🕰 КУОСЕКА

ECOSYS ECOSYS ECOSYS ECOSYS

FS-4300DN FS-4200DN FS-4100DN FS-2100DN FS-2100D



Published in December 2012 842LV112 2LVSM062 Rev.2

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 REMPLACEE PAR UN MODELE DE TYPE INCORRECT. METTRE AU REBUT LES BATTERIES UTILISEES SELON LES INSTRUCTIONS DONNEES.

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.

Notation of products in the manual

For the purpose of this service manual, products are identified by print speed at A4.

ECOSYS FS-4300DN : 60 ppm model ECOSYS FS-4200DN : 50 ppm model ECOSYS FS-4100DN : 45 ppm model ECOSYS FS-2100DN : 40 ppm model (with Network) ECOSYS FS-2100D : 40 ppm model (without Network)

Revision history

Revision	Date	pages	Revised contents
1	11 October 2012	CONTENTS	Correction of Page 1-3-1 (3) Printing an event log : 1-3-15 to 1-3-16 Installation guide : SSD(HD-6)
		1-1-2	Change of Specification Output tray capacity / Faceup : 100 sheets to 250 sheets
		1-1-3	Change of Description "Expanded HDD (SSD)" to "SSD (HD-6)".
		1-1-8, 9	Correction of Figure 1-1-6 The position of No.11 was corrected.
		1-2-4	Correction of Figure 1-2-6 The container label was changed.
		1-2-6	Correction of Figure 1-2-9
		1-2-7	Correction of Figure 1-2-13
		1-2-8	Correction of Figure 1-2-14 and Figure 1-2-15
		1-2-10	Change of Procedures Procedures 1 and 2 were replaced.
		1-3-4, 9	Addition of Description "(83) Full page printing mode" was added.
		1-3-10	Addition of Description "OP Network Status" was added.
		1-3-11	Addition of Description "Test Page" was added.
		1-4-19	Addition of Description The check of TRA31was added.
		1-4-24, 30	Addition of Description "(15)Carrier leaking occurs." was added.
		1-5-9, 10	Change of Procedures Procedures of "(3) Detaching and refitting the MP paper feed pulley" was changed.
		1-5-31	Correction of Figure 1-5-52 Developer fan motor (Rating label) : outside to inside
2	December 2012	CONTENTS	Correction of Page 1-6-2 Remarks on PWB replacement : 1-6-3
		1-2-2	Form change of 9, packing position change of 12 and 13
		1-3-6	Correction of "description" and "supplement" at (39).
		1-3-14	Addition of Service item "Drum heater (110V only)" was added.
		1-6-2	Addition of Procedure "Emargency-UPDATE" was added.
		2-1-8	Addition of the drum heater (110V only).
		2-2-7, 8	Addition of the drum heater (110V only).
		2-3-6, 9, 10	Addition of the connector of YC9 (110V only).

Revision	Date	pages	Revised contents
2	December 2012	2-4-9	Setting-range change of X9: 0 and 1 are changed into 0 and 2.
		2-4-11 to 14	Addition of the connector of YC9 (110V only). :2-4-11, 13 Correction of header (the model number) : 2-4-11 to 14

КУОСЕКА

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.



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	\bigcirc
•	Do not install the copier in a humid or dusty place. This may cause fire or electric shock	\bigcirc
•	Do not install the copier near a radiator, heater, other heat source or near flammable material. This may cause fire.	\bigcirc
•	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	\bigcirc
•	Always handle the machine by the correct locations when moving it.	0
•	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.	0
•	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.	0
•	Advice customers that they must always follow the safety warnings and precautions in the copier's instruction handbook.	0

2. Precautions for Maintenance

Always remove the power plug from the wall outlet before starting machine disassembly	8=5
Always follow the procedures for maintenance described in the service manual and other related brochures.	\bigcirc
Under no circumstances attempt to bypass or disable safety features including safety mechanisms and protective circuits.	\bigcirc
	\wedge
Always use parts having the correct specifications.	\bigcirc
 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 acci- dent. 	0
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	0
Always check that the copier is correctly connected to an outlet with a ground connection	Ð
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.	0
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.	

•	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.	\triangle
•	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.	0

• Do not remove the ozone filter, if any, from the copier except for routine replacement.	\bigcirc
 Do not pull on the AC power cord or connector wires on high-voltage components when removing them; always hold the plug itself. 	\bigcirc
• 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.	\bigcirc
• Treat the ends of the wire carefully when installing a new charger wire to avoid electric leaks	0
Remove toner completely from electronic components.	
Run wire harnesses carefully so that wires will not be trapped or damaged	0
• 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.	0
• 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:	0
Never dispose of toner or toner bottles in fire. Toner may cause sparks when exposed directly to fire in a furnace, etc.	\bigcirc
Should smoke be seen coming from the copier, remove the power plug from the wall outlet immedi- ately.	8-5

3. Miscellaneous

WARNING

•	Never attempt to heat the drum or expose it to any organic solvents such as alcohol, other than	n 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

500 sheets paper feeder 2000 sheets bulk paper feeder SSD (HD-6) IEEE1284 Interface Network interface Wireless LAN interface

2LV/2L1/2L2/2MS/2MT

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1-1-1 Specifications

Item		Specifications			
		60 ppm	50 ppm	45 ppm	40 ppm
Туре		Desktop			
Printing method		Electrophotograph	y by semiconductor	laser	
Paper	Cassette	60 to 120 g/m ²			
weight	MP tray	60 to 220 g/m ² , 23	0 g/m² (Postcard)		
Paper type	Cassette	Plain, Recycled, Bond, Color (Colour), Preprinted, Letterhead, Prepunched, Rough, High quality, Custom 1 to 8			
	MP tray	Plain, Recycled, Bond, Color (Colour), Preprinted, Letterhead, Prepunched, Rough, High quality, Label, Transparency, Postcard, Vellum, Thick, Envelope, Custom 1 to 8			
	Cassette	Legal, Oficio II, Mexican Oficio, Letter, Executive, Statement, Folio, A4, B5(JIS), A5, B6 *1, A6 *1, Return postcard *1, B5(ISO), C5, DL *1, 16K, Custom			
Paper size	MP tray	Legal, Oficio II, Mexican Oficio, Letter, Executive, Statement, Folio, A4, B5(JIS), A5, B6, A6, Return postcard, Postcard, B5(ISO), C5, Commercial #10, DL, Commercial #9, Monarch, Commercial #6-3/4, Youkei4, Youkei2, 16K, Custom			
*1: 60/50/45 ppm model only					
Printing speed (ppm) Full speed	[Simplex] A4/Letter -/Legal B5R A5R A6R	60/62 - /50 48 32 32	50/52 - /42 40 27 27	45/47 - /38 36 23 23	40/42 - /33 33 22 22
	[Duplex] A4/Letter -/Legal B5R A5R	43/44 - /25 34 23	36/37 - /21 28 19	32/33 - /16 25 16	20/21 - /16.5 16.5 11
Printing speed (ppm) Half speed	[Simplex] A4/Letter -/Legal B5R A5R A6R [Duplex] A4/Letter -/Legal B5R A5R	30/31 - /25 24 16 16 21.5/22 - /12.5 17	25/26 - /21 20 13.5 13.5 18/18.5 - /10.5 14	22.5/23.5 - /19 18 11.5 11.5 16/16.5 - /8 12.5 8	20/21 - /17 16.5 11 11 10/10.5 - /8 8 5.5

Item		Specifications				
		60 ppm	50 ppm	45 ppm	40 ppm	
Reso	lution	Fine1200, Fast120	00(KIR), 600dpi(KIR) , 300dpi		
First print time (A4, feed from cassette)		9.0 s or less				
Warm-up time (22 °C/	Power on/ Off mode/ Sleep mode	25 s or less	20 s or less	15 s or less	15 s or less	
71.6 °F, 60% RH)	Low power mode	-				
Paper	Cassette	500 sheets (80g/m	1 ²)			
capacity	MP tray	100 sheets (80 g/r	100 sheets (80 g/m²)			
Output tray	Facedown	500 sheets (67g/m	500 sheets (67g/m²)		250 sheets (67g/m²)	
	Faceup	250 sheets (67g/m	250 sheets (67g/m ²) -			
Photoco	onductor	a-Si drum (diameter 30 mm)				
Image write system		Semiconductor laser				
Charging system		Contact charger roller method				
Developer system		Mono component dry developing method Toner replenishing: Automatic from the toner container				
Transfer system		Transfer roller method				
Separation system		Small diameter separation, dischager needle (DC bias)				
Cleaning system		Counter blade cleaning + cleaning roller				
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		PowerPC465, ARM7/ARM9		PowerPC465 *1		
Main m	Main memory 256 MB / 1280 MB (Standard / Max) *2					
Operating system		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 X				
Interface	Standard	USB device interface connector: 1 (USB 2.0) USB host interface connector: 2 (USB 2.0) Network interface connector: 1 (10BASE-T/100BASE-TX/1000BASE-T) *3				
Option		eKUIO slot: 1				
Page descrip	Page description language PRESCRIBE					
Emulation PCL6, KPDL3, XPS, Line printer, IBM Proprinter X24E, EPSON LQ-85		PSON LQ-850				

Item		Specifications				
		60 ppm	50 ppm	45 ppm	40 ppm	
	Temperature	10 to 32.5 °C/50 to	90.5 °F			
Operating	Humidity	15 to 80% RH				
environment	Altitude	2,500 m/8,202 ft or less				
	Brightness	1,500 lux or less				
Dimensions (W × D × H)		380 × 416 × 320 mm / 14 15/16" × 16 3/8 "× 12 1/4" 380 × 416 × 24 14 15/16" × 16 8 "× 11 1/4"			380 × 416 × 285 14 15/16" × 16 3/ 8 "× 11 1/4"	
Weight (with toner container)		14.6 kg / 32.2 lb			13.5kg/29.8lb	
		380 × 593 mm / 14	4 1 <mark>5/16" × 23 3/8" (</mark>	using MP tray)		
Space required (W × D)		380 × 1138 mm / 14 15/16" × 44 13/16" (using 2000 sheets paper feeder + Faceup tray)		380 × 799 mm / 14 15/16" × 31 7/ 16" (using 2000 sheets paper feeder)		
Power	source				·	
120 V AC, 60 Hz 220 - 240 V AC, 50/60 Hz		more than 10.0 A more than 6.0 A				
Opti	ions	500 sheets paper feeder, 2000 sheets bulk paper feeder, Faceup tray *4, SSD (HD-6), IEEE1284 Interface, Network interface, Wireless LAN interface, Expanded memory, SD card, Card Authentication Kit, IC card reader, Data Security Kit(E), USB keyboard, UG-33(Thin print)				

*1: 40 ppm (without Network) model ;

*2: 40 ppm (without Network) model ; 128 MB / 1152 MB (Standard / Max)

*3: 40 ppm (without Network) model ; Network interface connector : 0

*4: 60/50/45 ppm model only

NOTE: These specifications are subject to change without notice.

1-1-2 Parts names

(1) Machine (front side)





- 1. Machine
- 2. Power switch
- 3. Cassette
- 4. Paper size label
- 5. Paper width guides
- 6. Paper length guide

- 7. USB memory slot
- 8. Top cover
- 9. Toner container
- 10. Lock lever (Toner container)
- 11. Developer unit



Figure 1-1-2

- 12. Operation panel
- 13. MP (multi purpose) tray
- 14. MP middle tray
- 15. MP top tray
- 16. MP Paper width guides
- 17. MP paper feed roller
- 18. Left cover
- 19. Waste toner box
- 20. Top tray (facedown)
- 21. Eject roller

(2) Machine (rear side)



Figure 1-1-3

- 22. Rear cover
- 23. Faceup roller *1
- 24. Tray attachment plate *2
- 25. Faceup tray *2
- 26. Paper stopper *2
- 27. Network interface connector *3
- 28. USB interface connector

- 29. USB port
- 30. Power cord connector
- *1: 60/50/45 ppm model only
- *2: 60/50/45 ppm model only (Option)
- *3: Except 40 ppm model (without Network)

(3) Operation section



Figure 1-1-4

- 31. Ready indicator
- 32. Data indicator
- 33. Attention indicator
- 34. Message display
- 35. Left select key
- 36. Right select key
- 37. Logout key
 38. Cancel key
- 39. Menu key
- 40. Back key
- 41. Numeric keys
- 42. Cursor keys

- 43. OK key
- 44. Clear key
- 45. Document box key

1-1-3 Machine cross section

(1) 60/50/45 ppm model





- 1. Cassette
- 2. Cassette paper feed section
- 3. Paper feed conveying section
- 4. MP tray
- 5. MP tray paper feed section
- 6. Toner container
- 7. Developer unit
- 8. Laser scanner unit (LSU)
- 9. Charger roller unit

- 10. Drum unit
- 11. Transfer/Separation section
- 12. Eject tray (facedown)
- 13. Eject section
- 14. Eject conveying section
- 15. Fuser unit
- 16. Duplex conveyning section
- 17. Faceup tray (option)

(2) 40 ppm model



Figure 1-1-6

- 1. Cassette
- 2. Cassette paper feed section
- 3. Paper feed conveying section
- 4. MP tray
- 5. MP tray paper feed section
- 6. Toner container
- 7. Developer unit
- 8. Laser scanner unit (LSU)
- 9. Charger roller unit

- 10. Drum unit
- 11. Transfer/Separation section
- 12. Eject tray (facedown)
- 13. Eject section
- 14. Eject conveying section
- 15. Fuser unit
- 16. Duplex conveyning section

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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: 120 V AC, 12.0 A

220 - 240 V AC, 6.5 A

- 4. Power supply 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 of alkaline vapors, inorganic gasses, NOx, SOx gases and chlorine-based organic solvents.

Select a well-ventilated location.

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



*1: Without the faceup tray

*2: With the faceup tray (60/50/45 ppm model)





1-2-2 Unpacking and installation

Removing the tapes and pads

- 1. Remove two tapes.
- 2. Remove the protection sheet.





3. Remove four tapes.



Figure 1-2-4



Figure 1-2-6

3. Rotate the toner container lock lever to the lock position and then remove the toner container from the printer by returning it to the unlock position.



Figure 1-2-7

4. Shake the turned toner container 10 times or more as shown in the figure in order to distribute the toner evenly inside the container.Caution:Do not press too firmly on the

center of the toner container or touch the toner feed slot or the terminal parts.

- 5. Set the toner container to the printer and then turn the toner container lock lever to the lock position.
- 6. Close the top cover.









1-2-7

5. Push the lock lever and slide the paper length guide to the desired paper size.

If you are going to set paper that is longer than A4, pull out the extension cassettes pushing the lock button one by one and adjust them to the desired paper size.





- 6. Fan the media (paper/transparencies), then tap it on a level surface to avoid media jams or skewed printing.
- 7. Slide the paper into the paper cassette.
- 8. Insert the cassette into the slot in the printer. Push it straight in as far as it will go.



Figure 1-2-15





Figure 1-2-20



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

Procedure

- 1. Remove the inlet cover.
- 2. Remove the slot cover.
- 3. Unplug the power cable.

Caution: Do not insert or remove main PWB assembly while machine power is on.

Doing so may cause damage to the machine and the main PWB.



Figure 1-2-22

- 4. Remove five screws and then remove the main PWB assembly.
- 5. Aligning the cutouts of the memory module with the matching keys of the socket, carefully plug the memory module into the memory socket until it clicks in place.
- 6. Then, push down the memory module to secure.
- 7. Refit the main PWB assembly and the screws.
- 8. Refit the covers.
- 9. Plug the printer into a power outlet.
- Print a status page to check the memory expansion. (See page 1-3-2)
 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 256 MB. *1

*1: 40 ppm (without Metwork); 128MB




1-2-4 Install the memory card (SD card) (option)

Procedure

- 1. Remove the main PWB assembly from the machine. (SeePage 1-2-12)
- 2. SD card is inserted in a SD card slot. Maximum memory capacity 32 GB.
- 3. Remove the main PWB assmbly and the covers.



1-2-5 Option composition



1-3-1 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	Printing a status page for service purpose
	DescriptionPrints a status page for service purpose. The status page includes various settings and service cumulative.PurposeTo acquire the current printing environmental parameters and cumulative information.
	 Method 1. Enter the Service Setting menu. 2. Select [Status Page] using the cursor up/down keys. 3. Press the OK key. 4. Select the [YES] using the left select key. [Accepted] is displayed and two pages will be printed.

2LV/2L1/2L2/2MS/2MT

tems	Description								
	Service stat	us page (1)							
S PI	ervice S	itatus Pa	ge		(3)	(2) 2012/04 (4)	/19 16:39 (5)		
(1)	Firmware version 2I	V_2000.000.000 20	12.04.19			x] [XXXXXXXX] [)	xxxxxxxxx]		
	ontroller Infor	mation							
	Memory status								
(7) Standard Size	128.0 KB							
8) (8) Option Slot	128.0 KB				•			
(5	1 10tal 312e	230.0 KB							
	Time								
(10) Local Time Zone	+01:00 Toki	0						
(12	Time Server	10.183.53.1	3						
	,								
	Installed Options					•			
(13) Paper feeder2	Installed							
(14	Paper leeder3	Not Installed	4						
(16) Paper feeder5	Not Installed	ź						
(17) Bulk Feeder	Not Installed	t						
(19) SSD	Installed							
(20	Card Authenticatio	n Kit (B) Installed							
(21	Data Security Kit(E)	(E)							
(22) UG-33	Installed							
(23) USB Keyboard	Connected							
(24	USB Keyboard Ty	pe US-English							
(25) Print Coverage								
(26	Average(%)	/ Usage Page(A4/Let	ter Conve	rsion)					
	K: 1.10	/ 1111111.11		,	PDF mode	Y5	00		
(27) Last Page (%)	1.00							
(28) FRPO Status			(29)	RP Code				
	User Top Margin	A1+A2/100	0.00		1234 5678 9012	-			
	User Left Margin	A3+A4/100	0.00		5678 9012 3456				
					3456 7890 1234				
-				1		(6) [******	~~~~~~		
				Figure	9 1-3-1				
	1								

rvice items	Description							
	Service status page	ge (2)						
S Pr	ervice Stat	us Page		2012/04/19 16:39				
	Firmware version 2LV_2000	0.000.000 2012.04.19	[XXXXXXXX] [XX	xxxxxx] [xxxxxxxx]				
	aging Information		Sond Informat	ion				
(30) (31)	NVRAM Version MAC Address	_1F31225_1F31225 00:C0:EE:D0:01:0D	(32) Date and Time (33) Address	10/06/19 16:39				
(36) (37) (38) (39) (40)	1/2 (34) (35) 100/100 0/0/0/0/0/0/ 0/0/0/0/0/0/ 0/0/0/0/	/0000000/0000000/000000/00 /0000000/ 00/00/						
(57)	(41)(42)(43)(44)(45)(4 0000/0000/0000/0000/0000	/0000/0000/0000/0000/0000/0000/00	2)(53)(54)(55)(56) 00/0000/0000/0000/0000/					
(58)	0000/0000/0000/0000/0000 12345678/11223344/00001 t/ (59)	/0000/0000/0000/0000/0000/ 234abcd567800001234abcd56	78/0123456789012345678901	2345678901/0008/00/07				
(63) (64)	00000000000000000000000000000000000000	0000000000/000000000000000000000000000	00000000000000000000000000000000000000	52)				
		Ļ						
(65) (69) (77) (78) (79) (80) (81)	00000000/00000000000000000000000000000	<pre>vvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvv</pre>	0000/00000000/000000000000 0000/00000000	00000/00000000/00000000/ 00000/00000000				
	ABCD/ABCDEFGHIJ/ (84)	(85)						
_		2		[XXXXXXXXXXXXXXXX]				
		Fig	ure 1-3-2					

Service it	tems	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 1	Installed/Not Installed				
	(14)	Presence or absence of the optional paper feeder 2	Installed/Not Installed				
	(15)	Presence or absence of the optional paper feeder 3	Installed/Not Installed				
	(16)	Presence or absence of the optional paper feeder 4	Installed/Not Installed				
	(17)	Presence or absence of the optional bulk feeder	Installed/Not Installed				
	(18)	Presence or absence of the optional memory card	Installed/Not Installed				
	(19)	Presence or absence of the optional SSD	Installed/Not Installed				
	(20)	Presence or absence of the optional Card Authentication Kit(B)	Installed/Not Installed/Trial				
	(21)	Presence or absence of the optional Security Kit(E)	Installed/Not Installed				
	(22)	Presence or absence of the optional UG-33	Installed/Not Installed				
[(23)	The connection state of an optional USB Keyboard	Connected/Not Connected				
[(24)	Displays setting of optional USB Keyboard	US English/US English with Euro/German/French				

Service items	;	Description					
	Detail of service status page						
No.	Description	Supplement					
(25)	Page of relation to the A4/Letter	-					
(26)	Average coverage for printer	Black					
(27)	Coverage on the final output page	-					
(28)	FRPO setting	-					
(29)	RP Code	Code the engine software version and the date of update. Code the main software version and the date of update. Code the engine software version and the date of the previous update. Code the main software version and the date of the previous update.					
(30)	NV RAM version	 1F3 1225 _ 1F3 1225 (a) (b) (c) (d) (e) (f) (a) Consistency of the present software version and the database _ (underscore): OK * (Asterisk): NG (b) Database version (c) The oldest time stamp of database version (d) Consistency of the present software version and the ME firmware version _ (underscore): OK * (Asterisk): NG (e) ME firmware version (f) The oldest time stamp of the ME database version (f) The oldest time stamp of the ME database version (g) ME firmware version (h) The oldest time stamp of the ME database version (h) The oldest time stamp of the ME database version 					
(31)	Mac address	-					
(32)	The last sent date and time	-					
(33)	Transmission address	-					
(34)	Destination information	-					
(35)	Area information	-					
(36)	Margin settings	Top margin/Left margin					
(37)	Top offset for each paper source	MP tray/Paper feeder 1/Paper feeder 2/ Paper feeder 3/Paper feeder 4/Duplex/Page rotation					
(38)	Left offset for each paper source	MP tray/Paper feeder 1/Paper feeder 2/ Paper feeder 3/Paper feeder 4/Duplex/Page rotation					
(39)	L value settings	Top margin integer part / Top margin decimal part/ Left margin integer part / Left margin decimal part/					

ice items		Description			
No.	Description	Supplement			
(40)	Life counter (The first line) Machine life/MP tray/Cassette/Paper feeder Paper feeder 2/Paper feeder 3/Paper feeder				
	Life counter (The second line)	Bulk Feeder counter/Drum counter K/ Developer counter K/Maintenance kit counter			
(41)	Panel lock information	F00: OFF F01: Partial Lock 1 F02: Partial Lock 2 F03: Partial Lock 3 F04: Full Lock			
(42)	USB information	U00: Not installed/U01: Full speed/U02: Hi speed			
(43)	Paper handling information	0: Paper source unit select/1: Paper source unit			
(44)	Black and white printing double count mode	0: All single counts 3: Folio, Single count, Less than 330 mm (length)			
(45)	Billing counting timing	-			
(46)	Temperature (machine inside)	-			
(47)	Temperature (machine outside)	-			
(48)	Relative temperature (machine outside)	-			
(49)	Absolute temperature (machine outside)	-			
(50)	XLI calibration information	-			
(51)	Beam A/BD synchronous fine- tuning value	-			
(52)	Beam B/BD synchronous fine- tuning value	-			
(53)	Fixed assets number	-			
(54)	Job end judgment time-out time	-			
(55)	Job end detection mode	-			
(56)	PRESCRIBE environmental reset	-			
(57)	Media type attributes 1 to 28 (Not used: 18, 19, 20)	Weight settingsFuser settings0: Light0: High1: Normal 11: Middle2: Normal 22: Low3: Normal 33: Vellum4: Heavy 1Duplex settings5: Heavy 20: Disable6: Heavy 31: Enable7: Extra Heavy			

Service ite	ems	Description				
1	No.	Description	Supplement			
(!	58) F	RFID information	Product (OEM/maker) / destination code / a toner name / lot number / toner capacity / toner empty infor- mation / number of times of toner refilling			
(!	59) -	Foner install mode information	0:OFF t:ON			
(6	60) [Drum status	-			
(6	61) [Drum surface potential	-			
(6	62) [Drum density	-			
(6	63) l	_SU light volume distribution	-			
(6	64) [ORT parameter coefficient	-			
(6	65) \$	Soft version of the optional paper feeder	Paper feeder 1/Paper feeder 2/Paper feeder 3 Paper feeder 4			
(6	66) \	Version of the optional message	-			
(6	67)	Altitude	0: Standard 1: High altitude 1 2: High altitude 2			
(6	68) (Charger roller correction	1 to 5			
(6	69) [Data Sanitization details result	-			
(7	70) -	Foner Low setting	0:Invalid 1: Effective			
(7	71) -	Foner Low detection level	0 to 100(%)			
(7	72) a	Number of page that swept out any time (SP1)	1 to 65535			
(7	73) I	Number of page that swept out at instancy (SP2)	1 to 65535			
(7	74) ⁻ r	The practice standard printing rate of development TC (SGE)	0 to 15			
(7	75) ⁻ r (The practice standard printing ate according to area TC (SDR)	0 to15			
(7	76) ⁻ r	The number of times of enforce- nent of the development TC	-			
(7	77) ⁻ r	The number of times of enforce- ment according to area	-			

Service	items	ns Description													
	Na														
	NO. (78)	The last page	e printi	ng rat	e of	0.0)0 to 1	00.00	(%)	Supp	leme	nı			_
		each area	<u> </u>						(0())						
	(79)	The average each area	printin	g rate	of	0.0)0 to 1	00.00	(%)						
	(80)	The average 1000 past	printin	g rate	for the	0.0)0 to 1	00.00	(%)						
	(81)	The average 1000 past of	printin each a	g rate area	for the	0.0)0 to 1	00.00	(%)						
	(82)	ErP application	on			0: 1:	ErP L ErP A	Jn-App Applica	olying ation n	mode node	!				
	(83)	Full page prir	iting m	node		0:N 1:F	Norma ⁻ ull pa	l mode ge mo	e (The	e facto	ory de	fault s	ettings)		
	(84)	Drum ID				-									
	(85)	Drum serial r	umbei	r		-									
			Code	conve	ersion										
			А	В	С	D	E	F	G	Н	I	J]		
			0	1	2	3	4	5	6	7	8	9			

Service items	Description
Network Status	Printing a status page for network
	 Description Prints a status page for network. Execution is possible only the model with network. Purpose To acquire the detailed network setting information. Method Enter the Service Setting menu. Select [Network Status] using the cursor up/down keys. Press the OK key. Select the [YES] using the left select key. [Accepted] is displayed and Network status page will be printed.
Status	 Description Prints a status page for optional network. Execution is possible only the model with optional network. Purpose To acquire the detailed network setting information. Method Enter the Service Setting menu. Select [OP Network Status] using the cursor up/down keys. Press the OK key. Select the [YES] using the left select key. [Accepted] is displayed and Network status page will be printed.

Service items	Description
Test Page	Printing a test page
	 Description The test page is printed with halftones. Purpose To check the activation of the developer and drum units. Method Enter the Service Setting menu. Select [Test Page] using the cursor up/down keys. Press the OK key. Select the [YES] using the left select key. [Accepted] is displayed and Test page will be printed.
	14-13000 BLST6337577 Counter 113
	Figure 1-3-3

Service items	Description
Maintenance	Counter reset for the maintenance kit
	Description
	The "Install MK" message means that maintenance kit should be replaced at fixed pages
	of printing. The interval counter must be manually reset using this service item.
	Maintenance kit MK-3102 (for 120 V) (40 ppm) :300,000 images
	Maintenance kit MK-3132 (for 120 V) (60/50/45 ppm) :500,000 images
	Maintenance kit MK-3100 (for 230 V) (40 ppm) :300,000 images
	Maintenance kit MK-3130 (for 230 V) (60/50/45 ppm) :500,000 images
	Maintenance kit includes the following units:
	Drum unit
	Developer unit
	Fusor unit
	Paper feed roller assembly
	Retard roller assembly
	Purpose
	To reset the life counter for maintenance kit.
	Method
	Drum unit (see page 1-5-15)
	Developer unit (see page 1-5-13)
	Transfer roller assembly (see page 1-5-16)
	Fuser unit (see page 1-5-19)
	Paper leed roller assembly (see page 1-5-8) Retard roller assembly (see page 1-5-8)
	Method
	1. Enter the Service Setting menu.
	2. Select [Maintenance] using the cursor up/down keys.
	 Fless the OK key. Select the IVEST using the left select key.
	[Completed] is displayed.
	The counter for each component is reset immediately.
	Note:
	Occurrences of resetting the maintenance kits are recorded on the service status page
	or event log in number of pages at which the maintenance kit was replaced (see page 1-
	s-2, page 1-3-16). This may be used to determine the possibility that the counter was
	chomoduly or diministrationally redet.

Service items	Description
New Developer	Initializing the developing unit (toner install mode)
	 Description The new developing unit is shipped from the factory with no toner contained. The developing unit can be automatically replete with toner when a toner container is installed onto it and the printer is turned on. However, because the toner reservoir in the developing unit has a large capacity, it requires a lengthy period of time until a substantial amount of toner has been fed to get the printer ready. (A new developing unit needs approximately 200 g for triggering the sensor inside.) Purpose To execute when the developing unit has been replaced. Method Enter the Service Setting menu. Select [New Developer] using the cursor up/down keys. Press the OK key. Select the [YES] using the left select key. [Accepted] is displayed. The toner installation is performed when power is turned on and off. NOTE: Toner supply is stopped when toner installation mode is performing.
Auto Drum Refresh	Automatic drum surface refreshing Description The drum surface refreshing operation is normally performed when the power is turned on to the printer or during warm-up when the printer is recovering from the Sleep mode, but even then only at those times that the temperature/humidity sensor detects the drum surface to be in a state of dew condensation. By using this mode, it is possible to force the drum surface refreshing operation to be performed automatically at a predetermined period of time, regardless of the status detected by the temperature/humidity sensor. Purpose To prevent bleeding of the output image when the printer's operating environment is one of high humidity. Method 1. Enter the Service Setting menu. 2. Select [Auto Drum Refresh] using the cursor up/down keys. 3. Press the OK key. 4. Select the desire mode (Off/Short/Standard/Long) using the cursor up/down keys. 5. Press the OK key. The new value is set.

Service items	Description
Drum heater	Setting drum heater
	Description "On/Off" of a drum heater is set up.
	If it sets to "ON", drum refresh time will become short.
	Purpose In order to improve the picture blot by high humidity.
	Method 1 Enter the Service Setting menu
	 Select [Drum heater] using the cursor up/down keys. Press the OK key.
	4. Select [Off] or [On] using the cursor up/down keys.5. Press the OK key. The setting is set.
Durant	
Drum	Drum surface refreshing
	Description Rotates the drum approximately 3 minutes with toner lightly on the overall drum using the high-voltage output control. The cleaning blade in the drum unit scrapes toner off the drum surface to clean it.
	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.
	 Method 1. Enter the Service Setting menu. 2. Select [Drum] using the cursor up/down keys. 3. Press the OK key. 4. Select the [YES] using the left select key. Drum surface refreshing will start.
Write Data	Write data (USB memory data write)
	Description To write data into a USB memory. Execution is possible only when a USB memory is detected.
	 Method Install the USB memory before attempting to write data. 1. Enter the Service Setting menu. 2. Select [Write Data] using the cursor up/down keys. 3. Press the OK key. 4. Select the [YES] using the left select key.
	 [Data waiting] is displayed and the printer waits for data to be written. When the data is sent, [Processing] appears and the data is written to USB memory. When data writing ends, the display returns to [Ready].

Service items	Description
Altitude adj.	Setting altitude adjustment
	 Description Sets the altitude adjustment mode. Purpose Used when print quality deteriorates in an installation at the altitude of 1,500 meters or higher. Method Enter the Service Setting menu. Select [Altitude Adj.] using the cursor up/down keys. Press the OK key. Select [Normal], [High 1] or [High 2] using the cursor up/down keys. Press the OK key. The setting is set.
МС	Setting main charger output
	 Description Sets the main charger output. Execution is possible only when the altitude adjustment mode is set to [Normal]. Purpose Execute when the image density declines, dirt of a background or an offset has occurred. Method Enter the Service Setting menu. Select [MC] using the cursor up/down keys. Press the OK key. Select [1] to [5] using the cursor up/down keys. Press the OK key. The setting is set.

(3) Printing an event log

Service items	Description
Printing an	Printing an event log (EVENT LOG)
event log	Description
	Prints a history list of occurrences of paper jam, self-diagnostics, toner replacements,
	etc.
	To allow machine malfunction analysis based on the frequency of paper misfeeds, self
	diagnostic errors and replacements.
	Method
	1. Connect the USB or network cable between machine and PC (network).
	2. Remove the inlet cover and connect the power cord.
	Network cable
	Power cord
	Figure 1-3-4
	3. Refit the inlet cover.
	4. Turn the main power switch on. Make sure the machine is ready.
	5. Send the following PRESCRIBE command sequence from the PC to the machine.
	!R!KCFG"ELOG";EXIT;
	6. A sheet of event log will be printed.
	Completion

Service items	Description
Printing an	Remarks: Details of configurations (See above 5.)
event log	
	Notes on Connecting to USB (1)Save the PRESCRIBE commands above as a text file in the PC
	(2)Select the Sharing tab of the printer properties and share the printer.
	(3)Select a USB port in the Port tab. (Specify the printer name for sharing.)
	(4)From the DOS Prompt, execute the following command line:
	copy file-name\\computer-name\shared-printe
	Notes on connecting via network (using FTP protocol)
	(1)Save the PRESCRIBE commands above as a text file in the PC.
	(2)From the DOS Prompt, execute the following command line:
	Do not specify user name and password.
	(3)From the DOS Prompt, execute the following command:
	put file-name
	File-name should be the name of the file that was saved in step 1.
1	

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items	items Description			
	ltomo		Description	
NO.	Items		Description	1
(7)	Paper Jam Log	# Remembers 1 to 16 of	Count. The total page count at	Event Log code (hexadeci-
	occurrence. If the occurrence of the previ- ous paper jam is less than 16, all of the paper jams are logged. When the occurrence excesseds 16, the old- est occurrence is removed.	the time of the paper jam.	 mal, 5 categories) (a) Cause of a paper jam (b) Paper source (c) Paper size (d) Paper type (e) Paper eject 	
		(a) Cause of paper jam (Hexadecimal)	
		0000: Initial jam 0100: Secondary paper f 0101: Waiting for process 0104: Waiting for convey 0106: Paper feeding requ 0107: Waiting for fuser p 0120: Receiving a duples 0121: Exceeding number 0501: No paper feed of ja 0502: No paper feed of ja 0503: No paper feed of ja 0504: No paper feed of ja 0505: No paper feed of ja 0508: No paper feed of ja 0509: No paper feed of ja 0511: Multiple sheets of 0512: Multiple sheets of 0513: Multiple sheets of 0514: Multiple sheets of 0515: Multiple sheets of 0518: Multiple sheets of 0519: Multiple sheets of 0519: Multiple sheets of 1403: PF feed sensor 1 u 1404: PF feed sensor 1 u 1413: PF feed sensor 1 u 1413: PF feed sensor 1 u 1415: PF feed sensor 1 u	reed request time out s package to be ready uest for duplex printing tin ackage to be ready x paper feeding request w r of duplex pages circulate am (cassette 1) am (cassette 2) am (cassette 3) am (cassette 4) am (cassette 5) am (duplex section) am (MP tray) jam (cassette 2) jam (cassette 2) jam (cassette 2) jam (cassette 3) jam (cassette 3) jam (cassette 4) jam (cassette 5) jam (duplex section) jam (MP tray) am (bulk feeder) jam (bulk feeder) non arrival jam (cassette 4) stay jam (cassette 3) stay jam (cassette 4) stay jam (cassette 4)	ne out /hile paper is empty ed 3) 4) 5)

Service	Service items		Description	
	No.	Items	Description	
	(7)	Paper Jam	1604: PF feed sensor 2 non arrival jam (cassette 4)	
	cont	Log	1605: PF feed sensor 2 non arrival jam (cassette 5)	
			1614: PF feed sensor 2 stay jam (cassette 4)	
			1615: PF feed sensor 2 stay jam (cassette 5)	
			1805: PF feed sensor 3 non arrival jam (cassette 5)	
			1815: PF feed sensor 3 stay jam (cassette 5)	
			4002: Registration sensor 2 non arrival jam (cassette 2)	
			4003: Registration sensor 2 non arrival jam (cassette 3)	
			4004: Registration sensor 2 non arrival jam (cassette 4)	
			4005: Registration sensor 2 non arrival jam (cassette 5)	
			4012: Registration sensor 2 stay jam (cassette 2)	
			4013: Registration sensor 2 stay jam (cassette 3)	
			4014: Registration sensor 2 stay jam (cassette 4)	
			4015: Registration sensor 2 stay jam (cassette 5)	
			4101: Registration sensor 3 non arrival jam (cassette 1)	
			4102: Registration sensor 3 non arrival jam (cassette 2)	
			4103: Registration sensor 3 non arrival jam (cassette 3)	
			4104: Registration sensor 3 non arrival jam (cassette 4)	
			4105: Registration sensor 3 non arrival jam (cassette 5)	
			4108: Registration sensor 3 non arrival jam (duplex section)	
			4109: Registration sensor 3 non arrival jam (MP tray)	
			4111: Registration sensor 3 stay jam (cassette 1)	
			4112: Registration sensor 3 stay jam (cassette 2)	
			113: Registration sensor 3 stay jam (cassette 3)	
			1114: Registration sensor 3 stay jam (cassette 4)	
			4115: Registration sensor 3 stay jam (cassette 5)	
			4118: Registration sensor 3 stay jam (duplex section)	
			4119: Registration sensor 3 stay jam (MP tray)	
			4201: Eject full sensor non arrival jam (cassette 1)	
			4202: Eject full sensor non arrival jam (cassette 2)	
			4203: Eject full sensor non arrival jam (cassette 3)	
			4204: Eject full sensor non arrival jam (cassette 4)	
			4205: Eject full sensor non arrival jam (cassette 5)	
			4208: Eject full sensor non arrival jam (duplex section)	
			4209: Eject full sensor non arrival jam (MP tray)	
			4211: Eject full sensor stay jam (cassette 1)	
			4212: Eject full sensor stay jam (cassette 2)	
			4213: Eject full sensor stay jam (cassette 3)	
			4214: Eject full sensor stay jam (cassette 4)	
			4215: Eject full sensor stay jam (cassette 5)	
			4218: Eject full sensor stay jam (duplex section)	
			4219: Eject full sensor stay jam (MP tray)	
			4301: Duplex sensor 1 non arrival jam (cassette 1)	
			4302: Duplex sensor 1 non arrival jam (cassette 2)	
			4303: Duplex sensor 1 non arrival jam (cassette 3)	
			4304: Duplex sensor 1 non arrival jam (cassette 4)	
			4305: Duplex sensor 1 non arrival jam (cassette 5)	
			4309: Duplex sensor 1 non arrival jam (MP tray or bulk feeder)	
l •				

Service	items		Description				
[No.	Items		Description			
	(7) cont	(7) Paper Jam cont Log	4401: Duplex sensor 2 n 4402: Duplex sensor 2 n 4403: Duplex sensor 2 n 4404: Duplex sensor 2 n 4405: Duplex sensor 2 n 4409: Duplex sensor 2 n 4418: Duplex sensor 2 s	on arrival jam (cassette 1) on arrival jam (cassette 2) on arrival jam (cassette 3) on arrival jam (cassette 4) on arrival jam (cassette 5) on arrival jam (MP tray or tay jam (duplex section)))) bulk feeder)		
			(b) Detail of paper source	e (Hexadecimal)			
			00: MP tray 01: Cassette 1 02: Cassette 2 (paper feeder 1) 03: Cassette 3 (paper feeder 2) 04: Cassette 4 (paper feeder 3) 05 to 09: Reserved				
			(c) Detail of paper size (I	Hexadecimal)			
			 00: (Not specified) 01: Monarch 02: Business 03: International DL 04: International C5 05: Executive 06: Letter-R 86: Letter-E 07: Legal 08: A4R 88: A4E 09: B5R 20: D55 	0B: B4 0C: Ledger 0D: A5R 0E: A6 0F: B6 10: Commercial #9 11: Commercial #6 12: ISO B5 13: Custom size 1E: C4 1F: Postcard 20: Reply-paid postcard	 22: Special 1 23: Special 2 24: A3 wide 25: Ledger wide 26: Full bleed paper (12 x 8) 27: 8K 28: 16K-R A8: 16K-E 32: Statement-R B2: Statement-E 33: Folio 		
			0A: A3		35: Western type 4		
			(d) Detail of paper type (Hexadecimal)			
			01: Plain 02: Transparency 03: Preprinted 04: Labels 05: Bond 06: Recycled 07: Vellum 08: Rough 09: Letterhead (e) Detail of paper eject I	0A: Color 0B: Prepunched 0C: Envelope 0D: Cardstock 0E: Coated 0F: 2nd side 10: Thick 11: High quality ocation (Hexadecimal)	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 items	Description			
No.	Items		Descriptio	n
(8)	Service Call	#	Count.	Service Code
	Log	Remembers 1 to 8 of occurrence of self diagnostics error. If the occurrence of the previous diag- nostics error is less than 8, all of the diagnostics errors are logged.	The total page count at the time of the self diag- nostics error.	Self diagnostic error code (See page 1-4-8) Example: 01.6000 01: Self diagnostic error 6000: Self diagnostic error code number
(9)	Mainte-	#	Count.	item
	nance Log	Remembers 1 to 8 of occurrence of replacement. If the occurrence of the previous replace- ment of toner con- tainer is less than 8, all of the occur- rences of replace- ment are logged.	The total page count at the time of the replacement of the toner con- tainer.	Code of maintenance replac- ing item (1 byte, 2 categories) First byte (Replacing item) 01: Toner container Second byte (Type of replacing item) 00: Black First byte (Replacing item) 02: Maintenance kit Second byte (Type of replacing item) 01: MK-3100/3102 (40 ppm model only) MK-3130/3132 (60/50/45 ppm model only)
(10)	Unknown Toner Log	# 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.	Count. 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

Service items	ice items Description			
No.	Items	Description		
(11)	Counter Log	(f) Paper jam	(g) Self diagnostic error	(h) Maintenance item replac- ing
	Comprised of three log counters including paper jams, self diagnos- tics errors, and replacement of the toner container.	Indicates the log counter of paper jams depending on location. Refer to Paper Jam Log. All instances including those are not occurred are displayed.	error Indicates the log counter of self diag- nostics errors depending on cause. (See page 1-4-8) Example: C6000: 4 Self diagnostics error 6000 has hap- pened four times.	ing Indicates the log counter depending on the mainte- nance item for maintenance. T: Toner container 00: Black M: Maintenance kit 01: MK-3100/3102 (40 ppm model only) MK-3130/3132 (60/50/45 ppm model only) Example: T00: 1 The toner container has been replaced once.

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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 misfeed in the machine, pull out the cassette, open the front cover or the rear cover.



(2) Paper misfeed detection condition

(2-1) PF-320 (500 sheets Paper feeder)



Figure 1-4-1 Paper jam location

(2-2) PF-315+ (Bulk Paper Feeder)



Figure 1-4-2 Paper jam location

(A)Misfeed in cassette1
(B)Misfeed in paper feed section
(C)Misfeed in MP tray
(D)Misfeed in bulk paper feeder (Option)
(E)Misfeed in cassette2 (Option)
(F)Misfeed in cassette3 (Option)
(G)Misfeed in cassette4 (Option)
(H)Misfeed in cassette5 (Option)
(I)Misfeed in exit conveying section
(J)Misfeed in duplex conveying section
(L)Misfeed in fuser section

Code	Contents	Conditions	Jam location*
0000	Initial jam	The power is turned on when a sensor in the con- veying system is on.	-
0100	Secondary paper feed request time out	Secondary paper feed request given by the con- troller is unreachable.	-
0101	Waiting for process package to be ready	Process package won't be ready.	-
0104	Waiting for conveying pack- age to be ready	Conveying package won't be ready.	-
0106	Paper feeding request for duplex printing time out	Paper feeding request for duplex printing given by the controller is unreachable.	-
0107	Waiting for fuser package to be ready	Fuser package won't be ready.	-
0120	Receiving a duplex paper feeding request while paper is empty	Paper feed request was received from the duplex section despite the absence of paper in the duplex section.	-
0121	Exceeding number of duplex pages circulated	The controller issued the duplex section a request for more pages than the duplex print cycle contains.	-
0501	No paper feed of jam	The registration sensor 2 (RS2) does not turn on during paper feed from cassette 1.	A
0502		PF feed sensor 1 (PFPFS1) does not turn on dur- ing paper feed from cassette 2.	E
0503		PF feed sensor 2 (PFPFS2) does not turn on dur- ing paper feed from cassette 3.	F
0504		PF feed sensor 3 (PFPFS3) does not turn on dur- ing paper feed from cassette 4.	G
0505		PF feed sensor 4 (PFPFS4) does not turn on dur- ing paper feed from cassette 5.	Н
0508		The registration sensor 2 (RS2) does not turn on during paper feed from duplex section.	В
0509		The registration sensor 2 (RS2) does not turn on during paper feed from MP tray.	С

Code	Contents	Conditions	Jam location*
0511	Multiple sheets of jam	The registration sensor 2 (RS2) does not turn off during paper feed from cassette 1.	В
0512		PF feed sensor 1 (PFPFS1) does not turn off dur- ing paper feed from cassette 2.	В
0513		PF feed sensor 2 (PFPFS2) does not turn off dur- ing paper feed from cassette 3.	В
0514		PF feed sensor 3 (PFPFS3) does not turn off dur- ing paper feed from cassette 4.	В
0515		PF feed sensor 4 (PFPFS4) does not turn off dur- ing paper feed from cassette 5.	В
0518		The registration sensor 2 (RS2) does not turn off during paper feed from duplex section.	В
0519		The registration sensor 2 (RS2) does not turn off during paper feed from MP tray.	В
0529	No paper feed of jam (Bulk feeder)	The registration sensor 2 (RS2) does not turn on during paper feed from bulk feeder.	D
0539	Multiple sheets of jam (Bulk feeder)	The registration sensor 2 (RS2) does not turn off during paper feed from bulk feeder.	В
1403	PF feed sensor 1 non arrival jam	PF feed sensor 1 (PFPFS1) does not turn on dur- ing paper feed from cassette 3.	E
1404		PF feed sensor 1 (PFPFS1) does not turn on dur- ing paper feed from cassette 4.	Ш
1405		PF feed sensor 1 (PFPFS1) does not turn on dur- ing paper feed from cassette 5.	E
1413	PF feed sensor 1 stay jam	PF feed sensor 1 (PFPFS1) does not turn off dur- ing paper feed from cassette 3.	Ш
1414		PF feed sensor 1 (PFPFS1) does not turn off dur- ing paper feed from cassette 4.	E
1415		PF feed sensor 1 (PFPFS1) does not turn off dur- ing paper feed from cassette 5.	E
1604	PF feed sensor 2 non arrival jam	PF feed sensor 2 (PFPFS2) does not turn on dur- ing paper feed from cassette 4.	F
1605		PF feed sensor 2 (PFPFS2) does not turn on dur- ing paper feed from cassette 5.	F
1614	PF feed sensor 2 stay jam	PF feed sensor 2 (PFPFS2) does not turn off dur- ing paper feed from cassette 4.	F
1615		PF feed sensor 2 (PFPFS2) does not turn off dur- ing paper feed from cassette 5.	F
1805	PF feed sensor 3 non arrival jam	PF feed sensor 3 (PFPFS3) does not turn on dur- ing paper feed from cassette 5.	G
1815	PF feed sensor 3 stay jam	PF feed sensor 3 (PFPFS3) does not turn off dur- ing paper feed from cassette 5.	G

Code	Contents	Conditions	Jam location*
4002	Registration sensor 2 non arrival jam	The registration sensor 2 (RS2) does not turn on during paper feed from cassette 2.	В
4003		The registration sensor 2 (RS2) does not turn on during paper feed from cassette 3.	В
4004		The registration sensor 2 (RS2) does not turn on during paper feed from cassette 4.	В
4005		The registration sensor 2 (RS2) does not turn on during paper feed from cassette 5.	В
4012	Registration sensor 2 stay jam	The registration sensor 2 (RS2) does not turn off during paper feed from cassette 2.	В
4013		The registration sensor 2 (RS2) does not turn off during paper feed from cassette 3.	В
4014		The registration sensor 2 (RS2) does not turn off during paper feed from cassette 4.	В
4015		The registration sensor 2 (RS2) does not turn off during paper feed from cassette 5.	В
4101	Registration sensor 3 non arrival jam	The registration sensor 3 (RS3) does not turn on during paper feed from cassette 1.	В
4102		The registration sensor 3 (RS3) does not turn on during paper feed from cassette 2.	В
4103		The registration sensor 3 (RS3) does not turn on during paper feed from cassette 3.	В
4104		The registration sensor 3 (RS3) does not turn on during paper feed from cassette 4.	В
4105		The registration sensor 3 (RS3) does not turn on during paper feed from cassette 5.	В
4108		The registration sensor 3 (RS3) does not turn on during paper feed from duplex section.	В
4109		The registration sensor 3 (RS3) does not turn on during paper feed from MP tray.	В

Code	Contents	Conditions	Jam location*
4111	Registration sensor 3 stay jam	The registration sensor 3 (RS3) does not turn off during paper feed from cassette 1.	В
4112		The registration sensor 3 (RS3) does not turn off during paper feed from cassette 2.	В
4113		The registration sensor 3 (RS3) does not turn off during paper feed from cassette 3.	В
4114		The registration sensor 3 (RS3) does not turn off during paper feed from cassette 4.	В
4115		The registration sensor 3 (RS3) does not turn off during paper feed from cassette 5.	В
4118		The registration sensor 3 (RS3) does not turn off during paper feed from duplex section.	В
4119		The registration sensor 3 (RS3) does not turn off during paper feed from MP tray.	В
4201	Ejetct sensor non arrival jam	The eject sensor (ES) does not turn on during paper feed from cassette 1.	I
4202		The eject sensor (ES) does not turn on during paper feed from cassette 2.	I
4203		The eject sensor (ES) does not turn on during paper feed from cassette 3.	I
4204		The eject sensor (ES) does not turn on during paper feed from cassette 4.	I
4205		The eject sensor (ES) does not turn on during paper feed from cassette 5.	I
4208		The eject sensor (ES) does not turn on during paper feed from duplex section.	I
4209		The eject sensor (ES) does not turn on during paper feed from MP tray.	Ι

Code	Contents	Conditions	Jam location*
4211	Ejetct sensor stay jam	The eject sensor (ES) does not turn off during paper feed from cassette 1.	l or L
4212		The eject sensor (ES) does not turn off during paper feed from cassette 2.	l or L
4213		The eject sensor (ES) does not turn off during paper feed from cassette 3.	l or L
4214		The eject sensor (ES) does not turn off during paper feed from cassette 4.	l or L
4215		The eject sensor (ES) does not turn off during paper feed from cassette 5.	l or L
4218		The eject sensor (ES) does not turn off during paper feed from duplex section.	l or L
4219		The eject sensor (ES) does not turn off during paper feed from MP tray.	l or L
4301	Duplex sensor 1 non arrival jam	The duplex sensor 1 (DUS1) does not turn on dur- ing paper feed from cassette 1.	J
4302		The duplex sensor 1 (DUS1) does not turn on dur- ing paper feed from cassette 2.	J
4303		The duplex sensor 1 (DUS1) does not turn on dur- ing paper feed from cassette 3.	J
4304		The duplex sensor 1 (DUS1) does not turn on dur- ing paper feed from cassette 4.	J
4305		The duplex sensor 1 (DUS1) does not turn on dur- ing paper feed from cassette 5.	J
4309		The duplex sensor 1 (DUS1) does not turn on dur- ing paper feed from MP tray or bulk feeder.	J
4401	Duplex sensor 2 non arrival jam	The duplex sensor 2 (DUS2) does not turn on dur- ing paper feed from cassette 1.	К
4402		The duplex sensor 2 (DUS2) does not turn on dur- ing paper feed from cassette 2.	К
4403		The duplex sensor 2 (DUS2) does not turn on dur- ing paper feed from cassette 3.	К
4404		The duplex sensor 2 (DUS2) does not turn on dur- ing paper feed from cassette 4.	К
4405		The duplex sensor 2 (DUS2) does not turn on dur- ing paper feed from cassette 5.	К
4409		The duplex sensor 2 (DUS2) does not turn on dur- ing paper feed from MP tray or bulk feeder.	К
4418	Duplex sensor 2 stay jam	The duplex sensor 2 (DUS2) does not turn off dur- ing paper feed from duplex section.	К

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
0100	Backup memory device error	Defective flash memory.	Replace the main PWB and check for cor- rect operation (see page 1-5-22).
		Defective main PWB.	
0120	MAC address data error	Defective flash memory.	Replace the main PWB and check for correct operation (see page 1-5-22).
	For data in which the MAC address is invalid.	Defective main PWB.	Replace the main PWB and check for correct operation (see page 1-5-22).
0130	Backup memory read/write error (main PWB)	Defective flash memory.	Replace the main PWB and check for correct operation (see page 1-5-22).
		Defective main PWB.	
0140	Backup memory data error (main PWB)	Defective flash memory.	Replace the main PWB and check for correct operation (see page 1-5-22).
		Defective main PWB.	
0150	Backup memory read/write error (engine PWB)	Improper installa- tion engine PWB EEPROM.	Check the installation of the EEPROM and remedy if necessary.
	Detecting engine PWB EEPROM communication error.	Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
		Device damage of EEPROM.	Contact the Service Administrative Division.
0160	Backup memory data error (engine PWB)	Defective EEPROM.	Replace the engine PWB and check for correct operation (see page 1-5-22).
		Defective engine PWB.	

Code	Contents	Causes	Check procedures/ corrective measures
0170	70 Billing counting error A checksum error is detected in the main and engine backup memories for the bill- ing 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- 5-22, 1-5-22).
0190	Backup memory device error (engine PWB)	Defective engine PWB.	Replace the engine PWB and check for cor- rect operation (see page 1-5-22).
0800	Image processing error JAM010x is detected twice.	Defective main PWB.	Replace the main PWB and check for cor- rect operations page 1-5-22).
0840	40 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 dis- connected from the main PWB.	Check visually and remedy if necessary
		Defective main PWB.	Replace the main PWB and check for cor- rect operation (see page 1-5-22).
1010	1010 Lift motor error (60/50/45 ppm model only) After cassette 1 is inserted, lift	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.
sensor does not 10 s. This error i four times succe	sensor does not turn on within 10 s. This error is detected four times successively.	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable.
			Lift motor and engine PWB (YC13)
		Defective drive transmission sys- tem 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 1-5-22).

Code	Contents	Causes	Check procedures/ corrective measures
1020	1020PF lift motor 1 error (paper feeder)After cassette 2 is inserted, PF lift sensor 1 does not turn on. This error is detected four 	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 connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. PF lift motor 1 and PF main PWB (YC7)
		Defective drive transmission sys- tem 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 1.
		Defective PF main PWB.	Replace the PF main PWB (Refer to the ser- vice manual for the paper feeder).
1030 PF lift mo (paper fee After cass	PF lift motor 2 error (paper feeder) After cassette 3 is inserted,	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.
	PF lift sensor 2 does not turn on. This error is detected four times successively.	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. PF lift motor 2 and PF main PWB (YC7)
		Defective drive transmission sys- tem 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 2.
		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
------	--	--	--
1040	PF lift motor 3 error (paper feeder) After cassette 4 is inserted, PF lift sensor 3 does not turn on. This error is detected four 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 connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. PF lift motor 3 and PF main PWB (YC7)
		Defective drive transmission sys- tem 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 3.
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
1050	PF lift motor 4 error (paper feeder) After cassette 5 is inserted,	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.
	PF lift sensor 4 does not turn on. This error is detected four times successively.	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. PF lift motor 4 and PF main PWB (YC7)
		Defective drive transmission sys- tem 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 4.
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
1140	BPF lift motor upward error (Bulk paper feeder) BPF lift maximum sensor	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. BPF lift motor and BPF main PWB
	does not turn on. The lock signal of the motor is detected continuously three times.	Defective drive transmission sys- tem of the motor.	Check if the gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective BPF lift motor.	Replace the BPF lift motor.
		Defective BPF main PWB.	Replace the BPF main PWB (Refer to the service manual for the paper feeder).

Code	Contents	Causes	Check procedures/ corrective measures
1150	BPF lift motor downward error (Bulk paper feeder) BPF lift minimum sensor does	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. BPF lift motor and BPF main PWB
	not turn on. The lock signal of the motor is detected continuously three times	Defective drive transmission sys- tem of the motor.	Check if the gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective BPF lift motor.	Replace the BPF lift motor.
		Defective BPF main PWB.	Replace the BPF main PWB (Refer to the service manual for the paper feeder).
1800	Paper feeder 1 communica- tion error	Improper installa- tion paper feeder.	Follow installation instruction carefully again.
	A communication error is detected 10 times in succession.	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. PF main PWB (YC3) and engine PWB (YC22)
		Defective engine PWB.	Replace the engine PWB and check for cor- rect operation (see page 1-5-22).
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
1810	Paper feeder 2 communica- tion error	Improper installa- tion paper feeder.	Follow installation instruction carefully again.
	A communication error is detected 10 times in succession.	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. PF main PWB (YC3) and PF main PWB (YC4)
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
1820	Paper feeder 3 communica- tion error	Improper installa- tion paper feeder.	Follow installation instruction carefully again.
	A communication error is detected 10 times in succession.	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. PF main PWB (YC3) and PF main PWB (YC4)
		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
1830	Paper feeder 4 communica- tion error	Improper installa- tion paper feeder.	Follow installation instruction carefully again.
	A communication error is detected 10 times in succession.	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. PF main PWB (YC3) and PF main PWB (YC4)
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
1900	Paper feeder 1/BPF paper feeder EEPROM error	Defective PF main PWB.	Replace the PF main PWB or the BPF main PWB (Refer to the service manual for the
	When writing the data, the write data and the read data is not in agreement.	Device damage of EEPROM.	paper feeder).
1910	Paper feeder 2 EEPROM error	Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
	When writing the data, the write data and the read data is not in agreement.	Device damage of EEPROM.	
1920	Paper feeder 3 EEPROM error	Defective PF main PWB.	Replace the PF main PWB (Refer to the ser- vice manual for the paper feeder).
	When writing the data, the write data and the read data is not in agreement.	Device damage of EEPROM.	
1930	Paper feeder 4 EEPROM error	Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
	When writing the data, the write data and the read data is not in agreement.	Device damage of EEPROM.	
2000	Main motor drive error The main motor is not stabi- lized within 2 s after driving	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Main motor and engine PWB (YC4)
	starts.	Defective drive transmission sys- tem of the main 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 main motor.	Replace the main motor.
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).

Code	Contents	Causes	Check procedures/ corrective measures
2010	Main motor steady-state error Stable OFF is detected for 2 s continuously after main motor stabilized.	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Main motor and engine PWB (YC4)
		Defective drive transmission sys- tem of the main 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 main motor.	Replace the main motor.
		Defective engine PWB.	Replace the engine PWB and check for cor- rect operation (see page 1-5-22).
2200	Drum motor drive error (60/50/45 ppm model only) The drum motor is not stabi-	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Drum motor and engine PWB (YC4)
	lized within 2 s after driving starts.	Defective drive transmission sys- tem 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 cor- rect operation (see page 1-5-22).
2210	2210 Drum motor steady-state error (60/50/45 ppm model only) Stable OFF is detected for 2 s continuously after drum motor stabilized.	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Drum motor and engine PWB (YC4)
		Defective drive transmission sys- tem 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 cor- rect operation (see page 1-5-22).

Code	Contents	Causes	Check procedures/ corrective measures
2330	Fuser pressure release motor error (Over-current) (60/50/45 ppm model only)	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Fuser pressure release motor and relay-L PWB(YC11) Relay-L PWB and engine PWB(YC2)
	signal of the motor is detected continuously twenty times.	Defective drive transmission sys- tem of the fuser pressure release motor.	Check if the 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 PWB.	Replace the relay-L PWB or engine PWB. (See Page 1-5-24,1-5-22)
2340	Fuser pressure release motor error (Timeout) (60/50/45 ppm model only) The position detection sensor	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Fuser pressure release motor and relay-L PWB(YC11) Relay-L PWB and engine PWB(YC2)
	is not detected continuously for 30 s.	Defective drive transmission sys- tem of the fuser pressure release motor.	Check if the 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 PWB.	Replace the relay-L PWB or engine PWB. (See Page 1-5-24,1-5-22)
2600	PF drive motor 1 error (paper feeder 1) When the PF drive motor is driven, error signal is detected continuously for 2 s.	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. PF drive motor 1 and PF main PWB (YC6)
		Defective drive transmission sys- tem of the PF drive 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 drive motor.	Replace the PF drive motor 1.
		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
2610	PF drive motor 2 error (paper feeder 2) When the PF drive motor is driven, error signal is detected continuously for 2 s.	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. PF drive motor 2 and PF main PWB (YC6)
		Defective drive transmission sys- tem of the PF drive 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 drive motor.	Replace the PF drive motor 2.
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
2620	PF drive motor 3 error (paper feeder 3) When the PF drive motor is	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. PF drive motor 3 and PF main PWB (YC6)
	driven, error signal is detected continuously for 2 s.	Defective drive transmission sys- tem of the PF drive 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 drive motor.	Replace the PF drive motor 3.
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
2630	 PF drive motor 4 error (paper feeder 4) When the PF drive motor is driven, error signal is detected continuously for 2 s. 	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. PF drive motor 4 and PF main PWB (YC6)
		Defective drive transmission sys- tem of the PF drive 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 drive motor.	Replace the PF drive motor 4.
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
4000	Polygon motor synchroni- zation error	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Polygon motor and engine PWB (YC15)
	bilized within 20 s after driving starts.	Defective polygon motor.	Replace the laser scanner unit (see page 1- 5-18).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).

Code	Contents	Causes	Check procedures/ corrective measures
4200	BD steady-state error When the value of Register BDSET is 1 after setting Reg-	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. PD PWB and engine PWB (YC16)
	ister BDSET as one and pass- ing by BD1 cycle.	Defective PD PWB.	Replace the laser scanner unit (see page 1- 5-18).
		Defective engine PWB.	Replace the engine PWB and check for cor- rect operation (see page 1-5-22).
5100	Chager current error When the current value mea- sured at the time of potential adjustment is less than 20 µA.	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Chager unit and high voltage PWB High voltage PWB and engine PWB (YC16)
	When the current values in the chager voltage 500V con- stitute not less than 85% of	Defective high voltage PWB.	Replace the high voltage PWB and check for correct operation (see page 1-5-26).
	stitute not less than 85% of target current values.	Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
6000	Broken fuser heater wire (60/50/45 ppm model) The detection temperature of fuser thermistor 2 is 100 °C/ 212°F or less after the fuser heater lamp has been turned on continuously for 30 s.	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Fuser heater and power source PWB (YC2) Fuser thermistor and Fuser thermistor con- nect PWB Fuser thermistor connect PWB and engine PWB (YC21)
	(40 ppm model)	Deformed connec- tor pin.	See page 1-4-19.
	fuser thermistor 1 is 100 °C/	Defective triac.	See page 1-4-19.
	212°F or less after the fuser heater lamp has been turned	Fuser thermostat triggered.	Reinsert the fuser unit (see page 1-5-19).
	on continuously for 30 s.	Broken fuser heater wire.	
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).

Code	Contents	Causes	Check procedures/ corrective measures
6020	Abnormally high fuser thermistor 2 temperature (60/50/45 ppm model only)	Deformed connec- tor pin.	See page 1-4-19.
		Defective triac.	See page 1-4-19.
	The detection temperature of fuser thermistor 2 is higher than 235° C/455°F. In a heater-off state, the detection temperature of fuser thermistor 2 is higher than 195° C/383°F after the detection temperature of fuser thermistor 2 was 155° C/311°F or less.	Shorted fuser thermistor.	Replace the fuser unit (see page 1-5-19).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
6030	Broken fuser thermistor 2 wire (60/50/45 ppm model only) A/D value of the fuser thermis- tor 2 exceeds 1019 bit contin- uously for 4 s during warming	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Fuser thermistor and fuser thermistor con- nect PWB Fuser thermistor connect PWB and engine PWB (YC21)
up.	up.	Deformed connec- tor pin.	See page 1-4-19.
		Defective triac.	See page 1-4-19.
		Defective fuser thermistor.	Replace the fuser unit (see page 1-5-19).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).

Code	Contents	Causes	Check procedures/ corrective measures
6000/ 6020/ 6030/	 Broken fuser heater wire Abnormally high fuser thermistor 2 temperature Broken fuser thermistor 2 wire Abnormally high fuser thermistor 1 temperature Broken fuser thermistor 1 wire 	Deformed connec- tor pin.	If the I/F connector pins of the fuser unit and the main unit are deformed owing to foreign matters, replace the connectors or the units including the connectors.
6120/ 6130/ Com- bined		Defective triac.	Remove the power cord and check that the resistance between terminals T1 and T2 of the triac TRA31 and triac TRA41 (the triac TRA41 is 60/50/45 ppm model only) are of several Mega-Ohms and not shorted (see figure 1-4-3). If failed, replace the power source PWB (see page 1-5-25).
		TRA31 TRA41	Image: wide wide wide wide wide wide wide wide

Code	Contents	Causes	Check procedures/ corrective measures
6120	Abnormally high fuser thermistor 1 temperature	Deformed connec- tor pin.	See page 1-4-19.
	(60/50/45 ppm model) The detection temperature of fuser thermistor 1 is higher than 245°C/473°F. In a heater-off state, the detection temperature of fuser thermistor 1 is higher than 195°C/383°F after the detec- tion temperature of fuser thermistor 1 was 155°C/311°F or less.	Defective triac.	See page 1-4-19.
		Shorted fuser thermistor.	Replace the fuser unit (see page 1-5-19).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
	(40 ppm model) The detection temperature of fuser thermistor 1 is higher than 250°C/482°F. In a heater-off state, the detection temperature of fuser thermistor 1 is higher than 170°C/338°F after the detec- tion temperature of fuser thermistor 1 was 155°C/311°F or less.		
6130	Broken fuser thermistor 1 wire A/D value of the fuser thermis- tor 1 exceeds 1019 bit contin- uously for 4 s during warming up.	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Fuser thermistor and fuser thermistor con- nect PWB Fuser thermistor connect PWB and engine PWB (YC21)
		Deformed connec- tor pin.	See page 1-4-19.
		Defective triac.	See page 1-4-19.
		Defective fuser thermistor.	Replace the fuser unit (see page 1-5-19).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).

Code	Contents	Causes	Check procedures/ corrective measures
6400	Zero-cross signal error While fuser heater control is performed, the zero-cross sig- nal is not input within 2 s.	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Power source PWB (YC3) and engine PWB (YC1)
		Defective power source PWB or engine PWB.	Replace the power source PWB or the engine PWB and check for correct operation (see page 1-5-22).
7000	Toner motor error During driving the toner motor, an over-current detection sig- nal is detected at intervals of 10 ms as for 300 accumula-	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Toner motor and drum PWB (YC4) Drum PWB and relay-L PWB (YC3) Relay-L PWB and engine PWB (YC2)
	tion.	Defective toner motor.	Replace the toner motor.
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
7100	Toner sensor error Sensor output value of 930 or more continuously for 5 s.	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Toner sensor and drum PWB (YC3) Drum PWB and relay-L PWB (YC3) Relay-L PWB and engine PWB (YC2)
		Defective toner sensor.	Replace the developer unit. (See Page 1-5-13)
		Defective engine PWB.	Replace the engine PWB and check for cor- rect operation (see page 1-5-22).
7400	Developer unit non-install- ing error Sensor output value of 31 or less continuously for 5 s.	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Developer unit and drum PWB (YC3) Drum PWB and relay-L PWB (YC3) Relay-L PWB and engine PWB (YC2)
		Defective toner sensor.	Replace the developer unit. (See Page 1-5-13)
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).

Code	Contents	Causes	Check procedures/ corrective measures
7410	Drum unit type mismatch error The drum PWB EEPROM does not communicate normally.	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Drum unit and drum connect PWB (YC1) Drum connect PWB and relay-L PWB (YC3) Relay-L PWB and engine PWB (YC2)
	Absence of the drum unit is detected.	Defective toner sensor.	Replace the drum unit. (See Page 1-5-13)
		Defective engine PWB.	Replace the engine PWB and check for cor- rect operation (see page 1-5-22).
7800	Broken external thermistor wire The average of thermistor out-	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Operation PWB and engine PWB (YC17)
	put value of 1016 or more continuously for 160 ms. The average of thermistor out- put value of 930 or more con- tinuously for 5 s.	Defective tempera- ture sensor.	Replace the operation PWB.
7810	Short-circuited external thermistor wire The average of thermistor out- put value of 31 or less contin- uously for 5 s.	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Operation PWB and engine PWB (YC17)
		Defective tempera- ture sensor.	Replace the operation PWB.
7900	Drum unit EEPROM error No response is issued from the device in reading/writing for 5 ms or more and this problem is repeated five times	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Drum unit and drum connect PWB (YC1) Drum connect PWB and relay-L PWB (YC3) Relay-L PWB and engine PWB (YC15)
	successively. Mismatch of reading data from two locations occurs eight times successively. Mismatch between writing data and reading data occurs eight times successively.	Defective drum unit.	Replace the drum unit (see 1-5-15).

Code	Contents	Causes	Check procedures/ corrective measures
F000	Main PWB - operation PWB communication error	Defective connec- tor cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Operation PWB and engine PWB (YC17)
		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 1-5-22).
		Defective opera- tion PWB.	Replace the operation 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 1-5-22).
F020	Main PWB RAM checksum error	Defective main memory (RAM) in main PWB	Turn the main power switch off/on to restart the machine. If the error is not resolved, replace main PWB (see page 1-5-22).
		Defective expended memory (DIMM)	Replace the expansion memory (DIMM). (See Page 1-2-12) Also in the case of the capacity besides specification, it displays.
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 1-5-22).
		Defective engine PWB.	Replace the engine PWB and check for cor- rect operation (see page 1-5-22).
F050	Print engine ROM check- sum 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 1-5-22).

1-4-3 Image formation problems

(2) No image

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

(3) Image is too

See page 1-4-26

(8) Spots are

printed.

light.

(1) No image appears (entirely white).





appears (entirely

See page 1-4-25

(6) Black streaks are printed vertically.



See page 1-4-28 (11) Offset occurs.



See page 1-4-29

See page 1-4-25 (7) Streaks are printed horizontally.







See page 1-4-30

(4) The background is col-

ored.

See page 1-4-27

See page 1-4-29

(14)Image is out of

focus.

(9) Image is

blurred.





See page 1-4-27 (10)Paper is wrinkled.



See page 1-4-29 (15)Carrier leaking occurs.

Г	
	······
	,,,,,

See page 1-4-30

See page 1-4-28 (12)Part of image is missing.

See page 1-4-29

See page 1-4-28 (13)Fusing is loose.

See page 1-4-30

(1) No image appears (entirely white).

Print example		Causes	Check procedures/corrective measures
	Defective developer bias output.	Defective connector cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Developer unit and high voltage PWB High voltage PWB and engine PWB (YC19)
		Defective high voltage PWB.	Replace the high voltage PWB (see page 1-5-26).
		Defective engine PWB.	Replace the engine PWB (see page 1-5-22).
	No LSU laser is out- put.	Defective connector cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Laser scanner unit and engine PWB (YC16)
		The shutter of a laser scan- ner unit does not open.	The operating state of a link part with an top cover is checked.
		Defective laser scanner unit.	Replace the laser scanner unit (see page 1-5-18).
		Defective engine PWB.	Replace the engine PWB (see page 1-5-22).
		Defective main PWB.	Replace the main PWB (see page 1-5-22).

(2) No image appears (entirely black).

Print example	Causes		Check procedures/corrective measures
No main charging.		Defective connector cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Chager roller unit and high voltage PWB High voltage PWB and engine PWB (YC19)
		Defective poor connection of the charger roller	Connection is checked by the electrical con- nection inspection of the charger roller.
		Defective charger roller unit.	Replace the charger roller unit (see page 1-5-15).
		Defective high voltage PWB.	Replace the high voltage PWB (see page 1-5-26).
		Defective engine PWB.	Replace the engine PWB (see page 1-5-22).

Print example	Causes		Check procedures/corrective measures
	Dew condensation of the drum surface.		Perform the drum surface refreshing in a sys- tem menu.
	The paper is moist.		The storage state of a paper is checked.
	Defective transfer charger out- put.	Defective connector cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Transfer roller unit and high voltage PWB High voltage PWB and engine PWB (YC19)
		Defective high voltage PWB.	Replace the high voltage PWB (see page 1-5-26).
		Defective engine PWB.	Replace the engine PWB (see page 1-5-22).
	Defective developer bias output.	Defective connector cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Developer unit and high voltage PWB High voltage PWB and engine PWB (YC10)
		Defective high voltage PWB.	Replace the high voltage PWB (see page 1-5-26).
		Defective engine PWB.	Replace the engine PWB (see page 1-5-22).
	Insufficient to	ner.	If the display shows the message requesting toner replenishment, replace the container.

(3) Image is too light.

(4) The background is colored.

Print example	e Causes		Check procedures/corrective measures
	Defective main charger out- put.	Defective connector cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Chager roller unit and high voltage PWB High voltage PWB and engine PWB (YC19)
		Defective high voltage PWB.	Replace the high voltage PWB (see page 1-5-26).
		Defective engine PWB.	Replace the engine PWB (see page 1-5-22).
	Defective developer bias output.	Defective connector cable or poor contact in the con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, replace the cable. Developer unit and high voltage PWB High voltage PWB and engine PWB (YC10)
		Defective developer unit.	Replace the developer unit (see page 1-5-13).
		Defective high voltage PWB.	Replace the high voltage PWB (see page 1-5-26).
		Defective engine PWB.	Replace the engine PWB (see page 1-5-22).
	Deteriorated	toner.	Perform the drum surface refreshing opera- tion.

(5) White streaks are printed vertically.

Print example	Causes	Check procedures/corrective measures
	Foreign matter in the devel- oper unit.	Check if the magnetic brush is formed uniformly. Replace the developer unit if any foreign matter (see page 1-5-13).
	Adhesion of soiling to transfer roller.	Clean the transfer roller. Replace the transfer roller if it is extremely dirty (see page 1-5-16).
	Dust adhesion to the charger roller unit.	Clean the chager roller unit.
	Dirty dust shield glass of laser scanner unit.	Clean the dust shield glass of laser scanner unit.

(6) Black streaks are printed vertically.

Print example	Causes	Check procedures/corrective measures
	Dirty or flawed drum.	Perform the drum surface refreshing operation. Flawed drum. Replace the drum unit (see page 1-5-15).
	Deformed or worn cleaning blade in the drum unit.	Replace the drum unit (see page 1-5-15).
	Defective transfer roller.	Replace the transfer roller unit (see page 1-5-16).
	Defective chager roller.	Replace the chager roller unit (see page 1-5-15).
	Defective developer roller.	Replace the developer unit (see page 1-5-13).

(7) Streaks are printed horizontally.

Print example	Causes	Check procedures/corrective measures
	Dirty or flawed drum.	Perform the drum surface refreshing operation. Flawed drum. Replace the drum unit (see page 1-5-15).
	Dirty developer section.	Clean any part contaminated with toner in the developer section.
	Poor contact of grounding ter- minal of drum unit.	Check the installation of the drum unit. If it operates incorrectly, replace it (see page 1-5-15).
	The beam detection error of a laser scanner unit	Replace the laser scanner unit (see page 1-5-18).

(8) Spots are printed.

Print example	Causes	Check procedures/corrective measures
	Dirty or flawed drum.	Perform the drum surface refreshing operation. Flawed drum. Replace the drum unit (see page 1-5-15).
	Deformed or worn cleaning blade in the drum unit.	Replace the drum unit (see page 1-5-15).
•	Flawed developer roller.	Replace the developer unit (see page 1-5-13).
	Dirty heat roller and press roller.	Clean the heat roller and press roller.

(9) Image is blurred.

Print example	Causes	Check procedures/corrective measures
	Deformed press roller.	Replace the fuser unit (see page 1-5-19).
	Paper conveying section drive problem.	Check the gears and belts and, if necessary, grease them.

(10) Paper is wrinkled.

Print example	Causes	Check procedures/corrective measures
	Paper curled.	Check the paper storage conditions.
	Paper damp.	
{	Defective pressure springs.	Replace the fuser unit (see page 1-5-19).

(11) Offset occurs.

Print example	Causes	Check procedures/corrective measures
	Deformed or worn cleaning blade in the drum unit.	Replace the drum unit (see page 1-5-15).
	Defective fuser unit.	Replace the fuser unit (see page 1-5-19).
	Wrong types of paper.	Check if the paper meets specifications. Replace paper.

(12) 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 operation.
	Dirty or flawed drum.	Perform the drum surface refreshing operation. Flawed drum. Replace the drum unit (see page 1-5-15).
	Dirty transfer roller.	Clean the transfer roller. Replace the transfer roller if it is extremely dirty (see page 1-5-16).

(13) Fusing is loose.

Print example	Causes	Check procedures/corrective measures
	Wrong types of paper.	Check if the paper meets specifications, replace paper. Setup of media Practical use of half speed printing
	Paper creased.	Replace the paper.
	Flawed heat roller or press roller.	Replace the fuser unit (see page 1-5-19).
	Defective pressure springs.	
	Defective fuser heater.	

(14) Image is out of focus.

Print example	Causes	Check procedures/corrective measures
	Drum condensation.	Perform the drum refresh operation.

(15) Carrier leaking occurs.

Print example	Causes	Check procedures/corrective measures
	Paper creased.	Replace the paper.
		Each of following paper kinds are changed and printed. A paper setup of a printer is changed.
		Menu
		Paper Settings Press the [OK] key.
		Media Type Set. Press the [OK] key.
		CUSTOM 8 Press the [OK] key.
		→ Paer Weight Press the [OK] key.
		Normal 3
		Press the [EXIT] key.
		A setup of a driver is changed.
		By basic setup, the kind of paper is made "CUSTOM 8".

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	1. No electricity at the power outlet.	Measure the input voltage.	
not operate when the power switch is turned on.	2. The power cord is not plugged in prop- erly.	Check the contact between the power plug and the outlet.	
	3. Broken power cord.	Check for continuity. If none, replace the cord.	
	4. Defective power switch.	Check for continuity across the contacts. If none, replace the power switch.	
	5. Defective interlock switch.	Check for continuity across the contacts of interlock switch. If none, replace the power source PWB (see page 1-5-25).	
	6. Defective power source PWB.	Replace the power source PWB or engine PWB (see page 1-5-25,1-5-22).	
(2) Eject motor does not operate.	1. Defective connector cable or poor con- tact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Eject motor and relay-L PWB (YC12) Relay-L PWB and engine PWB (YC2/YC3)	
	2. Defective drive trans- mission 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 eject motor.	
	4. Defective PWB.	Replace the engine PWB or the relay-L PWB and check for correct operation (see page 1-5-22, 1-5-24).	
(3) Power source fan motor does not	1. Defective connector cable or poor con- tact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Power source fan motor and engine PWB (YC10)	
operate.	2. Defective motor.	Replace the power source fan motor.	
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).	
(4) LSU fan motor does not operate.	1. Defective connector cable or poor con- tact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. LSU fan motor and relay-L PWB (YC4) Relay-L PWB and engine PWB (YC2/YC3)	
	2. Defective motor.	Replace the LSU fan motor.	
	3. Defective PWB.	Replace the engine PWB or the relay-L PWB and check for correct operation (see page 1-5-22, 1-5-24).	

Problem	Causes	Check procedures/corrective measures	
(5) Developer fan motor does not operate.	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Developer fan motor and fuser thermistor connect PWB (YC4) Fuser thermistor connect PWB and engine PWB (YC21)	
	2. Defective motor.	Replace the developer fan motor.	
	3. Defective PWB.	Replace the engine PWB or fuser thermistor connect PWB and check for correct operation (see page 1-5-22).	
(6) Paper feed clutch does not operate.	1. Defective connector cable or poor con- tact 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 (YC5)	
	2. Defective clutch.	Replace the paper feed clutch.	
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).	
(7) Registration clutch does not operate.	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Registration clutch and engine PWB (YC5)	
	2. Defective clutch.	Replace the registration clutch.	
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).	
(8) Duplex clutch does not operate.	1. Defective connector cable or poor con- tact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Duplex clutch and engine PWB (YC5)	
(60/50/45 ppm	2. Defective clutch.	Replace the duplex clutch.	
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).	
(9) Developer clutch does not operate.	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Developer clutch and engine PWB (YC5)	
	2. Defective clutch.	Replace the developer clutch.	
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).	
(10) Conveying clutch does not operate.	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Conveying clutch and engine PWB (YC5)	
(60/50/45 ppm model only)	2. Defective clutch.	Replace the Conveying clutch.	
model only)	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).	
(11) MP solenoid does not operate.	1. Defective connector cable or poor con- tact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. MP solenoid and engine PWB (YC8)	
	2. Defective solenoid.	Replace the MP solenoid.	
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).	

Problem	Causes	Check procedures/corrective measures	
(12)Feedshift solenoid does not operate.(60/50/45 ppm	1. Defective connector cable or poor con- tact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Feedshift solenoid and relay-L PWB (YC13) Relay-L PWB and engine PWB (YC2/YC3)	
model only)	2. Defective solenoid.	Replace the Feedshift solenoid.	
	3. Defective PWB.	Replace the engine PWB or the relay-L PWB and check for correct operation (see page 1-5-22, 1-5-24).	
(13) The message requesting paper to	 Defective connector cable or poor con- tact 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 (YC19)	
be loaded is shown when paper is present on the cas-	2. Deformed actuator of the paper sensor.	Check visually and replace if necessary.	
sette.	3. Defective paper sen- sor.	Replace the engine PWB or the high voltage PWB and check for correct operation (see page 1-5-22,1-5-26).	
	4. Defective PWB.		
(14) The message requesting paper to be loaded is shown	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. MP paper sensor and relay-L PWB (YC8) Relay-L PWB and engine PWB (YC2)	
when paper is present on the MP	2. Deformed actuator of the MP paper sensor.	Check visually and replace if necessary.	
liay.	 Defective MP paper sensor. 	Replace the MP paper sensor.	
	4. Defective PWB.	Replace the engine PWB or the relay-L PWB and check for correct operation (see page 1-5-22, 1-5-24).	
(15) The size of paper on the cassette is	1. Defective connector cable or poor con- tact 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 (YC7)	
not displayed cor- rectly.	2. Defective cassette size switch.	Replace the cassette size switch.	
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).	

Problem	Causes	Check procedures/corrective measures	
(16) A paper jam in the paper feed, paper conveying or eject section is indi- cated when the main power switch	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Regist sensor 2 and Drum PWB (YC6) DU sensor 1 and Relay-L PWB (YC9) PF feed sensor and PF main PWB Eject full sensor and engine PWB (YC12) Eject sensor and Engine PWB (YC26)	
is turned on.	2. A piece of paper torn from paper is caught around registration sensor, duplex sen- sor, PF feed sensor, eject full sensor or eject sensor.	Check visually and remove it, if any.	
	3. Defective sensor.	Replace the registration sensor, duplex sensor, PF feed sensor, eject full sensor or eject sensor.	
	4. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).	
(17) A message indicat- ing cover open is	1. Defective connector cable or poor con- tact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Interlock switch and engine PWB (YC6)	
displayed when the top cover is closed.	2. Defective interlock switch.	Check and replace if necessary.	
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).	
(18) A message indicat- ing cover open is displayed when the	1. Defective connector cable or poor con- tact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Rear cover switch and relay-L PWB (YC10) Relay-L PWB and engine PWB (YC2/3)	
rear cover is closed.	2. Defective rear cover switch.	Check and replace if necessary.	
model only)	3. Defective PWB.	Replace the engine PWB or the relay-L PWB and check for correct operation (see page 1-5-22, 1-5-24).	

1-4-5 Mechanical problems

Problem	Causes/check procedures	Corrective measures
(1) No primary paper feed.	Check if the surfaces of the following roll- ers are dirty with paper powder. Pickup roller Paper feed roller MP paper feed pulley	Clean with isopropyl alcohol.
	Check if the following rollers is deformed. Pickup roller Paper feed roller MP paper feed pulley	Check visually and replace any deformed (see page 1-5-8, 1-5-10).
	Defective paper feed clutch installation.	Check visually and remedy if necessary.
(2) No secondary paper feed.	Check if the surfaces of the following roll- ers are dirty with paper powder. Upper registration roller Lower 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)	Check if the paper is excessively curled.	Change the paper.
Multiple sheets of	Paper is loaded incorrectly.	Load the paper correctly.
paper are red.	Check if the retard roller is worn.	Replace the retard roller if it is worn (see page 1-5-8).
(5)	Check if the paper is excessively curled.	Change the paper.
Paper jams.	Check if the contact between the upper and lower 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 1-5-19).
(6) Toner drops on the paper conveying path.	Check if the drum unit or developer unit is extremely dirty.	Clean the drum unit or developer unit.
(7) Abnormal noise is	Check if the rollers, pulleys and gears operate smoothly.	Grease the bushes and gears.
heard.	Check if the following clutches are installed correctly. Paper feed clutch Registration clutch Duplex clutch	Check visually and remedy if necessary.

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

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1-5-1 Precautions for assembly and disassembly

(1) Precautions

Before starting disassembly, push the power switch and check the disappeared display of an operation panel certainly. Unplug the power cable from the wall outlet.

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 unit

Note the following when handling or storing the drum unit.

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

Keep the drum unit 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 unit.

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 containers in a cool, dark place. Avoid exposing the toner containers to direct light and high humidity.

(4) How to tell a genuine Kyocera toner container

As a means of brand protection, the Kyocera 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 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 top cover

Procedure

- 1. Open the rear cover.
- 2. Open the top cover.
- 3. Remove two screws.
- 4. Release two hooks and then lift the top cover upward.
- 5. Pull out FFC from the connector and then remove the top cover assembly.



Figure 1-5-3

(2) Detaching and refitting the inlet cover and slot cover

- 1. Open the rear cover.
- 2. Remove the inlet cover.
- 3. Release the hook of the slot cover and then remove the slot cover.



Figure 1-5-4

(3) Detaching and refitting the right upper cover

Procedure

- 1. Open the front cover.
- 2. Remove the top cover assembly. (See page 1-5-3)
- 3. Remove the slot cover. (See page 1-5-3)
- 4. Remove two screws.
- 5. Release hook A.
- 6. Release two hooks B by sliding the right upper cover upward and then remove the right upper cover.



Figure 1-5-5

(4) Detaching and refitting the right lower cover

- 1. Remove the right upper cover. (See page 1-5-4)
- 2. Remove the inlet cover. (See page 1-5-4)
- 3. Pull out the cassette.
- 4. Remove three screws.
- 5. Release two hooks by sliding the right lower cover upward and then remove the right lower cover.



Figure 1-5-6

(5) Detaching and refitting the rear left cover

Procedure

- 1. Open the rear cover.
- 2. Release two hooks of the rear left cover while pulling forward.
- 3. Remove the rear left cover by rotating.



Figure 1-5-7

(6) Detaching and refitting the left upper cover

- 1. Open the front cover.
- 2. Remove the top cover assembly. (See page 1-5-3)
- 3. Remove the rear left cover. (See page 1-5-5)
- 4. Release the hook A by sliding the left upper cover upward.
- Release the hook B and hook C and then remove the left upper cover and the waste toner box cover. (See page 1-5-5)



Figure 1-5-8

(7) Detaching and refitting the left lower cover

Procedure

- 1. Remove the left upper cover. (See page 1-5-5)
- 2. Pull out the cassette.
- 3. Remove the rear left lower cover. (See page 1-5-5)
- 4. Remove the screw.
- 5. Release the hook A.
- 6. Release two hooks B by sliding the left lower cover upward and then remove the left lower cover.



Figure 1-5-9

(8) Detaching and refitting the rear cover

Procedure

- 1. Remove the rear left lower cover. (See page 1-5-5)
- 2. Open the rear cover.

[60/50/45 ppm model only]

- 3. Remove the screw and then the grounding wire.
- 4. Open the connector cover and then remove three connectors.



Figure 1-5-10

5. Remove the fulcrum axis by sliding the rear cover assembly while avoiding rear cover and then remove the rear cover assembly.



Figure 1-5-11

1-5-3 Paper feed section

(1) Detaching and refitting the paper feed roller

Procedure

- 1. Pull out the cassette.
- 2. Release the lock by pulling the lever.
- 3. Remove the paper feed roller assembly by pulling and raising and then sliding forward.
- 4. Check or replace the paper feed roller and refit all the removed parts.



Figure 1-5-12

(2) Detaching and refitting the retard roller

Procedure

1. Release two hooks in backside of cassette and then remove the retard roller assembly.



Figure 1-5-13

- 2. Remove the spring.
- 3. Remove the retard roller holder by rotating.
- 4. Check or replace the retard roller and refit all the removed parts.





(3) Detaching and refitting the MP paper feed pulley

- 1. Open the top cover.
- 2. Open the front cover.
- 3. Remove the MP tray from the printer while bending it.



Figure 1-5-15

- 4. Remove the fulcrum of leftside by extending a cover.
- 5. Remove the fulcrum of rightside during twisting a cover.
- 6. Remove the front cover forward.



Figure 1-5-16
7. Remove two screws on the MP paper feed unit.



Figure 1-5-17

8. Remove the MP paper feed unit from the printer.





- 9. Release the lock lever and then slide the MP paper feed pulley axis.
- 10. Remove MP paper feed pulley.
- 11. Check or replace the MP paper feed pulley and refit all the removed parts.



Figure 1-5-19

1-5-4 Developer section

(1) Detaching and refitting the developer unit

Procedure

- 1. Open the top cover.
- 2. Release the lock lever by rotating and then remove the toner container.



Figure 1-5-20

- 3. Open the front cover.
- 4. Pull the imaging unit forward.
- 5. Release the hook and then remove the container guide by sliding backwards.



Figure 1-5-21



Figure 1-5-22

1-5-5 Drum section

(1) Detaching and refitting the drum unit

Procedure

- 1. Remove the developer unit. (See page 1-5-13)
- 2. Remove the lock lever L.
- 3. Remove the lock lever R by sliding backward.
- 4. Remove the drum unit by sliding forward.
- 5. Check or replace the drum unit and refit all the removed parts.





(2) Detaching and refitting the chager roller unit

- 1. Release the lock lever and then remove the chager roller unit.
- 2. Check or replace the charger roller unit and refit all the removed parts.



Figure 1-5-24

1-5-6 Transfer/separation section

(1) Detaching and refitting the transfer roller assembly

- 1. Release four hooks by sliding to left the paper chute guide.
- 2. Remove the paper chute guide upward.



Figure 1-5-25

- 3. Remove the axes of transfer roller from each bush.
- 4. Remove the transfer roller assembly upward.
- 5. Check or replace the transfer roller assembly and refit all the removed parts.



Figure 1-5-26

(2) Detaching and refitting the separation needle unit

Procedure

- 1. Remove the transfer roller unit. (See page 1-5-16)
- 2. Release four hooks of separation needle unit by rotating and then remove the separation needle unit upward.
- 3. Check or replace the separation needle unit and refit all the removed parts.

Caution: Check certainly being fixed at the time of attachment.



Figure 1-5-27

1-5-7 Optical section

(1) Detaching and refitting the laser scanner unit

- 1. Remove the top cover assembly. (See page 1-5-3)
- 2. Remove the right upper cover. (See page 1-5-4)
- 3. Pull the connector and FFC from engine PWB out.
- 4. Release the wires from the wire guide.
- 5. Remove four screws and then remove the laser scanner unit upward.
- 6. Check or replace the laser scanner unit and refit all the removed parts.



Figure 1-5-28

1-5-8 Fuser section

(1) Detaching and refitting the fuser unit

- 1. Remove the rear cover. (See page 1-5-6)
- 2. Remove the screw and then remove the connector cover A.
- 3. Pull two connectors out.





- 4. Remove the connector cover B by releasing the hook.
- 5. Remove the screw of connector cover C.
- 6. Remove the connector cover C by releasing the hook.
- 7. Pull two connectors out.



Figure 1-5-30

[60/50/45 ppm model]

- 8. Remove the screw and then remove the fuser unit forward.
- 9. Check or replace the fuser unit and refit all the removed parts.

Caution: when refitting the fuser unit, perform the following procedures.

(1)Turn on the power switch while opening the rear cover after removing the fuser unit.(2)Turn off the power switch after 5-second or more progress.

(release state of fixing pressure)(3)Refit the fuser unit.



Figure 1-5-31

[40 ppm model]

- 8. Pull up the release lever of fixing pressure.
- 9. Remove the screw and then remove the fuser unit forward.
- 10. Check or replace the fuser unit and refit all the removed parts.

Caution: Pull down the release lever of fixing pressure after refitting the fuser unit.(pressurization state)



Figure 1-5-32

1-5-9 ejection section

(1) Detaching and refitting the ejection unit

Procedure

- 1. Remove the top cover assembly. (See page 1-5-3)
- 2. Remove the right upper cover and the right lower cover. (See page 1-5-4)
- 3. Remove the left upper cover. (See page 1-5-5)
- 4. Remove the controller box cover. (See page 1-5-25)
- 5. Pull the connector out and then release the wires from Hooks.
- 6. Remove three screws and then remove the ejection unit.
- 7. Check or replace the ejection unit and refit all the removed parts.

*1: 60/50/45 ppm model only

*2: 40 ppm model only



Figure 1-5-33

1-5-10 PWBs

(1) Detaching and refitting the main PWB

Procedure

- 1. Remove the inlet cover and the slot cover.(See page 1-5-3)
- 2. Unplug the power cable.

Caution: Do not insert or remove main PWB assembly while machine power is on.

Doing so may cause damage to the machine and the main PWB.

- 3. Remove five screws and then pull the main PWB assembly out forward.
- 4. Check or replace the main PWB and refit all the removed parts.



Figure 1-5-34

(2) Detaching and refitting the engine PWB

Procedure

- 1. Remove the top cover assembly. (See page 1-5-3)
- 2. Remove the right upper cover. (See page 1-5-4)
- 3. Remove the main PWB assembly. (See page 1-5-22)
- 4. Remove the screw and then the grounding terminal.
- 5. Release the wires and FFC from hooks.
- 6. Release the fixing hook and then remove the wire guide.



Figure 1-5-35

- 7. Pull two connectors out.
- 8. Remove the screw and two hooks and then remove the wire guide.



Figure 1-5-36

- 9. Pull all connectors out from main PWB.
- 10. Remove four screws and then remove the engine PWB.
- 11. Check or replace the engine PWB and refit all the removed parts.



Figure 1-5-37

(3) Detaching and refitting the relay-L PWB

- 1. Remove the top cover assembly. (See page 1-5-3)
- 2. Pull the connectors out from relay-L PWB and then release the wires from hooks.
- 3. Remove the LSU fan motor assembly upward.



Figure 1-5-38

- 4. Pull the connectors and FFC out and then remove the relay-L PWB.
- 5. Check or replace the relay-L PWB and refit all the removed parts.



Figure 1-5-39

(4) Detaching and refitting the power source PWB

Procedure

- 1. Remove the top cover assembly. (See page 1-5-3)
- 2. Remove the right upper cover. (See page 1-5-4)
- 3. Remove the right lower cover. (See page 1-5-4)
- 4. Remove the main PWB. (See page 1-5-22)
- 5. Remove the wire guide. (See page 1-5-22)
- 6. Remove three screws and then remove the controller box cover.



Figure 1-5-40

- 7. Remove the grounding wire by removing the screw.
- 8. Remove three screws and then remove the power source PWB assembly.
- 9. Check or replace the power source PWB and refit all the removed parts.



Figure 1-5-41

(5) Detaching and refitting the high voltage PWB

Procedure

- 1. Remove the cassette.
- 2. Remove the right upper cover and the right lower cover. (See page 1-5-4)
- 3. Remove the left upper cover and the left lower cover. (See page 1-5-6)
- 4. Remove the power source fan motor. (See page1-5-30)
- 5. Remove the power source PWB. (See page1-5-25)
- 6. Stand the printer front side up.
- 7. Remove four screws each and then remove the bottom plate 1 and the bottom plate 2.



Figure 1-5-42

8. [60/50/45 ppm model only] Release two hooks and then remove the wire cover. Pull the connector of lift sensor out.



Figure 1-5-43

- 9. Remove seven screws.
- 10. Extract the feed roller axis by pushing the joint part.
- 11. Remove the DU assy to the front.



Figure 1-5-44

- 12. Remove the screw.
- 13. Pull two connectors out and then remove the high voltage PWB.
- 14. Check or replace the high voltage PWB and refit all the removed parts.



Figure 1-5-45

(6) Detaching and refitting the operation PWB

- 1. Open the top cover.
- 2. Remove the JAM processing procedure sheet.
- 3. Remove three screws.



Figure 1-5-46

- 4. Rotate the operation PWB cover.
- 5. Remove the screw and then remove the operation PWB.
- 6. Check or replace the operation PWB and refit all the removed parts.



Figure 1-5-47

1-5-11 Others

(1) Detaching and refitting the main driving motor unit

- 1. Remove the right upper cover. (See page 1-5-4)
- 2. Remove the right lower cover. (See page 1-5-4)
- 3. Pull the connector out from the motor and then release the wires from wire holder.
- 4. Remove three screws and then remove the main driving motor unit.
- 5. Check or replace the main driving motor unit and refit all the removed parts.







Figure 1-5-49

(2) Detaching and refitting the paper feed driving motor unit

Procedure

- 1. Remove the right upper cover. (See page 1-5-4)
- 2. Remove the right lower cover. (See page 1-5-4)
- 3. Pull the connectors of clutches and solenoid out.
- 4. Remove three screws and then remove the paper feed driving motor unit.
- 5. Check or replace the paper feed driving motor unit and refit all the removed parts.



Figure 1-5-50

(3) Detaching and refitting the power source fan motor

- 1. Remove the right upper cover. (See page 1-5-4)
- 2. Remove the right lower cover. (See page 1-5-4)
- 3. Pull the connector of the power source fan motor wire out.
- Release three hooks using flat-blade screwdriver and then remove the power source fan motor assembly.
- 5. Check or replace the power source fan motor and refit all the removed parts.



Figure 1-5-51

(4) Direction of installing the principal fan motors

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



Figure 1-5-52

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1-6-1 Upgrading the firmware

Follow the procedure to upgrade the firmware below.

- * Main PWB (CTRL)
- * Engine PWB (ENGN)

- * PF main PWB (PF)
- * Language data (OPT)

Preparation

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

NOTE: To improve Firmware Upgrade speed, a separate SKIP file can be added to the USB Memory Stick with the Firmware Upgrade package. The Skip file will allow ONLY the Firmware that has been Upgraded to a New Version to load, skipping duplicate Firmware Levels.

Procedure

1. Turn ON the power switch and confirm if the screen shows "Ready to print" then, turn OFF the power switch.

> Ready to print. ₽⊑ A4 1⊒ A6 [Status] [Toner]

- 2. Insert USB memory that has the firmware in the USB host interface slot.
- 3. Turn ON the power switch.
- 4. About 50 seconds later, "FW-Update" will be displayed (this shows to start the download).
- 5. Display the software that now upgrading.

```
\mathsf{CTRL} \to \mathsf{PF1} \to \mathsf{PF2} \to \mathsf{PF3} \to \mathsf{PF4} \to \mathsf{ENGN} \to \mathsf{OPT}
```

Figure 1-6-1

 \bigcirc

🔘 USB host

interface slot

USB memory

SAMPLE: ================

 FW-Update [CTRL]
 The first line:
 Display that shows update object

 Image: Im

Caution:

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

6. Display the completion of the upgrade.

(The 1st page)	(2 page or subsequent ones)	
=================	================	
FW-Update	[ENGN]	2/8
Completed	2LV_3F00.001.014	
=======================================	=======================================	

7. ROM version is confirmed by the content of the display.

8. Unplug the power cable and remove the USB memory.

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.2LV] to [KM_EMRG.2LV]

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

- 1. Unplug the power cable.
- 2. Insert the USB memory which contains the firmware into the USB host interface slot.
- 3. Plug the printer into a power outlet and then turn the power switch on.
- Rewriting of the PWB software will start for restoration. The data and attention LEDs will be blinking.
- 5. Only the Data LED will be blinking when rewriting is successful.
 - * : Only the Attention LED will be blinking when rewriting is failed.
- 6. Unplug the power cable and then remove the USB memory from the USB host interface slot.
- 7. 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.
- 8. Insert the USB memory in which the firmware was copied into the USB host interface slot.
- 9. Plug the printer into a power outlet.
- 10. Perform steps 3 to 8 on the previous page.





1-6-2 Remarks on PWB replacement

(1) Engine PWB

NOTE: When replacing the PWB, remove the EEPROM from the PWB and then reattach it to the new PWB.



Figure 1-6-3

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 500 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. Paper feed roller
- 2. Pickup roller
- 3. Feed holder
- 4. Retard roller

- 5. Retard holder
- 6. Retard guide
- 7. Bottom plate
- 8. Cassette base



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

^{*1: 60/50/45} ppm model only

(2) MP tray paper feed section

The MP tray can contain 100 sheets. Feeding from the MP tray is performed by the rotation of the MP paper feed roller. Also, function of the MP separation pad prevents paper from multiple feeding.



Figure 2-1-3 MP tray paper feed section

- 1. MP paper feed roller
- 2. MP separation pad
- 3. MP bottom plate

- 4. MP frame
- 5. MP base
- 6. MP (Multi purpose)tray



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

(3) Conveying section

The 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 paper feed roller to the position where the registration sensor (RS) is turned on, and then sent to the transfer/separation section by the upper registration roller and lower registration roller.



Figure 2-1-5 Conveying section

- 1. Middle feed roller
- 2. Feed DU pulley
- 3. Upper registration guide
- 4. Actuator (Registration sensor 1 (RS1)) *1
- 5. Upper registration roller
- 6. Lower registration roller
- 7. Actuator
 - (Registration sensor 3 (RS3)) *2



Figure 2-1-6 Paper conveying section block diagram

- *1: 40ppm model only
- *2: 60/50/45 ppm model only

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.

(1) Charger roller unit

The drum surface is uniformly charged

by contacting the roller which gave the electric charge and was charged on the drum surface, and rotating it.



Figure 2-1-7 Charger roller unit

- 1. Drum
- 2. Charger roller

- 3. Charger cleaning roller
- 4. Charger case



Figure 2-1-8 Charger roller unit

(2) Cleaning unit

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 2-1-9 Cleaning unit

- 1. Cleaning blade
- 2. Cleaning roller
- 3. Control roller
- 4. Sweep roller

- 5. Drum frame
- 6. Scraper
- 7. Cleaning lamp (CL)



Figure 2-1-10 Cleaning unit block diagram

2-1-3 Developer section

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



Figure 2-1-11 Developer section

- 1. Developer roller
- 2. Developer blade
- 3. Magnet blade
- 4. Developer screw A
- 5. Developer screw B

- 6. Developer case
- 7. Upper developer cover
- 8. Toner supply roller
- 9. Toner container



Figure 2-1-12 Developer section block diagram

2-1-4 Optical section

(1) 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.



Figure 2-1-13 Laser scanner unit (LSU)

- 1. Polygon motor (PM)
- 2. fθ main lens

- 4. LSU dust shield glass 5. LSU base
- 3. Direction change mirrer
- 6. LSU cover



Figure 2-1-14 Laser scanner unit block diagram

2-1-5 Transfer/Separation section

The transfer and separation section consists mainly of the transfer roller and separation electrode. A high voltage generated by the high voltage PWB (HVPWB) is applied to the transfer roller for transfer charging.

Paper after transfer is separated from the drum by applying separation charging that is output from the high voltage PWB (HVPWB) to the separation electrode.



Figure 2-1-15 Transfer/Separation section

1. Transfer roller

- 4. Drum
- 5. Drum heater *1
- Paper chute guide
 Separation needle



Figure 2-1-16 Transfer/Separation section block diagram

*1: 110V only

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 (FUH), 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 (FUTH1,2) 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 (FUH) is forced to turn off.





- 1. Heat roller
- 2. Fuser heater (FUH)
- 3. Fuser thermostat (FUTS)
- 4. Fuser thermistor (FUTH1)
- 5. Separators
- 6. Press roller
- 7. Actuater (Eject sensor (ES))
- 8. Fuser eject roller
- 9. Fuser eject pulley
- 10. Upper fuser frame
- 11. Lower Fuser frame
- 12. Pre fuser guide
- 13. Fuser thermistor (FUTH2)



(60/50/45 ppm model)

(40 ppm model)



Figure 2-1-18 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 facedown tray, the faceup tray (60/50/45 ppm model only) or the duplex conveying section.



Figure 2-1-19 Eject/Feedshift section

- 1. Upper eject roller
- 2. Upper eject pulley
- 3. Actuator
 - (Eject full sensor (EFS)) *2
- 4. Lower eject roller
- 5. Lower eject pulley
- 6. Vertical guide
- *1: 60/50/45 ppm model only
- *2: Except 40 ppm (without Network) model

- 7. Paper exit guide
- 8. Top cover
- 9. DU feed pulley
- 10. Rear cover
- 11. Faceup roller *1
- 12. Faceup pulley *1
- 13. Feedshift guide *1


Figure 2-1-20 Eject/Feed shift section block diagram

*2: Except 40 ppm (without Network) model

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.





- 1. DU conveying roller
- 2. DU conveying pulley
- 3. Actuater
 - (Duplex sensor 1 (DUS1)) *1
- 4. Actuater
 - (Duplex sensor 2 (DUS2))
- 5. DU base
- 6. DU lower guide
- 7. Upper feed guide



Figure 2-1-22 Duplex conveying section block diagram

*1: 60/50/45 ppm model only

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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 con- trol, paper conveying system control, and fuser temperature con- trol, etc.
3. Power source PWB (PSPWB)	After full-wave rectification of AC power source input, switching for converting to 24 V DC for output. Controls the fuser heater.
4. High voltage PWB (HVPWB)	Generates main charging, developing bias, transfer bias.
5. Drum PWB (DRPWB)	Relays wirings from electrical components on the drum unit. Drum individual information in EEPROM storage.
6. Drum relay PWB (DRRPWB)	Consists of wiring relay circuit between engine PWB and the drum unit.
7. Relay-L PWB (R-LPWB)	Consists of wiring relay circuit between engine PWB and drum connect PWB.
8. Operation PWB (OPPWB-M)	Consists the LCD, LED indicators and key switches.
9. Backlight PWB (BLPWB)	LCD lighting.
10. Fuser thermistor relay PWB	
(FUTHRPWB)	Consists of wiring relay circuit between engine PWB ,fuser thermistors and cooling fans.
11. APC PWB (APCPWB)	Generates and controls the laser beam.
12. PD PWB (PDPWB)	Controls horizontal synchronizing timing of laser beam.
13. Container PWB (CPWB)	Reads the container information.

List of correspondences of PWB names

No.	Name used in service manual	Name used in parts list		
1	Main PWB (MPWB)	PARTS PWB ASSY MAIN SP		
2	Engine PWB (EPWB)	PARTS PWB ASSY ENGINE SP		
3	Power source PWB (PSPWB)	PARTS SWITCHING REGULATOR 120V SP PARTS SWITCHING REGULATOR 230V SP		
4	High voltage PWB (HVPWB)	PARTS HIGH VOLTAGE UNIT SP		
5	Drum PWB (DRPWB)	P.W. BOARD ASSY DRUM		
6	Drum connect PWB (DRRPWB)	P.W. BOARD ASSY DRUM CONNECT		
7	Relay-L PWB (R-LPWB)	P.W. BOARD ASSY CONNCT-L		
8	Operation PWB (OPPWB)	PARTS PW/B ASSY PANEL SP		
9	Backlight PWB (BLPWB)	- PARTS PWB ASST PANEL SP		
10	Fuser thermistor relay PWB (FUTHRPWB)	P.W. BOARD ASSY TH CONNECT		
11	APC PWB (APCPWB)	P.W. BOARD ASSY APC		
12	PD PWB (PDPWB)	P.W. BOARD ASSY PD		
13	Container PWB (CPWB)	P.W. BOARD ASSY CONTAINER		

(2) Switches and sensors



Figure 2-2-2 Switches and sensors

1.	Paper sensor 1 (PS1)	Detects the presence of paper in the cassette.
2.	Paper sensor 2 (PS2)	Detects the presence of paper in the cassette.
3.	Cassette size switch (CSSW)	Detects the paper size dial setting of the paper setting dial.
4.	Eject full sensor (EFS) *3	Detects the paper full in the upper tray (Facedown).
5.	Registration sensor 1 (RS1) *2	Controls the secondary paper feed start timing.
6.	Registration sensor 2 (RS2) *1	Controls the secondary paper feed start timing.
7.	Registration sensor 3 (RS3) *1	Controls the Image data beginning timing.
8.	Duplex sensor 1 (DUS1) *1	Detects a paper jam in the duplex section.
9.	Duplex sensor 2 (DUS2)	Detects a paper jam in the duplex section.
10.	MP paper sensor (MPPS)	Detects the presence of paper on the MP tray.
11.	Eject sensor (ES)	Detects a paper misfeed in the fuser or eject section.
12.	Fuser pressure release sensor	
	(FURS)	Detects the change state of pressure in fuser unit.
13.	Fuser thermistor 1 (FUTH1)	Detects the heat roller temperature at the edge position.
14.	Fuser thermistor 2 (FUTH2)	Detects the heat roller temperature at the center position.
15.	Toner sensor (TS)	Detects the amount of toner in the developer.
16.	Lift sensor (LS) *1	Detects the top limit of the bottom plate.
17.	Interlock switch (ILSW)	Shuts off 24 V DC power line when the top cover is opened.
18.	Rear cover switch (RECSW) *1	Detects the opening and closing of the rear cover.
19.	Waste toner sensor (WTS)	Detects when the waste toner box is full.
20.	Power source switch (PSSW)	Change ON/OFF the power supply of a main PWB, an operation PWB, etc.

*1: 60/50/45 ppm model only *2: 40 ppm model only

- *3: Except 40 ppm model (without network)

(3) Motors



Figure 2-2-3 Motors

- 1. Main motor (MM)..... Drives the paper feed section and conveying section.
- 2. Drum motor (DRM) *1 Drives the drum unit and transfer roller.
- 3. Eject motor (EM)..... Drives the eject section.
- 4. Polygon motor (PM)..... Drives the polygon mirror.
- 5. Fuser pressure release motor (FUPRM) *1Drives the change mechanism of fixing pressure in fuser unit.
- 6. Lift motor (LM) *1 Operates the bottom plate in the cassette.
- 7. Toner motor (TM) Replenishes toner to the developer unit.
- 8. LSU fan motor (LSUFM) Cools the LSU unit.
- 9. Power source fan motor (PSFM) Cools the power source PWB.
- 10. Developer fan motor (DEVFM) Cools the developer unit.

*1: 60/50/45 ppm model only

(4) Clutches and others



Figure 2-2-4 Clutches and others

- 1. Paper feed clutch (PFCL) Primary paper feed from cassette.
- 2. Registration clutch (RCL)..... Controls the secondary paper feed.
- 3. Developer stop clutch (DEVSCL)...... Controls the drive of the developer.
- 4. Conveying clutch (PCCL) *1 Controls the paper conveying.
- 5. Duplex clutch (DUCL) *1..... Controls the drive of the duplex feed roller.
- 6. MP solenoid (MPSOL) Controls the MP bottom plate.
- 7. Feedshift solenoid (FSSOL) *1 Operates the feedshift guide.
- 8. LCD (LCD) LCD display. Displays an operating state.
- 9. Cleaning lamp (CL)..... Eliminates the residual electrostatic charge on the drum.
- 10. Fuser heater 1 (FUH1)..... Heats the heat roller.
- 11. Fuser heater 2 (FUH2) *1 Heats the heat roller.
- 12. Fuser thermostat 1 (FUTS1) Prevents overheating of the heat roller.
- 13. Fuser thermostat 2 (FUTS2) *1..... Prevents overheating of the heat roller.
- 14. Drum heater (DH) *2..... Heats the drum.
- *1: 60/50/45 ppm model only

*2: 110V only

2-3-1 Main PWB (MPWB)



Figure 2-3-1 Main PWB silk-screen diagram and Photograph

Connector	Pin	Signal	I/O	Voltage	Description
YC1	1	CD/DAT3	I/O	0/3.3 V DC	control signal
Connected to	2	CMD	I/O	0/3.3 V DC	control signal
the SD card	3	Vss	-	-	Ground
I/F	4	Vdd	-	0/3.3 V DC	control signal
	5	CLK	-	0/3.3 V DC	control signal
	6	Vss	-	-	Ground
	7	DAT0	I/O	0/3.3 V DC(pulse)	Data bus signal
	8	DAT1	I/O	0/3.3 V DC(pulse)	Data bus signal
	9	DAT2	I/O	0/3.3 V DC(pulse)	Data bus signal
	10	CD	Ι	0/3.3 V DC	control signal
	11	COMMON	-	0/3.3 V DC	control signal
	12	WP	Ι	0/3.3 V DC	control signal
YC2	A1	E2C_INT	I	0/3.3 V DC	Transmission clock signal
Connected to	B1	C2E_INT	0	0/3.3 V DC	controller interrupt signal
the engine	A2	GND	-	-	Ground
PWB	B2	C2E_OFFRD Y	0	0/3.3 V DC	OFF mode sift signal
	A3	GND	-	-	Ground
	В3	VSYNC	Ι	0/3.3 V DC(pulse)	Sub scanning synchronizing signal
	A4	E2C_SBSY	Ι	0/3.3 V DC	System busy signal
	B4	E2C_SDIR	Ι	0/3.3 V DC	Serial communication direction signal
	A5	C2E_SDAT	0	0/3.3 V DC(pulse)	Serial communication data input
	B5	C2E_SCKN	0	0/3.3 V DC(pulse)	Serial communication clock signal
	A6	E2C_IRN	Ι	0/3.3 V DC	Engine interrupt signal
	B6	E2C_SDAT	Ι	0/3.3 V DC(pulse)	Serial communication data output
	A7	GND	-	-	Ground
	B7	PLGCLK	0	0/3.3 V DC	PM control signal
	A8	VDATA2N	0	0/3.3 V DC	Video data signal
	B8	VDATA1N	0	0/3.3 V DC	Video data signal
	A9	VDATA2P	0	0/3.3 V DC	Video data signal
	В9	VDATA1P	0	0/3.3 V DC	Video data signal
	A10	GND	-	-	Ground
	B10	PDN	Ι	0/3.3 V DC(pulse)	Main scanning synchronizing signal
	A11	SAMPLE1	0	0/3.3 V DC	Sample/Hold signal
	B11	SAMPLE2	0	0/3.3 V DC	Sample/Hold signal
	A12	C2P_SDAT	0	0/3.3 V DC	Panel transmitted data signal
	B12	P2C_SDAT	I	0/3.3 V DC	Panel received data sjgnal

Connector	Pin	Signal	I/O	Voltage	Description
YC2	A13	C2P_LCDCO	0	0/3.3 V DC	Panel LCD control signal
		Ν			
Connected to	B13	P2C_PKEY	I	0/3.3 V DC	Panel start signal
the engine	A14	C2P_BUZCO	0	0/3.3 V DC	Panel buzzer control signal
FVVD		Ν			
	B14	FUPRST	0	0/3.3 V DC	Panel reset signal
	A15	GND	-	-	Ground
	B15	GND	-	-	Ground
	A16	VBUS	0	5V DC	5 V DC power output to USB
	B16	UDATAP	I/O	-	USB data signal
	A17	GND	-	-	Ground
	B17	UDATAN	I/O	-	USB data signal
	A18	GND	-	-	Ground
	B18	GND	-	-	Ground
	A19	+5V2	Т	5 V DC	5 V DC power input from EPWB
	B19	+5V2	Ι	5 V DC	5 V DC power input from EPWB
	A20	+5V2	I	5 V DC	5 V DC power input from EPWB
	B20	+5V2	Ι	5 V DC	5 V DC power input from EPWB
YC5	1	VDD5	0	5 V DC	5 V DC power output to eKUIO
Connected to	2	GND	-	-	Ground
the eKUIO IF	3	RESETN	0	0/3.3 V DC	Reset signal
	4	VDD5_CUT	0	0/3.3 V DC	Sleep signal
	5	GND	-	-	Ground
	6	WAKEUP	I	0/3.3 V DC	Wake-up signal
	7	AUDIO	I	0/3.3 V DC	Audio signal
	8	NC	-	-	Not used
	9	NC	-	-	Not used
	10	NC	-	-	Not used
	11	GND	-	-	Ground
	12	NC	-	-	Not used
	13	NC	-	-	Not used
	14	GND	-	-	Ground
	15	NC	-	-	Not used
	16	NC	-	-	Not used
	17	GND	_	-	Ground
			1		
-	18	USB DP	I/O	-	USB data signal
	18 19	USB_DP USB_DN	I/O I/O	-	USB data signal USB data signal

Connector	Pin	Signal	I/O	Voltage	Description
YC6	1	+3.3V	0	3.3 V DC	5 V DC power output to OP
Connected to	2	+5.0V	0	5 V DC	5 V DC power output to OP
the centro	3	P1284DIR	0	0/3.3 V DC	Direction input signal
	4	NACK	0	0/3.3 V DC	Acknowledge input signal
	5	BUSY	0	0/3.3 V DC	Busy input
	6	PERROR	0	0/3.3 V DC	Errer signal
	7	SELECT	0	0/3.3 V DC	Select signal
	8	NFAULT	0	0/3.3 V DC	Errer signal
	9	PDATA1	I/O	-	Data signal
	10	PDATA2	I/O	-	Data signal
	11	PDATA3	I/O	-	Data signal
	12	PDATA4	I/O	-	Data signal
	13	PDATA5	I/O	-	Data signal
	14	PDATA6	I/O	-	Data signal
	15	PDATA7	I/O	-	Data signal
	16	PDATA8	I/O	-	Data signal
	17	NSELECTIN	Ι	0/3.3 V DC	Select signal
	18	NSTROBE	Ι	0/3.3 V DC	Output signal
	19	NAUTOFD	Ι	0/3.3 V DC	AUTO-FEED signal
	20	NINIT	Ι	0/3.3 V DC	Reset signal
	21	PDETECT	Ι	0/3.3 V DC	OP detection signal
	22	GND	-	-	Ground
YC8	1	TD1+	I/O	0/3.3 V DC(pulse)	Trancemitted data
Connected to	2	TD1-	I/O	0/3.3 V DC(pulse)	Send data
the network I/	3	TD2+	I/O	0/3.3 V DC(pulse)	Send data
Г	4	TD2-	I/O	0/3.3 V DC(pulse)	Send data
	5	CT1	0	3.3 V DC	3.3 V DC power output
	6	CT2	0	3.3 V DC	3.3 V DC power output
	7	TD3+	I/O	0/3.3 V DC(pulse)	Send data
	8	TD3-	I/O	0/3.3 V DC(pulse)	Send data
	9	TD4+	I/O	0/3.3 V DC(pulse)	Send data
	10	TD4-	I/O	0/3.3 V DC(pulse)	Send data
	11	GRLED_A	I	0/3.3 V DC	LED flashing caution signal
	12	GRLED_K	Ι	0/3.3 V DC	LED flashing caution signal
	13	YWLED_A	Ι	0/3.3 V DC	LED flashing caution signal
	14	YWLED_K	Ι	0/3.3 V DC	LED flashing caution signal

Connector	Pin	Signal	I/O	Voltage	Description
YC10	A1	VBUS_A	0	5 V DC	5 V DC power output to USB device
Connected to	A2	DA	I/O	-	USB data signal
the USB host	A3	D+_A	I/O	-	USB data signal
device I/F	A4	GND_A	-	-	Ground
	B1	VBUS_B	0	5 V DC	5 V DC power output to USB host
	B2	DB	I/O	-	USB data signal
	В3	D+_B	I/O	-	USB data signal
	B4	GND_B	-	-	Ground

2-3-2 Engine PWB (EPWB)



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

Connector	Pin	Signal	I/O	Voltage	Description
YC1	1	HEAT2REM	0	0/3.3 V DC	TH2 remote signal
Connected to	2	HEAT1REM	0	0/3.3 V DC	TH1 remote signal
the power	3	ZCROSSN	Ι	0/3.3 V DC	Zero crossing detection signal
source PWB	4	RELAY	0	0/3.3 V DC	Relay driving signal
*: 60/50/45	5	PSLEEPN	0	0/3.3 V DC	Sleep signal
ppm model	6	GND	-	-	Ground
only	7	GND	-	-	Ground
	8	GND	-	-	Ground
	9	GND	-	-	Ground
	10	+24V1	I	24 V DC	24 V DC power input from PSPWB
	11	+24V1	Ι	24 V DC	24 V DC power input from PSPWB
	12	+24V1	Ι	24 V DC	24 V DC power input from PSPWB
	13	+24V1	Ι	24 V DC	24 V DC power input from PSPWB
YC2	1	EECLK	0	0/3.3 V DC	Clock signal
Connected to	2	GND	-	-	Ground
the relay-L	3	EESIO	I/O	0/3.3 V DC(pulse)	Communication data
PWB	4	ERASER	0	0/3.3 V DC	CL: On/Off
*: 60/50/45	5	+3.3V6	0	3.3 V DC	3.3 V DC power output to R-LPWB
ppm model	6	TSENS	Ι	Analog	TS output signal
only	7	SBMDIR	0	0/3.3 V DC	SBM: On/Off
	8	WTSENS	Ι	Analog	WTS output signal
	9	SBMENBLN	0	0/3.3 V DC	SBM enable signal
	10	WTLED	0	0/3.3 V DC	LED: On/Off
	11	SBMSTEP	0	0/3.3 V DC(pulse)	SBM clock signal
	12	MEFSENS	Ι	0/3.3 V DC	MPS: On/Off
	13	SBMMODE	0	0/3.3 V DC	SBM mode signal
	14	+3.3V2	0	3.3 V DC	3.3 V DC power output
	15	тмот	0	0/3.3 V DC	TM: On/Off
	16	LFANN	0	0/3.3 V DC	CENFM: On/Off
	17	FUDR	0	0/3.3 V DC	FSSOL: On/Off
	18	ENVMOT	0	0/3.3 V DC	FUPRM: On/Off
	19	FDDR	0	0/3.3 V DC	FSSOL: On/Off
	20	DUJAMSEN1 N	I	0/3.3 V DC	DUS: On/Off
	21	REGSEN2		0/3.3 V DC	RS: On/Off
	22	REARSWN		0/3.3 V DC	RCS: On/Off

Connector	Pin	Signal	I/O	Voltage	Description
YC3	1	+24V4	0	24 V DC	24 V DC power output
Connected to	2	GND	-	-	Ground
the relay-L	3	GND	-	-	Ground
PWB	4	+24V6	0	24 V DC	24 V DC power output
YC4	1	MMOTCW	0	0/5 V DC	MM drive shift signal
Connected to	2	MMOTRDYN	Ι	0/3.3 V DC	MM ready signal
the drum	3	MMOTCLKN	0	0/5 V DC(pulse)	MM clock signal
main motor	4	MMOTONN	0	0/5 V DC	MM: On/Off
	5	GND	-	-	Ground
*: 60/50/45	6	+24V3	0	24 V DC	24 V DC power output
ppm model	7	DMOTCW	0	0/5 V DC	DRM rotation direction
Only	8	DMOTRDYN	Ι	0/3.3 V DC	DRM ready signal
	9	DMOTCLKN	0	0/5 V DC(pulse)	DRM clock signal
	10	DMOTONN	0	0/5 V DC	DRM: On/Off
	11	GND	-	-	Ground
	12	+24V3	0	24 V DC	24 V DC power output
YC5	1	+24V3	0	24 V DC	24 V DC power output to DEVCL
Connected to	2	DLPCLN	0	0/3.3 V DC	DEVCL: On/Off
the duplex	3	+24V3	0	24 V DC	24 V DC power output to PFCL
citch,mid	4	FEEDCLN	0	0/24 V DC	PFCL: On/Off
registration	5	+24V3	0	24 V DC	24 V DC power output to RCL
clutch,paper	6	REGCLN	0	0/24 V DC	RCL: On/Off
feed cltch	7	+24V3	0	24 V DC	24 V DC power output to PCCL
developer	8	MIDCLN	0	0/24 V DC	PCCL: On/Off
clutch	9	+24V3	0	24 V DC	24 V DC power output to DUCL
*: 60/50/45	10	DUCLN	0	0/24 V DC	DUCL: On/Off
ppm model					
YC6	1	+24V1	0	24 V DC	24 V DC power output
Connected to	2	+24V2	0	24 V DC	24 V DC power output
the interlock			_		
switch					
YC7	1	CAS3	I	0/24 V DC	CSSW: On/Off
Connected to	2	CAS2	Ι	0/3.3 V DC	CSSW: On/Off
the cassette	3	CASSET	-	-	CSSW common signal
SIZE SWILCH	4	CAS1	Ι	0/3.3 V DC	CSSW: On/Off

Connector	Pin	Signal	I/O	Voltage	Description
YC8	1	+24V3	0	24 V DC	24 V DC power output to MPSOL
Connected to	2	MEFSOLN	0	0/24 V DC	MPSOL: On/Off
the MP					
solenoid			-		
YC9	1	DHEATER	0	0/24 V DC	DH: On/Off
Connected to	2	+24V1	0	24 V DC	24 V DC power output to DH
heater					
YC10	1	+24V1	0	24 V DC	24 V DC power output to PSFM
Connected to	2	FANRN	0	0/24 V DC	PSFM: On/Off
the power	-		0	0,21,7,2,0	
source fan					
motor					
YC12	1	+3.3V10	0	3.3 V DC	3.3 V DC power output to EFS
Connected to	2	GND	-	-	Ground
the eject full sensor	3	PAPFULN	Ι	0/3.3 V DC	EFS: On/Off
YC13	1	LIFTMOTOR	0	0/5 V DC	LM: On/Off
Connected to	2	GND	-	-	Ground
the lift motor					
YC14	1	+3.3V9	0	3.3 V DC	3.3 V DC power output to LS
Connected to	2	GND	-	-	Ground
the lift sensor	3	LSENS	I	0/3.3 V DC	LS: On/Off
YC15	1	+24V6	0	24 V DC	24 V DC power output to PM
Connected to	2	GND	-	-	Ground
the polygon	3	PLGDRN	0	0/5 V DC	PM: On/Off
motor	4	PLGRDYN	I	0/3.3 V DC	PM ready signal
	5	POLCLK	0	0/3.3 V DC(pulse)	PM clock signal
YC16	1	+5V5	0	5 V DC	5 V DC power output to APCPWB
Connected to	2	VDATA1P	0	LVDS	Video data 1 signal (+)
the APC	3	VDATA1N	0	LVDS	Video data 1 signal (-)
PWB	4	VDATA2P	0	LVDS	Video data 2 signal (+)
	5	VDATA2N	0	LVDS	Video data 2 signal (-)
	6	SAMPLEN1	0	0/3.3 V DC	Sample / hold signal 1
	7	SAMPLEN2	0	0/3.3 V DC	Sample / hold signal 2
	8	OUTPEN	ο	0/3.3 V DC	Laser enable
	9	VCONT1	Ο	Analog	LD-1 Light volume adjustment
	10	VCONT2	0	Analog	LD-2 Light volume adjustment
	11	GND	-	-	Ground
	12	PDN	I	0/3.3 V DC (pulse)	Main scanning synchronizing signal

Connector	Pin	Signal	I/O	Voltage	Description
YC16	13	+3.3V6	0	3.3 V DC	3.3 V DC power output to APCPWB
YC17	1	+3.3V6	0	3.3 V DC	3.3 V DC power output to OPPWB
Connected to	2	FUPRSTN	0	0/3.3 V DC	OPPWB reset signal
the opera-	3	P2C_OK_KEY	T	0/3.3 V DC	OK KEY:On/Off
	4	C2P_BUZCO N	0	0/3.3 V DC	Buzzer control signal
	5	AIRTEMP	Ι	Analog	Temperature sensor input signal
	6	C2P_LCDCO N	0	0/5 V DC	LCD: On/Off
	7	+5V5	0	5 V DC	5 V DC power output to LCD
	8	P2C_SDAT	Ι	0/3.3 V DC	Data signal
	9	AIRWET	Ι	Analog	Humid sensor input signal
	10	C2P_SDAT	0	0/3.3 V DC	The data signal between panel main
	11	WETCLK	0	0/3.3 V DC (pulse)	Humid sensor clock signal
	12	LED	0	0/3.3 V DC	READY LED control signal
	13	FG	-	-	Ground
	14	GND	-	-	Ground
YC18	1	GND	-	-	Ground
Connected to the power switch	2	POWERSW	Ι	0/3.3 V DC	PSSW: On/Off
YC19	1	ENVSENSN	I	0/3.3 V DC	ENVS: On/Off
Connected to	2	GND	-	-	Ground
the high volt-	3	MISENS	Ι	Analog	MC output signal
аде Руув	4	MHVCLK	0	0/3.3 V DC (pulse)	MC clock signal
	5	MACCNT	0	Analog	MC AC control signal
	6	MDCCNT	0	Analog	MC DC control signal
	7	HVCLK	0	0/3.3 V DC (pulse)	DEV clock signal
	8	BDCNT	0	Analog	DEV DC control signal
	9	BACNT	0	Analog	DEV AC control signal
	10	PAPERSEN2 N	Ι	0/3.3 V DC	EFS2: On/Off
	11	PAPERSEN1 N	Ι	0/3.3 V DC	EFS1: On/Off
	12	REGSENSN	I	0/3.3 V DC	RS: On/Off
	13	DUJAMSEN2 N	Ι	0/3.3 V DC	DUS: On/Off
	14	+3.3V6	0	3.3 V DC	3.3 V DC power output to HVPWB

Connector	Pin	Signal	I/O	Voltage	Description
YC19	15	SCNT	0	0/3.3 V DC	Separation output control signal
Connected to	16	TRREM	0	0/3.3 V DC	TC remote signal
the high volt-	17	TCNT	0	Analog	TC control signal
аде Руув	18	+24V3	0	24 V DC	24 V DC power output to HVPWB
YC20	A1	+5V2	0	5 V DC	5 V DC power output to MPWB
Connected to	A2	+5V2	0	5 V DC	5 V DC power output to MPWB
the main	A3	GND	-	-	Ground
PWB	A4	GND	-	-	Ground
	A5	VBUS	Ι	3.3 V DC	3.3 V DC power output to USB host
	A6	GND	-	-	Ground
	A7	C2P_BUZCO N	Ι	0/3.3 V DC	Buzzer control signal
	A8	C2P_LCDCO N	I	0/3.3 V DC	LCD: On/Off
	A9	C2P_SDAT	Ι	0/3.3 V DC	The data signal between panel main
	A10	SAMPLE1	Ι	0/3.3 V DC	Sample / hold signal 1
	A11	GND	-	-	Ground
	A12	VDATA2P	Ι	LVDS	Video data 2 signal (+)
	A13	VDATA2N	I	LVDS	Video data 2 signal (-)
	A14	GND	-	-	Ground
	A15	E2C_IRN	0	0/3.3 V DC	Engine interrupt signal
	A16	C2E_SDAT	Ι	0/3.3 V DC	Serial communication data input
	A17	E2C_SBSY	0	0/3.3 V DC	System busy signal
	A18	GND	-	-	Ground
	A19	GND	-	-	Ground
	A20	E2C_INT	0	0/3.3 V DC	Interrupt signal
	B1	+5V2	0	5 V DC	5 V DC power output to MPWB
	B2	+5V2	0	5 V DC	5 V DC power output to MPWB
	B3	GND	-	-	Ground
	B4	UDATAN	I/O	LVDS	USB host data signal (-)
	B5	UDATAP	I/O	LVDS	USB host data signal (+)
	B6	GND	-	-	Ground
	B7	FUPRSTN	Ι	0/3.3 V DC	OPPWB reset signal
	B8	P2C_PKEY	0	0/3.3 V DC	OK KEY:On/Off
	B9	P2C_SDAT	0	0/3.3 V DC	The data signal between panel main
	B10	SAMPLE2	Ι	0/3.3 V DC	Sample / hold signal 2
	B11	PDN	0	0/3.3 V DC (pulse)	Main scanning synchronizing signal

Connector	Pin	Signal	I/O	Voltage	Description
YC20	B12	VDATA1P	I	LVDS	Video data 1 signal (+)
Connected to	B13	VDATA1N	I	LVDS	Video data 1 signal (-)
the main PWB	B14	PLGCLK	I	0/3.3 V DC (pulse)	PM clock signal
	B15	E2C_SDAT	0	0/3.3 V DC (pulse)	Serial communication data output
	B16	C2E_SCKN	Ι	0/3.3 V DC (pulse)	Serial communication clock
	B17	E2C_SDIR	0	0/3.3 V DC	Communication direction change signal
	B18	VSYNC	0	0/3.3 V DC (pulse)	Sub scanning synchronizing signal
	B19	C2E_OFFRD Y	I	0/3.3 V DC	Off-mode notice signal
	B20	C2E_INT	Ι	0/3.3 V DC	Interrupt signal
YC21	1	TH2	I	Analog	FUTH2 output signal
Connected to	2	TH1	Ι	Analog	FUTH1output signal
the fuser	3	GND	-	-	Ground
connect	4	REARFANN	0	24 V DC	REFM: On/Off
PWB	5	+24V4	0	24 V DC	24 V DC power output to FTHPWB
YC22	1	+24V5	0	24 V DC	24 V DC power output to PF
Connected to	2	OPSDO	0	0/3.3 V DC (pulse)	PF communication serial data signal
the paper	3	OPSDI	I	0/3.3 V DC (pulse)	PF communication serial data signal
	4	OPCLK	0	0/3.3 V DC (pulse)	PF communication serial clock signal
	5	OPRDYN	Ι	0/3.3 V DC	Option communication ready signal
	6	+3.3V7	0	3.3 V DC	3.3 V DC power output to PF
	7	GND	-	-	Ground
	8	OPSEL2	0	0/3.3 V DC	PF select signal
	9	OPSEL1	0	0/3.3 V DC	PF select signal
	10	OPSEL0	0	0/3.3 V DC	PF select signal
	11	OPPAUSEN	0	0/3.3 V DC	Paper stop signal
	12	GND	-	-	Ground
YC23	1	VBUS	0	5 V DC	5 V DC power output to USB host
Connected to	2	UDATAN	I/O	LVDS	USB data signal (-)
the USB host	3	UDATAP	I/O	LVDS	USB data signal (+)
	4	GND	-	-	Ground
	5	GND	-	-	Ground
YC26	1	+3.3V13	0	3.3 V DC	3.3 V DC power output to ES
Connected to	2	GND	-	-	Ground
the eject sen- sor	3	EXITSENSN	Ι	0/3.3 V DC	ES: On/Off

2-3-3 Power source PWB (PSPWB)



Figure 2-3-3 Power source PWB silk-screen diagram and Photograph

Connector	Pin	Signal	I/O	Voltage	Description
YC1	1	LIVE	I	100 V AC	AC power input
Connected to	2	NEUTRAL	Ι	100 V AC	AC power input
the inlet					
YC2	1	NEUTRAL1	I	100 V AC	Fuser heater
Connected to	2	LIVE	0	100 V AC	AC power input
the fuser unit	3	NEUTRAL2	Ι	100 V AC	Fuser heater
YC3	1	+24V1	0	24 V DC	24 V DC power output to EPWB
Connected to	2	+24V1	0	24 V DC	24 V DC power output to EPWB
the engine PWB	3	+24V1	0	24 V DC	24 V DC power output to EPWB
	4	+24V1	0	24 V DC	24 V DC power output to EPWB
	5	GND	-	-	Ground
	6	GND	-	-	Ground
	7	GND	-	-	Ground
	8	GND	-	-	Ground
	9	PSLEEPN	Ι	0/5 V DC	Sleep mode signal
	10	RELAY	I	0/5 V DC	Relay control
	11	ZCROSSN	0	0/5 V DC(pulse)	Zero crossing signal
	12	HEAT1REM	I	0/24 V DC	Fuser heater control
	13	HEAT2REM	I	0/24 V DC	Fuser heater control

2-3-4 Relay-L PWB (R-LPWB)



Figure 2-3-4 Relay-L PWB silk-screen diagram and Photograph

Connector	Pin	Signal	I/O	Voltage	Description
YC1	1	EECLK	I	0/3.3 V DC(pulse)	Clock signal
Connected to	2	GND	-	-	Ground
the engine	3	EESIO	I/O	0/3.3 V DC	Data signal
PWB	4	ERASER	I	0/3.3 V DC	CL control signal
	5	+3.3V6	I	3.3 V DC	3.3 V DC power input from EPWB
	6	TSENS	0	Analog	TS output signal
	7	SBMDIR	I	0/5 V DC	SBM: On/Off
	8	WTSENS	0	Analog	WTS output signal
	9	SBMENBLN	I	0/3.3 V DC	SBM output control signal
	10	WTLED	I	0/3.3 V DC	Waste toner LED control
	11	SBMSTEP	I	0/3.3 V DC	SBM step signal
	12	MEFSENS	0	0/3.3 V DC	MPS: On/Off
	13	SBMMODE	I	0/3.3 V DC	SBM mode control signal
	14	+3.3V2	I	3.3 V DC	3.3 V DC power input from EPWB
	15	тмот	I	0/3.3 V DC	TM: On/Off
	16	LFANN	I	0/24 V DC	LFM: On/Off
	17	FUDR	I	0/24 V DC	FSSOL: On/Off
	18	ENVMOT	I	0/5 V DC	ENVM: On/Off
	19	FDDR	I	0/24 V DC	FSSOL: On/Off
	20	DUJAMSEN1	0	0/3.3 V DC	DUS1: On/Off
		Ν			
	21	REGSEN2	0	0/3.3 V DC	RS2: On/ Off
	22	REARSWN	0	0/3.3 V DC	RECSW: On/Off
YC2	1	+24V6	I	24 V DC	24 V DC power input from EPWB
Connected to	2	GND		-	Ground
the engine	3	GND		-	Ground
FVVD	4	+24V4	I	24 V DC	24 V DC power input from EPWB
YC3	1	TSENS	I	Analog	TS output signal
Connected to	2	+24V6	0	24 V DC	24 V DC power output to DRRPWB
the drum	3	ERASERN	0	0/24 V DC	CL: On/Off
PWB	4	EECLK	0	0/24 V DC(pulse)	Clock signal
	5	EESIO	I/O	0/3.3 V DC	Data signal
	6	тмот	0	0/5 V DC	TM control signal
	7	+3.3V6	0	3.3 V DC	3.3 V DC power output to DRRPWB
	8	GND	-	-	Ground
	9	REGSEN2	I	0/3.3 V DC	RS2: On/Off

Connector	Pin	Signal	I/O	Voltage	Description
YC4	1	LFANN	-	0/24 V DC	LFM: On/Off
Connected to	2	+24V4	0	24 V DC	24 V DC power output to LSUFM
the LSU fan					
VC7	1	+3 3\/12	0		33VDC power output to W/TS/LED)
Connected to	2				WTS(LED): Op/Off
the waste	2	WILEDIN			WTS output signal
toner sensor	3				
VC9	4	+3.370	0	3.3 V DC	
ruo Connected to	1	+3.3V8	0	-	
the MP paper	2	GND	-	-	
sensor	3	MEFSENS	I	00	MPS: On/Off
YC9	1	+3.3V11	0	3.3 V DC	3.3 V DC power output to DUS
Connected to	2	GND	-	-	Ground
the duplex	3	DUJAMSEN1	I	0/3.3 V DC	DUS: On/Off
sensor 1		Ν			
YC10	1	REARSWN	Ι	0/3.3 V DC	RECSW: On/Off
Connected to	2	GND	-	-	Ground
the rear					
cover switch					
YC11	1	ENVMOT	0	0/5 V DC	FUPRM: On/Off
Connected to	2	GND	-	-	Ground
pressure					
release					
motor					
YC12	1	OUTB3	0	0/3.3 V DC	SBM B3 drive control signal
Connected to	2	OUTB1	0	0/3.3 V DC	SBM B1 drive control signal
the shiftback	3	OUTA3	0	0/3.3 V DC	SBM A3 drive control signal
motor	4	OUTA1	0	0/3.3 V DC	SBM A1 drive control signal
YC13	1	FACEDDRN	0	0/24 V DC	FSSOL: On/Off
Connected to	2	+24V6	0	24 V DC	24 V DC power output to FSSOL
the feed shift	3	FACEUDRN	0	0/24 V DC	FSSOL: On/Off
solenoid					

2-3-5 High voltage PWB (HVPWB)





Figure 2-3-5 High voltage silk-screen diagram and Photograph

Connector	Pin	Signal	I/O	Voltage	Description
YC101	1	+24V3	0	24 V DC	24 V DC power output to EPWB
Connected to	2	TCNT	0	Analog	Transfer control
the engine	3	TRREM	0	0/3.3 V DC	Transfer remote signal
PWB	4	SCNT	0	Analog	Separation control
	5	+3.3V	0	3.3 V DC	3.3 V DC power output
	6	DUJAMSEN2 N	I	0/3.3 V DC	DUS2:On/Off
	7	REGSENSN	I	0/3.3 V DC	RS:On/Off
	8	PAPERSEN1 N	Ι	0/3.3 V DC	PS1:On/Off
	9	PAPERSEN2 N	I	0/3.3 V DC	PS2:On/Off
	10	BACNT	I	Analog	Developer AC control
	11	BDCNT	I	Analog	Developer DC control
	12	HVCLK	0	0/3.3 V DC	Developer clock signal
	13	MDCCNT	I	Analog	Charger DC control
	14	MACCNT	I	Analog	Charger AC control
	15	MHVCLK	0	0/3.3 V DC	Charger clock signal
	16	MISENS	0	Analog	Charger current detection
	17	GND	-	-	Ground
	18	ENVSENSN	Ι	0/3.3 V DC	ES:On/Off
YC102	1	+3.3V14	0	3.3 V DC	3.3 V DC power output to FUPRS
Connected to	2	GND	-	-	Ground
the fuser	3	ENVSENSN	I	0/3.3 V DC	FUPRS:On/Off
pressure release sen-					
sor					

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2-4-1 Appendixes

(1) Maintenance kits

1. 60/50/45 ppm model

Maintenai	Parts No	Alternative		
Name used in service	Name used in parts list	Faits NO.	part No.	
MK-3130/MAINTENANCE KIT (500,000 images)	MK-3130/MAINTENANCE KIT	1702MT8NL0	072MT8NO	
MK-3132/MAINTENANCE KIT (300,000 sheets)	MK-3132/MAINTENANCE KIT	1702MT8US0	072MT8UO	
Transfer roller assembly	ROLLER TRANSFER ASSY	-	-	
Drum unit	DRUM UNIT	-	-	
Developer unit	DLP UNIT	-	-	
Fuser unit	FUSER UNIT(KME)	-	-	
Paper feed roller assembly	HOLDER FEED ASSY	-	-	
Retard roller assembly	RETARD ROLLER ASSY	-	-	

2. 40 ppm model

Maintena	Parts No	Alternative	
Name used in service	Name used in parts list	Faits NO.	part No.
MK-3100/MAINTENANCE KIT (300,000 sheets)	MK-3100/MAINTENANCE KIT	1702MS8NLP0	072MS8NO
MK-3102/MAINTENANCE KIT (300,000 images)	MK-3102/MAINTENANCE KIT	1702MT8US0	072MT8UO
Transfer roller assembly	ROLLER TRANSFER ASSY	-	-
Drum unit	DRUM UNIT	-	-
Developer unit	DLP UNIT	-	-
Fuser unit	FUSER UNIT(KME)	-	-
Paper feed roller assembly	HOLDER FEED ASSY	-	-
Retard roller assembly	RETARD ROLLER ASSY	-	-

2LV/2L1/2L2/2MS/2MT

(2) Repetitive defects gauge

 First occurrence of defect
 29.9 mm/1 3/16" Chager roller 36.8 mm/1 7/16" Registration roller 44.9 mm/1 3/4" Developer roller
 ← 78.5 mm/3 1/16" Press roller (40 ppm)
 84.8 mm/3 5/16" Heat roller (40 ppm) 94.2 mm/3 11/16" Drum/Press roller (60/50/45 ppm) 109.9 mm/4 5/16" Heat roller (60/50/45 ppm)

(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 the firmware

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

Note: Before changing any FRPO parameters, 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 PC-PR201/65A !R! FRPO P1, 11; EXIT;

Item	FRPO	Setting values	Factory setting
Top margin	A1	Integer value in inches	0
	A2	Fraction value in 1/100 inches	0
Left margin	A3	Integer value in inches	0
	A4	Fraction value in 1/100 inches	0
Page length	A5	Integer value in inches	13
	A6	Fraction value in 1/100 inches	61
Page width	A7	Integer value in inches	13
	A8	Fraction value in 1/100 inches	61
Default pattern resolution	B8	0: 300 dpi 1: 600 dpi	0
Copy count	C0	Number of copies to print:1-999	1
Page orientation	C1	0: Portrait 1: Landscape	0
Default font No.	C2	Middle two digits of power-up font	0
	C5	First two digits of power-up font	0
PCL font switch	C8	0:HP compatibility mode (Characters higher than 127 are not printed.) 32:Conventional mode (Characters higher than 127 are printed. Supported symbol sets: ISO- 60 Norway [00D], ISO-15 Italian [00I], ISO-11 Sweden [00S], ISO-6 ASCII [00U], ISO-4 U.K. [01E], ISO-69 France [01F], ISO-21 Germany [01G], ISO-17 Spain [02S], Symbol [19M)	0

FRPO parameters

ltem	FRPO	Setting values	Factory setting
Printing concentration	D4	1: Thin. 2: Slightly Thin. 3: Standard 4: Slightly Deep. 5: Deep.	3
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 (0 to 99).	6
KIR mode	N0	0: Off 2: On	2
Duplex binding	N4	0: Off 1: Long edge 2: Short edge	0
Sleep timer time-out time	N5	1 to 240 minutes [0: Off]	1
Ecoprint level	N6	0: Off 2: On	0
Resolution	N8	0: 300dpi 1: 600dpi 3: 1200dpi	1
Parallel interface mode	O0	0: Standard Mode1: Fast Mode5: Nibble (High Speed) Mode70: Automatic Mode	70
Parallel interface Error control	02	0: Line Control OFF2: Compatibility with PCL	2
Default emulation mode	P1	0 : Line printer 1 : IBM proprinter 2 : DIABLO 630 5 : Epson LQ-850 6 : PCL6 (except PCL XL) 8 : KC-GL 9 : KPDL 11 : PC-PR201 12 : IBM 5577 13 : VP-1000 14 : N5200 15 : FMPR-359F1	9(U.S.A) or 6(Euro and other)
Carriage-return action *	P2	0: Ignores 0x0d 1: Carriage-return 2: Carriage-return+linefeed	1
Linefeed action *	P3	0: Ignores 0x0d 1: Linefeed 2: Linefeed+carriage-return	1

Item	FRPO	Setting values	Factory setting
Automatic emulation sensing (For KPDL3)	P4	0: AES disabled 1: AES enabled	1(U.S.A) or 0(Euro and other)
Alternative emulation	P5	6: PCL 6	6
Automatic emulation switching trigger (For KPDL3)	P7	 0: Page eject commands 1: None 2: Page eject and PRESCRIBE EXIT 3: PRESCRIBE EXIT 4: Formfeed (^AL) 6: Page eject, PRESCRIBE EXIT and formfeed 10: Page eject commander if AEC fails 	11(U.S.A) or 10(Euro and other)
		resolves to KPDL	
Command recognition character	P9	ASCII code of 33 to 126	82 (R)
Default stacker	R0	1 (inner tray) 3 5	1
Default paper size	R2	0: Size of the default paper cassette (See R4.) 1: Monarch $(3-7/8 \times 7-1/2 \text{ inches})$ 2: Business $(4-1/8 \times 9-1/2 \text{ inches})$ 3: International DL $(11 \times 22 \text{ cm})$ 4: International C5 $(16.2 \times 22.9 \text{ cm})$ 5: Executive $(7-1/4 \times 10-1/2 \text{ inches})$ 6: US Letter $(8-1/2 \times 11 \text{ inches})$ 7: US Legal $(8-1/2 \times 14 \text{ inches})$ 8: A4 $(21.0 \times 29.7 \text{ cm})$ 9: JIS B5 $(18.2 \times 25.7 \text{ cm})$ 10: A3 $(29.7 \cdot 42 \text{ cm})$ 11: B4 $(25.7 \cdot 36.4 \text{ cm})$ 12: US Ledger $(11 \cdot 17 \text{ inches})$ 13: ISO A5 14: A6 $(10.5 \times 14.8 \text{ cm})$ 15: JIS B6 $(12.8 \times 18.2 \text{ cm})$ 16: Commercial #9 $(3-7/8 \times 8-7/8 \text{ inches})$ 17: Commercial #6 $(3-5/8 \times 6-1/2 \text{ inches})$ 18: ISO B5 $(17.6 \times 25 \text{ cm})$ 19: Custom $(11.7 \times 17.7 \text{ inches})$ 30: C4 $(22.9 \cdot 32.4 \text{ cm})$ 31: Hagaki $(10 \times 14.8 \text{ cm})$ 32: Ofuku-hagaki $(14.8 \times 20 \text{ cm})$ 33: Officio II 39: 8K 40: 16K 42: 216x340 50: Statement 51: Folio 52: Youkei 2 53: Youkei 4	0
ltem	FRPO	Setting values	Factory setting
--------------------	------	---	--
Default cassette	R4	0: MP tray 1: Cassette 1 2: Cassette 2 3: Cassette 3	1
MP tray paper size	R7	Same as the R2 values except: 0	6(U.S.A) or 8(Euro and other)
A4/letter equation	S4	0: Off 1: On	1
Host buffer size	S5	0: 10kB (x H8) 1: 100kB (x H8) 2: 1024kB (x H8)	1
RAM disk size	S6	1 to 1024 MB	400
RAM disk mode	S7	0: Off 1: On	1
Wide A4	T6	0: Off 1: On	0
Line spacing	U0	Lines per inch (integer value)	6
Line spacing	U1	Lines per inch (fraction value)	0
Character spacing	U2	Characters per inch (integer value)	10
Character spacing	U3	Characters per inch (fraction value)	0

ltem	FRPO	Setting values	Factory setting
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 21: US ASCII (U7 = 50 SET) 77: HP Roman-8 (U7 = 52 SET)	41
Code set at power up in daisy- wheel emulation	U7	0: Same as the default emulation mode (P1) 1: IBM 6: IBM PC-8 50: US ASCII (U6 = 21 SET) 52: HP Roman-8 (U6 = 77 SET)	53
Font pitch for fixed pitch scalable font	U8	Integer value in cpi: 0 to 99	10
	U9	Fraction value in 1/100 cpi: 0 to 99	0
Font height for the default scal- able font	V0	Integer value in 100 points: 0 to 9	0
	V1	Integer value in points: 0 to 99	12
	V2	Fraction value in 1/100 points: 0, 25, 50, 75	0
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

Item	FRPO	Setting values	Factory setting
Paper type for the MP tray	X0	1: Plain 1 2: Transparency 3: Preprinted 4: Label 5: Bond 6: Recycle 7: Vellum 9: Letterhead 10: Color 11: Prepunched 12: Envelope 13: Cardstock 16: Thick 17: High quality 21: Custom1 22: Custom2 23: Custom3 24: Custom4 25: Custom5 26: Custom6 27: Custom7 28: Custom8	1
Paper type for paper cassettes 1	X1	1: Plain 3: Preprinted 5: Bond 6: Recycled 9: Letterhead 10: Color 11: Prepunched 17: High quality 21: Custom1 22: Custom2 23: Custom3 24: Custom4 25: Custom5 26: Custom6 27: Custom7 28: Custom8	1

ltem	FRPO	Setting values	Factory setting
Paper type for paper cassettes 2 to 5	X2 X3 X4 X5	1: Plain 3: Preprinted 5: Bond 6: Recycled 9: Letterhead 10: Color 11: Prepunched 17: High quality 21: Custom1 22: Custom2 23: Custom3 24: Custom4 25: Custom5 26: Custom6 27: Custom7 28: Custom8	1
PCL paper source	X9	 Paper selection depending on an escape sequence compatible with HP-LJ5Si. 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	Number from 0 to 99 in increments of 5 sec- onds	6 (30 secons)
Heater ON/OFF switch	Y2	0: Heater OFF at the time of "Ready" 1: Heater ON at the time of "Ready"	0
Error message for device error	Y3	0: Not detect 1: Detect	0

ltem	FRPO	Setting values	Factory setting
Duplex operation for specified paper type (Prepunched, Preprintedand Let- terhead)	Y4	0: Off 1: On	0
Default operation for PDF direct printing	Y5	 O: Enlarges or reduces the image to fit in the current paper size. Loads paper from the current paper cassette. Through the image. Loads paper which is the same size as the image. Enlarges or reduces the image to fit in the current paper size. Loads Letter, A4 size paper depending on the image size. Through the image. Loads Letter, A4 size paper depending on the image size. Through the image. Loads paper from the current paper cassette. Through the image. Loads Letter, A4 size paper depending on the image size. Through the image. Loads Letter, A4 size paper depending on the image size. Through the image. Loads Letter, A4 size paper depending on the image size. Enlarges or reduces the image to fit in the current paper size. Loads Letter, A4 size paper depending on the image size. 	0
e-MPS error	Y6	0:Does not print the error report and display	3

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.	

(4) Wiring diagram (60/50/45 ppm model)



2LV/2L1/2L2/2MS/2MT-2



(5) Wiring diagram (40ppm model)





500 sheets paper feeder Installation Guide

PF-320

Installation Guide Installationsanleitung Guide d'installation Guida all'installazione Guía de instalación 安装手册

安装手册 설치안내서 インストールガイド



For U.S.A.:

To install the optional paper feeder unit, contact your service representative. This unit is for use only with Laser Printers, Models FS-2100D, FS-2100DN, FS-4100DN, FS-4200DN and FS-4300DN. For Canada:

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Installation of PF-320 Installation von PF-320 Installation de PF-320 Installazione di PF-320 Instalación de PF-320 PF-320 的安装 PF-320 설치 PF-320の設置









Removing Paper Jams Entfernen von Papierstaus Solution pour les bourrages papier Rimozione degli inceppamenti carta Eliminación de los atascos de papel 取出卡纸 종이 잼 제거 紙づまりの処理





Printed in China 303NY5631002 Rev. 1 2012.8

2000 sheets bulk paper feeder Installation Guide

PF-315+



Installation Guide Installationsanleitung Guide d'installation Guida all'installazione Guía de instalación 安装手册 설치안내서

インストールガイド



3

6

9

For U.S.A.:

2

5

8

To install the optional paper feeder unit, contact your service representative. This unit is for use only with Laser Printers, Models FS-2100D, FS-2100DN, FS-4100DN, FS-4200DN and FS-4300DN.

For Canada:

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.





2





양면 장치 両面ユニット



0

Printed in China 303KF5632002 Rev. 1 2012.7

SSD (HD-6) Installation Guide



English

Optional SSD HD-6

Installation Guide

Introduction The HD-6 is an optional SSD for use with the MFPs and the page printers. Please read this Installation Guide thoroughly so that you understand the correct installation method. This SSD can be installed in other models using the same installation procedure.

Packing List HD-6.....

Installation Guide (this guide).....1

Precautions for Handling the SSD

- When handling the SSD, adhere to the following precautions.
- The SSD is delivered in an antistatic bag. To prevent any damage, briefly touch a large metal object to ensure discharge of static electricity before removing the
- SSD from the bag. • Never touch the SSD's connector section directly with hands.
- When holding the SSD, avoid contact with the surface of the circuit board. Hold it at the edges.
- Do not apply undue force when installing.

Installing the SSD CAUTION

Before installing (or removing) the SSD, be sure to turn off the machine's

Français

SSD HD-6 en option

Guide d'installation

Introduction

Le HD-6 est un SSD optionnel destiné à être utilisé avec les imprimantes multifonctions et les imprimantes par page. Veuillez lire entièrement ce guide d'installation et vous assurer que vous comprenez bien les méthodes d'installation. Ce SSD peut être installé dans d'autres modèles en utilisant la même procédure d'installation.

Contenu de l'emballage

HD-6 Guide d'installation (ce manuel).....

Précautions de manipulation du SSD

Lorsque vous manipulez le SSD, observez les précautions suivantes. • Le SSD est livré dans un sac antistatique. Avant de le retirer du sac, touchez brièvement un grand objet métallique pour vous décharger de toute électricité statique.Vous éviterez ainsi d'endommager le SSD.

- Ne touchez jamais directement la partie du connecteur du SSD avec les mains.
 Lorsque vous tenez le SSD, ne touchez pas la surface de la carte de circuits imprimés. Saisissez-le par les bords.
- N'appliquez aucune force inutile en l'installant.

Installation du SSD ATTENTION

Español

SSD HD-6 opcional

Guía de instalación

Introducción

HD-6 es una SSD opcional para utilizar con la copiadora e impresora de hojas. Lea detenidamente esta Guía de instalación para entender los métodos de instalación y operación correctos. Esta SSD puede instalarse en otros modelos utilizando el mismo procedimiento de instalación.

Lista del contenido del paquete

HD-6 Guía de instalación (este folleto).....

Precauciones para el manejo de la SSD

- Cuando maneje la SSD, tenga en cuenta las siguientes precauciones. • La SSD se entrega en una bolsa antiestática. Para evitar cualquier daño, antes
- de sacar la SSD de la bolsa, toque un objeto metálico grande para descargar la electricidad estática de su cuerpo.
- Nunca toque la sección del conector de la SSD directamente con las manos.
 Cuando sostenga la SSD, no toque con las manos la superficie de la placa del circuito impreso. Sujétela por los bordes.
- No aplique demasiada fuerza al realizar la instalación.

Instalación de la SSD PRECAUCIÓN

Antes de instalar (o desmontar) la SSD, asegúrese de desconectar la



power and disconnect the power cord plug from the AC outlet.

Formatting the SSD

After installing the SSD in the machine, the SSD must to be formatted before used. Formatting is performed from the machine's operation panel. Refer to the Operation Guide for the formatting of the SSD.

Verifying Installation of the SSD

To verify that the SSD has been correctly installed, try to print out the status page. Refer to the Operation Guide for the method for printing a status page. Avant d'installer (ou de retirer) le SSD, mettez toujours l'imprimante hors tension et débranchez la fiche du cordon d'alimentation de la prise de courant.

Formatage du SSD

Après avoir installé le SSD dans l'imprimante, vous devez le formater pour pouvoir l'utiliser. Le formatage s'effectue depuis le panneau de commande de l'imprimante.

Consultez le manuel d'utilisation pour formater le SSD.

Vérification de l'installation du SSD

Pour vous assurer que le SSD a été correctement installé, essayez d'imprimer la page d'état de l'imprimante.

Pour connaître la méthode d'impression de la page d'état, consultez le manuel d'utilisation.

alimentación de la impresora y de desenchufar el cable de alimentación de la toma de corriente de CA.

Inicialización de la SSD (formateo)

Después de instalar la SSD en la impresora, deberá inicializarla (formatearla) antes de utilizarla. La inicialización se realiza desde el panel de control de la impresora.

Consulte la Guía de uso para inicializar (formatear) la SSD.

Verificación de la instalación de la SSD

Para verificar que la SSD ha sido instalada correctamente, trate de imprimir la página de estado de la impresora.

Consulte la Guía de uso para obtener información sobre la impresión de la página de estado de la impresora.



Optionale SSD HD-6

Installationsanleitung

Einführung

Die HD-6 ist eine optionale SSD zur Verwendung mit den MFPs und den Seitendruckern. Bitte lesen Sie sich diese Installationsanleitung sorgfältig durch, damit Sie das Gerät korrekt installieren. Diese SSD kann mithilfe des selben Installationsvorgangs in anderen Modellen eingebaut werden.

Verpackungsinhalt

HD-6. Installationsanleitung (diese Anleitung)..

Vorsichtshinweise beim Umgang mit der SSD

- Bitte beachten Sie die folgenden Vorsichtshinweise beim Umgang mit der SSD. • Die SSD wird in einem Antistatikbeutel geliefert. Um eine Beschädigung der SSD zu vermeiden, sollten Sie kurz einen großen Gegenstand aus Metall berühren, um sich von statischer Elektrizität zu entladen, bevor Sie die SSD aus der Verpackung entfernen.
- Berühren Sie auf keinen Fall die Steckleiste der SSD mit bloßen Händen. · Achten Sie beim Halten der SSD darauf, eine Berührung der Platinenoberfläche
- zu vermeiden. Halten Sie die SSD stets an den Kanten der Platine

Installation der SSD

VORSICHT

Achten Sie vor dem Installieren (bzw. Entfernen) der SSD unbedingt darauf, den Drucker auszuschalten und das Netzkabel von der Netzsteckdose zu trennen.

Formatierung der SSD

Nach der Installation der SSD im Drucker muss diese vor der Inbetriebnahme formatiert werden. Die Formatierung wird am Bedienfeld des Druckers ausgeführt. Die Vorgehensweise für die Formatierung der SSD finden Sie in der Bedienungsanleitung.

Überprüfung der Installation der SSD

- Um eine korrekte Installation der SSD zu überprüfen, drucken Sie die Statusseite
- Die Vorgehensweise für das Ausdrucken einer Statusseite finden Sie in der Bedienungsanleitung

Italiano

SSD HD-6 opzionale

Guida all'installazione

Introduzione HD-6 è un'unità a stato solido (SSD) opzionale per utilizzi con stampanti multifunzione (MFP) e con stampanti a pagine. Si prega di leggere attentamente la presente Guida all'installazione per comprendere il corretto metodo di installazione. Questa SSD può essere installata in altri modelli che utilizzano la stessa procedura di installazione.

Contenuto della confezione

HD-6. Guida all'installazione (la presente guida).

Precauzioni d'uso per la SSD

- Durante l'utilizzo della SSD, adottare le precauzioni che seguono. · La SSD è spedita in una custodia antistatica. Per evitare eventuali danni, toccare per pochi istanti un oggetto metallico di grandi dimensioni per assicurarsi di scaricare l'elettricità statica prima di rimuovere la SSD dalla custodia.
- · Non toccare la sezione del connettore della SSD direttamente con le mani. · Nell'afferrare la SSD, evitare il contatto con la superficie della scheda a circuito Afferrarla alle estremità
- · Non esercitare una forza eccessiva durante l'installazione.

Installazione della SSD

ATTENZIONE:

prima di installare (o di rimuovere) la SSD, assicurarsi di aver spento l'alimentazione della macchina e di aver disconnesso la spina del cavo di alimentazione dalla presa CA.

Formattazione della SSD

- Dopo aver installato la SSD nella macchina, è necessario formattarla prima dell'utilizzo. La formattazione può essere eseguita dal pannello operativo della macchina.
- Per la formattazione della SSD, consultare la Guida alle funzioni.

Verifica dell'installazione della SSD

- Per verificare che la SSD sia stata installata correttamente, stampare la pagina di stato.
- funzioni.

简体中文

选装 SSD HD-6 安装手册

HD-6 是一款适用于 MFP 和页式打印机的选装 SSD。为了解正确的安装方法,请仔 细通读本《安装手册》。本 SSD 可通过同样的安装步骤安装到其他机型上去。

包装内容列表 HD-6

前言

.....1 安装手册(本手册)1

使用本 SSD 的注意事项 使用本 SSD 时,请遵守以下注意事项。

- 本 SSD 被包装在防静电袋中。将 SSD 从包装袋中取出之前,请短暂触摸大件金属物体以消除静电,以免造成损坏。
 请勿直接用手触摸 SSD 的连接器部分。
- 拿握 SSD 时,请勿接触到电路板的表面。请拿握其边缘。
- 安装时请不要过于用力。
- 安装本 SSD 注意:

安装(或拆卸)本 SSD 前,请务必关掉机器的电源并将电源线插头从 AC 插座上 断开。

格式化本 SSD

将 SSD 安装入机器后,必须在使用之前对 SSD 进行格式化。通过机器的操作面板 来执行格式化操作 有关格式化 SSD 的相关信息,请参阅《操作手册》。

确认本 SSD 安装正确 为确认本 SSD 已经正确安装,请尝试打印状态页。 有关打印状态页的方法,请参阅《操作手册》



옵션 SSD HD-6 토너 설치 안내서

소개

HD-6는 MFP 및 페이지 프린터에 사용되는 옵션 SSD입니다. 본 토너 설치 안내서를 주의 깊게 읽고 올바른 설치 방법을 숙지하시기 바랍니다. 본 SSD는 같은 설치 절차를 적용하여 다른 모델에 설치될 수 있습니다.

포장 내용물

HD-6.. 토너 설치 안내서 (본 안내서)......1

SSD 취급 시 주의사항

- SSD 취급 시, 다음과 같은 주의사항을 지켜주시기 바랍니다.
- SSD는 정전기 방지 봉투에 포장되어 있습니다. SSD를 꺼내기 전에 손상을 예방하기 위해 큰 금속 물체를 잠시 만져서 정전기를 방지하시기 바랍니다.
- SSD 연결부를 직접 손으로 만지지 마십시오.
- SSD를 잡을 때는 회로판 표면에 닿지 않도록 끝부분을 잡으십시오.
- 설치 시 과도한 힘을 가하지 마십시오.
- SSD 설치 주의사항

SSD를 설치(또는 제거)하기 전, 기기의 전원을 끄고 AC 아우트렛에서 전원선을 분리하십시오.

SSD 포맷

り、電源プラグをコンセントから抜いた状態で行ってください。

オプションSSD HD-6 インストールガイド

はじめに

日本語

HD-6 は京セラ複合機およびプリンター用 SSD ユニットです。本書をよくお読みい ただき、正しく装着してください。なお、本オプションはその他の機種でも同様の 手順で装着できます。

梱包内容の確認

HD-6本体.....

取扱い上の注意

- 本オプションの取り扱いには、以下のことにご注意ください。
- 本品は静電気防止対策済みの袋に入っています。袋の中から取り出す際は、念の
- ため大きな金属物に触れて身体の静電気を取り除いてください。

SSD ユニットの装着

注意 本オプションの装着(または取り外し)は、複合機またはプリンターの電源を切

- 本品のコネクター部分には手を触れないでください
- 本品を持つ際は基板の表面に手を触れずに、基板の端を持ってください。
- 装着時は無理な力を加えないでください。

Per scoprire le modalità di stampa della pagina di stato, consultare la Guida alle

SSD를 기기에 설치한 뒤, 사용하기 전에 반드시 SSD을 포맷해야 합니다. 기기의 조작 패널에서 포맷을 수행할 수 있습니다. SSD 포맷에 관한 자세한 내용은 사용설명서를 참고하시기 바랍니다.

SSD 설치 확인

SSD가 올바르게 설치되었는지 확인하려면 상태 페이지를 출력해보십시오. 상태 페이지를 출력하는 방법에 관해서는 사용설명서를 참고하시기 바랍니다.

SSD のフォーマット

本オプション装着後は、使用する前に操作パネルからフォーマットをする必要が あります。

SSDのフォーマットは、使用説明書を参照してください。

装着の確認

ステータスページを印刷して、本オプションが正しく装着されたかを確認します。 ステータスページの印刷方法は、使用説明書を参照してください。

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IEEE1284 Interface Installation Guide







English

Optional Parallel Interface Kit IB-32

Installation Guide

Introduction

The IB-32 is an optional parallel interface kit for use with the page printers. Please read this Installation Guide thoroughly so that you understand the correct installation method

This parallel interface kit can be installed in other models using the same installation procedure.

Packing List

B-32	. 1
Plate	
Screw	. 2
Relav cable	. '
Seal	. '
antellation Quida (this suida)	

Installation Guide (this guide) ..

Precautions for Handling the Parallel Interface Kit

When handling the parallel interface kit, adhere to the following precautions

Français

Kit d'interface parallèle IB-32 en option

Guide d'installation

Introduction

L'IB-32 est un kit d'interface parallèle en option destiné à être utilisé avec les imprimantes par page. Veuillez lire entièrement ce guide d'installation et vous assurer que vous comprenez bien les méthodes d'installation Ce kit d'interface parallèle peut être installé dans d'autres modèles à l'aide de la même procédure d'installation

Contenu de l'emballage

IB-32	1
Plaque	1
Vis	2
Câble de relais	1
Obturateur	1
Guide d'installation (ce manuel)	1

Précautions de manipulation du kit d'interface parallèle

Lorsque vous manipulez le kit d'interface parallèle, observez les précautions suivantes



Kit de interfaz en paralelo IB-32 opcional Guía de instalación

Introducción

El IB-32 es un kit de interfaz en paralelo opcional para utilizar con la impresora de hojas. Lea completamente esta Guía de instalación de forma que pueda entender los métodos de instalación y operación correctos. Este kit de interfaz en paralelo puede instalarse en otros modelos utilizando el

mismo procedimiento de instalación

Lista del contenido del paquete

IB-32	1
Placa	1
Tornillo	2
Cable de relé	1
Sello	1
Guía de instalación (este folleto)	1

Precauciones para el manejo del kit de interfaz en paralelo

Cuando maneje el kit de interfaz en paralelo, tenga en cuenta las siguientes precauciones

- The parallel interface kit is delivered in an antistatic bag. To prevent any damage, briefly touch a large metal object to ensure discharge of static electricity before removing the parallel interface kit from the bag.
- Never touch the parallel interface kit's connector section directly with hands.
- When holding the parallel interface kit, avoid contact with the surface of the circuit board. Hold it at the edges.
- Do not apply undue force when installing.

Installing the Parallel Interface Kit

CAUTION

Before installing (or removing) the parallel interface kit, be sure to turn off the machine's power and disconnect the power cord plug from the AC outlet.

Verifying Installation of the Parallel Interface Kit

To verify that the parallel interface kit has been correctly installed, try to print out the status page.

Refer to the Operation Guide for the method for printing a status page.

- · Le kit d'interface parallèle est livré dans un sac antistatique. Avant de le retirer du sac, touchez brièvement un grand objet métallique pour vous décharger de toute électricité statique. Vous éviterez ainsi d'endommager le kit d'interface parallèle.
- Ne touchez jamais directement la partie du connecteur du kit d'interface parallèle avec les mains.

Lorsque vous tenez le kit d'interface parallèle, ne touchez pas la surface de la carte de circuits imprimés. Saisissez-le par les bords.

• N'appliquez aucune force inutile en l'installant.

Installation du kit d'interface parallèle ATTENTION

Avant d'installer (ou de retirer) le kit d'interface parallèle, mettez toujours l'imprimante hors tension et débranchez la fiche du cordon d'alimentation de la prise de courant.

Vérification de l'installation du kit d'interface parallèle

Pour vous assurer que le kit d'interface parallèle a été correctement installé, essayez d'imprimer la page d'état de l'imprimante.

Pour connaître la méthode d'impression de la page d'état, consultez le manuel d'utilisation

- El kit de interfaz en paralelo se entrega en una bolsa antiestática. Para evitar cualquier daño, antes de sacar el kit de interfaz en paralelo de la bolsa, toque un objeto metálico grande para descargar la electricidad estática de su cuerpo.
- · Nunca toque la sección del conector del kit de interfaz en paralelo directamente con las manos.
- · Cuando sostenga el kit de interfaz en paralelo, no toque con las manos la superficie de la placa del circuito impreso. Sujétela por los bordes.
- No aplique demasiada fuerza al realizar la instalación.

Instalación del kit de interfaz en paralelo PRECAUCIÓN

Antes de instalar (o desmontar) el kit de interfaz en paralelo, asegúrese de desconectar la alimentación de la impresora y de desenchufar el cable de alimentación de la toma de corriente de CA.

Verificación de la instalación del kit de interfaz en paralelo

Para verificar que el kit de interfaz en paralelo ha sido instalado correctamente, trate de imprimir la página de estado de la impresora.

Consulte la Guía de uso para obtener información sobre la impresión de la página de estado de la impresora.

Deutsch

Optionales Parallel Interface Kit IB-32

Installationsanleitung

Einführung

Das IB-32 ist ein optionales Parallel Interface Kit zur Verwendung mit Seitendruckern. Bitte lesen Sie sich diese Installationsanleitung sorgfältig durch, damit Sie das Gerät korrekt installieren.

Dieses Parallel Interface Kit kann mithilfe des selben Installationsvorgangs in anderen Modellen eingebaut werden.

Verpackungsinhalt

IB-32	1
Platte	1
Schraube	2
Relaiskabel	1
Dichtung	1
Installationsanlaitung (diasa Anlaitung)	1

Vorsichtsmaßnahmen bei der Handhabung des Parallel Interface Kits Bitte beachten Sie die folgenden Vorsichtshinweise beim Umgang mit dem Parallel Interface Kit.

- Das Parallel Interface Kit wird in einem Antistatikbeutel geliefert. Um eine Beschädigung zu vermeiden, sollten Sie kurz einen großen Gegenstand aus Metall berühren, um sich von statischer Elektrizität zu entladen, bevor Sie das
- Parallel Interface Kit aus der Verpackung entfernen. · Berühren Sie auf keinen Fall die Steckleiste des Parallel Interface Kits mit
- bloßen Händen.
- Achten Sie beim Halten des Parallel Interface Kits darauf, eine Berührung der Platinenoberfläche zu vermeiden. Halten Sie das Parallel Interface Kit stets an den Kanten der Platine
- · Vermeiden Sie übermäßige Kraftanwendung beim Installieren.

Installation des Parallel Interface Kits

VORSICHT

Achten Sie vor dem Installieren (bzw. Entfernen) des Parallel Interface Kits unbedingt darauf, den Drucker auszuschalten und das Netzkabel von der Netzsteckdose zu trennen.

Überprüfung der Installation des Parallel Interface Kits

Um eine korrekte Installation des Parallel Interface Kits zu überprüfen, drucken Sie die Statusseite aus.

Die Vorgehensweise für das Ausdrucken einer Statusseite finden Sie in der Bedienungsanleitung.

Italiano

Kit interfaccia parallela IB-32 opzionale Guida all'installazione

Introduzione

IB-32 è un kit interfaccia parallela opzionale per utilizzi con stampanti a pagine. Si prega di leggere attentamente la presente Guida all'installazione per comprendere il corretto metodo di installazione

Questo kit interfaccia parallela può essere installato in altri modelli che utilizzano la stessa procedura di installazione.

Contenuto della confezione

IB-32	1
Vassoio	1
Vite	2
Cavo relè	1
Chiusura	1
Guida all'installazione (la presente guida)	1

Precauzioni d'uso del kit interfaccia parallela

Durante l'utilizzo del kit interfaccia parallela, adottare le precauzioni che seguono. · Il kit interfaccia parallela è spedito in una custodia antistatica. Per evitare

eventuali danni, toccare per pochi istanti un oggetto metallico di grandi dimensioni per assicurarsi di scaricare l'elettricità statica prima di rimuovere il kit interfaccia parallela dalla custodia.

• Non toccare la sezione del connettore del kit interfaccia parallela direttamente con le mani.

- Nell'afferrare il kit interfaccia parallela, evitare il contatto con la superficie della
- scheda a circuito. Afferrarlo alle estremità. · Non esercitare una forza eccessiva durante l'installazione.

Istallazione del kit interfaccia parallela

ATTENZIONE:

prima di installare (o di rimuovere) il kit interfaccia parallela, assicurarsi di aver spento l'alimentazione della macchina e di aver disconnesso la spina del cavo di alimentazione dalla presa CA.

Verifica dell'installazione del kit interfaccia parallela

Per verificare che il kit interfaccia parallela sia stato installato correttamente stampare la pagina di stato.

Per scoprire le modalità di stampa della pagina di stato, consultare la Guida alle funzioni

简体中文

选装并行接口套件 IB-32 安装手册

前言	
IB-32 是一款适用于页式打印机的选装并行接口套件。为了解正确的安装方法,	请
仔细通读本《安装手册》。	
本并行接口套件可通过同样的安装步骤安装到其他机型上去。	

包装内容列表 IB-32

1D-52	
板	
螺钉	2
继电器电缆	
密封件	
安装手册(本手册)	

使用本并行接口套件的注意事项

使用本并行接口套件时,请遵守以下注意事项。 本并行接口套件被包装在防静电袋中。将并行接口套件从包装袋中取出之前,请 短暂触摸大件金属物体以消除静电,以免造成损坏。

• 请勿直接用手触摸并行接口套件的连接器部分。

• 拿握并行接口套件时,请勿接触到电路板的表面。请拿握其边缘。

• 安装时请不要过于用力。

安装本并行接口套件

注意: 安装(或拆卸)本并行接口套件前,请务必关掉机器的电源并将电源线插头从 AC 插座上断开。

确认本并行接口套件安装正确

为确认本并行接口套件已经正确安装,请尝试打印状态页。 有关打印状态页的方法,请参阅《操作手册》。

동봉물

옵션 병렬 인터페이스 키트 IB-32 토너 설치 안내서

소개 IB-32는 페이지 프린터에 사용되는 옵션 병렬 인터페이스 키트입니다. 본 토너 설치 안내서를 주의 깊게 읽고 올바른 설치 방법을 숙지하시기 바랍니다. 본 병렬 인터페이스 키트는 같은 설치 절차를 적용하여 다른 모델에 설치될 수 있습니다

포장 내용물

IB-32	
플레이트	
나사	
릴레이 케이블	
실	

토너 설치 안내서 (본 안내서) 병렬 인터페이스 키트 취급 시 주의사항

병렬 인터페이스 키트 취급 시, 다음과 같은 주의사항을 지켜주시기 바랍니다. • 병렬 인터페이스 키트는 정전기 방지 봉투에 포장되어 있습니다. 병렬 인터페이스 키트를 꺼내기 전에 손상을 예방하기 위해 큰 금속 물체를 잠시

- 만져서 정전기를 방지하시기 바랍니다. • 병렬 인터페이스 키트의 연결부를 직접 손으로 만지지 마십시오.
- 병렬 인터페이스 키트를 잡을 때는 회로판 표면에 닿지 않도록 끝부분을 잡으십시오.
- 설치 시 과도한 힘을 가하지 마십시오.

병렬 인터페이스 키트 설치 주의사항

병렬 인터페이스 키트를 설치(또는 제거)하기 전, 기기의 전원을 끄고 AC 아우트렛에서 전원선을 분리하십시오.

병렬 인터페이스 키트 설치 확인

병렬 인터페이스 키트가 올바르게 설치되었는지 확인하려면 상태 페이지를 출력해 보십시오. 상태 페이지를 출력하는 방법에 관해서는 사용설명서를

日本語

オプションパラレルインターフェイスキット IB-32 インストールガイド

はじめに

IB-32 は京セラプリンター用パラレルインターフェイスキットです。本書をよくお 読みいただき、正しく装着してください。なお、本オプションはその他の機種でも 同様の手順で装着できます。

梱包内容の確認

IB-32本体	
プレート	
ネジ	
中継線	
シール	
インストールガイド(本書)	

取扱い上の注意

- 本オプションの取り扱いには、以下のことにご注意ください。
- 本品は静電気防止対策済みの袋に入っています。袋の中から取り出す際は、念の ため大きな金属物に触れて身体の静電気を取り除いてください。
- ・本品のコネクター部分には手を触れないでください
- 本品を持つ際は基板の表面に手を触れずに、基板の端を持ってください。
- ・装着時は無理な力を加えないでください。

パラレルインターフェイスキットの装着 注意

本オプションの装着(または取り外し)は、プリンターの電源を切り、電源プラグ をコンセントから抜いた状態で行ってください。

装着の確認

- ステータスページを印刷して、本オプションが正しく装着されたかを確認できま す。
- タスページの印刷方法は、使用説明書を参照してください。

참고하시기 바랍니다

Network interface Installation Guide

KYOCERa





English

Optional Network Interface Kit IB-50 Installation Guide

Introduction

The IB-50 is an optional network interface kit for use with the MFPs and the page printers. Please read this Installation Guide thoroughly so that you understand the correct installation method.

This network interface kit can be installed in other models using the same installation procedure.

Packing List

CD-ROM

IB-50
Installation Guide (this guide)
Setup Guide

Precautions for Handling the Network Interface Kit

- When handling the network interface kit, adhere to the following precautions. • The network interface kit is delivered in an antistatic bag. To prevent any damage, briefly touch a large metal object to ensure discharge of static
- electricity before removing the network interface kit from the bag. Never touch the network interface kit's connector section directly with hands.
- . When holding the network interface kit, avoid contact with the surface of the circuit board. Hold it at the edges.
- Do not apply undue force when installing

Installing the Network Interface Kit

CAUTION

Before installing (or removing) the network interface kit, be sure to turn off the machine's power and disconnect the power cord plug from the AC outlet.

Verifying Installation of the Network Interface Kit

To verify that the network interface kit has been correctly installed, try to print out the status page.

Refer to the Operation Guide for the method for printing a status page

Français

Kit d'interface réseau IB-50 en option Guide d'installation

Introduction

L'IB-50 est un kit d'interface réseau en option destiné à être utilisé avec les imprimantes multifonctions et les imprimantes par page. Veuillez lire entièrement ce guide d'installation et vous assurer que vous comprenez bien les méthodes d'installation.

Ce kit d'interface réseau peut être installé dans d'autres modèles à l'aide de la même procédure d'installation.

Contenu de l'emballage

IB-501	
Guide d'installation (ce manuel)1	
Guide de mise en service1	
CD-ROM 1	

Précautions de manipulation du kit d'interface réseau

Lorsque vous manipulez le kit d'interface réseau, observez les précautions suivantes

- Le kit d'interface réseau est livré dans un sac antistatique. Avant de le retirer du sac, touchez brièvement un grand objet métallique pour vous décharger de toute électricité statique. Vous éviterez ainsi d'endommager le kit d'interface réseau.
- Ne touchez jamais directement la partie du connecteur du kit d'interface réseau avec les mains.
- · Lorsque vous tenez le kit d'interface réseau, ne touchez pas la surface de la carte de circuits imprimés. Saisissez-le par les bords.
- N'appliquez aucune force inutile en l'installant.

Installation du kit d'interface réseau

ATTENTION

Avant d'installer (ou de retirer) le kit d'interface réseau, mettez toujours l'imprimante hors tension et débranchez la fiche du cordon d'alimentation de la prise de courant.

Español

Kit de interfaz de red IB-50 opcional Guía de instalación

Introducción

El IB-50 es un kit de interfaz de red opcional para utilizar con la copiadora e impresora de hojas. Lea completamente esta Guía de instalación de forma que pueda entender los métodos de instalación y operación correctos

Este kit de interfaz de red puede instalarse en otros modelos utilizando el mismo procedimiento de instalación.

Lista del contenido del paquete

IB-50	.1
Guía de instalación (este folleto)	.1
Guía de configuración	.1
CD-ROM	.1

Precauciones para el manejo del kit de interfaz de red

Cuando maneje el kit de interfaz de red, tenga en cuenta las siguientes precauciones.

- · El kit de interfaz de red se entrega en una bolsa antiestática. Para evitar cualquier daño, antes de sacar el kit de interfaz de red de la bolsa, toque un
- objeto metálico grande para descargar la electricidad estática de su cuerpo. • Nunca toque la sección del conector del kit de interfaz de red directamente con
- las manos. · Cuando sostenga el kit de interfaz de red, no toque con las manos la superficie
- de la placa del circuito impreso. Suiétela por los bordes. • No aplique demasiada fuerza al realizar la instalación.
- Instalación del kit de interfaz de red

PRECAUCIÓN

Antes de instalar (o desmontar) el kit de interfaz de red, asegúrese de desconectar la alimentación de la impresora y de desenchufar el cable de alimentación de la toma de corriente de CA.

Network settings

Refer to the Operation guide for the network settings.

Vérification de l'installation du kit d'interface réseau

Pour vous assurer que le kit d'interface réseau a été correctement installé, essavez d'imprimer la page d'état de l'imprimante.

Pour connaître la méthode d'impression de la page d'état, consultez le manuel d'utilisation

Réglages réseau

Pour connaître les réglages réseau, consultez le manuel d'utilisation.

Verificación de la instalación del kit de interfaz de red

Para verificar que el kit de interfaz de red ha sido instalado correctamente, trate de imprimir la página de estado de la impresora.

Consulte la Guía de uso para obtener información sobre la impresión de la página de estado de la impresora.

Configuración de la red

Consulte la Guía de uso para obtener información sobre la configuración de la red.

Deutsch

Optionales Network Interface Kit IB-50

Installationsanleitung

Einführung

Das IB-50 ist ein optionales Network Interface Kit zur Verwendung mit den MFPs und den Seitendruckern. Bitte lesen Sie sich diese Installationsanleitung sorgfältig durch, damit Sie das Gerät korrekt installieren

Dieses Network Interface Kit kann mithilfe des selben Installationsvorgangs in anderen Modellen eingebaut werden.

Verpackungsinhalt

IB-50	'
Installationsanleitung (diese Anleitung)	1
Einrichtungsleitfaden	'
CD-ROM	

Vorsichtsmaßnahmen bei der Handhabung des Network Interface Kits Bitte beachten Sie die folgenden Vorsichtshinweise beim Umgang mit dem Network Interface Kit.

- Das Network Interface Kit wird in einem Antistatikbeutel geliefert. Um eine Beschädigung des Network Interface Kits zu vermeiden, sollten Sie kurz einen großen Gegenstand aus Metall berühren, um sich von statischer Elektrizität zu
- entladen, bevor Sie das Network Interface Kit aus der Verpackung entfernen. Berühren Sie auf keinen Fall die Steckleiste des Network Interface Kits mit bloßen Händen.
- · Achten Sie beim Halten des Network Interface Kits darauf, eine Berührung der Platinenoberfläche zu vermeiden. Halten Sie das Network Interface Kit stets an den Kanten der Platine
- · Vermeiden Sie übermäßige Kraftanwendung beim Installieren.

Installation des Network Interface Kits

VORSICHT

Achten Sie vor dem Installieren (bzw. Entfernen) des Network Interface Kits unbedingt darauf, den Drucker auszuschalten und das Netzkabel von der Netzsteckdose zu trennen.

Überprüfung der Installation des Network Interface Kits

Um eine korrekte Installation des Network Interface Kits zu überprüfen, drucken Sie die Statusseite aus

Die Vorgehensweise für das Ausdrucken einer Statusseite finden Sie in der Bedienungsanleitung

Netzwerkeinstellungen

Die Netzwerkeinstellungen finden Sie in der Bedienungsanleitung.

Italiano

Kit interfaccia di rete IB-50 opzionale Guida all'installazione

Introduzione

IB-50 è un kit interfaccia di rete opzionale per utilizzi con stampanti multifunzione (MFP) e con stampanti a pagine. Si prega di leggere attentamente la presente Guida all'installazione per comprendere il corretto metodo di installazione. Questo kit interfaccia di rete può essere installato in altri modelli che utilizzano la stessa procedura di installazione.

Contenuto della confezione

IB-501	
Guida all'installazione (la presente guida)1	
Guida alla configurazione1	
CD-ROM 1	

Precauzioni d'uso del kit interfaccia di rete

- Durante l'utilizzo del kit interfaccia di rete, adottare le precauzioni che seguono. · Il kit interfaccia di rete è spedito in una custodia antistatica. Per evitare eventuali danni, toccare per pochi istanti un oggetto metallico di grandi dimensioni per assicurarsi di scaricare l'elettricità statica prima di rimuovere il kit interfaccia di
- rete dalla custodia. Non toccare la sezione del connettore del kit interfaccia di rete direttamente con le mani.
- · Nell'afferrare il kit interfaccia di rete, evitare il contatto con la superficie della scheda a circuito. Afferrarlo alle estremità.
- · Non esercitare una forza eccessiva durante l'installazione.
- Istallazione del kit interfaccia di rete

ATTENZIONE:

prima di installare (o di rimuovere) il kit interfaccia di rete, assicurarsi di aver spento l'alimentazione della macchina e di aver disconnesso la spina del cavo di alimentazione dalla presa CA.

Verifica dell'installazione del kit interfaccia di rete

Per verificare che il kit interfaccia di rete sia stato installato correttamente,

stampare la pagina di stato Per scoprire le modalità di stampa della pagina di stato, consultare la Guida alle funzioni

Impostazioni di rete

Per le impostazioni di rete, consultare la Guida alle funzioni

简体中文

选装网络接口套件 IB-50 安装手册

前言 IB-50 是一款适用于 MFP 和页式打印机的选装网络接口套件。为了解正确的安装 方法,请仔细通读本《安装手册》

本网络接口套件可通过同样的安装步骤安装到其他机型上去。

包装内容列表

1D-D0	
安装手册(本手册)	'
设置手册	'
CD-ROM	

使用本网络接口套件的注意事项

使用本网络接口套件时,请遵守以下注意事项。 本网络接口套件被包装在防静电袋中。将网络接口套件从包装袋中取出之前,请 短暂触摸大件金属物体以消除静电,以免造成损坏。

- 请勿直接用手触摸网络接口套件的连接器部分。
- 拿握网络接口套件时,请勿接触到电路板的表面。请拿握其边缘。
- 安装时请不要过于用力。
- 安装本网络接口套件

注意:

安装(或拆卸)本网络接口套件前,请务必关掉 机器的电源并将电源线插头从 AC 插座上断开。

确认本网络接口套件安装正确

为确认本网络接口套件已经正确安装,请尝试打印 状态页。

有关打印状态页的方法,请参阅《操作手册》。

网络设置

有关网络设置的相关信息,请参阅《操作手册》。



옵션 네트워크 인터페이스 키트 IB-50 토너 설치 안내서

소개

IB-50은 MFP와 페이지 프린터에 사용되는 옵션 네트워크 인터페이스 키트입니다. 본 토너 설치 안내서를 주의 깊게 읽고 올바른 설치 방법을 숙지하시기 바랍니다. 본 네트워크 인터페이스 키트는 같은 설치 절차를 적용하여 다른 모델에 설치될 수 있습니다.

포장 내용물

ID-20	
토너 설치 안내서 (본 안내서)	1
설정 안내서	1
CD_ROM	1

네트워크 인터페이스 키트 취급 시 주의사항

네트워크 인터페이스 키트 취급 시, 다음과 같은 주의사항을 지켜주시기 바랍니다.

- 네트워크 인터페이스 키트는 정전기 방지 봉투에 포장되어 있습니다. 네트워크 인터페이스 키트를 꺼내기 전에 손상을 예방하기 위해 큰 금속 물체를 잠시 만져서 정전기를 방지하시기 바랍니다.
- 네트워크 인터페이스 키트의 연결부를 직접 손으로 만지지 마십시오.
- 네트워크 인터페이스 키트를 잡을 때는, 회로판 표면에 닿지 않도록 끝부분을 잡으십시오
- 설치 시 과도한 힘을 가하지 마십시오.

네트워크 인터페이스 키트 설치 주의사항

네트워크 인터페이스 키트를 설치(또는 제거)하기 전, 기기의 전원을 끄고 AC 아우트렛에서 전원선을 분리하십시오.

네트워크 인터페이스 키트 설치 확인

네트워크 인터페이스 키트가 올바르게 설치되었는지 확인하려면 상태 페이지를 출력해보십시오. 상태 페이지를 출력하는 방법에 관해서는 사용설명서를 참고하시기 바랍니다.

日本語

オプションネットワークインターフェイスキット IB-50 インストールガイド

はじめに

IB-50 は京セラ複合機およびプリンター用増設ネットワークです。本書をよくお読 みいただき、正しく装着してください。なお、本オプションはその他の機種でも同 様の手順で装着できます。

梱包内容の確認

1B-50 本体	T
インストールガイド(本書)	1
セットアップガイド	1
CD-ROM	1

取扱い上の注意

- 本オプションの取り扱いには、以下のことにご注意ください。
- ・本品は静電気防止対策済みの袋に入っています。袋の中から取り出す際は、念の ため大きな金属物に触れて身体の静電気を取り除いてください。
- 本品のコネクター部分には手を触れないでください
- 本品を持つ際は基板の表面に手を触れずに、基板の端を持ってください。
- ・装着時は無理な力を加えないでください。

ネットワークインターフェイスキットの装着 注意

本オプションの装着(または取り外し)は、複合機またはプリンターの電源を切 り、電源プラグをコンセントから抜いた状態で行ってください。

装着の確認

ステータスページを印刷して、本オプションが正しく装着されたかを確認できま

ステータスページの印刷方法は、使用説明書を参照してください。

ネットワークの設定

네트워크 섬정

네트워크 설정에 관련된 정보는 사용설명서를 참고하시기 바랍니다.

ネットワークの設定については、使用説明書を参照してください。

June, 2011

IB-50

Setup Guide Guía de configuración Manual de instalação Guide d'installation Setup-Leitfaden Installatiehandleiding Guida all'installazione 설치 안내서 设置向导 設定指南 セットアップガイド

- (E) Thank you for purchasing the IB-50 Network Card (hereinafter "IB-50"). Follow the instructions in this setup guide to configure Windows environments for use with the IB-50. Simply follow the steps 1 to 2. For instructions on configuring other environments, refer to the online manual on the CD-ROM.
- (S) Gracias por adquirir la tarjeta de red IB-50 (de aquí en adelante, "IB-50"). Siga las instrucciones de esta guía de configuración para configurar los entornos Windows para su uso con el IB-50. Simplemente siga los pasos 1 a 2. Para instrucciones sobre la configuración en otros entornos, consulte el manual en línea del CD-ROM
- (P) Obrigado por comprar a Placa de rede IB-50 (daqui em diante "IB-50"). Siga as instruções deste manual de instalação para configurar ambientes Windows para utilização com o IB-50. Efectue os procedimentos de 1 a 2. Para mais informações sobre como configurar outros ambientes, consulte o manual on-line de CD-ROM
- (F) Nous vous remercions d'avoir acheté la carte réseau IB-50 (ci-après dénommé "IB-50").

Veuillez suivre les instructions du présent guide d'installation pour configurer les environnements Windows pour l'utilisation avec l'IB-50. Suivez simplement les étapes 1 à 2. Pour les instructions relatives à la configuration des autres environnements, reportez-vous au manuel en ligne sur le CD-ROM.

- (D) Vielen Dank, dass Sie sich für den Kauf der IB-50 Netzwerkkarte entschieden haben (im Weiteren als "IB-50" bezeichnet). Bitte folgen Sie den Anweisungen dieses Setup-Leitfadens, um Windows-Umgebungen für den Gebrauch mit dem IB-50 zu konfigurieren. Dazu führen Sie einfach Schritt 1 bis 2 aus. Anweisungen zumKonfigurieren anderer Umgebungen finden Sie im Online-Handbuch der CD-ROM.
- (N) Wij danken u dat u de IB-50-netwerkkaart hebt aangeschaft (hierna te noemen "IB-50"). Volg de instructies in deze installatiehandleiding om Windows-omgevingen te configureren voor gebruik met de IB-50. Volg stap 1 tot en met 2. Raadpleeg voor instructies voor de configuratie van andere omgevingen de on line handleiding op de CD-ROM.
- (I) Grazie per aver acquistato la scheda di rete IB-50 (che d'ora in avanti verrà chiamato "IB-50"). Seguire le istruzioni in questa guida all'installazione per configurare gli ambienti Windows per l'utilizzo con l'IB-50. È sufficiente seguire i passi da 1 a 2 della procedura. Per le istruzioni su come configurare altri ambienti, consultare il manuale online nel CD-ROM.
- (CS)感谢您购买IB-50网卡(下面简称为"IB-50")。请按照此设置向导中的说 明,配置使用IB-50的Windows环境。请执行步骤[1]至[2]。有关其它环 境的配置说明,请参见CD-ROM中的联机手册。
- (CT)感謝您購買IB-50網路卡(下面簡稱"IB-50")。請按照此設定指南中的說明 ,安裝使用IB-50的Windows環境。請執行步驟[1]至[2]。有關環境之外的 安裝說明,請參見CD-ROM中的線上手冊。

- (K) IB-50 네트워크 카드 ("IB-50") 를 구입해 주셔서 감사합니다. 이 설치 안내서의 지침에 따라 IB-50 을 설치하여 사용할 수 있도록 Windows 환경을 구성합니다. [1] 단계에서 [2] 단계까지만 수행하면 됩니다. 다른 환경 구성에 대한 지침은 CD-ROM 의 온라인 설명서를 참조하십시오
- (J) このたびは、ネットワークカード IB-50(以降 IB-50) をお買いあげいた だき、誠にありがとうございます。 本紙では Windows環境での環境構築方法を記載しています。①から②の 手順で操作してください。他の環境での設定方法は付属のCD-ROMに 収録されているオンラインマニュアルを参照してください。
- · Supported Operating Systems / · Sistemas operativos compatibles / · Sistemas operativos suportados / · Systèmes d'exploitation pris en charge
- Unterstütze Betriebssysteme /• Ondersteunde besturingssystemen/ Sistemi operativi supportati /
- ・支持的操作系统 / ・支援的操作系統 / ・ 지원되는 운영 체제 / ・ 対応OS

Windows 2000/XP/Vista/7/Server 2003/Server 2008 Netware 3.x, 4.x, 5.x, 6.x / MacOS 9.x, 10.x / UNIX

Installing the IB-50 in the printer and connecting to the network

1

Instalación de la IB-50 en la impresora y conexión a la red

Instalando a IB-50 na impressora e conectando à rede

Installation de la IB-50 dans l'imprimante et raccord au réseau

Installation der IB-50 im Drucker und Verbindung zum Netzwerk

De IB-50 in de printer installeren en aansluiten op het netwerk.

Installare la scheda IB-50 nella stampante ed eseguire il collegamento alla rete.

在打印机中安装IB-50 并连接到网络

將 IB-50 安裝到印表機, 並連接到網路

프린터에 IB-50 설치 및 네트워크에 연결

本製品をプリンターに装着しネット ワーク環境に接続する

(E) • If you connect the IB-50 to another network later, restore the default settings before doing so.

Refer to the online manual included on the CD-ROM for details on restoring the factory default settings.

- Before connecting the IB-50, prepare the network cable.
- 1. Turn off the printer and unplug the AC power cable from the printer. 2. Install the IB-50 in the printer. Refer to the installation guide of IB-50. For machines to be installed by a service person, refer to the service manual
- 3. Connect the IB-50 to a PC or an Ethernet hub using a network cable.
- 4. Turn the printer on. Check that at least one of the two green LEDs on the IB-50 turns on.
- (S) · Si posteriormente conecta el IB-50 a otra red, antes de hacerlo debe restaurar las configuraciones predeterminadas.

Consulte el manual en línea incluido en el CD-ROM para obtener una información detallada sobre la restauración de la configuración predeterminada de fábrica. Antes de conectar la IB-50, prepare el cable de red.

1. Apague la impresora y desconecte el cable de alimentación de CA de la impresora 2. Instale la IB-50 en la impresora. Consulte la guía de instalación de la IB-50.

Para las máquinas instaladas por el técnico del servicio, vea el manual de servicio.

- 3. Conecte la IB-50 a un PC o a un concentrador Ethernet empleando un cable de red.
- 4. Encienda la impresora. Verifique que al menos uno de los dos LED verdes de la IB-50 se enciende.
- (P) Se ligar o IB-50 a outra rede posteriormente, restaure as predefinições antes de o fazer.

Consulte o manual on-line incluído no CD-ROM para obter detalhes sobre como restaurar as configurações padrão de fábrica. Antes de conectar a IB-50, prepare o cabo de rede.

- 1. Desligue a impressora e retire o cabo de alimentação CA da impressora.
- 2. Instale a IB-50 na impressora. Consulte o guia da instalação da IB-50. Para as máguinas que devem ser instaladas por pessoal de servico gualificado, consulte o manual de serviço.
- 3. Conecte a IB-50 a um PC ou a um hub Ethernet usando um cabo de rede. 4. Ligue a impressora. Verifique se pelo menos um dos dois LEDs verdes na IB-50 está aceso
- (F) Si vous connectez l'IB-50 à un autre réseau plus tard, vous devrez d'abord rétablir les paramètres par défaut. Reportez-vous au manuel en ligne inclus sur le CD-ROM pour plus d'informations

sur la restauration des paramètres d'origine. Préparez le câble réseau avant de raccorder la IB-50.

- 1. Éteignez l'imprimante et débranchez le câble d'alimentation.
- 2. Installez l'IB-50 dans l'imprimante. Reportez-vous au guide d'installation de l'IB-50.
- Pour les machines installées par un agent d'entretien, voir le manuel de service.
- 3. Raccordez la IB-50 sur un ordinateur ou sur un concentrateur Ethernet à l'aide d'un câble réseau
- 4. Allumez l'imprimante. Vérifiez qu'au moins un des deux voyants verts sur la IB-50 s'allume.
- (D) Wenn der IB-50 später an ein anderes Netzwerk angeschlossen werden soll, müssen Sie vorher darauf achten, die Standardeinstellungen wiederherzustellen. Details zur Wiederherstellung der werksseitigen Standardeinstellungen finden Sie im Onlinehandbuch auf der CD-ROM. Stellen Sie vor dem Anschluss der IB-50 das Netzwerkkabel bereit
 - 1. Den Druckerstrom ausschalten und das Stromkabel vom Drucker abziehen. 2. Installieren Sie die IB-50 im Drucker. Siehe Installationsanweisung

der IB-50 Angaben zu Maschinen, die von Service-Personal zu installieren sind, finden Sie in der Wartungsanleitung.

- 3. Schließen Sie die IB-50 an einen PC oder an einen Ethernet-Verteiler über ein Netzwerkkabel an.
- 4. Schalten Sie den Drucker ein. Überprüfen Sie, dass mindestens eine der beiden grünen LEDs an der IB-50 aufleuchtet.
- (N) Wanneer u de IB-50 later op een ander netwerk aansluit, moet u van tevoren de standaardinstellingen herstellen
 - Raadpleeg de online-handleiding die op de CD-ROM staat voor details over het herstellen van de fabriekswaarden. Maak de netwerkkabel gereed voordat u de IB-50 aansluit.
 - 1. Schakel de printer uit en maak het netsnoer los van de printer,
 - 2. Installeer de IB-50 in de printer. Raadpleeg hiervoor de installatiehandleiding van de IB-50. Refereer aan de onderhoudshandleiding voor machines die geïnstalleerd dienen te worden door onderhoudspersoneel. 3. Sluit de IB-50 met behulp van een netwerkkabel aan op een PC of een
 - Ethernet-hub. 4. Zet de printer aan. Controleer of ten minste één van de twee groene LED's op de IB-50 gaat branden.
- (I) Se si collega l'IB-50 a un'altra rete in un secondo momento, ripristinare le impostazioni predefinite prima di farlo. Fare riferimento al manuale in linea incluso nel CD-ROM per le istruzioni dettagliate

su come ripristinare le impostazioni predefinite di fabbrica. Preparare il cavo di rete prima di collegare la scheda IB-50. 1. Spegnere la stampante e scollegare il cavo di alimentazione CA dalla stampante.

- 2. Installare la scheda IB-50 sulla stampante. Vedere la guida all'installazione di IB-50.
- Per le macchine che devono essere installate da un tecnico di assistenza, fare riferimento al manuale d'istruzioni.
- 3. Collegare la scheda IB-50 a un computer o a un hub Ethernet tramite un cavo di rete.
- 4. Accendere la stampante. Verificare che almeno uno dei due LED verdi della scheda IB-50 sia acceso.
- (CS) 如果此后要将IB-50与其它网络连接,请在连接前恢复默认设置。 有关恢复出厂默认设置的详细信息,请参见CD-ROM上的联机手册。在 连接 IB-50之前,准备好网络电缆。
 - 1. 关闭打印机,并从打印机上拔下AC电源电缆。
 - 2. 在打印机中安装 IB-50。请参见 IB-50 的安装手册。 对于维修人员安装机器时,请参照维修手册。
 - 3. 使用网络电缆将IB-50连接到PC或以太网集线器
 - 4. 打开打印机。检查IB-50上的两个绿色 LED 至少有一个为亮起状态。

- (CT) 如果此後要將IB-50與其它網路連接,請在連接前恢復預設設定。 有關恢復預設設定的說明,請參見CD-ROM所隨附的線上手冊。連接 IB-50之前,請先準備好網路纜線。
 - 1. 關閉印表機,從印表機上拔下AC電源電纜。
 - 2. 欲安裝 IB-50 至機器,詳見 IB-50 之安裝手冊。 如由服務人員裝機,請參閱技術手冊。
 - 3. 使用網路纜線將IB-50連接到 PC 或 Ethernet 集線器。
 - 4. 開啓印表機。確認IB-50上的兩個綠色LED中至少有一個是開啓的。
- (K) 나중에 IB-50 을 다른 네트워크에 연결할 경우 연결하기 전에 기본 설정을 복원합니

공장 기본 설정 복원에 대한 자세한 내용은 CD-ROM 에 포함된 온라인 설명서를 참조하십시오.

IB-50 을 연결하기 전에 네트워크 케이블을 준비합니다. 1.프린터를 끄고 AC 전원 케이블을 프린터에서 분리합니다. 2.프린터에 IB-50을 설치방법은 설치 설명서를 참조하십시오. 서비스 기사가 설치하는 기계는 서비스 매뉴얼을 참조해 주십시오 3.네트워크 케이블을 사용하여 IB-50 을 PC 또는 이더넷 허브에 연결한니다

4.프린터의 전원을 켭니다. IB-50 에 있는 두 개의 녹색 LED 중 최소한 하나가 켜져 있는지 확인합니다.

(J) 他のネットワークにつなぎかえる場合は、工場出荷時設定に戻してくだ さい

工場出荷時設定に戻す方法は、CDに収録されているオンラインマニュア ルを参照してください

接続前にネットワークケーブルを準備してください。

- 1. プリンターの電源を切り、電源ケーブルをプリンターから抜きます。
- 2. 別紙 (IB-50)の手順で IB-50をプリンターに装着します。 サービス担当者が設置する機械は、サービスマニュアルを参照してく ださい。
- 3. IB-50とPCまたはイーサネットハブをネットワークケーブルで接続します。
- 4. プリンターの電源を入れます。IB-50の2つの緑のLEDのうちどちらかが 点灯することを確認します。

2

Configure the IB-50's IP address Configurar la dirección IP del IB-50 Configurar o endereço IP do IB-50 Configurez l'adresse IP de l'IB-50 Konfigurieren Sie die IP-Adresse des IB-50 Configureer het IP-adres van de IB-50 Configurare l'indirizzo IP dell'IB-50

配置IB-50的IP地址

設定IB-50的IP位址

IB-50 의 IP 주소 구성

IB-50にIPアドレスを設定する



- (E) Insert the CD-ROM supplied with the interface card in your CD-ROM drive.
- (S) Inserte en la unidad el CD-ROM que se suministra con la tarjeta de interfaz.
- (P) Insira o CD-ROM fornecido com a placa de interface na unidade de CD-ROM.
- (F) Insérez le CD-ROM fourni avec la carte d'interface dans votre lecteur de CD-ROM.
- (D) Die der Schnittstellenkarte beiliegende CD-ROM in das CD-ROM-Laufwerk einlegen.
- (N) Plaats de CD-ROM die bij de interfacekaart wordt geleverd, in uw CD-ROM-station.
- Inserire il CD-ROM fornito con la scheda di interfaccia nell'unità CD-ROM.

(CS) 将接口卡随附的光盘插入光盘驱动器。

(CT)將介面卡隨附的光碟插入光碟機。

- (K) 사용자의 CD-ROM 드라이브에 인터페이스와 함께 제공되는 CD-ROM 을 삽입합니다.
- (J) 付属のCD-ROMをPCにセットします。
- 2.
- (E) Click Quick Network Setup.
- (S) Pulse Pulse Quick Network Setup.
- (P) Clique em Quick Network Setup.
- (F) Cliquez sur Quick Network Setup.
- (D) Klicken Sie auf Quick Network Setup.
- (N) Klik op Quick Network Setup.
- (I) Fare clic su Quick Network Setup.
- (CS) 单击Quick Network Setup
- (CT) 按一下Quick Network Setup。
- (K) Quick Network Setup 를 클릭합니다.
- (J) [Quick Network Setup]をクリックします。

3.

Δ

- (E) Click Next when the Wizard screen is displayed.
- (S) Haga clic en Siguiente cuando aparezca la pantalla del Asistente.
- (P) Clique em Avançar quando a tela do Assistente for exibida.
- (F) Cliquez sur Suivant lorsque l'écran de l'assistant s'affiche.
- (D) Klicken Sie auf Weiter, wenn der Bildschirm des Assistenten gezeigt wird.
- (N) Klik op Volgende wanneer het Wizard-scherm verschijnt
- (I) Fare clic su **Avanti** alla visualizzazione della schermata di Installazione guidata stampante.
- (CS) 显示向导屏幕时,单击下一步。
- (CT) 當精靈畫面顯示時,按一下下一步。
- (K) 마법사 화면이 표시되면 다음을 클릭합니다.
- (J) ウィザード画面が表示されるので[次へ]をクリックします。

Quick Setup			
	Printing systems on	the network	
00.c0.ee.14.00.87	P address: 192.168.1.2	Network Component FS-6950DN	
Show only printing a	ystems without IP address.	Refresh	
onow all priming sys	nome. to configure from the list above		
elect printing systems i			
not displayed in the lis n the network status p	t, enter the printing system's Ma age. Press the Status key on th	AC address. (The MAC address may be fo te printing systems front panel.)	
elect printing systems (i not displayed in the lis in the network status p	t, enter the printing system's M age. Press the Status key on th 00.c0.ee:14.00.87	AC address. (The MAC address may be fo he printing systems front panel.)	

- (E) Select the printer that the card is installed in from the list of print servers, and then click **Next**.
- If the printer that the card is installed in does not appear in the list of search results :
- Make sure the computer's network environment (IP address) is correctly configured.
- Temporarily disable any security software and the standard firewall built into the operating system (for Windows XP), if applicable.
- (S) Seleccione la impresora en la que está instalada la tarjeta en la lista de servidores de impresión y a continuación haga clic en Siguiente.
- Si la impresora en la que está instalada la tarjeta no aparece en la lista de resultados de búsqueda :
- Asegúrese de que el entorno de red del PC (dirección IP) está correctamente configurado.
- Desactive temporalmente cualquier software de seguridad y el cortafuegos del sistema operativo (en Windows XP), si es aplicable.
- (P) Selecione, na lista de servidores de impressão, a impressora na qual a placa está instalada e depois clique em Avançar.

Se a impressora na qual a placa está instalada não surgir na lista de resultados da pesquisa :

- Certifique-se de que o ambiente de rede do computador (endereço IP) está configurado correctamente.
- Desactive temporariamente qualquer software de segurança e a firewall standard integrada no sistema operativo (para Windows XP), se aplicável.
- (F) Choisissez l'imprimante avec la carte installée dans la liste des serveurs d'impression, et cliquez ensuite sur Suivant. Si l'imprimante avec la carte installée ne figure pas dans la liste des
 - résultats de recherche : • Vérifiez que l'environnement du réseau de l'ordinateur (l'adresse
 - IP) est correctement configuré.
 - Désactivez temporairement tout logiciel de sécurité et le firewall standard intégré par défaut au système d'exploitation (pour Windows XP), le cas échéant.
- (D) Wählen Sie den Drucker, in dem die Karte installiert ist, aus der Liste der Druckserver aus, und klicken Sie anschließend auf Weiter. Falls der Drucker, in dem die Karte installiert ist, nicht in der Liste der Suchergebnisse angezeigt wird :
- Vergewissern Sie sich, das die Netzwerkumgebung des PC (IP-Adresse) korrekt konfiguriert ist.
- Sperren Sie ggf. vorübergehend eine momentan aktivierte Sicherheits-Software und die Standard-Firewall des Betriebssystems (bei Windows XP).

(N) Selecteer de printer waarin de kaart is geïnstalleerd, uit de lijst van print-servers en klik daarna op Volgende.

Als de printer waarin de kaart is geïnstalleerd, niet in de lijst met zoekresultaten voorkomt :

- Controleer of de netwerkomgeving van de computer (het IP-adres) op de juiste manier is geconfigureerd.
- Schakel beveiligingssoftware en de standaardfirewall die in het besturingssysteem is ingebouwd (voor Windows XP) voorlopig uit, indien van toepassing.
- (I) Selezionare la stampante in cui è installata la scheda dall'elenco dei server di stampa, quindi fare clic su Avanti.
 Se la stampante in cui è installata la scheda non appare nell'elenco dei risultati della ricerca :
 - Assicurarsi che l'ambiente di rete del computer (indirizzo IP) sia configurato correttamente.
 - Disattivare temporaneamente qualsiasi software di sicurezza e il firewall di serie incorporato nel sistema operativo (per Windows XP), se applicabile.
- (CS) 如果安装了该卡的打印机未出现在搜索结果列表中:
 - 确认是否正确配置了电脑的网络环境(IP地址)。
 - 暂时中断所有正在适用的安全软件和内置于操作系统(Windows XP)的标准防火墙的执行。

(CT) 從列印伺服器清單中選取安裝了網路卡的印表機,然後按一下下一頁。

- 如果安裝了網路卡的印表機沒有出現在搜尋結果 清單中:
- 確認是否正確設定了電腦的網路環境(IP位址)。
- 暫時中斷所有安全軟體和建於操作系統(Windows XP)的標準防火 牆的執行。
- (K) 인쇄 서버 목록에서 카드가 설치되어 있는 프린터를 선택하고 다음을 클릭합니다.
 - 카드가 설치되어 있는 프린터가 검색 결과 목록에 표시되지 않는 경우:
 - 컴퓨터의 네트워크 환경(IP 주소)이 제대로 구성되어 있는지 확인합니다.
 - 운영 체제 (Windows XP 용)에 내장되어 있는 보안 소프트웨어와 표준 방화벽을 잠시 사용하지 않도록 설정합니다.
- (J) プリントサーバーリストから、装着したプリンターを選択して、[次 へ]をクリックします。

検索結果一覧に装着したプリンターが表示されないときは... ※PCのネットワーク環境(IPアドレス)が正しく設定されているかを確認し てください。

※セキュリティソフトおよび、OS標準のファイアウォール機能(Windows XPの場合)をご利用の場合は、一時的に無効にしてください。



5.

- (E) Enter the IP address, Subnet mask, and Default gateway. Click Next.
- (S) Introduzca la dirección IP, máscara de subred y Gateway por omisión. Pulse Siguiente.
- (P) Introduza o Endereço IP, a Máscara de sub-rede e a Gateway padrão. Clique em Ávançar.
- (F) Saisissez l'adresse IP, le Masque de sous-réseau et la Passerelle par défaut. Cliquez sur **Suivant**.
- (D) Geben Sie IP-Adresse, Subnetzmaske und Standard-Gateway ein, und klicken Sie dann auf Weiter.
- (N) Voer het IP-adres, het Subnetmasker en de Standaardgateway in. Klik op Volgende.
- (I) Immettere Indirizzo IP, Maschera sottorete e Gateway predefinito. Fare clic su Avanti.
- (CS) 键入IP地址、子网掩码和默认网关。单击下一步。

(CT) 輸入IP位址、子網路遮罩和預設閘道。按一下下一頁。

- (K) IP 주소, 서브넷 마스크 및 기본 게이트웨이를 입력합니다. 다음을 클릭합니다.
- (J) IP アドレス、サブネットマスク、デフォルトゲートウェイを 入力し、[次へ]をクリックします。

6.

- (E) Confirm the settings and click Next.
- (S) Confirme las configuraciones y pulse Siguiente.
- (P) Confirme as configurações e clique em Avançar.
- (F) Vérifiez les paramètres et cliquez sur Suivant.
- (D) Überprüfen Sie die vorgenommenen Einstellungen, und klicken Sie dann auf Weiter.
- (N) Bevestig de instellingen en klik op Volgende.
- (I) Verificare le impostazioni e fare clic su Avanti.

(CS)确认设置后单击下一步。

(CT) 確認設定後按一下下一頁。

- (K) 설정을 확인하고 다음을 클릭합니다.
- (J) 設定内容を確認し、[次へ]をクリックします。

7.

- (E) When the final installation screen of the Quick Network Setup is displayed, click Finish.
- (S) Cuando aparezca la pantalla de instalación final de Quick Network Setup.
- (P) Quando aparecer o ecrã de instalação final do Quick Network Setup, clique em Concluir.
- (F) Lorsque l'écran final d'installation de Quick Network Setup s'affiche, cliquez sur Terminer.
- (D) Wenn die letzte Seite der Quick Network Setup angezeigt wird, klicken Sie auf Ende.
- (N) Wanneer het laatste installatiescherm van Quick Network Setup wordt weergegeven, klikt u op Voltooien.
- Quando viene visualizzata la schermata di installazione finale di Quick Network Setup, fare clic su Fine.
- (CS) 显示Quick Network Setup的最后安装画面时,单击完成。
- (CT) 顯示Quick Network Setup的最後安裝畫面時,按一下完成。
- (K) Quick Network Setup의 마지막 설치 화면이 표시되면 마침을 클릭합니다.
- (J) [Quick Network Setup]の終了画面が表示されたら、 [完了]をクリックします。

8.

- (E) For the operation of the IB-50, refer to the online manual on the CD-ROM
- (S) Para obtener información sobre la IB-50, consulte el manual en línea del CD-ROM.
- (P) Para a operação da IB-50, consulte o manual on-line no CD-ROM.
- (F) Pour l'utilisation de l'IB-50, reportez-vous au manuel en ligne sur le CD-ROM.
- (D) Um die IB-50 in Betrieb zu nehmen, sehen Sie im Online-Handbuch auf der CD-ROM nach.
- (N) Raadpleeg voor de bediening van de IB-50 de onlinehandleiding op de CD-ROM.
- Per utilizzare la scheda IB-50, fare riferimento al manuale in linea incluso nel CD-ROM.
- (CS) 有关 IB-50 的操作情况,请参见 CD-ROM 中的联机手册。
- (CT) 有關 IB-50 的操作方法,請參照 CD-ROM 中的線上手冊。
- (K) IB-50 의 조작방법에 대해서 CD-ROM에 포함된 온라인 설명서를 참조하십시오.
- (J) IB-50の操作方法についてはCD-ROMに収録されているオンライン マニュアルを参照して下さい。

Wireless LAN interface Installation Guide

KYOCERa

For European countries and Australia : X C CE





English

Optional Wireless Network Interface Kit IB-51 Installation Guide

Introduction

The IB-51 is an optional wireless network interface kit for use with the MFPs and the page printers. Please read this Installation Guide thoroughly so that you understand the correct installation method.

This wireless network interface kit can be installed in other models using the same installation procedure.

Packing List

IB-51
Installation Guide (this guide)
CD BOM

Precautions for Handling the Wireless Network Interface Kit

When handling the wireless network interface kit, adhere to the following precautions.

- The wireless network interface kit is delivered in an antistatic bag. To prevent any damage, briefly touch a large metal object to ensure discharge of static electricity before removing the wireless network interface kit from the bag.
- Never touch the wireless network interface kit's connector section directly with hands. • When holding the wireless network interface kit, avoid contact with the surface of the
- circuit board. Hold it at the edges. • Do not apply undue force when installing

Installing the Wireless Network Interface Kit CAUTION

Before installing (or removing) the wireless network interface kit, be sure to turn off the machine's power and disconnect the power cord plug from the

Verifying Installation of the Wireless Network Interface Kit

To verify that the wireless network interface kit has been correctly installed, try to print out the status page.

Français

Kit d'interface réseau sans fil IB-51 en option Guide d'installation

Introduction

L'IB-51 est un kit d'interface réseau sans fil en option destiné à être utilisé avec les imprimantes multifonctions et les imprimantes par page. Veuillez lire entièrement ce guide d'installation et vous assurer que vous comprenez bien les méthodes d'installation.

Ce kit d'interface réseau sans fil peut être installé dans d'autres modèles à l'aide de la même procédure d'installation.

Contenu de l'emballage

IB-511	
Guide d'installation (ce manuel)1	
CD-ROM 1	

Précautions de manipulation du kit d'interface réseau sans fil

Lorsque vous manipulez le kit d'interface réseau sans fil, observez les précautions suivantes

- · Le kit d'interface réseau sans fil est livré dans un sac antistatique. Avant de le retirer du sac, touchez brièvement un grand objet métallique pour vous décharger de toute électricité statique. Vous éviterez ainsi d'endommager le kit d'interface réseau sans fil. · Ne touchez jamais directement la partie du connecteur du kit d'interface réseau sans fil
- avec les mains · Lorsque vous tenez le kit d'interface réseau sans fil, ne touchez pas la surface de la
- carte de circuits imprimés. Saisissez-le par les bords. · N'appliquez aucune force inutile en l'installant.

Installation du kit d'interface réseau sans fil

ATTENTION

Avant d'installer (ou de retirer) le kit d'interface réseau sans fil, mettez toujours l'imprimante hors tension et débranchez la fiche du cordon d'alimentation de la prise de courant.

Español

Kit de interfaz de red inalámbrica IB-51 opcional Guía de instalación

Introducción

El IB-51 es un kit de interfaz de red inalámbrica opcional para utilizar con la copiadora e impresora de hojas. Lea completamente esta Guía de instalación de forma que pueda entender los métodos de instalación y operación correctos. Este kit de interfaz de red inalámbrica puede instalarse en otros modelos utilizando el mismo procedimiento de instalación.

Lista del contenido del paquete

Lista dei contenido dei paquete	
B-51	.1
Guía de instalación (este folleto)	.1
CD-ROM	.1

Precauciones para el manejo del kit de interfaz de red inalámbrica

Cuando maneje el kit de interfaz de red inalámbrica, tenga en cuenta las siguientes precauciones.

- El kit de interfaz de red inalámbrica se entrega en una bolsa antiestática. Para evitar cualquier daño, antes de sacar el kit de interfaz de red inalámbrica de la bolsa, toque un objeto metálico grande para descargar la electricidad estática de su cuerpo.
- Nunca toque la sección del conector del kit de interfaz de red inalámbrica directamente con las manos.
- · Cuando sostenga el kit de interfaz de red inalámbrica, no toque con las manos la superficie de la placa del circuito impreso. Sujétela por los bordes

• No aplique demasiada fuerza al realizar la instalación. Instalación del kit de interfaz de red inalámbrica

PRECAUCIÓN

Antes de instalar (o desmontar) el kit de interfaz de red inalámbrica, asegúrese de desconectar la alimentación de la impresora y de desenchufar el cable de alimentación de la toma de corriente de CA.

Verificación de la instalación del kit de interfaz de red inalámbrica Para verificar que el kit de interfaz de red inalámbrica ha sido instalado

Refer to the Operation Guide for the method for printing a status page

Network settings

AC outlet.

For the network settings and operation procedure, refer to the printer's Operation Guide and the wireless network interface manual.

Vérification de l'installation du kit d'interface réseau sans fil

Pour vous assurer que le kit d'interface réseau sans fil a été correctement installé, essayez d'imprimer la page d'état de l'imprimante. Pour connaître la méthode d'impression de la page d'état, consultez le manuel d'utilisation.

Réglages réseau

Pour les réglages réseau et la procédure d'utilisation, consultez le manuel d'utilisation de l'imprimante et le manuel de l'interface réseau sans fil.

correctamente, trate de imprimir la página de estado de la impresora. Consulte la Guía de uso para obtener información sobre la impresión de la página de estado de la impresora.

Configuración de la red

Si desea obtener información sobre la configuración de la red y el procedimiento de operación, consulte la Guía de uso y el manual de la interfaz de red inalámbrica.



Optionales Wireless Network Interface Kit IB-51

Installationsanleitung

Einführung

Das IB-51 ist ein optionales Wireless Network Interface Kit zur Verwendung mit den MFPs und den Seitendruckern. Bitte lesen Sie sich diese Installationsanleitung sorgfältig durch, damit Sie das Gerät korrekt installieren. Dieses Wireless Network Interface Kit kann mithilfe des selben Installationsvor-

gangs in anderen Modellen eingebaut werden.

Verpackungsinhalt

IB-51 Installationsanleitung (diese Anleitung)..... CD-ROM.

Vorsichtsmaßnahmen bei der Handhabung des Wireless Network Interface Kits

Bitte beachten Sie die folgenden Vorsichtshinweise beim Umgang mit dem Wireless Network Interface Kit.

- Das Wireless Network Interface Kit wird in einem Antistatikbeutel geliefert. Um eine Beschädigung des Wireless Network Interface Kits zu vermeiden, sollten Sie kurz einen großen Gegenstand aus Metall berühren, um sich von statischer Elektrizität zu
- entladen, bevor Sie das Wireless Network Interface Kit aus der Verpackung entfernen.
 Berühren Sie auf keinen Fall die Steckleiste des Wireless Network Interface Kits mit bloßen Händen.
- Achten Sie beim Halten des Wireless Network Interface Kits darauf, eine Berührung der Platinenoberfläche zu vermeiden. Halten Sie das Wireless Network Interface Kit stets an den Kanten der Platine.

· Vermeiden Sie übermäßige Kraftanwendung beim Installieren.

Installation des Wireless Network Interface Kits VORSICHT

Achten Sie vor dem Installieren (bzw. Entfernen) des Wireless Network Interface Kits unbedingt darauf, den Drucker auszuschalten und das Netzkabel von der Netzsteckdose zu trennen.

Überprüfung der Installation des Wireless Network Interface Kits

Um eine korrekte Installation des Wireless Network Interface Kits zu überprüfen, drucken Sie die Statusseite aus.

Die Vorgehensweise für das Ausdrucken einer Statusseite finden Sie in der Bedienungsanleitung.

Netzwerkeinstellungen

Netzwerkeinstellungen und Betriebsverfahren finden Sie in Bedienungsanleitung und Anleitung vom Wireless Network Interface.



Kit interfaccia di rete wireless IB-51 opzionale Guida all'installazione

Introduzione

IB-51 è un kit interfaccia di rete wireless opzionale per utilizzi con stampanti multifunzione (MFP) e con stampanti a pagine. Si prega di leggere attentamente la presente Guida all'installazione per comprendere il corretto metodo di installazione.

Questo kit interfaccia di rete wireless può essere installato in altri modelli che utilizzano la stessa procedura di installazione.

Contenuto della confezione

IB-51.....1 Guida all'installazione (la presente guida).....1 CD-ROM.....1

Precauzioni d'uso del kit interfaccia di rete wireless

Durante l'utilizzo del kit interfaccia di rete wireless, adottare le precauzioni che seguono.

- Il kit interfaccia di rete wireless è spedito in una custodia antistatica. Per evitare eventuali danni, toccare per pochi istanti un oggetto metallico di grandi dimensioni per assicurarsi di scaricare l'elettricità statica prima di rimuovere la il kit interfaccia di rete wireless dalla custodia.
- Non toccare la sezione del connettore del kit interfaccia di rete wireless direttamente con le mani.
- Nell'afferrare il kit interfaccia di rete wireless, evitare il contatto con la superficie della scheda a circuito. Afferrarlo alle estremità.

Non esercitare una forza eccessiva durante l'installazione.

Istallazione del kit interfaccia di rete wireless

ATTENZIONE:

prima di installare (o di rimuovere) il kit interfaccia di rete wireless, assicurarsi di aver spento l'alimentazione della macchina e di aver

disconnesso la spina del cavo di alimentazione dalla presa CA. Verifica dell'installazione del kit interfaccia di rete wireless

Per verificare che il kit interfaccia di rete wireless sia stato installato correttamente, stampare la pagina di stato. Per scoprire le modalità di stampa della pagina di stato, consultare la Guida alle

funzioni.

Impostazioni di rete

Per le impostazioni di rete e la procedura operativa, consultare la Guida alle funzioni della stampante e il manuale dell'interfaccia di rete wireless.

简体中文

选装无线网络接口套件 IB-51 安装手册

前言

IB-51 是一款适用于 MFP 和页式打印机的选装无线网络接口套件。为了解正确的 安装方法,请仔细通读本《安装手册》。

本无线网络接口套件可通过同样的安装步骤安装到其他机型上去。

包装内容列表

IB-51		 	
安装手册	(本手册)	 	

CD-ROM 使用本无线网络接口套件的注意事项

使用本无线网络接口套件时,请遵守以下注意事项。

本无线网络接口套件被包装在防静电袋中。将无线网络接口套件从包装袋中取出之前,请短暂触摸大件金属物体以消除静电,以免造成损坏。

- 请勿直接用手触摸无线网络接口套件的连接器部分。
- 拿握无线网络接口套件时,请勿接触到电路板的表面。请拿握其边缘。
- 安装时请不要过于用力。

安装本无线网络接口套件 注意:

口心: 安装(或拆卸)本无线网络接口套件前,请务必关掉机器的电源并将电源线插头从 AC 插座上断开。

确认本无线网络接口套件安装正确

为确认本无线网络接口套件已经正确安装,请尝试 打印状态页。

有关打印状态页的方法,请参阅《操作手册》。

网络设置

有关网络设置的操作方法和步骤,请参阅打印机的《操作手册》和无线网络接口手册。

옵션 무선 네트워크 인터페이스 키트 IB-5 토너 설치 안내서

소개

IB-51은 MFP와 페이지 프린터에 사용되는 옵션 무선 네트워크 인터페이스 키트입니다. 본 토너 설치 안내서를 주의 깊게 읽고 올바른 설치 방법을 숙지하시기 바랍니다. 본 무선 네트워크 인터페이스 키트는 같은 설치 절차를 적용하여 다른 모델에 설치될 수 있습니다.

포장 내용물

IB-51 토너 설치 안내서 (본 안내서)

CD-ROME.....

무선 네트워크 인터페이스 키트 취급 시 주의사항

무선 네트워크 인터페이스 키트 취급 시, 다음과 같은 주의사항을 지켜주시기 바랍니다.

- 무선 네트워크 인터페이스 키트는 정전기 방지 봉투에 포장되어 있습니다. 무선 네트워크 인터페이스 키트를 꺼내기 전에 손상을 예방하기 위해 큰 금속 물체를 잠시 마져서 적전기를 받지하시기 바랍니다.
- 무선 네트워크 인터페이스 키트의 연결부를 직접 손으로 만지지 마십시오.
- 무선 네트워크 인터페이스 키트를 잡을 때는 회로판 표면에 닿지 않도록 끝부분을 잡으십시오.
- 설치 시 과도한 힘을 가하지 마십시오.

무선 네트워크 인터페이스 키트 설치

주의사항 무선 네트워크 인터페이스 키트를 설치(또는 제거)하기 전, 기기의 전원을 끄고 AC 아우트렛에서 전원선을 분리하십시오.

무선 네트워크 인터페이스 키트 설치 확인

무선 네트워크 인터페이스 키트가 올바르게 설치되었는지 확인하려면 상태 페이지를 출력해보십시오. 상태 페이지를 출력하는 방법에 관해서는 사용설명서를 참고하시기 바랍니다.

네트워크 설정

日本語

オプションワイヤレスネットワーク インターフェイスキット IB-51 インストールガイド

はじめに

IB-51 は京セラ複合機およびプリンター用ワイヤレスネットワークインターフェ イスキットです。本書をよくお読みいただき、正しく装着してください。なお、本オ プションはその他の機種でも同様の手順で装着できます。

梱包内容の確認

ワイヤレスネットワークインターフェイス本体1

取扱い上の注意

- 本オプションの取り扱いには、以下のことにご注意ください。
- 本品は静電気防止対策済みの袋に入っています。袋の中から取り出す際は、念のため大きな金属物に触れて身体の静電気を取り除いてください。
- 本品のコネクター部分には手を触れないでください。
- ・本品を持つ際は基板の表面に手を触れずに、基板の端を持ってください。
- ・装着時は無理な力を加えないでください。

ワイヤレスネットワークインターフェイスキットの装着

注意

本オプションの装着(または取り外し)は、複合機またはプリンターの電源を切り、電源プラグをコンセントから抜いた状態で行ってください。

装着の確認

す

- ステータスページを印刷して、本オプションが正しく装着されたかを確認できま
- ステータスページの印刷方法は、使用説明書を参照してください。

네트워크 설정 및 사용 절차에 관련된 정보는 프린터의 사용설명서와 무선 네트워크 인터페이스 매뉴얼을 참고하시기 바랍니다.

ネットワークの設定、操作手順については、プリンターの使用説明書とワイヤレス ネットワークインターフェイスのマニュアルを参照してください。

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