



TASKalfa 265ci

SERVICE MANUAL

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First Edition

CAUTION

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

It may be illegal to dispose of this battery into the municipal waste stream. Check with your local solid waste officials for details in your area for proper disposal.

ATTENTION

IL Y A UN RISQUE D'EXPLOSION SI LA BATTERIE EST REMPLACÉE PAR UN MODÈLE DE TYPE INCORRECT. METTRE AU REBUT LES BATTERIES UTILISÉES SELON LES INSTRUCTIONS DONNÉES.

Il peut être illégal de jeter les batteries dans des eaux d'égout municipales. Vérifiez avec les fonctionnaires municipaux de votre région pour les détails concernant des déchets solides et une mise au rebut appropriée.

Revision history

Revision	Date	Replaced pages	Remarks

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Safety precautions


This booklet provides safety warnings and precautions for our service personnel to ensure the safety of their customers, their machines as well as themselves during maintenance activities. Service personnel are advised to read this booklet carefully to familiarize themselves with the warnings and precautions described here before engaging in maintenance activities.

Safety warnings and precautions

Various symbols are used to protect our service personnel and customers from physical danger and to prevent damage to their property. These symbols are described below:

 **DANGER:** High risk of serious bodily injury or death may result from insufficient attention to or incorrect compliance with warning messages using this symbol.

 **WARNING:** Serious bodily injury or death may result from insufficient attention to or incorrect compliance with warning messages using this symbol.

 **CAUTION:** Bodily injury or damage to property may result from insufficient attention to or incorrect compliance with warning messages using this symbol.

Symbols

The triangle (\triangle) symbol indicates a warning including danger and caution. The specific point of attention is shown inside the symbol.



General warning.



Warning of risk of electric shock.



Warning of high temperature.

 indicates a prohibited action. The specific prohibition is shown inside the symbol.



General prohibited action.



Disassembly prohibited.

 indicates that action is required. The specific action required is shown inside the symbol.



General action required.





Remove the power plug from the wall outlet.











Always ground the copier.

1. Installation Precautions

WARNING











- Do not use a power supply with a voltage other than that specified. Avoid multiple connections to one outlet: they may cause fire or electric shock. When using an extension cable, always check that it is adequate for the rated current. 
- Connect the ground wire to a suitable grounding point. Not grounding the copier may cause fire or electric shock. Connecting the earth wire to an object not approved for the purpose may cause explosion or electric shock. Never connect the ground cable to any of the following: gas pipes, lightning rods, ground cables for telephone lines and water pipes or faucets not approved by the proper authorities. 

CAUTION:





- Do not place the copier on an infirm or angled surface: the copier may tip over, causing injury. 
- Do not install the copier in a humid or dusty place. This may cause fire or electric shock. 
- Do not install the copier near a radiator, heater, other heat source or near flammable material. This may cause fire. 
- Allow sufficient space around the copier to allow the ventilation grills to keep the machine as cool as possible. Insufficient ventilation may cause heat buildup and poor copying performance. 
- Always handle the machine by the correct locations when moving it. 
- Always use anti-toppling and locking devices on copiers so equipped. Failure to do this may cause the copier to move unexpectedly or topple, leading to injury. 
- Avoid inhaling toner or developer excessively. Protect the eyes. If toner or developer is accidentally ingested, drink a lot of water to dilute it in the stomach and obtain medical attention immediately. If it gets into the eyes, rinse immediately with copious amounts of water and obtain medical attention. 
- Advise customers that they must always follow the safety warnings and precautions in the copier's instruction handbook. 












2. Precautions for Maintenance

WARNING

- Always remove the power plug from the wall outlet before starting machine disassembly. 
- Always follow the procedures for maintenance described in the service manual and other related brochures. 
- Under no circumstances attempt to bypass or disable safety features including safety mechanisms and protective circuits. 
- Always use parts having the correct specifications. 
- Always use the thermostat or thermal fuse specified in the service manual or other related brochure when replacing them. Using a piece of wire, for example, could lead to fire or other serious accident. 
- When the service manual or other serious brochure specifies a distance or gap for installation of a part, always use the correct scale and measure carefully. 
- Always check that the copier is correctly connected to an outlet with a ground connection. 
- Check that the power cable covering is free of damage. Check that the power plug is dust-free. If it is dirty, clean it to remove the risk of fire or electric shock. 
- Never attempt to disassemble the optical unit in machines using lasers. Leaking laser light may damage eyesight. 
- Handle the charger sections with care. They are charged to high potentials and may cause electric shock if handled improperly. 



CAUTION

- Wear safe clothing. If wearing loose clothing or accessories such as ties, make sure they are safely secured so they will not be caught in rotating sections. 
- Use utmost caution when working on a powered machine. Keep away from chains and belts. 
- Handle the fixing section with care to avoid burns as it can be extremely hot. 
- Check that the fixing unit thermistor, heat and press rollers are clean. Dirt on them can cause abnormally high temperatures. 

- Do not remove the ozone filter, if any, from the copier except for routine replacement. 
- Do not pull on the AC power cord or connector wires on high-voltage components when removing them; always hold the plug itself. 
- Do not route the power cable where it may be stood on or trapped. If necessary, protect it with a cable cover or other appropriate item. 
- Treat the ends of the wire carefully when installing a new charger wire to avoid electric leaks. 
- Remove toner completely from electronic components. 
- Run wire harnesses carefully so that wires will not be trapped or damaged. 
- After maintenance, always check that all the parts, screws, connectors and wires that were removed, have been refitted correctly. Special attention should be paid to any forgotten connector, trapped wire and missing screws. 
- Check that all the caution labels that should be present on the machine according to the instruction handbook are clean and not peeling. Replace with new ones if necessary. 
- Handle greases and solvents with care by following the instructions below: 
 - Use only a small amount of solvent at a time, being careful not to spill. Wipe spills off completely.
 - Ventilate the room well while using grease or solvents.
 - Allow applied solvents to evaporate completely before refitting the covers or turning the power switch on.
 - Always wash hands afterwards.
- Never dispose of toner or toner bottles in fire. Toner may cause sparks when exposed directly to fire in a furnace, etc. 
- Should smoke be seen coming from the copier, remove the power plug from the wall outlet immediately. 

3. Miscellaneous

WARNING

- Never attempt to heat the drum or expose it to any organic solvents such as alcohol, other than the specified refiner; it may generate toxic gas. 
- Keep the machine away from flammable liquids, gases, and aerosols. A fire or an electric shock might occur. 

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INSTALLATION GUIDE

Card Authentication Kit(D)

1-1-1 Specifications

Machine

Item		Specifications
Type		Desktop
Printing method		Electrophotography by semiconductor laser, tandem (4) drum system
Originals		Sheet, Book, 3-dimensional objects (maximum original size: Folio/Legal)
Original feed system		Fixed
Paper weight	Cassette	60 to 163 g/m ² (Duplex: 60 to 163 g/m ²)
	MP tray	60 to 220 g/m ² , 230 μm (Cardstock)
Paper type	Cassette	Plain, Recycled, Preprinted, Bond, Color (Colour), Prepunched, Letterhead, Thick, High quality, Custom 1 to 8 (Duplex: Same as simplex)
	MP tray	Plain, Transparency, Vellum, Labels, Recycled, Preprinted, Bond, Cardstock, Color (Colour), Prepunched, Letterhead, Thick, Envelope, Coated, High quality, Custom 1 to 8
Paper size	Cassette	A4, A5, A6, B5, Letter, Legal, Statement, Executive, Oficio II, Folio, 16K, Custom
	MP tray	A4, A5, A6, B5, ISO B5, B6, Letter, Legal, Statement, Executive, Oficio II, Folio, 16K, Envelope #10, Envelope #9, Envelope #6, Envelope Monarch, Envelope DL, Envelope C5, Postcards, Return postcard, Youkei 2, Youkei 4, Custom
Zoom level		Manual mode : 25 to 400%, 1% increments Auto mode : 400%, 200%, 141%, 129%, 115%, 90%, 86%, 78%, 70%, 64%, 50%, 25%
Copying speed	Simplex	A4R : 26 sheets/min LetterR : 28 sheets/min Legal : 23 sheets/min B5R : 28 sheets/min A5R : 28 sheets/min A6R : 28 sheets/min
	Duplex	A4R : 13 sheets/min LetterR : 13 sheets/min Legal : 12 sheets/min
First copy time (A4, feed from cassette)	B/W	When using the DP : 11.0 s or less When the DP is not used: 10.0 s or less
	Color	When using the DP : 13.0 s or less When the DP is not used: 12.0 s or less
Warm-up time (22 °C/71.6 °F, 60% RH)		Power on : 29 s or less Sleep mode: 20 s or less
Paper capacity	Cassette	250 sheets (80g/m ²)
	MP tray	50 sheets (80 g/m ² , plain paper, A4/Letter or less)
Output tray capacity		150 sheets (80g/m ²)
Continuous copying		1 to 999 sheets
Light source		LED

Item		Specifications
Scanning system		Flat bed scanning by CCD image sensor
Photoconductor		OPC drum (diameter 30 mm)
Image write system		Semiconductor laser
Charging system		Charger roller
Developing system		Touch down developing system Developer: 2-component Toner replenishing: Automatic from the toner container
Transfer system		Primary: Transfer belt Secondary: Transfer roller
Separation system		Small diameter separation
Cleaning system		Drum: Counter blade
Charge erasing system		Exposure by cleaning lamp (LED)
Fusing system		Heat and pressure fusing with the heat roller and the press roller Heat source: halogen heater Abnormally high temperature protection devices: thermostat
CPU		PowerPC464 (800MHz)
Main memory	Standard	1024 MB
	Maximum	2048 MB
Interface	Standard	USB interface connector: 1 (USB Hi-speed) USB host: 2 Network interface: 1 (10BASE-T/100BASE-TX/1000BASE-T)
	Option	eKUIO slot: 1
Resolution		600 × 600 dpi
Operating environment	Temperature	10 to 32.5 °C/50 to 90.5 °F
	Humidity	15 to 80% RH
	Altitude	2,500 m/8,202 ft or less
	Brightness	1,500 lux or less
Dimensions (W × D × H)		514 × 550 × 603 mm
Weight		38.7 kg (with toner container)
Space required (W × D)		514 × 750 mm (using MP tray)
Power source		220 - 240 V AC, 50/60 Hz, more than 5.0 A
Options		Paper feeder × 2, Expanded memory, Card authentication kit, Card reader holder, Network interface kit, USB keyboard

Document processor

Item	Specifications
Original feed method	Automatic feed
Supported original types	Sheet originals
Original sizes	Maximum: A4/Legal Minimum : A5/Statement
Original weights	Simplex: 50 to 120 g/m ² Duplex : 50 to 110 g/m ²
Loading capacity	50 sheets (50 to 80 g/m ²) or less
Dimensions (W × D × H)	490 × 338 × 104 mm 19 5/16 × 13 5/16 × 4 1/8"
Weight	3 kg/ 6.6 lb or less

Printer

Item	Specifications
Printing speed	Same as copying speed.
First print time (A4, feed from cassette)	B/W : 9.0 s or less Color: 10.5 s or less
Resolution	600 dpi
Operating system	Windows 2000, Windows XP, Windows XP Professional, Windows Server 2003, Windows Server 2003 x64 Edition, Windows Vista x86 Edition, Windows Vista x64 Edition, Windows 7 x86 Edition, Windows 7 x64 Edition, Windows Server 2008, Windows Server 2008 x64 Edition, Apple Macintosh OS 10.x, Windows 8 x86 Edition, Windows 8 x64 Edition
Interface	USB interface connector: 1 (USB Hi-speed) USB host: 2 Network interface: 1 (10BASE-T/100BASE-TX/1000BASE-T)
Page description language	PRESCRIBE

Scanner

Item		Specifications
Operating system		Windows 2000 (Service Pack 4), Windows XP, Windows Vista, Windows 7, Windows Server 2003, Windows Server 2008, Windows 8 x86 Edition, Windows 8 x64 Edition
System requirements		IBM PC/AT compatible CPU: Celeron 600 MHz or higher RAM: 128 MB or more HDD free space: 20 MB or more Interface: Ethernet
Resolution		600 dpi, 400 dpi, 300 dpi, 200 dpi, 200×400 dpi, 200×100 dpi
File format		JPEG, TIFF, PDF, XPS
Scanning speed	Simplex	B/W : 35 images/min Color: 25 images/min (A4 landscape, 300 dpi, Image quality: Text/Photo original)
	Duplex	B/W : 18 images/min Color: 13 images/min (A4 landscape, 300 dpi, Image quality: Text/Photo original)
Interface		Ethernet (10 BASE-T/100 BASE-TX/1000BASE-T)
Network protocol		TCP/IP
Transmission system		PC transmission SMB Scan to SMB FTP Scan to FTP, FTP over SSL E-mail transmission SNTP Scan to E-mail TWAIN scan*1 WIA scan*2

*1 Available operating system: Windows 2000 (Service Pack 4), Windows XP, Windows Vista, Windows Server 2008, Windows 7, Windows 8

*2 Available operating system: Windows Vista, Windows Server 2008, Windows 7, Windows 8

FAX

Item	Specifications
Compatibility	G3
Communication line	Subscriber telephone line
Transmission time	3 s or less (33600 bps, JBIG, ITU-T A4 #1 chart)
Transmission speed	33600/31200/28800/26400/24000/21600/19200/16800/14400/12000/9600/ 7200/4800/2400 bps
Coding scheme	JBIG/MMR/MR/MH
Error correction	ECM
Original size	Max. width: 8 1/2"/216 mm Max. length: 14"/356 mm
Automatic document feed	Max. 50 sheets
Scanner resolution	Horizontal × Vertical 200 × 100 dpi Normal (8 dot/mm × 3.85 line/mm) 200 × 200 dpi Fine (8 dot/mm × 7.7 line/mm) 200 × 400 dpi Super fine (8 dot/mm × 15.4 line/mm) 400 × 400 dpi Ultra fine (16 dot/mm × 15.4 line/mm)
Printing resolution	600 × 600 dpi
Gradations	256 shades (Error diffusion)
One-Touch key	100 keys
Multi-Station transmission	Max. 100 destinations
Substitute memory reception	256 sheets or more (when using ITU-T A4 #1 chart)
Image memory capacity	3.5 MB (standard) (for incoming faxed originals)
Report output	Sent result report, FAX RX result report, Report for job canceled before sending, Activity report, Status page

NOTE: These specifications are subject to change without notice.

1-1-2 Parts names

(1) Machine (front side)

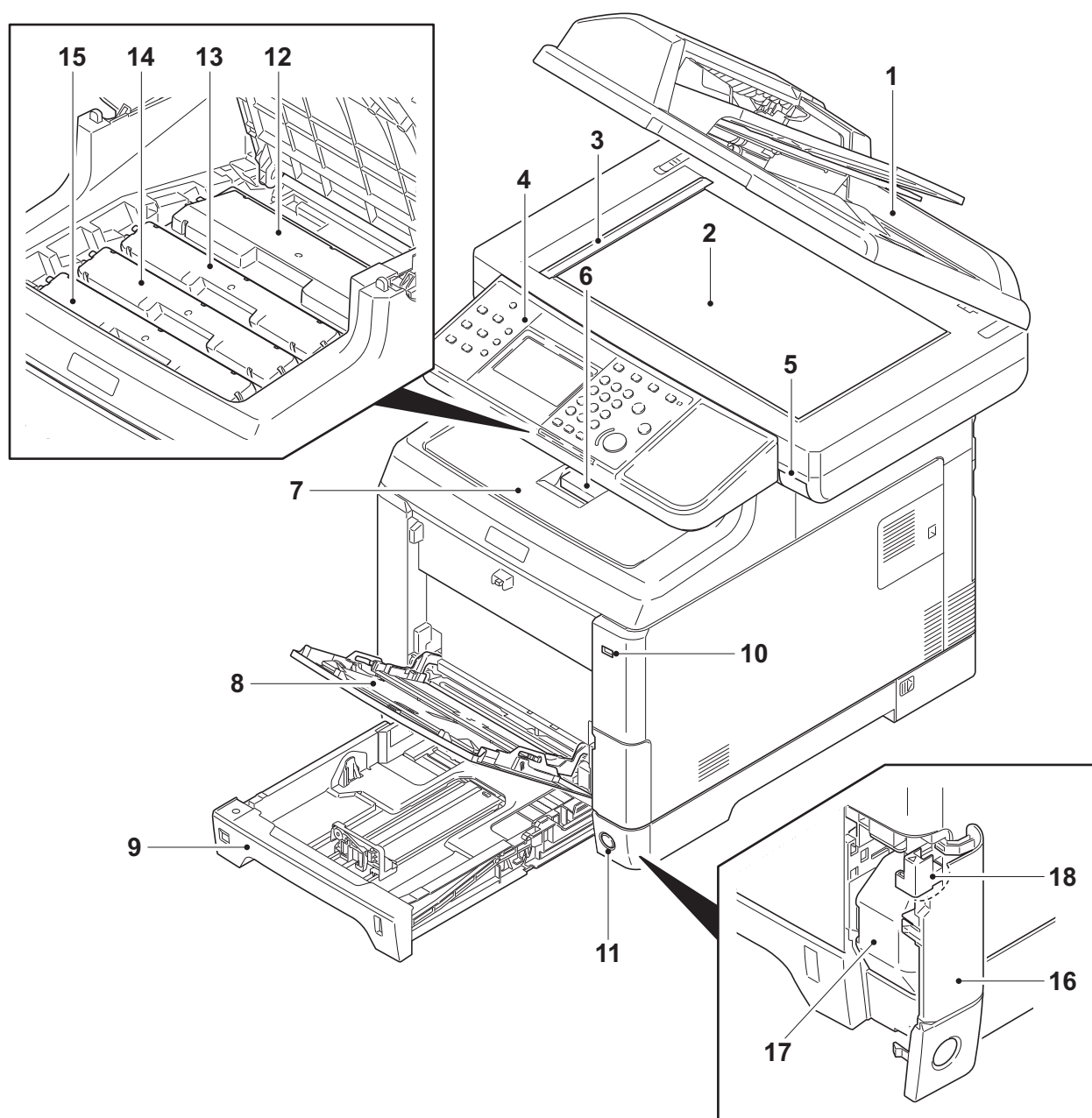
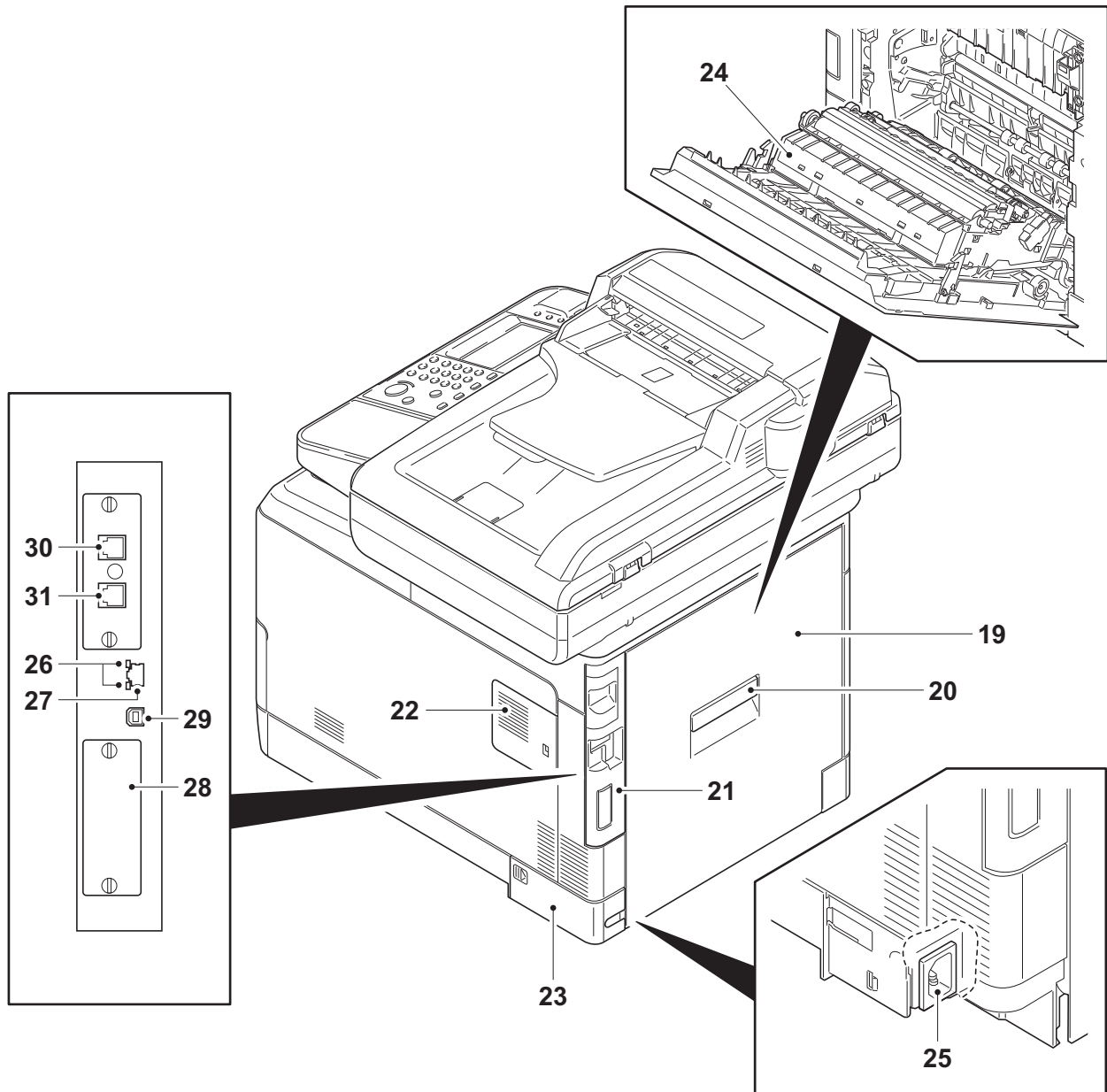
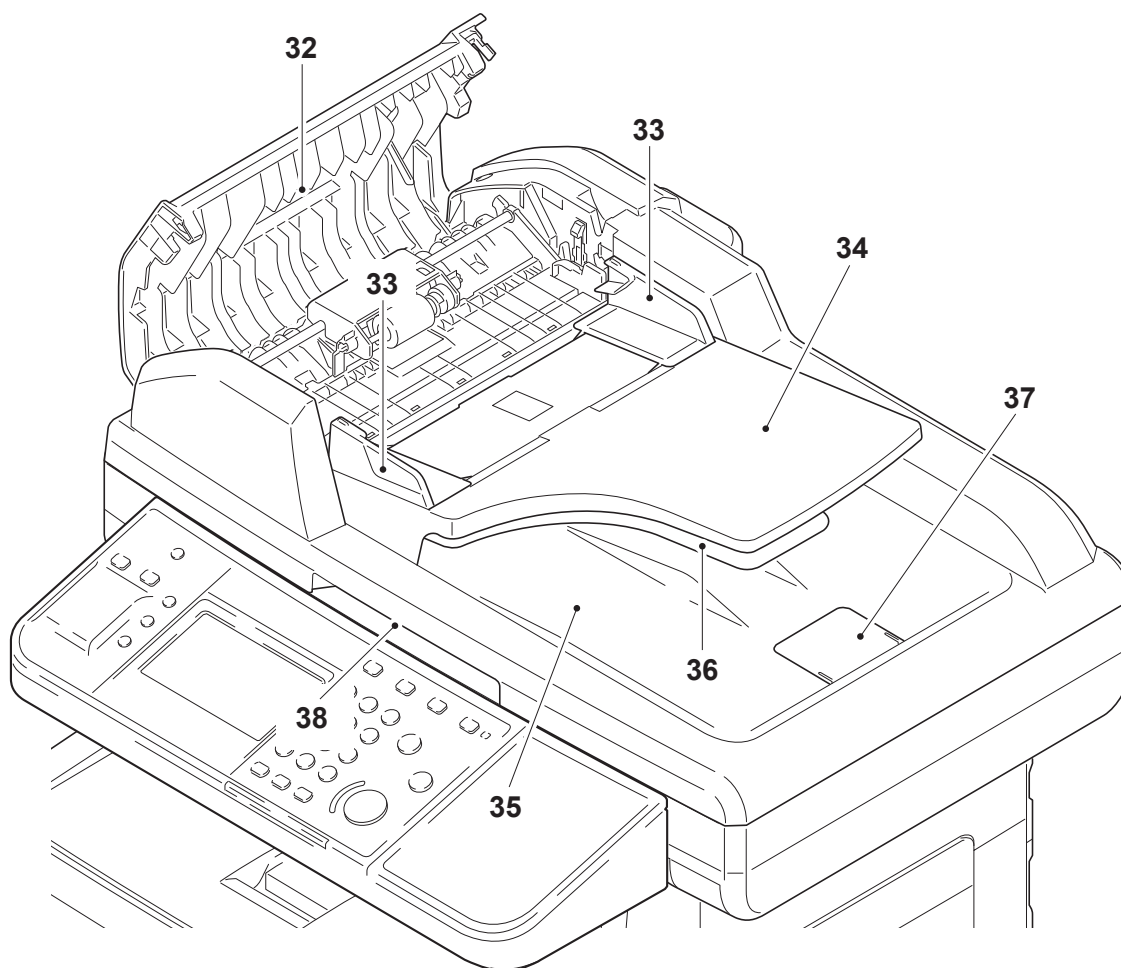


Figure 1-1-1

- | | |
|----------------------------------|-------------------------|
| 1. Document processor (DP) | 10. USB memory slot |
| 2. Contact glass | 11. Main power switch |
| 3. Original size Indicator plate | 12. Toner container K |
| 4. Operation panel | 13. Toner container M |
| 5. Inner tray lever | 14. Toner container C |
| 6. Paper stopper | 15. Toner container Y |
| 7. Inner tray | 16. Waste toner cover |
| 8. MP (Multi-Purpose) tray | 17. Waste toner box |
| 9. Cassette | 18. Lock release button |

(2) Machine (rear side)**Figure 1-1-2**

- | | |
|--------------------------|---------------------------------|
| 19. Rear cover | 26. Network indicators |
| 20. Rear cover lever | 27. Network interface connector |
| 21. IF cover | 28. eKUIO connector |
| 22. Memory cover | 29. USB interface connector |
| 23. Power cord cover | 30. LINE connector |
| 24. Paper conveying unit | 31. TEL connector |
| 25. Power cord connector | |

(3) Document processor**Figure 1-1-3**

- 32. DP top cover
- 33. Original width guides
- 34. Original table
- 35. Original eject table
- 36. Switchback table
- 37. Original stopper
- 38. Opening Handle

(4) Operation panel

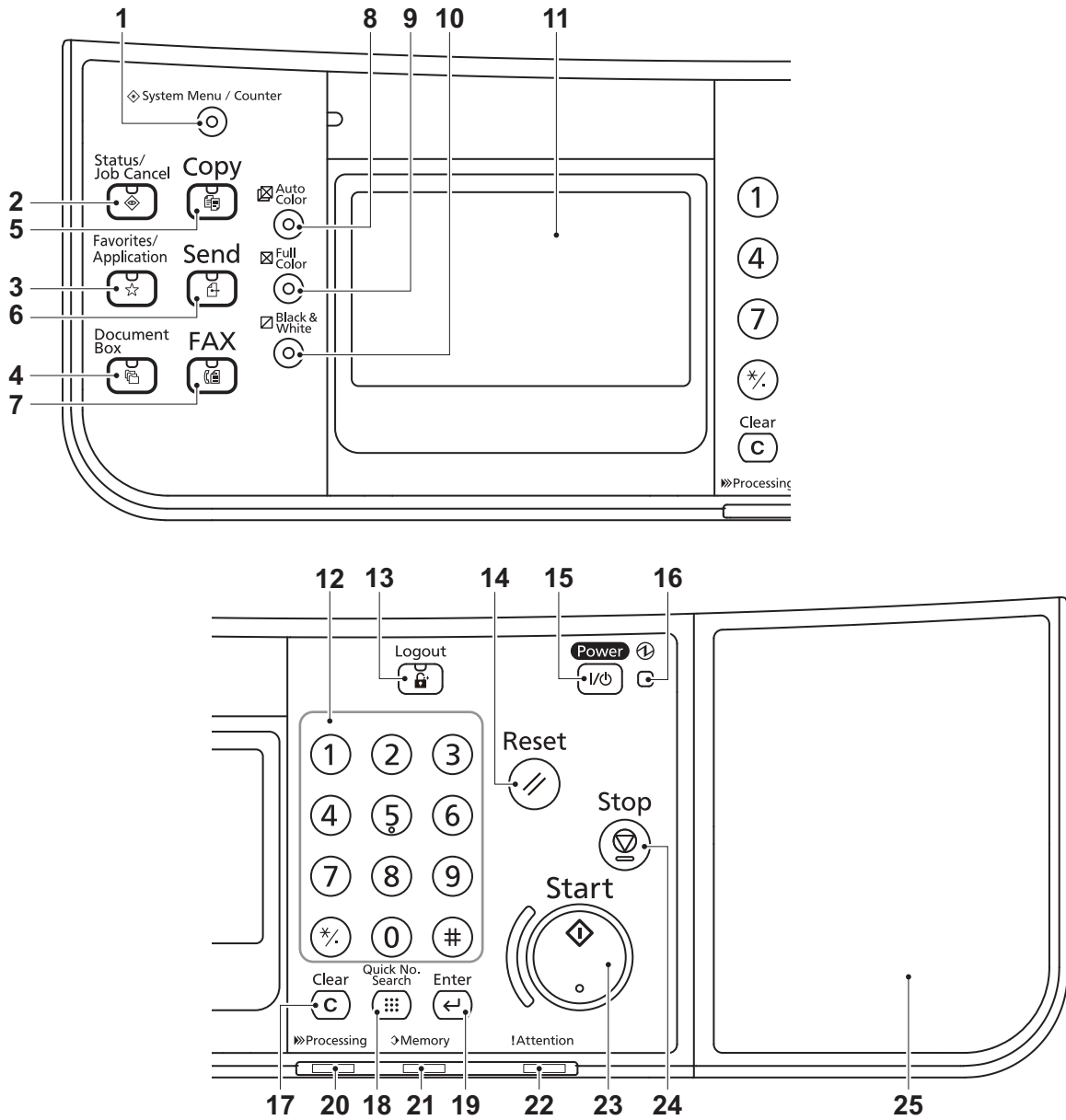


Figure 1-1-4

- | | | |
|------------------------------|--------------------------|--------------------------|
| 1. System menu/Counter key | 10. Black and White key | 19. Enter key |
| 2. Status/Job cancel key | 11. Message display | 20. Processing indicator |
| 3. Favorites/application key | 12. Numeric keys | 21. Memory indicator |
| 4. Document box key | 13. Logout key | 22. Attention indicator |
| 5. Copy key | 14. Reset key | 23. Start key |
| 6. Send key | 15. Power key | 24. Stop key |
| 7. FAX key | 16. Main power LED | 25. IC Card reader box |
| 8. Auto color key | 17. Clear key | |
| 9. Full color key | 18. Quick No. Search key | |

1-1-3 Machine cross section

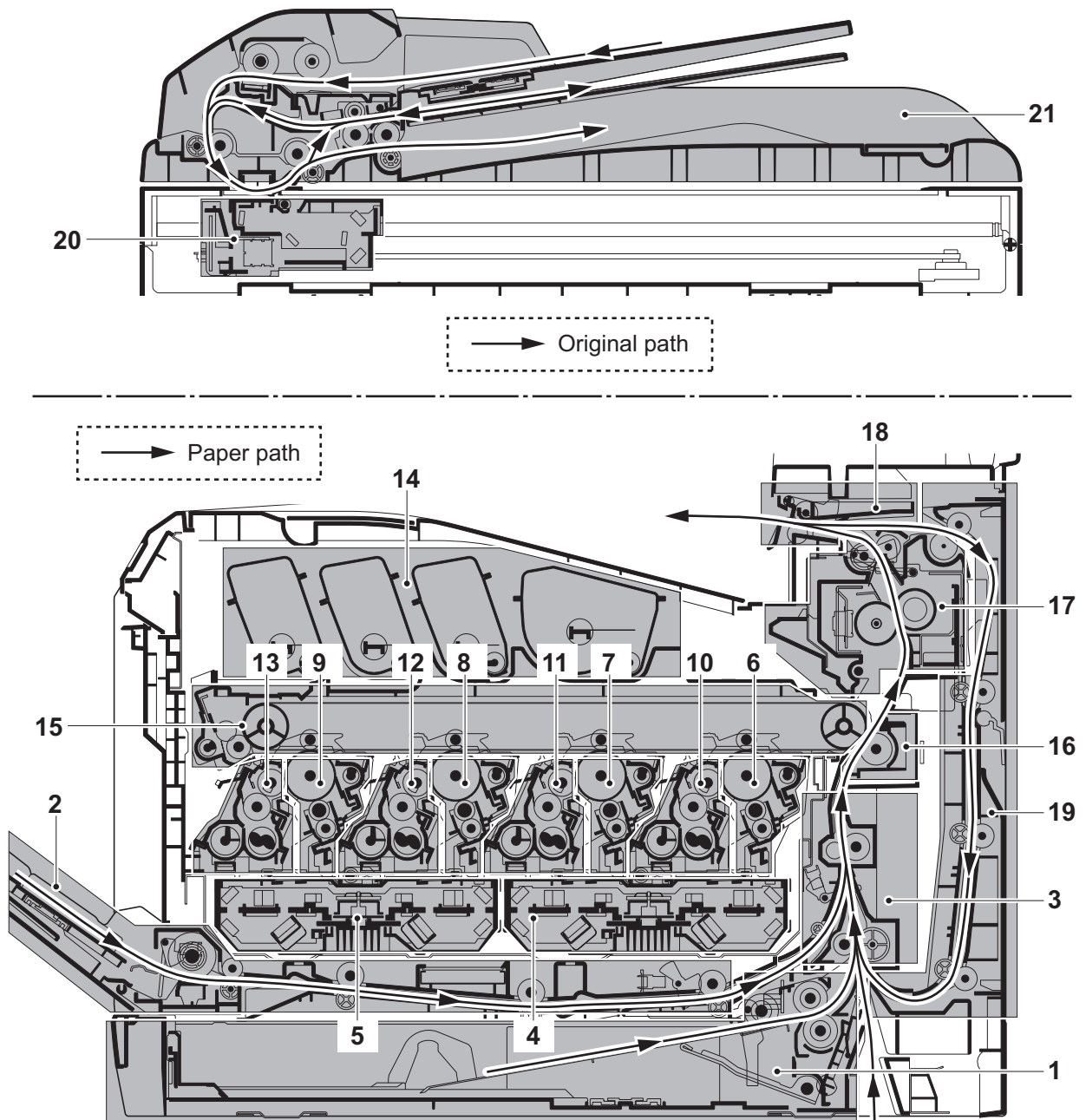


Figure 1-1-5

- | | | |
|--------------------------------|------------------------------|--|
| 1. Cassette paper feed section | 9. Drum unit Y | 16. Secondary transfer/Separation sections |
| 2. MP tray paper feed section | 10. Developing unit K | 17. Fuser section |
| 3. Paper conveying section | 11. Developing unit M | 18. Eject/Feed shift sections |
| 4. Laser scanner unit KM | 12. Developing unit C | 19. Duplex section |
| 5. Laser scanner unit CY | 13. Developing unit Y | 20. Image scanner unit |
| 6. Drum unit K | 14. Toner container section | 21. Document processor |
| 7. Drum unit M | 15. Primary transfer section | |
| 8. Drum unit C | | |

1-2-1 Installation environment

1. Temperature: 10 to 32.5°C/50 to 90.5°F
2. Humidity: 15 to 80% RH
3. Power supply: 220 - 240 V AC, 4.7 A
4. Power source frequency: 50 Hz \pm 2%/60 Hz \pm 2%
5. Installation location

Avoid direct sunlight or bright lighting. Ensure that the photoconductor will not be exposed to direct sunlight or other strong light when removing paper jams.

Avoid locations subject to high temperature and high humidity or low temperature and low humidity; an abrupt change in the environmental temperature; and cool or hot, direct air.

Avoid places subject to dust and vibrations.

Choose a surface capable of supporting the weight of the machine.

Place the machine on a level surface (maximum allowance inclination: 1°).

Avoid air-borne substances that may adversely affect the machine or degrade the photoconductor, such as mercury, acidic or alkaline vapors, inorganic gasses, NO_x, SO_x gases and chlorine-based organic solvents.

Select a well-ventilated location.

6. Allow sufficient access for proper operation and maintenance of the machine.

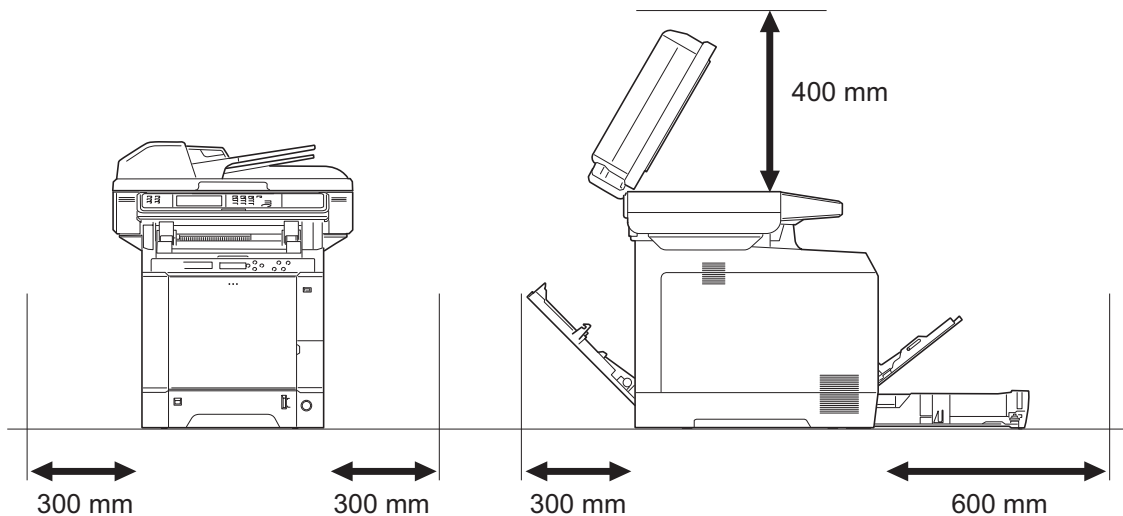


Figure 1-2-1

1-2-2 Unpacking

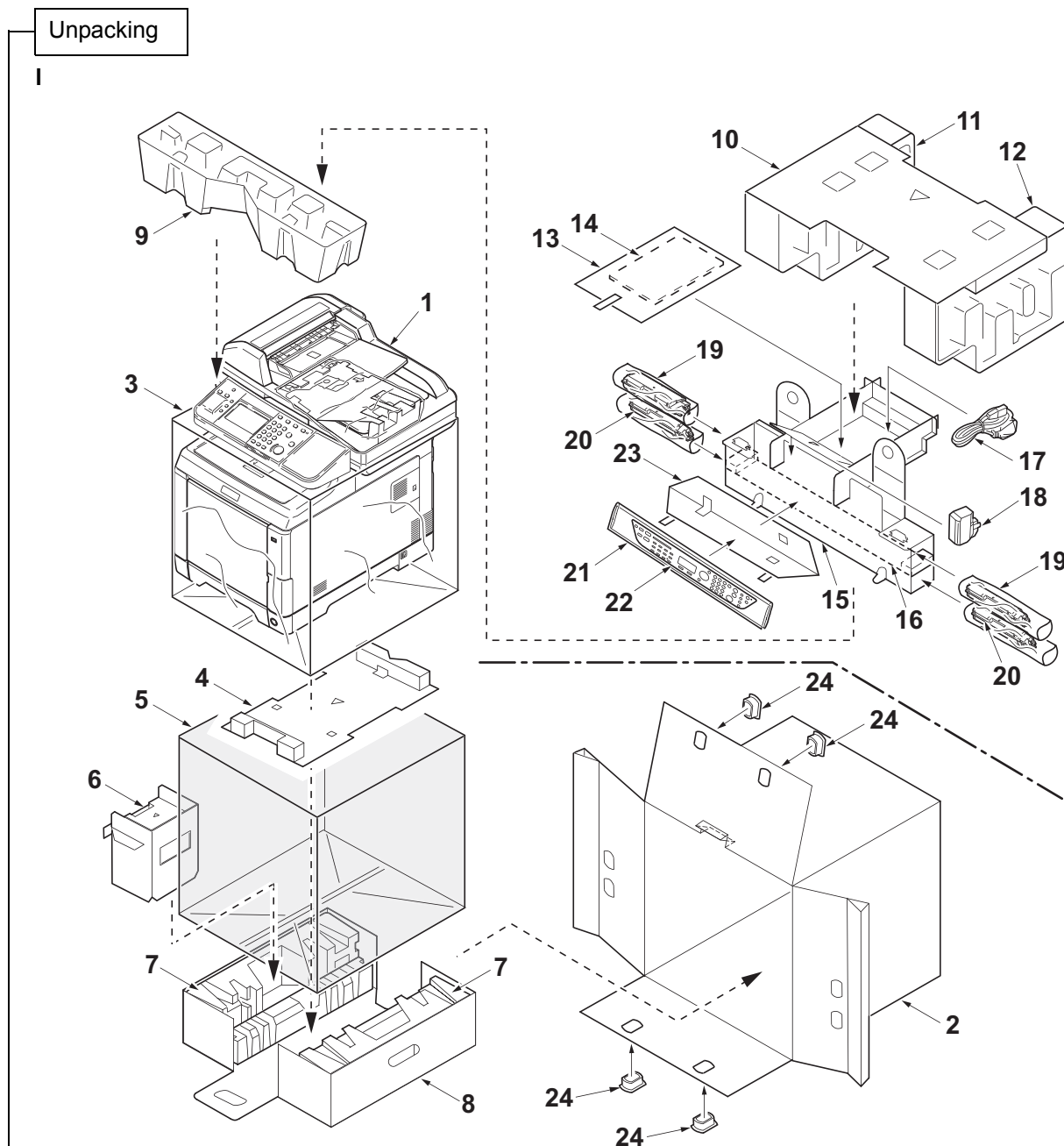


Figure 1-2-2

- | | | |
|------------------------------|-----------------------------|------------------------------|
| 1. Machine | 9. Front pad | 17. Power cord |
| 2. Outer case | 10. Top spacer | 18. Waste toner box |
| 3. Machine cover (620 × 580) | 11. Top pad L | 19. Toner containers |
| 4. Bottom spacer | 12. Top pad R | 20. Plastic bags (200 × 450) |
| 5. Plastic bag (650 × 650) | 13. Plastic bag (240 × 350) | 21. Plastic bag (250 × 600) |
| 6. Left spacer | 14. Installation guide etc. | 22. Operation labels |
| 7. Bottom pads | 15. Middle spacer | 23. Operation label pad |
| 8. Bottom case | 16. Middle spacer B | 24. Hinge joints |

Removing the tapes and pads

1. Open the DP.
2. Remove two tapes.
3. Remove the sheet.

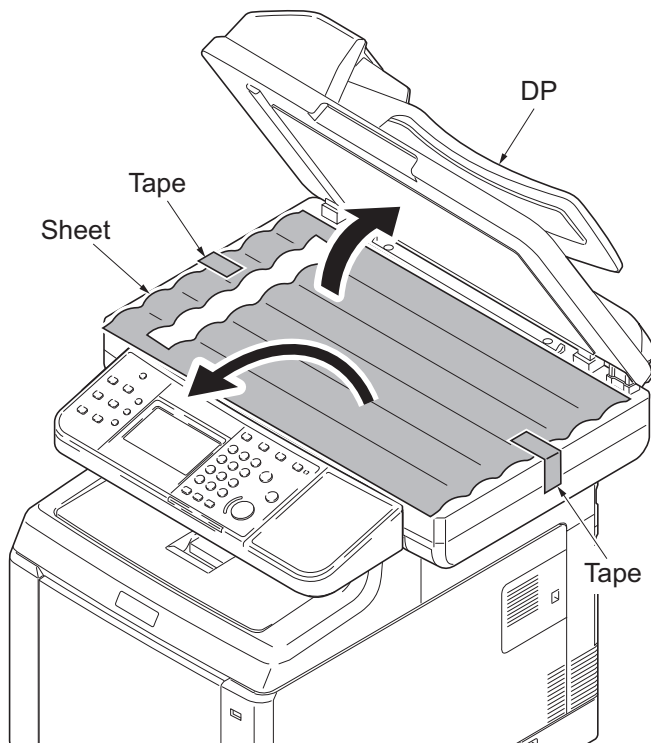


Figure 1-2-3

4. Remove the paper.

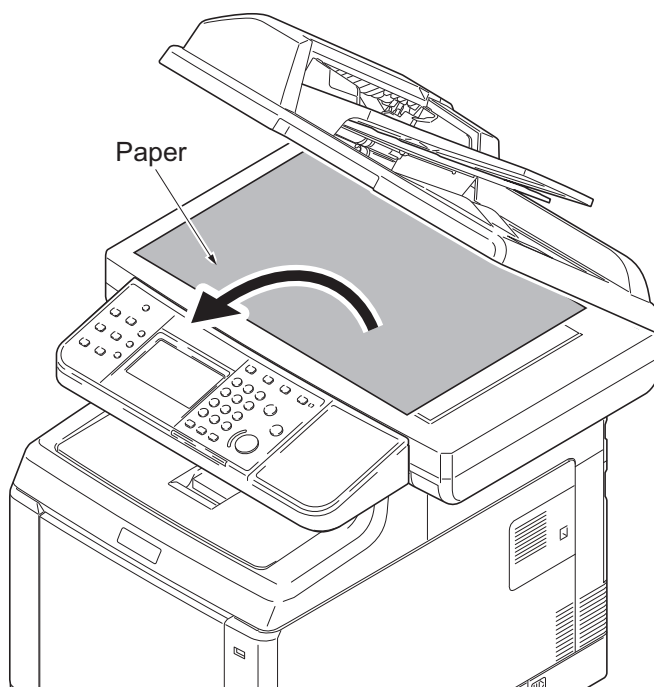


Figure 1-2-4

5. Remove tape A and pad.
6. Move the lock lever to the position of release.
- * : When turning on power if the lock lever is not released, the error message is displayed.
7. Remove two tapes B.
8. Remove the protection film.
9. Close the DP.

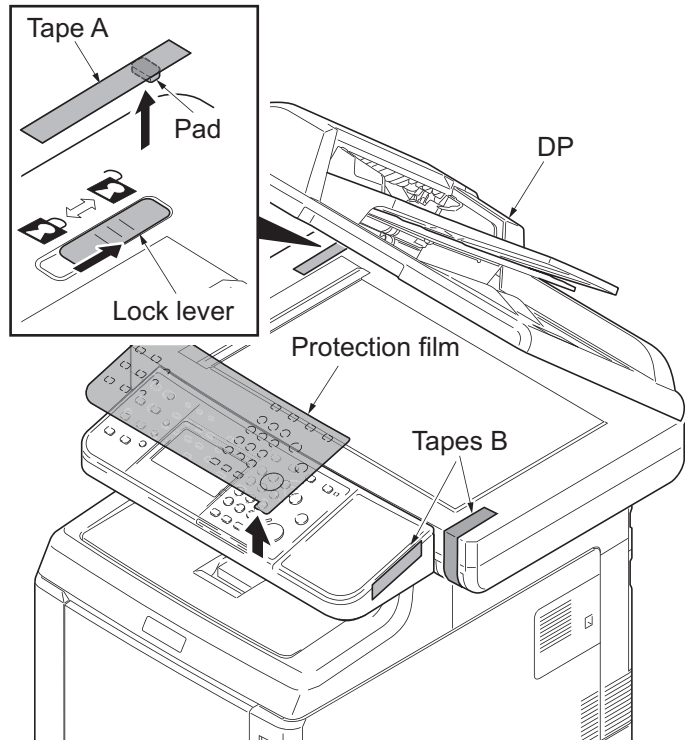


Figure 1-2-5

10. Remove two tapes.

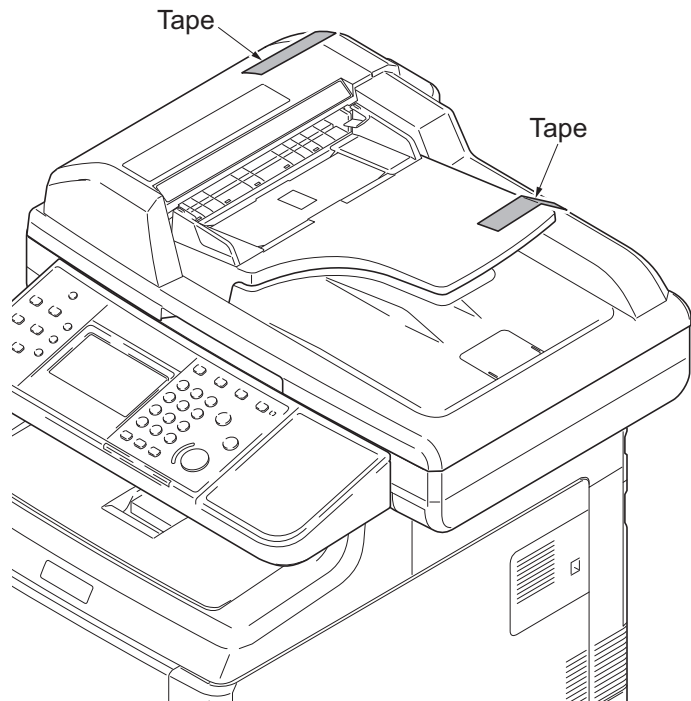


Figure 1-2-6

- 11. Open the DP top cover.
- 12. Remove two tapes.
- 13. Close the DP top cover.

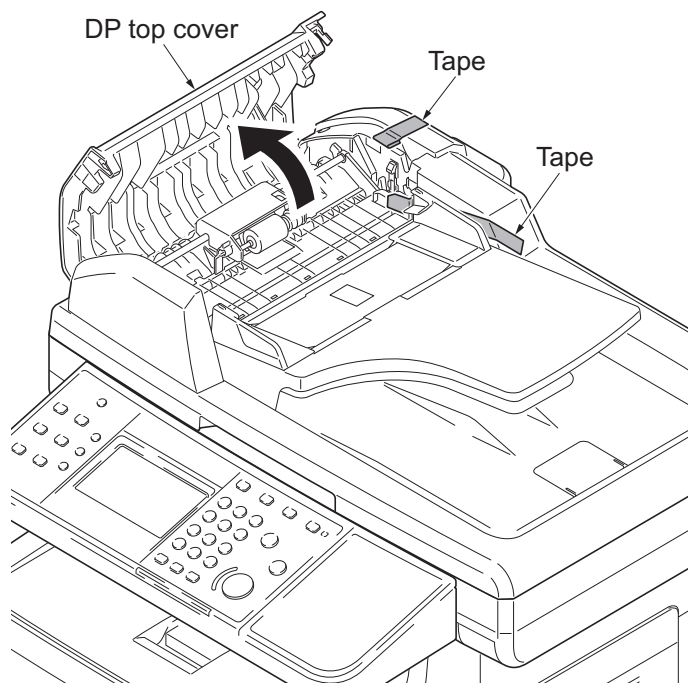


Figure 1-2-7

- 14. Remove six tapes.

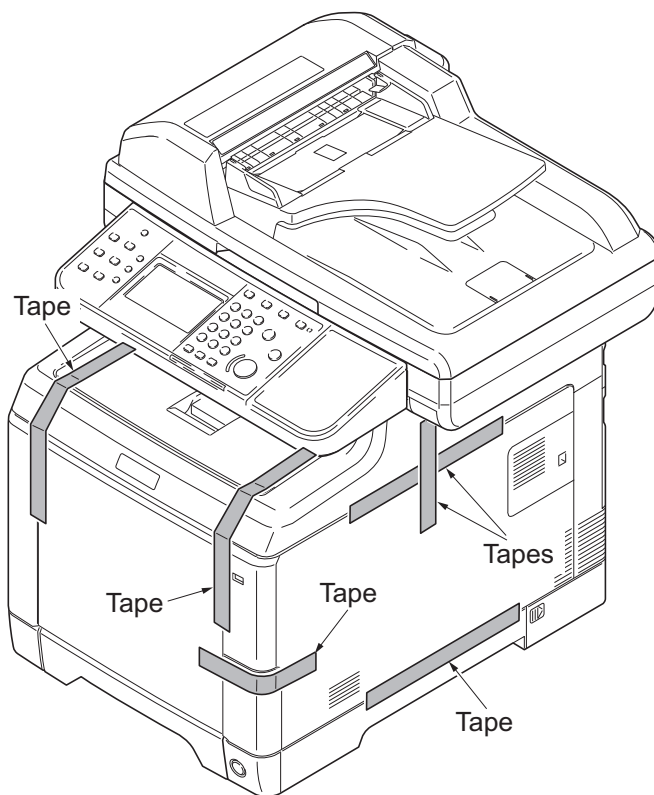


Figure 1-2-8

15. Remove five tapes.

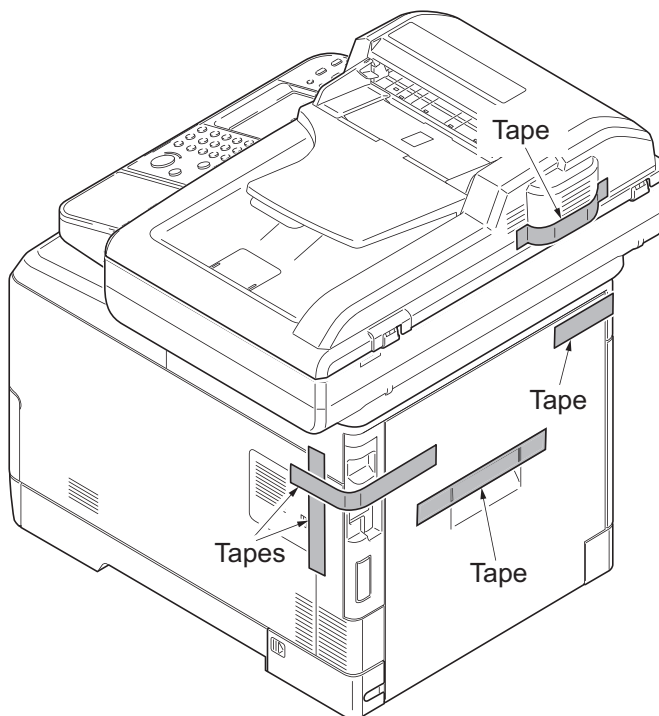


Figure 1-2-9

- 16. Open the inner tray.
- 17. Remove pads A and B.
- 18. Close the inner tray.

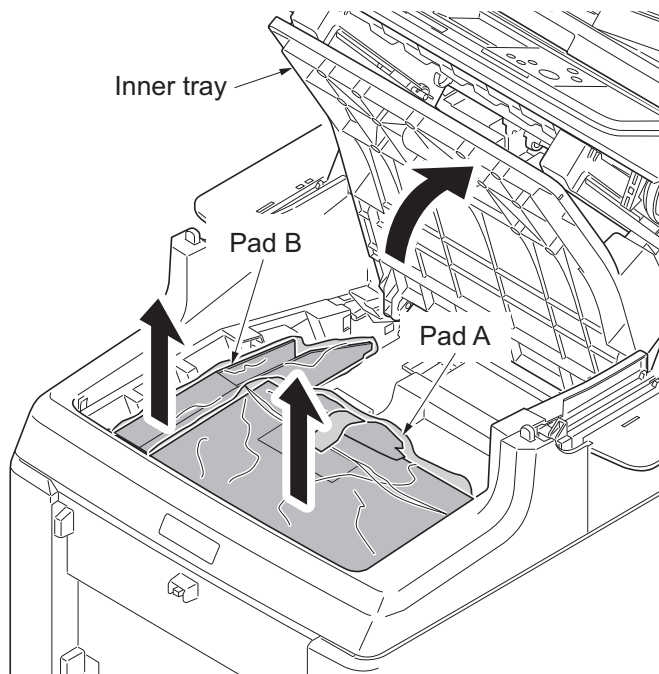


Figure 1-2-10

Installing the toner containers

1. Slide the release lever backward.

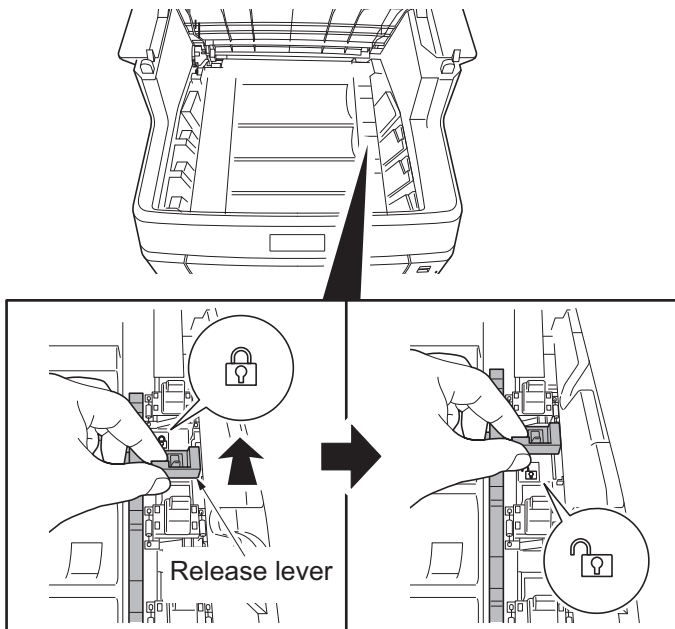


Figure 1-2-11

2. Facing the toner feed slot up and shake the toner container 5 to 6 times.

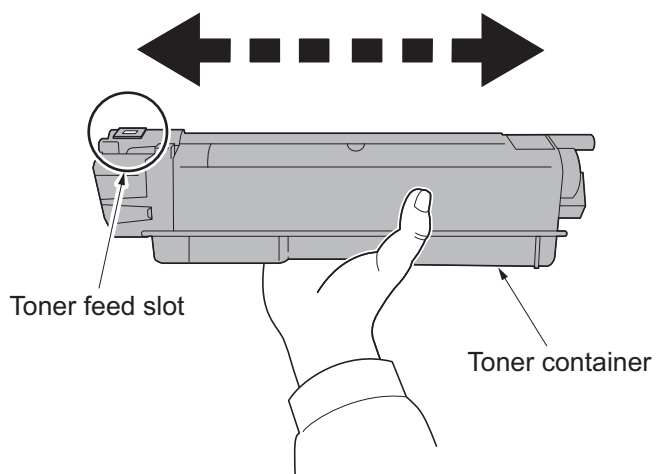


Figure 1-2-12

- 3. Install toner containers (K, M, C, Y).
- 4. Close the inner tray.

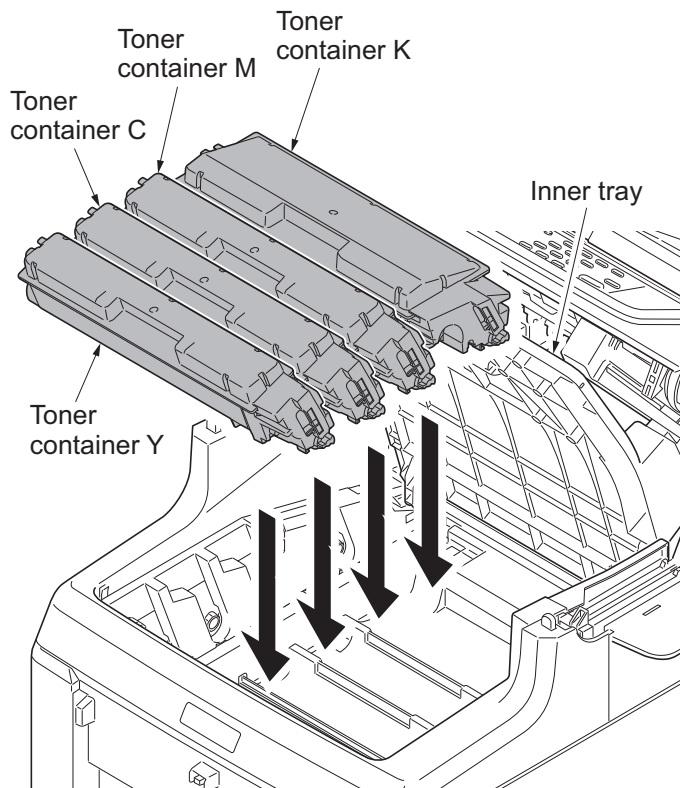


Figure 1-2-13

Installing the waste toner box

- 1. Open the waste toner cover.
- 2. Open the cap of the waste toner box.
- 3. Install the waste toner box.
- 4. Close the waste toner cover.

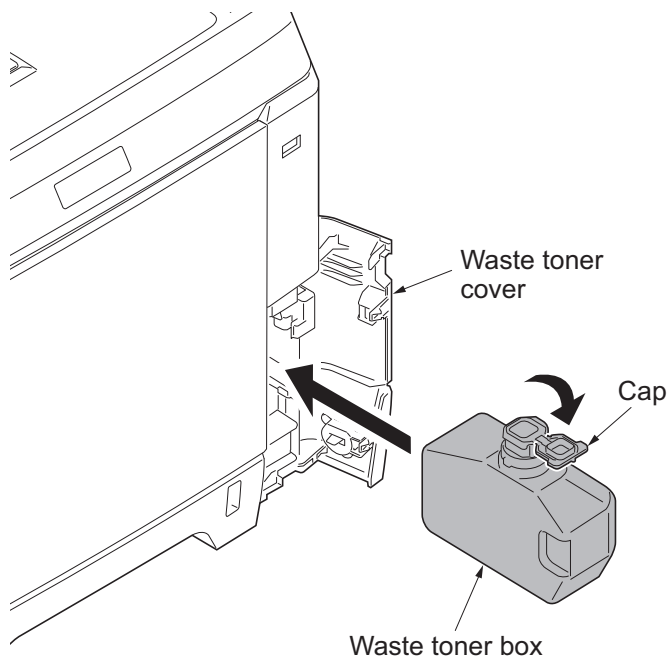


Figure 1-2-14

Loading paper

1. Pull the cassette out.
2. While pressing the width lever, adjust the paper width guides to fit the paper size.
3. While pressing the length lever, adjust the paper length guide to fit the paper size.

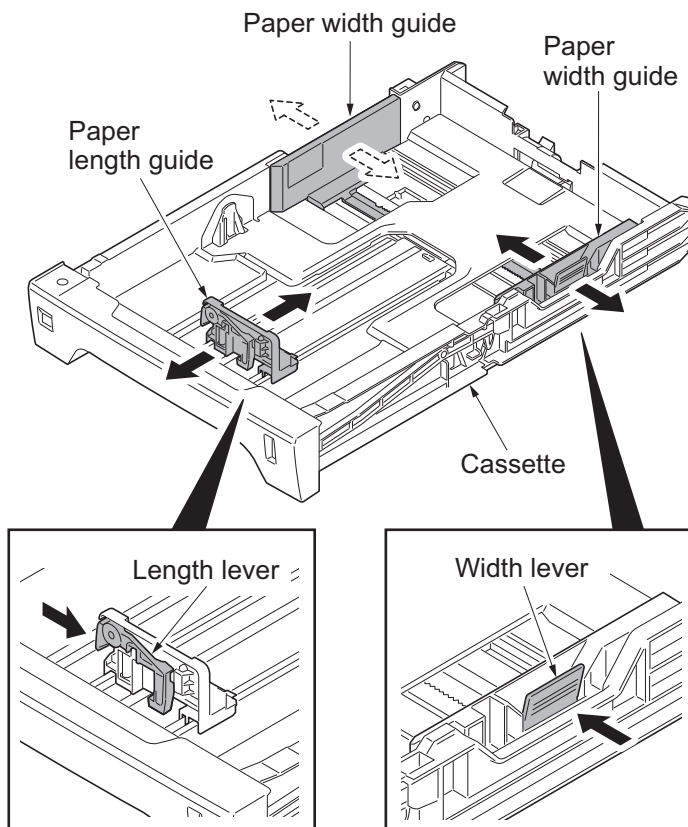


Figure 1-2-15

4. Load the paper in the cassette.
5. Turn the paper size dial so that it shows the paper size you are going to use.
6. Insert the cassette.

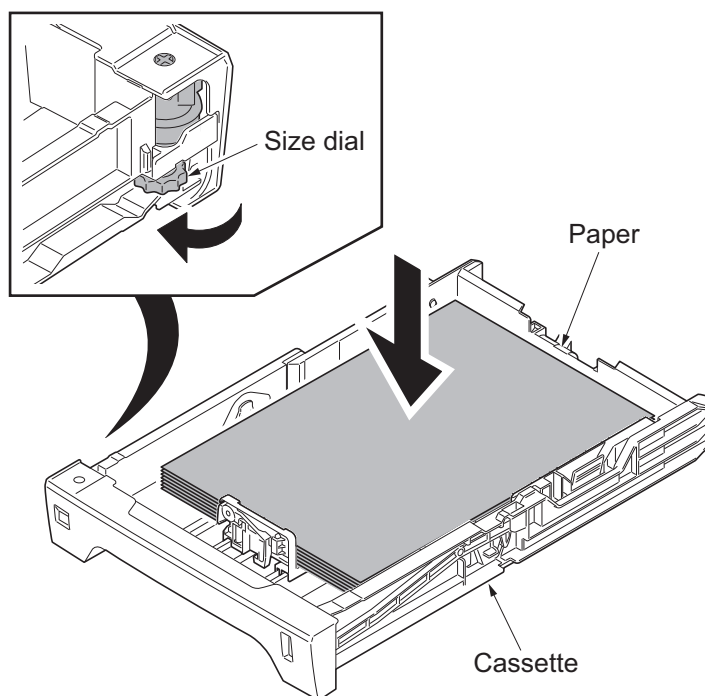


Figure 1-2-16

Connecting the interface cable

1. Connect the interface cable to the machine and PC or network.

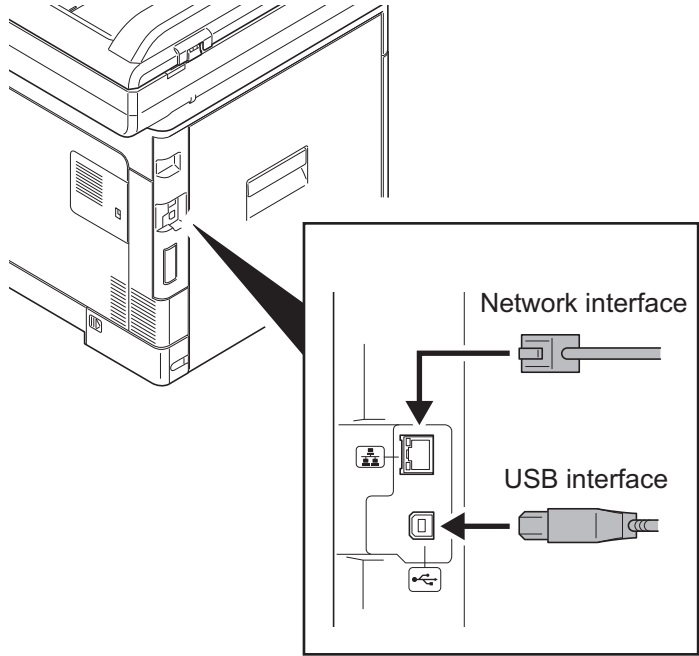


Figure 1-2-17

Connecting the power cord

1. Remove the power cord cover.
2. Connect the power cord to the machine and the wall outlet.
3. Refit the power cord cover.
4. Press the main power switch to turn power on.
5. Installing the printer driver (refer to operation guide).

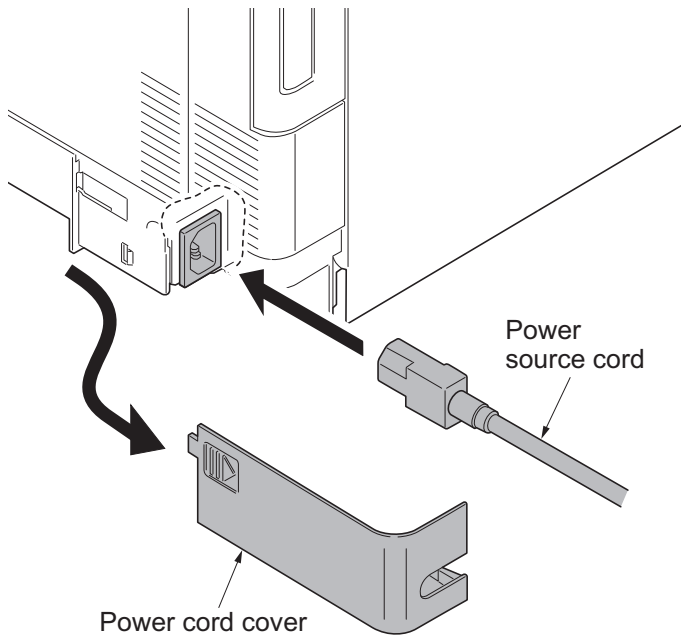


Figure 1-2-18

Completion of the machine installation

1-2-3 Installing the expansion memory (option)

Procedure

1. Turn off the main power switch.
Caution: Do not insert or remove expansion memory while machine power is on.
 Doing so may cause damage to the machine and the expansion memory.
2. Remove the memory cover.

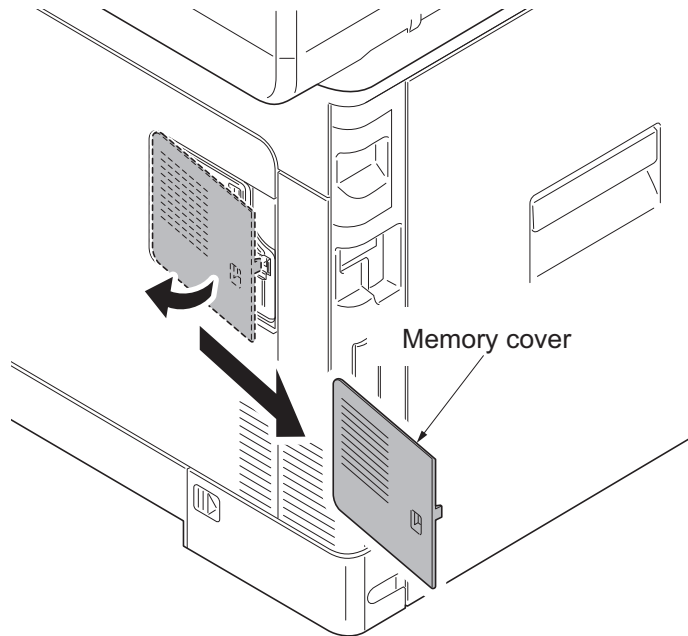


Figure 1-2-19

3. Release the hook and then open the fan bracket.

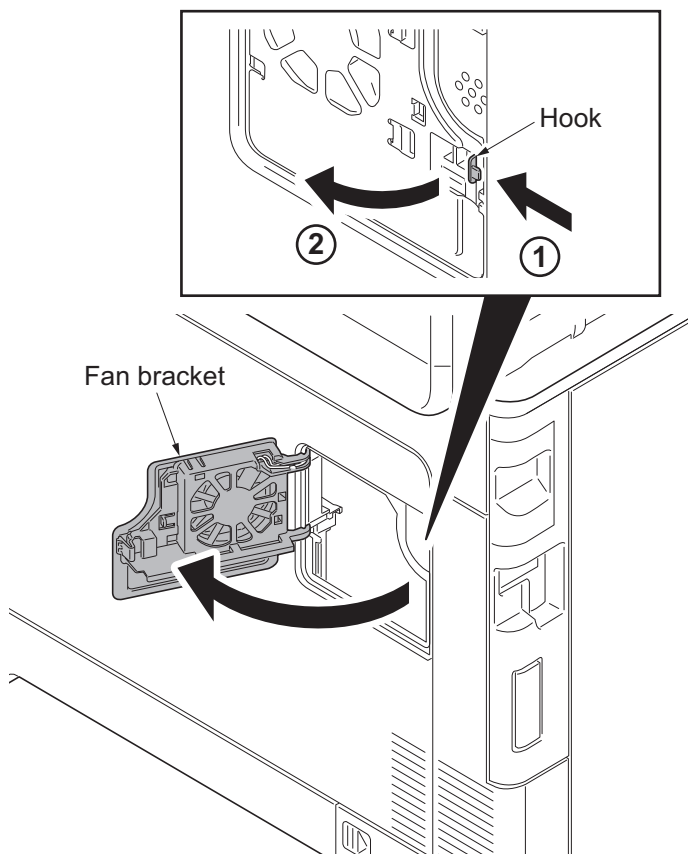
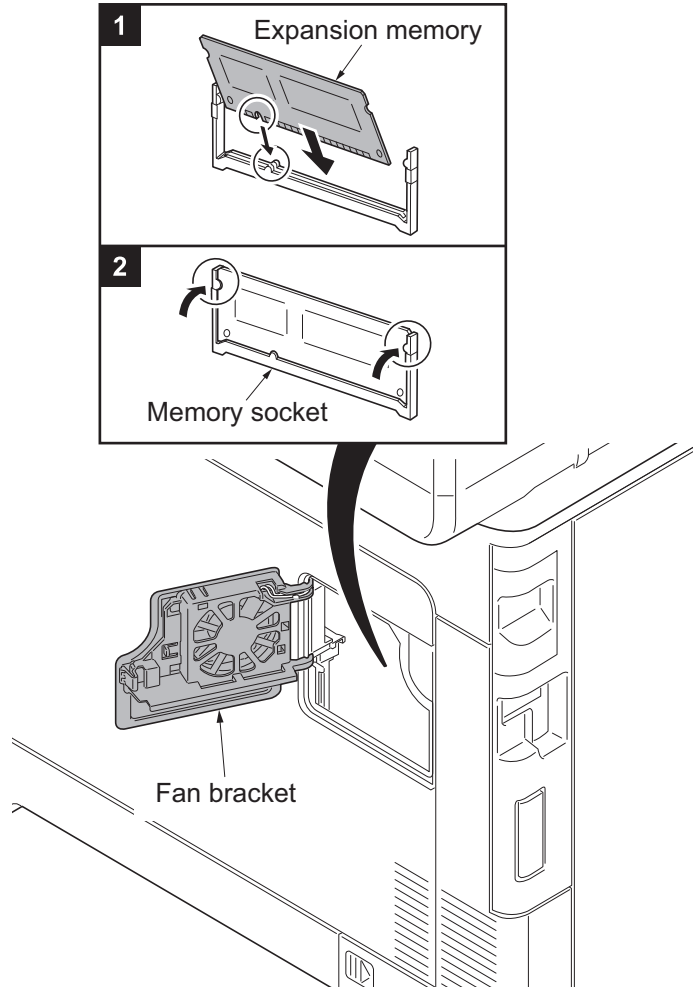


Figure 1-2-20

4. Insert the expansion memory into the memory socket so that the notches on the memory align with the corresponding protrusions in the slot.
 5. Close the fan bracket.
 6. Refit the memory cover.
 7. Print a status page to check the memory expansion (see page 1-3-61).
- If memory expansion has been properly performed, information on the installed memory is printed with the total memory capacity has been increased. Standard memory capacity 1024 MB.

**Figure 1-2-21**

1-2-4 Installing the memory card (option)

<Procedure>

1. Turn off the main power switch.
Caution: Do not insert or remove memory card while machine power is on.
Doing so may cause damage to the machine and the memory card.
2. Remove the IF cover.
(see page 1-5-3)
3. Remove two screws and then remove the option interface slot cover.
4. Install the memory card into the option interface slot.
5. Refit the option interface slot cover by two screws.
6. Refit the IF cover.

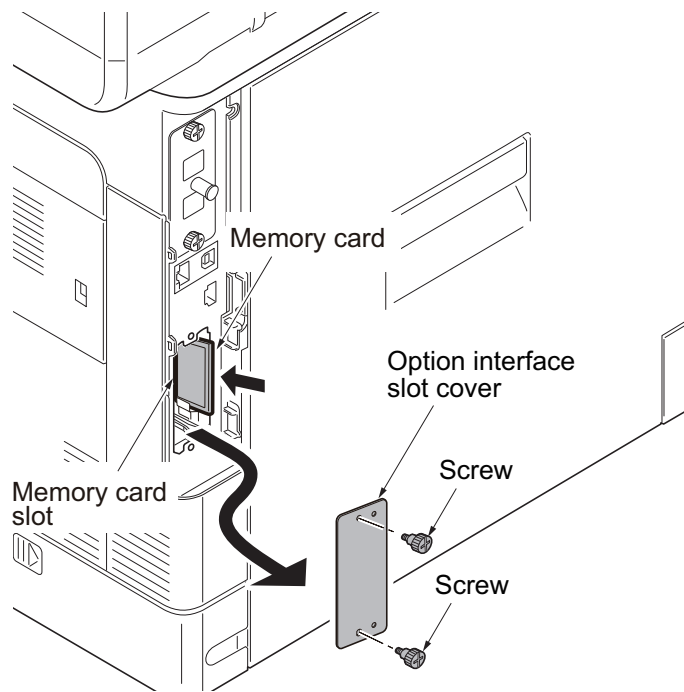


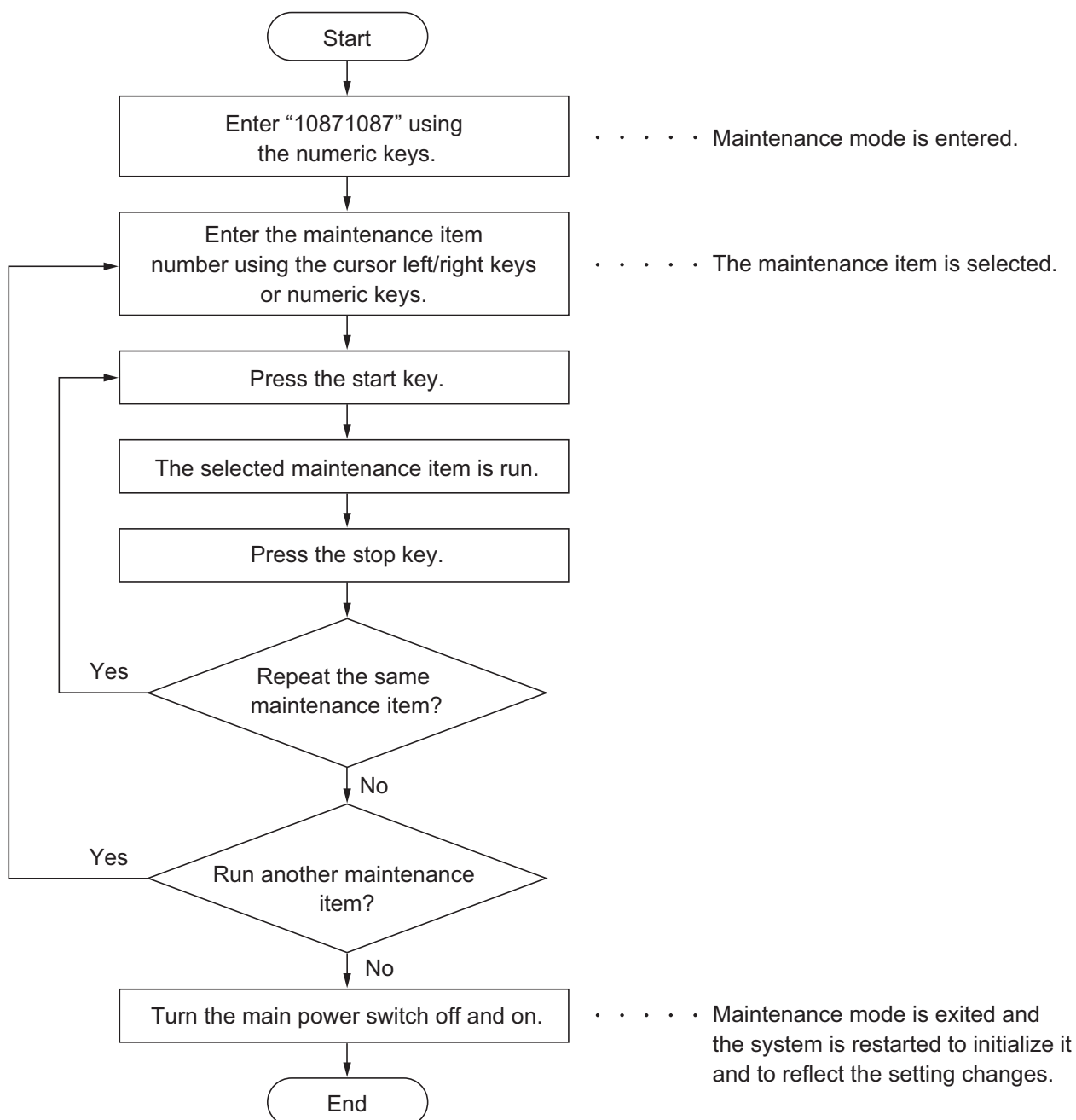
Figure 1-2-22

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1-3-1 Maintenance mode

The machine is equipped with a maintenance function which can be used to maintain and service the machine.

(1) Executing a maintenance item



(2) Maintenance modes item list

Section	Item No.	Content of maintenance item	Initial setting
General	U000	Output Maintenance Report	-
	U001	Exit Maintenance Mode	-
	U002	Set Factory Default	-
	U004	Machine Number	-
	U019	Firmware Version	-
Drive, paper feed and paper conveying system	U034	Adjust Paper Timing Data LSU Out Top LSU Out Left	0/0/0 0/0/0/0/0
Optical	U065	Adjust Scanner Motor Speed	0/0
	U066	Adjust Table Leading Edge Timing	0/0
	U067	Adjust Table Center	0/0
	U068	Adjust DP Scan Position	0/0
	U070	Adjust DP Motor Speed	0
	U071	Adjust DP Leading Edge Timing	0/0/0/0/0
	U072	Adjust DP Original Center	0/12/0
Operation panel and support equipment	U201	Initialize Touch Panel	-
	U203	Check DP Operation	-
	U222	Set IC Card Type	Other
	U224	Install Original Panel Display	-
Mode setting	U250	Set Maintenance Counter Pre-set	200000
	U251	Clear Maintenance Counter	0
	U252	Set Destination	-
	U253	Set Double/Single Count	Double count
	U260	Set Copy Count Mode	Eject
	U285	Set Service Status Page	On
	U332	Adjust Coverage Size Calculation Rate	1.0
	U345	Set Maintenance Time Soon Display	0

Section	Item No.	Content of maintenance item	Initial setting	
Image processing	U402	Adjust Print Margin		
	U403	Adjust Scanning Margin(Table)		
	U404	Adjust Scanning Margin(DP)		
	U410	Half Tone Auto Adjustment	-	
	U411	Scanner Auto Adjustment	-	
	U425	Set Target Adjustment Value	-	
Fax	U600	Initialize: All Data	-	
	U601	Initialize: Keep Data	-	
	U603	User Data 1	DTMF	
	U604	User Data 2	2 (120 V) 1 (220-240 V)	
	U605	Clear Data	-	
	U610	System Setting 1	Setting the number of lines to be ignored when receiving a fax at 100% magnification	3
			Setting the number of lines to be ignored when receiving a fax in the auto reduction mode	0
			Setting the number of lines to be ignored when receiving a fax (A4R/LetterR) in the auto reduction mode	0
	U611	System Setting 2	Setting the number of adjustment lines for automatic reduction	7
			Setting the number of adjustment lines for automatic reduction when A4 paper is set	22
		Setting the number of adjustment lines for automatic reduction when letter size paper is set	26	
U612	System Setting 3	Selecting if auto reduction in the auxiliary direction is to be performed	On	
		Setting the automatic printing of the protocol list	Off	
		Setting how trailing edge margins are detected	On	
U620	FAX System	One		
U625	Set Communication	Setting the auto redialing interval	3 (120 V) 2 (220-240 V)	
		Setting the number of times of auto redialing	2 (120 V) 3 (220-240 V)	

Section	Item No.	Content of maintenance item	Initial setting
Fax	U630	Communication Control 1 Setting the communication starting speed Setting the reception speed Setting the waiting period to prevent echo problems at the sender Setting the waiting period to prevent echo problems at the receiver	14400bps/V17 14400bps 300 75
	U631	Communication Control 2 Setting ECM transmission Setting ECM reception Setting the frequency of the CED signal	On On 2100
	U632	Communication Control 3 Setting the DIS signal to 4 bytes Setting the CNG detection times in the fax/telephone auto select mode	Off 2Time
	U633	Communication Control 4 Enabling/disabling V.34 communication Setting the number of times of DIS signal reception Setting the number of times of DIS signal reception Setting the reference for RTN signal output	On On Once 15%
	U634	Communication Control 5	0
	U640	Communication Time 1 Setting the one-shot detection time for remote switching Setting the continuous detection time for remote switching	7 80
	U641	Communication Time 2 Setting the T0 time-out time Setting the T1 time-out time Setting the T2 time-out time Setting the Ta time-out time Setting the Tb1 time-out time Setting the Tb2 time-out time Setting the Tc time-out time Setting the Td time-out time	56 36 69 30 20 80 60 9 (120 V) 6 (220-240 V)
	U650	Modem 1 Setting the G3 transmission cable equalizer Setting the G3 reception cable equalizer Setting the modem detection level	0dB 0dB -43dBm

Section	Item No.	Content of maintenance item	Initial setting
Fax	U651	Modem 2 Modem output level	9 (120 V) 10 (220-240 V)
		DTMF output level (main value)	5 (120 V) 10.5 (220-240 V)
		DTMF output level (level difference)	2 (120 V) 2.5 (220-240 V)
		U660	Set Calls Setting the connection to PBX/PSTN Setting PSTN dial tone detection Setting busy tone detection Setting for a PBX Setting the loop current detection before dialing
	U670	Output List	-
	U695	Customize FAX Function	On/Off
	U699	Set: Soft SW	-
Others	U910	Clear Coverage Data	-
	U917	Read/Write Backup HDD Data(USB)	-
	U920	Charge Counter	-
	U927	Clear All Charge/Life Counter (one time only)	-
	U928	Machine Life Counter	-
	U977	Set Data Capture Mode	-
	U995	Set Memory Data Individually	-

(3) Contents of the maintenance mode items

Item No.	Description																
U000	<p>Output Maintenance Report</p> <p>Description Outputs lists of the current settings of the maintenance items and paper jam and service call occurrences. Outputs the event log. Also sends output data to the USB memory.</p> <p>Purpose To check the current setting of the maintenance items, or paper jam or service call occurrences. Before initializing or replacing the backup RAM, output a list of the current settings of the maintenance items to reenter the settings after initialization or replacement.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select the item to be output. <table border="1"> <thead> <tr> <th>Display</th> <th>Output list</th> </tr> </thead> <tbody> <tr> <td>Maintenance</td> <td>List of the current settings of the maintenance modes</td> </tr> <tr> <td>Event</td> <td>Outputs the event log</td> </tr> <tr> <td>All</td> <td>Outputs the all reports</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 3. Press the start key. A list is output. <p>Method: Send to the USB memory</p> <ol style="list-style-type: none"> 1. Press the power key on the operation panel, and after verifying the main power indicator has gone off, switch off the main power switch. 2. Insert USB memory in USB memory slot. 3. Turn the main power switch on. 4. Enter the maintenance item. 5. Press the start key. 6. Select the item to be send. 7. Select [Text] or [HTML]. <table border="1"> <thead> <tr> <th>Display</th> <th>Output list</th> </tr> </thead> <tbody> <tr> <td>Print</td> <td>Outputs the report</td> </tr> <tr> <td>USB (Text)</td> <td>Sends output data to the USB memory (text type)</td> </tr> <tr> <td>USB (HTML)</td> <td>Sends output data to the USB memory (HTML type)</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 8. Press the start key. Output will be sent to the USB memory. <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Output list	Maintenance	List of the current settings of the maintenance modes	Event	Outputs the event log	All	Outputs the all reports	Display	Output list	Print	Outputs the report	USB (Text)	Sends output data to the USB memory (text type)	USB (HTML)	Sends output data to the USB memory (HTML type)
Display	Output list																
Maintenance	List of the current settings of the maintenance modes																
Event	Outputs the event log																
All	Outputs the all reports																
Display	Output list																
Print	Outputs the report																
USB (Text)	Sends output data to the USB memory (text type)																
USB (HTML)	Sends output data to the USB memory (HTML type)																

Item No.	Description																																																																																																																																																																																																																			
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Event Descriptions	16	1876543	0501.01.08.01.01	15	166554	4020.01.08.01.01	14	4988	0501.01.08.01.01	13	4988	4020.01.08.01.01	12	4988	0501.01.08.01.01	11	4988	4020.01.08.01.01	10	1103	0501.01.08.01.01	9	1103	4020.01.08.01.01	8	1103	0501.01.08.01.01	7	1103	4020.01.08.01.01	6	1027	0501.01.08.01.01	5	1027	4020.01.08.01.01	4	1027	0501.01.08.01.01	3	1027	4020.01.08.01.01	2	406	0501.01.08.01.01	1	36	4020.01.08.01.01	#	Count.	Service Code	8	1881214	01.6000	7	178944	01.2100	6	5296	01.4000	5	5295	01.6000	4	2099	01.2100	3	1054	01.4000	2	809	01.6000	1	30	01.2100	#	Count.	Item	8	1045571	01.00	7	104511	01.00	6	7045	01.00	5	3454	01.00	4	3454	01.01	3	3454	01.01	2	417	01.01	1	34	01.01	#	Count.	Item	5	3454	01.00	4	3454	01.00	3	3454	01.00	2	406	01.00	1	32	01.00	(f)			(g)			(h)		J0100: 0	J0512: 0	J4201: 0	C0030: 1	C2100: 1	T00: 1			J0105: 0	J0513: 0	J4202: 0	C0070: 1	C2200: 1	T01: 1			J0106: 0	J0518: 0	J4203: 0	C0100: 1	C2300: 1				J0110: 0	J0519: 0	J4208: 0	C0120: 1	C2330: 1				J0111: 0	J1020: 0	J4209: 0	C0130: 1	C2340: 1						
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Figure 1-3-1

Item No.	Description											
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	No.	Items	Description									
	(1)	System version										
	(2)	System date										
	(3)	Engine soft version										
	(4)	Engine boot version										
	(5)	Operation panel mask version										
	(6)	Machine serial number										
	(7)	Paper Jam Log	<table border="1"> <thead> <tr> <th>#</th> <th>Count.</th> <th>Event</th> </tr> </thead> <tbody> <tr> <td>Remembers 1 to 16 of occurrence. If the occurrence of the previous paper jam is less than 16, all of the paper jams are logged. When the occurrence exceeds 16, the oldest occurrence is removed.</td> <td>The total page count at the time of the paper jam.</td> <td> Log code (hexadecimal, 5 categories) (a) Cause of a paper jam (b) Paper source (c) Paper size (d) Paper type (e) Paper eject </td> </tr> </tbody> </table>	#	Count.	Event	Remembers 1 to 16 of occurrence. If the occurrence of the previous paper jam is less than 16, all of the paper jams are logged. When the occurrence exceeds 16, the oldest occurrence is removed.	The total page count at the time of the paper jam.	Log code (hexadecimal, 5 categories) (a) Cause of a paper jam (b) Paper source (c) Paper size (d) Paper type (e) Paper eject	<table border="1"> <thead> <tr> <th>(a) Cause of paper jam (Hexadecimal)</th> </tr> </thead> <tbody> <tr> <td> Refer to P.1-4-1 for paper jam location 0100: Controller sequence error 0105: Registration sensor not detected 0106: Controller sequence error 0110: Inner tray open 0111: Rear cover open 0112: Front cover open 0113: MP tray open 0120: Controller sequence error 0121: Controller sequence error 0211: Rear cover open (paper feeder 1) 0212: Rear cover open (paper feeder 2) 0501: No paper feed from cassette 1 0502: No paper feed from cassette 2 0503: No paper feed from cassette 3 0508: No paper feed from duplex section 0509: No paper feed from MP tray 0511: Multiple sheets in cassette 1 0512: Multiple sheets in cassette 2 0513: Multiple sheets in cassette 3 0518: Multiple sheets in duplex section 0519: Multiple sheets in MP tray 1020: MP paper conveying sensor is turned ON 1403: PF feed sensor 1 does not turn ON 1413: PF feed sensor 1 does not turn OFF 1420: PF feed sensor 1 is turned ON 1620: PF feed sensor 2 is turned ON </td> </tr> </tbody> </table>	(a) Cause of paper jam (Hexadecimal)	Refer to P.1-4-1 for paper jam location 0100: Controller sequence error 0105: Registration sensor not detected 0106: Controller sequence error 0110: Inner tray open 0111: Rear cover open 0112: Front cover open 0113: MP tray open 0120: Controller sequence error 0121: Controller sequence error 0211: Rear cover open (paper feeder 1) 0212: Rear cover open (paper feeder 2) 0501: No paper feed from cassette 1 0502: No paper feed from cassette 2 0503: No paper feed from cassette 3 0508: No paper feed from duplex section 0509: No paper feed from MP tray 0511: Multiple sheets in cassette 1 0512: Multiple sheets in cassette 2 0513: Multiple sheets in cassette 3 0518: Multiple sheets in duplex section 0519: Multiple sheets in MP tray 1020: MP paper conveying sensor is turned ON 1403: PF feed sensor 1 does not turn ON 1413: PF feed sensor 1 does not turn OFF 1420: PF feed sensor 1 is turned ON 1620: PF feed sensor 2 is turned ON
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	(7) cont.	Paper Jam Log	4002: Registration sensor does not turn ON (Paper feeder 1) 4003: Registration sensor does not turn ON (Paper feeder 2) 4009: Registration sensor does not turn ON (MP tray) 4012: Registration sensor does not turn OFF (Paper feeder 1) 4013: Registration sensor does not turn OFF (Paper feeder 2) 4019: Registration sensor does not turn OFF (MP tray) 4020: Registration sensor is turned ON 4201: Eject sensor does not turn ON (Cassette) 4202: Eject sensor does not turn ON (Paper feeder 1) 4203: Eject sensor does not turn ON (Paper feeder 2) 4208: Eject sensor does not turn ON (Duplex) 4209: Eject sensor does not turn ON (MP tray) 4211: Eject sensor does not turn OFF (Cassette) 4212: Eject sensor does not turn OFF (Paper feeder 1) 4213: Eject sensor does not turn OFF (Paper feeder 2) 4218: Eject sensor does not turn OFF (Duplex) 4219: Eject sensor does not turn OFF (MP tray) 4220: Eject sensor is turned ON 9010: DP top cover open 9400: No original feed 9401: An original jam in the original switchback section 2 9410: An original jam in the original conveying section 9411: An original jam in the original switchback section 1																																									
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	00: MP tray 01: Cassette 1 02: Cassette 2 (paper feeder 1) 03: Cassette 3 (paper feeder 2) 04 to 09: Reserved																																											
	(c) Detail of paper size (Hexadecimal)																																											
<table border="1"> <tbody> <tr> <td>00: (Not specified)</td> <td>0B: B4</td> <td>22: Special 1</td> </tr> <tr> <td>01: Monarch</td> <td>0C: Ledger</td> <td>23: Special 2</td> </tr> <tr> <td>02: Business</td> <td>0D: A5R</td> <td>24: A3 wide</td> </tr> <tr> <td>03: International DL</td> <td>0E: A6</td> <td>25: Ledger wide</td> </tr> <tr> <td>04: International C5</td> <td>0F: B6</td> <td>26: Full bleed paper (12 x 8)</td> </tr> <tr> <td>05: Executive</td> <td>10: Commercial #9</td> <td>27: 8K</td> </tr> <tr> <td>06: Letter-R</td> <td>11: Commercial #6</td> <td>28: 16K-R</td> </tr> <tr> <td>86: Letter-E</td> <td>12: ISO B5</td> <td>A8: 16K-E</td> </tr> <tr> <td>07: Legal</td> <td>13: Custom size</td> <td>32: Statement-R</td> </tr> <tr> <td>08: A4R</td> <td>1E: C4</td> <td>B2: Statement-E</td> </tr> <tr> <td>88: A4E</td> <td>1F: Postcard</td> <td>33: Folio</td> </tr> <tr> <td>09: B5R</td> <td>20: Reply-paid post- card</td> <td>34: Western type 2</td> </tr> <tr> <td>89: B5E</td> <td>21: Oficio II</td> <td>35: Western type 4</td> </tr> <tr> <td>0A: A3</td> <td></td> <td></td> </tr> </tbody> </table>			00: (Not specified)	0B: B4	22: Special 1	01: Monarch	0C: Ledger	23: Special 2	02: Business	0D: A5R	24: A3 wide	03: International DL	0E: A6	25: Ledger wide	04: International C5	0F: B6	26: Full bleed paper (12 x 8)	05: Executive	10: Commercial #9	27: 8K	06: Letter-R	11: Commercial #6	28: 16K-R	86: Letter-E	12: ISO B5	A8: 16K-E	07: Legal	13: Custom size	32: Statement-R	08: A4R	1E: C4	B2: Statement-E	88: A4E	1F: Postcard	33: Folio	09: B5R	20: Reply-paid post- card	34: Western type 2	89: B5E	21: Oficio II	35: Western type 4	0A: A3		
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0A: A3																																												

Item No.	Description			
U000	(7) cont. Paper Jam Log	Description		
		(d) Detail of paper type (Hexadecimal)		
		01: Plain 02: Transparency 03: Preprinted 04: Labels 05: Bond 06: Recycled 07: Vellum 08: Rough 09: Letterhead	0A: Color 0B: Prepunched 0C: Envelope 0D: Cardstock 0E: Coated 0F: 2nd side 10: Thick 11: High quality	15: Custom 1 16: Custom 2 17: Custom 3 18: Custom 4 19: Custom 5 1A: Custom 6 1B: Custom 7 1C: Custom 8
		(e) Detail of paper eject location (Hexadecimal)		
	01: Face down (FD)			
	(8) Service Call Log	#	Count.	Service Code
		Remembers 1 to 8 of occurrence of self diagnostics error. If the occurrence of the previous diagnostics error is less than 8, all of the diagnostics errors are logged.	The total page count at the time of the self diagnostics error.	Self diagnostic error code (See page 1-4-5) Example: 01.6000 01: Self diagnostic error 6000: Self diagnostic error code number
	(9) Maintenance Log	#	Count.	Item
		Remembers 1 to 8 of occurrence of replacement. If the occurrence of the previous replacement of toner container is less than 8, all of the occurrences of replacement are logged.	The total page count at the time of the replacement of the toner container.	Code of maintenance replacing item (1 byte, 2 categories) First byte (Replacing item) 01: Toner container Second byte (Type of replacing item) 00: Black 01: Cyan 02: Magenta 03: Yellow First byte (Replacing item) 02: Maintenance kit Second byte (Type of replacing item) 01: MK-590

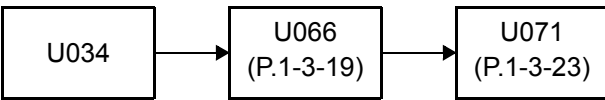
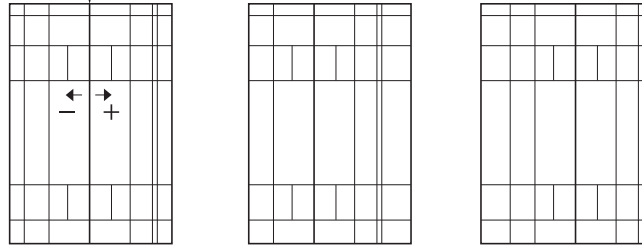
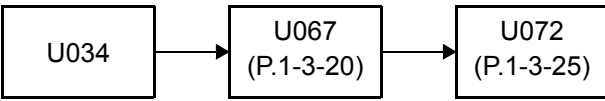
Item No.	Description				
<p>U000</p>	No.	Items	Description		
	(10)	Unknown Toner Log	#	Count.	
			Remembers 1 to 5 of occurrence of unknown toner detection. If the occurrence of the previous unknown toner detection is less than 5, all of the unknown toner detection are logged.	The total page count at the time of the toner empty error with using an unknown toner container.	Item Unknown toner log code (1 byte, 2 categories) First byte 01: Toner container (Fixed) Second byte 00: Black 01: Cyan 02: Magenta 03: Yellow
	(11)	Counter Log Comprised of three log counters including paper jams, self diagnostics errors, and replacement of the toner container.	(f) Paper jam	(g) Self diagnostic error	(h) Maintenance item replacing
		Indicates the log counter of paper jams depending on location. Refer to Paper Jam Log. All instances including those are not occurred are displayed.	Indicates the log counter of self diagnostics errors depending on cause. (See page 1-4-5) Example: C6000: 4 Self diagnostics error 6000 has happened four times.	Indicates the log counter depending on the maintenance item for maintenance. T: Toner container 00: Black 01: Cyan 02: Magenta 03: Yellow M: Maintenance kit 01: MK-590 Example: T00: 1 The toner container has been replaced once.	


Item No.	Description								
U001	<p>Exit Maintenance Mode</p> <p>Description Exits the maintenance mode and returns to the normal copy mode.</p> <p>Purpose To exit the maintenance mode.</p> <p>Method 1. Press the start key. The normal copy mode is entered.</p>								
U002	<p>Set Factory Default</p> <p>Description Restores the machine conditions to the factory default settings.</p> <p>Purpose To move the image scanner unit to the home position.</p> <p>Method 1. Press the start key. 2. Select [Mode1(All)]. 3. Press the start key. The image scanner unit returns to the home position. 4. Turn the main power switch off and on. * : An error code is displayed in case of an initialization error. When errors occurred, turn main power switch off then on, and execute initialization using maintenance item U002.</p> <p>Error codes</p> <table border="1"> <thead> <tr> <th>Codes</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0001</td> <td>Controller error</td> </tr> <tr> <td>0020</td> <td>Engine error</td> </tr> <tr> <td>0040</td> <td>Scanner error</td> </tr> </tbody> </table>	Codes	Description	0001	Controller error	0020	Engine error	0040	Scanner error
Codes	Description								
0001	Controller error								
0020	Engine error								
0040	Scanner error								


Item No.	Description										
U004	<p>Machine Number</p> <p>Description Sets or displays the machine number.</p> <p>Purpose To check or set the machine number.</p> <p>Method</p> <p>1. Press the start key.</p> <p>If the machine serial number of engine PWB matches with that of main PWB</p> <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Machine No.</td> <td>Displays the machine serial number</td> </tr> </tbody> </table> <p>If the machine serial number of engine PWB does not match with that of main PWB</p> <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Machine No.(Main)</td> <td>Displays the machine serial number of main</td> </tr> <tr> <td>Machine No.(Eng)</td> <td>Displays the machine serial number of engine</td> </tr> </tbody> </table> <p>Setting Carry out if the machine serial number does not match.</p> <p>1. Press [Execute]. 2. Press the start key. Writing of serial No. starts.</p> <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	Machine No.	Displays the machine serial number	Display	Description	Machine No.(Main)	Displays the machine serial number of main	Machine No.(Eng)	Displays the machine serial number of engine
Display	Description										
Machine No.	Displays the machine serial number										
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Machine No.(Main)	Displays the machine serial number of main										
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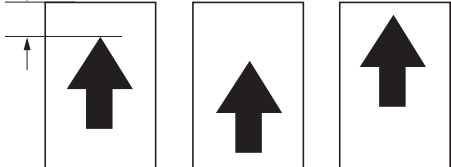
Item No.	Description																																				
U019	<p>Firmware Version</p> <p>Description Displays the part number of the ROM fitted to each PWB.</p> <p>Purpose To check the part number or to decide, if the newest version of ROM is installed.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. The ROM version are displayed. 2. Change the screen using the cursor up/down keys. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr><td>Main</td><td>Main ROM</td></tr> <tr><td>MMI</td><td>Operation ROM</td></tr> <tr><td>Engine</td><td>Engine ROM</td></tr> <tr><td>Engine Boot</td><td>Engine booting</td></tr> <tr><td>Scanner</td><td>Scanner ROM</td></tr> <tr><td>Scanner Boot</td><td>Scanner booting</td></tr> <tr><td>Browser</td><td>Browser ROM</td></tr> <tr><td>Dictionary</td><td>-</td></tr> <tr><td>Solution Framework</td><td>Framework ROM</td></tr> <tr><td>Cassette2</td><td>Paper feeder 2</td></tr> <tr><td>Cassette3</td><td>Paper feeder 3</td></tr> <tr><td>Option Language</td><td>Optional language ROM</td></tr> <tr><td>Color Table1</td><td>Color table 1 ROM</td></tr> <tr><td>Color Table2</td><td>Color table 2 ROM</td></tr> <tr><td>Fax APL</td><td>Fax APL</td></tr> <tr><td>Fax Boot</td><td>Fax Boot</td></tr> <tr><td>Fax IPL</td><td>Fax IPL</td></tr> </tbody> </table> <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	Main	Main ROM	MMI	Operation ROM	Engine	Engine ROM	Engine Boot	Engine booting	Scanner	Scanner ROM	Scanner Boot	Scanner booting	Browser	Browser ROM	Dictionary	-	Solution Framework	Framework ROM	Cassette2	Paper feeder 2	Cassette3	Paper feeder 3	Option Language	Optional language ROM	Color Table1	Color table 1 ROM	Color Table2	Color table 2 ROM	Fax APL	Fax APL	Fax Boot	Fax Boot	Fax IPL	Fax IPL
Display	Description																																				
Main	Main ROM																																				
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Scanner	Scanner ROM																																				
Scanner Boot	Scanner booting																																				
Browser	Browser ROM																																				
Dictionary	-																																				
Solution Framework	Framework ROM																																				
Cassette2	Paper feeder 2																																				
Cassette3	Paper feeder 3																																				
Option Language	Optional language ROM																																				
Color Table1	Color table 1 ROM																																				
Color Table2	Color table 2 ROM																																				
Fax APL	Fax APL																																				
Fax Boot	Fax Boot																																				
Fax IPL	Fax IPL																																				

Item No.	Description																										
U034	<p>Adjust Paper Timing Data</p> <p>Description</p> <p>Adjusts the leading edge registration or center line.</p> <p>Purpose</p> <p>Make the adjustment if there is a regular error between the leading edges of the copy image and original.</p> <p>Make the adjustment if there is a regular error between the center lines of the copy image and original.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select the item to be adjusted. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>LSU Out Top</td> <td>Leading edge registration adjustment</td> </tr> <tr> <td>LSU Out Left</td> <td>Center line adjustment</td> </tr> </tbody> </table> <p>Adjustment: [LSU Out Top]</p> <ol style="list-style-type: none"> 1. Press the system menu key. 2. Press the start key to output a test pattern. 3. Press the system menu key. 4. Select the item to be adjusted. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> <th>Change in value per step</th> </tr> </thead> <tbody> <tr> <td>MPT</td> <td>Paper feed from MP tray</td> <td>-100 to 600</td> <td>0</td> <td>0.1 mm</td> </tr> <tr> <td>Cassette</td> <td>Paper feed from cassette</td> <td>-100 to 600</td> <td>0</td> <td>0.1 mm</td> </tr> <tr> <td>Duplex</td> <td>Duplex mode (second)</td> <td>-100 to 600</td> <td>0</td> <td>0.1 mm</td> </tr> </tbody> </table> <p>5. Change the setting value using the cursor left/right keys or numeric keys. For output example 1, increase the value. For output example 2, decrease the value.</p> <div> <p>Leading edge registration (20 ± 1.0 mm)</p> <p>Correct image</p> <p>Output example 1</p> <p>Output example 2</p> </div> <p>Figure 1-3-2</p> <p>6. Press the start key. The value is set.</p>	Display	Description	LSU Out Top	Leading edge registration adjustment	LSU Out Left	Center line adjustment	Display	Description	Setting range	Initial setting	Change in value per step	MPT	Paper feed from MP tray	-100 to 600	0	0.1 mm	Cassette	Paper feed from cassette	-100 to 600	0	0.1 mm	Duplex	Duplex mode (second)	-100 to 600	0	0.1 mm
Display	Description																										
LSU Out Top	Leading edge registration adjustment																										
LSU Out Left	Center line adjustment																										
Display	Description	Setting range	Initial setting	Change in value per step																							
MPT	Paper feed from MP tray	-100 to 600	0	0.1 mm																							
Cassette	Paper feed from cassette	-100 to 600	0	0.1 mm																							
Duplex	Duplex mode (second)	-100 to 600	0	0.1 mm																							

Item No.	Description																														
<p>U034</p>	<p>Caution Check the copy image after the adjustment. If the image is still incorrect, perform the following adjustments in maintenance mode.</p> <div style="text-align: center;">  </div> <p>Adjustment: [LSU Out Left]</p> <ol style="list-style-type: none"> 1. Press the system menu key. 2. Press the start key to output a test pattern. 3. Press the system menu key. 4. Select the item to be adjusted. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> <th>Change in value per step</th> </tr> </thead> <tbody> <tr> <td>MPT</td> <td>Paper feed from MP tray</td> <td>-100 to 600</td> <td>0</td> <td>0.1 mm</td> </tr> <tr> <td>Cassette1</td> <td>Paper feed from optional cassette1</td> <td>-100 to 600</td> <td>0</td> <td>0.1 mm</td> </tr> <tr> <td>Cassette2</td> <td>Paper feed from optional cassette2</td> <td>-100 to 600</td> <td>0</td> <td>0.1 mm</td> </tr> <tr> <td>Cassette3</td> <td>Paper feed from optional cassette3</td> <td>-100 to 600</td> <td>0</td> <td>0.1 mm</td> </tr> <tr> <td>Duplex</td> <td>Duplex mode (second)</td> <td>-100 to 600</td> <td>0</td> <td>0.1 mm</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 5. Change the setting value using the cursor left/right keys or numeric keys. For output example 1, increase the value. For output example 2, decrease the value. <div style="text-align: center;"> <p>Center line of printing (within ± 2.0 mm)</p>  <p>Correct image Output example 1 Output example 2</p> </div> <p>Figure 1-3-3</p> <ol style="list-style-type: none"> 6. Press the start key. The value is set. <p>Caution Check the copy image after the adjustment. If the image is still incorrect, perform the following adjustments in maintenance mode.</p> <div style="text-align: center;">  </div> <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	Setting range	Initial setting	Change in value per step	MPT	Paper feed from MP tray	-100 to 600	0	0.1 mm	Cassette1	Paper feed from optional cassette1	-100 to 600	0	0.1 mm	Cassette2	Paper feed from optional cassette2	-100 to 600	0	0.1 mm	Cassette3	Paper feed from optional cassette3	-100 to 600	0	0.1 mm	Duplex	Duplex mode (second)	-100 to 600	0	0.1 mm
Display	Description	Setting range	Initial setting	Change in value per step																											
MPT	Paper feed from MP tray	-100 to 600	0	0.1 mm																											
Cassette1	Paper feed from optional cassette1	-100 to 600	0	0.1 mm																											
Cassette2	Paper feed from optional cassette2	-100 to 600	0	0.1 mm																											
Cassette3	Paper feed from optional cassette3	-100 to 600	0	0.1 mm																											
Duplex	Duplex mode (second)	-100 to 600	0	0.1 mm																											


Item No.	Description															
<p>U065</p>	<p>Adjust Scanner Motor Speed</p> <p>Description Adjusts the magnification of the original scanning.</p> <p>Purpose Make the adjustment if the magnification in the main scanning direction is incorrect. Make the adjustment if the magnification in the auxiliary scanning direction is incorrect.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Press the system menu key. 3. Place an original and press the start key to make a test copy. 4. Press the system menu key. 5. Select the item to be adjusted. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> <th>Change in value per step</th> </tr> </thead> <tbody> <tr> <td>Main Scan</td> <td>Scanner magnification in the main scanning direction</td> <td>-32 to 127</td> <td>0</td> <td>0.1 %</td> </tr> <tr> <td>Sub Scan</td> <td>Scanner magnification in the auxiliary scanning direction</td> <td>-25 to 25</td> <td>0</td> <td>0.1 %</td> </tr> </tbody> </table> <p>Adjustment: [Main Scan]</p> <ol style="list-style-type: none"> 1. Change the setting value using the cursor left/right keys or numeric keys. For copy example 1, increase the value. For copy example 2, decrease the value. Increasing the setting enlarges the image and decreasing it narrows the image. <div style="text-align: center;">  <p>Original Copy example 1 Copy example 2</p> </div> <p style="text-align: center;">Figure 1-3-4</p> <ol style="list-style-type: none"> 2. Press the start key. The value is set. 	Display	Description	Setting range	Initial setting	Change in value per step	Main Scan	Scanner magnification in the main scanning direction	-32 to 127	0	0.1 %	Sub Scan	Scanner magnification in the auxiliary scanning direction	-25 to 25	0	0.1 %
Display	Description	Setting range	Initial setting	Change in value per step												
Main Scan	Scanner magnification in the main scanning direction	-32 to 127	0	0.1 %												
Sub Scan	Scanner magnification in the auxiliary scanning direction	-25 to 25	0	0.1 %												

Item No.	Description
U065	<p>Adjustment: [Sub Scan]</p> <p>1. Change the setting value using the left/right keys or numeric keys. For copy example 1, increase the value. For copy example 2, decrease the value. Increasing the value makes the image longer, while decreasing the value makes the image shorter.</p> <div style="text-align: center;"><p>Original Copy example 1 Copy example 2</p></div> <p style="text-align: center;">Figure 1-3-5</p> <p>2. Press the start key. The value is set.</p> <p>Completion</p> <p>Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>


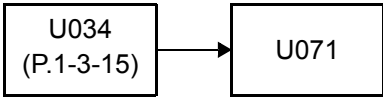
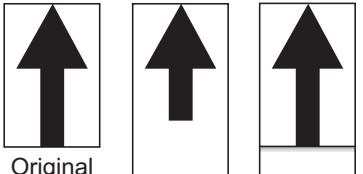
Item No.	Description																				
U066	<p>Adjust Table Leading Edge Timing</p> <p>Description</p> <p>Adjusts the scanner leading edge registration of the original scanning.</p> <p>Purpose</p> <p>Make the adjustment if there is a regular error between the leading edges of the copy image and original.</p> <p>Adjustment</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Press the system menu key. 3. Place an original and press the start key to make a test copy. 4. Press the system menu key. 5. Select the item to be adjusted. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> <th>Change in value per step</th> </tr> </thead> <tbody> <tr> <td>Front</td> <td>Scanner leading edge registration</td> <td>-45 to 45</td> <td>0</td> <td>0.091 mm</td> </tr> <tr> <td>Rotate</td> <td>Scanner leading edge registration (rotate copying)</td> <td>-45 to 45</td> <td>0</td> <td>0.100 mm</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 6. Change the setting value using the cursor left/right keys or numeric keys. For copy example 1, increase the value. For copy example 2, decrease the value. Increasing the value moves the image forward and decreasing the value moves the image backward. <div style="text-align: center;"> <p>Leading edge registration of the copy image (+1.0/-1.5 mm or less)</p>  <p>Original Copy example 1 Copy example 2</p> </div> <p>Figure 1-3-6</p> <ol style="list-style-type: none"> 7. Press the start key. The value is set. <p>Caution</p> <p>If the above adjustment does not optimize the leading edge registration, proceed with the following maintenance modes.</p> <div style="text-align: center;"> <table border="1"> <tr> <td style="padding: 5px;">U034 (P.1-3-15)</td> <td style="text-align: center;">→</td> <td style="padding: 5px;">U065 (P.1-3-17)</td> <td style="text-align: center;">→</td> <td style="padding: 5px;">U066</td> </tr> </table> </div> <p>Completion</p> <p>Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	Setting range	Initial setting	Change in value per step	Front	Scanner leading edge registration	-45 to 45	0	0.091 mm	Rotate	Scanner leading edge registration (rotate copying)	-45 to 45	0	0.100 mm	U034 (P.1-3-15)	→	U065 (P.1-3-17)	→	U066
Display	Description	Setting range	Initial setting	Change in value per step																	
Front	Scanner leading edge registration	-45 to 45	0	0.091 mm																	
Rotate	Scanner leading edge registration (rotate copying)	-45 to 45	0	0.100 mm																	
U034 (P.1-3-15)	→	U065 (P.1-3-17)	→	U066																	

Item No.	Description																				
U067	<p>Adjust Table Center</p> <p>Description</p> <p>Adjusts the scanner center line of the original scanning.</p> <p>Purpose</p> <p>Make the adjustment if there is a regular error between the center lines of the copy image and original.</p> <p>Adjustment</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Press the system menu key. 3. Place an original and press the start key to make a test copy. 4. Press the system menu key. 5. Select the item to be adjusted. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> <th>Change in value per step</th> </tr> </thead> <tbody> <tr> <td>Front</td> <td>Scanner center line</td> <td>-40 to 40</td> <td>0</td> <td>0.085 mm</td> </tr> <tr> <td>Rotate</td> <td>Scanner center line (rotate copying)</td> <td>-40 to 40</td> <td>0</td> <td>0.100 mm</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 6. Change the setting value using the cursor left/right keys or numeric keys. For copy example 1, decrease the value. For copy example 2, increase the value. Increasing the value moves the image leftward and decreasing it moves the image rightward. <div style="text-align: center;"> <p>Center line of the copy image (within ± 2.0 mm)</p> <p>Original Copy example 1 Copy example 2</p> </div> <p>Figure 1-3-7</p> <ol style="list-style-type: none"> 7. Press the start key. The value is set. <p>Caution</p> <p>If the above adjustment does not optimize the center line, proceed with the following maintenance modes.</p> <div style="text-align: center;"> <table border="1"> <tr> <td style="padding: 5px;">U034 (P.1-3-16)</td> <td style="padding: 5px; text-align: center;">→</td> <td style="padding: 5px;">U065 (P.1-3-17)</td> <td style="padding: 5px; text-align: center;">→</td> <td style="padding: 5px;">U067</td> </tr> </table> </div> <p>Completion</p> <p>Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	Setting range	Initial setting	Change in value per step	Front	Scanner center line	-40 to 40	0	0.085 mm	Rotate	Scanner center line (rotate copying)	-40 to 40	0	0.100 mm	U034 (P.1-3-16)	→	U065 (P.1-3-17)	→	U067
Display	Description	Setting range	Initial setting	Change in value per step																	
Front	Scanner center line	-40 to 40	0	0.085 mm																	
Rotate	Scanner center line (rotate copying)	-40 to 40	0	0.100 mm																	
U034 (P.1-3-16)	→	U065 (P.1-3-17)	→	U067																	

Item No.	Description															
U068	<p>Adjust DP Scan Position</p> <p>Description</p> <p>Adjusts the position for scanning originals from the DP. Performs the test copy at the four scanning positions after adjusting.</p> <p>Purpose</p> <p>Used when the image fogging occurs because the scanning position is not proper when the DP is used. Run U071 to adjust the timing of DP leading edge when the scanning position is changed.</p> <p>Setting</p> <ol style="list-style-type: none"> 1. Press the start key. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> <th>Change in value per step</th> </tr> </thead> <tbody> <tr> <td>DP Read</td> <td>Starting position adjustment for scanning originals</td> <td>-33 to 33</td> <td>0</td> <td>0.086 mm</td> </tr> <tr> <td>Black Line</td> <td>Scanning position for the test copy originals</td> <td>0 to 3</td> <td>0</td> <td>0.22 mm</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 2. Select [DP Read]. 3. Change the setting using the cursor left/right keys or numeric keys. When the setting value is increased, the scanning position moves to the right and it moves to the left when the setting value is decreased. 4. Press the start key. The value is set. 5. Select [Black Line]. 6. Change the setting using the +/- keys or numeric keys. 7. Press the start key. The value is set. 8. Set the original (the one which density is known) in the DP and press the system menu key. 9. Press the start key. Test copy is executed. 10. Perform the test copy at each scanning position with the setting value from 0 to 3 and check that no black line appears and the image is normally scanned. <p>Completion</p> <p>Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	Setting range	Initial setting	Change in value per step	DP Read	Starting position adjustment for scanning originals	-33 to 33	0	0.086 mm	Black Line	Scanning position for the test copy originals	0 to 3	0	0.22 mm
Display	Description	Setting range	Initial setting	Change in value per step												
DP Read	Starting position adjustment for scanning originals	-33 to 33	0	0.086 mm												
Black Line	Scanning position for the test copy originals	0 to 3	0	0.22 mm												

Item No.	Description										
U070	<p>Adjust DP Motor Speed</p> <p>Description</p> <p>Adjusts the DP original scanning speed.</p> <p>Purpose</p> <p>Make the adjustment if the magnification is incorrect in the auxiliary scanning direction when the DP is used.</p> <p>Adjustment</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Press the system menu key. 3. Place an original on the DP and press the start key to make a test copy. 4. Press the system menu key. 5. Select [Convey Speed]. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> <th>Change in value per step</th> </tr> </thead> <tbody> <tr> <td>Convey Speed</td> <td>Magnification in the auxiliary scanning direction of CCD (first side)</td> <td>-25 to 25</td> <td>0</td> <td>0.1 %</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 6. Change the setting value using the cursor left/right keys or numeric keys. For copy example 1, increase the value. For copy example 2, decrease the value. Increasing the value makes the image longer, while decreasing the value makes the image shorter. <div style="text-align: center;">  <p>Original</p> <p>Copy example 1</p> <p>Copy example 2</p> </div> <p>Figure 1-3-8</p> <ol style="list-style-type: none"> 7. Press the start key. The value is set. 	Display	Description	Setting range	Initial setting	Change in value per step	Convey Speed	Magnification in the auxiliary scanning direction of CCD (first side)	-25 to 25	0	0.1 %
Display	Description	Setting range	Initial setting	Change in value per step							
Convey Speed	Magnification in the auxiliary scanning direction of CCD (first side)	-25 to 25	0	0.1 %							

Item No.	Description																														
U071	<p>Adjust DP Leading Edge Timing</p> <p>Description</p> <p>Adjusts the DP original scanning timing.</p> <p>Purpose</p> <p>Make the adjustment if there is a regular error between the leading or trailing edges of the original and the copy image when the DP is used.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Press the system menu key. 3. Place an original on the DP and press the start key to make a test copy. 4. Press the system menu key. 5. Select the item to be adjusted. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> <th>Change in value per step</th> </tr> </thead> <tbody> <tr> <td>Front Head</td> <td>Leading edge registration of CCD (first side)</td> <td>-32 to 32</td> <td>0</td> <td>0.196 mm</td> </tr> <tr> <td>Front Tail</td> <td>Trailing edge registration of CCD (first side)</td> <td>-32 to 32</td> <td>0</td> <td>0.196 mm</td> </tr> <tr> <td>Back Head</td> <td>Leading edge registration of CCD (second side)</td> <td>-45 to 45</td> <td>0</td> <td>0.196 mm</td> </tr> <tr> <td>Back Tail</td> <td>Trailing edge registration of CCD (second side)</td> <td>-45 to 45</td> <td>0</td> <td>0.196 mm</td> </tr> <tr> <td>Rotate</td> <td>Leading edge registration (rotate copying)</td> <td>-128 to 127</td> <td>0</td> <td>0.196 mm</td> </tr> </tbody> </table>	Display	Description	Setting range	Initial setting	Change in value per step	Front Head	Leading edge registration of CCD (first side)	-32 to 32	0	0.196 mm	Front Tail	Trailing edge registration of CCD (first side)	-32 to 32	0	0.196 mm	Back Head	Leading edge registration of CCD (second side)	-45 to 45	0	0.196 mm	Back Tail	Trailing edge registration of CCD (second side)	-45 to 45	0	0.196 mm	Rotate	Leading edge registration (rotate copying)	-128 to 127	0	0.196 mm
Display	Description	Setting range	Initial setting	Change in value per step																											
Front Head	Leading edge registration of CCD (first side)	-32 to 32	0	0.196 mm																											
Front Tail	Trailing edge registration of CCD (first side)	-32 to 32	0	0.196 mm																											
Back Head	Leading edge registration of CCD (second side)	-45 to 45	0	0.196 mm																											
Back Tail	Trailing edge registration of CCD (second side)	-45 to 45	0	0.196 mm																											
Rotate	Leading edge registration (rotate copying)	-128 to 127	0	0.196 mm																											

Item No.	Description
U071	<p>Adjustment: Leading edge registration</p> <p>1. Change the setting value using the cursor left/right keys or numeric keys. For copy example 1, increase the value. For copy example 2, decrease the value. Increasing the value moves the image forward and decreasing the value moves the image backward.</p> <div style="text-align: center;">  <p>Original Copy example 1 Copy example 2</p> </div> <p style="text-align: center;">Figure 1-3-9</p> <p>2. Press the start key. The value is set.</p> <p>Caution If the first side is adjusted, check the second side and if adjustment is required, carry out the adjustment. If the above adjustment does not optimize the leading edge registration, proceed with the following maintenance modes.</p> <div style="text-align: center;">  </div> <p>Adjustment: Trailing edge registration</p> <p>1. Change the setting value using the cursor left/right keys or numeric keys. For copy example 1, increase the value. For copy example 2, decrease the value.</p> <div style="text-align: center;">  <p>Original Copy example 1 Copy example 2</p> </div> <p style="text-align: center;">Figure 1-3-10</p> <p>2. Press the start key. The value is set.</p> <p>Caution If the first side is adjusted, check the second side and if adjustment is required, carry out the adjustment.</p> <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>

Item No.	Description																				
U072	<p>Adjust DP Original Center</p> <p>Description Adjusts the scanning start position for the DP original.</p> <p>Purpose Make the adjustment if there is a regular error between the centers of the original and the copy image when the DP is used.</p> <p>Adjustment</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Press the system menu key. 3. Place an original on the DP and press the start key to make a test copy. 4. Press the system menu key. 5. Select the item to be adjusted. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> <th>Change in value per step</th> </tr> </thead> <tbody> <tr> <td>Front</td> <td>DP center line (first side)</td> <td>-39 to 39</td> <td>0</td> <td>0.085 mm</td> </tr> <tr> <td>Back</td> <td>DP center line (second side)</td> <td>-39 to 39</td> <td>12</td> <td>0.085 mm</td> </tr> <tr> <td>Rotate</td> <td>DP center line (rotate copying)</td> <td>-39 to 39</td> <td>0</td> <td>0.085 mm</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 6. Change the setting value using the cursor left/right keys or numeric keys. For copy example 1, increase the value. For copy example 2, decrease the value. Increasing the value moves the image rightward and decreasing it moves the image leftward. <div style="text-align: center;"> <p>Original Copy example 1 Copy example 2</p> </div> <p>Figure 1-3-11</p> <ol style="list-style-type: none"> 7. Press the start key. The value is set. <p>Caution If the first side is adjusted, check the second side and if adjustment is required, carry out the adjustment. If the above adjustment does not optimize the center line, proceed with the following maintenance modes.</p> <pre> graph LR U034["U034 (P.1-3-16)"] --> U065["U065 (P.1-3-17)"] U065 --> U067["U067 (P.1-3-20)"] U067 --> U072["U072"] </pre> <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	Setting range	Initial setting	Change in value per step	Front	DP center line (first side)	-39 to 39	0	0.085 mm	Back	DP center line (second side)	-39 to 39	12	0.085 mm	Rotate	DP center line (rotate copying)	-39 to 39	0	0.085 mm
Display	Description	Setting range	Initial setting	Change in value per step																	
Front	DP center line (first side)	-39 to 39	0	0.085 mm																	
Back	DP center line (second side)	-39 to 39	12	0.085 mm																	
Rotate	DP center line (rotate copying)	-39 to 39	0	0.085 mm																	

Item No.	Description						
U201	<p>Initialize Touch Panel</p> <p>Description</p> <p>Automatically correct the positions of the X- and Y-axes of the touch panel.</p> <p>Purpose</p> <p>To automatically correct the display positions on the touch panel after it is replaced.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select the [Initialize] or [Check]. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Initialize</td> <td>Adjusts the display on the panel automatically.</td> </tr> <tr> <td>Check</td> <td>Checks the display on the touch panel.</td> </tr> </tbody> </table> <p>Method: Initialize</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Press the center of the + keys. Be sure to press three + keys displayed in order. The touch panel is adjusted automatically. 3. Press the indicated three + keys, and then check the display. 4. Press the stop key. The screen for selecting a maintenance item No. is displayed. <p>Method: Check</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Press the indicated three + keys, and then check the display. When adjusting the display, press [INITIALIZE] to execute the adjustment automatically. 3. Press the stop key. The screen for selecting a maintenance item No. is displayed. <p>Completion</p> <p>Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	Initialize	Adjusts the display on the panel automatically.	Check	Checks the display on the touch panel.
Display	Description						
Initialize	Adjusts the display on the panel automatically.						
Check	Checks the display on the touch panel.						

Item No.	Description																
U203	<p>Check DP Operation</p> <p>Description</p> <p>Simulates the original conveying operation separately in the DP.</p> <p>Purpose</p> <p>To check the DP operation.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Place an original in the DP if running this simulation with paper. 3. Select the speed to be operated. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Normal Speed</td> <td>Normal reading (600 dpi)</td> </tr> <tr> <td>High Speed</td> <td>High-speed reading</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 4. Press the start key. 5. Select the item to be operated. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>CCD ADP (Non-P)</td> <td>Without paper, single-sided original of CCD (continuous operation)</td> </tr> <tr> <td>CCD ADP</td> <td>With paper, single-sided original of CCD</td> </tr> <tr> <td>CCD RADP (Non-P)</td> <td>Without paper, double-sided original of CCD (continuous operation)</td> </tr> <tr> <td>CCD RADP</td> <td>With paper, double-sided original of CCD</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 6. Press the start key. The operation starts. 7. To stop continuous operation, press the stop key. <p>Completion</p> <p>Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	Normal Speed	Normal reading (600 dpi)	High Speed	High-speed reading	Display	Description	CCD ADP (Non-P)	Without paper, single-sided original of CCD (continuous operation)	CCD ADP	With paper, single-sided original of CCD	CCD RADP (Non-P)	Without paper, double-sided original of CCD (continuous operation)	CCD RADP	With paper, double-sided original of CCD
Display	Description																
Normal Speed	Normal reading (600 dpi)																
High Speed	High-speed reading																
Display	Description																
CCD ADP (Non-P)	Without paper, single-sided original of CCD (continuous operation)																
CCD ADP	With paper, single-sided original of CCD																
CCD RADP (Non-P)	Without paper, double-sided original of CCD (continuous operation)																
CCD RADP	With paper, double-sided original of CCD																

Item No.	Description						
U222	<p>Set IC Card Type</p> <p>Description Sets the type of IC card.</p> <p>Purpose To change the type of IC card.</p> <p>Setting</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select the item. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Other</td> <td>The type of IC card is SSFC.</td> </tr> <tr> <td>SSFC</td> <td>The type of IC card is not SSFC.</td> </tr> </tbody> </table> <p>* : Initial setting: Other</p> <ol style="list-style-type: none"> 3. Press the start key. The setting is set. <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	Other	The type of IC card is SSFC.	SSFC	The type of IC card is not SSFC.
Display	Description						
Other	The type of IC card is SSFC.						
SSFC	The type of IC card is not SSFC.						

Item No.	Description														
U224	<p>Install Original Panel Display</p> <p>Description</p> <p>Changes the image data, the message and telephone number of the service call screen to user specified data.</p> <p>Purpose</p> <p>Set according to the preference of the user.</p> <p>Setting</p> <ol style="list-style-type: none"> 1. Write the image data or the message data to the USB memory. 2. Insert USB memory in USB memory slot of the machine. 3. Turn the main power switch on. 4. Enter the maintenance item. 5. Press the start key. 6. Select the [Install] or [UnInstall]. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Install</td> <td>Installs the image data or the message data</td> </tr> <tr> <td>UnInstall</td> <td>Restores the original image data or message data</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 7. Select the item. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Call Msg Top</td> <td>Service call message 1</td> </tr> <tr> <td>Call Msg Detail</td> <td>Service call message 2</td> </tr> <tr> <td>Call Msg TEL No.</td> <td>The telephone number for service</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 8. Press the start key. Installation or uninstallation is started. 9. When normally completed, [OK] is displayed. <p>Completion</p> <p>Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	Install	Installs the image data or the message data	UnInstall	Restores the original image data or message data	Display	Description	Call Msg Top	Service call message 1	Call Msg Detail	Service call message 2	Call Msg TEL No.	The telephone number for service
Display	Description														
Install	Installs the image data or the message data														
UnInstall	Restores the original image data or message data														
Display	Description														
Call Msg Top	Service call message 1														
Call Msg Detail	Service call message 2														
Call Msg TEL No.	The telephone number for service														

Item No.	Description						
U250	<p>Set Maintenance Counter Pre-set</p> <p>Description Displays, clears and changes the maintenance cycle.</p> <p>Purpose To check and change the maintenance cycle.</p> <p>Method 1. Press the start key. The currently set maintenance cycle is displayed.</p> <p>Setting 1. Select [M.Cnt A]. 2. Change the setting using the cursor left/right keys or numeric keys.</p> <table border="1"> <thead> <tr> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> </tr> </thead> <tbody> <tr> <td>Maintenance cycle</td> <td>0 to 9999999</td> <td>200000</td> </tr> </tbody> </table> <p>3. Press the start key. The value is set.</p> <p>Clearing 1. Select [Clear]. 2. Press the start key. The count is cleared.</p> <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Description	Setting range	Initial setting	Maintenance cycle	0 to 9999999	200000
Description	Setting range	Initial setting					
Maintenance cycle	0 to 9999999	200000					

Item No.	Description						
U251	<p>Clear Maintenance Counter</p> <p>Description Displays, clears and changes the maintenance count.</p> <p>Purpose To check the maintenance count. Also to clear the count during maintenance service (replacing the maintenance kit).</p> <p>Method 1. Press the start key. The maintenance count is displayed.</p> <p>Setting 1. Select [M.Cnt A]. 2. Change the setting using the cursor left/right keys or numeric keys.</p> <table border="1"> <thead> <tr> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> </tr> </thead> <tbody> <tr> <td>Maintenance count</td> <td>0 to 9999999</td> <td>0</td> </tr> </tbody> </table> <p>3. Press the start key. The count is set.</p> <p>Clearing 1. Select [Clear]. 2. Press the start key. The count is cleared.</p> <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Description	Setting range	Initial setting	Maintenance count	0 to 9999999	0
Description	Setting range	Initial setting					
Maintenance count	0 to 9999999	0					

Item No.	Description														
<p>U252</p>	<p>Set Destination</p> <p>Description Switches the operations and screens of the machine according to the destination.</p> <p>Purpose To be executed after initializing the backup RAM, in order to return the setting to the value before replacement or initialization.</p> <p>Setting</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select the destination. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Inch</td> <td>Inch (North America) specifications</td> </tr> <tr> <td>Europe Metric</td> <td>Metric (Europe) specifications</td> </tr> <tr> <td>Asia Pacific</td> <td>Metric (Asia Pacific) specifications</td> </tr> <tr> <td>Australia</td> <td>Australia specifications</td> </tr> <tr> <td>China</td> <td>China specifications</td> </tr> <tr> <td>Korea</td> <td>Korea specifications</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 3. Press the start key. 4. Turn the main power switch off and on. <p>Supplement The specified initial settings are provided according to the destinations in the maintenance items below. To change the initial settings in those items, be sure to run maintenance item U021 after changing the destination.</p>	Display	Description	Inch	Inch (North America) specifications	Europe Metric	Metric (Europe) specifications	Asia Pacific	Metric (Asia Pacific) specifications	Australia	Australia specifications	China	China specifications	Korea	Korea specifications
Display	Description														
Inch	Inch (North America) specifications														
Europe Metric	Metric (Europe) specifications														
Asia Pacific	Metric (Asia Pacific) specifications														
Australia	Australia specifications														
China	China specifications														
Korea	Korea specifications														

Item No.	Description												
U253	<p>Set Double/Single Count</p> <p>Description Switches the count system for the total counter and other counters.</p> <p>Purpose Used to select, according to the preference of the user (copy service provider), if folio size paper is to be counted as one sheet (single count) or two sheets (double count).</p> <p>Setting</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select the item to set. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Color</td> <td>Count system of color mode</td> </tr> <tr> <td>B/W</td> <td>Count system of black/white mode</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 3. Press the start key. 4. Select the count system using the cursor up/down keys. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>SGL (All)</td> <td>Single count for all size paper</td> </tr> <tr> <td>DBL (Folio)</td> <td>Double count for Folio size or larger</td> </tr> </tbody> </table> <p>* : Initial setting: DBL Count(Folio)</p> <ol style="list-style-type: none"> 5. Press the start key. The setting is set. <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	Color	Count system of color mode	B/W	Count system of black/white mode	Display	Description	SGL (All)	Single count for all size paper	DBL (Folio)	Double count for Folio size or larger
Display	Description												
Color	Count system of color mode												
B/W	Count system of black/white mode												
Display	Description												
SGL (All)	Single count for all size paper												
DBL (Folio)	Double count for Folio size or larger												
U260	<p>Set Copy Count Mode</p> <p>Description Changes the copy count timing for the total counter and other counters.</p> <p>Purpose To be set according to user request.</p> <p>Setting</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select the copy count timing. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Feed</td> <td>When secondary paper feed starts</td> </tr> <tr> <td>Eject</td> <td>When the paper is ejected</td> </tr> </tbody> </table> <p>* : Initial setting: Eject</p> <ol style="list-style-type: none"> 3. Press the start key. The setting is set. <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	Feed	When secondary paper feed starts	Eject	When the paper is ejected						
Display	Description												
Feed	When secondary paper feed starts												
Eject	When the paper is ejected												

Item No.	Description								
U285	<p>Set Service Status Page</p> <p>Description Determines displaying the print coverage report on reporting.</p> <p>Purpose According to user request, changes the setting.</p> <p>Setting</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select On or Off. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>On</td> <td>Displays the print coverage</td> </tr> <tr> <td>Off</td> <td>Not to display the print coverage</td> </tr> </tbody> </table> <p>* : Initial setting: On</p> <ol style="list-style-type: none"> 3. Press the start key. The setting is set. <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	On	Displays the print coverage	Off	Not to display the print coverage		
Display	Description								
On	Displays the print coverage								
Off	Not to display the print coverage								
U332	<p>Adjust Coverage Size Calculation Rate</p> <p>Description Sets the coefficient of nonstandard sizes in relation to the A4/Letter size. The coefficient set here is used to convert the black ratio in relation to the A4/Letter size and to display the result in user simulation.</p> <p>Purpose To set the coefficient for converting the black ratio for nonstandard sizes in relation to the A4/Letter size.</p> <p>Setting</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Change the setting using the cursor left/right keys or numeric keys. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> </tr> </thead> <tbody> <tr> <td>Rate</td> <td>Size parameter</td> <td>0.1 to 3.0</td> <td>1.0</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 3. Press the start key. The value is set. <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	Setting range	Initial setting	Rate	Size parameter	0.1 to 3.0	1.0
Display	Description	Setting range	Initial setting						
Rate	Size parameter	0.1 to 3.0	1.0						

Item No.	Description						
U345	<p>Set Maintenance Time Soon Display</p> <p>Description</p> <p>Sets when to display a message notifying that the time for maintenance is about to be reached, by setting the number of copies that can be made before the current maintenance cycle ends. When the difference between the number of copies of the maintenance cycle and that of the maintenance count reaches the set value, the message is displayed.</p> <p>Purpose</p> <p>To change the time for maintenance due indication.</p> <p>Setting</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select [Cnt]. 3. Change the setting using the cursor left/right keys. <table border="1"> <thead> <tr> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> </tr> </thead> <tbody> <tr> <td>Time for maintenance due indication (Remaining number of copies that can be made before the current maintenance cycle ends)</td> <td>0 to 9999</td> <td>0</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 4. Press the start key. The value is set. <p>Clearing</p> <ol style="list-style-type: none"> 1. Select [Clear]. 2. Press the start key. The value is cleared. <p>Completion</p> <p>Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Description	Setting range	Initial setting	Time for maintenance due indication (Remaining number of copies that can be made before the current maintenance cycle ends)	0 to 9999	0
Description	Setting range	Initial setting					
Time for maintenance due indication (Remaining number of copies that can be made before the current maintenance cycle ends)	0 to 9999	0					

Item No.	Description																												
U402	<p>Adjust Print Margin</p> <p>Description Adjusts margins for image printing.</p> <p>Purpose Make the adjustment if margins are incorrect.</p> <p>Adjustment</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Press the system menu key. 3. Press the start key to output a test pattern. 4. Press the system menu key. 5. Select the item to be adjusted. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> <th>Change in value per step</th> </tr> </thead> <tbody> <tr> <td>Lead</td> <td>Printer leading edge margin</td> <td>0.0 to 10.0</td> <td>4.0</td> <td>-</td> </tr> <tr> <td>A Margin</td> <td>Printer left margin</td> <td>0.0 to 10.0</td> <td>4.0</td> <td>-</td> </tr> <tr> <td>C Margin</td> <td>Printer right margin</td> <td>0.0 to 10.0</td> <td>4.0</td> <td>-</td> </tr> <tr> <td>Trail</td> <td>Printer trailing edge margin</td> <td>0.0 to 10.0</td> <td>4.0</td> <td>-</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 6. Change the setting value using the cursor left/right keys or numeric keys. Increasing the value makes the margin wider, and decreasing it makes the margin narrower. <div style="text-align: center;"> <p>Printer leading edge margin (4.0 +1.5/-1.0 mm)</p> <p>Printer left margin (2.5 +1.5/-2.0 mm)</p> <p>Printer right margin (2.5 +1.5/-2.0 mm)</p> <p>Printer trailing edge margin (4.0 mm or less)</p> </div> <p>Figure 1-3-12</p> <ol style="list-style-type: none"> 7. Press the start key. The value is set. <p>Caution If the above adjustment does not optimize the margins, perform the following maintenance modes.</p> <div style="text-align: center;"> <table border="1"> <tr> <td style="padding: 5px;">U034 (P.1-3-16)</td> <td style="text-align: center; padding: 0 10px;">→</td> <td style="padding: 5px;">U402</td> </tr> </table> </div> <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	Setting range	Initial setting	Change in value per step	Lead	Printer leading edge margin	0.0 to 10.0	4.0	-	A Margin	Printer left margin	0.0 to 10.0	4.0	-	C Margin	Printer right margin	0.0 to 10.0	4.0	-	Trail	Printer trailing edge margin	0.0 to 10.0	4.0	-	U034 (P.1-3-16)	→	U402
Display	Description	Setting range	Initial setting	Change in value per step																									
Lead	Printer leading edge margin	0.0 to 10.0	4.0	-																									
A Margin	Printer left margin	0.0 to 10.0	4.0	-																									
C Margin	Printer right margin	0.0 to 10.0	4.0	-																									
Trail	Printer trailing edge margin	0.0 to 10.0	4.0	-																									
U034 (P.1-3-16)	→	U402																											

Item No.	Description																									
U403	<p>Adjust Scanning Margin(Table)</p> <p>Description Adjusts margins for scanning the original on the contact glass.</p> <p>Purpose Make the adjustment if margins are incorrect.</p> <p>Adjustment</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Press the system menu key. 3. Place an original and press the start key to make a test copy. 4. Press the system menu key. 5. Select the item to be adjusted. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> <th>Change in value per step</th> </tr> </thead> <tbody> <tr> <td>A Margin</td> <td>Scanner left margin</td> <td>0.0 to 10.0</td> <td>2.0</td> <td>0.5 mm</td> </tr> <tr> <td>B Margin</td> <td>Scanner leading edge margin</td> <td>0.0 to 10.0</td> <td>2.0</td> <td>0.5 mm</td> </tr> <tr> <td>C Margin</td> <td>Scanner right margin</td> <td>0.0 to 10.0</td> <td>2.0</td> <td>0.5 mm</td> </tr> <tr> <td>D Margin</td> <td>Scanner trailing edge margin</td> <td>0.0 to 10.0</td> <td>2.0</td> <td>0.5 mm</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 6. Change the setting value using the cursor left/right keys or numeric keys. Increasing the value makes the margin wider, and decreasing it makes the margin narrower. <div style="text-align: center;"> <p>Leading edge margin of the copy image (4.0 +1.5/-1.0 mm)</p> <p>Left margin of the copy image (2.5 +1.5/-2.0 mm)</p> <p>Right margin of the copy image (2.5 +1.5/-2.0 mm)</p> <p>Trailing edge margin of the copy image (4.0 mm or less)</p> </div> <p>Figure 1-3-13</p> <ol style="list-style-type: none"> 7. Press the start key. The value is set. <p>Caution If the above adjustment does not optimize the margins, perform the following maintenance modes.</p> <pre> graph LR U034[U034 (P.1-3-16)] --> U402[U402 (P.1-3-36)] U402 --> U403[U403] </pre> <p>Completion Press the stop key. The indication for selecting a maintenance item No. appears.</p>	Display	Description	Setting range	Initial setting	Change in value per step	A Margin	Scanner left margin	0.0 to 10.0	2.0	0.5 mm	B Margin	Scanner leading edge margin	0.0 to 10.0	2.0	0.5 mm	C Margin	Scanner right margin	0.0 to 10.0	2.0	0.5 mm	D Margin	Scanner trailing edge margin	0.0 to 10.0	2.0	0.5 mm
Display	Description	Setting range	Initial setting	Change in value per step																						
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D Margin	Scanner trailing edge margin	0.0 to 10.0	2.0	0.5 mm																						

Item No.	Description																									
U404	<p>Adjust Scanning Margin(DP)</p> <p>Description Adjusts margins for scanning the original from the DP.</p> <p>Purpose Make the adjustment if margins are incorrect.</p> <p>Adjustment</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Press the system menu key. 3. Place an original on the DP and press the start key to make a test copy. 4. Press the system menu key. 5. Select the item to be adjusted. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> <th>Change in value per step</th> </tr> </thead> <tbody> <tr> <td>A Margin</td> <td>DP left margin</td> <td>0.0 to 10.0</td> <td>3.0</td> <td>0.5 mm</td> </tr> <tr> <td>B Margin</td> <td>DP leading edge margin</td> <td>0.0 to 10.0</td> <td>2.5</td> <td>0.5 mm</td> </tr> <tr> <td>C Margin</td> <td>DP right margin</td> <td>0.0 to 10.0</td> <td>3.0</td> <td>0.5 mm</td> </tr> <tr> <td>D Margin</td> <td>DP trailing edge margin</td> <td>0.0 to 10.0</td> <td>4.0</td> <td>0.5 mm</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 6. Change the setting value using the cursor left/right keys or numeric keys. Increasing the value makes the margin wider, and decreasing it makes the margin narrower. <div style="text-align: center;"> <p>The diagram shows a rectangular document with four margin settings indicated by arrows and text:</p> <ul style="list-style-type: none"> DP leading edge margin (4.0 +1.5/-1.0 mm) at the top. DP left margin (2.5 +1.5/-2.0 mm) on the left side. DP right margin (2.5 +1.5/-2.0 mm) on the right side. DP trailing edge margin (4.0 mm or less) at the bottom. </div> <p>Figure 1-3-14</p> <ol style="list-style-type: none"> 7. Press the start key. The value is set. <p>Caution If the above adjustment does not optimize the margins, perform the following maintenance modes.</p> <div style="text-align: center;"> <pre> graph LR U034["U034 (P.1-3-16)"] --> U402["U402 (P.1-3-36)"] U402 --> U403["U403 (P.1-3-37)"] U403 --> U404["U404"] </pre> </div> <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	Setting range	Initial setting	Change in value per step	A Margin	DP left margin	0.0 to 10.0	3.0	0.5 mm	B Margin	DP leading edge margin	0.0 to 10.0	2.5	0.5 mm	C Margin	DP right margin	0.0 to 10.0	3.0	0.5 mm	D Margin	DP trailing edge margin	0.0 to 10.0	4.0	0.5 mm
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Item No.	Description																																
U410	<p>Half Tone Auto Adjustment</p> <p>Description</p> <p>Carries out processing for the data acquisition that is required in order to perform either automatic adjustment of the halftone or the ID correction operation.</p> <p>Purpose</p> <p>Performed when the quality of reproduced halftones has dropped.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Select [Normal Mode]. 2. Press the start key. A test patterns 1 and 2 are outputted. 3. Place the output test pattern 1 as the original. Place approximately 20 sheets of white paper on the test pattern 1 and set them. 4. Press the start key. Adjustment is made (first time). 5. Place the output test pattern 2 as the original. Place approximately 20 sheets of white paper on the test pattern 2 and set them. 6. Press the start key. Adjustment is made (second time). 7. When normally completed, [Finish] is displayed. If a problem occurs during auto adjustment, error code is displayed. <p>Error codes</p> <table border="1"> <thead> <tr> <th>Codes</th> <th>Description</th> <th>Codes</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>S001</td> <td>Patch not detected</td> <td>E001</td> <td>Engine status error</td> </tr> <tr> <td>S002</td> <td>Original deviation in the main scanning direction</td> <td>E002</td> <td>Engine sensor error</td> </tr> <tr> <td>S003</td> <td>Original deviation in the auxiliary scanning direction</td> <td>EFFF</td> <td>Engine other error</td> </tr> <tr> <td>S004</td> <td>Original inclination error</td> <td>C001</td> <td>Controller error</td> </tr> <tr> <td>S005</td> <td>Original type error</td> <td>C100</td> <td>Adjustment value error</td> </tr> <tr> <td>SFFF</td> <td>Scanner other error</td> <td>C200</td> <td>Adjustment value error</td> </tr> <tr> <td></td> <td></td> <td>CFFF</td> <td>Controller other error</td> </tr> </tbody> </table> <p>Completion</p> <p>Press the stop key. The screen for selecting a maintenance item is displayed.</p>	Codes	Description	Codes	Description	S001	Patch not detected	E001	Engine status error	S002	Original deviation in the main scanning direction	E002	Engine sensor error	S003	Original deviation in the auxiliary scanning direction	EFFF	Engine other error	S004	Original inclination error	C001	Controller error	S005	Original type error	C100	Adjustment value error	SFFF	Scanner other error	C200	Adjustment value error			CFFF	Controller other error
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SFFF	Scanner other error	C200	Adjustment value error																														
		CFFF	Controller other error																														

Item No.	Description												
U411	<p>Scanner Auto Adjustment</p> <p>Description</p> <p>Uses a specified original and automatically adjusts the following items in the scanner and the DP scanning sections.</p> <p>Scanner section: Original size magnification, leading edge timing, center line, input gamma, input gamma in monochrome mode and matrix</p> <p>DP scanning section: Original size magnification, leading edge timing, center line</p> <p>Purpose</p> <p>To perform automatic adjustment of various items in the scanner and the DP scanning sections.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select the item. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> <th>Original to be used for adjustment (P/N)</th> </tr> </thead> <tbody> <tr> <td>All</td> <td>Performs automatic adjustment in the DP scanning section following automatic adjustment in the scanner section</td> <td>302FZ56990/ 303LJ57010</td> </tr> <tr> <td>Table</td> <td>Automatic adjustment in the scanner section</td> <td>302FZ56990</td> </tr> <tr> <td>DP</td> <td>Automatic adjustment in the DP scanning section:</td> <td>303LJ57010</td> </tr> </tbody> </table> <p>Method: Table</p> <ol style="list-style-type: none"> 1. Enter the target values which are shown on the specified original (P/N: 302FZ56990) executing maintenance item U425. 2. Set a specified original (P/N: 302FZ56990) on the platen. 3. Enter maintenance item U411. 4. Select [Table]. 5. Press the start key. Auto adjustment starts. 6. When automatic adjustment has normally completed, [OK] is displayed. If a problem occurs during auto adjustment, [NG XX] (XX is replaced by an error code) is displayed and operation stops. Should this happen, determine the details of the problem and repeat the procedure from the beginning. 7. To return to the screen for selecting an item, press the stop key. <p>Method: DP</p> <ol style="list-style-type: none"> 1. Select [DP]. 2. Set a specified original (P/N: 303LJ57010) in the DP. 3. Press the start key. Auto adjustment starts. 4. When automatic adjustment has normally completed, [OK] is displayed. If a problem occurs during auto adjustment, [NG XX] (XX is replaced by an error code) is displayed and operation stops. Should this happen, determine the details of the problem and repeat the procedure from the beginning. 5. To return to the screen for selecting an item, press the stop key. 	Display	Description	Original to be used for adjustment (P/N)	All	Performs automatic adjustment in the DP scanning section following automatic adjustment in the scanner section	302FZ56990/ 303LJ57010	Table	Automatic adjustment in the scanner section	302FZ56990	DP	Automatic adjustment in the DP scanning section:	303LJ57010
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U411	<p>Error Codes</p> <table border="1"> <thead> <tr> <th>Codes</th> <th>Description</th> </tr> </thead> <tbody> <tr><td>01</td><td>Black band detection error (scanner leading edge registration)</td></tr> <tr><td>02</td><td>Black band detection error (scanner center line)</td></tr> <tr><td>03</td><td>Black band detection error (scanner main scanning direction magnification)</td></tr> <tr><td>04</td><td>Black band is not detected (scanner leading edge registration)</td></tr> <tr><td>05</td><td>Black band is not detected (scanner center line)</td></tr> <tr><td>06</td><td>Black band is not detected (scanner main scanning direction magnification)</td></tr> <tr><td>07</td><td>Black band is not detected</td></tr> <tr><td>08</td><td>(scanner auxiliary scanning direction magnification)</td></tr> <tr><td>09</td><td>Black band is not detected</td></tr> <tr><td>0a</td><td>(DP main scanning direction magnification far end)</td></tr> <tr><td>0b</td><td>Black band is not detected</td></tr> <tr><td>0c</td><td>(DP main scanning direction magnification near end)</td></tr> <tr><td>0d</td><td>Black band is not detected</td></tr> <tr><td>0e</td><td>(DP auxiliary scanning direction magnification leading edge)</td></tr> <tr><td>0f</td><td>Black band is not detected</td></tr> <tr><td>10</td><td>(DP auxiliary scanning direction magnification leading edge original check)</td></tr> <tr><td>11</td><td>Black band is not detected (DP auxiliary scanning direction trailing edge)</td></tr> <tr><td>12</td><td>Black band is not detected (DP auxiliary scanning direction trailing edge 2)</td></tr> <tr><td>13</td><td>DMA time out</td></tr> <tr><td>14</td><td>Auxiliary scanning direction magnification error</td></tr> <tr><td>15</td><td>Auxiliary scanning direction leading edge detection error</td></tr> <tr><td>16</td><td>Auxiliary scanning direction trailing edge detection error</td></tr> <tr><td>17</td><td>Auxiliary scanning direction skew 1.5 error</td></tr> <tr><td>18</td><td>Maintenance request error</td></tr> <tr><td>19</td><td>Main scanning direction center line error</td></tr> <tr><td>1a</td><td>Main scanning direction skew 1.5 error</td></tr> <tr><td>1b</td><td>Main scanning direction magnification error</td></tr> <tr><td>1c</td><td>Service call error</td></tr> <tr><td>1d</td><td>DP paper misfeed error</td></tr> <tr><td>1e</td><td>PWB replacement error</td></tr> <tr><td>1f</td><td>Original error</td></tr> <tr><td>1g</td><td>Input gamma adjustment original error</td></tr> <tr><td>1h</td><td>Matrix adjustment original error</td></tr> </tbody> </table> <p>Completion</p> <p>Press the stop key. The screen for selecting a maintenance item is displayed.</p>	Codes	Description	01	Black band detection error (scanner leading edge registration)	02	Black band detection error (scanner center line)	03	Black band detection error (scanner main scanning direction magnification)	04	Black band is not detected (scanner leading edge registration)	05	Black band is not detected (scanner center line)	06	Black band is not detected (scanner main scanning direction magnification)	07	Black band is not detected	08	(scanner auxiliary scanning direction magnification)	09	Black band is not detected	0a	(DP main scanning direction magnification far end)	0b	Black band is not detected	0c	(DP main scanning direction magnification near end)	0d	Black band is not detected	0e	(DP auxiliary scanning direction magnification leading edge)	0f	Black band is not detected	10	(DP auxiliary scanning direction magnification leading edge original check)	11	Black band is not detected (DP auxiliary scanning direction trailing edge)	12	Black band is not detected (DP auxiliary scanning direction trailing edge 2)	13	DMA time out	14	Auxiliary scanning direction magnification error	15	Auxiliary scanning direction leading edge detection error	16	Auxiliary scanning direction trailing edge detection error	17	Auxiliary scanning direction skew 1.5 error	18	Maintenance request error	19	Main scanning direction center line error	1a	Main scanning direction skew 1.5 error	1b	Main scanning direction magnification error	1c	Service call error	1d	DP paper misfeed error	1e	PWB replacement error	1f	Original error	1g	Input gamma adjustment original error	1h	Matrix adjustment original error
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U425	<p>Set Target Adjustment Value</p> <p>Description</p> <p>Enters the lab values that is indicated on the back of the chart (P/N: 302FZ56990) used for adjustment.</p> <p>Purpose</p> <p>Performs data input in order to correct for differences in originals during automatic adjustment.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select the item to be set. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>N875</td> <td>Setting the N875 patch for the original for adjustment</td> </tr> <tr> <td>N475</td> <td>Setting the N475 patch for the original for adjustment</td> </tr> <tr> <td>N125</td> <td>Setting the N125 patch for the original for adjustment</td> </tr> <tr> <td>C</td> <td>Setting the cyan patch for the original for adjustment</td> </tr> <tr> <td>M</td> <td>Setting the magenta patch for the original for adjustment</td> </tr> <tr> <td>Y</td> <td>Setting the yellow patch for the original for adjustment</td> </tr> <tr> <td>R</td> <td>Setting the red patch for the original for adjustment</td> </tr> <tr> <td>G</td> <td>Setting the green patch for the original for adjustment</td> </tr> <tr> <td>B</td> <td>Setting the blue patch for the original for adjustment</td> </tr> <tr> <td>Adjust Original</td> <td>Setting the main and auxiliary scanning directions</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 3. Select the item to be set. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> <th>Setting range</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>Setting the L value</td> <td>0.0 to 100.0</td> </tr> <tr> <td>a</td> <td>Setting the a value</td> <td>-200.0 to 200.0</td> </tr> <tr> <td>b</td> <td>Setting the b value</td> <td>-200.0 to 200.0</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 4. Enters the value that is indicated on the back of the chart using the cursor left/right keys or numeric keys. 5. Press the start key. The value is set. 	Display	Description	N875	Setting the N875 patch for the original for adjustment	N475	Setting the N475 patch for the original for adjustment	N125	Setting the N125 patch for the original for adjustment	C	Setting the cyan patch for the original for adjustment	M	Setting the magenta patch for the original for adjustment	Y	Setting the yellow patch for the original for adjustment	R	Setting the red patch for the original for adjustment	G	Setting the green patch for the original for adjustment	B	Setting the blue patch for the original for adjustment	Adjust Original	Setting the main and auxiliary scanning directions	Display	Description	Setting range	L	Setting the L value	0.0 to 100.0	a	Setting the a value	-200.0 to 200.0	b	Setting the b value	-200.0 to 200.0
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Item No.	Description
U425	<p>Setting: [Adjust Original]</p> <ol style="list-style-type: none"> Measure the distance from the left edge to the black belt (a) of the original at A, B and C. Measurement procedure <ol style="list-style-type: none"> Measure the distance from the edge to the black belt (a) of the original at A (30 mm from the leading edge), B (154.5 mm from the leading edge) and C (267 mm from the leading edge), respectively. Apply the following formula for the values obtained: $((A + C) / 2 + B) / 2$ Enter the values solved using the cursor left/right keys or numeric keys in [MAIN]. Press the start key. The value is set. Measure the distance from the leading edge to the black belt (c) of the original at D, E and F. Measurement procedure <ol style="list-style-type: none"> Measure the distance from the edge to the black belt (c) of the original at D (50 mm from the left edge), E (105 mm from the left edge) and F (160 mm from the left edge), respectively. Apply the following formula for the values obtained: $((D + F) / 2 + E) / 2$ Enter the values solved using the cursor left/right keys or numeric keys in [SUB LEAD]. Press the start key. The value is set. Measure the length (G) from the edge of the black belt (b) to edge of the black belt (c) of the original. Enter the measured value using the cursor left/right keys or numeric keys in [SUB TAIL]. Press the start key. The value is set. <div style="text-align: center; margin-top: 20px;"> <p style="text-align: center;">Original for adjustment (P/N: 302FZ56990)</p> </div> <div style="border: 1px solid black; padding: 5px; margin-top: 20px; width: fit-content;"> <p>[Main] = $((A+C)/2+B)/2$</p> <p>[Sub Lead] = $((D+F)/2+E)/2$</p> <p>[SubTail] = G</p> </div>

Figure 1-3-15

Completion

Press the stop key. The screen for selecting a maintenance item No. is displayed.

Item No.	Description																																																																												
U600	<p>Initialize: All Data</p> <p>Description</p> <p>Initializes software switches and all data in the backup data on the FAX control PWB, according to the destination and OEM.</p> <p>Executes the check of the file system, when abnormality of the file system is detected, initializes the file system, communication past record and register setting contents.</p> <p>Purpose</p> <p>To initialize the FAX control PWB.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select [Execute]. The screen for entering the destination code and OEM code is displayed. 3. Select [Country Code] and enter a destination code using the numeric keys (refer to the destination code list on following for the destination code). 4. Press the start key. There is no operation necessary on this screen. The destination code and the OEM code are displayed with the values currently set. 5. Press the start key. Data initialization starts. To cancel data initialization, press the stop key. 6. After data initialization, the entered destination, OEM codes and ROM version are displayed. A ROM version displays three kinds, application, boot, and IPL. <p>Destination code list</p> <table border="1"> <thead> <tr> <th>Code</th> <th>Destination</th> <th>Code</th> <th>Destination</th> </tr> </thead> <tbody> <tr> <td>000</td> <td>Japan</td> <td>253</td> <td>CTR21 (European nations)</td> </tr> <tr> <td>009</td> <td>Australia</td> <td></td> <td>Italy</td> </tr> <tr> <td>038</td> <td>China</td> <td></td> <td>Germany</td> </tr> <tr> <td>080</td> <td>Hong Kong</td> <td></td> <td>Spain</td> </tr> <tr> <td>084</td> <td>Indonesia</td> <td></td> <td>U.K.</td> </tr> <tr> <td>088</td> <td>Israel</td> <td></td> <td>Netherlands</td> </tr> <tr> <td>097</td> <td>Korea</td> <td></td> <td>Sweden</td> </tr> <tr> <td>108</td> <td>Malaysia</td> <td></td> <td>France</td> </tr> <tr> <td>126</td> <td>New Zealand</td> <td></td> <td>Austria</td> </tr> <tr> <td>136</td> <td>Peru</td> <td></td> <td>Switzerland</td> </tr> <tr> <td>137</td> <td>Philippines</td> <td></td> <td>Belgium</td> </tr> <tr> <td>152</td> <td>Middle East</td> <td></td> <td>Denmark</td> </tr> <tr> <td>156</td> <td>Singapore</td> <td></td> <td>Finland</td> </tr> <tr> <td>159</td> <td>South Africa</td> <td></td> <td>Portugal</td> </tr> <tr> <td>169</td> <td>Thailand</td> <td></td> <td>Ireland</td> </tr> <tr> <td>181</td> <td>U.S.A.</td> <td></td> <td>Norway</td> </tr> <tr> <td>242</td> <td>South America</td> <td>254</td> <td>Taiwan</td> </tr> <tr> <td>243</td> <td>Saudi Arabia</td> <td></td> <td></td> </tr> </tbody> </table>	Code	Destination	Code	Destination	000	Japan	253	CTR21 (European nations)	009	Australia		Italy	038	China		Germany	080	Hong Kong		Spain	084	Indonesia		U.K.	088	Israel		Netherlands	097	Korea		Sweden	108	Malaysia		France	126	New Zealand		Austria	136	Peru		Switzerland	137	Philippines		Belgium	152	Middle East		Denmark	156	Singapore		Finland	159	South Africa		Portugal	169	Thailand		Ireland	181	U.S.A.		Norway	242	South America	254	Taiwan	243	Saudi Arabia		
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Item No.	Description								
U601	<p>Initialize: Keep Data</p> <p>Description Initializes software switches on the FAX control PWB according to the destination and OEM.</p> <p>Purpose To initialize the FAX control PWB without changing user registration data.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select [Execute]. The screen for entering the destination code and OEM code is displayed. 3. Select [Country Code] and enter a destination code using the numeric keys (refer to the destination code list on page 1-3-44 for the destination code). 4. Press the start key. There is no operation necessary on this screen. The destination code and the OEM code are displayed with the values currently set. 5. Press the start key. Data initialization starts. To cancel data initialization, press the back key. 6. After data initialization, the entered destination, OEM codes and ROM version are displayed. A ROM version displays three kinds, application, boot, and IPL. 								
U603	<p>User Data 1</p> <p>Description Makes user settings to enable the use of the machine as a fax.</p> <p>Purpose To be executed as required.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select [Line Type] and press the start key. 3. Select the setting. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>DTMF</td> <td>DTMF</td> </tr> <tr> <td>10PPS</td> <td>10 PPS</td> </tr> <tr> <td>20PPS</td> <td>20 PPS</td> </tr> </tbody> </table> <p>* : Initial setting: DTMF</p> <ol style="list-style-type: none"> 4. Press the start key. The setting is set. <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	DTMF	DTMF	10PPS	10 PPS	20PPS	20 PPS
Display	Description								
DTMF	DTMF								
10PPS	10 PPS								
20PPS	20 PPS								

Item No.	Description						
U604	<p>User Data 2</p> <p>Description Makes user settings to enable the use of the machine as a fax.</p> <p>Purpose Use this if the user wishes to adjust the number of rings that occur before the unit switches into fax receiving mode when fax/telephone auto-select is enabled.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Change the setting using the cursor left/right keys or numeric keys. <table border="1"> <thead> <tr> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> </tr> </thead> <tbody> <tr> <td>Number of fax/telephone rings</td> <td>0 to 15</td> <td>2 (120 V)/1 (220-240 V)</td> </tr> </tbody> </table> <p>* : If you set this to 0, the unit will start fax reception without any ringing.</p> <ol style="list-style-type: none"> 3. Press the start key. The value is set. <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Description	Setting range	Initial setting	Number of fax/telephone rings	0 to 15	2 (120 V)/1 (220-240 V)
Description	Setting range	Initial setting					
Number of fax/telephone rings	0 to 15	2 (120 V)/1 (220-240 V)					
U605	<p>Clear Data</p> <p>Description Initializes data related to the fax transmission such as transmission history.</p> <p>Purpose To clear the transmission history.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select [Comm REC]. 3. Press the start key. Initialization processing starts. When processing is finished, [Completed] is displayed. <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>						

Item No.	Description																								
U610	<p>System Setting 1</p> <p>Description</p> <p>Makes settings for fax reception regarding the sizes of the fax paper and received images and automatic printing of the protocol list.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select the item to be set. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Cut Line:100%</td> <td>Sets the number of lines to be ignored when receiving a fax at 100% magnification.</td> </tr> <tr> <td>Cut Line:Auto</td> <td>Sets the number of lines to be ignored when receiving a fax in the auto reduction mode.</td> </tr> <tr> <td>Cut Line:A4</td> <td>Sets the number of lines to be ignored when receiving a fax (A4R/LetterR) in the auto reduction mode.</td> </tr> </tbody> </table> <p>Setting the number of lines to be ignored when receiving a fax at 100% magnification</p> <p>Sets the maximum number of lines to be ignored if the received data volume exceeds the recording capacity when recording the data at 100% magnification. If the number of excess lines is below the setting, those lines are ignored. If over the setting, they are recorded on the next page.</p> <ol style="list-style-type: none"> 1. Change the setting using the cursor left/right keys or numeric keys. <table border="1"> <thead> <tr> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> <th>Change in value per step</th> </tr> </thead> <tbody> <tr> <td>Number of lines to be ignored when receiving at 100%</td> <td>0 to 22</td> <td>3</td> <td>16 lines</td> </tr> </tbody> </table> <p>* : Increase the setting if a blank second page is output, and decrease it if the received image does not include the entire transmitted data.</p> <ol style="list-style-type: none"> 2. Press the start key. The value is set. <p>Setting the number of lines to be ignored when receiving a fax in the auto reduction mode</p> <p>Sets the maximum number of lines to be ignored if the received data volume exceeds the recording capacity when the data is recorded in the auto reduction mode. If the number of excess lines is below the setting, those lines are ignored. If over the setting, the entire data on a page is further reduced so that it can be recorded on the same page.</p> <ol style="list-style-type: none"> 1. Change the setting using the cursor left/right keys or numeric keys. <table border="1"> <thead> <tr> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> <th>Change in value per step</th> </tr> </thead> <tbody> <tr> <td>Number of lines to be ignored when receiving in the auto reduction mode</td> <td>0 to 22</td> <td>0</td> <td>16 lines</td> </tr> </tbody> </table> <p>* : Increase the setting if a page received in the reduction mode is over-reduced and too much trailing edge margin is left. Decrease it if the received image does not include all transmitted data.</p> <ol style="list-style-type: none"> 2. Press the start key. The value is set. 	Display	Description	Cut Line:100%	Sets the number of lines to be ignored when receiving a fax at 100% magnification.	Cut Line:Auto	Sets the number of lines to be ignored when receiving a fax in the auto reduction mode.	Cut Line:A4	Sets the number of lines to be ignored when receiving a fax (A4R/LetterR) in the auto reduction mode.	Description	Setting range	Initial setting	Change in value per step	Number of lines to be ignored when receiving at 100%	0 to 22	3	16 lines	Description	Setting range	Initial setting	Change in value per step	Number of lines to be ignored when receiving in the auto reduction mode	0 to 22	0	16 lines
Display	Description																								
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Item No.	Description								
U610	<p>Setting the number of lines to be ignored when receiving a fax (A4R/LetterR) in the auto reduction mode</p> <p>Sets the maximum number of lines to be ignored if the received data volume exceeds the recording capacity when the data is recorded in the auto reduction mode onto A4R or LetterR paper under the conditions below.</p> <p>If the number of excess lines is below the setting, those lines are ignored. If over the setting, the entire data on a page is further reduced so that it can be recorded on the same page.</p> <p>1. Change the setting using the cursor left/right keys or numeric keys.</p> <table border="1"> <thead> <tr> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> <th>Change in value per step</th> </tr> </thead> <tbody> <tr> <td>Number of lines to be ignored when receiving a fax (A4R, letter) in the auto reduction mode</td> <td>0 to 22</td> <td>0</td> <td>16 lines</td> </tr> </tbody> </table> <p>* : Increase the setting if a page received in the reduction mode is over-reduced and too much trailing edge margin is left. Decrease it if the received image does not include all transmitted data.</p> <p>2. Press the start key. The value is set.</p> <p>Completion</p> <p>Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Description	Setting range	Initial setting	Change in value per step	Number of lines to be ignored when receiving a fax (A4R, letter) in the auto reduction mode	0 to 22	0	16 lines
Description	Setting range	Initial setting	Change in value per step						
Number of lines to be ignored when receiving a fax (A4R, letter) in the auto reduction mode	0 to 22	0	16 lines						

Item No.	Description																										
U611	<p>System Setting 2</p> <p>Description</p> <p>Sets the number of adjustment lines for automatic reduction.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select the item to be set. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Adj Lines</td> <td>Sets the number of adjustment lines for automatic reduction.</td> </tr> <tr> <td>Adj Lines(A4)</td> <td>Sets the number of adjustment lines for automatic reduction when A4 paper is set.</td> </tr> <tr> <td>Adj Lines(LT)</td> <td>Sets the number of adjustment lines for automatic reduction when letter size paper is set.</td> </tr> </tbody> </table> <p>Setting the number of adjustment lines for automatic reduction</p> <p>Sets the number of adjustment lines for automatic reduction.</p> <ol style="list-style-type: none"> 1. Change the setting using the cursor left/right keys or numeric keys. <table border="1"> <thead> <tr> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> </tr> </thead> <tbody> <tr> <td>Number of adjustment lines for automatic reduction</td> <td>0 to 22</td> <td>7</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 2. Press the start key. The value is set. <p>Setting the number of adjustment lines for automatic reduction when A4 paper is set</p> <p>Sets the number of adjustment lines for automatic reduction when A4 paper is set.</p> <ol style="list-style-type: none"> 1. Change the setting using the cursor left/right keys or numeric keys. <table border="1"> <thead> <tr> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> </tr> </thead> <tbody> <tr> <td>Number of adjustment lines for automatic reduction when A4 paper is set</td> <td>0 to 22</td> <td>22</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 2. Press the start key. The value is set. <p>Setting the number of adjustment lines for automatic reduction when letter size paper is set</p> <p>Sets the number of adjustment lines for automatic reduction when letter size paper is set.</p> <ol style="list-style-type: none"> 1. Change the setting using the cursor left/right keys or numeric keys. <table border="1"> <thead> <tr> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> </tr> </thead> <tbody> <tr> <td>Number of adjustment lines for automatic reduction when letter size paper is set</td> <td>0 to 26</td> <td>26</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 2. Press the start key. The value is set. <p>Completion</p> <p>Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	Adj Lines	Sets the number of adjustment lines for automatic reduction.	Adj Lines(A4)	Sets the number of adjustment lines for automatic reduction when A4 paper is set.	Adj Lines(LT)	Sets the number of adjustment lines for automatic reduction when letter size paper is set.	Description	Setting range	Initial setting	Number of adjustment lines for automatic reduction	0 to 22	7	Description	Setting range	Initial setting	Number of adjustment lines for automatic reduction when A4 paper is set	0 to 22	22	Description	Setting range	Initial setting	Number of adjustment lines for automatic reduction when letter size paper is set	0 to 26	26
Display	Description																										
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Description	Setting range	Initial setting																									
Number of adjustment lines for automatic reduction when letter size paper is set	0 to 26	26																									

Item No.	Description																						
U612	<p>System Setting 3</p> <p>Description</p> <p>Makes settings for fax transmission regarding operation and automatic printing of the protocol list. This determines how trailing edge margin is detected (to prevent image from being mutilated) while printing a received Fax.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select the item to be set. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Auto Reduction</td> <td>Selects if auto reduction in the auxiliary direction is to be performed.</td> </tr> <tr> <td>Protocol List</td> <td>Sets the automatic printing of the protocol list.</td> </tr> <tr> <td>Detect Trail</td> <td>Sets how trailing edge margins are detected</td> </tr> </tbody> </table> <p>Selecting if auto reduction in the auxiliary direction is to be performed</p> <p>Sets whether to receive a long document by automatically reducing it in the auxiliary direction or at 100% magnification.</p> <ol style="list-style-type: none"> 1. Select the setting using the cursor left/right keys. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>On</td> <td>Auto reduction is performed if the received document is longer than the fax paper.</td> </tr> <tr> <td>Off</td> <td>Auto reduction is not performed.</td> </tr> </tbody> </table> <p>* : Initial setting: On</p> <ol style="list-style-type: none"> 2. Press the start key. The setting is set. <p>Setting the automatic printing of the protocol list</p> <p>Sets if the protocol list is automatically printed out.</p> <ol style="list-style-type: none"> 1. Select the setting using the cursor left/right keys. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>On</td> <td>The protocol list is automatically printed out after communication.</td> </tr> <tr> <td>Err</td> <td>The protocol list is automatically printed out after communication only if a communication error occurs.</td> </tr> <tr> <td>Off</td> <td>The protocol list is not printed out automatically.</td> </tr> </tbody> </table> <p>* : Initial setting: Off</p> <ol style="list-style-type: none"> 2. Press the start key. The setting is set. 	Display	Description	Auto Reduction	Selects if auto reduction in the auxiliary direction is to be performed.	Protocol List	Sets the automatic printing of the protocol list.	Detect Trail	Sets how trailing edge margins are detected	Display	Description	On	Auto reduction is performed if the received document is longer than the fax paper.	Off	Auto reduction is not performed.	Display	Description	On	The protocol list is automatically printed out after communication.	Err	The protocol list is automatically printed out after communication only if a communication error occurs.	Off	The protocol list is not printed out automatically.
Display	Description																						
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Err	The protocol list is automatically printed out after communication only if a communication error occurs.																						
Off	The protocol list is not printed out automatically.																						

Item No.	Description						
U612	<p>Setting how trailing edge margins are detected This determines whether trailing edge margin is detected (to prevent image from being mutilated) while printing a received Fax.</p> <ol style="list-style-type: none"> 1. Select On or Off using the cursor left/right keys. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>On</td> <td>Detects trailing edge margin</td> </tr> <tr> <td>Off</td> <td>Does not detect trailing edge margin</td> </tr> </tbody> </table> <p>* : Initial setting: On</p> <ol style="list-style-type: none"> 2. Press the start key. The setting is set. <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	On	Detects trailing edge margin	Off	Does not detect trailing edge margin
Display	Description						
On	Detects trailing edge margin						
Off	Does not detect trailing edge margin						
U620	<p>FAX System</p> <p>Description Sets the signal detection method for remote switching. Be sure to change the setting according to the type of telephone connected to the machine.</p> <p>Setting</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select [Remort Mode] and press the start key. 3. Select the mode. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>One</td> <td>One-shot detection</td> </tr> <tr> <td>Cont</td> <td>Continuous detection</td> </tr> </tbody> </table> <p>* : Initial setting: One</p> <ol style="list-style-type: none"> 4. Press the start key. The setting is set. <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	One	One-shot detection	Cont	Continuous detection
Display	Description						
One	One-shot detection						
Cont	Continuous detection						

Item No.	Description																		
U625	<p>Set Communication</p> <p>Description Makes settings for the auto redialing interval and the number of times of auto redialing.</p> <p>Purpose Change the setting to prevent the following problems: fax transmission is not possible due to too short redial interval, or fax transmission takes too much time to complete due to too long redial interval.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select the item to be set. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Interval</td> <td>Setting the auto redialing interval</td> </tr> <tr> <td>Times</td> <td>Setting the number of times of auto redialing</td> </tr> </tbody> </table> <p>Setting the auto redialing interval</p> <ol style="list-style-type: none"> 1. Change the setting using the cursor left/right keys. <table border="1"> <thead> <tr> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> </tr> </thead> <tbody> <tr> <td>Redialing interval</td> <td>1 to 9 (min.)</td> <td>3 (120 V)/2 (220-240 V)</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 2. Press the start key. The value is set. <p>Setting the number of times of auto redialing</p> <ol style="list-style-type: none"> 1. Change the setting using the cursor left/right keys or numeric keys. <table border="1"> <thead> <tr> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> </tr> </thead> <tbody> <tr> <td>Number of redialing</td> <td>0 to 15</td> <td>2 (120 V)/3 (220-240 V)</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 2. Press the start key. The value is set. <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	Interval	Setting the auto redialing interval	Times	Setting the number of times of auto redialing	Description	Setting range	Initial setting	Redialing interval	1 to 9 (min.)	3 (120 V)/2 (220-240 V)	Description	Setting range	Initial setting	Number of redialing	0 to 15	2 (120 V)/3 (220-240 V)
Display	Description																		
Interval	Setting the auto redialing interval																		
Times	Setting the number of times of auto redialing																		
Description	Setting range	Initial setting																	
Redialing interval	1 to 9 (min.)	3 (120 V)/2 (220-240 V)																	
Description	Setting range	Initial setting																	
Number of redialing	0 to 15	2 (120 V)/3 (220-240 V)																	

Item No.	Description																														
U630	<p>Communication Control 1</p> <p>Description</p> <p>Makes settings for fax transmission regarding the communication.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select the item to be set. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>TX Speed</td> <td>Sets the communication starting speed.</td> </tr> <tr> <td>RX Speed</td> <td>Sets the reception speed.</td> </tr> <tr> <td>TX Echo</td> <td>Sets the waiting period to prevent echo problems at the sender.</td> </tr> <tr> <td>RX Echo</td> <td>Sets the waiting period to prevent echo problems at the receiver.</td> </tr> </tbody> </table> <p>Setting the communication starting speed</p> <p>Sets the initial communication speed when starting transmission. When the destination unit has V.34 capability, V.34 is selected for transmission, regardless of this setting.</p> <ol style="list-style-type: none"> 1. Select the setting. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>14400bps/V17</td> <td>V.17, 14400 bps</td> </tr> <tr> <td>9600bps/V29</td> <td>V.17, 9600 bps</td> </tr> <tr> <td>4800bps/V27ter</td> <td>V.27ter, 4800 bps</td> </tr> <tr> <td>2400bps/V27ter</td> <td>V.27ter, 2400 bps</td> </tr> </tbody> </table> <p>* : Initial setting: 14400bps/V17</p> <ol style="list-style-type: none"> 2. Press the start key. The setting is set. <p>Setting the reception speed</p> <p>Sets the reception speed that the sender is informed of using the DIS or NSF signal. When the destination unit has V.34 capability, V.34 is selected, regardless of the setting.</p> <ol style="list-style-type: none"> 1. Select the setting. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>14400bps</td> <td>V.17, V.33, V.29, V.27ter</td> </tr> <tr> <td>9600bps</td> <td>V.29, V.27ter</td> </tr> <tr> <td>4800bps</td> <td>V.27ter</td> </tr> <tr> <td>2400bps</td> <td>V.27ter (fallback only)</td> </tr> </tbody> </table> <p>* : Initial setting: 14400bps</p> <ol style="list-style-type: none"> 2. Press the start key. The setting is set. 	Display	Description	TX Speed	Sets the communication starting speed.	RX Speed	Sets the reception speed.	TX Echo	Sets the waiting period to prevent echo problems at the sender.	RX Echo	Sets the waiting period to prevent echo problems at the receiver.	Display	Description	14400bps/V17	V.17, 14400 bps	9600bps/V29	V.17, 9600 bps	4800bps/V27ter	V.27ter, 4800 bps	2400bps/V27ter	V.27ter, 2400 bps	Display	Description	14400bps	V.17, V.33, V.29, V.27ter	9600bps	V.29, V.27ter	4800bps	V.27ter	2400bps	V.27ter (fallback only)
Display	Description																														
TX Speed	Sets the communication starting speed.																														
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2400bps/V27ter	V.27ter, 2400 bps																														
Display	Description																														
14400bps	V.17, V.33, V.29, V.27ter																														
9600bps	V.29, V.27ter																														
4800bps	V.27ter																														
2400bps	V.27ter (fallback only)																														

Item No.	Description												
U630	<p>Setting the waiting period to prevent echo problems at the sender</p> <p>Sets the period before a DCS signal is sent after a DIS signal is received. Used when problems occur due to echoes at the sender.</p> <p>1. Select the setting.</p> <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>500</td> <td>Sends a DCS 500 ms after receiving a DIS.</td> </tr> <tr> <td>300</td> <td>Sends a DCS 300 ms after receiving a DIS.</td> </tr> </tbody> </table> <p>* : Initial setting: 300</p> <p>2. Press the start key. The setting is set.</p> <p>Setting the waiting period to prevent echo problems at the receiver</p> <p>Sets the period before an NSF, CSI or DIS signal is sent after a CED signal is received. Used when problems occur due to echoes at the receiver.</p> <p>1. Select the setting.</p> <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>500</td> <td>Sends an NSF, CSI or DIS 500 ms after receiving a CED.</td> </tr> <tr> <td>75</td> <td>Sends an NSF, CSI or DIS 75 ms after receiving a CED.</td> </tr> </tbody> </table> <p>* : Initial setting: 75</p> <p>2. Press the start key. The setting is set.</p> <p>Completion</p> <p>Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	500	Sends a DCS 500 ms after receiving a DIS.	300	Sends a DCS 300 ms after receiving a DIS.	Display	Description	500	Sends an NSF, CSI or DIS 500 ms after receiving a CED.	75	Sends an NSF, CSI or DIS 75 ms after receiving a CED.
Display	Description												
500	Sends a DCS 500 ms after receiving a DIS.												
300	Sends a DCS 300 ms after receiving a DIS.												
Display	Description												
500	Sends an NSF, CSI or DIS 500 ms after receiving a CED.												
75	Sends an NSF, CSI or DIS 75 ms after receiving a CED.												

Item No.	Description																										
U631	<p>Communication Control 2</p> <p>Description</p> <p>Makes settings regarding fax transmission.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select the item to be set. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>ECM TX</td> <td>Sets ECM transmission.</td> </tr> <tr> <td>ECM RX</td> <td>Sets ECM reception.</td> </tr> <tr> <td>CED Freq</td> <td>Sets the frequency of the CED signal.</td> </tr> </tbody> </table> <p>Setting ECM transmission</p> <p>To be set to Off when reduction of transmission costs is of higher priority than image quality. This should not be set to Off when connecting to the IP (Internet Protocol) telephone line.</p> <ol style="list-style-type: none"> 1. Select the setting. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>On</td> <td>ECM transmission is enabled.</td> </tr> <tr> <td>Off</td> <td>ECM transmission is disabled.</td> </tr> </tbody> </table> <p>* : Initial setting: On</p> <ol style="list-style-type: none"> 2. Press the start key. The setting is set. <p>Setting ECM reception</p> <p>To be set to Off when reduction of transmission costs is of higher priority than image quality. This should not be set to Off when connecting to the IP (Internet Protocol) telephone line.</p> <ol style="list-style-type: none"> 1. Select the setting. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>On</td> <td>ECM reception is enabled.</td> </tr> <tr> <td>Off</td> <td>ECM reception is disabled.</td> </tr> </tbody> </table> <p>* : Initial setting: On</p> <ol style="list-style-type: none"> 2. Press the start key. The setting is set. <p>Setting the frequency of the CED signal</p> <p>Sets the frequency of the CED signal. Used as one of the measures to improve transmission performance for international communications.</p> <ol style="list-style-type: none"> 1. Select the setting. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>2100</td> <td>2100 Hz</td> </tr> <tr> <td>1100</td> <td>1100 Hz</td> </tr> </tbody> </table> <p>* : Initial setting: 2100</p> <ol style="list-style-type: none"> 2. Press the start key. The setting is set. <p>Completion</p> <p>Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	ECM TX	Sets ECM transmission.	ECM RX	Sets ECM reception.	CED Freq	Sets the frequency of the CED signal.	Display	Description	On	ECM transmission is enabled.	Off	ECM transmission is disabled.	Display	Description	On	ECM reception is enabled.	Off	ECM reception is disabled.	Display	Description	2100	2100 Hz	1100	1100 Hz
Display	Description																										
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Display	Description																										
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1100	1100 Hz																										

Item No.	Description																		
U632	<p>Communication Control 3</p> <p>Description</p> <p>Makes settings for fax transmission regarding the communication.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select the item to be set. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>DIS 4Byte</td> <td>Sets the DIS signal to 4 bytes.</td> </tr> <tr> <td>Num OF CNG(F/T)</td> <td>Sets the CNG detection times in the fax/telephone auto select mode.</td> </tr> </tbody> </table> <p>Setting the DIS signal to 4 bytes</p> <p>Sets if bit 33 and later bits of the DIS/DTC signal are sent.</p> <ol style="list-style-type: none"> 1. Select the setting. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>On</td> <td>Bit 33 and later bits of the DIS/DTC signal are not sent.</td> </tr> <tr> <td>Off</td> <td>Bit 33 and later bits of the DIS/DTC signal are sent.</td> </tr> </tbody> </table> <p>* : Initial setting: Off</p> <ol style="list-style-type: none"> 2. Press the start key. The setting is set. <p>Setting the CNG detection times in the fax/telephone auto select mode</p> <p>Sets the CNG detection times in the fax/telephone auto select mode.</p> <ol style="list-style-type: none"> 1. Select the setting. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1Time</td> <td>Detects CNG once.</td> </tr> <tr> <td>2Time</td> <td>Detects CNG twice.</td> </tr> </tbody> </table> <p>* : Initial setting: 2Time</p> <ol style="list-style-type: none"> 2. Press the start key. The setting is set. <p>Completion</p> <p>Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	DIS 4Byte	Sets the DIS signal to 4 bytes.	Num OF CNG(F/T)	Sets the CNG detection times in the fax/telephone auto select mode.	Display	Description	On	Bit 33 and later bits of the DIS/DTC signal are not sent.	Off	Bit 33 and later bits of the DIS/DTC signal are sent.	Display	Description	1Time	Detects CNG once.	2Time	Detects CNG twice.
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Display	Description																		
1Time	Detects CNG once.																		
2Time	Detects CNG twice.																		

Item No.	Description																										
U633	<p>Communication Control 4</p> <p>Description</p> <p>Makes settings for fax transmission regarding the communication.</p> <p>Purpose</p> <p>To reduce transmission errors when a low quality line is used.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select the item to be set. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>V.34</td> <td>Enables or disables V.34 communication.</td> </tr> <tr> <td>V.34-3429Hz</td> <td>Sets the V.34 symbol speed (3429 Hz).</td> </tr> <tr> <td>DIS 2Res</td> <td>Sets the number of times of DIS signal reception.</td> </tr> <tr> <td>RTN Check</td> <td>Sets the reference for RTN signal output.</td> </tr> </tbody> </table> <p>Enabling/disabling V.34 communication</p> <p>Sets whether V.34 communication is enabled/disabled for transmission and reception.</p> <ol style="list-style-type: none"> 1. Select the setting <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>On</td> <td>V.34 communication is enabled for both transmission and reception.</td> </tr> <tr> <td>TX</td> <td>V.34 communication is enabled for transmission only.</td> </tr> <tr> <td>RX</td> <td>V.34 communication is enabled for reception only.</td> </tr> <tr> <td>Off</td> <td>V.34 communication is disabled for both transmission and reception.</td> </tr> </tbody> </table> <p>* : Initial setting: On</p> <ol style="list-style-type: none"> 2. Press the start key. The setting is set. <p>Setting the V.34 symbol speed (3429 Hz)</p> <p>Sets if the V.34 symbol speed 3429 Hz is used.</p> <ol style="list-style-type: none"> 1. Select the setting <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>On</td> <td>V.34 symbol speed 3429 Hz is used.</td> </tr> <tr> <td>Off</td> <td>V.34 symbol speed 3429 Hz is not used.</td> </tr> </tbody> </table> <p>* : Initial setting: On</p> <ol style="list-style-type: none"> 2. Press the start key. The setting is set. 	Display	Description	V.34	Enables or disables V.34 communication.	V.34-3429Hz	Sets the V.34 symbol speed (3429 Hz).	DIS 2Res	Sets the number of times of DIS signal reception.	RTN Check	Sets the reference for RTN signal output.	Display	Description	On	V.34 communication is enabled for both transmission and reception.	TX	V.34 communication is enabled for transmission only.	RX	V.34 communication is enabled for reception only.	Off	V.34 communication is disabled for both transmission and reception.	Display	Description	On	V.34 symbol speed 3429 Hz is used.	Off	V.34 symbol speed 3429 Hz is not used.
Display	Description																										
V.34	Enables or disables V.34 communication.																										
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Item No.	Description																
U633	<p>Setting the number of times of DIS signal reception Sets the number of times to receive the DIS signal to once or twice. Used as one of the correction measures for transmission errors and other problems.</p> <ol style="list-style-type: none"> Select the setting. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Once</td> <td>Responds to the first signal.</td> </tr> <tr> <td>Twice</td> <td>Responds to the second signal.</td> </tr> </tbody> </table> <p>* : Initial setting: Once</p> <ol style="list-style-type: none"> Press the start key. The setting is set. <p>Setting the reference for RTN signal output Sets the error line rate as the reference for RTN signal output. If transmission errors occur frequently due to the quality of the line, they can be reduced by lowering this setting.</p> <ol style="list-style-type: none"> Select the setting. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>5%</td> <td>Error line rate of 5%</td> </tr> <tr> <td>10%</td> <td>Error line rate of 10%</td> </tr> <tr> <td>15%</td> <td>Error line rate of 15%</td> </tr> <tr> <td>20%</td> <td>Error line rate of 20%</td> </tr> </tbody> </table> <p>* : Initial setting: 15%</p> <ol style="list-style-type: none"> Press the start key. The setting is set. <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	Once	Responds to the first signal.	Twice	Responds to the second signal.	Display	Description	5%	Error line rate of 5%	10%	Error line rate of 10%	15%	Error line rate of 15%	20%	Error line rate of 20%
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20%	Error line rate of 20%																
U634	<p>Communication Control 5</p> <p>Description Sets the maximum number of error bytes judged acceptable when receiving a TCF signal. Used as a measure to ease transmission conditions if transmission errors occur.</p> <p>Setting</p> <ol style="list-style-type: none"> Press the start key. Change the setting using the cursor left/right keys or numeric keys. <table border="1"> <thead> <tr> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> </tr> </thead> <tbody> <tr> <td>Number of allowed error bytes when detecting TCF</td> <td>0 to 255</td> <td>0</td> </tr> </tbody> </table> <ol style="list-style-type: none"> Press the start key. The value is set. <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Description	Setting range	Initial setting	Number of allowed error bytes when detecting TCF	0 to 255	0										
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Number of allowed error bytes when detecting TCF	0 to 255	0															

Item No.	Description																		
U640	<p>Communication Time 1</p> <p>Description</p> <p>Sets the detection time when one-shot detection is selected for remote switching. (This setting item will be displayed, but the setting made is ineffective.)</p> <p>Sets the detection time when continuous detection is selected for remote switching. (This setting item will be displayed, but the setting made is ineffective.)</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select the item to be set. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Time (One)</td> <td>Sets the one-shot detection time for remote switching.</td> </tr> <tr> <td>Time (Cont)</td> <td>Sets the continuous detection time for remote switching.</td> </tr> </tbody> </table> <p>Setting the one-shot detection time for remote switching</p> <ol style="list-style-type: none"> 1. Change the setting using the cursor left/right keys. <table border="1"> <thead> <tr> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> </tr> </thead> <tbody> <tr> <td>One-shot detection time for remote switching</td> <td>0 to 255</td> <td>7</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 2. Press the start key. The value is set. <p>Setting the continuous detection time for remote switching</p> <ol style="list-style-type: none"> 1. Change the setting using the cursor left/right keys. <table border="1"> <thead> <tr> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> </tr> </thead> <tbody> <tr> <td>Continuous detection time for remote switching</td> <td>0 to 255</td> <td>80</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 2. Press the start key. The value is set. <p>Completion</p> <p>Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	Time (One)	Sets the one-shot detection time for remote switching.	Time (Cont)	Sets the continuous detection time for remote switching.	Description	Setting range	Initial setting	One-shot detection time for remote switching	0 to 255	7	Description	Setting range	Initial setting	Continuous detection time for remote switching	0 to 255	80
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Continuous detection time for remote switching	0 to 255	80																	

Item No.	Description																														
U641	<p>Communication Time 2</p> <p>Description</p> <p>Sets the time-out time for fax transmission.</p> <p>Purpose</p> <p>To improve transmission performance for international communications mainly.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select the item to be set. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>T0 Time Out</td> <td>Sets the T0 time-out time.</td> </tr> <tr> <td>T1 Time Out</td> <td>Sets the T1 time-out time.</td> </tr> <tr> <td>T2 Time Out</td> <td>Sets the T2 time-out time.</td> </tr> <tr> <td>Ta Time Out</td> <td>Sets the Ta time-out time.</td> </tr> <tr> <td>Tb1 Time Out</td> <td>Sets the Tb1 time-out time.</td> </tr> <tr> <td>Tb2 Time Out</td> <td>Sets the Tb2 time-out time.</td> </tr> <tr> <td>Tc Time Out</td> <td>Sets the Tc time-out time.</td> </tr> <tr> <td>Td Time Out</td> <td>Sets the Td time-out time.</td> </tr> </tbody> </table> <p>Setting the T0 time-out time</p> <p>Sets the time before detecting a CED or DIS signal after a dialing signal is sent. Depending on the quality of the exchange, or when the auto select function is selected at the destination unit, a line can be disconnected. Change the setting to prevent this problem.</p> <ol style="list-style-type: none"> 1. Change the setting using the cursor left/right keys. <table border="1"> <thead> <tr> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> </tr> </thead> <tbody> <tr> <td>T0 time-out time</td> <td>30 to 90 s</td> <td>56</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 2. Press the start key. The value is set. <p>Setting the T1 time-out time</p> <p>Sets the time before receiving the correct signal after call reception. No change is necessary for this maintenance item.</p> <ol style="list-style-type: none"> 1. Change the setting using the cursor left/right keys. <table border="1"> <thead> <tr> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> </tr> </thead> <tbody> <tr> <td>T1 time-out time</td> <td>30 to 90 s</td> <td>36</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 2. Press the start key. The value is set. 	Display	Description	T0 Time Out	Sets the T0 time-out time.	T1 Time Out	Sets the T1 time-out time.	T2 Time Out	Sets the T2 time-out time.	Ta Time Out	Sets the Ta time-out time.	Tb1 Time Out	Sets the Tb1 time-out time.	Tb2 Time Out	Sets the Tb2 time-out time.	Tc Time Out	Sets the Tc time-out time.	Td Time Out	Sets the Td time-out time.	Description	Setting range	Initial setting	T0 time-out time	30 to 90 s	56	Description	Setting range	Initial setting	T1 time-out time	30 to 90 s	36
Display	Description																														
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Item No.	Description																						
U641	<p>Setting the T2 time-out time</p> <p>The T2 time-out time decides the following.</p> <p>From CFR signal output to image data reception</p> <p>From image data reception to the next signal reception</p> <p>In ECM, from RNR signal detection to the next signal reception</p> <ol style="list-style-type: none"> 1. Change the setting using the cursor left/right keys. <table border="1"> <thead> <tr> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> <th>Change in value per step</th> </tr> </thead> <tbody> <tr> <td>T2 time-out time</td> <td>1 to 255</td> <td>69</td> <td>100 ms</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 2. Press the start key. The value is set. <p>Setting the Ta time-out time</p> <p>In the fax/telephone auto select mode, sets the time to continue ringing an operator through the connected telephone after receiving a call as a fax machine (see figure 1-3-16). A fax signal is received within the Ta set time, or the fax mode is selected automatically when the time elapses. In fax/telephone auto select mode, change the setting when fax reception is unsuccessful or a telephone fails to receive a call.</p> <ol style="list-style-type: none"> 1. Change the setting using the cursor left/right keys. <table border="1"> <thead> <tr> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> </tr> </thead> <tbody> <tr> <td>Ta time-out time</td> <td>1 to 255</td> <td>30</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 2. Press the start key. The value is set. <div> </div> <p>Figure 1-3-16 Ta/Tb1/Tb2 time-out time</p> <p>Setting the Tb1 time-out time</p> <p>In the fax/telephone auto select mode, sets the time to start sending the ring back tone after receiving a call as a fax machine (see figure 1-3-16). In fax/telephone auto select mode, change the setting when fax reception is unsuccessful or a telephone fails to receive a call.</p> <ol style="list-style-type: none"> 1. Change the setting using the cursor left/right keys. <table border="1"> <thead> <tr> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> <th>Change in value per step</th> </tr> </thead> <tbody> <tr> <td>Tb1 time-out time</td> <td>1 to 255</td> <td>20</td> <td>100 ms</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 2. Press the start key. The value is set. 	Description	Setting range	Initial setting	Change in value per step	T2 time-out time	1 to 255	69	100 ms	Description	Setting range	Initial setting	Ta time-out time	1 to 255	30	Description	Setting range	Initial setting	Change in value per step	Tb1 time-out time	1 to 255	20	100 ms
Description	Setting range	Initial setting	Change in value per step																				
T2 time-out time	1 to 255	69	100 ms																				
Description	Setting range	Initial setting																					
Ta time-out time	1 to 255	30																					
Description	Setting range	Initial setting	Change in value per step																				
Tb1 time-out time	1 to 255	20	100 ms																				

Item No.	Description																				
U641	<p>Setting the Tb2 time-out time</p> <p>In the fax/telephone auto select mode, sets the time to start ringing an operator through the connected telephone after receiving a call as a fax machine (see figure 1-3-16). In the fax/telephone auto select mode, change the setting when fax reception is unsuccessful or a telephone fails to receive a call.</p> <ol style="list-style-type: none"> 1. Change the setting using the cursor left/right keys. <table border="1"> <thead> <tr> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> <th>Change in value per step</th> </tr> </thead> <tbody> <tr> <td>Tb2 time-out time</td> <td>1 to 255</td> <td>80</td> <td>100 ms</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 2. Press the start key. The value is set. <p>Setting the Tc time-out time</p> <p>In the TAD mode, set the time to check if there are any triggers for shifting to fax reception after a connected telephone receives a call. Only the telephone function is available if shifting is not made within the set Tc time.</p> <p>In the TAD mode, change the setting when fax reception is unsuccessful or a telephone fails to receive a call.</p> <ol style="list-style-type: none"> 1. Change the setting using the cursor left/right keys. <table border="1"> <thead> <tr> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> </tr> </thead> <tbody> <tr> <td>Tc time-out time</td> <td>1 to 255</td> <td>60</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 2. Press the start key. The value is set. <p>Setting the Td time-out time</p> <p>Sets the length of the time required to determine silent status (fax), one of the triggers for Tc time check. In the TAD mode, change the setting when fax reception is unsuccessful or a telephone fails to receive a call. Be sure not to set it too short; otherwise, the mode may be shifted to fax while the unit is being used as a telephone.</p> <ol style="list-style-type: none"> 1. Change the setting using the cursor left/right keys. <table border="1"> <thead> <tr> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> </tr> </thead> <tbody> <tr> <td>Td time-out time</td> <td>1 to 255</td> <td>9 (120 V)/6 (220-240 V)</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 2. Press the start key. The value is set. <p>Completion</p> <p>Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Description	Setting range	Initial setting	Change in value per step	Tb2 time-out time	1 to 255	80	100 ms	Description	Setting range	Initial setting	Tc time-out time	1 to 255	60	Description	Setting range	Initial setting	Td time-out time	1 to 255	9 (120 V)/6 (220-240 V)
Description	Setting range	Initial setting	Change in value per step																		
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Description	Setting range	Initial setting																			
Td time-out time	1 to 255	9 (120 V)/6 (220-240 V)																			

Item No.	Description								
U650	<p>Modem 1</p> <p>Description Sets the G3 cable equalizer. Sets the modem detection level.</p> <p>Purpose Perform the following adjustment to make the equalizer compatible with the line characteristics. To improve the transmission performance when a low quality line is used.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select the item to be set. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Reg G3 TX Eqr</td> <td>Sets the G3 transmission cable equalizer.</td> </tr> <tr> <td>Reg G3 RX Eqr</td> <td>Sets the G3 reception cable equalizer.</td> </tr> <tr> <td>RX Mdm Level</td> <td>Sets the modem detection level.</td> </tr> </tbody> </table> <p>Setting the G3 transmission cable equalizer</p> <ol style="list-style-type: none"> 1. Select [0dB], [4dB], [8dB] or [12dB]. * : Initial setting: 0dB 2. Press the start key. The setting is set. <p>Setting the G3 reception cable equalizer</p> <ol style="list-style-type: none"> 1. Select [0dB], [4dB], [8dB] or [12dB]. * : Initial setting: 0dB 2. Press the start key. The setting is set. <p>Setting the modem detection level</p> <ol style="list-style-type: none"> 1. Select [-33dBm], [-38dBm], [-43dBm] or [-48dBm]. * : Initial setting: -43dBm 2. Press the start key. The setting is set. <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	Reg G3 TX Eqr	Sets the G3 transmission cable equalizer.	Reg G3 RX Eqr	Sets the G3 reception cable equalizer.	RX Mdm Level	Sets the modem detection level.
Display	Description								
Reg G3 TX Eqr	Sets the G3 transmission cable equalizer.								
Reg G3 RX Eqr	Sets the G3 reception cable equalizer.								
RX Mdm Level	Sets the modem detection level.								

Item No.	Description																
U651	<p>Modem 2</p> <p>Description Sets the modem output level. Sets the DTMF output level of a push-button dial telephone.</p> <p>Purpose Used if problems occur when sending a signal with a push-button dial telephone.</p> <p>Setting</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select the item to be set. 3. Change the setting using the cursor left/right keys or numeric keys. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> <th>Setting range</th> <th>Initial setting</th> </tr> </thead> <tbody> <tr> <td>Sgl LV Mdm</td> <td>Modem output level</td> <td>1 to 15</td> <td>9 (120 V) 10 (220-240 V)</td> </tr> <tr> <td>DTMF LV(C)</td> <td>DTMF output level (main value)</td> <td>0 to 15.0</td> <td>5 (120 V) 10.5 (220-240 V)</td> </tr> <tr> <td>DTMF LV(D)</td> <td>DTMF output level (level difference)</td> <td>0 to 5.5</td> <td>2 (120 V) 2.5 (220-240 V)</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 4. Press the start key. The setting is set. <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	Setting range	Initial setting	Sgl LV Mdm	Modem output level	1 to 15	9 (120 V) 10 (220-240 V)	DTMF LV(C)	DTMF output level (main value)	0 to 15.0	5 (120 V) 10.5 (220-240 V)	DTMF LV(D)	DTMF output level (level difference)	0 to 5.5	2 (120 V) 2.5 (220-240 V)
Display	Description	Setting range	Initial setting														
Sgl LV Mdm	Modem output level	1 to 15	9 (120 V) 10 (220-240 V)														
DTMF LV(C)	DTMF output level (main value)	0 to 15.0	5 (120 V) 10.5 (220-240 V)														
DTMF LV(D)	DTMF output level (level difference)	0 to 5.5	2 (120 V) 2.5 (220-240 V)														

Item No.	Description																								
U660	<p>Set Calls</p> <p>Description Makes setting regarding the network control unit (NCU).</p> <p>Purpose To be executed as required.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select the item to be set. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Exchange</td> <td>Sets the connection to PBX/PSTN.</td> </tr> <tr> <td>Dial Tone</td> <td>Sets PSTN dial tone detection.</td> </tr> <tr> <td>Busy Tone</td> <td>Sets busy tone detection.</td> </tr> <tr> <td>PBX Setting</td> <td>Setting for a PBX.</td> </tr> <tr> <td>DC Loop</td> <td>Sets the loop current detection before dialing.</td> </tr> </tbody> </table> <p>Setting the connection to PBX/PSTN</p> <p>Selects if a fax is to be connected to either a PBX or public switched telephone network.</p> <ol style="list-style-type: none"> 1. Select the setting. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>PSTN</td> <td>Connected to the public switched telephone network.</td> </tr> <tr> <td>PBX</td> <td>Connected to a PBX.</td> </tr> </tbody> </table> <p>* : Initial setting: PSTN</p> <ol style="list-style-type: none"> 2. Press the start key. The setting is set. <p>Setting PSTN dial tone detection</p> <p>Selects if the dial tone is detected to check the telephone is off the hook when a fax is connected to a public switched telephone network.</p> <ol style="list-style-type: none"> 1. Select the setting. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>On</td> <td>Detects the dial tone.</td> </tr> <tr> <td>Off</td> <td>Does not detect the dial tone.</td> </tr> </tbody> </table> <p>* : Initial setting: On</p> <ol style="list-style-type: none"> 2. Press the start key. The setting is set. 	Display	Description	Exchange	Sets the connection to PBX/PSTN.	Dial Tone	Sets PSTN dial tone detection.	Busy Tone	Sets busy tone detection.	PBX Setting	Setting for a PBX.	DC Loop	Sets the loop current detection before dialing.	Display	Description	PSTN	Connected to the public switched telephone network.	PBX	Connected to a PBX.	Display	Description	On	Detects the dial tone.	Off	Does not detect the dial tone.
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Off	Does not detect the dial tone.																								

Item No.	Description																		
U660	<p>Setting busy tone detection</p> <p>When a fax signal is sent, sets whether the line is disconnected immediately after a busy tone is detected, or the busy tone is not detected and the line remains connected until T0 time-out time. Fax transmission may fail due to incorrect busy tone detection. When set to 2, this problem may be prevented. However, the line is not disconnected within the T0 time-out time even if the destination line is busy.</p> <p>1. Select the setting.</p> <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>On</td> <td>Detects busy tone.</td> </tr> <tr> <td>Off</td> <td>Does not detect busy tone.</td> </tr> </tbody> </table> <p>* : Initial setting: On</p> <p>2. Press the start key. The setting is set.</p> <p>Setting for a PBX</p> <p>Selects the mode to connect an outside call when connected to a PBX.</p> <p>According to the type of the PBX connected, select the mode to connect an outside call.</p> <p>1. Select the setting.</p> <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Flash</td> <td>Flashing mode</td> </tr> <tr> <td>Loop</td> <td>Code number mode</td> </tr> </tbody> </table> <p>* : Initial setting: Loop</p> <p>2. Press the start key. The setting is set.</p> <p>Setting the loop current detection before dialing</p> <p>Sets if the loop current detection is performed before dialing.</p> <p>1. Select the setting.</p> <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>On</td> <td>Performs loop current detection before dialing.</td> </tr> <tr> <td>Off</td> <td>Does not perform loop current detection before dialing.</td> </tr> </tbody> </table> <p>* : Initial setting: On</p> <p>2. Press the start key. The setting is set.</p> <p>Completion</p> <p>Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	On	Detects busy tone.	Off	Does not detect busy tone.	Display	Description	Flash	Flashing mode	Loop	Code number mode	Display	Description	On	Performs loop current detection before dialing.	Off	Does not perform loop current detection before dialing.
Display	Description																		
On	Detects busy tone.																		
Off	Does not detect busy tone.																		
Display	Description																		
Flash	Flashing mode																		
Loop	Code number mode																		
Display	Description																		
On	Performs loop current detection before dialing.																		
Off	Does not perform loop current detection before dialing.																		

Item No.	Description																				
<p>U670</p>	<p>Output List</p> <p>Description Outputs a list of data regarding fax transmissions. Printing a list is disabled either when a job is remaining in the buffer or when [Pause All Print Jobs] is pressed to halt printing.</p> <p>Purpose To check conditions of use, settings and transmission procedures of the fax.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Select the item to be output. 3. Press the start key. The selected list is output. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Sys Conf Report</td> <td>Outputs a list of software switches, self telephone number, confidential boxes, ROM versions and other information.</td> </tr> <tr> <td>Action List</td> <td>Outputs a list of error history, transmission line details and other information.</td> </tr> <tr> <td>Self Sts Report</td> <td>Outputs a list of settings in maintenance mode (own-status report) regarding fax transmission only.</td> </tr> <tr> <td>Protocol List</td> <td>Outputs a list of transmission procedures.</td> </tr> <tr> <td>Error List</td> <td>Outputs a list of error.</td> </tr> <tr> <td>Addr List(No.)</td> <td>Outputs address book in order IDs were added</td> </tr> <tr> <td>Addr List(Idx)</td> <td>Outputs address book in order of names</td> </tr> <tr> <td>One-touch List</td> <td>Outputs a list of one-touch.</td> </tr> <tr> <td>Group List</td> <td>Outputs a list of group.</td> </tr> </tbody> </table> <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	Sys Conf Report	Outputs a list of software switches, self telephone number, confidential boxes, ROM versions and other information.	Action List	Outputs a list of error history, transmission line details and other information.	Self Sts Report	Outputs a list of settings in maintenance mode (own-status report) regarding fax transmission only.	Protocol List	Outputs a list of transmission procedures.	Error List	Outputs a list of error.	Addr List(No.)	Outputs address book in order IDs were added	Addr List(Idx)	Outputs address book in order of names	One-touch List	Outputs a list of one-touch.	Group List	Outputs a list of group.
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One-touch List	Outputs a list of one-touch.																				
Group List	Outputs a list of group.																				

Item No.	Description																		
U695	<p>Customize FAX Function</p> <p>Description</p> <p>Sets fax batch transmission ON/OFF. Also changes the print size priority at the time of small size reception.</p> <p>Purpose</p> <p>To be executed as required.</p> <p>Setting</p> <p>1. Select the setting.</p> <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>FAX Bulk TX</td> <td>fax batch transmission On/Off</td> </tr> <tr> <td>A5 Pt Pri Chg</td> <td>Change of print size priority at the time of small size reception</td> </tr> </tbody> </table> <p>Setting: [FAX Bulk TX]</p> <p>1. Select [On] or [Off].</p> <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>On</td> <td>Fax batch transmission is enabled.</td> </tr> <tr> <td>Off</td> <td>Fax batch transmission is disabled.</td> </tr> </tbody> </table> <p>* : Initial setting: On</p> <p>2. Press the start key. The setting is set.</p> <p>Setting: [A5 Pt Pri Chg]</p> <p>1. Select [ON] or [OFF].</p> <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>On</td> <td>At the time of A5 size reception: A5→B5→A4</td> </tr> <tr> <td>Off</td> <td>At the time of A5 size reception: A5→A4→B5</td> </tr> </tbody> </table> <p>* : Initial setting: Off</p> <p>2. Press the start key. The setting is set.</p> <p>Completion</p> <p>Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	FAX Bulk TX	fax batch transmission On/Off	A5 Pt Pri Chg	Change of print size priority at the time of small size reception	Display	Description	On	Fax batch transmission is enabled.	Off	Fax batch transmission is disabled.	Display	Description	On	At the time of A5 size reception: A5→B5→A4	Off	At the time of A5 size reception: A5→A4→B5
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Item No.	Description																																														
U699	<p>Set: Soft SW</p> <p>Description Sets the software switches on the FAX control PWB individually.</p> <p>Purpose To change the setting when a problem such as split output of received originals occurs. Since the communication performance is largely affected, normally this setting need not be changed.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the start key. 2. Press [SW No.]. 3. Enter the desired software switch number (3 digits) using the numeric keys and press the enter key. 4. Use numeric keys 7 to 0 to switch each bit between 0 and 1. 5. Press the start key to set the value. <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p> <p>List of Software Switches of Which the Setting Can Be Changed</p> <p><Communication control procedure></p> <table border="1"> <thead> <tr> <th>No.</th> <th>Bit</th> <th>Item</th> </tr> </thead> <tbody> <tr> <td rowspan="2">36</td> <td>7654</td> <td>Coding format in transmission</td> </tr> <tr> <td>3210</td> <td>Coding format in reception</td> </tr> <tr> <td rowspan="6">37</td> <td>5</td> <td>33600 bps/V34</td> </tr> <tr> <td>4</td> <td>31200 bps/V34</td> </tr> <tr> <td>3</td> <td>28800 bps/V34</td> </tr> <tr> <td>2</td> <td>26400 bps/V34</td> </tr> <tr> <td>1</td> <td>24000 bps/V34</td> </tr> <tr> <td>0</td> <td>21600 bps/V34</td> </tr> <tr> <td rowspan="8">38</td> <td>7</td> <td>19200 bps/V34</td> </tr> <tr> <td>6</td> <td>16800 bps/V34</td> </tr> <tr> <td>5</td> <td>14400 bps/V34</td> </tr> <tr> <td>4</td> <td>12000 bps/V34</td> </tr> <tr> <td>3</td> <td>9600 bps/V34</td> </tr> <tr> <td>2</td> <td>7200 bps/V34</td> </tr> <tr> <td>1</td> <td>4800 bps/V34</td> </tr> <tr> <td>0</td> <td>2400 bps/V34</td> </tr> <tr> <td>41</td> <td>3</td> <td>FSK detection in V.8</td> </tr> <tr> <td rowspan="2">42</td> <td>4</td> <td>4800 bps when low-speed setting is active</td> </tr> <tr> <td>2</td> <td>FIF length in transmission of more than 4 times of DIS/DTC signal</td> </tr> </tbody> </table>	No.	Bit	Item	36	7654	Coding format in transmission	3210	Coding format in reception	37	5	33600 bps/V34	4	31200 bps/V34	3	28800 bps/V34	2	26400 bps/V34	1	24000 bps/V34	0	21600 bps/V34	38	7	19200 bps/V34	6	16800 bps/V34	5	14400 bps/V34	4	12000 bps/V34	3	9600 bps/V34	2	7200 bps/V34	1	4800 bps/V34	0	2400 bps/V34	41	3	FSK detection in V.8	42	4	4800 bps when low-speed setting is active	2	FIF length in transmission of more than 4 times of DIS/DTC signal
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Item No.	Description		
U699	<Communication time setting>		
	No.	Bit	Item
	53	76543210	T3 timeout setting
	54	76543210	T4 timeout setting (automatic equipment)
	55	76543210	T5 timeout setting
	60	76543210	Time before transmission of CNG (1100 Hz) signal
	63	76543210	T0 timeout setting (manual equipment)
	64	7	Phase C timeout in ECM reception
	66	76543210	Timeout 1 in countermeasures against echo
	68	76543210	Timeout for FSK detection start in V.8
	<Modem setting>		
	No.	Bit	Item
	89	76543	RX gain adjust
	<NCU setting>		
	No.	Bit	Item
	121	7654	Dial tone/busy tone detection pattern
	122	7654	Busy tone detection pattern
		1	Busy tone detection in automatic FAX/TEL switching
	125	76543210	Access code registration for connection to PSTN
	126	7654	FAX/TEL automatic switching ringback tone ON/OFF cycle
	<Calling time setting>		
	No.	Bit	Item
	133	76543210	DTMF signal transmission time
	134	76543210	DTMF signal pause time
	141	76543210	Ringer detection cycle (minimum)
	142	76543210	Ringer detection cycle (maximum)
	143	76543210	Ringer ON time detection
	144	76543210	Ringer OFF time detection
145	76543210	Ringer OFF non-detection time	
147	76543210	Dial tone detection time (continuous tone)	
148	76543210	Allowable dial tone interruption time	
149	76543210	Time for transmitting selection signal after closing the DC circuit	
151	76543210	Ringer frequency detection invalid time	

Item No.	Description
U910	<p>Clear Coverage Data</p> <p>Description</p> <p>Clears the accumulated data for the print coverage per A4 size paper and its period of time (as shown on the service status report).</p> <p>Purpose</p> <p>To clear data as required at times such as during maintenance service.</p> <p>Method</p> <ol style="list-style-type: none">1. Press the start key.2. Select [Execute].3. Press the start key. The print coverage data is cleared. <p>Completion</p> <p>Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>

Item No.	Description																														
U917	<p>Read/Write Backup HDD Data(USB)</p> <p>Description</p> <p>Retrieves the backup data to a USB memory from the machine; or writes the data from the USB memory to the machine.</p> <p>Purpose</p> <p>To store and write data when replacing the HDD.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Press the power key on the operation panel, and after verifying the power indicator has gone off, switch off the main power switch. 2. Insert USB memory in USB memory slot. 3. Turn the main power switch on. Wait for 10 seconds to allow the machine to recognize the USB memory. 4. Enter the maintenance item. 5. Press the start key. 6. Select [Export] or [Import] and press the start key. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Import</td> <td>Writing data from the USB memory to the machine</td> </tr> <tr> <td>Export</td> <td>Retrieving from the machine to a USB memory</td> </tr> </tbody> </table> <ol style="list-style-type: none"> 7. Select the item. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> <th>Depending data</th> </tr> </thead> <tbody> <tr> <td>Address Book</td> <td>Address book</td> <td>-</td> </tr> <tr> <td>Job Account</td> <td>Job accounting</td> <td>-</td> </tr> <tr> <td>One Touch</td> <td>Information on one-touch key</td> <td>Address book</td> </tr> <tr> <td>User</td> <td>User managements</td> <td>Job accounting</td> </tr> <tr> <td>Program</td> <td>Program information</td> <td>Job accountings and user managements</td> </tr> <tr> <td>Document Box</td> <td>Document box information</td> <td>Job accountings and user managements</td> </tr> <tr> <td>Fax Forward</td> <td>FAX transfer information</td> <td>Job accountings, user managements and document box information</td> </tr> </tbody> </table> <p>* : Since data are dependent with each other, data other than those assigned are also retrieved or written in.</p> <ol style="list-style-type: none"> 8. Select [On]. 9. Press the start key. Starts reading or writing. The progress of selected item is displayed in %. When an error occurs, the operation is canceled and an error code is displayed. 10. When normally completed, [Fin] is displayed. 11. Turn the main power switch off and on after completing writing when selecting [Import]. 	Display	Description	Import	Writing data from the USB memory to the machine	Export	Retrieving from the machine to a USB memory	Display	Description	Depending data	Address Book	Address book	-	Job Account	Job accounting	-	One Touch	Information on one-touch key	Address book	User	User managements	Job accounting	Program	Program information	Job accountings and user managements	Document Box	Document box information	Job accountings and user managements	Fax Forward	FAX transfer information	Job accountings, user managements and document box information
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Document Box	Document box information	Job accountings and user managements																													
Fax Forward	FAX transfer information	Job accountings, user managements and document box information																													

Item No.	Description			
U917	Error Codes			
	Codes	Description	Codes	Description
	e002	Parameter error	e31e	User managements error
	e003	File write error	e31f	User managements open error
	e004	File initialization error	e320	User managements error
	e005	File error	e410	Box file open error
	e006	Processing error	e411	Box error in writing
	e010	Address book clear error (contact)	e412	Box error in reading
	e011	Address book open error (contact)	e413	Box list error
	e012	Address book list error (contact)	e414	Box list error
	e013	Address book list error (contact)	e415	Box error
	e014	Address book clear error (group)	e416	Box error
	e015	Address book open error (group)	e417	Box open error
	e016	Address book list error (group)	e418	Box close error
	e017	Address book list error (group)	e419	Box creation error
	e110	Job accounting clear error	e41a	Box creation error
	e111	Job accounting open error	e41b	Box deletion error
	e112	Job accounting open error	e41c	Box movement error
	e113	Job accounting error in writing	e510	Program error in writing
	e114	Job accounting list error	e511	Program error in reading
	e115	Job accounting list error	e710	Fax memory open error
	e210	One-touch open error	e711	Fax memory initialization error
	e211	One-touch list error	e712	Fax memory list error
	e212	One-touch list error	e713	Fax memory error
	e310	User managements backup error	e714	Fax memory error
	e311	User managements clear error	e715	Fax memory mode error
	e312	User managements open error	e716	Fax memory error
	e313	User managements open error	e717	Fax memory error
	e314	User managements open error	e718	Fax memory mode error
	e315	User managements error in writing	e910	File reading error
	e316	User managements list error	e911	File writing error
	e317	User managements list error	e912	Data mismatch
	e318	User managements list error	e913	Log file open error
	e319	User managements list error	e914	Log file error in writing
	e31a	User managements open error	e915	Directory open error
	e31b	User managements error	e916	Directory error in reading
	e31c	User managements error	e917	Synchronization error
	e31d	User managements open error	e918	Synchronization error

Item No.	Description			
U917	Error Codes			
	Codes	Description	Codes	Description
	d000	Unspecified error	d00b	File reading error
	d001	HDD unavailable	d00c	File writing error
	d002	USB memory is not inserted	d00d	File copy error
	d003	File for writing is not found in the USB	d00e	File compressed error
	d004	File for reading is not found in the HDD	d00f	File decompressed error
	d005	USB error in writing	d010	Directory open error
	d006	USB error in reading	d011	Directory creation error
	d007	USB unmount error	d012	File writing error
	d008	File rename error	d013	File reading error
	d009	File open error	d014	File deletion error
	d00a	File close error	d015	File copy error to the USB
	Supplement			
	The following restrictions apply to the data which were imported from 4 in 1 models (with FAX) to 3 in 1 models (without FAX).			
Personal address book: FAX-related data are not imported.				
Group address book: Group addresses including FAX addresses are not imported.				
Job accounting data: Initial values are added for FAX-related data.				
One-touch data: Groups assigned with FAX addresses or those including FAX are not imported.				
User management data: Initial values are added for out-going FAXes of authentication.				
Program data: Not imported. (The same applies when data are imported from 3 in 1 to 4 in 1 models.)				
Completion				
Press the stop key. The screen for selecting a maintenance item No. is displayed.				

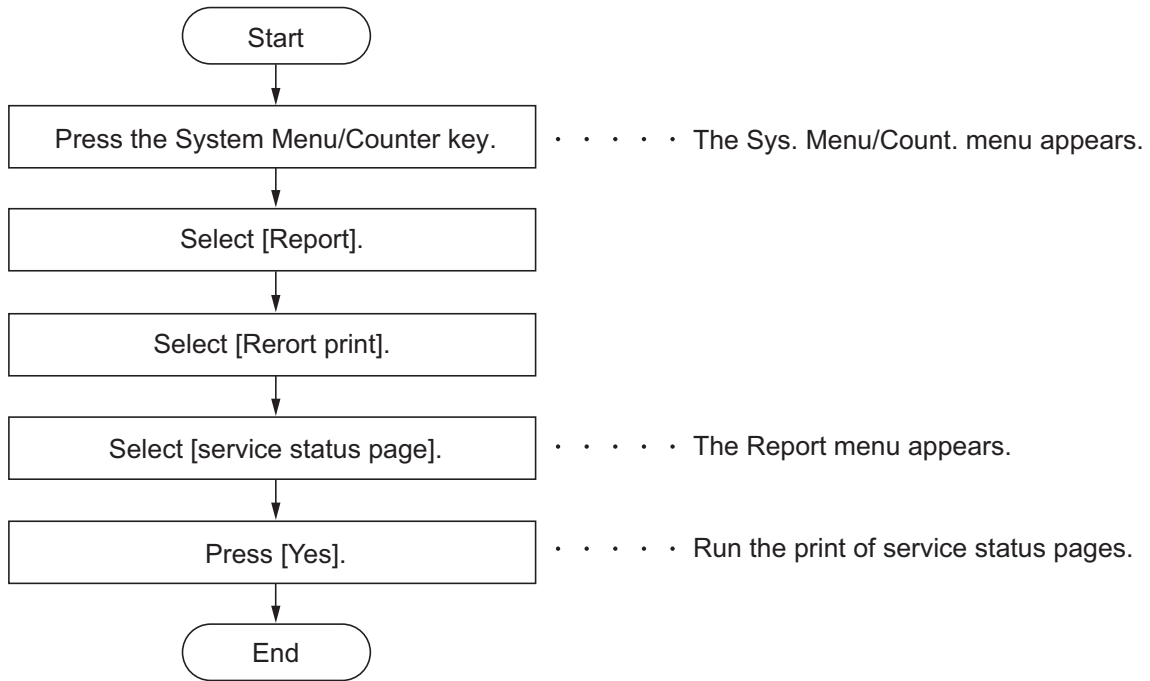
Item No.	Description												
U920	<p>Charge Counter</p> <p>Description Checks the copy counts.</p> <p>Purpose To check the copy counts.</p> <p>Method 1. Press the start key. The current counts are displayed.</p> <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Color Copy</td> <td>Count value of color copy</td> </tr> <tr> <td>B/W Copy</td> <td>Count value of black/white copy</td> </tr> <tr> <td>Color Prn</td> <td>Count value of color print</td> </tr> <tr> <td>B/W Prn</td> <td>Count value of black/white print</td> </tr> <tr> <td>B/W Fax</td> <td>Count value of black/white FAX</td> </tr> </tbody> </table> <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	Color Copy	Count value of color copy	B/W Copy	Count value of black/white copy	Color Prn	Count value of color print	B/W Prn	Count value of black/white print	B/W Fax	Count value of black/white FAX
Display	Description												
Color Copy	Count value of color copy												
B/W Copy	Count value of black/white copy												
Color Prn	Count value of color print												
B/W Prn	Count value of black/white print												
B/W Fax	Count value of black/white FAX												
U927	<p>Clear All Charge/Life Counter (one time only)</p> <p>Description Resets all of the counts back to zero.</p> <p>Supplement The total account counter and the machine life counter can be cleared only once if all count values are 1000 or less.</p> <p>Method 1. Press the start key. 2. Select [Execute]. 3. Press the start key. All copy counts and machine life counts are cleared.</p> <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>												

Item No.	Description				
U928	<p>Machine Life Counter</p> <p>Description Displays the machine life counts.</p> <p>Purpose To check the machine life counts.</p> <p>Method 1. Press the start key. The current machine life counts is displayed.</p> <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Life Cont</td> <td>Machine life counts</td> </tr> </tbody> </table> <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>	Display	Description	Life Cont	Machine life counts
Display	Description				
Life Cont	Machine life counts				
U977	<p>Set Data Capture Mode</p> <p>Description Store the print data sent to the machine into USB memory.</p> <p>Purpose In case to occur the error at printing, check the print data sent to the machine.</p> <p>Method 1. Insert USB memory in USB memory slot. 2. Turn the main power switch on. 3. Enter the maintenance item. 4. Press the start key. 5. Select [Execute]. 6. Press the start key. 7. Send the print data to the machine. Once the print data is stored into USB memory, [OK] will be displayed.</p> <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>				
U995	<p>Set Memory Data Individually</p> <p>Description Displays the memory data.</p> <p>Purpose This mode need not be executed. When the status report is output, the setting is displayed.</p> <p>Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.</p>				

1-3-2 Service mode

The machine is equipped with a maintenance function which can be used to maintain and service the machine.

(1) Executing a service mode



(2) Description of service mode

Service items	Description
Service Status	<p>Printing a status page for service purpose</p> <p>Description Prints a status page for service purpose. The status page includes various settings and service cumulative.</p> <p>Purpose To acquire the current printing environmental parameters and cumulative information.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Select [Service status]. 2. Select [YES]. Two pages will be printed. <p>Completion Press the System Menu/Counter key.</p>

Service items	Description																																								
	<p>Service status page (1)</p> <div style="border: 1px solid black; padding: 10px;"> <h2>Service Status Page</h2> <p>MFP</p> <p>(2) 06/02/2013 12:00</p> <p>(1) Firmware version 2PA_2000.000.000 2013.02.06</p> <p>(3) [XXXXXXXX] (4) [XXXXXXXX] (5) [XXXXXXXX]</p> <hr/> <h3>Controller Information</h3> <p>Memory status</p> <table> <tr> <td>(7) Standard Size</td> <td>128.0 KB</td> </tr> <tr> <td>(8) Option Slot</td> <td>128.0 KB</td> </tr> <tr> <td>(9) Total Size</td> <td>256.0 KB</td> </tr> </table> <p>(27) FRPO Status</p> <table> <tr> <td>User Top Margin</td> <td>A1+A2/100</td> <td>0.00</td> </tr> <tr> <td>User Left Margin</td> <td>A3+A4/100</td> <td>0.00</td> </tr> </table> <p>Time</p> <table> <tr> <td>(10) Local Time Zone</td> <td>+01:00 Tokio</td> </tr> <tr> <td>(11) Date and Time</td> <td>06/04/2010 12:00</td> </tr> <tr> <td>(12) Time Server</td> <td>10.183.53.13</td> </tr> </table> <p>Installed Options</p> <table> <tr> <td>(13) Paper Feeder</td> <td>Cassette</td> </tr> <tr> <td>(14) Card Authentication Kit (B)</td> <td>Installed</td> </tr> <tr> <td>(15) USB Keyboard</td> <td>Connected</td> </tr> <tr> <td>(16) USB Keyboard Type</td> <td>US-English</td> </tr> </table> <p>Print Coverage</p> <p>(17) Average(%) / Usage Page(A4/Letter Conversion)</p> <p>(18) Total K: 1.10 / 1111111.11 C: 2.20 / 2222222.22 M: 3.30 / 3333333.33 Y: 4.40 / 4444444.44</p> <p>(19) Copy K: 1.10 / 1111111.11 C: 2.20 / 2222222.22 M: 3.30 / 3333333.33 Y: 4.40 / 4444444.44</p> <p>(20) Printer PDF mode Y5 00</p> <table> <tr> <td>K: 1.10</td> <td>/ 1111111.11</td> </tr> <tr> <td>C: 2.20</td> <td>/ 2222222.22</td> </tr> <tr> <td>M: 3.30</td> <td>/ 3333333.33</td> </tr> <tr> <td>Y: 4.40</td> <td>/ 4444444.44</td> </tr> </table> <p>(21) FAX K: 1.10 / 1111111.11</p> <p>(22) Period (27/10/2009 - 03/11/2009 08:40)</p> <p>(23) Last Page K/C/M/Y(%) 1.00 / 2.22 / 3.33 / 4.44</p> <p>FAX Information</p> <table> <tr> <td>(24) Rings (Normal)</td> <td>3</td> </tr> <tr> <td>(25) Rings (FAX/TEL)</td> <td>3</td> </tr> <tr> <td>(26) Rings (TAD)</td> <td>3</td> </tr> </table> <hr/> <p style="text-align: right;">1 (6) [XXXXXXXXXXXXXXXXXXXX]</p> </div>	(7) Standard Size	128.0 KB	(8) Option Slot	128.0 KB	(9) Total Size	256.0 KB	User Top Margin	A1+A2/100	0.00	User Left Margin	A3+A4/100	0.00	(10) Local Time Zone	+01:00 Tokio	(11) Date and Time	06/04/2010 12:00	(12) Time Server	10.183.53.13	(13) Paper Feeder	Cassette	(14) Card Authentication Kit (B)	Installed	(15) USB Keyboard	Connected	(16) USB Keyboard Type	US-English	K: 1.10	/ 1111111.11	C: 2.20	/ 2222222.22	M: 3.30	/ 3333333.33	Y: 4.40	/ 4444444.44	(24) Rings (Normal)	3	(25) Rings (FAX/TEL)	3	(26) Rings (TAD)	3
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(26) Rings (TAD)	3																																								

Figure 1-3-17

Service items	Description																				
	Service status page (2)																				
	<div style="border: 1px solid black; padding: 10px;"><h2 style="margin: 0;">Service Status Page</h2><p style="margin: 0;">MFP 06/02/2013 12:00</p><p style="margin: 0;">Firmware version 2PA_2000.000.000 2013.02.06 [XXXXXXXX] [XXXXXXXX] [XXXXXXXX]</p><hr/><table border="0" style="width: 100%;"><tr><td style="width: 50%;">Engine Information</td><td style="width: 50%;">Send Information</td></tr><tr><td>(28) NVRAM Version _1F31225_1F31225</td><td>(33) Date and Time 10/04/06 15:30</td></tr><tr><td>(29) Scanner Version 2PA_1200.001.089</td><td>(34) Address</td></tr><tr><td>(30) FAX</td><td></td></tr><tr><td> FAX BOOT Version 2PA_5000.001.001</td><td></td></tr><tr><td> FAX APL Version 2PA_5100.001.001</td><td></td></tr><tr><td> FAX IPL Version 2PA_5200.001.001</td><td></td></tr><tr><td>(31) MAC Address 00:C0:EE:D0:01:0D</td><td></td></tr><tr><td>(32) DP Counters</td><td></td></tr><tr><td> Total 1234</td><td></td></tr></table> <p>1/2 (35) (36)</p><p>(37) 100/100</p><p>(38) 0/0/0/0/0</p><p>(39) 0/0/0/0/0</p><p>(40) 0/0/0/0/0/0/0/0/</p><p>(41) 0000000/0000000/0000000/0000000/0000000/0000000/</p><p> 0000000/0000000/0000000/0000000/0000000/0000000/0000000/0000000/0000000/0000000/</p><p>F00/U00/0/0/0/0/30/30/70/70/abcde/1/0 (42) (43) (44) (45) (46) (47) (48) (49) (50) (51) (52) (53) (54)</p><p>(55) 0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/</p><p> 0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/</p><p>(56) 0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/</p><p> 0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/</p><p>(57) 12345678/11223344/00001234abcd567800001234abcd5678/01234567890123456789012345678901/0008/00/07</p><p> 12345678/11223344/00001234abcd567800001234abcd5678/01234567890123456789012345678901/0008/00/07</p><p> 12345678/11223344/00001234abcd567800001234abcd5678/01234567890123456789012345678901/0008/00/07</p><p> 12345678/11223344/00001234abcd567800001234abcd5678/01234567890123456789012345678901/0008/00/07</p><p> 2PA_D100.001.005/0/ (58) (59)</p><p> [ABCDEFGHJI][ABCDEFGHJI] (60)</p><p> [2PA_0000.001.005][] (61) (62) (63)</p><p>(64) 0000000000/F80C001A37/302A183C00/000100013D/8791BEC305/0000003100/000F5D0000/01FD000000/</p><p> 0000000000/0000000000/0000000000/0000000000/0000260000/0000000000/0000000000/0000000000/0000008400/</p><p> 0/3/ (65) (66)</p><p>(67) ABCDEFGHIJ/ABCDEFGHIJ/ABCDEFGHIJ/ABCDEFGHIJ/</p><hr/><p style="text-align: center;">2 [XXXXXXXXXXXXXXXXXX]</p></div>	Engine Information	Send Information	(28) NVRAM Version _1F31225_1F31225	(33) Date and Time 10/04/06 15:30	(29) Scanner Version 2PA_1200.001.089	(34) Address	(30) FAX		FAX BOOT Version 2PA_5000.001.001		FAX APL Version 2PA_5100.001.001		FAX IPL Version 2PA_5200.001.001		(31) MAC Address 00:C0:EE:D0:01:0D		(32) DP Counters		Total 1234	
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(31) MAC Address 00:C0:EE:D0:01:0D																					
(32) DP Counters																					
Total 1234																					

Figure 1-3-18

Service items	Description	
	Detail of service status page	
	No.	Description
		Supplement
(1)	Firmware version	-
(2)	System date	-
(3)	Engine soft version	-
(4)	Engine boot version	-
(5)	Operation panel mask version	-
(6)	Machine serial number	-
(7)	Standard memory size	-
(8)	Optional memory size	-
(9)	Total memory size	-
(10)	Local time zone	-
(11)	Report output date	Day/Month/Year hour:minute
(12)	NTP server name	-
(13)	Presence or absence of the optional paper feeder	Paper feeder 2/Paper feeder 3/Not Installed
(14)	Presence or absence of the optional IC card authentication kit	Installed/Not Installed/Trial
(15)	Presence or absence of the USB Keyboard	Connected/Not Connected
(16)	Type of the USB Keyboard	US-English/US-English with Euro
(17)	Page of relation to the A4/Letter	-
(18)	Average coverage for total	Black/Cyan/Magenta/Yellow
(19)	Average coverage for copy	Black/Cyan/Magenta/Yellow
(20)	Average coverage for printer	Black/Cyan/Magenta/Yellow
(21)	Average coverage for fax	Black
(22)	Cleared date and output date	-
(23)	Coverage on the final output page	-
(24)	Number of rings	0 to 15
(25)	Number of rings before automatic switching	0 to 15
(26)	Number of rings before connecting to answering machine	0 to 15
(27)	FRPO setting	-

Service items	Description																																																
	<table border="1"> <thead> <tr> <th>No.</th> <th>Description</th> <th>Supplement</th> </tr> </thead> <tr> <td>(28)</td> <td>NV RAM version</td> <td> <p>_ 1F3 1225 _ 1F3 1225 (a) (b) (c) (d) (e) (f)</p> <p>(a) Consistency of the present software version and the database _ (underscore): OK * (Asterisk): NG</p> <p>(b) Database version</p> <p>(c) The oldest time stamp of database version</p> <p>(d) Consistency of the present software version and the ME firmware version _ (underscore): OK * (Asterisk): NG</p> <p>(e) ME firmware version</p> <p>(f) The oldest time stamp of the ME database version</p> <p>Normal if (a) and (d) are underscored, and (b) and (e) are identical with (c) and (f).</p> </td> </tr> <tr> <td>(29)</td> <td>Scanner firmware version</td> <td>-</td> </tr> <tr> <td>(30)</td> <td>Fax firmware version</td> <td>-</td> </tr> <tr> <td>(31)</td> <td>Mac address</td> <td>-</td> </tr> <tr> <td>(32)</td> <td>Number of original feed from DP</td> <td>-</td> </tr> <tr> <td>(33)</td> <td>The last sent date and time</td> <td>-</td> </tr> <tr> <td>(34)</td> <td>Transmission address</td> <td>-</td> </tr> <tr> <td>(35)</td> <td>Destination information</td> <td>-</td> </tr> <tr> <td>(36)</td> <td>Area information</td> <td>-</td> </tr> <tr> <td>(37)</td> <td>Margin settings</td> <td>Top margin/Left margin</td> </tr> <tr> <td>(38)</td> <td>Top offset for each paper source</td> <td>MP tray/Paper feeder 2/Paper feeder 3/Duplex/ Page rotation</td> </tr> <tr> <td>(39)</td> <td>Left offset for each paper source</td> <td>MP tray/Paper feeder 2/Paper feeder 3/Duplex/ Page rotation</td> </tr> <tr> <td>(40)</td> <td>Margin/Page length/Page width settings</td> <td>Top margin integer part/Top margin decimal part/ Left margin integer part/Left margin decimal part/ Page length integer part/Page length decimal part/ Page width integer part/Page width decimal part</td> </tr> <tr> <td></td> <td>Life counter (The first line)</td> <td>Machine life/MP tray/Cassette/Paper feeder 1/ Paper feeder 2 /Duplex</td> </tr> <tr> <td>(41)</td> <td>Life counter (The second line)</td> <td>Drum unit K/Drum unit C/Drum unit M/Drum unit Y/ Intermediate transfer unit/Developing unit K/ Developing unit C/Developing unit M/ Developing unit Y/Maintenance kit</td> </tr> </table>	No.	Description	Supplement	(28)	NV RAM version	<p>_ 1F3 1225 _ 1F3 1225 (a) (b) (c) (d) (e) (f)</p> <p>(a) Consistency of the present software version and the database _ (underscore): OK * (Asterisk): NG</p> <p>(b) Database version</p> <p>(c) The oldest time stamp of 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Page width integer part/Page width decimal part		Life counter (The first line)	Machine life/MP tray/Cassette/Paper feeder 1/ Paper feeder 2 /Duplex	(41)	Life counter (The second line)	Drum unit K/Drum unit C/Drum unit M/Drum unit Y/ Intermediate transfer unit/Developing unit K/ Developing unit C/Developing unit M/ Developing unit Y/Maintenance kit
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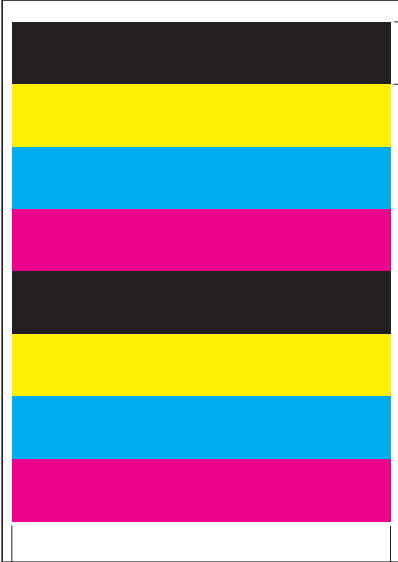
 |

Service items	Description																			
	<table border="1"> <thead> <tr> <th>No.</th> <th>Description</th> <th>Supplement</th> </tr> </thead> </table>	No.	Description	Supplement																
No.	Description	Supplement																		
	(42) Panel lock information	0: OFF/1: Partial lock/2: Full lock																		
	(43) USB information	U00: Not installed/U01: Full speed/U02: Hi speed																		
	(44) Paper handling information	0: Paper source unit select/1: Paper source unit																		
	(45) Color printing double count mode	0: All single counts 3: Folio, Single count, Less than 330 mm (length)																		
	(46) Black and white printing double count mode	0: All single counts 3: Folio, Single count, Less than 330 mm (length)																		
	(47) Billing counting timing	-																		
	(48) Temperature (machine inside)	-																		
	(49) Temperature (machine outside)	-																		
	(50) Relative temperature (machine outside)	-																		
	(51) Absolute temperature (machine outside)	-																		
	(52) Fixed assets number	-																		
	(53) Job end judgment time-out time	-																		
	(54) Job end detection mode	-																		
	(55) Media type attributes 1 to 28 (Not used: 18, 19, 20)	<table border="0"> <tr> <td>Weight settings</td> <td>Fuser settings</td> </tr> <tr> <td>0: Light</td> <td>0: High</td> </tr> <tr> <td>1: Normal 1</td> <td>1: Middle</td> </tr> <tr> <td>2: Normal 2</td> <td>2: Low</td> </tr> <tr> <td>3: Normal 3</td> <td>3: Vellum</td> </tr> <tr> <td>4: Heavy 1</td> <td>Duplex settings</td> </tr> <tr> <td>5: Heavy 2</td> <td>0: Disable</td> </tr> <tr> <td>6: Heavy 3</td> <td>1: Enable</td> </tr> <tr> <td>7: Extra Heavy</td> <td></td> </tr> </table>	Weight settings	Fuser settings	0: Light	0: High	1: Normal 1	1: Middle	2: Normal 2	2: Low	3: Normal 3	3: Vellum	4: Heavy 1	Duplex settings	5: Heavy 2	0: Disable	6: Heavy 3	1: Enable	7: Extra Heavy	
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4: Heavy 1	Duplex settings																			
5: Heavy 2	0: Disable																			
6: Heavy 3	1: Enable																			
7: Extra Heavy																				
	(56) Calibration information	Black/Cyan/Magenta/Yellow																		
	(57) RFID information	-																		
	(58) RFID reader/writer version information	-																		
	(59) Toner install mode information	0: Off t: On																		
	(60) Soft version of the optional paper feeder	Paper feeder 2/Paper feeder 3																		
	(61) Version of the optional message	-																		
	(62) Color table version for printer	-																		
	(63) Second's color table version for printer	-																		
	(64) Maintenance information	-																		

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<p>Network Status</p>	<p>Printing a status page for network</p> <p>Description Prints a status page for network.</p> <p>Purpose To acquire the detailed network setting information.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Enter the Service Setting menu. 2. Select [Network Status]. 3. Press the start key. 4. Press [Yes] (the Left Select key). Network status page will be printed. <p>Completion Press the stop key.</p>																																																																																				

Service items	Description
<p>Test Page</p>	<p>Printing a test page</p> <p>Description Four colors are printed respectively with halftones of three different levels.</p> <p>Purpose To check the activation of the developer and drum units of four colors.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Enter the Service Setting menu. 2. Select [Test Page]. 3. Press the start key. 4. Press [Yes] (the Left Select key). Test page will be printed. <div> </div> <p>*1: Since focusing in yellow is hardly readable, yellow is mixed with cyan for more readability, resulting in green.</p> <p>*2: Each portion of colors has three different magnitude of halftones (bands). If focus is excessively lost, dots are not recognizable with the 16/256 band, resulting in uneven density. It also results in vertical streaks in the 24/256 and/or 32/256 bands.</p> <p style="text-align: center;">Figure 1-3-19</p> <p>Completion Press the stop key.</p>

Service items	Description
Developer Setting	<p>Entering initial value for replacing the developing unit</p> <p>Description</p> <p>After replacing the developing unit, enter the initial value (6-digit data) assigned on a label attached to the package or developing unit.</p> <p>Purpose</p> <p>To set the initial value after replacing the developing unit.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Enter the Service Setting menu. 2. Select [DeveloperSetting]. 3. Press the start key. Enter the initial value (6-digit data) using the numeric keys. 4. Press the start key. The initial value is set. <div style="text-align: center;"> <p>The diagram illustrates the location of the initial value label. It shows a 'Developing unit' on the left and a 'Package' on the right. A 'Label' is shown above them, containing a QR code, the alphanumeric code '128F1E', and the model number 'DV560Y'. Dashed circles indicate the label's location on both the developing unit and the package.</p> </div> <p>Figure 1-3-20</p> <p>Completion</p> <p>Press the stop key.</p>

Service items	Description
Developer Refresh	<p>Performing developer refresh</p> <p>Description The laser output of the image data for developer refreshing is carried out, and operation to exposure, developing, and primary transfer is performed by 10 pages (paper is not fed).</p> <p>Purpose To perform cleaning when faulty images occur and a line appears longitudinally.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Enter the Service Setting menu. 2. Select [Developer Refresh]. 3. Press the start key. 4. Press [Yes] (the Left Select key). Developer refresh is performed. <div style="text-align: center;"> <p>A4 paper size</p>  <p>33 mm</p> <p>200 mm</p> <p>Toner image on the transfer belt</p> </div> <p>Figure 1-3-21</p> <p>Completion Press the stop key.</p>

Service items	Description
Laser Scanner Cleaning	<p>Performing LSU cleaning</p> <p>Description The LSU cleaning motor drives the cleaning pad which in turn wipes clean the LSU dust shield glass.</p> <p>Purpose To perform cleaning when the printed image is bad and stripes are seen in the vertical direction.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Enter the Service Setting menu. 2. Select [Laser Scanner Cln]. 3. Press the start key. 4. Press [Yes] (the Left Select key). LSU cleaning is performed. <p>Completion Press the stop key.</p>
Drum surface refreshing	<p>Performing drum surface refreshing</p> <p>Description Rotates the drum approximately 2 minutes with toner lightly on the overall drum. The cleaning blade in the drum unit scrapes toner off the drum surface to clean it.</p> <p>Purpose To clean the drum surface when image failure occurs due to the drum. This mode is effective when dew condensation on the drum occurs.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Enter the Service Setting menu. 2. Select [Drum Refresh]. 3. Press the start key. 4. Press [Yes] (the Left Select key). Drum surface refreshing is performed. <p>Completion Press the stop key.</p>

Service items	Description
Altitude adjustment	<p>Setting altitude adjustment</p> <p>Description Sets the altitude adjustment mode.</p> <p>Purpose Used when print quality deteriorates in an installation at the altitude of 1,500 meters or higher.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Enter the Service Setting menu. 2. Select [Altitude Adj]. 3. Press the start key. 4. Select [Normal], [High 1] or [High 2]]. 5. Press the start key. The setting is set. <p>Completion Press the stop key.</p>
Main charger adjustment	<p>Setting main charger output</p> <p>Description Sets the main charger output. This is executable only when the altitude adjustment mode is set to [Normal].</p> <p>Purpose Execute when the image density declines or an offset has occurred.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Enter the Service Setting menu. 2. Select [MC]. 3. Press the start key. 4. Select [1], [2] or [3]. 5. Press the start key. The setting is set. <p>Completion Press the stop key.</p>

Service items	Description																																																																												
FAX country code	<p>FAX Country Code</p> <p>Description Initializes software switches and all data in the backup data on the FAX control PWB, according to the destination.</p> <p>Purpose To initialize the FAX control PWB.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Enter the Service Setting menu. 2. Select [FAX Country Code]. 3. Press the start key. 4. Enter a destination code using the numeric keys. 5. Press the start key. The setting is set. 6. Press the start key. Data initialization starts. <p>Destination code list</p> <table border="1"> <thead> <tr> <th>Code</th> <th>Destination</th> <th>Code</th> <th>Destination</th> </tr> </thead> <tbody> <tr> <td>000</td> <td>Japan</td> <td>253</td> <td>CTR21 (European nations)</td> </tr> <tr> <td>009</td> <td>Australia</td> <td></td> <td>Italy</td> </tr> <tr> <td>038</td> <td>China</td> <td></td> <td>Germany</td> </tr> <tr> <td>080</td> <td>Hong Kong</td> <td></td> <td>Spain</td> </tr> <tr> <td>084</td> <td>Indonesia</td> <td></td> <td>U.K.</td> </tr> <tr> <td>088</td> <td>Israel</td> <td></td> <td>Netherlands</td> </tr> <tr> <td>097</td> <td>Korea</td> <td></td> <td>Sweden</td> </tr> <tr> <td>108</td> <td>Malaysia</td> <td></td> <td>France</td> </tr> <tr> <td>126</td> <td>New Zealand</td> <td></td> <td>Austria</td> </tr> <tr> <td>136</td> <td>Peru</td> <td></td> <td>Switzerland</td> </tr> <tr> <td>137</td> <td>Philippines</td> <td></td> <td>Belgium</td> </tr> <tr> <td>152</td> <td>Middle East</td> <td></td> <td>Denmark</td> </tr> <tr> <td>156</td> <td>Singapore</td> <td></td> <td>Finland</td> </tr> <tr> <td>159</td> <td>South Africa</td> <td></td> <td>Portugal</td> </tr> <tr> <td>169</td> <td>Thailand</td> <td></td> <td>Ireland</td> </tr> <tr> <td>181</td> <td>U.S.A.</td> <td></td> <td>Norway</td> </tr> <tr> <td>242</td> <td>South America</td> <td>254</td> <td>Taiwan</td> </tr> <tr> <td>243</td> <td>Saudi Arabia</td> <td></td> <td></td> </tr> </tbody> </table> <p>Completion Press the stop key.</p>	Code	Destination	Code	Destination	000	Japan	253	CTR21 (European nations)	009	Australia		Italy	038	China		Germany	080	Hong Kong		Spain	084	Indonesia		U.K.	088	Israel		Netherlands	097	Korea		Sweden	108	Malaysia		France	126	New Zealand		Austria	136	Peru		Switzerland	137	Philippines		Belgium	152	Middle East		Denmark	156	Singapore		Finland	159	South Africa		Portugal	169	Thailand		Ireland	181	U.S.A.		Norway	242	South America	254	Taiwan	243	Saudi Arabia		
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FAX call Setting	<p>FAX call setting</p> <p>Description Selects if a fax is to be connected to either a PBX or public switched telephone network. Selects the mode to connect an outside call when connected to a PBX. Access code registration for connection to PSTN.</p> <p>Purpose To be executed as required.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Enter the Service Setting menu. 2. Select [FAX Call Set.]. 3. Press the start key. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Exchange Select.</td> <td>Setting the connection to PBX/PSTN</td> </tr> <tr> <td>PBX Setting</td> <td>Setting for a PBX</td> </tr> <tr> <td>Dial No. to PSTN</td> <td>Setting access code to PSTN</td> </tr> </tbody> </table> <p>Setting the connection to PBX/PSTN</p> <ol style="list-style-type: none"> 1. Select [Exchange Select.]. 2. Press the start key. 3. Select [PBX] or [PSTN]. 4. Press the start key. The setting is set. <p>Setting for PBX</p> <ol style="list-style-type: none"> 1. Select [PBX Setting]. 2. Press the start key. 3. Select [Loop], [Flash] or [Earth]. 4. Press the start key. The setting is set. <p>Setting access code to PSTN</p> <ol style="list-style-type: none"> 1. Select [Dial No. to PSTN]. 2. Press the start key. 3. Enter access code using the numeric keys. (0 to 9, 00 to 99) 4. Press the start key. The setting is set. <p>Completion Press the stop key.</p>	Display	Description	Exchange Select.	Setting the connection to PBX/PSTN	PBX Setting	Setting for a PBX	Dial No. to PSTN	Setting access code to PSTN
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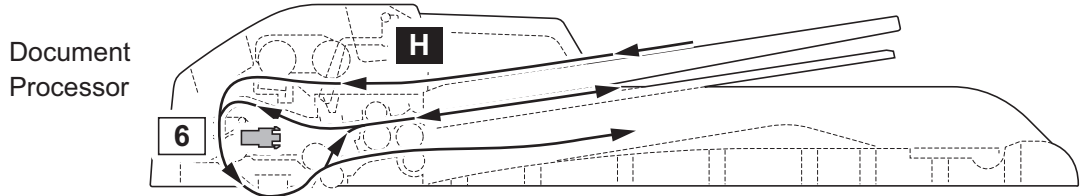
Service items	Description
Remote diagnostics	<p>Setting remote diagnostics</p> <p>Description Sets the remote diagnostics.</p> <p>Purpose Used to establish communication between the machine and the service facility when a problem is encountered.</p> <p>Method</p> <ol style="list-style-type: none"> 1. Enter the Service Setting menu. 2. Select [Remote Diag.Set.]. 3. Press the start key. 4. Select [On]. 5. Press the start key. The setting is set. 6. Select [Remote Diag. ID]. 7. Press the start key. 8. Enter the prespecified remote diagnostics ID number (0000 to 9999) using the numeric keys. 9. Press the start key. The setting is set. <p>Completion Press the stop key.</p>

1-4-1 Paper misfeed detection

(1) Paper misfeed indication

When a paper misfeed occurs, the machine immediately stops printing and displays the paper misfeed message on the operation panel. To remove paper misfed in the machine, pull out the cassette, open the rear cover or paper conveying unit.

(2) Paper misfeed detection condition



Paper jam location	
A	Cassette 1
B	MP tray
C	Machine inside
D	Fuser/Eject sections
E	Duplex section
F	Cassette 2
G	Cassette 3
H	Document processor

Sensors	
1	Registration sensor
2	MP paper conveying sensor
3	Eject sensor
4	PF feed sensor 1
5	PF feed sensor 2
6	DP timing sensor

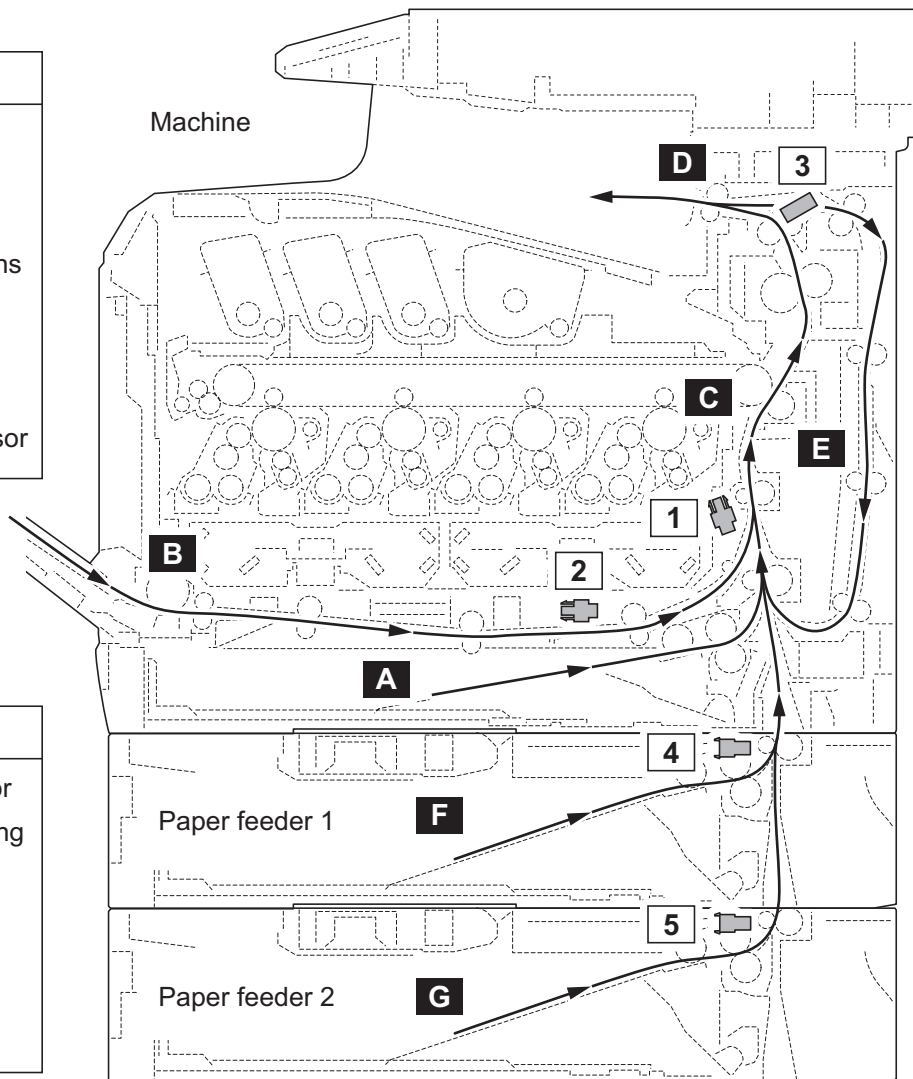


Figure 1-4-1 Paper jam location

Code	Contents	Conditions	Jam location*
0100	Controller sequence error	Secondary paper feed request given by the controller is unreachable.	C
0105	Registration sensor not detected	Activation of the registration sensor (on/off) is undetected for 90 s during printing.	-
0106	Controller sequence error	Paper feeding request for duplex printing given by the controller is unreachable.	E
0110	Inner tray open	The inner tray is opened during printing.	-
0111	Rear cover open	The rear cover is opened during printing.	-
0112	Front cover open	The waste toner cover is opened during printing.	-
0120	Controller sequence error	Paper feed request was received from the duplex section despite the absence of paper in the duplex section.	E
0121	Controller sequence error	The controller issued the duplex section a request for more pages than the duplex print cycle contains.	E
0211	Rear cover open (paper feeder 1)	The rear cover of paper feeder 1 is opened during printing.	-
0212	Rear cover open (paper feeder 2)	The rear cover of paper feeder 2 is opened during printing.	-
0501	No paper feed from cassette 1	The registration sensor (RS) does not turn on during paper feed from cassette.	A
0502	No paper feed from cassette 2	PF feed sensor 1 (PFFS1) does not turn on during paper feed from paper feeder 1.	F
0503	No paper feed from cassette 3	PF feed sensor 2 (PFFS2) does not turn on during paper feed from paper feeder 2.	G
0508	No paper feed from duplex section	The registration sensor (RS) does not turn on during paper feed from duplex section.	E
0509	No paper feed from MP tray	MP paper conveying sensor (MPPCS) does not turn on during paper feed from MP tray.	B
0511	Multiple sheets in cassette 1	The registration sensor (RS) does not turn off during paper feed from cassette.	A
0512	Multiple sheets in cassette 2	PF feed sensor 1 (PFFS1) does not turn off during paper feed from paper feeder 1.	F
0513	Multiple sheets in cassette 3	PF feed sensor 2 (PFFS2) does not turn off during paper feed from paper feeder 2.	G
0518	Multiple sheets in duplex section	The registration sensor (RS) does not turn off during paper feed from duplex section.	E
0519	Multiple sheets in MP tray	MP paper conveying sensor (MPPCS) does not turn off during paper feed from MP tray.	B

*: Refer to figure 1-4-2 for paper jam location (see page 1-4-1).

Code	Contents	Conditions	Jam location*
1020	MP feed sensor remaining jam	MP feed sensor (MPFS) is turned on when the power is turned on.	B
1403	PF feed sensor 1 non arrival jam	PF feed sensor 1 (PFFS1) does not turn on during paper feed from paper feeder 2.	F
1413	PF feed sensor 1 stay jam	PF feed sensor 1 (PFFS1) does not turn off during paper feed from paper feeder 2.	F
1420	PF feed sensor 1 remaining jam	PF feed sensor 1 (PFFS1) is turned on when the power is turned on.	F
1620	PF feed sensor 2 remaining jam	PF feed sensor 2 (PFFS2) is turned on when the power is turned on.	G
4002	Registration sensor non arrival jam	The registration sensor (RS) does not turn on during paper feed from paper feeder 1.	A
4003		The registration sensor (RS) does not turn on during paper feed from paper feeder 2.	A
4009		The registration sensor (RS) does not turn on during paper feed from MP tray.	A
4012	Registration sensor stay jam	The registration sensor (RS) does not turn off during paper feed from paper feeder 1.	C
4013		The registration sensor (RS) does not turn off during paper feed from paper feeder 2.	C
4019		The registration sensor (RS) does not turn off during paper feed from MP tray.	C
4020	Registration sensor remaining jam	The registration sensor (RS) is turned on when the power is turned on.	C
4201	Eject sensor non arrival jam	The eject sensor (ES) does not turn on during paper feed from cassette.	C
4202		The eject sensor (ES) does not turn on during paper feed from paper feeder 1.	C
4203		The eject sensor (ES) does not turn on during paper feed from paper feeder 2.	C
4208		The eject sensor (ES) does not turn on during paper feed from duplex section.	C
4209		The eject sensor (ES) does not turn on during paper feed from MP tray.	C

*: Refer to figure 1-4-2 for paper jam location (see page 1-4-1).

Code	Contents	Conditions	Jam location*
4211	Eject sensor stay jam	The eject sensor (ES) does not turn off during paper feed from cassette.	D
4212		The eject sensor (ES) does not turn off during paper feed from paper feeder 1.	D
4213		The eject sensor (ES) does not turn off during paper feed from paper feeder 2.	D
4218		The eject sensor (ES) does not turn off during paper feed from duplex section.	D
4219		The eject sensor (ES) does not turn off during paper feed from MP tray.	D
4220	Eject sensor remaining jam	The eject sensor (ES) is turned on when the power is turned on.	D
9000	No original feed	The DP timing sensor (DPTS) does not turn on within specified time during the first sheet feeding (Retry 5 times).	H
9001	An original jam in the original conveying section	DP timing sensor (DPTS) turns off within the specified time since the sensor turns on.	H
9003	An original jam in the original switchback section 1	During duplex switchback scanning, the DP timing sensor (DPTS) does not turn off within specified time.	H
9004	An original jam in the original switchback section 2	During duplex switchback scanning, the DP timing sensor (DPTS) does not turn on within specified time since original switchback operation starts.	H
9011	DP top cover open	The DP or DP top cover is opened during original feeding.	H
9401	An original jam in the original conveying section	The DP timing sensor (DPTS) does not turn off within specified time of the DP timing sensor (DPTS) turning on.	H

*: Refer to figure 1-4-2 for paper jam location (see page 1-4-1).

1-4-2 Self-diagnostic function

(1) Self-diagnostic function

This machine is equipped with self-diagnostic function. When a problem is detected, the machine stops printing and display an error message on the operation panel. An error message consists of a message prompting a contact to service personnel and a four-digit error code indicating the type of the error.

(2) Self diagnostic codes

If the part causing the problem was not supplied, use the unit including the part for replacement.

Code	Contents	Causes	Check procedures/ corrective measures
0030	FAX control PWB system error Processing with the fax software was disabled due to a hardware problem.	Defective FAX control PWB.	Replace the fax control PWB and check for correct operation. (see page 1-5-36).
0070	FAX control PWB incompatible detection error Abnormal detection of FAX control PWB incompatibility In the initial communication with the FAX control PWB, any normal communication command is not transmitted.	Defective FAX software.	Install the fax software.
		Defective FAX control PWB.	Replace the fax control PWB and check for correct operation. (see page 1-5-36).
0100	Backup memory device error	Defective flash memory.	Replace the main PWB and check for correct operation (see page 1-5-30).
		Defective main PWB.	Replace the main PWB and check for correct operation (see page 1-5-30).
0120	MAC address data error For data in which the MAC address is invalid.	Defective flash memory.	Replace the main PWB and check for correct operation (see page 1-5-30).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
0130	Backup memory read/write error (main PWB)	Defective flash memory.	Replace the main PWB and check for correct operation (see page 1-5-30).
		Defective main PWB.	Replace the main PWB and check for correct operation (see page 1-5-30).

Code	Contents	Causes	Check procedures/ corrective measures
0140	Backup memory data error (main PWB)	Defective flash memory.	Replace the main PWB and check for correct operation (see page 1-5-30).
		Defective main PWB.	Replace the main PWB and check for correct operation (see page 1-5-30).
0150	Engine PWB EEPROM error Detecting engine PWB EEPROM communication error.	Improper installation engine PWB EEPROM.	Check the installation of the EEPROM and remedy if necessary.
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
		Device damage of EEPROM.	Contact the Service Administrative Division.
0170	Billing counting error A checksum error is detected in the main and engine backup memories for the billing counters.	Data damage of EEPROM.	Contact the Service Administrative Division.
		Defective PWB.	Replace the main PWB or the engine PWB and check for correct operation (see page 1-5-30, 1-5-27).
0180	Machine number mismatch Machine number of main and engine does not match.	Data damage of EEPROM.	Contact the Service Administrative Division.
0600	Expanded memory (DIMM) installing error The expansion memory modules (DIMM) are not correctly mounted.	Improper installation expanded memory (DIMM).	Check the installation of the expanded memory (DIMM).

Code	Contents	Causes	Check procedures/ corrective measures
0610	Expanded memory (DIMM) error The expansion memory modules (DIMM) mounted on the main PWB does not operate correctly.	Defective expanded memory (DIMM).	Replace the expanded memory (DIMM) and check for correct operation (see page 1-2-11).
		Defective main PWB.	Replace the main PWB and check for correct operation (see page 1-5-30).
0830	FAX control PWB flash program area checksum error A checksum error occurred with the program of the FAX control PWB.	Defective FAX software.	Install the fax software.
		Defective FAX control PWB.	Replace the FAX control PWB (see page 1-5-36).
0840	Faults of RTC The time is judged to go back based on the comparison of the RTC time and the current time or five years or more have passed.	The battery is disconnected from the main PWB.	Check visually and remedy if necessary
		Defective main PWB.	Replace the main PWB and check for correct operation (see page 1-5-30).
0870	FAX control PWB to main PWB high capacity data transfer error High-capacity data transfer between the FAX control PWB and the main PWB of the machine was not normally performed even if the data transfer was retried the specified times.	Improper installation FAX control PWB.	Reinstall the FAX control PWB (see page 1-5-36).
		Defective FAX control PWB or main PWB.	Replace the FAX control PWB or main PWB and check for correct operation (see page 1-5-36 or 1-5-30).
0920	Fax file system error The backup data is not retained for file system abnormality of flash memory of the FAX control PWB.	Defective FAX control PWB.	Replace the FAX control PWB and check for correct operation (see page 1-5-36).

Code	Contents	Causes	Check procedures/ corrective measures
0930	EEPROM bus error	Defective drum PWB (EEPROM).	Replace the drum unit (see page 1-5-21).
		Defective engine PWB (EEPROM).	Replace the engine PWB and check for correct operation (see page 1-5-27).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
		Defective main PWB.	Replace the main PWB and check for correct operation (see page 1-5-30).
1010	Lift motor error When the lift motor is driven, the motor over-current detection signal is detected continuously for 50 times (5 s) at 100 ms intervals. After the lift motor is driven, the ON status of lift sensor cannot be detected for 8 s. The cassette installed confirmation message is displayed on the operation panel, and even if the cassette is opened and closed, the cassette installed confirmation message is displayed 5 times successively.	Defective bottom plate elevation mechanism in the cassette.	Check to see if the bottom plate can move smoothly and repair it if any problem is found.
		Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Lift motor and engine PWB (YC27)
		Defective drive transmission system of the lift motor.	Check if the gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective lift motor.	Replace the lift motor
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
1020	PF lift motor error (paper feeder 1) When the lift motor is driven, the motor over-current detection signal is detected continuously for 50 times (5 s) at 100 ms intervals. After the lift motor is driven, the ON status of lift sensor cannot be detected for 8 s. The cassette installed confirmation message is displayed on the operation panel, and even if the cassette is opened and closed, the cassette installed confirmation message is displayed 5 times successively.	Defective bottom plate elevation mechanism in the cassette.	Check to see if the bottom plate can move smoothly and repair it if any problem is found.
		Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PF lift motor and PF main PWB (YC7)
		Defective drive transmission system of the PF lift motor.	Check if the gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective PF lift motor.	Replace the PF lift motor
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).

Code	Contents	Causes	Check procedures/ corrective measures
1030	PF lift motor error (paper feeder 2) When the lift motor is driven, the motor over-current detection signal is detected continuously for 50 times (5 s) at 100 ms intervals. After the lift motor is driven, the ON status of lift sensor cannot be detected for 8 s. The cassette installed confirmation message is displayed on the operation panel, and even if the cassette is opened and closed, the cassette installed confirmation message is displayed 5 times successively.	Defective bottom plate elevation mechanism in the cassette.	Check to see if the bottom plate can move smoothly and repair it if any problem is found.
		Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PF lift motor and PF main PWB (YC7)
		Defective drive transmission system of the PF lift motor.	Check if the gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective PF lift motor.	Replace the PF lift motor
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
1500	PF heater 1 high temperature error (paper feeder 1) A temperature higher than 75°C/167°F is detected.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PF fan motor 1 and PF main PWB (YC111)
		Shorted PF thermistor 1.	Replace the top heater unit (Refer to the service manual for the paper feeder).
		Defective PF fan motor 1.	Replace the top heater unit (Refer to the service manual for the paper feeder).
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
1510	PF heater 2 high temperature error (paper feeder 1) A temperature higher than 75°C/167°F is detected.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PF fan motor 2 and PF main PWB (YC111)
		Shorted PF thermistor 2.	Replace the side heater unit (Refer to the service manual for the paper feeder).
		Defective PF fan motor 2.	Replace the side heater unit (Refer to the service manual for the paper feeder).
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).

Code	Contents	Causes	Check procedures/ corrective measures
1520	PF heater 1 high temperature error (paper feeder 2) A temperature higher than 75°C/167°F is detected.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PF fan motor 1 and PF main PWB (YC111)
		Shorted PF thermistor 1.	Replace the top heater unit (Refer to the service manual for the paper feeder).
		Defective PF fan motor 1.	Replace the top heater unit (Refer to the service manual for the paper feeder).
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
1530	PF heater 2 high temperature error (paper feeder 2) A temperature higher than 75°C/167°F is detected.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PF fan motor 2 and PF main PWB (YC111)
		Shorted PF thermistor 2.	Replace the side heater unit (Refer to the service manual for the paper feeder).
		Defective PF fan motor 2.	Replace the side heater unit (Refer to the service manual for the paper feeder).
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
1600	PF heater 1 low temperature error (paper feeder 1) An external temperature higher than + 5°C/+ 9°F is not detected when one minute elapses after PF heater 1 is turned on.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PF heater 1 and PF heater PWB (YC1) PF heater PWB (YC3) and PF main PWB (YC113) PF thermistor 1 and PF main PWB (YC114)
		PF thermistor 1 installed incorrectly.	Check the installation of the PF thermistor 1.
		Defective PF thermistor 1.	Replace the top heater unit (Refer to the service manual for the paper feeder).
		Broken PF heater 1.	Replace the top heater unit (Refer to the service manual for the paper feeder).
		Defective PF heater PWB or PF main PWB.	Replace the PF heater PWB or PF main PWB (Refer to the service manual for the paper feeder).

Code	Contents	Causes	Check procedures/ corrective measures
1610	PF heater 2 low temperature error (paper feeder 1) An external temperature higher than + 5°C/+ 9°F is not detected when one minute elapses after PF heater 2 is turned on.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PF heater 2 and PF heater PWB (YC2) PF heater PWB (YC3) and PF main PWB (YC113) PF thermistor 2 and PF main PWB (YC115)
		PF thermistor 2 installed incorrectly.	Check the installation of the PF thermistor 2.
		Defective PF thermistor 2.	Replace the side heater unit (Refer to the service manual for the paper feeder).
		Broken PF heater 2.	Replace the side heater unit (Refer to the service manual for the paper feeder).
		Defective PF heater PWB or PF main PWB.	Replace the PF heater PWB or PF main PWB (Refer to the service manual for the paper feeder).
1620	PF heater 1 low temperature error (paper feeder 2) An external temperature higher than + 5°C/+ 9°F is not detected when one minute elapses after PF heater 1 is turned on.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PF heater 1 and PF heater PWB (YC1) PF heater PWB (YC3) and PF main PWB (YC113) PF thermistor 1 and PF main PWB (YC114)
		PF thermistor 1 installed incorrectly.	Check the installation of the PF thermistor 1.
		Defective PF thermistor 1.	Replace the top heater unit (Refer to the service manual for the paper feeder).
		Broken PF heater 1.	Replace the top heater unit (Refer to the service manual for the paper feeder).
		Defective PF heater PWB or PF main PWB.	Replace the PF heater PWB or PF main PWB (Refer to the service manual for the paper feeder).

Code	Contents	Causes	Check procedures/ corrective measures
1630	PF heater 2 low temperature error (paper feeder 2) An external temperature higher than + 5°C/+ 9°F is not detected when one minute elapses after PF heater 2 is turned on.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PF heater 2 and PF heater PWB (YC2) PF heater PWB (YC3) and PF main PWB (YC113) PF thermistor 2 and PF main PWB (YC115)
		PF thermistor 2 installed incorrectly.	Check the installation of the PF thermistor 2.
		Defective PF thermistor 2.	Replace the side heater unit (Refer to the service manual for the paper feeder).
		Broken PF heater 2.	Replace the side heater unit (Refer to the service manual for the paper feeder).
		Defective PF heater PWB or PF main PWB.	Replace the PF heater PWB or PF main PWB (Refer to the service manual for the paper feeder).
1800	Paper feeder communication error Communication error between engine PWB and optional paper feeder.	Improper installation paper feeder.	Follow installation instruction carefully again.
		Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PF main PWB (YC3) and engine PWB (YC33)
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
2100	Developing motor error The developing motor ready input is not given for 5 s during the main motor is ON.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Developing motor and engine PWB (YC14)
		Defective drive transmission system of the developing motor.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective developing motor.	Replace the developing motor.
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).

Code	Contents	Causes	Check procedures/ corrective measures
2200	Drum motor error The drum motor ready input is not given for 5 s during the drum motor is ON.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Drum motor and engine PWB (YC13)
		Defective drive transmission system of the drum motor.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective drum motor.	Replace the drum motor.
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
2330	Fuser pressure release motor error When the fuser pressure release motor is driven, the motor over-current detection signal is detected continuously for 8 times (800 ms) at 100 ms intervals.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Fuser pressure release motor and engine PWB (YC38)
		Defective drive transmission system of the fuser pressure release motor.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective fuser pressure release motor.	Replace the fuser pressure release motor.
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
2340	Fuser pressure release motor time-out error When the fuser pressure release motor is driven, the envelope switch (EVS) is not detectable for 6 s.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Fuser pressure release motor and engine PWB (YC38)
		Defective drive transmission system of the fuser pressure release motor.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective fuser pressure release motor.	Replace the fuser pressure release motor.
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).

Code	Contents	Causes	Check procedures/ corrective measures
2500	Paper feed motor error The drum motor ready input is not given for 5 s during the paper feed motor is ON.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Paper feed motor and engine PWB (YC3)
		Defective drive transmission system of the paper feed motor.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective paper feed motor.	Replace the paper feed motor.
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
2600	PF paper feed motor error (paper feeder 1) The drum motor ready input is not given for 2 s during the PF paper feed motor is ON.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PF paper feed motor and PF main PWB (YC6)
		Defective drive transmission system of the PF paper feed motor.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective PF paper feed motor.	Replace the PF paper feed motor.
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
2610	PF paper feed motor error (paper feeder 2) The drum motor ready input is not given for 2 s during the PF paper feed motor is ON.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PF paper feed motor and PF main PWB (YC6)
		Defective drive transmission system of the PF paper feed motor.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective PF paper feed motor.	Replace the PF paper feed motor.
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).

Code	Contents	Causes	Check procedures/ corrective measures
2730	Developing release motor error When the developing release motor is driven, the motor over-current detection signal is detected continuously for 8 times (800 ms) at 100 ms intervals.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Developing release motor and engine PWB (YC35)
		Defective drive transmission system of the developing release motor.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective developing release motor.	Replace the developing release motor.
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
2740	Developing release motor time-out error When the developing release motor is driven, the developing release switch (DEVRSW) is not detectable for 1 s.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Developing release motor and engine PWB (YC35)
		Defective drive transmission system of the developing release motor.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective developing release motor.	Replace the developing release motor.
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
2820	Fuser motor error The fuser motor ready input is not given for 5 s during the fuser motor is ON.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Fuser motor and engine PWB (YC15)
		Defective drive transmission system of the fuser motor.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective fuser motor.	Replace the fuser motor.
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).

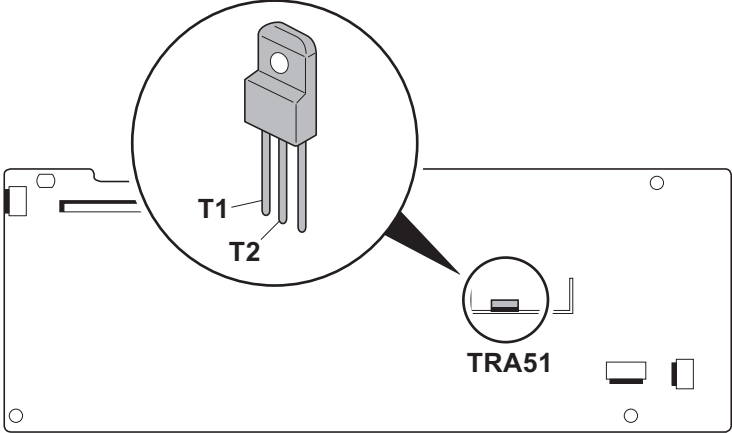
Code	Contents	Causes	Check procedures/ corrective measures
3100	ISU home position error The home position is not correct when the power is turned on or at the start of copying using the table.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Home position sensor and CCD PWB (YC3) CCD PWB (YC1) and main PWB (YC8) ISU motor and main PWB (YC36)
		Defective home position sensor.	Replace the home position sensor.
		Defective ISU motor.	Replace the ISU motor.
		Defective CCD PWB.	Replace the scanner unit (see page 1-5-48).
		Defective main PWB.	Replace the main PWB and check for correct operation (see page 1-5-30).
3200	Exposure lamp error The exposure lamp does not turn on when power is on. The lamp's lumosity does not stabilize in one minute after power is on.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. LED PWB and LED driving PWB (YC2) LED driving PWB (YC1) and CCD PWB (YC3) CCD PWB (YC1) and main PWB (YC8)
		Defective LED PWB.	Replace the scanner unit (see page 1-5-48).
		Defective LED driving PWB or CCD PWB.	Replace the scanner unit (see page 1-5-48).
		Defective main PWB.	Replace the main PWB and check for correct operation (see page 1-5-30).

Code	Contents	Causes	Check procedures/ corrective measures
3500	Communication error between scanner and ASIC An error code is detected.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. CCD PWB (YC1) and main PWB (YC8)
		Defective CCD PWB.	Replace the scanner unit (see page 1-5-48).
		Defective main PWB.	Replace the main PWB and check for correct operation (see page 1-5-30).
4001	Polygon motor KM error The polygon motor KM ready input is not given for 10 s during the polygon motor is ON.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Laser scanner unit KM and engine PWB (YC31)
		Defective polygon motor KM.	Replace the laser scanner unit KM (see page 1-5-45).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
4002	Polygon motor CY error The polygon motor CY ready input is not given for 10 s during the polygon motor is ON.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Laser scanner unit CY and engine PWB (YC31)
		Defective polygon motor CY.	Replace the laser scanner unit CY (see page 1-5-45).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
4201	Laser output error (black) The pin photo signal is not output from PD PWB K for one second while laser is emitted.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. APC PWB K and engine PWB (YC31)
		Defective APC PWB K.	Replace the laser scanner unit KM (see page 1-5-45).
		Defective PD PWB K.	Replace the laser scanner unit KM (see page 1-5-45).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).

Code	Contents	Causes	Check procedures/ corrective measures
4202	Laser output error (cyan) The pin photo signal is not output from PD PWB C for one second while laser is emitted.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. APC PWB C and engine PWB (YC32)
		Defective APC PWB C.	Replace the laser scanner unit CY (see page 1-5-45).
		Defective PD PWB C.	Replace the laser scanner unit CY (see page 1-5-45).
		Defective engine PWB.	Replace the engine PWB (see page 1-5-27).
4203	Laser output error (magenta) The pin photo signal is not output from PD PWB M for one second while laser is emitted.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. APC PWB M and engine PWB (YC31)
		Defective APC PWB M.	Replace the laser scanner unit KM (see page 1-5-45).
		Defective PD PWB M.	Replace the laser scanner unit KM (see page 1-5-45).
		Defective engine PWB.	Replace the engine PWB (see page 1-5-27).
4204	Laser output error (yellow) The pin photo signal is not output from PD PWB Y for one second while laser is emitted.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. APC PWB Y and engine PWB (YC32)
		Defective APC PWB Y.	Replace the laser scanner unit CY (see page 1-5-45).
		Defective PD PWB Y.	Replace the laser scanner unit CY (see page 1-5-45).
		Defective engine PWB.	Replace the engine PWB (see page 1-5-27).
4600	LSU cleaning motor error When the LSU cleaning motor is driven, the motor over-current detection signal is detected continuously for 50 times (5 s) at 100 ms intervals.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. LSU cleaning motor and engine PWB (YC36)
		Defective drive transmission system of the LSU cleaning motor.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective LSU cleaning motor.	Replace the LSU cleaning motor.
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).

Code	Contents	Causes	Check procedures/ corrective measures
4700	VIDEO ASIC device error	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Main PWB (YC39) and relay PWB (YC3) Relay PWB (YC2, 4) and engine PWB (YC8, 9)
		Defective main PWB or engine PWB.	Replace the main PWB or the engine PWB and check for correct operation (see page 1-5-30, 1-5-27).
5301	Broken cleaning lamp K wire When the cleaning lamp K is driven, the lamp over-current detection signal is detected continuously for 10 times (1 s) at 100 ms intervals.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Drum unit K and Drum relay PWB (YC2) Drum relay PWB (YC1) and engine PWB (YC34)
		Defective cleaning lamp K.	Replace the drum unit K. (see page 1-5-21).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
5302	Broken cleaning lamp C wire When the cleaning lamp C is driven, the lamp over-current detection signal is detected continuously for 10 times (1 s) at 100 ms intervals.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Drum unit C and Drum relay PWB (YC4) Drum relay PWB (YC1) and engine PWB (YC34)
		Defective cleaning lamp C.	Replace the drum unit C. (see page 1-5-21).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
5303	Broken cleaning lamp M wire When the cleaning lamp M is driven, the lamp over-current detection signal is detected continuously for 10 times (1 s) at 100 ms intervals.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Drum unit M and Drum relay PWB (YC3) Drum relay PWB (YC1) and engine PWB (YC34)
		Defective cleaning lamp M.	Replace the drum unit M. (see page 1-5-21).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).

Code	Contents	Causes	Check procedures/ corrective measures
5304	Broken cleaning lamp Y wire When the cleaning lamp Y is driven, the lamp over-current detection signal is detected continuously for 10 times (1 s) at 100 ms intervals.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Drum unit Y and Drum relay PWB (YC5) Drum relay PWB (YC1) and engine PWB (YC34)
		Defective cleaning lamp Y.	Replace the drum unit Y. (see page 1-5-21).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
6000	Broken fuser heater wire The detected temperature of fuser thermistor does not rise 1°C/1.8°F after the fuser heater has been turned on continuously for 10 s in warming up. The fuser temperature does not reach 100°C/212°F after the fuser heater has been turned on continuously for 30 s in warming up. The detected temperature of fuser thermistor does not reach the specified temperature (ready indication temperature) after the fuser heater has been turned on continuously for 60 s in warming up. The detected temperature of fuser thermistor does not rise 1°C/1.8°F after the fuser heater has been turned on continuously for 10 s during printing.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Fuser heater and power source PWB (YC102) Fuser unit and eject PWB (YC3) Eject PWB (YC1) and engine PWB (YC19)
		Deformed connector pin.	See page 1-4-21.
		Defective triac.	See page 1-4-21.
		Fuser thermostat triggered.	Reinsert the fuser unit (see page 1-5-26).
		Broken fuser heater wire.	Replace the fuser unit (see page 1-5-26).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
6020	Abnormally high fuser thermistor temperature The fuser thermistor detects a temperature higher than 240°C/464°F. By the activation of the high temperature error detection circuit (230°C/446°F or more) of fuser thermistor, the illumination of fuser heater was forcibly turned off and 10 s has elapsed.	Deformed connector pin.	See page 1-4-21.
		Defective triac.	See page 1-4-21.
		Shorted fuser thermistor.	Replace the fuser unit (see page 1-5-26).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).

Code	Contents	Causes	Check procedures/ corrective measures
6030	Broken fuser thermistor wire Input from fuser thermistor is 3 or less (A/D value) continuously for 1 s.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Fuser unit and eject PWB (YC3) Eject PWB (YC1) and engine PWB (YC19)
		Deformed connector pin.	See page 1-4-21.
		Defective triac.	See page 1-4-21.
		Broken fuser thermistor wire.	Replace the fuser unit (see page 1-5-26).
		Fuser thermostat triggered.	Reinsert the fuser unit (see page 1-5-26).
		Broken fuser heater wire.	Replace the fuser unit (see page 1-5-26).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
6000/ 6020/ 6030 Combined	Broken fuser heater wire Abnormally high fuser thermistor temperature Broken fuser thermistor wire	Deformed connector pin.	If the I/F connector pins of the fuser unit and the main unit are deformed owing to foreign matters, such as paper dusts, replace the connectors or the units including the connectors.
		Defective triac.	Remove the power cord and check that the resistance between terminals T1 and T2 of the triac TRA51 is of several Mega-Ohms and not shorted (see figure 1-4-4). If failed, replace the power source PWB (see page 1-5-29).
 <p>Power source PWB</p> <p>Figure 1-4-2</p>			

Code	Contents	Causes	Check procedures/ corrective measures
6400	Zero-cross signal error The zero-cross signal does not reach the engine PWB for more than 1 s.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Power source PWB (YC103) and relay PWB (YC1) Relay PWB (YC4) and engine PWB (YC9)
		Defective power source PWB or engine PWB.	Replace the power source PWB or the engine PWB and check for correct operation (see page 1-5-29, 1-5-27).
7001	Toner motor K error When the toner motor K is driven, the motor over-current detection signal is detected continuously for 50 times (5 s) at 100 ms intervals.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Toner motor K and engine PWB (YC23)
		Defective drive transmission system of the toner motor K.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective toner motor K.	Replace the toner motor K.
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
7002	Toner motor C error When the toner motor C is driven, the motor over-current detection signal is detected continuously for 50 times (5 s) at 100 ms intervals.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Toner motor C and engine PWB (YC25)
		Defective drive transmission system of the toner motor C.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective toner motor C.	Replace the toner motor C.
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
7003	Toner motor M error When the toner motor M is driven, the motor over-current detection signal is detected continuously for 50 times (5 s) at 100 ms intervals.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Toner motor M and engine PWB (YC24)
		Defective drive transmission system of the toner motor M.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective toner motor M.	Replace the toner motor M.
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).

Code	Contents	Causes	Check procedures/ corrective measures
7004	Toner motor Y error When the toner motor Y is driven, the motor over-current detection signal is detected continuously for 50 times (5 s) at 100 ms intervals.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Toner motor Y and engine PWB (YC26)
		Defective drive transmission system of the toner motor Y.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective toner motor Y.	Replace the toner motor Y.
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
7401	Developing unit K non-installing error No density detection signal is output from toner sensor K in developing unit K.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Developing unit K and Drum relay PWB (YC6) Drum relay PWB (YC1) and engine PWB (YC34)
		Defective toner sensor K.	Replace the developing unit K (see page 1-5-19).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
7402	Developing unit C non-installing error No density detection signal is output from toner sensor C in developing unit C.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Developing unit C and Drum relay PWB (YC10) Drum relay PWB (YC1) and engine PWB (YC34)
		Defective toner sensor C.	Replace the developing unit C (see page 1-5-19).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
7403	Developing unit M non-installing error No density detection signal is output from toner sensor M in developing unit M.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Developing unit M and Drum relay PWB (YC7) Drum relay PWB (YC1) and engine PWB (YC34)
		Defective toner sensor M.	Replace the developing unit M (see page 1-5-19).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).

Code	Contents	Causes	Check procedures/ corrective measures
7404	Developing unit Y non-installing error No density detection signal is output from toner sensor Y in developing unit Y.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Developing unit Y and Drum relay PWB (YC13) Drum relay PWB (YC1) and engine PWB (YC34)
		Defective toner sensor Y.	Replace the developing unit Y (see page 1-5-19).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
7411	Drum unit K non-installing error The EEPROM of drum PWB K does not communicate normally.	Installation of incompatible drum unit K.	Install drum unit K compatible with the specifications to the machine.
		Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Drum unit K and Drum relay PWB (YC2) Drum relay PWB (YC1) and engine PWB (YC34)
		Defective drum PWB K.	Replace the drum unit K (see page 1-5-21).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
7412	Drum unit C non-installing error The EEPROM of drum PWB C does not communicate normally.	Installation of incompatible drum unit C.	Install drum unit C compatible with the specifications to the machine.
		Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Drum unit C and Drum relay PWB (YC4) Drum relay PWB (YC1) and engine PWB (YC34)
		Defective drum PWB C.	Replace the drum unit C (see page 1-5-21).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).

Code	Contents	Causes	Check procedures/ corrective measures
7413	Drum unit M non- installing error The EEPROM of drum PWB M does not communicate normally.	Installation of incompatible drum unit M.	Install drum unit M compatible with the specifications to the machine.
		Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Drum unit M and Drum relay PWB (YC3) Drum relay PWB (YC1) and engine PWB (YC34)
		Defective drum PWB M.	Replace the drum unit M (see page 1-5-21).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
7414	Drum unit Y non- installing error The EEPROM of drum PWB Y does not communicate normally.	Installation of incompatible drum unit Y.	Install drum unit Y compatible with the specifications to the machine.
		Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Drum unit Y and Drum relay PWB (YC5) Drum relay PWB (YC1) and engine PWB (YC34)
		Defective drum PWB Y.	Replace the drum unit Y (see page 1-5-21).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
9500			Contact the Service Administrative Division.
9510			
9520			
9530	Backup data error The serial number of the machine written on the EEPROM of the engine PWB differs with that is written on both the flash memory of the engine PWB and the EEPROM of the drum PWB as a backup.	Replacing both the engine PWB and the drum unit at the same time.	Check that the machine operates properly by reverting the engine controller and the drum unit to the old ones. To replace the engine PWB and the drum unit at the same time, turn on the machine after replacing either one. Check that the machine operates properly and then turn off the machine. Replace the other and turn on the machine to check that the machine operates properly. Be sure to replace one by one.

Code	Contents	Causes	Check procedures/ corrective measures
F000	Main PWB - operation panel PWB communication error	Defective main PWB.	Turn the main power switch off/on to restart the machine. If the error is not resolved, replace main PWB (see page 1-5-30).
		Defective operation panel PWB.	Replace the operation panel PWB and check for correct operation.
F010	Main PWB checksum error	Defective main PWB.	Turn the main power switch off/on to restart the machine. If the error is not resolved, replace main PWB (see page 1-5-30).
F020	Main PWB RAM checksum error	Defective main memory (RAM) on the main PWB.	Turn the main power switch off/on to restart the machine. If the error is not resolved, replace main PWB (see page 1-5-30).
		Defective expanded memory (DIMM).	Replace the expanded memory (DIMM) (see page 1-2-11).
F040	Main PWB - print engine communication error	Defective main PWB.	Turn the main power switch off/on to restart the machine. If the error is not resolved, replace main PWB (see page 1-5-30).
			Replace the engine PWB and check for correct operation (see page 1-5-27).
F041	Main PWB - scanner engine communication error	Defective main PWB.	Turn the main power switch off/on to restart the machine. If the error is not resolved, replace main PWB (see page 1-5-30).
F050	Print engine ROM checksum error	Defective engine PWB.	Turn the main power switch off/on to restart the machine. If the error is not resolved, replace engine PWB (see page 1-5-27).
F051	Scanner engine ROM checksum error	Defective engine PWB.	Turn the main power switch off/on to restart the machine. If the error is not resolved, replace engine PWB (see page 1-5-27).
F278	Power supply in drive system error	Main power switch was turned off without using the power key, or a power failure has occurred.	Turn on power. (To switch off power, first press the power key until the main power indicator goes off, then turn the main power switch off.)

1-4-3 Image formation problems

If the part causing the problem was not supplied, use the unit including the part for replacement.

(1) No image appears (entirely white).



See page 1-4-28

(2) No image appears (entirely black).



See page 1-4-28

(3) A specific color is printed solid.



See page 1-4-29

(4) The back side gets dirty.



See page 1-4-29

(5) Image is too light.



See page 1-4-29

(6) The background is colored.



See page 1-4-30

(7) White streaks are printed vertically.



See page 1-4-30

(8) Black streaks are printed vertically.



See page 1-4-30

(9) Streaks are printed horizontally.



See page 1-4-31

(10) Spots are printed.



See page 1-4-31

(11) The leading edge of image begins to print too early or too late.



See page 1-4-31

(12) Paper is wrinkled.



See page 1-4-31

(13) Offset occurs.



See page 1-4-32

(14) Part of image is missing.



See page 1-4-32

(15) Fusing is loose.



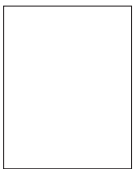
See page 1-4-32

(16) Colors are printed offset to each other.




See page 1-4-33


(1) No image appears (entirely white).

Print example	Causes		Check procedures/corrective measures
	Defective transfer bias output.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. High voltage PWB and engine PWB (YC11)
		Defective high voltage PWB.	Replace the high voltage PWB (see page 1-5-35).
		Defective engine PWB.	Replace the engine PWB (see page 1-5-27).
	Defective developing bias output.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. High voltage PWB and engine PWB (YC11)
		Defective high voltage PWB.	Replace the high voltage PWB (see page 1-5-35).
		Defective engine PWB.	Replace the engine PWB (see page 1-5-27).
	No LSU laser is output.	Defective laser scanner unit.	Replace the laser scanner unit KM/CY (see page 1-5-45).
		Defective engine PWB.	Replace the engine PWB (see page 1-5-27).

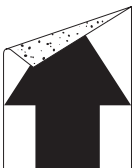
(2) No image appears (entirely black).

Print example	Causes		Check procedures/corrective measures
	No main charging.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. High voltage PWB and engine PWB (YC11)
		Defective charger roller unit.	Replace the drum unit (see page 1-5-21).
		Defective high voltage PWB.	Replace the high voltage PWB (see page 1-5-35).
		Defective engine PWB.	Replace the engine PWB (see page 1-5-27).
	Exposure lamp fails to light.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Exposure lamp and inverter PWB (CN2) Inverter PWB (CN1) and CCD PWB (YC3) CCD PWB (YC1) and main PWB (YC8)
		Defective inverter PWB or CCD PWB.	Replace the scanner unit (see page 1-5-48).
		Defective main PWB.	Replace the main PWB (see page 1-5-30).
	The laser is activated simultaneously for all colors.	Defective laser scanner unit.	Replace the laser scanner unit KM/CY (see page 1-5-45).

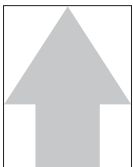
(3) A specific color is printed solid.

Print example	Causes	Check procedures/corrective measures
	Defective charger roller unit which corresponds to the color causing the problem.	Replace the drum unit for the color that causes an error (see page 1-5-21).
	Laser of laser scanner unit for solid color printing is ON. Defective laser scanner unit.	Replace the laser scanner unit KM/CY (see page 1-5-45).

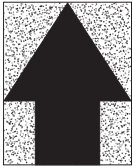
(4) The back side gets dirty.

Print example	Causes	Check procedures/corrective measures
	Dirty secondary transfer roller.	Clean the secondary transfer roller.
	Dirty paper conveying path.	Clean the paper conveying path.
	Dirty heat roller and press roller.	Clean the heat roller and press roller.


(5) Image is too light.

Print example	Causes	Check procedures/corrective measures	
	Defective developing bias output.	Defective developing unit.	Replace the developing unit for the color that causes an error (see page 1-5-19).
		Defective high voltage PWB.	Replace the high voltage PWB (see page 1-5-35).
		Defective engine PWB.	Replace the engine PWB (see page 1-5-27).
	Defective drum unit.		Decrease the surface potential by performing the main charger adjustment (see page 1-3-72). When the problem is not cleared, replace the drum unit (see page 1-5-21).
	Defective transfer bias output.	Defective high voltage PWB.	Replace the high voltage PWB (see page 1-5-35).
		Defective engine PWB.	Replace the engine (see page 1-5-27).
	Defective color calibration.		Perform the color calibration (Refer to operation guide).
	Insufficient toner.		If the display shows the message requesting toner replenishment, replace the container.
	Insufficient agitation of toner container.		Shake the toner container vertically approximately 10 times.
Paper damp.		Check the paper storage conditions, replace the paper.	

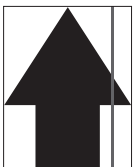
(6) The background is colored.

Print example	Causes	Check procedures/corrective measures	
	Defective color calibration.	Perform the color calibration (Refer to operation guide).	
	Defective developing bias output.	Defective developing unit.	Replace the developing unit for the color that causes an error (see page 1-5-19).
		Defective high voltage PWB.	Replace the high voltage PWB (see page 1-5-35).
		Defective engine PWB.	Replace the engine PWB (see page 1-5-27).
	Defective drum surface charging.	Defective drum unit.	Replace the drum unit (see page 1-5-21).
		Defective high voltage PWB.	Replace the high voltage PWB (see page 1-5-35).
Defective engine PWB.		Replace the engine PWB (see page 1-5-27).	

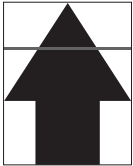
(7) White streaks are printed vertically.

Print example	Causes	Check procedures/corrective measures
	Foreign object in one of the developing units.	Replace the developing unit for the color that causes an error (see page 1-5-19).
	Adhesion of soiling to transfer belt.	Clean the transfer belt. Replace the intermediate transfer unit if it is extremely dirty (see page 1-5-22).
	Adhesion of soiling to transfer roller.	Clean the transfer roller. Replace the transfer roller if it is extremely dirty (see page 1-5-25).
	Dirty LSU dust shield glass.	Perform the LSU dust shield glass cleaning.


(8) Black streaks are printed vertically.

Print example	Causes	Check procedures/corrective measures
	Dirty contact glass.	Clean the contact glass.
	Dirty slit glass.	Clean the slit glass.
	Dirty or flawed drum.	Perform the drum surface refreshing (see page 1-3-71). Flawed drum. Replace the drum unit (see page 1-5-21).
	Deformed or worn cleaning blade in the drum unit.	Replace the drum unit (see page 1-5-21).
	Worn primary transfer belt.	Replace the intermediate transfer unit (see page 1-5-22).
	Defective transfer roller.	Replace the transfer roller (see page 1-5-25).

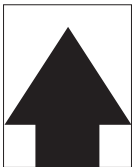
(9) Streaks are printed horizontally.

Print example	Causes	Check procedures/corrective measures
	Dirty or flawed drum.	Perform the drum surface refreshing (see page 1-3-71). Flawed drum. Replace the drum unit (see page 1-5-21).
	Dirty developing section.	Clean any part contaminated with toner in the developing section.
	Poor contact of grounding terminal of drum unit.	Check the installation of the drum unit. If it operates incorrectly, replace it (see page 1-5-21).

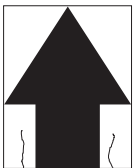
(10) Spots are printed.

Print example	Causes	Check procedures/corrective measures
	Dirty contact glass.	Clean the contact glass.
	Dirty or flawed drum.	Perform the drum surface refreshing (see page 1-3-71). Flawed drum. Replace the drum unit (see page 1-5-21).
	Deformed or worn cleaning blade in the drum unit.	Replace the drum unit (see page 1-5-21).
	Flawed developing roller.	Replace the developing unit (see page 1-5-19).
	Dirty heat roller and press roller.	Clean the heat roller and press roller.

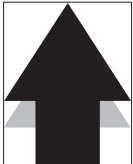
(11) The leading edge of image begins to print too early or too late.

Print example	Causes	Check procedures/corrective measures
	Paper feed clutch or registration clutch operating incorrectly.	Check the installation of the clutch. If it operates incorrectly, replace it.


(12) Paper is wrinkled.

Print example	Causes	Check procedures/corrective measures
	Paper curled.	Check the paper storage conditions.
	Paper damp.	Check the paper storage conditions.

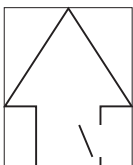
(13) Offset occurs.

Print example	Causes	Check procedures/corrective measures
	Defective drum surface charging.	Perform the drum surface refreshing (see page 1-3-71). When the problem is not cleared, increase the surface potential by performing the main charger adjustment (see page 1-3-72).
	Deformed or worn cleaning blade in the drum unit.	Replace the drum unit (see page 1-5-21).
	Defective transfer belt cleaning.	Replace the intermediate transfer unit (see page 1-5-22).
	Defective fuser unit.	Replace the fuser unit (see page 1-5-26).
	Wrong types of paper.	Check if the paper meets specifications. Replace paper.


(14) Part of image is missing.

Print example	Causes	Check procedures/corrective measures
	Paper damp.	Check the paper storage conditions.
	Paper creased.	Replace the paper.
	Drum condensation.	Perform the drum surface refreshing (see page 1-3-71).
	Dirty or flawed drum.	Perform the drum surface refreshing (see page 1-3-71). Flawed drum. Replace the drum unit (see page 1-5-21).
	Dirty transfer belt.	Clean the transfer belt. Replace the intermediate transfer unit if it is extremely dirty (see page 1-5-22).
	Dirty transfer roller.	Clean the transfer roller. Replace the transfer roller if it is extremely dirty (see page 1-5-25).

(15) Fusing is loose.

Print example	Causes	Check procedures/corrective measures
	Wrong types of paper.	Check if the paper meets specifications, replace paper.
	Flawed heat roller or press roller.	Replace the fuser unit (see page 1-5-26).

(16) Colors are printed offset to each other.

Print example	Causes	Check procedures/corrective measures
	Defective color calibration.	Perform the color calibration (refer to operation guide).
	Slip the mirror position of laser scanner unit.	Perform the normal color registration. When the problem is not cleared, perform the detail color registration adjustment (refer to operation guide).

1-4-4 Electric problems

If the part causing the problem was not supplied, use the unit including the part for replacement. Troubleshooting to each failure must be in the order of the numbered symptoms.

Problem	Causes	Check procedures/corrective measures
(1) The machine does not operate when the main power switch is turned on.	1. No electricity at the power outlet.	Measure the input voltage.
	2. The power cord is not plugged in properly.	Check the contact between the power plug and the outlet.
	3. The inner tray is not closed completely.	Check the inner tray.
	4. Broken power cord.	Check for continuity. If none, replace the cord.
	5. Defective main power switch.	Check for continuity across the contacts. If none, replace the power source PWB (see page 1-5-29).
	6. Defective interlock switch.	Check for continuity across the contacts of interlock switch. If none, replace the power source PWB (see page 1-5-29).
	7. Defective power source PWB.	Replace the power source PWB (see page 1-5-29).
(2) Duplex motor does not operate.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Duplex motor and engine PWB (YC37)
	2. Defective drive transmission system.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
	3. Defective motor.	Replace the duplex motor.
	4. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
(3) Right fan motor does not operate.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Right fan motor and main PWB (YC42)
	2. Defective motor.	Replace the right fan motor.
	3. Defective PWB.	Replace the main PWB and check for correct operation (see page 1-5-30).
(4) Left fan motor does not operate.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Left fan motor and engine PWB (YC29)
	2. Defective motor.	Replace the left fan motor.
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).

Problem	Causes	Check procedures/corrective measures
(5) Controller fan motor does not operate.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Controller fan motor and main PWB (YC41)
	2. Defective motor.	Replace the controller fan motor.
	3. Defective PWB.	Replace the main PWB and check for correct operation (see page 1-5-30).
(6) Fuser fan motor does not operate.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Fuser fan motor and engine PWB (YC40)
	2. Defective motor.	Replace the fuser fan motor.
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
(7) Container fan motor does not operate.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Container fan motor and engine PWB (YC28)
	2. Defective motor.	Replace the container fan motor.
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
(8) ISU motor does not operate.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. ISU motor and main PWB (YC36)
	2. Defective drive transmission system.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
	3. Defective motor.	Replace the ISU motor.
	4. Defective PWB.	Replace the main PWB and check for correct operation (see page 1-5-30).
(9) Paper feed clutch does not operate.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Paper feed clutch and engine PWB (YC3)
	2. Defective clutch.	Replace the paper feed clutch.
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
(10) MP feed clutch does not operate.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. MP feed clutch and engine PWB (YC3)
	2. Defective clutch.	Replace the MP feed clutch.
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).

Problem	Causes	Check procedures/corrective measures
(11) Registration clutch does not operate.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Registration clutch and engine PWB (YC3)
	2. Defective clutch.	Replace the registration clutch.
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
(12) Middle clutch does not operate.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Middle clutch and engine PWB (YC3)
	2. Defective clutch.	Replace the middle clutch.
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
(13) MP solenoid does not operate.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. MP solenoid and engine PWB (YC4)
	2. Defective solenoid.	Replace the MP solenoid.
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
(14) The message requesting paper to be loaded is shown when paper is present on the cassette.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Cassette PWB (YC1) and engine PWB (YC21)
	2. Deformed actuator of the paper sensor.	Check visually and replace if necessary.
	3. Defective paper sensor.	Replace the cassette PWB.
	4. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
(15) The message requesting paper to be loaded is shown when paper is present on the MP tray.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. MP paper sensor and engine PWB (YC16)
	2. Deformed actuator of the MP paper sensor.	Check visually and replace if necessary.
	3. Defective MP paper sensor.	Replace the MP paper sensor.
	4. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).
(16) The size of paper on the cassette is not displayed correctly.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Cassette size switch and engine PWB (YC17)
	2. Defective cassette size switch.	Replace the cassette size switch.
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-27).

Problem	Causes	Check procedures/corrective measures
(17) A paper jam in the paper feed, paper conveying or eject section is indicated when the main power switch is turned on.	1. A piece of paper torn from paper is caught around registration sensor, MP paper conveying sensor or eject sensor.	Check visually and remove it, if any.
	2. Defective registration sensor.	Replace the registration sensor.
	3. Defective MP paper conveying sensor.	Replace the MP paper conveying sensor.
	4. Defective eject sensor.	Replace the eject PWB.
(18) A message indicating cover open is displayed when the inner tray or rear cover is closed.	1. Deformed actuator of the interlock switch.	Check visually and replace if necessary.
	2. Defective interlock switch.	Replace the interlock switch.
(19) DP paper feed motor does not operate.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. DP paper feed motor and DP drive PWB (YC3) DP drive PWB (YC1) and main PWB (YC32)
	2. Defective drive transmission system.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
	3. Defective motor.	Replace the DP paper feed motor.
	4. Defective PWB.	Replace the DP drive PWB or main PWB and check for correct operation (see page 1-5-61, 1-5-30).
(20) DP paper feed clutch does not operate.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. DP paper feed clutch and DP drive PWB (YC6) DP drive PWB (YC8) and main PWB (YC32)
	2. Defective clutch.	Replace the DP paper feed clutch.
	3. Defective PWB.	Replace the DP drive PWB or main PWB and check for correct operation (see page 1-5-61, 1-5-30).
(21) DP pressure solenoid does not operate.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. DP pressure solenoid and DP drive PWB (YC4) DP drive PWB (YC8) and main PWB (YC32)
	2. Defective solenoid.	Replace the DP pressure solenoid.
	3. Defective PWB.	Replace the DP drive PWB or main PWB and check for correct operation (see page 1-5-61, 1-5-30).

Problem	Causes	Check procedures/corrective measures
(22) DP switchback solenoid does not operate.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. DP switchback solenoid and DP drive PWB (YC5) DP drive PWB (YC8) and main PWB (YC32)
	2. Defective solenoid.	Replace the DP switchback solenoid.
	3. Defective PWB.	Replace the DP drive PWB or main PWB and check for correct operation (see page 1-5-61, 1-5-30).
(23) An original jams when the main power switch is turned on.	1. A piece of paper torn from an original is caught around the DP timing sensor.	Check visually and remove it, if any.
	2. Defective DP timing sensor.	Replace the DP timing sensor.
(24) A message indicating cover open is displayed when the DP top cover is closed.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. DP open/close sensor and DP drive PWB (YC2) DP drive PWB (YC8) and main PWB (YC32)
	2. Defective DP open/close sensor.	Replace the DP open/close sensor.

1-4-5 Mechanical problems

If the part causing the problem was not supplied, use the unit including the part for replacement.

Problem	Causes/check procedures	Corrective measures
(1) No primary paper feed.	Check if the surfaces of the following rollers are dirty with paper powder. Pickup roller Paper feed roller MP paper feed roller	Clean with isopropyl alcohol.
	Check if the following rollers is deformed. Pickup roller Paper feed roller MP paper feed roller	Check visually and replace any deformed (see page 1-5-15, 1-5-17).
	Defective paper feed clutch installation.	Check visually and remedy if necessary.
(2) No secondary paper feed.	Check if the surfaces of the following rollers are dirty with paper powder. Front registration roller Rear registration roller	Clean with isopropyl alcohol.
	Defective registration clutch installation.	Check visually and remedy if necessary.
(3) Skewed paper feed.	Paper width guide in a cassette installed incorrectly.	Check the paper width guide visually and remedy or replace if necessary.
(4) Multiple sheets of paper are fed.	Check if the paper is excessively curled.	Change the paper.
	Paper is loaded incorrectly.	Load the paper correctly.
	Check if the retard roller is worn.	Replace the retard roller if it is worn (see page 1-5-13).
(5) Paper jams.	Check if the paper is excessively curled.	Change the paper.
	Check if the contact between the front and rear registration rollers is correct.	Check visually and remedy if necessary.
	Check if the heat roller or press roller is extremely dirty or deformed.	Check visually and replace the fuser unit (see page 1-5-26).
(6) Abnormal noise is heard.	Check if the rollers, pulleys and gears operate smoothly.	Grease the bushes and gears.
	Check if the following clutches are installed correctly. Paper feed clutch MP feed clutch Registration clutch Middle clutch	Check visually and remedy if necessary.
	Check if the following fan motors are installed correctly. Left fan motor Right fan motor Controller fan motor Fuser fan motor Container fan motor	Check visually and remedy if necessary.

Problem	Causes/check procedures	Corrective measures
(7) No primary original feed.	Check if the surfaces of the following pulleys are dirty with paper powder. DP forwarding pulley DP feed pulley	Clean with isopropyl alcohol.
	Check if the following pulleys is deformed. DP forwarding pulley DP feed pulley	Check visually and replace any deformed (see page 1-5-56).
(8) Multiple sheets of original are fed.	Original is not correctly set.	Set the original correctly.
	Check if the DP separation pad is worn.	Replace the DP separation pad if it is worn (see page 1-5-60).
(9) Originals jam.	Originals outside the specifications are used.	Use only originals conforming to the specifications.
	Check if the surfaces of the following pulleys are dirty with paper powder. DP forwarding pulley DP feed pulley	Clean with isopropyl alcohol.
	Check if the contact between the conveying roller and conveying pulley is correct.	Check visually and remedy if necessary.
	Check if the contact between the eject roller and eject pulley is correct.	Check visually and remedy if necessary.
	Check if the contact between the switchback roller and switchback pulley is correct.	Check visually and remedy if necessary.

1-4-6 Send error code

This section describes the scanning errors and descriptions, preventive actions, as well as corrective actions. Error codes not described here could fall within software errors.

If such an error is encountered, turn power off then on, and advise the service representative.

(1) Scan to SMB error codes

Code	Contents	Check procedures/corrective measures
1101	Host destined does not exist on the network.	<ol style="list-style-type: none"> 1. Confirm destined host. 2. Confirm device's network parameters. 3. Confirm the network parameters the device is connected.
1102	Login to the host has failed.	<ol style="list-style-type: none"> 1. Confirm user name and password. 2. Confirm the network parameters the device is connected. 3. Check the host if the folder is properly shared.
1103	Destined host, folder, and/or file names are invalid.	<ol style="list-style-type: none"> 1. Check illegal characters are not contained within these names. 2. Check the name of the folder and files conform with the naming syntax. 3. Confirm destined host and folder.
1105	SMB protocol is not enabled.	<ol style="list-style-type: none"> 1. Confirm device's SMB protocols.
2101	Login to the host has failed.	<ol style="list-style-type: none"> 1. Confirm destined host. 2. Confirm that the LAN cable is properly connected to the device. 3. Check the SMB port number. 4. Confirm device's network parameters. 5. Confirm the network parameters the device is connected.
2201	Writing scanned data has failed.	<ol style="list-style-type: none"> 1. Check the scanning file name. 2. Confirm device's network parameters. 3. Confirm the network parameters the device is connected.

(2) Scan to FTP error codes

Code	Contents	Check procedures/corrective measures
1101	FTP server does not exist on the network.	<ol style="list-style-type: none"> 1. Check the FTP server name. 2. Confirm device's network parameters. 3. Confirm the network parameters the device is connected.
1102	Login to the FTP server has failed.	<ol style="list-style-type: none"> 1. Confirm user name and password. 2. Check the FTP server name.
1103	Destined folder is invalid.	<ol style="list-style-type: none"> 1. Check illegal characters are not contained within these names. 2. Check the FTP server name.
1105	FTP protocol is not enabled.	<ol style="list-style-type: none"> 1. Confirm device's FTP protocols.
1131	Initializing TLS has failed.	<ol style="list-style-type: none"> 1. Confirm device's security parameters.
1132	TLS negotiation has failed.	<ol style="list-style-type: none"> 1. Confirm device's security parameters. 2. Check the FTP server name.
2101	Access to the FTP server has failed.	<ol style="list-style-type: none"> 1. Check the FTP server name. 2. Confirm that the LAN cable is properly connected to the device. 3. Check the FTP port number. 4. Confirm device's network parameters. 5. Confirm the network parameters the device is connected. 6. Check the FTP server name.
2102	Access to the FTP server has failed. (Connection timeout)	<ol style="list-style-type: none"> 1. Check the FTP server name. 2. Check the FTP port number. 3. Confirm device's network parameters. 4. Confirm the network parameters the device is connected. 5. Check the FTP server name.
2201	Connection with the FTP server has failed.	<ol style="list-style-type: none"> 1. Confirm device's network parameters. 2. Confirm the network parameters the device is connected. 3. Confirm destined folder. 4. Check the FTP server name.
2202	Connection with the FTP server has failed. (Timeout)	<ol style="list-style-type: none"> 1. Confirm device's network parameters. 2. Confirm the network parameters the device is connected.
2231	Connection with the FTP server has failed. (FTPS communication)	<ol style="list-style-type: none"> 1. Confirm device's network parameters. 2. Confirm the network parameters the device is connected.
3101	FTP server responded with an error.	<ol style="list-style-type: none"> 1. Confirm device's network parameters. 2. Confirm the network parameters the device is connected. 3. Check the FTP server.

(3) Scan to E-mail error codes

Code	Contents	Check procedures/corrective measures
1101	SMTP/POP3 server does not exist on the network.	<ol style="list-style-type: none"> 1. Check the SMTP/POP3 server name. 2. Confirm device's network parameters. 3. Confirm the network parameters the device is connected.
1102	Login to the SMTP/POP3 server has failed.	<ol style="list-style-type: none"> 1. Confirm user name and password. 2. Check the SMTP/POP3 server.
1104	The domain the destinated address belongs is prohibited by scanning restriction.	<ol style="list-style-type: none"> 1. Confirm device's SMTP parameters.
1105	SMTP protocol is not enabled.	<ol style="list-style-type: none"> 1. Confirm device's SMTP protocols.
1106	Sender's address is not specified.	<ol style="list-style-type: none"> 1. Confirm device's SMTP protocols.
2101	Connection to the SMTP/POP3 server has failed.	<ol style="list-style-type: none"> 1. Check the SMTP/POP3 server name. 2. Confirm that the LAN cable is properly connected to the device. 3. Check the SMTP/POP3 port number. 4. Confirm device's network parameters. 5. Confirm the network parameters the device is connected. 6. Check the SMTP/POP3 server.
2102	Connection to the SMTP/POP3 server has failed. (Connection timeout)	<ol style="list-style-type: none"> 1. Check the SMTP/POP3 server name. 2. Check the SMTP/POP3 port number. 3. Confirm device's network parameters. 4. Confirm the network parameters the device is connected. 5. Check the SMTP/POP3 server.
2201	Connection to the SMTP/POP3 server has failed.	<ol style="list-style-type: none"> 1. Confirm device's network parameters. 2. Confirm the network parameters the device is connected.
2202	Connection to the SMTP/POP3 server has failed. (Timeout)	<ol style="list-style-type: none"> 1. Confirm device's network parameters. 2. Confirm the network parameters the device is connected.
2204	The size of scanning exceeded its limit.	<ol style="list-style-type: none"> 1. Confirm device's network parameters.
3101	SMTP/POP3 server responded with an error.	<ol style="list-style-type: none"> 1. Confirm device's network parameters. 2. Confirm the network parameters the device is connected. 3. Check the SMTP/POP3 server.
3201	No SMTP authentication is found.	<ol style="list-style-type: none"> 1. Check the SMTP server. The device supports SMTP authentication services including CRAM-MD5, DIGEST-MD5, PLAIN and LOGIN.

1-4-7 Error codes

(1) Error code

Error codes are listed on the communication reports, activity report, etc. The codes consist of an error code indication U followed by a 5-digit number. (Error codes for V34 communication errors start with an E indication, followed by five digits.)

The upper three of the five digits indicate general classification of the error and its cause, while the lower two indicate the detailed classification. Items for which detailed classification is not necessary have 00 as the last two digits.

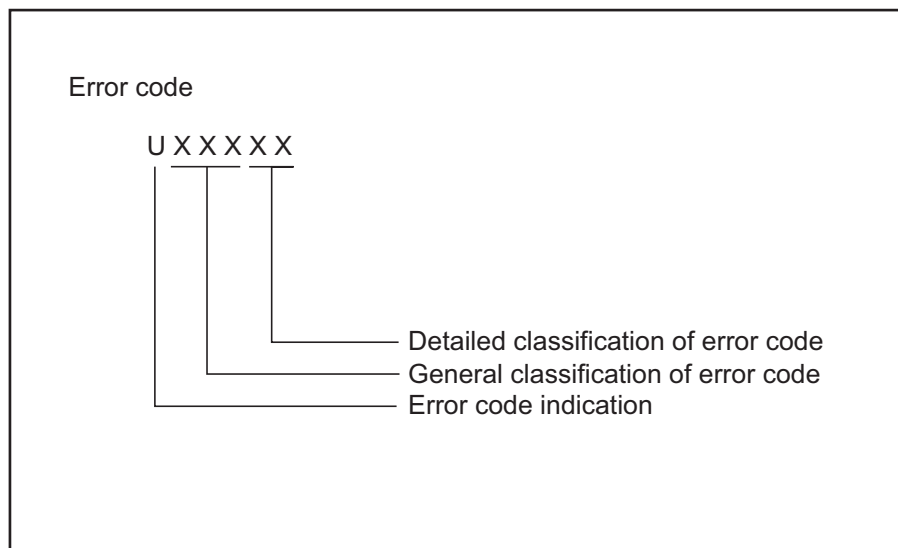


Figure 1-4-3

(2) Table of general classification

Error code	Description
U00000	No response or busy after the set number of redials.
U00100	Transmission was interrupted by a press of the stop/clear key.
U00200	Reception was interrupted by a press of the stop/clear key.
U00300	Recording paper on the destination unit has run out during transmission.
U004XX	A connection was made but interrupted during handshake with the receiver unit (refer to 1-4-47 U004XX error code table).
U006XX	Communication was interrupted because of a machine problem (refer to 1-4-47 U006XX error code table).
U00700	Communication was interrupted because of a problem in the destination unit.
U008XX	A page transmission error occurred in G3 mode (refer to 1-4-47 U008XX error code table).
U009XX	A page reception error occurred in G3 mode (refer to 1-4-47 U009XX error code table).
U010XX	Transmission in G3 mode was interrupted by a signal error (refer to 1-4-48 U010XX error code table).
U011XX	Reception in G3 mode was interrupted by a signal error (refer to 1-4-49 U011XX error code table).
U01400	An invalid one-touch key was specified during communication.
U01500	A communication error occurred when calling in V.8 mode.
U01600	A communication error occurred when called in V.8 mode.
U017XX	A communication error occurred before starting T.30 protocol during transmission in V.34 mode (refer to 1-4-50 U017XX error code table).
U018XX	A communication error occurred before starting T.30 protocol during reception in V.34 mode (refer to 1-4-50 U018XX error code table).
U03000	No document was present in the destination unit when polling reception started.
U03200	In interoffice subaddress-based bulletin board reception, data was not stored in the box specified by the destination unit.
U03300	In polling reception from a unit of our make, operation was interrupted due to a mismatch in permit ID or telephone number. Or, in interoffice subaddress-based bulletin board reception, operation was interrupted due to a mismatch in permit ID or telephone number.
U03400	Polling reception was interrupted because of a mismatch in individual numbers (destination unit is either of our make or by another manufacturer).
U03500	In interoffice subaddress-based bulletin board reception, the specified Subaddress confidential box number was not registered in the destination unit.
U03600	An interoffice subaddress-based bulletin board reception was interrupted because of a mismatch in the specified subaddress confidential box number.
U03700	Interoffice subaddress-based bulletin board reception failed because the destination unit had no subaddress-based bulletin board transmission capability, or data was not stored in any subaddress confidential box in the destination unit.
U04000	In interoffice subaddress-based transmission mode, the specified subaddress box number was not registered in the destination unit.

Error code	Description
U04100	Subaddress-based transmission failed because the destination unit had no subaddress-based reception capability.
U04200	In encrypted transmission, the specified encryption box was not registered in the destination unit.
U04300	Encrypted transmission failed because the destination unit had no encrypted communication capability.
U04400	Encrypted transmission was interrupted because encryption keys did not agree.
U04500	Encrypted reception was interrupted because of a mismatch in encryption keys.
U05100	Password check transmission or restricted transmission was interrupted because the permit ID's did not agree with.
U05200	Password check reception or restricted reception was interrupted because the permit ID's did not match, the rejected FAX number's did match, or the destination receiver did not return its phone number.
U05300	The password check reception or the restricted reception was interrupted because the permitted numbers did not match, the rejected numbers did match, or the machine in question did not acknowledge its phone number.
U14000	Memory overflowed during confidential reception. Or, in subaddress-based confidential reception, memory overflowed.
U14100	In interoffice subaddress-based transmission, memory overflowed in the destination unit.
U19000	Memory overflowed during memory reception.
U19100	Memory overflowed in the destination unit during transmission.
U19300	Transmission failed because an error occurred during JBIG encoding.

(2-1) U004XX error code table: Interrupted phase B

Error code	Description
U00430	Polling request was received but interrupted because of a mismatch in permit number. Or, subaddress-based bulletin board transmission request was received but interrupted because of a mismatch in permit ID in the transmitting unit.
U00431	An subaddress-based bulletin board transmission was interrupted because the specified subaddress confidential box was not registered.
U00432	An subaddress-based bulletin board transmission was interrupted because of a mismatch in Subaddress confidential box numbers.
U00433	Subaddress-based bulletin board transmission request was received but data was not present in the subaddress confidential box.
U00440	Subaddress-based confidential reception was interrupted because the specified subaddress box was not registered.
U00450	The destination transmitter disconnected because the permit ID's did not agree with while the destination transmitter is in password-check transmission or restricted transmission.
U00460	Encrypted reception was interrupted because the specified encryption box number was not registered.
U00462	Encrypted reception was interrupted because the encryption key for the specified encryption box was not registered.

(2-2) U006XX error code table: Problems with the unit

Error code	Description
U00601	Document jam or the document length exceeds the maximum.
U00613	Image writing section problem
U00656	Data was not transmitted to a modem error.
U00690	System error.

(2-3) U008XX error code table: Page transmission error

Error code	Description
U00800	A page transmission error occurred because of reception of a RTN or PIN signal.
U00811	A page transmission error reoccurred after retry of transmission in the ECM mode.

(2-4) U009XX error code table: Page reception error

Error code	Description
U00900	An RTN or PIN signal was transmitted because of a page reception error.
U00910	A page reception error remained after retry of transmission in the ECM mode.

(2-5) U010XX error code table: G3 transmission

Error code	Description
U01000	An FTT signal was received for a set number of times after TCF signal transmission at 2400 bps. Or, an RTN signal was received in response to a Q signal (excluding EOP) after transmission at 2400 bps.
U01001	Function of the unit differs from that indicated by a DIS signal.
U01016	An MCF signal was received but no DIS signal was received after transmission of an EOM signal, and T1 timeout was detected.
U01019	No relevant signal was received after transmission of a CNC signal, and the preset number of command retransfers was exceeded (between units of our make).
U01020	No relevant signal was received after transmission of a CTC signal, and the preset number of command retransfers was exceeded (ECM).
U01021	No relevant signal was received after transmission of an EOR.Q signal, and the preset number of command retransfers was exceeded (ECM).
U01022	No relevant signal was received after transmission of an RR signal, and the preset number of command retransfers was exceeded (ECM).
U01028	T5 time-out was detected during ECM transmission (ECM).
U01052	A DCN signal was received after transmission of an RR signal (ECM).
U01080	A PIP signal was received after transmission of a PPS.NULL signal.
U01092	During transmission in V.34 mode, communication was interrupted because of an impossible combination of the symbol speed and communication speed.
U01093	A DCN or other inappropriate signal was received during phase B of transmission.
U01094	The preset number of command retransfers for DCS/NSS signals was exceeded during phase B of transmission.
U01095	No relevant signal was received after transmission of a PPS (Q) signal during phase D of transmission, and the preset number of command transfers was exceeded.
U01096	A DCN signal or invalid command was received during phase D of transmission.
U01097	The preset number of command retransfers was exceeded after transmission of an RR signal or no response.

(2-6) U011XX error code table: G3 reception

Error code	Description
U01100	Function of the unit differs from that indicated by a DCS signal.
U01101	Function of the unit (excl. communication mode select) differs from that indicated by an NSS signal.
U01102	A DTC (NSC) signal was received when no transmission data was in the unit.
U01110	No response after transmission of a DIS signal.
U01111	No response after transmission of a DTC (NSC) signal.
U01113	No response after transmission of an FTT signal.
U01125	No response after transmission of a CNS signal (between units of our make).
U01129	No response after transmission of an SPA signal (short protocol).
U01141	A DCN signal was received after transmission of a DTC signal.
U01143	A DCN signal was received after transmission of an FTT signal.
U01155	A DCN signal was received after transmission of an SPA signal (short protocol).
U01160	During message reception, transmission time exceeded the maximum transmission time per line.
U01162	Reception was aborted due to a modem malfunction during message reception.
U01191	Communication was interrupted because an error occurred during an image data reception sequence in the V.34 mode.
U01193	There was no response, or a DCN signal or invalid command was received, during phase C/D of reception.
U01194	A DCN signal was received during phase B of reception.
U01195	No message was received during phase C of reception.
U01196	Error line control was exceeded and a decoding error occurred for the message being received.

(2-7) U017XX error code table: V.34 transmission

Error code	Description
U01700	A communication error occurred in phase 2 (line probing).
U01720	A communication error occurred in phase 4 (modem parameter exchange).
U01721	Operation was interrupted due to the absence of a common communication speed between units.

U01700: A communication error that occurs at the transmitting unit in the period after transmission of INFO0 before entering phase 3 (primary channel equivalent device training). For example, INFO0/A/Abar (B/Bbar, for polling transmission)/INFOh was not detected.

U01720: A communication error that occurs at the transmitting unit in the period after initiating the control channel before entering the T.30 process. For example, PPh/ALT/MPh/E was not detected.

U01721: In the absence of a common communication speed between units (including when an impossible combination of communication speed and symbol speed occurs) after MPh exchange; 1) a DCN signal was received from the destination unit, and the line was cut; or 2) a DIS (NSF, CSI) signal was received from the destination unit and, in response to the signal, the unit transmitted a DCN signal, and the line was cut.

(2-8) U018XX error code table: V.34 reception

Error code	Description
U01800	A communication error occurred in phase 2 (line probing).
U01810	A communication error occurred in phase 3 (primary channel equivalent device training).
U01820	A communication error occurred in phase 4 (modem parameter exchange).
U01821	Operation was interrupted due to the absence of a common communication speed between units.

U01800: A communication error that occurs at the receiver unit in the period after transmission of INFO0 before entering phase 3 (primary channel equivalent device training). For example, INFO0/B/Bbar (A/Abar, for polling reception)/probing tone was not detected.

U01810: A communication error that occurs at the receiver unit in phase 3 (primary channel equivalent device training). For example, S/Sbar/PP/TRN was not detected.

U01820: A communication error that occurs at the receiver unit in the period after initiating the control channel before entering the T.30 process. For example, PPh/ALT/MPh/E was not detected.

U01821: In the absence of a common communication speed between units (including when an impossible combination of communication speed and symbol speed occurs) after MPh exchange, a DCN signal was transmitted to the destination unit and the line was cut.

1-5-1 Precautions for assembly and disassembly

(1) Precautions

Before starting disassembly, press the Power key on the operation panel to off. Make sure that the Power lamp is off before turning off the main power switch. And then unplug the power cable from the wall outlet.

When the fax kit is installed, be sure to disconnect the modular code before starting disassembly.

When handling PWBs (printed wiring boards), do not touch parts with bare hands.

The PWBs are susceptible to static charge.

Do not touch any PWB containing ICs with bare hands or any object prone to static charge.

When removing the hook of the connector, be sure to release the hook.

Take care not to get the cables caught.

To reassemble the parts, use the original screws. If the types and the sizes of screws are not known, refer to the PARTS LIST.

(2) Drum

Note the following when handling or storing the drum.

When removing the drum unit, never expose the drum surface to strong direct light.

Keep the drum at an ambient temperature between -20°C/-4°F and 40°C/104°F and at a relative humidity not higher than 85% RH. Avoid abrupt changes in temperature and humidity.

Avoid exposure to any substance which is harmful to or may affect the quality of the drum.

Do not touch the drum surface with any object. Should it be touched by hands or stained with oil, clean it.

(3) Toner

Store the toner container in a cool, dark place.

Avoid direct light and high humidity.

(4) How to tell a genuine Kyocera Mita toner container

As a means of brand protection, the Kyocera Mita toner container utilizes an optical security technology to enable visual validation. A validation viewer is required to accomplish this.

Hold the validation viewer over the left side part of the brand protection seal on the toner container. Through each window of the validation viewer, the left side part of the seal should be seen as follows:

A black-colored band when seen through the left side window (●)

A shiny or gold-colored band when seen through the right side window (☀)

The above will reveal that the toner container is a genuine Kyocera Mita branded toner container, otherwise, it is a counterfeit.

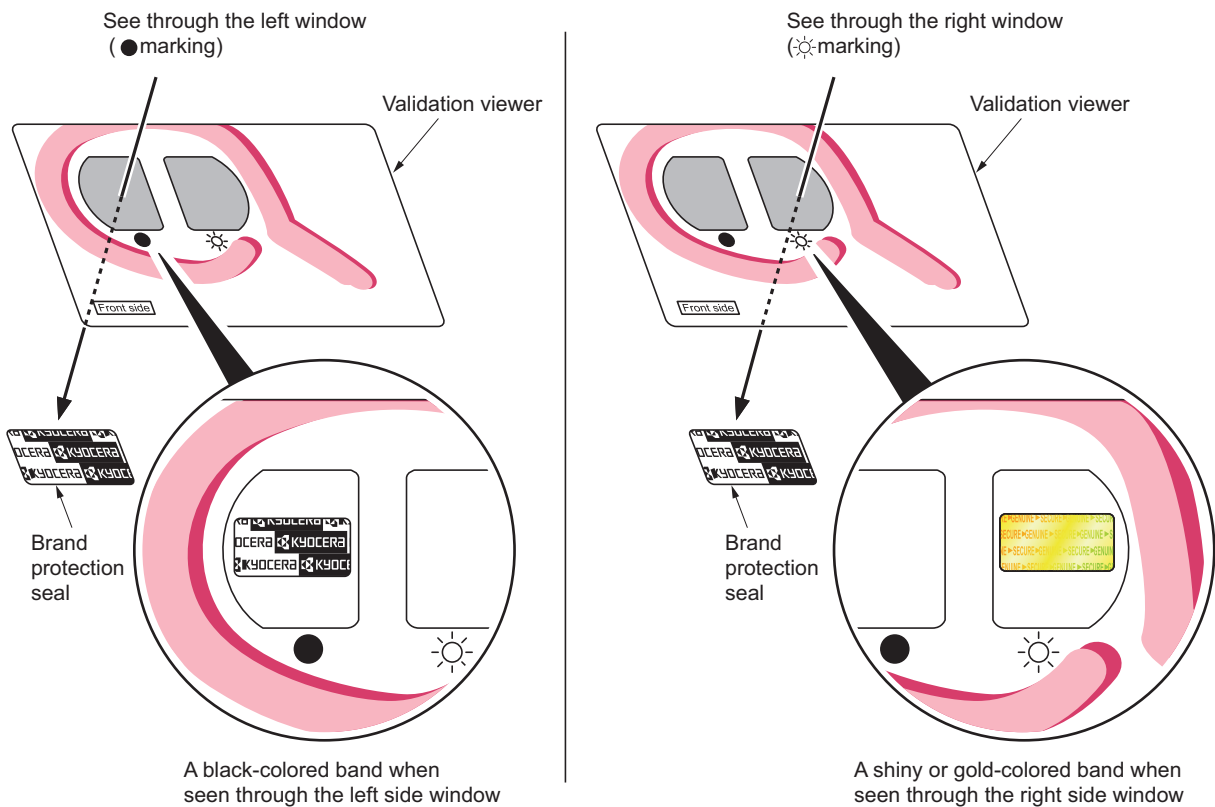


Figure 1-5-1

The brand protection seal has an incision as shown below to prohibit reuse.

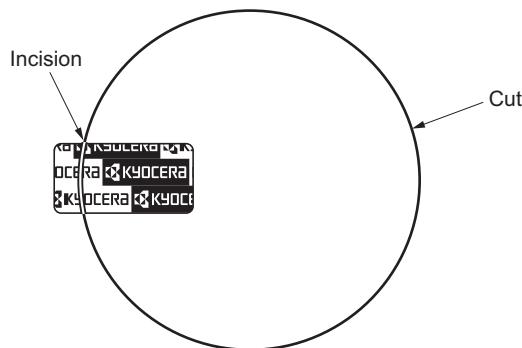


Figure 1-5-2

1-5-2 Outer covers

(1) Detaching and refitting the rear upper cover, right upper cover, left upper cover and front cover

Procedure

1. Open the paper conveying unit.
2. Release the hook and then remove the IF cover.

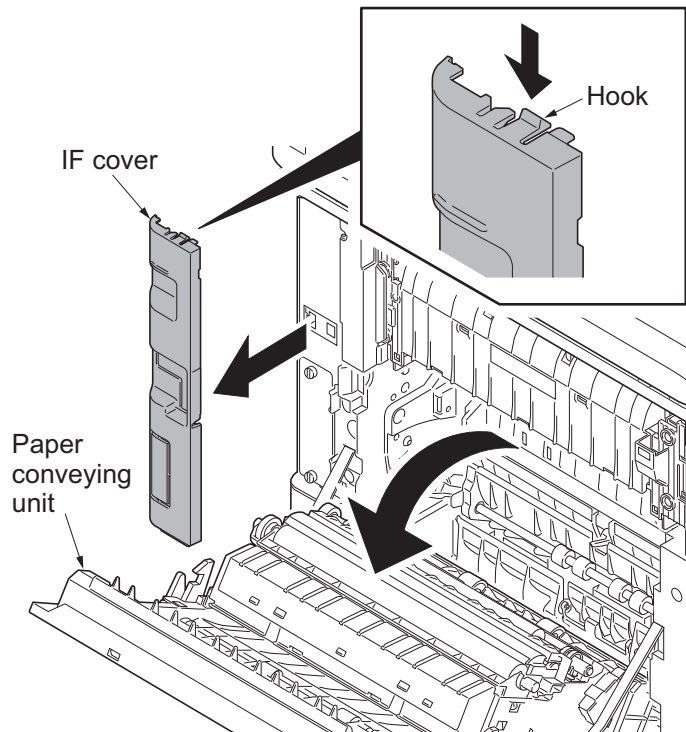


Figure 1-5-3

3. Remove two screws and then remove the rear upper cover.

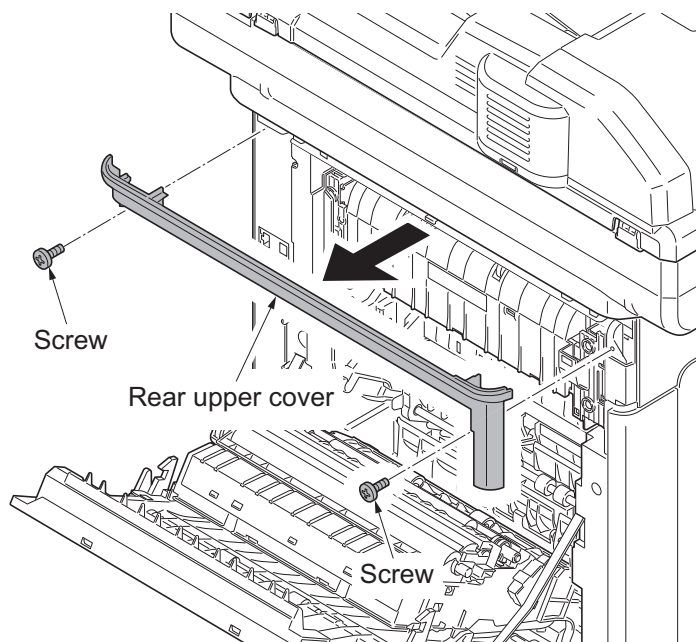


Figure 1-5-4

4. Pull the inner tray lever and open the inner tray.
5. Release two hooks. Slide the right upper cover backward and then remove it.

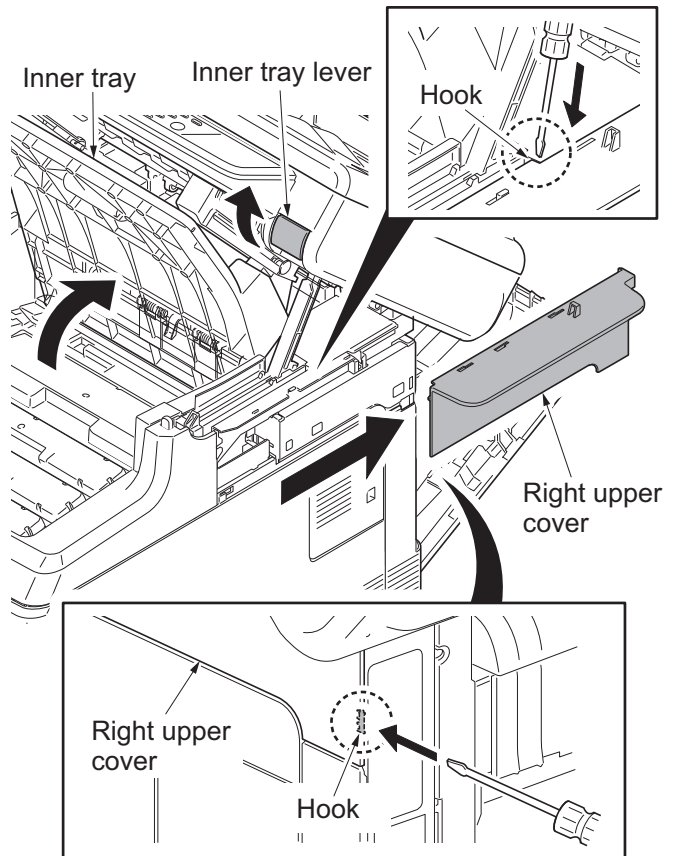


Figure 1-5-5

6. Release the hook. Slide the left upper cover backward and then remove it.

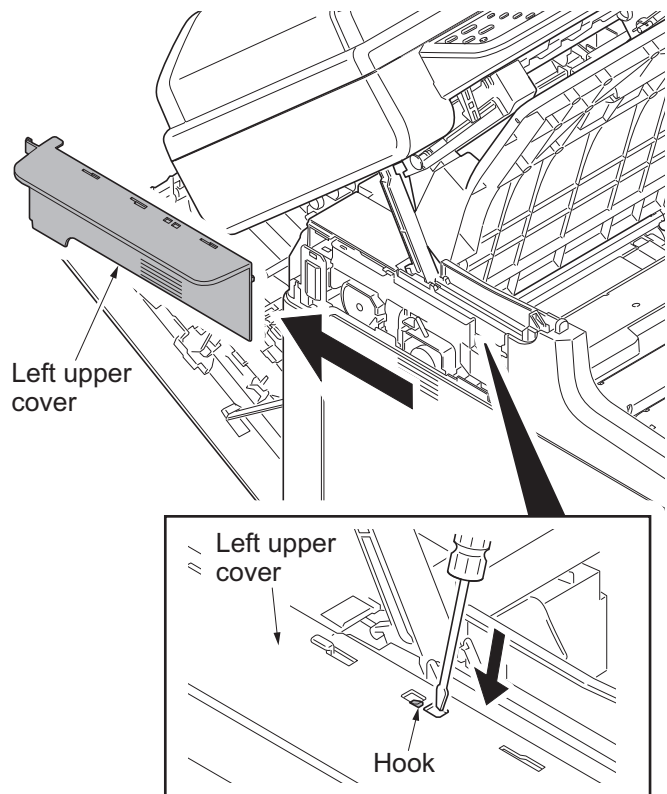


Figure 1-5-6

7. Release five hooks (hook A → B) and then remove the front cover.

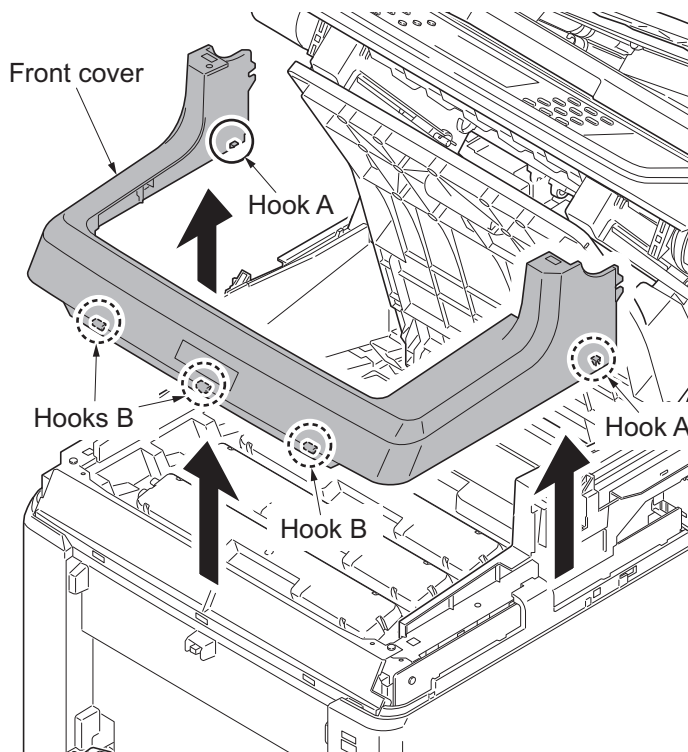


Figure 1-5-7

(2) Detaching and refitting the right rear cover, right cover and right lower cover

Procedure

1. Remove the rear upper cover, right upper cover, left upper cover and front cover (see page 1-5-3).
2. Slide the power source cover backward and then remove it.

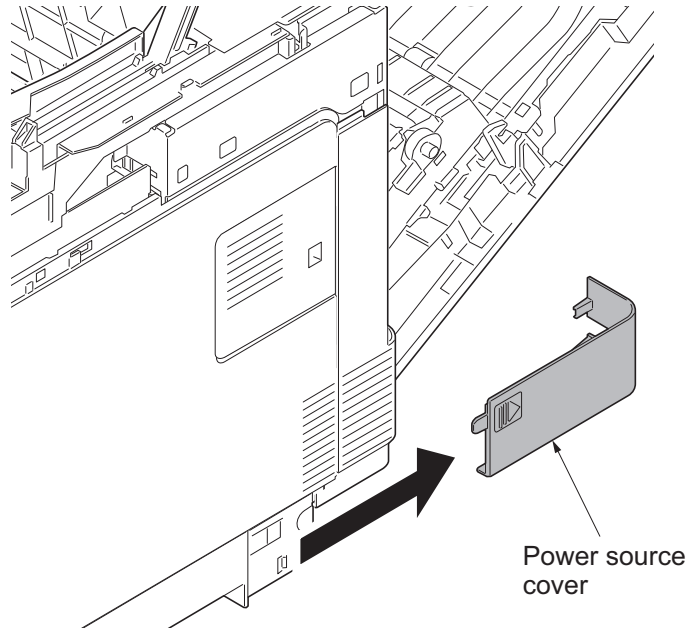


Figure 1-5-8

3. Remove the screw.
4. Release four hooks. Slide the right rear cover backward and then remove it.

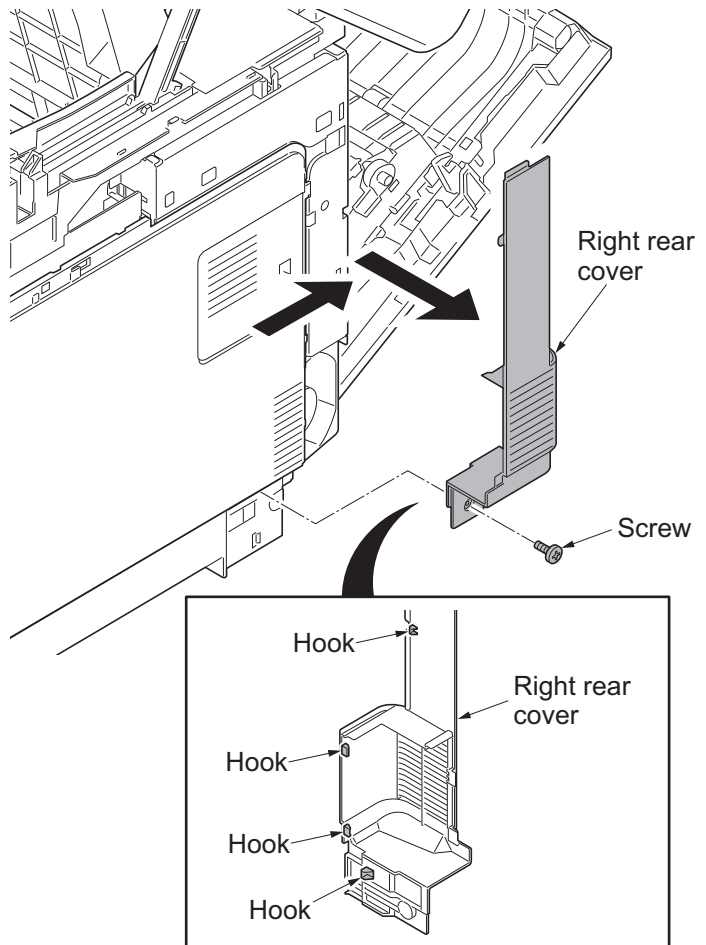


Figure 1-5-9

- 5. Open the memory cover and then remove it.

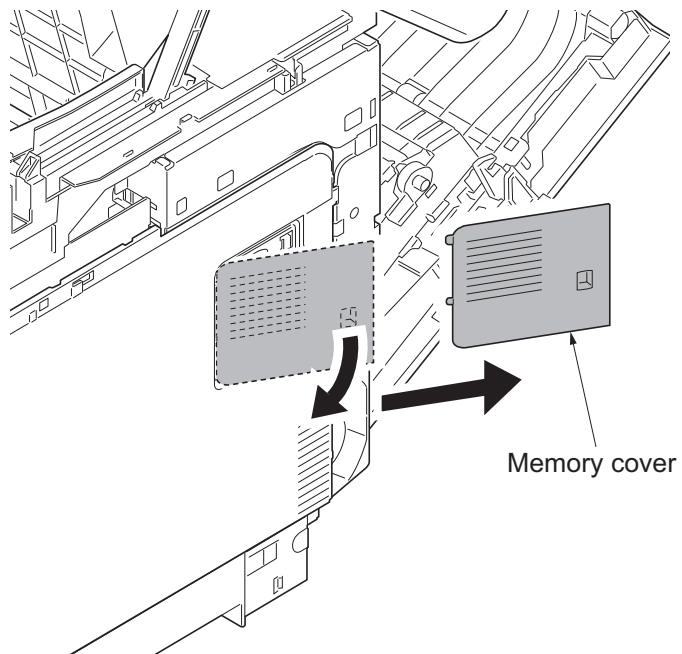


Figure 1-5-10

- 6. Open the waste toner cover.
- 7. Push the lock release button and then remove the waste toner box.

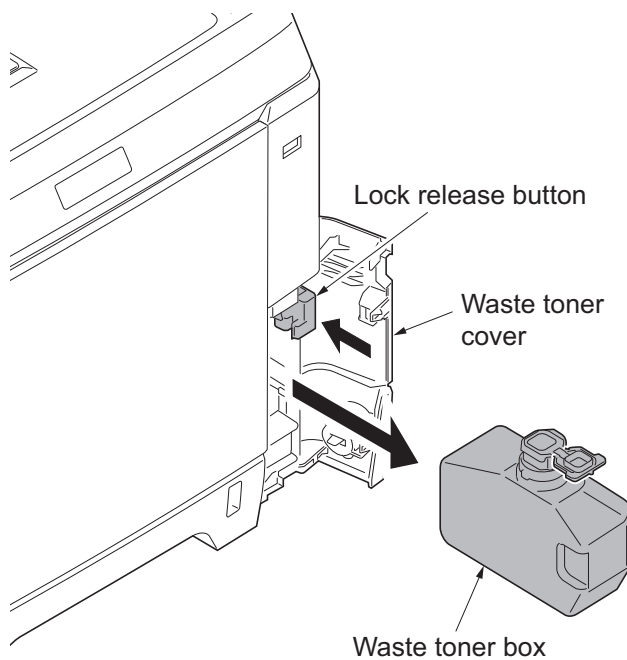


Figure 1-5-11

8. Release four hooks (hook A → B → C). Slide the right cover forward and then remove it.
9. Remove the waste toner cover.

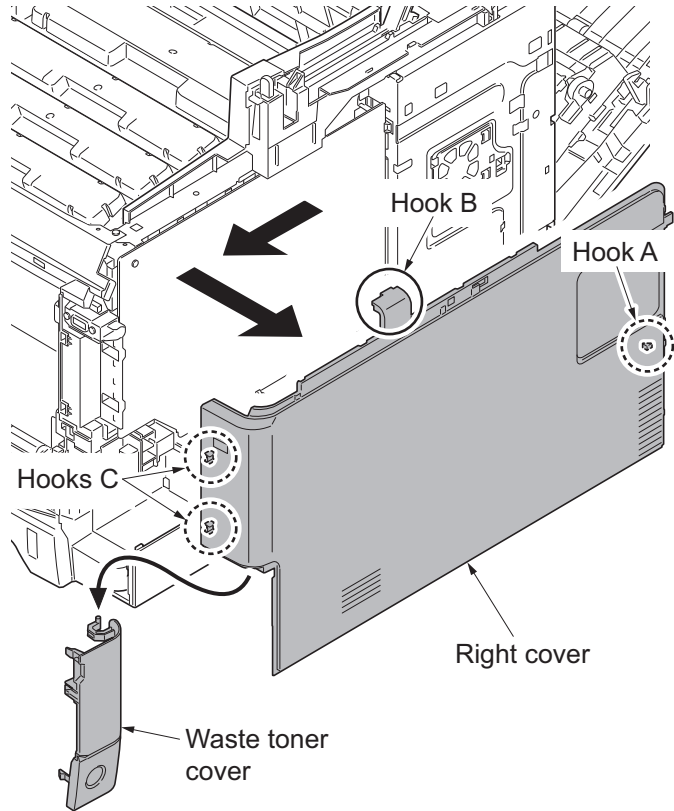


Figure 1-5-12

10. Release the hook. Slide the right lower cover forward and then remove it.

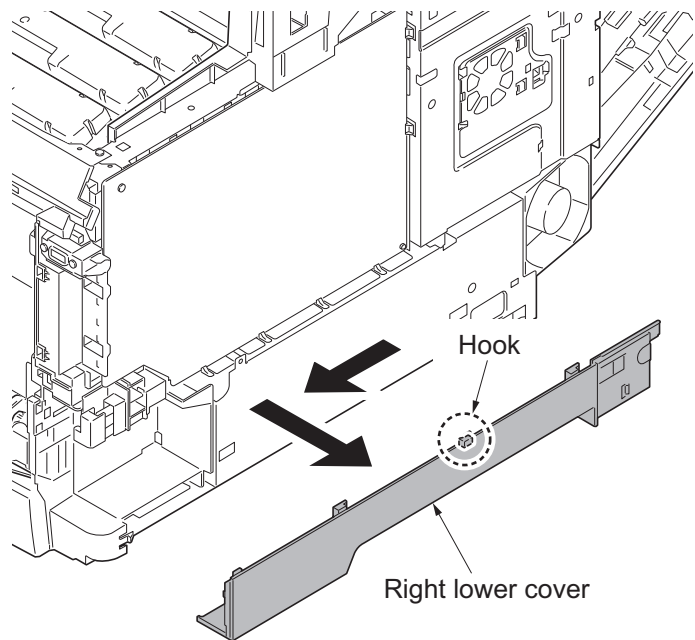


Figure 1-5-13

(3) Detaching and refitting the left rear cover, left cover and left lower cover

Procedure

1. Remove the rear upper cover, right upper cover, left upper cover and front cover (see page 1-5-3).
2. Release the hook. Slide the left rear cover upward and then remove it.

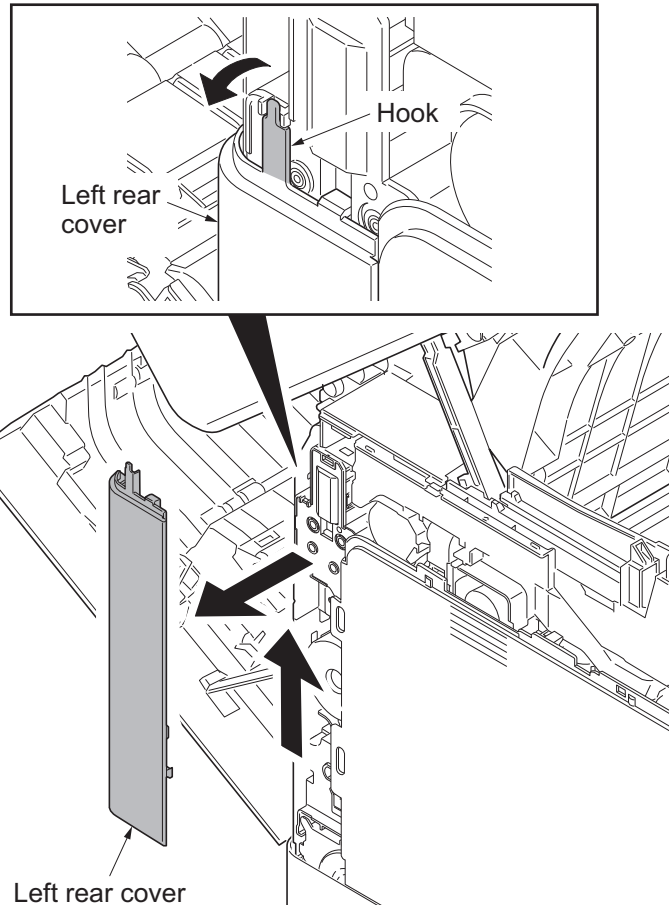


Figure 1-5-14

3. Release four hooks (hook A → B) and then remove the left cover.

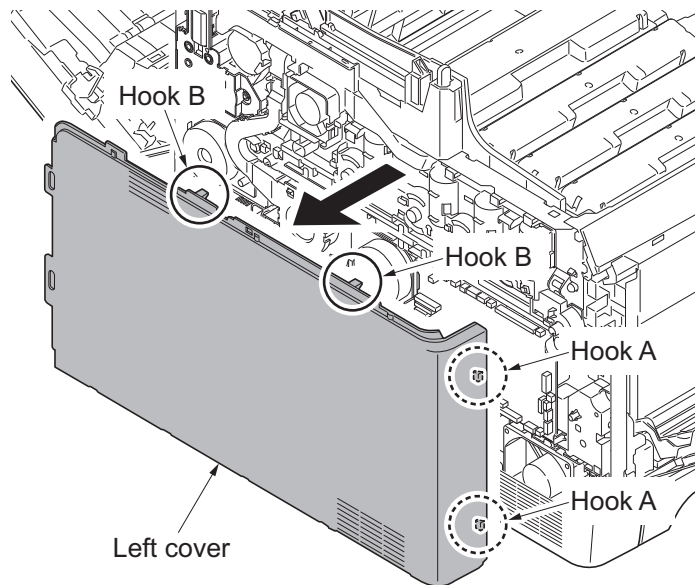


Figure 1-5-15

4. Remove the screw.
5. Release three hooks (hook A → B → C) and then remove the left lower cover.

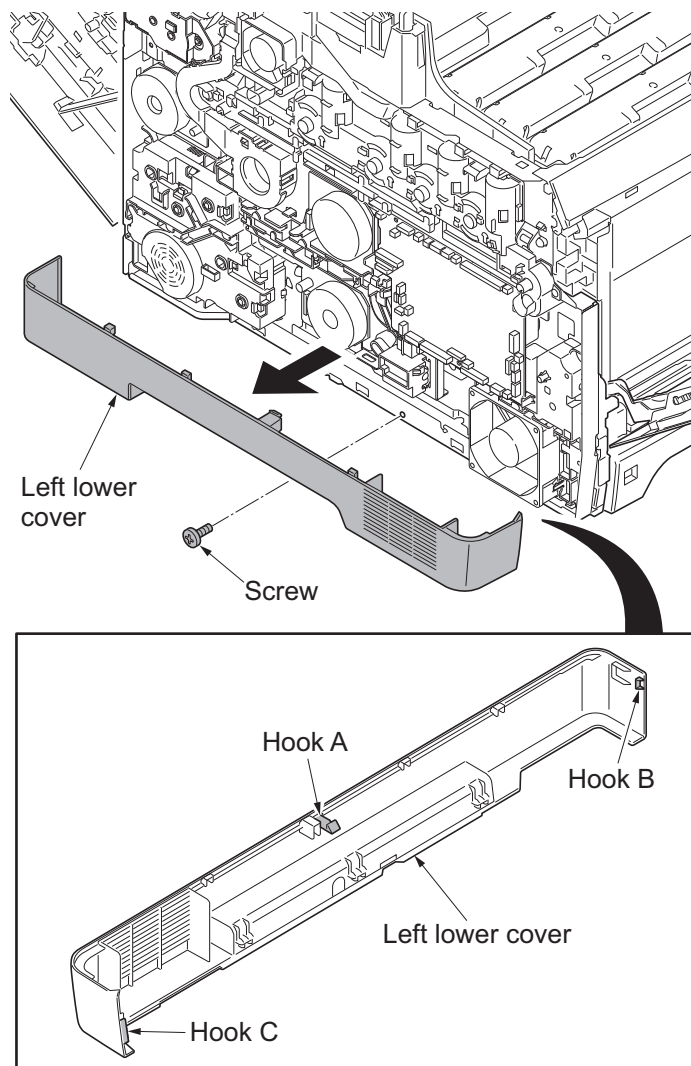


Figure 1-5-16

(4) Detaching and refitting the inner cover

Procedure

1. Remove the cassette.

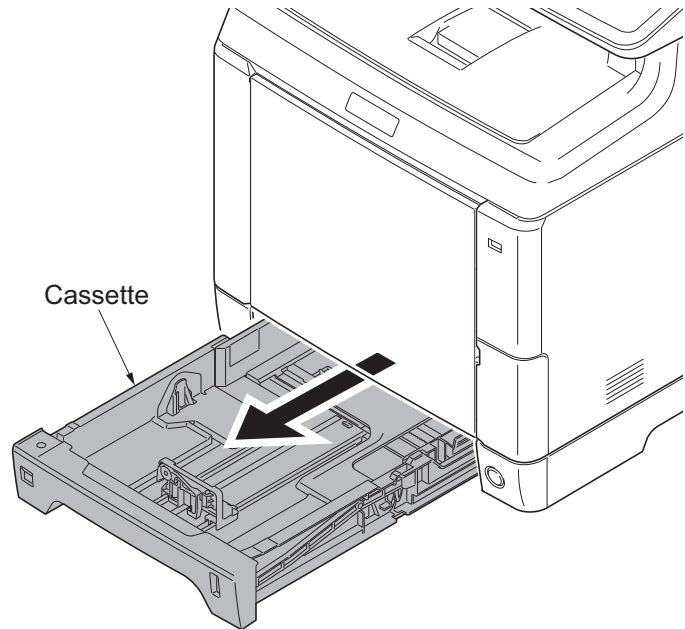


Figure 1-5-17

2. Remove the MP tray cover.
(see page 1-5-17)
3. Remove the MP tray.

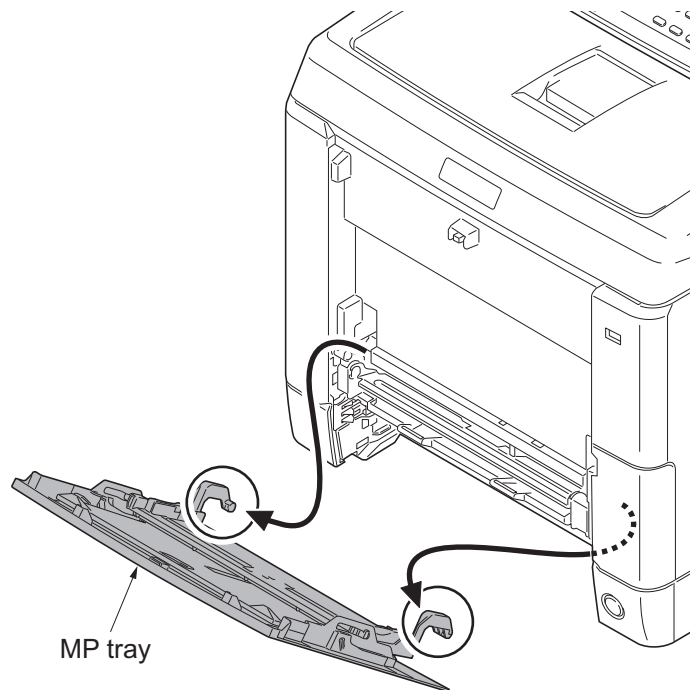


Figure 1-5-18

4. Remove the rear upper cover, right upper cover, left upper cover and front cover (see page 1-5-3).
5. Remove the right rear cover and right cover (see page 1-5-6).
6. Remove the left rear cover and left cover (see page 1-5-9).
7. Release three hooks and then remove the switch holder.
8. Release four hooks and then remove the inner cover.

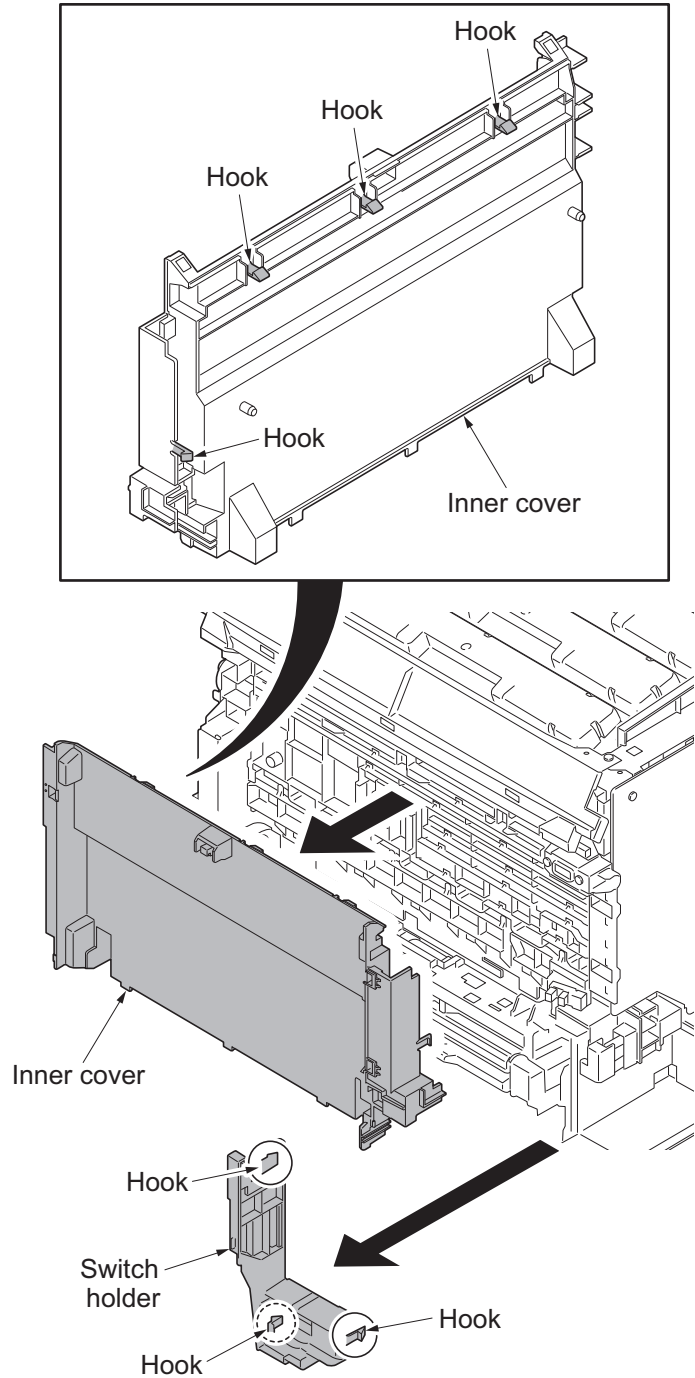


Figure 1-5-19

1-5-3 Paper feed section

(1) Detaching and refitting the retard roller unit

Procedure

1. Open the paper conveying unit.
2. Pull the middle roller unit forward to the hook.
3. While pressing the right and left hooks outwards, unlatch the shaft from the rail and remove the middle roller unit.

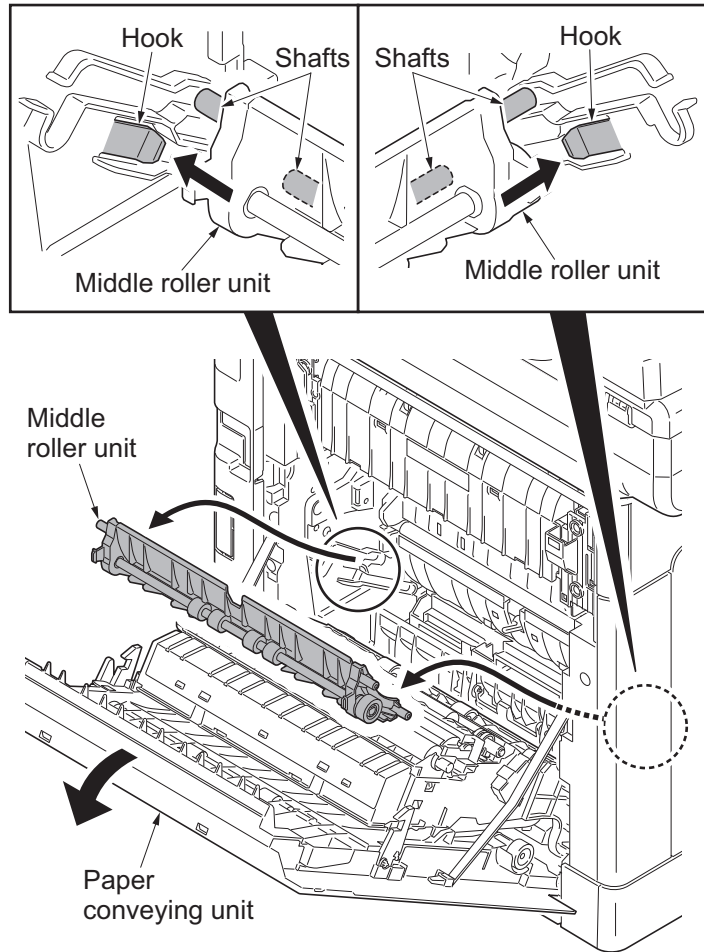


Figure 1-5-20

4. Pull the retard cover down and remove.
5. Release two hooks and then remove the retard roller unit.
6. Check or replace the retard roller unit and refit all the removed parts.

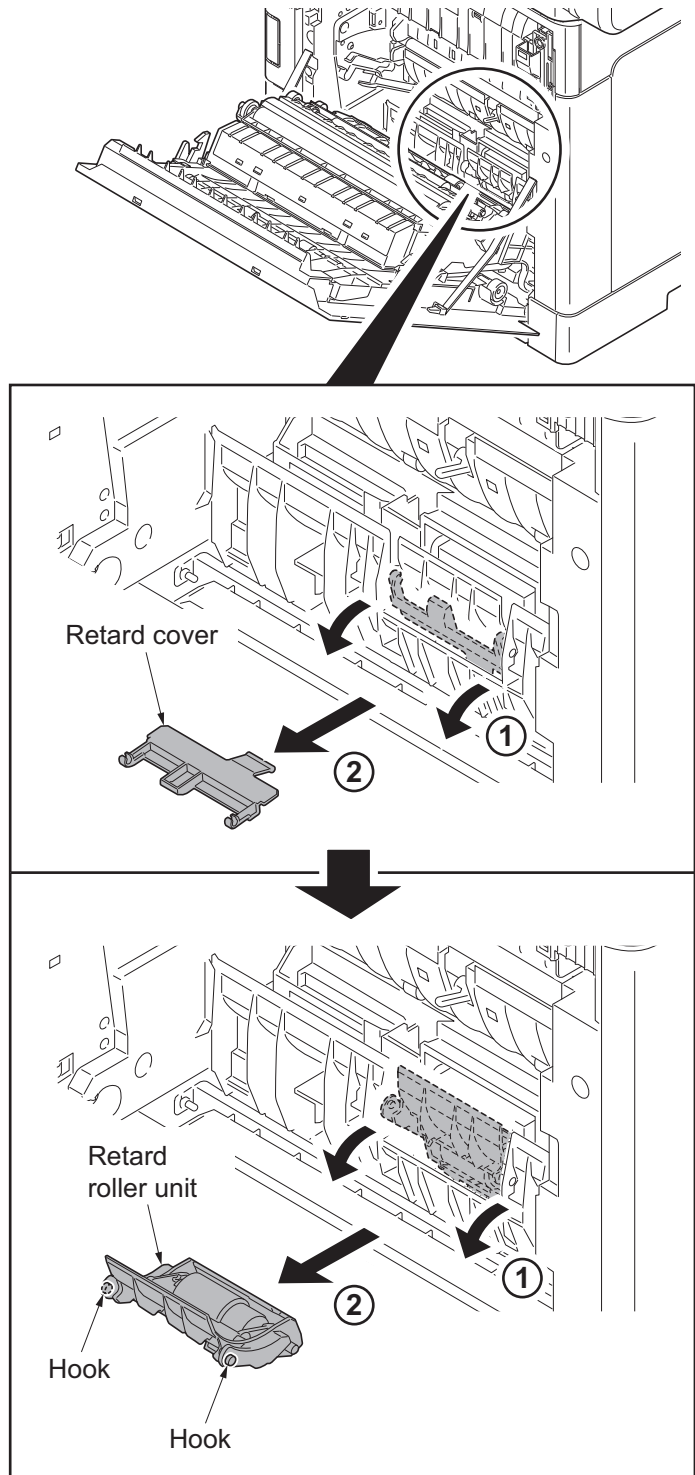


Figure 1-5-21

(2) Detaching and refitting the paper feed roller unit

Procedure

1. Remove the retard roller unit (see page 1-5-13).
2. Turn forward the lever of the feed pin to release the lock.
3. Slide the feed pin.

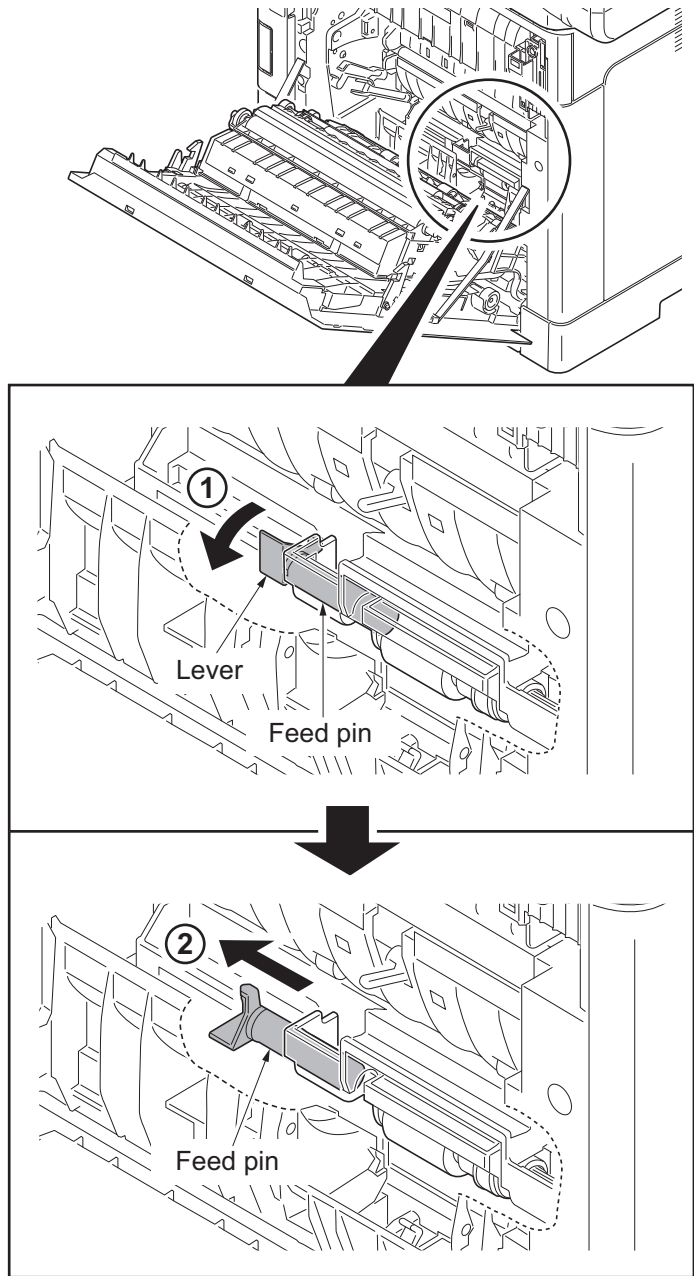


Figure 1-5-22

4. Remove the paper feed roller unit.
5. Check or replace the paper feed roller unit and refit all the removed parts.

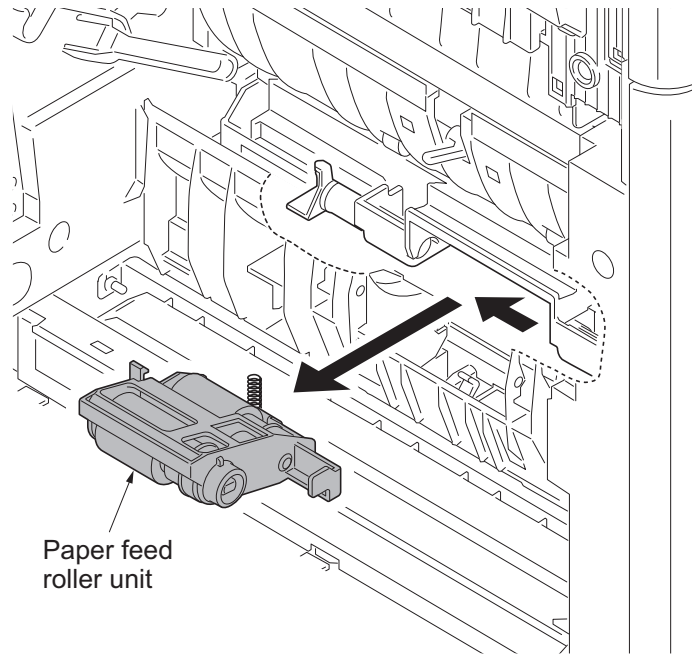


Figure 1-5-23

(3) Detaching and refitting the MP paper feed roller

Procedure

1. Remove the cassette.
2. Remove the guide sections of the MP tray cover from the MP tray.
3. Raise the MP tray cover upward. Release two hooks and then remove the MP tray cover.

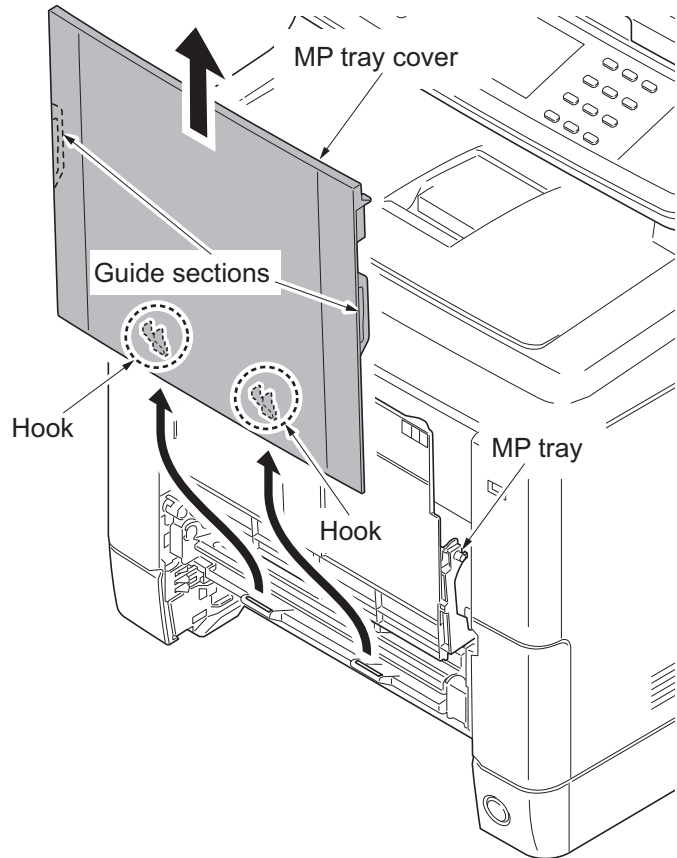


Figure 1-5-24

4. Open the conveying lower cover.

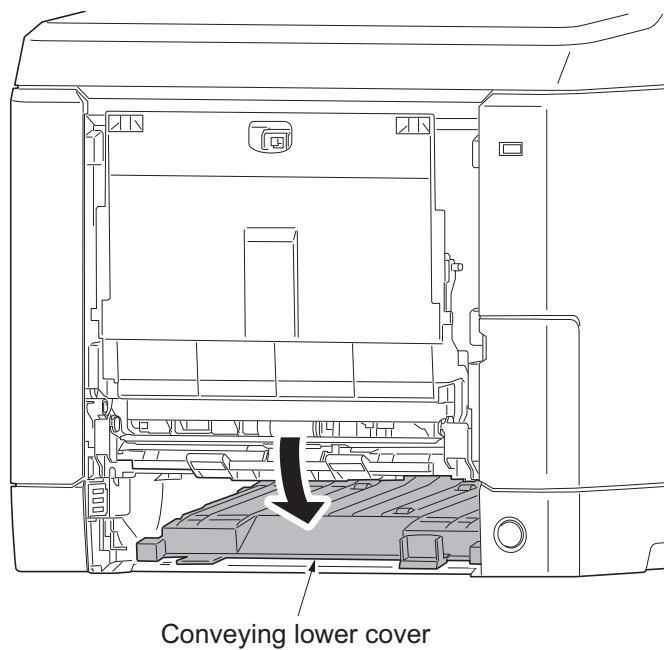


Figure 1-5-25

5. Remove two screws and then remove the MP paper feed lower unit.

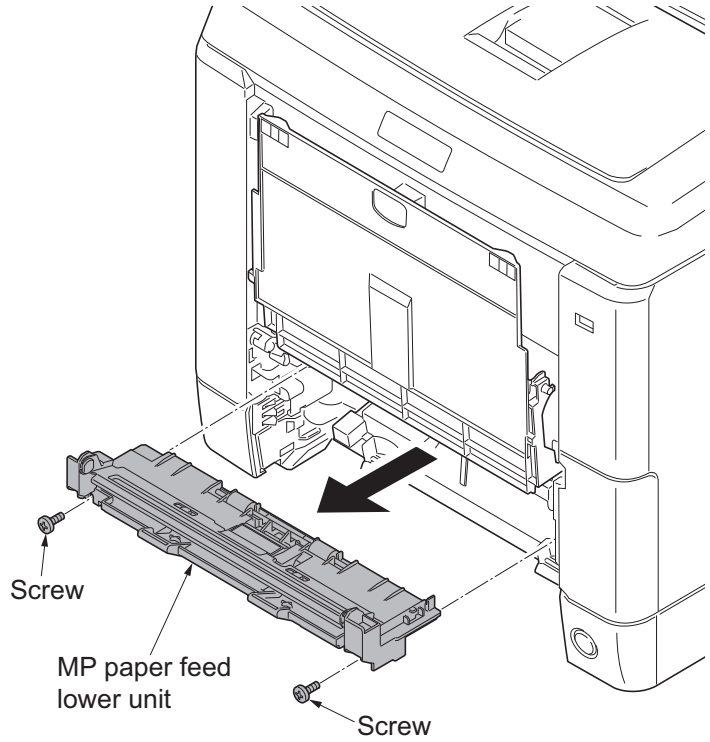


Figure 1-5-26

6. Pull the hook forward and then slide the MP feed shaft.
7. Remove the MP paper feed roller.
8. Check or replace the Mp paper feed roller and refit all the removed parts.

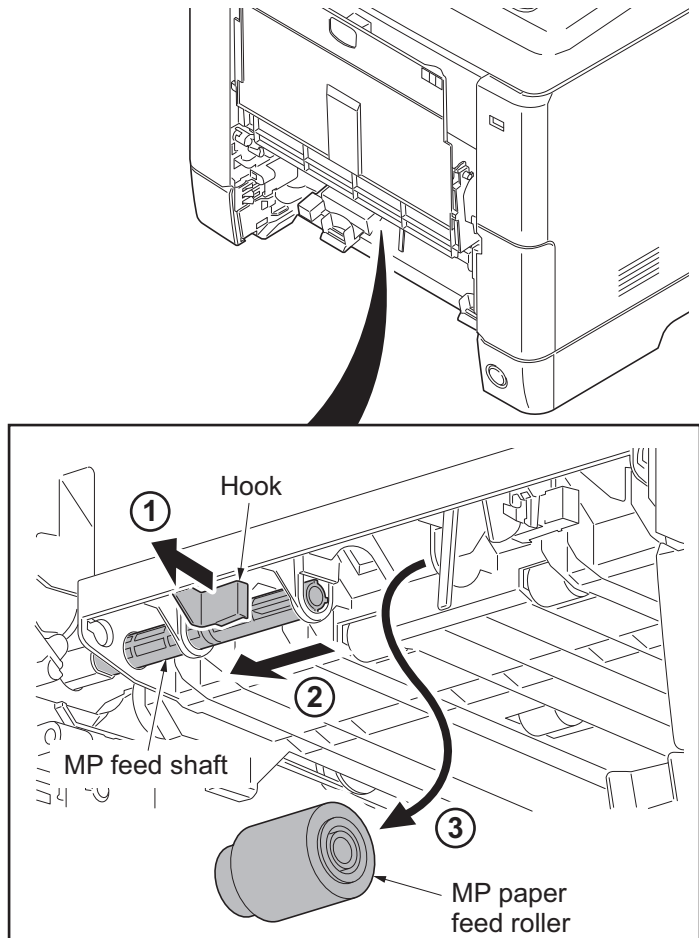


Figure 1-5-27

1-5-4 Developing section

(1) Detaching and refitting the developing unit

Procedure

1. Remove the intermediate transfer unit (see page 1-5-22).
2. Remove drum units (K, M, C, Y).
3. Pinch the lever of developing unit.
4. Remove developing units (K, M, C, Y).

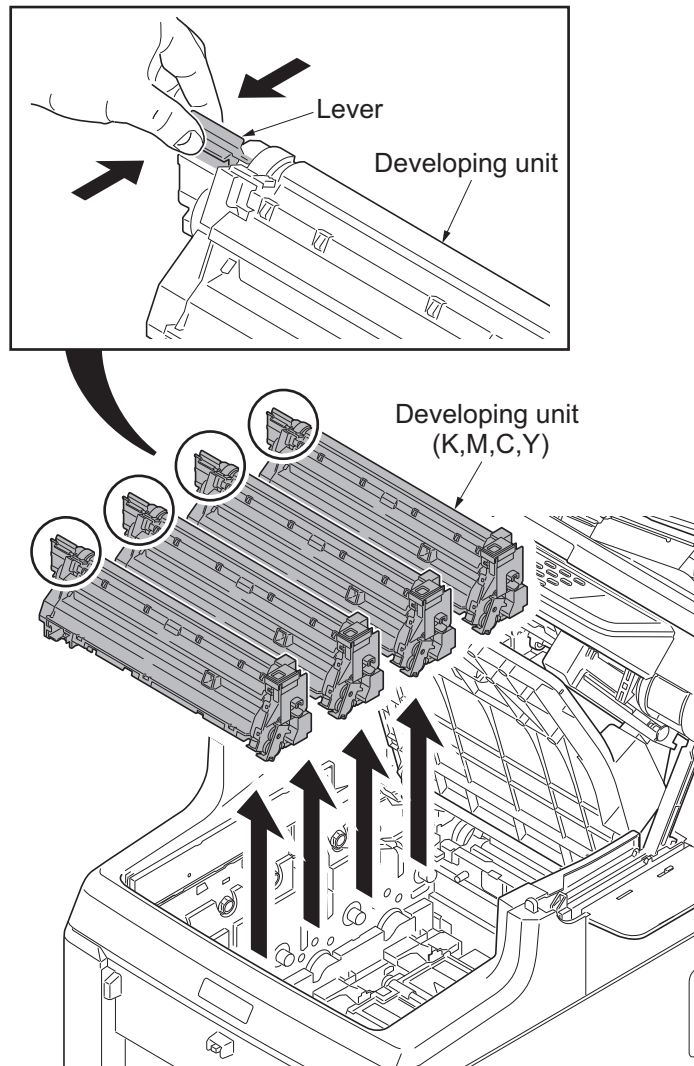


Figure 1-5-28

5. Check or replace the developing unit and refit all the removed parts.

NOTE:

- *: Remove the cap before installing the new developing unit.
- *: When reinstalling the developing unit, press it down until the lever of developing unit is engaged with the notch.
- *: If it is difficult to engage the lever, press the unit down while rotating the gear to engage it.

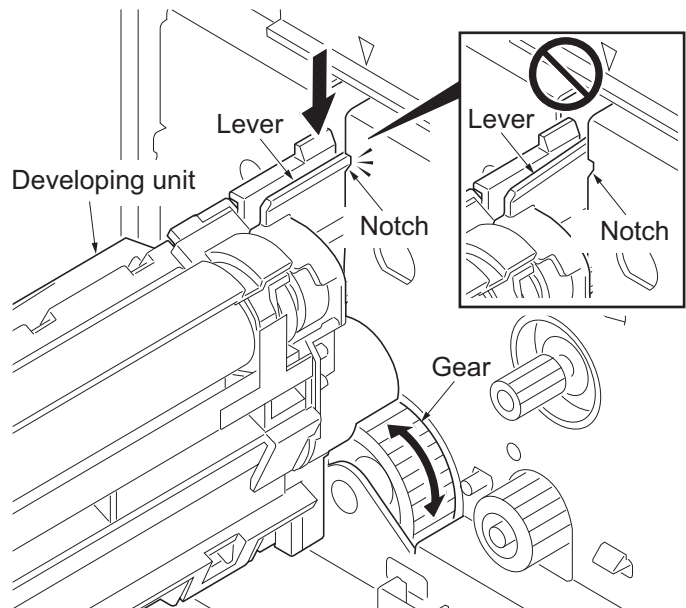
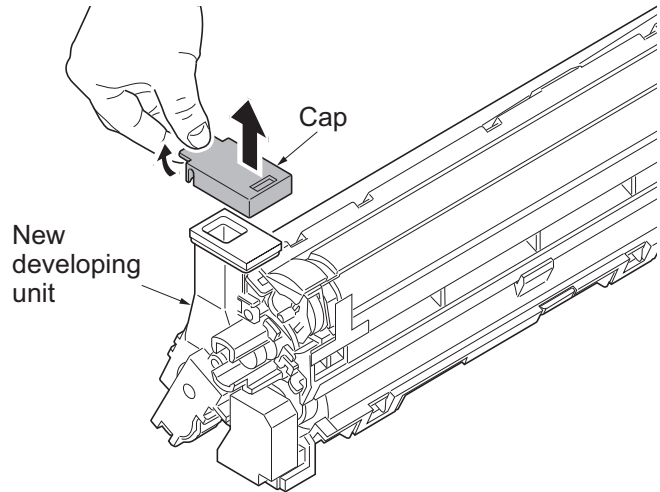


Figure 1-5-29

1-5-5 Drum section

(1) Detaching and refitting the drum unit

Procedure

1. Remove the intermediate transfer unit (see page 1-5-22).
2. Remove drum units (K, M, C, Y).
3. Check or replace the drum unit and refit all the removed parts.

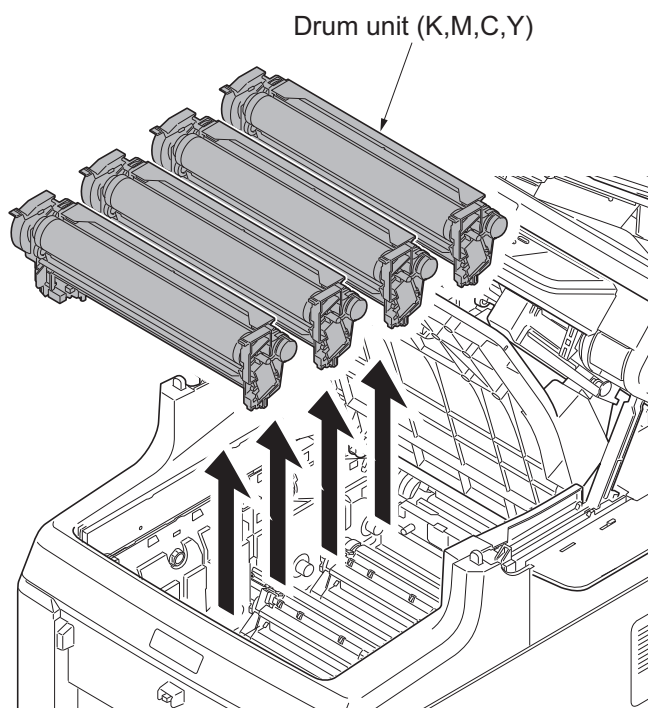


Figure 1-5-30

1-5-6 Transfer/Separation section

(1) Detaching and refitting the intermediate transfer unit

Procedure

1. Open the inner tray and the paper conveying unit.
2. Remove toner containers (K, M, C, Y).

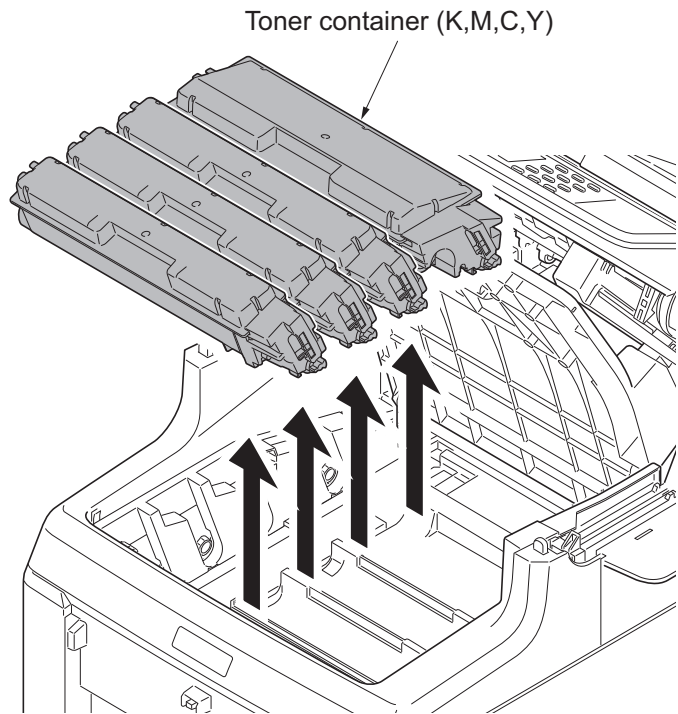


Figure 1-5-31

3. Slide the container guide forward and then remove it.

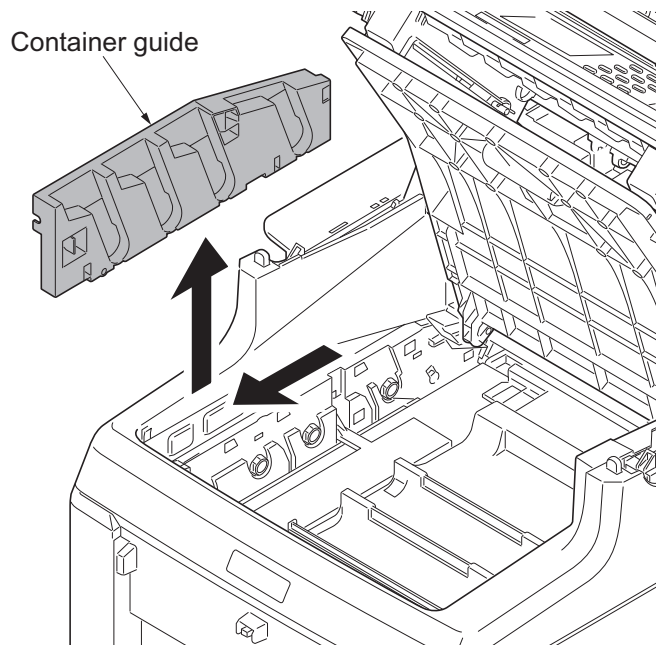


Figure 1-5-32

4. Open the RFID holder.

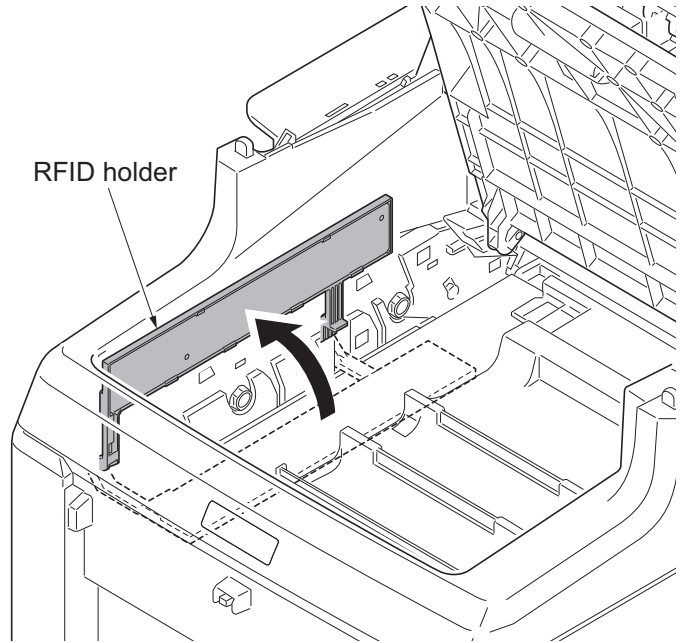


Figure 1-5-33

- 5. Slide the shutter forward and seal the toner inlet.
- 6. Remove the screw.

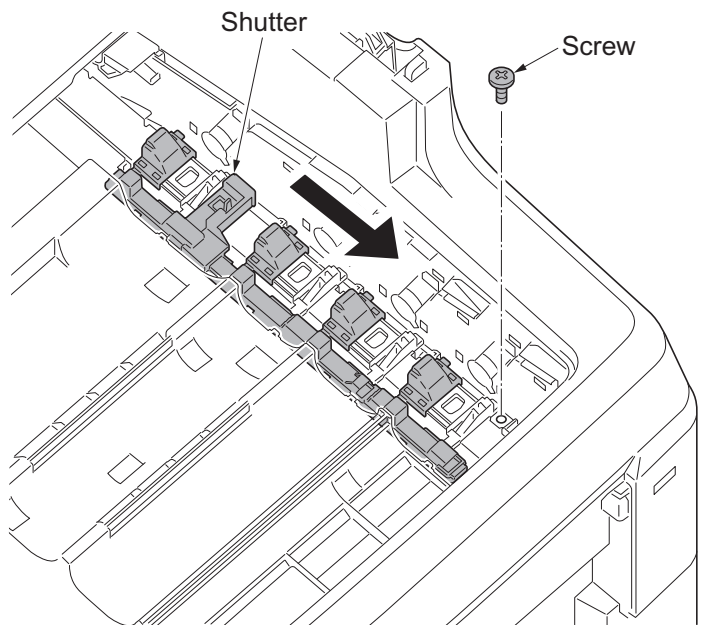


Figure 1-5-34

7. Remove the intermediate transfer unit.
8. Check or replace the intermediate transfer unit and refit all the removed parts.

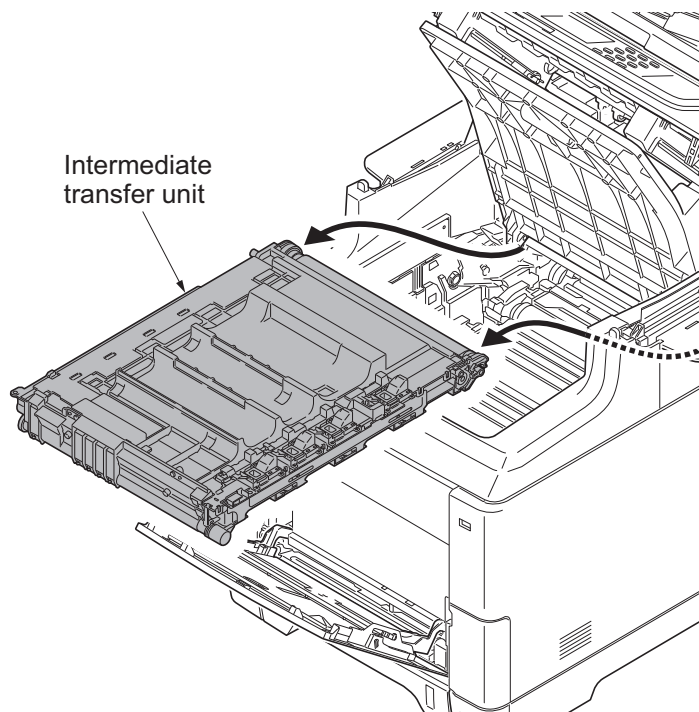


Figure 1-5-35

(2) Detaching and refitting the transfer roller unit

Procedure

1. Open the paper conveying unit.
2. Release two hooks and then remove the transfer roller unit.
3. Check or replace the transfer roller unit and refit all the removed parts.

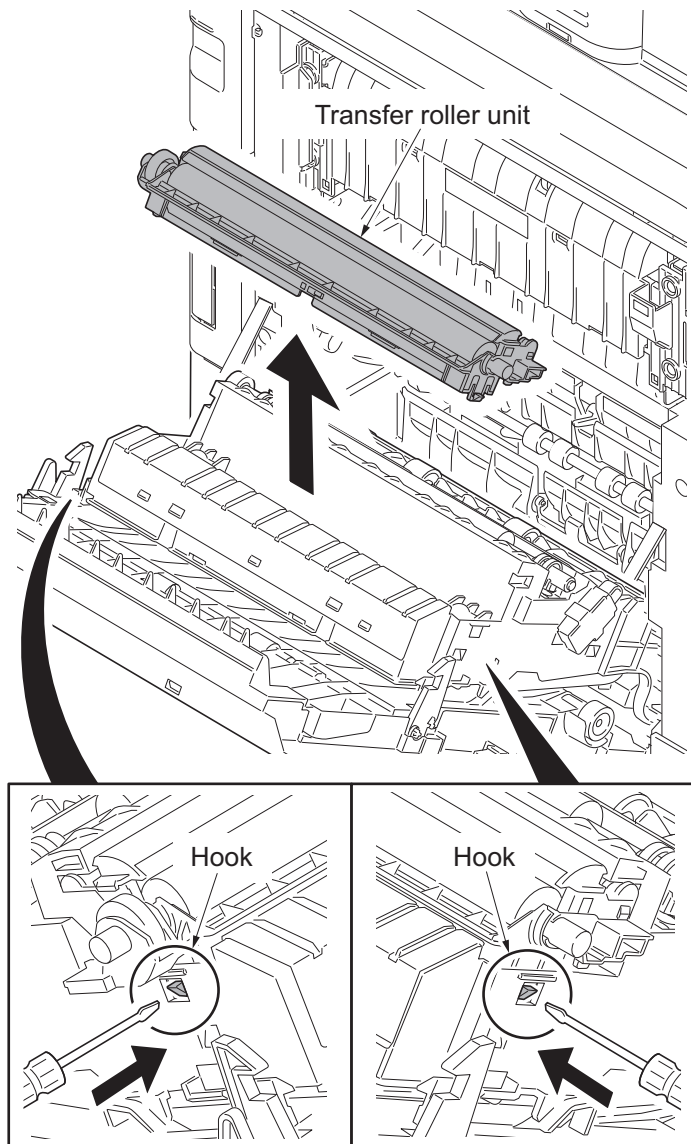


Figure 1-5-36

1-5-7 Fuser section

(1) Detaching and refitting the fuser unit

Procedure

1. Open the paper conveying unit.
2. Remove the IF cover (see page 1-5-3).
3. Remove the screw and then fuser wire cover.

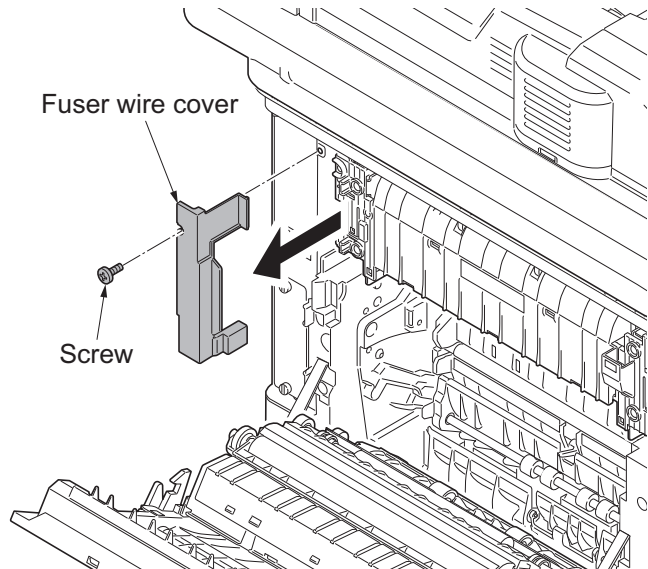


Figure 1-5-37

4. Remove three connectors.
 5. Remove two screws and then remove the fuser unit.
 6. Check or replace the fuser unit and refit all the removed parts.
- *: Take care not to get the cables caught.

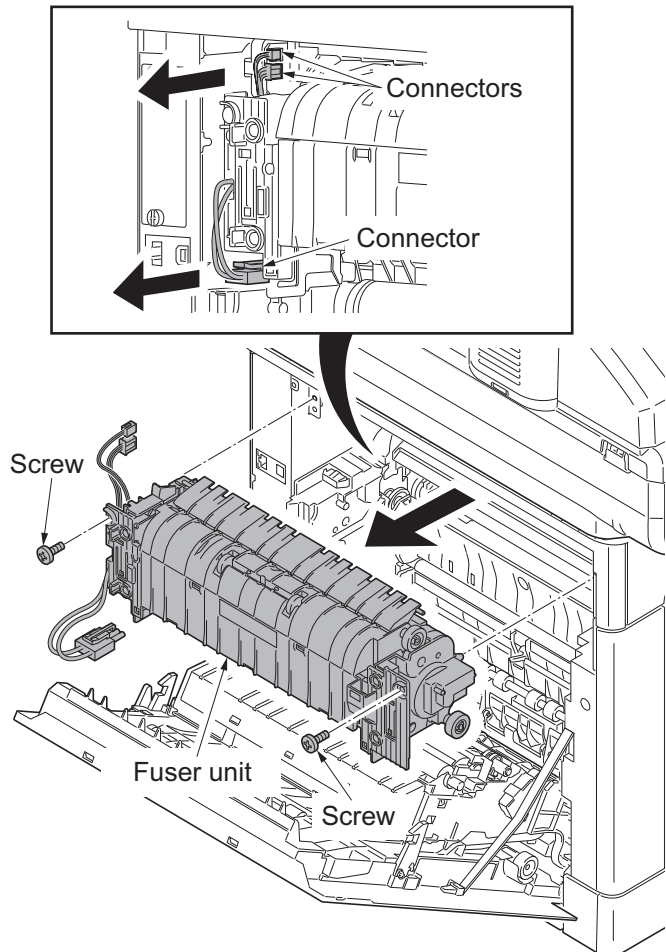


Figure 1-5-38

1-5-8 PWBs

(1) Detaching and refitting the engine PWB

Procedure

- 1. Remove the left cover (see page 1-5-9).
- 2. Remove all connectors from the engine PWB.

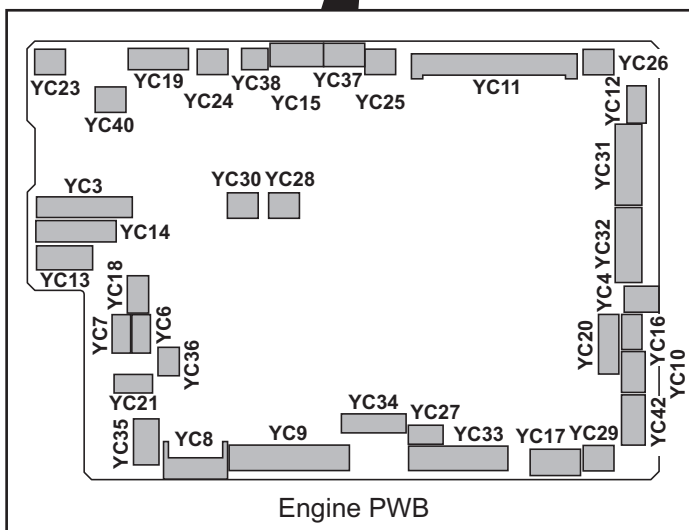
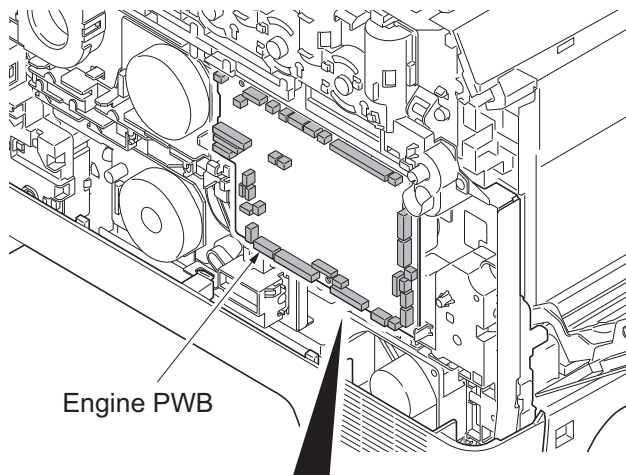


Figure 1-5-39

3. Remove three screws and then remove the engine PWB.
 4. Check or replace the engine PWB and refit all the removed parts.
- *: To replace the engine PWB, remove the EEPROM (U1) from the old engine PWB and mount it to the new engine PWB.

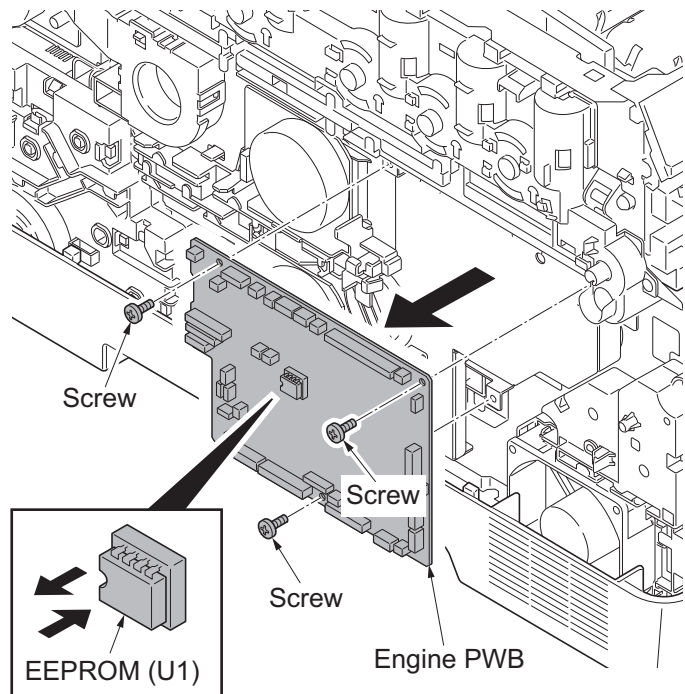


Figure 1-5-40

(2) Detaching and refitting the power source PWB

Procedure

1. Remove the right rear cover, right cover and right lower cover (see page 1-5-6).
2. Remove three screws and then remove the power source shield.
Screws A and B are unidentical, therefore, do not mix up.

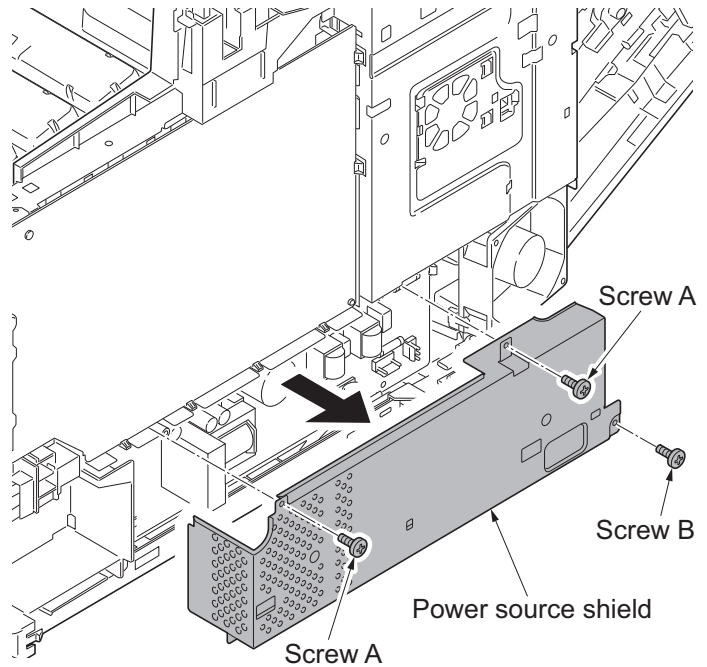


Figure 1-5-41

3. Remove all connectors from power source PWB.
4. Remove two screws.
5. Release three hooks and then remove the power source PWB.
6. Check or replace the power source PWB and refit all the removed parts.

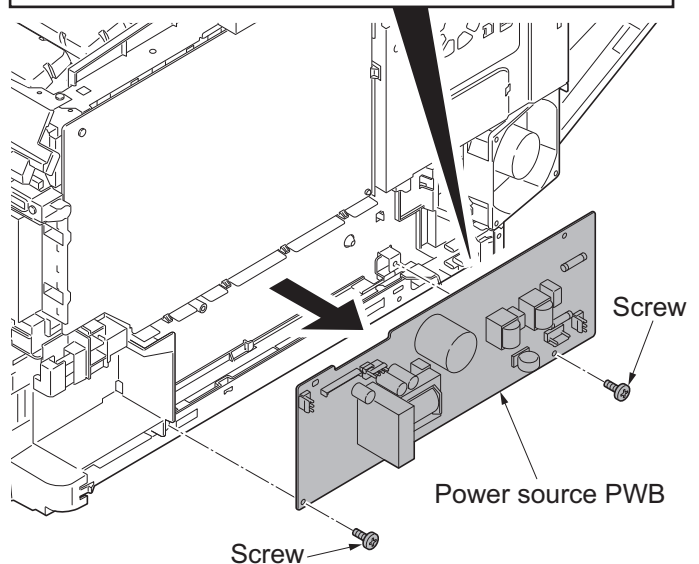
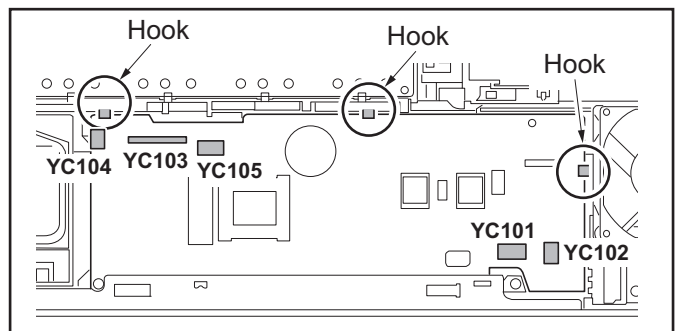


Figure 1-5-42

(3) Detaching and refitting the main PWB

Procedure

1. Remove the FAX control PWB, if installed (see page 1-5-36).
2. Remove the right rear cover, right cover and right lower cover (see page 1-5-6).
3. Remove three screws and then remove the power source shield.
Screws A and B are unidentical, therefore, do not mix up.

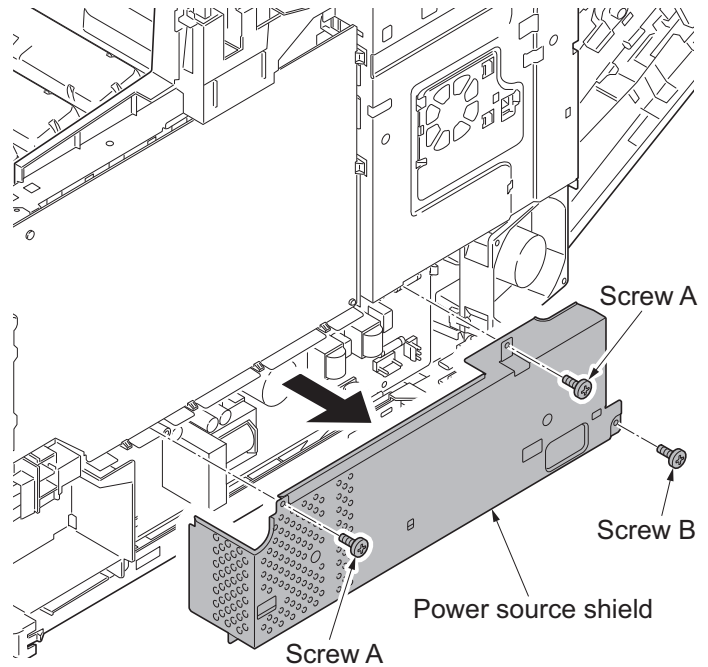


Figure 1-5-43

4. Open the fan bracket.
5. Slide the fan plate. Release four hooks and then remove the fan plate.

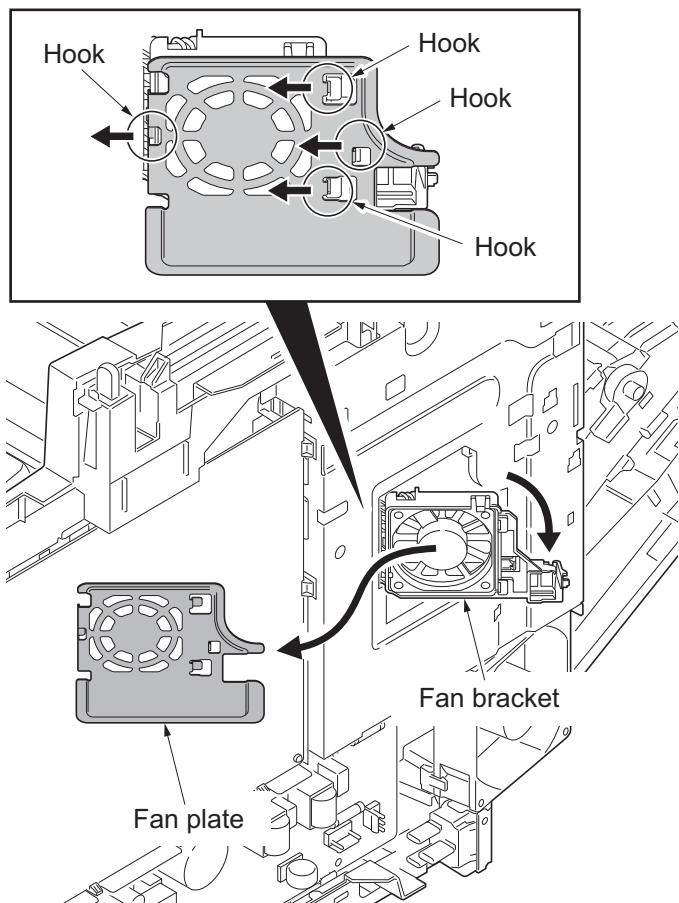


Figure 1-5-44

- 6. Remove the screw and then remove the fuser wire cover.

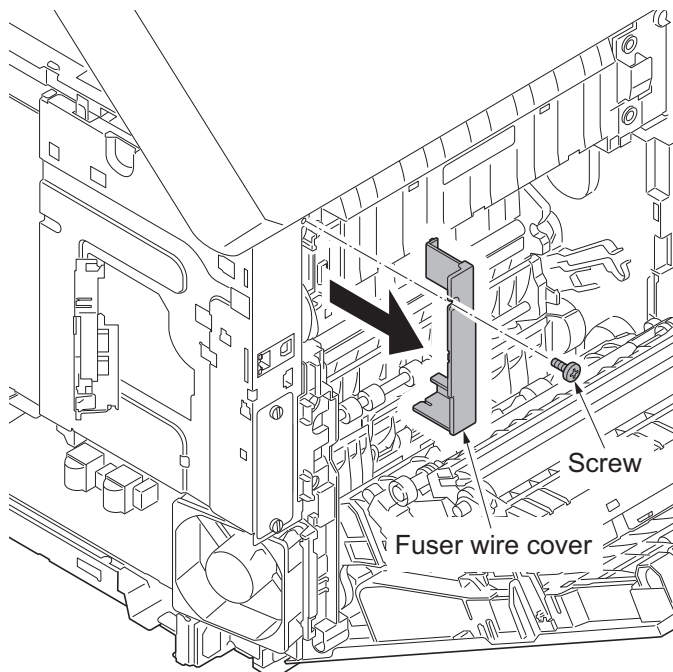


Figure 1-5-45

- 7. Remove five screws and then remove the controller shield.

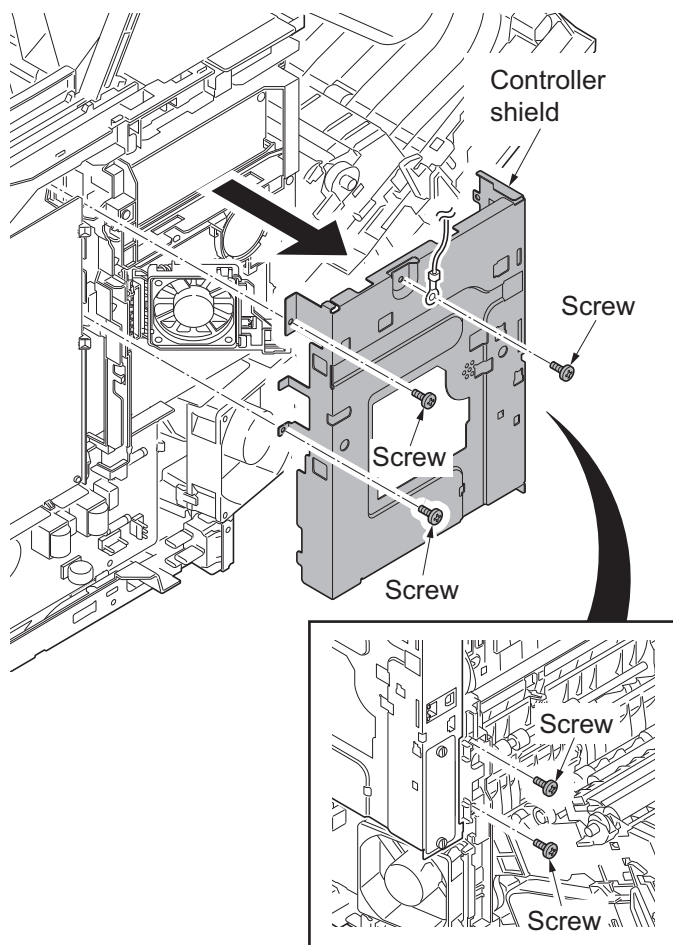


Figure 1-5-46

8. Remove the connector (YC41) of the controller fan motor.
9. Open the fan bracket and then remove it.

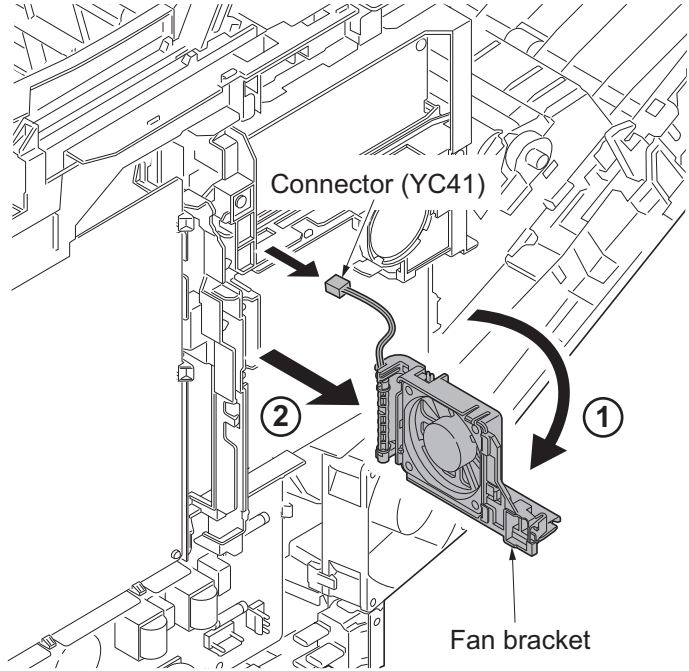


Figure 1-5-47

10. Remove seven connectors (YC37, YC41, YC40, YC100, YC38, YC39 and YC42) from the main PWB.

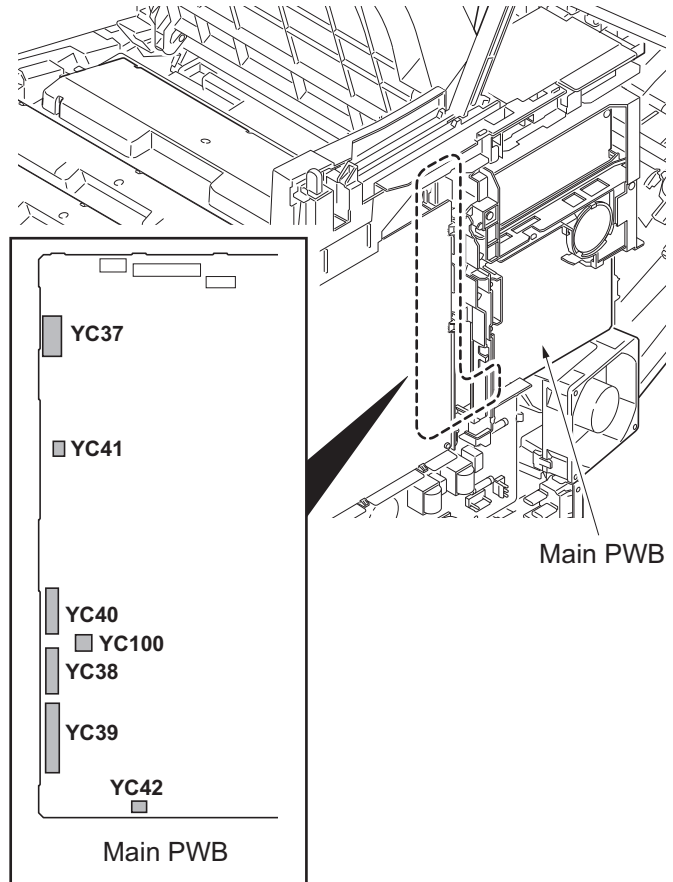


Figure 1-5-48

11. Remove two screws.
12. Release three hooks and then remove the wire holder.

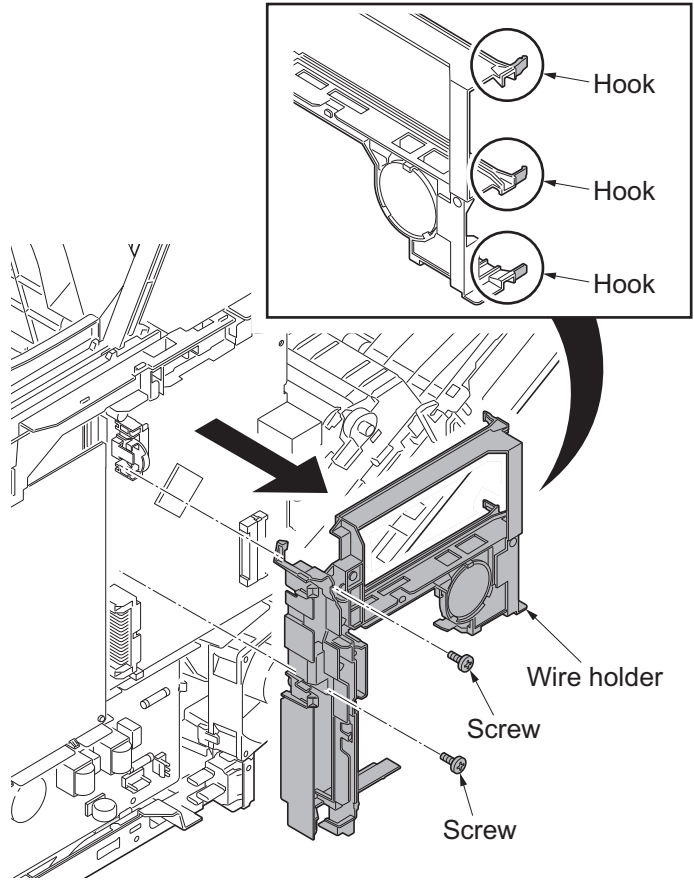


Figure 1-5-49

13. Remove six connectors (YC36, YC32, YC102, YC101, YC107, YC108) and FFC (YC8) from the main PWB.

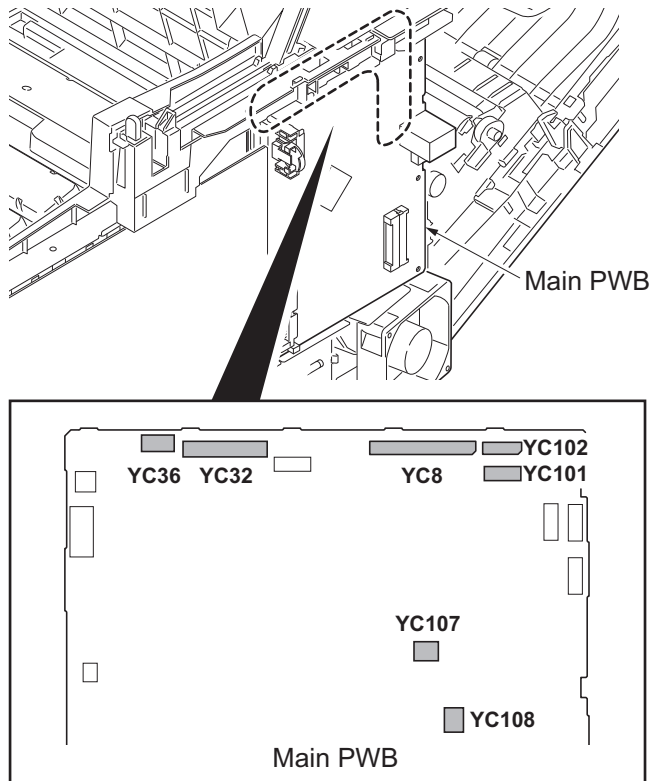


Figure 1-5-50

14. Remove five screws and then remove the main PWB.
15. Check or replace the main PWB and refit all the removed parts.

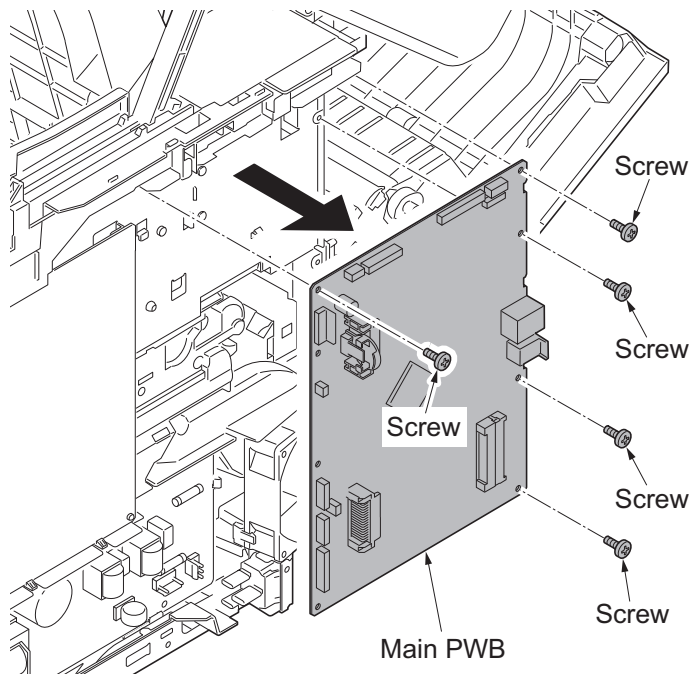


Figure 1-5-51

(4) Detaching and refitting the high voltage PWB

Procedure

1. Remove the right rear cover and right cover (see page 1-5-6).
2. Remove the FFC from the high voltage PWB.

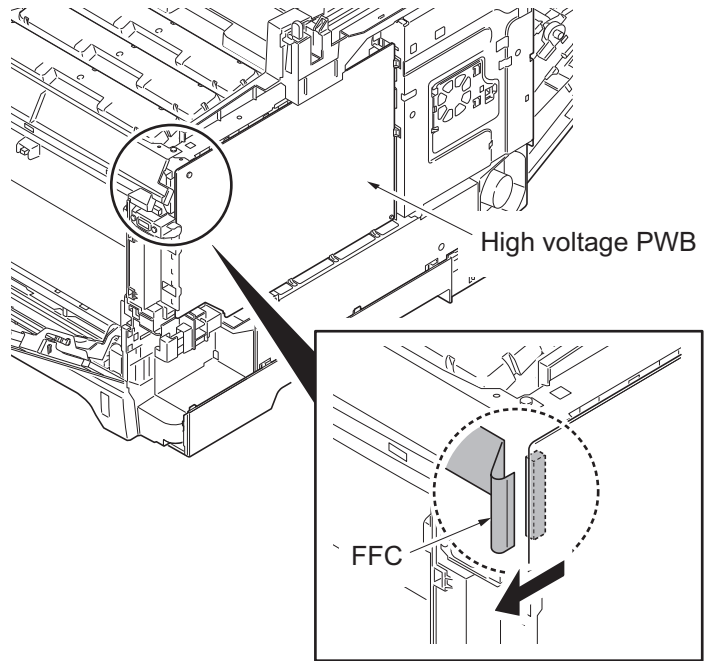


Figure 1-5-52

3. Remove the screw.
4. Release eight hooks and then remove the high voltage PWB.
5. Check or replace the high voltage PWB and refit all the removed parts.

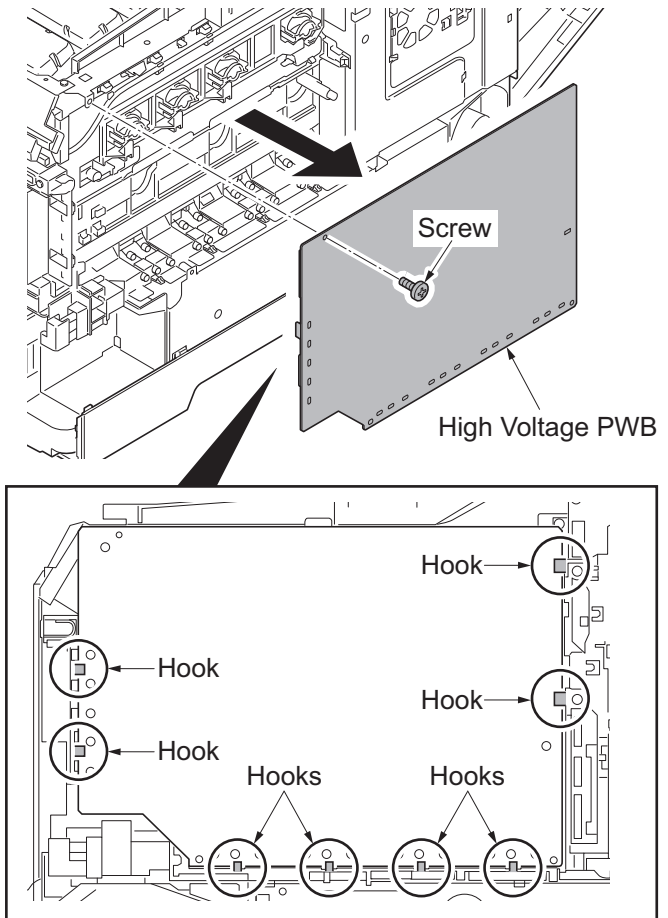


Figure 1-5-53

(5) Detaching and refitting the FAX control PWB

Procedure

1. Remove the IF cover (see page 1-5-3).
2. Remove two screws and then remove the FAX control PWB.
3. Check or replace the FAX control PWB and refit all the removed parts.

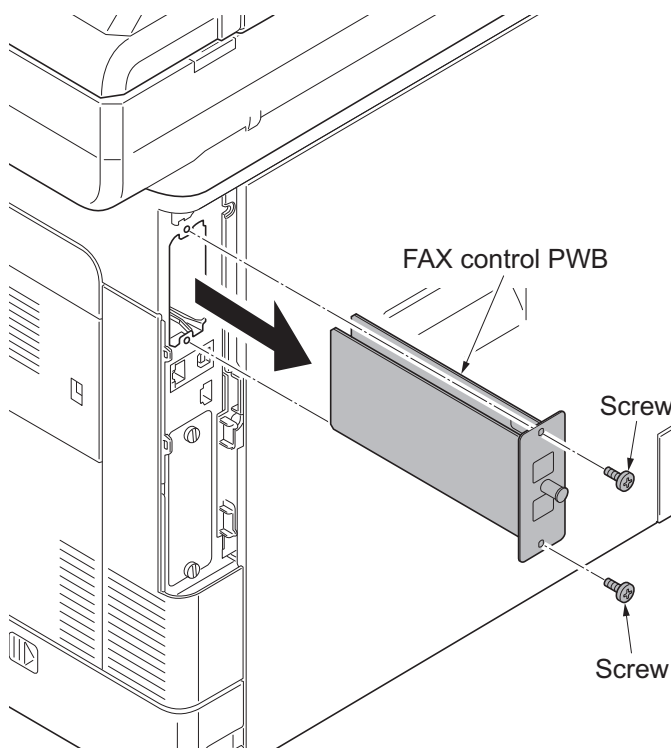


Figure 1-5-54

1-5-9 Drive section

(1) Detaching and refitting the MP feed drive unit

Procedure

1. Remove the rear upper cover, right upper cover, left upper cover and front cover (see page 1-5-3).
2. Remove the right rear cover and right cover (see page 1-5-6).
3. Remove the left rear cover, left cover and left lower cover (see page 1-5-9).
4. Remove the inner cover (see page 1-5-11).
5. Remove the engine PWB (see page 1-5-27).
6. Release three hooks and then remove the left fan motor.

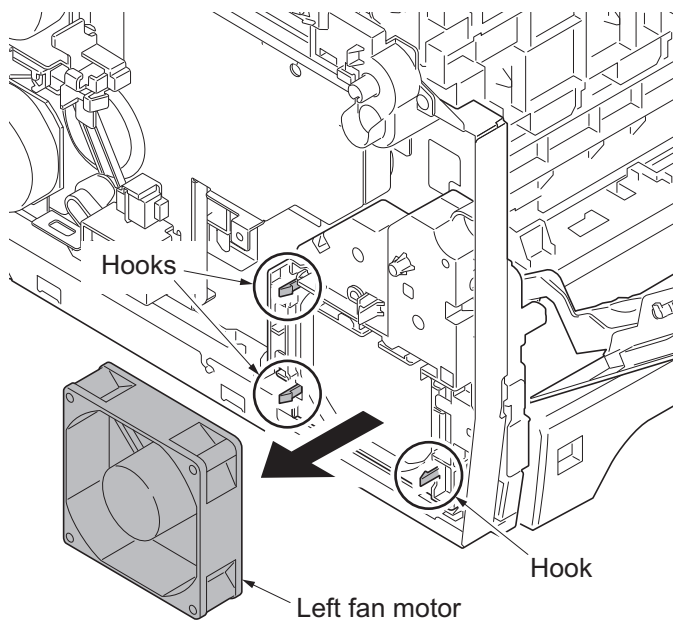


Figure 1-5-55

7. Turn the cam inside the device to the position indicated.
8. Remove three screws and then remove MP feed drive unit.
9. Check or replace the MP feed drive unit and refit all the removed parts.

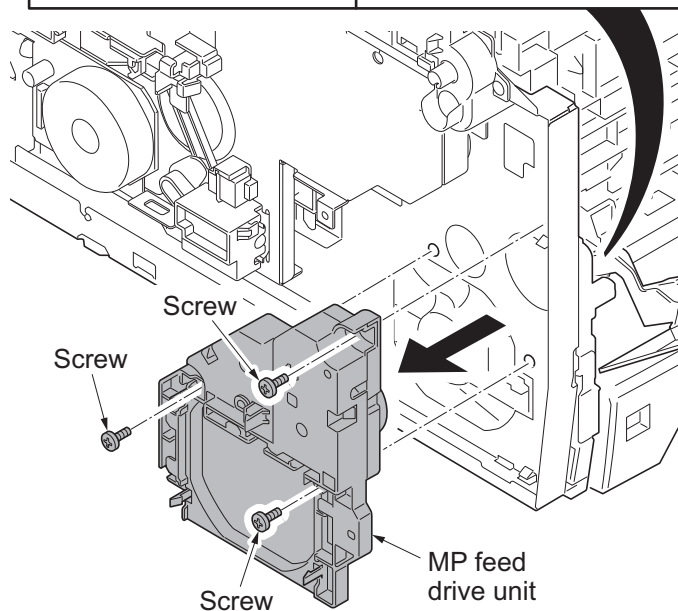
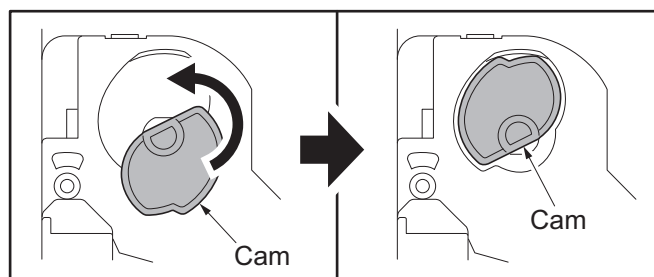


Figure 1-5-56

(2) Detaching and refitting the drum/developing drive unit

Procedure

1. Remove drum units (K, M, C, Y) and developing units (K, M, C, Y) (see page 1-5-21, 19).
2. Remove the rear upper cover, right upper cover, left upper cover and front cover (see page 1-5-3).
3. Remove the left rear cover, left cover and left lower cover (see page 1-5-9).
4. Remove the engine PWB (see page 1-5-27).
5. Remove the screw and release the hook, and then remove the container fan unit.

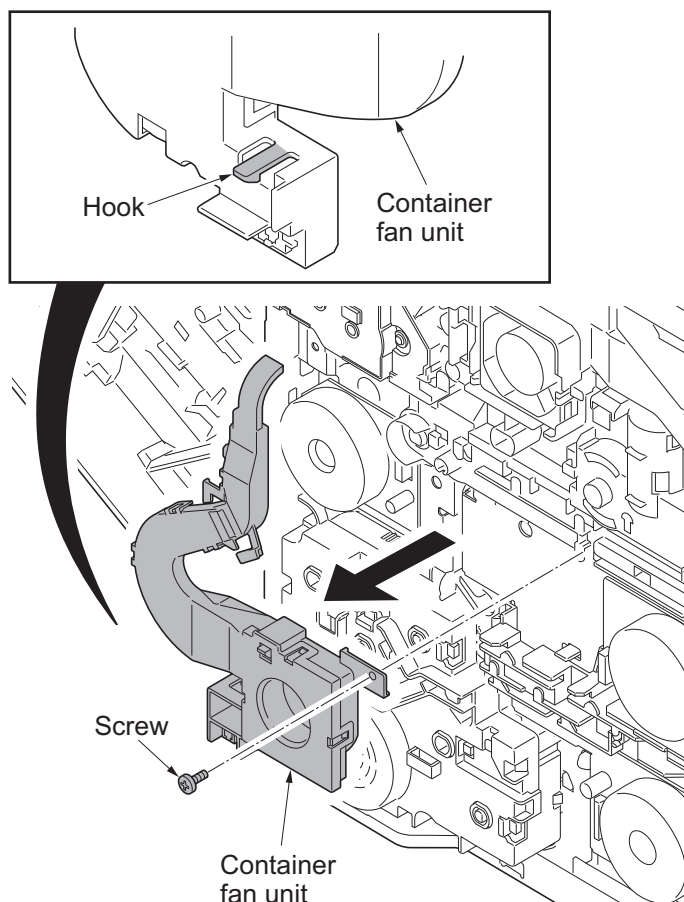


Figure 1-5-57

6. Remove the screw and then remove the ID guide.

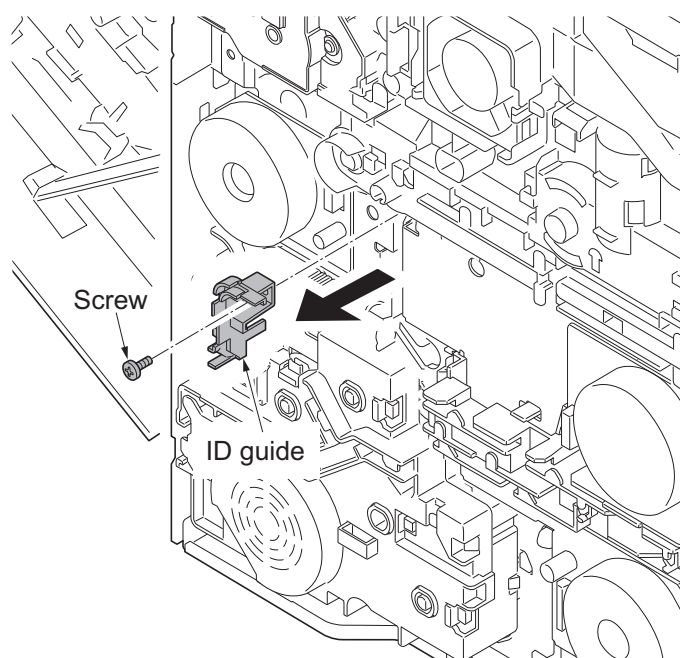


Figure 1-5-58

7. Remove five screws and then remove drum/developing drive unit.
8. Check or replace the drum/developing drive unit and refit all the removed parts.

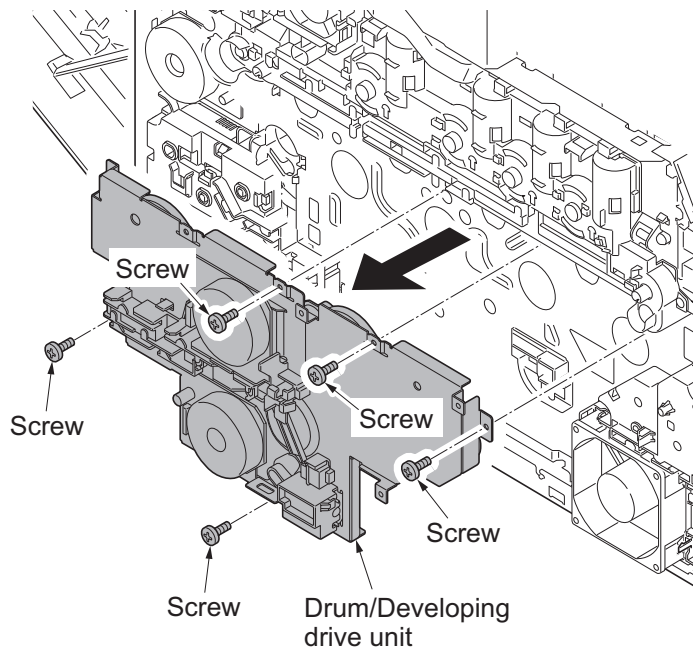


Figure 1-5-59

(3) Detaching and refitting the paper feed drive unit

Procedure

1. Remove the rear upper cover, right upper cover, left upper cover and front cover (see page 1-5-3).
2. Remove the left rear cover, left cover and left lower cover (see page 1-5-9).
3. Remove connector (YC3) from engine PWB.

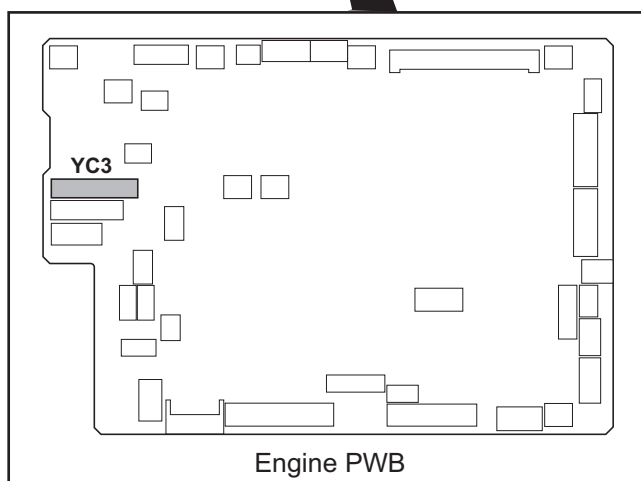
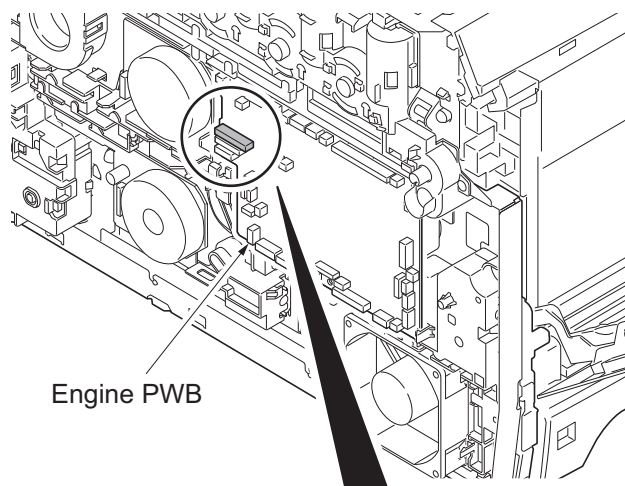


Figure 1-5-60

4. Remove four screws and then remove the paper feed drive unit.
5. Check or replace the paper feed drive unit and refit all the removed parts.

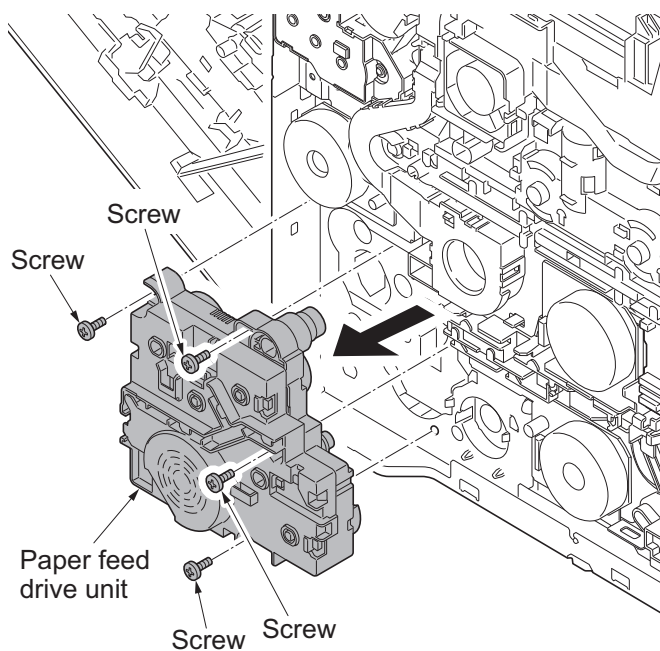


Figure 1-5-61

(4) Detaching and refitting the fuser pressure drive unit

Procedure

1. Remove the fuser unit (see page 1-5-26).
2. Remove the rear upper cover, right upper cover, left upper cover and front cover (see page 1-5-3).
3. Remove the left rear cover and left cover (see page 1-5-9).
4. Remove connector (YC38) from engine PWB.

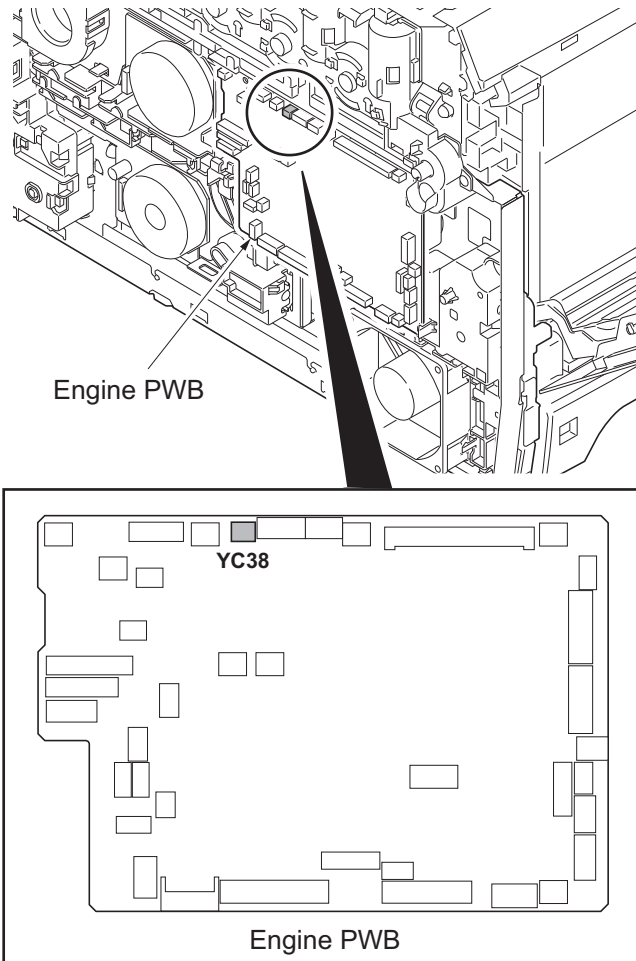
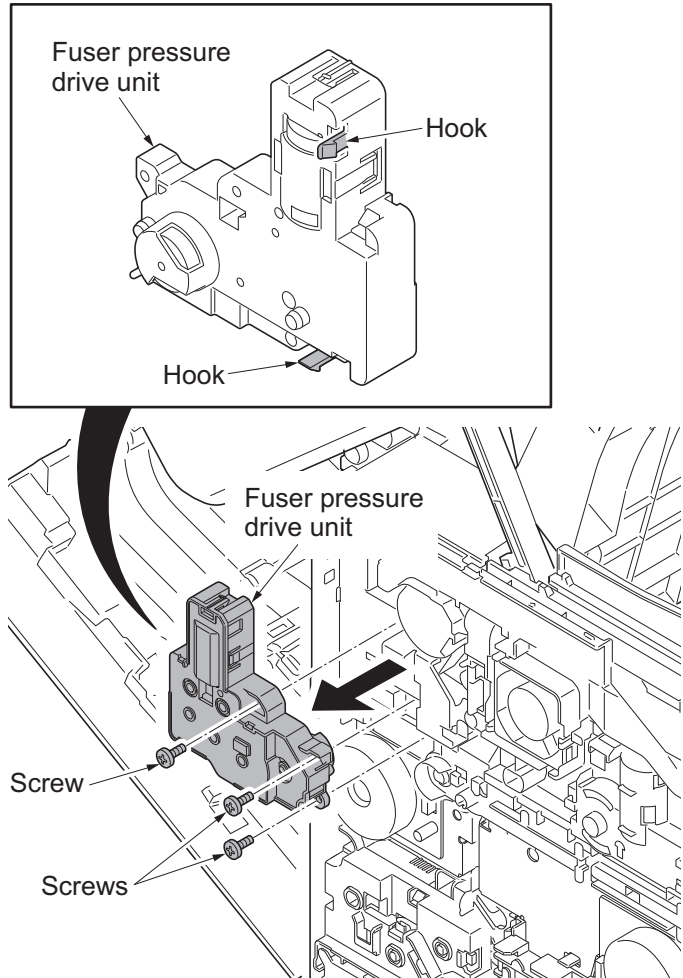


Figure 1-5-62

5. Remove the developing fan unit (see page 1-5-38).
6. Remove three screws.
7. Release two hooks remove the fuser pressure drive unit.
8. Check or replace the fuser pressure drive unit and refit all the removed parts.

**Figure 1-5-63**

(5) Detaching and refitting the middle transfer drive unit

Procedure

1. Remove the intermediate transfer unit (see page 1-5-22).
2. Remove the rear upper cover, right upper cover, left upper cover and front cover (see page 1-5-3).
3. Remove the left rear cover and left cover (see page 1-5-9).
4. Remove the fuser pressure drive unit (see page 1-5-41).
5. Remove connector (YC15) from engine PWB.

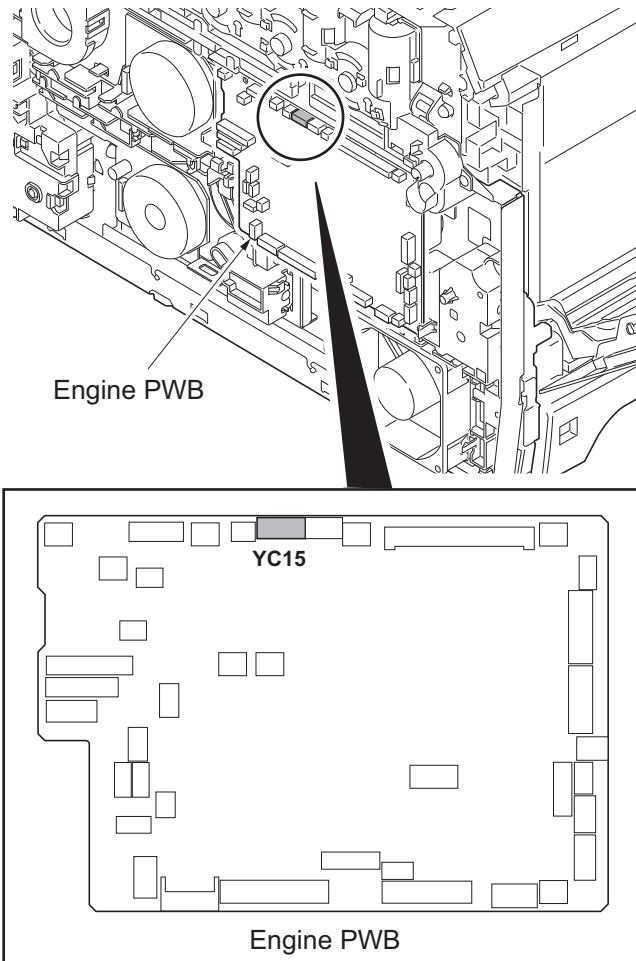


Figure 1-5-64

6. Remove the screw and then remove the ID guide.

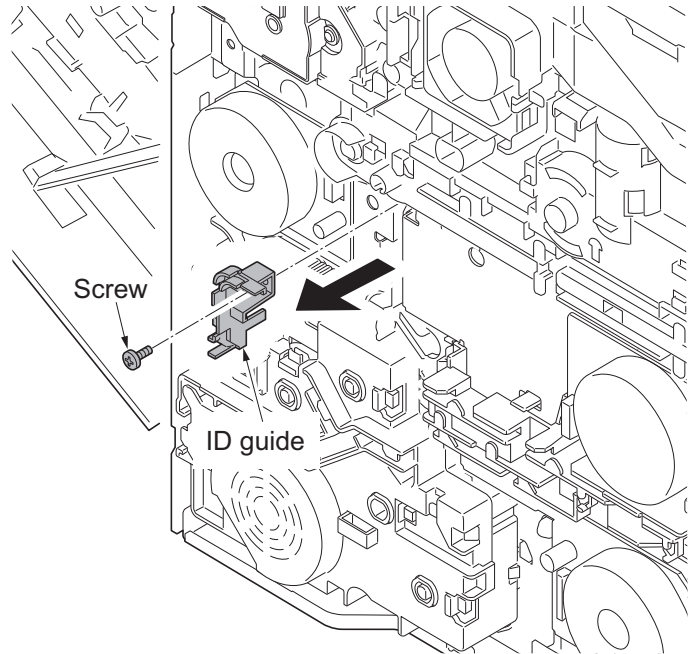


Figure 1-5-65

7. Remove three screws and then remove the middle transfer drive unit.
8. Check or replace the middle transfer drive unit and refit all the removed parts.

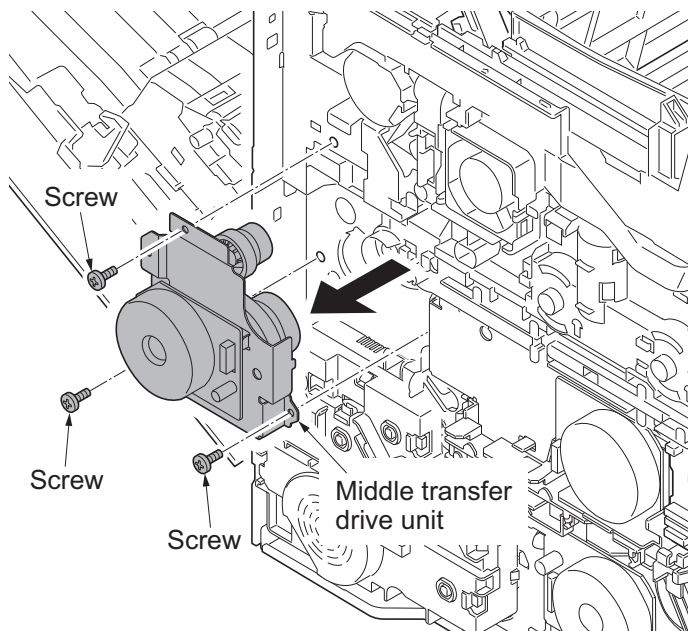


Figure 1-5-66

1-5-10 Optical section

(1) Detaching and refitting the laser scanner unit

Procedure

1. Remove the intermediate transfer unit (see page 1-5-22).
2. Remove drum units (K, M, C, Y) and developing units (K, M, C, Y) (see page 1-5-21, 19).
3. Remove the rear upper cover, right upper cover, left upper cover and front cover (see page 1-5-3).
4. Remove the left rear cover and left cover (see page 1-5-9).
5. Remove two connectors (YC32, YC32) from engine PWB.

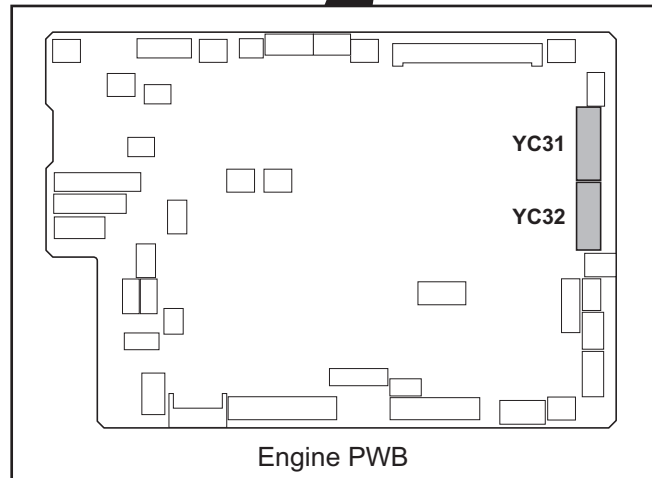
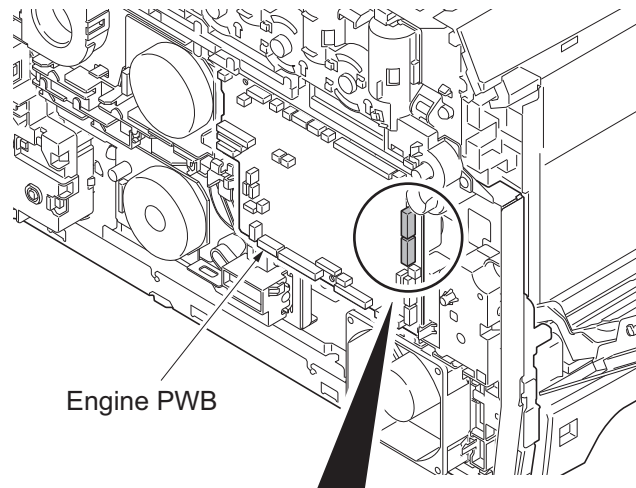


Figure 1-5-67

6. Draw two connectors (YC31, YC32) into the machine inside.

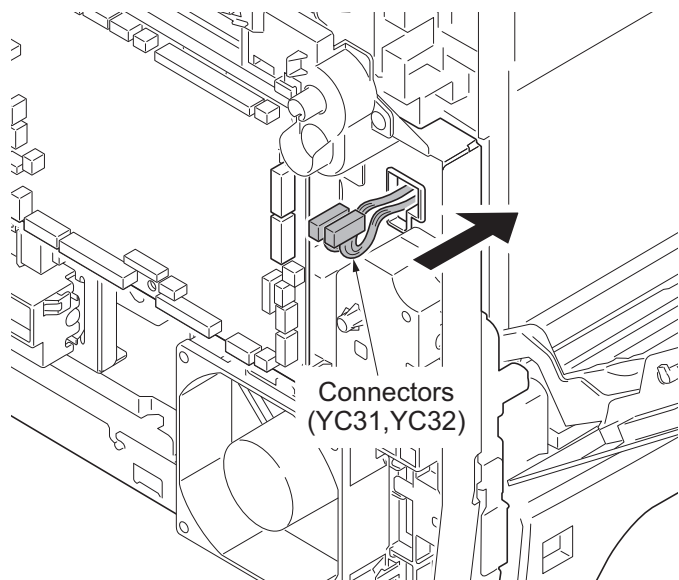


Figure 1-5-68

7. Remove the right rear cover, right cover and right lower cover (see page 1-5-6).
8. Remove the controller shield (see page 1-5-30).
9. Remove two connectors (YC38, YC40) from main PWB.

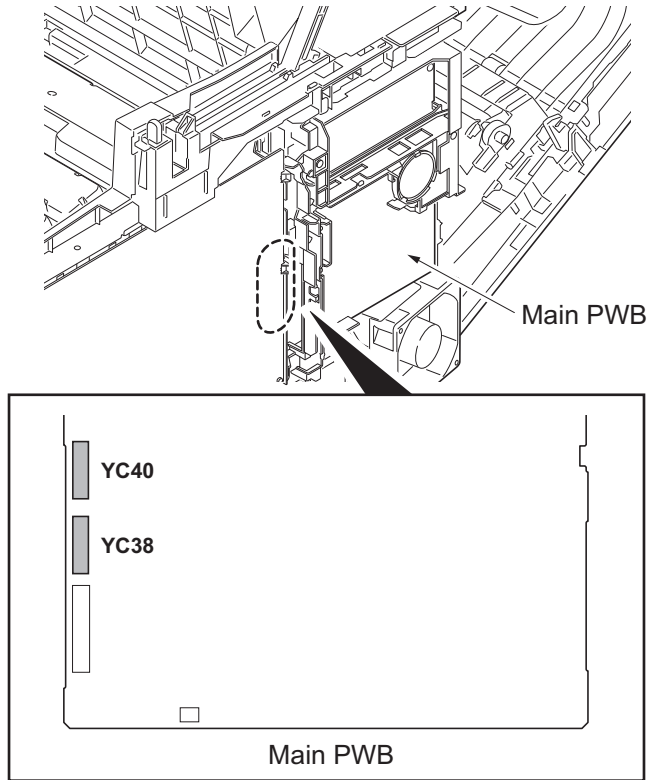


Figure 1-5-69

10. Draw two connectors (YC38, YC40) into the machine inside.

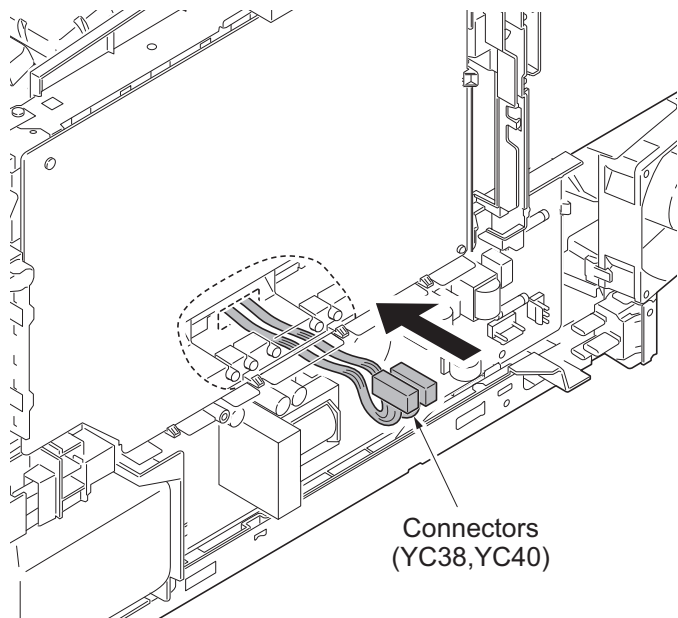


Figure 1-5-70

11. Remove each three screws and then remove laser scanner unit (KM, CY).
12. Check or replace the laser scanner unit and refit all the removed parts.

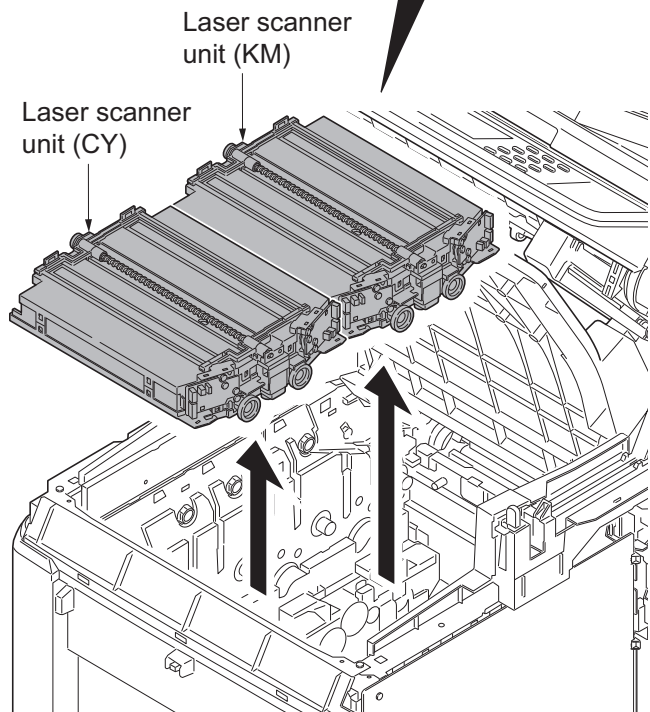
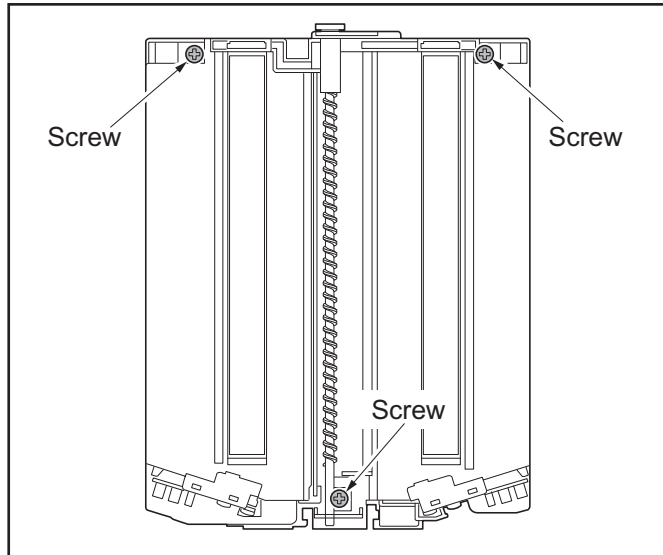


Figure 1-5-71

(2) Detaching and refitting the scanner unit

Procedure

1. Remove the document processor (see page 1-5-52).
2. Remove five connectors and the FFC from main PWB.
3. Open the scanner unit.

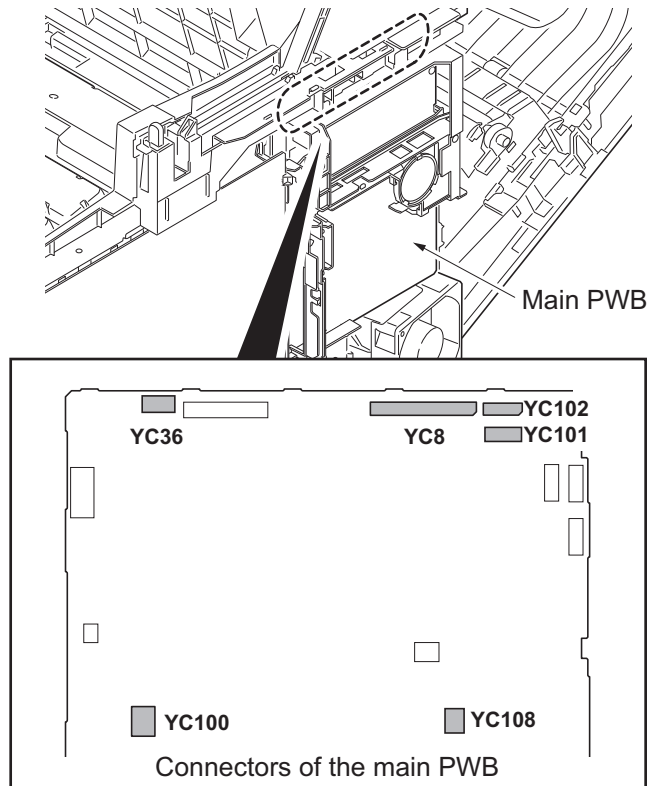


Figure 1-5-72

4. Remove the motor wire, CCD wire and operation panel wires from the wire holder.

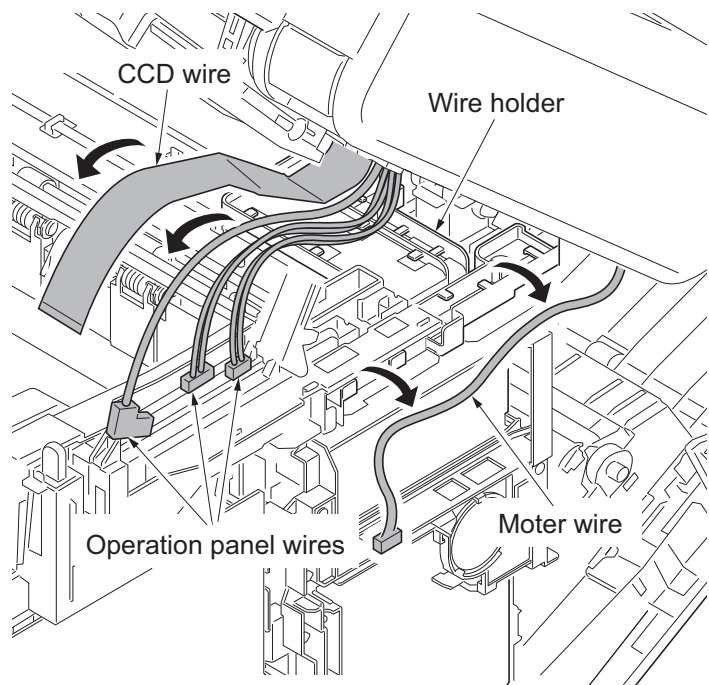


Figure 1-5-73

5. Release each four hooks and then remove left and right rails.

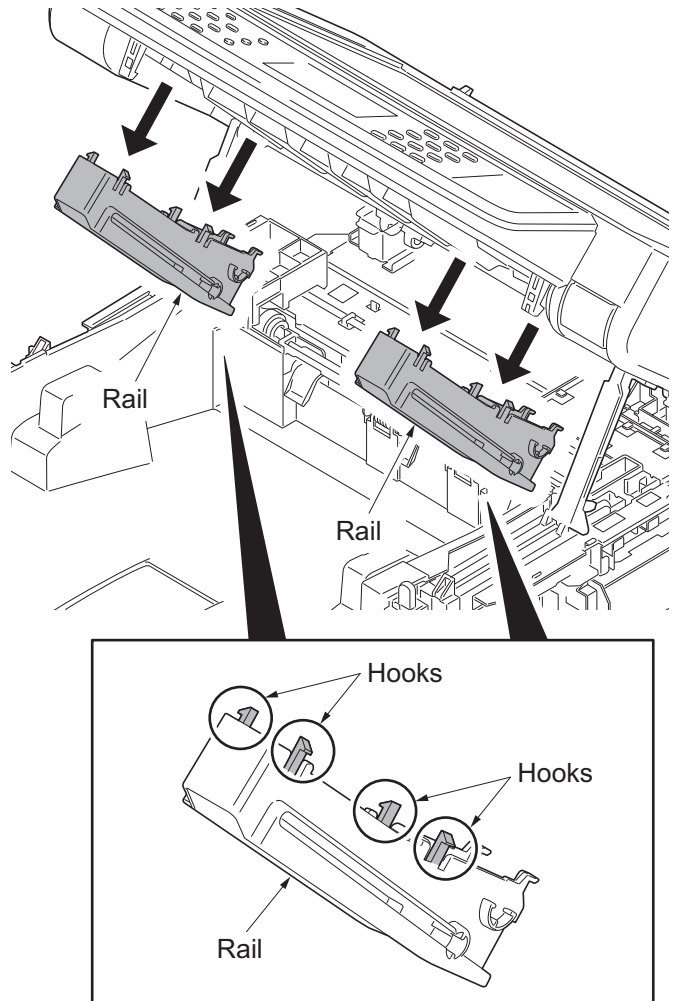


Figure 1-5-74

6. Remove two springs from left and right rails.

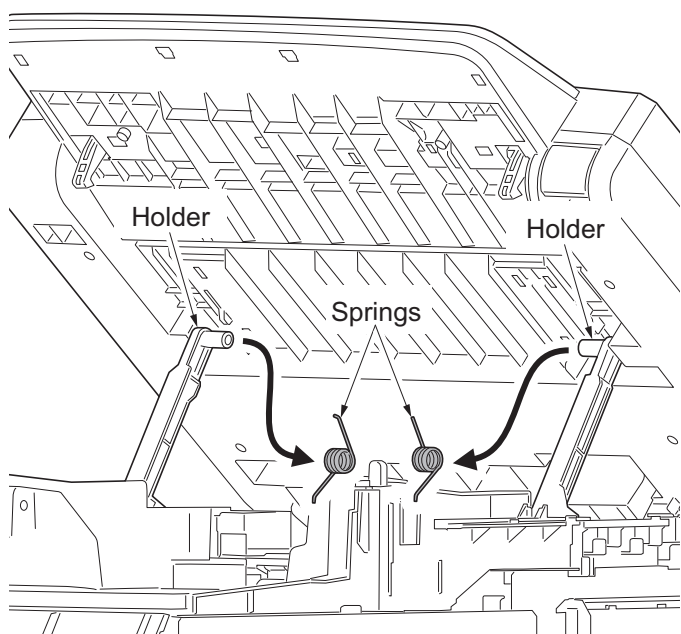


Figure 1-5-75

7. Remove left and right rails from the scanner unit.

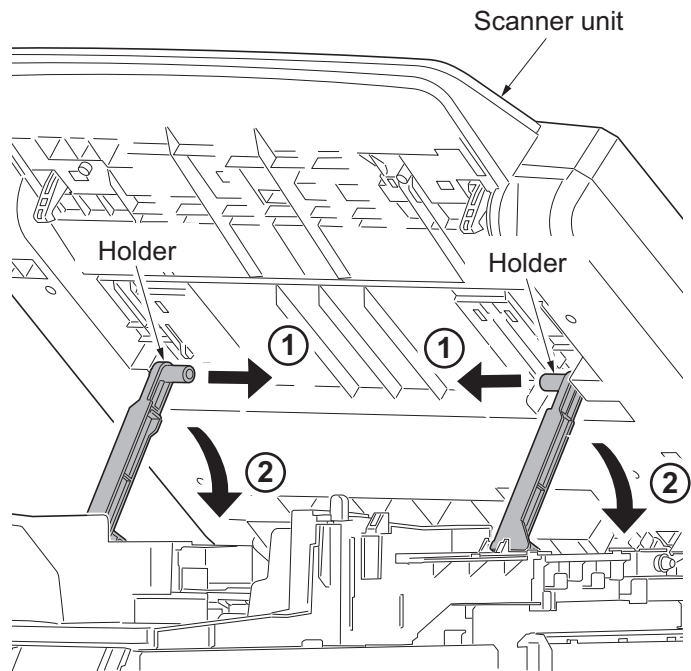


Figure 1-5-76

8. Remove the spring and then pull right and left pin out.

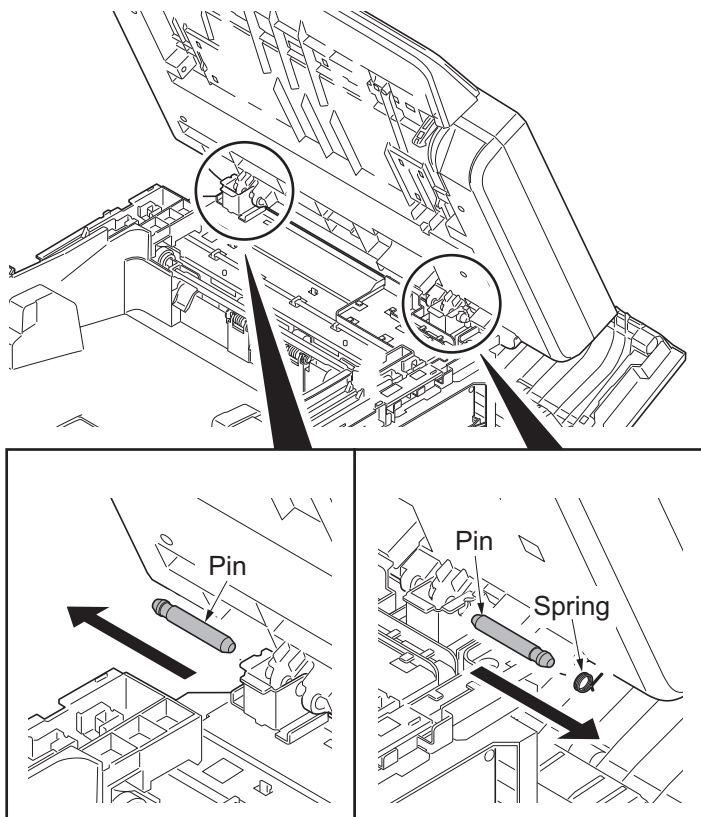


Figure 1-5-77

9. Remove the scanner unit.

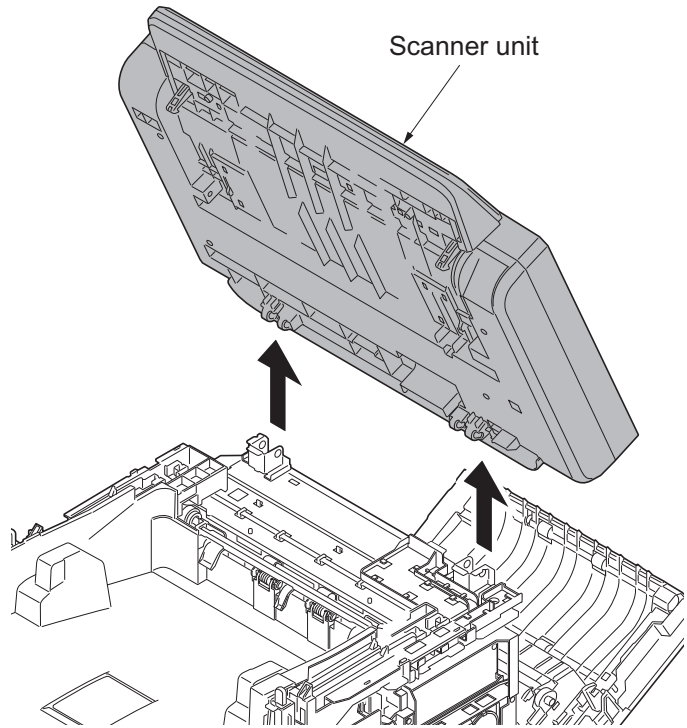


Figure 1-5-78

1-5-11 Document processor

(1) Detaching and refitting the document processor

Procedure

1. Remove the rear upper cover, right upper cover, left upper cover and front cover (see page 1-5-3).
2. Remove left and right pins and then close the inner tray.

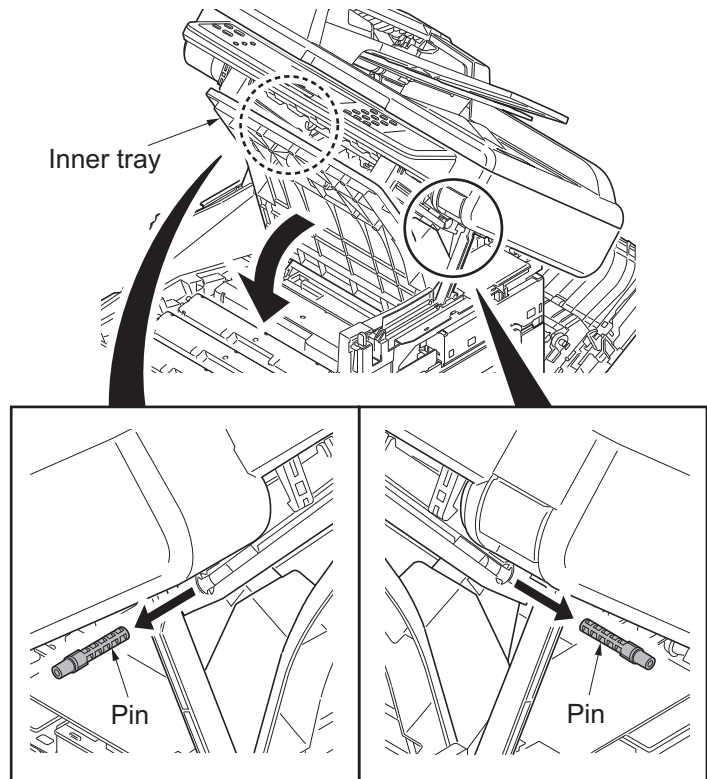


Figure 1-5-79

3. Release three hooks and then remove the upper middle cover.

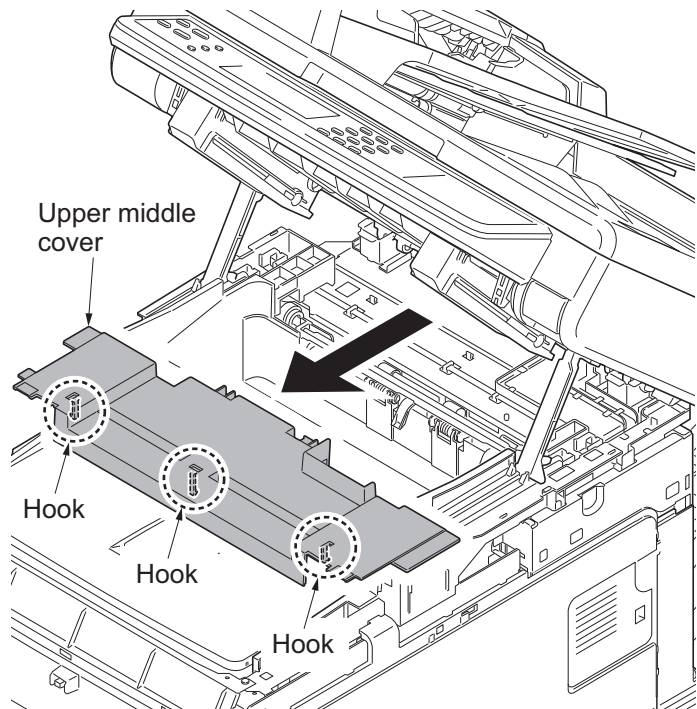


Figure 1-5-80

4. Remove the right rear cover, right cover and right lower cover (see page 1-5-6).
5. Remove the controller shield (see page 1-5-30).
6. Remove connector (YC32) from main PWB.

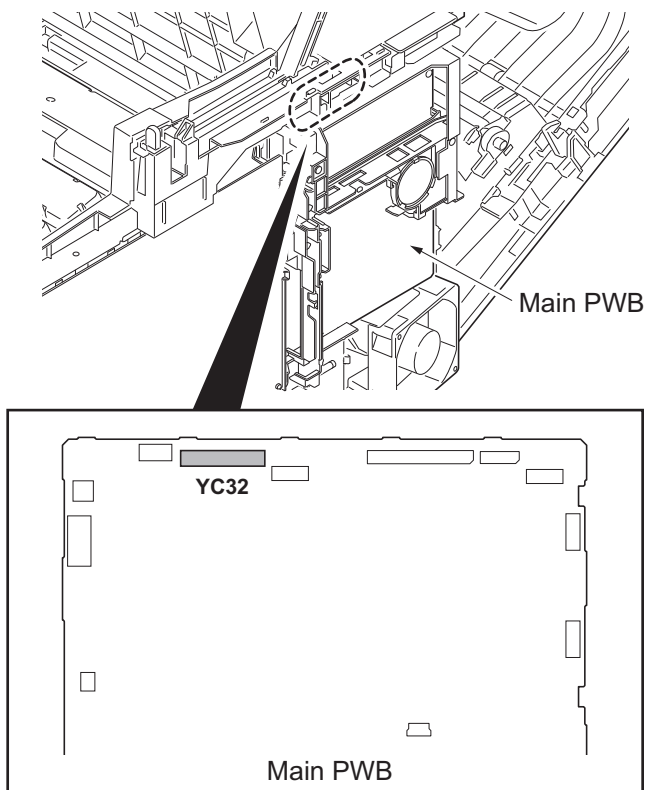


Figure 1-5-81

7. Cut the band and then remove the it.
8. Remove the DP wire and ground wire from wire holder.
9. Close the scanner unit.

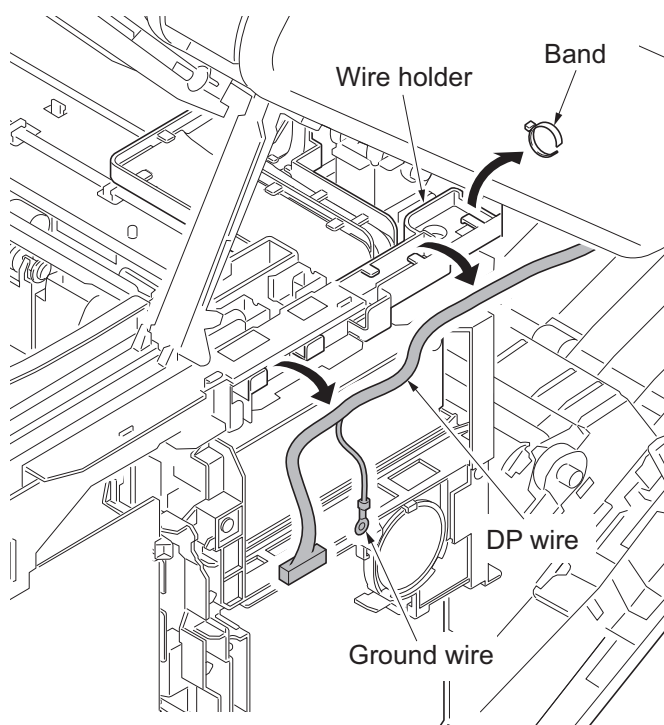


Figure 1-5-82

10. Press the DP lock lever through the hole at the bottom right side of the scanner unit, and open the document processor.

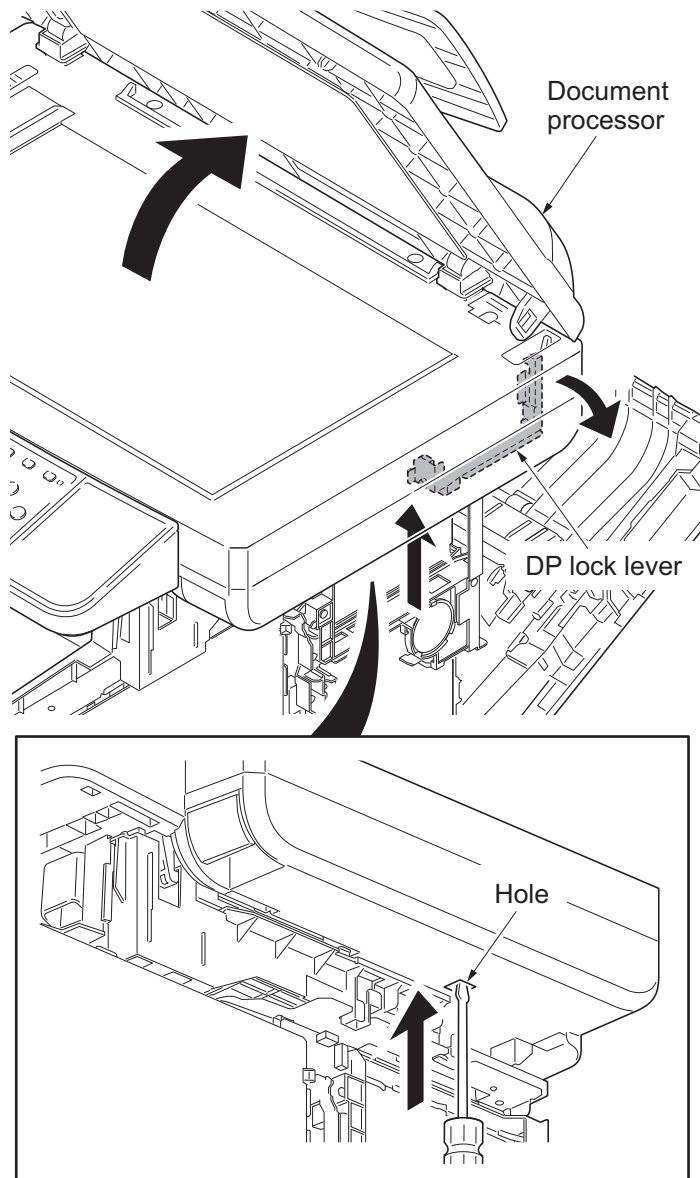


Figure 1-5-83

11. Remove the wire cover.

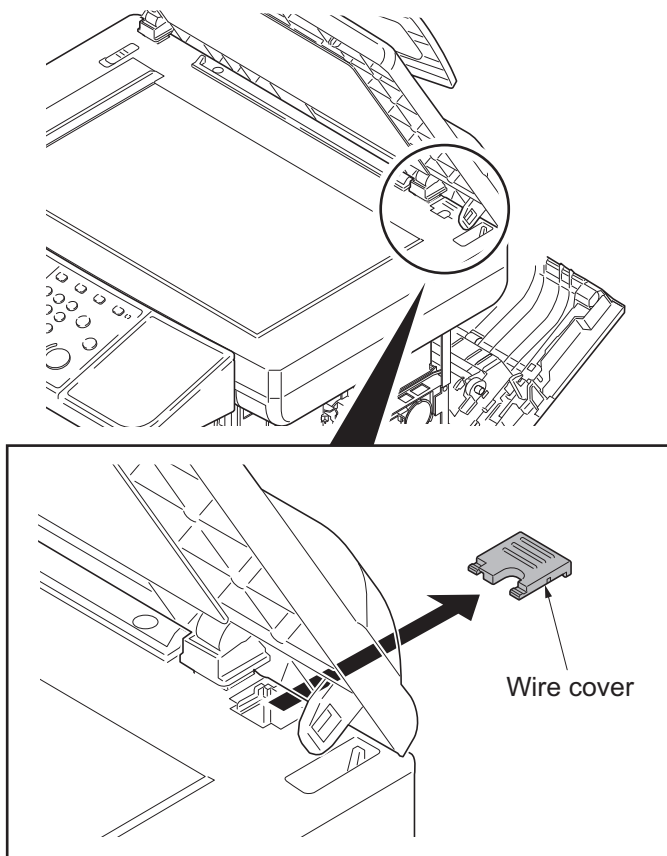


Figure 1-5-84

12. Remove the document processor.

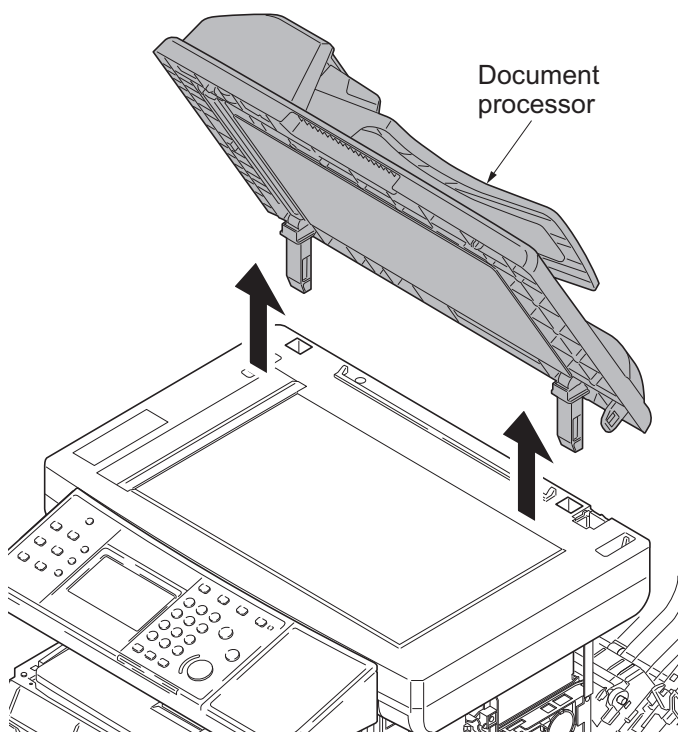


Figure 1-5-85

(2) Detaching and refitting the DP paper feed pulley unit

Procedure

1. Open the DP top cover.
2. Remove the screw.
3. Release three hooks and then remove the DP rear cover.

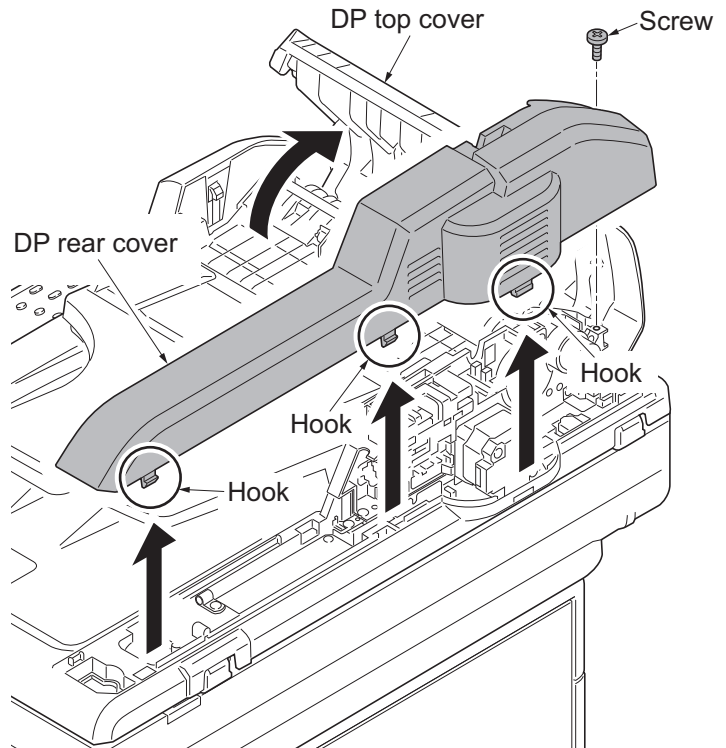


Figure 1-5-86

4. Release two hooks and then remove the DP front cover.

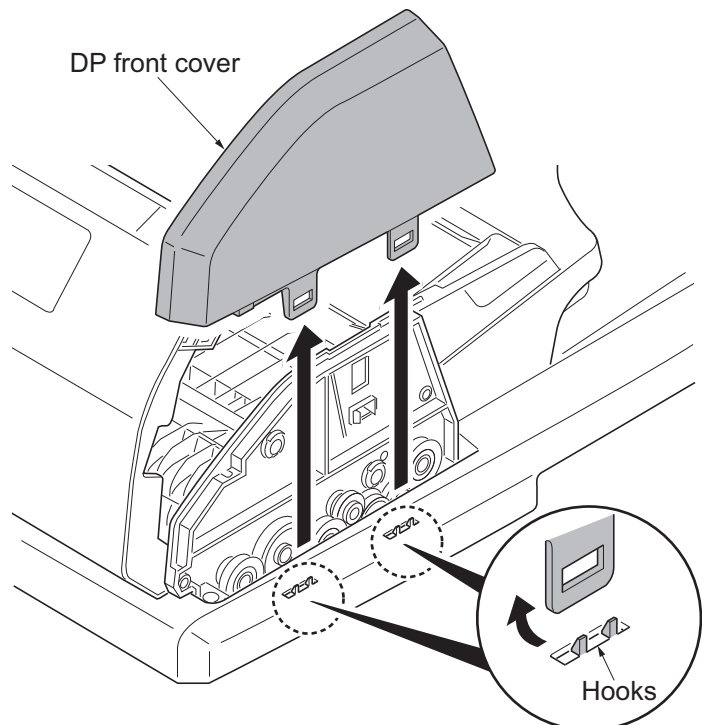


Figure 1-5-87

5. Remove the stop ring and bush.

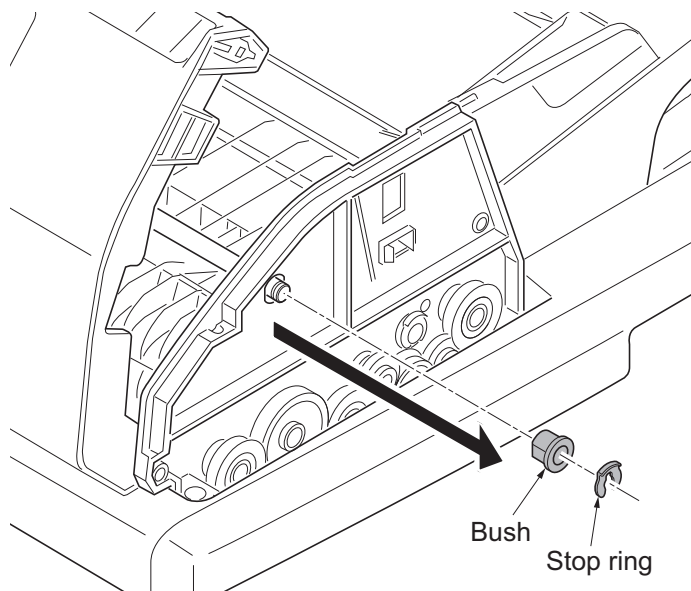


Figure 1-5-88

6. Remove the stop ring A and then remove the DP paper feed clutch from the PF shaft.
7. Remove the stop ring B and then remove the PF collar, spring, spring collar, pin and bush from the PF shaft.

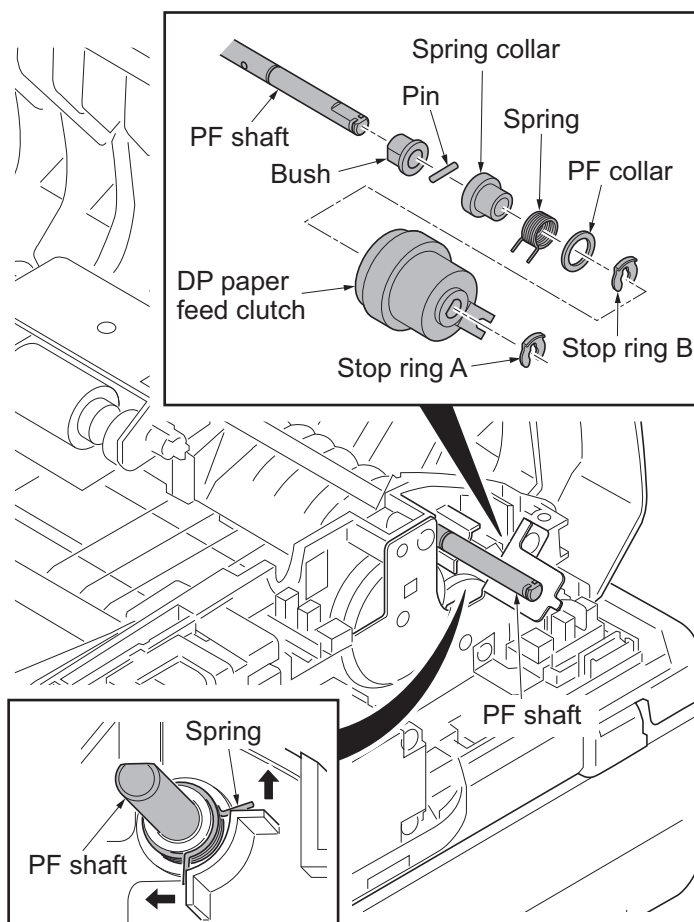


Figure 1-5-89

8. Remove the DP forwarding pulley unit.

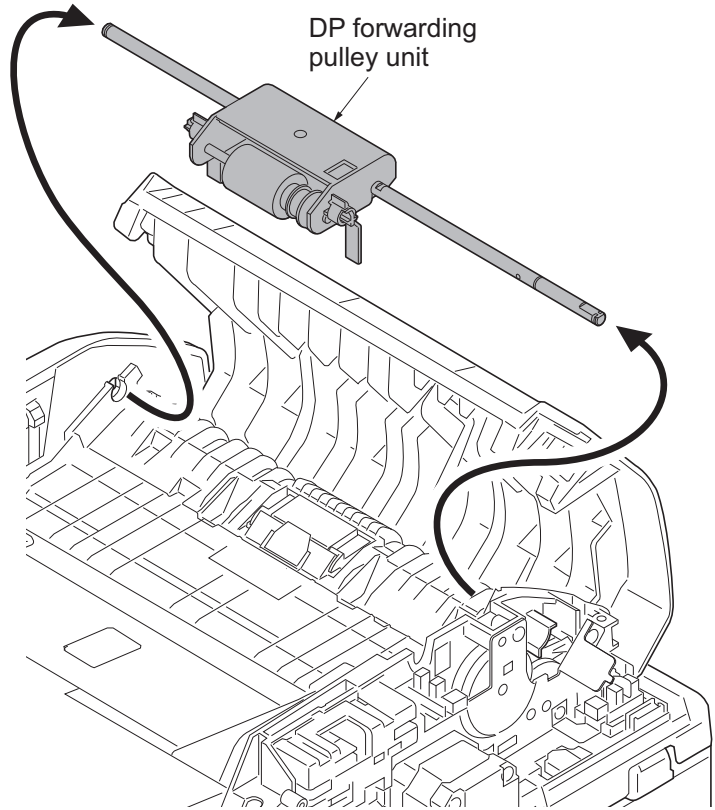


Figure 1-5-90

- 9. Remove the stop ring A.
- 10. Remove the DP feed pulley unit from the LF holder.
- 11. Remove the stop ring B.
- 12. Remove the PF collar, spring, spring collar and pin from the PF shaft.
- 13. Remove the DP feed pulley, one-way clutch, PF pulley gear and pin from the PF shaft.

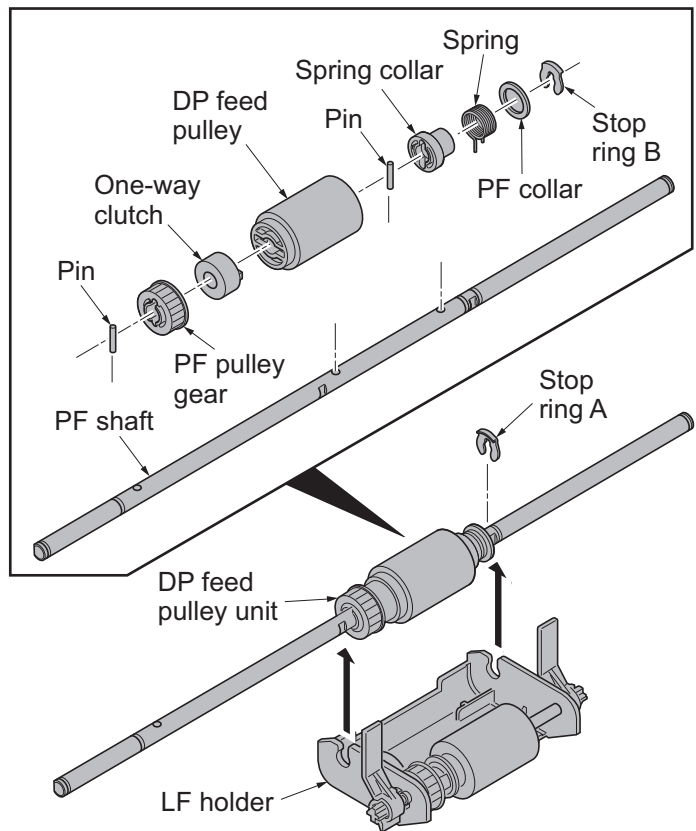


Figure 1-5-91

14. Remove the PF stopper from the LF holder.
15. Remove the stop ring.
16. Pull out the LF shaft and then remove the LF gear 18, joint gear and DP forwarding pulley.
17. Check or replace the DP feed pulley and DP forwarding pulley, and refit all the removed parts.

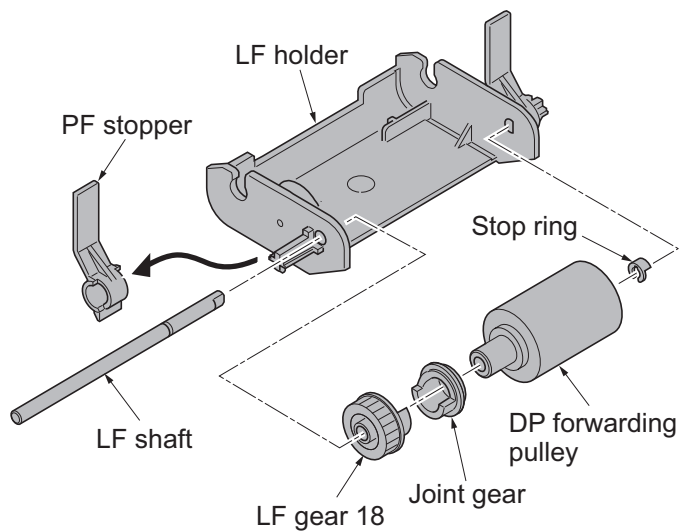


Figure 1-5-92

(3) Detaching and refitting the DP separation pad

Procedure

1. Remove the DP paper feed pulley unit (see page 1-5-56).
2. Remove the DP separation pad.
3. Check or replace the DP separation pad and refit all the removed parts.

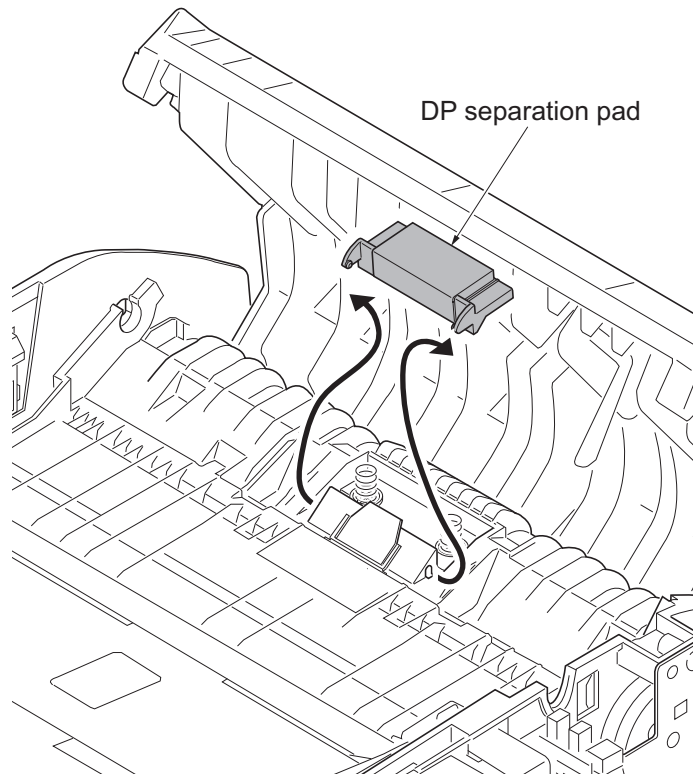


Figure 1-5-93

(4) Detaching and refitting the DP drive PWB

Procedure

1. Remove the DP rear cover (see page 1-5-56).
2. Remove all connectors from DP drive PWB.
3. Remove the screw and then remove the DP drive PWB.
4. Check or replace the DP drive PWB and refit all the removed parts.

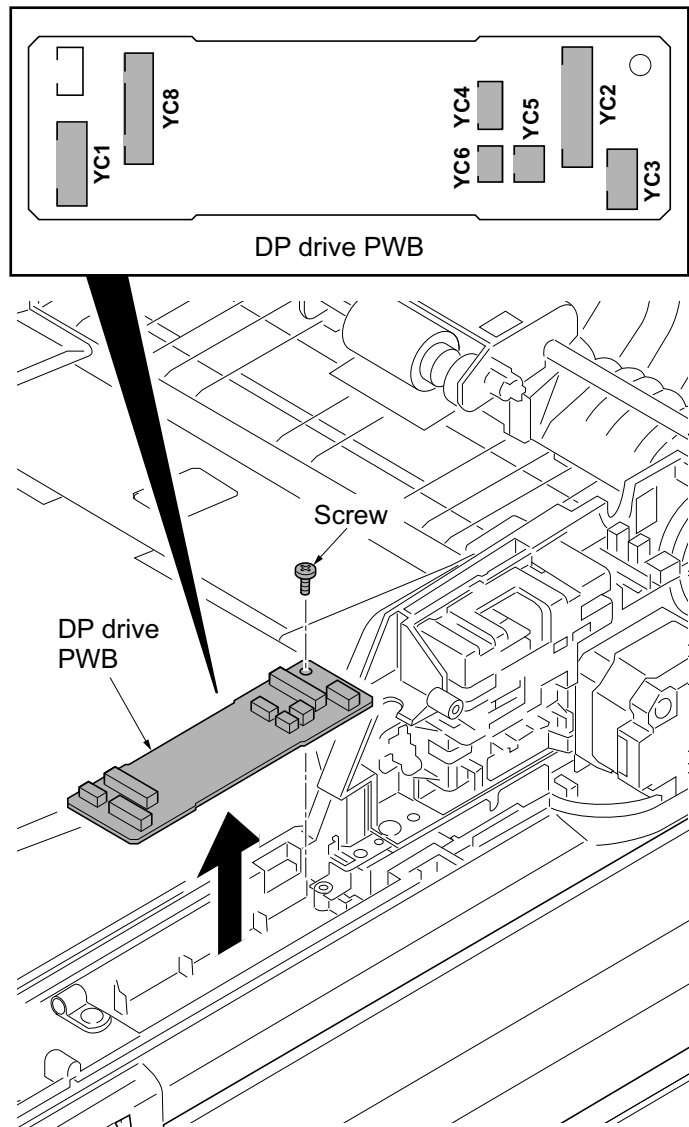


Figure 1-5-94

1-5-12 Others

(1) Detaching and refitting the paper conveying unit

Procedure

1. Open the rear cover.
2. Remove left and right straps.

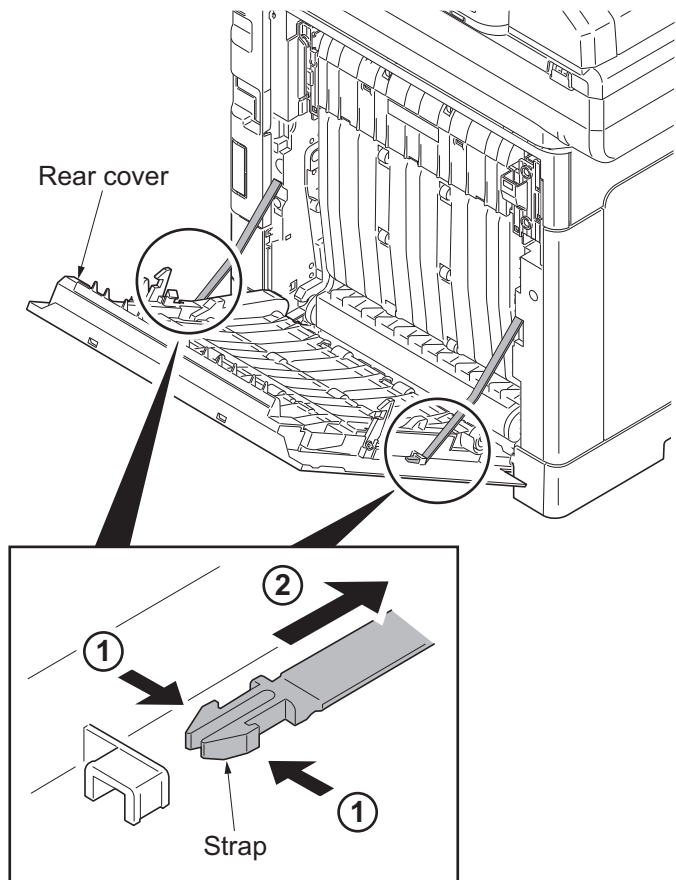


Figure 1-5-95

3. Remove the rear cover unit.

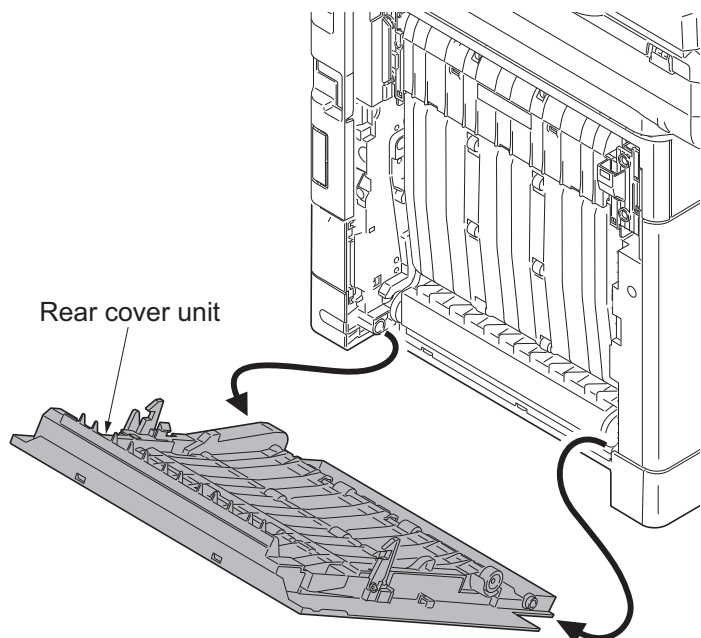


Figure 1-5-96

4. Remove the paper conveying unit.

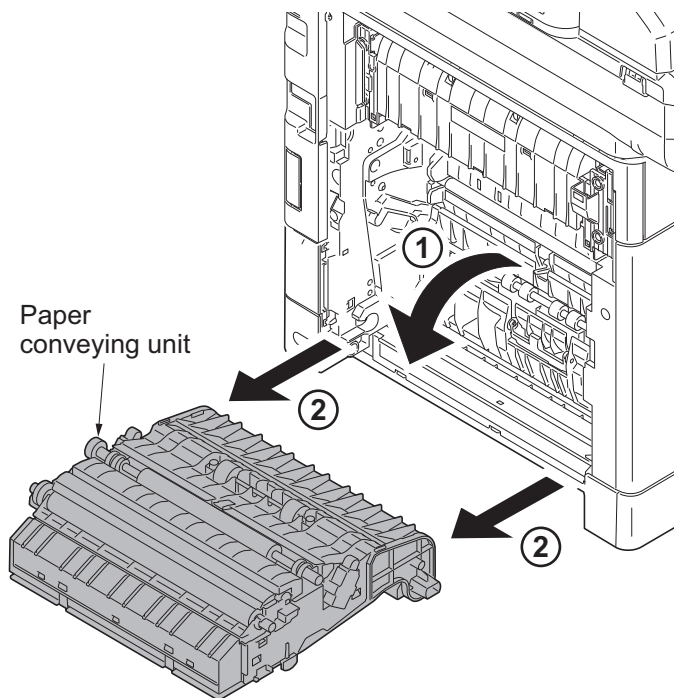


Figure 1-5-97

(2) Detaching and refitting the operation panel

Procedure

1. Remove the operation panel right cover by sliding forward.

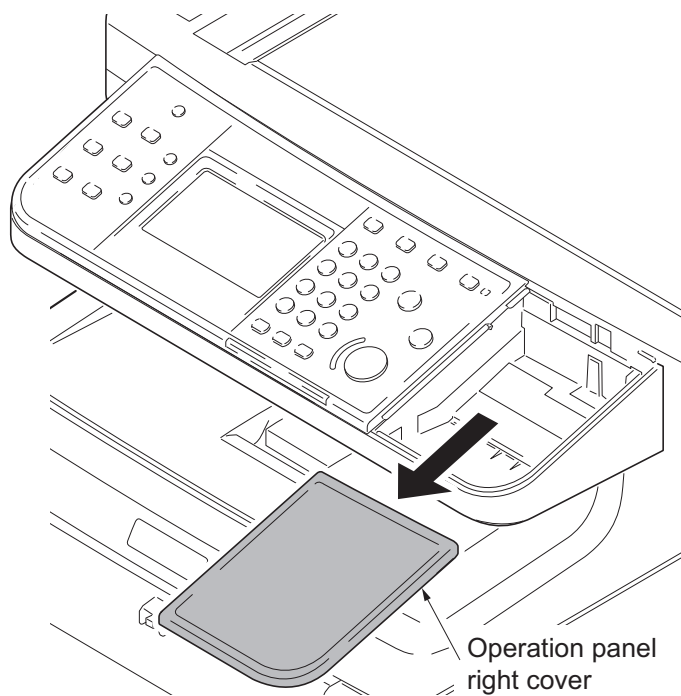


Figure 1-5-98

2. Release three hooks and then remove the operation panel.
3. Remove three connectors.
4. Check or replace the operation panel and refit all the removed parts.

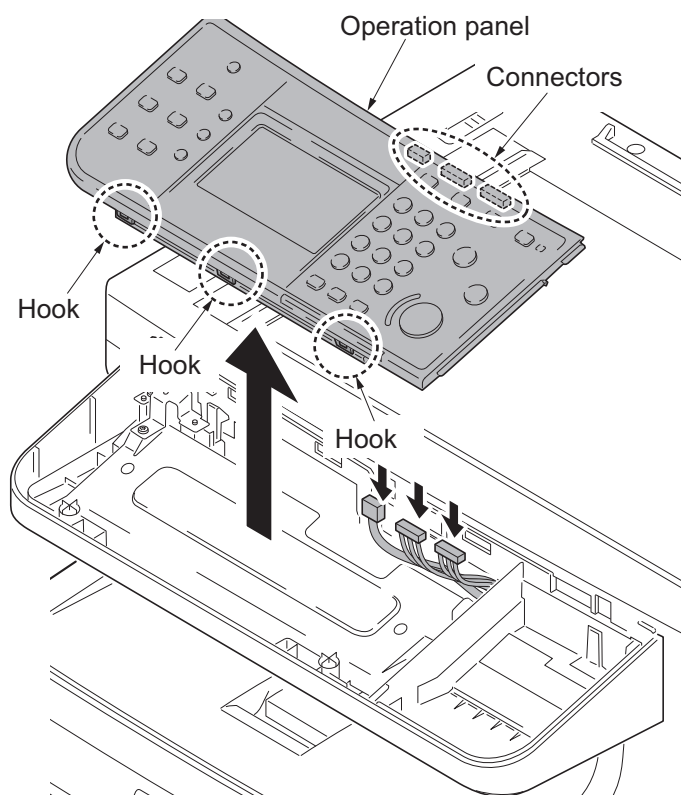


Figure 1-5-99

(3) Detaching and refitting the power source inlet

Procedure

1. Remove the power source PWB (see page 1-5-29).
2. Remove the connector and release the hook and then remove the right fan motor.

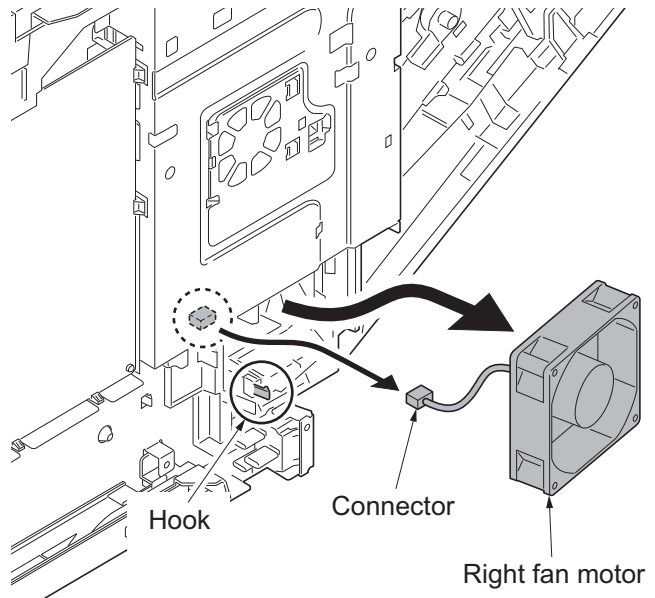


Figure 1-5-100

3. Remove the screw of the grounding wire.

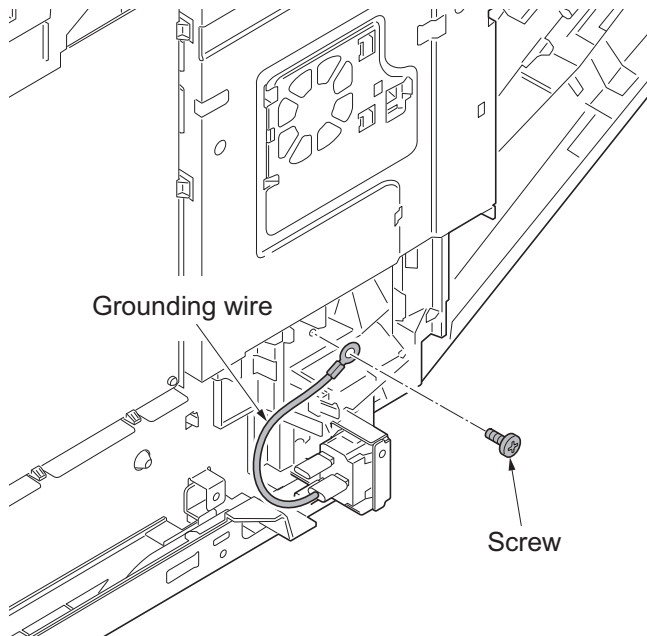


Figure 1-5-101

4. Remove the screw and two terminals and then remove the power source inlet.

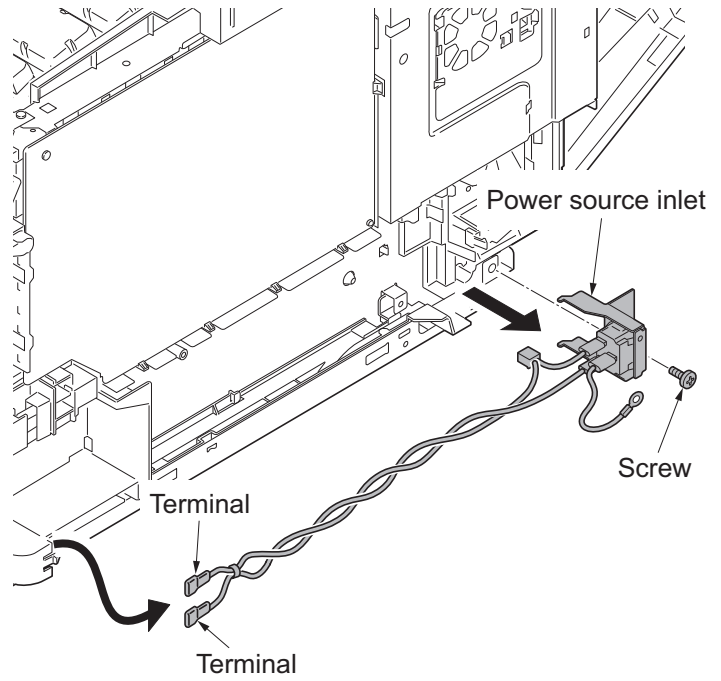


Figure 1-5-102

5. Check or replace the power source inlet and refit all the removed parts.
 *: Before mounting the AC inlet on the main unit, twist the wires 5 to 7 turns.

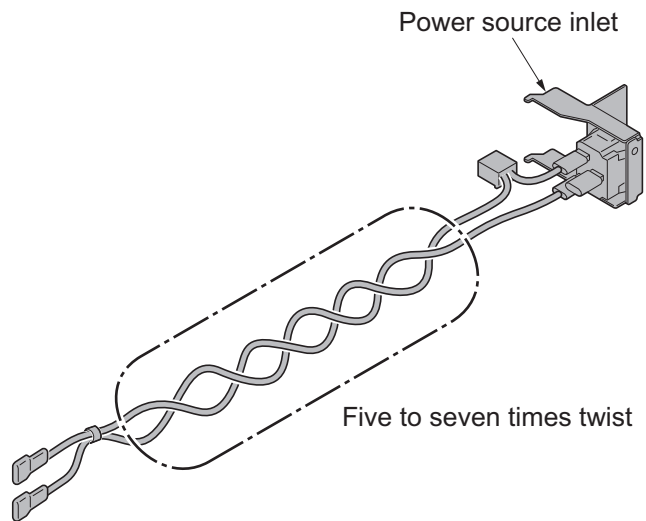


Figure 1-5-103

(4) Direction of installing the principal fan motors

When detaching or refitting the fan motors, be careful of the airflow direction (intake or exhaust).

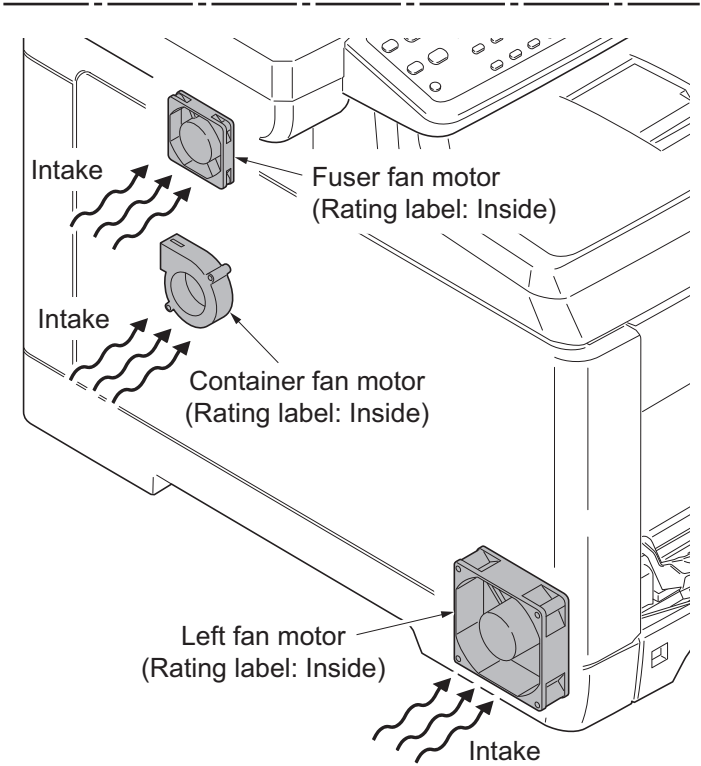
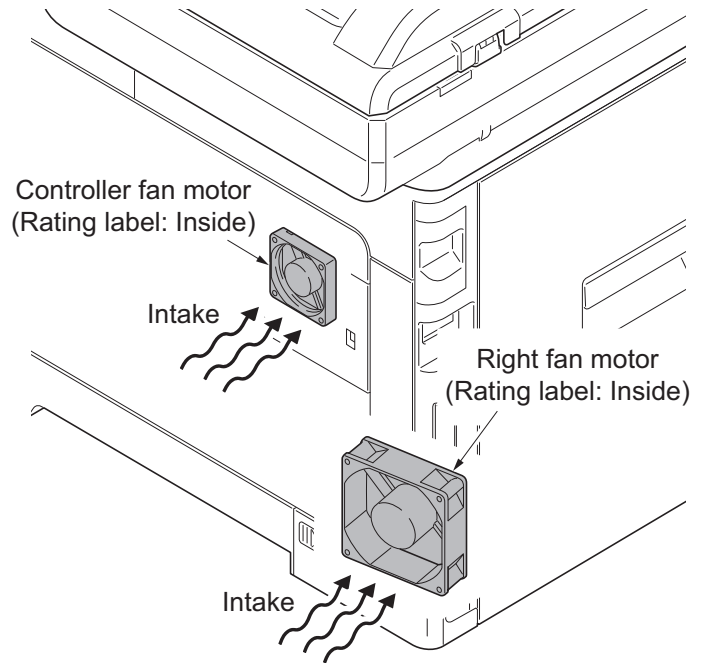


Figure 1-5-104

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1-6-1 Upgrading the firmware

Follow the procedure below to upgrade the firmware of main PWB (main controller and scanner), engine PWB, FAX control PWB*, optional language, optional paper feeder and color table.

Preparation

Extract the file that has the download firmware and put them in the USB Memory.

Procedure

1. Turn ON the main power switch and confirm if the screen shows "Ready to copy" then, turn OFF the main power switch.
2. Insert USB memory that has the firmware in the USB memory slot.
3. Turn ON the main power switch.
4. About 40 seconds later, "FW-Update" will be displayed and blinking the memory indicator (this shows to start the download).
5. Display the software that now upgrading.

"FW-Update [CTRL]"

"FW-Update [ENGN]"

"FW-Update [PF1]"

"FW-Update [PF2]"

"FW-Update [SCAN]"

"FW-Update [FAX]" *

"FW-Update [OPT]"

"FW-Update [CLT]"

Caution:

Never turn off the power switch or remove the USB flash device during upgrading.

6. Display the completion of the upgrade (Memory indicator is ON condition).
7. ROM version is confirmed by the content of the display.
8. Turn OFF the main power switch and remove the USB memory.

*: 4 in 1 model (with FAX) only.

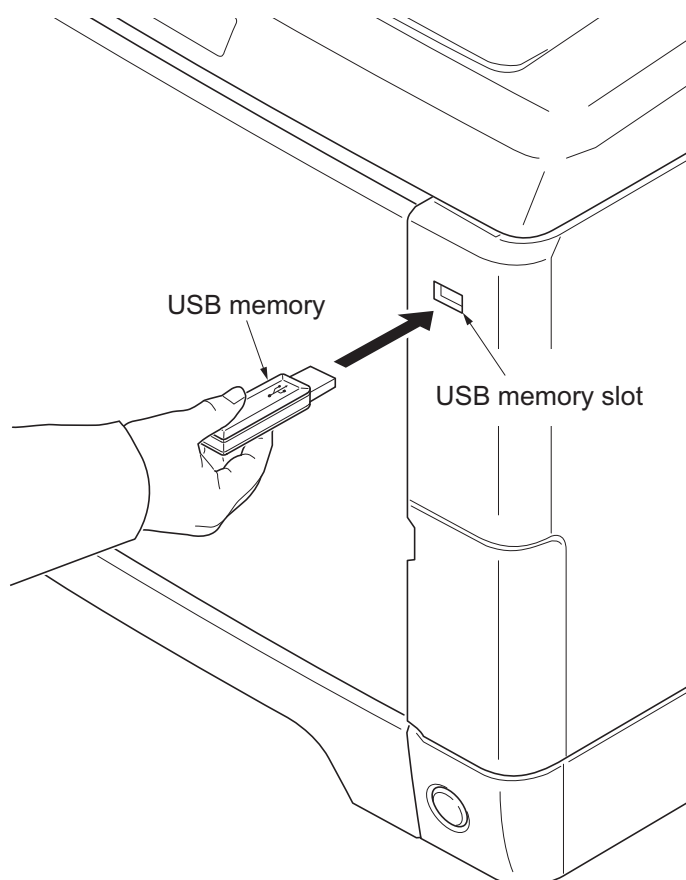


Figure 1-6-1

Emergency-UPDATE

If the device is accidentally switched off and upgrading was incomplete, upgrade becomes impossible. In that case, retry upgrading after recovering the software by following the procedure below.

Preparation

The USB memory must be formatted in FAT or FAT32 in advance.

Extract the main firmware to download from the file.

Rename the file which was extracted from the archive. [DL_CTRL.2M9] to [KM_EMRG.2M9]

Copy the all extracted files to the root of the USB memory.

1. **Procedur** Turn the main power switch off.
2. Insert the USB memory which contains the firmware into the USB memory slot.
3. Turn the main power switch on.
4. Rewriting of the PWB software will start for restoration.
The memory and attention indicators will be blinking.
5. Only the Memory indicator will be blinking when rewriting is successful.

* : Only the Attention indicator will be

blinking when rewriting is failed.

6. Turn the main power switch off.
7. Wait for several seconds and then remove the USB memory from the USB memory slot.
8. Extract the firmware to download from the archive and copy to the root of the formatted USB memory.
NOTE: Deletes the "ES_SKIP.on" file When it is contained directly under the USB memory.
9. Insert the USB memory in which the firmware was copied in the USB memory slot.
10. Perform steps 3 to 8 on the previous page.
11. Turn the main power switch on.
12. Perform maintenance item U000 (Print a maintenance report) to check that the version of ROM U019 has been upgraded.

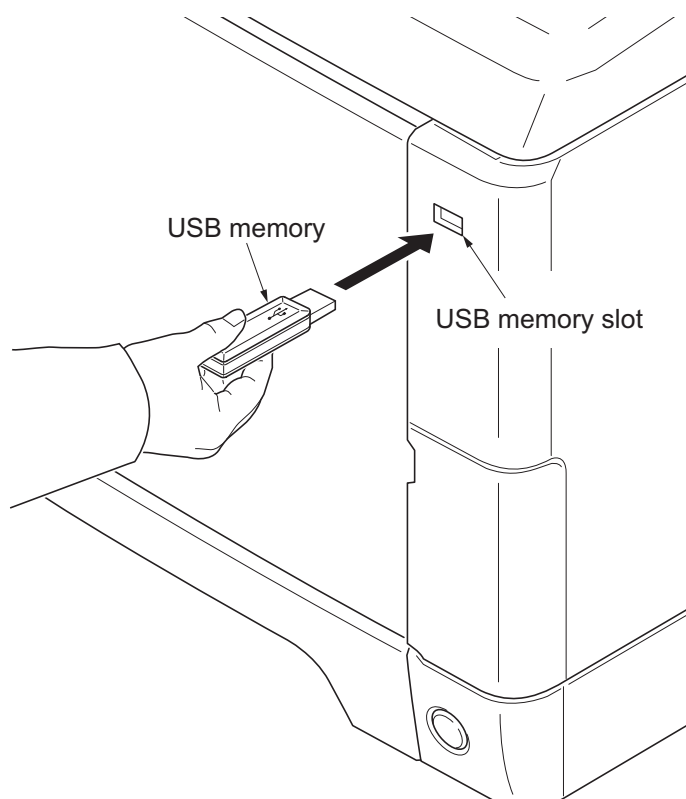


Figure 1-6-2

1-6-2 Remarks on engine PWB replacement

When replacing the engine PWB, remove the EEPROM (U1) from the engine PWB that has been removed and then reattach it to the new engine PWB.

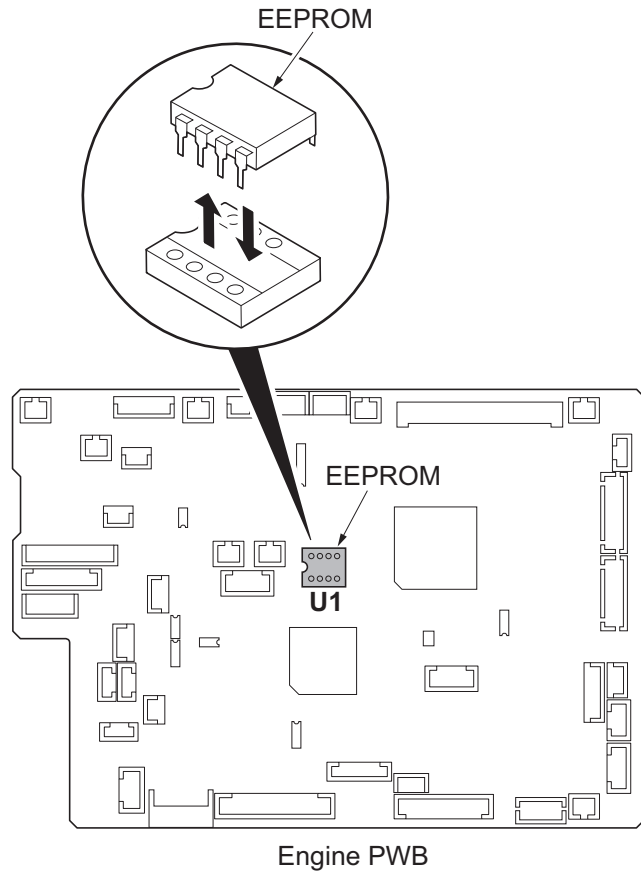


Figure 1-6-3

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2-1-1 Paper feed/conveying section

Paper feed/conveying section consists of the paper feed unit that feeds paper from the cassette and the MP tray paper feed unit that feeds paper from the MP tray, and the paper conveying section that conveys the fed paper to the transfer/separation section.

(1) Cassette paper feed section

The cassette can contain 250 sheets. The sheet from the cassette is pulled out by rotation of the pickup roller and sent to the paper conveying section by rotation of the paper feed roller. Also the retard roller prevents multiple feeding of paper.

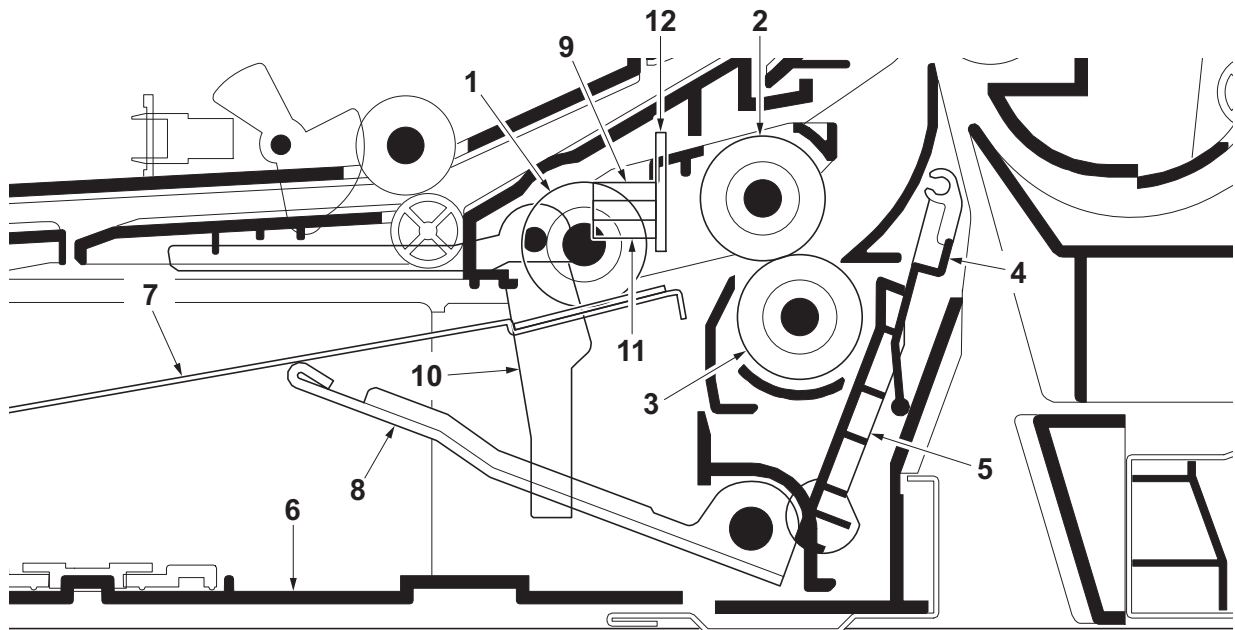


Figure 2-1-1 Cassette paper feed section

- | | |
|----------------------|-----------------------------|
| 1. Pickup roller | 7. Bottom plate |
| 2. Paper feed roller | 8. Lift work plate |
| 3. Retard roller | 9. Paper sensor (PS) |
| 4. Retard cover | 10. Actuator (paper sensor) |
| 5. Retard lever | 11. Lift sensor (LS) |
| 6. Cassette base | 12. Cassette PWB (CPWB) |

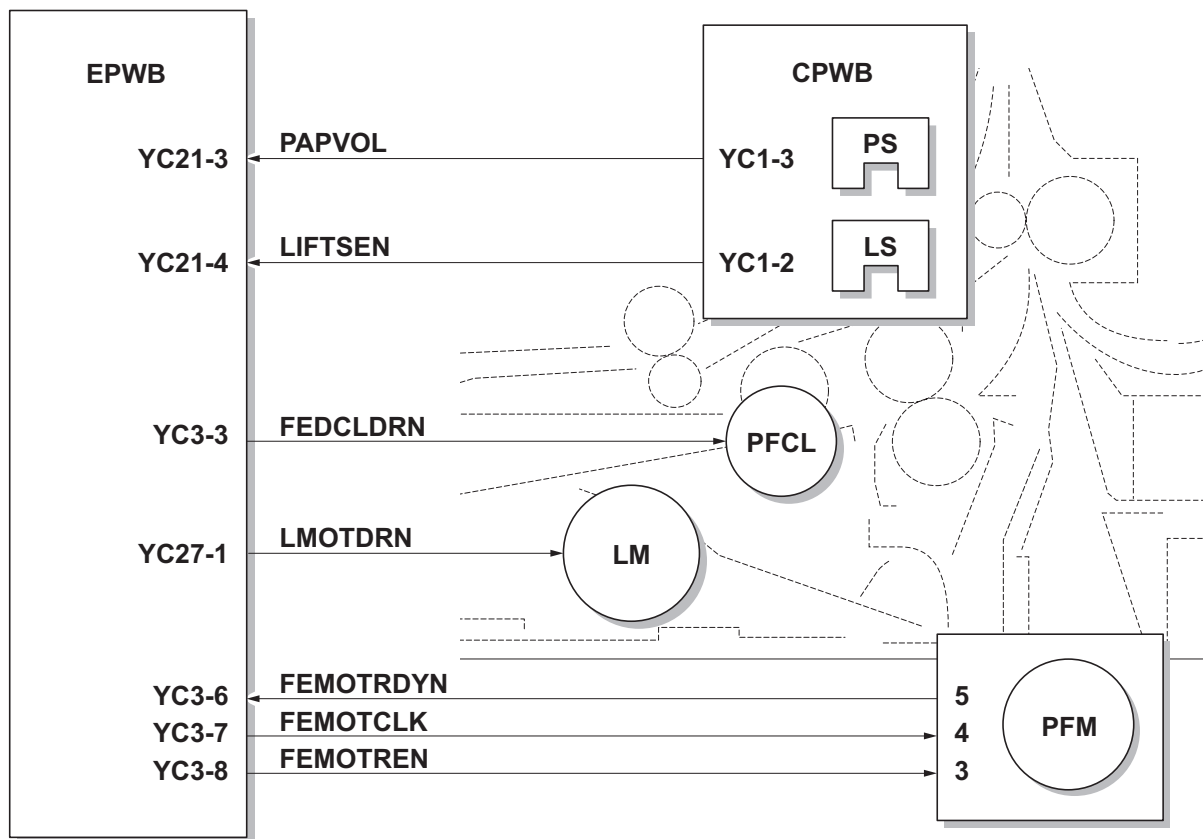


Figure 2-1-2 Cassette paper feed section block diagram

(2) MP tray paper feed section

The MP tray can contain 50 sheets. Feeding from the MP tray is performed by the rotation of the MP paper feed roller. Also, function of the MPF separation pad prevents paper from multiple feeding.

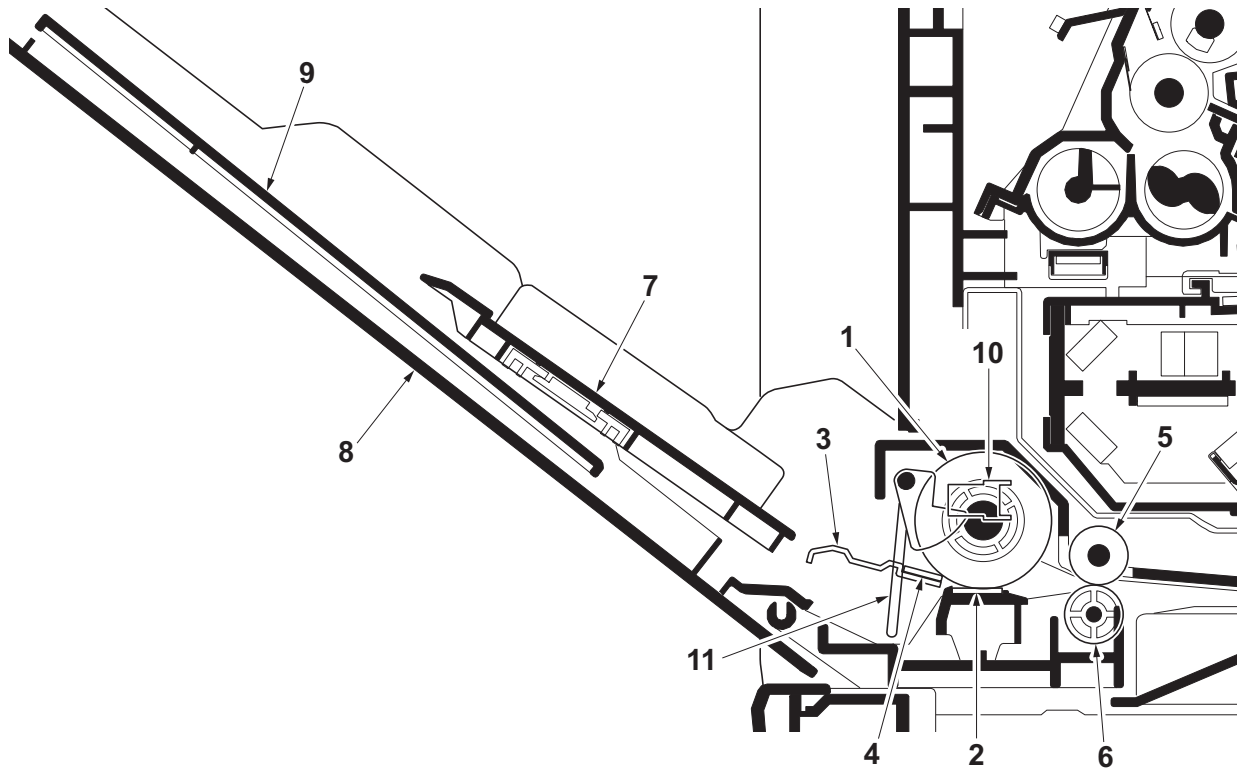


Figure 2-1-3 MP tray paper feed section

- | | |
|-------------------------|--------------------------------|
| 1. MP paper feed roller | 7. MPF base |
| 2. MPF separation pad | 8. MPF cover |
| 3. MPF bottom plate | 9. MPF tray |
| 4. Friction pad | 10. MP paper sensor (MPPS) |
| 5. MPF feed roller | 11. Actuator (MP paper sensor) |
| 6. Feed pulley | |

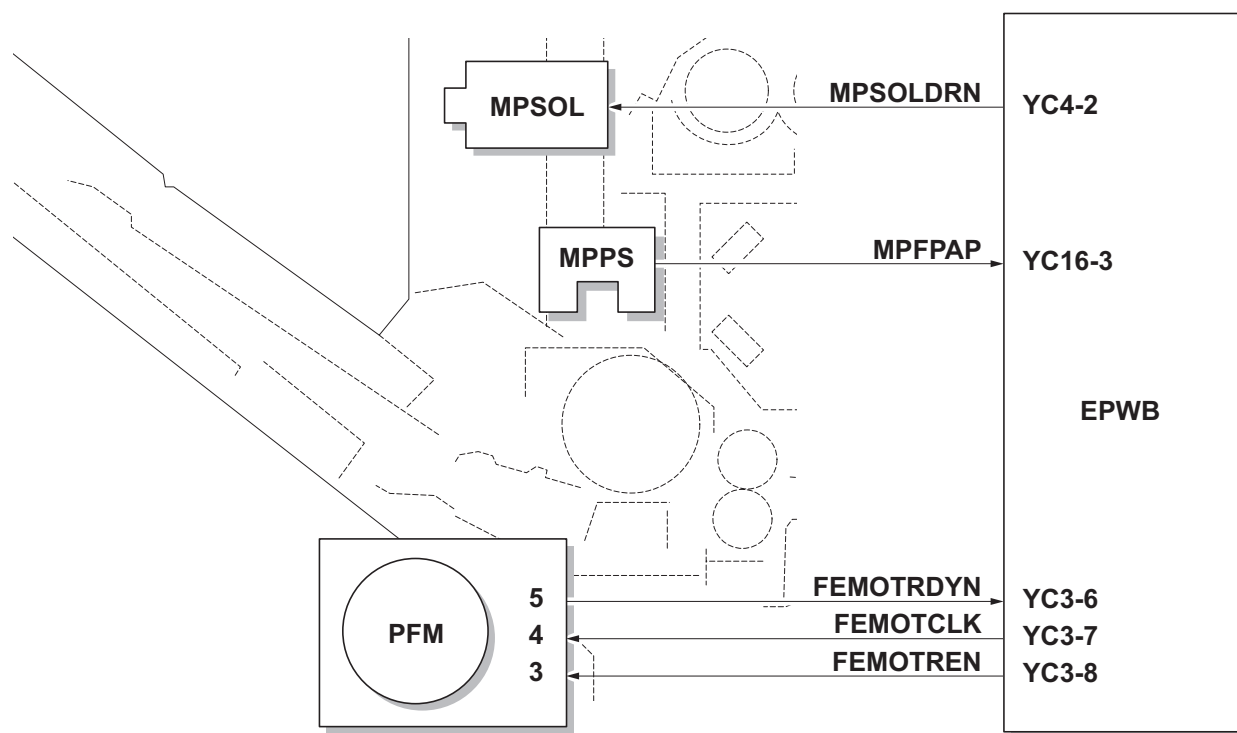


Figure 2-1-4 MP tray paper feed section block diagram

(3) Paper conveying section

The paper conveying section conveys paper to the transfer/separation section as paper feeding from the cassette or MP tray, or as paper refeeding for duplex printing. Paper by feeding is conveyed by the middle roller to the position where the registration sensor (RS) is turned on, and then sent to the transfer/separation section by the front registration roller and rear registration roller.

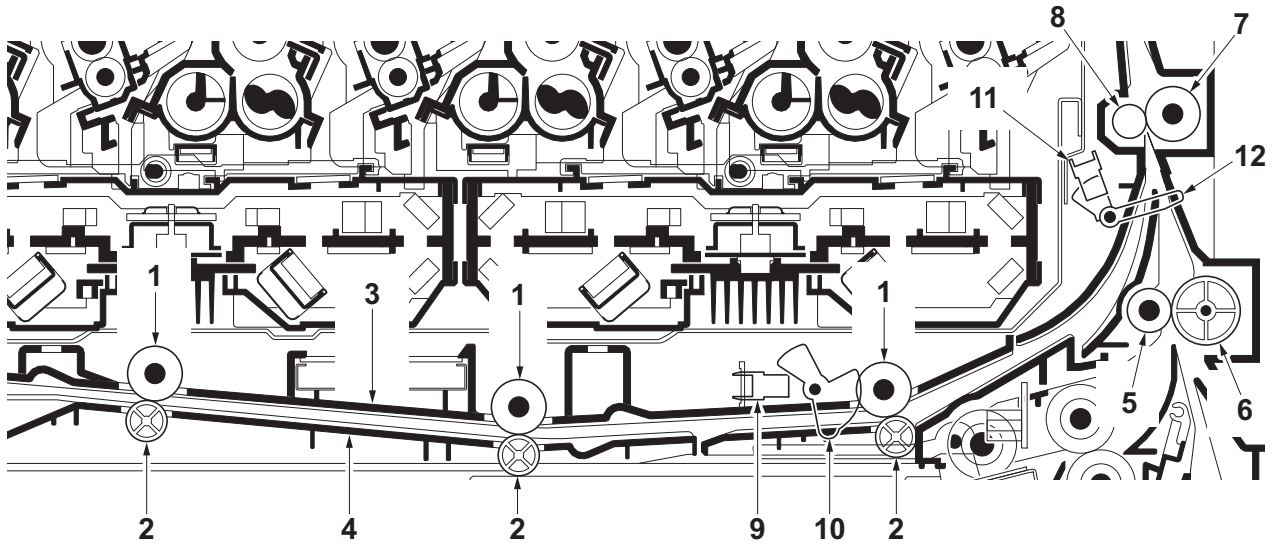


Figure 2-1-5 Paper conveying section

- | | |
|------------------------------|--|
| 1. MPF feed rollers | 8. Rear registration roller |
| 2. Feed pulleys | 9. MP paper conveying sensor (MPPCS) |
| 3. MPF feed upper guide | 10. Actuator (MP paper conveying sensor) |
| 4. MPF feed lower guide | 11. Registration sensor (RS) |
| 5. Middle roller | 12. Actuator (registration sensor) |
| 6. Middle pulley | |
| 7. Front registration roller | |

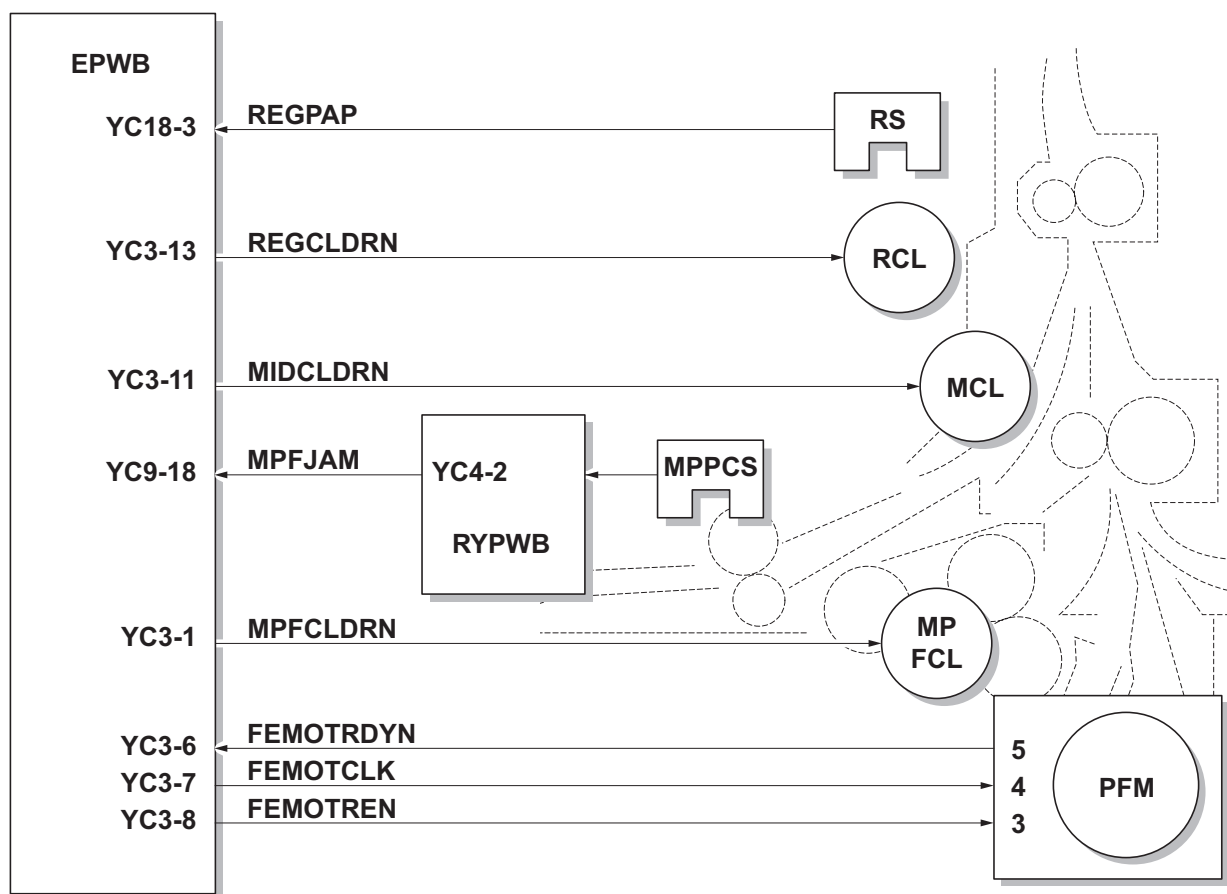


Figure 2-1-6 Paper conveying section block diagram

2-1-2 Drum section

The drum section consists of the drum, the charger roller unit, and the cleaning unit, and the drum surface is uniformly charged in preparation for formation of residual image by laser beam.

After transfer is complete, toner remaining on the drum surface is chipped off with the cleaning blade and is collected to the waste toner box with the drum screw. The cleaning lamp (CL) consists of LEDs and removes residual charge on the drum before main charging.

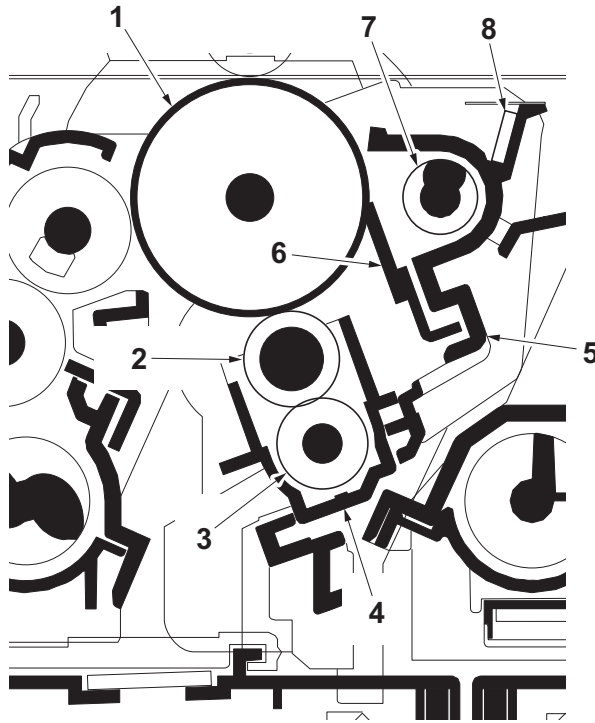


Figure 2-1-7 Drum section

- | | |
|----------------------------|-----------------------|
| 1. Drum | 5. Drum frame |
| 2. Charger roller | 6. Cleaning blade |
| 3. Charger cleaning roller | 7. Drum screw |
| 4. Charger case | 8. Cleaning lamp (CL) |

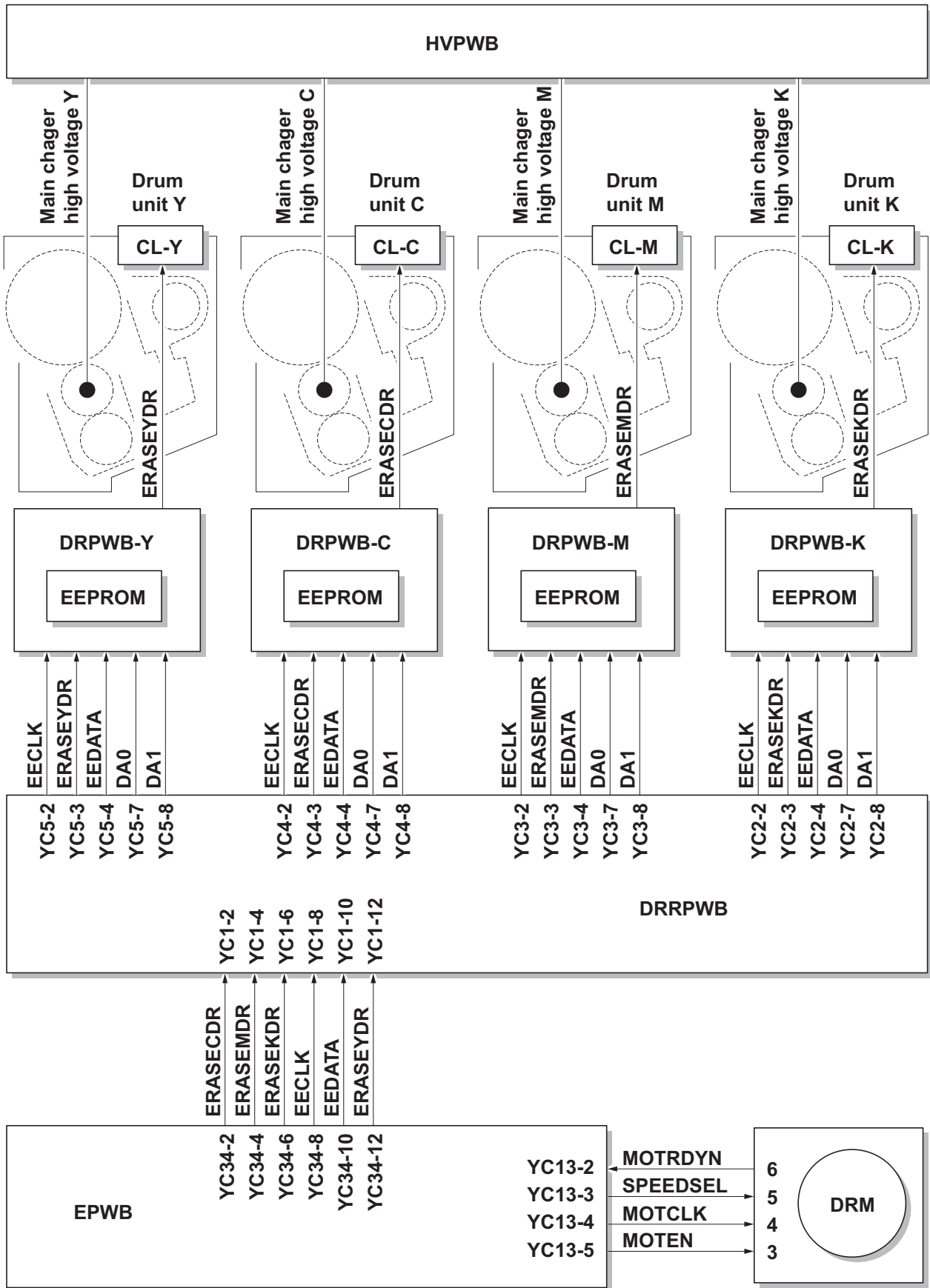


Figure 2-1-8 Drum section block diagram

2-1-3 Developing section

The developing unit consists of the sleeve roller that forms the magnetic brush, the magnet roller, the developing blade and the developing screws that agitate the toner. Also, the toner sensor (TS) checks whether or not toner remains in the developing unit.

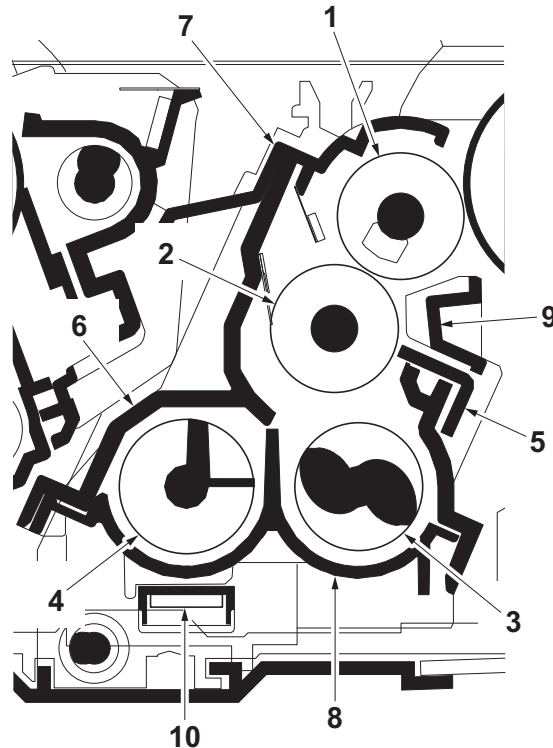


Figure 2-1-9 Developing section

- | | |
|-----------------------|--------------------------|
| 1. Sleeve roller | 6. Developer case |
| 2. Magnet roller | 7. Upper developer cover |
| 3. Developing screw A | 8. Developer base |
| 4. Developing screw B | 9. Sleeve cover |
| 5. Developing blade | 10. Toner sensor (TS) |

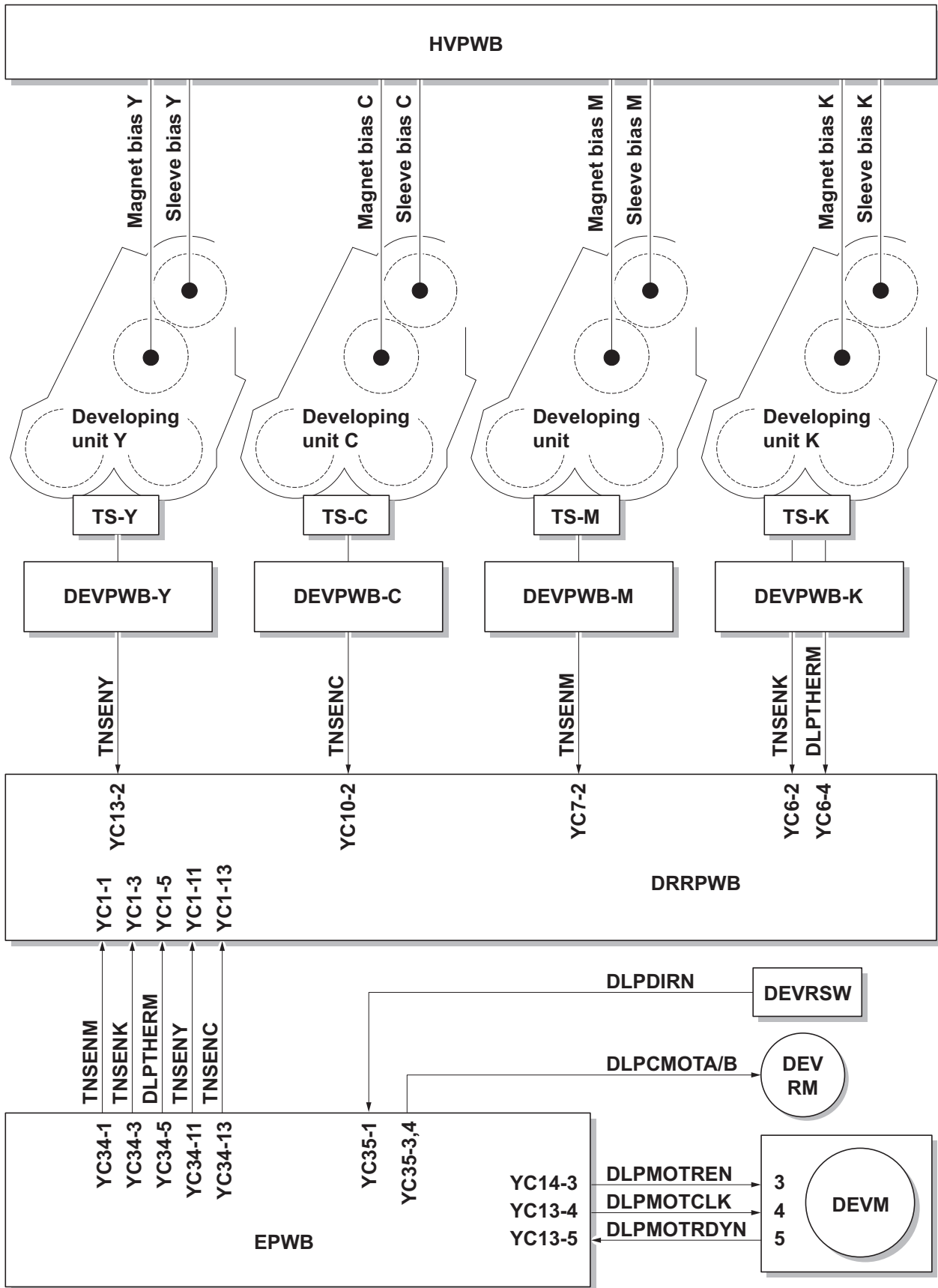


Figure 2-1-10 Developing section block diagram

2-1-4 Optical section

The optical section consists of the image scanner section for scanning and the laser scanner section for printing.

(1) Image scanner section

The original image is illuminated by the LED and scanned by the CCD image sensor in the CCD PWB (CCD-PWB) via the five mirrors and ISU lens, the reflected light being converted to an electrical signal.

If a document processor is used, the image scanner unit stops at the position of the DP contact glass and scans sequentially one row of the image on the original in synchronization with the moving timing of the original in the sub scan direction by driving the DP.

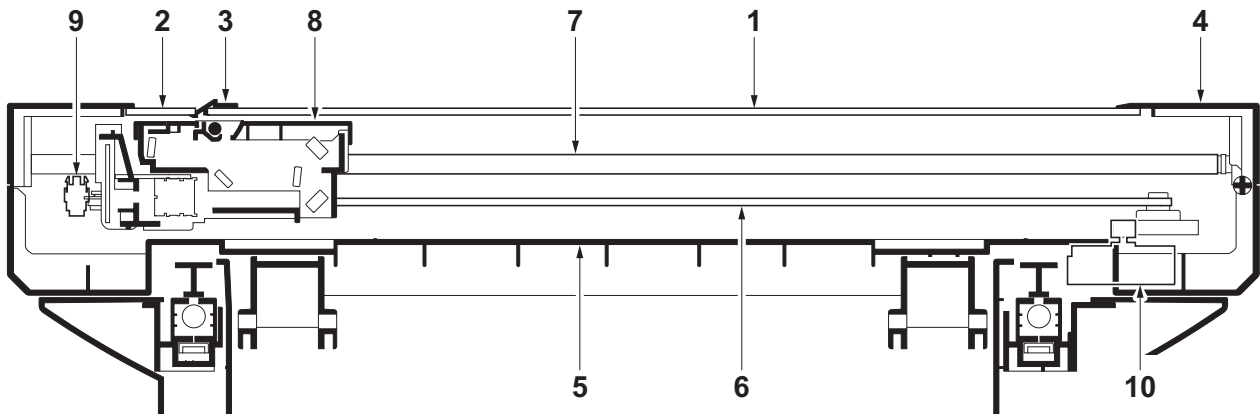


Figure 2-1-11 Scanner unit

- | | |
|----------------------------------|-------------------------------|
| 1. Contact glass | 6. ISU belt |
| 2. DP contact glass | 7. ISU shaft |
| 3. Original size indicator plate | 8. Image scanner unit (ISU) |
| 4. ISU top frame | 9. Home position sensor (HPS) |
| 5. ISU bottom frame | 10. ISU motor (ISUM) |

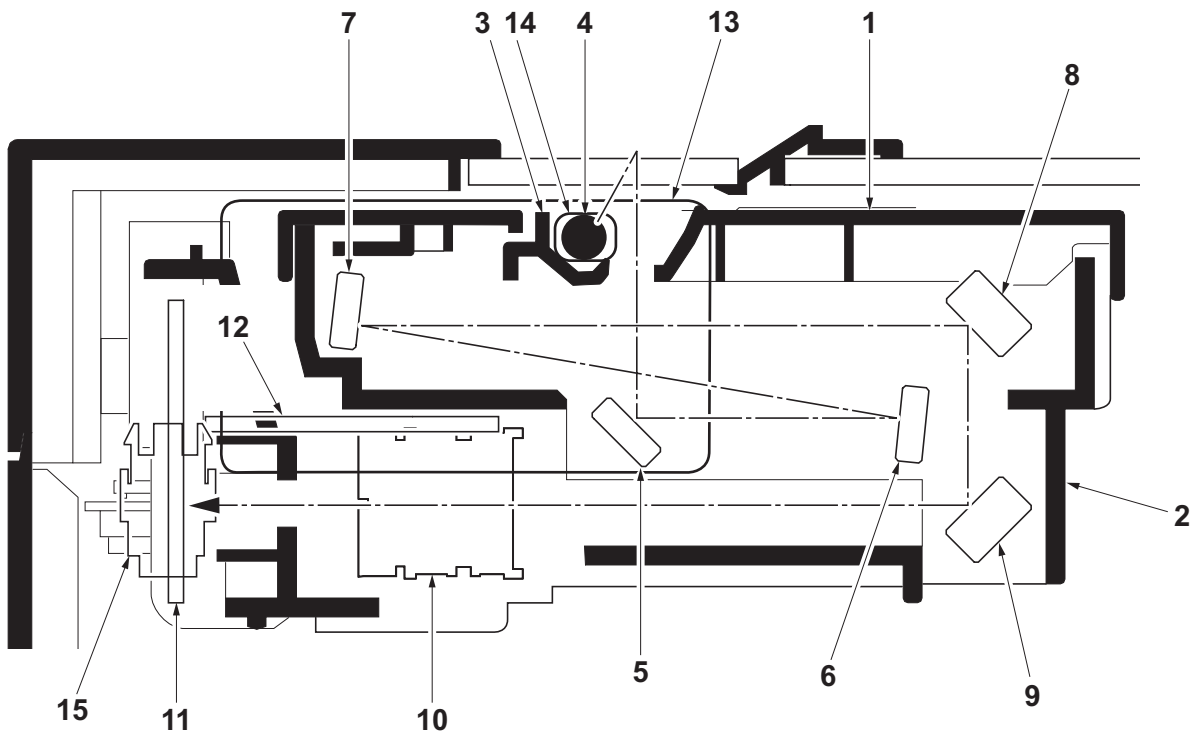


Figure 2-1-12 Image scanner unit (ISU)

- | | |
|-------------------------|--------------------------------|
| 1. Unit cover | 9. Mirror E |
| 2. ISU housing | 10. ISU lens |
| 3. Reflector | 11. CCD PWB (CCDPWB) |
| 4. Transparent material | 12. DriverPWB (DRPWB) |
| 5. Mirror A | 13. LED PWB (LEDPWB) |
| 6. Mirror B | 14. LED |
| 7. Mirror C | 15. Home position sensor (HPS) |
| 8. Mirror D | |

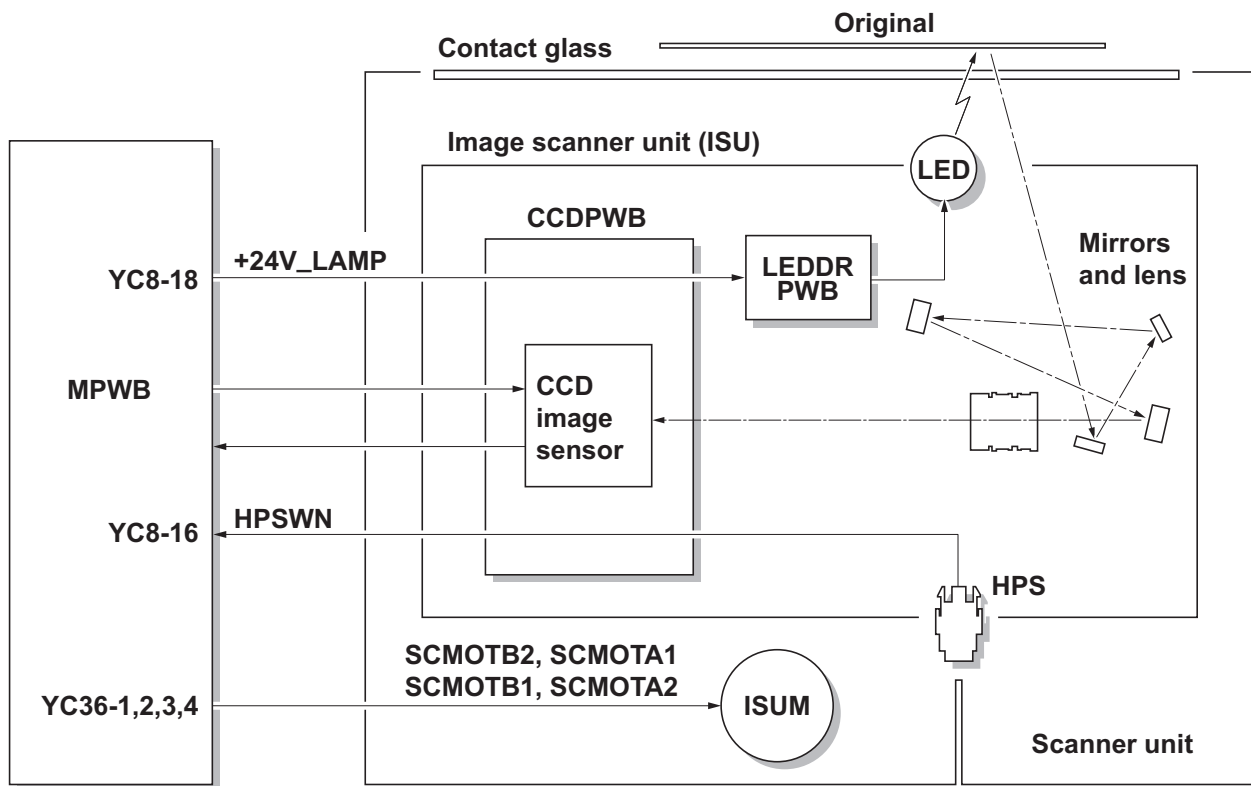


Figure 2-1-13 Scanner unit block diagram

(2) Laser scanner section

The charged surface of the drum is then scanned by the laser beam from the laser scanner unit. The laser beam is dispersed as the polygon motor (PM) revolves to reflect the laser beam over the drum. Various lenses and mirror are housed in the laser scanner unit, adjust the diameter of the laser beam, and focalize it at the drum surface. Also the LSU cleaning motor (LSUCM) is activated to conduct automatically cleaning of the LSU dust shield glass.

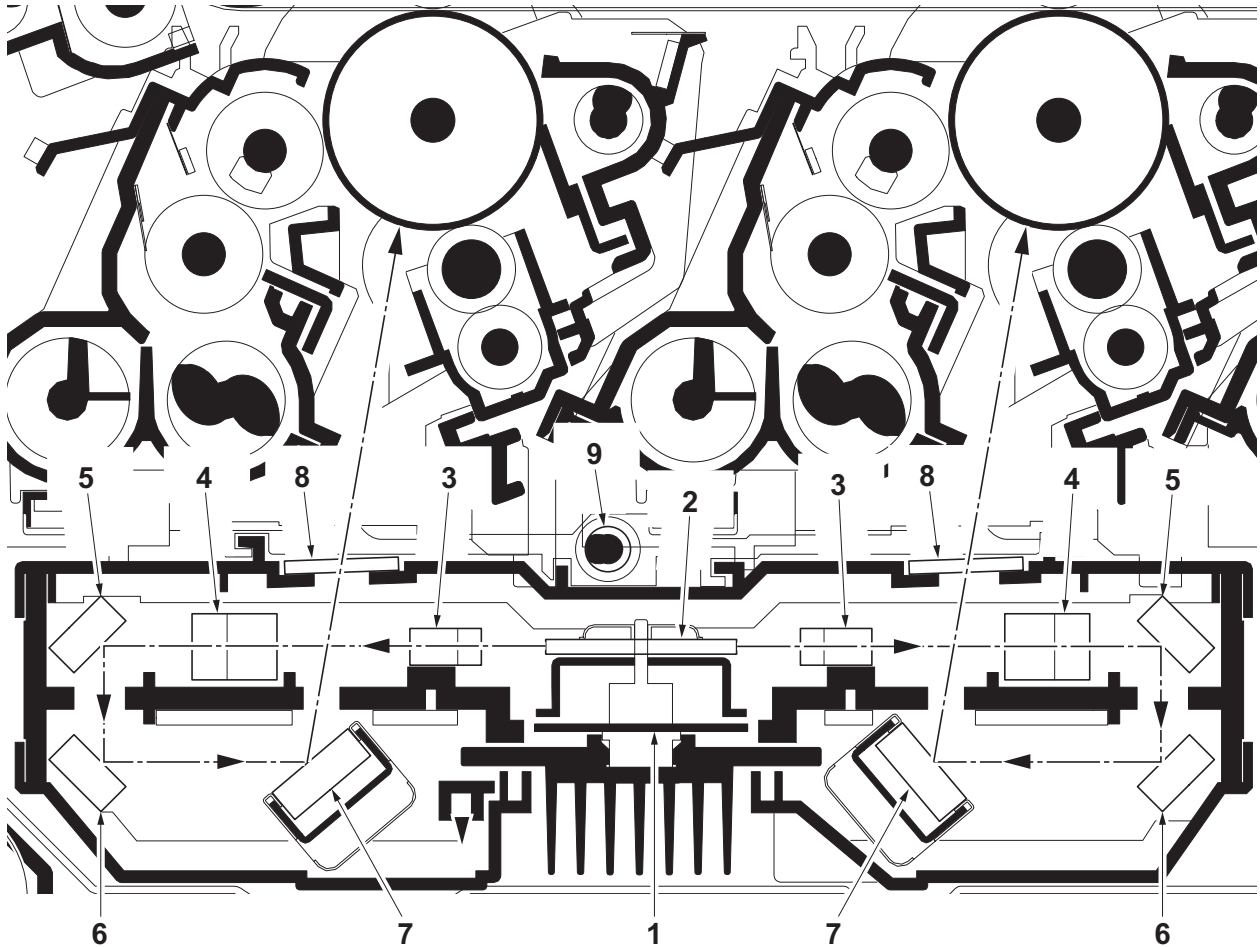


Figure 2-1-14 Laser scanner unit (LSU)

- | | |
|-----------------------|--------------------------|
| 1. Polygon motor (PM) | 6. Mirror B |
| 2. Polygon mirror | 7. Mirror C |
| 3. f-θ lens A | 8. LSU dust shield glass |
| 4. f-θ lens B | 9. LSU spiral |
| 5. Mirror A | |

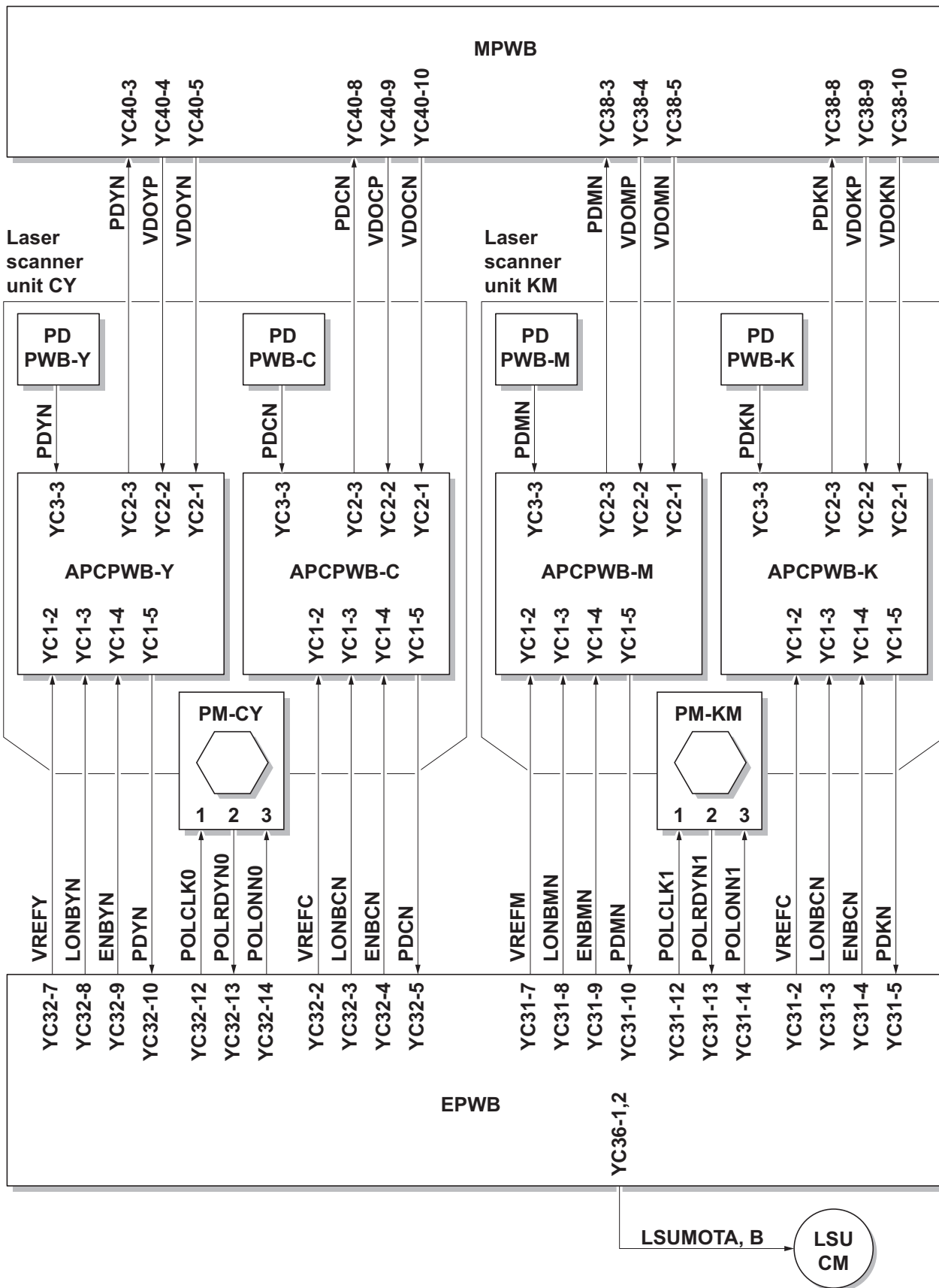


Figure 2-1-15 Laser scanner unit block diagram

2-1-5 Transfer/Separation section

The transfer/separation section consists of the intermediate transfer unit section and the secondary transfer roller section.

(1) Intermediate transfer unit section

The intermediate transfer unit section consists of the transfer cleaning unit, the transfer belt, and the four primary transfer rollers for respective color drums, and forms a full-color toner image by superimposing and transferring single-color toner images formed on each drum onto the transfer belt. Also with the ID sensors (IDS) mounted on the machine frame, the toner density on the transfer belt is measured.

The transfer cleaning unit collects toner remaining on the transfer belt after secondary transfer and forwards it as waste toner to the waste toner box.

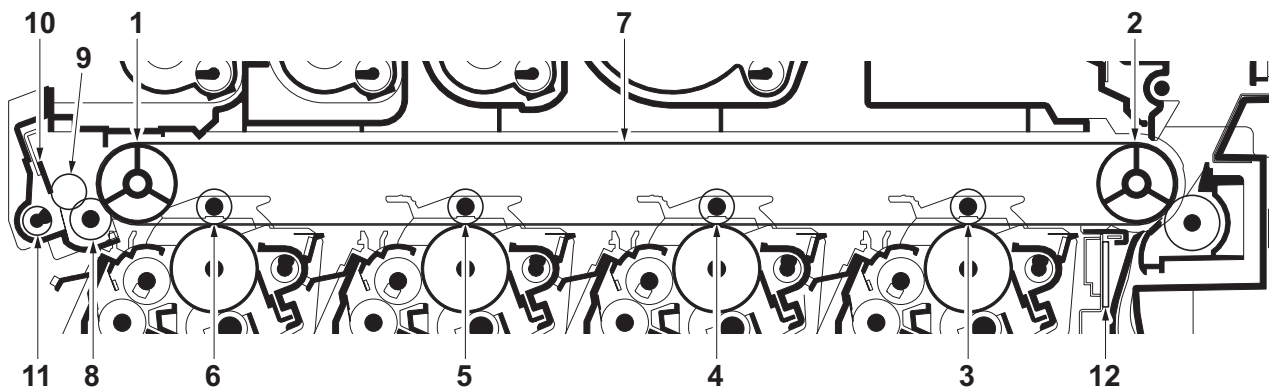


Figure 2-1-16 Intermediate transfer unit section

- | | |
|------------------------------|-----------------------|
| 1. Tension roller | 7. Transfer belt |
| 2. Drive roller | 8. Cleaning fur brush |
| 3. Primary transfer roller K | 9. Cleaning roller |
| 4. Primary transfer roller M | 10. Cleaning blade |
| 5. Primary transfer roller C | 11. Cleaning screw |
| 6. Primary transfer roller Y | 12. ID sensors (IDS) |

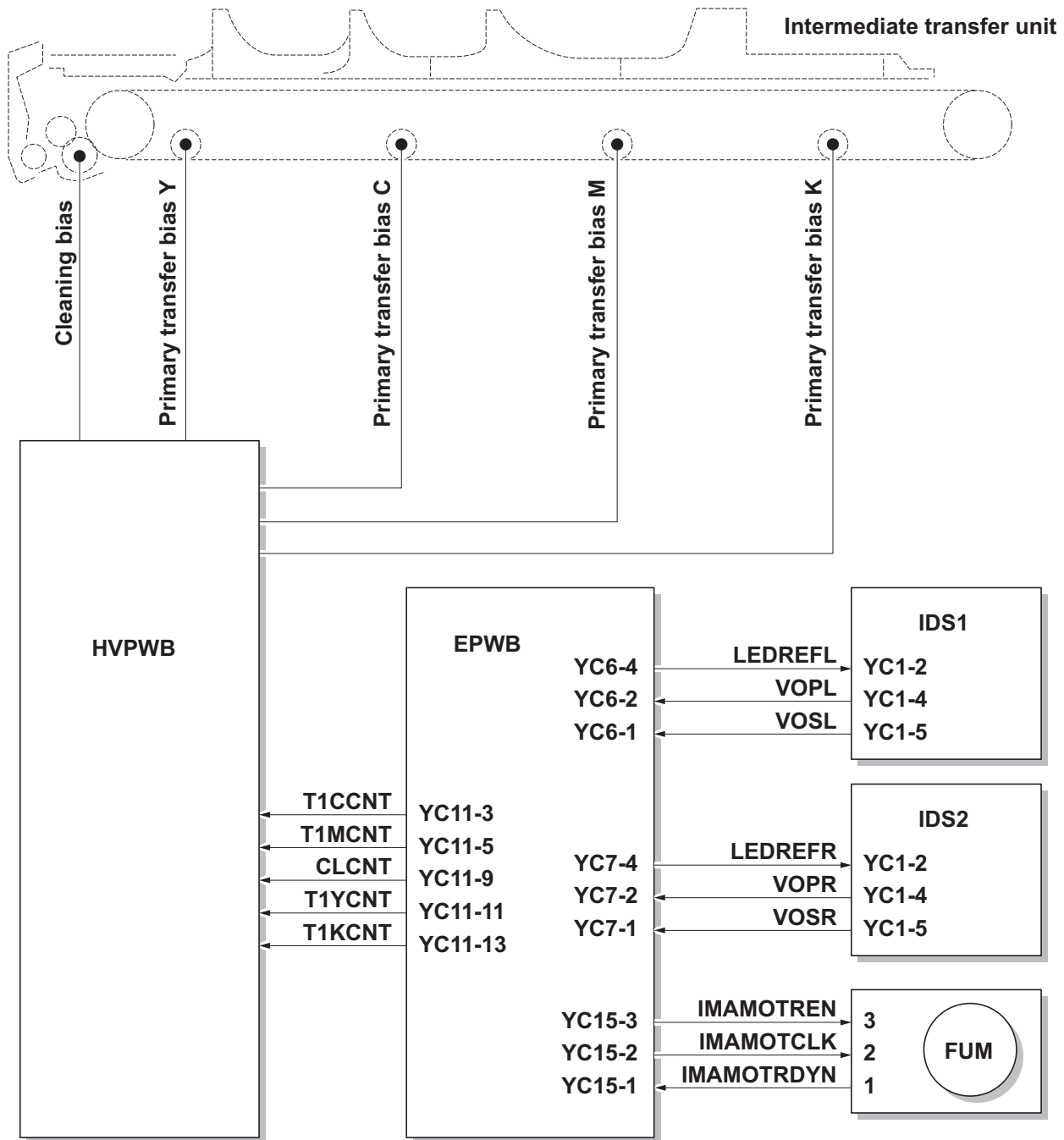


Figure 2-1-17 Intermediate transfer unit section block diagram

(2) Secondary transfer roller section

The secondary transfer roller section consists of the secondary transfer roller mounted to the paper conveying unit and the separation brush. To the secondary transfer roller, DC bias is applied from the high voltage PWB (HVPWB). The toner image formed on the transfer belt is transferred to the paper by the potential difference and the paper is separated by curvature separation.

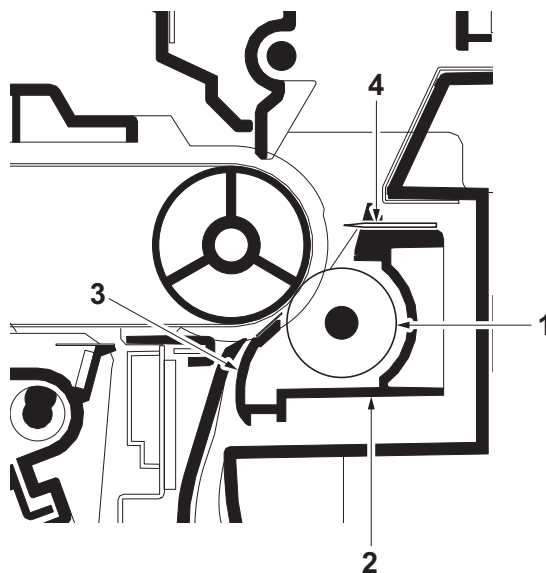


Figure 2-1-18 Secondary transfer roller section

- 1. Secondary transfer roller
- 2. Brush holder
- 3. Paper chute guide
- 4. Separation brush

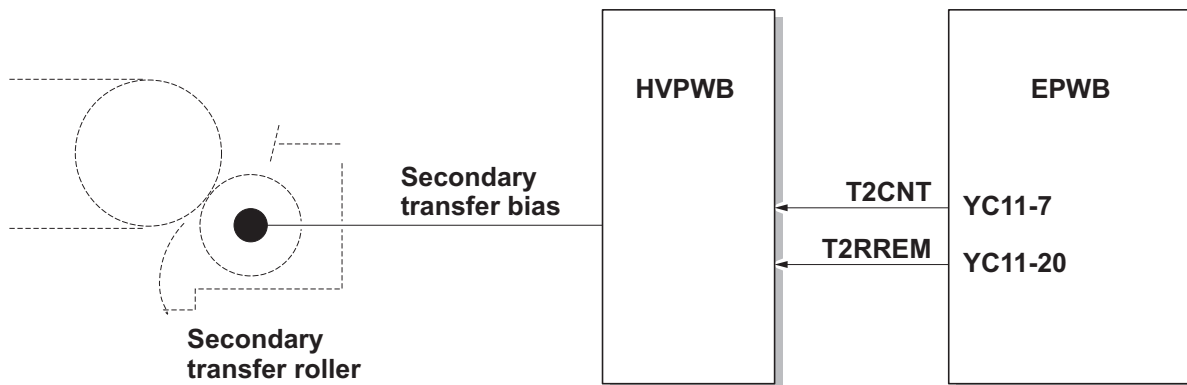


Figure 2-1-19 Secondary transfer roller section block diagram

2-1-6 Fuser section

The paper sent from the transfer/separation section is interleaved between the heat roller and the press roller. The heat roller is heated by the fuser heater (FH), and the toner is fused by heat and pressure and fixed onto the paper because the press roller is pressed by the fuser press spring. The surface temperature of heat roller is detected by the fuser thermistor (FTH) and controlled by the engine PWB (EPWB). If the fuser section shows extremely high temperature, the power line will be shut off and the fuser heater (FH) is forced to turn off.

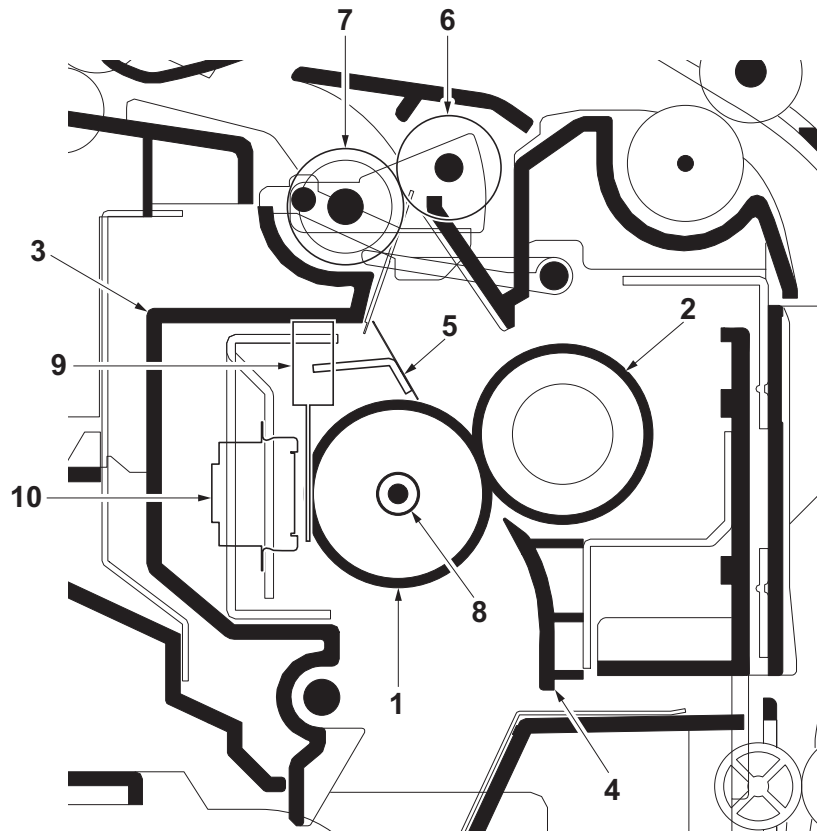


Figure 2-1-20 Fuser section

- | | |
|----------------------|----------------------------|
| 1. Heat roller | 6. Eject roller |
| 2. Press roller | 7. Eject pulley |
| 3. Upper fuser frame | 8. Fuser heater (FH) |
| 4. Fuser paper guide | 9. Fuser thermistor (FTH) |
| 5. Separators | 10. Fuser thermostat (FTS) |

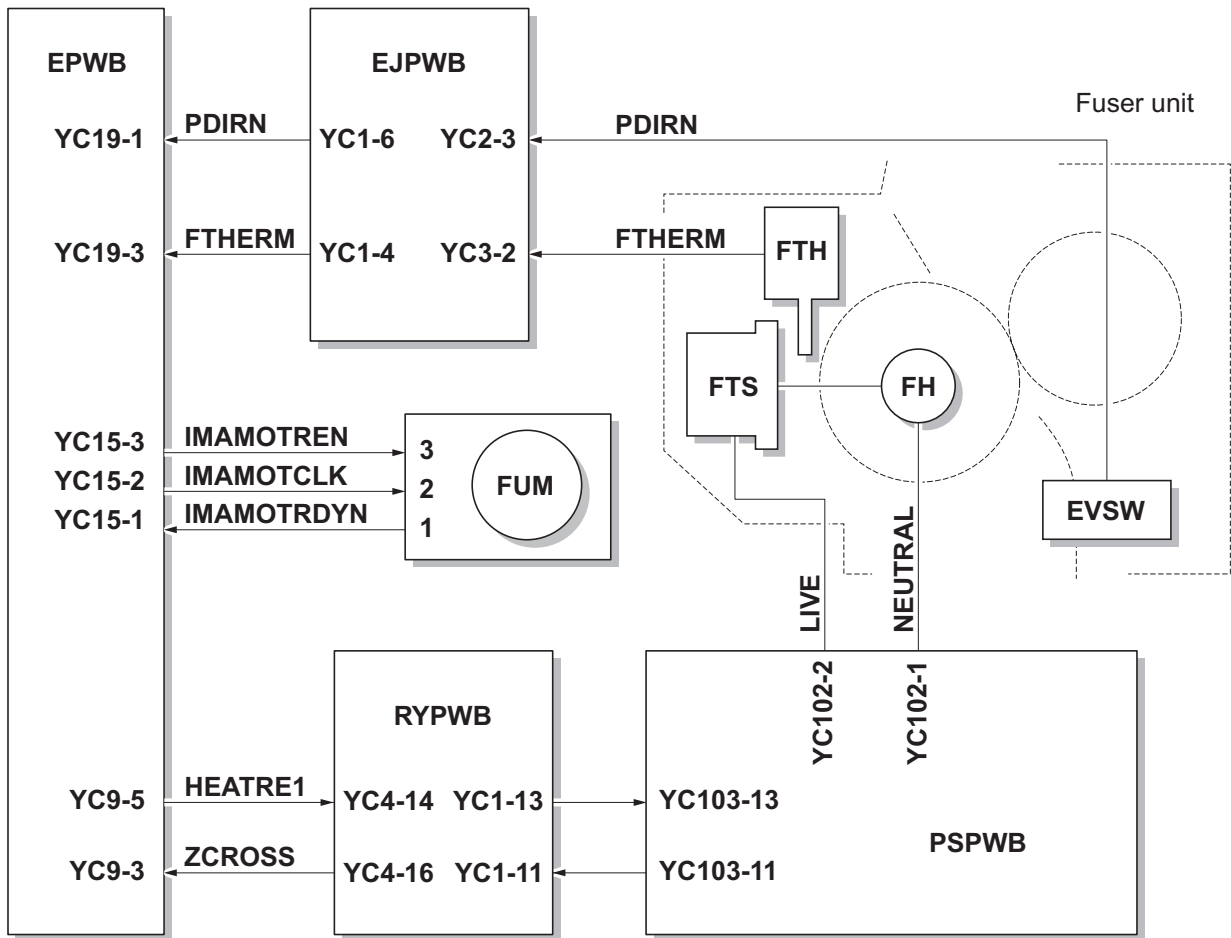


Figure 2-1-21 Fuser section block diagram

2-1-7 Eject/Feedshift section

The paper eject/feedshift section consists of the conveying path which sends the paper that has passed the fuser section to the inner tray or the duplex conveying section.

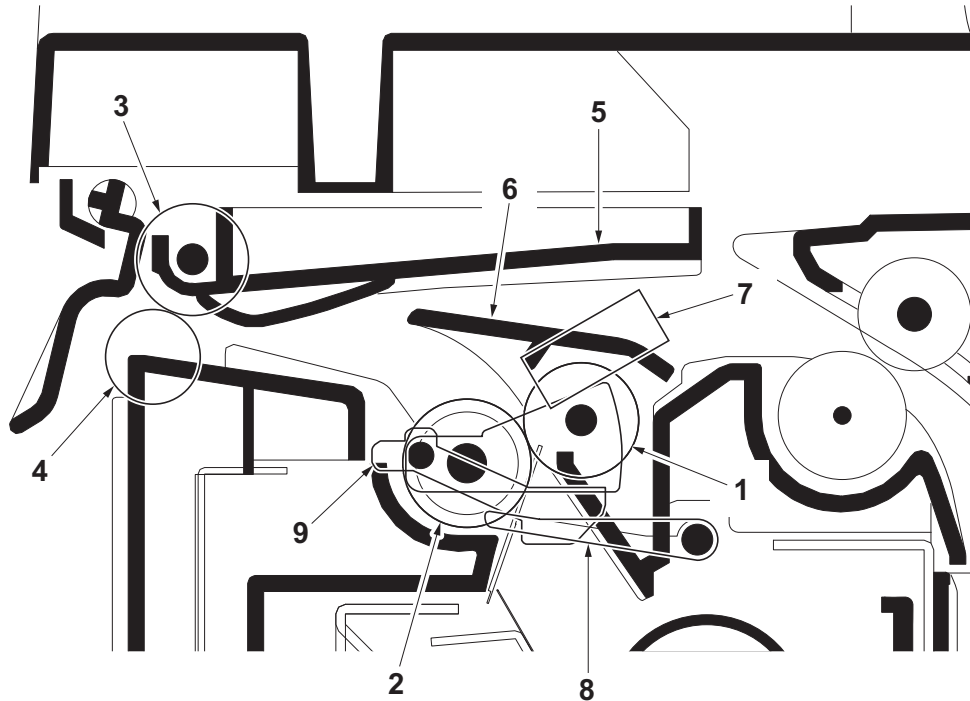


Figure 2-1-22 Eject/Feed shift section

- | | |
|----------------------|----------------------------|
| 1. Eject roller | 6. Change guide |
| 2. Eject pulley | 7. Eject sensor (ES) |
| 3. Eject roller | 8. Actuator (eject sensor) |
| 4. Eject pulley | 9. Actuator (eject sensor) |
| 5. Upper eject guide | |

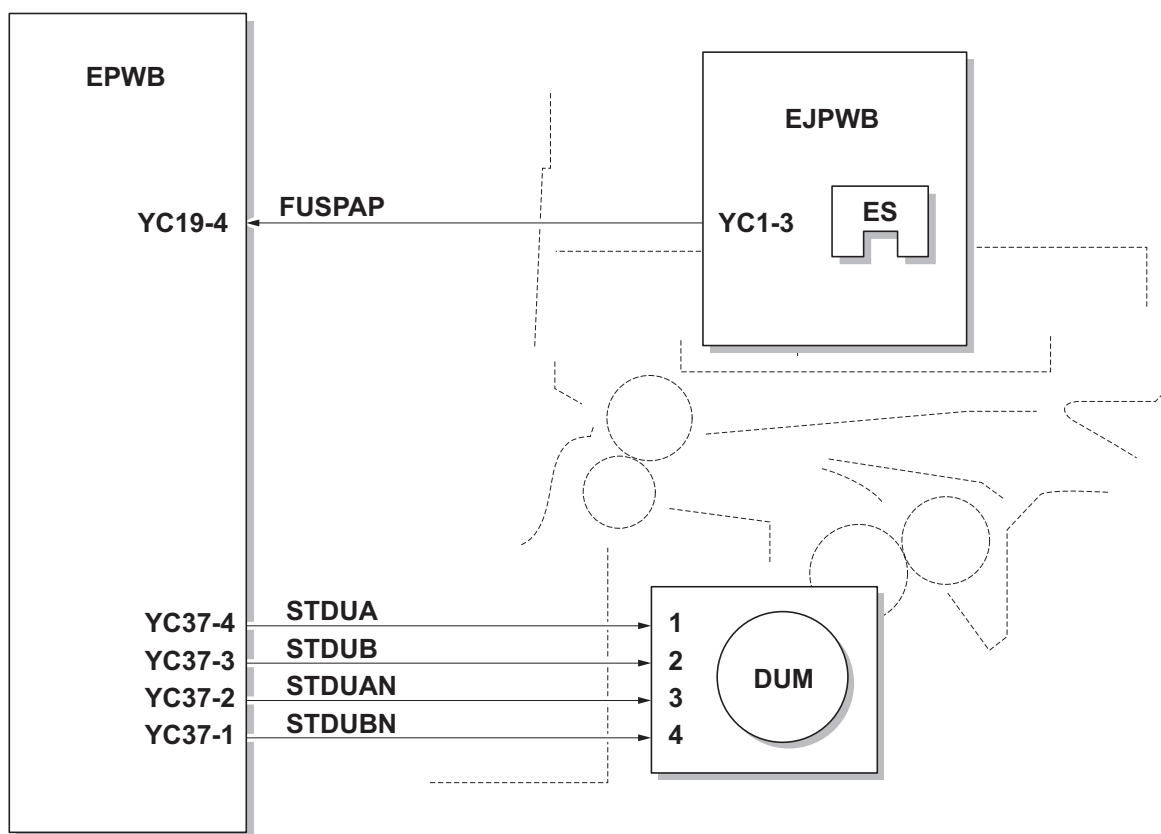


Figure 2-1-23 Eject/Feed shift section block diagram

2-1-8 Duplex conveying section

The duplex conveying section consists of conveying path which sends the paper sent from the eject/feedshift section to the paper feed/conveying section when duplex printing.

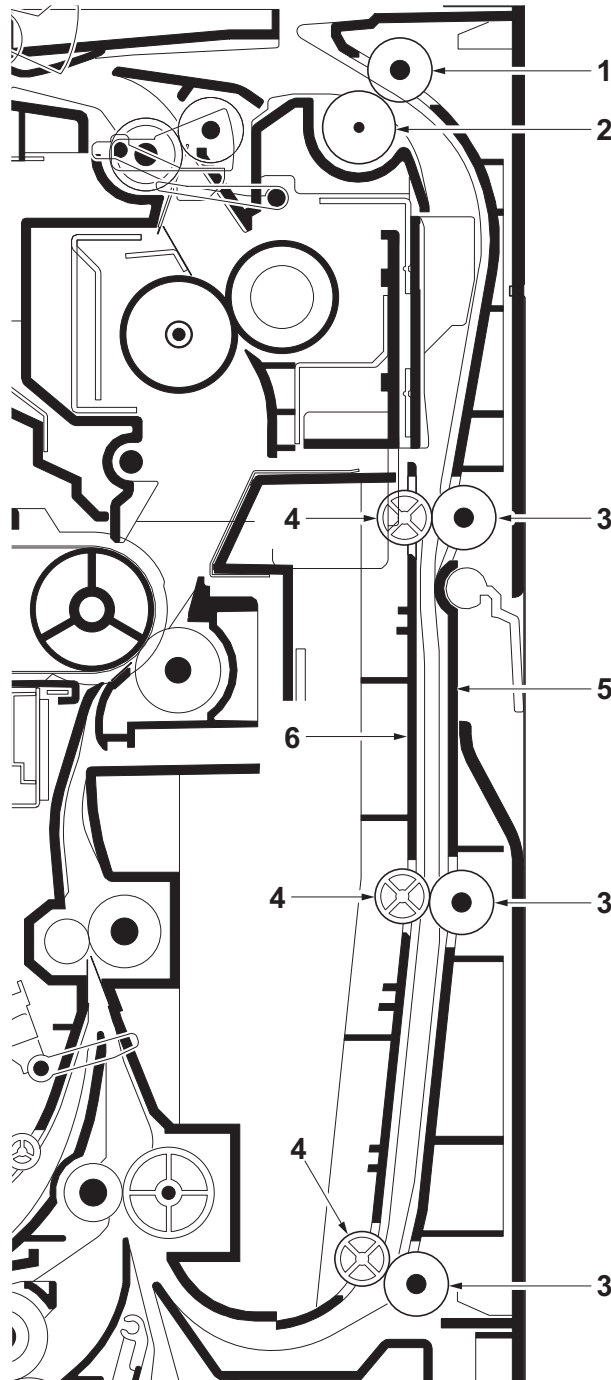


Figure 2-1-24 Duplex conveying section

- | | |
|---------------------|----------------------|
| 1. Duplex roller L | 4. Duplex pulleys |
| 2. Eject pulley | 5. Duplex frame |
| 3. Duplex rollers S | 6. Duplex feed guide |

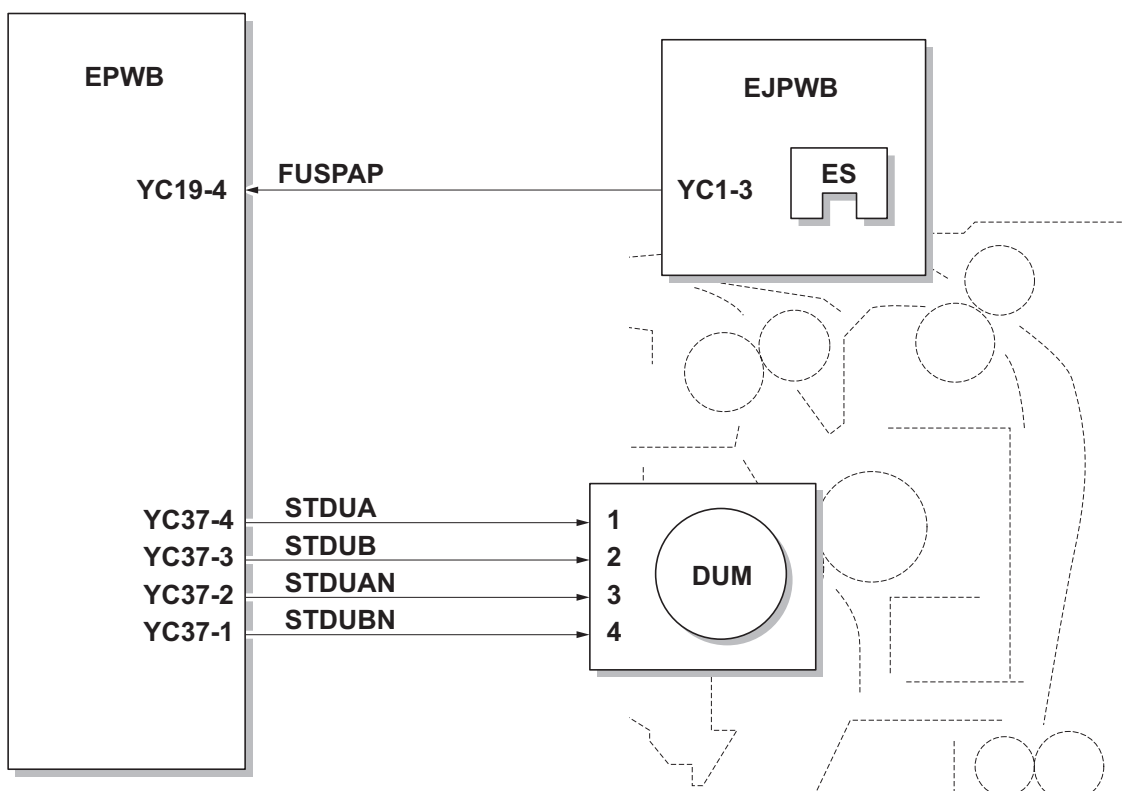


Figure 2-1-25 Duplex conveying section block diagram

2-1-9 Document processor

(1) Original feed section

The original feed section consists of the parts shown in figure. An original placed on the original table is conveyed to the original conveying section. Original is fed by the rotation of the DP forwarding pulley and DP feed pulley.

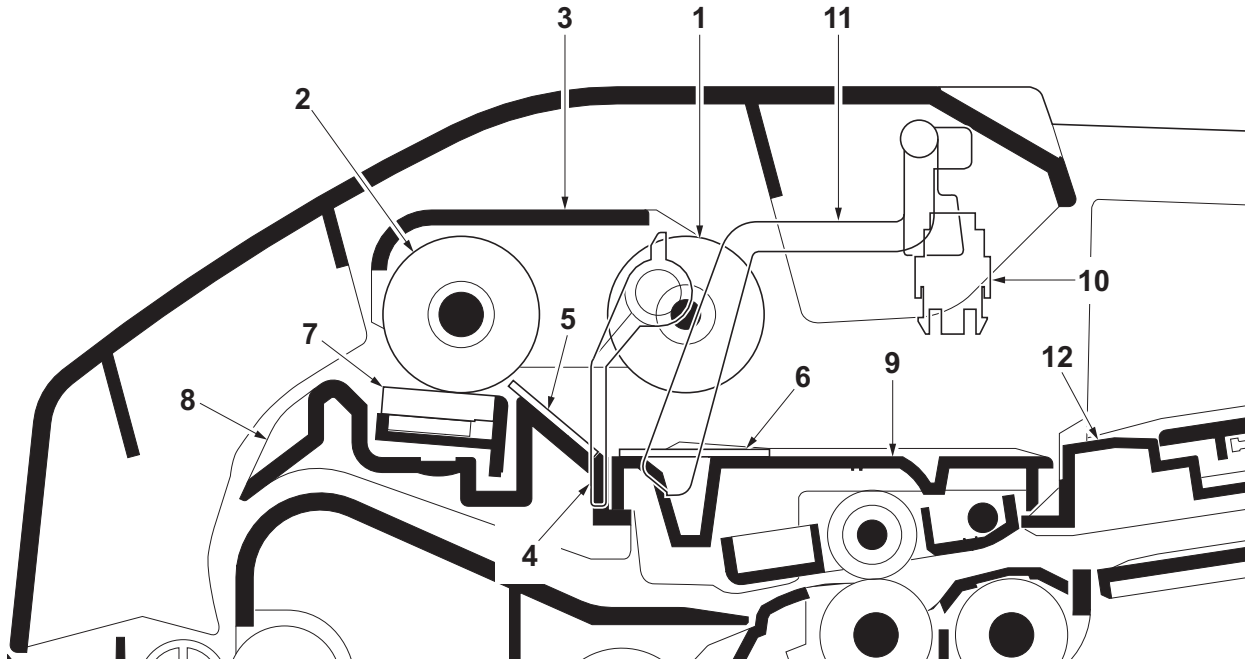


Figure 2-1-26 Original feed section

- | | |
|-------------------------|-----------------------------------|
| 1. DP forwarding pulley | 7. DP separation pad |
| 2. DP feed pulley | 8. Upper guide |
| 3. LF holder | 9. Switchback guide |
| 4. PF stopper | 10. DP original sensor (DPOS) |
| 5. Front separation pad | 11. Actuator (DP original sensor) |
| 6. LF friction plate | 12. Original table |

1

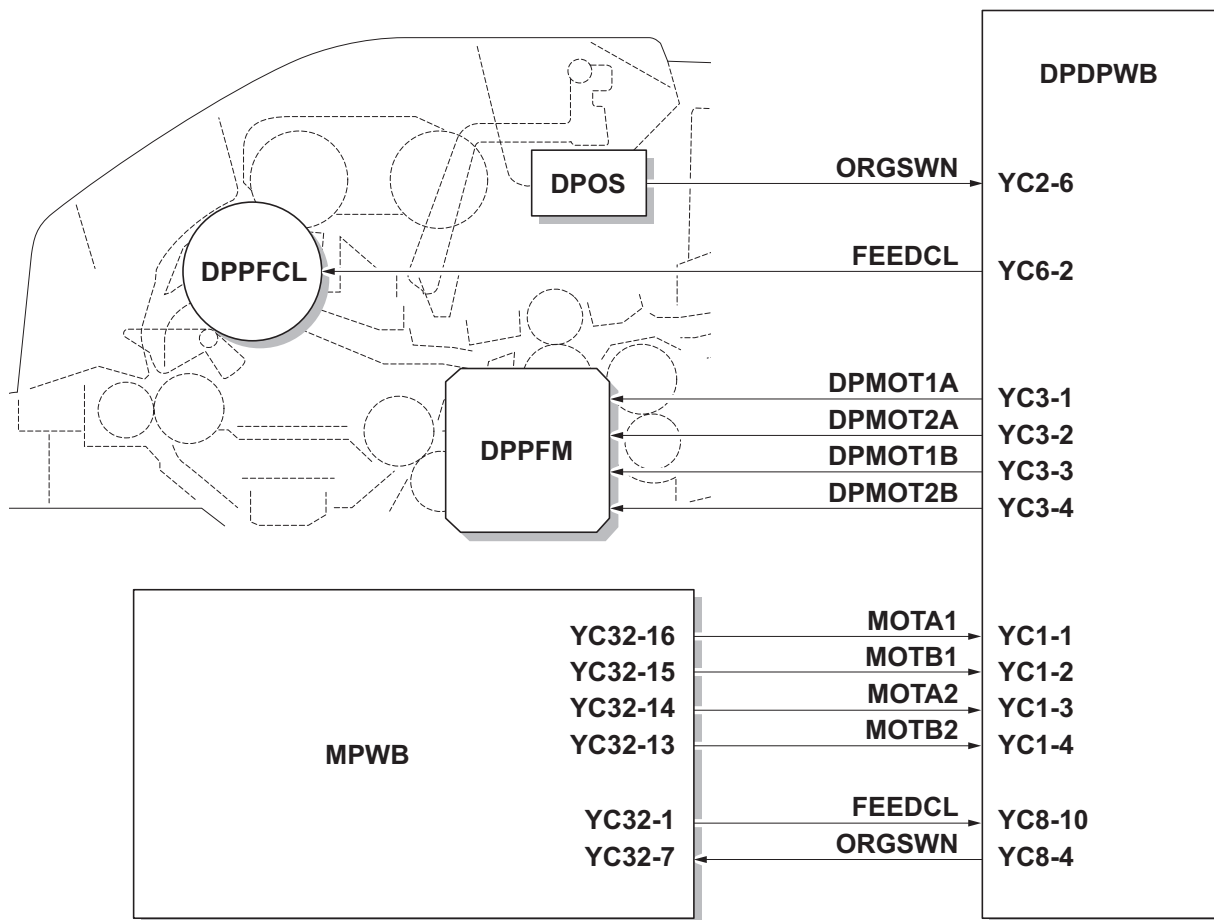


Figure 2-1-27 Original feed section block diagram

(2) Original conveying section

The original conveying section consists of the parts shown in figure. A conveyed original is scanned by the optical section (CCD) of main machine when it passes through the DP contact glass of main machine.

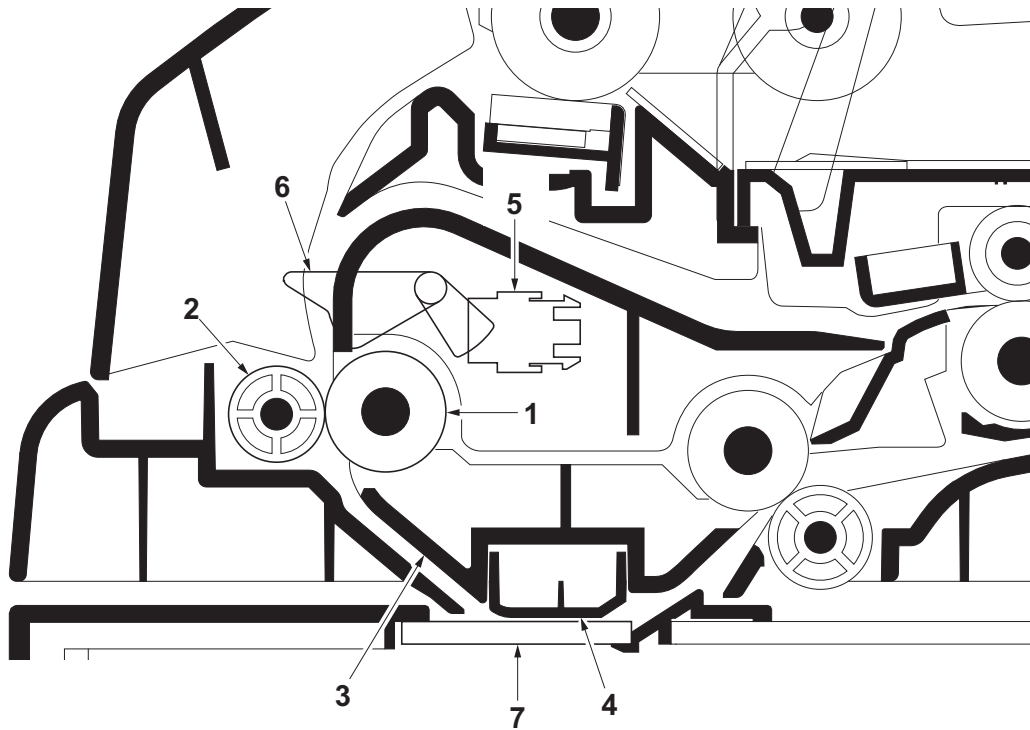


Figure 2-1-28 Original conveying section

- | | |
|-----------------------|--------------------------------|
| 1. Conveying roller A | 5. DP timing sensor (DPTS) |
| 2. Conveying pulley | 6. Actuator (DP timing sensor) |
| 3. Conveying bottom | 7. DP contact glass |
| 4. Reading guide | |

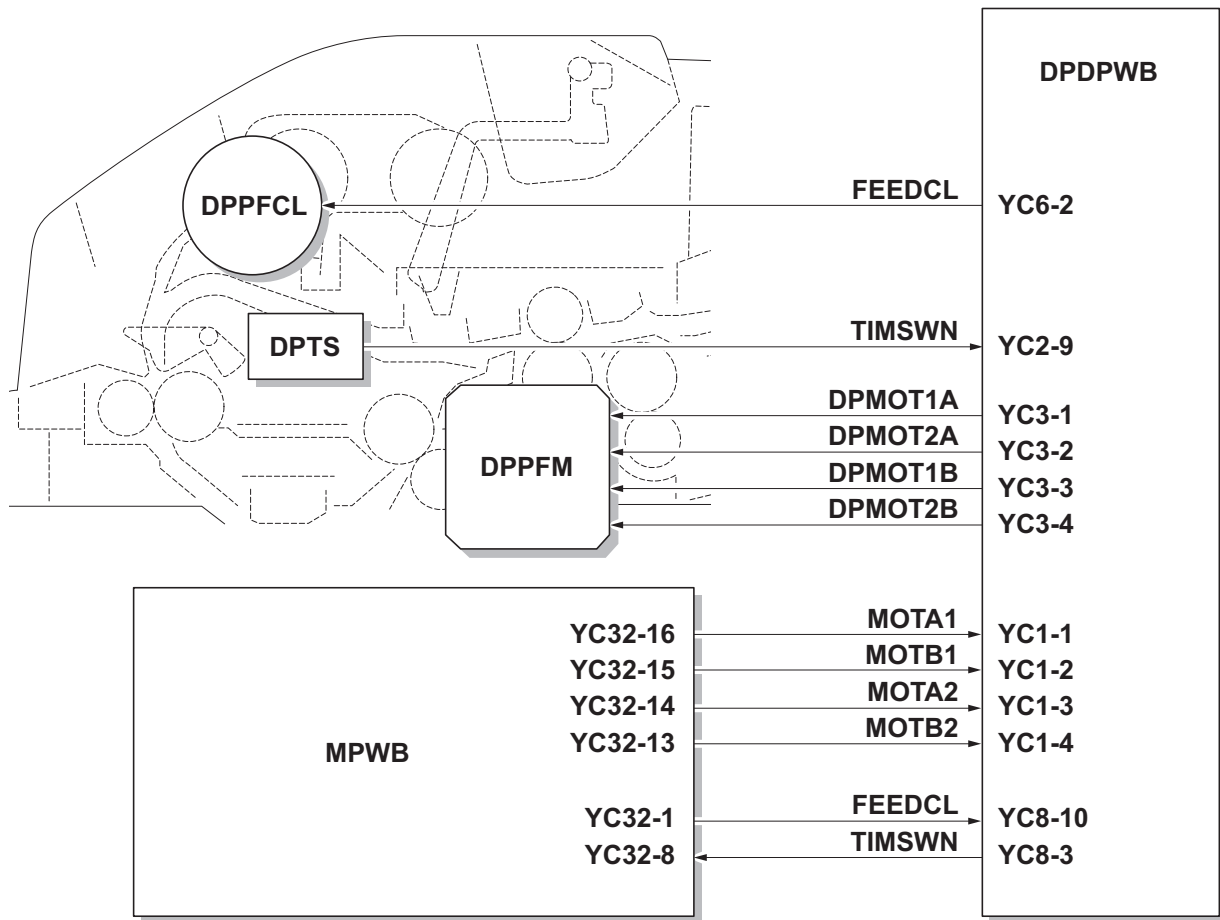


Figure 2-1-29 Original conveying section block diagram

(3) Original switchback/eject sections

The original switchback/eject sections consists of the parts shown in figure. An original of which scanning is complete is ejected to the original eject table by the eject roller. In the case of duplex switchback scanning, an original is conveyed temporarily to the switchback tray and conveyed again to the original conveying section by the switchback roller.

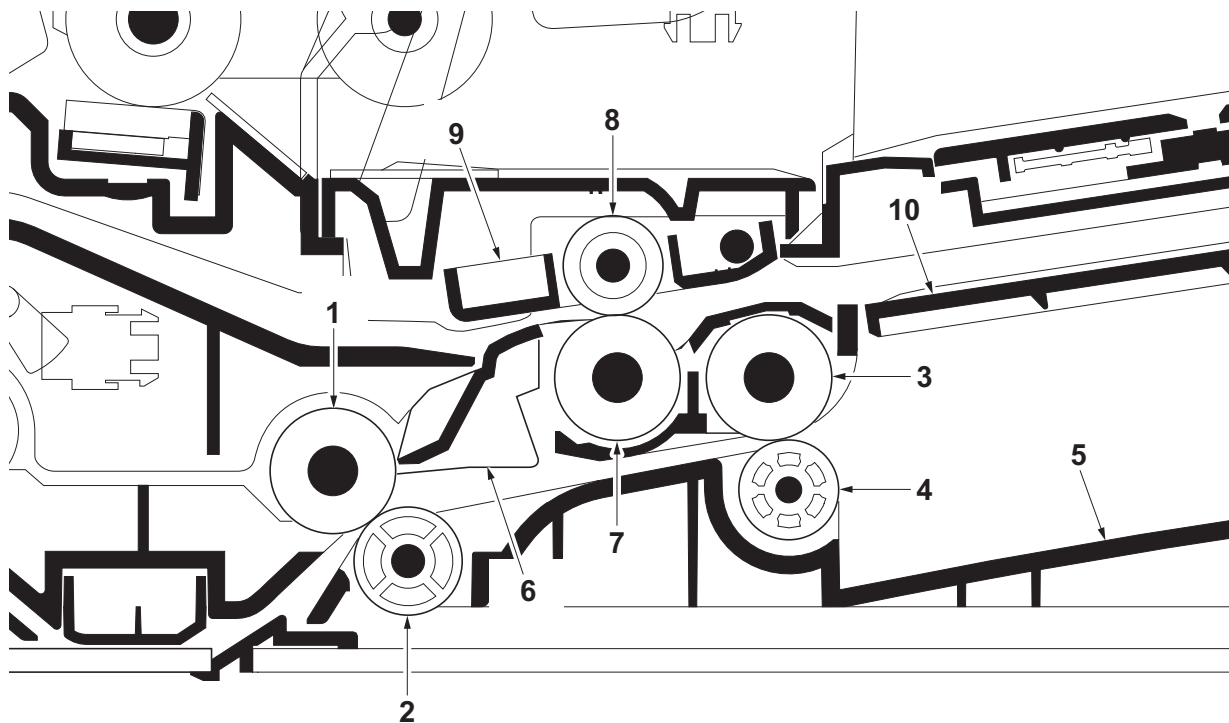


Figure 2-1-30 Original switchback/eject sections

- | | |
|-------------------------|----------------------------|
| 1. Conveying roller B | 6. Switchback guide |
| 2. Conveying pulley | 7. Switchback roller |
| 3. Eject roller | 8. Switchback pulley |
| 4. Eject pulley | 9. Switchback pulley mount |
| 5. Original eject table | 10. Switchback tray |

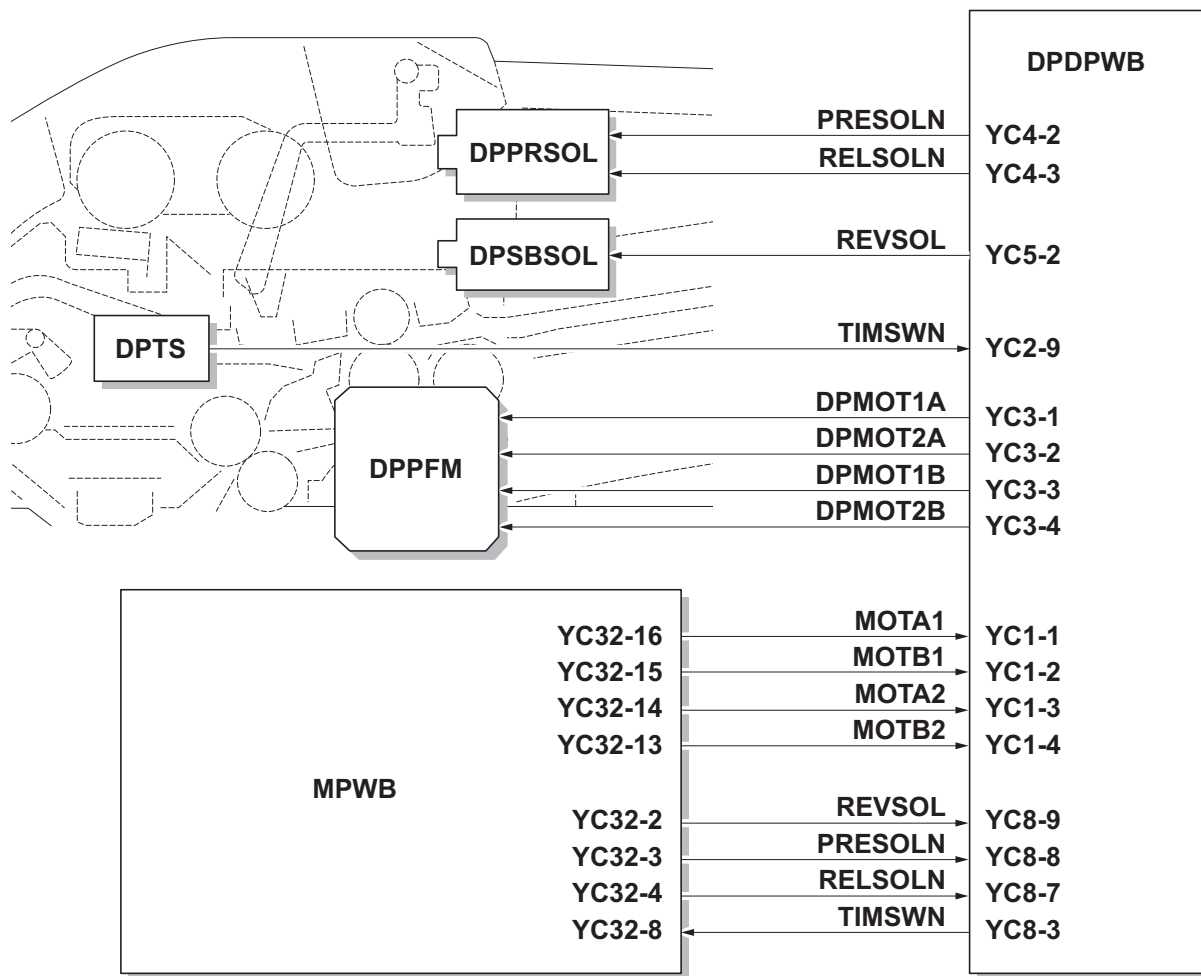


Figure 2-1-31 Original switchback/eject sections block diagram

2-2-1 Electrical parts layout

(1) PWBs

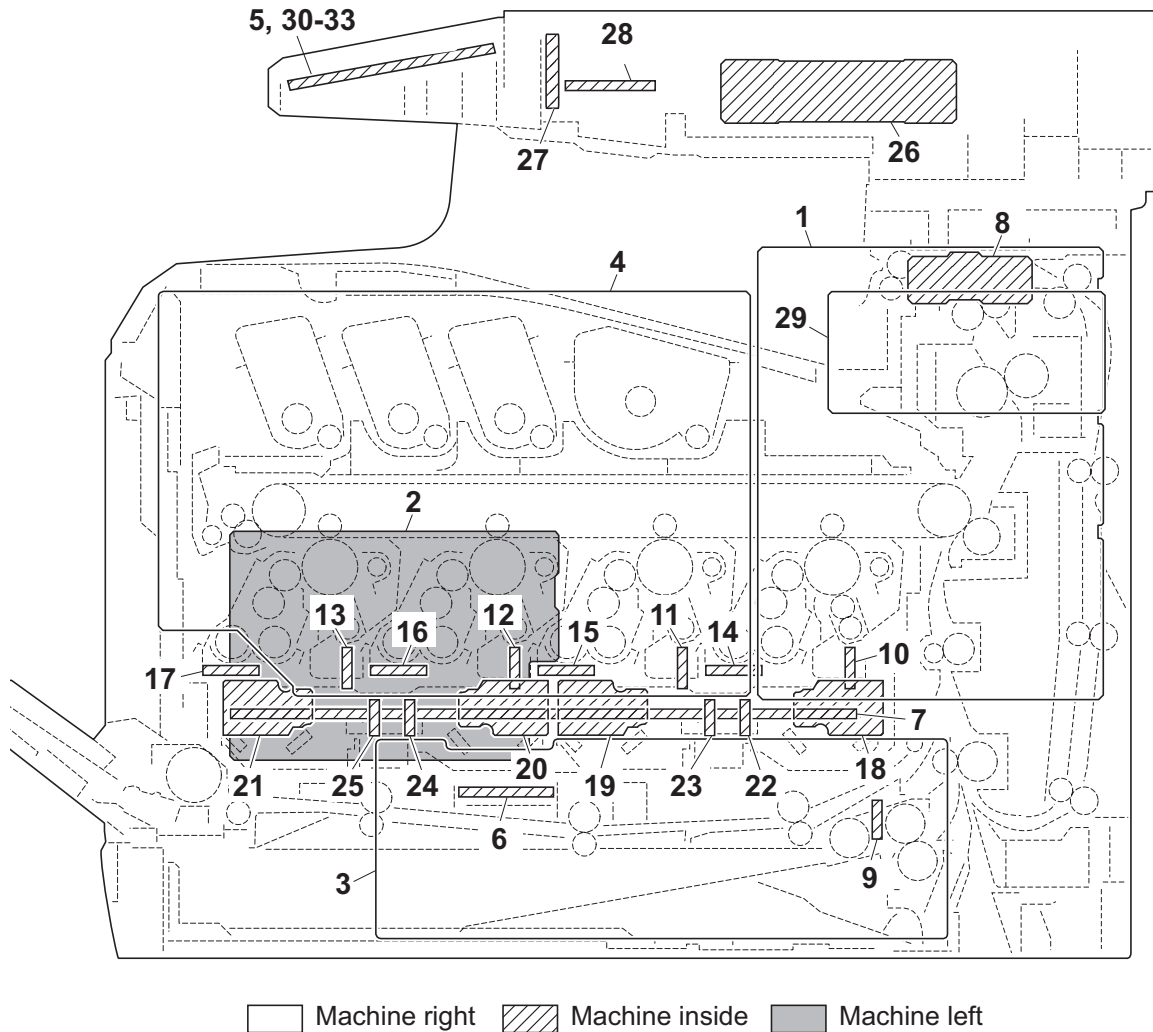


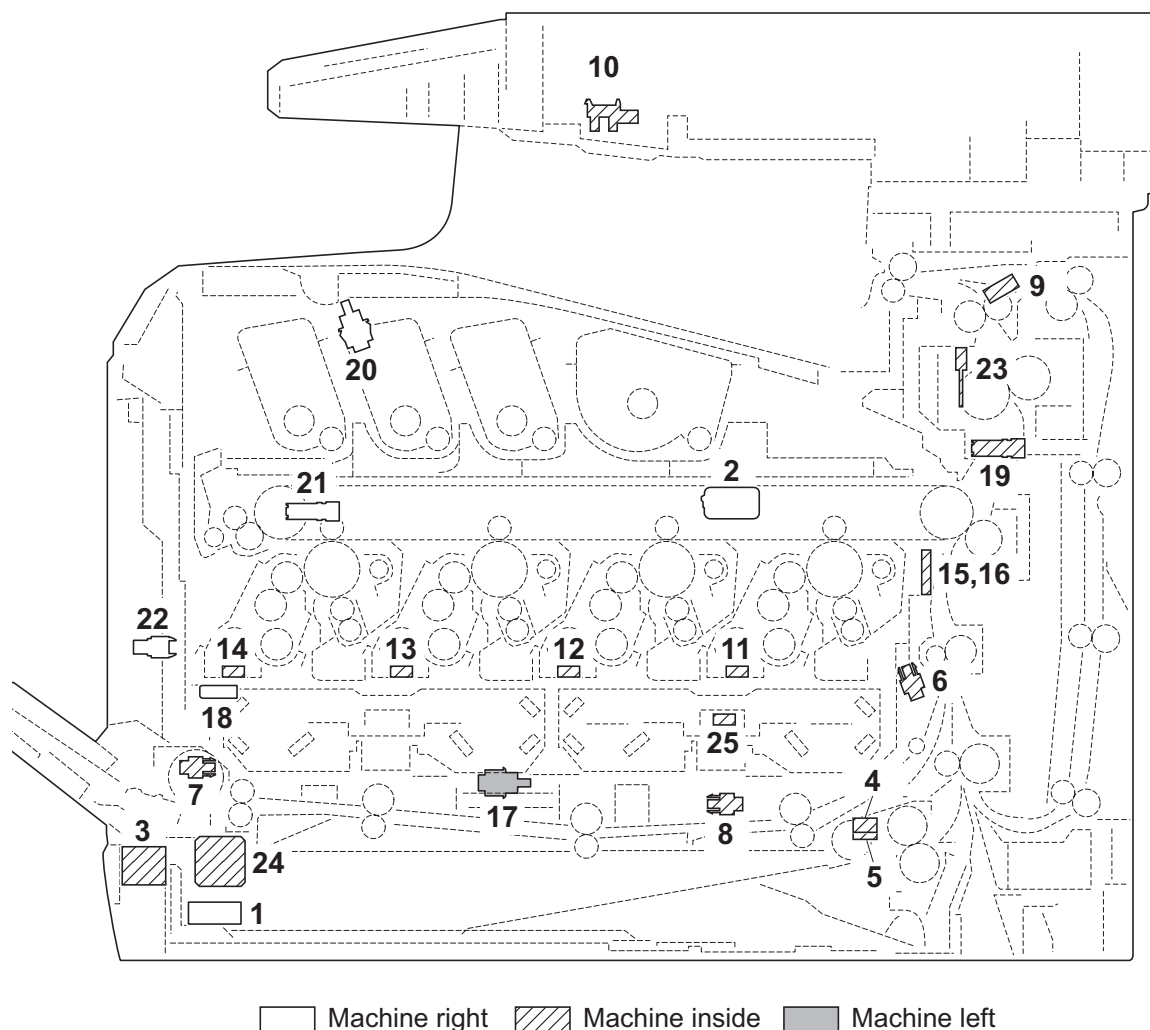
Figure 2-2-1 PWBs

- 1. Main PWB (MPWB) Controls the software such as the print data processing and provides the interface with computers.
- 2. Engine PWB (EPWB)..... Controls printer hardware such as high voltage/bias output control, paper conveying system control, and fuser temperature control, etc.
- 3. Power source PWB (PSPWB) After full-wave rectification of AC power source input, switching for converting to 24 V DC and 5V DC for output. Controls the fuser heater.
- 4. High voltage PWB (HVPWB) Generates main charging, developing bias, transfer bias and cleaning bias.
- 5. Operation panel PWB (OPPWB) Controls the touch panel. Consists the touch panel, LED indicators and key switches.
- 6. Relay PWB (RPWB) Consists of wiring relay circuit between main PWB and engine PWB and power source PWB.
- 7. Drum relay PWB (DRRPWB)..... Consists of wiring relay circuit between engine PWB and the drum units and developing units.

8. Eject PWB (EJPWB) Consists of wiring relay circuit between engine PWB and each electrical component (eject section).
9. Cassette PWB (CPWB) Interconnects the engine PWB and each electrical component (cassette section).
10. Drum PWB K (DRPWB-K) Relays wirings from electrical components on the drum unit K. Drum individual information in EEPROM storage.
11. Drum PWB M (DRPWB-M) Relays wirings from electrical components on the drum unit M. Drum individual information in EEPROM storage.
12. Drum PWB C (DRPWB-C) Relays wirings from electrical components on the drum unit C. Drum individual information in EEPROM storage.
13. Drum PWB Y (DRPWB-Y) Relays wirings from electrical components on the drum unit Y. Drum individual information in EEPROM storage.
14. Developing PWB K (DEVPWB-K) Relays wirings from electrical components on the developing unit K.
15. Developing PWB M (DEVPWB-M) Relays wirings from electrical components on the developing unit M.
16. Developing PWB C (DEVPWB-C) Relays wirings from electrical components on the developing unit C.
17. Developing PWB Y (DEVPWB-Y) Relays wirings from electrical components on the developing unit Y.
18. APC PWB K (APCPWB-K) Generates and controls the laser beam (black).
19. APC PWB M (APCPWB-M) Generates and controls the laser beam (magenta).
20. APC PWB C (APCPWB-C) Generates and controls the laser beam (cyan).
21. APC PWB Y (APCPWB-Y) Generates and controls the laser beam (yellow).
22. PD PWB K (PDPWB-K) Controls horizontal synchronizing timing of laser beam (black).
23. PD PWB M (PDPWB-M) Controls horizontal synchronizing timing of laser beam (magenta).
24. PD PWB C (PDPWB-C) Controls horizontal synchronizing timing of laser beam (cyan).
25. PD PWB Y (PDPWB-Y) Controls horizontal synchronizing timing of laser beam (yellow).
26. CCD PWB (CCDPWB) Reads the image of originals.
27. LED PWB (LEDPWB) Controls the LED.
28. LED Driver PWB (LEDDRPWB) Controls the LED.
29. Fax control PWB (FCPWB) Modulates, demodulates, compresses, decompresses and smoothes out image data, and converts resolution of image data.
30. Operation panel PWB L (OPPWB-L) Controls the key switches and LED.
31. Operation panel PWB R (OPPWB-R) Controls the key switches and LED.
32. LCD relay PWB (LCDRPWB) Consists of wiring relay circuit between operation panel PWB and the LED.
33. LCD PDB (LCDPWB) Controls the LCD.

List of correspondences of PWB names

No.	Name used in service manual	Name used in parts list
1	Main PWB (MPWB)	PARTS PWB MAIN ASSY SP
2	Engine PWB (EPWB)	PARTS PWB ENGINE ASSY SP
3	Power source PWB (PSPWB)	PARTS SWITCHING REGULATOR SP
4	High voltage PWB (HVPWB)	PARTS HIGH VOLTAGE UNIT SP
5	Operation panel PWB (OPPWB)	-
6	Relay PWB (RPWB)	-
7	Drum relay PWB (DRRPWB)	-
8	Eject PWB (EJPWB)	PARTS PWB ASSY EXIT SP
9	Cassette PWB (CPWB)	PARTS PWB ASSY CASSETTE SP
10	Drum PWB K (DRPWB-K)	-
11	Drum PWB M (DRPWB-M)	-
12	Drum PWB C (DRPWB-C)	-
13	Drum PWB Y (DRPWB-Y)	-
14	Developing PWB K (DEVPWB-K)	-
15	Developing PWB M (DEVPWB-M)	-
16	Developing PWB C (DEVPWB-C)	-
17	Developing PWB Y (DEVPWB-Y)	-
18	APC PWB K (APCPWB-K)	-
19	APC PWB M (APCPWB-M)	-
20	APC PWB C (APCPWB-C)	-
21	APC PWB Y (APCPWB-Y)	-
22	PD PWB K (PDPWB-K)	-
23	PD PWB M (PDPWB-M)	-
24	PD PWB C (PDPWB-C)	-
25	PD PWB Y (PDPWB-Y)	-
26	CCD PWB (CCDPWB)	-
27	LED PWB (LEDPWB)	-
28	LED driver PWB (LEDDRPWB)	-
29	Fax control PWB (FCPWB)	PARTS FAX UNIT J SP
30	Operation panel PWB L (OPPWB-L)	-
31	Operation panel PWB R (OPPWB-R)	-
32	LCD relay PWB (LCDRPWB)	-
33	LCD PDB (LCDPWB)	-

(2) Switches and sensors**Figure 2-2-2 Switches and sensors**

- | | |
|--|---|
| 1. Main power switch (MSW) | Turns ON/OFF the AC power source. |
| 2. Interlock switch (ILSW) | Shuts off 24 V DC power line when the inner tray and rear cover are opened. |
| 3. Cassette size switch (CSSW) | Detects the paper size dial setting of the paper setting dial. |
| 4. Paper sensor (PS) | Detects the presence of paper in the cassette. |
| 5. Lift sensor (LS)..... | Detects activation of upper limit of the bottom plate. |
| 6. Registration sensor (RS)..... | Controls the secondary paper feed start timing. |
| 7. MP paper sensor (MPPS) | Detects the presence of paper on the MP tray. |
| 8. MP paper conveying sensor (MPFS) | Detects a paper misfeed in the MP paper conveying section. |
| 9. Eject sensor (ES)..... | Detects a paper misfeed in the fuser or eject section. |
| 10. Home position sensor (HPS) | Detects the ISU in the home position. |
| 11. Toner sensor K (TS-K) | Detects the toner density in the developing unit K. |
| 12. Toner sensor K (TS-M)..... | Detects the toner density in the developing unit M. |
| 13. Toner sensor K (TS-C)..... | Detects the toner density in the developing unit C. |
| 14. Toner sensor K (TS-Y) | Detects the toner density in the developing unit Y. |
| 15. ID sensor 1 (IDS1) | Measures image density for color calibration. |
| 16. ID sensor 2 (IDS2) | Measures image density for color calibration. |

17. Developing release switch (DEVRSW)..... Detects separation of developing units M, C and Y.
18. Waste toner sensor (WTS)..... Detects when the waste toner box is full.
19. Envelope switch (EVSW)..... Detects the envelope mode setting.
20. Inner tray switch (ITSW) Detects the opening and closing of the inner tray.
21. Toner container sensor (TCS)..... Detects the presence of the toner container.
22. Waste toner cover sensor (WTCS) Detects the opening and closing of the waste toner cover.
23. Fuser thermistor (FTH) Detects the heat roller temperature.
24. Outer temperature sensor (OTEMS)..... Detects the outside temperature and humidity.
25. Inner temperature sensor (ITEMS) Detects the inside temperature.

(3) Motors

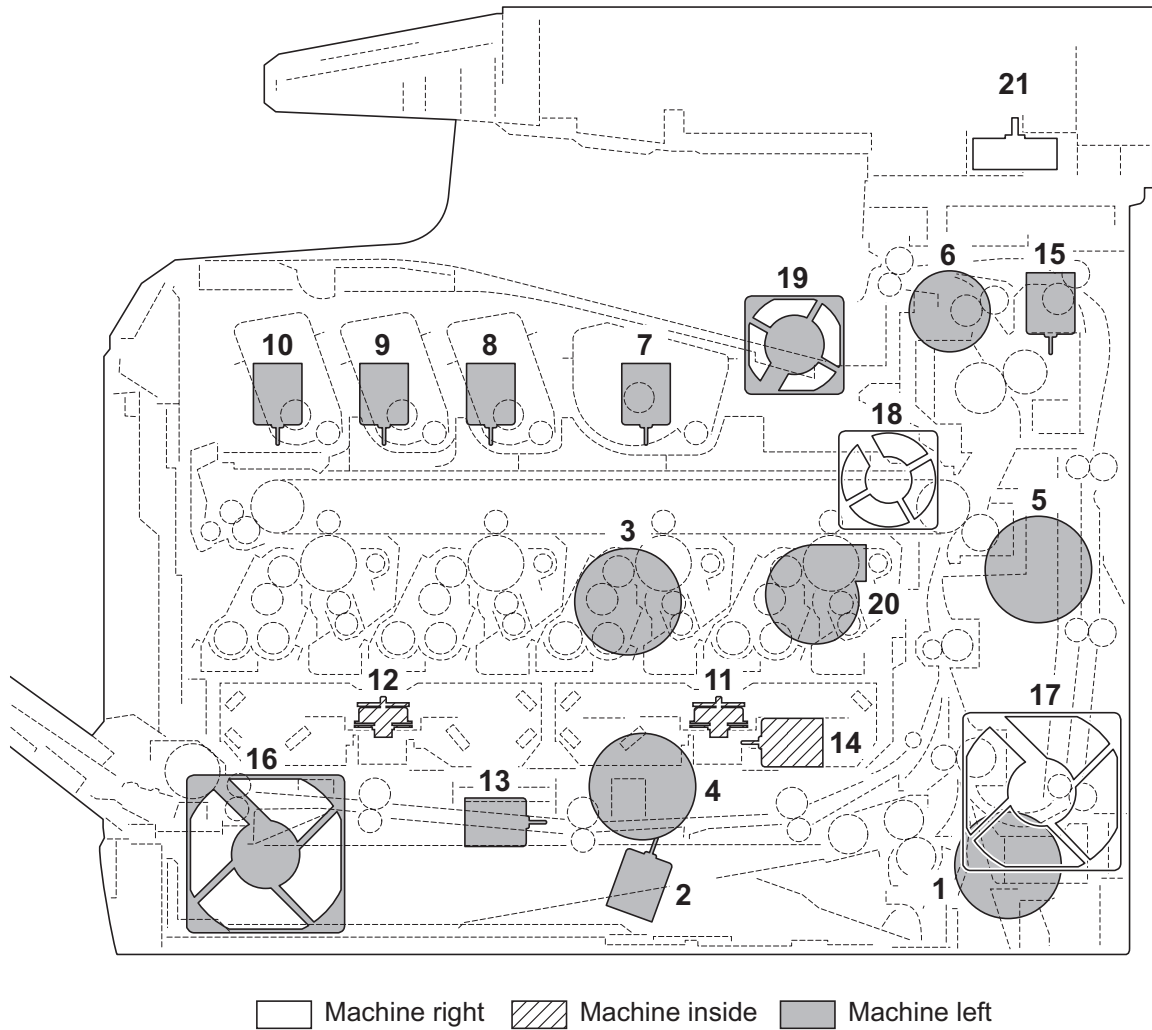


Figure 2-2-3 Motors

- 1. Paper feed motor (PFM) Drives the paper feed section.
- 2. Lift motor (LM)..... Operates the bottom plate.
- 3. Drum motor (DRM) Drives the drum unit.
- 4. Developing motor (DEVM)..... Drives the developing unit.
- 5. Fuser motor (FUM) Drives the transfer section and the fuser section.
- 6. Duplex motor (DUM)..... Drives the duplex section.
- 7. Toner motor K (TM-K)..... Replenishes toner to the developing unit K
- 8. Toner motor M (TM-M)..... Replenishes toner to the developing unit M
- 9. Toner motor C (TM-C)..... Replenishes toner to the developing unit C
- 10. Toner motor Y (TM-Y) Replenishes toner to the developing unit Y
- 11. Polygon motor KM (PM-KM)..... Drives the polygon mirror KM.
- 12. Polygon motor CY (PM-CY)..... Drives the polygon mirror CY.
- 13. Developing release motor (DEVRM)..... Drives separation of developing units M, C and Y.
- 14. LSU cleaning motor (LSUCM) Drives LSU dust shield glass cleaning system.
- 15. Fuser pressure release motor (FPRM) Drives fuser pressure release.
- 16. Left fan motor (LFM) Cools the interior of machine.
- 17. Right fan motor (RFM) Cools the interior of machine.

- 18. Controller fan motor (CONFM)..... Cools the controller section.
- 19. Fuser fan motor (FUFM) Cools the toner container section.
- 20. Container fan motor (CFM) Cools the toner container section.
- 21. ISU motor (ISUM) Drives the ISU.

(4) Others

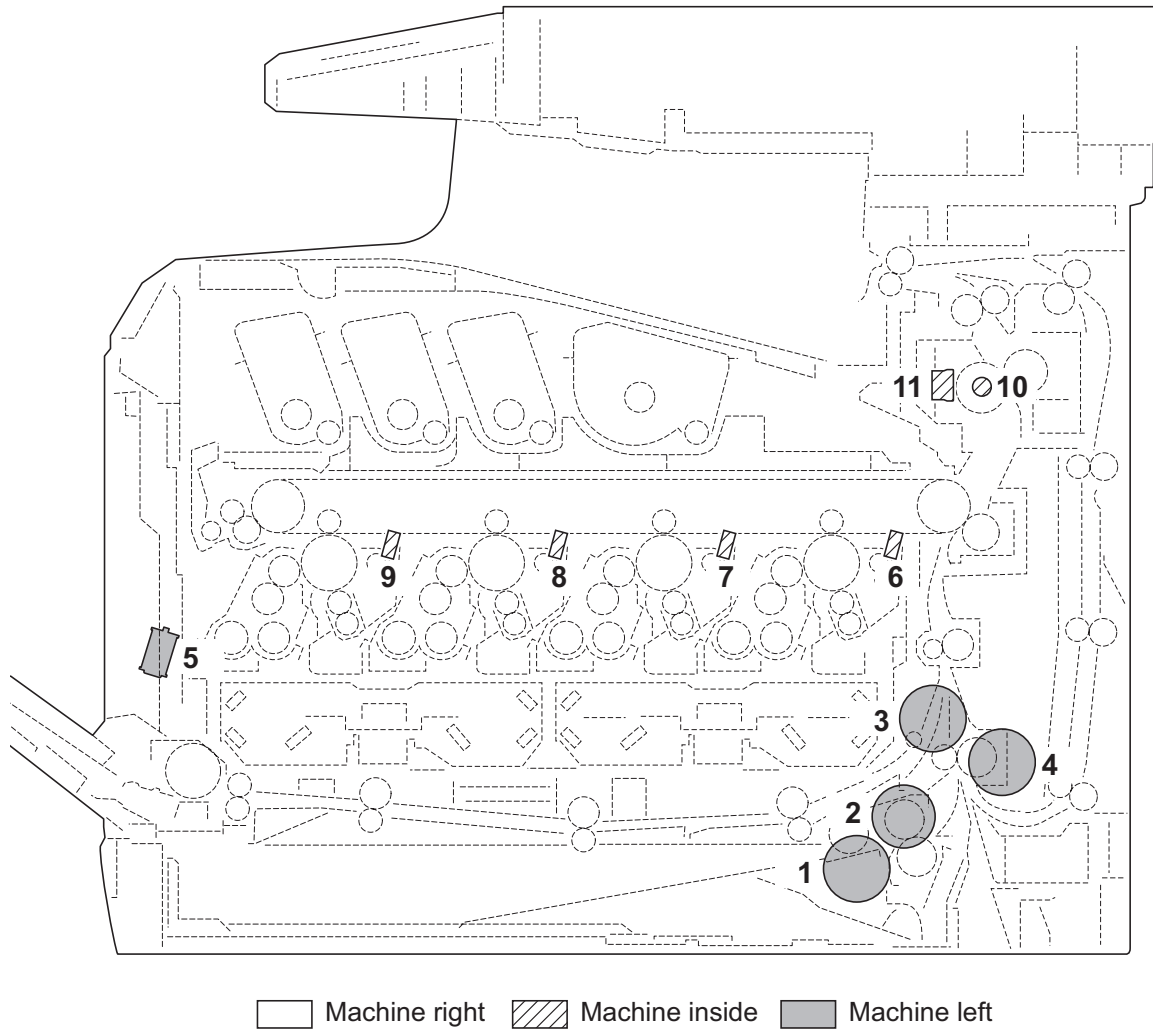
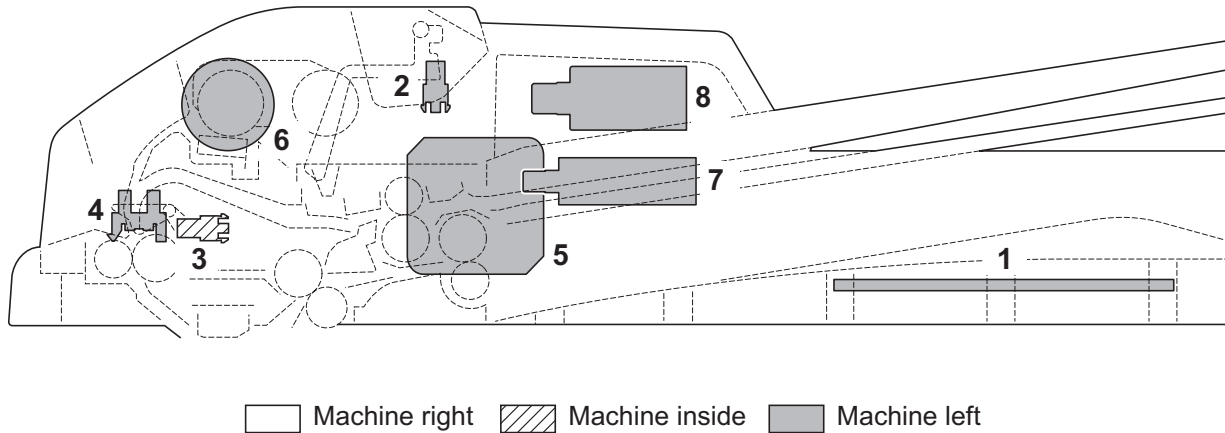


Figure 2-2-4 Others

- | | |
|--|--|
| <p>1. Paper feed clutch (PFCL)</p> <p>2. MP feed clutch (MPFCL).....</p> <p>3. Registration clutch (RCL).....</p> <p>4. Middle clutch (MCL).....</p> <p>5. MP solenoid (MPSOL)</p> <p>6. Cleaning lamp K (CL-K).....</p> <p>7. Cleaning lamp M (CL-M).....</p> <p>8. Cleaning lamp C (CL-C).....</p> <p>9. Cleaning lamp Y (CL-Y).....</p> <p>10. Fuser heater (FH)</p> <p>11. Fuser thermal cutout.....</p> | <p>Primary paper feed from cassette.</p> <p>Controls the drive of MP conveying section.</p> <p>Controls the secondary paper feed.</p> <p>Controls the drive of conveying section.</p> <p>Controls the MP bottom plate.</p> <p>Eliminates the residual electrostatic charge on the drum (black).</p> <p>Eliminates the residual electrostatic charge on the drum (magenta).</p> <p>Eliminates the residual electrostatic charge on the drum (cyan).</p> <p>Eliminates the residual electrostatic charge on the drum (yellow).</p> <p>Heats the heat roller.</p> <p>Prevents overheating of the heat roller.</p> |
|--|--|

(5) Document processor**Figure 2-2-5 Document processor**

1. DP drive PWB (DPDPWB)..... Consists the solenoids and clutch driver circuit and wiring relay circuit.
2. DP original sensor (DPOS)..... Detects the presence of an original.
3. DP timing sensor (DPTS)..... Detects the original scanning timing.
4. DP open/close sensor (DPOCS)..... Detects the opening/closing of the DP.
5. DP paper feed motor (DPPFM)..... Drives the original feed section.
6. DP paper feed clutch (DPPFCL)..... Controls the drive of the DP forwarding pulley and DP feed pulley.
7. DP switchback solenoid (DPSBSOL).... Operates the switchback guide.
8. DP pressure solenoid (DPPRSOL)..... Operates the switchback pulley.

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2-3-1 Power source PWB

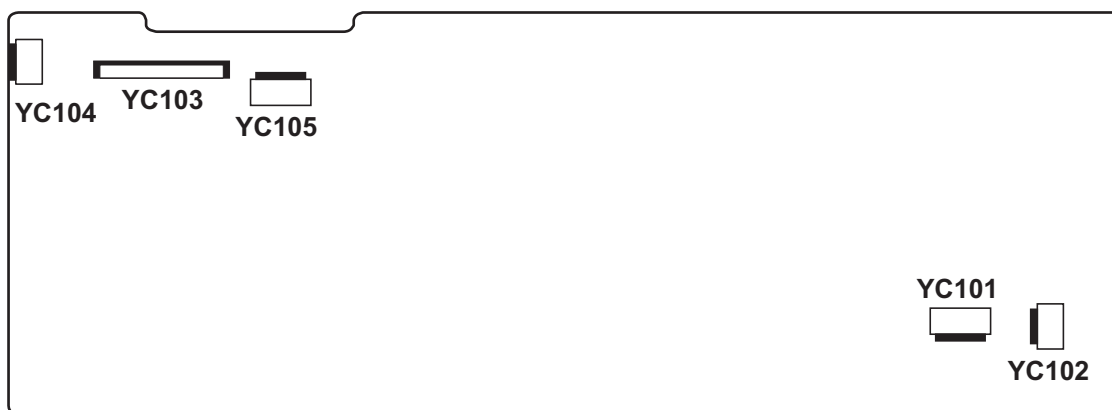


Figure 2-3-1 Power source PWB silk-screen diagram

Connector	Pin	Signal	I/O	Voltage	Description	
YC101	1	LIVE	I	120 V AC 220-240 V AC	AC power input	
	Connected to AC inlet and main power switch	2	NEUTRAL	I	120 V AC 220-240 V AC	AC power input
YC102	1	NEUTRAL	O	120 V AC/0 V 220-240 V AC/0 V	FH: On/Off	
	Connected to fuser heater	2	LIVE	O	120 V AC 220-240 V AC	AC power to FH
YC103	1	+24V1	O	24 V DC	24 V DC power to RYPWB	
	Connected to relay PWB	2	GND	-	-	Ground
		3	GND	-	-	Ground
		4	GND	-	-	Ground
		5	GND	-	-	Ground
		6	+24V2	O	24 V DC	24 V DC power to RYPWB (via ILSW)
	7	+24V2	O	24 V DC	24 V DC power to RYPWB (via ILSW)	
	8	+24V2	O	24 V DC	24 V DC power to RYPWB (via ILSW)	
	9	+24V2	O	24 V DC	24 V DC power to RYPWB (via ILSW)	
	10	PSSLEEPN	I	0/3.3 V DC	Sleep mode signal: On/Off	
	11	ZCROSS	O	0/3.3 V DC (pulse)	Zero-cross signal	
	12	RELAY	I	0/3.3 V DC	Power relay signal: On/Off	
	13	HEATRE1	I	0/3.3 V DC	FH: On/Off	
YC104	1	+24V1	O	24 V DC	24 V DC power to ILSW	
	Connected to interlock switch	2	N.C	-	-	Not used
		3	+24V2	I	24 V DC	24 V DC power from ILSW
YC105	1	+24V1	O	24 V DC	24 V DC power to MPWB	
	Connected to main PWB	2	GND	-	-	Ground
		3	GND	-	-	Ground
		4	+5V1	O	5 V DC	5 V DC power to MPWB

2-3-2 Engine PWB

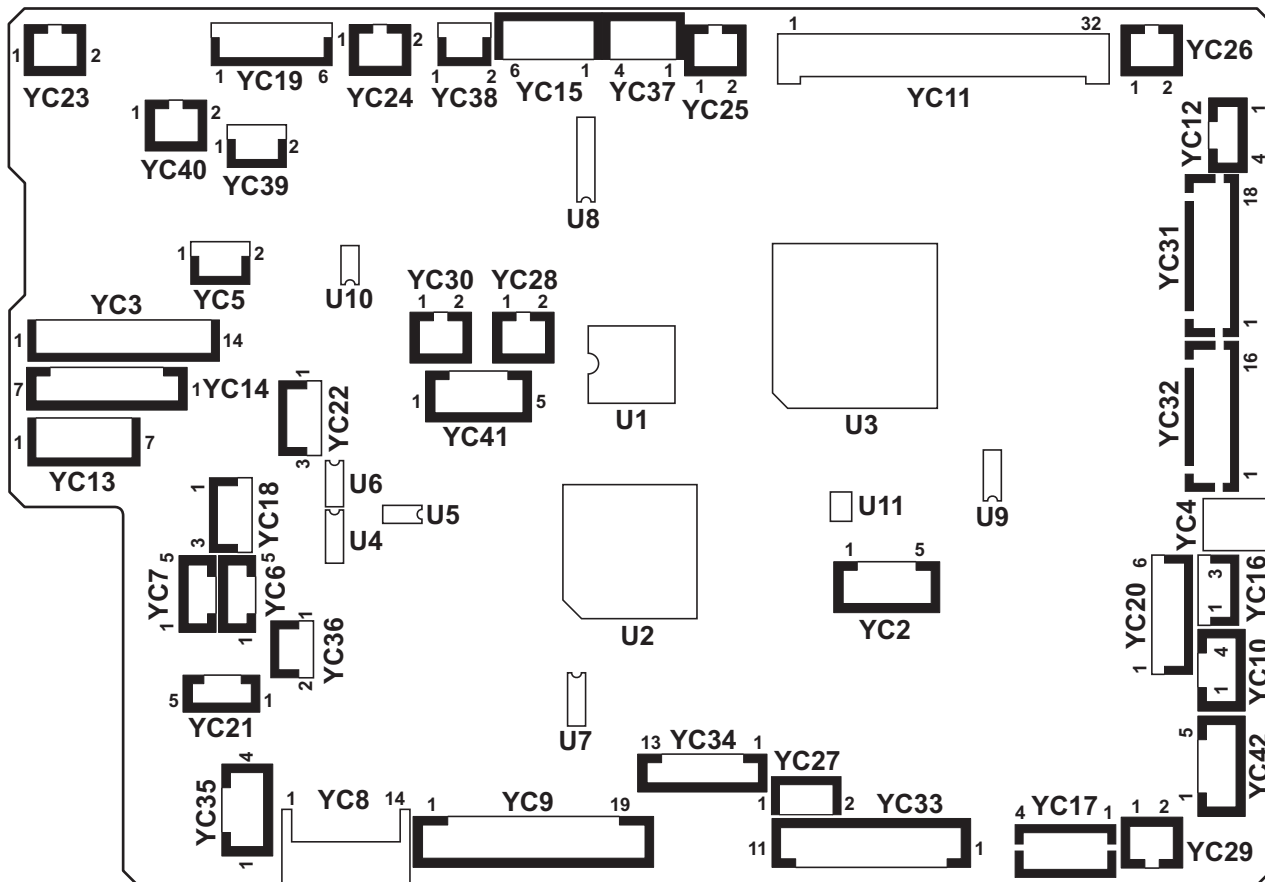


Figure 2-3-2 Engine PWB silk-screen diagram

Connector	Pin	Signal	I/O	Voltage	Description
YC3	1	MPFCLDRN	O	0/24 V DC	MPFCL: On/Off
Connected to MP feed clutch, paper feed clutch, paper feed motor, middle clutch and registration clutch	2	+24V3	O	24 V DC	24 V DC power to MPFCL
	3	FEDCLDRN	O	0/24 V DC	PFCL: On/Off
	4	+24V3	O	24 V DC	24 V DC power to PFCL
	5	N.C.	-	-	Not used
	6	FEMOTRDYN	I	0/3.3 V DC	PFM ready signal
	7	FEMOTCLK	O	0/3.3 V DC (pulse)	PFM clock signal
	8	FEMOTREN	O	0/3.3 V DC	PFM: On/Off
	9	GND	-	-	Ground
	10	+24V3	O	24 V DC	24 V DC power to PFM
	11	MIDCLDRN	O	0/24 V DC	MCL: On/Off
	12	+24V3	O	24 V DC	24 V DC power to MCL
	13	REGCLDRN	O	0/24 V DC	RCL: On/Off
	14	+24V3	O	24 V DC	24 V DC power to RCL
	YC4	1	+24V3	O	24 V DC
Connected to MP solenoid	2	MPSOLDRN	I	0/24 V DC	MPSOL: On/Off
YC6	1	VOSL	I	Analog	IDS1 detection signal
Connected to ID sensor 1	2	VOPL	I	Analog	IDS1 detection signal
	3	GND	-	-	Ground
	4	LEDREFL	O	Analog	IDS1 control signal
	5	+3.3V2	O	3.3 V DC	3.3 V DC power to IDS1
	YC7	1	VOSR	I	Analog
Connected to ID sensor 2	2	VOPR	I	Analog	IDS2 detection signal
	3	GND	-	-	Ground
	4	LEDREFR	O	Analog	IDS2 control signal
	5	+3.3V2	O	3.3 V DC	3.3 V DC power to IDS2

Connector	Pin	Signal	I/O	Voltage	Description
YC8	1	+24V1	I	24 V DC	24 V DC power from RYPWB
Connected to relay PWB	2	GND	-	-	Ground
	3	GND	-	-	Ground
	4	GND	-	-	Ground
	5	GND	-	-	Ground
	6	+24V3	O	24 V DC	24 V DC power from RYPWB
	7	+24V3	O	24 V DC	24 V DC power from RYPWB
	8	+24V3	O	24 V DC	24 V DC power from RYPWB
	9	+24V3	O	24 V DC	24 V DC power from RYPWB
	10	GND	-	-	Ground
	11	SLEEPN	O	0/3.3 V DC	Sleep mode signal: On/Off
	12	HYPINT	O	0/3.3 V DC	Sleep return signal: On/Off
	13	I2CINT	-	-	Not used
	14	+3.3V2	I	3.3 V DC	3.3 V DC power from RYPWB
	YC9	1	TCOVOPN	O	0/3.3 V DC
Connected to relay PWB	2	EGHOLD	I	0/3.3 V DC	Engine hold signal
	3	ZCROSS	I	0/3.3 V DC (pulse)	Zero-cross signal
	4	RELAY	O	0/3.3 V DC	Power relay signal
	5	HEATRE1	O	0/3.3 V DC	FH: On/Off
	6	(HEATRE2)	-	-	Not used
	7	VSYNC	O	0/3.3 V DC	Vertical synchronizing signal
	8	EGIRN	O	0/3.3 V DC	Engine interruption signal
	9	SBSY	O	0/3.3 V DC	Serial busy signal
	10	SDIR	O	0/3.3 V DC	Serial communication direction change signal
	11	SI	I	0/3.3 V DC (pulse)	Serial communication data signal input
	12	SO	O	0/3.3 V DC (pulse)	Serial communication data signal output
	13	SCKN	I	0/3.3 V DC (pulse)	Serial communication clock signal
	14	N.C.	-	-	Not used
	15	I2CSCL	I	0/3.3 V DC (pulse)	EEPROM clock signal
	16	GND	-	-	Ground
	17	I2CSDA	I/O	0/3.3 V DC (pulse)	EEPROM data signal
	18	MPFJAM	I	0/3.3 V DC	MPPCS: On/Off
	19	+3.3V1_MFP	O	3.3 V DC	3.3 V DC power to RYPWB

Connector	Pin	Signal	I/O	Voltage	Description
YC10 Connected to waste toner sensor	1	LEDA	O	3.3 V DC	3.3 V DC power to WTS
	2	LEDK	O	0/3.3 V DC (pulse)	WTS LED emitter signal
	3	PTRE	I	Analog	WTS detection signal
	4	PTRC	O	3.3 V DC	3.3 V DC power to WTS
YC11 Connected to high voltage PWB	1	+24V3	O	24 V DC	24 V DC power to HVPWB
	2	+24V3	O	24 V DC	24 V DC power to HVPWB
	3	T1CCNT	O	PWM	Primary transfer bias control voltage (Cyan)
	4	HVCLKY	O	0/3.3 V DC (pulse)	Developing bias clock signal (Yellow)
	5	T1MCNT	O	PWM	Primary transfer bias control voltage (Magenta)
	6	HVCLKC	O	0/3.3 V DC (pulse)	Developing bias clock signal (Cyan)
	7	T2CNT	O	PWM	Secondary transfer bias control voltage
	8	BCMCNT	O	PWM	Developing magnet roller bias control voltage (Cyan)
	9	CLCNT	O	PWM	Cleaning bias control voltage
	10	BKMCNT	O	PWM	Developing magnet roller bias control voltage (Black)
	11	T1YCNT	O	PWM	Primary transfer bias control voltage (Yellow)
	12	BKSCNT	O	PWM	Developing sleeve roller bias control voltage (Black)
	13	T1KCNT	O	PWM	Primary transfer bias control voltage (Black)
	14	BYSCNT	O	PWM	Developing sleeve roller bias control voltage (Yellow)
	15	MYCNT	O	PWM	Charger roller control voltage (Yellow)
	16	BMMCNT	O	PWM	Developing magnet roller bias control voltage (Magenta)
	17	MKCNT	O	PWM	Charger roller control voltage (Black)
	18	BYMCNT	O	PWM	Developing magnet roller bias control voltage (Yellow)
	19	MCCNT	O	PWM	Charger roller control voltage (Cyan)
	20	T2RREM	O	0/3.3 V DC (pulse)	Secondary transfer bias reverse signal
	21	MMCNT	O	PWM	Charger roller control voltage (Magenta)
	22	BMSCNT	O	PWM	Developing sleeve roller bias control voltage (Magenta)
	23	MISENS	I	Analog	Charger roller AC current signal
	24	BKACNT	O	PWM	Developing AC bias control voltage (Black)

Connector	Pin	Signal	I/O	Voltage	Description
YC11 Connected to high voltage PWB	25	BCACNT	O	PWM	Developing AC bias control voltage (Cyan)
	26	BMACNT	O	PWM	Developing AC bias control voltage (Magenta)
	27	BYACNT	O	PWM	Developing AC bias control voltage (Yellow)
	28	HVCLKK	O	0/3.3 V DC (pulse)	Developing bias clock signal (Black)
	29	BCSCNT	O	PWM	Developing sleeve roller bias control voltage (Cyan)
	30	HVCLKM	O	0/3.3 V DC (pulse)	Developing bias clock signal (Magenta)
	31	GND	-	-	Ground
	32	GND	-	-	Ground
YC12 Connected to RFID PWB.	1	+3.3V2		3.3 V DC	3.3 V DC power to RFPWB
	2	RFCLK	O	0/3.3 V DC (pulse)	RFPWB EEPROM clock signal
	3	GND	-	-	Ground
	4	RFDATA	I/O	0/3.3 V DC (pulse)	RFPWB EEPROM data signal
	5	GND	-	-	Ground
YC13 Connected to drum motor	1	MOTREV (GND)	-	-	Ground
	2	MOTRDYN	I	0/3.3 V DC	DRM ready signal
	3	SPEEDSEL	O	0/3.3 V DC	DRM speed selection signal
	4	MOTCLK	O	0/3.3 V DC (pulse)	DRM clock signal
	5	MOTEN	O	0/3.3 V DC	DRM: On/Off
	6	GND	-	-	Ground
	7	+24V3	O	24 V DC	24 V DC power to DRM
YC14 Connected to developing motor	1	+24V3	O	24 V DC	24 V DC power to DEVM
	2	GND	-	-	Ground
	3	DLPMOTREN	O	0/3.3 V DC	DEVM: On/Off
	4	DLPMOTCLK	O	0/3.3 V DC (pulse)	DEVM clock signal
	5	DLPMOT RDYN	I	0/3.3 V DC	DEVM ready signal
	6	MOTREV	O	0/3.3 V DC	DEVM drive switch signal
YC15 Connected to fuser motor	1	IMAMOT RDYN	I	0/3.3 V DC	FUM ready signal
	2	IMAMOTCLK	O	0/3.3 V DC (pulse)	FUM clock signal
	3	IMAMOTREN	O	0/3.3 V DC	FUM: On/Off
	4	GND	-	-	Ground
	5	+24V3	O	24 V DC	24 V DC power to FUM

Connector	Pin	Signal	I/O	Voltage	Description
YC16 Connected to MP paper sensor	1	+3.3V2_LED1	O	3.3 V DC	3.3 V DC power to MPPS
	2	GND	-	-	Ground
	3	MPFPAP	I	0/3.3 V DC	MPPS: On/Off
YC17 Connected to cassette size switch	1	CAS2	I	0/3.3 V DC	CSSW (SW2): On/Off
	2	CAS1	I	0/3.3 V DC	CSSW (SW1): On/Off
	3	COM	-	-	Ground
	4	CAS0	I	0/3.3 V DC	CSSW (SW0): On/Off
YC18 Connected to registration sensor	1	+3.3V2_LED2	O	3.3 V DC	3.3 V DC power to RS
	2	GND	-	-	Ground
	3	REGPAP	I	0/3.3 V DC	RS: On/Off
YC19 Connected to eject PWB	1	PDIRN	I	0/3.3 V DC	EVSW: On/Off
	2	+3.3V2	O	3.3 V DC	3.3 V DC power to EJPWB
	3	F THERM	I	Analog	FTH detection voltage
	4	FUSPAP	I	0/3.3 V DC	ES: On/Off
	5	NC	-	-	Not used
	6	GND	-	-	Ground
YC20 Connected to toner container sensor and waste toner cover sensor	1	+3.3V2_LED3	O	3.3 V DC	3.3 V DC power to TCS
	2	GND	-	-	Ground
	3	TCONTN	I	0/3.3 V DC	TCS: On/Off
	4	+3.3V2_LED7	O	3.3 V DC	3.3 V DC power to WTCS
	5	GND	-	-	Ground
	6	WSTOPN	I	0/3.3 V DC	WTCS: On/Off
YC21 Connected to cassette PWB	1	GND	-	-	Ground
	2	PAPVOL2	-	-	Not used
	3	PAPVOL1	I	0/3.3 V DC	PS: On/Off
	4	LIFTSEN	I	0/3.3 V DC	LS: On/Off
	5	+3.3V2	O	3.3 V DC	3.3 V DC power to CPWB
YC23 Connected to toner motor K	1	+24V3	O	24 V DC	24 V DC power to TM-K
	2	TNMKDRN	O	0/24 V DC	TM-K: On/Off
YC24 Connected to toner motor M	1	+24V3	O	24 V DC	24 V DC power to TM-M
	2	TNMMDRN	O	0/24 V DC	TM-M: On/Off

Connector	Pin	Signal	I/O	Voltage	Description
YC25 Connected to toner motor C	1	+24V3	O	24 V DC	24 V DC power to TM-C
	2	TNMCDRN	O	0/24 V DC	TM-C: On/Off
YC26 Connected to toner motor Y	1	+24V3	O	24 V DC	24 V DC power to TM-Y
	2	TNMYDRN	O	0/24 V DC	TM-Y: On/Off
YC27 Connected to lift motor	1	LMOTDRN	O	0/24 V DC	LM: On/Off
	2	GND	-	-	Ground
YC28 Connected to container fan motor	1	+24V1	O	24 V DC	24 V DC power to CFM
	2	TCONTFAN DRN	O	0/12/24 V DC	CFM: Full speed/Half speed/Off
YC29 Connected to left fan motor	1	+24V1	O	24 V DC	24 V DC power to LFM
	2	LFANDRN	O	0/12/24 V DC	LFM: Full speed/Half speed/Off
YC30 Connected to inner tray switch	1	TOPOPON	O	0/3.3 V DC	ITSW: On/Off
	2	GND	-	-	Ground
YC31 Connected to laser scanner unit KM	1	GND	-	-	Ground
	2	VREFK	O	Analog	APCPWB-K laser power standard voltage
	3	LONBKN	O	0/3.3 V DC	APCPWB-K sample/hold signal
	4	ENBKN	O	0/3.3 V DC	APCPWB-K laser enable signal
	5	PDKN	I	0/3.3 V DC (pulse)	Horizontal synchronizing signal
	6	GND	-	-	Ground
	7	VREFM	O	Analog	APCPWB-M laser power standard voltage
	8	LONBMN	O	0/3.3 V DC	APCPWB-M sample/hold signal
	9	ENBMN	O	0/3.3 V DC	APCPWB-M laser enable signal
	10	PDMN	I	0/3.3 V DC (pulse)	Horizontal synchronizing signal
	11	LSUTHERMM	I	Analog	ITEMS detection voltage
	12	POLCLK1	O	0/3.3 V DC (pulse)	PM-KM clock signal
	13	POLRDYN1	I	0/3.3 V DC	PM-KM ready signal
	14	POLONN1	O	0/3.3 V DC	PM-KM: On/Off
	15	GND	-	-	Ground
	16	+24V3	O	24 V DC	24 V DC power to PM-KM
	17	N.C.	-	-	Not used
	18	N.C.	-	-	Not used

Connector	Pin	Signal	I/O	Voltage	Description
YC32	1	GND	-	-	Ground
Connected to laser scanner unit CY	2	VREFC	O	Analog	APCPWB-C laser power standard voltage
	3	LONBCN	O	0/3.3 V DC	APCPWB-C sample/hold signal
	4	ENBCN	O	0/3.3 V DC	APCPWB-C laser enable signal
	5	PDCN	I	0/3.3 V DC (pulse)	Horizontal synchronizing signal
	6	GND	-	-	Ground
	7	VREFY	O	Analog	APCPWB-Y laser power standard voltage
	8	LONBYN	O	0/3.3 V DC	APCPWB-Y sample/hold signal
	9	ENBYN	O	0/3.3 V DC	APCPWB-Y laser enable signal
	10	PDYN	I	0/3.3 V DC (pulse)	Horizontal synchronizing signal
	11	LSUTHERMY	-	-	Not used
	12	POLCLK0	O	0/3.3 V DC (pulse)	PM-CY clock signal
	13	POLRDYN0	I	0/3.3 V DC	PM-CY ready signal
	14	POLONN0	O	0/3.3 V DC	PM-CY: On/Off
	15	GND	-	-	Ground
	16	+24V3	O	24 V DC	24 V DC power to PM-CY
YC33	1	GND	-	-	Ground
Connected to paper feeder	2	OPCLK	O	0/3.3 V DC (pulse)	Paper feeder clock signal
	3	OPRDYN	I	0/3.3 V DC	Paper feeder ready signal
	4	OPSDI	I	0/3.3 V DC (pulse)	Paper feeder serial communication data signal input
	5	OPSDO	O	0/3.3 V DC (pulse)	Paper feeder serial communication data signal output
	6	+3.3V1	O	3.3 V DC	3.3 V DC power to paper feeder
	7	GND	-	-	Ground
	8	OPSEL0	O	0/3.3 V DC	Paper feeder selection signal
	9	OPSEL1	O	0/3.3 V DC	Paper feeder selection signal
	10	OPSEL2	O	0/3.3 V DC	Paper feeder selection signal
	11	+24V3	O	24 V DC	24 V DC power to paper feeder

Connector	Pin	Signal	I/O	Voltage	Description
YC34	1	TNSENK	I	Analog	TS-M detection voltage
Connected to drum relay PWB	2	ERASECDR	O	0/24 V DC	CL-C: On/Off
	3	TNSENK	I	Analog	TS-K detection voltage
	4	ERASEMDR	O	0/24 V DC	CL-M: On/Off
	5	DLPTHERM	I	Analog	DEVTH detection voltage
	6	ERASEKDR	O	0/24 V DC	CL-K: On/Off
	7	+3.3V2	O	3.3 V DC	3.3 V DC power to DRRPWB
	8	EECLK	O	0/3.3 V DC (pulse)	EEPROM clock signal
	9	GND	-	-	Ground
	10	EEDATA	I/O	0/3.3 V DC (pulse)	EEPROM data signal
	11	TNSENK	I	Analog	TS-Y detection voltage
	12	ERASEYDR	O	0/24 V DC	CL-Y: On/Off
	13	TNSENK	I	Analog	TS-C detection voltage
YC35	1	DLPDIRN	I	0/3.3 V DC	DEVRSW: On/Off
Connected to developing release switch and developing release motor	2	GND	-	-	Ground
	3	DLPCMOTA	O	24/0 V DC	DEVCM: Forward/Stop (Reverse)
	4	DLPCMOTB	O	24/0 V DC	DEVCM: Reverse/Stop (Forward)
YC36	1	LSUMOTA	O	24/0 V DC	LSUCM: Forward/Stop (Reverse)
Connected to LSU cleaning motor	2	LSUMOTB	O	24/0 V DC	LSUCM: Reverse/Stop (Forward)
YC37	1	STDUBN	O	0/24 V DC (pulse)	DUM drive control signal
Connected to duplex motor	2	STDUAN	O	0/24 V DC (pulse)	DUM drive control signal
	3	STDUB	O	0/24 V DC (pulse)	DUM drive control signal
	4	STDUA	O	0/24 V DC (pulse)	DUM drive control signal
YC38	1	PREMOTDRN	O	0/24 V DC	FPRM: On/Off
Connected to fuser pressure release motor	2	GND	-	-	Ground
YC40	1	+24V1	O	24 V DC	24 V DC power to FUFM
Connected to fuser fan motor	2	FUFANDRN	O	0/12/24 V DC	FUFM: Full speed/Half speed/Off

Connector	Pin	Signal	I/O	Voltage	Description
YC42	1	GND	-	-	Ground
Connected to outer temper- ature sensor	2	AIRTEMP	I	Analog	OITEMS detection voltage (temperature)
	3	WETCLK0	O	0/3.3 V DC (pulse)	OITEMS clock signal
	4	WETCLK1	O	0/3.3 V DC (pulse)	OITEMS clock signal
	5	AIRWETOUT	I	Analog	OITEMS detection voltage (humidity)

2-3-3 Main PWB

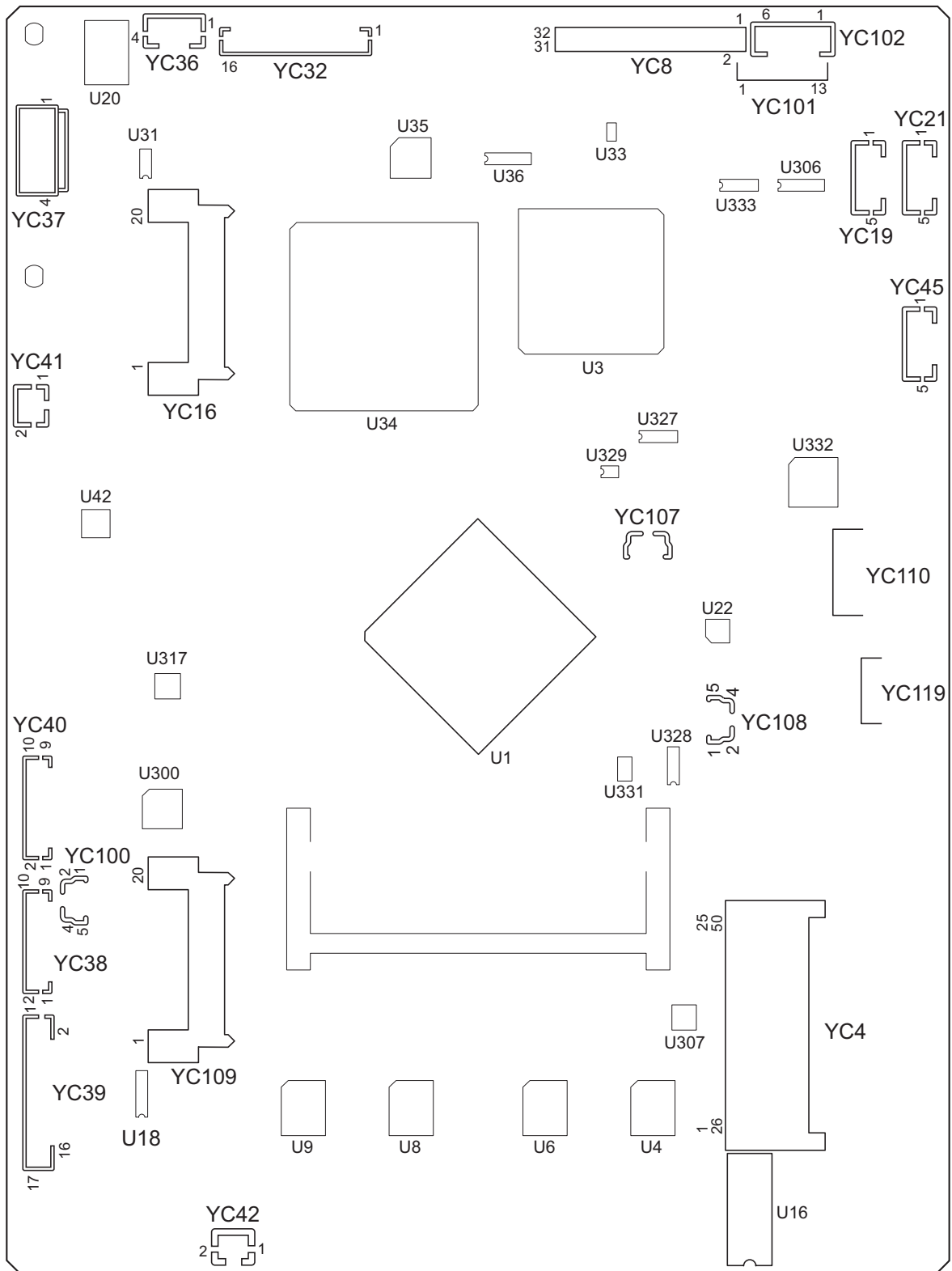


Figure 2-3-3 Main PWB silk-screen diagram

Connector	Pin	Signal	I/O	Voltage	Description
YC8	1	CCDSW	O	0/3.3 V DC	CCD color/BW change signal
Connected to CCD PWB	2	CCDSH	O	0/3.3 V DC	CCD shift gate signal
	3	CCDCLPN	O	LVDS	CCD clamp signal
	4	CCDCLPP	O	LVDS	CCD clamp signal
	5	GND	-	-	Ground
	6	CCDRSP	O	LVDS	CCD reset signal
	7	CCDRSN	O	LVDS	CCD reset signal
	8	GND	-	-	Ground
	9	CCDPH1N	O	LVDS	CCD shift register clock signal
	10	CCDPH1P	O	LVDS	CCD shift register clock signal
	11	GND	-	-	Ground
	12	CCDPH2P	O	LVDS	CCD shift register clock signal
	13	CCDPH2N	O	LVDS	CCD shift register clock signal
	14	NC	-	-	Not used
	15	+3.3VS	O	3.3 V DC	3.3 V DC power to CCDPWB
	16	HPSWN	I	0/3.3 V DC	HPS: On/Off
	17	NC	-	-	Not used
	18	+24V_LAMP	O	24 V DC	24 V DC power to CCDPWB
	19	LAMPTH	O	0/3.3 V DC	EL drive signal
	20	GND_LAMP	-	-	Ground
	21	GND	-	-	Ground
	22	GND	-	-	Ground
	23	CCDDATAB	I	Analog	CCD image output signal (B)
	24	GND	-	-	Ground
	25	CCDDATAG	I	Analog	CCD image output signal (G)
	26	GND	-	-	Ground
	27	CCDDATAR	I	Analog	CCD image output signal (R)
	28	GND	-	-	Ground
	29	GND	-	-	Ground
	30	+5V1	O	5 V DC	5 V DC power to CCDPWB
	31	NC	-	-	Not used
	32	+12VS	O	DC12V	12 V DC power to CCDPWB

Connector	Pin	Signal	I/O	Voltage	Description
YC16 Connected to Fax control PWB	1	VDD5	O	3.3 V DC	3.3 V DC power to FCPWB
	2	GND	-	-	Ground
	3	RESETN	I	0/3.3 V DC	Reset signal
	4	VDD5_CUT	O	3.3 V DC	3.3 V DC power to FCPWB
	5	GND	-	-	Ground
	6	WAKEUP	O	0/3.3 V DC	Control signal
	7	AUDIO	I	Analog	Audio signal
	8	RESERVE	-	-	-
	9	RESERVE	-	-	-
	10	RESERVE	-	-	-
	11	GND	-	-	Ground
	12	RESERVE	-	-	-
	13	RESERVE	-	-	-
	14	GND	-	-	Ground
	15	RESERVE	-	-	-
	16	RESERVE	-	-	-
	17	GND	-	-	Ground
	18	USB_DP	I/O	-	USB data signal
	19	USB_DN	I/O	-	USB data signal
	20	VBUS	O	3.3 V DC	3.3 V DC power to FCPWB
YC32 Connected to DP drive PWB	1	FEEDCL	O	0/24 V DC	DPPFCL: On/Off
	2	REVSOL	O	0/24 V DC	DPSBSOL: On/Off
	3	PRESOLN	O	0/24 V DC	DPPRSOL: On (Press)/Off
	4	RELSOLN	O	0/24 V DC	DPPRSOL: On (Release)/Off
	5	DPDETN	I	0/3.3 V DC	DP set signal
	6	OPSWN	I	0/3.3 V DC	DPOCS: On/Off
	7	ORGSWN	I	0/3.3 V DC	DPOS: On/Off
	8	TIMSWN	I	0/3.3 V DC	DPTS: On/Off
	9	GND	-	-	Ground
	10	+3.3V2	O	3.3 V DC	3.3 V DC power to DPDPWB
	11	GND	-	-	Ground
	12	+24V2	O	24 V DC	24 V DC power to PDPWB
	13	MOTB2	O	0/24 V DC (pulse)	DPPFM drive control signal
	14	MOTA2	O	0/24 V DC (pulse)	DPPFM drive control signal
	15	MOTB1	O	0/24 V DC (pulse)	DPPFM drive control signal
	16	MOTA1	O	0/24 V DC (pulse)	DPPFM drive control signal

Connector	Pin	Signal	I/O	Voltage	Description
YC36 Connected to ISU motor	1	SCMOTB2	O	0/24 V DC (pulse)	ISUM drive control signal
	2	SCMOTA1	O	0/24 V DC (pulse)	ISUM drive control signal
	3	SCMOTB1	O	0/24 V DC (pulse)	ISUM drive control signal
	4	SCMOTA2	O	0/24 V DC (pulse)	ISUM drive control signal
YC37 Connected to power source PWB	1	+24V1	I	24 V DC	24 V DC power from PSPWB
	2	GND	-	-	Ground
	3	GND	-	-	Ground
	4	+5V1	I	5 V DC	5 V DC power from PSPWB
YC38 Connected to laser scanner unit KM	1	GND	-	-	Ground
	2	+3.3V3	O	3.3 V DC	3.3 V DC power to APCPWB-K
	3	PDMN	I	0/3.3 V DC (pulse)	Horizontal synchronizing signal
	4	VDOMP	O	LVDS	APCPWB-K video data signal (+)
	5	VDOMN	O	LVDS	APCPWB-K video data signal (-)
	6	GND	-	-	Ground
	7	+3.3V3	O	3.3 V DC	3.3 V DC power to APCPWB-M
	8	PDKN	I	0/3.3 V DC (pulse)	Horizontal synchronizing signal
	9	VDOKP	O	LVDS	APCPWB-M video data signal (+)
	10	VDOKN	O	LVDS	APCPWB-M video data signal (-)
YC39 Connected to relay PWB	1	+3.3V1_MFP	O	3.3 V DC	3.3 V DC power to RYPWB
	2	I2CSDA	I/O	0/3.3 V DC (pulse)	EEPROM data signal
	3	GND	-	-	Ground
	4	I2CSCL	O	0/3.3 V DC (pulse)	EEPROM clock signal
	5	SCKN	O	0/3.3 V DC (pulse)	Serial communication clock signal
	6	SO	I	0/3.3 V DC (pulse)	Serial communication data signal input
	7	SI	O	0/3.3 V DC (pulse)	Serial communication data signal output
	8	SDIR	I	0/3.3 V DC	Serial communication direction change signal
	9	SBSY	I	0/3.3 V DC	Serial busy signal
	10	EGIRN	I	0/3.3 V DC	Engine interruption signal
	11	VSYNC	I	0/3.3 V DC (pulse)	Vertical synchronizing signal
	12	+3.3V2	O	3.3 V DC	3.3 V DC power to RYPWB
	13	GND	-	-	Ground
	14	EGHOLD	O	0/3.3 V DC	Engine hold signal
	15	I2CINT	-	-	Not used
	16	HYPINT	I	0/3.3 V DC	Sleep return signal: On/Off
	17	PSSLEEPN	O	0/3.3 V DC	Sleep mode signal: On/Off

Connector	Pin	Signal	I/O	Voltage	Description
YC40 Connected to laser scanner unit CY	1	GND	-	-	Ground
	2	+3.3V3	O	3.3 V DC	3.3 V DC power to APCPWB-C
	3	PDCN	I	0/3.3 V DC (pulse)	Horizontal synchronizing signal
	4	VDOCP	O	LVDS	APCPWB-C video data signal (+)
	5	VDOCN	O	LVDS	APCPWB-C video data signal (-)
	6	GND	-	-	Ground
	7	+3.3V3	O	3.3 V DC	3.3 V DC power to APCPWB-Y
	8	PDYN	I	0/3.3 V DC (pulse)	Horizontal synchronizing signal
	9	VDOYP	O	LVDS	APCPWB-Y video data signal (+)
	10	VDOYN	O	LVDS	APCPWB-Y video data signal (-)
YC41 Connected to controller fan motor	1	+24V1	O	24 V DC	24 V DC power to CONFM
	2	CONTFAN DRN	O	0/12/24 V DC	CONFM: Full speed/Half speed/Off
YC42 Connected to right fan motor	1	+24V1	O	24 V DC	24 V DC power to RFM
	2	RFANDRN	O	0/12/24 V DC	RFM: Full speed/Half speed/Off
YC100 Connected to operation panel PWB.	1	VBUS	O	5 V DC	5 V DC power to OPPWB
	2	DATA+	I/O	-	USB data signal
	3	DATA-	I/O	-	USB data signal
	4	NC(ID)	-	-	Not used
	5	GND	-	-	Ground

Connector	Pin	Signal	I/O	Voltage	Description
YC101 Connected to operation panel PWB.	1	GND	-	-	Ground
	2	PANEL_STAT US	I	0/3.3 V DC	Operation panel status signal
	3	INT_POWER KEY_N	I	0/3.3 V DC	Power key: On/Off
	4	PANEL_RESE T	O	0/3.3 V DC	Reset signal
	5	AUDIO	O	Analog	Audio output signal
	6	LIGHTOFF_P OWERON	O	0/3.3 V DC	Sleep return signal
	7	SHUTDOWN	O	0/3.3 V DC	24 V down signal
	8	LED_PROCE SSING_N	O	0/3.3 V DC	Processing LED control signal
	9	LED_ATTENS ION_N	O	0/3.3 V DC	Attention LED control signal
	10	LED_MEMOR Y_N	O	0/3.3 V DC	Memory LED control signal
	11	SUSPEND_P OWER	O	3.3 V DC	3.3 V DC power to OPWB1
	12	ENERGY_SA VE	O	0/3.3 V DC	Energy save signal
	13	BEEP_POWE RON	O	0/3.3 V DC	Sleep return signal
YC102 Connected to operation panel PWB.	1	+5V2	O	5 V DC	5 V DC power to OPPWB
	2	+5V2	O	5 V DC	5 V DC power to OPPWB
	3	+5V2	O	5 V DC	5 V DC power to OPPWB
	4	GND	-	-	Ground
	5	GND	-	-	Ground
	6	GND	-	-	Ground
YC107 Connected to USB	1	VBUS	O	5 V DC	5 V DC power output
	2	DATA-	I/O	-	USB data signal
	3	DATA+	I/O	-	USB data signal
	4	NC	-	-	Not used
	5	GND	-	-	Ground

Connector	Pin	Signal	I/O	Voltage	Description
YC108 Connected to IC card reader.	1	VBUS	O	5 V DC	5 V DC power to ICCR
	2	DATA-	I/O	-	USB data signal
	3	DATA+	I/O	-	USB data signal
	4	NC(ID)	-	-	Not used
	5	GND	-	-	Ground
YC109 Connected to e-KUIO slot	1	VDD5	O	3.3 V DC	3.3 V DC power
	2	GND	-	-	Ground
	3	RESETN	I	0/3.3 V DC	Reset signal
	4	VDD5_CUT	O	3.3 V DC	3.3 V DC power
	5	GND	-	-	Ground
	6	WAKEUP	O	0/3.3 V DC	Control signal
	7	AUDIO	I	Analog	Audio signal
	8	RESERVE	-	-	-
	9	RESERVE	-	-	-
	10	RESERVE	-	-	-
	11	GND	-	-	Ground
	12	RESERVE	-	-	-
	13	RESERVE	-	-	-
	14	GND	-	-	Ground
	15	RESERVE	-	-	-
	16	RESERVE	-	-	-
	17	GND	-	-	Ground
	18	USB_DP	I/O	-	USB data signal
	19	USB_DN	I/O	-	USB data signal
	20	VBUS	O	3.3 V DC	3.3 V DC power

Connector	Pin	Signal	I/O	Voltage	Description
YC110	1	TC1+	O	0/3.3 V DC (pulse)	Transmission data
Connected to ethernet	2	TD1-	O	0/3.3 V DC (pulse)	Transmission data
	3	TD2+	O	0/3.3 V DC (pulse)	Transmission data
	4	RD2-	O	0/3.3 V DC (pulse)	Transmission data
	5	CT1	O	3.3 V DC	3.3 V DC power output
	6	CT2	O	3.3 V DC	3.3 V DC power output
	7	TD3+	O	0/3.3 V DC (pulse)	Transmission data
	8	TD3-	O	0/3.3 V DC (pulse)	Transmission data
	9	TD4+	O	0/3.3 V DC (pulse)	Transmission data
	10	TD4-	O	0/3.3 V DC (pulse)	Transmission data
	11	GRLED-A	O	0/3.3 V DC	LED emitter signal
	12	GRLED-K	O	0/3.3 V DC	LED emitter signal
	13	YWLED-A	O	0/3.3 V DC	LED emitter signal
	14	YWLED-K	O	0/3.3 V DC	LED emitter signal

2-3-4 Drum relay PWB



Figure 2-3-4 Drum relay PWB silk-screen diagram

Connector	Pin	Signal	I/O	Voltage	Description
YC1 Connected to engine PWB	1	TNSENK	O	Analog	TS-M detection voltage
	2	ERASECDR	I	0/24 V DC	CL-C: On/Off
	3	TNSENK	O	Analog	TS-K detection voltage
	4	ERASEMDR	I	0/24 V DC	CL-M: On/Off
	5	DLP THERM	O	Analog	DEVTH detection voltage
	6	ERASEKDR	I	0/24 V DC	CL-K: On/Off
	7	+3.3V2	I	3.3 V DC	3.3 V DC power from EPWB
	8	EECLK	I	0/3.3 V DC (pulse)	EEPROM clock signal
	9	GND	-	-	Ground
	10	EEDATA	I/O	0/3.3 V DC (pulse)	EEPROM data signal
	11	TNSENK	O	Analog	TS-Y detection voltage
	12	ERASEYDR	I	0/24 V DC	CL-Y: On/Off
	13	TNSENK	O	Analog	TS-C detection voltage
YC2 Connected to drum PWB K	1	GND	-	-	Ground
	2	EECLK	O	0/3.3 V DC (pulse)	EEPROM clock signal
	3	ERASEKDR	O	0/24 V DC	CL-K: On/Off
	4	EEDATA	I/O	0/3.3 V DC (pulse)	EEPROM data signal
	5	N.C.	-	-	Not used
	6	+3.3V2	O	3.3 V DC	3.3 V DC power to DRPWB-K
	7	DA0	-	-	Not used
	8	DA1	-	-	Not used
YC3 Connected to drum PWB M	1	GND	-	-	Ground
	2	EECLK	O	0/3.3 V DC (pulse)	EEPROM clock signal
	3	ERASEMDR	O	0/24 V DC	CL-M: On/Off
	4	EEDATA	I/O	0/3.3 V DC (pulse)	EEPROM data signal
	5	N.C.	-	-	Not used
	6	+3.3V2	O	3.3 V DC	3.3 V DC power to DRPWB-M
	7	DA0	-	-	Ground
	8	DA1	-	-	Not used
YC4 Connected to drum PWB C	1	GND	-	-	Ground
	2	EECLK	O	0/3.3 V DC (pulse)	EEPROM clock signal
	3	ERASECDR	O	0/24 V DC	CL-C: On/Off
	4	EEDATA	I/O	0/3.3 V DC (pulse)	EEPROM data signal
	5	N.C.	-	-	Not used
	6	+3.3V2	O	3.3 V DC	3.3 V DC power to DRPWB-C
	7	DA0	-	-	Not used
	8	DA1	-	-	Ground

Connector	Pin	Signal	I/O	Voltage	Description
YC5 Connected to drum PWB Y	1	GND	-	-	Ground
	2	EECLK	O	0/3.3 V DC (pulse)	EEPROM clock signal
	3	ERASEYDR	O	0/24 V DC	CL-Y: On/Off
	4	EEDATA	I/O	0/3.3 V DC (pulse)	EEPROM data signal
	5	N.C.	-	-	Not used
	6	+3.3V2	O	3.3 V DC	3.3 V DC power to DRPWB-Y
	7	DA0	-	-	Ground
	8	DA1	-	-	Ground
YC6 Connected to developing PWB K	1	GND	-	-	Ground
	2	TNSENK	I	Analog	TS-K detection voltage
	3	+3.3V2	O	3.3 V DC	3.3 V DC power to DEVPWB-K
	4	DLPTHERM	I	Analog	DEVTH detection voltage
YC7 Connected to developing PWB M	1	GND	-	-	Ground
	2	TNSEN M	I	Analog	TS-M detection voltage
	3	+3.3V2	O	3.3 V DC	3.3 V DC power to DEVPWB-M
	4	N.C.	-	-	Not used
YC10 Connected to developing PWB C	1	GND	-	-	Ground
	2	TNSEN C	I	Analog	TS-C detection voltage
	3	+3.3V2	O	3.3 V DC	3.3 V DC power to DEVPWB-C
	4	N.C.	-	-	Not used
YC13 Connected to developing PWB Y	1	GND	-	-	Ground
	2	TNSEN Y	I	Analog	TS-Y detection voltage
	3	+3.3V2	O	3.3 V DC	3.3 V DC power to DEVPWB-Y
	4	N.C.	-	-	Not used

2-3-5 DP drive PWB

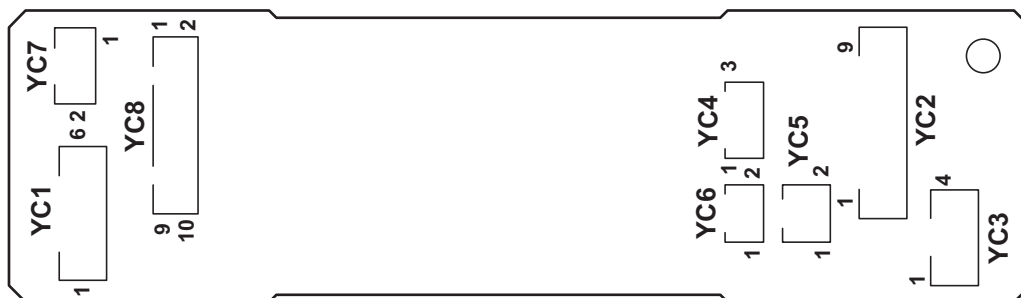


Figure 2-3-5 DP drive PWB silk-screen diagram

Connector	Pin	Signal	I/O	Voltage	Description
YC1 Connected to main PWB	1	MOTA1	I	0/24 V DC (pulse)	DPPFM drive control signal
	2	MOTB1	I	0/24 V DC (pulse)	DPPFM drive control signal
	3	MOTA2	I	0/24 V DC (pulse)	DPPFM drive control signal
	4	MOTB2	I	0/24 V DC (pulse)	DPPFM drive control signal
	5	+24V2	I	24 V DC	24 V DC power from MPWB
	6	GND	-	-	Ground
YC2 Connected to DP open/close sensor, DP original sensor and DP timing sensor	1	+3.3V2	O	3.3 V DC	3.3 V DC power to DPOCS
	2	GND	-	-	Ground
	3	OPSWN	I	0/3.3 V DC	DPOCS: On/Off
	4	+3.3V2	O	3.3 V DC	3.3 V DC power to DPOS
	5	GND	-	-	Ground
	6	ORGSWN	I	0/3.3 V DC	DPOS: On/Off
	7	+3.3V2	O	3.3 V DC	3.3 V DC power to DPTS
	8	GND	-	-	Ground
	9	TIMSWN	I	0/3.3 V DC	DPTS: On/Off
YC3 Connected to DP paper feed motor	1	DPMOT1A	O	0/24 V DC (pulse)	DPPFM drive control signal
	2	DPMOT2A	O	0/24 V DC (pulse)	DPPFM drive control signal
	3	DPMOT1B	O	0/24 V DC (pulse)	DPPFM drive control signal
	4	DPMOT2B	O	0/24 V DC (pulse)	DPPFM drive control signal
YC4 Connected to DP pressure solenoid	1	+24V2	O	24 V DC	24 V DC power to DPPRSOL
	2	PRESOLN	O	0/24 V DC	DPPRSOL: On (Press)/Off
	3	RELSOLN	O	0/24 V DC	DPPRSOL: On (Release)/Off
YC5 Connected to DP switch-back solenoid	1	+24V2	O	24 V DC	24 V DC power to DPSBSOL
	2	REVSOL	O	0/24 V DC	DPSBSOL: On/Off
YC6 Connected to DP paper feed clutch	1	+24V2	O	24 V DC	24 V DC power to DPPFCL
	2	FEEDCL	O	0/24 V DC	DPPFCL: On/Off

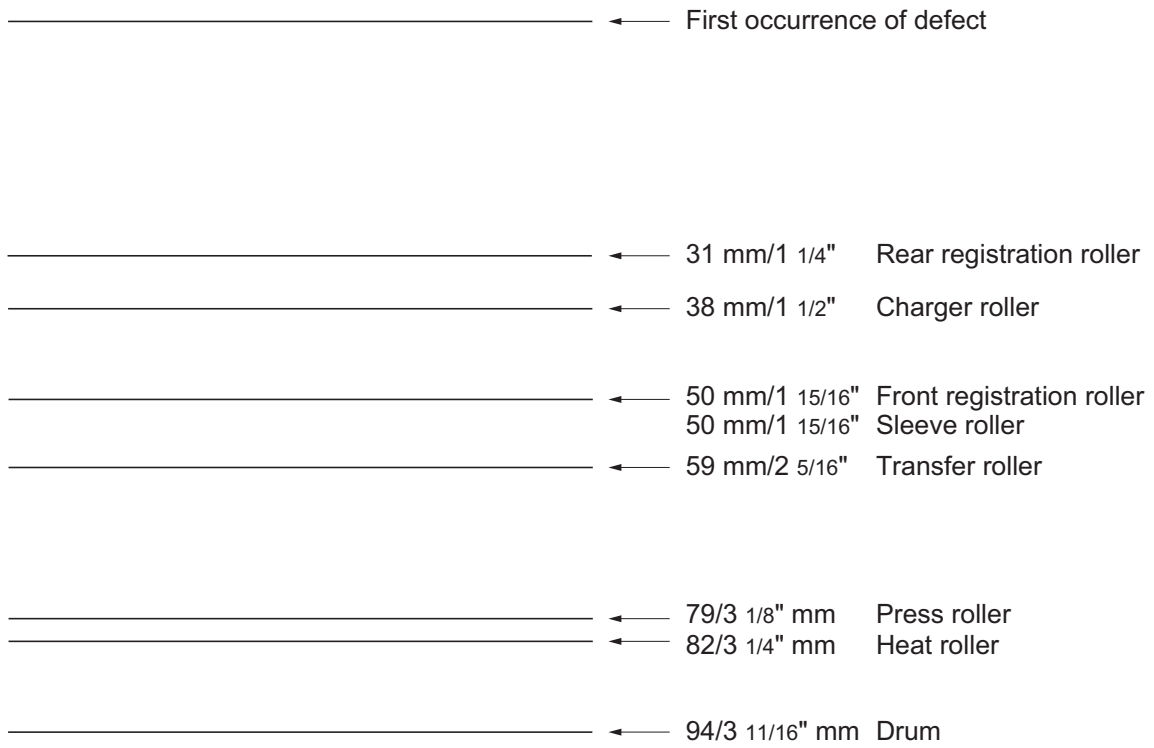
Connector	Pin	Signal	I/O	Voltage	Description
YC8	1	+3.3V2	I	3.3 V DC	3.3 V DC power from MPWB
Connected to main PWB	2	GND	-	-	Ground
	3	TIMSWN	O	0/3.3 V DC	DPTS: On/Off
	4	ORGSWN	O	0/3.3 V DC	DPOS: On/Off
	5	OPSWN	O	0/3.3 V DC	DPOCS: On/Off
	6	DPDETN	O	0/3.3 V DC	DP set signal
	7	RELSOLN	I	0/24 V DC	DPPRSOL: On (Release)/Off
	8	PRESOLN	I	0/24 V DC	DPPRSOL: On (Press)/Off
	9	REVSOL	I	0/24 V DC	DPSBSOL: On/Off
	10	FEEDCL	I	0/24 V DC	DPPFCL: On/Off

2-4-1 Appendixes

(1) Maintenance kits

Maintenance part name		Parts No.	Alternative part No.
Name used in service	Name used in parts list		
MK-590/Maintenance kit (200,000 images)	MK-590/MAINTENANCE KIT	1702KV8NLO	072KV8NL
Developing unit K	DV-560(K)	-	-
Developing unit M	DV-560(M)	-	-
Developing unit C	DV-560(C)	-	-
Developing unit Y	DV-560(Y)	-	-
Drum unit	DK-590	-	-
Intermediate transfer unit	TR-590	-	-
Fuser unit	FK-590(E)	-	-
Retard roller unit	PARTS HOLDER RETARD ASSY SP	-	-
Paper feed roller unit	PARTS HOLDER FEED ASSY SP	-	-
MP paper feed roller	ROLLER M/P ASSY	-	-

(2) Repetitive defects gauge



(3) Firmware environment commands

The printer maintains a number of printing parameters in its memory. These parameters may be changed permanently with the FRPO (Firmware RePrOgram) commands.

This section provides information on how to use the FRPO command and its parameters using examples.

Using FRPO commands for reprogramming firmware

The current settings of the FRPO parameters are listed as optional values on the service status page.

Note: Before changing any FRPO parameter, print out a service status page, so you will know the parameter values before the changes are made. To return FRPO parameters to their factory default values, send the FRPO INIT (FRPO-INITialize) command.(!R! FRPO INIT; EXIT;)

The FRPO command is sent to the printer in the following sequence:

!R! FRPO parameter, value; EXIT;

Example: Changing emulation mode to PCL6

!R! FRPO P1, 6; EXIT;

FRPO parameters

Item	FRPO	Setting values	Factory setting
Default pattern resolution	B8	0: 300 dpi 1: 600 dpi	0
Page orientation	C1	0: Portrait 1: Landscape	0
Default font No. *	C2 C3 C5	Middle two digits of power-up font Last two digits of power-up font First two digits of power-up font	0 0 0
PCL font switch	C8	0: HP compatibility mode 32: Conventional compatibility mode	0
Total host buffer size	H8	0 to 99 in units of the size defined by FRPO S5	5
Form feed time-out value	H9	Value in units of 5 seconds (1 to 99)	6
Duplex mode	N4	0: Off 1: Long edge binding 2: Short edge binding	0
Sleep timer time-out time	N5	Value in units of 1 minute (1 to 240)	1
Ecoprint level	N6	0: Off 2: On	0

Item	FRPO	Setting values	Factory setting
Default emulation mode	P1	6: PCL 6 9: KPDL	6
Carriage-return action	P2	0: Ignores 1: Carriage-return 2: Carriage-return + linefeed	1
Linefeed action	P3	0: Ignores 1: Linefeed 2: Linefeed + carriage-return	1
Automatic emulation switching	P4	0: AES disabled 1: AES enabled	0
Automatic emulation switching trigger	P7	0: Page eject commands 1: None 2: Page eject and prescribe EXIT commands 3: Prescribe EXIT commands 4: Formfeed (^L) commands 6: Prescribe EXIT and formfeed commands 10: Page eject commands; if AES fails, resolves to KPDL	10
Command recognition character	P9	ASCII code of 33 to 126	82 (R)
Default paper size	R2	0: Size of the default paper cassette (See R4.) 1: Envelope Monarch 2: Envelope #10 3: Envelope DL 4: Envelope C5 5: Executive 6: Letter 7: Legal 8: ISO A4 9: JIS B5 13: ISO A5 14: ISO A6 15: JIS B6 16: Envelope #9 17: Envelope #6-3/4 18: ISO B5 19: Custom 31: Postcard 32: Reply-paid postcard 33: Oficio II 40: 16K 50: Statement 51: Folio 52: Youkei 2 53: Youkei 4	0
Default cassette	R4	0: MP tray 1: Cassette 1 2: Cassette 2 3: Cassette 3	1

Item	FRPO	Setting values	Factory setting
MP tray paper size	R7	0: Maximum paper size Same as the R2 values except: 0	8
A4/letter equation	S4	0: Off 1: On	1
Host buffer size	S5	0: 10 KB 1: 100 KB 2: 1024 KB	1
RAM disk capacity	S6	0 to 1024 MB	400
RAM disk	S7	0: Disabled 1: Enabled	0
Wide A4	T6	0: Off 1: On	0
Line spacing *	U0	Lines per inch (integer value)	6
	U1	Lines per inch (decimal value)	0
Character spacing *	U2	Characters per inch (integer value)	10
	U3	Characters per inch (decimal value)	0
Country code	U6	0: US-ASCII 1: France 2: Germany 3: UK 4: Denmark 5: Sweden 6: Italy 7: Spain 8: Japan 9: US Legal 10: IBM PC-850 (Multilingual) 11: IBM PC-860 (Portuguese) 12: IBM PC-863 (Canadian French) 13: IBM PC-865 (Norwegian) 14: Norway 15: Denmark 2 16: Spain 2 17: Latin America 50 - 99: HP PCL symbol set coding	41
Code set at power up in daisywheel emulation	U7	0: Same as the default emulation mode (P1) 1: IBM 6: IBM PC-8 7 - 99: HP PCL symbol set coding	53
Font pitch for fixedpitch scalable font *	U8	Default font pitch (integer value)	10
	U9	Default font pitch (decimal value)	0
Font height for the default scalable font *	V0	Integer value in 100 points: 0 to 9	0
	V1	Integer value in points: 0 to 99	12
	V2	decimal value in 1/100 points: 0, 25, 50, 75	0

Item	FRPO	Setting values	Factory setting
Default scalable font *	V3	Name of typeface of up to 32 characters, enclosed with single or double quotation marks	Courier
Default weight (courier and letter Gothic)	V9	0: Courier = darkness Letter Gothic = darkness 1: Courier = regular Letter Gothic = darkness 4: Courier = darkness Letter Gothic = regular 5: Courier = regular Letter Gothic = regular	5
Color mode	W1	0: Black & white 1: Color	1
Gloss mode	W6	0: Low (normal) 1: High	0
Paper type for the MP tray	X0	1: Plain 2: Transparency 3: Preprinted 4: Label 5: Bond 6: Recycle 7: Vellum 9: Letterhead 10: Color 11: Prepunched 12: Envelope 13: Cardstock 14: Coated 16: Thick 17: High quality 21 to 28: Custom1 to 8	1
Paper type for cassettes 1	X1	1: Plain 3: Preprinted 5: Bond 6: Recycled 7: Vellum 9: Letterhead 10: Color 11: Prepunched 16: Thick 17: High quality 21 to 28: Custom1 to 8	1

Item	FRPO	Setting values	Factory setting
Paper type for cassettes 2 and 3	X2 X3	Paper feeder (Normal) 1: Plain 3: Preprinted 5: Bond 6: Recycled 9: Letterhead 10: Color 11: Prepunched 17: High quality 21 to 28: Custom1 to 8 Multi purpose feeder 1: Plain 3: Preprinted 4: Label 5: Bond 6: Recycle 7: Vellum 9: Letterhead 10: Color 11: Prepunched 12: Envelope 13: Cardstock 14: Coated 16: Thick 17: High quality 21 to 28: Custom1 to 8	1
PCL paper source	X9	0: Paper selection depending on an escape sequence compatible with HP-LJ5Si. 2: Paper selection depending on an escape sequence compatible with HP-LJ8000.	0
Automatic continue for 'Press GO'	Y0	0: Off 1: On	0
Automatic continue timer	Y1	Value in units of 5 seconds (1 to 99)	6 (30 s)
Error message for device error	Y3	0: Not detect 127: Detect	127
Duplex operation for specified paper type (Prepunched, Preprinted and Letterhead)	Y4	0: Off 1: On	0

Item	FRPO	Setting values	Factory setting
Default operation for PDF direct printing	Y5	0: Enlarges or reduces the image to fit in the current paper size. Loads paper from the current paper cassette. 1: Through the image. Loads paper which is the same size as the image. 2: Enlarges or reduces the image to fit in the current paper size. Loads Letter, A4 size paper depending on the image size. 3: Through the image. Loads Letter, A4 size paper depending on the image size. 8: Through the image. Loads paper from the current paper cassette. 9: Through the image. Loads Letter, A4 size paper depending on the image size. 10: Enlarges or reduces the image to fit in the current paper size. Loads Letter, A4 size paper depending on the imagesize.	0
e-MPS error	Y6	0: Does not print the error report and display the error message. 1: Prints the error report. 2: Displays the error message. 3: Prints the error report and displays the error message.	3

*: Ignored in some emulation modes.

(4) Maintenance Commands

This section provides information on how to use the maintenance command and its parameters using examples.

Adjusting the print start timing (alternative command for the maintenance mode U034)

Description

Adjusts the leading edge registration or left edge.

Purpose

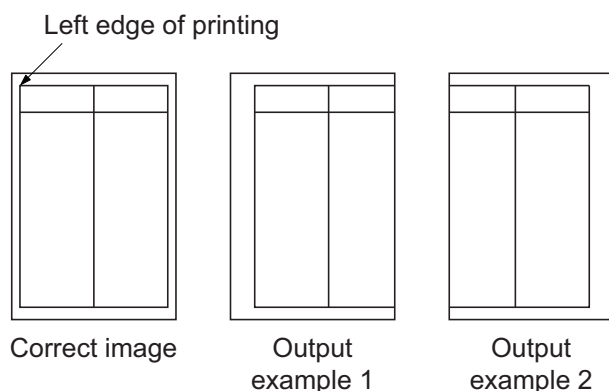
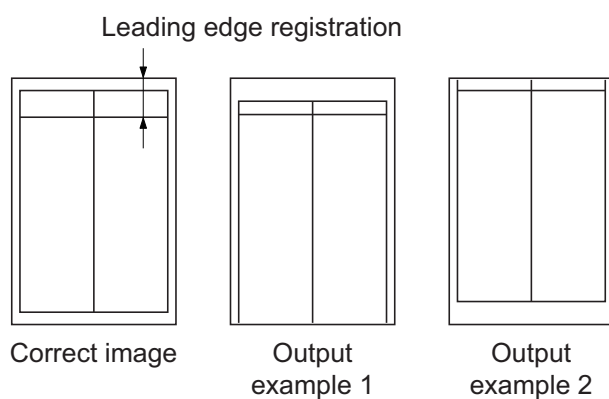
Make the adjustment if there is a regular error between the leading edges of the copy image and original.

Make the adjustment if there is a regular error between the left edges of the copy image and original.

Format	!R! KCFG"PFRC",#1 ,#2 ,#3;	
Parameter	#1	Paper source number 0: MP tray 2-6 : Cassette2-6 100: Duplex (e.g. landscape images short-edge bind) 200: Rotated duplex (e.g. portrait images long-edge bind)
	#2	Edge to adjust 1: Leading edge 2: Left edge
	#3	Adjustable range (-128 to +127) number of dot in 600dpi

Example: Set the leading edge of MP tray to +30 dots

```
!R! KCFG "PFRC",0,1,30;EXIT;
```



Adjusting the scanner magnification (alternative command for the maintenance mode U065)

Description

Adjusts the magnification of the original scanning.

Purpose

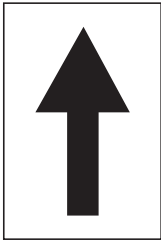
Make the adjustment if the magnification in the main scanning direction is incorrect.

Make the adjustment if the magnification in the auxiliary scanning direction is incorrect.

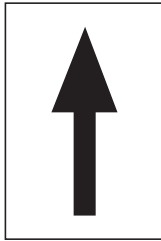
Format	!R! KCFG "SCAN",8, #1,#2;EXIT;	
Parameter	#1	1: Y SCAN ZOOM Scanner magnification in the main scanning direction 2: X SCAN ZOOM Scanner magnification in the auxiliary scanning direction
	#2	#1=1: Adjustable range: -32 to 127 (in 0.1% increment) (0: default) #2=2 : Adjustable range: -25 to 25 (in 0.1% increment) (0: default)

Example: Y SCAN ZOOM set to 55, X SCAN ZOOM set to 10

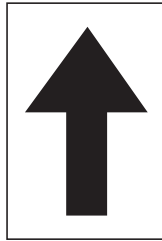
!R! KCFG "SCAN",8,1,55; KCFG "SCAN",8,2,10;EXIT;



Original

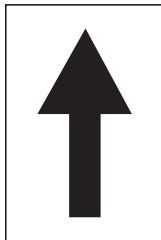


Copy
example 1

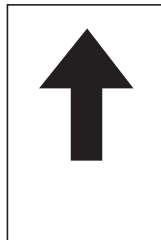


Copy
example 2

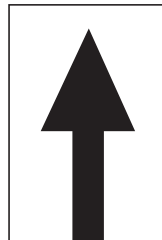
Magnified in the main
scanning direction



Original



Copy
example 1



Copy
example 2

Magnified in the auxiliary
scanning direction

Adjusting the scanner leading edge registration (alternative command for the maintenance U066)

Description

Adjusts the scanner leading edge registration of the original scanning.

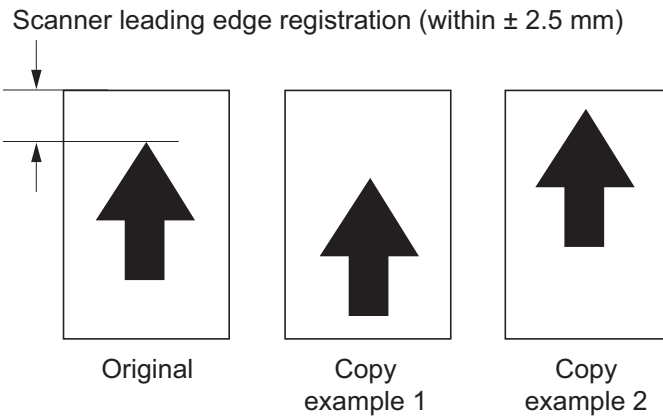
Purpose

Make the adjustment if there is a regular error between the leading edges of the copy image and original.

Format	!R! KCFG "SCAN",5,#1,#2;;EXIT;	
Parameter	#1	1: Scanner leading edge registration 2: Scanner leading edge registration of rotated scan
	#2	Adjustable range: -45 to 45 (in 0.086mm increment) (0: default)

Example: Scanner leading edge registration set to 10 to increase 0.86mm

!R! KCFG "SCAN",5,1,"10";EXIT;



Adjusting the scanner center line (alternative command for the maintenance mode U067)

Description

Adjusts the scanner center line of the original scanning.

Purpose

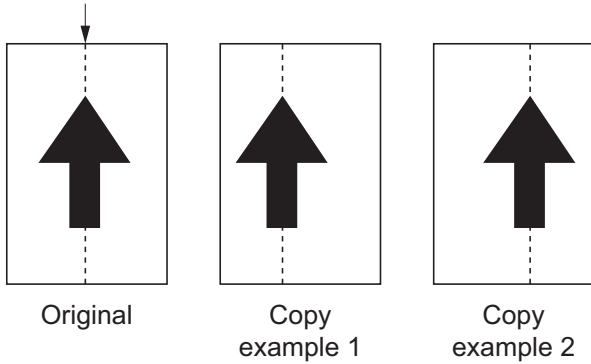
Make the adjustment if there is a regular error between the center lines of the copy image and original.

Format	!R! KCFG "SCAN",6, #1;#2;EXIT;	
Parameter	#1	1: Scanner center line 2: Scanner center line of rotated scan
	#2	#1=1: Adjustable range: -70 to 70 (in 0.086mm increment) (0: default) #1=2: Adjustable range: -40 to 40 (in 0.086mm increment) (0: default)

Example: Scanner leading edge registration set to 20 to increase 1.72mm

!R! KCFG "SCAN",6,1,20;EXIT;

Scanner center line (within ± 2.0 mm)



Adjusting the scanning position for originals from the DP (alternative command for the maintenance mode U068)

Description

Adjusts the position for scanning originals from the DP. Performs the test copy at the four scanning positions after adjusting.

Purpose

Used when the image fogging occurs because the scanning position is not proper when the DP is used. Execute KCFG "EESS",4, 107, 1, "#1"; command to adjust the timing of DP leading edge when the scanning position is changed.

Format	!R! KCFG "SCAN",9, #1,#2;EXIT;	
Parameter	#1	1: DP READ Starting position adjustment for scanning originals 2: BLACK LINE Scanning position for the test copy originals
	#2	#1=1: Adjustable range: -33 to 33 (in 0.086mm increment) (0: default) #1=2: Adjustable range: 0 to 3 (in 0.22mm increment) (0: default)

Example: DP READ set to 15, BLACK LINE set to 3

!R! KCFG "SCAN",9,1,15; KCFG "SCAN",9,2,3;EXIT;

Adjusting the DP magnification (alternative command for the maintenance mode U070)

Description

Adjusts the DP original scanning speed.

Purpose

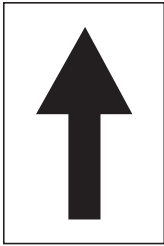
Make the adjustment if the magnification is incorrect in the auxiliary scanning direction when the DP is used.

Format	!R! KCFG "SCAN",4, #1;#2;EXIT;	
Parameter	#1	2: CONVEYING SPEED Magnification in the auxiliary scanning direction
	#2	Adjustable range: --25 to 25 (in 0.1% increment) (0: default)

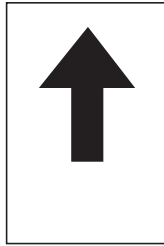
Example: DP scanning magnification set to 20 to increase 2%

!R! KCFG "SCAN",4,2,20;EXIT;

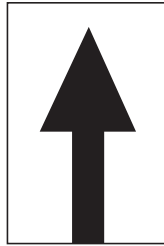
Leading edge registration



Original



Copy
example 1



Copy
example 2

Adjusting the DP scanning timing (alternative command for the maintenance mode U071)

Description

Adjusts the DP original scanning timing.

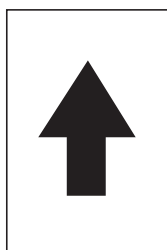
Purpose

Make the adjustment if there is a regular error between the leading or trailing edges of the original and the copy image when the DP is used.

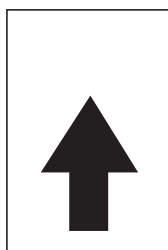
Format	!R! KCFG "SCAN",2,#1,#2;EXIT;	
Parameter	#1	1: FRONT HEAD Leading edge registration (first page) 2: FRONT TAIL Trailing edge registration (first page) 3: BACK HEAD Leading edge registration (second page) 4: BACK TAIL Trailing edge registration (second page) 5: ROTATE Leading edge registration (rotate scan)
	#2	#1=1: Adjustable range: -32 to 32 (in 0.196mm increment) (0: default) #1=2: Adjustable range: -32 to 32 (in 0.196mm increment) (0: default) #1=3: Adjustable range: -45 to 45 (in 0.196mm increment) (0: default) #1=4: Adjustable range: -45 to 45 (in 0.196mm increment) (0: default) #1=5: Adjustable range: -128 to 128 (in 0.196mm increment) (0: default)

Example: FRONT HEAD set to 10, FRONT TAIL set to 15, BACK HEAD set to 10, BACK TAIL 15
!R! KCFG "SCAN",2,1,10; KCFG "SCAN",2,2,15; KCFG "SCAN",2,3,10; KCFG "SCAN",2,4,15;EXIT;

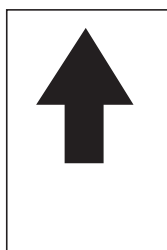
Leading edge registration



Original

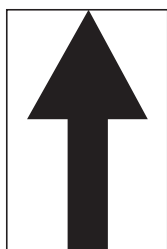


Copy example 1



Copy example 2

Trailing edge registration



Original



Copy example 1



Copy example 2

Adjusting the DP center line (alternative command for the maintenance mode U072)

Description

Adjusts the scanning center line for the DP original.

Purpose

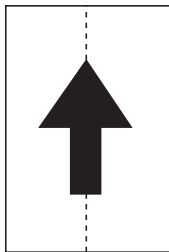
Make the adjustment if there is a regular error between the centers of the original and the copy image when the DP is used.

Format	!R! KCFG "SCAN",3, #1,#2;EXIT;	
Parameter	#1	1: FRONT Center line (first page) 2: BACK Center line (second page) 3: ROTATE Center line (rotated scan)
	#2	Setting range: -39 to 39 (in 0.086mm increment) (initial: 0)

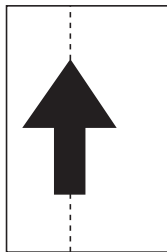
Example: FRONT set to 15, BACK set to 3

!R! KCFG "SCAN",3,1,15; KCFG "SCAN",3,2,3;EXIT;

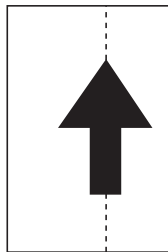
DP center line



Original

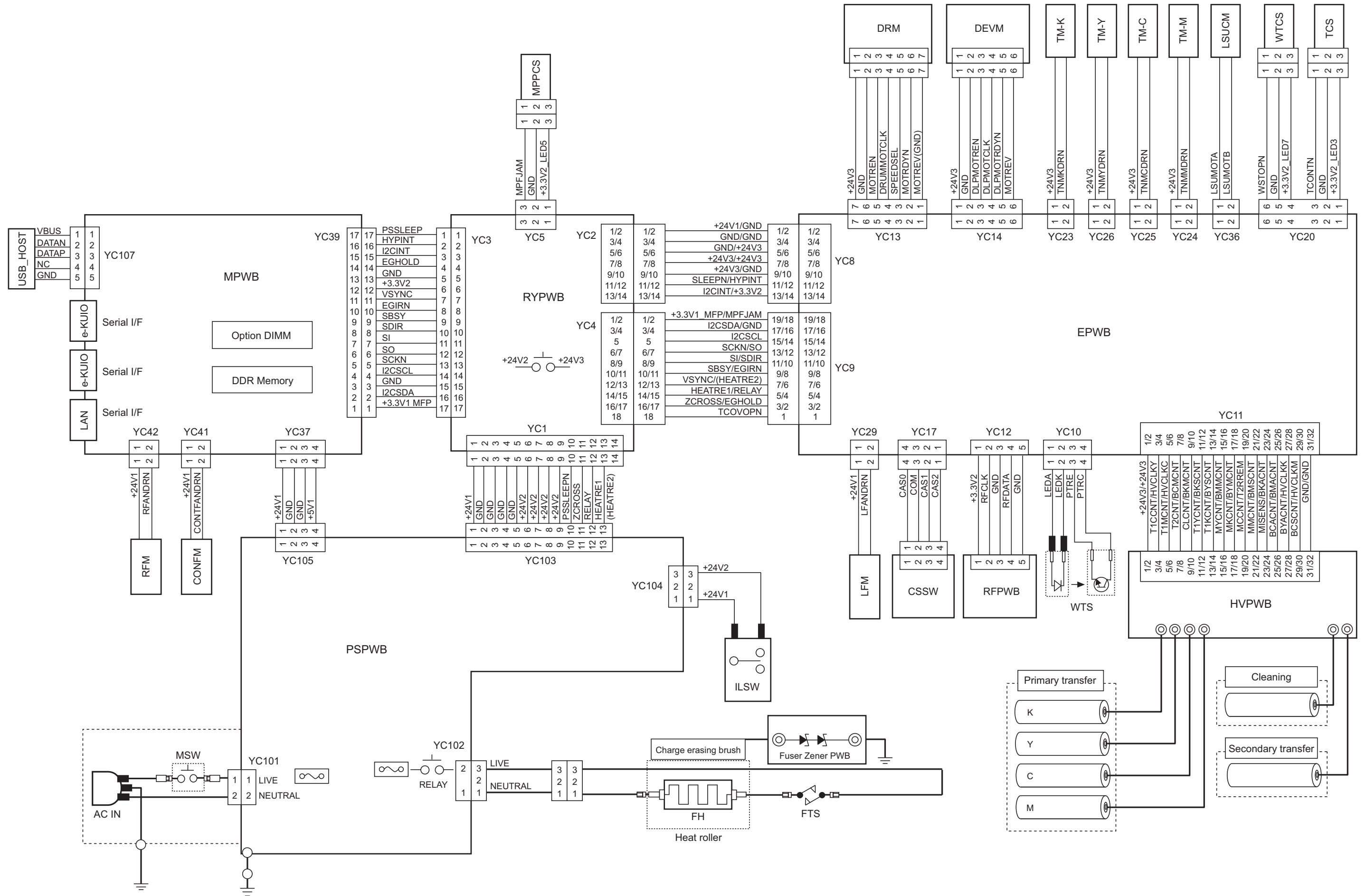


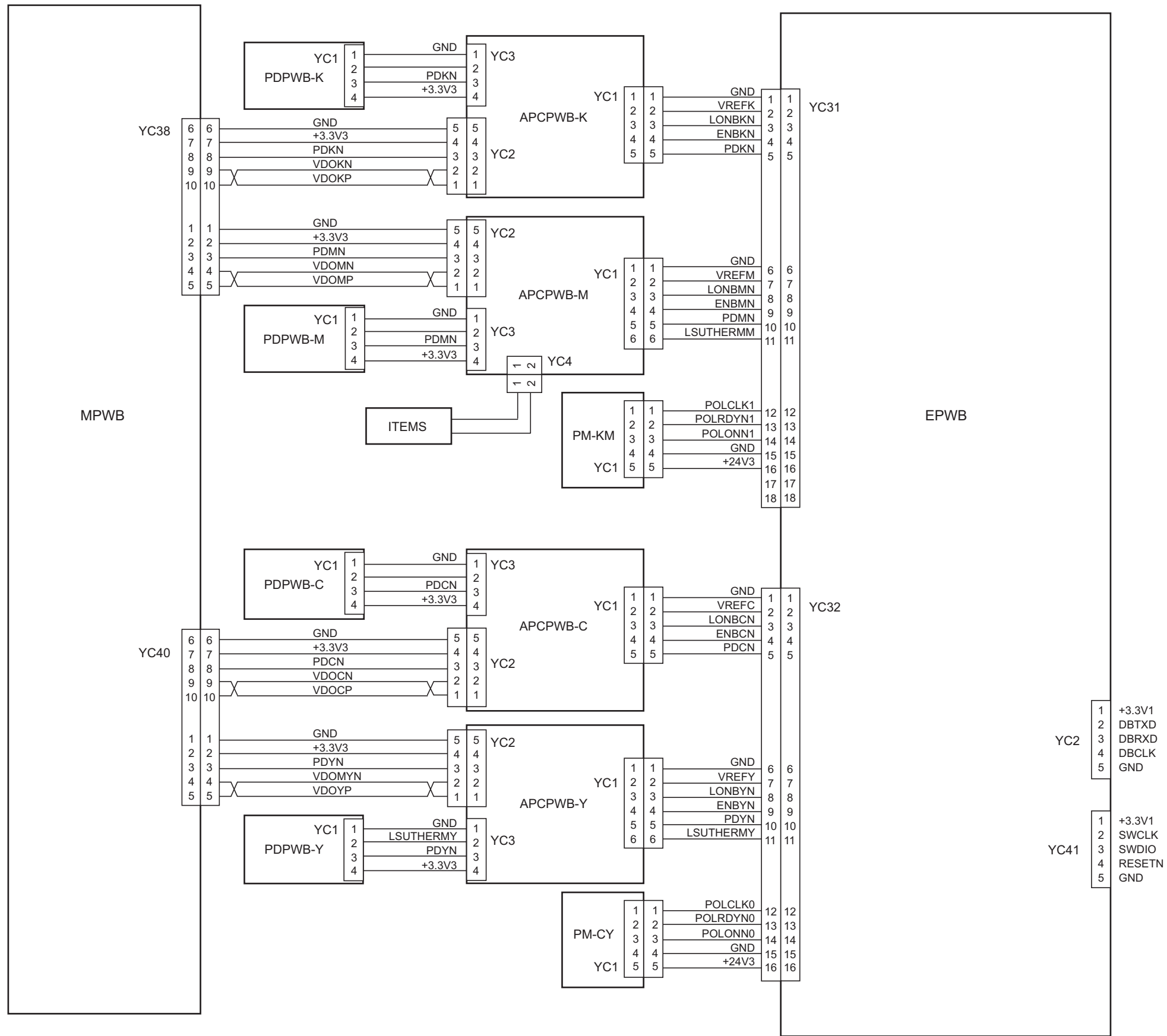
Copy
example 1

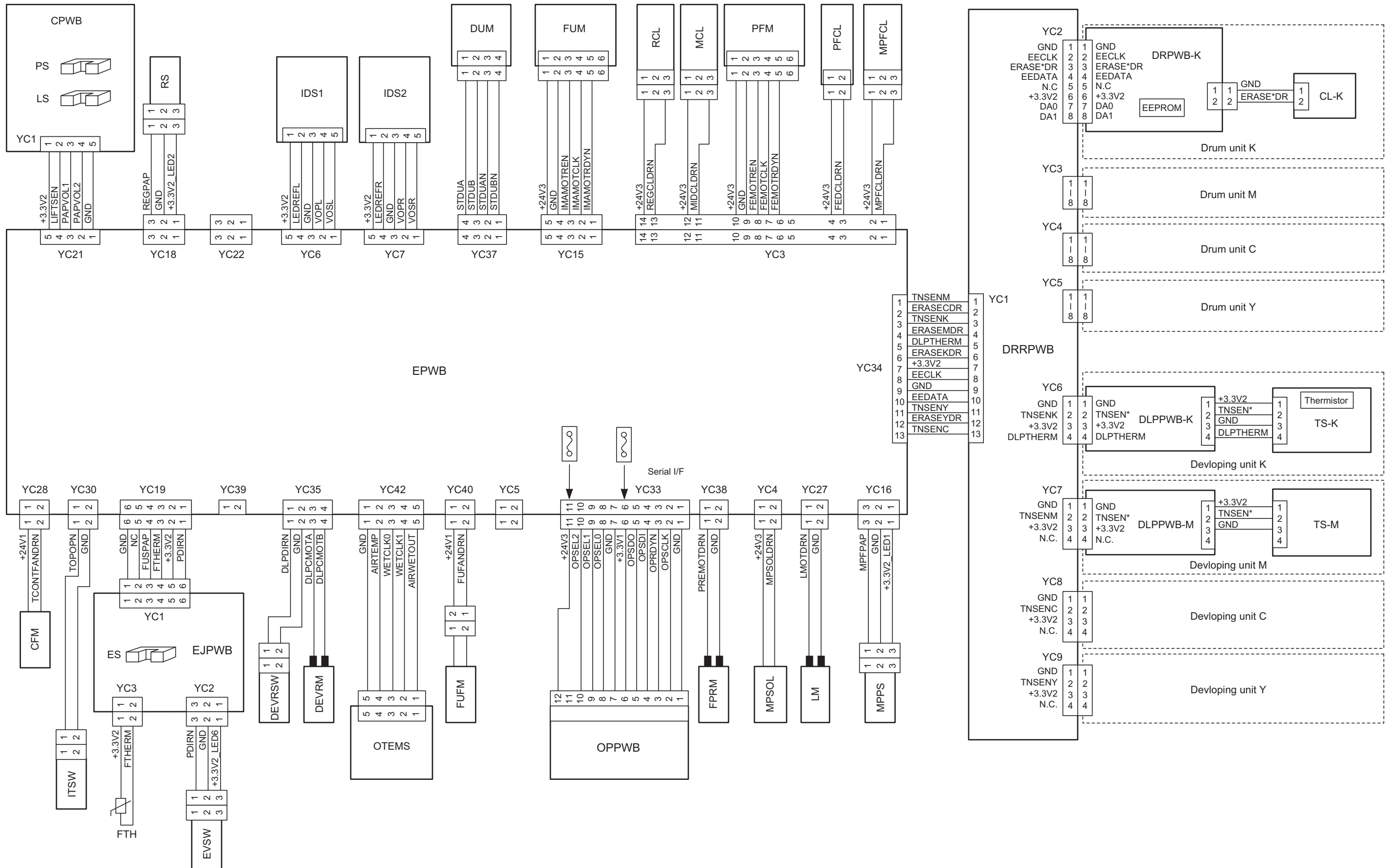


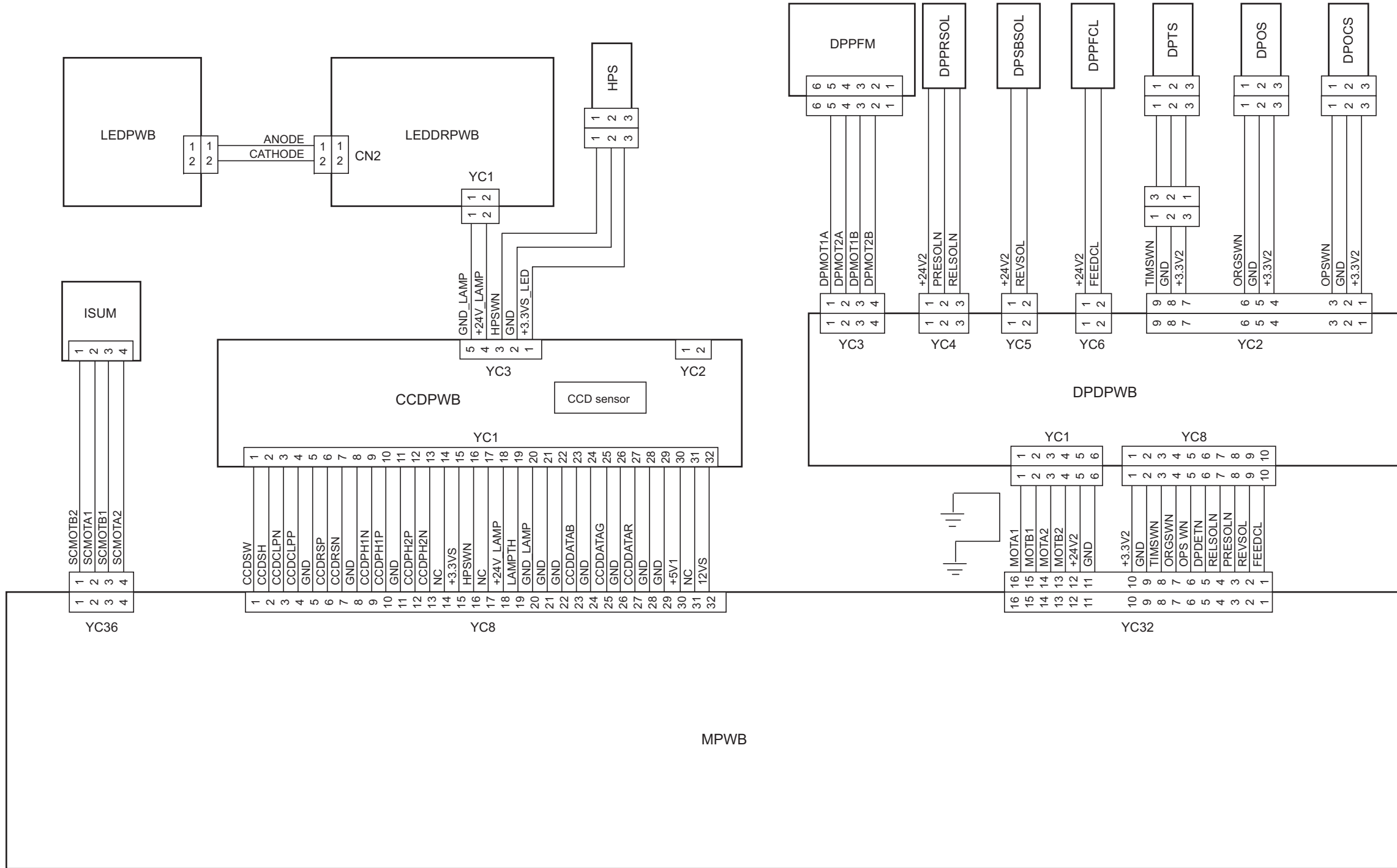
Copy
example 2

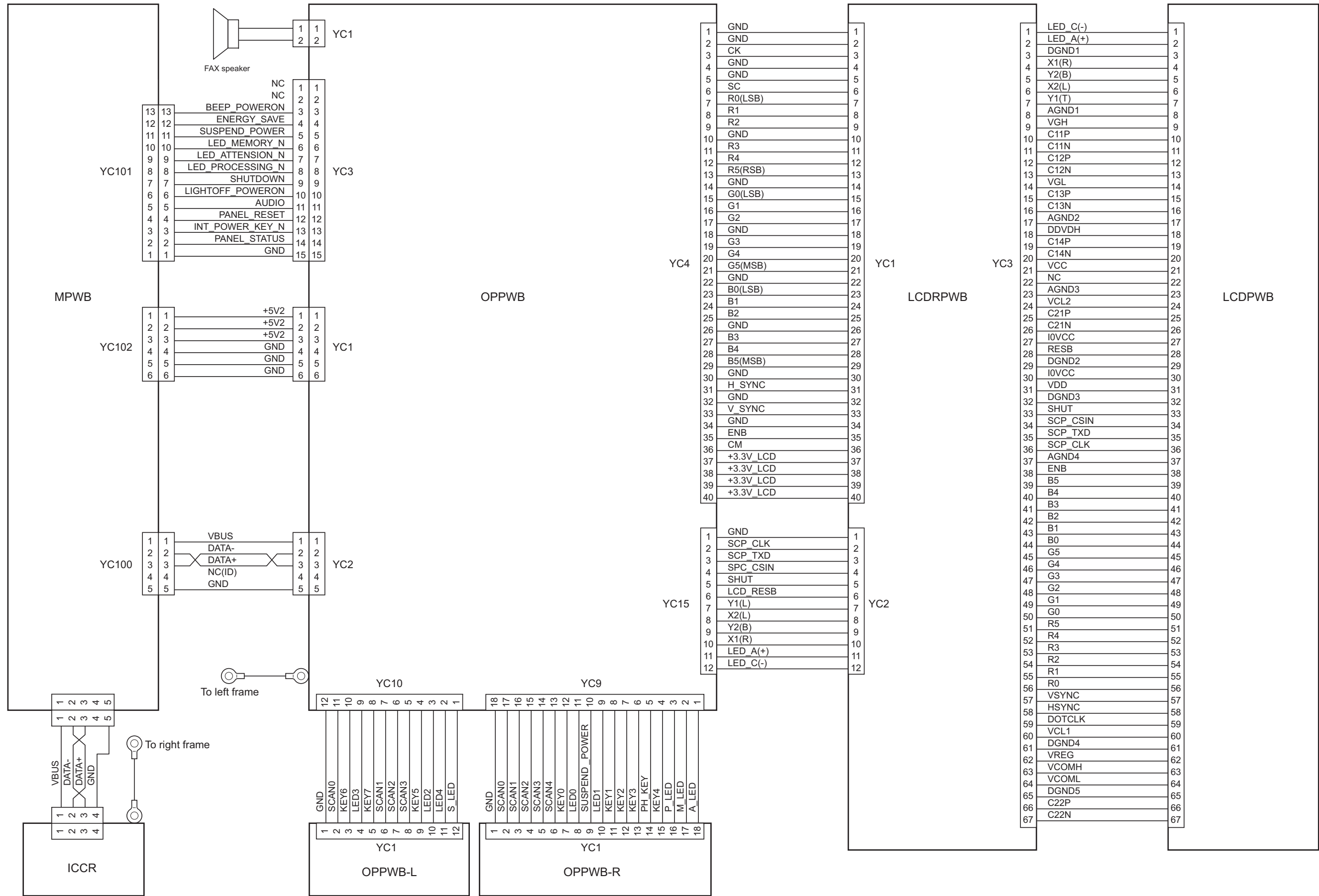
(5) Wiring diagram





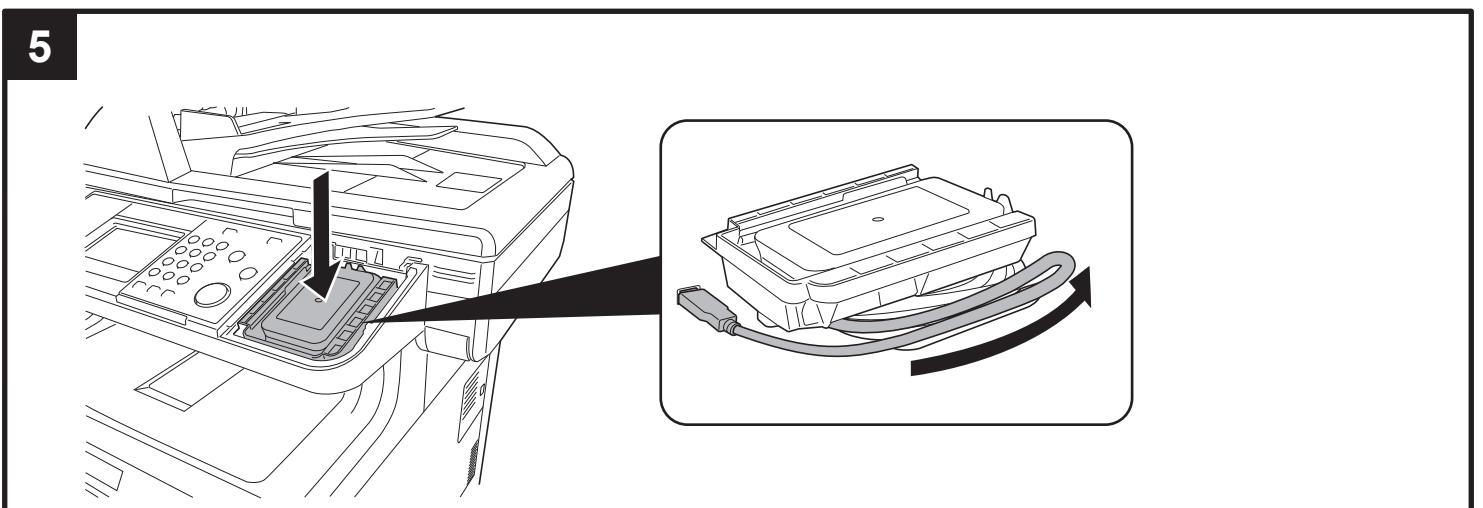
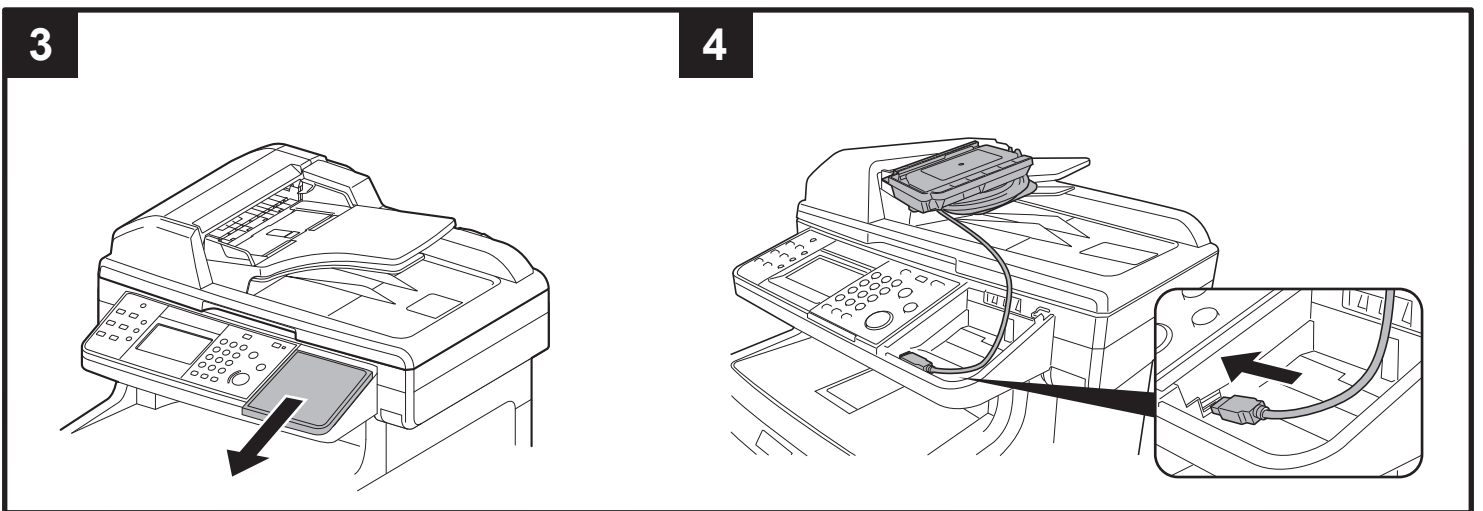
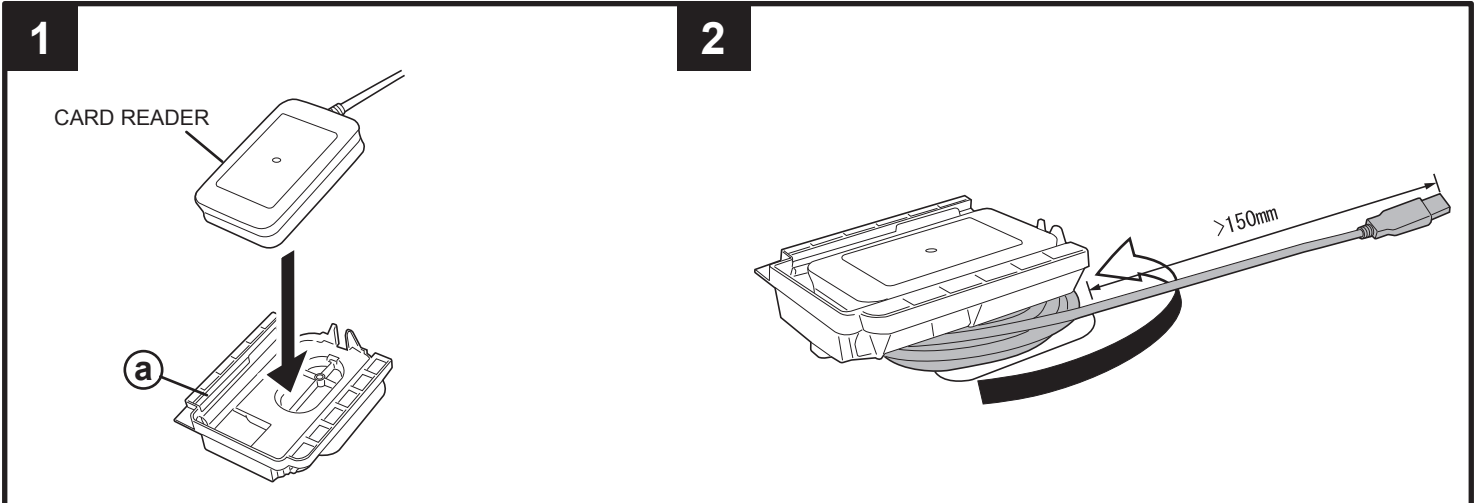
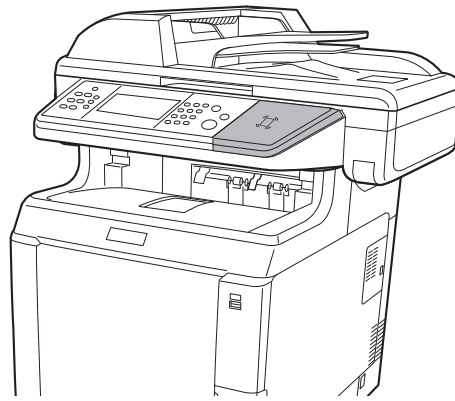
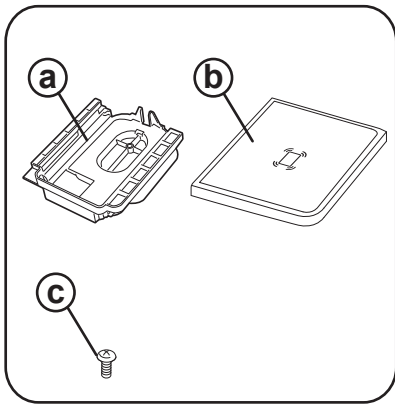




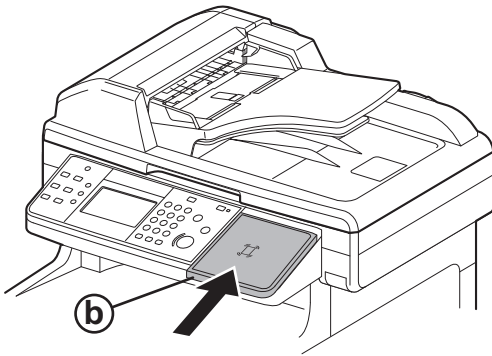


INSTALLATION GUIDE FOR Card Authentication Kit(D)

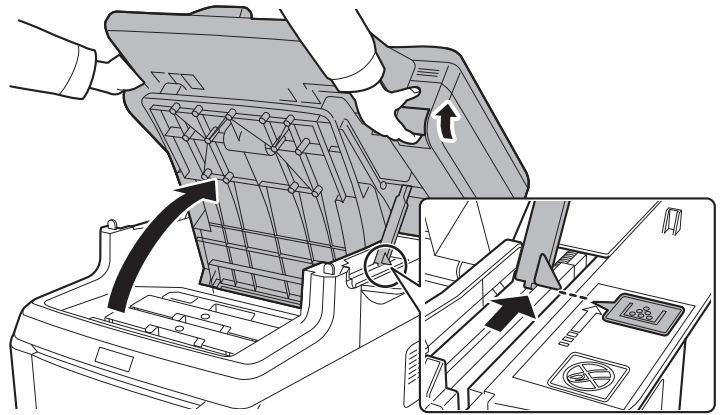
CARD READER HOLDER (D)



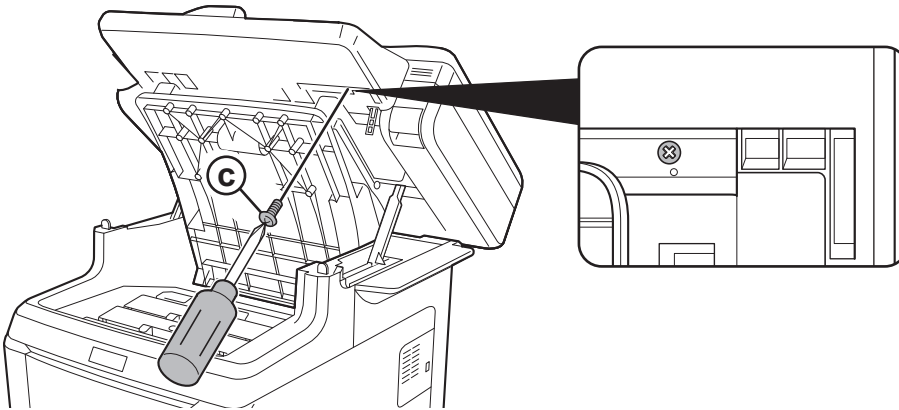
6



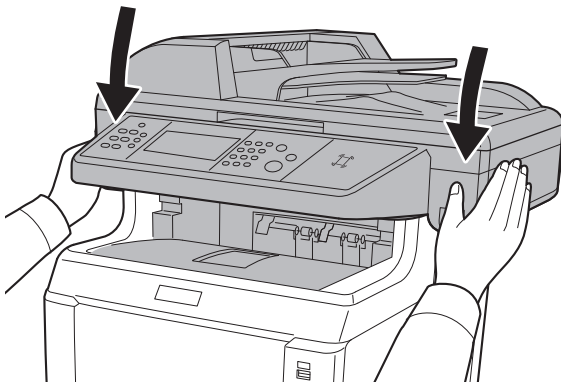
7



8



9



10

- (ENG) Refer to the Card Authentication Kit (B) Operation Guide on the bundled Product Library DVD for descriptions of the Card Authentication Kit options and the procedures for using them.
- (ES) Consulte la Card Authentication Kit (B) Operation Guide, disponible en el Product Library DVD suministrado, para obtener descripciones de las opciones de Card Authentication Kit y los procedimientos de uso.
- (FR) Se reporter au Card Authentication Kit (B) Operation Guide sur le Product Library DVD fourni pour les descriptions des options de Card Authentication Kit et leurs procédures d'utilisation.
- (DE) Siehe auch in Card Authentication Kit (B) Operation Guide auf der Product Library DVD für Erklärungen der Card Authentication Kit Optionen und den Gebrauch.
- (IT) Vedere Card Authentication Kit (B) Operation Guide sul Product Library DVD fornito per la descrizione delle opzioni Card Authentication Kit e le procedure di utilizzo del kit.
- (CN) 有关 Card Authentication Kit 选项的说明以及使用该选项的步骤, 请参阅附带的 Product Library DVD 上的 Card Authentication Kit (B) 操作手册。
- (TW) 有關 Card Authentication Kit 選項和使用它們的步驟的說明, 請參閱附帶的 Product Library DVD 上的 Card Authentication Kit (B) 操作手冊。
- (KO) Card Authentication Kit 옵션과 사용 과정에 관한 설명은 함께 제공된 Product Library DVD 에 있는 Card Authentication Kit (B) 조작 설 명서를 참조하시기 바랍니다 .
- (JP) ICカード認証キットで設定できる内容や操作方法については、付属のProduct Library DVD に収録されているICカード認証キット (B) 使用説明書を参照してください。

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