

Installation Procedure

iR C3100 Series

iR3100CN

Canon

Application

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Printed in Japan

Caution

Use of this manual should be strictly supervised to avoid disclosure of confidential information.



Symbols Used

This documentation uses the following symbols to indicate special information:

Symbol	Description
	Indicates an item of a non-specific nature, possibly classified as Note, Caution, or Warning.
	Indicates an item requiring care to avoid electric shocks.
	Indicates an item requiring care to avoid combustion (fire).
	Indicates an item prohibiting disassembly to avoid electric shocks or problems.
	Indicates an item requiring disconnection of the power plug from the electric outlet.
 Memo	Indicates an item intended to provide notes assisting the understanding of the topic in question.
 REF.	Indicates an item of reference assisting the understanding of the topic in question.
	Provides a description of a service mode.
	Provides a description of the nature of an error indication.

The following rules apply throughout this Service Manual:

1. Each chapter contains sections explaining the purpose of specific functions and the relationship between electrical and mechanical systems with reference to the timing of operation.

In the diagrams,  represents the path of mechanical drive; where a signal name accompanies the symbol, the arrow  indicates the direction of the electric signal.

The expression "turn on the power" means flipping on the power switch, closing the front door, and closing the delivery unit door, which results in supplying the machine with power.

2. In the digital circuits, '1' is used to indicate that the voltage level of a given signal is "High", while '0' is used to indicate "Low". (The voltage value, however, differs from circuit to circuit.) In addition, the asterisk (*) as in "DRMD*" indicates that the DRMD signal goes on when '0'.

In practically all cases, the internal mechanisms of a microprocessor cannot be checked in the field. Therefore, the operations of the microprocessors used in the machines are not discussed: they are explained in terms of from sensors to the input of the DC controller PCB and from the output of the DC controller PCB to the loads.

The descriptions in this Service Manual are subject to change without notice for product improvement or other purposes, and major changes will be communicated in the form of Service Information bulletins.

All service persons are expected to have a good understanding of the contents of this Service Manual and all relevant Service Information bulletins and be able to identify and isolate faults in the machine."

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Chapter 1 Installation Procedure

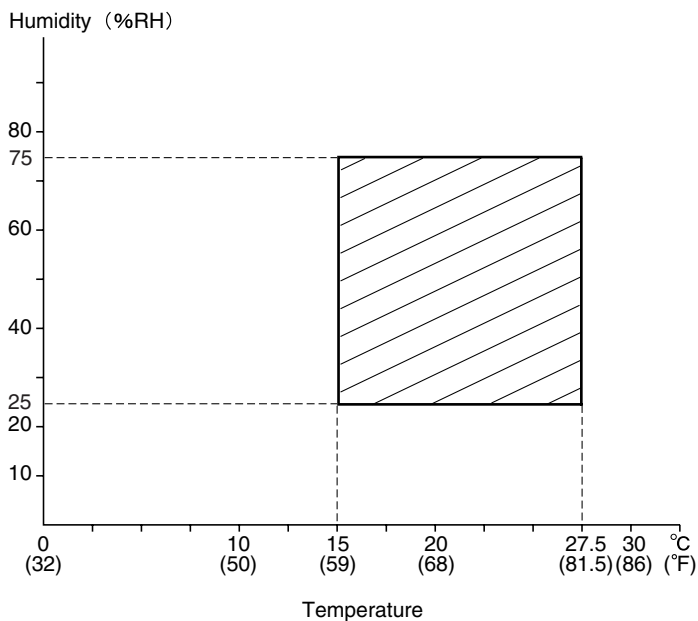
1.1 Making Pre-Checks

1.1.1 Selecting the Site of Installation

0001-7300

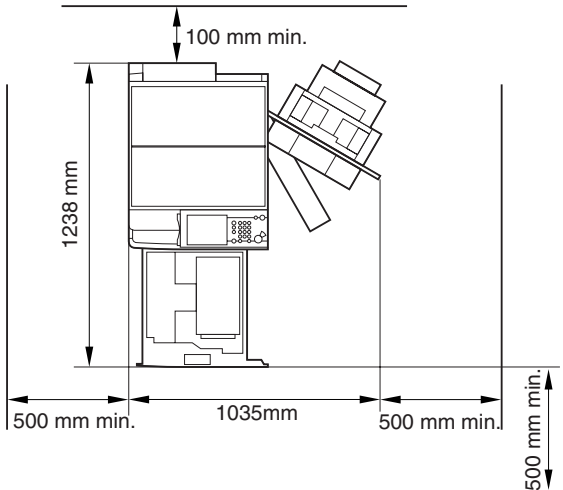
Select the site of installation against the following requirements; if possible, visit the user's before delivery of the machine:

- 1) There must be a power outlet properly grounded and rated as indicated (+, -10%) for exclusive use by the machine.
- 2) The environment of the room must be as indicated in the following diagram, and the machine must not be installed near a water faucet, water boiler, humidifier, or refrigerator:



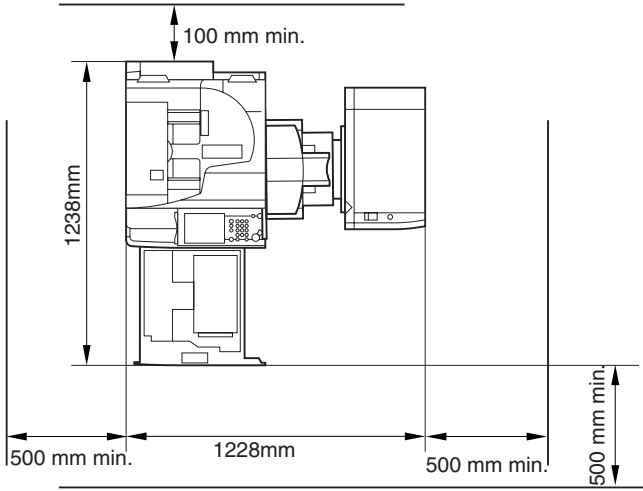
F-1-1

- 3) The machine must not be installed near a source of fire or in an area subject to dust or ammonium gas.
If the area is exposed to direct rays of the sun, provide curtains to the window.
- 4) The room must be well ventilated. (The level of ozone generated by the machine in use will not affect the individuals around it. However, some may find its odor to be unpleasant, as when working in a poorly ventilated room.)
- 5) The floor of the machine must be level so that the feet of the machine will remain in contact and the machine will remain level.
- 6) The machine must be at least 10 cm away from any wall, permitting unobstructed use.



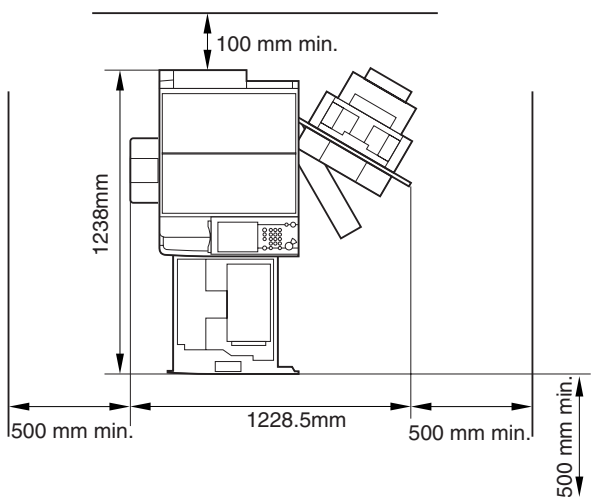
F-1-2

Without a Finisher or Side Paper Deck-P1 Installed



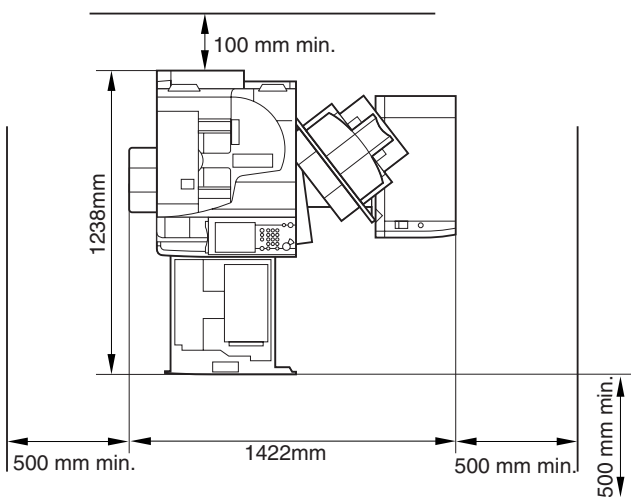
F-1-3

With the Side Paper Deck-Q1 Installed



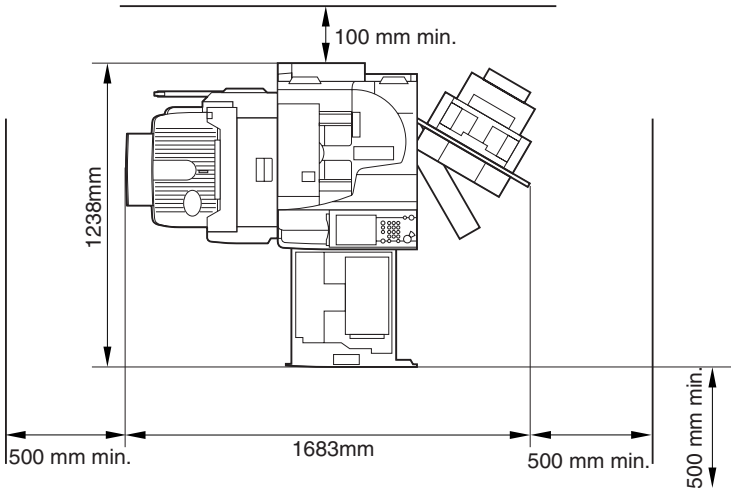
F-1-4

With the Finisher-P1 Installed



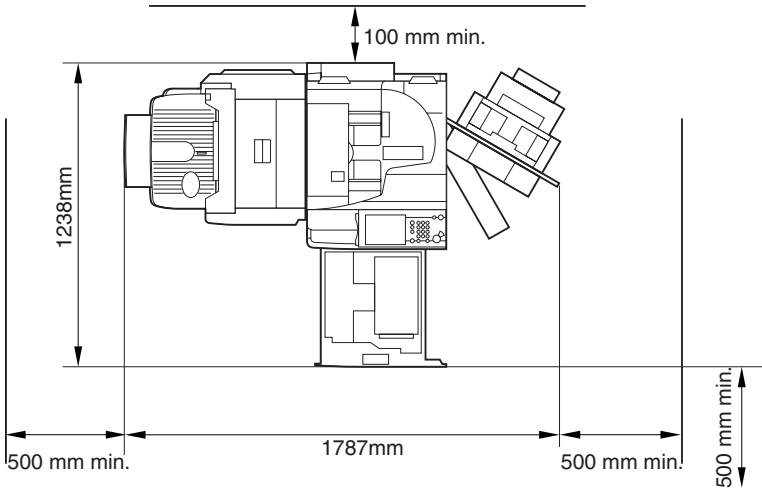
F-1-5

With the Side Paper Deck-Q1 and Finisher-P1 Installed



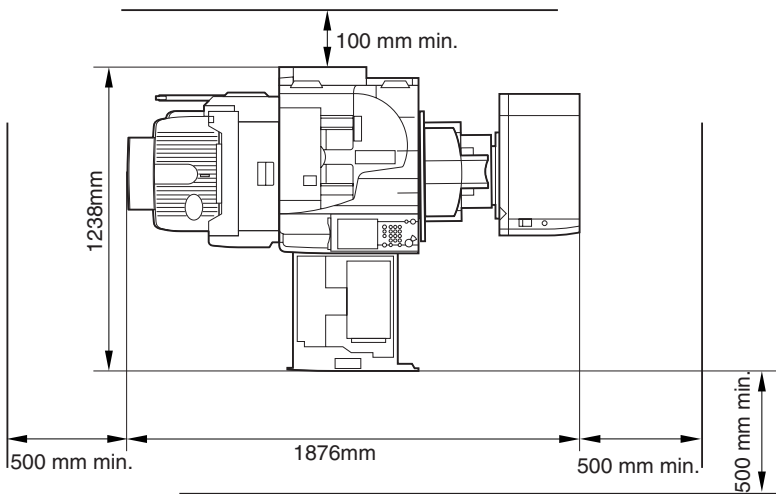
F-1-6

With the Finisher-Q1 Installed



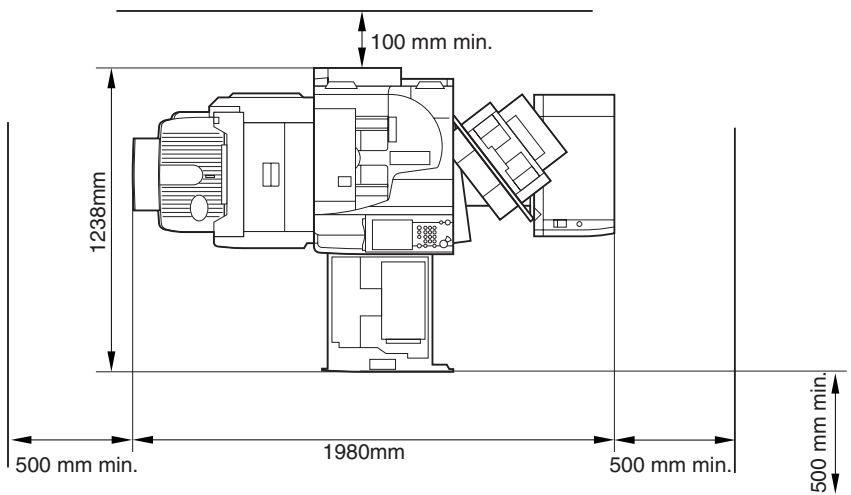
F-1-7

With the Saddle Finisher-Q2 Installed



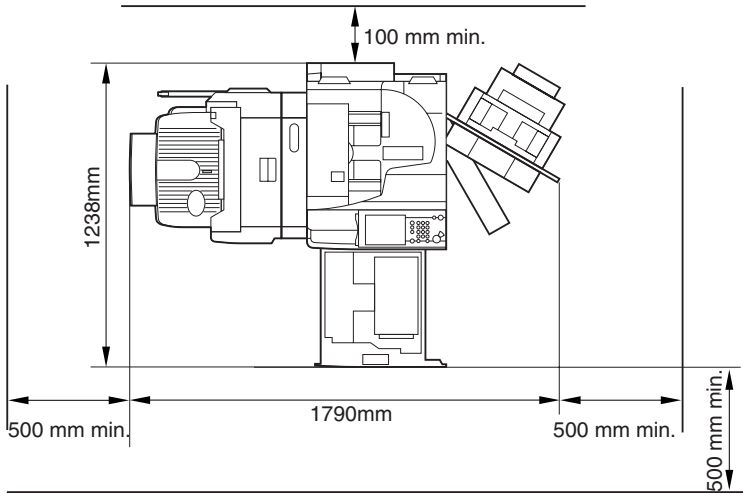
F-1-8

With the Side Paper Deck-Q1 and Finisher-Q1 Installed



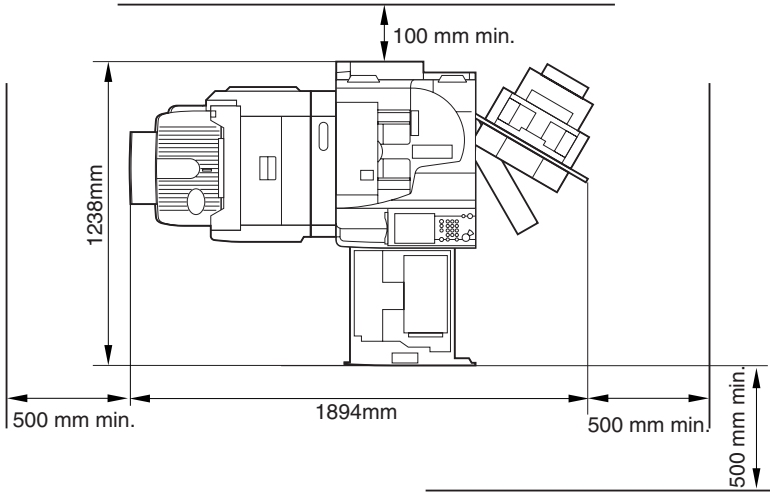
F-1-9

With the Side Paper Deck-Q1 and Saddle Finisher-Q2 Installed



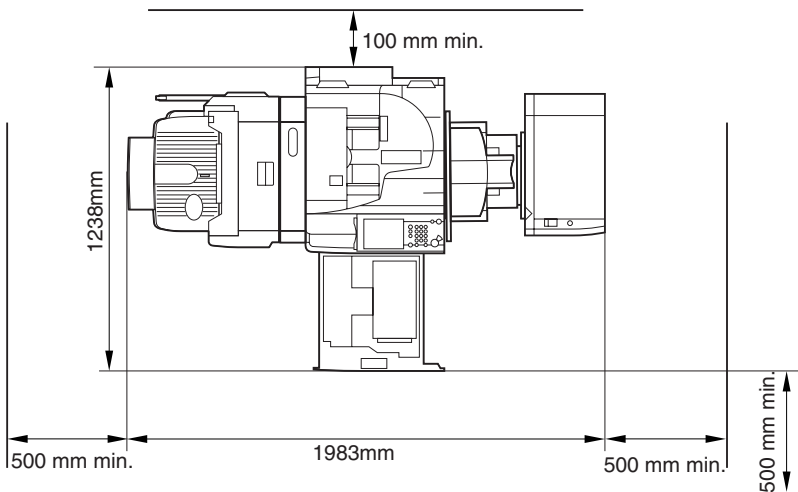
F-1-10

With the Finisher-Q1 and Puncher Unit-L1/M1/N1/PI Installed



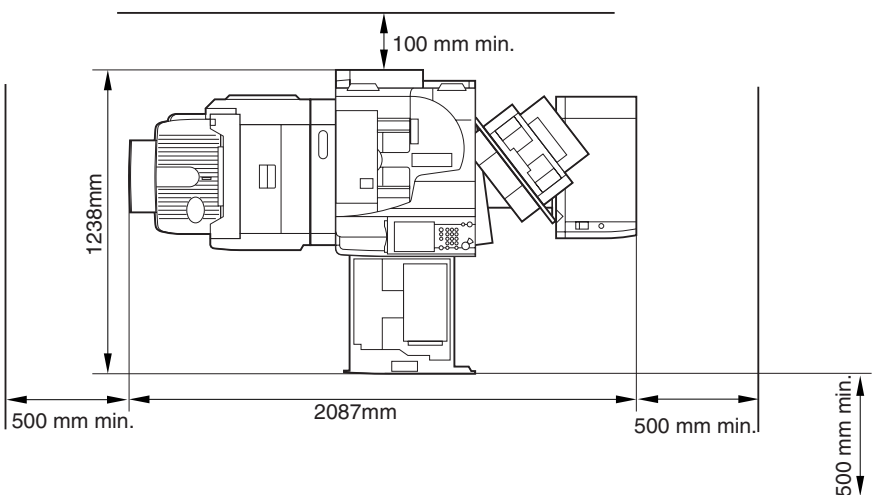
F-1-11

With the Saddle Finisher -Q2 and Paper Deck Unit-L1/M1/N1/PI Installed



F-1-12

With the Side Paper Deck-Q1, Finisher-Q1, and Puncher Unit-L1/M1/N1/P1 Installed



F-1-13

With the Side Paper Deck-Q1, Saddle Finisher-Q2, and Puncher Unit-L1/M1/N1/P1 Installed

7) The machine must be placed in a well ventilated area. It is important to make sure, however, that the machine is not near the air vent (for suction) of the room.

1.1.2 Making Checks Before Starting the Work

0001-7575

1-1 Points to Note

Keep the following in mind concerning the installation of the machine:

- 1) If you are moving the machine from a cold to warm place for installation, the machine can suffer condensation, causing image faults. If such is the case, leave the machine alone unpacked for at least 2 hr so that it is fully used to the temperature of the room before installation.

(The term "condensation" refers to the droplets of water on a metal surface when it is brought in from a cold to warm

place, caused by rapid cooling of the vapor in the atmosphere by the cold metal.)

- 2) The machine weighs about 100 kg (max.; including the DADF). Be sure to work in a group of 4 persons or more when lifting it.

1-2 Recording the Service Mode Settings

Be sure to record the service mode settings as instructed herein as part of the installation work. At the end of the work, check to be sure that the record shows all settings.

T-1-1

<Service Mode Label>

initial screen	Level 1 item	Level 2 item	Level 3 item	Check
COPIER	ADJUST	DENS	REF-Y	
			REF-M	
			REF-C	
			SGNL-Y	
			SGNL-M	
			SGNL-C	

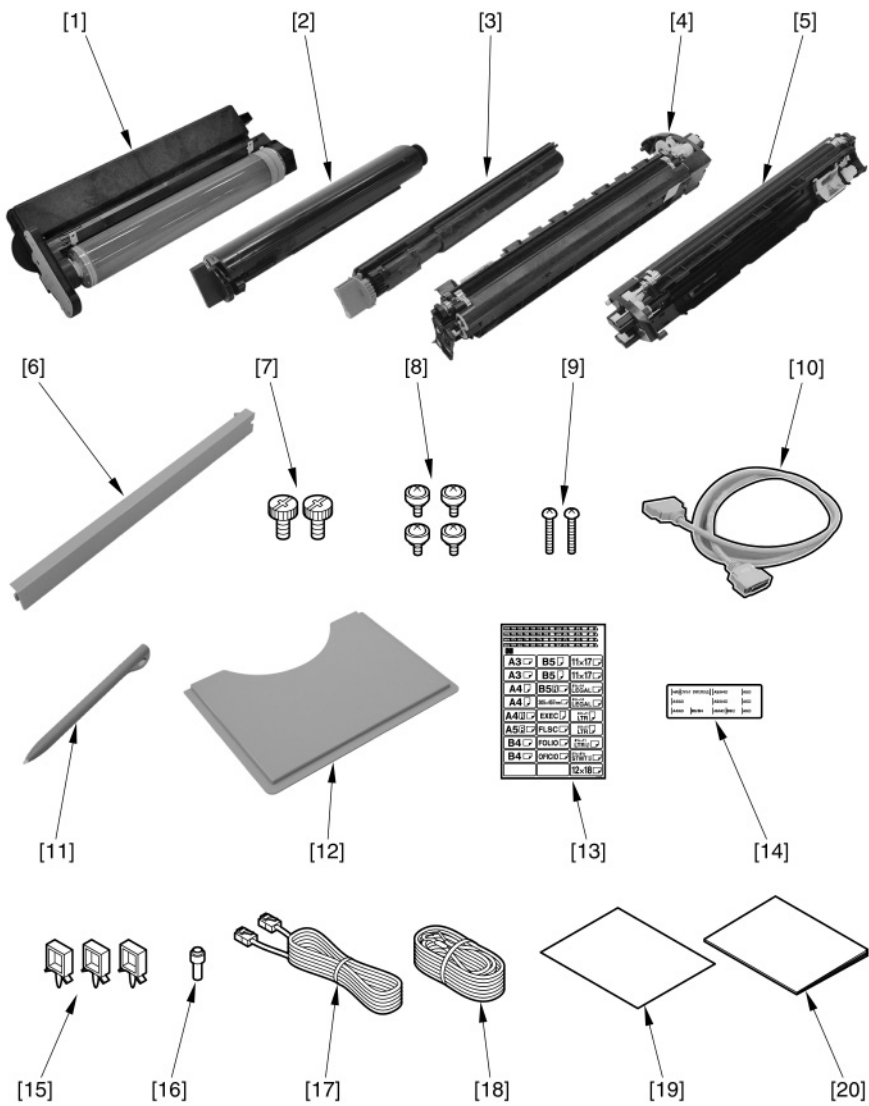
T-1-2

<Drum Counter Reading Label>

Initial screen	Level 1 item	Level 2 item	Level 3 item	Check
COPIER	ADJUST	HV-PRI	DR-I-INT	

1-3 Checking the Contents

It is important that you send back the QR Sheet that comes with the machine. Regardless of the presence/absence of a fault in the machine, be sure to fill it out and fax it as soon as possible. If there is a missing item, indicate its number in the QR Sheet. If there is a fault in the external appearance, indicate it also in the QR Sheet by referring to the following diagram.



F-1-14

T-1-3

[1] Drum unit	1 pc.	[12] Service book case	1 pc.
[2] Toner cartridge (black)	1 pc.	[13] Cassette size label	2 pc. *
[3] Toner cartridge (cyan, magenta, yellow)	1 pc. each	[14] Size label (small; only for model w/ DADF)	1 pc. *
[4] Developing assembly (black)	1 pc.	[15] Wire saddle	3 pc.
[5] Developing assembly (cyan, magenta, yellow)	1 pc. each	[16] Stamp (only for model w/ fax function)	1 pc.

[6]	Lower right over	1 pc.	[17]	Modular cable (only if equipped with fax function)	1 pc. *
[7]	Adjusting screw	2 pc.	[18]	Grounding cord (100V model only)	1 pc. *
[8]	Developing assembly fixing screw (stepped)	4 pc.	[19]	QR sheet (100V model only)	1 pc. *
[9]	Drum unit fixing screw (M4x20; white)	2 pc.	[20]	Service book (100V model only)	1 pc. *
[10]	Reader communication cable	1 pc. *	*: packed inside the cassette.		
[11]	Touch pen	1 pc.			

Memo:

The developing assembly fixing screws (stepped) may come together with or separately with their collars. If latter, be user to put the screws with collars before use.

Check the documentation and CDs against the following table:

T-1-4

Documentation	iR C3100	iR C3100F	iR C3100N	iR C3100i
User's manual	yes	yes	yes	yes
Copy/Box Guide	yes	yes	yes	yes
Transmission/Fax Guide		yes		yes
UFR/LIPS Printer Guide		yes	yes	yes
Remote UI Guide	yes	yes	yes	yes
Network Guide	yes	yes	yes	yes
License Agreement		yes	yes	yes

T-1-5

CD-ROM	iR C3100	iR C3100F	iR C3100N	iR C3100i
UFR User Software CD-ROM		yes	yes	yes
Color Network ScanGear CD-ROM		yes	yes	yes

CD-ROM	iR C3100	iR C3100F	iR C3100N	iR C3100i
LIPS IV User Software CD-ROM				yes
NetSpot Resource Downloader CD				yes
FAX Driver Software CD-ROM		yes		yes
Emulation Manual CD				yes

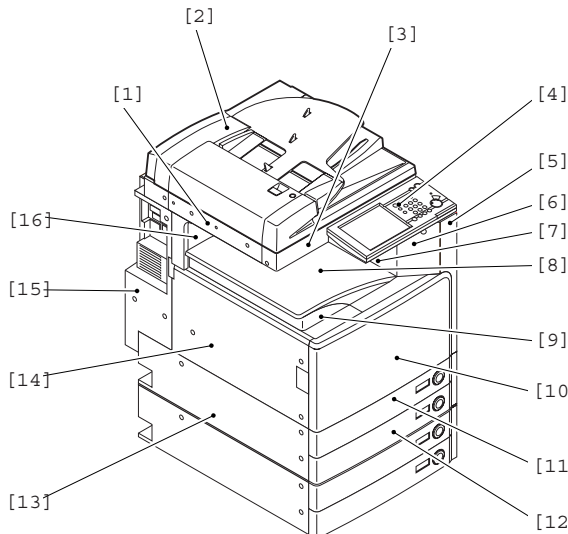
Reference:

The term "CD" refers to the CD-ROM itself.

The term "CD-ROM Unit" refers to a unit consisting of CD ROM and documentation.

The Use's Manual and the CDs are packed inside the cassette.

1-4 External View

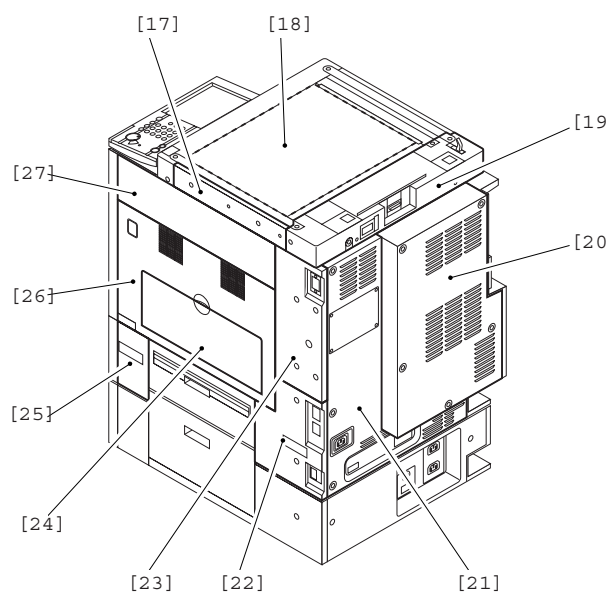


F-1-15

T-1-6

- | | |
|-----------------------------------|-------------------------------|
| [1] ADF reading glass retainer | [9] Delivery tray lower cover |
| [2] DADF (for model w/ DADF only) | [10] Front cover |

[3]	Reader cover (front)	[11]	Cassette 1
]			
[4]	Control panel	[12]	Cassette 2
]			
[5]	Support cover (right)	[13]	Left cove (lower)
]			
[6]	Support cover	[14]	Left cover
]			
[7]	Delivery tray right cover	[15]	Left cover (rear)
]			
[8]	Delivery tray	[16]	Delivery tray rear cover
]			



F-1-16

T-1-7

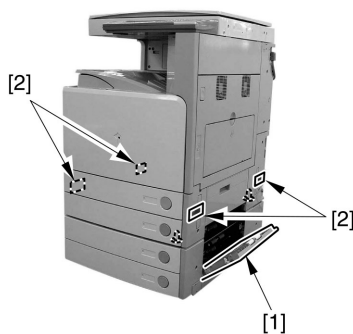
[17]	Reader cover (right)	[23]	Right cover (upper right)
[18]	Copyboard glass	[24]	Manual feed tray
[19]	Reader cover (rear)	[25]	Right cover (lower front)
[20]	Rear cover (right)	[26]	Right door unit
[21]	Rear cover (left)	[27]	Right cover (upper)
[22]	Right cover (lower rear)		

1.2 Unpacking and Installation

1.2.1 Unpacking and Removing the Fixing Materials

0001-7766

- 1) Unpack the machine, and remove the plastic covering.
 - If you are installing a pedestal together with the machine, unpack it also.
- 2) If you are installing the machine on a Cassette Pedestal-Y1, open the right door [1] of the pedestal.
- 3) Working as a group of 4 persons, hold the grips [2], and place the machine on the pedestal.

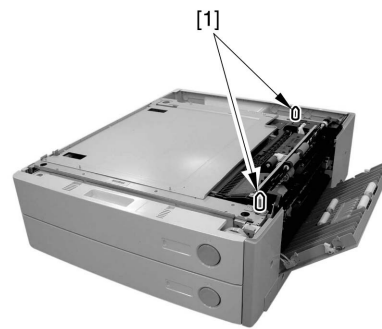


F-1-17

⚠ The machine weighs as much as 100 kg (including the DADF). Be sure always to work as a group of 4 persons when lifting it.

Memo:

When placing the machine on a cassette pedestal, be sure to match the 2 positioning pins [1] found on the top surface of the pedestal against the holes found in the base of the machine.

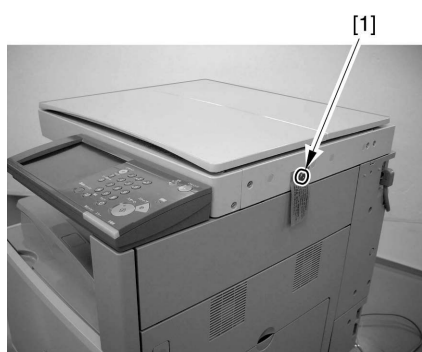


F-1-18

- 4) Close the right door of the pedestal (in the case of the 2-Cassette Pedestal-Y1).
- 5) Remove the fixing tape/fixing material from the individual parts.
 - front door
 - right door
 - manual feed assembly
 - cassette 1/2
 - inside of cassette 1/2
 - DADF (if found)
 - copyboard glass
- 6) Push the cassette releasing button, and remove the cassettes 1 and 2.

⚠ Go through steps 6) through 8) only if you are installing the machine on a 2-Cassette Pedestal-Y1.

- 7) Join the machine and the pedestal using a screw [1]. The screw comes with the 2-Cassette Pedestal-Y1.
- 8) Slide the cassette 1 and 2 back in.
- 9) Remove the optical system fixing screw [1] from the outside of the reader unit right cover. (Store away the screw for possible future relocation of the machine.)

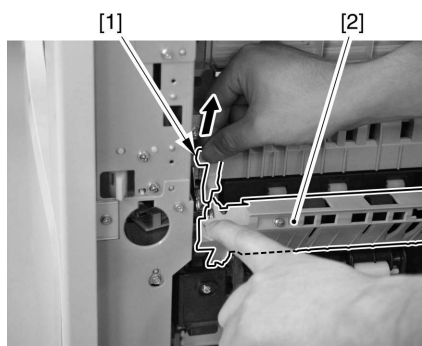


F-1-19

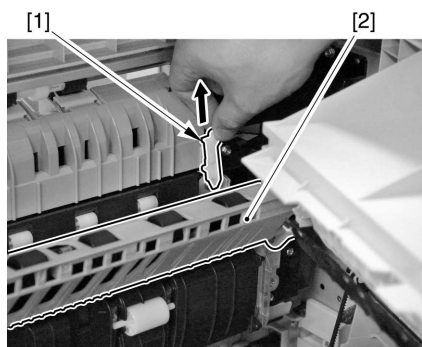
10) Open the right door.

11) Remove the 2 fixing assembly releasing rolls [1].

⚠ When removing the fixing assembly releasing roll, be sure not to force down the jam guide [2] of the fixing assembly. Otherwise, the force can damage the jam guide of the fixing assembly.



F-1-20



F-1-21

12) Close the right door.

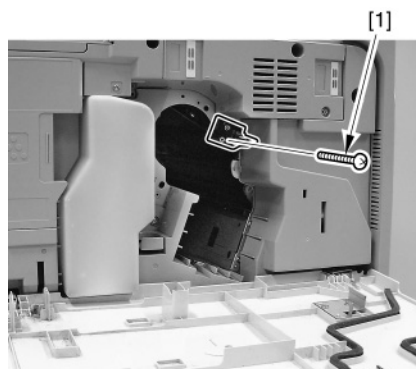
1.2.2 Installing the Drum

Unit

0001-7796

1) Open the front cover.

2) Remove the ITB releasing lever fixing screw (M3x20; black) [1].



F-1-22

3) Remove the wrapping from the drum unit.

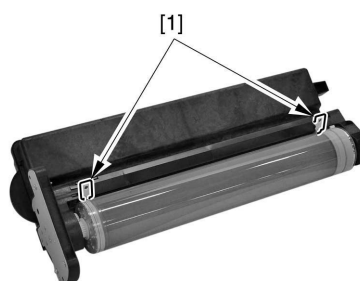
- Be sure to remove the drum protective sheet.

- The drum counter reading recording label comes with the drum protective sheet. Use it for the next step (i.e., initializing the drum unit).

日付	date	カウンター	counter	備考	notes
date	Datum	compteur	Zähler	note	Notiz

F-1-23

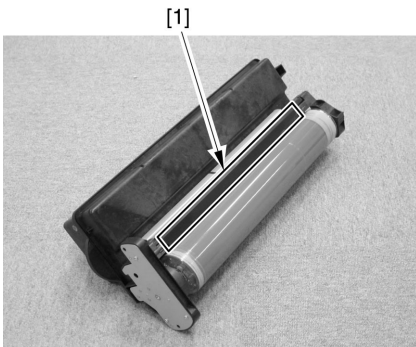
4) Remove the 2 charging roller releasing rolls [1] of the drum unit.



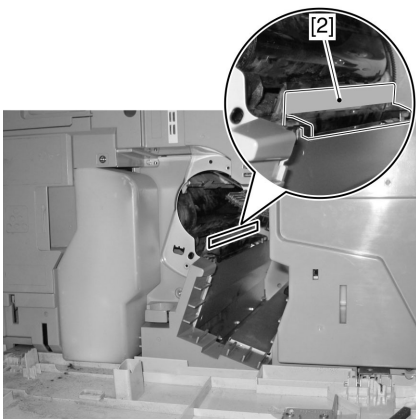
F-1-24

⚠ Be sure not to touch or damage the surface of the photosensitive drum in the drum unit.

5) Check to see if there is a build-up of dust in the area [1] of the drum unit and the area [2] of the optical hood. As needed, clean the areas with a cloth moistened with water.



F-1-25



F-1-26

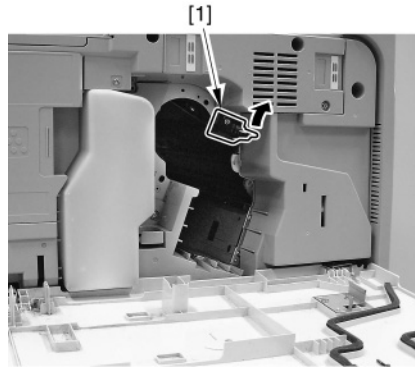
⚠ Do not dry wipe the area. Otherwise, static charges will build up to attract dust.

Memo:

The laser light moves through the area between [1] and [2] of the figure to reach the photosensitive drum. The presence of dust in the area will block some of the

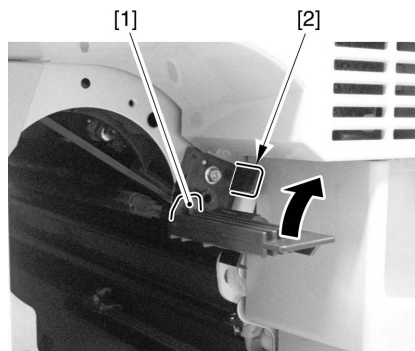
light, thus causing white lines in the images.

6) Turn the ITB releasing lever [1] clockwise until it becomes locked, thereby releasing the ITB.



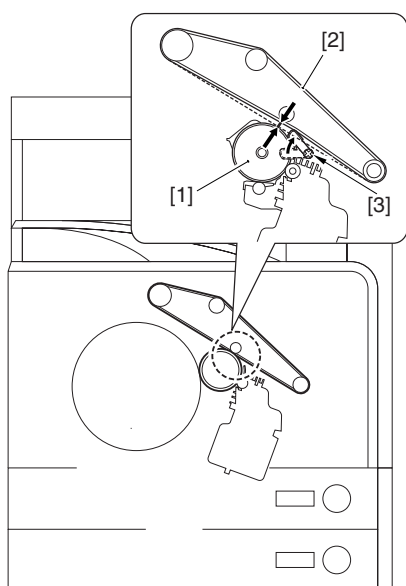
F-1-27

⚠ A protrusion is found on the back of the ITB releasing lever [1]. The ITB releasing lever becomes locked in place when it is turned until the protrusion has ridden over the stopper [2].



F-1-28

⚠ The photosensitive drum [1] and the ITB [2] are in contact, and turning the ITB releasing lever clockwise will cause the releasing member [3] (operating in conjunction with the lever) to push up the ITB [2], thereby moving the ITB [2] away from the photosensitive drum [1].

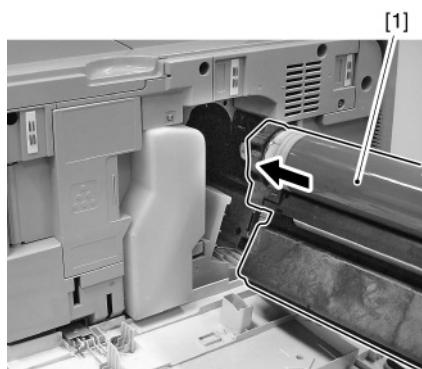


F-1-29

At this time, the ITB is slack temporarily. If left as it is for a long time, however, the ITB can suffer deformation. Be sure to limit the time during which the ITB remains slack.

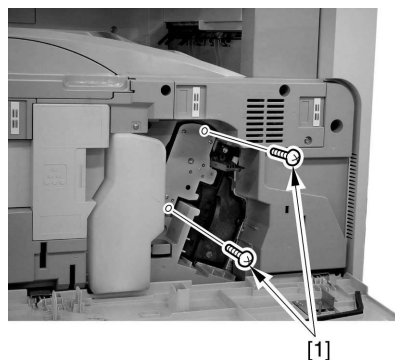
7) Fit the drum unit [1] in the machine.

⚠ When fitting the drum unit in the machine, be sure to hold it level and move it until it butts against the rear of the machine. If moved at an angle, the photosensitive drum can interfere with components inside the machine to damage them.



F-1-30

8) Fix the drum unit in place using the 2 drum unit fixing screws (M4x20; white) [1].



F-1-31

9) Turn the ITB releasing lever counterclockwise.

10) Fix the ITB releasing lever in place using the ITB releasing lever fixing screw (M3x20; black) [1].



F-1-32

1.2.3 Preparing for the Mounting of the Developing Assembly

0001-7798

⚠ When turning the rotary by hand, take care not to touch the rotating area.

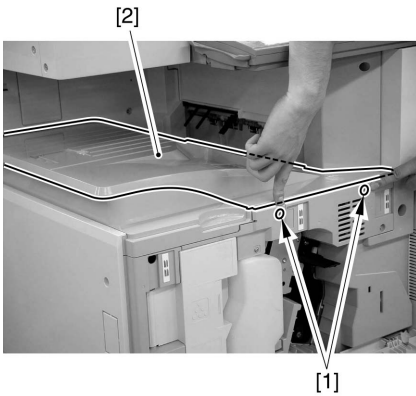
1) Loosen the 2 screws [1], and detach the delivery tray [2].



1. Take care not to damage the transfer belt by the rib

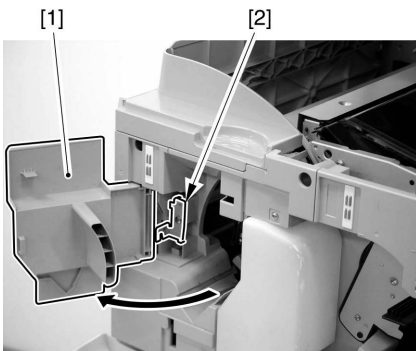
found on the back of the delivery tray.

2. Take care not to hit the delivery sensor flag against the tray to break it.
3. Detaching the delivery tray will expose the ITB. If you must detach it for the work, be sure to take full care not to touch the belt.



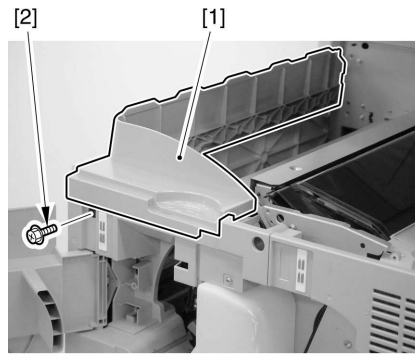
F-1-33

- 2) Open the toner cartridge access cover [1].
- 3) Remove the rotary lock fixing [2] (1 self-tapping screw).



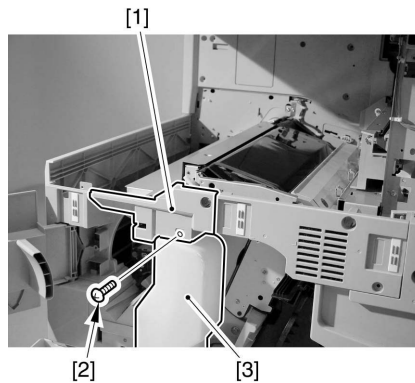
F-1-34

- 4) Remove the delivery tray lower cover [1] (1 screw [2]).



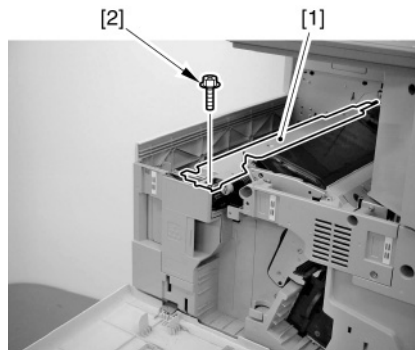
F-1-35

- 5) Remove the waste toner bottle retainer [1]. (1 TP screw [2])
- 6) Detach the waste toner bottle [3].



F-1-36

- 7) Close the toner cartridge access cover.
- 8) Remove the protective plate [1]. (1 screw [2])



F-1-37

⚠ Take care not to touch the ITB while detaching the

part.

- 9) Turn the rotary to the point of replacement for the cyan developing assembly as follows:

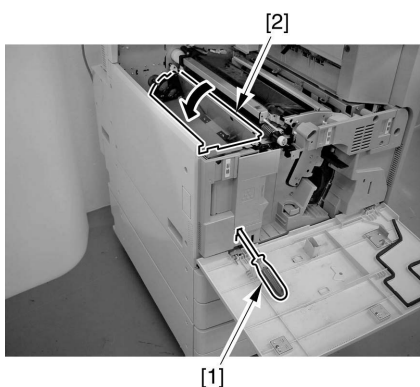
Memo:

A colored marking is used to identify the point of replacement for cyan, yellow, and magenta. There is no label, however, for the black developing assembly.



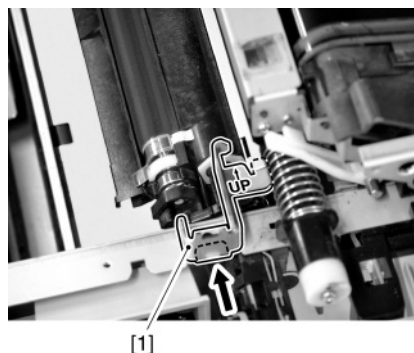
F-1-38

- 9-1) While unlocking the rotary using a screwdriver [1], turn the rotary [2] counterclockwise by hand until it is near the point of replacement for cyan.

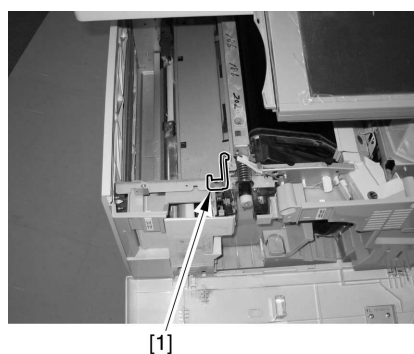


F-1-39

- 9-2) Fix the rotary in place to the front side plate using the rotary fixing [1]. Be sure that the marking UP of the rotary fixing [1] faces upward. The rotary fixing is the one removed in the foregoing step "Preparing for the Mounting of the Developing Assembly."



F-1-40



F-1-41

⚠ Mount the developing assemblies strictly in the following order:

1. cyan
2. black
3. yellow
4. magenta

Otherwise, the weight of the rotary can cause it to rotate unexpectedly.

1.2.4 Mounting the Cyan

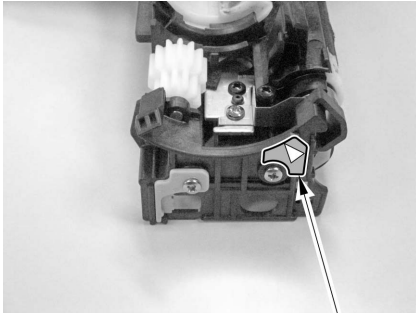
Developing Assembly 0001-7838

- 1) Make a cut in the package bag of the cyan developing assembly with scissors, and take out the developing assembly.

Memo:

To check the color of the toner inside a developing assembly, refer to the color of the label attached to the front of the developing assembly.

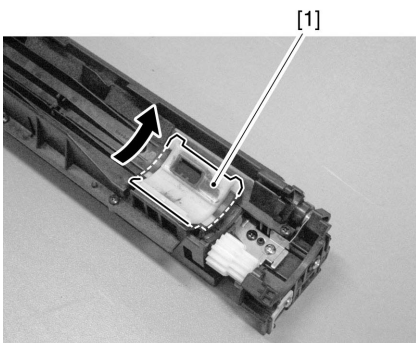
The packaging bag is transparent; be user to check the color of the label [1] before opening it.



F-1-42

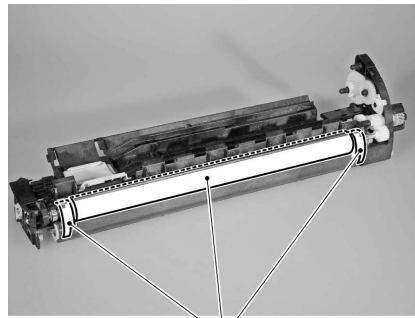
2) Check to see that the toner shutter [1] is fitted all the way in the direction of the arrow in the figure. Otherwise, move it in the direction of the arrow unit it stops.

- If the toner shutter is not fully butted, you may not be able to mount the toner cartridge.



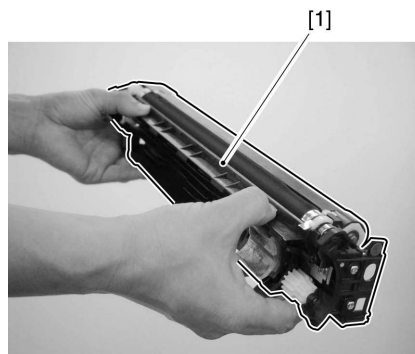
F-1-43

3) Remove the protective sheet [1] used to cover the developing cylinder.



F-1-44

4) Hold the cyan developing assembly [1] as shown in the figure.



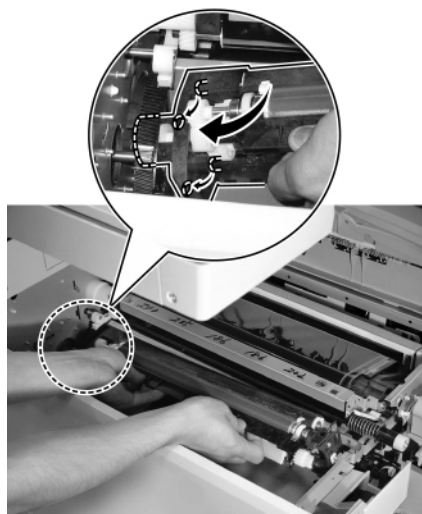
F-1-45

⚠ Do not touch the sleeve surface.

5) Fit the cyan developing assembly [1] in the rotary.
- Be sure to set the rear of the developing assembly at an angle.

Memo:

Fit the gear and the protrusion of the developing assembly in the hole of the rotary flange (rear).



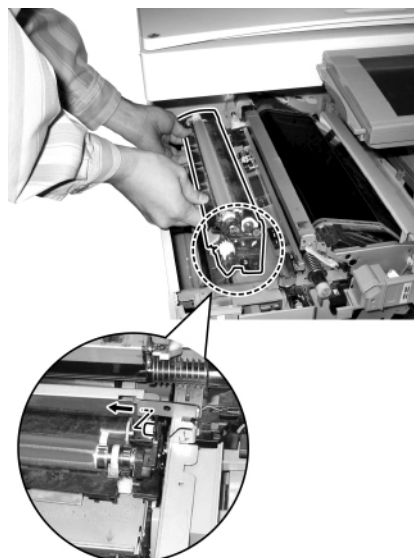
F-1-46

- Set the front of the developing assembly in the rotary.

⚠ When fitting the developing assembly, take care not to bring the developing assembly into contact with the rotary fixing. Otherwise, the rotary fixing can become displaced.

Memo:

Fit the protrusion of the developing assembly in the hole of the rotary flange (front). For a better view of the protrusion of the developing assembly, stand to the left of the machine's front.

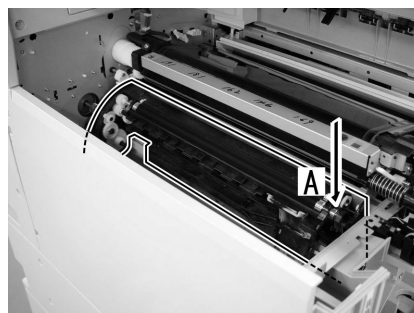


F-1-47

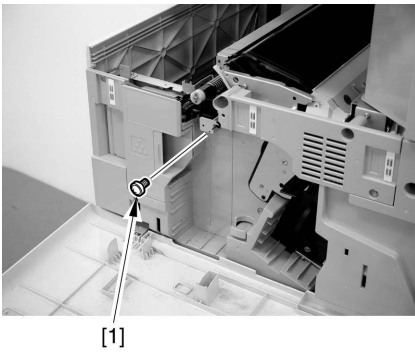


F-1-48

- 6) While pushing the cyan developing assembly in the direction of the arrow A, fix it in place using the included developing assembly fixing stepped screw [1].



F-1-49

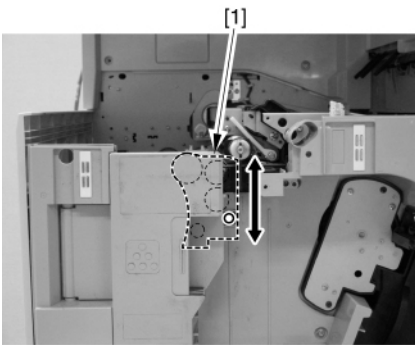


F-1-50

Memo:

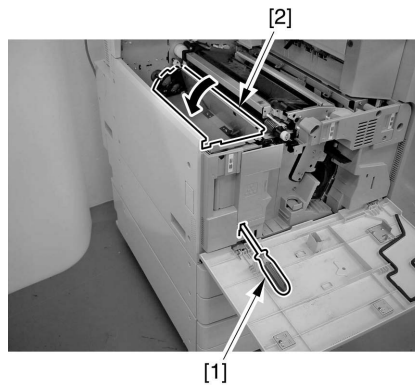
If the developing assembly fixing stepped screw came separately with its collar, be sure to put them together before use.

7) Check to make sure there is play of about 1.5 to 2 mm in up/down and right/left directions of the cyan developing assembly [1]. If not, the developing assembly fixing stepped screw may be failing to force the developing assembly correctly. Loosen the developing assembly fixing stepped screw once, and tighten it back.



F-1-51

8) Remove the rotary fixing.
 9) While freeing the rotary lock using a screwdriver [1], turn the rotary [2] counterclockwise by hand until it is near the point of replacement for black.



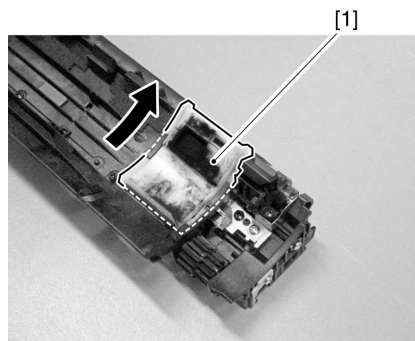
F-1-52

10) You need not use the rotary fixing to fix the rotary in place at the point of replacement for black; simply remove the screwdriver so that it will lock into place on its own. (In other word, the black developing assembly does not need a rotary fixing.)

1.2.5 Mounting the Black

Developing Assembly 0002-5229

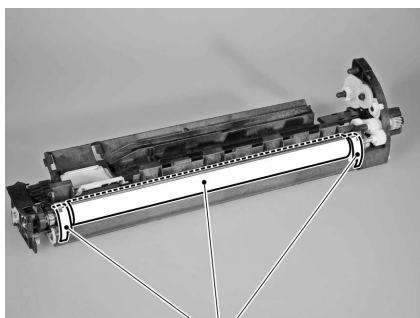
- 1) Cut the packaging bag of the black developing assembly with scissors, and take out the developing assembly.
 - 2) Check to make sure that the toner shutter [1] is fully butted in the direction of the arrows. If not, move the toner shutter [1] in the direction of the arrow until it is fully butted.
- If you fail to butt it fully, you may not be able to mount the toner cartridge correctly.



F-1-53

- 3) Remove the protective sheet [1] used to cover the

developing cylinder.

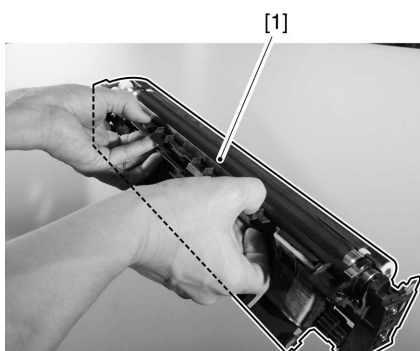


[1]

F-1-54

4) Hold the black developing assembly [1] as shown.

⚠ Take care not to touch the cylinder surface.



F-1-55

5) Fit the black developing assembly [1] in the rotary.

- Set the rear of the developing assembly in the rotary at an angle.

Memo:

Fit the gear and the protrusion of the developing assembly in the hole of the rotary flange (rear).



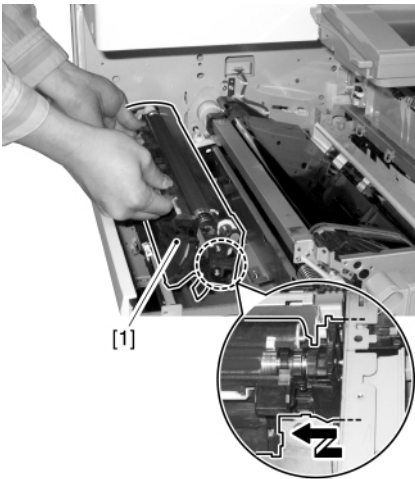
F-1-56

- Set the front of the developing assembly in the rotary.

⚠ When fitting the developing assembly, take care not to bring the developing assembly into contact with the rotary fixing. Otherwise, the rotary fixing can become displaced.

Memo:

Fit the protrusion of the developing assembly into the hole of the rotary flange (front).



F-1-57

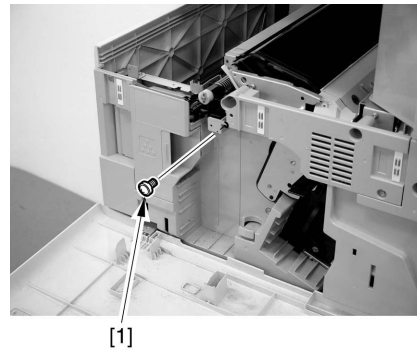


F-1-58

- 6) While pushing the developing assembly in the direction of the arrow A, fix it in place using the included black developing assembly fixing screw [1].



F-1-59

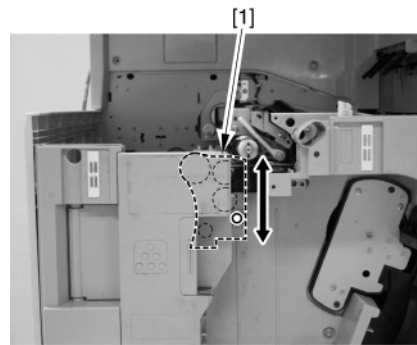


F-1-60

Memo:

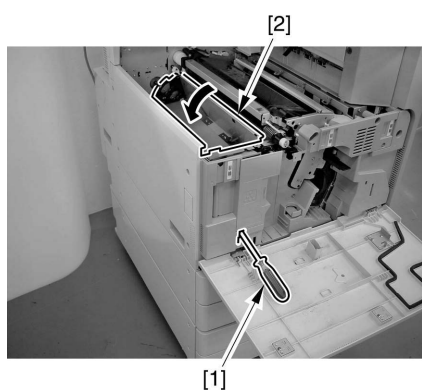
If the developing assembly fixing screw came separately with its collar, be sure to put them together before use.

- 7) Check to see if there is play of about 1.5 to 2 mm in up/down and left/right directions of the black developing assembly [1]. If not, the developing assembly fixing screw may not be pushing the developing assembly correctly. Loosen the developing assembly fixing stepped screw once, and tighten it back.



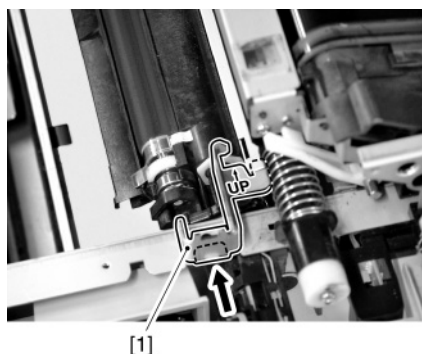
F-1-61

- 8) While freeing the rotary using a screwdriver [1], turn the rotary [2] counterclockwise by hand until it is near the point of replacement for yellow.

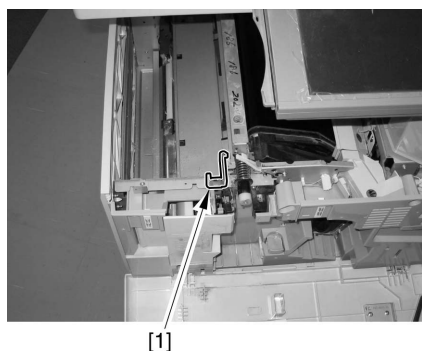


F-1-62

- 9) Fix the rotary in place to the front plate using the rotary fixing [1]. Be sure that the marking "UP" on the rotary fixing [1] faces upward.



F-1-63



F-1-64

1.2.6 Mounting the Yellow Developing Assembly

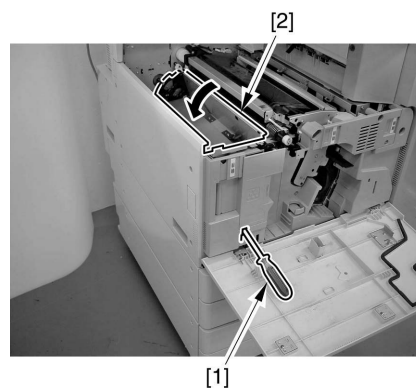
0002-5232

Perform steps 1) through 8) shown for installing the

cyan developing assembly for the yellow developing assembly.

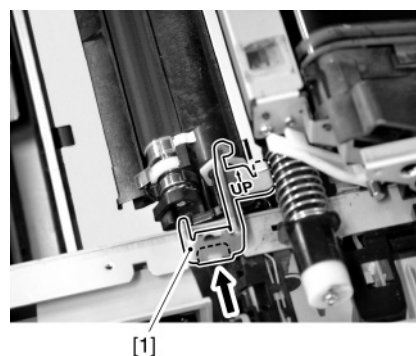
Thereafter, perform the following steps to fix the rotary in place for magenta:

- 1) While keeping the rotary unlocked using a screwdriver [1], turn the rotary counterclockwise by hand so that it is positioned near the point of magenta replacement.

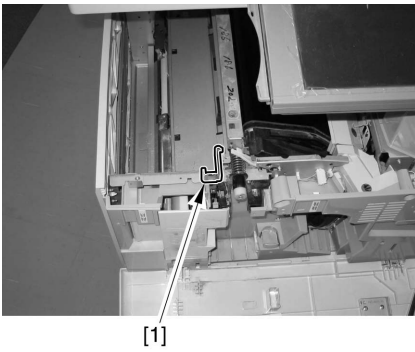


F-1-65

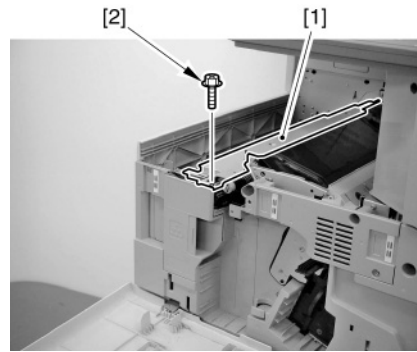
- 2) Fix the rotary in place to the front plate using the rotary lock fixing [1]. Be sure that the UP marking on the rotary lock fixing [1] faces upward.



F-1-66



F-1-67



F-1-69

1.2.7 Mounting the Magenta Developing Assembly

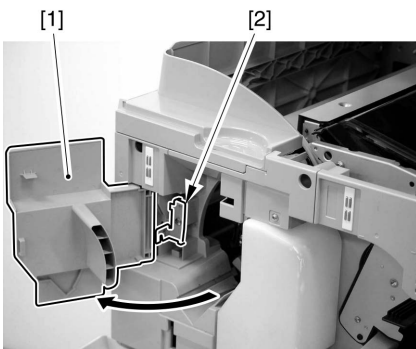
0002-5247

Perform steps 1) through 8) under "Mounting the Cyan Developing Assembly" for the magenta developing assembly.

1.2.8 After Mounting the Developing Assembly

0002-5249

- 1) Open the toner cartridge access cover [1], and fit the rotary fixing [2]. (1 self-tapping screw).

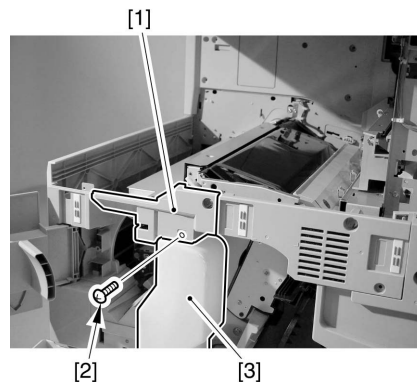


F-1-68

- 2) Fit the protective plate [1]. (1 screw [2])

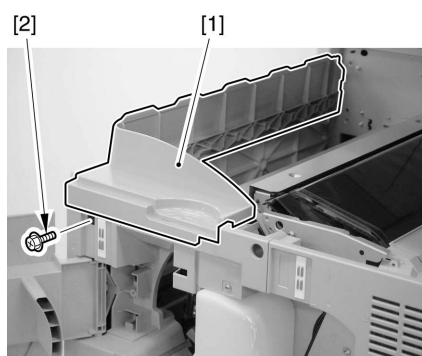
⚠ Take care not to touch the ITB while attaching the part.

- 3) Fit the waste toner bottle [3].
- 4) Fit the waste toner bottle retainer [1]. (1 TP screw [2])



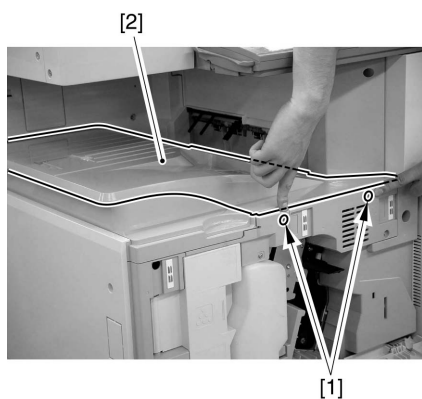
F-1-70

- 5) Mount the delivery tray lower cover [1]. (1 screw [2])



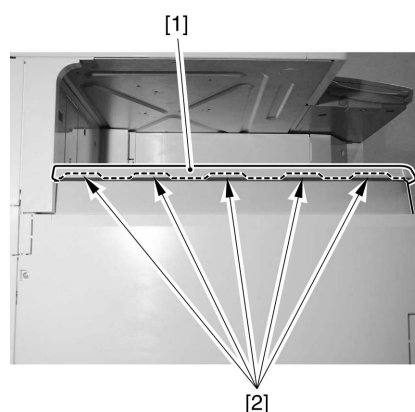
F-1-71

- 6) Close the toner cartridge access cover.
- 7) Mount the delivery tray [2], and tighten the 2 screws [1].



F-1-72

⚠ Be sure that the delivery tray [1] covers the rib area [2] of the delivery tray lower cover.



F-1-73

- 8) Close the front cover.

1.2.9 Fixing the Machine in Place

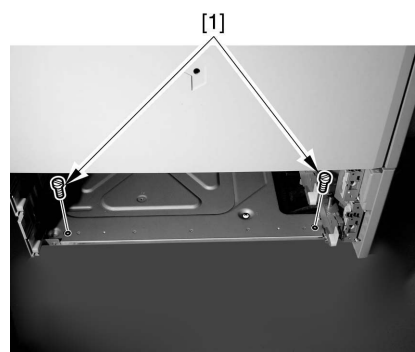
0001-8288

- If a Pedestal Is Used

- 1) Move the machine to its permanent position, and fix it in place using the 4 adjusters of the pedestal.

- If No Pedestal Is Used

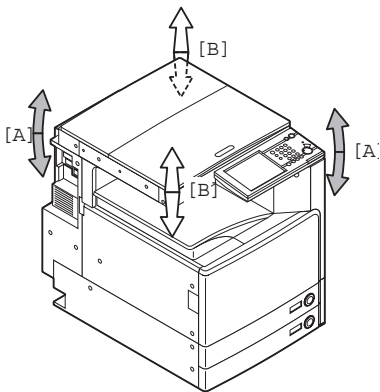
- 1) Take out the cassettes 1 and 2, and temporarily tighten the adjusting screw [1] on the base plate of the machine (with the foot of the adjusting screw lightly in contact).



F-1-74

- 2) Check the table or the floor to see that the machine will not wobble; if it does, tighten the adjusting screw to stop it as follows:
 - if it moves in the direction of the arrow A, tighten the screw on the right in the figure.

- if it moves in the direction of the arrow B, tightened the screw on the left in the



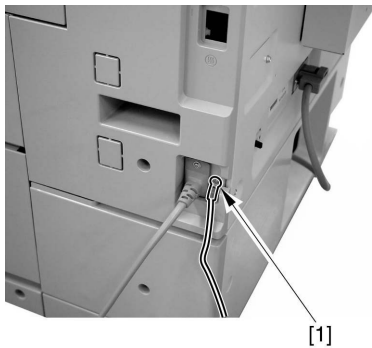
F-1-75

4) Put back the cassettes 1 and 2.

1.2.10 Connecting the Cable

0001-7929

1) Connect the machine to the ground using the grounding wire.



F-1-76

Ground

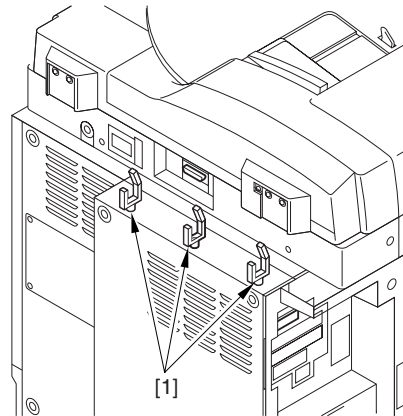
- a. grounding terminal of the power outlet
- b. grounding terminal prepared according to regulations



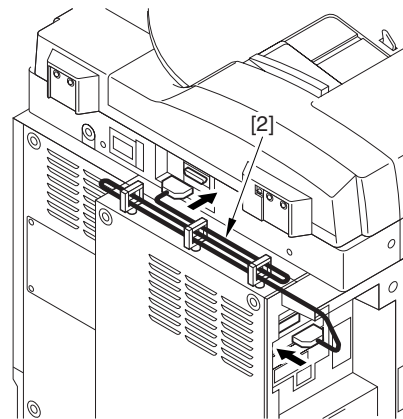
1. Be sure that the grounding is appropriately done. Otherwise, the leakage breaker may fail to operate.
2. Check to see that the open/close lever of the leakage

breaker is on the ON side.

- 2) Fit the 3 wire saddles [1] to the rear cover (right) of the printer unit.
- 3) Fit the reader communication cable [2] to the reader printer. Bundle the cable using the wire saddles as shown, and be sure to push the connectors on both ends of the cable until a click is felt.

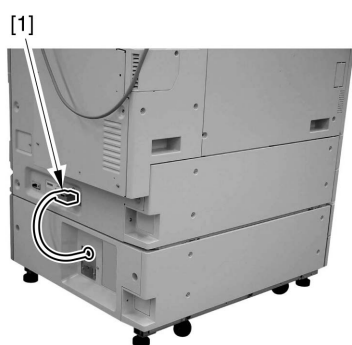


F-1-77



F-1-78

- 4) If you are installing a cassette pedestal, remove the lattice connector cover, and fit the lattice connector [1] of the cassette pedestal to the machine.



F-1-79

5) Connect the power plug to the power outlet.



1. Power supply voltage shall be +/-10% of the rating.
2. The amperage of the power supply must be as rated.
3. Before connecting the power plug, check to be sure that the main power switch is off.

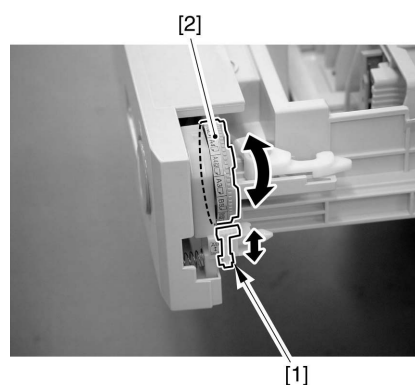
6) Turn on the main power switch.

- The machine issues a message to indicate that it is loading programs.
- The machine issues a message to indicate that its printer is getting ready for a job.
- In about 6 min, the machine issues a message to indicate that it is checking the network settings.
- Be sure to set up the cassette before the machine completes its warm-up period. (For instructions, see "Setting Up the Cassette.")

1.2.11 Setting Up the Cassette

0001-7937

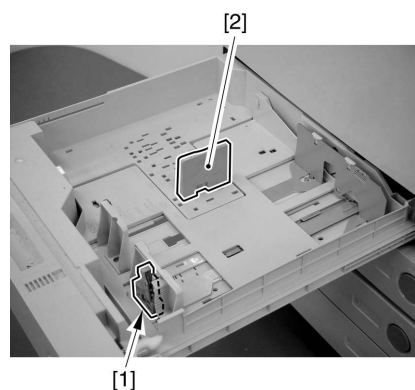
- 1) Press the cassette release button, and slide out the cassette to the front.
- 2) Check the type of paper that the user uses, check to see that the size configuration switch [1] of the cassette is set to the paper size. As necessary, change the switch position.
- 3) Set the paper size dial [1] to suit the size of the paper in question.



F-1-80

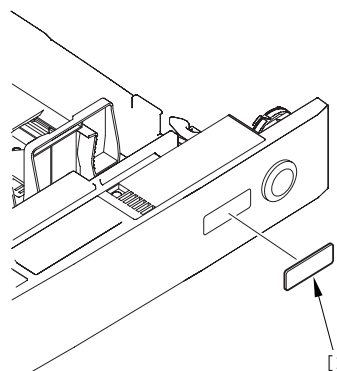
4) Pick the lever [1] of the side guide plate, and move the side guide plate to the desired position.

5) Push the trailing edge guide plate [2] to the right to detach. Match the trailing edge guide plate against a specific size index found on the cassette bottom.



F-1-81

6) Attach the cassette size label [1] that matches the selected size of paper to the front of the cassette.



F-1-82

- 7) Deposit paper in the cassette; then, slide in the cassette.
- 8) Perform the same for the other cassette.
- 9) If a cassette pedestal is used, set it by referring to its Installation Procedure.

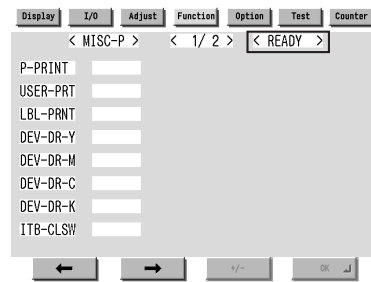
1.2.12 Mounting the Toner Cartridge

0001-7943

! If the developing rotary fails to stop at an appropriate position and thus prevents mounting of a toner cartridge, move it as follows before attempting to set the toner cartridge:

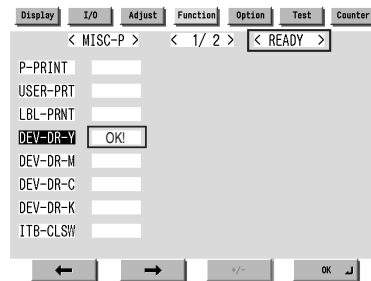
- 1) Check to see that the screen indicates [ready].
- 2) Make the following selections, and press [OK]:
COPIER>FUNCTION>MISC-P>DEV-DR-Y/M/C/K (select the desired color).
- 3) Check to see that the message has changed from [service] to [ready]; then, open the front cover and the toner cartridge access cover, and mount the toner cartridge in question.

- 1) Take out the toner cartridge from its packaging bag.
- 2) When the machine has completed its warm-up period, start service mode by pressing the Additional Function key, the 2 and 8 keys at the same time, and then the Additional Function key once again.
- 3) Mount the yellow toner cartridge as follows:
 - 3-1) Make the following selections:
COPIER>FUNCTION>MISC-P>DEV-DR-Y.
Then, check to see that the screen indicates [ready], and press [OK]. Check to see that the developing rotary moves to the point of replacement for the yellow toner cartridge.



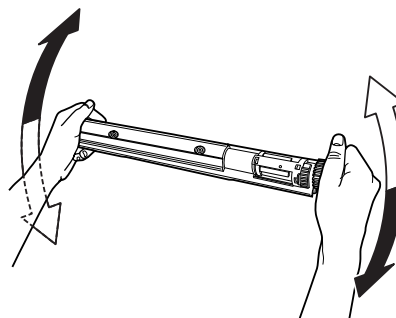
F-1-83

- 3-2) Check to see that the screen indicates [OK!] and [ready]; then, open the front cover and the toner cartridge access cover.



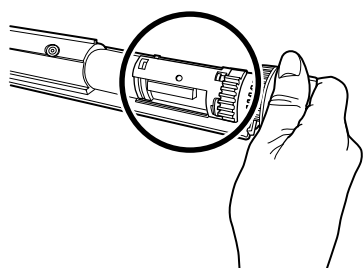
F-1-84

- 3-3) Hold the toner cartridge as shown with both your hands, and move it to and for about 10 times so as to turn over the toner inside it.



F-1-85

- !** When moving the toner cartridge, take care not to touch the shutter area or turn the knob; otherwise, the toner may start to leak.



F-1-86

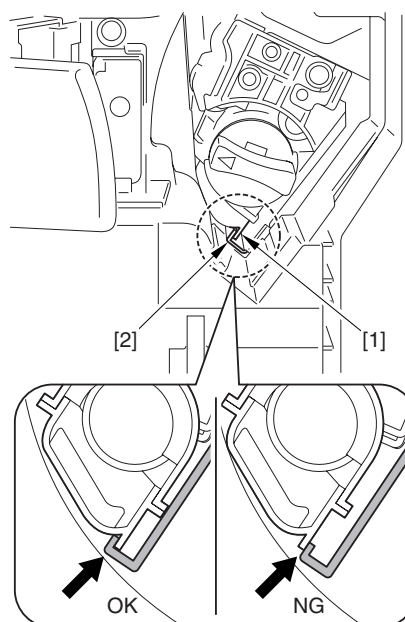
3-4) Keep the toner cartridge so that its side with 2 arrows face upward; then, fit it into the machine in the direction of the arrow.



F-1-87

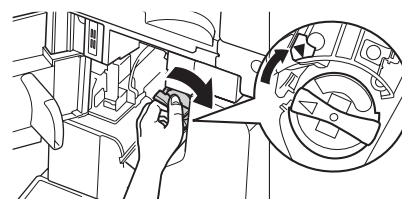
⚠ When fitting the toner cartridge into the printer unit, be sure that the guide [1] of the toner cartridge is inside the bend on the rail [2] of the rotary assembly.

Check to be sure that the guide [1] of the toner cartridge has not ridden over the rail [2] of the rotary when it is fitted into the printer unit; otherwise, the machine may suffer leakage of toner.



F-1-88

3-5) Turn the knob of the toner cartridge clockwise until it stops.



F-1-89

3-6) Close the toner cartridge access cover and the front cover.

4) Fit the magenta toner cartridge as follows:

4-1) Wait until the screen indicates [ready].

4-2) Make the following selections, and press [OK]:
COPIER>FUNCTION>MISC-P>DEV-DR-M.

See that the developing rotary moves to the point of replacement for the magenta toner cartridge.

4-3) Check to see that the screen shows [OK!] and [ready]; then, mount the magenta toner cartridge as you did the yellow toner cartridge.

5) Mount the cyan toner cartridge as follows:

5-1) Wait until the screen indicates [ready].

5-2) Make the following selections, and press [OK];

COPIER>FUNCTION>MISC-P>DEV-DR-C.

See that the developing rotary moves to the point of replacement for the cyan toner cartridge.

- 5-3) Check to see that the screen indicates [OK!] and [ready]; then, mount the cyan toner cartridge as you did the yellow toner cartridge.

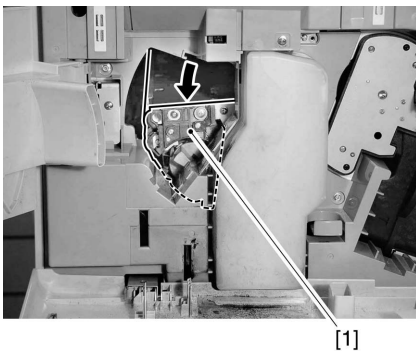
- 6) Mount the black toner cartridge as follows:

Memo:

You need not shake the black toner cartridge before mounting it.

- 6-1) Wait until the screen indicates [ready].
 6-2) Make the following selections, and press [OK]:
 COPIER>FUNCTION>MISC-P>DEV-DR-K.
 See that the developing rotary moves to the point of replacement for the black toner cartridge.
 6-3) See that the screen indicates [OK!] and [ready]; then, open the front cover and the toner cartridge access cover.

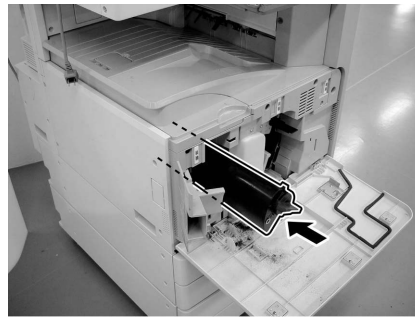
⚠ When the toner cartridge access cover is opened, the rotary [1] may not be at the point of cartridge replacement; if such is the case, turn it counterclockwise until the rotary is locked in position so that the black toner cartridge may be fitted in place.



F-1-90

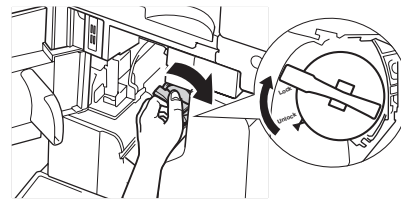
- 6-4) With the side of the toner cartridge indicating 2 arrows facing upward, slide the cartridge in the

direction of the arrow.



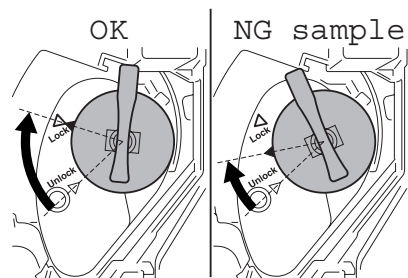
F-1-91

- 6-5) Turn the knob of the toner cartridge clockwise (from UNLOCK position to LOCK position) until it stops.



F-1-92

⚠ After turning the toner cartridge knob, check to see that the triangle marking of the toner cartridge knob is positioned against LOCK; otherwise, the machine can suffer leakage of toner.



F-1-93

- 7) Close the toner cartridge access cover.
 8) Close the front cover.

1.2.13 Making Initial Settings for the Developing Assembly 0001-7998

▲If you want to use service mode from this point on, be sure to check to see that the screen indicates [ready] before doing so.

- 1) Execute stirring of the developer.
 - Make the following selections, and press [OK]: COPIER>FUNCTION>INSTALL>STIR-4.
 - When done, the machine indicates [OK!]. (in about 2 min)
- 2) Make ATR initial settings.
 - Make the following selections, and press [OK]: COPIER>FUNCTION>INSTALL>IN-3.
 - When done, the machine indicates [OK!]. (in about 40 sec)
- 3) Open the front cover.
- 4) Record the result of the following on the service label: COPIER>FUNCTION>INSTALL>IN-3. Be sure that the following 6 items have been noted:
 - for ADJ>DENS>REF-Y of the label, record the value of COPIER>ADJUST>DENS>REF-Y.
 - for ADJ>DNES>REF-M of the label, record the value of COPIER>ADJUST>DENS-REF-M.
 - for ADF>DENS>REF-C of the label, record the value of COPIER>ADJUST>DENS>REF-C.
 - for ADJ>DENS>SGNL-Y of the label, record the value of COPIER>ADJUST>DENS-Y.
 - for ADJ>DENS>SGNL-M of the label, record the value of COPIER>ADJUST>DENS>SGNL-M.
 - for ADJ>DENS>SGNL-C of the label, record the value of COPIER>ADJUST>DENS>SGNL-C.
- 5) Close the front cover.
- 6) Supply toner to the developing assembly.
 - Make the following selections, and press [OK]: COPIER>FUNCTION>INSTALL>SPLY-H-4.
 - When done, the machine indicates [OK!]. (in bout 1

min)

1.2.14 Initializing the Drum Unit 0001-8272

1) Initialize the drum unit by making the following selections and pressing [OK]:

- COPIER>FUNCTION>CLEAR>DRM-LIFE

The machine flashes [active] on its screen while it executes initialization, which takes about 1 min.

▲Do not press any of the keys, open the door, or turn off the power switch while initialization is under way (while [active] is flashing); otherwise, go back to step 1) and start over.

2) When initialization is done, check to see that the value of the following is '0%':

- COPIER>DISPLAY>MISC>DRM-LIFE

Otherwise, go back to step 2) and start over.

3) Record the value of the following service mode item in the Remarks column of the drum counter label

- COPIER>ADJUST>HV-PRI>DR-I-INT

4) Press the Reset key twice to end service mode.

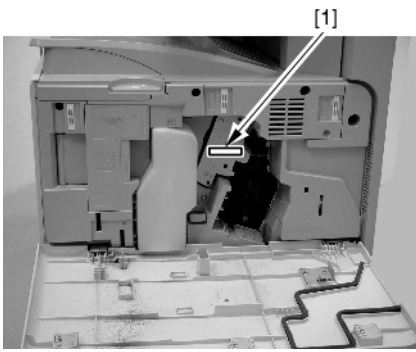
5) Record the date and the counter reading to the drum counter label.

日付	date	カウンター	counter	備考	notes
date	Datum	compteur	Zähler	note	Notiz

F-1-94

6) Open the front cover.

7) Attach the drum counter label to the front of the drum unit.



F-1-95

8) Close the front cover.

1.2.15 Automatic Gradation Correction 0001-8292

⚠ If the machine is not equipped with a copyboard cover, fit the copyboard cover to it. If you are installing a DADF, perform the steps up to A. "DADF" under 2. "Installation" of the DADF-L1 Installation Procedure.

- 1) Clean the machine's copyboard glass.
- 2) Place A3, A4, 11x17, or LTR paper in the cassette.
(See the instructions on how to set up the cassette.)
- 3) Press the Additional Function key.
- 4) Make the following selections: adjust/clean>auto gradation correction>full correction>test print 1.
- The test print 1 will be printed out.
- 5) Place the printout of the test print 1 on the copyboard glass as instructed on the control panel screen.
- 6) Press [start to read].
- The machine reads the printout of the test print 1.
- When a message appears prompting you to remove the test print, remove the printout of the test print 1 from the copyboard glass.
- 7) Press [test print 2].
- The machine prints out the test print 2.
- 8) Place the printout of the test print 2 on the

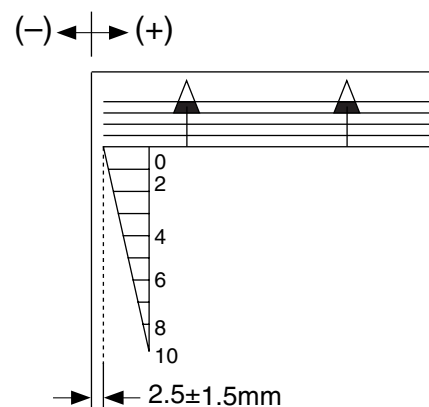
copyboard glass as instructed on the control panel scan.

- 9) Press [start to read].
- The machine reads the print out of the test print 2.
- When a message appears promoting you to remove the test print, remove the printout of the test print 2 from the copyboard glass.
- 10) Press [test print 3].
- The machine prints the test print 3.
- 11) Place the printout of the test print 3 on the copyboard glass as instructed on the control panel screen.
- 12) Press [start to read].
- The machine reads the printout of the test print 3.
- The machine issues a message to indicate that it has completed full correction. In response, remove the printout of the test print 3 from the copyboard glass.
- 13) Press the Reset key once to end user mode.

1.2.16 Adjusting the Image Position 0001-8326

1. Adjusting the Margin (1st side; mechanical adjustment)

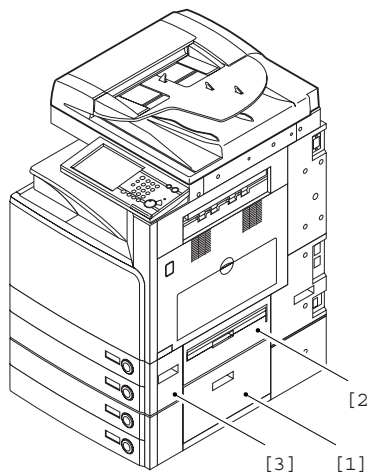
- 1) Make a copy using the cassette 1/2 as the source of paper; then, check to see that the margin on the front side is 2. +/-1.5 mm.



F-1-96

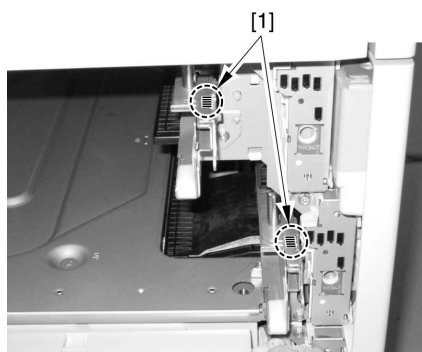
- If the value for the cassette 1 or 2 is not as indicated, make the following adjustments:

- 2) If a 2-Cassette Pedestal-Y1 is used, open its right door [1].
- 3) Open the lower right cover [2]; then, remove the 2 screws [3], and detach the cover (lower front) [3].



F-1-97

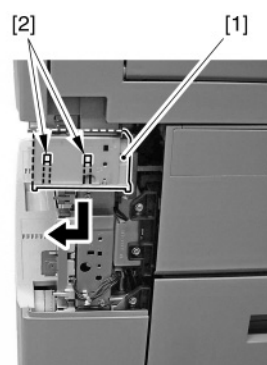
- 4) Slide out the cassettes 1 and 2.
- 5) Check the index position [1] on the adjusting plate.



F-1-98

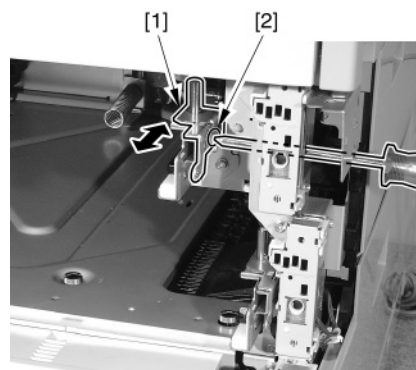
- Making Adjustments for the Cassette 1

- 6) Free the 2 claws [2], and pull the grip (right front) [1] in the direction of the arrow to detach.



F-1-99

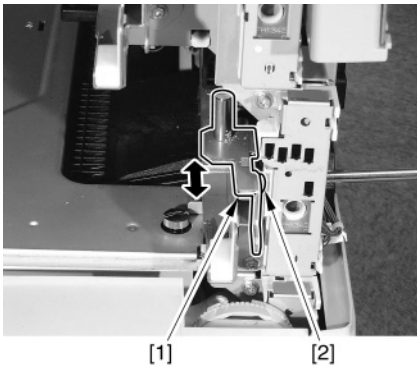
- 7) Loosen the fixing screw [2] of the adjusting plate [1].
- 8) By referring to the index you took note of in step 5), move the adjusting plate back and forth. Moving it toward the rear of the machine will increase the margin on the image front.



F-1-100

- 9) Tighten the fixing screw.
 - 10) Slide in the cassette 1.
 - 11) Make a copy using the cassette 1 as the source of paper; then, check to see that the margin in the image front direction is 2.5 +/-1.5 mm.
 - 12) Mount back the grip (front right).
 - 13) Mount back the machine's front right cover.
- #### - Making Adjustments to the Cassette 2
- 6) Loosen the fixing screw [2] of the adjusting plate [1].
 - 7) By referring to the index you took note of in step 5), move the adjusting plate back and forth. Moving it toward the rear of the machine will increase the

margin on the image front side.

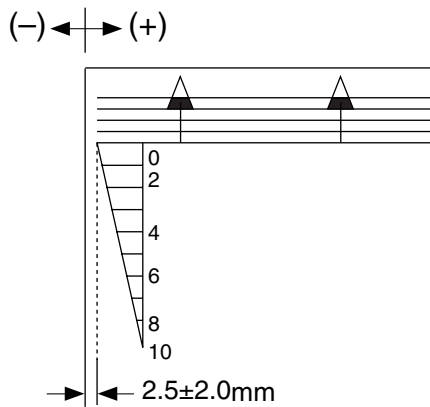


F-1-101

- 8) Tighten the fixing screw.
- 9) Slide back the cassette 2.
- 10) Make a copy using the cassette 2 as the source of paper; then, check to see that the margin in the image front direction is 2.5 +/-1.5 mm.
- 11) Mount back the machine's right front cover.

2. Adjusting the Margin (2nd side)

- 1) Make a copy using the cassette 1 as the source of paper; then, check to make sure that the margin on the front side is 2.5 +/-2.0 mm.



F-1-102

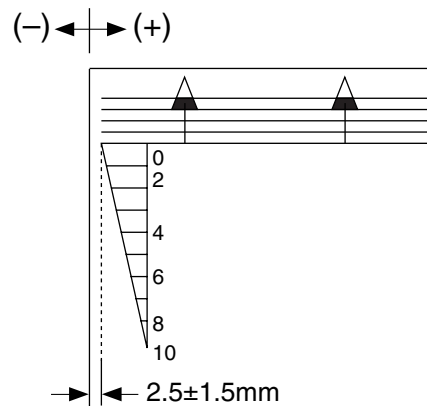
- 2) If the margin is as indicated, change the adjustment value of the horizontal registration for the 2nd side for the cassette 1.
 - COPIER>ADJUST>FEED-ADJ>ADJ-C1RE
 An increase by '1' will decrease the margin on the front side by 0.1 mm.
- 3) Enter the adjustment value for the horizontal

registration of the 2nd side for the cassette 1 as the adjustment value for the horizontal registration of the 2nd side of the cassette 2.

- COPIER>ADJUST>FEED-ADJ>ADJ-C2RE
- 4) Make a copy using the cassette 2 as the source of paper; then, check to make sure that the margin on the front side is 2.5 +/-2 mm.
 - 5) If the value is not as indicated, change the adjustment value of the 2nd side for the cassette 2.
 - COPIER>ADJUST>FEED-ADJ>ADJ-C2RE
 An increase by '1' (for DJ-C2RE) will decrease the horizontal registration on the front side by 0.1 mm.
 - 6) Record the new values on the service label.
 - ADJ-C1RE
 - ADJ-C2RE
 - 7) Press the Reset key twice to end service mode.

3. Adjusting the Margin for the Manual Feed Tray (1st side; mechanical adjustment)

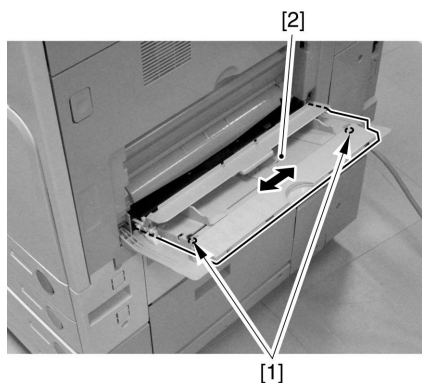
- 1) Place paper in the manual feed tray. For instructions, see the label attached to the manual feed tray.
- 2) Make a copy using the manual feed tray as the source of paper; then, check to make sure that the margin on the front side is 2.5 +/-1.5 mm.



F-1-103

- If the value is not as indicated, make the following adjustments:
- 3) Remove the paper from the manual feed tray.
 - 4) Loosen the fixing screw [1] of the manual feed tray upper cover.

- 5) With reference to the value you took note of in step 2), move the manual feed upper cover back and forth. Moving it toward the rear of the machine will increase the margin on the front side.



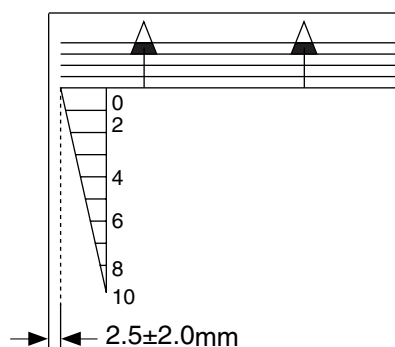
F-1-104

- 6) Tighten the fixing screw of the manual feed tray upper cover.
- 7) Place paper in the manual feed tray.
- 8) Make a copy; then, check to make sure that the margin on the image front side is 2.0 ± 1.5 mm.

4. Adjusting the Margin (manual feed tray; 2nd side)

- 1) Make a double-sided copy using the manual feed tray as the source of paper; then, check to make sure that the margin on the front side for the 2nd side is 2.5 ± 2.0 mm.

(-) ← | → (+)



F-1-105

- 2) If the value is not as indicated, change the horizontal registration adjustment value for the 2nd side for the manual feed tray.

- COPIER>ADJUST>FEED-ADJ>ADJ-MFRE

An increase by '1'(ADJ-MFRE) will decrease the margin on the front side by 0.1 mm.

- 3) Record the new adjustment value on the service label.

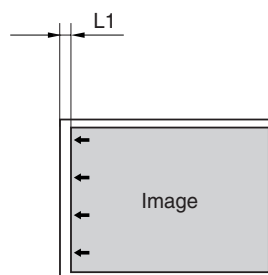
- ADJ-MFRE

- 4) Press the Reset key twice to end service mode.

5. Adjusting the Margin Along the Leading Edge (1st side)

- Make a copy using the cassette 1 as the source of paper; then, check to make sure that the margin along the image leading edge (L1) is 2.5 ± 1.5 mm. If not, make adjustments as follows:

- 1) Make the following selections in service mode: COPIER>ADJUST>FEED-ADJ>REGIST.
- 2) Change the setting to make adjustments. (A change of '1' will cause a shift of 0.1 mm, with a higher value moving the image toward the leading edge.)



An increase in REGIST will shift the image toward the leading edge of the paper.

F-1-106

- 3) Record the new adjustment value on the service label.

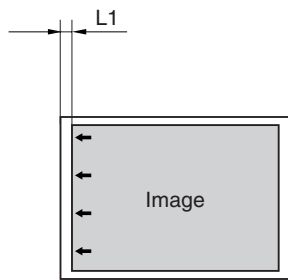
- REGIST

6. Adjusting the Margin Along the Leading Edge (2nd side)

- Make a double-sided copy using the cassette 1 as the source of paper; then, check to see if the margin along the image leading edge for the 2nd side (L) is 2.5 ± 2.0 mm. If not, make adjustments as follows:

- 1) Make the following selections in service mode: COPIER>ADJUST>FEED-ADJ>RG-REFE.
- 2) Change the setting, and make adjustments. (A change of '1' will cause a shift of 0.1 mm, with a

higher setting moving the image toward the leading edge.)



An increase in RG-REFE will shift the image toward the leading edge of paper (toward the trailing edge of feed).

F-1-107

3) Record the new adjustment value on the service label.

- RG-REFE

7. Correcting the Shading Position

If a line occurs in the output image, go through the following:

- if a ADF is used,

1) Make the following selections in service mode:
COPIER>ADJUST>ADJ-XY>STRD-POS.

2) Change the setting to adjust the shading position.

- if a copyboard cover is used,

1) Make the following selections in service mode:
COPIER>ADJUST>ADJ-XY>ADJ-S.

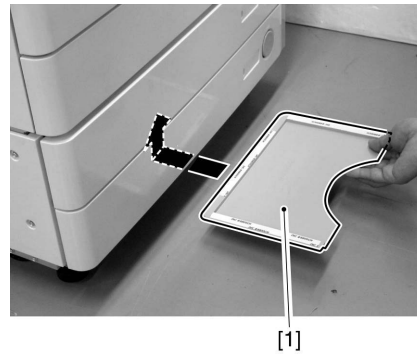
2) Change the setting to adjust the shading position.

1.2.17 Others

0001-8365

1. Service Book Case

1) Peel off the double-sided adhesive tape from the rib area of the service book case [1], and attach the case to the bottom plate of the pedestal.



F-1-108

! Do not attach the service book case to any of the following:

- inside the machine (behind the front cover)
- area that covers the louver
- area that covers the grip portion

Memo:

If no pedestal is used, attach the book case to the left cover of the machine.

2. Touch Pen

1) Fit the touch pen [1] to the control panel.

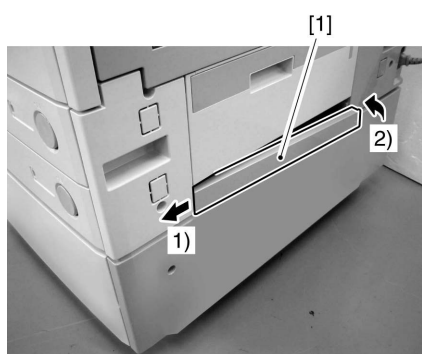


F-1-109

3. Lower Right Cover

1) Mount the lower right cover [1].

(Perform this step if you are installing the machine on a pedestal other than a 2-Cassette Pedestal-Y1.)

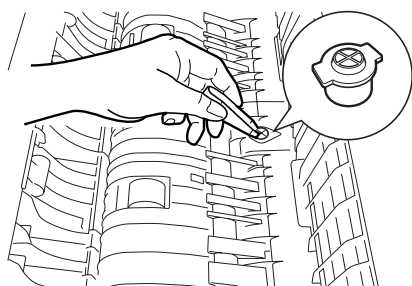


F-1-110

4. Stamp (only if equipped with a DADF)

- 1) Open the ADF feeder cover and separation guide.
- 2) Using tweezers, fix the stamp in place, making sure that the print face of the stamp faces upward.

⚠ Be sure to push in the stamp until a click is felt. The presence of a gap can cause paper to jam.



F-1-111

5. Size Label (only if equipped with a DADF)

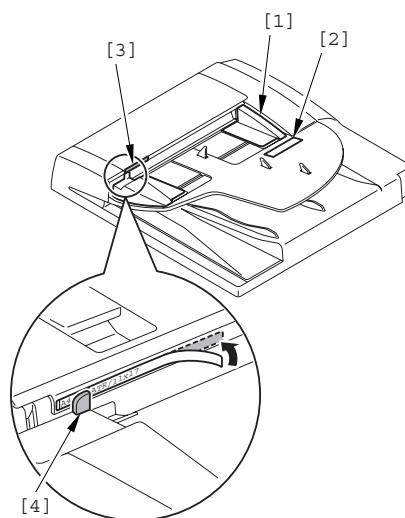
- 1) Match the side guide (rear) [1] against the index A4/A3 or LTR/11x17 indicated by a marking [2].
- 2) Attach the size label (small) [3] of the correct paper configuration to the feeder cover.

Memo:

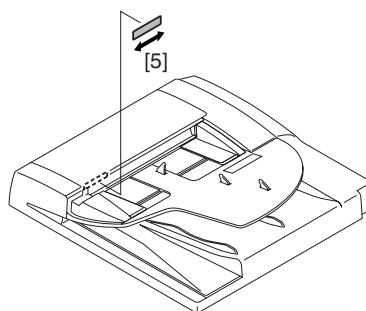
This label is designed to help individuals needing different angles of view.

Move the label back and forth (in the direction of the arrow [5]) so that the index [4] of the side guide (front)

will match the appropriate index of the size label.



F-1-112



F-1-113

1.3 Checking the Connection to the Network

1.3.1 Connecting to the Network

0000-8240

⚠ Go through the following steps only if you are connecting the machine to a network:

- 1) Turn off the control panel power switch.
- 2) Turn off the main power switch.
- 3) Connect the network cable to the machine, and turn on the main power switch.
- 4) Inform the user's system administrator that the installation work is over, and ask him/her to set up the machine for use on the user's network.
- 5) When network settings have been made, turn off the control power switch, and then turn off and then on the main power switch.

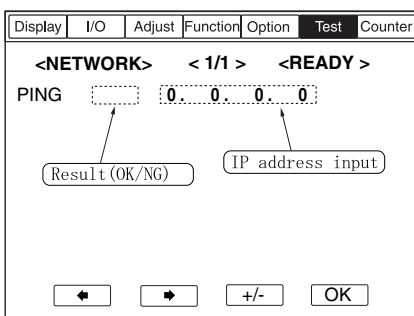
1.3.2 Using PING

0000-4373

⚠ Go through the following steps only if the machine is connected to a network:

If the user's network environment is based on TCP/IP, use the PING function to see that the Ethernet PCB has been correctly mounted and the network settings have been correctly made. If the user's network environment is based on IPX/SPX or AppleTalk, on the other hand, you need not make a PING-based check.

- 1) Make the following selections in service mode: COPIER>TEST>NETWORK>PING.
 - 2) Enter the IP address using the keypad on the control panel, and press the OK key.
 - 3) Press the Start key.
- If the PING check is successful, the machine will indicate 'OK'; otherwise, it will indicate 'NG'.



F-1-114

1.3.3 Making Checks Using a Remote Host Address

0000-4374

You can execute PING using a remote host address, thereby checking the connection to the network.


The term "remote address" refers to the IP address of a PC terminal connected to and operating in a TCP/IP network environment to which the machine belongs.

- 1) Inform the system administrator that you will be checking the connection to the network using PING.
- 2) Check with the system administrator to find out the remote host address.
- 3) Enter the remote host address you obtained in PING.
- 4) If the indication is 'OK", the machine is correctly connected to the network.
- 5) If the indication is 'NG", the machine is not correctly connected to the network. Go through the following troubleshooting steps:

1.4 Troubleshooting the Network

1.4.1 Troubleshooting the Network

0000-4375

 Go through the following steps only if the machine is connected to the network:

If the connection to the network is not correct, you may suspect the following:

- a. poor connection between the network and the Ethernet PCB
- b. wrong TCP/IP setting on the machine
- c. faulty Ethernet PCB or poorly mounted PCB
- d. faulty user network

Go through the following steps to find out and correct the cause:

1.4.2 Making Checks Using a Loopback Address

0000-8237

A loopback address returns before it reaches the network PCB; therefore, executing PING using a loopback address will enable you to find out whether the TCP/IP settings of the machine are correct.

1) Enter the loopback address (127.0.0.1) to PING.

- if the machine indicates 'NG', check the TCP/IP settings of the machine once again, and then execute PING once again.
- if the machine indicates 'OK', check the local host address.

1.4.3 Checking the Connection of the Network Cable

0000-8238

The local host address is the IP address of the machine; therefore, executing PING using the local host address, which returns after it has reached the network PCB, enables you to find out if the network PCB is good or not.

1) Enter the IP address of the machine to PING.

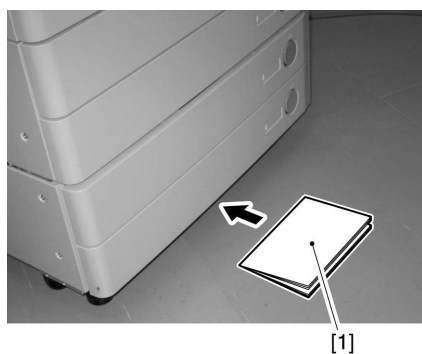
- if the machine indicates 'NG', make the following checks/corrections, and execute PING once again.
 - a. faulty IP address of the machine: check with the system administrator to find out if the IP address (and its settings) assigned to the machine is correct.
 - b. poor connection of the network PC: check the connectors associated with the network PCB.
 - c. faulty network PCB: replace the network PCB.
- if the machine indicates 'OK', suspect a fault in the user's network environment. Report to the system administrator, ask for corrective action.

1.5 Checking the Images/Operations

1.5.1 Checking the Images

0001-8222

- 1) Place the test chart on the copyboard glass, and make copies using the individual cassettes as the source of paper. then, check the images.
 - check to see that the machine does not produce any abnormal noise.
 - check to see that the images are produced correctly at different magnifications.
 - check to see that the machine produces as many copies as specified normally.
- 2) Make settings (Additional Function ; e.g., date, time) to suit the needs of the user.
- 3) Start service mode.
 - press the Additional Function key, press the 2 and 8 keys at the same time, press the Additional Function key once gain.
- 4) Make the user-related settings to suit the needs of the user (COPIER>OPTION>USER).
- 5) Print out test prints in service mode (COPIER>FUNCTION>MISC-P>P-PRINT).
- 6) Put away the printed test print [1] in the service book case.



F-1-115

- 7) Press the Reset key twice to end service mode.
- 8) Clean up the area around the machine, and fill out the service book.

1.6 Installing the Card Reader-C1

1.6.1 Points to Note 0001-2860

⚠ You will need a Card Reader Mounting Kit-B1 to install the Card Reader-C1.

1.6.2 Checking the Contents 0001-2898

<Card Reader-C1>

- [1] Card Reader-C1 1 pc
- [2] Screw (RS tightening; M4x10) 1 pc.
- [3] Toothed washer 1 pc.

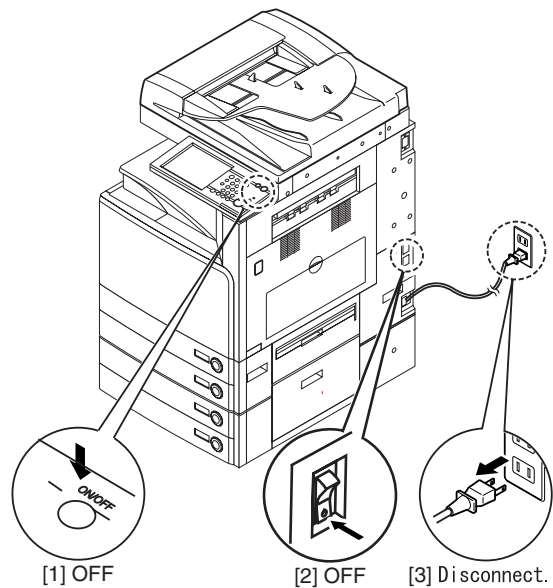
<Card Reader Mounting Kit-B>

- [1] Card reader base 1 pc.
- [2] Relay harness 1 pc.
- [3] TP screw (M4x8) 1 pc.
- [4] TP screw (M4x25) 1 pc.
- [5] Toothed washer 1 pc.

1.6.3 Installation 0001-2930

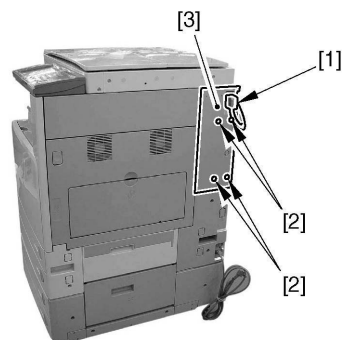
⚠ When you have installed the Card Reader-C1, enter the numbers of the cards to be used in service mode (COPIER>FUNCTION>INSTALL>CARD); otherwise, the reader will not recognize cards upon insertion.

- 1) Turn off the control panel power switch.
- 2) Turn off the main power switch.
- 3) Disconnect the power cable (from the power outlet) [3].



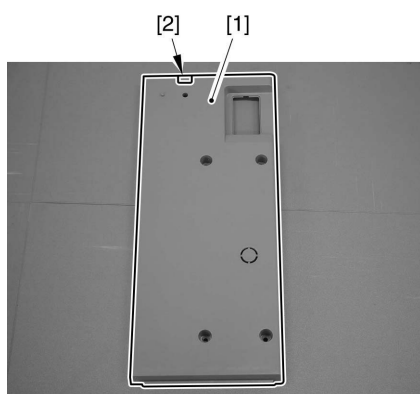
F-1-116

- 4) Disconnect the reader power cable [1].
- 5) Remove the 4 screws [2], and detach the rear right cover [3].



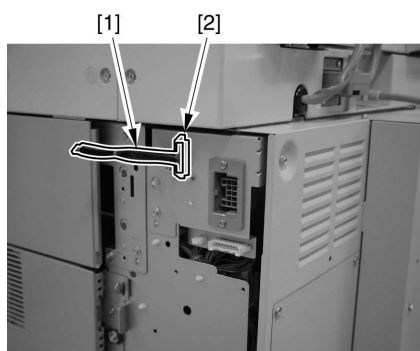
F-1-117

- 6) Remove the face plate [2] of the rear right cover using nippers or the like.



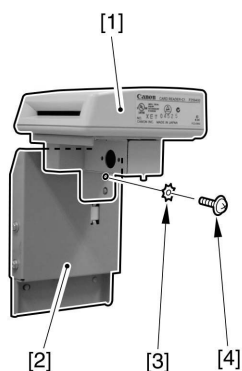
F-1-118

- 7) Connect the relay cable [1] to the machines' connector assembly.



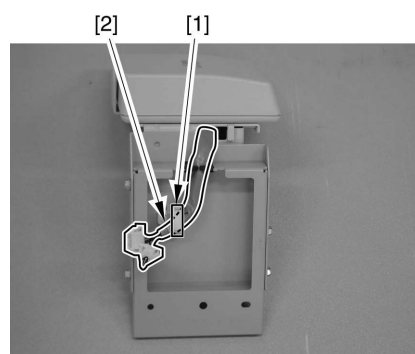
F-1-119

- 8) Mount the rear right cover using 4 screws.
9) Mount the card Reader-C1 [1] and the card reader base [2] using the included TP screw (M4x8) [4] together with its washer [3].



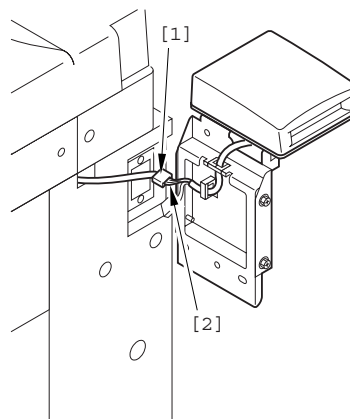
F-1-120

- 10) Route the relay cable [2] through the wire saddle.



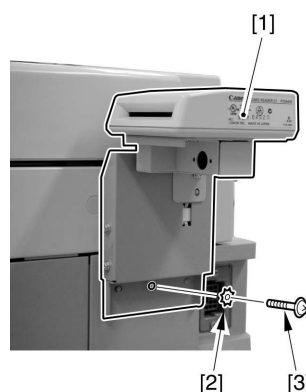
F-1-121

- 11) Connect the machine's cable [1] to the relay cable [2] of the Card Reader-C1.



F-1-122

- 12) Taking care so that that the harness will not be trapped, mount the card Reader-C1 [1] using a TP screw (M4x25) [3] together with its washer [2].



F-1-123

- 13) Connect the power cable to the power outlet, and

turn on the power. Check to see that the machine has entered a standby state, and start service mode.

14) Enter the numbers of the cards to be used in service mode (COPIER>FUNCTION>INSTALL>CARD).

- Enter the lowest number of the card numbers the user is planning to use.

- As many as 300 cards may be used (starting with the number you have entered).

15) Turn off the control panel power switch.

16) Turn off and then on the main power switch.


1.6.4 Using with NetSpot

Accountant (NSA) 0001-9160

1) Make the following selections in Additional Function: system control settings>group ID control>count control; then, check to see IDs 00000001 thorough 00001000 have been created (i.e., if you entered '1' as the first number in service mode):

COPIER>FUNCTION>INSTALL>CARD).

2) Make the following selections in Additional Function: system control settings>network settings>TCP/IP settings>IP address; then set up the following: IP address, gateway address, subnet mask.

 Take care. If you fail to register [system control group] and [system control ID No.], you will not be able to perform 'register card to device' as part of NSA setup work.

3) Under [system administrator info] of Additional Function, enter any number for [system control group] and [system control ID No.].

4) Turn off the control panel switch.

5) Turn off and then on the main power switch.

1.7 Installing the NE Controller-A1

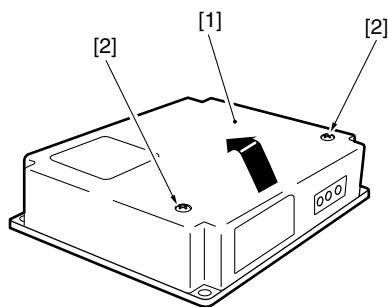
1.7.1 Installing the NE Controller-A1

0001-2145

If you want to install an NE controller-A1 to the machine, be sure to observe the following:

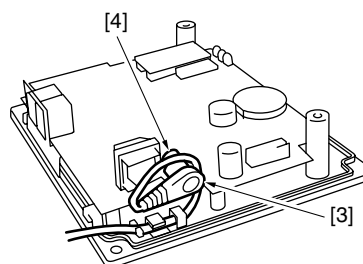
1. follow the laws and regulations of the country in question.
2. check to see that the host machine has properly been installed.
3. check to see that the host machine's power plug is disconnected.
4. identify the screws by type (length, diameter) and location.
5. prepare the unit setup data on the PC at the service station.

- 1) Remove the 2 screws [2], and detach the upper cover [1] of the unit.



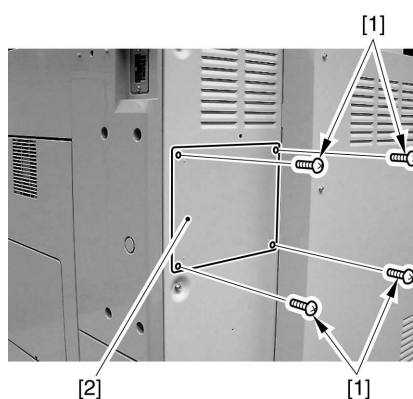
F-1-124

- 2) Connect the connector [3] of the power supply to the connector [4] of the unit.



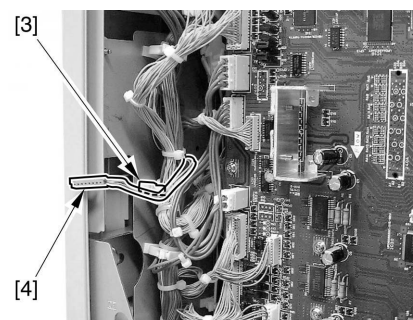
F-1-125

- 3) Remove the 4 screws [1], and detach the face plate [2] of the host machine's upper cover.



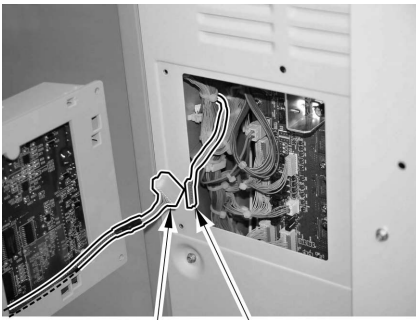
F-1-126

- 4) Remove the wire saddle [3], and detach the cable [4] of the unit.



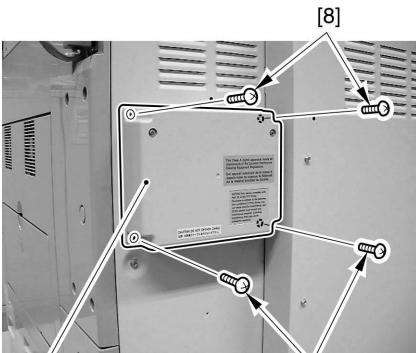
F-1-127

- 5) Connect the cable [5] of the unit to the connector [6] of the host machine's DC controller.



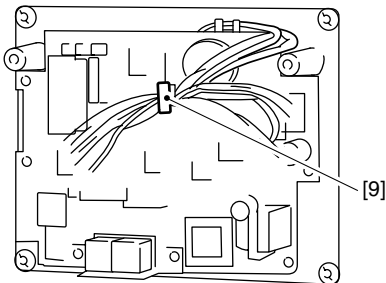
F-1-128

6) Fix the unit [7] in place to the host machine's rear cover using 4 screws [8]. (Use the screws that come with the unit.)



F-1-129

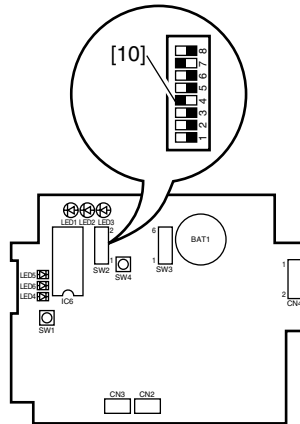
7) Remove the slack from the cable lying between the host machine and the unit; bundle the excess length of cable, and fix it in place using the harness band [9].



F-1-130

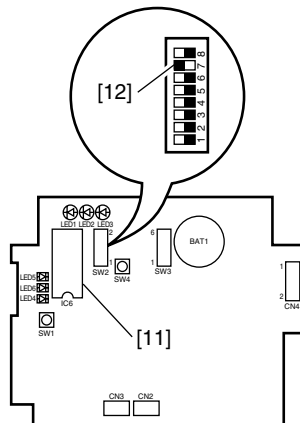
8) Shift bit 4 of the DIP switch [10] on the PCB to ON (SW2-4 so that the communication between the

unit and the host machine will be in IPC mode).



F-1-131

9) If IC6 [11] is found on the PCB, shift bit 7 of the DIP switch [12] (SW2-7) to ON; otherwise, shift it to OFF.



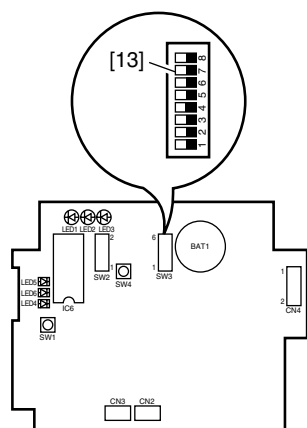
F-1-132

! If IC6 [11] is not found, there is no need to mount one.

If you are mounting a ROM (IC6) [11] for upgrading the unit or replacing the ROM, be sure to shift bit 7 of the DIP switch [12] to ON (SW2-7).

10) Set the bits of the DIP switch [13] (SW3) on the PCB as indicated:

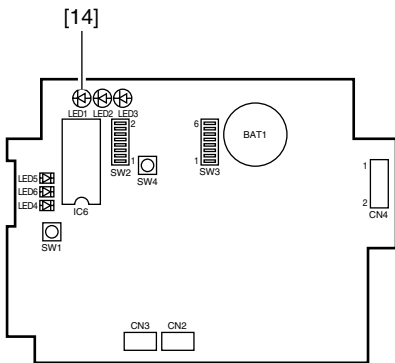
T-1-8



F-1-133

Notation	Setting	SW3-1	SW3-2	Description
		OFF	OFF	set the modem signal transmission level to -16 dBm.
		ON	OFF	set the modem signal transmission level to -14 dBm.
SW3-1	see right	OFF	ON	set the modem signal transmission level to -12 dBm.
SW3-2		ON	ON	set the modem signal transmission level to -10 dBm.
SW3-3	OFF	set to OFF at all times.		
SW3-4	ON	set the line of the unit to push pulse.		
	OFF	set the line of the unit to dial pulse.		
SW3-5	ON	set the dial pulse speed to 20 PPS.		
	OFF	set the dial pulse speed to 10 PPS.		
SW3-6	-	not used		

11) Connect the power supply to the power plug; then, check to see that LED1 [14] on the PCB (green) comes on.



F-1-134

See the bits of the DIP switch [15] (SW2) of the PCB as indicated; then, press the push switch [16] (SW4) so that LED5 [17] (red) goes on.

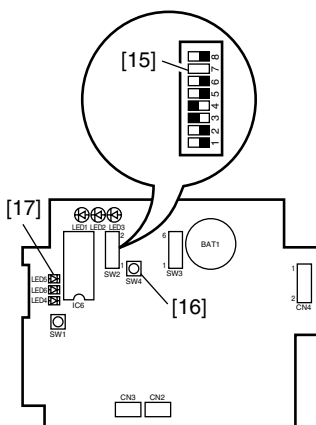
T-1-9

12) Initialize the RAM of the unit.

bits of SW2	Setting
SW2-1	OFF
SW2-2	OFF
SW2-3	ON
SW2-4	ON
SW2-5	OFF
SW2-6	OFF
SW2-7	See step 9).
SW2-8	OFF

13) When LED5 [17] (red) has come on, set the bits of the DIP switch [15] (SW2) on the PCB as indicated, and press the push switch [16] (SW4) so that LED5 [17] (red) goes off to indicate that RAM has been initialized.

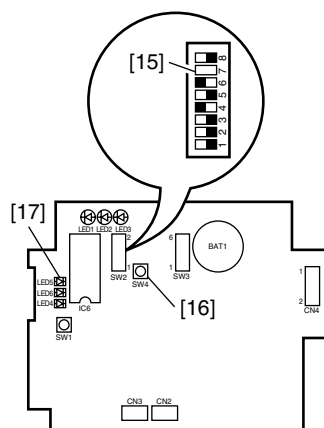
T-1-10



F-1-135

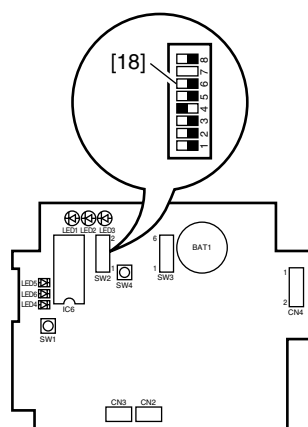
bits of SW2	Setting
SW2-1	OFF

bits of SW2	Setting
SW2-2	OFF
SW2-3	OFF
SW2-4	ON
SW2-5	OFF
SW2-6	ON
SW2-7	See step 9).
SW2-8	OFF



F-1-136

- 14) Shift bit 6 of the DIP switch [18] (SW2-6) on the PCB to OFF.

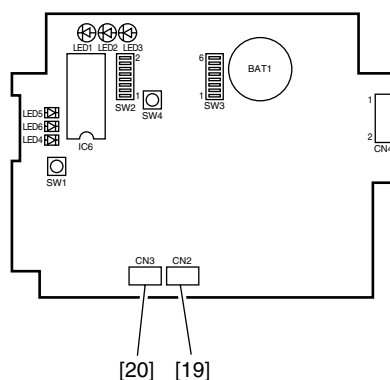


F-1-137

- 15) Connect the telephone line to the unit.
If the unit is to be used on its own, connect the

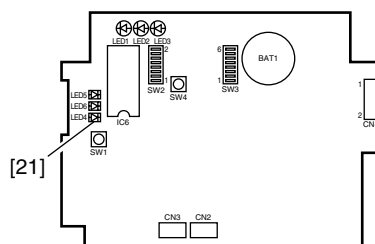
modular jack cable to the connector [19] (LINE) of the unit.

If the extension function of the unit is to be used, connect the existing telephone or fax to the connector [20] (TEL) of the unit, and connect the telephone line to the other connector [19] (LINE) of the unit.



F-1-138

- 16) Call the service station, and ask for initial setup work for the unit. (In response to an incoming call, LED4 (red) [21] of the unit will come on.)



F-1-139

17) Call the service station, and check to find out if the initial setup work for the unit has ended. If the work failed, go back to RAM initialization, and go through steps 11) through 13).

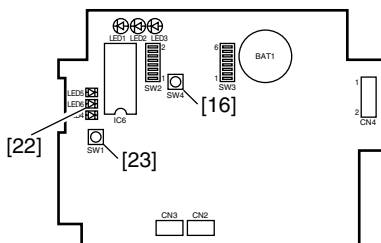
⚠ Be sure to find out if the settings of the unit are correct by contacting the service station.

18) Check to find out if a call may be placed using the unit to the PC located at the service station.

Press the push switch [16] (SW4) of the PCB. In response, LED6 [22] (red) will go on; it goes off when the transmission is done, and starts to flash if it fails.

A press on the push switch (SW4) [16] while LED6 [22] is flashing will initiate transmission for a second time.

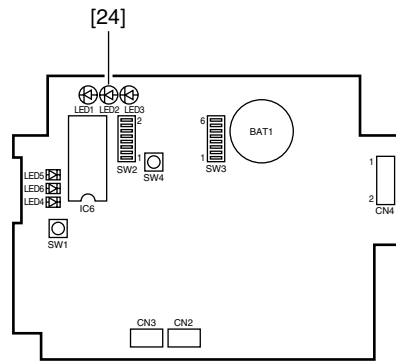
A press on the push switch (SW1) [23] while LED6 [22] is flashing will cancel the ongoing transmission by the unit.



F-1-140

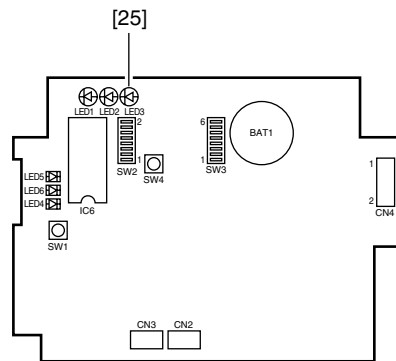
19) Check to see that the communication between the unit and its host machine is normal.

Connect the host machine's power plug, and turn on the power switch; then, see that LED2 [2] (orange) flashes.



F-1-141

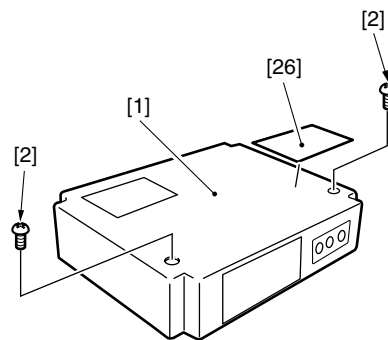
20) Press the host machine's Start key, and check to see that LED3 [25] (pink) flashes each time delivery takes place.



F-1-142

21) Attach the Switch Settings label [26] to the upper cover; then, record the individual switch settings.

22) Mount the upper cover [1] in place with 2 screws [2]. When doing so, be sure that heat cable of the power supply is secured by the cable guide inside and is not trapped by the upper cover [1].



F-1-143

1.8 Installing the Key Switch Unit-A1

1.8.1 Checking the Contents

0000-8761

Key Switch Unit-A1

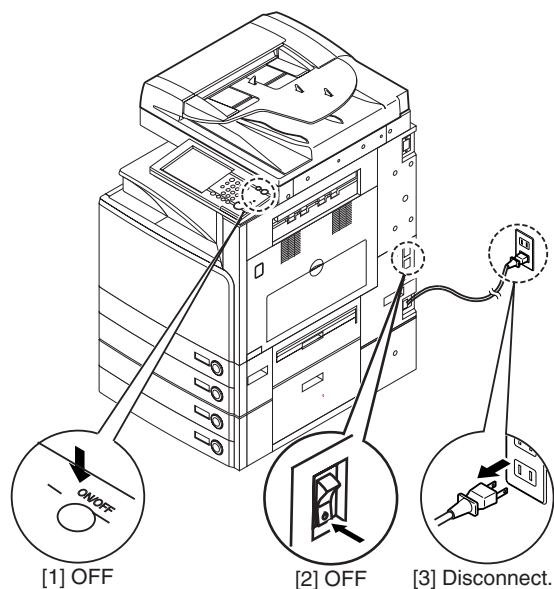
- [1] Key Switch Unit 1 PC.
- [2] Control key 1 pc.
- [3] Binding screw (M4x6) 1 pc.

1.8.2 Installation

0000-8762

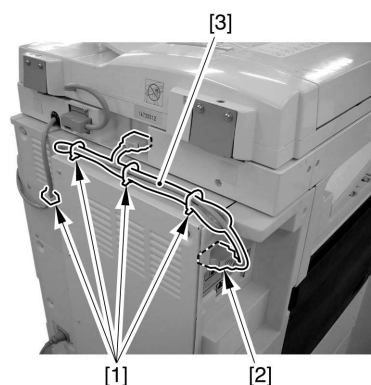
⚠ Before starting the work, be sure to go through the following on the host machine in strict order:

1. turn off the control panel power switch.
2. turn off the main power switch.
3. disconnect the power cable (from the power outlet).



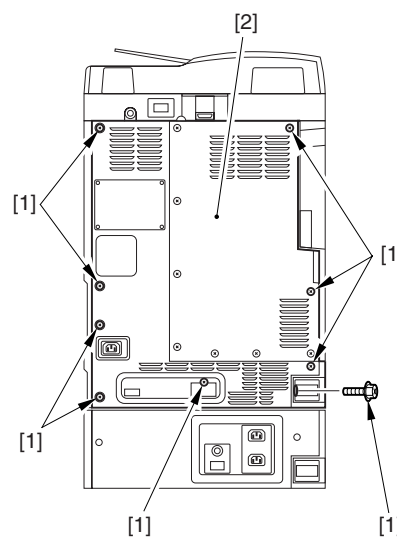
F-1-144

- 1) Remove the 3 wire saddles [1].
- 2) Disconnect the connector [2], and detach the reader communication cable [3].



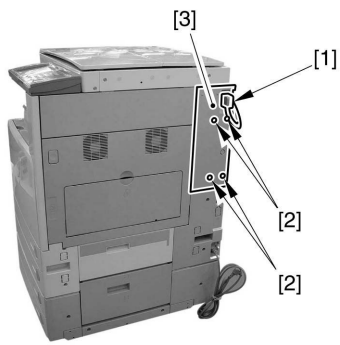
F-1-145

- 3) Remove the 9 screws [1], and detach the rear cover [2].



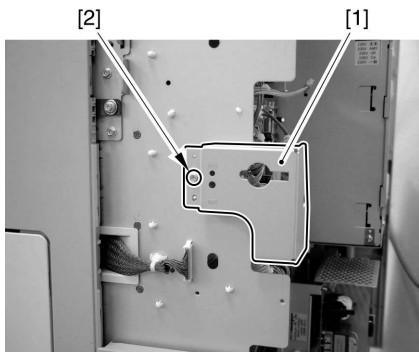
F-1-146

- 4) Disconnect the reader power cable [1].
- 5) Remove the 4 screws [2], and detach the rear right cover [3].



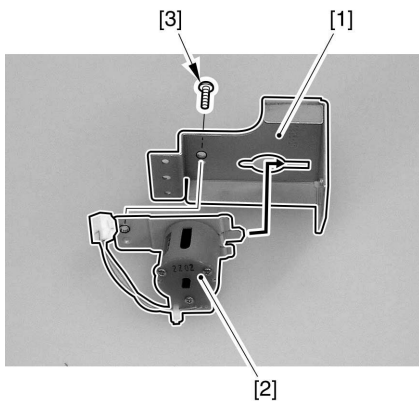
F-1-147

6) Remove the screw [2], and detach the bracket [1] from the key switch.



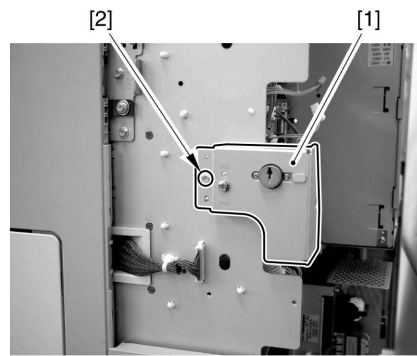
F-1-148

7) Mount the key switch unit [2] to the key switch breaker [1] using the included screw [3] (M4x6).



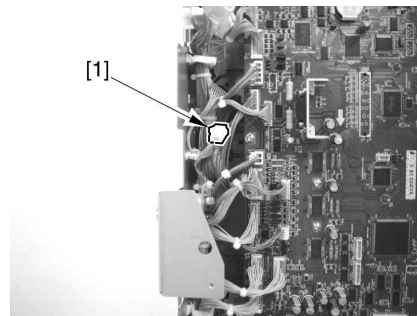
F-1-149

8) Mount the key switch bracket [1] with a screw [2].



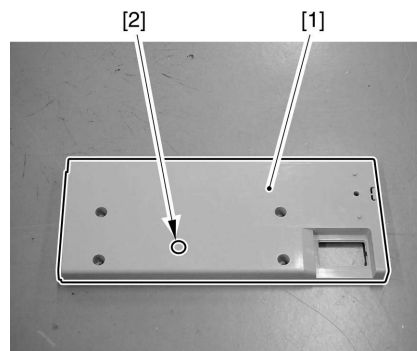
F-1-150

9) Connect the connector [1] of the key switch unit.



F-1-151

10) Remove the face plate [2] from the rear right cover [1] using nippers.



F-1-152

11) Mount the rear cover of the host machine using 9 screws.

12) Mount the rear right cover using 4 screws.

13) Fit the reader communications cable.

14) Fit the reader power cable.

15) Fit the power cable (for the power outlet).

- 16) Turn on the main power switch.

1.8.3 Making Checks After

Installation

0000-8764

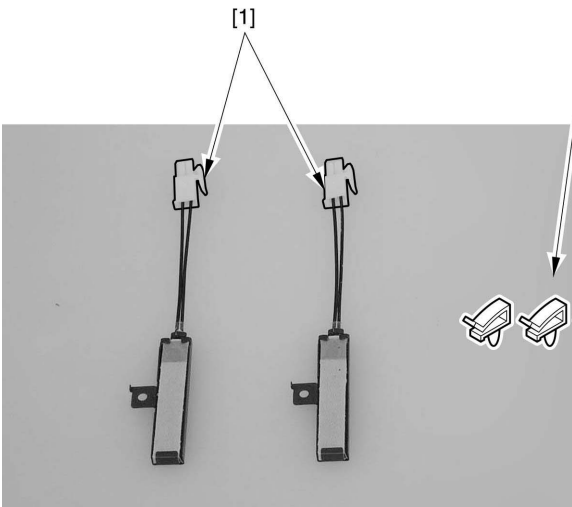
- 1) Start service mode.
- 2) Make the following selections, and enter '1':
COPIER>FUNCTION>INSTALL>KEY.
- 3) Turn off the control panel power switch.
- 4) Turn off and then on the main power.
- 5) Check to see that the message "set the control key"
has appeared.
- 6) Fit the key to the key switch unit.

1.9 Installing the Anti-Condensation Heater

1.9.1 Checking the Contents

0000-9880

- [1] Reader Heater 2 pc.
- [2] Clamp 3 pc.
- [3] Screw (M4x6) 2 pc.



F-1-153

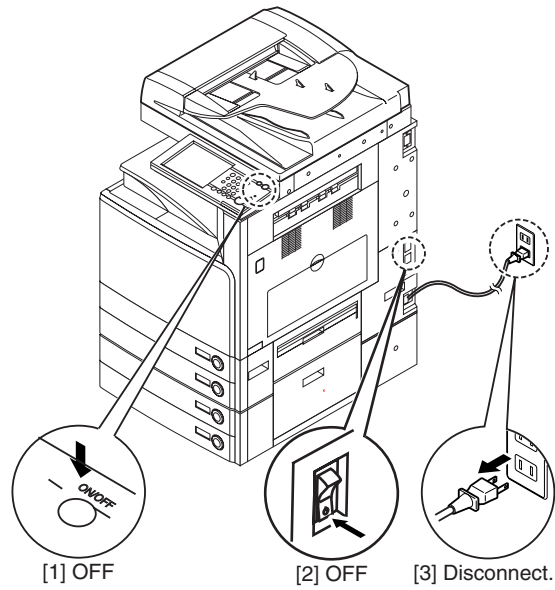
1.9.2 Installation

0000-9957

⚠ There are 2 locations for the heaters. Any of the 2 heaters may be used for any of the locations.

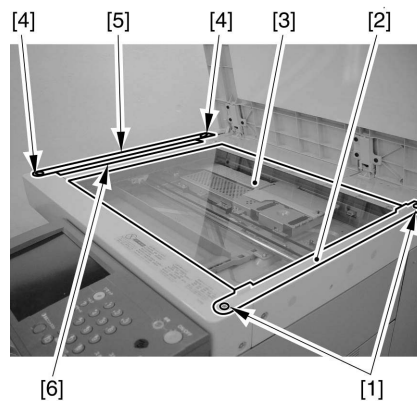
⚠ Before starting the work, be sure to go through the following on the host machine in strict order:

1. turn off the control panel power switch.
2. turn off the main power switch.
3. disconnect the power cable (from the power outlet).



F-1-154

- 1) Open the copyboard cover/ADF.
- 2) Remove the 2 screws, and detach the glass retainer (right) [2].
- 3) Remove the copyboard glass (for copyboard cover) [3].
- 4) Remove the 2 screws [4], and detach the glass retainer (left) [5].
- 5) Remove the copyboard glass (for ADF) [6].

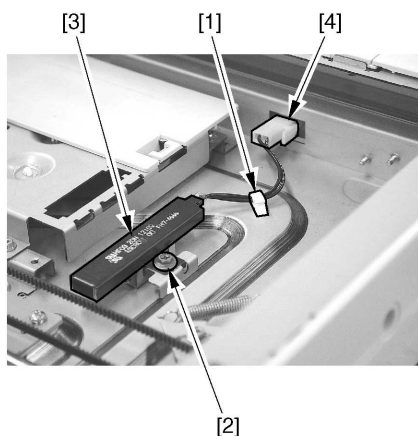


F-1-155

⚠ When removing the copyboard glass, take care not

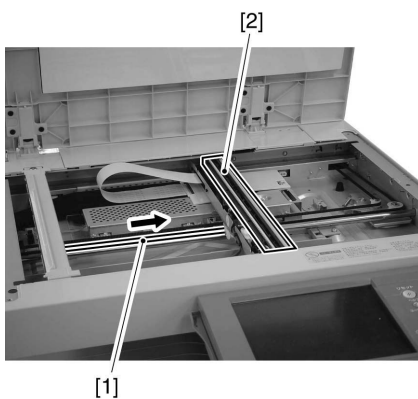
to touch the glass surface and the white plate on its back. (The presence of dirt will cause a black line in the images.)

- 6) Mount the clamp [1].
- 7) Fix the heater [3] in place using a screw [2].
- 8) Fit the connector [4] of the heater, and fix the harness of the heater in place using the clamp [1].



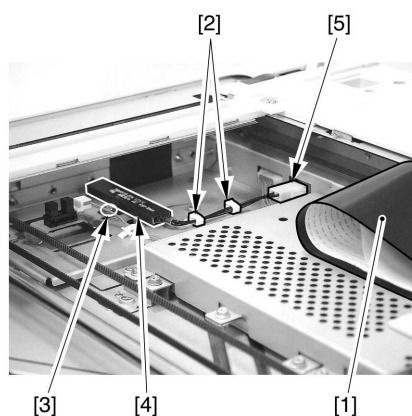
F-1-156

- 9) Pull the drive belt (front side) [1] to the right to move the contact sensor unit [2] to the center.



F-1-157

- 10) Peel off the protective sheet [1], and fit the 2 clamps [2]. (Keep the protective sheet peeled until step 12.)
- 11) Fix the heater [4] in place using a screw [3].
- 12) Fit the connector [5] of the heater in place, and fit the harness of the heater to the clamp [2].



F-1-158

- 13) Put back the protective sheet.
- 14) Mount the copyboard glass (for DF) and the copyboard glass (for copyboard cover).
- 15) Mount the glass retainer (let, right) using 2 screws each.
- 16) Connect the power cable.

Chapter 2 Relocating the Machine

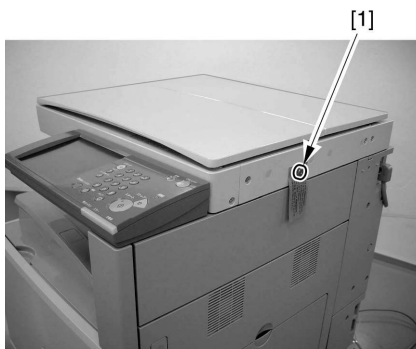
2.1 Relocating the Machine

0001-7304

If you need to relocate the machine after installation by truck or other means of transportation, be sure to perform the following work in advance:

⚠ If you want to move the machine intact with its pedestal, be sure not to use the machine's grips; otherwise, the machine will come off the pedestal as when it is moved over a step. Be sure to lift the pedestal.

1) Fix the scanner in place using the scanner fixing screw [1] that has been set aside from the time of installation.



F-2-1

2) Put paper on the copyboard glass.

3) Remove all toner cartridges and developing assembly so that the developing rotary will not rotate in response to vibration occurring in transit.

Nov 12 2003

