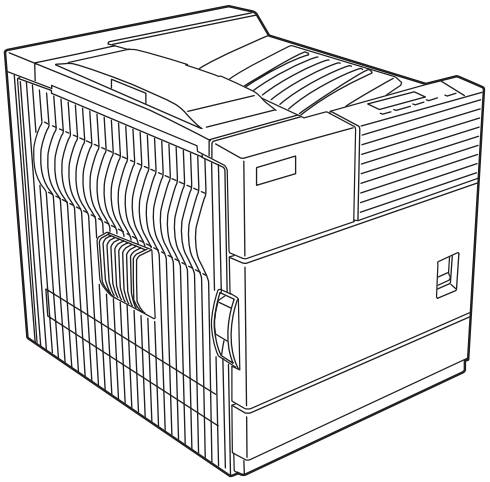
OKI®

SERVICE MANUAL



LASER PRINTER
MODEL B8300n

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CAUTION

This product is a class 1 laser product that complies with 21CFR 1040.10 and 1040.11 of the CDRH standard and IEC825. This means that this machine does not produce hazardous laser radiation. The use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
This laser radiation is not a danger to the skin, but when an exact focusing of the laser beam is achieved on the eye's retina, there is the danger of spot damage to the retina.
The following cautions must be observed to avoid exposure of the laser beam to your eyes at the time of servicing.

1) When a problem in the laser optical unit has occurred, the whole optical unit must be exchanged as a unit, not as individual parts.
2) Do not look into the machine with the main switch turned on after removing the developer unit, toner cartridge, and drum cartridge.
3) Do not look into the laser beam exposure slit of the laser optical unit with the connector connected when removing and installing the optical system.
4) The middle frame contains the safety interlock switch.
   Do not defeat the safety interlock by inserting wedges or other items into the switch slot.

Cautions on laser

Wave length	785 nm +10 nm −15 nm
Pulse times	North America: 35 cpm model: (4.1 µs ± 4.1 ns)/7 mm 45 cpm model: (5.7 µs ± 5.7 ns)/7 mm Europe: 35 cpm model: (3.8 µs ± 3.8 ns)/7 mm 45 cpm model: (4.4 µs ± 4.4 ns)/7 mm
Output power	0.2 mW - 0.4 mW

At the production line, the output power of the scanner unit is adjusted to 0.4 MILLIWATT PLUS 8 % and is maintained constant by the operation of the Automatic Power Control (APC).

Caution
This product contains a low power laser device. To ensure safety do not remove any cover or attempt to gain access to the inside of the product. Refer all servicing to qualified personnel.

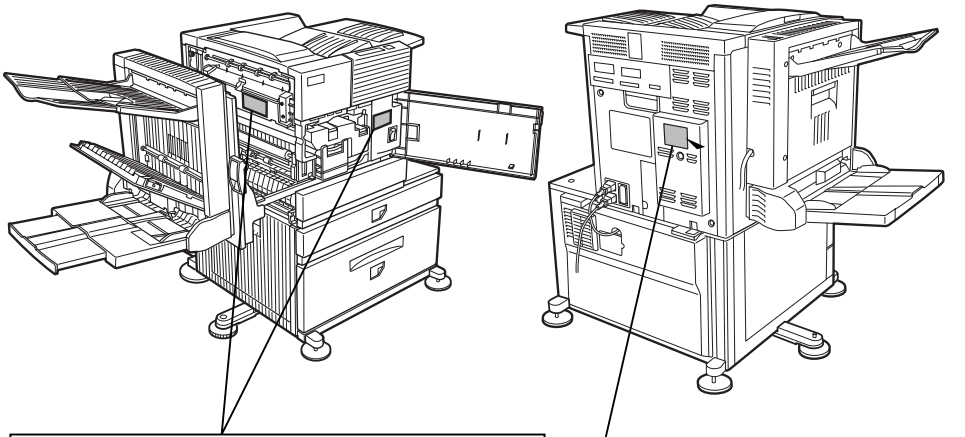
For North America:

SAFETY PRECAUTIONS

This Digital Equipment is rated Class 1 and complies with 21 CFR 1040.10 and 1040.11 of the CDRH standards. This means that the equipment does not produce hazardous laser radiation. For your safety, observe the precautions below.

- Do not remove the cabinet, operation panel or any other covers.
- The equipment's exterior covers contain several safety interlock switches. Do not bypass any safety interlock by inserting wedges or other items into switch slots.

Caution
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.



CLASS 1 LASER PRODUCT

LASER KLASSE 1

For Europe:

CLASS 1 LASER PRODUCT

LASER KLASSE 1

LUOKAN 1 LASERLAITE

KLASS 1 LASERAPPARAT

CAUTION
INVISIBLE LASER RADIATION WHEN OPEN INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.

VORSICHT
UNSICHTBARE LASERSTRAHLUNG WENN ABDECKUNG GEÖFFNET UND SICHERHEITSVERRIEGELUNG ÜBERBRÜCKT. NICHT DEM STRAHL AUSSETZEN.

ADVARSEL
USYNLIG LASERSTRÅLNING VED ÅBNING, NÅR SIKKERHEDSBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSAETTELSE FOR STRÅLNING.

VAROITUS!
LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ KÄYTTÖOHJEESSA MAINITULLA TAVALLA SAATTAA ALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN 1 YLITTÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.

VARNING
OM APPARATEN ANVÄNDS PÅ ANNAT SÄTT ÄN I DENNA BRUKSANVISNING SPECIFICERATS, KAN ANVÄNDAREN UTSÄTTAS FÖR OSYNLIG LASERSTRÅLNING, SOM ÖVERSKRIDER GRÄNSEN FÖR LASERKLASS 1.

CAUTION FOR BATTERY REPLACEMENT

(Danish) ADVARSEL !
Lithiumbatteri – Eksplosionsfare ved fejlagtig håndtering.
Udskiftning må kun ske med batteri
af samme fabrikat og type.
Levér det brugte batteri tilbage til leverandoren.

(English) Caution !
Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type
recommended by the manufacturer.
Dispose of used batteries according to manufacturer's instructions.

(Finnish) VAROITUS
Paristo voi räjähtää, jos se on virheellisesti asennettu.
Vaihda paristo ainoastaan laitevalmistajan suosittelemaan
tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden
mukaisesti.

(French) ATTENTION
Il y a danger d'explosion s' il y a remplacement incorrect
de la batterie. Remplacer uniquement avec une batterie du
même type ou d'un type équivalent recommandé par
le constructeur.
Mettre au rebut les batteries usagées conformément aux
instructions du fabricant.

(Swedish) VARNING
Explosionsfara vid felaktigt batteribyte.
Använd samma batterityp eller en ekvivalent
typ som rekommenderas av apparattillverkaren.
Kassera använt batteri enligt fabrikantens
instruktion.

(German) Achtung
Explosionsgefahr bei Verwendung inkorrekter Batterien.
Als Ersatzbatterien dürfen nur Batterien vom gleichen Typ oder
vom Hersteller empfohlene Batterien verwendet werden.
Entsorgung der gebrauchten Batterien nur nach den vom
Hersteller angegebenen Anweisungen.

CAUTION FOR BATTERY DISPOSAL

(For USA,CANADA)

Contains lithium-ion battery. Must be disposed of properly.
Remove the battery from the product and contact
federal or state environmental
agencies for information on recycling and disposal options.

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[1] GENERAL

1. Note for servicing

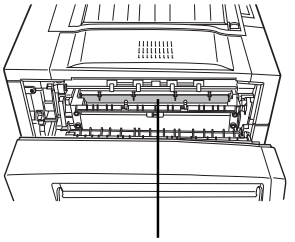
Line Art

This Service Manual uses line art to illustrate safe operation. Please take the time to understand the meanings of the illustrations before beginning service.

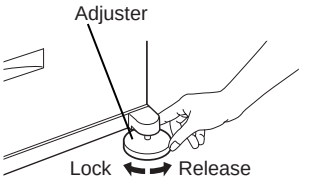
CAUTION: If these warnings are ignored, an injury or damage to property could occur.

A. Service Caution

1. Do not touch the photoconductive drum. Scratches or smudges on the drum will cause dirty printouts.
2. The fusing unit is extremely hot. Exercise care in this area.



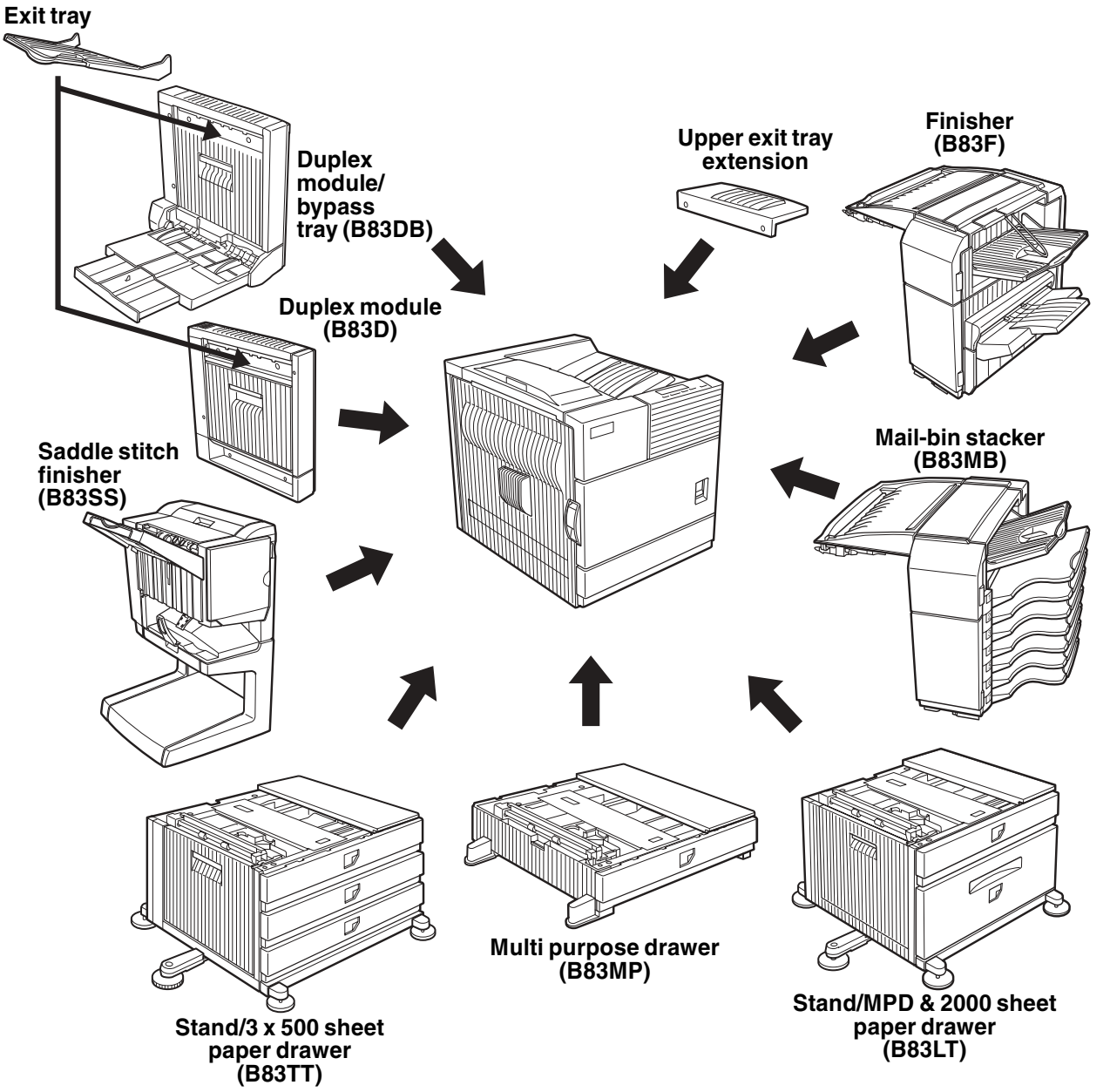
3. Five adjusters are provided on all optional stand/paper drawer units. These adjusters should be lowered until they contact the floor.



4. Do not perform any modifications to this machine outside of the scope of the instructions. Doing so may result in personal injury or damage to the machine.
5. Because the machine is heavy, it is recommended that it be moved by more than one person to prevent injury.
6. When connecting this machine to a computer, be sure to first turn both the computer and the machine off.
7. Do not print anything which is prohibited from printing by law. The following items are normally prohibited from printing by national law. Other items may be prohibited by local law.
   - Money
   - Stamps
   - Bonds
   - Stocks
   - Bank drafts
   - Checks
   - Passports
   - Driver's licenses
8. Do not throw toner or a toner cartridge into fire. Toner may be spattered, causing a burn.
9. Store toner or toner cartridges in a hard-to-reach place for children.

[2] CONFIGURATION

1. System Configurations



2. Standard

Category	Model Name	Other options required for the installation/mounting. (Such option has be ordered separately.)	Remarks
Printer model (45ppm) (NIC standard)	B8300n	Multi Purpose Drawer (B83MP), or Stand/MPD&2000 Sheet Paper Drawer (B83LT), or Three paper drawer stand (B83TT) Power Supply Unit (B83PS) is required for Stand/MPD&2000 Sheet Paper Drawer (B83LT), Three paper drawer stand (B83TT), Finisher (B83F), Saddle stitch finisher (B83SS), or Mail-bin stacker (B83MB).	

3. Combination list of peripheral devices

As shown in the table below, some peripheral devices may require installation of another peripheral device. Some peripheral devices cannot be installed together.

Related to paper feed unit	*Model Designation*	Multi Purpose Drawer	Stand/3 x 500 sheet paper drawer	Stand/MPD & 2000 sheet	Duplex module/bypass tray	Duplex module	Saddle stitch finisher	Finisher	Mail-bin stacker	Exit tray	Upper exit tray extension	Punch unit	Print server card	Power supply unit	Hard disk drive
Multi purpose drawer	B83MP	—	X	X			X					X			
Stand/3 x 500 sheet paper drawer	B83TT	X	—	X										O	
Stand/MPD & 2000 sheet paper drawer	B83LT	X	X	—										O	
Duplex module/bypass tray	B83DB	O[1]			—		X					X		O[2]	
Duplex module	B83D	O[1]				—								O[2]	
Output units															
Saddle stitch finisher	B83SS	X	O[1]		X	O	—	X		X				O	
Finisher	B83F	O[1]					X	—	X		X	X		O	
Mail-bin stacker	B83MB	O[1]						X	—		X			O	
Exit tray for Duplexer	Exit Tray				O[1]		X	X	X	—		X			
Upper exit tray extension	Upper Exit Tray							X	X		—				
Punch unit	B83FHP	X	O[1]		X	O	O	X		X		—		O	
Related to extension of functions and others															
Power supply unit	B83PS													—	
Hard disk drive	B83HD														—
Print server card	Okilan B83E												—		

Symbol	**Description**
O	Must be installed together
O[*1]	Any of the units must be installed together
O[*2]	Must be installed for installation of the stand/3x500 sheet paper drawer or the stand/ MPD & 2000 sheet drawer
X	Cannot be installed together

[3] SPECIFICATIONS

1. Basic Specification

A. Base Engine

1. Engine speed

Paper size	Pages/Minute
A4, 8.5" x 11"	45ppm
A5R/5.5" x 8.5"R	45ppm
B5	45ppm
B4/8.5" x 14	22ppm
A3/11" x 17"	20ppm

2. Engine composition

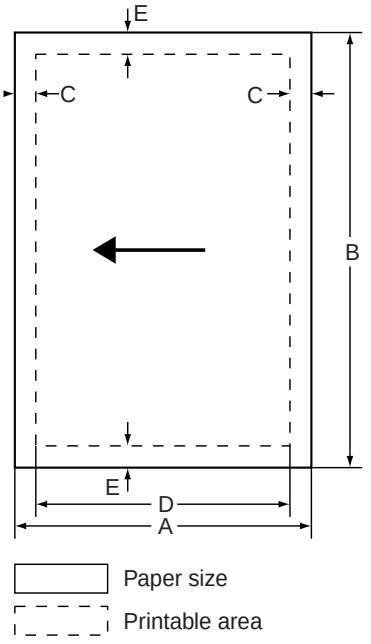
Photoconductor type	OPC (diameter of photoconductor : ø30mm)
Record method	Electrophotograph (laser)
Development method	Dry-type dual-component magnetic brush development
Charge method	Charged saw-tooth method
Transfer method	Transfer roller
Cleaning method	Counter blade
Fusing method	Heat roller
Used toner disposal	Toner recycling system

3. Engine resolution

Resolution	Write: 600dpi
Smoothing	Write: 1200dpi equivalent
Gradation	Write: 2 levels

4. Printable area

The print area of this product is shown below.



If a printer driver for Windows or Macintosh is used for printing, the printable area will be smaller. The actual printable area depends on the printer driver used.

Refer to above diagram for A-E sizing information					
Paper media	**A**	**B**	**C**	**D**	**E**
in millimeters					
A3	297mm	420mm	4mm	289mm	4mm
B4	257	364	4	242	4
A4	210	297	4	202	4
B5	182	257	4	168	4
A5	148	210	4	140	4
Japanese postcard	100	148	4	92	4
C5(envelope)	162	229	4	154	4
DL(envelope)	110	220	4	102	4
ISO B5(envelope)	176	250	4	168	4
in inches					
Tabloid	10.98”	17.07”	.16”	10.67”	.16”
Legal	8.50	14.00	.16	8.19	.16
Legal 13 (Foolscap)	8.50	12.99	.16	8.19	.16
Letter	8.50	11.00	.16	8.19	.16
Executive	7.24	10.51	.16	7.20	.16
Invoice	5.51	8.50	.16	5.20	.16
Com-10 (envelope)	4.13	9.49	.16	3.82	.16
Monarch (envelope)	3.86	7.52	.16	3.54	.16

5. Warm-up

Warm-up time	less than 80 seconds
Pre-heat requirement	Required
Jam recovery time	Target: about 30 seconds (Under standard condition of 60 seconds left after side cover opening, polygon motor halt)

6. Power source

Voltage	100V system
	100-127V
Frequency	50/60Hz

7. Power consumption

Max. Power consump.	1350W
Average waiting mode	1200W

8. Energy Star benchmark

Low power mode	75W
Transition time to Low power mode	60min

9. Noise

Working	less than 6.7 dB
Waiting mode	less than 4.8 dB

Note: Showing noise benchmark in each model as a whole system.

10. Dimensions

External dimensions (With multi purpose tray)	25.75” x 22.32” x 23.35” (WxDxH) (inches) 654 x 567 x 593 (mm)
Occupied space dimensions (With multi purpose tray)	25.75” x 22.32” (W x D) (inches) 654 x 567 (mm)
Weight	Approx. 85.98 lbs (39 kg) Approx. 110.23 lbs (50 kg) (with multi-purpose tray and upper exit tray extension)

B. Document Feeding Equipment

1. One-drawer tray (included in the base engine)

Paper feed method	One-drawer tray	
Sizes to be fed	A4, B5, 8.5" x 11"	
Paper capacity	500 sheets (at 21.22 lbs or 80 g/m²)	
Media available for paper feeding	Plain paper 16 - 28lbs or 60 - 105g/m²	
Paper type	Plain, recycled, pre-printed, pre-punched, color, letter head	
Paper size switching	To be switched by user (paper size to be entered from the operation panel).	
Dehumidification heater	Not provided	
Balance detection	Provided (paper empty and 3 steps)	
Default size setting	100V system	200V system
	8.5" x 11"	A4
Mounting/demounting of the tray	Provided	

C. Output Equipment

1. Face-down Exit Tray (included in the base engine)

Output position/method	Face-down output at the upper side of main unit
Output paper capacity	400 sheets (at 21.22 lbs or 80 g/m² sheet)
Output paper size	A3, B4, A4, A4R, B5, B5R, A5R 11 " x 17", 8.5" x 14", 8.5" x 13", 8.5" x 11 ", 8.5" x 11 "R, 5.5" x 8.5"R Executive, postal card, Monarch (98 x 191) Com-10 (105 x 241), DL (110 x 220), C5 (162 x 229), ISO B5 (176 x 250)
Spec of media for paper output	Tracing paper : 14 ~ 15lbs / 52 ~ 59g/m² Plain paper : 16 ~ 34lbs / 60 ~ 128g/m² Index paper : 47lbs / 176g/m² Cover paper : 54 ~ 55lbs / 205g/m² Transparency firm
Remaining paper detection	Not provided
Exit tray full detection	Provided

The meaning of “R” in paper size indications

Some paper sizes can be placed in the printer so that it feeds either long edge first or short edge first.

To differentiate between the two sizes in the various tables, the short edge first size indication will contain an “R”. These are indicated as 8½ x 11R, 5½ x 8½R, A4R, B5R, etc.

Sizes that can be placed only in the landscape orientation (11 x 17, 8½ x 14, 8½ x 13, A3, B4) do not contain the “R” in their size indication.

2. Printer Function Specification

A. Platform

IBM PC/AT (Include compatible machine)
Macintosh (680x0), Power Macintosh, iMac, G3 and G4 Macintosh

B. Support OS

Custom PS	Windows 95/98/Me
	Windows NT 4.0 Windows 2000/XP
	Mac OS 7.6 to Mac OS 9 (OS 10 - driver runs in Classic environment only)
Custom PCL5e/6(XL) SPDL	Windows 95/98/Me
	Windows NT 4.0 Windows 2000/XP
PPD	Windows 95/98/Me
	Windows NT 4.0 Windows 2000/XP
	Mac OS 8.5.1 - Mac OS 9 (OS 10 - driver runs in Classic environment only)

C. PCL emulation

PCL6 compatible, PCL5e compatible,
PostScript Level 2 compatible, PostScript 3 compatible

D. Print Function

1. General

Function	PCL5e/ PCL6	PS	PPD (Windows)	PPD (Macintosh)
Copies	1 - 999	1 - 999	1 - 999	1 - 999
Orientation	Yes	Yes	Yes	Yes
Duplex print	Yes	Yes	Yes	Yes
Saddle stitch	Yes	Yes	No	N/A
Binding edge	Left/top/right	Left/top/right	Long/short	Long/short
N-up	2/4/6/8	2/4/6/8	2/4 *3 *4	2/4/6/9/16
N-up direction	Fixed	Fixed	Fixed	Selectable
N-up border line	Yes	Yes	Yes(always)	Yes

2. Paper input

Function	PCL5e/ PCL6	PS	PPD (Windows)	PPD (Macintosh)
Paper size	Yes	Yes	Yes	Yes
Custom paper size	1 size	1 size	3 sizes *3 *5	N/A
Source selection	Yes	Yes	Yes	Yes
Different first page	Yes	Yes	N/A	Yes
Transparency inserts	Yes	Yes	N/A	Yes

3. Paper output

Function	PCL5e/ PCL6	PS	PPD (Windows)	PPD (Macintosh)
Output tray selection	Yes	Yes	Yes	Yes
Mail bin	Yes	Yes	Yes	Yes
Staple	Yes	Yes	Yes	Yes
Offset	Yes	Yes	Yes	Yes
Punch	Yes	Yes	Yes	Yes

4. Graphic

Function	PCL5e/ PCL6	PS	PPD (Windows)	PPD (Macintosh)
Resolution	600/300 dpi	600 dpi	600 dpi	600 dpi
Halftone	N/A	Yes	Yes	N/A
Graphic mode	Yes	N/A	N/A	N/A
Smoothing	Yes	Yes	Yes	Yes
Toner save	Yes	Yes	Yes	Yes
Photo enhancement	Yes *8	Yes	N/A	N/A
Negative image	N/A	Yes	Yes	Yes
Mirror image	N/A	Horizontal/ vertical	Horizontal	Yes
Zoom	N/A	N/A	Yes	Yes
Fit to page	Yes	Yes	N/A	N/A

5. Font

Function	PCL5e/PCL6	PS	PPD (Windows)	PPD (Macintosh)
Resident font	45 fonts	136 fonts	136 fonts*6	35 fonts
Download font	Bitmap TrueType, Graphic	Bitmap Type1 TrueType	Bitmap Type1 TrueType	N/A

6. Others

Function	PCL5e/PCL6	PS	PPD (Windows)	PPD (Macintosh)
Watermark *7	Yes	Yes	Yes	Yes
Overlay	Yes	Yes	N/A	N/A
Job retention *1	Yes	Yes	N/A	Yes
Account control	Yes	Yes	N/A	Yes
Custom settings	Yes	Yes	N/A	N/A
Automatic configuration *2	Yes	Yes	N/A	Yes
Job end notification	Yes	Yes	N/A	N/A

* 1 In the models without a hard disk drive, an optional hard disk drive must be installed.

* 2 Functions when peripheral devices are installed.

* 3 Not supported in the Windows NT 4.0 environment.

* 4 2/4/6/9/16 is supported in the Windows 2000 environment.

* 5 Only one size is supported in the Windows 2000 environment.

* 6 Only 35 fonts are supported in the Windows NT 4.0 environment.

* 7 This function is limited for PPD.

* 8 PCL6 only

E. Compatibility

PCL 5e compatibility	Target for PCL5e is to be compatible with HP LaserJet 4000. Small margin difference, rendering difference by different font family, default and transfer function difference are not to be included in the compatibility. All the PJL commands are not necessarily included in the compatibility.
PCL6 compatibility	Target for PCL6 is to be compatible with HP LaserJet 4000. Small margin difference, rendering difference by different font family, default and transfer function difference are not to be included in the compatibility. All the PJL commands are not necessarily included in the compatibility.
PostScript Compatibility	Roman PostScript is targeted to be compatible with Adobe PostScript as performed in HP LaserJet 4000. Small margin difference, rendering difference by different font family, default and transfer function difference are not to be included in the compatibility.

3. Expanded RAM

Installation of an expanded RAM will avoid the following status.

1. Time out error reduction
2. Spool time reduction
3. Avoidance of VM error / memory full

Use commercially available RAM with the following specifications.

If the RAM that does not meet the specifications is installed, it may cause a trouble such as that it is not recognized or its capacity is not correctly recognized.

Specification

DIMM TYPE	168pin 3.3V Unbuffered SDRAM DIMM Non-ECC
DIMM capacity	64MByte, 128MByte, 256MByte
CAS LATENCY	CL=2
SDRAM CLOCK	For PC100, PC133
SPD	Supporting
Parity	Not support
ECC	Not support

[4] CONSUMABLE PARTS

1. Supply system table

NO	Name	Content		Life	Remark
1	Drum/Toner cartridge (Black) with IC	Drum/Toner cartridge	x1	27K	*Life setup is based on A4 5%
		(Toner: Net weight 27oz or 778g)			
		Warranty paper	x1		
		Postcard label	x1		
		Polyethylene bag (for toner collection)	x1		
2	Developer cartridge (Black)	Developer cartridge	x1	100K	
		(Toner: Net weight 16oz or 450g)			
		Warranty paper	x1		
		Postcard label	x1		
		Polyethylene bag (for toner collection)	x1		
3	Starter kit	Drum/Toner cartridge (Black) with IC (15K)	x1		When start only
		Developer cartridge (Black) (100K)	x1		
4	100K PM kit	Transfer unit	x1	100K	
		Ozone filter	x1		
		Paper dust removing unit	x1		
5	200K PM kit	Fusing unit (CRU)	x1	200K	
6	Staple cartridge	Staple cartridge	x3	3000x3	Common with cartridge or B83SS & B83F
7	Staple cartridge	Staple cartridge	x3	5000x3	Common with cartridge for B83SS

* Packed with the machine: DV100K/DT15K

* The other maintenance parts which are not listed above are registered as service parts.

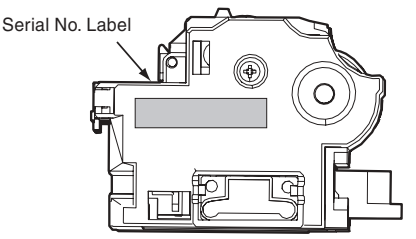
2. Production number identification

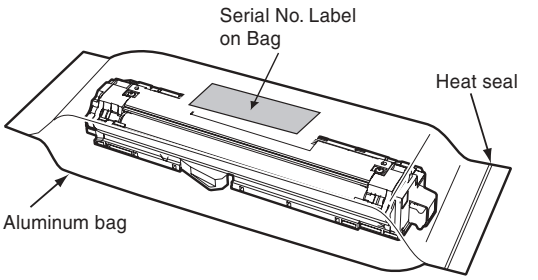
A. Developer cartridge unit

The lot number comprises 7 digits with each digit indicating the information as follows. The lot number will be printed in the position shown in the figure.

1	2	3	4	5	6	7

1 Version number (A - sequentially revised)
2 Numeral figure
Indicates the end digit of the production year.
3 Alphabet
Indicates the production factory. (B for SOCC)
4 Destination code
5,6 Numeral figures
Indicates the production day.
7 Numeral figure or X, Y, Z
Indicates the production month.
X stands for October, Y November, and Z December.



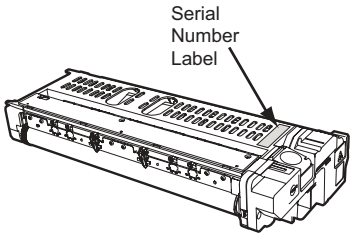


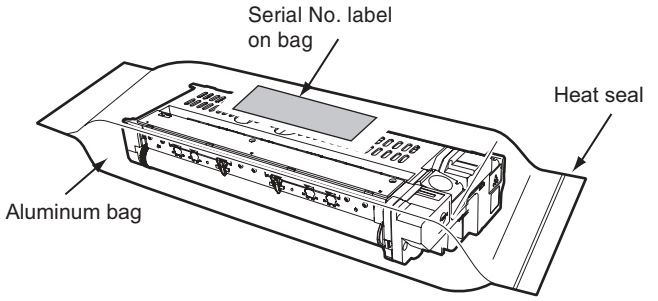
B. Drum toner cartridge

The lot number comprises 7 digits with each digit indicating the information as follows. The lot number will be printed in the position shown in the figure.

1	2	3	4	5	6	7

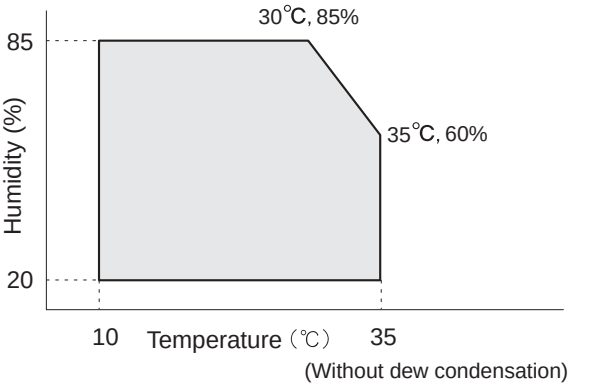
1 Version number (A - sequentially revised)
2 Numeral figure
Indicates the end digit of the production year.
3 Alphabet
Indicates the production factory. (B for SOCC)
4 Destination code
5,6 Numeral figures
Indicates the production day.
7 Numeral figure or X, Y, Z
Indicates the production month.
X stands for October, Y November, and Z December.



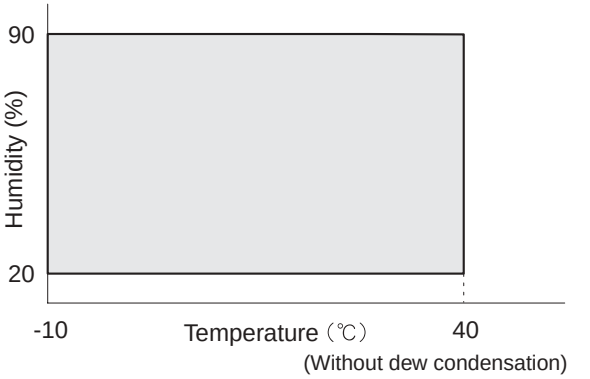


3. Environmental conditions

A. Operating conditions

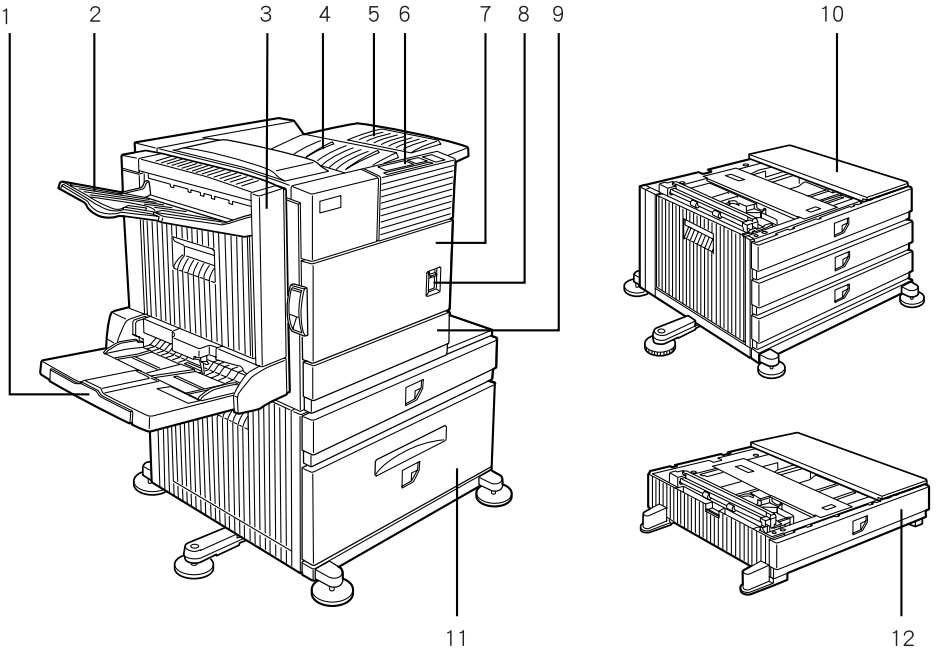


B. Storage conditions



[5] EXTERNAL VIEWS AND INTERNAL STRUCTURES

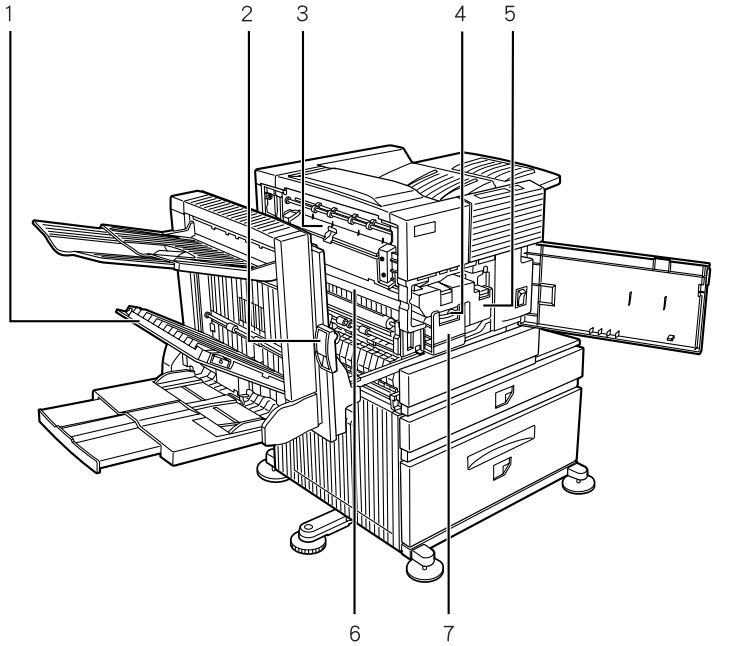
1. Appearance



1*	Bypass tray	2*	Exit tray	3*	Duplex module
4	Upper paper output area	5*	Upper exit tray extension	6	Operation panel
7	Front cover	8	Main switch	9	Paper tray 1
10*	Stand / 3 x 500 sheet paper drawer	11*	Stand / MPD & 2000 sheet paper drawer	12*	Multi purpose drawer

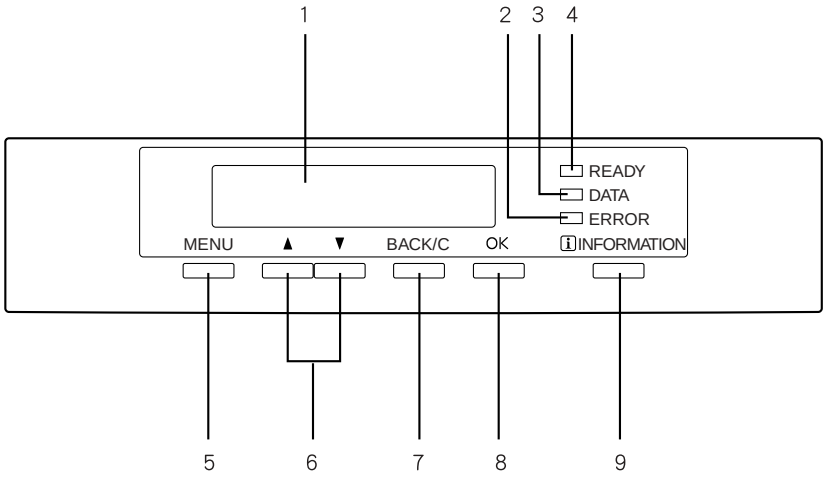
* 1, 2, 3, 5, 10, 11, and 12 are peripheral units. The configuration of peripheral units varies with the main unit model.

2. Internal



1	Duplex module side cover	2	Side cover open knob	3	Fusing unit
4	Developer cartridge	5	Toner cartridge	6	Photoconductive drum
7	Cartridge lock lever				

3. Operation panel



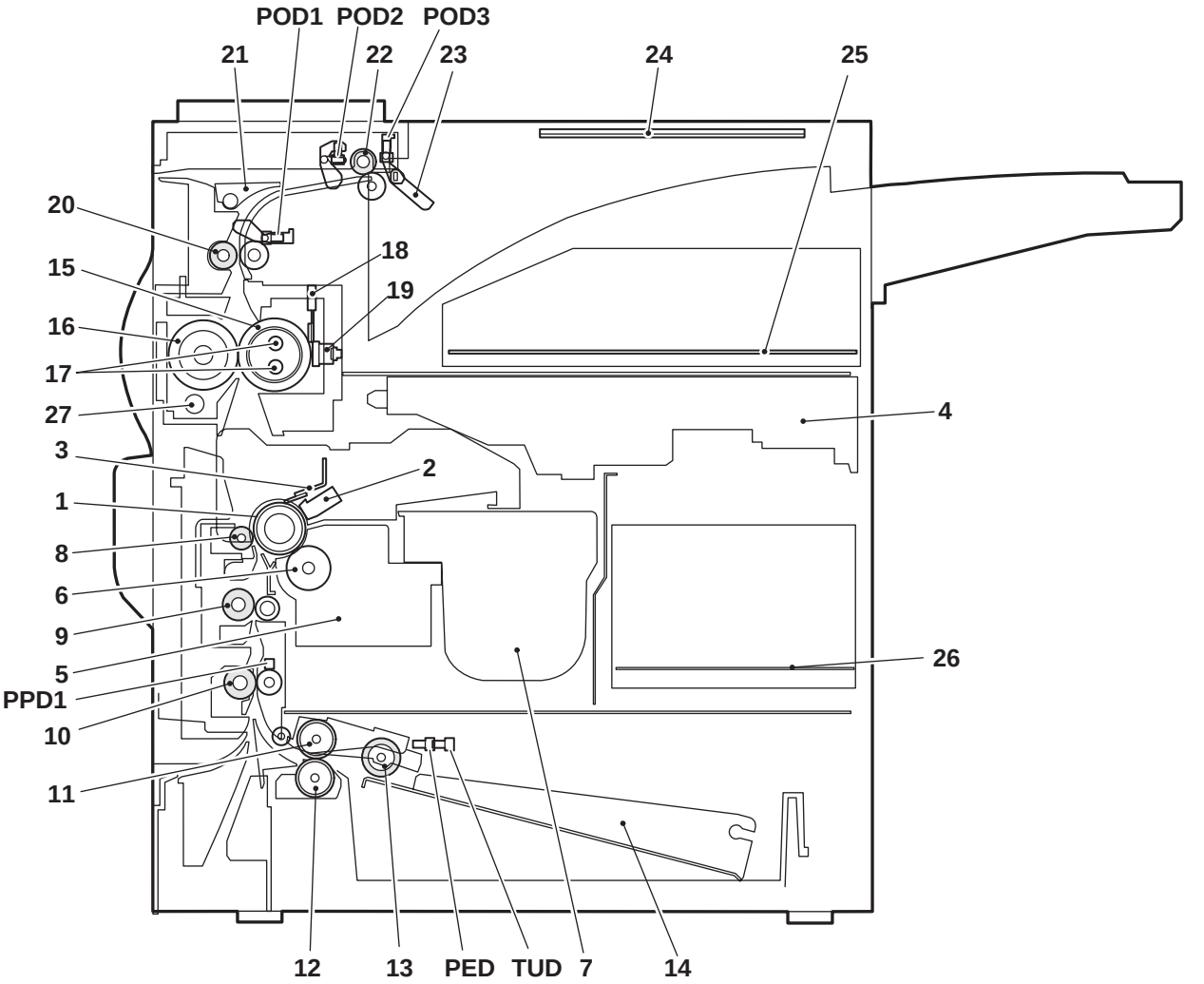
1	Message display	2	[ERROR] indicator	3	[DATA] indicator
4	[READY] indicator	5	[MENU] key	6	[▲/▼] keys
7	[BACK/C] key	8	[OK] key	9	[INFORMATION] key

Function of each LED

	READY	DATA	ERROR
ON	Print job reception enable	When RIP-completed print data is stored in memory.	When trouble, which can be canceled by the user, occurs.
Flash		When data is processed in the printer board (during RIP).	When trouble, which requires a service call, occurs.
OFF	Print job reception disable	Neither print data nor data under process are stored.	No trouble

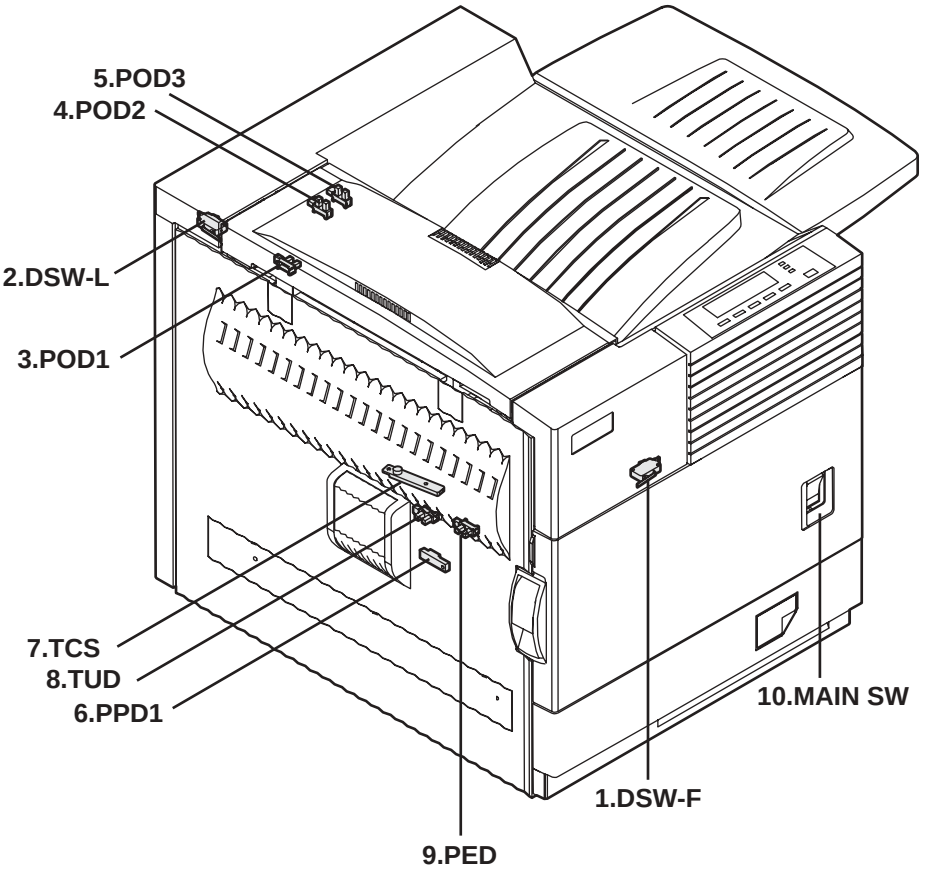
* RIP:Raster In Processor. Develops the print command into pixel information.

4. Cross sectional view



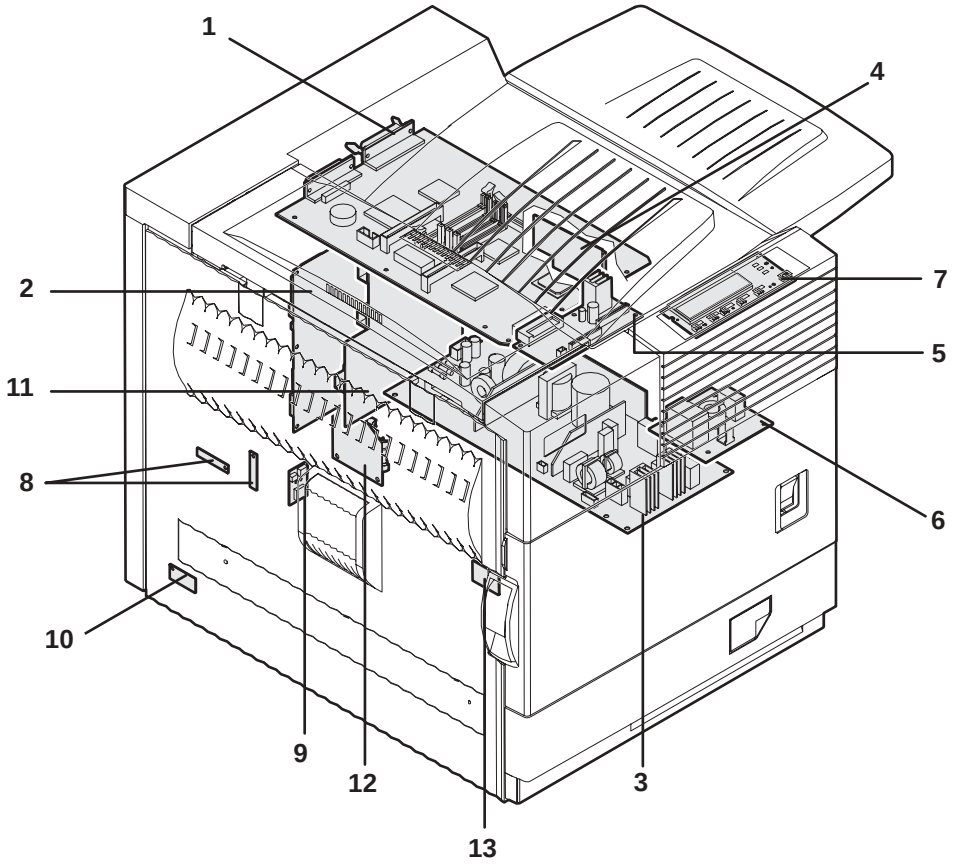
No.	Name	No.	Name
1	OPC drum	15	Upper heat roller
2	Main charger	16	Pressure roller
3	Cleaning blade	17	Heater lamp
4	LSU	18	Thermistor (RTH1 / RTH2)
5	Developing unit	19	Thermostat
6	Magnet roller	20	Fusing back roller
7	Toner hopper	21	Reverse gate
8	Transfer roller	22	Paper exit roller
9	Resist roller	23	Full detection lever
10	Paper transport roller	24	Printer operation PWB
11	Machine tray (Paper tray1) paper feed roller	25	Printer control PWB
12	Machine tray (Paper tray1) separation roller	26	Power supply unit
13	Machine tray (Paper tray1) take-up roller	27	Cleaning roller
14	Machine tray (Paper tray1) rotating plate		

5. Switch, Sensor



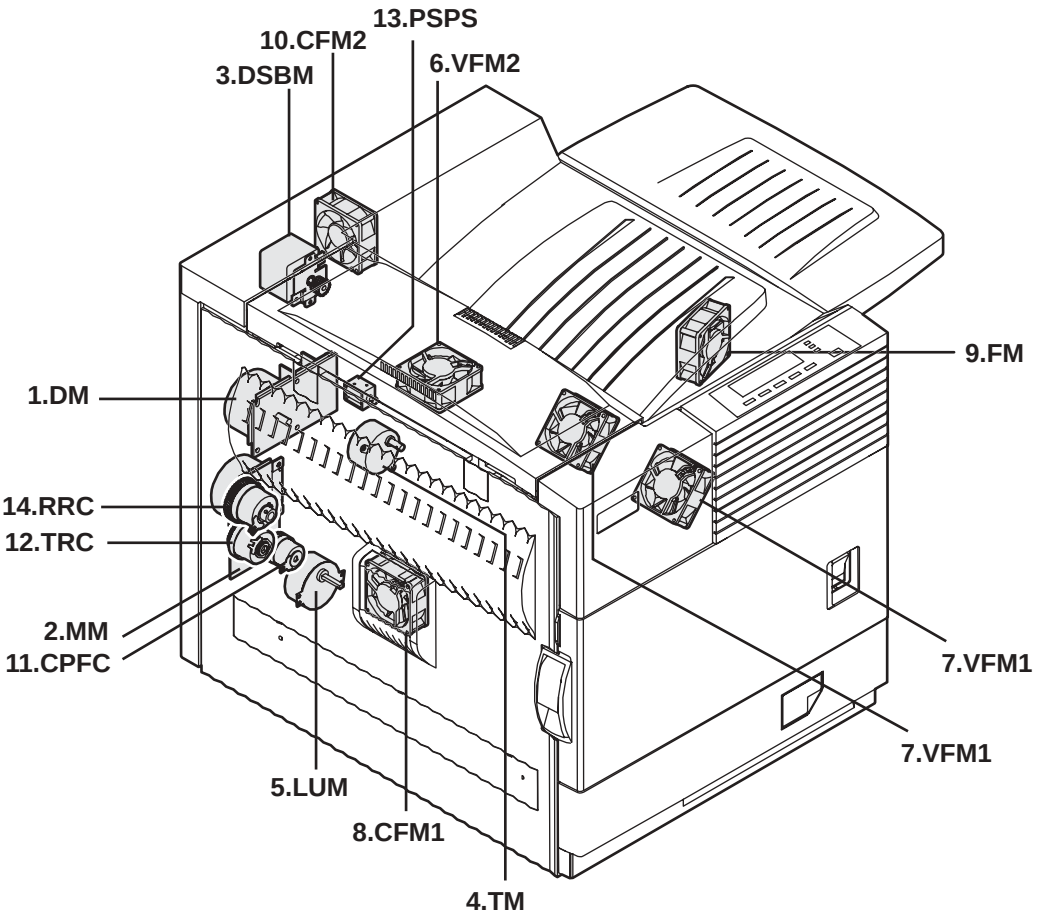
	Code	Function/Operation	Active condition
1	DSW-F	Front door open/close detection	H= Door open
2	DSW-L	Left door open/close detection	H=Door open
3	POD1	Paper exit detection	L= Paper detection
4	POD2	Paper exit detection	L= Paper detection
5	POD3	Paper exit detection Full	L= Paper detection
6	PPD1	Paper transport detection	L= Paper detection
7	TCS	Toner concentration sensor	
8	TUD	Paper feed cassette upper limit detection	H= Upper limit detection
9	PED	Paper feed cassette paper empty detection	L= Paper empty detection
10	MAIN SW	Power switch	

6. PWB - Print Wire Board



	Name	Function/Operation
1	PRT controller	Image process, image data communication control
2	PCU PWB	Overall control of the machine and options
3	Power supply unit	DC power supply
4	LD PWB (Inside LSU)	Laser ON control (Inside LSU: LSU cannot be disassembled.)
5	Mother PWB	Signal interface between PCU and the controller
6	Filter PWB	AC power input
7	Printer operation PWB	Key input, machine state display
8	High voltage resistor PWB	High voltage load adjustment
9	Cassette detection PWB	Paper cassette control
10	Drawer PWB	Fan control
11	High voltage PWB	High voltage power supply
12	Fuse PWB	Protects the machine when an abnormal amount of power is supplied.
13	Initial detection PWB (in the developing unit)	New DV cartridge detection

7. Motor, Clutch, Solenoid



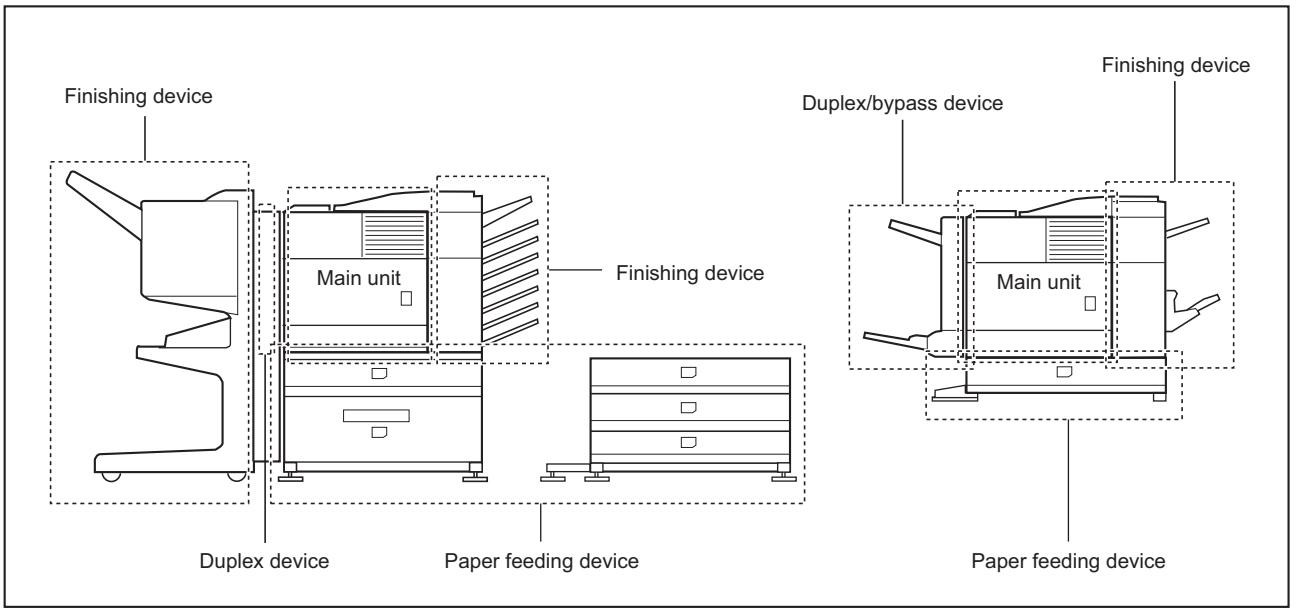
	Code	Function/Operation	Type
1	DM	Drum motor	Brushless motor
2	MM	Main motor	Brushless motor
3	DSBM	Paper exit motor	Stepping motor
4	TM	Toner motor	Synchronous motor
5	LUM	Lift-up motor	Synchronous motor
6	VFM2	Heat exhaust fan motor	Fan motor
7	VFM1	Cooling fan motor	Fan motor
8	CFM1	Suction fan motor	Fan motor
9	FM	Controller cooling fan motor	Fan motor
10	CFM2	Ozone exhaust fan motor	Fan motor
11	CPFC	Paper cassette paper feed clutch	
12	TRC	Paper transport clutch	
13	PSPS	Separation solenoid	
14	RRC	Resist roller clutch	

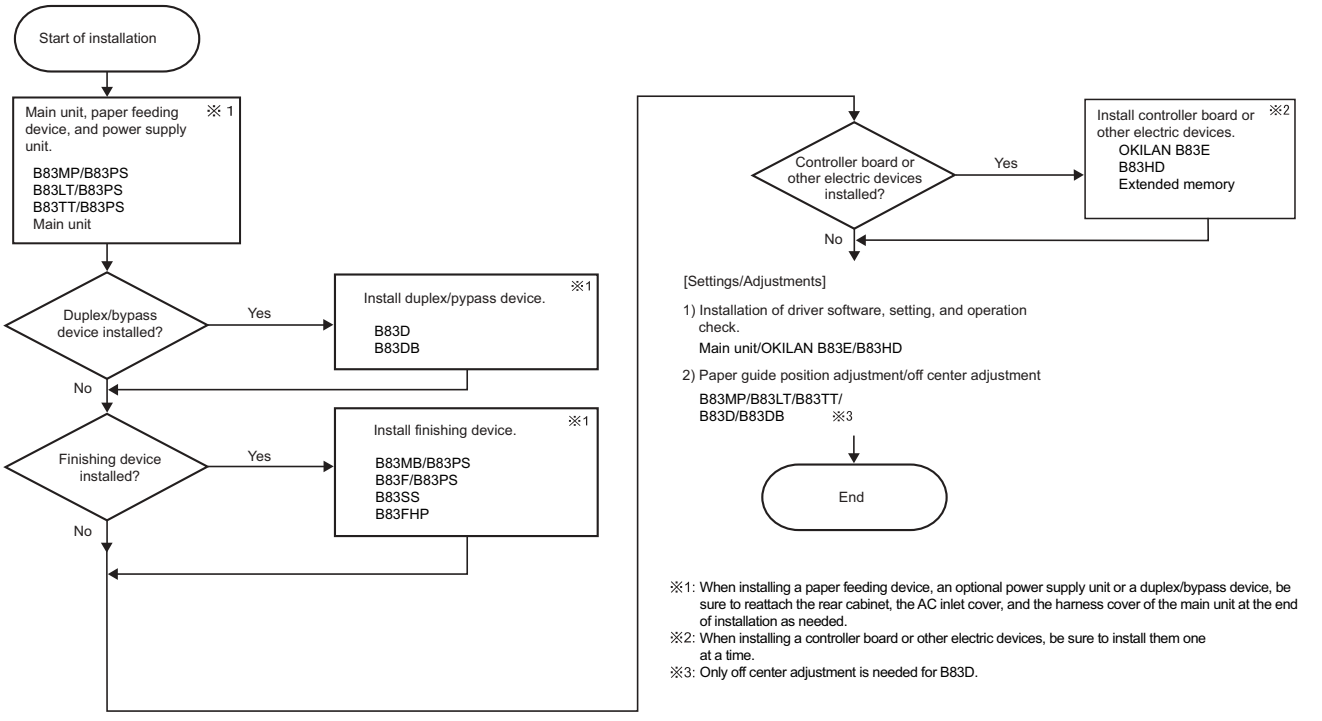
[6] UNPACKING AND INSTALLATION

1. Installing procedure flowchart

Because of the many available option units, there are many configuration possibilities. When installing option units, observe the following procedures for efficiency.

Some peripheral devices may have be installed as standard devices depending on the main unit model. To that end, some descriptions and illustrations may be different from your configuration.



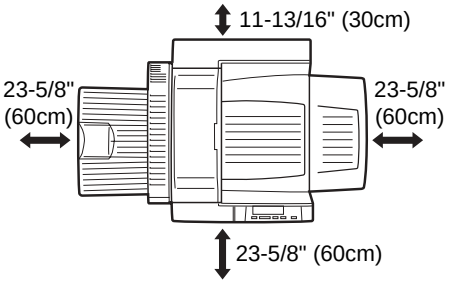


* For installation of an option unit, refer to the Service Manual of the option unit.

2. Note for installation placement

Improper installation may damage this product. Please note the following during initial installation and whenever the machine is moved.

1. The machine should be installed near an accessible power outlet for easy connection.
2. Be sure to connect the power cord only to a power outlet that meets the specified voltage and current requirements. Also make certain the outlet is properly grounded.
   - For the power supply requirements, see the name plate of the main unit.
3. Do not install your machine in areas that are:
   - damp, humid, or very dusty
   - exposed to direct sunlight
   - poorly ventilated
   - subject to extreme temperature or humidity changes, e.g., near an air conditioner or heater.
4. Be sure to allow the required space around the machine for servicing and proper ventilation.



3. Check the parts included

Maintenance card	☐
Drum / Toner cartridge	☐
Developer cartridge	☐
Printer CD-ROM	☐
Operation manual	☐
Delivery installation report	☐
Guarantee card	☐

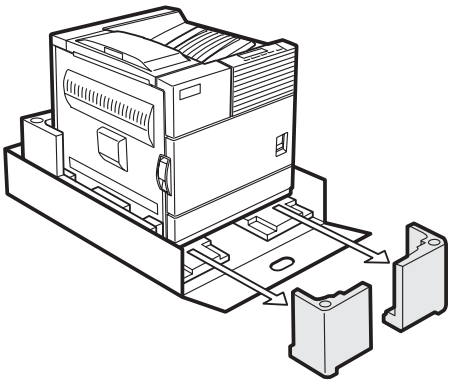
(May not be included depending on the destination.)

4. Main Unit Installation procedure

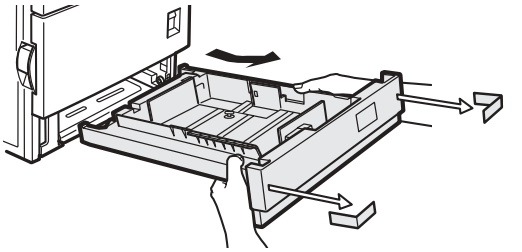
A. Remove the main unit from the carton

Caution:Removal of this machine and carrying it must be always performed by two people.

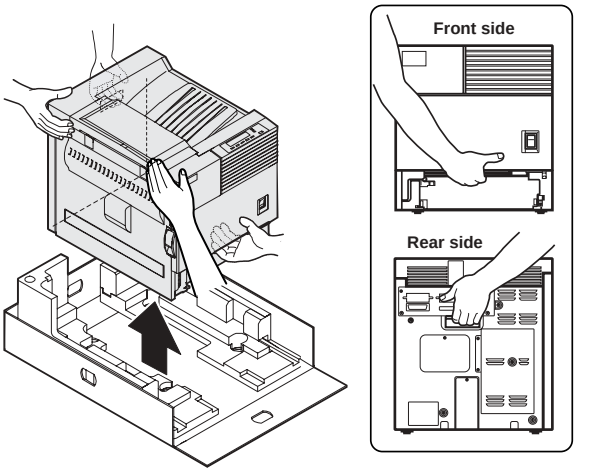
1. Remove the cushioning materials from the right and left of the front side.



2. Remove the locking tape from the right and left sides of the tray. Then, remove the top of the carton and lower the plastic bag that covered the machine while the machine still sits on the carton base.
3. Remove the packing tape from the paper tray. Pull out the paper tray until it stops and remove it by tilting it upward.



4. One person should lift the machine using empty front tray pocket while steadying the machine. The other person must lift using the lifting recess in the rear of the machine as shown in the illustration.

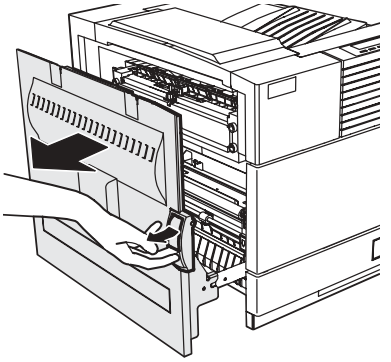


B. Install the main unit.

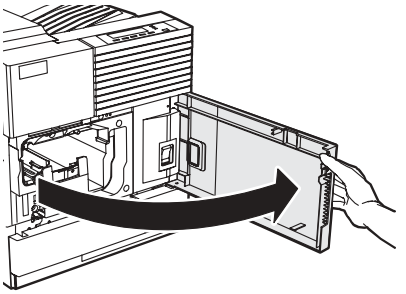
Be sure to carry out this step after the paper feeding device has been connected to the main unit.

1. Remove the remainder of packing tape from the operation panel.

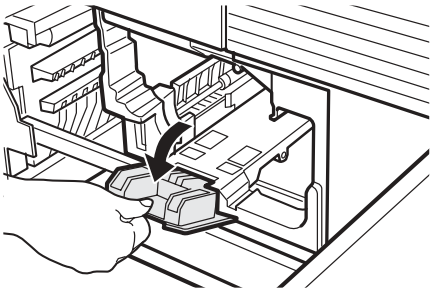
2. Raise the lever of the left door to unlock it and open the left door.



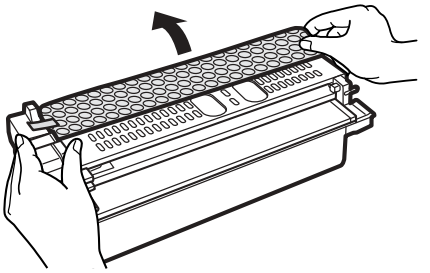
3. Open the front cover.



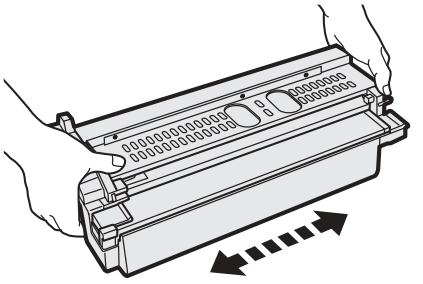
4. Rotate the developer unit lock lever down.



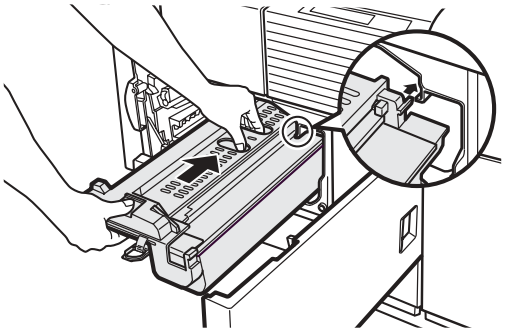
5. Remove the protective covering from the toner/drum cartridge.



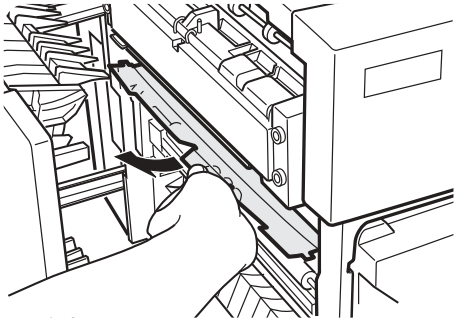
6. Shake the toner/drum cartridge horizontally approximately 5 times.



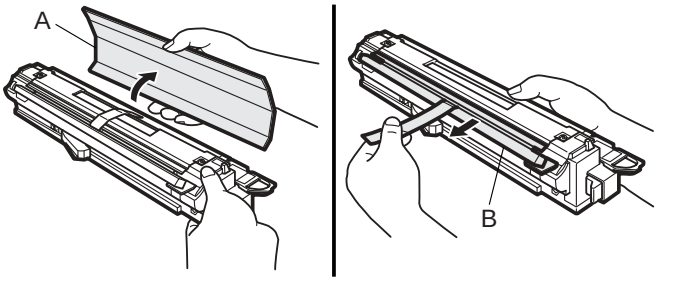
7. Insert the toner/drum cartridge into the main unit.



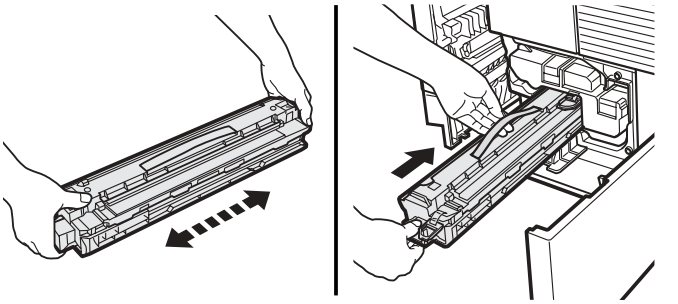
8. Remove the drum protective paper in the direction indicated by the arrow.



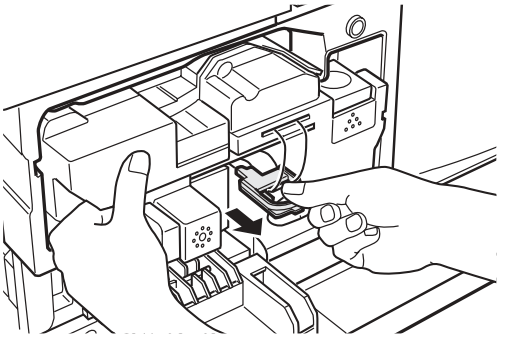
9. Remove the supplied developer cartridge from the packing case and remove the protective materials A and B.



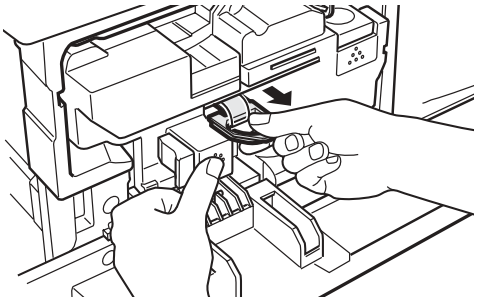
10. Shake the developer cartridge horizontally approximately 5 times and insert it into the machine.



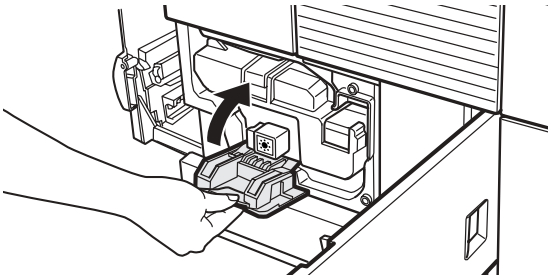
11. Remove the sealing tape from the toner/drum cartridge by pulling it in the direction indicated by the arrow.



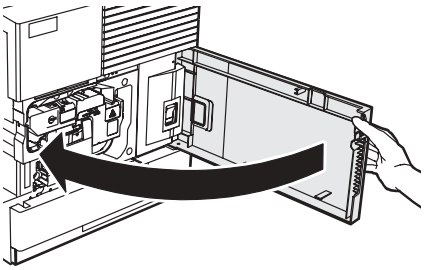
12. Remove the sealing tape from the developer cartridge in the direction indicated by the arrow.



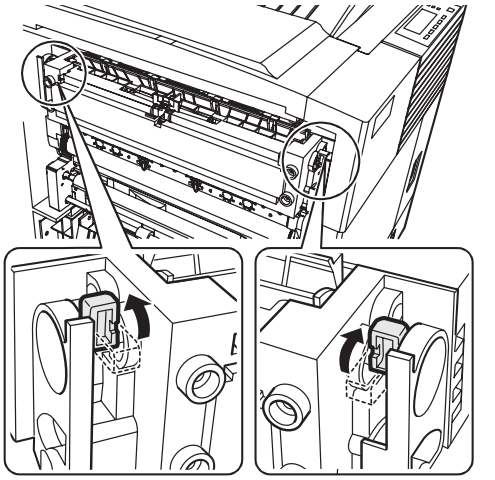
13. Return the developer unit lock to its original position.



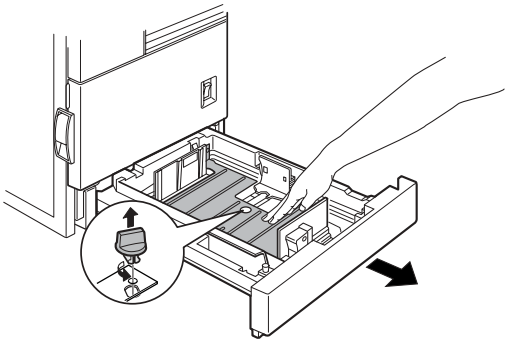
14. Close the front cover, gently.



15. Apply pressure to the fusing roller. Raise the right and left levers of the fusing unit in the direction indicated by the arrow.



16. Close the left door.
17. Turn the lock pin a 1/4 turn and remove it while pressing down on the pressure plate. Remove the lock pin while holding down on the paper pressure plate and insert the paper tray into the main unit.

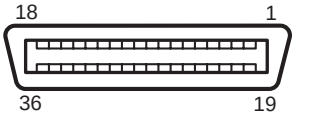


C. Connecting the machine to a computer.

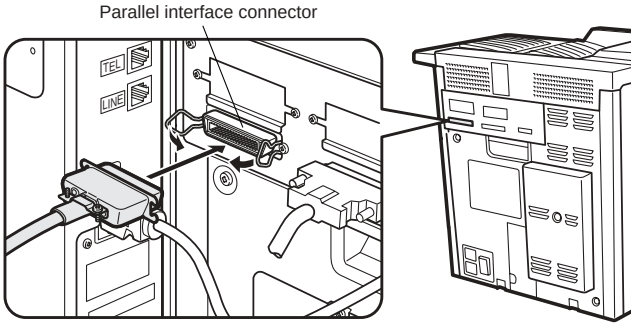
1. Connect the machine to the computer

   a. When connecting to a parallel port the parallel interface of this machine conforms to IEEE - STD - 1284 - 1983. Use a commercially available shielded type parallel interface cable conforming to the specifications of both the machine and the computer.

      The connector on this machine is a 36-pin Amphenol female connector.



For the specifications of the connector on the computer, see the operation manual of the computer.



b. When using this machine as a network printer a Print Server Card (Okilan B83E) is required to connect the machine to a network. See the separate installation manual for and also the manual contained in PDF format on the CD supplied with the print server card.

* If another peripheral device must be installed, carry out the following step at the end of the installation work.

2. Insert the power plug into an outlet.

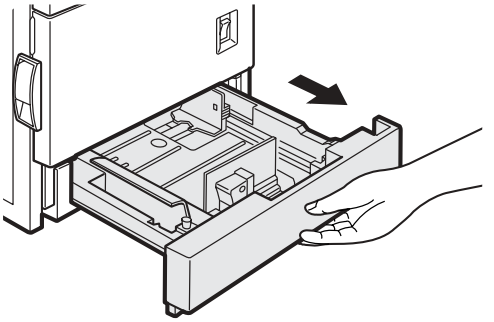
Caution: If the outlet is also used for lighting fixtures, the lighting fixtures may flicker. Use an outlet that is not connected to lighting fixtures.

3. Turn on the main switch of the main unit. Automatic level adjustment of toner density sensor will start and a message indicating [WARMING UP] will appear on the operation panel. After the level adjustment is complete, the ready indicator will light up.

Caution:While automatic adjustment of the toner density sensor is being done, do not turn the power to the machine off. This will cause improper adjustment.

D. Load paper.

1. Pull out the paper tray until it stops.



2. Load paper into the tray. Do not exceed the maximum height line. (Up to 500 sheets of Oki Data recommended paper can be loaded)

E. Check the printer operation

For installation of printer drivers, refer to the User's Guide (for printer operation and general information) supplied with the machine. After driver installation, execute a test print to ensure normal printing.

F. Other options

For installation of the other options, refer to the Service Manual for each option.

[7] DISASSEMBLY AND ASSEMBLY, MAINTENANCE

Self Print of Setup Value

By using the self print mode (Pattern 98) of diag, the setup values and the jam history of the machine can be printed.

Before maintenance and disassembly procedures, they must be printed in advance.

1. Maintenance System Table

A. Engine section

Maintenance cycle : 50K

× Check (Clean, replace, or adjust as necessary.) ○ Clean ▲ Replace △ Adjust ☆ Lubricate ☐ Move position

Unit name	Part name	When calling	50K	100K	150K	200K	250K	300K	350K	400K	Remark
Drum toner cartridge		×									User replacement. The starter kit life is 15K (5% out put). Thereafter, equivalent to 27K (778g).
Developer cartridge		×		▲		▲		▲		▲	User replacement.
100K PM kit	Transfer unit	×		▲		▲		▲		▲	
	Ozone filter	×		▲		▲		▲		▲	
	Paper dust removal unit	×		▲		▲		▲		▲	
200K PM kit	Fusing unit	×				▲				▲	
Paper feed section	Paper feed rollers	○									Note 1
	Torque limiter	×									Note 1
Transport section Paper exit reverse section	PS follower roller	○									
	Transport rollers	○									
	Transport paper guide	○									
Drive section	Specified position	☆									
	Belts	×									
Image quality section		×									
Other	Sensors	×									

Note 1:Replacement reference: Use the counter value of each paper feed port as the replacement reference. Paper feed roller/Torque limiter section: 80K or 2 years

B. Peripheral devices

Maintenance cycle : 50K

× Check (Clean, replace, or adjust as necessary.) ○ Clean ▲ Replace △ Adjust ☆ Lubricate ☐ Move position

Option name	Part name		When calling	50K	100K	150K	200K	250K	300K	350K	400K	Remark
ADU + Manual feed	Paper feed separation section	Paper feed rollers	(○) ×									Note 3 Replace the whole set.
		Separation pad	(○) ×									
		Torque limiter	(○) ×									
	Transport section	Transport rollers	○									
		Transport paper guides	○									
	Drive section	Gears	☆									(Specified position)
		Belts	×									
	Other	Sensors	×									

Option name	Part name		When calling	50K	100K	150K	200K	250K	300K	350K	400K	Remark
Drawer (Multi stage, LCC) Multi purpose	Paper feed separation section	Paper feed rollers	(○) ×									Note 3 Replace the whole set.
		Torque limiter	(○) ×									
	Transport section	Transport rollers	○									
		Transport paper guides	○									
	Drive section	Gears	☆									(Specified position)
		Belts	×									
	Other	Sensors	×									
Finisher	Transport section	Transport rollers	○									
		De-curler rollers	(○) ×									
		Transport paper guides	○									
	Drive section	Gears	☆									(Specified position)
		Belts	×									
	Other	Sensors	×									
		Discharge brushes	×									
	Staple UN											Replace the unit at 100K stapling.
	Staple cartridge											User replacement for every 3000 pcs.
Mail-bin stacker	Transport section	Transport rollers	○									
		Transport paper guides	○									
	Drive section	Gears	☆									(Specified position)
		Belts	×									
	Other	Sensors	×									
		Discharge brushes	×									
Saddle finisher	Transport section	Transport rollers	○									
		Transport paper guides	○									
	Drive section	Gears	☆									(Specified position)
		Belts	×									
	Other	Sensors	×									
		Discharge brushes	×									
	Staple UN											Replace UN (including the staple unit and the holder section) at 100K stapling.
	Staple cartridge											User replacement for every 5,000 pcs.

Note 3:Replacement reference: Use the counter value of each paper feed port as the replacement reference. Paper feed roller/Separation pad/Torque limiter section: 80K or 2 years

2. Disassembly and assembly

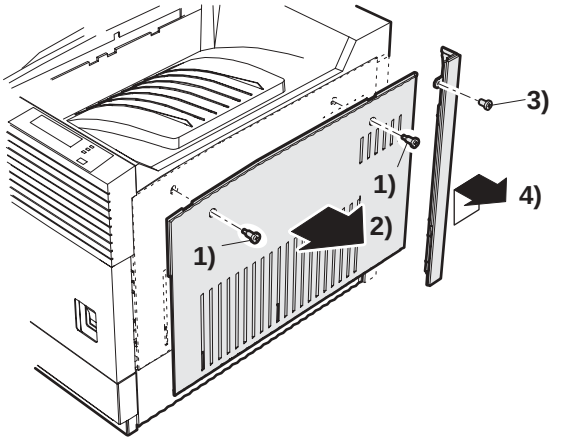
Note:

- When assembling, check that the flat cable and the harness connectors are securely connected.
- When connecting the flat cable, be careful not to break the pins.
- When installing the PWB unit and the memory module, use an earth band to prevent against breakage by static electricity.

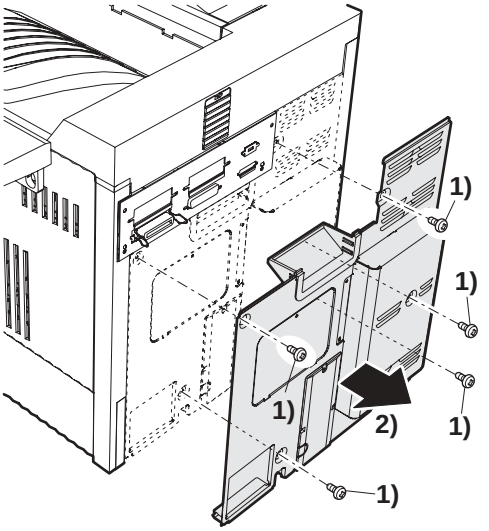
A. Exterior

Note: The numbers referenced in the pictures refer to the sequence in which parts are disassembled/reassembled.

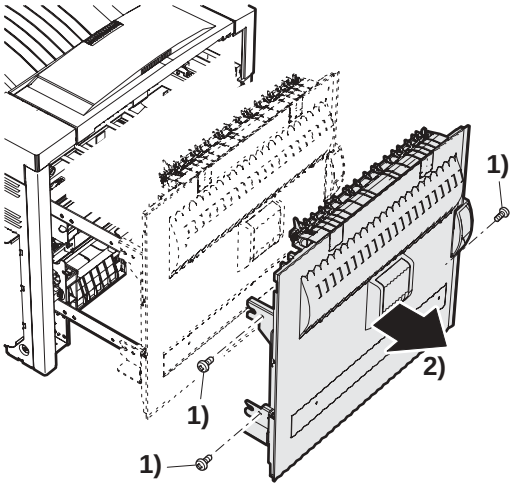
1. Right cabinet/Right rear cabinet Remove the right cabinet, and then remove the right rear cabinet.



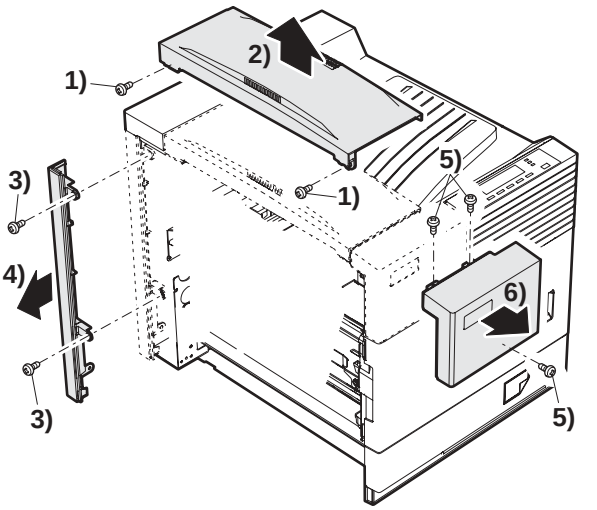
2. Rear cabinet.



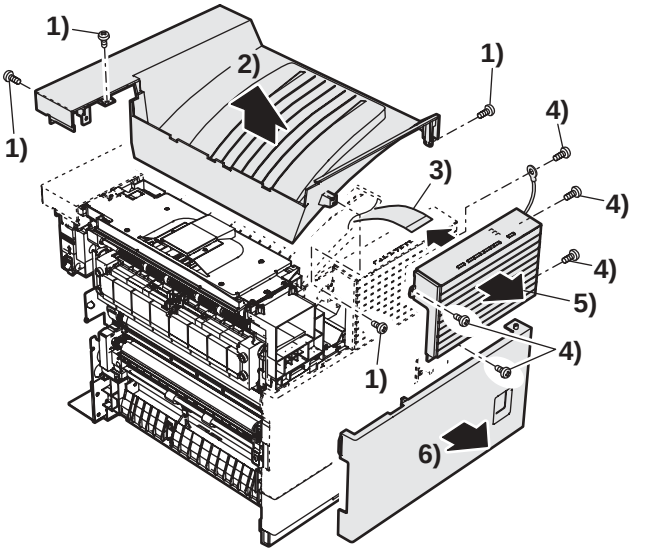
3. Left door unit.



4. Paper exit upper cabinet/Front left upper cabinet/Left rear cabinet.

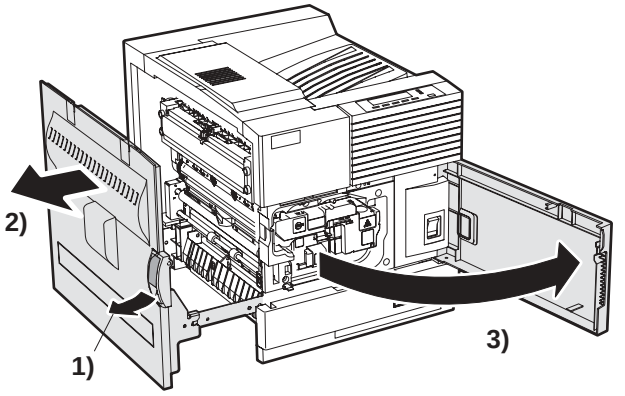


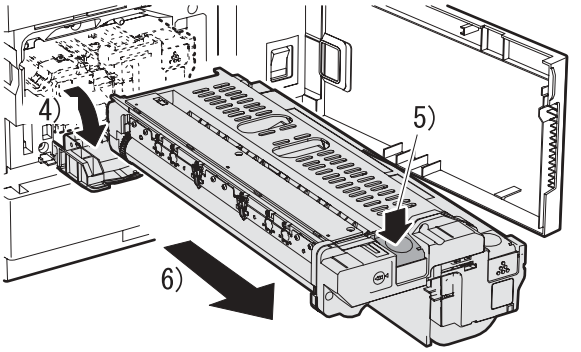
5. Upper cabinet/Operation panel/Front door.



B. Drum peripheral

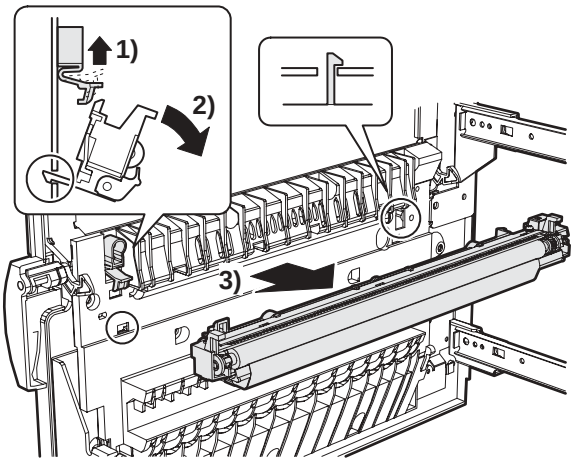
1. Drum Toner cartridge



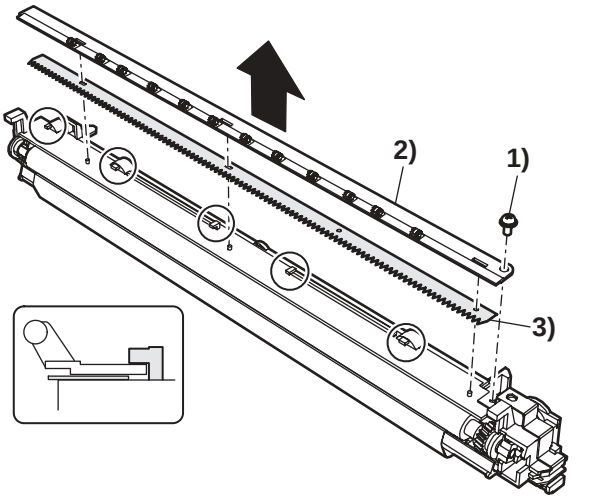


C. Transfer roller unit

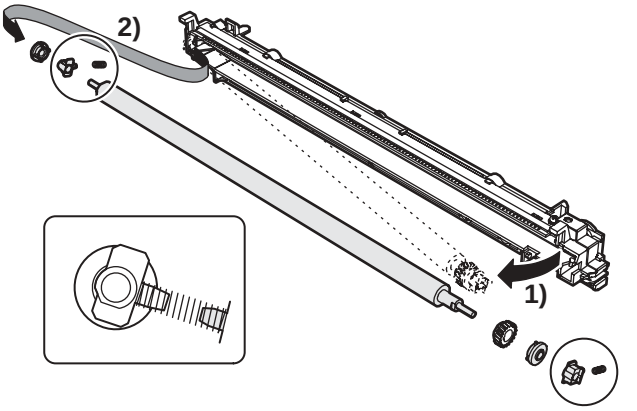
With the left door open, the transfer roller unit can be removed.



1. Discharge plate



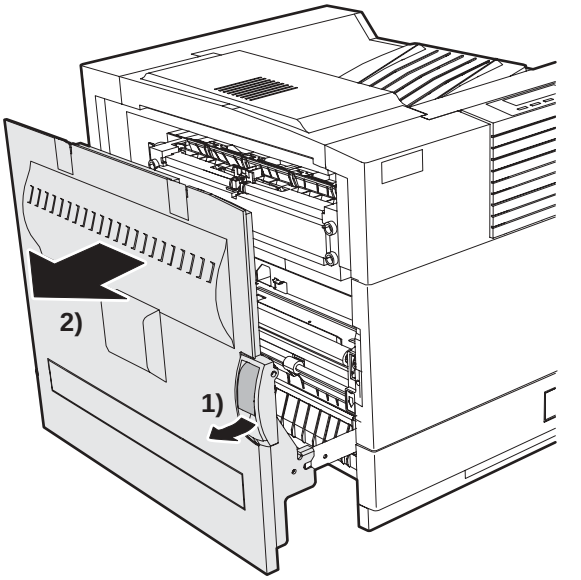
2. Transfer roller

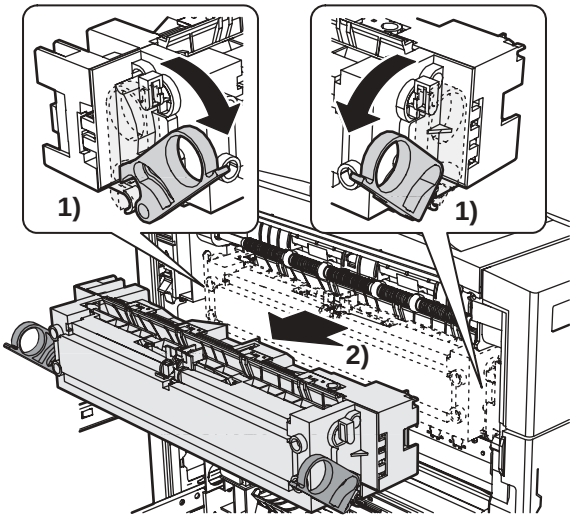


Note: When assembling, first assemble the front side and insert it into the case. Then install the rear side. That is an easy method of assembly.

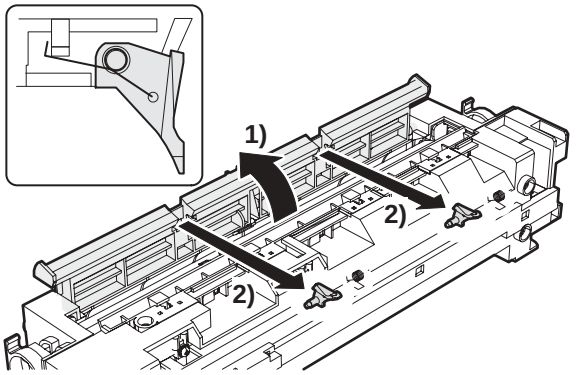
D. Fusing unit

With the left door open, the fusing unit can be removed.

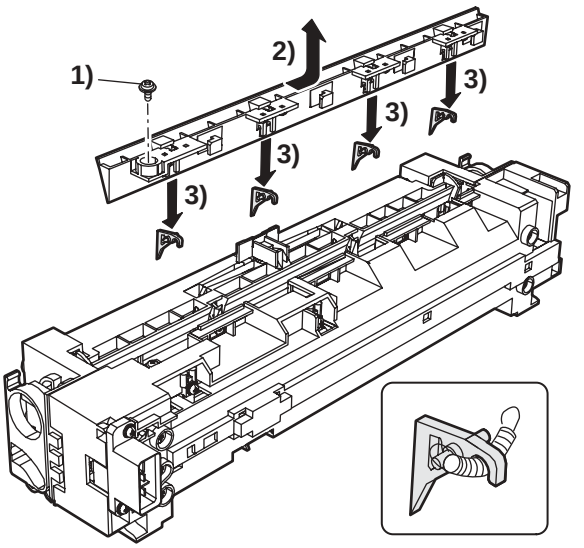




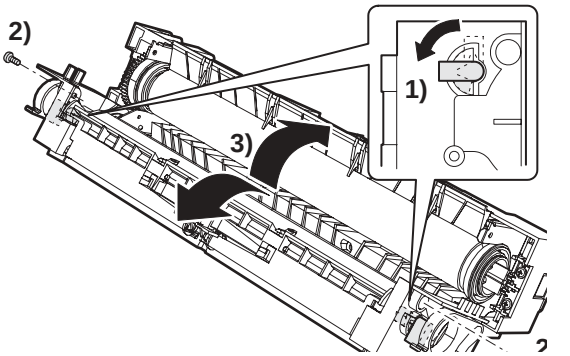
1. Lower separation pawl

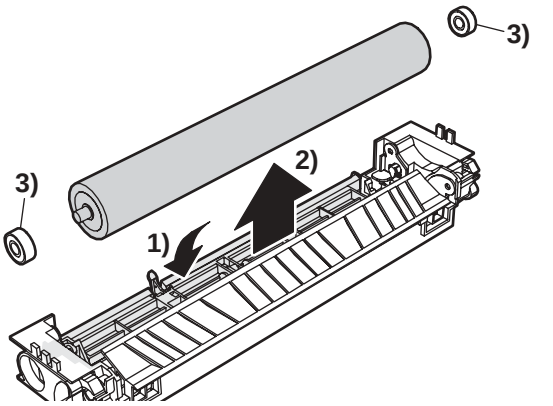


2. Upper separation pawl.

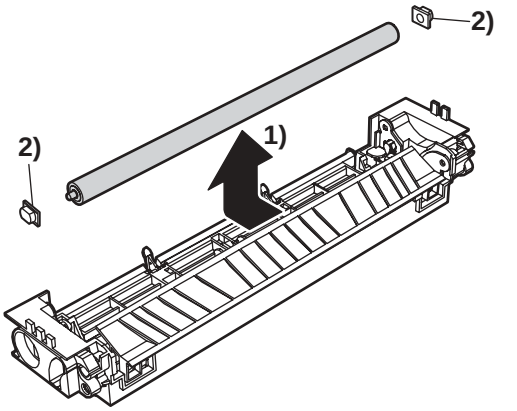


3. Lower heat roller.

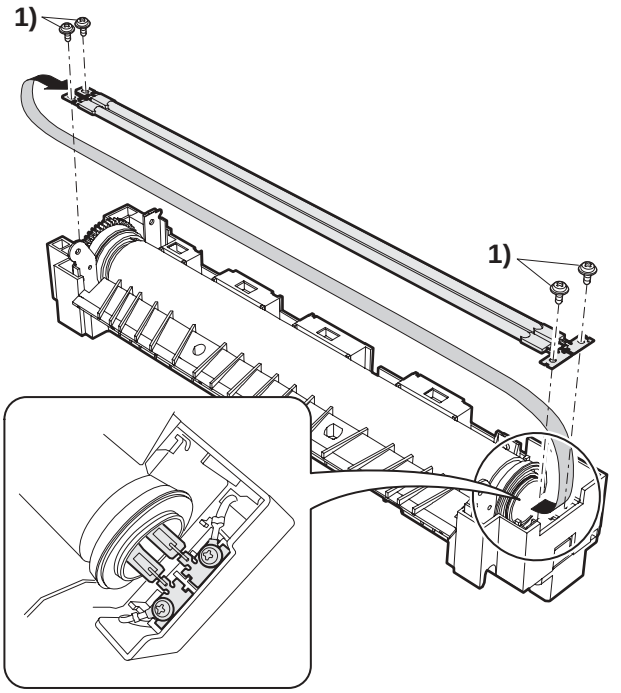




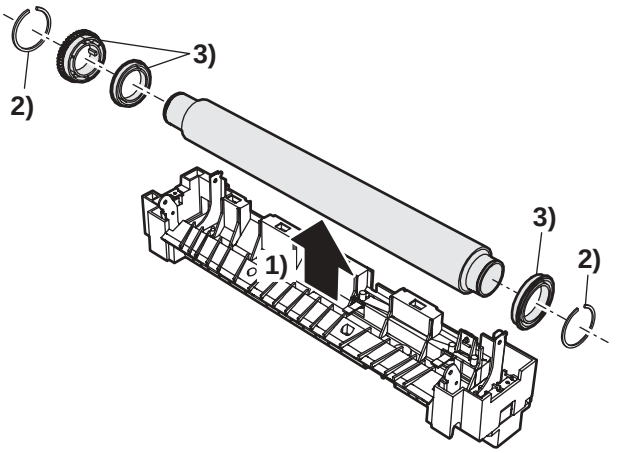
4. Cleaning roller.



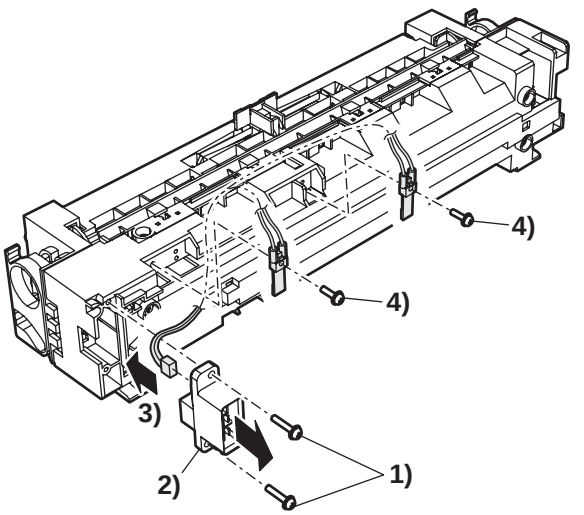
5. Heater lamp.
Be careful not to mistake the installation position of the heater lamp.



6. Upper heat roller.

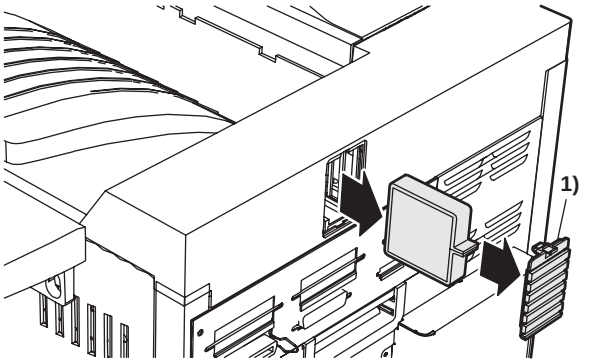


7. Thermistor.



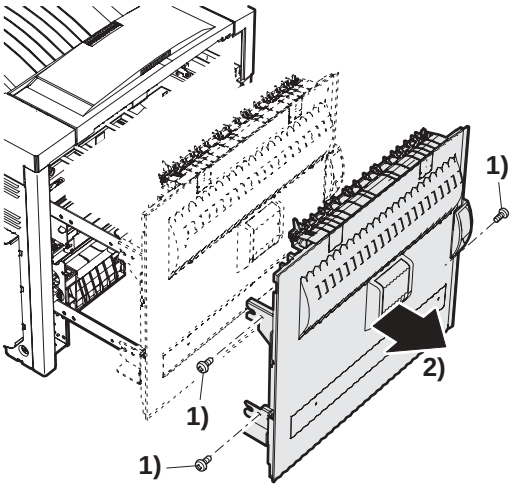
E. Ozone filter

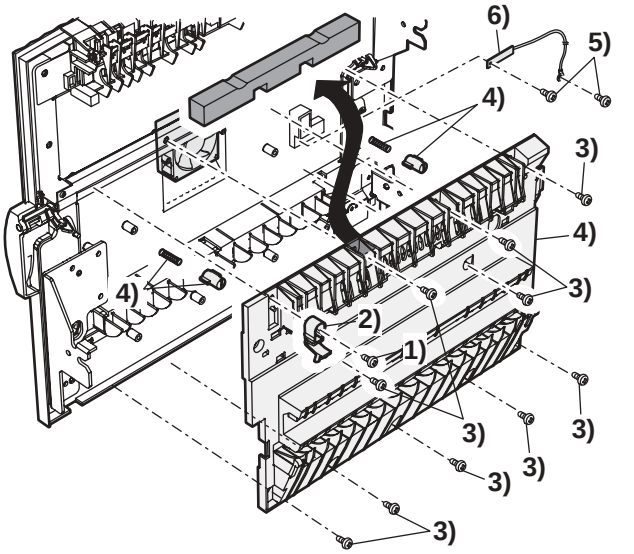
1. Ozone filter.



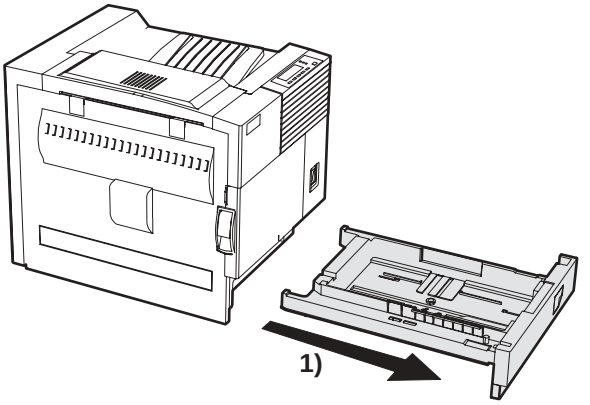
2. Ozone filter

Note: Not subject to maintenance. This part is not included in the PM kit.

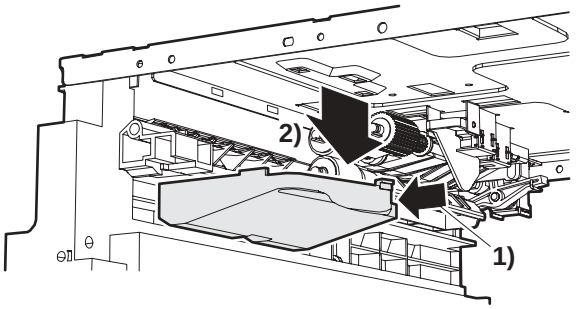




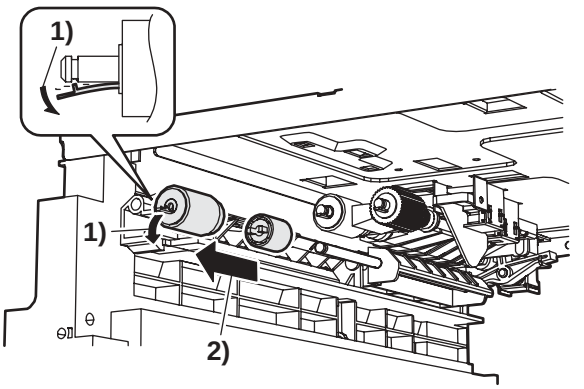
F. Paper feed section



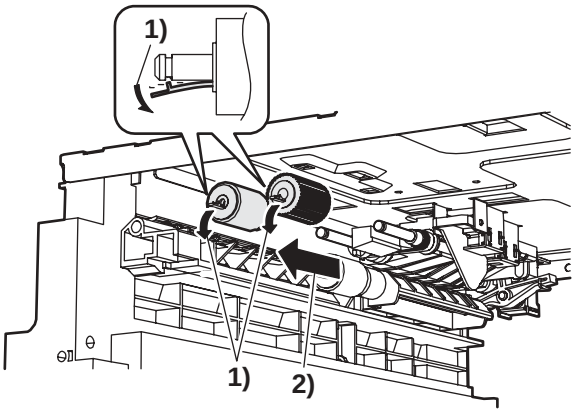
1. Paper guide.



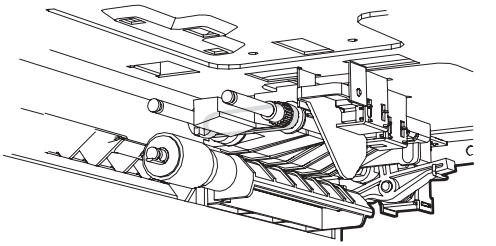
2. Separation roller/torque limiter.



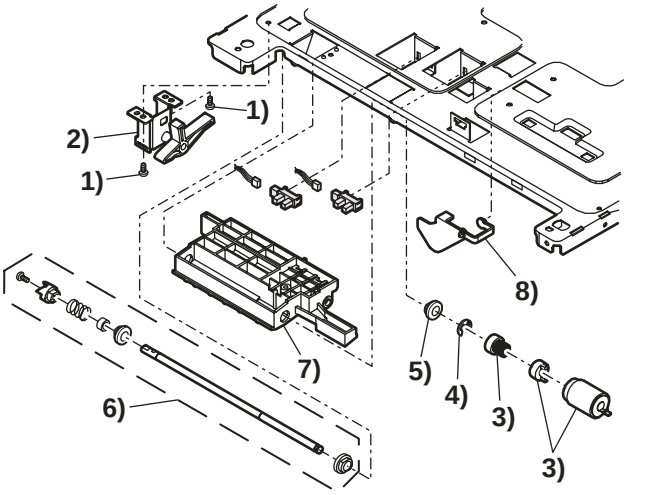
3. Pick-up roller/ paper feed roller.



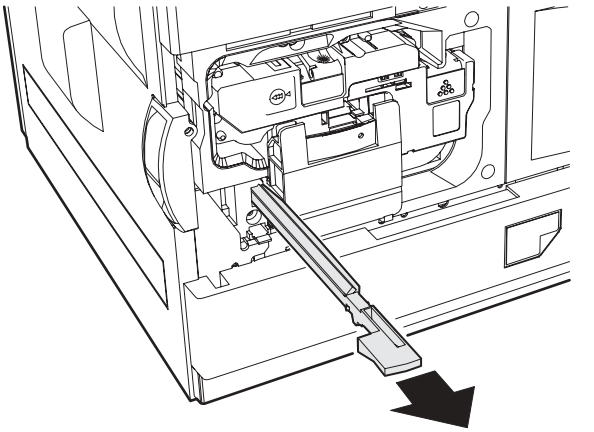
4. Belt.



5. Upper limit sensor/paper empty sensor.

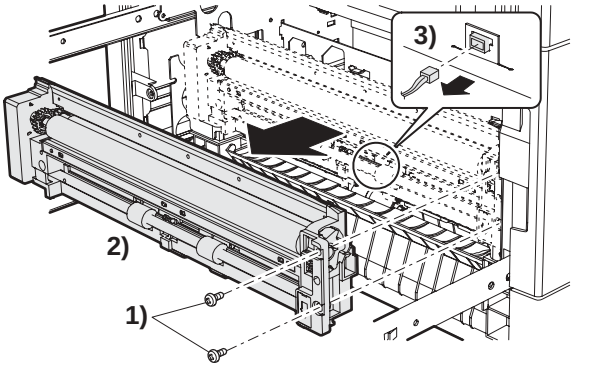


G. Paper dust removing unit



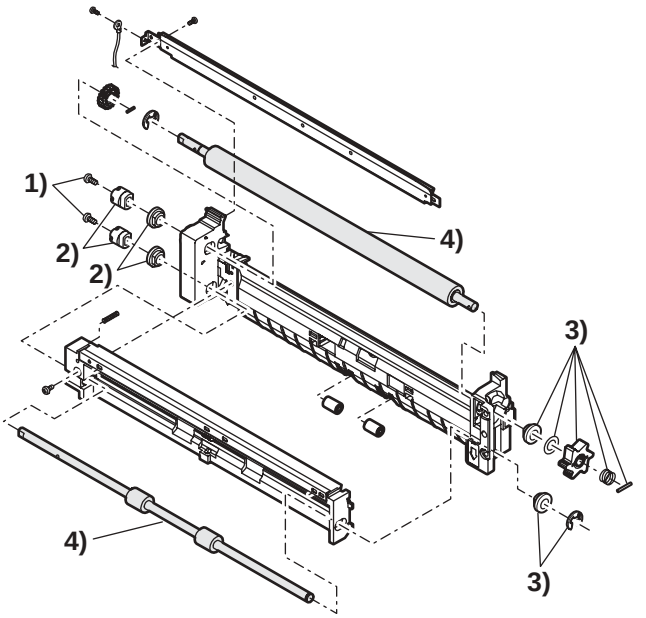
H. Resist roller unit

Before removing this unit, remove the paper dust removing unit in advance.

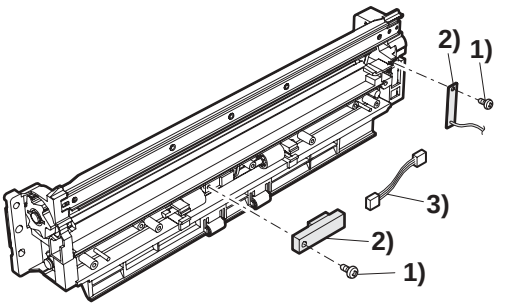


Note: That the harness is connected to the back of the unit.

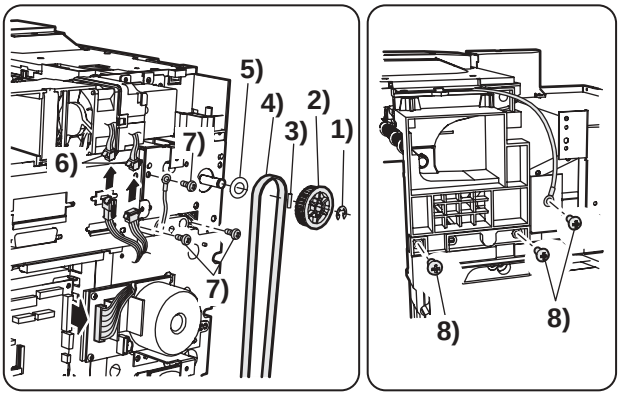
1. Resist roller.

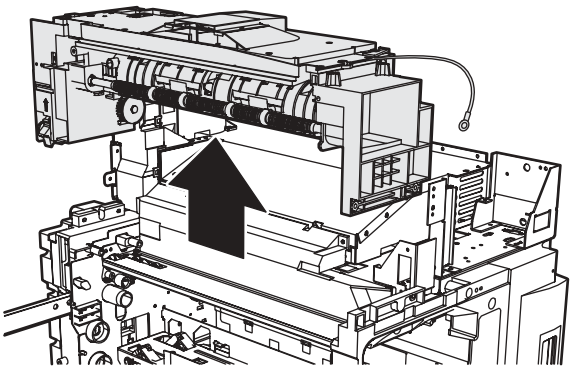


2. Resist sensor.

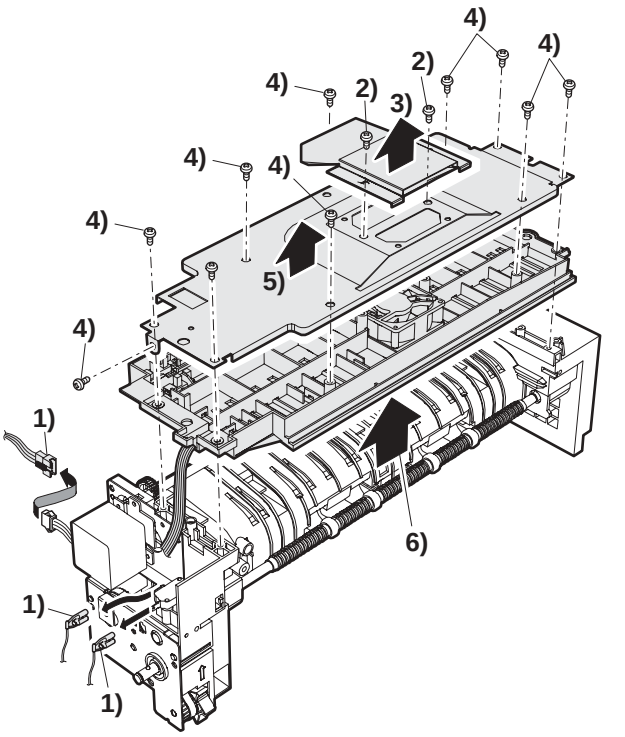


I. Paper exit unit

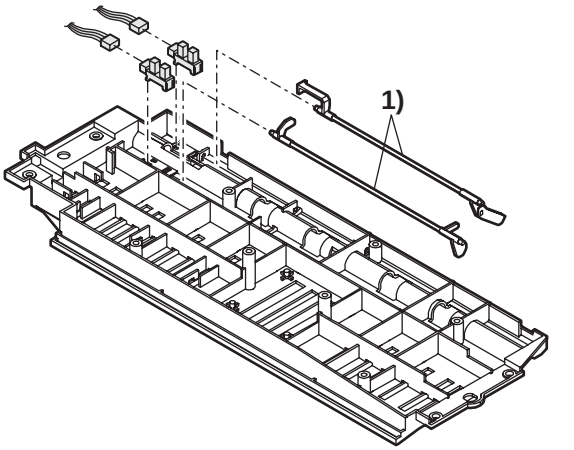




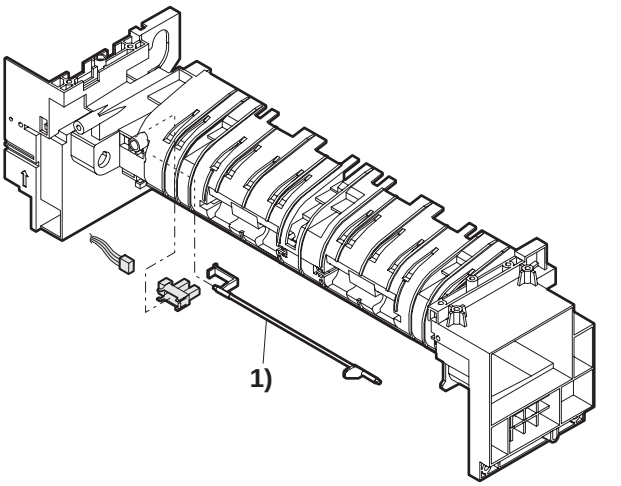
1. Paper exit upper paper guide unit.



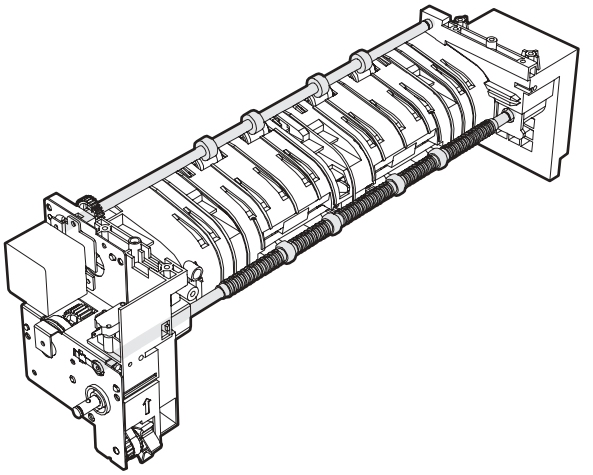
2. Paper exit sensor/switch-back sensor.



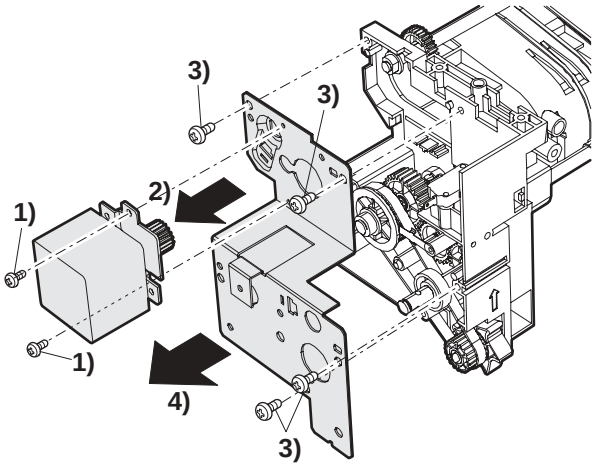
3. Paper exit sensor 2.



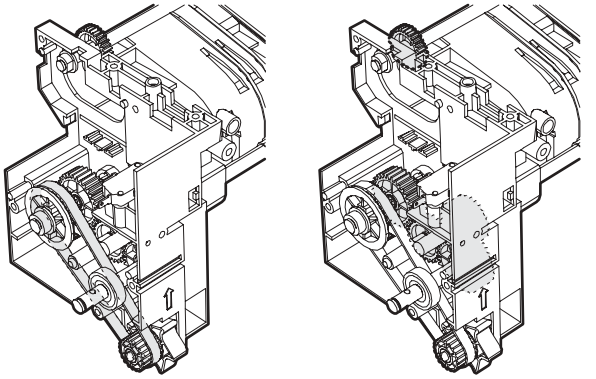
4. Paper exit roller.



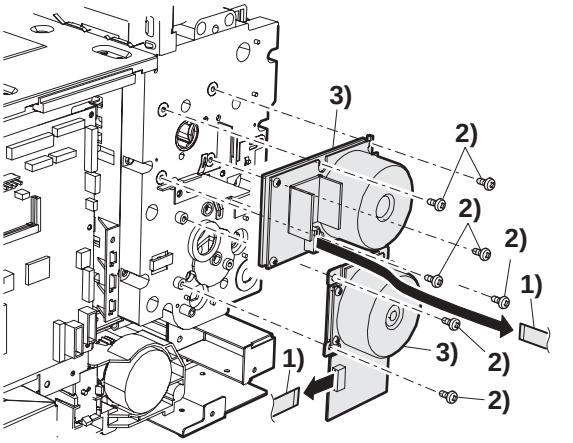
5. Paper exit motor.



6. Paper exit drive section.

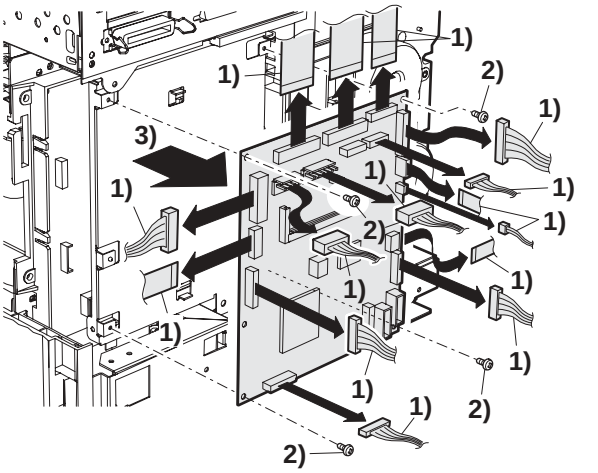


J. Main motor/drum motor

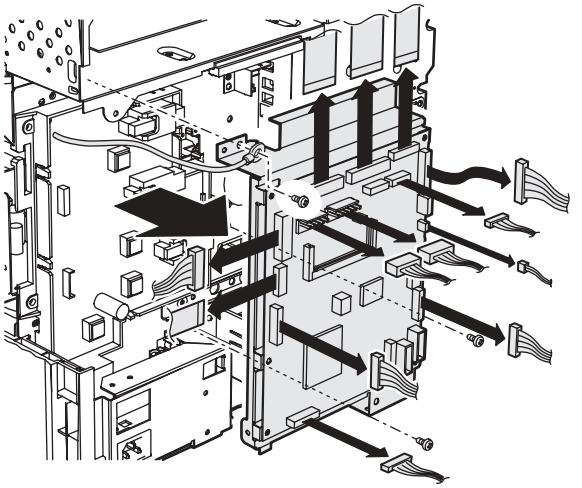


K. PCU PWB

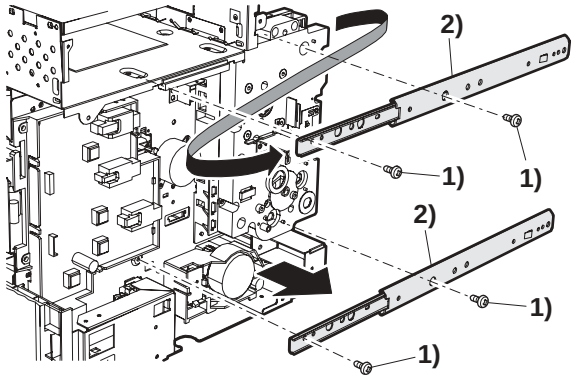
Note:When replacing the PCU PWB, remove the EEPROM from the PCU PWB and install it to a new PWB.

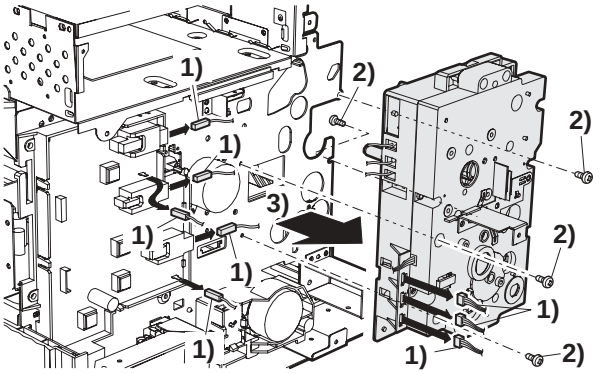


L. PCU PWB base plate unit

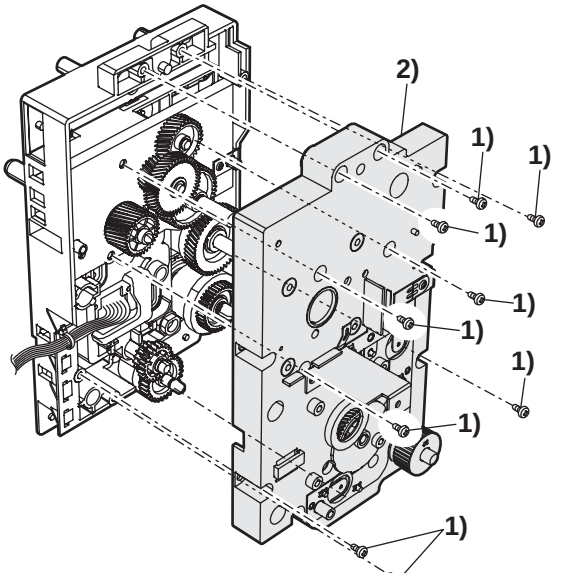


M. Main drive unit

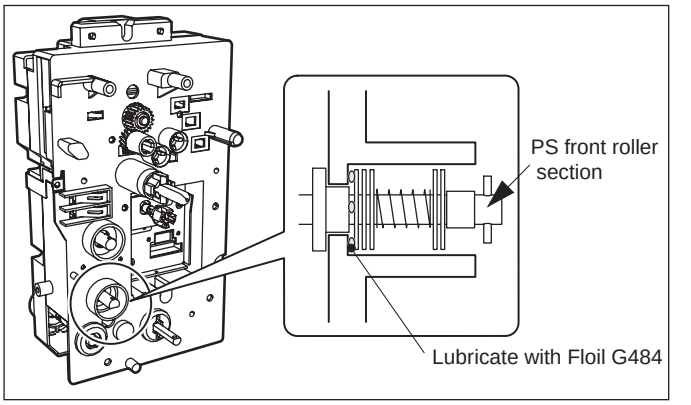


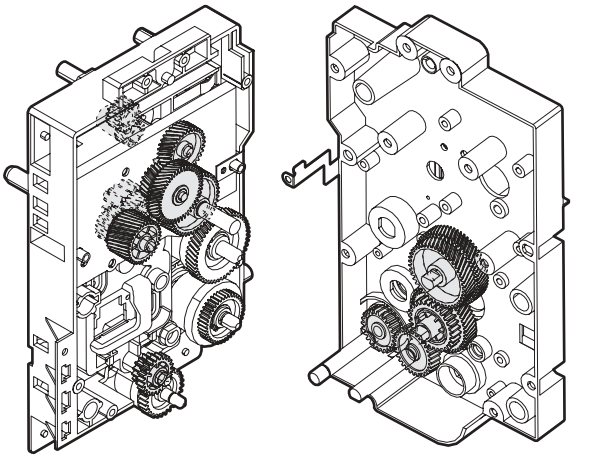


1. Drive gear.

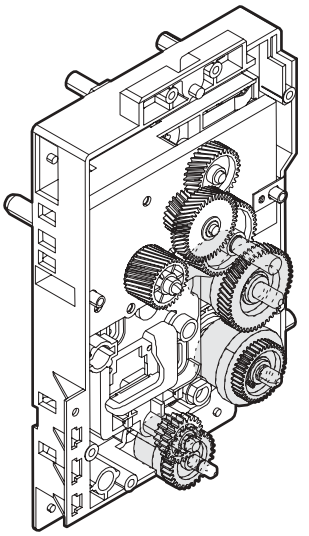


Remove the PS unit and apply grease to the bottom of the PS front roller section brake.

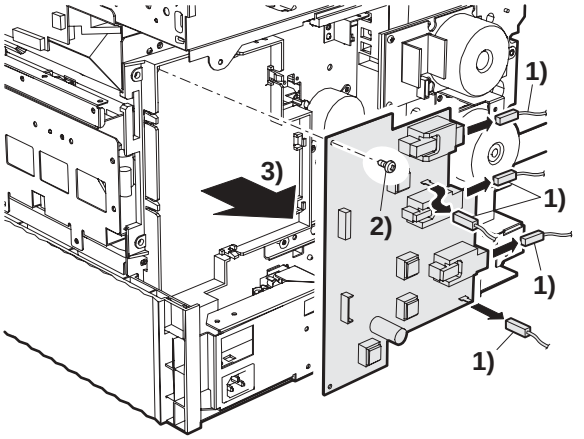




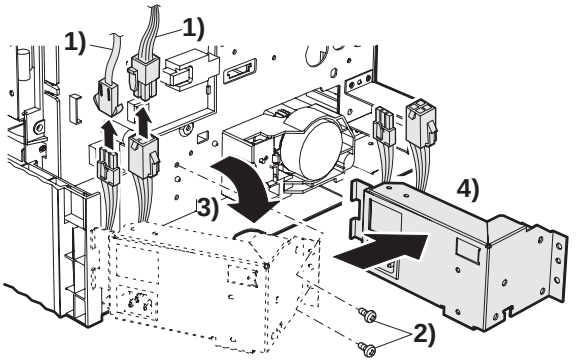
2. Clutch.

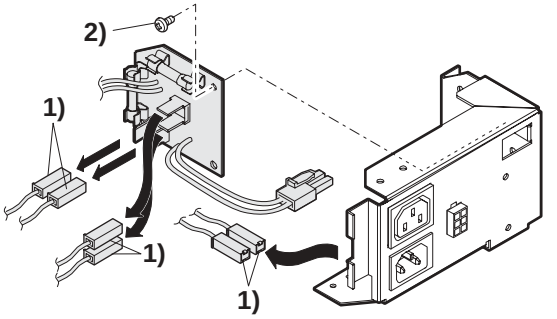


N. High voltage PWB



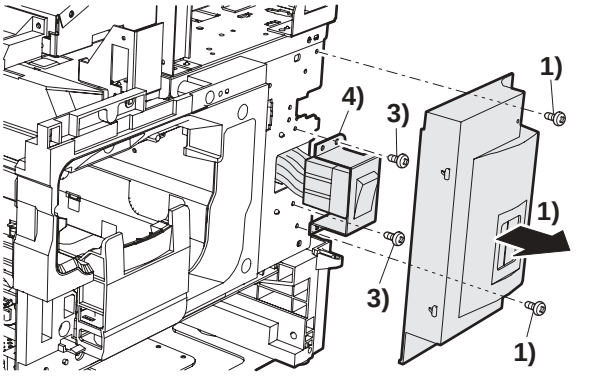
O. Fuse PWB



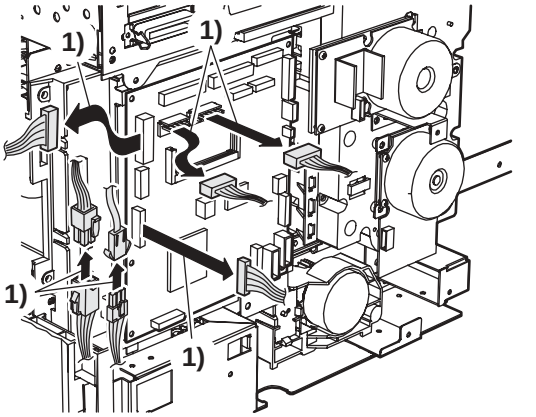


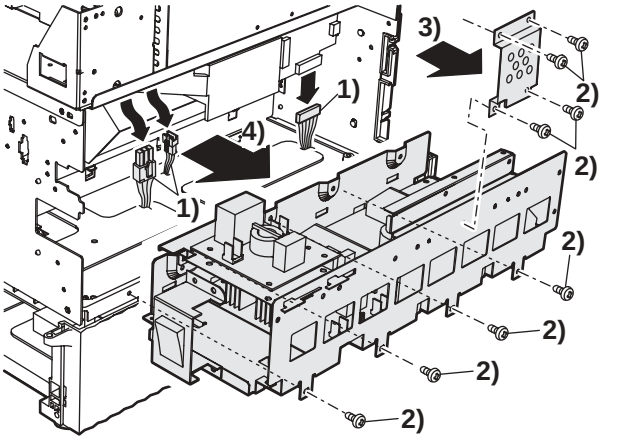
P. Power unit peripheral

1. Power switch.

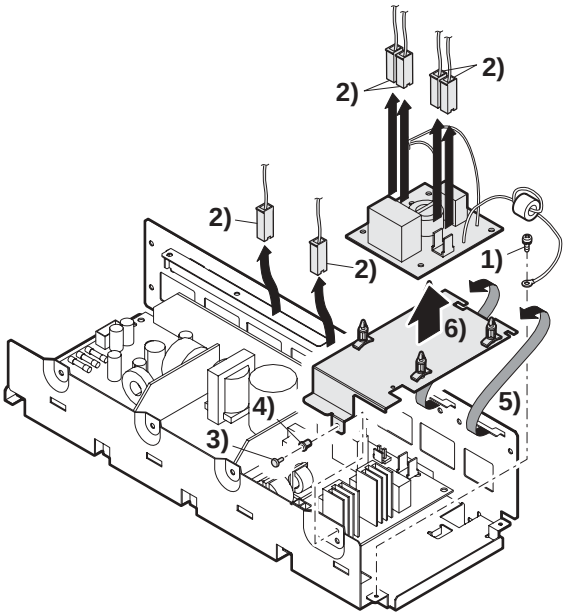


2. Power unit.

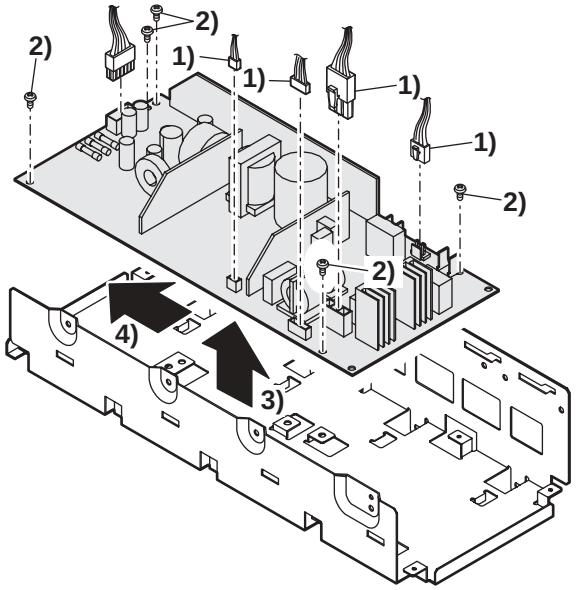




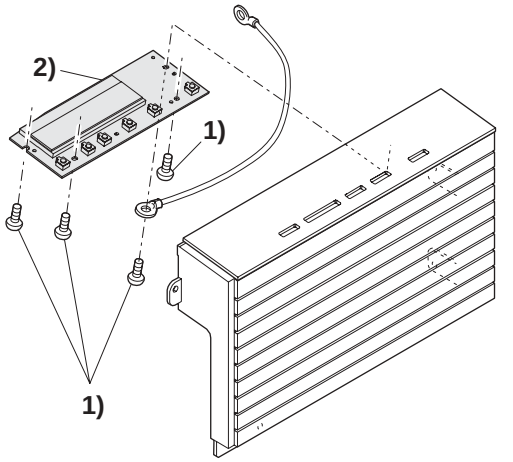
3. Filter PWB.



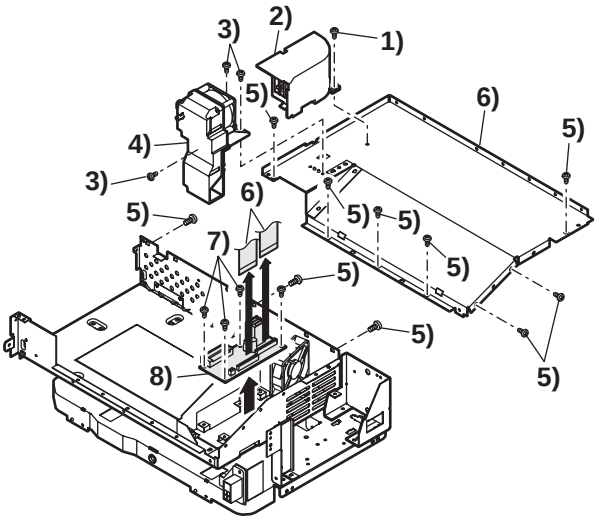
4. Power PWB.



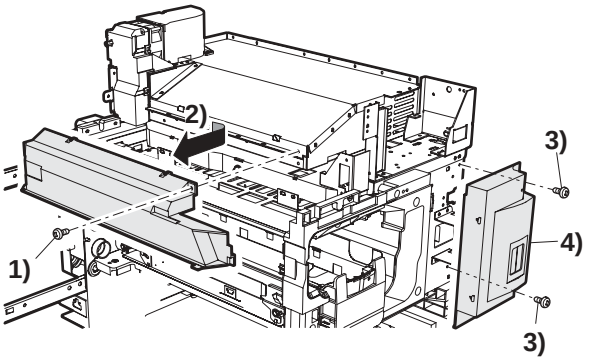
Q. Printer operation PWB

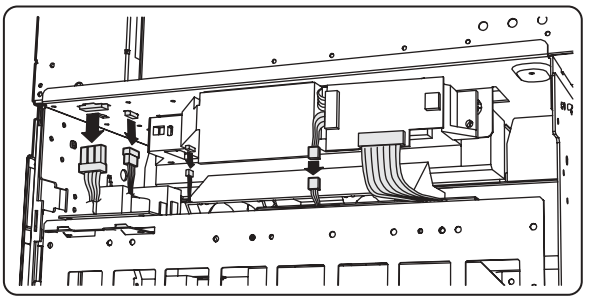


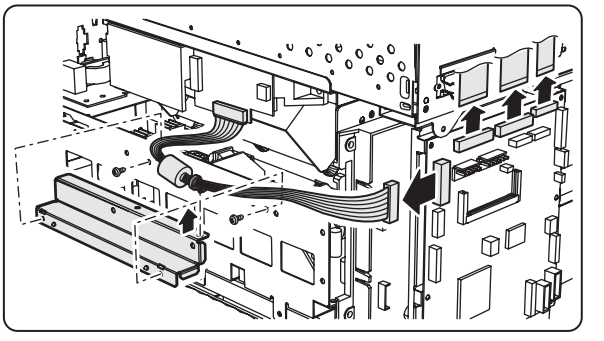
R. Mother PWB

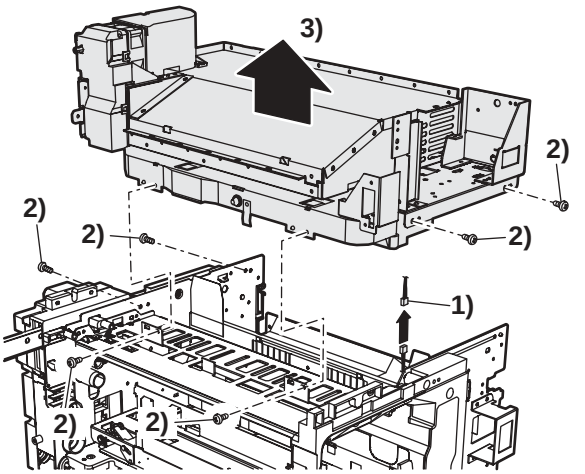


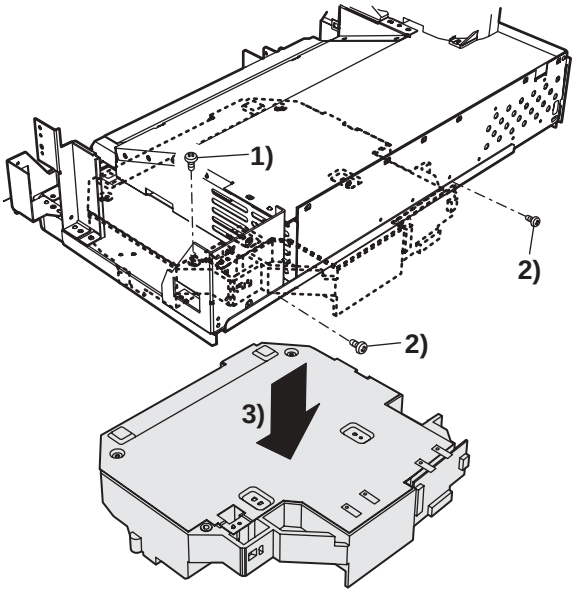
S. Laser unit







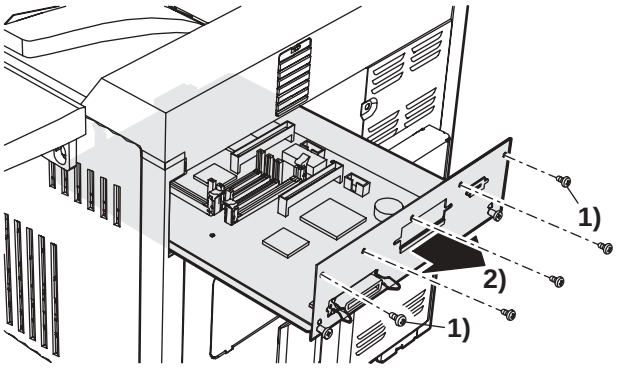




Note:When the LSU is disassembled, the LSU right angle adjustment is required.

T. Controller PWB

Remove two screws so that the controller PWB can be removed.



[8] MACHINE OPERATION

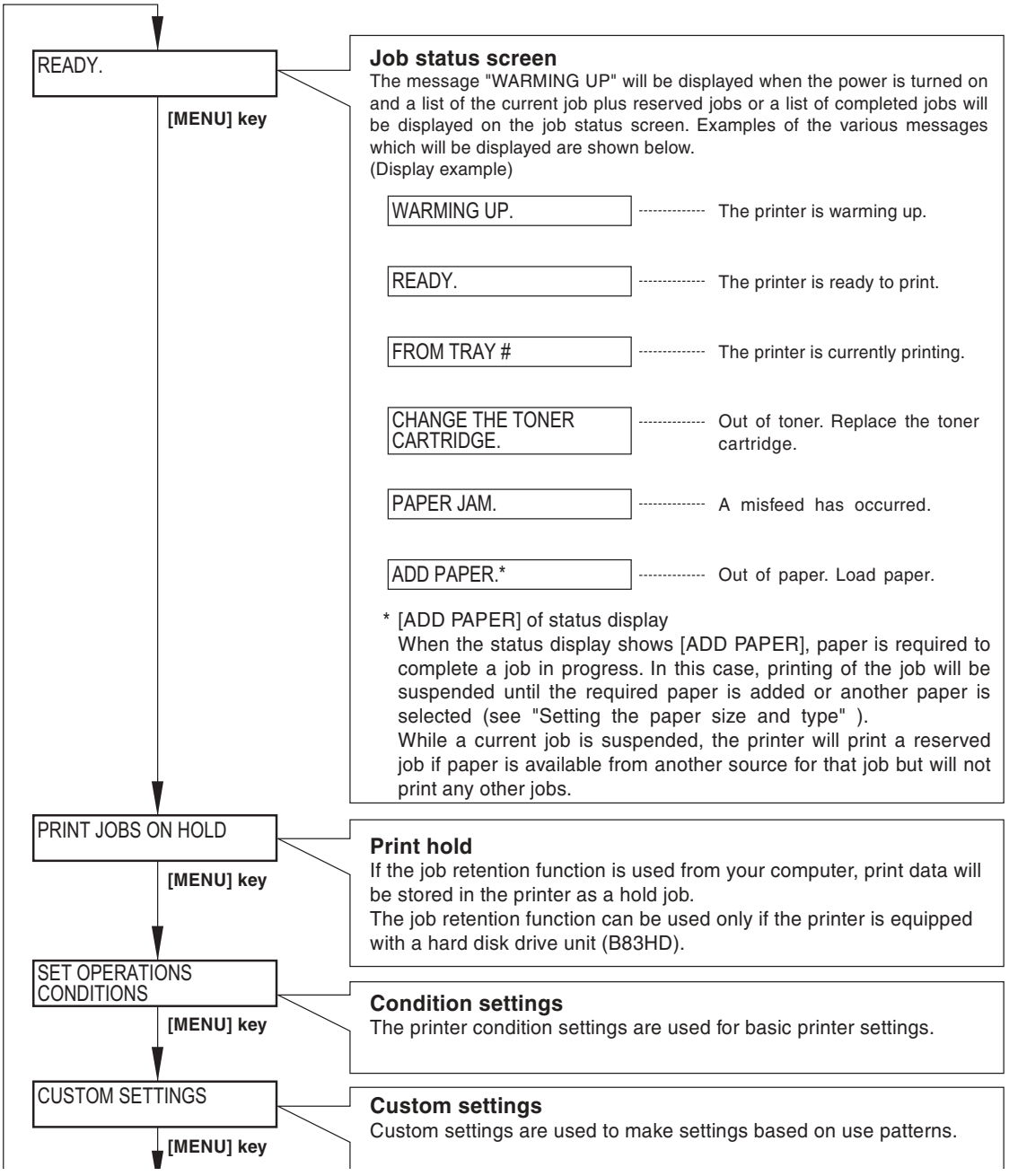
1. Function of each LED

	READY	DATA	ERROR
ON	Print job reception enable	When RIP-completed print data are stored in memory.	When a trouble which can be canceled by the user occurred.
Flash		When data are processed in the printer board (during RIP).	When a trouble which requires service call occurred.
OFF	Print job reception disable	Neither print data nor data under process are stored.	No trouble

* RIP:Raster In Processor. Develops the print command into pixel information.

2. Outline of each mode

The menu groups are classified into five groups and are selected consecutively by pressing the **MENU** key. If the **OK** key is pressed when the desired menu screen is displayed, a message will appear to indicate the next required operation. In addition, there is the service diag mode used for a serviceman.



3. Computer Client Settings

Type	Description	Remark
Setting by the printer driver	Changed and set according to the print form of each job.	
Web menu	Used to set the work board functions from the Web browser (*1).	Only when the NIC board (Okilan B83E) is installed.

*1: Recommended Web browser
Internet Explorer 4.0 or later,
Netscape Navigator 4.0 or later

4. Printer environment setup

		Set value (Default)
Initial setup	Smoothing	YES* • NO
	Number of copies	1* ~ 999
	Print direction	Vertical* • Horizontal
	Standard paper feed paper size	A3 • B4 • A4* • B5 • A5 11” x 17” • 8.5” x 14” • 8.5” x 13” • 8.5” x 11” • 7.25” • 10.5” • 5.5” x 8.5”
	Standard paper feed paper type	Normal paper, printed paper, recycled paper, letter head paper, punched paper, color paper
	Standard paper exit tray	Differs depending on installation of peripheral devices. *1
	White paper print inhibition	Inhibit / Allow*
SPDL setup	PCL symbol set	See separate table
PS setup		(PS error cause) Print / not print *

5. PCL symbol set

No.	Symbol set
1	Roman-8
2	ISO 8859-1 Latin 1
3	PC-8
4	PC-8 Danish/Norwegian
5	PC-850
6	ISO 6 ASCII
7	Legal
8	ISO 21 German
9	ISO 17 Spanish
10	ISO 69 French
11	ISO 15 Italian
12	ISO 60 Norwegian v1
13	ISO 4 United Kingdom
14	ISO 11 Swedish:names
15	PC1004 (OS/2)
16	DeskTop
17	PS Text
18	Microsoft Publishing
19	Math-8
20	PS Math
21	Pi Font
22	ISO 8859-2 Latin 2
23	ISO 8859-9 Latin 5
24	ISO 8859-10 Latin 6
25	PC-852
26	PC-775
27	PC Turkish
28	MC Text
29	Windows 3.1 Latin 1
30	Windows 3.1 Latin 2
31	Windows 3.1 Latin 5
32	Windows Baltic (not 3.1)
33	Windows 3.0 Latin 1
34	Symbol
35	Wingdings

6. Key operator program

Key operator program - list			Set value (Default) Engine section LCD	Remark
Account control	Auditing mode		ON/OFF*	
	Print per account	Print per account display	ON*/OFF	
		Print per account print		
	Reset account			
	Account number control	Enter new account number(5digits)		
		Delete account number		
		Change account number		
		Print account number		
	No print if acc't # invalid		Yes/No*	
Energy save	Auto power shut-off timer		15min/30min*/60min/120min/240min	
	Auto power shut-off		Disable/Enable*	
	Preheat mode		15min*/30min/60min/120min/240min/None	
	Toner save		ON/OFF*	
Operation panel settings	Auto clear setting		15sec/30sec/60sec*/OFF	
	Message display time		3sec/6sec*/9sec/12sec	
	Language setting		American English/English*/French/Spanish	Depends on destination
Device settings	Disable duplex unit		Yes/No*	
	Disable stapler unit		Yes/No*	
	Disable paper desk drawers		Yes/No*	
	Disable finisher		Yes/No*	
	Disable mail-bin stacker		Yes/No*	
	Saddle stitch adjust	Paper size A4	-3.0mm~0.0mm*~3.0mm (0.1mm unit)	With the saddle finisher installed
		Paper size B4	-3.0mm~0.0mm*~3.0mm (0.1mm unit)	
		Paper size A4R	-3.0mm~0.0mm*~3.0mm (0.1mm unit)	
		Paper size Ledger	-3.0mm~0.0mm*~3.0mm (0.1mm unit)	
		Paper size Letter-R	-3.0mm~0.0mm*~3.0mm (0.1mm unit)	
Print key operator program list				
Key operator code change	Set code		00000*	
System settings	Default settings	Print density level	Normal*/DAKER/DARKEST/LIGHTEST/LIGHTER	
		Disable notice page printing	Yes*/No	
		Disable test page printing	Yes*/No	
		A4/LT auto select	ON/OFF*	
	Interface settings	Hexadecimal dump mode	ON/OFF*	
		PDL for parallel port	Auto*/PostScript/PCL	
		PDL for network port	Auto*/PostScript/PCL	
		I/O timeout	1sec~20sec*~999sec	
		Port switching	Per job*/Timeout/Parallel OFF/Network OFF	
	Network settings	IP address setting	IP address 000.000.000.000*	
			IP subnet mask 000.000.000.000*	
			IP gateway 000.000.000.000*	
		Enable TCP/IP	Yes*/No	
		Enable NetWare	Yes*/No	
		Enable EtherTalk	Yes*/No	
		Enable NetBEUI	Yes*/No	
		Reset the NIC		
	Initialize/Store settings	Restore factory defaults		
		Store current configuration		
		Restore configuration		
Product key	PS3 expansion kit			
	E-mail alert and status			

7. Canceling a print job and deleting print data

To cancel a print job in progress and delete the print data:

1. Press the **BACK/CLEAR** key during printing. Printing will stop and a message asking for confirmation to delete the job will appear.
2. To delete the data, press the **OK** key.
3. To cancel deletion, press the **BACK/CLEAR** key. Printing will resume.

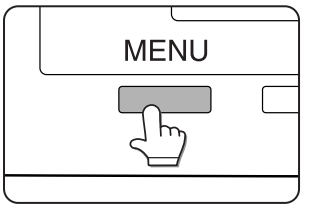
To delete print data of a reserved job:

1. Print data transmitted from computers will be stored in this printer (up to 99 jobs) and will be output sequentially.
2. To delete print data of a reserved job before starting printing, press the [▲] or [▼] key to display the desired data in the message display.
3. If you press the **BACK/CLEAR** key at this time, a confirmation message for deletion will appear. To delete the data, press the **OK** key.
4. To cancel deletion, press the **BACK/CLEAR** key. Printing will resume.

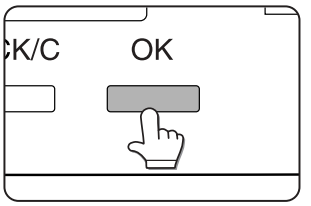
8. Setting the paper size and type

When the paper size or type is changed in a paper tray, refer to the following procedure.

1. Press the **MENU** key repeatedly until "CUSTOM SETTINGS" appears in the message display.



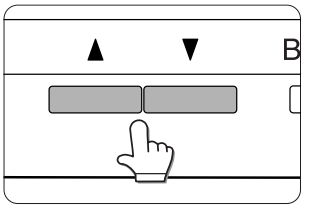
2. Press the **OK** key. When the **OK** key is pressed, "TRAY SETTING" will appear in the message display.



3. Press the **OK** key. When the [OK] key is pressed, the message shown below will appear in the message display.

```
TRAY  SETTING
              TRAY1▼
```

4. Select the desired paper tray. Press the [▲] or [▼] key repeatedly until the desired paper tray is indicated in the display.



5. Press the **OK** key. The paper size and paper type of the tray selected in Step 4. will appear.
   - If TRAY 1 is selected in Step 4., the message shown below will appear in the display.

```
LETTER
PLAIN                ▼
```

6. Press the [▼] key. If TRAY 1 is selected in Step 4., the message shown below will appear in the display.

```
CHANGE  TRAY1
SETTING  OK?
```

7. Press the **OK** key. To cancel the setting change, press the **BACK/C** key to return to Step 4.

   Note: Special paper such as thick paper, transparency film, labels, and postcards can be set for tray 2 and the bypass tray. Envelopes can be set only for tray 2.

8. Select the paper type that has been set in the tray. Press the [▲] or [▼] key repeatedly until the paper type that has been set appears.

```
PLAIN
OK?
```

9. Press the **OK** key.
10. Ensure that the desired paper size is selected.
    - Press the [▲] or [▼] key repeatedly until the desired paper size appears.

```
LETTER
OK?
```

    - Depending on the selected tray, a selection for "AUTO-AB" and "AUTO-INCH" may appear:
      – "AUTO-AB": Select when you have set AB system paper.
      – "AUTO-INCH": Select when you have set inch system paper.
    - When the paper system is changed from the inch system to the AB system or vice versa, the paper type must be designated. Select the paper type; see the User Guide for further information.
    - If you have set paper of non-standard size, select "NON STANDARD". This size can be selected when tray 2 or the bypass tray has been selected in step 4).
11. Press the **OK** key to terminate the setting.

9. Specifications of paper trays

The specifications for types and sizes of paper for loading paper trays are shown below.

Tray		Tray No. (tray name)	Applicable paper types		Applicable paper sizes	Paper weight
Paper tray 1		Tray 1	Plain paper (Refer to the next page for applicable papers.)		8-1/2 x 11, A4, B5	16 to 28 lbs. or 60 to 105g/m²
Multi purpose drawer/ bypass tray		Tray 2/ bypass tray	Plain paper (Refer to the next page for applicable papers.)		• If "AUTO-INCH" is selected in setting the paper size and type, the following paper sizes can be used with the automatic detection function: 11 x 17, 8-1/2 x 14, 8-1/2 x 11, 8-1/2 x 11R, 7-1/4 x 10-1/2, 5-1/2 x 8-1/2R • If "AUTO-AB" is selected in setting the paper size and type, the following paper sizes can be used with the automatic detection function: A3, B4, A4, A4R, B5, B5R, A5R, 8-1/2 x 13 • Non-standard sizes	16 to 34 lbs. or 60 to 128g/m²
			Special paper (Refer to the next page for applicable papers.)	• Thick paper • Labels, transparency film	• If "AUTO-INCH" is selected in setting the paper size and type, the following paper sizes can be used with the automatic detection function: 8-1/2 x 11, 8-1/2 x 11R • If "AUTO-AB" is selected in setting the paper size and type , the following paper sizes can be used with the automatic detection function: A4, A4R, B5, B5R • Non-standard sizes smaller than 8-1/2 x 11 or A4	See the remarks for special paper
				Postcard	• Japanese official postcard	
				Envelopes can only be fed from the multi-purpose drawer. Applicable paper stock weight for envelopes is 20 to 23 lbs. or 75 to 90g/m²	• Applicable standard size envelopes: COM-10, Monarch, DL, C5, ISO B5 • Non-standard size	
Stand/3 x 500 sheet paper drawer	Upper	Tray 2	Same as multi purpose drawer			
	Middle	Tray 3	Plain paper (Refer to the next page for applicable papers.)		• If "AUTO-INCH" is selected in setting the paper size and type, the following paper sizes can be used with the automatic detection function: 11 x 17, 8-1/2 x 14, 8-1/2 x 11, 8-1/2 x 11R, 7-1/4 x 10-1/2, 5-1/2 x 8-1/2R • If "AUTO-AB" is selected in setting the paper size and type, the following paper sizes can be used with the automatic detection function: A3, B4, A4, A4R, B5, B5R, A5R, 8-1/2 x 13	16 to 28 lbs. or 60 to 105g/m²
	Lower	Tray 4				
Stand/ MPD & 2000 sheet paper drawer	Upper	Tray 2	Same as multi purpose drawer			
	Lower	Tray 3	Plain paper (Refer to the next page for applicable papers.)		• 8-1/2 x 11, A4	16 to 28 lbs. or 60 to 105g/m²

A. Applicable plain paper

For satisfactory results, plain paper must conform to the following requirement

	Paper in AB system	Paper in inch system
	A5 to A3	5-1/2 x 8-1/2 to 11 x 17
Plain paper	16 to 28 lbs. or 60 to 105g/m²	
Recycled, colored, pre-punched, pre-printed and letterhead papers must conform to the same conditions as above.		

B. Applicable special paper

For satisfactory results, special paper must conform to the following requirements.

	Type	Remarks
Special paper	Thick paper	• For 5-1/2 x 8-1/2 to 8-1/2 x 11 or A5 to A4 sizes, thick paper ranging from 16 to 34 lbs. or 60 to 128g/m² can be used. • For sizes larger than 8-1/2 x 11 or A4, thick paper ranging from 16 to 28 lbs. or 60 to 105g/m² can be used. • Other thick papers Index stock (65 lbs. or 176g/m²) can be used. Cover stock (110 lbs. or 200 to 205g/m²) can be used but only for 8-1/2 x 11, A4 or smaller paper in the portrait orientation.
	Transparency film, labels, and tracing paper	Use Oki Data recommended paper. Do not use labels other than Oki Data recommended labels. Doing so may leave adhesive residue in the printer, causing paper misfeeds, smudges on prints or other machine trouble.
	Postcards	Japanese official postcards can be used.
	Envelopes	• Applicable standard envelopes: COM-10, Monarch, DL, C5, ISO B5 • Envelopes can only be fed from the multi-purpose drawer. Applicable paper stock weight for envelopes is 20 to 23 lbs. or 75 to 90g/m².

10. Printing onto envelopes

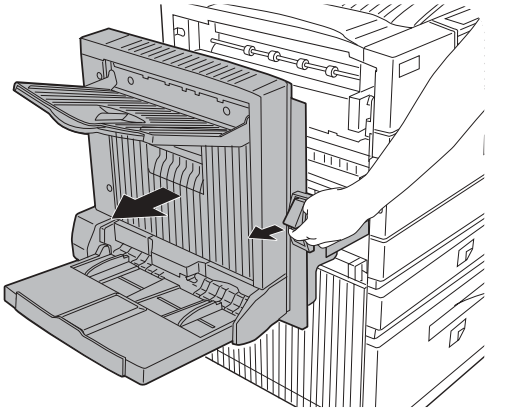
- Do not use envelopes that have metal clasps, plastic snaps, string closures, windows, linings, self-adhesive patches or synthetic materials. Attempting to print on these may cause misfeeds, inadequate toner adherence or other problems.
- Envelopes of which the surface is not flat because of embossing may cause the prints to smudge.
- Under high humidity and temperature conditions, the glue flaps on some envelopes may become sticky and seal when printing.
- Use only envelopes which are flat and crisply folded. Curled or poorly formed envelopes may be poorly printed or may cause misfeeds.

A. Fusing unit pressure adjusting levers

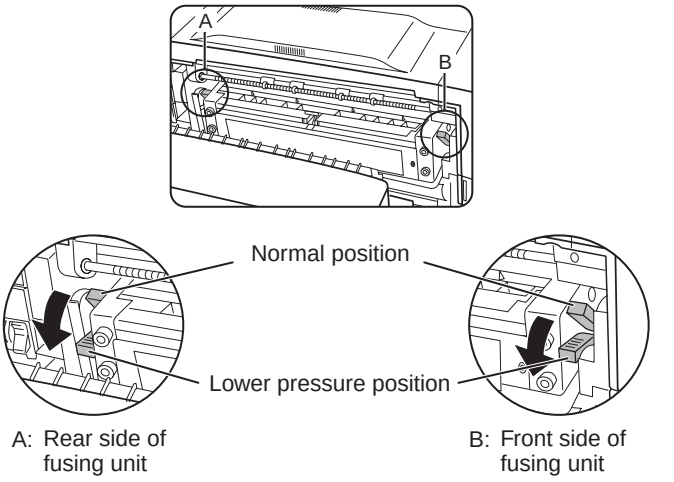
When feeding envelopes from the multi purpose drawer, damage to the envelopes or smudges on prints may occur even if envelopes within specification are used. In this case, the problem may be reduced by shifting the fusing unit pressure adjusting levers from the normal position to the lower pressure position. Follow the procedure below.

NOTE: Be sure to return the lever to the normal position when finished feeding envelopes. If not, inadequate toner adherence, paper misfeeds or other trouble may occur.

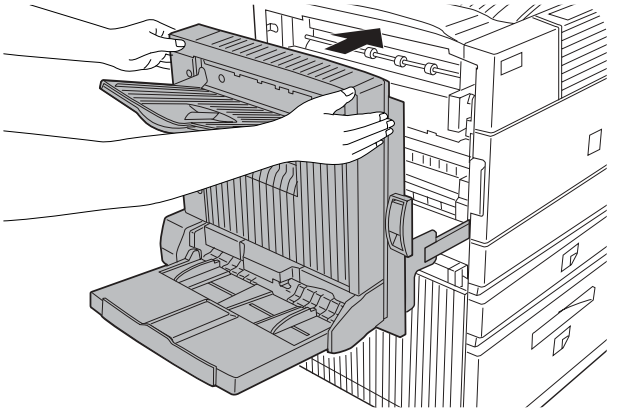
1. Unlatch the duplex module and slide it to the left. Unlatch the module and gently move the module away from the machine. If the machine is not equipped with a duplex module, open the side cover similarly.



2. Lower the two fusing unit pressure adjusting levers marked A and B in the illustration.



3. Gently close the duplex module.
   If the machine is not equipped with a duplex module, close the side cover.



11. Loading transparency film

Be sure to load the transparency film with the white label side up. Make sure no image will be printed on the label. Printing on the label may cause smudges on prints. Transparency film must be set in the portrait orientation.

[9] ADJUSTMENTS

		Contents of adjustment	
1	Engine	A	LSU right-angle adjustment
		B	Print magnification ratio adjustment
		C	Print off-center adjustment
		D	Self print lead edge adjustment
		E	Void area adjustment
		F	Resist quantity adjustment
		G	Option paper feed tray paper guide adjustment
		H	Option manual feed section paper guide position adjustment

1. Engine

A. LSU right-angle adjustment

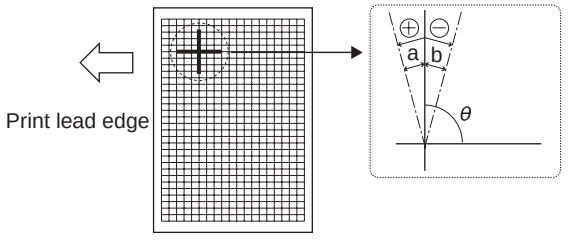
This adjustment is required in the following cases:

- When the LSU is replaced.
- When a distortion is produced in print. (Check with self print pattern "71".)

After completion of this adjustment, the following adjustments should be performed.

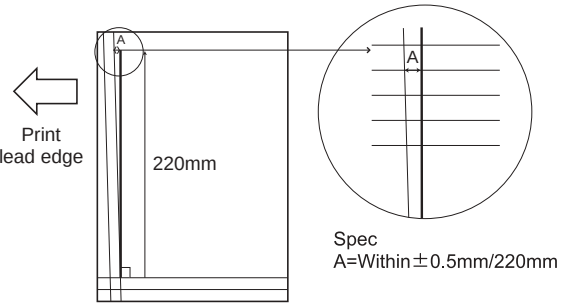
- Print off-center adjustment
- Void area adjustment

1. Press and hold the **MENU** key and the **OK** key and turn on the power. "PCU DIAG MODE ***" is displayed.
   - Do not touch the keys for about 8 seconds after releasing fingers from the above keys.
2. Press the **MENU** key several times until "TEST PRINT" is displayed, and push the **OK** key to enter the test print mode.
3. Press the **MENU** key several times until "PRINT PATTERN" is displayed, and, using the arrow keys, select "71." Press the **OK** key to execute.
4. Press the **MENU** key several times until "CASSETTE" is displayed, and check with [▲] key that the paper for tray 1 is properly set for the destination.
   - AB series: "A4" is displayed
   - Inch series: LETTER is displayed.
5. Press the **OK** key to make the self-print. Review the output print.



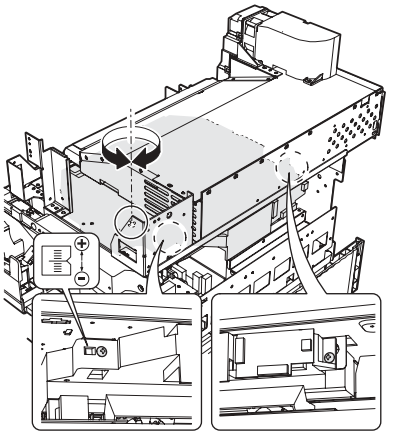
Right angle check method

1. Following the instructions above, make self-print of pattern 71.
2. Draw a line perpendicular to the sub scan direction (paper transport direction) with a square. The point of intersection of the perpendicular line and the horizontal line is regarded as the starting point.
3. Measure distance A (between the self-printed line and the perpendicular line drawn with a square) at a position of 220mm from the starting point.
4. Check that distance A satisfies the following specification.



B. LSU manual adjustment

1. Loosen two fixing screws of the LSU unit (M4 screws which fix the LSU and the top plate).
2. Turn the adjustment screw on the upper side (on the back of the printer operation panel) clockwise or counterclockwise to adjust the height of the LSU front side.
3. After completion of the adjustment, tighten the two fixing screws of the LSU unit.
4. Print the grid pattern again and review for accuracy.
5. Repeat until the specification is satisfied.
6. After completion of adjustment, apply screw lock to the screws.



Specification

	Measuring point	Specification	Set value
Print distortion adjustment	Self print pattern 71	θ = 90° ± 0.13°	θ changes about 0.25 degrees for 1 scale of adjustment.

C. Print off-center adjustment

This adjustment is performed in the following cases:

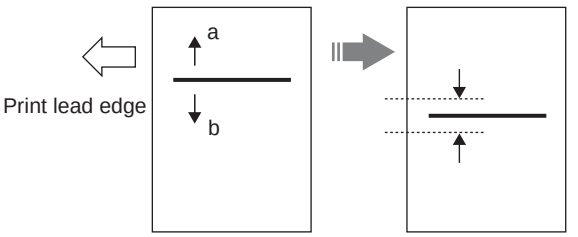
- When the center of print is misaligned. (Check with the self print pattern "1".)
- When the LSU is replaced.
- When the option paper feed unit or the automatic duplex unit is installed or replaced.

Before executing this adjustment, the following adjustments must have been completed.

- LSU right-angle adjustment
- After completion of this adjustment, the following adjustment must be performed.
- Void area adjustment

1. Press and hold the **MENU** key and the **OK** key and turn on the power. "PCU DIAG MODE ***" is displayed.
   - Do not touch the keys for about 8 seconds after releasing fingers from the above keys.
2. Press the **MENU** key several times until "TEST PRINT" is displayed, and push the **OK** key to enter the test print mode.
3. Make a print with "1."
4. Press **MENU** key several times to set all Voids to "35."
5. Press the **MENU** key several times until “T1 OFF CENTER ADJ” is displayed.
6. Press the **OK** key.
7. Review the print and use [▲] or [▼] key to adjust the value of “T1 OFF CENTER ADJ” so that the off-center value is within the specified range.
8. If the option paper feed unit or the automatic duplex unit is installed, make an adjustment for each unit.

   * When using the duplex unit, set DUPLEX to USE.



	Measurement reference	Specification	Set value	
Standard tray self print off-center (T1 OFF CENTER ADJ)	Output pattern 1 Center line	0 ±1.5mm	Shift of 0.1mm for set value 1.	
No. 2 tray self print off-center (T2 OFF CENTER ADJ)				When the option paper feed unit is installed.
No. 3 tray self print off-center (T3 OFF CENTER ADJ)				
No. 4 tray self print off-center (T4 OFF CENTER ADJ)				
Manual feed tray self print off-center (BPT OFF CENTER ADJ)		0 ±1.5mm		When the option automatic duplex unit is installed.
ADU Self print off-center (ADU OFF CENTER ADJ)				

- When the print line is shifted toward ‘a’ from the paper center, decrease the value.
- When the print line is shifted toward ‘b’ from the paper center, increase the value.

D. Self print lead edge adjustment

This adjustment is performed in the following cases:

- When the print start position is improper. (Check with the self print pattern "1".)
- When the LSU is replaced.
- Before executing this adjustment, the following adjustments must have been completed.
- LSU right-angle adjustment
- After completion of this adjustment, the following adjustment must be performed.
- Void area adjustment

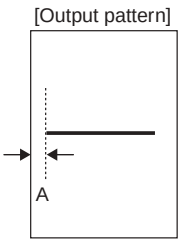
1. Press and hold the **MENU** key and the **OK** key and turn on the power. "PCU DIAG MODE ***" is displayed.
   - Do not touch the keys for about 8 seconds after releasing fingers from the above keys.
2. Press the **MENU** key several times until "TEST PRINT" is displayed, and push the **OK** key to enter the test print mode.
3. Make a print with self print pattern "1."
4. Press **MENU** key several times to set all Voids to "35."
5. Press the **MENU** key several times until LEAD EDGE is displayed, and push the **OK** key.
6. Check the print and use [▲] or [▼] key to adjust the value LEAD EDGE so that the distance shown in the figure below is within the specified range.

7. Check that the print lead edge is within the specified range.

Specification

	Set position	Specification	Set value
Self print lead edge adjustment (LEAD EDGE)	Print start position A of the output pattern 1	A = 4.0mm or less (Lead and tail total: 8.0mm or less)	Shift of 0.175mm (35ppm) / 0.225mm (45ppm) for set value 1.

- To increase the print lead edge, decrease the set value with [▼] key.
- To decrease the print lead edge, increase the set value with [▲] key.



E. Void area adjustment

This adjustment is performed in the following cases:

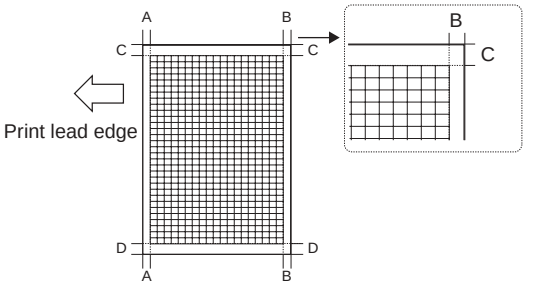
- When the print start position is improper. (Check with the self print pattern "71".)
- When the LSU is replaced.
- Before executing this adjustment, the following adjustments must have been completed.
- LSU right-angle adjustment
- Print off-center adjustment

1. Press and hold the **MENU** key and the **OK** key and turn on the power. "PCU DIAG MODE ***" is displayed.
   - Do not touch the keys for about 8sec after releasing fingers from the above keys.
2. Press the **MENU** key several times until "TEST PRINT" is displayed, and push the **OK** key to enter the test print mode.
3. Make a print with self print pattern "71."
4. Press the **MENU** key several times until LEAD EDGE VOID is displayed, and push the **OK** key.
5. Review the print and use [▲] or [▼] key to adjust the value LEAD EDGE VOID so that the distance ‘A’ shown in the figure below is within the specified range.
6. Press the **MENU** key several times until TAIL EDGE VOID is displayed, and push the **OK** key to make a self print.
7. Review the self print and use [▲] or [▼] key to adjust the value of TAIL EDGE VOID so that the distance ‘B’ in the figure below is within the specified range.
8. Press the **MENU** key several times to display SIDE EDGE VOID, and push the **OK** key to make a self print.
9. Check the self print and use [▲] or [▼] key to adjust the value of SIDE EDGE VOID so that the total of distances ‘C’ and ‘D’ in the figure below is within the specified range.
10. Review that the lead edge is within the specified range.

Specification

	Measuring point	Specification	Set value
Lead edge void adjustment (LEAD EDGE VOID)	Output pattern 71 print void A	A = 4.0mm or less (Total of A and B = 8.0mm or less)	Shift of 0.1 mm for set value 1.
Rear edge void adjustment (TAIL EDGE VOID)	Output pattern 71 print void B	B = 4.0mm or less (Total of A and B = 8.0mm or less)	
Side edge void adjustment (SIDE EDGE VOID)	Output pattern 71 print void C-D	Total of C and D = 8.0mm or less	

- To decrease the void quantity, decrease the set value with [▼] key.
- To increase the void quantity, increase the set value with [▲] key.



F. Resist quantity adjustment

This adjustment is performed in the following cases:

- When the void quantity is changed by the paper feed tray.
- When paper feed skew occurs.
- Before executing this adjustment, the following adjustments must have been completed.
- LSU right-angle adjustment
- Print off-center adjustment
- Void area adjustment

1. Press and hold the **MENU** key and the **OK** key and turn on the power. "PCU DIAG MODE ***" is displayed.
   - Do not touch the keys for about 8sec after releasing fingers from the above keys.
2. Press the **MENU** key several times until "TEST PRINT" is displayed, and push the **OK** key to enter the test print mode.
3. Make a print with self print pattern "71" from each paper feed tray.
4. Press the **MENU** key several times until PAPER BUCKLE is displayed. Adjust the resist quantity so that paper is transported normally.

Factory setup

45PPM	BPT	55
	T1	60
	T2	50
	DESK	50
	ADU	50

[10] DIAG

1. Diag mode

The machine can be checked and tested with the following diag mode.

A. Entering Diag mode

1. With the power OFF, hold and press the **MENU** key and the **OK** key, and at the same time turn on the power.

B. Selecting Diag menus

1. Press the **MENU** key to change the diag menu.
2. Pressing OPERATION GUIDE key returns to the previous menu.
3. Press the **OK** key to execute the test.
4. Press [▲] or [▼] key to go to the input menu.
5. Press the **BACK/C** key to return to the previous menu.

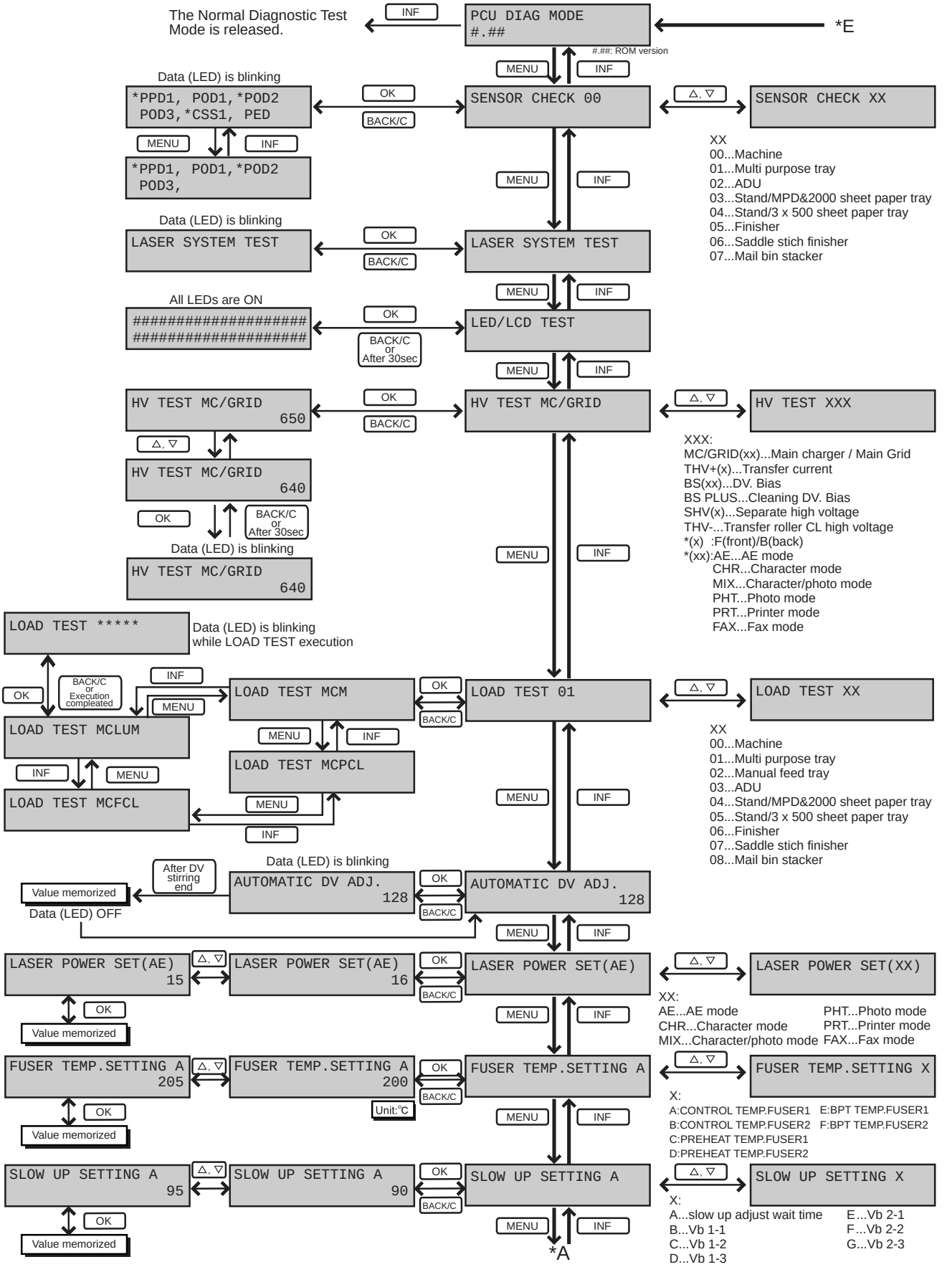
C. Canceling the Diag mode

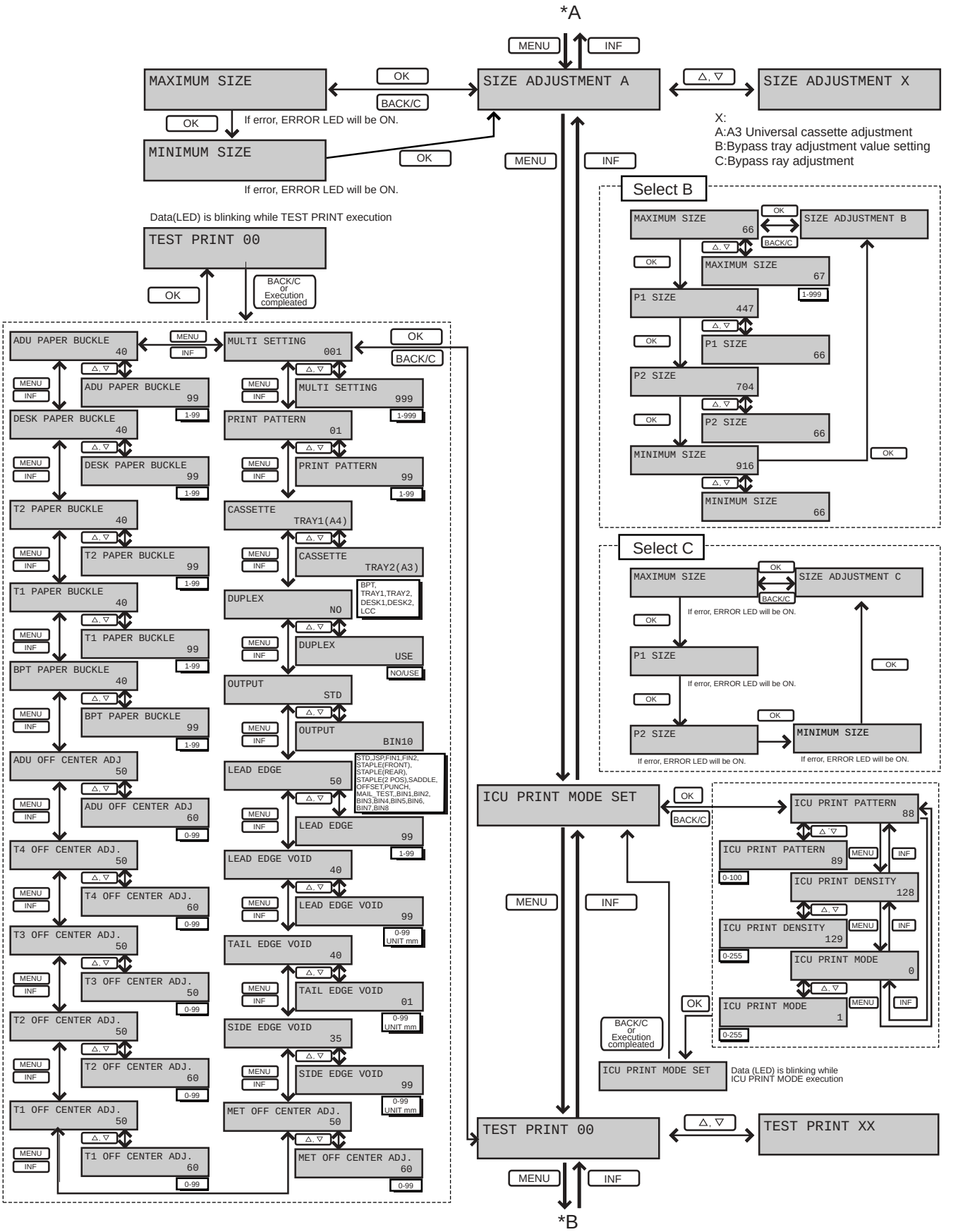
1. Turn off the power to cancel the diag mode.

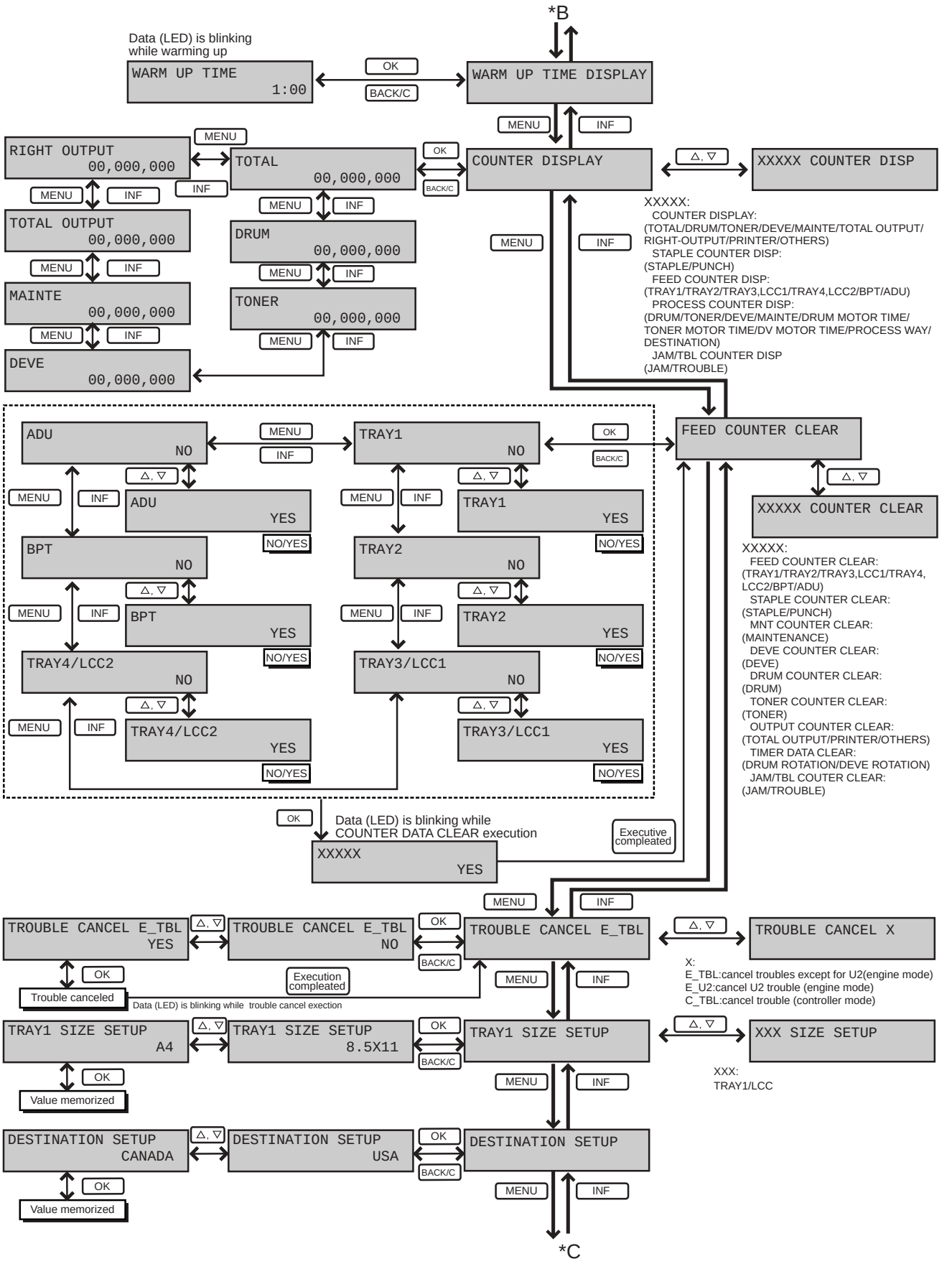
D. Diag mode list

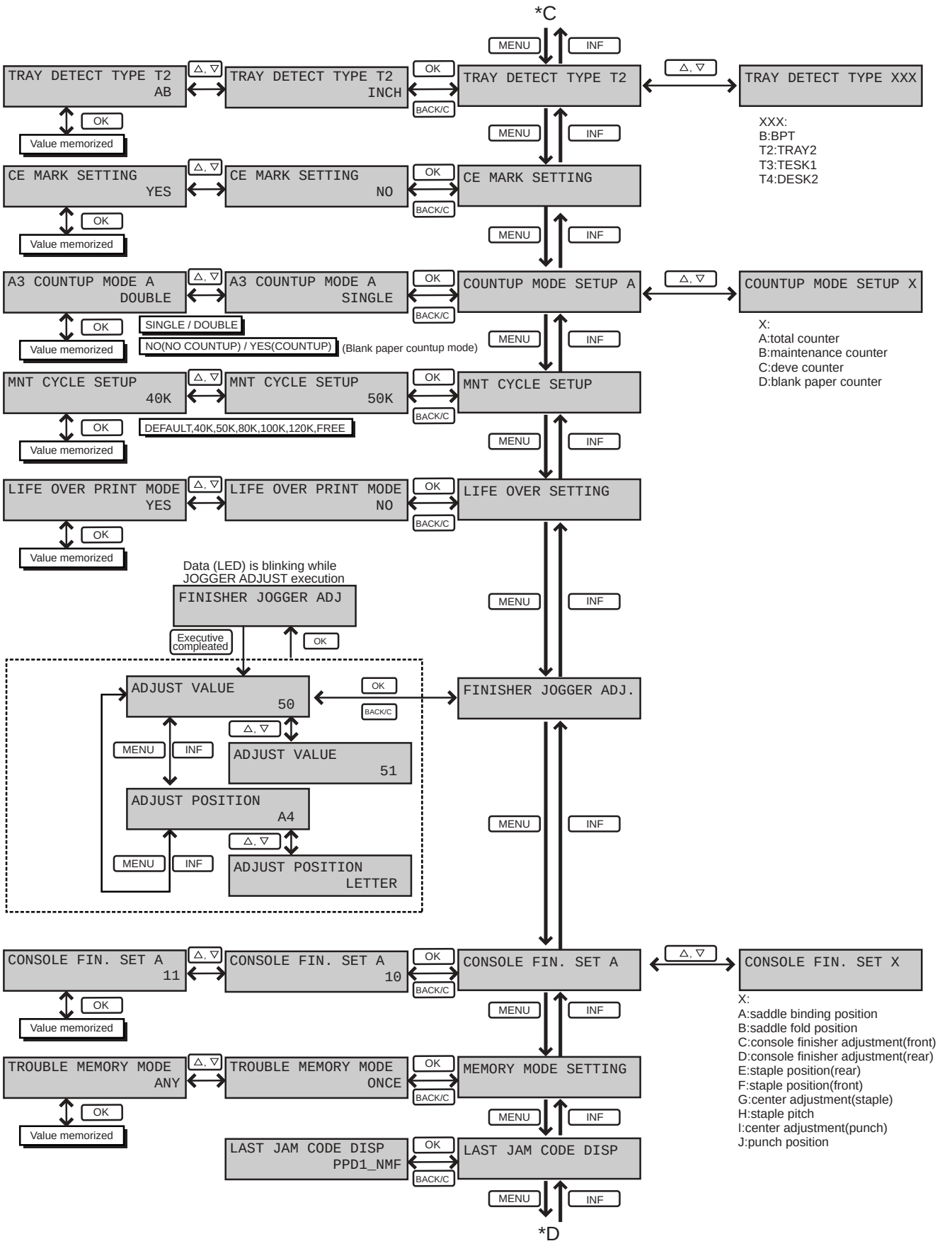
Menu	LCD display
Diag mode initial display	PCU DIAG MODE #
Sensor check mode	SENSOR CHECK XX
LSU test	LASER SYSTEM TEST
LED/LCD test	LED/LCD TEST
High voltage test	HV TEST XXX
Operation test mode	LOAD TEST XX
Auto developer adjustment	AUTOMATIC DV ADJ.
Laser output setup	LASER OUTPUT SETUP (XXX)
Fusing temperature setup	FUSER TEMP. SETTING X
Process control value setup	SLOW UP SETTING
Paper feed size setup	SIZE ADJUSTMENT X
ICU print mode setup	ICU PRINT MODE SET
Test print	TEST PRINT XX
Warm-up time display	WARM UP TIME DISPLAY
Counter display	COUNTER DISPLAY
Counter clear	COUNTER CLEAR
Trouble cancel	TROUBLE CANCEL X
Paper feed tray size setup	XXX SIZE SETUP
Destination setup	DESTINATION SETUP
Paper feed tray paper type setup	TRAY DETECT TYPE xx
CE mark setup	CE MARK SETTING
A3 count mode setup	COUNTUP MODE SETUP X
Maintenance cycle setup	MNT CYCLE SETUP
Operation-at-life-over setup	LIFE OVER SETTING
Finisher jogger adjustment	FINISHER JOGGER ADJ.
Saddle stitch finisher setup	CONSOLE FIN. SET X
Trouble memory mode setup	MEMORY MODE SETTING
Last JAM code display	LAST JAM CODE DISP
System information display	SYSTEM INFORMATION X
Process control data display	PROCESS DATA DISP X
Port check	CENTRO PORT CHECK
SELECT IN signal setup	SELECT IN SIGNAL SET

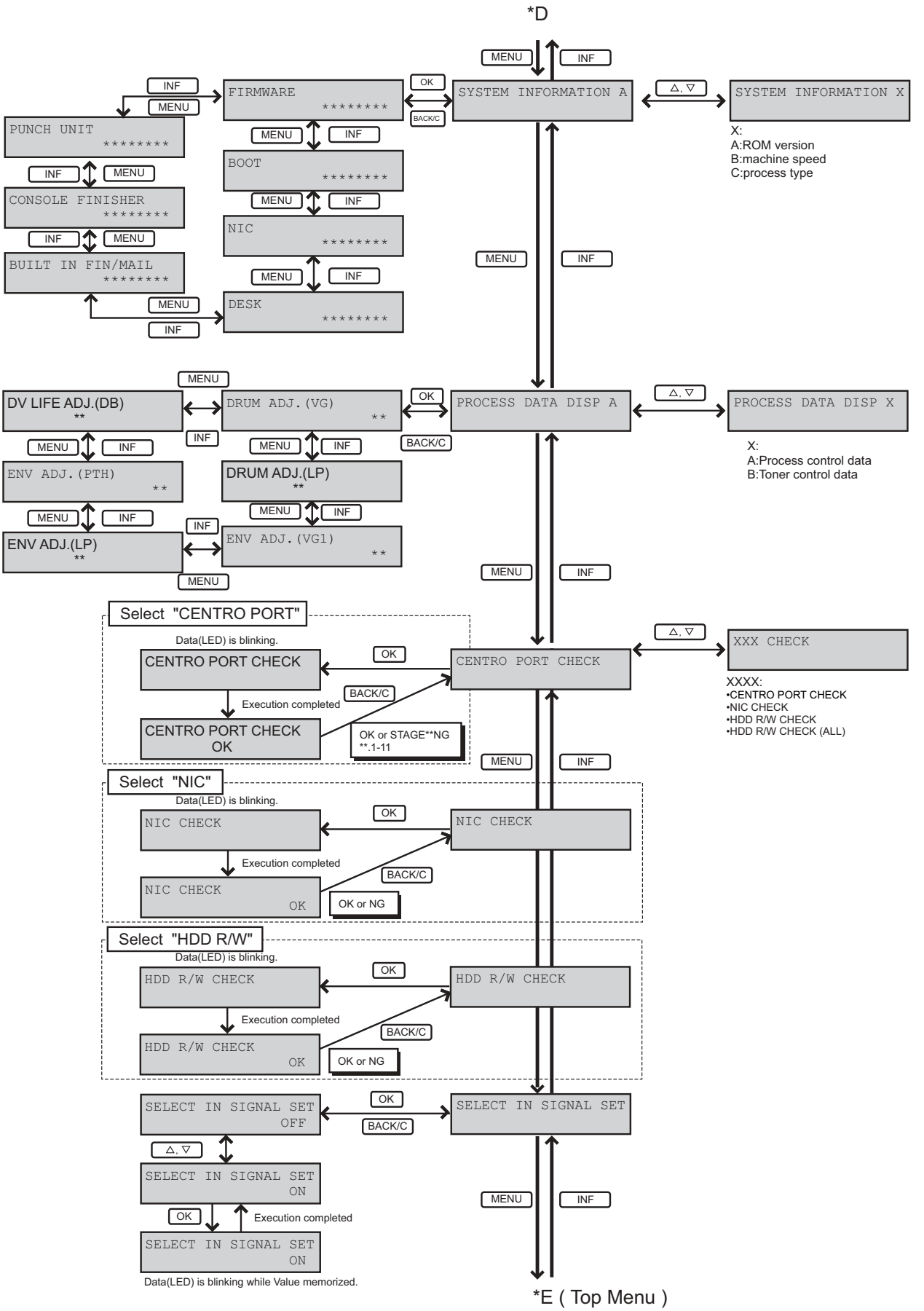
E. Diag mode menu transition




*A
MENU
INF
MAXIMUM SIZE
OK
BACK/C
SIZE ADJUSTMENT A
△, ▽
SIZE ADJUSTMENT X
OK
If error, ERROR LED will be ON.
MINIMUM SIZE
OK
X:
A:A3 Universal cassette adjustment
B:Bypass tray adjustment value setting
C:Bypass ray adjustment
MENU
INF
If error, ERROR LED will be ON.
Data(LED) is blinking while TEST PRINT execution
TEST PRINT 00
OK
BACK/C or Execution compleated
Select B
MAXIMUM SIZE 66
SIZE ADJUSTMENT B
MAXIMUM SIZE 67
1-999
P1 SIZE 447
P1 SIZE 66
P2 SIZE 704
P2 SIZE 66
MINIMUM SIZE 916
MINIMUM SIZE 66
Select C
MAXIMUM SIZE
SIZE ADJUSTMENT C
If error, ERROR LED will be ON.
P1 SIZE
P2 SIZE
MINIMUM SIZE
If error, ERROR LED will be ON.
If error, ERROR LED will be ON.
ADU PAPER BUCKLE 40
ADU PAPER BUCKLE 99
1-99
DESK PAPER BUCKLE 40
DESK PAPER BUCKLE 99
T2 PAPER BUCKLE 40
T2 PAPER BUCKLE 99
T1 PAPER BUCKLE 40
T1 PAPER BUCKLE 99
BPT PAPER BUCKLE 40
BPT PAPER BUCKLE 99
ADU OFF CENTER ADJ 50
ADU OFF CENTER ADJ 60
0-99
T4 OFF CENTER ADJ. 50
T4 OFF CENTER ADJ. 60
T3 OFF CENTER ADJ. 50
T3 OFF CENTER ADJ. 50
T2 OFF CENTER ADJ. 50
T2 OFF CENTER ADJ. 60
T1 OFF CENTER ADJ. 50
T1 OFF CENTER ADJ. 60
MULTI SETTING 001
MULTI SETTING 999
PRINT PATTERN 01
PRINT PATTERN 99
CASSETTE TRAY1(A4)
CASSETTE TRAY2(A3)
BPT, TRAY1,TRAY2, DESK1,DESK2, LCC
DUPLEX NO
DUPLEX USE
NO/USE
OUTPUT STD
OUTPUT BIN10
STD,JSP,FIN1,FIN2, STAPLE(FRONT), STAPLE(REAR), STAPLE(2 POS),SADDLE, OFFSET,PUNCH, MAIL_TEST,BIN1,BIN2, BIN3,BIN4,BIN5,BIN6, BIN7,BIN8
LEAD EDGE 50
LEAD EDGE 99
LEAD EDGE VOID 40
LEAD EDGE VOID 99
0-99 UNIT mm
TAIL EDGE VOID 40
TAIL EDGE VOID 01
SIDE EDGE VOID 35
SIDE EDGE VOID 99
MET OFF CENTER ADJ. 50
MET OFF CENTER ADJ. 60
ICU PRINT MODE SET
ICU PRINT PATTERN 88
ICU PRINT PATTERN 89
0-100
ICU PRINT DENSITY 128
ICU PRINT DENSITY 129
0-255
ICU PRINT MODE 0
ICU PRINT MODE 1
BACK/C or Execution compleated
ICU PRINT MODE SET
Data (LED) is blinking while ICU PRINT MODE execution
TEST PRINT 00
TEST PRINT XX
*B


*B
Data (LED) is blinking while warming up
WARM UP TIME 1:00
OK
BACK/C
WARM UP TIME DISPLAY
MENU
INF
COUNTER DISPLAY
△, ▽
XXXXX COUNTER DISP
XXXXX:
COUNTER DISPLAY:
(TOTAL/DRUM/TONER/DEVE/MAINTE/TOTAL OUTPUT/RIGHT-OUTPUT/PRINTER/OTHERS)
STAPLE COUNTER DISP:
(STAPLE/PUNCH)
FEED COUNTER DISP:
(TRAY1/TRAY2/TRAY3,LCC1/TRAY4,LCC2/BPT/ADU)
PROCESS COUNTER DISP:
(DRUM/TONER/DEVE/MAINTE/DRUM MOTOR TIME/TONER MOTOR TIME/DV MOTOR TIME/PROCESS WAY/DESTINATION)
JAM/TBL COUNTER DISP
(JAM/TROUBLE)
RIGHT OUTPUT 00,000,000
TOTAL 00,000,000
TOTAL OUTPUT 00,000,000
DRUM 00,000,000
MAINTE 00,000,000
TONER 00,000,000
DEVE 00,000,000
FEED COUNTER CLEAR
XXXXX COUNTER CLEAR
XXXXX:
FEED COUNTER CLEAR:
(TRAY1/TRAY2/TRAY3,LCC1/TRAY4,LCC2/BPT/ADU)
STAPLE COUNTER CLEAR:
(STAPLE/PUNCH)
MNT COUNTER CLEAR:
(MAINTENANCE)
DEVE COUNTER CLEAR:
(DEVE)
DRUM COUNTER CLEAR:
(DRUM)
TONER COUNTER CLEAR:
(TONER)
OUTPUT COUNTER CLEAR:
(TOTAL OUTPUT/PRINTER/OTHERS)
TIMER DATA CLEAR:
(DRUM ROTATION/DEVE ROTATION)
JAM/TBL COUTER CLEAR:
(JAM/TROUBLE)
ADU NO
ADU YES
BPT NO
BPT YES
TRAY4/LCC2 NO
TRAY4/LCC2 YES
TRAY1 NO
TRAY1 YES
TRAY2 NO
TRAY2 YES
TRAY3/LCC1 NO
TRAY3/LCC1 YES
NO/YES
Data (LED) is blinking while COUNTER DATA CLEAR execution
XXXXX YES
Executive compleated
TROUBLE CANCEL E_TBL YES
TROUBLE CANCEL E_TBL NO
TROUBLE CANCEL E_TBL
TROUBLE CANCEL X
X:
E_TBL:cancel troubles except for U2(engine mode)
E_U2:cancel U2 trouble (engine mode)
C_TBL:cancel trouble (controller mode)
Trouble canceled
Data (LED) is blinking while trouble cancel exection
Execution compleated
TRAY1 SIZE SETUP A4
TRAY1 SIZE SETUP 8.5X11
TRAY1 SIZE SETUP
XXX SIZE SETUP
XXX:
TRAY1/LCC
Value memorized
DESTINATION SETUP CANADA
DESTINATION SETUP USA
DESTINATION SETUP
Value memorized
*C

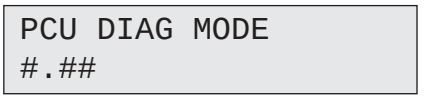

*C
MENU
INF
TRAY DETECT TYPE T2
AB
△, ▽
TRAY DETECT TYPE T2
INCH
OK
BACK/C
TRAY DETECT TYPE T2
△, ▽
TRAY DETECT TYPE XXX
OK
Value memorized
XXX:
B:BPT
T2:TRAY2
T3:TESK1
T4:DESK2
CE MARK SETTING
YES
CE MARK SETTING
NO
CE MARK SETTING
OK
Value memorized
A3 COUNTUP MODE A
DOUBLE
A3 COUNTUP MODE A
SINGLE
COUNTUP MODE SETUP A
COUNTUP MODE SETUP X
SINGLE / DOUBLE
NO(NO COUNTUP) / YES(COUNTUP)
(Blank paper countup mode)
X:
A:total counter
B:maintenance counter
C:deve counter
D:blank paper counter
MNT CYCLE SETUP
40K
MNT CYCLE SETUP
50K
MNT CYCLE SETUP
DEFAULT,40K,50K,80K,100K,120K,FREE
LIFE OVER PRINT MODE
YES
LIFE OVER PRINT MODE
NO
LIFE OVER SETTING
Data (LED) is blinking while
JOGGER ADJUST execution
FINISHER JOGGER ADJ
Executive compleated
ADJUST VALUE
50
ADJUST VALUE
51
ADJUST POSITION
A4
ADJUST POSITION
LETTER
FINISHER JOGGER ADJ.
CONSOLE FIN. SET A
11
CONSOLE FIN. SET A
10
CONSOLE FIN. SET A
CONSOLE FIN. SET X
X:
A:saddle binding position
B:saddle fold position
C:console finisher adjustment(front)
D:console finisher adjustment(rear)
E:staple position(rear)
F:staple position(front)
G:center adjustment(staple)
H:staple pitch
I:center adjustment(punch)
J:punch position
TROUBLE MEMORY MODE
ANY
TROUBLE MEMORY MODE
ONCE
MEMORY MODE SETTING
LAST JAM CODE DISP
PPD1_NMF
LAST JAM CODE DISP
*D


*D
MENU
INF
SYSTEM INFORMATION A
OK
BACK/C
△, ▽
SYSTEM INFORMATION X
X:
A:ROM version
B:machine speed
C:process type
FIRMWARE ********
PUNCH UNIT ********
BOOT ********
CONSOLE FINISHER ********
NIC ********
BUILT IN FIN/MAIL ********
DESK ********
PROCESS DATA DISP A
PROCESS DATA DISP X
X:
A:Process control data
B:Toner control data
DV LIFE ADJ.(DB) **
DRUM ADJ.(VG) **
ENV ADJ.(PTH) **
DRUM ADJ.(LP) **
ENV ADJ.(LP) **
ENV ADJ.(VG1) **
Select "CENTRO PORT"
Data(LED) is blinking.
CENTRO PORT CHECK
Execution completed
CENTRO PORT CHECK OK
OK or STAGE**NG **.1-11
XXX CHECK
XXXX:
•CENTRO PORT CHECK
•NIC CHECK
•HDD R/W CHECK
•HDD R/W CHECK (ALL)
Select "NIC"
NIC CHECK
NIC CHECK OK
OK or NG
Select "HDD R/W"
HDD R/W CHECK
HDD R/W CHECK OK
SELECT IN SIGNAL SET OFF
SELECT IN SIGNAL SET ON
Data(LED) is blinking while Value memorized.
*E (Top Menu)

F. Diag mode

<table>
<tr><th>Menu</th><th>Content</th><th>Initial value</th><th>Set range</th></tr>
<tr><td>PCU DIAG MODE #</td><td>

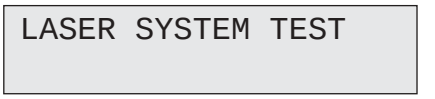
Initial screen of the diag mode



• To terminate the diag mode, turn off and on the power.
• PCU ROM number is displayed in the #.

</td><td></td><td></td></tr>
<tr><td>SENSOR CHECK XX</td><td>

SENSOR Check mode
Used to check the sensors of the machine and the options.
(LCD display)



• Pressing [▲] or [▼] key selects the sensor group for the Sensor check mode.

• Pressing the **OK** key starts the selected Sensor check.
• DATA (LED) blinks during the processing
• Using **MENU** moves to the next sensor data.
• Pressing **BACK/C** key terminates the Sensor check Mode.

(Selectable sensor group)

00 : machine

PPD1	Paper transport sensor 1	DVCRUin	DV unit initial detection
POD1	Paper exit sensor 1	DSWL	Left door open sensor
POD2	Paper exit sensor 2	DSWF	Front door open sensor
POD3	Paper full sensor	ADU	ADU detection
CSS1	Cassette detection sensor	MPF	BPT detection
PED	Paper empty detection	DSW_D	ADU door open sensor
LUD	Cassette upper limit sensor		

01 : Multi purpose tray

MCSET	MPT detection	MCSPD	MPT remaining quantity detection
MCDRS	MPT side door open sensor	MCLUD	MPT upper limit sensor
MCSS4	MPT size detection 4	MCPED	MPT paper empty sensor
MCSS3	MPT size detection 3	MCPPD	MPT transport detection
MCSS2	MPT size detection 2	DPFD1	MPT transport detection
MCSS1	MPT size detection 1	TPFD1	MPT transport detection

02 : ADU/Operation panel

MPLD1	Length detection 1	KEYin	Key input signal
MPLS2	BPT draw out sensor 2	KEY1	Key1
MPLS1	BPT draw out sensor 1	KEY2	Key2
MPED	MPT paper empty detection	KEY3	Key3
AINPD	ADU paper entry detection	KEY4	Key4
APOD	ADU paper exit detection	KEY5	Key5
APPDCP	ADU transport detection 1	KEY6	Key6
APPD2	ADU transport detection 2		

03 : LCC desk (B83LT)

DRS	side door open detection sensor	SPD1	Tray1 remaining quantity detection
TSD	Tray detection sensor	PED2	Tray paper detection sensor 2
LUD2	Tray2 upper limit sensor	PED1	Tray paper detection sensor 1
LUD1	Tray1 upper limit sensor	PFD3	Paper transport sensor 3
SPD2	Tray2 remaining quantity detection	PFD2	Paper transport sensor 2

When the specified sensor is active, " * "mark will appear before the sensor name.

</td><td></td><td></td></tr>
</table>

Menu	Content	Initial value	Set range
SENSOR CHECK XX	**SENSOR Check mode** Used to check the sensors of the machine and the options. (Selectable sensor group) 04 : 3 tray desk (B83TT)		

DRS	Door open detection sensor	PFD3	Paper transport sensor 3
SPD2	Cassette2 remaining quantity detection	CSS14	Cassette1 paper rear edge detection sensor 4
SPD1	Cassette1 remaining quantity detection	CSS13	Cassette1 paper rear edge detection sensor 3
CSS24	Cassette2 paper rear edge detection sensor 4	CSS12	Cassette1 paper rear edge detection sensor 2
CSS23	Cassette2 paper rear edge detection sensor 3	CSS11	Cassette1 paper rear edge detection sensor 1
CSS22	Cassette2 paper rear edge detection sensor 2	LUD1	Cassette1 upper limit sensor
CSS21	Cassette2 paper rear edge detection sensor 1	PED1	Cassette1 paper detection sensor
LUD2	Cassette2 upper limit sensor	PFD2	Paper transport sensor 2
PED2	Cassette2 paper detection sensor		

05 : FINISHER (B83F)

STHP	Stapler HP detection	PSHP	Pusher home position detection
POD	Tray2 exit paper detection	PPD	Paper holding detection
SCID	Staple compiler paper entry detection	DSW2	Staple door open/close detection
PID	Paper entry detection	DSW1	Compiler jam cancel door detection
T2PD	Tray2 paper detection	24VM	24V detection
T2DN	Tray2 lower limit sensor	T1PF	Tray1 paper full detection
T2UP	Tray2 upper limit sensor	STSP	Stapler prepare detection
JRHP	Jogger home position (rear)	STLS	Staple detection
JFHP	Jogger home position (front)	STNC	Cartridge detection
SCID2	Staple compiler paper entry detection 2	DOPD	Relay unit door open detection
STHP2	Staple Revolution HP detection 2	MMLK	Main drive motor lock sensor
STHP1	Staple Revolution HP detection 1	SCPD	Staple compiler paper detection
STUHP	Staple movement home position detection		

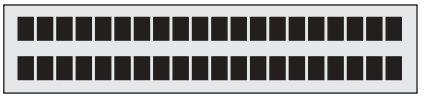
06 : SADDLE STITCH FINISHER (B83SS)

PE	Punch motor encoder	SHPS	Slide home position sensor
PSHPS	Punch side home position	LE	Lift lock sensor
PUC	Punch connection detection	LLLS	Lift lower sensor
PDS	Punch dust sensor	ULS	Lift upper sensor
PDSS4	Punch side sensor 4	FE	Bookbinding clock sensor
PDSS3	Punch side sensor 3	FES	Bookbinding paper sensor
PDSS2	Punch side sensor 2	FRHPS	Bookbinding roller HP sensor
PDSS1	Punch side sensor 1	FHPS	Bookbinding home position sensor
PTS	Punch timing sensor	FPS	Bookbinding position sensor
SSS	Stapler safety switch	SLS	Paper level sensor
JS	Joint switch	BES	Tray paper sensor
FDSW	Front door switch	OBHPS	Exit belt home position sensor
TCS	Upper cover sensor	AS	Alignment tray sensor
FDS	Front door sensor	RJHPS	Alignment home position sensor (rear)
SPS	Self prime sensor	FJHPS	Alignment home position sensor (front)
SUC	Stapler connection detection	ARHPS	Bundle roller home position sensor
SS	Staple sensor	PHPS	Paddle home position sensor
STHPS	Stapler home position sensor	ES	Entry sensor

07 : Mail bin stacker (B83MB)

24VM	24V detection	PFD8	Tray paper exit sensor 8
DD1	Jam cancel door	PFD7	Tray paper exit sensor 7
DOPD	Relay unit door	PFD6	Tray paper exit sensor 6
PPD5	Paper transport sensor 5	PFD5	Tray paper exit sensor 5
PPD4	Paper transport sensor 4	PFD4	Tray paper exit sensor 4
PPD3	Paper transport sensor 3	PFD3	Tray paper exit sensor 3
PPD2	Paper transport sensor 2	PFD2	Tray paper exit sensor 2
PPD1	Paper transport sensor 1	PFD1	Tray paper exit sensor 1
PID	Relay unit paper entry detection		

When the specified sensor is active, " * "mark will appear before the sensor name.

<table>
<tr><th>Menu</th><th>Content</th><th>Initial value</th><th>Set range</th></tr>
<tr><td>LASER SYSTEM TEST</td><td>LASER System Unit test.
Used to check the operation of the laser system.
LASER SYSTEM TEST
• Pressing OK key turns on the polygonal mirror and the laser.
• DATA (LED) blinks during the processing
• When the polygonal mirror does not rotate and the cover is open, ERROR LED lights up.
• When the HSYNC is properly detected, READY lights up.</td><td></td><td></td></tr>
<tr><td>LED/LCD TEST</td><td>LED/LCD display test.
Used to check the lighting test of the operation panel LED and LCD.
LED/LCD TEST
• Pressing OK key lights up the all LEDs.
• Test is terminated 30 seconds after, or can be terminated by pressing BACK/C key.
(LCD display)
 
All LCD dots will be "on" during the operation.</td><td></td><td></td></tr>
<tr><td>HV TEST XXX</td><td>High voltage test.
Used to perform the output test from the high voltage PWB.
(LCD display)
HV TEST XXX
• Pressing [▲] or [▼] key selects the high voltage unit for the testing.
• Pressing OK key can change the selected High voltage value.
• Using [▲] or [▼] key changes the voltage.
• Pressing OK key starts the High voltage output.
• DATA (LED) blinks during the processing.
• After 30 seconds high voltage output is terminated.
• Pressing BACK/C key terminates the High voltage test.
<table>
<tr><th>XXX:</th><th></th><th colspan="3">Initial value</th></tr>
<tr><td>MC/GRID (xx):</td><td>Main charger / Grid bias test</td><td colspan="3">645</td></tr>
<tr><td rowspan="2">THV+(x):</td><td rowspan="2">Transfer High voltage test</td><td>35PPM</td><td>F : 220</td><td>B : 267</td></tr>
<tr><td>45PPM</td><td>F : 267</td><td>B : 310</td></tr>
<tr><td>BS(xx):</td><td>Developer bias test /Volume</td><td colspan="3">485</td></tr>
<tr><td>BS PLUS:</td><td>Developer bias test (cleaning mode)</td><td colspan="3">150</td></tr>
<tr><td rowspan="2">SHV(x):</td><td rowspan="2">separate high voltage test</td><td>35PPM</td><td>F : 120</td><td>B : 120</td></tr>
<tr><td>45PPM</td><td>F : 160</td><td>B : 160</td></tr>
<tr><td>THV-:</td><td>transfer cleaning high voltage test</td><td colspan="3">780</td></tr>
</table>
<table>
<tr><td>X</td><td></td></tr>
<tr><td>F</td><td>Cassette / Manual paper feed</td></tr>
<tr><td>B</td><td>ADU Paper feed</td></tr>
</table>
<table>
<tr><td>XX</td><td></td></tr>
<tr><td>AE</td><td>AE mode</td></tr>
<tr><td>CHR</td><td>Text mode</td></tr>
<tr><td>MIX</td><td>Text/Photo mode</td></tr>
<tr><td>PHT</td><td>Photo mode</td></tr>
<tr><td>PRT</td><td>Printer mode</td></tr>
</table>
</td><td>Refer to the text.</td><td></td></tr>
</table>

Menu	Content	Initial value	Set range
LOAD TEST XX	**Load test mode.** Used to perform the operation test of the motors and clutches of the machine and the options. (LCD display) LOAD TEST XX • Pressing [▲] or [▼] key selects the LOAD group for the Load Test mode. • Press the **OK** key to determine the load operation group. • Press **MENU** key to select the load to be tested. • Pressing **OK** key starts the selected Load Test. • DATA (LED) blinks during the processing. • Pressing **BACK/C** key terminates the Load Test Mode. (Selectable Loads Group)		

00 : machine

HLPR	Heater power relay	BS_PHT	Developing bias voltage (photo mode)
DCPR	DC power relay	BS_MIX	Developing bias voltage (character/photo mode)
MM	Main motor	BS_CHR	Developing bias voltage (character mode)
DM	Drum motor	BS_AE	Developing bias voltage (auto mode)
DSB_FW	Stepping motor forward rotation	FMHi	Fun motor (high speed)
DSB_RV	Stepping motor reverse rotation	FMLo	Fun motor (low speed)
TM	Toner motor	PSPS	Separation pawl operation solenoid
CPFC	Paper feed clutch	VG_FAX	Main charger grid voltage (FAX mode)
RRC	Resist roller clutch	VG_PRT	Main charger grid voltage (printer mode)
TRC	Transport clutch	VG_PHT	Main charger grid voltage (photo mode)
FGS_FIN	Finisher gate solenoid	VG_MIX	Main charger grid voltage (character/photo mode)
TRC_DSK	DESK Transport clutch	VG_CHR	Main charger grid voltage (character mode)
LUM	TRAY1 Lift up motor	VG_AE	Main charger grid voltage (auto mode)
HL1	Heater lamp (lower)	THV+_BACK	Transfer charger output voltage (back mode)
HL2	Heater lamp (upper)	THV+FRONT	Transfer charger output voltage (front mode)
BS_PLUS	Developing bias voltage (cleaning mode)	THV-	Transfer roller output voltage (DC)
BS_FAX	Developing bias voltage (FAX mode)	SHV_BACK	Transfer roller output voltage (AC) (back mode)
BS_PRT	Developing bias voltage (printer mode)	SHV_FRONT	Transfer roller output voltage (AC) (front mode)

01 : Multi purpose tray

MCM	MP drive motor	MCFCL	MP tray transport clutch
MCPCL	MP tray paper feed clutch	MCLUM	MP tray lift up motor

02 : Manual feed tray

MPFS	Manual paper solenoid	MSS	Manual paper entry gate solenoid
MPFC	Manual paper clutch		

03 : ADU

ADMEN1	ADU motor 1	DGS	ADU entry gate solenoid
ADMEN2	ADU motor 2		

<table>
<tr><th>Menu</th><th>Content</th><th>Initial value</th><th>Set range</th></tr>
<tr><td>LOAD TEST XX</td><td>
Load test mode.
Used to perform the operation test of the motors and clutches of the machine and the options.

(Selectable Loads Grope)
04 : LCC desk (B83LT)
<table>
<tr><td>TLUM2</td><td>LCC lift up motor 2</td><td>TPCL2</td><td>LCC paper feed clutch 2</td></tr>
<tr><td>TLUM1</td><td>LCC lift up motor 1</td><td>TPCL1</td><td>LCC paper feed clutch 1</td></tr>
<tr><td>L_MCLM</td><td>LCC multi lift up motor</td><td>L_MCPCL</td><td>LCC multi paper feed clutch</td></tr>
<tr><td>TPFCL</td><td>LCC transport clutch</td><td>TMM</td><td>LCC transport motor</td></tr>
</table>
05 : 3 tray desk (B83TT)
<table>
<tr><td>DLUM2</td><td>DESK lift up motor 2</td><td>DPCL2</td><td>DESK paper feed clutch 2</td></tr>
<tr><td>DLUM1</td><td>DESK lift up motor 1</td><td>DPCL1</td><td>DESK paper feed clutch 1</td></tr>
<tr><td>D_MCLM</td><td>DESK multi lift up motor</td><td>D_MPCL</td><td>DESK multi paper feed clutch</td></tr>
<tr><td>DPFCL</td><td>DESK transport clutch</td><td>DMM</td><td>DESK transport motor</td></tr>
</table>
06 : FINISHER (B83F)
<table>
<tr><td>T2S</td><td>TRAY2 solenoid</td><td>STUM</td><td>Staple movement motor</td></tr>
<tr><td>T2OM</td><td>Paper exit motor</td><td>MM</td><td>Main drive motor</td></tr>
<tr><td>SPS</td><td>Stopper solenoid</td><td>EVM</td><td>Elevator motor</td></tr>
<tr><td>SCRS</td><td>Roller pressure Release solenoid</td><td>STM</td><td>Staple motor</td></tr>
<tr><td>PPS</td><td>Rear edge holding solenoid</td><td>JRM</td><td>Jogger motor (rear)</td></tr>
<tr><td>SCGS</td><td>Compiler gate solenoid</td><td>JFM</td><td>Jogger motor (front)</td></tr>
<tr><td>STTM</td><td>Staple revolution motor</td><td>PSM</td><td>Pusher motor</td></tr>
</table>
07 : SADDLE STITCH FINISHER (B83SS)
<table>
<tr><td>FFC</td><td>Fold clutch</td><td>FRJM</td><td>Alignment motor (rear)</td></tr>
<tr><td>FPSM</td><td>Punch side motor</td><td>FFJM</td><td>Alignment motor (front)</td></tr>
<tr><td>FPNM</td><td>Punch motor</td><td>FAM</td><td>Bundle exit motor</td></tr>
<tr><td>FLM</td><td>Shift motor</td><td>FPM</td><td>Paddle motor</td></tr>
<tr><td>FFSM</td><td>Stapler motor</td><td>FFM</td><td>Transport motor</td></tr>
<tr><td>FSM</td><td>Slide motor</td><td></td><td></td></tr>
</table>
08 : Mail bin stacker (B83MB)
<table>
<tr><td>MMM</td><td>Main drive motor</td><td>MGSOL4</td><td>Gate solenoid 4</td></tr>
<tr><td>MGSOL1</td><td>Gate solenoid 1</td><td>MGSOL5</td><td>Gate solenoid 5</td></tr>
<tr><td>MGSOL2</td><td>Gate solenoid 2</td><td>MGSOL6</td><td>Gate solenoid 6</td></tr>
<tr><td>MGSOL3</td><td>Gate solenoid 3</td><td>MGSOL7</td><td>Gate solenoid 7</td></tr>
</table>
</td><td></td><td></td></tr>
<tr><td>AUTOMATIC DV ADJ.</td><td>
Automatic DV adjustment.

Note: Before execution of this mode, be sure to clear the developing counter and the developing motor rpm.

Used to perform the auto developer adjustment.
(LCD display)
<pre>AUTOMATIC DV ADJ.</pre>
• Pressing the OK key starts the automatic DV adjustment.
• Toner control sensor value is displayed in the LCD during the operation.
• DATA (LED) blinks during the processing
• When adjustment error occurred, ERROR LED lights up.
• Adjustment value is memorized after 2 minutes DV stirring.
• Pressing BACK/C key terminates the adjustment mode.
</td><td>118</td><td></td></tr>
</table>

<table>
<tr><th>Menu</th><th>Content</th><th>Initial value</th><th>Set range</th></tr>
<tr><td>LASER OUTPUT SETUP (XXX)</td><td>

Laser output setup.
Used to set the laser output value.

Note: Do not change the factory setup on the laser output.

(LCD display)

LASER POWER SET(XX)

- Pressing [▲] or [▼] key selects the LASER OUTPUT SETUP mode.
- Pressing **OK** key starts the laser output setup.
- Using [▲] or [▼] key changes the value.
- Pressing **OK** key memorizes the value.
- Pressing **BACK/C** key terminates the setting.

XX		45PPM
AE	AE mode	104
CHR	Text mode	104
MIX	Text/Photo mode	104
PHT	Photo mode	104
PRT	Printer mode	104
FAX	Fax mode	104

</td><td>Refer to the text.</td><td></td></tr>
<tr><td>FUSER control temperature setting X</td><td>

Fuser control Temperature setting.
Used to set the fusing temperature.
(LCD display)

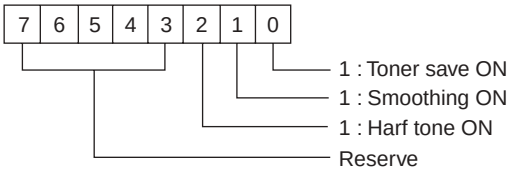
FUSER TEMP.SETTING X

- Using [▲] or [▼] key select the thermistor.
- Pressing **OK** key starts the setting.
- Using [▲] or [▼] key changes the value.
- Pressing **OK** key memorizes the value.
- Pressing **BACK/C** key terminates the setting.

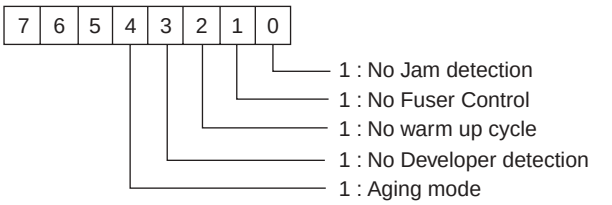
X:		Initial value
A:	control temperature FUSER 1	190
B:	control temperature FUSER 2	190
C:	preheat temperature FUSER 1	150
D:	preheat temperature FUSER 2	150
E:	Bypass tray control temperature FUSER 1	200
F:	Bypass tray control temperature FUSER 2	200

</td><td>Refer to the text.</td><td></td></tr>
</table>

<table>
<tr><th>Menu</th><th>Content</th><th>Initial value</th><th>Set range</th></tr>
<tr><td>SLOW UP SETTING</td><td>
Process control value setting.
Used to set the process control value.
SLOW UP SETTING X
• Using [▲] or [▼] key select the process control value.
• Pressing OK key starts the setting.
• Using [▲] or [▼] key changes the value.
• Pressing OK key memorize the value.
• Pressing BACK/C key terminates the setting.
<table>
<tr><td>X:</td><td></td><td>Initial value</td></tr>
<tr><td>A:</td><td>slow up adjust wait time</td><td>90</td></tr>
<tr><td>B:</td><td>Vb1-1</td><td>50</td></tr>
<tr><td>C:</td><td>Vb1-2</td><td>50</td></tr>
<tr><td>D:</td><td>Vb1-3</td><td>50</td></tr>
<tr><td>E:</td><td>Vb2-1</td><td>15</td></tr>
<tr><td>F:</td><td>Vb2-2</td><td>15</td></tr>
<tr><td>G:</td><td>Vb2-3</td><td>15</td></tr>
</table>
</td><td>Refer to the text.</td><td></td></tr>
<tr><td>SIZE adjustment X</td><td>
SIZE adjustment
Used to perform the size detection adjustment of the optional universal tray and the manual feed tray.
(LCD display)
SIZE ADJUSTMENT X
Using [▲] or [▼] key select the tray.
Pressing OK key enters the adjustment mode.
(Selectable modes)
<table>
<tr><td>X:</td><td></td></tr>
<tr><td>A:</td><td>Multi purpose tray adjustment</td></tr>
<tr><td>B:</td><td>Bypass tray setting</td></tr>
<tr><td>C:</td><td>Bypass tray adjustment</td></tr>
</table>
Select A
1. Widen the guide to the MAXIMUM position.
• Pressing OK key starts the adjustment.
2.Narrow the guide to the MINIMUM position.
• Pressing OK key starts the adjustment.
• Pressing BACK/C key terminates the setting.
Select B
• Pressing OK key displays the adjustment value.
• Using [▲] and [▼] keys changes the value.
• Pressing OK key sets the changes of the value, and moves to the next mode.
• Pressing BACK/C key terminates the setting.
<table>
<tr><td>Max : 66</td></tr>
<tr><td>P1 : 447</td></tr>
<tr><td>P2 : 704</td></tr>
<tr><td>MIN : 916</td></tr>
</table>
Select C
1. Widen the guide to the MAXIMUM position.
• Pressing OK key starts the adjustment.
2.Guide to the P1 paper guide position.
• Pressing OK key starts the adjustment.
3.Guide to the P2 paper guide position.
• Pressing OK key starts the adjustment.
4.Narrow the guide to the MINIMUM position.
• Pressing OK key starts the adjustment.
• Pressing BACK/C key terminates the setting.
</td><td>Refer to the text.</td><td></td></tr>
</table>

<table>
<tr><th>Menu</th><th>Content</th><th>Initial value</th><th>Set range</th></tr>
<tr><td>ICU PRINT MODE SET</td><td>
ICU print mode setting.
Used to set the print patterns which are to be used in “TEST PRINT”. The set patterns can be printed with "Print Pattern "99".
(LCD display)
<pre>ICU PRINT MODE SET</pre>
• Press OK key to start the setup mode.
• Press MENU key to shift to the next item.
• Pressing MENU moves to the next item
• Using [▲] and [▼] keys changes the mode.
• Pressing BACK/C key releases the print mode set.
• Pressing OK key starts the print mode set.
• DATA (LED) blinks during the print mode set execution.
<table>
<tr><td></td><td>Initial value</td></tr>
<tr><td>ICU PRINT PATTERN : Test print pattern (0~99)</td><td>87</td></tr>
<tr><td>ICU PRINT DENSITY : Print density (0~255)</td><td>128</td></tr>
<tr><td>ICU PRINT MODE : Mode setting (0~255)</td><td>0</td></tr>
</table>


<table>
<tr><th>X</th><th>Mode</th></tr>
<tr><td>0</td><td>ALL OFF</td></tr>
<tr><td>1</td><td>Toner save ON</td></tr>
<tr><td>2</td><td>Smoothing ON</td></tr>
<tr><td>4</td><td>Harf tone ON</td></tr>
</table>
</td><td></td><td></td></tr>
</table>

Menu	Content	Initial value	Set range
TEST PRINT XX	**Printing Test** Used to perform self-printing under the set conditions, and to adjust and check the engine set value. TEST PRINT 00 Pressing [▲] or [▼] key selects the mode. XX (select the number changed to decimal.)  Aging mode:		

Set value XX	Mode	Set value XX	Mode
0		16	Aging mode
1	No jam detection	17	Aging mode + No jam detection
2	No fusing control	18	Aging mode + No fusing control
3	No fusing control + No jam detection	19	Aging mode + No fusing control + No jam detection
4	No warm-up cycle	20	Aging mode + No warm-up cycle
5	No warm-up cycle + No jam detection	21	Aging mode + No warm-up cycle No jam detection
6	No warm-up cycle + No fusing control	22	Aging mode + No warm-up cycle + No fusing detection
7	No warm-up cycle + No fusing control + No jam detection	23	Aging mode + No warm-up cycle + No fusing detection + No jam detection
8	No DV detection	24	Aging mode + No DV detection
9	No DV detection + No jam detection	25	Aging mode + No DV detection + No jam detection
10	No DV detection + No fusing control	26	Aging mode + No DV detection + No fusing control
11	No DV detection + No fusing control + No jam detection	27	Aging mode + No DV detection + No fusing control + No jam detection
12	No DV detection + No warm-up cycle	28	Aging mode + No DV detection + No warm-up cycle
13	No DV detection + No warm-up cycle + No jam detection	29	Aging mode + No DV detection + No warm-up cycle + No jam detection
14	No DV detection + No warm-up cycle + No fusing control	30	Aging mode + No DV detection + No warm-up cycle + No fusing control
15	No DV detection + No warm-up cycle + No fusing control + No jam detection	31	Aging mode + No DV detection + No warm-up cycle + No fusing control + No jam detection

example: If you need "Aging mode" only, select "16".

If you need "Aging mode" and "No jam detection", select "17".

- Pressing **OK** key displays the setting menu for printing test.
- Pressing **MENU** moves to the next item
- Using [▲] and [▼] keys changes the mode.
- Pressing **BACK/C** key releases the printing menu mode.
- Pressing **OK** starts the printing test.
- DATA (LED) blinks during the TEST PRINT execution.

Menu	Content	Initial value	Set range
TEST PRINT XX	**Printing Test** Used to perform self-printing under the set conditions, and to adjust and check the engine set value. Selection Menu:	Refer to the text.	

LCD display	Content	Set value	Initial value
MULTI SETTING	Continuous print quantity setup	001 - 999	
PRINT PATTERN	Test print pattern	1 - 99 (94 - 97 for production only)	
		1 : Off center pattern	
		40 : White copy	
		64 : All Black copy	
		70 : Scale pattern	
		71 : Grid pattern	
		75 : ID: BG pattern	
		87 : Test image pattern	
		98 : List of the setup values	
		99 : Patterns set in ICU Print Mode set.	
CASSETTE	Cassette selection	BPT: Manual paper feed tray TRAY1: No. 1 tray (STD) TRAY2: No. 2 tray DESK1: No. 3 tray DESK2: No. 4 tray LCC: LCC tray	
DUPLEX	Duplex setup	NO/USE	NO
OUTPUT	Paper exit, finishing method setup	STD: Standard paper exit tray JSP: FIN1: Finisher Top FIN2: Finisher Second STAPLE (F): Staple front STAPLE (R): Staple rear STAPLE (2POS): Staple 2 positions SADLE: Saddle OFFSET: Offset PUNCH: Punch MAIL_TEST BIN1: No. 1 ~ bin-BIN8: No.8 bin	STD
LEAD EDGE	Lead edge	0 - 99 (mm)	50
LEAD EDGE VOID	Lead edge void setup	0 - 99 (mm)	35
TAIL EDGE VOID	Rear edge void setup	0 - 99 (mm)	35
SIDE EDGE VOID	Side edge void setup	0 - 99 (mm)	35
T1 PAPER BUCKLE	Tray 1 resist quantity setup	0 - 99	45PPM: 60
T2 PAPER BUCKLE	Tray 2 resist quantity setup	0 - 99	45PPM: 50
DESK PAPER BUCKLE	Desk resist quantity setup	0 - 99	45PPM: 50
BPT PAPER BUCKLE	Manual feed resist quantity adjustment	0 - 99	45PPM: 55
ADU PAPER BUCKLE	Auto duplex resist quantity setup	0 - 99	45PPM: 50
BPT OFF CENTER ADJ	Manual feed tray off-center adjustment	0 - 99	50
T1 OFF CENTER ADJ	Tray 1 of-center adjustment	0 - 99	
T2 OFF CENTER ADJ	A3 universal tray off-center adjustment	0 - 99	
T3 OFF CENTER ADJ	Desk 1 tray/LCC1 off-center adjustment	0 - 99	
T4 OFF CENTER ADJ	Desk 2 tray/LCC2 off-center adjustment	0 - 99	
ADU OFF CENTER ADJ	Duplex off-center adjustment value setup	0 - 99	

<table>
<tr><th>Menu</th><th>Content</th><th>Initial value</th><th>Set range</th></tr>
<tr><td>WARM UP TIME DISPLAY</td><td>Warm up time display mode.
Used to display the warm-up time.
(LCD display)
WARM UP TIME DISPLAY
• Pressing OK key enter the Warm up time display mode.
• Pressing BACK/C key terminates the Warm up time display mode.</td><td></td><td></td></tr>
<tr><td>COUNTER DATA DISPLAY</td><td>Counter data display.
Used to display each counter value.
(LCD display)
COUNTER DISPLAY
• Pressing the [▲] or [▼] key selects the counter group for the counter display mode.
• Pressing OK key displays the counter value.
• Using MENU moves to the next item.
• Pressing BACK/C key terminates the Counter Display Mode.

COUNTER DISP XXXX:
<table>
<tr><td>COUNTER DISP.</td><td></td></tr>
<tr><td>TOTAL</td><td>Total print quantity</td></tr>
<tr><td>DRUM</td><td>Drum counter</td></tr>
<tr><td>TONER</td><td>Toner counter</td></tr>
<tr><td>DEVE</td><td>Developing counter</td></tr>
<tr><td>MAINTE</td><td>Maintenance counter</td></tr>
<tr><td>TOTAL OUTPUT</td><td>Copy counter
(Effective paper counter)</td></tr>
<tr><td>RIGHT-OUTPUT</td><td>Right paper exit counter</td></tr>
<tr><td>PRINTER</td><td>Printer counter</td></tr>
<tr><td>OTHERS</td><td>Others</td></tr>
<tr><td colspan="2">STAPLE COUTNER DISP.</td></tr>
<tr><td>STAPLE</td><td>Staple counter</td></tr>
<tr><td>PUNCH</td><td>Punch counter</td></tr>
<tr><td colspan="2">FEED COUNTER DISP.</td></tr>
<tr><td>TRAY1</td><td>Paper feed tray 1 counter</td></tr>
<tr><td>TRAY2</td><td>Paper feed tray 2 counter</td></tr>
<tr><td>LCC1/TRAY3</td><td>Paper feed tray 3 counter</td></tr>
<tr><td>LCC2/TRAY4</td><td>LCC2
or paper feed tray 4 counter</td></tr>
<tr><td>BPT</td><td>Manual paper feed counter</td></tr>
<tr><td>ADJ</td><td>Duplex counter</td></tr>
</table>
<table>
<tr><td>PROCESS COUNTER DISP.</td><td colspan="2"></td></tr>
<tr><td>DRUM</td><td colspan="2">Drum counter</td></tr>
<tr><td>TONER</td><td colspan="2">Toner counter</td></tr>
<tr><td>DEVE</td><td colspan="2">Developing counter</td></tr>
<tr><td>MAINTE</td><td colspan="2">Maintenance counter</td></tr>
<tr><td>DRUM MOTOR TIME</td><td colspan="2">Drum motor drive time</td></tr>
<tr><td>TONER MOTOR TIME</td><td colspan="2">Toner supply time</td></tr>
<tr><td>DV MOTOR TIME</td><td colspan="2">Developing motor drive time</td></tr>
<tr><td>PROCESS WAY</td><td colspan="2">Process system</td></tr>
<tr><td></td><td>A</td><td>SRU3 : BTA-A</td></tr>
<tr><td></td><td>B</td><td>SRU3 : BTA-B</td></tr>
<tr><td></td><td>C</td><td>SRU3 : BTA-B</td></tr>
<tr><td></td><td>D</td><td>SRU3 : BTA-B</td></tr>
<tr><td></td><td>E</td><td>SRU3 : BTA-B</td></tr>
<tr><td></td><td>F</td><td>SRU3 : BTA-B</td></tr>
<tr><td></td><td>G</td><td>SRU3 : BTA-B</td></tr>
<tr><td></td><td>H</td><td>SRU3 : BTA-B</td></tr>
<tr><td></td><td>I</td><td>SRU3 : BTA-B</td></tr>
<tr><td></td><td>J</td><td>SRU3 : BTA-B</td></tr>
<tr><td></td><td>K</td><td>SRU3 : BTA-B</td></tr>
<tr><td>DESTINATION</td><td colspan="2">Destination</td></tr>
<tr><td></td><td>1</td><td>SRU-OTHER</td></tr>
<tr><td></td><td>2</td><td>SRU-JAPAN</td></tr>
<tr><td></td><td>3</td><td>CRU</td></tr>
<tr><td colspan="3">JAM/TBL COUNTER DISP</td></tr>
<tr><td>JAM</td><td colspan="2">Jam counter</td></tr>
<tr><td>TROUBLE</td><td colspan="2">Trouble counter</td></tr>
</table>
</td><td></td><td></td></tr>
</table>

<table>
<tr><th>Menu</th><th>Content</th><th>Initial value</th><th>Set range</th></tr>
<tr><td>COUNTER DATA CLEAR</td><td>

Counter data clear.
Used to clear each counter value.
(LCD display)
XXXXX COUNTER CLEAR
• Pressing the [▲] or [▼] key selects the counter group for the counter clear mode.
• Pressing **OK** key displays the counter clear group.
• Using **MENU** moves to the next mode
• Pressing the [▲] or [▼] keys changes the YES or NO.
• Pressing **OK** key starts the counter data clear mode.
• Pressing **BACK/C** key terminates the counter data clear mode.

COUNTER CLEAR:

FEED COUNTER CLEAR		DEVE COUNTER CLEAR	
TRAY1	Paper feed tray 1 counter	DEVE	Developing counter
TRAY2	Paper feed tray 2 counter	DRUM COUNTER CLEAR	
LCC1/TRAY3	Paper feed tray 3 counter	DRUM	Drum counter
LCC1/TRAY4	LCC1 or paper ray tray 4 counter	TONER COUNTER CLEAR	
BPT	Manual paper feed counter	TONER	Toner counter
ADU	Duplex counter	OUTPUT COUNTER CLEAR	
STAPLE COUNTER CLEAR		TOTAL OUTPUT	Copy counter (Effective paper counter)
STAPLE	Staple counter	PRINTER	Printer counter
PUNCH	Punch counter	OTHERS	Others
MNT COUNTER CLEAR		TIMER DATA CLEAR	
MENTENANCE	Maintenance counter	DRUM ROTATION	Drum motor RPM
		DEVE ROTATION	Developing motor RPM
		JAM/TBL COUNTER CL	
		JAM	Jam counter
		TROUBLE	Trouble counter

</td><td></td><td></td></tr>
<tr><td>TROUBLE CANCEL X</td><td>

Trouble cancel
Used to cancel a trouble code.
(LCD display)
TROUBLE CANCEL X
• Pressing the [▲] or [▼] key selects the trouble cancel mode.
• Pressing **OK** key start the trouble cancel mode.
• Using [▲] and [▼] keys changes the YES or NO.
• Pressing **OK** key starts the trouble cancel mode.
• Pressing **BACK/C** key terminates the trouble cancel mode.

X:	
E-TBL	Cancel troubles except for U2 in the engine mode.
E-U2	Cancel U2 trouble in the engine mode.
C-TBL	Cancel trouble in the controller.

</td><td></td><td></td></tr>
</table>

<table>
<tr><th>Menu</th><th>Content</th><th>Initial value</th><th>Set range</th></tr>
<tr><td>XXX SIZE SETUP</td><td>Tray size setting.
Used to set the paper size on No. 1 paper feed tray and the LCC tray.
(LCD display)
XXX SIZE SETUP
• Pressing the [▲] or [▼] key selects the tray.
• Pressing OK key displays the tray size.
• Using [▲] and [▼] keys changes the tray size.
• Pressing OK key sets the change of the tray size.
• Pressing BACK/C key terminates the setting.
<table><tr><td>XXX:</td><td></td></tr><tr><td>TRAY1</td><td>TRAY1</td></tr><tr><td>LCC</td><td>LCC</td></tr></table></td><td>inch
8.5"x11"
AB
A4</td><td>Tray1
A4
B5
8.5"x11"
LCC
A4
8.5"x11"</td></tr>
<tr><td>DESTINATION SETUP</td><td>Destination setup.
Used to perform the destination setup.
(LCD display)
DESTINATION SETUP
• Pressing the [▲] or [▼] key selects the destination.
• Pressing OK key displays the destination.
• Using [▲] and [▼] keys changes the destination.
• Pressing OK key sets the change of the destination.
• Pressing BACK/C key terminates the setting.</td><td></td><td></td></tr>
<tr><td>TRAY DETECT
TYPE xx</td><td>Tray detect type setting.
Used to select between the AB series and the inch series for size detection of each paper feed tray.
(LCD display)
TRAY DETECT TYPE XXX
• Pressing the [▲] or [▼] key selects the tray.
• Pressing OK key displays the destination.
• Using [▲] and [▼] keys changes the destination.
• Pressing OK key sets the change of the destination.
• Pressing BACK/C key terminates the setting.
<table><tr><td>XX:</td><td></td></tr><tr><td>B:</td><td>BPT</td></tr><tr><td>T2:</td><td>Multi purpose tray</td></tr><tr><td>T3:</td><td>Desk tray1</td></tr><tr><td>T4:</td><td>Desk tray2</td></tr></table></td><td></td><td>AB
INCH</td></tr>
<tr><td>CE MARK SETTING</td><td>CE mark setting.
Used to set the operation mode conforming to the CE mark.
(LCD display)
CE MARK SETTING
• Pressing OK key start the setting.
• Using [▲] and [▼] keys changes the YES or NO.
• Pressing OK key memorize the CE mark mode.
• Pressing BACK/C key terminates the setting.</td><td>Yes (Europe)
No (Others)</td><td>YES
NO</td></tr>
</table>

<table>
<tr><th>Menu</th><th>Content</th><th>Initial value</th><th>Set range</th></tr>
<tr><td>COUNTUP MODE SETUP</td><td>Countup mode setup
1.Used to set the count-up mode of A3 (11 x 17) paper.
2.Used to set whether to perform count-up of blank paper.
(LCD display)
COUNTUP MODE SETUP X
• Pressing the [▲] or [▼] key selects the counter mode.
• Pressing OK key starts the setting.
• Using [▲] and [▼] keys changes the countup number.
• Pressing OK key memorizes the countup number.
• Pressing BACK/C key terminates the setting.
<table><tr><td>X:</td><td></td></tr><tr><td>A:</td><td>total counter A3(11X17) countup mode.</td></tr><tr><td>B:</td><td>mainte counter A3(11X17) countup mode.</td></tr><tr><td>C:</td><td>deve counter A3(11X17) countup mode.</td></tr><tr><td>D:</td><td>blank paper countup mode.</td></tr></table></td><td>A ~ C
Double

D
No (Japan, AUS)
Yes (Others)</td><td>A ~ C
Single
Double

D
No (No-Count Up)
Yes (Count Up)</td></tr>
<tr><td>MNT CYCLE SETUP</td><td>Maintenance cycle setup.
Sets the maintenance cycle.
Caution: This function is not include.
(LCD display)
MNT CYCLE SETUP
• Pressing OK key displays the maintenance cycle.
• Using [▲] and [▼] keys changes the maintenance cycle.
• Pressing OK key sets the change of the maintenance cycle.
• Pressing BACK/C key terminates the setting.</td><td>Default</td><td>Default
40K
50K
80K
100K
120K
FREE</td></tr>
<tr><td>LIFE OVER SETTING</td><td>Life over setting.
Set to stop printing when the developer life is over.
(LCD display)
LIFE OVER SETTING
• Pressing OK key start the setting.
• Using [▲] and [▼] keys changes the YES or NO.
• Pressing OK key memorizes the life over mode.
• Pressing BACK/C key terminates the setting.</td><td>Yes</td><td>YES
NO</td></tr>
</table>

<table>
<tr><th>Menu</th><th>Content</th><th>Initial value</th><th>Set range</th></tr>
<tr><td>FINISHER JOGGER ADJ.</td><td>Finisher jogger adjustment.
Adjusts the finisher (B83F) jogger.
For details, refer to each Service Manual of the B83F.
(LCD display)
FINISHER JOGGER ADJ.
• Press the OK key to display the finisher jogger adjustment value.
• Using [▲] or [▼] key changes the value.
• Press the MENU key to display the adjustment value.
• Press [▲] or [▼] key to change the value.
• Pressing OK key starts the finisher jogger adjustment.
• DATA (LED) blinks during the processing.
• Pressing BACK/C key terminates the finisher jogger adjustment.</td><td>50</td><td></td></tr>
<tr><td>CONSOLE FIN. SET X</td><td>Saddle stitch finisher setting.
Performs the adjustments of the Saddle stitch finisher (B83SS).
For details, refer to the Service Manual of the B83SS.
(LCD display)
CONSOLE FIN. SET X
• Pressing the [▲] or [▼] key select the saddle stitch finisher mode.
• Pressing OK key starts the setting.
• Using [▲] and [▼] keys changes the value.
• Pressing OK key memorizes the value.
• Pressing BACK/C key terminates the setting.
<table><tr><td>X:</td><td></td><td>Initial value</td></tr><tr><td>A:</td><td>saddle binding position</td><td>200</td></tr><tr><td>B:</td><td>saddle fold position</td><td>200</td></tr><tr><td>C:</td><td>saddle stitch finisher adjustment (front)</td><td>10</td></tr><tr><td>D:</td><td>saddle stitch finisher adjustment (rear)</td><td>10</td></tr><tr><td>E:</td><td>staple position (rear)</td><td>100</td></tr><tr><td>F:</td><td>staple position (front)</td><td>100</td></tr><tr><td>G:</td><td>center adjustment (staple)</td><td>100</td></tr><tr><td>H:</td><td>staple pitch</td><td>50</td></tr><tr><td>I:</td><td>center adjustment (punch)</td><td>50</td></tr><tr><td>J:</td><td>punch position</td><td>50</td></tr></table></td><td>Refer to the text.</td><td></td></tr>
<tr><td>TROUBLE MEM. MODE SET</td><td>Trouble memory mode setting.
Sets the storing method of data into memory in case of a trouble.
(LCD display)
MEMORY MODE SETTING
• Pressing OK key starts the setting.
• Using [▲] and [▼] keys changes the value.
• Pressing OK key memorizes the value.
• Pressing BACK/C key terminates the setting.
<table><tr><td>Set value</td><td>Operation</td></tr><tr><td>ONCE</td><td>The same trouble as the previous one is not stored.</td></tr><tr><td>ANY</td><td>Any trouble is stored unconditionally.</td></tr></table></td><td>Once</td><td><table><tr><td>ONCE</td></tr><tr><td>ANY</td></tr></table></td></tr>
</table>

Menu	Content	Initial value	Set range
LAST JAM CODE DISP	**Last jam code display.** Used to display the final jam history. (LCD display) LAST JAM CODE DISP • Pressing **OK** key enters the last jam code display mode. • Pressing **BACK/C** key terminates the last jam code display mode.		

NONE	No jam. Also used when canceling a jam.	MPFD_ND1	MPFD not-reaching jam (Desk tray 1 paper)
NONE	No jam. Also used when canceling a jam.	MPFD_ND2	MPFD not-reaching jam (Desk tray 2 paper)
TRAY2	Tray 2 paper feed jam (MPFD not-reaching)	MPFD_NTD	MPFD not-reaching jam (Tandem desk tray paper)
MPFD_ST2	MPFD remaining jam (Machine tray 2 paper)	MPFD_SD2	MPFD remaining jam (Desk tray 2 paper)
MPFD_SD1	MPFD remaining jam (Desk tray 1 paper)	MPFD_STD	MPFD remaining ham (Tandem desk paper)

Menu	Content	Initial value	Set range
LAST JAM CODE DISP	**Last jam code display.** Used to display the final jam history.		

PPD1_NMF	PPD1 not-reaching jam (Manual feed tray paper)	PPD1_ND2	PPD1 not-reaching jam (Desk tray 2 paper)
TRAY1	Tray 1 paper feed jam (PPD1 not-reaching)	PPD1_NTD	PPD1 not-reaching jam (Tandem desk paper)
PPD1_NT2	PPD1 not-reaching jam (Machine tray 2 paper)	PPD1_NAD	PPD1 not-reaching jam (ADU re-feed paper)
PPD1_ND1	PPD1 not-reaching jam (Desk tray 1 paper)		
PPD1_SMF	PPD1 remaining jam (Manual feed tray paper)	PPD1_SD2	PPD1 remaining jam (Desk tray 2 paper)
PPD1_ST1	PPD1 remaining jam (Machine tray 1 paper)	PPD1_STD	PPD1 remaining jam (Tandem desk paper)
PPD1_ST2	PPD1 remaining jam (Machine tray 2 paper)	PPD1_SAD	PPD1 remaining jam (ADU re-feed paper)
PPD1_SD1	PPD1 remaining jam (Desk tray 1 paper)		
PPD1_PRI	PPD1 jam (Image ready complete is not sent from the ICU.)	POD2_N	POD2 not-reaching jam
POD1_N	POD1 not-reaching jam	POD2_SR	POD2 remaining jam (When discharging paper to the right side of the machine.)
POD1_S	POD1 remaining jam	POD2_SL	POD2 remaining jam (When discharging paper to the left side of the machine.)
AINPD_N	ADU paper entry sensor not-reaching jam	APPD1_S	ADU transport sensor 1 remaining
AINPD_S	ADU paper entry sensor remaining jam	APPD2_N	ADU transport sensor 2 not-reaching jam (During ADU transport)
APOD_N	ADU paper exit sensor not-reaching jam	APPD2_S	ADU transport sensor 2 remaining jam (During ADU transport)
APOD_S	ADU paper exit sensor remaining jam	BPT	Manual feed tray paper feed jam (APPD2 not-reaching)
APPD1_N	ADU transport sensor 1 not-reaching jam	APPD2 _SMF	ADU transport sensor 2 remaining jam (Manual paper feed tray paper)
DESK2	Desk tray 2 paper feed jam (DPFD3 not-reaching)	DPFD2_ND2	DPFD2 not-reaching jam (Desk tray 2 paper)
DPFD3_SD2	DPFD3 remaining jam (Desk tray 2 paper)	DPFD2_SD1	DPFD2 remaining jam (Desk tray 1 paper)
DESK1	Desk tray 1 paper feed jam (DPFD2 not-reaching)	DPFD2_SD2	DPFD2 remaining jam (Desk tray 2 paper)
TTRAY2	Tandem tray 2 paper feed jam (TPFD3 not-reaching)	TPFD2 _NTD2	TPFD2 not-reaching jam (Tandem tray 2 paper)
TPFD3 _STD2	TPFD3 remaining jam (Tandem tray 2 paper)	TPFD2 _STD1	TPFD2 remaining jam (Tandem tray 1 paper)
TTRAY1	Tandem tray 1 paper feed jam (TPFD2 not-reaching)	TPFD2 _STD2	TPFD2 remaining jam (Tandem tray 2 paper)
FPID_N	Build-in finisher PID not-reaching jam	FPPD_S	Build-in finisher PPD remaining jam
FPID_S	Build-in finisher PID remaining jam	FSCPD_N	Build-in finisher SCPD not-reaching jam
FSCID_N	Build-in finisher SCID not-reaching jam	FSCPD_S	Build-in finisher SCPD remaining jam
FSCID_S	Build-in finisher SCID remaining jam	FPOD_N	Build-in finisher POD not-reaching jam
FSCID2_N	Build-in finisher SCID2 not-reaching jam	FPOD_S	Build-in finisher POD remaining jam
FSCID2_S	Build-in finisher SCID2 remaining jam		

<table>
<tr><th>Menu</th><th>Content</th><th>Initial value</th><th>Set range</th></tr>
<tr><td>LAST JAM CODE DISP</td><td>Last jam code display.
Used to display the final jam history.
<table>
<tr><td>FES_N</td><td>Saddle stitch finisher entry port sensor (FES) not-reaching jam</td><td>FSTPL</td><td>Saddle stitch finisher staple jam
(The stapler does not end clinching.)</td></tr>
<tr><td>FES_S</td><td>Saddle stitch finisher entry port sensor (FES) remaining jam</td><td>FPNCH</td><td>Saddle stitch finisher punch jam
(The puncher does not end punching.)</td></tr>
<tr><td>FFPS_N</td><td>Saddle stitch finisher not-reaching jam
(The saddle does not reach the folding position sensor (FFPS).)</td><td>FDOP</td><td>Saddle stitch finisher door open jam
(The front door/joint/upper cover is opened during paper passing or after process.)</td></tr>
<tr><td>FFPS_S</td><td>Saddle stitch finisher saddle remaining jam
(The folding position sensor (FFPS) does not turn off.)</td><td></td><td></td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
<tr><td>PID_N</td><td>Mail box PID not-reaching jam</td><td>MPPD3_N</td><td>Mail box MPPD3 not-reaching jam</td></tr>
<tr><td>PID_S</td><td>Mail box PID remaining jam</td><td>MPPD3_S</td><td>Mail box MPPD3 remaining jam</td></tr>
<tr><td>MPPD1_N</td><td>Mail box MPPD1 not-reaching jam</td><td>MPPD4_N</td><td>Mail box MPPD4 not-reaching jam</td></tr>
<tr><td>MPPD1_S</td><td>Mail box MPPD1 remaining jam</td><td>MPPD4_S</td><td>Mail box MPPD4 remaining jam</td></tr>
<tr><td>MPPD2_N</td><td>Mail box MPPD2 not-reaching jam</td><td>MPPD5_N</td><td>Mail box MPPD5 not-reaching jam</td></tr>
<tr><td>MPPD2_S</td><td>Mail box MPPD2 remaining jam</td><td>MPPD5_S</td><td>Mail box MPPD5 remaining jam</td></tr>
</table></td><td></td><td></td></tr>
<tr><td>SYSTEM INFORMATION X</td><td>System information display.
Use to display the machine information.
(LCD display)
SYSTEM INFORMATION X
• Pressing the [▲] or [▼] key selects the group.
• Pressing OK key displays the system information.
• Using MENU moves to the next item.
• Pressing BACK/C key terminates the system information
Mode group is:
<table>
<tr><td>X:</td><td colspan="2"></td></tr>
<tr><td>A:</td><td colspan="2">ROM version</td></tr>
<tr><td rowspan="2">B:</td><td rowspan="2">machine speed</td><td>45PPM</td></tr>
<tr><td>35PPM</td></tr>
<tr><td rowspan="3">C:</td><td rowspan="3">process type</td><td>SRU (Others)</td></tr>
<tr><td>SRU (Japan)</td></tr>
<tr><td>CRU</td></tr>
</table></td><td></td><td></td></tr>
</table>

<table>
<tr><th>Menu</th><th>Content</th><th>Initial value</th><th>Set range</th></tr>
<tr><td>PROCESS DATA DISPLAY</td><td>Process control data display.
(LCD display)
PROCESS DATA DISP
• Pressing the [▲] or [▼] key selects the group.
• Pressing OK key displays the process control data.
• Using MENU moves to the next item
• Pressing BACK/C key terminates the process control data display mode.

Group is:
<table><tr><td>X:</td><td></td></tr><tr><td>A:</td><td>process control data</td></tr><tr><td>B:</td><td>toner control data</td></tr></table></td><td></td><td></td></tr>
<tr><td>XXX CHECK.</td><td>Controller port check.
Used to check the interface port (Centro/NICS) of the controller PWB.
(LCD display)
CENTRO PORT CHECK NIC CHECK
• Pressing the [▲] or [▼] key selects the port check mode.
• Pressing OK key starts the port check.
• Pressing BACK/C key terminates the port check mode.
<table><tr><td>CENTRO PORT CHECK</td><td>CENTRO PORT CHECK</td></tr><tr><td>NIC CHECK</td><td>NIC CHECK (network interface card check)</td></tr><tr><td>HDD R/W CHECK</td><td>HDD operation check (read/write) (Partial check)</td></tr><tr><td>HDD R/W CHECK (ALL)</td><td>HDD operation check (read/write) (All area check)</td></tr></table></td><td></td><td></td></tr>
<tr><td>SELECT IN SIGNAL SET</td><td>Select in signal setting.
Used to set ON/OFF of the select IN signal of the parallel interface.
(LCD display)
SELECT IN SIGNAL SET
• Pressing OK key starts the select in signal setting mode.
• Using the [▲] and [▼] keys changes the ON or OFF.
• Pressing OK key starts the select in signal setting.
• Pressing BACK/C key terminates the select in signal setting mode.</td><td>ON</td><td><table><tr><td>ON</td></tr><tr><td>OFF</td></tr></table></td></tr>
</table>

[11] ERROR CODES

1. Error codes list

Error codes		Contents	Remark	Error detection
C1	00	MC error		PCU
E7	02	Laser error		PCU
	03	HDD error	With HDD installed	Controller
	06	Decode error		Controller
	50	LSU connection error		PCU
F1	00	Finisher communication error	With Finisher installed	PCU
	08	Finisher staple shift motor error	With Finisher installed	PCU
	10	Finisher stapler motor error	With Finisher installed	PCU
	11	Finisher bundle exit motor error	With Finisher installed	PCU
	15	Finisher lift motor error	With Finisher installed	PCU
	19	Finisher alignment motor error FRONT	With Finisher installed	PCU
	20	Finisher alignment motor error	With Finisher installed	PCU
	80	Finisher 24V power supply error	With Finisher installed	PCU
	87	Finisher staple rotation motor error	With Finisher installed	
F1	00	Mail bin stacker communication error	With Mail bin stacker installed	PCU
	02	Mail bin stacker main drive motor error	With Mail bin stacker installed	PCU
	12	Mail bin stacker gate error	With Mail bin stacker installed	PCU
	80	Mail bin stacker 24V power supply error	With Mail bin stacker installed	PCU
F1	03	Saddle stitch finisher paddle motor error	With Saddle Stitch Finisher installed	PCU
	06	Saddle stitch finisher slide motor error	With Saddle Stitch Finisher installed	PCU
	10	Saddle stitch finisher stapler motor error	With Saddle Stitch Finisher installed	PCU
	11	Saddle stitch finisher bundle exit motor error	With Saddle Stitch Finisher installed	PCU
	15	Saddle stitch finisher lift motor error	With Saddle Stitch Finisher installed	PCU
	19	Saddle stitch finisher alignment motor error FRONT	With Saddle Stitch Finisher installed	PCU
	20	Saddle stitch finisher alignment motor error	With Saddle Stitch Finisher installed	PCU
	30	Saddle stitch finisher communication error	With Saddle Stitch Finisher installed	PCU
	31	Saddle stitch finisher fold sensor error	With Saddle Stitch Finisher installed	PCU
	32	Saddle stitch finisher punch unit communication error	With Saddle Stitch Finisher installed	PCU
	33	Saddle stitch finisher punch side register motor error	With Saddle Stitch Finisher installed	PCU
	34	Saddle stitch finisher punch motor error	With Saddle Stitch Finisher installed	PCU
	35	Saddle stitch finisher punch side register sensor error	With Saddle Stitch Finisher installed	PCU
	36	Saddle stitch finisher punch timing sensor error	With Saddle Stitch Finisher installed	PCU
	37	Saddle stitch finisher backup RAM error	With Saddle Stitch Finisher installed	PCU
	38	Saddle stitch finisher punch backup RAM error	With Saddle Stitch Finisher installed	PCU
	81	Saddle stitch finisher transport motor error	With Saddle Stitch Finisher installed	PCU
F2	00	Toner concentration sensor open		PCU
	02	Toner supply abnormality		PCU
	04	Improper cartridge (Destination error, life cycle error)		PCU
	05	CRUM error		PCU
	39	Process thermistor breakdown		PCU

Error codes		Contents	Remark	Error detection
F3	12	Tray 1 lift-p error		PCU
	22	Tray 2 lift-up error (Multi-purpose tray)	Multi-purpose tray	PCU
H2	00	Thermistor open (HL1)		PCU
	01	Thermistor open (HL2)		PCU
H3	00	Heat roller high temperature detection (HL1)		PCU
	01	Heat roller high temperature detection (HL2)		PCU
H4	00	Heat roller low temperature detection (HL1)		PCU
	01	Heat roller low temperature detection (HL2)		PCU
H5	01	5-time continuous POD1 not-reaching JAM detection		PCU
L4	01	Main motor lock detection		PCU
	02	Drum motor lock detection		PCU
L6	10	Polygon motor lock detection		PCU
L8	01	No full-wave signal		PCU
	02	Full-wave signal width abnormality		PCU
U6	00	Desk/LCC communication error	With Paper feed desk installed	PCU
	01	Desk/LCC1CS lift-up error (Multi-purpose tray)	With Paper feed desk installed	PCU
	02	Desk2 CS lift-up error/LCC1 lift-up error	With Paper feed desk installed	PCU
	03	Desk3 CS lift-up error/LCC2 lift-up error	With Paper feed desk installed	PCU
	10	Desk/LCC transport motor error	With Paper feed desk installed	PCU
EE	EL	Auto developer adjustment error (Over-toner)	Only during DIAG	PCU
	EU	Auto developer adjustment error (Under-toner)	Only during DIAG	PCU
F9	02	Centro port check error		Controller
	03	NIC port check error		Controller
U2	00	EEPROM read/write error (Controller)		Controller
	11	Counter check sum error (Controller EEPROM)		Controller
	12	Adjustment value check sum error (Controller EEPROM)		Controller
	90	PCU section EEPROM read/write error		PCU
	91	PCU section memory sum check error		PCU
PF	--	RIC copy inhibit command reception		Controller
CH	--	Door open (CH ON)		PCU
	00	No developer cartridge		PCU
	01	No toner cartridge		PCU
--	--	Auditor not ready		Controller
PC	--	Personal counter not installed		Controller

2. Details of error codes

MAIN	SUB		
C1	00	Content	MC error
		Detail	Main charger output abnormality (Output open) Error signal is outputted from the high voltage transformer.
		Cause	The main charger is not installed properly. The main charger is not assembled properly. Disconnection of connector of high voltage transformer. High voltage harness disconnection or breakage.
		Check and remedy	Use the diag mode or DIAG to check the main charger output. Check for disconnection of the main charger. Replace the high voltage unit.
E7	02	Content	Laser error
		Detail	BD signal from LSU is kept OFF, or ON.
		Cause	The connector of LSU or the harness in LSU is disconnected or broken. The polygon motor does not rotate normally. The laser home position sensor in LSU is shifted. The proper voltage is not supplied to the power line for laser. Laser emitting diode error PCU PWB error Controller PWB error
		Check and remedy	Check for disconnection of the LSU connector. Use DIAG (SIM 61-1) to check LSU operation. Check that the polygon motor rotates normally or not. Check light emission of laser emitting diode. Replace the LSU unit. Replace the PCU PWB. Replace the Controller PWB.
E7	03	Content	HDD error
		Detail	HDD does not operate properly in the machine with HDD installed.
		Cause	HDD is not installed properly to the Controller PWB. HDD does not operate properly in the Controller PWB. Controller PWB error
		Check and remedy	Check installation of HDD to the Controller PWB. Check connection of the harness of HDD to the Controller PWB. Use DIAG (SIM 62-2, -3) to check read/write of HDD. Check HDD and Controller PWB. If bad, then replace.
	50	Content	LSU connection error
		Detail	An LSU which does not conform to the machine is installed.
		Cause	PCU PWB error LSU error
		Check and remedy	Check LSU PWB. Check PCU PWB. Check connection of the connector and the harness between PCU and LSU.

MAIN	SUB		
F1	00	Content	Finisher (B83F) communication error
		Detail	Communication cable test error after turning on the power or exiting from DIAG. Communication error with the finisher
		Cause	Improper connection or disconnection of connectors and harness between the machine and the finisher. Finisher control PWB error Control PWB (PCU) error Malfunction by noises
		Check and remedy	Canceled by turning OFF/ON the power. Check connectors and harness in the communication line. Replace the finisher control PWB or PCU PWB.
	08	Content	Finisher (B83F) staple shift motor error
		Detail	Staple motor drive error
		Cause	Motor lock Motor rpm abnormality Overcurrent to the motor Finisher control PWB error
		Check and remedy	Use DIAG (SIM3-3) to check operations of the staple motor.

MAIN	SUB		
F1	10	Content	Finisher (B83F) stapler motor error
		Detail	Stapler motor operation abnormality
		Cause	Motor lock Motor rpm abnormality Overcurrent to the motor Finisher control PWB error
		Check and remedy	Use DIAG (SIM3-3) to check the motor operation. If diagnostic check reveals the motor is bad, then replace motor.
	11	Content	Finisher (B83F) bundle exit motor error
		Detail	Bundle exit motor operation abnormality
		Cause	Motor lock Motor rpm abnormality Overcurrent to the motor Finisher control PWB error
		Check and remedy	Use DIAG (SIM3-3) to check the motor operation. If diagnostic check reveals the motor is bad, then replace motor.
	15	Content	Finisher (B83F) lift motor error
		Detail	Lift motor operation abnormality
		Cause	Motor lock Motor rpm abnormality Overcurrent to the motor Finisher control PWB error
	19	Content	Finisher (B83F) front alignment motor error
		Detail	Front alignment motor operation abnormality
		Cause	Motor lock Motor rpm abnormality Overcurrent to the motor Finisher control PWB error
		Check and remedy	Use DIAG (SIM3-3) to check the motor operation. If diagnostic check reveals the motor is bad, then replace motor.
	20	Content	Finisher (B83F) rear alignment motor error
		Detail	Rear alignment motor operation abnormality
		Cause	Motor lock Motor rpm abnormality Overcurrent to the motor Finisher control PWB error
		Check and remedy	Use DIAG (SIM3-3) to check the motor operation. If diagnostic check reveals the motor is bad, then replace motor.
	80	Content	Finisher (B83F) power abnormality
		Detail	The 24V power is not supplied to the finisher PWB.
		Cause	Improper connection or disconnection of connector and harness Finisher control PWB error Power unit error
		Check and remedy	Use DIAG (SIM3-2) to check the sensor.
	87	Content	Finisher (B83F) staple rotation motor error
		Detail	Front staple rotation motor error
		Cause	Motor lock Motor rpm abnormality Overcurrent to the motor Finisher control PWB error
		Check and remedy	Use DIAG (SIM3-3) to check the motor operation. If diagnostic check reveals the motor is bad, then replace motor.

MAIN	SUB		
F1	00	Content	Mail-bin stacker (B83MB) communication error
		Detail	Communication cable test error after turning on the power or exiting from DIAG. Communication error with the Mail-bin stacker.
		Cause	Improper connection or disconnection of connector and harness between the machine and the Mail-bin stacker. Mail-bin stacker control PWB error Control PWB (PCU) error Malfunction by noises
		Check and remedy	Canceled by turning OFF/ON the power. Check harness and connector in the communication line. Replace the Mail-bin stacker PWB or PCU PWB.
	02	Content	Mail-bin stacker (B83MB) transport motor abnormality
		Detail	Transport motor error
		Cause	Motor lock Motor rpm abnormality Overcurrent to the motor Mail-bin stacker control PWB error
		Check and remedy	Use DIAG (SIM3-21) to check the transport motor operation.
	12	Content	Mail-bin stacker (B83MB) gate error
		Detail	Gate operation abnormality
		Cause	Gate lock Mail-bin stacker control PWB error
		Check and remedy	Use DIAG (SIM3-21) to check the transport gate operation.
	80	Content	Mail-bin stacker (B83MB) power abnormality
		Detail	The 24V power is not supplied to the Mail-bin stacker PWB.
		Cause	Improper connection or disconnection of connector and harness Mail-bin stacker control PWB error Power unit (B83PS) error
		Check and remedy	Use DIAG (SIM3-20) to check the sensor operation.
F1	03	Content	Saddle stitch finisher (B83SS) paddle motor error
		Detail	Paddle motor operation abnormality
		Cause	Motor lock Motor rpm abnormality Overcurrent to the motor Saddle stitch finisher control PWB error
		Check and remedy	Use DIAG (SIM3-3) to check the motor operation.
	06	Content	Saddle stitch finisher (B83SS) slide motor error
		Detail	Slide motor operation abnormality
		Cause	Motor lock Motor rpm abnormality Overcurrent to the motor Saddle stitch finisher control PWB error
		Check and remedy	Use DIAG (SIM3-3) to check the motor operation.

MAIN	SUB		
F1	10	Content	Saddle stitch finisher (B83SS) stapler motor error
		Detail	Stapler motor operation abnormality
		Cause	Motor lock Motor rpm abnormality Overcurrent to the motor Saddle stitch finisher control PWB error
		Check and remedy	Use DIAG (SIM3-3) to check the motor operation.
	11	Content	Saddle stitch finisher (B83SS) bundle exit motor error
		Detail	Bundle exit motor operation abnormality
		Cause	Motor lock Motor rpm abnormality Overcurrent to the motor Saddle stitch finisher control PWB error
		Check and remedy	Use DIAG (SIM3-3) to check the motor operation.
	15	Content	Saddle stitch finisher (B83SS) lift motor error
		Detail	Lift motor operation abnormality
		Cause	Motor lock Motor rpm abnormality Overcurrent to the motor Saddle stitch finisher control PWB error
		Check and remedy	Use DIAG (SIM3-3) to check the motor operation.
	19	Content	Saddle stitch finisher (B83SS) front alignment motor error
		Detail	Front alignment motor operation abnormality
		Cause	Motor lock Motor rpm abnormality Overcurrent to the motor Saddle stitch finisher control PWB error
		Check and remedy	Use DIAG (SIM3-3) to check the motor operation.
	20	Content	Saddle stitch finisher (B83SS) rear alignment motor error
		Detail	Rear alignment motor operation abnormality
		Cause	Motor lock Motor rpm abnormality Overcurrent to the motor Saddle stitch finisher control PWB error
		Check and remedy	Use DIAG (SIM3-3) to check the motor operation.
	30	Content	Saddle stitch finisher (B83SS) communication error
		Detail	Communication cable test error after turning on the power or exiting from DIAG. Communication error with the saddle stitch finisher
		Cause	Improper connection or disconnection of connector and harness between the machine and the saddle stitch finisher. Saddle stitch finisher control PWB error Control PWB (PCU) error Malfunction by noises
		Check and remedy	Canceled by turning OFF/ON the power. Check connectors and harness in the communication line. Replace the saddle stitch finisher control PWB or PCU PWB.

MAIN	SUB		
F1	31	Content	Saddle stitch finisher (B83SS) fold sensor error
		Detail	Sensor input value abnormality
		Cause	Sensor breakage harness breakage Saddle stitch finisher control PWB error
		Check and remedy	Use DIAG (SIM3-2) to check the sensor operation.
	32	Content	Communication error between the saddle stitch finisher (B83SS) and the punch unit (B83FHP).
		Detail	Communication err between the saddle stitch finisher and the punch unit.
		Cause	Improper connection or disconnection of connector and harness between the saddle stitch finisher and the punch unit. Saddle stitch finisher control PWB error Control PWB (PCU) error Malfunction by noise
		Check and remedy	Canceled by turning OFF/ON the power. Check connectors and harness in the communication line. Replace the saddle stitch finisher control PWB.
	33	Content	Saddle stitch finisher (B83SS) punch (B83FHP) side registration motor error
		Detail	Punch side registration motor operation abnormality
		Cause	Motor lock Motor rpm abnormality Overcurrent to the motor Saddle stitch finisher control PWB error
		Check and remedy	Use DIAG (SIM3-3) to check the motor operation.
	34	Content	Saddle stitch finisher (B83SS) punch (B83FHP) motor error
		Detail	Punch motor operation abnormality
		Cause	Motor lock Motor rpm abnormality Overcurrent to the motor Saddle stitch finisher control PWB error
		Check and remedy	Use DIAG (SIM3-3) to check the motor operation.
	35	Content	Saddle stitch finisher (B83SS) punch (B83FHP) side registration sensor error
		Detail	Sensor input value abnormality
		Cause	Sensor breakage Harness disconnection Saddle stitch finisher control PWB error
		Check and remedy	Use DIAG (SIM3-2) to check the sensor operation.
	36	Content	Saddle stitch finisher (B83SS) punch (B83FHP) timing sensor error
		Detail	Sensor input value abnormality
		Cause	Sensor breakage Harness disconnection Saddle stitch finisher control PWB error
		Check and remedy	Use DIAG (SIM3-2) to check the sensor operation.

MAIN	SUB		
F1	37	Content	Saddle stitch finisher (B83SS) backup RAM error
		Detail	Backup RAM contents are disturbed.
		Cause	Saddle stitch finisher control PWB error Malfunction by noise
		Check and remedy	Replace the saddle stitch finisher control PWB.
	38	Content	Saddle stitch finisher (B83SS) punch (B83FHP) backup RAM error
		Detail	Punch unit backup RAM contents are disturbed.
		Cause	Punch control PWB error Malfunction by noise
		Check and remedy	Replace the punch control PWB.
	81	Content	Saddle stitch finisher transport motor abnormality
		Detail	Transport motor error
		Cause	Motor lock Motor rpm abnormality Overcurrent to the motor Saddle stitch finisher control PWB error
		Check and remedy	Use DIAG (SIM3-3) to check the motor operation.
F2	00	Content	Toner control sensor abnormality
		Detail	Toner control sensor output open
		Cause	Connector harness error Connector disconnection
		Check and remedy	Check connection of the toner control sensor. Check connection of connector and harness to the main PWB. Check for disconnection of harness.
	02	Content	Toner supply abnormality
		Detail	Toner control sensor output value becomes under-toner too earlier.
		Cause	Connector harness error Toner control sensor error The toner cartridge seal is not removed
		Check and remedy	Check connection of the connector in the toner motor section. Check connection of connector and harness to the main PWB. Check for disconnection of harness. Toner control sensor output check DIAG (SIM25-1) Remove the toner cartridge seal.
	04	Content	Improper cartridge (life cycle error, etc.)
		Detail	An improper process cartridge is inserted.
		Cause	IC chip error Improper cartridge
		Check and remedy	Insert a proper cartridge.
	05	Content	DRUM error
		Detail	Communication with IC chip cannot be made.
		Cause	IC chip error Improper cartridge
		Check and remedy	Check IC Chip Reseat cartridge properly. If wrong cartridge, insert proper cartridge.

MAIN	SUB		
F2	39	Content	Process thermistor error
		Detail	Process thermistor open
		Cause	Process thermistor error Process thermistor harness disconnection PCU PWB error
		Check and remedy	Check connection of harness and connector of the process thermistor. Check PCU PWB.
F3	12	Content	Machine no. 1 tray lift-up error
		Detail	PED does not turn ON in the specified time. LUD does not turn ON in the specified time.
		Cause	PED/LUD error No. 1 tray lift-up error Check connection of harness between the PCVU PWB, lift-up unit, and paper feed unit.
		Check and remedy	Check PED, LUD, and their harness and connectors. Check the lift-up unit.
	22	Content	Multi purpose tray lift-up error
		Detail	MCPED does not turn ON in the specified time. MCLUD does not turn ON in the specified time.
		Cause	MCPED/MCLUD error Multi purpose tray lift-up motor error Harness disconnection f the PCU PWB, the lift-up unit, and the paper feed unit.
		Check and remedy	Check MCPED, PCLUD, and their harness and connectors. Check the lift-up unit.
H2	00⋯ HL1 (RT H1) 01⋯ HL2 (RT H2)	Content	thermistor open Fusing unit not installed
		Detail	Thermistor is open. (An input voltage of 2.92V or above is detected.) Fusing unit not installed
		Cause	Thermistor error Control PWB error Fusing section connector disconnection AC power error Fusing unit not installed
		Check and remedy	Check harnesses and connectors from the thermistor to the control PWB. Use DIAG (SIM14) to clear the self diag display.
H3	00⋯ HL1 (RT H1) 01⋯ HL2 (RT H2)	Content	Fusing section high temperature error
		Detail	The fusing temperature exceeds 467.6 °F (242°C). (An input voltage of 0.27V or above is detected.)
		Cause	thermistor error Control PWB error Fusing section connector disconnection AC power error
		Check and remedy	Use DIAG (SIM5-2) to check the heater lamp Blinking operation. If the heater lamp blinks normally: Check the thermistor and its harness. Check the thermistor input circuit in the control PWB. If the heater lamp keep lighting: Check the AC PWB and the lamp control circuit in the control PWB. Use DIAG (SIM14) to cancel the error

MAIN	SUB		
H4	00⋯ HL1 (RT H1) 01⋯ HL2 (RT H2)	Content	Fusing section low temperature error
		Detail	The set temperature is not reached within the specified time (normally 3 min) when warming up or resetting from pre-heating. Under the ready state. (An input voltage of 1.21V or below is detected 5 times continuously.)
		Cause	thermistor error Heater lamp error Control PWB error Thermostat error AC power error Interlock switch error
		Check and remedy	Use DIAG (SIM5-2) to check the heater lamp Blinking operation. If the heater lamp blinks normally: Check the thermistor and its harness. Check the thermistor input circuit in the control PWB. If the heater lamp does not light: Check for heater lamp disconnection and thermostat disconnection. Check the interlock switch. Check the AC PWB and the lamp control circuit in the control PWB. Use DIAG (SIM14) to cancel the error.
H5	01	Content	5-time continuous POD1 not-reaching jam detection
		Detail	5-time continuous POD1 not-reaching jam detection
		Cause	A fusing section jam is not properly removed. (Jam paper remains.) POD1 sensor error, or harness disconnection Improper installation of fusing unit
		Check and remedy	Check jam paper in the fusing section. (winding, etc.) Check POD1 sensor harness, and check installation the fusing unit. Use DIAG (SIM14) to cancel the error.
L4	01	Content	Main motor lock detection
		Detail	The motor lock signal is detected for 1.5sec during rotation of the main motor.
		Cause	main motor error Check connection of harness between the PCU PWB and the main motor. Control circuit error
		Check and remedy	Use DIAG (SIM25-1) to check the main motor operation. Check harness and connector between the PCU PWB and the main motor.
	02	Content	Drum motor lock detection
		Detail	The motor lock signal is detected for 1.5sec during rotation of the drum motor.
		Cause	Drum motor error Improper connection of harness between the PCU PWB and the drum motor. Control circuit error
		Check and remedy	Use DIAG (SIM25-1) to check the drum motor operation. Check harness and connector between the PCU PWB and the drum motor.

MAIN	SUB		
L6	10	Content	Polygon motor lock detection
		Detail	It is judged that the polygon motor lock signal is not outputted. Lock signal is checked in the interval of 10sec after starting the polygon motor, and it is judged that the polygon motor does not rotate normally.
		Cause	The LSU connector or harness in the LSU is disconnected or broken. Polygon motor error
		Check and remedy	Use DIAG (SIM61-1) to check the polygon motor operation. Check connector and harness connection. Replace LSU.
L8	01	Content	No fullwave signal
		Detail	Full wave signal is not detected.
		Cause	The PCU PWB connector or the power unit harness is disconnected or broken. PCU PWB error Power unit error
		Check and remedy	Check connection of the harness and connector. Replace PCU PWB. Replace the power unit.
	02	Content	Full wave signal width abnormality
		Detail	It is judged as frequency abnormality of full wave signal. (When the detection cycle is judged as 69Hz or above or 42.5Hz or below)
		Cause	The connector or harness of the PCU PWB and the power PWB is disconnected. PCU PWB error Power unit error
		Check and remedy	Check connection of the harness and connector. Replace the PCU PWB. Replace the power unit.
U6	00	Content	Desk/LCC communication error
		Detail	Desk/LCC communication error Communication cable test error after turning on the power or exiting DIAG.
		Cause	Improper connection or disconnection of connector and harness Desk control PWB error Control PWB (PCU) error Malfunction by noise
		Check and remedy	Canceled by turning OFF/ON the power. Check connection of the harness and connector in the communication line.
	01	Content	Desk/LCC No. 1 tray lift-up error
		Detail	Desk/LCC No. 1 tray lift-up error
		Cause	Sensor error Desk control PWB error Gear breakage Lift-up motor error
		Check and remedy	Use DIAG (SIM4-2) to check the lift-up sensor detection. Use DIAG (SIM4-3) to check the lift-up motor operation.

MAIN	SUB		
U6	02	Content	Desk No. 2 tray/LCC1 lift-up error
		Detail	Desk No. 2 tray/LCC lift-up error
		Cause	Sensor error Desk control PWB error Gear breakage Lift-up motor error
		Check and remedy	Use DIAG (SIM4-2) to check the lift-up sensor detection. Use DIAG (SIM4-3) to check the lift-up motor operation.
	03	Content	Desk No. 3 tray/LCC2 lift-up error
		Detail	Desk no. 3 tray lift-up error
		Cause	Sensor error Desk control PWB error Gear breakage Lift-up motor error
		Check and remedy	Use DIAG (SIM4-2) to check the lift-up sensor detection. Use DIAG (SIM4-3) to check the lift-up motor operation.
	10	Content	Desk/LCC transport motor error
		Detail	Desk/LCC transport motor operation error
		Cause	Motor lock Motor rpm abnormality Overcurrent to the motor Desk control PWB error
		Check and remedy	Use DIAG (SIM4-3) to check the transport motor operation.
EE	EL	Content	Auto developer adjustment error (Over-toner)
		Detail	The sample data is of 68 or below when auto developer adjustment is performed.
		Cause	Toner concentration sensor error Charging voltage, developing voltage abnormality Insufficient toner concentration Developing unit error PCU PWB error
		Check and remedy	Use DIAG (SIM25-2) to perform auto developer adjustment.
	EU	Content	Auto developer adjustment error (Under-toner)
		Detail	The sample data is of 168 or above when auto developer adjustment is performed.
		Cause	Insufficient toner concentration Charging voltage, developing voltage abnormality Insufficient toner concentration Developing unit error PCU PWB error
		Check and remedy	Use DIAG (SIM25-2) to perform auto developer adjustment.

MAIN	SUB		
F9	02	Content	PRT Centro port check error
		Detail	Controller Centro port error
		Cause	Centro port error Controller PWB error
		Check and remedy	Replace the Controller PWB.
	03	Content	NIC port check error
		Detail	NIC port check error
		Cause	NIC port error NIC PWB error Controller PWB error
		Check and remedy	Replace the NIC PWB. Replace the Controller PWB.
U1	01	Content	Battery abnormality
		Detail	Backup SRAM battery voltage fall
		Cause	Battery life Battery circuit abnormality
		Check and remedy	Check that the battery voltage is about 2.5V or above. Check the battery circuit.

MAIN	SUB		
U2	00	Content	EEPROM read/write error (Controller)
		Detail	EEPROM write error
		Cause	EEPROM error EEPROM is not initialized. Controller PWB EEPROM access circuit error
		Check and remedy	Check that EEPROM is properly inserted. Save the counter/adjustment values with the DIAG simulation. Use DIAG (SIM16) to cancel U2 error. Replace the Controller PWB.
	11	Content	Counter check sum error (Controller)
		Detail	Counter data area check sum error
		Cause	EEPROM error Control circuit error by noise Controller PWB EEPROM access circuit error
		Check and remedy	Check that EEPROM is properly inserted. Save the counter/adjustment values with the DIAG simulation. Use DIAG (SIM16) to cancel U2 error. Replace the Controller PWB.
	12	Content	Adjustment value check sum error (Controller)
		Detail	Adjustment data area check sum error
		Cause	EEPROM error Control circuit error by noise Controller PWB EEPROM access circuit error
		Check and remedy	Check that EEPROM is properly inserted. Save the counter/adjustment values with the DIAG simulation. Use DIAG (SIM16) to cancel U2 error. Replace the Controller PWB.
	90	Content	EEPROM read/write error (PCU)
		Detail	PCU EEPROM write error
		Cause	EEPROM error EEPROM is not initialized. PCU PWB EEPROM access circuit error
		Check and remedy	Check that EEPROM is properly inserted. Save the counter/adjustment values with the DIAG simulation. Use DIAG (SIM16) to cancel U2 error. Replace the Controller PWB.
	91	Content	Memory check sum error (PCU)
		Detail	PCU memory check sum error
		Cause	EEPROM error EEPROM is not initialized. PCU PWB EEPROM access circuit error Uninitialized E2PROM installed.
		Check and remedy	Check that EEPROM is properly inserted. Save the counter/adjustment values with the DIAG simulation. Use DIAG (SIM16) to cancel U2 error. Replace the Controller PWB.

3. Operation Errors

A. Condition-dependent Errors where the machine can be repaired

Error	Judgment block	Error code	Repair-possible mode		
			Copy read (interruption, etc.)	Print	List print
(AE error)	-	L9	△2	O	O
(ADU error)	PCU	U4	△3	△3	△3
Staple error	PCU	F1(10)	△4	△4	△4
Paper feed tray error	PCU	F3, U6 (Desk)	△5	△5	△5
(Process control error)	PCU		△6	△6	△6
PCU section errors (Motor, fusing, etc.)	PCU		X	X	X
After-work error	PCU		△9	△9	△9
Laser error	PCU	E7 (02 only), L6	X	X	X
HDD error	Controller	E7 (03)	X	X	X
PCU communication error	Controller	E7 (90)	X	X	X
Printer port error	Controller	F9	O	△11	O
Backup battery voltage fall	Controller	U1 (01)	O	O	O
Memory error (Expansion RAM not installed, etc.)	Controller	U2 (00, 11, 12)	X	X	X
External communication invalid (RIC)	Controller	U7, PF	X	X	X
Image memory error, decode error	Controller	E7(01, 06)	X	X	X

O : Operation possible X : Operation impossible △ : Operation possible depending on conditions

△1:Operation possible in the OC mode

△2:Operation possible in the manual mode

△3:Single mode only

△4:Operation possible except for the staple mode

△5:Operation possible except for the error tray

△6:Operation possible if the image can be limited

△8:Original/list print possible after reception

△9:Operation possible except for the error paper exit section

△10:Operation possible by use of memory only

△11:Operation possible if the used port (NIC, Centro) is normal

B. Error mode process

Machine operation possible depending on conditions	Operation except for the error mode are possible (READY). For the error mode, only setup is allowed. The displayed message indicates that operations are impossible. (NOT READY in this case.) (**Display**) A dialog is shown in case of an error. For the mode where operations are possible, the **OK** button is added to the message. For the mode where operations are impossible, the **OK** button is not shown, and the process to cancel is indicated.
Machine operation is impossible	The error display is always shown, and all setup operations are invalid.

C. Writing to the error memory

In this series, the simulation (diag) allows you to select if the same error is written to the error memory when it occurs. If the DIAG simulation is set as above, when any error occurs, its log is written to the error memory. DIAG (SIM 26-35)

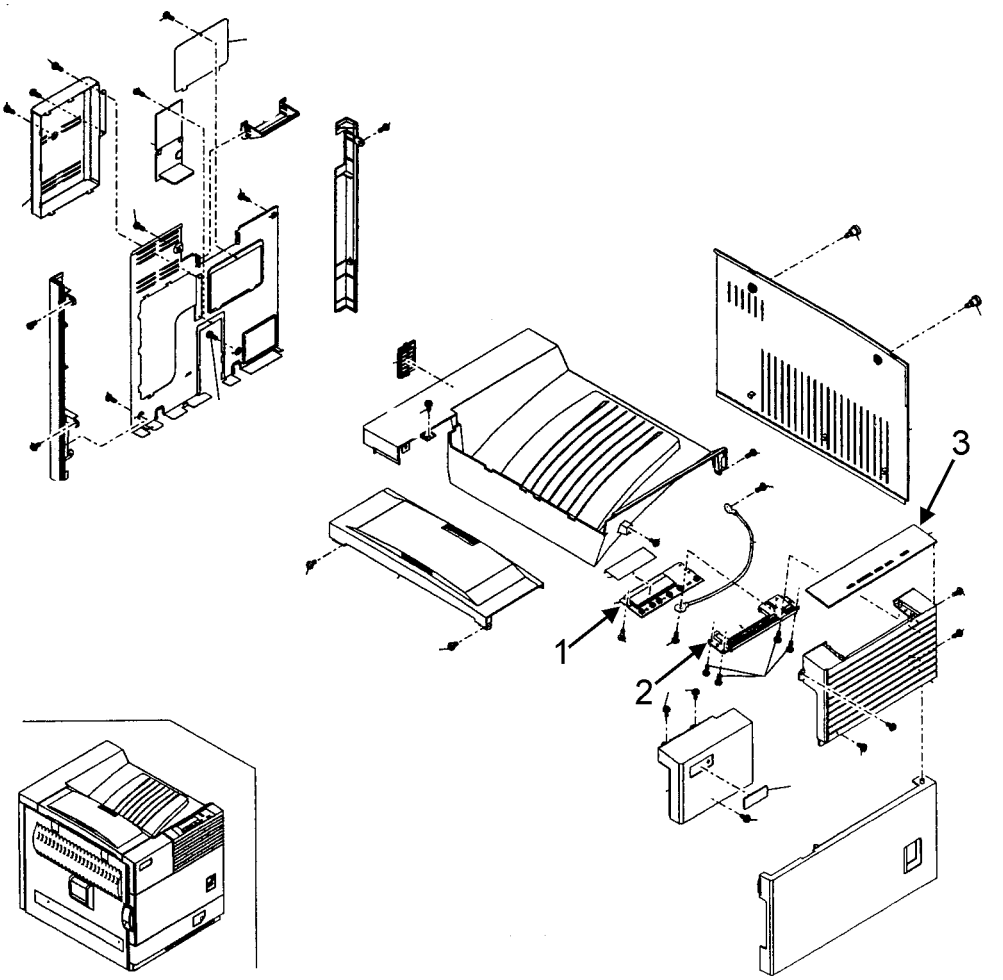
0: The same error as the previous one is not recorded. (Default)

1: When an error occurs, it is written to the error memory without exception.

[12] PART NUMBERS

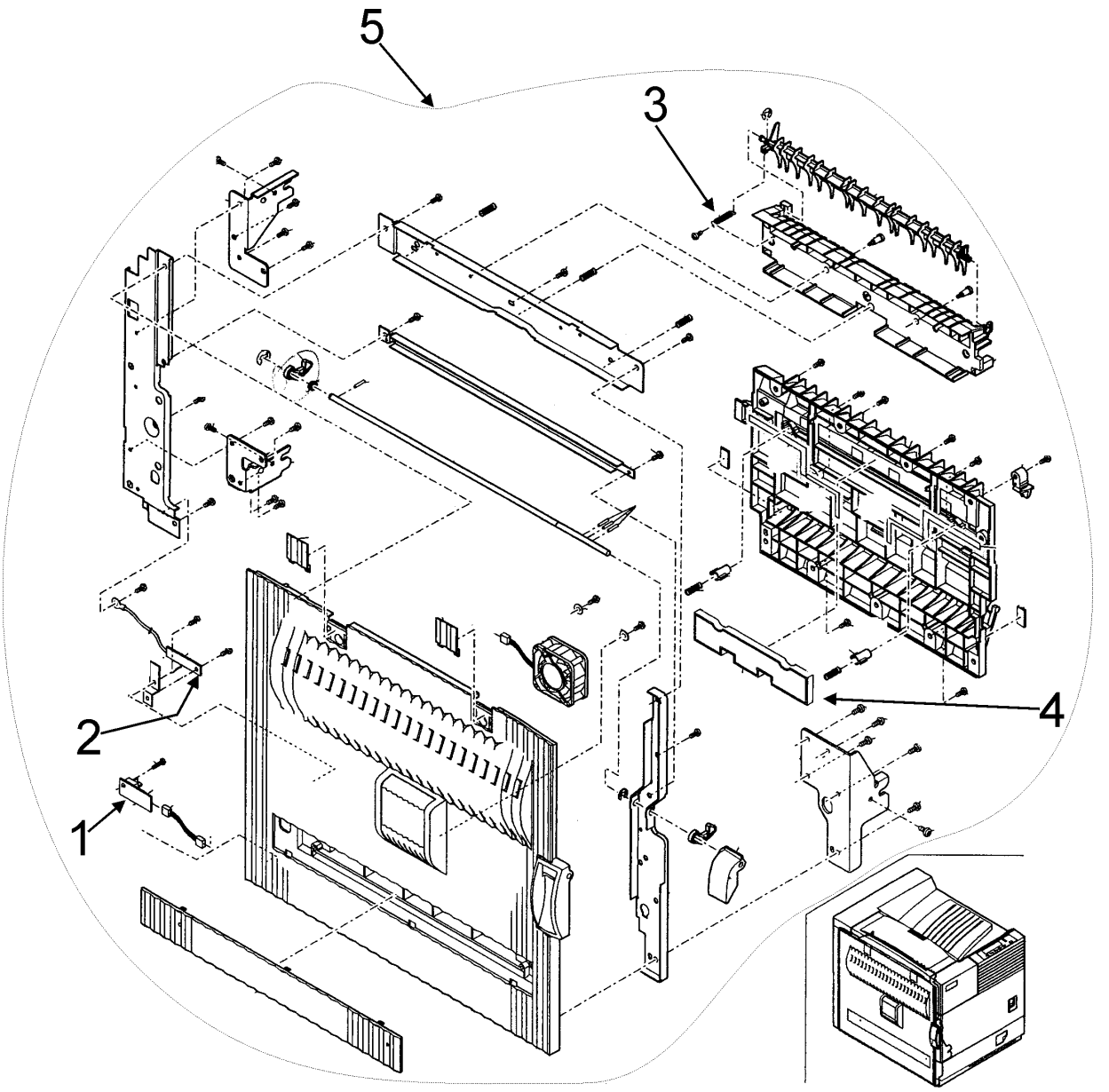
1. Exterior

No.	Parts Code	Description
1	55084801	Printer Operation PWB unit
2	50608901	Operation Key
3	55506801	Operation Filter



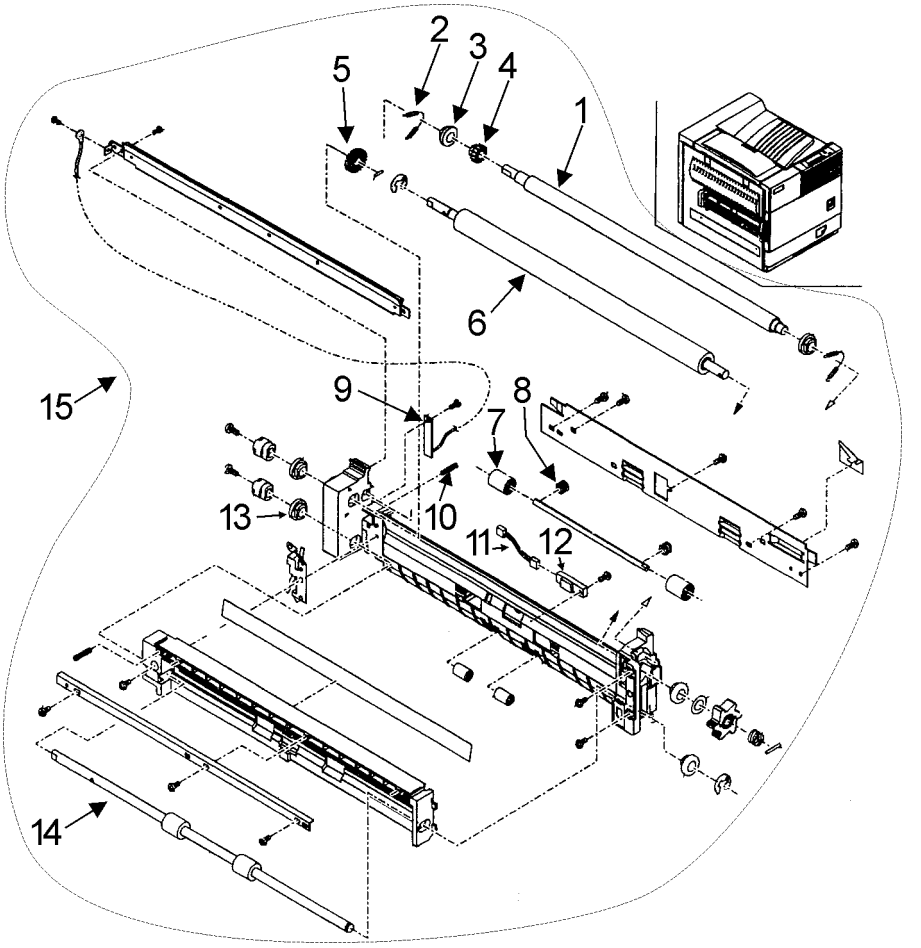
2. Left Door Unit

No.	Parts Code	Description
1	55084901	Drawer PWB
2	55085001	High Voltage Resister PWB
3	50933801	Reverse Gate Spring
4	55506601	Ozone Filter
5	53080201	Left Door Unit - Everything pictured below



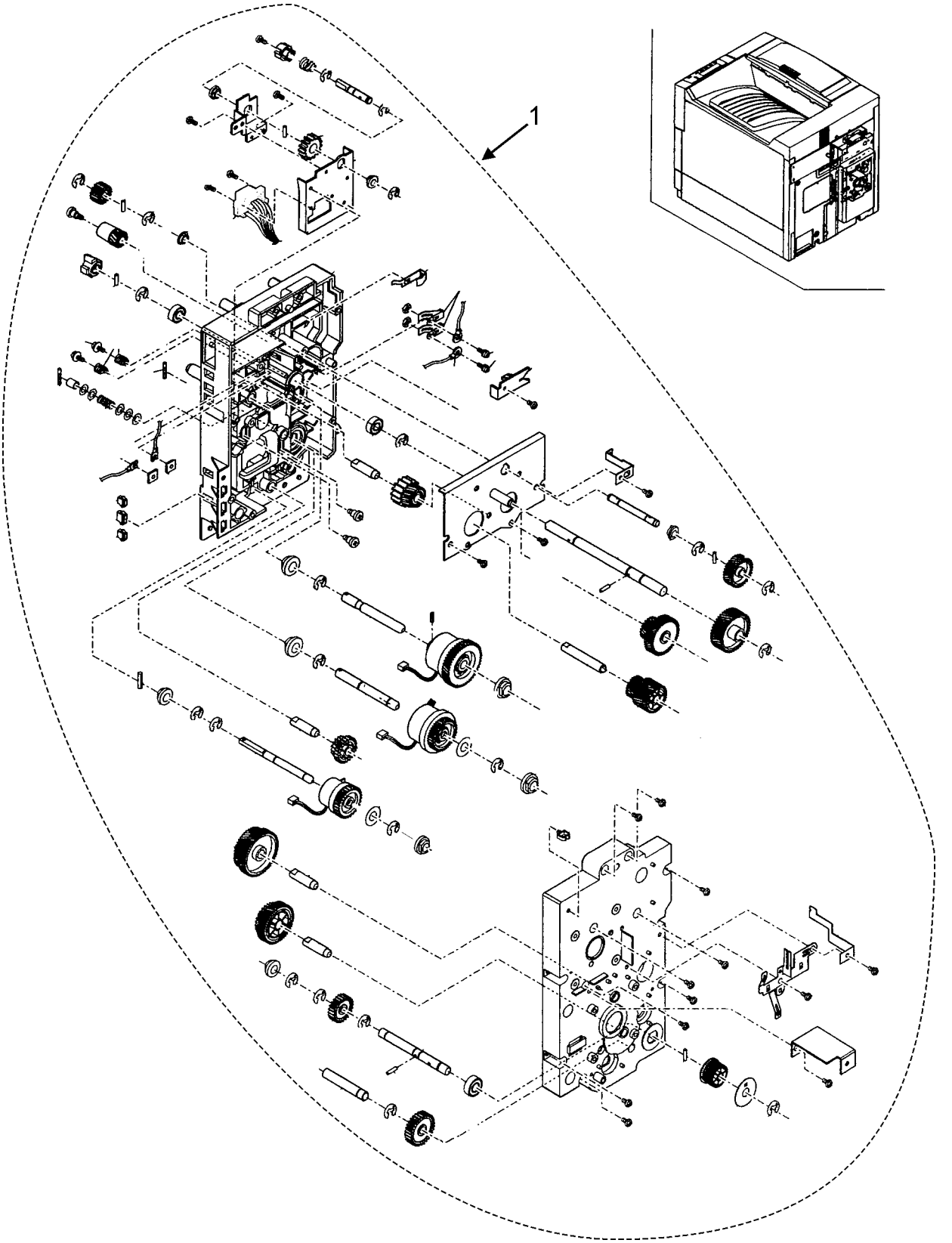
3. PS Roller Unit

No.	Parts Code	Description
1	50413701	PS Follower Roller
2	50933301	PS Pressure Spring
3	51610101	PS Follower Roller Bearing
4	51242001	PS Follower Gear
5	51242101	PS Gear
6	50413801	PS Roller
7	50709901	Transfer Follower Collar
8	50933401	PS Front Pressure Spring
9	55085001	High Voltage Resister PWB PS
10	50933501	TC Spring
11	56733101	PPD Harness
12	55627601	LED (GP2A200L)
13	51610201	Bearing
14	50413901	PS Front Roller
15	50414001	PS Roller Unit - Everything pictured below



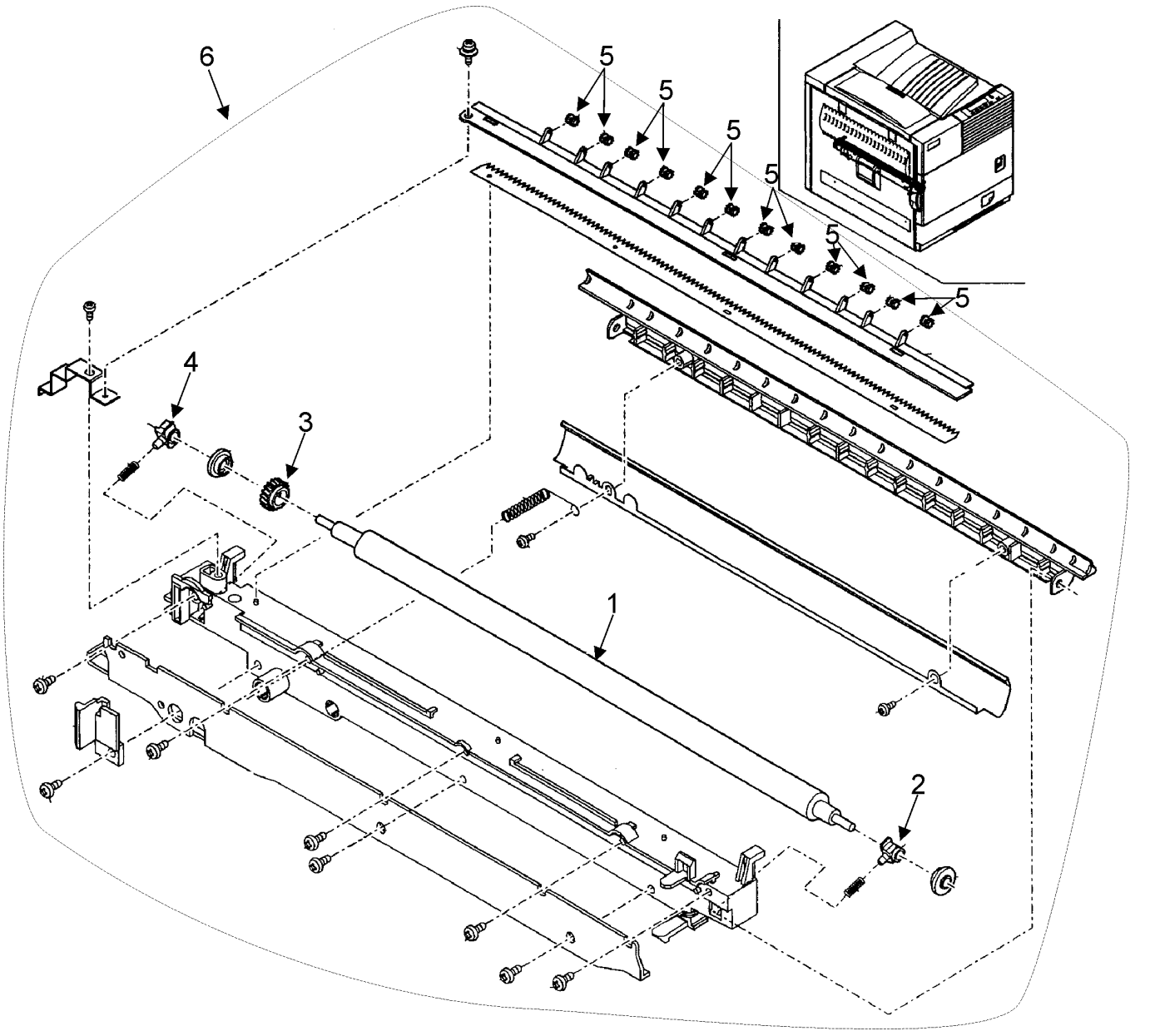
4. Main Drive Unit

No.	Parts Code	Description
1	50225201	Main Drive Unit - Everything pictured below



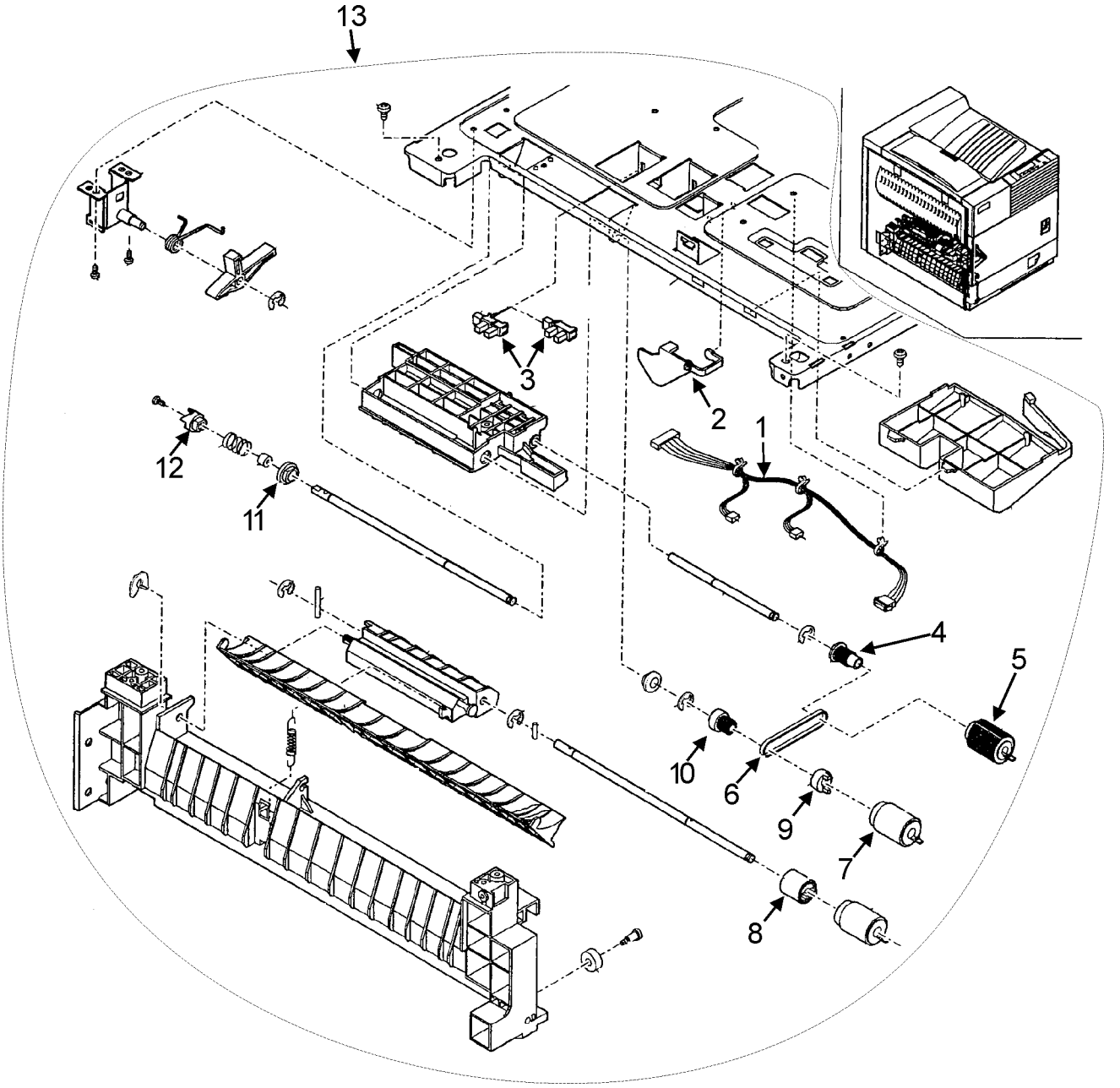
5. TC Unit

No.	Parts Code	Description
1	50414101	Transfer Roller
2	51610301	TR Bearing
3	51242201	TR Gear
4	51610401	TR Bearing
5	53352001	Starling
6	5022501	Transfer Unit - Everything pictured below



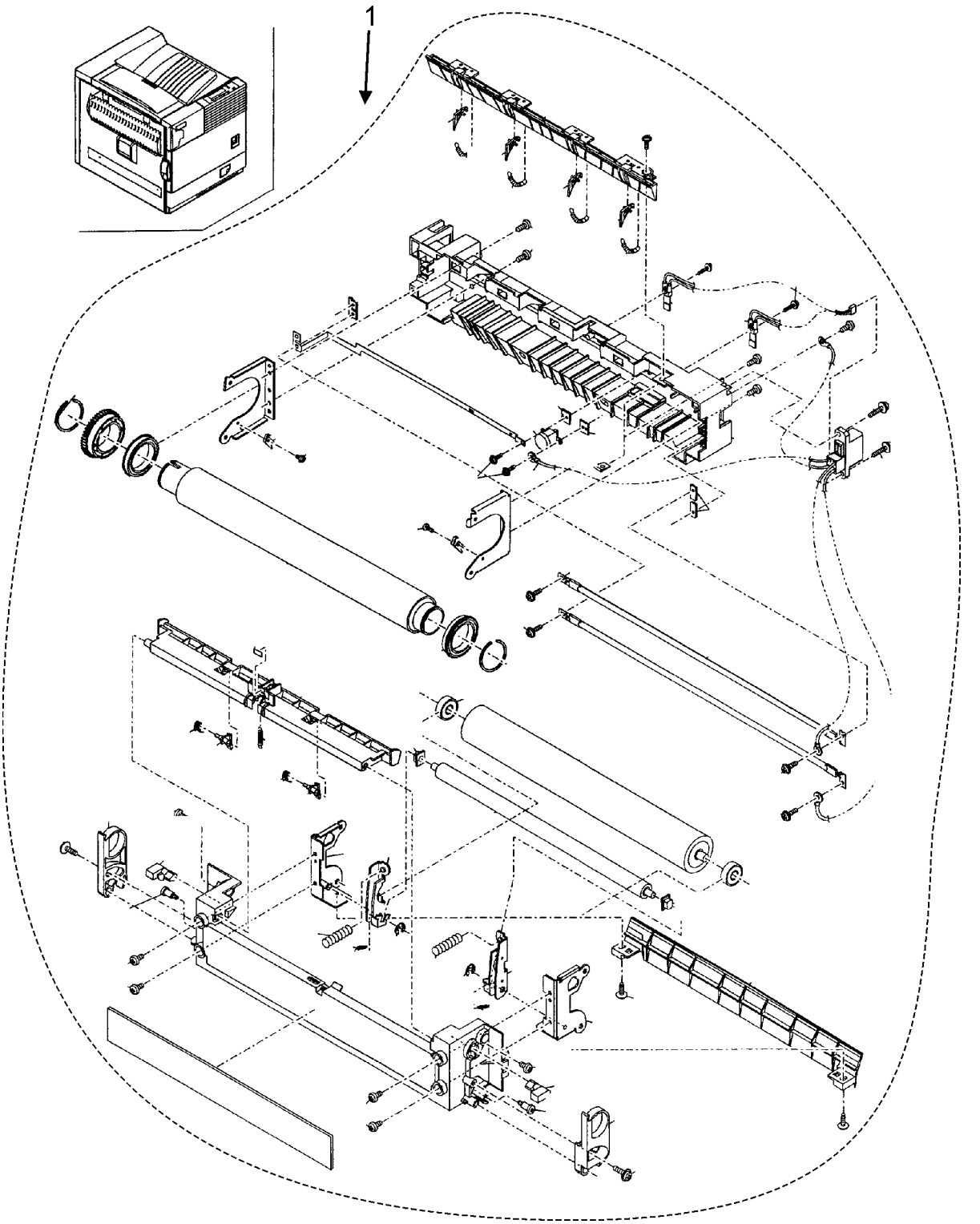
6. Cassette Paper Feeder

No.	Parts Code	Description
1	56733201	Cassette Detect Interface Harness
2	53351901	PE Actuator
3	55627701	LED
4	51242301	Pickup Roller Pulley
5	50414301	Pickup Roller
6	51305501	Belt
7	50414201	Paper Feed Separation Roller
8	55628101	Separator Roller Torque Limiter
9	51500401	Oneway Coupling
10	51242401	Paper Feed Roller Pulley
11	51610501	Bearing
12	51500501	Paper Feed Coupling
13	NA	Cassette Paper Feeder - Not offered as an assembly



7. Fusing Unit

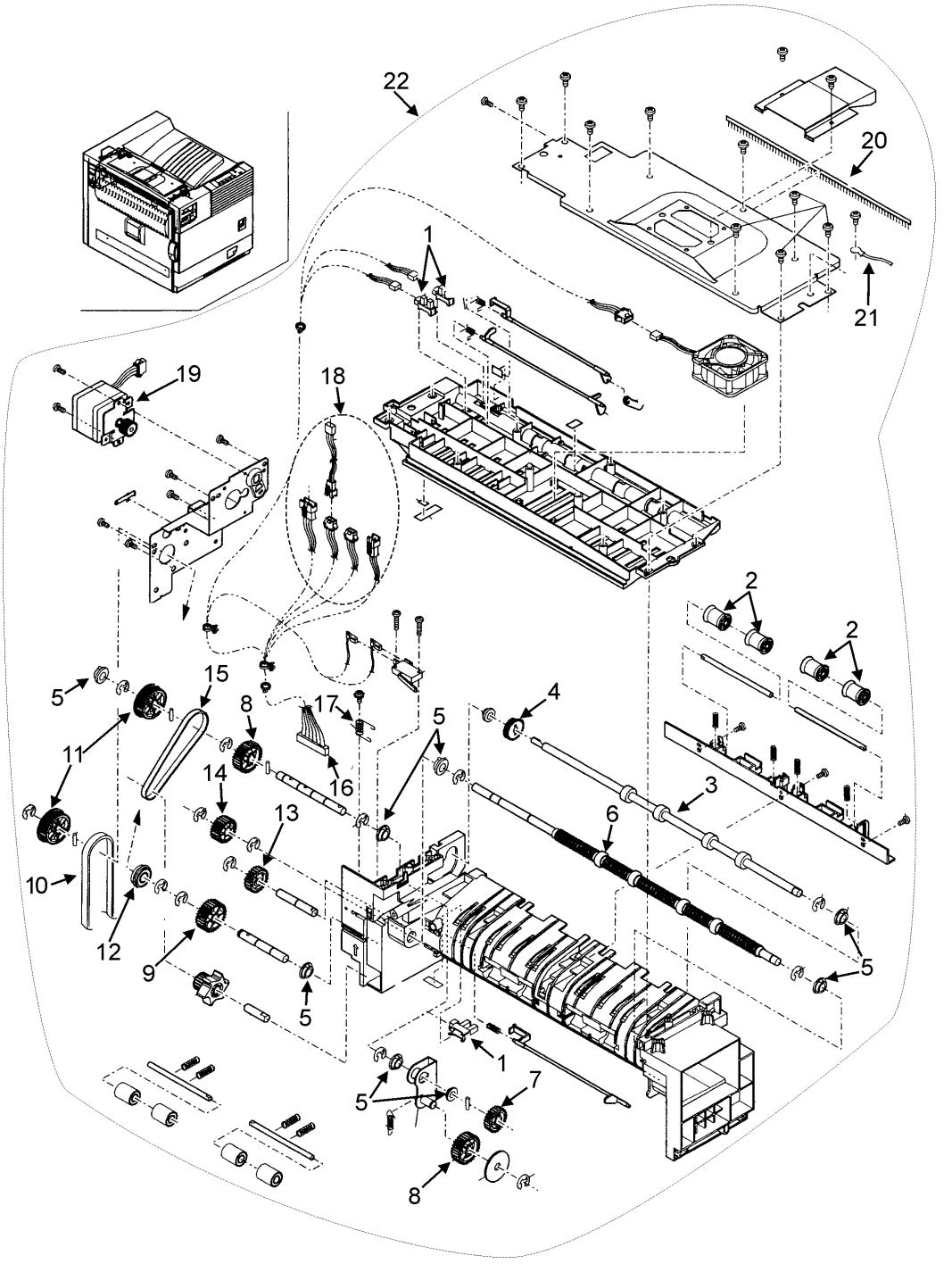
No.	Parts Code	Description
1	50224901	Fusing Unit Assembly - Everything Pictured Below



8. Delivery Turn Over Unit

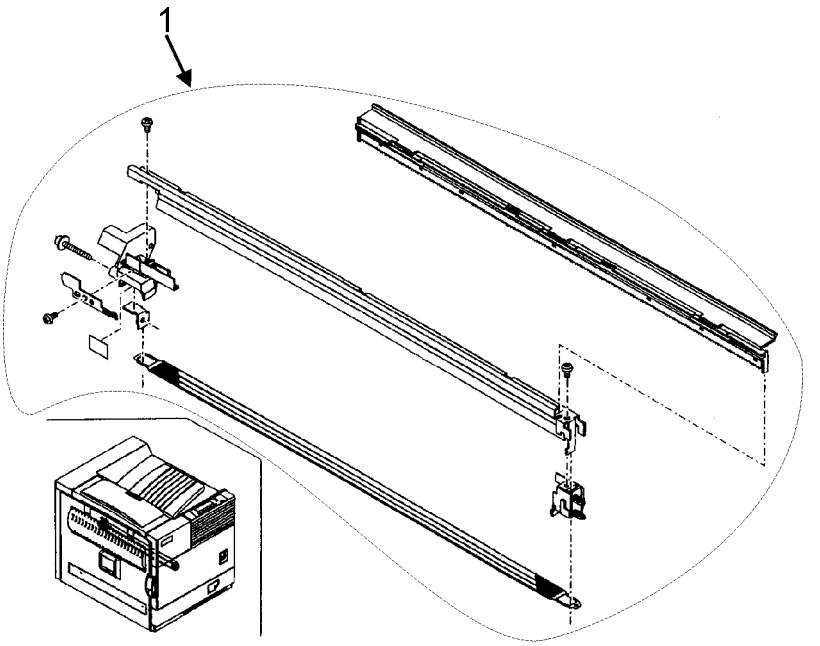
No.	Parts Code	Description
1	55628001	LED (GP1A73A)
2	50414701	Paper Exit Follower Roller
3	50414801	Exit Paper Roller
4	51242601	Paper Exit Gear
5	51611001	PF Bearing
6	50414901	Fusing Roller Rear
7	51242701	Gear 24T
8	51242801	Fusing Drive Gear
9	51242901	Oneway Gear
10	51305601	Belt
11	51243001	Pulley

No.	Parts Code	Description
12	51611101	Bearing
13	51243101	Idle Gear
14	51243201	Oneway Gear
15	51305701	Belt
16	56733401	Paper Exit Harness
17	56213801	Door Switch Spring
18	56733501	Sensor Harness
19	56516101	Paper Exit Motor
20	51305801	Discharge Brush
21	56733601	Paper Exit Earth Harness
22	50225201	Paper Exit Reverse Unit - Everything Pictured Below



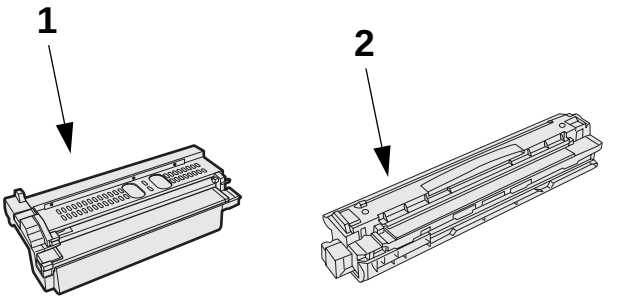
9. MC Unit

No.	Parts Code	Description
1	50128301	MC Unit - Everything pictured below



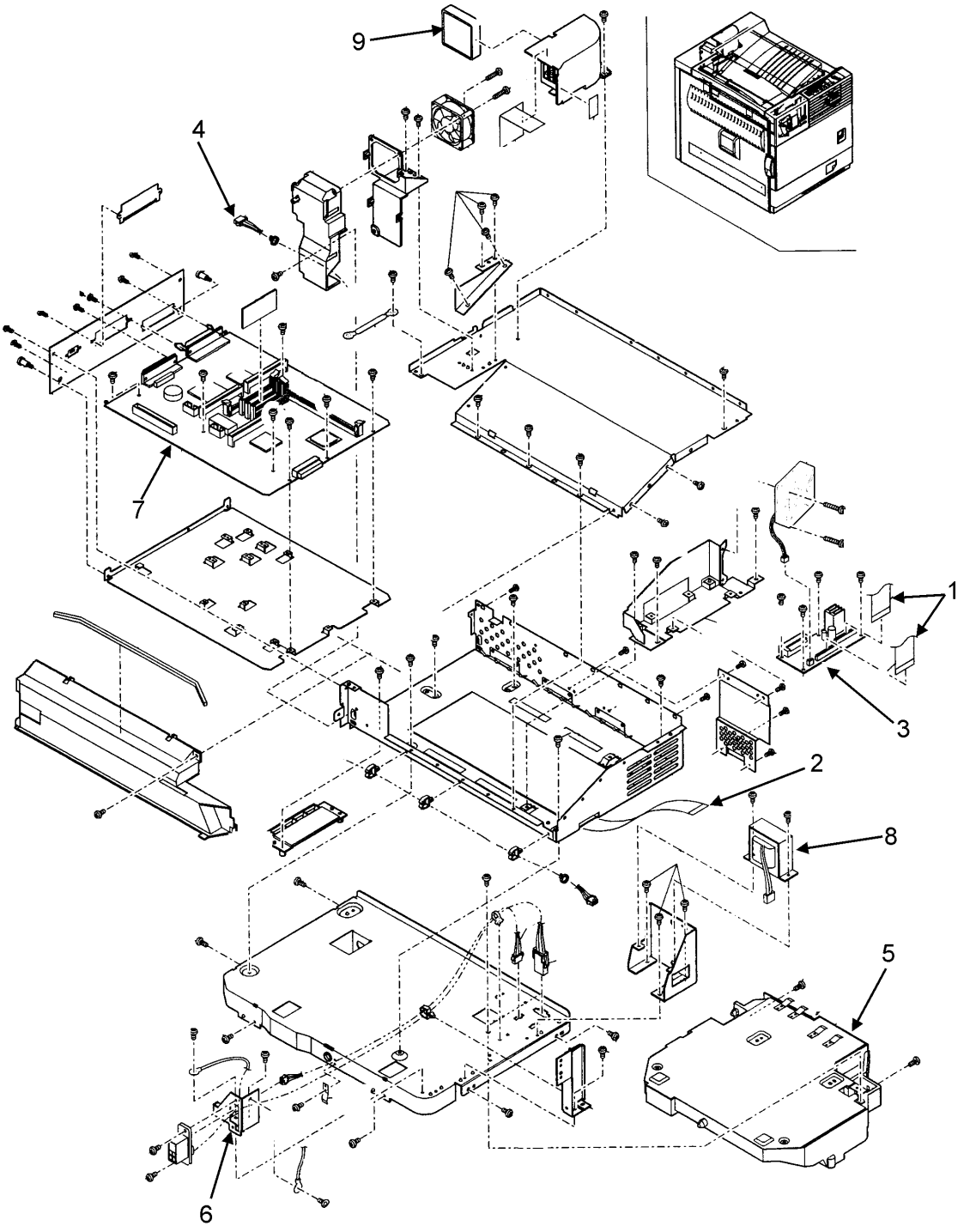
10. Printer Cartridge and Developer Cartridge

No.	Parts Code	Description
1	56115001	Printer Cartridge
2	57100101	Developer Cartridge



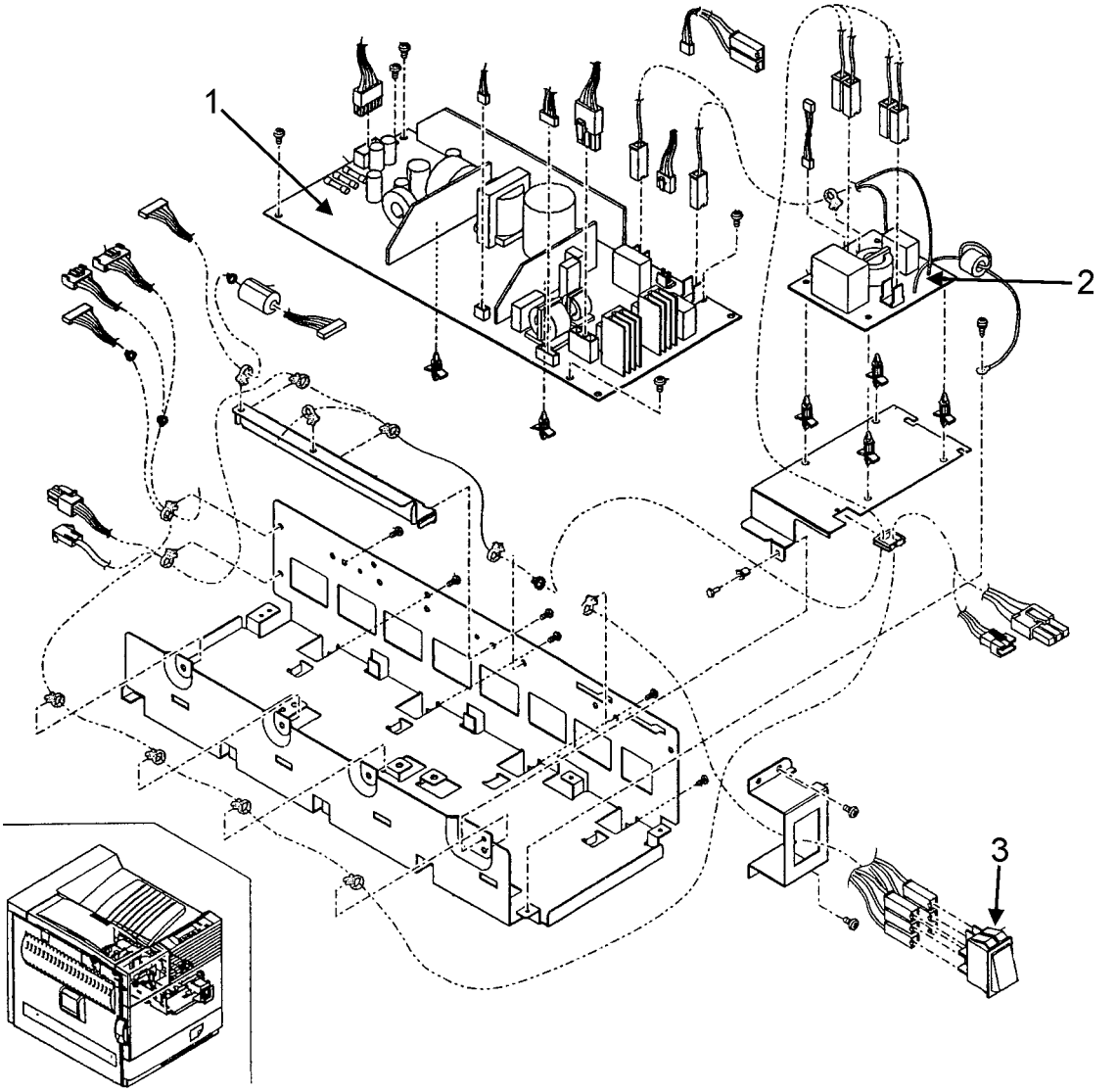
11. Controller Box Unit

No.	Parts Code	Description
1	55085501	Printer Interface FCC
2	55085601	OPE Interface FFC
3	55085701	Mother Board Unit
4	56733701	DSW Interface Harness
5	50225301	LSU Unit
6	56733801	Fusing Interface Harness
7	55085101	Print Control PWB Unit
8	55506801	Coil
9	55506701	Ozone Filter



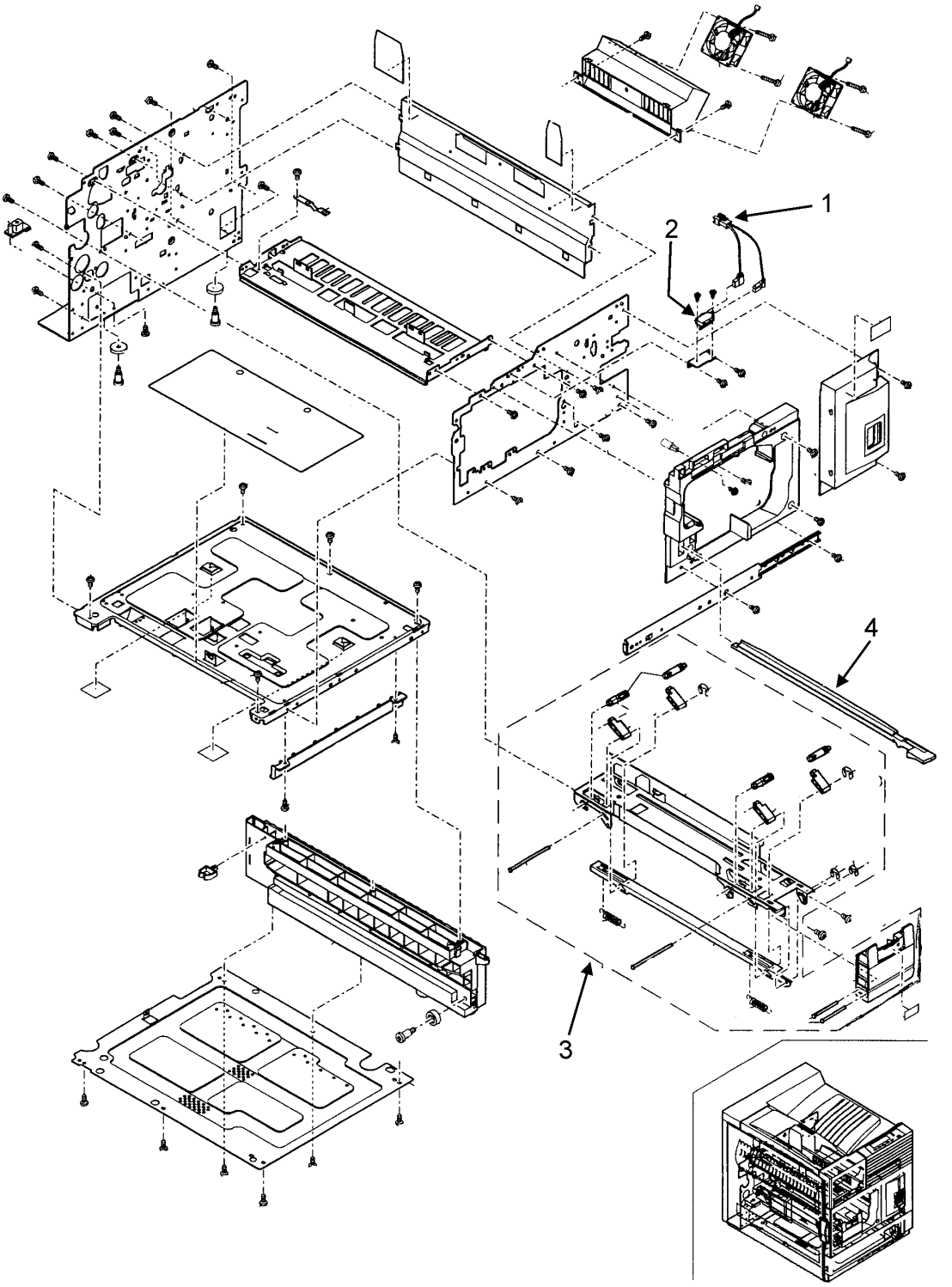
12. Power Supply Unit

No.	Parts Code	Description
1	56416901	AC/DC Power Supply PWB
2	55085201	Filter PWB
3	56213901	Switch



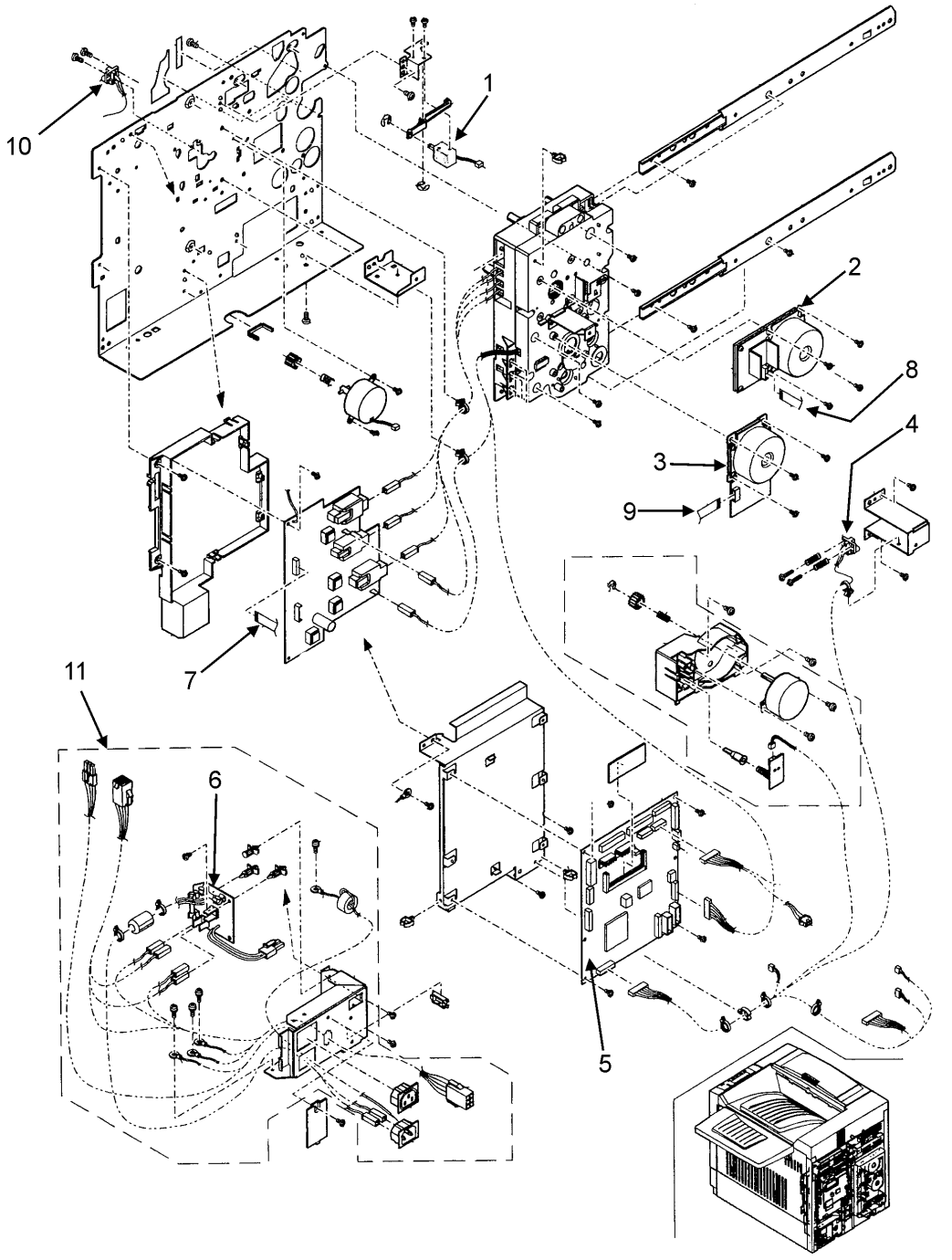
13. Rear Frame Section 1

No.	Parts Code	Description
1	56734701	DSWF Harness
2	56213801	Door Switch
3	51027801	DV Guide Assembly
4	53607901	Paper Powder Remove Case Unit



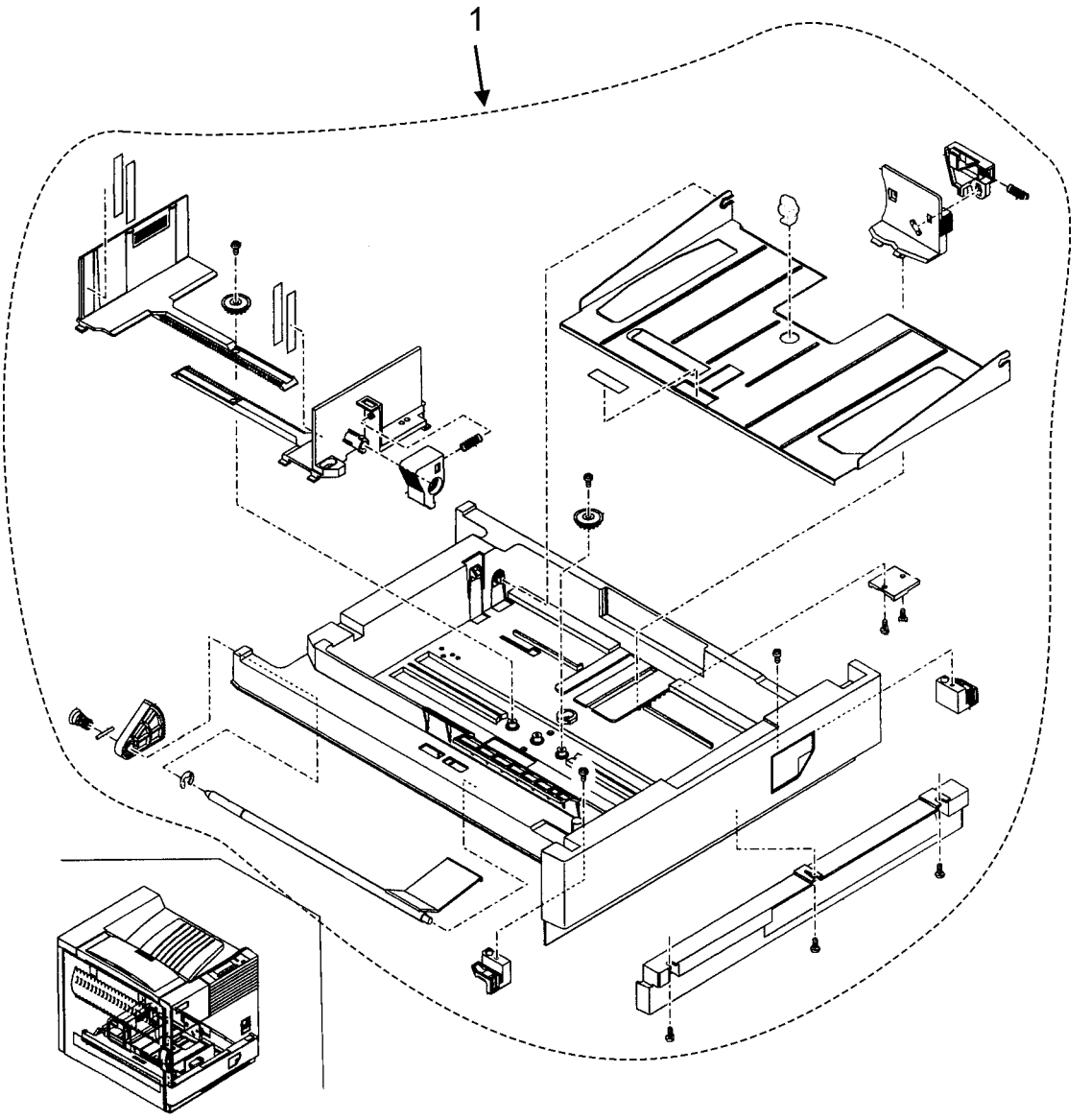
14. Rear Frame Section 2

No.	Parts Code	Description
1	56516601	Separator Pawl Solenoid
2	56516701	Drum Motor
3	56516801	Main Motor
4	56734501	Main Drive Interface Harness
5	55085401	PCU PWB Unit
6	56307701	Fuse PWB
7	55085801	HV Interface
8	56516401	Drum Motor Interface
9	56516501	Main Motor Interface
10	56734601	Hopper Interface Harness
11	51027701	Inlet Fixing Plate



15. Cassette Unit

No.	Parts Code	Description
1	50128301	Cassette Unit - Everything Pictured Below



16. RSPL Part Number List

Part #	Description
50128201	CASSETTE: UNIT
50128301	ASSY: MECHANISM CONTROL UNIT
50224901	FUSING UNIT
50225001	FUSING UNIT
50225101	DRIVE: MAIN UNIT
50225201	ASSY: PAPER EXIT REVERSE UNIT
50225301	SCANNER: LASER UNIT
50225401	ASSY: TRANSFER UNIT
50413701	ROLLER: PS FOLLOWER
50413801	ROLLER: PS
50413901	ROLLER: PS FRONT
50414001	ROLLER: PS GUIDE UNIT
50414101	ROLLER: TRANSFER
50414201	ROLLER: PAPER FEED SEPARATION
50414401	ROLLER PRESSURE WELDING
50414701	ROLLER: PAPER EXIT FOLLOWER
50414901	ROLLER: FUSING REAR
50416901	SENSOR: SF PAPER IN
50419301	SENSOR: ADU PAPER STOP
50608901	KEY: OPERATION
50709901	COLLAR: TRANSFER FOLLOWER
50933401	SPRING: PS PRESSURE
50933801	SRPING: REVERSE GATE
51027701	PLATE: INLET FIXING UNIT 100V
51027702	PLATE: INLET FIXING UNIT 200V
51027801	GUIDE: DV
51242001	GEAR: PS FOLLOWER
51242101	GEAR: PS
51242201	GEAR: TR
51242301	PULLEY: PICKUP ROLLER
51242501	GEAR: FUSING 48T
51242601	GEAR: PAPER EXIT 30T
51242801	GEAR: FUSING DRIVE
51242901	GEAR: ONE WAY 30T
51243001	PULLEY: S3M-E5T
51243101	GEAR: IDLE 24T
51243201	GEAR: ONE WAY 24T

Part #	Description
51305501	BELT: 55MLL3.2
51305601	BELT
51305701	BELT
51305801	BRUSH: DISCHARGE
51500401	COUPLING: ONE WAY
51500501	COUPLING: PAPER FEED
51500601	COUPLING: HOPPER
51610101	BEARING: FOLLOWER ROLLER
51610301	BEAR: TR F
51610401	BEARING: TR R
51610501	BEARING: FOLLOWER ROLLER
51610901	BEARING
51611001	BEARING: PF (F8X12X5 16X)
53080201	COVER: SIDE ASSY (LEFT)
53351901	ACTUATOR PE
53352001	ROLLER: DISCHARGE PLATE
53607901	CASE: PAPER POWDER REMOVE
54335701	RESISTOR: MPT VARIABLE
55084801	PCB: PRINTER OPERATION UNIT
55084901	PCB: DRAWER
55085001	PCB: HIGH VOLTAGE RESISTOR
55085101	PCB: PRINT CONTROL UNIT
55085201	PCB: FILTER
55085301	PCB: FILTER
55085401	PCB: PCU UNIT
55085501	PCB: FFC PRINTER INTERFACE
55085601	PCB: OPE INTERFACE FFC
55085701	PCB: MAIN UNIT
55085801	PCB: FFC (HV INTERFACE)
55087801	PWB: MPF WIDTH DETECT
55506601	FILTER: OZONE
55506701	FILTER: OZONE
55506801	FILTER: OZONE
55627601	LED: GSP2A200L
55627701	LED
55627701	LED: GP1A73A
55628001	LED: GP1A73A
55628101	REGULATOR: SEPARATOR TORQUE
55628201	INTERRUPTER: PHOTO

Part #	Description
55628301	CLUTCH 4K W
55628401	CLUTCH 5K B
55628601	SENSOR: PHOTO
55946301	IC: EES041400P
55946401	IC: EEP64
55946801	I/C
55946901	I/C
55947101	I/C
55947501	PCB: LED UNIT
56115001	PRINT CARTRIDGE
56213801	SWITCH: DOOR
56213801	SWITCH: DOOR
56213901	SWITCH
56214301	SWITCH: MICRO
56307701	FUSE: PCB 100M (100V SERIES)
56307801	FUSE: PCB 200 M (200V SERIES)
56307901	FUSE: 15A 250V (100 SERIES)
56308001	FUSE: 10A 240V (200 SERIES)
56308101	FUSE: FBT6.3 AC125V 6.3A
56308201	FUSE: FBT4 AC125V 4A
56308301	FUSE: T4A H/250V
56308401	FUSE: 215 6.3A
56416901	POWER SUPPLY: AC/DC 100
56417001	POWER SUPPLY AC/DC 200
56417101	TRANSFORMER: HIGH VOLTAGE
56516001	FAN
56516101	MTOR: PAPER EXIT
56516201	FAN
56516301	MOTOR: TONER
56516401	MOTOR: DRUM I/F FFC
56516501	MOTOR: MAIN I/F FFC
56516601	SOLENOID: SEPARATOR PAWL
56516701	MOTOR: DRUM
56516801	SOLENOID: MOTOR MAIN 45
56516901	MOTOR: DRIVE UNIT ASSY
56517401	SOLENOID: ADU GATE
56517801	MOTOR: TRANSPORT SFN
56518001	SOLENOID: SF PAPER EXIT
56518101	SOLENOID: PRESSURE

Part #	Description
56518201	SOLENOID: SF PAPER FIXING
56518301	SOLENOID: STOPPER
56518401	MOTOR: SF JOGER
56518501	MOTOR: SF PAPER IN
56518601	MOTOR: ADU TRANSPORT LOWER
56518701	SOLENOID: PADDLER
56518801	MOTOR: STEPPING
56518901	MOTOR: DC
56519001	MOTOR
56519101	MOTOR
56519201	MOTOR: STEPPING
56519301	MOTOR: STEPPING
56519901	MOTOR: ADU TRANSPORT
56520001	MOTOR: ADU COOLING FAN
56733001	HARNESS: LEFT DOOR INTERFACE
56733101	HARNESS: PPD
56733201	HARNESS: CASSETTE DETECT INTER.
56733401	HARNESS: LEFT DOOR INTERFACE
56733501	HARNESS: SENSOR
56733601	HARNES: PAPER EXIT EARTH
56733701	HARNESS: DSW I/F
56733801	HARNESS: FUSING INTERFACE
56733901	HARNESS: MSW INTERFACE 100V
56734101	HARNESS: 100 AC/DC
56734201	HARNESS: 200 AC/DC
56734301	HARNESS
56734401	HARNESS: FILTER IF
56734501	HARNESS: MAIN DRIVE I/F
56734601	HARNESS: HOPPER I/F
56734701	HARNESS: DSWF
56738001	HARNESS: SF RELAY UNIT
57100101	DEVELOPER

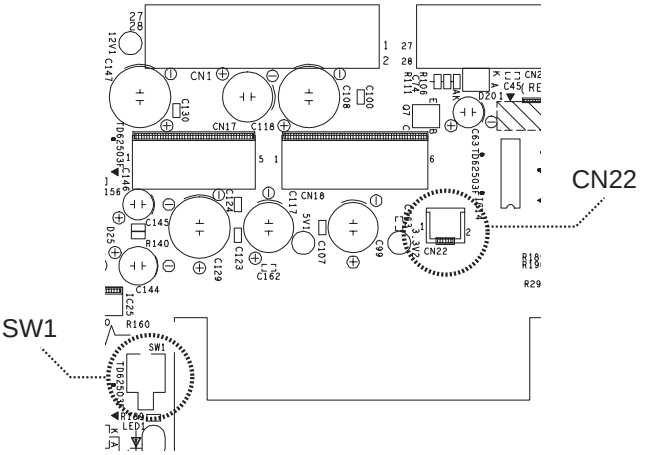
[13] OTHERS

1. PCU self print

Use this mode to print using only the PCU data and the firmware, without using the printer controller. This allows you isolate PCU and controller trouble.

A. Self Print Procedure

1. Remove the printer controller and remove the rear cabinet.
2. Short CN22 on the PCU PWB.
3. While pressing **MENU** key and **OK** key together, turn on the power to the main unit.
4. When the power is turned on, push the orange SW1 switch on the side of the PWB to reset the PCU.



5. The machine is now operating in the Diag mode.
6. Press **MENU** key to select the self-print mode.
7. Select the self-print pattern to 1 - 40, and execute the operation.
   - Self-print patterns 1 - 40 are formed in the PCU. Do not select any others.
8. if the self-print successfully occurs, then the PCU is functioning normally and the trouble occurs elsewhere.

2. Flash ROM Update for PWB

A. Required for updating Flash ROM:

- Core Printer Machine
- PC (operating on MS-DOS mode)
- Printer cable (Parallel)
- Firmware for upgrade (XXXX.SFU file)
- Firmware transfer software (FCOPY.EXE)
- Flash ROM for written PCU (When PCU version is upgraded)

B. Update procedure

1. Turn off the power.
2. Remove the PWB controller.
3. Switch the jumper wires shown in Fig. 1.
   - In the case of printer control PWB

JP-2	VCCW	L → H
JP-4	DIAG	OFF → ON

4. Remove the Flash ROM from the PWB by pressing the tab at the end of the module. The Flash ROM will pop up for easy removal.
5. Insert the new Flash ROM by pressing evenly and firmly until it snaps into place.
6. Install the controller PWB back into the printer.
7. Connect the PC and the machine with the printer cable and power on the unit.
8. The machine will boot into BOOT mode and the following message is displayed.

```
Version Check
  XXXXXXXXXX
```

9. Select the following display screen with MENU key, and press OK key.
   - Rewriting the flash ROM inserted to an empty socket

```
CN Update
  From Parallel
```

↓ [OK]key

```
CN Update
  Waiting Data
```

   - Rewriting the controller Flash ROM

```
Firm Update
  From Parallel
```

↓ [OK]key

```
Firm Update
  Waiting Data
```

10. Power on the PC. Locate the directory and the file name of the *.SFU file.
11. Open an MS-DOS Command Prompt and enter the command below and execute. The file is then written.
    FCOPY XXXX.SFU (XXXX.SFU: File name)

12. When the data is received, the display shows the following. The data LED also blinks.

Rewriting the flash ROM inserted to an empty socket

```
CN Update
  Receiving Data
```

When data reception is normally completed, the screen changes to the display below.

```
CN Update PCU
  Writing OK?
```

↓ [OK] key [Check writing]

```
CN Update PCU ->CN5
  Writing Data
```

↓ [↑][↓] key [Write slot selection]

```
CN Update PCU ->CN6
  Writing Data
```

↓ [OK] key [Slot check]

```
CN Update PCU ->CN6
  Writing Data
```

↓ [Writing]

```
CN Update PCU ->CN6
  Result: OK
```

Rewriting the controller Flash ROM

```
Firm Update
  Receiving Data
```

↓ [Data receiving]

```
Firm Update
  Writing Data
```

↓ [Writing]

```
Firm Update
  Result: OK
```

13. When data reception completes normally, the display shows the following. The data LED turns off.

Rewriting the flash ROM inserted to an empty socket

```
CN Update:XXXX
  Result:OK
```

Rewriting the controller Flash ROM

```
Firm Update:XXXX
  Result:OK
```

14. If data reception does not complete normally, the display shows the following. Also, the error LED blinks.

Rewriting the flash ROM inserted to an empty socket

```
CN Update:XXXX
  Result:NG
```

Rewriting the controller Flash ROM

```
Firm Update:XXXX
  Result:NG
```

If this happens, turn off the power and repeat procedures from step 7.

15. When data reception is completed normally, turn off the power and pull out the control PWB.
16. Remove the flash ROM from the socket, and replace it to the original PWB.
17. Replace the jumper wire of the control PWB to the original position.
    - In the case of printer control PWB

JP-2	VCCW	H → L
JP-4	DIAG	ON → OFF

18. Install the control PWB.

Table 1 Control PWB Jumper-PIN

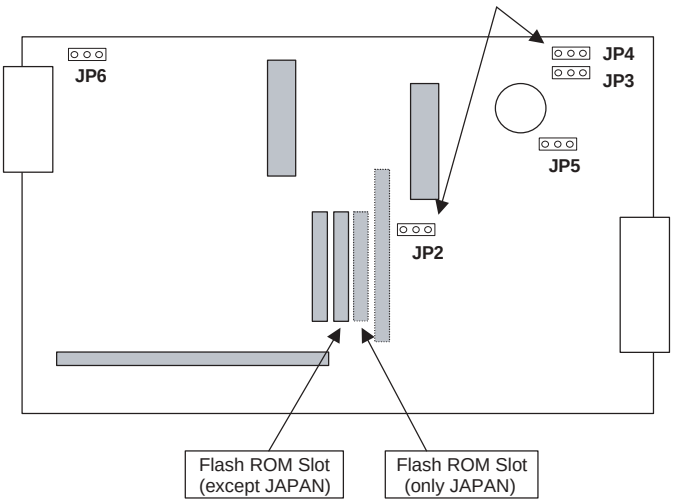
Printer control PWB

Jumper switching function	The mark printed on PWB		Function			
BOOT program start	DIAG	JP4	ON		OFF*	
Flash write (Control-PWB)	VCCW	JP2	H	enable	L*	protect
Battery ON/OFF	BATTERY	JP5	ON*		OFF	
no use	SW1	JP3	H		L*	

* Default setting

Fig.1

Printer control PWB



C. Supplement

When the controller flash ROM upgrade procedure is not completed normally due to a power OFF trouble, etc. the printer may not power on.

In this occurs, the upgrade procedure has failed and has incorrectly written over the controller boot ROM and the Controller ROM. Replace both ROMS. When servicing, therefore, be sure to carry those two ROMs.