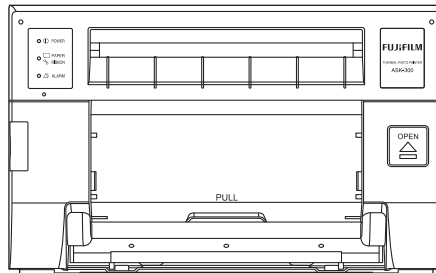


Service Manual

DIGITAL COLOR PRINTER



MODEL
ASK-300

This model is RoHS-compliant.
Provide servicing referring to "NOTES
FOR SERVICING RoHS-COMPLIANT
PRODUCTS" described in the service
manual.

(Pb) Solder, (Pb) Joints, (Pb) PCA

This product uses lead-free solder
on the circuit boards. For repairing
circuit boards, see "Precautions for
resoldering" in this Service Manual.

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prohibited by the Copyright Law.

CAUTION

Before servicing this chassis, it is important that the service person reads the "SAFETY PRECAUTIONS" and "PRODUCT SAFETY NOTICE" in this service manual.

NOTES FOR SERVICING RoHS-COMPLIANT PRODUCTS

Follow the notes and instructions below when servicing RoHS-compliant products.

1. For RoHS-compliant products, be sure to use RoHS-compliant service parts.
2. Check the presence of <G> marking on the rating plate to distinguish RoHS-compliant product from non-RoHS-compliant product.

<G> marking

With <G> marking: RoHS-compliant product

Without <G> marking: Non-RoHS-compliant product

<Sample>

FUJIFILM THERMAL PHOTO PRINTER THERMO-FOTODRUCKER Термический фотопринтер 热升华照片打印机 熱感應式照片印表機 サーマルフोटプリンター MODEL/MODELL/МОДЕЛЬ/型号/型名 ASK-300	 CAUTION: SHOCK HAZARD, DO NOT OPEN. ATTENTION: RISQUE DE CHOC ELECTRIQUE. NE PAS OUVRIR.  CAUTION: BEFORE CONNECTING READ INSTRUCTIONS. IC : 7736B-ASK300 THIS CLASS A DIGITAL APPARATUS COMPLIES WITH CANADIAN ICES-003. CET APPAREIL NUMERIQUE DE LA CLASSE A EST CONFORME A LA NORME NMB-003 DU CANADA.	FCC ID : W2Z-ASK300 THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRE OPERATION.
220-240V ~ 50/60Hz 2.4A     BZ02	120V ~ 50/60Hz 4.6A  LISTED I.T.E. 19LF	100V ~ 50/60Hz 5.5A この装置は、クラス A 情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。 VCCI-A ・取扱説明書にて指定の電源コードをご使用ください。 ・必ず接地接続を行ってください。
FUJIFILM Corporation 富士フイルム株式会社	MADE IN MALAYSIA / СДЕЛАНО В МАЛАЙЗИИ / 马来西亚制造 / 馬來西亞製造	這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

ZCJ 7P-56

 776C505B10

Mark position

SPECIFICATIONS

• Power Supply	: AC 100/110/120/220 - 240V 50/60Hz,	• Gradations	: 256 (8 bits) for each color
• Power Consumption	: 5.5A (AC 100/110V, 50/60Hz), 4.6A (AC 120V, 50/60Hz) 2.4A (AC 220 - 240V, 50/60Hz)	• Printing Size	: 89×127(3.5×5") 89×127mm(without frame) : 102×152(4×6") 102×152mm(without frame) : 127×178(5×7") 127×178mm(without frame) : 152×203(6×8") 152×203mm(without frame)
• Printing Method	: Sublimation Dye Thermal Transfer line print 3 color faces progressive printing (yellow, magenta and cyan) and surface lamination		
• Print's quality	: 300×300 DPI (DPI: Dots per inch)		
• Dot resolution	: 89×127(3.5×5") 1076 x 1568 dots : 102×152(4×6") 1228 x 1864 dots : 127×178(5×7") 1568 x 2128 dots : 152×203(6×8") 1864 x 2422 dots	• Supply method	: Automatic
		• Interface	: Hi-Speed USB (Ver. 2.0)
		• Operating conditions	: Temperature 15 - 35°C(59 - 95°F) Humidity 30 - 80% RH (No dewing)
		• Installation conditions	: Operating attitude : Horizontal ±5°
		• Outside dimensions	: 275 (W) × 446 (D) × 170 (H) mm
		• Weight	: Approx. 12kg

- Weight and dimensions shown are approximate.
- Design and specifications are subject to change without notice.

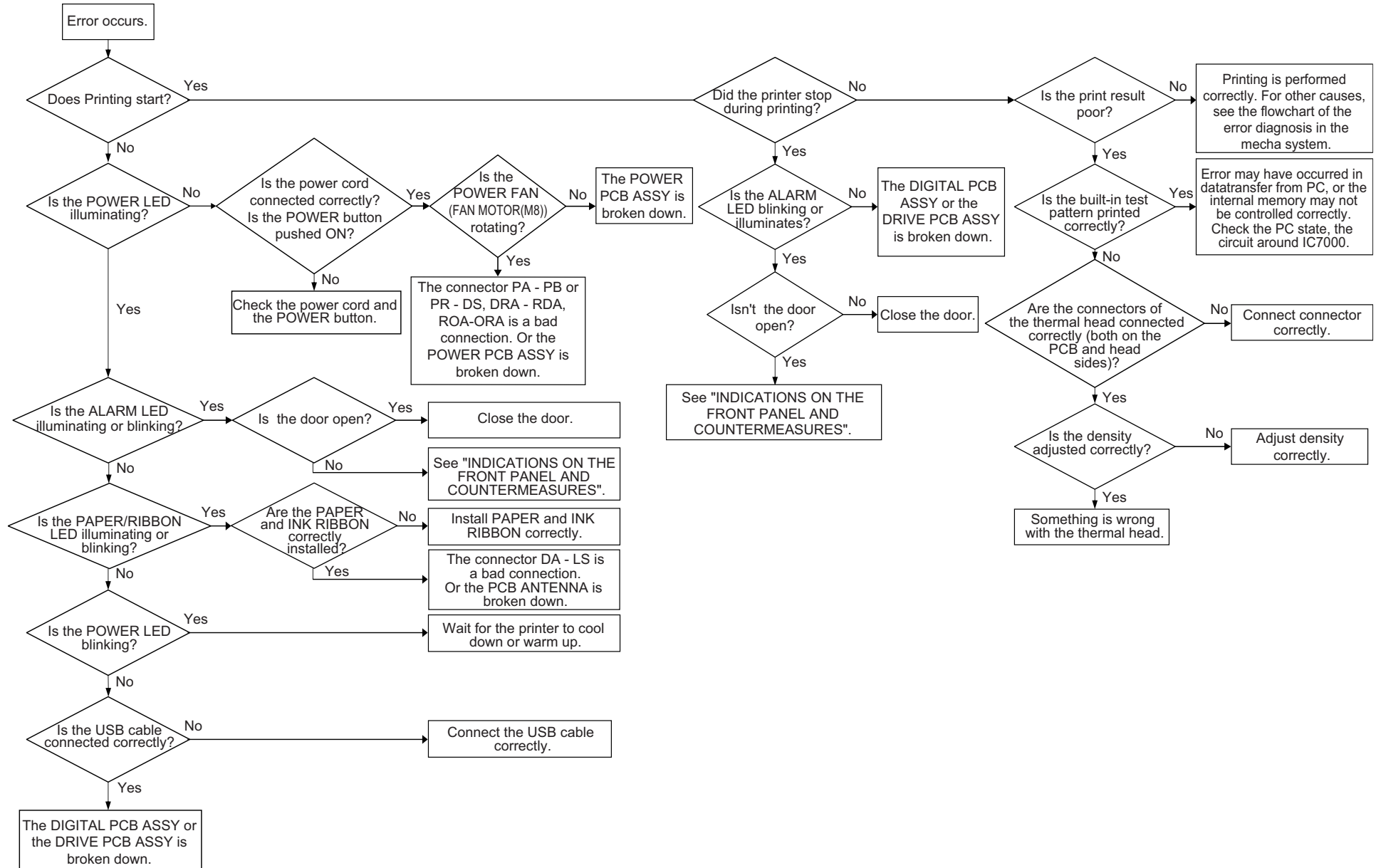
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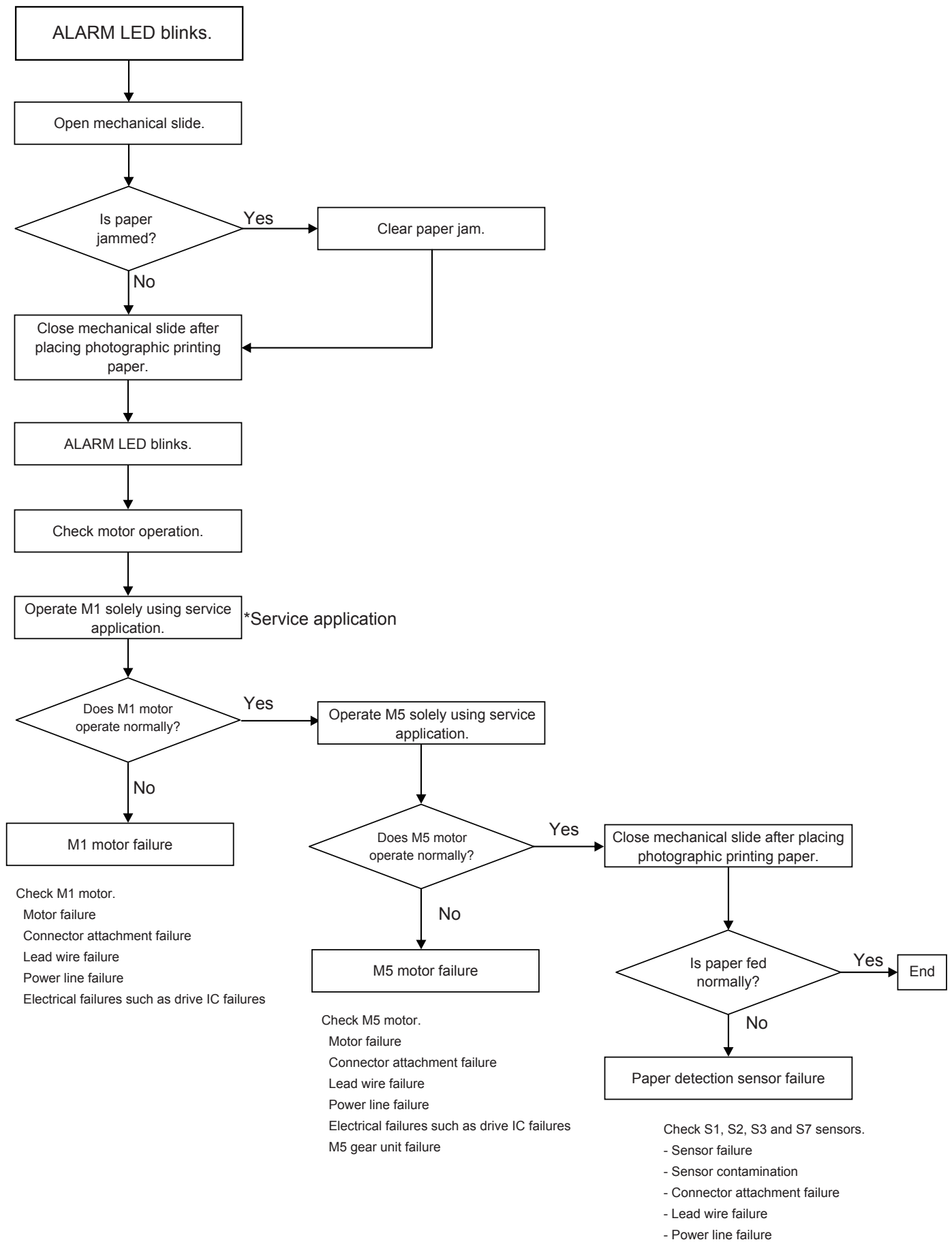
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ERROR DETECTION FLOW CHART

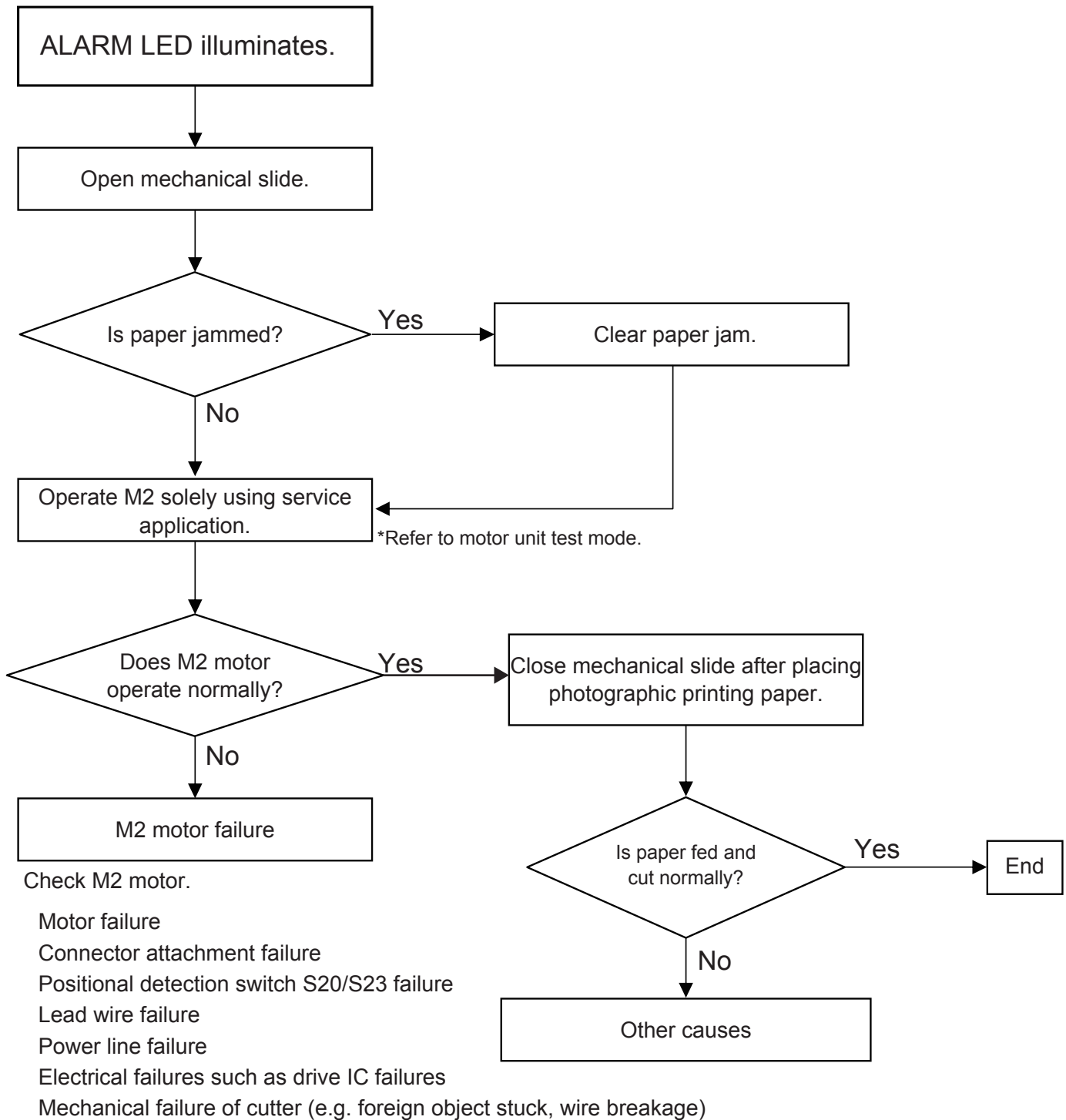
■Flowchart of the error diagnosis in the electrical system



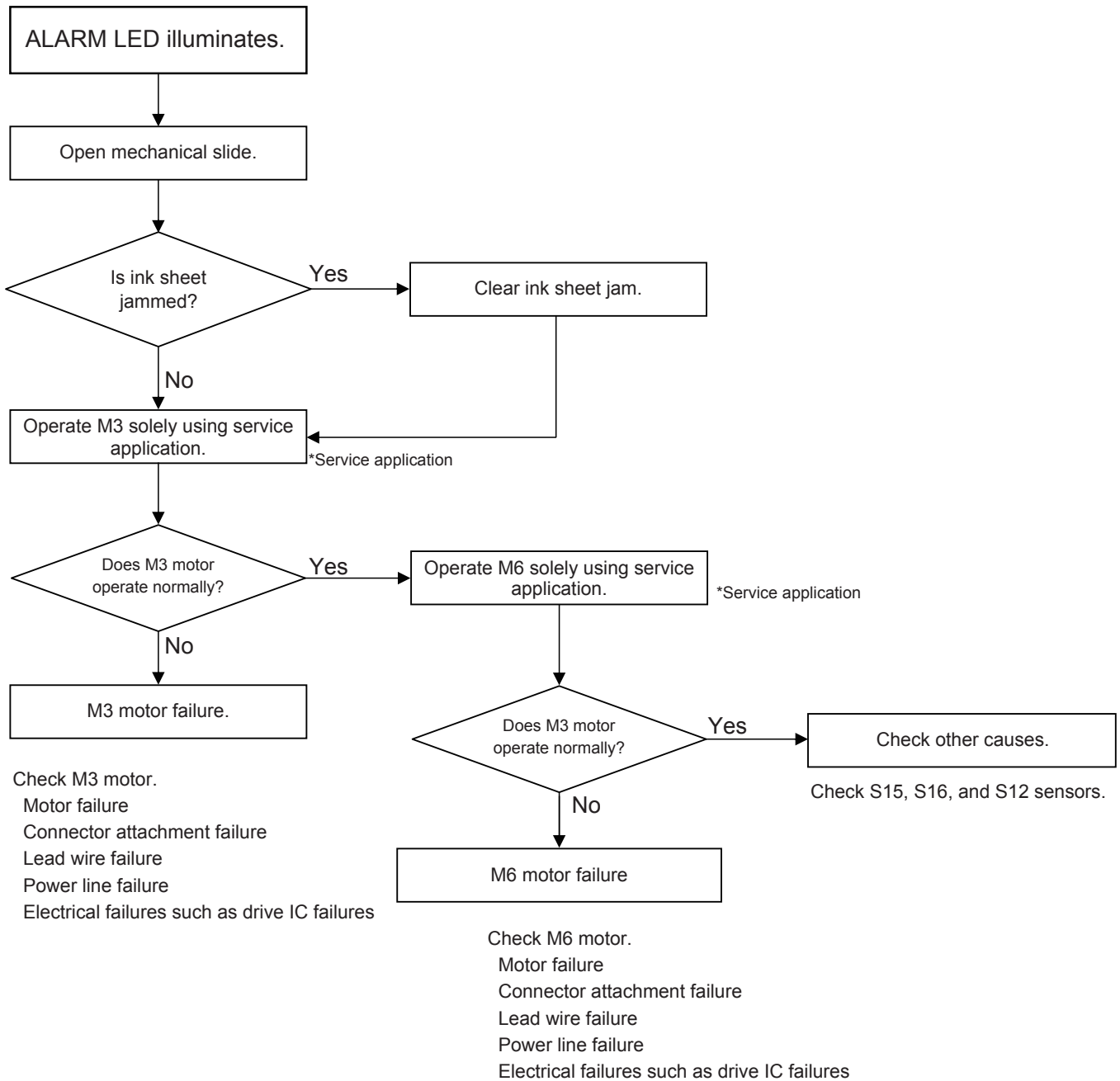
1. Flow Chart of Paper Transfer and Feeding System (M1/M5 Motor)



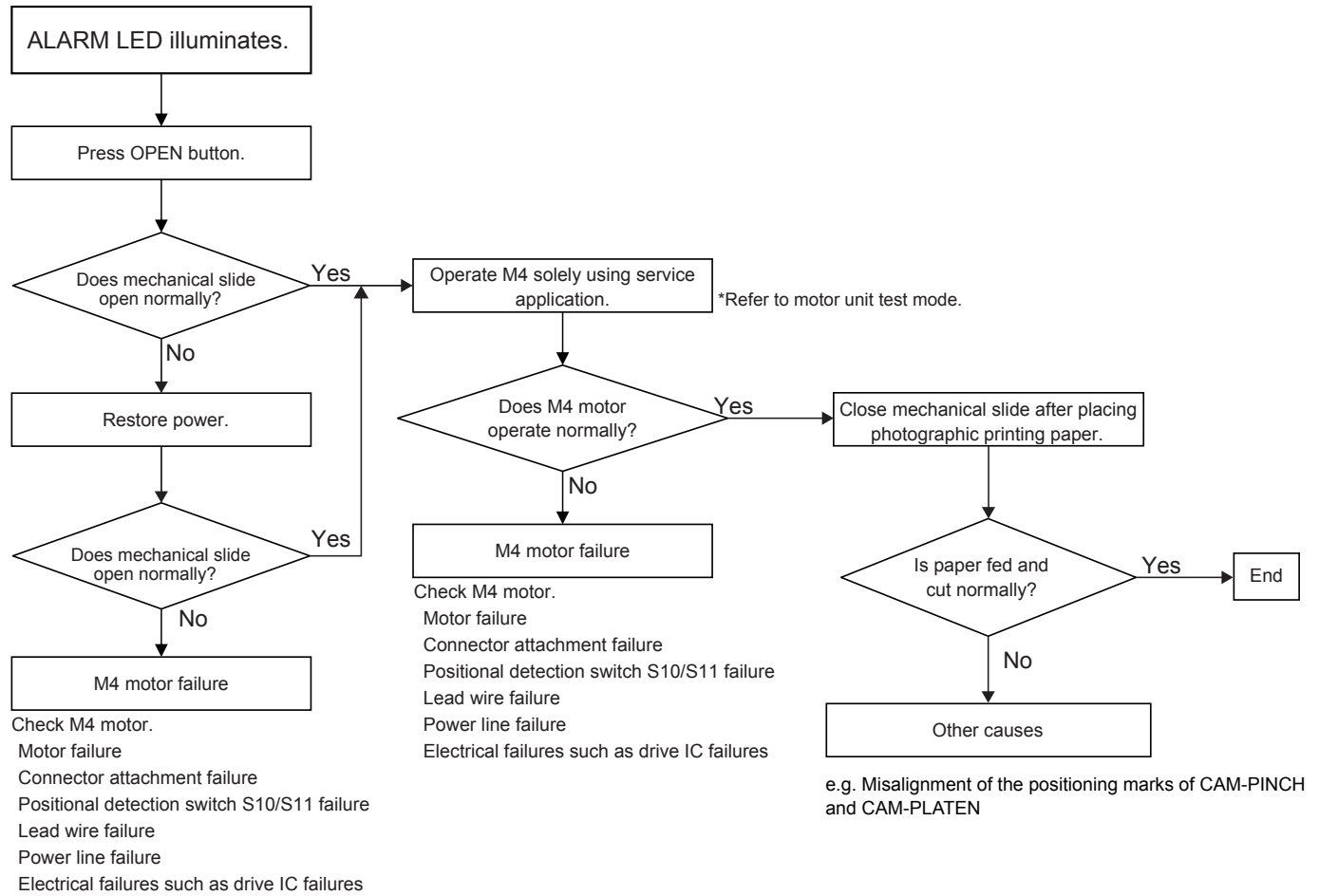
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3. Flow Chart of Ink Sheet Drive System (M3/M6 Motor)



4. Flow Chart of Pinch Pressure Bonding/Platen Pressure Bonding (M4 Motor)



ERROR CODE

Priority level	Error Code (test print)	Timing	Mode	Detail	LED			Recovery condition from error / Diagnosis part (Check point for each error code)	Error Code (Service application)	
					POWER	Alarm	MEDIA		Code	Error Name
Low	—	—	No Error(Stand-by/Printing)		○	●	●	—	—	—
	—	At Start of Printing	Pre-Heating		○	●	●	—	—	—
	—	At Start of Printing	Over-Heating		○	●	●	—	1011	Error_HeatError
	1	During Stand-by/AT Start of Printing	No Paper Strip Bin		○	○	○	Attach Paper Strip Bin	1111	Error_NoScrap Box
	2	At Power ON/Door Close	No Ink Ribbon Cassette		○	●	○	Install Ink Ribbon	1015	Error_SheetCassettIllegal
	3	At Power ON/Door Close	No Paper		○	●	○	Install Paper	1002	Error_PaperEnd
	4	At Power ON/Door Close	Ribbon and paper combination error		○	●	○	Exchange Ink Ribbon or Paper	1008	Error_PaperSheetIllegal
	5	At Power ON/Door Close	Ink Ribbon Empty		○	●	○	Install Ink Ribbon	1017	Error_SheetRemain
	6	At Power ON/Door Close	Unusable Ink Ribbon		○	●	○	Install Ink Ribbon	1014	Error_UnusableSheet
	7	During Printing	Image size and ribbon combination error		○	●	○	Exchange Ink Ribbon and Paper	1008	Error_PaperSizeIllegal
	8	During Printing	Paper End		○	●	○	Install Paper	1016	Error_PaperRemain
	9	During Printing	Ink Ribbon End		○	●	○	Install Ink Ribbon	1001	Error_SheetEnd
	A	During Stand-by	Door Open		○	○	●	Close Door	1013	Error_DoorOpen
	B	During Printing	Door Open while Printing		○	○	●	Remove Paper and Re-install Paper	1112	Error_PrintingDoorOpen
	C	At Power ON	Power OFF while Printing		—	—	—	Power ON	1108	Error_PrintingTurnOff
	D	During Printing	Ink Ribbon Error	Can't detect MCOP ink mark	○	○	○	Remove Paper and Re-install Paper	1113	Error_SheetError
	E			Ink Skip 1	○	○	○	Remove Paper and Re-install Paper	1113	Error_SheetError
	F			Ink Skip 2	○	○	○	Remove Paper and Re-install Paper	1113	Error_SheetError
	10			Ink Jam	○	○	○	Remove Paper and Re-install Paper / Check Ink Ribbon	1004	Error_SheetJam
	20	Printing/Feed&Cut etc.	Paper Jam	Paper Jam 110	○	○	○	Remove Paper and Re-install Paper	1003	Error_PaperJam
	21			Paper Jam 111	○	○	○	Remove Paper and Re-install Paper	1003	Error_PaperJam
	22			Paper Jam 115	○	○	○	Remove Paper and Re-install Paper	1003	Error_PaperJam
	23			Paper Jam 120	○	○	○	Remove Paper and Re-install Paper	1003	Error_PaperJam
	24			Paper Jam 125	○	○	○	Remove Paper and Re-install Paper	1003	Error_PaperJam
	25			Paper Jam 210	○	○	○	Remove Paper and Re-install Paper	1003	Error_PaperJam
	26			Paper Jam 310	○	○	○	Remove Paper and Re-install Paper	1003	Error_PaperJam
	27			Paper Jam 311	○	○	○	Remove Paper and Re-install Paper	1003	Error_PaperJam
	28			Paper Jam 315	○	○	○	Remove Paper and Re-install Paper	1003	Error_PaperJam
	29			Paper Jam 320	○	○	○	Remove Paper and Re-install Paper	1003	Error_PaperJam
	2A			Paper Jam 720	○	○	○	Remove Paper and Re-install Paper	1003	Error_PaperJam
	2B			Paper Jam 130	○	○	○	Remove Paper and Re-install Paper	1003	Error_PaperJam
	30	Printing/Feed&Cut etc.	Mechanical Error	Mecha Error 200	○	○	●	Remove Paper and Re-install Paper	1103	Error_MechaError
	37			Mecha Error 205	○	○	●	Power ON	1103	Error_MechaError
	31			Mecha Error 210	○	○	●	Remove Paper and Re-install Paper	1103	Error_MechaError
	32			Mecha Error 213	○	○	●	Power ON	1103	Error_MechaError
	33			Mecha Error 400	○	○	●	Power ON	1103	Error_MechaError
	34			Mecha Error 410	○	○	●	Remove Paper and Re-install Paper	1103	Error_MechaError
	35			Mecha Error 421	○	○	●	Remove Paper and Re-install Paper	1103	Error_MechaError
	36			Mecha Error 425	○	○	●	Power ON	1103	Error_MechaError
	3A	Power ON	Electrical Error	RF-ID Error	○	○	●	PCB-DIGITAL IC7205, IC7206, IC7207 and Peripheral Circuit [DA][DJ]Connector	1109	Error_PrinterError
	3B	Always		FLASH Memory Write Error	○	○	●	IC7200, IC7200~IC7203, IC7204 and Peripheral Circuit	1109	Error_PrinterError
	3C	Always		EEPROM Read Error	○	○	●	PCB-DIGITAL IC7200 and Peripheral Circuit [DH][DJ]Connector Thermal Head	1109	Error_PrinterError
	3D	During Pre-Heating		Pre-Heating Error	○	○	●	PCB-DIGITAL IC7200 and Peripheral Circuit [DH][DJ]Connector Thermal Head	1109	Error_PrinterError
	3E	Always		MDA Error	○	○	●	PCB-DRIVE	1109	Error_PrinterError
	3F	Always		Power Fan Lock	○	○	●	PCB-DIGITAL IC7200 and Peripheral Circuit [DS]Connector PCB-POWER [PR][PF1][PF2]Connector	1109	Error_PrinterError
	40	Always		24V Voltage Error/Others	○	○	●	PCB-DIGITAL IC7200 and Peripheral Circuit [DS]Connector PCB-POWER	1109	Error_PrinterError
High										

○: ON, ●: OFF, ◎: Blinking

EXPOSED

SAFETY PRECAUTIONS

NOTICE : Observe all cautions and safety notes located inside the cabinet and on the chassis.

LEAKAGE CURRENT CHECK

Before returning the printer to the customer, it is recommended that leakage current be measured according to the following methods.

1. Cold Check

With the AC plug removed from the 100V / 110V / 120 V / 220-240 V AC source, place a jumper across the two AC plug prongs. Turn the printer AC switch on. Using an ohm-meter, connect one lead to the AC plug and touch the other lead to each exposed metal part (screwheads, metal overlays, etc.), particularly any exposed metal part having a return path to the chassis. Exposed metal parts having a return path to the chassis should have a minimum resistance reading of 1 meg ohm. Any resistance below this value indicates an abnormality which requires corrective action. Exposed metal parts not having a return path to the chassis will indicate an open circuit.

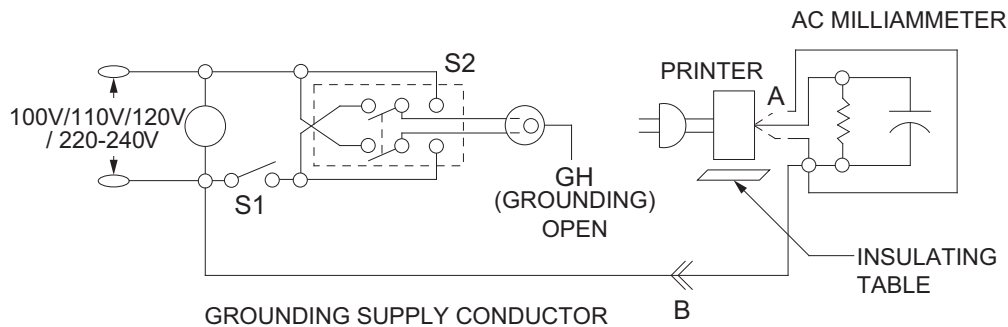
2. Hot Check

Use the circuit in the Figure to perform this test.

(1) With switch S1 open, connect the printer to the measuring circuit. Immediately after connection, measure the leakage current using both positions of switch S2, and with the switching devices in the printer in all of their operating positions.

(2) Switch S1 is then closed, energising the printer. Immediately after closing the switch, measure the leakage current using both positions of switch S2, and with the switching devices in the printer in all of their operating positions.

Current measurements of items (1) and (2) are to be repeated after the printer has reached thermal stabilisation. The leakage current shall not be more than 0.5 milliamperes.



PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the printer have special safety related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, etc. Replacement parts which have these special safety characteristics are identified in this service manual. Electrical components having such features are identified by shading on the schematic diagram and the parts list of this service manual, and by the supplementary sheet for this chassis to be issued subsequently. Therefore replacements for any safety parts should be identical in value and characteristics.

PRECAUTIONS FOR RESOLDERING

Lead-free solder is handled in a different way from eutectic solder. See below for details.

How to distinguish circuit boards using lead-free solder from those using eutectic solder

Circuit boards using lead-free solder

A mark of **(Pb) Solder**, **(Pb) Joints**, **(Pb) PCA** or **LFS** (for limited marking space) is printed near the board assembly number on the component side.

Circuit boards using eutectic solder

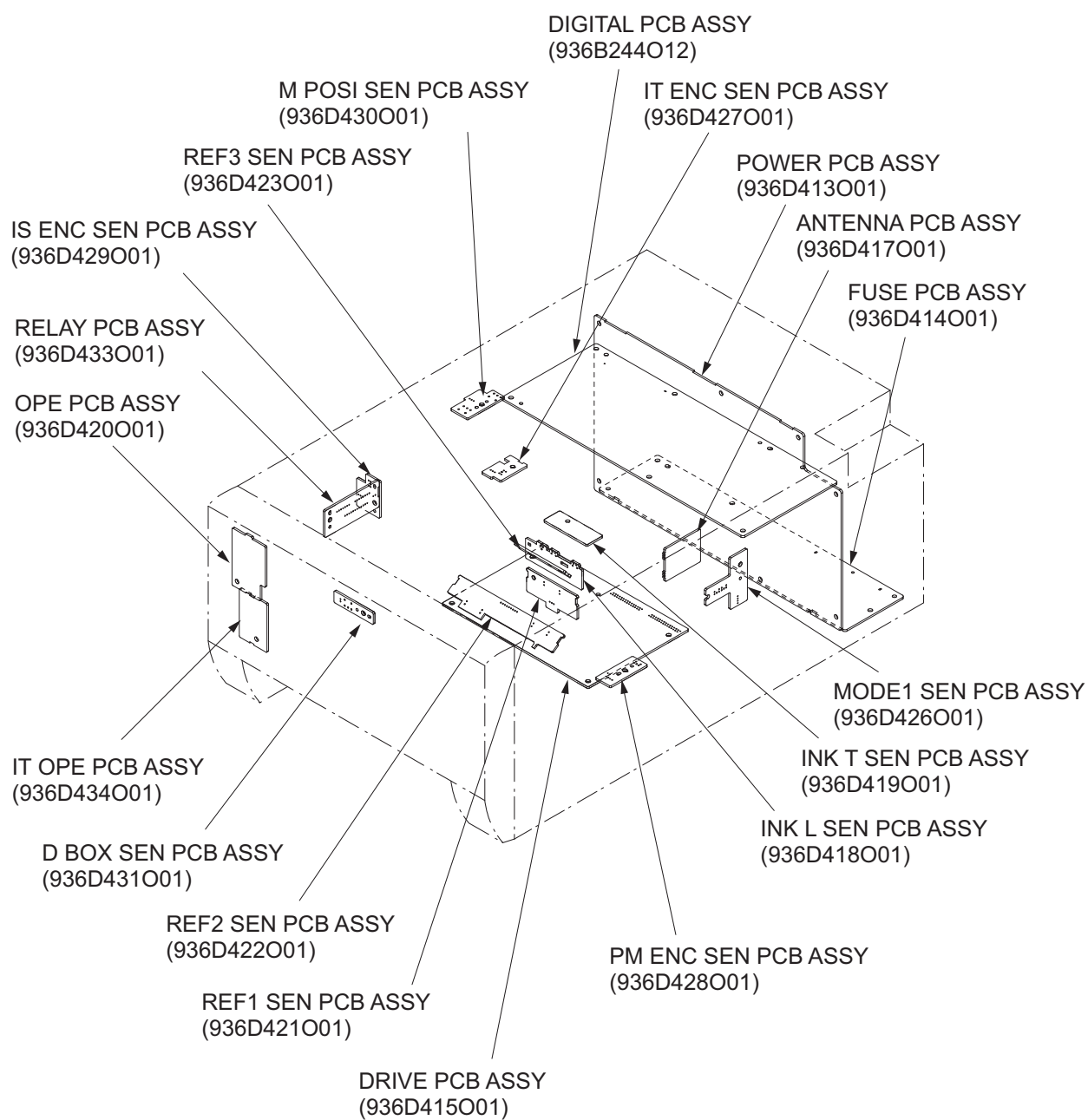
Circuit boards using eutectic solder are divided into two groups.

- Boards having no mark of **(Pb) Solder**, **(Pb) Joints**, **(Pb) PCA** or **LFS** (for limited marking space) near the board assembly number.
- Boards having a mark of **(Pb) Solder**, **(Pb) Joints**, **(Pb) PCA** or **LFS** (for limited marking space) that is painted out by a feltpen near the board assembly number.
- * Only when there is a limited marking space on the board, **(Pb) Solder** may be indicated as **(Pb) S**, **(Pb) Joints** as **(Pb) J**, and **(Pb) PCA** as **(Pb) P**.
- * Circuit boards using lead-free solder and those using eutectic solder may be used together in the same product.

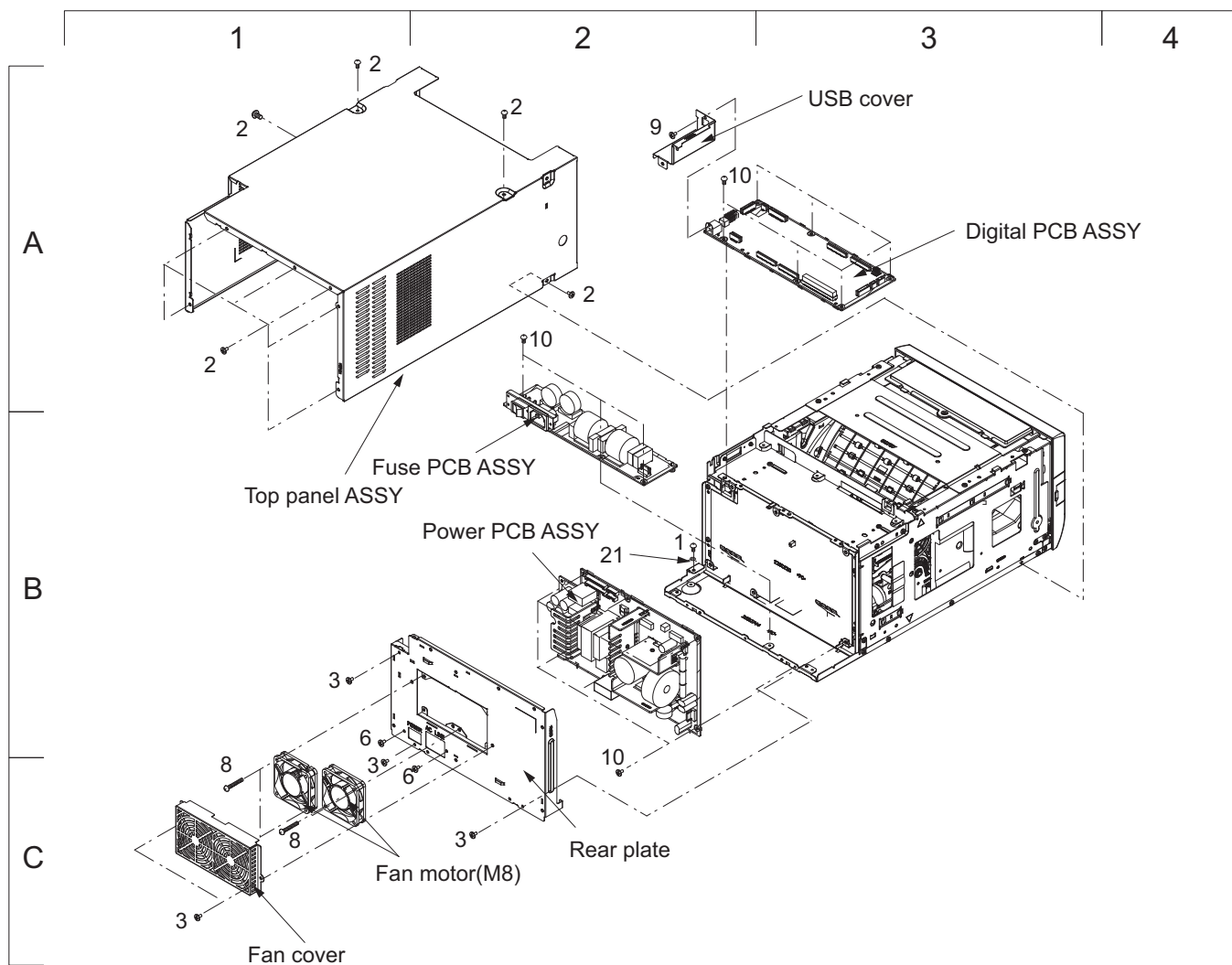
Instructions for resoldering

- For circuit boards using lead-free solder, use lead-free solder.
- For circuit boards using eutectic solder, use eutectic solder.
- Separate the soldering iron for lead-free solder from that for eutectic solder completely for use.
(It is prohibited to use a same soldering iron for lead-free solder and eutectic solder.)
- For lead-free solder, it is advisable to use a soldering iron of at least 40 W because lead-free solder has a melting point approx. 35°C higher than that of eutectic solder as conventionally used. For wire solder, use M705ESC made by Senju Metal Industry Co., Ltd.
- To remove solder, you can use desoldering wires for eutectic solder as conventionally used.

PCB LOCATION



DISASSEMBLY

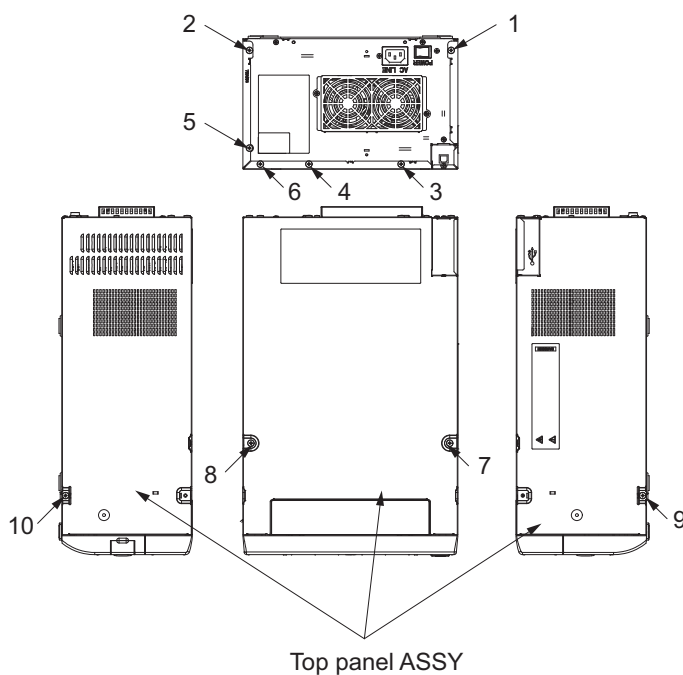


[Note] “Step No.” shows the removing order of parts to disassemble the printer.

1. Fan motor(M8)

Step No.	Parts name	Address	Number of parts to be removed	Connectors or parts to be removed
1	Top panel ASSY [Note 1]	B-1	2 (10pcs.)	-----
2	USB cover	A-3	9 (1pc.) / 3 (1pc.)	-----
3	Rear plate	C-2	6 (2pcs.) / 3 (2pcs.)	PF1 / PF2
4	Fan cover	C-1	3 (2pcs.)	-----
5	Fan motor(M8)	C-1	8 (2pcs.)	-----

[Note 1] When you assemble the Top panel ASSY, attach screws in the order shown below.



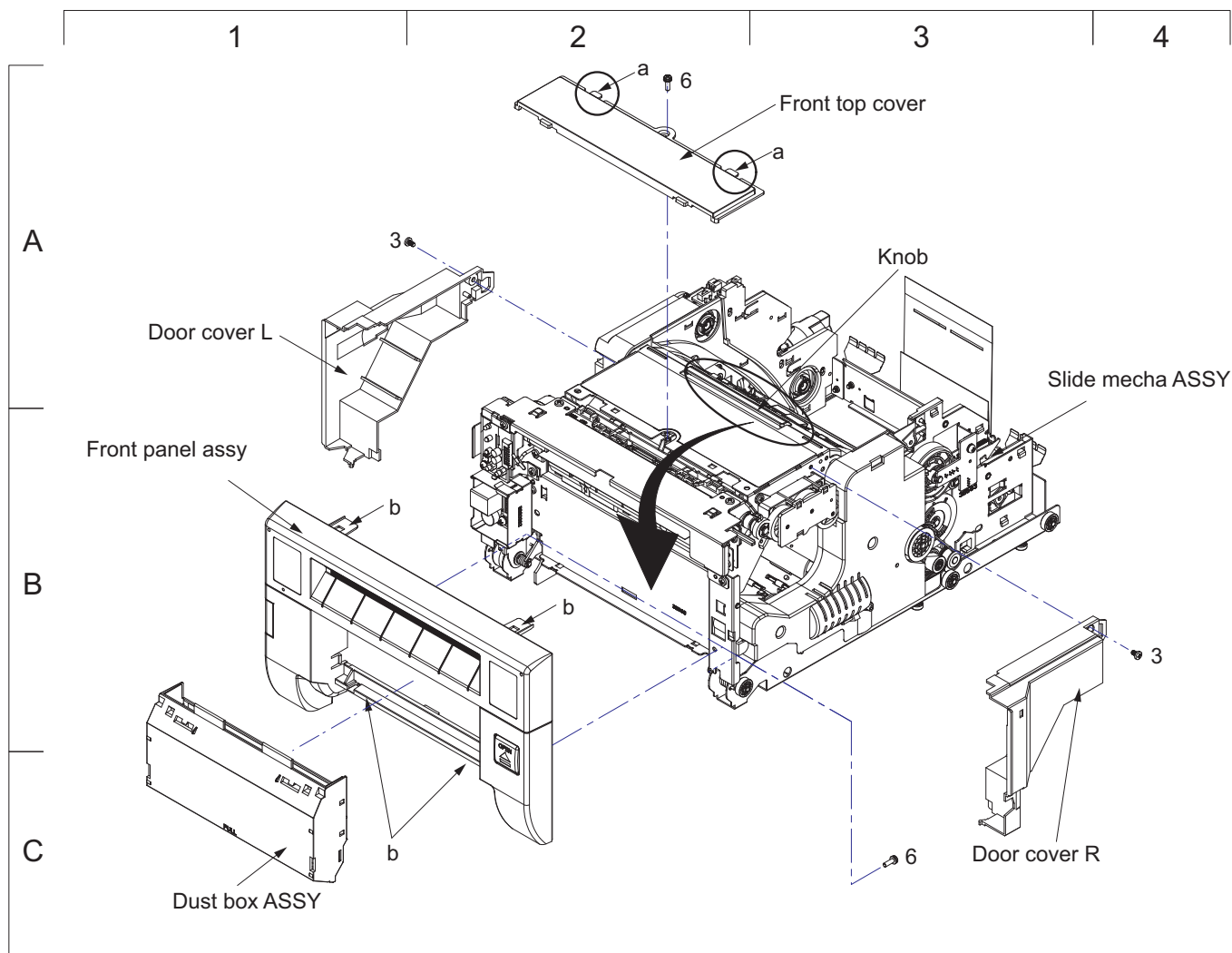
2. Digital PCB ASSY

Step No.	Parts name	Address	Number of parts to be removed	Connectors or parts to be removed
1	Procedure of 1-1 to 1-2 (Top panel ASSY / USB cover)			
2	Digital PCB ASSY [Note 1]	A-3	10 (6pcs.)	All connectors

[Note 1] When you attach the DA connector, place the label to seal the connector.

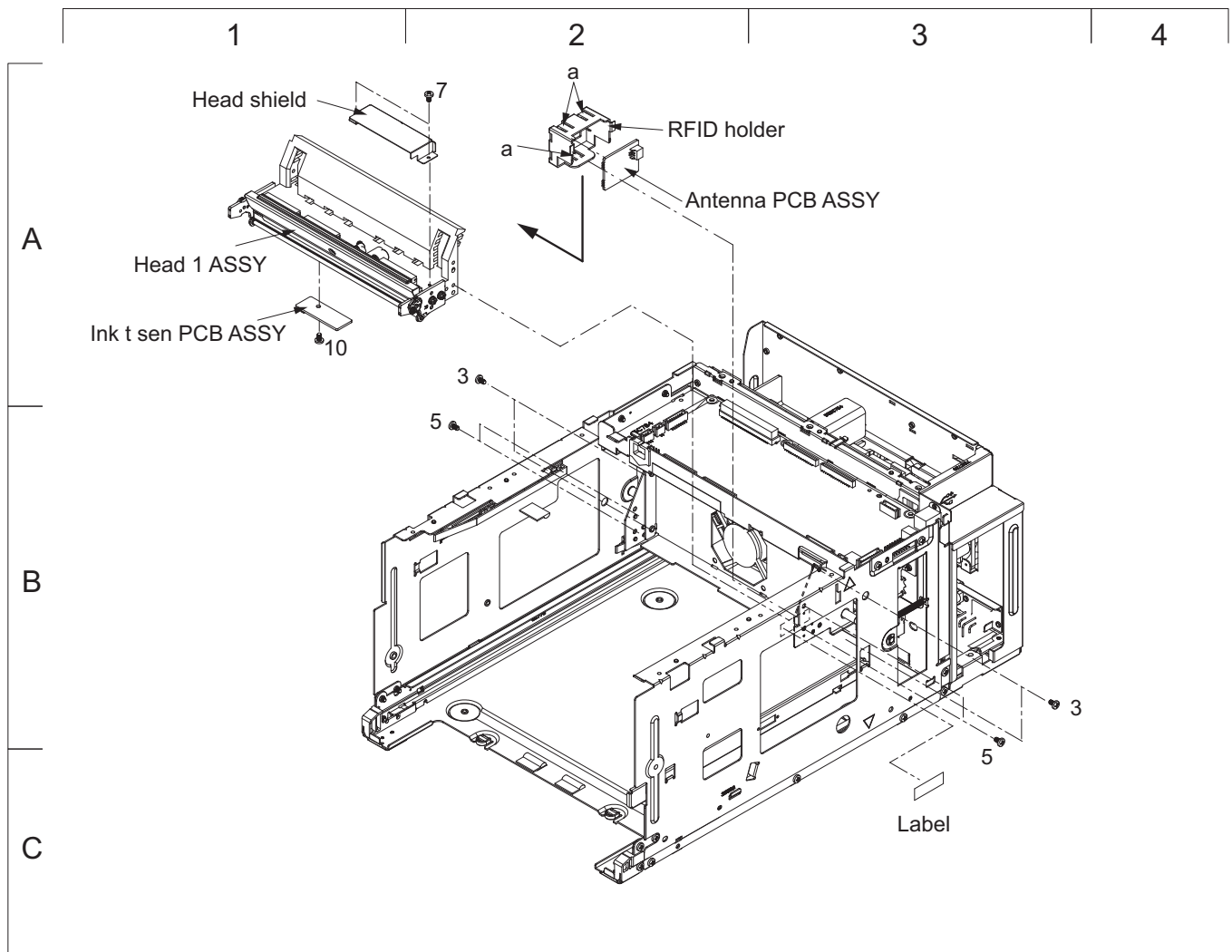
3. Fuse PCB ASSY / Power PCB ASSY

Step No.	Parts name	Address	Number of parts to be removed	Connectors or parts to be removed
1	Procedure of 1-1 to 1-3 (Top panel ASSY / USB cover / Rear plate)			
2	Fuse PCB ASSY	B-1	10 (3pcs.) / 1 (1pc.)	21 / PA
3	Power PCB ASSY	B-2	10 (6pcs.)	All connectors



4. Front panel ASSY

Step No.	Parts name	Address	Number of parts to be removed	Connectors or parts to be removed
1	Pull out and remove the slide mecha assy.			DRA / DRB
2	Front top cover	A-3	6 (1pc.) / a (2pcs.)	-----
3	Pull the knob to open the front door assy .			
4	Dust box ASSY	C-1	-----	-----
5	Door cover L	A-1	3 (1pc.)	-----
6	Door cover R	C-3	3 (1pc.)	-----
7	Front panel ASSY	B-1	6 (2pcs.) / b (4pcs.)	-----



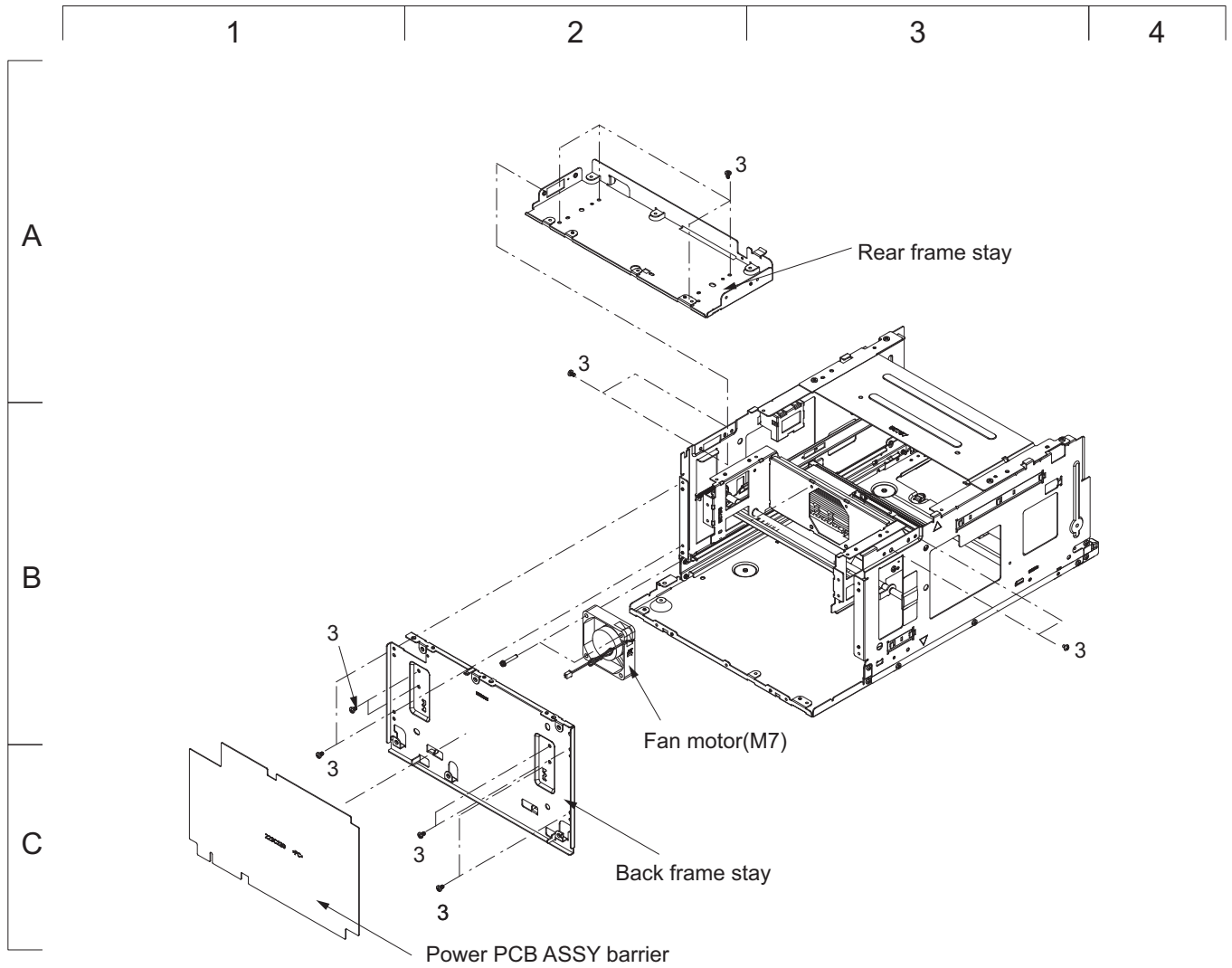
5. Antenna PCB ASSY

Step No.	Parts name	Address	Number of parts to be removed	Connectors or parts to be removed
1	Procedure of 1-1 (Top panel ASSY)			
2	Procedure of 4-1 (Slide mecha ASSY)			
3	Label [Note 1]	C-3	-----	-----
4	Remove the RFID holder by moving it in the direction shown by the arrow.			
5	Antenna PCB ASSY	A-2	a (3pcs.)	LS

[Note 1] When you attach the RFID holder, make sure to place the label.

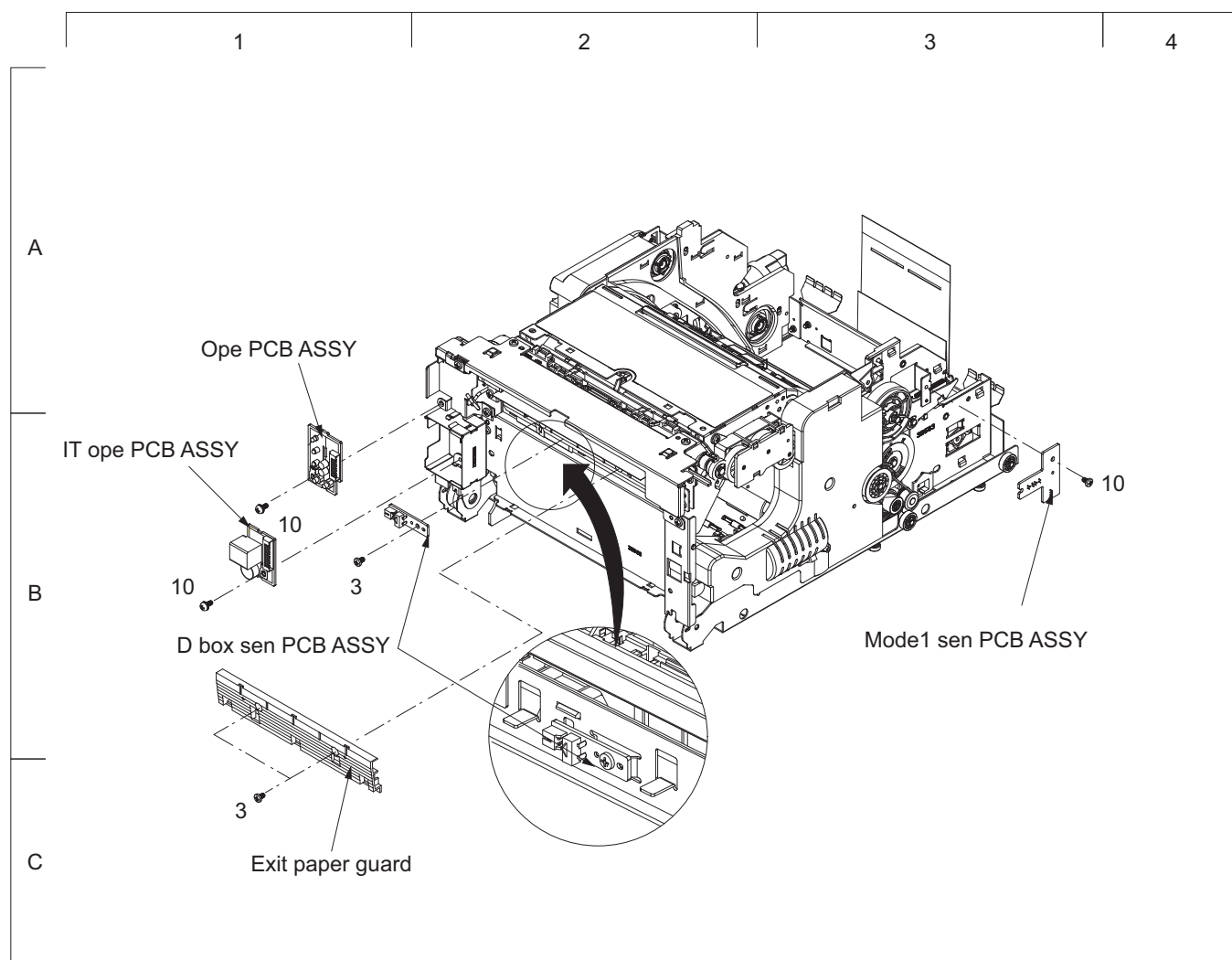
6. Head 1 ASSY / Ink t sen PCB ASSY

Step No.	Parts name	Address	Number of parts to be removed	Connectors or parts to be removed
1	Procedure of 1-1 (Top panel ASSY)			
2	Procedure of 4-1 (Slide mecha ASSY)			
3	Head shield	A-1	7 (2pcs.)	-----
4	Head 1 ASSY	A-1	3 (4pcs.) / 5 (4pcs.)	All connectors
5	Ink t sen PCB ASSY	A-1	10 (1pc.)	S19



7. Fan motor(M7)

Step No.	Parts name	Address	Number of parts to be removed	Connectors or parts to be removed
1	Procedure of 1-1 to 1-3 (Top panel ASSY / USB cover / Rear plate)			
2	Procedure of 2-2(Digital PCB ASSY)			
3	Procedure of 3-2 to 3-3(Fuse PCB ASSY / Power PCB ASSY)			
4	Power PCB ASSY barrier	C-2	-----	-----
5	Back frame stay	C-2	3 (8pcs.)	-----
6	Rear frame stay	A-3	3 (8pcs.)	-----
7	Fan motor(M7)	B-2	13 (2pcs.)	DN

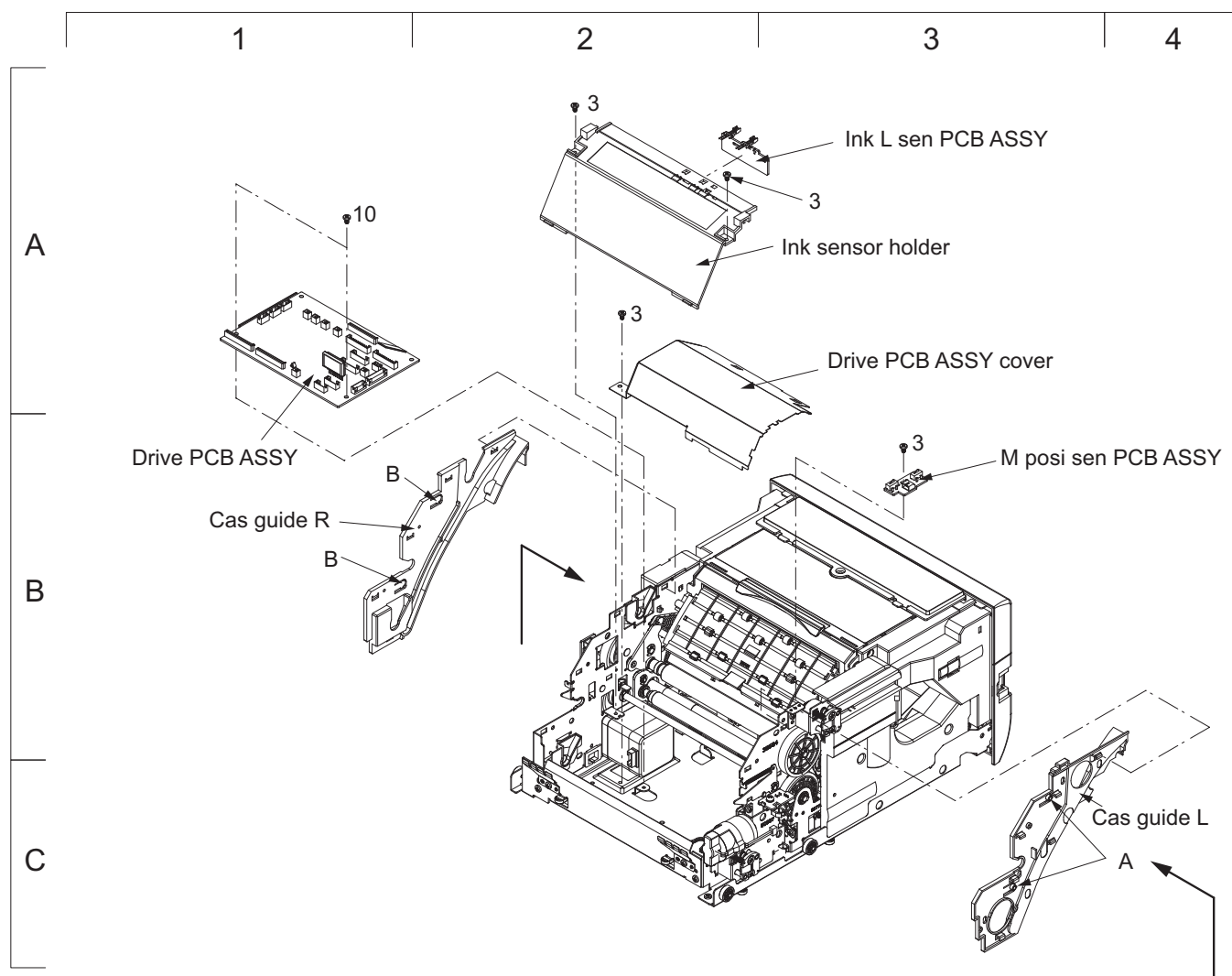


8. Ope PCB ASSY / IT ope PCB ASSY / D box sen PCB ASSY

Step No.	Parts name	Address	Number of parts to be removed	Connectors or parts to be removed
1	Procedure of 4-1 to 4-7 (Front panel ASSY)			
2	Ope PCB ASSY	A-1	10 (1pc.)	ORA
	IT ope PCB ASSY	B-1	10 (1pc.)	ORB
3	Exit paper guard	B-1	3 (2pcs.)	-----
4	D box sen PCB ASSY	C-1	3 (1pc.)	S29

9. Mode1 sen PCB ASSY

Step No.	Parts name	Address	Number of parts to be removed	Connectors or parts to be removed
1	Procedure of 4-1 (Slide mecha ASSY)			
2	Mode1 sen PCB ASSY	B-3	10 (1pc.)	S10



10. Cas guide L / Ink L sen PCB ASSY / Drive PCB ASSY

Step No.	Parts name	Address	Number of parts to be removed	Connectors or parts to be removed
1	Procedure of 4-1 (Slide mecha ASSY)			
2	Remove the cas guide L by moving it in the direction shown by the arrow while pushing the areas A.			
3	Ink sensor holder	A-3	3 (2pcs.)	-----
4	Ink L sen PCB ASSY	A-3	-----	S15
5	Drive PCB ASSY cover	A-3	3 (1pc.)	-----
6	Drive PCB ASSY	B-1	10 (2pcs.)	All connectors

11. Cas guide R

Step No.	Parts name	Address	Number of parts to be removed	Connectors or parts to be removed
1	Procedure of 4-1 (Slide mecha ASSY)			
2	Remove the cas guide R by moving it in the direction shown by the arrow while pushing the areas B.			

12. M posi sen PCB ASSY

Step No.	Parts name	Address	Number of parts to be removed	Connectors or parts to be removed
1	Procedure of 4-1 (Slide mecha ASSY)			
2	M posi sen PCB ASSY	B-3	3 (1pc.)	S24

14. IT enc sen PCB ASSY / TU ink bracket ASSY(M3)

Step No.	Parts name	Address	Number of parts to be removed	Connectors or parts to be removed
1	Procedure of 4-1 (Slide mecha ASSY)			
2	IT enc sen PCB ASSY	A-1	10 (1pc.)	S12
3	Procedure of 10-2 to 10-5 (Drive PCB ASSY cover)			
4	TU ink bracket ASSY(M3)	A-1	3 (2pcs.)	M3 / 120 / 121

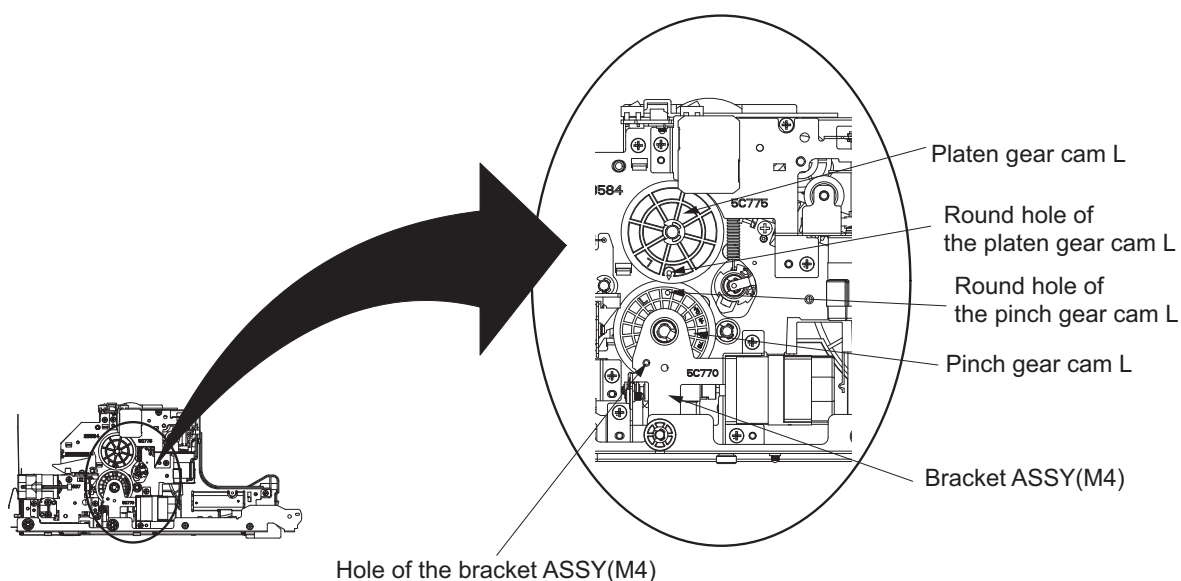
15. IS enc sen PCB ASSY / SP ink bracket ASSY(M6)

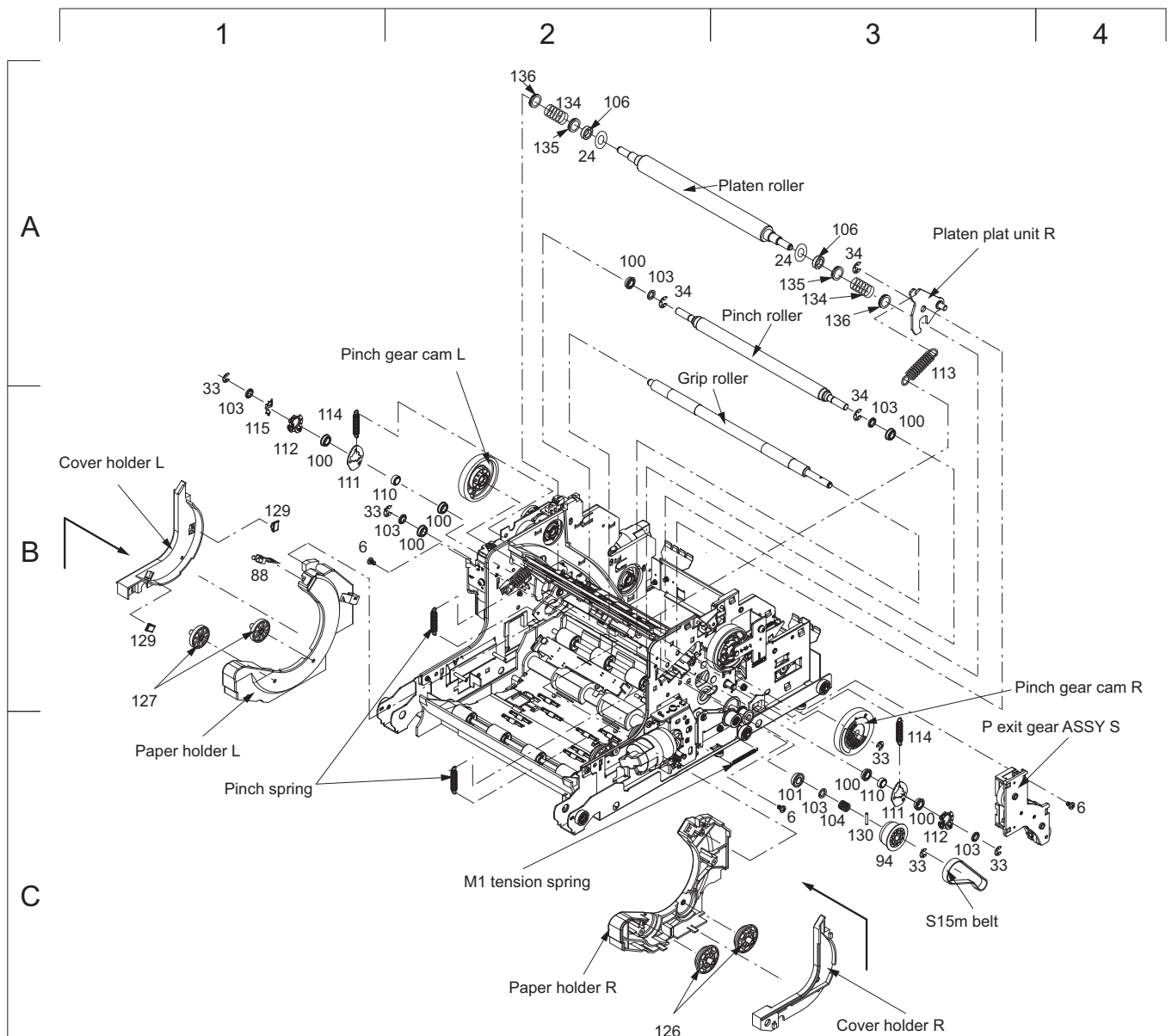
Step No.	Parts name	Address	Number of parts to be removed	Connectors or parts to be removed
1	Procedure of 4-1 (Slide mecha ASSY)			
2	Mecha cover L	C-1	6 (2pcs.)	-----
3	IS enc sen PCB ASSY	C-2	10 (1pc.)	S14
4	Procedure of 10-2 to 10-5 (Drive PCB ASSY cover)			
5	SP ink bracket ASSY(M6)	C-2	3 (3pcs.)	M6

16. Bracket ASSY(M4)

Step No.	Parts name	Address	Number of parts to be removed	Connectors or parts to be removed
1	Procedure of 4-1 (Slide mecha ASSY)			
2	Procedure of 15-2 (Mecha cover L)			
3	Procedure of 10-2 to 10-5 (Drive PCB ASSY cover)			
4	Bracket ASSY(M4) [Note 1]	B-3	3 (3pcs.)	M4

[Note 1] To attach the bracket ASSY (M4), align the round hole of the pinch gear cam L with that of the platen gear cam L, in addition, align the hole of the bracket ASSY (M4) with the other round hole of the pinch gear cam L.



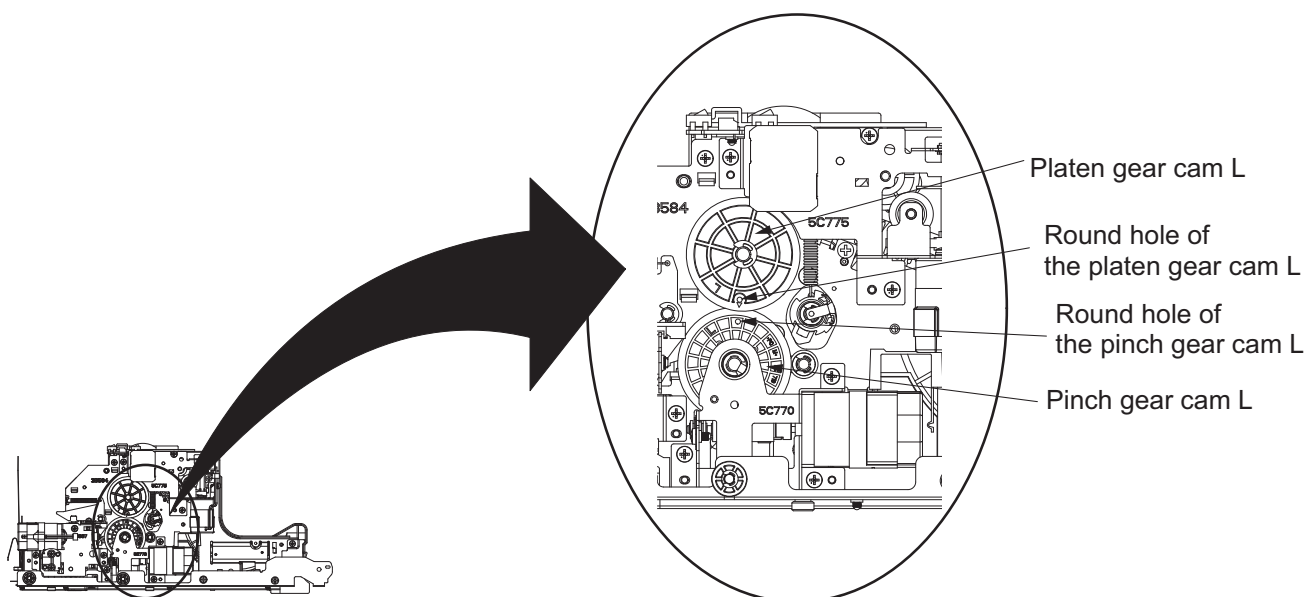


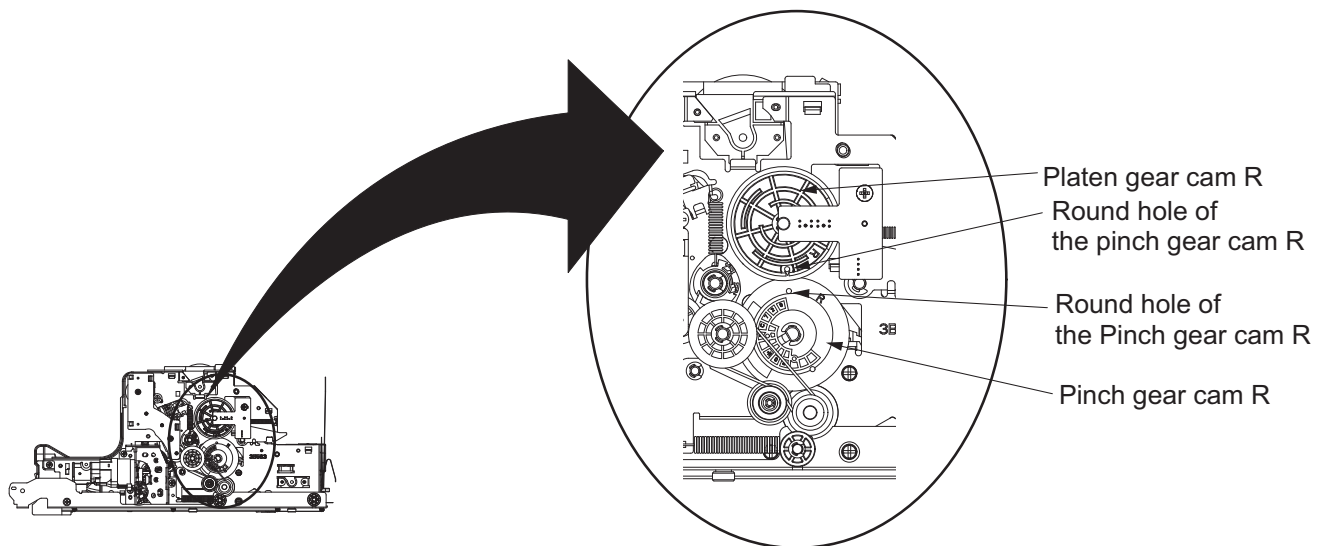
18. Grip roller / pinch roller

Step No.	Parts name	Address	Number of parts to be removed	Connectors or parts to be removed
1	Procedure of 4-1 (Slide mecha ASSY)			
2	Procedure of 13-3 (Mecha cover R)			
3	Procedure of 15-2 (Mecha cover L)			
2	Procedure of 17-2 to 17-3 (Front door ASSY open. / S1 sen holder)			
4	Paper holder L	B-1	6 (1pc.)	127
5	Remove the cover holder L by moving it in the direction shown by the arrow.			
6	P exit gear ASSY S	C-3	6 (1pc.)	
7	Paper holder R	C-2	6 (1pc.)	126
8	Remove the cover holder R by moving it in the direction shown by the arrow.			
9	M1 tension spring	C-2	-----	-----
10	S15m belt	C-3	-----	-----
11	Pinch spring	C-1	-----	-----
12	Grip roller	A-2	33 (2pcs.)	94 / 100 / 101 / 103 / 104 / 130
13	Procedure of 16-2 (Bracket ASSY(M4))			
14	Procedure of 14-3 (It enc sen PCB ASSY)			
15	Pinch gear cam L [Note 1]	A-1	33 (1pc.)	-----
16	Pinch gear cam R [Note 1]	B-3	33 (1pc.)	-----
17	Pinch roller [Note 2]	A-3	34 (2pcs.)	103 / 100

[Note 1] To attach the pinch gear cam L or pinch gear cam R, align the round hole of the pinch gear cam L or pinch gear cam R with that of the platen gear cam L or platen gear cam R.

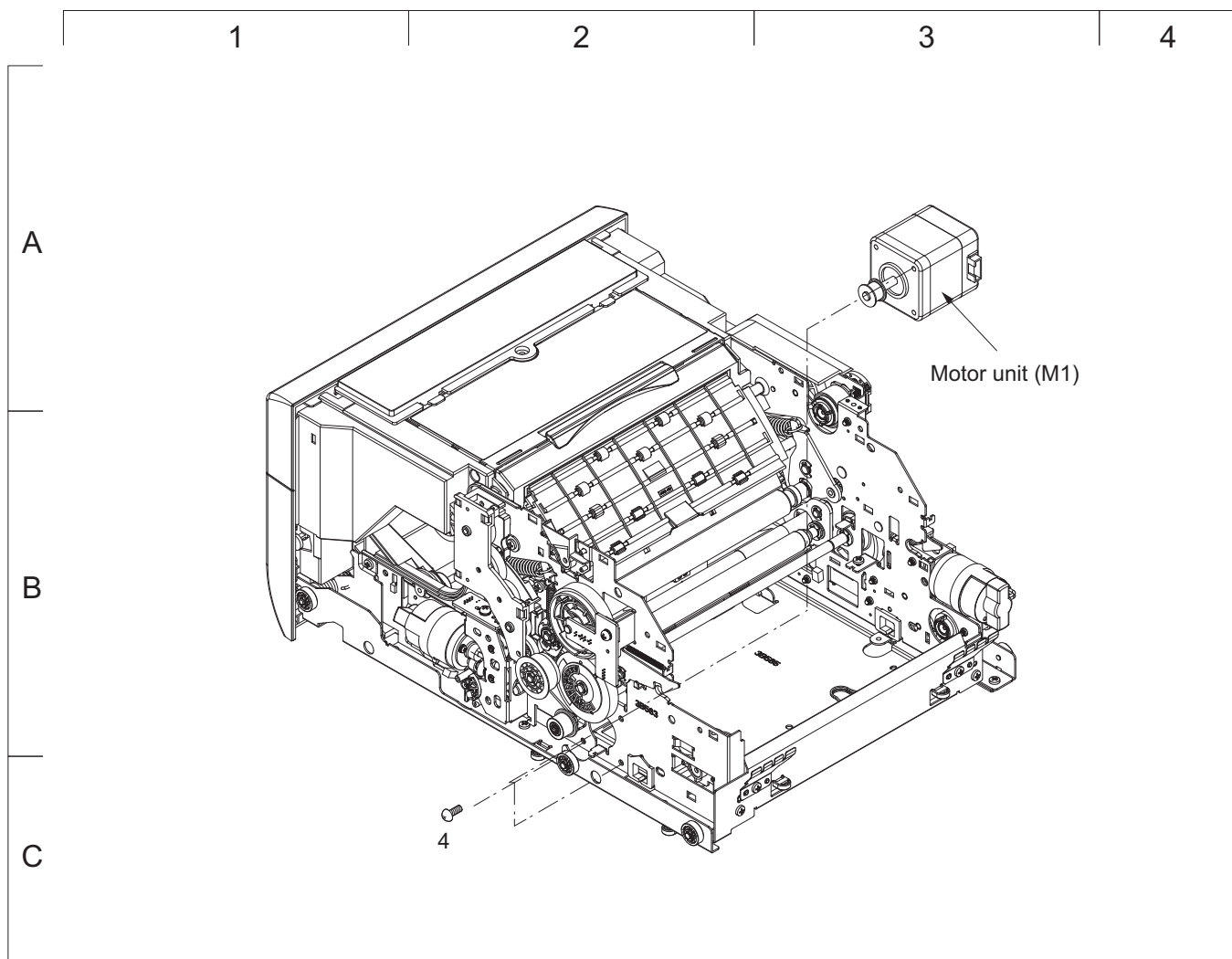
[Note 2] When you remove the pinch roller, move the right edge of the pinch roller to the hole of the grip roller and push out to the right, then remove the pinch roller from the left side.





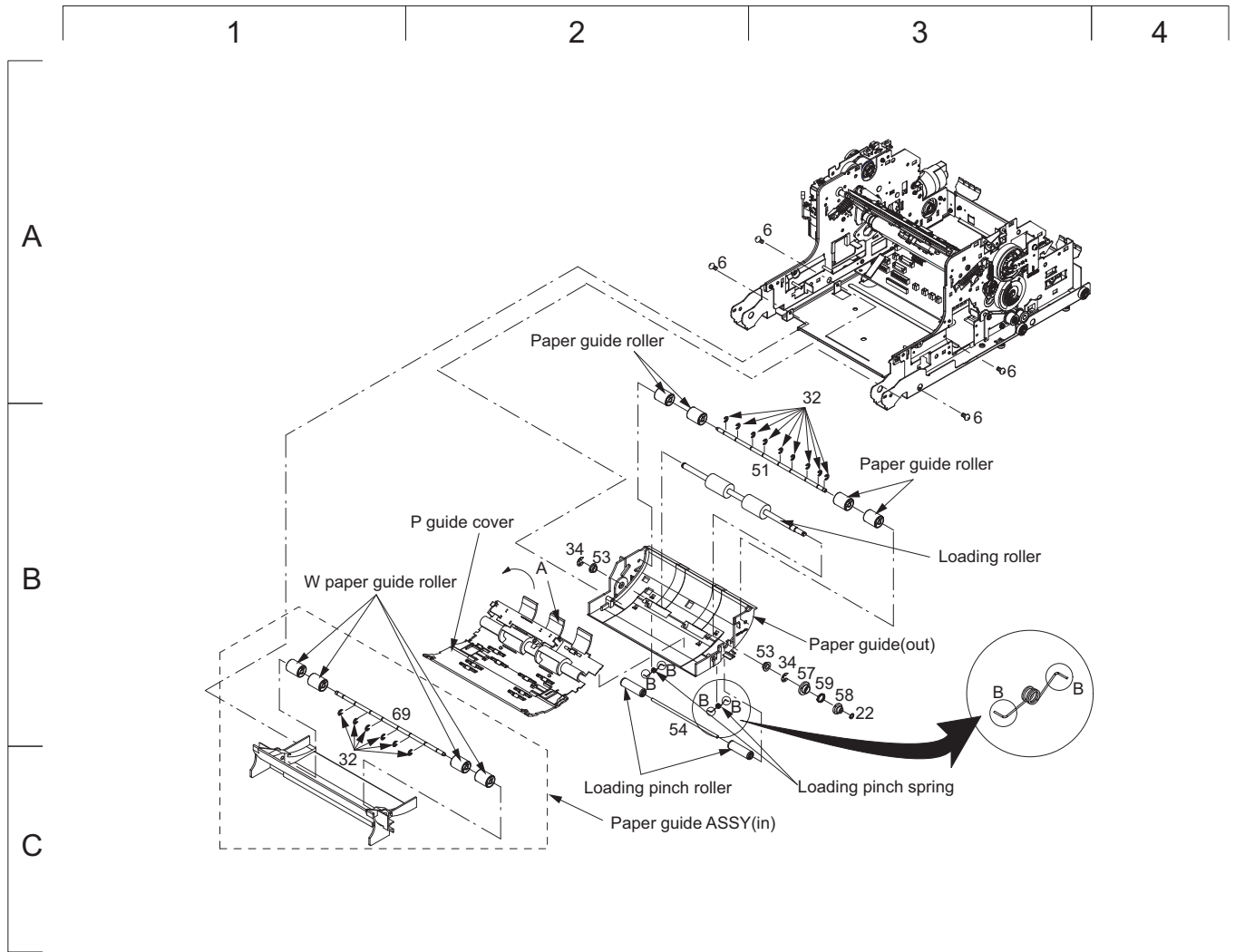
19. Platen roller

Step No.	Parts name	Address	Number of parts to be removed	Connectors or parts to be removed
1	Procedure of 4-1 (Slide mecha ASSY)			
2	Procedure of 11-2 (Cas guide R)			
3	Procedure of 13-3 (Mecha cover R)			
4	Procedure of 15-2 (Mecha cover L)			
5	Procedure of 17-2 to 17-3 (Front door ASSY open. / S1 sen holder)			
6	Procedure of 18-4 to 18-8 (Paper holder L/Paper holder R / Cover holder L/Cover holder R / P exit gear ASSY S)			
7	Platen plat unit R	A-3	34 (1pc.)	113
8	Platen roller	A-3	33 (2pcs.)	24 / 100 / 103 / 106 / 110 / 111 / 112 / 114 / 115 / 134 / 135 / 136



20. Motor unit (M1)

Step No.	Parts name	Address	Number of parts to be removed	Connectors or parts to be removed
1	Procedure of 4-1 (Slide mecha ASSY)			
2	Procedure of 10-2 to 10-6 (Drive PCB ASSY)			
3	Procedure of 13-3 (Mecha cover R)			
4	Procedure of 18-9 to 18-10 (M1 tension spring / S15m belt)			
5	Motor unit (M1)	A-3	4 (3pcs.)	M1



21. W paper guide roller

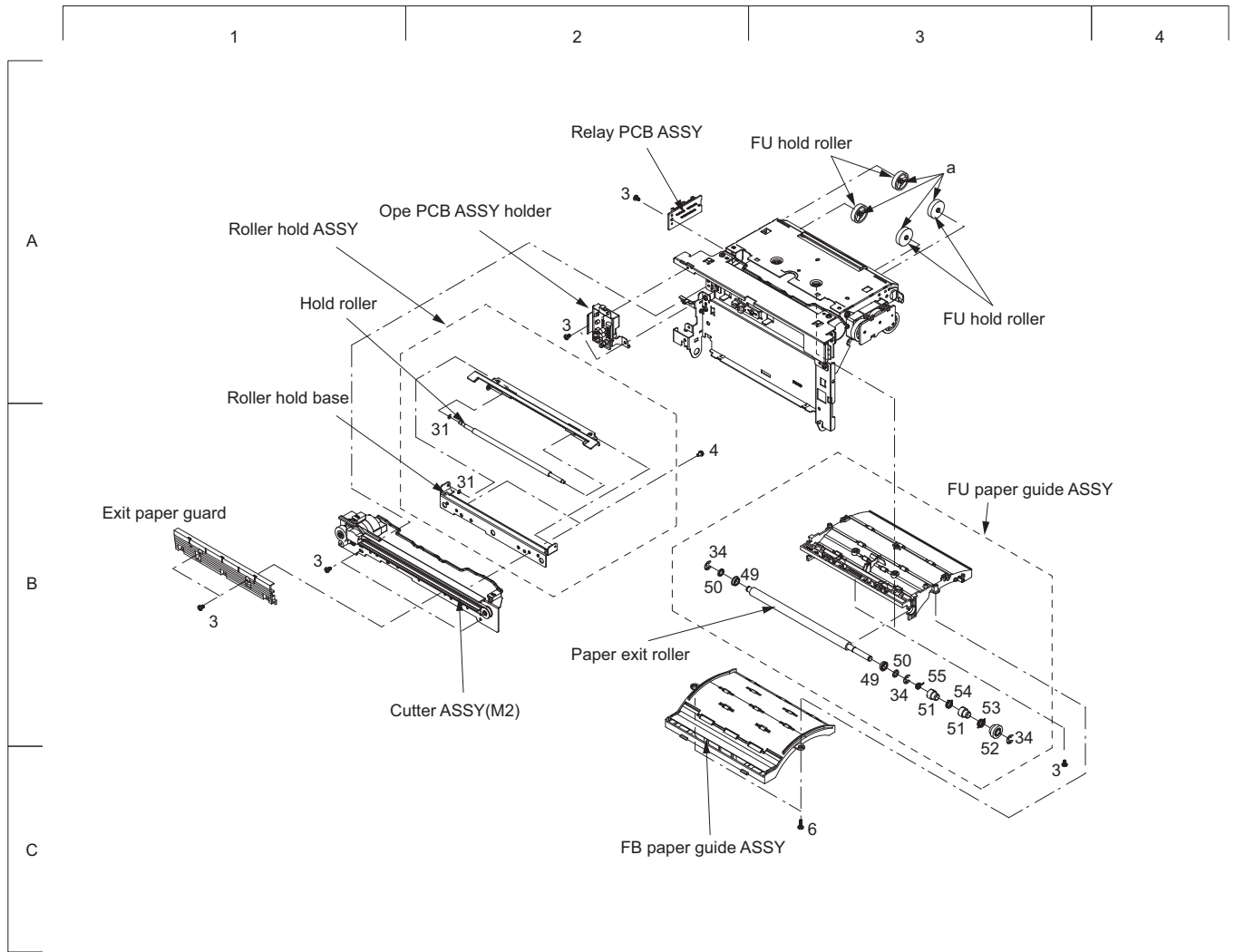
Step No.	Parts name	Address	Number of parts to be removed	Connectors or parts to be removed
1	Procedure of 4-1 (Slide mecha ASSY)			
2	Procedure of 10-2 to 10-5 (Drive PCB ASSY cover)			
3	Procedure of 13-3 to 13-4 (Mecha cover R / P roll bracket ASSY(M5))			
4	Procedure of 15-2 (Mecha cover L)			
5	Procedure of 17-2 to 17-3 (Front door ASSY open. / S1 sen holder)			
6	Procedure of 18-4 to 18-12 (Grip roller)			
7	Remove the P guide cover by moving the area A in the direction shown by the arrow.			
8	Paper guide ASSY(in)	C-2	6 (2pcs.)	-----
9	W paper guide roller	B-1	32 (6pcs.)	69

22. Loading roller / Loading pinch roller

Step No.	Parts name	Address	Number of parts to be removed	Connectors or parts to be removed
1	Procedure of 4-1 (Slide mecha ASSY)			
2	Procedure of 10-2 to 10-5 (Drive PCB ASSY cover)			
3	Procedure of 13-3 to 13-4 (Mecha cover R / P roll bracket ASSY(M5))			
4	Procedure of 15-2 (Mecha cover L)			
5	Procedure of 17-2 to 17-3 (Front door ASSY open. / S1 sen holder)			
6	Procedure of 18-4 to 18-12 (Grip roller)			
7	Procedure of 21-7 (P guide cover)			
8	Paper guide(out)	B-3	6 (2pcs.)	-----
9	Loading roller	B-3	34 (2pcs.) / 22(1pc.)	53 / 57 /58 / 59
10	Release the area B of the loading pinch spring.			
11	Remove the loading pinch roller by pushing out from above.			

23. Paper guide roller

Step No.	Parts name	Address	Number of parts to be removed	Connectors or parts to be removed
1	Procedure of 4-1 (Slide mecha ASSY)			
2	Procedure of 10-2 to 10-5 (Drive PCB ASSY cover)			
3	Procedure of 13-3 to 13-4 (Mecha cover R / P roll bracket ASSY(M5))			
4	Procedure of 15-2 (Mecha cover L)			
5	Procedure of 17-2 to 17-3 (Front door ASSY open. / S1 sen holder)			
6	Procedure of 18-4 to 18-12 (Grip roller)			
7	Procedure of 21-7 (P guide cover)			
8	Procedure of 22-8 (Paper guide(out))			
9	Paper guide roller	B-3	32 (9pcs.)	51



24. Relay PCB ASSY

Step No.	Parts name	Address	Number of parts to be removed	Connectors or parts to be removed
1	Procedure of 4-1 to 4-5 (Door cover L)			
2	Relay PCB ASSY	A-2	3 (1pc.)	M2 / LR / LS20 / LS4

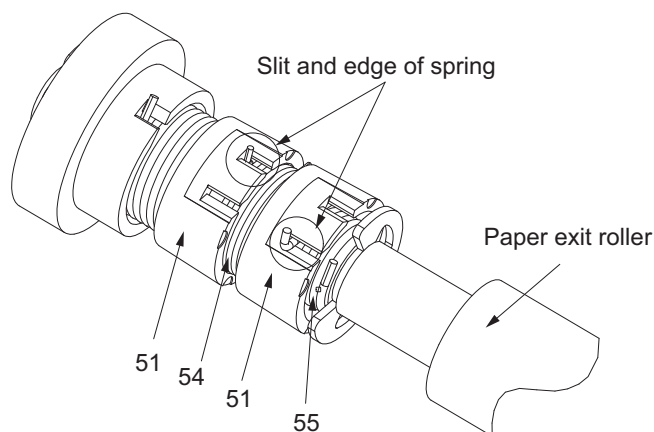
25. Cutter ASSY(M2) / Hold roller

Step No.	Parts name	Address	Number of parts to be removed	Connectors or parts to be removed
1	Procedure of 4-1 to 4-7 (Front panel ASSY)			
2	Ope PCB ASSY holder	A-2	3 (2pcs.)	ORA
3	Exit paper guard	B-1	3 (2pcs.)	-----
4	Cutter ASSY(M2)	B-1	3 (2pcs.)	M2 / LS20
5	Roller hold ASSY	A-1	4 (2pcs.)	-----
6	Roller hold base	A-1	31 (1pc.)	-----
7	Hold roller	A-1	31 (1pc.)	-----

26. Paper exit roller

Step No.	Parts name	Address	Number of parts to be removed	Connectors or parts to be removed
1	Procedure of 4-1 to 4-6 (Door cover R)			
2	Procedure of 17-2 (Front door ASSY open.)			
3	FU hold roller	A-3	a (4pcs.)	-----
4	FB paper guide ASSY	C-2	6 (2pcs.)	-----
5	FU paper guide ASSY	B-3	3 (2pcs.)	-----
6	Paper exit roller [Note 1]	B-2	34 (3pcs.)	49 / 50 / 51 / 52 / 53 / 54 / 55

[Note 1] To attach the paper exit roller, put the edge of the spring 54 into shorter slit of 51 as shown in the illustration below. And put the edge of the spring 55 into longer slit of 51.



CLEANING THE PINCH ROLLER

1. Pull out the slide mecha assy.
2. Remove two screws of the ink sensor holder (3) and the connector (S15), and then remove the ink sensor holder.
3. Cut the wrapping film sheet equivalent to the following to an appropriate size.

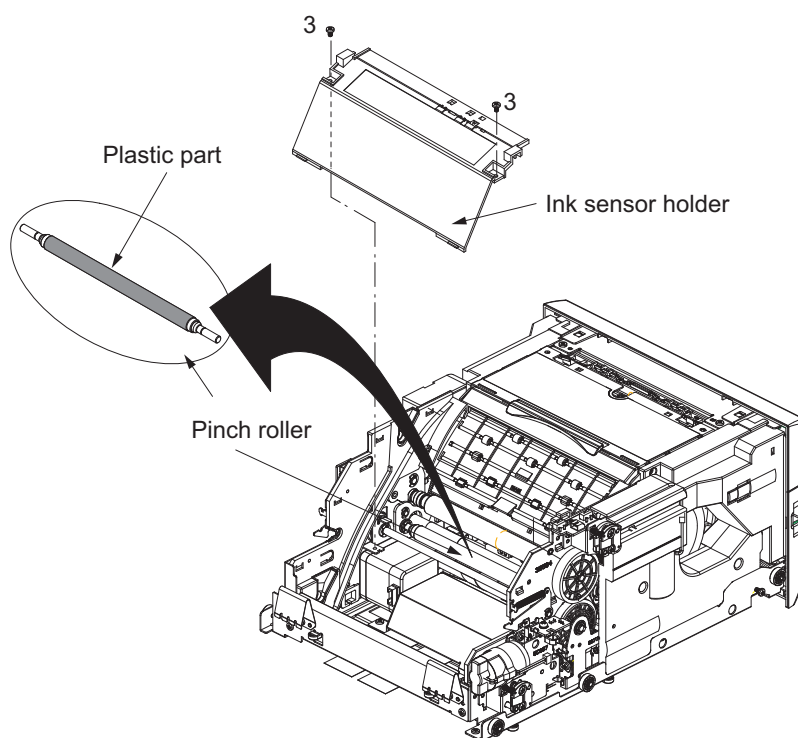
Manufacturer	Particle size	Mesh number	Color
Sumitomo 3M Limited	9μm	#2000	Light blue

4. Place the wrapping film sheet to the plastic part of the pinch roller, and then move the sheet from side to side for 20 times.
5. Turn the pinch roller and follow the step 4 and repeat this procedure for all the surface of the roller.
6. Wipe the pinch roller with an alcohol.

7. Attach two screws of the ink sensor holder (3) and the connector (S15), and then attach the ink sensor holder.

[Note] Attach the connector (S15) securely.

[Note] After attaching the ink sensor holder, check that the ink sensor holder isn't floated.

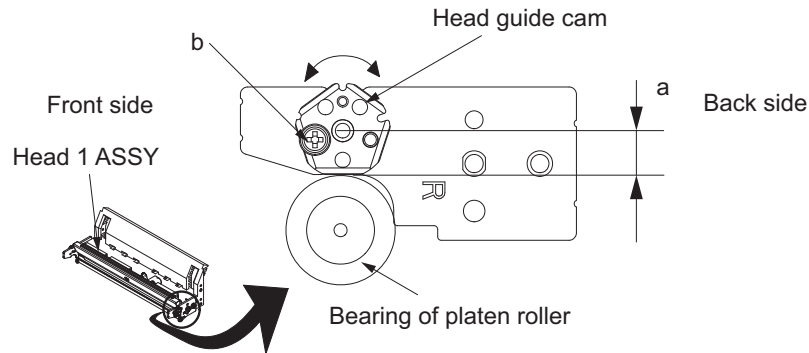


LINE UP ADJUSTMENT

Drag line and faint black color can be improved by carrying out the head line up adjustment. (Drag lines are streaks that may appear following dark parts of the printed image depending on the situation.)

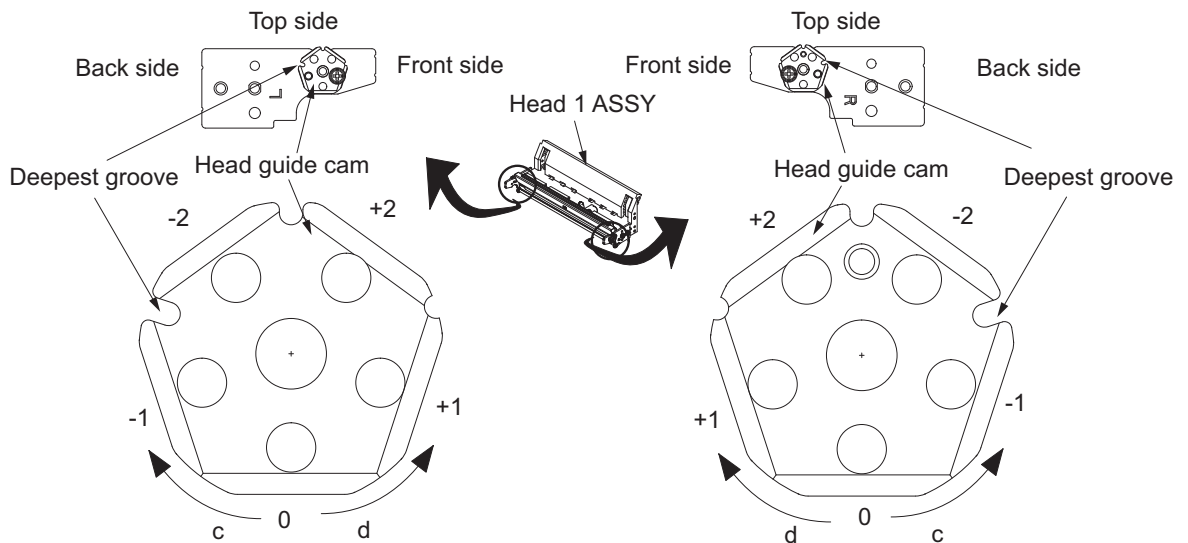
1. Remove the screw "b" of the head guide cam on each side and then turn the head guide cam to improve the drag line or faint black color according to the following note.

[Note] By moving the head toward the bottom of the product, faint black color is improved. By moving the head toward the top of the product, drag line is improved. By rotating and securing the head guide cam, you can move the head up and down. (The distance from the center of the head guide cam to each of its sides (a) is different. By rotating the head guide cam to change the side that comes into contact with the bearing of the platen roller, you can change the distance from the bearing of the platen roller (a). Because the bearing of the platen roller is secured, the head moves up and down. As the distance from the center to the side (a) increases, the head moves downward, and as the distance decreases, the head moves upward.)



Locate the deepest groove of the head guide cam to the back center and define the positions therefrom as +1, +2, -1 and -2 to the right and left direction. When the head guide cam is turned in the direction "c" to the position +1 or +2, the head moves upward. When the cam is turned in the direction "d" to the position -1 or -2, the head moves downward. (Turn both right and left cams in the same direction and same amount.)

Name of side	Distance from the center to the side	Head location	Head location	Rotating direction from 0
+2	 The distance gets longer.	 The head moves downward.(Faint black color is improved.)	 The head moves upward. (Drag line is improved.)	 Turn the head in the direction "c." Turn the head in the direction "d."
+1				
0				
-1				
-2				



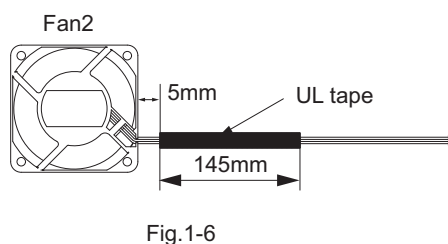
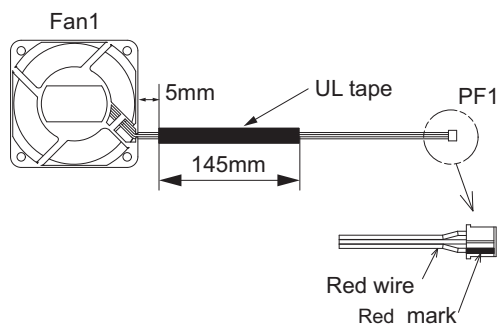
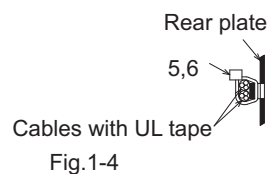
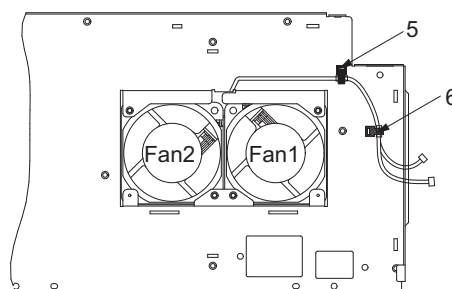
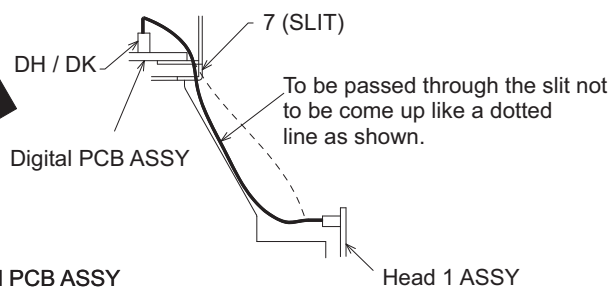
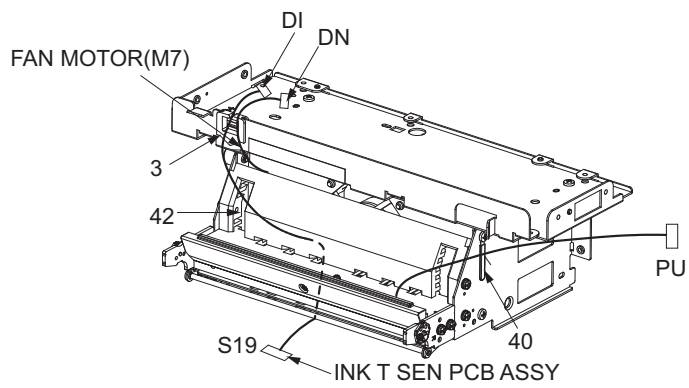
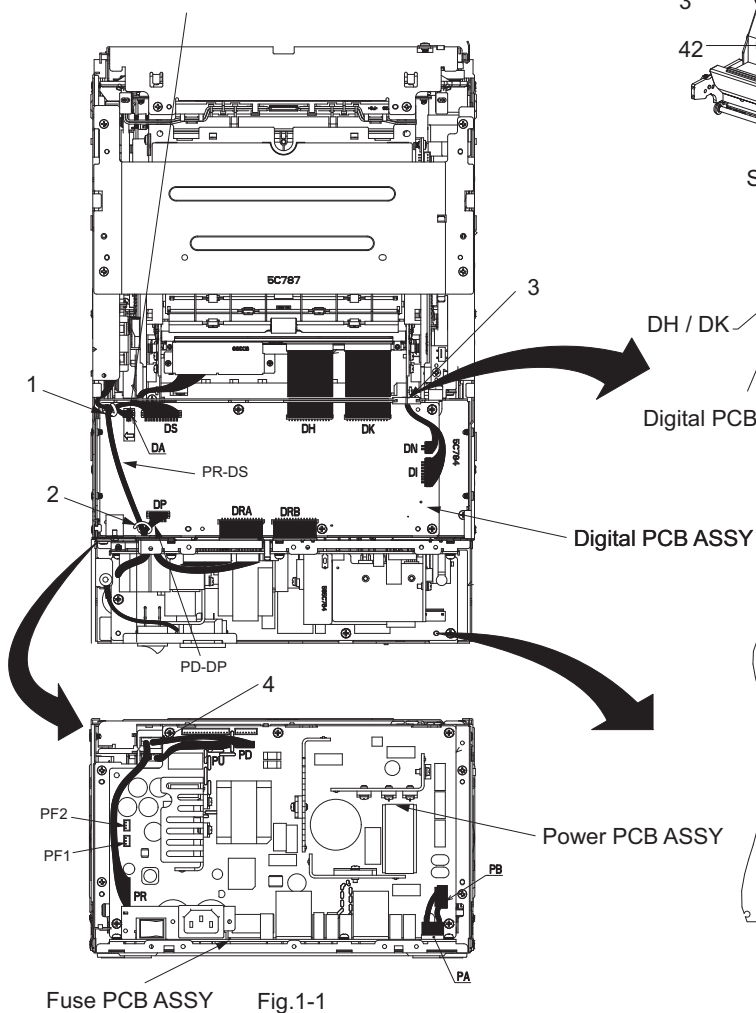
2. Tighten the screw "b" of each head guide cam.
3. Repeat the procedures 1 and 2 until the drag line or faint black color is improved to the best level.

LEAD DRESS

The Lead Wires to be clamped are listed in the table below.

Note: The inner wires are clamped so that they do not come close to heat generating or high voltage parts. After servicing route all wires in their original position.

When you attach the DA connector, place this label to seal the connector.



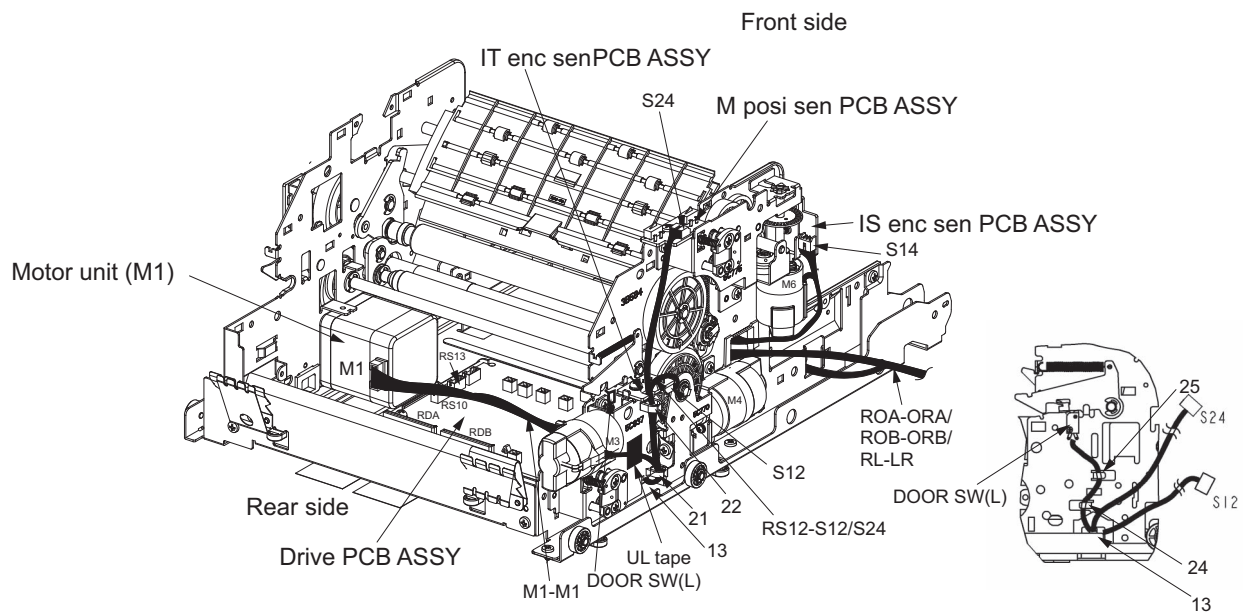


Fig.2-1 Slide base ASSY (left side)

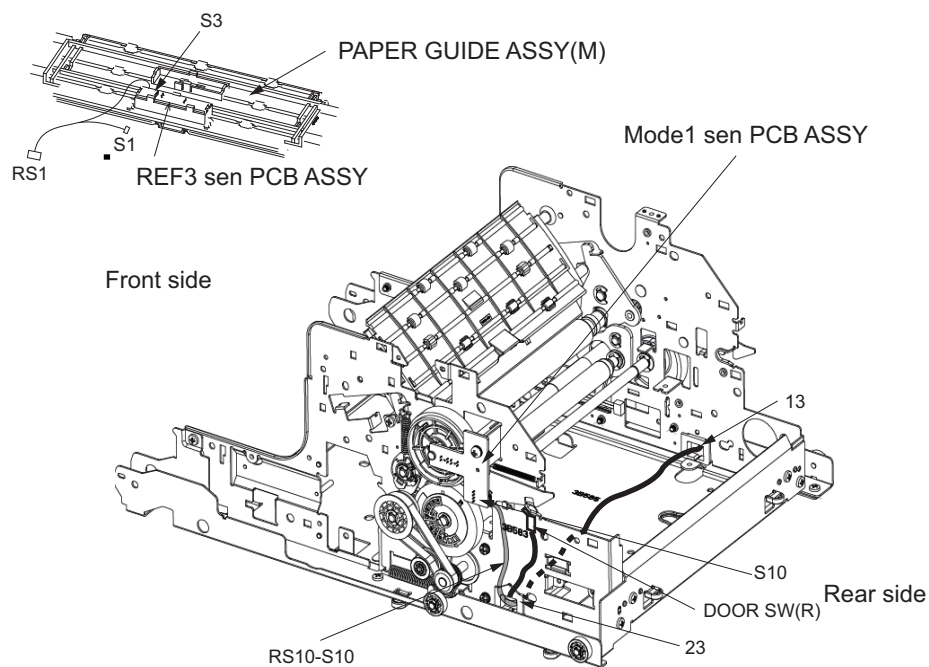


Fig.2-2 Slide base ASSY (right side)

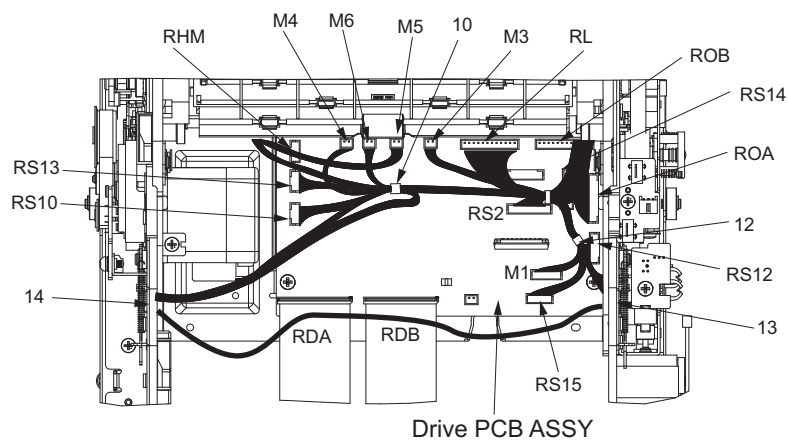
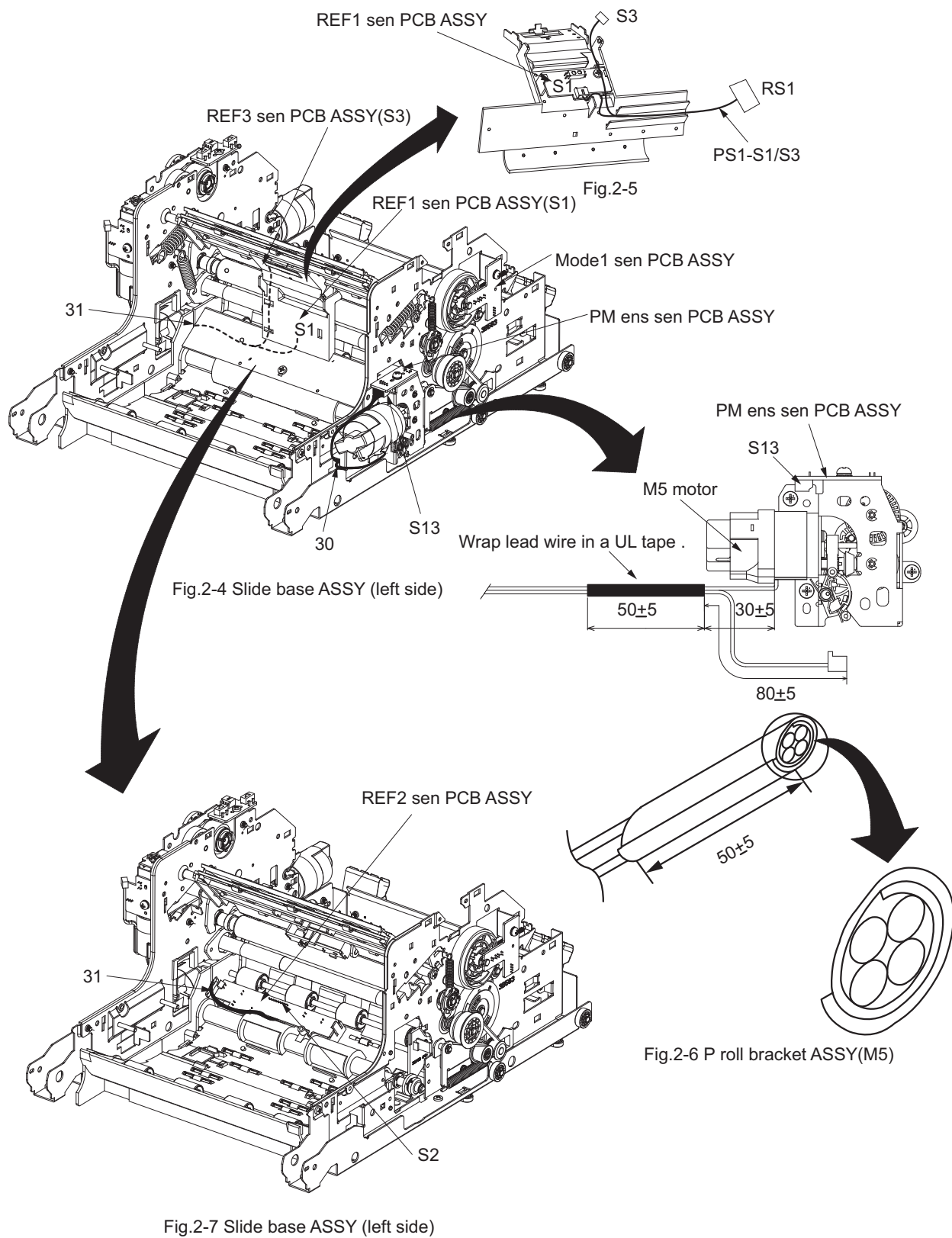


Fig.2-3 Drive PCB ASSY



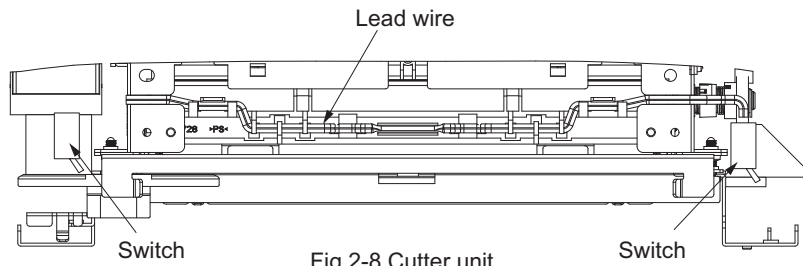


Fig.2-8 Cutter unit

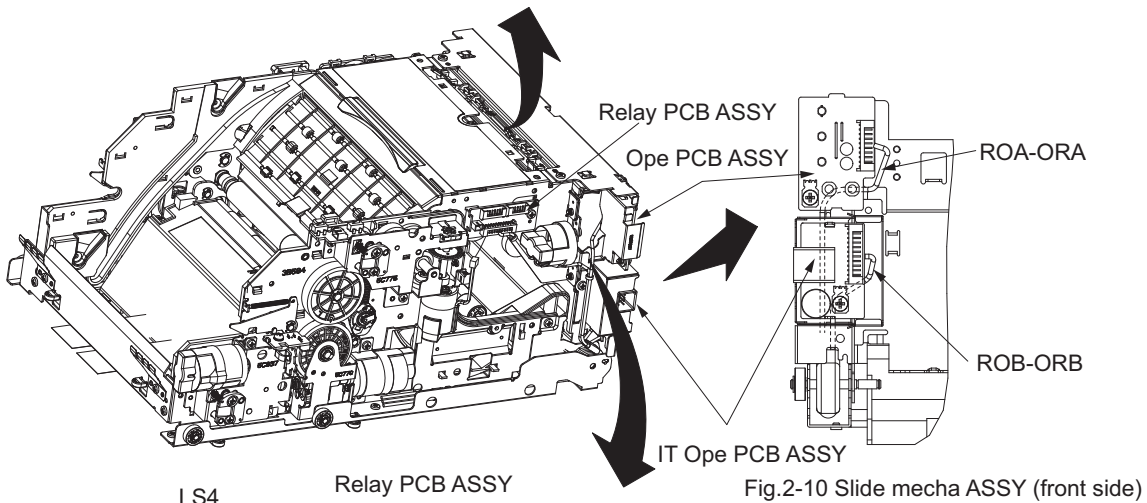


Fig.2-10 Slide mecha ASSY (front side)

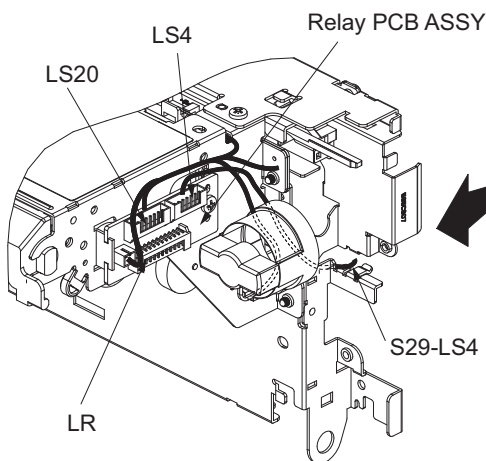


Fig.2-11 Relay PCB ASSY

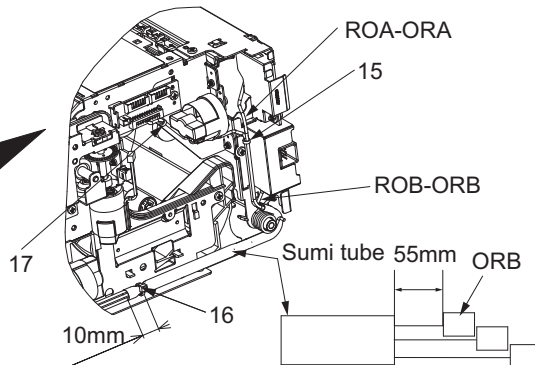


Fig.2-9 Slide mecha ASSY (left side)

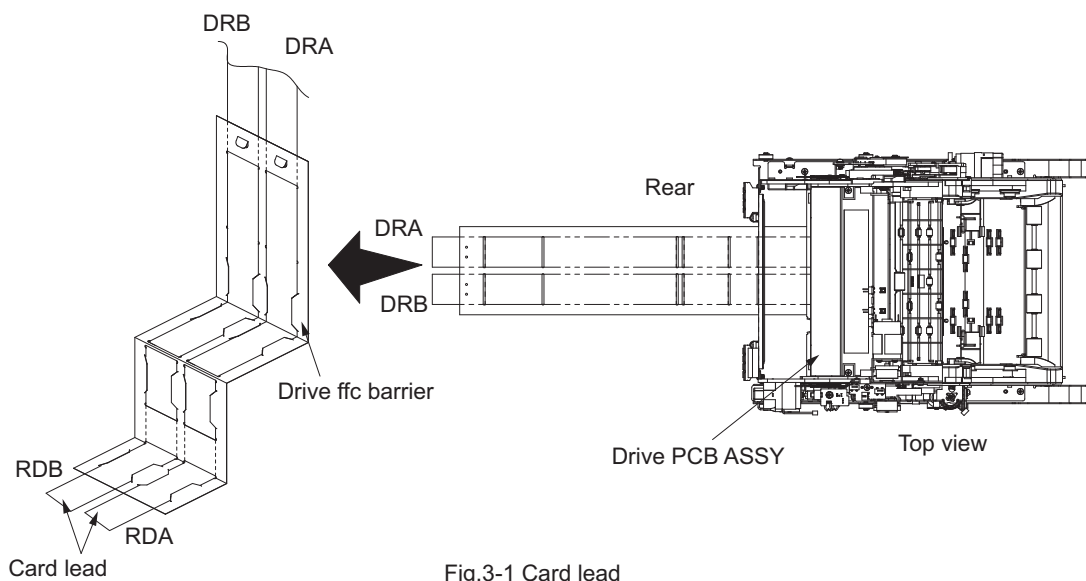


Fig.3-1 Card lead

CLAMPS FOR CONNECTOR LEAD WIRES

Name of connector	Name of clamber			Fig.
DA-LS	DIGITAL PCB ASSY	1	ANTENNA PCB ASSY	Fig. 1-1
DH	DIGITAL PCB ASSY	7	HEAD 1 ASSY	Fig. 1-3
DI-S19	DIGITAL PCB ASSY	3-41-42	INK T SEN PCB ASSY	Fig. 1-1→Fig. 1-2
DK	DIGITAL PCB ASSY	7	HEAD 1 ASSY	Fig. 1-3
DN	DIGITAL PCB ASSY	3	FAN MOTOR(M7)	Fig. 1-1
DOOR SW(R)-S24	-	23-13-21-22	M POSI SEN PCB ASSY	Fig. 2-2→Fig. 2-1
DOOR SW(L)-RS12	-	22-21-13	DRIVE PCB ASSY	Fig. 2-1→Fig. 2-3
DOOR SW(R)-(L)	-	23-13-24-25	-	Fig. 2-2→Fig. 2-1
DP-PD	DIGITAL PCB ASSY	2-4	POWER PCB ASSY	Fig. 1-1
DRA-RDA	DIGITAL PCB ASSY	-	DRIVE PCB ASSY	Fig. 3-1
DRB-RDB	DIGITAL PCB ASSY	-	DRIVE PCB ASSY	Fig. 3-1
DS-PR	DIGITAL PCB ASSY	1-2-4	POWER PCB ASSY	Fig. 1-1
LR-RL	RELAY PCB ASSY	17-15-16-20-11	DRIVE PCB ASSY	Fig. 2-9→Fig. 2-1→Fig. 2-3
LS20-RS20	RELAY PCB ASSY	17	CUTTER ASSY(M2)	Fig. 2-9
LS4-S29	RELAY PCB ASSY	17	D BOX SEN PCB ASSY	Fig. 2-9
M1-M1	DRIVE PCB ASSY	12-11-10	MOTOR UNIT (M1)	Fig. 2-3
M2-M2	CUTTER ASSY(M2)	17	RELAY PCB ASSY	Fig. 2-9
M3-M3	DRIVE PCB ASSY	12-11-21	TU INK BRACKET ASSY(M3)	Fig. 2-3→Fig. 2-1
M4-M4	DRIVE PCB ASSY	10-11	BRACKET ASSY(M4)	Fig. 2-3
M5-M5	DRIVE PCB ASSY	30	P ROLL BRACKET ASSY(M5)	Fig. 2-4
M6-M6	DRIVE PCB ASSY	11-20	SP INK BRACKET ASSY(M6)	Fig. 2-3→Fig. 2-1
ORA-ROA	OPE PCB ASSY	16-20	DRIVE PCB ASSY	Fig. 2-9→Fig. 2-1
ORB-ROB	IT OPE PCB ASSY	15-16-20-11	DRIVE PCB ASSY	Fig. 2-9→Fig. 2-1→Fig. 2-3
PA-PB	FUSE PCB ASSY	-	POWER PCB ASSY	-
PF1	POWER PCB ASSY	6-5	FAN MOTOR(M8) (POWER-FAN)	Fig. 1-4
PF2	POWER PCB ASSY	6-5	FAN MOTOR(M8) (POWER-FAN)	Fig. 1-4
PU	POWER PCB ASSY	4-40	HEAD 1 ASSY	Fig. 1-1→Fig. 1-2
RS10-S10	DRIVE PCB ASSY	10-23	MODE1 SEN PCB ASSY	Fig. 2-3→Fig. 2-2
RS12-S12	DRIVE PCB ASSY	12-13-21-22	IT ENC SEN PCB ASSY	Fig. 2-3→Fig. 2-1
RS12-S24	DRIVE PCB ASSY	24-13-21-22	M POSI SEN PCB ASSY	Fig. 2-3→Fig. 2-1
RS13-S13	DRIVE PCB ASSY	10-30	PM ENC SEN PCB ASSY	Fig. 2-3→Fig. 2-4
RS14-S14	DRIVE PCB ASSY	11-20	IS ENC SEN PCB ASSY	Fig. 2-3→Fig. 2-1
RS15-S15	DRIVE PCB ASSY	12	INK L SEN PCB ASSY	Fig. 2-3
RS1-S1	DRIVE PCB ASSY	11-31	REF1 SEN PCB ASSY	Fig. 2-3→Fig. 2-4
RS1-S3	DRIVE PCB ASSY	11-31	REF3 SEN PCB ASSY	Fig. 2-3→Fig. 2-4
RS2-S2	DRIVE PCB ASSY	11	REF2 SEN PCB ASSY	Fig. 2-3

ADJUSTMENT ITEM LIST

When you replace parts, adjust the following items.

replace parts	adjustment items						
	24V adjustment	Density adjustment	Adjustment of M1 motor current	Adjustment of M3 motor Duty	Adjustment of Ink-black mark sensor	Adjustment of vertical print position	Adjustment of horizontal print position
PCB-POWER	○						
head		○	△	△	△	△	△
PCB-DRIVE	not necessary to adjust						
sensor (S1)						○	
sensor (S7)							
sensor (S15 and S16)					○		
PCB-DIGITAL	○						
M1 motor			○				
M3 motor				○			

○ : Adjustment is required.

△ : Copy of the adjustment values from old head to the new head is necessary.

Each adjustment value is stored to the EEPROM in the head.

When you replace the head, read the adjustment values stored in the old head before the replacement. And then, write the values read from the old head into the newly replaced head.

It is not necessary to readjust the adjustment values marked with “△”. For these values, copy the adjustment values from the old head to the new one as described above.

However, when the adjustment values cannot be read because of the EEPROM failure or other failures, readjustment is necessary.

Procedure for replacing the head

- (1) Print the head pattern before replacing the head.
- (2) Read all the data using the EEPROM read/write menu in the service application.
- (3) Replace the head.
- (4) Write the data read in step (2) into the newly attached head using the EEPROM read/write menu in the service application.
- (5) Print the head pattern after replacing the head.
- (6) Adjust the density according to the density adjustment menu in the service application.

SERVICE APPLICATION

Available functions of the service application (adjustment/check items)

- Motor test
- 24V adjustment
- Density adjustment
- Adjustment of M1 motor current
- Adjustment of M3 motor Duty
- Adjustment of Ink-black mark sensor
- Adjustment of vertical print position
- Adjustment of horizontal print position
- Printer Information
- EEPROM Reading/Writing
- Sensor check

*Refer to the service application manual for details.

ADJUSTMENT PROCEDURE USING THE SERVICE APPLICATION

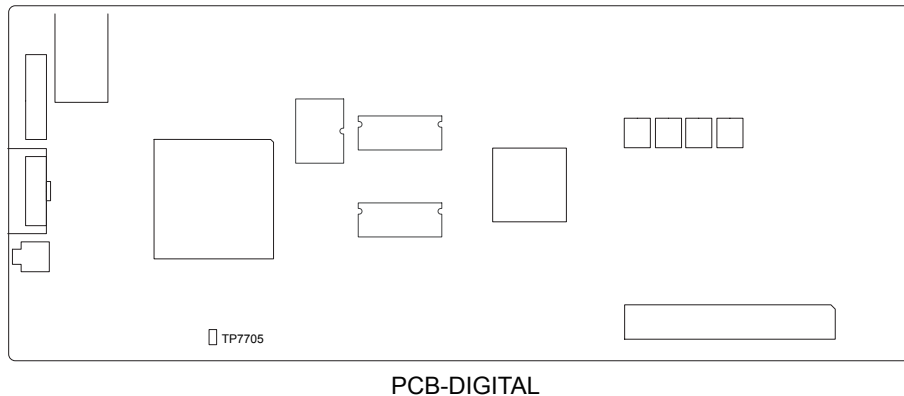
In this printer, adjustments are performed using the service application. The adjustment procedures are as follows. In addition, see the operation manual supplied with the service application for the adjustment procedure using the software.

1. 24V adjustment

This item is used to adjust the voltage of 24 V. In case of an adjustment failure, M1 motor loses steps. In addition, the printing density becomes dark or light.

Adjustment procedure

1. Remove the top panel and measure the voltage of the TP7705 on the PCB-DIGITAL. (Connect the minus terminal to the chassis.)
2. Adjust the voltage of the TP7705 to 24.00 ± 0.05 V using the 24V Adjustment menu in the service application.



2. Density adjustment

This item is used to decrease the density variations caused by the head resistance variations. In case of an adjustment failure, black areas in the printing image become too light, too dark, burnt, or matte.

Adjustment procedure

1. Printing before the head replacement (to compare the printings before and after replacement)
Print the head pattern in 10x15 (4x6") size using the Density Adjustment menu in the service application.
2. Printing after the head replacement
Set the density adjustment value to the default using the Density Adjustment menu in the service application, and print the head pattern (in 10X15 (4X6") size).
3. Comparing with the printing before the head replacement and performing the fine adjustment
Compare the image printed in step (1) (before the head replacement) with that printed in step (2) (after the head replacement), and if necessary, perform the fine adjustment using the density adjustment menu in the service application.

3. Adjustment of M1 motor current

This item is used to decrease the uneven rotation of the motor caused by the variation of the M1 motor.

In case of an adjustment failure, banding is happened in the printed image.

Adjustment procedure

1. Printing images before adjustment
Set the adjustment value in the Adjustment of M1 motor current of the service application to the default and print a solid gray pattern (in 10X15 (4X6") size). The following adjustment isn't necessary when banding is not happened.
2. M1 motor current adjustment
Print a solid gray pattern and, according to the printing result, adjust the Adjustment of M1 motor current of the service application to the value at which banding is not happened. Select from the adjustment values. Described in the service application.

4. Adjustment of M3 motor Duty

This item is used to adjust the tension to the ink ribbon caused by the variation of the M3 motor.

In case of an adjustment failure, the tension to the ink becomes insufficient, as a result, wrinkle is happened in the printed image.

Adjustment procedure

1. M3 motor duty adjustment

Set the adjustment value using the Adjustment of M3 motor Duty in the service application. Input the M3 motor duty value specified in the sheet supplied with the M3 motor.

5. Adjustment of Ink-black mark sensor

This item is used to adjust the sensor sensitivity of the ink ribbon.

In case of an adjustment failure, ink ribbon markings cannot be determined, resulting in the ink-related error.

Adjustment procedure

1. Printer settings

Remove the ink ribbon from the printer and close the door.

2. Adjusting the sensor of black marking for ink

Adjust using the Adjustment of Ink-black mark sensor in the service application.

6. Adjustment of vertical print position

This item is used to adjust the vertical position of the printed image and the amount of the margin cut. In case of an adjustment failure, a white horizontal line appears on the top or bottom of an image (edge of an image isn't printed), or a paper jam occurs due to the margin cut.

Adjustment procedure

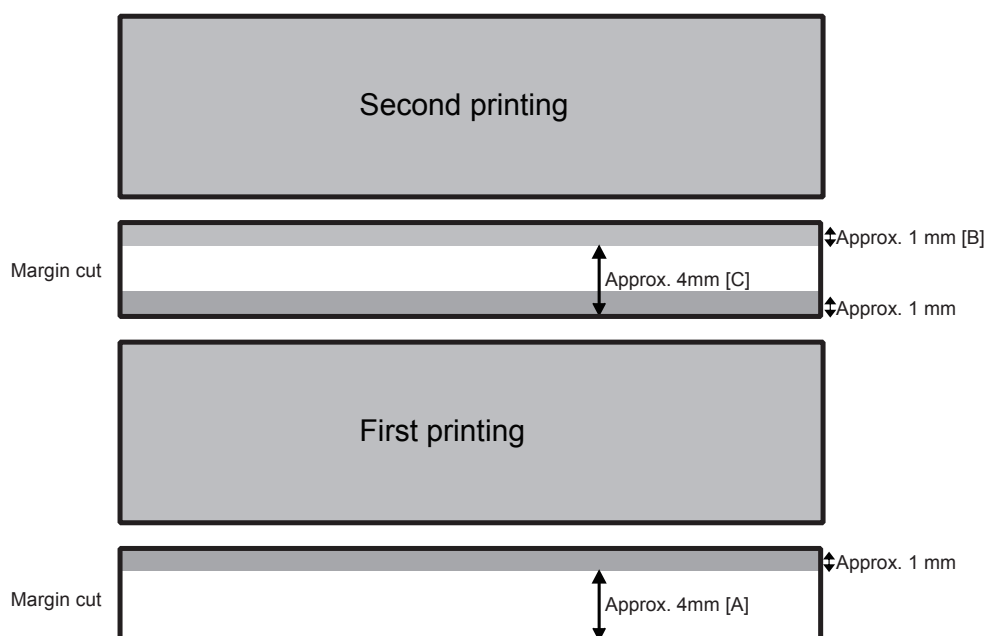
1. Printing images before adjustment

Before adjusting the printing position, perform the Feed&Cut using the service application.

Print two sheets of a solid gray pattern continuously in 10x15 (4x6") size using the Adjustment of vertical print position in the service application.

2. Checking the margin cut before adjustment

This adjustment is not necessary when the margin cut of two sheets is as follows.



* When the margin cut isn't performed properly, adjust the following items.

3. Adjusting the amount of the margin cut

Adjust the following parameters using the printing position adjustment (vertical) menu in the service application.

- First print (blank length).....Measure the length of Area [A] and input the Measured value.
- Second print (margin length)Measure the length of Area [B] and input the Measured value.
- Second print (blank length).....Measure the length of Area [C] and input the Measured value.

7. Adjustment of horizontal print position

Center the printing image horizontally.

When an adjustment error occurs, a white vertical line appears on the right or left edge of the printing image (edge of an image isn't printed).

Adjustment procedure

1. Checking the horizontal position of the printing image before adjustment
Print a solid gray pattern in 10x15 (4x6") size using the Adjustment of horizontal print position in the service application.
This adjustment isn't necessary when the printing image is centered horizontally.
2. Adjusting the horizontal position of the printing image
Center the printing image horizontally using the Adjustment of horizontal print position in the service application.

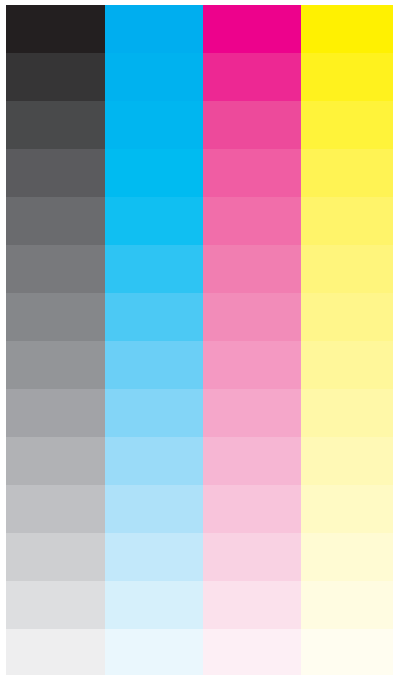
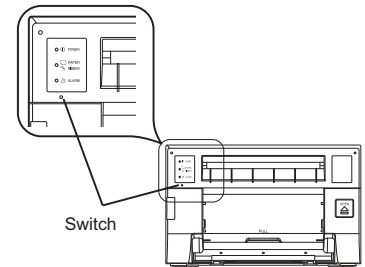
TEST PRINT (FOR SERVICE)

1. Enter the test mode and select the test print mode (for service).
2. Press the ENTER button. (Test print is carried out.)

Another procedure

1. Press the switch inside the hole on the front panel by using a pin of about $\Phi 1\text{mm}$. For example, the paper clip is extended, and make it pin shape. (See the figure on the right.)

When you press the switch and release it within one second, the test print is carried out. When you press and hold the switch for five seconds or more, the printer is reset.



ASK-300 Test Print (02)

Print Count : 3736223
Cut Count : 0787693

Number of printings
Number of cuts

L315A1 27A9F
M316A1 3BA7C
F317A1 464F5
T318A1 3F8DF
R319A1 2C32E

```

Loader version and check sum
Main version
FPGA version
Copy version
Tag version

```

[illegible]

Errors

REFERENCE METHOD OF ERROR INFORMATION

Service Test Print

Please refer from the following format to the situation when the error occurs.

```
aa bb cc dd ee ff  gg hh ii ii  jj kk      xxxxxxxx
```

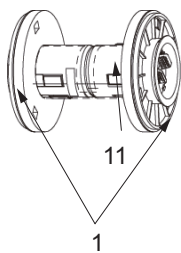


h h : Error Code (Refer to the Error Code on page 6 of DIAGNO)

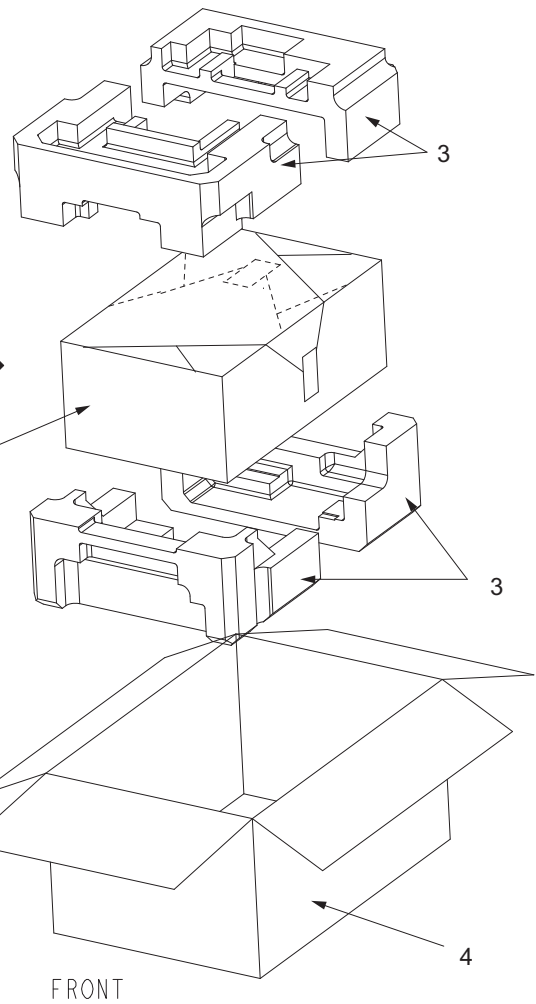
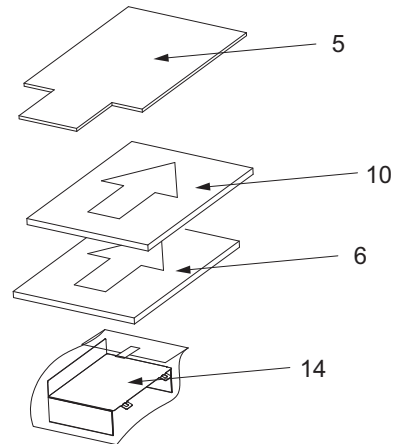
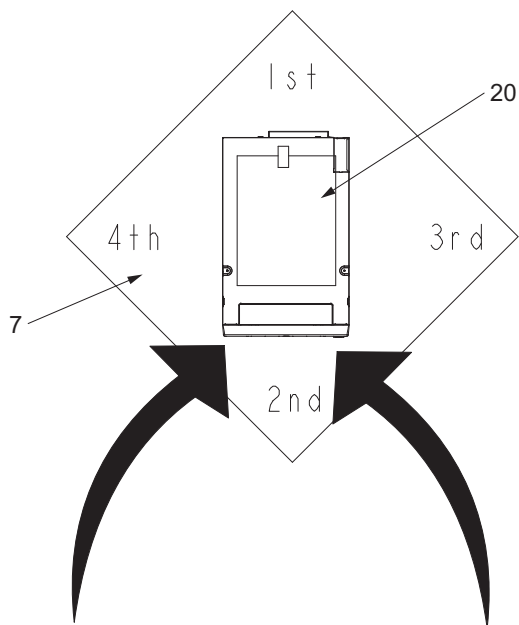
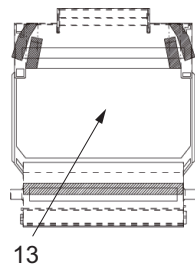
PARTSLIST

PACKING PARTS

[Paper flange ASSY]



[Ink cassette]



21
Stick the FILAMENT TAPE from the front to the side.



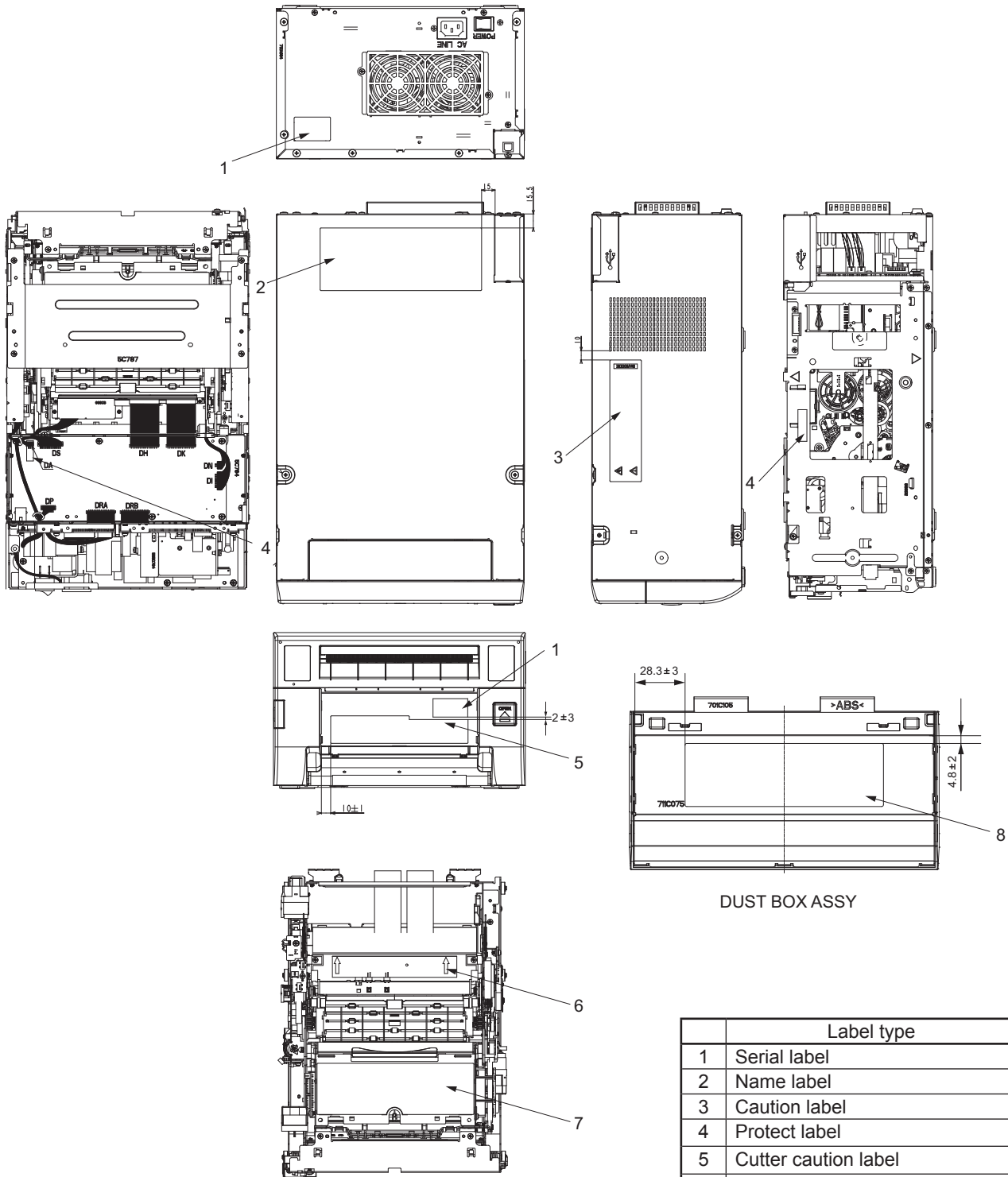
(RoHS-compliant model)

- Parts listed below are all RoHS-compliant.
- When servicing this model, use RoHS-compliant parts only.

ITEM No.	PARTS No.	PARTS NAME	DESCRIPTION
1	956C297O01	PAPER FRANGE ASSY	
⚠ 3	803C476O10	CUSHION T/B	
4	801C719O10	PACKING CASE	
5	◆	PACKING SHEET	
⚠ 6	◆	INSTRUCTION BOOK	
7	◆	PACKING SHEET	
10	◆	QUICK GUIDE	
11	◆	AIR SHEET	
13	◆	INK CASSETTE	
14	760C837O10	TRAY UNIT	
20	◆	INST SHEET	
21	◆	FILAMENT TAPE	

⚠ mark : Critical components
 ◆ mark : Not supply items

LABEL ATTACHING POSITION



	Label type
1	Serial label
2	Name label
3	Caution label
4	Protect label
5	Cutter caution label
6	Caution label
7	Top door label
8	Bin installation guide label

PARTS LIST

(RoHS-compliant model)

- Parts listed below are all RoHS-compliant.
- When servicing this model, use RoHS-compliant parts only.

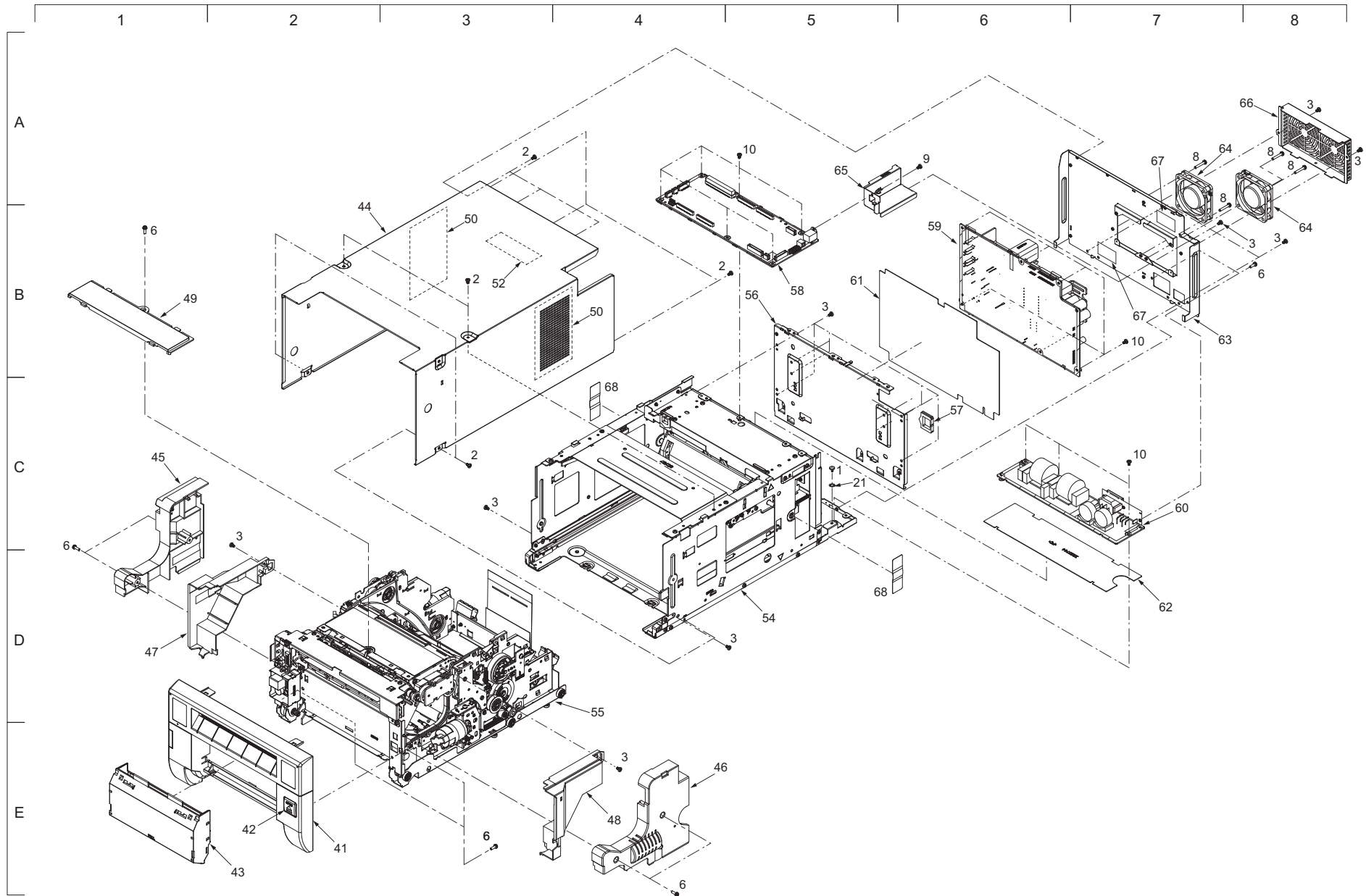


: Critical components

SYMBOL No.	PART No.	PART NAME	DESCRIPTION	SYMBOL No.	PART No.	PART NAME	DESCRIPTION
MISCELLANEOUS				573D361010	P EXIT TL SPRING1		
	243C389010	CARD LEAD WIRE	30P L=435	573D362010	P EXIT TL SPRING2		
	288P319010	FAN MOTOR(M7)	F6015ER-24PCV	573D363010	P EXIT TL SPRING3		
	288P322010	FAN MOTOR(M8)	2406KL-05W-B39	622C748010	P GUIDE COVER		
	283D207060	FUSE	T10AH 250V		956C293021	P ROLL BRACKET ASSY(M5)	
	283P181010	FUSE	250V T1A				
	283P243020	FUSE	125V 1A	630C381010	PAPER EXIT ROLLER		
DH	243C389020	CARD LEAD WIRE	30P L=105	623D609010	PAPER GUIDE ROLLER		
DK	243C389020	CARD LEAD WIRE	30P L=105	622C743010	PAPER GUIDE(OUT)		
	F5000	283P161040	FUSE	622C770010	PAPER WIDTH GUIDE L		
			FSMD150-2920	622C771010	PAPER WIDTH GUIDE R		
PRINTED CIRCUIT BOARD ASSY'S				685D033050	PARALLEL PIN	2-12	
	936D417001	ANTENNA PCB ASSY		622C719010	PINCH GEAR CAM L		
	936D431001	D BOX SEN PCB ASSY		622C720010	PINCH GEAR CAM R		
	936B244012	DIGITAL PCB ASSY		630C378010	PINCH ROLLER		
	936D415001	DRIVE PCB ASSY		622C724010	PLATEN GEAR CAM L		
	936D414001	FUSE PCB ASSY					
	936D418001	INK L SEN PCB ASSY		622C725010	PLATEN GEAR CAM R		
	936D419001	INK T SEN PCB ASSY		630C380010	PLATEN ROLLER		
	936D429001	IS ENC SEN PCB ASSY		521D114010	S15M BELT		
	936D427001	IT ENC SEN PCB ASSY		669D487030	SCREW	3X6	
	936D434001	IT OPE PCB ASSY		669D933010	SCREW		
	936D430001	M POSI SEN PCB ASSY		530D104010	BEARING		
	936D426001	MODE1 SEN PCB ASSY			623D573010	SLIDER ROLLER	
	936D420001	OPE PCB ASSY			956C288021	SP INK BRACKET ASSY(M6)	
	936D428001	PM ENC SEN PCB ASSY		622C736010	SP3 INK GEAR		
	936D413001	POWER PCB ASSY		956D197001	SPECER ASSY S		
	936D421001	REF1 SEN PCB ASSY		956D190001	TENSION ROLLER ASSY		
	936D422001	REF2 SEN PCB ASSY		552C024040	THRUST WASHER		
	936D423001	REF3 SEN PCB ASSY		622C746010	TL LOADING GEAR		
	936D433001	RELAY PCB ASSY		622C747010	TL LOADING ROTOR		
				573D374010	TL LOADING SPRING		
MECHANICAL PARTS					956C289021	TU INK BRACKET ASSY(M3)	
	530D080010	BUSH		623D650010	TU1 INK GEAR		
	530D080020	BUSH			956C287001	BRACKET ASSY(M4)	
	956C311021	CUTTER ASSY(M2)		COSMETIC PARTS			
	221C089010	DRIVE FFC BARRIER			976B012015	FRONT PANEL ASSY	
	976C027001	DUST BOX ASSY		752C362010	FRONT TOP COVER		
				754D053010	OPEN BUTTON		
	956C301001	F EXIT P GEAR ASSY			712B383010	REAR PLATE	
	622C727010	FB PAPER GUIDE			598D775060	TOP PANEL ASSY	
	622C787010	FLANGE HOLD ROLLER L		PACKING PARTS AND ACCESSORY			
	622C767010	FLANGE HOLD ROLLER R			803C476010	CUSHION T/B	
	630C386010	GRIP ROLLER		801C719010	PACKING CASE		
	956C284002	HEAD 1 ASSY		956C297001	PAPER FLANGE ASSY		
	573D386010	LEVER LOCK SPRING L		760C837010	TRAY UNIT		
	573D387010	LEVER LOCK SPRING R		JIG			
	623D589010	LOADING PINCH ROLLER		859C810010	SERVICE-APPLICATION		
	573D373010	LOADING PINCH SPRING					
	630C383010	LOADING ROLLER					
	622C718010	M1 GRIP PULLEY					
	288P362010	MOTOR UNIT(M1)					
	956C300001	P EXIT GEAR ASSY S					
	623D580010	P EXIT TL GEAR					

EXPLODED

EXPLODED VIEW CHASSIS



PARTS LIST

In order to expedite delivery of replacement part orders.

- Specify : 1. Model number/Serial number
2. Part number and Description
3. Quantity

Unless full information is supplied, delay in execution of orders will result.

-  : Critical components
♦ : Not supply items

(RoHS-compliant model)

- Parts listed below are all RoHS-compliant.
- When servicing this model, use RoHS-compliant parts only.

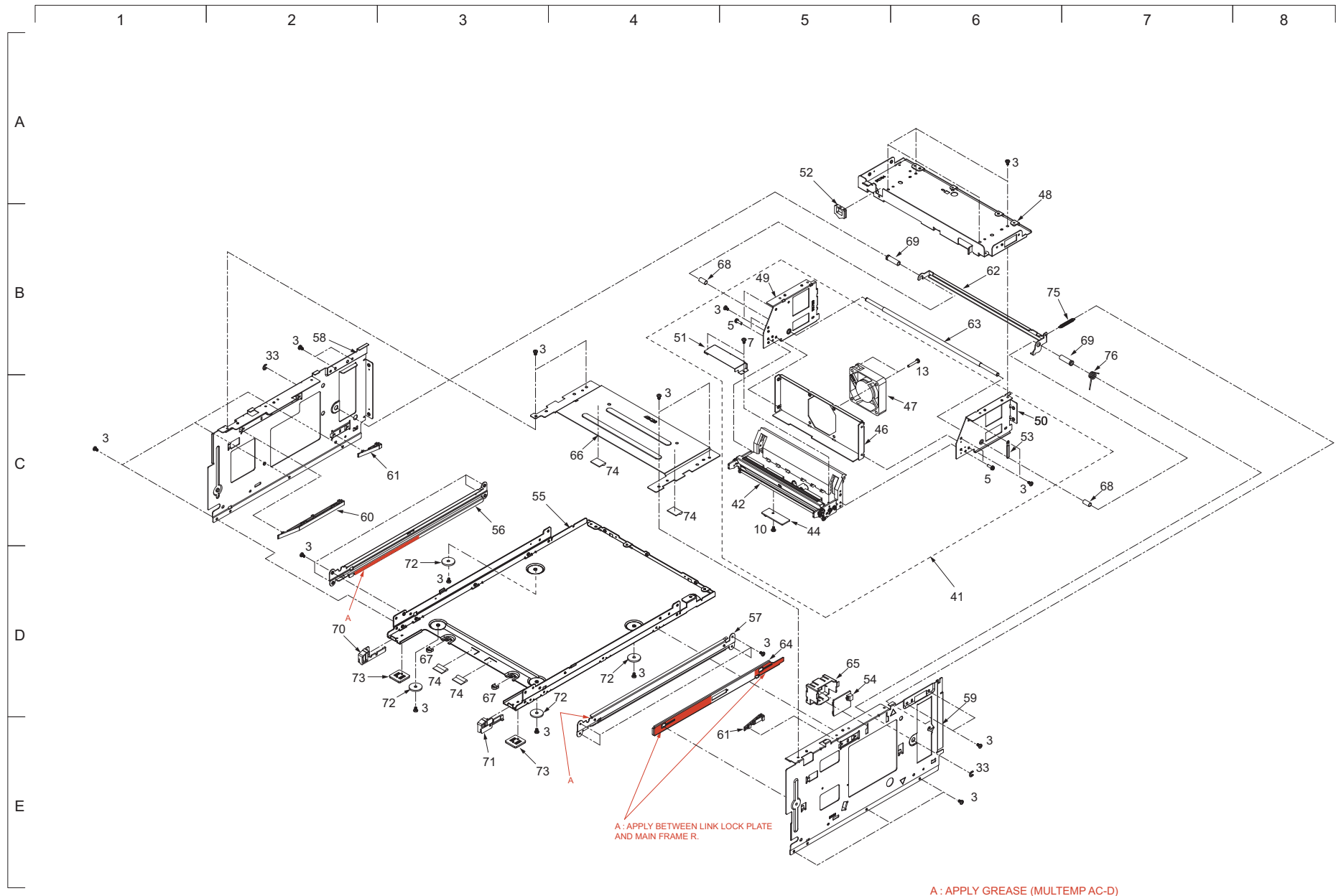
CHASSIS

ITEM	PARTS NO.	ADDRESS		PARTS NAME	DESCRIPTION
1	♦	C-5		SCREW	
2	669D487O30	A-3	B-3	SCREW	3X6
		B-5	C-3		
3	♦	A-8	B-5	SCREW	3X6
		B-8	C-2		
		C-3	D-5		
		E-4			
6	♦	B-1	B-8	SCREW	3X10
		C-1	E-3		
		E-4			
8	♦	A-7	A-8	SCREW	M3X0.5-20 3W
		B-7			
9	♦	A-6		SCREW	M3X0.5-6 3W
10	669D933O10	A-5	B-7	SCREW	3X8
		C-7			
21	♦	C-5		TOOTHED WASHER	
 41	976B012O15	E-2		FRONT PANEL ASSY	
42	754D053O10	E-2		OPEN BUTTON	
43	976C027O01	E-2		DUST BOX ASSY	
 44	598D775O60	B-2		TOP PANEL ASSY	
45	♦	C-1		MECHA COVER L	
46	♦	E-5		MECHA COVER R	
47	♦	D-1		DOOR COVER L	
48	♦	E-4		DOOR COVER R	
49	752C362O10	B-1		FRONT TOP COVER	
50	♦	B-3	B-4	AIR FILTER	
 52	♦	B-3		TOP PANEL BARRIER	
54	♦	D-5		MAIN FRAME ASSY	
55	♦	D-4		SLIDE MECHA ASSY	
56	♦	B-5		BACK FRAME STAY	
57	♦	C-6		EDGE SADDLE	

ITEM	PARTS NO.	ADDRESS		PARTS NAME	DESCRIPTION
⚠ 58	936B244O12	B-5		DIGITAL PCB ASSY	
⚠ 59	936D413O01	B-6		POWER PCB ASSY	
⚠ 60	936D414O01	C-7		FUSE PCB ASSY	
⚠ 61	◆	B-5		POWER PCB ASSY BARRIER	
⚠ 62	◆	D-7		FUSE PCB ASSY BARRIER	
⚠ 63	712B383O10	B-7		REAR PLATE	Including items 3 and 66. 2406KL-05W-B39
⚠ 64	288P322O10	A-7	B-8	FAN MOTOR(M8)	
65	◆	A-5		USB COVER	
66	◆	A-8		FAN COVER	
67	◆	A-7	B-7	BARRIER S	
68	◆	C-4	D-5	BARRIER FILTER	

MAIN FRAME ASSY

- 9 -



A: APPLY GREASE (MULTEMP AC-D)

PARTS LIST

In order to expedite delivery of replacement part orders.

- Specify : 1. Model number/Serial number
2. Part number and Description
3. Quantity

Unless full information is supplied, delay in execution of orders will result.

-  : Critical components
♦ : Not supply items

(RoHS-compliant model)

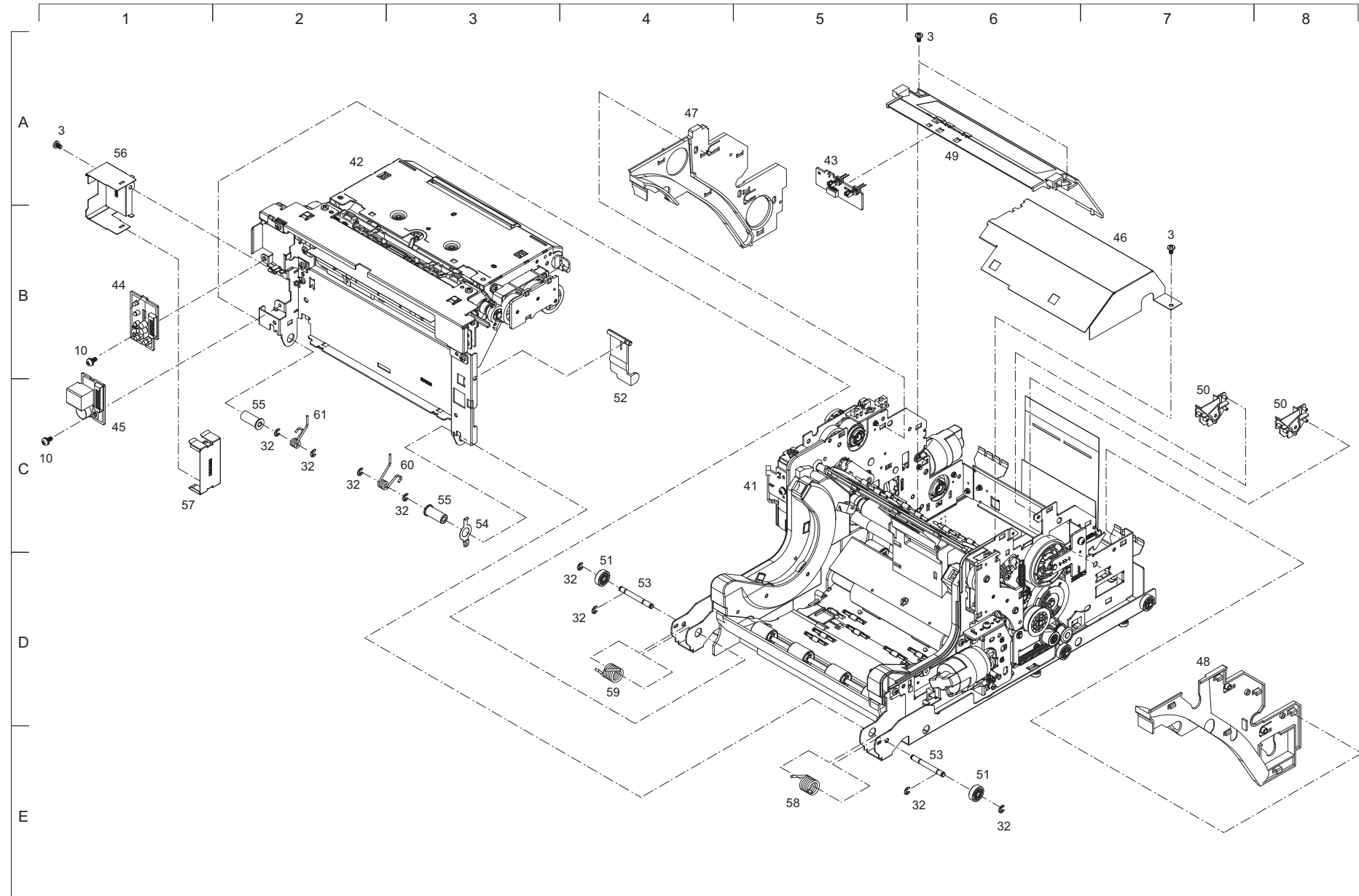
- Parts listed below are all RoHS-compliant.
- When servicing this model, use RoHS-compliant parts only.

MAIN FRAME ASSY

ITEM	PARTS NO.	ADDRESS		PARTS NAME	DESCRIPTION
3	♦	A-6	B-2	SCREW	3X6
		B-5	C-1		
		C-3	C-4		
		C-5	C-6		
		D-2	D-3		
		D-4	D-5		
		E-4	E-6		
5	♦	B-5	C-6	SCREW	M3X0.5-10
7	♦	B-5		SCREW	M2X0.4-5 3W
10	669D933O10	C-5		SCREW	3X8
13	♦	C-6		SCREW	M3X0.5-20
33	♦	B-2	E-6	RETAINING RING	E-4 3W
41	♦	D-6		HEAD ASSY	
 42	956C284O02	C-5		HEAD 1 ASSY	
 44	936D419O01	C-5		INK T SEN PCB ASSY	
46	♦	C-5		HEAD1 FAN STAY	
 47	288P319O10	C-6		FAN MOTOR(M7)	F6015ER-24PCV
48	♦	A-6		REAR FRAME STAY	
49	♦	B-5		HEAD PLATE L	
50	♦	C-6		HEAD PLATE R	
51	♦	B-4		HEAD SHIELD	
52	♦	A-5		LEAD CLAMPER	
53	♦	C-6		LEAD CLAMPER	
 54	936D417O01	D-5		ANTENNA PCB ASSY	
55	♦	C-3		BASE CHASSIS	
56	♦	C-3		SLIDE RAIL L	
57	♦	D-5		SLIDE RAIL R	
58	♦	B-2		MAIN FRAME L	
59	♦	D-6		MAIN FRAME R	
60	♦	C-2		INK CAM SLIDER SP	
61	♦	C-3	E-4	INK CAM SLIDER TU	

ITEM	PARTS NO.	ADDRESS		PARTS NAME	DESCRIPTION
62	◆	B-6		SLIDE OPEN LEVER	
63	◆	B-6		HEAD LOCK SHAFT	
64	◆	D-5		LINK LOCK PLATE	
65	◆	D-5		RFID HOLDER	
66	◆	C-4		FRONT FRAME STAY	
67	◆	D-3		PLATE CAP	
68	◆	B-5	C-7	SHAFT SLEEVE H1	
69	◆	B-6	B-7	SHAFT SLEEVE H2	
70	◆	D-2		ROLLER HOLDER L	
71	◆	E-3		ROLLER HOLDER R	
72	◆	D-3	D-4	SPACER	
73	956D197O01	D-2	E-3	SPECER ASSY S	
74	◆	C-4	D-3	SHIELD GASKET	
75	◆	B-7		OPEN LEVER SPRING	
76	◆	B-7		SLIDE LOCK SPRING	

SLIDE MECHA ASSY



PARTS LIST

In order to expedite delivery of replacement part orders.

Specify : 1. Model number/Serial number

2. Part number and Description

3. Quantity

Unless full information is supplied, delay in execution of orders will result.

 : Critical components

◆ : Not supply items

(RoHS-compliant model)

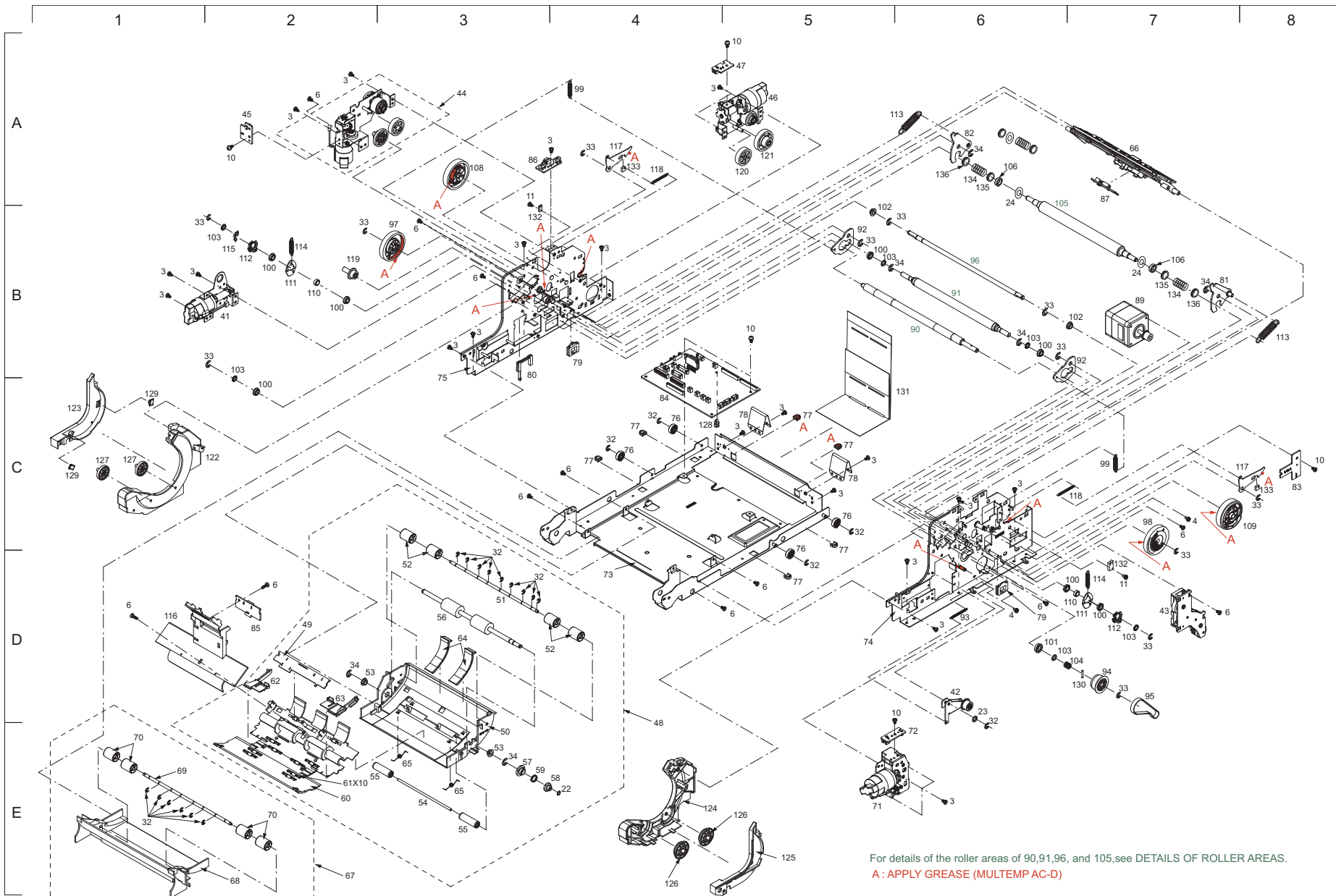
- Parts listed below are all RoHS-compliant.

- When servicing this model, use RoHS-compliant parts only.

SLIDE MECHA ASSY

ITEM	PARTS NO.	ADDRESS		PARTS NAME	DESCRIPTION
3	◆	A-1	A-6	SCREW	3X6
10	669D933O10	B-7			
32	◆	B-1	C-1	SCREW	3X8
41	◆	C-2	C-3	RETAINING RING	E-3 3W
42	◆	D-4	E-6		
		C-5		SLIDE BASE ASSY	
		A-2		FRONT DOOR ASSY	
 43	936D418O01	A-5		INK L SEN PCB ASSY	
 44	936D420O01	B-1		OPE PCB ASSY	
 45	936D434O01	C-1		IT OPE PCB ASSY	
46	◆	B-7		DRIVE PCB ASSY COVER	
47	◆	A-4		CAS GUIDE L	
48	◆	D-7		CAS GUIDE R	
49	◆	A-6		INK SENSOR HOLDER	
50	◆	C-7	C-8	INK BOBBIN CATCH	
 51	623D573O10	D-4	E-6	SLIDER ROLLER	
52	◆	C-4		SLIDE LINK LEVER	
53	◆	D-4	E-6	FRONT DOOR SHAFT	
54	◆	C-3		DOOR EARTH PLATE	
55	◆	C-2	C-3	FRONT DOOR SLEEVE	
56	◆	A-1		IT OPE PCB ASSY COVER	
57	◆	C-1		IT OPE PCB ASSY COVER S	
58	◆	E-5		DOOR OPEN SPRING R	
59	◆	D-4		DOOR OPEN SPRING L	
60	◆	C-3		DOOR CLOSE SPRING R	
61	◆	C-2		DOOR CLOSE SPRING L	

SLIDE BASE ASSY



PARTS LIST

In order to expedite delivery of replacement part orders.

- Specify : 1. Model number/Serial number
2. Part number and Description
3. Quantity

Unless full information is supplied, delay in execution of orders will result.

-  : Critical components
♦ : Not supply items

(RoHS-compliant model)

- Parts listed below are all RoHS-compliant.
- When servicing this model, use RoHS-compliant parts only.

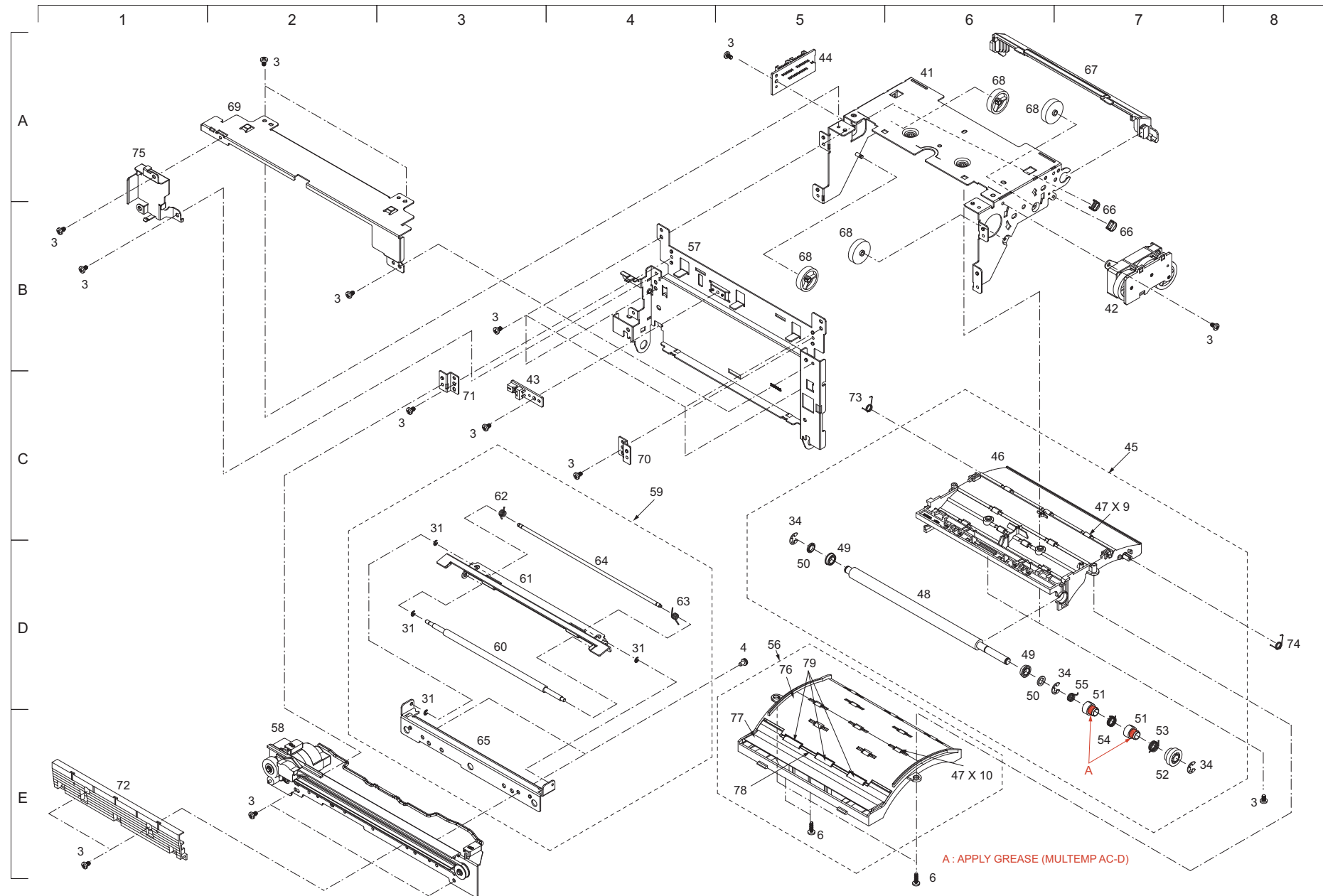
SLIDE BASE ASSY

ITEM	PARTS NO.	ADDRESS		PARTS NAME	DESCRIPTION
3	♦	A-2	A-4	SCREW	3X6
		B-1	B-3		
		B-4	C-5		
		C-6	D-6		
		E-6			
4	♦	C-7	D-6	SCREW	M3X0.5-6 3W
6	♦	A-2	B-3	SCREW	3X10
		C-3	C-4		
		C-7	D-1		
		D-2	D-5		
		D-6	D-7		
10	669D933O10	A-2	A-3	SCREW	3X8
		A-5	B-5		
		C-8	D-6		
11	♦	A-3	D-7	SCREW	M1.6X0.35-6
22	♦	E-4		CUT WASHER	4.1X6.5X0.5
23	♦	D-6		THRUST WASHER	4.0XT0.25
24	552C024O40	A-6	B-7	THRUST WASHER	
32	♦	C-4	C-5	RETAINING RING	E-3 3W
		D-3	D-5		
		D-6	E-1		
33	♦	A-4	B-1	RETAINING RING	E-4 3W
		B-2	B-5		
		B-6	C-8		
		D-7			
34	♦	A-6	B-6	RETAINING RING	E-5 3W
		B-7	D-2		
		E-3			
 41	956C287O01	B-2		BRACKET ASSY(M4)	
42	956D190O01	D-6		TENSION ROLLER ASSY	
43	956C300O01	D-7		P EXIT GEAR ASSY S	
 44	956C288O21	A-3		SP INK BRACKET ASSY(M6)	

ITEM	PARTS NO.	ADDRESS		PARTS NAME	DESCRIPTION
⚠ 45	936D429O01	A-2		IS ENC SEN PCB ASSY	
⚠ 46	956C289O21	A-5		TU INK BRACKET ASSY(M3)	
⚠ 47	936D427O01	A-5		IT ENC SEN PCB ASSY	
48	◆	D-4		PAPER GUIDE ASSY(OUT)	
⚠ 49	936D422O01	D-2		REF2 SEN PCB ASSY	
50	622C743O10	E-3		PAPER GUIDE(OUT)	
51	◆	D-3		WIDTH P SHAFT	
52	623D609O10	D-3		PAPER GUIDE ROLLER	
53	◆	D-2	E-3	BUSH	
54	◆	E-3		LOADING PINCH SHAFT	
55	623D589O10	E-2	E-3	LOADING PINCH ROLLER	
56	630C383O10	D-3		LOADING ROLLER	
57	622C746O10	E-3		TL LOADING GEAR	
58	622C747O10	E-4		TL LOADING ROTOR	
59	573D374O10	E-3		TL LOADING SPRING	
60	622C748O10	E-2		P GUIDE COVER	
61	◆	E-2		PAPER PATH ROLLER	
62	622C770O10	D-2		PAPER WIDTH GUIDE L	
63	622C771O10	D-2		PAPER WIDTH GUIDE R	
64	◆	D-3		SLIDE SHEET	
65	573D373O10	E-3		LOADING PINCH SPRING	
66	◆	A-7		PAPER GUIDE ASSY(M)	
67	◆	E-2		PAPER GUIDE ASSY(IN)	
68	◆	E-2		PAPER IN GUIDE	
69	◆	E-1		P WIDTH SHAFT	
70	623D609O10	E-1	E-2	W PAPER GUIDE ROLLER	
⚠ 71	956C293O21	E-5		P ROLL BRACKET ASSY(M5)	
⚠ 72	936D428O01	E-6		PM ENC SEN PCB ASSY	
73	◆	D-4		BOTTOM PLATE ASSY SL	
74	◆	D-5		SLIDE PLATE ASSY R	
75	◆	B-3		SLIDE PLATE ASSY L	
76	623D573O10	C-4	C-5	SLIDER ROLLER	
77	◆	C-4	C-5	PLATE CAP	
		D-5			
78	◆	C-5		DOOR SPRING PLATE	
79	◆	B-4	D-6	CLAMPER	
80	◆	B-3		EDGE SADDLE	
81	◆	B-7		PLATEN PLAT UNIT R	
82	◆	A-6		PLATEN PLAT UNIT L	
⚠ 83	936D426O01	C-8		MODE1 SEN PCB ASSY	
⚠ 84	936D415O01	C-4		DRIVE PCB ASSY	
⚠ 85	936D421O01	D-2		REF1 SEN PCB ASSY	
⚠ 86	936D430O01	A-3		M POSI SEN PCB ASSY	
⚠ 87	936D423O01	A-7		REF3 SEN PCB ASSY	
⚠ 89	288P362O10	B-7		MOTOR UNIT(M1)	
90	630C386O10	B-6		GRIP ROLLER	
91	630C378O10	B-6		PINCH ROLLER	
92	◆	B-5	D-6	PINCH PLATE	
93	◆	B-7		M1 TENSION SPRING	
94	622C718O10	D-7		M1 GRIP PULLEY	
95	521D114O10	D-7		S15M BELT	
96	◆	B-6		PINCH SYNC SHAFT	

ITEM	PARTS NO.	ADDRESS		PARTS NAME	DESCRIPTION
97	622C719O10	B-3		PINCH GEAR CAM L	
98	622C720O10	C-7		PINCH GEAR CAM R	
99	◆	A-4	C-7	PINCH SPRING	
100	530D080O10	B-2	B-5	BUSH	
		B-6	C-2		
		D-6	D-7		
101	530D080O20	D-6		BUSH	
102	◆	B-5	B-7	BUSH	
103	◆	B-2	B-5	GRIP SPACER	
		B-6	D-6		
		D-7			
104	◆	D-7		GRIP SPRING	
105	630C380O10	A-6		PLATEN ROLLER	
106	530D104O10	A-6	B-7	BEARING	
108	622C724O10	A-3		PLATEN GEAR CAM L	
109	622C725O10	C-8		PLATEN GEAR CAM R	
110	◆	B-2	D-6	PLATEN SPACER	
111	◆	B-2	D-7	PLATEN HOOK PLATE	
112	◆	B-2	D-7	PLATEN HOOK CAP	
113	◆	A-5	B-8	PLATEN SPRING	
114	◆	B-2	D-7	PLATEN ADJUST SPRING	
115	◆	B-2		PLATEN EARTH PLATE	
116	◆	D-1		S1 SEN HOLDER	
117	◆	A-4	C-7	SLIDE LOCK LEVER	
118	◆	A-4	C-7	SLIDE LEVER SPRING	
119	622C736O10	B-2		SP3 INK GEAR	
120	623D650O10	A-5		TU1 INK GEAR	
121	◆	A-5		TU2 INK GEAR	
122	◆	C-2		PAPER HOLDER L	
123	◆	C-1		COVER HOLDER L	
124	◆	E-4		PAPER HOLDER R	
125	◆	E-5		COVER HOLDER R	
126	622C767O10	E-4	E-5	FLANGE HOLD ROLLER R	
127	622C787O10	C-1		FLANGE HOLD ROLLER L	
128	◆	C-4		POST	
129	◆	C-1		FL PAPER SLIDER	
130	685D033O50	D-7		PARALLEL PIN	
131	221C089O10	C-6		DRIVE FFC BARRIER	
132	◆	B-3	D-7	DOOR SW ASSY	
133	◆	A-4	C-8	SLIDE LEVER CAP	
134	◆	A-6	B-7	SPRING THRUST PLATEN	
135	◆	A-6	B-7	SPACER BEARING	
136	◆	A-6	B-7	BUSH	

FRONT DOOR ASSY



PARTS LIST

In order to expedite delivery of replacement part orders.

- Specify : 1. Model number/Serial number
2. Part number and Description
3. Quantity

Unless full information is supplied, delay in execution of orders will result.

-  : Critical components
♦ : Not supply items

(RoHS-compliant model)

- Parts listed below are all RoHS-compliant.
- When servicing this model, use RoHS-compliant parts only.

FRONT DOOR ASSY

ITEM	PARTS NO.	ADDRESS		PARTS NAME	DESCRIPTION
3	♦	A-2	A-5	SCREW	3X6
		B-1	B-2		
		B-3	B-7		
		C-3	C-4		
		E-1	E-2		
		E-8			
4	♦	D-5		SCREW	M3X0.5-6 3W
6	♦	E-5	E-6	SCREW	3X10
31	♦	C-3	D-3	RETAINING RING	E-2 3W
		D-4			
34	♦	C-5	D-7	RETAINING RING	E-5 3W
		E-7			
41	♦	A-6		TOP DOOR PLATE UNIT	
42	956C301O01	B-7		F EXIT P GEAR ASSY	
	43 936D431O01	C-3		D BOX SEN PCB ASSY	
	44 936D433O01	A-5		RELAY PCB ASSY	
45	♦	C-7		FU PAPER GUIDE ASSY	
46	♦	C-6		FU PAPER GUIDE	
47	♦	C-7	E-6	PAPER PATH ROLLER	
48	630C381O10	D-6		PAPER EXIT ROLLER	
49	530D080O10	D-5	D-6	BUSH	
50	♦	D-5	D-6	GRIP SPACER	
51	♦	D-7	E-7	P EXIT TL SLEEVE	
52	623D580O10	E-7		P EXIT TL GEAR	
53	573D361O10	E-7		P EXIT TL SPRING1	
54	573D362O10	E-7		P EXIT TL SPRING2	
55	573D363O10	D-7		P EXIT TL SPRING3	
56	♦	D-5		FB PAPER GUIDE ASSY	
57	♦	B-4		FRONT DOOR PLATE	
	58 956C311O21	E-2		CUTTER ASSY(M2)	
59	♦	C-4		ROLLER HOLD ASSY	

FRONT DOOR ASSY

ITEM	PARTS NO.	ADDRESS		PARTS NAME	DESCRIPTION
60	◆	D-3		HOLD ROLLER	
61	◆	D-3		ROLLER HOLD LEVER	
62	◆	C-3		ROLLER H SPRING L	
63	◆	D-4		ROLLER H SPRING R	
64	◆	D-4		ROLLER H LEVER SHAFT	
65	◆	E-3		ROLLER HOLD BASE	
66	◆	B-7		PLATE CAP	
67	◆	A-7		F DOOR LOCK LEVER	
68	◆	A-6	B-5	FU HOLD ROLLER	
69	◆	A-2		T FRONT DOOR PLATE	
70	◆	C-4		CUTTER HOLDER R	
71	◆	C-3		CUTTER HOLDER L	
72	◆	E-1		EXIT PAPER GUARD	
73	573D387O10	C-5		LEVER LOCK SPRING R	
74	573D386O10	D-8		LEVER LOCK SPRING L	
75	◆	A-1		OPE PCB ASSY HOLDER	
76	622C727O10	D-5		FB PAPER GUIDE	
77	◆	E-5		FB PAPER GUIDE2	
78	◆	E-5		LOADING PINCH SHAFT	
79	◆	D-5		PAPER EXIT ROLLER2	

DETAILS OF ROLLER AREAS

