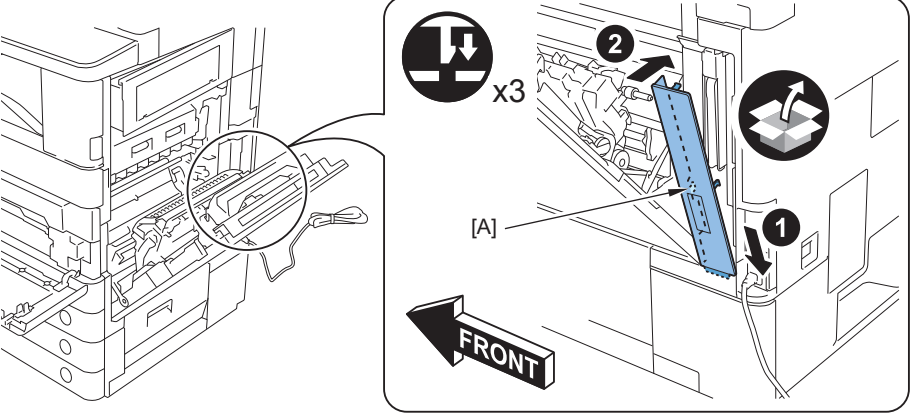
F-9-10

7) 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-9-11

8) Insert the protrusion in 1 place. While pushing down [A] claw, insert the claw in 3 places, and install the Right Rear Cover 3.

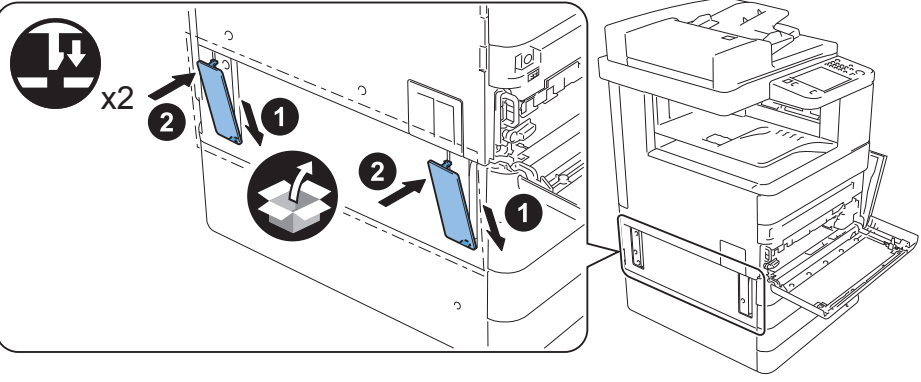


FRONT

F-9-12

9) Install the 2 Left Handle Covers.

- 1 protrusion each
- 1 claw each

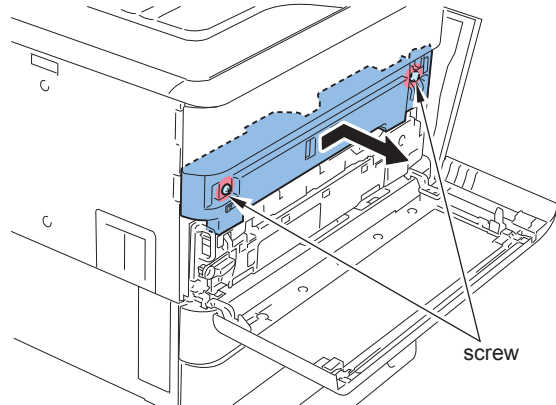


F-9-13

Installation Procedure

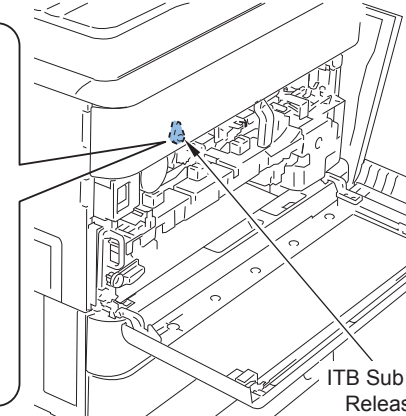
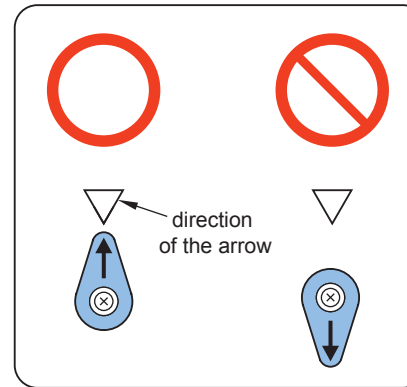
Installing the Drum Unit

- 1) Remove the ITB Cover.
• 2 screws (to loosen)



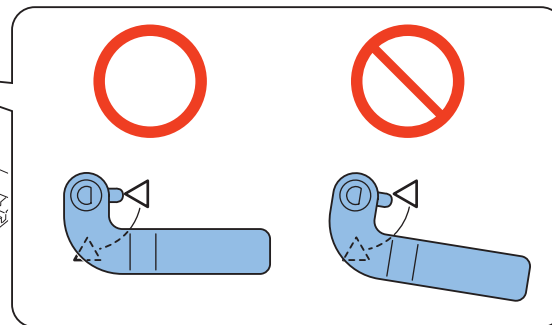
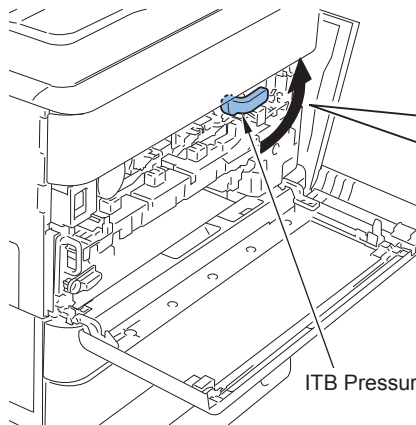
F-9-14

- 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.



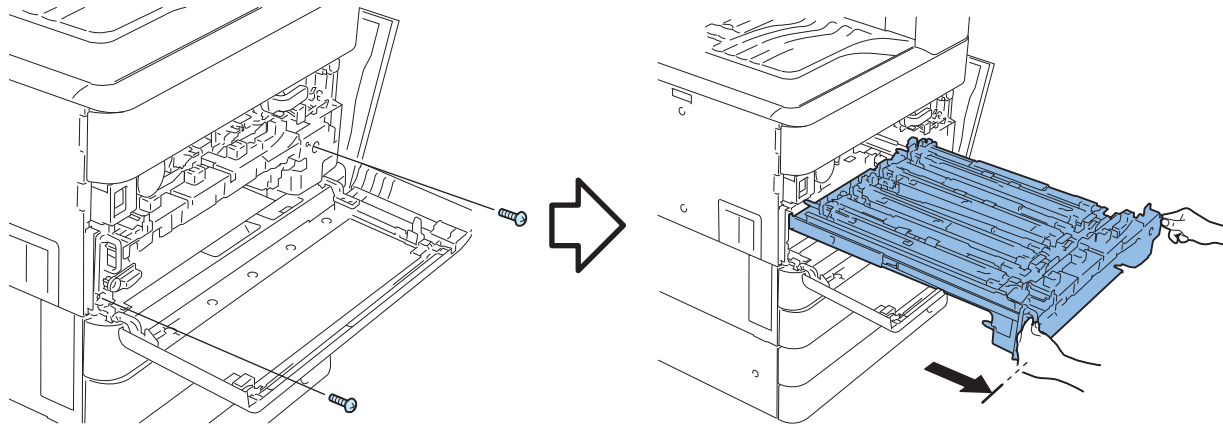
F-9-15

- 3) 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 release the pressure ITB.



F-9-16

4) Pull out the Process Unit until it stops.



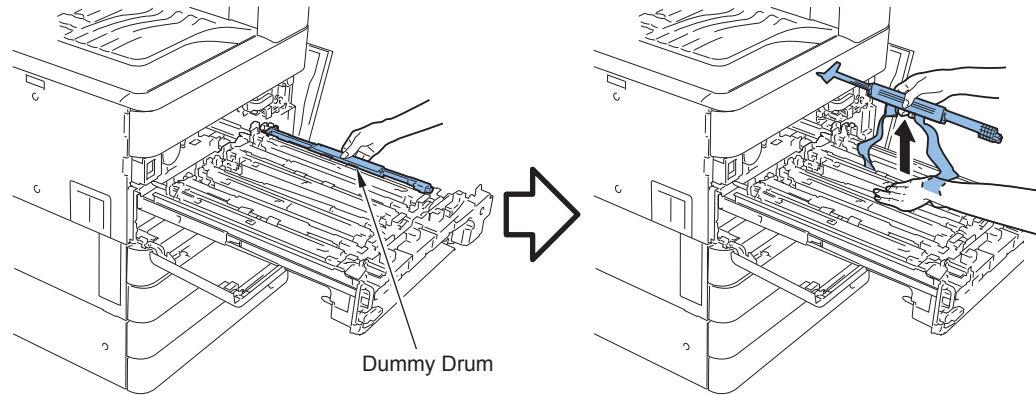
F-9-17

5) 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:

If diagonally pulled out, the seal might be damaged. Be sure to pull it out flatly in upper direction, and carefully.

Likely, remove the Drum of each color.



Dummy Drum

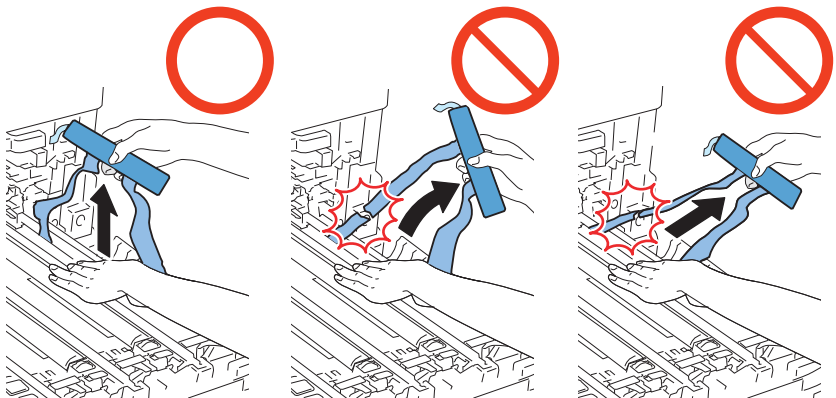
F-9-18

CAUTION: Points to Note when Removing the Dummy Drum

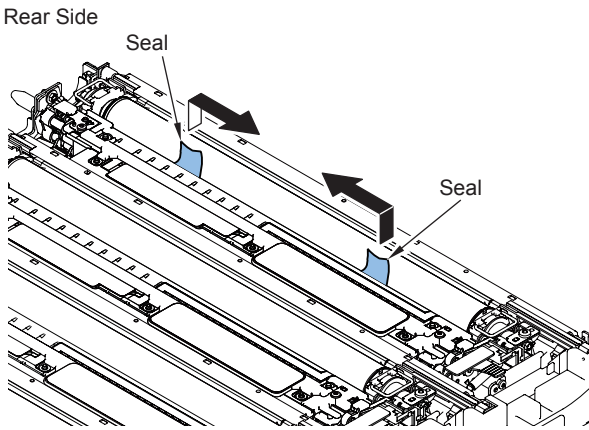
When removing the Dummy Drum, be sure to lift it slowly and vertically.

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-9-19



Rear Side

Seal

Seal

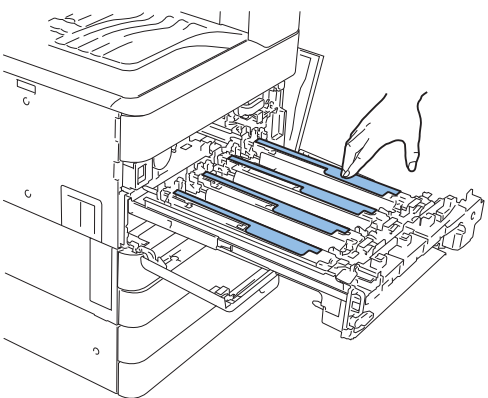
Front Side

F-9-20

6) 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-9-21

CAUTION:

Be sure to pay attention to the below in doing the next procedure.

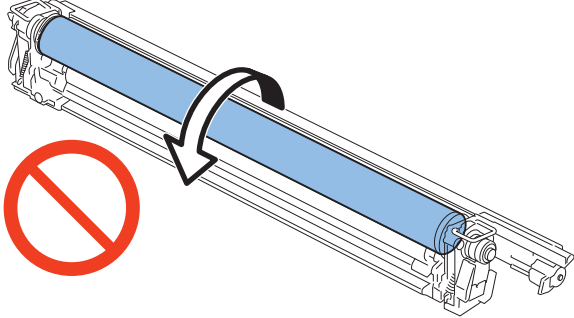
- Do not touch the Drum area.
- Do not make the Cover to be in contact with the Drum area.
- Do not make the Drum area disposed of light for 5 minutes or more.

NOTE:

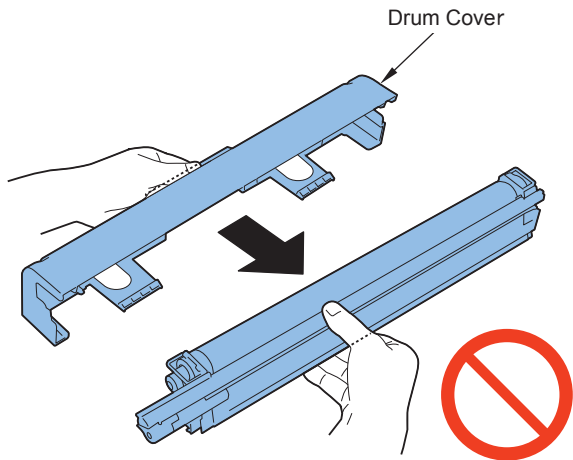
Step 7) to 8) is to install the Drum Unit of each color.

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-9-22



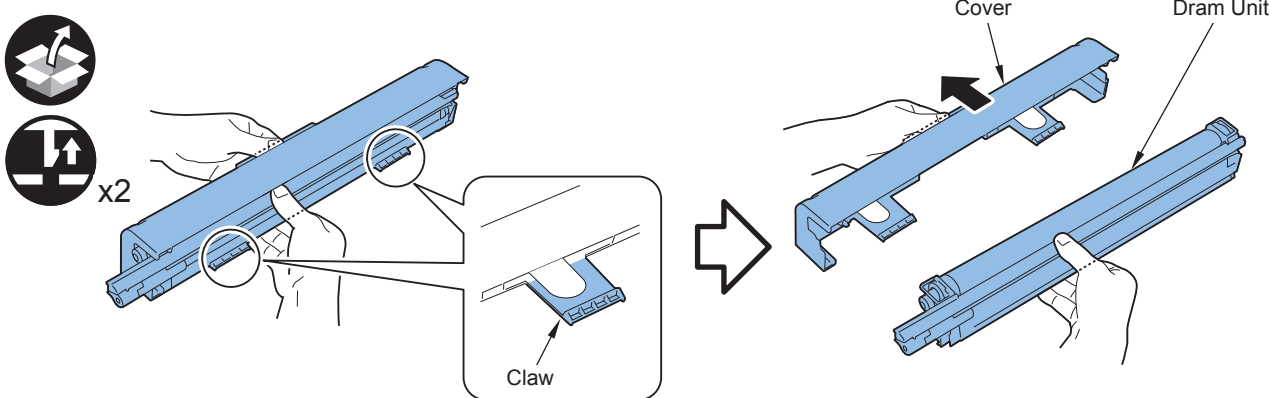
Drum Cover

F-9-23

7) Unpack the Drum Unit, and remove the cover from the Drum Unit.

- Claws 2pc

CAUTION:
The cover might be stiff, so proceed with extra care when removing the cover from the Drum Unit.



Claw

Cover

Drum Unit

F-9-24

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).

The diagram illustrates the components and installation of the drum unit. On the left, three green drums are labeled 'Drum for Color (Green)' and one blue drum is labeled 'Drum for Bk (Blue)'. On the right, a cross-sectional view of the printer's drum assembly shows the 'Position of Drum for Bk' (blue) and 'Position of Drum for Color' (green).

F-9-25

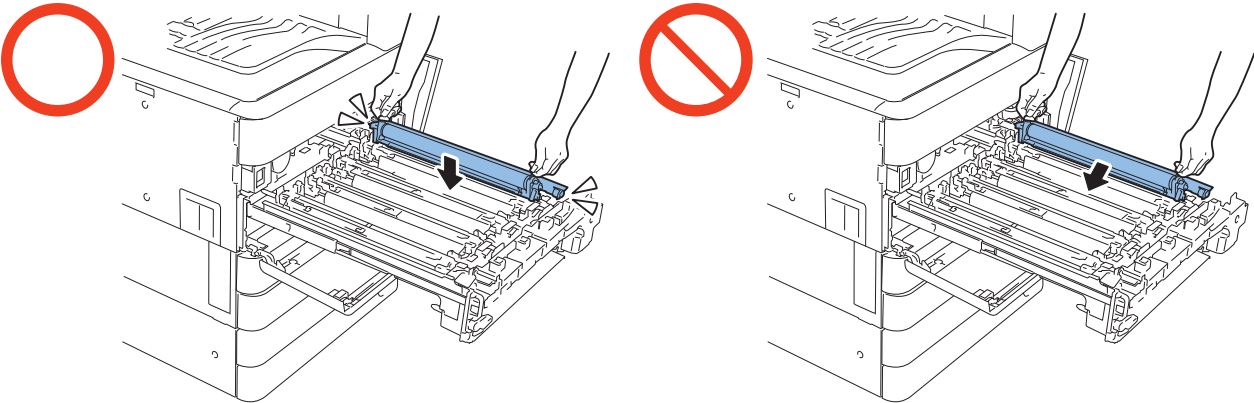
NOTE:
Hold the handles at right and left of the Drum Unit.

The diagram shows a hand holding a drum unit by its handles. A callout box labeled 'Grip' points to the handle mechanism. The main diagram shows the drum unit being inserted into the printer's drum assembly.

F-9-26

☐

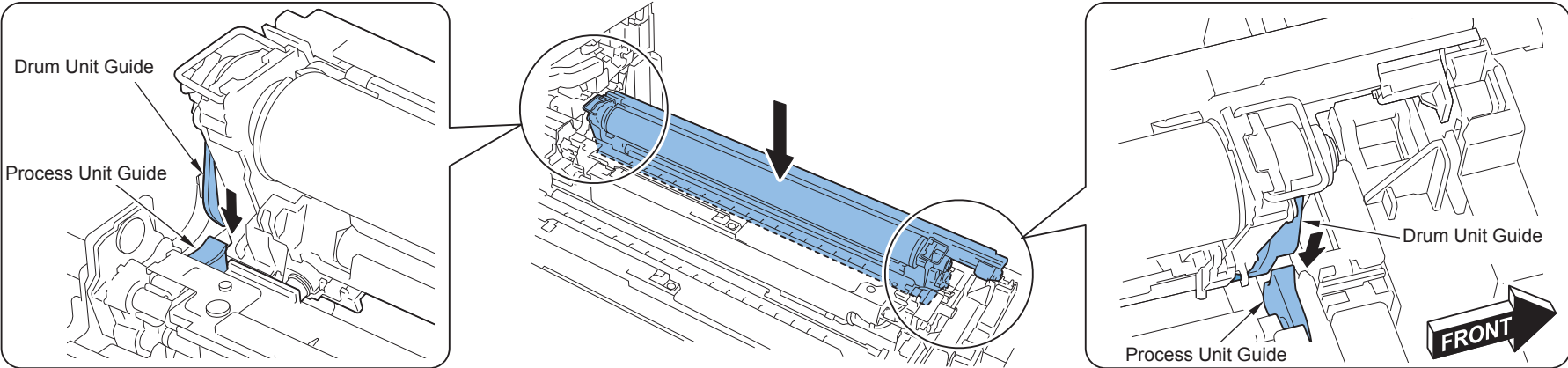
CAUTION:
If pushing it in the angle, the shutter may break. Thus make sure to install it from just above.



F-9-27

☐

8) Fit the guide of the Process Unit to the guide of the Drum Unit to install the Drum Unit.



Drum Unit Guide

Process Unit Guide

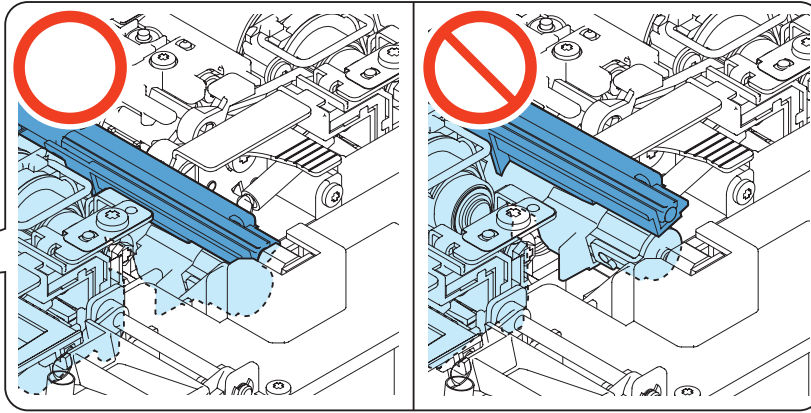
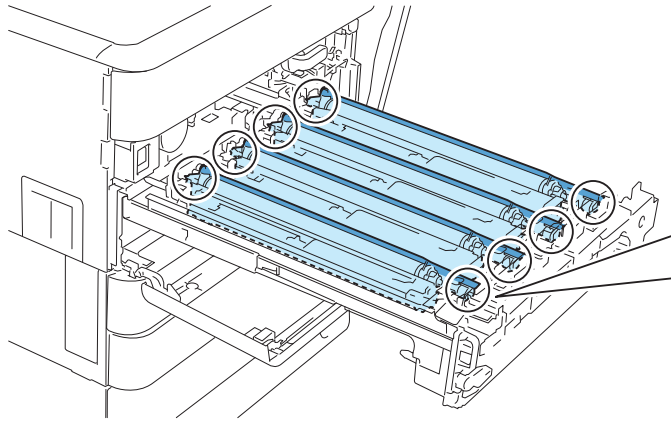
Drum Unit Guide

Process Unit Guide

FRONT

F-9-28

9) Check that the 8 LED light-receiving areas of the Drum Unit are not off from the base.

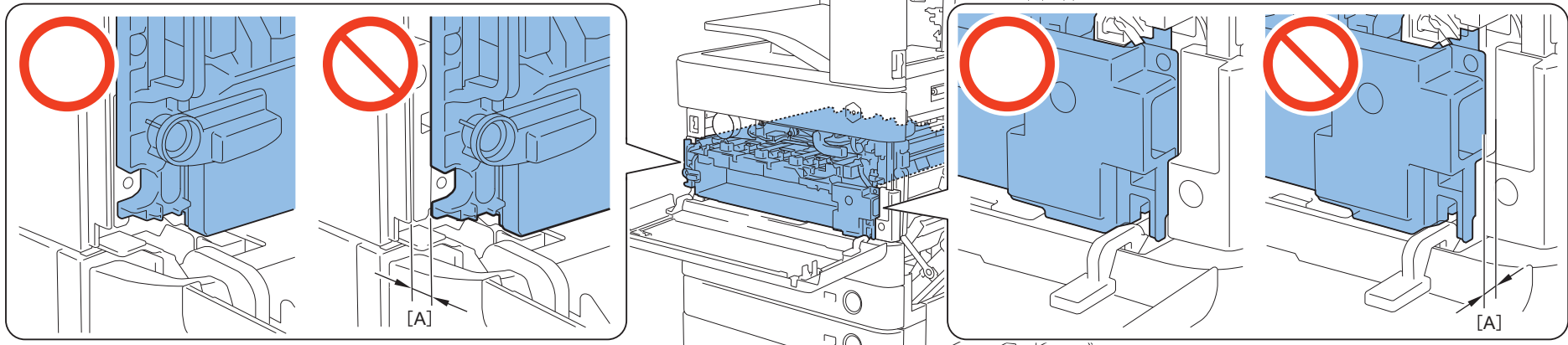


F-9-29

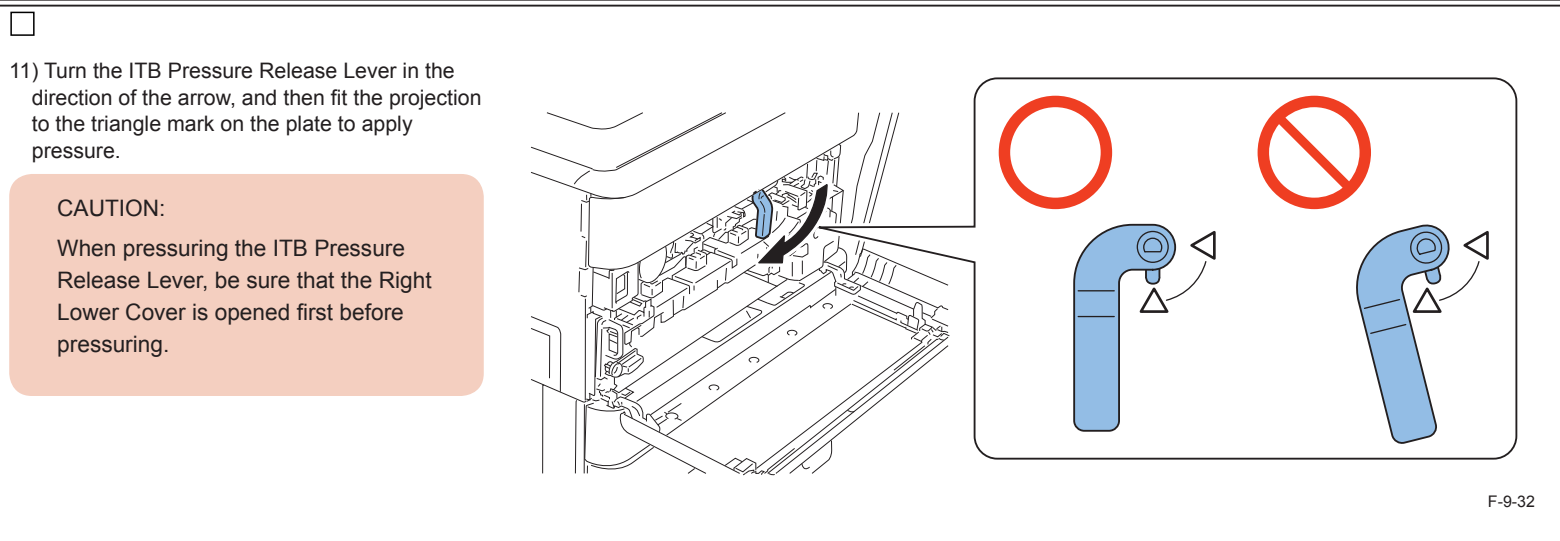
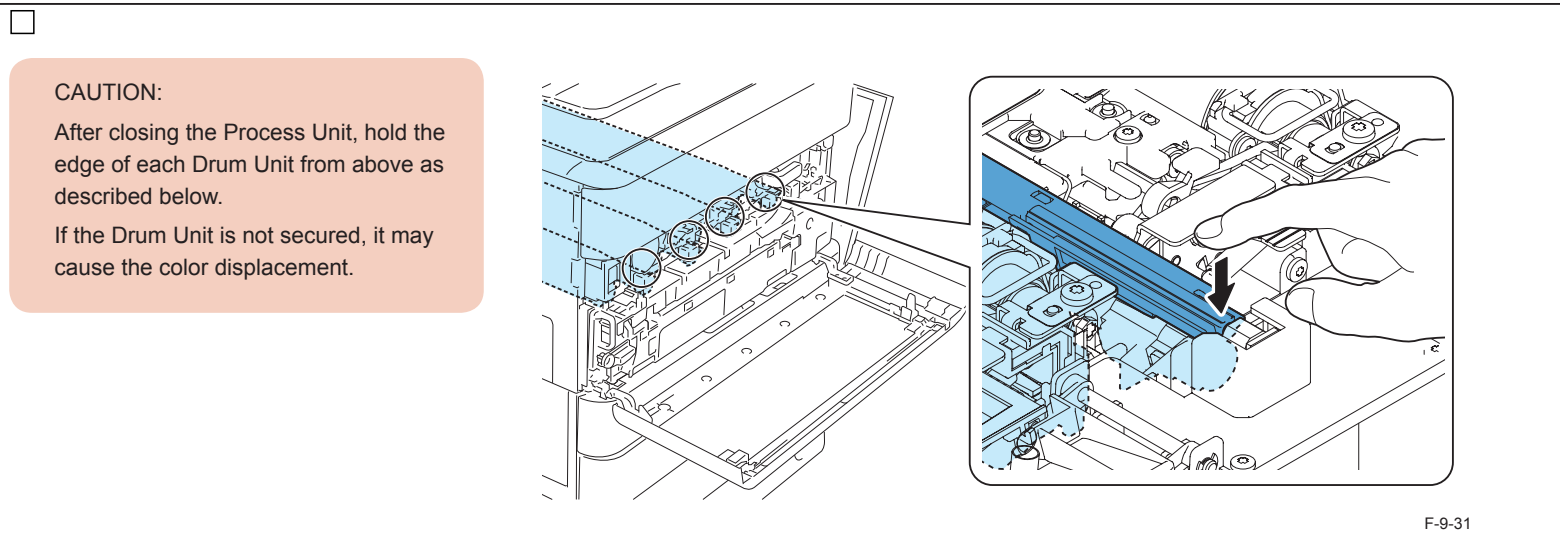
10) Put the Process Unit back to the host machine, and secure with the 2 screws.

CAUTION:

Check that there is no gap between the host machine and the Process Unit, and then secure with the screw.

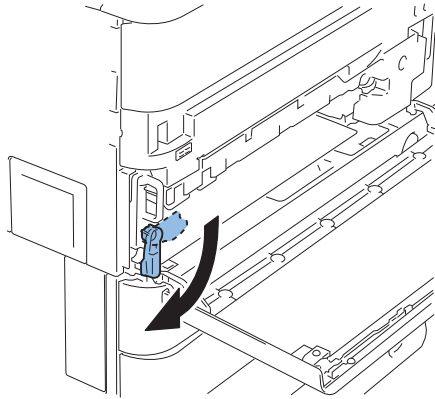


F-9-30



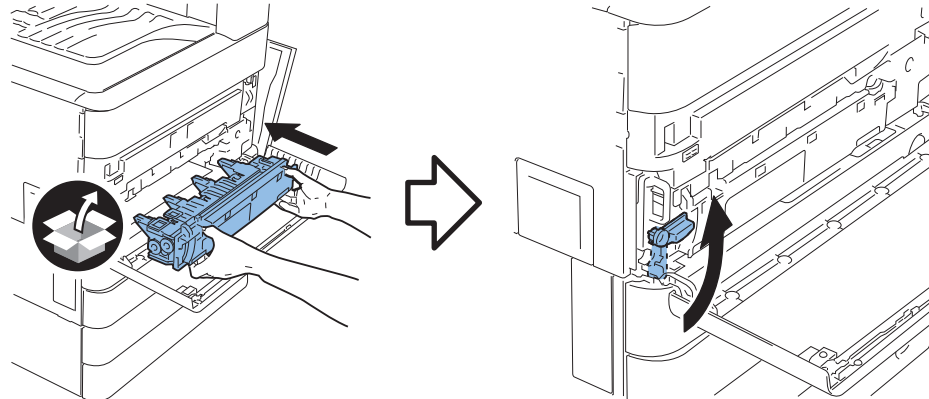
- 12) Install the ITB Cover, and tighten the 2 screws (which have been loosened).

- 13) Release the Waste Toner Lock Lever.



F-9-33

- 14) Set the Waste Toner Container, and then put the Lever back.



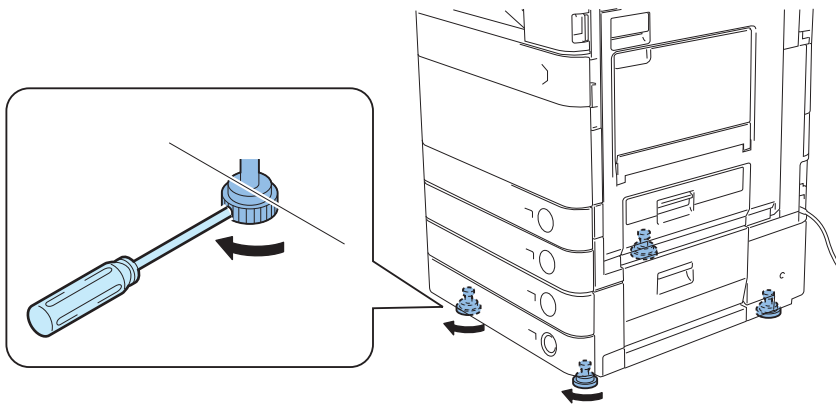
F-9-34

- 15) 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 host machine to installing position, turn the 4 adjusters of the pedestal with screwdriver, and secure this host machine.



F-9-35

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.

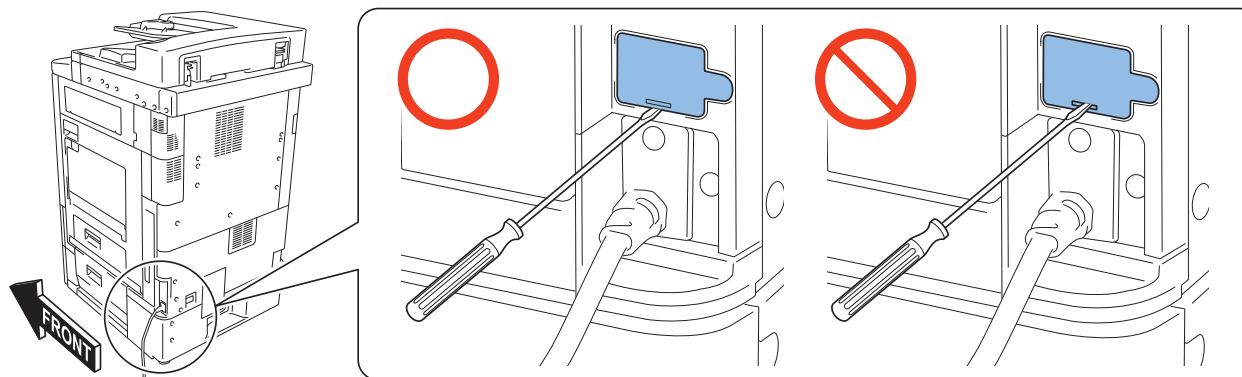
* This is the case that the value of the absolute water volume in the machine is about 12g or more. Service Mode > COPIER > DISPLAY > ANALOG > ABS-HUM

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.

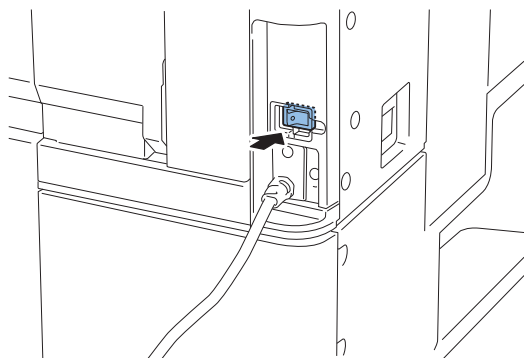
CAUTION:

When removing the cover, do not insert a screwdriver in the oval hole.



F-9-36

- 2) Turn ON the Environment Heater Switch.



F-9-37

- 3) Install the Environment Heater Switch Cover.

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.

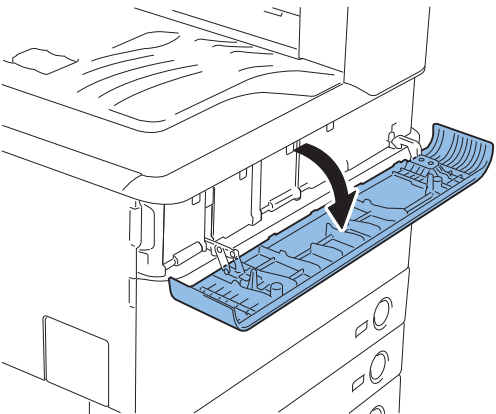
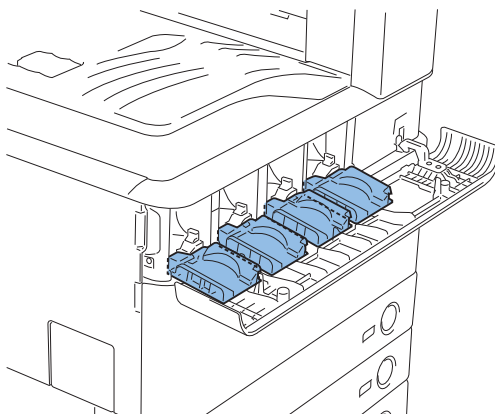
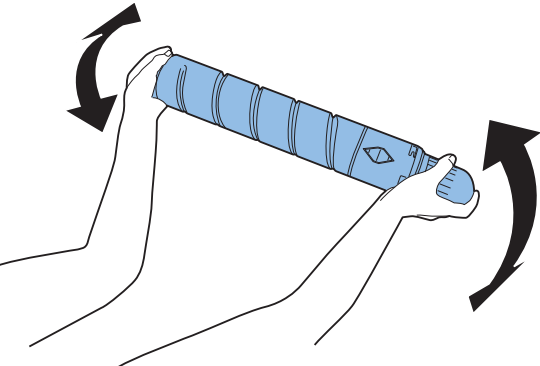
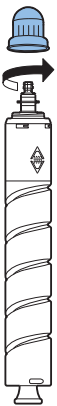
NOTE:

- 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 refill is executed in a row.
- Even turning OFF the main power during drum initialization, developing assembly initialization and toner refill, they will be re-executed when turning ON the power again.

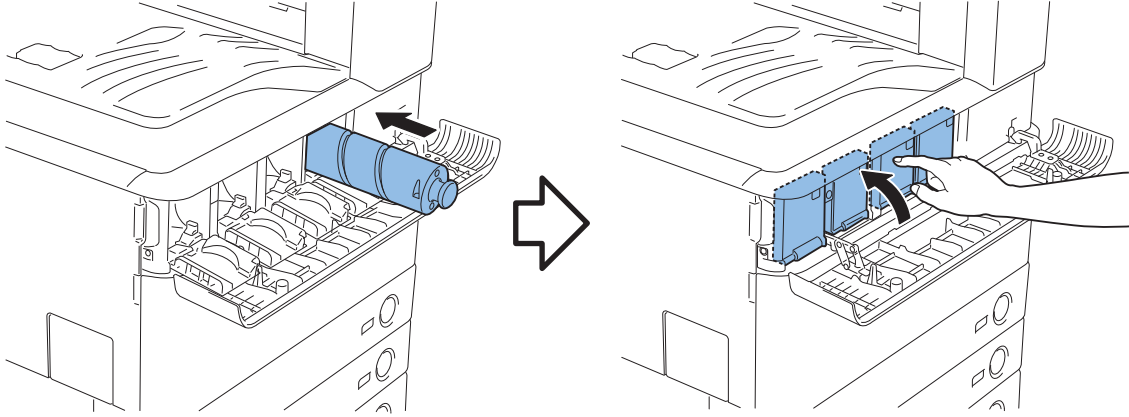
- 4) After activation, follow the instruction in the Control Panel, and press the shut down key in the Control Panel.
- 5) Turn ON the main power switch.
- 6) Enter the following Service Mode, make sure that the setting value is "1".
 - COPIER > OPTION > FNC-SW > W/SCNR
- 7) Set the value of the following Service Mode.
COPIER > OPTION > CUSTOM > SCANTYPE
 - Setting Value "0" Color Image Reader Unit-B1/ B2
 - Setting Value "1" Duplex Color Image Reader Unit-B1
- 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.

<p><input type="checkbox"/> 9) Open the Toner Cover.</p>  <p>F-9-38</p>	<p><input type="checkbox"/> 10) Add check marks to each color displayed on the operation screen, and press [Remove Toner Cartridges] to open the Toner Replacement Cover.</p>  <p>F-9-39</p>	
<p><input type="checkbox"/></p> <p>NOTE: Step 11) to 13) is to install the Toner Container of each color.</p>	<p><input type="checkbox"/> 11) Hold the Toner Container as the figure below, and shake it approximately 10 times.</p>  <p>F-9-40</p>	<p><input type="checkbox"/> 12) Remove the Protection Cap of the Toner Container while rotating it to the direction of the arrow.</p>  <p>F-9-41</p>

13) Insert the Toner Container all the way in, and close the Toner Exchange Cover.



F-9-42

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

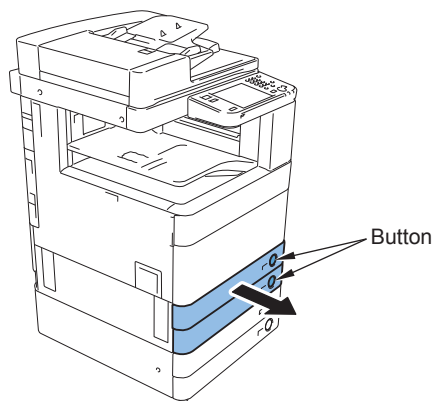
-
- 1) Turn OFF the main power switch of the host machine.
 - 2) Be sure that Control Panel Display and Main Power Lamp are both turned OFF, and then disconnect the power plug.

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.

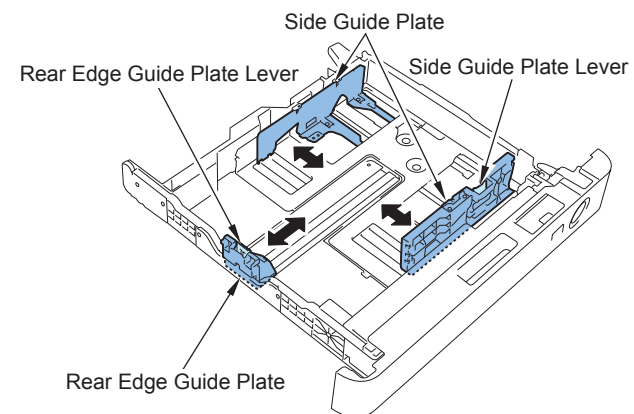
Cassette Setting

- 1) Press the Cassette Release Button, and pull out the Cassette 1 and 2 toward the front.



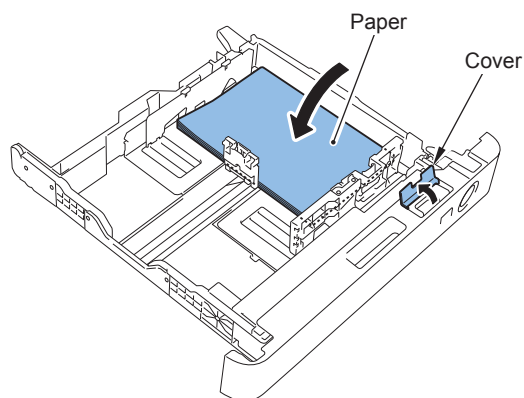
F-9-43

- 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.



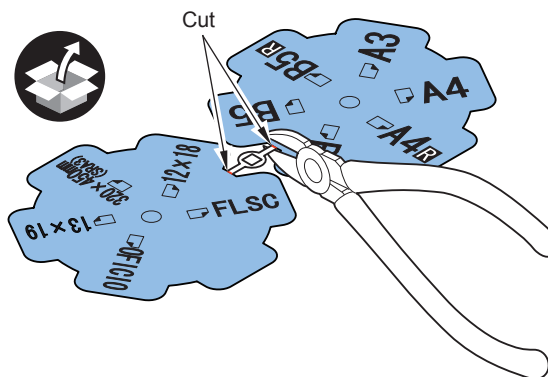
F-9-44

- 4) Set papers.
- 5) Open the cover from which the Size Plate is pushed in.



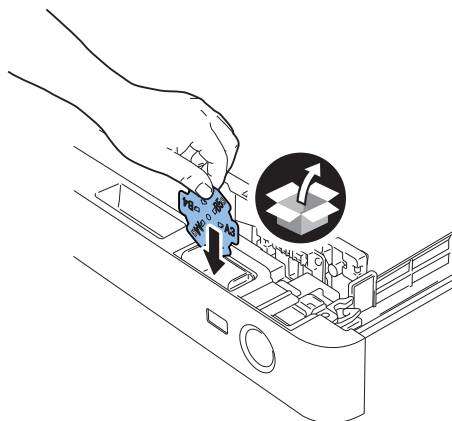
F-9-45

- 6) Cut 2 places of the Size Plate with nippers.



F-9-46

- 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.)



- 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 > COPIER > DISPLAY > HV-ST5 > THCK-Y
- Service Mode > COPIER > DISPLAY > HV-ST5 > THCK-M
- Service Mode > 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 > COPIER > FUNCTION > DPC > DRMRSETY
 - Service Mode > COPIER > FUNCTION > DPC > DRMRSETM
 - Service Mode > 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 > COPIER > ADJUST > DENS > CONT-Y
- Service Mode > COPIER > ADJUST > DENS > CONT-M
- Service Mode > COPIER > ADJUST > DENS > CONT-C
- Service Mode > 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 > COPIER > ADJUST > DENS > SGNL-Y
- Service Mode > COPIER > ADJUST > DENS > SGNL-M
- Service Mode > COPIER > ADJUST > DENS > SGNL-C
- Service Mode > COPIER > ADJUST > DENS > SGNL-K

NOTE:

Setting the ADF before executing Auto Adjust Gradation.
Refer to the "After installation setting" in the "the Duplex Color Image Reader Unit-B1, Color Image Reader Unit-B1/B2 installation procedure".

Execute the ITB Equilibrium Position Detection

In the case that the floor surface is either warped or uneven, execute the following work.

- 1) Check that the main body is in standby state.
- 2) Execute the ITB Equilibrium Position Detection Service Mode (COPIER > FUNCTION > MISC-P > ITB-INIT). This service mode will take approx. 2 to 3 minutes.
- 3) Check that the value of the following service mode is "-300 to +450".
COPIER > DISPLAY > MISC > ITB-POS

If the value is out of the range, be sure to perform the following procedure.

- If the value is larger than "+450": lift the left front side of the main body.
 - If the value is smaller than "-300": lift the right front side of the main body.
- Execute the ITB Equilibrium Position Detection Service Mode again, and check the value.

NOTE:

Change in equilibrium position per revolution of the adjuster: 80 to 100

Auto Adjust Gradation

Execute the auto gradation adjustment to the following 3 modes: [Plain], [Heavy 1/Heavy 2], and [Heavy 3].

CAUTION:

When using paper type to which auto gradation adjustment is not executed, image failure or damage on the hostmachine may occur.

■ When "Plain" paper is used

- 1) Clean the surface of copyboard glass.
- 2) Set A3, A4, 11×17 or LTR paper in the cassette.
- 3) Select [Settings/Registration] > [Adjustment/Maintenance] > [Adjust Image Quality] > [Auto Adjust Gradation] > [Plain] > [Full Adjust].
- 4) Select the cassette for the test print and press "OK".
- 5) Then, follow the direction displayed on UI.

■ When "Heavy1/Heavy2" paper is used

- 1) Clean the surface of copyboard glass.
- 2) Set the heavy paper in the cassette.
- 3) Select [Settings/Registration] > [Adjustment/Maintenance] > [Adjust Image Quality] > [Auto Adjust Gradation] > [Heavy1/Heavy2] > [Full Adjust].
- 4) Select the cassette for the test print and press "OK".
- 5) Then, follow the direction displayed on UI.

■ When "Heavy3" paper is used

- 1) Set the heavy paper on the Multi-purpose Tray.
- 2) Select [Settings/Registration] > [Adjustment/Maintenance] > [Adjust Image Quality] > [Auto Adjust Gradation] > [Heavy3] > [Full Adjust].
- 3) Select the cassette for the test print and press "OK".
- 4) Then, follow the direction displayed on UI.

Adjusting Image Position

NOTE:

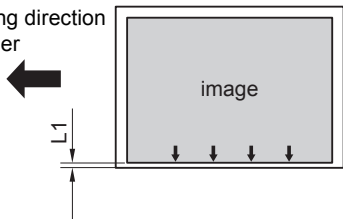
The second side of the 2-sided copy mentioned later means the second side in the image formation order.

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 ± 1.5 mm.

Feeding direction of paper

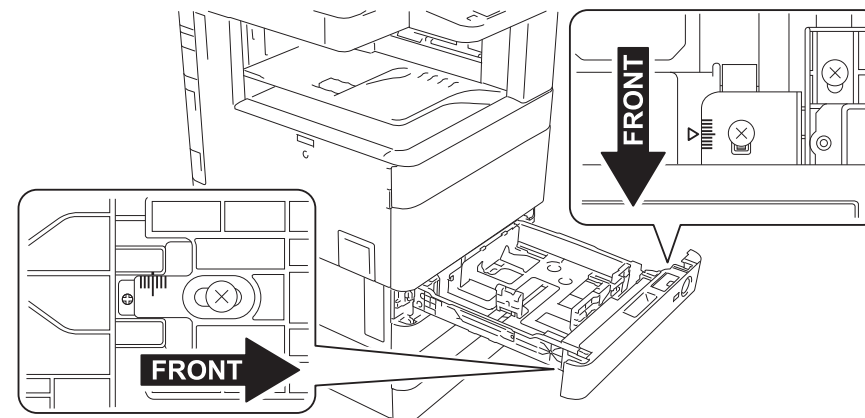


F-9-48

- 2) Pull out the cassette.
3) Check the 2 scale positions on the adjusting plates.

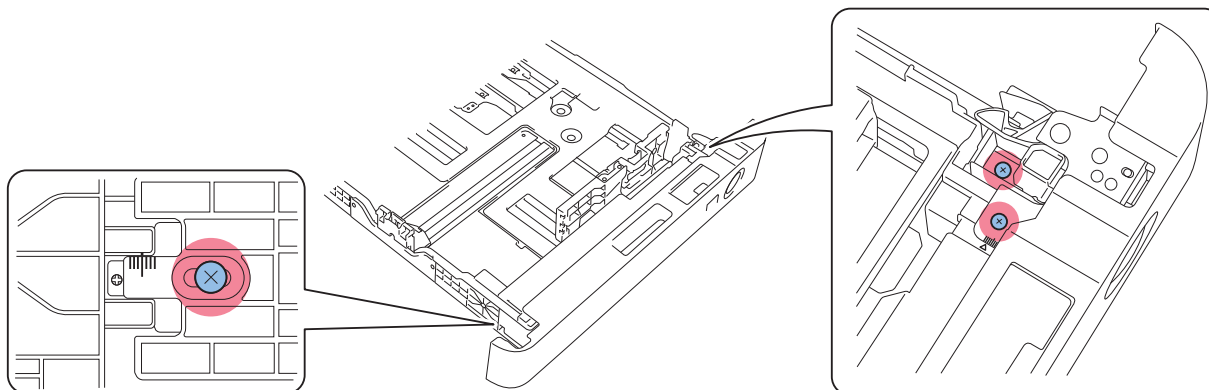
NOTE:

Adjustment method is same for both the Cassette 1 and 2.



F-9-49

- 4) Loosen the 3 fixing screws.

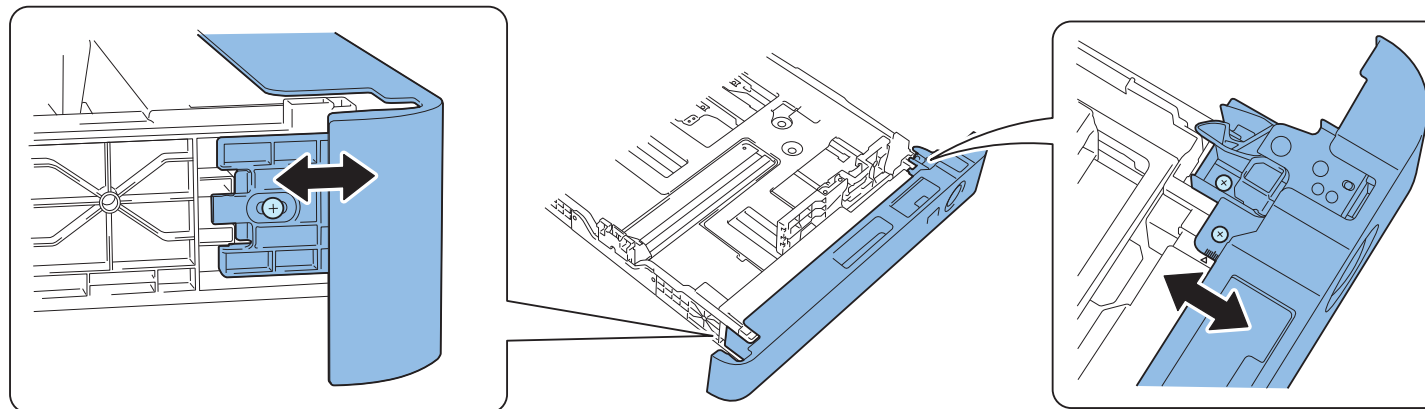


F-9-50



- 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.

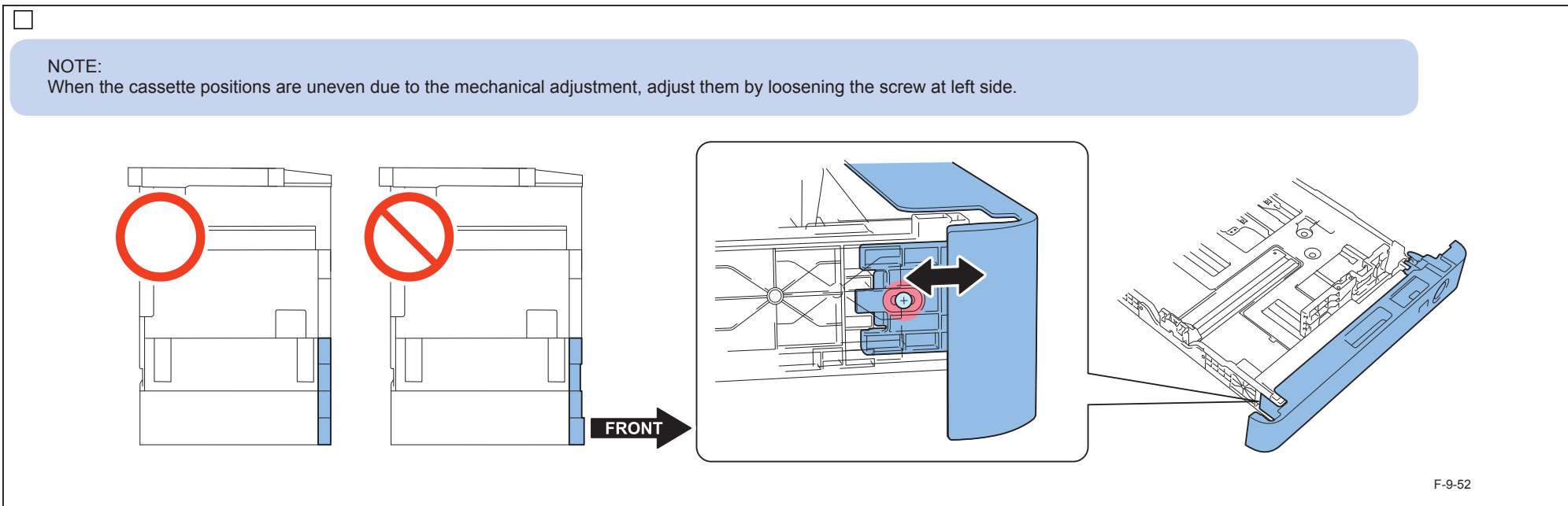
NOTE:
When moving the scale, be sure that the amount of the value to be moved are the same for the 2 points.



F-9-51



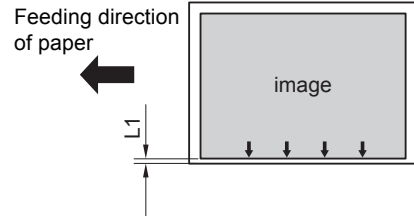
- 6) Tighten the fixing screw.
7) Return the cassette to its original position.



-
- 8) Make copies using the Cassette 1 and 2, and check that the left edge margin is 2.5 ± 1.5 mm.

Margin Adjustment (2nd side)

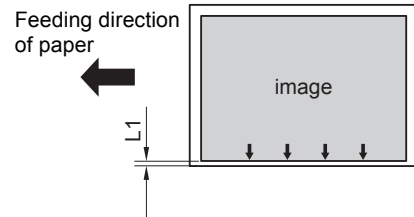
- 1) Make 2-sided copy from cassette 1, and check that the left margin is 2.5 +/- 2.0mm.



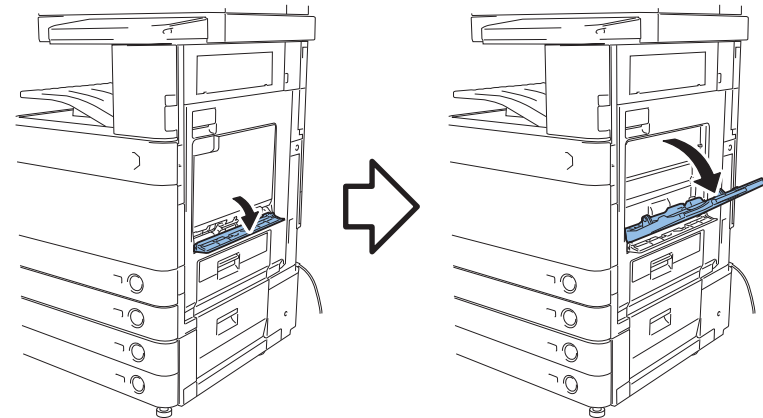
- 2) If the left margin is out of the specification, change the adjustment value for the left margin on the 2nd side in cassette 1.
COPIER > ADJUST > FEED-ADJ > ADJ-C1RE; 1 increment of the value reduces the left margin by 0.1mm
- 3) As for the adjustment value for side registration on the 2nd side in cassette 2, enter the same value as the adjustment value for the left margin on the 2nd side in cassette 1.
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.
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)

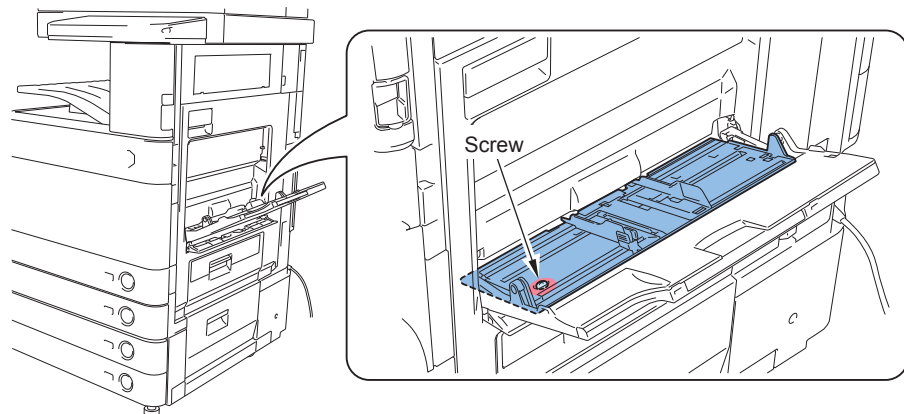
- 1) Place paper on the Multi Purpose Tray. See the label on manual feed area to place paper.
- 2) Make copy from the Multi Purpose Tray, and check that the left margin is 2.5 +/- 1.5mm.



- <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.

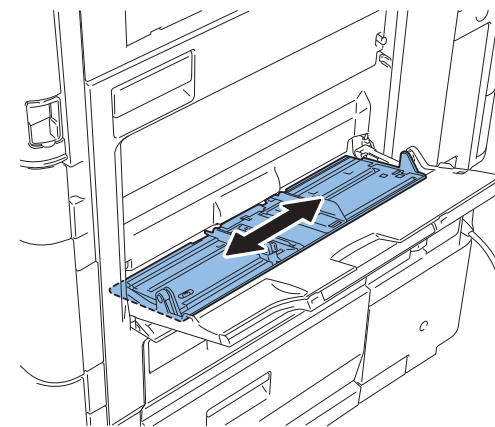


- 5) Loosen the fixing screw for the Multi Purpose Tray Upper Cover.



F-9-56

- 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-9-57

- 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)

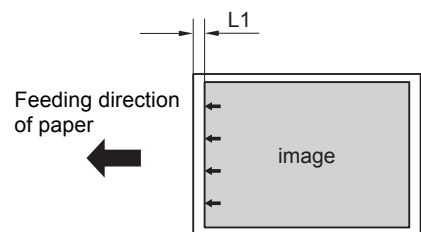


- 1) Make 2-sided copy from the manual feed tray, and check that the left margin on the 2nd side is 2.5 +/- 2.0mm.
- 2) If the left margin is out of the specification, change the adjustment value for the left margin on the 2nd side from the Multi Purpose Tray.
COPIER > ADJUST > FEED-ADJ > ADJ-MFRE ; 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.



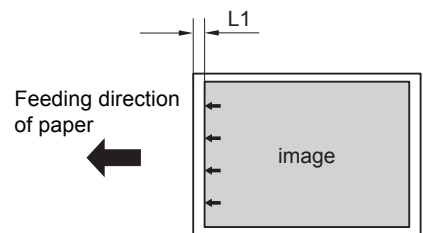
F-9-58



- 2) Select the following in Service Mode: 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-9-59

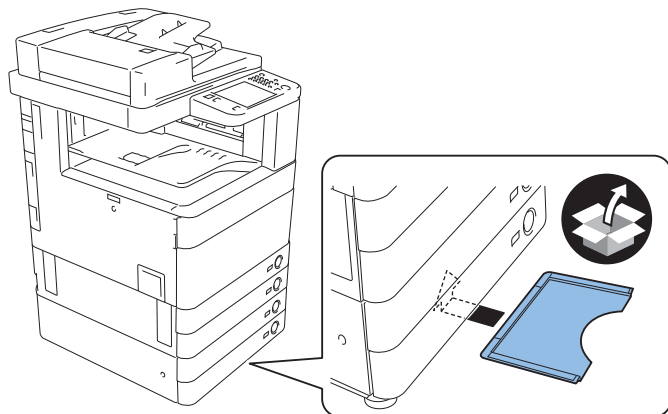
- 2) Select the following in Service Mode: COPIER > ADJUST > FEED-ADJ > REG-DUP1
- 3) Change the setting value to make adjustment (1 increment of the setting value reduces the lead-edge margin by 0.1mm)
- 4) To make the setting value effective, turn OFF/ON the main power of the Host Machine.
- 5) Write 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.



F-9-60



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:

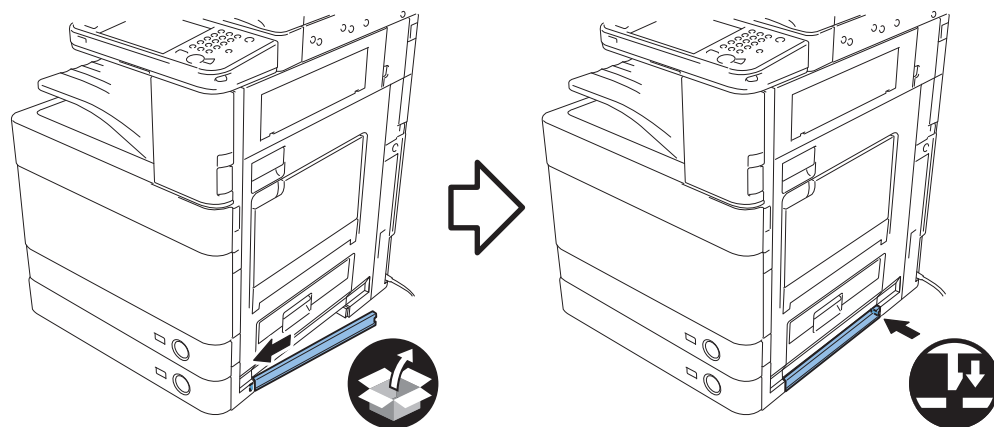
In the case of machine configuration without the cassette pedestal, attach the Service Book Case to the Left Cover of this main unit.



<Right Lower Sub Cover 1>

- 1) Install the Right Lower Sub Cover 1.
(Perform this step in the case that the cassette pedestal is not installed)

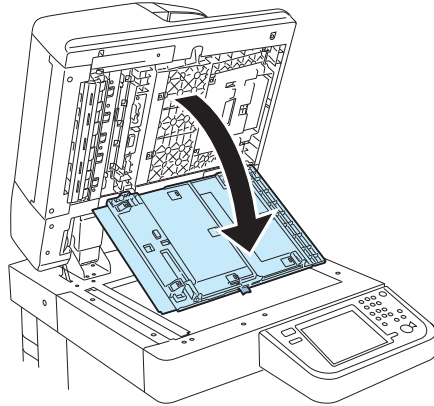
- 2 claws



F-9-61

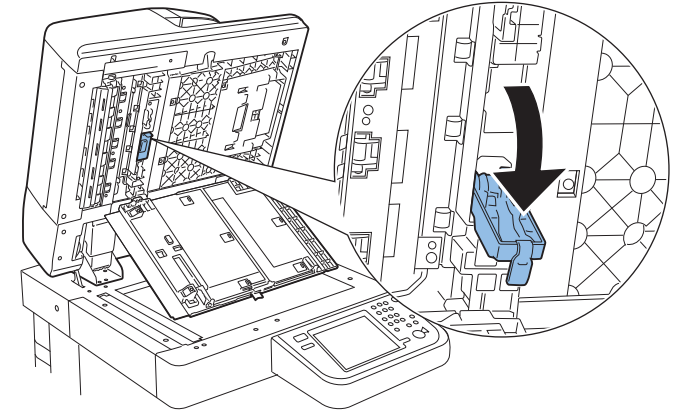
<Stamp Cartridge in the case of Duplex Color Image Reader Unit-B1>

- 1) Open the ADF.
- 2) Pull the lever at upper area of the ADF, and open the cover of the ADF reading area.



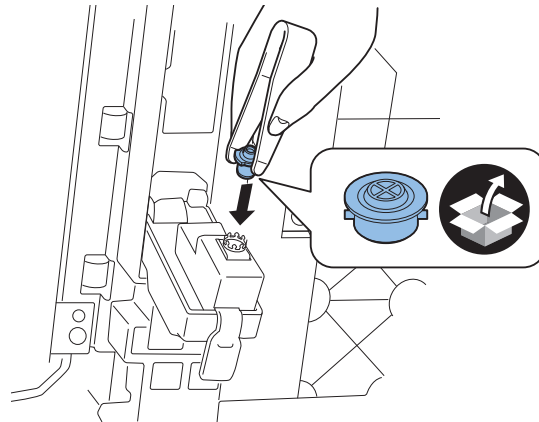
F-9-62

3) Open the Stamp Cover.



F-9-63

-
- 4) Using tweezers, install the Stamp Cartridge with its stamp side faces up.

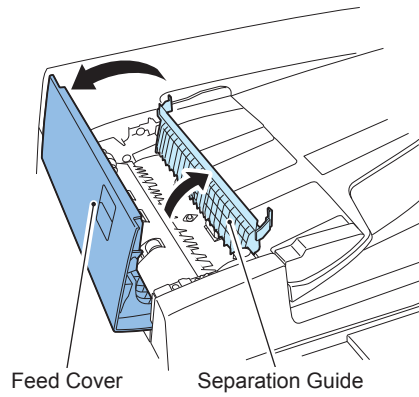


F-9-64

-
- 5) Close the Stamp Cover.
 - 6) Close the cover of the ADF reading area.
 - 7) Close the ADF.

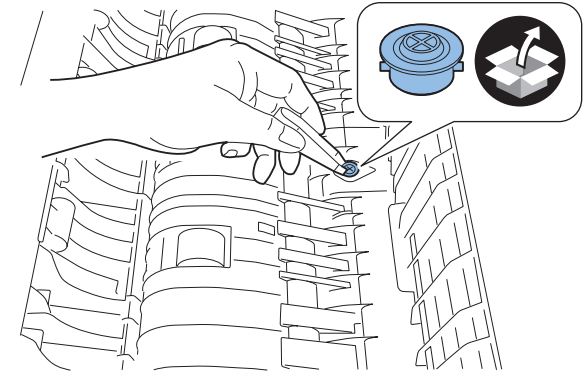
<Stamp Cartridge in the case of Color Image Reader Unit-B1>

1) Open the Feed Cover and the Separation Guide of the DADF.



F-9-65

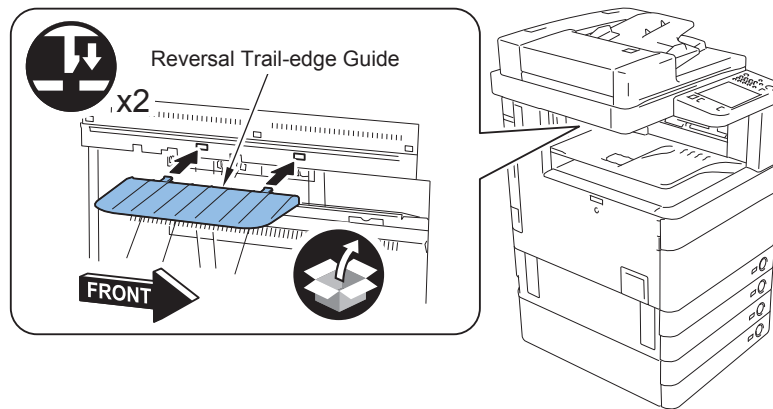
2) Using tweezers, install the Stamp Cartridge with its stamp side faces up.



F-9-66

3) Close the Feed Cover and the Separation Guide of the DADF.

<Reversal Trail-edge Guide>
Install the Reversal Trail-edge Guide to the delivery assembly.
• 2 claws



F-9-67

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

CAUTION:

Ping command cannot be executed to Windows Vista PC from the Host Machine.

To execute Ping command to Windows Vista PC, disable the Fire Wall.Or, execute Ping command to the Host Machine from Windows Vista PC.

- 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.

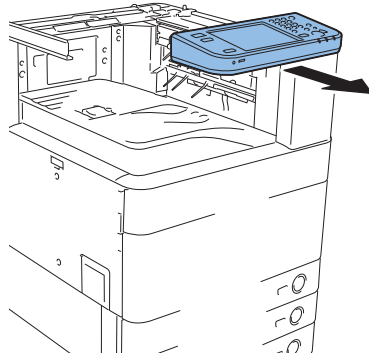
Replace with a main controller that works properly, and the check connection.

Turning OFF the Main Power Switch

Refer to "Turning OFF the Main Power Switch" in Main Unit Installation Procedure.

Installation Procedure

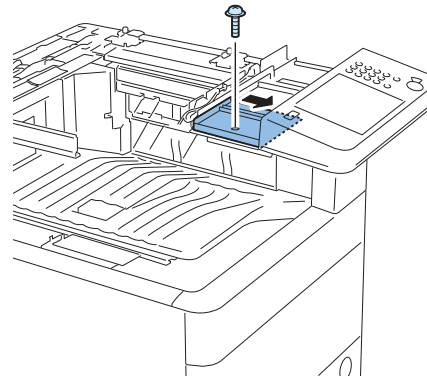
1) Move the Control Panel in the direction of the arrow.



F-9-68

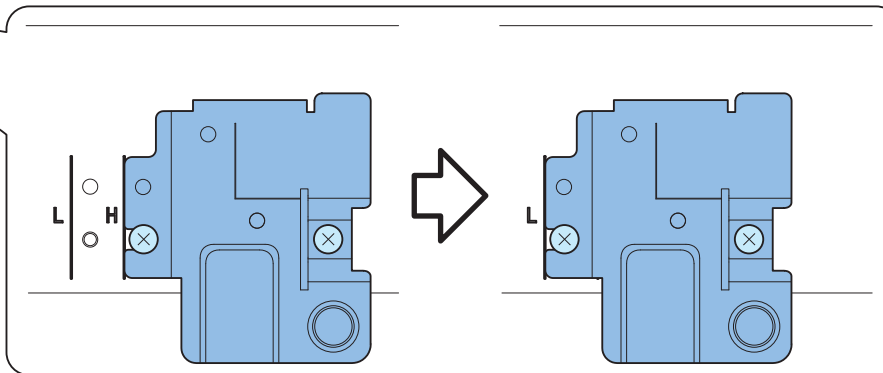
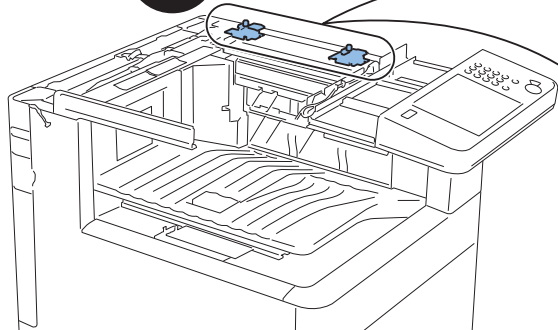
2) Move the Control Panel Mount Cover in the direction of the arrow.

- 1 screw

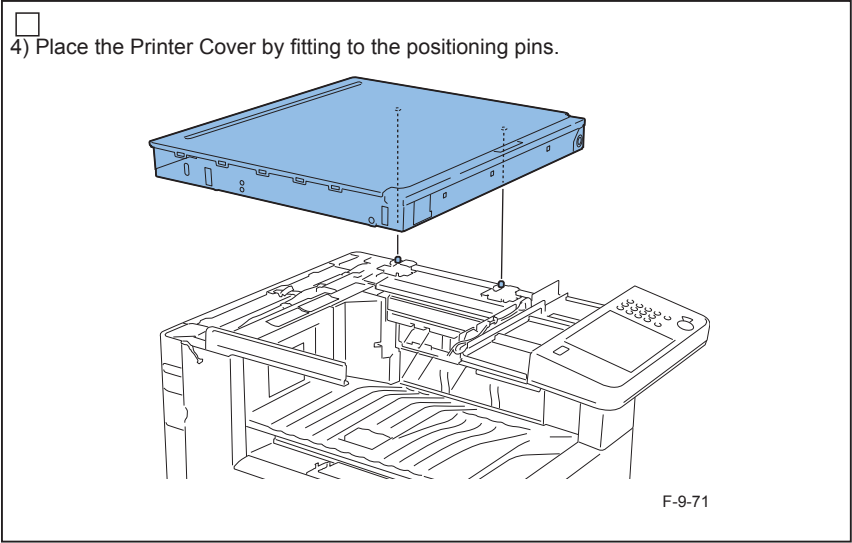


F-9-69

3) Check the installing position of the 2 Joints (Right). Install them on the L marking side if they are on the H marking side.



F-9-70



5) Fix the Printer Cover.

- 2 screws (Binding; M4x8)
- 1 stepped screw (M4)

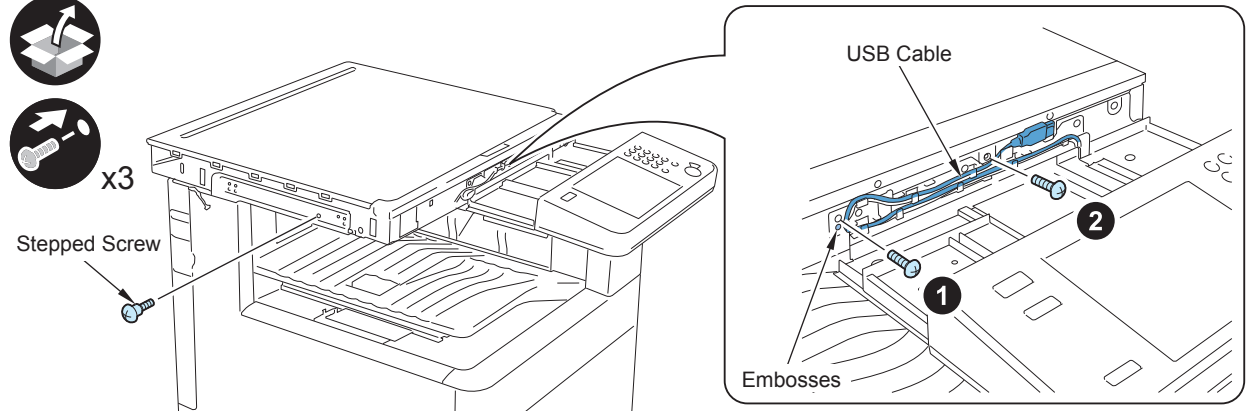
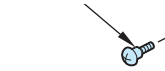
CAUTION:

- Align the screw in left side to the emboss and tighten first.
 - Ensure not to pinch the USB cable.
- (If tighten a screw after removing USB cable, ensure to re-install the USB cable.)



x3

Stepped Screw



F-9-72



6) Install the Reader Fixing Hook B.

- 2 screws (Flat Head; M4x6)

7) Install the Reader Fixing Hooks A and C after adjusting it to the emboss.

- 2 screws (Binding; M4x8)



F-9-73

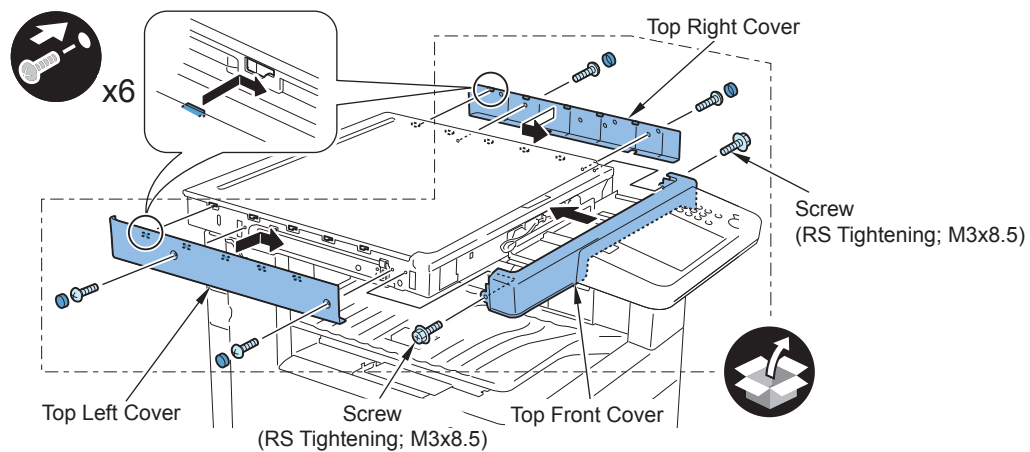


8) Install the Top Front Cover.

- 2 screws (RS Tightening; M3x8.5)

9) Install the Left Top Cover and Right Top Cover.

- 4 screws (Binding; M4x8)
- 4 rubber caps



F-9-74



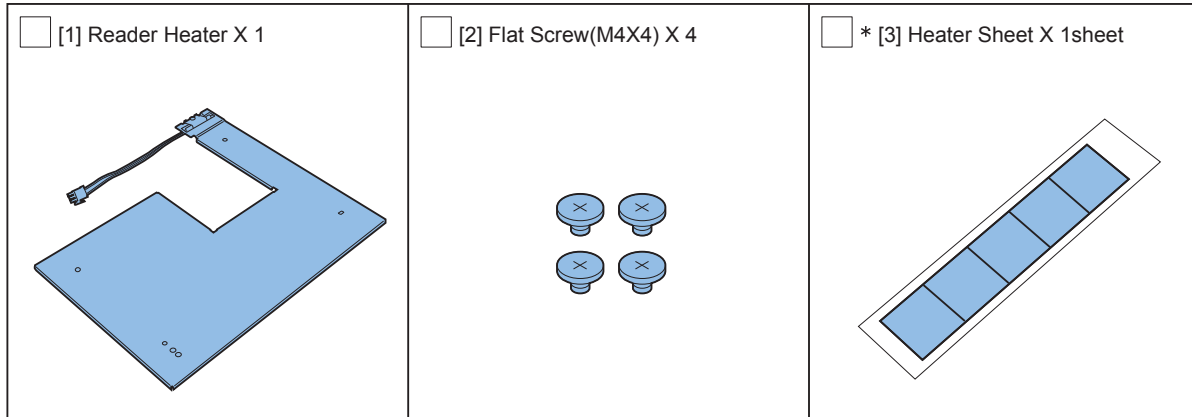
10) Return the Control Panel Mount Cover.

11) Return the Control Panel.

Reader Heater Unit (EUR onry)

Checking the contents

Prepare the following parts because each part of the Reader Heater Unit is assigned as service part.



F-9-75

*: 3 sheets are used in this Installation procedure.

NO.	Parts Number.	Q'ty
[1]	FK2-7164-000	1 pc
[2]	XA9-1956-000	4 pc
[3]	FC8-6060-000	1 sheet

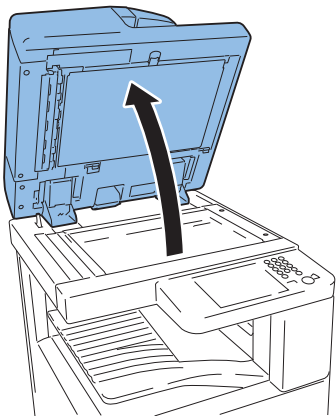
T-9-3

Turning OFF the power of the Host Machine.

Be sure to refer to How to Disconnect the Main Power in the Host Machine installation.

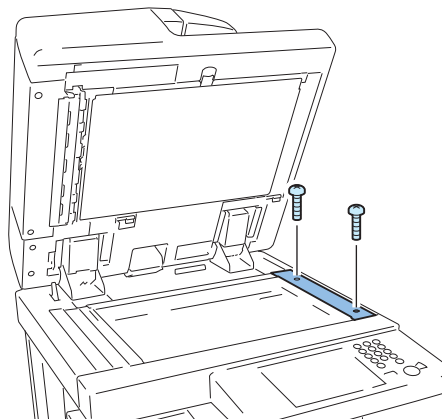
Installation Procedure

- 1) Open the ADF or Copyboard Cover.



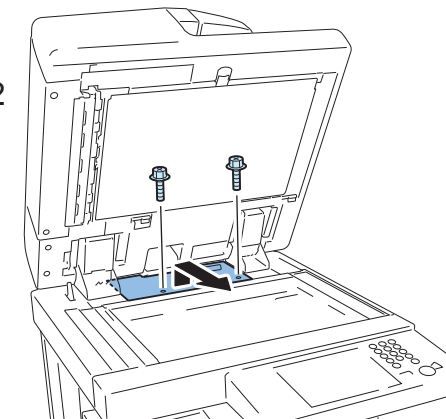
F-9-76

- 2) Remove the Reader Right Retainer Cover.
• 2 Screws



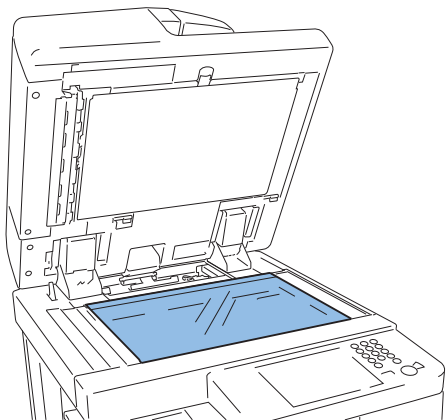
F-9-77

- 3) Remove the Reader Cable Cover.
• 2 Screws



F-9-78

- 4) Remove the Copyboard Glass.



F-9-79

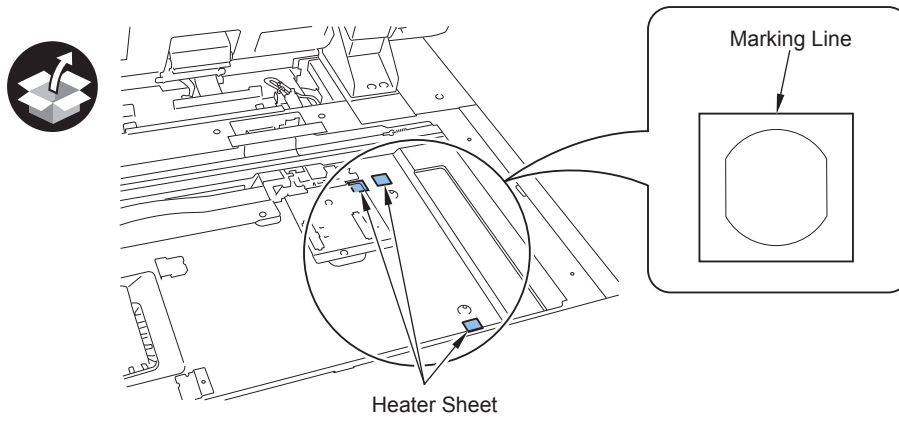
CAUTION:

When removing the Copyboard Glass, be sure not to touch your finger to the white plate in the surface and the backside of the glass. If it is dirty, clean it with lint-free paper.



F-9-80

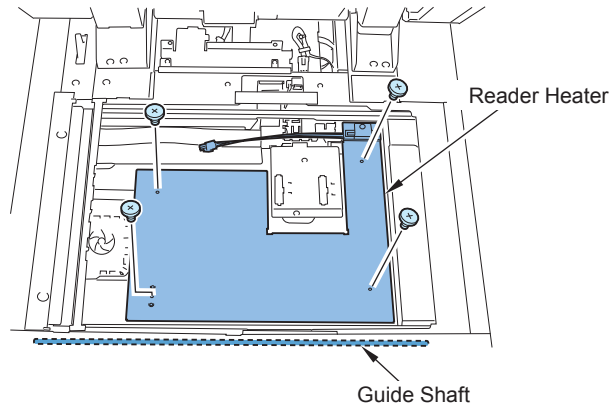
5) Align 3 sheets of heater sheet to the marking line, and adhere them.



F-9-81

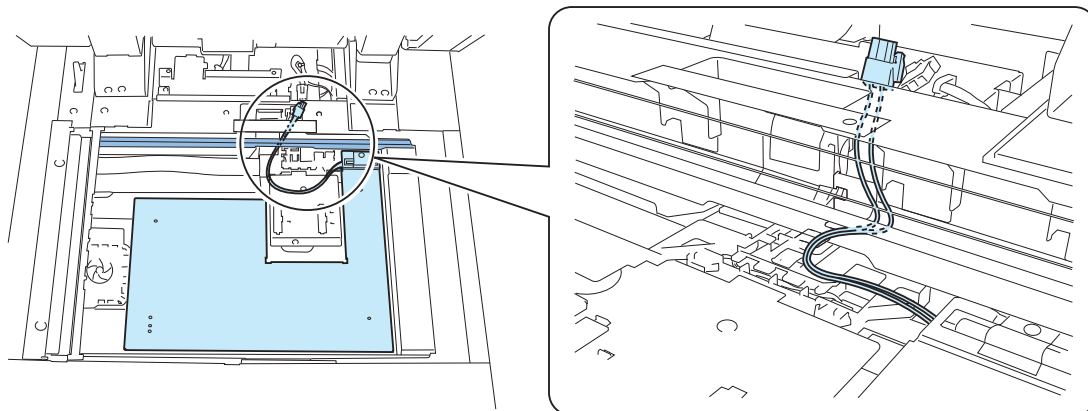
6) Install the Reader Heater.
• 4 Flat Screws (M4)

CAUTION:
Do not scratch the surface of the Guide Shaft.



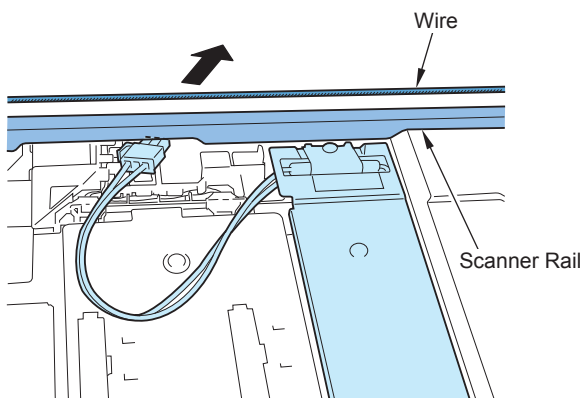
F-9-82

- 7) Pass the connector under the rail as shown.



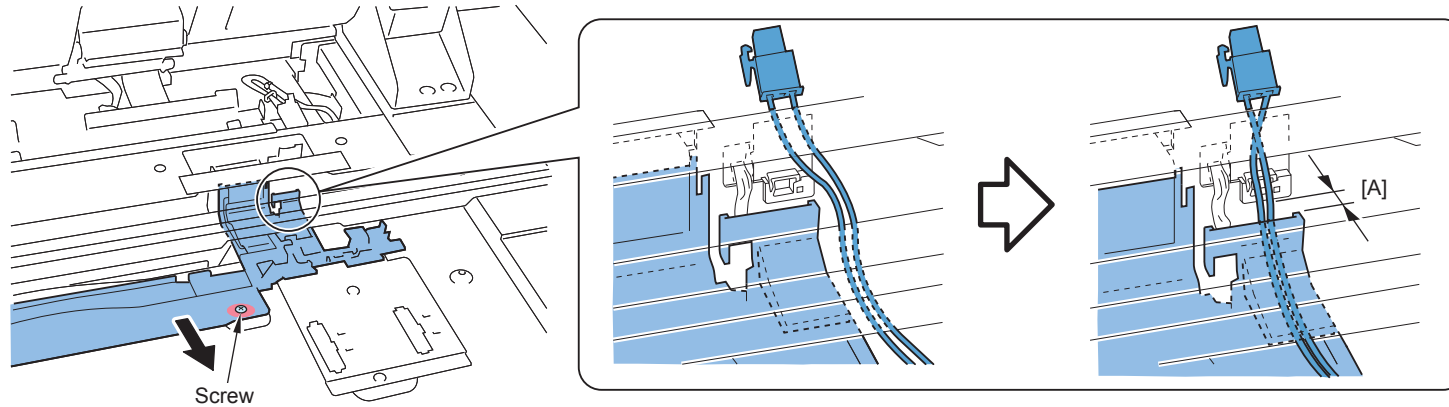
F-9-83

- CAUTION:**
Do not scratch surface of the wire and the Scanner Rail.



F-9-84

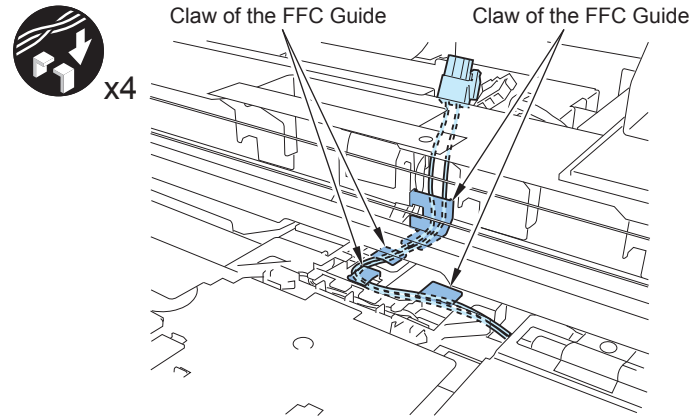
8) Loosen the screw, shift the Harness Guide in the direction of the arrow, pass the harness, and make space [A].



F-9-85

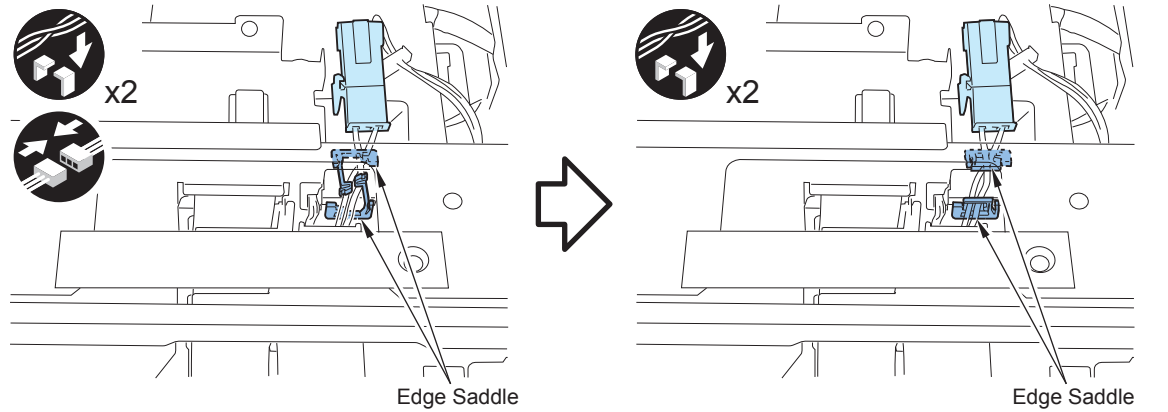
9) Pass the harnesses to the claw of the FFC Guide in 4 places.

NOTE:
Make sure that the harnesses are securely fixed.



F-9-86

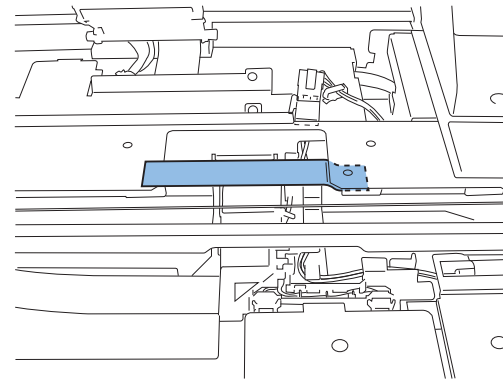
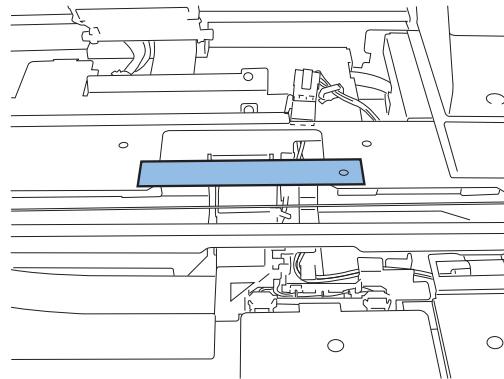
- 10) Put the harness through the 2 edge saddles and connect the connector.



F-9-87

- 11) Tighten the screw loosened in step 8) after adjusting it to the boss.

NOTE:
Make sure that the sheet is placed on the plate.



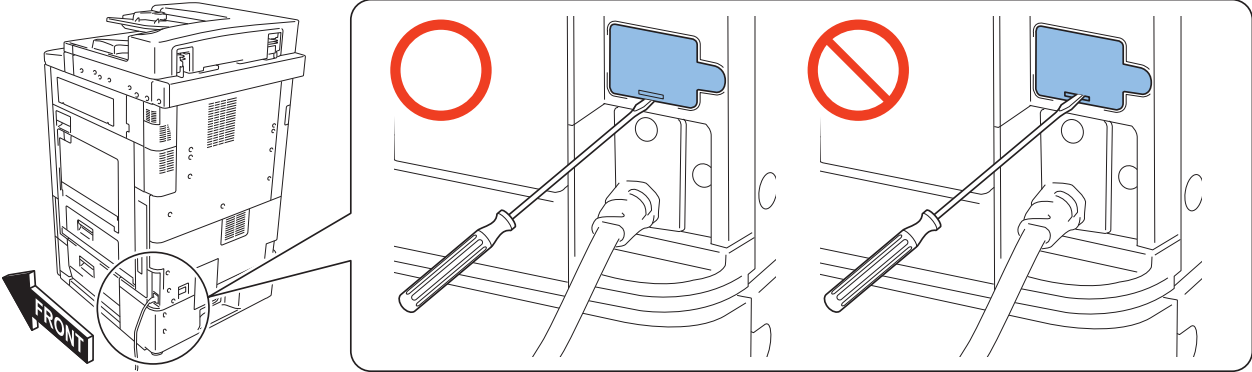
F-9-88

- 12) Install the removed covers.
- Copyboard Glass
 - Reader Cable Cover
 - Reader Right Retainer Cover
- 13) Close the ADF or the Copyboard Cover.
- 14) Insert the power plug of main unit into a socket.
- 15) Open the Switch Cover and turn the main power switch ON.

Checking after the installation

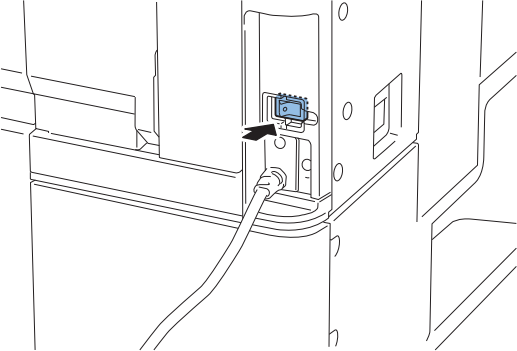
CAUTION:
When removing a cover, do not insert a screwdriver in the slot.

1) Remove the Environment Heater Switch cover.



F-9-89

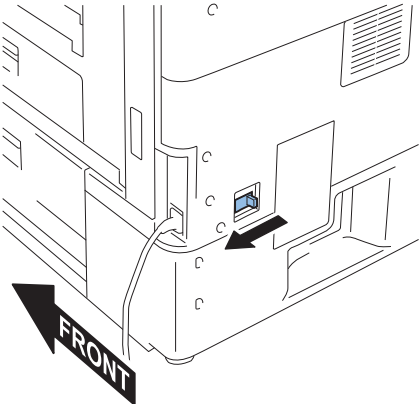
2) Check that the Environment Heater Switch is ON.
3) Turn ON, if it was OFF.



F-9-90

4) Install the Environment Heater Switch cover.

5) Check that the breaker switch in the back of the main unit is ON.5)
6) Turn ON, if it was OFF.



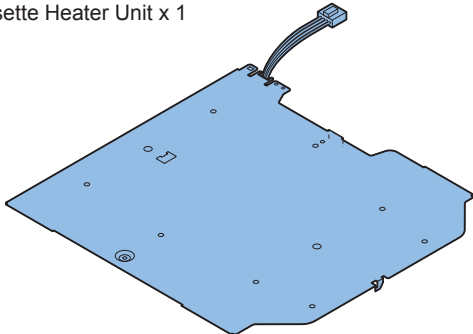
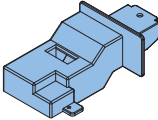



F-9-91

7) Connect the power plug of the host machine to the power outlet.

Cassette Heater Unit

Checking the Contents (ASIA only)

Cassette Heater Unit-37

<input type="checkbox"/> [1] Cassette Heater Unit x 1 	<input type="checkbox"/> *[2] Heater Connector Cover x 1 	<input type="checkbox"/> *[3] Wire Saddle x 1 	<input type="checkbox"/> [4] Screw (W Sems Round End; M3X6) x 1  <input type="checkbox"/> *[5] Screw (P Tight; M3x8) x 1 
--	--	--	---

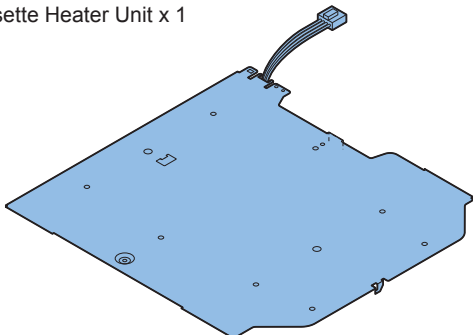

* Not used with this procedure.

F-9-92

Checking the Parts to be Installed (EUR only)

Cassette Heater Unit

Prepare the following parts because each part of the Cassette Heater Unit is assigned as service part.

<input type="checkbox"/> [1] Cassette Heater Unit x 1 	<input type="checkbox"/> [2] Screw (W Sems Round End; M3X6) x 1 
---	---

F-9-93

NO.	Parts name	Parts Number	Q'ty
[1]	Cassette Heater Unit	FM3-8915-000	1 pc.
[2]	Screw (W Sems Round End: M3x6)	XA9-1016-000	1 pc.

T-9-4

Turning OFF the Main Power Switch

Refer to "Turning OFF the Main Power Switch" in Main Unit Installation Procedure.

Installation Procedure

NOTE:
The installation procedure of this product is not changed either in the host machine t 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-9-94

2) Remove the Heater Connector Cover with a flat-blade screwdriver.

- 1 claw
- 2 protrusions

F-9-95

9 Installation > Cassette Heater Unit > Installation Procedure

9-50

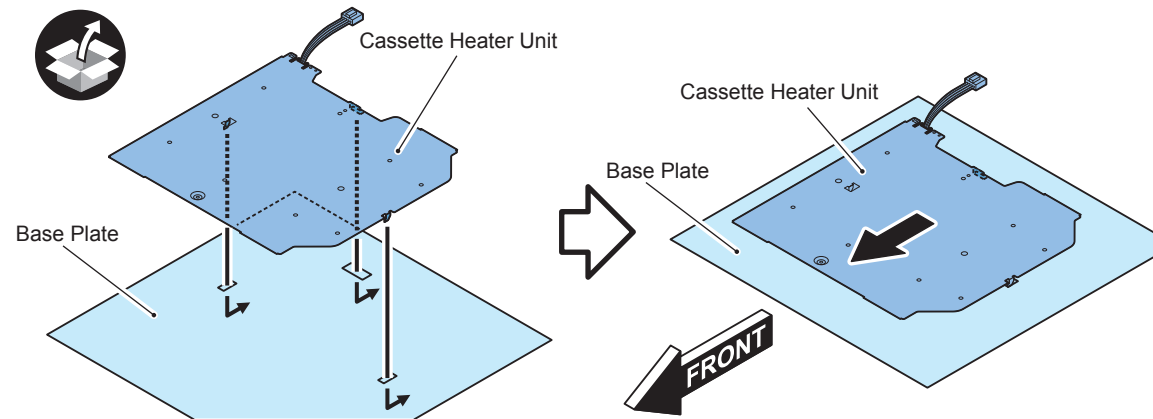


3) Fit the claws (3 places) on the Cassette Heater Unit into the holes on the Base Plate, and then, move it toward the front.

- 3 claws

Caution:

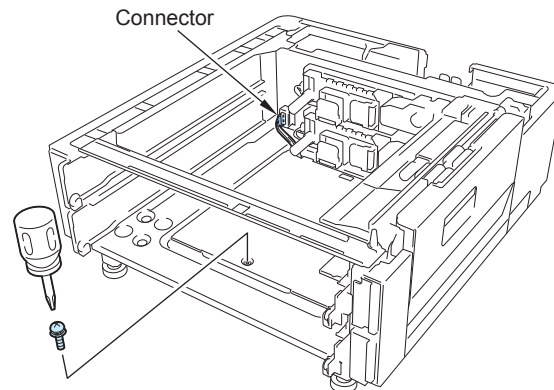
Be sure that the claws are fit into the holes of the Base Plate properly.



F-9-96



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.)

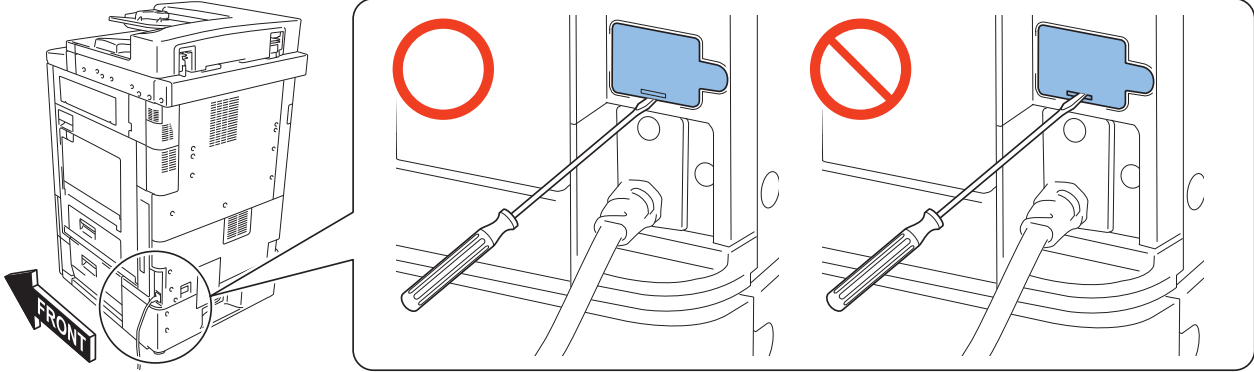


F-9-97

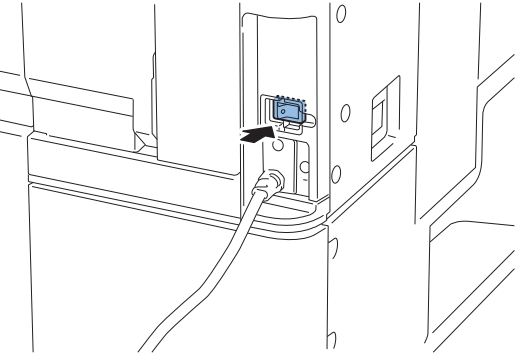


5) Install the heater Connector Cover.
6) Install the removed Cassettes.

Checking After the Installation

<p><input type="checkbox"/></p> <p>Caution: When removing the cover, be sure not to insert a screwdriver in the elongate hole.</p>	<p><input type="checkbox"/> 1) Remove the Environment Heater Switch Cover.</p>  <p style="text-align: right;">F-9-98</p>
---	--

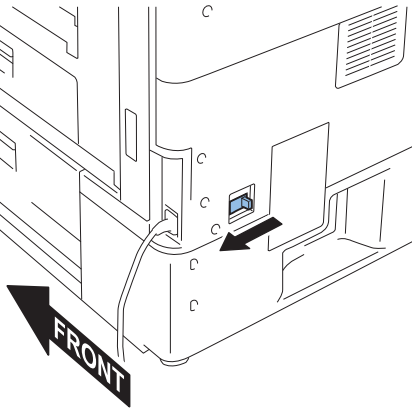
2) Check that the Environment Heater Switch is ON.
3) Turn ON, if it was OFF.



F-9-99

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.

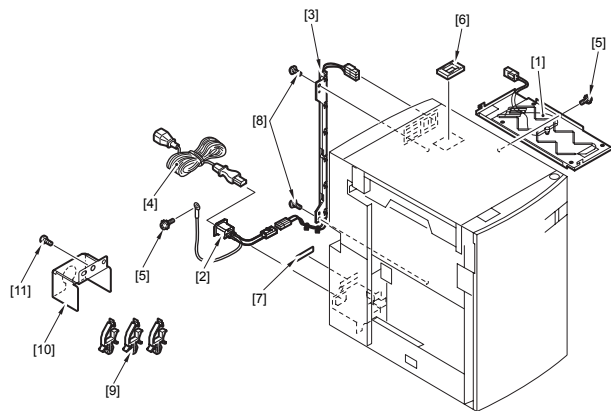


F-9-100

7) Connect the power plug of the host machine to the power outlet.

Cassette Heater Unit-32

Checking Bundled Components



F-9-101

<input type="checkbox"/>	[1]	Heater unit	1pc.
<input type="checkbox"/>	[2]	AC input connector	1pc.
<input type="checkbox"/>	[3]	Relay harness unit	1pc.
<input type="checkbox"/>	[4]	AC cable	1pc.
<input type="checkbox"/>	[5]	Screw (w/ washer)	2pcs.
<input type="checkbox"/>	[6]	Cable protection bush	1pc.
<input type="checkbox"/>	[7]	Power supply label	1pc.
<input type="checkbox"/>	[8]	RS tight screw(M4x8)	2pcs.
<input type="checkbox"/>	[9]	Wire saddle	3pcs.(*Only 2 pcs are used for this unit.)
<input type="checkbox"/>	[10]	Plug cover	1pc.
<input type="checkbox"/>	[11]	Binding screw (M4x4)	1pc.(*Not used for this unit.

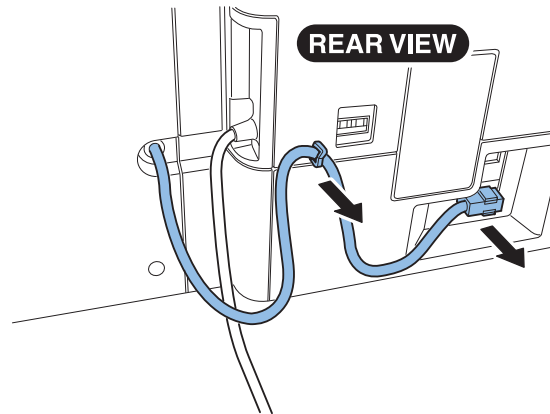
Turning OFF the Main Power Switch

Refer to "Turning OFF the Main Power Switch" in Main Unit Installation Procedure.

- ⚠** When installing the heater to the paper deck, take the following precautions:
- The AC power plug of the host machine must have been removed from the outlet.
 - Install the heater after installing the host machine and paper deck.
 - Use correct screws (lengths and diameters) at correct positions.

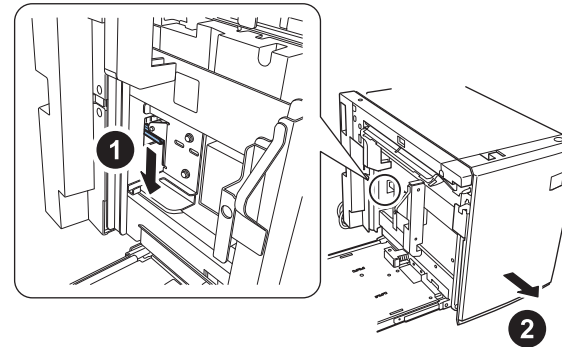
Installation Procedure

- 1) Remove reusable band, and then disconnect the paper deck connector from the host machine.

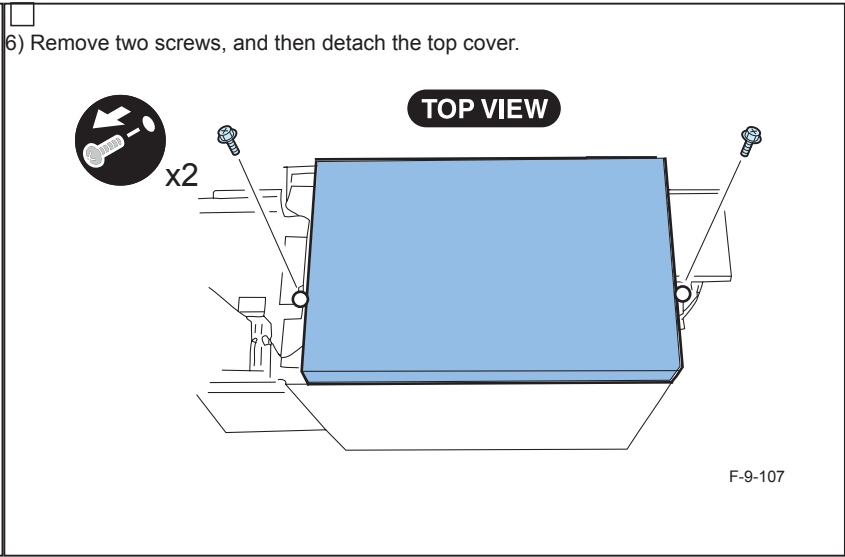
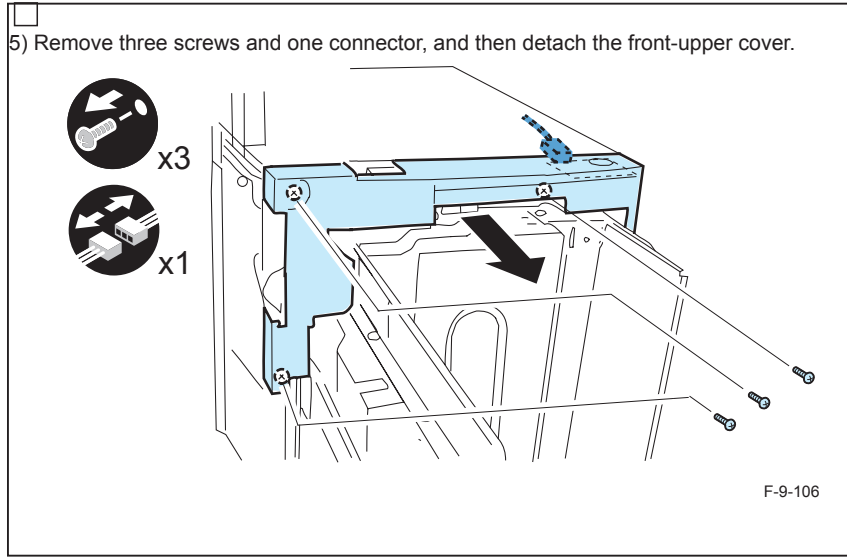
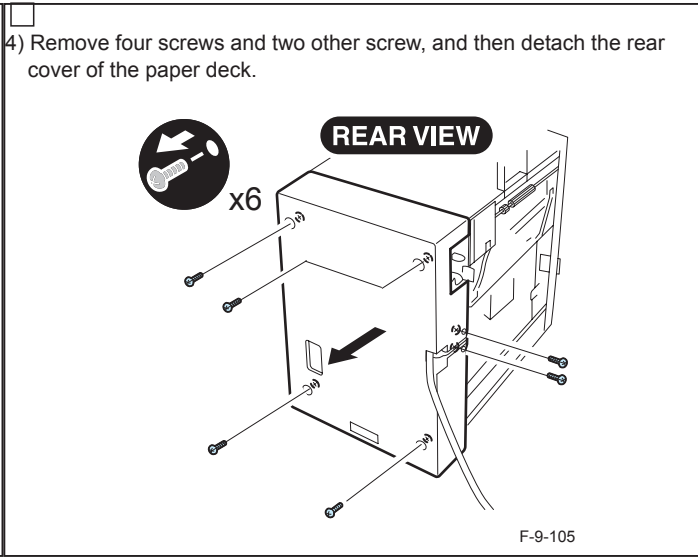
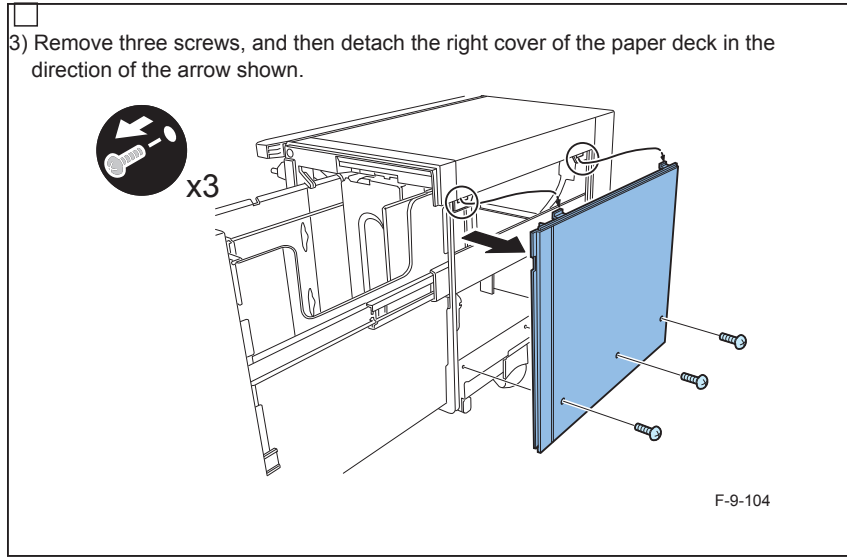


F-9-102

- 2) Release the paper deck from the host machine, and then press down the latch plate of the paper deck housing to open the housing.



F-9-103



7) Attach the supplied cable protection bushing to the hole on the top panel of the paper deck.

F-9-108

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 two hooks of the heater unit into the holes on the top plate of the paper deck, and then secure the heater unit to the main body of the paper deck using a screw with toothed washer.

F-9-109

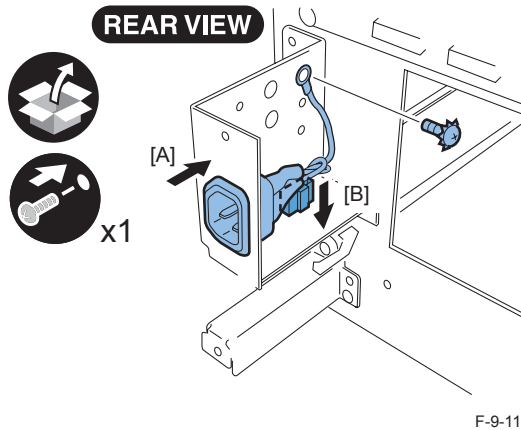
10) Attach the heater connector to the panel mount.

F-9-110

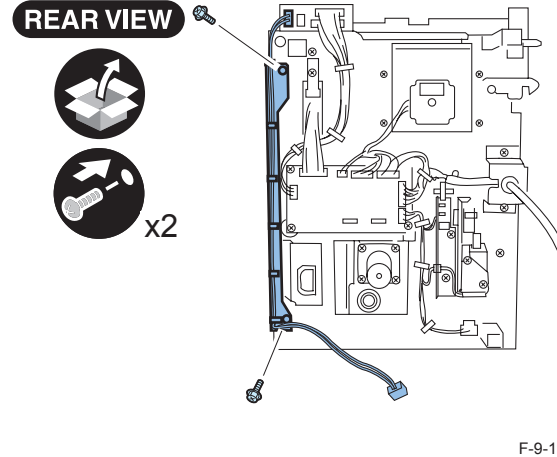
11) Remove one screw to remove the blind plate from the power cord mount of the paper deck.

F-9-111

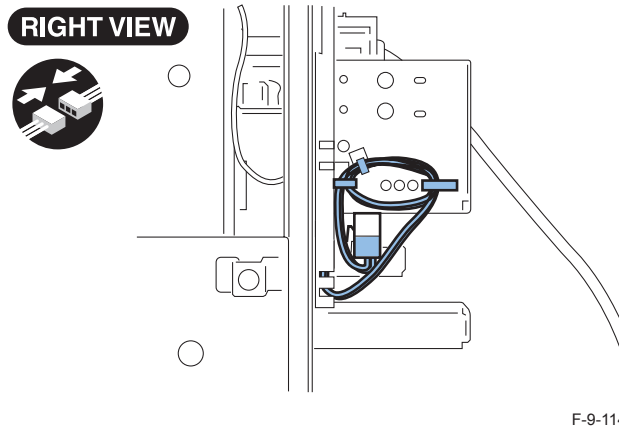
- 12 Install the supplied AC input connector in two steps([A] > [B]).
Install the ground cable using a screw with toothed washer.



- 13 Install the relay harness unit to the rear side panel of the paper deck using the two screws (M4X8), and then connect the connector.



- 14 Wind the relay harness (one and half turns) around the cable guides on the power cord mount, and then connect the connector.

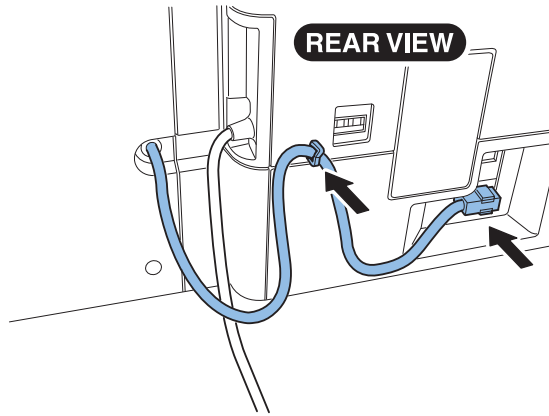


- 15 Reattach the exterior covers of the paper deck in the following sequence:

- [1] Top cover (Take care not to have cables caught.) (M4X8: 2 pcs.)
- [2] Front-upper cover (Insert the connector.) (M4X8: 3 pcs.)
- [3] Rear cover (M3X8: 2 pcs., M4X8: 4 pcs.)
- [4] Right cover (M4X8: 3 pcs.)

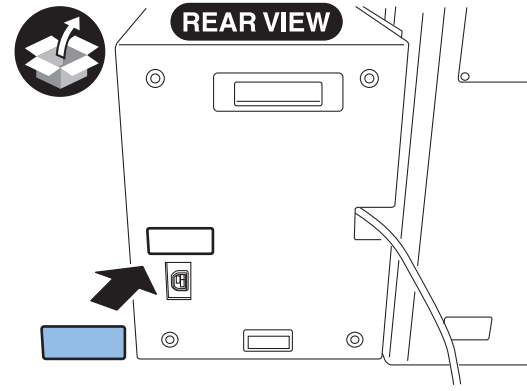
- 16 Manually slide the paper deck to the left to place it aside of the host machine.

17) Attach reusable band, and then connect the connector of the paper deck to the back of the host machine.



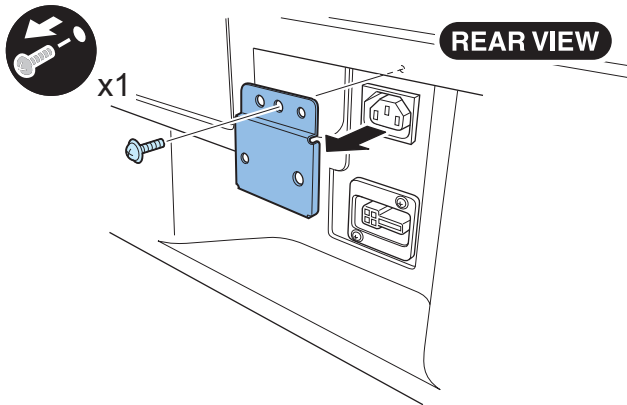
F-9-115

18) Stick the power supply label to the rear panel of the paper deck.



F-9-116

19) Remove 1 screw (bind head;M4x4) to detach the plate.



F-9-117

20) Attach two wire saddles 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-9-118

21) Fix the supplied plug cover at rear side of the host machine with 1 screw (bind head;M4x4) removed at the step 19.

F-9-119

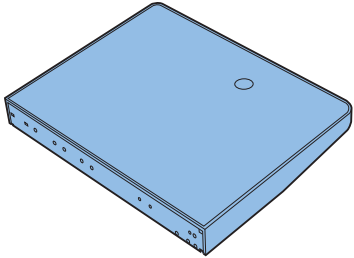
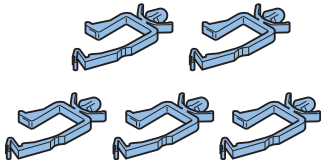
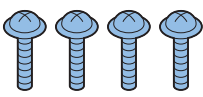
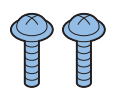
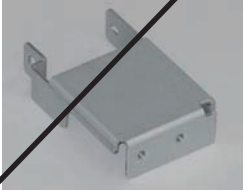
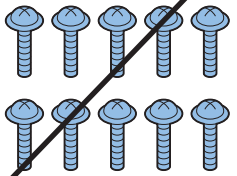
! To ensure smooth connection of the heater power connectors, explain to the user that any obstacle that can prevent the paper deck from opening should not be placed in the hatched area.

[1]: Host machine [2]: Paper deck [A]: Front

F-9-120

Utility Tray-A1/A2

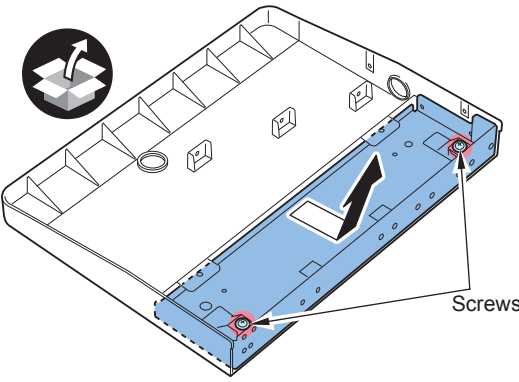
Checking the Contents

<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 ; M4x14) X 4 	<input type="checkbox"/> [4] Screw (TP ; M4x10) X 2 	<input type="checkbox"/> [5] Keyboard Table Plate X 1 Included in A2 only 
<input type="checkbox"/> [6] Screw (TP; M4x8) X 10 Included in A2 only 				

F-9-121

Installation Procedure

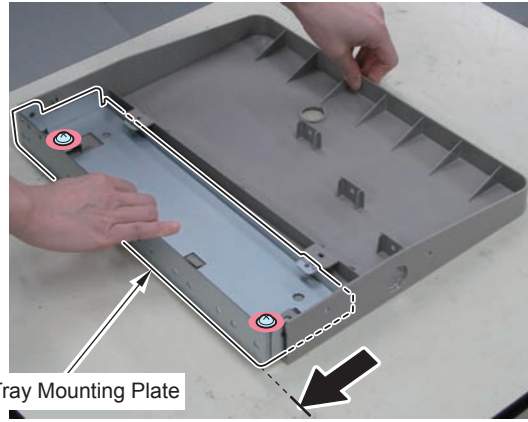
<In case of Utility Tray A1>
1) Loosen the 2 screws on the Utility Tray Unit to separate the Mounting Plate and the Utility Tray.



The diagram shows a perspective view of the Utility Tray A1. A blue mounting plate is attached to the bottom of the tray. Two screws are shown being loosened from the plate. A circular inset shows a screw being turned counter-clockwise. The label 'Screws' points to the two screws on the plate.

F-9-122

<In case of Utility Tray A2>
1-1) Loosen the 2 screws, and move the Utility Tray Mounting Plate in the direction of the arrow until it stops.

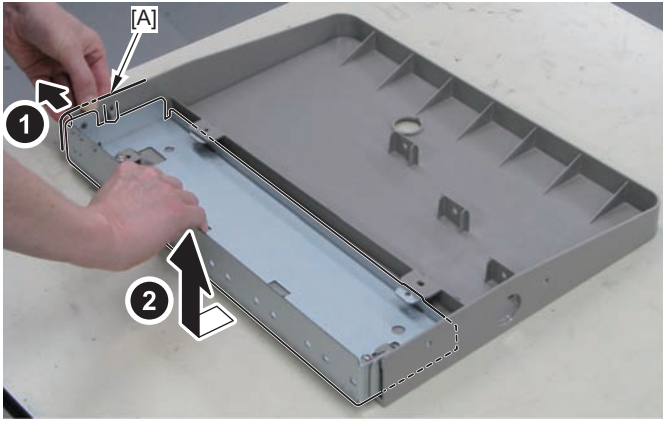


The photograph shows a person's hands moving the Utility Tray Mounting Plate on the Utility Tray A2. A dashed white line outlines the plate, and a black arrow points to the right, indicating the direction of movement. The label 'Utility Tray Mounting Plate' points to the plate.

F-9-123

1-2) While pulling the [A] part of the Utility Tray, remove the Utility Tray Mounting Plate.

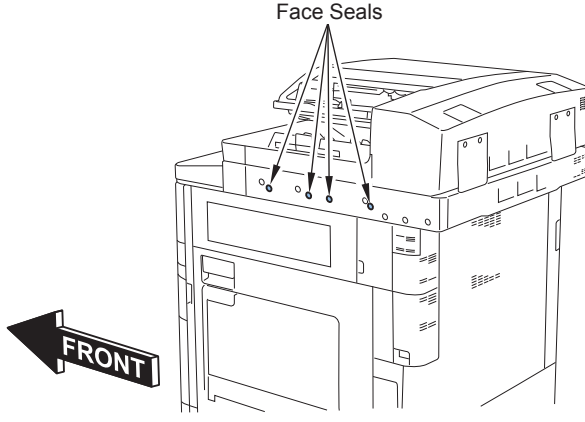
CAUTION:
Be sure not to pull the [A] part of the Utility Tray too much.



The photograph shows the Utility Tray A2 with the mounting plate being removed. A hand is pulling the [A] part of the tray, indicated by arrow 1. Another hand is pulling the mounting plate away, indicated by arrow 2.

F-9-124

2) Remove the 4 face seals from the Reader Right Cover.

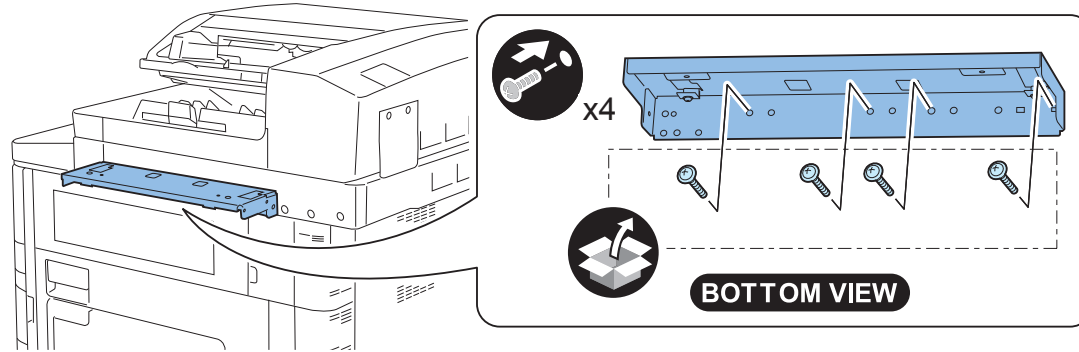


The diagram shows the Reader Right Cover of the device. Four face seals are indicated by arrows and labeled 'Face Seals'. A large arrow labeled 'FRONT' points to the left, indicating the orientation of the cover.

F-9-125

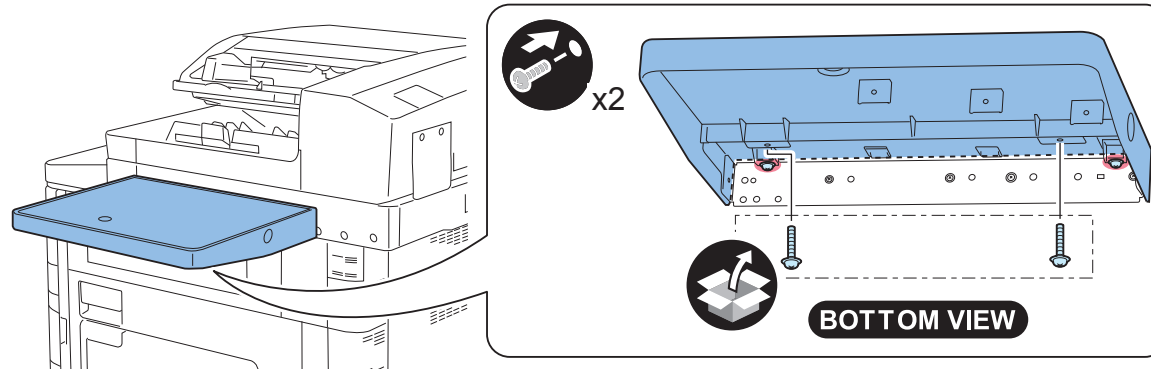
- 3) Install the Mounting Utility Tray Plate.

- 4 screws (TP; M4x10)



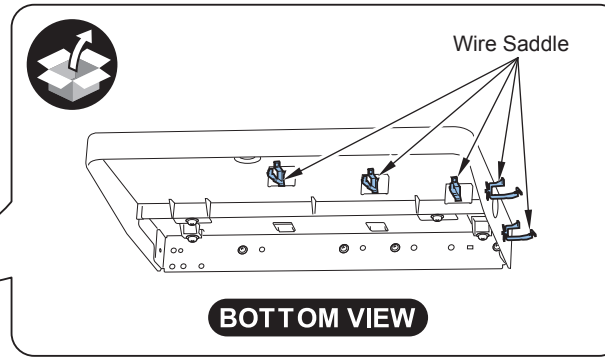
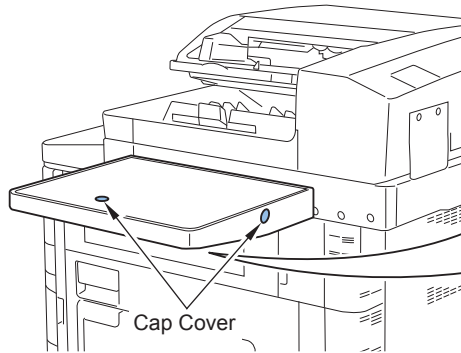
- 4) Install the Utility Tray.

- 2 screws (loosen)
- 2 screws (tighten) (TP; M4 x 10)



When installing the Keyboard

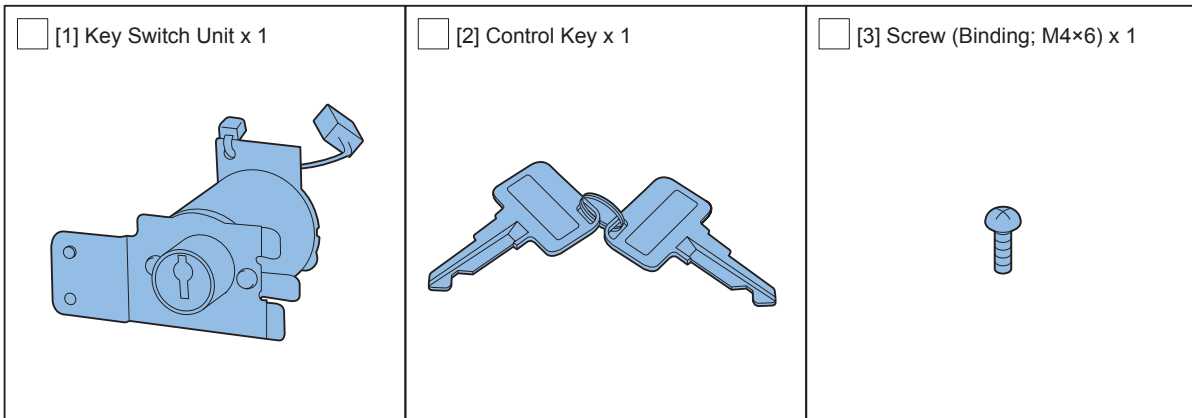
- 1) Remove the 2 cap covers and install the 5 wire saddles.



F-9-128

Key Switch Unit-A2

● Checking the Content



F-9-129

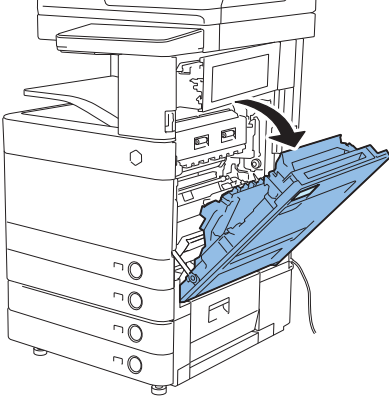
● Turning OFF the power of the Host Machine

Be sure to refer to How to Disconnect the Main Power in the Host Machine installation.

Installation Procedure

□

1) Open the Right Lower Cover. (Open also the Right Upper Cover in the same time).



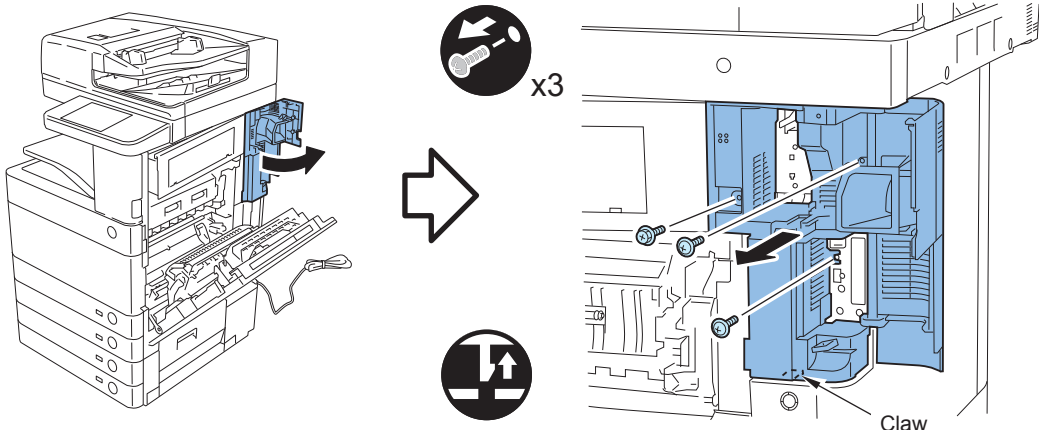
F-9-130

□

2) Open the Right Rear Cover 1.

3) Remove the Right Rear Cover 1.

- 1 Screw (RS Tightening; M4)
- 2 Screws (TP; M3)
- Claw in 1 place

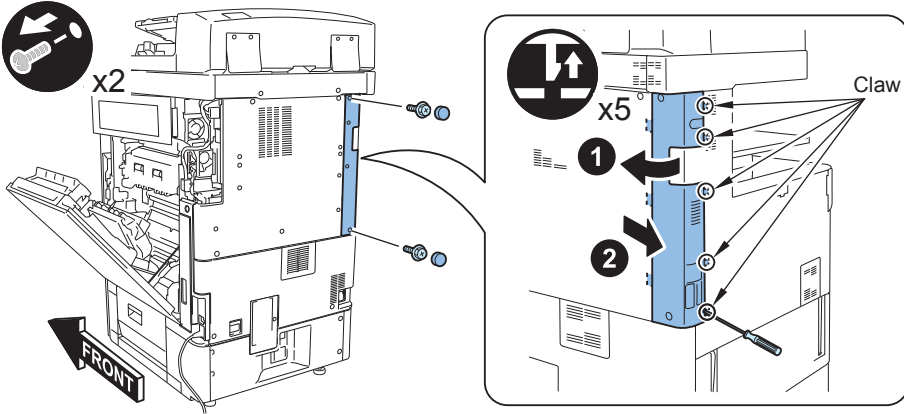


F-9-131

□

4) Remove the Left Rear Cover.

- 2 Rubber caps
- 2 Screw
- Claw in 5 places



F-9-132

5) Remove the Rear Cover.

- 2 Rubber caps
- 2 Screws
- Claw in 1 place

Claw

F-9-133

6) Remove the Connector Cover.

- 1 Screw

F-9-134

7) Remove the connector of the Cassette Pedestal. (If the Pedestal is not installed, this procedure is not needed.)

- Harness Guide in 6 places
- 5 Connectors

Connector

x6

x5

Guide

F-9-135

8) Remove the Rear Lower Cover.

- 2 Rubber caps
- 2 Screws
- Claw in 2 places
- Hook in 2 places

Claw

Hook

Claw

Hook

F-9-136

9) Remove the Right Rear Cover 3.

- Claw in 3 places

Claw

Claw

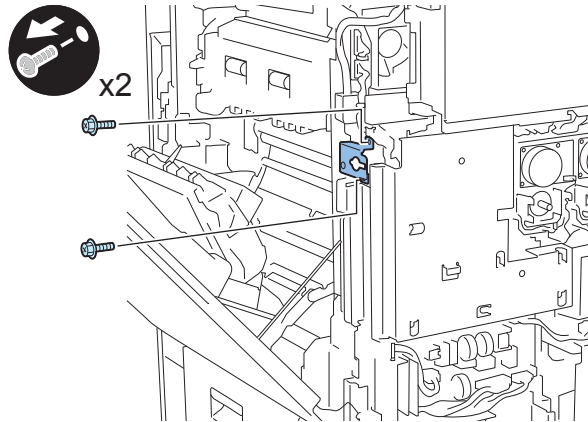
F-9-137

10) Remove the Right Rear Cover 2.

- 2 Screws

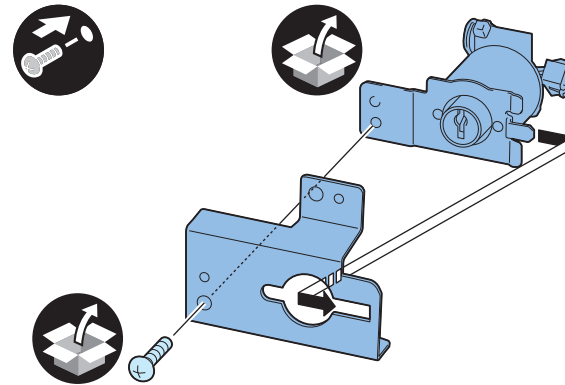
F-9-138

- 11) Remove the Key Switch Bracket.
• 2 Screws



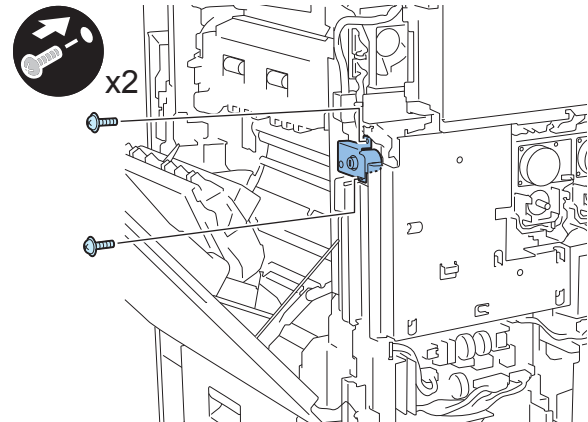
F-9-139

- 12) Install the Key Switch Unit to the Key Switch Bracket.
• 1 Screw (Binding: M4x6)



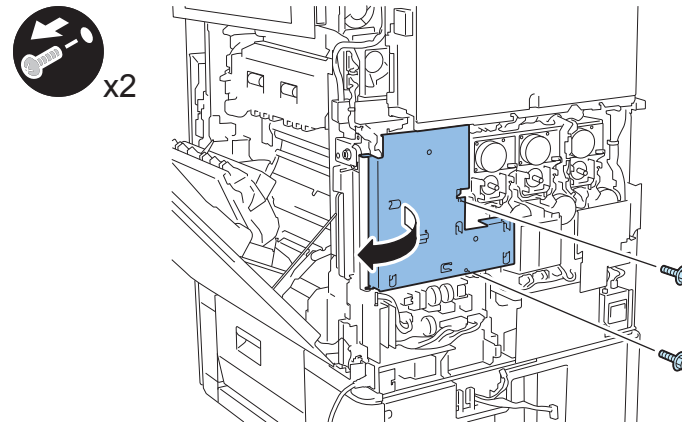
F-9-140

- 13) Install the Key Switch Bracket assembled in the previous procedure.
• 2 Screws (use the screw removed in step 11)



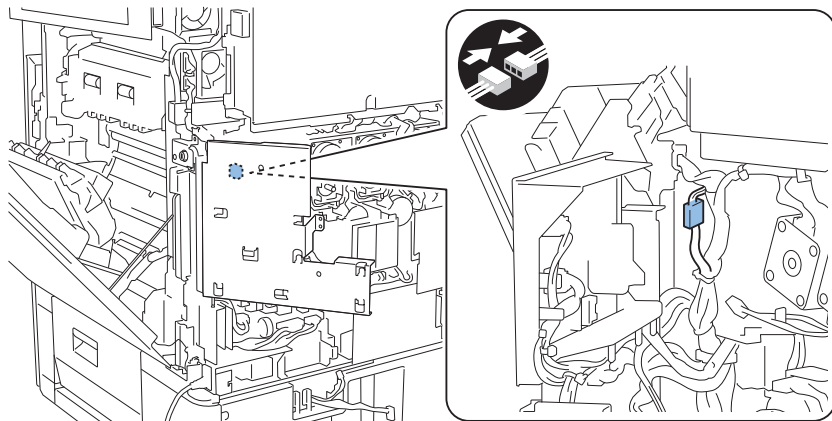
F-9-141

- 14) Open the Feed Driver PCB.
• 2 Screws



F-9-142

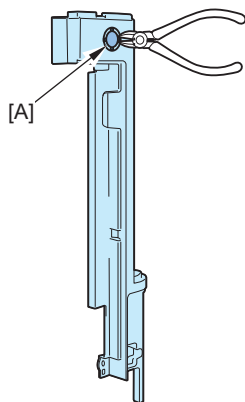
- 15) Connect the connector of the host machine with the connector of Key Switch Unit.



F-9-143

- 16) Put the Feed Driver PCB back in the original position.

- 17) Cut the [A] part of the removed Right Rear Cover 2 in step 10) with nipper, etc.



F-9-144

- 18) Reinstall the removed covers and the connectors.

- Right Rear Cover 2
- Right Rear Cover 3
- Rear Lower Cover
- Connector of the Cassette Pedestal
- Connector Cover
- Rear Cover
- Left Rear Cover
- Right Rear Cover 1
- Right Lower Cover
- Right Upper Cover

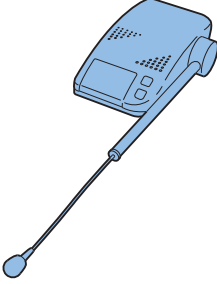
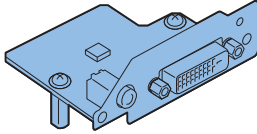
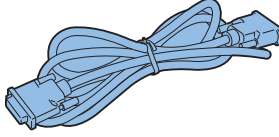
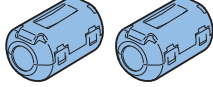

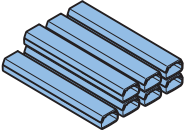
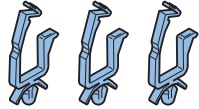




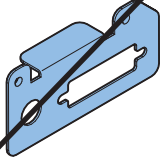
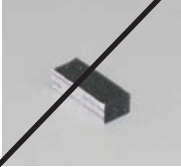


Checking after installation



- 1) Connect the power plug of the host machine into the outlet.
- 2) Open the switch cover and turn ON the main power switch.
- 3) Set the following service mode 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 Use 1 of them 	<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; M3x20) X 1 	<input type="checkbox"/> [10] Screw (Binding; M4x6) X 1 
<input type="checkbox"/> [11] Screw (TP; M3x6) X 2 	<input type="checkbox"/> [12] Support Plate X 1 	<input type="checkbox"/> [13] Cable Face Seal X 1 	<input type="checkbox"/> [14] Card Spacer X 1 	<input type="checkbox"/> [15] Screw (Binding; M4x14) X 1 

F-9-145

<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 when Installing

CAUTION:

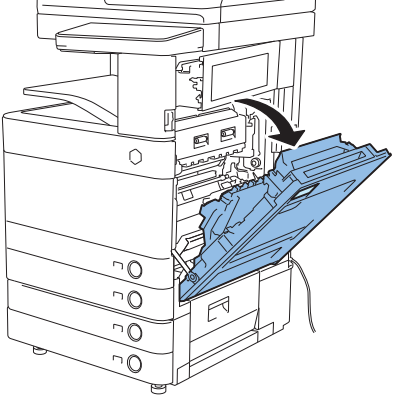
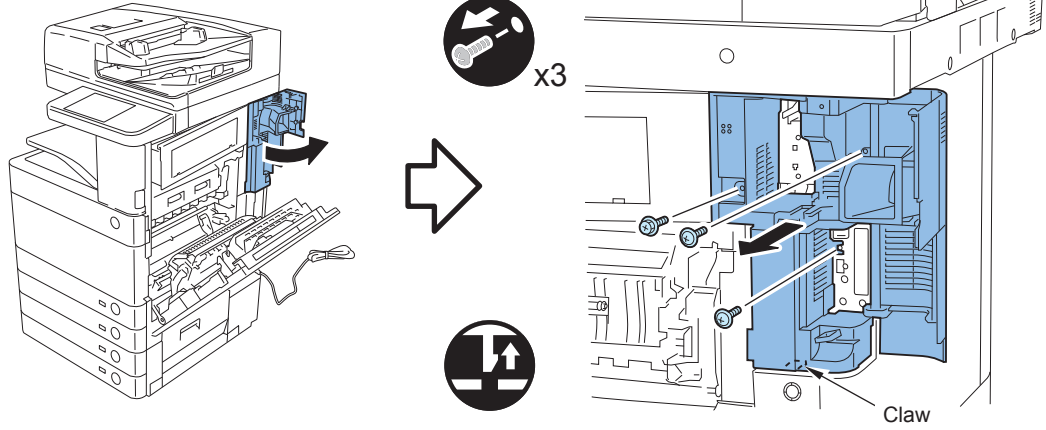
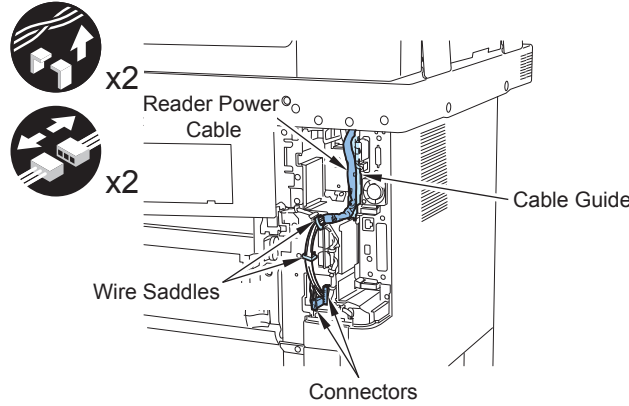
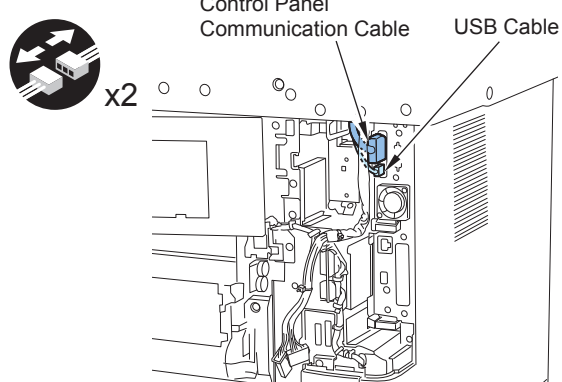
The Color Image Reader is necessary to operate this equipment.

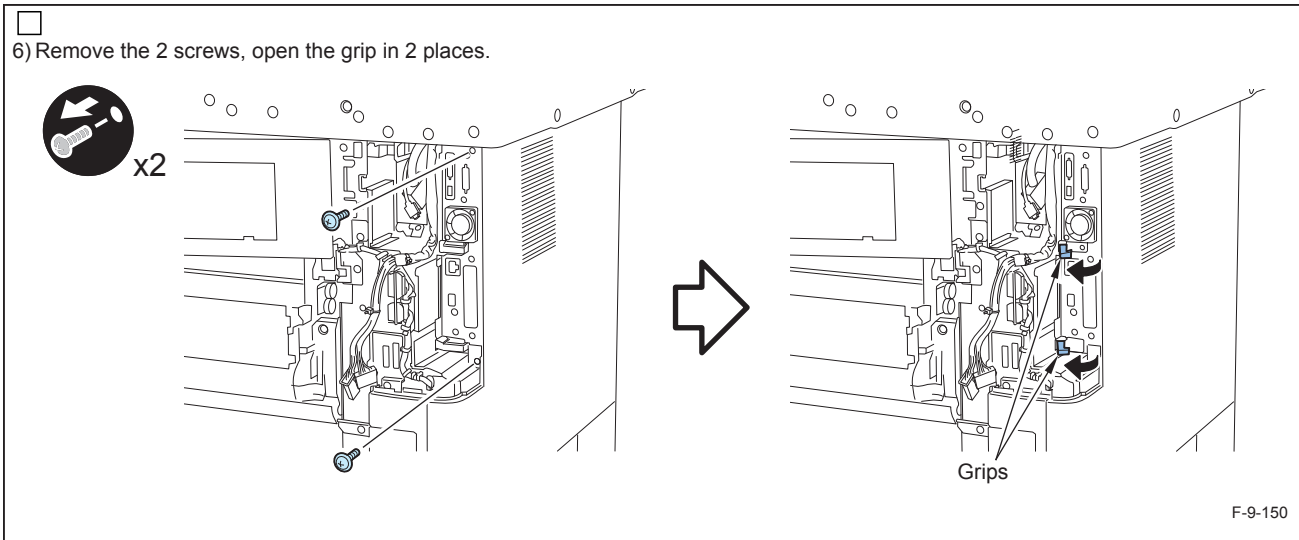
When installing the equipment, see the 'Combination Table of Accessory Installation'.

Turning OFF the Host Machine

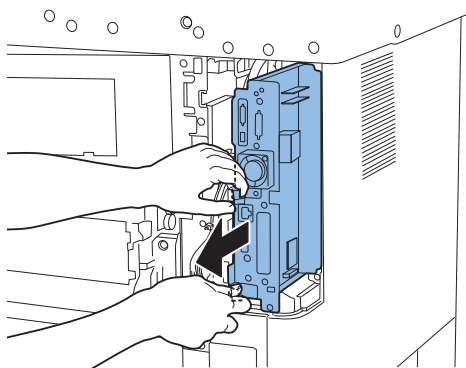
Be sure to refer to the Host Machine Installation "How to disconnect main power".

Installation Procedure

<p>□</p> <p>1) Open the Right Lower Cover (Open also the Right Delivery Unit in the same time).</p>  <p>F-9-146</p>	<p>□</p> <p>2) Open the Right Rear Cover 1. 3) Remove the Right Rear Cover 1.</p> <ul style="list-style-type: none"> • 1 Screw (RS Tight; M4) • 2 Screws (TP; M3) • Claw in 1 place  <p>F-9-147</p>
<p>□</p> <p>4) If Reader is installed, remove the Reader Power Cable.</p> <ul style="list-style-type: none"> • 2 Connectors • 1 Wire Saddle • 1 Cable Guide  <p>F-9-148</p>	<p>□</p> <p>5) Remove the USB cable and Control Panel Communication Cable.</p>  <p>F-9-149</p>

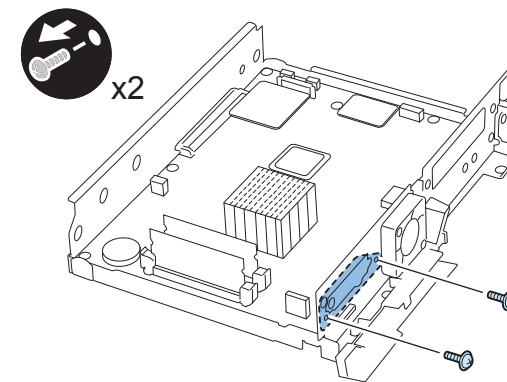


7) Hold the grip in 2 places, remove the Main Controller PCB 1 while avoiding the removed harness.



8) Remove the Voice Operation Board Support Plate from the Main Controller Roller PCB 1. (Do not use the removed Support Voice Operation Board.)

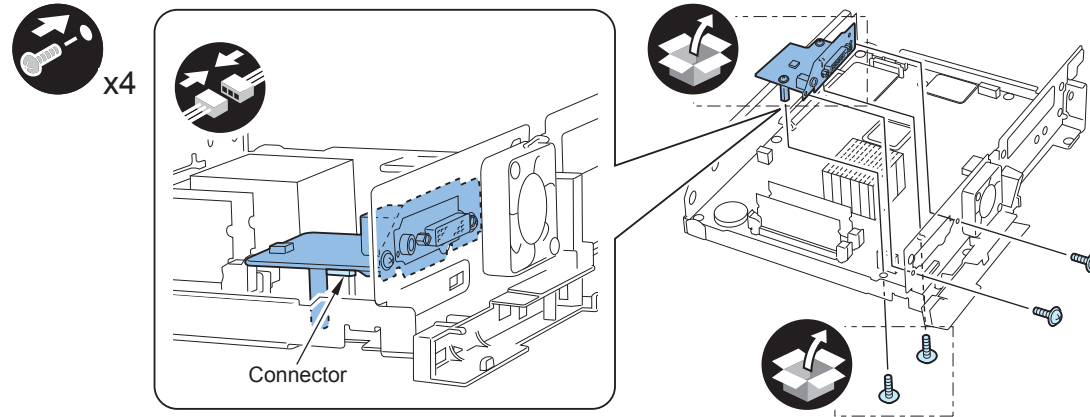
- 2 Screws (removed screw will be used in step 9))



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; M3x6)

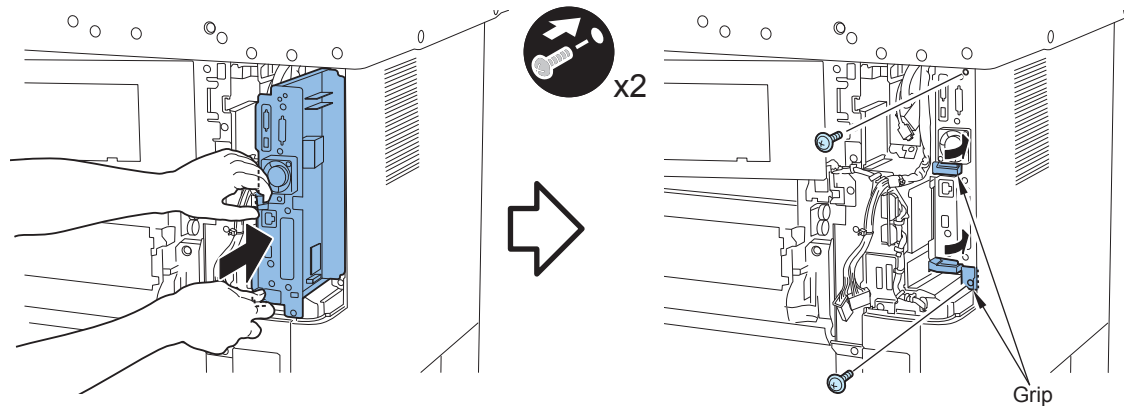
NOTE:
Make sure that the connector is properly installed.



F-9-153

10) 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.

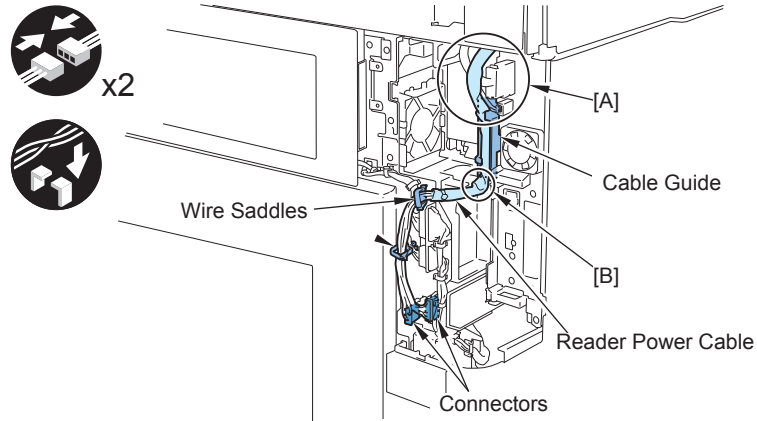


F-9-154



- 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.

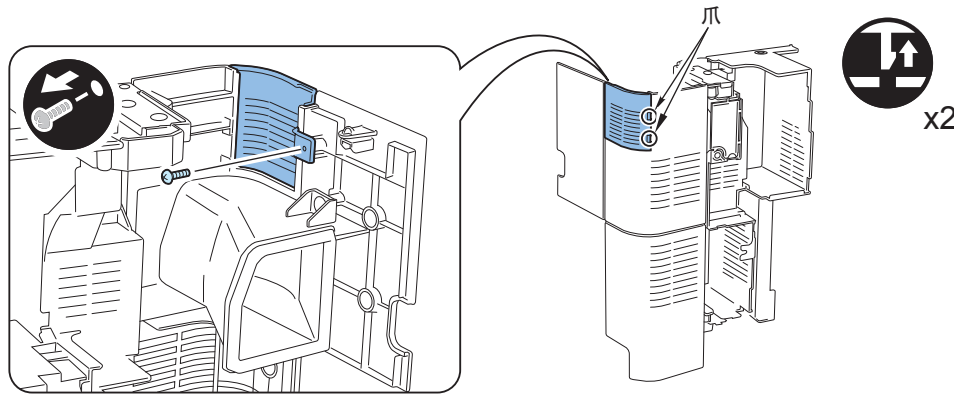


F-9-155



- 13) Remove the Small Cover installed in the Right Rear Cover 1.

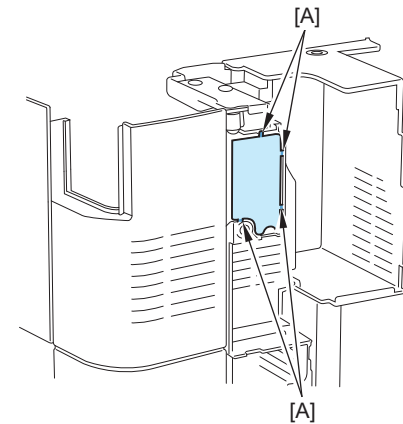
- 1 Screw
- Claw in 2 places



F-9-156



- 14) Cut the [A] part of the Right Rear Cover 1 with nipper, etc.



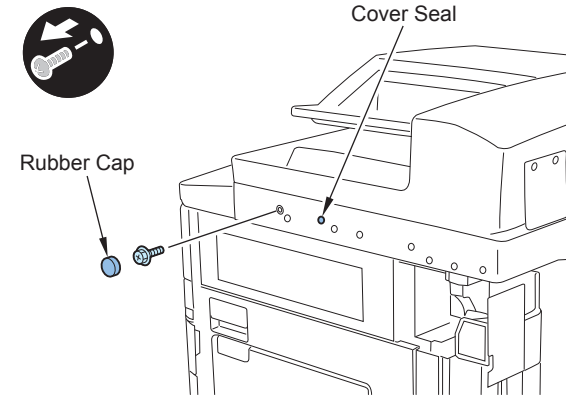
F-9-157

- 15) Install the Right Rear Cover 1.

NOTE:
Do not close the Right Rear
Cover 1.

- 16) Close the Right Lower Cover and Right Upper Cover.

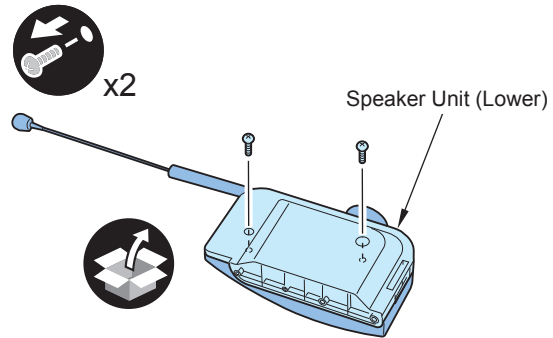
- 17) Remove the Rubber Cap, screw, the Cover Seal from the Reader Right Cover.
(Do not use the removed Rubber Cap, screw and Cover Seal.)



F-9-158

- 18) Remove the Speaker Unit (Lower) from the Speaker Unit.

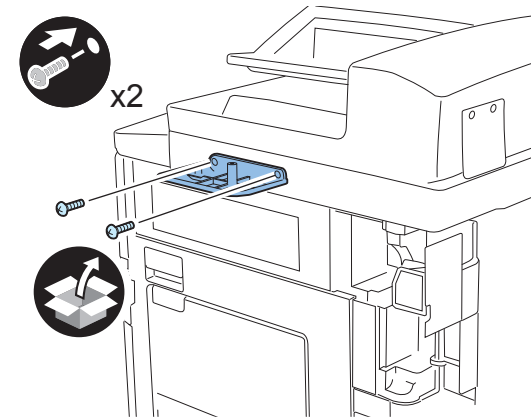
- 2 screws (removed screw will be used in step 20))



F-9-159

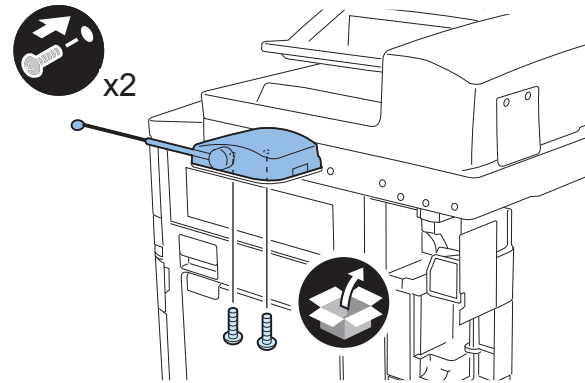
- 19) Install the Speaker Unit (Lower).

- 2 Screws (Binding; M4x20)

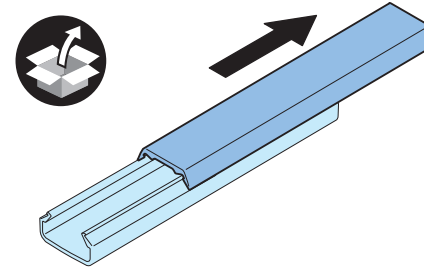


F-9-160

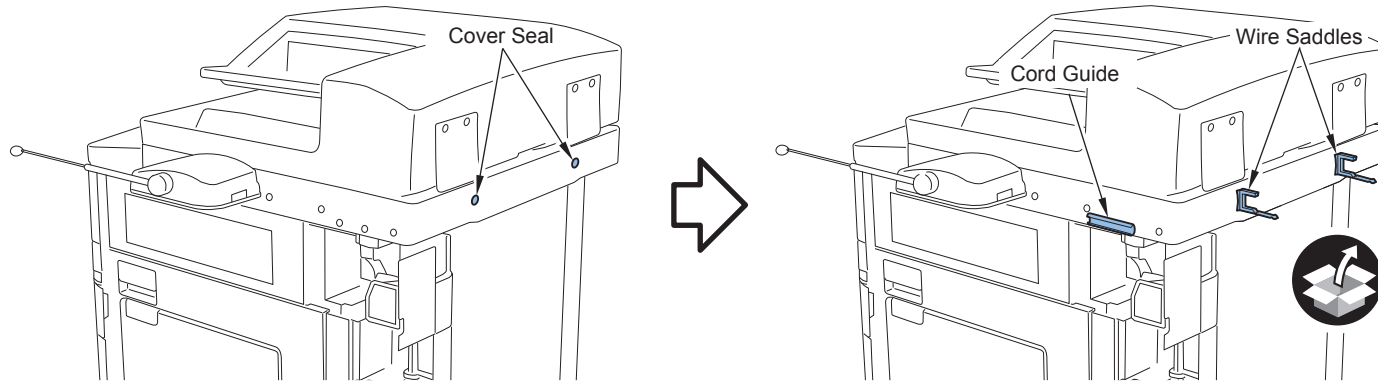
- 20) Install the Speaker Unit (Upper).
- 2 screws (screws that removed in step 18))



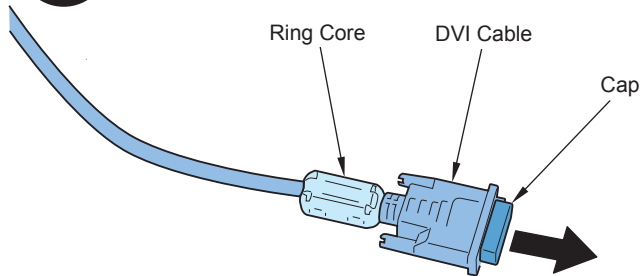
- 21) Remove the Cord Guide Cover.



- 22) Peel off the paper liner, and affix the Cord Guide.
- 23) Peel off the Cover Seal, and install the 2 Wire Saddles.

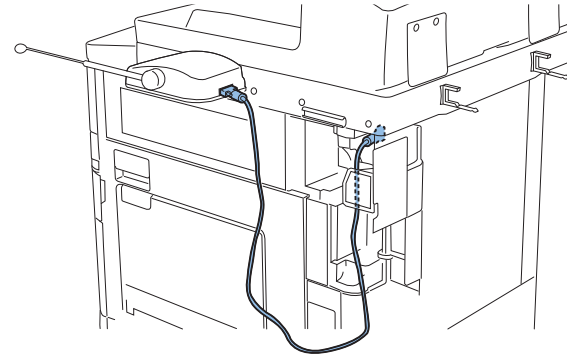


24) Install the Ring Core to both sides of the DVI Cable, and remove the cap.



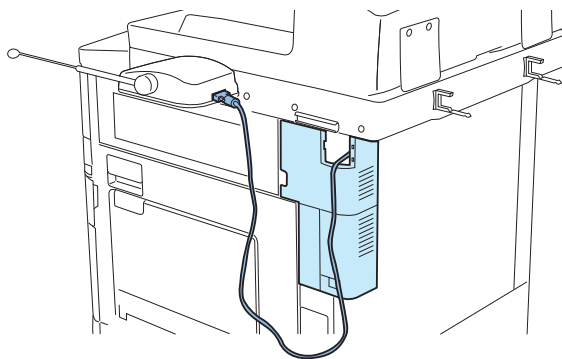
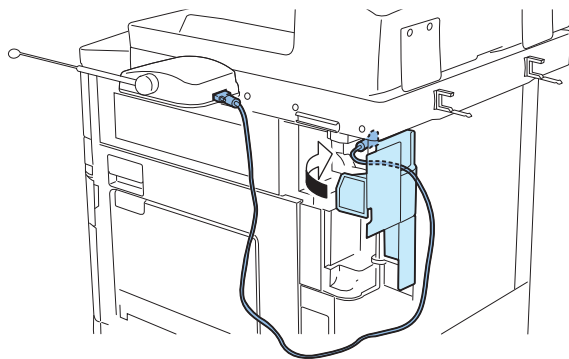
F-9-164

25) Connect both sides of the DVI Cable respectively.



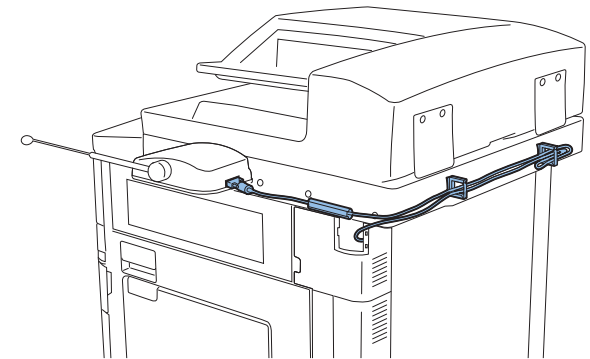
F-9-165

26) Pass the DVI Cable through the hole of the Right Rear Cover 1, and close the cover.



F-9-166

27) Pass DVI Cable to the Cord Guide, and install the cover.
28) Fix the DVI Cable to the Wire Saddle



F-9-167

Setting Check



- 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 is [Select Mode at Startup] 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 > [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 > [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-F1

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"/> *1 [5] Cord Guide X 7
<input type="checkbox"/> [6] Ring Core X 2 	<input type="checkbox"/> [7] Screw(Binding; M4X20) X 2 	<input type="checkbox"/> *2 [8] Screw(Binding; M4X16) X 2 	<input type="checkbox"/> *2 [9] Screw(Binding; M3X16) X 1 	<input type="checkbox"/> [10] Screw(Binding; M4X6) X 1 <input type="checkbox"/> *3 [11] Screw(TP; M3X6) X 2

F-9-168



*1: 3 pieces are used in this Installation procedure.

*2: Not used in this Installation procedure.

*3: 2 screws are used in this Installation Procedure.



<CD/GUIDES>

- Voice Guidance kit Users Guide
- Voice Guidance Guide CD
- Sheet: FCC/IC

Points to note when Installing

CAUTION:

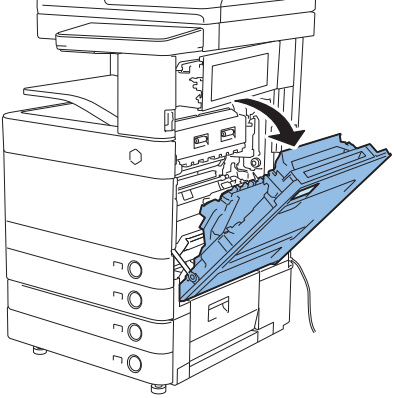
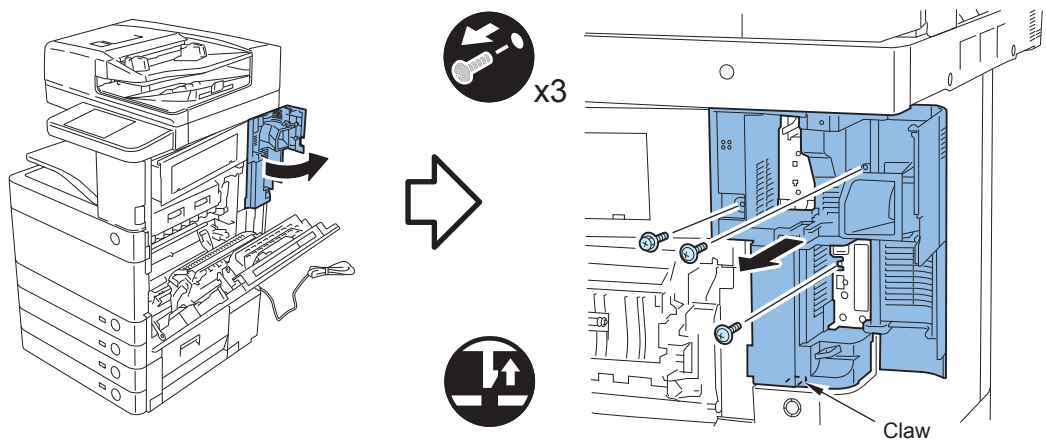
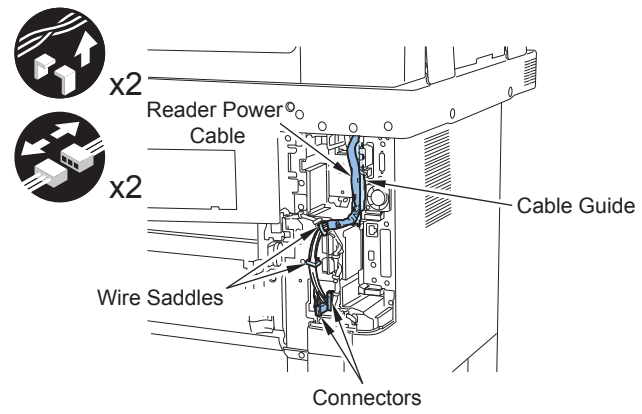
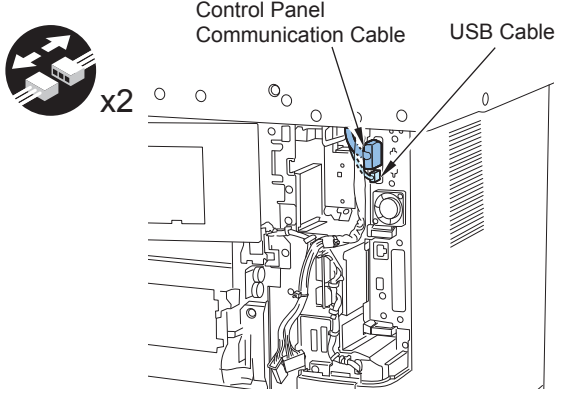
The Color Image Reader is necessary to operate this equipment.

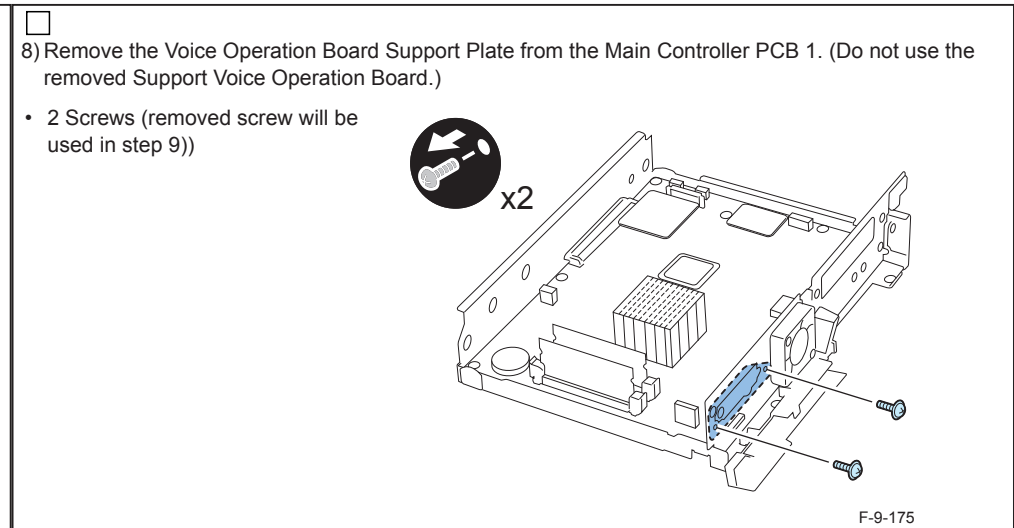
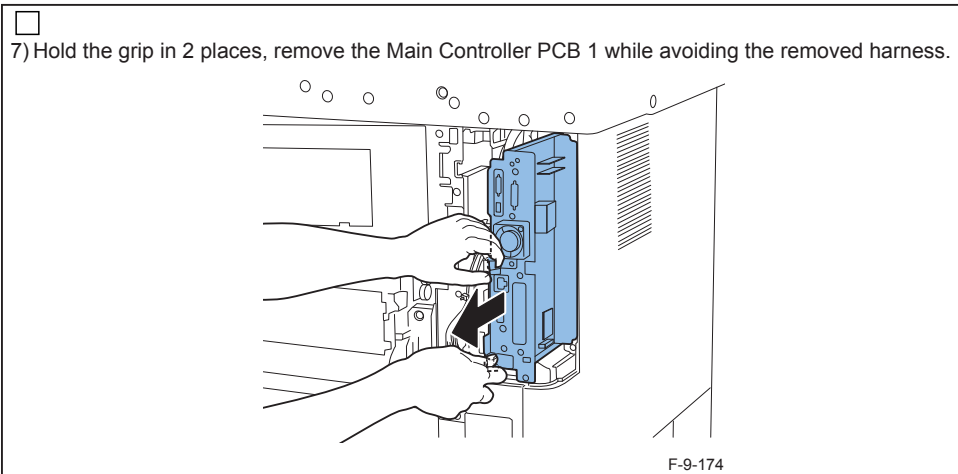
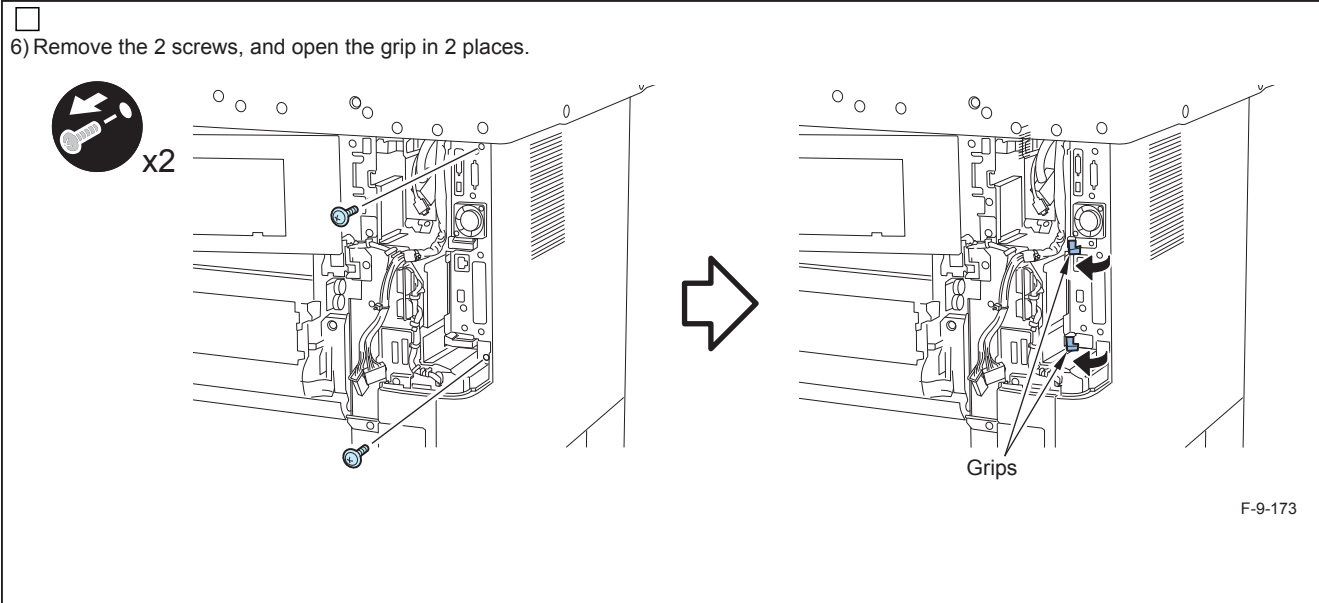
When installing the equipment, see the 'Combination Table of Accessory Installation'.

Turning OFF the Host Machine

Be sure to refer to Host Machine Installation “How to disconnect main power”.

Installation Procedure

<p><input type="checkbox"/> 1) Open the Right Lower Cover. (Open also the Right Delivery Unit in the same time.)</p>  <p>F-9-169</p>	<p><input type="checkbox"/> 2) Open the Right Rear Cover 1. 3) Remove the Right Rear Cover 1.</p> <ul style="list-style-type: none"> • 1 Screw (RS Tight; M4) • 2 Screws (TP; M3) • Claw in 1 place  <p>F-9-170</p>
<p><input type="checkbox"/> 4) If reader is installed, remove the Reader Power Cable.</p> <ul style="list-style-type: none"> • 2 Connectors • 2 wire Saddle • 1 Cable Guide  <p>F-9-171</p>	<p><input type="checkbox"/> 5) Remove the USB Cable and Control Panel Communication Cable.</p>  <p>F-9-172</p>

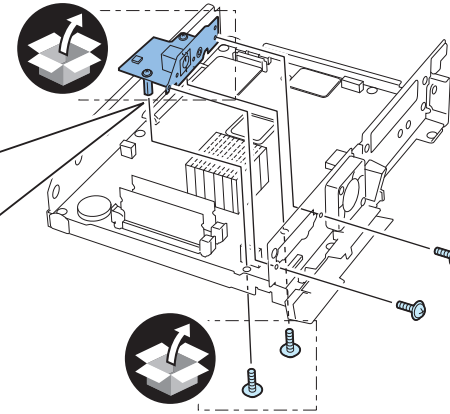
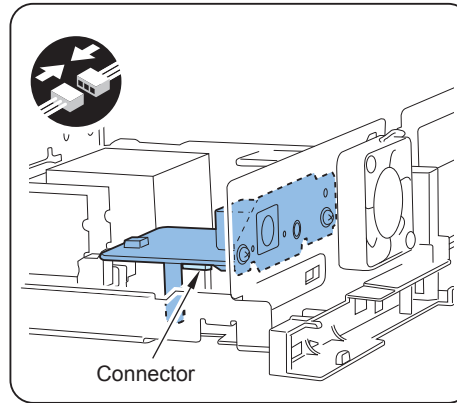




9) Install the Voice Guidance Board Unit in the Main Controller PCB 1.

- 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-9-176



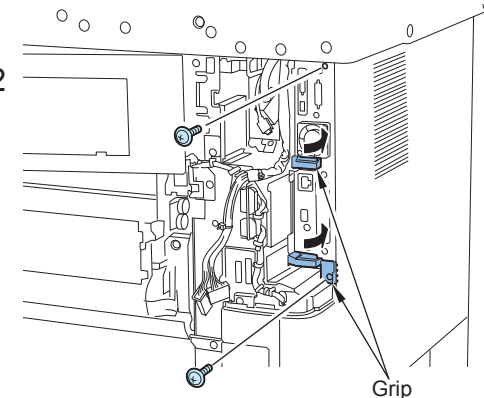
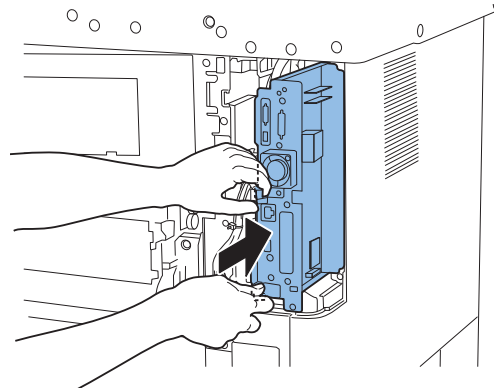
10) Install the Main Controller PCB 1 in the Host Machine.

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.

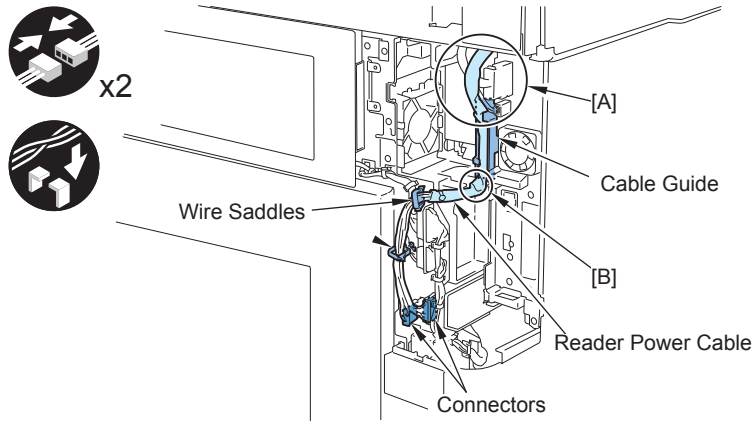
Check that the Main Controller PCB 1 is installed properly.



F-9-177

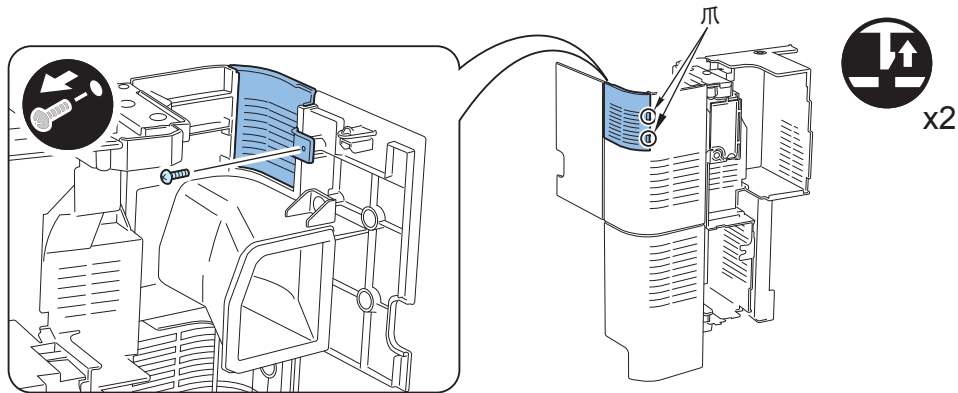
- 11) Install the USB Cable and Control Panel Communication Cable.
- 12) If reader is installed, install the Reader Power Cable.

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.



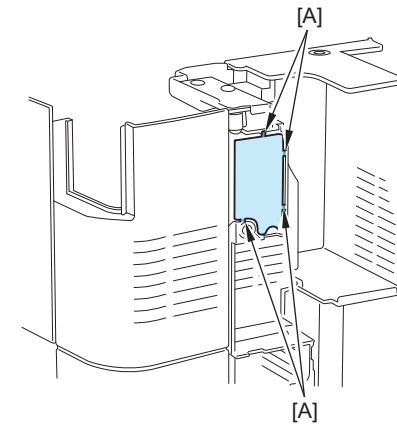
F-9-178

- 13) Remove the small cover installed in the Right Rear Cover 1.
- 1 Screw
- Claw in 2 places



F-9-179

- 14) Cut the [A] part of Right Rear Cover 1 with nipper, etc.



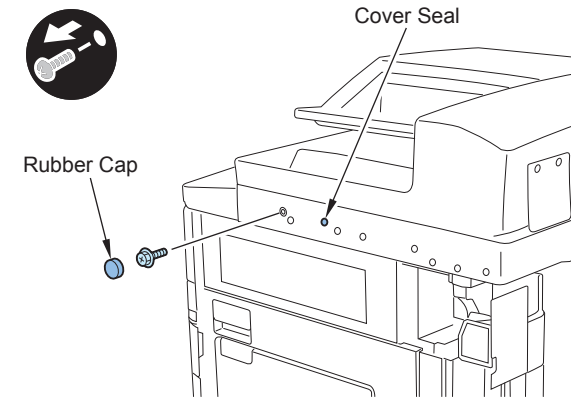
F-9-180

- 15) Install the Right Rear Cover 1.

NOTE:
Do not close the Right Rear Cover 1.

- 16) Close the Right Lower Cover and the Right Upper Cover.

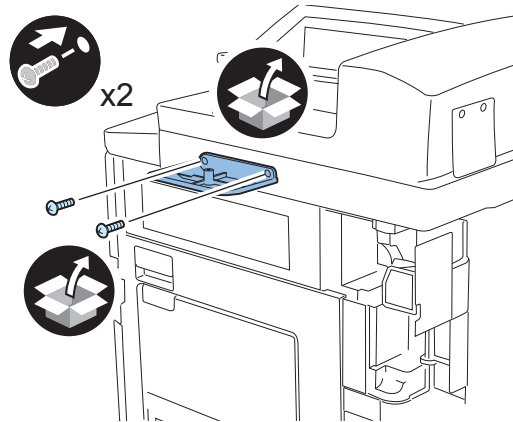
- 17) Remove the Rubber Cap, screw, and Cover Seal from the Reader Right Cover. (Do not use the removed Rubber Cap, screw and Cover Seal.)



F-9-181

- 18) Install the Speaker Unit (lower).

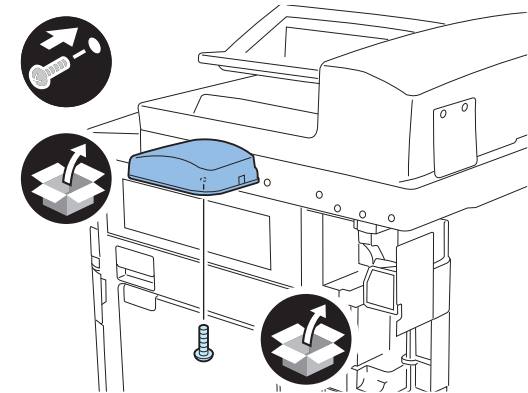
- 2 Screws (Bind; M4x20)



F-9-182

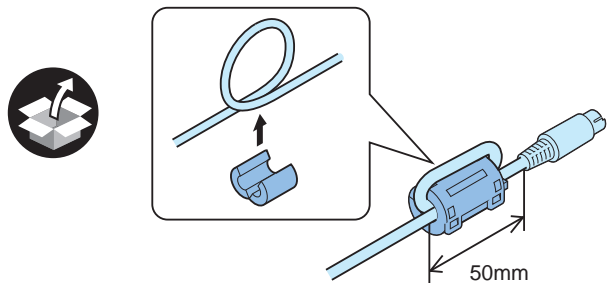
- 19) Install the Speaker Unit (Upper).

- 1 Screw (Bind; M4x6)



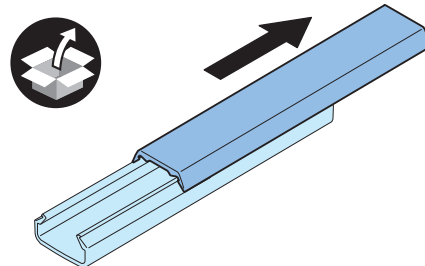
F-9-183

- 20) Install the Ring Core to both sides of the Speaker Cable.



F-9-184

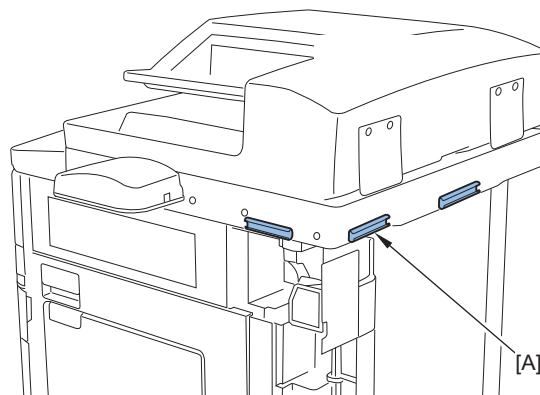
- 21) Remove the cover of the 3 Cord Guides.



F-9-185

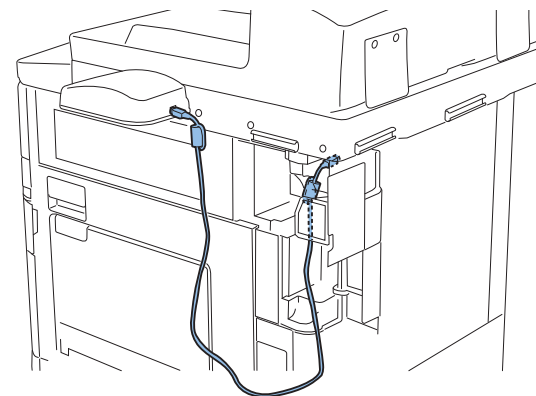
- 22) Peel off the paper liner, and affix them in 3 places in the Cord Guide as shown in the figure.

NOTE:
If this is used together with the Card Reader-C1.
Use the wire saddle enclosed with the Card Reader Installation Kit-B1 to the [A] area.

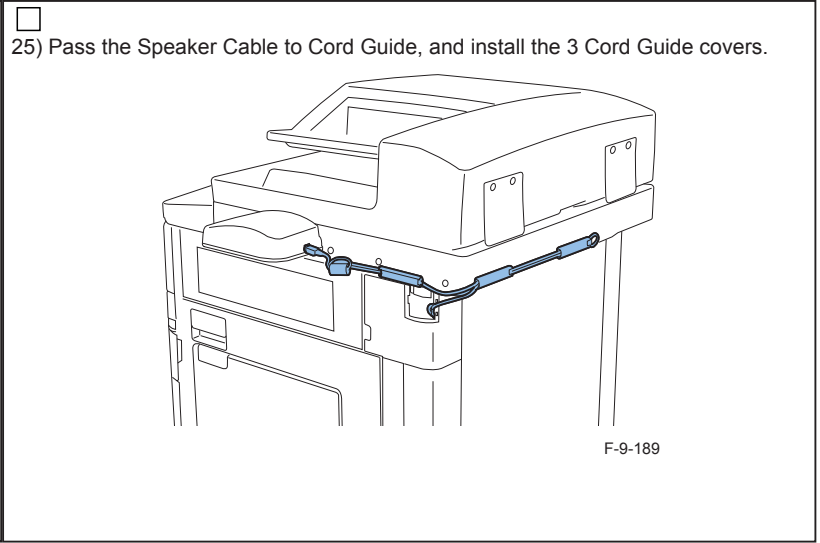
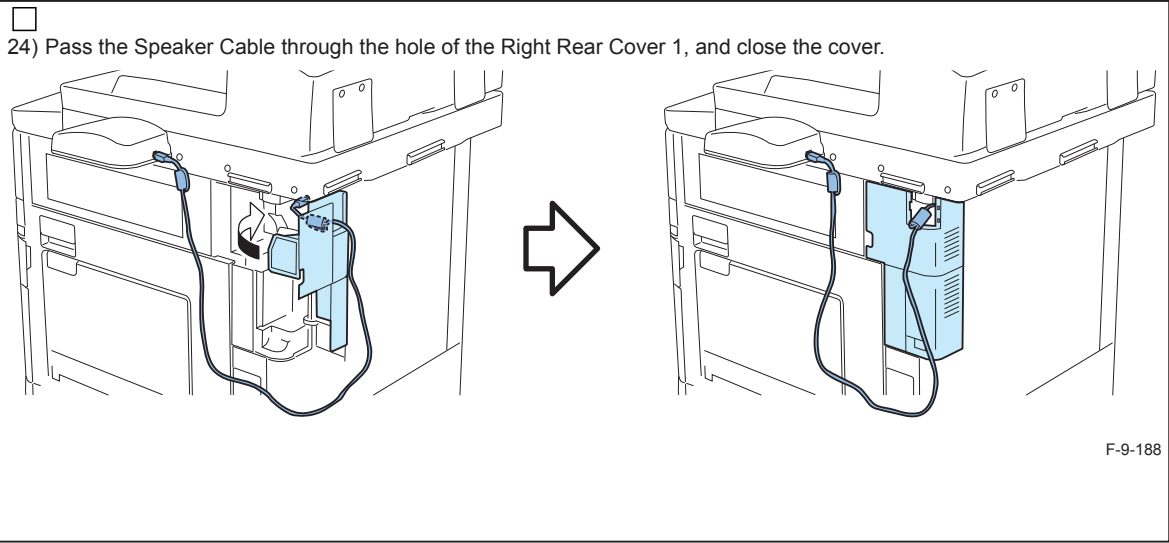


F-9-186

- 23) Connect both sides of the Speaker Cable respectively.



F-9-187



Checking after installation

-
- 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 > [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.

Card Reader-C1/Copy Card Reader-F1

Points to Note at Installation

NOTE:

Although model with the Card Reader-C1 is used for illustration in this procedure, the same procedure is applied to model with the Copy Card Reader-F1.

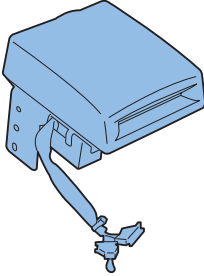


CAUTION:

To install the Card Reader-C1, the Card Reader Mounting Kit-B1 is required.

To install the Copy Card Reader-F1, the Card Reader Mounting Kit-B2 is required.

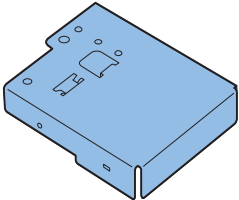
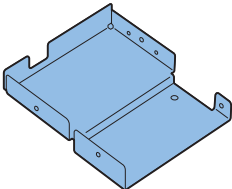
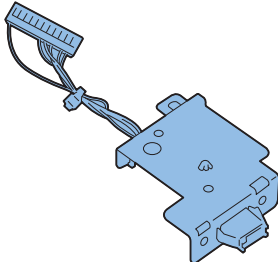
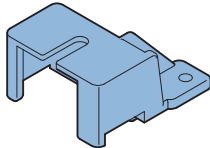
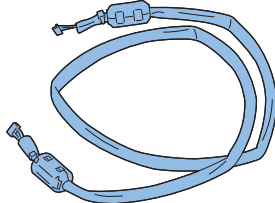
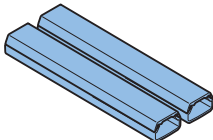


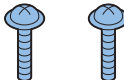
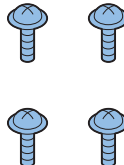
Checking the Contents

■ Card Reader-C1/Copy Card Reader-F1

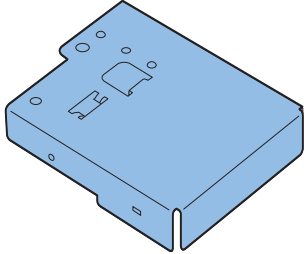
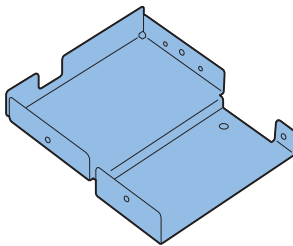
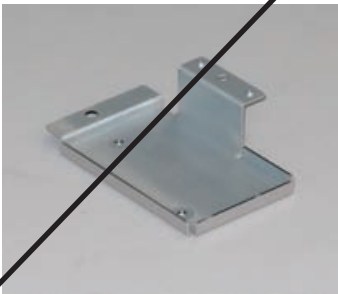
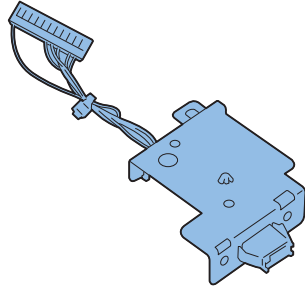
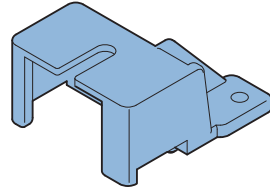
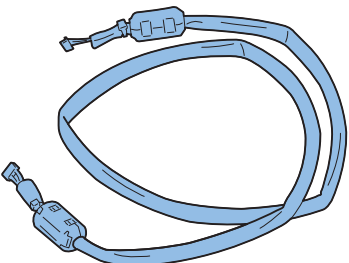
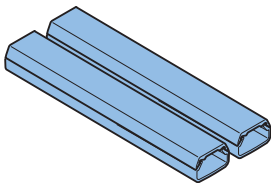

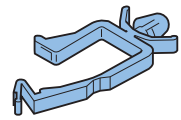
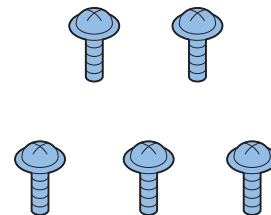
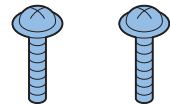
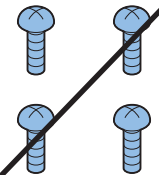
<input type="checkbox"/> [1] Card Reader Unit x 1	<input type="checkbox"/> [2] Screw (RS tight; M4X10) X 1	<input type="checkbox"/> [3] Toothed washer x 1
		

F-9-190

■ Card Reader Attachment-B1

<p><input type="checkbox"/> [1] Card Reader Mounting Plate (front) Unit x 1</p> 	<p><input type="checkbox"/> [2] Card Reader Mounting Plate (rear) Unit x 1</p> 	<p><input type="checkbox"/> [3] Card Reader Relay Unit x 1</p> 	<p><input type="checkbox"/> [4] Connector Cover x 1</p> 	<p><input type="checkbox"/> [5] Card Reader External Relay Harness x 1</p> 
<p><input type="checkbox"/> [6] Cord Guide x 2</p> 	<p><input type="checkbox"/> [7] PCB Spacer x 1</p> 	<p><input type="checkbox"/> [8] Wire Saddle x 1</p> 	<p><input type="checkbox"/> [9] Screw (TP; M4X12) x 2</p> 	<p><input type="checkbox"/> [10] Screw (TP; M3X6) x 4</p> 

■ Card Reader Attachment-B2

<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 <p>Use 4 of them</p> 
<input type="checkbox"/> [11] Screw (TP; M4x12) X 2 	<input type="checkbox"/> [12] Screw (Bind; M4x6) X 4 			

Turning OFF the Host Machine

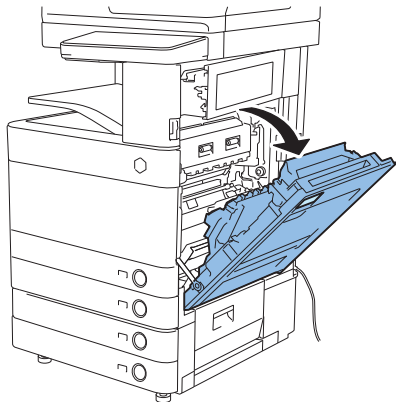
Refer to the host machine installation [Turning OFF the Main Power].

Installation Procedure

CAUTION:

- When installing this equipment, refer to [Option Installation Combination List] and install it.
- After installing the Card Reader-C1/Copy Card Reader-F1, input the card number to be used in service mode on this equipment: [COPIER] > [FUNCTION] > [INSTALL] > [CARD]; otherwise the card cannot be recognized even though it is inserted.

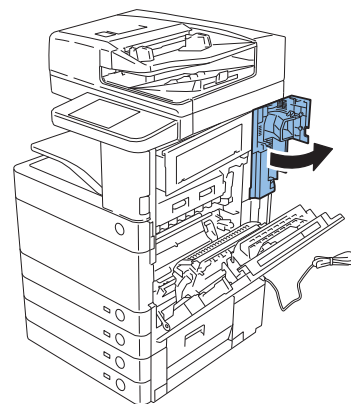
- 1) Open the Right Lower Cover. (Right Upper Cover will open simultaneously.)



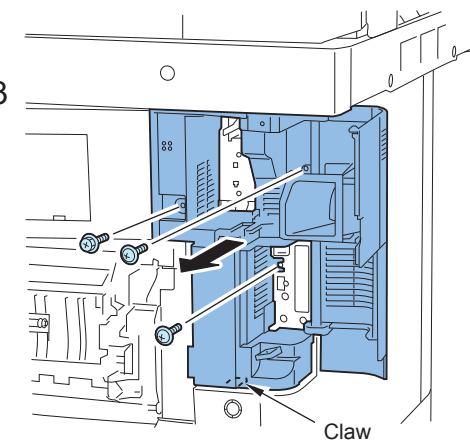
F-9-193

- 2) Open the Right Rear Cover Unit.
3) Remove the Right Rear Cover Unit 1.

- 1 Screw (RS tight; M4)
- 2 Screws (TP; M3)
- 1 Claw



x3



F-9-194

4) When the Reader is installed, remove the Reader Power Cable.

- 2 Connectors
- 2 Wire Saddles
- 1 Cable Guide

F-9-195

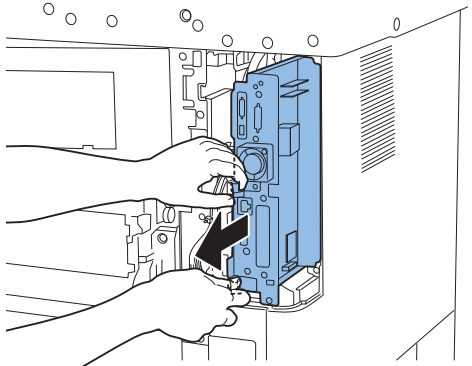
5) Remove the USB Cable and the Control Panel Communication Cable.

F-9-196

6) Remove the 2 screws and open the 2 grips.

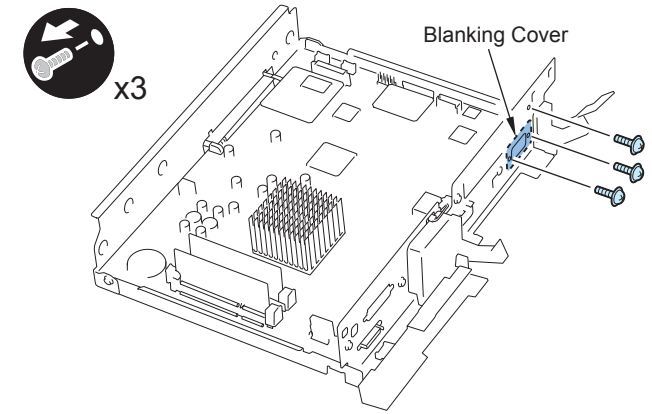
F-9-197

7) Hold the 2 grips and remove the Main Controller PCB 1 while avoiding the removed harness.



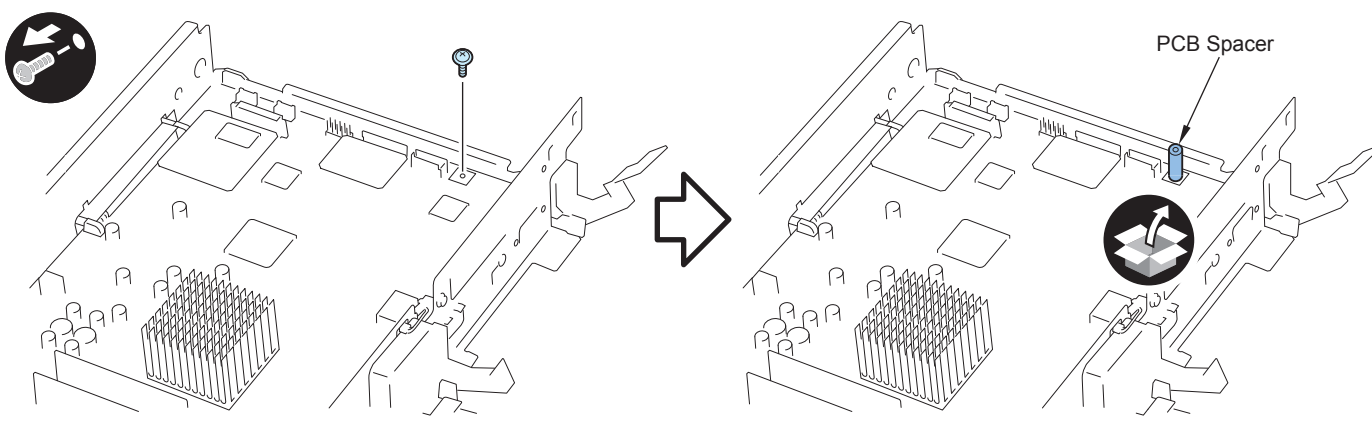
F-9-198

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-9-199

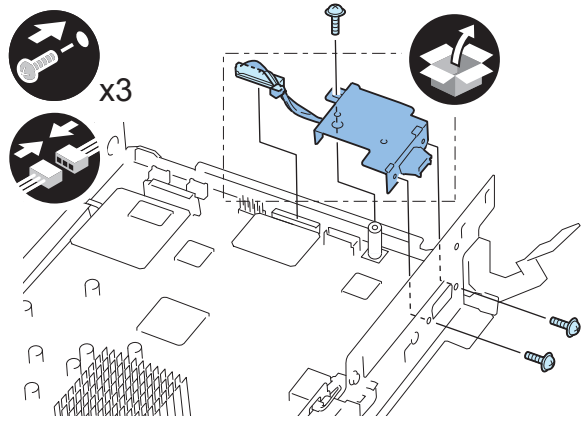
9) Remove the screw and remove the PCB Spacer. (Removed screw is used in the procedure 12)



F-9-200

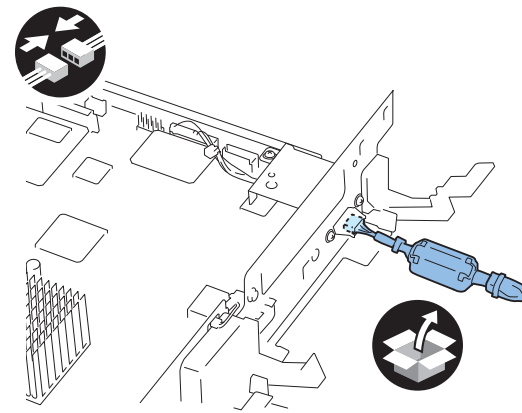
□
10) Install the Card Reader Relay Unit.

- 3 Screws (screws removed in step 8))
- 1 Connector



F-9-201

□
11) Install the connector of Card Reader External Relay Harness.



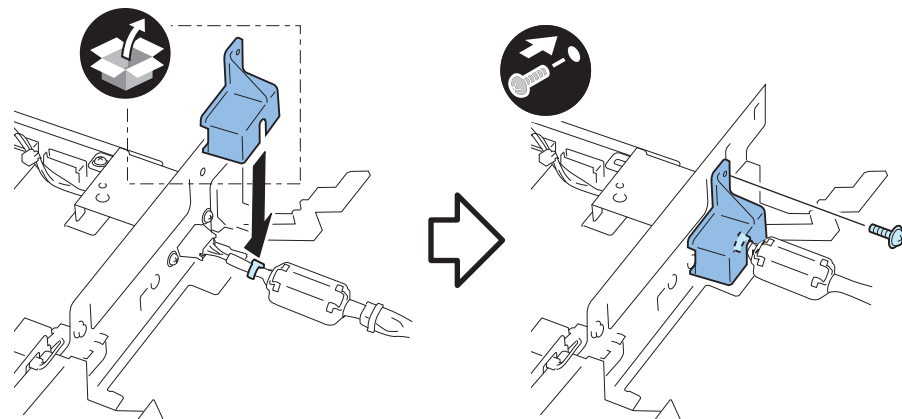
F-9-202

□
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..

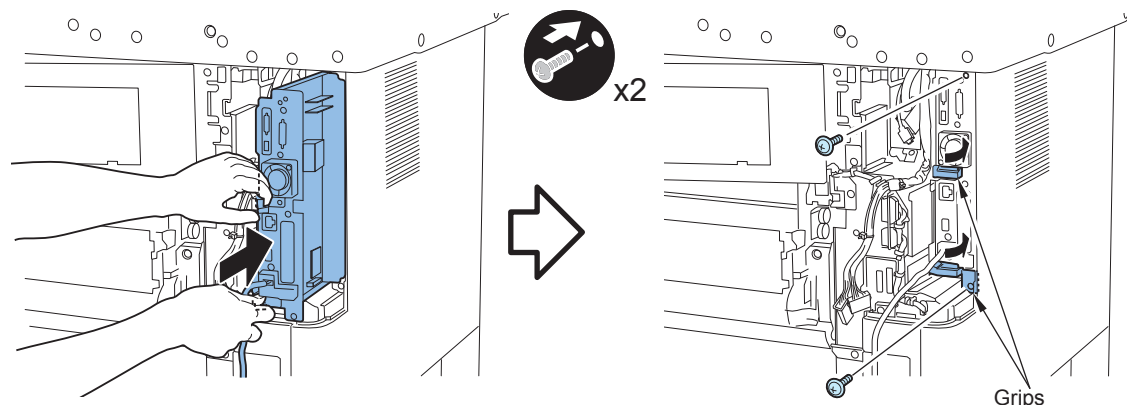


F-9-203

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.

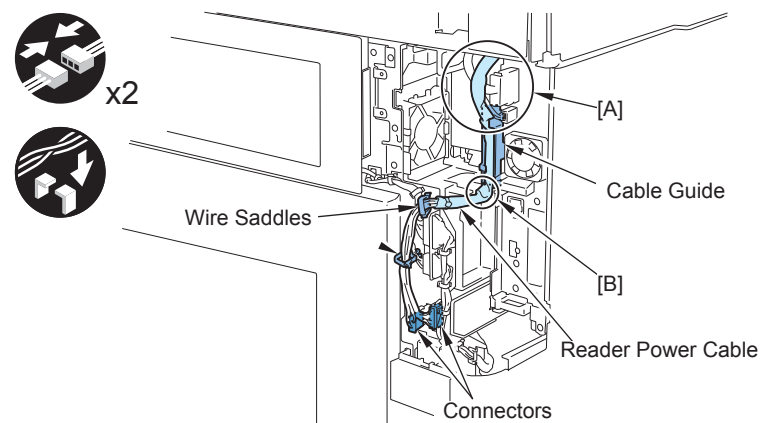


F-9-204

14) Install the USB Cable and the Control Panel Communication Cable.
15) When the Reader is installed, install the Reader Power Cable..

NOTE:

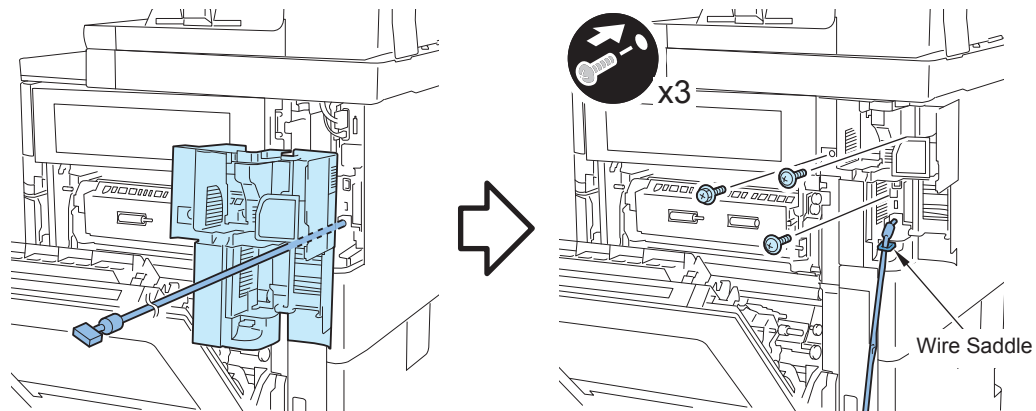
Handle the Reader Power Cable from the connector side and make a slack at A part.
Bend the Reader Power Cable at a right angle on B part.



F-9-205

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



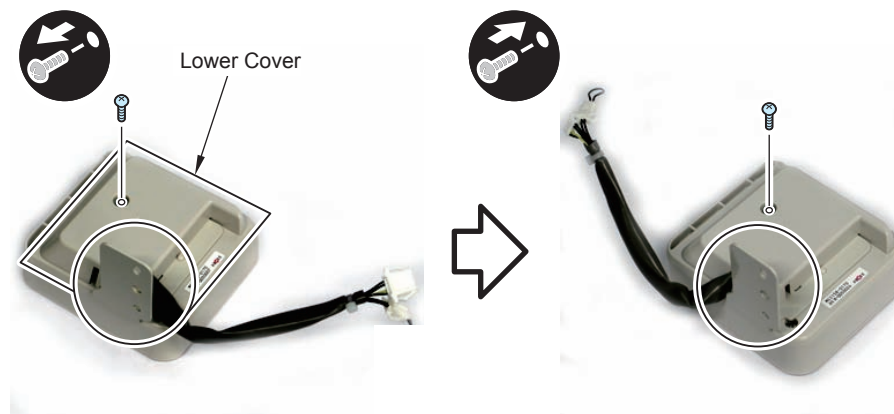
F-9-206

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. (Copy Card Reader-F1 only)

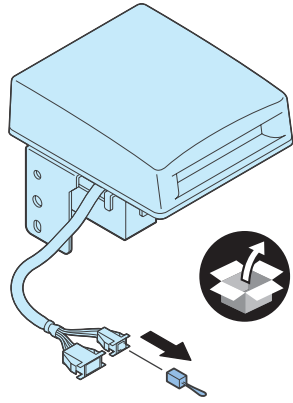
- 1 Screws

19) Install the Lower Cover of the Card Reader Unit.



F-9-207

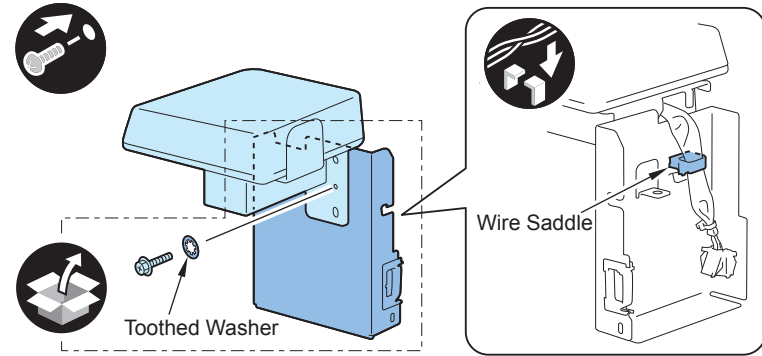
- 20) Remove the Jumper from the connector of Card Reader Unit.
(Removed Jumper will not be used.)



F-9-208

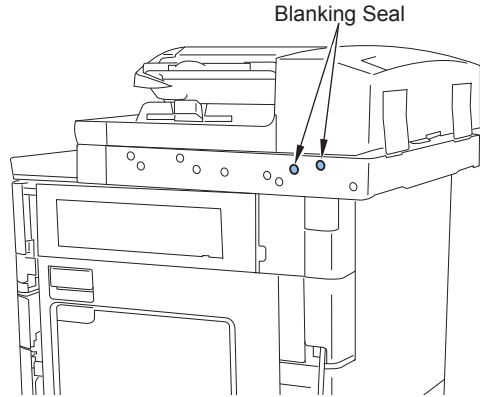
- 21) Install the Card Reader Unit to the Card Reader Mounting Plate (front) Unit.

- 1 Toothed Washer
- 1 Screw (RS tight; M4X10)
- 1 Wire saddle



F-9-209

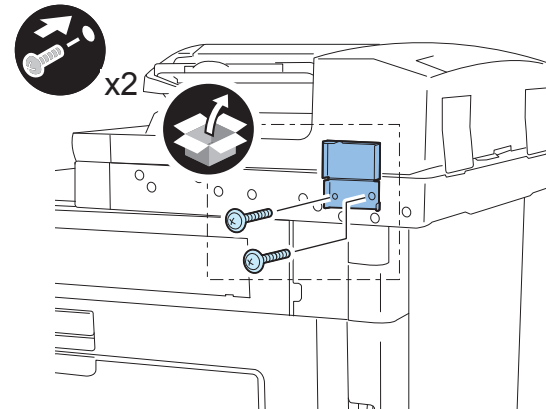
- 22) Remove the 2 Blanking Seal from the Reader Right Cover.



F-9-210

- 23) Install the CARD Reader Installation Plate (rear) to the host machine.

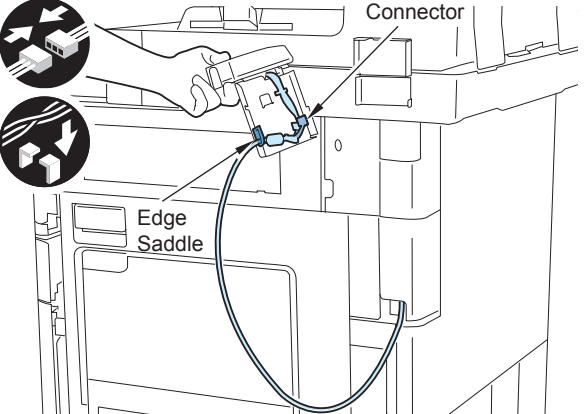
- 2 Screws (TP; M4X12)



F-9-211

24) Connect the Card Reader External Relay Harness to the connector of Card Reader Unit.

- 1 Connector
- 1 Edge Saddle

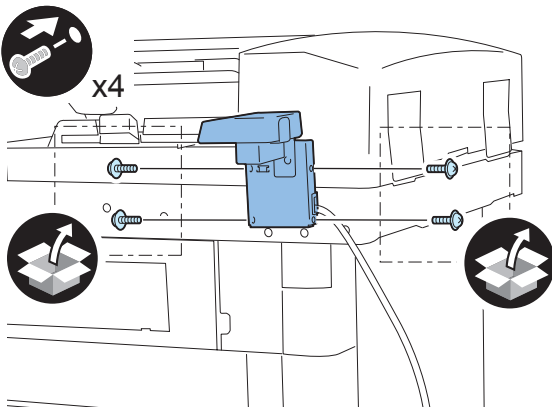


F-9-212

25) Install the Card Reader Mounting Plate (front) Unit to the Card Reader Mounting Plate (rear).

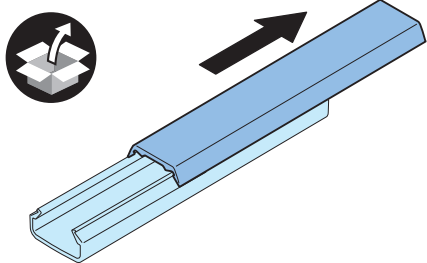
- 4 Screws (TP; M3X6)

CAUTION:
Do not pinch the harness.



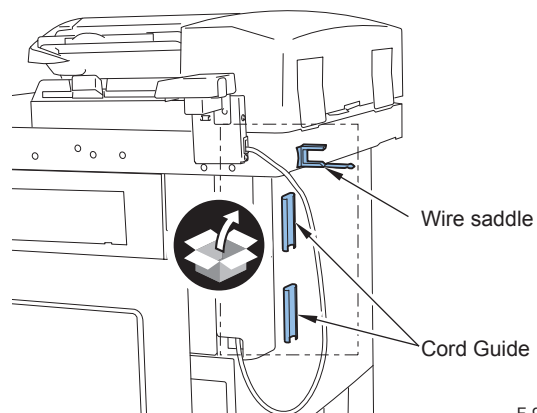
F-9-213

26) Remove the 2 covers of Cord Guide.

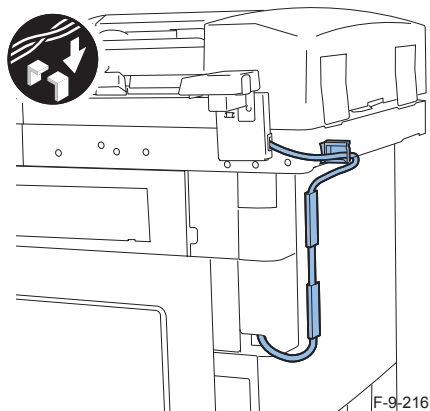


F-9-214

- 27) Remove the backing paper of Cord Guide and put it in the 2 places indicated in the figure.
28) Remove the face seal, and install the wire saddle.



- 29) Put the Card Reader External Relay Harness through the 2 places of Cord Guide and install the cover.
30) Fix the Card Reader External Relay Harness with the Wire Saddle.



- 31) Connect the Power Plug into the outlet.
32) Open the switch cover and turn ON the Main Power Switch.

Setting After Installation



- 1) Enter Service Mode, and set the model of the Card Reader.
- Service Mode: COPIER > OPTION > ACC > CR-TYPE
 - In the case of Card Reader-C1, select "1".
 - In the case of Copy Card Reader-F1, check that "0" is selected.



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
- 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.



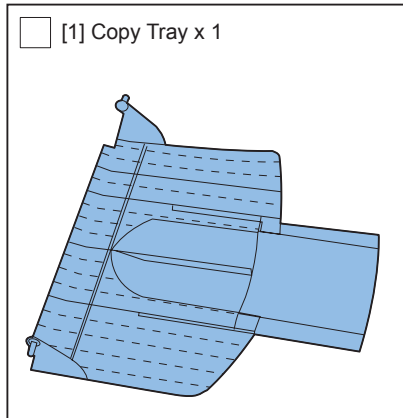
NOTE:

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: > [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



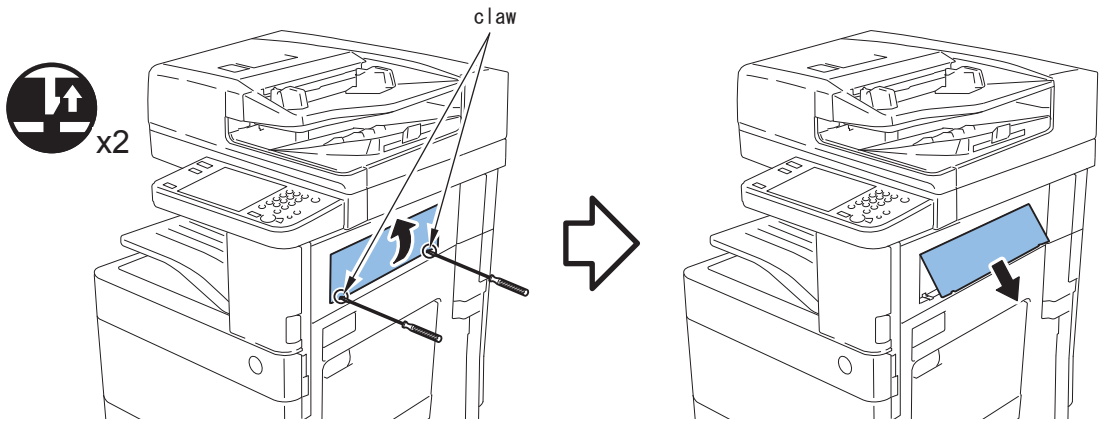
F-9-217

● Turning OFF the host machine

Refer to the host machine installation: "Turning OFF the main power".

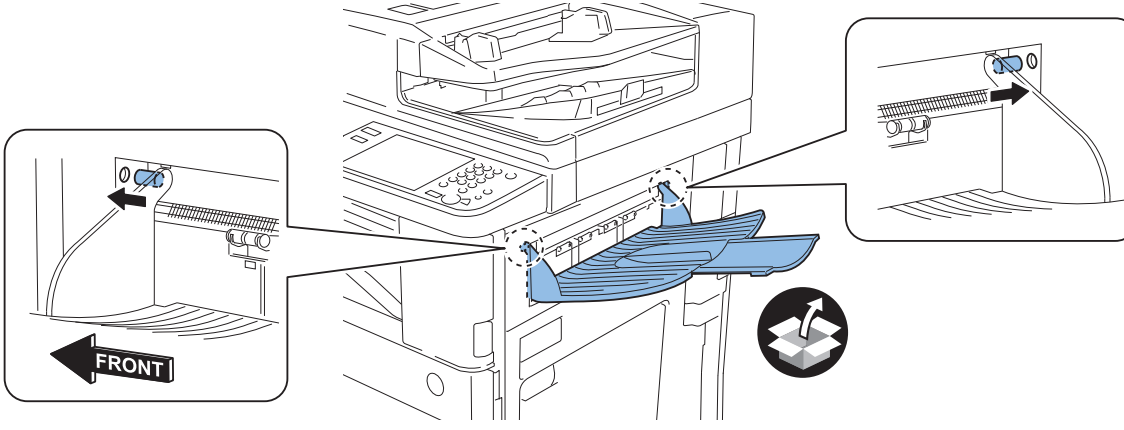
Installation procedure

1) Remove the Right Delivery Frame Cover with flat-blade screwdriver.
• 2 Claws



F-9-218

2) Install the Copy Tray.
• 2 Claws



F-9-219

3) Connect the Power Plug into the outlet.
4) Open the switch cover and turn ON the Main Power Switch.

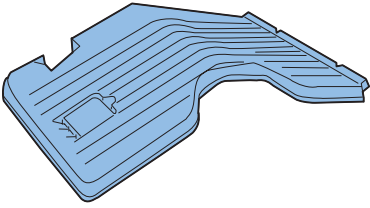
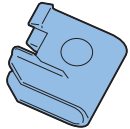

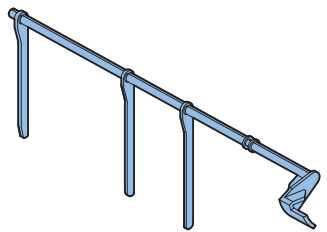
Setting after installation



- 1) Service Mode.
- 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 X1 	<input type="checkbox"/> [2] Insert pin X1 	<input type="checkbox"/> [3] Screw (TP; M3X6) X1 	<input type="checkbox"/> * [4] Second Delivery Full Detection Lever X 1 
--	---	---	--

*Not used in this Installation procedure.

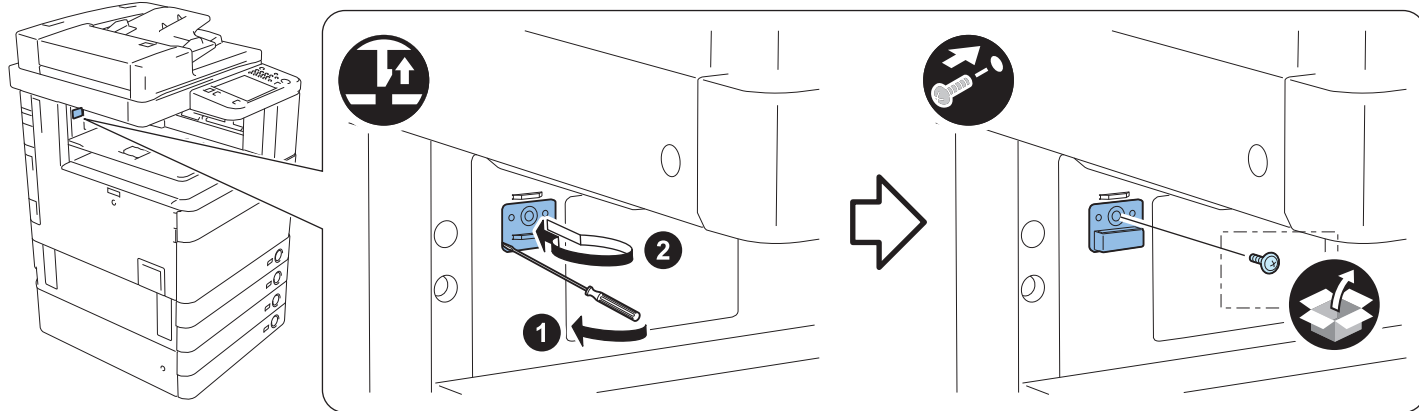
F-9-220

Turning Off the Main Power Switch

Refer to "Turning OFF the Main Power Switch" in Main Unit Installation Procedure.

Installation Procedure

-
- 1) Release the claw of the Inner 2way Tray Support using flat-blade screwdriver, and release the Inner 2way Tray from the host machine.
 - 2) Turn over the Inner 2way Tray Support and install to the host machine.
 - 1 Screw (TP; M3x6)



F-9-221

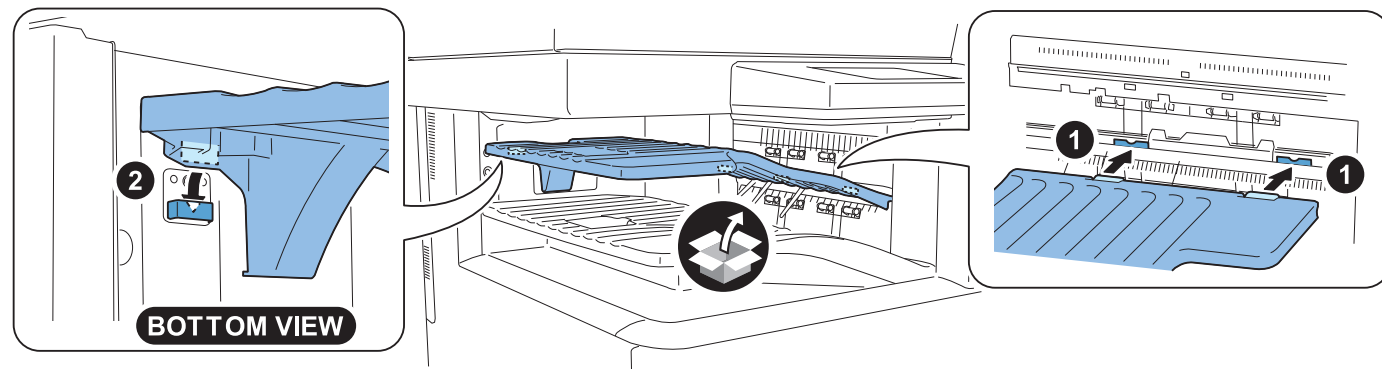
-
- 3) Insert the Inner 2way Tray to 2 slots of the Delivery Assembly, and hook it to the slot of the Inner 2way Tray Support.

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.

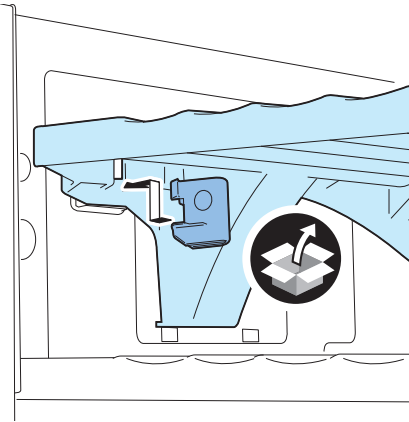
CAUTION:

Check that the Inner 2way Tray Unit is inserted to the Inner 2way Tray Support.



F-9-222

- 4) Insert the insert pin into the hole of the In Tray, and fix to the Inner 2way Tray Support.



F-9-223

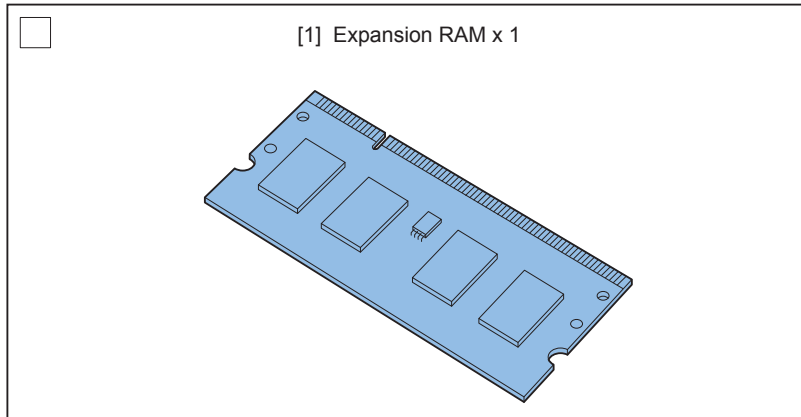
- 5) Select copy to the Tray B, and perform test. Connect the Power Plug into the outlet.
6) Open the switch cover and turn ON the Main Power Switch.

Setting after installation

-
- 1) Service Mode
 - 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 TypeB (512MB)

● Checking the contents



F-9-224

● Pre-Check

-
- 1) Check the memory capacity.
 - Service Mode > COPIER > DISPLAY > ACC-STS > RAM
 - 2) Exit the service mode.

● Turning OFF the Host Machine

Refer to the host machine installation: "Turning OFF the main power".

Installation Procedure

1) Remove the Left Rear Cover.

- 2 Rubber Caps
- 2 Screws
- 5 Claws

F-9-225

2) If the Reader is installed, remove the Reader Communication Cable.

F-9-226

3) Remove the Left Rear Sub Cover.

- 1 Screw
- 1 Hook

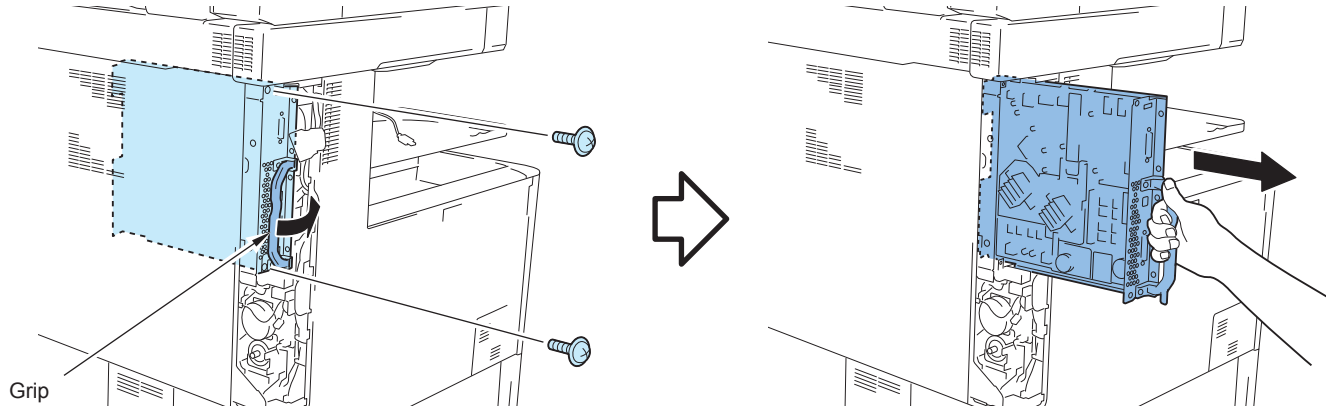
F-9-227

4) If FAX is installed, disconnect the FAX cable.

F-9-228

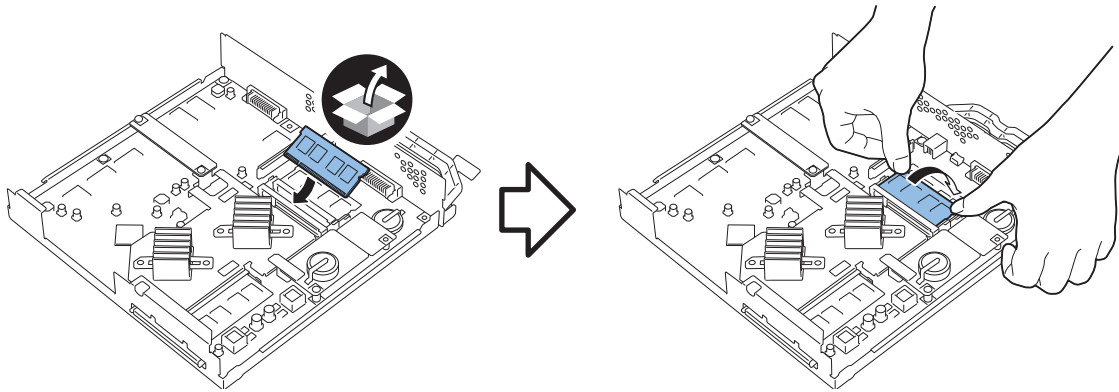
5) Hold the grip and remove the Main Controller PCB 2.

- 2 Screws



F-9-229

6) Install the Expansion RAM.

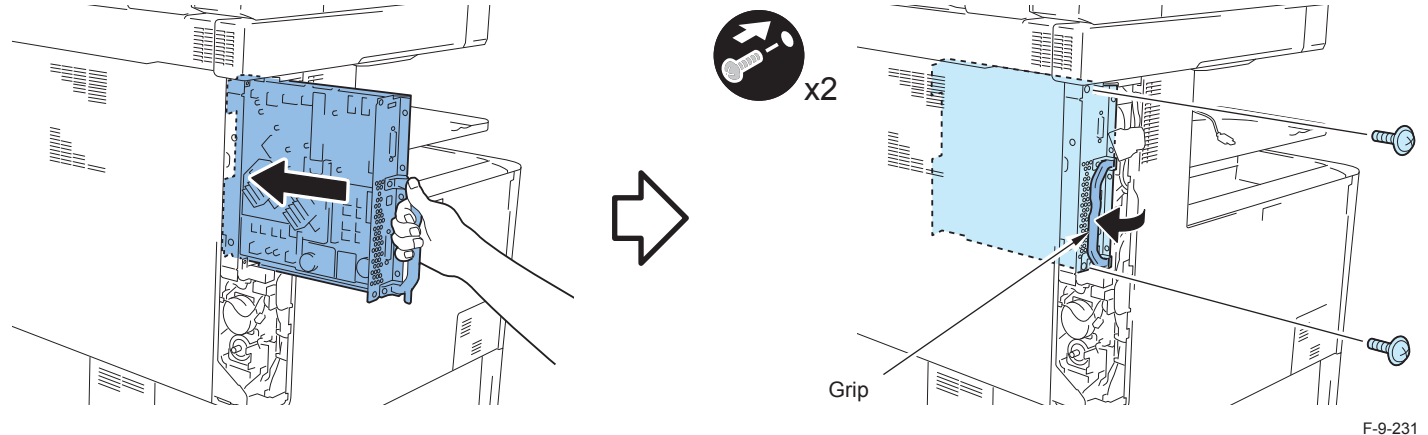


F-9-230

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.)
- Install the Left Rear Sub Cover.
- Install the Reader Communication Cable (if the Reader is installed).
- Install the Left Reader Cover.

9) Connect the Power Plug to the Outlet.

10) Open the switch cover and turn ON the Main Power Switch.

Checking after installation



- 1) After adding the Expansion RAM, check that the memory capacity is increased.
 - Service mode > COPIER > DISPLAY > ACC-STS > RAM
- 2) Exit the service mode.

Expansion Bus-F1/F2, IPsec Board-B2, Wireless LAN Board-B1/B2 Installation Procedure

Points to Note when Installing

CAUTION:

"PCI Bus Expansion Kit-F1/F2" is required to set "IPsec Board-B2" and "Wireless LAN Board-B1/B2"

When using with "Serial Interface Kit-K1" or "Copy Control Interface Kit-A1", install "Serial Interface Kit-K1" or "Copy Control Interface Kit-A1" beforehand.

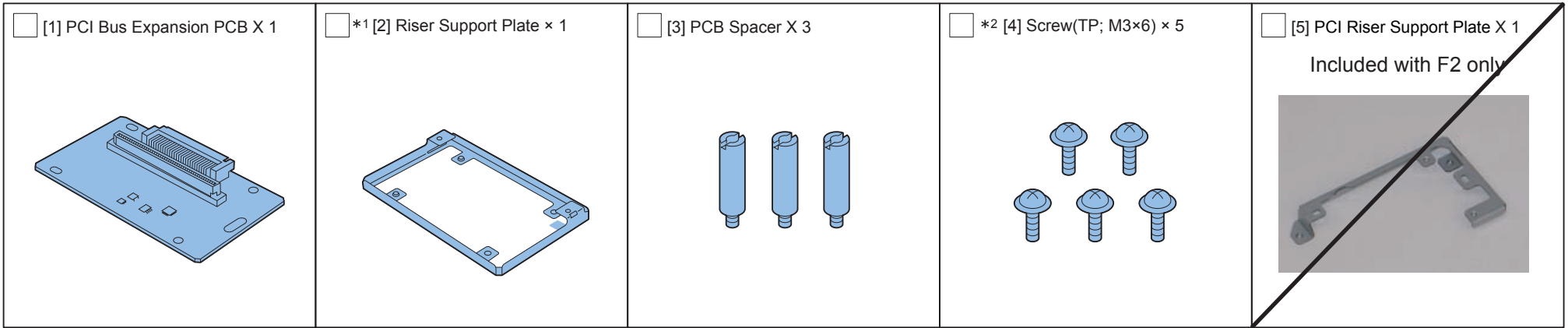
The following "Removing Main Controller PCB 1", there are 3 procedures based on the installation combination.

Expansion Bus-F1/F2	IPsec Security Board-B2	Wireless LAN Board-B1/B2	Reference for installation
○	○	-	Be sure to refer to "To install Expansion Bus-F1/F2 and IPsec Board-B2 at the same time"
○	-	○	Be sure to refer to "To install Expansion Bus-F1/F2 and Wireless LAN Board-B1/B2 and IPsec Board-B2 at the same time".
○	○	○	Be sure to refer to "To install Expansion Bus-F1/F2 and Wireless LAN Board-B1/B2 and IPsec Board-B2 at the same time".

T-9-5

Checking the contents

Expansion Bus-F1/F2

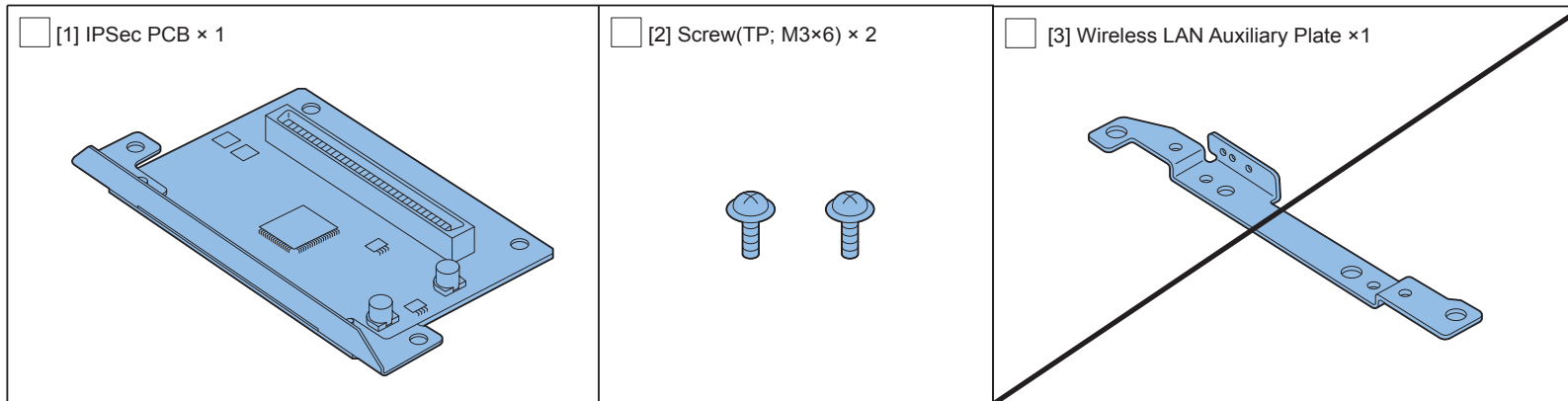


*1 This is used when connecting the "IPsec Board-B2".

*2 2 out of 5 screws are used.

F-9-232

IPsec Board-B2

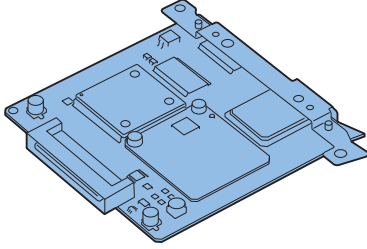
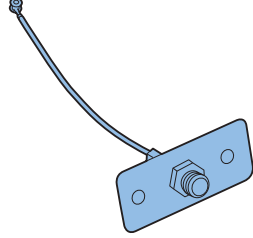
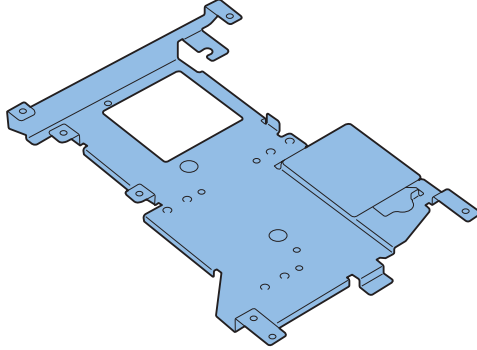
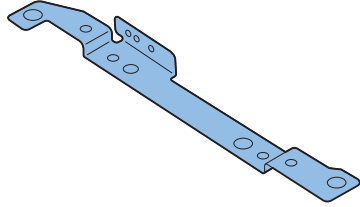
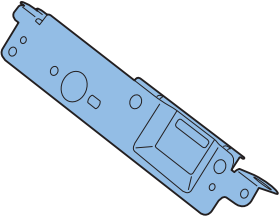
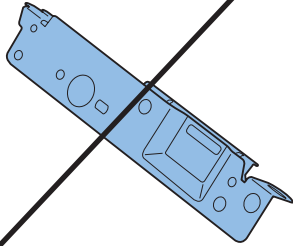
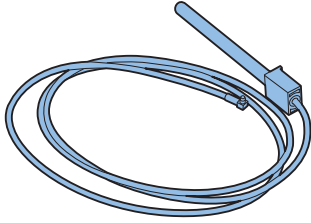
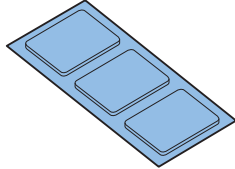

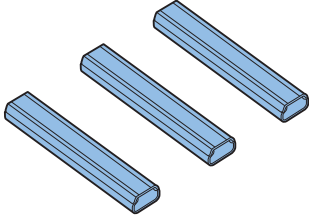
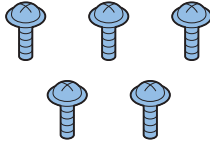
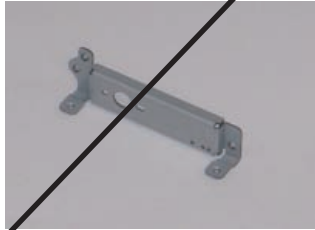


F-9-233

<CD/Guides>

- FCC/IC Instruction Sheet for UAS only

Wireless LAN Board-B1/B2

<input type="checkbox"/> [1] Wireless LAN Board x 1 	<input type="checkbox"/> [2] Bulk Head Unit x 1 	<input type="checkbox"/> [3] PCI Expansion Support Plate x 1 	<input type="checkbox"/> [4] Wireless LAN Auxiliary Plate x 1 	
<input type="checkbox"/> [5] Wireless LAN Support Plate x 1 	<input type="checkbox"/> [6] Wireless LAN Antenna Support Plate x 1 	<input type="checkbox"/> [7] Antenna for MFP x 1 	<input type="checkbox"/> * [8] Antenna Attachment Tape x 1 sheet 	<input type="checkbox"/> [9] Wireless LAN display Label x 1 
<input type="checkbox"/> [10] Cord Guide (L90) x 3 	<input type="checkbox"/> [11] Screws (TP; M3x6) x 5 Use 3 of them 	<input type="checkbox"/> [12] Wireless LAN Board Support Plate x 1 Included with B2 only 		

* Be sure to keep the remaining of the 3 sheets of tape, as it might be needed for later use.

<CD/Guides>

- Users Manual
- Wireless LAN User Manual CD
- Sheet: FCC/IC (UAS only)

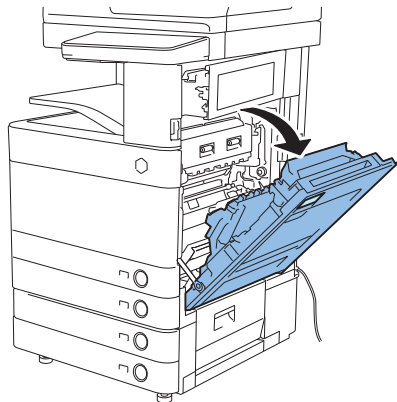
Turning the Host Machine OFF

Be sure to refer to How to Disconnect the Main Power in the Host Machine installation.

Installation Procedure

Removing the Main Controller PCB 1

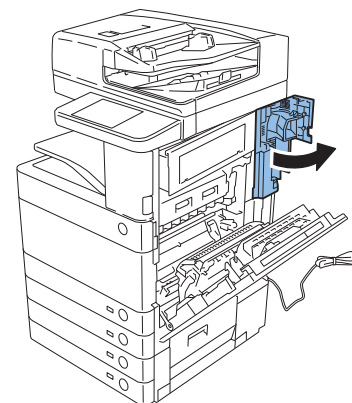
- 1) Open the Right Lower Cover (Open also the Right Delivery Unit in the same time).



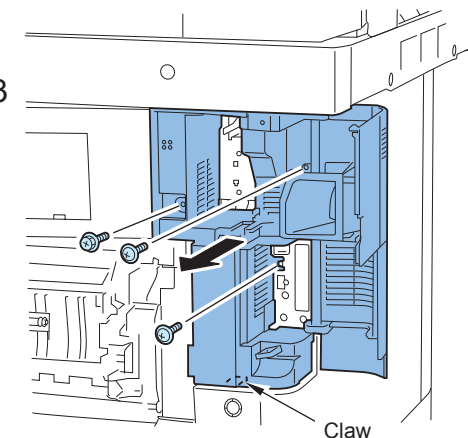
F-9-235

- 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



x3

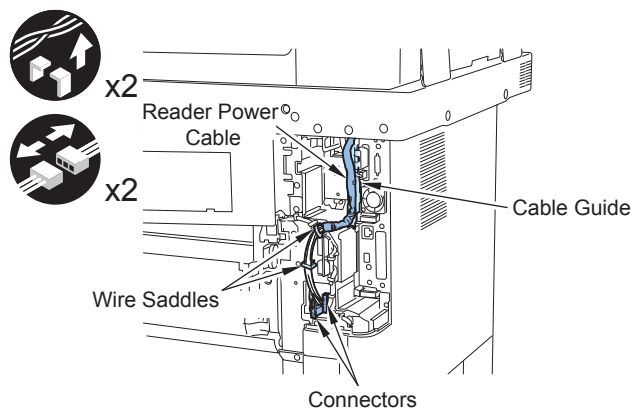


Claw

F-9-236

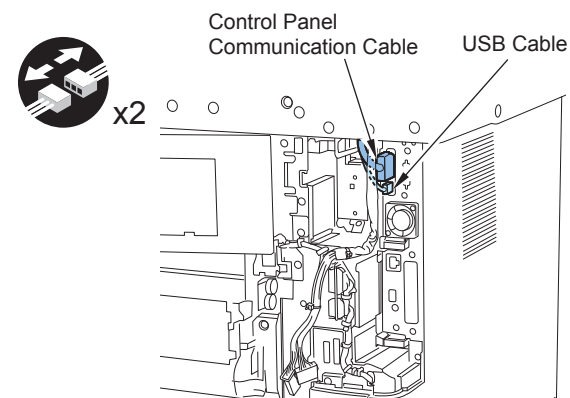
- 4) If Reader is installed, remove the Reader Power Cable.

- 2 Connectors
- 1 Wire Saddle
- 1 Cable Guide



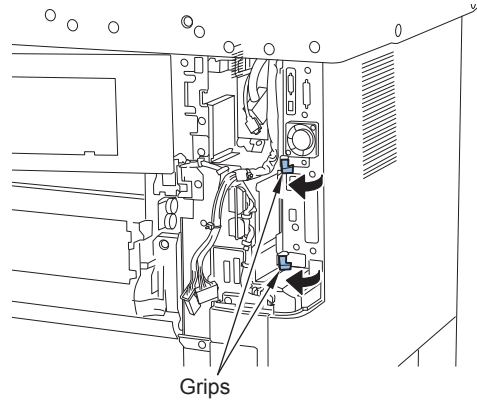
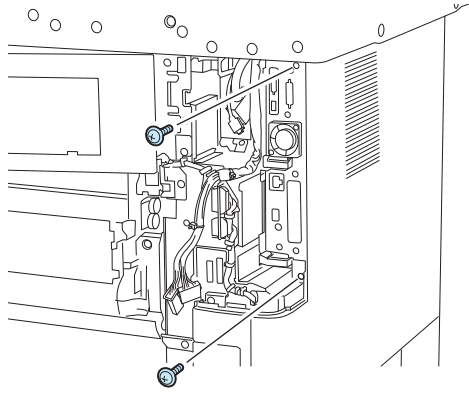
F-9-237

- 5) Remove the USB cable and Control Panel Communication Cable.



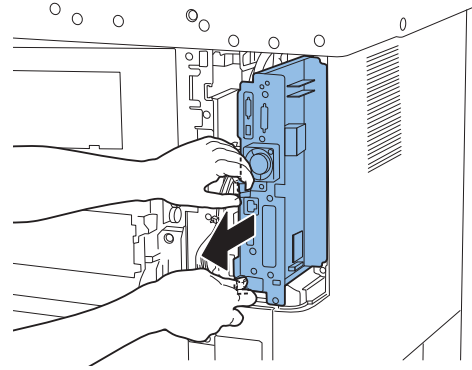
F-9-238

6) Remove the 2 screws, open the grip in 2 places.



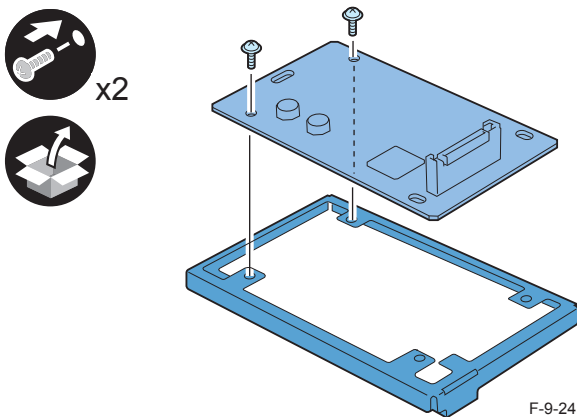
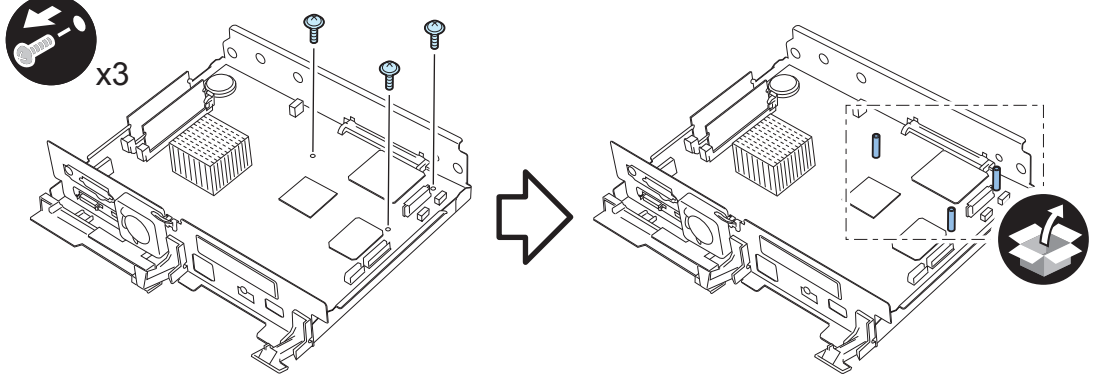
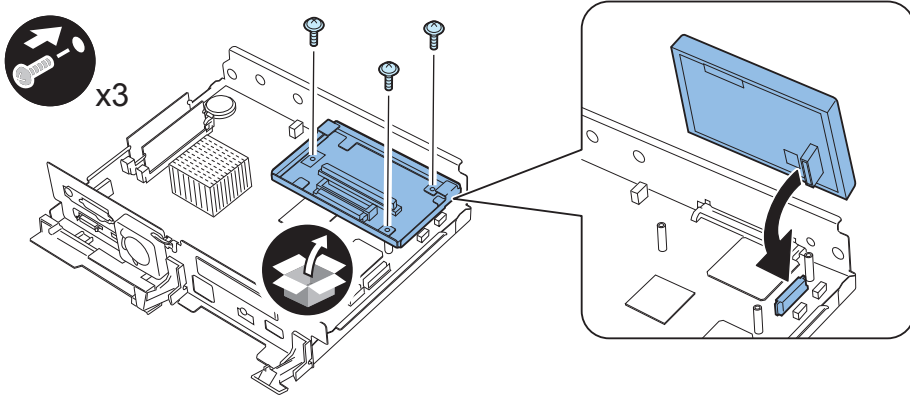
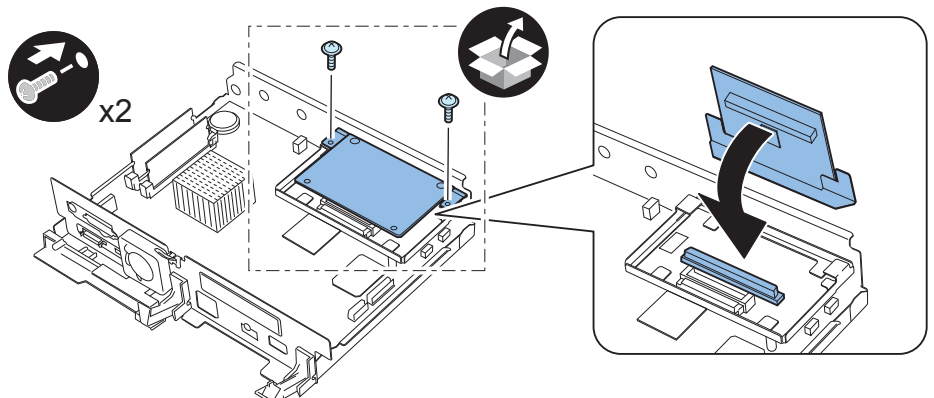
F-9-239

7) Hold the grip in 2 places, remove the Main Controller PCB 1 while avoiding the removed harness.



F-9-240

To install Expansion Bus-F1/F2 and IPsec Board-B2 in the same time

<p>□</p> <p>1) Install the PCI Bus Expansion PCB in Riser Support Plate.</p> <ul style="list-style-type: none"> • 2 Screws (TP; M3x6) (in the Expansion Bus-F1 contents)  <p>F-9-241</p>	<p>□</p> <p>2) Remove the 3 screws of the Main Controller PCB 1, and install the 3 PCB Spacers.</p> <ul style="list-style-type: none"> • 3 Screws (removed screw will be used in step 3))  <p>F-9-242</p>
<p>□</p> <p>3) Install the PCI Bus Expansion PCB by inserting it to the connector of the Main Controller PCB 1.</p> <ul style="list-style-type: none"> • 3 Screws (screws removed in step 2)).  <p>F-9-243</p>	<p>□</p> <p>4) Install the IPsec Security PCB by inserting it to the connector of the PCI Bus Expansion PCB.</p> <ul style="list-style-type: none"> • 2 Screws (TP; M3x6) (in the IPsec Board-B2 contents)  <p>F-9-244</p>



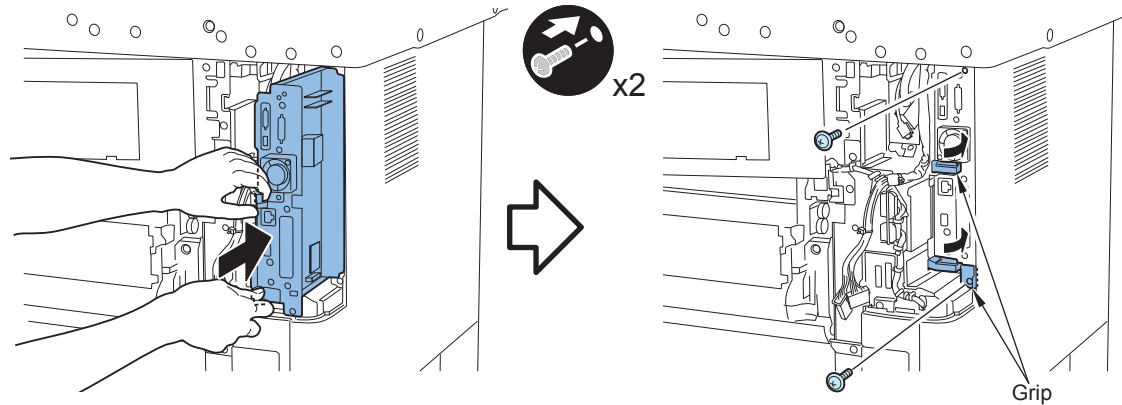
5) Install the Main Controller PCB 1 to the host machine.

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-9-245

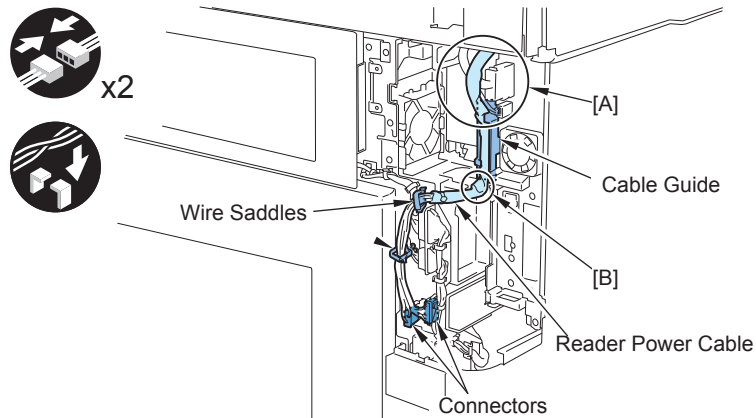


6) Install the USB Cable and Control Panel Communication Cable.

7) 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.



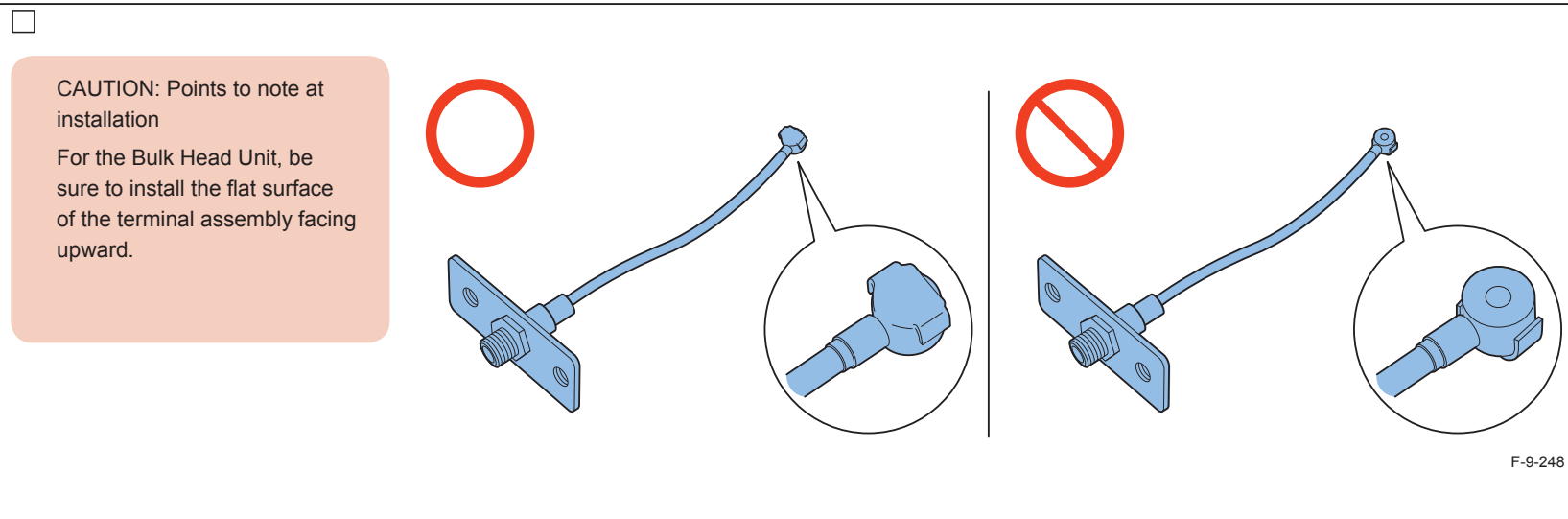
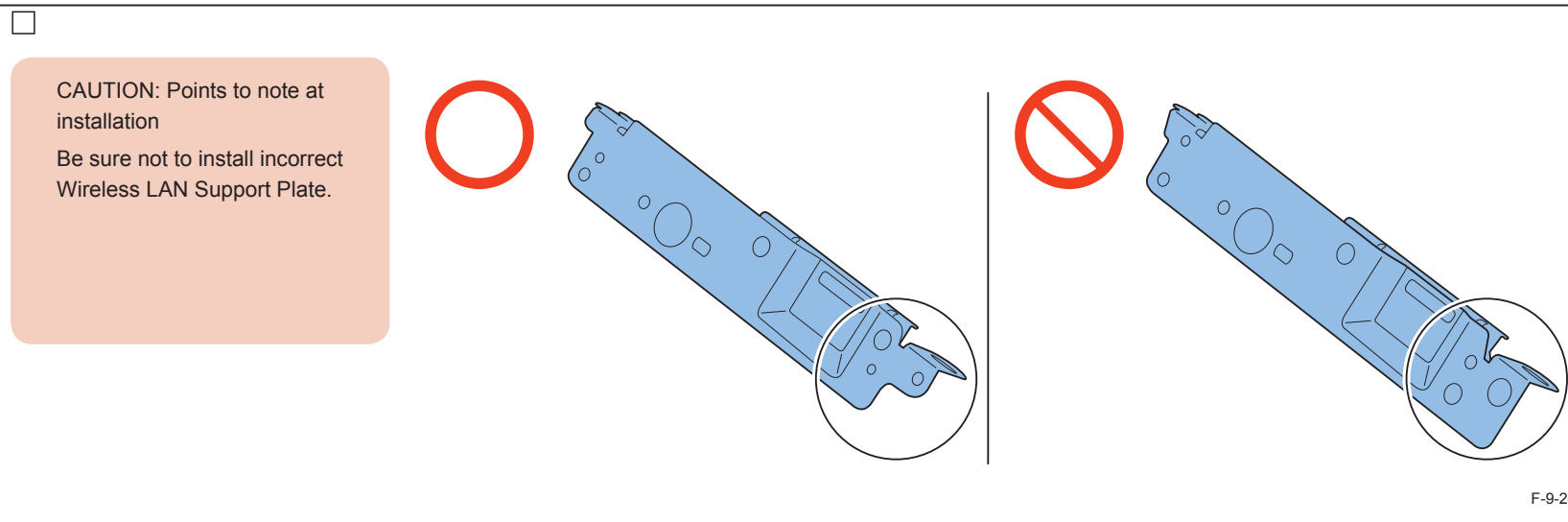
F-9-246



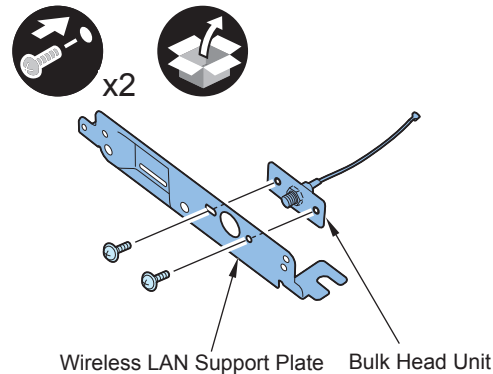
8) Install the Right Rear Cover 1.

9) Close the Right Lower Cover.

10) Close the Right Upper Cover.

To install the Expansion Bus-F1/F2, Cordless Wireless LAN Board-B1/B2 and IPsec Board in the same time.

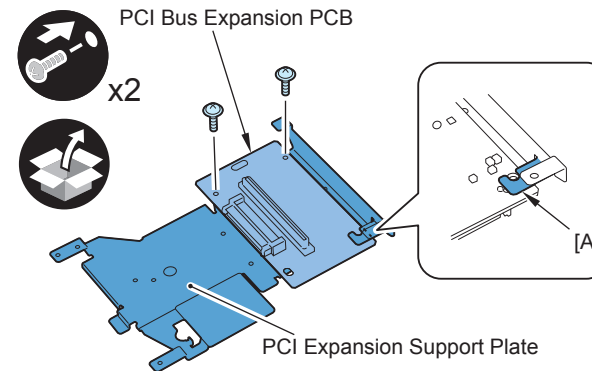
-
- 1) Install the Bulk Head Unit in the Wireless LAN Support Plate.
- 2 Screws (TP; M3x6) (in the Wireless LAN Board-B1 contents).



F-9-249

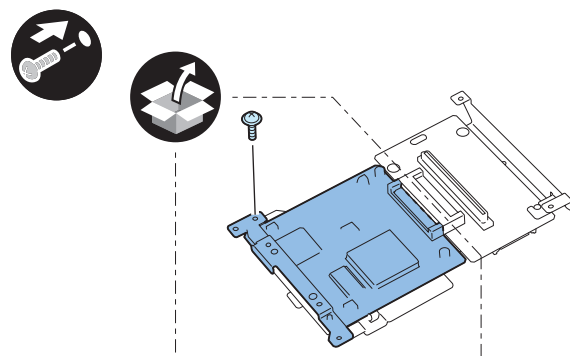
-
- 2) Install the PCI Bus Expansion PCB (in the Expansion Bus-F1 contents) in the PCI Expansion Support Plate.
- 2 Screws (TP; M3x6) (in the Expansion Bus-F1 contents)

CAUTION: Note when installing
Be sure to install the PCI Bus Expansion PCB to come under [A] part of PCI Expansion Support Plate.



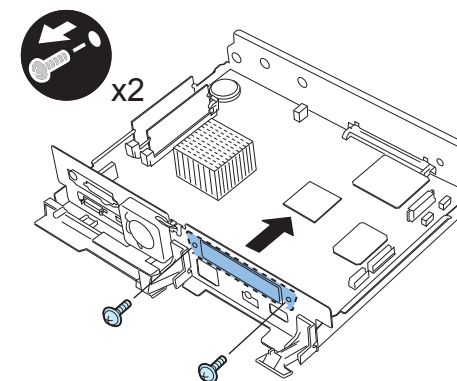
F-9-250

-
- 3) Insert the Wireless LAN Board to the connector of the PCI Bus Expansion PCB, and install it in PCI Expansion Support Plate.
- 1 Screw (TP; M3x6) (in the Wireless LAN Board-B1 contents).



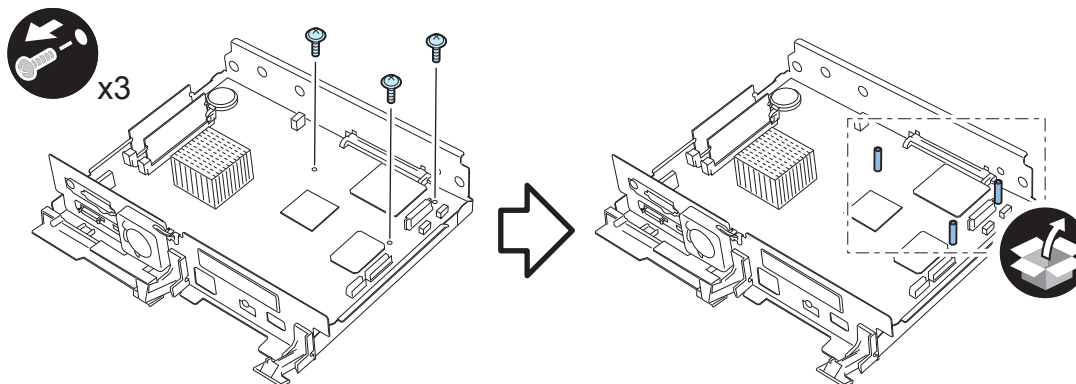
F-9-251

-
- 4) Remove the Cover Plate from the Main Controller Roller PCB 1 (The removed Cover Plate will not be used anymore).
- 2 Screws (the removed screw will be used in step 7)



F-9-252

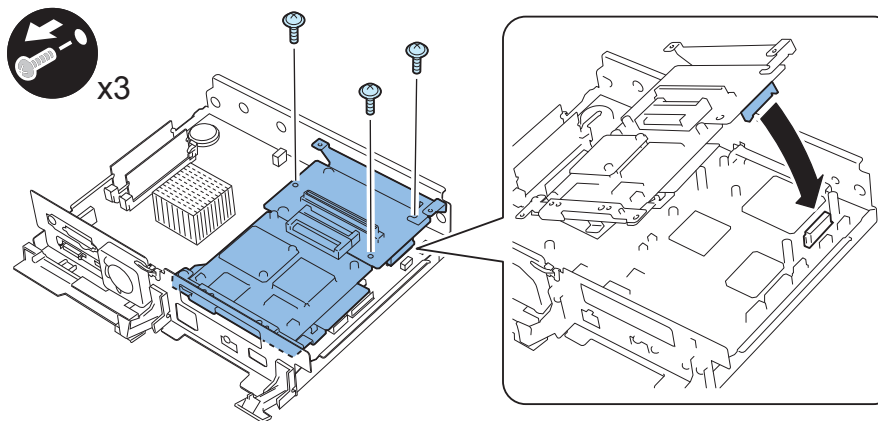
-
- 5) Remove the 3 screws of the Main Controller PCB 1, and install the 3 PCB Spacers (in the PCI Bus Expansion Kit Content).
- 3 Screws (the removed screws will be used in step 6)).



-
- 6) Install the PCI Expansion Support Plate assembled at step 3) in the Main Controller PCB 1.
- 3 Screws (use the screws removed in step 5)).

CAUTION:

Do not tuck the Fan Cable when installing the PCI Expansion Support Plate.



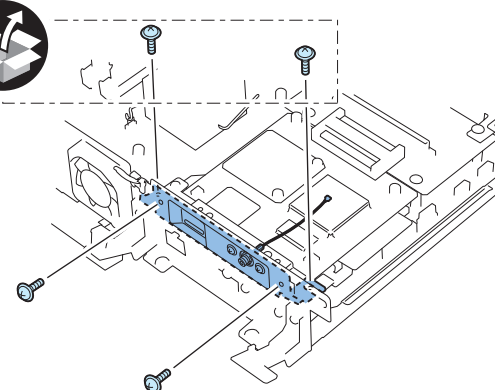


7) Install the Wireless LAN Support Plate assembled in step 1) in the Main Controller PCB 1.

- 2 Screws (use the screws removed in step 4))
- 2 Screws (TP; M3x6) (in the Wireless LAN Board-B1 Contents)



x4



CAUTION:

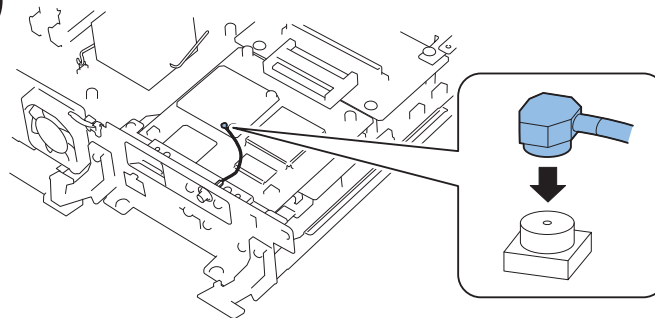
Do not tuck the Fan Cable when tightening the screw of Wireless LAN Support Plate.

F-9-255



8) Insert the terminal of Bulk Head Unit into the indicated position.

NOTE:
Make sure that the terminal is securely settled.



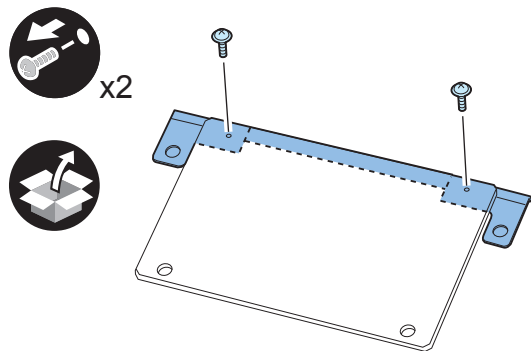
F-9-256



NOTE:

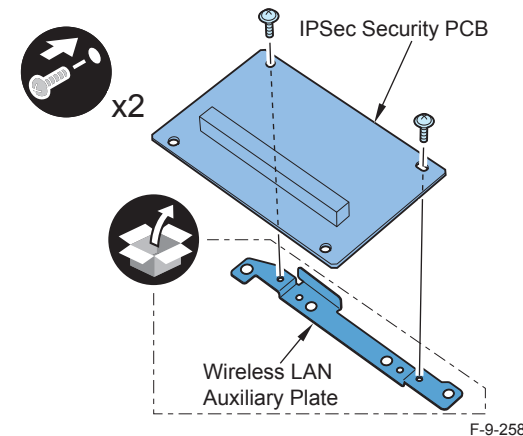
To install the IPsec Security Board, perform step 9) to 11). If IPsec Security Board is not to be installed, perform from step 12.

- 9) Remove the plate of the IPsec Security PCB. (Removed plate is not used anymore).
- 2 Screws (Removed screws will be used in step 10)).



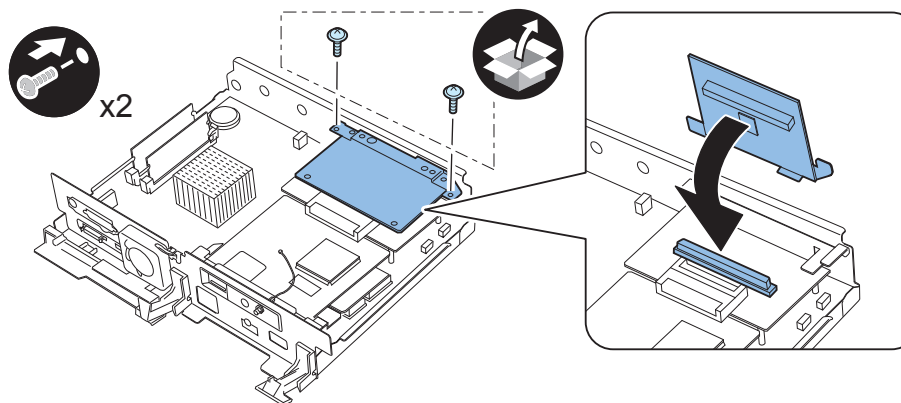
F-9-257

- 10) Turn the IPsec Security PCB (in the IPsec Board-B2 contents) upside down, and install the Wireless LAN Auxiliary Plate (in the Wireless LAN Board content)..
- 2 Screws (use the screws removed in step 9)).



F-9-258

- 11) Install the IPsec Security PCB by inserting it to the connector of the PCI Bus Expansion PCB.
- 2 Screws (TP; M3x6) (in the IPsec Board-B2 contents)



F-9-259



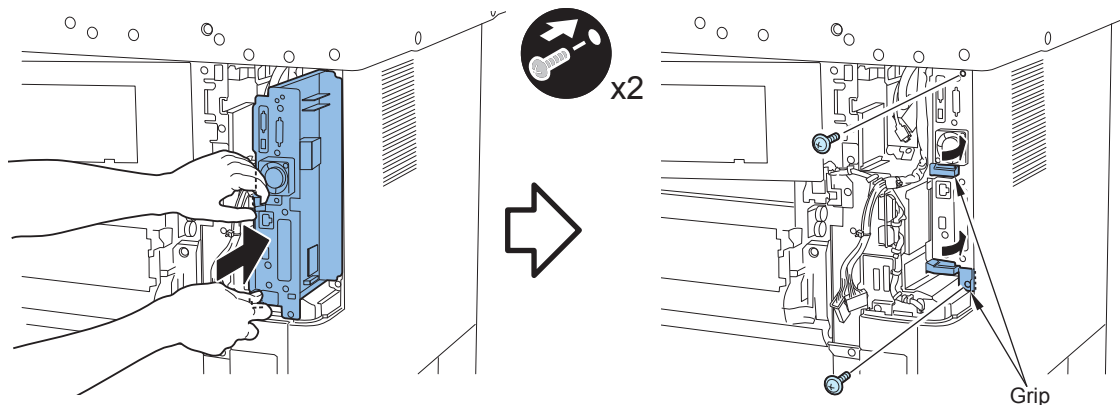
12) Install the Main Controller PCB 1 to the host machine.

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-9-260

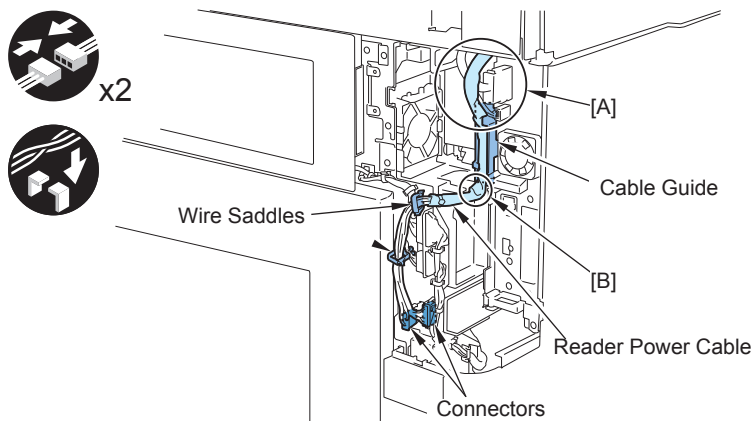


13) Install the USB Cable and Control Panel Communication Cable.

14) 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-9-261



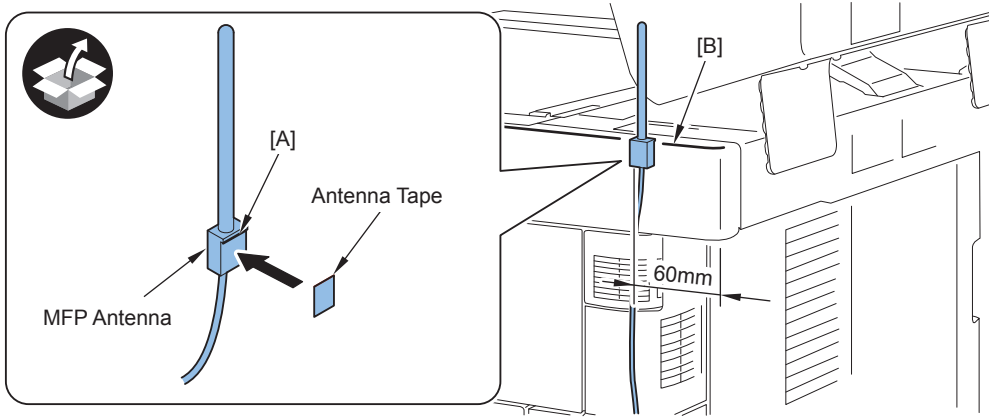
15) Install the Right Rear Cover 1.

16) Close the Right Lower Cover.

17) Close the Right Upper Cover.

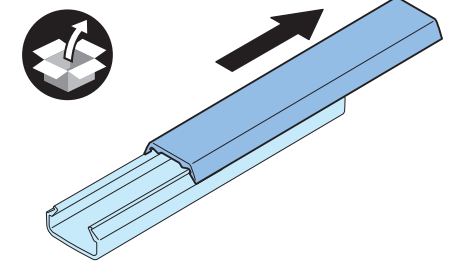
18) Affix the Antenna Tape in MFP Antenna, and affix it in the Reader.

CAUTION: Points to note at installation
To prevent the MFP Antenna from being caught by ADF, put it within 60mm from the back side. Make sure that [A] part overlaps with [B] line.



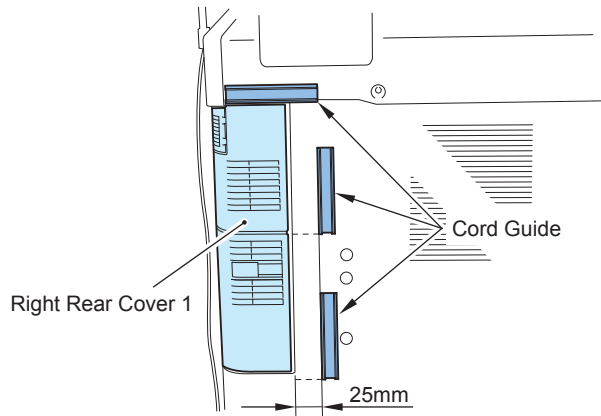
F-9-262

19) Remove the cover of the 3 Cord Guide.



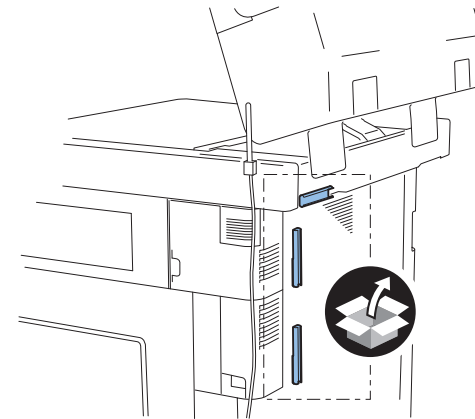
F-9-263

CAUTION: Points to note at installation
Be sure to affix the Cord Guide 25 mm from the Right Rear Cover 1.



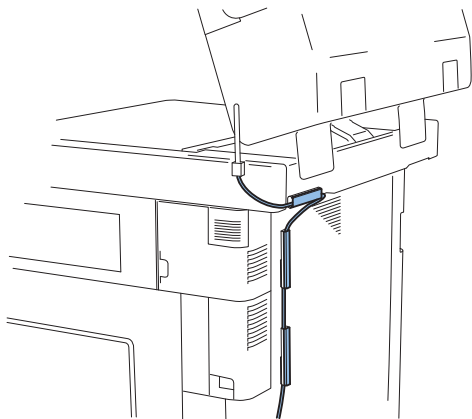
F-9-264

20) Peel off the paper liner, and install the Cord Guide.



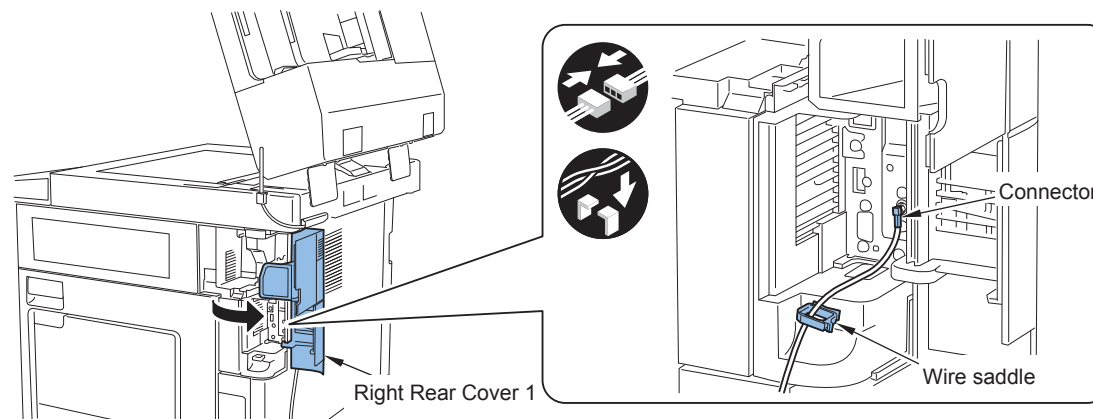
F-9-265

- 21) Pass the MFP Antenna Cable to the Cord Guide, and install the Cord Guide Cover.



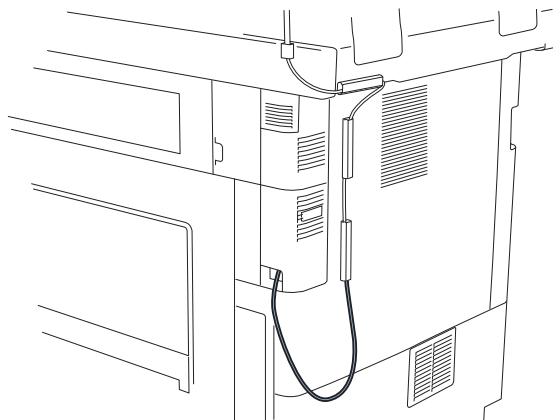
F-9-266

- 22) Open the Right Rear Cover 1, insert the connector of MFP Antenna to the terminal of the Main Controller PCB 1.
- 1 Wire Saddle



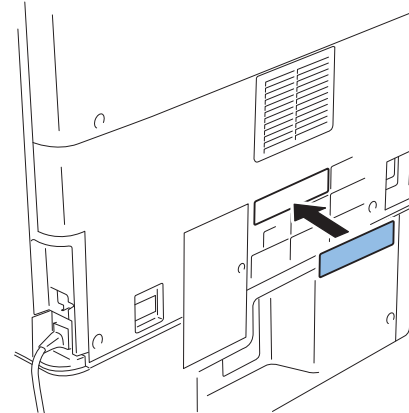
F-9-267

- .
- NOTE:**
Be sure that the slack of the MFP Antenna Cable is in the backside lower part of the Host Machine.



F-9-268

- 23) Affix the Wireless LAN Indication Label.



F-9-269

Checking after installation



When IPsec Security Board has already been installed

- 1) Insert the Power Plug in the outlet.
- 2) Turn ON the main power switch.
- 3) [Settings/Restriction] > [Preference] > [Network] > [Confirm Network Connection Set. Changes] > turn it [ON].
- 4) [Settings/Restriction] > [Preference] > [Network] > and select [TCP/IP Settings].
- 5) Be sure that "IPsec Settings" is displayed.



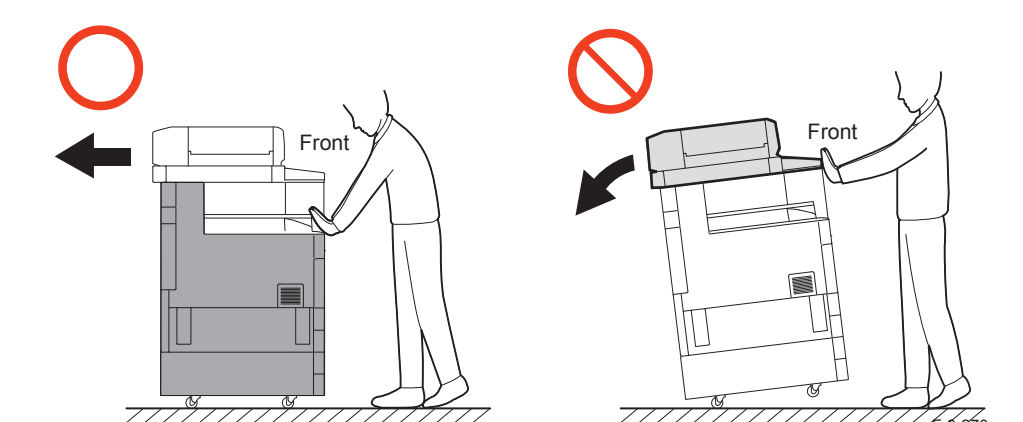
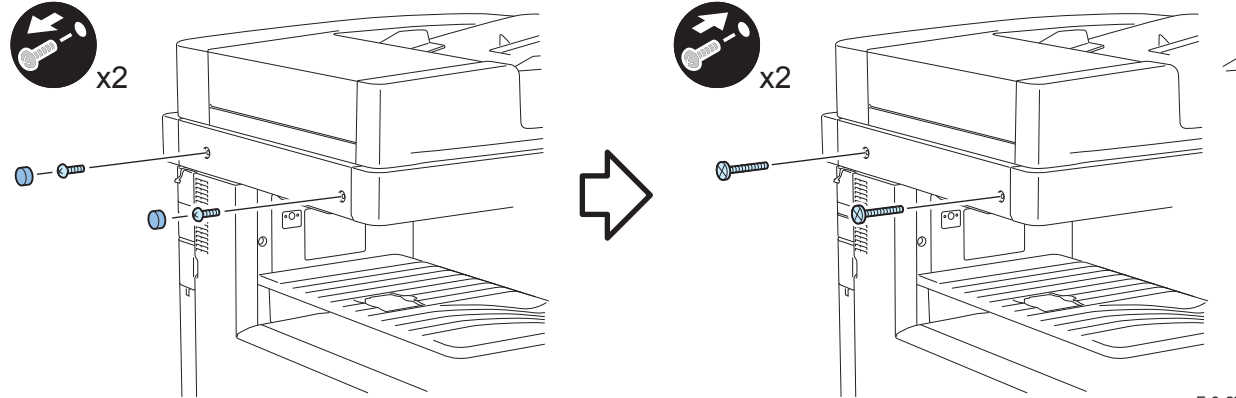
When Wireless LAN Board has been already installed

- 1) Insert the Power Plug in the outlet.
- 2) Turn ON the main power switch.
- 3) [Settings/Restriction] > [Preference] > select [External Interface].
- 4) Be sure that "Extension Card Settings" is displayed.

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.

<p><input type="checkbox"/></p> <ol style="list-style-type: none"> 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. 	<p><input type="checkbox"/></p> <p>4) When moving the machine, be sure to push the position indicated in the figure.</p> <div style="border: 1px solid black; padding: 5px; background-color: #f9cb9c;"> <p>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.)</p> </div>	 <p style="text-align: right;">F-9-270</p>
<p><input type="checkbox"/></p> <ol style="list-style-type: none"> 5) Remove the rubber cap and screw. 6) Fix the scanner in place using the scanner fixing screw that has been set aside from the time of installation.  <p style="text-align: right;">F-9-271</p>	<p><input type="checkbox"/></p> <ol style="list-style-type: none"> 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. <ol style="list-style-type: none"> 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/80GB HDD-C1
- 2.5inch/250GB HDD-D1
- Removable HDD Kit-AC1
- HDD Mirroring Kit-D1
- HDD Data Encryption & Mirroring Kit-C1

CAUTION:

When using the mirroring function, be sure to install 2 HDDs of the same capacity.

Reference Pages in the Manual According to Product Combination

Title	Combination of Product	Reference Pages	Remarks
TYPE-1	Option HDD (250GB)	p. 9-134 to p. 9-143	
TYPE-2*	Removable HDD Kit	p. 9-144 to p. 9-159	
TYPE-3	Option HDD (250GB) + Removable HDD Kit	p. 9-160 to p. 9-181	
TYPE-4*	Option HDD (80GB) + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit	p. 9-182 to p. 9-204	TYPE-4 to 7 correspond to "CASE-1" described in "HDD Data Encryption & Mirroring Kit-C Series Installation Procedure" included in HDD Data Encryption & Mirroring Kit-C2.
TYPE-5	2 Option HDDs (250GB) + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit	p. 9-205 to p. 9-228	
TYPE-6*	HDD Data Encryption & Mirroring Kit	p. 9-229 to p. 9-248	
TYPE-7	Option HDD (250GB) + HDD Data Encryption & Mirroring Kit	p. 9-249 to p. 9-271	
TYPE-8*	Option HDD (80GB) + Removable HDD Kit + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit	p. 9-272 to p. 9-303	TYPE-8 to 11 correspond to "CASE-2" described in "HDD Data Encryption & Mirroring Kit-C Series Installation Procedure" included in HDD Data Encryption & Mirroring Kit-C2.
TYPE-9	2 Option HDDs (250GB) + Removable HDD Kit + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit	p. 9-304 to p. 9-335	
TYPE-10*	Removable HDD Kit + HDD Data Encryption & Mirroring Kit	p. 9-336 to p. 9-363	
TYPE-11	Option HDD (250GB) + Removable HDD Kit + HDD Data Encryption & Mirroring Kit	p. 9-364 to p. 9-392	

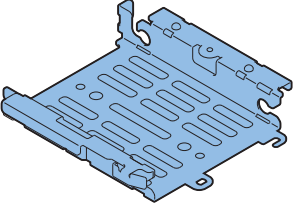
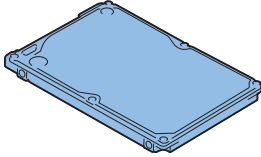
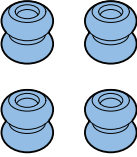
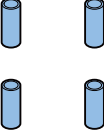
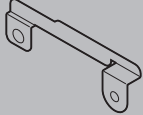
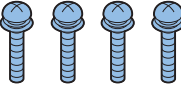


* Use the HDD installed to the machine as standard.

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[TYPE-1] Option HDD (250GB)

Checking the Contents

The parts with a gray in the contents list will not be used.

<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] Spacers x 4 	<input type="checkbox"/> [5] Grounding Plate x 1 
<input type="checkbox"/> [6] Screw (W sems; M3x14) x 4 	<input type="checkbox"/> [7] Screw (TP;M3x6) x 2 	<input type="checkbox"/> [8] Gasket x 1 		

<CD/GUIDS>

- Notice for FCC/IC
- China RoHS Notice 3

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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
Send Function Favorite Settings	Yes
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

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*1; Can only be backed up using the Remote UI.

*2; Depending on the MEAP application.

*3: Only the following data saved in Mail Box/Advanced Box 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
- Advanced Box URI Transmission Settings

*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 to be Backed Up

Data to be backed up	Reference
Address Book	For information on exporting data, see the "e-Manual > Remote UI".
Settings/Registration settings	
Device Settings (Forwarding Settings, Address List, Favorite Settings)	
Printer Settings	
Paper Information	
Favorite Settings for Web browser	See the "e-Manual > Web Access". (You can select this if web browser (Option) is installed.)
License files for MEAP applications	For information on downloading license files, see the "e-Manual > MEAP".
Data saved by MEAP applications	Data saved by MEAP applications may be able to be backed up, depending on the MEAP application. See the documentation included with the MEAP application.
Data stored in Mail Boxes or the Advanced Box	See the "e-Manual > Remote UI" to "Setting the Backup Location for Stored Data".
Image forms stored in the Superimpose Image	
SSO-H (Single Sign-On H) user authentication information	See the "e-Manual > MEAP".
Quick Menu Information	See the "e-Manual > Quick Menu".
User Information of the Advanced Box	See the "e-Manual > Security".

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CAUTION: Work to Perform After Installing the Kit

- When you start using this product, passwords set for Mail Boxes 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 this product has been installed. These data items are property of the user, and the restoration work must be performed by the system administrator.

The method of restoration is described in the Users Guide. See Table (Data to be backed up) in Points to Note About Installation of the Installation Procedure.

1. Procedure to make a backup of Address Book

- 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].
- 3) Click [Address List].
- 4) Click [Export].
- 5) Select the save format for Address list, and click [Start Export].
- 6) Following the instructions on the window, specify the location to save the file. Be sure to set a distinctive name to an export file so that you can recognize it when importing it.

NOTE:

Exporting the device settings will export all contents of the address list. In other words, there is no need for a backup unless it needs to be done individually.

2. Device Settings Export Procedure

- 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].
- 3) Click [Device Settings (Forwarding Settings, Address List, Favorite Settings)].
- 4) Click [Export], and then click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

3. Settings/Registration Export Procedure

- 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].
- 3) Click [Settings/Registration].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

4. Printer Settings Export Procedure

NOTE:

The following items to be exported are the same as the ones which are distributed by device information distribution.

- 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].
- 3) Click [Printer Settings].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

5. Paper Information Export Procedure

- 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].
- 3) Click [Paper Information].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

6. 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.

CAUTION: MEAP Backup Function Using the SST

Data that has been backed up using MEAP back of the SST before the use of this product is started must not be written back to the host machine after the use of this product is started. Similarly, even if the data that has been backed up after the use of this product is started is written back to the host machine before the use of this product is started, the machine does not operate. It is necessary to make sure that the implementation conditions for this product are compatible before and after making a backup of data, and the MEAP backup function does not permit making a backup of data in the course of installing the kit.

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.

7. 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) Click the application of which license has been installed.
- 5) Click [License Control], and then click [Disable]. Click [Yes] in a confirmation window for disabling the license.

- 6) Click [Download] under "Download/delete Disabled License File" item. 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.
- 7) 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).
- 8) 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).

8. 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/](http://[IP address of the device]:8000/sso/)
 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 the user has changed the password, ask him/her to change the password again after the use of this product is started.

- 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].

9. Backup of User inbox and Advanced Box document data

CAUTION: Backup of "Advanced Box"

When setting a SMB server as a backup destination, Advanced Box data saved in a large capacity HDD cannot be backed up. The Advanced Box data backed up from the large capacity HDD cannot be restored to the standard HDD.

Depending on the system version of the machine, both backup and restoration might not be performed.

The procedure of backup and restoration of a box document data is described below.

Specify the backup destination of a document data:

- Backup to SMB server
 Select SMB as a backup destination and specify an address, a user name, a password, and a path to the SMB server to which saved data is backed up.
- Backup to USB HDD
 Select USB HDD as a backup destination and specify a path to the USB HDD folder to which saved data is backed up.

CAUTION: Data which cannot be backed up

If you back up/restore stored data without restarting the machine after changing the language displayed on the touch panel display by pressing [Settings/Registration] > [Preferences] from the control panel of the machine, the stored data may not be backed up/restored properly. For more information on the data that cannot be backed up, see Points to Note for Installation.

CAUTION:

If the language setting in the common specification settings (Settings/Registration) is set to ON, 'host address' and 'path to folder' might not be displayed correctly or cannot be referred.

CAUTION:

- Regarding the method of inputting characters, see 'Basic Operations' in the e-Manual.
- A host address can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,' 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A path to the folder can be up to 255 characters in 1 byte (127 characters in 2 bytes).
- A user name can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,' 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A password can be up to 7 to 48 characters using the 'alphanumeric character' and 'mark (1 byte)' modes.
- The voice sound symbol and the semi-voice sound symbol entered in the 'Katakana (1 byte)' mode are counted up as one 1-byte character.

[\[Backup method of User inbox and Advanced Box document data\]](#)

- 1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Backup].
- 2) Select 'All' or 'Changes' for the backup method.
- 3) Click [Execute].

CAUTION:

- If any of the host IP address, user name, password, or path to the folder is not correctly entered, a backup cannot be made.
- If you select to encrypt the backup data, the backup process may take longer.

[\[Restoring the backup data of User inbox and Advanced Box document data\]](#)

- 1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Restore].
- 2) Click [Display Backup Data].
- 3) Select the backup data to restore from the list and then click [Execute].

CAUTION:

- If you want to restore encrypted backup data, enter the same password used when backing up the data.
- Depending on the settings of the machine, the backup data may not be completely restored, or some documents may be automatically printed.
- Restoration is performed after all of the box data stored in the machine, or documents that are being sent, received, or stored, are erased.

10. Quick Menu Information Export Procedure

- 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 Basic Tools > [Quick Menu] > [Export].
- 3) If the file needs to be encrypted, enter the password after check [Encrypt file]. (The number of characters for the password must be more than 4 but less than 16.)
- 4) Click [Export].
- 5) Following the instructions on the window, specify the location to save the file.

11. User Information of the Advanced Box Export Procedure

- 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 Basic Tools > [User Access Control for Advanced Box]. The dialog box to enter the user name of administrator and password appears, enter the system administrator ID and password, and then click [Log In].
The default administrator user name and password are as follows:
User Name: Administrator
Password: password
- 3) Click [Export], and click [Start Export].
- 4) Following the instructions on the window, specify the location to save the file.

 **Check Items when Turning OFF the Main Power**

Check that the main power switch is OFF.

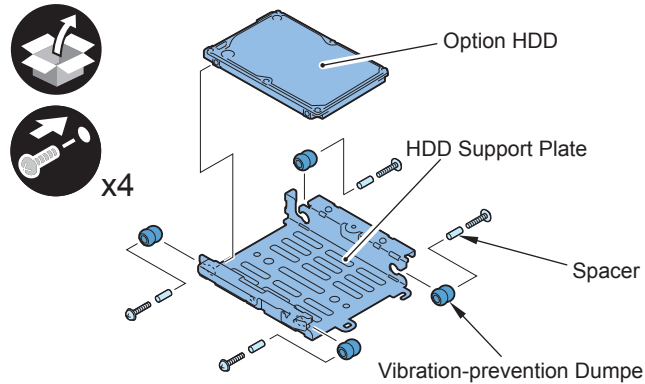
- 1) Turning off the Main Power Supply Switch of the Host Machine.
- 2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

Installation Procedure



1) Assemble the option HDD (250GB).

- 1 Option HDD
- 1 HDD Support Plate
- 4 Dust-prevention Dumpers
- 4 spacers
- 4 screws (binding with flat washer; M3x14)

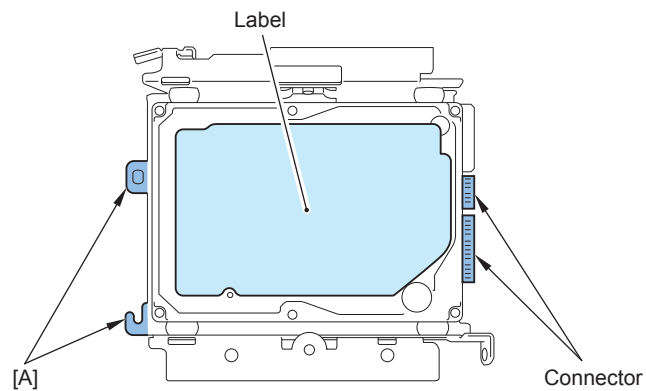


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CAUTION:

- 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.



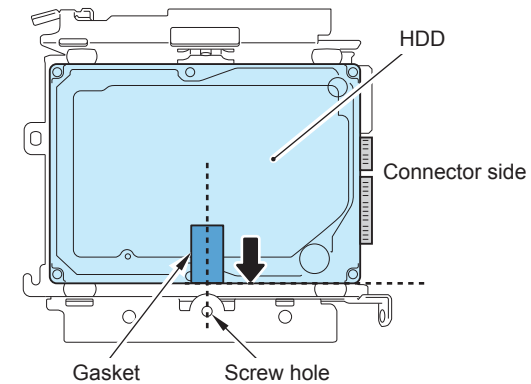
F-9-274



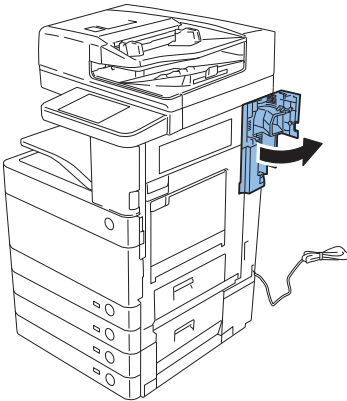
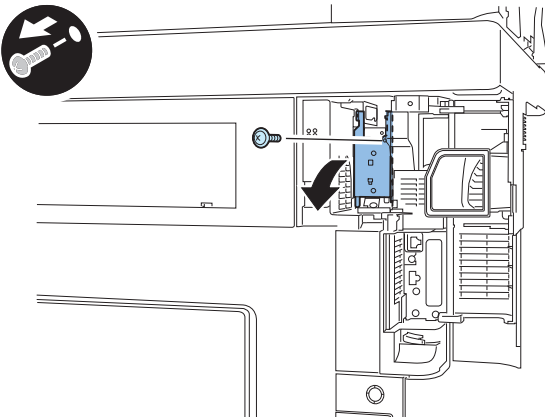
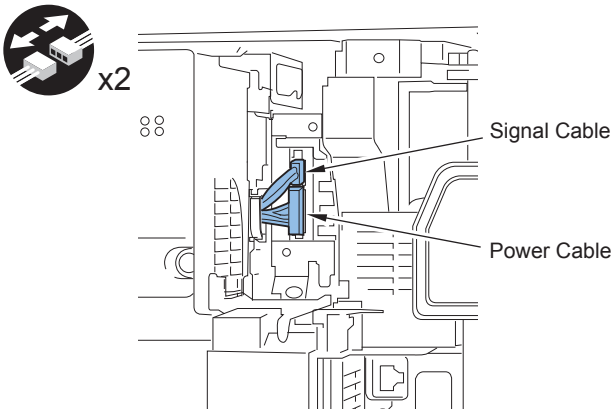
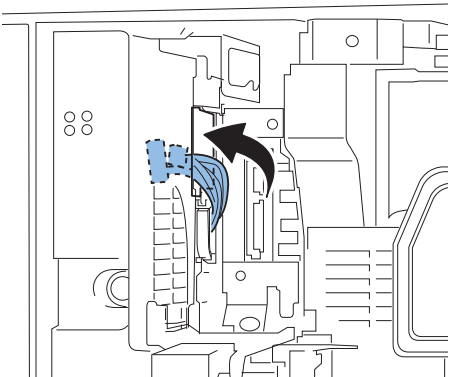
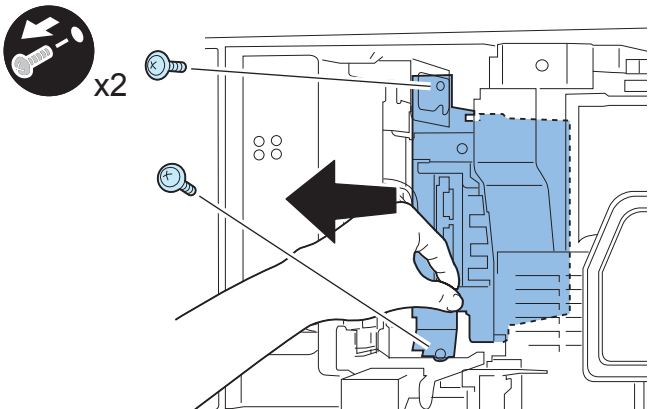
2) Affix the gasket to the place shown in the figure below.

CAUTION:

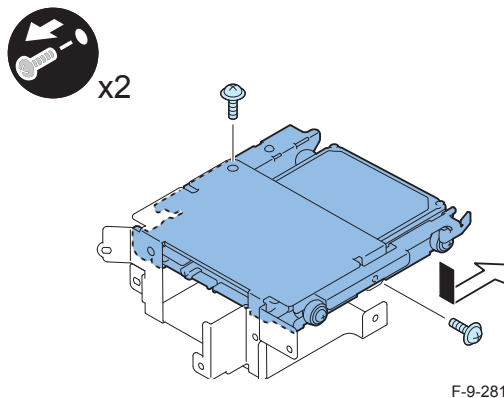
- Be sure to place the gasket in contact with the label-free metal surface of the HDD surface.



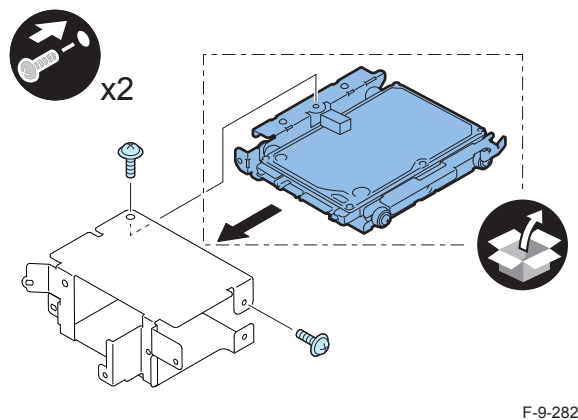
F-9-275

<p><input type="checkbox"/> 3) Open the Right Rear Cover 1.</p>  <p>F-9-276</p>	<p><input type="checkbox"/> 4) Open the HDD Lid behind the Right Rear Cover 1.</p> <ul style="list-style-type: none"> • 1 screw  <p>F-9-277</p>	<p><input type="checkbox"/> 5) Remove the Signal Cable and the Power Cable from the HDD.</p>  <p>F-9-278</p>
<p><input type="checkbox"/> 6) Put the Signal Cable and the Power Cable aside so that they are not pinched between the Controller Box and the HDD Unit.</p>  <p>F-9-279</p>	<p><input type="checkbox"/> 7) Remove the HDD Unit by holding it as shown in the figure below.</p> <ul style="list-style-type: none"> • 2 screws  <p>F-9-280</p>	

-
- 8) Remove the HDD (80GB) installed as standard from the removed HDD Unit. (Removed HDD (80GB) will not be used.)
- 2 screws (Removed screw will be used in step 9.)



-
- 9) Install the Option HDD (250GB).
- 2 screws (The screw removed in step 8.)



-
- 10) Install the HDD Unit to the host machine.
- 11) Install the Signal Cable and the Power Cable to the Option HDD.
- 12) Close the HDD Lid.
- 13) Close the Right Rear Cover 1.
- 14) Close the Right Lower Cover.
- 15) Close the Right Upper Cover.

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 CONNECT.

2) From the list of machine series, select the appropriate model.

3) Select 'single', and click START.

4) Execute HDD format.

5) After 5 sec from when the power of the host machine is turned OFF, restart the host machine in download mode of safe mode.

6) When "download mode" is displayed on the control panel, click simple mode start.

7) Click start to execute download.

8) Follow the instruction on the screen and when download is complete, click OK.

9) Exit SST.

10) Check the versions of MN-CONT and LANG etc in service mode.

Execution of Auto Adjust Gradation



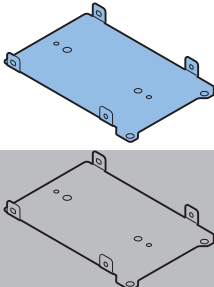
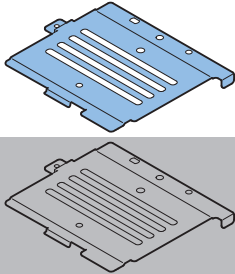
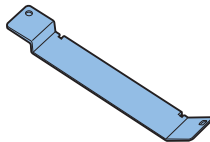
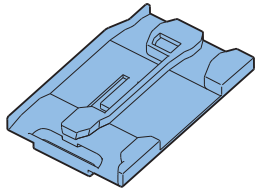
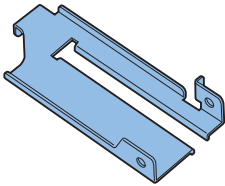

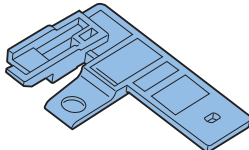
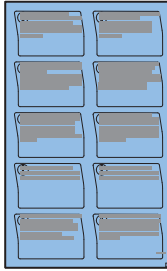
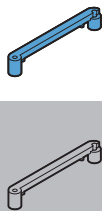
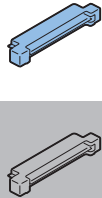
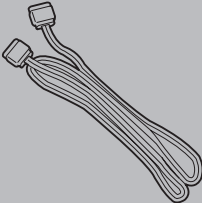
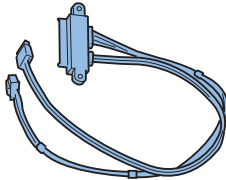
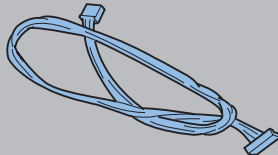
When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.

Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

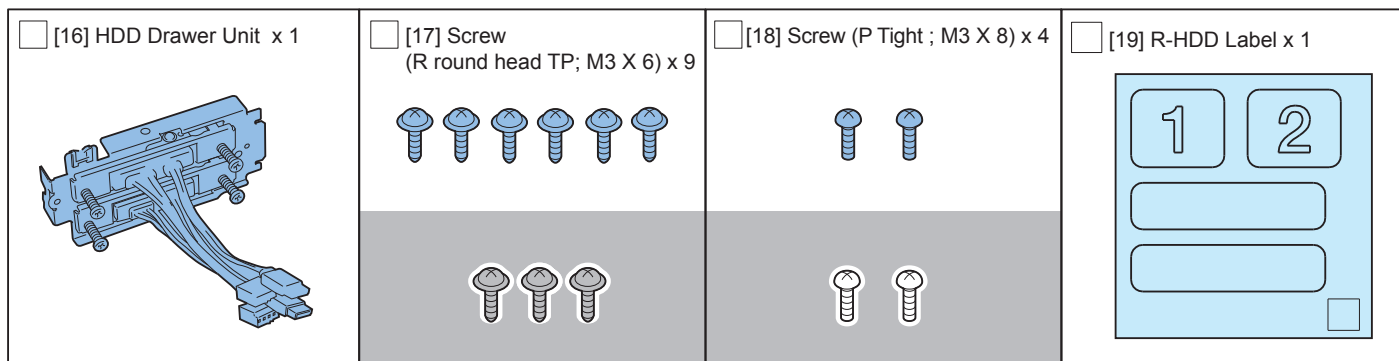
[TYPE-2] Removable HDD Kit

Checking the Contents

The parts with a gray in the contents list will not be used.

<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 	<input type="checkbox"/> [13] Signal Cable (660mm ; Red) x 1 	<input type="checkbox"/> [14] IV Cable (FK2-8453) x 1 	<input type="checkbox"/> [15] Power Cable (650mm ; FK2-8464) x 1 

F-9-283



F-9-284

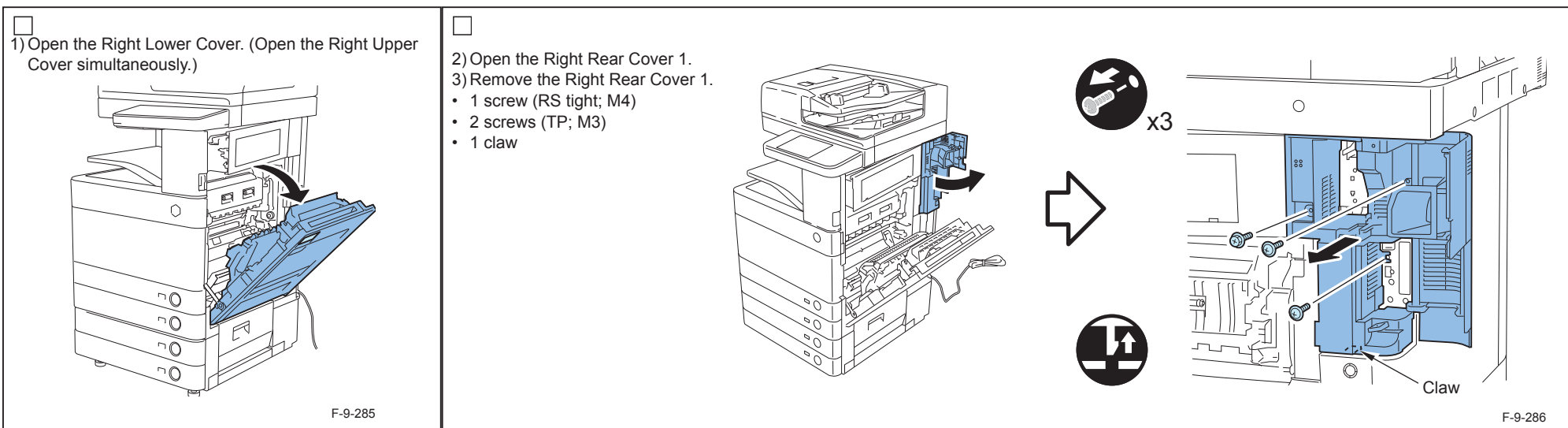
Check Items when Turning OFF the Main Power

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

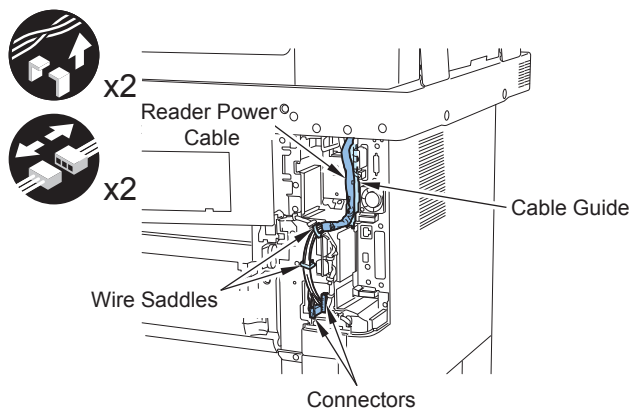
Removing the HDD Unit, Signal Cable and Power Supply Cable





4) When the Reader is installed, remove the Reader Power Cable.

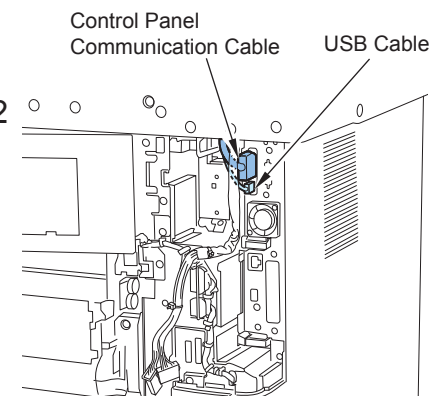
- 2 connectors
- 2 wire saddles
- 1 cable guide



F-9-287



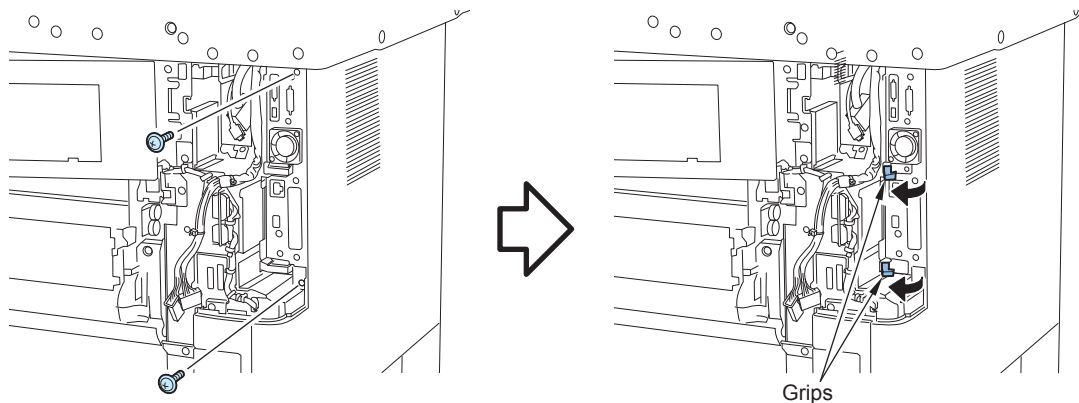
5) Remove the USB Cable and the Control Panel Communication Cable.



F-9-288



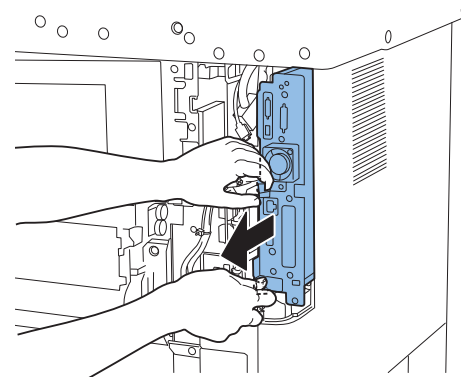
6) Remove the 2 screws, open the grip in 2 places.



F-9-289



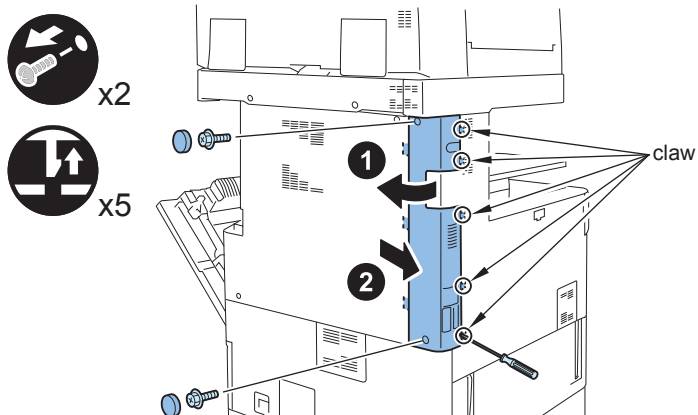
7) Hold the 2 Grips, and pull out the Main Controller PCB 1 approximately 10mm toward front.



F-9-290

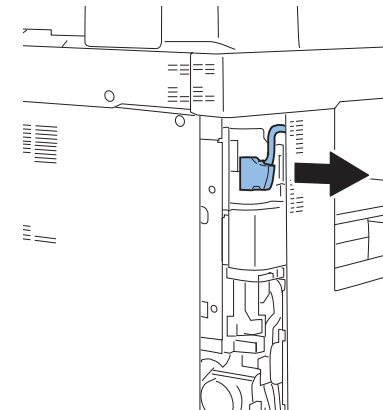
8) Remove the Left Rear Cover.

- 2 rubber caps
- 2 screws
- 5 claws



F-9-291

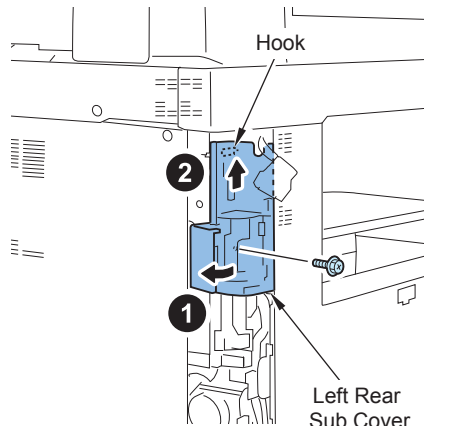
9) When the Reader is installed, remove the Reader Communication Cable.



F-9-292

10) Remove the Left Rear Sub Cover.

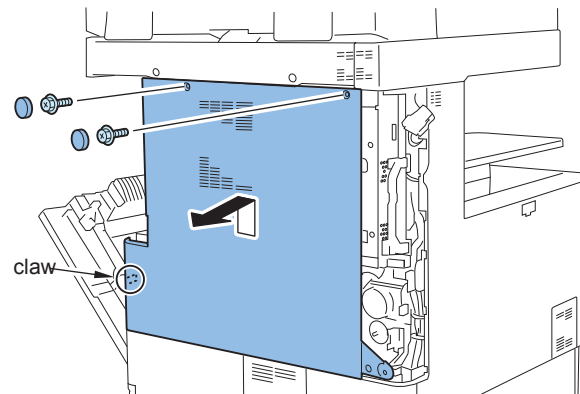
- 1 screw
- 1 hook



F-9-293

11) Remove the Rear Cover.

- 2 rubber caps
- 2 screws
- 1 claw



F-9-294

12) Open the Controller Box while avoiding the harness.

- 2 screws

F-9-295

NOTE:
If the FAX Unit has been installed, remove the 3 screws and open the Controller Box with the FAX Unit.

F-9-296

13) Remove the Controller Cover.

- 11 screws (loosen)

F-9-297

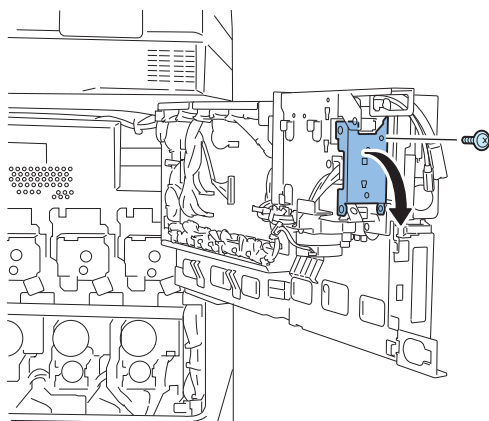
14) Remove the Signal Cable and the Power Cable.

CAUTION:
Do not remove the Fan Cable.

- 1 edge saddle
- 3 wire saddles
- 1 cable retainer

F-9-298

- 15) Open the HDD Lid.
• 1 screw (Removed screw will not be used.)



F-9-299

- 16) Remove the Signal Cable and the Power Cable.

- 2 dege saddles
- 5 wire saddles
- 2 connectors

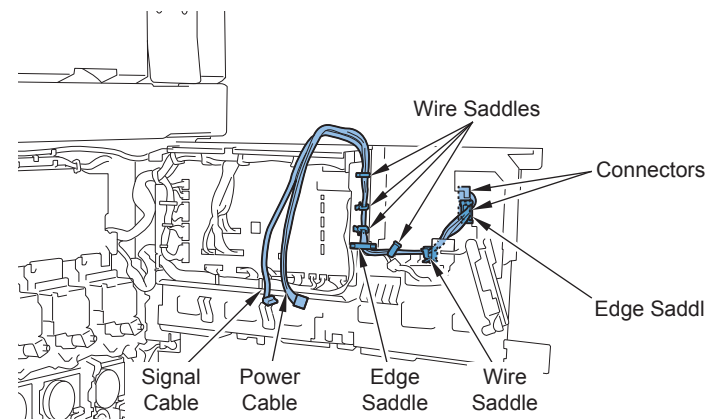


x2



x7

NOTE:
Removed Signal Cable
and Power Cable will
not be used.

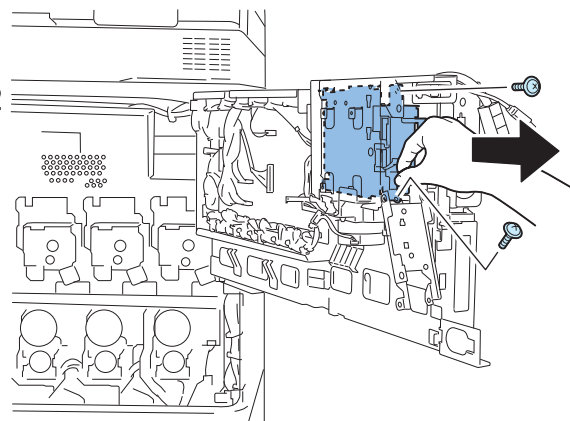


F-9-300

- 17) Remove the HDD Unit by holding it as shown in the figure below.
• 2 screws (Removed screw will not be used.)



x2

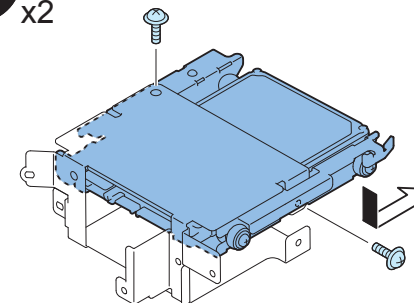


F-9-301

- 18) Remove the fixed HDD from the removed HDD Unit. (Removed plate and screw will not be used.)
• 2 screws



x2



F-9-302

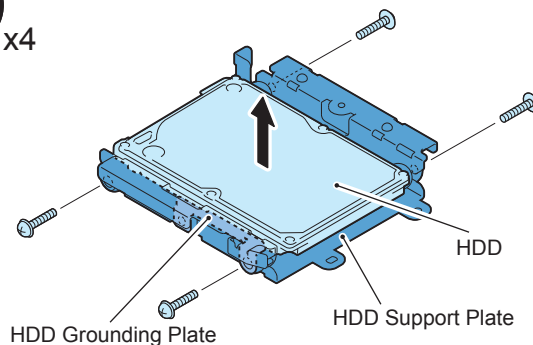
Assembling and Installing the Removable HDD

1) Remove the HDD from the HDD Support Plate. (Use the installed HDD (80GB) removed in "Removing the HDD Unit, Signal Cable and Power Supply Cable" step 18.)

- 1 HDD Grounding Plate (If the HDD Grounding Plate is installed, remove it. The removed HDD Grounding Plate will not be used.)
- 4 screws



x4



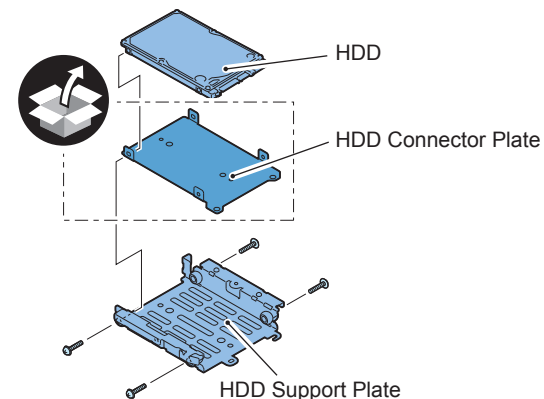
F-9-303

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



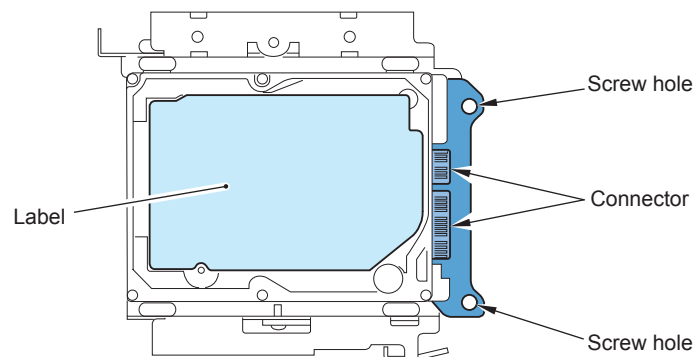
x4



F-9-304

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-9-305

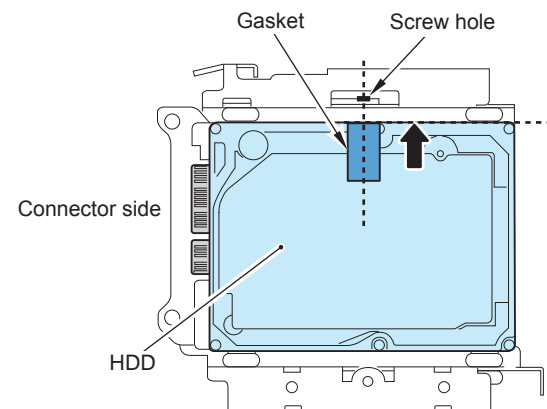
If there is no gasket with the HDD removed from the host machine, prepare the gasket with the following part number and perform step 3).

- KE8-1134-030

3) 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.

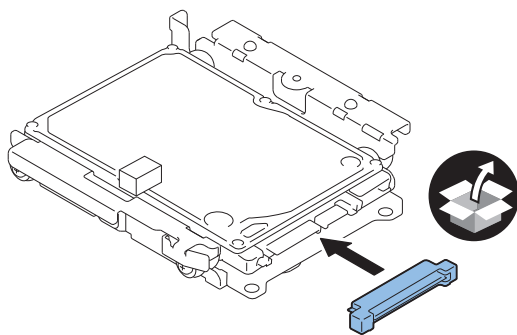


F-9-306



4) Install the Conversion Connector.

CAUTION:
Make sure that there is no opening between the Conversion Connector and part of HDD.



F-9-307

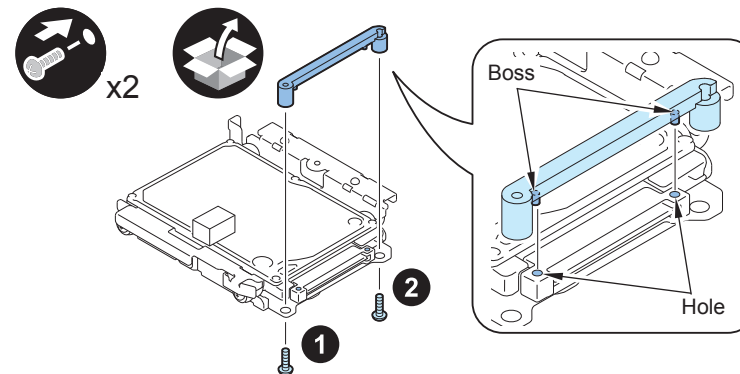


5) Fit the 2 bosses of Connector Fixing Block to the hole of Conversion Connector and install it.

- 2 screws (P Tight; M3X8)

CAUTION:

Be sure not to tighten the screws in wrong order. Otherwise, the Conversion Connector will not be secured properly.

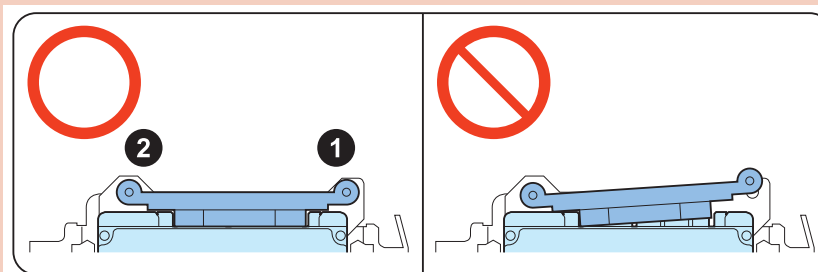


F-9-308



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-9-309

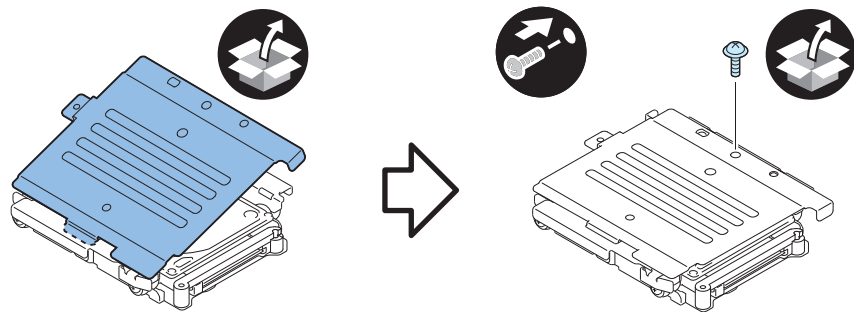


6) Install the HDD Cover.

- 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-9-310

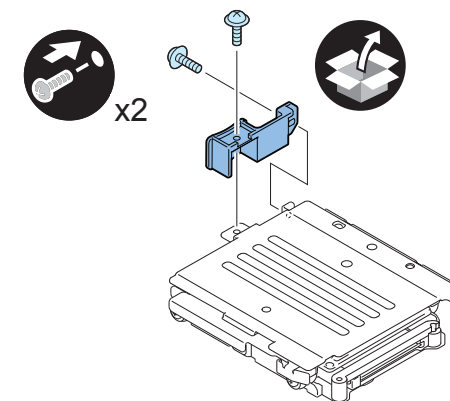


7) Install the HDD Handle.

- 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.

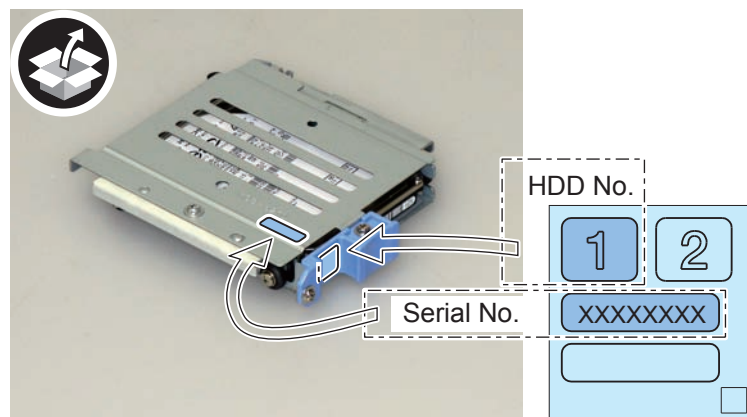


F-9-311



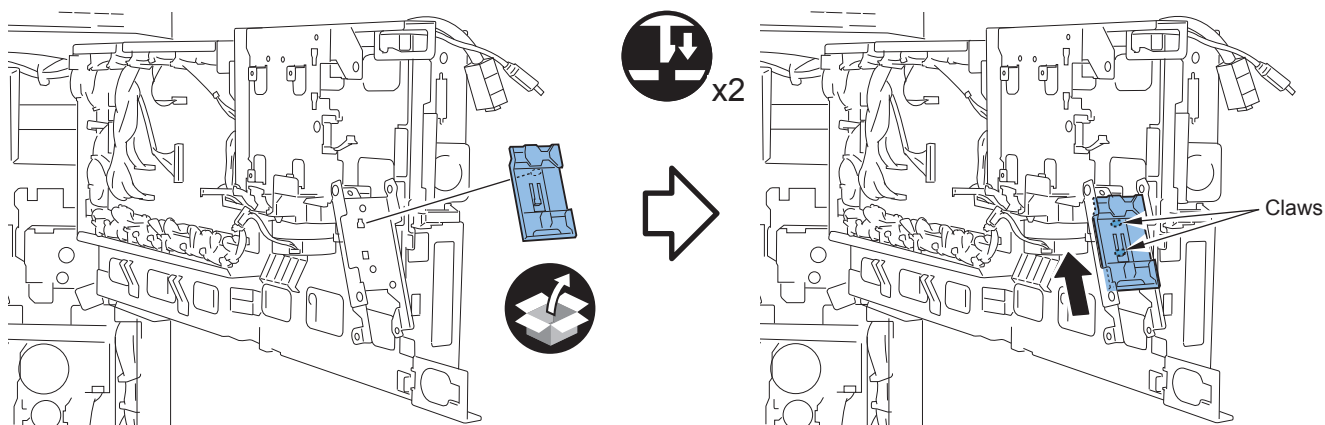
8) Affix the HDD No.1 Label to the handle of the Removable HDD.

9) 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.



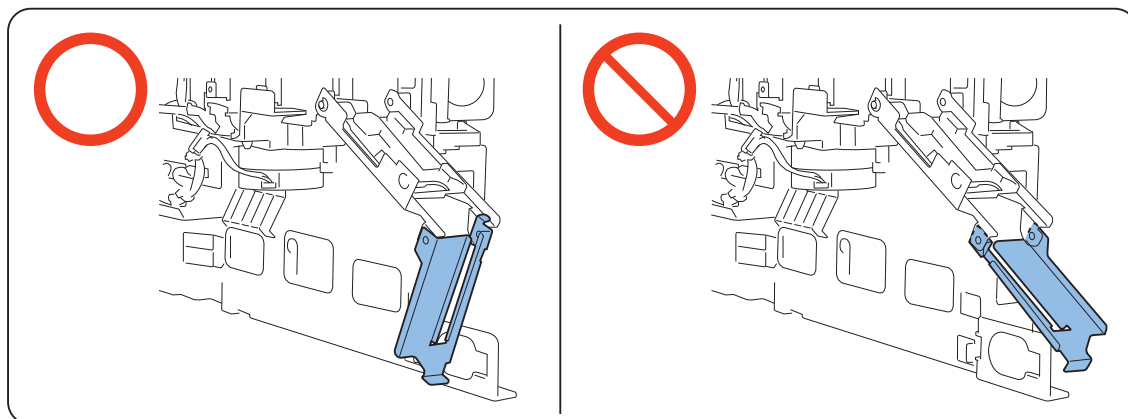
F-9-312

- 10) Install the HDD Door Guide.
 - 2 claws



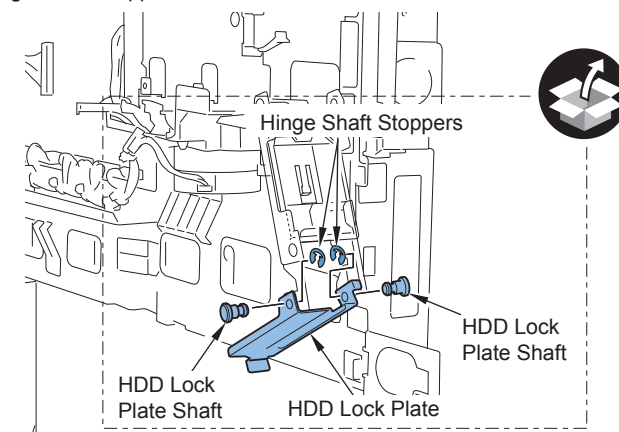
F-9-313

CAUTION:
Be careful of the installation direction of HDD Lock Plate.



F-9-314

- 11) Install the HDD Lock Plate.
 - 2 HDD Lock Plate Shafts
 - 2 Hinge Shaft Stoppers



F-9-315

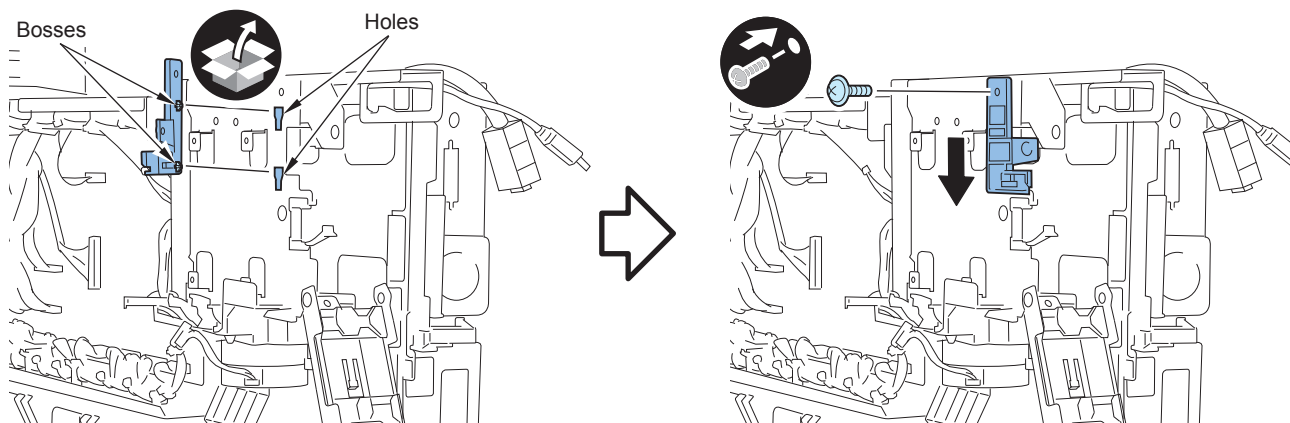


12) Adjust the 2 bosses to the hole and install the HDD Lid Retainer.

- 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.

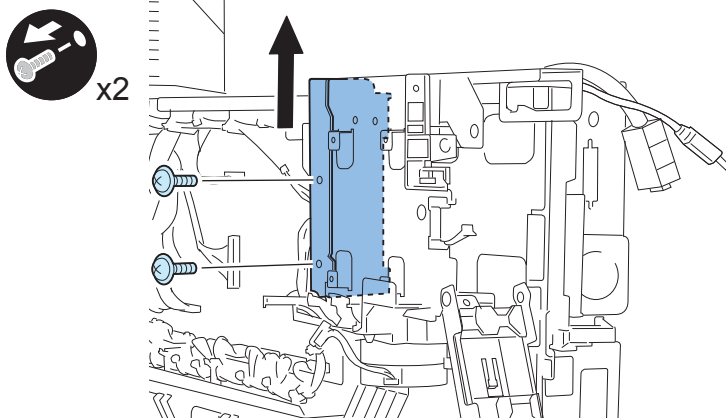


F-9-316



13) Remove the HDD Rear Cover. (Removed HDD Rear Cover will not be used.)

- 2 screws (Removed screw will be used in step 18)

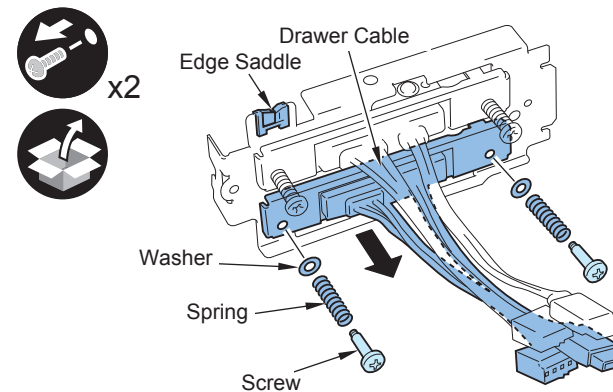


F-9-317



14) 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 17.)



F-9-318

□

15) Remove the Drawer Cable.

- 2 screws (Removed screw will be used in step 16.)

F-9-319

□

16) Install the IV Cable.

- 2 screws (screw removed in step 15))

F-9-320

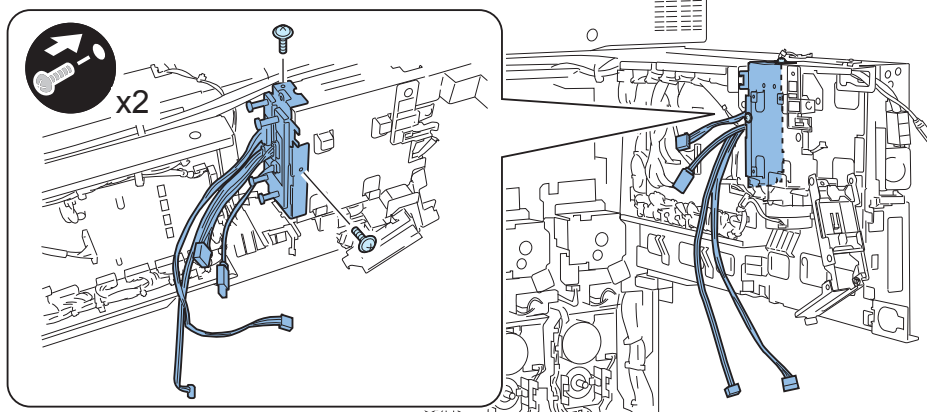
□

17) Install the IV Cable of HDD Drawer Unit.

- 2 screws
- 2 springs
- 2 washers
- (Use the parts removed in step 14.)

F-9-321

- 18) Install the HDD Drawer Unit.
 • 2 screws (screw removed in step 13))

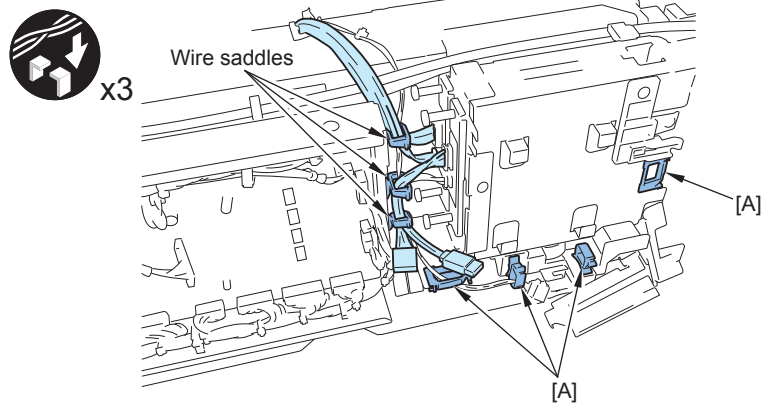


F-9-322

- 19) 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.

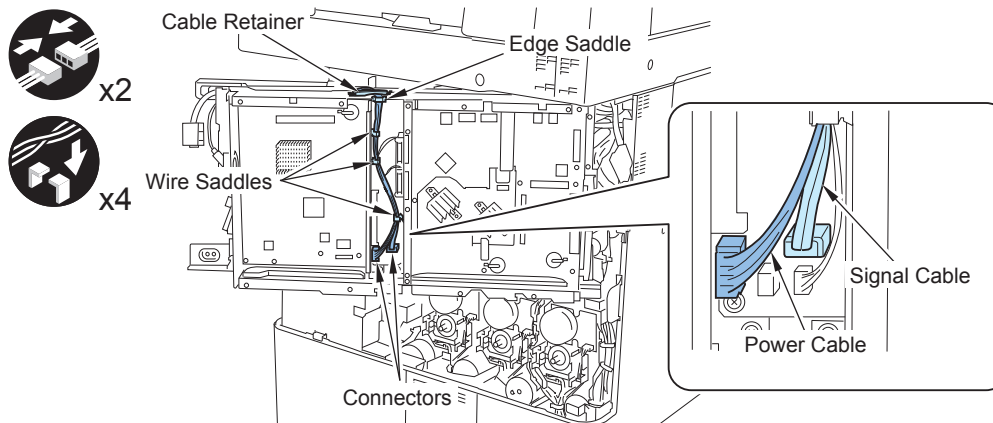


F-9-323



20) Install the IV Cable.

- 1 edge saddle
- 3 wire saddles
- 2 connectors
- 1 cable retainer



F-9-324



21) Install the Controller Cover.

Caution:

Be sure that the gaskets on left/right side of the Controller Cover are not protruded.

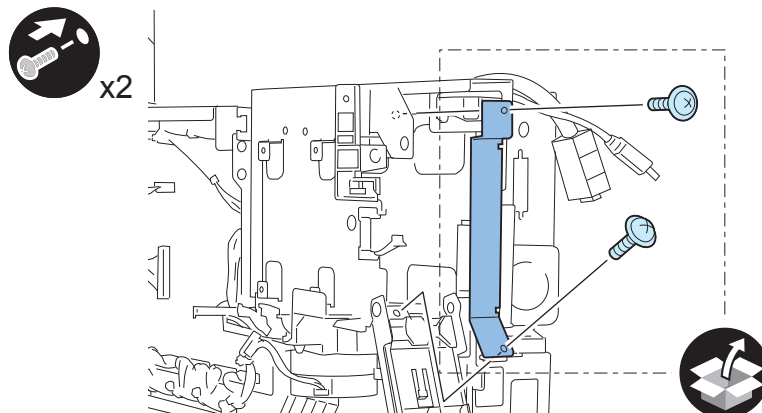


22) Install the HDD Blanking Plate to Slot.1 (left side).

- 2 screws (TP round end; M3X6)

CAUTION:

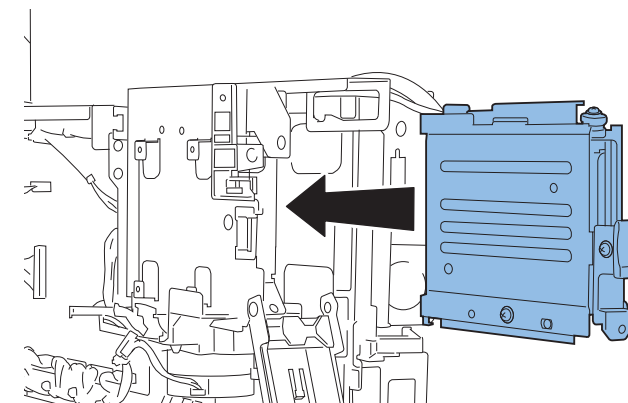
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



F-9-325



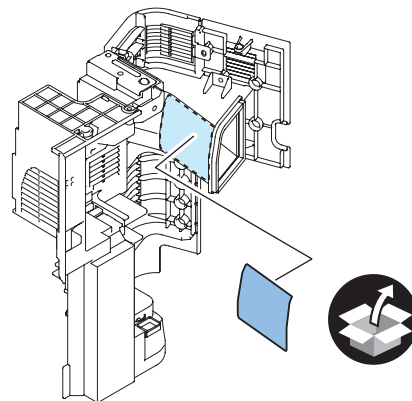
23) Install the HDD to Slot.2 (right side).



F-9-326

- 24) Close the HDD Lid.
25) Restore the Controller Box.

- 26) Affix the Shutdown Warning Label in the appropriate language on the Right Rear Cover 1.



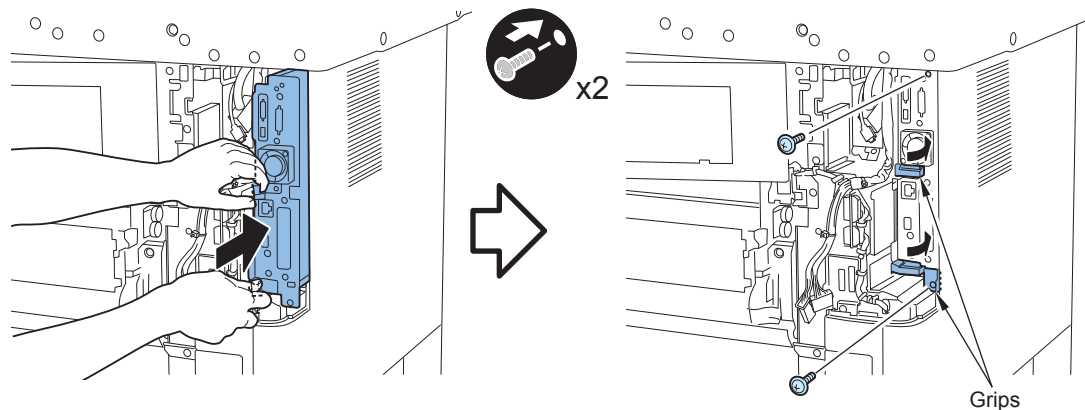
F-9-327

- 27) Install the removed cover and the cable.
- Rear Cover
 - Left Rear Sub Cover
 - Reader Communication Cable (when reader is installed)
 - Left Rear Cover
 - USB Cable and Control Panel Communication Cable

- 28) 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.



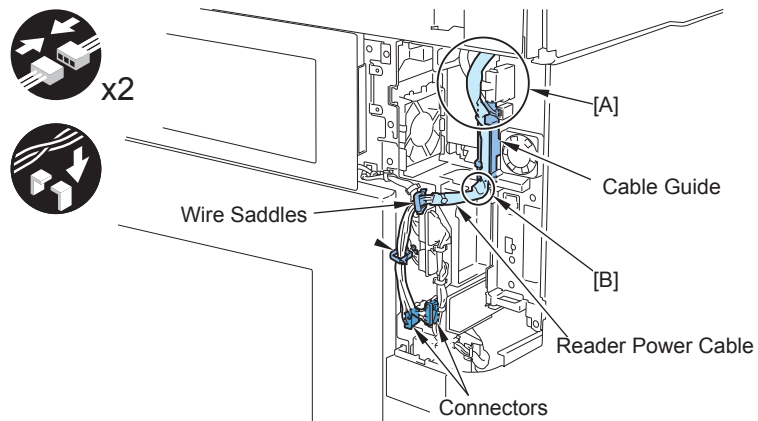
F-9-328



29) 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-9-329



30) Install the Right Rear Cover 1.

31) Close the Right Rear Cover 1, Right Lower Cover, and Right Upper Cover.

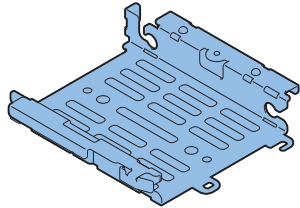
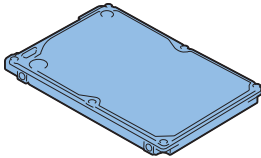
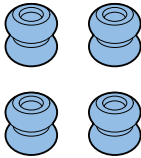
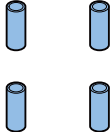
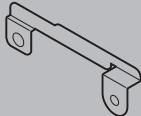
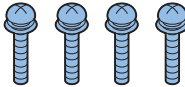


32) Insert the power plug into the socket and turn on the main power of the host machine.

[TYPE-3] Option HDD (250GB) + Removable HDD Kit

Checking the Contents

The parts with a gray in the contents list will not be used.

Option HDD (250GB)



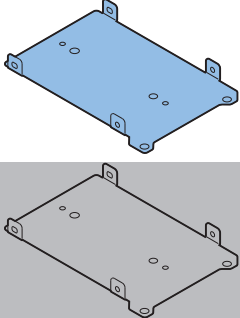
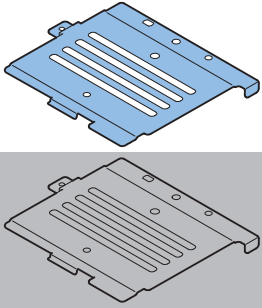
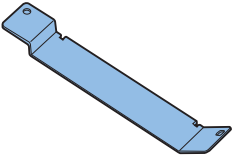
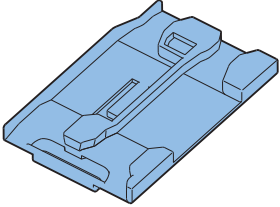
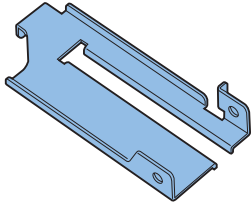

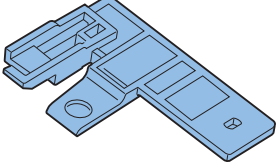
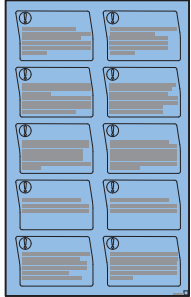
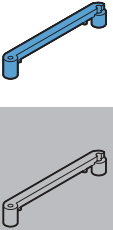
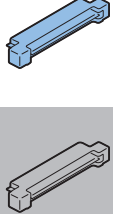
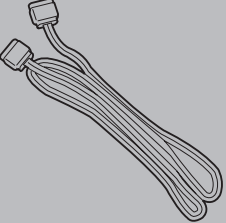
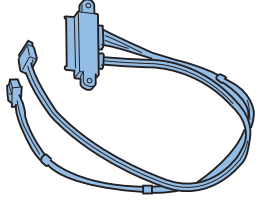
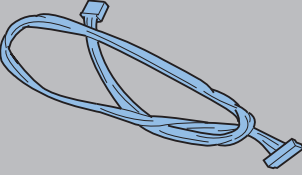
<input type="checkbox"/> [1] HDD Support Pate x 1 	<input type="checkbox"/> [2] HDD x 1 	<input type="checkbox"/> [3] Vibration-prevention Dumper x 4 	<input type="checkbox"/> [4] Spacers x 4 	<input type="checkbox"/> [5] Grounding Plate x 1 
<input type="checkbox"/> [6] Screw (W sems; M3x14) x 4 	<input type="checkbox"/> [7] Screw (TP;M3x6) x 2 	<input type="checkbox"/> [8] Gasket x 1 		

<CD/GUIDS>

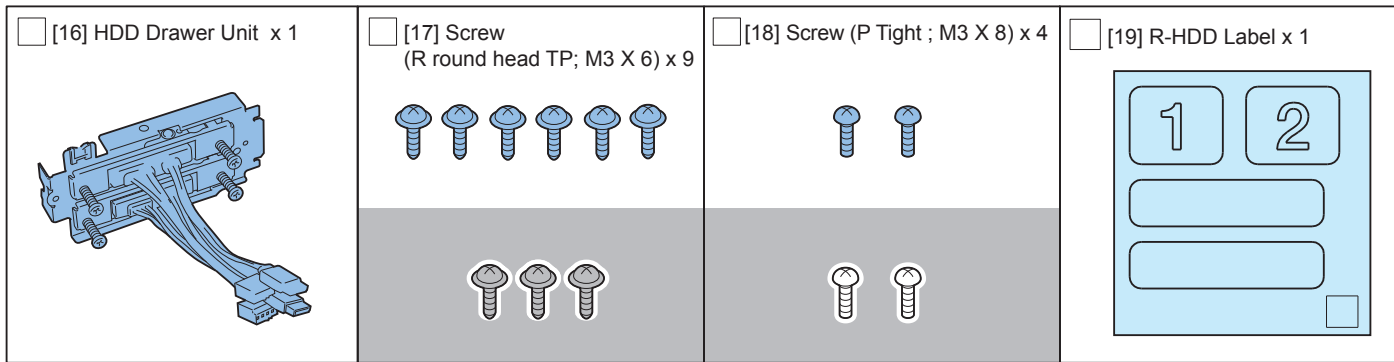
- Notice for FCC/IC
- China RoHS Notice 3

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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 	<input type="checkbox"/> [13] Signal Cable (660mm ; Red) x 1 	<input type="checkbox"/> [14] IV Cable (FK2-8453) x 1 	<input type="checkbox"/> [15] Power Cable (650mm ; FK2-8464) x 1 

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F-9-332

<CD/Guide>

- HDD Mirroring Kit-D1 User Documentation
- Notice for FCC/IC
- China RoHS Notice 3

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
Send Function Favorite Settings	Yes
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

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*1; Can only be backed up using the Remote UI.

*2; Depending on the MEAP application.

*3: Only the following data saved in Mail Box/Advanced Box 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
- Advanced Box URI Transmission Settings

*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 to be Backed Up

Data to be backed up	Reference
Address Book	For information on exporting data, see the "e-Manual > Remote UI".
Settings/Registration settings	
Device Settings (Forwarding Settings, Address List, Favorite Settings)	
Printer Settings	
Paper Information	
Favorite Settings for Web browser	See the "e-Manual > Web Access". (You can select this if web browser (Option) is installed.)
License files for MEAP applications	For information on downloading license files, see the "e-Manual > MEAP".
Data saved by MEAP applications	Data saved by MEAP applications may be able to be backed up, depending on the MEAP application. See the documentation included with the MEAP application.
Data stored in Mail Boxes or the Advanced Box	See the "e-Manual > Remote UI" to "Setting the Backup Location for Stored Data".
Image forms stored in the Superimpose Image	
SSO-H (Single Sign-On H) user authentication information	See the "e-Manual > MEAP".
Quick Menu Information	See the "e-Manual > Quick Menu".
User Information of the Advanced Box	See the "e-Manual > Security".

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CAUTION: Work to Perform After Installing the Kit

- When you start using this product, passwords set for Mail Boxes 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 this product has been installed. These data items are property of the user, and the restoration work must be performed by the system administrator.

The method of restoration is described in the Users Guide. See Table (Data to be backed up) in Points to Note About Installation of the Installation Procedure.

1. Procedure to make a backup of Address Book

- 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].
- 3) Click [Address List].
- 4) Click [Export].
- 5) Select the save format for Address list, and click [Start Export].
- 6) Following the instructions on the window, specify the location to save the file. Be sure to set a distinctive name to an export file so that you can recognize it when importing it.

NOTE:

Exporting the device settings will export all contents of the address list. In other words, there is no need for a backup unless it needs to be done individually.

2. Device Settings Export Procedure

- 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].
- 3) Click [Device Settings (Forwarding Settings, Address List, Favorite Settings)].
- 4) Click [Export], and then click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

3. Settings/Registration Export Procedure

- 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].
- 3) Click [Settings/Registration].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

4. Printer Settings Export Procedure

NOTE:

The following items to be exported are the same as the ones which are distributed by device information distribution.

- 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].
- 3) Click [Printer Settings].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

5. Paper Information Export Procedure

- 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].
- 3) Click [Paper Information].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

6. 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.

CAUTION: MEAP Backup Function Using the SST

Data that has been backed up using MEAP back of the SST before the use of this product is started must not be written back to the host machine after the use of this product is started. Similarly, even if the data that has been backed up after the use of this product is started is written back to the host machine before the use of this product is started, the machine does not operate. It is necessary to make sure that the implementation conditions for this product are compatible before and after making a backup of data, and the MEAP backup function does not permit making a backup of data in the course of installing the kit.

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.

7. 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) Click the application of which license has been installed.
- 5) Click [License Control], and then click [Disable]. Click [Yes] in a confirmation window for disabling the license.

- 6) Click [Download] under "Download/delete Disabled License File" item. 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.
- 7) 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).
- 8) 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).

8. 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/](http://[IP address of the device]:8000/sso/)
 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 the user has changed the password, ask him/her to change the password again after the use of this product is started.

- 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].

9. Backup of User inbox and Advanced Box document data

CAUTION: Backup of "Advanced Box"

When setting a SMB server as a backup destination, Advanced Box data saved in a large capacity HDD cannot be backed up. The Advanced Box data backed up from the large capacity HDD cannot be restored to the standard HDD.

Depending on the system version of the machine, both backup and restoration might not be performed.

The procedure of backup and restoration of a box document data is described below.

Specify the backup destination of a document data:

- Backup to SMB server
 Select SMB as a backup destination and specify an address, a user name, a password, and a path to the SMB server to which saved data is backed up.
- Backup to USB HDD
 Select USB HDD as a backup destination and specify a path to the USB HDD folder to which saved data is backed up.

CAUTION: Data which cannot be backed up

If you back up/restore stored data without restarting the machine after changing the language displayed on the touch panel display by pressing [Settings/Registration] > [Preferences] from the control panel of the machine, the stored data may not be backed up/restored properly. For more information on the data that cannot be backed up, see Points to Note for Installation.

CAUTION:

If the language setting in the common specification settings (Settings/Registration) is set to ON, 'host address' and 'path to folder' might not be displayed correctly or cannot be referred.

CAUTION:

- Regarding the method of inputting characters, see 'Basic Operations' in the e-Manual.
- A host address can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,' 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A path to the folder can be up to 255 characters in 1 byte (127 characters in 2 bytes).
- A user name can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,' 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A password can be up to 7 to 48 characters using the 'alphanumeric character' and 'mark (1 byte)' modes.
- The voice sound symbol and the semi-voice sound symbol entered in the 'Katakana (1 byte)' mode are counted up as one 1-byte character.

[Backup method of User inbox and Advanced Box document data]

- 1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Backup].
- 2) Select 'All' or 'Changes' for the backup method.
- 3) Click [Execute].

CAUTION:

- If any of the host IP address, user name, password, or path to the folder is not correctly entered, a backup cannot be made.
- If you select to encrypt the backup data, the backup process may take longer.

[Restoring the backup data of User inbox and Advanced Box document data]

- 1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Restore].
- 2) Click [Display Backup Data].
- 3) Select the backup data to restore from the list and then click [Execute].

CAUTION:

- If you want to restore encrypted backup data, enter the same password used when backing up the data.
- Depending on the settings of the machine, the backup data may not be completely restored, or some documents may be automatically printed.
- Restoration is performed after all of the box data stored in the machine, or documents that are being sent, received, or stored, are erased.

10. Quick Menu Information Export Procedure

- 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 Basic Tools > [Quick Menu] > [Export].
- 3) If the file needs to be encrypted, enter the password after check [Encrypt file]. (The number of characters for the password must be more than 4 but less than 16.)
- 4) Click [Export].
- 5) Following the instructions on the window, specify the location to save the file.

11. User Information of the Advanced Box Export Procedure

- 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 Basic Tools > [User Access Control for Advanced Box]. The dialog box to enter the user name of administrator and password appears, enter the system administrator ID and password, and then click [Log In].
The default administrator user name and password are as follows:
User Name: Administrator
Password: password
- 3) Click [Export], and click [Start Export].
- 4) Following the instructions on the window, specify the location to save the file.

Check Items when Turning OFF the Main Power

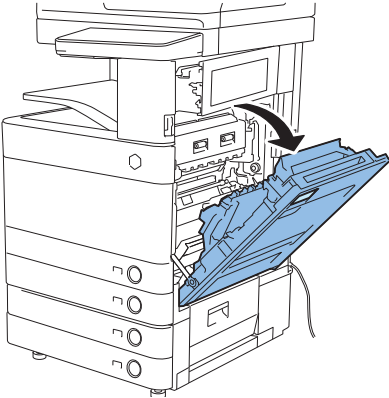
Check that the main power switch is OFF.

- 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.)

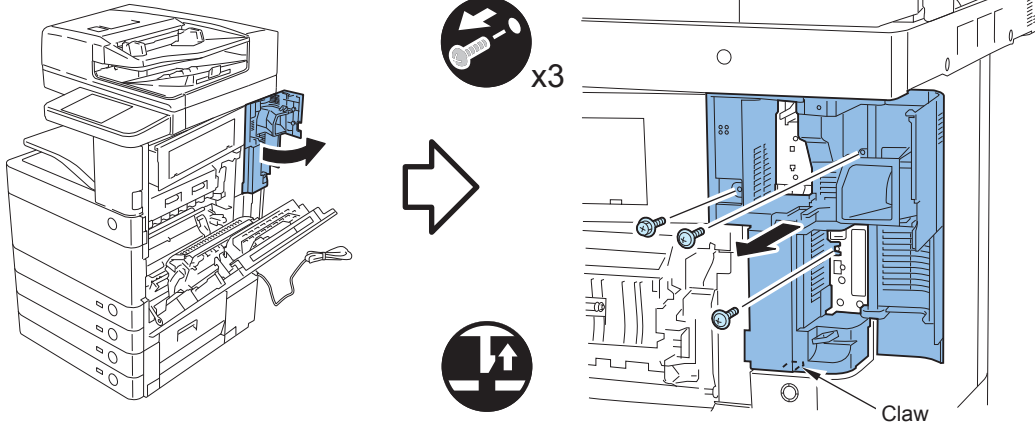


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2) Open the Right Rear Cover 1.

3) Remove the Right Rear Cover 1.

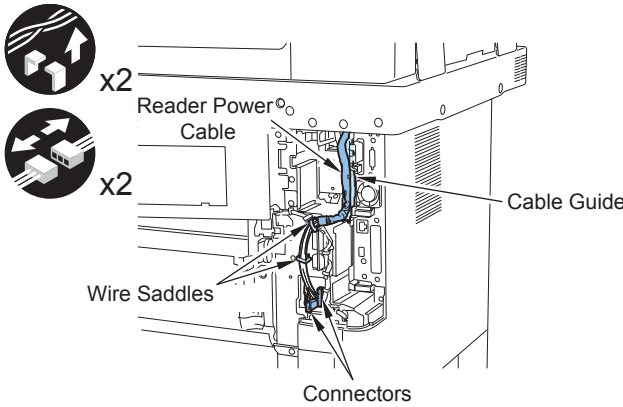
- 1 screw (RS tight; M4)
- 2 screws (TP; M3)
- 1 claw



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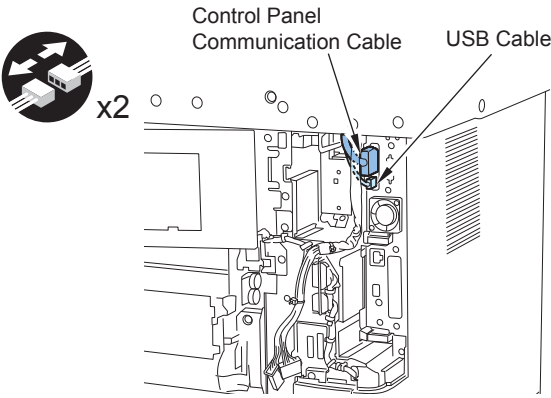
4) When the Reader is installed, remove the Reader Power Cable.

- 2 connectors
- 2 wire saddles
- 1 cable guide



F-9-335

5) Remove the USB Cable and the Control Panel Communication Cable.

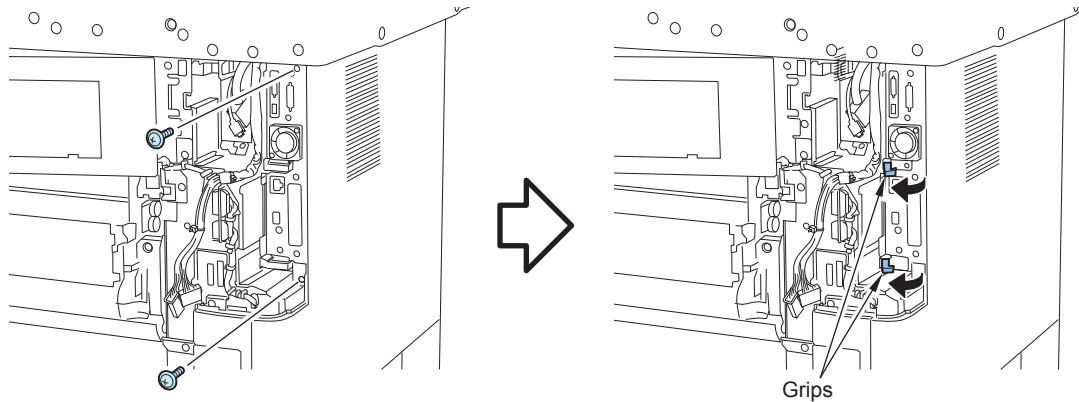


F-9-336

6) Remove the 2 screws, open the grip in 2 places.



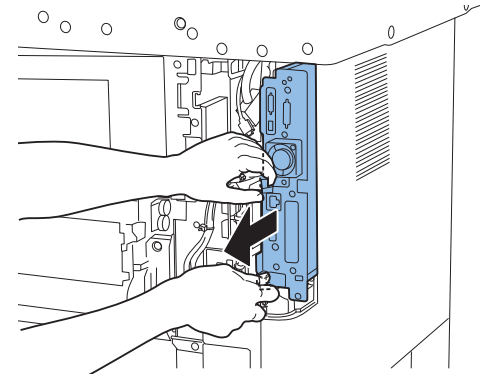
x2



Grips

F-9-337

7) Hold the 2 Grips, and pull out the Main Controller PCB 1 approximately 10mm toward front.



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8) Remove the Left Rear Cover.

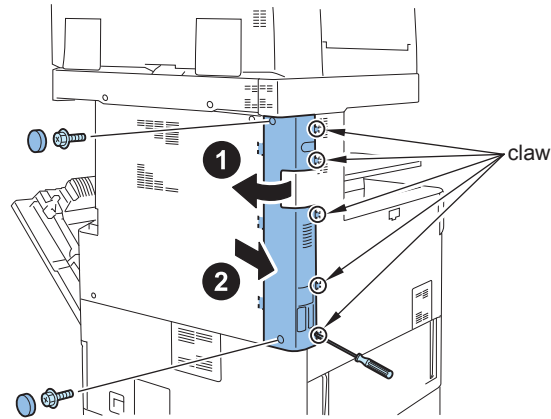
- 2 rubber caps
- 2 screws
- 5 claws



x2

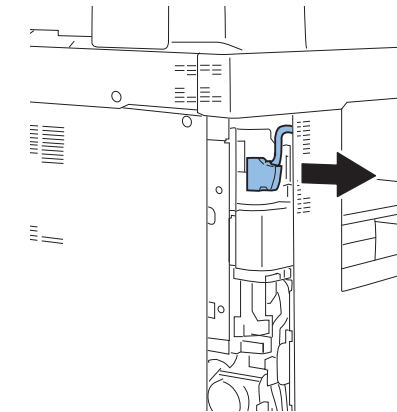


x5



F-9-339

9) When the Reader is installed, remove the Reader Communication Cable.



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10) Remove the Left Rear Sub Cover.

- 1 screw
- 1 hook

Hook

Left Rear Sub Cover

F-9-341

11) Remove the Rear Cover.

- 2 rubber caps
- 2 screws
- 1 claw

claw

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12) Open the Controller Box while avoiding the harness.

- 2 screws

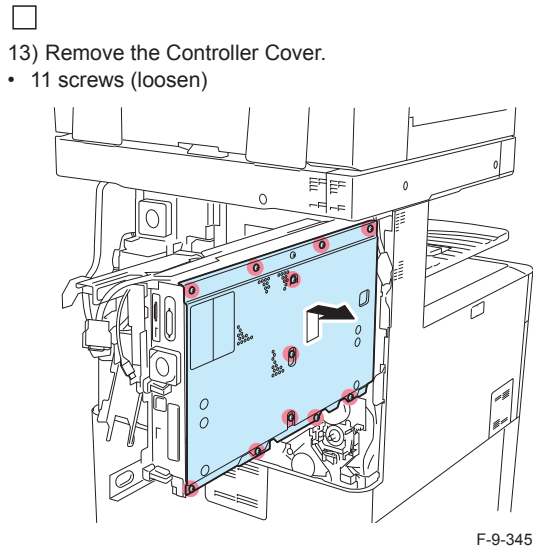
Harness

F-9-343

NOTE:
If the FAX Unit has been installed, remove the 3 screws and open the Controller Box with the FAX Unit.

Harness

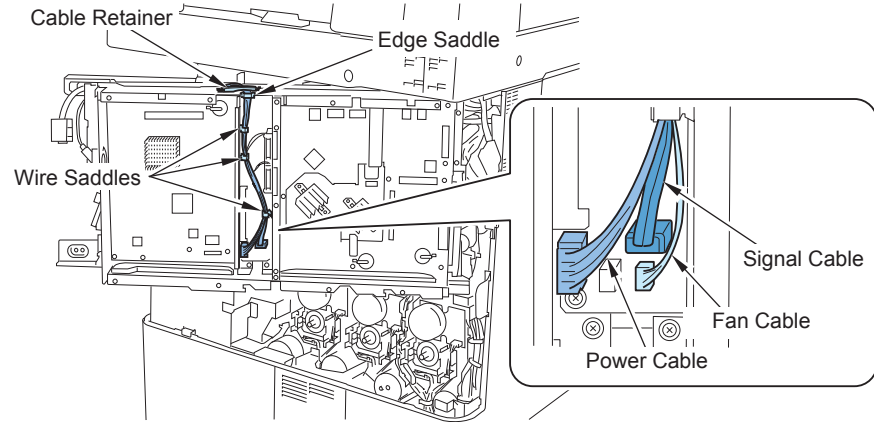
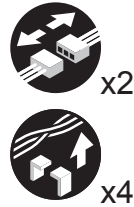
F-9-344



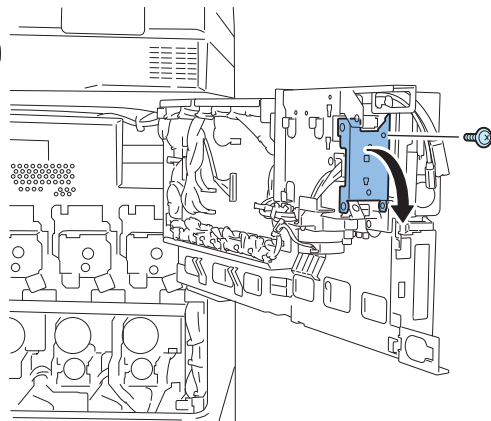
14) Remove the Signal Cable and the Power Cable.

CAUTION:
Do not remove the Fan Cable.

- 1 edge saddle
- 3 wire saddles
- 1 cable retainer



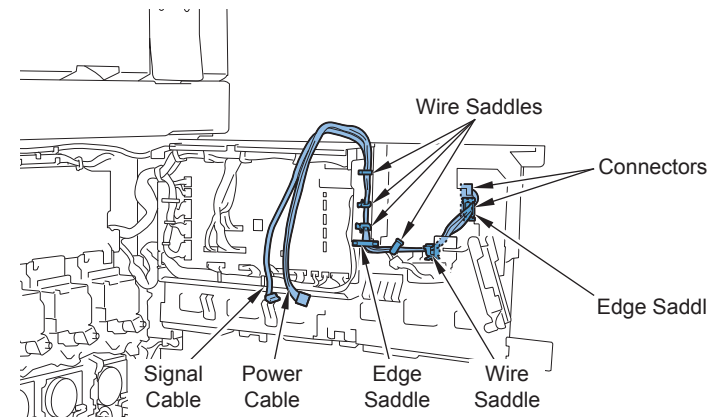
15) Open the HDD Lid.
• 1 screw (Removed screw will not be used.)



16) Remove the Signal Cable and the Power Cable.

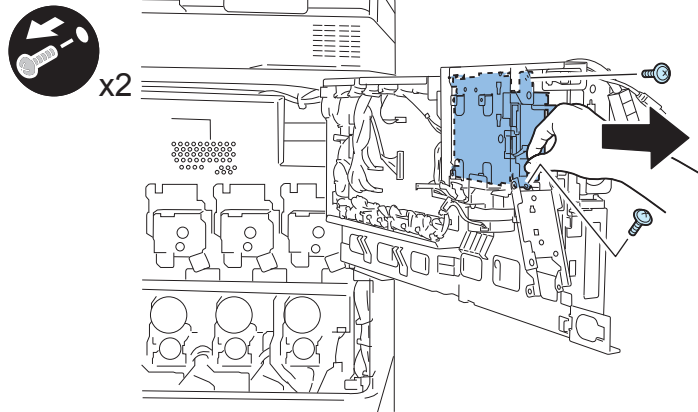
- 2 edge saddles
- 5 wire saddles
- 2 connectors

NOTE:
Removed Signal Cable and Power Cable will not be used.





- 17) 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.)



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■ Installing the Removable HDD Kit

□

1) Install the HDD Door Guide.

- 2 claws

F-9-350

□

CAUTION:
Be careful of the installation direction of HDD Lock Plate.

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□

2) Install the HDD Lock Plate.

- 2 HDD Lock Plate Shafts
- 2 Hinge Shaft Stoppers

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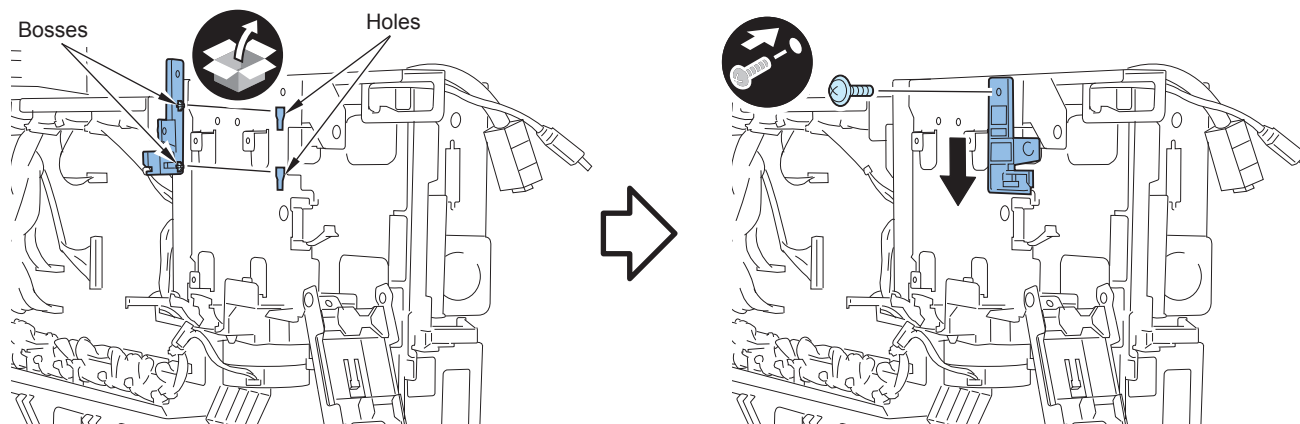


3) Adjust the 2 bosses to the hole and install the HDD Lid Retainer.

- 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.

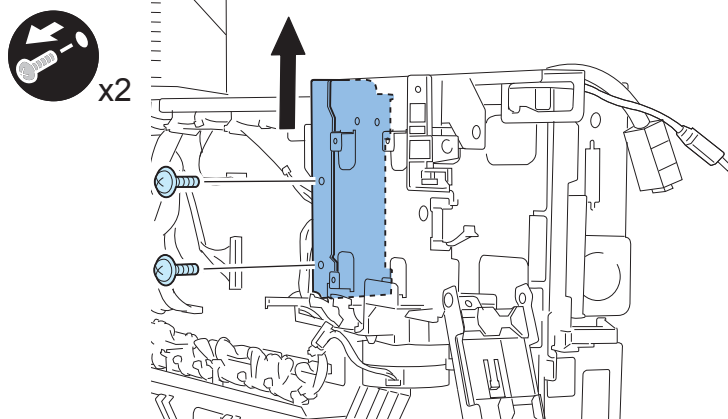


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4) Remove the HDD Rear Cover. (Removed HDD Rear Cover will not be used.)

- 2 screws (Removed screw will be used in step 9.)

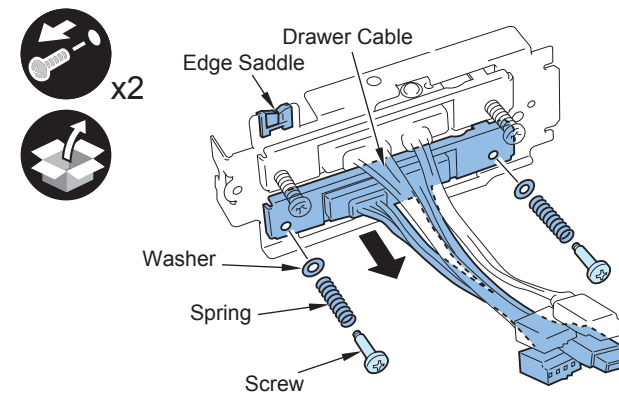


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5) Place it in the position where the edge saddle of HDD Drawer Unit is facing up, remove the lower Drawer Cable (Slot.2).

- 2 screws
 - 2 springs
 - 2 washers
- (The removed springs and washers will be used in step 8.)

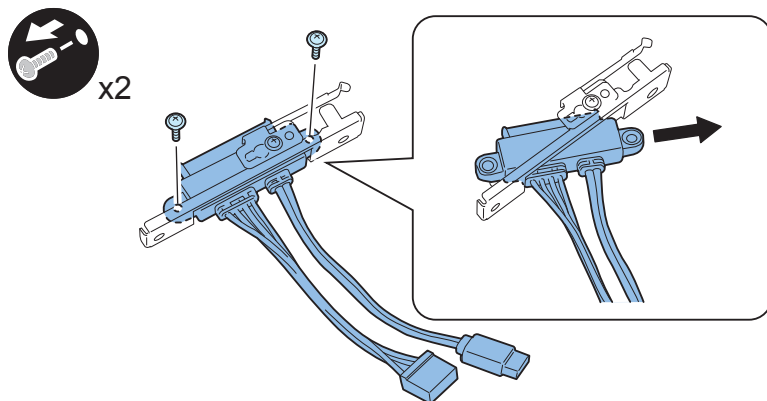


F-9-355



6) Remove the Drawer Cable.

- 2 screws (Removed screw will be used in step 7).)

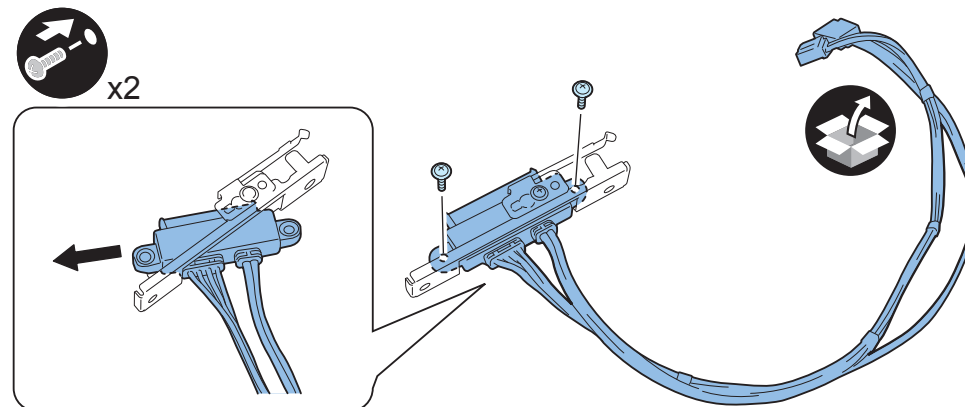


F-9-356



7) Install the IV Cable.

- 2 screws (screw removed in step 6))

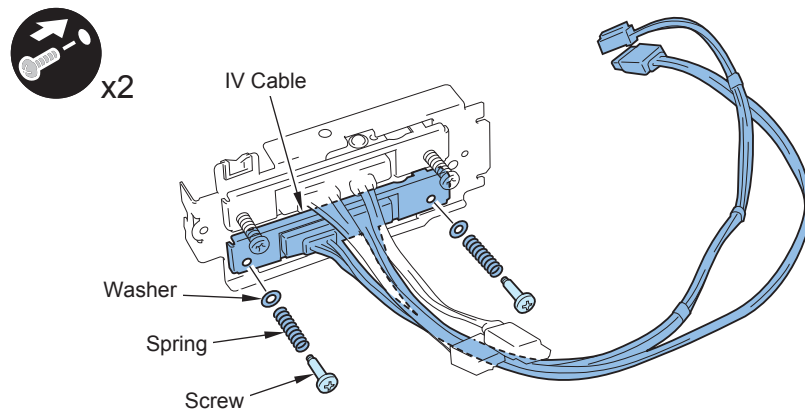


F-9-357



8) Install the IV Cable of HDD Drawer Unit.

- 2 screws
- 2 springs
- 2 washers (Use the parts removed in step 5).)

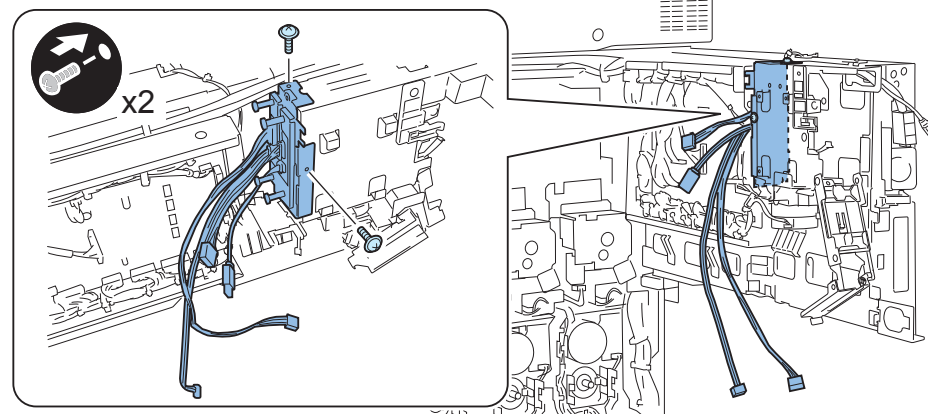


F-9-358



9) Install the HDD Drawer Unit.

- 2 screws (screw removed in step 4))



F-9-359

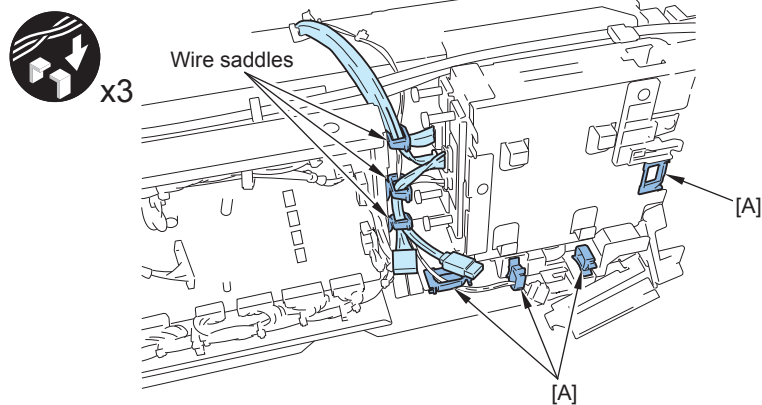


10) Fix the cable of the Drawer Unit.

- 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.

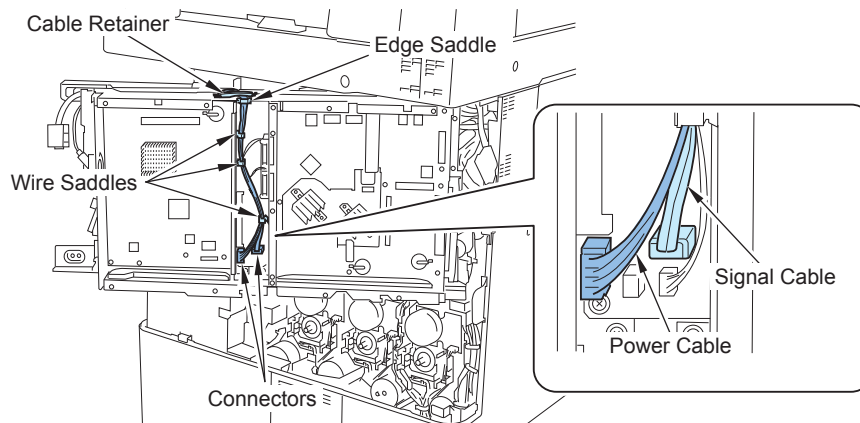


F-9-360



11) Install the IV Cable.

- 1 edge saddle
- 3 wire saddles
- 2 connectors
- 1 cable retainer



F-9-361



12) Install the Controller Cover.

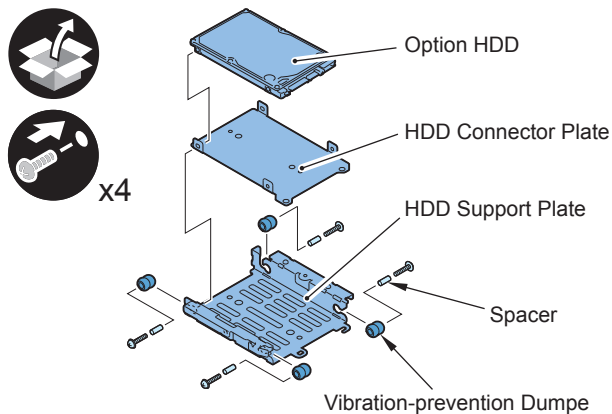
Caution:

Be sure that the gaskets on left/right side of the Controller Cover are not protruded.

Assembling and Installing the Option HDD

1) Purchase option HDD and assemble the second HDD.

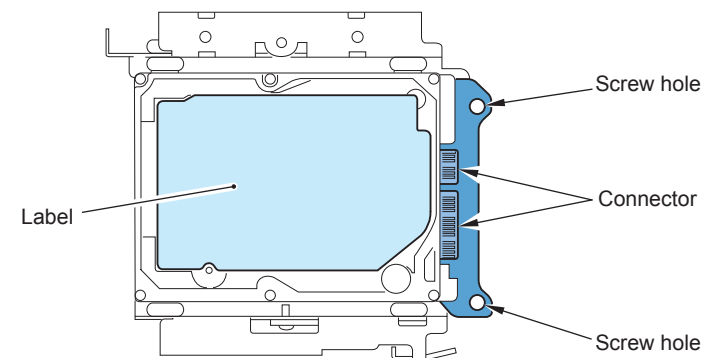
- 1 Option HDD (enclosed with option HDD)
- 1 HDD Support Plate (enclosed with option HDD)
- 1 HDD Connector Plate (enclosed with removable HDD Kit)
- 4 Vibration-prevention Dumpers (enclosed with option HDD)
- 4 spacers (enclosed with option HDD)
- 4 screws (binding with flat washer; M3X14) (enclosed with option HDD)



F-9-362

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)

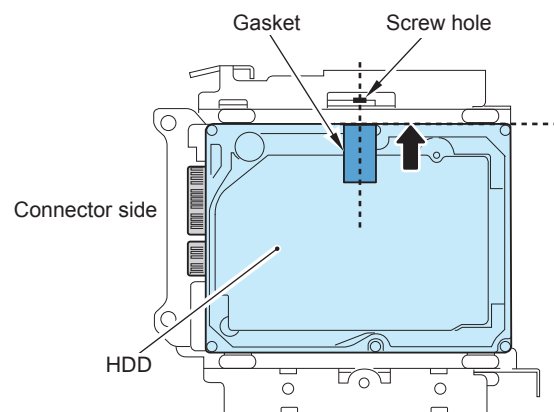


F-9-363

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.

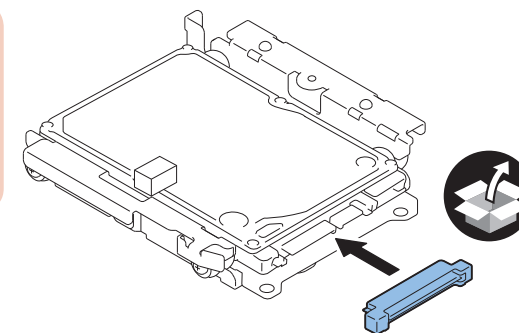


F-9-364

3) Install the Conversion Connector.

CAUTION:

Make sure that there is no opening between the Conversion Connector and part of HDD.



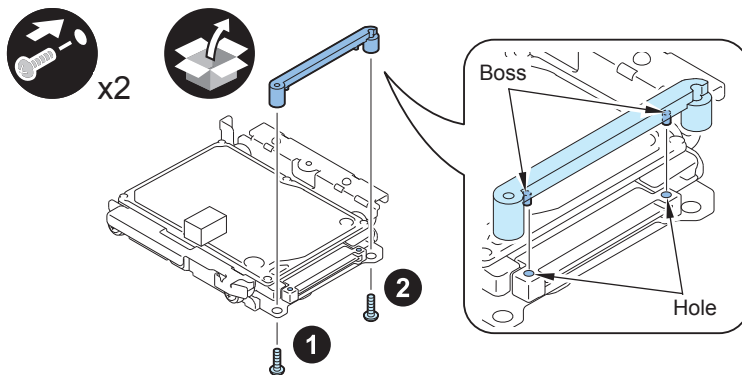
F-9-365

4) Fit the 2 bosses of Connector Fixing Block to the hole of Conversion Connector and install it.

- 2 screws (P Tight; M3X8)

CAUTION:

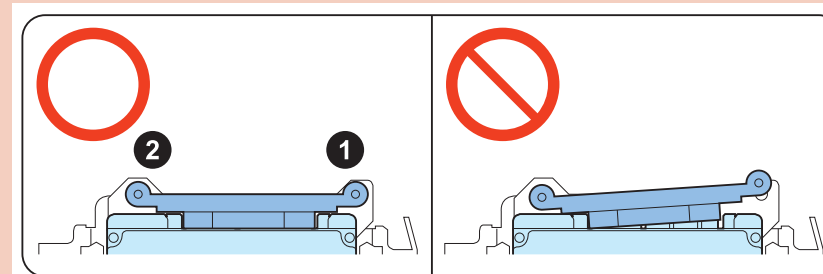
Be sure not to tighten the screws in wrong order. Otherwise, the Conversion Connector will not be secured properly.



F-9-366

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.



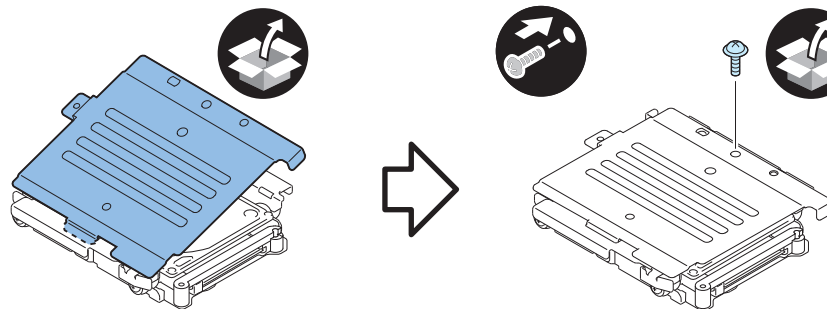
F-9-367

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.



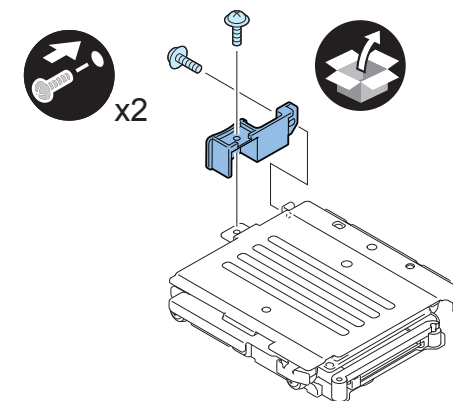
F-9-368

6) Install the HDD Handle.

- 2 screws (TP round end; M3X6)

CAUTION:

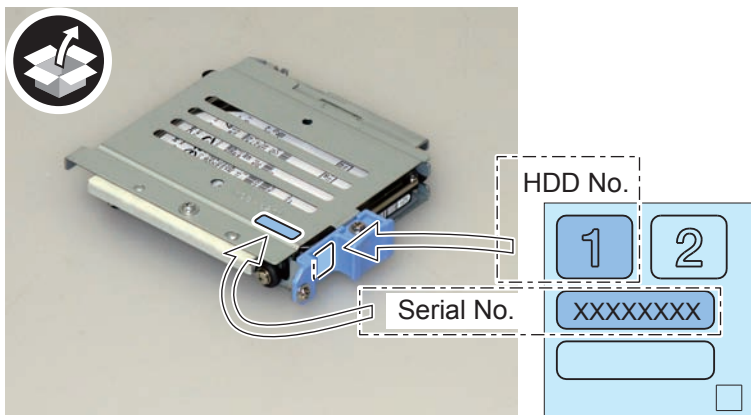
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



F-9-369



- 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.



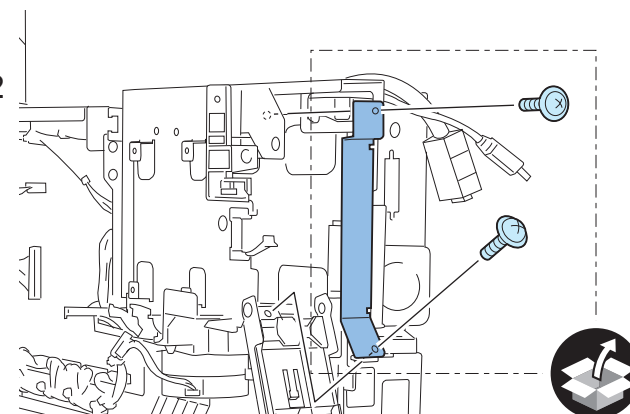
F-9-370



- 9) Install the HDD Blanking Plate to Slot.1 (left side).
• 2 screws (TP round end; M3X6)

CAUTION:

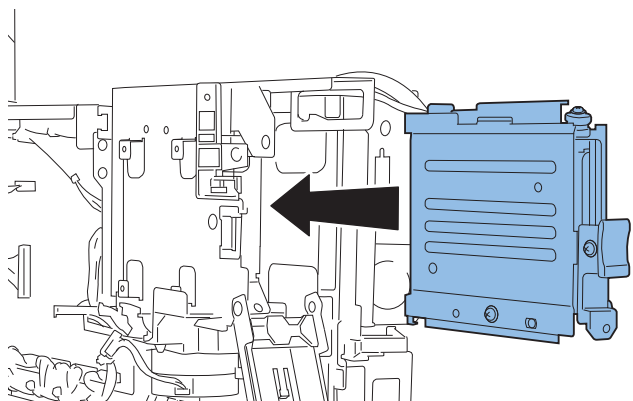
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



F-9-371



- 10) Install the HDD to Slot.2 (right side).



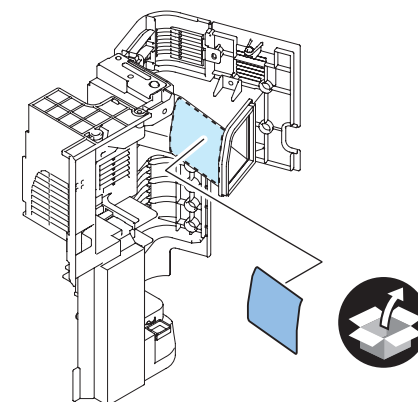
F-9-372



- 11) Close the HDD Lid.
12) Restore the Controller Box.



- 13) Affix the Shutdown Warning Label in the appropriate language on the Right Rear Cover 1.



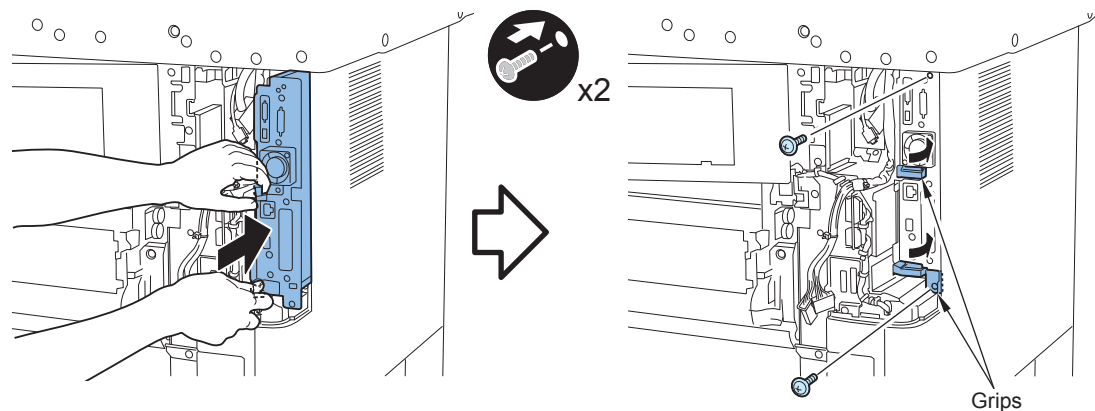
F-9-373

- 14) Install the removed cover and the cable.
- Rear Cover
 - Left Rear Sub Cover
 - Reader Communication Cable (when reader is installed)
 - Left Rear Cover
 - USB Cable and Control Panel Communication Cable

- 15) 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.

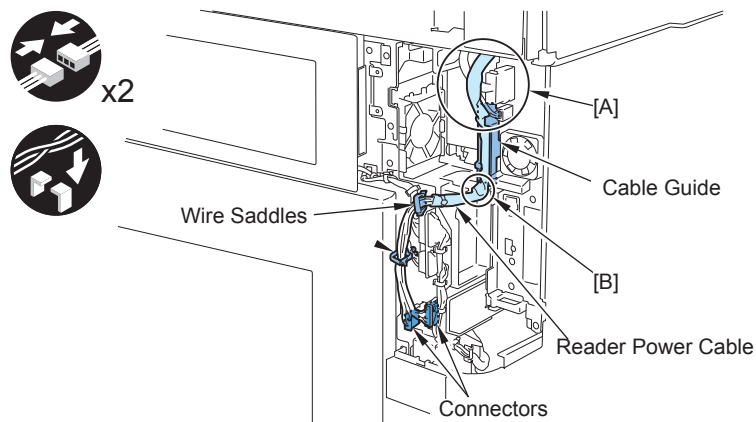


F-9-374

- 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-9-375

- 17) Install the Right Rear Cover 1.
18) Close the Right Rear Cover 1, Right Lower Cover, and Right Upper Cover.

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 CONNECT.

2) From the list of machine series, select the appropriate model.

3) Select 'single', and click START.

4) Execute HDD format.

5) After 5 sec from when the power of the host machine is turned OFF, restart the host machine in download mode of safe mode.

6) When "download mode" is displayed on the control panel, click simple mode start.

7) Click start to execute download.

8) Follow the instruction on the screen and when download is complete, click OK.

9) Exit SST.

10) Check the versions of MN-CONT and LANG etc 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] Option HDD (80GB) + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit

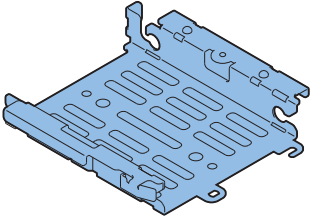
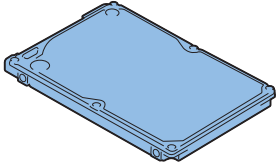
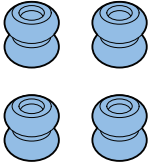
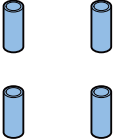
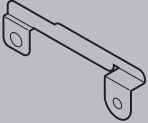
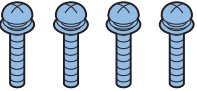

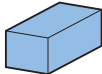
Points to Note when HDD Data Encryption & Mirroring Kit has been Installed

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

The parts with a gray in the contents list will not be used.

Option HDD (80GB)

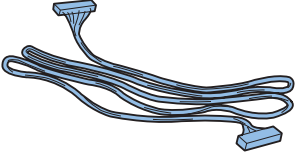
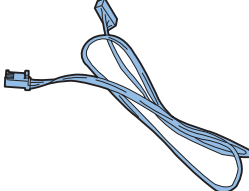
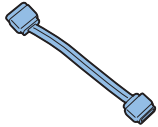
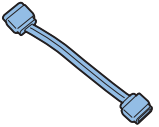
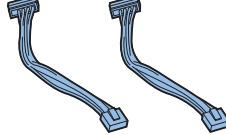
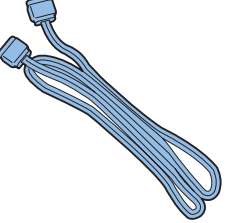
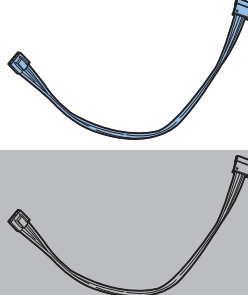
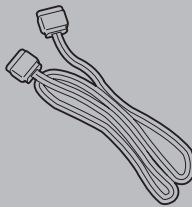
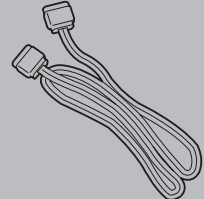

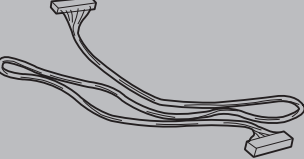
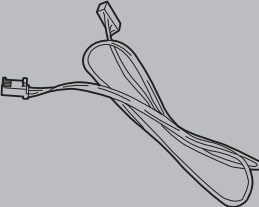
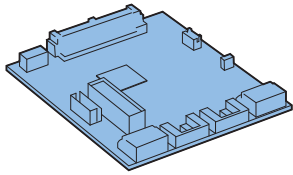
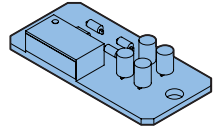
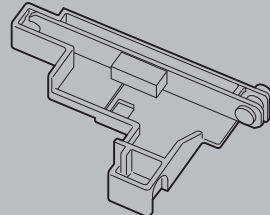
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<input type="checkbox"/> [6] Screw (W sems; M3x14) x 4 	<input type="checkbox"/> [7] Screw (TP; M3x6) x 2 	<input type="checkbox"/> [8] Gasket x 1 		

<CD/GUIDS>

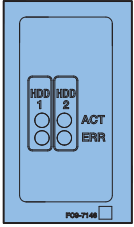

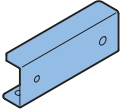
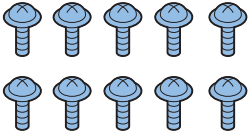
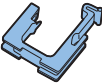
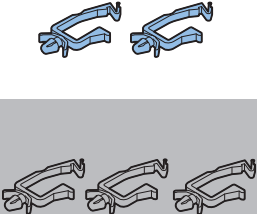
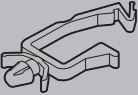

- Notice for FCC/IC
- China RoHS Notice 3

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HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit

<input type="checkbox"/> [1] LED Cable (1200mm; 7 pin) x 1 	<input type="checkbox"/> [2] STS Cable (550mm (Light blue); 5 pin) x 1 	<input type="checkbox"/> [3] Signal Cable (80mm (Red); FK2-8436) x 1 	<input type="checkbox"/> [4] Signal Cable (80mm (Blue); FK2-8438) x 1 	<input type="checkbox"/> [5] Power Cable (80mm; FK2-8461) x 2 
<input type="checkbox"/> [6] Signal Cable (450mm (Red); FK2-8435) x 1 	<input type="checkbox"/> [7] Power Cable (430mm; FK2-8463) x 2 	<input type="checkbox"/> [8] Signal Cable (340mm (Red); FK2-8434) x 1 	<input type="checkbox"/> [9] Signal Cable (370mm (Blue); FK2-8441) x 1 	<input type="checkbox"/> [10] Power Cable (320mm; FK2-8467) x 1 
<input type="checkbox"/> [11] LED Cable (290mm; 7 pin) x 1 	<input type="checkbox"/> [12] STS Cable (420mm (Light blue); 5 pin) x 1 	<input type="checkbox"/> [13] Mirroring Board or Encryption Board x 1 	<input type="checkbox"/> [14] LED Board (Small) x 1 	<input type="checkbox"/> [15] LED Board (large) x 1 

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<input type="checkbox"/> [16] LED Label (Small) x 1 	<input type="checkbox"/> [17] LED Label (large) x 1 	<input type="checkbox"/> [18] HDD Connection Plate x 1 	<input type="checkbox"/> [19] Screw (TP; M3 X 6) x 10 	<input type="checkbox"/> [20] Edge Saddle x 1 
<input type="checkbox"/> [21] Wire saddle (Small) x 5 	<input type="checkbox"/> [22] Wire saddle (large) x 1 	<input type="checkbox"/> [23] Wire saddle (Middle) x 1 		

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< 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 Notice
- Installation Procedure
- Noticed for FCC/IC

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
Send Function Favorite Settings	Yes
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-9-11

*1; Can only be backed up using the Remote UI.

*2; Depending on the MEAP application.

*3: Only the following data saved in Mail Box/Advanced Box 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
- Advanced Box URI Transmission Settings

*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 to be Backed Up

Data to be backed up	Reference
Address Book	For information on exporting data, see the "e-Manual > Remote UI".
Settings/Registration settings	
Device Settings (Forwarding Settings, Address List, Favorite Settings)	
Printer Settings	
Paper Information	
Favorite Settings for Web browser	See the "e-Manual > Web Access". (You can select this if web browser (Option) is installed.)
License files for MEAP applications	For information on downloading license files, see the "e-Manual > MEAP".
Data saved by MEAP applications	Data saved by MEAP applications may be able to be backed up, depending on the MEAP application. See the documentation included with the MEAP application.
Data stored in Mail Boxes or the Advanced Box	See the "e-Manual > Remote UI" to "Setting the Backup Location for Stored Data".
Image forms stored in the Superimpose Image	
SSO-H (Single Sign-On H) user authentication information	See the "e-Manual > MEAP".
Quick Menu Information	See the "e-Manual > Quick Menu".
User Information of the Advanced Box	See the "e-Manual > Security".

T-9-12

CAUTION: Work to Perform After Installing the Kit

- When you start using this product, passwords set for Mail Boxes 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 this product has been installed. These data items are property of the user, and the restoration work must be performed by the system administrator.

The method of restoration is described in the Users Guide. See Table (Data to be backed up) in Points to Note About Installation of the Installation Procedure.

1. Procedure to make a backup of Address Book

- 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].
- 3) Click [Address List].
- 4) Click [Export].
- 5) Select the save format for Address list, and click [Start Export].
- 6) Following the instructions on the window, specify the location to save the file. Be sure to set a distinctive name to an export file so that you can recognize it when importing it.

NOTE:

Exporting the device settings will export all contents of the address list. In other words, there is no need for a backup unless it needs to be done individually.

2. Device Settings Export Procedure

- 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].
- 3) Click [Device Settings (Forwarding Settings, Address List, Favorite Settings)].
- 4) Click [Export], and then click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

3. Settings/Registration Export Procedure

- 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].
- 3) Click [Settings/Registration].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

4. Printer Settings Export Procedure

NOTE:

The following items to be exported are the same as the ones which are distributed by device information distribution.

- 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].
- 3) Click [Printer Settings].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

5. Paper Information Export Procedure

- 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].
- 3) Click [Paper Information].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

6. 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.

CAUTION: MEAP Backup Function Using the SST

Data that has been backed up using MEAP back of the SST before the use of this product is started must not be written back to the host machine after the use of this product is started. Similarly, even if the data that has been backed up after the use of this product is started is written back to the host machine before the use of this product is started, the machine does not operate. It is necessary to make sure that the implementation conditions for this product are compatible before and after making a backup of data, and the MEAP backup function does not permit making a backup of data in the course of installing the kit.

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.

7. 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) Click the application of which license has been installed.
- 5) Click [License Control], and then click [Disable]. Click [Yes] in a confirmation window for disabling the license.

- 6) Click [Download] under "Download/delete Disabled License File" item. 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.
- 7) 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).
- 8) 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).

8. 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/`

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 the user has changed the password, ask him/her to change the password again after the use of this product is started.

- 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].

9. Backup of User inbox and Advanced Box document data

CAUTION: Backup of "Advanced Box"

When setting a SMB server as a backup destination, Advanced Box data saved in a large capacity HDD cannot be backed up. The Advanced Box data backed up from the large capacity HDD cannot be restored to the standard HDD.

Depending on the system version of the machine, both backup and restoration might not be performed.

The procedure of backup and restoration of a box document data is described below.

Specify the backup destination of a document data:

- Backup to SMB server
Select SMB as a backup destination and specify an address, a user name, a password, and a path to the SMB server to which saved data is backed up.
- Backup to USB HDD
Select USB HDD as a backup destination and specify a path to the USB HDD folder to which saved data is backed up.

CAUTION: Data which cannot be backed up

If you back up/restore stored data without restarting the machine after changing the language displayed on the touch panel display by pressing [Settings/Registration] > [Preferences] from the control panel of the machine, the stored data may not be backed up/restored properly. For more information on the data that cannot be backed up, see Points to Note for Installation.

CAUTION:

If the language setting in the common specification settings (Settings/Registration) is set to ON, 'host address' and 'path to folder' might not be displayed correctly or cannot be referred.

CAUTION:

- Regarding the method of inputting characters, see 'Basic Operations' in the e-Manual.
- A host address can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,' 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A path to the folder can be up to 255 characters in 1 byte (127 characters in 2 bytes).
- A user name can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,' 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A password can be up to 7 to 48 characters using the 'alphanumeric character' and 'mark (1 byte)' modes.
- The voice sound symbol and the semi-voice sound symbol entered in the 'Katakana (1 byte)' mode are counted up as one 1-byte character.

[Backup method of User inbox and Advanced Box document data]

- 1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Backup].
- 2) Select 'All' or 'Changes' for the backup method.
- 3) Click [Execute].

CAUTION:

- If any of the host IP address, user name, password, or path to the folder is not correctly entered, a backup cannot be made.
- If you select to encrypt the backup data, the backup process may take longer.

[Restoring the backup data of User inbox and Advanced Box document data]

- 1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Restore].
- 2) Click [Display Backup Data].
- 3) Select the backup data to restore from the list and then click [Execute].

CAUTION:

- If you want to restore encrypted backup data, enter the same password used when backing up the data.
- Depending on the settings of the machine, the backup data may not be completely restored, or some documents may be automatically printed.
- Restoration is performed after all of the box data stored in the machine, or documents that are being sent, received, or stored, are erased.

10. Quick Menu Information Export Procedure

- 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 Basic Tools > [Quick Menu] > [Export].
- 3) If the file needs to be encrypted, enter the password after check [Encrypt file]. (The number of characters for the password must be more than 4 but less than 16.)
- 4) Click [Export].
- 5) Following the instructions on the window, specify the location to save the file.

11. User Information of the Advanced Box Export Procedure

- 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 Basic Tools > [User Access Control for Advanced Box]. The dialog box to enter the user name of administrator and password appears, enter the system administrator ID and password, and then click [Log In].
The default administrator user name and password are as follows:
User Name: Administrator
Password: password
- 3) Click [Export], and click [Start Export].
- 4) Following the instructions on the window, specify the location to save the file.

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.

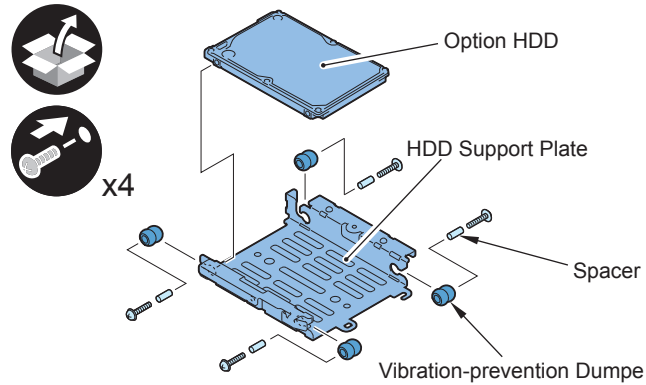
Installation Procedure

Assembling the Option HDD



1) Assemble the option HDD (250GB).

- 1 Option HDD
- 1 HDD Support Plate
- 4 Dust-prevention Dumpers
- 4 spacers
- 4 screws (binding with flat washer; M3x14)

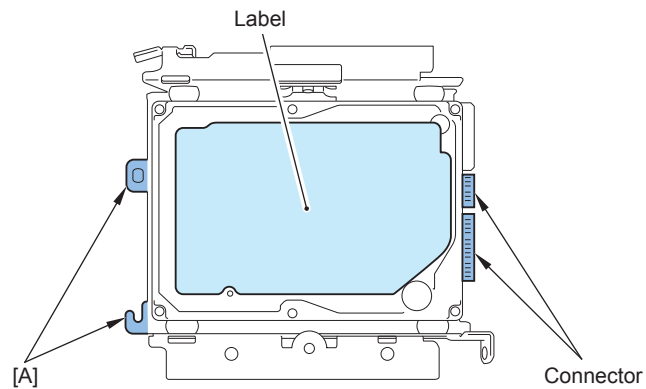


F-9-379



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.



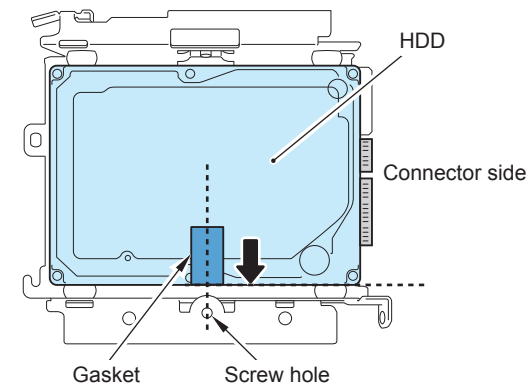
F-9-380



2) Affix the gasket to the place shown in the figure below.

CAUTION:

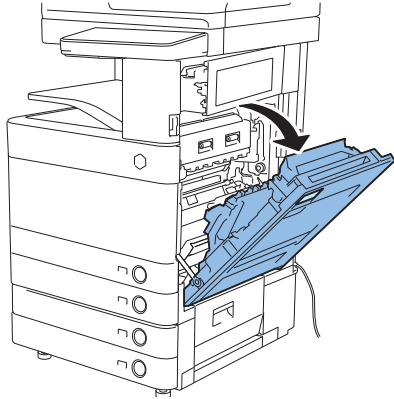
- Be sure to place the gasket in contact with the label-free metal surface of the HDD surface.



F-9-381

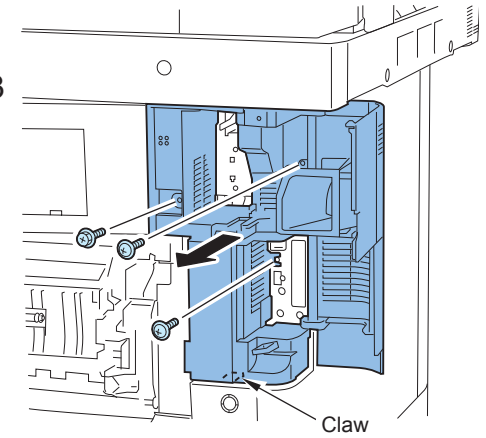
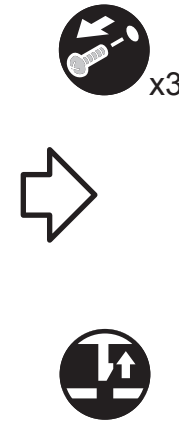
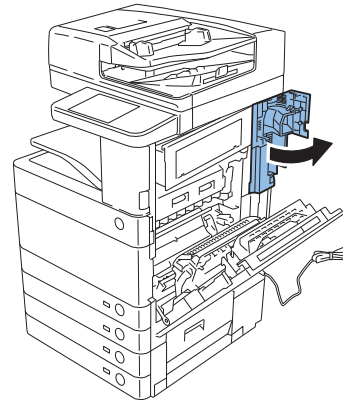
■ Removing and Installing the HDD Unit

- 1) Open the Right Lower Cover. (Open the Right Upper Cover simultaneously.)



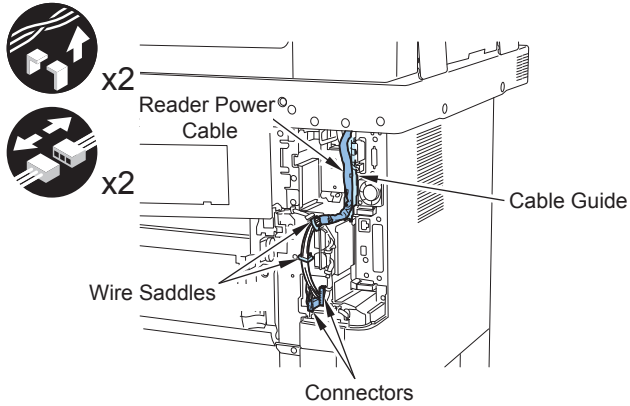
F-9-382

- 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



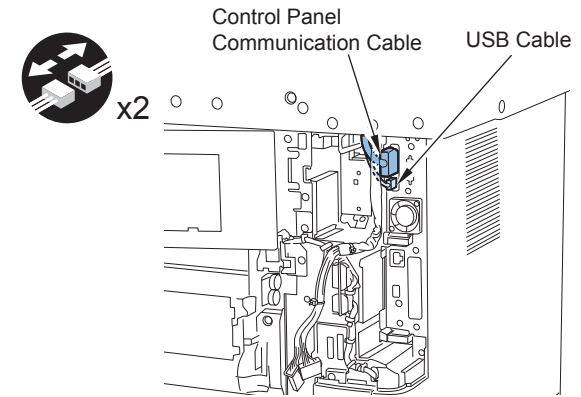
F-9-383

- 4) When the Reader is installed, remove the Reader Power Cable.
 - 2 connectors
 - 2 wire saddles
 - 1 cable guide



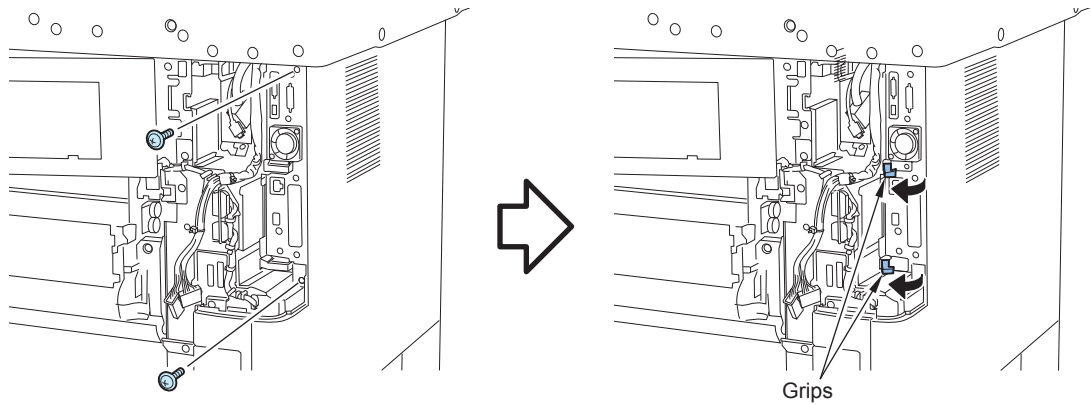
F-9-384

- 5) Remove the USB Cable and the Control Panel Communication Cable.



F-9-385

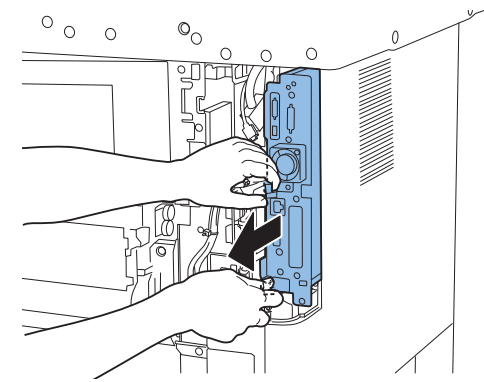
6) Remove the 2 screws, open the grip in 2 places.



Grips

F-9-386

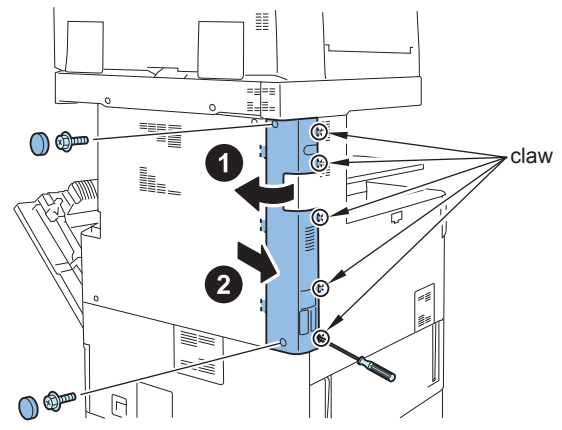
7) Hold the 2 Grips, and pull out the Main Controller PCB 1 approximately 10mm toward front.



F-9-387

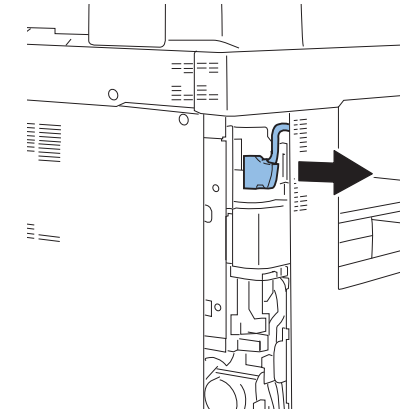
8) Remove the Left Rear Cover.

- 2 rubber caps
- 2 screws
- 5 claws



F-9-388

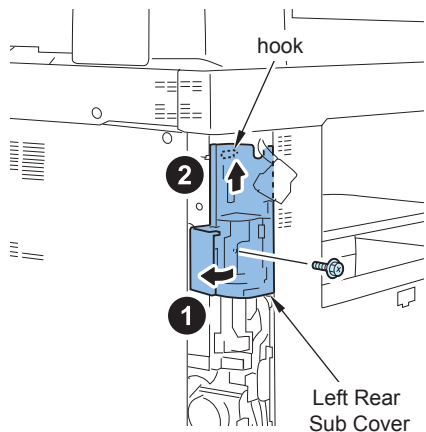
9) When the Reader is installed, remove the Reader Communication Cable.



F-9-389

10) Remove the Left Rear Sub Cover.

- 1 screw
- 1 hook



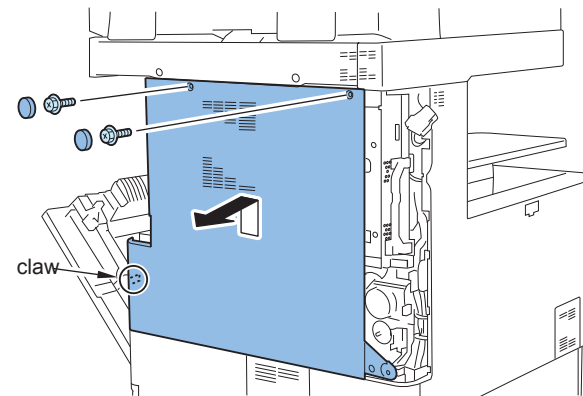
F-9-390

11) Remove the Rear Cover.

- 2 rubber caps
- 2 screws
- 1 claw



x2



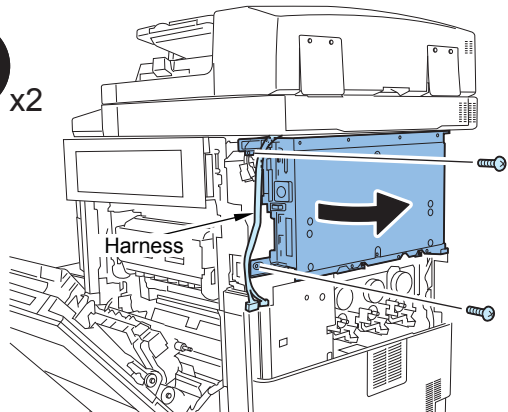
F-9-391

12) Open the Controller Box while avoiding the harness.

- 2 screws



x2

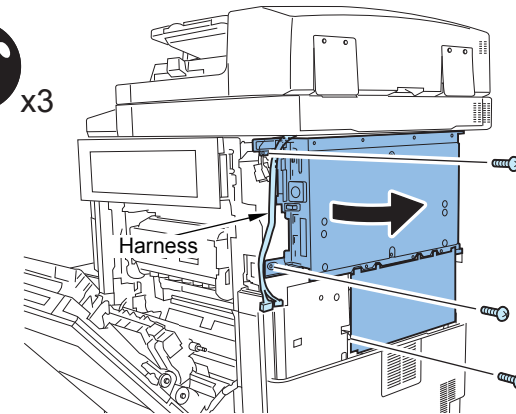


F-9-392

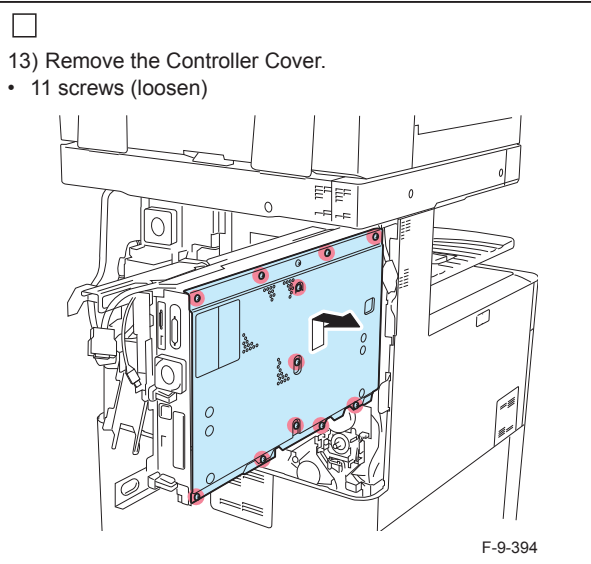
NOTE:
If the FAX Unit has been installed, remove the 3 screws and open the Controller Box with the FAX Unit.



x3



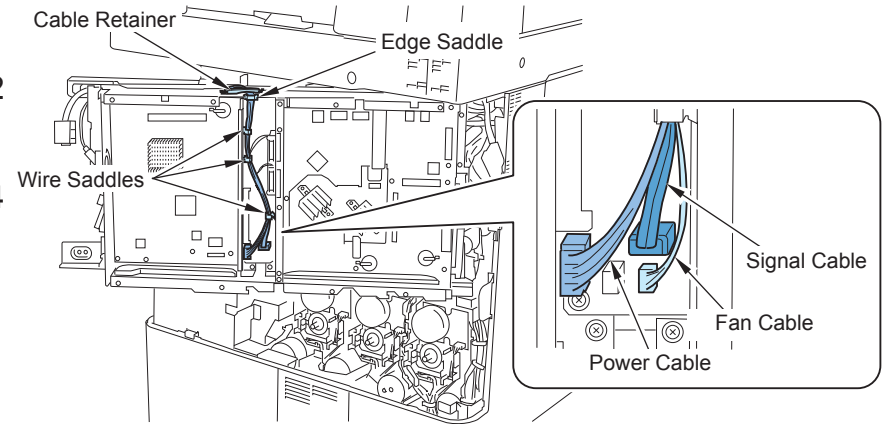
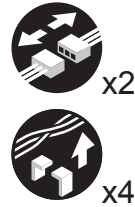
F-9-393



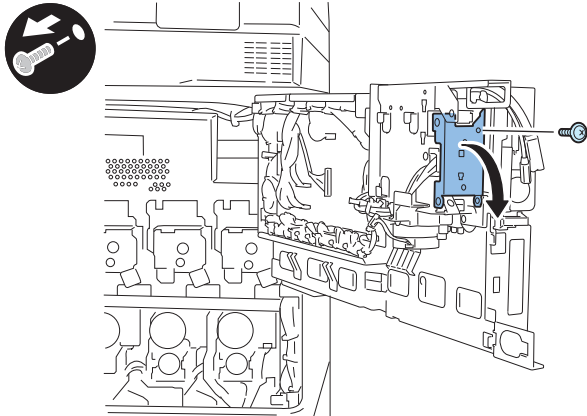
- 14) Remove the Signal Cable and the Power Cable.

CAUTION:
Do not remove the Fan Cable.

- 1 edge saddle
- 3 wire saddles
- 1 cable retainer



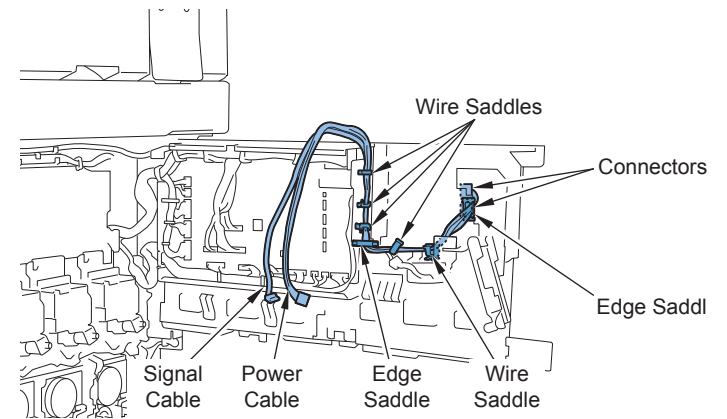
- 15) Open the HDD Lid.
• 1 screw (Removed screw will not be used.)



- 16) Remove the Signal Cable and the Power Cable. (Removed cables will not be used.)

- 2 edge saddles
- 5 wire saddles
- 2 connectors

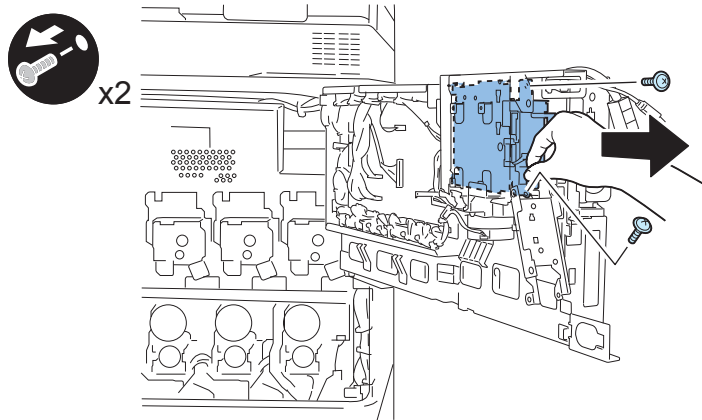
NOTE:
Removed Signal Cable and Power Cable will not be used.





17) Remove the HDD Unit by holding it as shown in the figure below.

- 2 screws

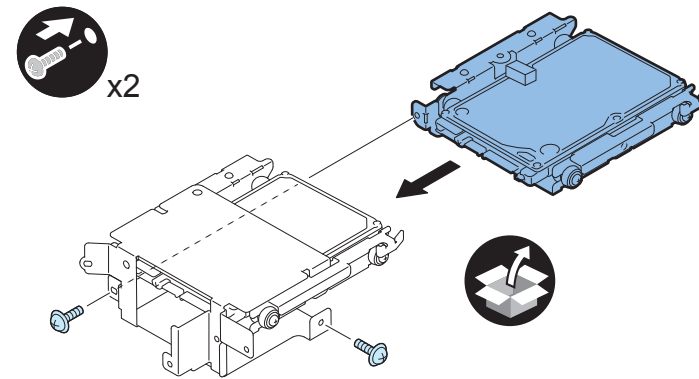


F-9-398



18) Install the assembled Option HDD to the removed HDD Unit.

- 2 screws (TP; M3X6)

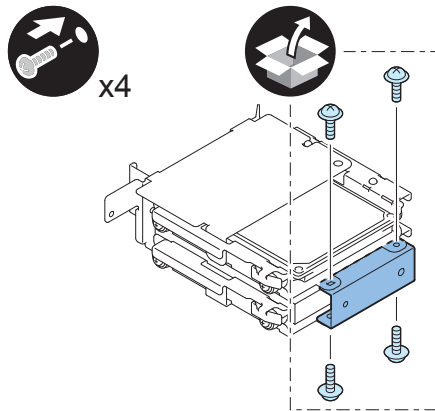


F-9-399



19) Install the enclosed HDD Connection Plate to the HDD Mirroring Kit.

- 4 screws (TP; M3X6) (enclosed with HDD Mirroring Kit)



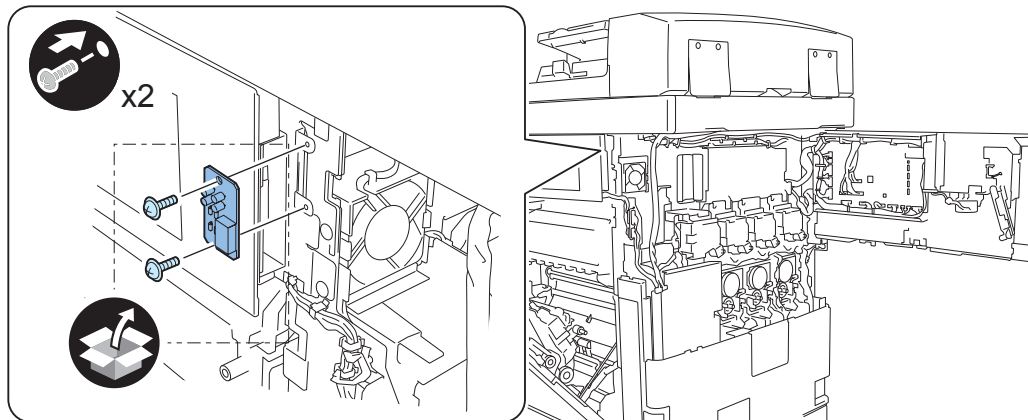
F-9-400



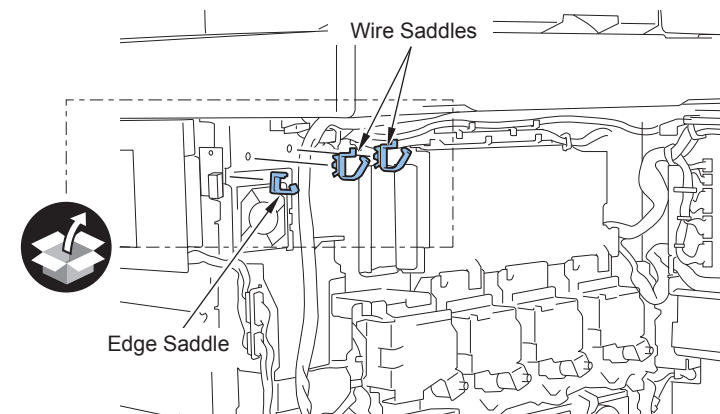
20) Install the HDD Unit to the host machine.

■ Installing the LED Board

- 1) Install the LED Board (small).
 • 2 screws (TP; M3X6)



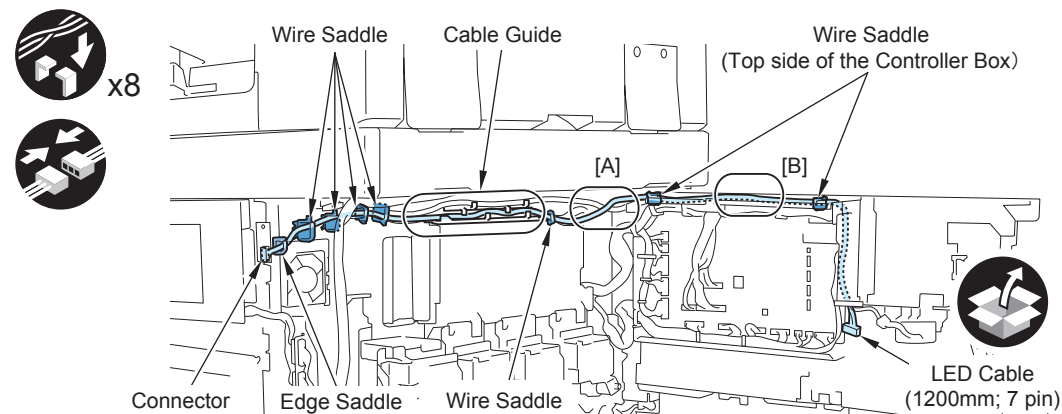
- 2) Install the 2 wire saddles and the edge saddle.



- 3) Install the LED Cable (1200mm; 7 pin).
 • 7 wire saddles
 • 1 edge saddle
 • 1 cable guide
 • 1 connector

CAUTION:

- Be sure to allow extra cable at [A] area in the condition that the Controller Box is fully opened.
- Be sure to tuck the [B] area of the LED cable under the other 2 cables running through the [B] area. This is to prevent the [B] area of the LED cable from being slacked off when closing the Controller Box.



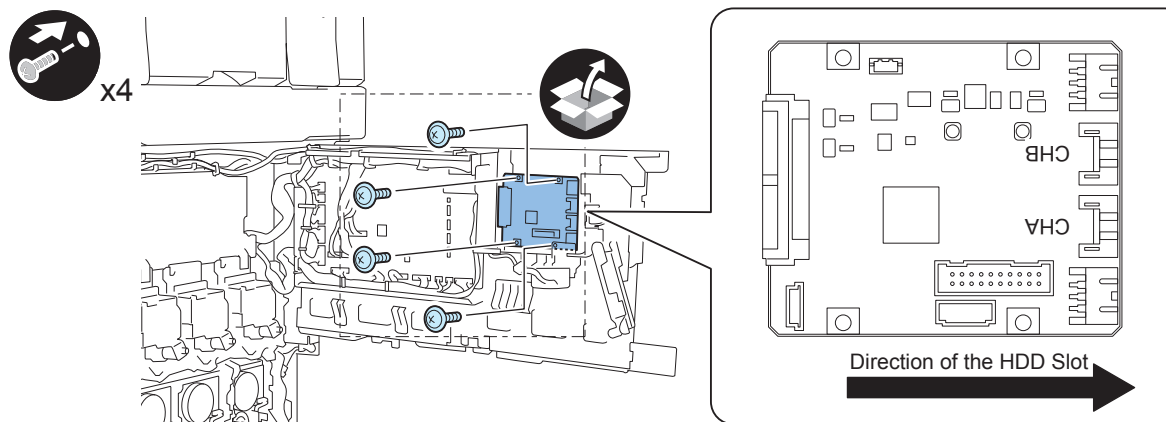
■ Installing the Mirroring Board or Encryption Board

- 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.



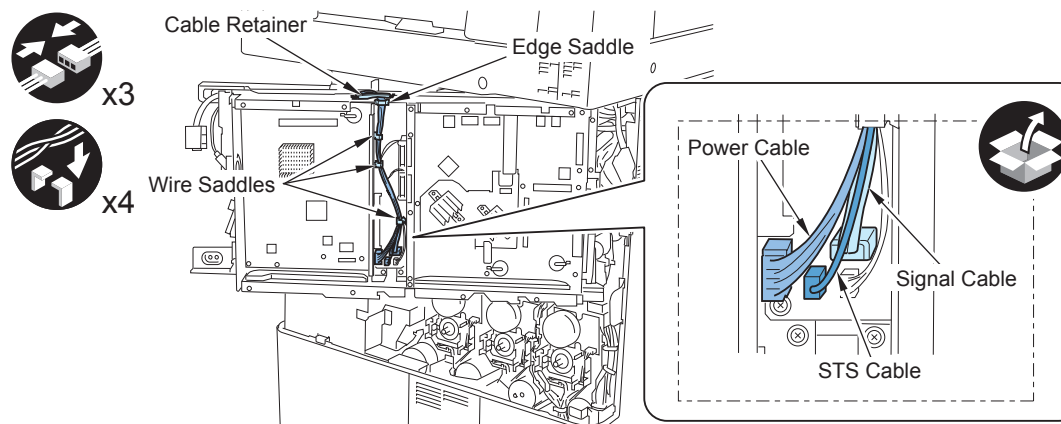
F-9-404

- 2) Install the cables to the PCB on the backside.

- Signal Cable (450mm (Red); FK2-8435)
- Power Cable (430mm; FK2-8463)
- STS Cable (550mm (Light blue); 5 Pin)

- 3) Fix the cables.

- 3 wire saddles
- 1 edge saddle
- Cable retainer



F-9-405



4) Install the Controller Cover.

CAUTION:

Be sure that the gaskets on left/right side of the Controller Cover are not protruded.



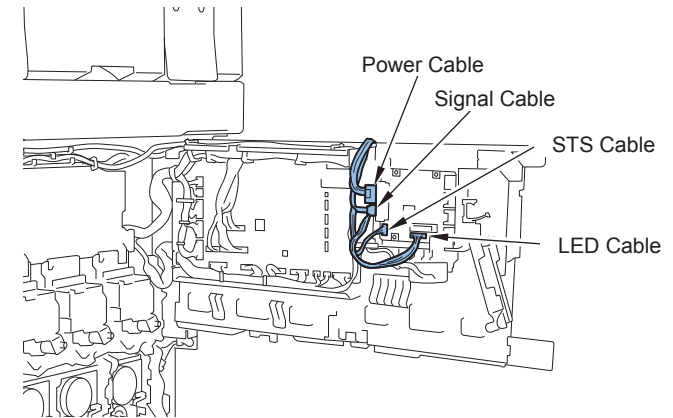
5) Install the cables to the Mirroring Board or Encryption Board.

- Signal Cable (450mm (Red); FK2-8435)
- Power Cable (430mm; FK2-8463)
- LED Cable (1200mm; 7 Pin)
- STS Cable (550mm (Light blue); 5 Pin)



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-9-406

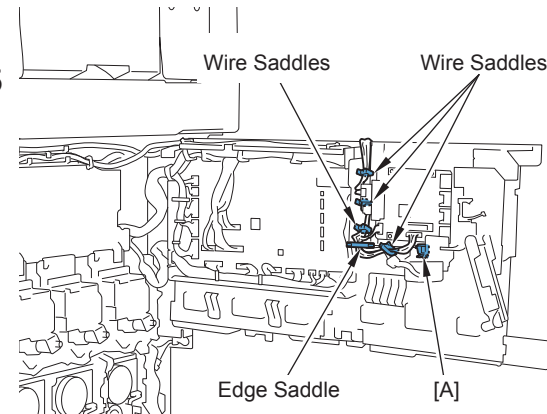


6) Fix the cables.

- 4 wire saddles
- 1 edge saddle

NOTE:

Be sure to close the unused wire saddle [A].

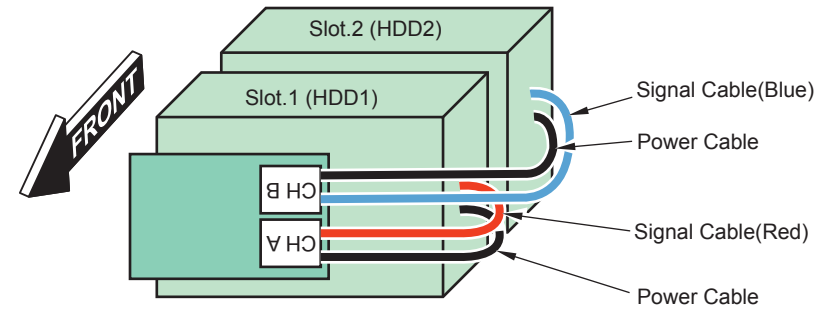


F-9-407

CAUTION:

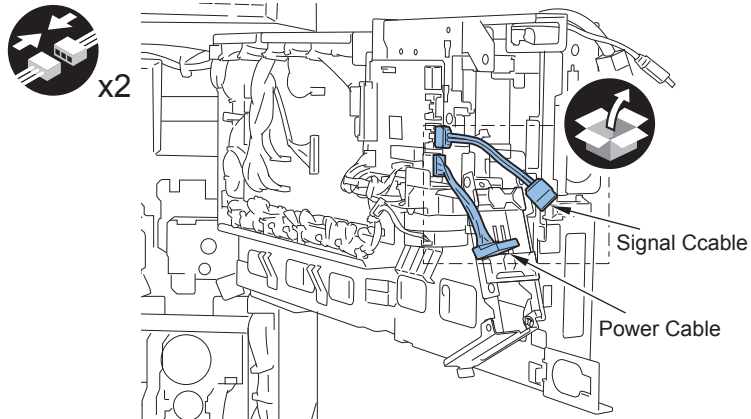
Be sure to acknowledge the following caution before performing the next procedure.
Combinations of connection between the HDDs and the Mirroring Board or Encryption Board are shown below.

- Connect Slot 1 to "CHA". (Originally installed HDD)
- Connect Slot 2 to "CHB". (New HDD)



F-9-408

- 7) Install the Signal Cable (80mm (Red); FK2-8436) and the Power Cable (80mm; FK2-8461) to CHA on the Mirroring Board or Encryption Board.

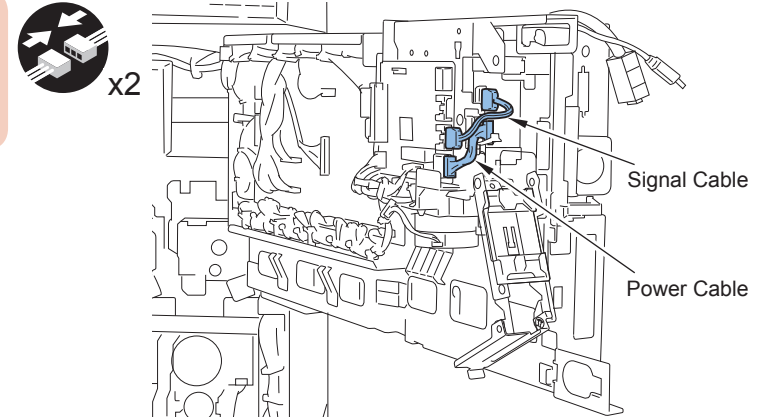


F-9-409

- 8) Install the Signal Cable (80mm (Red); FK2-8436) and the Power Cable (80mm; FK2-8461) to the first HDD (Slot 1).

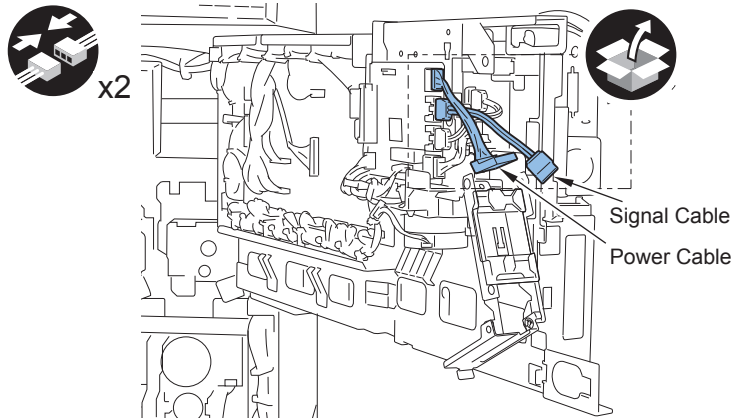
CAUTION:

Install the cables to correct positions.



F-9-410

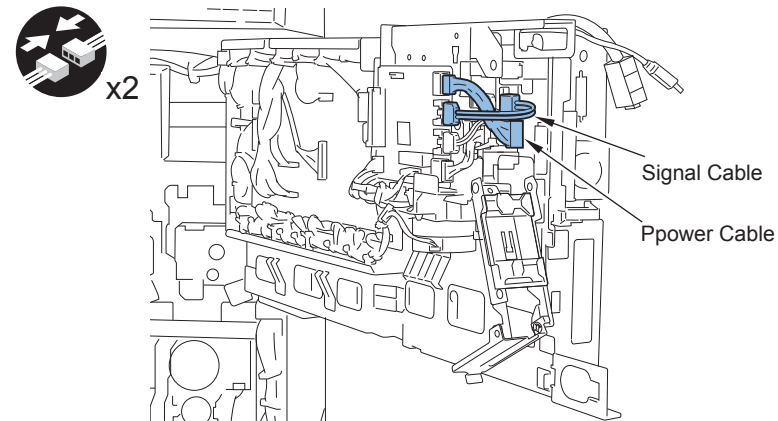
- 9) Install the Signal Cable (80mm (Blue); FK2-8438) and the Power Cable (80mm; FK2-8461) to CHB on the Mirroring Board or Encryption Board.



F-9-411

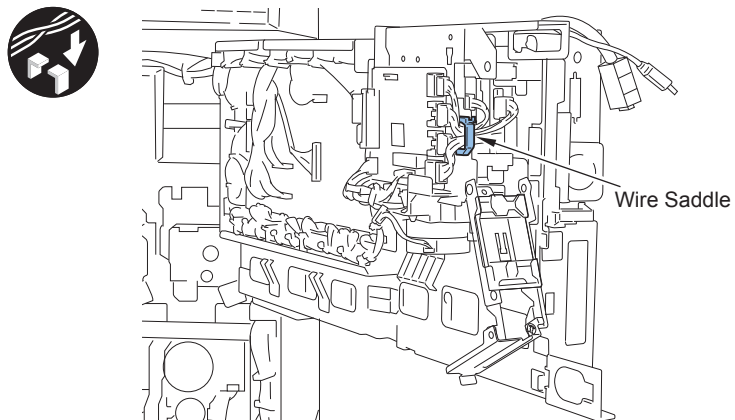
- 10) Install the Signal Cable (80mm (Blue); FK2-8438) and the Power Cable (80mm; FK2-8461) to the second HDD (Slot 2).

CAUTION:
Install the cables to correct positions.



F-9-412

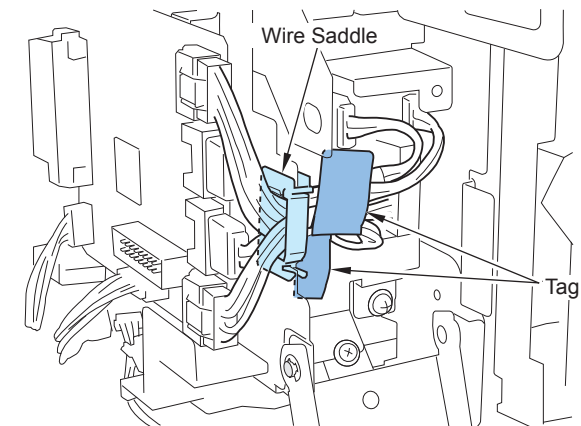
- 11) Fix the cables with the wire saddle.



F-9-413

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.



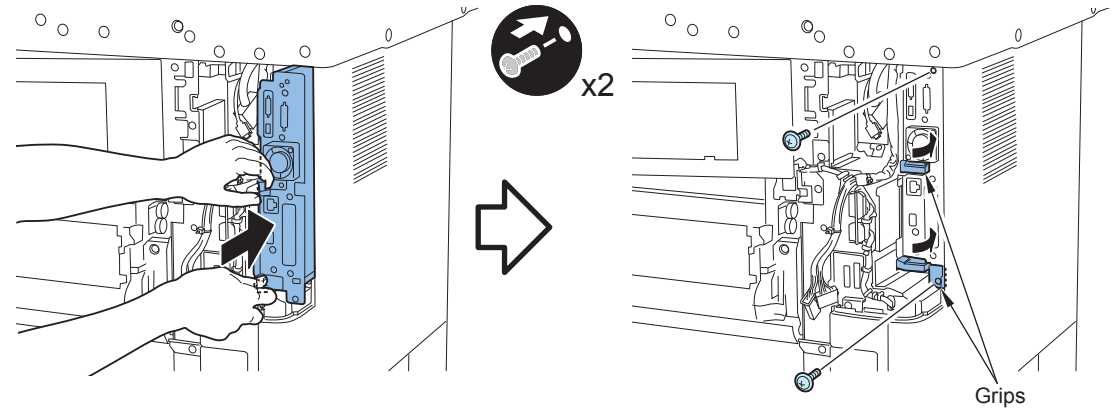
F-9-414

-
- 12) Close the HDD Lid.
 13) Place the Controller Box to the original position.
 14) Install the removed cover and the cable.
- Rear Cover
 - Left Rear Sub Cover
 - Reader Communication Cable (when reader is installed)
 - Left Rear Cover
 - USB Cable and Control Panel Communication Cable

-
- 15) 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.

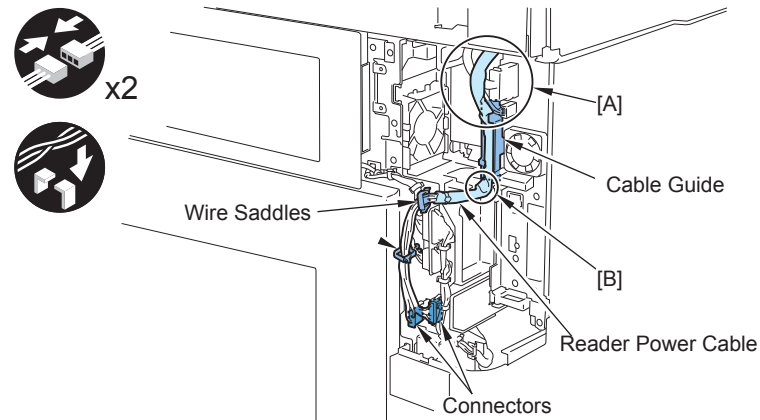


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-
- 16) If Reader is installed, install the Reader Power Cable.

NOTE:

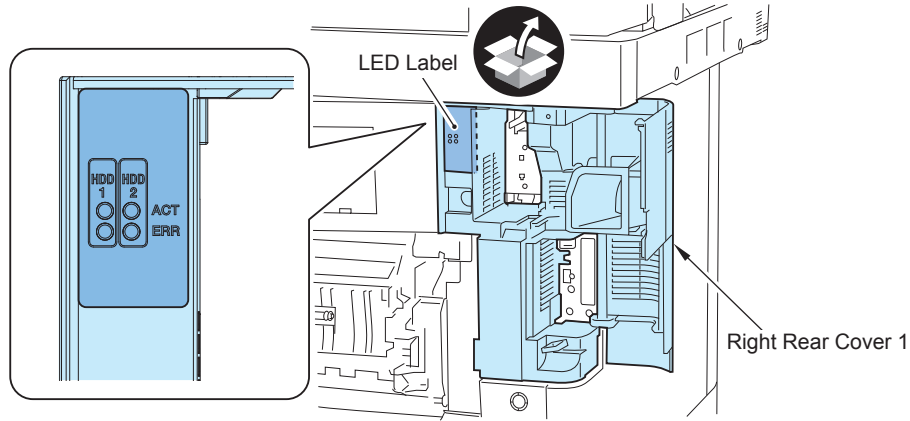
Handle the Reader Power Cable from the connector side and make a slack at A part. Bend the Reader Power Cable at a right angle on B part.



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-
- 17) Install the Right Rear Cover 1.

- 18) Affix the LED label so that it fits the edge of the Right Rear Cover 1.



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- 19) Close the Right Rear Cover 1, Right Lower Cover, and Right Upper Cover.
 20) Insert the power plug into the socket and turn on the main power of the host machine.

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 CONNECT.
- 2) From the list of machine series, select the appropriate model.
- 3) Select 'single', and click START.
- 4) Execute HDD format.
- 5) After 5 sec from when the power of the host machine is turned OFF, restart the host machine in download mode of safe mode.
- 6) When "download mode" is displayed on the control panel, click simple mode start.
- 7) Click start to execute download.
- 8) Follow the instruction on the screen and when download is complete, click OK.
- 9) Exit SST.
- 10) Check the versions of MN-CONT and LANG etc 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 > FNCSW > 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 > FNCSW > 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 > FNCSW > 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 (250GB) + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit

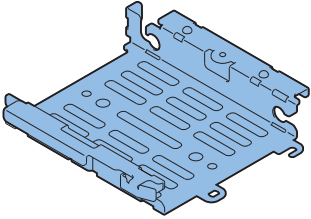
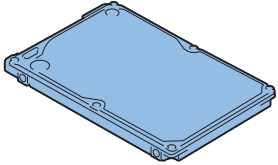
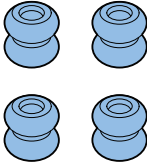
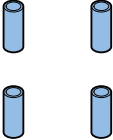
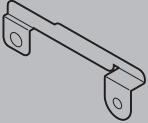
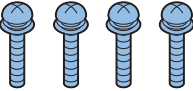

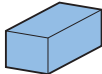
Points to Note when HDD Data Encryption & Mirroring Kit has been Installed

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

The parts with a gray in the contents list will not be used.

Option HDD (250GB)

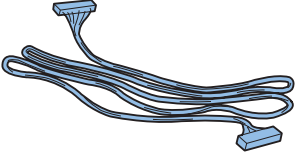
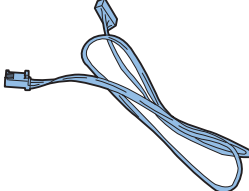
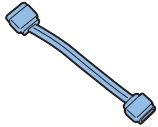
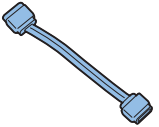
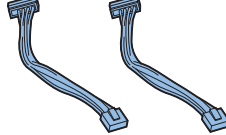
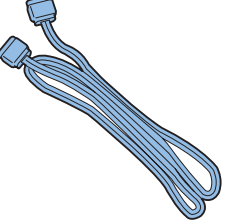
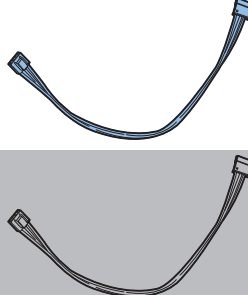
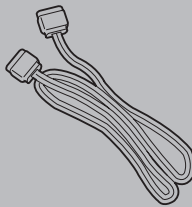
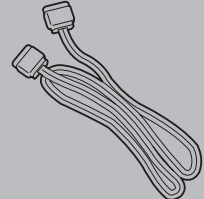

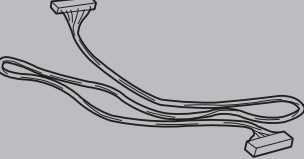
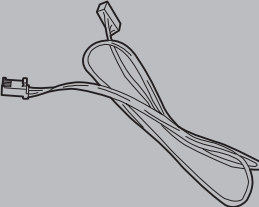
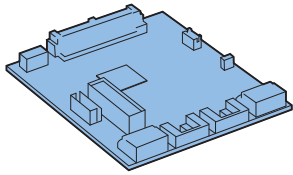
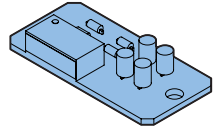
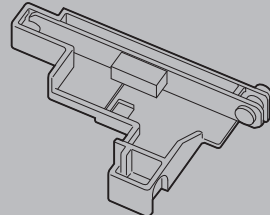
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<input type="checkbox"/> [6] Screw (W sems; M3x14) x 4 	<input type="checkbox"/> [7] Screw (TP; M3x6) x 2 	<input type="checkbox"/> [8] Gasket x 1 		

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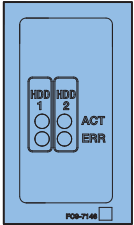

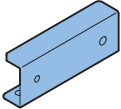
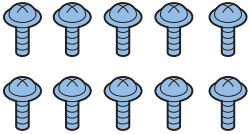
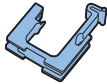
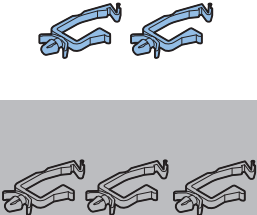
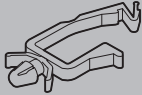

- Notice for FCC/IC
- China RoHS Notice 3

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HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit

<input type="checkbox"/> [1] LED Cable (1200mm; 7 pin) x 1 	<input type="checkbox"/> [2] STS Cable (550mm (Light blue); 5 pin) x 1 	<input type="checkbox"/> [3] Signal Cable (80mm (Red); FK2-8436) x 1 	<input type="checkbox"/> [4] Signal Cable (80mm (Blue); FK2-8438) x 1 	<input type="checkbox"/> [5] Power Cable (80mm; FK2-8461) x 2 
<input type="checkbox"/> [6] Signal Cable (450mm (Red); FK2-8435) x 1 	<input type="checkbox"/> [7] Power Cable (430mm; FK2-8463) x 2 	<input type="checkbox"/> [8] Signal Cable (340mm (Red); FK2-8434) x 1 	<input type="checkbox"/> [9] Signal Cable (370mm (Blue); FK2-8441) x 1 	<input type="checkbox"/> [10] Power Cable (320mm; FK2-8467) x 1 
<input type="checkbox"/> [11] LED Cable (290mm; 7 pin) x 1 	<input type="checkbox"/> [12] STS Cable (420mm (Light blue); 5 pin) x 1 	<input type="checkbox"/> [13] Mirroring Board or Encryption Board x 1 	<input type="checkbox"/> [14] LED Board (Small) x 1 	<input type="checkbox"/> [15] LED Board (large) x 1 

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<input type="checkbox"/> [16] LED Label (Small) x 1 	<input type="checkbox"/> [17] LED Label (large) x 1 	<input type="checkbox"/> [18] HDD Connection Plate x 1 	<input type="checkbox"/> [19] Screw (TP; M3 X 6) x 10 	<input type="checkbox"/> [20] Edge Saddle x 1 
<input type="checkbox"/> [21] Wire saddle (Small) x 5 	<input type="checkbox"/> [22] Wire saddle (large) x 1 	<input type="checkbox"/> [23] Wire saddle (Middle) x 1 		

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< 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 Notice
- Installation Procedure
- Noticed for FCC/IC

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
Send Function Favorite Settings	Yes
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

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*1; Can only be backed up using the Remote UI.

*2; Depending on the MEAP application.

*3: Only the following data saved in Mail Box/Advanced Box 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
- Advanced Box URI Transmission Settings

*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 to be Backed Up

Data to be backed up	Reference
Address Book	For information on exporting data, see the "e-Manual > Remote UI".
Settings/Registration settings	
Device Settings (Forwarding Settings, Address List, Favorite Settings)	
Printer Settings	
Paper Information	
Favorite Settings for Web browser	See the "e-Manual > Web Access". (You can select this if web browser (Option) is installed.)
License files for MEAP applications	For information on downloading license files, see the "e-Manual > MEAP".
Data saved by MEAP applications	Data saved by MEAP applications may be able to be backed up, depending on the MEAP application. See the documentation included with the MEAP application.
Data stored in Mail Boxes or the Advanced Box	See the "e-Manual > Remote UI" to "Setting the Backup Location for Stored Data".
Image forms stored in the Superimpose Image	
SSO-H (Single Sign-On H) user authentication information	See the "e-Manual > MEAP".
Quick Menu Information	See the "e-Manual > Quick Menu".
User Information of the Advanced Box	See the "e-Manual > Security".

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CAUTION: Work to Perform After Installing the Kit

- When you start using this product, passwords set for Mail Boxes 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 this product has been installed. These data items are property of the user, and the restoration work must be performed by the system administrator.

The method of restoration is described in the Users Guide. See Table (Data to be backed up) in Points to Note About Installation of the Installation Procedure.

1. Procedure to make a backup of Address Book

- 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].
- 3) Click [Address List].
- 4) Click [Export].
- 5) Select the save format for Address list, and click [Start Export].
- 6) Following the instructions on the window, specify the location to save the file. Be sure to set a distinctive name to an export file so that you can recognize it when importing it.

NOTE:

Exporting the device settings will export all contents of the address list. In other words, there is no need for a backup unless it needs to be done individually.

2. Device Settings Export Procedure

- 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].
- 3) Click [Device Settings (Forwarding Settings, Address List, Favorite Settings)].
- 4) Click [Export], and then click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

3. Settings/Registration Export Procedure

- 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].
- 3) Click [Settings/Registration].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

4. Printer Settings Export Procedure

NOTE:

The following items to be exported are the same as the ones which are distributed by device information distribution.

- 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].
- 3) Click [Printer Settings].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

5. Paper Information Export Procedure

- 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].
- 3) Click [Paper Information].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

6. 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.

CAUTION: MEAP Backup Function Using the SST

Data that has been backed up using MEAP back of the SST before the use of this product is started must not be written back to the host machine after the use of this product is started. Similarly, even if the data that has been backed up after the use of this product is started is written back to the host machine before the use of this product is started, the machine does not operate. It is necessary to make sure that the implementation conditions for this product are compatible before and after making a backup of data, and the MEAP backup function does not permit making a backup of data in the course of installing the kit.

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.

7. 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) Click the application of which license has been installed.
- 5) Click [License Control], and then click [Disable]. Click [Yes] in a confirmation window for disabling the license.

- 6) Click [Download] under "Download/delete Disabled License File" item. 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.
- 7) 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).
- 8) 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).

8. 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/`

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 the user has changed the password, ask him/her to change the password again after the use of this product is started.

- 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].

9. Backup of User inbox and Advanced Box document data

CAUTION: Backup of "Advanced Box"

When setting a SMB server as a backup destination, Advanced Box data saved in a large capacity HDD cannot be backed up. The Advanced Box data backed up from the large capacity HDD cannot be restored to the standard HDD.

Depending on the system version of the machine, both backup and restoration might not be performed.

The procedure of backup and restoration of a box document data is described below.

Specify the backup destination of a document data:

- Backup to SMB server
Select SMB as a backup destination and specify an address, a user name, a password, and a path to the SMB server to which saved data is backed up.
- Backup to USB HDD
Select USB HDD as a backup destination and specify a path to the USB HDD folder to which saved data is backed up.

CAUTION: Data which cannot be backed up

If you back up/restore stored data without restarting the machine after changing the language displayed on the touch panel display by pressing [Settings/Registration] > [Preferences] from the control panel of the machine, the stored data may not be backed up/restored properly. For more information on the data that cannot be backed up, see Points to Note for Installation.

CAUTION:

If the language setting in the common specification settings (Settings/Registration) is set to ON, 'host address' and 'path to folder' might not be displayed correctly or cannot be referred.

CAUTION:

- Regarding the method of inputting characters, see 'Basic Operations' in the e-Manual.
- A host address can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,' 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A path to the folder can be up to 255 characters in 1 byte (127 characters in 2 bytes).
- A user name can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,' 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A password can be up to 7 to 48 characters using the 'alphanumeric character' and 'mark (1 byte)' modes.
- The voice sound symbol and the semi-voice sound symbol entered in the 'Katakana (1 byte)' mode are counted up as one 1-byte character.

[Backup method of User inbox and Advanced Box document data]

- 1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Backup].
- 2) Select 'All' or 'Changes' for the backup method.
- 3) Click [Execute].

CAUTION:

- If any of the host IP address, user name, password, or path to the folder is not correctly entered, a backup cannot be made.
- If you select to encrypt the backup data, the backup process may take longer.

[Restoring the backup data of User inbox and Advanced Box document data]

- 1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Restore].
- 2) Click [Display Backup Data].
- 3) Select the backup data to restore from the list and then click [Execute].

CAUTION:

- If you want to restore encrypted backup data, enter the same password used when backing up the data.
- Depending on the settings of the machine, the backup data may not be completely restored, or some documents may be automatically printed.
- Restoration is performed after all of the box data stored in the machine, or documents that are being sent, received, or stored, are erased.

10. Quick Menu Information Export Procedure

- 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 Basic Tools > [Quick Menu] > [Export].
- 3) If the file needs to be encrypted, enter the password after check [Encrypt file]. (The number of characters for the password must be more than 4 but less than 16.)
- 4) Click [Export].
- 5) Following the instructions on the window, specify the location to save the file.

11. User Information of the Advanced Box Export Procedure

- 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 Basic Tools > [User Access Control for Advanced Box]. The dialog box to enter the user name of administrator and password appears, enter the system administrator ID and password, and then click [Log In].
The default administrator user name and password are as follows:
User Name: Administrator
Password: password
- 3) Click [Export], and click [Start Export].
- 4) Following the instructions on the window, specify the location to save the file.

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.

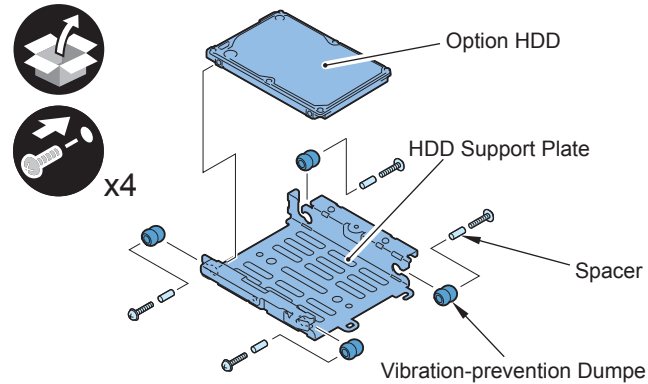
Installation Procedure

Assembling the Option HDD



1) Assemble the option HDD (250GB).

- 1 Option HDD
- 1 HDD Support Plate
- 4 Dust-prevention Dumpers
- 4 spacers
- 4 screws (binding with flat washer; M3x14)

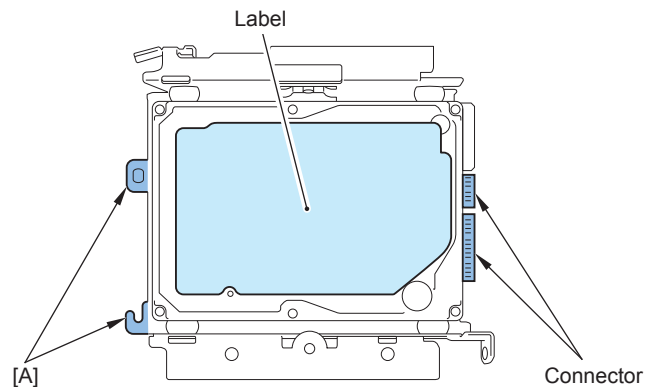


F-9-421



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.



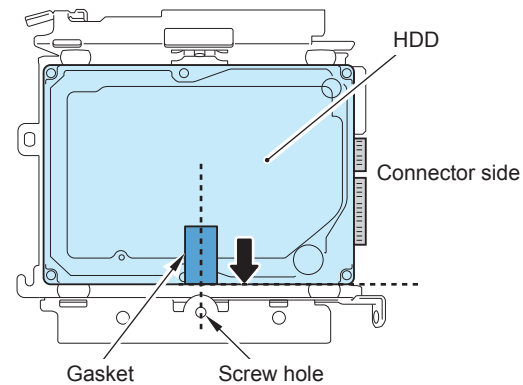
F-9-422



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.



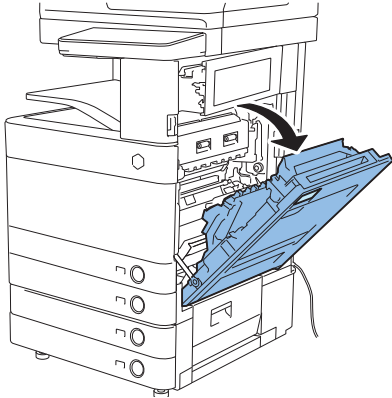
F-9-423



3) Assemble the other Option HDD (250GB) in the same way.

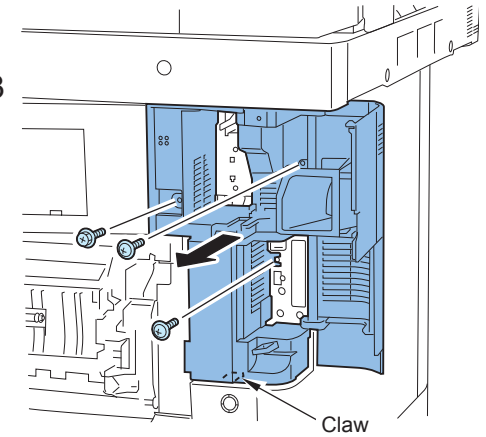
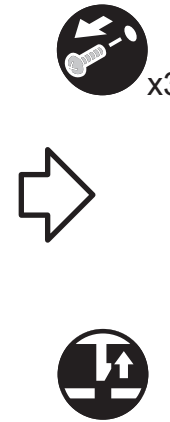
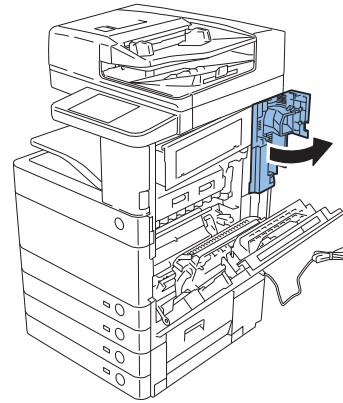
■ Removing and Installing the HDD Unit

- 1) Open the Right Lower Cover. (Open the Right Upper Cover simultaneously.)



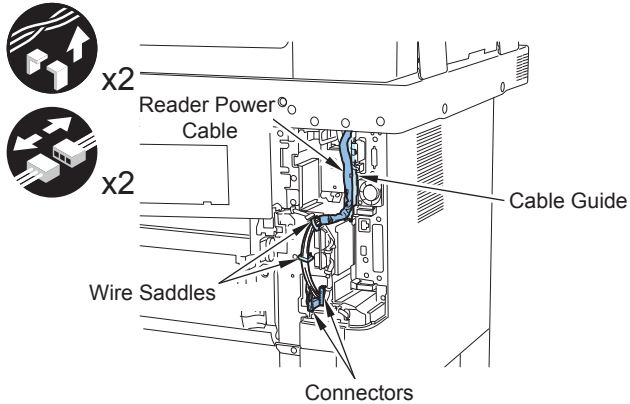
F-9-424

- 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



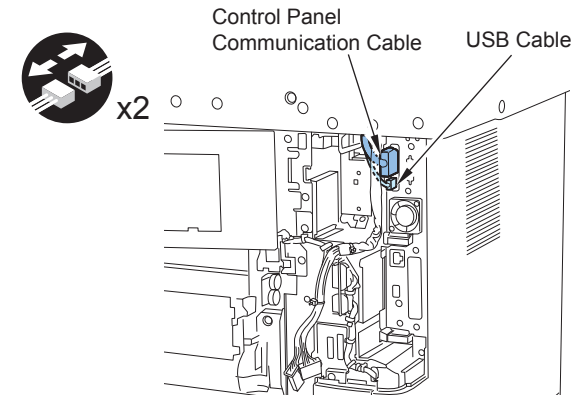
F-9-425

- 4) When the Reader is installed, remove the Reader Power Cable.
 • 2 connectors
 • 2 wire saddles
 • 1 cable guide



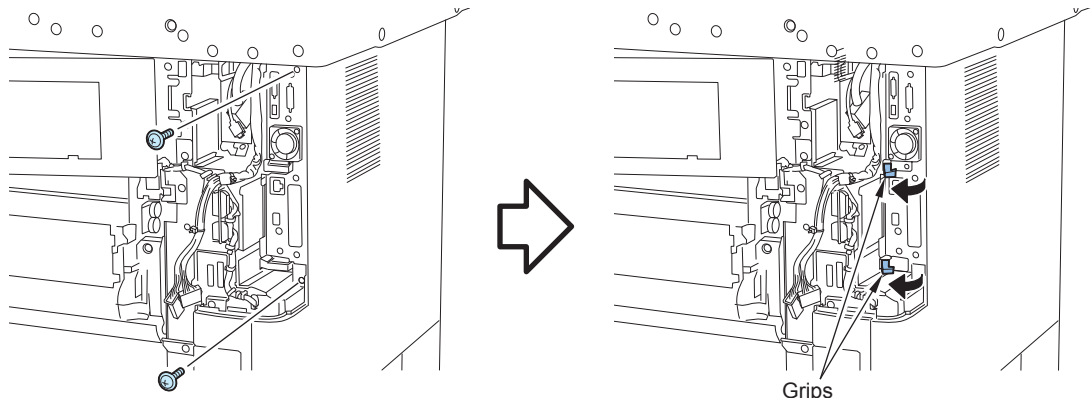
F-9-426

- 5) Remove the USB Cable and the Control Panel Communication Cable.



F-9-427

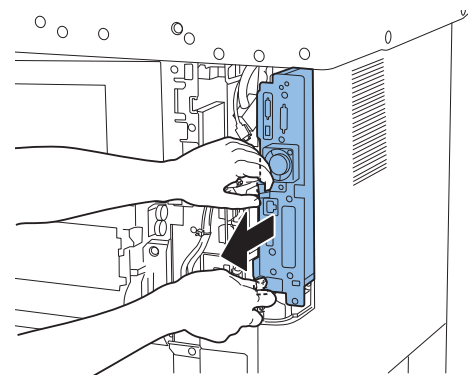
6) Remove the 2 screws, open the grip in 2 places.



Grips

F-9-428

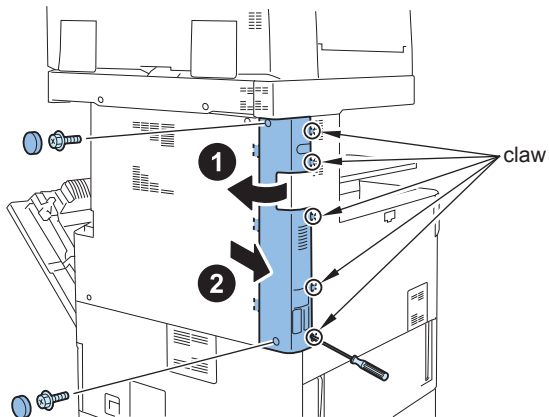
7) Hold the 2 Grips, and pull out the Main Controller PCB 1 approximately 10mm toward front.



F-9-429

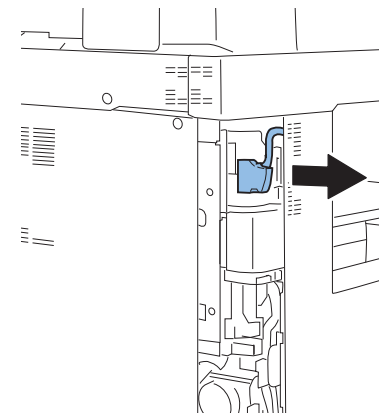
8) Remove the Left Rear Cover.

- 2 rubber caps
- 2 screws
- 5 claws



F-9-430

9) When the Reader is installed, remove the Reader Communication Cable.



F-9-431

10) Remove the Left Rear Sub Cover.

- 1 screw
- 1 hook

hook

Left Rear Sub Cover

F-9-432

11) Remove the Rear Cover.

- 2 rubber caps
- 2 screws
- 1 claw

claw

F-9-433

12) Open the Controller Box while avoiding the harness.

- 2 screws

Harness

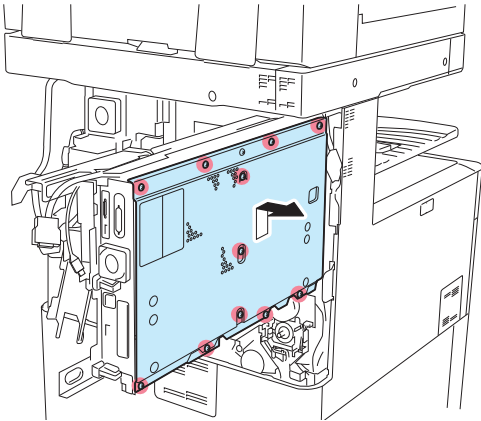
F-9-434

NOTE:
If the FAX Unit has been installed, remove the 3 screws and open the Controller Box with the FAX Unit.

Harness

F-9-435

- 13) Remove the Controller Cover.
 - 11 screws (loosen)

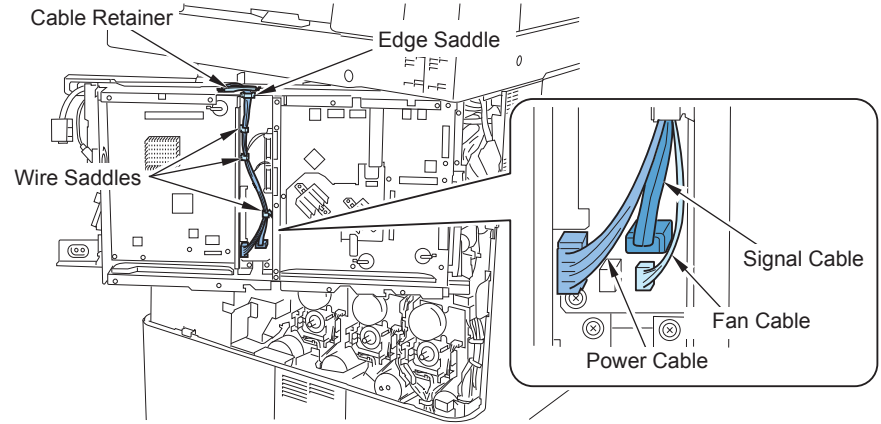


F-9-436

- 14) Remove the Signal Cable and the Power Cable.

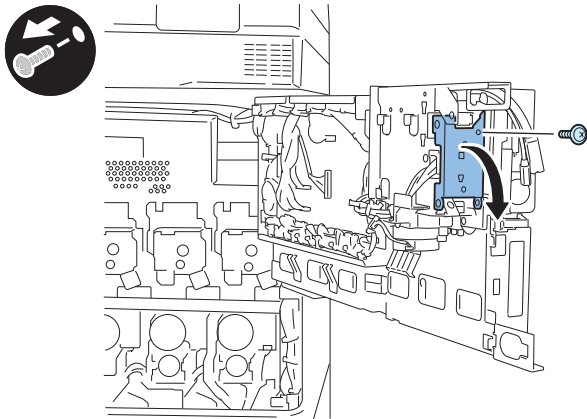
CAUTION:
Do not remove the Fan Cable.

- 1 edge saddle
- 3 wire saddles
- 1 cable retainer



F-9-437

- 15) Open the HDD Lid.
 - 1 screw (Removed screw will not be used.)

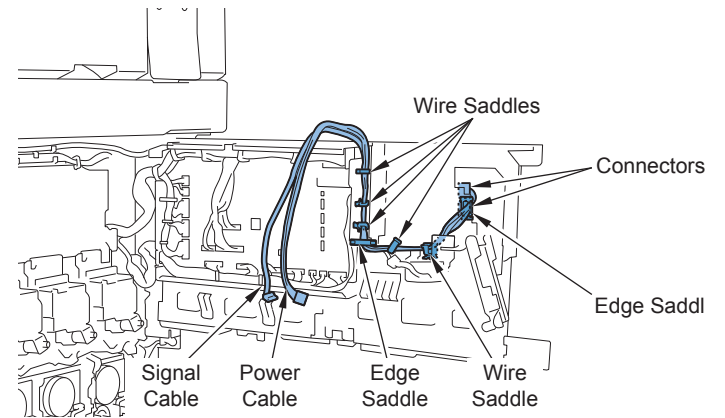
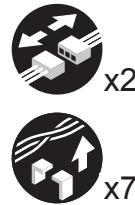


F-9-438

- 16) Remove the Signal Cable and the Power Cable.

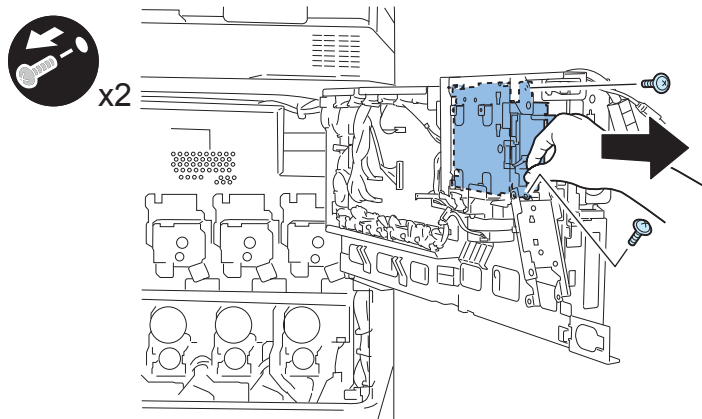
- 2 edge saddles
- 5 wire saddles
- 2 connectors

NOTE:
Removed Signal Cable and Power Cable will not be used.



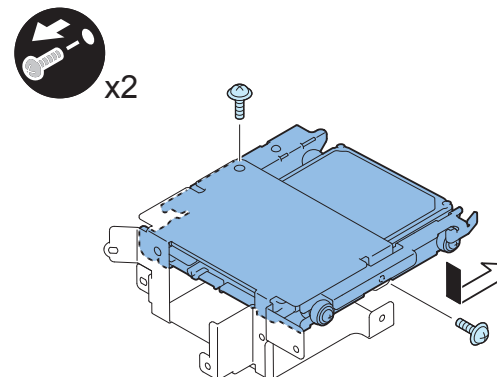
F-9-439

- 17) Remove the HDD Unit by holding it as shown in the figure below.
• 2 screws



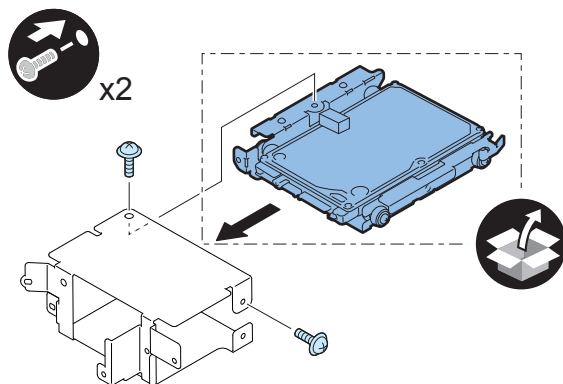
F-9-440

- 18) Remove the HDD (80GB) installed as standard from the removed HDD Unit. (Removed HDD (80GB) will not be used.)
• 2 screws (Removed screw will be used in step 19.)



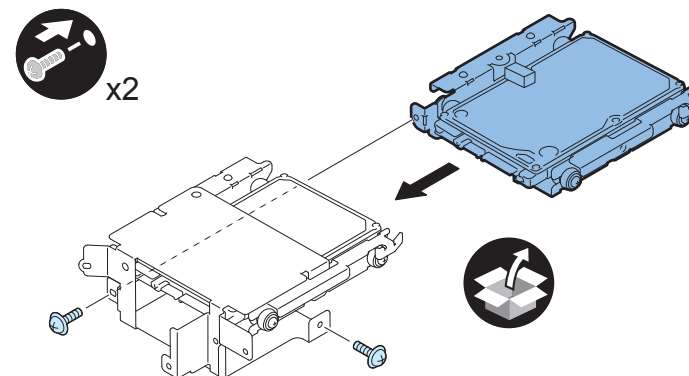
F-9-441

- 19) Install the Option HDD (250GB).
• 2 screws (The screw removed in step 18.)



F-9-442

- 20) Install the other Option HDD (250GB).
• 2 screws (TP; M3X6) (enclosed with option HDD)

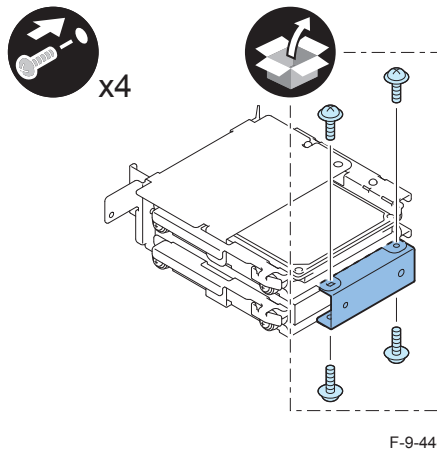


F-9-443



21) Install the enclosed HDD Connection Plate to the HDD Mirroring Kit.

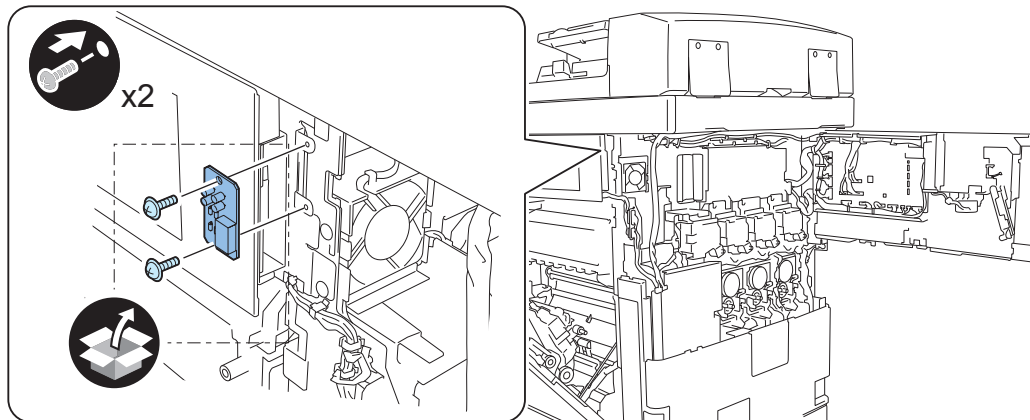
- 4 screws (TP; M3X6) (enclosed with HDD Mirroring Kit)



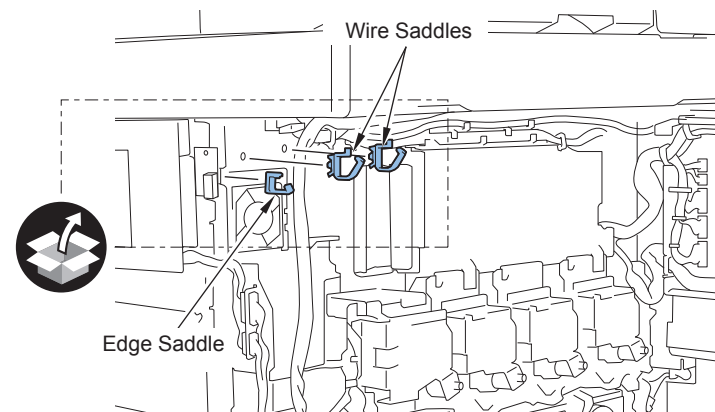
22) Install the HDD Unit to the host machine.

■ Installing the LED Board

- 1) Install the LED Board (small).
 • 2 screws (TP; M3X6)



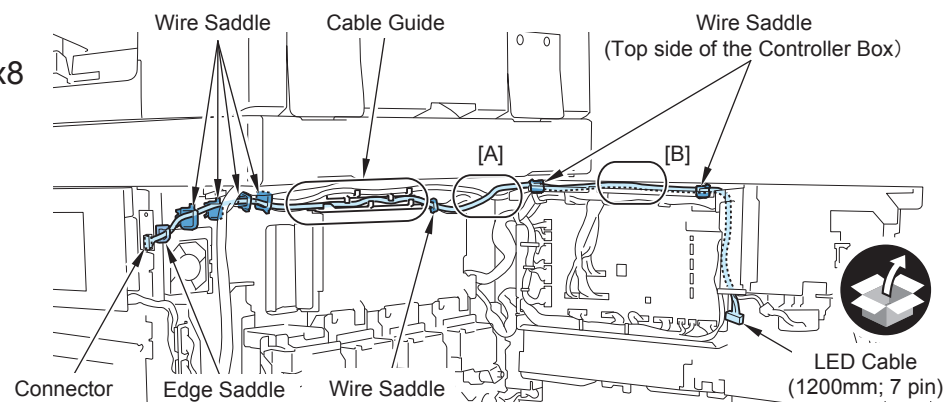
- 2) Install the 2 wire saddles and the edge saddle.



- 3) Install the LED Cable (1200mm; 7 pin).
 • 7 wire saddles
 • 1 edge saddle
 • 1 cable guide
 • 1 connector

CAUTION:

- Be sure to allow extra cable at [A] area in the condition that the Controller Box is fully opened.
- Be sure to tuck the [B] area of the LED cable under the other 2 cables running through the [B] area. This is to prevent the [B] area of the LED cable from being slacked off when closing the Controller Box.



F-9-447

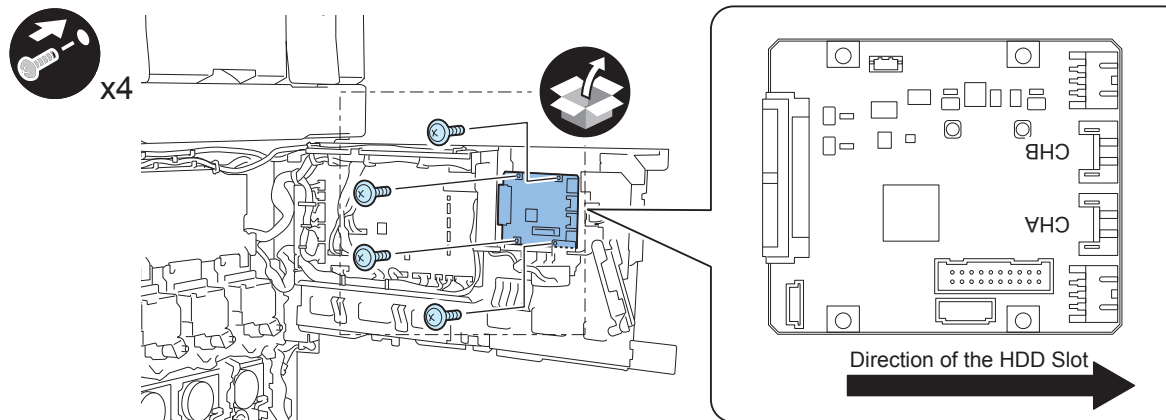
■ Installing the Mirroring Board or Encryption Board

- 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.



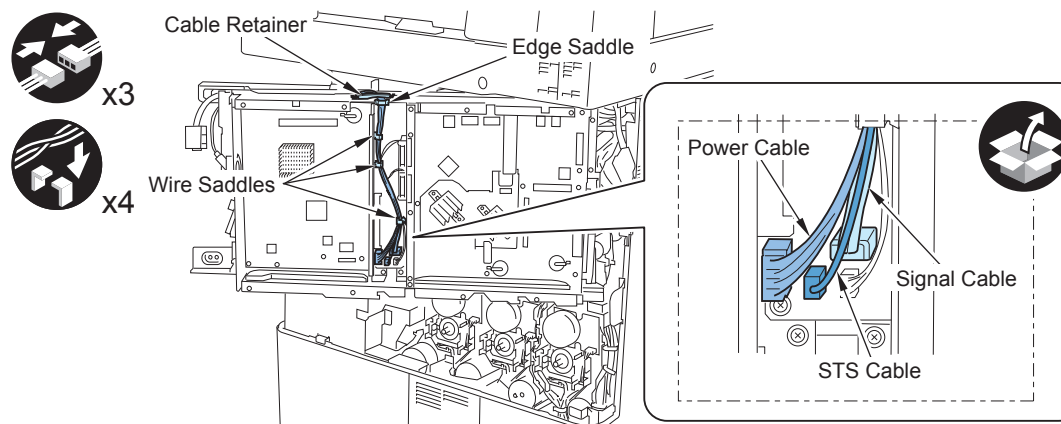
F-9-448

- 2) Install the cables to the PCB on the backside.

- Signal Cable (450mm (Red); FK2-8435)
- Power Cable (430mm; FK2-8463)
- STS Cable (550mm (Light blue); 5 Pin)

- 3) Fix the cables.

- 3 wire saddles
- 1 edge saddle
- Cable retainer



F-9-449

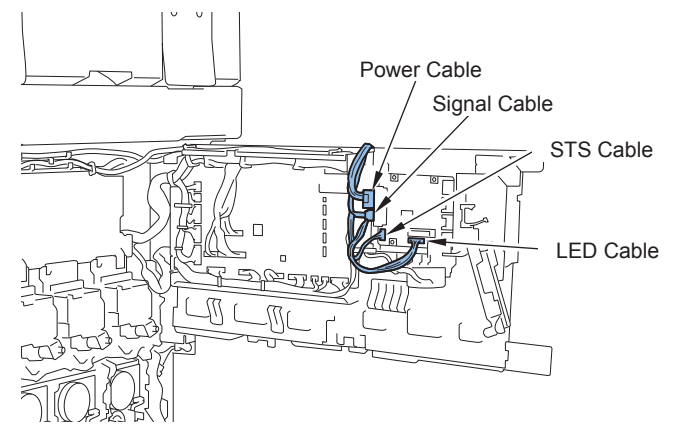
4) Install the Controller Cover.

CAUTION:
Be sure that the gaskets on left/right side of the Controller Cover are not protruded.

5) Install the cables to the Mirroring Board or Encryption Board.

- Signal Cable (450mm (Red); FK2-8435)
- Power Cable (430mm; FK2-8463)
- LED Cable (1200mm; 7 Pin)
- STS Cable (550mm (Light blue); 5 Pin)

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.

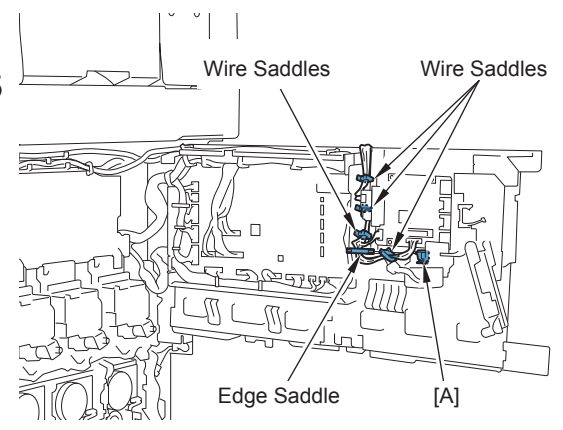


F-9-450

6) Fix the cables.

- 4 wire saddles
- 1 edge saddle

NOTE:
Be sure to close the unused wire saddle [A].

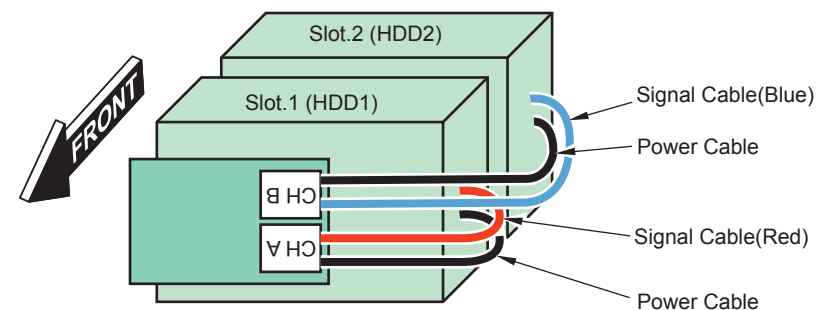


F-9-451

CAUTION:

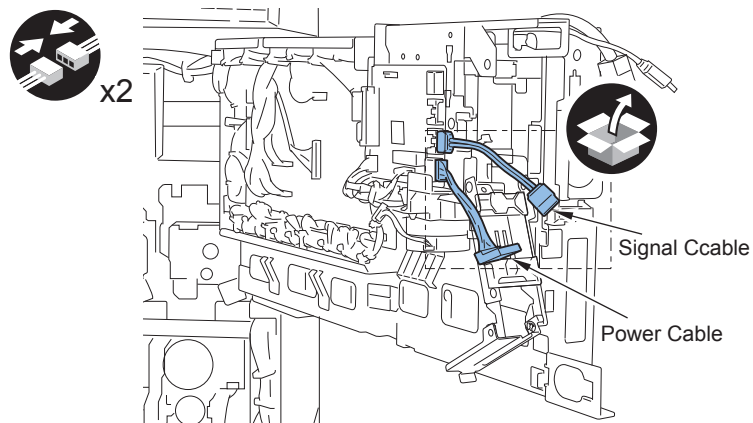
Be sure to acknowledge the following caution before performing the next procedure.
Combinations of connection between the HDDs and the Mirroring Board or Encryption Board are shown below.

- Connect Slot 1 to "CHA". (Originally installed HDD)
- Connect Slot 2 to "CHB". (New HDD)



F-9-452

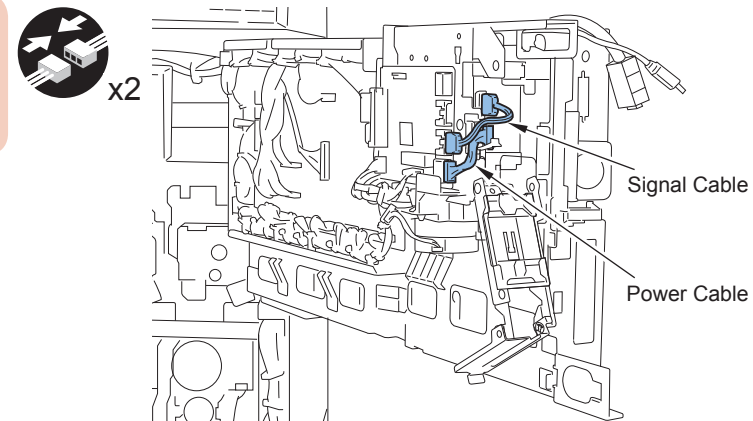
- 7) Install the Signal Cable (80mm (Red); FK2-8436) and the Power Cable (80mm; FK2-8461) to CHA on the Mirroring Board or Encryption Board.



F-9-453

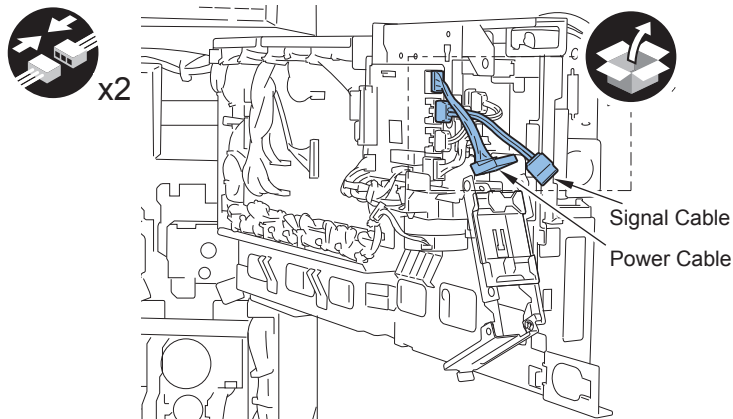
- 8) Install the Signal Cable (80mm (Red); FK2-8436) and the Power Cable (80mm; FK2-8461) to the first HDD (Slot 1).

CAUTION:
Install the cables to
correct positions.



F-9-454

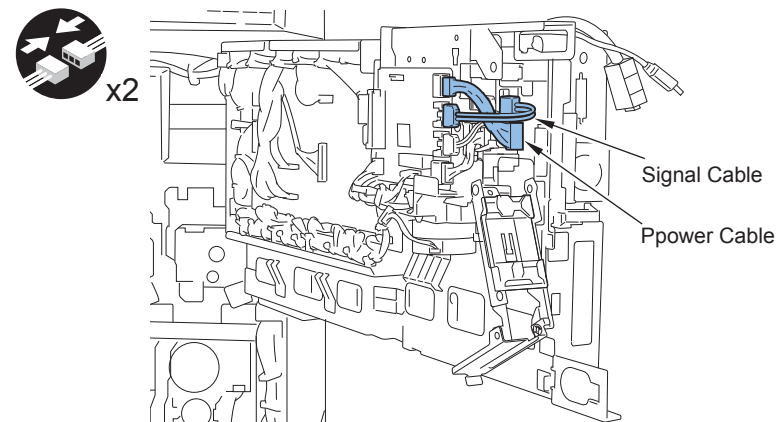
- 9) Install the Signal Cable (80mm (Blue); FK2-8438) and the Power Cable (80mm; FK2-8461) to CHB on the Mirroring Board or Encryption Board.



F-9-455

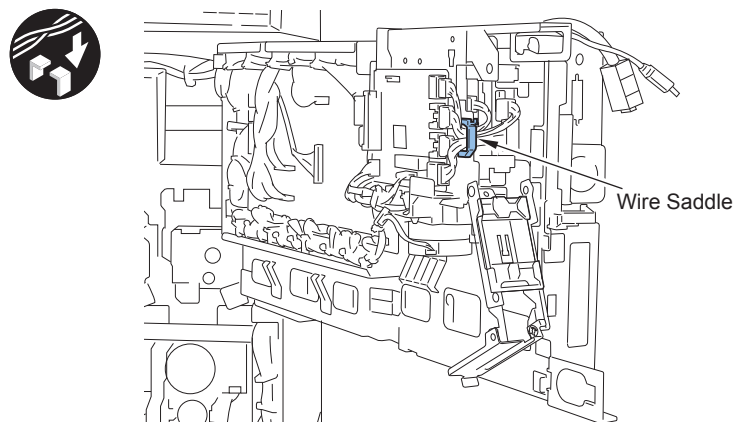
- 10) Install the Signal Cable (80mm (Blue); FK2-8438) and the Power Cable (80mm; FK2-8461) to the second HDD (Slot 2).

CAUTION:
Install the cables to correct positions.



F-9-456

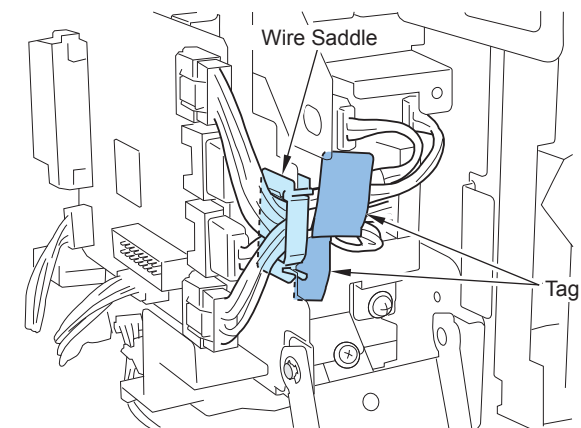
- 11) Fix the cables with the wire saddle.



F-9-457

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.



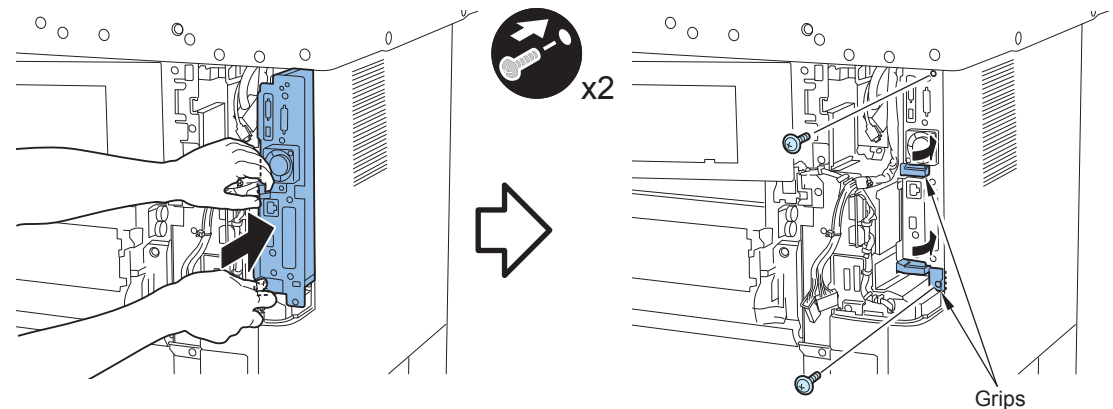
F-9-458

-
- 12) Close the HDD Lid.
13) Place the Controller Box to the original position.
14) Install the removed cover and the cable.
- Rear Cover
 - Left Rear Sub Cover
 - Reader Communication Cable (when reader is installed)
 - Left Rear Cover
 - USB Cable and Control Panel Communication Cable

-
- 15) 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.

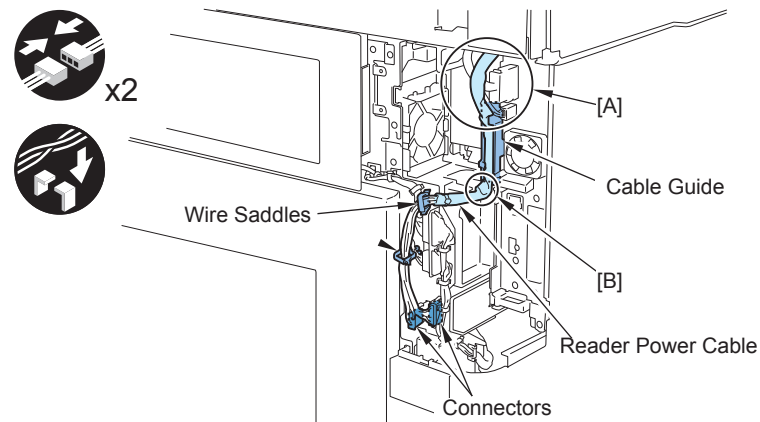


F-9-459

-
- 16) If Reader is installed, install the Reader Power Cable.

NOTE:

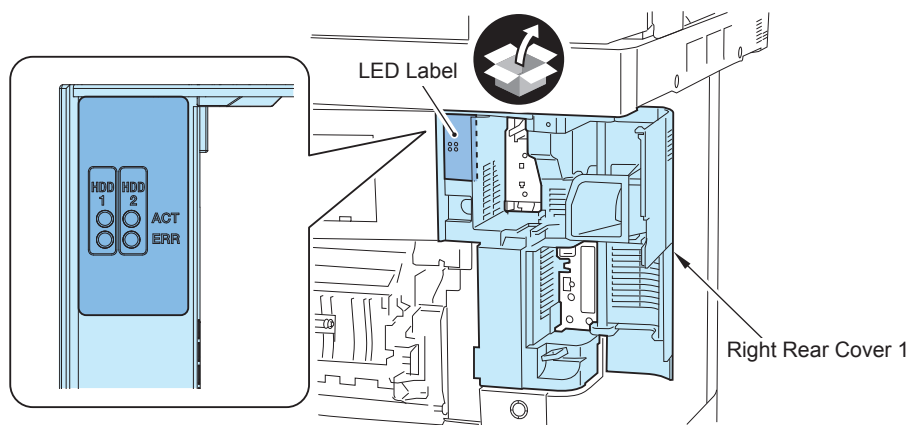
Handle the Reader Power Cable from the connector side and make a slack at A part. Bend the Reader Power Cable at a right angle on B part.



F-9-460

-
- 17) Install the Right Rear Cover 1.

- 18) Affix the LED label so that it fits the edge of the Right Rear Cover 1.



F-9-461

- 19) Close the Right Rear Cover 1, Right Lower Cover, and Right Upper Cover.

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 CONNECT.
- 2) From the list of machine series, select the appropriate model.
- 3) Select 'single', and click START.
- 4) Execute HDD format.
- 5) After 5 sec from when the power of the host machine is turned OFF, restart the host machine in download mode of safe mode.
- 6) When "download mode" is displayed on the control panel, click simple mode start.
- 7) Click start to execute download.
- 8) Follow the instruction on the screen and when download is complete, click OK.
- 9) Exit SST.
- 10) Check the versions of MN-CONT and LANG etc 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 > FNCSW > 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 > FNCSW > 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 > FNCSW > 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] HDD Data Encryption & Mirroring Kit

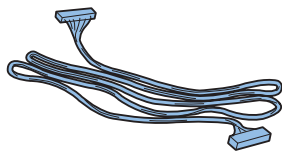
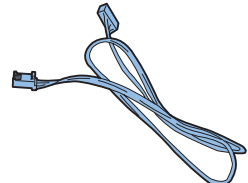
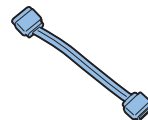
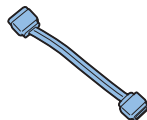
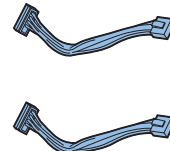
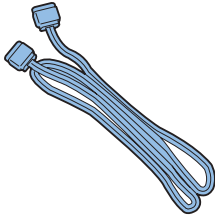
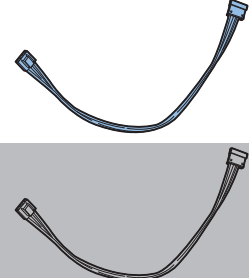
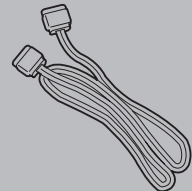
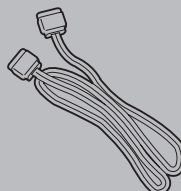

Points to Note when HDD Data Encryption & Mirroring Kit has been Installed

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.

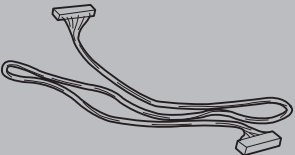
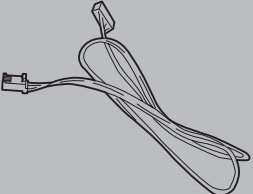
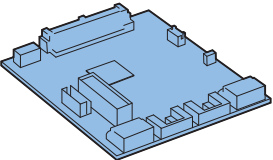
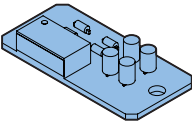
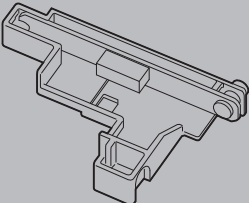


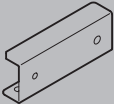
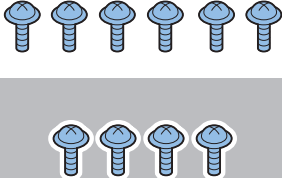

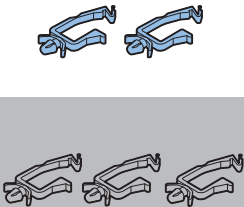
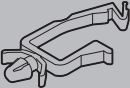

Checking the Contents

The parts with a gray in the contents list will not be used.

HDD Data Encryption & Mirroring Kit

<input type="checkbox"/> [1] LED Cable (1200mm; 7 pin) x 1 	<input type="checkbox"/> [2] STS Cable (550mm (Light blue); 5 pin) x 1 	<input type="checkbox"/> [3] Signal Cable (80mm (Red); FK2-8436) x 1 	<input type="checkbox"/> [4] Signal Cable (80mm (Blue); FK2-8438) x 1 	<input type="checkbox"/> [5] Power Cable (80mm; FK2-8461) x 2 
<input type="checkbox"/> [6] Signal Cable (450mm (Red); FK2-8435) x 1 	<input type="checkbox"/> [7] Power Cable (430mm; FK2-8463) x 2 	<input type="checkbox"/> [8] Signal Cable (340mm (Red); FK2-8434) x 1 	<input type="checkbox"/> [9] Signal Cable (370mm (Blue); FK2-8441) x 1 	<input type="checkbox"/> [10] Power Cable (320mm; FK2-8467) x 1 

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<input type="checkbox"/> [11] LED Cable (290mm; 7 pin) x 1 	<input type="checkbox"/> [12] STS Cable (420mm (Light blue); 5 pin) x 1 	<input type="checkbox"/> [13] Encryption Board x 1 	<input type="checkbox"/> [14] LED Board (Small) x 1 	<input type="checkbox"/> [15] LED Board (large) x 1 
<input type="checkbox"/> [16] LED Label (Small) x 1 	<input type="checkbox"/> [17] LED Label (large) x 1 	<input type="checkbox"/> [18] HDD Connection Plate x 1 	<input type="checkbox"/> [19] Screw (TP; M3 X 6) x 10 	<input type="checkbox"/> [20] Edge Saddle x 1 
<input type="checkbox"/> [21] Wire saddle (Small) x 5 	<input type="checkbox"/> [22] Wire saddle (large) x 1 	<input type="checkbox"/> [23] Wire saddle (Middle) x 1 		

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<CD/Guide>

- HDD Data Encryption & Mirroring Kit-C1 User Documentation
- HDD Data Encryption Kit Notice Notice
- Installation Procedure
- Noticd for FCC/IC

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
Send Function Favorite Settings	Yes
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

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*1; Can only be backed up using the Remote UI.

*2; Depending on the MEAP application.

*3: Only the following data saved in Mail Box/Advanced Box 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
- Advanced Box URI Transmission Settings

*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 to be Backed Up

Data to be backed up	Reference
Address Book Settings/Registration settings	For information on exporting data, see the "e-Manual > Remote UI".
Device Settings (Forwarding Settings, Address List, Favorite Settings)	
Printer Settings	
Paper Information	
Favorite Settings for Web browser	See the "e-Manual > Web Access". (You can select this if web browser (Option) is installed.)
License files for MEAP applications	For information on downloading license files, see the "e-Manual > MEAP".
Data saved by MEAP applications	Data saved by MEAP applications may be able to be backed up, depending on the MEAP application. See the documentation included with the MEAP application.
Data stored in Mail Boxes or the Advanced Box Image forms stored in the Superimpose Image	See the "e-Manual > Remote UI" to "Setting the Backup Location for Stored Data".
SSO-H (Single Sign-On H) user authentication information	See the "e-Manual > MEAP".
Quick Menu Information	See the "e-Manual > Quick Menu".
User Information of the Advanced Box	See the "e-Manual > Security".

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CAUTION: Work to Perform After Installing the Kit

- When you start using this product, passwords set for Mail Boxes 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 this product has been installed. These data items are property of the user, and the restoration work must be performed by the system administrator.

The method of restoration is described in the Users Guide. See Table (Data to be backed up) in Points to Note About Installation of the Installation Procedure.

1. Procedure to make a backup of Address Book

- 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].
- 3) Click [Address List].
- 4) Click [Export].
- 5) Select the save format for Address list, and click [Start Export].
- 6) Following the instructions on the window, specify the location to save the file. Be sure to set a distinctive name to an export file so that you can recognize it when importing it.

NOTE:

Exporting the device settings will export all contents of the address list. In other words, there is no need for a backup unless it needs to be done individually.

2. Device Settings Export Procedure

- 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].
- 3) Click [Device Settings (Forwarding Settings, Address List, Favorite Settings)].
- 4) Click [Export], and then click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

3. Settings/Registration Export Procedure

- 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].
- 3) Click [Settings/Registration].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

4. Printer Settings Export Procedure

NOTE:

The following items to be exported are the same as the ones which are distributed by device information distribution.

- 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].
- 3) Click [Printer Settings].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

5. Paper Information Export Procedure

- 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].
- 3) Click [Paper Information].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

6. 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.

CAUTION: MEAP Backup Function Using the SST

Data that has been backed up using MEAP back of the SST before the use of this product is started must not be written back to the host machine after the use of this product is started. Similarly, even if the data that has been backed up after the use of this product is started is written back to the host machine before the use of this product is started, the machine does not operate. It is necessary to make sure that the implementation conditions for this product are compatible before and after making a backup of data, and the MEAP backup function does not permit making a backup of data in the course of installing the kit.

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.

7. 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) Click the application of which license has been installed.
- 5) Click [License Control], and then click [Disable]. Click [Yes] in a confirmation window for disabling the license.

- 6) Click [Download] under "Download/delete Disabled License File" item. 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.
- 7) 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).
- 8) 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).

8. 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/`

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 the user has changed the password, ask him/her to change the password again after the use of this product is started.

- 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].

9. Backup of User inbox and Advanced Box document data

CAUTION: Backup of "Advanced Box"

When setting a SMB server as a backup destination, Advanced Box data saved in a large capacity HDD cannot be backed up. The Advanced Box data backed up from the large capacity HDD cannot be restored to the standard HDD.

Depending on the system version of the machine, both backup and restoration might not be performed.

The procedure of backup and restoration of a box document data is described below.

Specify the backup destination of a document data:

- Backup to SMB server
Select SMB as a backup destination and specify an address, a user name, a password, and a path to the SMB server to which saved data is backed up.
- Backup to USB HDD
Select USB HDD as a backup destination and specify a path to the USB HDD folder to which saved data is backed up.

CAUTION: Data which cannot be backed up

If you back up/restore stored data without restarting the machine after changing the language displayed on the touch panel display by pressing [Settings/Registration] > [Preferences] from the control panel of the machine, the stored data may not be backed up/restored properly. For more information on the data that cannot be backed up, see Points to Note for Installation.

CAUTION:

If the language setting in the common specification settings (Settings/Registration) is set to ON, 'host address' and 'path to folder' might not be displayed correctly or cannot be referred.

CAUTION:

- Regarding the method of inputting characters, see 'Basic Operations' in the e-Manual.
- A host address can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,' 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A path to the folder can be up to 255 characters in 1 byte (127 characters in 2 bytes).
- A user name can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,' 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A password can be up to 7 to 48 characters using the 'alphanumeric character' and 'mark (1 byte)' modes.
- The voice sound symbol and the semi-voice sound symbol entered in the 'Katakana (1 byte)' mode are counted up as one 1-byte character.

[Backup method of User inbox and Advanced Box document data]

- 1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Backup].
- 2) Select 'All' or 'Changes' for the backup method.
- 3) Click [Execute].

CAUTION:

- If any of the host IP address, user name, password, or path to the folder is not correctly entered, a backup cannot be made.
- If you select to encrypt the backup data, the backup process may take longer.

[Restoring the backup data of User inbox and Advanced Box document data]

- 1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Restore].
- 2) Click [Display Backup Data].
- 3) Select the backup data to restore from the list and then click [Execute].

CAUTION:

- If you want to restore encrypted backup data, enter the same password used when backing up the data.
- Depending on the settings of the machine, the backup data may not be completely restored, or some documents may be automatically printed.
- Restoration is performed after all of the box data stored in the machine, or documents that are being sent, received, or stored, are erased.

10. Quick Menu Information Export Procedure

- 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 Basic Tools > [Quick Menu] > [Export].
- 3) If the file needs to be encrypted, enter the password after check [Encrypt file]. (The number of characters for the password must be more than 4 but less than 16.)
- 4) Click [Export].
- 5) Following the instructions on the window, specify the location to save the file.

11. User Information of the Advanced Box Export Procedure

- 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 Basic Tools > [User Access Control for Advanced Box]. The dialog box to enter the user name of administrator and password appears, enter the system administrator ID and password, and then click [Log In].
The default administrator user name and password are as follows:
User Name: Administrator
Password: password
- 3) Click [Export], and click [Start Export].
- 4) Following the instructions on the window, specify the location to save the file.

Check Items when Turning OFF the Main Power

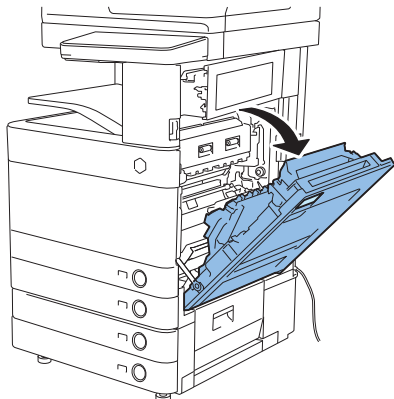
Check that the main power switch is OFF.

- 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

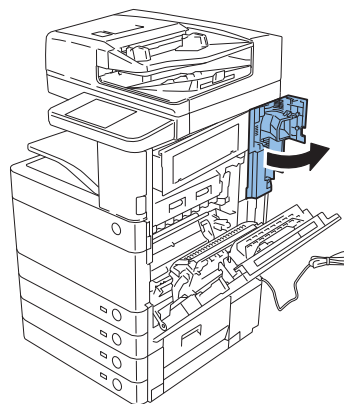
Removing the Signal Cable and Power Supply Cable

- 1) Open the Right Lower Cover. (Open the Right Upper Cover simultaneously.)

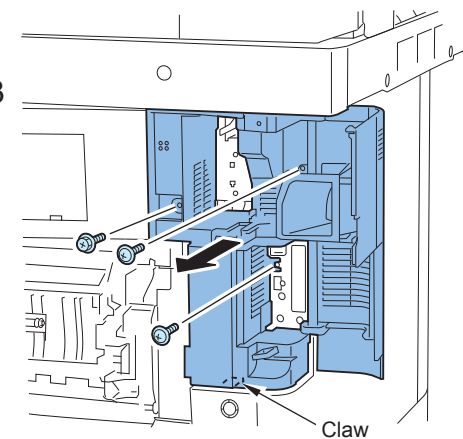


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- 2) Open the Right Rear Cover 1.
3) Remove the Right Rear Cover 1.
- 1 screw (RS tight; M4)
 - 2 screws (TP; M3)
 - 1 claw



x3



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- 4) When the Reader is installed, remove the Reader Power Cable.

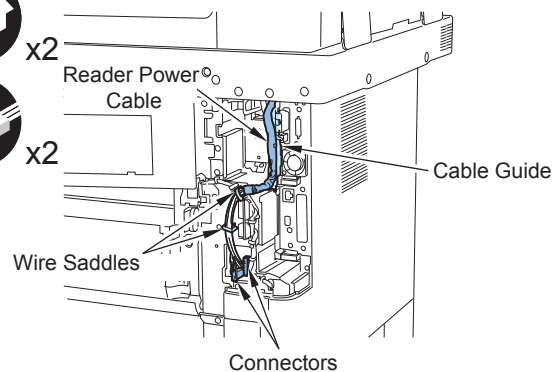
- 2 connectors
- 2 wire saddles
- 1 cable guide



x2



x2

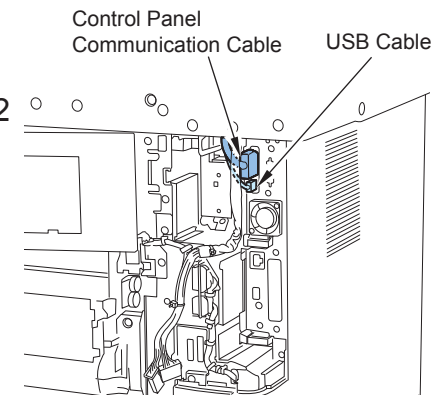


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- 5) Remove the USB Cable and the Control Panel Communication Cable.

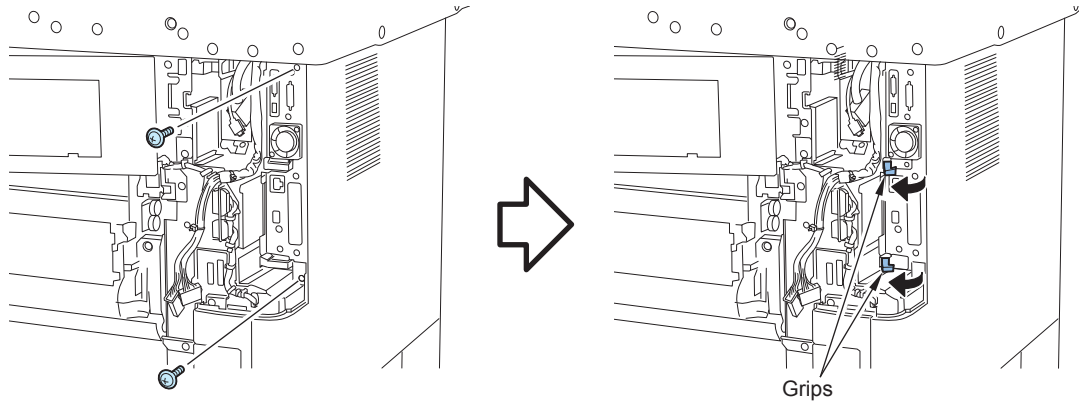


x2



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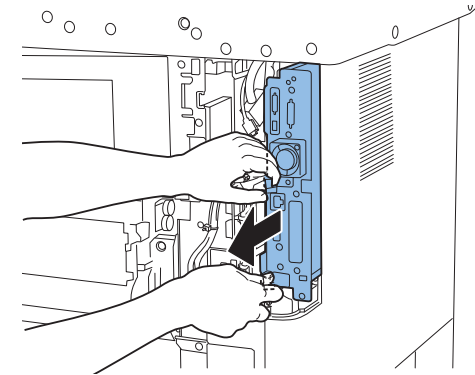
6) Remove the 2 screws, open the grip in 2 places.



Grips

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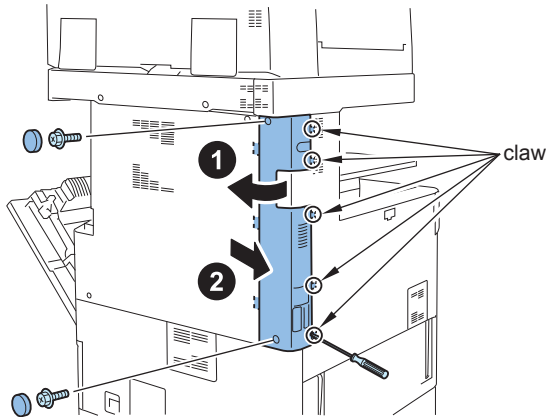
7) Hold the 2 Grips, and pull out the Main Controller PCB 1 approximately 10mm toward front.



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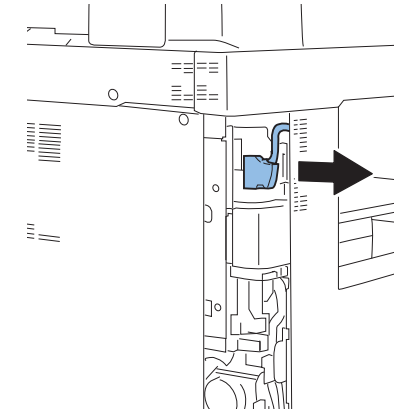
8) Remove the Left Rear Cover.

- 2 rubber caps
- 2 screws
- 5 claws



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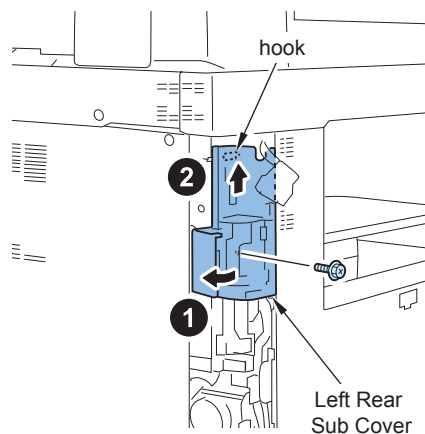
9) When the Reader is installed, remove the Reader Communication Cable.



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10) Remove the Left Rear Sub Cover.

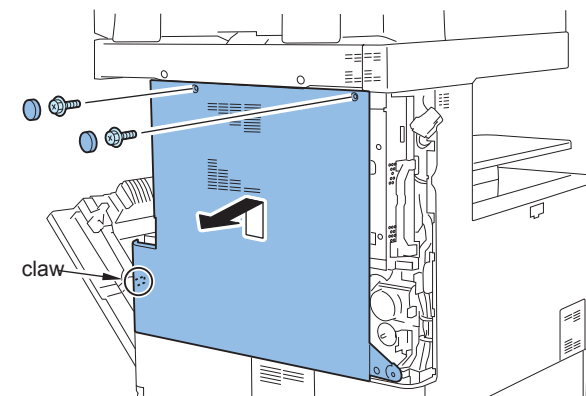
- 1 screw
- 1 hook



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11) Remove the Rear Cover.

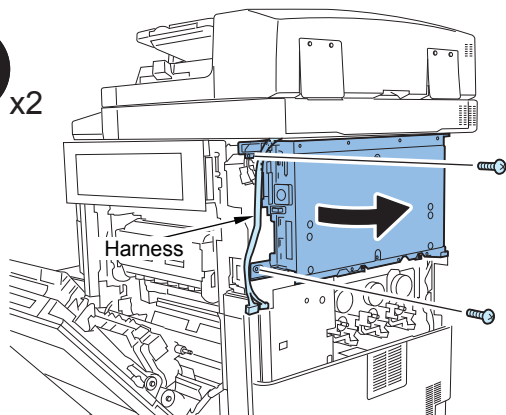
- 2 rubber caps
- 2 screws
- 1 claw



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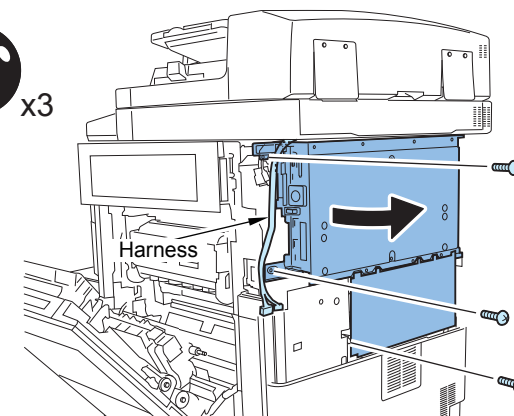
12) Open the Controller Box while avoiding the harness.

- 2 screws

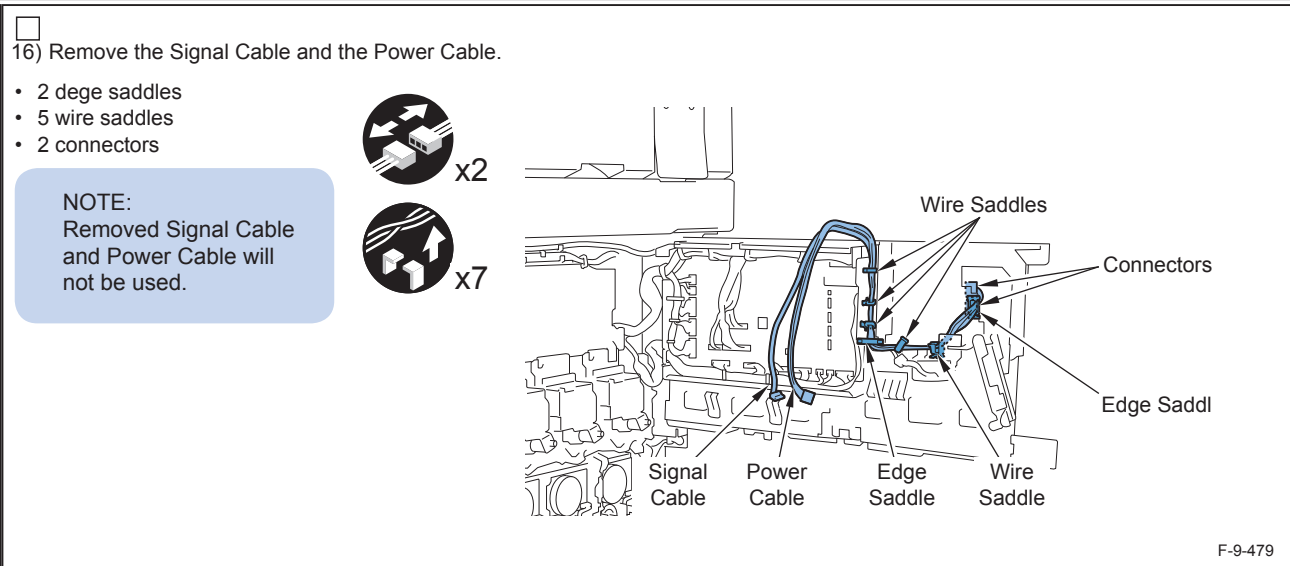
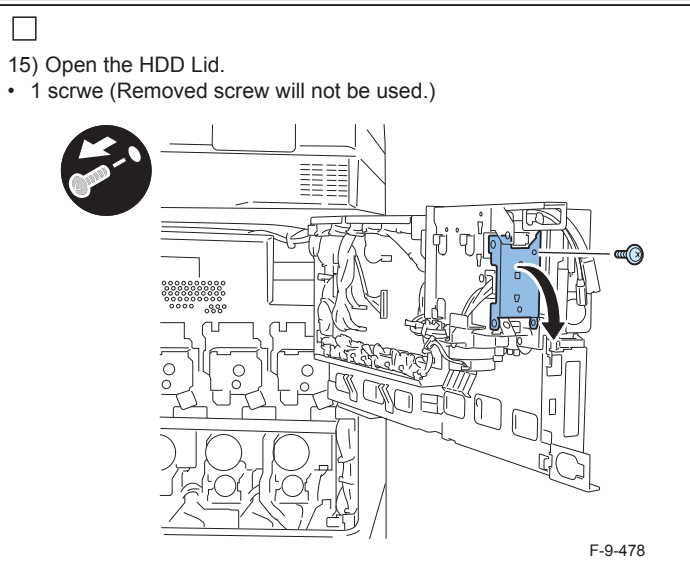
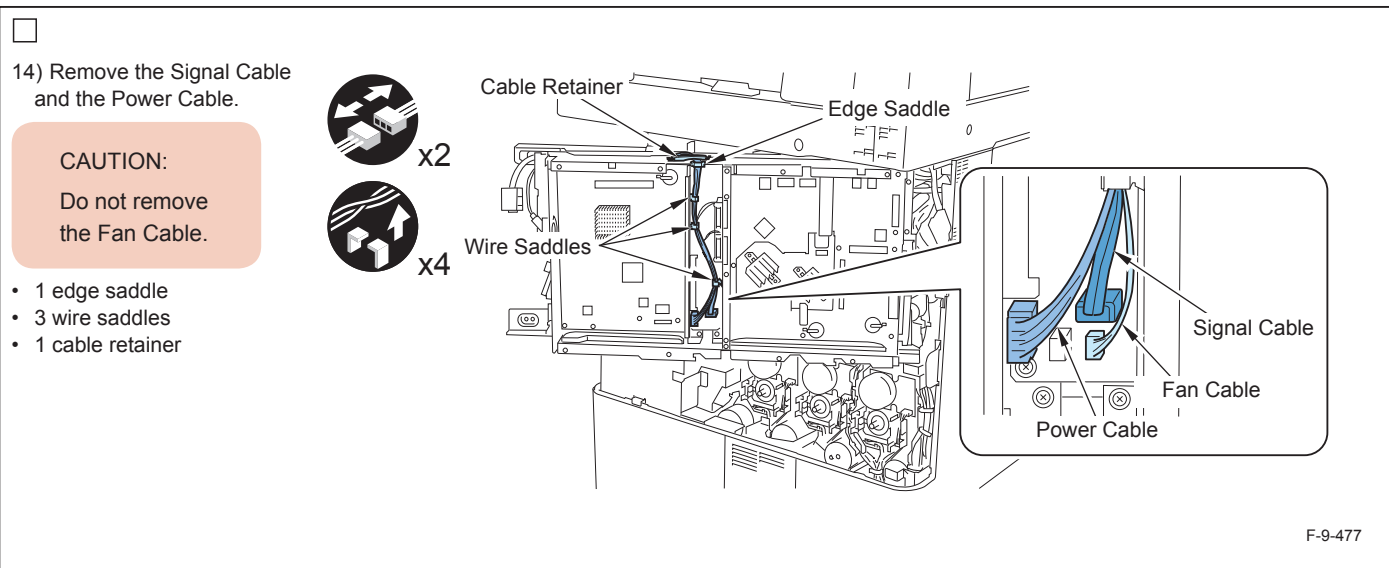
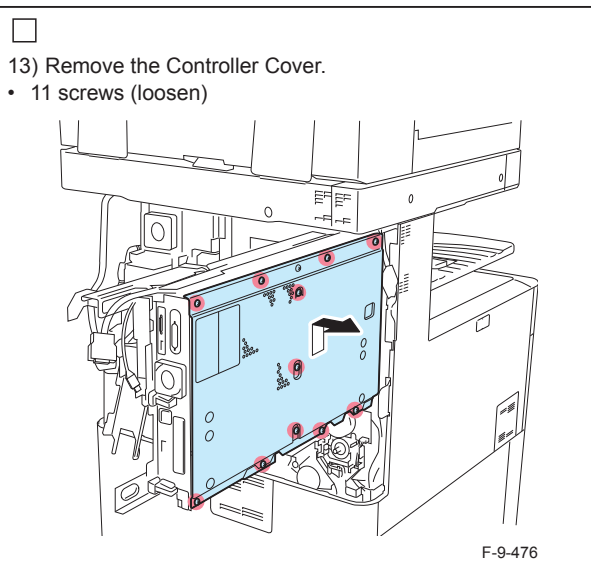


F-9-474

NOTE:
If the FAX Unit has been installed, remove the 3 screws and open the Controller Box with the FAX Unit.

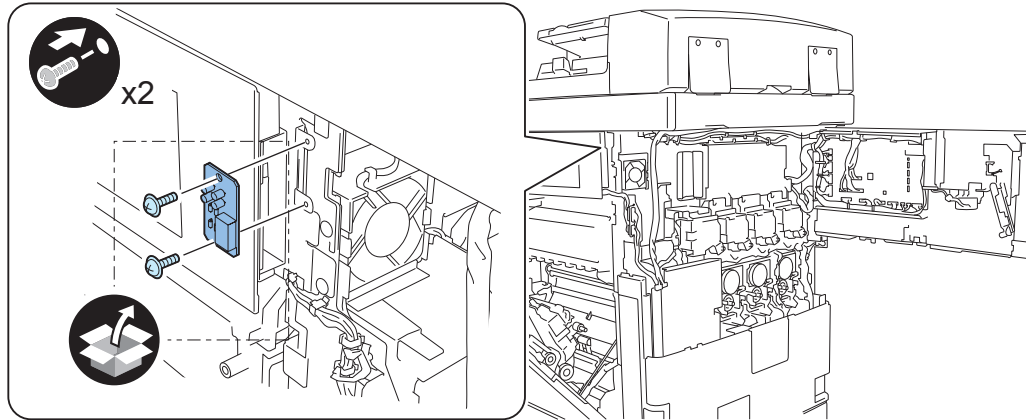


F-9-475

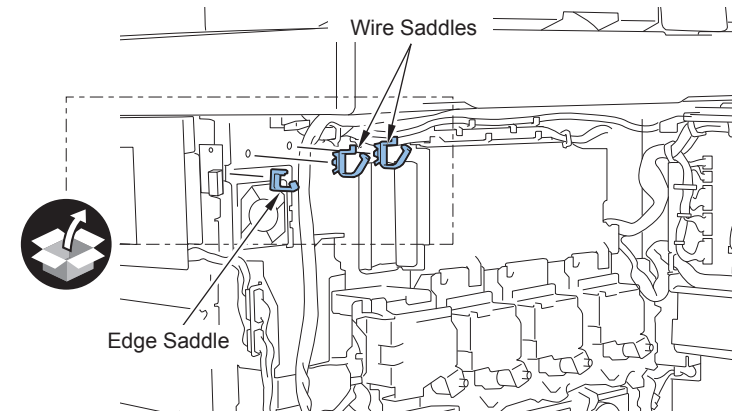


Installing the LED Board

-
- 1) Install the LED Board (small).
- 2 screws (TP; M3X6)



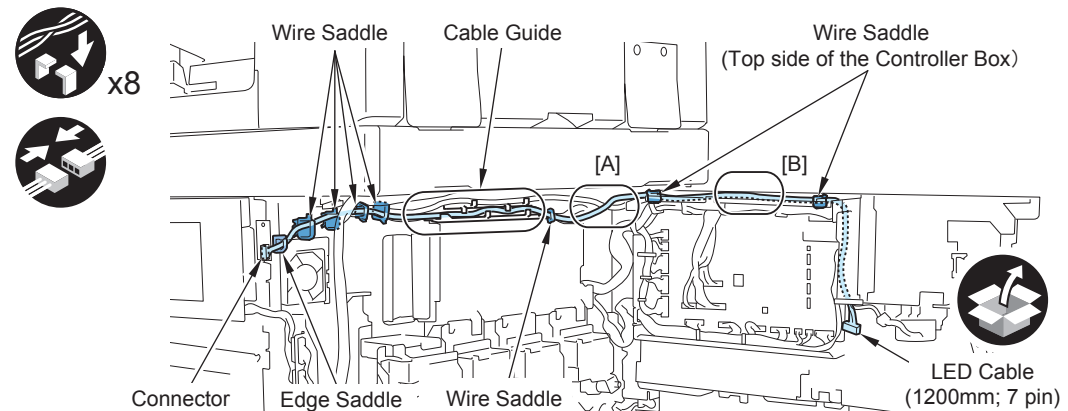
-
- 2) Install the 2 wire saddles and the edge saddle.



-
- 3) Install the LED Cable (1200mm; 7 pin).
- 7 wire saddles
 - 1 edge saddle
 - 1 cable guide
 - 1 connector

CAUTION:

- Be sure to allow extra cable at [A] area in the condition that the Controller Box is fully opened.
- Be sure to tuck the [B] area of the LED cable under the other 2 cables running through the [B] area. This is to prevent the [B] area of the LED cable from being slacked off when closing the Controller Box.



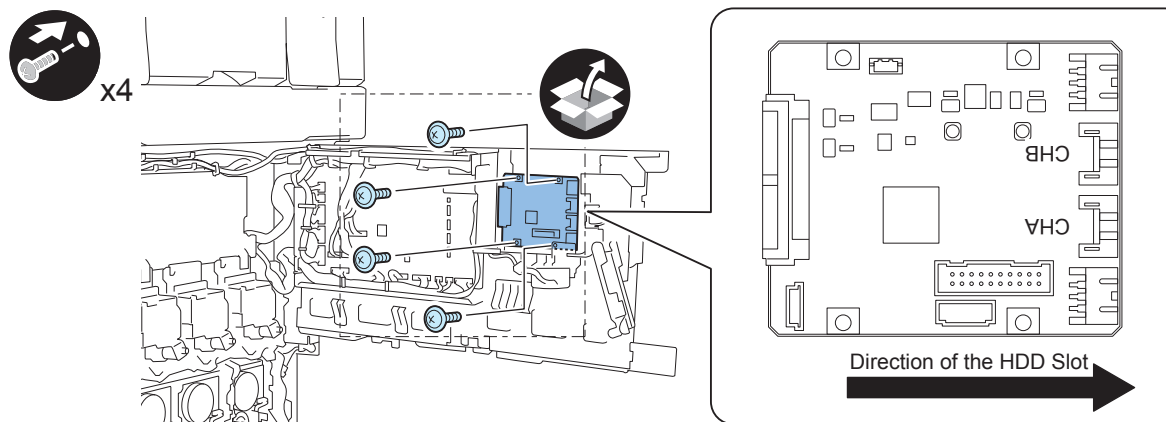
■ Installing the Encryption Board

- 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.



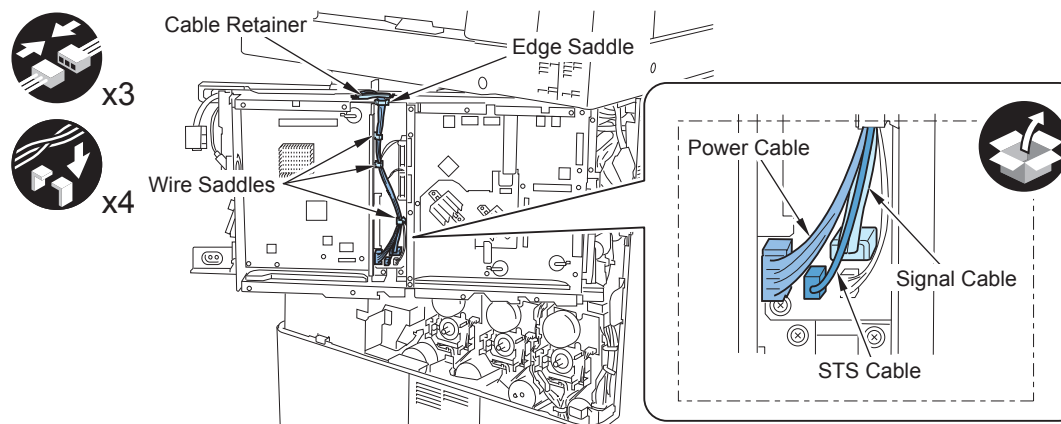
F-9-483

- 2) Install the cables to the PCB on the backside.

- Signal Cable (450mm (Red); FK2-8435)
- Power Cable (430mm; FK2-8463)
- STS Cable (550mm (Light blue); 5 Pin)

- 3) Fix the cables.

- 3 wire saddles
- 1 edge saddle
- Cable retainer



F-9-484



4) Install the Controller Cover.

CAUTION:

Be sure that the gaskets on left/right side of the Controller Cover are not protruded.

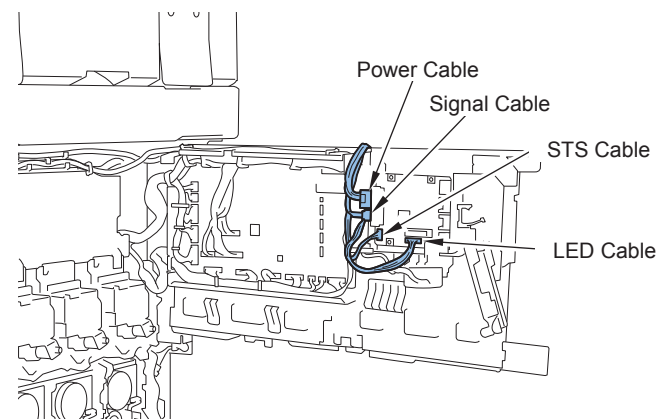


5) Install the cables to the Encryption Board.

- Signal Cable (450mm (Red); FK2-8435)
- Power Cable (430mm; FK2-8463)
- LED Cable (1200mm; 7 Pin)
- STS Cable (550mm (Light blue); 5 Pin)

**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-9-485

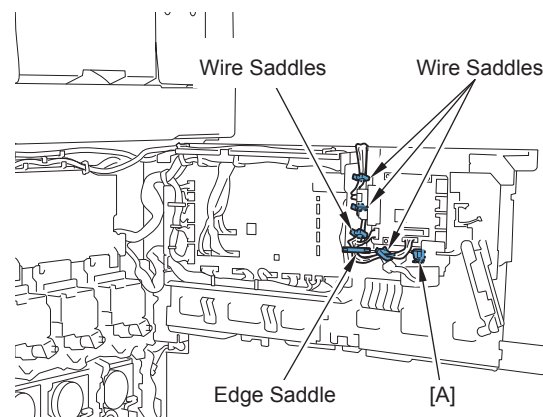


6) Fix the cables.

- 4 wire saddles
- 1 edge saddle

NOTE:

Be sure to close the unused wire saddle [A].



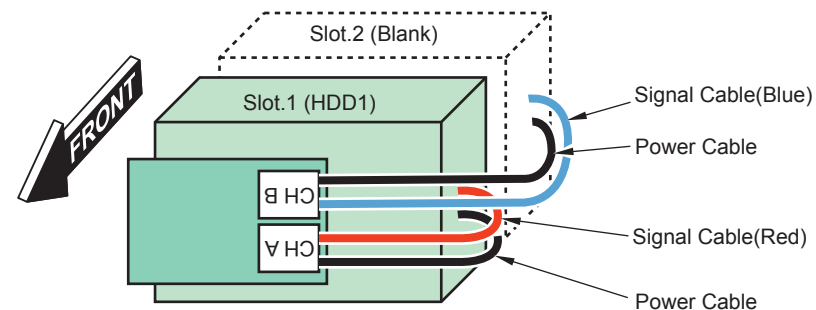
F-9-486

**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.

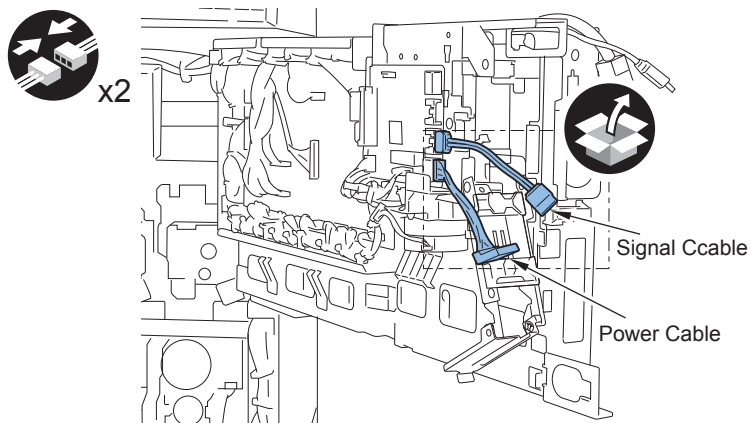
- Connect Slot 1 to "CHA".
- Connect Slot 2 to "CHB".



F-9-487



7) Install the Signal Cable (80mm (Red); FK2-8436) and the Power Cable (80mm; FK2-8461) to CHA on the Encryption Board.



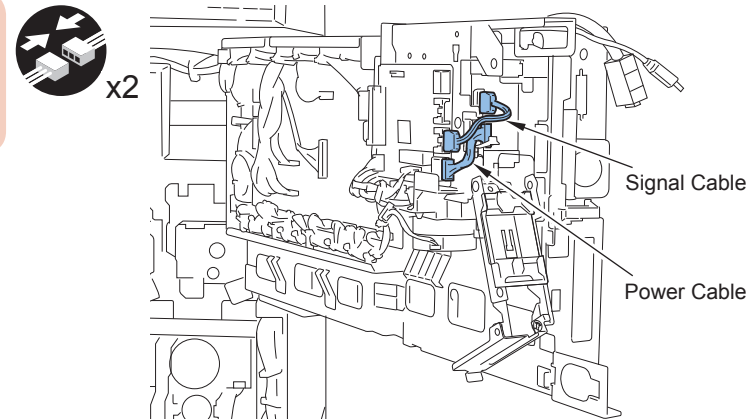
F-9-488



8) Install the Signal Cable (80mm (Red); FK2-8436) and the Power Cable (80mm; FK2-8461) to the first HDD (Slot 1).

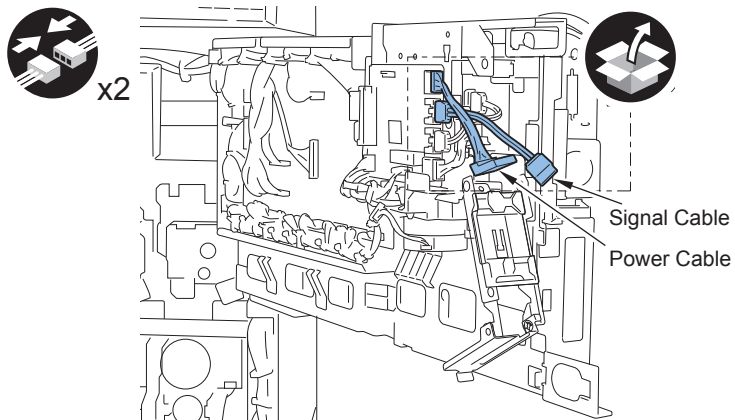
CAUTION:

Install the cables to correct positions.



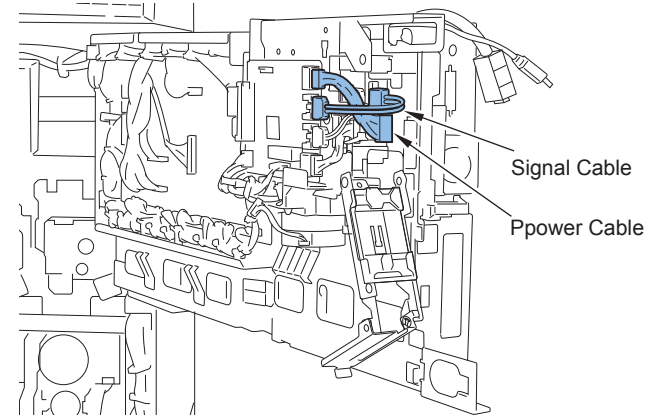
F-9-489

- 9) Install the Signal Cable (80mm (Blue); FK2-8438) and the Power Cable (80mm; FK2-8461) to CHB on the Encryption Board.



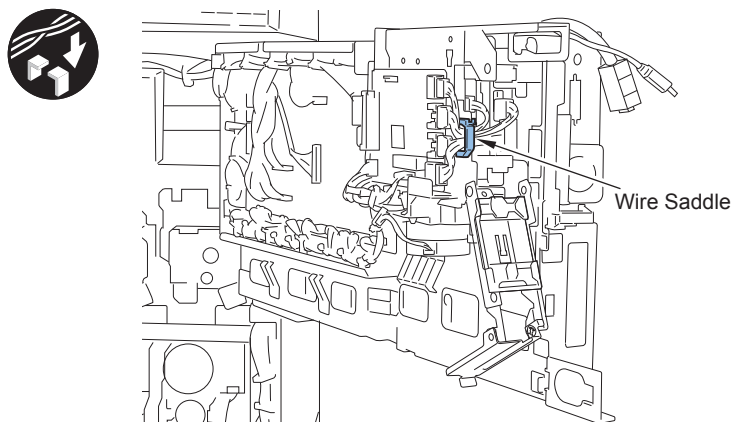
F-9-490

- 10) Place the Signal Cable (80mm (Blue); FK2-8438) and the Power Cable (80mm; FK2-8461) to the empty space of the second HDD (Slot 2).



F-9-491

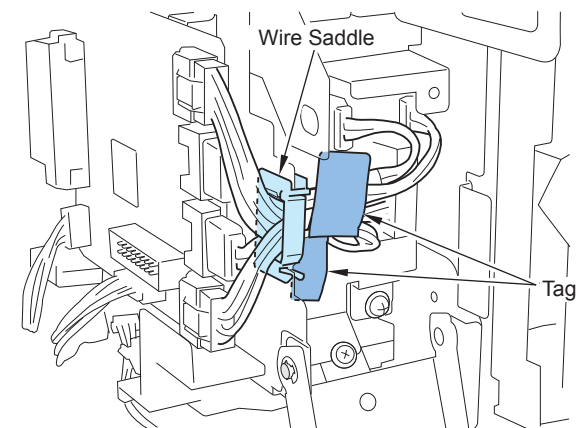
- 11) Fix the cables with the wire saddle.



F-9-492

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.



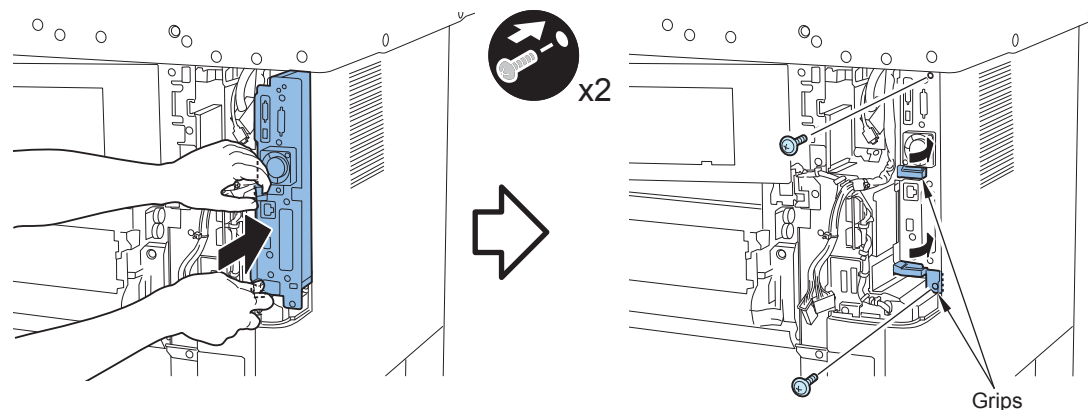
F-9-493

-
- 12) Close the HDD Lid.
 13) Place the Controller Box to the original position.
 14) Install the removed cover and the cable.
- Rear Cover
 - Left Rear Sub Cover
 - Reader Communication Cable (when reader is installed)
 - Left Rear Cover
 - USB Cable and Control Panel Communication Cable

-
- 15) 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.

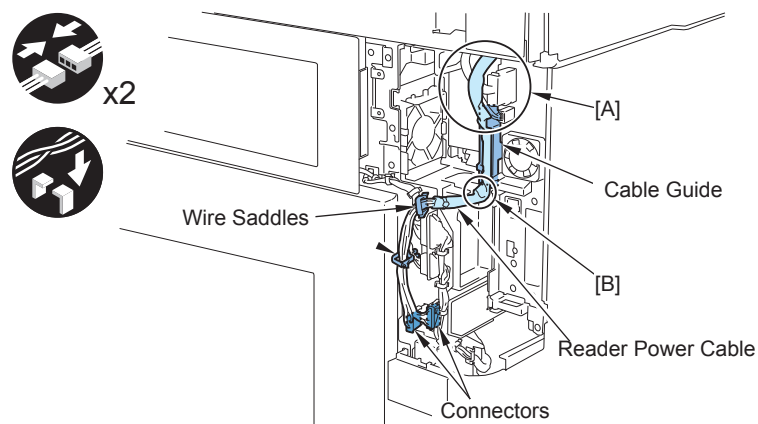


F-9-494

-
- 16) If Reader is installed, install the Reader Power Cable.

NOTE:

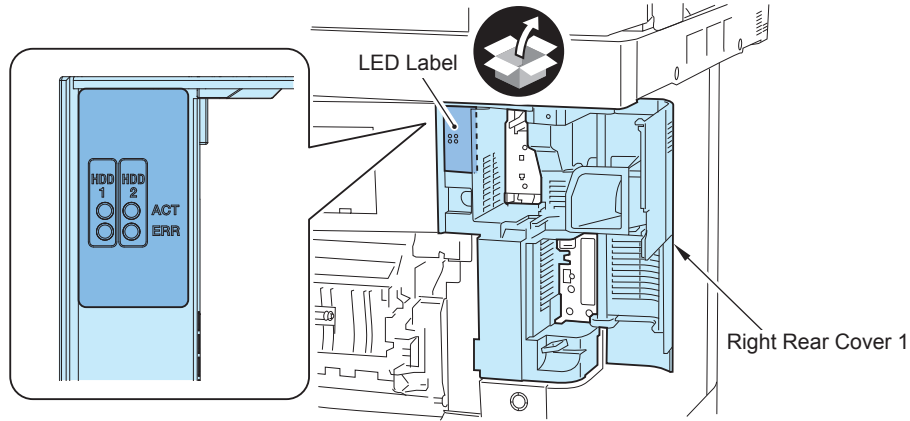
Handle the Reader Power Cable from the connector side and make a slack at A part. Bend the Reader Power Cable at a right angle on B part.



F-9-495

-
- 17) Install the Right Rear Cover 1.

- 18) Affix the LED label so that it fits the edge of the Right Rear Cover 1.



F-9-496

- 19) Close the Right Rear Cover 1, Right Lower Cover, and Right Upper Cover.

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 CONNECT.
- 2) From the list of machine series, select the appropriate model.
- 3) Select 'single', and click START.
- 4) Execute HDD format.
- 5) After 5 sec from when the power of the host machine is turned OFF, restart the host machine in download mode of safe mode.
- 6) When "download mode" is displayed on the control panel, click simple mode start.
- 7) Click start to execute download.
- 8) Follow the instruction on the screen and when download is complete, click OK.
- 9) Exit SST.
- 10) Check the versions of MN-CONT and LANG etc 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 (250GB) + HDD Data Encryption & Mirroring Kit

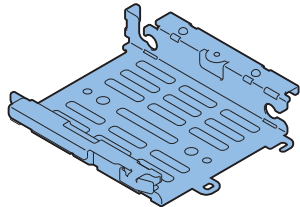
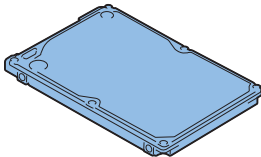
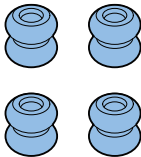
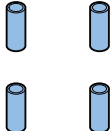
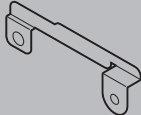
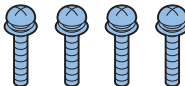


Points to Note when HDD Data Encryption & Mirroring Kit has been Installed

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

The parts with a gray in the contents list will not be used.

Option HDD (250GB)

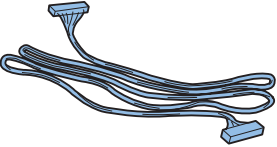
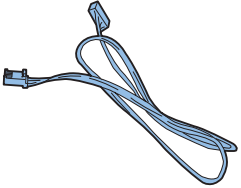
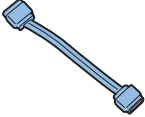
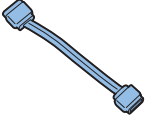
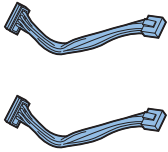
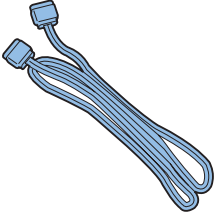
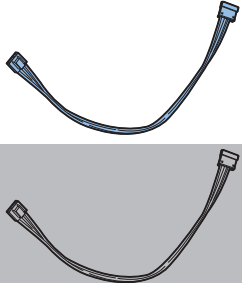
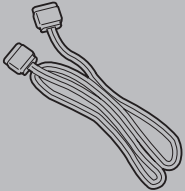
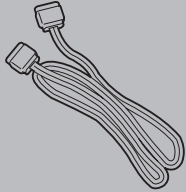

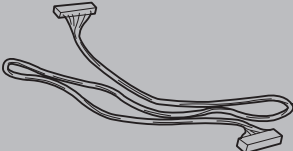
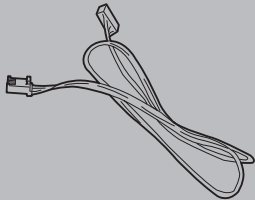
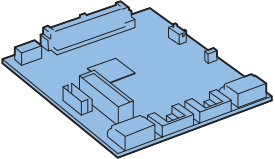
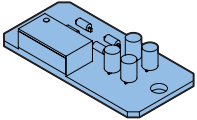
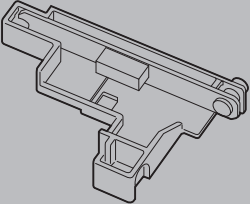
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<input type="checkbox"/> [6] Screw (W sems; M3x14) x 4 	<input type="checkbox"/> [7] Screw (TP;M3x6) x 2 	<input type="checkbox"/> [8] Gasket x 1 		

<CD/GUIDS>



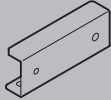
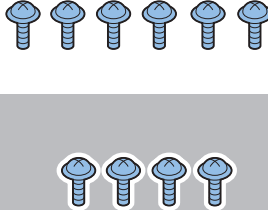

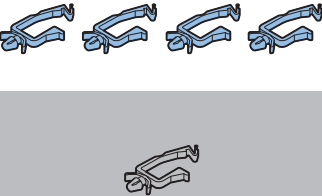
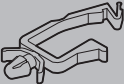

- Notice for FCC/IC
- China RoHS Notice 3

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HDD Data Encryption & Mirroring Kit

<input type="checkbox"/> [1] LED Cable (1200mm; 7 pin) x 1 	<input type="checkbox"/> [2] STS Cable (550mm (Light blue); 5 pin) x 1 	<input type="checkbox"/> [3] Signal Cable (80mm (Red); FK2-8436) x 1 	<input type="checkbox"/> [4] Signal Cable (80mm (Blue); FK2-8438) x 1 	<input type="checkbox"/> [5] Power Cable (80mm; FK2-8461) x 2 
<input type="checkbox"/> [6] Signal Cable (450mm (Red); FK2-8435) x 1 	<input type="checkbox"/> [7] Power Cable (430mm; FK2-8463) x 2 	<input type="checkbox"/> [8] Signal Cable (340mm (Red); FK2-8434) x 1 	<input type="checkbox"/> [9] Signal Cable (370mm (Blue); FK2-8441) x 1 	<input type="checkbox"/> [10] Power Cable (320mm; FK2-8467) x 1 
<input type="checkbox"/> [11] LED Cable (290mm; 7 pin) x 1 	<input type="checkbox"/> [12] STS Cable (420mm (Light blue); 5 pin) x 1 	<input type="checkbox"/> [13] Encryption Board x 1 	<input type="checkbox"/> [14] LED Board (Small) x 1 	<input type="checkbox"/> [15] LED Board (large) x 1 

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<input type="checkbox"/> [16] LED Label (Small) x 1 	<input type="checkbox"/> [17] LED Label (large) x 1 	<input type="checkbox"/> [18] HDD Connection Plate x 1 	<input type="checkbox"/> [19] Screw (TP; M3 X 6) x 10 	<input type="checkbox"/> [20] Edge Saddle x 1 
<input type="checkbox"/> [21] Wire saddle (Small) x 5 	<input type="checkbox"/> [22] Wire saddle (large) x 1 	<input type="checkbox"/> [23] Wire saddle (Middle) x 1 		

F-9-499

<CD/Guide>

- HDD Data Encryption & Mirroring Kit-C1 User Documentation
- HDD Data Encryption Kit Notice Notice
- Installation Procedure
- Noticd for FCC/IC

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
Send Function Favorite Settings	Yes
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

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*1; Can only be backed up using the Remote UI.

*2; Depending on the MEAP application.

*3: Only the following data saved in Mail Box/Advanced Box 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
- Advanced Box URI Transmission Settings

*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 to be Backed Up

Data to be backed up	Reference
Address Book	For information on exporting data, see the "e-Manual > Remote UI".
Settings/Registration settings	
Device Settings (Forwarding Settings, Address List, Favorite Settings)	
Printer Settings	
Paper Information	
Favorite Settings for Web browser	See the "e-Manual > Web Access". (You can select this if web browser (Option) is installed.)
License files for MEAP applications	For information on downloading license files, see the "e-Manual > MEAP".
Data saved by MEAP applications	Data saved by MEAP applications may be able to be backed up, depending on the MEAP application. See the documentation included with the MEAP application.
Data stored in Mail Boxes or the Advanced Box	See the "e-Manual > Remote UI" to "Setting the Backup Location for Stored Data".
Image forms stored in the Superimpose Image	
SSO-H (Single Sign-On H) user authentication information	See the "e-Manual > MEAP".
Quick Menu Information	See the "e-Manual > Quick Menu".
User Information of the Advanced Box	See the "e-Manual > Security".

T-9-18

CAUTION: Work to Perform After Installing the Kit

- When you start using this product, passwords set for Mail Boxes 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 this product has been installed. These data items are property of the user, and the restoration work must be performed by the system administrator.

The method of restoration is described in the Users Guide. See Table (Data to be backed up) in Points to Note About Installation of the Installation Procedure.

1. Procedure to make a backup of Address Book

- 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].
- 3) Click [Address List].
- 4) Click [Export].
- 5) Select the save format for Address list, and click [Start Export].
- 6) Following the instructions on the window, specify the location to save the file. Be sure to set a distinctive name to an export file so that you can recognize it when importing it.

NOTE:

Exporting the device settings will export all contents of the address list. In other words, there is no need for a backup unless it needs to be done individually.

2. Device Settings Export Procedure

- 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].
- 3) Click [Device Settings (Forwarding Settings, Address List, Favorite Settings)].
- 4) Click [Export], and then click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

3. Settings/Registration Export Procedure

- 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].
- 3) Click [Settings/Registration].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

4. Printer Settings Export Procedure

NOTE:

The following items to be exported are the same as the ones which are distributed by device information distribution.

- 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].
- 3) Click [Printer Settings].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

5. Paper Information Export Procedure

- 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].
- 3) Click [Paper Information].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

6. 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.

CAUTION: MEAP Backup Function Using the SST

Data that has been backed up using MEAP back of the SST before the use of this product is started must not be written back to the host machine after the use of this product is started. Similarly, even if the data that has been backed up after the use of this product is started is written back to the host machine before the use of this product is started, the machine does not operate. It is necessary to make sure that the implementation conditions for this product are compatible before and after making a backup of data, and the MEAP backup function does not permit making a backup of data in the course of installing the kit.

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.

7. 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) Click the application of which license has been installed.
- 5) Click [License Control], and then click [Disable]. Click [Yes] in a confirmation window for disabling the license.

- 6) Click [Download] under "Download/delete Disabled License File" item. 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.
- 7) 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).
- 8) 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).

8. 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/`

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 the user has changed the password, ask him/her to change the password again after the use of this product is started.

- 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].

9. Backup of User inbox and Advanced Box document data

CAUTION: Backup of "Advanced Box"

When setting a SMB server as a backup destination, Advanced Box data saved in a large capacity HDD cannot be backed up. The Advanced Box data backed up from the large capacity HDD cannot be restored to the standard HDD.

Depending on the system version of the machine, both backup and restoration might not be performed.

The procedure of backup and restoration of a box document data is described below.

Specify the backup destination of a document data:

- Backup to SMB server
Select SMB as a backup destination and specify an address, a user name, a password, and a path to the SMB server to which saved data is backed up.
- Backup to USB HDD
Select USB HDD as a backup destination and specify a path to the USB HDD folder to which saved data is backed up.

CAUTION: Data which cannot be backed up

If you back up/restore stored data without restarting the machine after changing the language displayed on the touch panel display by pressing [Settings/Registration] > [Preferences] from the control panel of the machine, the stored data may not be backed up/restored properly. For more information on the data that cannot be backed up, see Points to Note for Installation.

CAUTION:

If the language setting in the common specification settings (Settings/Registration) is set to ON, 'host address' and 'path to folder' might not be displayed correctly or cannot be referred.

CAUTION:

- Regarding the method of inputting characters, see 'Basic Operations' in the e-Manual.
- A host address can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,' 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A path to the folder can be up to 255 characters in 1 byte (127 characters in 2 bytes).
- A user name can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,' 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A password can be up to 7 to 48 characters using the 'alphanumeric character' and 'mark (1 byte)' modes.
- The voice sound symbol and the semi-voice sound symbol entered in the 'Katakana (1 byte)' mode are counted up as one 1-byte character.

[Backup method of User inbox and Advanced Box document data]

- 1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Backup].
- 2) Select 'All' or 'Changes' for the backup method.
- 3) Click [Execute].

CAUTION:

- If any of the host IP address, user name, password, or path to the folder is not correctly entered, a backup cannot be made.
- If you select to encrypt the backup data, the backup process may take longer.

[Restoring the backup data of User inbox and Advanced Box document data]

- 1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Restore].
- 2) Click [Display Backup Data].
- 3) Select the backup data to restore from the list and then click [Execute].

CAUTION:

- If you want to restore encrypted backup data, enter the same password used when backing up the data.
- Depending on the settings of the machine, the backup data may not be completely restored, or some documents may be automatically printed.
- Restoration is performed after all of the box data stored in the machine, or documents that are being sent, received, or stored, are erased.

10. Quick Menu Information Export Procedure

- 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 Basic Tools > [Quick Menu] > [Export].
- 3) If the file needs to be encrypted, enter the password after check [Encrypt file]. (The number of characters for the password must be more than 4 but less than 16.)
- 4) Click [Export].
- 5) Following the instructions on the window, specify the location to save the file.

11. User Information of the Advanced Box Export Procedure

- 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 Basic Tools > [User Access Control for Advanced Box]. The dialog box to enter the user name of administrator and password appears, enter the system administrator ID and password, and then click [Log In].
The default administrator user name and password are as follows:
User Name: Administrator
Password: password
- 3) Click [Export], and click [Start Export].
- 4) Following the instructions on the window, specify the location to save the file.

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.

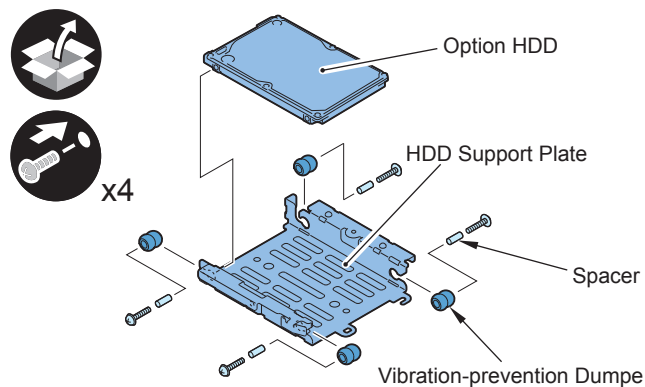
Installation Procedure

Assembling and Installing the Option HDD



1) Assemble the option HDD (250GB).

- 1 Option HDD
- 1 HDD Support Plate
- 4 Dust-prevention Dumpers
- 4 spacers
- 4 screws (binding with flat washer; M3x14)

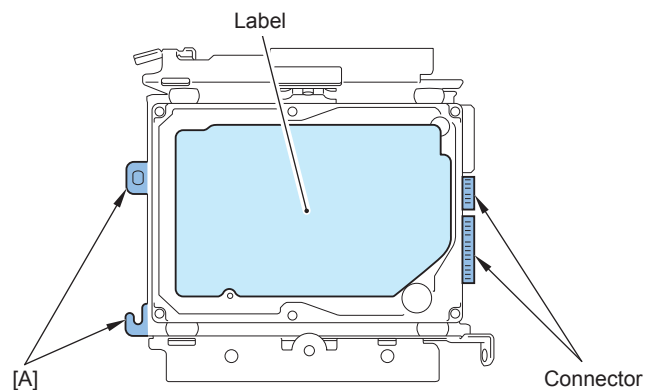


F-9-500



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.



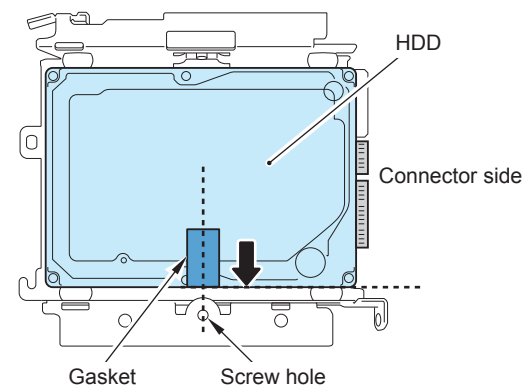
F-9-501



2) Affix the gasket to the place shown in the figure below.

CAUTION:

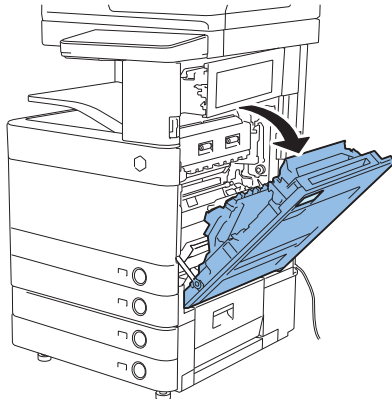
- Be sure to place the gasket in contact with the label-free metal surface of the HDD surface.



F-9-502

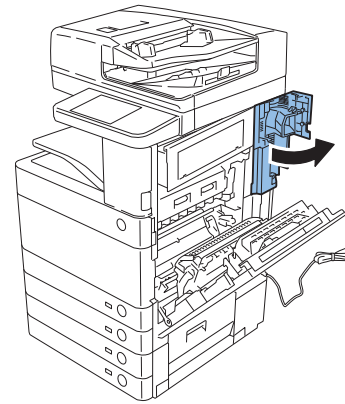
Removing and Installing the HDD Unit

- 1) Open the Right Lower Cover. (Open the Right Upper Cover simultaneously.)

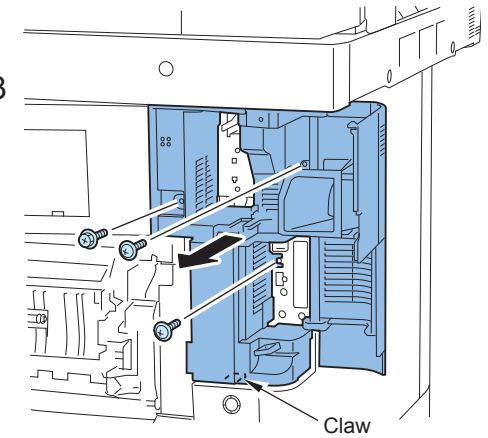


F-9-503

- 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



x3



F-9-504

- 4) When the Reader is installed, remove the Reader Power Cable.

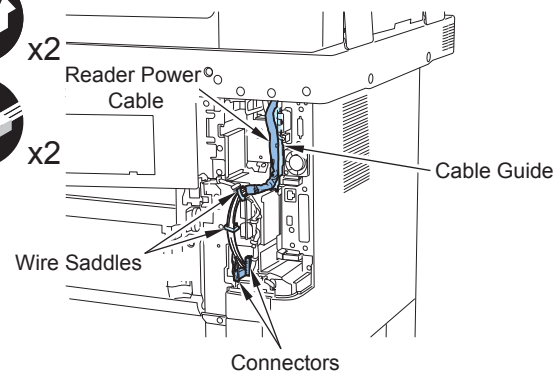
- 2 connectors
- 2 wire saddles
- 1 cable guide



x2



x2

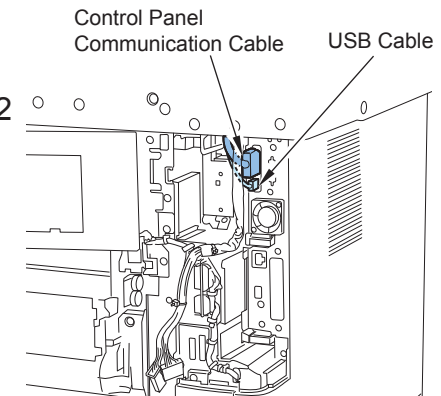


F-9-505

- 5) Remove the USB Cable and the Control Panel Communication Cable.

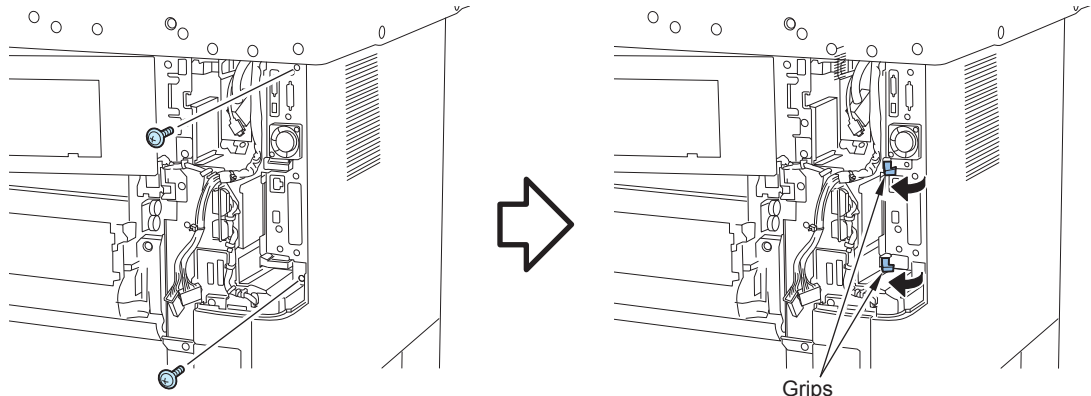


x2



F-9-506

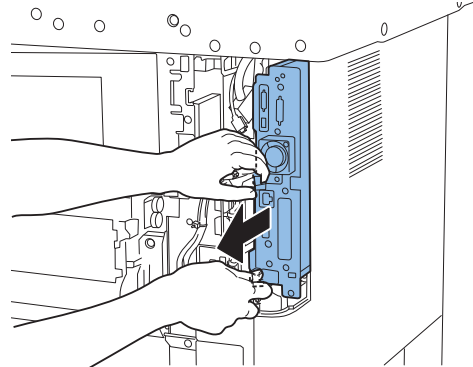
6) Remove the 2 screws, open the grip in 2 places.



Grips

F-9-507

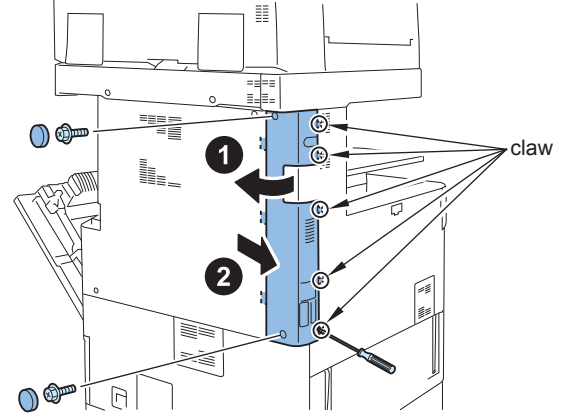
7) Hold the 2 Grips, and pull out the Main Controller PCB 1 approximately 10mm toward front.



F-9-508

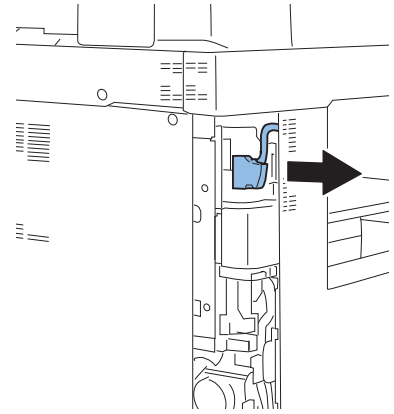
8) Remove the Left Rear Cover.

- 2 rubber caps
- 2 screws
- 5 claws



F-9-509

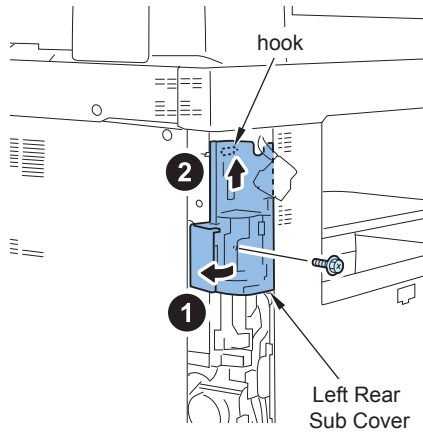
9) When the Reader is installed, remove the Reader Communication Cable.



F-9-510

10) Remove the Left Rear Sub Cover.

- 1 screw
- 1 hook



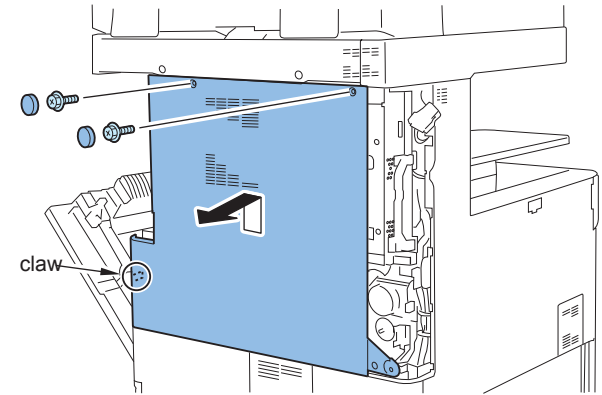
F-9-511

11) Remove the Rear Cover.

- 2 rubber caps
- 2 screws
- 1 claw



x2



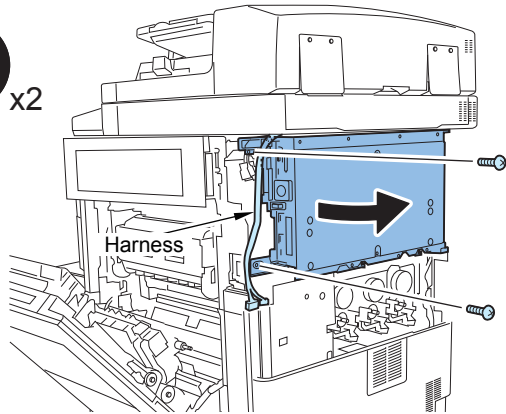
F-9-512

12) Open the Controller Box while avoiding the harness.

- 2 screws



x2

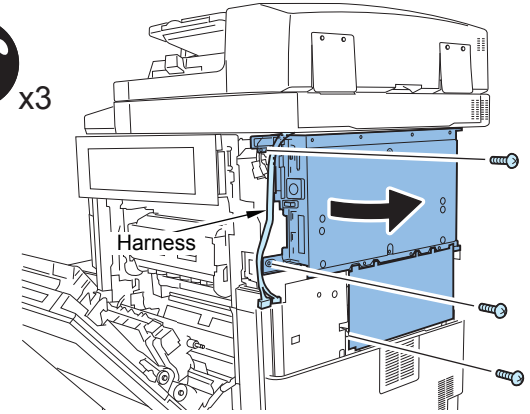


F-9-513

NOTE:
If the FAX Unit has been installed, remove the 3 screws and open the Controller Box with the FAX Unit.

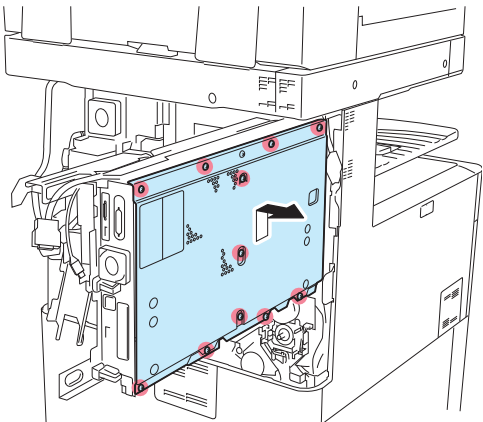


x3



F-9-514

13) Remove the Controller Cover.
 • 11 screws (loosen)

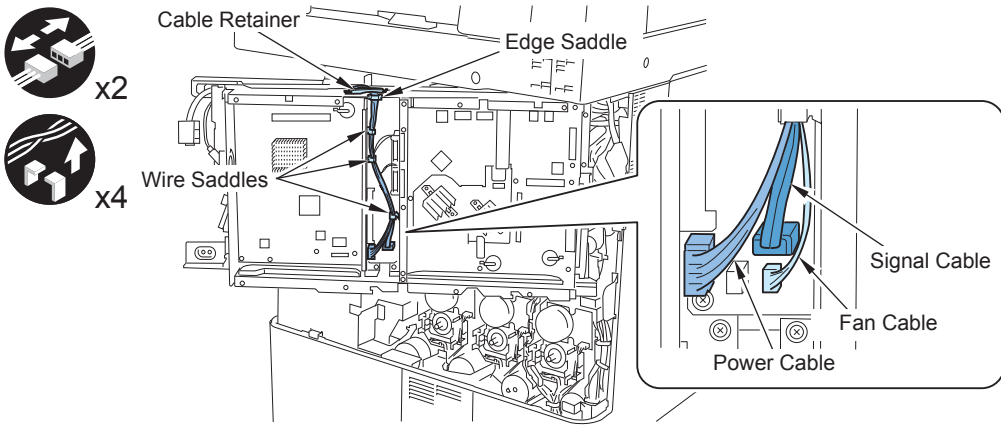


F-9-515

14) Remove the Signal Cable and the Power Cable.

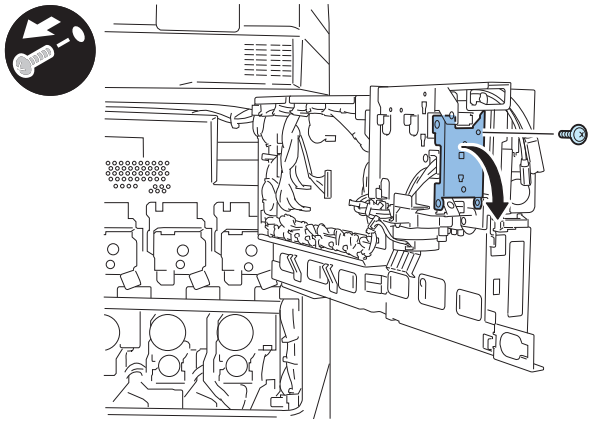
CAUTION:
 Do not remove the Fan Cable.

- 1 edge saddle
- 3 wire saddles
- 1 cable retainer



F-9-516

15) Open the HDD Lid.
 • 1 screw (Removed screw will not be used.)

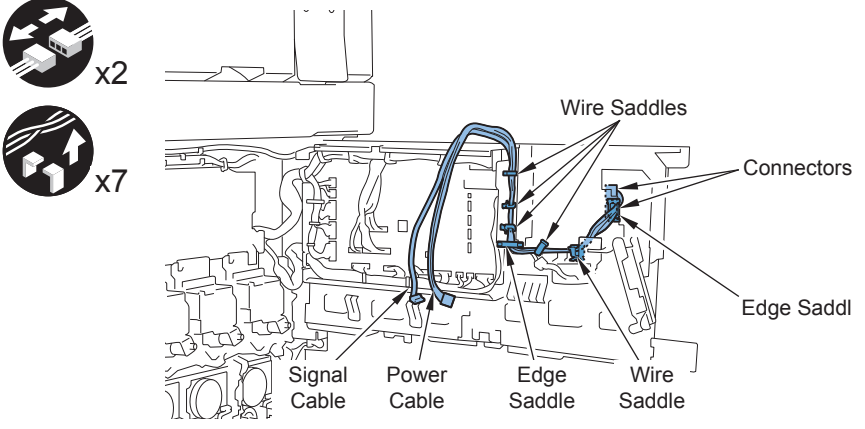


F-9-517

16) Remove the Signal Cable and the Power Cable.

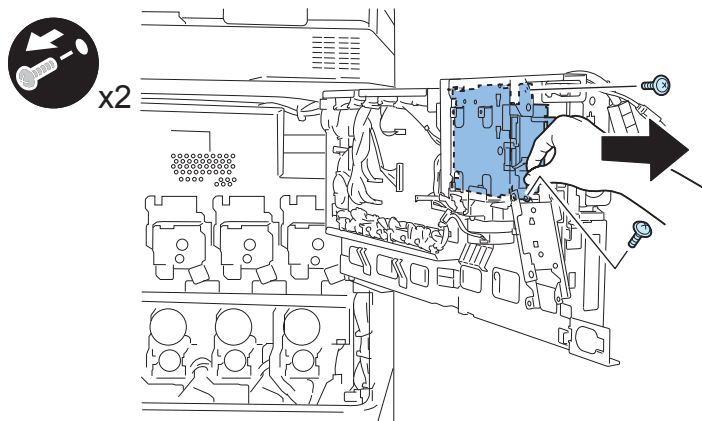
- 2 edge saddles
- 5 wire saddles
- 2 connectors

NOTE:
 Removed Signal Cable and Power Cable will not be used.



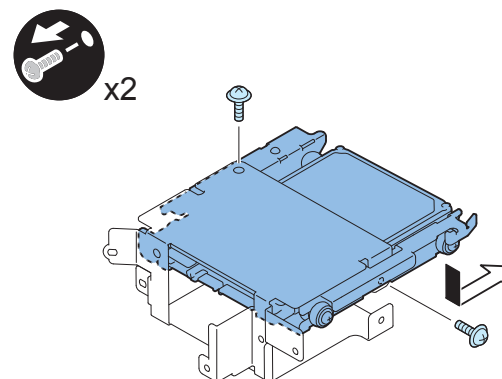
F-9-518

- 17) Remove the HDD Unit by holding it as shown in the figure below.
• 2 screws



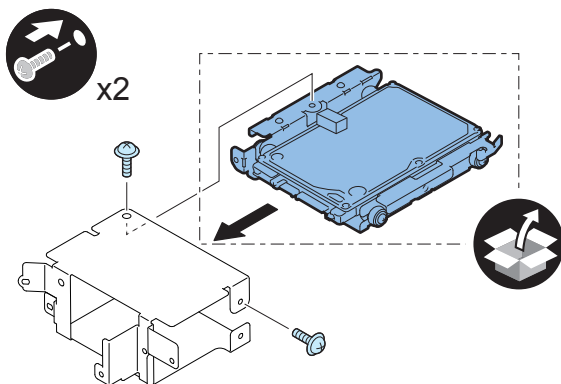
F-9-519

- 18) Remove the HDD (80GB) installed as standard from the removed HDD Unit. (Removed HDD (80GB) will not be used.)
• 2 screws (Removed screw will be used in step 19).)



F-9-520

- 19) Install the Option HDD (250GB).
• 2 screws (The screw removed in step 18).)

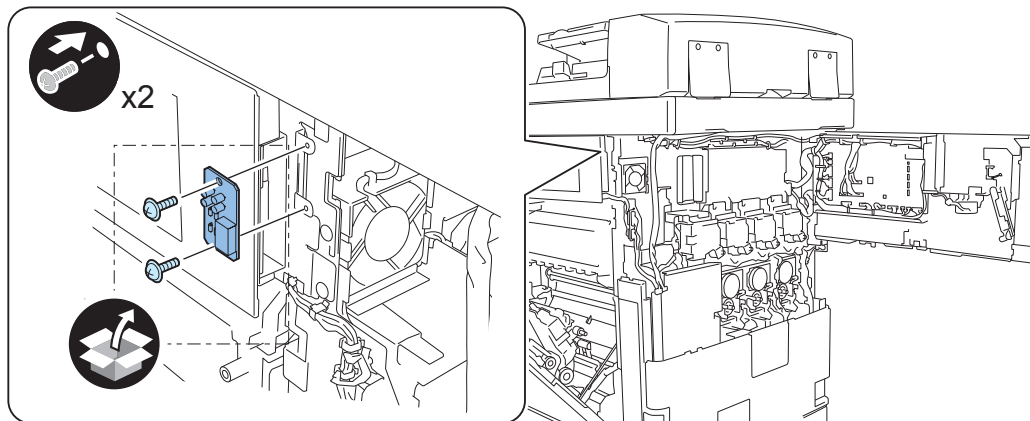


F-9-521

- 20) Install the HDD Unit to the host machine.

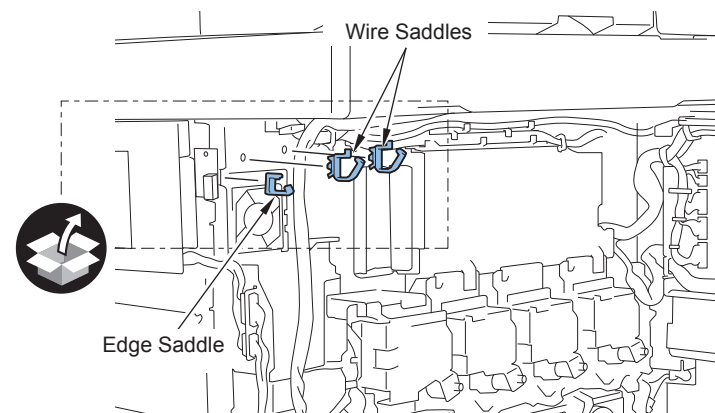
Installing the LED Board

- 1) Install the LED Board (small).
 • 2 screws (TP; M3X6)



F-9-522

- 2) Install the 2 wire saddles and the edge saddle.

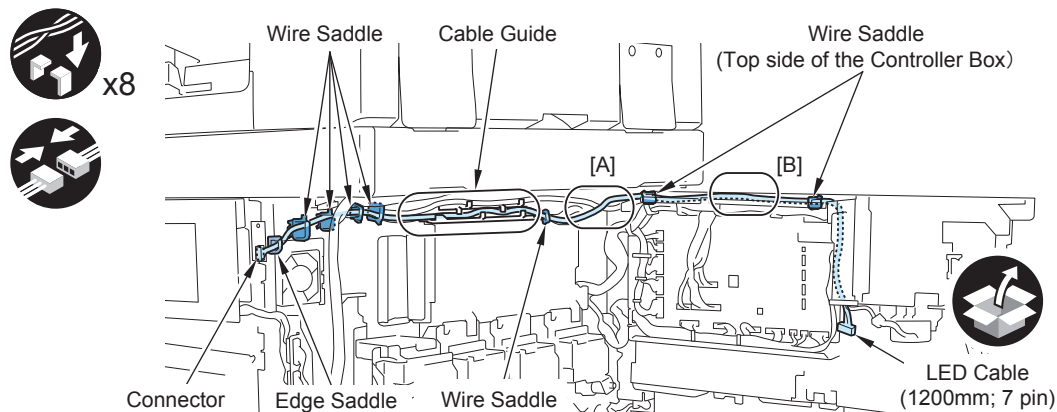


F-9-523

- 3) Install the LED Cable (1200mm; 7 pin).
 • 7 wire saddles
 • 1 edge saddle
 • 1 cable guide
 • 1 connector

CAUTION:

- Be sure to allow extra cable at [A] area in the condition that the Controller Box is fully opened.
- Be sure to tuck the [B] area of the LED cable under the other 2 cables running through the [B] area. This is to prevent the [B] area of the LED cable from being slacked off when closing the Controller Box.



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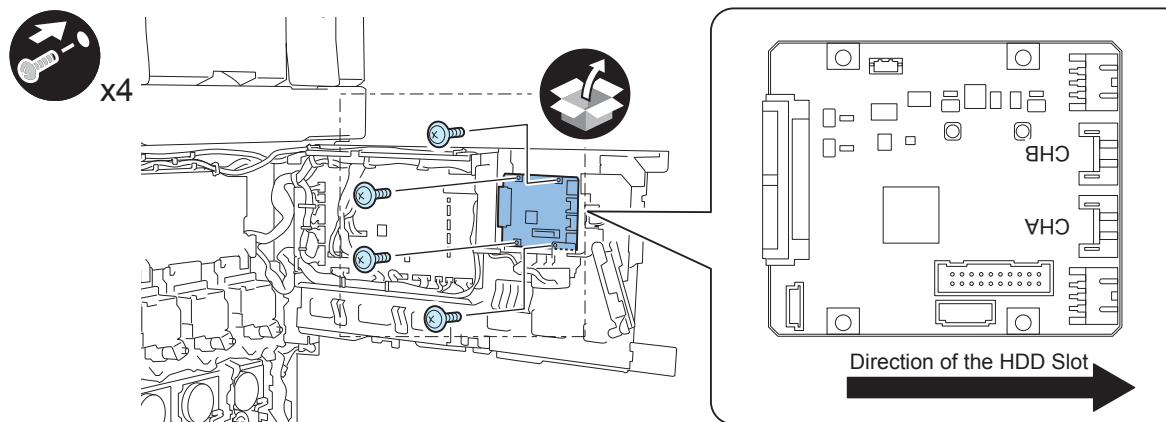
■ Installing the Encryption Board

- 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.



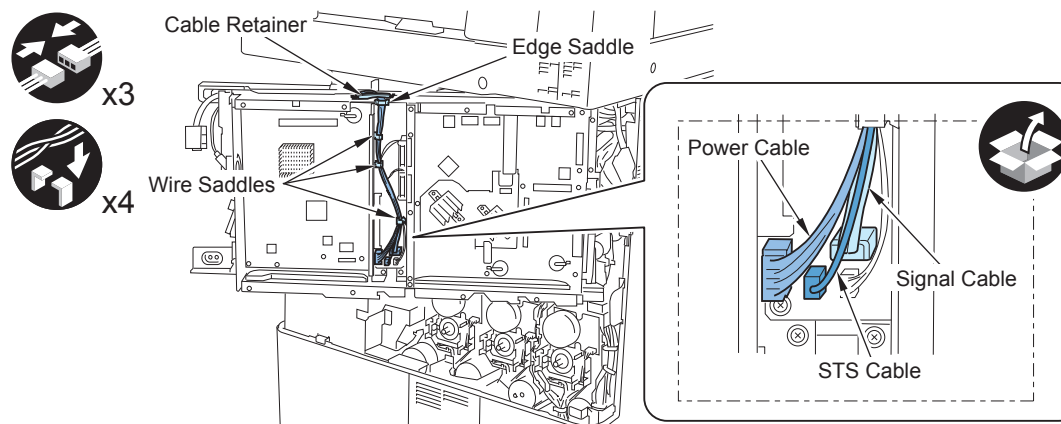
F-9-525

- 2) Install the cables to the PCB on the backside.

- Signal Cable (450mm (Red); FK2-8435)
- Power Cable (430mm; FK2-8463)
- STS Cable (550mm (Light blue); 5 Pin)

- 3) Fix the cables.

- 3 wire saddles
- 1 edge saddle
- Cable retainer



F-9-526



4) Install the Controller Cover.

CAUTION:

Be sure that the gaskets on left/right side of the Controller Cover are not protruded.

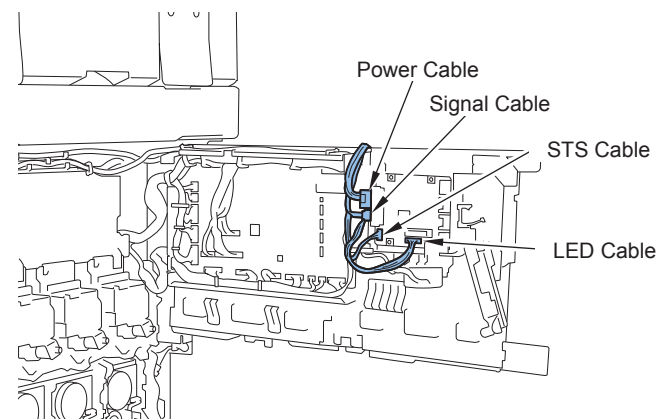


5) Install the cables to the Encryption Board.

- Signal Cable (450mm (Red); FK2-8435)
- Power Cable (430mm; FK2-8463)
- LED Cable (1200mm; 7 Pin)
- STS Cable (550mm (Light blue); 5 Pin)

**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-9-527

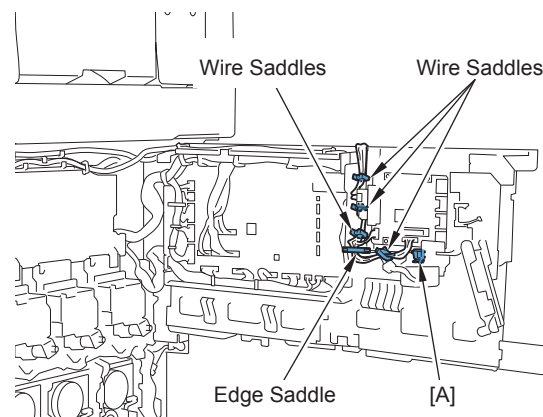


6) Fix the cables.

- 4 wire saddles
- 1 edge saddle

NOTE:

Be sure to close the unused wire saddle [A].



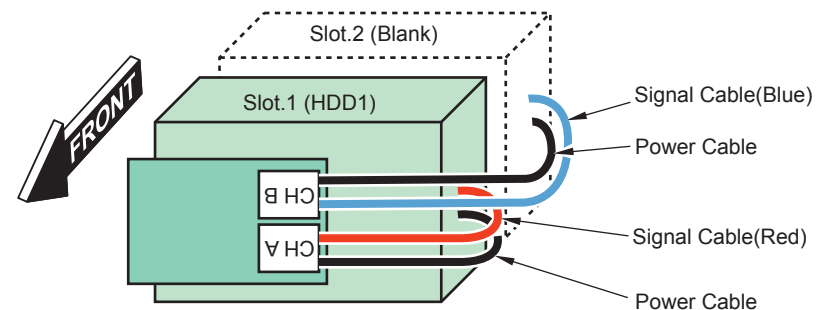
F-9-528

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.

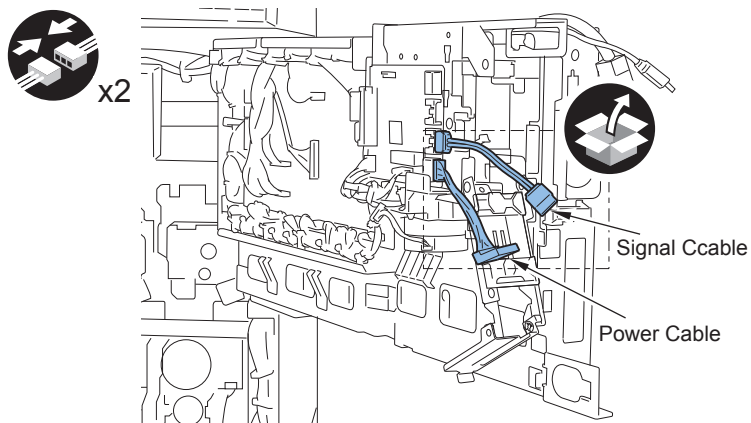
Keep Slot 2 in the condition where no HDD is installed, and only connect the cables.

- Connect Slot 1 to "CHA".
- Connect Slot 2 to "CHB".



F-9-529

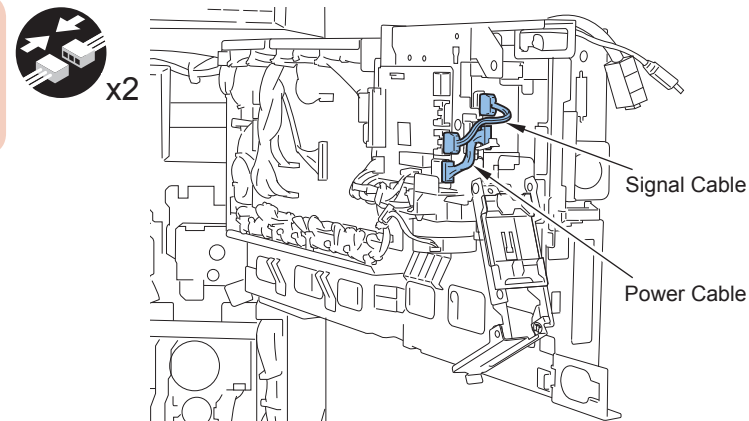
7) Install the Signal Cable (80mm (Red); FK2-8436) and the Power Cable (80mm; FK2-8461) to CHA on the Encryption Board.



F-9-530

8) Install the Signal Cable (80mm (Red); FK2-8436) and the Power Cable (80mm; FK2-8461) to the first HDD (Slot 1).

CAUTION:
Install the cables to correct positions.

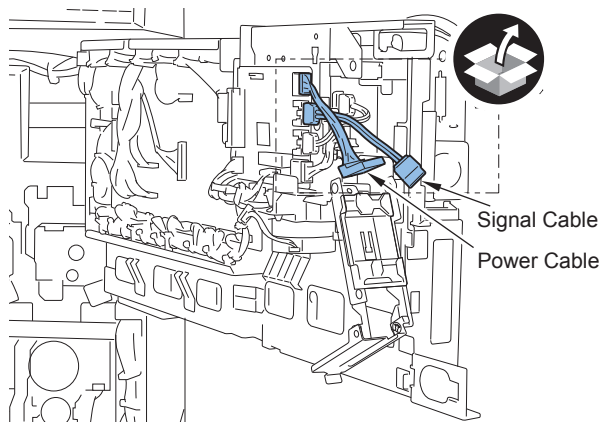


F-9-531

- 9) Install the Signal Cable (80mm (Blue); FK2-8438) and the Power Cable (80mm; FK2-8461) to CHB on the Encryption Board.



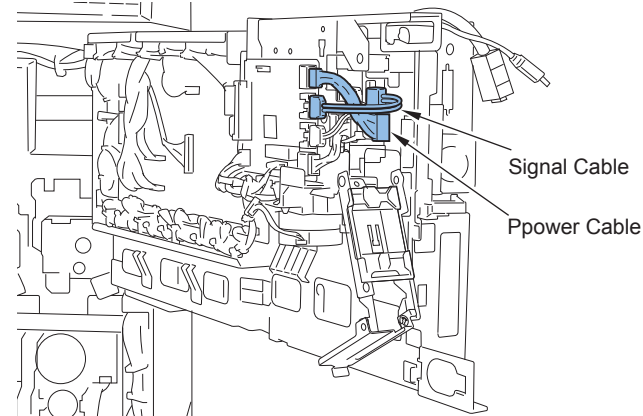
x2



Signal Cable
Power Cable

F-9-532

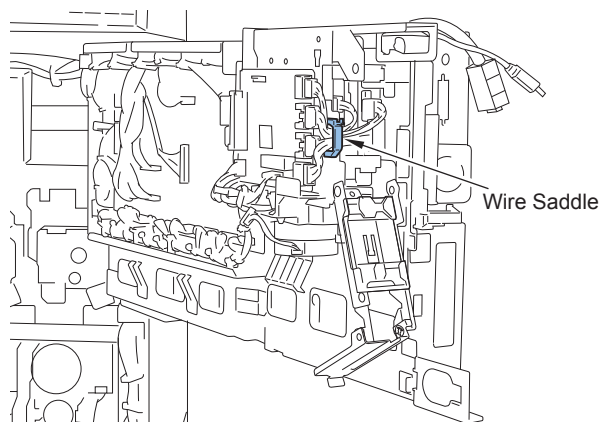
- 10) Place the Signal Cable (80mm (Blue); FK2-8438) and the Power Cable (80mm; FK2-8461) to the empty space of the second HDD (Slot 2).



Signal Cable
Ppower Cable

F-9-533

- 11) Fix the cables with the wire saddle.

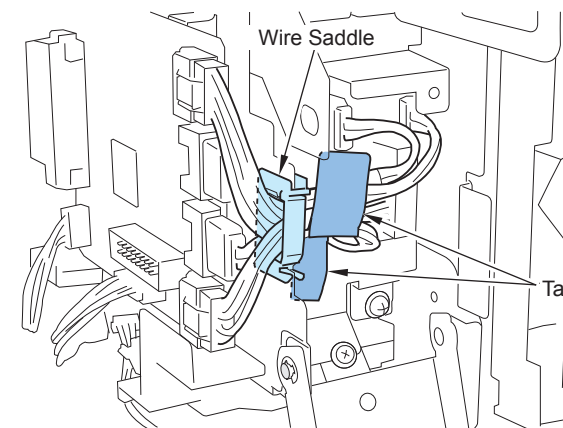


Wire Saddle

F-9-534

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.



Wire Saddle

Tag

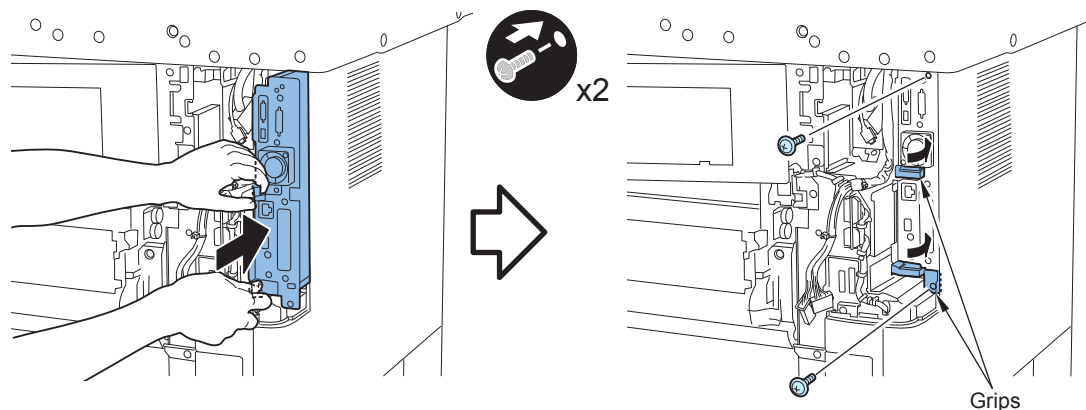
F-9-535

- 12) Close the HDD Lid.
13) Place the Controller Box to the original position.
14) Install the removed cover and the cable.
- Rear Cover
 - Left Rear Sub Cover
 - Reader Communication Cable (when reader is installed)
 - Left Rear Cover
 - USB Cable and Control Panel Communication Cable

- 15) 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.

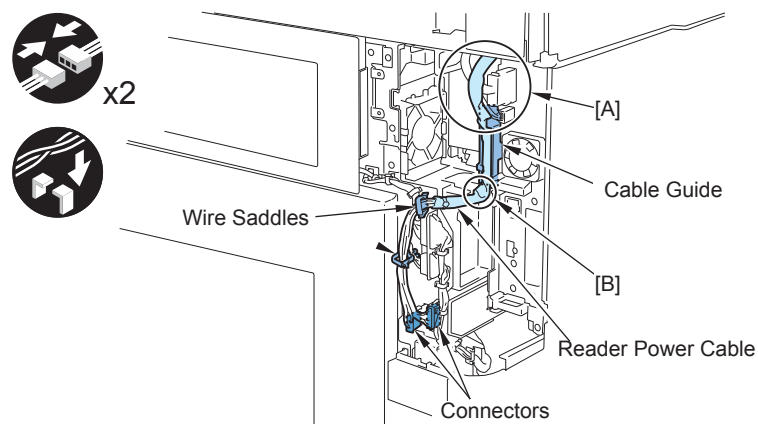


F-9-536

- 16) If Reader is installed, install the Reader Power Cable.

NOTE:

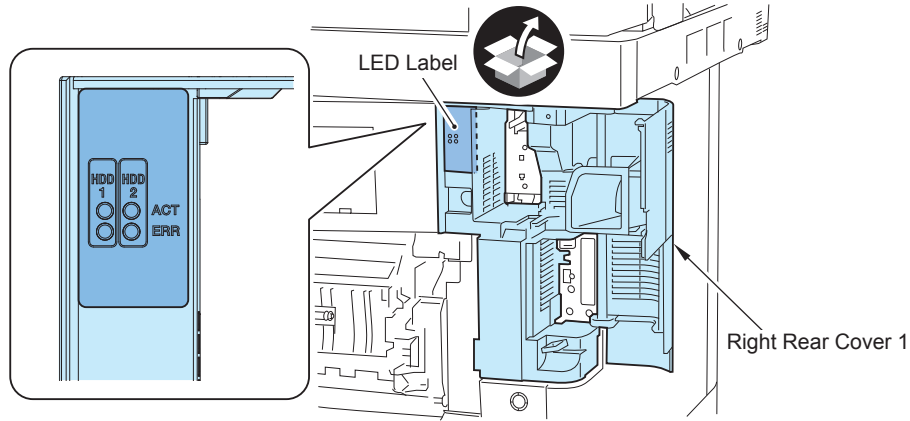
Handle the Reader Power Cable from the connector side and make a slack at A part. Bend the Reader Power Cable at a right angle on B part.



F-9-537

- 17) Install the Right Rear Cover 1.

- 18) Affix the LED label so that it fits the edge of the Right Rear Cover 1.



F-9-538

- 19) Close the Right Rear Cover 1, Right Lower Cover, and Right Upper Cover.

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 CONNECT.
- 2) From the list of machine series, select the appropriate model.
- 3) Select 'single', and click START.
- 4) Execute HDD format.
- 5) After 5 sec from when the power of the host machine is turned OFF, restart the host machine in download mode of safe mode.
- 6) When "download mode" is displayed on the control panel, click simple mode start.
- 7) Click start to execute download.
- 8) Follow the instruction on the screen and when download is complete, click OK.
- 9) Exit SST.
- 10) Check the versions of MN-CONT and LANG etc 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] Option HDD (80GB) + Removable HDD Kit + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit

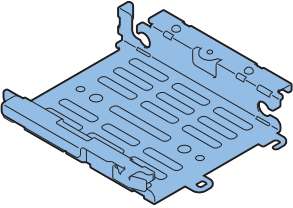
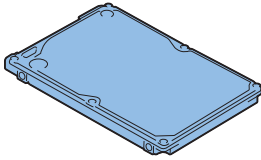
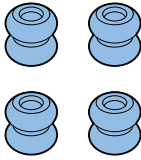
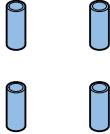
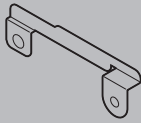
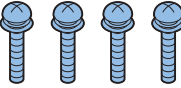


Points to Note when HDD Data Encryption & Mirroring Kit has been Installed

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

The parts with a gray in the contents list will not be used.

Option HDD (80GB)


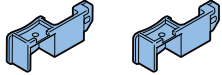
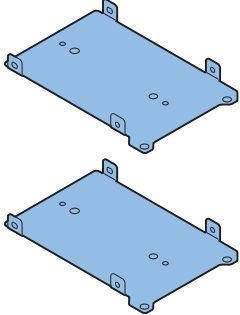
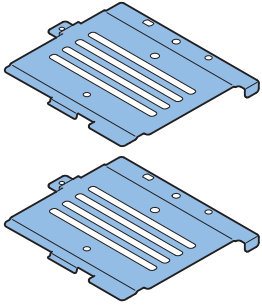
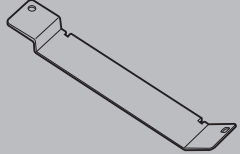
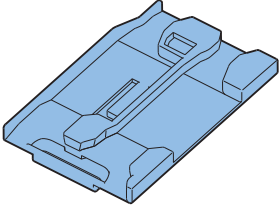
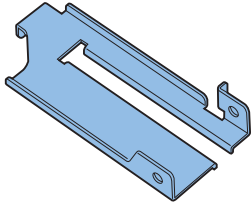

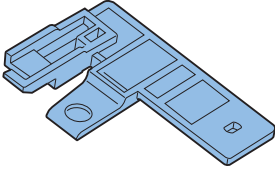
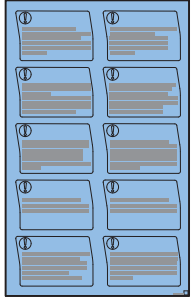
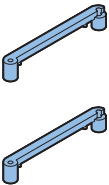
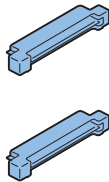
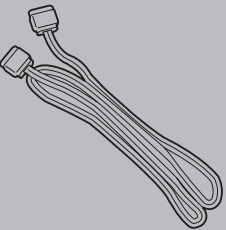
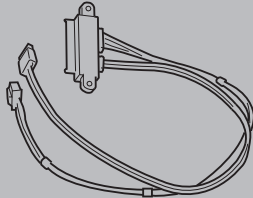
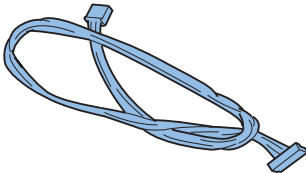
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<input type="checkbox"/> [6] Screw (W sems; M3x14) x 4 	<input type="checkbox"/> [7] Screw (TP; M3x6) x 2 	<input type="checkbox"/> [8] Gasket x 1 		

<CD/GUIDS>

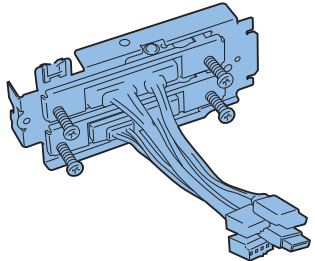
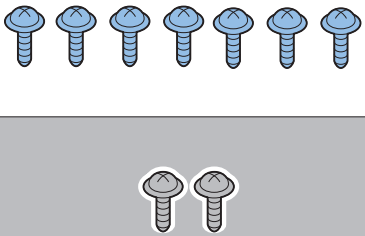
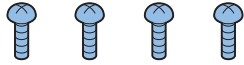
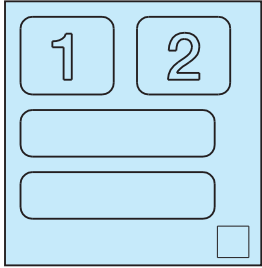
- Notice for FCC/IC
- China RoHS Notice 3

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Removable HDD Kit

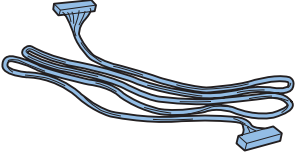
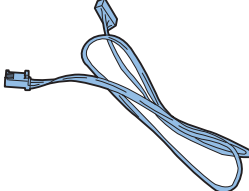
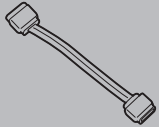
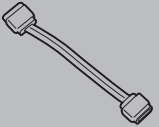
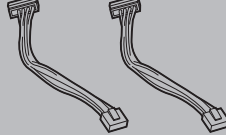
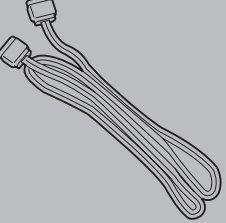
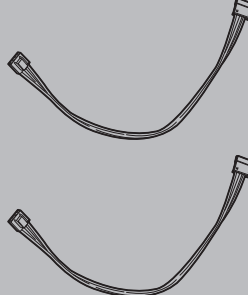
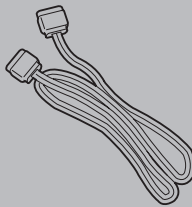
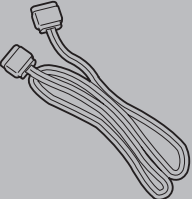

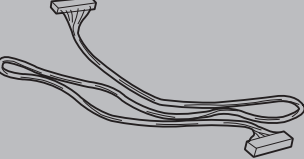
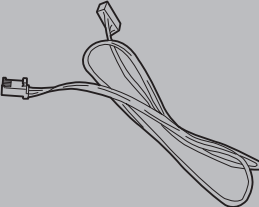
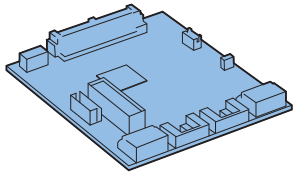
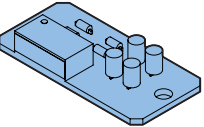
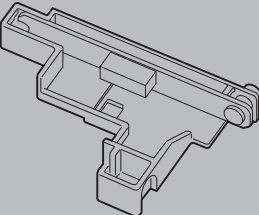
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<input type="checkbox"/> [6] HDD Door Guide x 1 	<input type="checkbox"/> [7] HDD Lock Plate x 1 	<input type="checkbox"/> [8] HDD Lock Plate Shaft x 2 	<input type="checkbox"/> [9] HDD Lid Retainer x 1 	<input type="checkbox"/> [10] Shutdown Caution Label x 1 
<input type="checkbox"/> [11] Connector Fixing Block x 2 	<input type="checkbox"/> [12] Conversion Connector x 2 	<input type="checkbox"/> [13] Signal Cable (660mm ; Red) x 1 	<input type="checkbox"/> [14] IV Cable (FK2-8453) x 1 	<input type="checkbox"/> [15] Power Cable (650mm ; FK2-8464) x 1 

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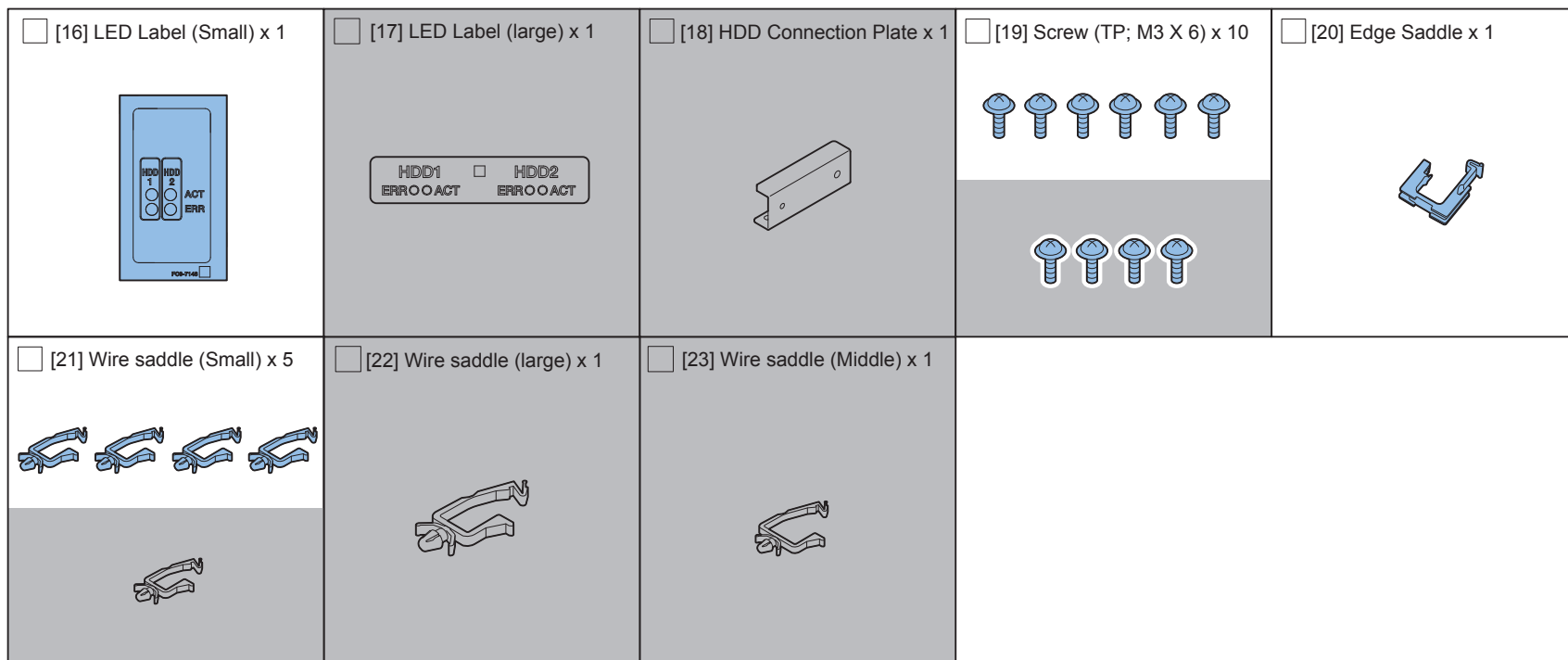
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F-9-541

HDD Mirroring Kit HDD Data Encryption & Mirroring Kit

<input type="checkbox"/> [1] LED Cable (1200mm; 7 pin) x 1 	<input type="checkbox"/> [2] STS Cable (550mm (Light blue); 5 pin) x 1 	<input type="checkbox"/> [3] Signal Cable (80mm (Red); FK2-8436) x 1 	<input type="checkbox"/> [4] Signal Cable (80mm (Blue); FK2-8438) x 1 	<input type="checkbox"/> [5] Power Cable (80mm; FK2-8461) x 2 
<input type="checkbox"/> [6] Signal Cable (450mm (Red); FK2-8435) x 1 	<input type="checkbox"/> [7] Power Cable (430mm; FK2-8463) x 2 	<input type="checkbox"/> [8] Signal Cable (340mm (Red); FK2-8434) x 1 	<input type="checkbox"/> [9] Signal Cable (370mm (Blue); FK2-8441) x 1 	<input type="checkbox"/> [10] Power Cable (320mm; FK2-8467) x 1 
<input type="checkbox"/> [11] LED Cable (290mm; 7 pin) x 1 	<input type="checkbox"/> [12] STS Cable (420mm (Light blue); 5 pin) x 1 	<input type="checkbox"/> [13] Mirroring Board or Encryption Board x 1 	<input type="checkbox"/> [14] LED Board (Small) x 1 	<input type="checkbox"/> [15] LED Board (large) x 1 

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< 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 Notice
- Installation Procedure
- Noticd for FCC/IC

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
Send Function Favorite Settings	Yes
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

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*1; Can only be backed up using the Remote UI.

*2; Depending on the MEAP application.

*3: Only the following data saved in Mail Box/Advanced Box 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
- Advanced Box URI Transmission Settings

*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 to be Backed Up

Data to be backed up	Reference
Address Book	For information on exporting data, see the "e-Manual > Remote UI".
Settings/Registration settings	
Device Settings (Forwarding Settings, Address List, Favorite Settings)	
Printer Settings	
Paper Information	
Favorite Settings for Web browser	See the "e-Manual > Web Access". (You can select this if web browser (Option) is installed.)
License files for MEAP applications	For information on downloading license files, see the "e-Manual > MEAP".
Data saved by MEAP applications	Data saved by MEAP applications may be able to be backed up, depending on the MEAP application. See the documentation included with the MEAP application.
Data stored in Mail Boxes or the Advanced Box	See the "e-Manual > Remote UI" to "Setting the Backup Location for Stored Data".
Image forms stored in the Superimpose Image	
SSO-H (Single Sign-On H) user authentication information	See the "e-Manual > MEAP".
Quick Menu Information	See the "e-Manual > Quick Menu".
User Information of the Advanced Box	See the "e-Manual > Security".

T-9-20

CAUTION: Work to Perform After Installing the Kit

- When you start using this product, passwords set for Mail Boxes 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 this product has been installed. These data items are property of the user, and the restoration work must be performed by the system administrator.

The method of restoration is described in the Users Guide. See Table (Data to be backed up) in Points to Note About Installation of the Installation Procedure.

1. Procedure to make a backup of Address Book

- 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].
- 3) Click [Address List].
- 4) Click [Export].
- 5) Select the save format for Address list, and click [Start Export].
- 6) Following the instructions on the window, specify the location to save the file. Be sure to set a distinctive name to an export file so that you can recognize it when importing it.

NOTE:

Exporting the device settings will export all contents of the address list. In other words, there is no need for a backup unless it needs to be done individually.

2. Device Settings Export Procedure

- 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].
- 3) Click [Device Settings (Forwarding Settings, Address List, Favorite Settings)].
- 4) Click [Export], and then click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

3. Settings/Registration Export Procedure

- 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].
- 3) Click [Settings/Registration].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

4. Printer Settings Export Procedure

NOTE:

The following items to be exported are the same as the ones which are distributed by device information distribution.

- 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].
- 3) Click [Printer Settings].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

5. Paper Information Export Procedure

- 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].
- 3) Click [Paper Information].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

6. 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.

CAUTION: MEAP Backup Function Using the SST

Data that has been backed up using MEAP back of the SST before the use of this product is started must not be written back to the host machine after the use of this product is started. Similarly, even if the data that has been backed up after the use of this product is started is written back to the host machine before the use of this product is started, the machine does not operate. It is necessary to make sure that the implementation conditions for this product are compatible before and after making a backup of data, and the MEAP backup function does not permit making a backup of data in the course of installing the kit.

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.

7. 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) Click the application of which license has been installed.
- 5) Click [License Control], and then click [Disable]. Click [Yes] in a confirmation window for disabling the license.

- 6) Click [Download] under "Download/delete Disabled License File" item. 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.
- 7) 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).
- 8) 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).

8. 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/`

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 the user has changed the password, ask him/her to change the password again after the use of this product is started.

- 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].

9. Backup of User inbox and Advanced Box document data

CAUTION: Backup of "Advanced Box"

When setting a SMB server as a backup destination, Advanced Box data saved in a large capacity HDD cannot be backed up. The Advanced Box data backed up from the large capacity HDD cannot be restored to the standard HDD.

Depending on the system version of the machine, both backup and restoration might not be performed.

The procedure of backup and restoration of a box document data is described below.

Specify the backup destination of a document data:

- Backup to SMB server
Select SMB as a backup destination and specify an address, a user name, a password, and a path to the SMB server to which saved data is backed up.
- Backup to USB HDD
Select USB HDD as a backup destination and specify a path to the USB HDD folder to which saved data is backed up.

CAUTION: Data which cannot be backed up

If you back up/restore stored data without restarting the machine after changing the language displayed on the touch panel display by pressing [Settings/Registration] > [Preferences] from the control panel of the machine, the stored data may not be backed up/restored properly. For more information on the data that cannot be backed up, see Points to Note for Installation.

CAUTION:

If the language setting in the common specification settings (Settings/Registration) is set to ON, 'host address' and 'path to folder' might not be displayed correctly or cannot be referred.

CAUTION:

- Regarding the method of inputting characters, see 'Basic Operations' in the e-Manual.
- A host address can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,' 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A path to the folder can be up to 255 characters in 1 byte (127 characters in 2 bytes).
- A user name can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,' 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A password can be up to 7 to 48 characters using the 'alphanumeric character' and 'mark (1 byte)' modes.
- The voice sound symbol and the semi-voice sound symbol entered in the 'Katakana (1 byte)' mode are counted up as one 1-byte character.

[\[Backup method of User inbox and Advanced Box document data\]](#)

- 1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Backup].
- 2) Select 'All' or 'Changes' for the backup method.
- 3) Click [Execute].

CAUTION:

- If any of the host IP address, user name, password, or path to the folder is not correctly entered, a backup cannot be made.
- If you select to encrypt the backup data, the backup process may take longer.

[\[Restoring the backup data of User inbox and Advanced Box document data\]](#)

- 1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Restore].
- 2) Click [Display Backup Data].
- 3) Select the backup data to restore from the list and then click [Execute].

CAUTION:

- If you want to restore encrypted backup data, enter the same password used when backing up the data.
- Depending on the settings of the machine, the backup data may not be completely restored, or some documents may be automatically printed.
- Restoration is performed after all of the box data stored in the machine, or documents that are being sent, received, or stored, are erased.

10. Quick Menu Information Export Procedure

- 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 Basic Tools > [Quick Menu] > [Export].
- 3) If the file needs to be encrypted, enter the password after check [Encrypt file]. (The number of characters for the password must be more than 4 but less than 16.)
- 4) Click [Export].
- 5) Following the instructions on the window, specify the location to save the file.

11. User Information of the Advanced Box Export Procedure

- 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 Basic Tools > [User Access Control for Advanced Box]. The dialog box to enter the user name of administrator and password appears, enter the system administrator ID and password, and then click [Log In].
The default administrator user name and password are as follows:
User Name: Administrator
Password: password
- 3) Click [Export], and click [Start Export].
- 4) Following the instructions on the window, specify the location to save the file.

 **Check Items when Turning OFF the Main Power**

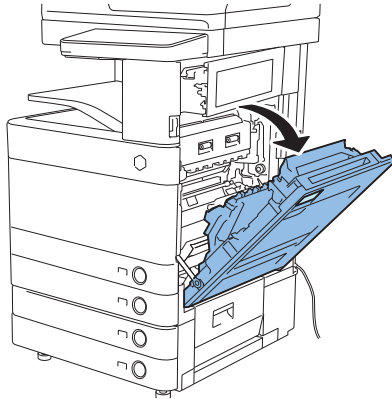
Check that the main power switch is OFF.

- 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

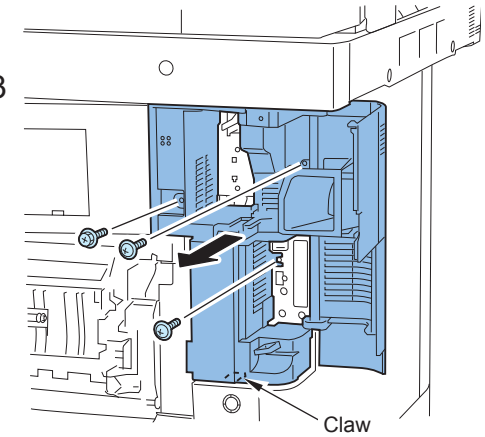
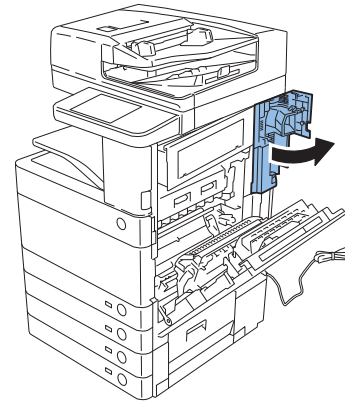
Removing the HDD Unit, Signal Cable and Power Supply Cable

- 1) Open the Right Lower Cover. (Open the Right Upper Cover simultaneously.)



F-9-544

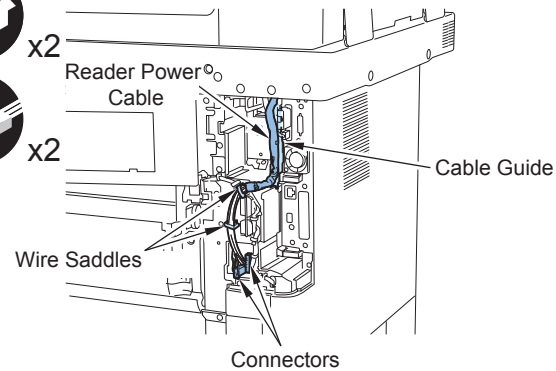
- 2) Open the Right Rear Cover 1.
3) Remove the Right Rear Cover 1.
- 1 screw (RS tight; M4)
 - 2 screws (TP; M3)
 - 1 claw



F-9-545

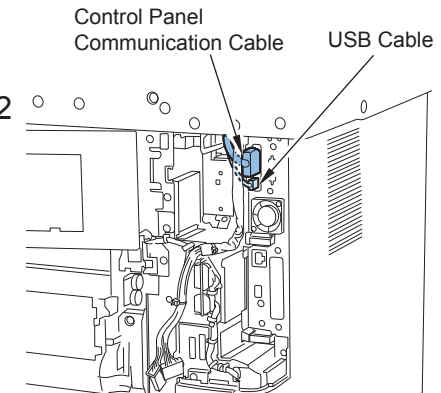
- 4) When the Reader is installed, remove the Reader Power Cable.

- 2 connectors
- 2 wire saddles
- 1 cable guide



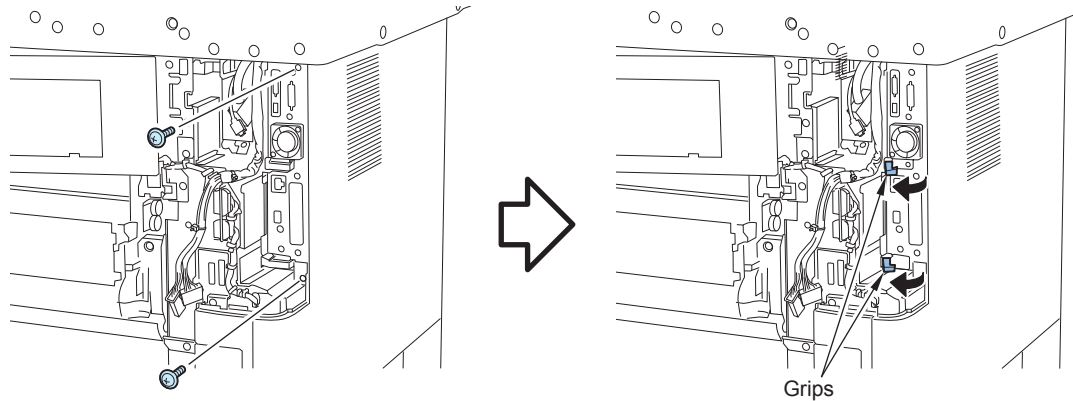
F-9-546

- 5) Remove the USB Cable and the Control Panel Communication Cable.



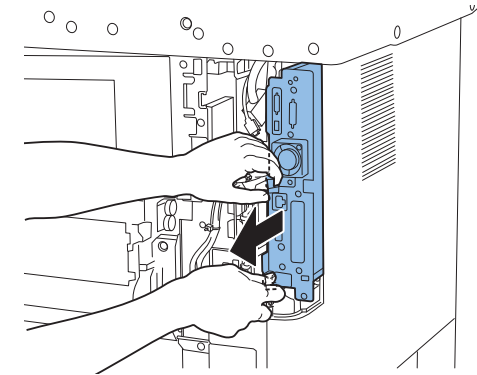
F-9-547

6) Remove the 2 screws, open the grip in 2 places.



F-9-548

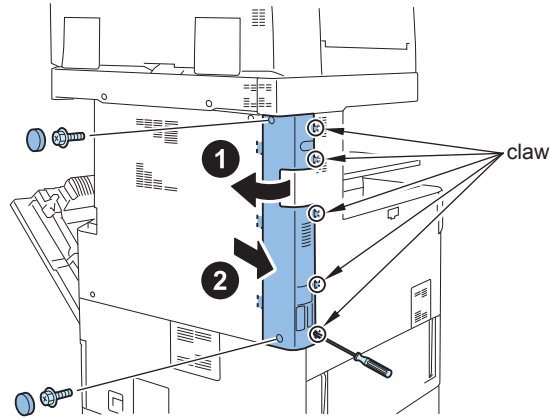
7) Hold the 2 Grips, and pull out the Main Controller PCB 1 approximately 10mm toward front.



F-9-549

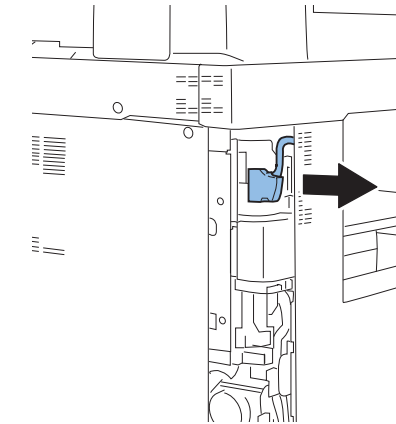
8) Remove the Left Rear Cover.

- 2 rubber caps
- 2 screws
- 5 claws



F-9-550

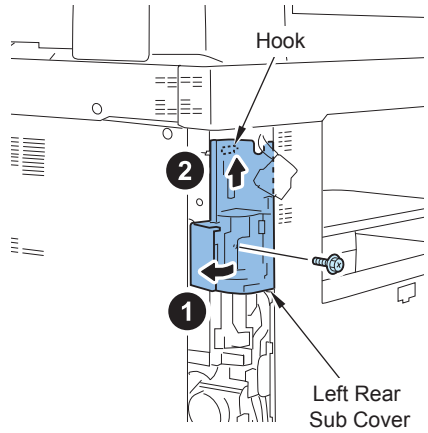
9) When the Reader is installed, remove the Reader Communication Cable.



F-9-551

10) Remove the Left Rear Sub Cover.

- 1 screw
- 1 hook



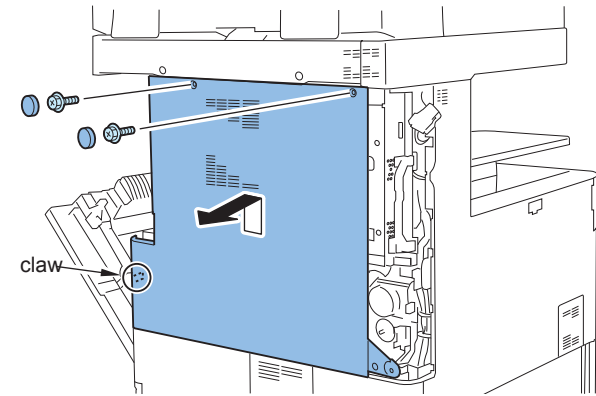
F-9-552

11) Remove the Rear Cover.

- 2 rubber caps
- 2 screws
- 1 claw



x2



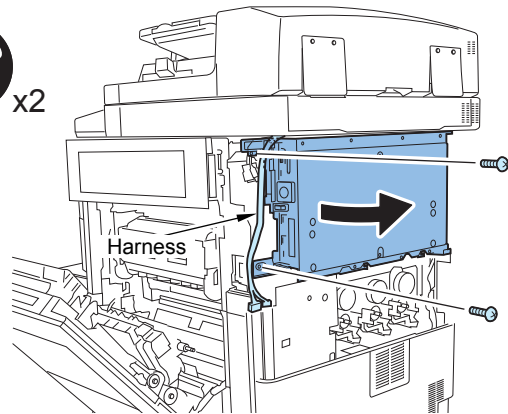
F-9-553

12) Open the Controller Box while avoiding the harness.

- 2 screws



x2

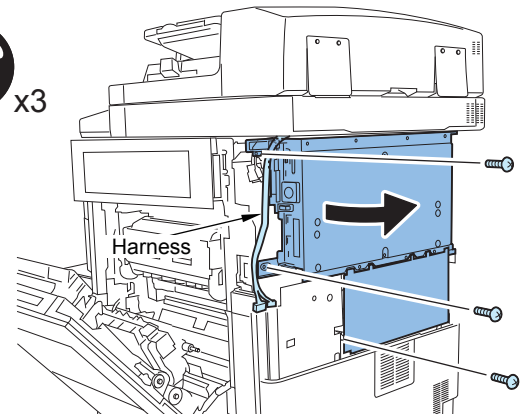


F-9-554

NOTE:
If the FAX Unit has been installed, remove the 3 screws and open the Controller Box with the FAX Unit.

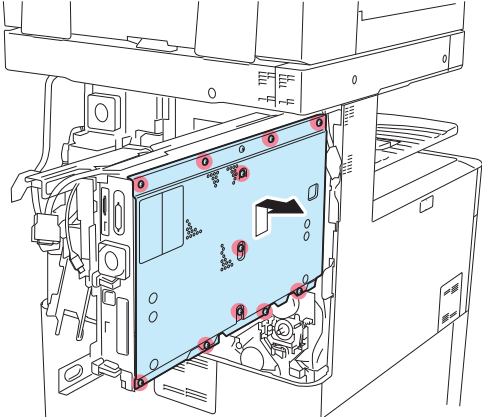


x3



F-9-555

13) Remove the Controller Cover.
 • 11 screws (loosen)

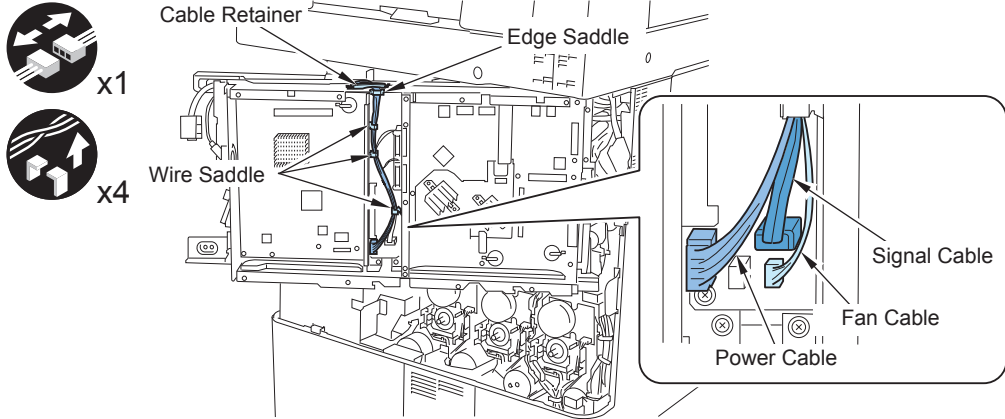


F-9-556

14) Remove the Power Cable.

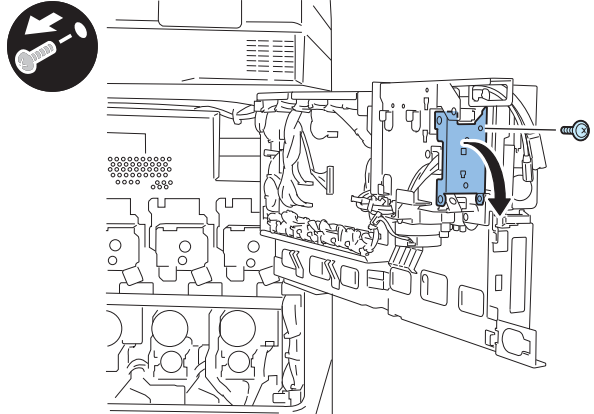
CAUTION:
 Do not remove the Signal Cable and the Fan Cable.

- 1 edge saddle
- 3 wire saddles
- 1 cable retainer



F-9-557

15) Open the HDD Lid.
 • 1 screw (Removed screw will not be used.)

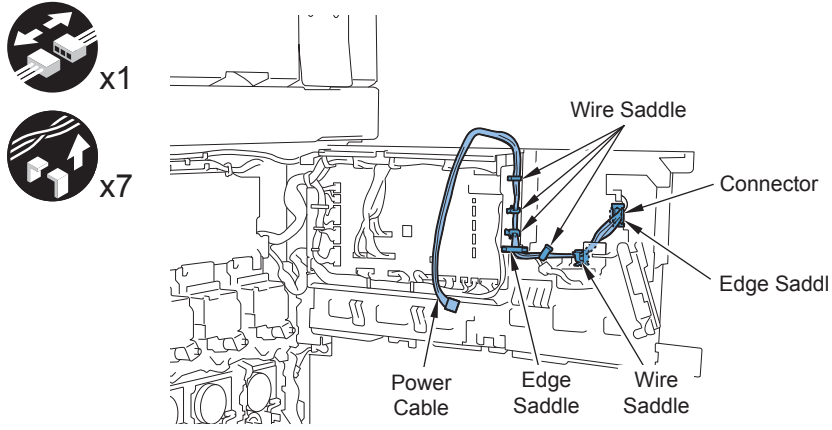


F-9-558

16) Remove the Power Cable.

- 2 edge saddles
- 5 wire saddles
- 1 connectors

NOTE:
 Removed Power Cable will not be used.

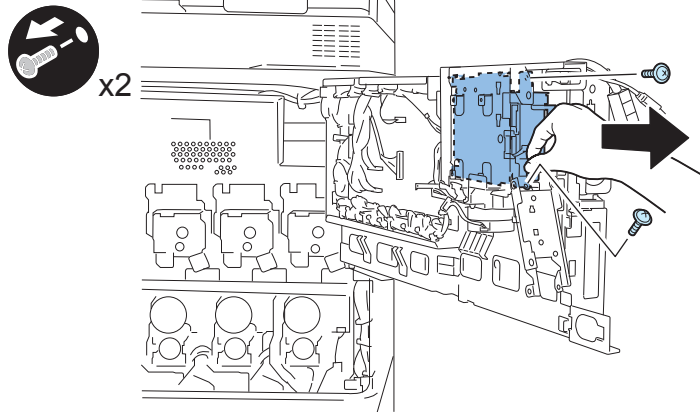


F-9-559



17) Remove the HDD Unit by holding it as shown in the figure below.

- 2 screws (Removed screw will not be used.)

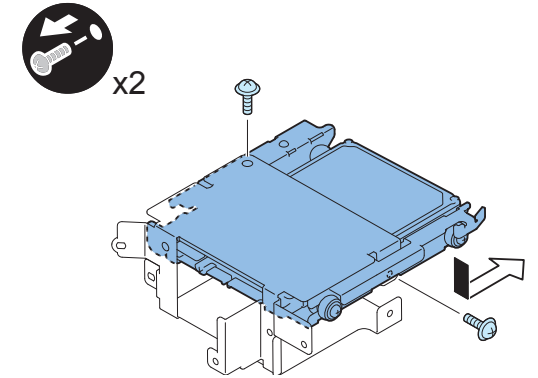


F-9-560



18) Remove the HDD (80GB) installed as standard from the removed HDD Unit. (The removed HDD Fixation Plate and the screws will not be used. The HDD (80GB) installed as standard will be used in "Disassembling/Assembling and Installing the HDD Removed from the Host Machine (First HDD)" step1.)

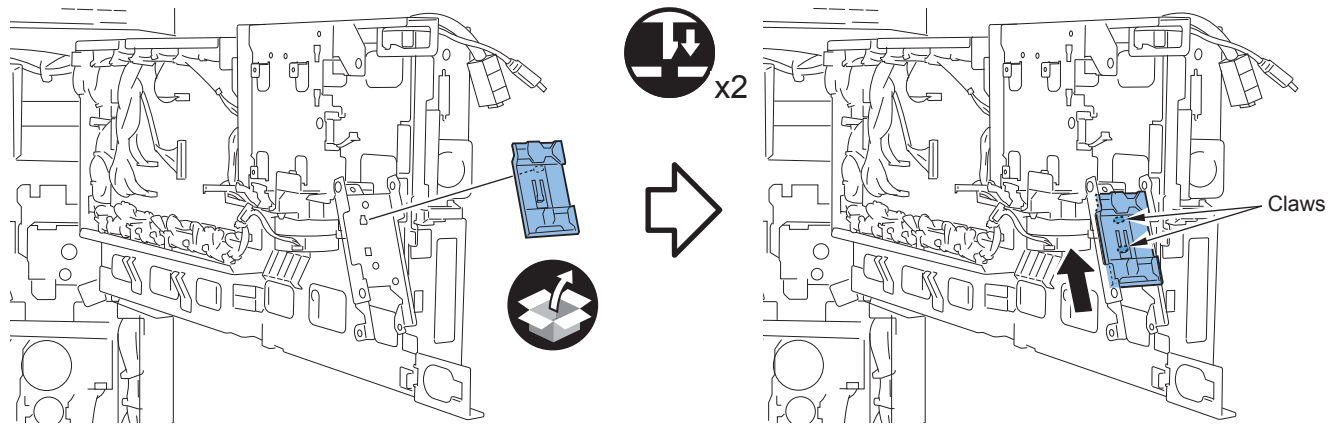
- 2 screws



F-9-561

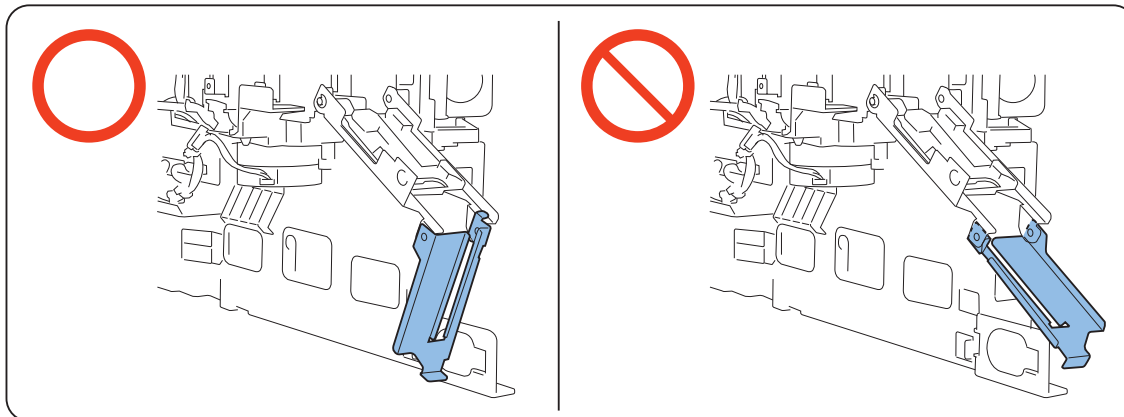
■ Installing the Removable HDD Kit

-
- 1) Install the HDD Door Guide.
- 2 claws



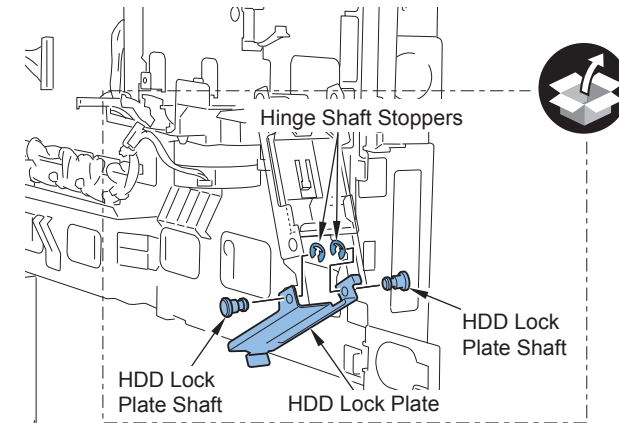
F-9-562

-
- CAUTION:**
Be careful of the installation direction of HDD Lock Plate.



F-9-563

-
- 2) Install the HDD Lock Plate.
- 2 HDD Lock Plate Shafts
 - 2 Hinge Shaft Stoppers



F-9-564

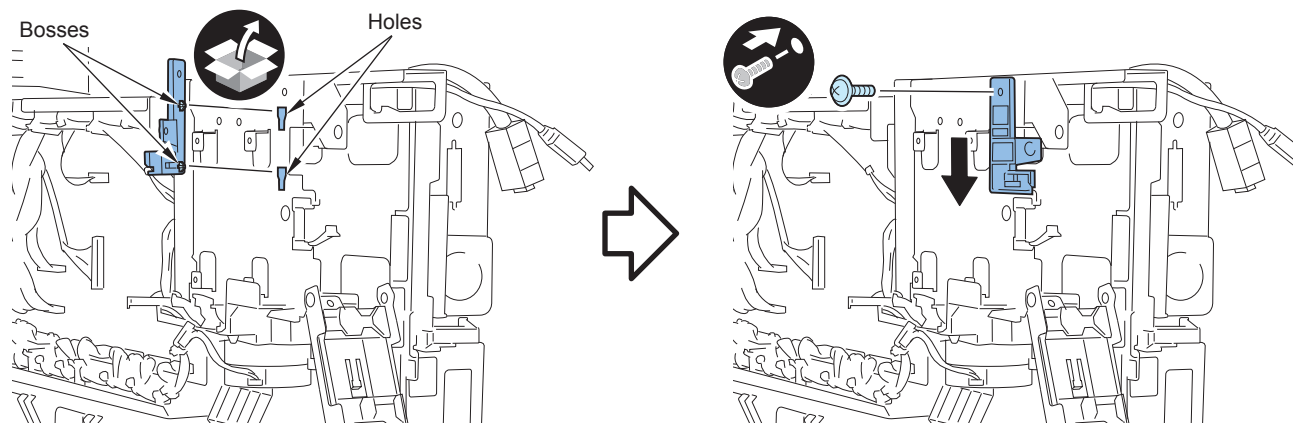


3) Adjust the 2 bosses to the hole and install the HDD Lid Retainer.

- 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.

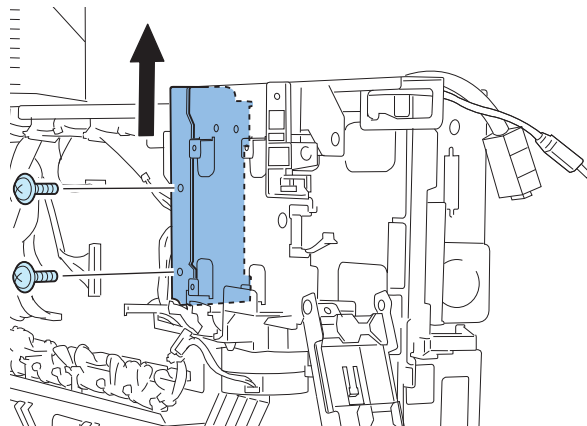


F-9-565



4) Remove the HDD Rear Cover. (Removed HDD Rear Cover will not be used.)

- 2 screws (Removed screw will be used in step 5)

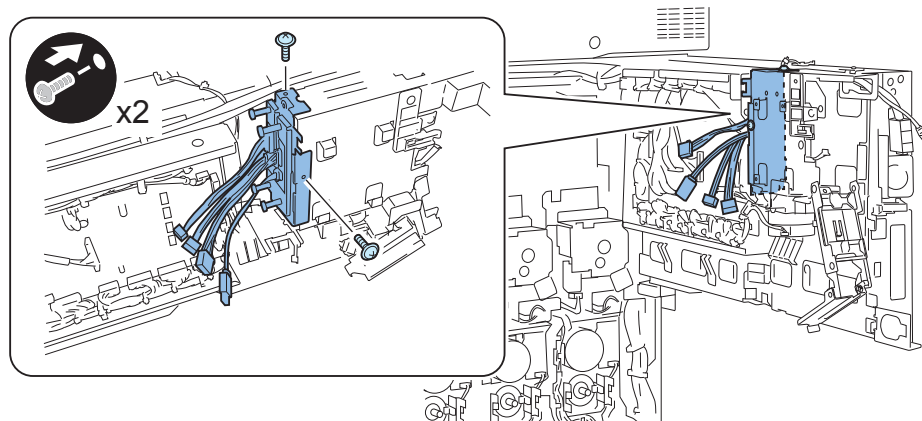


F-9-566



5) Install the HDD Drawer Unit.

- 2 screws (Removed screw will be used in step 4)



F-9-567

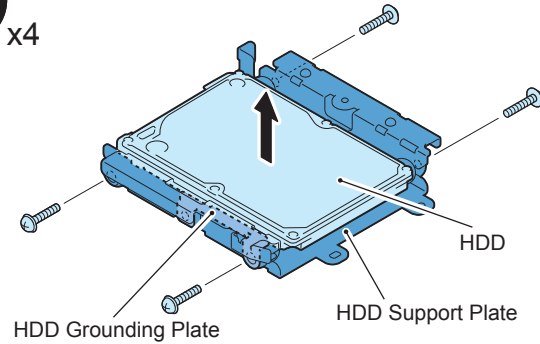
Disassembling/Assembling and Installing the HDD Removed from the Host Machine (First HDD)

- 1) Remove the HDD from the HDD Support Plate. (Use the HDD (80GB) removed in "Removing the HDD Unit, Signal Cable and Power Supply Cable" step 18.)

- 1 HDD Grounding Plate (If the HDD Grounding Plate is installed, remove it. The removed HDD Grounding Plate will not be used.)
- 4 screws



x4



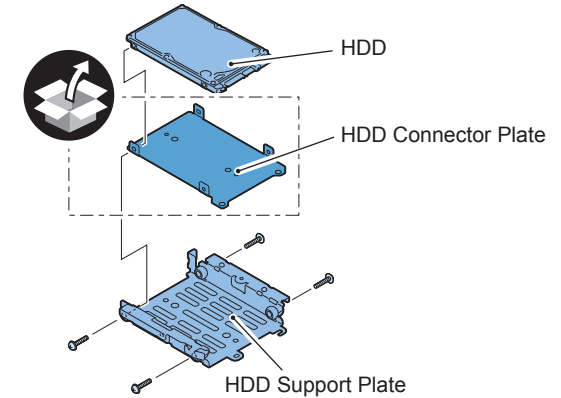
F-9-568

- 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



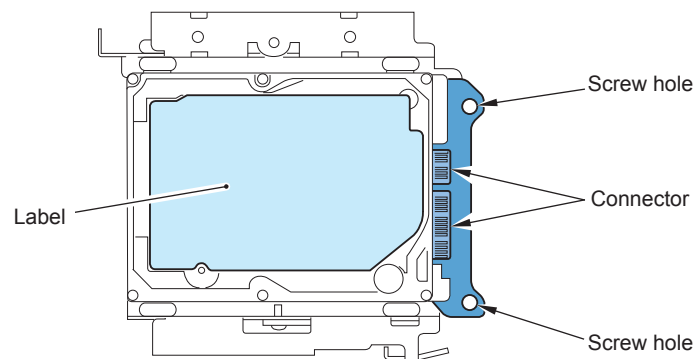
x4



F-9-569

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-9-570

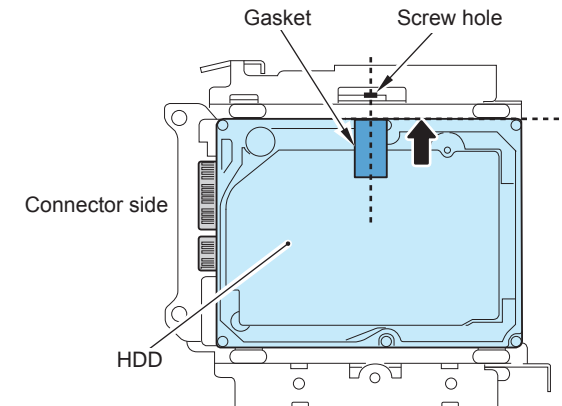
- If there is no gasket with the HDD removed from the host machine, prepare the gasket with the following part number and perform step 3).

- KE8-1134-030

- 3) 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.

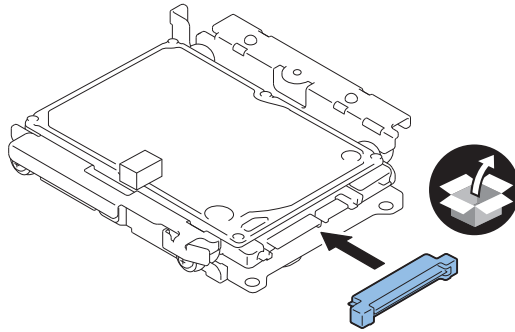


F-9-571



4) Install the Conversion Connector.

CAUTION:
Make sure that there is no opening between the Conversion Connector and part of HDD.



F-9-572

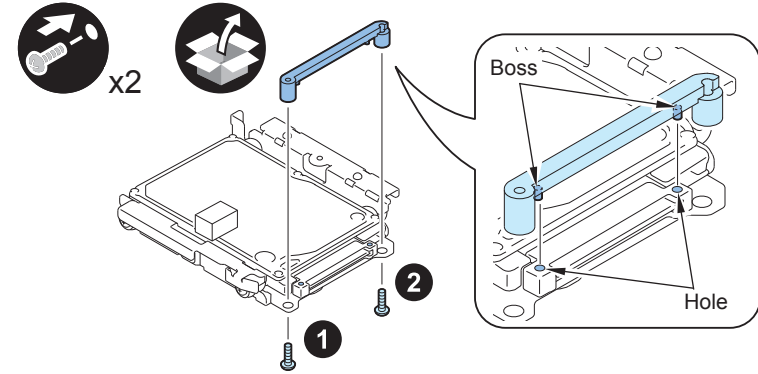


5) Fit the 2 bosses of Connector Fixing Block to the hole of Conversion Connector and install it.

- 2 screws (P Tight; M3X8)

CAUTION:

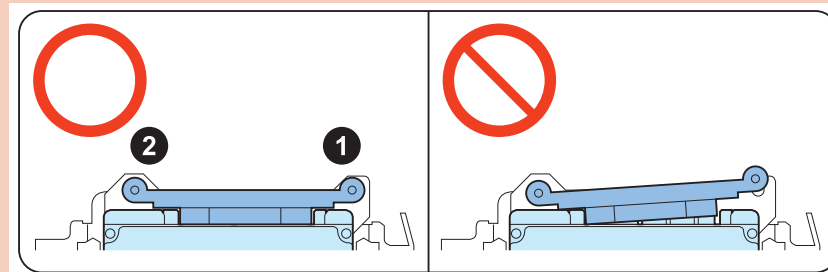
Be sure not to tighten the screws in wrong order. Otherwise, the Conversion Connector will not be secured properly.



F-9-573

**CAUTION:**

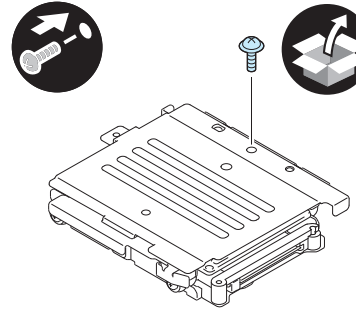
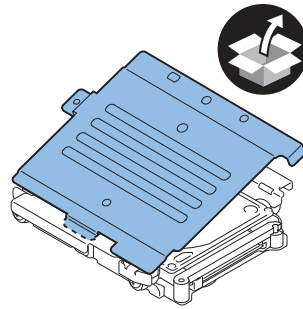
- Be sure to firmly hold the Connector Fixation Block when tightening the screws.
- Be sure to follow the correct order to tighten the screws, otherwise the Conversion Connector may not be connected properly, resulting in poor contact.



F-9-574

- 6) Install the HDD Cover.
- 1 claw
 - 1 screw (TP round end; M3X6)

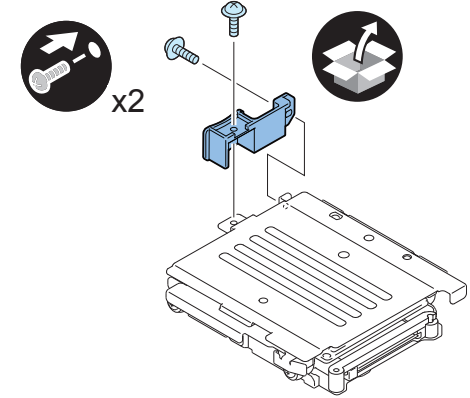
CAUTION:
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



F-9-575

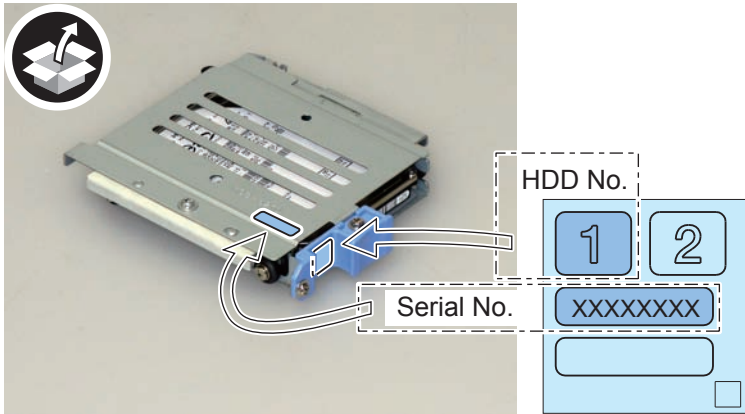
- 7) Install the HDD Handle.
- 2 screws (TP round end; M3X6)

CAUTION:
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



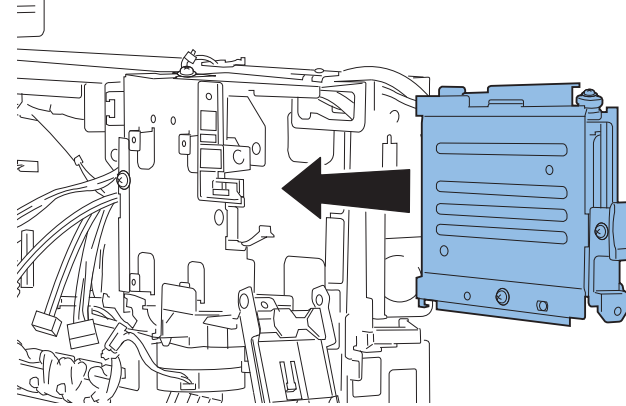
F-9-576

- 8) Affix the HDD No.1 Label to the handle of the Removable HDD.
9) 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-9-577

- 10) Install the originally installed HDD to Slot.1 (left side).



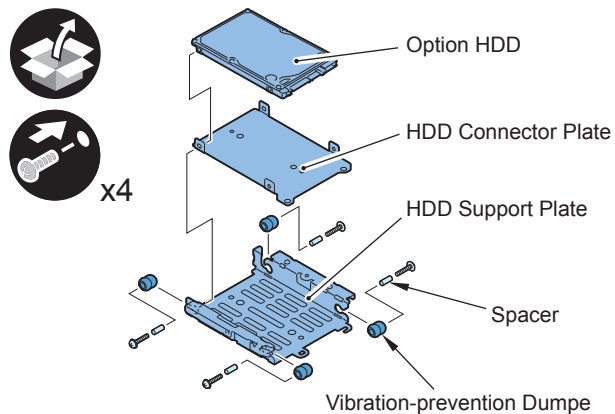
F-9-578

Assembling and Installing the Option HDD (Second 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 (binding with flat washer; M3X14) (enclosed with option HDD)

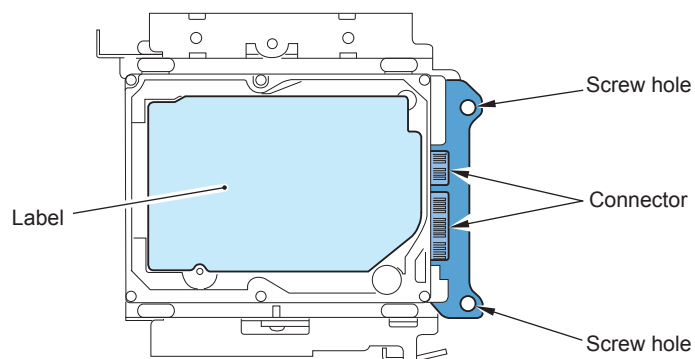


F-9-579



CAUTION:

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)



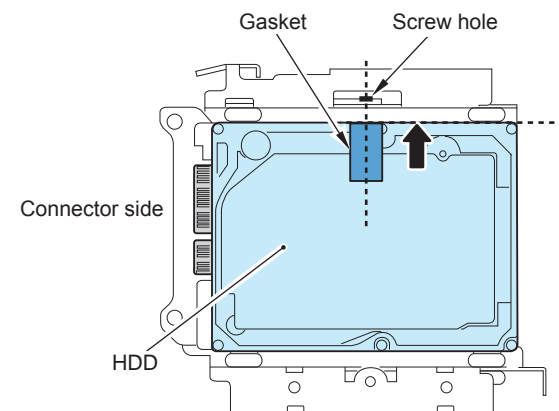
F-9-580



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.

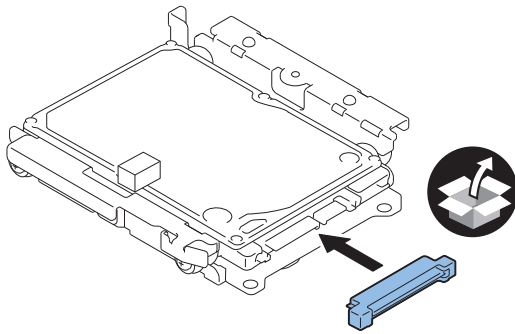


F-9-581



3) Install the Conversion Connector.

CAUTION:
Make sure that there is no opening between the Conversion Connector and part of HDD.



F-9-582

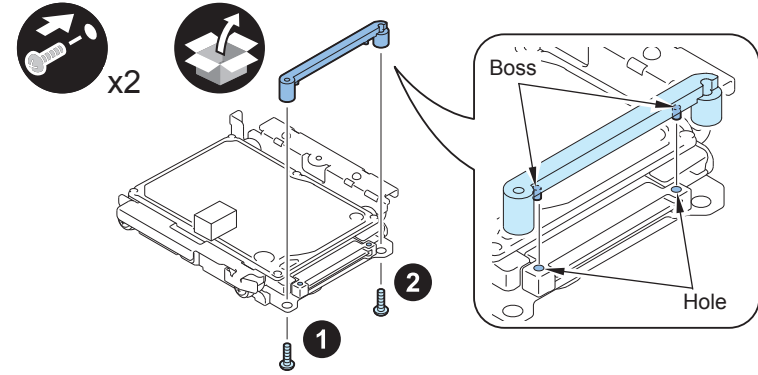


4) Fit the 2 bosses of Connector Fixing Block to the hole of Conversion Connector and install it.

- 2 screws (P Tight; M3X8)

CAUTION:

Be sure not to tighten the screws in wrong order. Otherwise, the Conversion Connector will not be secured properly.

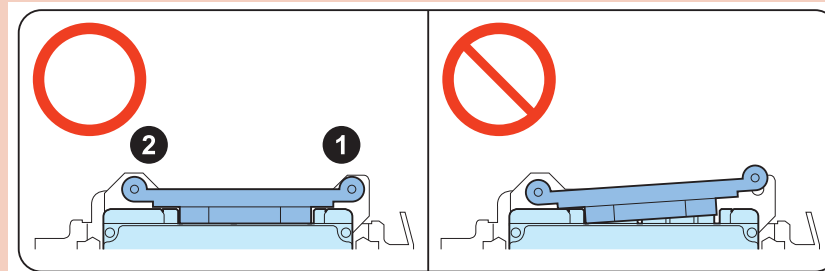


F-9-583



CAUTION:

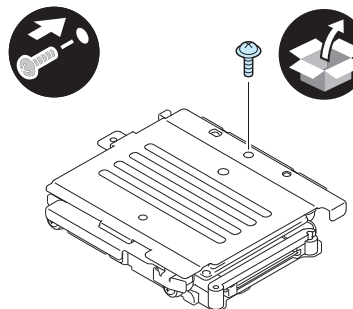
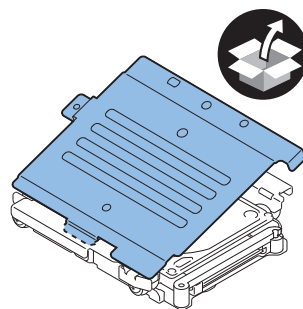
- Be sure to firmly hold the Connector Fixation Block when tightening the screws.
- Be sure to follow the correct order to tighten the screws, otherwise the Conversion Connector may not be connected properly, resulting in poor contact.



F-9-584

- 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.



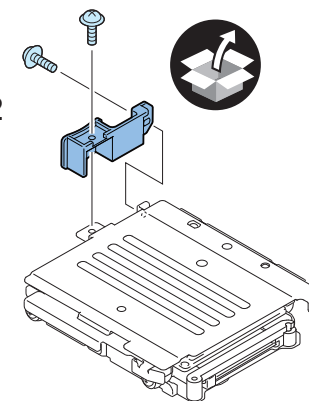
F-9-585

- 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.

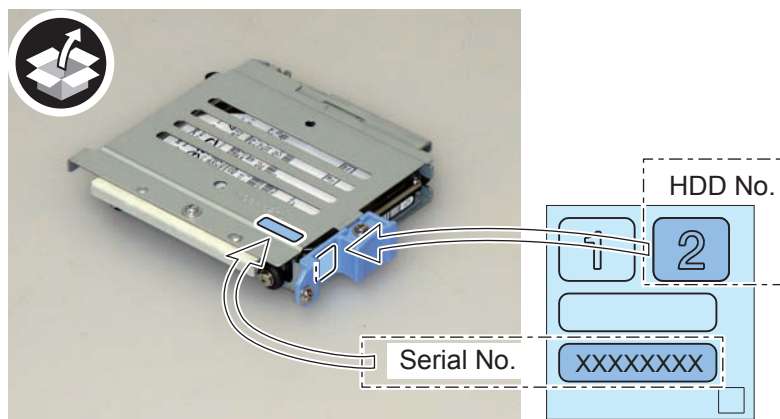


x2



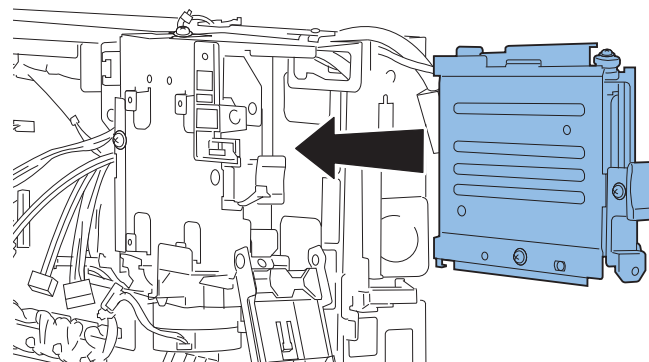
F-9-586

- 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-9-587

- 9) Install the HDD to Slot.2 (right side).

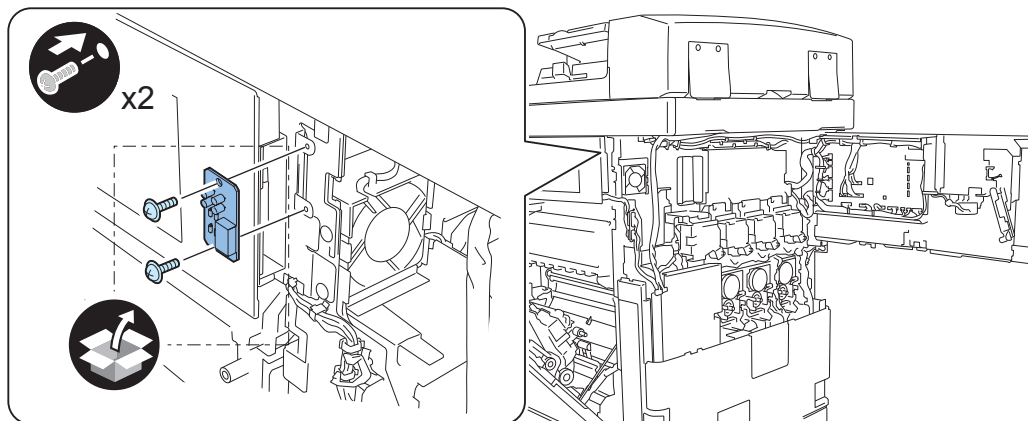


F-9-588

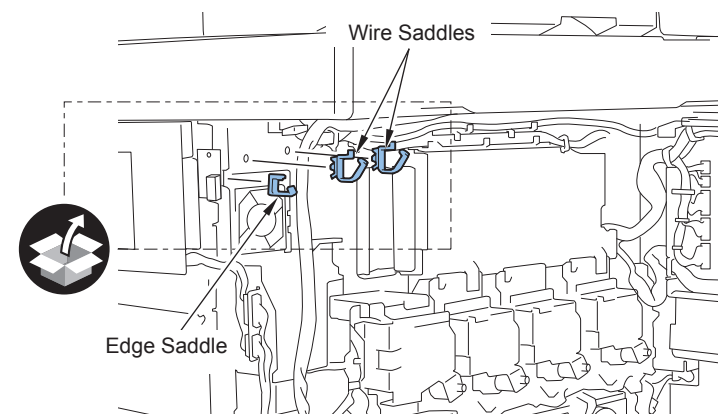
- 10) Close the Edge Saddle, and close the HDD Cap.

■ Installing the LED Board

- 1) Install the LED Board (small).
 • 2 screws (TP; M3X6)



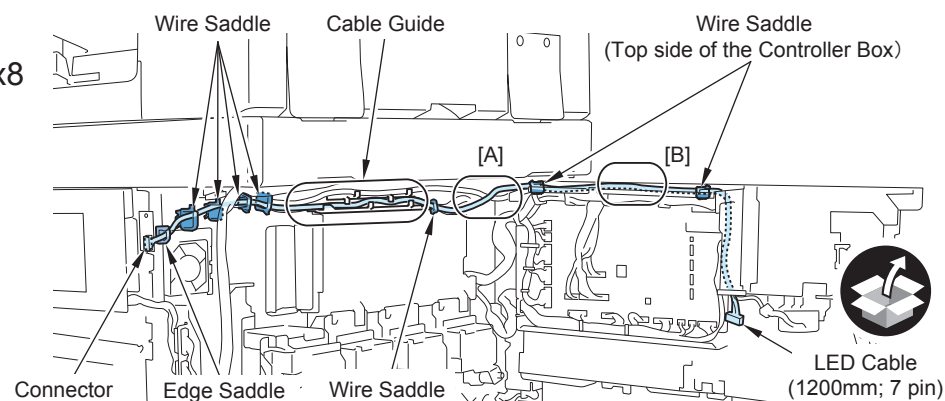
- 2) Install the 2 wire saddles and the edge saddle.



- 3) Install the LED Cable (1200mm; 7 pin).
 • 7 wire saddles
 • 1 edge saddle
 • 1 cable guide
 • 1 connector

CAUTION:

- Be sure to allow extra cable at [A] area in the condition that the Controller Box is fully opened.
- Be sure to tuck the [B] area of the LED cable under the other 2 cables running through the [B] area. This is to prevent the [B] area of the LED cable from being slacked off when closing the Controller Box.



F-9-591

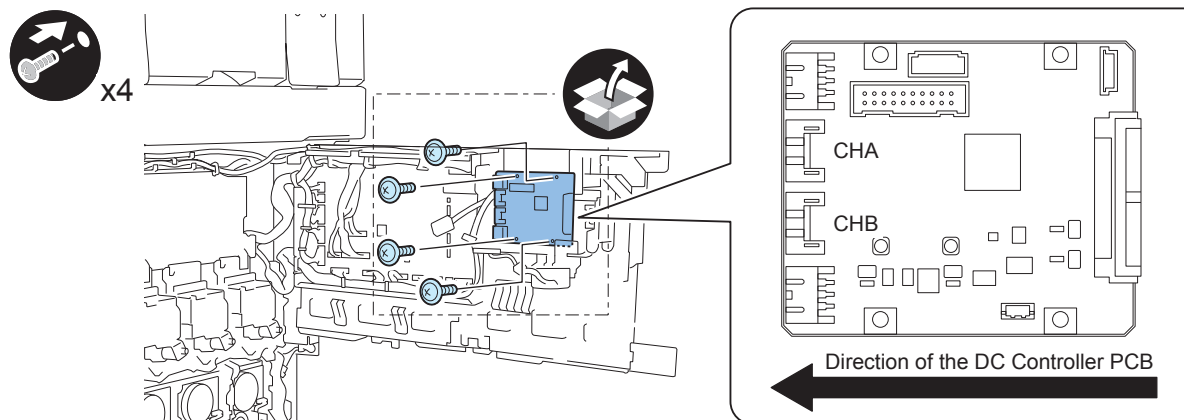
■ Installing the Mirroring Board or Encryption Board

- 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.



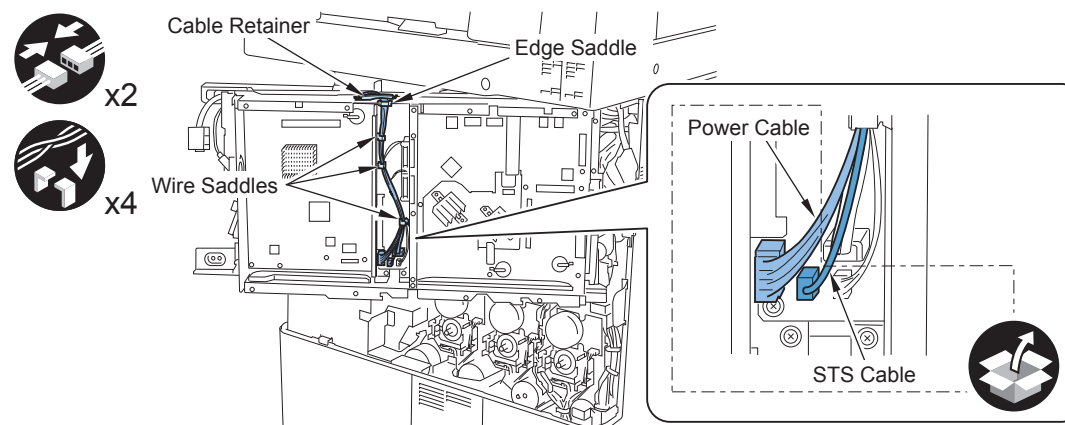
F-9-592

- 2) Install the cables to the PCB on the backside.

- Power Cable (650mm; FK2-8464) (Included in the Removable HDD Kit)
- STS Cable (550mm (Light blue); 5 pin) (Included in the HDD Mirroring Kit)

- 3) Fix the cables.

- 3 wire saddles
- 1 edge saddle
- Cable retainer



F-9-593



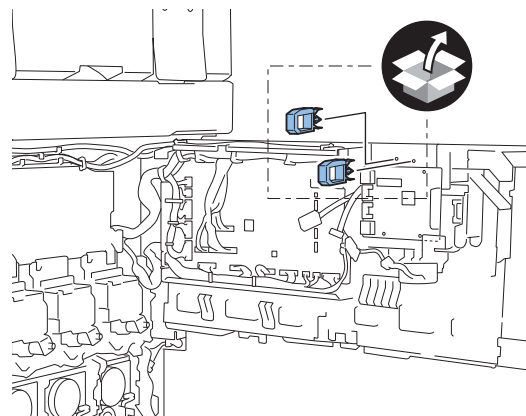
4) Install the Controller Cover.

CAUTION:

Be sure that the gaskets on left/right side of the Controller Cover are not protruded.



5) Install the 2 wire saddles.



F-9-594



6) Install the cable to the Mirroring Board or Encryption Board.

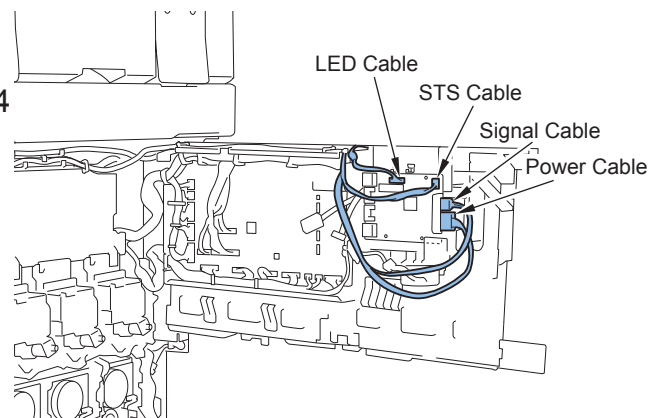
- Signal cable (existing cable)
- Power cable (650mm; FK2-8464)
- LED cable (1200mm; 7 pin)
- STS cable (550mm (Light blue); 5 pin)

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.



x4

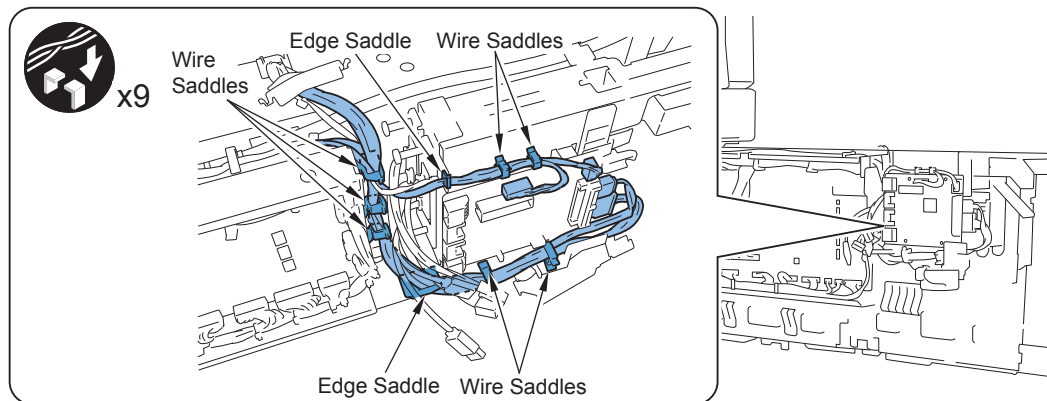


F-9-595



7) Fix the cables.

- 7 wire saddles
- 2 edge saddles

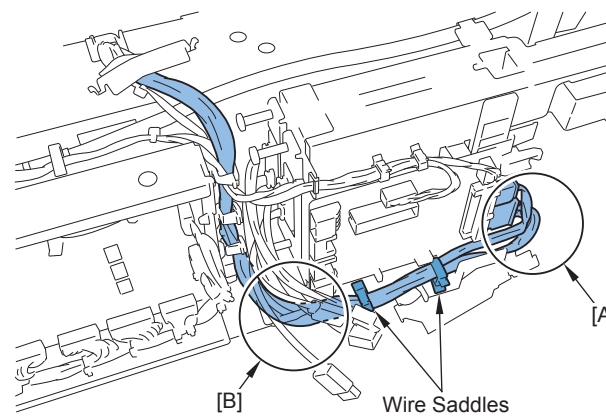


F-9-596



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.



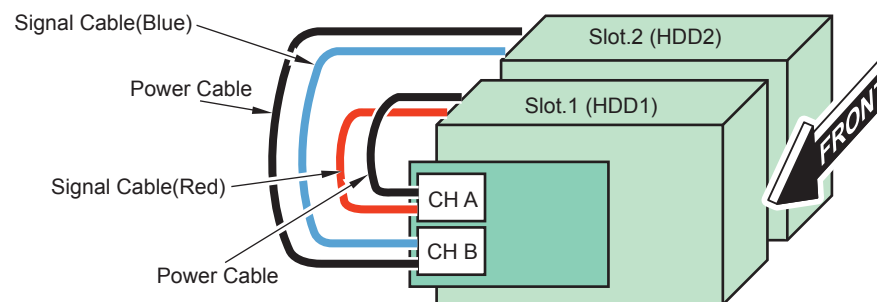
F-9-597

**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.

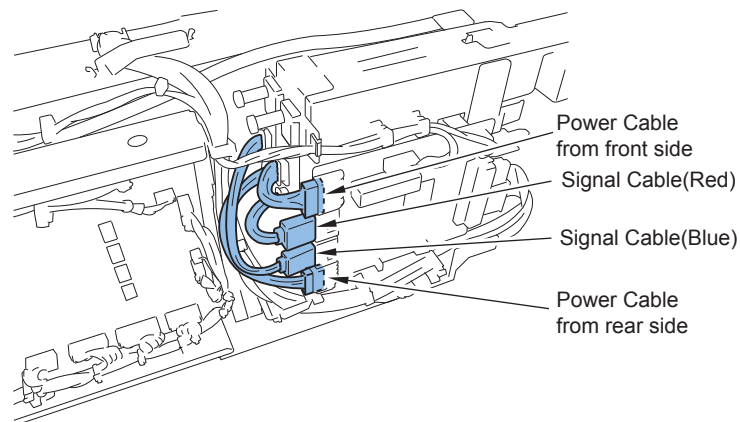
- Connect Slot 1 to "CHA". (Originally installed HDD)
- Connect Slot 2 to "CHB". (New HDD)



F-9-598



8) Install the cable of the HDD Drawer Unit to the Mirroring Board or Encryption Board.



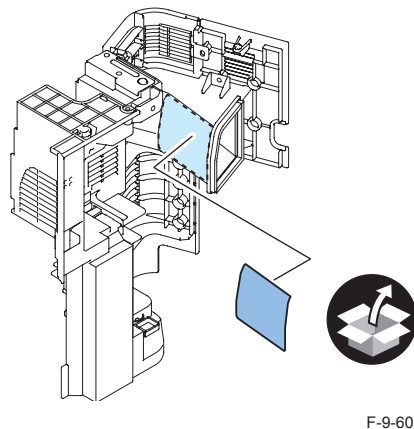
F-9-599



9) Place the Controller Box to the original position.



10) Affix the Shutdown Warning Label in the appropriate language on the Right Rear Cover 1. (included in the Removable HDD Kit).



F-9-600



11) Install the removed cover and the cable.

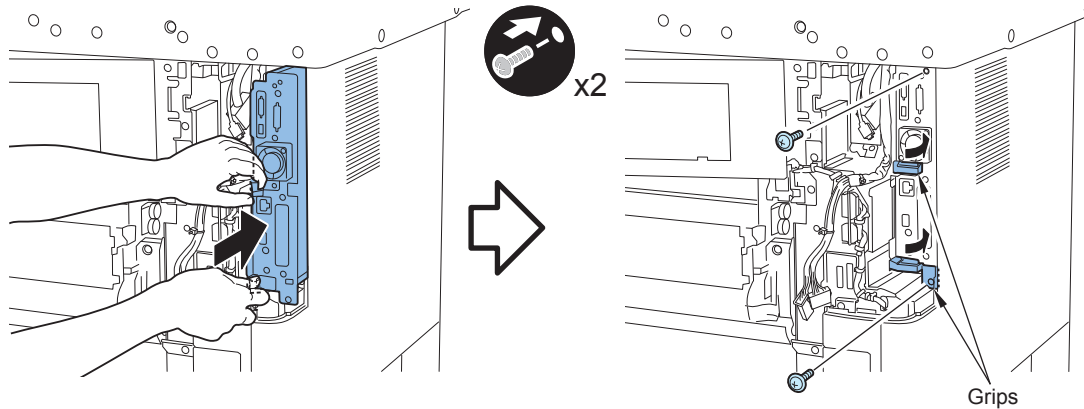
- Rear Cover
- Left Rear Sub Cover
- Reader Communication Cable (when reader is installed)
- Left Rear Cover
- USB Cable and Control Panel Communication Cable



112) 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.



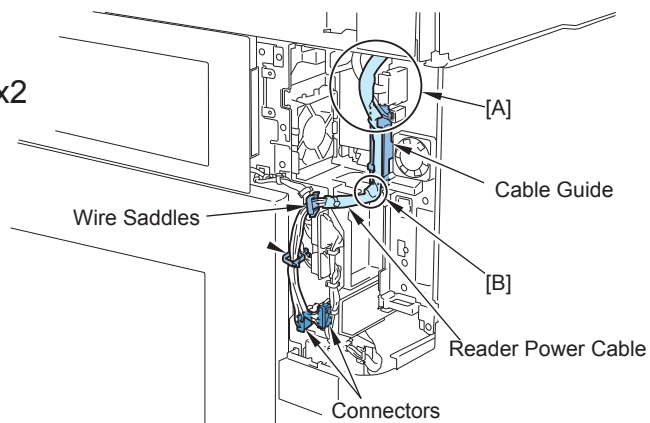
F-9-601



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.



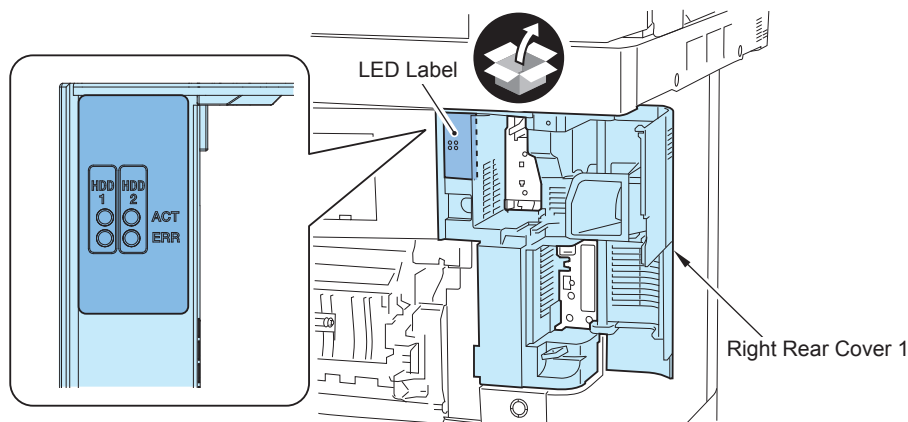
F-9-602



14) Install the Right Rear Cover 1.



15) Affix the LED label so that it fits the edge of the Right Rear Cover 1.



F-9-603



16) Close the Right Rear Cover 1, Right Lower Cover, and Right Upper Cover.
17) Insert the power plug into the socket and turn on the main power of the host machine.

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 CONNECT.
- 2) From the list of machine series, select the appropriate model.
- 3) Select 'single', and click START.
- 4) Execute HDD format.
- 5) After 5 sec from when the power of the host machine is turned OFF, restart the host machine in download mode of safe mode.
- 6) When "download mode" is displayed on the control panel, click simple mode start.
- 7) Click start to execute download.
- 8) Follow the instruction on the screen and when download is complete, click OK.
- 9) Exit SST.
- 10) Check the versions of MN-CONT and LANG etc 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 > FNCSW > 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 > FNCSW > 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 > FNCSW > 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 (250GB) + Removable HDD Kit + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit

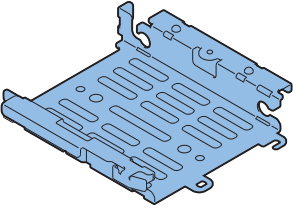
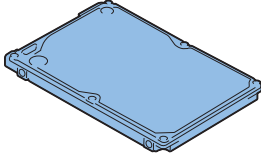
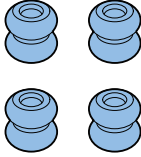
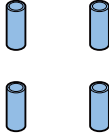
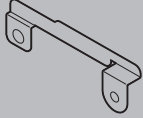
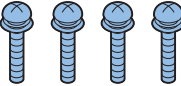


Points to Note when HDD Data Encryption & Mirroring Kit has been Installed

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

The parts with a gray in the contents list will not be used.

Option HDD (250GB)


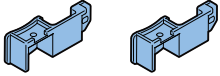
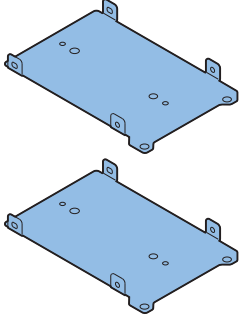
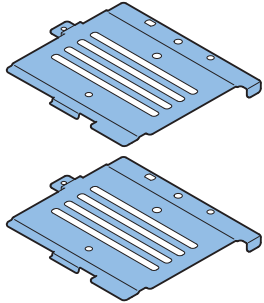
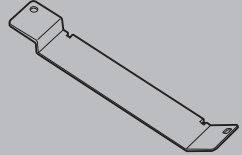
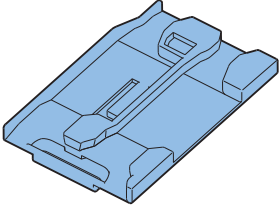
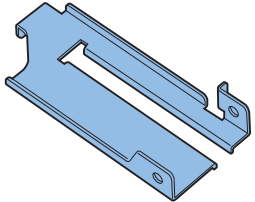

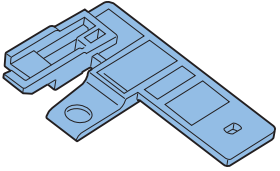
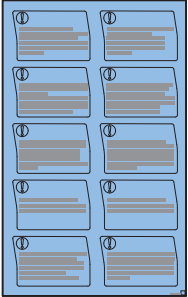
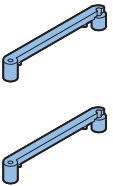
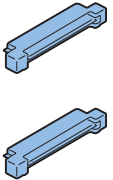
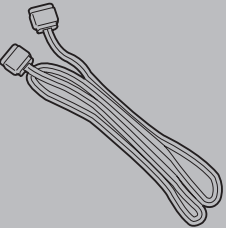
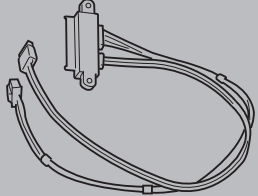
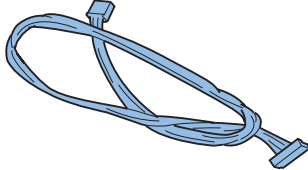
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<input type="checkbox"/> [6] Screw (W sems; M3x14) x 4 	<input type="checkbox"/> [7] Screw (TP;M3x6) x 2 	<input type="checkbox"/> [8] Gasket x 1 		

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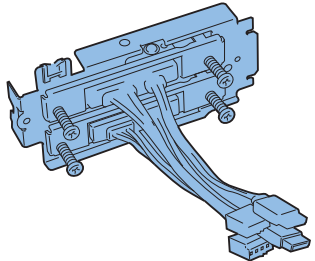
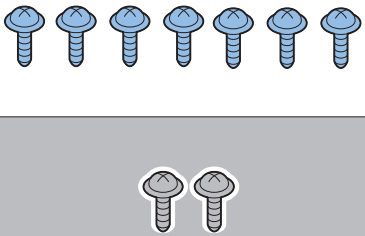
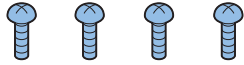
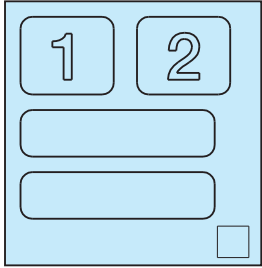
- Notice for FCC/IC
- China RoHS Notice 3

F-9-604

Removable HDD Kit or HDD Data Encryption & Mirroring Kit

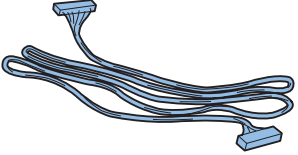
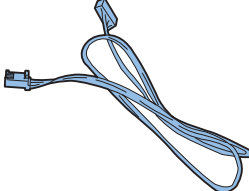
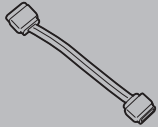
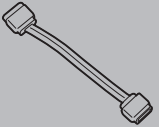
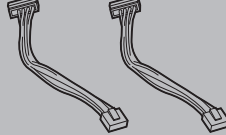
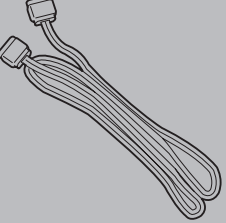
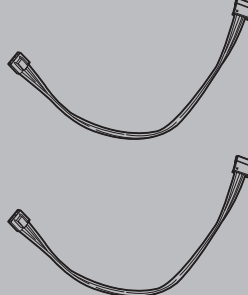
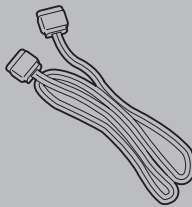
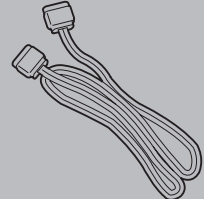

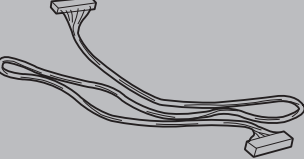
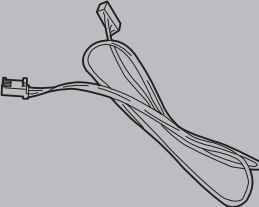
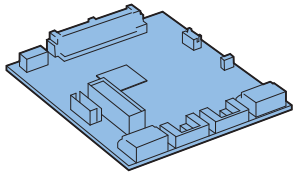
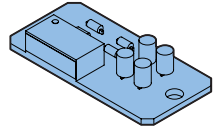
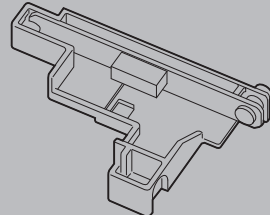
<input type="checkbox"/> [1] Hinge Shaft Stopper x 2 	<input type="checkbox"/> [2] HDD Handle x 2 	<input type="checkbox"/> [3] HDD Connector Plate x 2 	<input type="checkbox"/> [4] HDD Cover x 2 	<input type="checkbox"/> [5] HDD Blanking Plate x 1 
<input type="checkbox"/> [6] HDD Door Guide x 1 	<input 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 	<input type="checkbox"/> [13] Signal Cable (660mm ; Red) x 1 	<input type="checkbox"/> [14] IV Cable (FK2-8453) x 1 	<input type="checkbox"/> [15] Power Cable (650mm ; FK2-8464) x 1 

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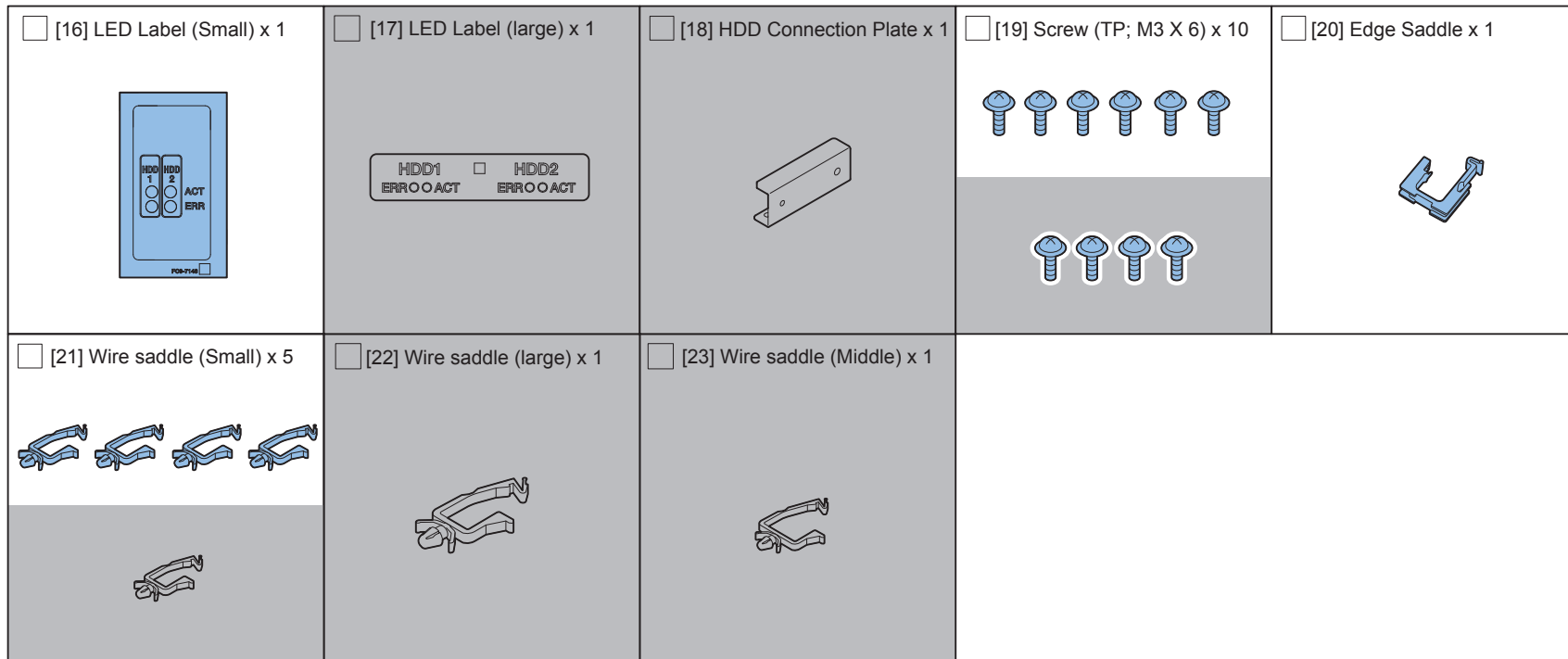
<p><input type="checkbox"/> [16] HDD Drawer Unit x 1</p> 	<p><input type="checkbox"/> [17] Screw (R round head TP; M3 X 6) x 9</p> 	<p><input type="checkbox"/> [18] Screw (P Tight ; M3 X 8) x 4</p> 	<p><input type="checkbox"/> [19] R-HDD Label x 1</p> 
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HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit

<input type="checkbox"/> [1] LED Cable (1200mm; 7 pin) x 1 	<input type="checkbox"/> [2] STS Cable (550mm (Light blue); 5 pin) x 1 	<input type="checkbox"/> [3] Signal Cable (80mm (Red); FK2-8436) x 1 	<input type="checkbox"/> [4] Signal Cable (80mm (Blue); FK2-8438) x 1 	<input type="checkbox"/> [5] Power Cable (80mm; FK2-8461) x 2 
<input type="checkbox"/> [6] Signal Cable (450mm (Red); FK2-8435) x 1 	<input type="checkbox"/> [7] Power Cable (430mm; FK2-8463) x 2 	<input type="checkbox"/> [8] Signal Cable (340mm (Red); FK2-8434) x 1 	<input type="checkbox"/> [9] Signal Cable (370mm (Blue); FK2-8441) x 1 	<input type="checkbox"/> [10] Power Cable (320mm; FK2-8467) x 1 
<input type="checkbox"/> [11] LED Cable (290mm; 7 pin) x 1 	<input type="checkbox"/> [12] STS Cable (420mm (Light blue); 5 pin) x 1 	<input type="checkbox"/> [13] Mirroring Board or Encryption Board x 1 	<input type="checkbox"/> [14] LED Board (Small) x 1 	<input type="checkbox"/> [15] LED Board (large) x 1 

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< 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 Notice
- Installation Procedure
- Noticd for FCC/IC

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
Send Function Favorite Settings	Yes
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

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*1; Can only be backed up using the Remote UI.

*2; Depending on the MEAP application.

*3: Only the following data saved in Mail Box/Advanced Box 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
- Advanced Box URI Transmission Settings

*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 to be Backed Up

Data to be backed up	Reference
Address Book	For information on exporting data, see the "e-Manual > Remote UI".
Settings/Registration settings	
Device Settings (Forwarding Settings, Address List, Favorite Settings)	
Printer Settings	
Paper Information	
Favorite Settings for Web browser	See the "e-Manual > Web Access". (You can select this if web browser (Option) is installed.)
License files for MEAP applications	For information on downloading license files, see the "e-Manual > MEAP".
Data saved by MEAP applications	Data saved by MEAP applications may be able to be backed up, depending on the MEAP application. See the documentation included with the MEAP application.
Data stored in Mail Boxes or the Advanced Box	See the "e-Manual > Remote UI" to "Setting the Backup Location for Stored Data".
Image forms stored in the Superimpose Image	
SSO-H (Single Sign-On H) user authentication information	See the "e-Manual > MEAP".
Quick Menu Information	See the "e-Manual > Quick Menu".
User Information of the Advanced Box	See the "e-Manual > Security".

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CAUTION: Work to Perform After Installing the Kit

- When you start using this product, passwords set for Mail Boxes 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 this product has been installed. These data items are property of the user, and the restoration work must be performed by the system administrator.

The method of restoration is described in the Users Guide. See Table (Data to be backed up) in Points to Note About Installation of the Installation Procedure.

1. Procedure to make a backup of Address Book

- 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].
- 3) Click [Address List].
- 4) Click [Export].
- 5) Select the save format for Address list, and click [Start Export].
- 6) Following the instructions on the window, specify the location to save the file. Be sure to set a distinctive name to an export file so that you can recognize it when importing it.

NOTE:

Exporting the device settings will export all contents of the address list. In other words, there is no need for a backup unless it needs to be done individually.

2. Device Settings Export Procedure

- 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].
- 3) Click [Device Settings (Forwarding Settings, Address List, Favorite Settings)].
- 4) Click [Export], and then click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

3. Settings/Registration Export Procedure

- 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].
- 3) Click [Settings/Registration].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

4. Printer Settings Export Procedure

NOTE:

The following items to be exported are the same as the ones which are distributed by device information distribution.

- 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].
- 3) Click [Printer Settings].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

5. Paper Information Export Procedure

- 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].
- 3) Click [Paper Information].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

6. 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.

CAUTION: MEAP Backup Function Using the SST

Data that has been backed up using MEAP back of the SST before the use of this product is started must not be written back to the host machine after the use of this product is started. Similarly, even if the data that has been backed up after the use of this product is started is written back to the host machine before the use of this product is started, the machine does not operate. It is necessary to make sure that the implementation conditions for this product are compatible before and after making a backup of data, and the MEAP backup function does not permit making a backup of data in the course of installing the kit.

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.

7. 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) Click the application of which license has been installed.
- 5) Click [License Control], and then click [Disable]. Click [Yes] in a confirmation window for disabling the license.

- 6) Click [Download] under "Download/delete Disabled License File" item. 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.
- 7) 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).
- 8) 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).

8. 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/`

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 the user has changed the password, ask him/her to change the password again after the use of this product is started.

- 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].

9. Backup of User inbox and Advanced Box document data

CAUTION: Backup of "Advanced Box"

When setting a SMB server as a backup destination, Advanced Box data saved in a large capacity HDD cannot be backed up. The Advanced Box data backed up from the large capacity HDD cannot be restored to the standard HDD.

Depending on the system version of the machine, both backup and restoration might not be performed.

The procedure of backup and restoration of a box document data is described below.

Specify the backup destination of a document data:

- Backup to SMB server
Select SMB as a backup destination and specify an address, a user name, a password, and a path to the SMB server to which saved data is backed up.
- Backup to USB HDD
Select USB HDD as a backup destination and specify a path to the USB HDD folder to which saved data is backed up.

CAUTION: Data which cannot be backed up

If you back up/restore stored data without restarting the machine after changing the language displayed on the touch panel display by pressing [Settings/Registration] > [Preferences] from the control panel of the machine, the stored data may not be backed up/restored properly. For more information on the data that cannot be backed up, see Points to Note for Installation.

CAUTION:

If the language setting in the common specification settings (Settings/Registration) is set to ON, 'host address' and 'path to folder' might not be displayed correctly or cannot be referred.

CAUTION:

- Regarding the method of inputting characters, see 'Basic Operations' in the e-Manual.
- A host address can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,' 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A path to the folder can be up to 255 characters in 1 byte (127 characters in 2 bytes).
- A user name can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,' 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A password can be up to 7 to 48 characters using the 'alphanumeric character' and 'mark (1 byte)' modes.
- The voice sound symbol and the semi-voice sound symbol entered in the 'Katakana (1 byte)' mode are counted up as one 1-byte character.

[Backup method of User inbox and Advanced Box document data]

- 1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Backup].
- 2) Select 'All' or 'Changes' for the backup method.
- 3) Click [Execute].

CAUTION:

- If any of the host IP address, user name, password, or path to the folder is not correctly entered, a backup cannot be made.
- If you select to encrypt the backup data, the backup process may take longer.

[Restoring the backup data of User inbox and Advanced Box document data]

- 1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Restore].
- 2) Click [Display Backup Data].
- 3) Select the backup data to restore from the list and then click [Execute].

CAUTION:

- If you want to restore encrypted backup data, enter the same password used when backing up the data.
- Depending on the settings of the machine, the backup data may not be completely restored, or some documents may be automatically printed.
- Restoration is performed after all of the box data stored in the machine, or documents that are being sent, received, or stored, are erased.

10. Quick Menu Information Export Procedure

- 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 Basic Tools > [Quick Menu] > [Export].
- 3) If the file needs to be encrypted, enter the password after check [Encrypt file]. (The number of characters for the password must be more than 4 but less than 16.)
- 4) Click [Export].
- 5) Following the instructions on the window, specify the location to save the file.

11. User Information of the Advanced Box Export Procedure

- 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 Basic Tools > [User Access Control for Advanced Box]. The dialog box to enter the user name of administrator and password appears, enter the system administrator ID and password, and then click [Log In].
The default administrator user name and password are as follows:
User Name: Administrator
Password: password
- 3) Click [Export], and click [Start Export].
- 4) Following the instructions on the window, specify the location to save the file.

Check Items when Turning OFF the Main Power

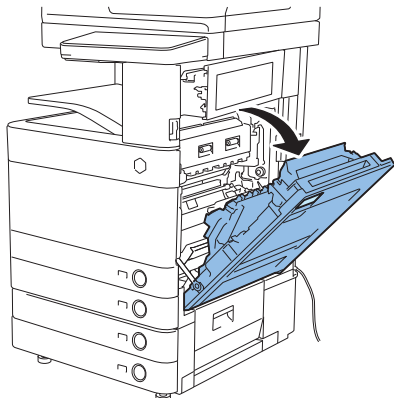
Check that the main power switch is OFF.

- 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

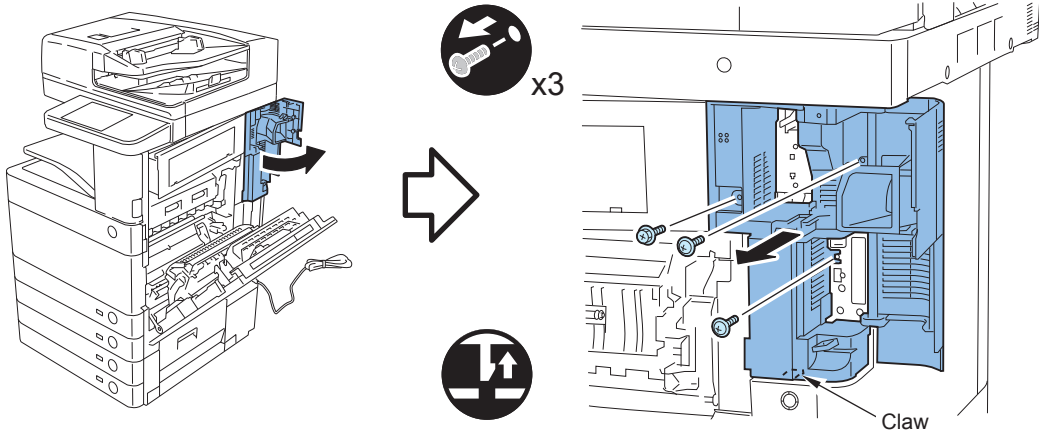
1) Open the Right Lower Cover. (Open the Right Upper Cover simultaneously.)



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2) Open the Right Rear Cover 1.
3) Remove the Right Rear Cover 1.

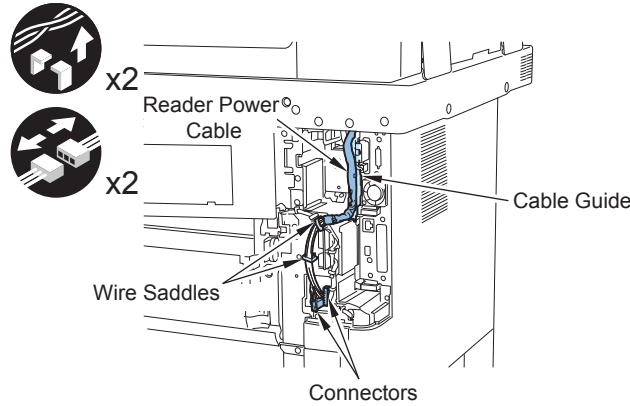
- 1 screw (RS tight; M4)
- 2 screws (TP; M3)
- 1 claw



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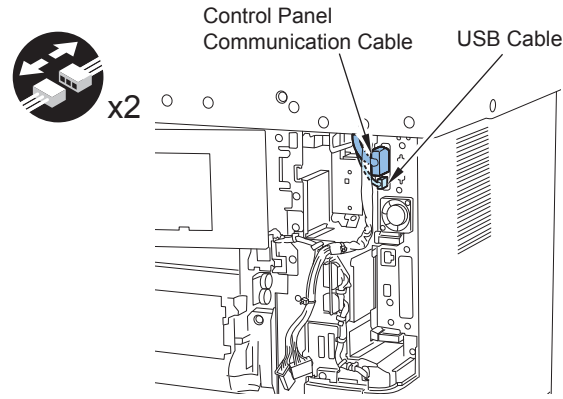
4) When the Reader is installed, remove the Reader Power Cable.

- 2 connectors
- 2 wire saddles
- 1 cable guide



F-9-611

5) Remove the USB Cable and the Control Panel Cable.

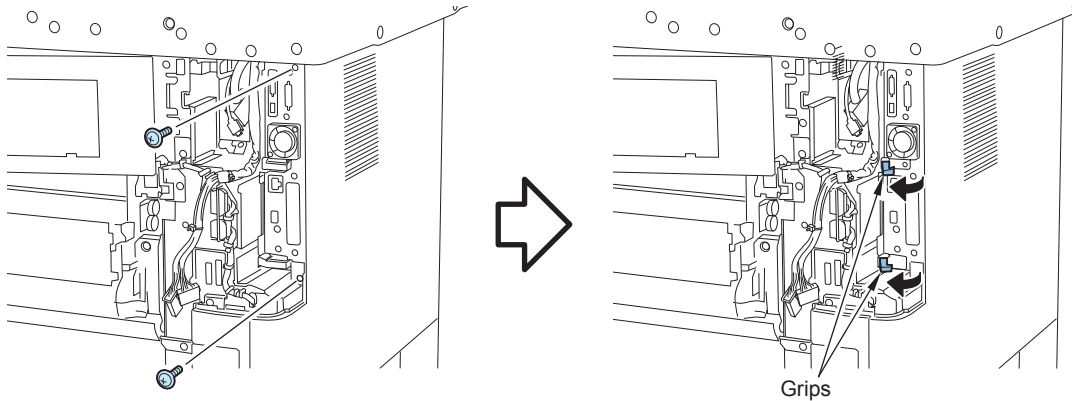


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6) Remove the 2 screws, open the grip in 2 places.



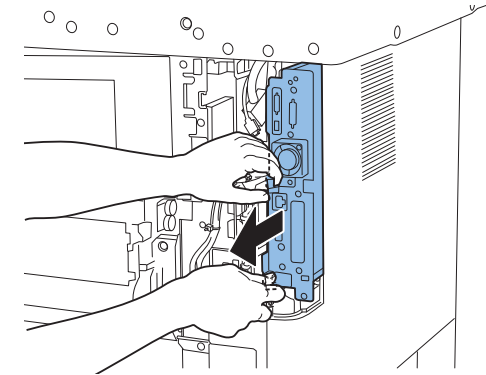
x2



Grips

F-9-613

7) Hold the 2 Grips, and pull out the Main Controller PCB 1 approximately 10mm toward front.



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8) Remove the Left Rear Cover.

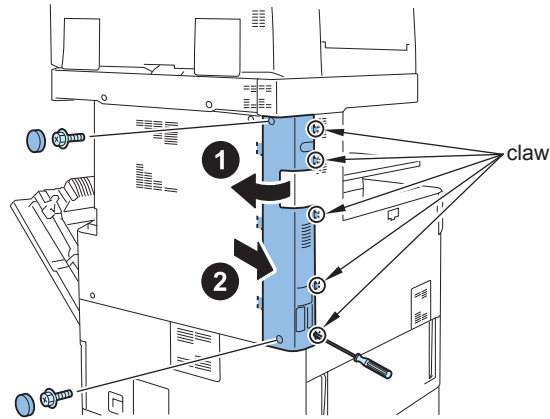
- 2 rubber caps
- 2 screws
- 5 claws



x2

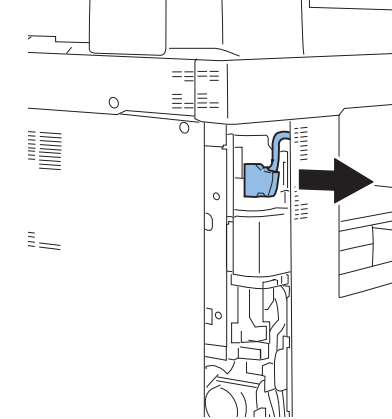


x5



F-9-615

9) When the Reader is installed, remove the Reader Communication Cable.



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10) Remove the Left Rear Sub Cover.

- 1 screw
- 1 hook

Hook

Left Rear Sub Cover

F-9-617

11) Remove the Rear Cover.

- 2 rubber caps
- 2 screws
- 1 claw

claw

F-9-618

12) Open the Controller Box while avoiding the harness.

- 2 screws

Harness

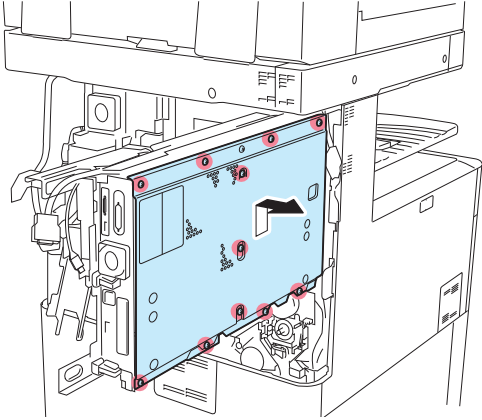
F-9-619

NOTE:
If the FAX Unit has been installed, remove the 3 screws and open the Controller Box with the FAX Unit.

Harness

F-9-620

13) Remove the Controller Cover.
 • 11 screws (loosen)

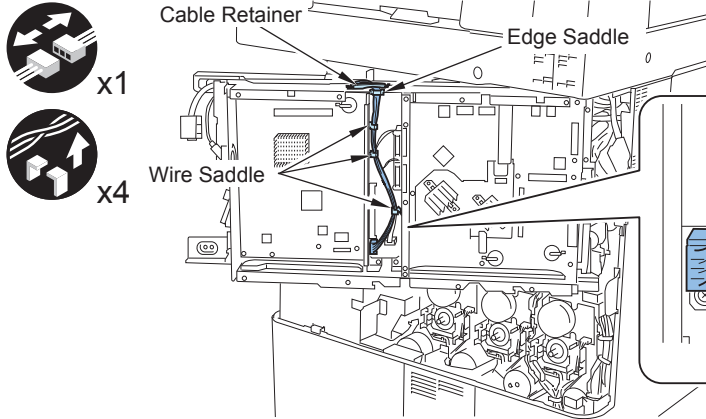
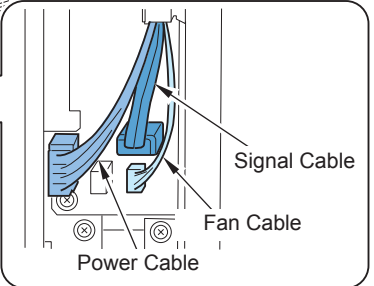


F-9-621

14) Remove the Power Cable.

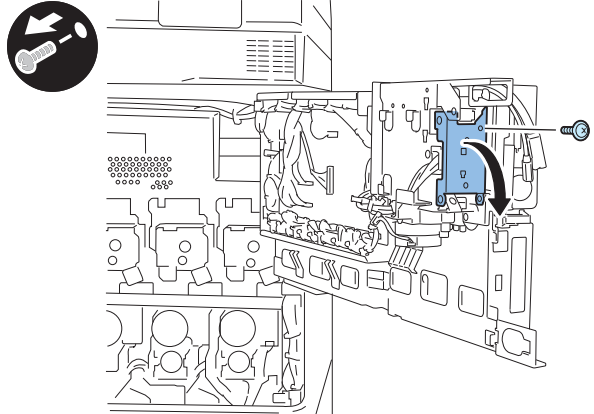
CAUTION:
 Do not remove the Signal Cable and the Fan Cable.

- 1 edge saddle
- 3 wire saddles
- 1 cable retainer

F-9-622

15) Open the HDD Lid.
 • 1 screw (Removed screw will not be used.)

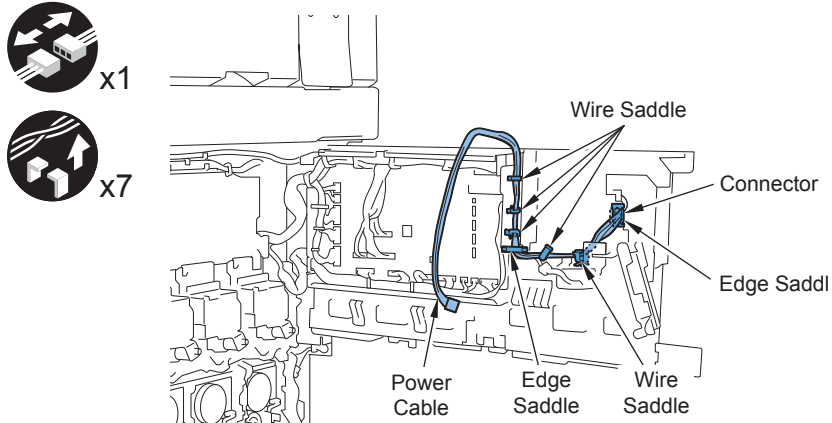


F-9-623

16) Remove the Power Cable.

- 2 edge saddles
- 5 wire saddles
- 1 connectors

NOTE:
 Removed Power Cable will not be used.

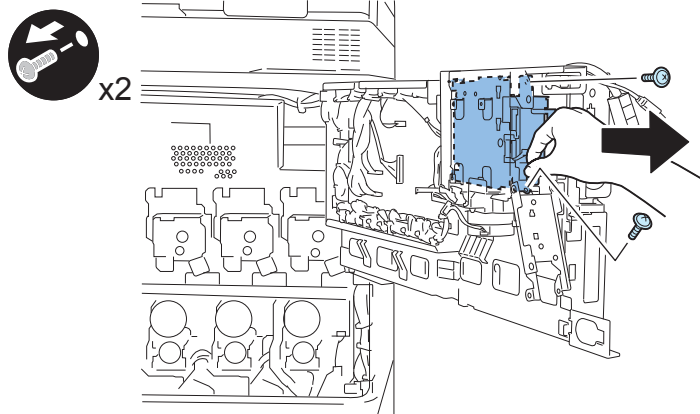


F-9-624



17) Remove the HDD Unit
by holding it as shown in
the figure below. (Removed
HDD unit will not be used.)

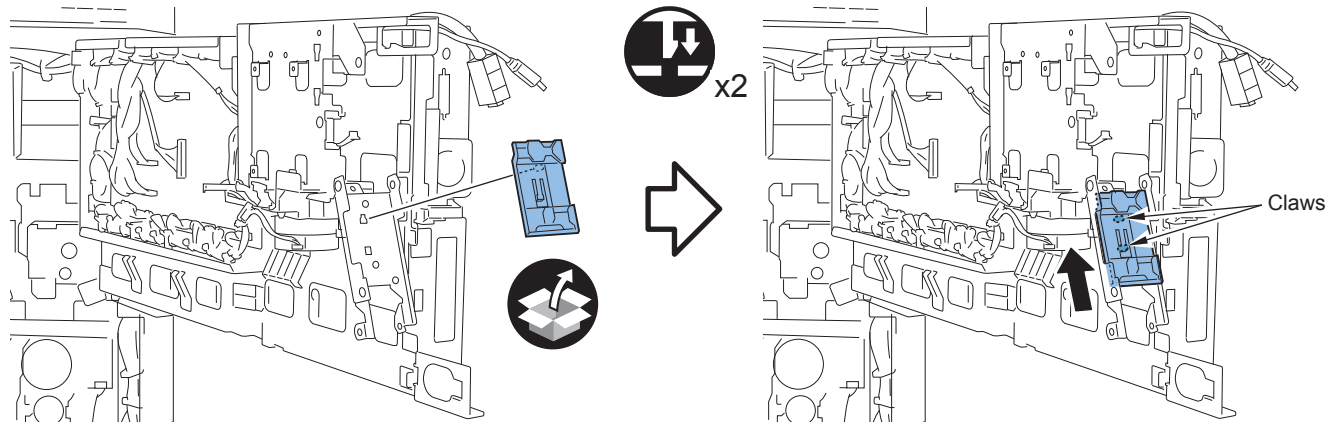
- 2 screws (Removed screw
will not be used.)



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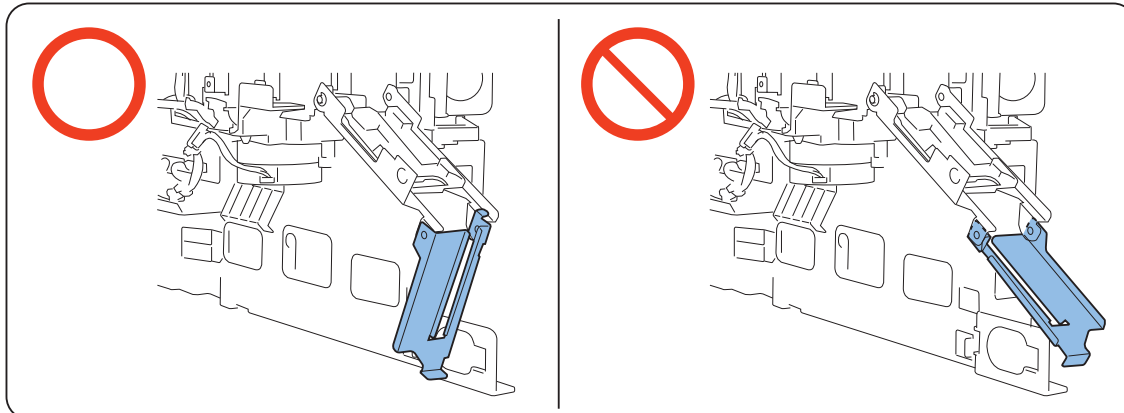
Installing the Removable HDD Kit

-
- 1) Install the HDD Door Guide.
- 2 claws



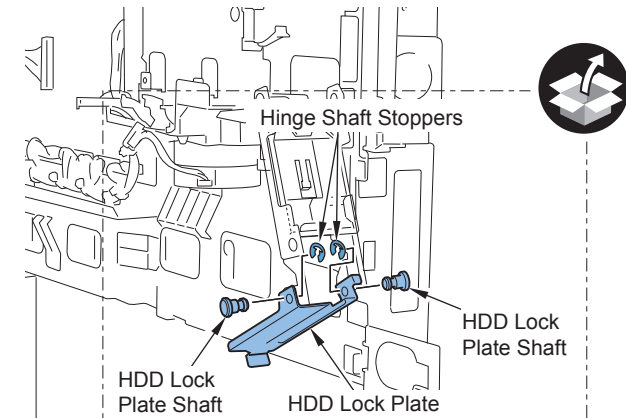
F-9-626

-
- CAUTION:**
Be careful of the installation direction of HDD Lock Plate.



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-
- 2) Install the HDD Lock Plate.
- 2 HDD Lock Plate Shafts
 - 2 Hinge Shaft Stoppers



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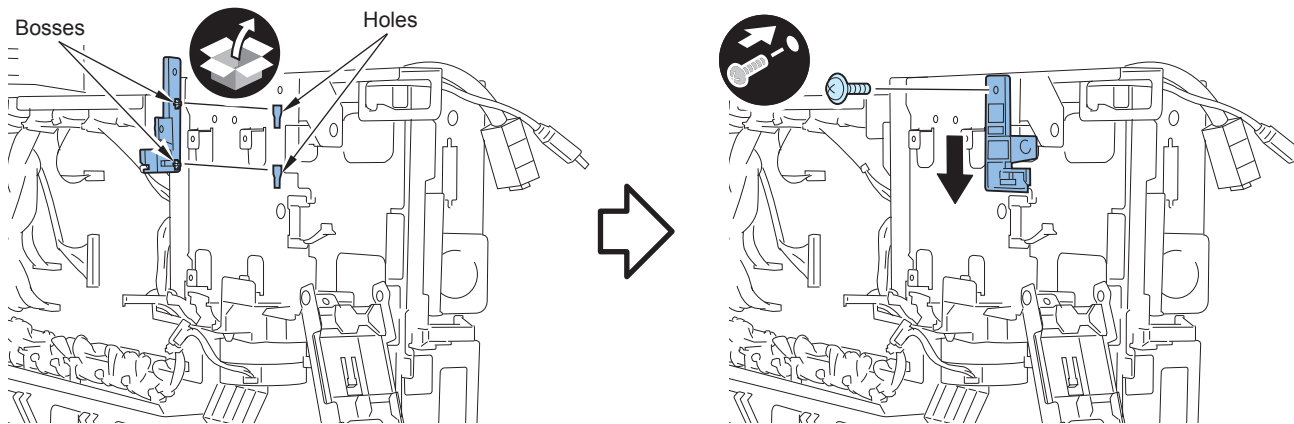


3) Adjust the 2 bosses to the hole and install the HDD Lid Retainer.

- 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.

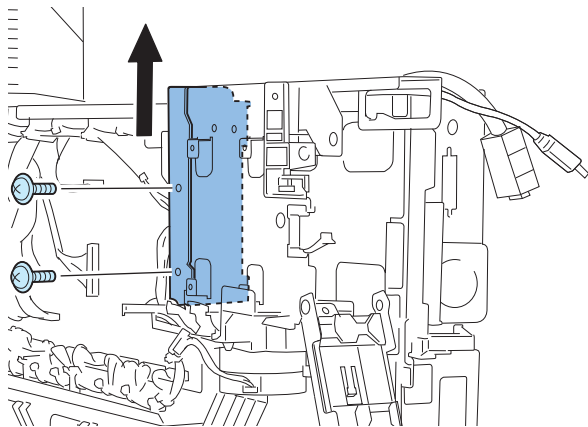


F-9-629



4) Remove the HDD Rear Cover. (Removed HDD Rear Cover will not be used.)

- 2 screws (Removed screw will be used in step 5)

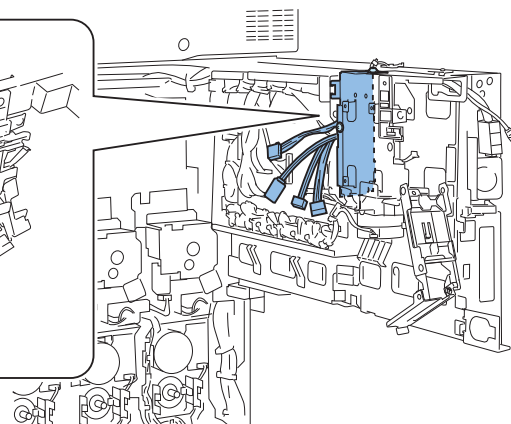
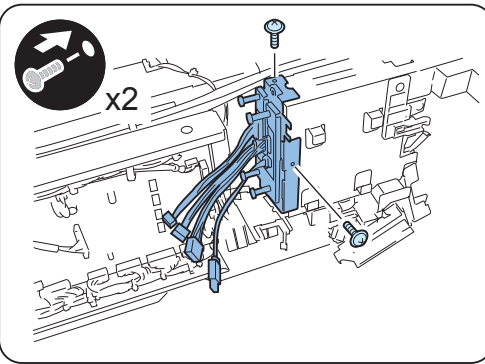


F-9-630



5) Install the HDD Drawer Unit.

- 2 screws (Removed screw will be used in step 4)



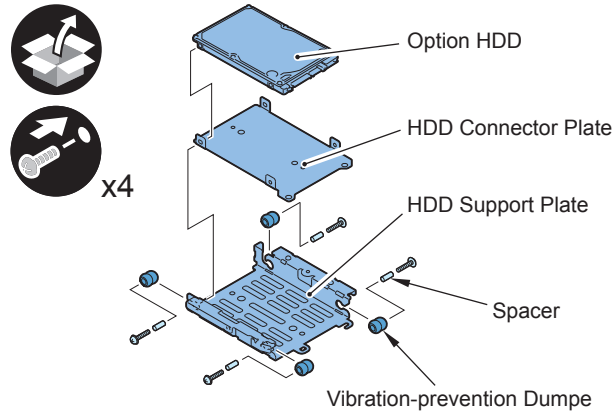
F-9-631

Assembling and Installing the Option HDD (First 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 (binding with flat washer; M3X14) (enclosed with option HDD)

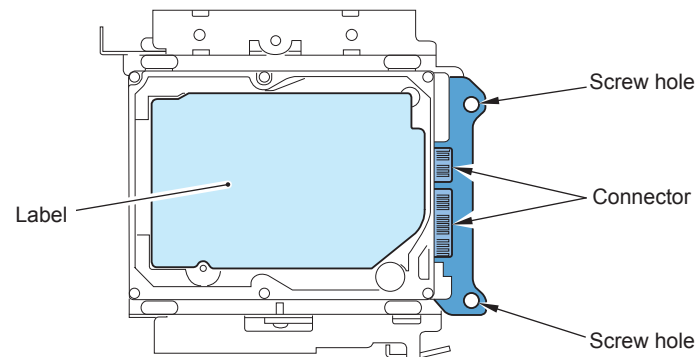


F-9-632



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)



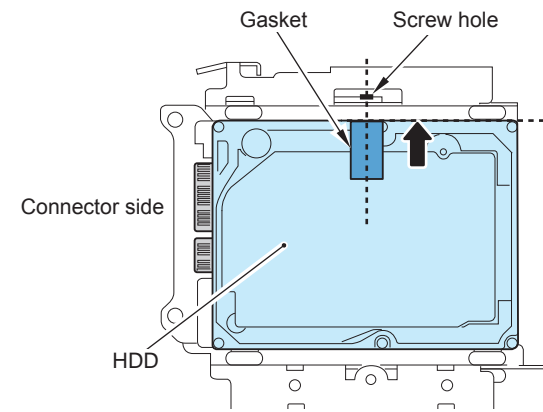
F-9-633



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.

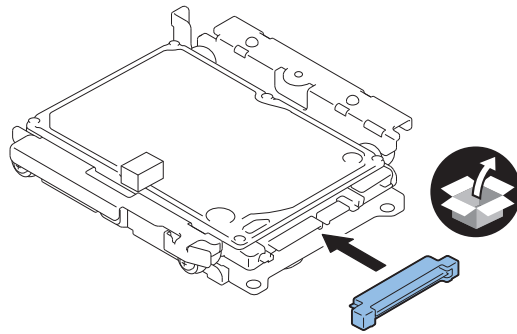


F-9-634



3) Install the Conversion Connector.

CAUTION:
Make sure that there is no opening between the Conversion Connector and part of HDD.



F-9-635

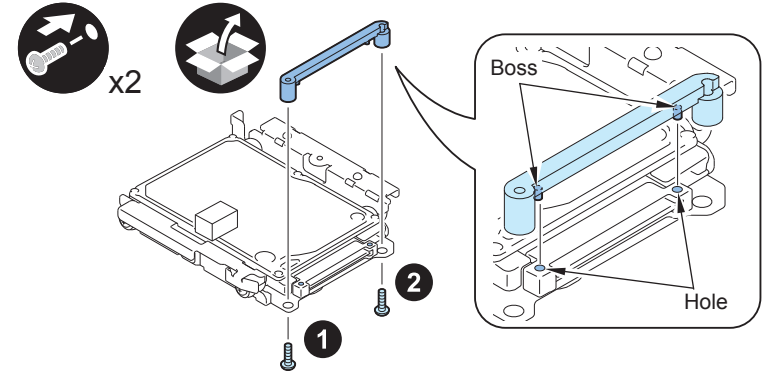


4) Fit the 2 bosses of Connector Fixing Block to the hole of Conversion Connector and install it.

- 2 screws (P Tight; M3X8)

CAUTION:

Be sure not to tighten the screws in wrong order. Otherwise, the Conversion Connector will not be secured properly.

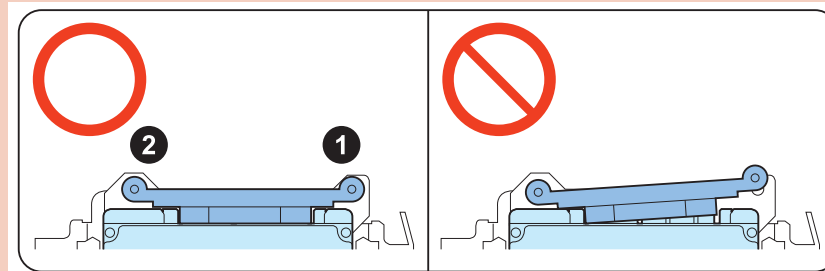


F-9-636



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-9-637

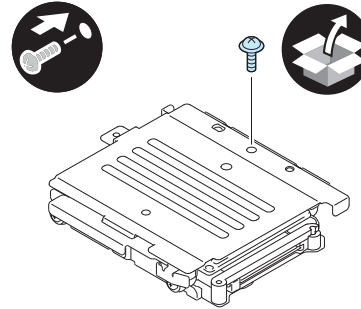
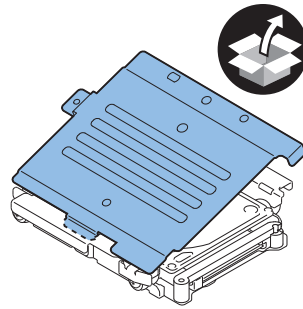


5) Install the HDD Cover.

- 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-9-638

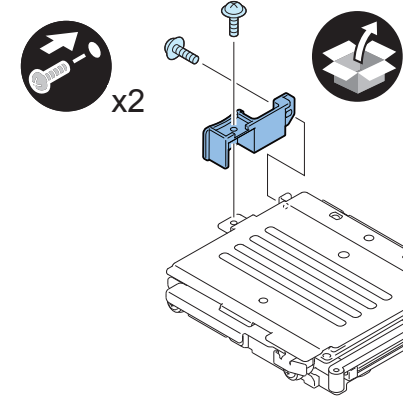


6) Install the HDD Handle.

- 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.

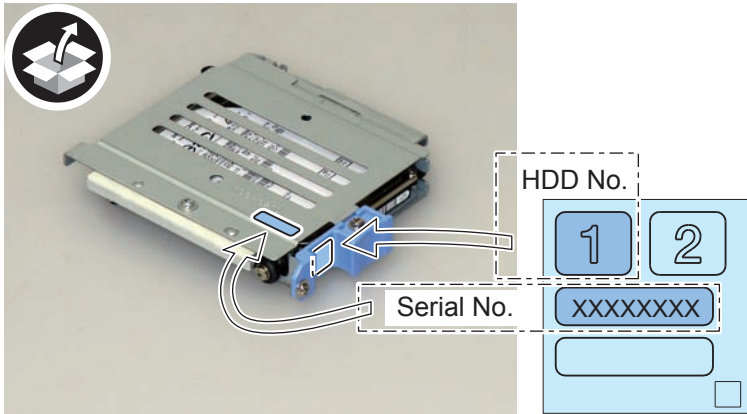


F-9-639



7) Affix the HDD No.1 Label to the handle of the Removable HDD.

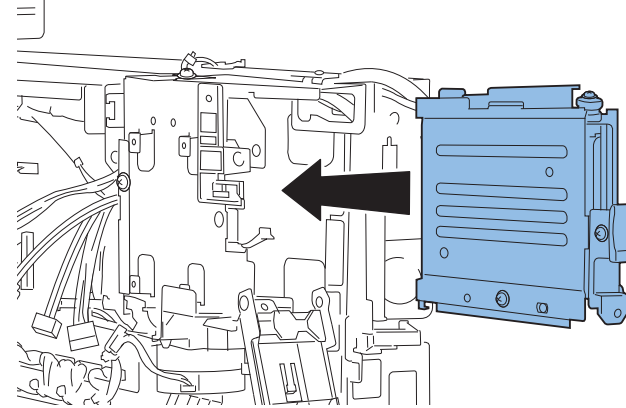
- 8) Write down the serial number of the host machine to the label for recording the number, and affix it to the area indicated in the figure.



F-9-640



9) Install the originally installed HDD to Slot.1 (left side).

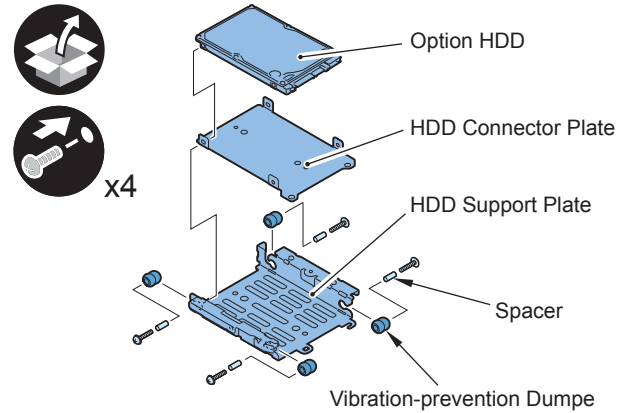


F-9-641

Assembling and Installing the Option HDD (Second HDD)

1) Purchase option HDD and assemble the second HDD.

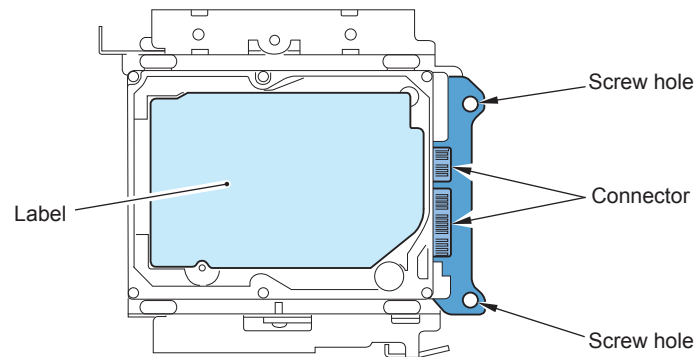
- 1 Option HDD (enclosed with option HDD)
- 1 HDD Support Plate (enclosed with option HDD)
- 1 HDD Connector Plate (enclosed with removable HDD Kit)
- 4 Vibration-prevention Dumpers (enclosed with option HDD)
- 4 spacers (enclosed with option HDD)
- 4 screws (binding with flat washer; M3X14) (enclosed with option HDD)



F-9-642

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)

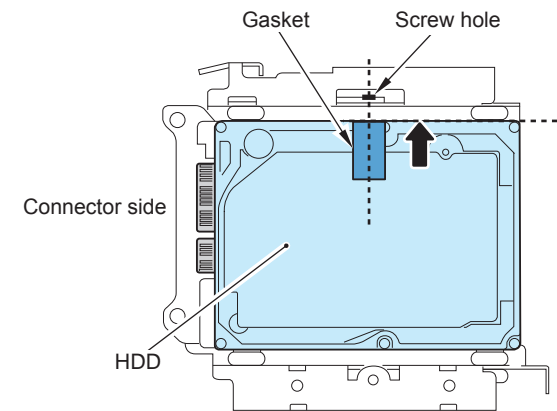


F-9-643

2) Affix the gasket to the place shown in the figure below.

CAUTION:

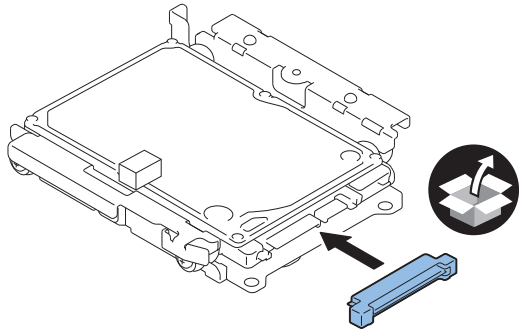
Be sure to place the gasket in contact with the label-free metal surface of the HDD surface.



F-9-644

3) Install the Conversion Connector.

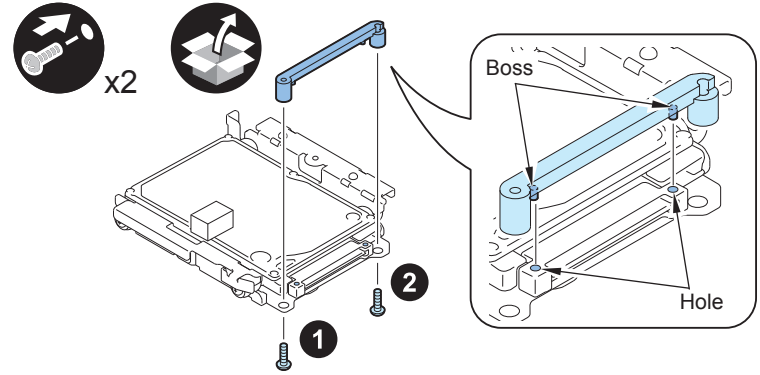
CAUTION:
Make sure that there is no opening between the Conversion Connector and part of HDD.



F-9-645

4) Fit the 2 bosses of Connector Fixing Block to the hole of Conversion Connector and install it.
• 2 screws (P Tight; M3X8)

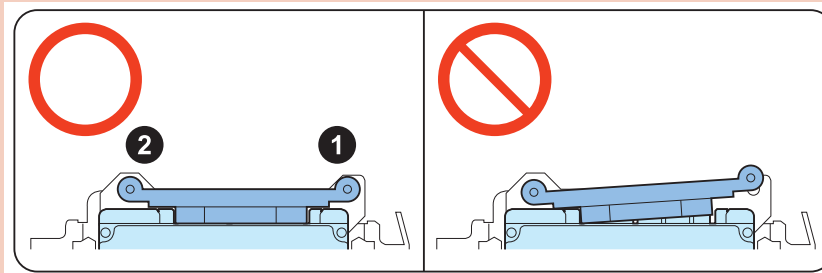
CAUTION:
Be sure not to tighten the screws in wrong order. Otherwise, the Conversion Connector will not be secured properly.



F-9-646

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-9-647

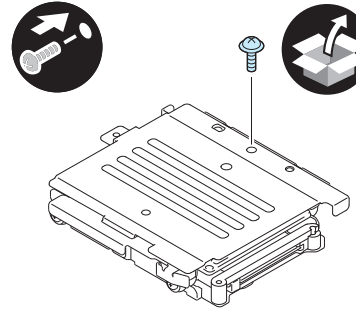
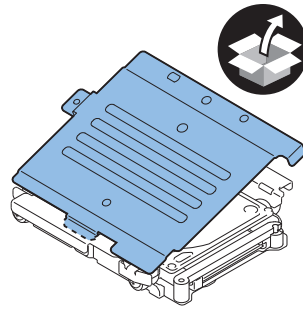


5) Install the HDD Cover.

- 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-9-648

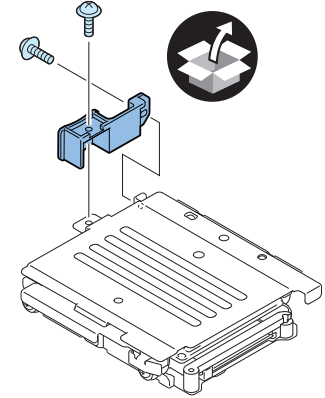


6) Install the HDD Handle.

- 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.

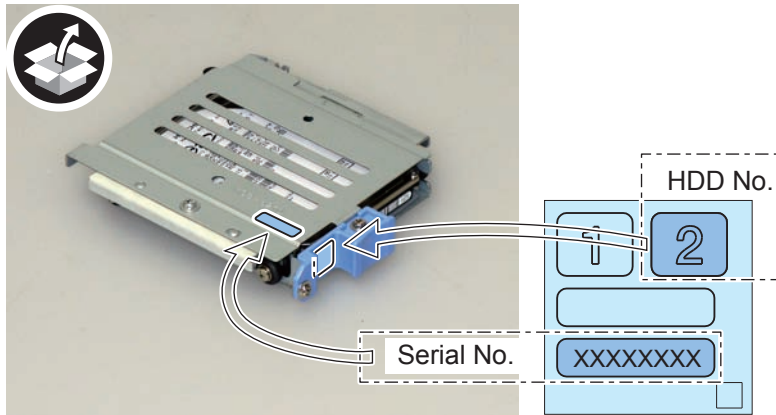


F-9-649



7) Affix the HDD No.2 Label to the handle of the Removable HDD.

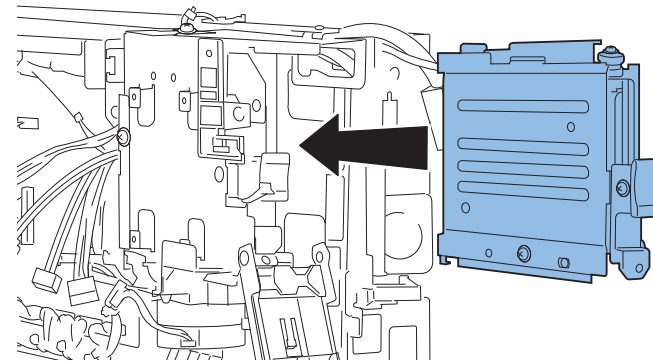
8) Write down the serial number of the host machine to the label for recording the number, and affix it to the area indicated in the figure.



F-9-650



9) Install the HDD to Slot.2 (right side).



F-9-651



10) Close the Edge Saddle, and close the HDD Lid.

■ 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.

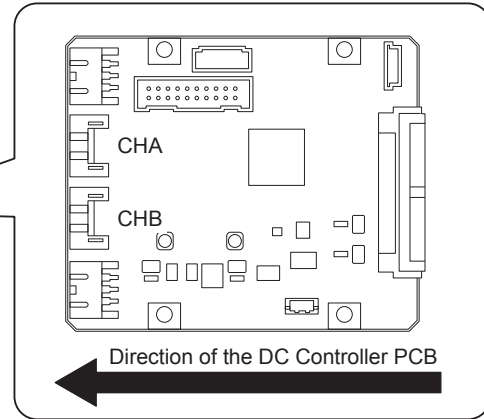
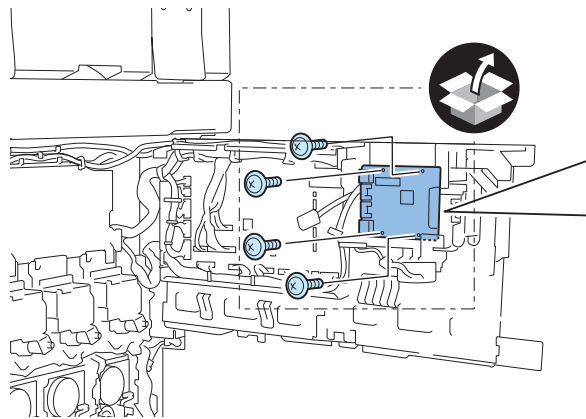
- 4 screws (TP; M3X6)

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.



x4



F-9-655



2) Install the cables to the PCB on the backside.

- Power Cable (650mm; FK2-8464) (Included in the Removable HDD Kit)
- STS Cable (550mm (Light blue); 5 pin) (Included in the HDD Mirroring Kit)

3) Fix the cables.

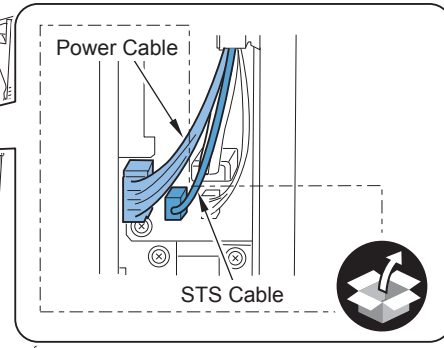
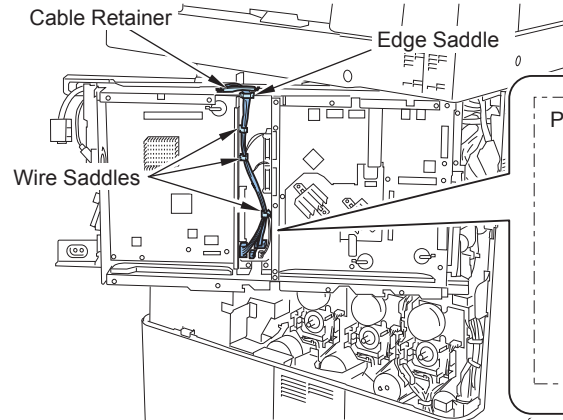
- 3 wire saddles
- 1 edge saddle
- Cable retainer



x2



x4



F-9-656



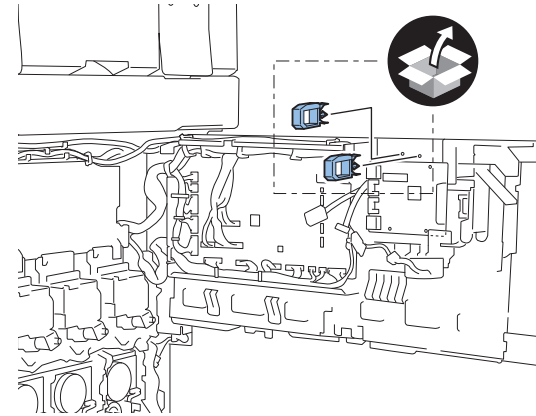
4) Install the Controller Cover.

CAUTION:

Be sure that the gaskets on left/right side of the Controller Cover are not protruded.



5) Install the 2 wire saddles.



F-9-657



6) Install the cable to the Mirroring Board or Encryption Board.

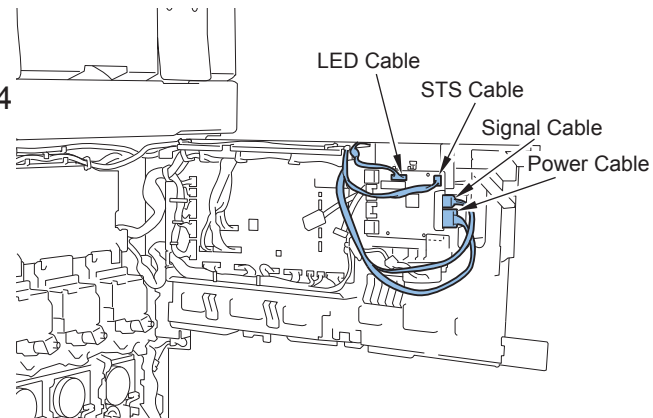
- Signal cable (existing cable)
- Power cable (650mm; FK2-8464)
- LED cable (1200mm; 7 pin)
- STS cable (550mm (Light blue); 5 pin)

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.



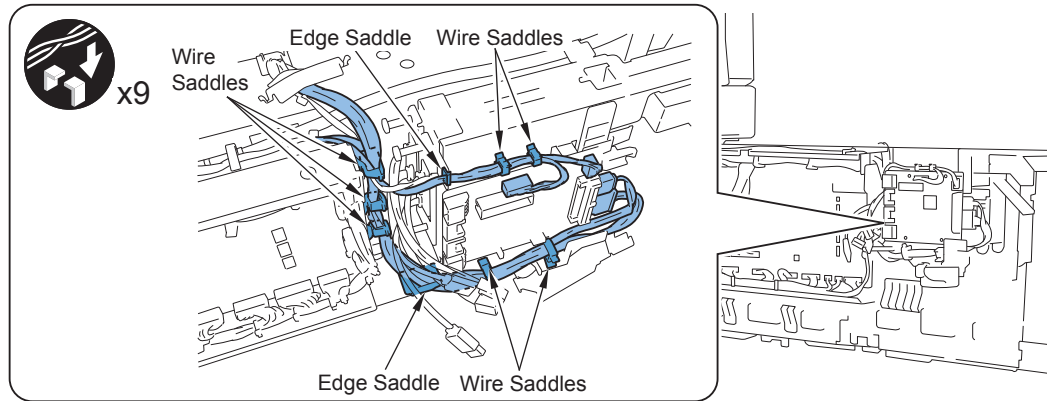
x4



F-9-658



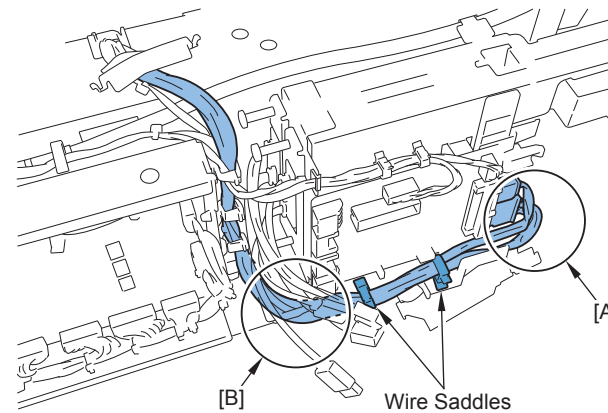
- 7) Fix the cables.
- 7 wire saddles
 - 2 edge saddles



F-9-659

**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.



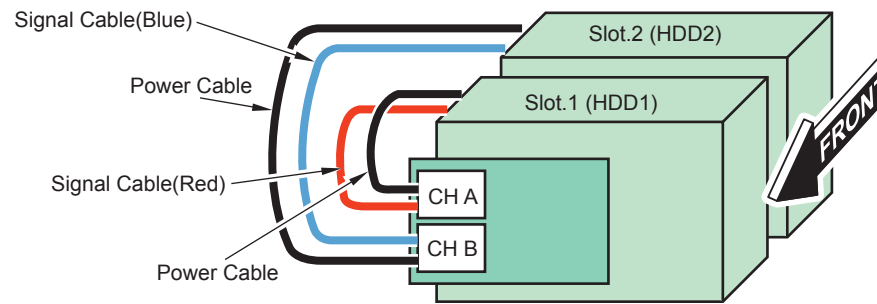
F-9-660

**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.

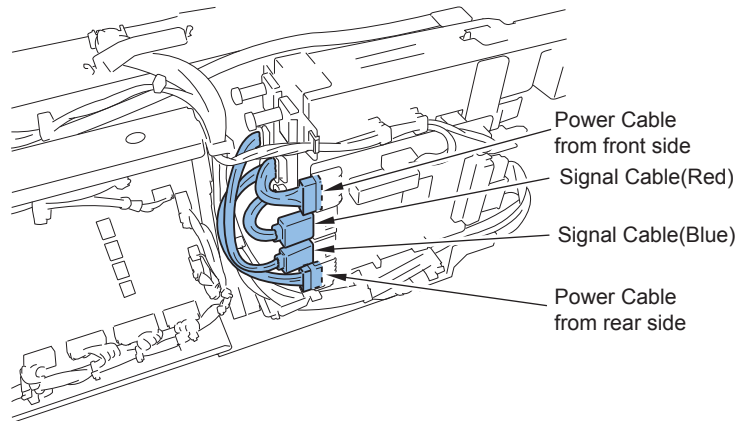
- Connect Slot 1 to "CHA". (Originally installed HDD)
- Connect Slot 2 to "CHB". (New HDD)



F-9-661



8) Install the cable of the HDD Drawer Unit to the Mirroring Board or Encryption Board.



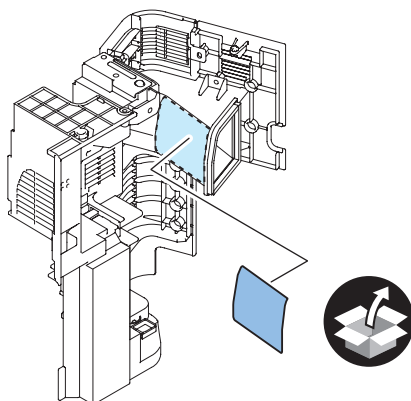
F-9-662



9) Place the Controller Box to the original position.



10) Affix the Shutdown Warning Label in the appropriate language on the Right Rear Cover 1. (included in the Removable HDD Kit).



F-9-663



11) Install the removed cover and the cable.

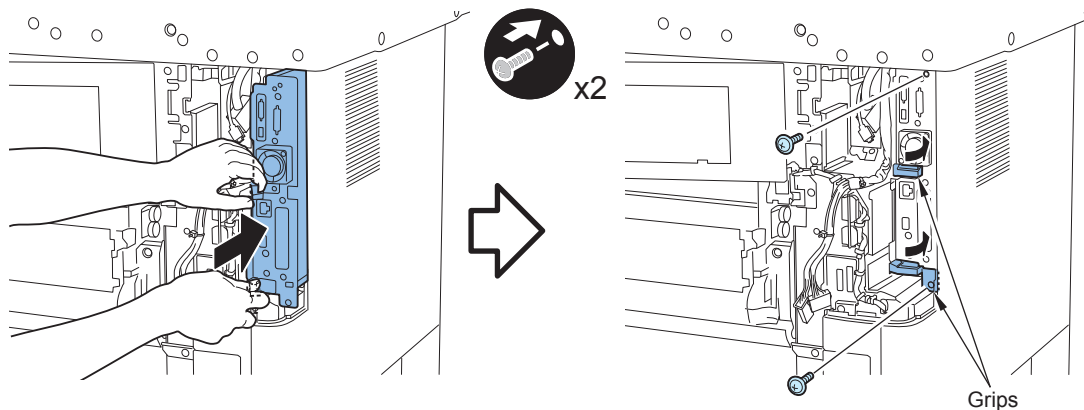
- Rear Cover
- Left Rear Sub Cover
- Reader Communication Cable (when reader is installed)
- Left Rear Cover
- USB Cable and Control Panel Communication Cable



12) 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.



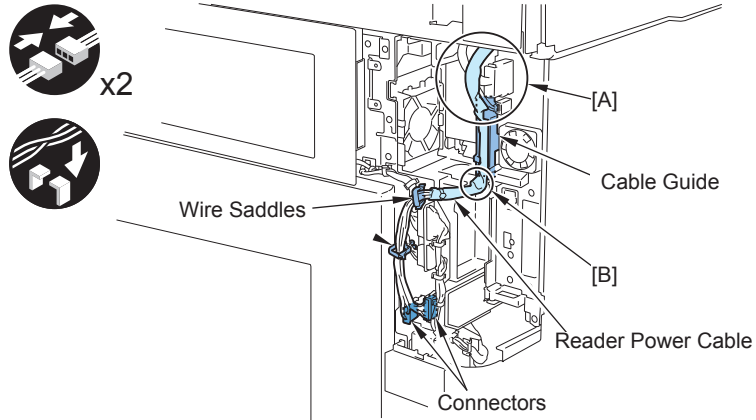
F-9-664



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.

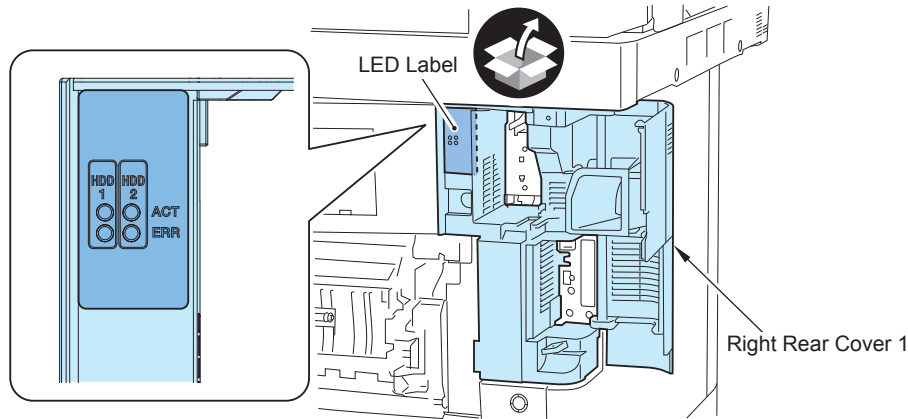


14) Install the Right Rear Cover 1.

F-9-665



15) Affix the LED Label so that it fits the edge of the Right Rear Cover 1.



F-9-666



16) Close the Right Rear Cover 1, Right Lower Cover, and Right Upper Cover.

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 CONNECT.

2) From the list of machine series, select the appropriate model.

3) Select 'single', and click START.

4) Execute HDD format.

5) After 5 sec from when the power of the host machine is turned OFF, restart the host machine in download mode of safe mode.

6) When "download mode" is displayed on the control panel, click simple mode start.

7) Click start to execute download.

8) Follow the instruction on the screen and when download is complete, click OK.

9) Exit SST.

10) Check the versions of MN-CONT and LANG etc 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 > FNCSW > 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 > FNCSW > 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 > FNCSW > 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] Removable HDD Kit + HDD Data Encryption & Mirroring Kit



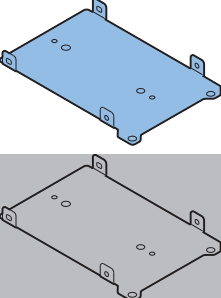
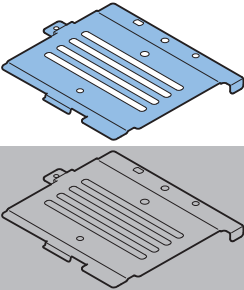
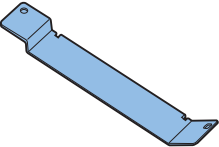
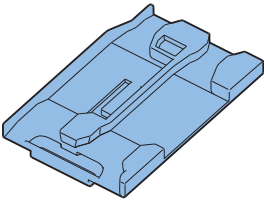
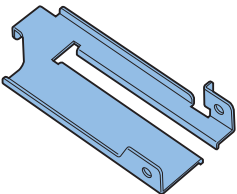

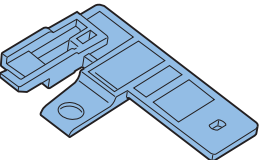
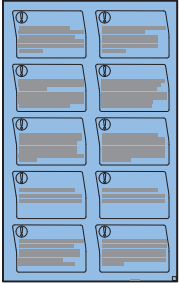
Points to Note when HDD Data Encryption & Mirroring Kit has been Installed

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.

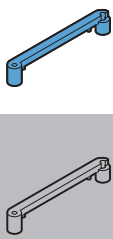
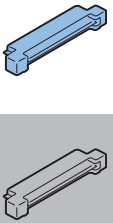
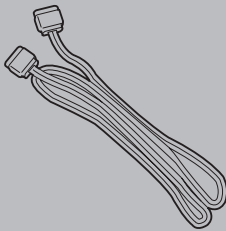
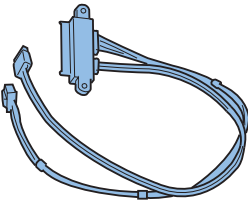
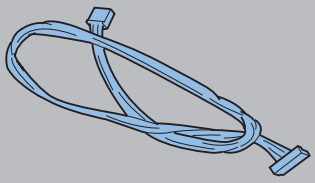
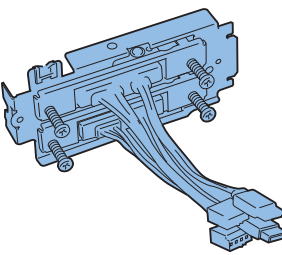
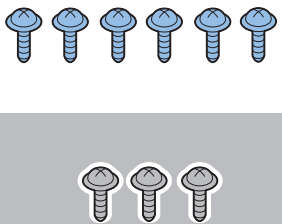
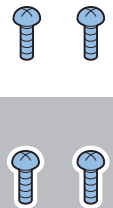
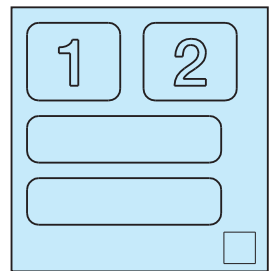
Checking the Contents

The parts with a gray in the contents list will not be used.

Removable HDD Kit

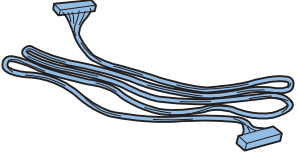
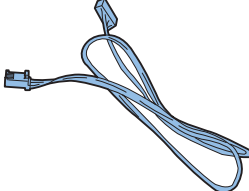
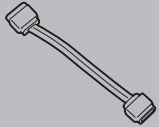
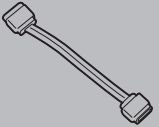
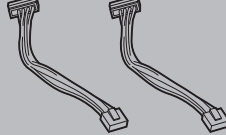
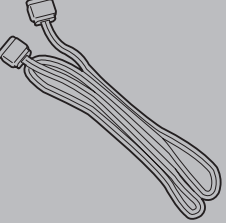
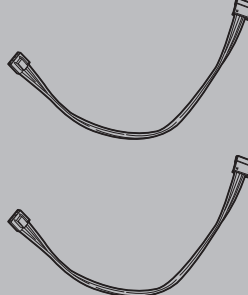
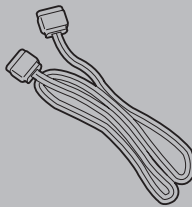
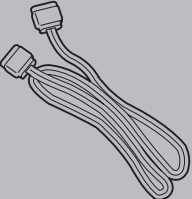

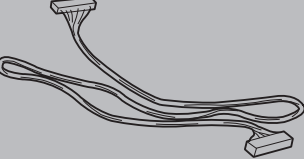
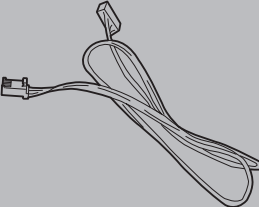
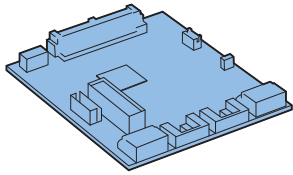
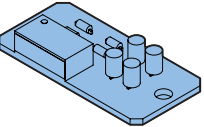
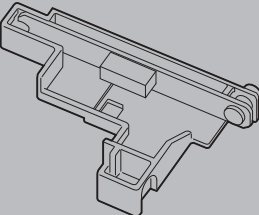
<input type="checkbox"/> [1] Hinge Shaft Stopper x 2 	<input type="checkbox"/> [2] HDD Handle x 2 	<input type="checkbox"/> [3] HDD Connector Plate x 2 	<input type="checkbox"/> [4] HDD Cover x 2 	<input type="checkbox"/> [5] HDD Blanking Plate x 1 
<input type="checkbox"/> [6] HDD Door Guide x 1 	<input 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 

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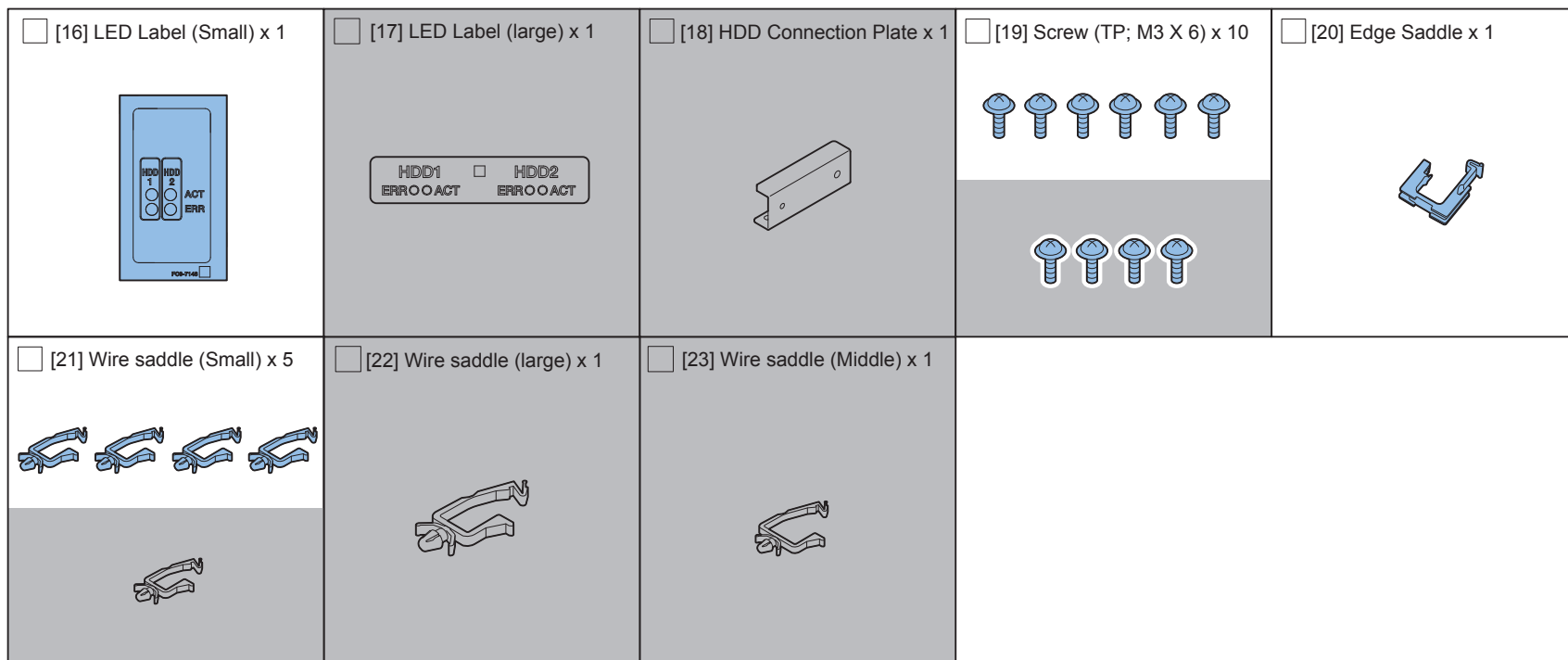
<p><input type="checkbox"/> [11] Connector Fixing Block x 2</p> 	<p><input type="checkbox"/> [12] Conversion Connector x 2</p> 	<p><input type="checkbox"/> [13] Signal Cable (660mm ; Red) x 1</p> 	<p><input type="checkbox"/> [14] IV Cable (FK2-8453) x 1</p> 	<p><input type="checkbox"/> [15] Power Cable (650mm ; FK2-8464) x 1</p> 
<p><input type="checkbox"/> [16] HDD Drawer Unit x 1</p> 	<p><input type="checkbox"/> [17] Screw (R round head TP; M3 X 6) x 9</p> 	<p><input type="checkbox"/> [18] Screw (P Tight ; M3 X 8) x 4</p> 	<p><input type="checkbox"/> [19] R-HDD Label x 1</p> 	

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HDD Data Encryption & Mirroring Kit

<input type="checkbox"/> [1] LED Cable (1200mm; 7 pin) x 1 	<input type="checkbox"/> [2] STS Cable (550mm (Light blue); 5 pin) x 1 	<input type="checkbox"/> [3] Signal Cable (80mm (Red); FK2-8436) x 1 	<input type="checkbox"/> [4] Signal Cable (80mm (Blue); FK2-8438) x 1 	<input type="checkbox"/> [5] Power Cable (80mm; FK2-8461) x 2 
<input type="checkbox"/> [6] Signal Cable (450mm (Red); FK2-8435) x 1 	<input type="checkbox"/> [7] Power Cable (430mm; FK2-8463) x 2 	<input type="checkbox"/> [8] Signal Cable (340mm (Red); FK2-8434) x 1 	<input type="checkbox"/> [9] Signal Cable (370mm (Blue); FK2-8441) x 1 	<input type="checkbox"/> [10] Power Cable (320mm; FK2-8467) x 1 
<input type="checkbox"/> [11] LED Cable (290mm; 7 pin) x 1 	<input type="checkbox"/> [12] STS Cable (420mm (Light blue); 5 pin) x 1 	<input type="checkbox"/> [13] Encryption Board x 1 	<input type="checkbox"/> [14] LED Board (Small) x 1 	<input type="checkbox"/> [15] LED Board (large) x 1 

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<CD/Guide>

- HDD Data Encryption & Mirroring Kit-C1 User Documentation
- HDD Data Encryption Kit Notice Notice
- Installation Procedure
- Noticd for FCC/IC

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
Send Function Favorite Settings	Yes
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

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*1; Can only be backed up using the Remote UI.

*2; Depending on the MEAP application.

*3: Only the following data saved in Mail Box/Advanced Box 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
- Advanced Box URI Transmission Settings

*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 to be Backed Up

Data to be backed up	Reference
Address Book	For information on exporting data, see the "e-Manual > Remote UI".
Settings/Registration settings	
Device Settings (Forwarding Settings, Address List, Favorite Settings)	
Printer Settings	
Paper Information	
Favorite Settings for Web browser	See the "e-Manual > Web Access". (You can select this if web browser (Option) is installed.)
License files for MEAP applications	For information on downloading license files, see the "e-Manual > MEAP".
Data saved by MEAP applications	Data saved by MEAP applications may be able to be backed up, depending on the MEAP application. See the documentation included with the MEAP application.
Data stored in Mail Boxes or the Advanced Box	See the "e-Manual > Remote UI" to "Setting the Backup Location for Stored Data".
Image forms stored in the Superimpose Image	
SSO-H (Single Sign-On H) user authentication information	See the "e-Manual > MEAP".
Quick Menu Information	See the "e-Manual > Quick Menu".
User Information of the Advanced Box	See the "e-Manual > Security".

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CAUTION: Work to Perform After Installing the Kit

- When you start using this product, passwords set for Mail Boxes 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 this product has been installed. These data items are property of the user, and the restoration work must be performed by the system administrator.

The method of restoration is described in the Users Guide. See Table (Data to be backed up) in Points to Note About Installation of the Installation Procedure.

1. Procedure to make a backup of Address Book

- 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].
- 3) Click [Address List].
- 4) Click [Export].
- 5) Select the save format for Address list, and click [Start Export].
- 6) Following the instructions on the window, specify the location to save the file. Be sure to set a distinctive name to an export file so that you can recognize it when importing it.

NOTE:

Exporting the device settings will export all contents of the address list. In other words, there is no need for a backup unless it needs to be done individually.

2. Device Settings Export Procedure

- 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].
- 3) Click [Device Settings (Forwarding Settings, Address List, Favorite Settings)].
- 4) Click [Export], and then click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

3. Settings/Registration Export Procedure

- 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].
- 3) Click [Settings/Registration].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

4. Printer Settings Export Procedure

NOTE:

The following items to be exported are the same as the ones which are distributed by device information distribution.

- 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].
- 3) Click [Printer Settings].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

5. Paper Information Export Procedure

- 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].
- 3) Click [Paper Information].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

6. 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.

CAUTION: MEAP Backup Function Using the SST

Data that has been backed up using MEAP back of the SST before the use of this product is started must not be written back to the host machine after the use of this product is started. Similarly, even if the data that has been backed up after the use of this product is started is written back to the host machine before the use of this product is started, the machine does not operate. It is necessary to make sure that the implementation conditions for this product are compatible before and after making a backup of data, and the MEAP backup function does not permit making a backup of data in the course of installing the kit.

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.

7. 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) Click the application of which license has been installed.
- 5) Click [License Control], and then click [Disable]. Click [Yes] in a confirmation window for disabling the license.

- 6) Click [Download] under "Download/delete Disabled License File" item. 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.
- 7) 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).
- 8) 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).

8. 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/`

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 the user has changed the password, ask him/her to change the password again after the use of this product is started.

- 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].

9. Backup of User inbox and Advanced Box document data

CAUTION: Backup of "Advanced Box"

When setting a SMB server as a backup destination, Advanced Box data saved in a large capacity HDD cannot be backed up. The Advanced Box data backed up from the large capacity HDD cannot be restored to the standard HDD.

Depending on the system version of the machine, both backup and restoration might not be performed.

The procedure of backup and restoration of a box document data is described below.

Specify the backup destination of a document data:

- Backup to SMB server
Select SMB as a backup destination and specify an address, a user name, a password, and a path to the SMB server to which saved data is backed up.
- Backup to USB HDD
Select USB HDD as a backup destination and specify a path to the USB HDD folder to which saved data is backed up.

CAUTION: Data which cannot be backed up

If you back up/restore stored data without restarting the machine after changing the language displayed on the touch panel display by pressing [Settings/Registration] > [Preferences] from the control panel of the machine, the stored data may not be backed up/restored properly. For more information on the data that cannot be backed up, see Points to Note for Installation.

CAUTION:

If the language setting in the common specification settings (Settings/Registration) is set to ON, 'host address' and 'path to folder' might not be displayed correctly or cannot be referred.

CAUTION:

- Regarding the method of inputting characters, see 'Basic Operations' in the e-Manual.
- A host address can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,' 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A path to the folder can be up to 255 characters in 1 byte (127 characters in 2 bytes).
- A user name can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,' 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A password can be up to 7 to 48 characters using the 'alphanumeric character' and 'mark (1 byte)' modes.
- The voice sound symbol and the semi-voice sound symbol entered in the 'Katakana (1 byte)' mode are counted up as one 1-byte character.

[Backup method of User inbox and Advanced Box document data]

- 1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Backup].
- 2) Select 'All' or 'Changes' for the backup method.
- 3) Click [Execute].

CAUTION:

- If any of the host IP address, user name, password, or path to the folder is not correctly entered, a backup cannot be made.
- If you select to encrypt the backup data, the backup process may take longer.

[Restoring the backup data of User inbox and Advanced Box document data]

- 1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Restore].
- 2) Click [Display Backup Data].
- 3) Select the backup data to restore from the list and then click [Execute].

CAUTION:

- If you want to restore encrypted backup data, enter the same password used when backing up the data.
- Depending on the settings of the machine, the backup data may not be completely restored, or some documents may be automatically printed.
- Restoration is performed after all of the box data stored in the machine, or documents that are being sent, received, or stored, are erased.

10. Quick Menu Information Export Procedure

- 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 Basic Tools > [Quick Menu] > [Export].
- 3) If the file needs to be encrypted, enter the password after check [Encrypt file]. (The number of characters for the password must be more than 4 but less than 16.)
- 4) Click [Export].
- 5) Following the instructions on the window, specify the location to save the file.

11. User Information of the Advanced Box Export Procedure

- 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 Basic Tools > [User Access Control for Advanced Box]. The dialog box to enter the user name of administrator and password appears, enter the system administrator ID and password, and then click [Log In].
The default administrator user name and password are as follows:
User Name: Administrator
Password: password
- 3) Click [Export], and click [Start Export].
- 4) Following the instructions on the window, specify the location to save the file.

 **Check Items when Turning OFF the Main Power**

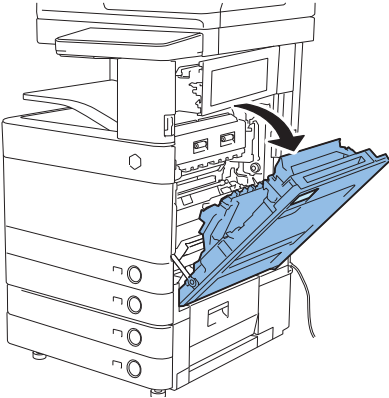
Check that the main power switch is OFF.

- 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.)

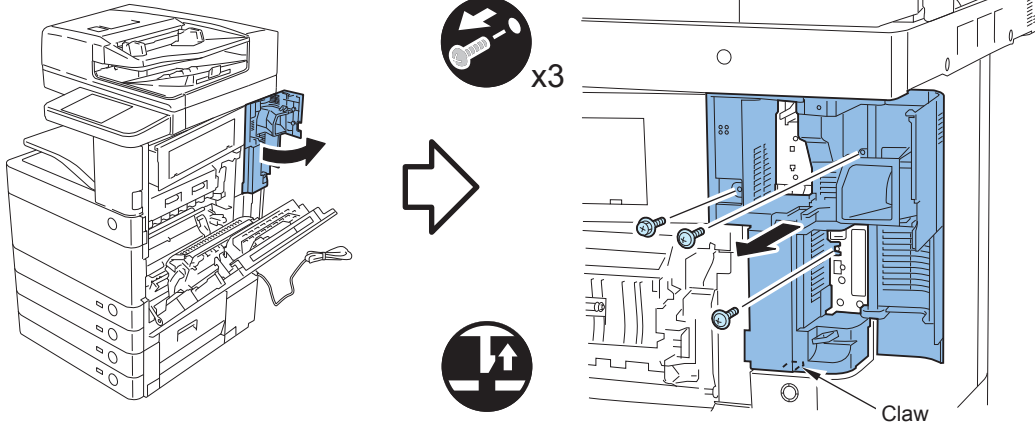


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2) Open the Right Rear Cover 1.

3) Remove the Right Rear Cover 1.

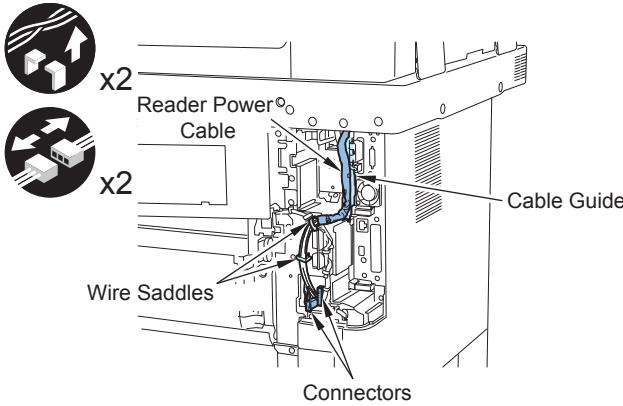
- 1 screw (RS tight; M4)
- 2 screws (TP; M3)
- 1 claw



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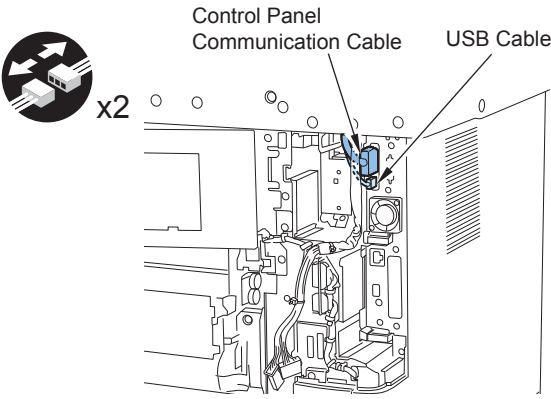
4) When the Reader is installed, remove the Reader Power Cable.

- 2 connectors
- 2 wire saddles
- 1 cable guide



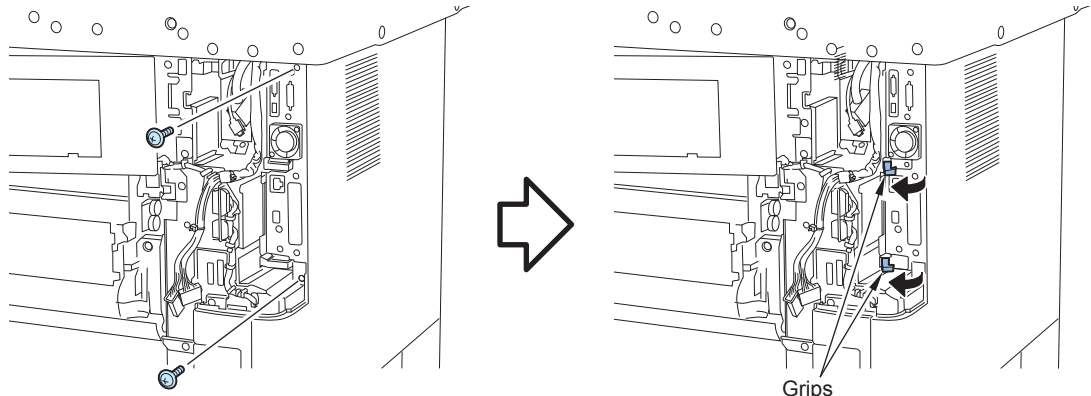
F-9-673

5) Remove the USB Cable and the Control Panel Communication Cable.



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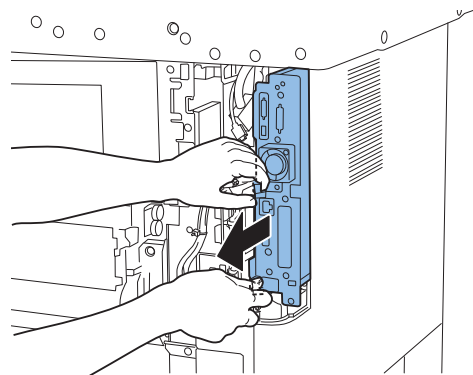
6) Remove the 2 screws, open the grip in 2 places.



Grips

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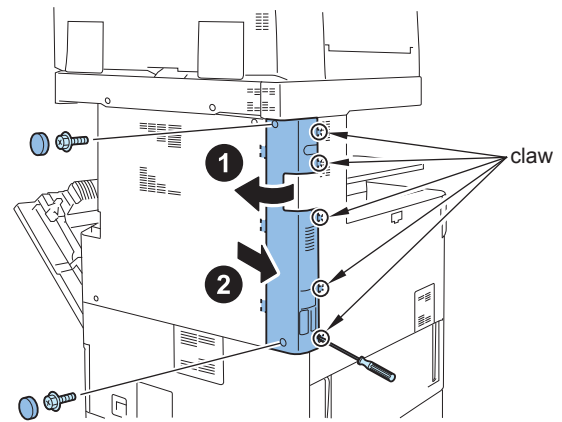
7) Hold the 2 Grips, and pull out the Main Controller PCB 1 approximately 10mm toward front.



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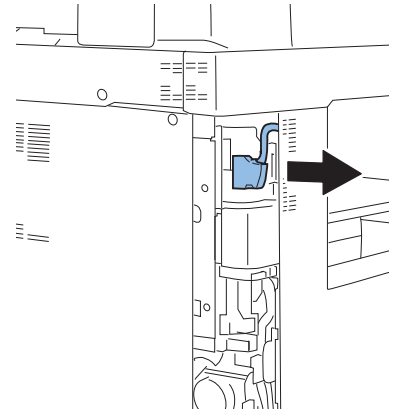
8) Remove the Left Rear Cover.

- 2 rubber caps
- 2 screws
- 5 claws



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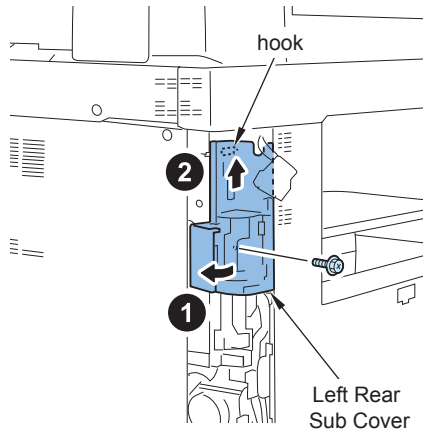
9) When the Reader is installed, remove the Reader Communication Cable.



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10) Remove the Left Rear Sub Cover.

- 1 screw
- 1 hook



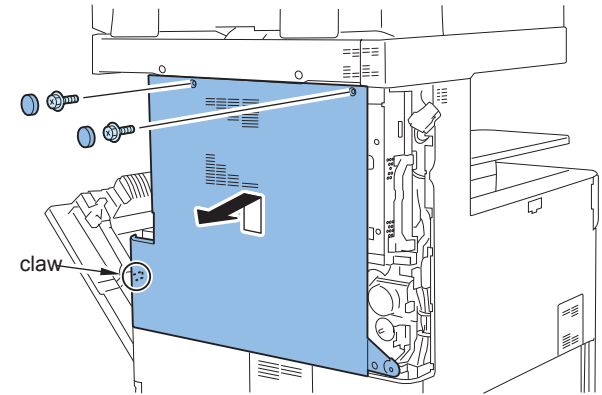
F-9-679

11) Remove the Rear Cover.

- 2 rubber caps
- 2 screws
- 1 claw



x2



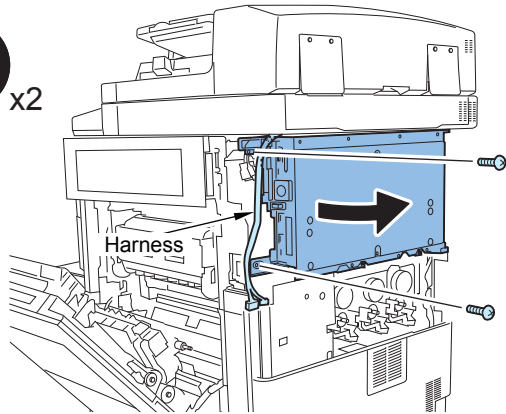
F-9-680

12) Open the Controller Box while avoiding the harness.

- 2 screws



x2

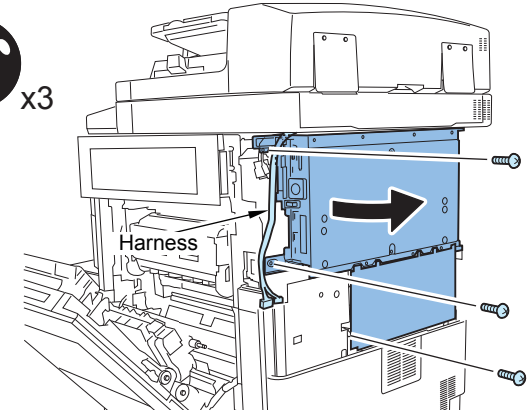


F-9-681

NOTE:
If the FAX Unit has been installed, remove the 3 screws and open the Controller Box with the FAX Unit.

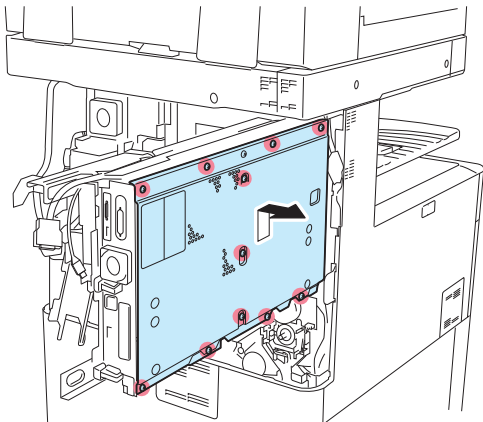


x3



F-9-682

13) Remove the Controller Cover.
 • 11 screws (loosen)

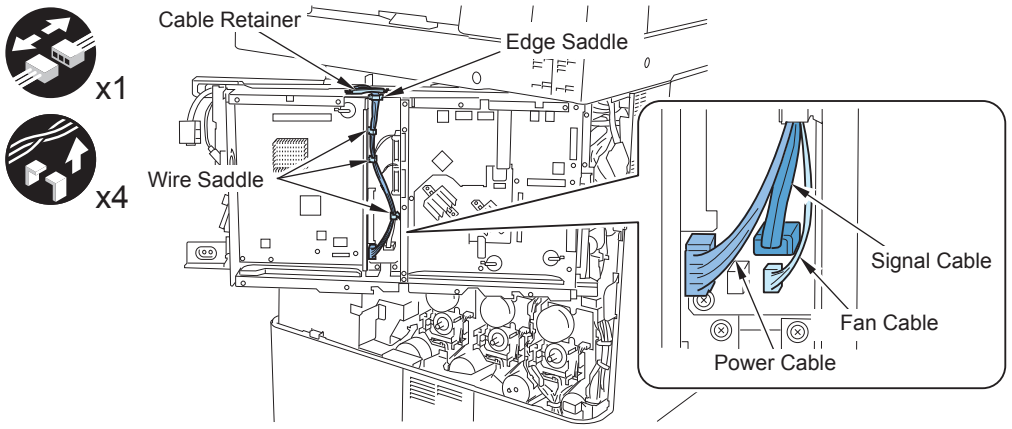


F-9-683

14) Remove the Power Cable.

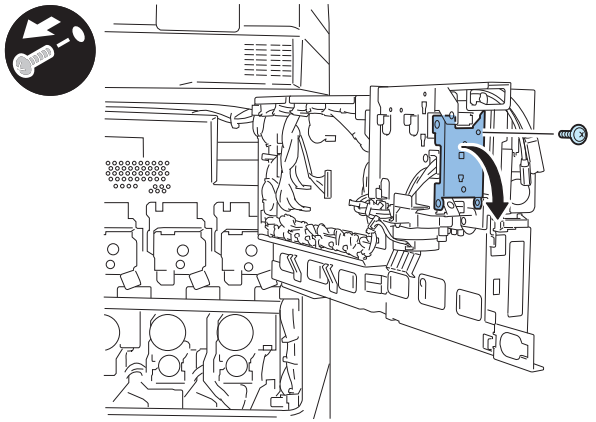
CAUTION:
 Do not remove the Signal Cable and the Fan Cable.

- 1 edge saddle
- 3 wire saddles
- 1 cable retainer



F-9-684

15) Open the HDD Lid.
 • 1 screw (Removed screw will not be used.)

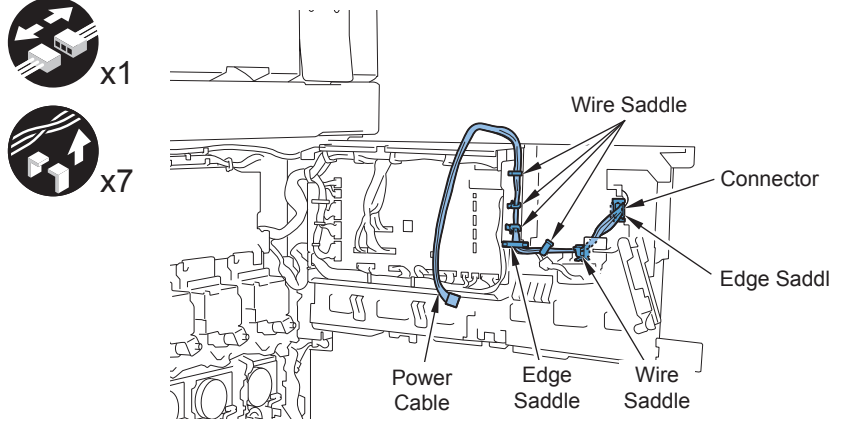


F-9-685

16) Remove the Power Cable.

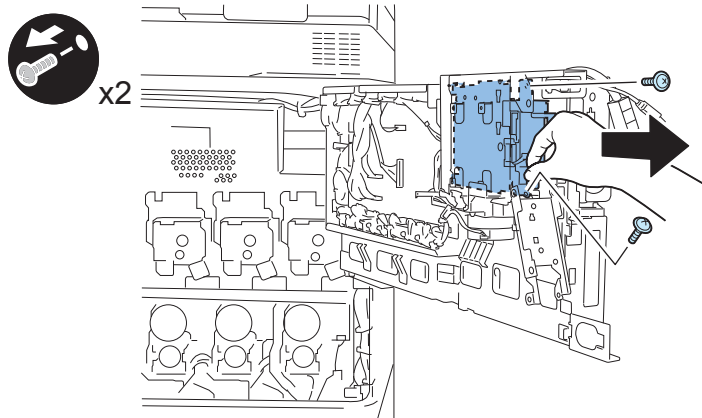
- 2 edge saddles
- 5 wire saddles
- 1 connectors

NOTE:
 Removed Power Cable will not be used.



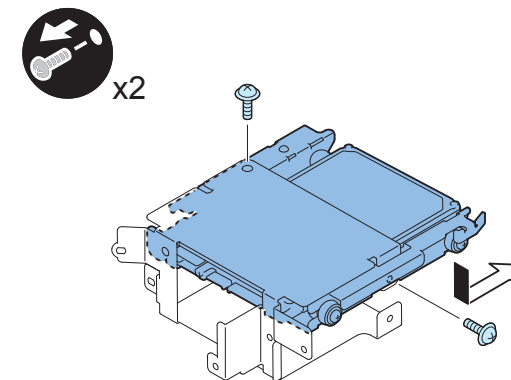
F-9-686

- 17) Remove the HDD Unit by holding it as shown in the figure below.
- 2 screws (Removed screw will not be used.)



F-9-687

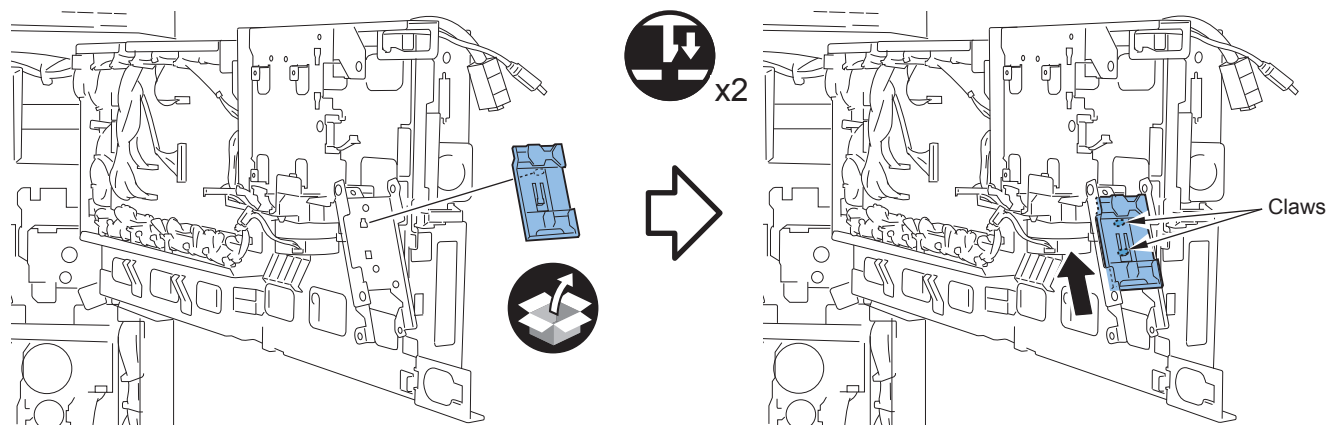
- 18) Remove the HDD (80GB) installed as standard from the removed HDD Unit. (The removed HDD Fixation Plate and the screws will not be used. The HDD (80GB) installed as standard will be used in "Assembling and Installing the Removable HDD" step1.)
- 2 screws



F-9-688

Installing the Removable HDD Kit

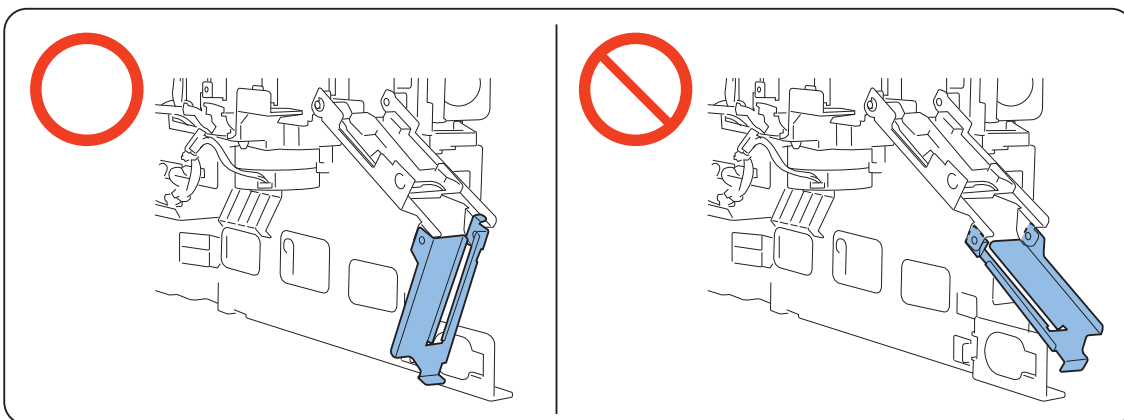
- 1) Install the HDD Door Guide.
- 2 claws



F-9-689

CAUTION:

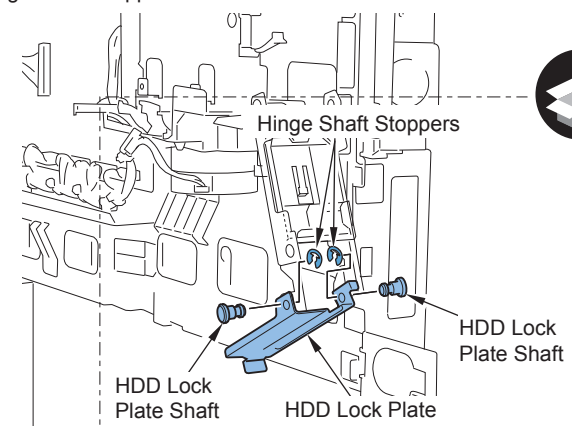
Be careful of the installation direction of HDD Lock Plate.



F-9-690

2) Install the HDD Lock Plate.

- 2 HDD Lock Plate Shafts
- 2 Hinge Shaft Stoppers



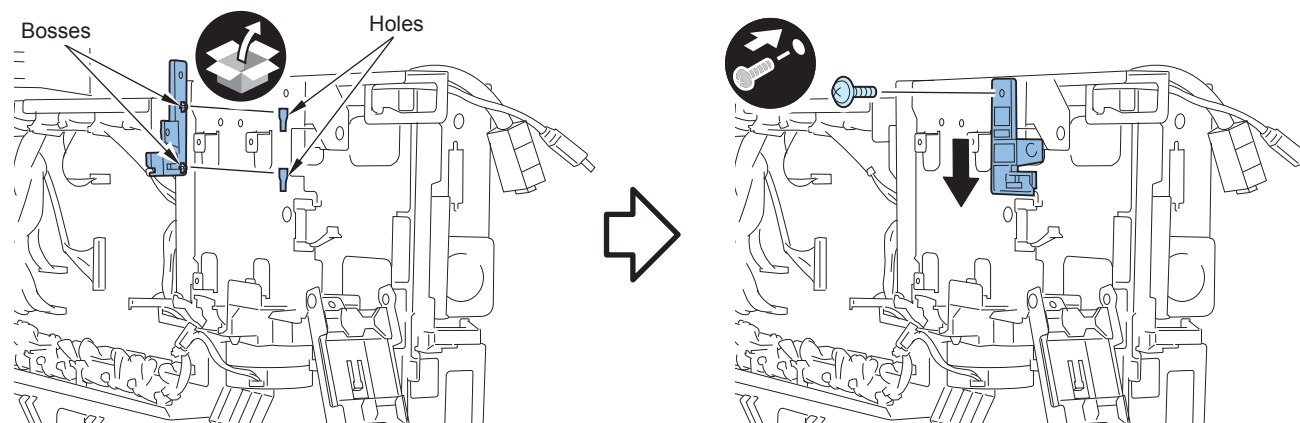
F-9-691

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-9-692

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-9-693

5) Install the HDD Drawer Unit.

- 2 screws (Removed screw will be used in step 4)

F-9-694

Assembling and Installing the Removable HDD

1) Remove the HDD from the HDD Support Plate. (Use the installed HDD (80GB) removed in "Removing the Signal Cable and Power Supply Cable" step 18.)

- 1 HDD Grounding Plate (If the HDD Grounding Plate is installed, remove it. The removed HDD Grounding Plate will not be used.)
- 4 screws

HDD Grounding Plate

HDD Support Plate

HDD

F-9-695

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

HDD

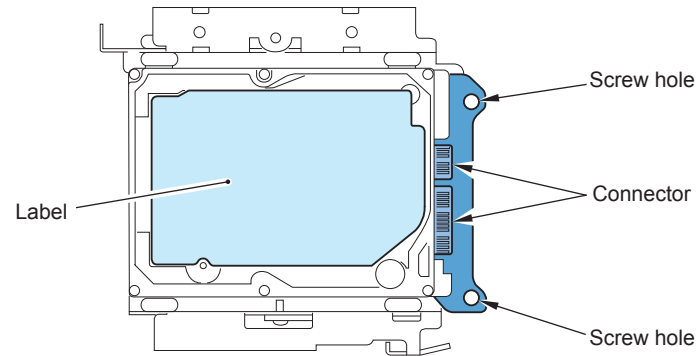
HDD Connector Plate

HDD Support Plate

F-9-696

**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-9-697



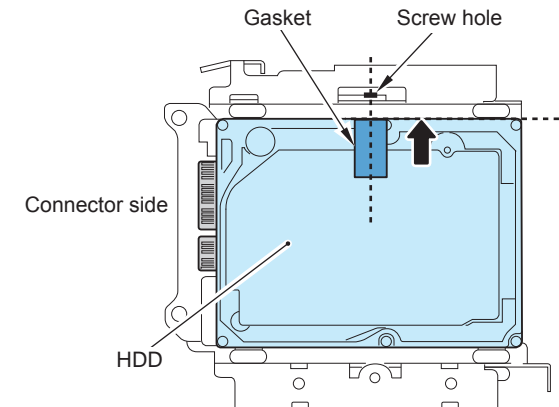
If there is no gasket with the HDD removed from the host machine, prepare the gasket with the following part number and perform step 3).

- KE8-1134-030

3) 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.



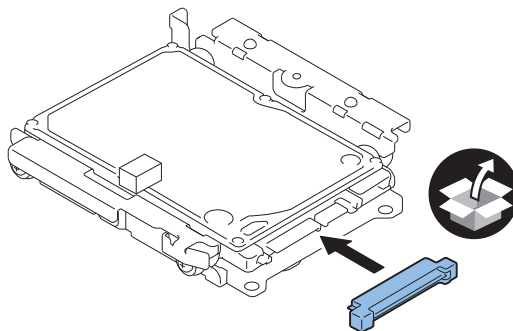
F-9-698



4) Install the Conversion Connector.

CAUTION:

Make sure that there is no opening between the Conversion Connector and part of HDD.



F-9-699

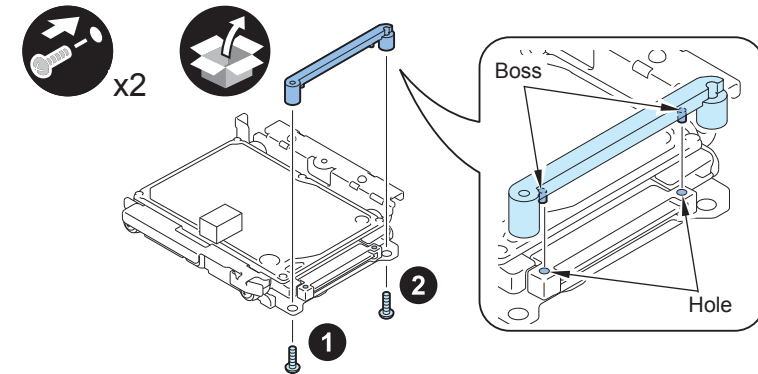


5) Fit the 2 bosses of Connector Fixing Block to the hole of Conversion Connector and install it.

- 2 screws (P Tight; M3X8)

CAUTION:

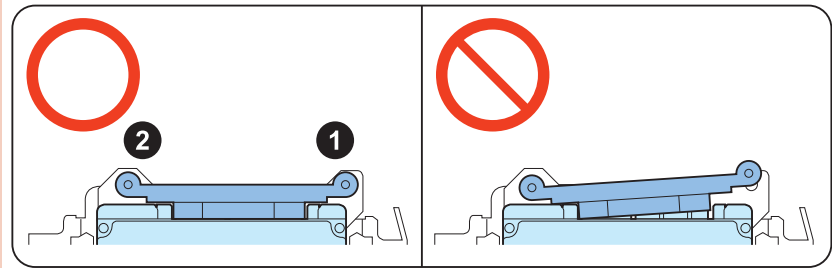
Be sure not to tighten the screws in wrong order. Otherwise, the Conversion Connector will not be secured properly.



F-9-700

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.

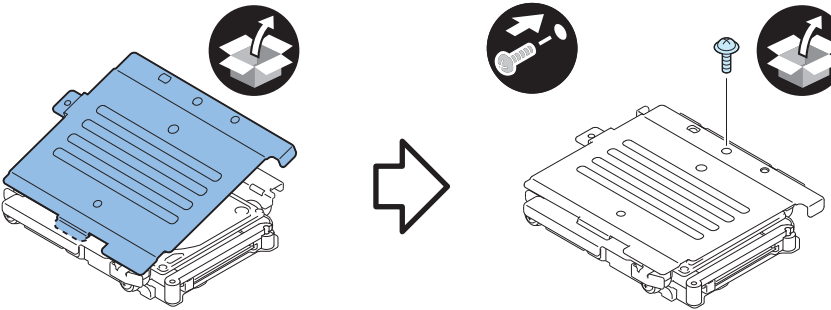


F-9-701

6) 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.

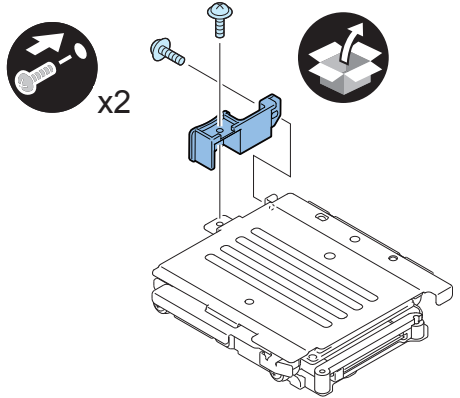


F-9-702

7) 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.

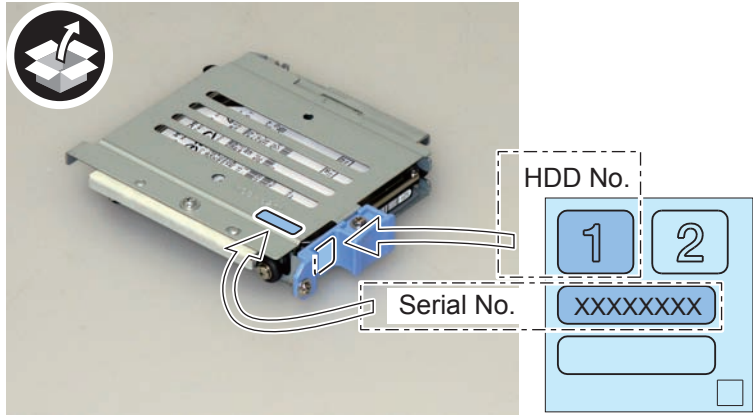


F-9-703



8) Affix the HDD No.1 Label to the handle of the Removable HDD.

9) 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.

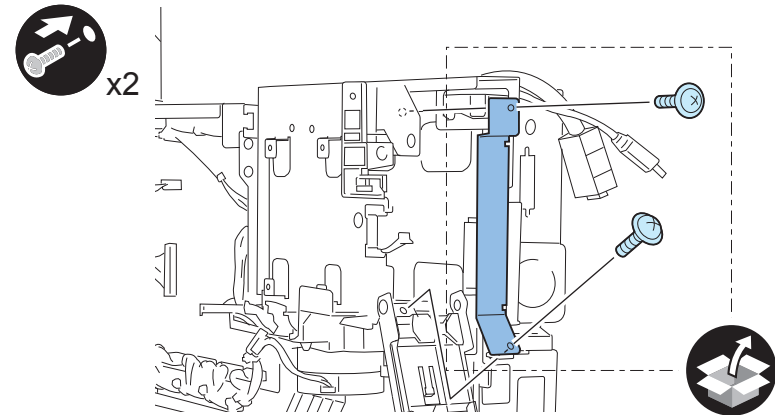


F-9-704



10) Install the HDD Blanking Plate to Slot.1 (left side).

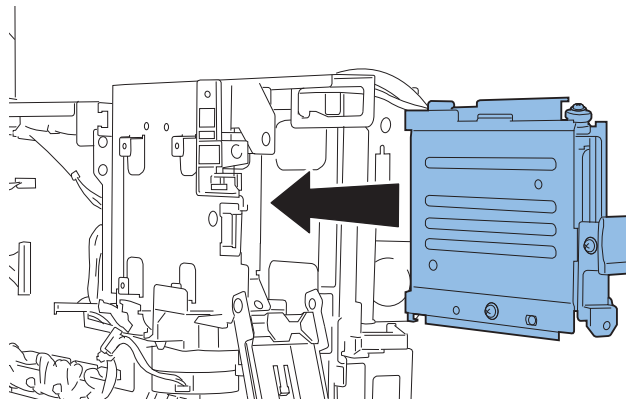
• 2 screws (TP round end; M3X6)



F-9-705



11) Install the HDD to Slot.2 (right side).



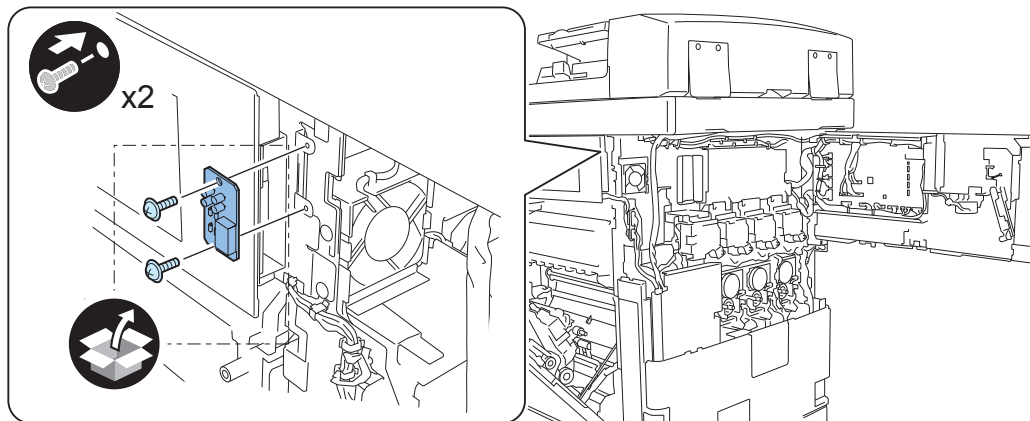
F-9-706



12) Close the Edge Saddle, and close the HDD Lid

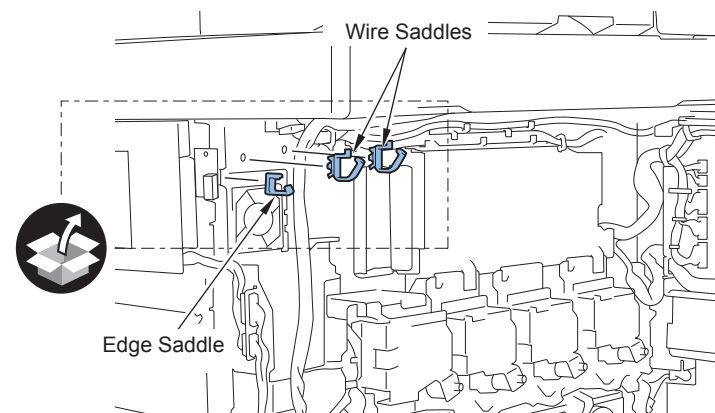
Installing the LED Board

- 1) Install the LED Board (small).
 • 2 screws (TP; M3X6)



F-9-707

- 2) Install the 2 wire saddles and the edge saddle.

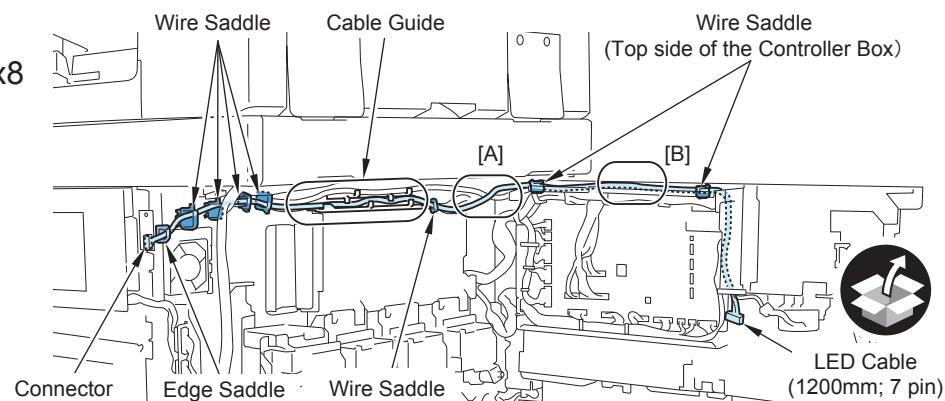


F-9-708

- 3) Install the LED Cable (1200mm; 7 pin).
 • 7 wire saddles
 • 1 edge saddle
 • 1 cable guide
 • 1 connector

CAUTION:

- Be sure to allow extra cable at [A] area in the condition that the Controller Box is fully opened.
- Be sure to tuck the [B] area of the LED cable under the other 2 cables running through the [B] area. This is to prevent the [B] area of the LED cable from being slacked off when closing the Controller Box.



F-9-709

■ Installing the Encryption Board



1) Install the Encryption Board so that "CHA" and "CHB" are placed in the direction of the DC Controller PCB.

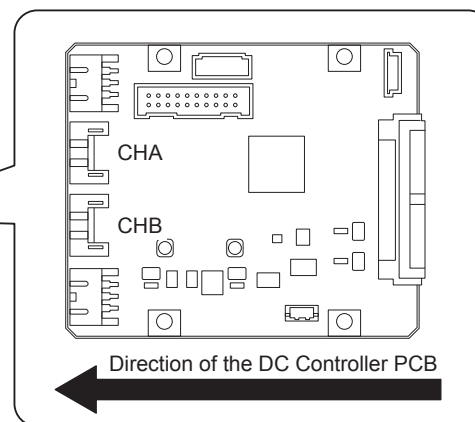
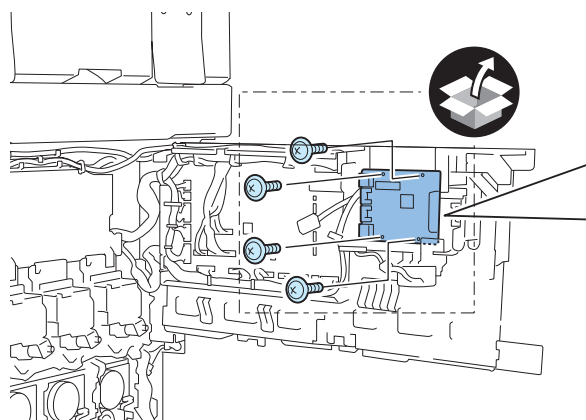
- 4 screws (TP; M3X6)

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.



x4



F-9-710



2) Install the cables to the PCB on the backside.

- Power Cable (650mm; FK2-8464) (Included in the Removable HDD Kit)
- STS Cable (550mm (Light blue); 5 pin) (Included in the HDD Encryption Kit)

3) Fix the cables.

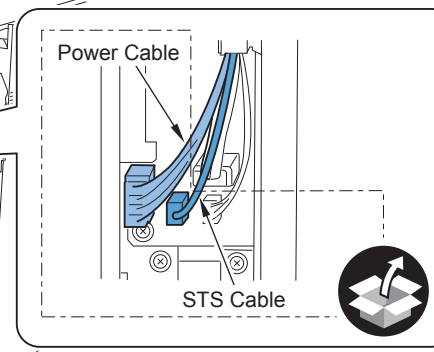
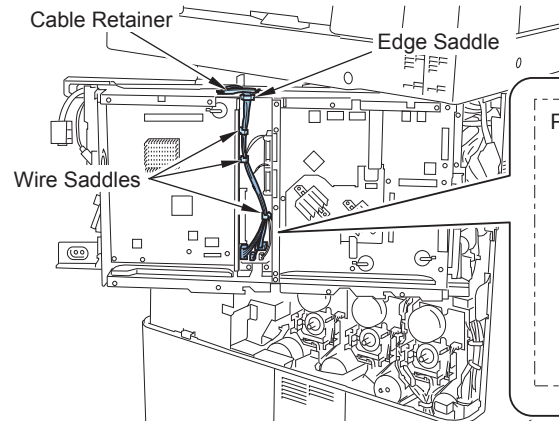
- 3 wire saddles
- 1 edge saddle
- Cable retainer



x2



x4



F-9-711



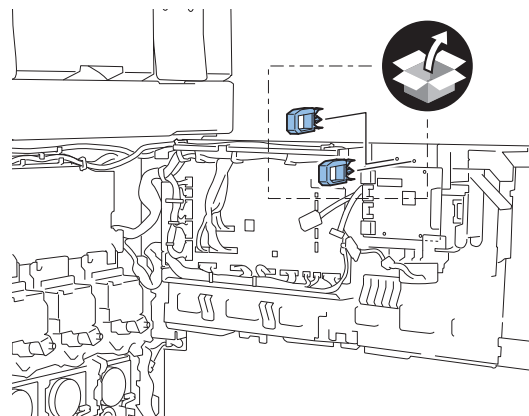
4) Install the Controller Cover.

CAUTION:

Be sure that the gaskets on left/right side of the Controller Cover are not protruded.



5) Install the 2 wire saddles.



F-9-712



6) Install the cable to the Encryption Board.

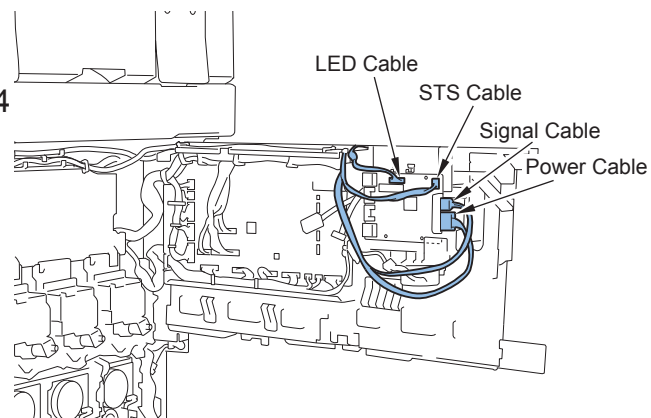
- Signal cable (existing cable)
- Power cable (650mm; FK2-8464)
- LED cable (1200mm; 7 pin)
- STS cable (550mm (Light blue); 5 pin)

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.



x4

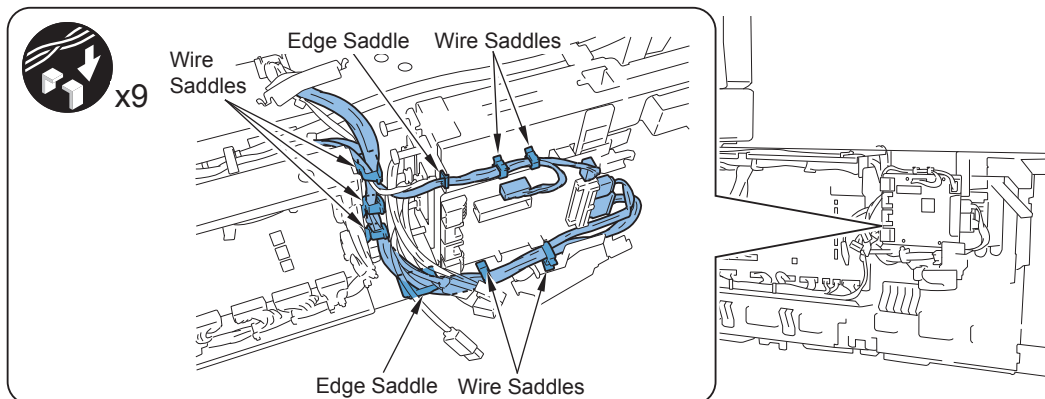


F-9-713



7) Fix the cables.

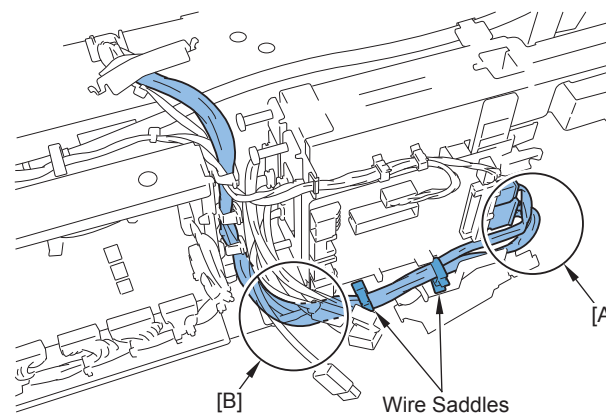
- 7 wire saddles
- 2 edge saddles



F-9-714

**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-9-715

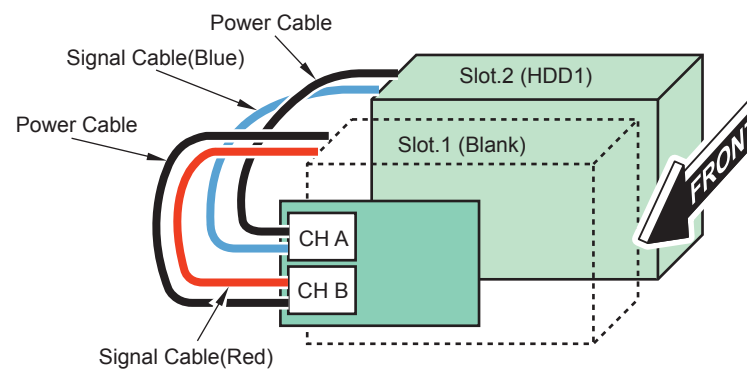
**CAUTION:**

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.

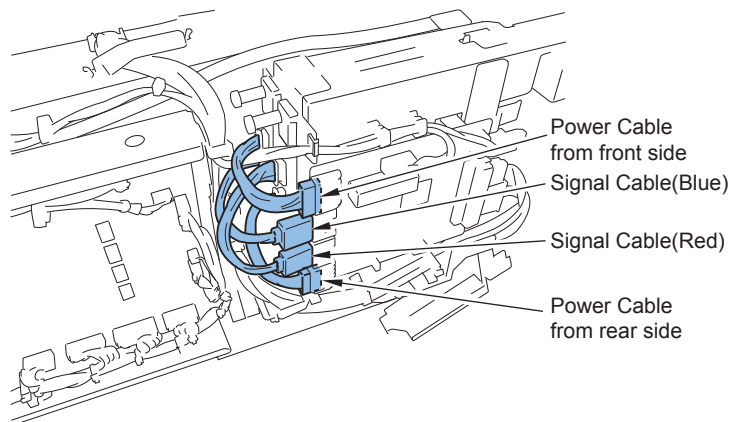
- Connect Slot 1 to "CHB".
- Connect Slot 2 to "CHA".



F-9-716



8) Install the cable of the HDD Drawer Unit to the Encryption Board.



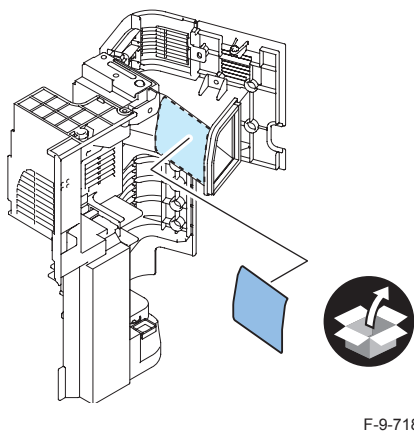
F-9-717



9) Place the Controller Box to the original position.



10) Affix the Shutdown Warning Label in the appropriate language on the Right Rear Cover 1. (included in the Removable HDD Kit).



F-9-718



11) Install the removed cover and the cable.

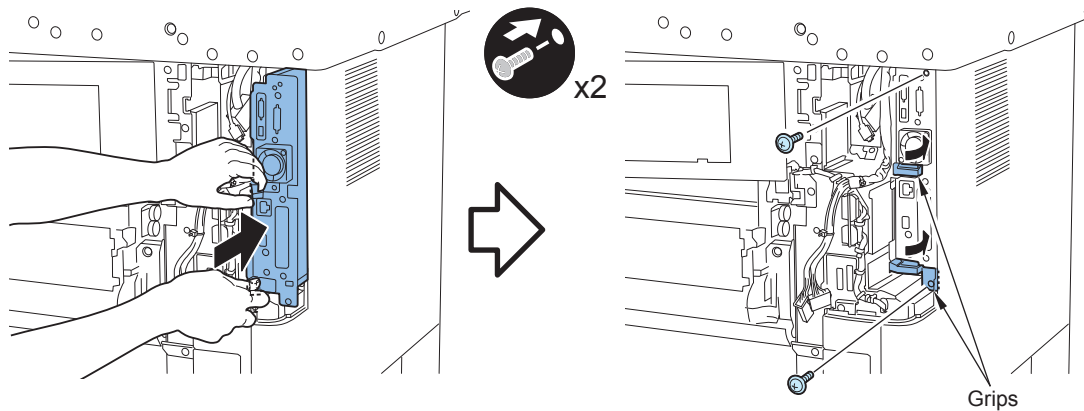
- Rear Cover
- Left Rear Sub Cover
- Reader Communication Cable (when reader is installed)
- Left Rear Cover
- USB Cable and Control Panel Communication Cable



12) 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.



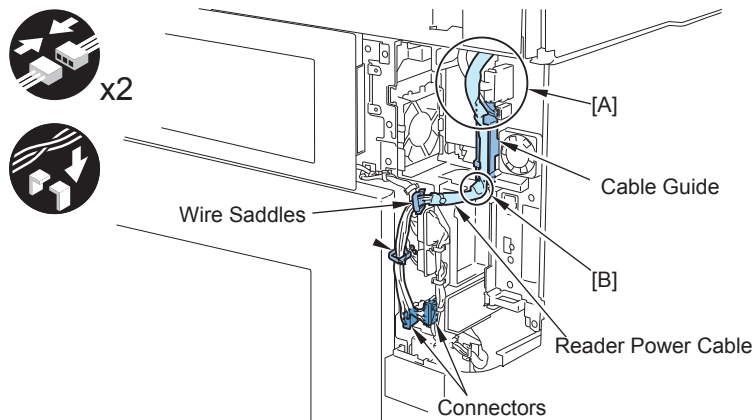
F-9-719



13) If Reader is installed, install the Reader Power Cable.

NOTE:

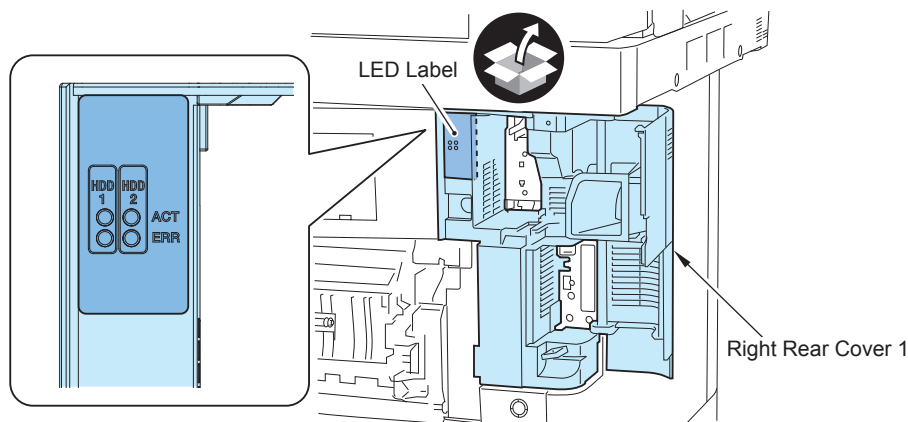
Handle the Reader Power Cable from the connector side and make a slack at A part. Bend the Reader Power Cable at a right angle on B part.



14) Install the Right Rear Cover 1.



15) Affix the LED Label so that it fits the edge of the Right Rear Cover 1.



16) Close the Right Rear Cover 1, Right Lower Cover, and Right Upper Cover.

F-9-720

F-9-721

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 CONNECT.
- 2) From the list of machine series, select the appropriate model.
- 3) Select 'single', and click START.
- 4) Execute HDD format.
- 5) After 5 sec from when the power of the host machine is turned OFF, restart the host machine in download mode of safe mode.
- 6) When "download mode" is displayed on the control panel, click simple mode start.
- 7) Click start to execute download.
- 8) Follow the instruction on the screen and when download is complete, click OK.
- 9) Exit SST.
- 10) Check the versions of MN-CONT and LANG etc 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-11] Option HDD (250GB) + Removable HDD Kit + HDD Data Encryption & Mirroring Kit

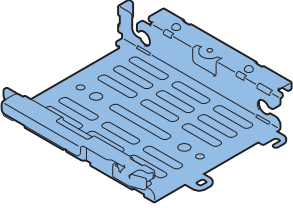
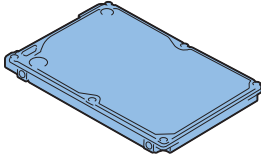
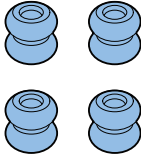
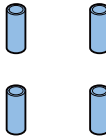
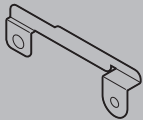
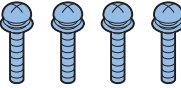


Points to Note when HDD Data Encryption & Mirroring Kit has been Installed

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

The parts with a gray in the contents list will not be used.

Option HDD (250GB)



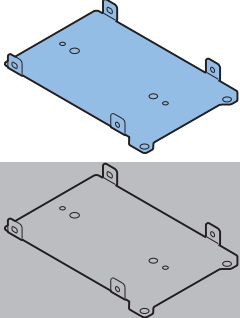
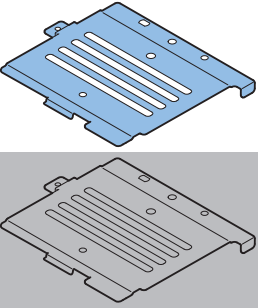
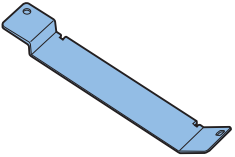
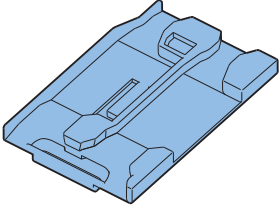
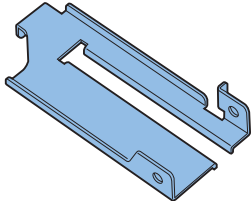

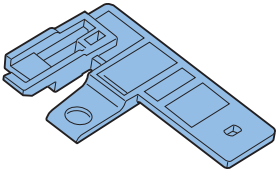
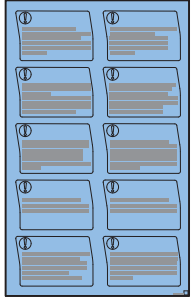
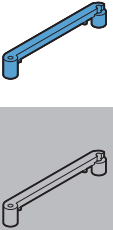
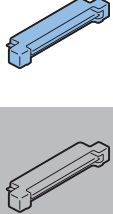
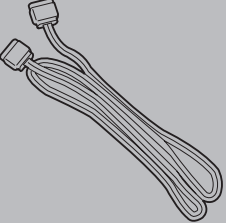
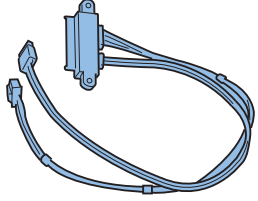
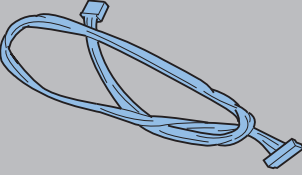
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<input type="checkbox"/> [6] Screw (W sems; M3x14) x 4 	<input type="checkbox"/> [7] Screw (TP;M3x6) x 2 	<input type="checkbox"/> [8] Gasket x 1 		

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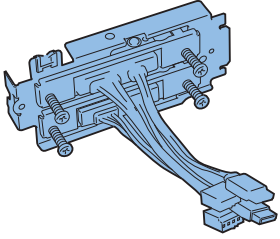
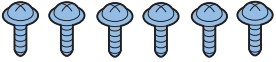



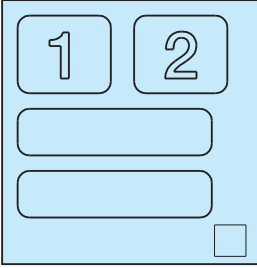
- Notice for FCC/IC
- China RoHS Notice 3

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Removable HDD Kit

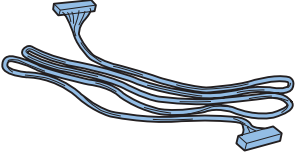
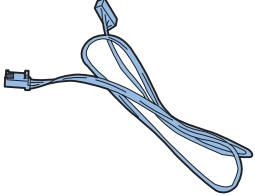
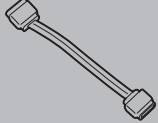
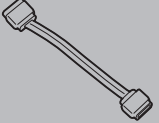
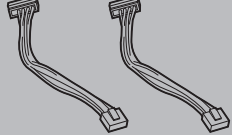
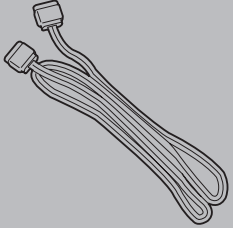
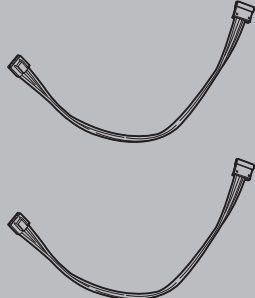
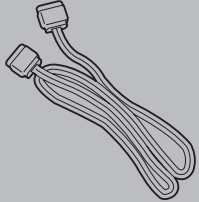
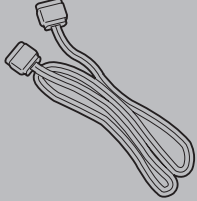

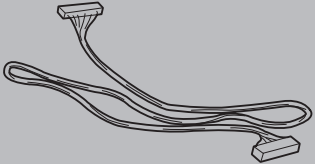
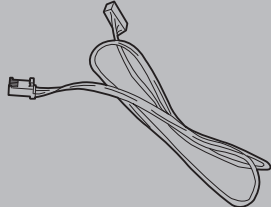
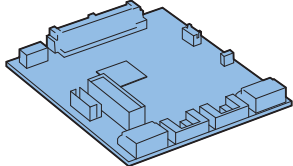
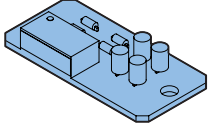
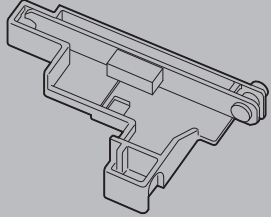
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<input type="checkbox"/> [6] HDD Door Guide x 1 	<input type="checkbox"/> [7] HDD Lock Plate x 1 	<input type="checkbox"/> [8] HDD Lock Plate Shaft x 2 	<input type="checkbox"/> [9] HDD Lid Retainer x 1 	<input type="checkbox"/> [10] Shutdown Caution Label x 1 
<input type="checkbox"/> [11] Connector Fixing Block x 2 	<input type="checkbox"/> [12] Conversion Connector x 2 	<input type="checkbox"/> [13] Signal Cable (660mm ; Red) x 1 	<input type="checkbox"/> [14] IV Cable (FK2-8453) x 1 	<input type="checkbox"/> [15] Power Cable (650mm ; FK2-8464) x 1 

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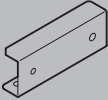
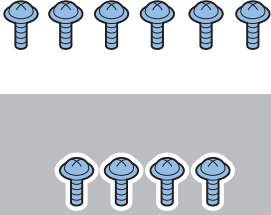

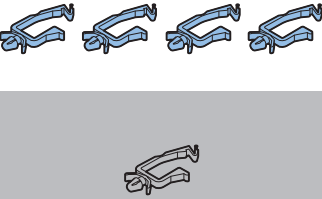
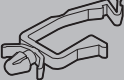

<p><input type="checkbox"/> [16] HDD Drawer Unit x 1</p> 	<p><input type="checkbox"/> [17] Screw (R round head TP; M3 X 6) x 9</p>  	<p><input type="checkbox"/> [18] Screw (P Tight ; M3 X 8) x 4</p>  	<p><input type="checkbox"/> [19] R-HDD Label x 1</p> 
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HDD Data Encryption & Mirroring Kit

<input type="checkbox"/> [1] LED Cable (1200mm; 7 pin) x 1 	<input type="checkbox"/> [2] STS Cable (550mm (Light blue); 5 pin) x 1 	<input type="checkbox"/> [3] Signal Cable (80mm (Red); FK2-8436) x 1 	<input type="checkbox"/> [4] Signal Cable (80mm (Blue); FK2-8438) x 1 	<input type="checkbox"/> [5] Power Cable (80mm; FK2-8461) x 2 
<input type="checkbox"/> [6] Signal Cable (450mm (Red); FK2-8435) x 1 	<input type="checkbox"/> [7] Power Cable (430mm; FK2-8463) x 2 	<input type="checkbox"/> [8] Signal Cable (340mm (Red); FK2-8434) x 1 	<input type="checkbox"/> [9] Signal Cable (370mm (Blue); FK2-8441) x 1 	<input type="checkbox"/> [10] Power Cable (320mm; FK2-8467) x 1 
<input type="checkbox"/> [11] LED Cable (290mm; 7 pin) x 1 	<input type="checkbox"/> [12] STS Cable (420mm (Light blue); 5 pin) x 1 	<input type="checkbox"/> [13] Encryption Board x 1 	<input type="checkbox"/> [14] LED Board (Small) x 1 	<input type="checkbox"/> [15] LED Board (large) x 1 

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<input type="checkbox"/> [16] LED Label (Small) x 1 	<input type="checkbox"/> [17] LED Label (large) x 1 	<input type="checkbox"/> [18] HDD Connection Plate x 1 	<input type="checkbox"/> [19] Screw (TP; M3 X 6) x 10 	<input type="checkbox"/> [20] Edge Saddle x 1 
<input type="checkbox"/> [21] Wire saddle (Small) x 5 	<input type="checkbox"/> [22] Wire saddle (large) x 1 	<input type="checkbox"/> [23] Wire saddle (Middle) x 1 		

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- HDD Data Encryption & Mirroring Kit-C1 User Documentation
- HDD Data Encryption Kit Notice Notice
- Installation Procedure
- Noticed for FCC/IC

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
Send Function Favorite Settings	Yes
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

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*1; Can only be backed up using the Remote UI.

*2; Depending on the MEAP application.

*3: Only the following data saved in Mail Box/Advanced Box 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
- Advanced Box URI Transmission Settings

*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 to be Backed Up

Data to be backed up	Reference
Address Book Settings/Registration settings	For information on exporting data, see the "e-Manual > Remote UI".
Device Settings (Forwarding Settings, Address List, Favorite Settings)	
Printer Settings	
Paper Information	
Favorite Settings for Web browser	See the "e-Manual > Web Access". (You can select this if web browser (Option) is installed.)
License files for MEAP applications	For information on downloading license files, see the "e-Manual > MEAP".
Data saved by MEAP applications	Data saved by MEAP applications may be able to be backed up, depending on the MEAP application. See the documentation included with the MEAP application.
Data stored in Mail Boxes or the Advanced Box Image forms stored in the Superimpose Image	See the "e-Manual > Remote UI" to "Setting the Backup Location for Stored Data".
SSO-H (Single Sign-On H) user authentication information	See the "e-Manual > MEAP".
Quick Menu Information	See the "e-Manual > Quick Menu".
User Information of the Advanced Box	See the "e-Manual > Security".

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CAUTION: Work to Perform After Installing the Kit

- When you start using this product, passwords set for Mail Boxes 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 this product has been installed. These data items are property of the user, and the restoration work must be performed by the system administrator.

The method of restoration is described in the Users Guide. See Table (Data to be backed up) in Points to Note About Installation of the Installation Procedure.

1. Procedure to make a backup of Address Book

- 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].
- 3) Click [Address List].
- 4) Click [Export].
- 5) Select the save format for Address list, and click [Start Export].
- 6) Following the instructions on the window, specify the location to save the file. Be sure to set a distinctive name to an export file so that you can recognize it when importing it.

NOTE:

Exporting the device settings will export all contents of the address list. In other words, there is no need for a backup unless it needs to be done individually.

2. Device Settings Export Procedure

- 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].
- 3) Click [Device Settings (Forwarding Settings, Address List, Favorite Settings)].
- 4) Click [Export], and then click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

3. Settings/Registration Export Procedure

- 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].
- 3) Click [Settings/Registration].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

4. Printer Settings Export Procedure

NOTE:

The following items to be exported are the same as the ones which are distributed by device information distribution.

- 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].
- 3) Click [Printer Settings].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

5. Paper Information Export Procedure

- 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].
- 3) Click [Paper Information].
- 4) Click [Export], and click [Start Export].
- 5) Following the instructions on the window, specify the location to save the file.

6. 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.

CAUTION: MEAP Backup Function Using the SST

Data that has been backed up using MEAP back of the SST before the use of this product is started must not be written back to the host machine after the use of this product is started. Similarly, even if the data that has been backed up after the use of this product is started is written back to the host machine before the use of this product is started, the machine does not operate. It is necessary to make sure that the implementation conditions for this product are compatible before and after making a backup of data, and the MEAP backup function does not permit making a backup of data in the course of installing the kit.

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.

7. 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) Click the application of which license has been installed.
- 5) Click [License Control], and then click [Disable]. Click [Yes] in a confirmation window for disabling the license.

- 6) Click [Download] under "Download/delete Disabled License File" item. 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.
- 7) 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).
- 8) 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).

8. 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/`

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 the user has changed the password, ask him/her to change the password again after the use of this product is started.

- 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].

9. Backup of User inbox and Advanced Box document data

CAUTION: Backup of "Advanced Box"

When setting a SMB server as a backup destination, Advanced Box data saved in a large capacity HDD cannot be backed up. The Advanced Box data backed up from the large capacity HDD cannot be restored to the standard HDD.

Depending on the system version of the machine, both backup and restoration might not be performed.

The procedure of backup and restoration of a box document data is described below.

Specify the backup destination of a document data:

- Backup to SMB server
Select SMB as a backup destination and specify an address, a user name, a password, and a path to the SMB server to which saved data is backed up.
- Backup to USB HDD
Select USB HDD as a backup destination and specify a path to the USB HDD folder to which saved data is backed up.

CAUTION: Data which cannot be backed up

If you back up/restore stored data without restarting the machine after changing the language displayed on the touch panel display by pressing [Settings/Registration] > [Preferences] from the control panel of the machine, the stored data may not be backed up/restored properly. For more information on the data that cannot be backed up, see Points to Note for Installation.

CAUTION:

If the language setting in the common specification settings (Settings/Registration) is set to ON, 'host address' and 'path to folder' might not be displayed correctly or cannot be referred.

CAUTION:

- Regarding the method of inputting characters, see 'Basic Operations' in the e-Manual.
- A host address can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,' 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A path to the folder can be up to 255 characters in 1 byte (127 characters in 2 bytes).
- A user name can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,' 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A password can be up to 7 to 48 characters using the 'alphanumeric character' and 'mark (1 byte)' modes.
- The voice sound symbol and the semi-voice sound symbol entered in the 'Katakana (1 byte)' mode are counted up as one 1-byte character.

[Backup method of User inbox and Advanced Box document data]

- 1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Backup].
- 2) Select 'All' or 'Changes' for the backup method.
- 3) Click [Execute].

CAUTION:

- If any of the host IP address, user name, password, or path to the folder is not correctly entered, a backup cannot be made.
- If you select to encrypt the backup data, the backup process may take longer.

[Restoring the backup data of User inbox and Advanced Box document data]

- 1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Restore].
- 2) Click [Display Backup Data].
- 3) Select the backup data to restore from the list and then click [Execute].

CAUTION:

- If you want to restore encrypted backup data, enter the same password used when backing up the data.
- Depending on the settings of the machine, the backup data may not be completely restored, or some documents may be automatically printed.
- Restoration is performed after all of the box data stored in the machine, or documents that are being sent, received, or stored, are erased.

10. Quick Menu Information Export Procedure

- 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 Basic Tools > [Quick Menu] > [Export].
- 3) If the file needs to be encrypted, enter the password after check [Encrypt file]. (The number of characters for the password must be more than 4 but less than 16.)
- 4) Click [Export].
- 5) Following the instructions on the window, specify the location to save the file.

11. User Information of the Advanced Box Export Procedure

- 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 Basic Tools > [User Access Control for Advanced Box]. The dialog box to enter the user name of administrator and password appears, enter the system administrator ID and password, and then click [Log In].
The default administrator user name and password are as follows:
User Name: Administrator
Password: password
- 3) Click [Export], and click [Start Export].
- 4) Following the instructions on the window, specify the location to save the file.

Check Items when Turning OFF the Main Power

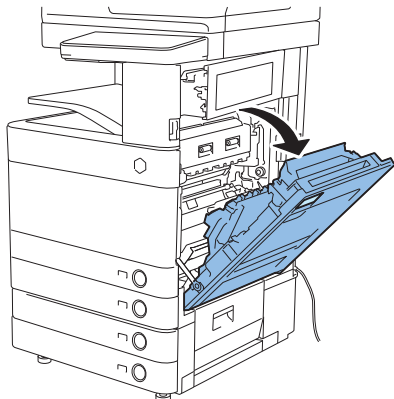
Check that the main power switch is OFF.

- 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

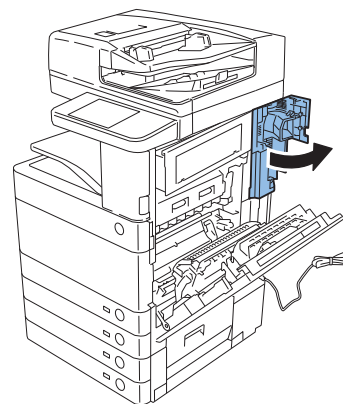
Removing the Signal Cable and Power Supply Cable

- 1) Open the Right Lower Cover. (Open the Right Upper Cover simultaneously.)

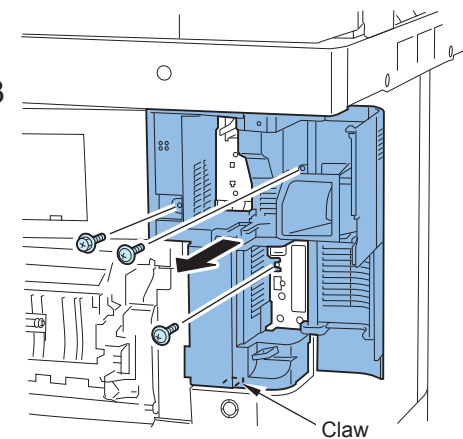


F-9-727

- 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



x3



F-9-728

- 4) When the Reader is installed, remove the Reader Power Cable.

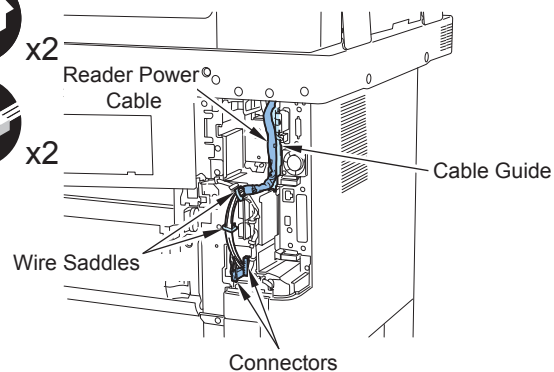
- 2 connectors
- 2 wire saddles
- 1 cable guide



x2



x2

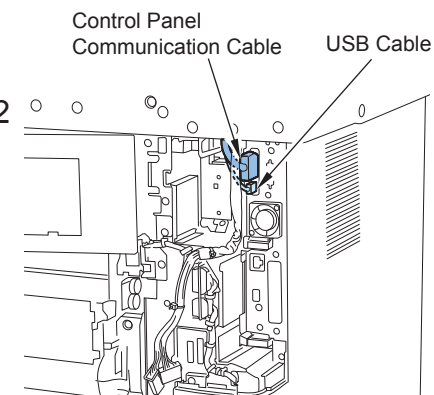


F-9-729

- 5) Remove the USB Cable and the Control Panel Communication Cable.

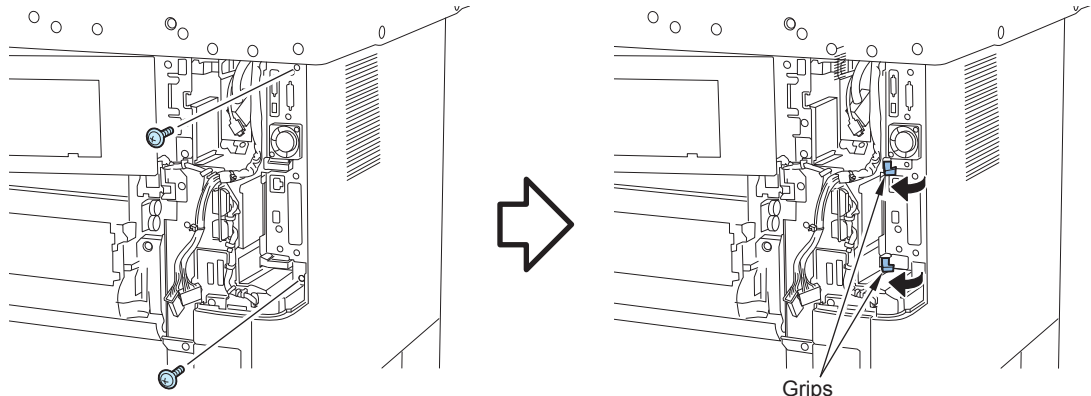


x2



F-9-730

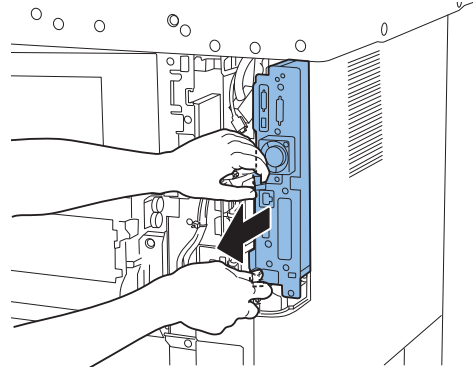
6) Remove the 2 screws, open the grip in 2 places.



Grips

F-9-731

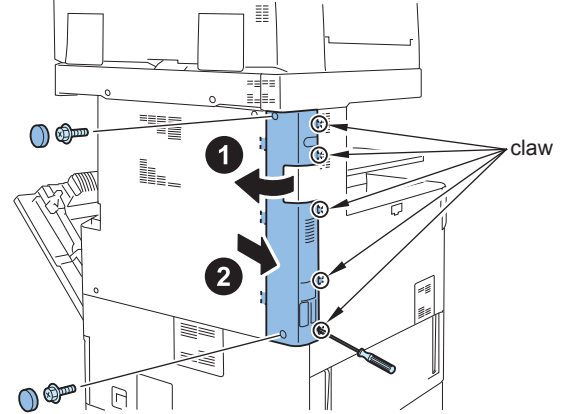
7) Hold the 2 Grips, and pull out the Main Controller PCB 1 approximately 10mm toward front.



F-9-732

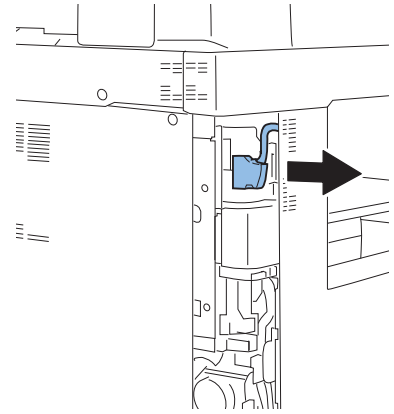
8) Remove the Left Rear Cover.

- 2 rubber caps
- 2 screws
- 5 claws



F-9-733

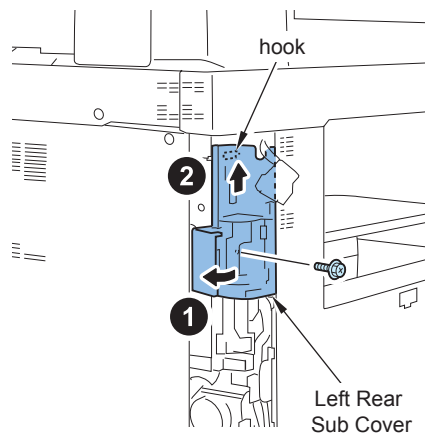
9) When the Reader is installed, remove the Reader Communication Cable.



F-9-734

10) Remove the Left Rear Sub Cover.

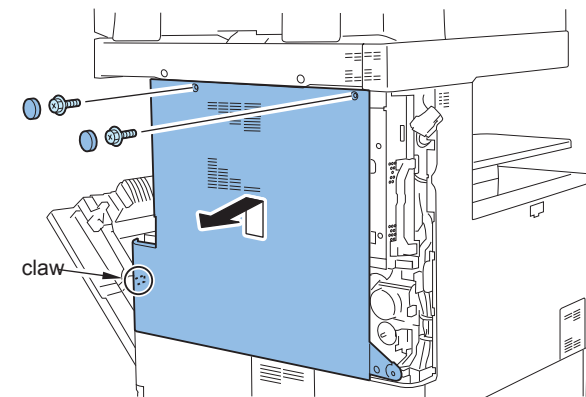
- 1 screw
- 1 hook



F-9-735

11) Remove the Rear Cover.

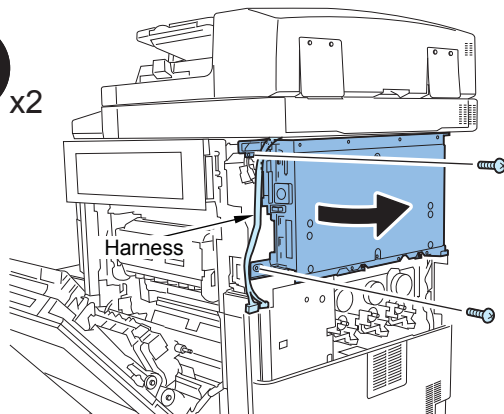
- 2 rubber caps
- 2 screws
- 1 claw



F-9-736

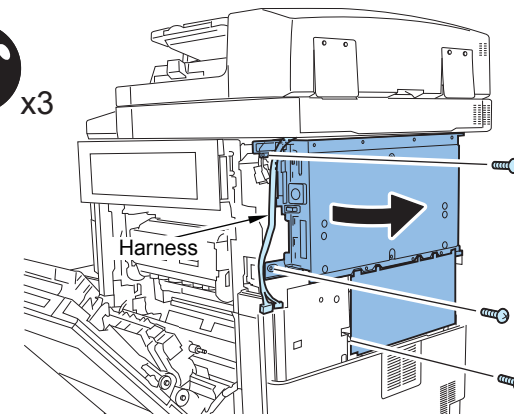
12) Open the Controller Box while avoiding the harness.

- 2 screws



F-9-737

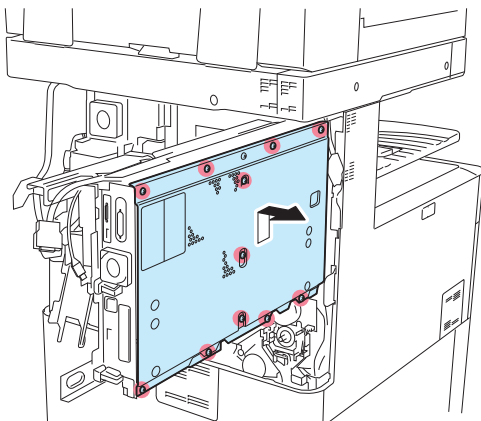
NOTE:
If the FAX Unit has been installed, remove the 3 screws and open the Controller Box with the FAX Unit.



F-9-738

13) Remove the Controller Cover.

- 11 screws (loosen)



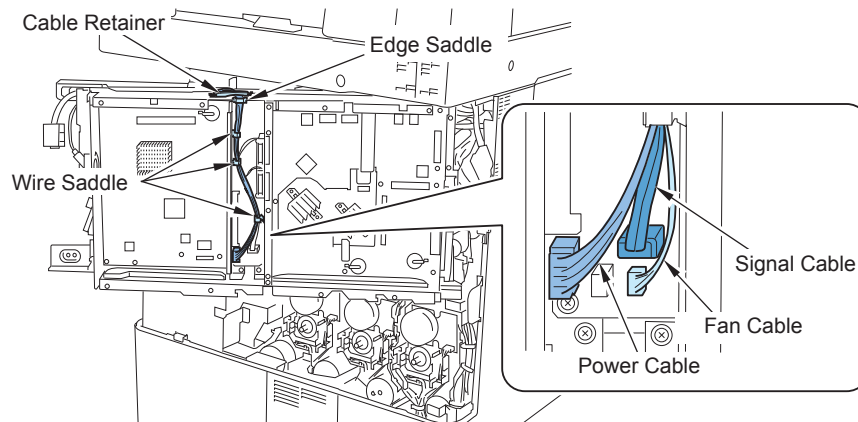
F-9-739

14) Remove the Power Cable.

CAUTION:

Do not remove the Signal Cable and the Fan Cable.

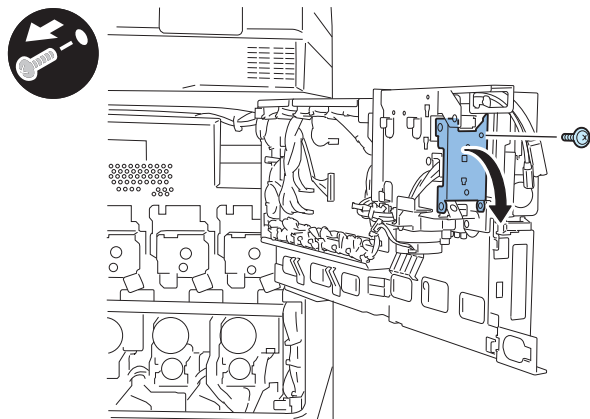
- 1 edge saddle
- 3 wire saddles
- 1 cable retainer



F-9-740

15) Open the HDD Lid.

- 1 screw (Removed screw will not be used.)



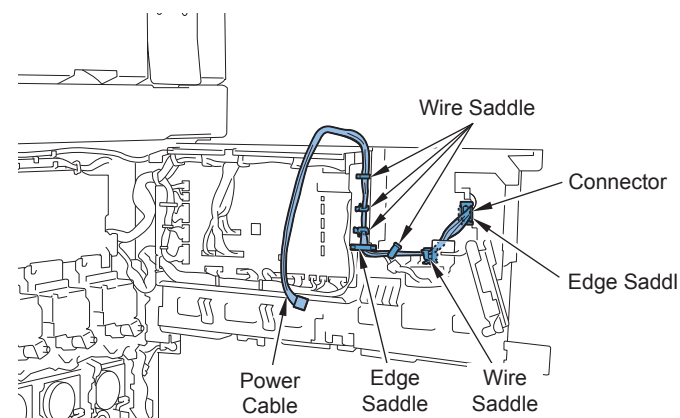
F-9-741

16) Remove the Power Cable.

- 2 edge saddles
- 5 wire saddles
- 1 connectors

NOTE:

Removed Power Cable will not be used.

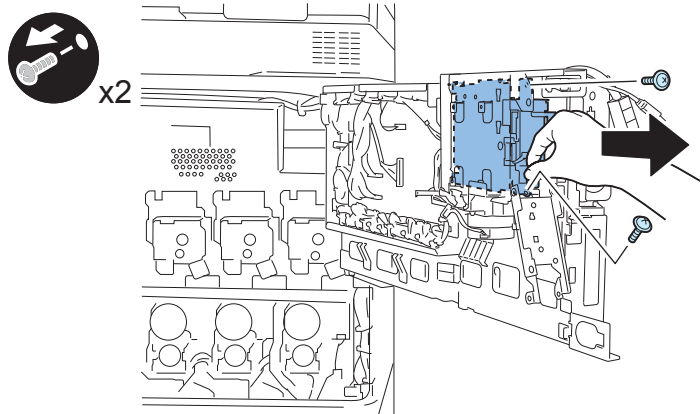


F-9-742



17) 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.)



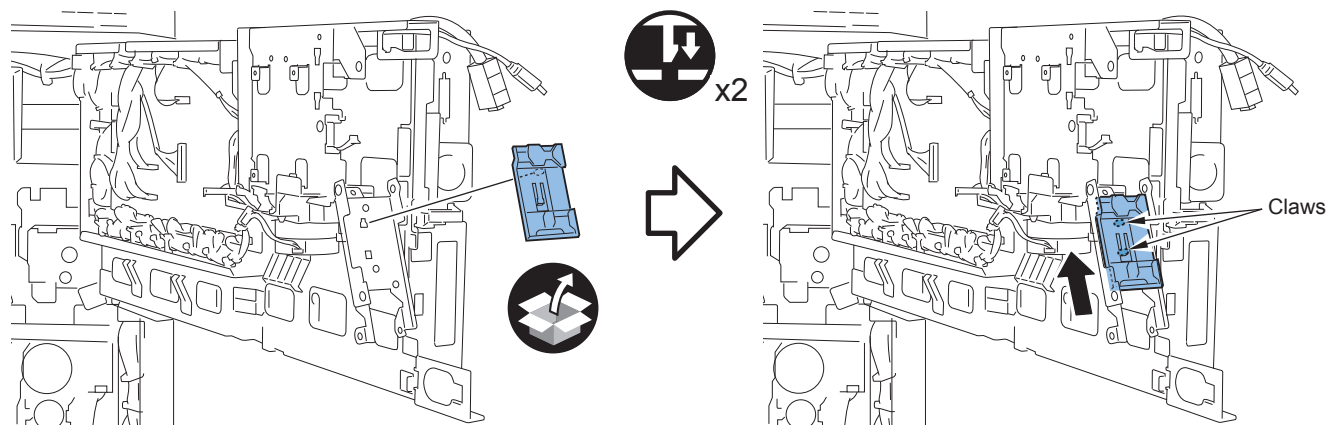
F-9-743

Installing the Removable HDD Kit



1) Install the HDD Door Guide.

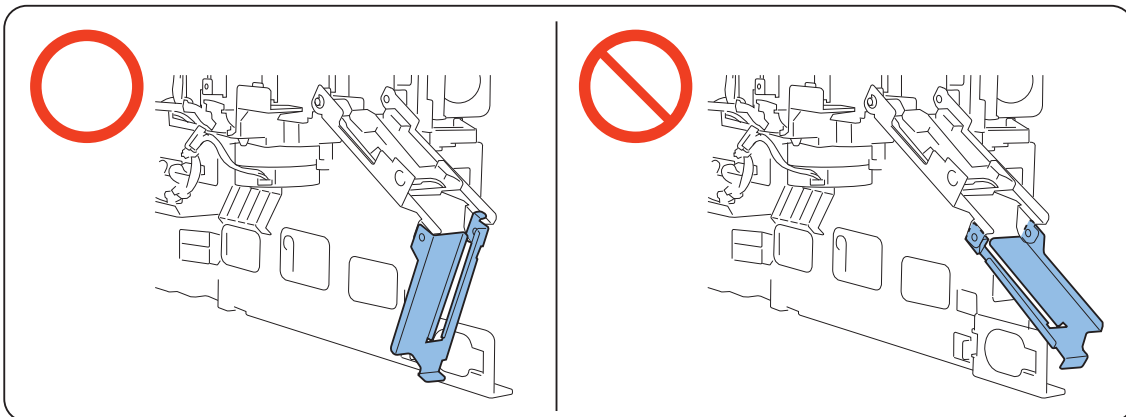
- 2 claws



F-9-744

CAUTION:

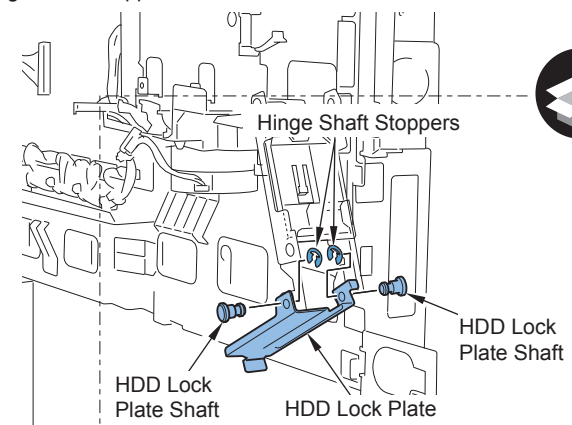
Be careful of the installation direction of HDD Lock Plate.



F-9-745

 2) Install the HDD Lock Plate.

- 2 HDD Lock Plate Shafts
- 2 Hinge Shaft Stoppers



F-9-746

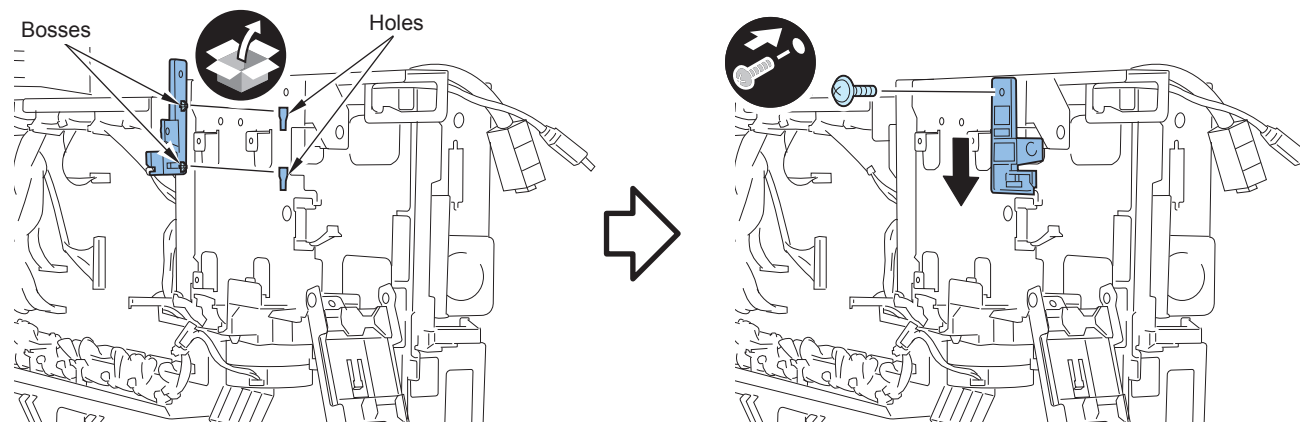


3) Adjust the 2 bosses to the hole and install the HDD Lid Retainer.

- 1 screw (TP round end; M3X6)

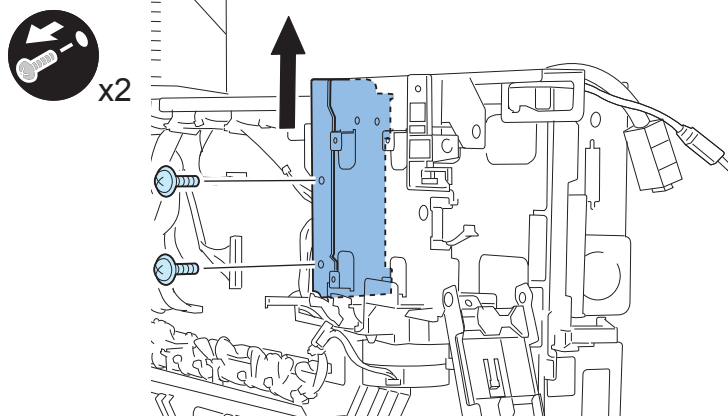
CAUTION:

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



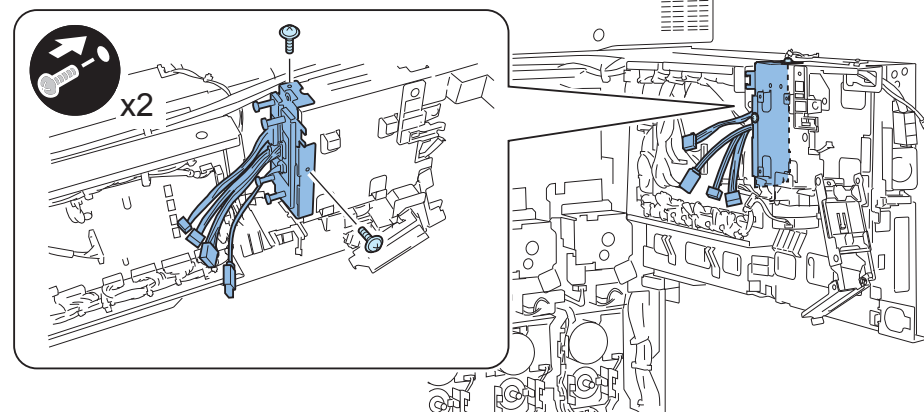
F-9-747

- 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-9-748

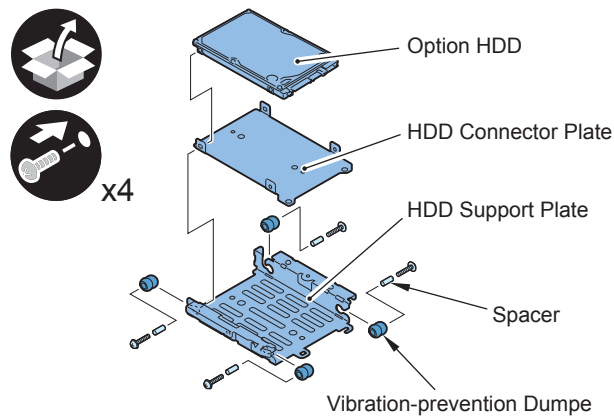
- 5) Install the HDD Drawer Unit.
- 2 screws (Removed screw will be used in step 4)



F-9-749

Assembling and Installing the Option HDD

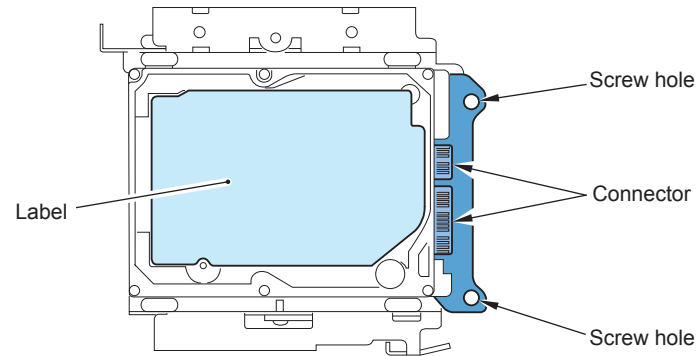
- 1) Purchase option HDD and assemble the second HDD.
- 1 Option HDD (enclosed with option HDD)
 - 1 HDD Support Plate (enclosed with option HDD)
 - 1 HDD Connector Plate (enclosed with removable HDD Kit)
 - 4 Vibration-prevention Dumpers (enclosed with option HDD)
 - 4 spacers (enclosed with option HDD)
 - 4 screws (binding with flat washer; M3X14) (enclosed with option HDD)



F-9-750

**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)



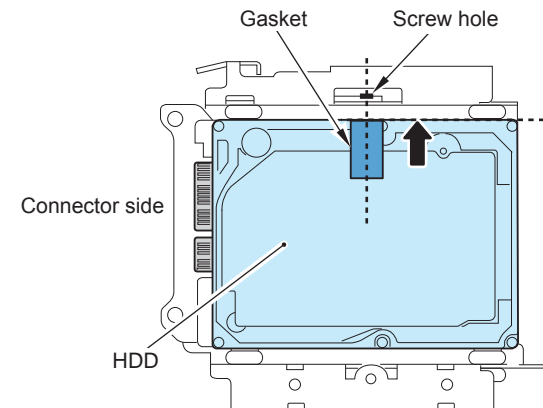
F-9-751



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.



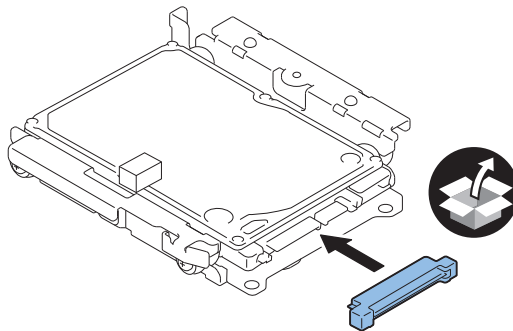
F-9-752



3) Install the Conversion Connector.

CAUTION:

Make sure that there is no opening between the Conversion Connector and part of HDD.



F-9-753

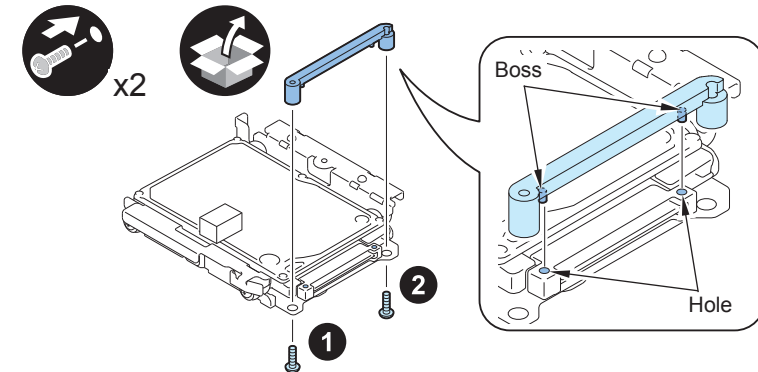


4) Fit the 2 bosses of Connector Fixing Block to the hole of Conversion Connector and install it.

- 2 screws (P Tight; M3X8)

CAUTION:

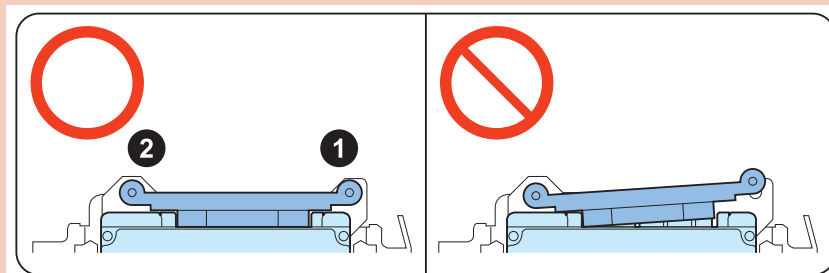
Be sure not to tighten the screws in wrong order. Otherwise, the Conversion Connector will not be secured properly.



F-9-754

**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-9-755

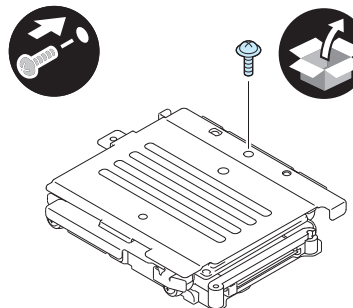
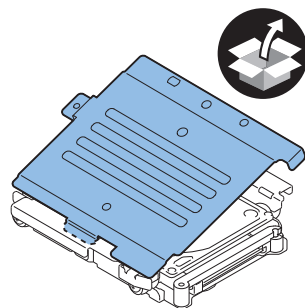


5) Install the HDD Cover.

- 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-9-756

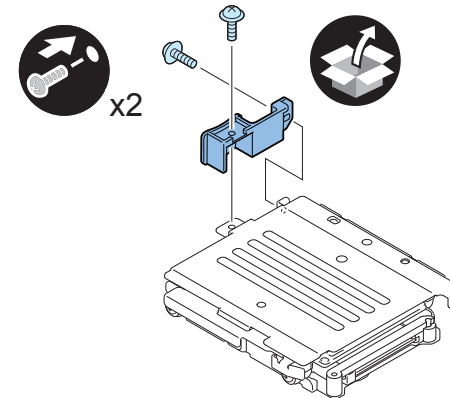


6) Install the HDD Handle.

- 2 screws (TP round end; M3X6)

CAUTION:

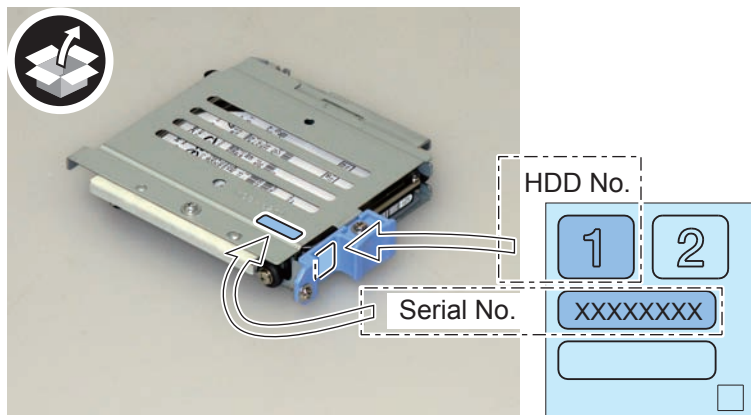
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



F-9-757



- 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.



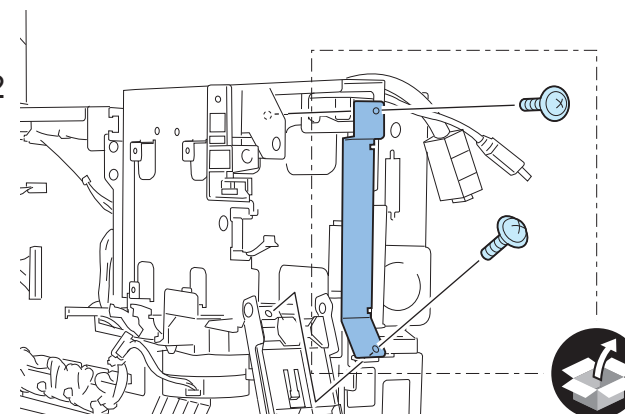
F-9-758



- 9) Install the HDD Blanking Plate to Slot.1 (left side).
 • 2 screws (TP round end; M3X6)

CAUTION:

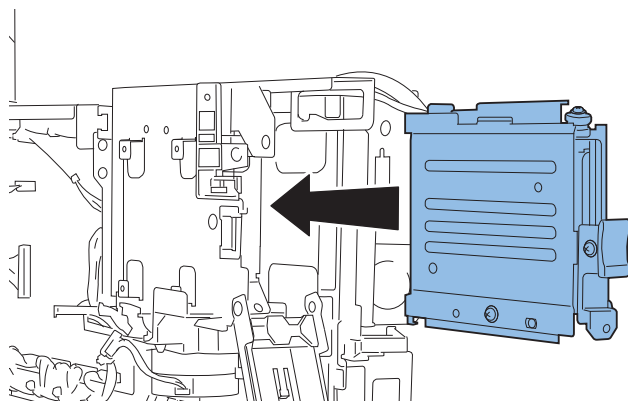
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



F-9-759



- 10) Install the HDD to Slot.2 (right side).



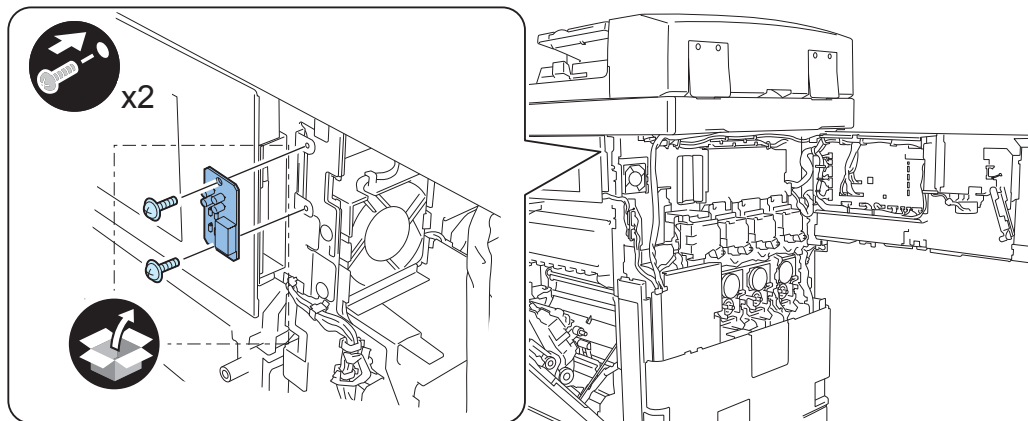
F-9-760



- 11) Close the Edge Saddle, and close the HDD Lid.

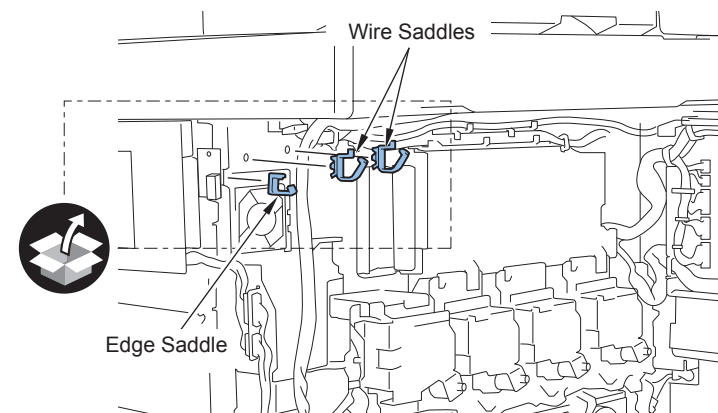
Installing the LED Board

- 1) Install the LED Board (small).
• 2 screws (TP; M3X6)



F-9-761

- 2) Install the 2 wire saddles and the edge saddle.

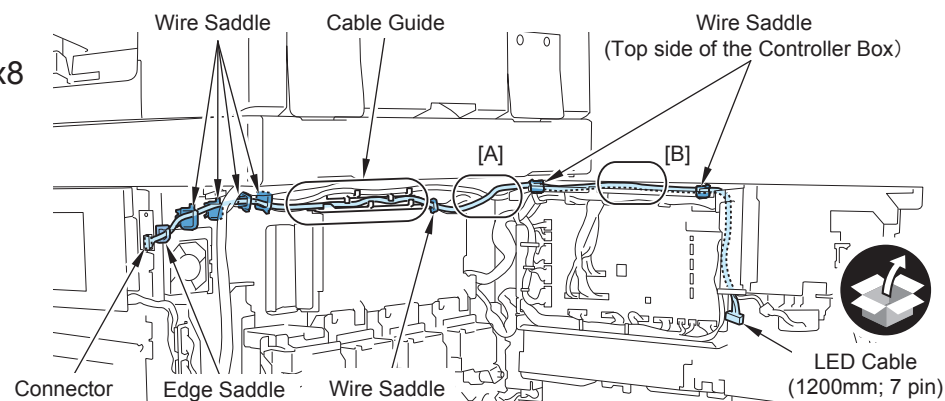


F-9-762

- 3) Install the LED Cable (1200mm; 7 pin).
• 7 wire saddles
• 1 edge saddle
• 1 cable guide
• 1 connector

CAUTION:

- Be sure to allow extra cable at [A] area in the condition that the Controller Box is fully opened.
- Be sure to tuck the [B] area of the LED cable under the other 2 cables running through the [B] area. This is to prevent the [B] area of the LED cable from being slacked off when closing the Controller Box.



F-9-763

■ Installing the Encryption Board



1) Install the Encryption Board so that "CHA" and "CHB" are placed in the direction of the DC Controller PCB.

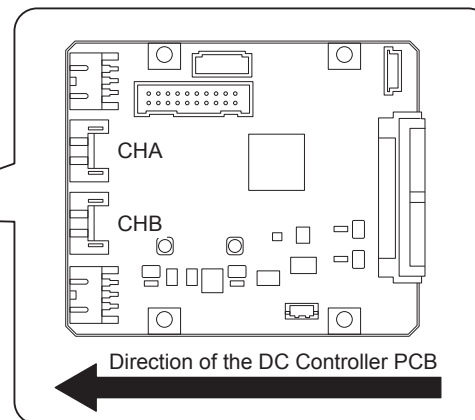
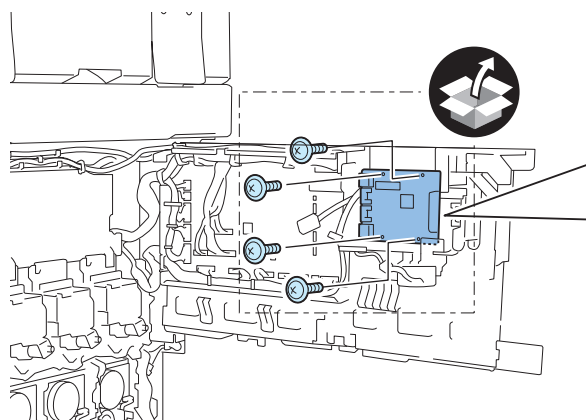
- 4 screws (TP; M3X6)

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.



x4



F-9-764



2) Install the cables to the PCB on the backside.

- Power Cable (650mm; FK2-8464) (Included in the Removable HDD Kit)
- STS Cable (550mm (Light blue); 5 pin) (Included in the HDD Encryption Kit)

3) Fix the cables.

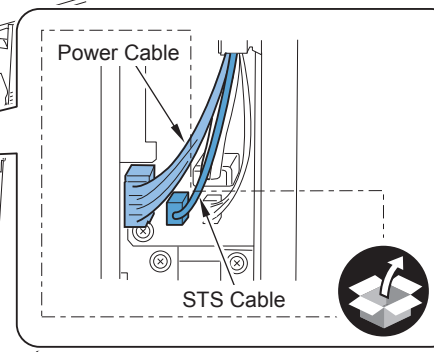
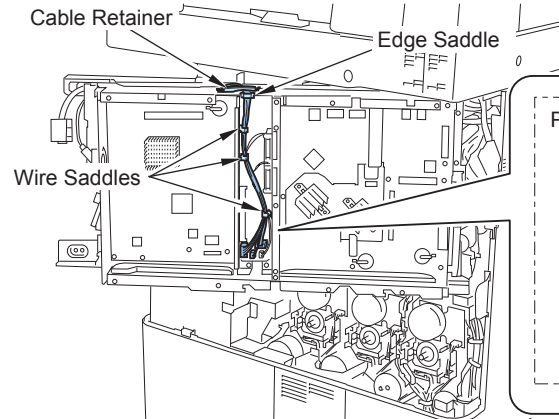
- 3 wire saddles
- 1 edge saddle
- Cable retainer



x2



x4



F-9-765



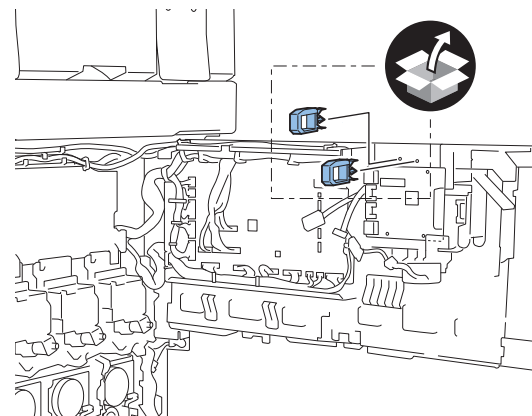
4) Install the Controller Cover.

CAUTION:

Be sure that the gaskets on left/right side of the Controller Cover are not protruded.



5) Install the 2 wire saddles.



F-9-766



6) Install the cable to the Encryption Board.

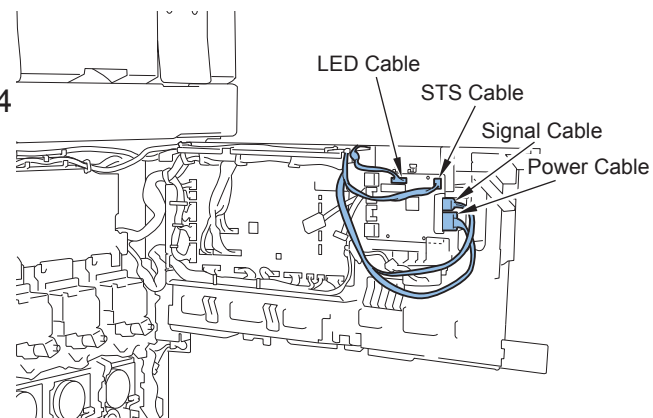
- Signal cable (existing cable)
- Power cable (650mm; FK2-8464)
- LED cable (1200mm; 7 pin)
- STS cable (550mm (Light blue); 5 pin)

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.



x4

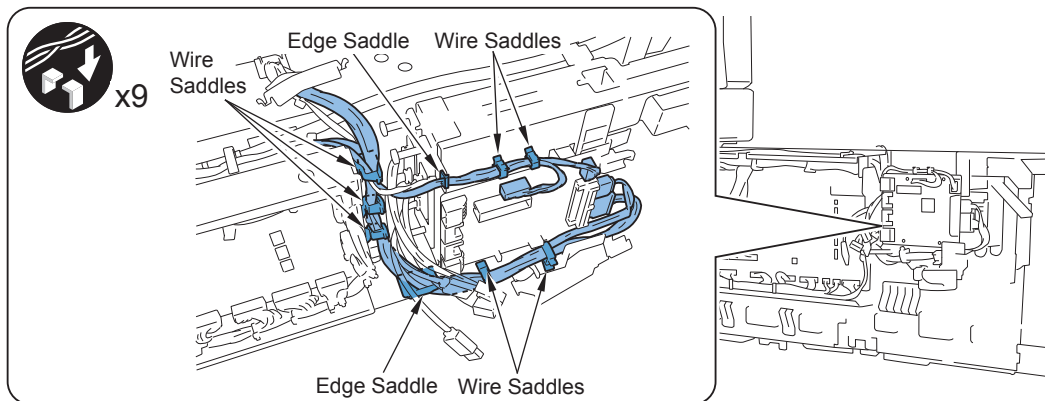


F-9-767



7) Fix the cables.

- 7 wire saddles
- 2 edge saddles

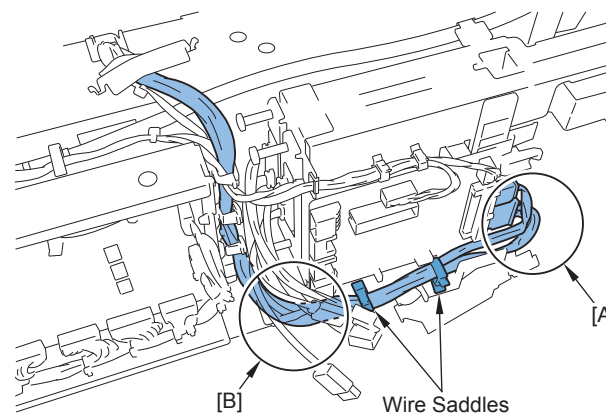


F-9-768



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-9-769

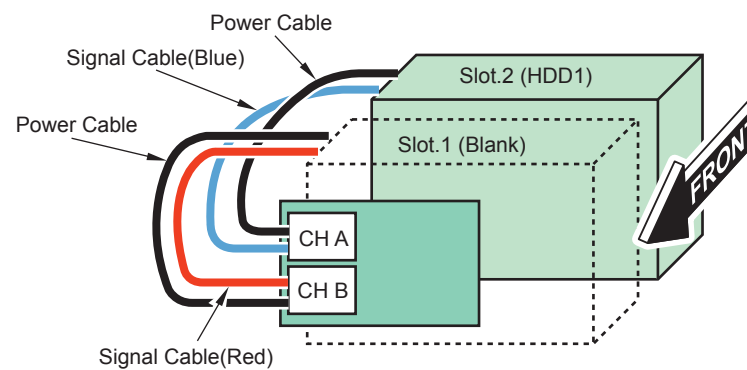
**CAUTION:**

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.

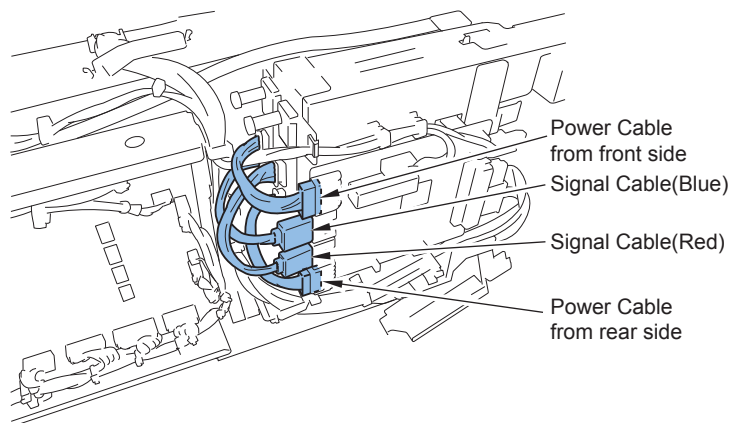
- Connect Slot 1 to "CHB".
- Connect Slot 2 to "CHA".



F-9-770



8) Install the cable of the HDD Drawer Unit to the Encryption Board.



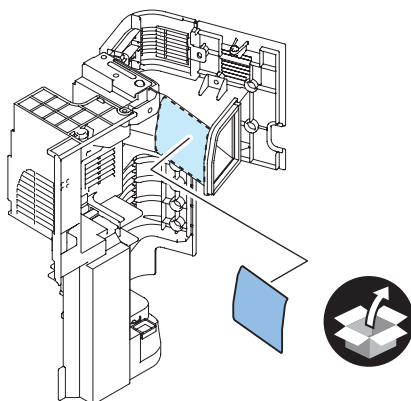
F-9-771



9) Place the Controller Box to the original position.



10) Affix the Shutdown Warning Label in the appropriate language on the Right Rear Cover 1. (included in the Removable HDD Kit).



F-9-772



11) Install the removed cover and the cable.

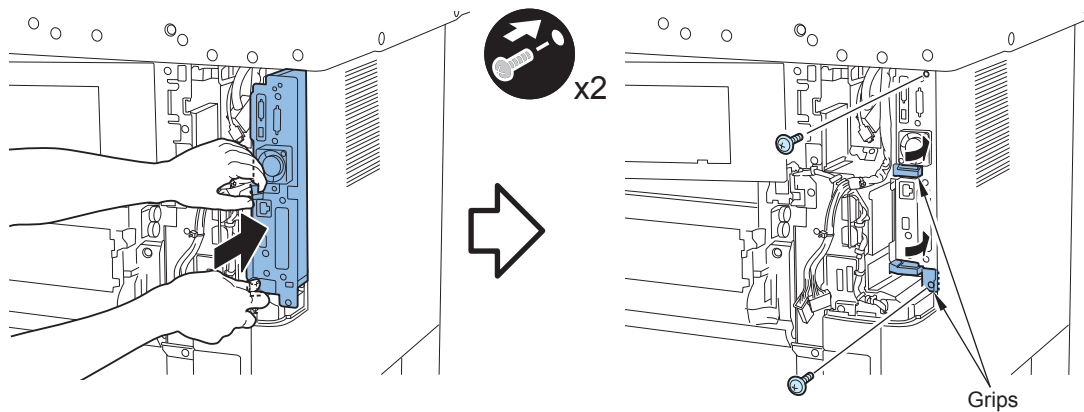
- Rear Cover
- Left Rear Sub Cover
- Reader Communication Cable (when reader is installed)
- Left Rear Cover
- USB Cable and Control Panel Communication Cable



12) 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.



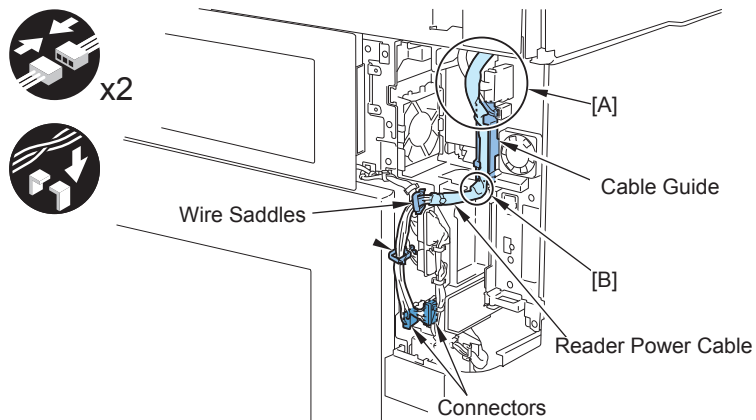
F-9-773



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.

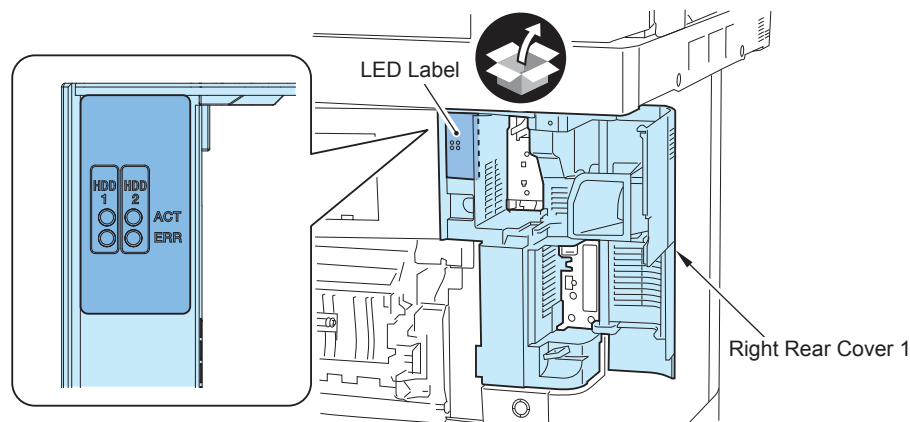


14) Install the Right Rear Cover 1.

F-9-774



15) Affix the LED Label so that it fits the edge of the Right Rear Cover 1.



F-9-775



16) Close the Right Rear Cover 1, Right Lower Cover, and Right Upper Cover.

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 CONNECT.
- 2) From the list of machine series, select the appropriate model.
- 3) Select 'single', and click START.
- 4) Execute HDD format.
- 5) After 5 sec from when the power of the host machine is turned OFF, restart the host machine in download mode of safe mode.
- 6) When "download mode" is displayed on the control panel, click simple mode start.
- 7) Click start to execute download.
- 8) Follow the instruction on the screen and when download is complete, click OK.
- 9) Exit SST.
- 10) Check the versions of MN-CONT and LANG etc 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.

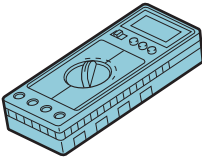
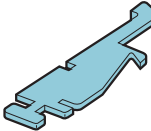
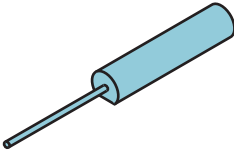
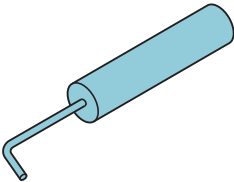
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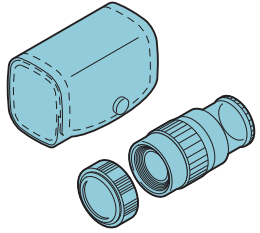
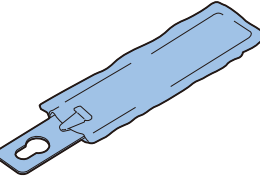
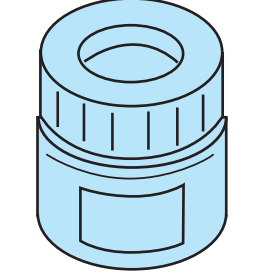
- Service Tools
- General Circuit Diagram
- General Timing Chart
- User Mode
- Backup Data

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"> Fluoride-family hydrocarbon Alcohol Surface activating Water 	<ul style="list-style-type: none"> Do not bring near fire. Procure locally. Substitute: IPA(isopropy alcohol)
Solvent	Cleaning; e.g., metal; oil or toner stain.	<ul style="list-style-type: none"> Fluoride-family hydrocarbon Chlorine-family hydrocarbon Alcohol 	<ul style="list-style-type: none"> Do not bring near fire. Procure locally. Substitute:MEK
Heat-resisting grease	Lubrication; e.g., fixing drive areas.	<ul style="list-style-type: none"> Mineral oil-family lithium soap Molybdenum disulfide 	<ul style="list-style-type: none"> MO-138S Tool No: CK-0427 (500 g/can)
Lubricating oil		Mineral oil (paraffin-family)	<ul style="list-style-type: none"> Tool No: CK-0524 (100 cc)
Lubricating oil	Lubrication; e.g., drive areas, friction areas.	<ul style="list-style-type: none"> Silicone oil 	<ul style="list-style-type: none"> Tool No: CK-0551 (20 g)
Lubricating oil (EM-50L)	Lubrication; e.g., gears.	<ul style="list-style-type: none"> Special oil Special solid lubricating agent Lithium soap 	<ul style="list-style-type: none"> Tool No: HY9-0007
Lubricating oil	Lubrication; e.g., scanner rail. Fixing pressure belt unit	<ul style="list-style-type: none"> Silicone oil 	<ul style="list-style-type: none"> Tool No: FY9-6011 (50 cc)
Conducting grease	Lubrication; e.g., edge of secondary transfer roller, drum heater sliding area.	<ul style="list-style-type: none"> Fluorine poly wthyl Polytetra fluorune ethylene 	<ul style="list-style-type: none"> Tool No: FY9-6008 (75 g)

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

Appendix > General Timing Chart > A4 single-sided 2 prints Bk color

Appendix > General Timing Chart > A4 single-sided 2 prints Bk color

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	Cassette 1 paper sensor
	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

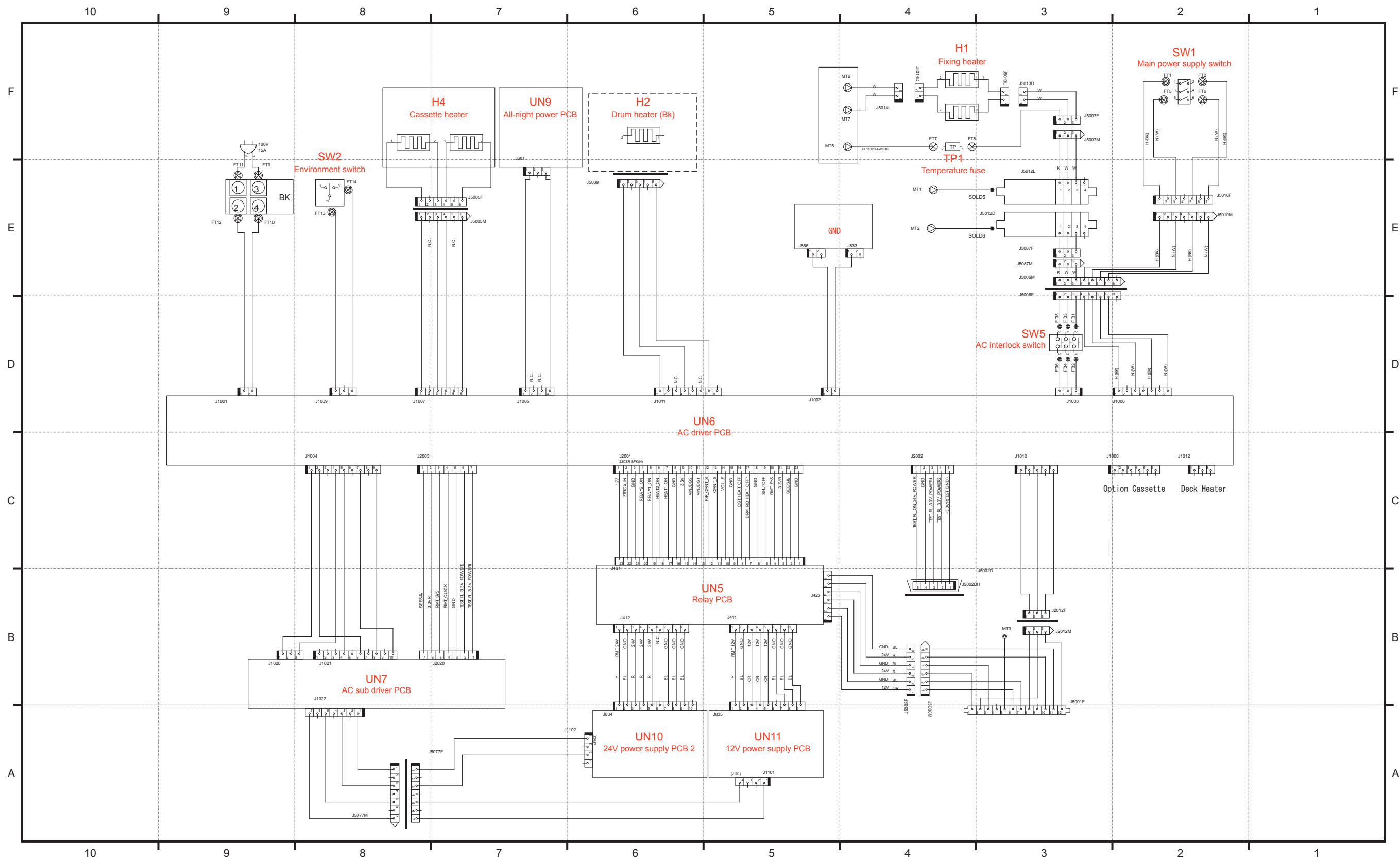
Jack. No.	Abbreviated Signal Name	Signal Name
J304	*ITB MTR BRK	ITB motor Break
	ITB MTR ON	ITB motor ON
	ITB MTR LOCK	ITB motor Lock
	ITB MTR GAIN	ITB motor Gain
	ITB MTR CLK	ITB motor Clock
	ITB MTR FG	ITB motor FG
	YORI A	ITB displacement control motor A
	YORI*A	ITB displacement control motor A*
	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

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General Circuit Diagram

General Circuit Diagram (1/16)



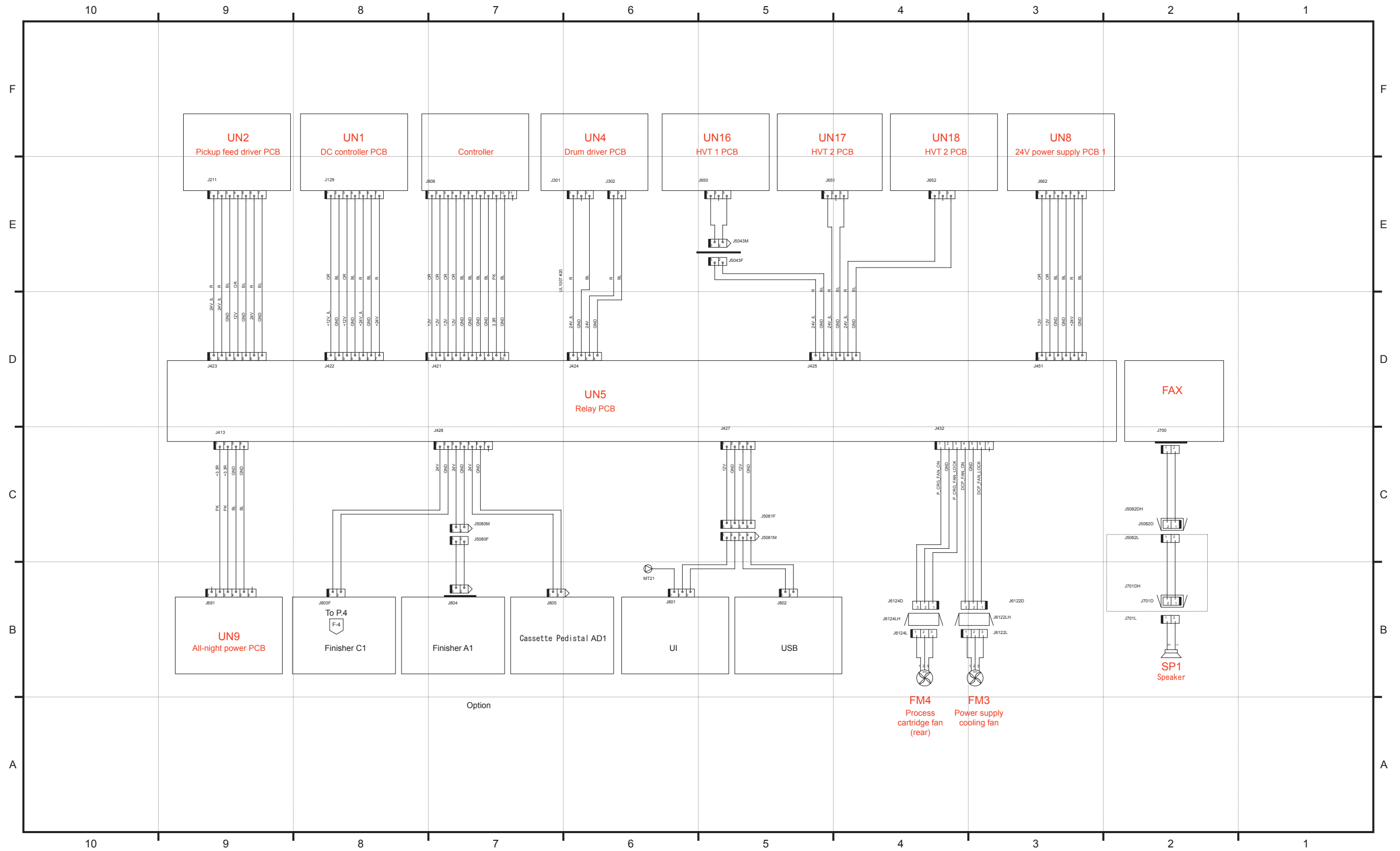
P.1

Appendix > General Circuit Diagram > General Circuit Diagram (1/16)

Appendix > General Circuit Diagram > General Circuit Diagram (1/16)

General Circuit Diagram (2/16)

Appendix > General Circuit Diagram > General Circuit Diagram (2/16)

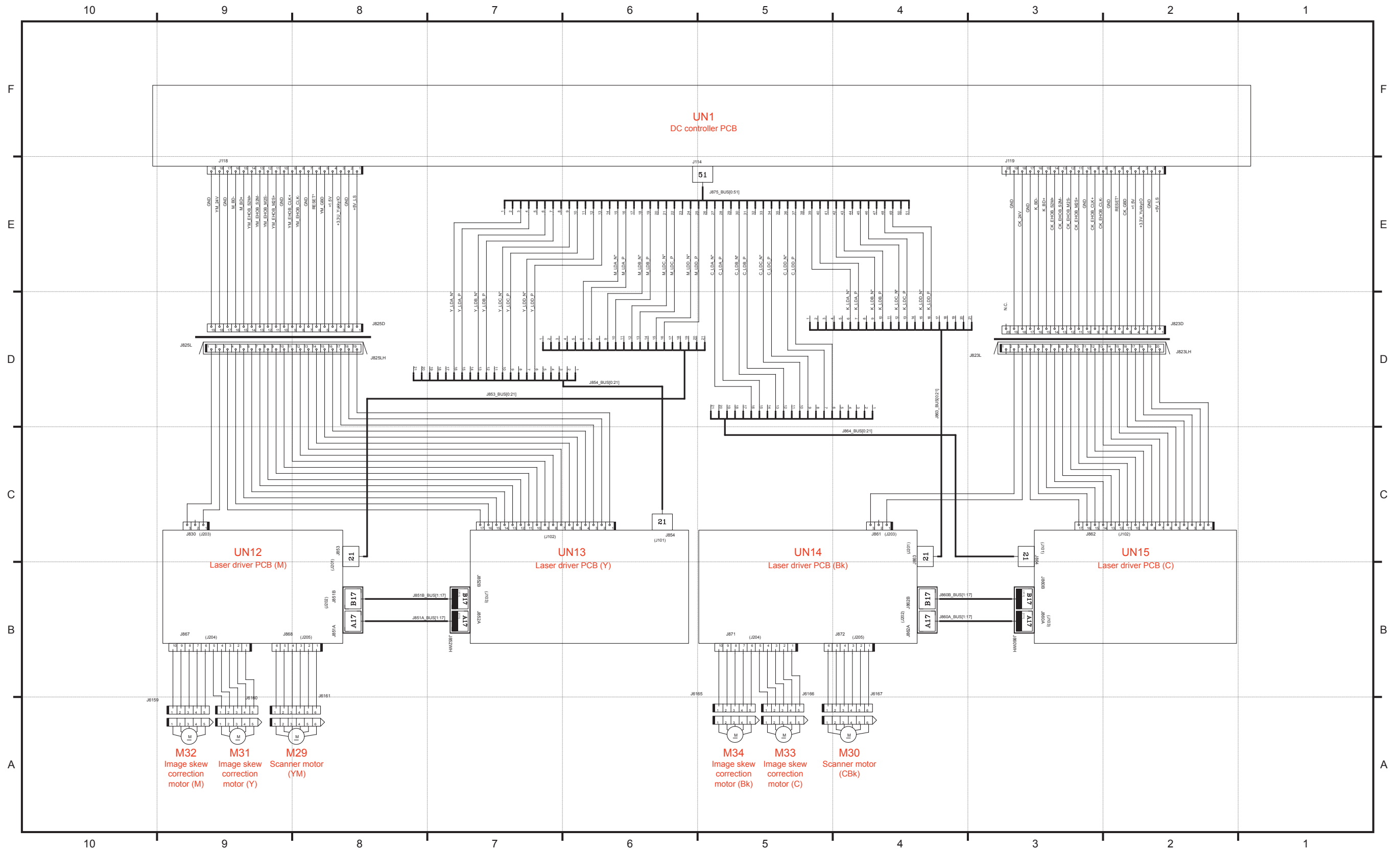


Appendix > General Circuit Diagram > General Circuit Diagram (2/16)

P.2

F-10-4

General Circuit Diagram (5/16)

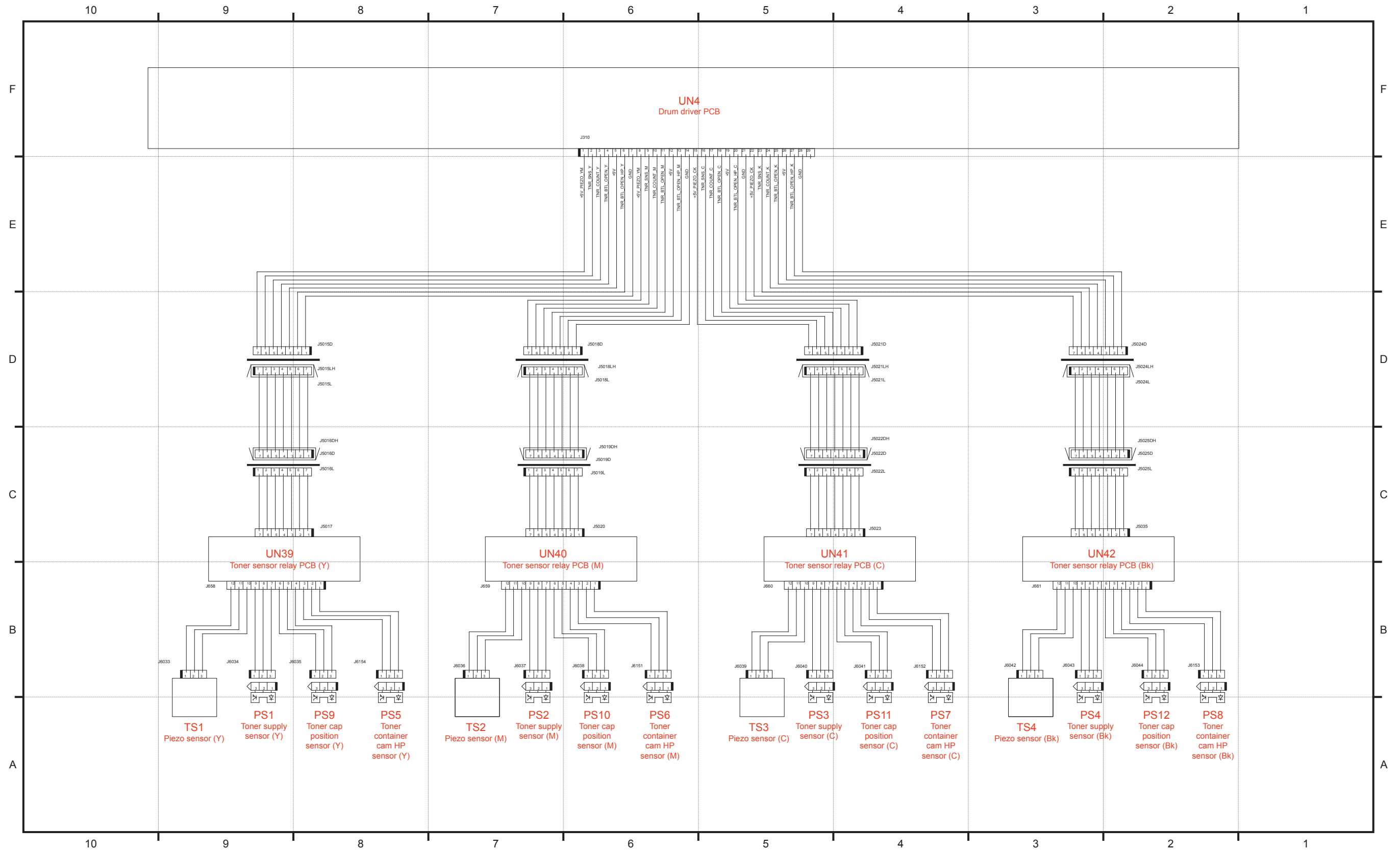


P.5

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General Circuit Diagram (7/16)

Appendix > General Circuit Diagram > General Circuit Diagram (7/16)



P.7

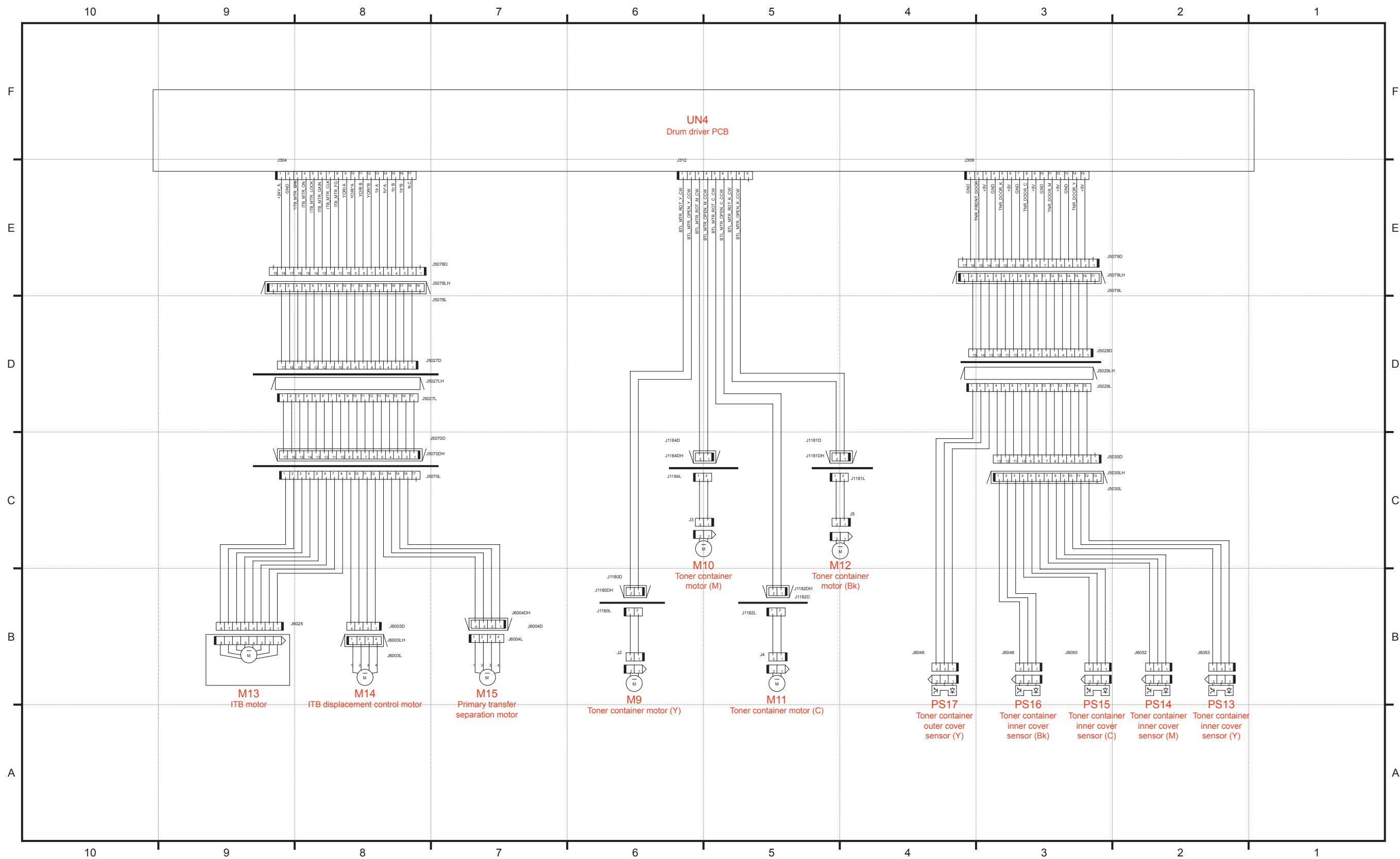
F-10-9

Appendix > General Circuit Diagram > General Circuit Diagram (7/16)

General Circuit Diagram (8/16)

Appendix > General Circuit Diagram > General Circuit Diagram (8/16)

Appendix > General Circuit Diagram > General Circuit Diagram (8/16)



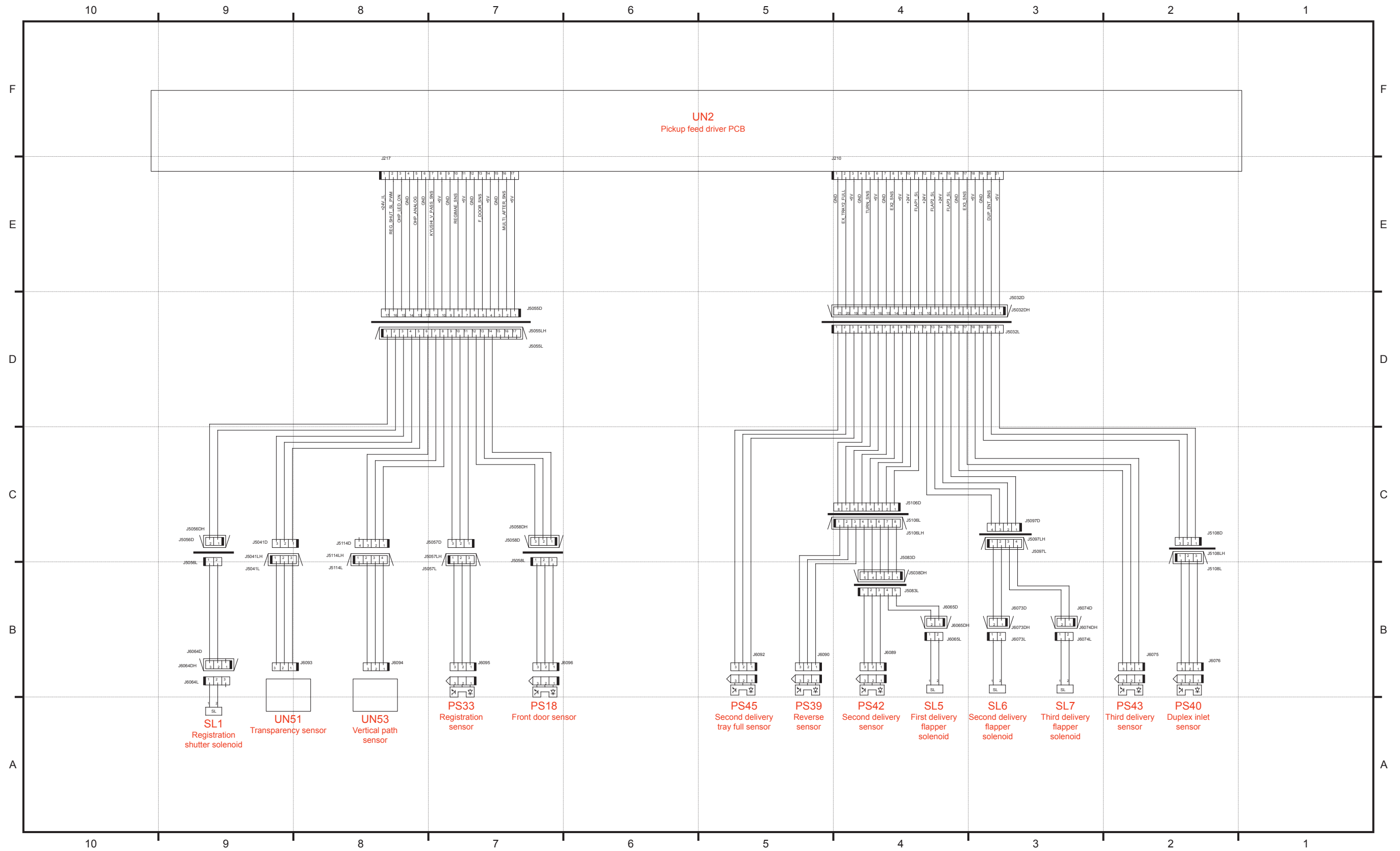
P.8

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General Circuit Diagram (9/16)

Appendix > General Circuit Diagram > General Circuit Diagram (9/16)

Appendix > General Circuit Diagram > General Circuit Diagram (9/16)



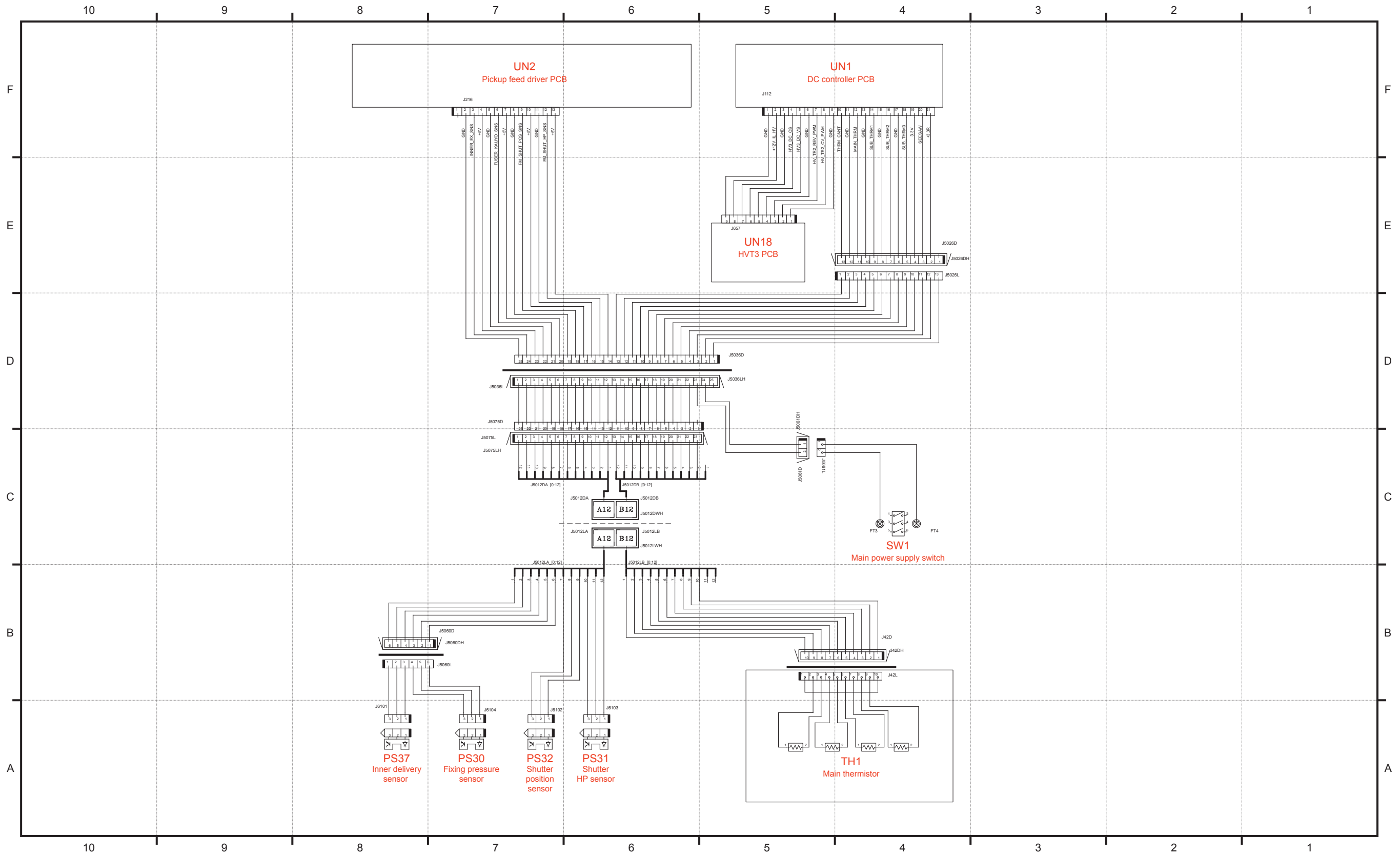
P.9

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General Circuit Diagram (11/16)

Appendix > General Circuit Diagram > General Circuit Diagram (11/16)

Appendix > General Circuit Diagram > General Circuit Diagram (11/16)



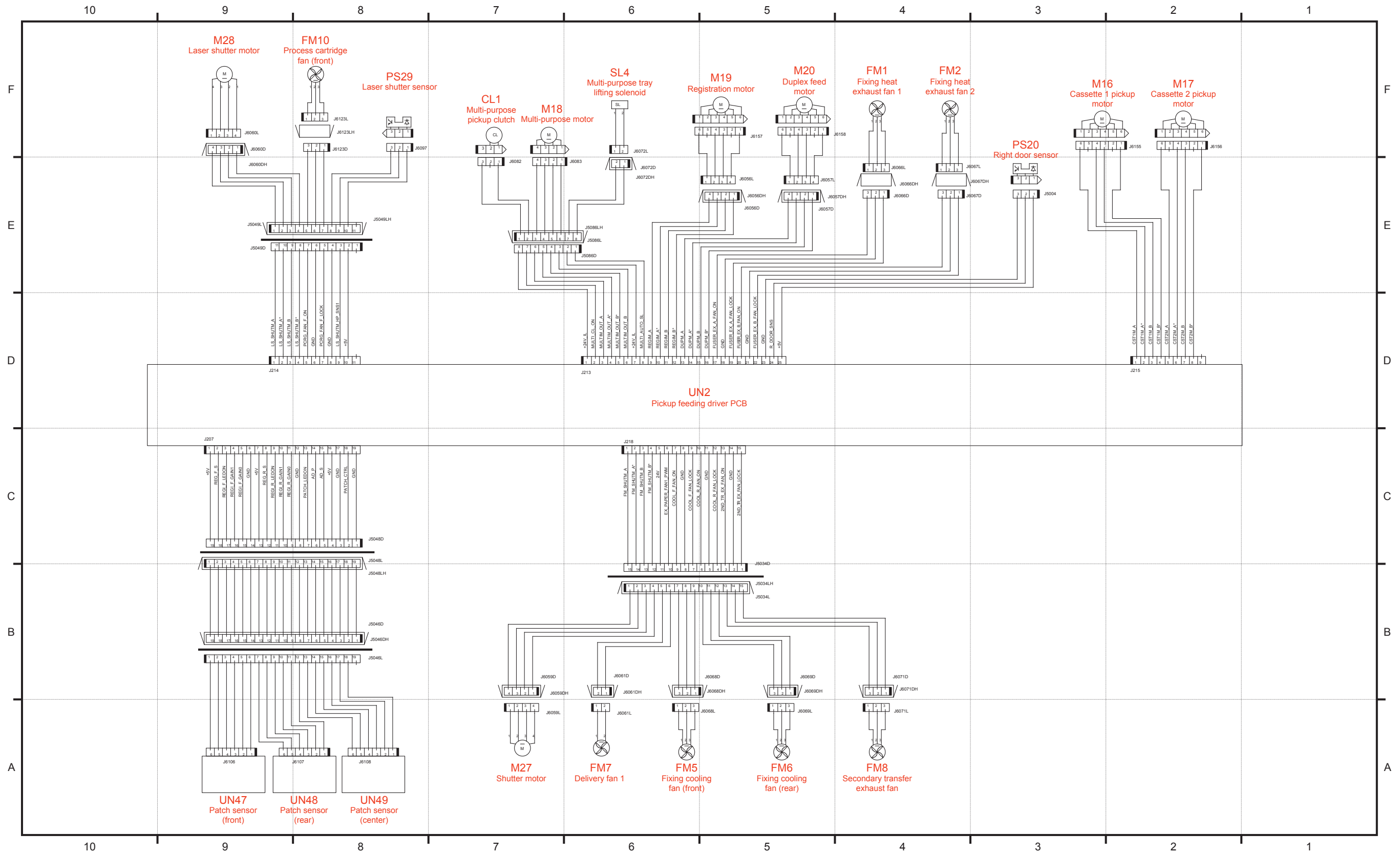
P.11

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General Circuit Diagram (12/16)

Appendix > General Circuit Diagram > General Circuit Diagram (12/16)

Appendix > General Circuit Diagram > General Circuit Diagram (12/16)



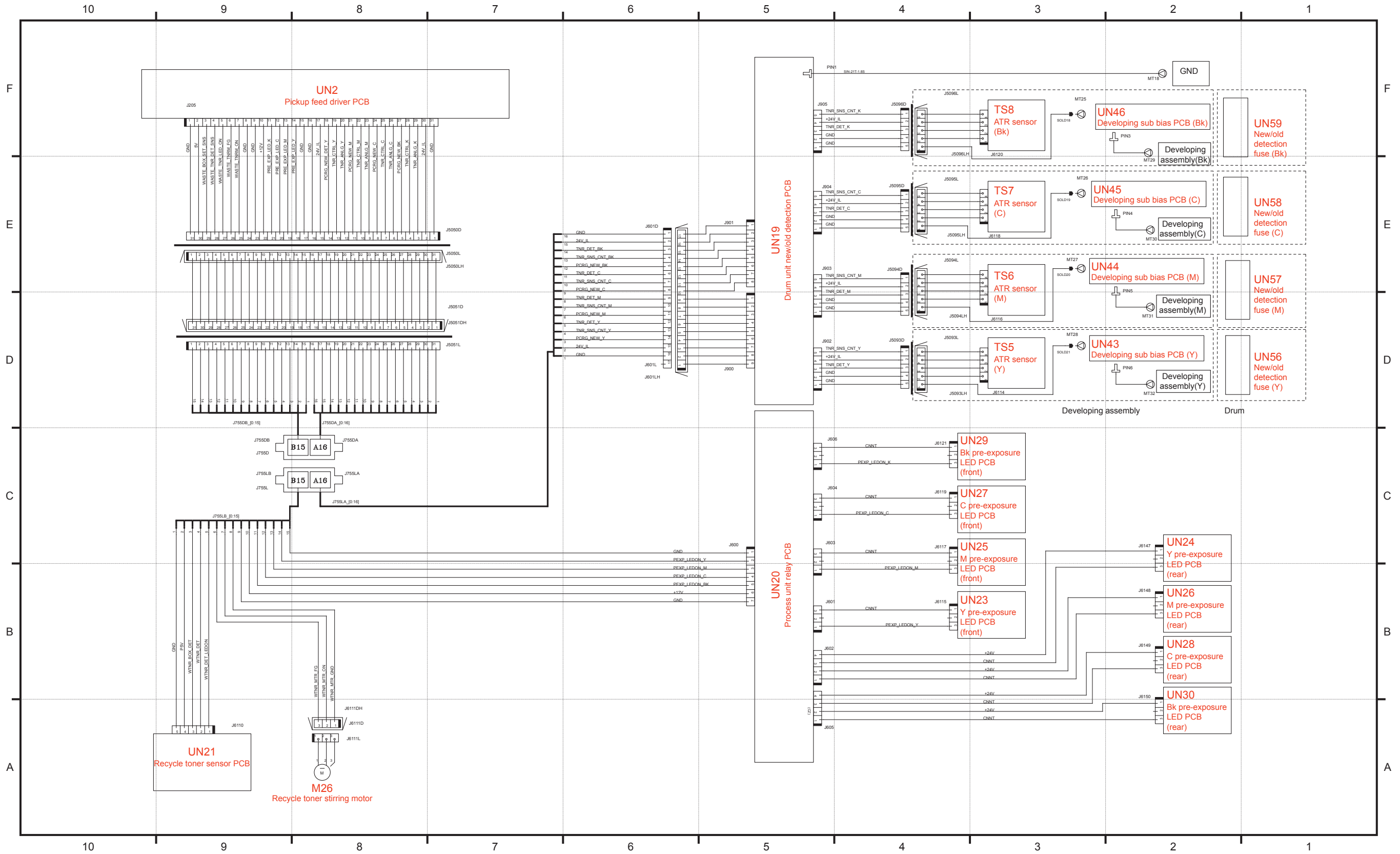
P.12

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General Circuit Diagram (13/16)

Appendix > General Circuit Diagram > General Circuit Diagram (13/16)

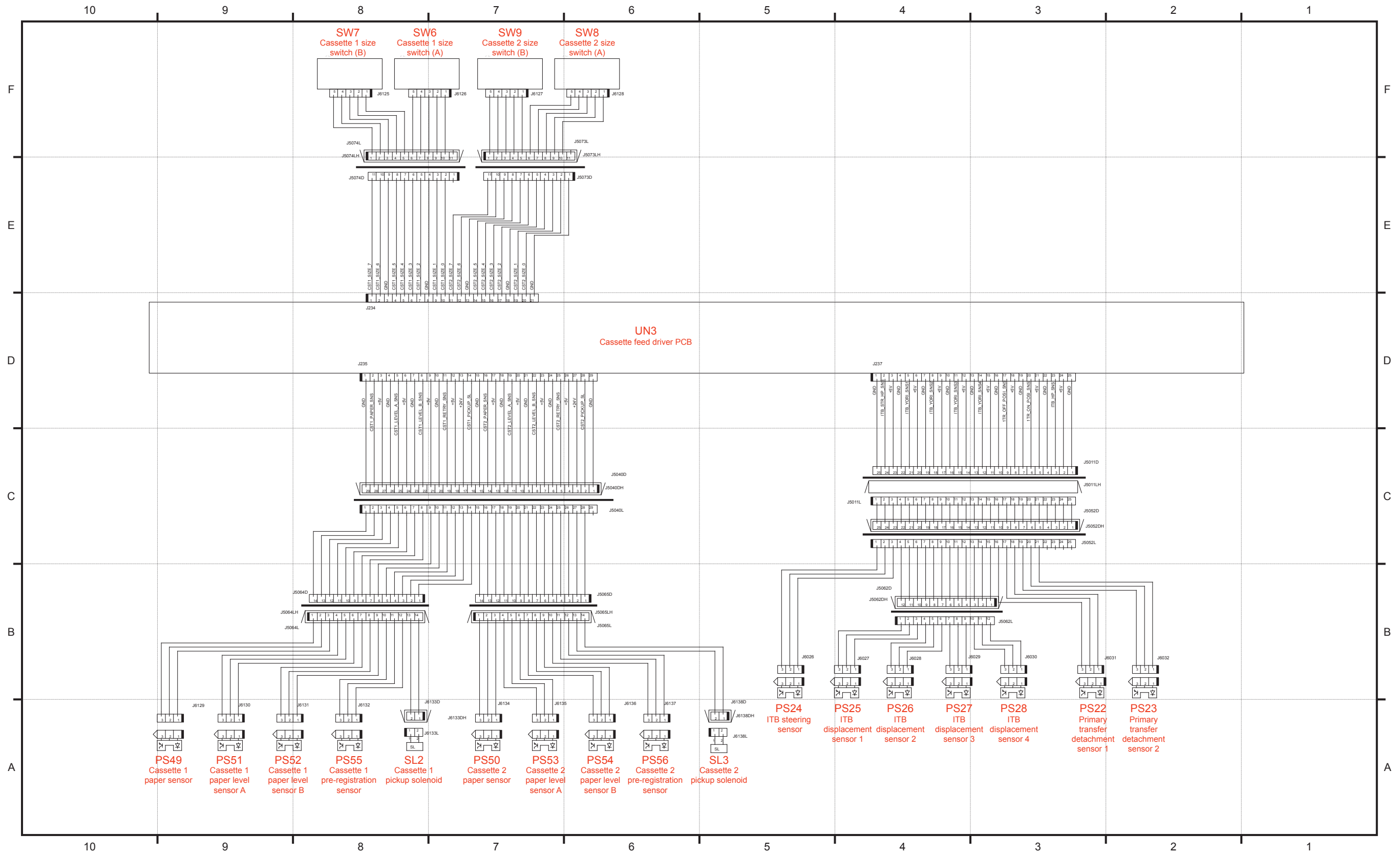
Appendix > General Circuit Diagram > General Circuit Diagram (13/16)



General Circuit Diagram (14/16)

Appendix > General Circuit Diagram > General Circuit Diagram (14/16)

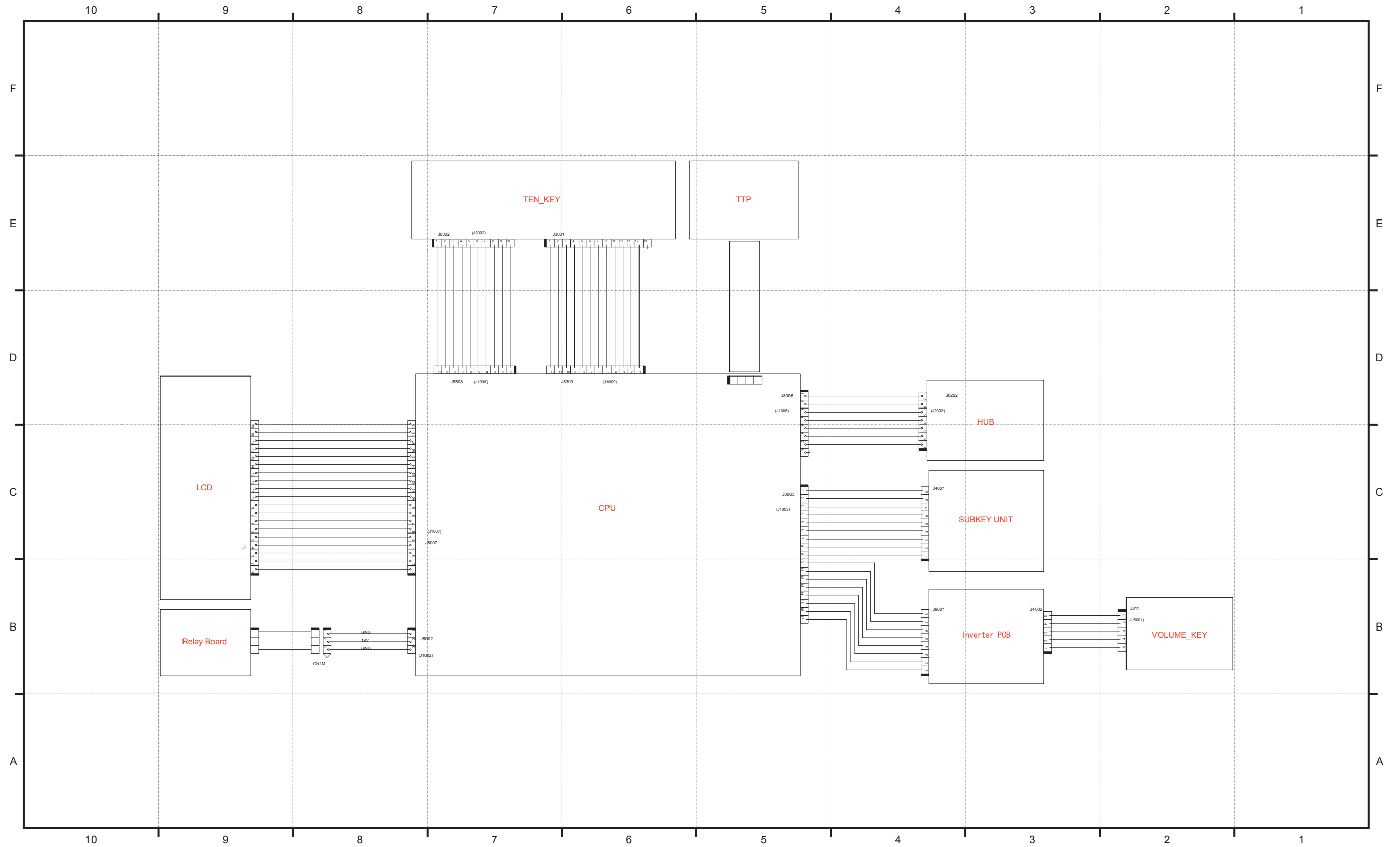
Appendix > General Circuit Diagram > General Circuit Diagram (14/16)



General Circuit Diagram (15/16)

Appendix > General Circuit Diagram > General Circuit Diagram (15/16)

Appendix > General Circuit Diagram > General Circuit Diagram (15/16)



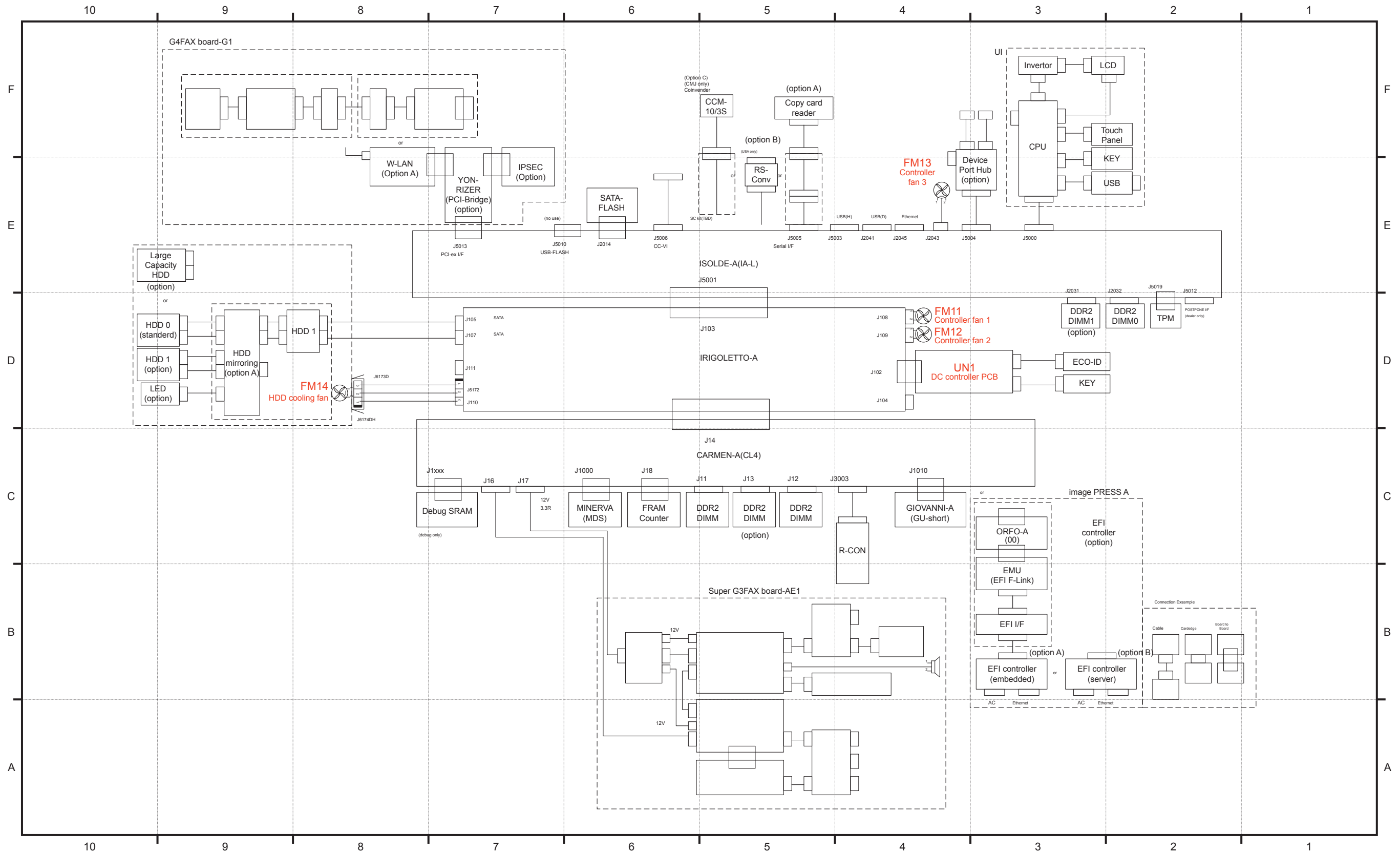
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General Circuit Diagram (16/16)

Appendix > General Circuit Diagram > General Circuit Diagram (16/16)

Appendix > General Circuit Diagram > General Circuit Diagram (16/16)



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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* ¹	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* ¹	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		
Send Filter		Yes
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
ReceieveFilter			
	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* ¹	Press [Start]	No
Original Scanning Area Cleaning Method* ¹	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* ¹		
If the Inner 2 Way Tray-F1 Is Attached		
Tray A	Copy*, Mail Box*, Printer, Receive, Fax, Other	No* ³
Tray B	Copy, Mail Box, Printer*, Receive*, Fax*, Other*	No* ³
If the Inner 2 Way Tray-F1 and Copy Tray-J1 Are Attached		
Tray A	Copy*, Mail Box*, Printer, Receive, Fax, Other	No* ³
Tray B	Copy, Mail Box, Printer*, Receive, Fax, Other	No* ³
Tray C	Copy, Mail Box, Printer, Receive*, Fax*, Other*	No* ³
If the Inner Finisher-A1 and Inner Finisher Additional Tray- A1 Are Attached		
Tray A	Copy*, Mail Box*, Printer, Receive, Fax, Other	No* ³
Tray B	Copy, Mail Box, Printer*, Receive*, Fax*, Other*	No* ³
If the Inner Finisher-A1 and Copy Tray-J1 Are Attached		
Tray A	Copy*, Mail Box*, Printer, Receive, Fax, Other	No* ³
Tray B	Copy, Mail Box, Printer*, Receive*, Fax*, Other*	No* ³
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* ³
Tray B	Copy, Mail Box, Printer*, Receive, Fax, Other	No* ³
Tray C	Copy, Mail Box, Printer, Receive*, Fax*, Other*	No* ³
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* ³
Tray B	Copy, Mail Box, Printer*, Receive, Fax, Other	No* ³
Tray C	Copy, Mail Box, Printer, Receive*, Fax*, Other*	No* ³
Tray Home Position	Tray A*,Tray B,Off	No* ³
Offset Jobs* ¹	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		
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"> 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) 	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"> 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 	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* ¹		
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* ¹	When Start is pressed*, When Performing from Panel	Yes
	Feeder Jam Recovery Method* ¹	From 1st Page*, From Stopped Original	Yes
	Scanner Noise Settings* ¹	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 ¹			
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 ³			
	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)* ¹	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* ¹	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 Printing Position: Inside, Outside* Display Destination Unit Name: On*, Off Telephone # Mark* ¹ : 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* ¹	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"> • If the Super G3 FAX Board and Super G3 2nd Line Fax Board are installed: • Line 2 	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"> • Line 2, Line 3, Line 4 	No
	Select TX Line	If the Super G3 FAX Board is installed: <ul style="list-style-type: none"> • Line 1: Priority TX, Prohibit TX* 	No
		If the Super G3 FAX Board and Super G3 2nd Line Fax Board are installed: <ul style="list-style-type: none"> • Line 1: Priority TX, Prohibit TX* • Line 2: Priority TX, Prohibit TX 	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"> • Line 1: Priority TX, Prohibit TX* • Line 2: Priority TX, Prohibit TX • Line 3: Priority TX, Prohibit TX • Line 4: Priority TX, Prohibit TX 	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* ⁸	On, Off*	Yes
	Line3* ⁹	On, Off*	Yes
	Line4* ⁹	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*1	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"> Reduction Mode: Auto*, Fixed Reduction %: 75 to 97% (90%*) Reduction Direction: Vertical & Horizontal, Vertical Only* 	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*1
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*1	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*1		
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 ^{*1}	On, Off*	Yes
Line2 ^{*1}	On, Off*	Yes
Line3 ^{*1}	On, Off*	Yes
Line4 ^{*1}	On, Off*	Yes

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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

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■ 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* ¹	On, Off*	Yes

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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

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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 • List • Select All • Search Depth (Router): 1 to 8 • Display Host Name: On, Off • Start Auto Search	
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

Data to Be Stored	Data Location	Whether to Delete or Not upon Execution											User Backup		Service Backup		Remarks		
		When Replacing HDD / Executing All Format	When Replacing Main PCB 1	Main PCB When Replacing Main PCB 2	When Replacing TPM PCB	User mode *Initialize All Data/Settings*	Function > CLEAR > MN-CONT	Function > CLEAR > DC-CON	Function > CLEAR > R-CON	Function > CLEAR > MMI	Function > CLEAR > ADRS-BK	Function > CLEAR > JV-CASHE	Can Data Be Backed up?	Method	Location to Be Stored	Can Data Be Backed up?		Method	Location to Be Stored
Address Book	HDD	Clear	---	---	---	Clear	---	---	---	Clear	---	---	Yes	Remote UI (Export/Import)	PC	No	---	---	
Forwarding Settings	HDD/ SRAM (M-CON2)	Clear	---	Clear	---	Clear	Clear	---	---	Clear	---	---	Yes	Remote UI (Export/Import)	PC	Yes	SST (Sramimg)	PC	
Settings/Registration																			
Preferences	SRAM (M-CON2/D-CON)	---	---	Clear	---	Clear	Clear	Clear*1	---	Clear	---	---	Yes*2	Remote UI (Export/Import)	PC	Yes	SST (Sramimg)	PC	*1:Excluding the following items. • Preference> Network> SNMP Settings> Use SNMPv.3> User Settings, Context Settings • Preference> Network> Firewall Settings> IPv4 Address Filter • Function Settings> Receive/Forward> Common Settings> Forwarding Settings, Set Fax/I-Fax Inbox. *2: Excluding the following item: Preference> Timer/Energy Settings> Excluding Adjust Time, Date/Time Settings.
Adjustment/Maintenance	SRAM (M-CON2)	---	---	Clear	---	Clear	Clear	---	---	Clear	---	---	Yes	Remote UI (Export/Import)	PC	Yes	SST (Sramimg)	PC	
Function Settings	SRAM (M-CON2/D-CON)	---	---	Clear	---	Clear	Clear	Clear*1	Clear*2	Clear	---	---	Yes*3	Remote UI (Export/Import)	PC	Yes	SST (Sramimg)	PC	*1:Excluding the following items. • Preference> Network> SNMP Settings> Use SNMPv.3> User Settings, Context Settings • Preference> Network> Firewall Settings> IPv4 Address Filter • Function Settings> Receive/Forward> Common Settings> Forwarding Settings, Set Fax/I-Fax Inbox.
Set Destination	SRAM (M-CON2)	---	---	Clear	---	Clear	Clear	---	---	Clear	---	---	Yes	Remote UI (Export/Import)	PC	Yes	SST (Sramimg)	PC	
Management Settings	SRAM (M-CON2)	---	---	Clear	---	Clear	Clear	---	---	Clear	---	---	Yes*	Remote UI (Export/Import)	PC	Yes	SST (Sramimg)	PC	*:Following data cannot be backed up. User Management>Department ID Management>Page Total
Printer Settings	SRAM (M-CON2)	---	---	Clear	---	Clear	Clear	---	---	Clear	---	---	Yes	Remote UI (Export/Import)	PC	Yes	SST (Sramimg)	PC	
Paper Information Settings	HDD	Clear	---	---	---	Clear	---	---	---	---	---	---	Yes	Remote UI (Export/Import)	PC	No	---	---	
Setting items for each menu in Main Menu (Copy, Scan and Send, Fax, Scan and Store, Access Stored Files, Fax/I-Fax Inbox)																			
Favorite Settings	HDD	Clear	---	---	---	Clear	---	---	---	---	---	Clear	Yes*1	Remote UI (Export/Import)	PC	Yes*2	SST (Sramimg)	PC	*1: Backup is available only "Favorite Settings" in "Scan and Send". *2: If the machine can be activated with download mode in safe mode at the time of HDD failure, backup of Meapback may be possible in some cases. In this case, install the system after replacing the HDD, and check that the machine starts normally. Then, active the download mode in safe mode, and restore the backup data so that data can be restored while retaining Meapback information.
Default Settings	HDD	Clear	---	---	---	Clear	---	---	---	---	---	Clear	No	---	---	Yes*	SST (Sramimg)	PC	*: If the machine can be activated with download mode in safe mode at the time of HDD failure, backup of Meapback may be possible in some cases. In this case, install the system after replacing the HDD, and check that the machine starts normally. Then, active the download mode in safe mode, and restore the backup data so that data can be restored while retaining Meapback information.
Shortcut settings for "Options"	HDD	Clear	---	---	---	Clear	---	---	---	---	---	Clear	No	---	---	Yes*	SST (Sramimg)	PC	
Previous Settings	HDD	Clear	---	---	---	Clear	---	---	---	---	---	Clear	No	---	---	Yes*	SST (Sramimg)	PC	
Setting items for Quick Menu																			
Button Size information	HDD	Clear	---	---	---	Clear	---	---	---	---	---	Clear	Yes	Remote UI (Export/Import)	PC	Yes*	SST (Sramimg)	PC	*: If the machine can be activated with download mode in safe mode at the time of HDD failure, backup of Meapback may be possible in some cases. In this case, install the system after replacing the HDD, and check that the machine starts normally. Then, active the download mode in safe mode, and restore the backup data so that data can be restored while retaining Meapback information.
Wallpaper Setting	HDD	Clear	---	---	---	Clear	---	---	---	---	---	Clear	Yes	Remote UI (Export/Import)	PC	Yes*	SST (Sramimg)	PC	
Button information in Quick Menu	HDD	Clear	---	---	---	Clear	---	---	---	---	---	Clear	Yes	Remote UI (Export/Import)	PC	Yes*	SST (Sramimg)	PC	
Restrict Quick Menu	HDD	Clear	---	---	---	Clear	---	---	---	---	---	Clear	Yes	Remote UI (Export/Import)	PC	Yes*	SST (Sramimg)	PC	
Setting items for Main Menu																			
Button settings in Main Menu	HDD	Clear	---	---	---	Clear	---	---	---	---	---	---	No	---	---	No	---	---	
Button settings on the top of the screen	HDD	Clear	---	---	---	Clear	---	---	---	---	---	---	No	---	---	No	---	---	
Wallpaper Setting for Main Menu	HDD	Clear	---	---	---	Clear	---	---	---	---	---	---	No	---	---	No	---	---	
Other settings for Main Menu	HDD	Clear	---	---	---	Clear	---	---	---	---	---	---	No	---	---	No	---	---	

Data to Be Stored	Data Location	Whether to Delete or Not upon Execution											User Backup			Service Backup			Remarks	
		When Replacing HDD / Executing All Format	When Replacing Main PCB 1	Main PCB When Replacing Main PCB 2	When Replacing TPM PCB	User mode "Initialize All Data/Settings"	Function > CLEAR > MN-CONT	Function > CLEAR > DC-CON	Function > CLEAR > R-CON	Function > CLEAR > MMI	Function > CLEAR > ADRS-BK	Function > CLEAR > JV-CASHE	Can Data Be Backed up?	Method	Location to Be Stored	Can Data Be Backed up?	Method	Location to Be Stored		
Setting for Box																				
User Box specification settings (Register Box Name, Password, Time until Document Auto Erase, Print upon storing from the printer driver)	HDD	Clear	---	---	---	Clear	---	---	---	---	---	---	---	Yes*	Remote UI (Backup/Restore)	PC	Yes*	SST (Sramimg)	PC	*: If the machine can be activated with download mode in safe mode at the time of HDD failure, backup of Sramimg may be possible in some cases. In this case, install the system after replacing the HDD, and check that the machine starts safe mode. Then, active the download mode in safe mode, and restore the backup data so that data can be restored while retaining Box information in HDD.
Image data of User Box, Confidential Fax Box, and System Box Image Data	HDD	Clear	---	---	---	Clear	---	---	---	---	---	---	---	Yes	Remote UI (Backup/Restore)	PC	Yes*	SST (Sramimg)	PC	*: If the machine can be activated with download mode in safe mode at the time of HDD failure, backup of Sramimg may be possible in some cases. In this case, install the system after replacing the HDD, and check that the machine starts safe mode. Then, active the download mode in safe mode, and restore the backup data so that data can be restored while retaining Box information in HDD.
Data File of Advanced Box	HDD	Clear	---	---	---	Clear	---	---	---	---	---	---	---	Yes	Remote UI (Backup/Restore)	PC	No	---	---	
Setting for Advance Box																				
User information of Advanced Box	HDD	Clear	---	---	---	Clear	---	---	---	---	---	Clear	Yes	Remote UI (Advanced Box)	PC	Yes*2	SST (Sramimg)	PC	*1:When the authentication management of Advanced Box is ON, it is necessary to export the Advanced Box account in advance and import it at the time of restoration. *2: If the machine can be activated with download mode in safe mode at the time of HDD failure, backup of Meapback may be possible in some cases. In this case, install the system after replacing the HDD, and check that the machine starts normally. Then, active the download mode in safe mode, and restore the backup data so that data can be restored while retaining Meapback information.	
Network place setting information	HDD	Clear	---	---	---	Clear	---	---	---	---	---	Clear	No	---	---	No	---	---	---	
Setting for PDL																				
Form of Superimpose Image	HDD	Clear	---	Clear	---	Clear	Clear	---	---	---	---	---	---	Yes	Remote UI (Backup/Restore)	PC	Yes	SST (Sramimg)	PC	
Setting for Web Access																				
Web Access Setting information	HDD	Clear	---	---	---	Clear	---	---	---	---	---	---	---	Yes*	Remote UI (Export/Import)	PC	Yes	SST (Sramimg)	PC	*:Only "Web Browser Favorites" can be backed up.

Data to Be Stored	Data Location	Whether to Delete or Not upon Execution											User Backup		Service Backup		Remarks		
		When Replacing HDD / Executing All Format	When Replacing Main PCB 1	Main PCB When Replacing Main PCB 2	When Replacing TPM PCB	User mode "Initialize All Data/Settings"	Function > CLEAR > MN-CONT	Function > CLEAR > DC-CON	Function > CLEAR > R-CON	Function > CLEAR > MMI	Function > CLEAR > ADRS-BK	Function > CLEAR > JV-CASHE	Can Data Be Backed up?	Method	Location to Be Stored	Can Data Be Backed up?		Method	Location to Be Stored
Setting for MEAP																			
MEAP application	HDD	Clear	---	---	---	Clear	---	---	---	---	---	Clear	No	---	---	Yes	SST (Meapback)	PC	
MEAP application license file	HDD	Clear	---	---	---	Clear	---	---	---	---	---	Clear	Yes	SMS	PC	Yes	SST (Meapback)	PC	
User authentication information registered by SSO-H (Single Sign-On H) local device authentication	HDD	Clear	---	---	---	Clear	---	---	---	---	---	Clear	Yes	SMS	PC	Yes	SST (Meapback)	PC	
Data saved by MEAP application	HDD	Clear	---	---	---	Clear	---	---	---	---	---	Clear	Yes*	---	---	Yes	SST (Meapback)	PC	Data can be backed up only when MEAP application has a backup function.
MEAP SMS (Service Management Service) password	HDD	Clear	---	---	---	Clear	---	---	---	---	---	Clear	No	---	---	Yes	SST (Meapback)	PC	
Setting for Universal Data																			
Unsent document (which is set timer transmission or reservation transmission)	HDD	Clear	---	---	---	Clear	---	---	---	---	---	---	No	---	---	No	---	---	
Job log information	HDD	Clear	---	---	---	Clear	---	---	---	---	---	---	No	---	---	No	---	---	
Key and server certificate which are registered in Management Settings>Device Settings>Certificate Setting	HDD	Clear	---	---	---	Clear	---	---	---	---	---	---	No	---	---	No	---	---	
Auto Adjust Gradation setting values	HDD (Partially, SRAM(M-CON2))	Clear	---	Clear	---	Clear	Clear	---	---	---	---	---	No	---	---	Yes	SST (Sramimg)	PC	
PS font	HDD	Clear	---	---	---	Clear	---	---	---	---	---	---	No	---	---	No	---	---	
Key information to be used for encryption when TPM is OFF	SRAM (M-CON2)	Clear *1	---	Clear *2	---	Clear	Clear *2	---	---	Clear *2	---	---	No *3	---	---	Yes	SST (Sramimg)	PC	*1: After clearing the backup key information in the HDD, it is automatically restored from the key in the SRAM. (M-CON2) *2: After clearing the key information in the SRAM, it is automatically restored from the backup key in the HDD. *1, 2: When replacing the HDD and Main Controller PCB 2 simultaneously, restoring the key information is not executed automatically. *3: There is no method to back up to the external devices.
Key and settings information to be used for encryption when TPM is ON	SRAM (M-CON2) HDD TPM Board	Clear *1	---	Clear *2	Clear	Clear *3	Clear *2	---	---	Clear *2	---	---	Yes *4	Settings/ Registration mode (Management Settings> Data Management> TPM Settings)	USB memory	Yes	SST (Sramimg)	PC	*1: When the TPM setting is "ON", the error code is displayed. After restart and initialization of all data/settings, it is restored from the error state by setting the TPM setting to "ON" again. *2: After executing each CLEAR operation, the key information in the SRAM(M-CON2) can be automatically restored from the common backup key in the HDD, and the TPM setting becomes "ON". However, only the UI display is "OFF", so it is required to change the TPM setting to "ON" manually. *3: By initializing all data/settings, the TPM setting is changed to "OFF". *4 :Only the backup for TPM PCB trouble is enabled. Data cannot be restored to the other devices whose TPM setting is "ON".
Service mode setting values (MN-CON)	SRAM (M-CON2)	---	---	Clear	---	---	Clear	---	---	---	---	---	No	---	---	Yes	SST (Sramimg)	PC	
Service mode setting values (DC-CON)	SRAM (DC-CON)	---	---	---	---	---	---	Clear	---	---	---	---	No	---	---	Yes	Service mode COPIER > FUNCTION > SYSTEM > DSRAMBUP	HDD	
Service mode setting values (R-CON)	EEPROM (R-CON)	---	---	---	---	---	---	---	Clear	---	---	---	No	---	---	Yes	Service mode COPIER > FUNCTION > SYSTEM > RSRAMBUP	HDD	

Detail of HDD partition

Partition name	CHK-TYPE	Description	HDD Format
FSTDEV	1	Image data storage area	enable
IMG-MNG		Management data of image	
FSTCDEV		Image data storage area (for Chasing)	
THUMDEV		Thumbnail	
APL_GEN	11	Storage area of universal data (Note: For details, see the following.)	enable
TMP_GEN	2	Storage area of universal data (temporary file)	enable
TMP_FAX		FAX (temporary file)	
TMP_PSS		PSS (temporary file)	
PDLDEV	3	PDL-related file storage area (font, registration form, color correction information file for ICCProfile-PDL function)	Enabled
BOOTDEV	4	Firmware storage area (Bootable/MEAP/key/certificate/PDF dictionary/RUI contents/voice dictionary (ICC profile. PS test data.))	Disabled
APL_MEAP	5	MEAP	Enabled
APL_SEND	6	Address book, Setting for Forwarding	Disabled
APL_KEEP	7	MEAP stored data	Disabled
APL_LOG	8	System log storage area	Enabled
CRBDEV	9	Advanced Box area	Enabled
APL_CDS	10	Area for distribution server	Enabled

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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

T-10-27

Soft counter specifications

Soft counter specifications

The numbers entered for software counters are classified as follows:

No.	Counter Details
000 to 099	Remote copy
100 to 199	Total
200 to 299	Copy
300 to 399	Print
400 to 499	Copy and print
500 to 599	Scan
600 to 699	Box
700 to 799	Reception print
800 to 899	Report print
900 to 999	Transmission

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Meanings of symbols in tables

- L: Large size (larger than B4 size)
- S: Small size (smaller than B4 size)
- S: Small size (smaller than B4 size)

It can be changed by the service mode (COPIER > OPTION > USER > B4_L_CNT) so that the paper larger than B4 size can be counted as large size paper.

- Copy: Local copy + remote copy
- Copy A: Local copy + remote copy + box print
- Print: PDL print + report print + box print
- Print A: PDL print + report print
- Scan: Black and white scan + color scan

No.	Counter Details
002	Remote copy (full color 1)
003	Remote copy (full color 2)
004	Remote copy (mono color 1)
005	Remote copy (mono color 2)
006	Remote copy (black and white 1)
007	Remote copy (black and white 2)
008	Remote copy (full color / large)
009	Remote copy (full color / small)
010	Remote copy (mono color / large)
011	Remote copy (mono color / small)
012	Remote copy (black and white / large)
013	Remote copy (black and white / small)
014	Remote copy (full color + mono color / large)
015	Remote copy (full color + mono color / small)
016	Remote copy (full color + mono color 2)
017	Remote copy (full color + mono color 1)
018	Remote copy (full color / large / double sided)
019	Remote copy (full color / small / double sided)
020	Remote copy (mono color / large / double sided)
021	Remote copy (mono color / small / double sided)
022	Remote copy (black and white / large / double sided)
023	Remote copy (black and white / small / double sided)
071	Toner bottle black
072	Toner bottle yellow
073	Toner bottle magenta
074	Toner bottle cyan
081	Toner bottle black + Remove the toner bottle black
082	Toner bottle yellow + Remove the toner bottle yellow
083	Toner bottle magenta + Remove the toner bottle magenta
084	Toner bottle cyan + Remove the toner bottle cyan
091	1/10 Toner bottle black
092	1/10 Toner bottle yellow
093	1/10 Toner bottle magenta
094	1/10 Toner bottle cyan
101	Total 1
102	Total 2
103	Total (large)
104	Total (small)
105	Total (full 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)

No.	Counter Details
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)
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)

No.	Counter Details
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)
211	Local copy (large)
212	Local copy (small)
213	Remote copy (Total 1)
214	Remote copy (Total 2)
215	Remote copy (large)
216	Remote 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)

No.	Counter Details
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)
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)

No.	Counter Details
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)
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)
339	PDLPrint (black and white 1)

No.	Counter Details
340	PDLPrint (black and white 2)
341	PDLPrint (full color /large)
342	PDLPrint (full color /small)
345	PDLPrint (black and white /large)
346	PDLPrint (black and white /small)
351	PDLPrint (full color /large /double sided)
352	DLPrint (full color /small/double sided)
355	PDLPrint (black and white /large /double sided)
356	PDLPrint (black and white /small/double sided)
401	Copy + print (full color /large)
402	Copy + print (full color /small)
403	Copy + print (black and white/large)
404	Copy + print (black and white/small)
405	Copy + print (black and white2)
406	Copy + print (black and white1)
407	Copy + print (full color +mono color /large)
408	Copy + print (full color +mono color /small)
409	Copy + print (full color +mono color /2)
410	Copy + print (full color +mono color /1)
411	Copy + print (large)
412	Copy + print (small)
413	Copy + print (2)
414	Copy + print (1)
415	Copy + print (mono color /large)
416	Copy + print (mono color /small)
417	Copy + print (full color /large/double sided)
418	Copy + print (full color /small/double sided)
419	Copy + print (mono color /large/double sided)
420	Copy + print (mono color /small/double sided)
421	Copy + print (black and white/large/double sided)
422	Copy + print (black and white/small/double sided)
501	Scan (Total 1)
502	Scan (Total 2)
503	Scan (large)
504	Scan (small)
505	Black and white Scan (Total 1)
506	Black and white Scan (Total 2)
507	Black and white Scan (large)
508	Black and white Scan (small)
509	Color scan (Total 1)
510	Color scan (Total 2)
511	Color scan (large)
512	Color scan (small)
601	Box print (Total 1)
602	Box print (Total 2)

No.	Counter Details
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)
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 (black and white /large)
716	Reception print (black and white /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)

No.	Counter Details
732	Advanced Box Print (full color 2)
733	Advanced Box Print(black and white 1)
734	Advanced Box Print(black and white 2)
735	Advanced Box Print(full color/large)
736	Advanced Box Print(full color/small)
737	Advanced Box Print(mono color /large)
738	Advanced Box Print(mono color /small)
739	Advanced Box Print(full color /large/double sided)
740	Advanced Box Print(full color /small/double sided)
741	Advanced Box Print(black and white /large/double sided)
742	Advanced Box Print(black and white /small/double sided)
743	Network Print(Total 1)
744	Network Print(Total 2)
745	Network Print(large)
746	Network Print(small)
747	Network Print(full color 1)
748	Network Print(full color 2)
749	Network Print(black and white 1)
750	Network Print(black and white 2)
751	Network Print(full color/large)
752	Network Print(full color/small)
753	Network Print(mono color /large)
754	Network Print(black and white/small)
755	Network Print(full color /large/double sided)
756	Network Print(full color /small/double sided)
757	Network Print(black and white /large/double sided)
758	Network Print(black and white /small/double sided)
759	Mobile Print(Total 1)
760	Mobile Print(Total 2)
761	Mobile Print(large)
762	Mobile Print(small)
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)

No.	Counter Details
803	Report print (large)
804	Report print (small)
805	Report print (full color 1)
806	Report print (full color 2)
809	Report print (black and white 1)
810	Report print (black and white 2)
811	Report print (full color /large)
812	Report print (full color /small)
815	Report print (black and white /large)
816	Report print (black and white /small)
821	Report print (full color /large /double sided)
822	Report print (full color /small /double sided)
825	Report print (black and white /large /double sided)
826	Report print (black and white /small /double sided)
915	Transmission scan total 2(color)
916	Transmission scan total 2(black and white)
917	Transmission scan total 3(color)
918	Transmission scan total 3(black and white)
921	Transmission scan total 5(color)
922	Transmission scan total 5(black and white)
929	Transmission scan total 6(color)
930	Transmission scan total 6(black and white)
937	Box scan (color)
938	Box scan (black and white)
939	Remote scan (color)
940	Remote scan (black and white)
945	Transmission scan / E-mail (color)
946	Transmission scan / E-mail (black and white)
959	Media Scan (Color)
960	Media Scan (black and white)
961	Application Scan(Total 1)
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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