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Learning ◆ Knowledge ◆ Performance

M035/M036
SERVICE MANUAL

004774MIU

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WARNING

The Service Manual contains information regarding service techniques, procedures, processes and spare parts of office equipment distributed by Ricoh Americas Corporation. Users of this manual should be either service trained or certified by successfully completing a Ricoh Technical Training Program.

Untrained and uncertified users utilizing information contained in this service manual to repair or modify Ricoh equipment risk personal injury, damage to property or loss of warranty protection.

Ricoh Americas Corporation

LEGEND

PRODUCT CODE	COMPANY			
	GESTETNER	LANIER	RICOH	SAVIN
M035	--	SP C231N	Aficio SP C231N	SP C231N
M036	--	SP C232DN	Aficio SP C232DN	SP C232DN

DOCUMENTATION HISTORY

REV. NO.	DATE	COMMENTS
*	05/2009	Original Printing

M035/M036

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Read This First

Safety Notices

Important Safety Notices

Prevention of Physical Injury

1. Before disassembling or assembling parts of the printer and peripherals, make sure that the printer power cord is unplugged.
2. The wall outlet should be near the printer and easily accessible.
3. If any adjustment or operation check has to be made with exterior covers off or open while the main switch is turned on, keep hands away from electrified or mechanically driven components.
4. The printer drives some of its components when it completes the warm-up period. Be careful to keep hands away from the mechanical and electrical components as the printer starts operation.
5. The inside and the metal parts of the fusing unit become extremely hot while the printer is operating. Be careful to avoid touching those components with your bare hands.

Health Safety Conditions

Toner is non-toxic, but if you get it in your eyes by accident, it may cause temporary eye discomfort. Try to remove with eye drops or flush with water as first aid. If unsuccessful, get medical attention.

Observance of Electrical Safety Standards

The printer and its peripherals must be serviced by a customer service representative who has completed the training course on those models.

Safety and Ecological Notes for Disposal

1. Do not incinerate toner bottles or used toner. Toner dust may ignite suddenly when exposed to an open flame.
2. Dispose of used toner, the maintenance unit which includes developer or the organic photoconductor in accordance with local regulations. (These are non-toxic supplies.)
3. Dispose of replaced parts in accordance with local regulations.

⚠WARNING

- To prevent a fire or explosion, keep the printer away from flammable liquids, gases, and aerosols. A fire or an explosion might occur.

Laser Safety

The Center for Devices and Radiological Health (CDRH) prohibits the repair of laser-based optical units in the field. The optical housing unit can only be repaired in a factory or at a location with the requisite equipment. The laser subsystem is replaceable in the field by a qualified Customer Engineer. The laser chassis is not repairable in the field. Customer engineers are therefore directed to return all chassis and laser subsystems to the factory or service depot when replacement of the optical subsystem is required.

⚠WARNING

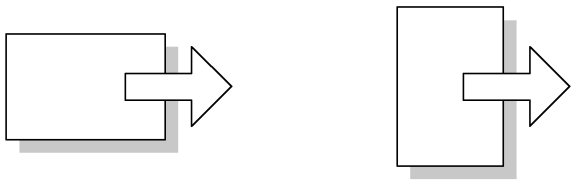
- Use of controls, or adjustment, or performance of procedures other than those specified in this manual may result in hazardous radiation exposure.

⚠WARNING
WARNING: Turn off the main switch before attempting any of the procedures in the Laser Optics Housing Unit section. Laser beams can seriously damage your eyes. **CAUTION MARKING:**  3b_decal

Symbols, Abbreviations and Trademarks

This manual uses several symbols and abbreviations. The meaning of those symbols and abbreviations are as follows:

	See or Refer to
	Clip ring
	Screw
	Connector
	Clamp
	E-ring
SEF	Short Edge Feed
LEF	Long Edge Feed



Short Edge Feed (SEF) **Long Edge Feed (LEF)**

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PRODUCT INFORMATION

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1. PRODUCT INFORMATION

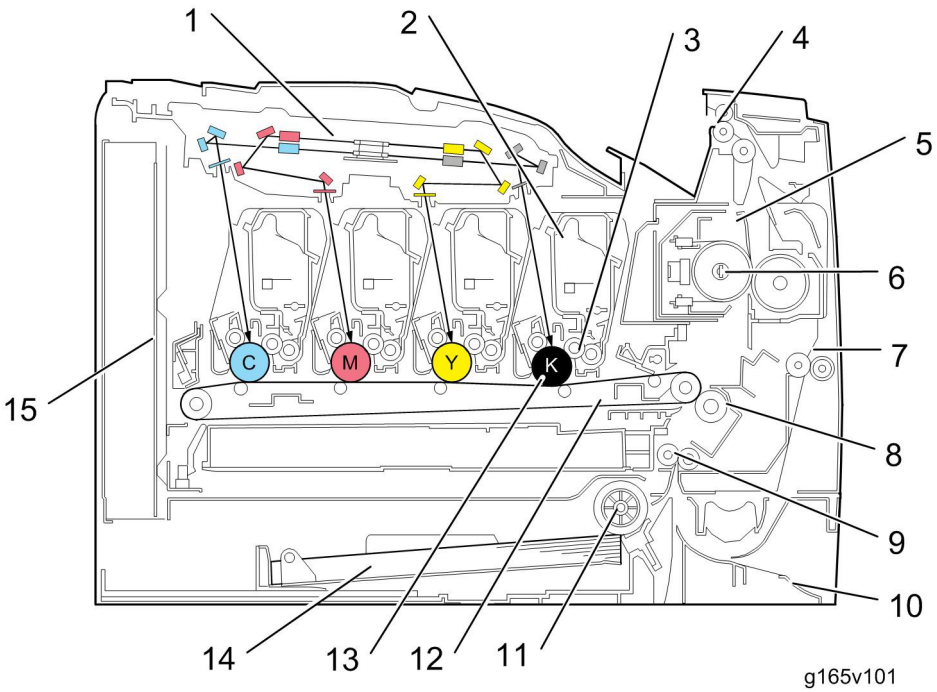
1.1 SPECIFICATIONS

See "Appendices" for the following information:

- "General Specifications"
- "Supported Paper Sizes"

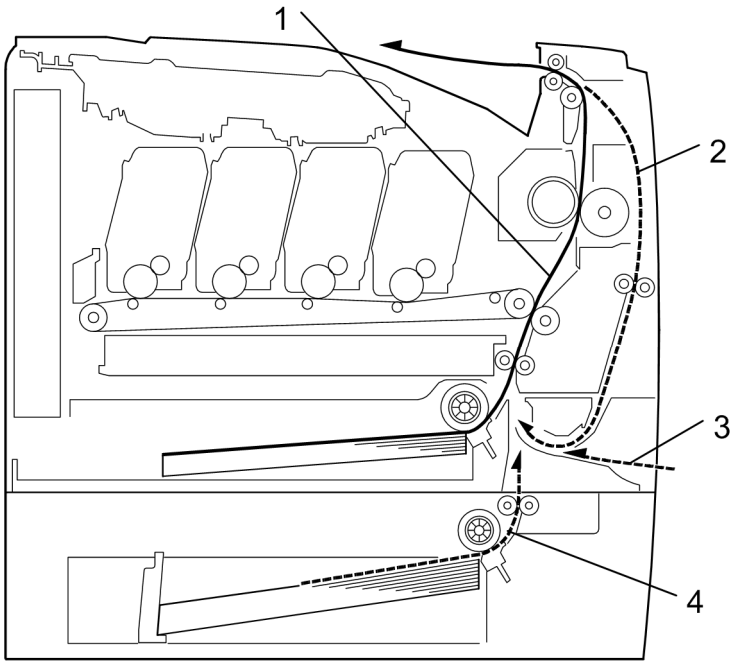
1.2 MACHINE OVERVIEW

1.2.1 COMPONENT LAYOUT



1. Laser Optics Housing Unit 2. Print Cartridge (AIO) 3. Development Roller (AIO) 4. Paper Exit 5. Fusing Unit 6. Fusing Lamp 7. Duplex Path 8. Transfer Roller	9. Registration Roller 10. By-pass 11. Paper Feed Roller 12. ITB (Image Transfer Belt) Unit 13. OPC (AIO) 14. Tray 1 15 EGB/Controller

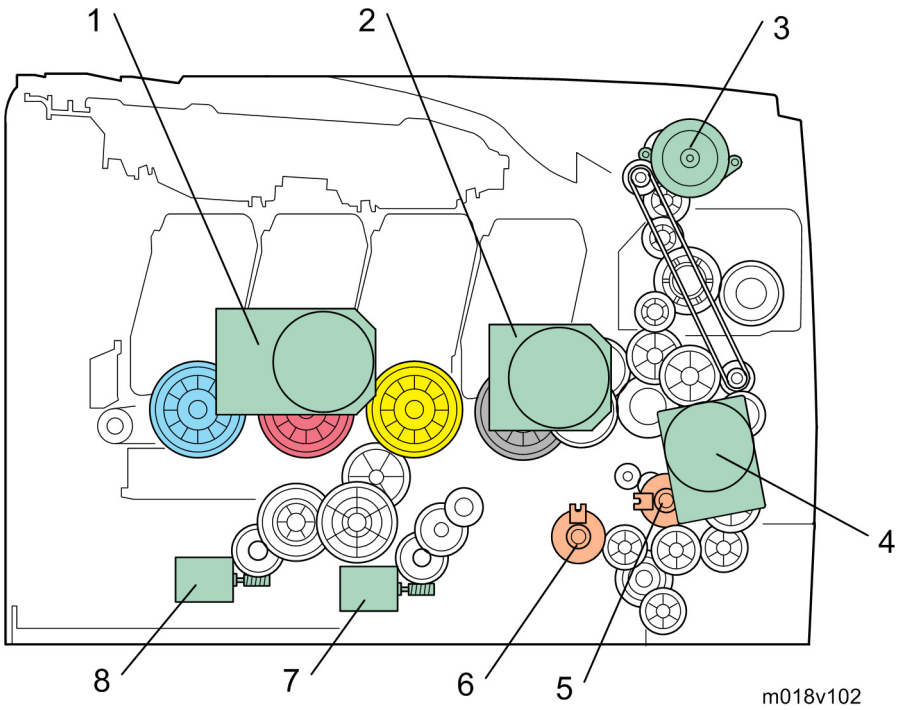
1.2.2 PAPER PATH



m018v107

1. Paper path from tray 1
2. Duplex path (M036 only)
3. By-pass tray
4. Paper path from tray 2 (optional)

1.2.3 DRIVE LAYOUT



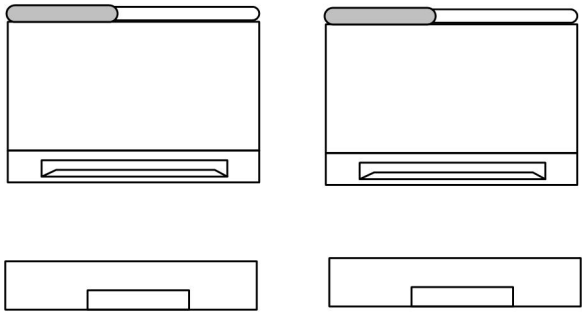
1. Color AIO Motor	5. Registration Clutch
2. Black AIO Motor	6. Paper Feed Clutch
3. Duplex Motor (M036 only)	7. Agitator Motor
4. Transport/Fusing Motor	8. ITB (Image Transfer Belt) Contact Motor

- **Color AIO Motor:**
  This drives the color AIOs (Cyan, Magenta and Yellow)
- **Black AIO Motor:**
  This drives the black AIO and the ITB (Image Transfer Belt).
- **Duplex Motor (M036 only):**
  This drives the paper exit roller and the duplex roller.
- **Transport/Fusing Motor:**
  This drives the fusing unit, paper feed roller, registration roller and paper exit roller via the paper feed clutch, registration clutch and gears.

- **Registration Clutch:**
  This transfers drive from the transport/ fusing motor to the registration roller.
- **Paper Feed Clutch:**
  This transfers drive from the transport/ fusing motor to the paper feed roller.
- **Agitator Motor:**
  This moves the agitators in the waste toner bottle.
- **ITB Contact Motor:**
  This moves the ITB into contact with and away from the color OPCs.

1.3 MACHINE CONFIGURATION

M035 **M036**



m035s611

Models	Duplex Unit	Optional Memory	Optional Tray (G849)	PCL PS
M035	Manual	Y	500x1	Y
M036	Auto	Y	500x1	Y

1.4 GUIDANCE FOR THOSE WHO ARE FAMILIAR WITH PREDECESSOR PRODUCTS

The M035/M036 series models are similar to the G165/G166/G167 series. If you have experience with those products, the following information will be of help when you read this manual.

Different Points from Previous Products

	M035/M036	G165/G166/G167
Print Cartridge (AIO)	Longer Life Print Cartridge (AIO)	-
Operation Panel	2-line LCD	No LCD

INSTALLATION

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
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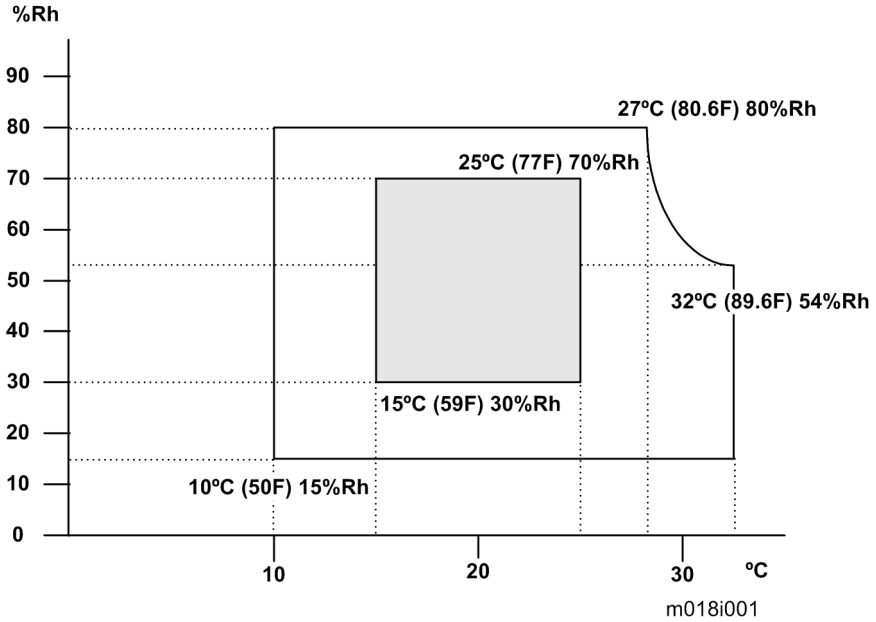
2. INSTALLATION

2.1 INSTALLATION REQUIREMENTS

2.1.1 ENVIRONMENT



1. Temperature Range: 10°C to 32°C (50°F to 89.6°F)
2. Humidity Range: 15% to 80% RH
3. Ambient Illumination: Less than 2,000 lux (do not expose to direct sunlight)
4. Ventilation: 3 times/hr/person
5. Do not put the machine in areas that get sudden temperature changes. This includes:
   - Areas directly exposed to cool air from an air conditioner
   - Areas directly exposed to heat from a heater.
6. Do not put the machine in areas that get exposed to corrosive gas.
7. Do not install the machine at locations over 2,500 m (8,125 ft.) above sea level.
8. Put the machine on a strong, level base. (Inclination on any side must be no more than 5 mm.)
9. Do not put the machine in areas with strong vibrations.

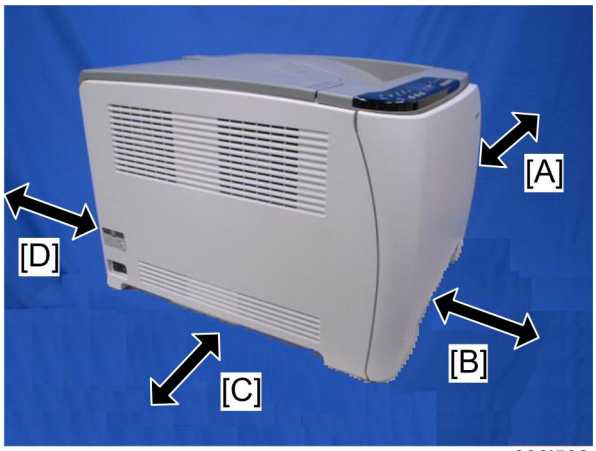
2.1.2 MACHINE LEVEL

Front to back: Within 5 mm (0.2") of level

Right to left: Within 5 mm (0.2") of level

2.1.3 MACHINE SPACE REQUIREMENT

Put the printer near the power source with these clearances:



m036i502

Right side [A]:	Over 10 cm (4.0")
Front [B]:	Over 70 cm (27.5")
Left side [C]:	Over 20 cm (7.9")
Rear [D]:	Over 10 cm (4.0")

2.1.4 POWER REQUIREMENTS

⚠CAUTION

- Make sure that the plug is tightly in the outlet.
- Avoid multi-wiring.
- Make sure that you ground the printer.

Input voltage level	120 V, 60 Hz: More than 11 A (for North America) 220 V to 240 V, 50 Hz/60 Hz: More than 6 A (for Europe/ Asia)
Permitted voltage fluctuation: 10%	
Do not set anything on the power cord.	

2.1.5 INSTALLATION PROCEDURE

Refer to the Quick Installation Guide for details about installing the printer.

PREVENTIVE MAINTENANCE

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

3. PREVENTIVE MAINTENANCE

3.1 PREVENTIVE MAINTENANCE

See "Appendices" for the "User Replaceable Items."

REPLACEMENT AND ADJUSTMENT

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

4. REPLACEMENT AND ADJUSTMENT

4.1 BEFORE YOU START

⚠CAUTION

- If there are printer jobs in the printer, print out all jobs in the printer buffer.
- Turn off the main power switch and unplug the printer before you do the procedures in this section.

4.2 SPECIAL TOOLS

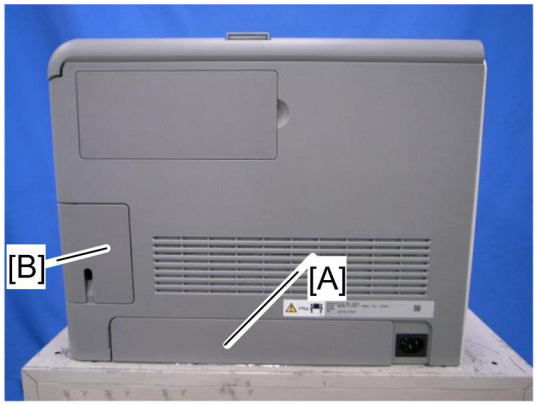
- PC: Windows 2000/XP/Vista, Windows Server 2003/2003 R2, or Mac OS X.
- USB cable or Crossover cable

4.3 EXTERIOR COVERS

⚠CAUTION

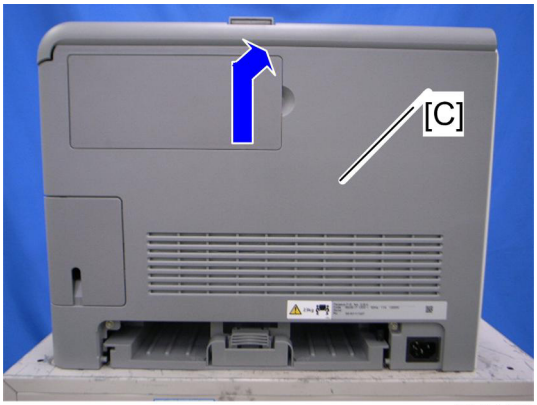
- Turn off the main power switch and unplug the printer before you do the procedures in this section.

4.3.1 REAR COVER



m036r500

1. Rear tray cover [A] (hooks)
2. Interface cover [B] (hooks)



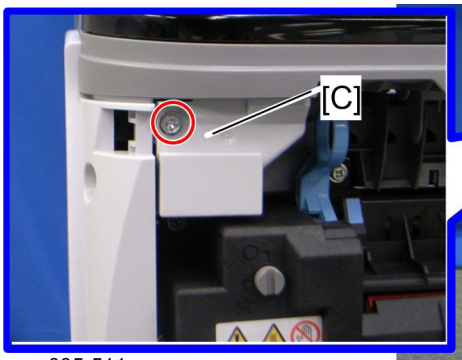
m036r502

3. Rear cover [C] (x 3)

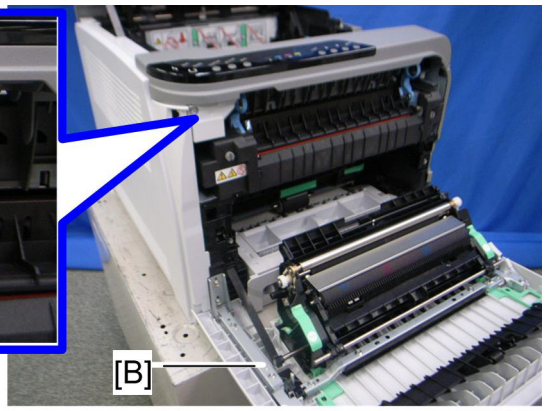
4.3.2 OPERATION PANEL

m035r509

1. Open the top cover [A].

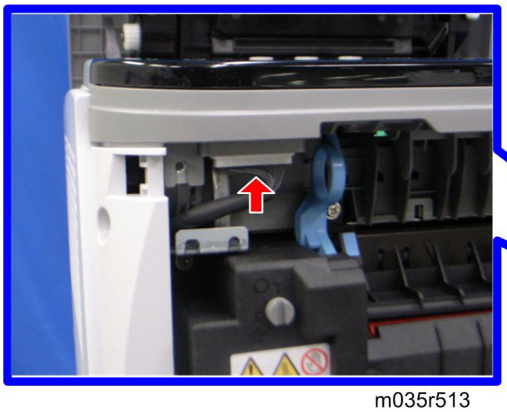


m035r511

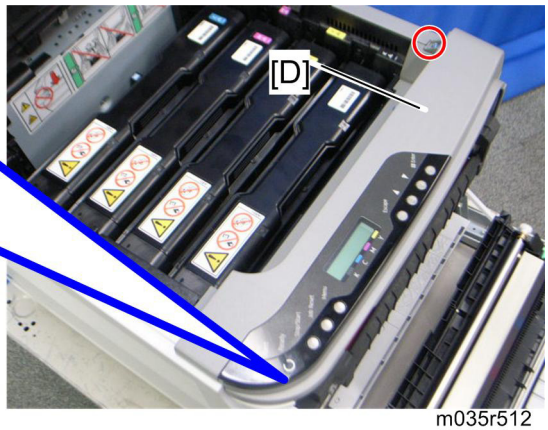


m035r510

2. Open the front cover [B].
3. Front harness cover [C] (x 1)



m035r513

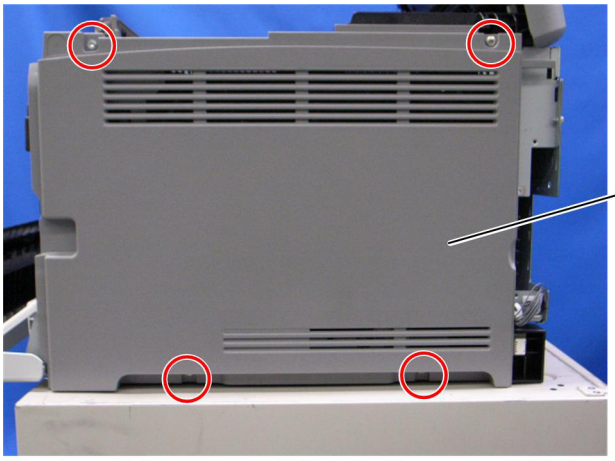


m035r512

4. Operation panel [D] (x 1, x 1)

4.3.3 RIGHT COVER

1. Rear cover (☛ p.4-3)
2. Operation panel (☛ p.4-4)



m018r524

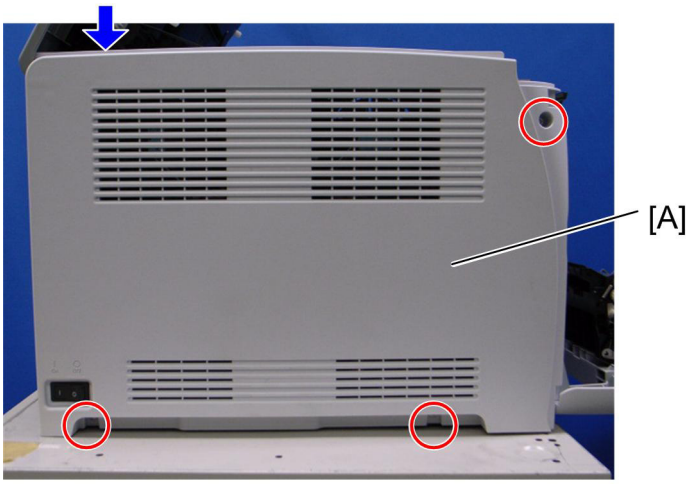
3. Right cover [A] (x 4)

Note

- Top front screw: M3x8, others: M4x10

4.3.4 LEFT COVER

1. Rear cover (☛ p.4-3)
2. Operation panel (☛ p.4-4)



m018r525

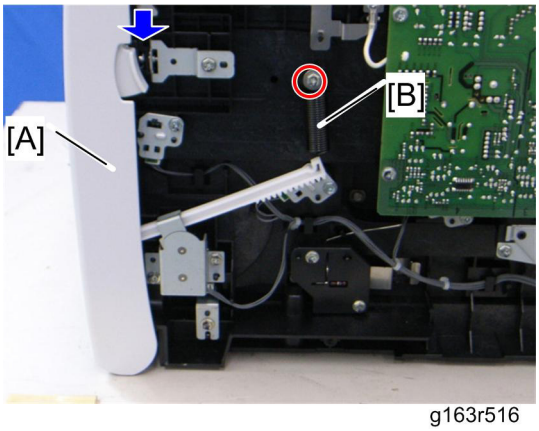
3. Left cover [A] (x 3, hook at arrow mark)

Note

- Top front screw: M3x8, others: M4x10

4.3.5 FRONT COVER UNIT

1. Rear cover (☛ p.4-3)
2. Operation panel (☛ p.4-4)
3. Transfer unit (☛ p.4-29)
4. Right cover (☛ p.4-5)



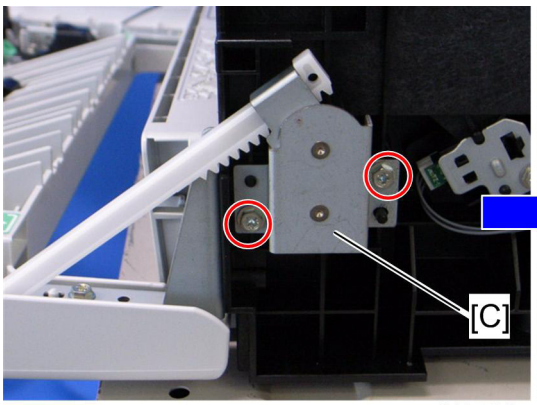
g163r516

5. Close the front cover [A].
6. Remove a spring [B] (🔩 x 1)

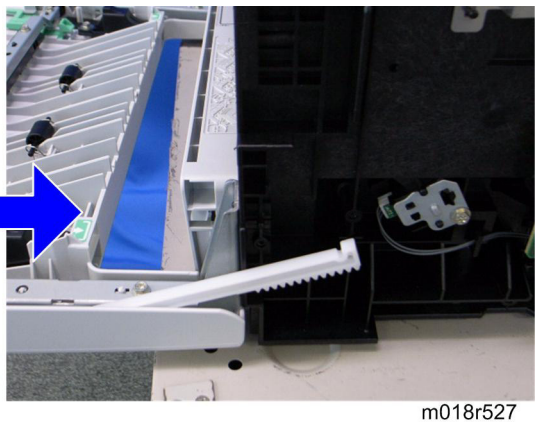
⚠CAUTION

- Never remove the spring with the front cover open.
- When removing the spring when it is extended, it may move in a unexpected direction and cause a slight injury.

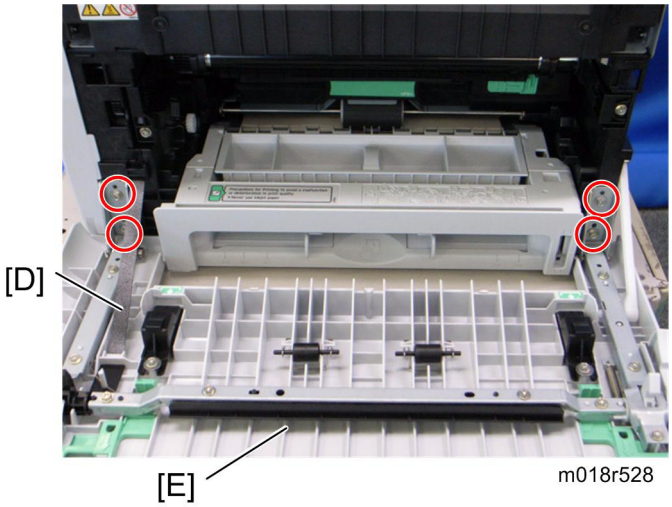
7. Open the front cover.



m018r526


m018r527

8. Cover link gear unit [C] (🔩 x 2)



9. Release the belt [D]
10. Front cover unit [E] (x 4)

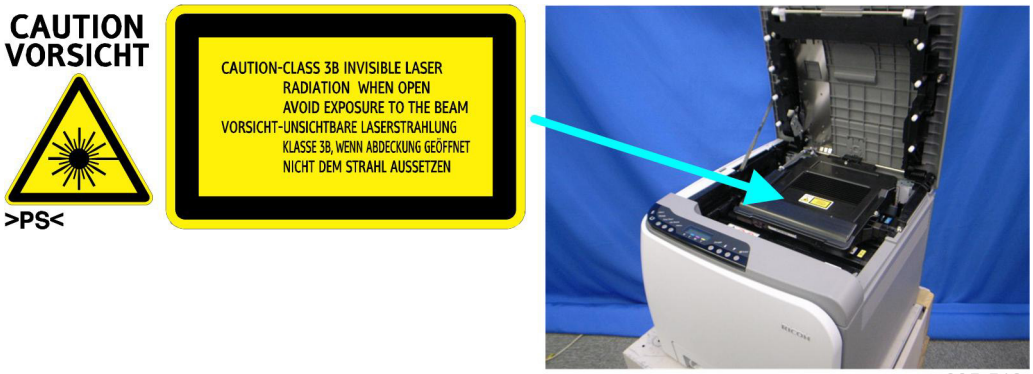
4.4 LASER OPTICS

⚠WARNING

- Turn off the main power switch and unplug the printer before beginning any of the procedures in this section. Laser beams can cause serious eye injury.

4.4.1 CAUTION DECAL LOCATION

Caution decals are attached as shown below.



m035r519

⚠WARNING

- Be sure to turn off the main power switch and disconnect the power plug from the power outlet before beginning any disassembly or adjustment of the laser unit. This printer uses a class IIIb laser beam with a wavelength of 780 nm and an output of 7 mW. The laser can cause serious eye injury.

4.4.2 LASER OPTICS HOUSING UNIT

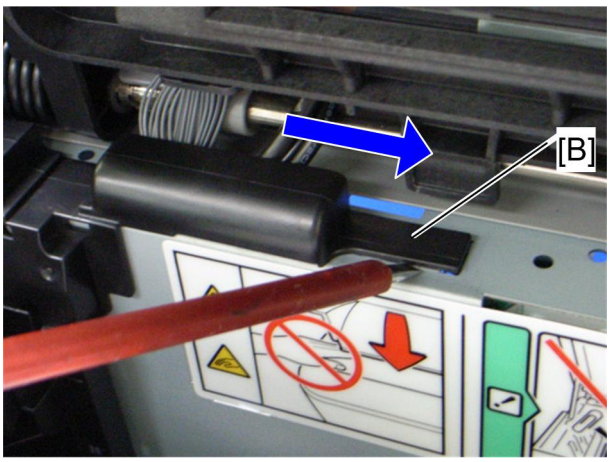
1. Rear cover (☛ p.4-3)
2. Controller box cover (☛ p.4-46)
3. Remove the controller bracket (☛ p.4-47)
4. Disconnect the three harnesses from CN301, 302 and 303 on the EGB (☞ x 3).


m018r510

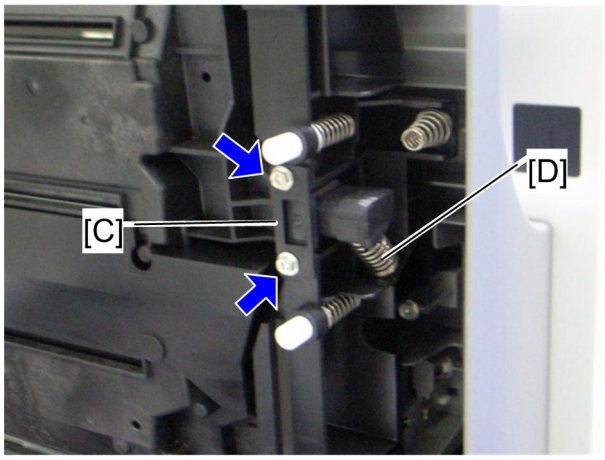
5. Open the top cover [A].

m035r509

6. Lift up the hook [B] of the harness guide at the rear-left frame and slide the harness guide to the right.

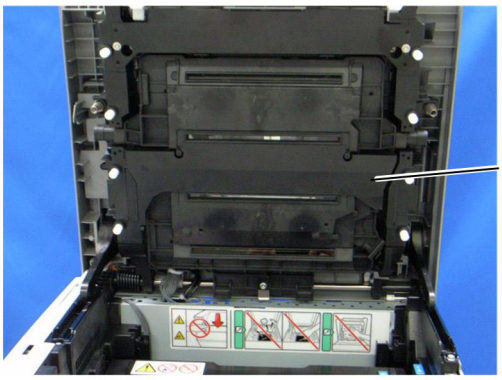


m018r514



m018r515

7. Remove the springs [D] (left side and right side).
8. Stoppers [C] (x 2 each; left side and right side)



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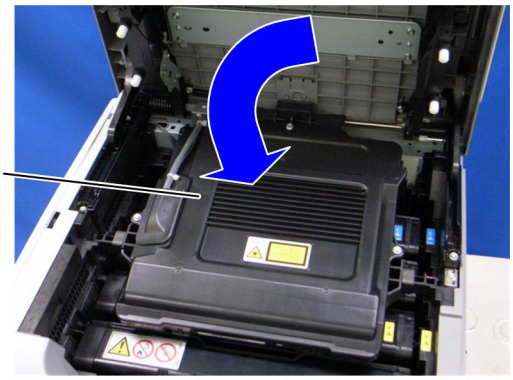
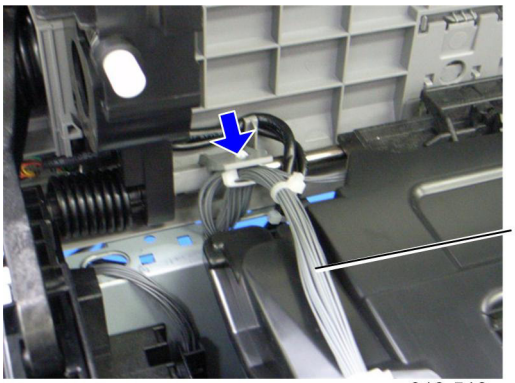


m018r517

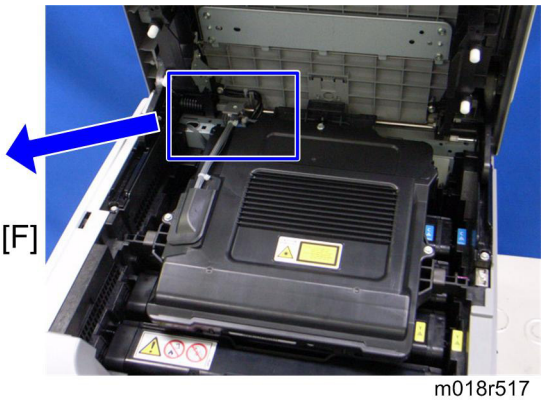
9. Remove the laser optics housing unit [E] from the top cover and place it on the main body.

Note

- Always use two hands when carrying the laser optics housing unit. Be sure not to drop the laser optics housing unit.



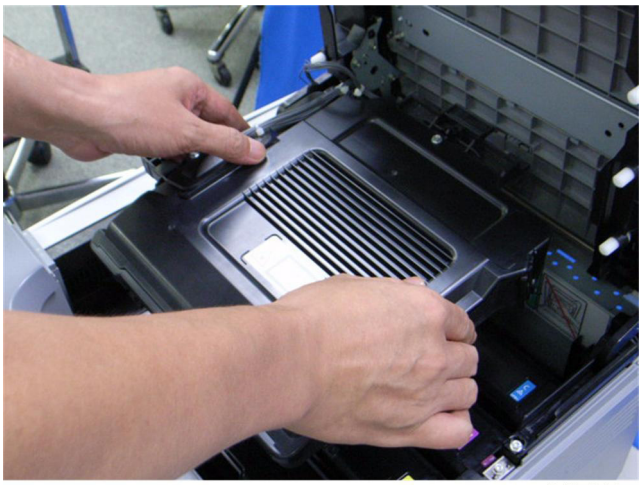
m018r518



m018r517

10. Take out the harnesses [F] (x 1).

11. Pull out the harnesses from the rear side.



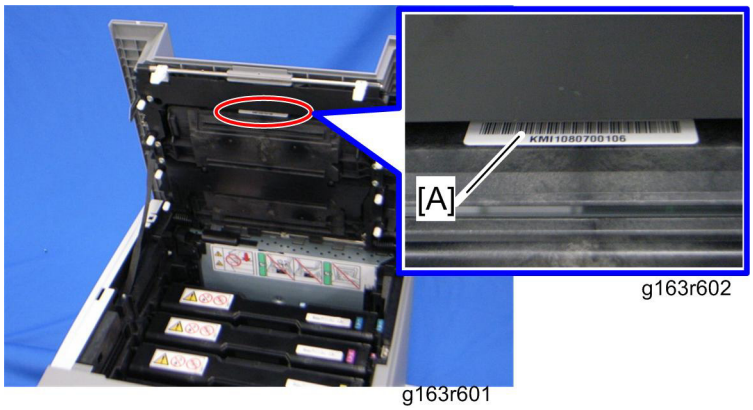
m018r519

12. Remove the laser optics housing unit.

After replacing the laser optics housing unit

Important

- Do the following step 4 with the front cover of the printer open.



g163r602

g163r601

1. Open the front cover and turn on the printer.
2. Look for the lot number [A] attached to the new laser optics housing unit. Then look for this lot number on the information sheet (this sheet will be released separately, and will contain lists of input data for each lot number)
   Input the data for this lot number from the information sheets with steps 3 to 7 below.

3. Open the front cover and turn on the printer.
4. Input the settings for the laser optics housing unit.
   - In the SOM utility, access “LSU Adjustment” inside the “SP Mode 2” tab.
   - Copy the corresponding LSU data inside the information sheet into the space provided in the SOM utility.
5. Close the front cover.
6. Execute "Color Registration" in the "SP Mode 2" tab.
7. Adjust the registration settings for each tray and for the front and rear sides of the paper with the "SP Mode 2" tab if necessary.

4.5 AIO CARTRIDGE

4.5.1 AIO CARTRIDGE (ALL IN ONE CARTRIDGE)

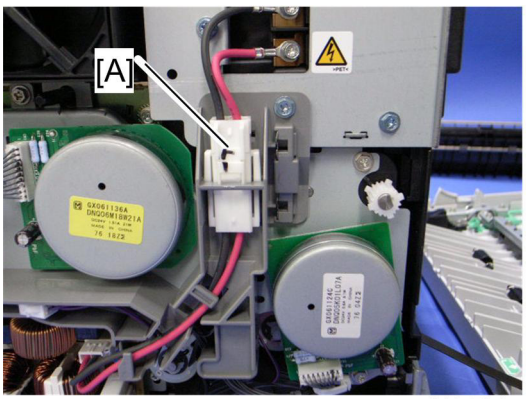
1. Open the top cover.

g163r522

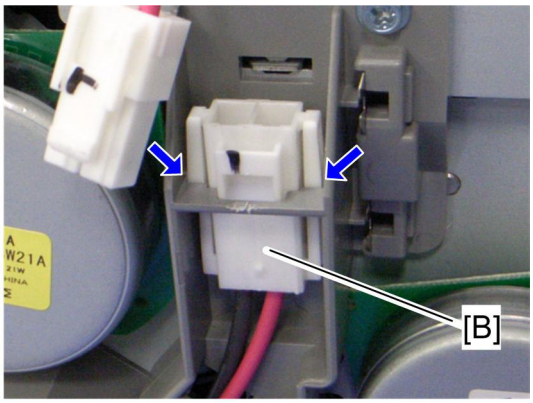
2. AIO cartridge [A]

4.5.2 BLACK AIO MOTOR

1. Left cover (☛ p.4-6)

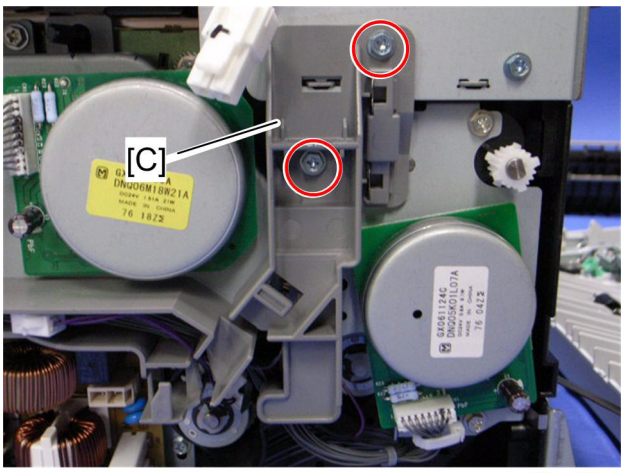


m018r531



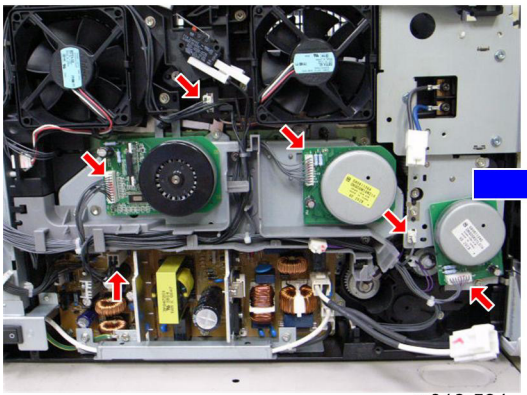
m018r532

2. Disconnect the fusing connector [A] and remove the fusing relay harness [B] (hooks).

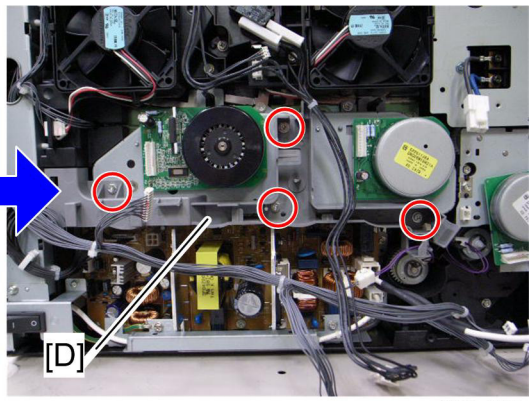


m018r533

3. Fusing harness guide [C] (🔩 x 2)

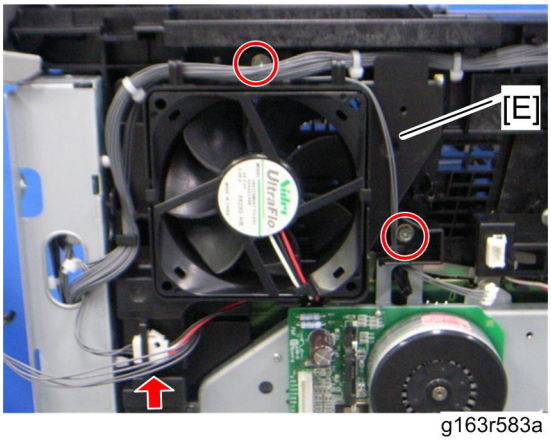


m018r534



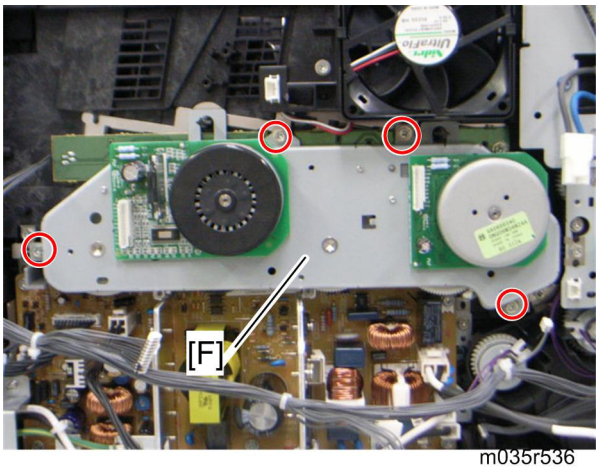
m018r535

4. Disconnect the connectors shown by arrows in the above picture and release all harnesses on the harness guide [D].
5. Harness guide [D] (x 4)
6. Interlock switch base (p.4-49 "Interlock Switches")
7. Controller bracket (p.4-46 "Controller Board")
8. Disconnect the connector (CN305) on the EGB.



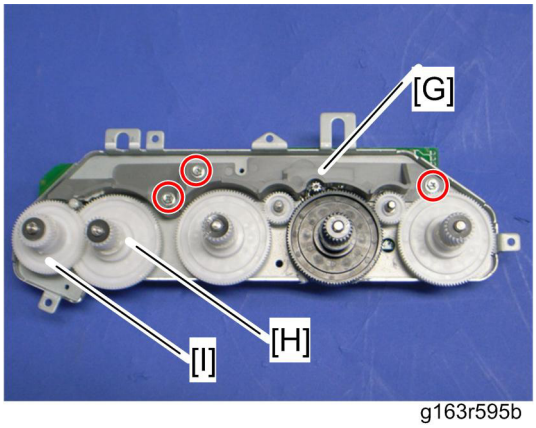
g163r583a

9. LSU fan motor base [E] (x 2, x 1)



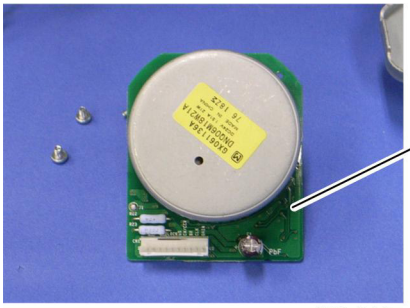
m035r536

10. Drive unit [F] (x 4)

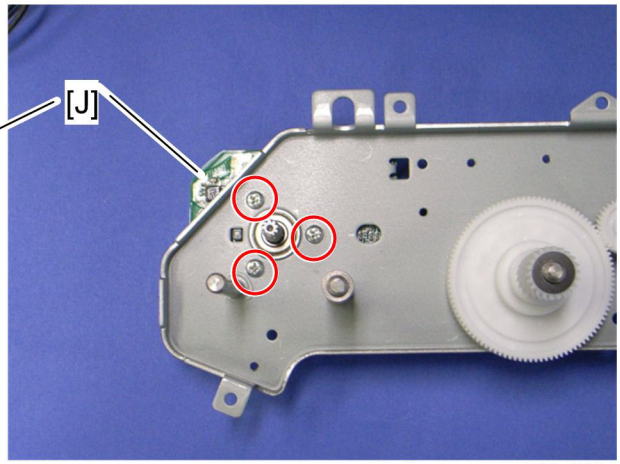


g163r595b

11. Drive unit guide [G] (x 3)
12. Black AIO gear [H] (snap ring x 1)
13. ITB gear [I] (snap ring x 1)



m018r541

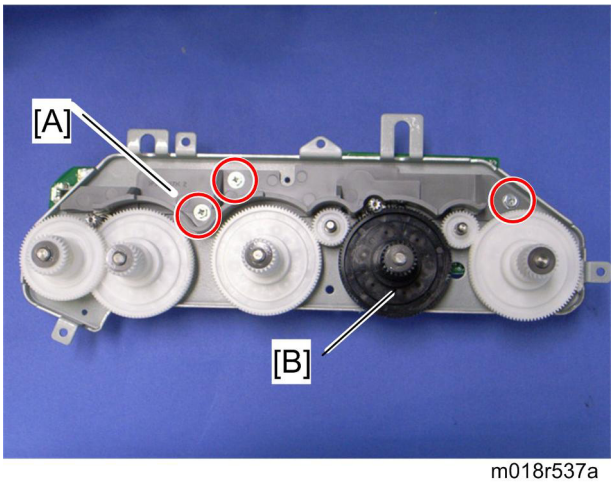


m018r540

14. Black AIO motor [J] (x 3)

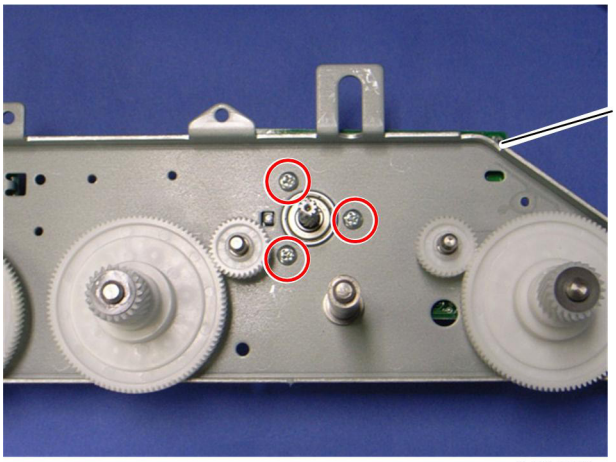
4.5.3 COLOR AIO MOTOR

1. Drive unit (☛ p.4-15 "Black AIO Motor")

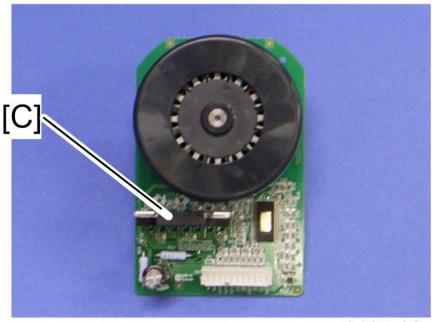


m018r537a

2. Drive unit guide [A] (🔩 x 3)
3. Color AIO gear [B] (ring stopper)



m018r538



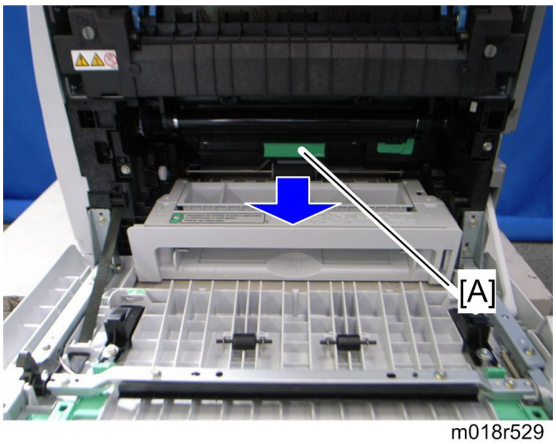
m018r539

4. Color AIO motor [C] (🔩 x 3)

4.6 IMAGE TRANSFER

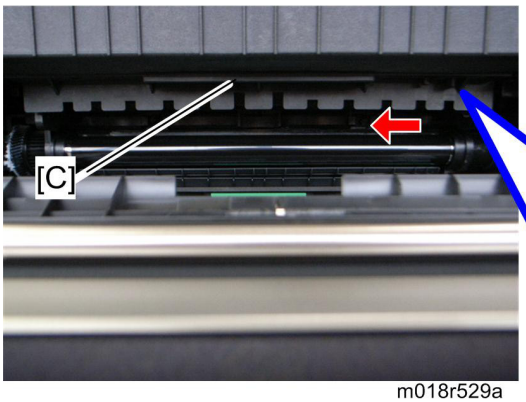
4.6.1 IMAGE TRANSFER BELT UNIT

1. Remove all the AIO cartridges (p.4-14).
2. Transfer unit (p.4-29)

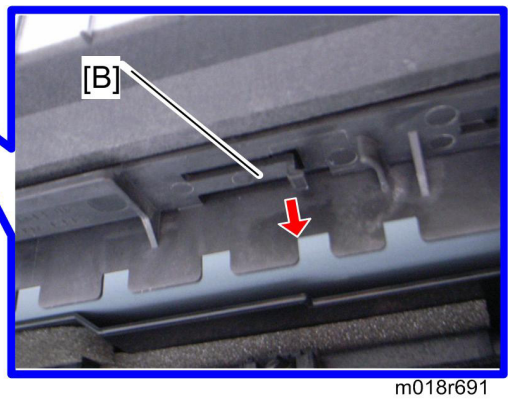


m018r529

3. Pull out the waste toner bottle [A].

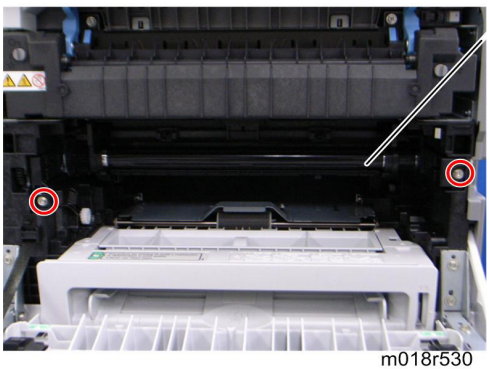


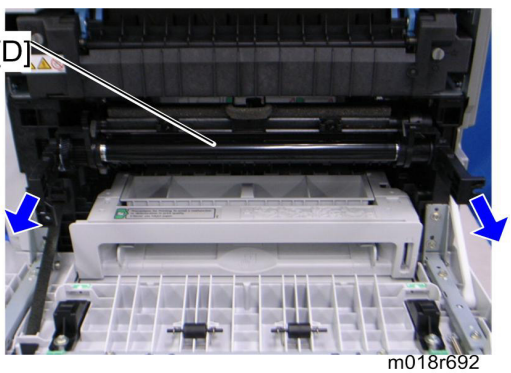
m018r529a



m018r691

4. Release the hook [B] under the guide plate.
5. Move the guide plate [C] underneath the fusing unit to the left, and then remove it.


m018r530



m018r692

6. Pull out the image transfer belt unit [D] (x 2).

After replacing the image transfer belt unit

Important

- Do the following step 2 with the front cover of the printer open.

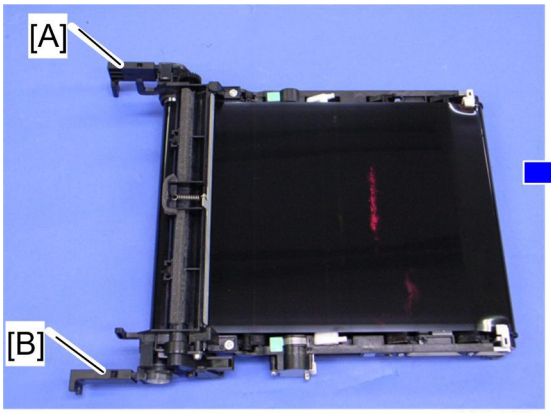
1. Open the front cover and turn on the printer.
2. Execute "Reset Transfer Unit Life Counter" with the "Engine Maintenance" menu.
3. Close the front cover.
4. Execute "Trans. Belt Adjust" with the "Engine Maintenance" menu.
5. Adjust the registration settings for each tray and for the front and rear sides of the paper with the "Engine Maintenance" menu if necessary.

4.6.2 ITB (IMAGE TRANSFER BELT) CLEANING UNIT

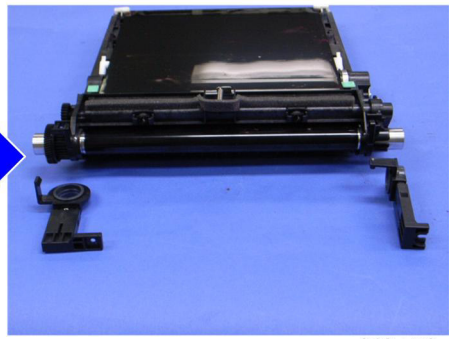
Note

- The ITB cleaning unit contains waste toner. When removing the ITB cleaning unit, put it on a sheet of paper.

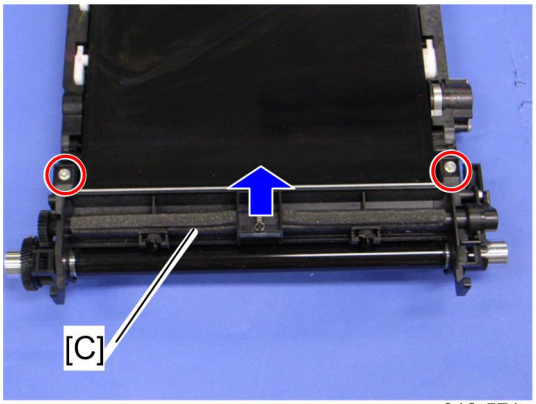
1. Image transfer belt unit (☛ p.4-19)



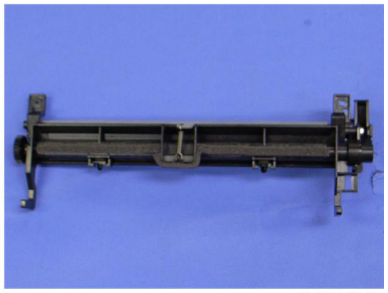
m018r569


m018r570

2. Left handle [A] (hook, bushing x 1)
3. Right handle [B] (hook, bushing x 1)



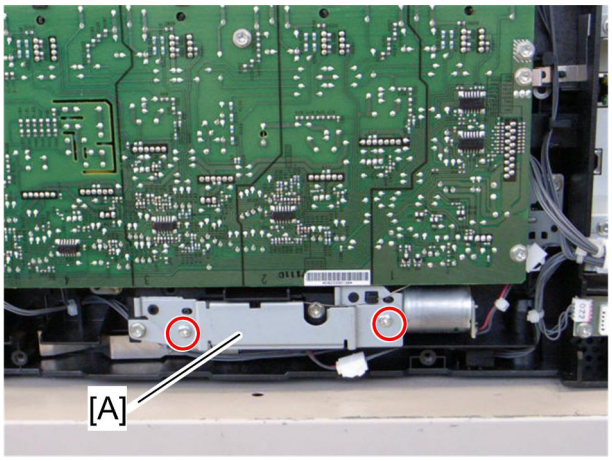
m018r571


m018r572

4. ITB cleaning unit [C] (☛ x 2)

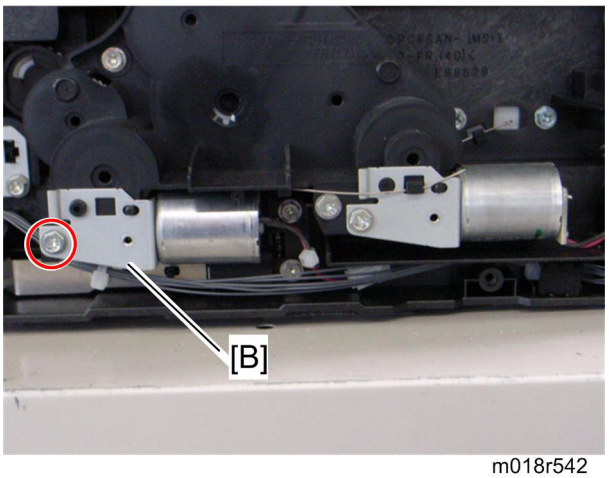
4.6.3 AGITATOR MOTOR

1. Right cover (☛ p.4-3)



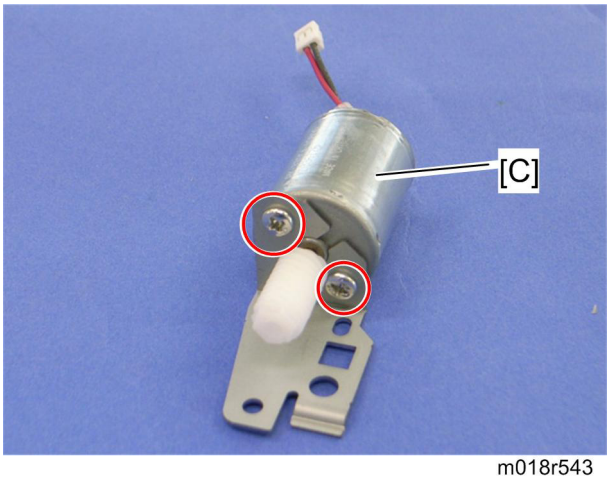
m018r541

2. Motor bracket [A] (🔩 x 2)



m018r542

3. Agitator motor assembly [B] (🔩 x 1, 🔌 x 1)

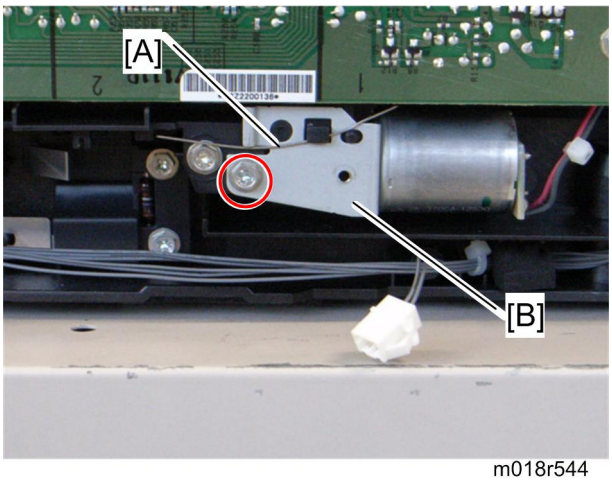


m018r543

4. Agitator motor [C] (🔩 x 2)

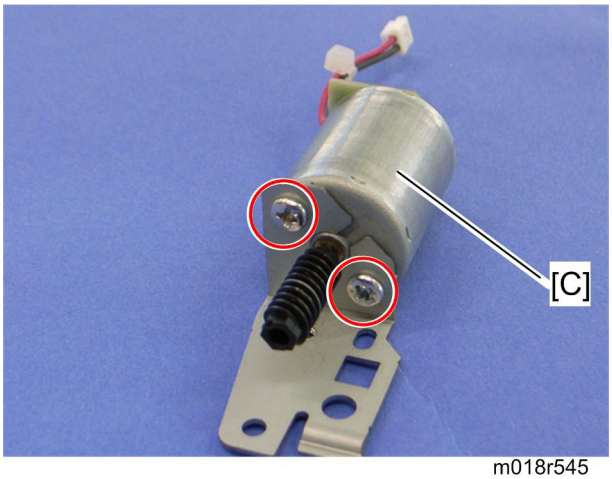
4.6.4 ITB (IMAGE TRANSFER BELT) CONTACT MOTOR

1. Agitator motor (☞ p.4-22)



m018r544

2. Release the wire [A].
3. ITB contact motor assembly [B] (x 1, x 1)

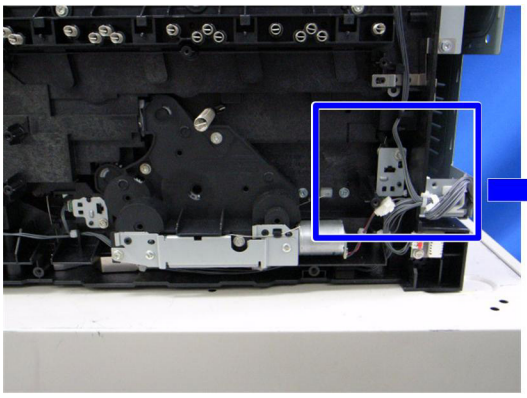


m018r545

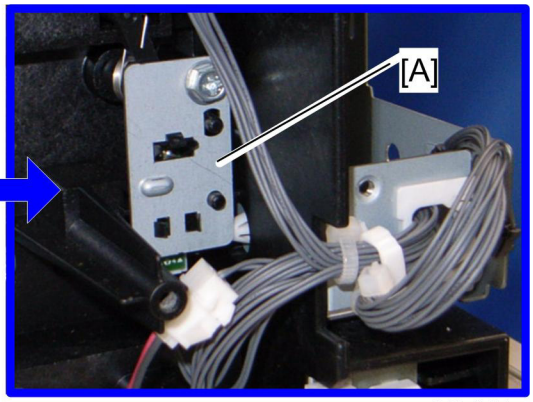
4. ITB contact motor [C] (x 2)

4.6.5 ITB (IMAGE TRANSFER BELT) CONTACT SENSOR

1. Right cover (☛ p.4-5)
2. High voltage power supply board (☛ p.4-56)

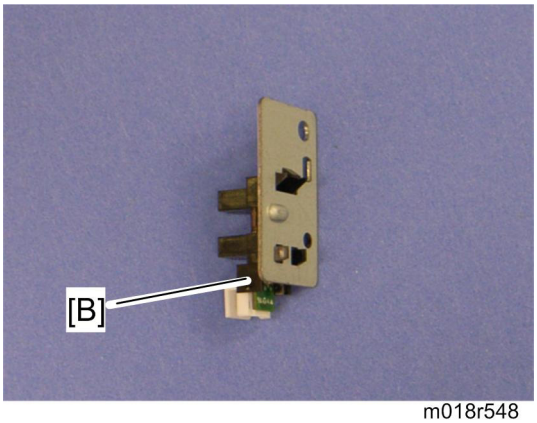


m018r546



m018r547

3. ITB contact sensor assembly [A] (☛ x 1, x 1)

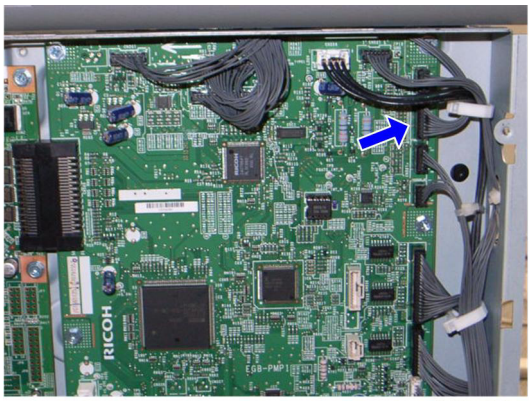


m018r548

4. ITB contact sensor [B] (hooks)

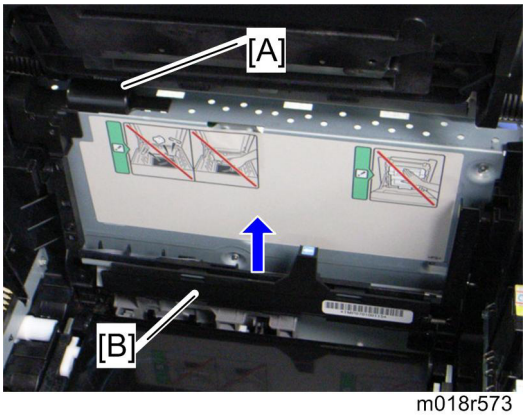
4.6.6 TM (TONER MARK) SENSOR BASE

1. Open the top cover.
2. Remove all AIO cartridges (☛ p.4-14).
3. Slide the ITB unit to the front side or remove it.
4. Rear cover (☛ p.4-5)
5. Controller box cover (☛ p.4-46)
6. Controller bracket (☛ p.4-47)



m018r689

7. Disconnect CN306 on the EGB (🔌 x 1).

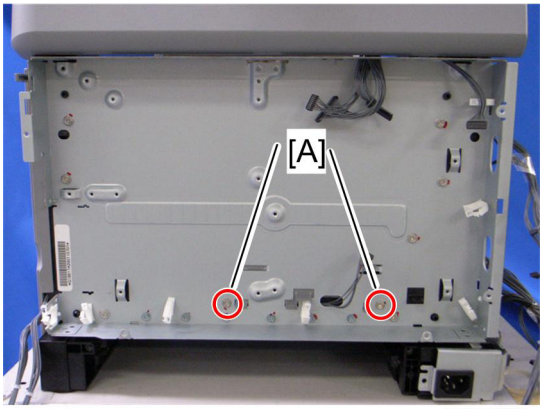


m018r573

8. Harness cover [A] (hook)
9. TM sensor base [B]

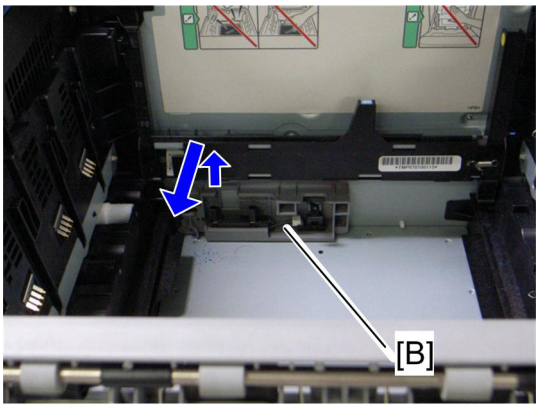
4.6.7 WASTE TONER BOTTLE SET SENSOR

1. Remove all AIO cartridges. (☛ p.4-14)
2. Image transfer belt unit (☛ p.4-19)
3. EGB (☛ p.4-47)



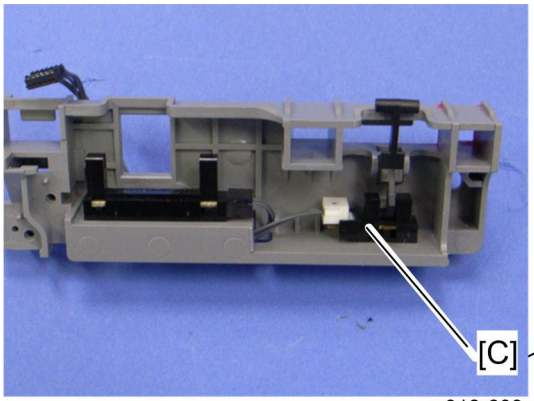
m018r607

4. Remove two screws [A] for the waste toner sensor base.

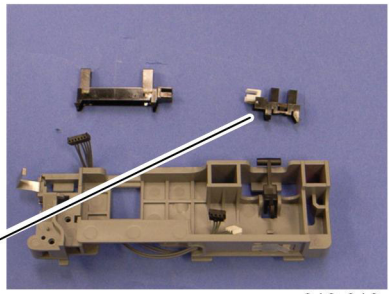


m018r608

5. Waste toner sensor base [B]



m018r609



m018r610

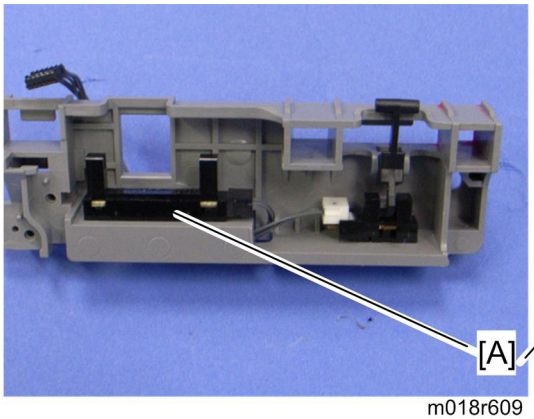
6. Remove the mylar fixing three hooks of the waste toner bottle set sensor.
7. Waste toner bottle set sensor [C] (hooks, x 1)

Note

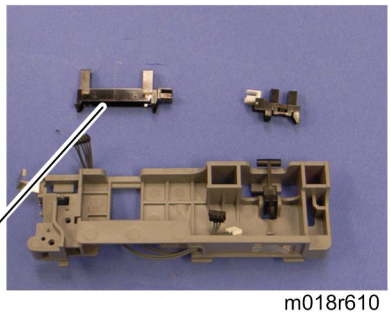
- When reinstalling the waste toner bottle set sensor, connect it to the white connector of the harness.

4.6.8 WASTE TONER OVERFLOW SENSOR

1. Remove all AIO cartridges. (☛ p.4-14)
2. Image transfer belt unit (☛ p.4-19)
3. EGB (☛ p.4-47)
4. Waste toner sensor base (☛ p.4-26 "Waste Toner Bottle Set Sensor")



m018r609


m018r610

5. Remove the mylar fixing three hooks of the waste toner bottle set sensor.
6. Waste toner overflow sensor [A] (hooks, x 1)

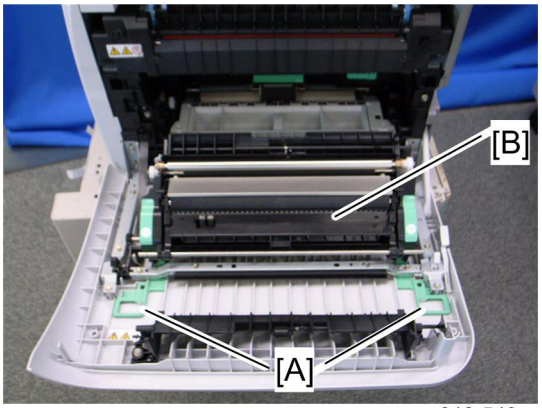
Note

- When reinstalling the waste toner overflow sensor, connect it to the black connector of the harness.

4.7 PAPER TRANSFER

4.7.1 TRANSFER UNIT

1. Open the front cover.

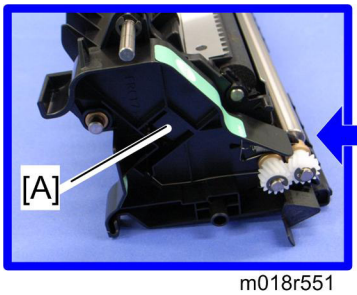


m018r549

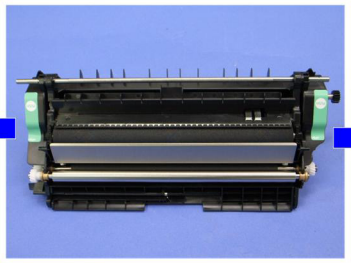
2. Release the locks [A].
3. Transfer unit [B]

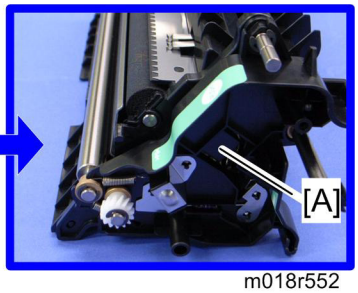
4.7.2 TRANSFER ROLLER

1. Transfer Unit (☛ p.4-29)



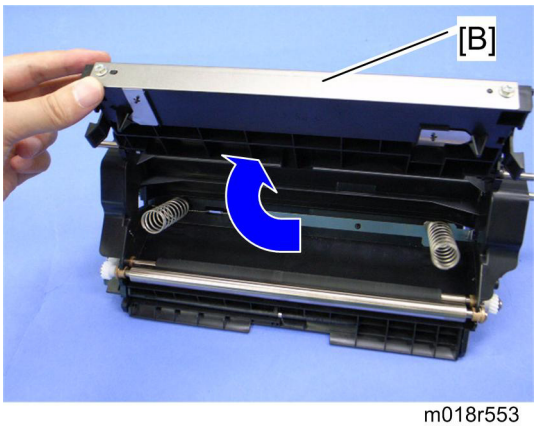
m018r551


m018r550



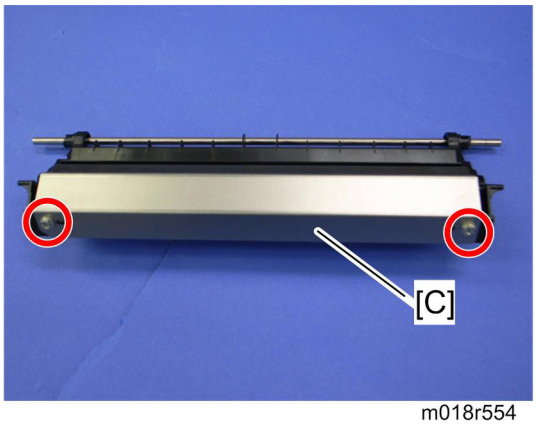
m018r552

2. Release the two hooks [A] at both sides of the transfer unit.



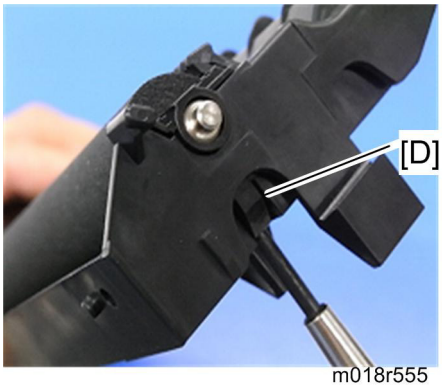
m018r553

3. Open the transfer roller unit [B] and remove it.

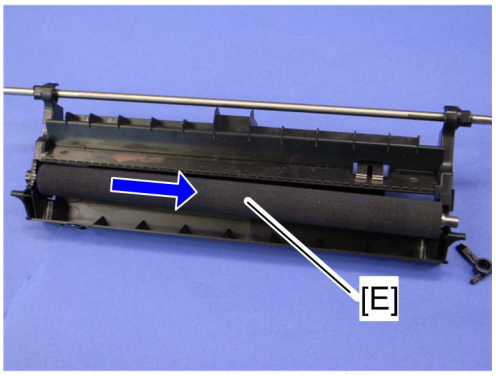


m018r554

4. Transfer roller assembly [C] (☛ x 2)



m018r555

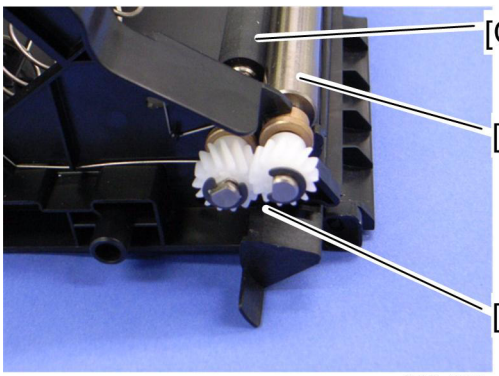


m018r556

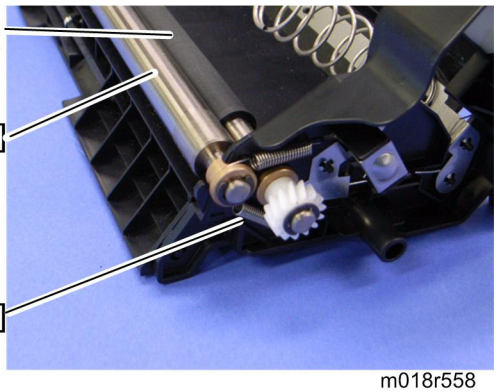
5. Release the holder [D] at the left side of the transfer roller unit (hook).
6. Transfer roller [E]

4.7.3 REGISTRATION ROLLER

1. Transfer unit (☛ p.4-29)
2. Transfer roller unit (☛ p.4-30)

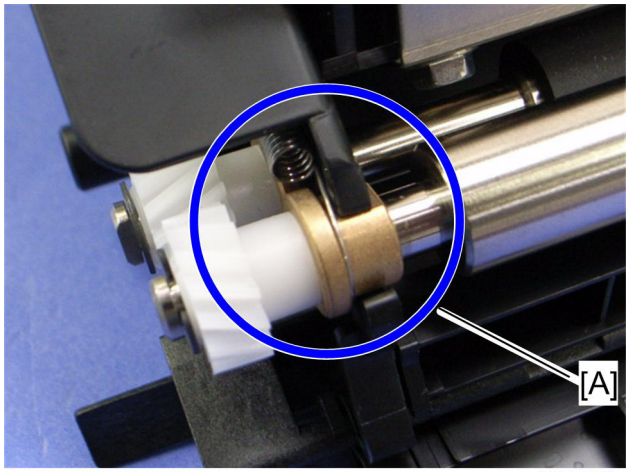


m018r557


m018r558

3. Tension springs [A] (both sides)
4. Registration idle roller [B] (☇ x 2, gear x 1, bushing x 2)
5. Registration roller [C] (☇ x 2, gear x 2, bushing x 2)

Reassembling the registration roller unit

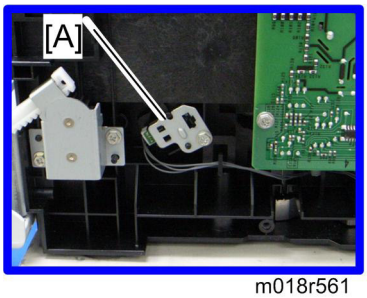


m018r559

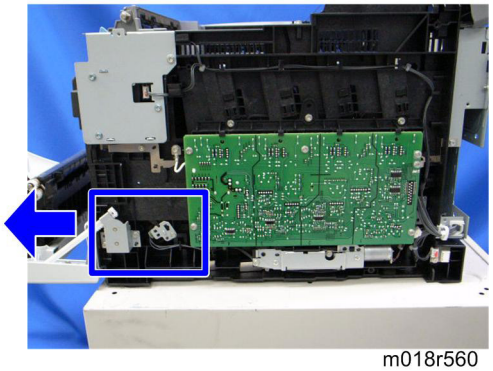
When installing the tension spring, make sure that the tension spring correctly hooks onto the bushing of the registration idle roller as shown above [A].

4.7.4 REGISTRATION SENSOR

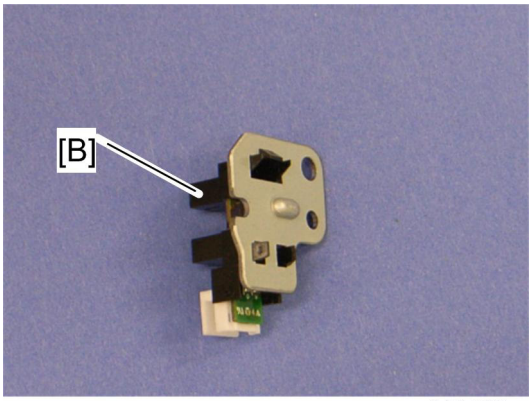
1. Rear cover (☛ p.4-3)
2. Right Cover (☛ p.4-5)



m018r561


m018r560

3. Registration sensor assembly [A] (☛ x 1, ☛ x 1)

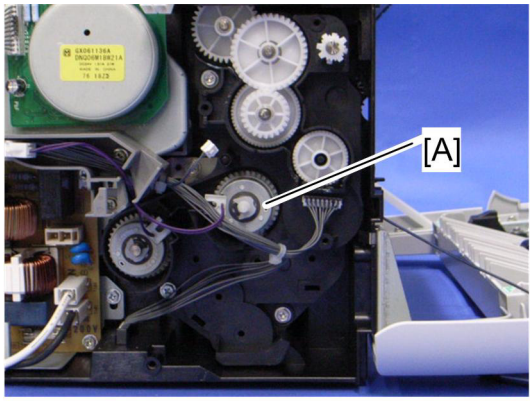


m018r562

4. Registration sensor [B] (hooks)

4.7.5 REGISTRATION CLUTCH

1. Rear cover (☛ p.4-3)
2. Left cover (☛ p.4-6)
3. Transport/Fusing motor (☛ p.4-38)



m018d592

4. Registration clutch [A] (x 1)

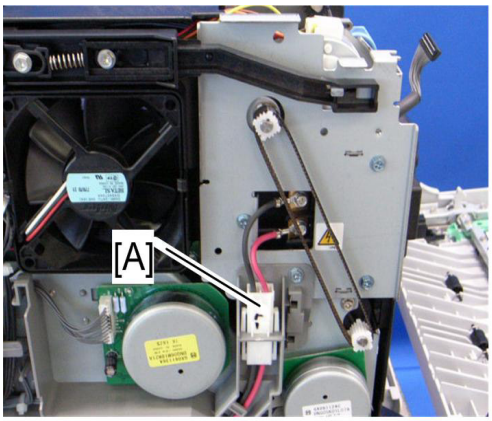
4.8 IMAGE FUSING

⚠CAUTION

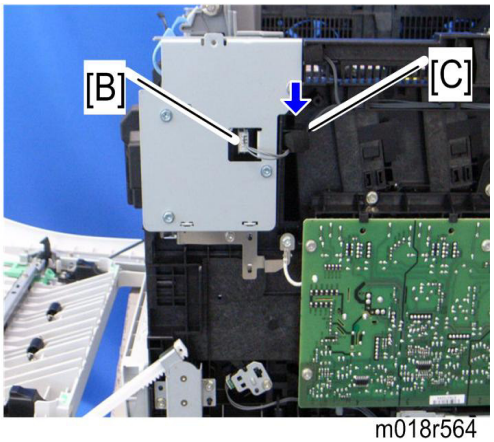
- Make sure that the fusing unit is cool before you touch it. The fusing unit can be very hot.
- Make sure to restore the insulators, shields, etc after you service the fusing unit.

4.8.1 FUSING UNIT

1. Open the front cover.
2. Rear cover (☛ p.4-3)
3. Right cover (☛ p.4-5)
4. Left cover (☛ p.4-6)



m018r563

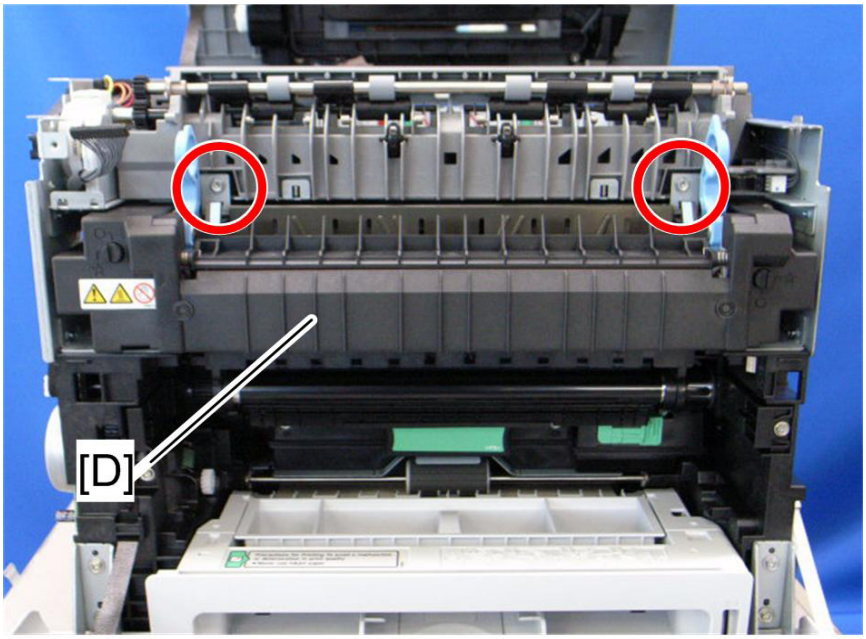


m018r564

5. Disconnect the connectors [A] [B] (hook).

Note

- The sponge [C] clamps the harness. Install this sponge in the same position after reinstalling the fusing unit.

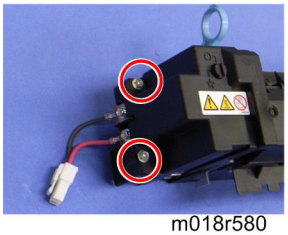


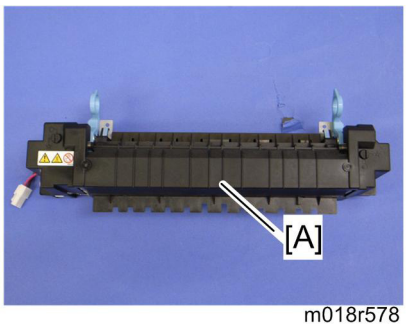
m018r565

6. Fusing unit [D] (x 2)

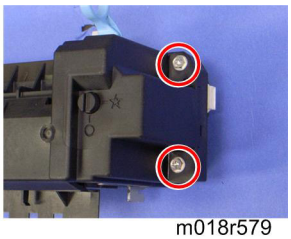
4.8.2 FUSING LAMP

1. Fusing unit (☛ p.4-35)


m018r580

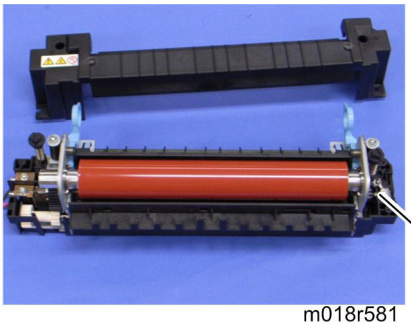


m018r578


m018r579

2. Fusing front cover [A] (🔩 x 4)


m018r584

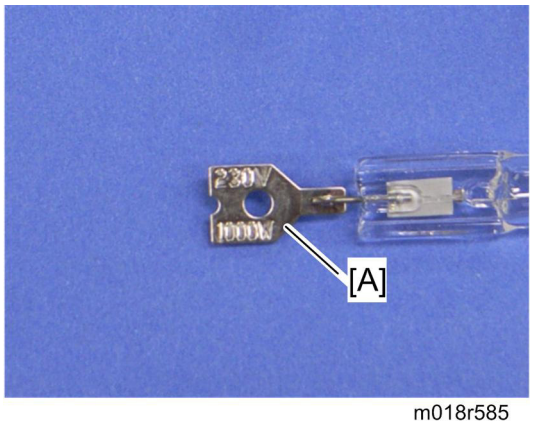


m018r581


m018r582

3. Fusing lamp [B] (🔩 x 2, ground cable x 1)

When Reinstalling the Fusing Lamp

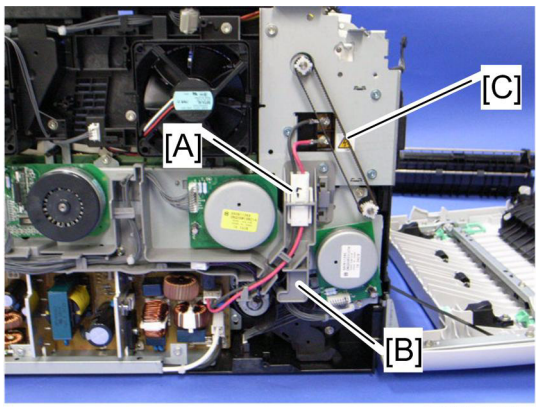


m018r585

The terminal [A], which shows the voltage and power ratings, must be placed at the left side of the fusing unit (fusing cable side).

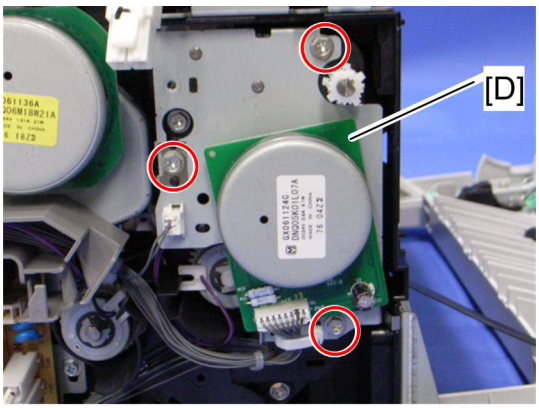
4.8.3 TRANSPORT/FUSING MOTOR

1. Rear cover (☛ p.4-3)
2. Left cover (☛ p.4-6)



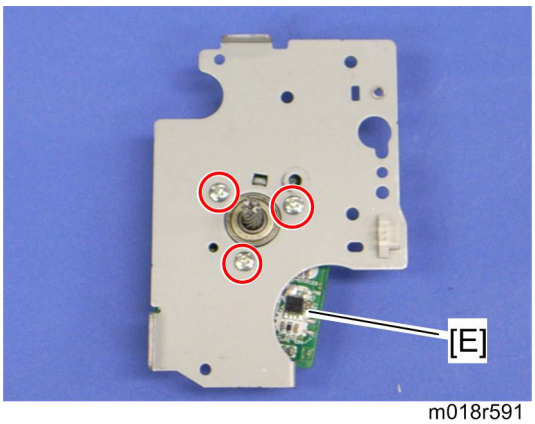
m018r587

3. Disconnect the fusing connector [A] (hook).
4. Fusing harness guide [B] (x 2)
5. Duplex timing belt [C]

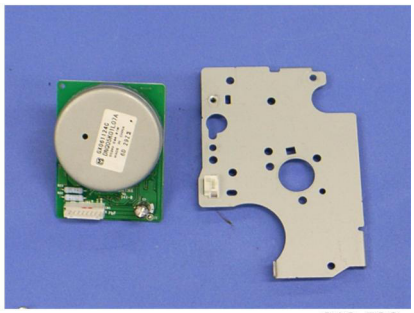


B018r590

6. Transport/Fusing motor assembly [D] (x 3, x 3, ground plate x 1)



m018r591



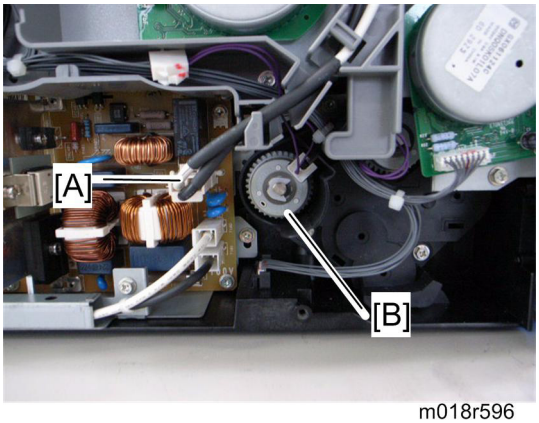
m018r592

7. Transport/Fusing motor [E] (x 3)

4.9 PAPER FEED

4.9.1 PAPER FEED CLUTCH

1. Rear cover (☞ p.4-3)
2. Left cover (☞ p.4-6)



m018r596

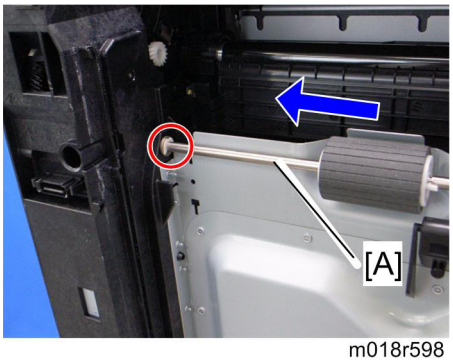
3. Disconnect the fusing relay harness [A] (hook).
4. Paper feed clutch [B] (x 1, x 1)

4.9.2 PAPER FEED ROLLER

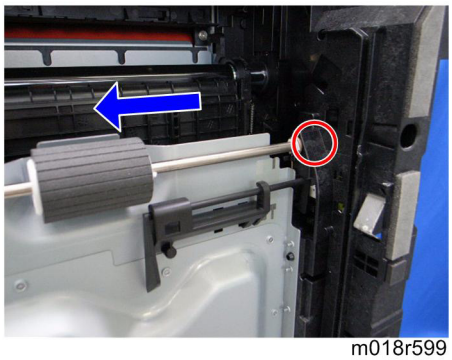
1. Remove all the AIO cartridges.
2. Remove the waste toner bottle.
3. Rear cover (☛ p.4-3)
4. Left cover (☛ p.4-6)
5. Paper feed clutch (☛ p.4-39)
6. Close the top cover and front cover.
7. Pull out the tray.


m018r597

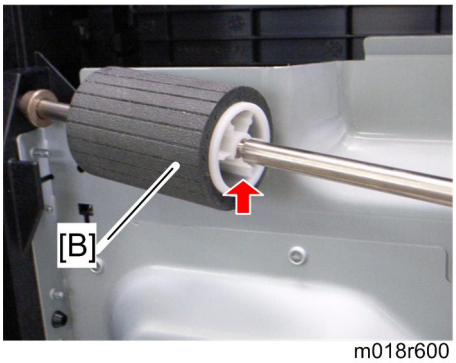
8. Stand the printer with the rear side facing the table.



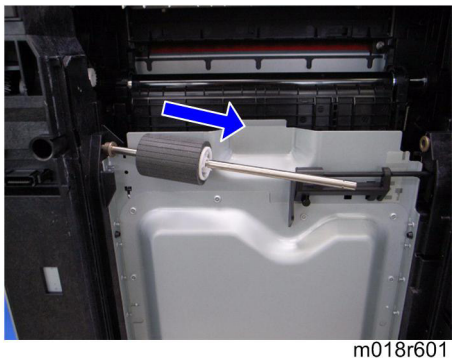
m018r598


m018r599

9. Slide the paper feed shaft [A] to the left side (x 2).



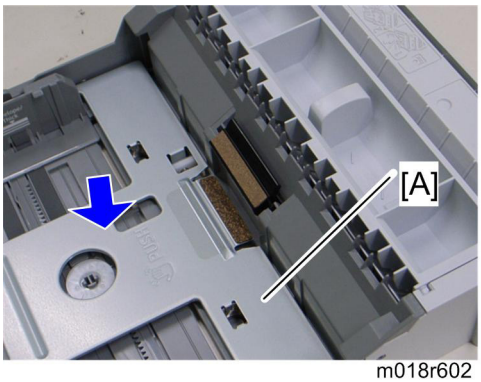
m018r600


m018r601

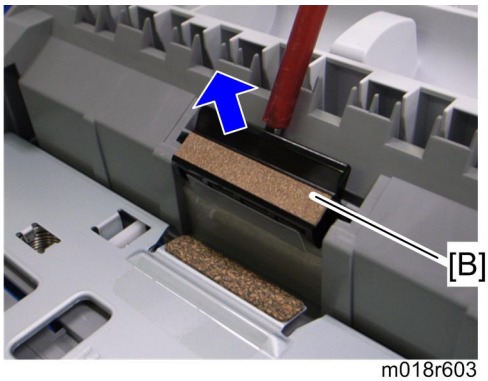
10. Paper feed roller [B] (hook)

4.9.3 SEPARATION PAD

1. Pull out the tray.

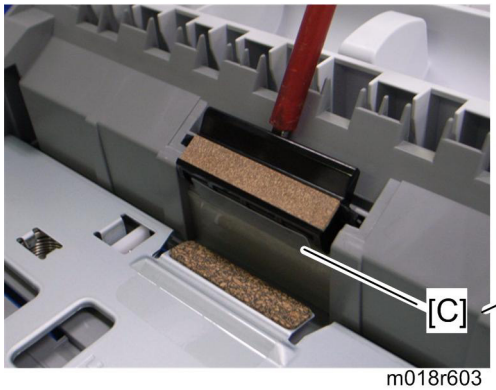


m018r602

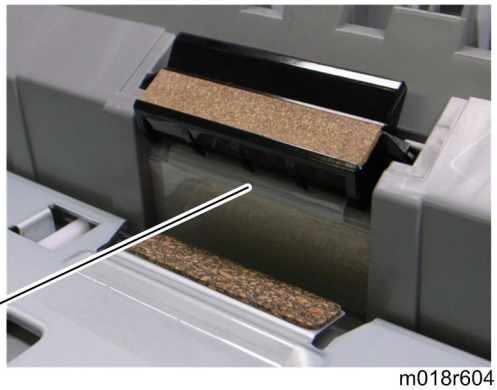


m018r603

2. Push down the bottom plate [A].
3. Separation pad [B] (hooks, spring x 1)



m018r603

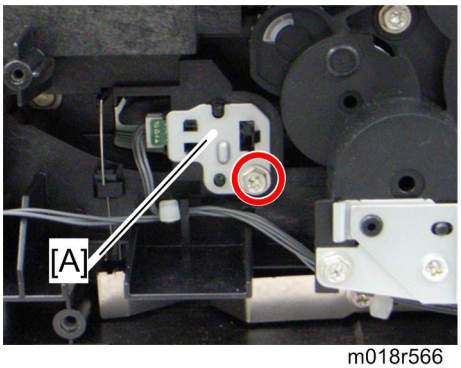

m018r604

Note

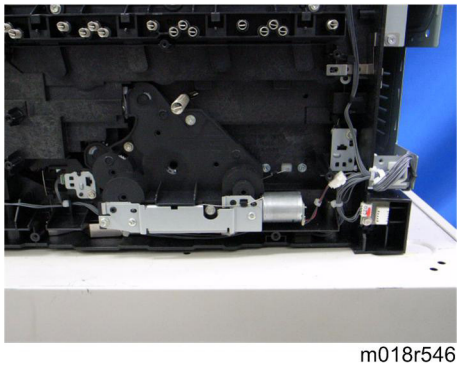
- When reinstalling the separation pad, make sure that the mylar [C] is not placed under the separation pad. The right side image above shows incorrect installation.

4.9.4 PAPER END SENSOR

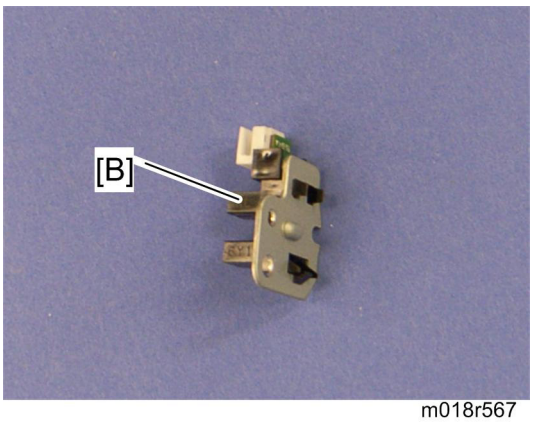
1. Rear cover (☛ p.4-3)
2. Right cover (☛ p.4-5)
3. High voltage power supply board (☛ p.4-56)



m018r566


m018r546

4. Paper end sensor assembly [A] (☛ x 1)



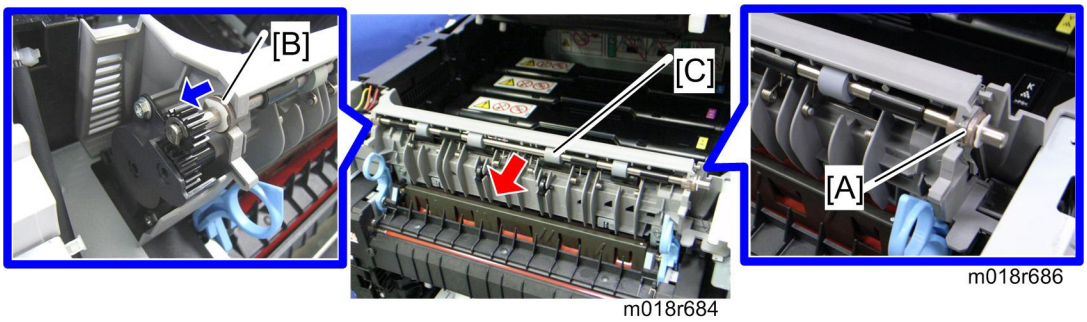
m018r567

5. Paper end sensor [B] (hooks)

4.10 PAPER EXIT

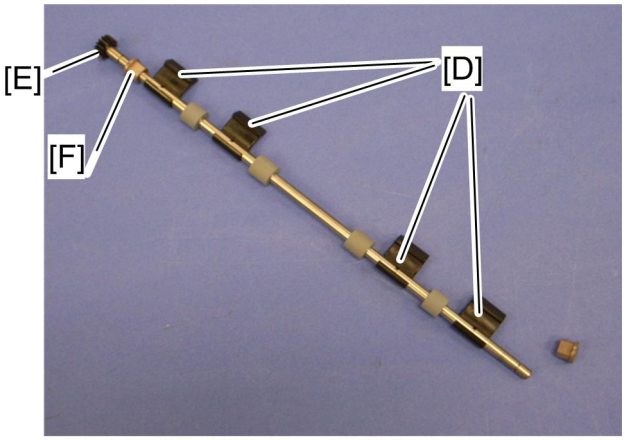
4.10.1 PAPER EXIT ROLLER

1. Operation panel (☛ p.4-4)



m018r686
m018r684

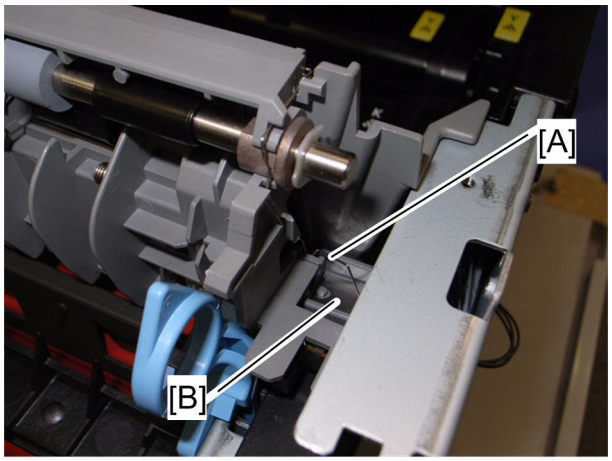
2. Remove the bushing [A] (🔩 x 1)
3. Move the bushing [B] to the left side (🔩 x 1).
4. Paper exit roller [C]



m018r687

5. Remove the four exit guides [D], gear [E] (ℂ x 1) and bushing [F].

When reinstalling the paper exit roller

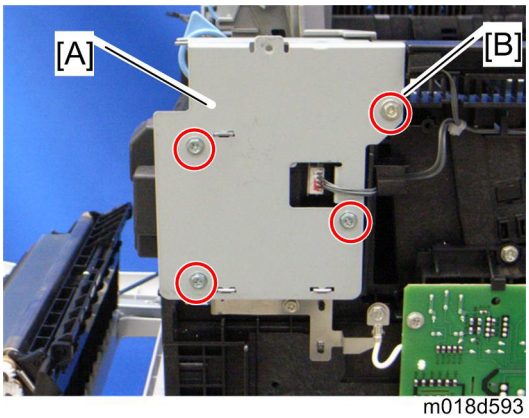


m018r688

Make sure that the ground wire [A] from the discharge sheet touches the ground plate [B] on the printer after reinstalling the paper exit roller.

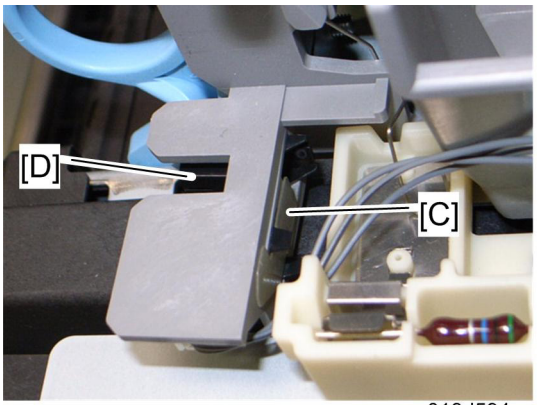
4.10.2 PAPER EXIT SENSOR

1. Rear cover (☛ p.4-3)
2. Right cover (☛ p.4-5)



m018d593

3. Right bracket [A] (x 3: M3x8, x 1 [B]: M4x10)



m018d594


m018d595

4. Mylar [C]

Note

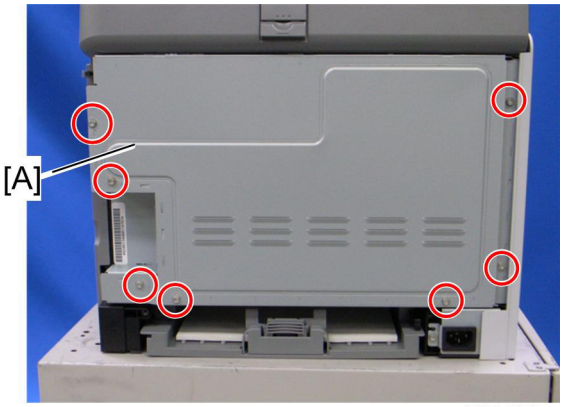
- This mylar is necessary for reinstalling the paper exit sensor.

5. Paper exit sensor [D] (hooks, x 1)

4.11 ELECTRICAL COMPONENTS

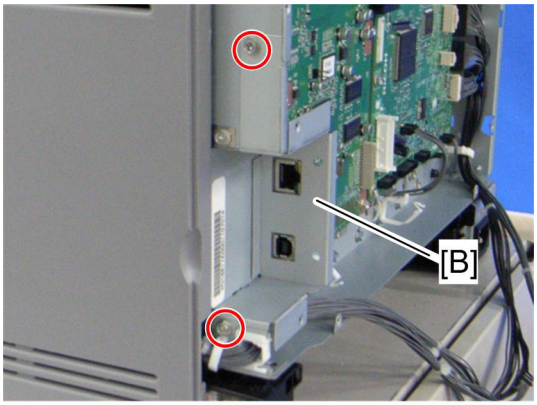
4.11.1 CONTROLLER BOARD

1. Rear cover (☞ p.4-3)



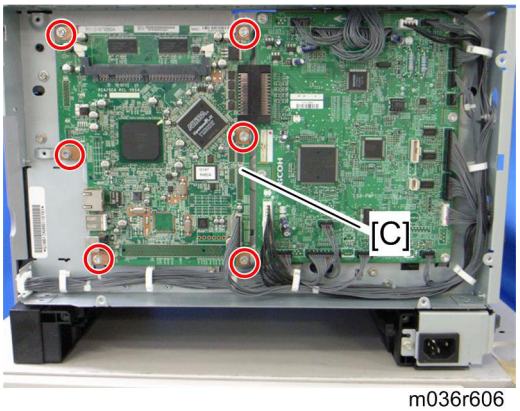
g165r509

2. Controller box cover [A] (🔩 x 7)



g165r605

3. Interface bracket [B] (🔩 x 2)

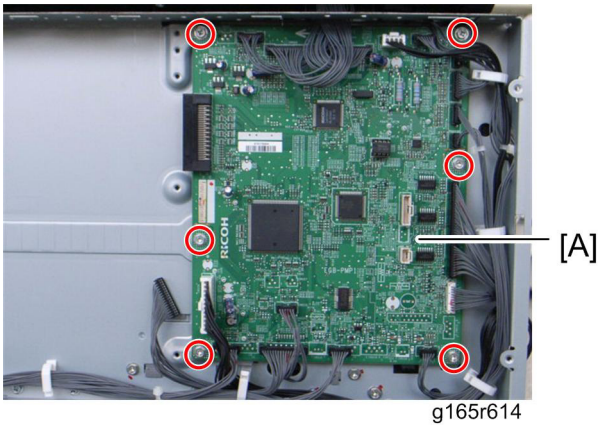


m036r606

4. Controller board [C] (🔩 x 6)

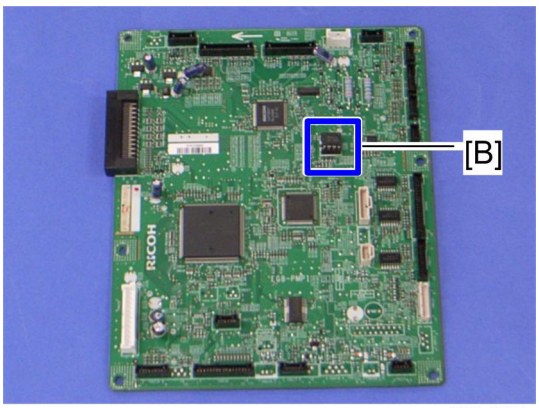
4.11.2 EGB (ENGINE BOARD)

1. Rear cover (☞ p.4-3)
2. Controller board (☞ p.4-46)



g165r614

3. EGB [A] (x 6, all s)

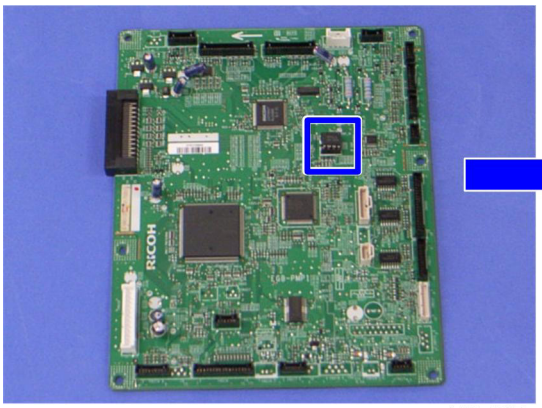


g165r615

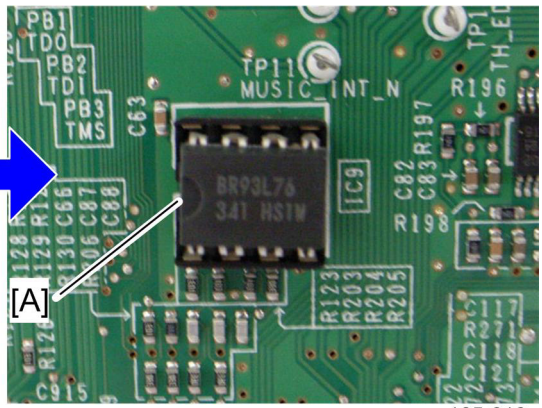
4. EEPROM [B]

When installing the new EGB

1. Remove the EEPROM from the old EGB.



g165r615



g165r616

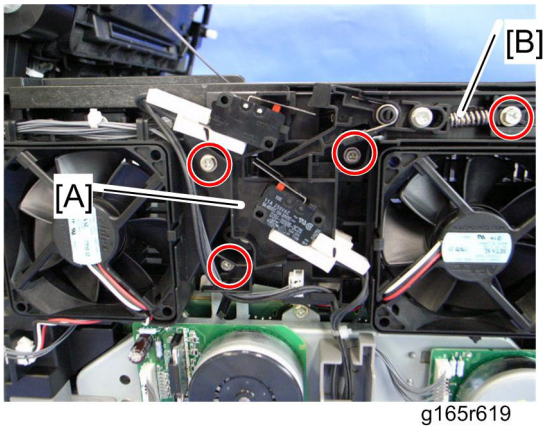
2. Install it on the new EGB with the mark [A] pointing to the left side of the board after you replace the EGB.
3. Replace the EEPROM if the EEPROM on the old EGB is defective.

CAUTION

- Keep the EEPROM away from objects that can cause static electricity. Static electricity can damage EEPROM data.
- Make sure that the EEPROM is correctly installed on the EGB.

4.11.3 INTERLOCK SWITCHES

1. Operation panel (☛ p.4-4)
2. Rear cover (☛ p.4-3)
3. Left cover (☛ p.4-6)

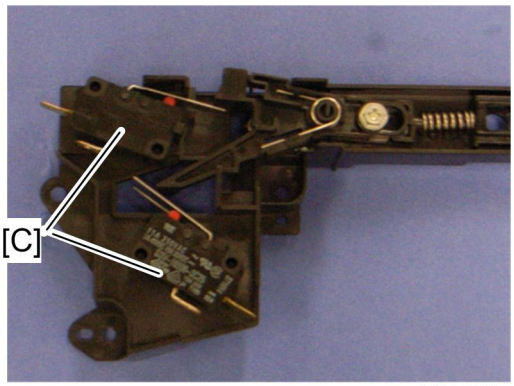


g165r619

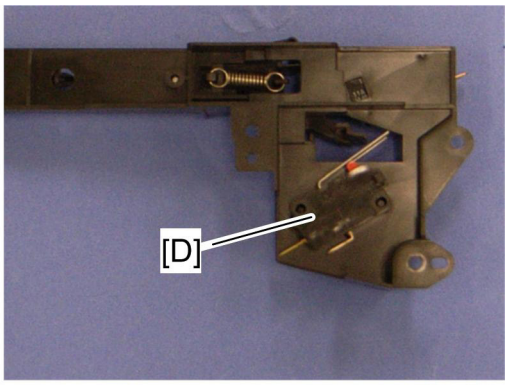
4. Interlock switch base [A] (x 4, all s)

Note

- Removing the spring [B] first makes this procedure easier.
- Remove all the connectors after the interlock switch base has been removed.



g165r620

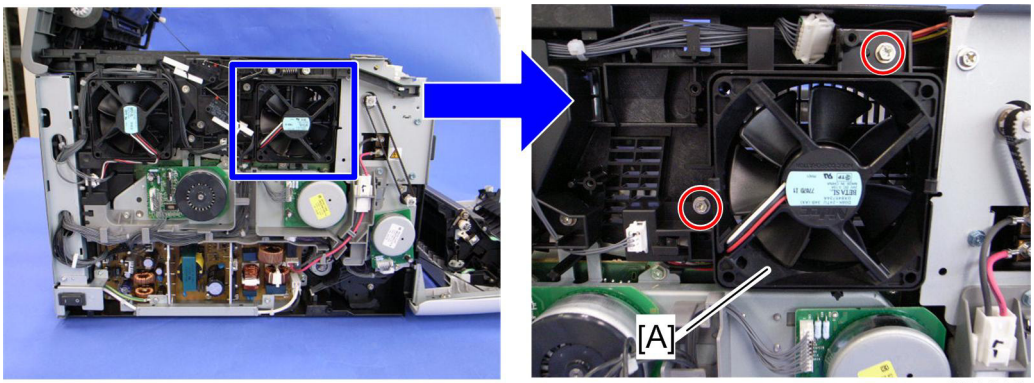


g165r621

5. Two interlock switches [C] at the outside of the base and one interlock switch [D] at the inside of the base (hooks)

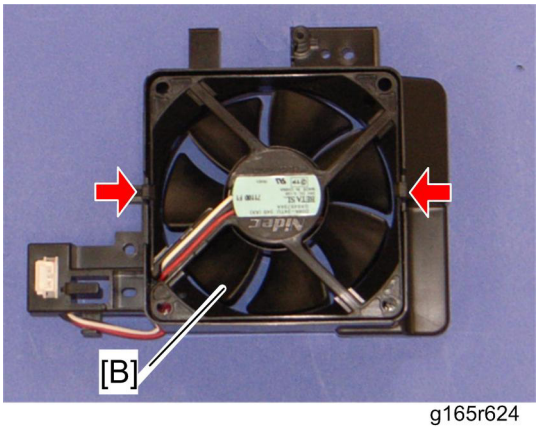
4.11.4 FUSING FAN MOTOR

1. Operation panel (☛ p.4-4)
2. Rear cover (☛ p.4-3)
3. Left cover (☛ p.4-6)
4. Interlock switch base (☛ p.4-49)



g165r622 g165r623

5. Fusing fan base [A] (🔧 x 2, 🖐 x 1)



g165r624

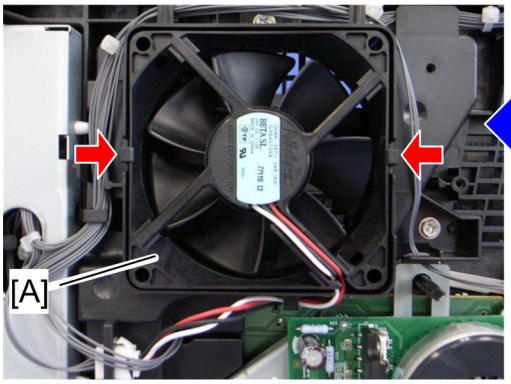
6. Fusing fan motor [B] (hooks, 🖐 x 1)

⚠CAUTION

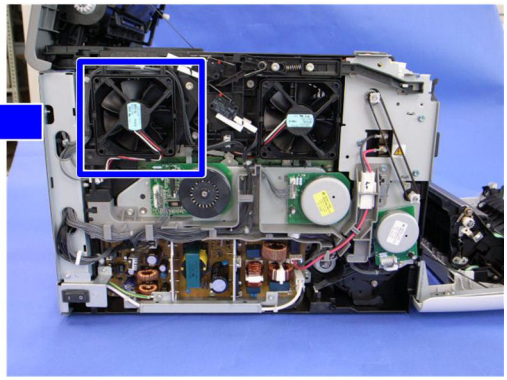
- Install the fusing fan motor with its decal facing the outside of the machine.

4.11.5 LSU FAN MOTOR

1. Operation panel (☛ p.4-4)
2. Rear cover (☛ p.4-3)
3. Left cover (☛ p.4-6)



g165r625



g165r622

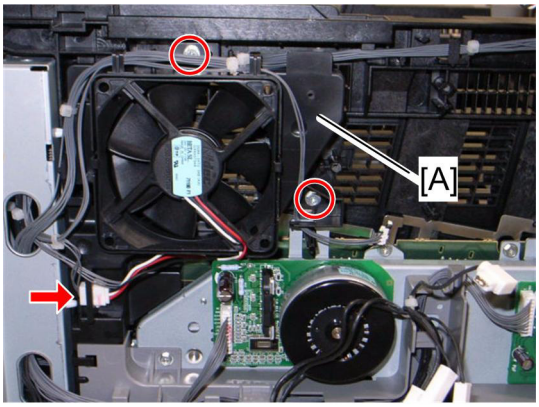
4. LSU fan motor [A] (hooks, x 1)

⚠CAUTION

- Install the LSU fan motor with its decal facing the outside of the machine.

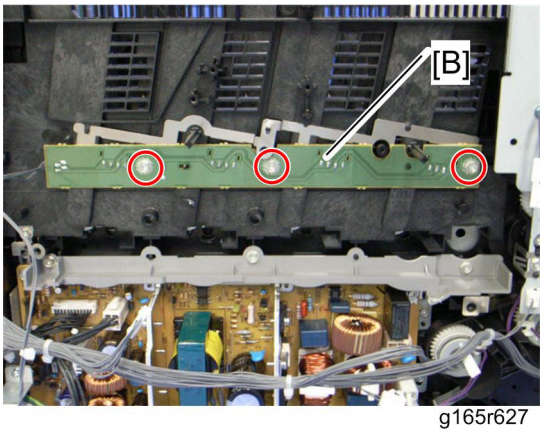
4.11.6 ID CHIP BOARD

1. Operation panel (☛ p.4-4)
2. Rear cover (☛ p.4-3)
3. Left cover (☛ p.4-6)
4. Controller box cover (☛ p.4-46)
5. Disconnect the connector (CN305) on the EGB.
6. Interlock switch base (☛ p.4-49)
7. Fusing fan base (☛ p.4-50)
8. Drive unit (☛ p.4-15)



g165r626

9. Take the harnesses aside around the LSU fan base [A].
10. LSU fan base [A] (x 2, x 1)

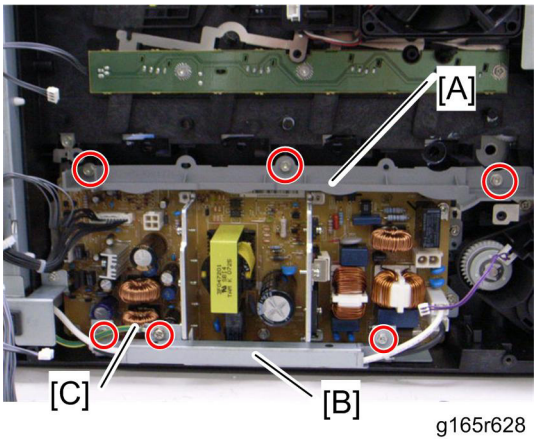


g165r627

11. ID Chip Board [B] (x 3)

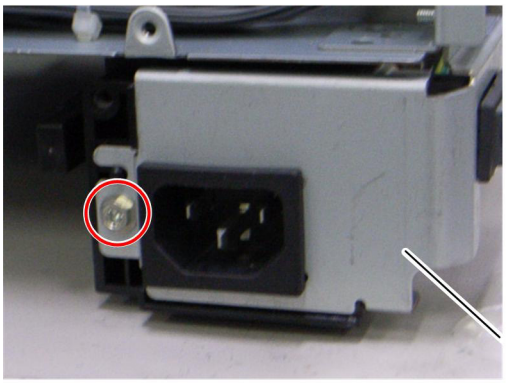
4.11.7 PSU

1. Operation panel (☛ p.4-4)
2. Rear cover (☛ p.4-3)
3. Left cover (☛ p.4-6)
4. Drive unit (☛ p.4-15)
5. LSU fan base (☛ p.4-51 "LSU Fan Motor")

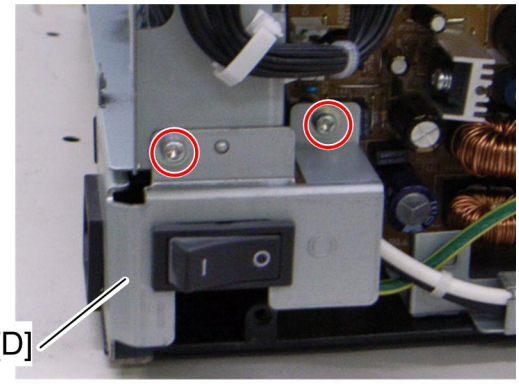


g165r628

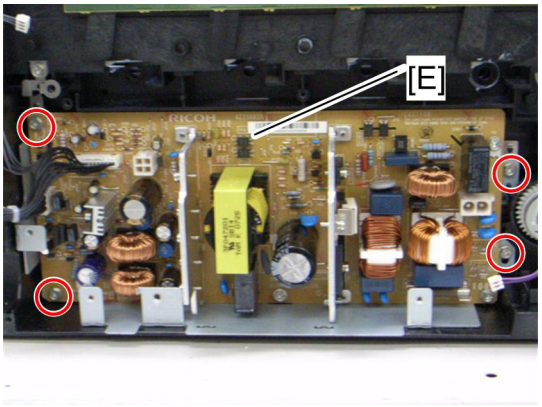
6. PSU guide [A] (🔩 x 3)
7. Power cord bracket [B] (🔩 x 2)
8. Ground cable [C] (🔩 x 1)



g165r629

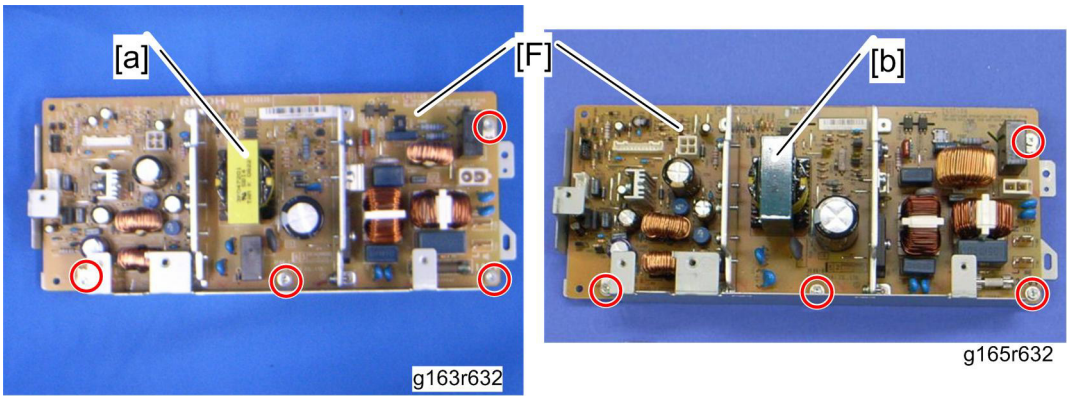

g165r630

9. Power switch assembly [D] (🔩 x 3, 🔌 x 2)



g165r631

10. PSU assembly [E] (x 4, all s)



g163r632

g165r632

11. PSU [F] (x 4)

Important

- There are two types of PSUs for this model. Do not install a wrong PSU in the machine.
- PSU has yellow [a] on the transistor is for NA models and PSU has green [b] on the transistor is for EU models.

Fuse

There is the removable fuse on the PSU.

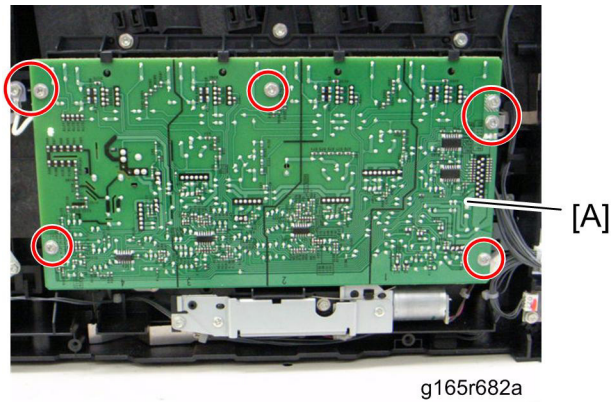
Fuse No.	Rating
FU101: NA	15 A, 125V
FU101: EU, ASIA	6.3A, 250V

⚠CAUTION

- Use a correct rating fuse for the fuse replacement. Never use a wrong rating fuse. If do so, the machine may be damaged.
- Never try direct connection of PSU circuit without a fuse.

4.11.8 HIGH VOLTAGE POWER SUPPLY BOARD

1. Remove all AIO cartridges.
2. Operation panel (☛ p.4-4)
3. Rear cover (☛ p.4-3)
4. Right cover (☛ p.4-5)

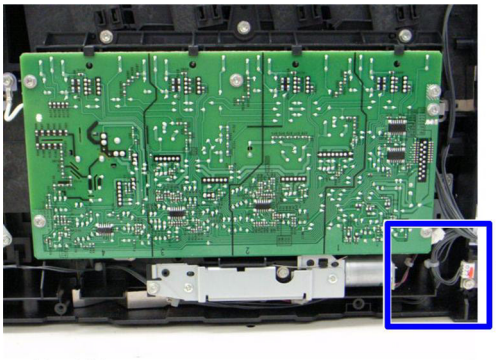


g165r682a

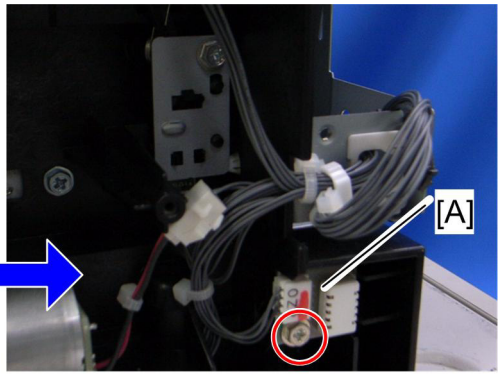
5. High Voltage Power Supply Board [A] (x 7, ground cable x 1, x 1)

4.11.9 TEMPERATURE/HUMIDITY SENSOR

1. Operation panel (☛ p.4-4)
2. Rear cover (☛ p.4-3)
3. Right cover (☛ p.4-5)



g165r682

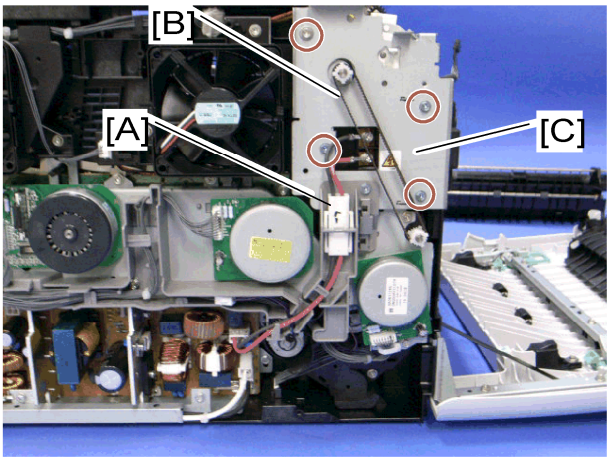


g165r683

4. Temperature/Humidity sensor [A] (x 1, x 1)

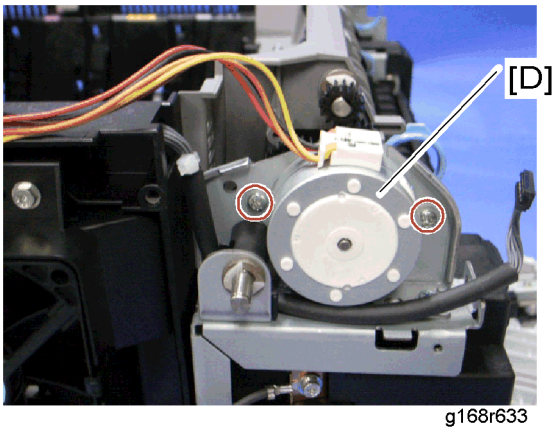
4.11.10 DUPLEX MOTOR (M036 ONLY)

1. Operation panel (☛ p.4-4)
2. Rear cover (☛ p.4-3)
3. Left cover (☛ p.4-6)



g168r587a

4. Disconnect the fusing connector [A]
5. Duplex timing belt [B]
6. Left bracket [C] (x 4)



g168r633

7. Duplex motor [D] (x 2, x 1)

4.11.11 EEPROM

Note

- Replacement and Reinstallation procedures for the EEPROM are included in the "EGB (Engine Board)" replacement procedure. Refer to "EGB (Engine Board)" for details.

When replacing an old EEPROM with a new EEPROM, EEPROM setting is required. Follow the EEPROM setting procedure described below.

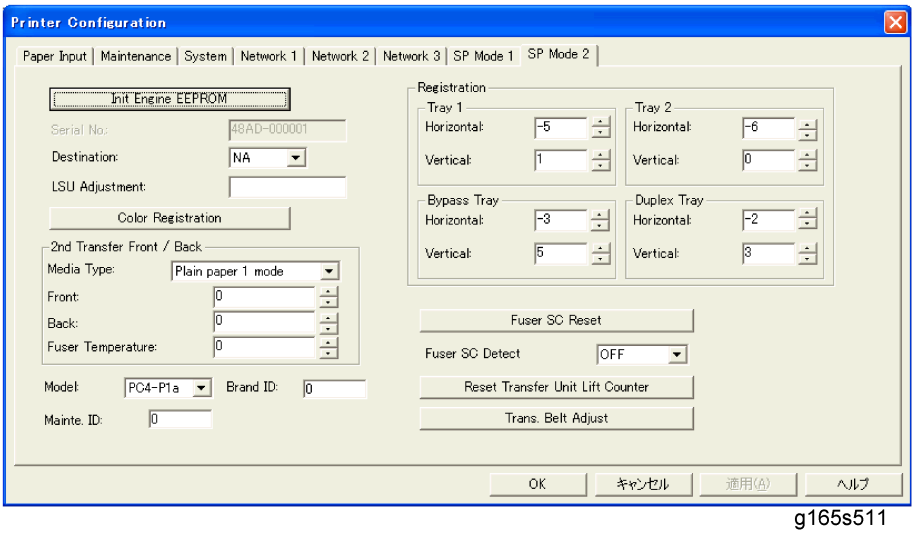
Important

- Do the following steps 1 to 11 with the front cover of the machine open. After completing these steps, turn off the machine.

1. Open the front cover and turn on the machine.

Note

- The machine may issue an error code (because the cover is open), but continue this procedure.



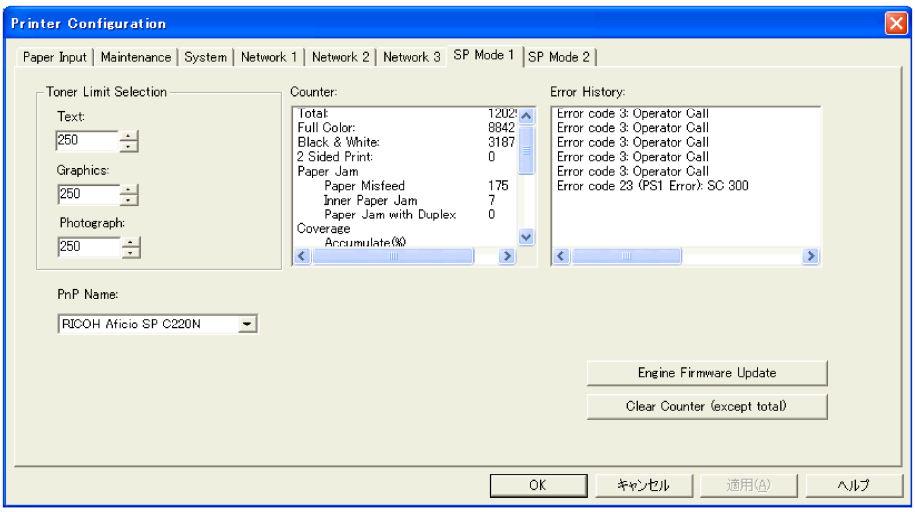
g165s511

2. Access the "SP Mode 2" tab.
3. Click the "Init Engine EEPROM" button to initialize the EEPROM.
4. Input the serial number in the "Serial No." box.

Note

- Ask your supervisor about how to input the serial number in its box.

5. Select a destination from the "Destination" box.
6. Select a model from the "Model" box.
7. Click the "SP Mode 1" tab.



g165s510

8. Select a plug and play name from the "PnP Name" box.
9. Click the "SP Mode 2" tab.
10. Input the LSU (laser optics housing unit) setting values in the "LSU Adjustment" box.
11. Turn off the machine.
12. Turn on the machine with the front cover open.
13. Enter SP Mode 2.
14. Close the front cover.
15. Click "Trans. Belt Adjust" to adjust the ITB (Image Transfer Belt) unit.
16. Select "ON" or "OFF" for the consecutive fusing jam detection with the "Fuser SC Detect" box.

Note

- The default setting is "OFF." Select "ON" only if the customer wants to use this feature.

17. Adjust the registration for each direction (vertical and horizontal) and trays with the "Registration" boxes if necessary.
18. Adjust the transfer roller bias and the temperature reduction of the fusing unit for each paper type and for the front and back sides with the "2nd Transfer Front/Back" boxes. The default settings for normal operation are all '0'.
19. Exit the "SP Mode."

SYSTEM MAINTENANCE REFERENCE

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

5. SYSTEM MAINTENANCE REFERENCE

5.1 SERVICE PROGRAM

See "Appendices" for "Smart Organizing Monitor" or “Service Program with Operation Panel”

5.1.1 OVERVIEW

There are two ways to execute the service program. One is to launch the SOM (Smart Organizing Monitor), which is provided with the printer driver, from your computer. The other is to execute the service program with the operation panel. Refer to the "Appendices" for the following information:

- Smart Organizing Monitor
- Service Program with Operation Panel

5.2 CONFIGURATION AND TEST PAGE INFORMATION

5.2.1 OVERVIEW

The configuration page and test page for this model have information about the machine's status. Print this sheet as shown below. Check the configuration page or test page when doing machine maintenance.

To Print the Configuration Page from the Machine

Before turning on the machine

1. Hold down the "Stop/Start" key, and then turn on the main switch of the printer.
2. Keep holding down the "Stop/Start" key until the "Alert LED" is blinking.

When the machine is power-on

1. Press "Menu" key.
2. Press the "▲" or "▼" key to select "List/Test Print", and then press the "#Enter" key.
3. Press the "#Enter" key at the "Config. Page."

To Print the Configuration Page from the SOM

1. Turn on the machine and the PC.
2. Start "Smart Organizing Monitor."
3. Select "Configuration Page" in "List/Test Print" on the "User Tools" tab.
4. Click "Print", and then "Yes."
5. The configuration page is printed.

To Print the Test Page from the Machine

Before turning on the machine

1. Hold down the "Job Reset" key, and then turn on the main switch of the printer.
2. Keep holding down the "Job Reset" key until the "Alert LED" is blinking.

When the machine is power-on

1. Press the "Menu" key.
2. Press the "▲" or "▼" key to select "List/Test Print", and then press the "#Enter" key.
3. Press the "#Enter" key at the "Test Page."

To Print the Test Page from the SOM

1. Turn on the machine and the PC.
2. Start "Smart Organizing Monitor."

3. Select "Test Page" in "List/Test Print" on the "User Tools" tab.
4. Click "Print", and then "Yes."
   The test page is printed.

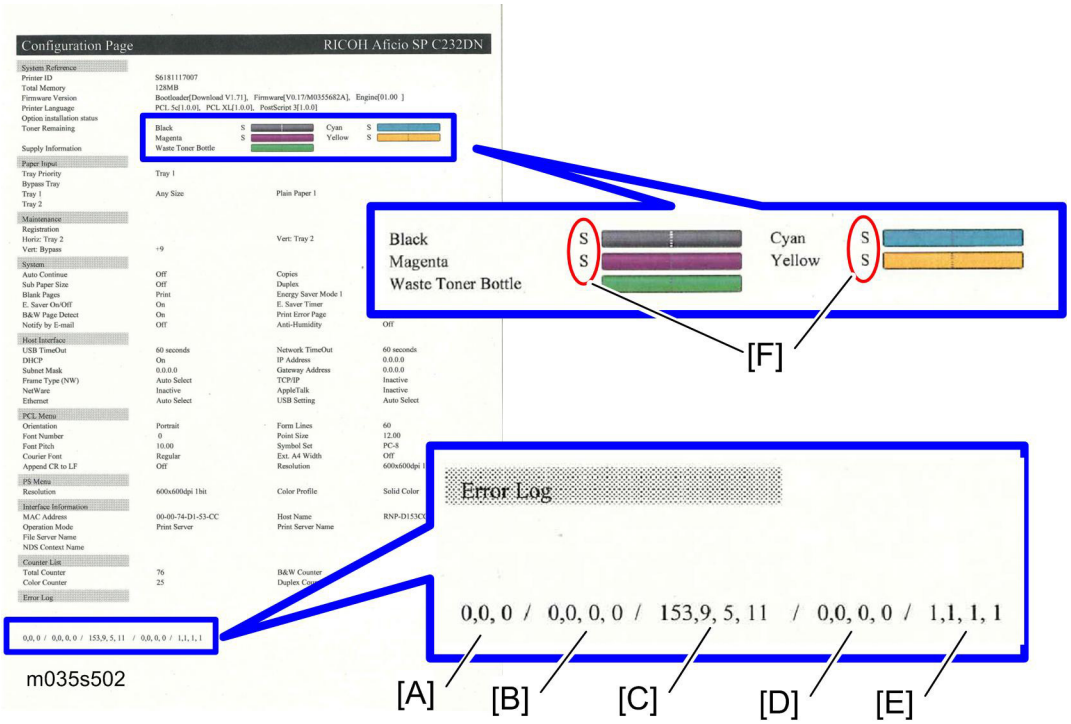
5.2.2 ERROR LOG

The Error Log on the configuration page has the error logs (SC codes) and the following information. However, the following error codes cannot be stored after turning off the machine.

Error Code	Description
Code 3	▪ Paper misfeed ▪ Paper is not detected in the tray. ▪ The loaded paper size does not match the setting. ▪ Some unit(s) is not correctly installed.
Code 4	Print/Data Error
Code 5	A consumable supply has run out
Code 6	Warning; Toner near end, Waste toner bottle near full, TM sensor cleaning, Fusing belt near end or Transfer belt near end
Code 7	Alert; Diagnostic Error

5.2.3 COUNTER AND COVERAGE

Configuration Page



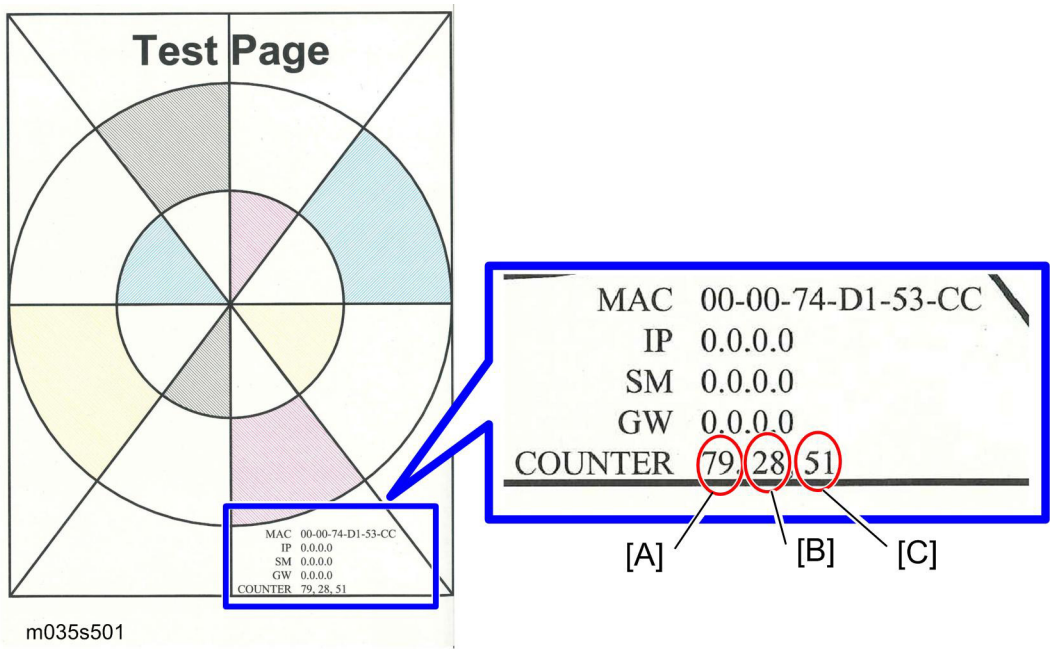
The configuration page for the printer models has the paper jam, coverage and consumed AIO counters in the bottom line, but these counter names are not printed on the configuration page. These counters give the following information;

Three counters [A]:	Feed jam counter, inner jam counter, duplex jam counter
Four counters [B]:	Recent coverage of K, C, M, Y
Four counters [C]:	Accumulated Coverage of K, C, M, Y
Four counters [D]:	Consumed High Yield AIO counter of K, C, M, Y
Four counters [E]:	Consumed Short Yield AIO counter of K, C, M, Y

The symbols [F] printed beside the remaining toner counter indicate the type of the AIO.

- S: Short Yield AIO
- H: High Yield AIO

Test Page



The page counters for each color are printed at the bottom of the test page.

- [A]: Total counter
- [B]: Color counter
- [C]: B&W counter

5.3 FIRMWARE UPDATING

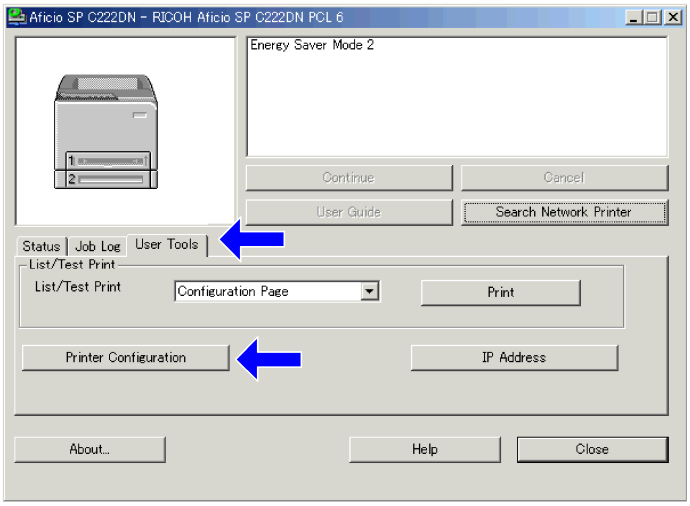
⚠CAUTION

- Do not turn off the main power of the machine during the firmware updating. In doing so, the engine board or controller board may be damaged.

5.3.1 PRINTER MODEL

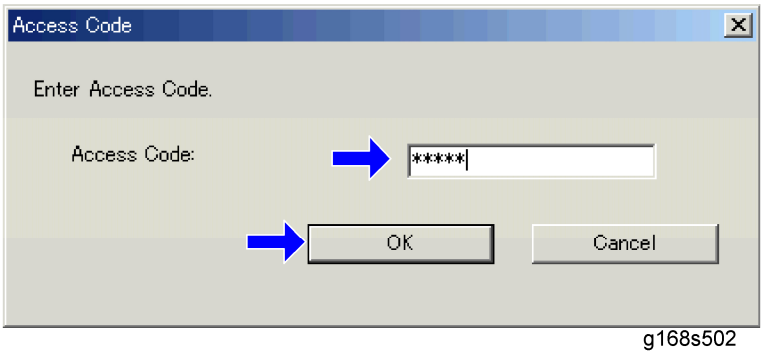
Controller Firmware

1. Start SOM.



g168s501

2. Click the "Printer Configuration" button on the "User Tools" tab.

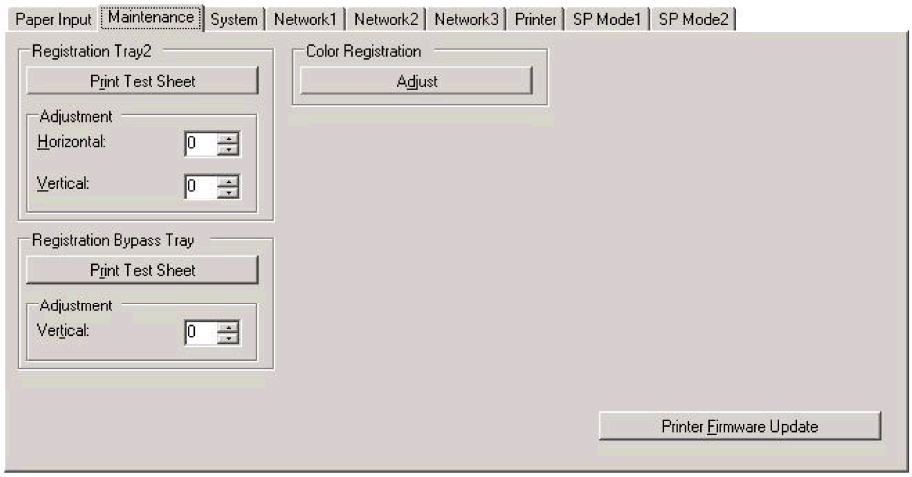


g168s502

3. Input the access code and click the "OK" button.

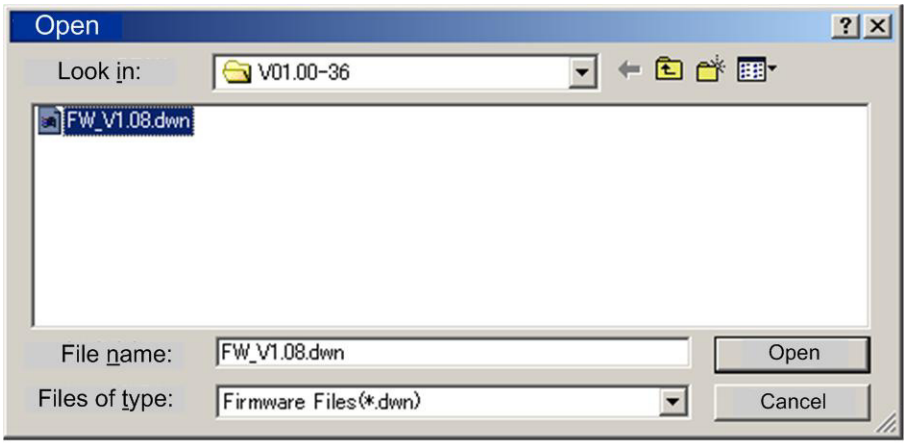
Note

- Ask your supervisor for the access code.



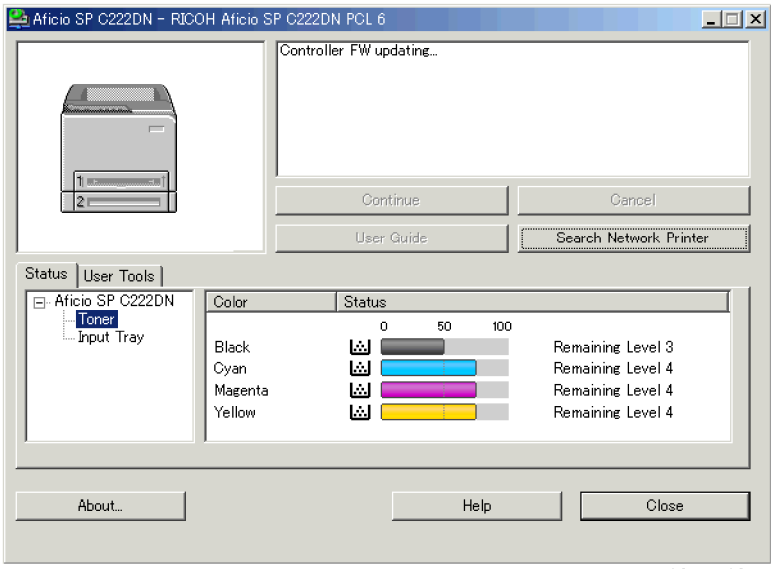
g165s504

4. Click the "Printer Firmware Update" button on the "Maintenance" tab.



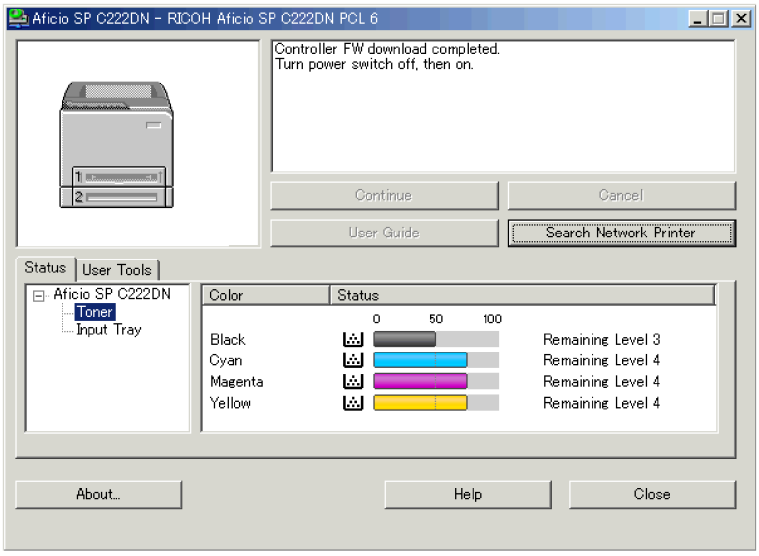
g165s512

5. Seek the location of the update file and select it, and then click the "Open" button.



g165s513

6. SOM shows "Controller FW updating..." and the Alert LED (red) on the printer starts blinking. (The Ready LED remains lit.)
7. Wait for a few minutes.



g165s514

8. When the update has finished, SOM shows "Controller FW download completed." and the Ready LED (green) on the printer starts blinking. (The Alert LED is still blinking.)

Note

- If "Controller FW download completed" does not appear, the download failed. Try again. You can also switch from an Ethernet connection to a USB connection and see if that works. If you still cannot download the firmware, it may be necessary to change the EGB and/or the controller board.
- If power failed during the download, try again. If you still cannot download the firmware, it may be necessary to change the EGB and/or the controller board.

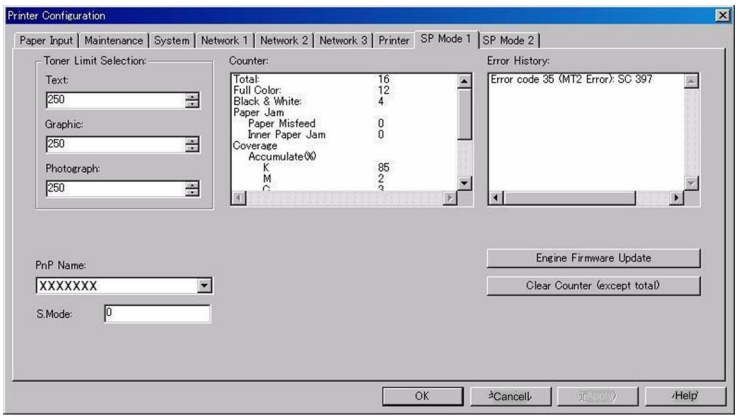
9. Turn the printer off and on.

Engine Firmware

1. Start SOM.
2. Click the "Printer Configuration" button on the "User Tools" tab.
3. Input the access code and click the "OK" button.

Note

- Ask your supervisor for the access code.



g165s518

4. Click the "Engine Firmware Update" button in the "SP Mode 1" tab.
5. Seek the location of the update file and select it, and then click the "Open" button.
6. SOM shows "Engine FW updating..." and the Alert LED (red) on the printer starts blinking. (The Ready LED remains lit.)
7. Wait for a few minutes.
8. When the update has finished, SOM shows "Engine FW download completed." and the Ready LED (green) on the printer starts blinking. (The Alert LED is still blinking.)

Note

- If "Engine FW download completed" does not appear, the download failed. Try again. You can also switch from an Ethernet connection to a USB connection and see if that works. If you still cannot download the firmware, it may be necessary to change the EGB and/or the controller board.
- If power failed during the download, try again. If you still cannot download the firmware, it may be necessary to change the EGB and/or the controller board.

9. Turn the printer off and on.

5.3.2 BOOT LOADER FIRMWARE

This is also listed on the configuration page, but this firmware is not updated in the field.

TROUBLESHOOTING

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

6. TROUBLESHOOTING

6.1 TROUBLESHOOTING GUIDE

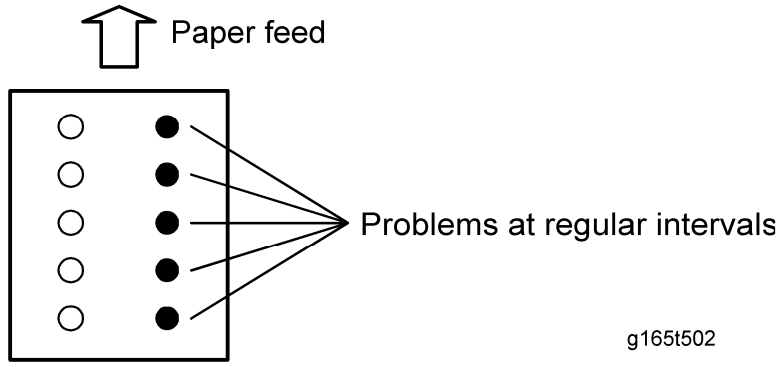
See "Appendices" for the following information:

- Error Messages
- Service Call Conditions

6.2 IMAGE PROBLEMS

6.2.1 OVERVIEW

Image problems may appear at regular intervals that depend on the circumference of certain components. The following diagram shows the possible symptoms (black or white dots at regular intervals).

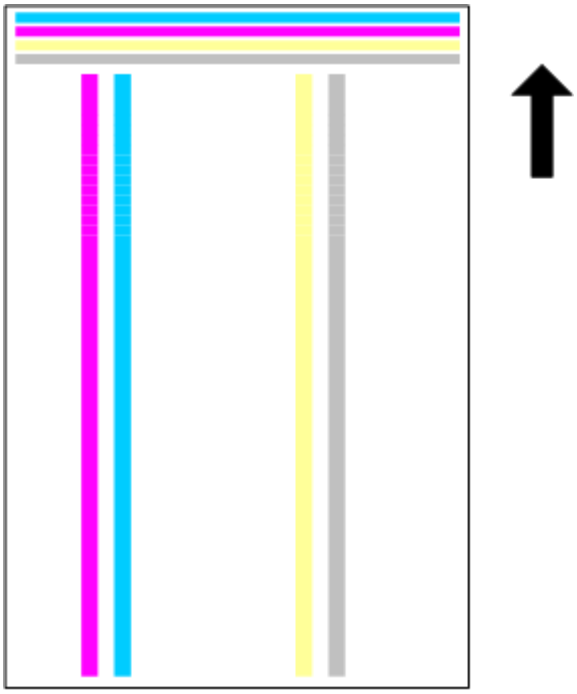


- Abnormal image at 24-mm intervals: Paper feed roller
- Abnormal image at 25.5-mm intervals: Image transfer belt unit
- Colored spots at 27-mm intervals: Print cartridge (Development roller)
- Abnormal image at 30-mm intervals: Charge roller
- Abnormal image at 38-mm intervals: Registration roller
- Abnormal image at 60-mm intervals: Transfer roller
- Colored spots at 76-mm intervals: Print cartridge (OPC drum)
- Abnormal image at 110-mm intervals: Fusing unit (Pressure roller)
- Abnormal image at 115.5-mm intervals: Fusing unit (Heat roller)

6.2.2 CHECKING A SAMPLE PRINTOUT

Print out a mono-color pattern (all K, C, M, or Y), which will clarify if the cause is a problem with one of the AIOs, the image transfer belt, image transfer roller, or the fusing unit. A sample page is provided with the printer driver's CD. You can print the sample page from the printer driver's CD. Before printing, you have to adjust the printer driver settings to make the problem become obvious. For details about adjusting the settings, refer to "Printer Driver Setting for Printing a Sample" described below.

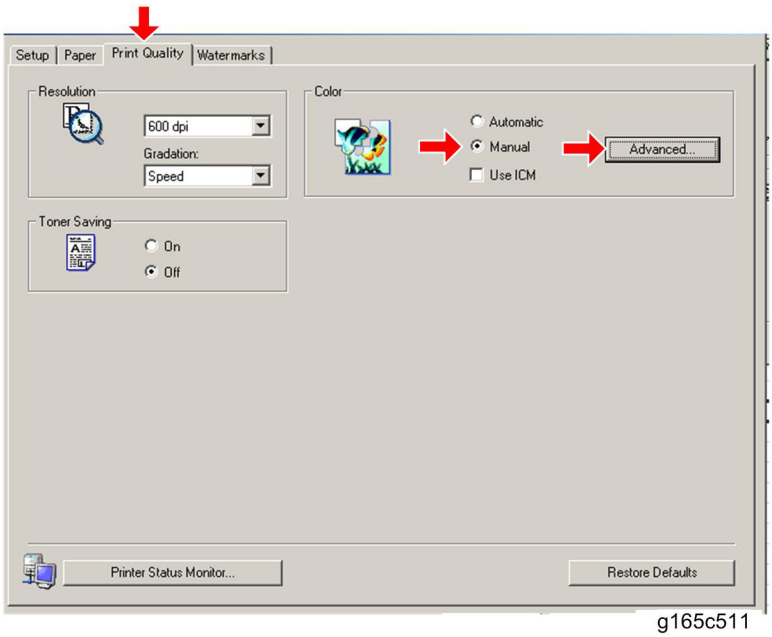
- Occurs with 1-3 colors: AIO unit(s) failure
- Occurs with all four colors: Image transfer belt, transfer roller or fusing unit failure



g165c502

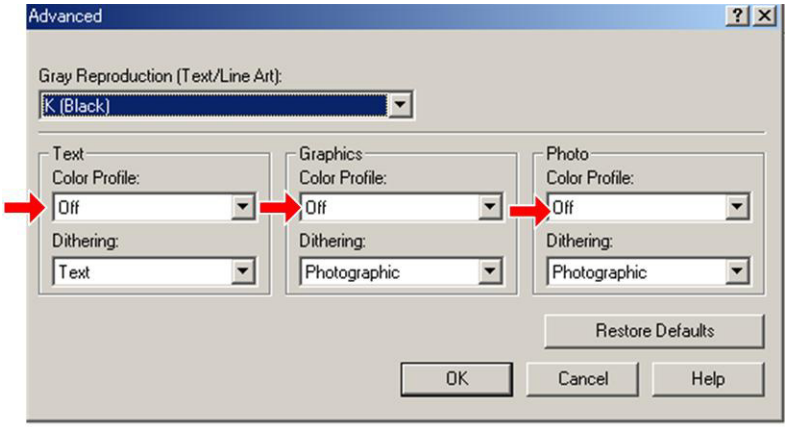
Printer Driver Setting for Printing a Sample

1. Click "Properties" on the printer driver.



g165c511

2. Click the "Print Quality" tab.
3. Check "Manual" in the color setting.
4. Click "Advanced…."



g165c510

5. Select "Off" from the pull-down menu in "Color Profile" in the "Text" area.
6. Select "Off" from the pull-down menu in "Color Profile" in the "Graphics" area.
7. Select "Off" from the pull-down menu in "Color Profile" in the "Photo" area.

M035/M036

SERVICE MANUAL APPENDICES

M035/M036 APPENDICES

TABLE OF CONTENTS

APPENDIX:

SPECIFICATIONS

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1. APPENDIX: SPECIFICATIONS

1.1 GENERAL SPECIFICATIONS

1.1.1 ENGINE

M035/M036

Type			Desktop
Technology			Laser beam scanning and electro-photographic printing
			Mono-component toner development
			4-drum tandem method
Resolution (dpi, bit/pixel)			600 × 600 dpi Speed (1bit) 600 × 600 dpi Standard (2bits) 600 × 600 dpi Fine (4bits)
Printing Speed	General Paper	A4/LT	BW/FC: 20ppm (LT:21ppm)
First Print Speed (A4/LT, SEF, Std. Tray)	Mono		14.0 sec or less
	F/C		14.0 sec or less
Duplex Printing	A4, LT, B5, LG, Exe		P1Eb: Manual P1Ec: Auto
Dimensions (W x D x H)			400 x 450 x 320 mm (15.8" × 17.8" ×12.8")
Weight			23 kg (50.6 lb.) *Includes consumables.

Input capacity	Standard	Std Tray	250 sheets (80 g/m^2)
		Bypass tray	1 sheet
	Op. Paper Tray	Paper Feed Unit	500 sheets (80 g/m^2) x 1
	Max		Up to 751 sheets
Output capacity	Standard Tray	Face down	Up to 150 sheets (A4/LT or 80g/m^2, 20lb)
Input Paper Size	Standard Tray		A4, B5, A5, B6, A6, Legal, Letter, HLT, Executive, Foolscap, Folio Custom size: Min. 90mm x 148mm (3.6" x 5.92"), Max. 216mm x 356mm (8.64" x 14.24")
	Bypass Tray		A4, B5, A5, B6, A6, Legal, Letter, HLT, Executive, Foolscap, Folio Custom size: Min. 90mm x 148mm (3.6" x 5.92"), Max. 216mm x 356mm (8.64" x 14.24")
	Op. Paper Tray		A4, Letter
Media Type	Std. Tray		Plain Paper, Recycle Paper, Application Paper, Envelope, Glossy, Thick Paper, Label
	Bypass Tray		Plain Paper, Recycle Paper, Application Paper, Envelope, Glossy, Thick Paper, Label
	Op. Paper Feed Unit		Plain Paper, Recycle Paper

Paper Weight	Standard Tray		60-160g/m^2 (16-40lb)
	Bypass tray		60-160g/m^2 (16-40lb)
	Op. Paper Tray	Paper Feed Unit	60-105g/m^2 (16-28lb)
Rating Power Spec.	NA version		120 V, 11 A or more, 60 Hz
	EU version		220-240 V, 6A or more, 50/60 Hz
Power Consumption	Max.		1300W or less
	Energy Saver		15 W or less
Warm-up Time			48 sec or less (from power on)
Energy Save Mode	Sleep Mode		48 sec (Uses approx 15W)
	Low Power Mode		10 sec (Uses approx 100W)

1.1.2 OPTION

Paper Feed Unit

Paper Tray (500x1)	Paper Size	A4,Letter
	Paper Weight	60-105g/m^2 (16-28lb)
	Paper capacity	500 sheets x 1 tray
	Dimensions (W x D x H)	400 x 450 x 127mm/16 x 18 x 5.08 inch
	Weight	6 kg/13.2 lb

1.2 SUPPORTED PAPER SIZES

A	Supported and the size is molded in the tray. Need to select paper size by operation panel/driver.
B	Supported but size is not molded in the tray. Need to select paper size by operation panel/driver.
C	Need to input paper size by operation panel and driver.
N	Not supported.

Type		SEF/ LEF	Size	Input Tray			Auto. Dup.
				Standard Tray	Option PFU	Bypass Tray	
Plain Paper	A4	SEF	210x297	A	A	B	Y
		LEF	297x210	N	N	N	N
	B5	SEF	182x257	A	N	B	Y
		LEF	257x182	N	N	N	N
	A5	SEF	148x210	A	N	B	N
		LEF	210x148	N	N	N	N
	B6	SEF	128x182	B	N	B	N
		LEF	182x128	N	N	N	N
	A6	SEF	105x148	B	N	B	N
		LEF	148x105	N	N	N	N

Type		SEF/ LEF	Size	Input Tray			Auto. Dup.
				Standard Tray	Option PFU	Bypass Tray	
Plain Paper	DLT	SEF	11" x 17"	N	N	N	N
	Legal	SEF	8 1/2”x14”	A	N	B	Y
	Letter	SEF	8 1/2”x11”	A	A	B	Y
		LEF	11”x 8 1/2”	N	N	N	N
	Half Letter	SEF	5 1/2” x 8 1/2”	C	N	C	N
	Executive	SEF	7 1/4”x10 1/2”	A	N	B	Y
		LEF	10 1/2”x7 1/4”	N	N	N	N
	F	SEF	8” x 13”	B	N	B	N
	Foolscap	SEF	8 1/2” x 13”	B	N	B	N
	Folio	SEF	8 1/4” x 13”	B	N	B	N
Plain Paper	8 Kai	SEF	267 x 390	N	N	N	N
	16 Kai	SEF	195 x 267	C	N	C	N
		LEF	267 x 195	N	N	N	N

Supported Paper Sizes

Type		SEF/ LEF	Size	Input Tray			Auto. Dup.
				Standard Tray	Option PFU	Bypass Tray	
Envelope	Com10	SEF	4 1/8” x 9 1/2”	C	N	C	N
	Monarch	SEF	3 7/8” x 7 1/2”	C	N	C	N
	C6	SEF	114 x 162	C	N	C	N
	C5	SEF	162 x 229	C	N	C	N
	DL Env	SEF	110 x 220	C	N	C	N
Custom		Width	90-216mm (3.6”x 8.5”)	C	N	C	N
	Length	148 – 356mm (5.8”x 14.24”)	C	N	C	N	

APPENDIX:
PREVENTIVE MAINTENANCE

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

2. APPENDIX: PREVENTIVE MAINTENANCE

2.1 PREVENTIVE MAINTENANCE

2.1.1 USER REPLACEABLE ITEMS

Item	Yield
Print Cartridge (AIO)	Starter: Approx. 1.0 k prints/cartridge Short: Approx. 2.5 k prints/cartridge Long: 6.5 k for BK, 6.0 k for CMY (prints/cartridge)
Waste Toner Bottle	Approx. 25 k prints/ bottle (See condition 5)

Condition:

1. An A4 (8.5"x11")/ 5% chart was used to measure the above yield except the Print Cartridge (AIO).
2. The yield was measured at standard temperature and humidity.
3. The expected yield measurement for the Print Cartridge (AIO) is based on the ISO 19798 (ISO chart, continuous prints).
4. These yield values may change depending on the circumstances and printing conditions.
5. Waste Toner Bottle yield was measured for 3P/J when the printer is used 50% for color and 50% for black-and-white

APPENDIX:

TROUBLESHOOTING GUIDE

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

3. APPENDIX: TROUBLESHOOTING GUIDE

3.1 ERROR MESSAGES

3.1.1 OVERVIEW

The error messages will be displayed on the LCD if the machine has a problem. These can be recovered by a customer.

3.1.2 ERROR MESSAGES LIST

000	Cover Open
	The front or top cover is open.
	1. Close the front or top cover. 2. Replace the interlock switches or actuator mechanism.

010	AIO Set Error (Black)
011	AIO Set Error (Magenta)
012	AIO Set Error (Cyan)
013	AIO Set Error (Yellow)
	▪ Black AIO not set ▪ Defective connection of the ID chip terminal on the black AIO
	Install the AIO (black, magenta, cyan or yellow). Reinstall or replace the AIO (black, magenta, cyan or yellow)

Error Messages

014	Waste Toner Bottle Set Error
	▪ Waste toner bottle not set ▪ Disconnected or defective harness of the waste toner bottle set sensor ▪ Defective waste toner bottle set sensor
	1. Install the waste toner bottle. 2. Check or replace the harness of the waste toner bottle set sensor. 3. Replace the waste toner bottle set sensor.

030	Tray/Paper Selection Error
	▪ No paper in the tray or tray not set in the machine ▪ Paper size requested by the job does not match the paper in the tray
	1. Install the tray or put the correct size paper in the tray. 2. Check the paper setting in the user menu mode.

031	Paper Selection Error: Feed and Exit
	▪ Paper size requested by the job does not match the paper in the tray ▪ Selection error for the paper feed and paper exit location in duplex mode
	Check the paper feed and exit location in the user menu mode.

050	Jam Error: No Feed from Tray 1
	▪ Paper slipped
	Remove the paper jam at tray 1.

052	Jam Error: No Feed from Optional Tray
	▪ Paper slipped
	Remove the paper jam at the optional tray (Tray 2).

055	Inner Jam Error: Registration/ Paper Exit
	A sheet of paper stays at the registration sensor or paper exit sensor. ▪ Paper slipped ▪ Paper double feed
	Remove the paper jam at the registration sensor or paper exit sensor.

056	Paper Exit Jam Error: Paper Exit/ Fusing Unit
	A sheet of paper stays at the paper exit sensor or winds around the rollers in the fusing unit. ▪ Paper slipped ▪ A sheet of paper is wound around the rollers in the fusing unit
	Remove the paper jam at the paper exit sensor or in the fusing unit.

070	Printing Error: No Paper
	▪ No paper in the tray
	Put paper in the tray.

080	Toner Near End: Black AIO
081	Toner End: Black AIO
	▪ Black toner near-end or end
	Replace the black AIO.

082	Toner Near End: Magenta AIO
083	Toner End: Magenta AIO
	▪ Magenta toner near-end or end
	Replace the magenta AIO.

084	Toner Near End: Cyan AIO
085	Toner End: Cyan AIO
	▪ Cyan toner near-end or end
	Replace the Cyan AIO.

086	Toner Near End: Yellow AIO
087	Toner End: Yellow AIO
	▪ Yellow toner near-end or end
	Replace the yellow AIO.

088	Waste Toner Bottle: Near Full
089	Waste Toner Bottle: Full
	▪ Waste toner bottle near-full or full
	Replace the waste toner bottle.

999	Color Registration (MUSIC) Error
	▪ Color registration (MUSIC) failure
	This error is not displayed even if this error occurs. It is just logged. This error is automatically recovered after the color registration (MUSIC) has been done successfully.

3.2 SERVICE CALL CONDITIONS

3.2.1 SUMMARY

This printer issues an SC (Service Call) code if an error occurs on the printer. The error code can be seen on the operation panel.

Make sure that you understand the following points;

1. All SCs are logged.
2. At first, always turn the main switch off and on if an SC code is issued.
3. First, disconnect then reconnect the connectors before you replace the PCBs, if the problem concerns electrical circuit boards.
4. First, check the mechanical load before you replace motors or sensors, if the problem concerns a motor lock.
5. Fusing related SCs: To prevent damage to the printer, the main printer cannot be operated until the fusing related SC has been reset by a service representative.
   - Enter the engine maintenance mode.
   - Press "O.K" in "Fuser SC Reset" with engine maintenance mode, and then turn the main power switch off and on.

3.2.2 ENGINE SC

SC 1xx (Other Error)

195	Serial Number Error
	The serial number stored in the memory (EGB) is not correct.
	▪ EEPROM defective ▪ EGB replaced without original EEPROM 1. Check the serial number. 2. If the stored serial number is incorrect, contact your supervisor.

SC 3xx (Charge Error)

300	High voltage power output error
	The measured voltage is not correct when the EGB measures each charge output (charge, development, image transfer belt unit, and transfer unit).
	▪ Disconnected or defective high voltage harness ▪ Defective high voltage power supply ▪ Defective EGB 1. Check or replace the harnesses. 2. Replace the high voltage power supply board 3. Replace the EGB.

396	Black drum motor error
	The LOCK signal error is detected when the EGB monitors the black drum motor state. (This monitoring is done immediately after power-on, when the motor starts rotating, and immediately after the motor stops.)
	▪ Disconnected or defective motor harness. ▪ Motor slips due to excessive load 1. Check the harness from the black drum motor. Replace it if necessary.
397	Color drum motor error
	The LOCK signal error is detected when the EGB monitors the color drum motor state. (This monitoring is done immediately after power-on, when the motor starts rotating, and immediately after the motor stops.)
	▪ Disconnected or defective motor harness. ▪ Motor slips due to excessive load 1. Check the harness from the color drum motor. Replace it if necessary.

SC 4xx (Image Transfer and Transfer Error)

445	ITB (Image Transfer Belt) Unit: Home Position Error
	▪ The ITB contact sensor does not detect the home position of the ITB for 5 seconds after the ITB unit initialization has been done.
	ITB (Image Transfer Belt) Unit: Contact Position Error
	▪ The ITB contact sensor does not detect the contact position of the ITB for 5 seconds after the ITB unit has moved to the contact position.
	ITB (Image Transfer Belt) Unit: No-contact Position Error
	▪ The ITB contact sensor does not detect the home position of the ITB for 5 seconds after the ITB unit has moved to no-contact position.
	▪ Defective ITB contact motor ▪ Defective ITB contact sensor ▪ Defective ITB unit 1. Replace the ITB contact motor. 2. Replace the ITB contact sensor. 3. Replace the ITB unit.

480	Agitator Motor Error
	The agitator motor error is detected twice for 10 msec during the initialization at power-on or after the cover is closed.
	▪ Disconnected or defective harness ▪ Defective agitator motor 1. Check or replace the harness. 2. Replace the agitator motor.

490	ITB (Image Transfer Belt) Unit Set Error
	The TM sensor does not detect the reflection from the ITB.
	▪ No ITB unit in the printer ▪ Dirty TM sensor 1. Check the installation of the ITB unit. 2. Clean the TM sensor.

SC 5xx (Motor and Fusing Error)

500	Transport/Fusing Motor Error
	The LOCK signal error is detected when the EGB monitors the transport/fusing motor state. (This monitoring is done immediately after power-on, when the motor starts rotating, and immediately after the motor stops.)
	▪ Disconnected or defective motor harness. ▪ Motor slips due to excessive load 1. Check the harness from the transport/fusing motor. Replace it if necessary.

530	LSU Fan Motor Error
	A LOCK signal is not detected for more than ten seconds while the motor START signal is on and if this error occurs twice consecutively, this SC is issued.
	▪ Disconnected or defective motor harness. ▪ Defective LSU fan motor 1. Check or replace the motor harness. 2. Replace the LSU fan motor.

531	Fusing Fan Motor Error
	A LOCK signal is not detected for more than ten seconds while the motor START signal is on and if this error occurs twice consecutively, this SC is issued.
	▪ Disconnected or defective motor harness. ▪ Defective LSU fan motor 1. Check or replace the motor harness. 2. Replace the fusing fan motor.

541	Thermistor Error
	The thermistor output is less than 0°C for 7 seconds.
	▪ Disconnected thermistor ▪ Defective harness connection 1. Check the harness connection of the thermistor. 2. Replace the fusing unit. Important ▪ Execute "Engine Maintenance Menu" to recover the printer after completing the recovery procedure. Otherwise, the printer continues to issue this SC code and cannot be operated.

542	Print Ready Temperature Error
	▪ The heating roller temperature increase during a set time is not correct. ▪ The fusing temperature does not reach the print ready temperature within a set time after the fusing lamp has turned on.
	▪ Defective thermistor ▪ Incorrect power supply input at the main power socket ▪ Defective fusing lamp 1. Check the voltage of the wall outlet. 2. Replace the fusing unit 3. Replace the fusing lamp. Important ▪ Execute "Engine Maintenance Menu" to recover the printer after completing the recovery procedure. Otherwise, the printer continues to issue this SC code and cannot be operated.

Service Call Conditions

543	High Temperature Detection Error
	This SC is issued if one of following conditions occurs: ▪ The thermistor (center) detects 255°C or thermistor (end) detects 245°C. ▪ The thermistor (center) detects a 3°C increment or more for five seconds at 220°C or more or the thermistor (end) detects a 4°C increment or more for five seconds at 210°C or more.
	▪ Defective I/O control (EGB) ▪ Defective EGB 1. Replace the EGB Important ▪ Execute "Engine Maintenance Menu" to recover the printer after completing the recovery procedure. Otherwise, the printer continues to issue this SC code and cannot be operated.

545	Heating Lamp Full-Power Error
	The fusing lamp is fully-powered for a certain time while the fusing unit stays in the stand-by mode and is not rotating.
	▪ Deformed thermistor ▪ Thermistor not in the correct position ▪ Defective fusing lamp 1. Replace the fusing unit. 2. Replace the fusing lamp. Important ▪ Execute "Engine Maintenance Menu" to recover the printer after completing the recovery procedure. Otherwise, the printer continues to issue this SC code and cannot be operated.

547	Zero Cross Error
	The zero cross signal is not detected for three seconds even though the fusing lamp relay is on after turning on the main power or closing the front door.
	▪ Defective fusing lamp relay 1. Turn the main power switch off and on. Important ▪ Execute "Engine Maintenance Menu" to recover the printer after completing the recovery procedure. Otherwise, the printer continues to issue this SC code and cannot be operated.

548	Low Temperature Error
	The center thermistor detects 100°C or less for 4 seconds.
	▪ Defective fusing lamp ▪ Defective thermistor 1. Replace the fusing unit. 2. Replace the fusing lamp. Important ▪ Execute "Engine Maintenance Menu" to recover the printer after completing the recovery procedure. Otherwise, the printer continues to issue this SC code and cannot be operated.

Service Call Conditions

557	Zero Cross Frequency Error
	The detection error occurs ten times consecutively in ten zero cross signal detections. This error is defined when the detected zero cross signal is 17 or less/27 or more for 0.2 seconds.
	▪ Defective fusing lamp relay ▪ Unstable input power source 1. Check the power supply source. 2. Replace the fusing unit. Important ▪ Execute "Engine Maintenance Menu" to recover the printer after completing the recovery procedure. Otherwise, the printer continues to issue this SC code and cannot be operated.

559	Consecutive Fusing Jam
	The paper jam counter for the fusing unit reaches 3. The paper jam counter is cleared if the paper is fed correctly. This SC is activated only when this function is enabled with "Engine Maintenance" (default "OFF").
	▪ Defective fusing unit ▪ Defective fusing control 1. Clear this SC to send a command after a jam removal. 2. Turn off this function after a jam removal. Important ▪ Execute "Engine Maintenance Menu" to recover the printer after completing the recovery procedure. Otherwise, the printer continues to issue this SC code and cannot be operated.

SC 6xx (Communication and Other Error)

669	EEPROM Error
	An unexpected value exists in the initialization flag of the EEPROM
	▪ EEPROM not initialized ▪ Defective EEPROM 1. Initialize the EEPROM. 2. Replace the EEPROM. 3. Replace the EGB.

690	GAVD Communication Error
	The ID of the GAVD is not identified during initialization.
	The chip ID of the GAVD cannot be detected by the printer at power-on.
	▪ Defective EGB 1. Replace the EGB.

3.2.3 CONTROLLER SC

SC8xx

819	Service Cycle Power
	▪ Incorrect combination of EGB and controller board. ▪ An unexpected error occurs in the EEPROM on the controller board.
	▪ Controller board defective 1. Install the correct EGB and controller boards for this printer. 2. Replace the controller board

823	USB/ Network Device Error
	An interface error in the USB connection or NIB connection occurs.
	▪ Controller board detective 1. Replace the controller board.

824	EEPROM Error
	An EEPROM check error at power-on occurs.
	▪ Controller board detective 1. Replace the controller board.

827	On-Board Memory Check Error
	An on-board memory check error at power-on occurs.
	▪ Controller board detective 1. Replace the controller board.

828	ROM Checksum Error
	A ROM checksum error at power-on occurs.
	1. Replace the controller board.

APPENDIX:

SP MODE TABLES

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

4. APPENDIX: SP MODE TABLES

4.1 SMART ORGANIZING MONITOR

4.1.1 OVERVIEW

SOM (Smart Organizing Monitor) is a utility which can check the status of a printer and set up a printer from a PC. This utility is executed from a printer driver.

4.1.2 PRINTER DRIVER INSTALLATION

1. Close all applications currently running.
2. Check the following:
   - The printer's USB cable is disconnected
   - The printer's main power switch is turned off
3. Insert the CD-ROM into the CD-ROM drive.
   The installer starts.
4. Select the interface language, and then click [OK].
5. Click [PCL 6 Printer Driver].
   The software license agreement appears.
6. After reading the agreement, click [I accept the agreement.], and then click [Next >].
7. In the [Method to install printer driver] dialog box, clear the [Search for network printers.] check box, select the [Connect a printer using a USB cable.] check box, and then click [Next >].
8. Select this printer, and then click [Next >].
   A message appears, asking you to check that the USB cable is not connected and that the printer's main power switch is turned to off.
9. Check the USB cable and the printer status, and then click [Next >].
10. When the [<Auto-detect USB Port>] dialog box appears, connect this printer to the computer using a USB cable, and then turn the printer's main power switch on.
    USB auto detection begins.
11. When the dialog box asking you to use this printer as the default printer appears, click either key.
12. When a message appears informing you that the installation was successfully completed, click [Finish].

4.1.3 ENTERING THE PRINTER CONFIGURATION

To enter the service system setting;

1. Launch the SOM utility.

   Take one of the following steps (a) or (b).

   (a)

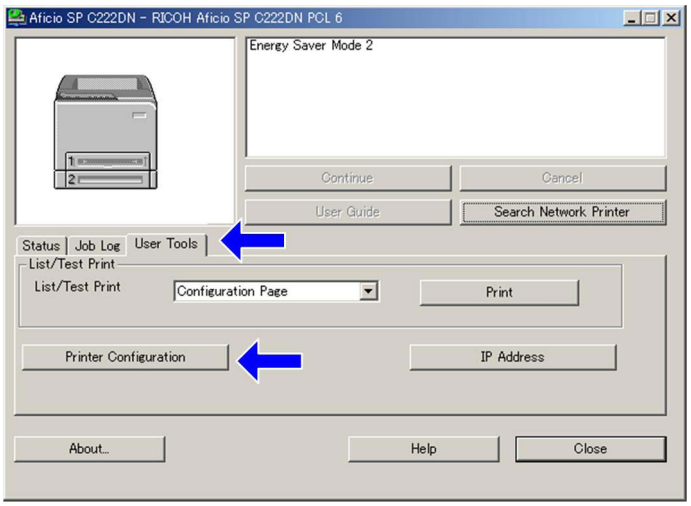
   - Open the Properties of the printer driver.
   - Click [Printing Preferences] on the Basic tab
   - Click [Smart Organizing Monitor…] on the Printing Preferences tab.

   (b)

   - Open the Properties of the printer driver.
   - Click [Smart Organizing Monitor…], on [Accessories], [Advanced Option] or [Paper Size Settings] tab.

   Note

   - To display the SOM dialog box automatically when any error occurs, check [Display Smart Organizing Monitor automatically] check box on [Advanced Options] tab.



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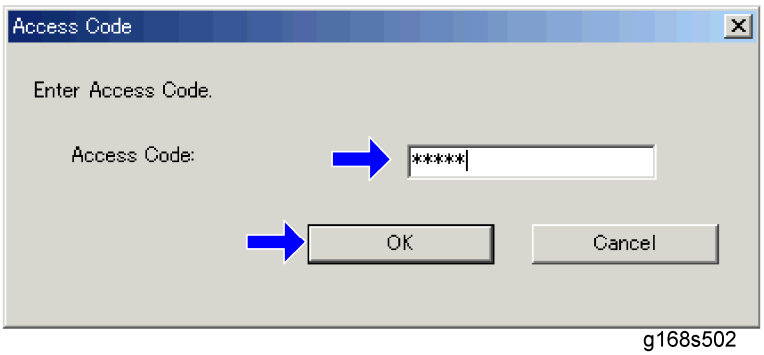
2. Click the "User Tools" tab.
3. Click "Printer Configuration".
4. The "Access Code" entry dialog appears.



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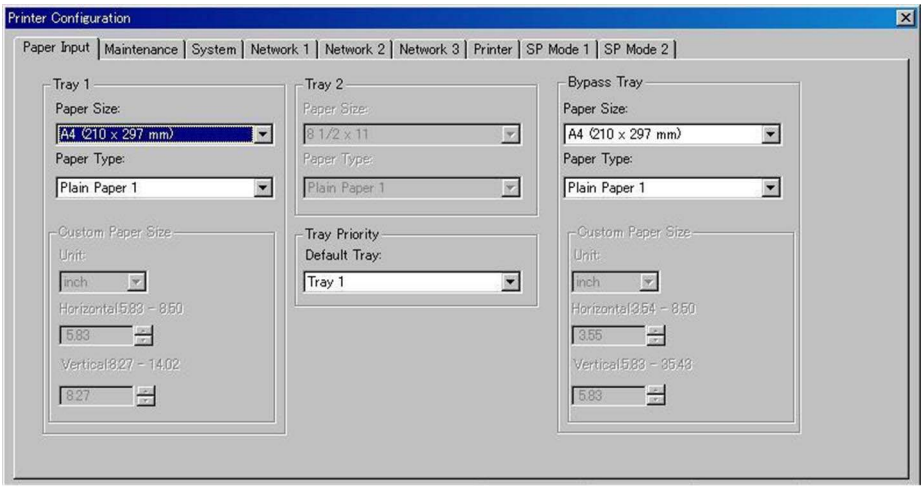
5. Input the access code and click the "OK" button.

Note

- Ask your supervisor for the access code.

6. Click the "OK" button.



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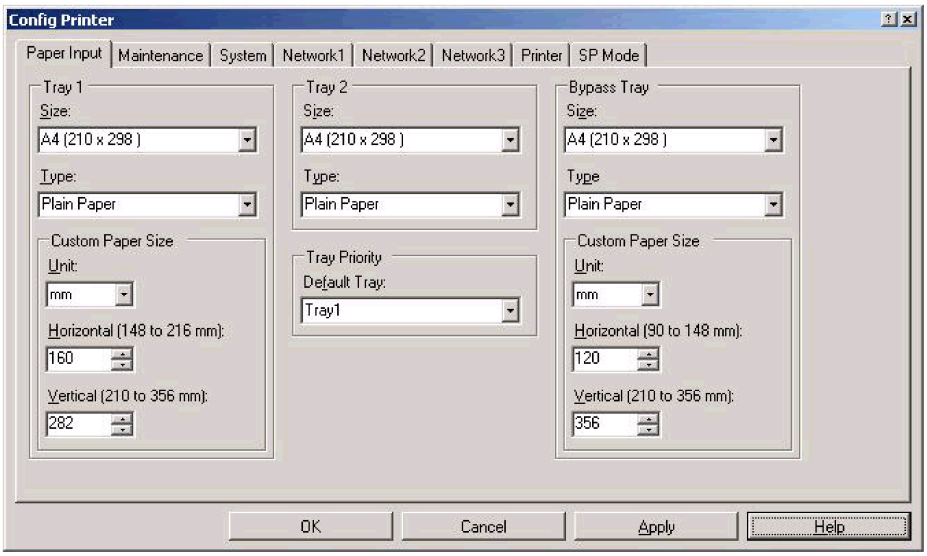
7. The "Printer Configuration" GUI appears.

4.1.4 PRINTER CONFIGURATION MENU LIST

The SOM has the following printer configuration menus. Each menu contains various setting items. The details of each setting item are explained in this section below.

Menu	Description
Paper Input	Adjusts the paper type and size settings.
Maintenance	Adjusts the image registration and executes the color registration adjustment.
System	Adjusts the system settings of the machine.
Network 1	Adjusts network settings (Information, Interface, TCP/IP).
Network 2	Adjusts network settings (IPX, SMTP).
Network 3	Adjusts network settings (SNMP, Apple Talk).
Printer	Adjusts the printer driver settings (PCL, PS).
SP mode 1	Adjusts and executes service program modes.
SP mode 2	Adjusts and executes service program modes.

Paper Input



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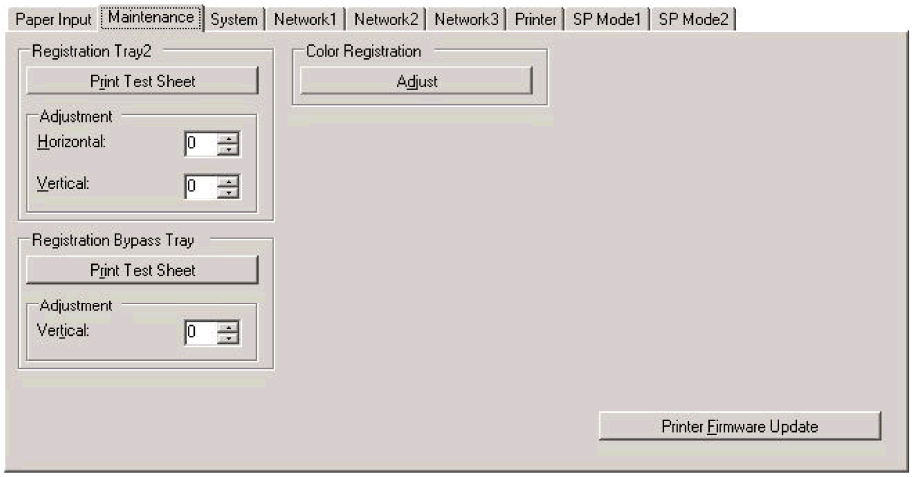
Item	Selections	Remarks
Tray 1 Paper Size (standard)	A4 */ B5/ A5/ B6/ A6/ Legal/ Letter*/ Half Letter/ Executive/ 8" x 13"/ 8.5" x 13"/ Folio/ Com10/ Monarch/ C5 Env/ C6 Env/ DL Env/ 16K/ Custom Paper/ Postcard/ Reply-paid Postcard/ Any size	*: Default (NA: Letter, EU: A4) The selectable paper sizes depend on the model. For details, refer to the "Supported Paper Size List".
Tray 1 Paper type (standard)	Thin Paper(60-75g/m^2)/ Plain Paper */ Plain Paper(90-105g/m^2)/ Recycled/ Color/ Preprinted/ Prepunched/ Thick Paper (105-160g/m^2)/ Letterhead/ Bond/ Cardstock/ Labels/ Envelope/ Any type	*: Default The selectable paper types depend on the model. For details, refer to the "Supported Paper Types" in the "Specifications" chapter.
Tray 2 Paper Size (optional)	A4 */ Letter *	*: Default (NA: Letter, EU: A4)

Item	Selections	Remarks
Tray 2 Paper type (optional)	Thin Paper(60-75g/m^2)/ Plain*/ Plain Paper(90-105g/m^2)/ Recycled/ Color/ Preprinted Paper/ Prepunched Paper/ Letterhead	-
Custom Size unit	Mm */ Inch *	If the paper size factory default is A4, then the custom size factory default unit is mm. If the paper size factory default is Letter, then the custom size factory default unit is inch.
Custom Horizontal	90*-216mm	3.54 – 8.50 inch. Precision is two digits after the decimal point in inch or one digit after the decimal point in mm. If an input value is more than the maximum value, then it will be treated as the maximum value. If an input value is less than the minimum value, then it will be treated as the minimum value.
Custom Vertical	148*-356mm	5.83 – 14.02 inch. Precision is two digits after the decimal point in inch or one digit after the decimal point in mm. If an input value is more than the maximum value, then it will be treated as the maximum value. If an input value is less than the minimum value, then it will be treated as the minimum value.

Item	Selections	Remarks
Priority Tray	MPT	Not used
	Tray1 *	-
	Tray2	

"*" indicates the factory default value.

Maintenance



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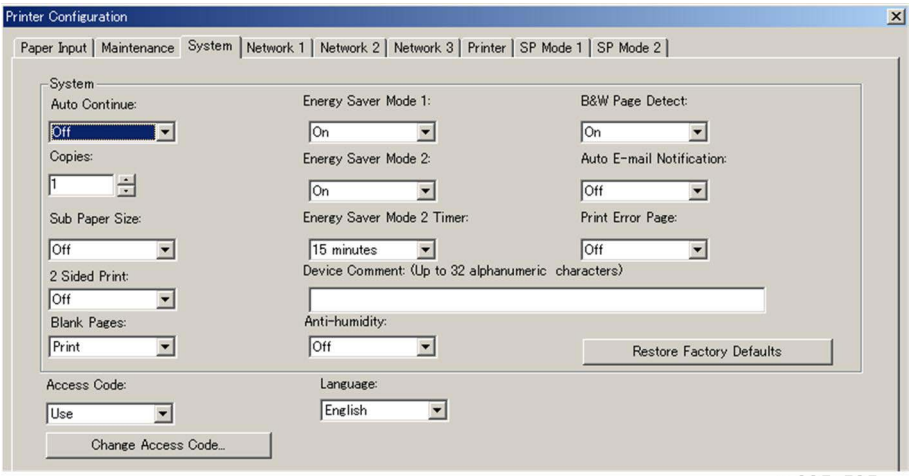
Group (Tab)	Item	Selections	Remarks
Registration Tray 2	Print Test Sheet button		Sends a command to the printer to print a test sheet. It is disabled when tray 2 is not installed.
	Adjustment Horizontal	(-15 to +15) step	0.34 mm per step. Range is -5 mm to +5 mm. If the machine settings are reset to the factory defaults, this value does not change.
	Adjustment Vertical	(-15 to +15) step	0.24 mm per step. Range is -3.6 mm to +3.6 mm

Smart Organizing Monitor

Group (Tab)	Item	Selections	Remarks
			If the machine settings are reset to the factory defaults, this value does not change.
Registration Bypass Tray	Print Test Sheet button		Sends a command to printer to print a test sheet.
	Adjustment Vertical	(-15 to +15) step	0.24 mm per step. Range is -3.6 mm to +3.6 mm
Color Registration	Adjust button		The engine will do color registration and density tuning automatically. The printer will warm up automatically after this setting is changed. The “color registration” in User Tools includes only a “Fine Adjustment”. In service support, never fail to use SP mode 2 including both fine and rough adjustment.
FW Update button	FW update button		This button is for updating the controller firmware. The button for updating the engine firmware is located in the "SP Mode 1" tab.

"*" indicates the factory default value.

System



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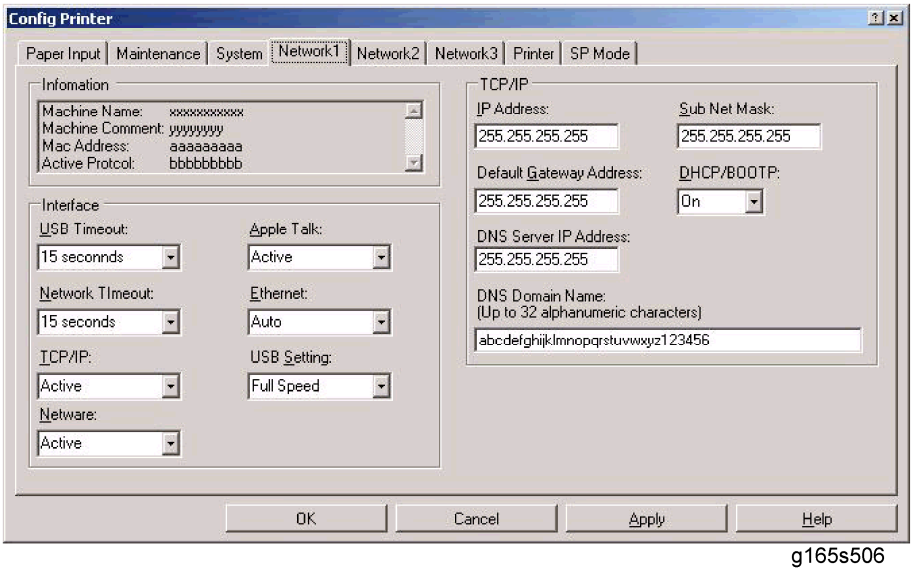
Item	Selections	Remarks
Auto Continue	On/Off *	
Copies	1*-999	Default is 1.
Sub Paper Size	Off */ Auto	A4 Letter override
2 Sided Print	Off */ Short Edge Bind/ Long Edge Bind	
Blank Page Print	Print */ Not Print	"Manual Duplex/Cover" has higher priority than the "Blank Pages" setting.
Low Power Standby	On	
	Off *	
Energy Saver	On *	
	Off	

Item	Selections	Remarks
Energy Saver Time	5min *	
	15min	
	30min	
	60min	
B/W Page Detect	On *	
	Off	
Notify by E-mail	On	
	Off *	
Print Error Page	On	
	Off *	
Machine Comment	Null string*	Up to 32 alphanumeric characters. The factory default is 'null string'.
Restore to Factory Default button		Restores all settings to the factory default settings for the market area setting.
Language	English *	The factory setting is English if the market is NA or EU or ASIA.
	French	
	German	
	Italian	
	Spanish	
	Dutch	
	Danish	
	Swedish	

Item	Selections	Remarks
	Norwegian	
	Portuguese	
	Polish	
	Czech	
	Hungarian	
	Finnish	
	Japanese	
	Simplified Chinese	
	Traditional Chinese	
	Russian	
Access Code	Used *	
	Not used	
Access code change button		Changes the access code. The button is grey if the Access code is set to "not used".

"*" indicates the factory default value.

Network 1



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Group (Tab)	Item	Selections	Remarks
Information	Machine Name		String length is 32
	Machine Comment		String length is 32
	Hardware Type		
	Mac Address		
	Active Protocol	TCP/IP, Netware, Apple Talk	List of 3 protocols when they are active.

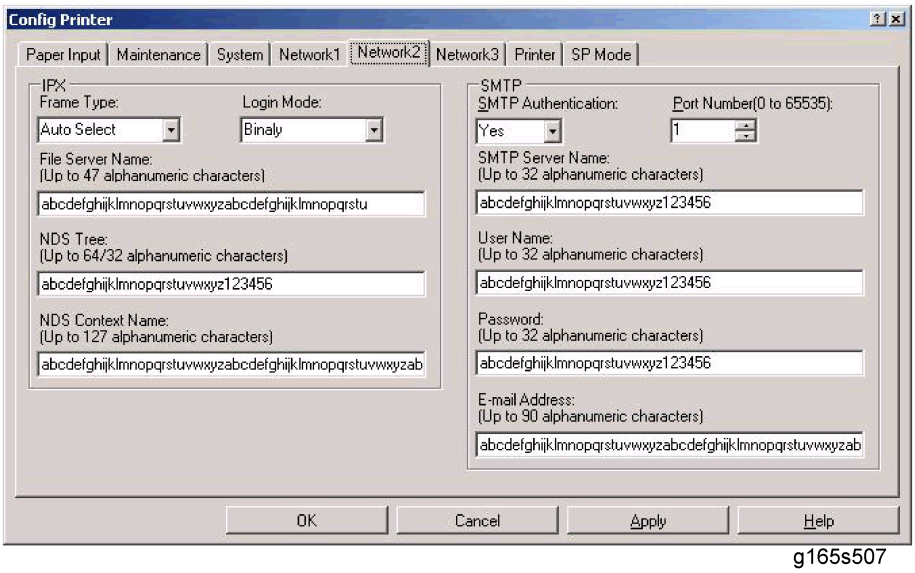
Group (Tab)	Item	Selections	Remarks
TCP/IP	IP address	xxx.xxx.xxx.xxx	This setting is not available if DHCP is enabled. If this setting is changed, the printer power must be turned off/on for the new setting to take effect. The default setting is "192.0.0.192" when DHCP is off.
	Subnet mask	xxx.xxx.xxx.xxx	This setting is not available if DHCP is enabled. If this setting is changed, the printer power must be turned off/on for the new setting to take effect. Will show all zero if network initialization is not finished. Any change will be ignored before the end of network initialization. The default setting is "255.255.255.0" when DHCP is off.
TCP/IP	Default Gateway address	xxx.xxx.xxx.xxx	This setting is not available if DHCP is enabled. If this setting is changed, the printer power must be turned off/on for the new setting to take effect. Will show all zero if network initialization is not finished. Any change will be ignored before the end of network initialization. The default setting is "192.0.0.192" when DHCP is off.
TCP/IP	DHCP	On */ Off	If this setting is changed, the printer power must be turned off/on for the new setting to take effect.

Group (Tab)	Item	Selections	Remarks
TCP/IP	DNS Server IP Address	xxx.xxx.xxx.xxx	Up to 32 alphanumeric characters. This setting is not available if DHCP is enabled. The default setting is "0.0.0.0"when DHCP is off. The setting when DHCP is changed from on to off is the previous setting when DHCP was on. If this setting is changed, the printer power must be turned off/on for the new setting to take effect.
	DNS Domain Name		Up to 32 alphanumeric characters. This setting is not available if DHCP is enabled. The default setting when DHCP is off is null string. The setting when DHCP is changed from on to off is the previous setting when DHCP was on. If this setting is changed, the printer power must be turned off/on for the new setting to take effect.
Interface	USB I/O Timeout	15 60 * 300	
	Network I/O Timeout	15 60 * 300	
	TCP/IP	Active* Not Active	If this setting is changed, the printer power must be turned off/on for the new setting to take effect.

Group (Tab)	Item	Selections	Remarks
	Netware	Active* Not Active	If this setting is changed, the printer power must be turned off/on for the new setting to take effect.
	Apple Talk	Active* Not Active	If this setting is changed, the printer power must be turned off/on for the new setting to take effect.
	Ethernet speed	Auto* 10M half 10M full 100M half 100M full	
	USB Setting	Full Speed Auto *	If this setting is changed, the printer power must be turned off/on for the new setting to take effect.

"*" indicates the factory default value.

Network 2



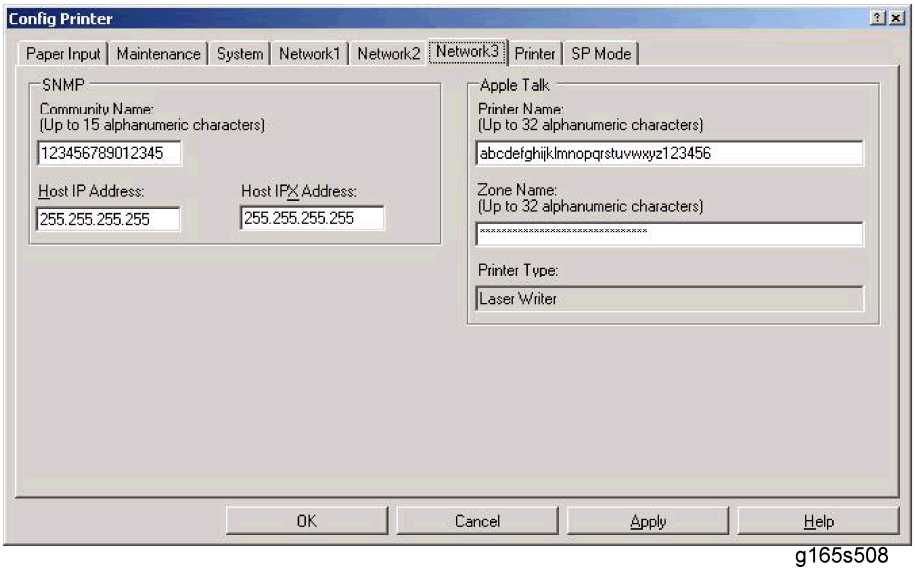
g165s507

Group (Tab)	Item	Selections	Remarks
IPX	Frame Type	Auto Select*	If this setting is changed, the printer power must be turned off/on for the new setting to take effect.
		Ethernet II	
	Login Mode	Bindery	If this setting is changed, the printer power must be turned off/on for the new setting to take effect.
		Both	
		NDS*	
	File Server Name	Null string*	Up to 47 alphanumeric characters. The factory default is 'null string'. If this setting is changed, the printer power must be turned off/on for the new setting to take effect.
	NDS Tree	Null string*	Up to 48 alphanumeric characters. The factory default is 'null string'. If this setting is changed, the printer power must be turned off/on for the new setting to take effect.

Group (Tab)	Item	Selections	Remarks
	NDS Context Name	Null string*	Up to 127 alphanumeric characters. The factory default is 'null string'. If this setting is changed, the printer power must be turned off/on for the new setting to take effect.
SMTP	SMTP Authentication	Yes*	
		No	
	SMTP Server Name	Null string*	Up to 64 alpha numeric characters. The factory default is 'null string'.
	Port Number	25*	1 to 65535 The factory default is 25.
	User Name	Null string*	Up to 32 alphanumeric characters. The factory default is 'null string'.
	Password	Null string*	Up to 32 alphanumeric characters. The factory default is 'null string'. User-input characters and characters read back from the printer will show "*" in order to protect the user password.
	E-mail Address	Null string*	Up to 64 alphanumeric characters. (address for receiving e-mail) The factory default is 'null string'.
	Administrator e-mail address	Null string*	Up to 64 alphanumeric characters. The factory default is 'null string'.
	SMTP server		

"*" indicates the factory default value.

Network 3



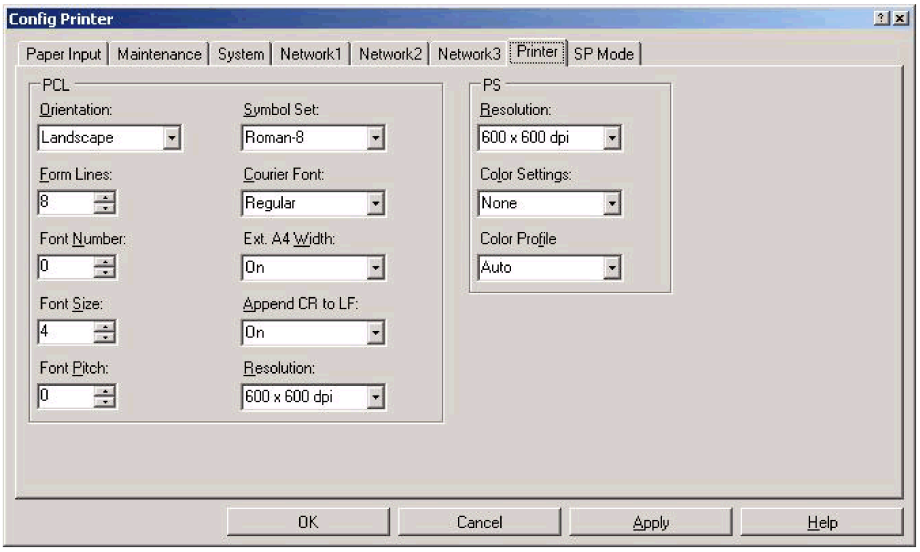
g165s508

Group (Tab)	Item	Selections	Remarks
SNMP	Community Name	Null string *	Up to 15 alphanumeric characters. The factory default is 'null string'.
	Host IP Address	0.0.0.0 *	The factory default is 0.0.0.0 If this setting is changed, the printer power must be turned off/on for the new setting to take effect.
	Host IPX Address	"FFFFFFFFFFFFFFFFFFFF" *	String length is 20. The factory default is 20 "F" characters. Valid characters are: "0123456789ABCDEFabcdef"; not case sensitive when setting but the capital character will change to lower case when reading. If this setting is changed, the printer power must be turned off/on for the new setting to take effect. A valid string length is 0 or 20.

Group (Tab)	Item	Selections	Remarks
			String lengths of 1 – 19 will cause the setting to be invalid. But SOM will not create an error message when the string length is in the range of 1 – 19. The invalid string can be saved at the printer side.
Apple Talk	Printer Name	"PublicWritter" *	String of maximum length 32. The factory default string is "PublicWritter". If this setting is changed, the printer power must be turned off/on for the new setting to take effect.
	Zone Name	"*"	Default is "*". Up to 32 in length. The factory default string is "*". If this setting is changed, the printer power must be turned off/on for the new setting to take effect.

"*" indicates the factory default value.

Printer



g165s509

Group (Tab)	Item	Selections	Remarks
PCL	Orientation	Portrait *	
		Landscape	
	Form Lines	5 to 128 by 1	If the machine settings are reset to the factory defaults, this value does not change.
	Font Number	0*-89	The factory default value is 0.
	Font Size	4 to 999.75 by 0.25 (12 *)	The factory default value is 12.
	Font Pitch	0.44 to 99.99 by 0.01 (10 *)	The factory default value is 10.
PCL	Symbol Set	Roman-8*, Roman-9, ISO L1, ISO L2, ISO L5, PC-8, PC-8 D/N, PC-850, PC-852,	

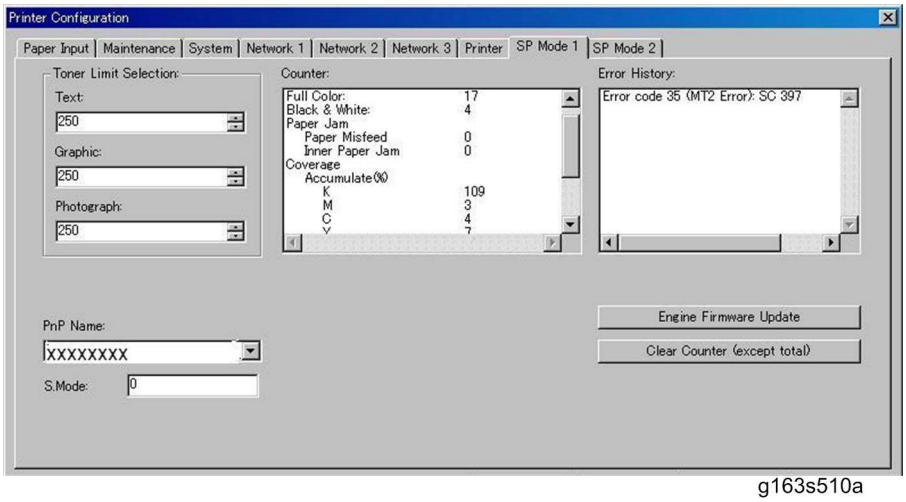
Group (Tab)	Item	Selections	Remarks
		PC-858, PC-8 TK, Win L1, Win L2, Win L5, Desktop, PS Text, VN Intl, VN US, MS Publ, Math-8, PS Math, VN Math, Pi Font, Legal, ISO 4, ISO 6, ISO 11, ISO 15, ISO 17, ISO 21, ISO 60, ISO 69, Win 3.0, MC Text, ISO L6, ISO L9, PC-775, PC-1004,	
PCL	Courier Font	Regular*	
		Dark	
	Ext. A4 Width	Off*	
		On	
	Append CR to LF	Off	
		On *	
	Resolution	600x600dpi 1bit*	
		600x600dpi 2bits	
		600x600dpi 4bits	
PS	Resolution	600 x 600 dpi*	
		600 x 600 dpi 2bits	
		600 x 600 dpi 4bits	

Smart Organizing Monitor

Group (Tab)	Item	Selections	Remarks
	Color Profile	Off	
		Solid color *	
		Presentation	
		Photographic	

"*" indicates the factory default value.

SP Mode 1



g163s510a

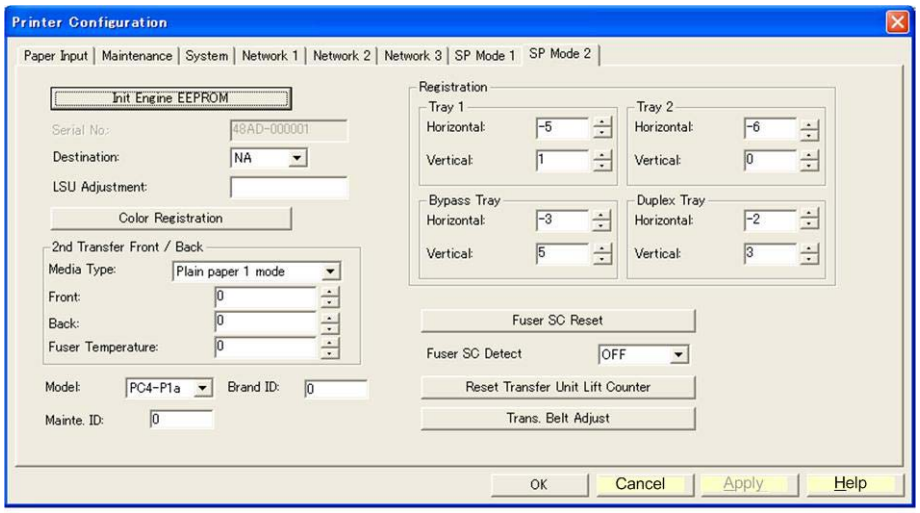
Item	Selections	Remarks
Toner Limit Selection	Text	This means "toner limit". Should by text/graphic/image. [200 to 400 / 250 (default) / 10/step]
	Graphic	
	Image	
Counter	Total	Total printed page counter
	Color	Total printed color page counter
	B/W	Total printed mono page counter
	Duplex	Total printed duplex page counter.
	Paper Jam - Misfeed	Misfeed jam counter [0 to 128]
	Paper Jam - Inner	Counter for jams inside the machine [0 to 128]
	Paper Jam - Duplex	Duplex jam counter [0 to 128] Always 0 if the printer does not have a duplex unit.

Smart Organizing Monitor

Item	Selections	Remarks
	Recent K, M, C, Y coverage	Recent K coverage = K data got from the engine (the unit is 1024 dots) / A4 full coverage dot number (the unit is 1024 dots). A4 full coverage dot number in units of 1024 dots is 4961*7016/1024. Recent M, C, Y coverage uses the same equation as K, using the M, C, Y data from the engine.
	Accumulate K, M, C, Y coverage	Added from recent coverage. Stored in the EEPROM.
Error History	Error code listing	Maximum 16 error codes. There is nothing displayed if there is no error code. If there is only one error code, then only one error code string is displayed.
PnP Name		Select a Plug in Play name from the dropdown list. The modified setting will only take effect after the printer power is turned off/on. The printer will warm up automatically after this setting is changed.
S. Mode	[0 to 7F]	This adjusts the M/A of toner. **0x00**: Normal (Default: no reduction) 0x06: 20% reduction 0x07: 10% reduction
Engine Firmware update button		Engine firmware update button
Clear Counter (except total)		This is used by Service. This clears all counters (except Total Counter).

"*" indicates the factory default value.

SP Mode 2



g165s511

Item	Selections	Remarks
Init Engine EEPROM		This clears all counters except "Full Color" and "Black and White" in the total counter. When you click the [Init Engine EEPROM] button, the engine EEPROM is initialized. Turn the machine power off/on after you change this setting.
Serial No.	11 characters	Displays and changes a serial number. (Character: alphanumeric, input length: 11 bytes) The printer will warm up automatically after this setting is changed.
Destination	1 byte. 0:DOM (JPN), 1:NA, 2:EU, 3:China, 4:Taiwan, 5:AP, 6:LA	Displays and changes a destination. It may damage the printer if you change this setting. Turn the machine power off/on after

Item	Selections	Remarks
		you change this setting. The printer will warm up automatically after this setting is changed. SOM will show a blank space if the printer destination setting is unknown.
LSU Adjustment	Input 160 bytes setting.	Character: alphanumeric "0-9", "a-f", "A-F", only valid data can be input. Input length: 160 bytes
Color Registration button		The engine will do color registration and density tuning automatically. The printer will warm up automatically after this setting is changed.
2nd Transfer Front / Back		
Media type	Display string only 0: Plain paper 1 mode 1: Plain paper 2 mode 2: Plain paper 3 mode 3: Reserved (not display) 4: Thick stock 1 mode 5: Thick stock 2 mode 6: Thick stock 3 mode (Not used) 7: Thick stock 4 mode 8: Envelope 1 mode	Please select the media type.
Front	(-15 to +15)	This adjusts the transfer roller current, based on the default value. The range of adjustment is from -15 [μA] to +15 [μA], in units of 1.

Item	Selections	Remarks
		The printer will warm up automatically after this setting is changed.
Back	(-15 to +15)	This adjusts the transfer roller current, based on the default value. The range of adjustment is from -15 [μA] to +15 [μA], in units of 1. The printer will warm up automatically after this setting is changed.
Fuser Temperature	(-15 to 0)	This adjusts the temperature of the fusing unit, based on the default value. The range of adjustment is from -15 [°C] to 0[°C], the unit is 2. The printer will warm up automatically after this setting is changed. *2
Model	Display string only 2: PE-P1Eb 3: PE-P1Ec	Displays the current model in a dropdown list. Do not change this setting (Designed for Factory Use).
Brand ID	00* – 7F	Displays the current brand ID number. Do not change this setting (Designed for Factory Use).
Mainte. ID	00* – 7F	Displays the current maintenance ID number. Do not change this setting (Designed for Factory Use).

Registration		
Tray1	Horizontal	1.32mm per step. Range is -15mm to +15mm. If the machine settings are reset to the factory defaults, this value does not change. The printer will exit the energy saver state after this setting is changed.
	Vertical	0.24mm per step. Range is -3.6mm to +3.6mm. If the machine settings are reset to the factory defaults, this value does not change. The printer will exit the energy saver state after this setting is changed.
Tray2	Horizontal (-15 to +15) step	1.32mm per step. Range is -5mm to +5mm. If the machine settings are reset to the factory defaults, this value does not change. The printer will exit the energy saver state after this setting is changed.
	Vertical (-15 to +15) step	0.24mm per step. Range is -3.6mm to +3.6mm. If the machine settings are reset to the factory defaults, this value does not change. The printer will exit the energy saver state after this setting is changed.

Bypass Tray	Horizontal	1.32mm per step. Range is -5mm to +5mm. If the machine settings are reset to the factory defaults, this value does not change. The printer will exit the energy saver state after this setting is changed.
	Vertical	0.24mm per step. Range is -3.6mm to +3.6mm. If the machine settings are reset to the factory defaults, this value does not change. The printer will exit the energy saver state after this setting is changed.
Duplex Tray	Horizontal (-15 to +15) step	1.32mm per step. Range is -5mm to +5mm. If the machine settings are reset to the factory defaults, this value does not change. The printer will exit the energy saver state after this setting is changed.
	Vertical (-15 to +15) step	0.24mm per step. Range is -3.6mm to +3.6mm. If the machine settings are reset to the factory defaults, this value does not change. The printer will exit the energy saver state after this setting is changed.
Fuser SC Reset		This button is for resetting an SC related with the fusing errors.

Fuser SC Detect	On/Off	If On, the engine detects SC559. If Off, the engine does not detect "Fusing SC Reset".
Reset Transfer Unit Life Counter		Resets the transfer unit life counter.
Trans. Belt Adjust		When you click the [Trans. Belt Adjust] button, the transfer belt adjustment is done. This calibrates the motor speed to match the length of the new transfer belt.

"*" indicates the factory default value.

4.2 SERVICE PROGRAM WITH OPERATION PANEL

4.2.1 OVERVIEW

This machine has a LCD on the operation panel. Therefore, you can directly execute the service program with the operation panel instead of the SOM.

Note

- Ask your supervisor for entering or exiting the service mode with the operation panel.

4.2.2 SERVICE MODE MENU ITEMS ON LCD

The wording and menu structures are described as shown below.

Service Menu (2nd Menu)

1st Menu	2nd Menu	3rd Menu	4th Menu
Service Mode	Service Menu	Toner Limit	Text
			Graphics
			Photograph
[200 to 400] Step by 10, Default is 250			

Engine Maintenance (2nd Menu)

1st Menu	2nd Menu	3rd Menu	4th Menu
Service Mode	Engine Maintenance	Brand	-
0: Ricoh/ 1: SP/ 2: NRG/ 3: Lanier			

1st Menu	2nd Menu	3rd Menu	4th Menu
Service Mode	Engine Maintenance	Destination	-
[0 to 6] **DFU**			

1st Menu	2nd Menu	3rd Menu	4th Menu
Service Mode	Engine Maintenance	2nd Transfer	Front
			Back
[-15 to +15/ 1 step] This adjusts the transfer roller current, based on the default value. The range of adjustment is from -15 [μA] to +15 [μA], in units of 1. The printer will warm up automatically after this setting is changed.			

1st Menu	2nd Menu	3rd Menu	4th Menu
Service Mode	Engine Maintenance	2nd Transfer	Fuser Temp
[0 to -30/ 1 step] This adjusts the offset temperature of the fusing unit, based on the default value. The range of adjustment is from -30 [°C] to 0[°C], the unit is 2. The printer will warm up automatically after this setting is changed. *2			

1st Menu	2nd Menu	3rd Menu	4th Menu
Service Mode	Engine Maintenance	Registration	Tray 1
			Tray 2
			By-pass
			Duplex
5th Menu ▪ Vertical ▪ Horizontal [-15 to +15/ 0.33 mm/ 1 step] This adjusts the vertical and horizontal registration for each tray. If the machine settings are reset to the factory defaults, this value does not change.			

Clear Log (2nd Menu)

This resets all log data.

APPENDIX: MACHINE SWAP

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

5. APPENDIX: MACHINE SWAP

5.1 EXCHANGE AND REPLACE PROCEDURE

If the machine exchange and replacement is required, arrange to send a machine without the four print cartridges (AIO) to the customer site.

5.1.1 INSTRUCTION

Instruct the customer to do the following procedure.

Before the substitute machine gets to the customer site

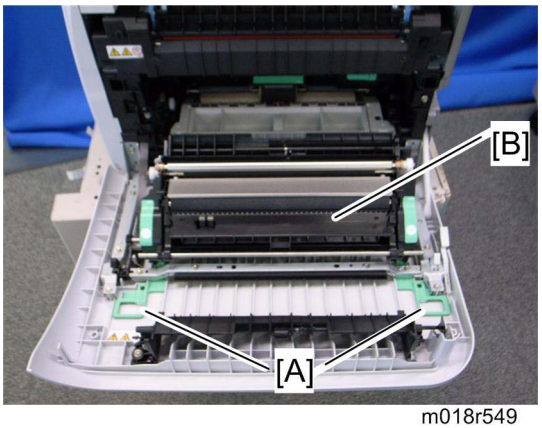
- Print the configuration page using "Smart Organizing Monitor".

When the substitute machine gets to the customer site

1. Remove the four print cartridges (AIO) from the problem machine.
2. Install the four print cartridges (AIO) into the substitute machine.
3. Input the customer settings which are printed on the configuration page by using "Smart Organizing Monitor".
4. Send back the problem machine to the repair center.

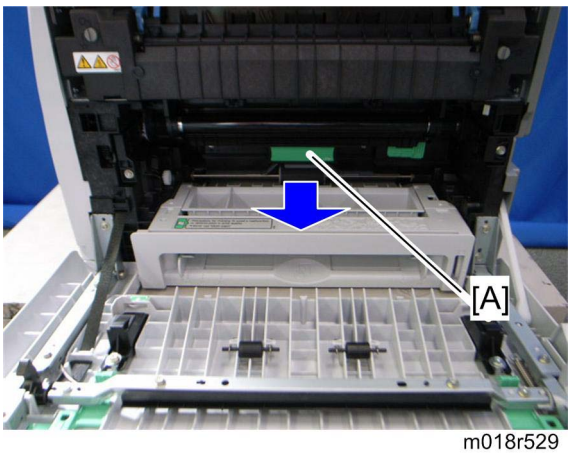
5.1.2 CLEANING POINTS AFTER MACHINE ARRIVAL AT DEPOT

1. Open the front cover.



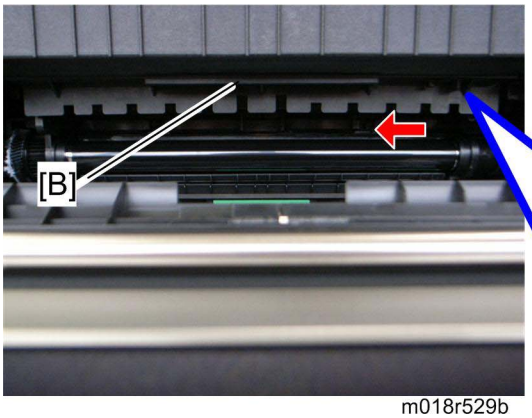
m018r549

2. Release the locks [A].
3. Transfer unit [B]

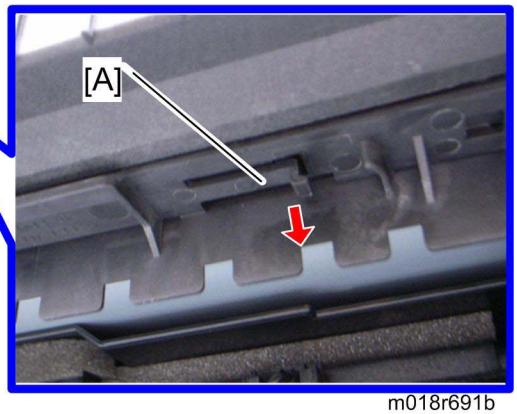


m018r529

4. Pull out the waste toner bottle [A].



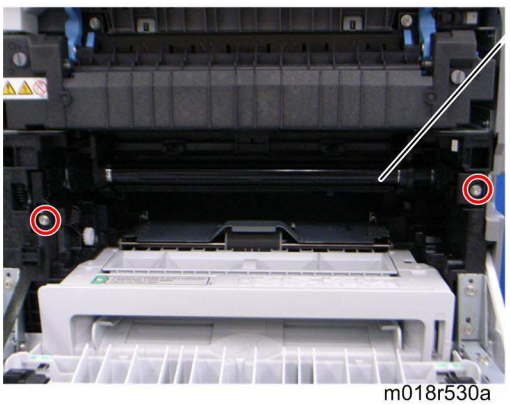
m018r529b



m018r691b

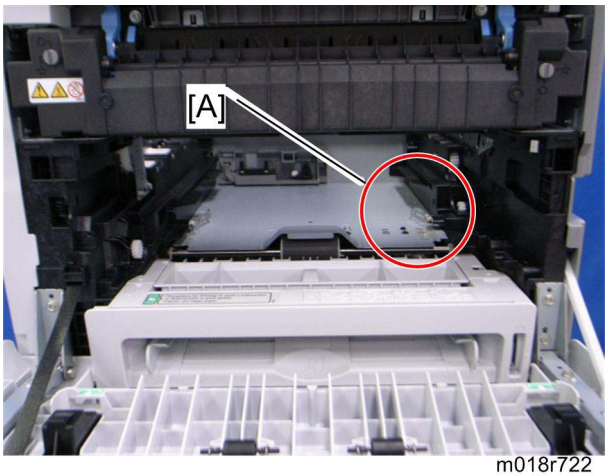
5. Release the hook [A] under the guide plate.

6. Move the guide plate [B] underneath the fusing unit to the left, and then remove it.


m018r530a

m018r692a

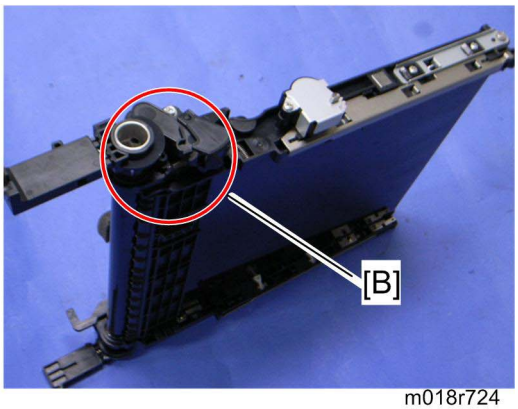
7. Pull out the image transfer belt unit [A] (x 2).



m018r722

8. Clean inside the printer, especially around the circled area [A].

m018r723



m018r724

9. Clean the circled area at the waste toner bottle [A] and circled area [B] at image transfer belt unit.
10. Reassemble the printer.

PAPER FEED UNIT TK1010
(G849)

PAPER FEED UNIT TK1010 (G849)

TABLE OF CONTENTS

Read This First

Safety and Symbols

Replacement Procedure Safety

⚠CAUTION

- Turn off the main power switch and unplug the machine before beginning any of the replacement procedures in this manual.

Symbols Used in this Manual

This manual uses the following symbols.

☛: See or Refer to

: Screws

: Connector

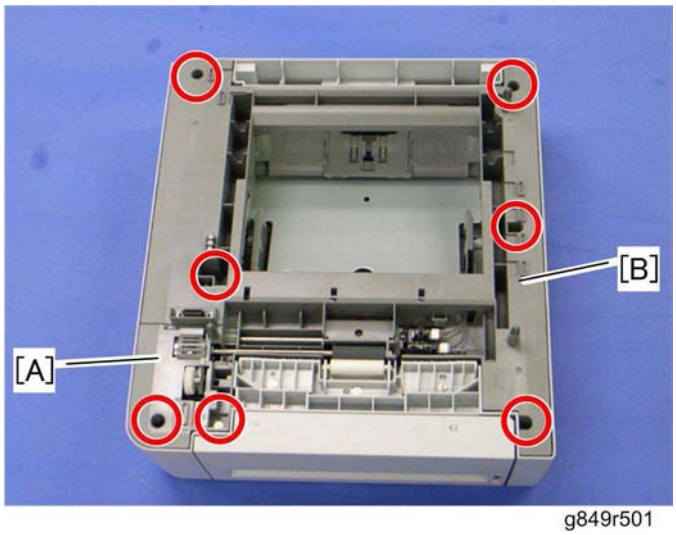
: Clip ring

: E-ring

1. REPLACEMENT AND ADJUSTMENT

1.1 PAPER FEED UNIT

1.1.1 TOP COVER

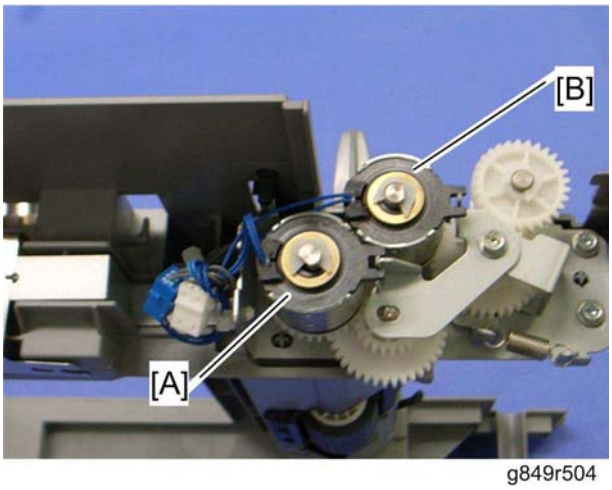


g849r501

1. Top left cover [A] (x 1)
2. Top cover [B] (x 6)

1.1.2 PAPER FEED AND RELAY CLUTCH

1. Top cover (☛ Top Cover)

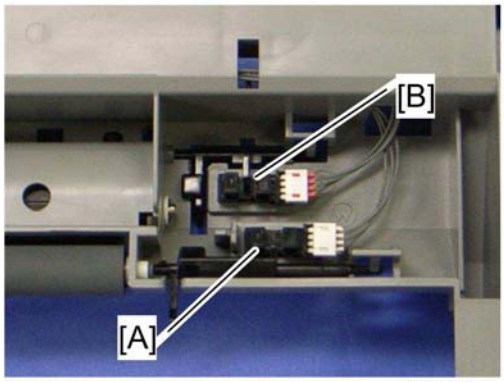


g849r504

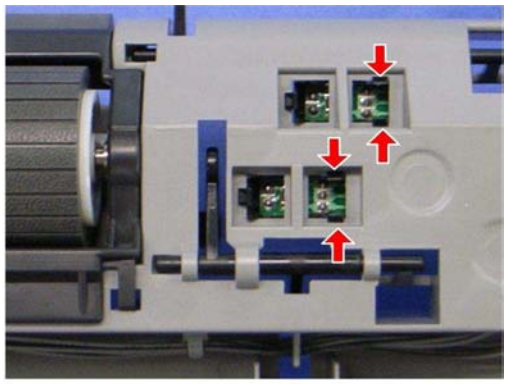
2. Paper feed clutch [A] (x 1, x 1)
3. Relay clutch [B] (x 1, x 1)

1.1.3 PAPER END AND RELAY SENSOR

1. Top cover (☛ Top Cover)



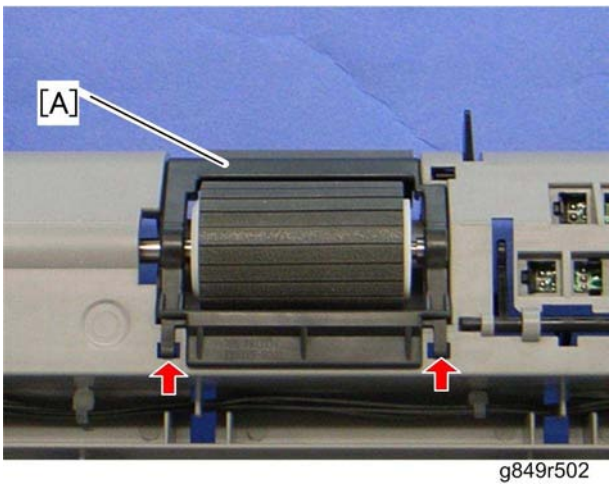
g849r505


g849r506

2. Paper end sensor [A] (hooks, ☜ x 1)
3. Relay sensor [B] (hooks, ☜ x 1)

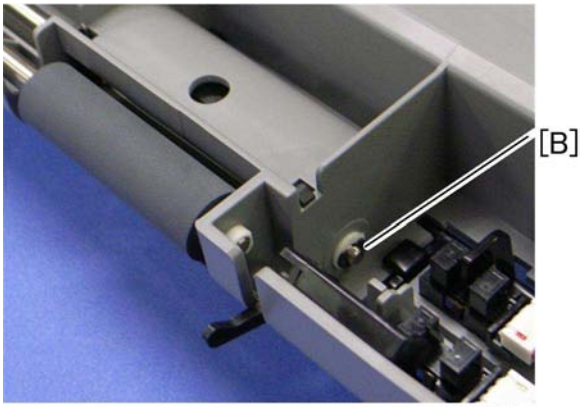
1.1.4 PAPER FEED ROLLER

1. Top cover (☛ Top Cover)
2. Paper feed clutch (☛ Top Cover)



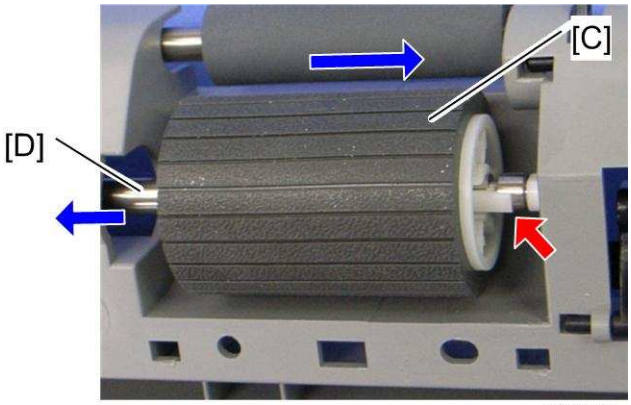
g849r502

3. Paper guide [A] (hooks)



g849r503

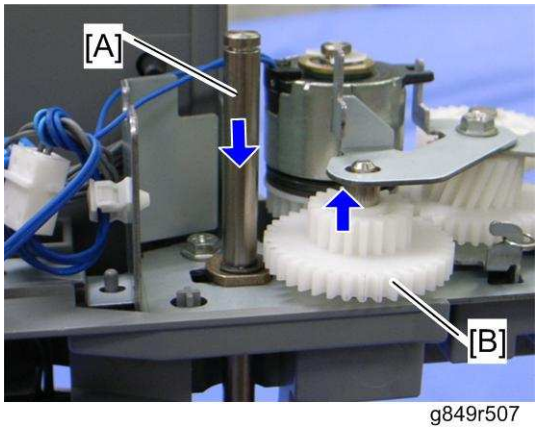
4. Remove the e-ring [B] at the right edge of the feed roller shaft.



g849r506

5. Slide the paper feed roller [C] to the right side (hook).
6. Pull out the feed roller shaft [D] to the left side (bushing x 1).

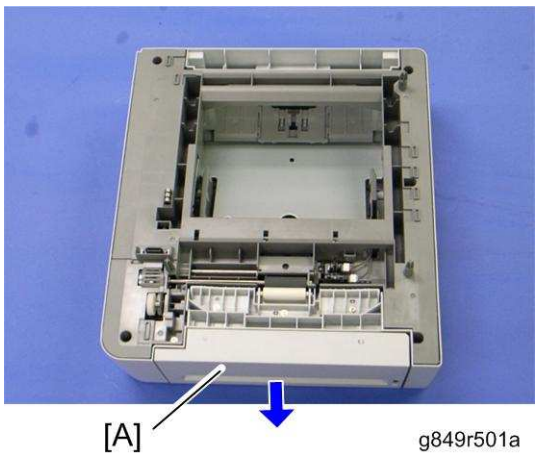
When reassembling



g849r507

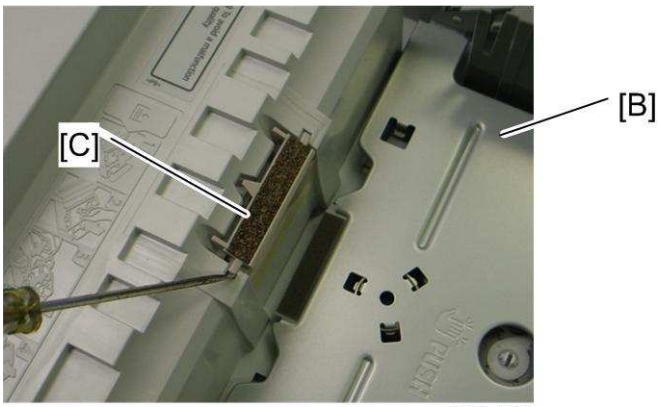
If the feed roller shaft [A] cannot be inserted easily, pull the gear [B], and then insert the feed roller shaft.

1.1.5 FRICTION PAD



g849r501a

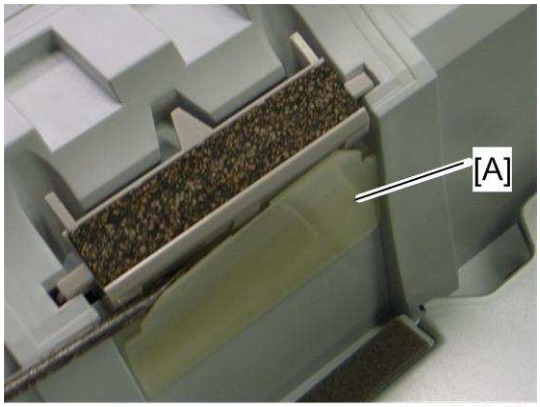
1. Pull out the tray [A]



g849r508

2. Press down the bottom plate [B]
3. Friction pad [C] (hooks, spring x 1)

When reassembling



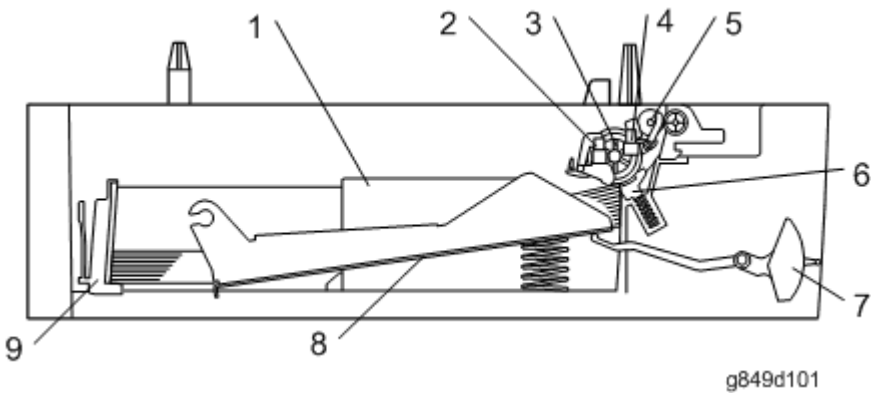
g849r509

When re-installing the friction pad, make sure that the mylar [A] does not go under the friction pad.

2. DETAILED SECTION DESCRIPTIONS

2.1 OVERVIEW

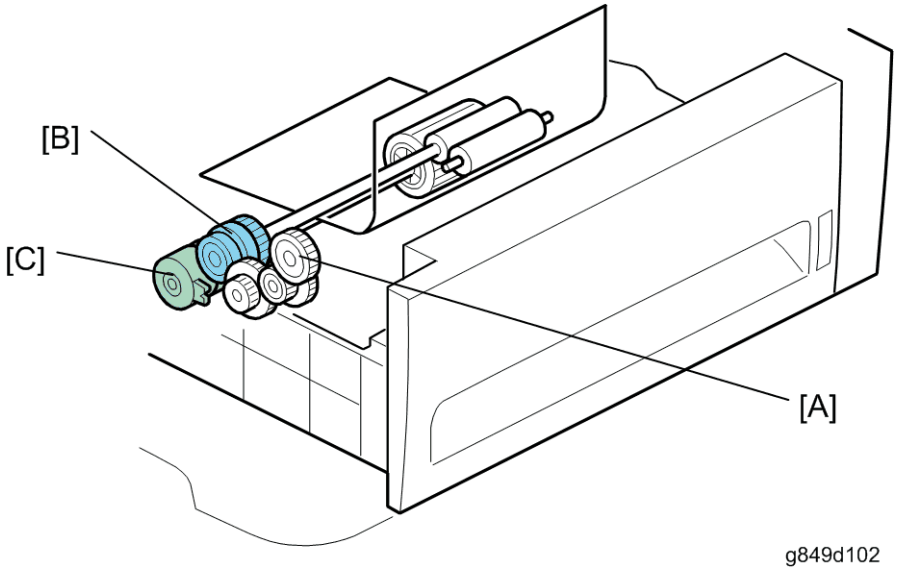
2.1.1 COMPONENT LAYOUT



1. Side Fence 2. Paper End Sensor 3. Paper Feed Roller 4. Relay Sensor 5. Relay Roller	6. Friction Pad 7. Paper Height Lever 8. Bottom Plate 9. Rear Fence

2.2 BASIC OPERATION

2.2.1 PAPER SEPARATION AND FEED



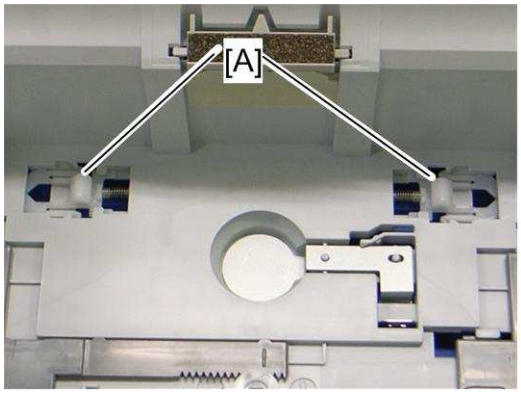
The paper tray holds 500 sheets of paper.

The paper feed unit uses a friction pad system.

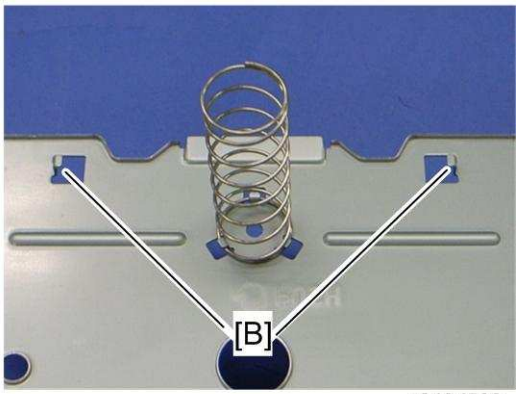
The gear [A] is driven by the transport/fusing motor in the mainframe.

The relay clutch [B] and paper feed clutch [C] control drive from the mainframe. When the optional tray is selected as the feed tray, the relay clutch and paper feed clutch transmit drive power to the relay roller and paper feed roller.

2.2.2 PAPER LIFT



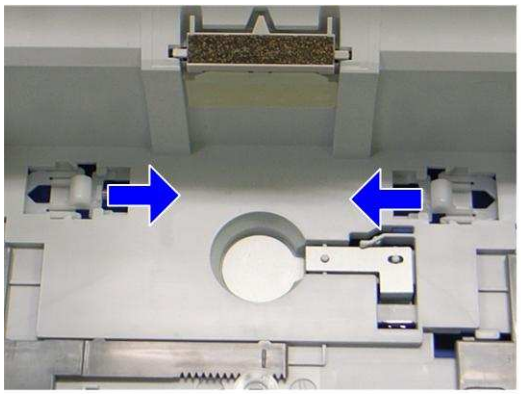
g849d501



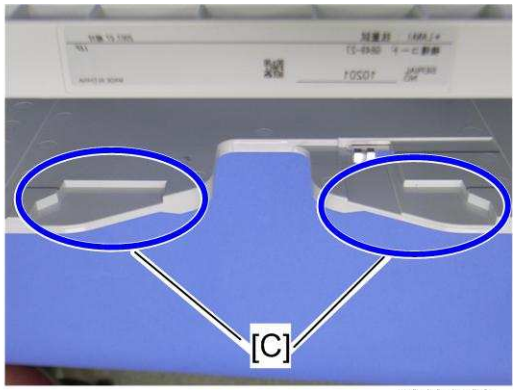
g849d502

The bottom plate is always pressed up by the spring in the tray. Therefore, you must press down the bottom plate when you insert the tray in the machine.

The bottom tray lock levers [A] hold the tabs [B] under the bottom plate after the bottom plate is pressed down.



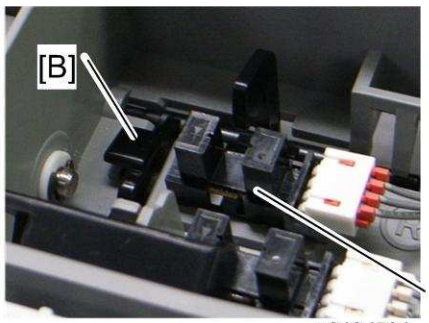
g849d501



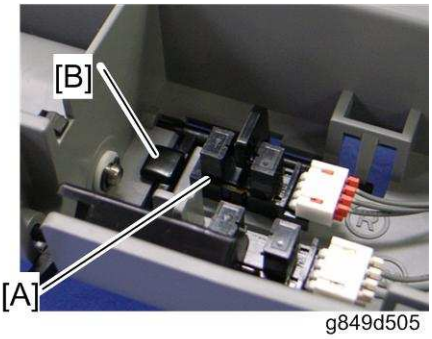
g849d503

When the tray is inserted in the machine, the lock lever guides [C] in the paper feed unit push the bottom plate lock levers, and then the lock levers release the tabs under the bottom plate. As a result, the bottom plate is lifted by the spring.

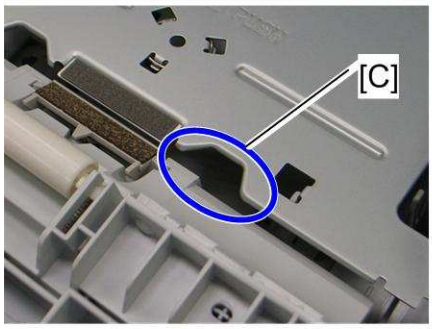
2.2.3 PAPER END DETECTION



g849d504



g849d505



g849d506

There is a paper end sensor [A] in the tray. The feeler [B] drops into the cutout [C] in the bottom plate and the actuator interrupts the paper end sensor. This sensor also detects whether the tray is set.

M035/M036 POINT TO POINT DIAGRAM

CN300					
Pin#	Signal Name	I/O	Pin#	Signal Name	I/O
1	HSYNC_N	O	26	GND	G
2	A_LGATE_N	I	27	GND	G
3	GND	G	28	GND	G
4	A_PCLK	I	29	GND	G
5	GND	G	30	GND	G
6	A_P0DAT0_N_K	I	31	GND	G
7	A_P0DAT2_N_K	I	32	A_P0DAT1_N_K	I
8	A_P0DAT3_N_K	I	33	GND	G
9	A_P1DAT1_N_M	I	34	A_P1DAT0_N_M	I
10	A_P1DAT2_N_M	I	35	GND	G
11	A_P1DAT3_N_M	I	36	GND	G
12	A_P2DAT0_N_Y	I	37	GND	G
13	A_P2DAT2_N_Y	I	38	A_P2DAT1_N_Y	I
14	A_P2DAT3_N_Y	I	39	GND	G
15	A_P3DAT1_N_C	I	40	A_P3DAT0_N_C	I
16	A_P3DAT2_N_C	I	41	GND	G
17	A_P3DAT3_N_C	I	42	GND	G
18	VP1FGATE_M	O	43	VP0FGATE_K	O
19	VP2FGATE_Y	O	44	VP3FGATE_C	O
20	A_PRREQ_N	I	45	SLP_N/A_SLP_PSU	I
21	IREADY_N	O	46	ENGRDY	O
22	A_COMMAND	I	47	+5VE	P
23	STATUS	O	48	+3.3VE	P
24	+3.3VE	P	49	+5VE	P
25	+3.3VE	P	50	+3.3VE	P

AIO [K]
AIO [Y]
AIO [M]
AIO [C]
ID Chip [K] (PCB2)
ID Chip [Y] (PCB2)
ID Chip [M] (PCB2)
ID Chip [C] (PCB2)
ID Chip Board [K, Y, M, C] (PCB3)

LSU Fan Motor
Fusing Fan Motor
TM Sensors
PCB4
Thermistors (Center, Edge)
Temperature/Humidity Sensor
Color AIO Motor
Black AIO Motor
Transport/Fusing Motor
Paper Feed Clutch
Registration Clutch
Optional Paper Feed Unit (G849)
Duplex Motor
Drawer

Main SW
SW1
Power Cord
Inlet
Fusing Lamp
L1
Interlock Switch (+5V) ×2
SW2
Interlock Switch (+24V)
PSU (PCB5)

Operation Panel Board (PCB1)

CN325 GND[0], GND[0], +24V[24], +24V[24]

EGB (PCB6)

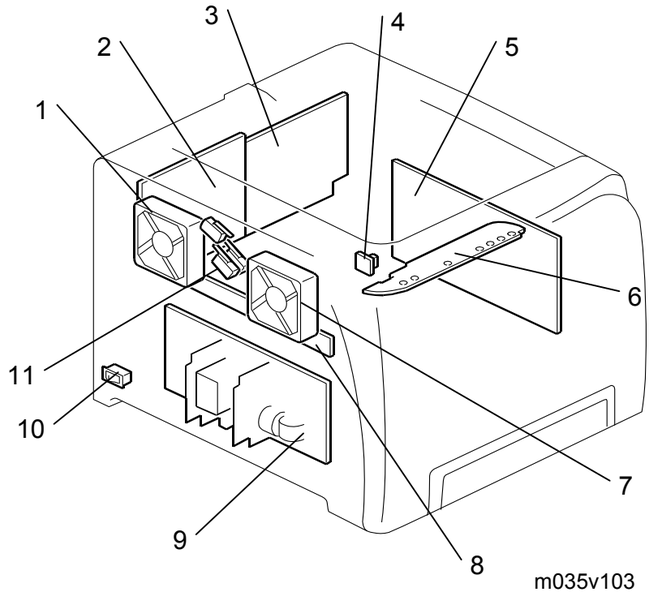
CN300
CON2

Controller Board (PCB7)

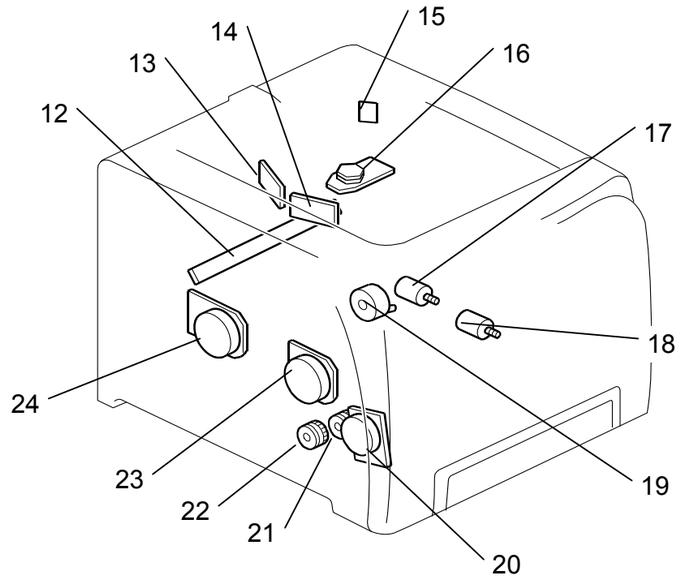
PCB8
LDB [C,M]
PCB9
LDB [K,Y]
M7
Polygon Motor
PCB10
Synchronizing Detector Board
Waste Toner Overflow Sensor
Waste Toner Bottle Set Sensor
Paper End Sensor
Registration Sensor
Paper Exit Sensor
ITB Contact Motor
ITB Contact Sensor
Agitate Motor
HVPS (PCB10)

SYMBOL TABLE
AC Line
DC Line
Signal Direction
[ ] Voltage

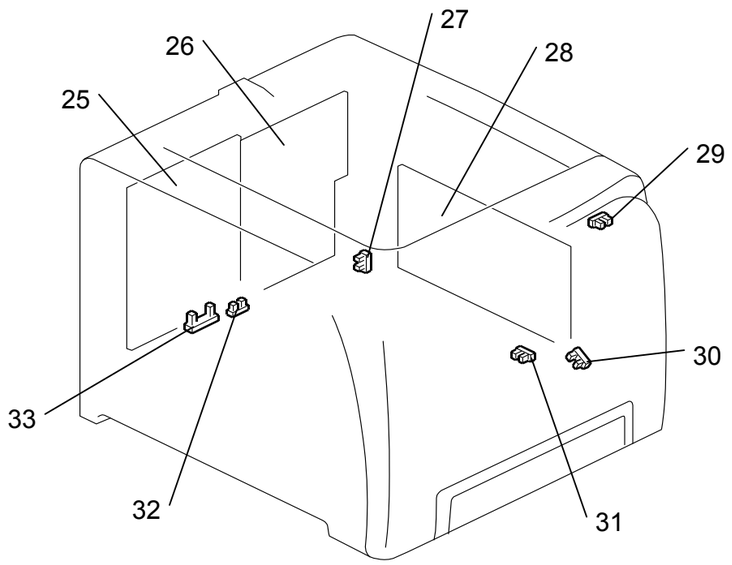
M035/M036 ELECTRICAL COMPONENT LAYOUT



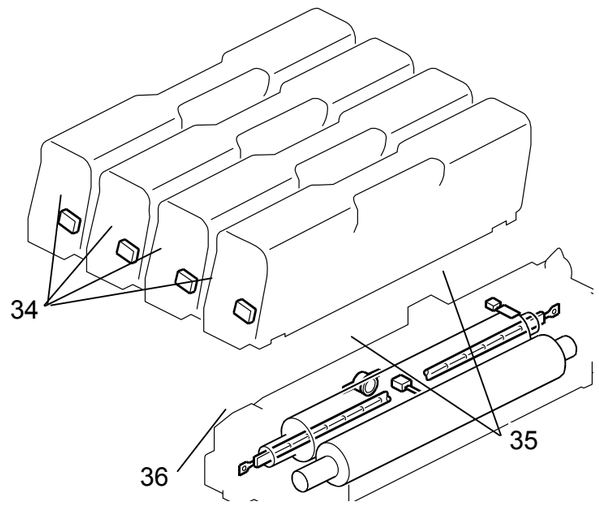
m035v103



m035v104



m035v105



Symbol	Name	Index No.	P to P
Motors			
M1	LSU Fan Motor	1	D3
M2	Fusing Fan Motor	7	D3
M3	Color AIO Motor	24	D6
M4	Black AIO Motor	23	D6
M5	Transport/Fusing Motor	20	D7
M6	Duplex Motor	19	D8
M7	Polygon Motor	16	G6
M8	ITB Contact Motor	17	G9
M9	Agitator Motor	18	G9
Sensors			
S1	Temperature/Humidity	4	D5
S2	Waste Toner Overflow	33	G7
S3	Waste Toner Bottle Set	32	G7
S4	Paper End Sensor	31	G8
S5	Registration Sensor	30	G8
S6	Paper Exit Sensor	29	G8
S7	ITB Contact Sensor	27	G9
Magnetic Clutches			
MC1	Paper Feed Clutcch	22	C7
MC2	Registration Clutch	21	D7
Switches			
SW1	Main Switch	10	B10
SW2	Interlock Switches	11	B11
Others			
L1	Fusing Lamp	36	A10
TH1	Thermistors	35	D5
PCBs			
PCB1	Operation Panel Board	6	E1
PCB2	ID Chip [B, Y, M, C]	34	B3-D3
PCB3	ID Chip Board	8	B4
PCB4	TM Sensor Board	12	D4
PCB5	PSU	9	C10-11
PCB6	EGB	2	E7
PCB7	Controller Board	3	G2-3
PCB8	LD Board - C/M	13	G4
PCB9	LD Board - K/Y	14	G5
PCB10	Synchronizing Detector	15	G6
PCB11	HVPS Board	28	G11

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M035/M036
PARTS CATALOG

004775MIU

LANIER RICOH savin

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RICOH
savin

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M035/M036
PARTS CATALOG

004775MIU

LANIER RICOH SAVIN

LEGEND

PRODUCT CODE	COMPANY			
	GESTETNER	**LANIER**	**RICOH**	**SAVIN**
M035	--	SP C231N	Aficio SP C231N	SP C231N
M036	--	SP C232DN	Aficio SP C232DN	SP C232DN

DOCUMENTATION HISTORY

REV. NO.	DATE	COMMENTS
*	05/2009	Original Printing

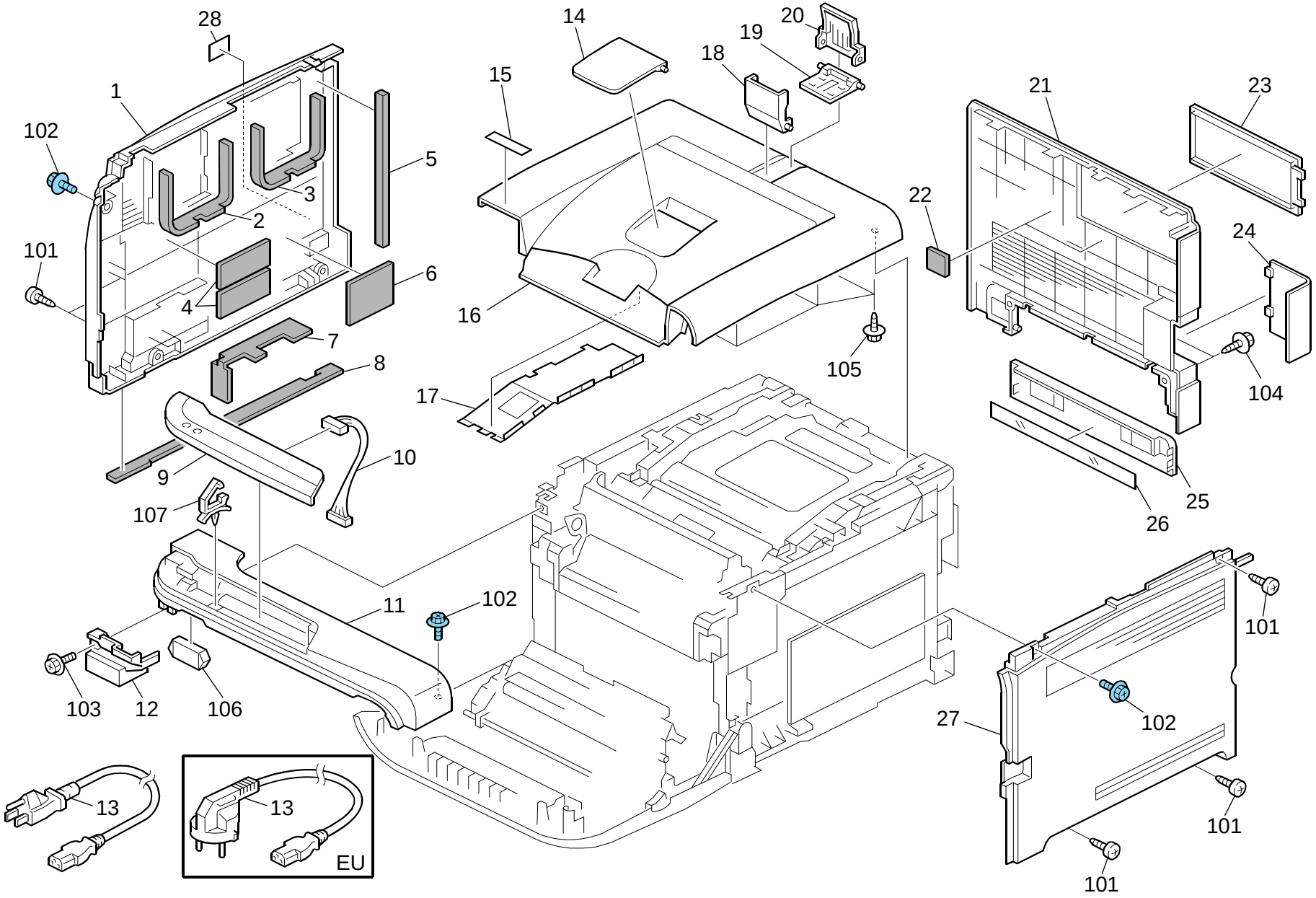
M035/M036

TABLE OF CONTENTS

M035/M036
PARTS LOCATION AND LIST

This section instructs you as to the numbers and names of parts on this machine.

1.Exterior 1 (M035/M036)

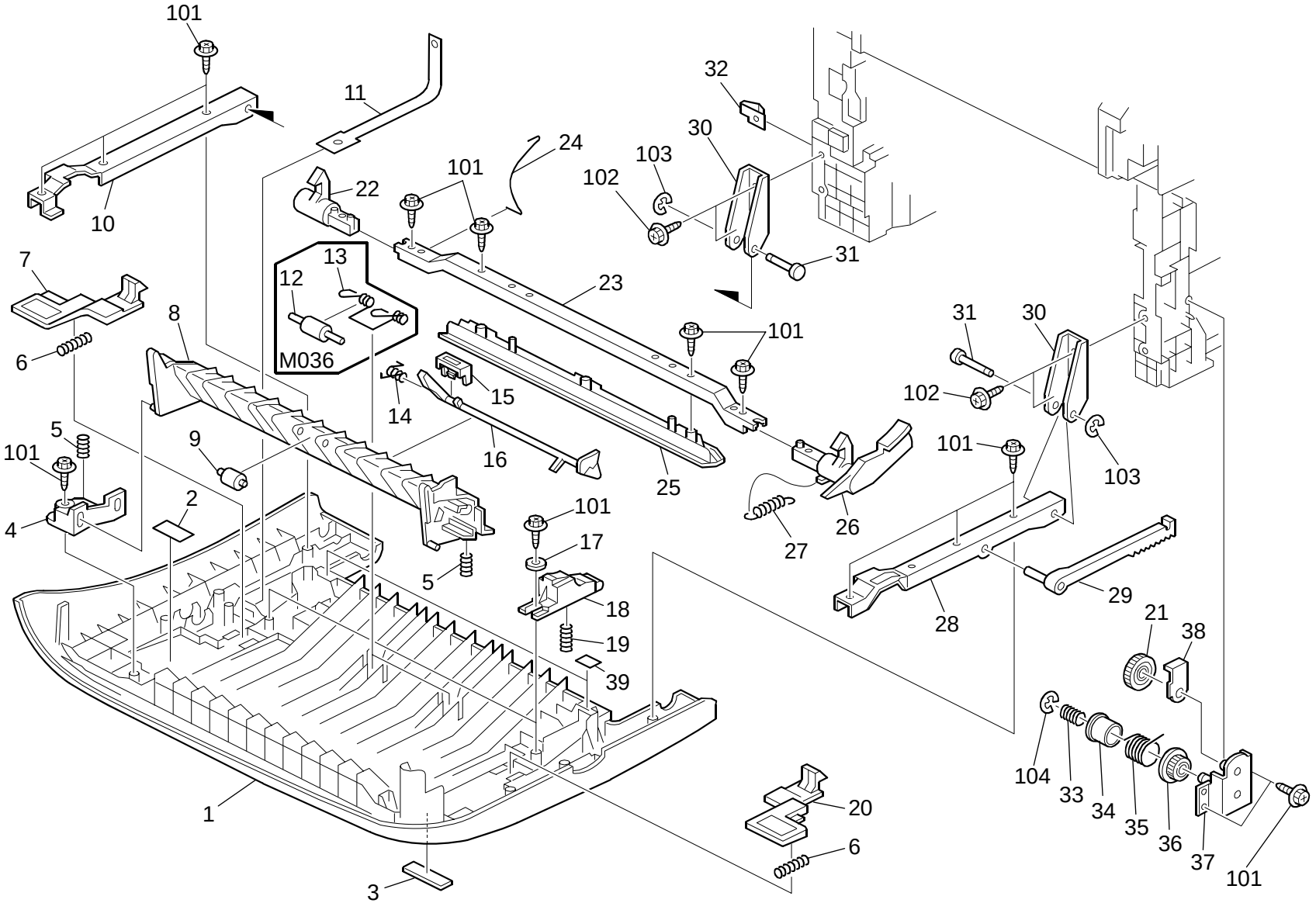


1.Exterior 1 (M035/M036)

Index No.	Part No.	Description	Q'ty Per Assembly
1	G166 1306	Left Cover - Non EU	1
1	G166 1336	Cover: Left: EU	1
2	G166 1309	Seal - 7x27x273mm	1
3	G166 1310	Seal - 5x21x273mm	1
4	G166 1319	Seal: Cover: Left: 7	2
5	G166 1311	Seal - 5x15x222mm	1
6	G166 1320	Seal: Cover: Left: 6	1
7	G166 1312	Seal - 7x25x176mm	1
8	G166 1313	Seal - 3x8x411mm	1
9	M035 1400	Operation Panel	1
9	M035 1401	Operation Panel: CHN	1
10	M035 5400	Harness: Interface: Operation Panel	1
11	G166 1277	Exit Cover	1
12	G166 1261	Inner Cover - Exit	1
13	G166 5429	Power Supply Cord - 125V 15A	1
13	G166 5430	Power Supply Cord - 250V 10A EU	1
14	G166 1260	Extend Tray	1
15	M035 1361	Decal: Name Plate - P1EB: RICOH	1
15	M035 1362	Decal: Name Plate: P1EB: NA-OEM	1
15	M035 1364	Decal: Name Plate: P1EB: NAS	1
15	M035 1365	Decal: Name Plate: P1EB: REX	1
15	M035 1366	Decal: Name Plate: P1EB: GES	1
15	M036 1361	Decal: Name Plate - P1EC: RICOH	1
15	M036 1362	Decal: Name Plate: P1EC: NA_OEM	1
15	M036 1364	Decal: Name Plate: P1EC: NAS	1
15	M036 1365	Decal: Name Plate: P1EC: REX	1
15	M036 1366	Decal: Name Plate: P1EC: GES	1
16	G166 1300	Cover: Upper	1
17	G166 5705	Shielding Plate	1
18	G166 1283	Front End Fence - Exit	1
19	G166 1281	Base - Exit End Fence	1
20	G166 1282	Rear End Fence - Exit	1
21	G166 1274	Rear Cover - NA (120V)	1
21	G166 1304	Rear Cover - EU (220V)	1
22	G166 1317	Seal - 4x30x30mm	2

Index No.	Part No.	Description	Q'ty Per Assembly
23	G166 1259	Memory Cover	1
24	G166 1308	Interface Cover	1
25	G166 1262	Cassette Cover	1
26	G166 1318	Sheet - Cassette Cover	1
27	G166 1303	Right Cover - Non EU	1
27	G166 1333	Cover: Right: EU	1
28	G166 1397	Decal: Caution: Pressure Release	1
101	0452 4010N	Binding Self-Tapping Screw: 4x10	
102	0454 3008Q	Tapping Screw: 3x8	
103	0360 3010N	Screw: M3x10	
104	0450 4010N	Tapping Screw: M4x10	
105	0450 3010N	Tapping Screw - M3x10	
106	1102 9156	Connector	
107	1105 0511	Harness Clamp - LWS-0306ZC	

2.Exterior 2 (M035/M036)

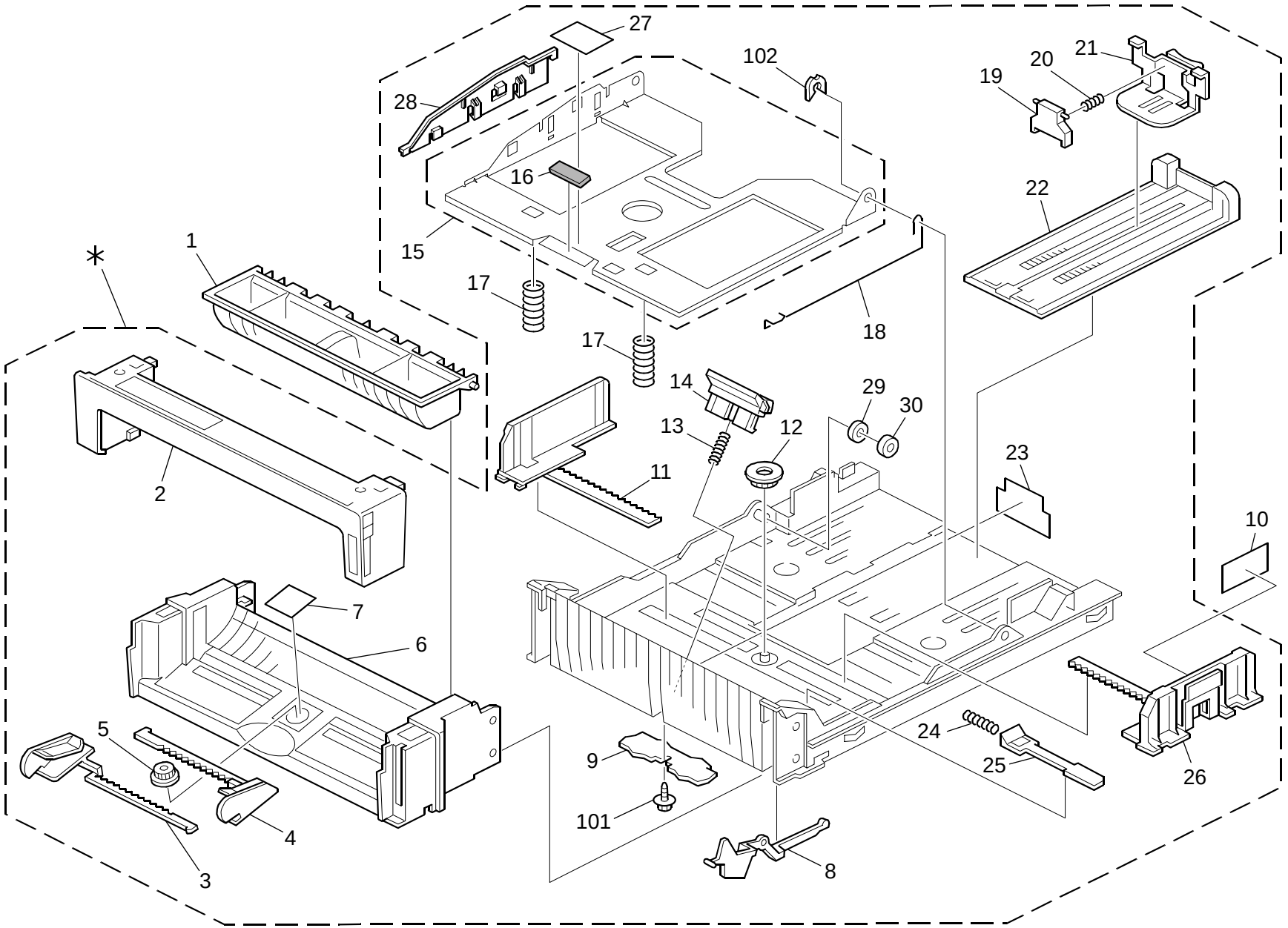


2.Exterior 2 (M035/M036)

Index No.	Part No.	Description	Q'ty Per Assembly
1	G166 3902	Front Cover	1
2	G166 4464	Decal: High temperature	1
3	G166 1268	Logo Plate - RIC	1
3	J012 1515	Logo Plate - NSA	1
3	J012 1516	Logo Plate - REX	1
3	J012 1517	Logo Plate - GES	1
4	G166 3912	Guide Plate Holder	1
5	G166 3921	Guide Plate Spring - Middle	2
6	G166 3972	Compression Spring - Grip	2
7	G166 3970	Left Hook	1
8	G166 3923	Exit Guide Plate - Middle	1
9	G166 3926	Exit Guide Roller - Middle	1
10	G166 3904	Left Frame - Front Cover	1
11	G166 3927	Stopper Band	1
12	G166 4606	Duplex Roller	2
13	G166 4607	Pressure Spring - Duplex Roller	2
14	G166 3925	Torsion Spring - Feeler	1
15	G166 3933	Stopper: Feeler: Paper Feed Sensor	1
16	G166 3924	Feeler - Paper Feed Sensor	1
17	G166 3957	Washer - 0.8x10.8mm	2
18	G166 3962	Compression Spring Holder	2
19	M035 3974	Compression Spring: Housing: Transport	2
20	G166 3971	Right Hook	1
21	G166 1093	Gear - 20Z	1
22	G166 3906	Left Lock Lever	1
23	G166 3908	Lock Lever Arm	1
24	G166 3910	Ground Wire	1
25	G166 3907	Lock Guide	1
26	G166 3905	Right Lock Lever	1
27	G166 3909	Tension Spring	1
28	G166 3903	Right Frame - Front Cover	1
29	G166 3928	Brake Rack - Front Cover	1
30	G166 1060	Base: Hinge: Cover: Front	2
31	G166 1061	Pin: Hinge	2
32	G166 1096	Ground Plate - Front	1

Index No.	Part No.	Description	Q'ty Per Assembly
33	G166 1065	Clutch Spring	1
34	G166 1066	Clutch/brake Case	1
35	G166 1064	Clutch/brake Spring	1
36	G166 1067	Gear - 14Z	1
37	G166 1008	Clutch/Brake Bracket	1
38	G166 1069	Rack Supporter	1
39	G166 3996	Decal: Insert Sub-unit: Cover	2
101	0450 3010N	Tapping Screw - M3x10	
102	0450 4010N	Tapping Screw: M4x10	
103	0720 0030E	Retaining Ring - M3	
104	0720 0040E	Retaining Ring - M4	

3.Paper Tray (M035/M036)

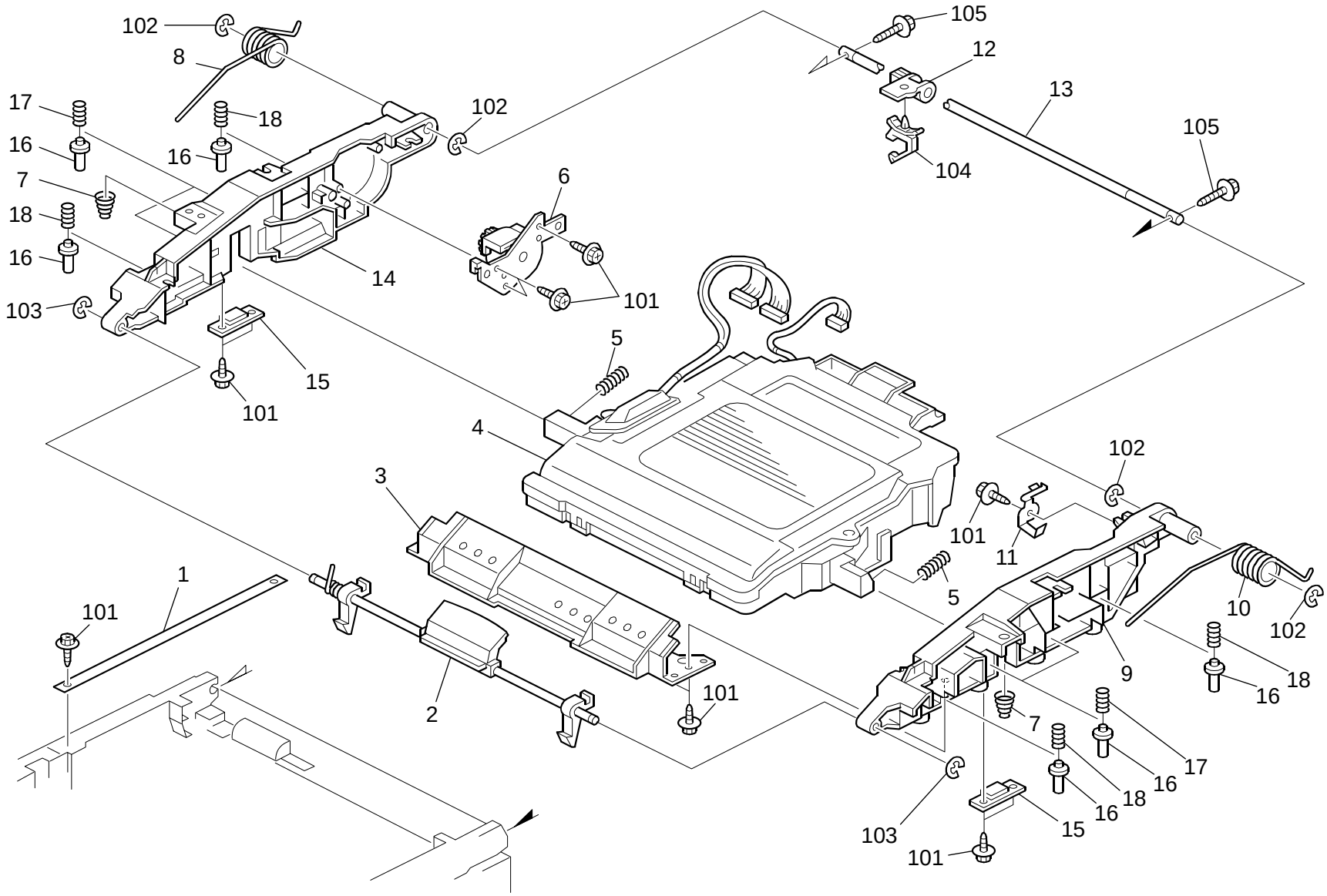


3.Paper Tray (M035/M036)

Index No.	Part No.	Description	Q'ty Per Assembly
*	M035 2527	Paper Tray Ass'y	1
1	G166 2554	Duplex Guide	1
2	G166 2553	Cassette Cover	1
3	G166 2560	Left Side Fence - Manual Feed	1
4	G166 2561	Right Side Fence - Manual Feed	1
5	A267 2869	Gear - 16Z	1
6	G166 2552	Paper Tray - Front	1
7	G166 2571	Sheet - Cassette	1
8	G166 2569	Lever Paper Volume Sensor	1
9	G166 2589	Damping Insulation	1
10	G166 2592	Side Fence Decal	1
11	G166 2555	Left Side Fence	1
12	G800 3133	Side Fence Gear	1
13	G166 2606	Compression Spring	1
14	M035 2620	Friction Pad	1
15	M018 2562	Base: Adhesion	1
16	5215 2713	Bottom Plate Pad	1
17	G166 2570	Compression Spring	2
18	G166 2572	Earth Spring	1
19	G166 2577	End Fence - Pressure	1
20	G166 2578	Compression Spring	1
21	G166 2559	End Fence	1
22	G166 2558	Extension Tray	1
23	G166 2573	Holder Sheet	1
24	G166 2568	Compression Spring	1
25	G166 2567	Bottom Plate Stopper	1
26	G166 2556	Right Side Fence	1
27	G166 2619	Sheet: Base	1
28	M018 2608	Cover: Base	1
29	AA13 2013	Spacer	1
30	D009 4511	Spacer: DIA8.0: 1.5mm	1

Index No.	Part No.	Description	Q'ty Per Assembly
101	0450 3010N	Tapping Screw - M3x10	
102	0805 0088	Retaining Ring - M6	

4.Imaging Unit (M035/M036)

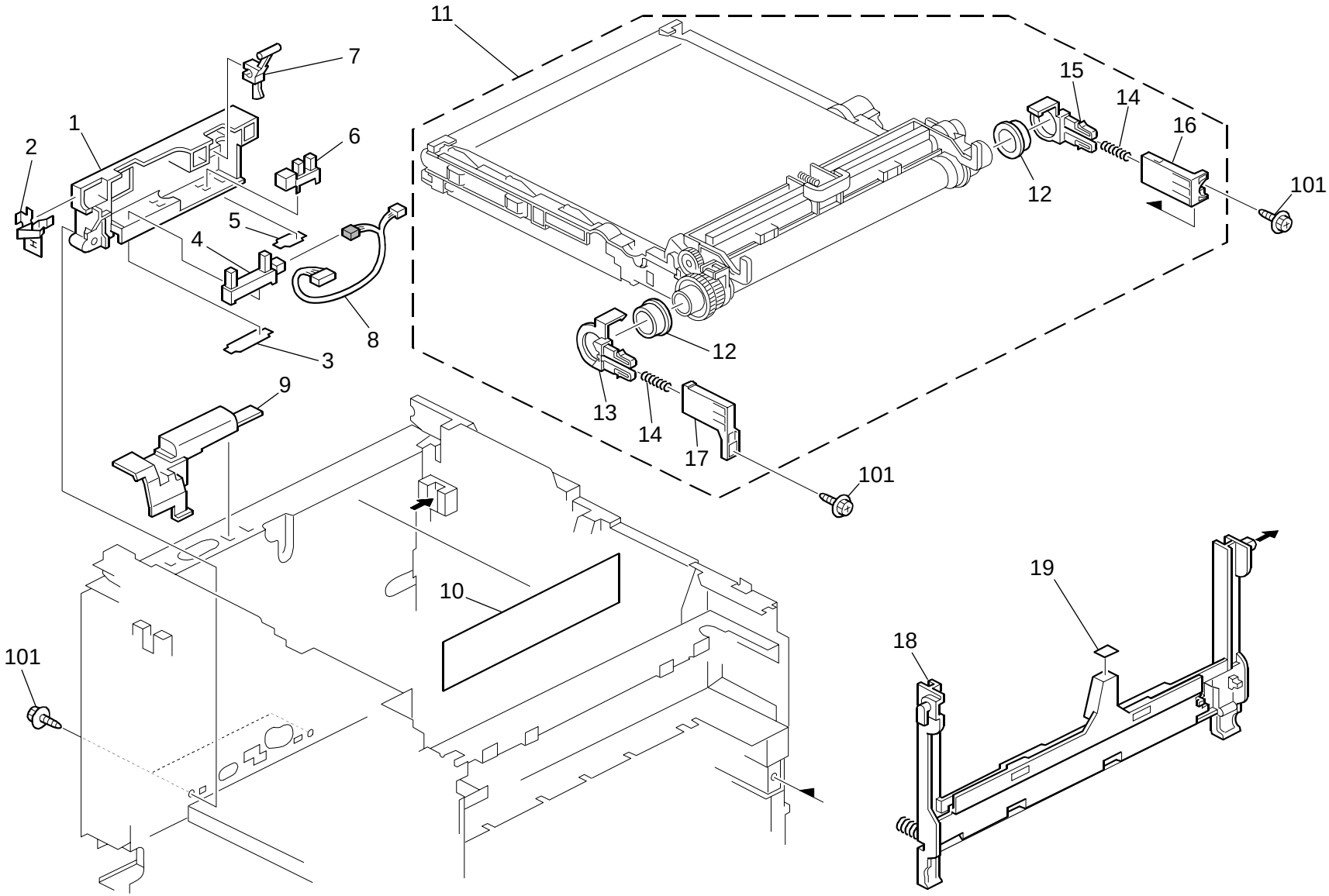


4.Imaging Unit (M035/M036)

Index No.	Part No.	Description	Q'ty Per Assembly
1	G166 1269	Stopper Band	1
2	G166 1012	Lock Shaft	1
3	G166 1088	Upper Front Duct	1
4	G166 1851	Imaging Unit: Ass'y (Non EU)	1
4	M035 1851	Imaging Unit: EU	1
5	G166 1078	Compression Spring	2
6	G166 1240	Brake: Cover: Upper	1
7	G166 1087	Spring: Cushion: Frame: Upper	2
8	G166 1081	Twist Spring - Left	1
9	G166 1071	Frame: Upper Right	1
10	G166 1080	Twist Spring - Right	1
11	G166 5706	Ground Plate: Shaft: Imaging Unit	1
12	G166 5724	Harness Clamp Holder	1
13	G166 1073	Shaft	1
14	G166 1070	Frame: Upper Left	1
15	G166 1086	Bracket: Optical Unit: Frame: Upper	2
16	G166 1089	Pin: Plate: Development Unit	8
17	G166 1072	Spring: Plate: AIO	4
18	G166 1084	Spring: Plate: AIO: Black	4

Index No.	Part No.	Description	Q'ty Per Assembly
101	0450 3010N	Tapping Screw - M3x10	
102	0720 0060E	Retaining Ring - M6	
103	0720 0040E	Retaining Ring - M4	
104	1105 0516	Clamp	
105	0450 3016N	Tapping Screw: 3x16	

5.Transfer Belt Unit (M035/M036)

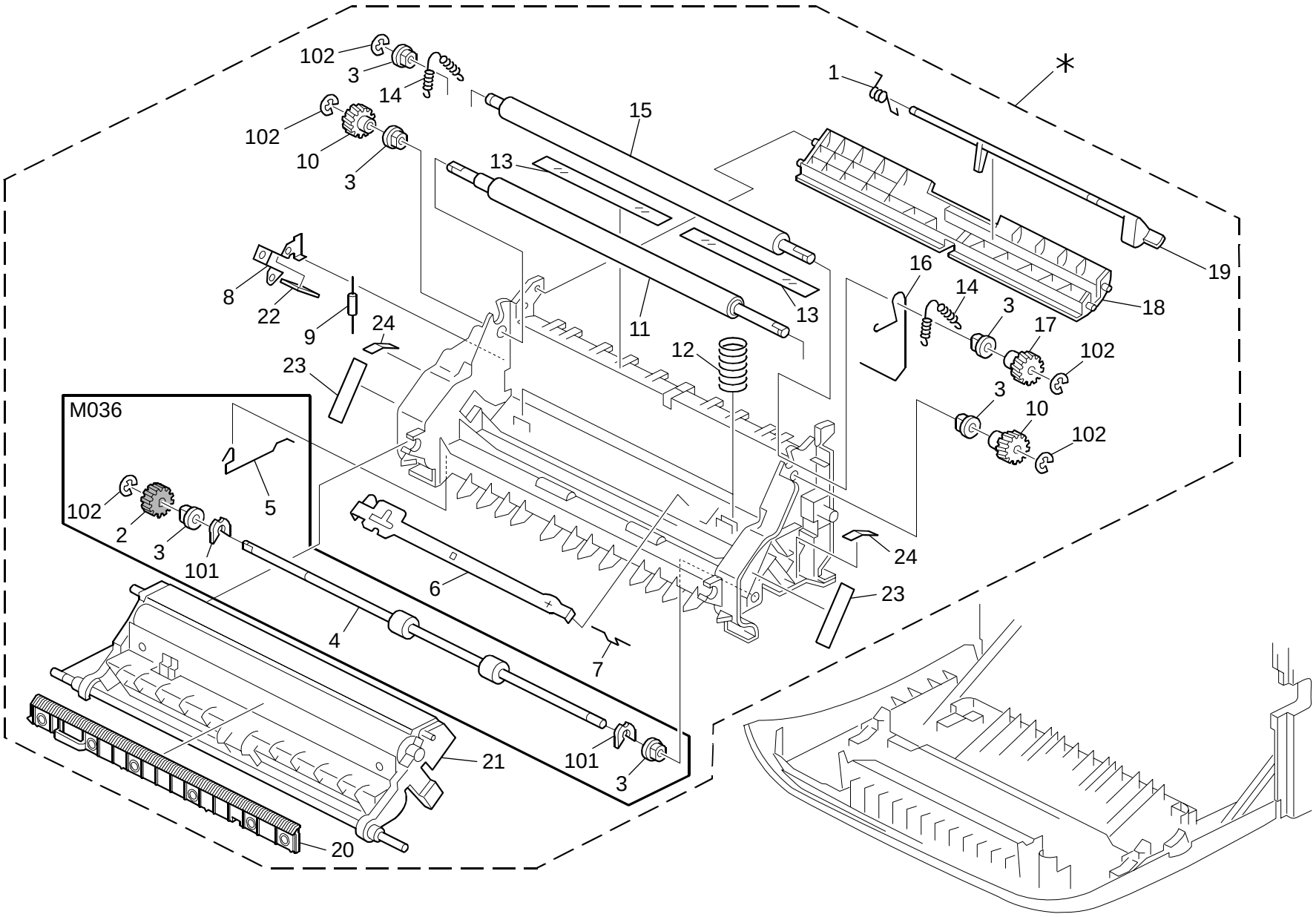


5.Transfer Belt Unit (M035/M036)

Index No.	Part No.	Description	Q'ty Per Assembly
1	G166 6587	Sensor Bracket	1
2	G166 6107	Grounding Plate	1
3	G166 6580	Stopper Sheet - Photointerruptor	1
4	G166 6584	Used Toner Sensor	1
5	G102 2789	Stopper: Photointerruptor	1
6	GW02 0020	Photointerruptor: LG248NL1	1
7	G166 6586	Feeler - Set Sensor	1
8	G166 5415	Sensor Harness	1
9	G166 5725	Harness Cover	1
10	G166 1390	Caution Decal - Transfer Belt	1
11	M018 0692	Intermediate Transfer Unit	1
12	G166 6026	Bushing - 19mm	2
13	G166 6193	Left Holder - Transfer Belt Unit	1
14	G166 6099	Compression Spring	2
15	G166 6194	Right Holder - Transfer Belt Unit	1
16	G166 6196	Right Slider - Transfer Belt Unit	1
17	G166 6197	Left Slider - Transfer Belt Unit	1
18	G166 6003	Density Sensor: Ass'y	1
19	G166 6191	Cleaner Decal - Density Sensor	1

Index No.	Part No.	Description	Q'ty Per Assembly
101	0450 3010N	Tapping Screw - M3x10	

6.Paper Transfer (M035/M036)

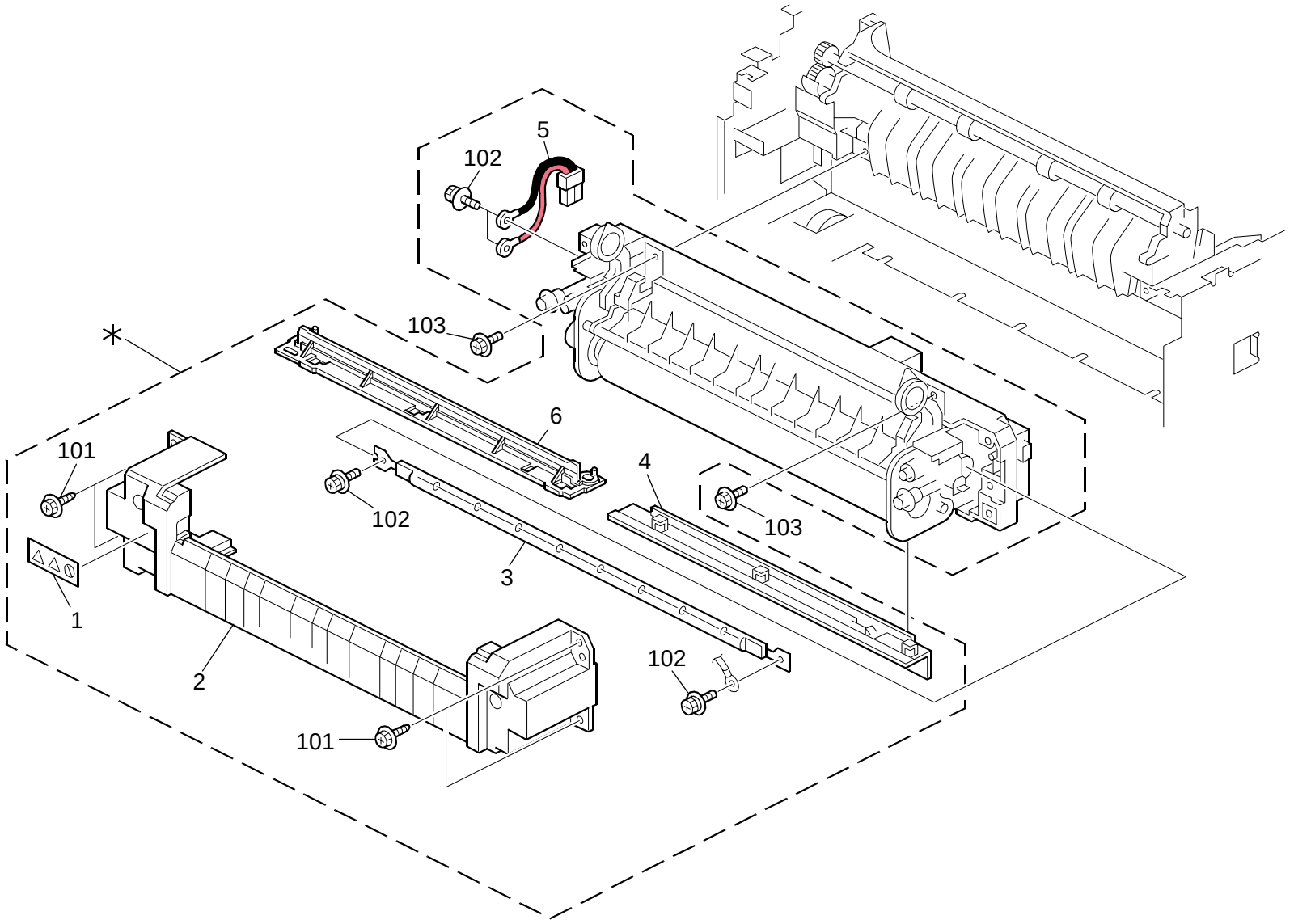


6.Paper Transfer (M035/M036)

Index No.	Part No.	Description	Q'ty Per Assembly
*	M018 3800	Housing: Transport Sub-unit: Ass'y	1
1	G166 3860	Torsion Spring	1
2	GB01 1133	Gear - 15Z	1
3	G166 3853	Bushing - 6mm	6
4	GF02 0054	Transport Roller: Duplex	1
5	G166 3998	Ground Wire- Duplex	1
6	G166 3967	Electrode Plate - Link	1
7	G166 3997	Ground Wire: Transfer/Separation	1
8	G166 3968	Electrode Plate - Contact Point	1
9	G166 3989	Resistor - 100M Ω ±10% 0.5W	1
10	G166 3865	Gear - 14Z	2
11	GF02 0000	Registration Roller - Drive	1
12	G166 3961	Compression Spring	2
13	G166 3862	Guide Sheet - Registration	2
14	G166 3855	Tension Spring	2
15	G166 3852	Registration Roller - Driven	1
16	G166 3965	Ground Wire	1
17	G166 3867	Drive Gear - 14Z	1
18	G166 3863	Registration Guide	1
19	G166 3859	Registration Sensor Feeler	1
20	G163 3979	Guide: Exit: Transfer/Separation: M	1
21	M018 3952	Transfer Roller: 2: Sub-ass'y	1
22	G166 3983	Spacer: Ground Plate: Transport	1
23	G166 3991	Grip Decal	2
24	G166 3995	Decal: Insert Sub-unit: Transport Unit	2

Index No.	Part No.	Description	Q'ty Per Assembly
101	0805 0089	Retaining Ring - M4	
102	0720 0040E	Retaining Ring - M4	

7.Fusing Unit (M035/M036)

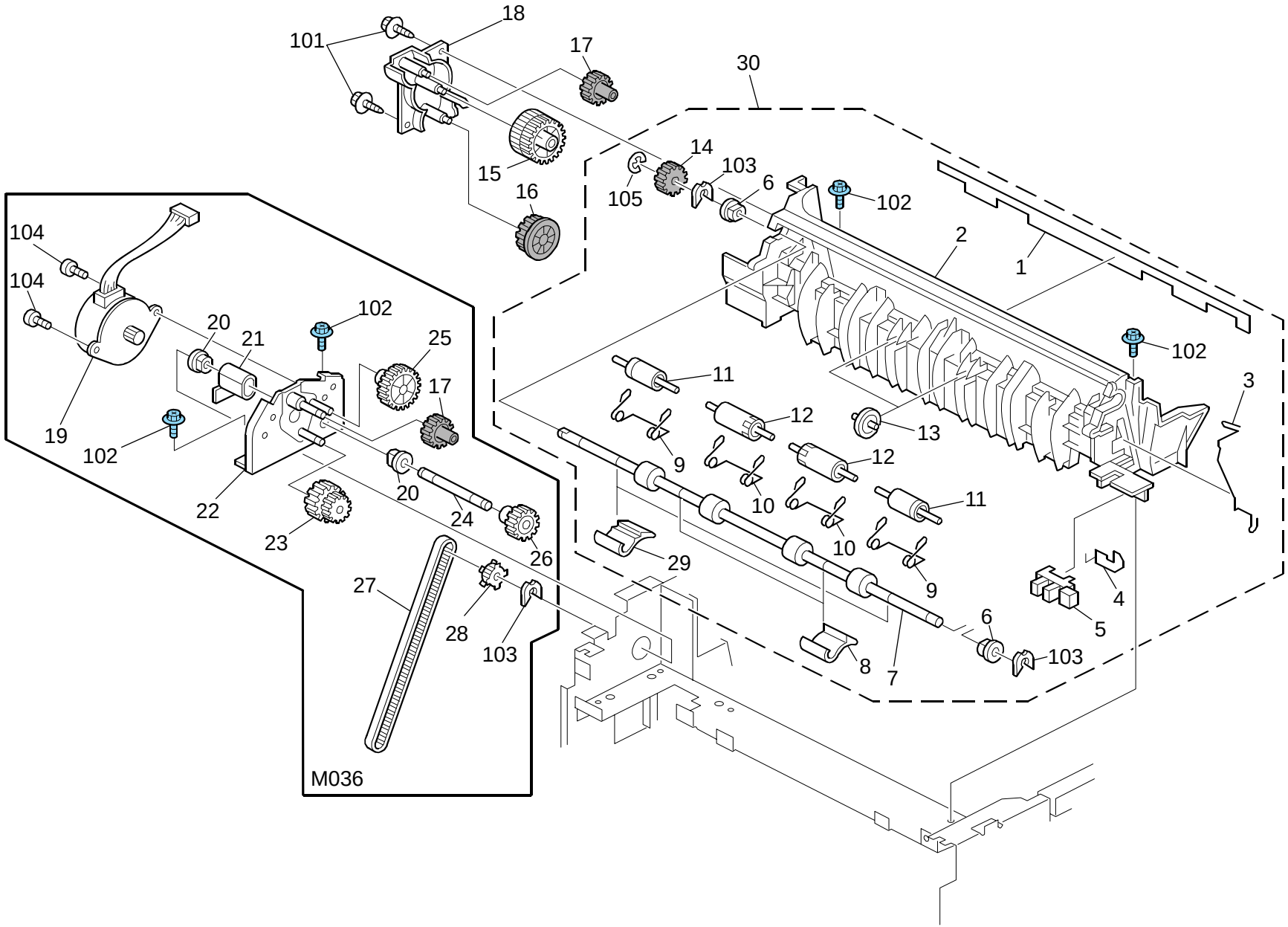


7.Fusing Unit (M035/M036)

Index No.	Part No.	Description	Q'ty Per Assembly
*	G166 4012	Fusing Unit - 120V	1
*	G166 4013	Fusing Unit - 220V	1
1	G166 4398	Decal - High Temperature	1
2	G166 4066	Front Cover - Fusing Unit	1
3	GX45 0002	Fusing Lamp - 120V 1000W	1
3	GX45 0003	Fusing Lamp - 230V 1000W	1
4	G166 4072	Fusing Entrance Guide - Lower	1
5	G166 5448	Interface Harness - 115V	1
5	G166 5449	Interface Harness - 230V	1
6	G166 4071	Fusing Entrance Guide - Upper	1

Index No.	Part No.	Description	Q'ty Per Assembly
101	0450 3010N	Tapping Screw - M3x10	
102	0804 6123	Hexagonal Bolt: W/Washer: M3x8	
103	0360 3006N	Screw - M3x6	

8.Paper Exit (M035/M036)

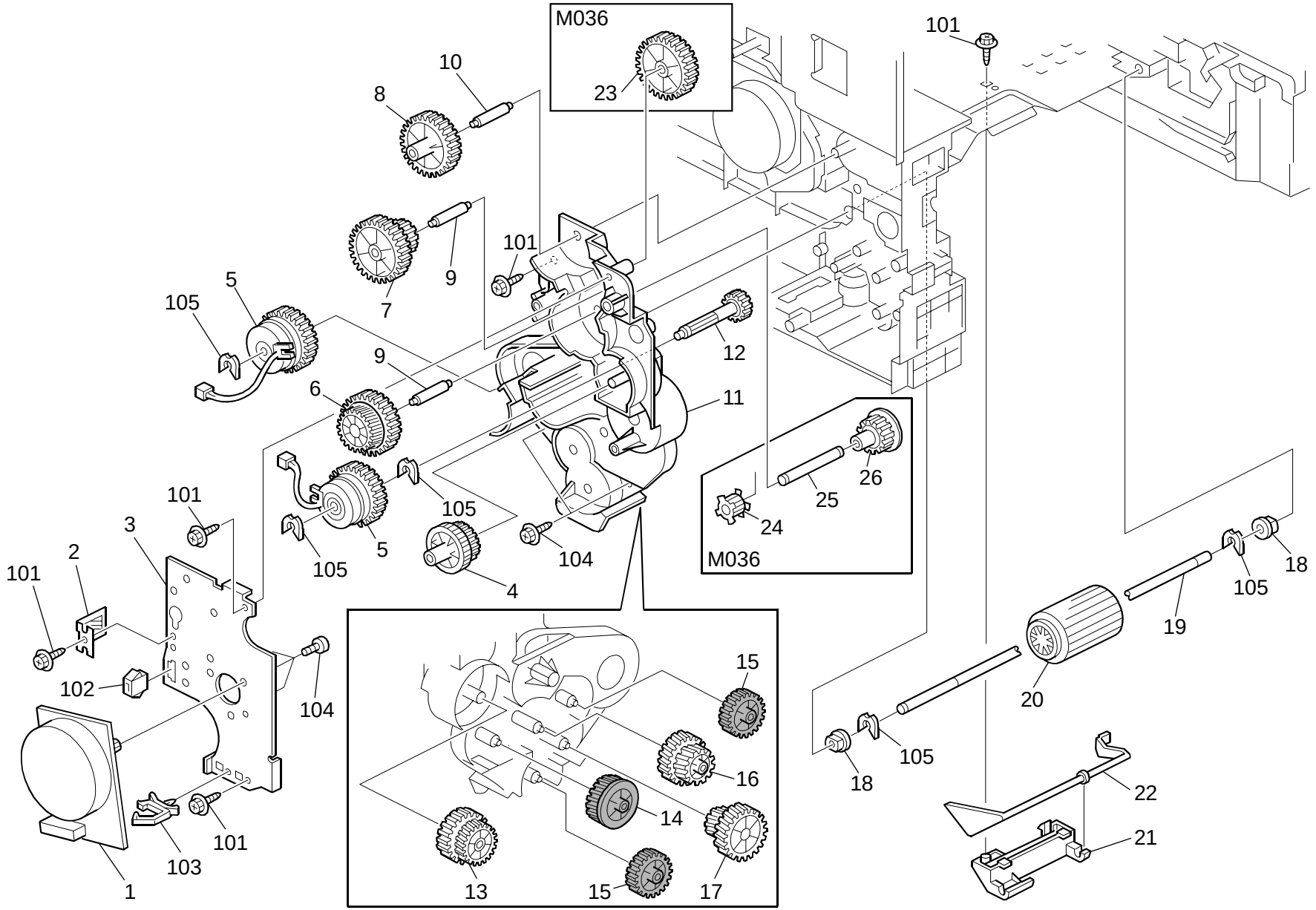


8.Paper Exit (M035/M036)

Index No.	Part No.	Description	Q'ty Per Assembly
1	GA12 0011	Discharge Brush Exit	1
2	G166 4455	Lower Exit Guide	1
3	G166 4461	Ground Wire	1
4	G166 4462	Stopper - Photointerruptor	1
5	GW02 0020	Photointerruptor: LG248NL1	1
6	GA08 2010	Bushing: DIA6: DIA10: 9	2
7	GF02 0055	Exit Roller	1
8	G166 4463	Exit Guide Plate	2
9	M018 4460	Spring: Pressure: Exit: Outer	2
10	M018 4458	Spring: Pressure: Exit: Inner	2
11	M018 4459	Roller: Driven: Exit: Outer	2
12	G166 4457	Driven Roller - Exit	2
13	G166 4456	Guide Roller - Exit	2
14	GB01 1133	Gear - 15Z	1
15	GB01 7105	Gear - 23/30Z	1
16	GB01 3064	Gear - 22Z	1
17	GB01 1111	Gear - 19Z	2
18	G166 1169	Bracket - Exit Drive Unit	1
19	GX04 1120	Stepper Motor - DC 14.8W	1
20	AA08 2101	Bushing - 6x10x6	2
21	G166 5745	Harness Cover	1
22	G166 1194	Frame - Duplex Drive Unit	1
23	GB01 7109	Gear - 16/42Z	1
24	GA14 5014	Shaft - 6 X 55.3mm	1
25	GB01 1112	Gear - 29Z	1
26	GB01 1108	Gear - 21Z	1
27	GA04 3030	Timing Belt - 60S2M280	1
28	GB03 0036	Pulley - 18T	1
29	M018 4464	Guide: Plate: Exit: Outer	2
30	M018 4450	Exit Guide Ass'y	1

Index No.	Part No.	Description	Q'ty Per Assembly
101	0450 3010N	Tapping Screw - M3x10	
102	0454 3006Q	Tapping Screw - M3x6	
103	0805 0089	Retaining Ring - M4	
104	0353 0060N	Bind Screw - M3x6	
105	0720 0040E	Retaining Ring - M4	

9.Drive Section 1 (M035/M036)

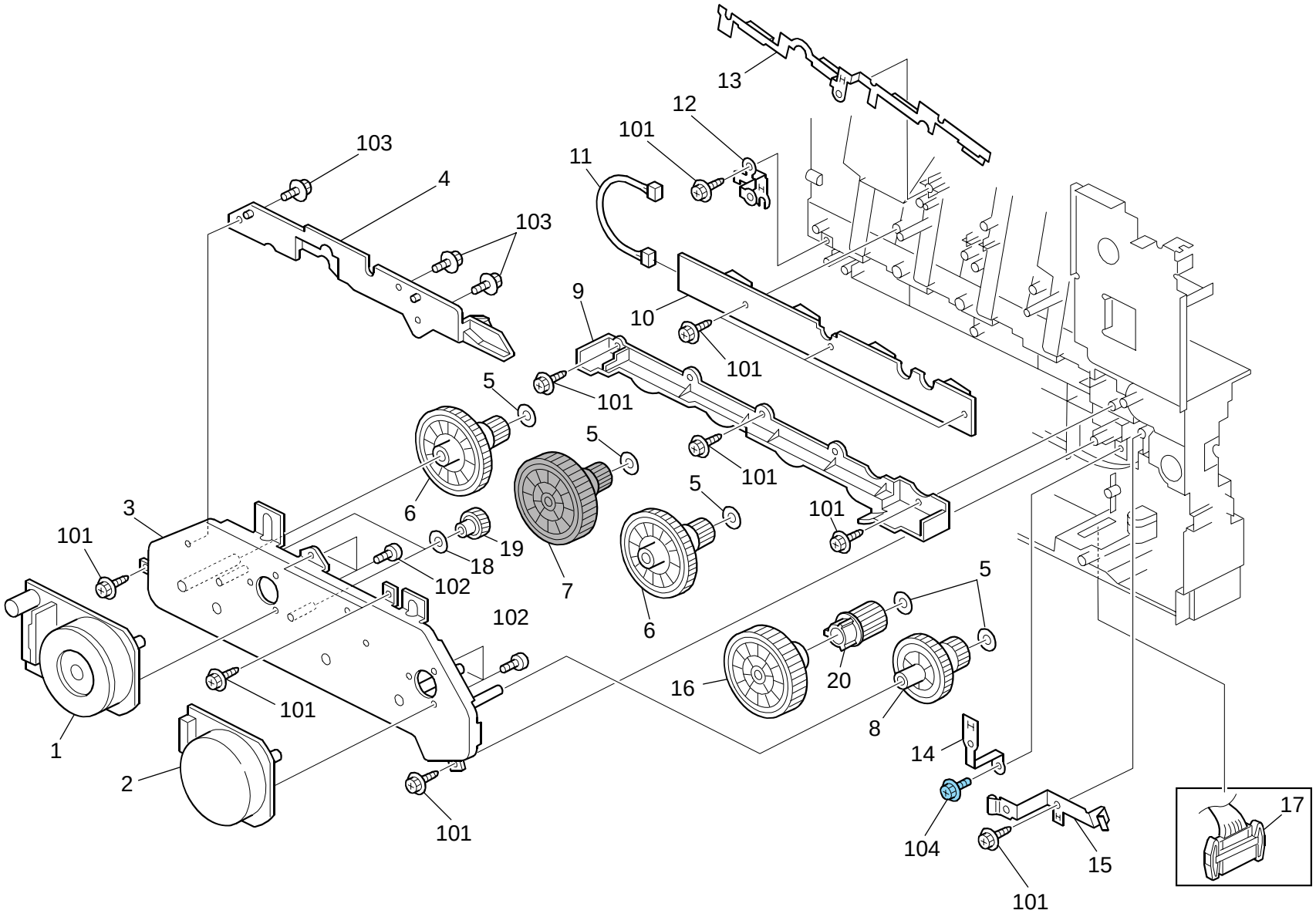


9.Drive Section 1 (M035/M036)

Index No.	Part No.	Description	Q'ty Per Assembly
1	GX06 0033	Brushless Motor: DC24V: 10W	1
2	G166 1152	Grounding Plate	1
3	G166 1151	Motor Bracket	1
4	GB01 7103	Gear - 21/45Z	1
5	GX20 1121	Magnetic Clutch	2
6	GB01 7104	Gear - 24/57Z	1
7	GB01 1101	Gear - 37Z	1
8	GB01 1102	Gear - 19/38Z	1
9	GA14 8018	Shaft - 6 x 21.9mm	2
10	GA14 8016	Shaft - 6 x 26.7mm	1
11	G166 1139	Frame - Transport Drive Unit	1
12	GB01 1118	Regist Drive Gear	1
13	GB01 1103	Gear - 28/36Z	1
14	GB01 1105	Gear - 29Z	1
15	GB01 1109	Gear - 28Z	2
16	GB01 1106	Gear - 22/31Z	1
17	GB01 1104	Gear - 20/35Z	1
18	AA08 2101	Bushing - 6x10x6	2
19	G166 2580	Shaft - Paper Feed Roller	1
20	AF03 1061	Paper Feed Roller	1
21	G166 2586	Feeler Holder	1
22	G166 2585	Feeler - Paper End Sensor	1
23	GB01 1110	Gear - 31Z	1
24	GB03 0036	Pulley - 18T	1
25	GA14 5013	Shaft - 6 x 39.5mm	1
26	GB01 1108	Gear - 21Z	1

Index No.	Part No.	Description	Q'ty Per Assembly
101	0450 3010N	Tapping Screw - M3x10	
102	1102 4473	CT Connector - 2P	
103	1105 0516	Clamp	
104	0353 0040N	Screw - M3x4	
105	0805 0089	Retaining Ring - M4	

10.Drive Section 2 (M035/M036)

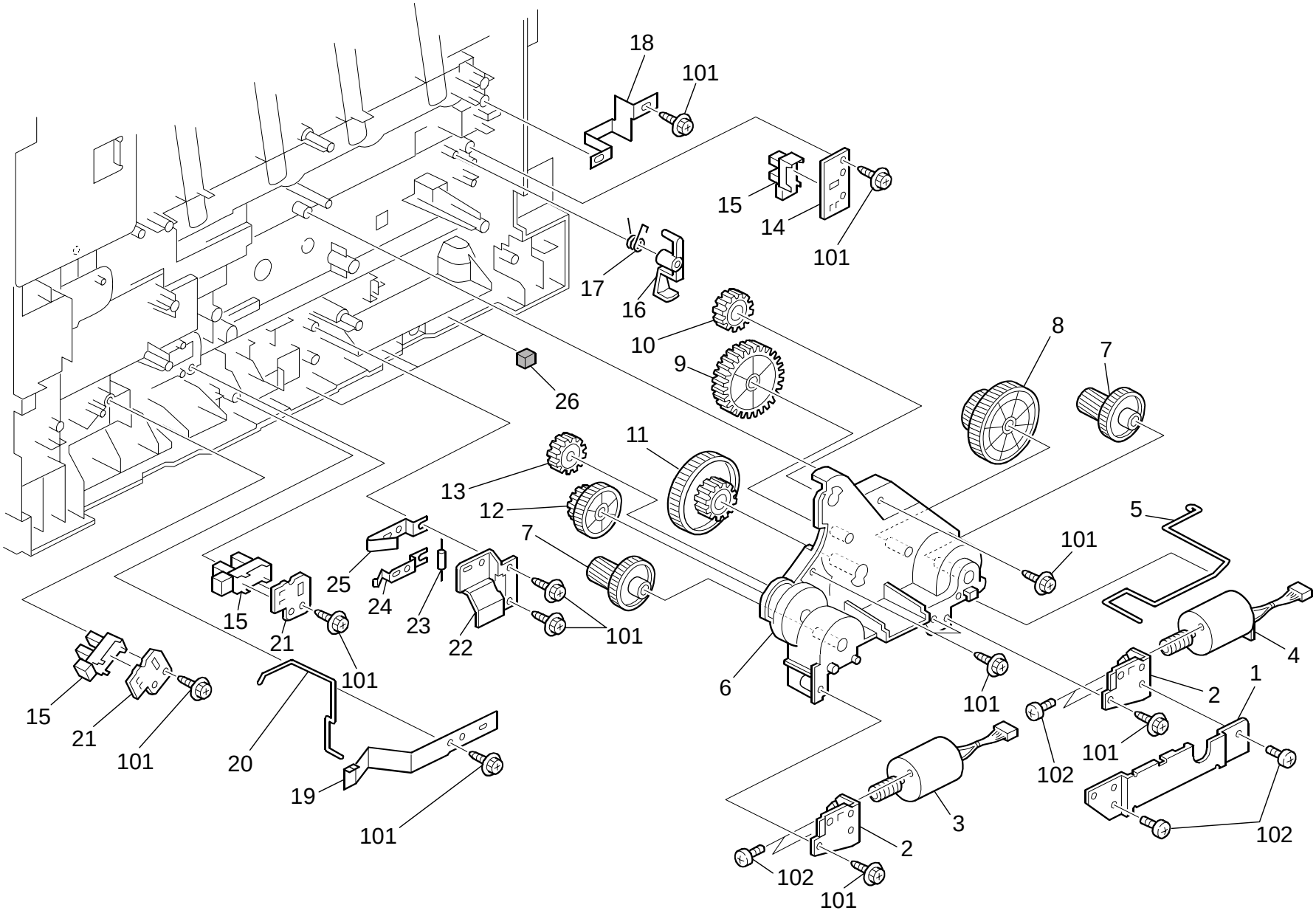


10.Drive Section 2 (M035/M036)

Index No.	Part No.	Description	Q'ty Per Assembly
1	GX06 0036	Brushless Motor: DC24V: 40W	1
2	GX06 0034	Brushless Motor: DC24V: 24W	1
3	M018 1102	Bracket: Motor: Ass'y	1
4	G166 1104	Shielding Plate	1
5	GA13 2101	Spacer - 0.13 x 12mm	5
6	GB01 7101	Gear - 22/99Z	2
7	GB01 7110	Gear - 22/99Z Cyan	1
8	GB01 7102	Gear - 27/76Z	1
9	G166 1112	Gear Cover	1
10	G166 5280	Terminal Board	1
11	G166 5427	Harness - EGB-ID	1
12	G166 1097	Ground Plate - Left	1
13	G166 1090	Ground Plate - DCHIP	1
14	G166 1091	Ground Plate - Power Supply Unit	1
15	G166 5761	Ground Plate: Registration Roller: 2	1
16	GB01 0121	Gear: AIO: Drive: 1	1
17	G166 5431	Harness - Motor/Clutch	1
18	GA13 2102	Spacer - 0.13 x 10mm	2
19	GB01 2101	Gear - 33Z	2
20	GB01 7120	Gear: AIO: Joint: 2	1

Index No.	Part No.	Description	Q'ty Per Assembly
101	0450 3010N	Tapping Screw - M3x10	
102	0353 0040N	Screw - M3x4	
103	0360 3006N	Screw - M3x6	
104	0454 3008Q	Tapping Screw: 3x8	

11.Drive Section 3 (M035/M036)

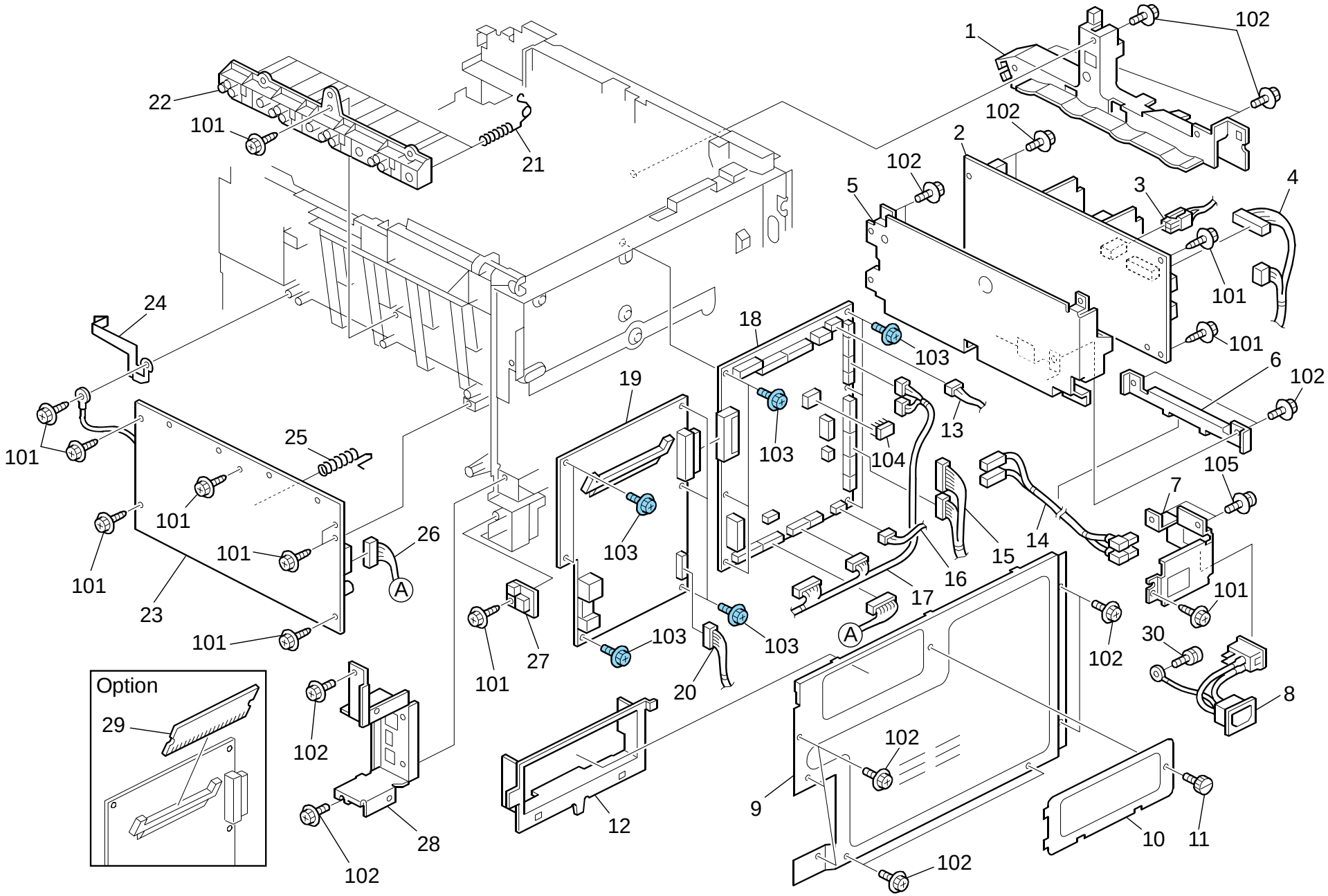


11.Drive Section 3 (M035/M036)

Index No.	Part No.	Description	Q'ty Per Assembly
1	G166 1125	Shielding Plate	1
2	G166 1119	Motor Bracket	2
3	G166 1135	Motor - DC24V 1.6W	1
4	G166 1131	DC Motor - DC24V 5.3W	1
5	G166 1118	Grounding Wire	1
6	G166 1123	Frame - On-Off Drive Unit	1
7	GB01 7111	Gear - 16/51Z	2
8	GB01 7113	Gear - 40/65Z	1
9	GB01 3114	Gear - 35Z	1
10	GB01 3115	Gear - 21Z	1
11	GB01 7112	Gear - 21/73Z	1
12	GB01 7116	Gear - 17/42Z	1
13	GB01 3117	Gear - 19Z	1
14	G166 6103	Sensor Holder	1
15	GW02 0020	Photointerruptor: LG248NL1	3
16	G166 6046	Sensor Feeler	1
17	G166 6045	Spring - Feeler	1
18	G166 1083	Grounding Plate - High Voltage	1
19	G166 2583	Spring Plate: Paper Tray: Positioning	1
20	G166 2582	Grounding Spring	1
21	G163 1068	Bracket - Photointerruptor	2
22	G166 2596	Holder: Resistor: Base	1
23	G166 3993	Resistor - 100M Ω ±10% 0.5W	1
24	G166 2597	Spring Plate: Resistor: Base: Lower	1
25	G166 2598	Spring Plate: Resistor: Base: Upper	1
26	G166 5726	Cushion - Harness	3

Index No.	Part No.	Description	Q'ty Per Assembly
101	0450 3010N	Tapping Screw - M3x10	
102	0353 0030N	Screw: M3x3	

12.Electrical Section 1 (M035/M036)

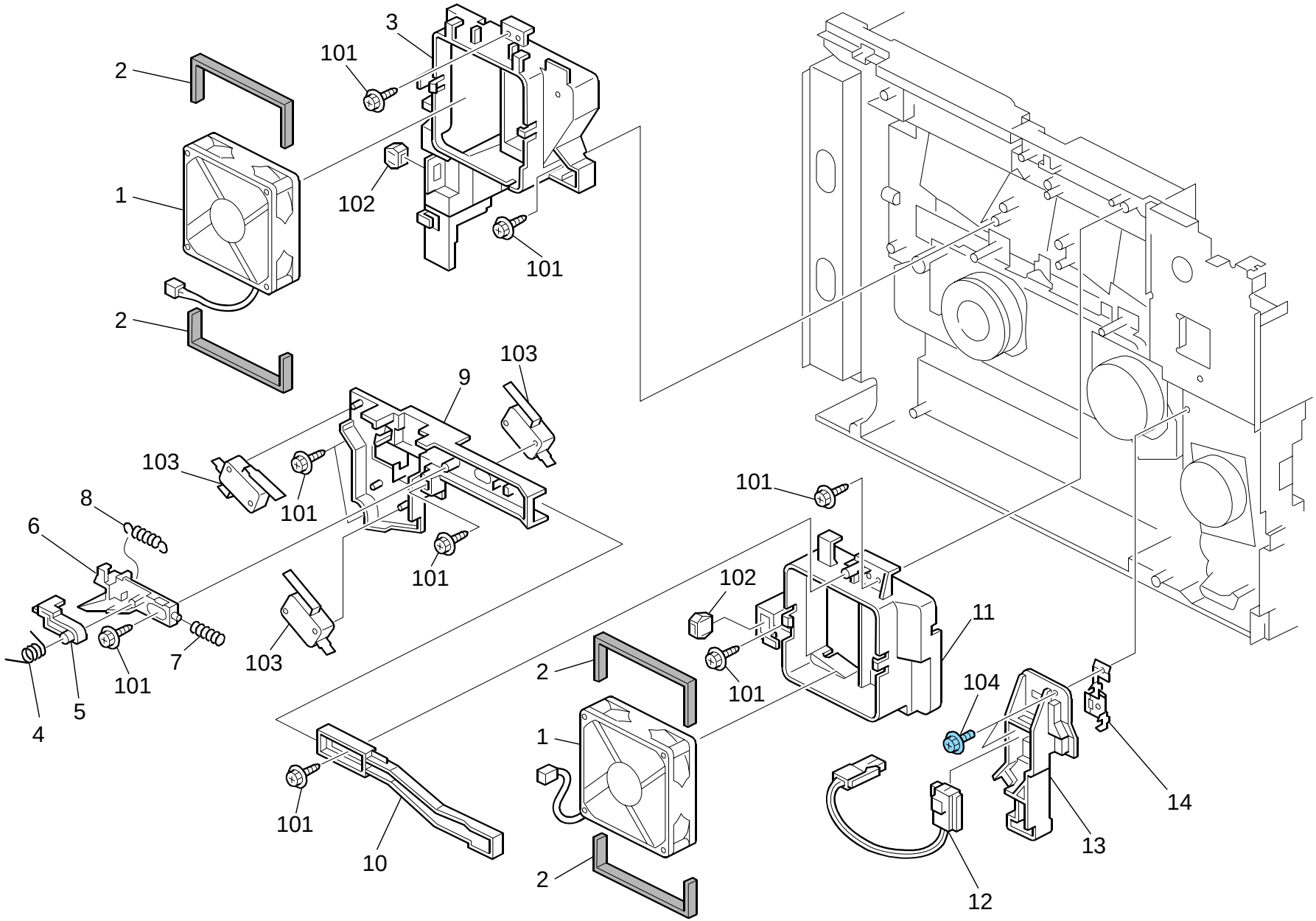


12.Electrical Section 1 (M035/M036)

Index No.	Part No.	Description	Q'ty Per Assembly
1	G166 1110	Harness Guide	1
2	GZ23 0035	Power Supply Unit - 115V	1
2	GZ23 0034	Power Supply Unit - 230V	1
3	G166 5426	Harness - PSU-Safety	1
4	G166 5444	Harness - EGB-PSU	1
5	G166 5700	Bracket - Power Supply Unit	1
6	G166 5701	Harness Cover - Power Supply Unit	1
7	G166 5715	Bracket - Main Switch	1
8	G166 5425	Harness - Power Supply Unit	1
9	G166 5740	Controller Cover	1
10	G166 5712	Memory Cover	1
11	M018 5754	Screw	1
12	G166 5746	Memory Stopper	1
13	G166 5454	Harness - EGB-Fan	1
14	G166 5452	AC Harness	1
15	G166 5431	Harness - Motor/Clutch	1
16	G166 5412	Harness - EGB-PSU	1
17	G166 5433	Harness - Sensor/Motor/TH	1
18	M035 5121	PCB: EGB (M035)	1
18	M035 5126	PCB: EGB-PP1ED: Ass'y (M036)	1
19	M035 5680	PCB: CTL: PCL	1
20	G166 5439	Harness - Operation Panel (M035)	1
20	G166 5432	Harness - EGB-Duplex (M036)	1
21	G166 5716	Terminal: AIO	12
22	G163 5731	Base: High Voltage: 3	1
23	GZ30 0003	Power Pack	1
24	G166 5708	2nd Terminal - Transfer	1
25	G166 5738	1st Terminal - Transfer	1
26	G166 5414	Harness - EGB-HVP	1
27	AW14 0015	Temperature & Humidity Sensor	1
28	G166 5743	Bracket - Control Board (M035)	1
28	G166 5729	Control Board Bracket (M036)	1
29	G891 5690	DDR-DIMM - 256MB	1
30	AA14 3592	Screw- M4x6	1

Index No.	Part No.	Description	Q'ty Per Assembly
101	0450 3010N	Tapping Screw - M3x10	
102	0360 3006N	Screw - M3x6	
103	0454 3006Q	Tapping Screw - M3x6	
104	1407 6657	EEPROM: BR93L76-W	
105	0954 3008N	Screw - M3x8	

13.Electrical Section 2 (M035/M036)

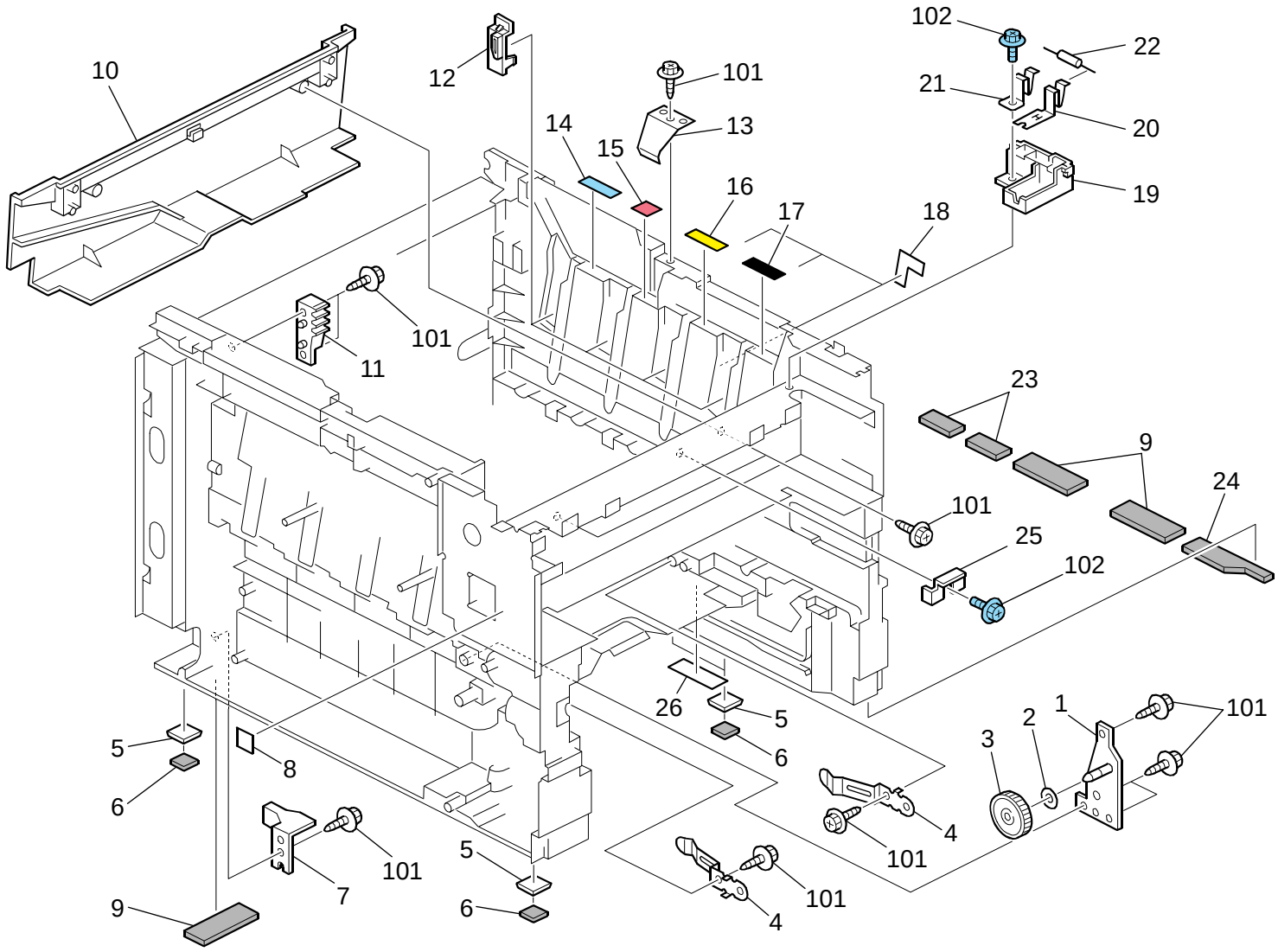


13.Electrical Section 2 (M035/M036)

Index No.	Part No.	Description	Q'ty Per Assembly
1	AX64 0199	Fan: MM80: 25mm: DC 2.16W	2
2	G163 5728	Seal: Fan: 2	4
3	G166 1059	Duct	1
4	G166 5734	Torsion Spring - Safety Switch	1
5	G166 5747	Arm - Safety Switch	1
6	G166 5733	Link - Safety Switch	1
7	G166 5737	Compression Spring - Safety Switch	1
8	G166 5736	Tension Spring - Safety Switch	1
9	G166 5732	Bracket Safety Switch	1
10	G166 5748	Lever - Safety Switch	1
11	G166 1058	Exit Duct	1
12	G166 5445	PSU Interface Harness - 115V	1
12	G166 5446	PSU Interface Harness - 230V	1
13	G166 5751	Connector Holder - Fusing	1
14	G166 5759	Ground Plate - Fusing	1

Index No.	Part No.	Description	Q'ty Per Assembly
101	0450 3010N	Tapping Screw - M3x10	
102	1102 4559	Connector - 3P	
103	1204 2612	Micro Switch: D3V-16506-3C25	
104	0454 3008Q	Tapping Screw: 3x8	

14.Frame Section (M035/M036)



14.Frame Section (M035/M036)

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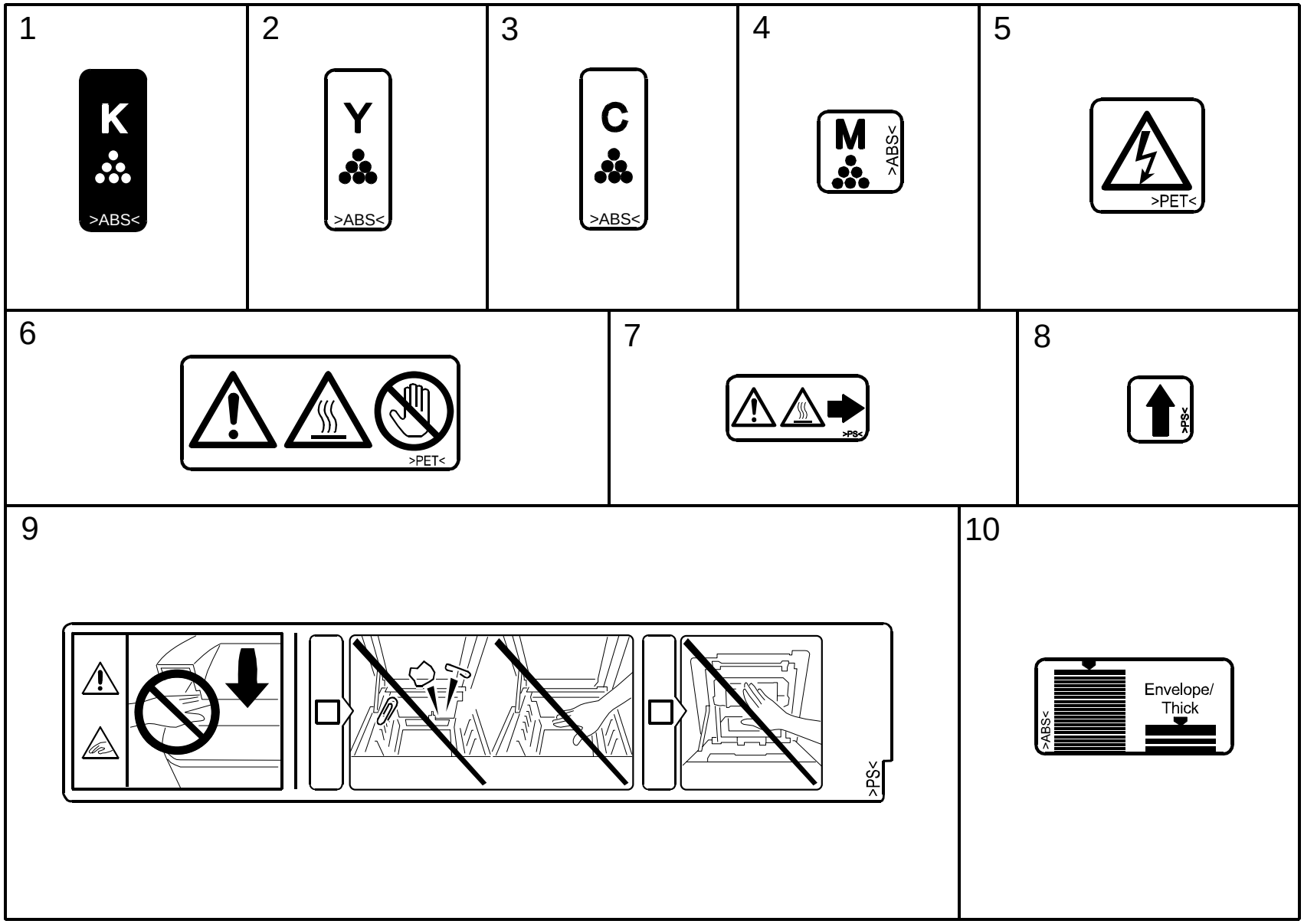
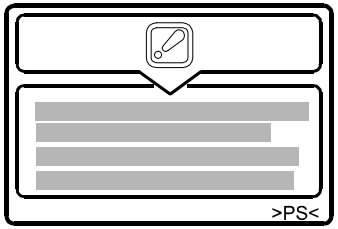
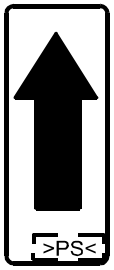
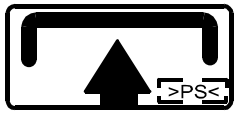
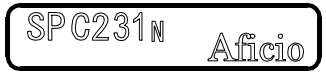
Index No.	Part No.	Description	Q'ty Per Assembly
1	G166 1111	Frame - Transfer Drive Unit	1
2	GA13 2101	Spacer - 0.13 x 12mm	1
3	GB01 2102	Gear - 54Z	1
4	G166 6592	Spring Plate - Collection Bottle	2
5	G166 1047	Spacer- Rubber Foot	4
6	G166 1048	Rubber Foot	4
7	G166 2588	Holder: Paper Tray: Positioning	1
8	G166 1389	Decal - High Voltage	1
9	G166 1315	Lower Seal - 2	3
10	G166 1068	Fusing Duct	1
11	G166 1342	Rack: Damper	1
12	G163 1098	Key: AIO: Main Ass'y: A	4
13	G166 1085	Spring Plate: LSU: Positioning	1
14	G166 3333	Decal - Cyan	1
15	G166 1046	Color Decal - Magenta	1
16	G166 3334	Decal - Yellow	1
17	G166 3331	Decal - Black	1
18	G166 1323	Sheet: Frame: Right	3
19	G166 5756	Resistor holder - Exit	1
20	G166 5757	Ground Plate - Input	1
21	G166 5758	Ground Plate - Output	1
22	M035 3994	Resistor: Earth: Exit: Discharge Section	1
23	G166 1316	Lower Seal - 3	2
24	G166 1314	Lower Seal - 1	1
25	G166 1343	Key: Fusing	1
26	G166 1095	Sheet: Base: Frame	1

Index No.	Part No.	Description	Q'ty Per Assembly
101	0450 3010N	Tapping Screw - M3x10	
102	0454 3006Q	Tapping Screw - M3x6	

15.Decals and Documents (M035/M036)



15.Decals and Documents (M035/M036)

11 	12 	
13 	14 	
15 	16 	17 
18 	19 	20 

15.Decals and Documents (M035/M036)

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Index No.	Part No.	Description	Q'ty Per Assembly
1	G166 3331	Decal - Black	1
2	G166 3334	Decal - Yellow	1
3	G166 3333	Decal - Cyan	1
4	G166 1046	Color Decal - Magenta	1
5	G166 1389	Decal - High Voltage	1
6	G166 4398	Decal - High Temperature	1
7	G166 4464	Decal: High temperature	1
8	G166 6191	Cleaner Decal - Density Sensor	1
9	G166 1390	Caution Decal - Transfer Belt	1
10	G166 2592	Side Fence Decal	1
11	G166 1397	Decal: Caution: Pressure Release	1
12	G166 3991	Grip Decal	1
13	G166 3995	Decal: Insert Sub-Unit: Transport Unit	1
14	G166 3996	Decal: Insert Sub-Unit: Cover	1
15	M035 1361	Decal: Name Plate - P1EB: RICOH	1
16	M035 1362	Decal: Name Plate: P1EB: NA-OEM	1
17	M035 1364	Decal: Name Plate: P1EB: NAS	1
17	M035 1365	Decal: Name Plate: P1EB: REX	1
17	M035 1366	Decal: Name Plate: P1EB: GES	1
18	M036 1361	Decal: Name Plate - P1EC: RICOH	1
19	M036 1362	Decal: Name Plate: P1EC: NA_OEM	1
20	M036 1364	Decal: Name Plate: P1EC: NAS	1
20	M036 1365	Decal: Name Plate: P1EC: REX	1
20	M036 1366	Decal: Name Plate: P1EC: GES	1

Index No.	Part No.	Description	Q'ty Per Assembly

M035/M036
PARTS INDEX

This section instructs you as to the numbers and names of parts on this machine.

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G166 3290	Decal - Black	29 - 17
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