Service Manual

iR4570/3570, 2870/2270 Series

Canon

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Application

This manual has been issued by Canon Inc. for qualified persons to learn technical theory, installation, maintenance, and repair of products. This manual covers all localities where the products are sold. For this reason, there may be information in this manual that does not apply to your locality.

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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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1.2.7.2 Printing Speed 1-48

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1.1 System Construction

1.1.1 Overview of the System with a Delivery Accessory

0006-6215

iR2270 / iR2870 / iR3570 / iR4570

The system may include a delivery accessory that may enable any of the following three:

- if a large volume of delivery processing or multiple types of delivery processing (e.g., stapling, punching) is needed: delivery accessory system configuration 1
- if delivery processing is limited to stapling/punching: delivery accessory system configuration 2
- if delivery processing is limited to 3-way delivery: delivery accessory system configuration 3

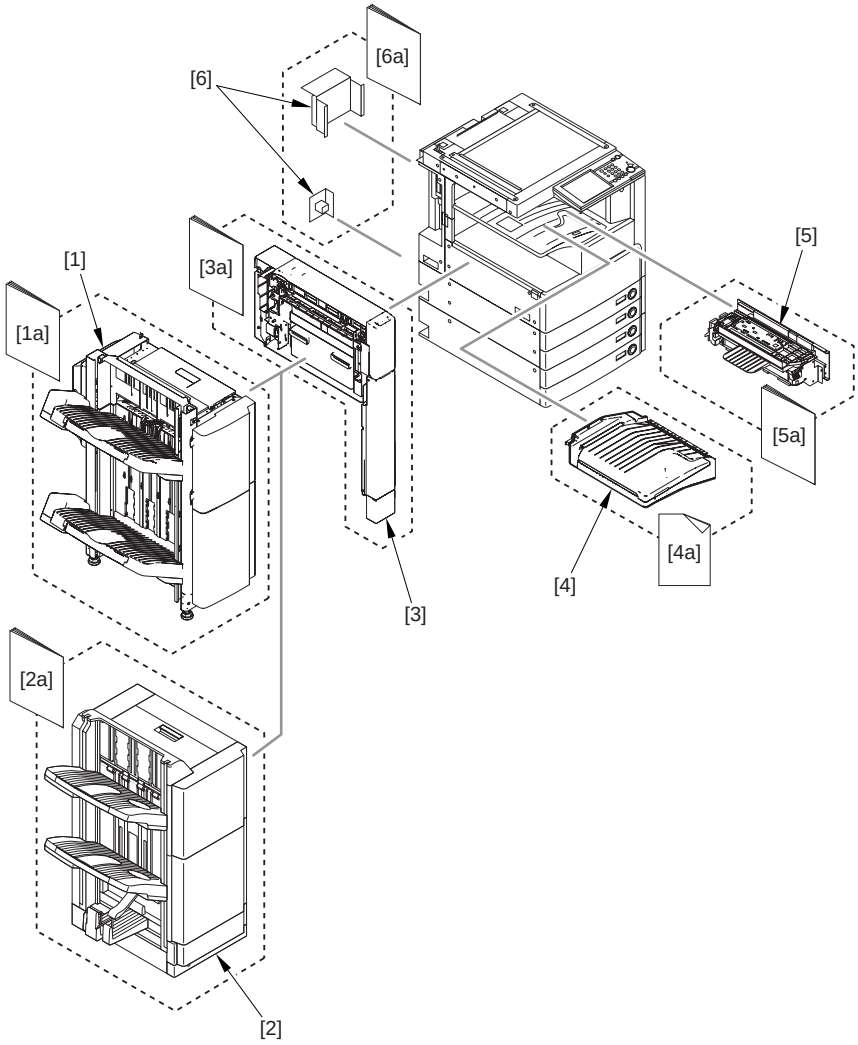
1.1.2 Delivery Accessory System Configuration 1

0006-6221

iR2270 / iR2870 / iR3570 / iR4570

The following shows a typical system configuration of this type:

Remarks:
The 3 Way Unit-A1 comes as standard with the following:
120V: all model
230V: iR4570, iR3570



F-1-1

T-1-1

[1]Finisher-Q3	[1a]Installation Procedure - Installation of the Finisher-Q3 - Installation of the Buffer Path Unit [4]
[2]Saddle Finisher-Q4	[2a]Installation Procedure - Installation of the Finisher-Q4 - Installation of the Buffer Path Unit [4]
[3]Punch Unit-L1/M1/N1/P1	[3a]Installation Procedure - Installation of the Punch Unit-L1/M1/N1/P1
[4]Buffer Path Unit-E1	[4a]Instruction Sheet (indicating references)
[5]3 Way Unit-A1	[5a]Installation Procedure - Installation of the 3 Way Unit-A1

[6]Accessories Power Supply-P2 (needed when installing [1] through [4]; standard with 120/ 230V model)	[6a]Installation Procedure - Installation of the Accessories Power Supply-P2

The following shows the functions that the system will provide and the accessories that will be needed:

T-1-2

Function provided	Accessory needed
- 3-way delivery - stapling	Finisher-Q3 or Saddle Finisher-Q4 Accessories Power Supply-P2 Buffer Path Unit-E1 3 Way Unit-A1

T-1-3

Function provided	Accessory needed
- saddle binding	Saddle Finisher-Q4 Accessories Power Supply-P2 Buffer Path Unit-E1 3 Way Unit-A1

T-1-4

Function provided	Accessory needed
- punching	Finisher-Q3 or Saddle Finisher -Q4 Accessories Power Supply-P2 Buffer Path Unit-E1 3 Way Unit-A1 Punch Unit-L1/M1/N1/P1

1.1.3 Delivery Accessory System Configuration 2

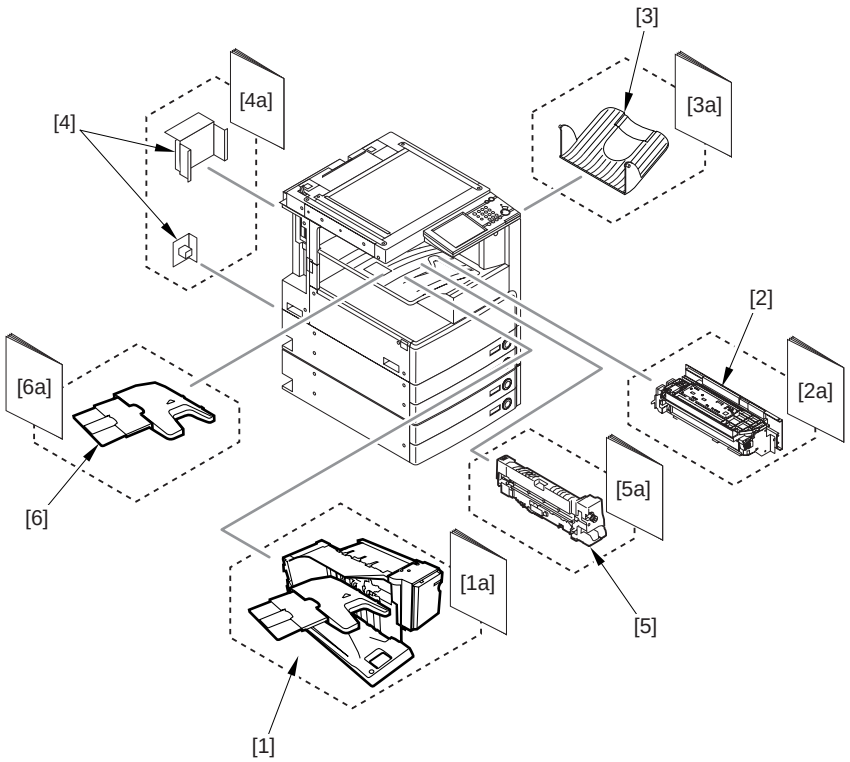
0006-6233

iR2270 / iR2870 / iR3570 / iR4570

The following shows a typical system configuration of this type:

Remarks:
The 3 Way Unit-A1 comes as standard with the following models:
120V: all model

230V: iR4570, iR3570



F-1-2

T-1-5

[1]Finisher-S1	[1a]Installation Procedure - Installation of the Finisher-S1
[2]3 Way Unit-A1	[2a]Installation Procedure - Installation of the 3 Way Unit-A1
[3]Copy Tray-J1	[3a]Installation Procedure - Installation of the Copy Tray-J1
[4]Accessories Power Supply-P2 (needed when installing [1]; standard with 120/230V model)	[4a]Installation Procedure - Installation of the Accessories Power Supply-P2
[5]Inner Puncher Kit-Q1/R1/S1/T1	[5a]Installation Procedure - Installation of the Inner Puncher Kit-Q1/R1/S1/T1
[6]Finisher Additional Tray-B1	[6a]Installation Procedure - Installation of the Finisher Additional Tray-B1

The following shows the functions that the system will provide and the accessories that will be needed:

T-1-6

Function provided	Accessory needed
- 2-way delivery - stapling	Finisher-S1 Accessories Power Supply-P2 3 Way Unit-A1 Copy Tray-J1

T-1-7

Function provided	Accessory needed
- 3-way delivery - stapling	Finisher-S1 Accessories Power Supply-P2 3 Way Unit-A1 Finisher Additional Tray-B1 Copy Tray-J1

T-1-8

Function provided	Accessory needed
- punching	Finisher-S1 Accessories Power Supply-P2 3 Way Unit-A1 Inner Puncher Kit-Q1/R1/S1/T1

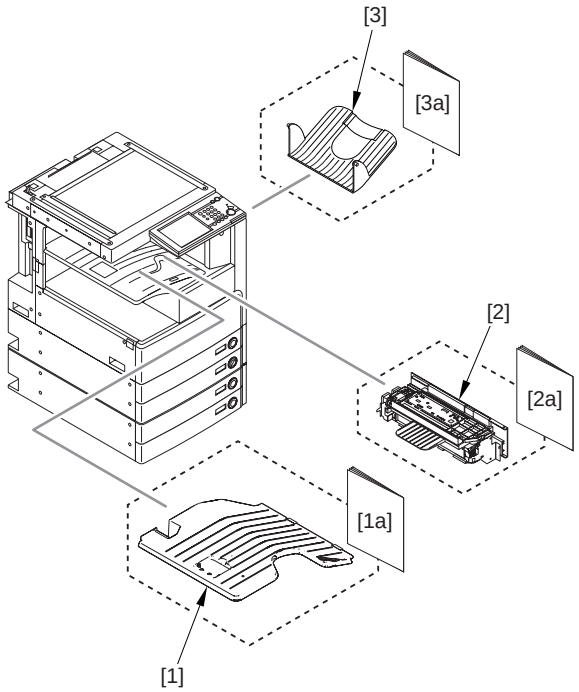
1.1.4 Delivery Accessory System Configuration 3

0006-6234

iR2270 / iR2870 / iR3570 / iR4570

The following shows a typical system configuration of this type:

Remarks:
The 3 Way Unit-A1 comes as standard with the following models:
120V: all model
230V: iR4570, iR3570



F-1-3

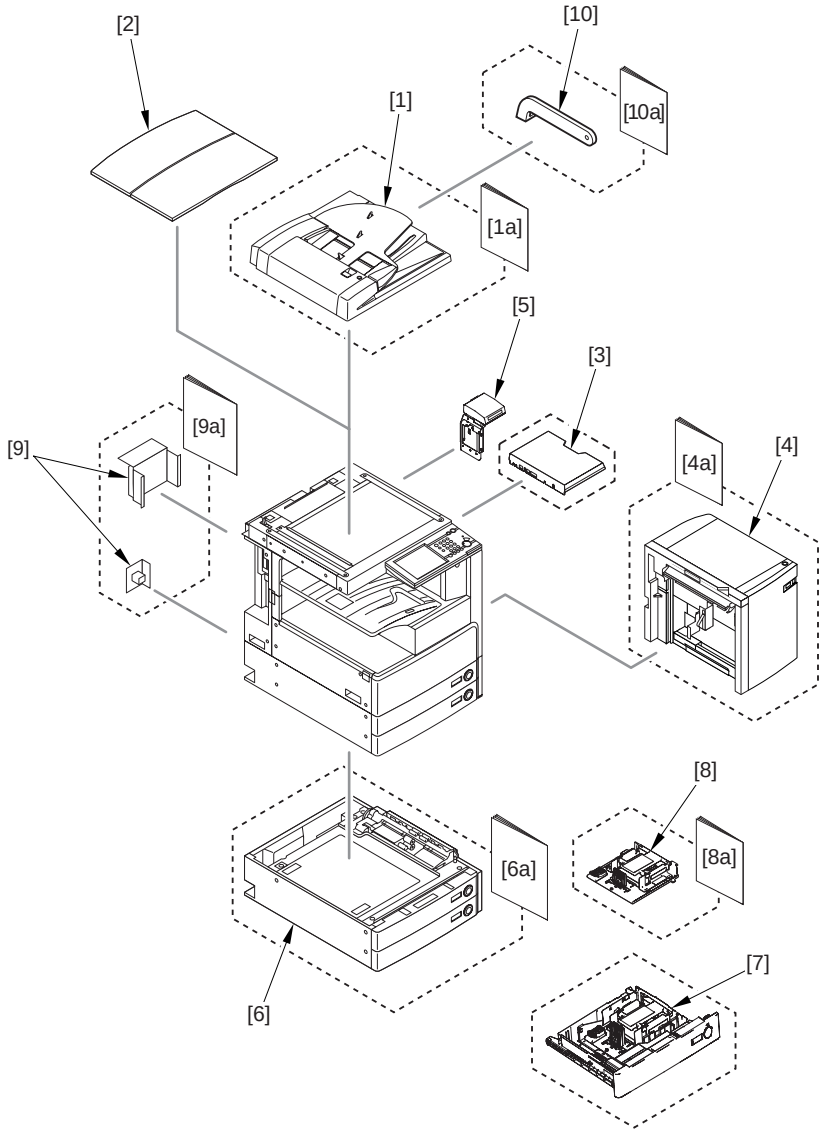
T-1-9

[1]Inner 2-Way Tray-D1	[1a]Installation Procedure - Installation of the Inner 2-Way Tray-D1
[2]3 Way Unit-A1 (powered by the printer unit, not requiring the Accessories Power Supply-P2)	[2a]Installation Procedure - Installation of the 3 Way Unit-A1
[3]Copy Tray-J1	[3a]Installation Procedure Installation of the Copy Tray-J1

1.1.5 Pickup/Original Handling Accessories System Configuration 0006-6254

iR2270 / iR2870 / iR3570 / iR4570

The following shows a typical system configuration:



F-1-4

T-1-10

[1]DADF-N1

[1a]Installation Procedure
- Installation of the DADF-N1

[2]Platen Cover Type-H

[3]Original Holder-J1

[3a]Installation Procedure
- Installation of the Original Holder-J1

[4]Side Paper Deck-Q1

[4a]Installation Procedure
- Installation of the Side Paper Deck-Q1

[5]Card Reader-C1, Card Reader Mounting Kit-B1

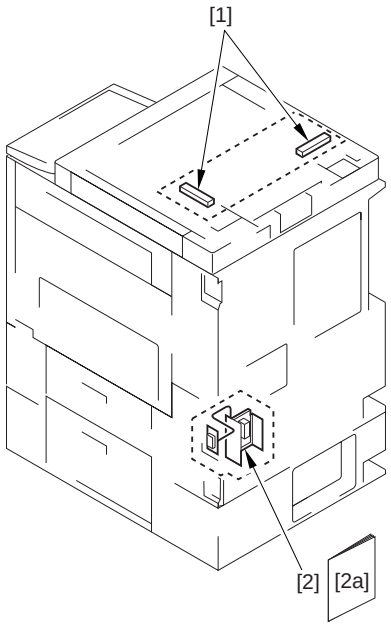
[6]2-Cassette Pedestal-Y2	[6a]Installation Procedure - Installation of the 2-Cassette Pedestal-Y2
[7]Envelope Cassette-C1 (100V)	
[8]Envelope Cassette Attachment-C1 (115/200V)	[8a]Installation Procedure - Installation of the Envelope Cassette Attachment-C1
[9]Accessories Power Supply-P2 (required when installing the Side Paper Deck Q1 [4]; standard with 120/230V model)	[9a]Installation Procedure - Installation of the Accessories Power Supply-P2
[10]DADF Handle-A1	[10a]Installation Procedure - Installation of the DADF Handle-A1

1.1.6 Reader Heater System Configuration

0006-6260

iR2270 / iR2870 / iR3570 / iR4570

The following shows a typical system configuration:



F-1-5

T-1-11

[1]Reader Heater Unit-B1
(A Heater PCB-C1 is needed for operation)

[2]Heater PCB-C1

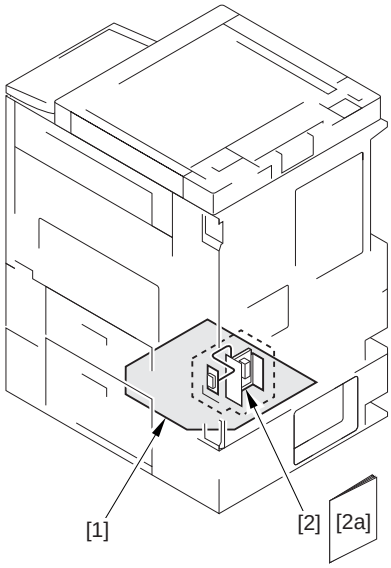
[2a]Installation Procedure
- Installation of the Heater PCB-C1
- Installation of the Cassette Heater Unit-29
  (installation to the printer unit)
- Installation of the Reader Heater Unit-B1

1.1.7 Cassette Heater System Configuration 1

0006-6261

iR2270 / iR2870 / iR3570 / iR4570

The following shows a typical system configuration:



F-1-6

T-1-12

[1]Cassette Heater Unit-29
(installation to the printer unit)
(A Heater PCB-C1 is needed for operation.)

[2]Heater PCB-C1

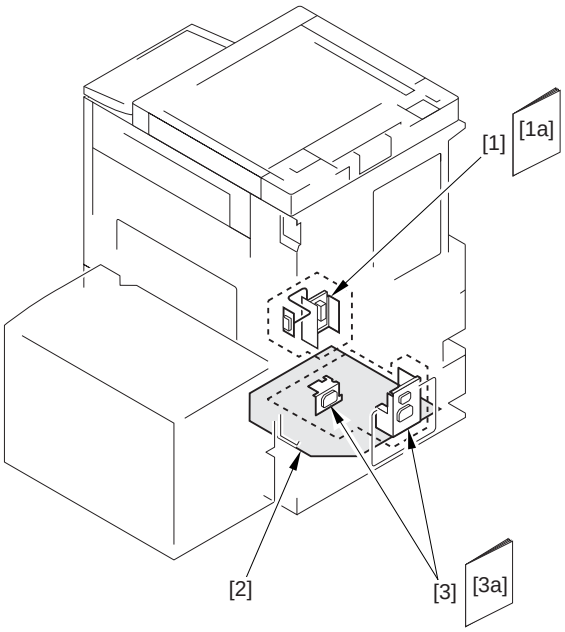
[2a]Installation Procedure
- Installation of the Heater PCB-C1
- Installation of the Cassette Heater Unit-29
  (installation to the printer unit)
- Installation to the Reader Heater Unit-B1

1.1.8 Cassette Heater System Configuration 2

0006-6262

iR2270 / iR2870 / iR3570 / iR4570

The following shows a typical system configuration:



F-1-7

T-1-13

[1]Heater PCB-C1

[1a]Installation Procedure
- Installation of the Heater PCB-C1
- Installation of the Cassette Heater Unit-29
  (installation to the printer unit)
- Installation of the Reader Heater Unit-B1

[2]Cassette Heater Unit-29
(installation to the cassette pedestal)
(Its operation requires the installation of the Heater PCB-C1 and the Cassette Heater Mounting Kit-B1.)

[3]Cassette Heater Mounting Kit-B1

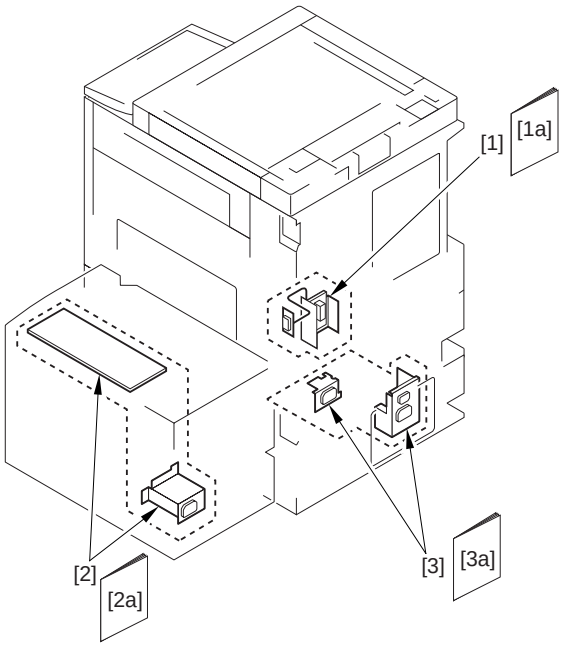
[3a]Installation Procedure
- Installation of the Cassette Heater Mounting Kit-B1
- Installation of the Cassette Heater Unit-25
- Installation of the Cassette Heater-29
  (installation to the cassette pedestal)

1.1.9 Side Deck Heater System Configuration

0006-6264

iR2270 / iR2870 / iR3570 / iR4570

The following shows a typical System configuration:



F-1-8

T-1-14

[1]Heater PCB-C1

[1a]Installation Procedure
- Installation of the Heater PCB-C1
- Installation of the Cassette Heater Unit-29
  (installation to the printer unit)
- Installation of the Reader Heater Unit-B1

[2]Cassette Heater Unit-25
(Its operation requires the installation of the Heater PCB-C1 and the Cassette Heater Mounting Kit-B1.)

[2a]Installation Procedure
- Installation of the Cassette Heater Unit-29
  *Not used for mounting this unit to this model.

[3]Cassette Heater Mounting Kit-B1

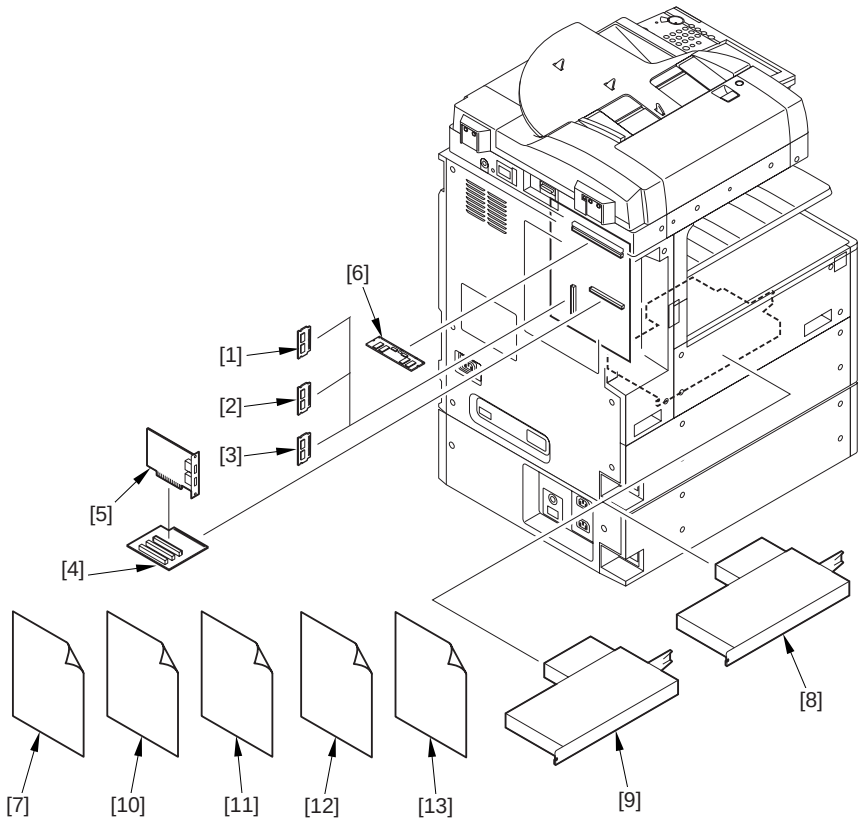
[3a]Installation Procedure
- Installation of the Cassette Heater Mounting Kit-B1
- Installation of the Cassette Heater Unit-25
- Installation of the Cassette Heater Unit-29
  (installation to the cassette pedestal)

1.1.10 Printing/Transmitting Accessories System Configuration

0006-6265

iR2270 / iR2870 / iR3570 / iR4570

The following is a diagram of the system configuration:



F-1-9

[1] UFR II Printer Kit-E3 (P BootROM)

[2] Printer Kit-E2 (H BootROM: for 230 V model)

[3] Multi-PDL Printer Kit-E1 (N BootROM)

[4] Expansion Bus-B1

[5] USB Application Interface Board-D1

[6] iR256MB Expansion RAM-B1 (standard with 120V model)

[7] iR Security Kit-A2 (License)

[8] Super G3 Fax Board-Q1

[9] Multi FAX Board-D1 (for 120 V model)
[10] Univrsal Send Kit -B1 (License)
[11] Universal Send PDF Enhancement Kit-B1 (License: for 120 V model)
[12] Universal Send PDF Encryption Kit-B1 (License: for 230 V model)
[13] Universal Send Searchable PDF Kit-A1 (License: for 230 V model)

1.1.11 List of Print Transmission Optional Functions

0006-6266

iR2270 / iR2870 / iR3570 / iR4570

- List of Print Transmission Optional Functions (120-V model)

The following is a brief explanation of the functions expected of the accessories; for details, see the chapters that follow:

T-1-15

UFR II print function	==>	UFR II Printer Kit-E3 (P BootROM)
UFR II/PCL/PS print function	==>	Multi-PDL Printer Kit-E1 (N BootROM)
Send function	==>	Univrsal Send Kit -B1
Fax function (1-line)	==>	Super G3 Fax Board-Q1
Fax function (2-line)	==>	Multi FAX Board-D1
MEAP application USB connection function	==>	USB Application Interface Board-D1 Expansion Bus-B1
Security function (HDD initialization+ encryption)	==>	USB Application Interface Board-D1 Expansion Bus-B1 iR Security Kit-A2
Encryption PDF function + searchable PDF function	==>	Univrsal Send Kit -B1 Universal Send PDF Enhancement Kit-B1

- List of Print Transmission Optional Functions (230-V model)

The following is a brief explanation of the functions expected of the accessories; for details, see the chapters that follow:

T-1-16

UFR II print function	==>	UFR II Printer Kit-E3 (P BootROM)

UFR II/PCL print function	==>	Printer Kit-E2 (H BootROM) iR256MB Expansion RAM-B1
UFR II/PCL/PS print function	==>	Multi-PDL Printer Kit-E1 (N BootROM) iR256MB Expansion RAM-B1
Send function	==>	Univrsal Send Kit -B1
Fax function (1-line)	==>	Super G3 Fax Board-Q1
MEAP function (C boot)	==>	no need for memory expansion MEAP authentication, MEAP application operation are both possible
MEAP function (P boot)	==>	**-When you want to enable only use of MEAP authentication** no need for memory expansion If MEAP application is installed, the device will not operate (E604-0001 is displayed) **-When you want to enable use of MEAP authentication and MEAP application operation** need for iR256 MB Expansion RAM-B1 installed
MEAP function (H boot/ N boot)	==>	memory expansion needed without memory expansion, the device will not operate (E744 is displayed)
MEAP application USB connection function	==>	USB Application Interface Board-D1 Expansion Bus-B1
Security function (HDD initialization+ encryption)	==>	USB Application Interface Board-D1 Expansion Bus-B1 iR Security Kit-A2 iR256MB Expansion RAM-B1
Encryption PDF function	==>	Univrsal Send Kit -B1 Universal Send PDF Encryption Kit-B1
Searchable PDF function	==>	Univrsal Send Kit -B1 Universal Send Searchable PDF Kit-A1 iR256MB Expansion RAM-B1
Encryption PDF function + Searchable PDF function	==>	Univrsal Send Kit -B1 Universal Send PDF Encryption Kit-B1 Universal Send Searchable PDF Kit-A1 iR256MB Expansion RAM-B1

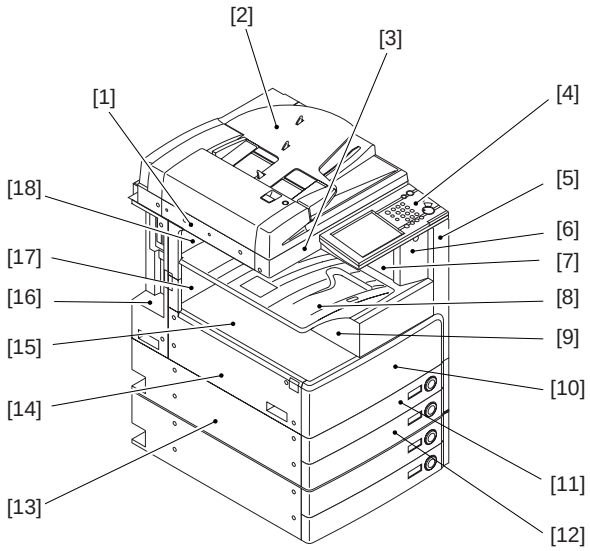
1.2 Product Specifications

1.2.1 Names of Parts

1.2.1.1 Names of Parts

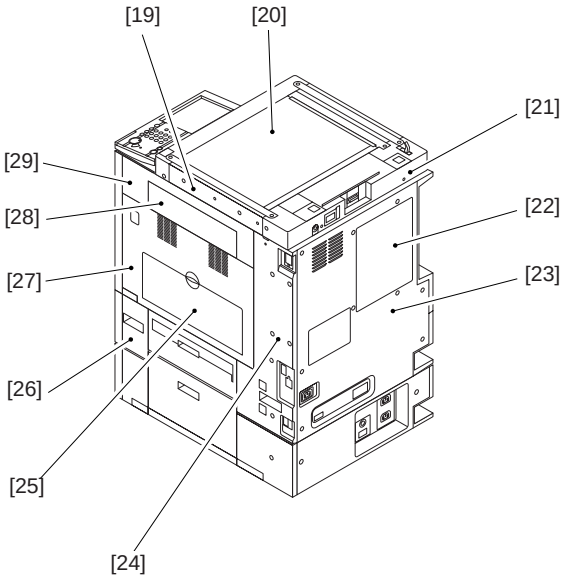
0007-2860

iR2270 / iR2870 / iR3570 / iR4570



F-1-10

[1] ADF reading glass retainer
[2] DADF
[3] Reader cover (front)
[4] Control panel
[5] Support cover (right)
[6] Support cover
[7] Delivery tray right cover
[8] Delivery tray
[9] Inside right cover
[10] Front cover unit
[11] Cassette 1
[12] Cassette 2
[13] Left cover (lower)
[14] Left cover
[15] Inside base cover
[16] Left cover (rear)
[17] Delivery tray rear cover (lower)
[18] Delivery tray rear cover



F-1-11

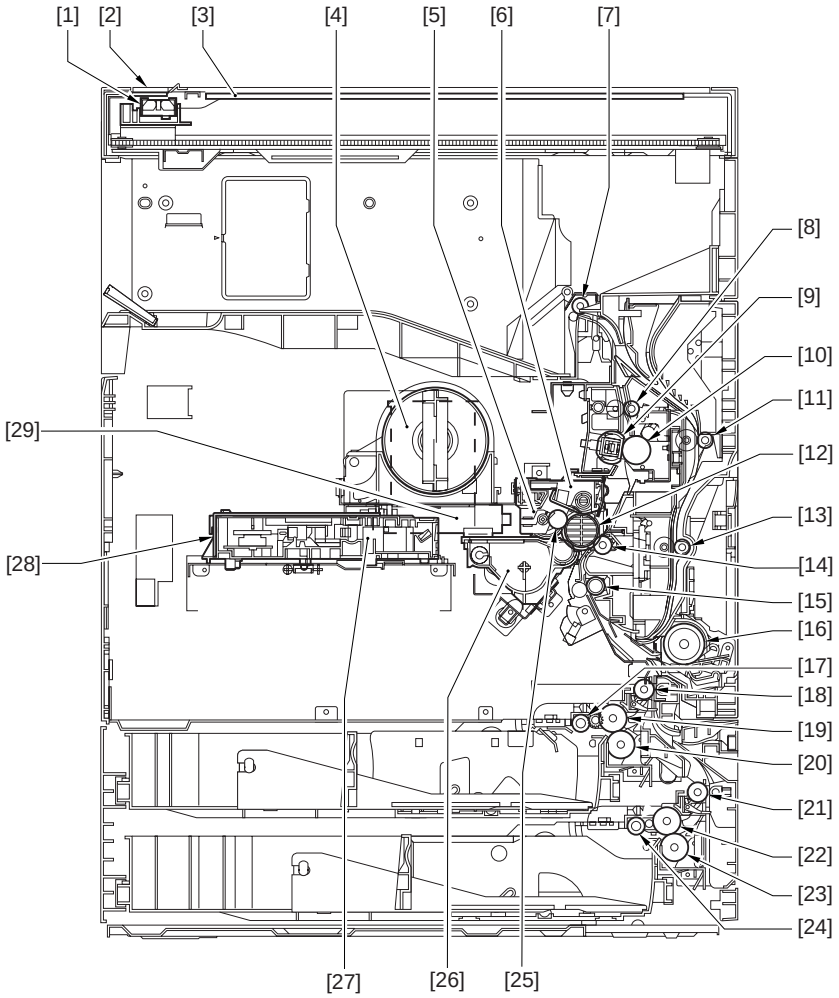
[19] Reader over (right)
[20] Copyboard glass
[21] Reader cover (rear)
[22] Face over (iR3570,4570)
[23] Rear cover
[24] Right cover (rear)
[25] Manual feed pickup tray
[26] Right cover (lower front)
[27] Right door unit
[28] Delivery cover
[29] Right cover (upper)

1.2.1.2 Cross Section

0007-9223

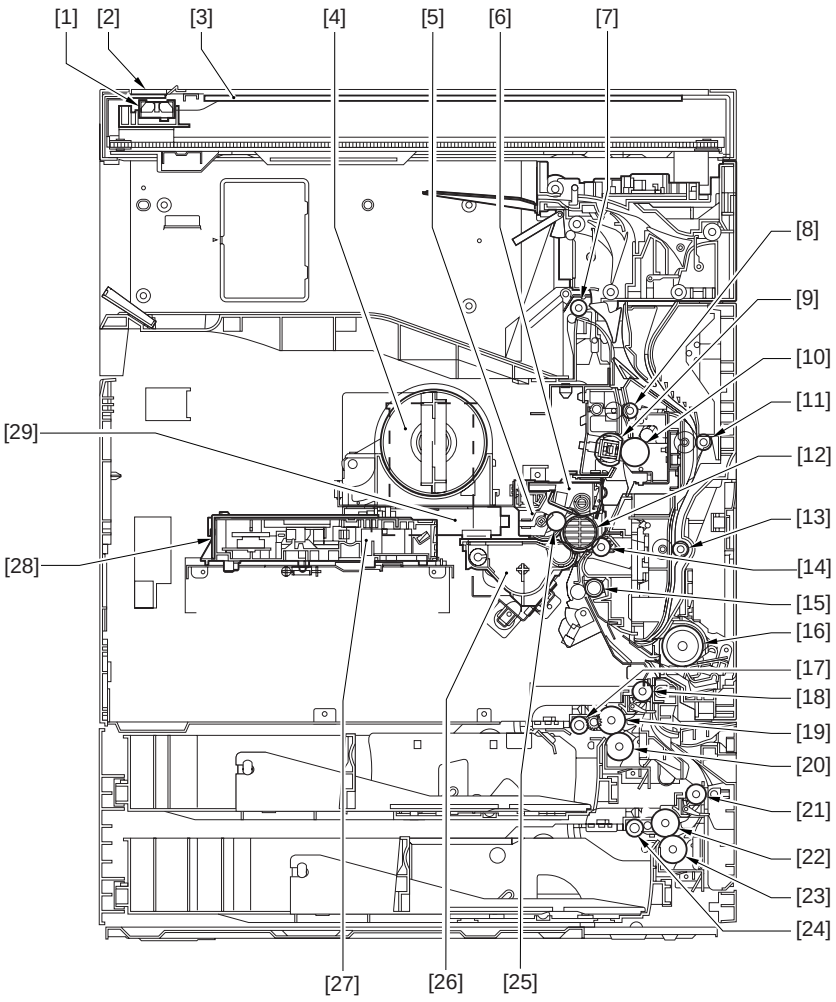
iR2270 / iR2870 / iR3570 / iR4570

iR2270 / iR2870 model



F-1-12

iR3570 / iR4570 model



F-1-13

T-1-17

[1]	CIS unit	[16]	Manual feed pickup roller
[2]	ADF reading glass	[17]	Pickup roller (cassette 1)
[3]	Copyboard glass	[18]	Vertical path roller 1
[4]	Toner bottle	[19]	Feed roller (cassette 1)
[5]	Drum unit	[20]	Separation roller (cassette 1)
[6]	Drum cleaner assembly	[21]	Vertical path roller 2
[7]	Delivery roller	[22]	Feed roller (cassette 2)
[8]	Fixing outlet roller	[23]	Separation roller (cassette 2)
[9]	Fixing film unit	[24]	Pickup roller (cassette 2)
[10]	Pressure roller	[25]	Primary charging roller

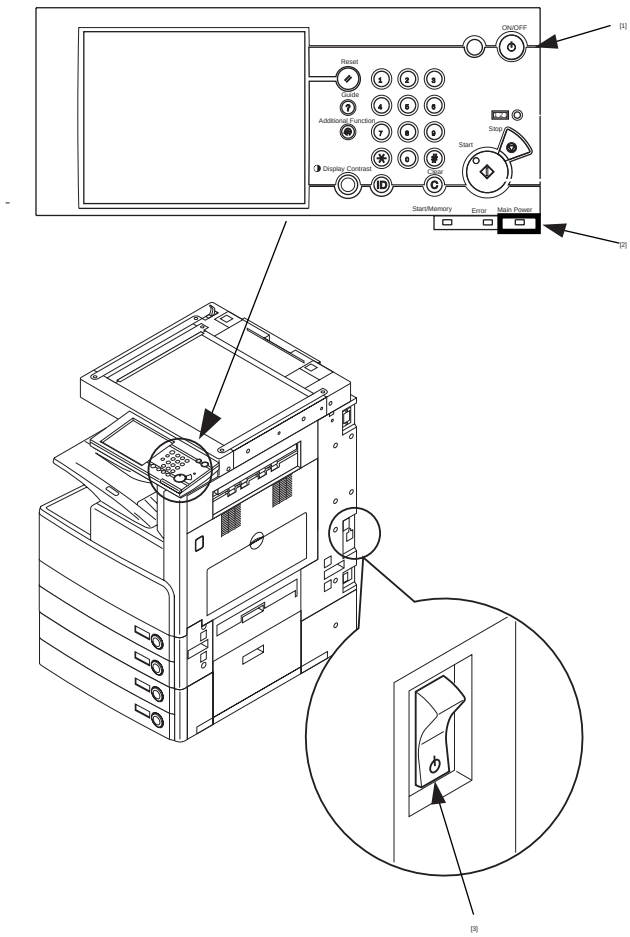
[11] Duplex feed roller 1
[12] Photosensitive drum
[13] Duplex feed roller 2
[14] Transfer roller
[15] Registration roller
[26] Developing assembly
[27] Laser scanner unit
[28] Dust-blocking sheet
[29] Sub hopper assembly

1.2.2 Using the Machine

1.2.2.1 Turning On the Power Switch 0007-3138

iR2270 / iR2870 / iR3570 / iR4570

The machine possesses 2 switches: main power switch and control panel power switch. Normally (i.e., other than in sleep mode), the machine goes on when its main power switch is turned on.



F-1-14

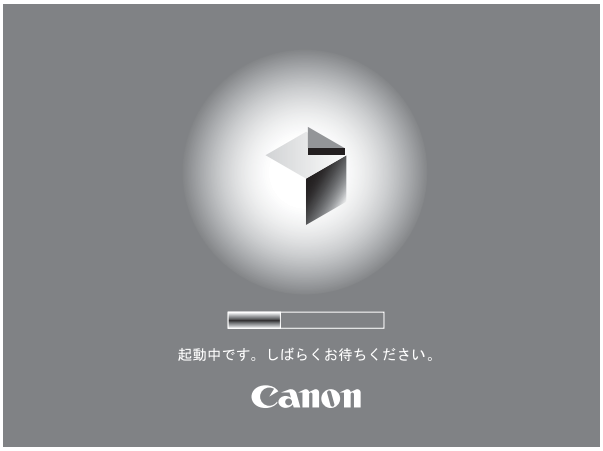
[1]Control panel power switch

[2]Main power lamp

[3]Main power switch

⚠

Do not turn off the main power while the progress bar is displayed, indicating that the HDD is being accessed. Otherwise, the HDD can suffer a fault (E602).



F-1-15

1.2.2.2 When Turning Off the Main Power Switch 0007-3160

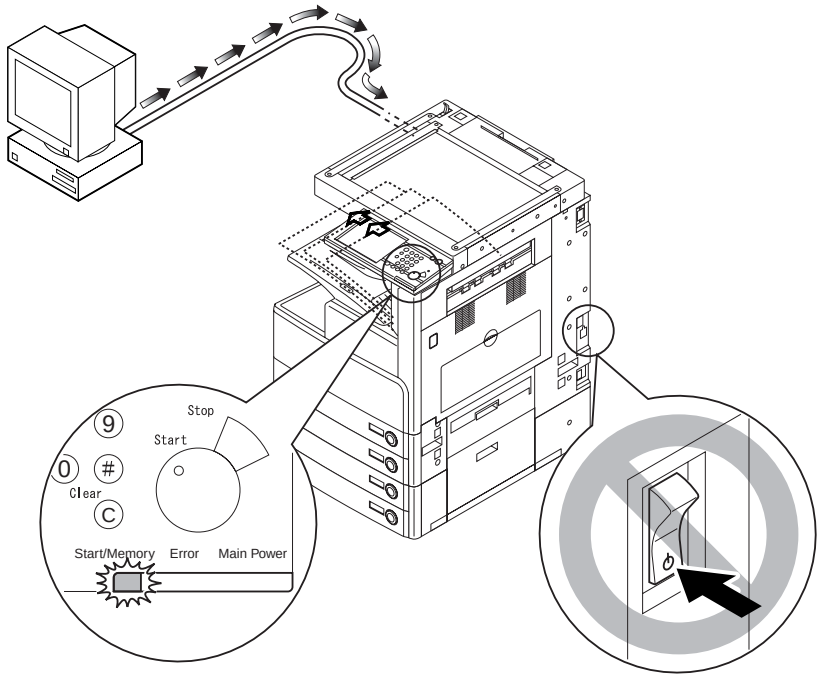
iR2270 / iR2870 / iR3570 / iR4570

Be sure always to turn off the control panel power switch before turning off the main power switch

⚠

When Using the Print Function/When Receiving or Transmitting a Fax

Before using the main power switch, check to be sure that the Execute/Memory lamp on the control panel is off. (Turning off the main power switch while an operation is under way can cause loss of data.)

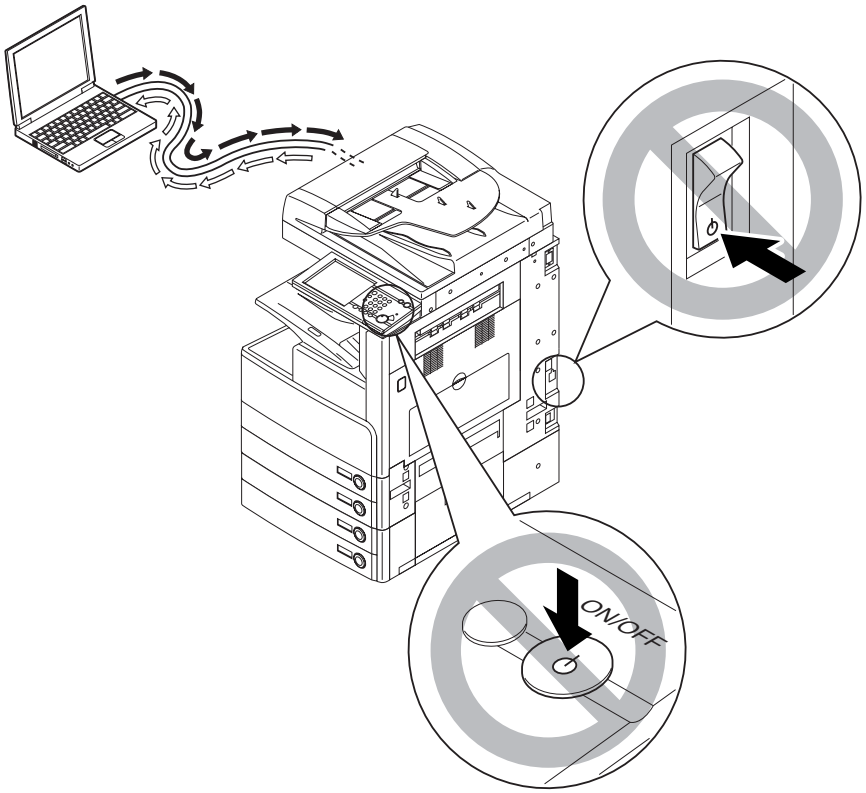


F-1-16

⚠

At Time of Downloading

Do not turn off the main power switch while downloading is under way. Otherwise, the machine may not be able to operate normally.

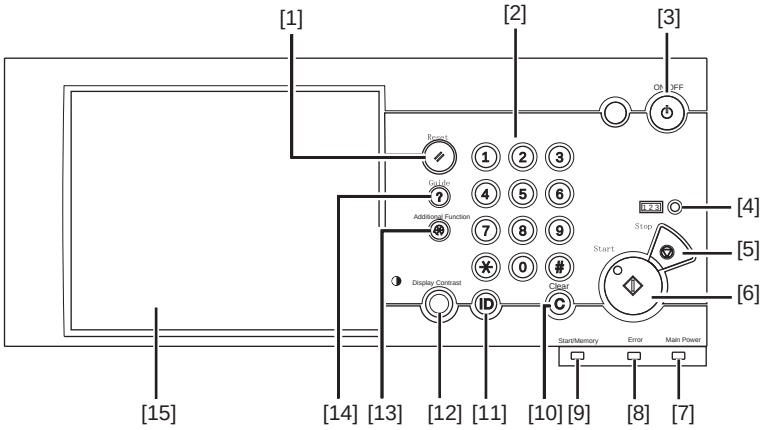


F-1-17

1.2.2.3 Control Panel

0007-3163

iR2270 / iR2870 / iR3570 / iR4570



F-1-18

T-1-18

[1] Reset key	[9] Execute/Memory lamp
[2] Keypad	[10] Clear key
[3] Control panel power switch	[11] ID key
[4] Counter Check key	[12] Image contrast adjustment dial
[5] Stop key	[13] User Mode key
[6] Start key	[14] Help key
[7] Main power lamp	[15] Touch panel
[8] Error lamp	

1.2.3 User Mode Items

1.2.3.1 Common Settings

0007-3164

iR2270 / iR2870 / iR3570 / iR4570

*Factory settings.
**Indicated in the presence of a specific accessory.
***If iR4570, iR3570, iR2870, or iR2270, indicated in the presence of a specific accessory (if model F, standard).

T-1-19

Mode	Description
initial setup	select initial function: *copy/transmit/Box/MEAP
	use 'system status screen' as initial screen: ON/*OFF
	give priority to 'device' of system status screen: *ON/OFF
select post-auto reset function	*use/do not use
set order of functions	copy/transmit/Box/remote scan (or functions appearing on tab); change order by Up/Down key
	set order of function groups: group A, MEAP, group B
enable/disable buzzer	input sound: *ON/OFF
	invalid input sound: ON/*OFF
	supply alert sound: ON/*OFF
	warning sound: *ON/OFF

Mode	Description
	job end sound: *ON/OFF
indicate paper level message	*ON/OFF
inch input	ON/*OFF (if US, *on)
enable/disable auto cassette select	copy/printer/Box, other (manual feed: ON/*OFF + cassette: *ON/OFF; manual feed not applicable to printer) consider copy/paper type: ON/*OFF (toggle)
register envelope cassette	ENV.1/ENV.2 default: env1/COM10/env2 COM10
register paper type	cassette 1/cassette 2/cassette 3/cassette 4/cassette 5 (paper deck); plain paper, recycled paper, colored paper, punched paper
power consumption at sleep	*low/high
select special tray** (w/ finisher)	- w/ No. 3 tray tray A: host middle tray tray B: No. 3 tray trayA: copy/box/printer/receive/fax/other trayB: copy/box/*printer/receive/*fax/*other fine setup for receive/fax tray A: receive/fax 1/fax 2 tray B: receive/fax 1/fax 2 - w/ inner tray tray A: host middle tray (lower) tray B: host middle tray (upper) tray A:*copy/box/printer/receive/fax/other tray B: copy/box/*printer/receive/*fax/*other fine setup for receive/fax tray A: receive, fax1, fax 2 tray B: receive/fax 1/*fax 2

Mode	Description
	- w/ inner tray + No. 3 tray tray A: host middle tray (lower) tray B: host middle tray (upper) tray C: No. 3 tray tray A: *copy*Box/printer/receive/fax/other tray B: copy/Box/*printer/receive/fax/other tray C: copy/Box/printer/receive/*fax/*other fine setup for receive/fax tray A: receive/fax 1/fax 2 tray B: receive/fax 1/fax 2 tray C: *receive/*fax 1/*fax 2 - Finisher-S1 + option tray tray A: finisher option tray tray B: finisher output tray tray A: *copy/*Box/printer/receive/fax/other tray B: copy/Box/*printer/receive/*fax/*other fine setup for receive/fax tray A: receive/fax 1/fax 2 tray B: *receive/*fax 1/fax 2 - Finisher-S1 + No. 3 tray tray A: finisher output tray tray B: No. 3 tray tray A: *copy/*Box/*printer/receive/fax/other tray B: copy/Box/printer/receive/*fax/*other fine setup for receive/fax tray A: receive/fax 1/fax 2 tray B: *receive/*fax 1/*fax 2

Mode	Description
	- Finisher-S1 + option tray + No. 3 tray tray A: finisher optional tray tray B: finisher output tray tray C: No. 3 tray tray A: *copy/*Box/printer/receive/fax/other tray B: copy/Box/*printer/receive/fax/other tray C: copy/Box/printer/receive/*fax/*other fine tune for fax/fax tray A: fax/fax 1/fax 2 tray B: receive/fax 1/fax 2 tray C: *receive/*fax 1/*fax 2 - w/ Fisher-Q3/Q4 tray A: finisher output tray (upper) tray B: finisher output tray (lower) tray C: host middle tray tray A: *copy/*Box/printer/receive/fax/other tray B: copy/Box/*printer/receive/fax/other tray C: copy/Box/printer/receive/*fax/*other fine tune for receive/fax tray A: fax/fax 1/fax 2 tray B: receive/fax 1/fax 2 tray C: *receive/*fax 1/*fax 2 - if w/o fax, 'receive/fax'>'receive' - if fax only 'receive/fax'>'fax - fine setup for receive/fax only if w/ fax - if fax is 1-line 'fax 1/fax 2'>'fax' *Finisher-S1 (w/o output option), special tray items not indicated - w/o output option tray tray A: host middle tray tray A: *copy/*Box/*printer/receive/*fax/*other (1 output target; therefore, special tray items not indicated)
assign print priority	copy: *1/2/3 printer: 1/*2/3

Mode	Description
	Box: 1/2/*3
	receive/fax: 1/2/*3
	other: 1/2/*3
register form for image merge	register: original size; full merge; see-through merge (20, *50, 90%); form name (up to 24 characters); form read delete
	delete
	check copy: select source of paper: print start
	detail info: indicate detailed information, change form name
register page/stamp characters	register/edit: character string (up to 16)
	delete
set manual feed envelope type	ON/*OFF (if outside Japan, fixed to on)
register manual feed paper standard mode	ON (select paper size/select paper type)/*OFF
switch pickup method	indicate manual feed, cassettes 1 through 5 icons and paper type priority on speed/priority on print
set standard mode for local print	select paper:*auto/cassette 1 through 5 number of prints: *1 through 2000 sorter: sort/group/staple sort/*shift sort/shift group/rotation sort/ rotation group/punch/Z-fold duplex: on (open to right/open to top/bottom)/*off delete file after print: ON/*OFF merge file: ON/*OFF
switch display language	ON/*OFF
reverse screen color	ON/*OFF
between-job shift**	*ON/OFF
put sheet between jobs**	On (select source of paper)/*OFF
put sheet between sets	On (No. of sets between 10 and 9999; select source of paper)/OFF
indicate print wait time	copy/Box/other (for all, ON/*OFF)
mix papers in output tray	*ON/OFF
indicate cleaning message for read area***	*ON/OFF
limit function	ON/*OFF
shutdown mode	Execute key
reset common settings	Do you want to reset?: yes/no

1.2.3.2 Setting the Time

0007-3165

iR2270 / iR2870 / iR3570 / iR4570

*Factory settings.

T-1-20

Mode	Description
set time (fine)	in 1-min increments (using +/-)
set auto sleep time	10, 15, 20, 30, 40, 50 min; *1 hr; 90 min, 2, 3, 4 hr
auto reset time	0: disable; 1, *2, ..., 9 min (in 1-min increments)
set weekly timer	00:00 to 23:59 (in 1-min increments); everyday from Sun to Sat

1.2.3.3 Adjustments and Cleaning

0007-3166

iR2270 / iR2870 / iR3570 / iR4570

*Factory settings.
**Indicated in the presence of a specific accessory.
***If iR4570, iR3570, iR2870, or iR2270, indicated in the presence of a specific accessory (if model F, standard).

T-1-21

Mode	Description
zoom fine adjust	XY, individually: -1.0T to +1.0% (in 0.1% increments)/*0%
center bind staple edging** (w/ saddle finisher)	Start key
center bind position change** (w/ saddle finisher)	size: A3,11x17/B4/LGL/A4R,LTRR position: -2.0 mm to +2.0 mm (in 0.35-mm increments)/*0 mm
density correction	copy/Box, transmit; 9 sets each (at time of shipment, set to '5')
page print/number of set prints adjust stamp position	X: -8 mm to +8 mm (in 1-mm increments)/*0 mm Y: -8 mm to +8 mm (in 1-mm increment)/*0 mm
clean feeder***	Start key

1.2.3.4 Report Output

0007-3167

iR2270 / iR2870 / iR3570 / iR4570

*Factory settings.
***If iR4570, iR3570, iR2870, or iR2270, indicated in the presence of a specific accessory (if model F, standard).

T-1-22

Mode	Description
transmit (setup)***	transmission results report: *only if error/ON/OFF
	show transmission original: *ON/OFF
	show transmission original for coded PDF: ON/*OFF
	communication control report
	print automatically at 100 communications:
	print at specified time: ON/*OFF
	set time: *00:00 to 23:59
	separate transmission and reception: ON/*OFF (toggle)
fax (settings)***	fax transmission result report: *only if error/ON/OFF
	show transmission report:*ON/OFF
	fax communication control report
	print automatically every 40 communications:
	print at specified time: ON/*OFF
	set time: *00:00 to 23:59
	separate transmission and reception: ON/*OFF (toggle)
	fax reception result report: only if error/ON/*OFF
	fax Box reception report:
list print (transmission)***	address book list: list print
	user data list: Do you want to print the user data list? yes/no
list print (fax)***	user data list: Do you want to print the user data list? yes/no
list print (network)	user list: Do you want to print the user data list? yes/no
	configuration page, font list
	PS: status print, font list
	LIPS/emulation: status print, font list, LIPS utility (status print, overlay list, overlay print, font list, micro list, form list, color sample), N201 utility (status print, overlay print), ESCP utility (status print, overlay print), i5577 utility (status print, overlay print), HP-GL utility (status print, sample print)

1.2.3.5 System Control Settings

0007-3168

iR2270 / iR2870 / iR3570 / iR4570

*Factory settings.

**Indicated in the presence of a specific accessory.

***If iR5570, iR3570, iR2870, or iR2270, indicated in the presence of a specific accessory (if model F, standard).

T-1-23

Mode	Description
set system administrator info	system administrator group ID: 7 characters max
	system administration ID: set (7 characters)
	system administrator name: 32 bytes
	mail address: 64 bytes
	contact: 32 bytes
	comment: 32 bytes
group ID control	group ID control: ON/*OFF
	register ID No.: register, edit, delete, limit function
	count control: reset, count print, all clear
	print without known ID: *ON/OFF
	scan without known ID: *ON/OFF
set communications control	e-mail/**i-fax setup
	transmission data size upper limit: 0: none; 1 through 99 MB, *3 MB
	abbreviation name: 40 characters; *attached image
	full mode transmissions time-out: 1 to 99 hr; *24 hr
	MDN/DSN reception print: ON/*OFF
	notify always if error: *ON/OFF
	user server route: ON/*OFF
	fax setup***
	transmission start speed: *33600 bps, 14400 bps, 9600 bps, 7200 bps, 4800 bps, 2400 bps
	reception start speed: 33600 bps*, 14400 bps, 9600 bps, 7200 bps, 4800 bps, 2400 bps
	reception password: 20 characters max.
	FIS switch: ON/*OFF
	system Box setup
	system box ID No.***: 7 characters
	use fax memory reception: ON/*OFF
	use i-fax memory reception: ON/*OFF
	memory reception start time***: everyday/day of week/*none

Mode	Description
	memory reception end time***: everyday/day of week/*none
enable/disable remote UI	*ON/OFF use SSL: ON/OFF
limit addresses***	address book ID No.: 7 characters max.
	address book access No. control: ON/*OFF
	limit new addresses: ON/*OFF
set device info	device name: 32 characters
	installation site: 32 characters
transfer setup***	reception method, conditions ON/OFF, register, register transfer without condition, e-mail priority, detail/edit, delete, list print
delete bulletin	delete
auto online/offline shift***	auto on-line shift: ON/*OFF
	auto on-line shift: ON/*OFF
	date/time setup: set (12 numeric characters) time zone: GMT - 12:00 to GMT + 12:00.GMT + *9:00 daylight saving time: ON/*OFF
register LDAP server***	register, detail/edit, delete, print list
register license	24 characters
set print	ON/*OFF group ID: ON/*OFF date: ON/*OFF character: ON/*OFF
MEAP setup	use HTTP: *ON/OFF use SSL: ON/OFF
	print system info: print
set device info distribution	register recipient: auto search/register, register, detail info, delete
	auto distribution setup: everyday, day of week, *none user mode setting: ON/*OFF network setting: include, do not include group ID: ON/*OFF address book : ON/*OFF
	manual distribution setup: user mode setting: ON/*OFF network setup: include, do not include group ID: ON/*OFF address book: ON/*OFF
	user mode sync level: ON/*OFF

Mode	Description
	recover data: user mode settings, group ID, address book
	limit reception by function: user mode setting: ON/*OFF group ID: ON/*OFF address book: ON/*OFF
	distribution/reception history: detail info

1.2.3.6 Copy Settings 0007-3169

iR2270 / iR2870 / iR3570 / iR4570

*Factory settings.
**Items indicated in the presence of a specific accessory.

T-1-24

Mode	Description
preference key 1	none, individual modes
preference key 2	none, individual modes
auto sort**	*ON/OFF
auto vertical/horizontal rotation	*ON/OFF
print photo mode	ON/*OFF
change standard mode	register/reset (at time of shipment: 1 set, auto paper, auto density, auto image quality, local printer)
reset copy settings	Do you really want to reset? yes/no (auto sort: on; face-down delivery: on; preference key: none)

1.2.3.7 Transmission/Reception Settings 0007-3170

iR2270 / iR2870 / iR3570 / iR4570

*Factory settings.
**Items indicated in the presence of a specific category.
***If iR4570, iR3570, iR2870, or iR2270, indicated in the pence of a specific accessory (if model F, standard).

Mode	Description
set common communications settings	register source name***: 01 to 99; register/edit (24 characters max.), delete register user abbreviation***: 24 characters max. permit non-ASCII code for FTP**: delete error file***: (*ON/OFF) transfer error processing (always print/save/print/*off) film photo mode***: OFF (ON/*OFF) number of retries***: *3 times (0 to 5 times) change standard mode for transmission function***: read mode: black-and-white machine default : *black 200 dpi/black 300 dpi/black 600 dpi/black 400 dpi (if fax only, black 200x100*/black 200x; 200/black 200x400/black 400x400) file format: *TIFF/PDF/PDF(OCR) divide by page: ON/*OFF (toggle) DONE stamp: ON/*OFF (toggle) register routine task button***: (register/edit, delete M1 through M9) register: Do you want to register? yes/no name: 10 characters x 2 lines (max.) confirm transmission of coded PDF file: (ON/*OFF) PDF (OCR setup)*** original orientation auto detection: (*ON/OFF) number of OCR characters for file name: (1 through *24) initial transmission screen***: routine task button/one-touch button/*new address source record***: *add/do not add display location: inside image/*outside image display target abbreviation: (*ON/OFF) telephone No. mark: *FAX/TEL communication mode: G3-G4/*G3 only switch character code for e-mail/i-fax transmission: *GB2312/GB18030 reset transmission function settings: Do you want to reset? yes/no
set common reception settings***	duplex record (ON/*OFF) cassette selection switch A: (*ON/OFF) switch B: (*ON/OFF) switch C: (*ON/OFF) switch D: (*ON/OFF)

Mode	Description
	image reduction image reduction: (*ON/OFF) reduction mode: *auto mode/fixed mode rate of reduction in fixed mode: E210to: 75% to 97% (in 1% increments)/*90% direction of reduction: vertical and horizontal, *vertical only
	2-on-1 record: (ON/*OFF)
	reception info record: add/*do not add
set fax basic settings	register user telephone No.***: telephone No.: 20 characters max. sub address: 19 characters max. sub address incoming: ON/*OFF source No. notice: ON-OFF/*abbreviate
	select line type***: 120V, 230V: *push tone, dial pulse, 10 PPS 100 V: *20 pps/10 pps/push tone 100V: *20pps/10pps/push tone
	volume control alarm sound level: 0 to 8 (*4) 0 to 8(*4)
	off-hook alarm: (*ON*/OFF)
set fax transmission function	ECM transmission (*ON/OFF)
	set pause length: (*1 to 15 sec/4 to 11 sec/3 to 6 sec)
	auto re-dial: (*ON/OFF) number of redials: 100V: 1-15 (*2), 120V: 1-10 (*2), 230V: 1-10 (*2) intervals for redials (min): 2-99 (*2) redial at communication error: 1st page and error page/all pages/off
	communication mode: *G4-G3/G3 only
	check dial tone before transmission: (*ON/OFF)
set fax reception settings***	ECM reception: (*ON/OFF)
	select reception mode fax/tel switchover: call start time: 0 to 30 sec (*8) call length: 15 to 300 sec (*17) operation after call: end/*receive audio response: ON/*OFF auto reception modem dial-in fax/tel switchover
	incoming ring: on (number of rings: 0 to N times)/*OFF

Mode	Description
	remote reception: on (remote reception ID: 00 to 99, 25)/*OFF
	auto reception switch-over: on (length of ring: 1 to n sec)/*OFF
	source record (G4): *add/do not add source record position: inside image/*outside image
set fax expansion line	register user telephone No.: 20 characters max.
	register user abbreviation: 24 characters max.
	select line type: *20 pps/10pps push tone
	select transmission line: line 1: *priority on transmission/prohibit transmission line 2: priority on transmission/prohibit transmission

1.2.3.8 Box Settings

0007-3171

iR2270 / iR2870 / iR3570 / iR4570

*Factory settings.

*If iR4570, iR3570, iR2870, or iR2270, indicated in the presence of a specific accessory (if model F, standard).

T-1-26

Mode	Description
set up/register user box	select box: 0 to 99 register box name: 24 characters max. ID NO.: 0 to 99999999 file auto delete: 0: no, 1, 2, 3, 6, 12 hr; 1, 2, *3, 7, 30 days URL transmissions setup: select e-mail address reset
print photo mode	(ON/*OFF)
standard mode for read setup	register/reset
set/register fax box***	select box: 0-49 register box name: 24 characters max. ID No.: 0 to 9999999 URL transmission setup: select e-mail address reset

1.2.3.9 Printer Settings

0007-3172

iR2270 / iR2870 / iR3570 / iR4570

*Factory settings.

**Indicated in the presence of a specific accessory.

T-1-27

Mode	Description
settings	number of copies: 1 to 9999 (*1) duplex: duplex/*simplex pickup default paper size: *A4 (additional 12 possible) default paper type: plain (additional 8 possible) paper size replacement: replace/*do not replace adjust print super smooth: *use/do not use **toner density: 1 to 9 (*5) toner save: enable/*disable layout bind position: *long side/short side bind margin: -50to+50mm (*0.0) horizontal correction/vertical correction: -50to+50mm (*0.0) auto error skip** skip/*do not skip secure print delete time length: *1, 2, 3, 6, 12, 24 hr timeout: 5 to 300 (*15 sec)/disable RIP: yes/*no sorter**: *do not use/sort/rotation sort/rotation group/shift sort/shift group/staple sort punch**: *disable/top/bottom/left/right booklet print**: *disable/open to left/open to right middle bind**: enable/*disable transparency interleaf: *disable/white sheet/printed sheet print in sets print in sets: enable/*disable print position: *5 locations/upper left/lower left/upper right/lower right print start character: 1 to 9999 (*1) print size: small at 12-point/medium at 24-point/large at 36-point density: 1 to 5 (*3) printer operating mode: *auto (additional 6 settings possible) priority emulation** (*none/4 additional settings possible)

Mode	Description
	auto switchover**
	LIPS: *enable/disable
	ESC-P: *enable/disable
	15577: *enable/disable
	HP-GL: *enable/disable
	connection recognition: *enable/disable
	printer settings rest: yes/no

1.2.3.10 Address Book Settings 0007-3173

iR2270 / iR2870 / iR3570 / iR4570

*Factory settings.
*If iR4570, iR3570, iR2870, or iR2270, indicated in the presence of a specific accessory (if model F, standard).

T-1-28

Mode	Description
fax (register target)	register name: 24 characters
	register name: 24 superscript characters
	telephone No.: 120 characters max. (+, pause, tone, <, >, backspace, space, ISDN sub address, F-Net, DT, R, PIN, sub settings)
	Sub Settings
	F code: 20 characters max.
	password: 20 characters max.
	ECM transmission: *ON/OFF
	transmission speed: 33600 bps*/14400bps/9600 bps/4800 bps
	international transmission: *domestic/international transmission (1)/ international transmission (2)/international transmission (3)
	communication mode: G4 to G3*/G3 only
e-mail (target registration)	register name: 24 characters
	register name: 24 superscript characters
	e-mail address: 128 characters

Mode	Description
i-fax (target registration)	register name: 24 characters register name: 24 superscript characters select mode: *Simple/Full i-fax address: 128 characters server route: ON/*OFF fixed sentence 1: 40 characters fixed sentence 2: 16 characters fine settings paper size: A4/LTR+ B4,A3/11x17 compression method: MH+ MR/MMR resolution: 200x100dpi,200x200dpi+200x400dpi/300x300dpi/400x400dpi/600x600dpi
file (register address)	register name: 24 characters register name: 24 superscript characters protocol: *FTP/Windows(SMB)/Netware(IPX) host name: 128 characters path to folder: 128 characters user name: FTP,Netware(IPX) : 24 characters Windows(SMB): 15 characters password: FTP,Netware(IPX): 24 characters Windows(SMB): 14 characters
group (register target)	register name: 24 characters register name: 24 superscript characters address book: existing in Address Book: select fax, e-mail, i-fax, remove file system, Jet Send, Box, local printer stored in Box: select Box: 00- to 99 delete

Mode	Description
register target (server) (register target)	simplified search server to search: select from pull-down menu (LDAP server already registered) (search condition): name: 128 characters e-mail: 128 characters fax: 128 characters fine search server to search: select from pull-down menu (LDAP server already registered) search conditions): *name/email/fax/organization/organization-based *including next/not including next/identical to next/not identical to next/starts with next/ends with next name, organization, organization-based: 128 characters e-mail, fax: 128 characters (combinations of conditions): *OR/AND search results address type: all e-mail/fax register e-mail as i-fax: ON/*OFF (toggle)
register address book	register name: 16 characters
register one-touch button	register address/edit: register/edit, delete one-touch name: 12 characters long

1.2.4 Maintenance by the User

1.2.4.1 Cleaning

0007-4601

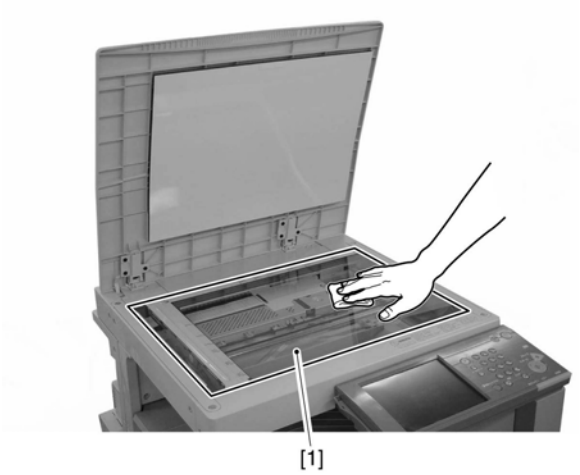
iR2270 / iR2870 / iR3570 / iR4570

- Copyboard Glass, Copyboard Cover (back; copyboard cover type H)

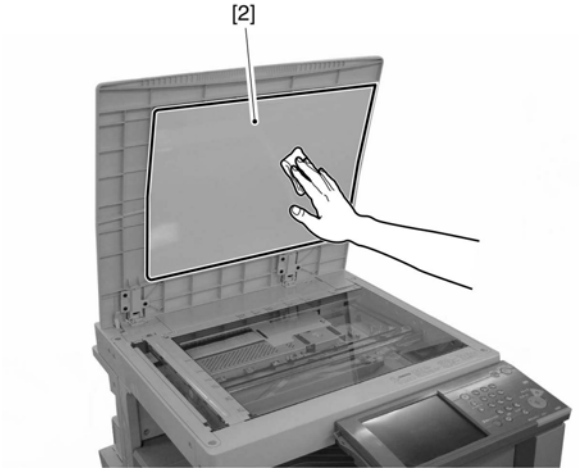
Advise the user to clean the surface of the copyboard glass and the back of the copyboard cover at least once a month.

Cleaning Procedure

Using a cloth moistened with water or solution of mild detergent, wipe the surface of the copyboard glass [1] and the back of the copyboard cover [2]; thereafter, dry wipe the surfaces with a dry, soft cloth.



F-1-19



F-1-20

1.2.4.2 Inspection

0007-4603

iR2270 / iR2870 / iR3570 / iR4570

- Checking the Operation of the Leakage Breaker

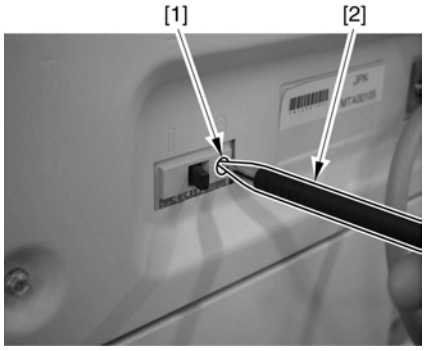
Advise the user to check the leakage breaker once or twice a month on a regular basis. Be sure also to ask the user to keep a record of checks.

Inspection Procedure

1) Turn on the main power switch.

2) Push he test button [1] of the leakage breaker with the tip of a ball-point pen [2].

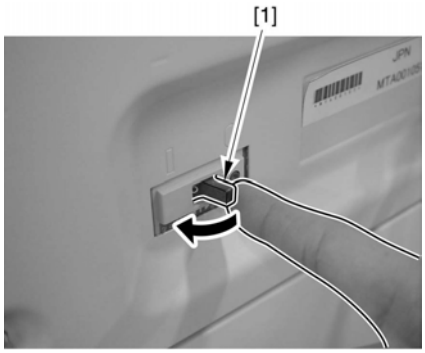
3) Check to make sure that the breaker switch shifts to the OFF side and the power is cut.



F-1-21

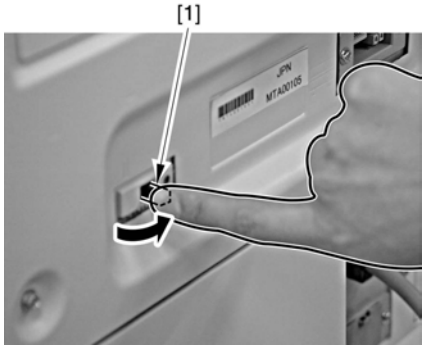
4) Turn off the main power switch.

5) Shift the breaker switch [1] back to the ON position.

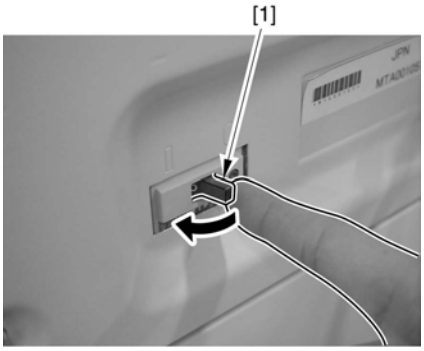


F-1-22

If the breaker switch has stopped between ON and OFF, be sure to shift it to OFF first and then back to ON.



F-1-23



F-1-24

6) Turn on the main power switch.

1.2.5 Safety

1.2.5.1 Safety of the Laser Light 0007-3174

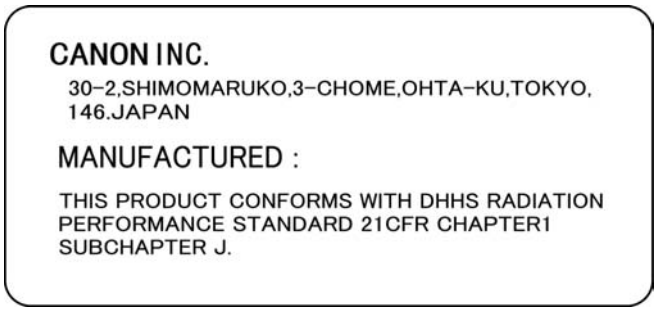
iR2270 / iR2870 / iR3570 / iR4570

Laser light can prove to be hazardous to the human body. The machine's laser unit is fully enclosed in a protective housing and external covers so that its light will not escape outside as long as the machine is used normally.

1.2.5.2 CDRH Regulations 0007-3175

iR2270 / iR2870 / iR3570 / iR4570

The Center for Devices and Radiological Health of the US Food and Drum Administration put into force regulations concerning laser products on August 2, 1976. These regulations apply to laser products manufactured on and after August 1, 1976, and the sale of laser products not certified under the regulations is banned within the Untied States. The label shown here indicates compliance with the CDRH regulations, and its attachment is required on all laser products that are sold in the United States.



F-1-25

⚠

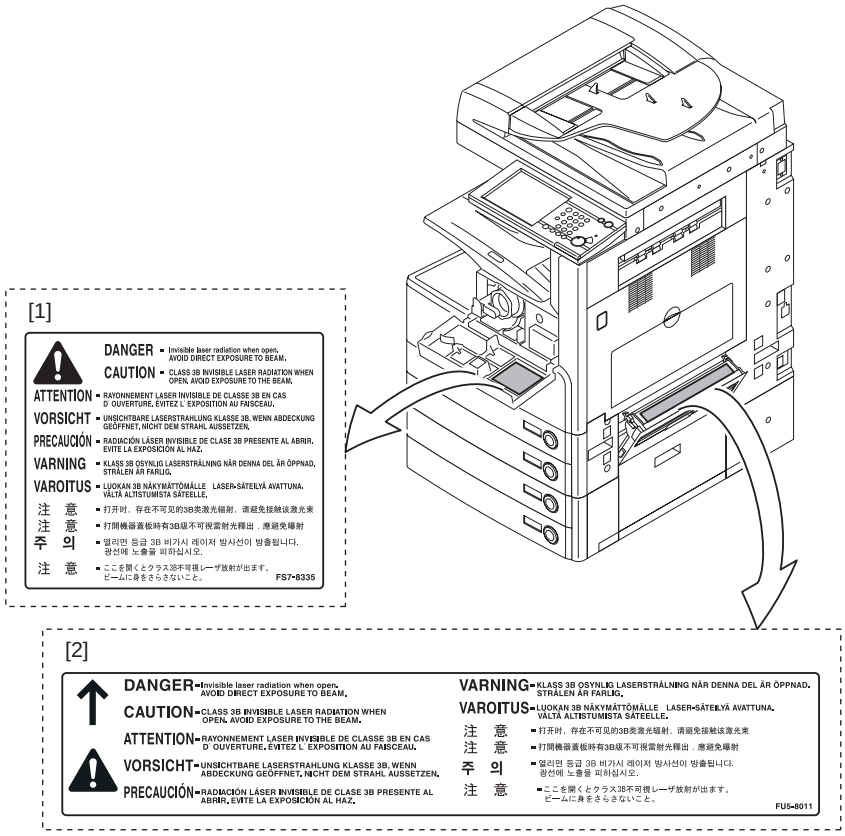
A different description may be used for a different product.

1.2.5.3 Handling the Laser Unit

0007-3176

iR2270 / iR2870 / iR3570 / iR4570

If you must service the area around the machine's laser unit, be sure to take full care to avoid exposure to laser light: do not insert a tool (e.g., screwdriver or those with a high reflectance) into the laser path; also, remove watches, rings, and the like before starting the work, as they reflect laser light.
The machine's laser light is red in color, and an appropriate label ([1], [2]) is attached to all covers that can reflect laser light. Keep also in mind that the machine's laser unit cannot be adjusted in the field.



F-1-26

1.2.5.4 Safety of Toner

0007-3177

iR2270 / iR2870 / iR3570 / iR4570

The machine's toner is a non-toxic material made of plastic, iron, and small amounts of dye.

⚠

Do not throw toner into fire. It may cause explosion.

Toner on Clothing or Skin

1. If your clothing or skin has come into contact with toner, wipe it off with tissue; then, wash it off with water.
2. Do not use warm water, which will cause the toner to jell and fuse permanently with the fibers of the cloth.
3. Do not bring toner into contact with plastic material. It tends to react easily.

1.2.6 Product Specifications

1.2.6.1 Product Specifications 0007-2862

iR2270 / iR2870 / iR3570 / iR4570

Copyboard	stream reading, fixed reading
Body	desktop
Light source type	LED array (CIS)
Photosensitive medium	OPC drum (30-mm dia.)
Image reading method	CCD (CIS)
Reproduction method	indirect electrostatic
Exposure method	by laser light
Charging method	by AC charging roller
Development method	1-component toner projection
Transfer method	by transfer roller
Separation method	by curvature + static eliminator
Cassette pickup method	retard
Multifeeder pickup method	dual processing
Drum cleaning method	by cleaning blade
Fixing method	on-demand
Delivery method	face-down
Reproduction ratio	25% to 400%
Warm-up time	iR 2270, iR2870: 30 sec or less; iR 3870, iR4570: 40 sec or less
Image margin (leading edge)	2.5 +/-1.5 mm (single-sided); 2.5 +/-2.0 mm (doubles-sided)

Image margin (trailing edge)	B4 or smaller: 2.5 +1.1, -1.7 mm; B4 or larger: 3.5 +0.6, -2.8 mm; free-side: 5.5 +1.5, -45. mm (single-sided), 0.5 mm or more (double-sided)
Image margin (left/ right)	left edge: 2.5 +1.5 mm (single-sided), 2.5 mm +2.0 (double-sided); right edge: 0.5 mm or more (single-sided), 0.5 mm or more (double-sided)
Non-image width (leading edge)	2.5 +/-1.5 mm or less
Non-image width (trailing edge)	B4 or smaller: 2.5 +1.1, -1.7 mm; B4 or larger: 3.5 +0.6, -2.8 mm; free-size: 5.5 +1.5, -4.5 mm
Non-image width (left/ right)	2.5 +/-1.5 mm or less
Number of gradations	256 gradations
Reading resolution	600 x 600 dpi
Copying resolution	1200 dpi (equivalent) x 600 dpi
Printing resolution	2400 dpi (equivalent) x 600 dpi
First print time	iR 2270, iR2870: 4.9 sec or less; iR 3870, iR4570: 3.9 sec or less
Cassette capacity	550 sheets (80 g/m2)
Multifeeder tray capacity	50 sheets (80 g/m2)
Continuous reproduction	1 to 999
Toner level detection function	keys
Toner type	magnetic negative toner
Original type	sheet, book
Maximum original size	297 x 431.8 mm
Original size detection function	by reflection type sensor
Duplex method	without tray
Sleep mode	yes
Option	See the system configuration chart.
Operating environment (temperature range)	15 to 27.5 deg C

Operating environment (humidity range)	25% to 75%
Operating environment (atmospheric pressure)	0.6 to 1.0 atm
Noise	iR 2270, iR2870: standby, 40 dB; in operation, 66 dB iR 3870, iR4570: standby, 50 dB; in operation, 71 dB
Power supply rating	100/120/230 V
Power consumption (maximum)	1350 W or less
Ozone	max.: 0.02 ppm or less; avr: 0.01 ppm or less
Dimensions	565 mm x 700 mm x 761.4 mm (WxDxH)
Weight	body: 61.6 kg; reader unit: 8.7 kg; ADF: 8.5 kg

1.2.7 Function List

1.2.7.1 Printing Speed

0007-7885

iR2270 / iR2870

Max/Min (max when the machine has fully cooled)
A value in brackets [ ] represents the iR2270.

T-1-29

	Paper size	Single-sided		Auto duplexing	
		cassette feed	manual feed	cassette feed	manual feed
Plain paper	A4	28[22]	25[22]	7	7
	A5R	17/14	17/14	7	7
	B5	27[22]	25[22]	7	7
	B5R	17/14	17/14	7	7
	A4R	17/14	17/14	5	5
	B4	24/13	13	4	4
	A3	14	14	4	4
	STMTR	17/14	17/14	7	7
	LTR	28[22]	25[22]	7	7
	LTRR	17/14	17/14	5	5
	LGL	13	13	5	5
	LDR	14	14	4	4
	free	-	13	-	-
Heavy paper	A4	-	25	-	-
	A5R	-	13	-	-
	B5	-	23[22]	-	-
	B5R	-	13	-	-
	A4R	-	13	-	-
	B4	-	11	-	-
	A3	-	12	-	-
	STMTR	-	13	-	-
	LTR	-	25[22]	-	-
	LTRR	-	13	-	-
	LGL	-	11	-	-
	LDR	-	12	-	-
	Postcard	-	12/8	-	-
	free	-	11	-	-
OHP	A4	-	25[22]	-	-
	LTR	-	25[22]	-	-

	Paper size	Single-sided		Auto duplexing	
		cassette feed	manual feed	cassette feed	manual feed
Envelope	Monarch	-	10/6	-	-
	COM10	-	10/6	-	-
	ISO-B5	-	10/6	-	-
	ISO-C5	-	10/6	-	-
	DL	-	10/6	-	-
	YOGATA No.4	-	10/6	-	-

1.2.7.2 Printing Speed

0007-7696

iR3570 / iR4570

Max/Min (max when the machine has fully cooled)
A value in brackets [ ] represents the iR3570.

T-1-30

	Paper size	Single-sided				Auto duplexing			
		cassette feed		manual feed		cassette feed		manual feed	
		1/2 dlvry	3 dlvry	1/2 dlvry	3 dlvry	1/2 dlvry	3 dlvry	1/2 dlvry	3 dlvry
Plain paper	A4	45[35]	15	25	8	22	7	12	4
	A5R	20/16	15	17/14	8	10/8	7	8/7	4
	B5	35	15	25	8	17	7	12	4
	B5R	20/16	7	17/14	4	10/8	3	8/7	2
	A4R	20/16	7	17/14	4	10/8	3	8/7	2
	B4	24/16	7	13	4	12/8	3	6	2
	A3	22	7	14	4	11	3	7	2
	STMTR	20/16	15	17/14	8	10/8	7	8/7	4
	LTR	45[35]	15	25	8	22	7	12	4
	LTRR	20/16	7	17/14	4	10/8	3	8/7	2
	LGL	16/14	7	13	4	8/7	3	6	2
	LDR	22	7	14	4	11	3	7	2
	free	-	-	13	-	-	-	-	-

	Paper size	Single-sided				Auto duplexing			
		cassette feed		manual feed		cassette feed		manual feed	
		1/2 dlvry	3 dlvry	1/2 dlvry	3 dlvry	1/2 dlvry	3 dlvry	1/2 dlvry	3 dlvry
Heavy paper	A4	-	-	25	-	-	-	-	-
	A5R	-	-	14	-	-	-	-	-
	B5	-	-	25	-	-	-	-	-
	B5R	-	-	14	-	-	-	-	-
	A4R	-	-	14	-	-	-	-	-
	B4	-	-	12	-	-	-	-	-
	A3	-	-	12	-	-	-	-	-
	STMTR	-	-	14	-	-	-	-	-
	LTR	-	-	25	-	-	-	-	-
	LTRR	-	-	14	-	-	-	-	-
	LGL	-	-	12	-	-	-	-	-
	LDR	-	-	12	-	-	-	-	-
	Post-card	-	-	18/10	-	-	-	-	-
	free	-	-	12	-	-	-	-	-
OHP	A4	-	-	25	-	-	-	-	-
	LTR	-	-	25	-	-	-	-	-
Envelope	Monarch	-	-	12/8	-	-	-	-	-
	COM10	-	-	12/8	-	-	-	-	-
	ISO-B5	-	-	12/8	-	-	-	-	-
	ISO-C5	-	-	12/8	-	-	-	-	-
	DL	-	-	12/9	-	-	-	-	-
	yogata NO.4	-	-	12/8	-	-	-	-	-

1.2.7.3 Types of Paper

0007-7893

iR2270 / iR2870 / iR3570 / iR4570

T-1-31

Type		Size	Source		
			Manual feed tray	Cassette	Side Paper Deck-Q1
Plain paper, eco paper, recycled paper		A3, B4, A4R, LDR, LGL, LTRR, B5, EXE, A5R, STMTR, B5R	yes	yes	no
		A4, LTR	yes	yes	yes
Special paper	Heavy paper	A3, B4, A4R, LDR, LGL, LTRR, B5, EXE, A5R, STMTR, B5R, A4, LTR	yes	yes	no
	OHP	A4, LTR	yes	yes	no
	Postcard	postcard A6R modified; double-postcard A5R modified	yes	no	no
	4-plane postcard	A4 modified	yes	no	no
	Label paper	A4, A4R, LTR, LTRR	yes	no	no
	3-hole paper	same as plain	yes	yes	yes
	Tracing paper	A3, B4, A4	yes	yes	no
	Envelope	Com10, Monarch, DL, ISO-C5ISO-B5	yes	yes	no

Chapter 2 Installation

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2.1 Making Pre-Checks

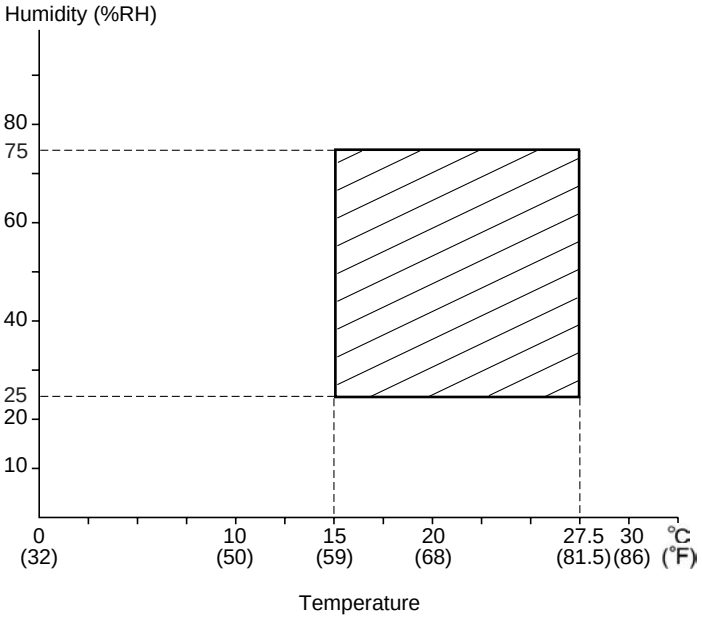
2.1.1 Selecting the Site of Installation

0007-4754

iR2270 / iR2870 / iR3570 / iR4570

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

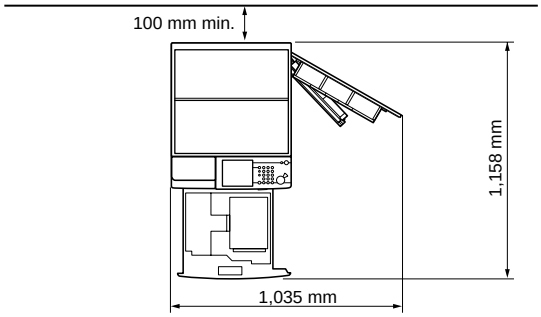
1) There must be a power outlet properly grounded and rated as indicated (+, -10%) for exclusive use by the machine.
2) The environment of the room must be as indicated in the following diagram, and the machine must not be installed near a water faucet, water boiler, humidifier, or refrigerator:



F-2-1

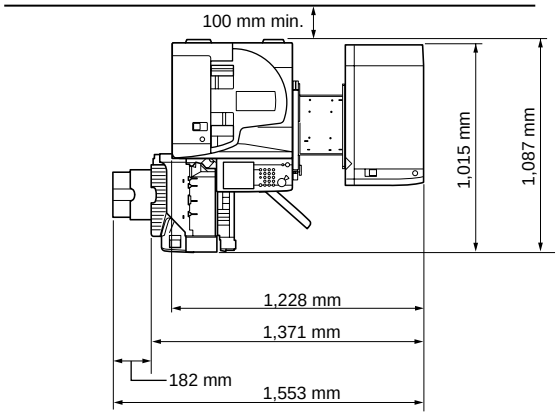
3) The machine must not be installed near a source of fire or in an area subject to dust or ammonium gas.
If the area is exposed to direct rays of the sun, provide curtains to the window.
4) The room must be well ventilated. (The level of ozone generated by the machine in use will not affect the individuals 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.

- Without a Finisher or Side Paper Deck-P1 Installed



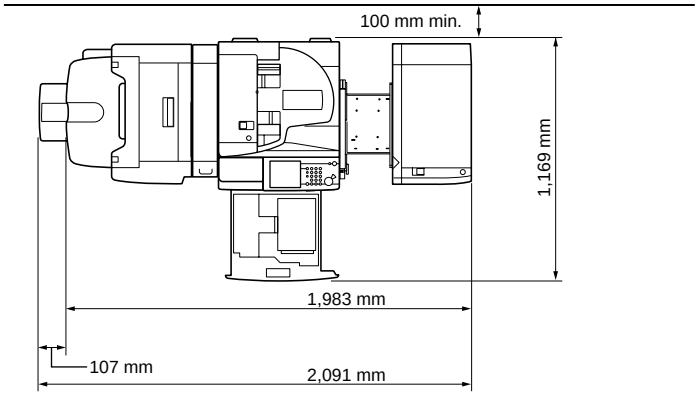
F-2-2

- Without a DADF-N1, Finisher S1, and Side Paper Deck-Q1 Installed



F-2-3

- With a DADF-N1, Side Paper Deck-Q1, Saddle Finisher-Q4, Buffer Path Unit-E1, and Puncher Unit-L1/M1/N1/P1 Installed



F-2-4

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.

2.1.2 Before Starting the Work (230V)

0008-3400

iR2270 / iR2870 / iR3570 / iR4570

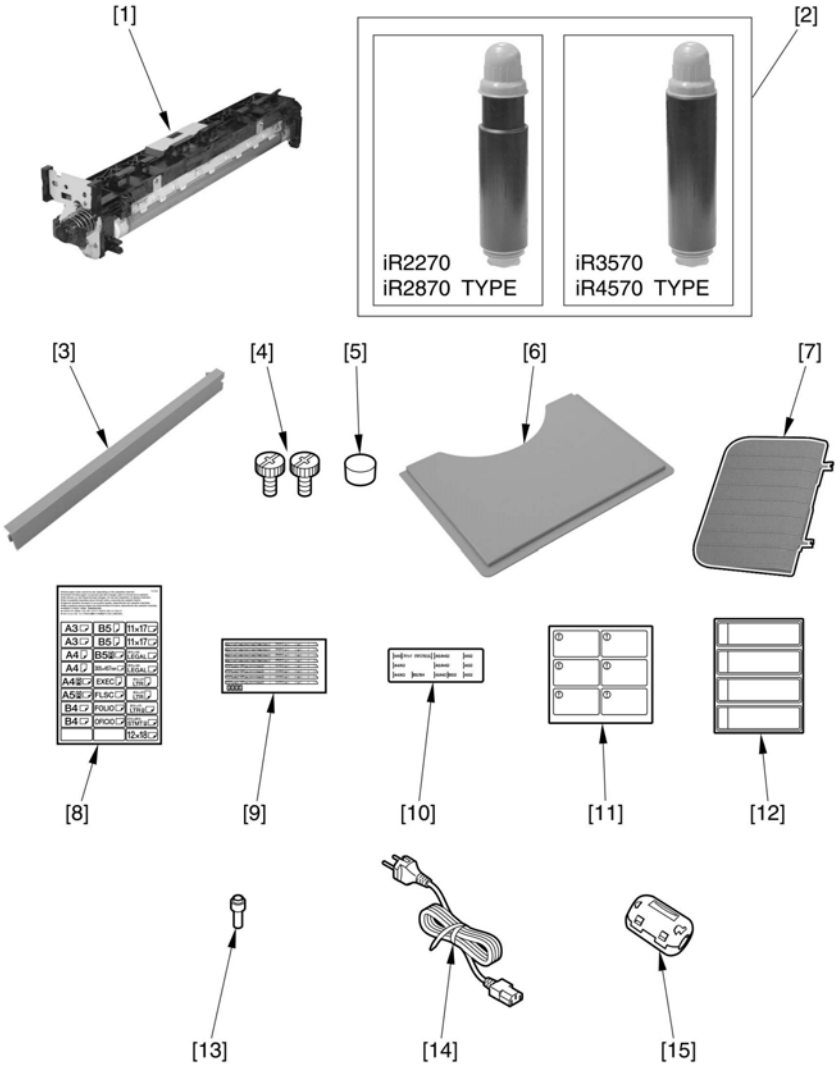
1-1 Points to Make Before Installation

Be sure to go through the following before starting the work:

1) If you are installing the machine after moving it from a cold to warm location, be sure to leave the machine unpacked for at least 2 hours so that the machine is fully used to the site temperature, thus avoiding image faults caused by condensation. (The term "condensation" refers to the formation of droplets of water on the surface of a metal object brought in from a cold to warm place, i.e., as the result of the rapid cooling of the moisture (vapor) around the object.)
2) The machine weighs a maximum of about 80 kg(including a DADF). Be sure to work in a group of 4 persons when lifting it.

1-2 Checking the Contents

Check to be sure that none of the following contents is missing:



F-2-5

T-2-1

[1]	Drum unit	1pc	[9]	Dial label	1pc
[2]	Toner bottle (230V CA model only)	1pc	[10]	Size label(small) (ADF standard model only)	1pc
[3]	Lower right cover	1pc	[11]	Shut-Down Warning Label	2pc*
[4]	Adjusting screw	2pc	[12]	Toner Bottle Warning Label	1pc
[5]	covering rubber	1pc	[13]	Stamp (DADF standard model only)	1pc

[6]	Service book case	1pc	[14]	Power Cable	1pc
[7]	Reversing Guide(iR3570 / 4570 model only)	1pc	[15]	Ferrite core	1pc
[8]	Cassette size label	1pc			

*230V CA mode --- 1pc

Check the documentation and CD against the following table:

T-2-2

- 230V EUR model

Operators manual: Users Guide

Operators manual CD-ROM

MEAP Admin.CD-ROM

T-2-3

- 230V model, 230V CA model

Operators manual: Reference Guide

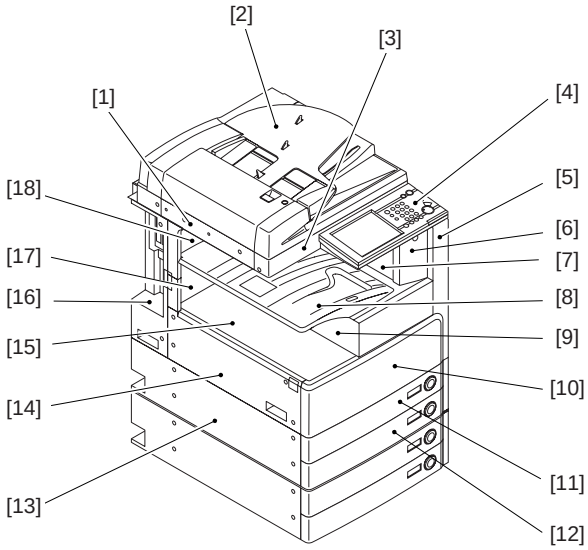
Operators manual: Copying/Mail Box Function Guide

Operators manual: Easy Operation Guide

Operators manual CD-ROM: NW/RUI Guide

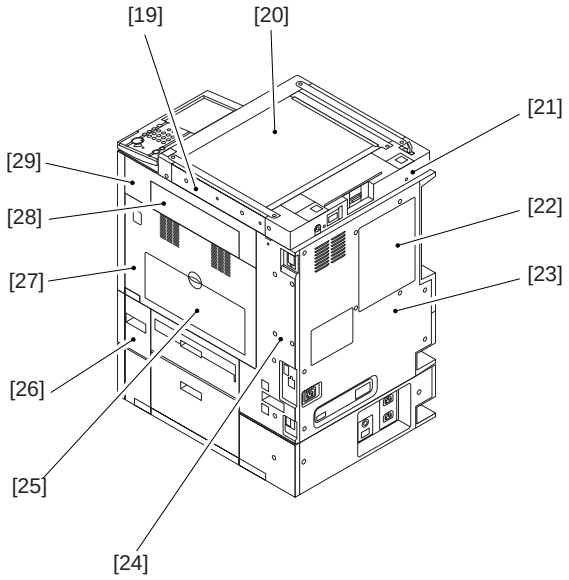
MEAP Admin.CD-ROM

1-3 Names of Parts



F-2-6

[1] ADF reading glass retainer
[2] DADF (Option)
[3] Reader cover (front)
[4] Control panel
[5] Support cover (right)
[6] Support cover
[7] Delivery tray right cover
[8] Delivery tray
[9] Inside right cover
[10] Front cover unit
[11] Cassette 1
[12] Cassette 2
[13] Left cover (lower)
[14] Left cover
[15] Inside base cover
[16] Left cover (rear)
[17] Delivery tray rear cover (lower)
[18] Delivery tray rear cover



F-2-7

[19] Reader over (right)
[20] Copyboard glass
[21] Reader cover (rear)
[22] Face over
[23] Rear cover
[24] Right cover (rear)
[25] Manual feed pickup tray
[26] Right cover (lower front)
[27] Right door unit
[28] Delivery cover
[29] Right cover (upper)

2.2 Unpacking and Installation

2.2.1 Unpacking and Removing the Packaging Materials

0006-6724

iR2270 / iR2870 / iR3570 / iR4570

1) Unpack and remove the plastic bags.
- When installing a pedestal to the copier at the same time, unpack it in the same way.

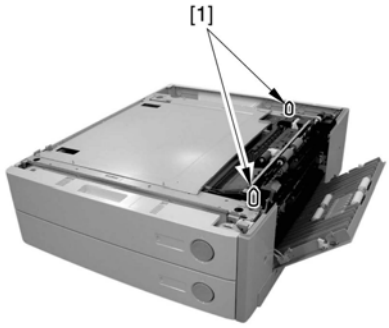
2) When installing the copier on the 2-cassette Pedestal-Y2, open the right door [1] of the pedestal.
3) Hold the recesses [2] of the copier with 4 or more people, and place it on the pedestal.



F-2-8

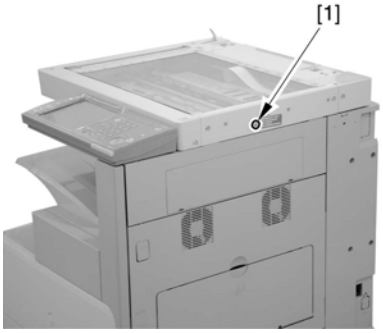
⚠The maximum weight of the copier is approx. 80kg (including the DADF), so be sure to lift it with 4 or more people.

Memo: When placing the copier on the cassette pedestal, be sure to align the two positioning pins [1] to the holes on the base plate of the copier.



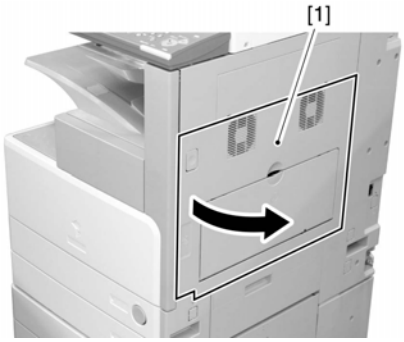
F-2-9

4) Close the right door of the pedestal (in the case of the 2-cassette Pedestal-Y2).
5) Remove the packaging tapes and materials from each unit.
   - Front door
   - Right door
   - Manual feeder unit
   - Cassettes 1 and 2
   - Inside the cassettes 1 and 2
   - DADF (In the case of the model with a DADF)
   - Platen glass
6) When installing the copier to the 2-cassette Pedestal-Y2, follow the installation procedure for the 2-cassette Pedestal-Y2.
7) Remove the optical system fixing screw [1] at the outside of the right cover in the reader unit. (Keep the optical system fixing screw for future relocation of the copier.)



F-2-10

8) Open the right door [1].

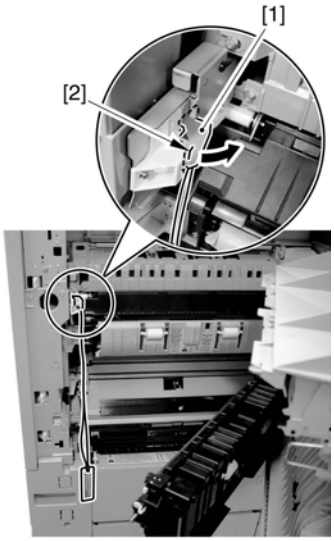


F-2-11

9) Remove the fixing assembly release cover [1].

Reference

To facilitate the work, try detaching it from the front top [2] of the fixing assembly release cover [1] in the direction of the arrow.



F-2-12

⚠If you turn on the machine without detaching the fixing assembly release cover, the fixing heater can suffer damage.

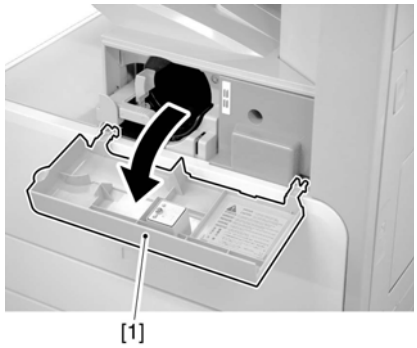
10) Close the right door.

2.2.2 Installing the Toner Bottle

0007-4955

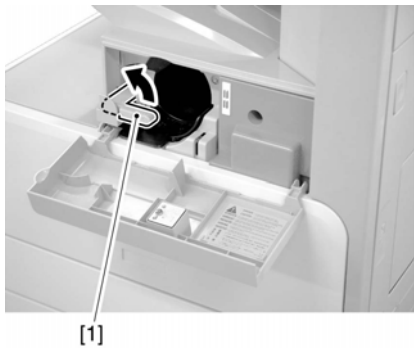
iR2270 / iR2870 / iR3570 / iR4570

1) Open the front cover [1].



F-2-13

2) Lift the lock lever [1].



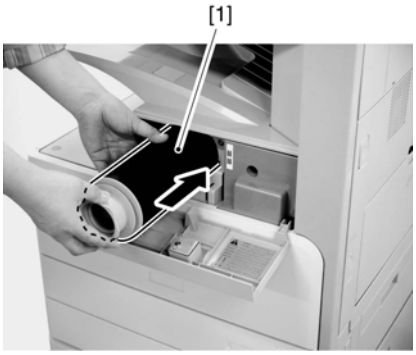
F-2-14

3) Unpack the toner bottle and remove the cap [1].



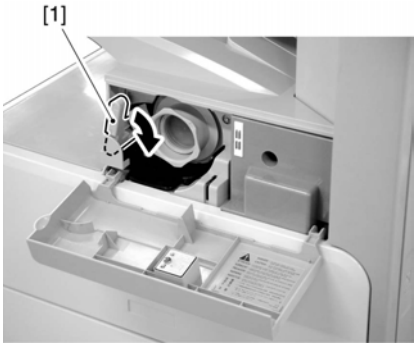
F-2-15

4) Mount the toner bottle [1] on the copier.



F-2-16

5) Push down the lock lever [1] so that the toner bottle is secured.



F-2-17

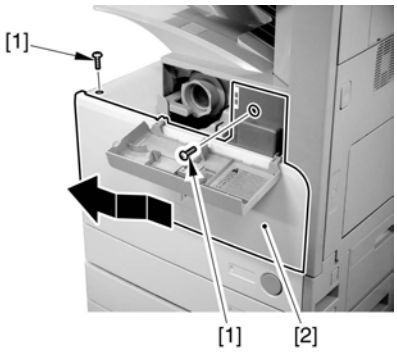
⚠Be sure to shift down the locking lever until it is fully horizontal; otherwise, no supply of toner will be made.

2.2.3 Installing the Drum Unit

0006-6766

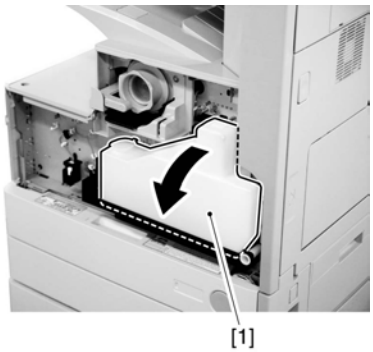
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the two screws [1] and detach the front cover unit [2] as sliding it to the left.



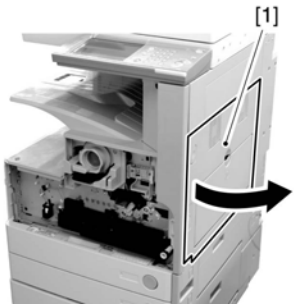
F-2-18

2) Remove the waste toner box [1].



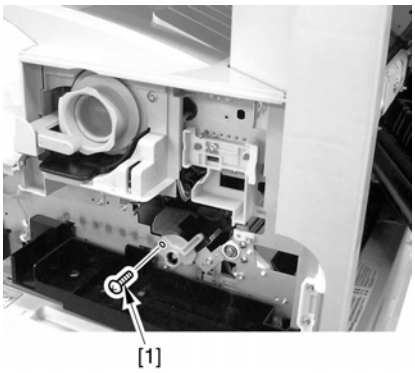
F-2-19

3) Open the right door [1].



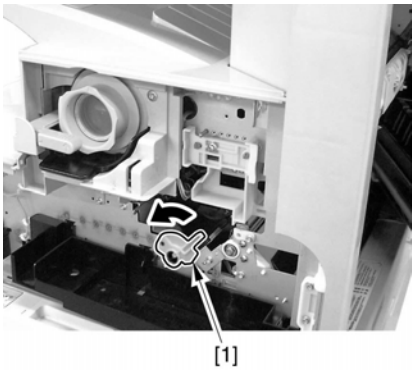
F-2-20

4) Remove the lock screw[1] of the developing assembly pressure lever.



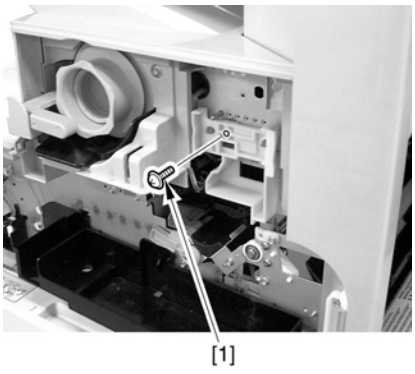
F-2-21

5) Turn the developing assembly pressure lever [1] to the left and release the pressure.

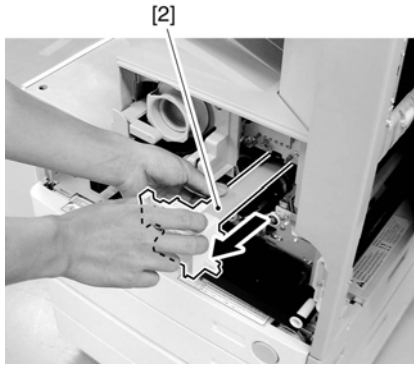


F-2-22

6) Remove the one screw [1] and take out the dummy drum [2].

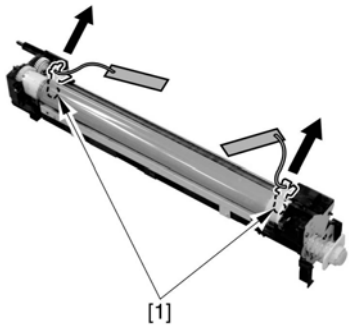


F-2-23



F-2-24

7) Remove the package of the drum unit, which is provided with the product, and remove the two drum pressure release blocks [1].

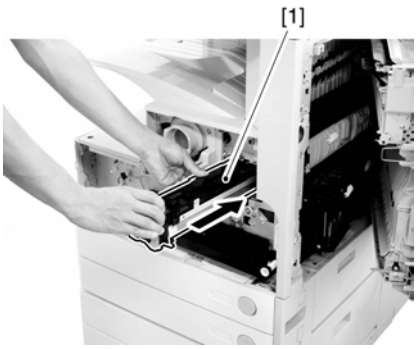


F-2-25

⚠

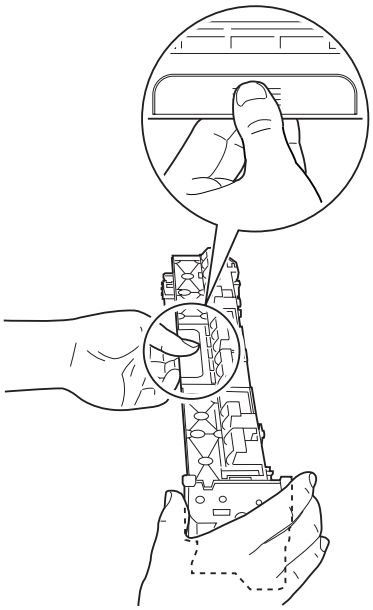
- Do not touch the photosensitive drum surface.
- Do not expose the photosensitive drum surface to light for a long period of time.
- Do not touch the rowel of the drum.

8) Mount the drum unit [1], which is provided with the product, to the copier.



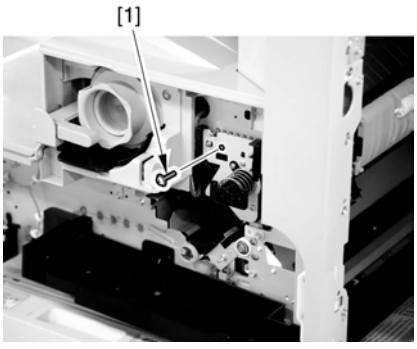
F-2-26

⚠Be careful where you hold the drum unit.



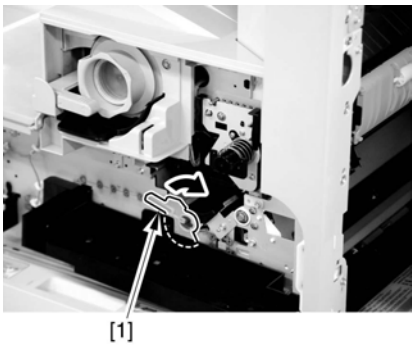
F-2-27

9) Secure the drum unit with the one screw [1] with which the dummy drum has been secured.



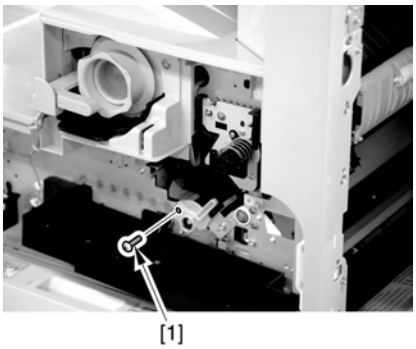
F-2-28

10) Push down the developing assembly pressure lever [1] and apply pressure.



F-2-29

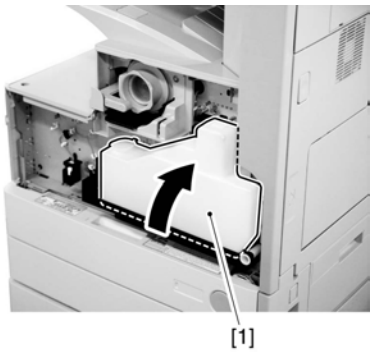
11) Secure the developing assembly pressure lever with the one screw [1].



F-2-30

12) Close the right door.

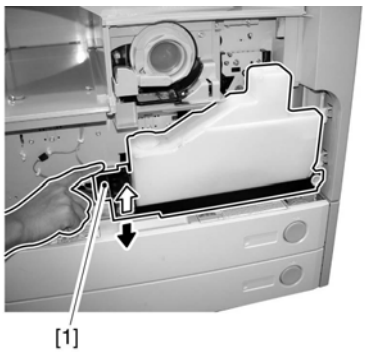
13) Mount the waste toner box [1].



F-2-31

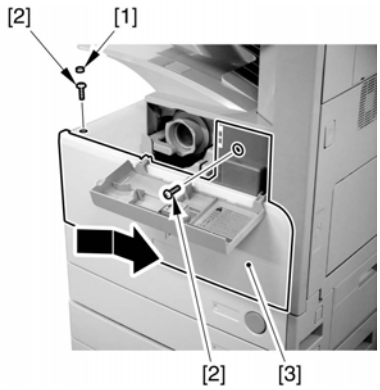
⚠Point to note after attaching the waste toner receptacle

After attaching the waste toner receptacle, move the waste toner full detection lever [1] up and down to make sure that the lever is moved smoothly. Faulty detection may be resulted if the lever is caught in something and is not moved smoothly.



F-2-32

14) Mount the front cover unit [3] with the two screws [2] and mount the covering rubber [1], which is provided with the product.

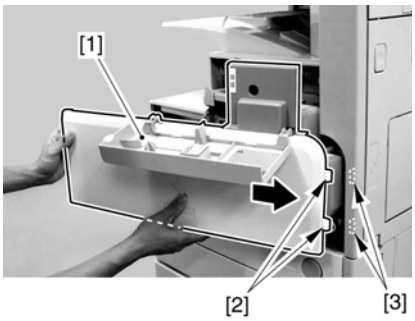


F-2-33

Reference

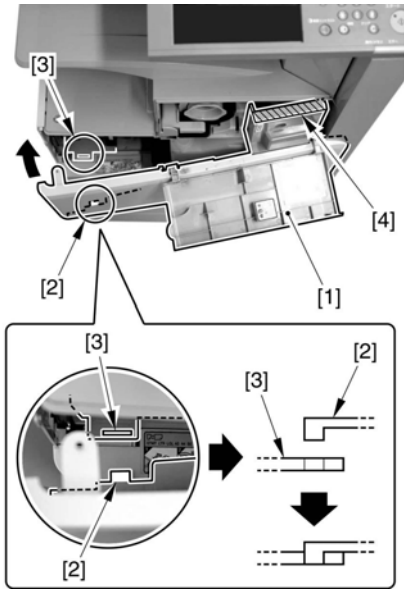
Mounting the Front Cover

1) Fit the 2 claws [2] of the front cover unit [1] into the claw holes [3] of the machine.



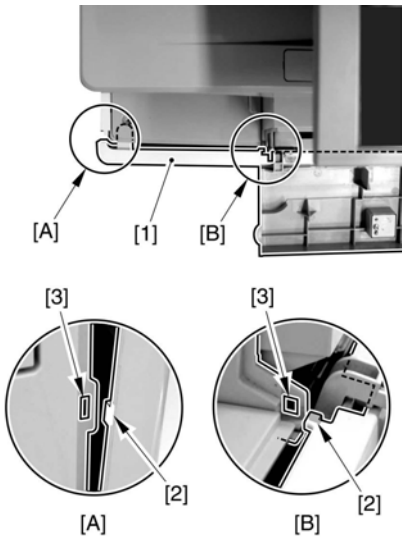
F-2-34

2) While matching the top [4] of the front cover unit against the machine, fit the lower left claw [2] of the front cover unit [1] in the claw hole [3] of the machine.



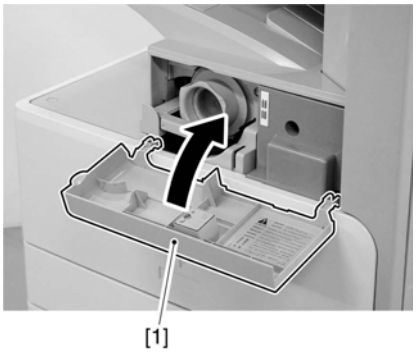
F-2-35

3) While matching the 2 claws [2] of the front cover unit [1], slide the front cover unit [1] to the right.



F-2-36

15) Close the front cover [1].



F-2-37

2.2.4 Securing the Copier Main Unit

0006-6767

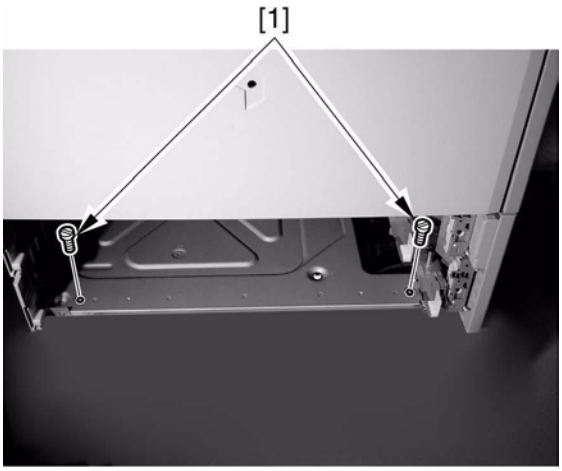
iR2270 / iR2870 / iR3570 / iR4570

- With a pedestal installed

1) Move the copier to the location where it will be installed, and then secure it with the 4 adjuster wheels of the pedestal.

- Without a pedestal installed

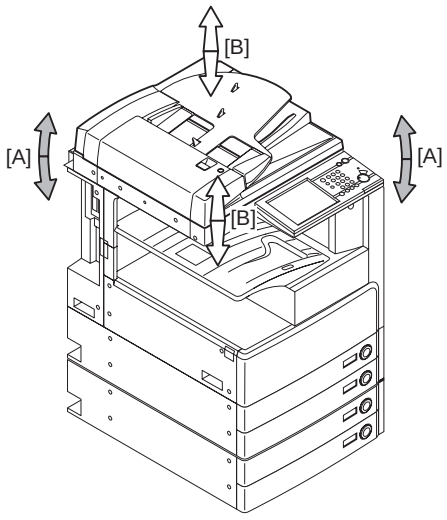
1) Remove the cassettes 1 and 2 and tighten the adjusting screws [1] at the base plate temporarily until the screw legs touch the bottom slightly.



F-2-38

2) Check if the machine wobbles while it is lying on the desk or the floor, and tighten the adjusting screws if necessary.

- When it wobbles in the direction shown by the arrow A, tighten the screw at the right side in the above picture.
- When it wobbles in the direction shown by the arrow B, tighten the screw at the left side in the above picture.



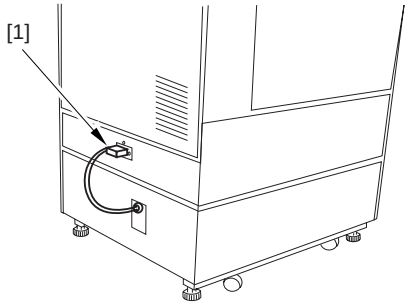
F-2-39

3) Mount the cassettes 1 and 2.

2.2.5 Connecting the Cable 0007-5059

iR2270 / iR2870 / iR3570 / iR4570

1) 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-2-40

2) 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.

3) 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.

⚠Turning Off the Main Power

Whenever you have to turn off the main power, be sure to go through the following to avoid damage to the hard disk:

1. Hold down the control panel power switch for 3 sec or more.
2. Go through the instructions for the shut-down sequence shown on the display so that the main power switch may be turned off.
3. Turn off the main power switch.

2.2.6 Stirring Toner 0007-5062

iR2270 / iR2870 / iR3570 / iR4570

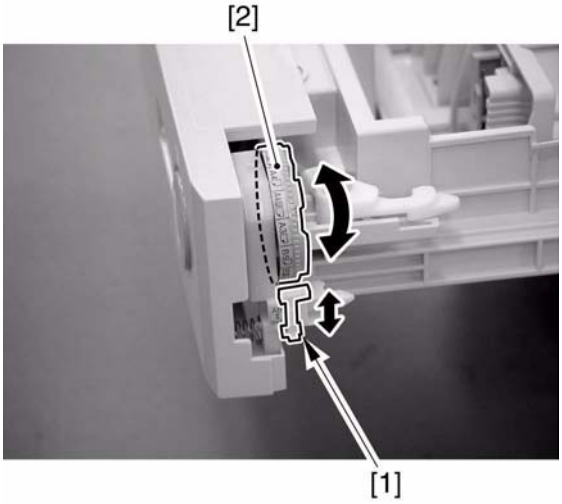
1) Enter the Service Mode. (Press "*" first, and "2" and "8" at the same time, and then "*.")
2) Select COPIER >FUNCTION > INSTALL> TONER-S.
3) Press the OK key.

- Toner stirring time is approx. 6 minutes. After counting up, it stops automatically.
- Make the cassette settings before toner stirring is completed. (See Setting the Cassettes.)

2.2.7 Setting the Cassettes 0007-5065

iR2270 / iR2870 / iR3570 / iR4570

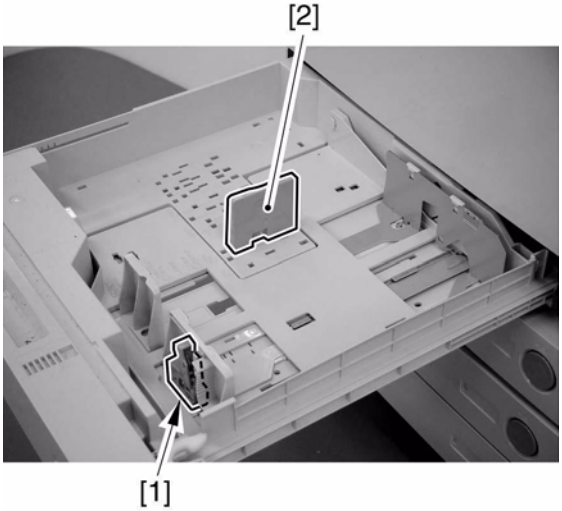
1) Press the cassette release button, and draw out the cassette to the front.
2) Check the paper series that the user is going to use, and verify whether or not the paper series selection switch [1] in the cassette matches that of the user's selection. If not, change the paper size series to the appropriate one.
3) Set the paper size selection dial [2] to the paper size of the paper to be placed.



F-2-41

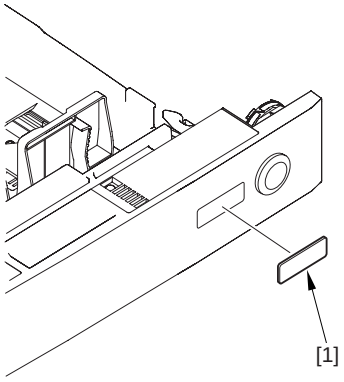
4) Hold the lever [1] of the side guide plate, and set the side guide plate to the appropriate size.

5) Turn the end guide plate [2] to the right and detach it. Following the instructions given on the base plate of the cassette, set the end guide plate to the appropriate size.



F-2-42

6) Affix the appropriate cassette size label [1] to the front side of the cassette.



F-2-43

7) Place sheets in the cassette, and then push the cassette into the machine.

8) Do the same operation to the other cassette.

9) If a cassette pedestal is installed, make the cassette settings in reference to the installation procedure of the cassette pedestal.

2.2.8 APVC Correction of the Drum

0007-5071

iR2270 / iR2870 / iR3570 / iR4570

1) Enter the Service Mode. (Press "*" first, and "2" and "8" at the same time, and then "*.")

2) Select COPIER >FUNCTION > DPC> D-GAMMA.

3) Press the OK key.

- Paper is fed from the cassette 1 (regardless of size of paper in the cassette).
- If there is no paper in the cassette 1, paper is fed from the lower cassette.
- That paper is delivered as it remains blank, and APVC correction is automatically completed.

4) Press the Reset key twice to exit the Service Mode.

⚠

There are cases where a small amount of toner, which is spilled inside the machine due to toner stirring, is attached to test copies (at the rear surface). It is solved after making about three test copies.

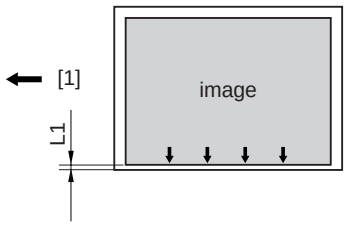
2.2.9 Adjusting the Image Position

0008-2475

iR2270 / iR2870 / iR3570 / iR4570

- Adjusting the Margin (1st side; mechanical)

1) Using the cassettes 1 and 2 and the manual feeder as the source of paper, make copies, and check to be sure that the left margin L1 is 2.5 +/-1.5 mm.



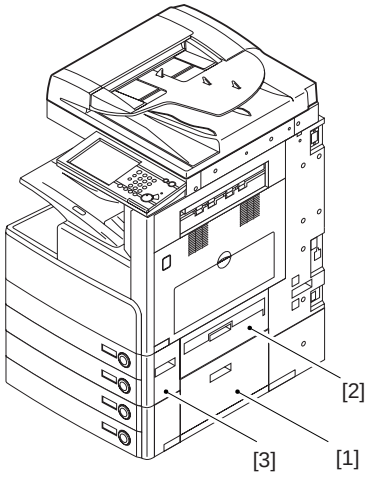
F-2-44

[1]Paper feed direction

*If the margin is not as indicated when the cassette 1 or 2 is used as the source of paper, make the following adjustments:

2) In the case of a 2-Cassette Pedestal-Y2, open its right door [1].

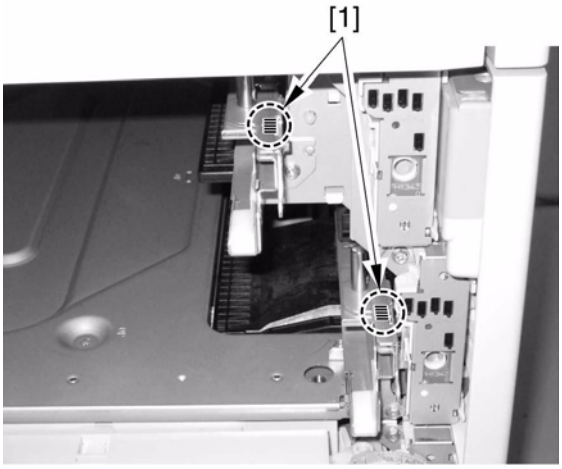
3) Open the lower right cover [2], and remove the 2 screws to detach the cover (lower right front).



F-2-45

4) Take out the cassettes 1 and 2.

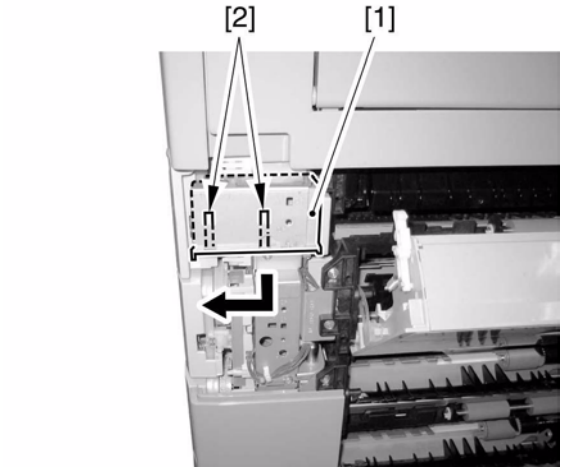
5) Check the position of the index [1] on the adjusting plate.



F-2-46

*Adjusting the Cassette 1

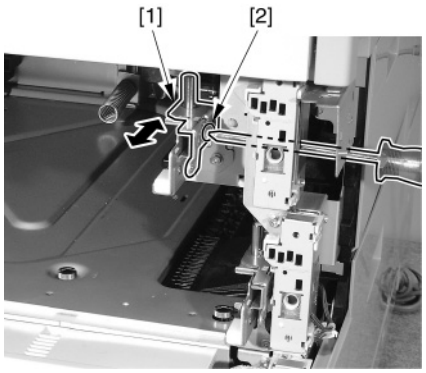
6) Remove the 2 claws [2], and detach the grip (right front) [1] in the direction of the arrow.



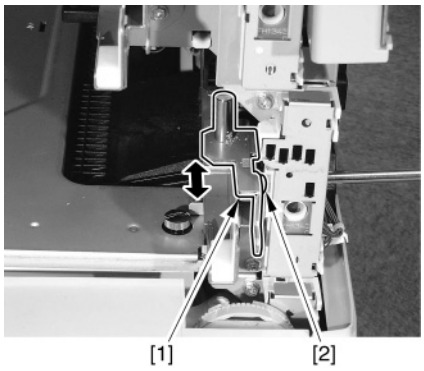
F-2-47

7) Loosen the fixing screw [2] of the adjusting plate [1].

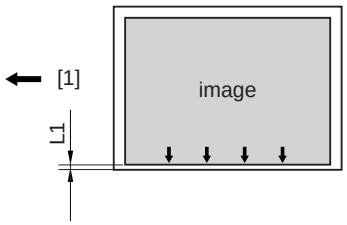
8) While referring to the index you checked in step 5), move the adjusting plate back and forth. Moving the adjusting plate toward the rear of the machine will increase the left margin L1 of the image.



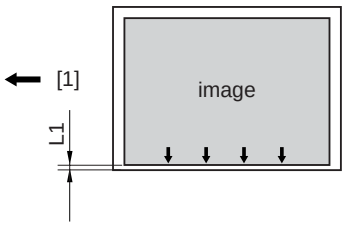
F-2-48



F-2-50



F-2-49



F-2-51

[1]Paper feed direction

9) Tighten the fixing screw.
10) Fit the cassette 1 back in.
11) Make a copy, and check to be sure that the left margin of the image on paper picked up from the cassette 1 is 2.5 +/-1.5 mm.
12) Fit the grip (right front) back in.
13) Attach the right cover of the machine.

*Adjusting the Cassette 2

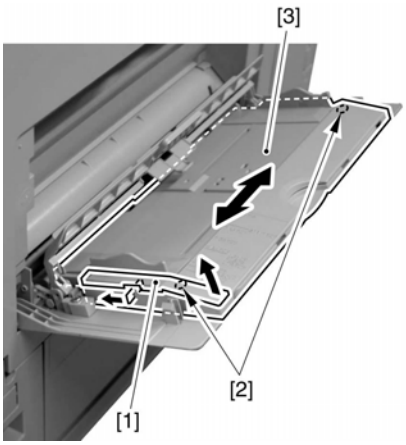
6) Loosen the fixing screw [2] of the adjusting plate [1].
7) While referring to the index you checked in step 5), move the adjusting plate back and forth. Moving the adjusting plate toward the rear of the machine will increase the left margin L1 of the image.

[1]Paper feed direction

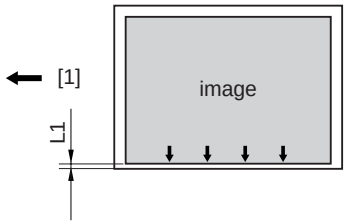
8) Tighten the fixing screw.
9) Fit the cassette 2 back in.
10) Make a copy, and check to see that the left margin of the image on paper picked up from the cassette 2 is 2.5 +/-1.5 mm.
11) Attach the right front cover of the machine.

*If the left margin on paper picked up from the manual feeder is not as indicated, make the following adjustments:

2) Remove the paper from the manual feed tray.
3) Loosen the fixing screw [1] of the manual feed tray upper cover.
4) While referring to the index you checked in step 1), move the manual feed tray upper cover back and forth. Moving the manual feed tray upper cover toward the rear of the machine will increase the left margin of the image L1.



F-2-52



F-2-53

[1]Paper feed direction

5) Tighten the fixing screw of the manual feed tray upper cover.
6) Put paper in the manual feed tray.
7) Make a copy, and check to make user that the left margin of the image on paper picked up from the manual feed tray is 2.5 +/-1.5 mm.

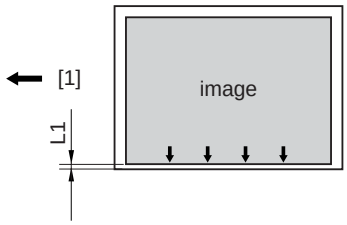
- Adjusting the Margin (2nd side)

Make adjustments separately for both small paper and large paper:

small paper: A4, B5, and the like whose length in feed direction is shorter than LTR.

large paper: A3, A4R, B5R, and the like whose length in feed direction is longer than LTR.

1) Put small paper in the cassette 1 and large paper in the cassette 2.
2) Make a double-sided copy using the cassette 1, and check to be sure that the left margin L1 of the image on the 2nd side is 2.5 +/-2.0 mm.



F-2-54

[1]Paper feed direction

3) If not as indicated, change the small paper 2nd side horizontal registration setting.

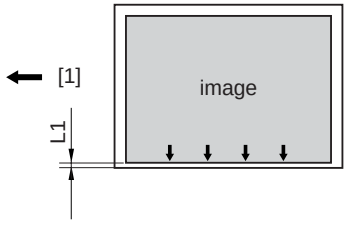
small paper: service mode COPIER>ADJUST>FEED-ADJ>ADJ-REF

An increase of '1' will increase the left margin of the image by 0.1 mm.

4) Enter the new value (obtained as the result of the foregoing adjustment) as the large paper 2nd side horizontal registration setting.

Large paper: service mode COPIER>ADJUST>FEED-ADJ>ADJ-RE-L.

5) Make a double-sided copy using the cassette 2, and check to make sure that the left margin of the image on the 2nd side is 2.5 +/-2.0 mm.



F-2-55

[1]Paper feed detection

6) If not as indicated, change the large paper 2nd side horizontal registration adjustment setting.

large paper: service mode COPIER>ADJUST>FEED-ADJ>ADJ-RE-L

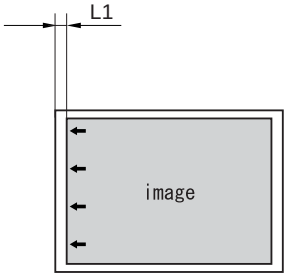
An increase of '1' will increase the left margin of the image by 0.1 mm.

- Leading edge margin

Make a copy using the cassette 1, and check to be sure that the leading edge margin L1 is 2.5 +/-1.5 mm. If

not, be sure to make the following adjustments

1) Make the following in service mode: COPIER >ADJUST >FEED-ADJ >REGIST.
2) Change the setting to make adjustments. (A change of '1' made to the setting will cause a move of 0.1 mm. A lower setting will move the image toward the leading edge.)



F-2-56

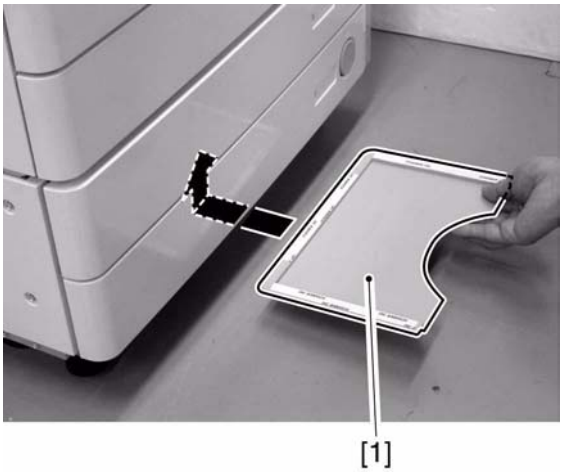
2.2.10 Attaching Other Parts

0007-5087

iR2270 / iR2870 / iR3570 / iR4570

- Service Book Holder

1) Remove release paper of the double-sided tape on the rib of the service book folder [1], and attach the holder to the bottom plate of the pedestal.



F-2-57

⚠Locations where the service book folder cannot be attached.

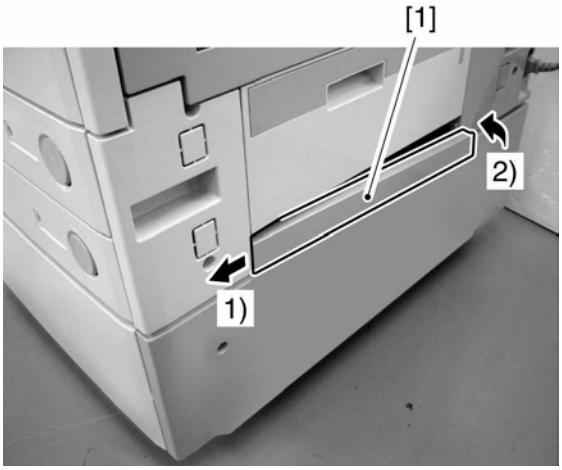
- Inside the machine (Inner side of the front cover)
- Locations where the louver is blocked.
- Locations where the grips are blocked.

Memo:

Attach the service book holder to the left cover of the machine if the pedestal is not installed.

- Lower right cover

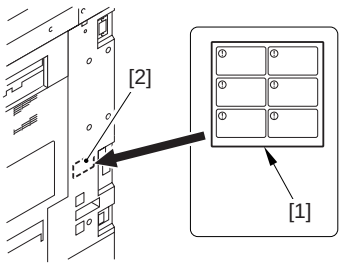
1) Attach the lower right cover [1]. (Perform this step when attaching the machine to the 2-level cassette pedestal Y2 or more.)



F-2-58

- Shut-Down Warning Label

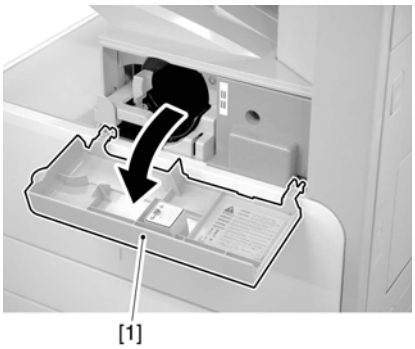
1) Attach the Shut-Down warning label [1] of the appropriate language to the right cover (rear) of the machine (i.e.,. on the left inside [2] of the main power supply.).



F-2-59

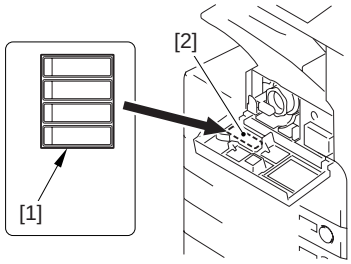
- Toner Bottle Warning Label

1) Open the front cover [1].



F-2-60

2) Attach the Toner Bottle warning label [1] of the appropriate language behind [2] the front cover.



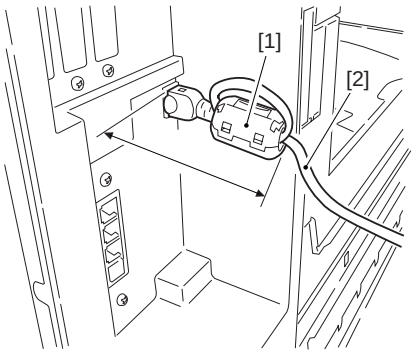
F-2-61

- Ferrite Core (230V model only)

1) Fit the ferrite core [1] to the network cable [2].

⚠Be sure to fit the ferrite core as follows to protect against noise:

- Be sure to fit it as close to the joint between the machine and the network cable as possible.
- The harness must be wound around the ferrite core once before the core is fixed in place.
- The harness is not trapped by the ferrite core.

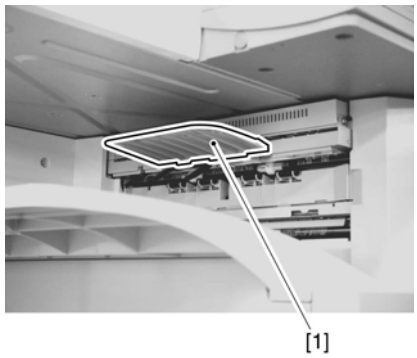


F-2-62

⚠When installing the machine newly or when replacing the harness, be sure not to leave behind the ferrite core.

- Reversing Guide (iR3570/4570 model only)

1) Fit the reversing guide [1].



F-2-63

2.2.11 If Not Connected to a Network

0007-6496

iR2270 / iR2870 / iR3570 / iR4570

Reference

If the machine is not connected to a network, its control panel will indicate the message "Check the Connection to the Network." To disable the message, turn off the following user mode item:

system setup>network>Ethernet driver setup>auto detect

2.3 Checking the Connection to the Network

2.3.1 Overview

0007-5605

iR2270 / iR2870 / iR3570 / iR4570

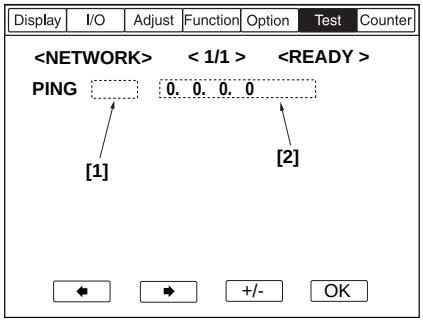
The instructions that follow apply only when the machine is connected to a network.
If the user's network environment is based on TCP/IP, use the PING function to make sure that the network settings are correct.
If the user's network environment is based on IPX/SPX or AppleTalk, on the other hand, such a check need not be made.

2.3.2 Using the PING Function

0007-5600

iR2270 / iR2870 / iR3570 / iR4570

1) Make the following selections in service mode: COPIER>TEST>NETWORK>PING.
2) Enter the correct IP address using the control panel keypad, and press the OK key.
3) Press the Start key.
- If successful, the indication will be 'OK'. If the attempt fails, however, 'NG' will be indicated.



F-2-64

[1] Result (OK/NG)
[2] IP address input

2.3.3 Making a Check Using a Remote Host Address

0007-5603

iR2270 / iR2870 / iR3570 / iR4570

You can use a remote host address in combination with the PING function to check the connection to the network.
The term "remote host address" refers to the IP address of a PC that is connected to the TCP/IP network to which the machine is connected.
1) Inform the system administrator that you will be checking the network connection using the PING function.

2) Ask the system administrator for the appropriate remote host address.
3) Enter the remote host address for PING.
4) If the result is 'OK', the connection to the network is correct.
5) If the result is 'NG', the connection to the network is not correct; start the following troubleshooting work:

2.4 Troubleshooting the Network

2.4.1 Overview

0007-5609

iR2270 / iR2870 / iR3570 / iR4570

The instructions that follow apply only when the machine is connected to a network.
If an attempt to connect to the network fails, the following may be suspected:
a.the connection between the machine and the network is faulty.
b.the machine's TCP/IP setting is faulty.
c.the user's network is faulty.
d.the main controller PCB is faulty.
Make checks by referring to the following detailed instructions:

2.4.2 Making a Check Using a Loopback Address

0007-5612

iR2270 / iR2870 / iR3570 / iR4570

A loopback address will return before it reaches the network controller. When you execute PING using a loopback address, you can find out whether the machine's TCP/IP setting is correct.

1) Enter the appropriate loopback address (127.0.0.1) for PING.
- If 'NG', check the machine's TCP/IP setting once again, and execute PING once again.
- If 'OK', go to the next check.

2.4.3 Making a Check Using a Local Host Address

0007-5614

iR2270 / iR2870 / iR3570 / iR4570

A local host address is the IP address of the machine. When you execute PING using the address, it will return after it has reached the network controller so that you will be able to find out whether the network controller (main controller PCB) is free of a fault or not.

1) Enter the IP address of the machine for PING.
If 'NG' is indicated, perform the following, and execute PING once again:
- if the IP address of the machine is faulty, check to be sure that the IP address setting is correct or, as necessary, report to the system administrator to see if the IP address is valid.
- if the main controller PCB is faulty, replace the PCB.

If 'OK' is indicated, suspect a fault in the user's network environment. Report to the system administrator for appropriate remedial action.

2.5 Checking the Images/Operations

2.5.1 Checking the Image Quality and Operation

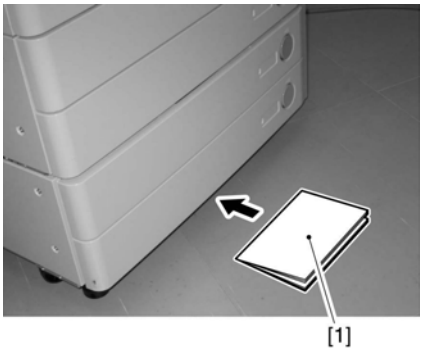
0007-5619

iR2270 / iR2870 / iR3570 / iR4570

1) Place the Test Chart on the copyboard glass, and make copies using the individual cassettes as the source of paper; then, check the output images.
- be sure that there is no abnormal sound.
- be sure that the images are correct at all reproduction ratios.
- be sure that as many copies as specified are made normally.

2) Make settings (e.g., date, time) to suit the needs of the user.
3) Start service mode.
- press the User Mode key, press the 2 and 8 keys at the same time, press the User Mode key once again

4) Make specifications-related settings to suit the needs of the user: COPIER>OPTION>USER.
5) Make test prints by making the following selections in service mode: COPIER>FUNCTION>MISC-P>P-PRINT.
6) Put the output [1] in the Service Book case for storage.



F-2-65

7) Press the Reset key twice to stop service mode.
8) Clean up the area around the machine, and fill out the form in the Service Book.

2.6 Installing the Card Reader

2.6.1 Points to Note

0007-2705

iR2270 / iR2870

⚠

The card reader must be used in combination with the Card Reader Mounting Kit-B1.

2.6.2 Checking the Contents

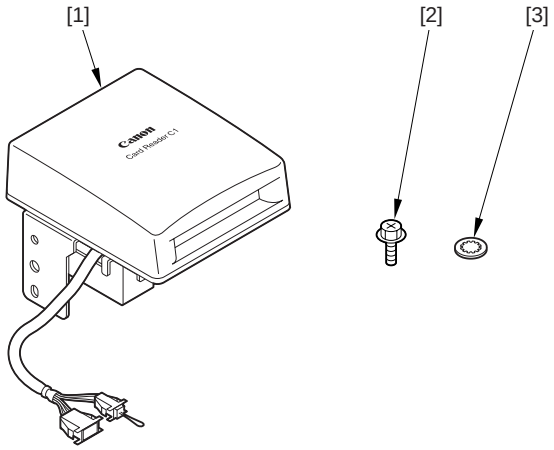
0007-2707

iR2270 / iR2870

<Card Reader-C1>

T-2-4

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

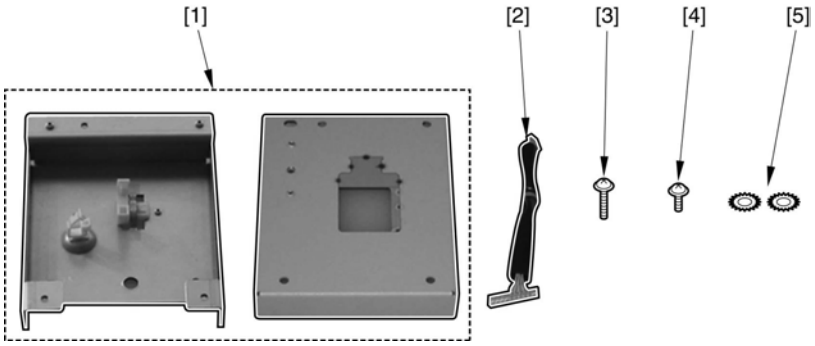


F-2-66

<Card Reader Mounting Kit-B1>

T-2-5

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



F-2-67

2.6.3 Installation Procedure

0007-2709

iR2270 / iR2870

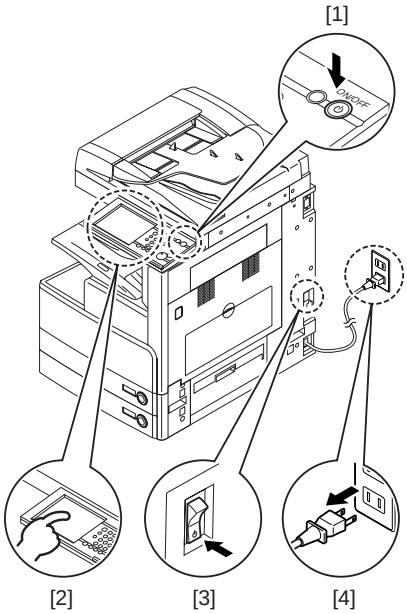
⚠

When you have installed the Card Reader-C1, make the following selections, COPIER> FUNCTION> INSTALL> CARD, and enter the card number you will be using; otherwise, the card will not be recognized upon insertion.

⚠

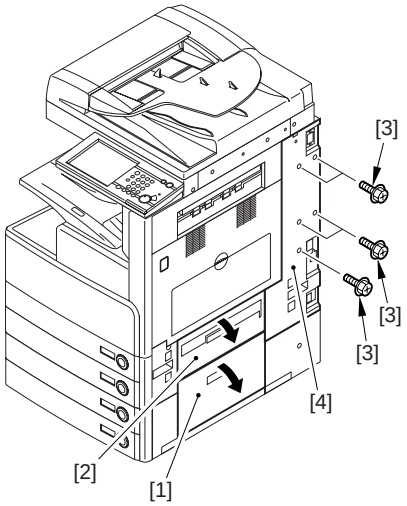
Be sure to go through the following steps on the host machine before starting the work:

1. Hold down the control panel power switch for 3 sec or more.
2. Go through the shutdown sequence as instructed on the screen so that you may turn off the main power switch.
3. Turn off the main power switch.
4. Disconnect the power cable (from the wall outlet).



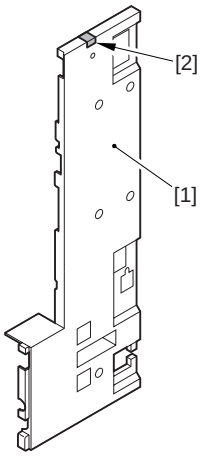
F-2-68

1) Open the pedestal right door [1]. (if equipped with a Cassette Feeding Unit-Y2)
2) Open the lower right cover [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].



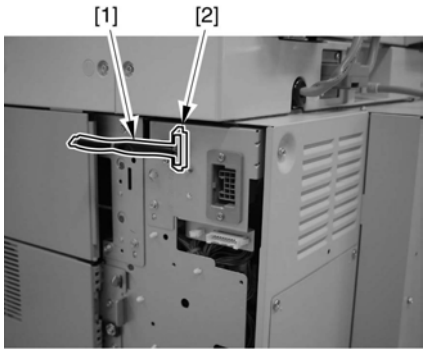
F-2-69

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



F-2-70

5) Connect the relay cable [1] to the connector of the host machine.



F-2-71

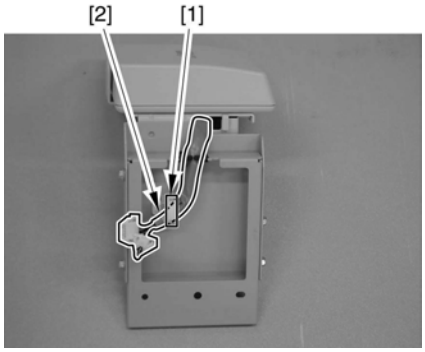
6) Mount the rear right cover using 4 screws.

7) Mount the card reader [1] and the card reader base [2] using the included TP screw (M4x8) [4]. Be sure to use the washer [3] when doing so.



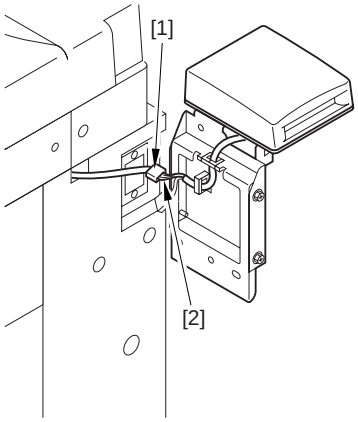
F-2-72

8) Route the relay cable [2] through the wire saddle [1].



F-2-73

9) Connect the cable [1] of the machine and the relay cable [2] of the card reader.



F-2-74

10) While making sure that the harness will not be trapped, mount the card reader [1] using a TP screw (4x25) [3] fitted with a washer [2].



F-2-75

11) Connect the power cable to the wall outlet, and turn on the main power switch. See that the machine is in a standby state, and start service mode.

12) Make the following selections in the machine's service mode (COPIER>FUNCTION>INSTALL>CARD); then,

enter the appropriate card number (1 to 2001).

-Use the number that is the lowest of all the numbers that the user will be using.

-As many as 1000 cards may be used starting with the number entered.

13) Turn off the control panel power switch.

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

2.6.4 Installation in a NetSpot Accountant (NSA) Environment

0007-2764

iR2270 / iR2870

1) Make the following selections in user mode: system control setup>group ID control>count control; then, see that the following numbers are available: ID00000001 to ID00001000. (If you entered '1' in service mode: COPIER>FUNCTION>INSTALL>CARD.)
2) Make the following selections in user mode: system setup>network setup>TCP/IP setup>IP address. Set the following: 'IP address', 'gateway address', 'subnet mask'.

⚠

Unless you have set 'system control group ID' and 'system control ID No.', you will not be able to execute 'register card to device' as part of NSA setup work.

---

3) In user mode, enter numbers of your choice for 'system control ID' and 'system control ID No.' as part of system administrator information.
4) Turn off the control panel power switch.
5) Turn off and then on the main power switch.

2.7 Installing the NE Controller

2.7.1 Installing the NE Controller-A1

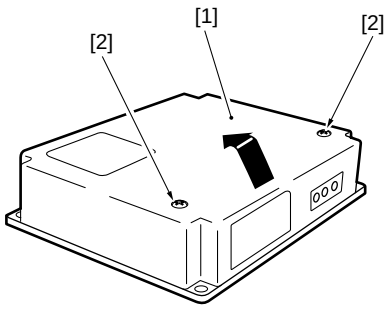
0007-5625

iR2270 / iR2870 / iR3570 / iR4570

When installing the NE Controller-A1 to its host machine, take note of the following:

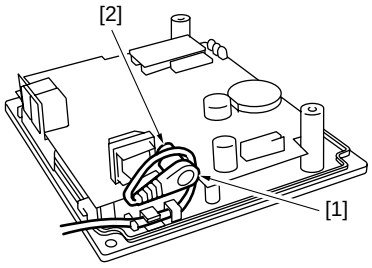
1. be sure to perform the work in compliance with the laws and regulations of the country in question.
2. be sure that the host machine has properly been installed before starting the work.
3. be sure to disconnect the power plug of the host machine before starting the work.
4. be sure to identify the screws by type (length, diameter) and location.
5. be sure the settings data are ready on the PC at the service station.

1) Remove the 2 screws [2] of the top cover [1], and detach the cover.



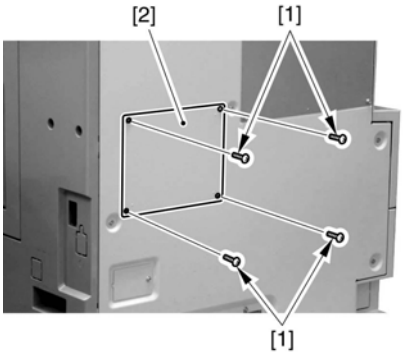
F-2-76

2) Connect the connector [1] of the power supply unit to the connector [2] as shown.



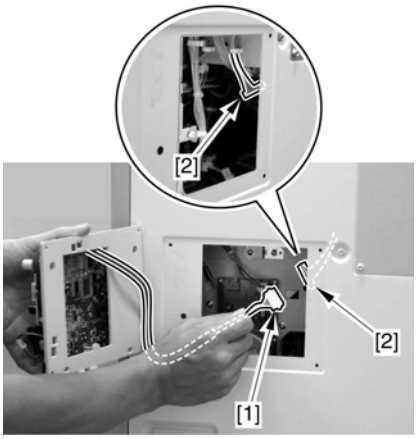
F-2-77

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



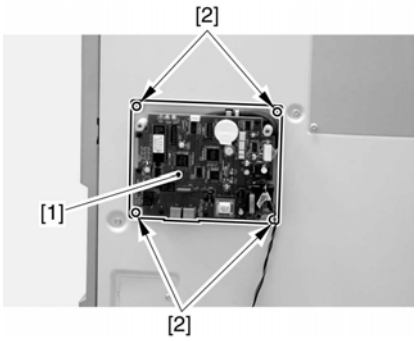
F-2-78

4) Connect the cable [1] to the connector [2] of the host machine (intended for an NE controller).



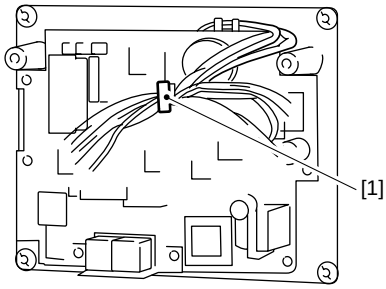
F-2-79

5) Secure the controller [1] to the host machine's rear cover using 4 screws [2].



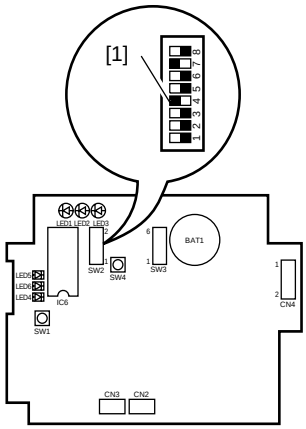
F-2-80

6) Take up the slack from the cable connecting the host machine and the controller; bundle the excess length on the controller side, and fix it in place using a harness guide [1].



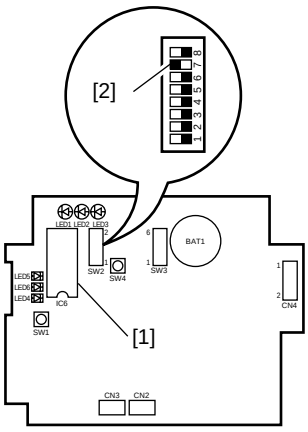
F-2-81

7) Shift bit 4 of the DIP switch [1] (SW2-4) found on the PCB of the controller to ON (so that the communication mode between the host machine and the controller will be IPC).



F-2-82

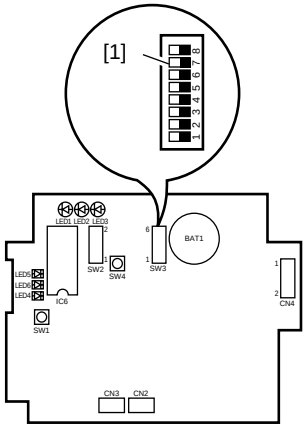
8) If IC6 [1] is found on the PCB, shift bit 7 of the DIP swish [2] (SW2-7) to ON; otherwise, shift bit 7 of the DIP switch [2] (SW2-7) to OFF.



F-2-83

If IC6 [1] is not found, you need not mount any.
If you are mounting a ROM (IC6) [1] or replacing it for upgrading the connector, be sure to shift bit 7 of the DIP switch [2] (SW2-7) to ON.

9) Set the bits of the DIP switch [1] (SW3) on the PCB as indicated in the table.

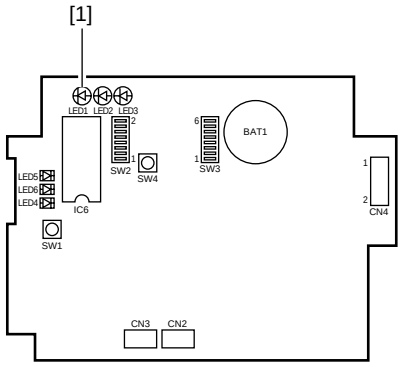


F-2-84

T-2-6

Switch notation	Setting	SW3-1	SW3-2	function
SW3-1	see right	OFF	OFF	sets the modem signal transmission level to -16 dBm.
		ON	OFF	sets the modem signal transmission level to -14 dBm.
		OFF	ON	sets the modem signal transmission level to -12 dBm.
SW3-2		ON	ON	sets the modem signal transmission level to -10 dBm.
SW3-3	OFF	keep at OFF at all times.		
SW3-4	ON	selects push pulse for controller line setting.		
	OFF	selects dial pulse for controller line setting.		
SW3-5	ON	selects 20PPS for dial pulse speed.		
	OFF	selects 10PPS for dial pulse speed.		
SW3-6	-	not used		

10) Connect the power supply unit to the power outlet, and check to see that LED1 [1] (green) on the PCB goes on.



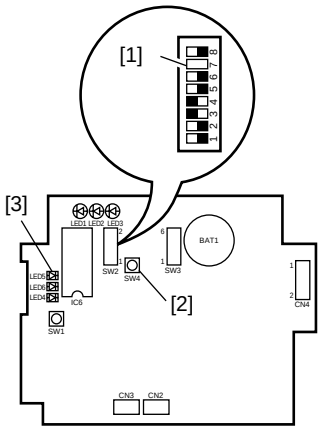
F-2-85

11) Execute RAM initialization.

Set the bits of the DIP switch [1] (SW-2) on the PC as indicated in the table; then, press the push switch [2]. A press on the push switch [2] (SW4) will causes LED5 [3] (red) to go on.

T-2-7

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



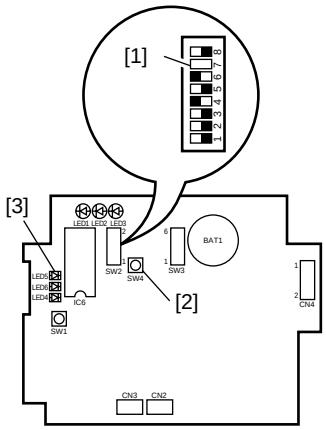
F-2-86

12) After making sure that LED5 [3] (red) has gone on, set the bits of the DIP switch [1] (SW2) on the PCB as indicated in the table; then, press the push switch [2] (SW4).

A press on the push switch [2] (SW4) will cause LED5 [3] (red) to go off, indicating that the RAM has been initialized.

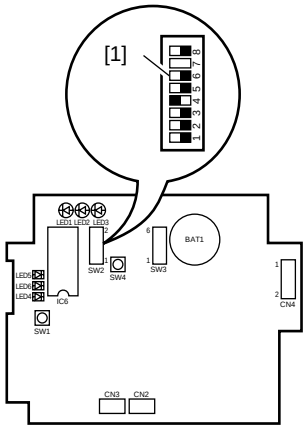
T-2-8

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



F-2-87

13) Shift bit 6 of the DIP switch [1] (SW2-6) on the PCB to OFF.

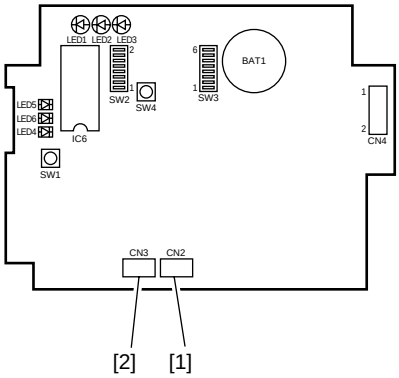


F-2-88

14) Connect the telephone line to the controller.

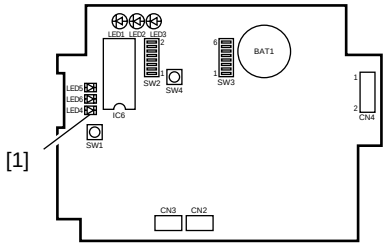
If you are using the controller on its own, connect the modular jack cable to the connector [1] (LINE) of the controller.

If you are using the extension function, connect the existing telephone or fax to the connector [2] (TEL), and connect the telephone line to the connector [1] (LINE) of the controller.



F-2-89

15) Call the service station, and ask for initial settings for the controller. (When a call comes in, LED 4 [1] (red) will start to flash.)



F-2-90

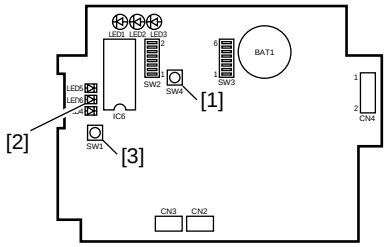
16) Call the service station, and check to make sure that the initial settings have correctly been made.
If failed, execute RAM initialization (steps 1) through 12)), and make initial settings once again.

⚠

Be sure to check with the service station to see that the settings are correct once again.

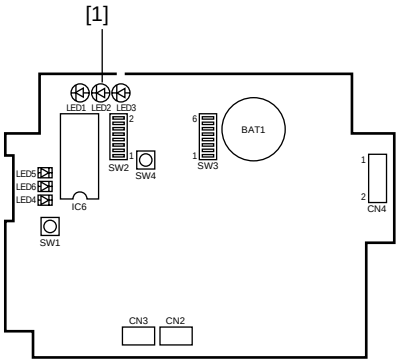
---

17) Check to find out if the controller is capable of placing a telephone call to the PC in the service station.
Press the push switch [1] (SW4) on the PCB.
A press on the push switch [1] (SW4) will cause LED6 [2] (red) to go on; when the transmission is done, LED6 [2] (red) will go off. If it has failed, LED6 [2] (red) will start to flash.
A press on the push switch [1] (SW4) while LED6 [2] is flashing will start transmission once again.
A press on the push switch [3] (SW1) while LED6 [2] is flashing will cancel the request for transmission.



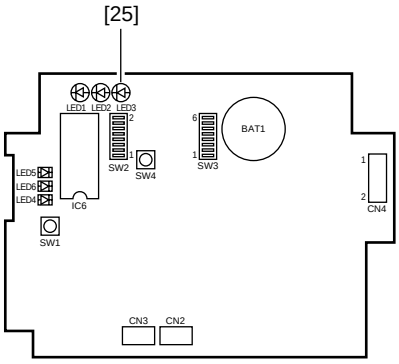
F-2-91

18) Check to make sure that the communication between the host machine and the controller is correct.
Connect the power plug of the host machine, and turn on its power switch to see that LED2 [1] (orange) flashes.



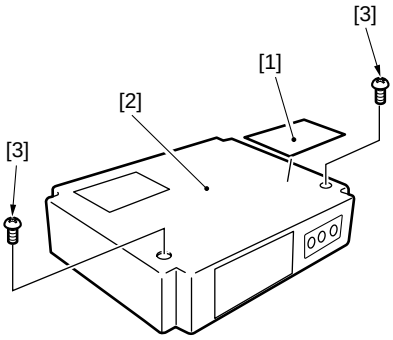
F-2-92

19) Press the Start key on the host machine, and see that LED3 [1] (pink) flashes each time paper is delivered.



F-2-93

20) Attach the switch settings label [1] on the top cover of the controller, and record the settings of the switches.
21) Secure the top cover [2] of the controller in place using 2 screws [3]. When doing so, check to be sure that the cable of the power supply unit is held in place by the cable guide inside the controller and is not trapped by the top cover [2].



F-2-94

Chapter 3 Basic Operation

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3.1.1 Functional Construction 3-1
3.1.2 Major PCB Wiring diagram 3-2
3.2 Basic Sequence 3-5
3.2.1 Basic Sequence of Operation at Power-On 3-5

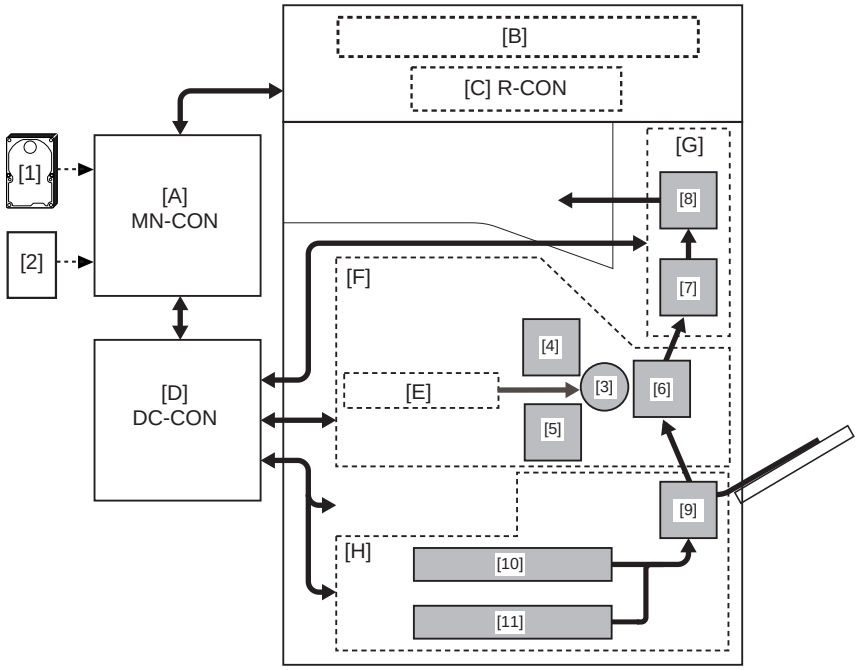
3.1 Construction

3.1.1 Functional Construction

0008-0985

iR2270 / iR2870 / iR3570 / iR4570

The machine may broadly be divided into the following functional blocks: general control system, original exposure system, reader control system, printer control system, laser exposure system, image formation system, pickup/feed system, fixing/delivery system. For detailed discussions of the individual blocks, see the chapters that follow.



F-3-1

T-3-1

[A]	General Control System	[1]	HDD
	main controller PCB	[2]	accessories PCB
[B]	Original Exposure System	[3]	photosensitive drum
[C]	reader Control System	[4]	charging
	reader controller PCB	[5]	developing

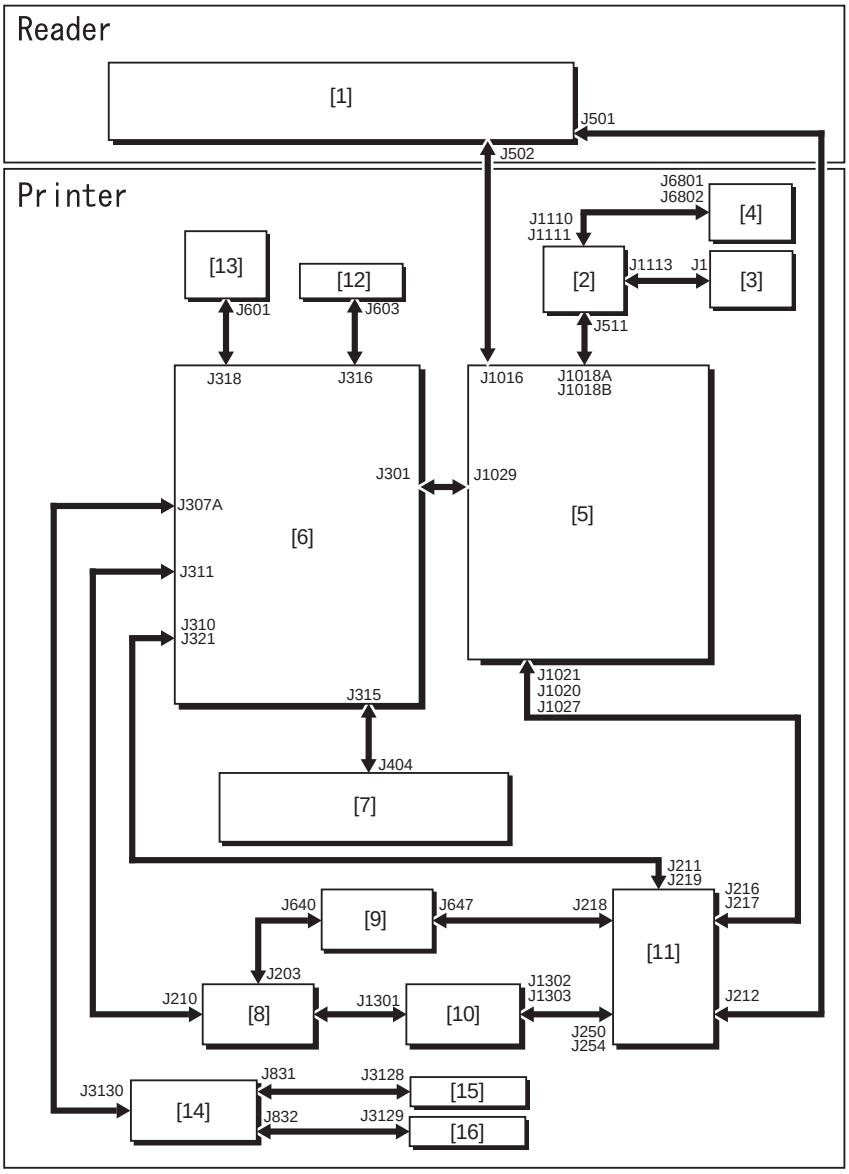
[D]	Printer Control System	[6]	transfer
	DC controller PCB	[7]	fixing
[E]	Laser Exposure System	[8]	delivery/reversal/duplex assembly
[F]	Image Formation System	[9]	pickup control
[G]	Fixing/Delivery System	[10]	cassette 1
[H]	Pickup/Feed System	[11]	cassette 2

3.1.2 Major PCB Wiring diagram

0008-0984

iR2270 / iR2870 / iR3570 / iR4570

The following is a wiring diagram showing the relationship among major PCBs:



F-3-2

T-3-2

[1]	Reamer controller PCB	[9]	Accessories power supply PCB
[2]	Control panel CPU PCB	[10]	Printer power supply PCB
[3]	Control panel inverter PCB	[11]	Controller power supply PCB
[4]	Keypad PCB	[12]	BD PCB
[5]	Main controller PCB	[13]	Laser drive PCB
[6]	DC controller PCB	[14]	Cassette size relay PCB
[7]	High-voltage PCB	[15]	Upper cassette size PCB

[8] AC drive PCB [16] Lower cassette size PCB

Memo:The arrows in the diagram indicate the wring between PCBs, and do not indicate the direction of individual signals.

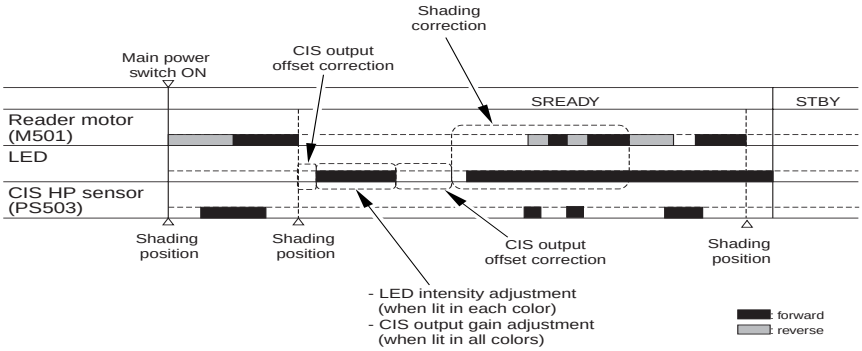
3.2 Basic Sequence

3.2.1 Basic Sequence of Operation at Power-On

0008-1235

iR2270 / iR2870 / iR3570 / iR4570

1. Reader Unit



F-3-3

2. Printer Unit

If any of the cassettes (1 through 4) is in low position, the lifter is moved up until the top of the stack of sheets is detected.

Chapter 4 Main Controller

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4.2 Construction of the Electrical Circuitry 4-3
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4.1 Construction

4.1.1 Construction and Mechanisms

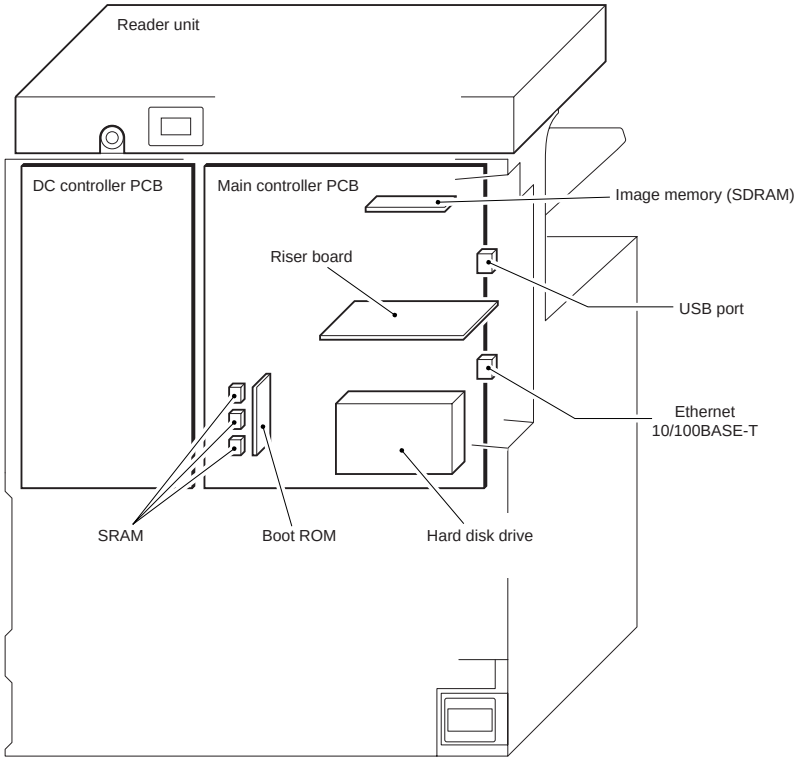
0006-6582

iR2270 / iR2870 / iR3570 / iR4570

The machine's main controller block consists of the following and has the following functions:

T-4-1

Item	Description
Main controller PCB	Controls system operation, memory, printer unit output, image processing, printer unit image input processing, rendering, color LCD controller, card printer unit interface, fax image processing, etc.
SRAM	Retains service mode settings (by SRAM), HDD management information
Image memory (SDRAM)	Temporarily retains image data (256 MB; 512 MB max.)
BOOTROM	Stores boot program
HDD	Stores system software, retains image data for Box/Fax function (20 GB)
USB port	USB2.0 interface
Ethernet port (10/100Bsae-T)	Ethernet interface


Reader unit
DC controller PCB
Main controller PCB
Image memory (SDRAM)
Riser board
USB port
Ethernet
10/100BASE-T
SRAM
Boot ROM
Hard disk drive

F-4-1

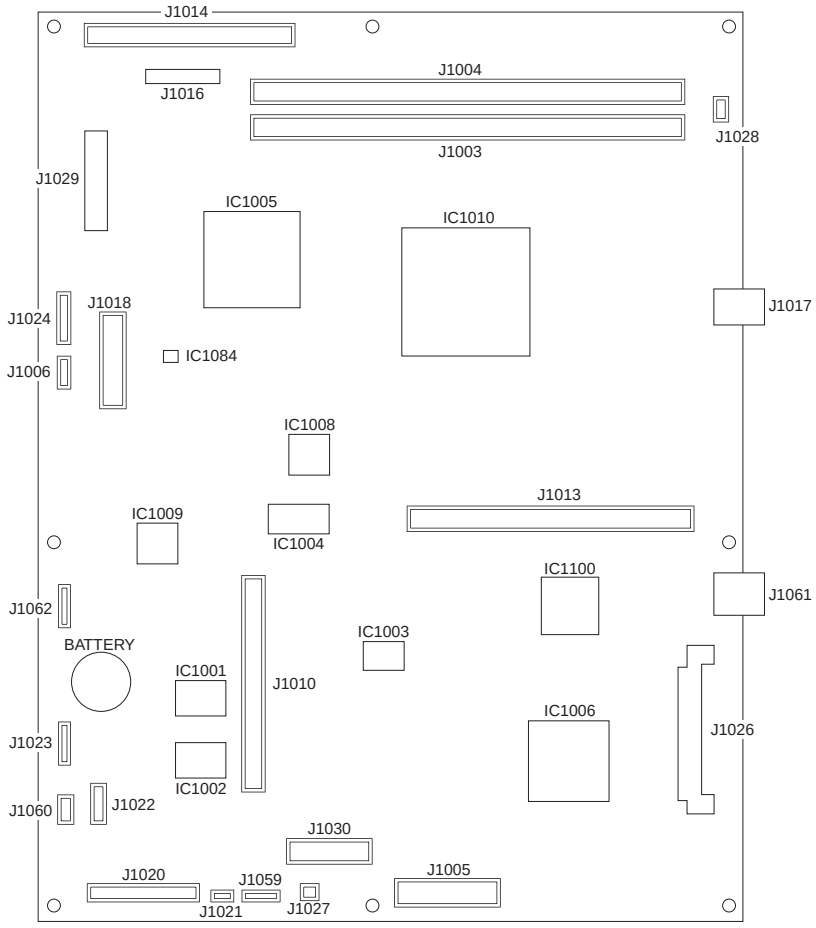
4.2 Construction of the Electrical Circuitry

4.2.1 Main Controller PCB

0006-6592

iR2270 / iR2870 / iR3570 / iR4570

The following is a diagram showing the major control mechanisms of the main controller according to connectors:



F-4-2

T-4-2

Connector	Description
J1003	SDRAM connection slot
J1004	SDRAM connection slot
J1005	Fax connector (2-port)
J1010	Boot ROM connector slot

Connector	Description
J1013	Riser board connection slot
J1014	Scanner DDI
J1017	USB port
J1018	Control panel connector
J1020	Power supply connector
J1026	Hard disk connector
J1029	Printer DDI
J1030	Fax connector (1-port)
J1061	Ethernet port (10/100BaseT)

4.2.2 HDD

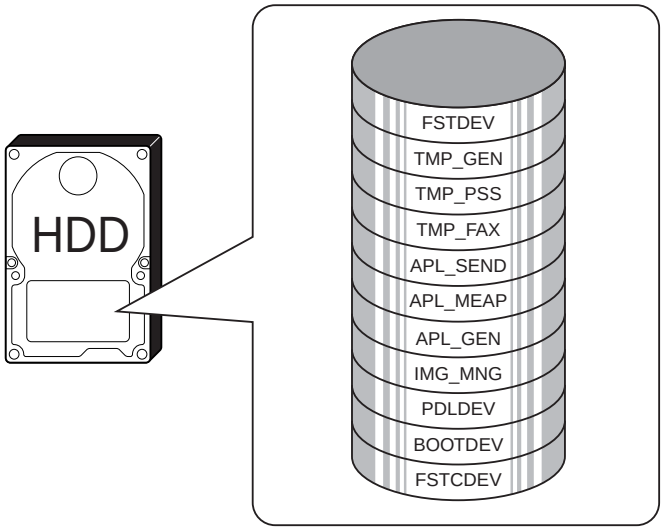
0008-4957

iR2270 / iR2870 / iR3570 / iR4570

The HDD is divided into 11 partitions (blocks), each assigned with specific functions.

T-4-3

Partition	Description
FSTDEV	Collects compressed image data.
TMP_GEN	Stores temporary files, log data.
TMP_PSS	PDL spool
TMP_FAX	Ensures fax reception.
APL_SEND	Stores user data (address book, transfer settings).
APL_MEAP	Stores MEAP applications.
APL_GEN	Mode memory data, standard mode data History (e.g., print job history) iFax image data Fax image data Other
IMG_MNG	Stores file management table, profile.
PDL_DEV	Stores PDL font, etc.
BOOTDEV	Stores execution module, message data file, RUI content, etc.
FSTCDEV	Chasing (not used)

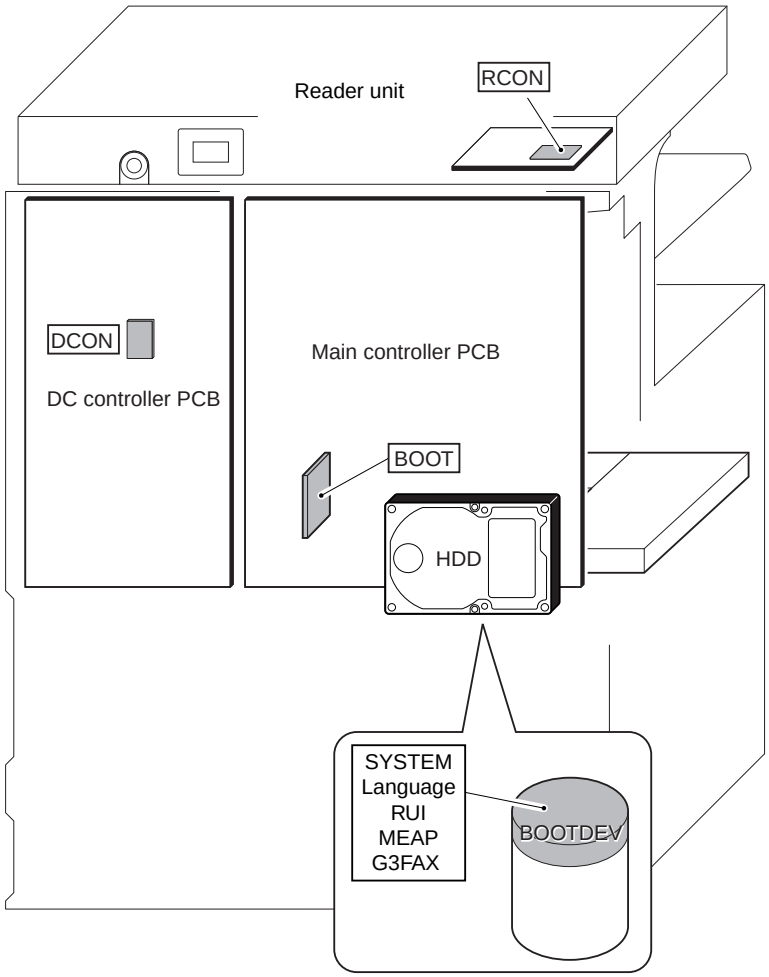


F-4-3

The following shows the construction of the machine's system software:

T-4-4

System software	Description	Location	Remarks
System	System module (controls mechanism as a whole)	HDD (BOOTDEV)	
Language	Language module (controls LCD indications)	HDD (BOOTDEV)	
RUI	Remote user interface module	HDD (BOOTDEV)	
Boot	Starts up the machine	BootROM	DIMM (FAX board)
G3FAX	Controls G3 Fax	HDD (BOOTDEV)	1-line
Dcon	Controls the DC controller	DC controller PCB	Mask ROM (soldered)
Rcon	Controls the printer unit controller	Printer unit controller PCB	Flash ROM (soldered)
Meapcont	Controls MEAP applications	HDD (BOOTDEV)	


Reader unit
RCON
DCON
DC controller PCB
Main controller PCB
BOOT
HDD
SYSTEM
Language
RUI
MEAP
G3FAX
BOOTDEV

F-4-4

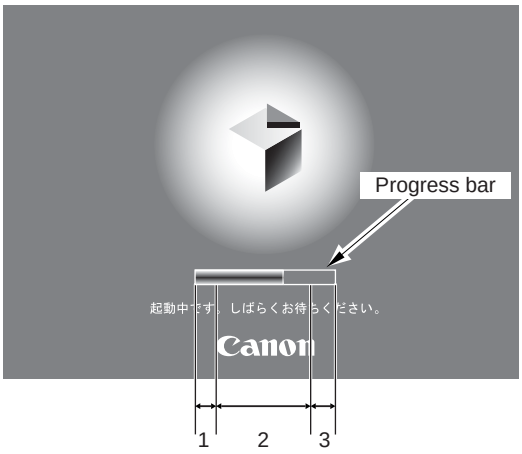
4.3 Start-Up Sequence

4.3.1 Overview

0006-6702

iR2270 / iR2870 / iR3570 / iR4570

The system software used to control the machine is stored on the HDD.
When the machine is started, the CPU on the main controller PCB reads the system software from the HDD according to the instructions of the boot ROM boot program, and writes it to the image memory (SDRAM) of the controller PCB.
While the CPU reads the system software from the HDD to the image memory (DRAM), the control panel shows the following screen, using a progress bar to indicate the progress of the start-up sequence.



F-4-5

⚠

Do not turn off the main power while the progress bar is indicated, as access is being made to the HDD. Turning off the power can cause a fault on the HDD (identified by E602).

4.3.2 Start-Up Sequence

0006-6703

iR2270 / iR2870 / iR3570 / iR4570

<Boot ROM Area>

- Self Diagnosis Program (interval 1)

The self-diagnosis program is run by the CPU on the main controller PCB when the main power switch is turned on.

The program is used to check the condition of the image memory (SDRAM) and the HDD.

The machine will indicate an error code if it finds a fault while running the program.

- Boot Program (interval 2)

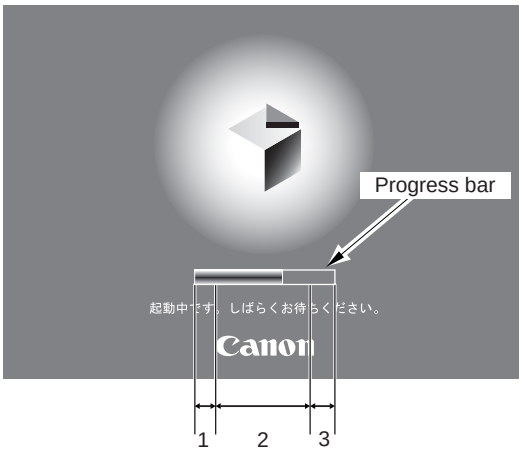
When the self-diagnosis program ends normally, the CPU on the main controller PCB executes the boot program.

The program is used to read the system software from the HDD to write it into the image memory (SDRAM).

<Image Memory (SDRAM) Area> (interval 3)

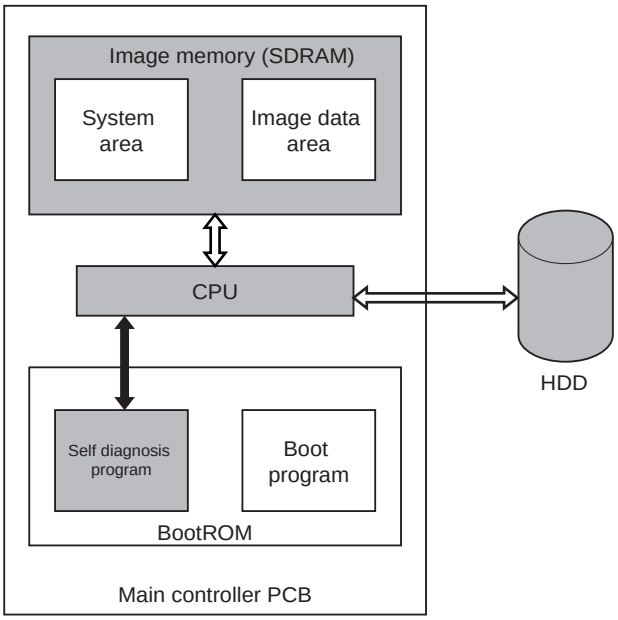
The system software written by the boot program initializes the various functional blocks (e.g., I/F settings of the main controller).

When all the foregoing ends normally, the machine becomes ready to accept a job
(i.e., the control panel shows the Operation screen, and the LED on the Start key changes from red to green).



F-4-6

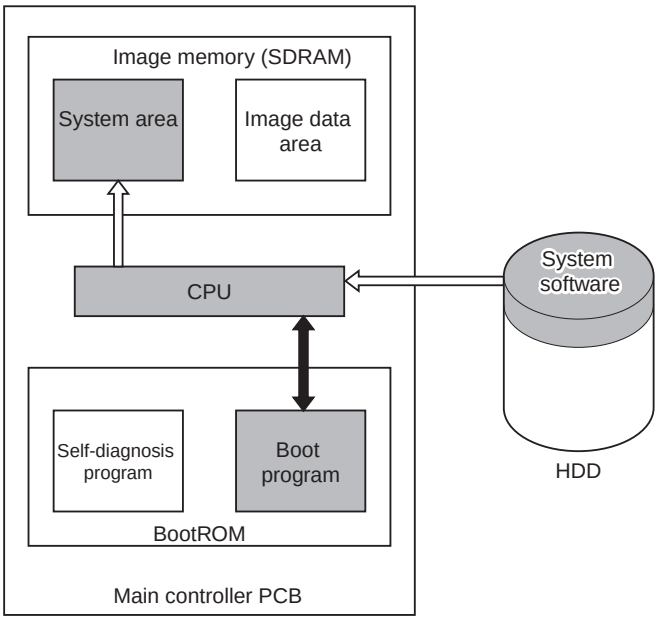
- While the Self-Diagnosis Program Is Being Executed



: access to the program during execution
: access for checking

F-4-7

- While the Boot Program Is Being Run



: access to the program during execution.
: flow of the system program.

F-4-8

4.4 Shut-Down Sequence

4.4.1 Overview

0006-8356

iR2270 / iR2870 / iR3570 / iR4570

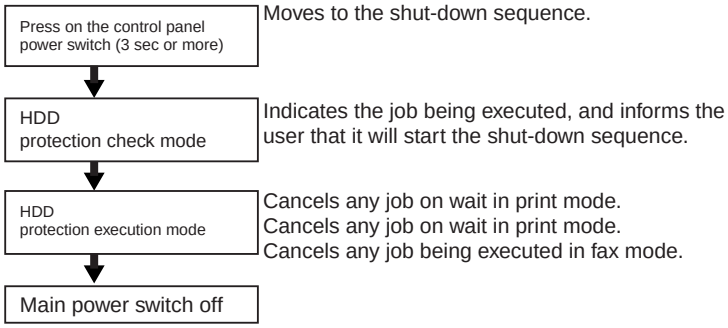
If the main power switch is turned off while the machine is accessing its HDD, damage can well occur on the HDD. To avoid such damage, the machine is provided with a shut-down sequence.

4.4.2 Flow of Operation

0006-8379

iR2270 / iR2870 / iR3570 / iR4570

The following diagram shows the flow of shut-down operation:



F-4-9

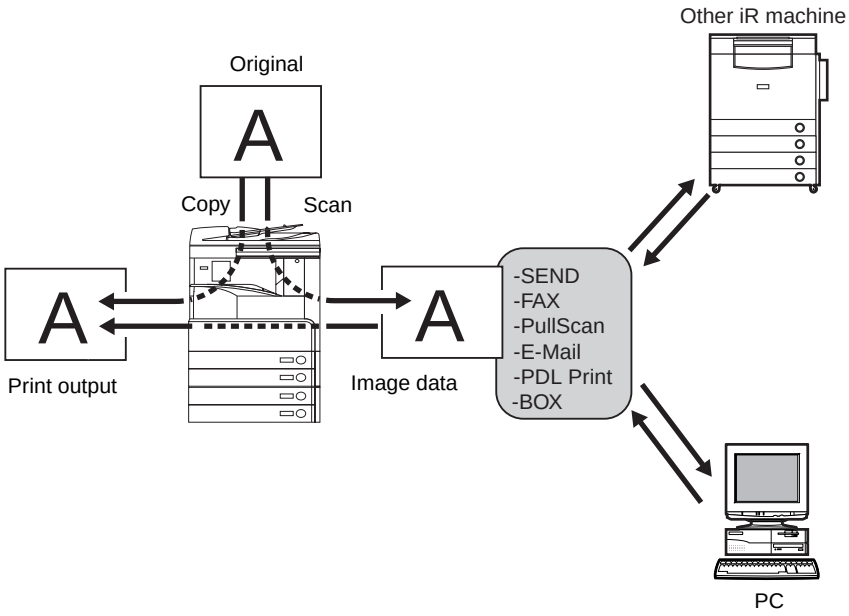
4.5 Image Processing

4.5.1 Overview of the Image Flow

0006-6704

iR2270 / iR2870 / iR3570 / iR4570

The following shows the flow of images in relation to the machine's functions:



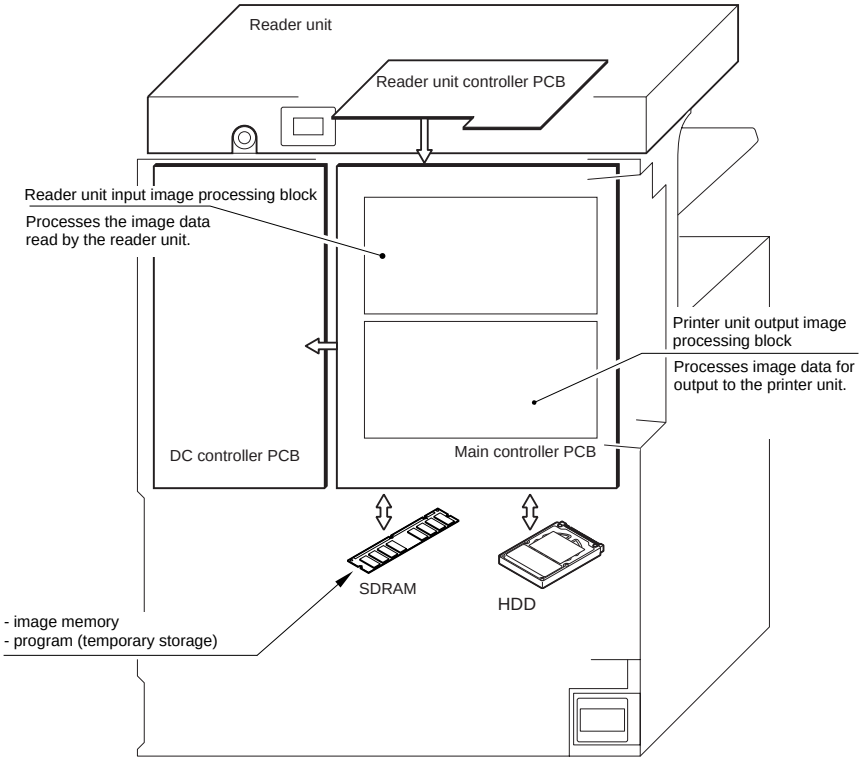
F-4-10

4.5.2 Construction of the Image Processing Module

0006-6706

iR2270 / iR2870 / iR3570 / iR4570

The machine's major image processing is executed by the main controller PCB.
The following shows the construction of the modules associated with image processing:



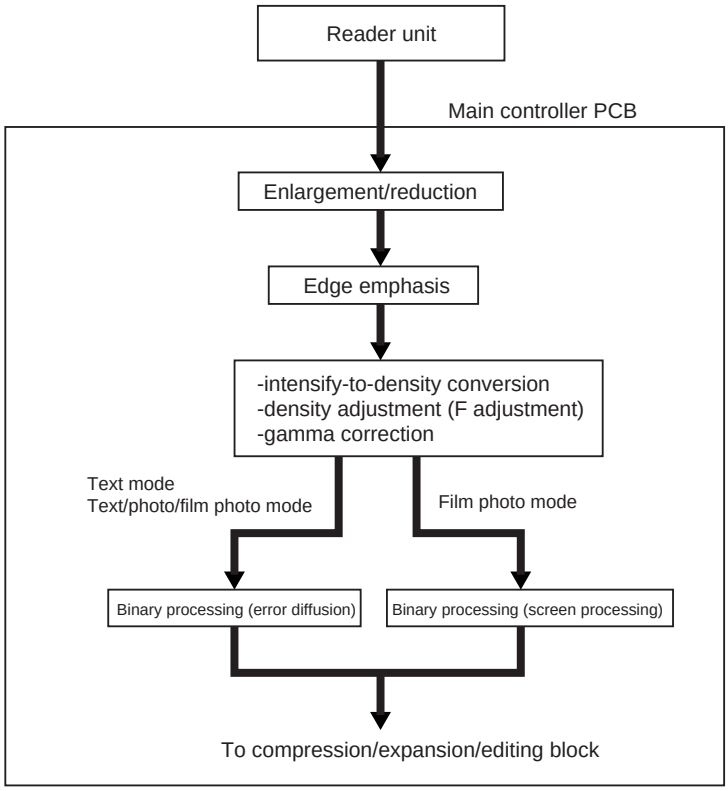
F-4-11

4.5.3 Reader Unit Input Image Processing

0006-6712

iR2270 / iR2870 / iR3570 / iR4570

The image data colleted by the contact image sensor is processed by the main controller PCB.



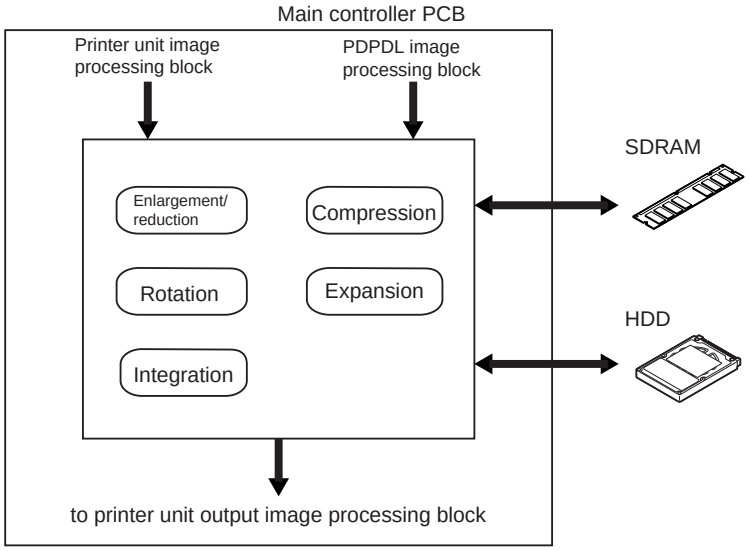
F-4-12

4.5.4 Compressio/ Extesion/ Editing Block

0006-6714

iR2270 / iR2870 / iR3570 / iR4570

Here, image data is processed for compression, extension, and editing.



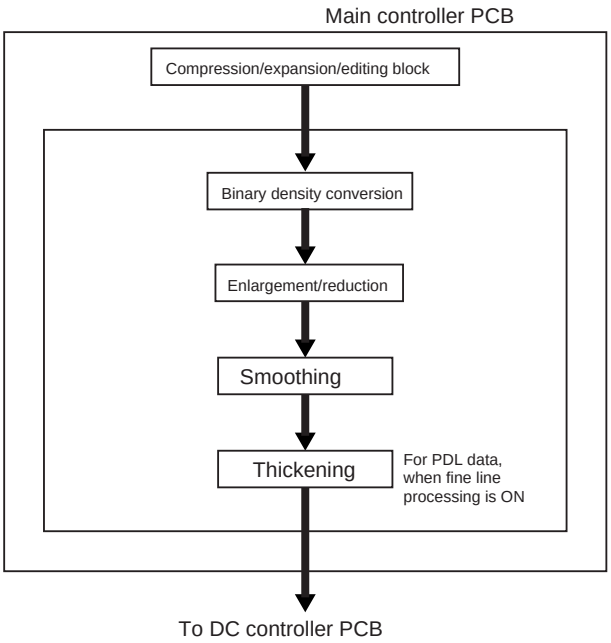
F-4-13

4.5.5 Printer unit Output Image Processing

0006-6715

iR2270 / iR2870 / iR3570 / iR4570

The main controller processes the image data coming from the printer unit for output to the printer unit.



F-4-14

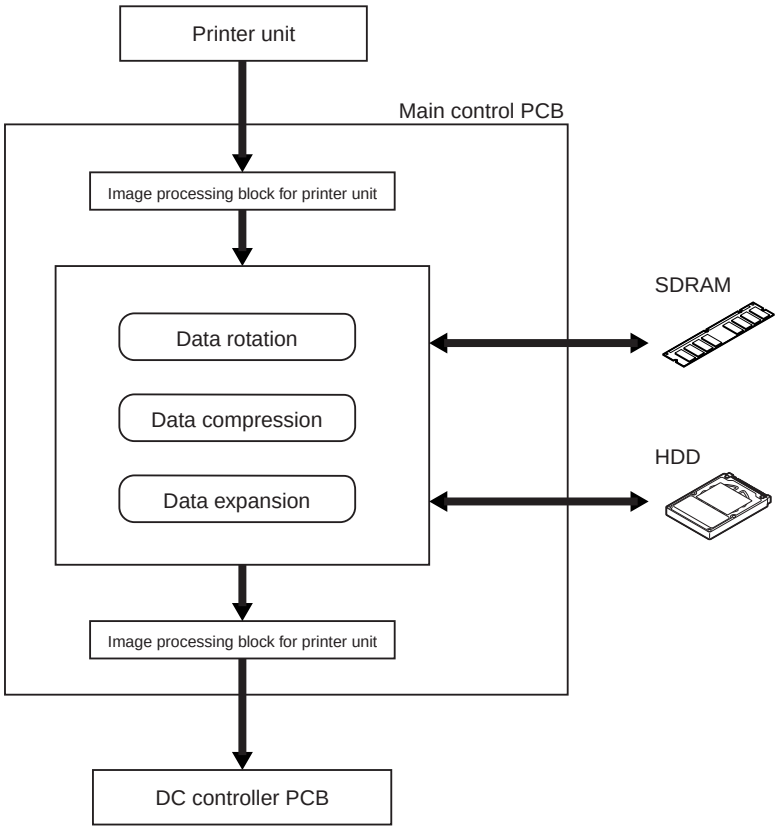
4.6 Flow of Image Data

4.6.1 Flow of Image Data According to Copy Functions

0006-6746

iR2270 / iR2870 / iR3570 / iR4570

The following is the flow of image data when the Copy Function is in use:



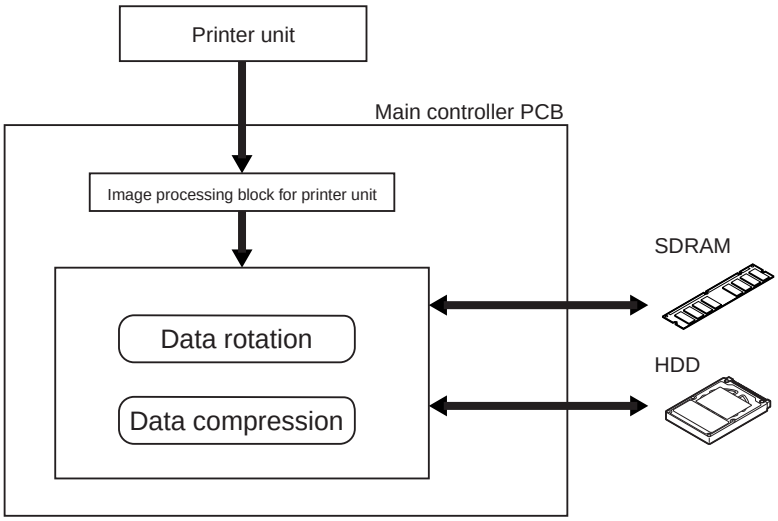
F-4-15

4.6.2 Flow of Image Data for the Box Function

0006-6747

iR2270 / iR2870 / iR3570 / iR4570

The following is the flow of image data when the Box function is in use:



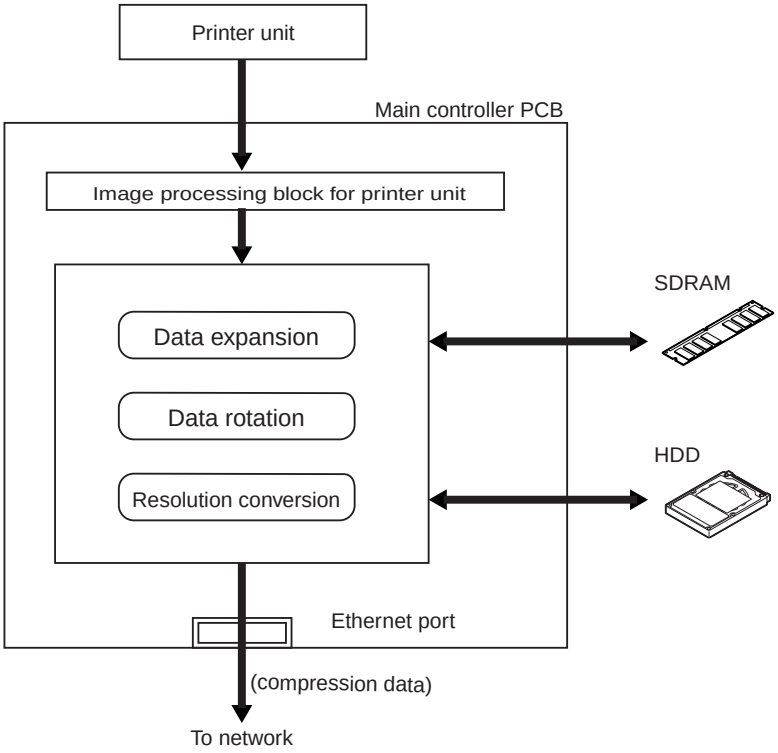
F-4-16

4.6.3 Flow of Image Data for the SEND Function

0006-6749

iR2270 / iR2870 / iR3570 / iR4570

The following is the flow of image data when the SEND function is in use.



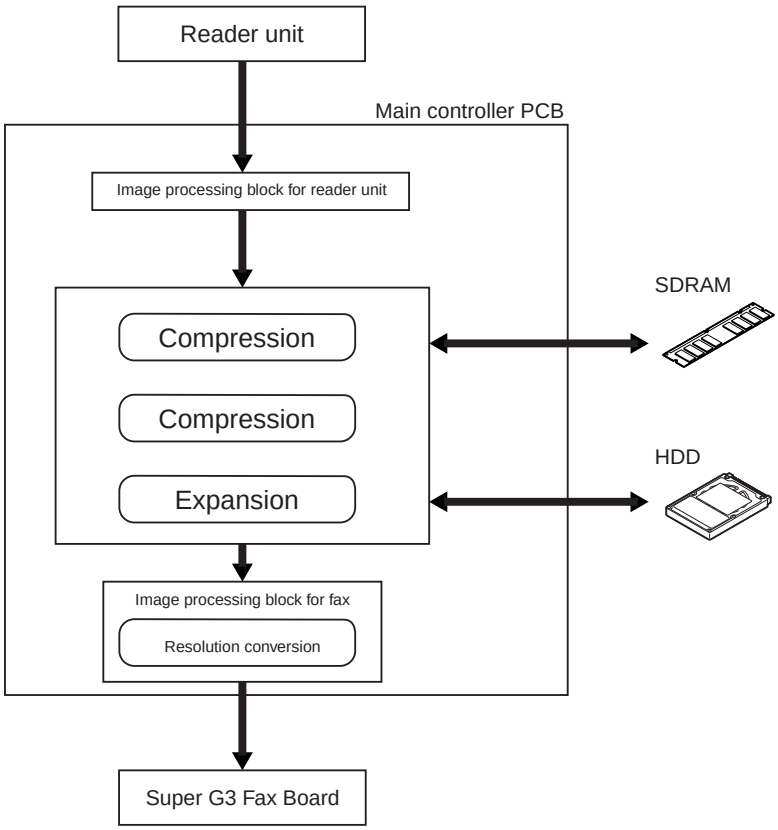
F-4-17

4.6.4 Flow of Image Data for the Fax Transmission

0006-6750

iR2270 / iR2870 / iR3570 / iR4570

The following is the flow of image data when the fax transmission function is in use:



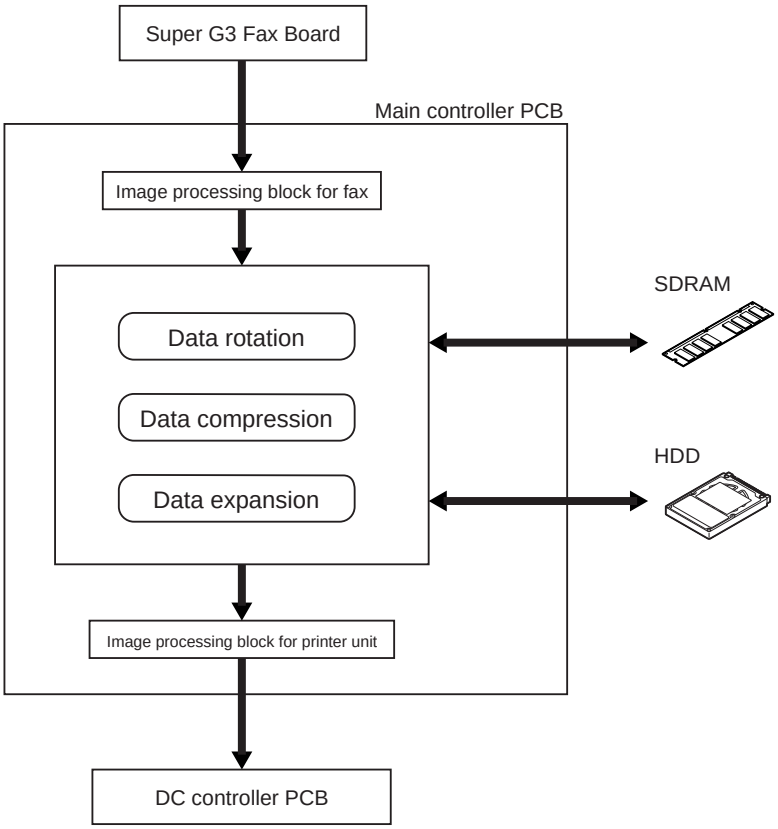
F-4-18

4.6.5 Flow of Image Data for the Fax Reception Function

0006-6751

iR2270 / iR2870 / iR3570 / iR4570

The following is the flow of image data when the fax reception function is in use:



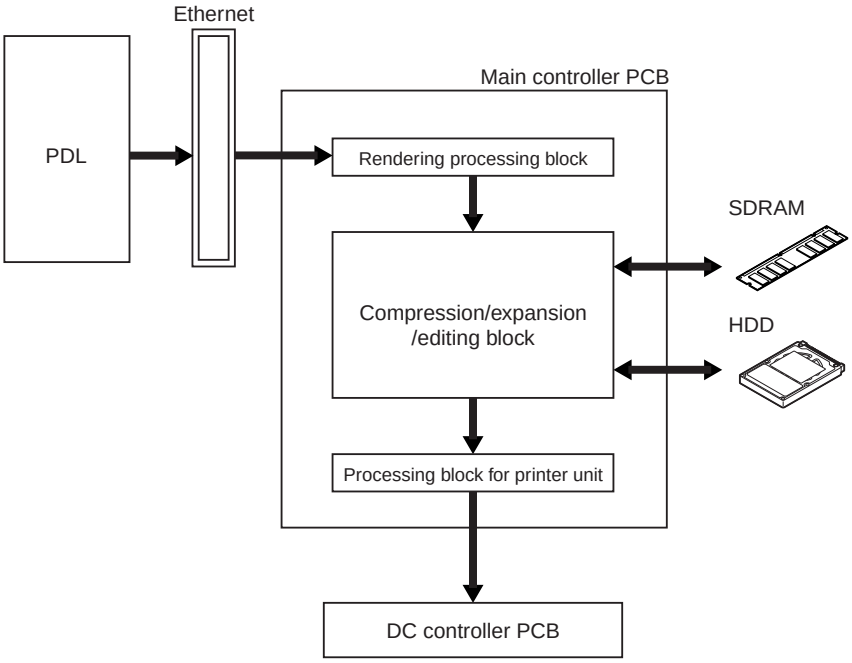
F-4-19

4.6.6 Flow of Image Data for the PDL Function

0006-6752

iR2270 / iR2870 / iR3570 / iR4570

The following is the flow of image data when the PDL function is in use:


Ethernet
PDL
Main controller PCB
Rendering processing block
SDRAM
Compression/expansion
/editing block
HDD
Processing block for printer unit
DC controller PCB

F-4-20

4.7 Parts Replacement Procedure

4.7.1 Main Controller PCB

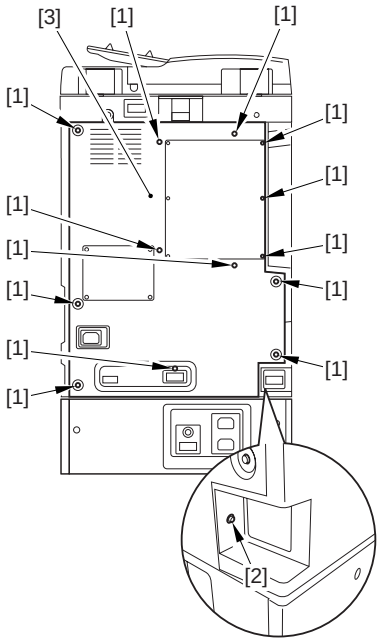
4.7.1.1 Removing the Rear Cover 0007-6401

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 13 screws [1] and then the other screw [2]; then, detach the rear cover [3].

⚠

If the left cover (lower) has already been detached, the screw [3] should also have been removed.

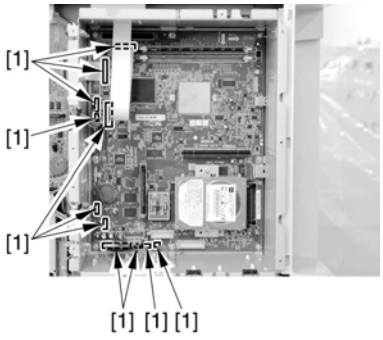


F-4-21

4.7.1.2 Removing the Main Controller PCB 0007-6417

iR2270 / iR2870 / iR3570 / iR4570

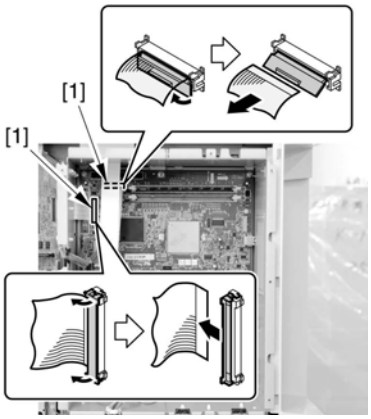
1) Disconnect the connector [1].



F-4-22

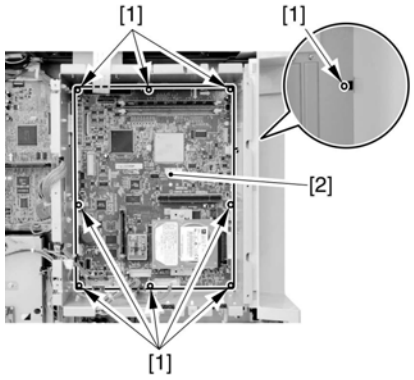
⚠**Freeing the Flexible Cable**

To free the flexible cable [1], shift up the lock first as shown.



F-4-23

2) Remove the 9 screws [1], and detach the main controller PCB [2].



F-4-24

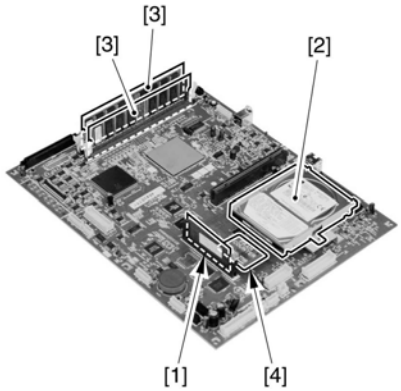
⚠

Points to Note When Replacing the Main Controller PCB

Remove the following components of the detached main controller PCB. Thereafter, be sure to mount them to the new main controller PCB.

---

[1] Boot ROM
[2] Hard disk
[3] SDRAM
[4] FRAM



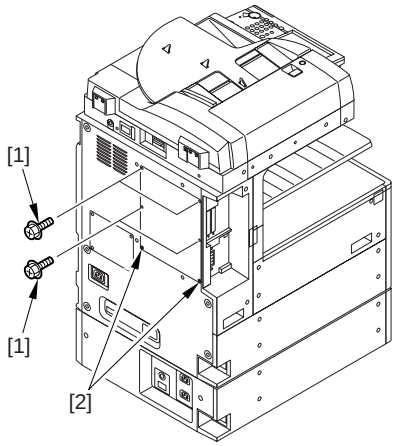
F-4-25

4.7.2 SDRAM

4.7.2.1 Removing the Face Cover 0007-6411

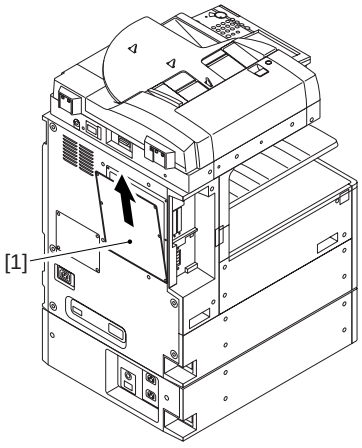
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 4 screws [1].
2) Loosen the 2 screws [2].



F-4-26

3) Pull off the face cover [1] in upward direction.

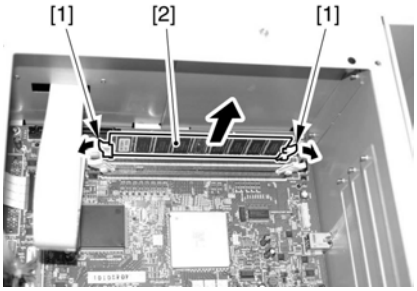


F-4-27

4.7.2.2 Removing the SDRAM 0007-6412

iR2270 / iR2870 / iR3570 / iR4570

1) Release the 2 locking levers [1], and detach the SDRAM [2].



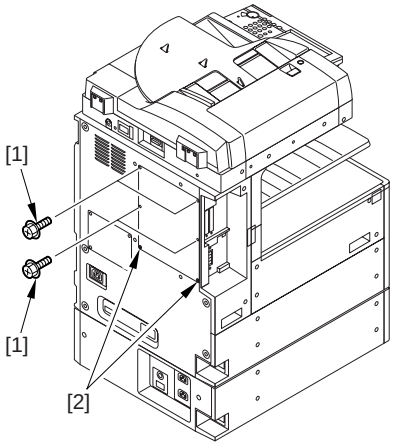
F-4-28

4.7.3 Boot ROM

4.7.3.1 Removing the Face Cover 0007-6413

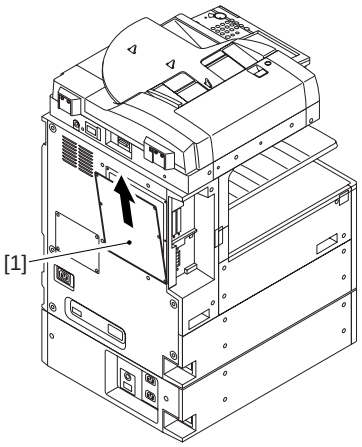
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 4 screws [1].
2) Loosen the 2 screws [2].



F-4-29

3) Pull off the face cover [1] in upward direction.

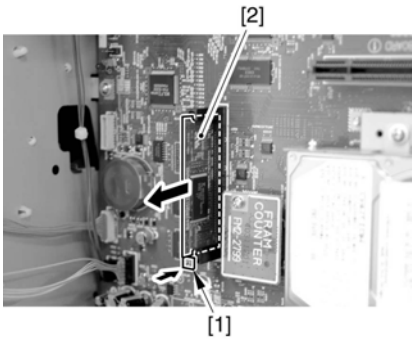


F-4-30

4.7.3.2 Removing the Boot ROM 0007-6414

iR2270 / iR2870 / iR3570 / iR4570

1) Push the locking lever [1], and detach the boot ROM [2].



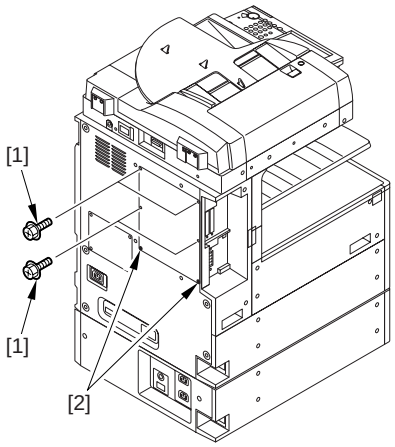
F-4-31

4.7.4 HDD

4.7.4.1 Removing the Face Cover 0007-6409

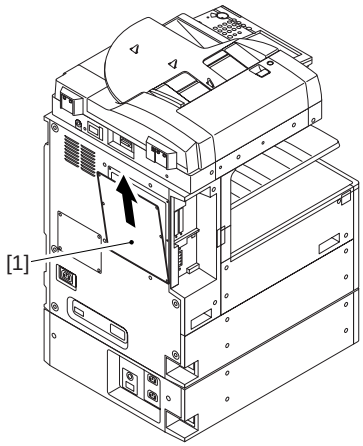
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 4 screws [1].
2) Loosen the 2 screws [2].



F-4-32

3) Pull off the face cover [1] in upward direction.

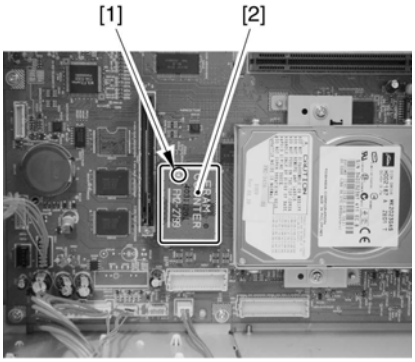


F-4-33

4.7.4.2 Removing the Counter PCB 0008-2478

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the screw [1], and detach the counter PCB [2].

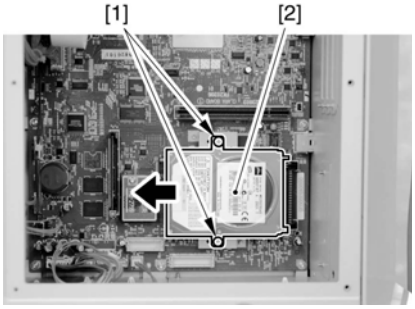


F-4-34

4.7.4.3 Removing the HDD 0007-6410

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws [1], and detach the HDD [2] in the direction of the arrow.



F-4-35

Chapter 5 Original Exposure System

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5.1 Construction

5.1.1 Specifications, Control Mechanisms, and Functions

0006-5712

iR2270 / iR2870 / iR3570 / iR4570

The major specifications, control mechanisms, and functions of the machine's original exposure system are as follows:

T-5-1

Item	Description	
Original exposure	by LED array, indirect (LED + photoconducting body)	
Original scan	in book mode: scan by moving contact image sensor (CIS)	
	in ADF mode: by original stream reading with contact image sensor (CIS) fixed in position	
Read resolution	600 (main scanning) x 600 (sub scanning) dpi	
Gradation	256	
Scanning speed (in ADF mode)	45 ipm (single-sided, A4/LTR)	
Carriage position detection	by contact image sensor (CIS), HP sensor (PS503)	
Magnification	25% to 400%	
	Main Scanning Direction	by main controller PCB (image processing)
	Sub Scanning Direction	
	in book mode:	by changing carriage travel speed; by processing images on reader controller PCB; by processing images on main controller PCB*1
	in ADF mode:	by changing original feed speed; by image processing on reader controller PCB; by image processing on main controller PCB*1
Lens	rod lens array	

Item	Description	
CCD	number of lines: 1	
	Number of pixels: Total 7488 (Number of effective pixels: 7180)	
	maximum original read width: 304 mm	
CIS drive control	by reader motor (M501)	
Original size identification	[1]Book Mode	
	in main scanning direction:	by reflection type sensor (AB/Inch)
	in sub scanning direction:	by reflection type sensor (AB/Inch)
	[2]ADF Mode	
	width:	by original width value in ADF
	length:	by photo sensor in ADF

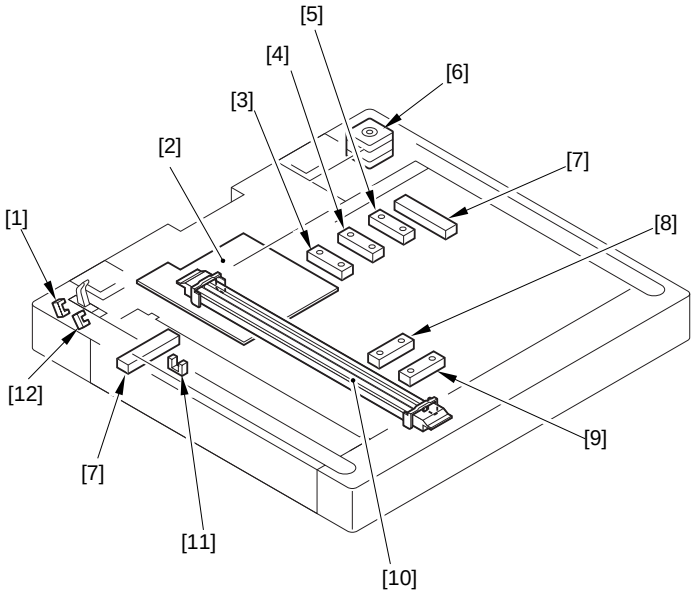
The particulars of control differ depending on the selected magnification. For details, see "Changing the Magnification."

5.1.2 Major Components

0006-5714

iR2270 / iR2870 / iR3570 / iR4570

The machine's original exposure system consists of the following major components:



F-5-1

T-5-2

	Item	Notation	Description
[1]	Original cover open/ closed sensor (rear)	PS501	photo interrupter: detects the state (open/ closed) of the copyboard cover; starts original size indication when the original cover is at 25 deg.
[2]	Reader controller PCB	-	controls the drive of the reader unit, and controls image processing
[3]	Original sensor 3	PS506	helps identify original size (for all destinations)
[4]	Original sensor 4	PS507	helps identify original size (AB, Inch/ AB)
[5]	Original sensor 5	PS508	helps identify original size (Inch/A)
[6]	Reader motor	M501	pulse motor: controls the drive of the carriage
[7]	Reader heater*	-	prevents condensation on the copyboard glass
[8]	Original sensor 1	PS504	helps identify original size (AB, Inch/A, Inch/AB)
[9]	Original sensor 2	PS505	helps identify original size (AB, A, Inch/ AB)

	Item	Notation	Description
[10]	Contact image sensor (CIS)	-	uses LEDs for indirect exposure (LED + photoconducting body)
[11]	CIS HP sensor	PS503	photo interrupter: detects CIS home position
[12]	Cupboard cover open/closed sensor	PS502	ends original size identification with the copyboard cover at 5 deg.

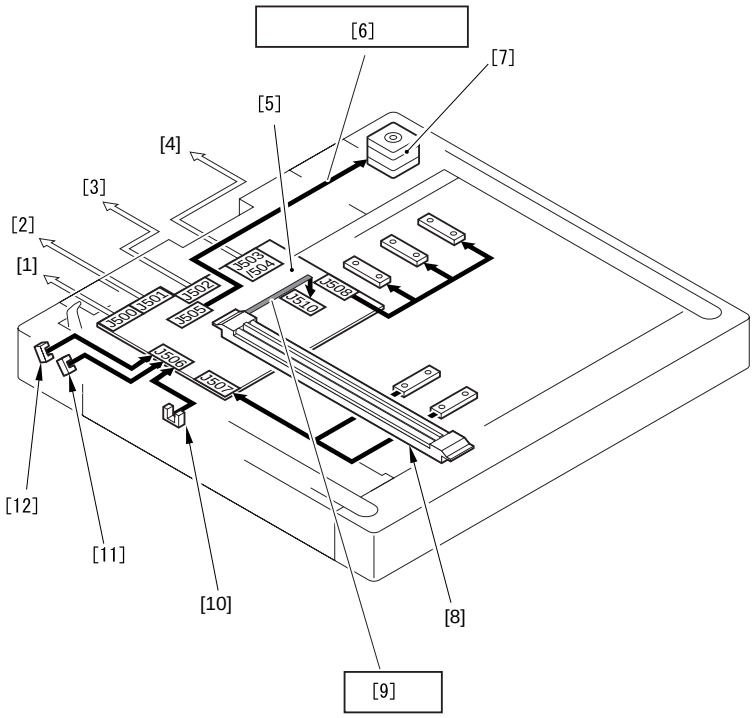
*Optional. (100/230-V model only).

5.1.3 Construction of the Control System

0006-5715

iR2270 / iR2870 / iR3570 / iR4570

The machine's control system is constructed as follows:



F-5-2

[1] Connection to ADF
[2] Connection to printer body
[3] Printer body (connected to main controller PCB)
[4] Connection to ADF
[5] Reader controller PCB
[6] Reader motor drive control

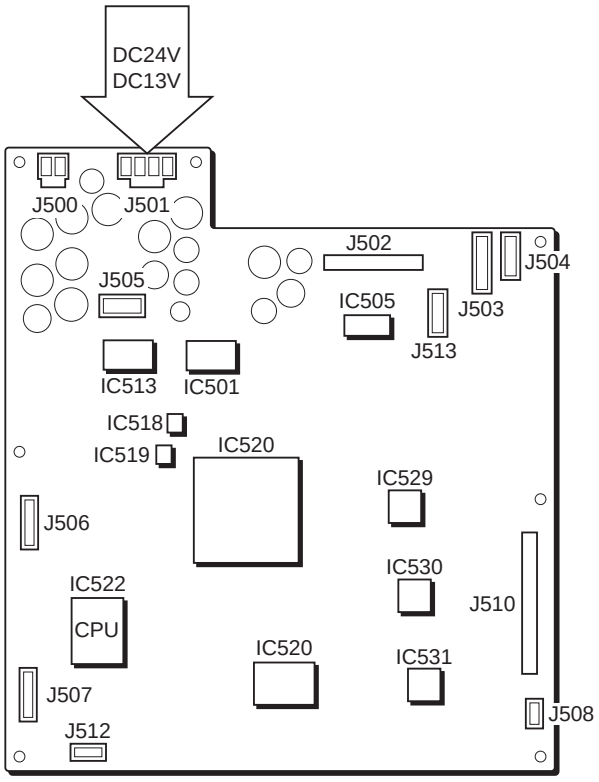
[7] Reader motor (M501)
[8] Contact image sensor
[9] Image signal
[10] CIS HP sensor (PS503)
[11] Copyboard cover open/closed sensor (front: PS502)
[12] Copyboard cover open/closed sensor (rear: PS503)

5.1.4 Reader Controller PCB

0006-5718

iR2270 / iR2870 / iR3570 / iR4570

The machine's reader controller PCB has the following functional construction:



F-5-3

T-5-3

Jack No.	Description
J500	supplies power to the ADF.
J501	receives power from the machine body (printer unit).
J502	communication with the machine body (printer unit).
J503	communication with the ADF.

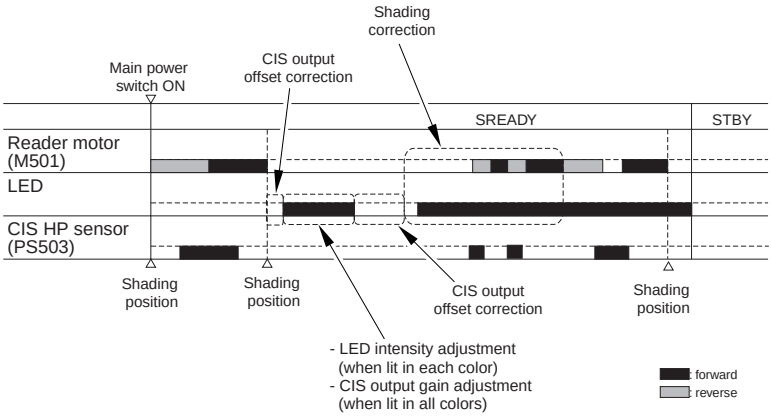
Jack No.	Description
J504	communication with the ADF.
J505	connects to the main motor.
J506	copyboard cover open/closed sensor; connects to the CIS HP sensor
J507	connects to original sensor 1, original sensor 2.
J508	connects to original sensor 3, original sensor 4.
J510	connects to the contact image sensor (CIS).
J512	for use at factory
J513	for use at factory

5.2 Basic Sequence

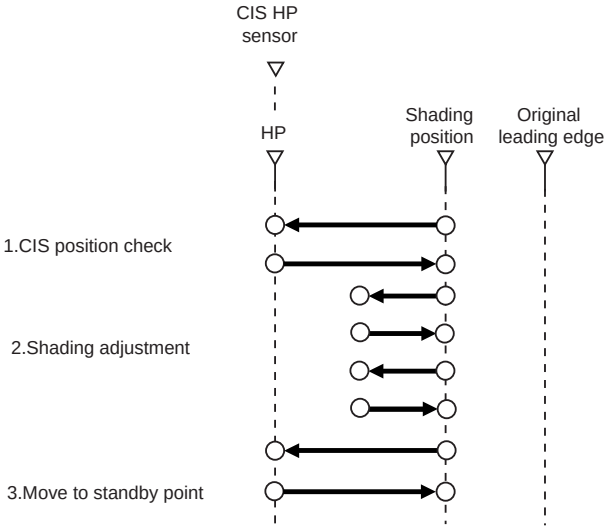
5.2.1 Basic Sequence of Operation at Power-On

0006-5719

iR2270 / iR2870 / iR3570 / iR4570



F-5-4

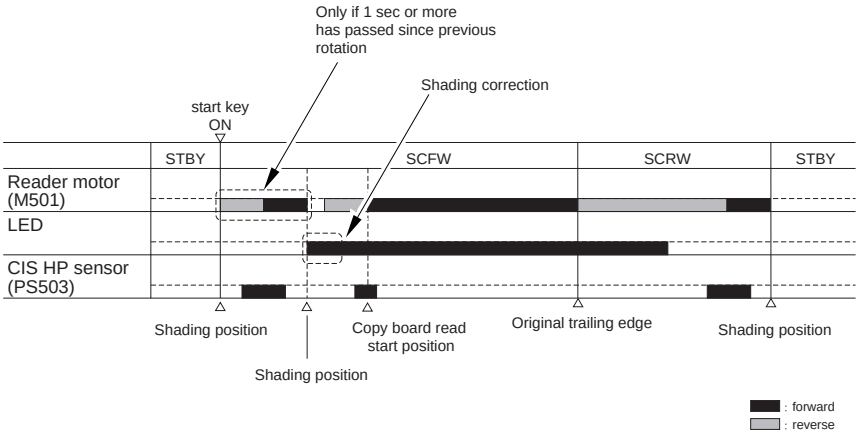


F-5-5

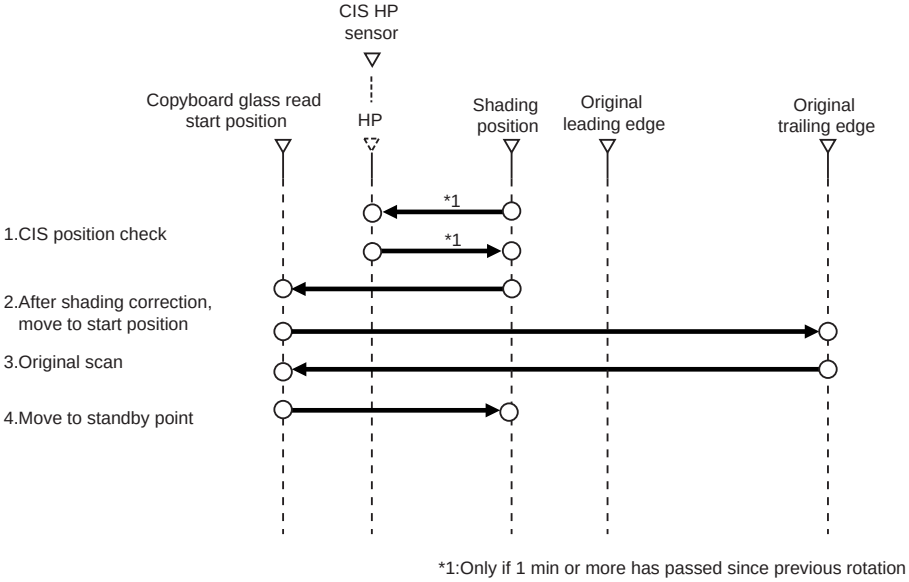
5.2.2 Basic Sequence of Operation in Response to a Press on the Start Key (book mode; 1 original)

0006-5720

iR2270 / iR2870 / iR3570 / iR4570



F-5-6

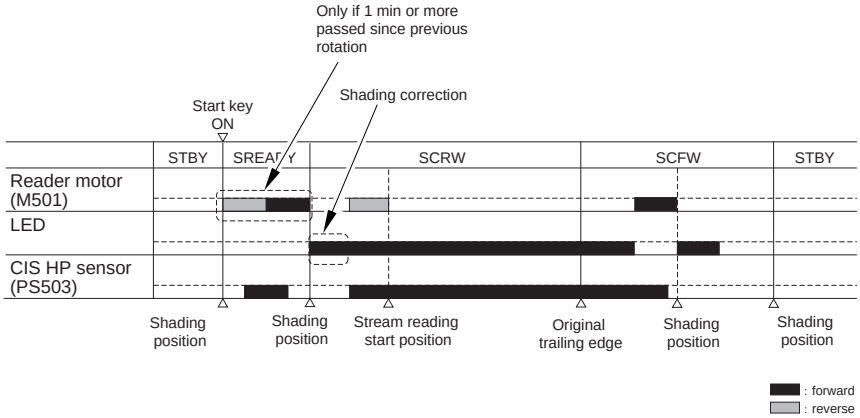


F-5-7

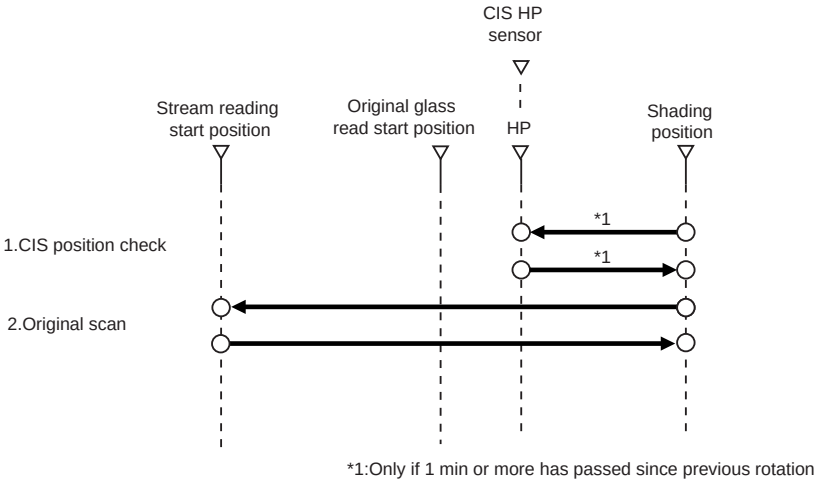
5.2.3 Basic Sequence of Operation in Response to a Press on the Start Key (ADF mode; 1 original)

0006-5721

iR2270 / iR2870 / iR3570 / iR4570



F-5-8



*1:Only if 1 min or more has passed since previous rotation

F-5-9

5.3 Various Control

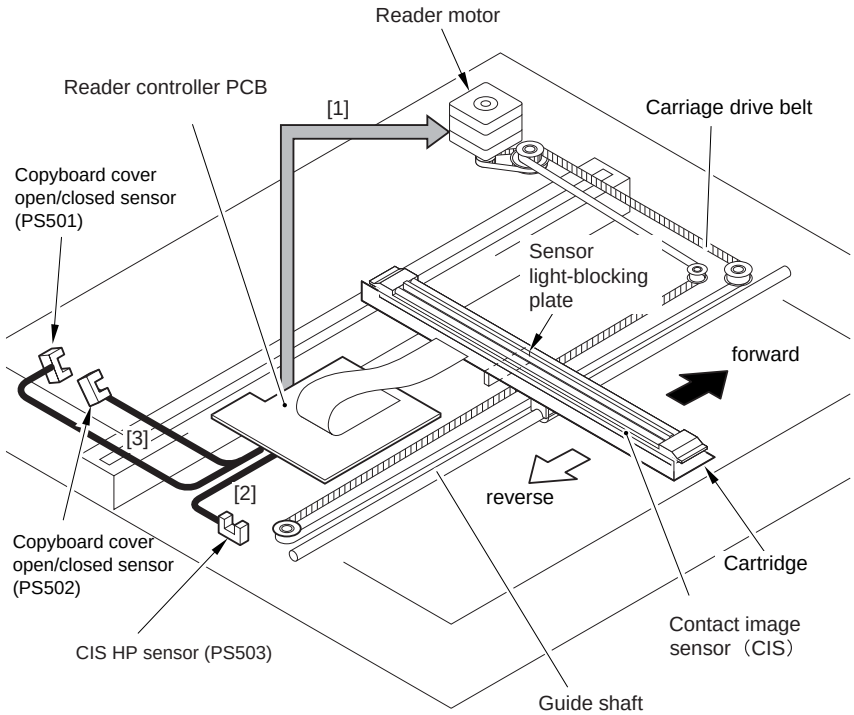
5.3.1 Controlling the Scanner Drive System

5.3.1.1 Outline

0006-5722

iR2270 / iR2870 / iR3570 / iR4570

The machine's scanner system consists of the following components:



F-5-10

[1] Reader Motor (M501) Drive Signal
turns on/off the motor, and controls its direction/speed of rotation.

[2] Contact Image Sensor (CIS) HP Sensor (PS503) Detection Signal
checks if the contact image sensor (CIS) is at home position.

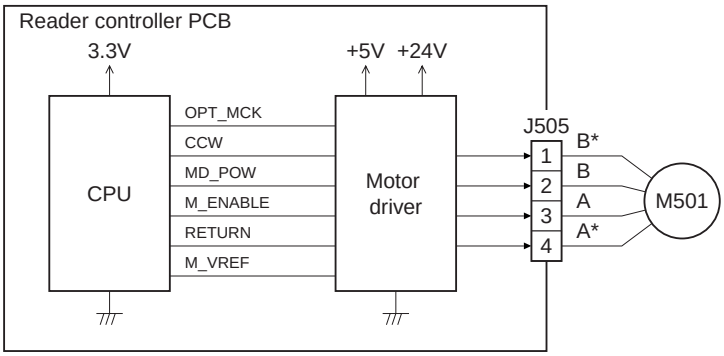
[3] Copyboard Cover Sensor (front, PS502; rear, PS501) Detection Signal
detects the state (open/close) of the copyboard cover.

5.3.1.2 Controlling the Reader Motor

0006-5723

iR2270 / iR2870 / iR3570 / iR4570

The reader motor driver turns on/off the reader motor and controls the direction/speed of its rotation according to the signals from the CPU.



F-5-11

<Memo>

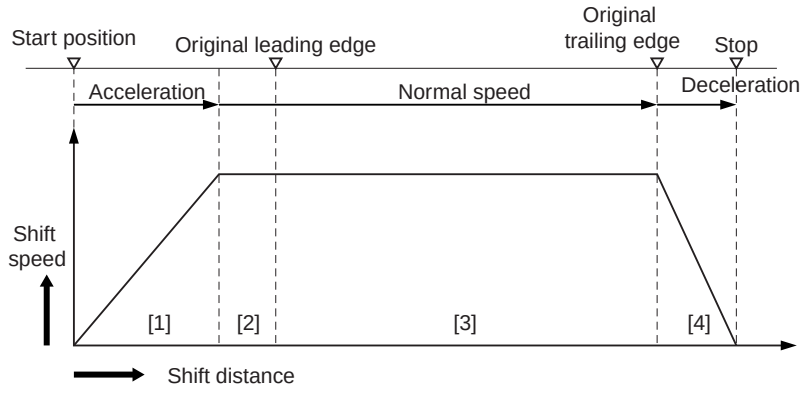
The scanning speed of this machine is as follows:

During copying (100%): 236 mm/sec

In SEND mode (600 dpi x 600 dpi):236 mm/sec

a.Forward Movement When Scanning an Image

To scan an image, the machine moves the contact image sensor (CIS) as follows by controlling the following motors:



[1] used until the sensor reaches a speed suited to the selected mode.
[2] used as a margin to ensure a stable speed.
[3] used for reading the image at a specific speed.
[4] used for prompt deceleration and suspension once the image end is reached.

F-5-12

b.Reverse Movement After Scanning an Image

After scanning an image, the machine moves the contact image sensor (CIS) to shading position at a specific speed (147 mm/sec).

5.3.2 Contact Image Sensor (CIS)

5.3.2.1 Outline

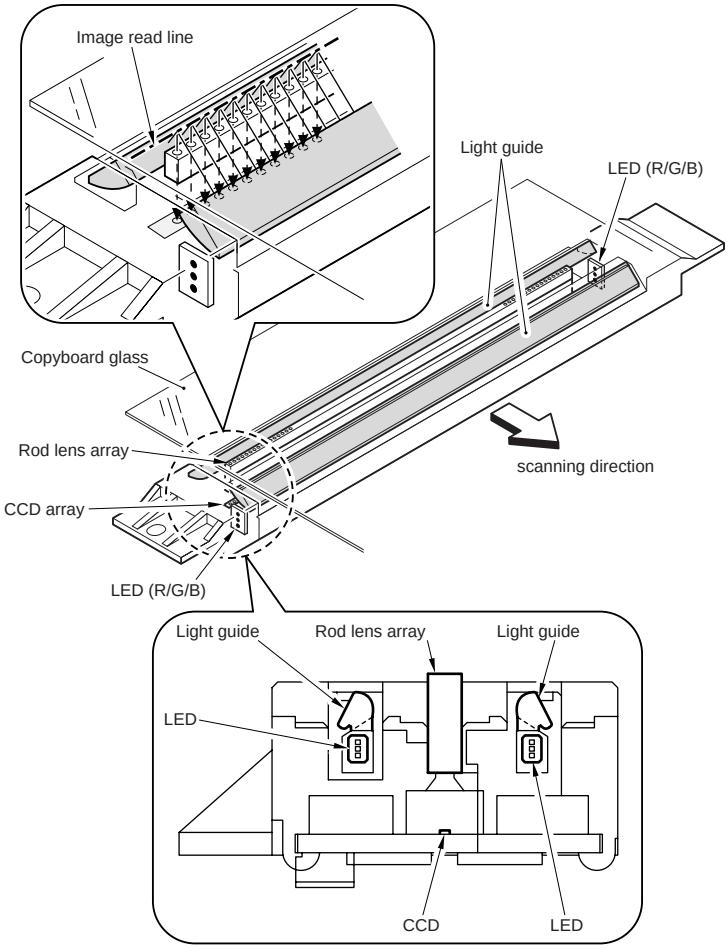
0006-5927

iR2270 / iR2870 / iR3570 / iR4570

The machine uses a contact image sensor (CIS) to expose and read an image, and the image is read on a line-by-line basis.

T-5-4

Item	Description
LED	serves as the source of light used to expose the original.
Light guide	directs the light from LEDs to the entire length of a single image line of the original.
Rod lens array	collects light reflected by the original.
CCD array	collects the reflected light coming through the rod lens array.



F-5-13

5.3.2.2 Analog Control Inside the Contact Image Sensor

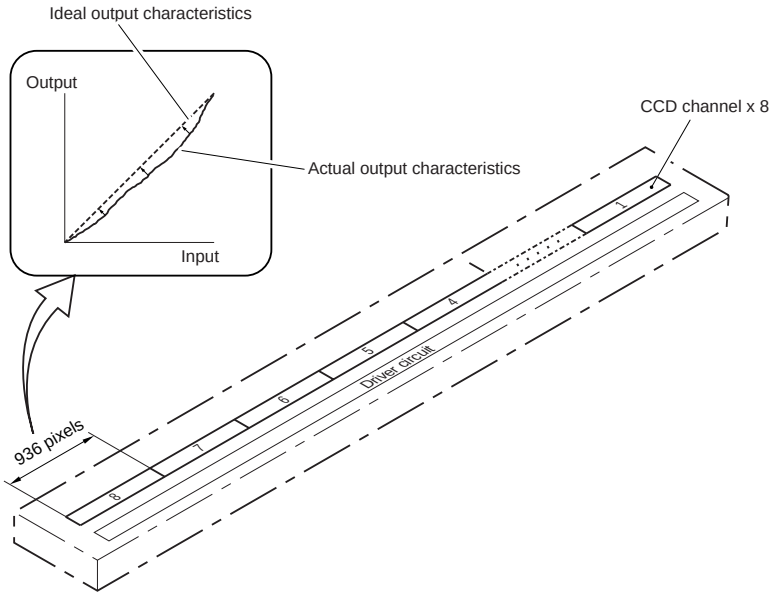
0006-5928

iR2270 / iR2870 / iR3570 / iR4570

The contact image sensor (CIS) is used to control analog image processing in the following flow of work:

The light reflected by the original is collected by the rod lens array;
the light is then collected by the CCD array;
the light is converted into an electric signal by the CCD array (photo-conversion) for output.

The CCD array consists of a total of 8 channels (units). Each channel possesses its own output correction table used to process an input intensity signal for gain correction for output of an image signal.



F-5-14

Be sure to correct the output among the channels using the following service mode items:

-if you have replaced the contact image sensor (CIS) and, as a result, a discrepancy occurs in the output of image density among channels; or

-if the setting of CCD-LUT is other than '0' and you have replaced the reader controller PCB.

<Service Mode>

for CIS unit gain correction data

COPIER>OPTION>BODY>CCD-LUT

for CCD gain correction

COPIER>FUNCTION>CCD>LUT-ADJ2

(using the D-10 Chart)

5.3.3 Enlargement/Reduction

5.3.3.1 Changing the Magnification in Main Scanning Direction 0006-5724

iR2270 / iR2870 / iR3570 / iR4570

In Book Mode/ADF Mode

The image is read at 100% in main scanning direction, and the magnification is varied by processing the data on the main controller PCB.

5.3.3.2 Varying the Magnification in Sub Scanning Direction 0006-5725

iR2270 / iR2870 / iR3570 / iR4570

To vary the magnification in sub scanning direction, the machine operates as follows depending on the selected method of reading the original and the selected rate of magnification:

1. In Book Mode

To suit the selected rate of magnification, the speed at which the original is read is varied and the data is processed by the reader controller PCB/main controller PCB.

EX: for reduction to 25%, the original is read at 236 mm/sec and the data is varied for 50% reduction by the reader controller PCB (skipping data for 1/2) and for 50% reduction by the main controller PCB (skipping data for 1/2).

EX: at 100%, the original is read at a speed of 236 mm/sec.

T-5-5

Operation	Magnification		
	25% to 49%	50% to 99%	100% to 400%
Varying the speed of reading the original (mm/sec)	236 to 120	236 to 119	236 to 59
Processing the data (digital; %) by the reader controller PCB	50	50	100
Processing the data (digital; %) by the main controller PCB	50	100	100

2. In ADF Mode

To suit the selected rate of magnification, the speed at which the original is read is varied and the data is processed by the reader controller PCB/main controller PCB.

EX: for reduction to 25%, the original is read at 236 mm/sec, and the data is processed for 50% reduction (skipping for 1/2) by the reader controller PCB and for 50% (skipping for 1/2) by the main controller PCB.

EX: for enlargement to 400%, the original is read at a speed of 118 mm/sec, and the data is processed for 200% enlargement (doubling) by the main control PCB.

T-5-6

Operation	Magnification			
	25% to 42%	43% to 84%	85% to 170%	171% to 400%
Varying the speed at which the original is read (mm/sec)	236 to 168	274 to 140	277 to 139	276 to 118
Processing the data (digital; %) by the reader controller PCB	50	50	100	100
Processing the data (digital; %) by the main controller PCB	50	100	100	200

5.3.4 Detecting the Size of Originals

5.3.4.1 Outline

0006-5731

iR2270 / iR2870 / iR3570 / iR4570

The machine identifies the size of the original with reference to the presence/absence of output levels of the reflecting type sensors; specifically,

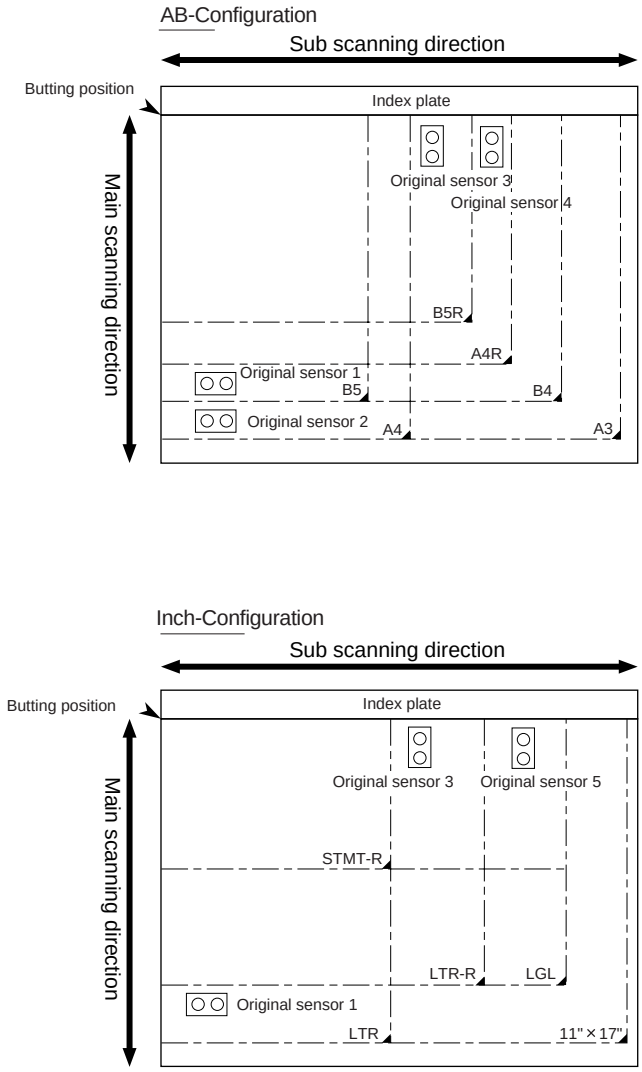
-the machine identifies the absence of paper if it finds a change in the output of the reflection type sensors when the copyboard cover is closed/opened.

-the machine identifies the presence of paper if it does not find a change in the output of the reflection type sensors when the copyboard cover is closed/opened.

The machine uses the following sensors; and the sensors are arranged as shown in the following figure:

-for main scanning direction, reflection type photosensors (AB-configuration, 2 locations; Inch-configuration, 1 location).

-for sub scanning direction, reflection type photosensors (AB-configuration, 2 locations; Inch-configuration, 2 locations)



F-5-15

5.3.4.2 Outline of Size Identification

0006-6792

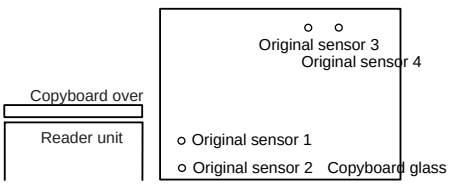
iR2270 / iR2870 / iR3570 / iR4570

-In Bk Mode

1 original (A4R), copyboard cover (copyboard cover/ADF) is closed

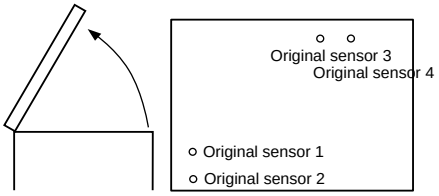
1. Standby State

original sensor: off



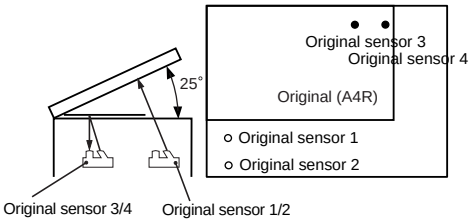
F-5-16

2. The copyboard cover is opened (with cover angle at 25 deg or more).
original sensor: off



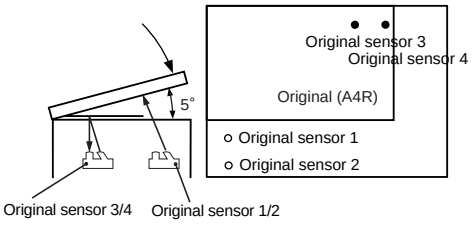
F-5-17

3. The copyboard cover is closed (with cover angle at 25 deg).
original sensor: on (original size identification processing 1)



F-5-18

4. Copyboard cover is closed (with cover angle at 5 deg or more but less than 25 deg).
Original sensor: on (original size identification 2)

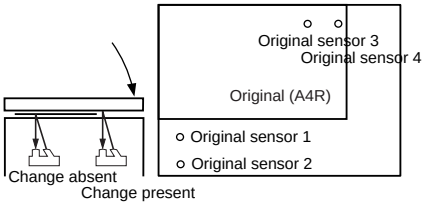


F-5-19

5. The copyboard cover is closed (5 deg or less).
size identified
original sensor: off

In identifying the size of an original, the data from original size identification processing 1 and data from original size identification processing 2 are compared, and the difference between these 2 sets of data is checked.
If any of the following is true, the output of the sensors may not show any change, preventing the machine from correctly identifying the size:
-the original is an A3 black original
-the original is a book (its thickness may not allow the copyboard cover to close fully, thus preventing the detection of a change in the sensor level).
-the copyboard cover is not closed fully (when a time-out condition occurs, there will be no detection of a change in

the sensor level).



F-5-20

The machine uses the following in reference to changes occurring in the sensor output as found in original size identification processing 1 and original size identification processing 2:

AB-Configuration

Original size	Original sensor 1	Original sensor 2	Original sensor 3	Original sensor 4
A3	○	○	○	○
A4	○	○	●	●
B4	○	●	○	○
B5	●	○	○	○
A4R	●	●	○	○
B5R	●	●	○	●
No original	●	●	●	●

Inch-Configuration

Original size	Original sensor 1	Original sensor 3	Original sensor 5
11"X17"	○	○	○
LTR	○	●	●
LGL	●	○	○
LTR-R	●	○	●
No original	●	●	●

○:No original
●:change absent

F-5-21

5.3.5 Dirt Sensor Control

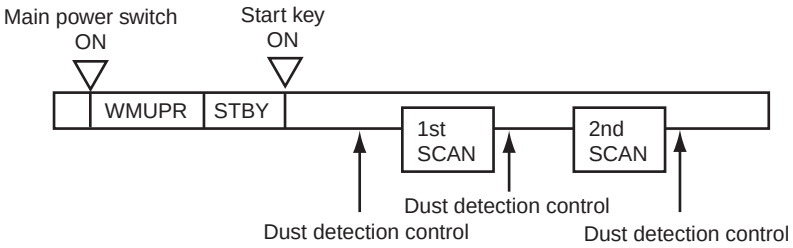
5.3.5.1 Outline

0006-5929

iR2270 / iR2870 / iR3570 / iR4570

The machine changes the original read point depending on the presence/absence of dust on the stream reading glass or the platen roller of the ADF, or it may execute image correction to prevent the dust from showing up in the output. These operations are carried out only when the ADF is in use and, in addition, is closed:

<Timing of Control>
-at the end of a job
-between sheets (for each reading of a sheet)
-at the start of a job (only when any of the following conditions is true)
1st job after power-on
dust detected at all points of detection at the end of the previous job
dust detection failed to end normally at the end of the previous job (e.g., ADF opened)



F-5-22

<Particulars of Control>

-At the End of a Job (dust detection)

The contact image sensor (CIS) checks the light reflected by the surface of the platen roller of the ADF at the read point for the presence/absence of dust. Presence of dust is detected at points A, B, and C in this order. The point where least dust is detected will be used as the read position for the next job.

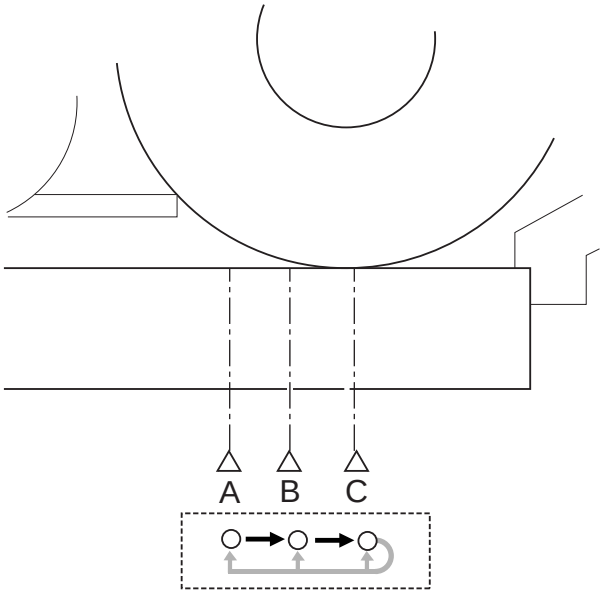
The point selected here will be used as the read position for the next job.

⚠

- For control at the end of a job, if an original is placed in the ADF with dust detected at all points (A, B, C), the machine will indicate a message on its control panel to prompt cleaning of the glass surface. The Start key will remain invalid until this message is cleared.

-At the Start of a Job (dust bypass)

Presence of dust is detected at points A, B, and C in this order in the same manner as at the end of the job. Read will take place at the point where least dust is detected.



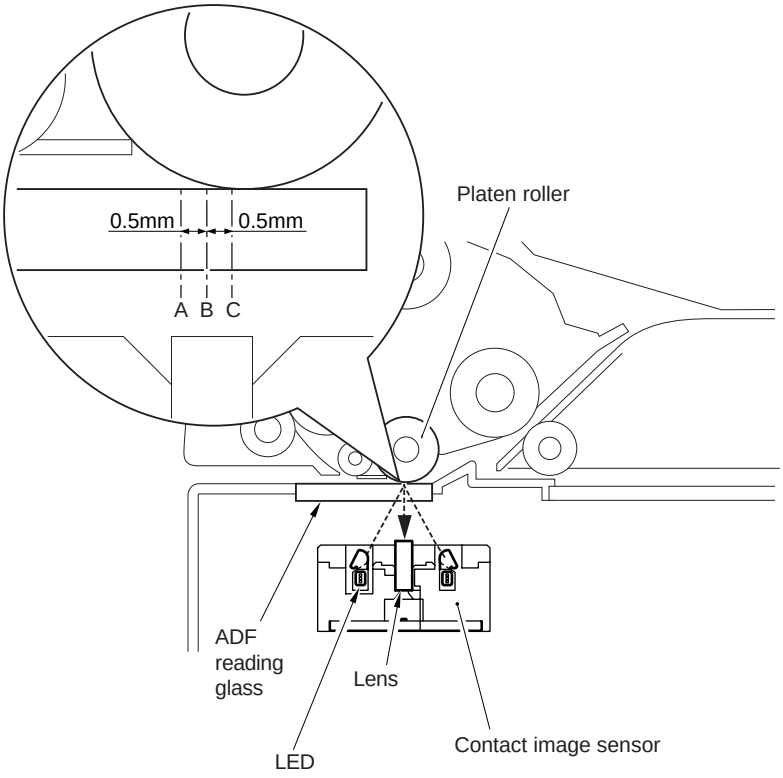
F-5-23

-Between Sheets

The machine does not move the contact image sensor (CIS) for dust detection between sheets. It reads the original using the position determined at the end or start of a job; if the presence of dust is detected, however, the machine will execute image correction.

T-5-7

Point	Discription
A	read reference position
B	about 0.5 mm from the reference position to the inner side of the roller
C	about 1.0 mm from the reference position to the inner side of the roller



F-5-24

<Service Mode>

COPIER>OPTION>BODY>DFDST-L1 (level 1)

(used to adjust the dust detection level between sheets)

COPIER>OPTION>BODY>DFDST-L2 (level 1)

(used to adjust the dust detection level at the end of a job)

5.3.6 Image Processing

5.3.6.1 Outline

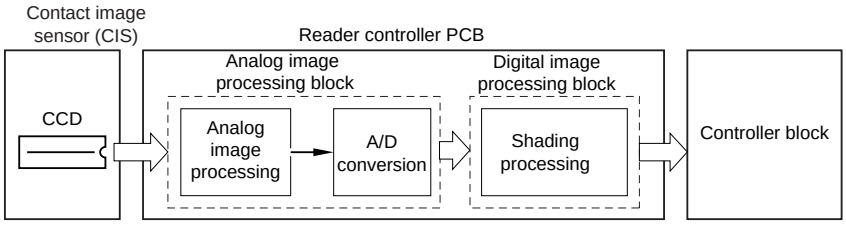
0006-5930

iR2270 / iR2870 / iR3570 / iR4570

The following shows the major specifications and functions of the machine's image processing system:

T-5-8

CCD	number of lines: 1 Number of pixels: Total 7488 (Number of effective pixels: 7180) size of pixel: 32 x 46.9 ym
Shading correction	shading correction: executed for each job shading adjustment: executed at power-on



F-5-25

The following shows the functions of the PCBs used by the machine's image processing system:

T-5-9

Reader controller PCB	CCD drive, analog image processing, A/D conversion, shading correction

The machine uses the reader controller PCB to process images for every single image line; specific functions are as follows:

1) Analog Image Processing

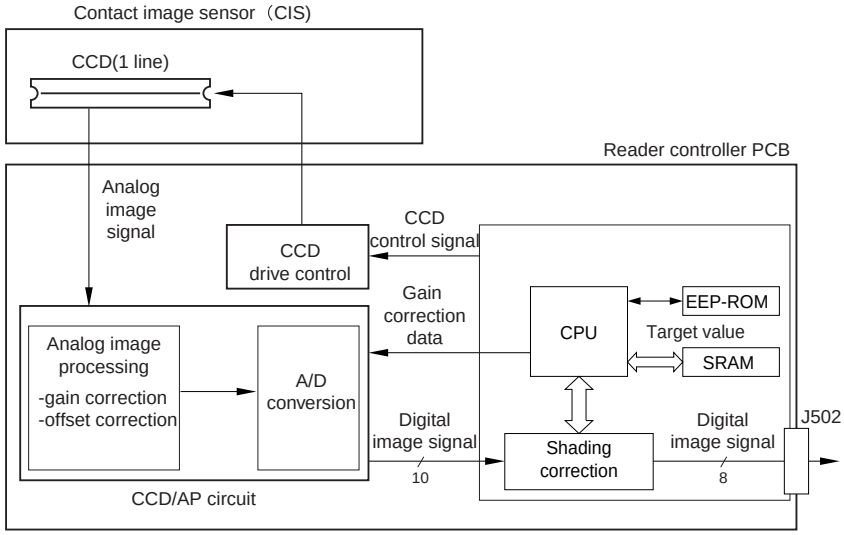
-CCD drive

-CCD output gain correction, offset correction

-CCD output A/D conversion

2) Digital Image Processing

-shading correction



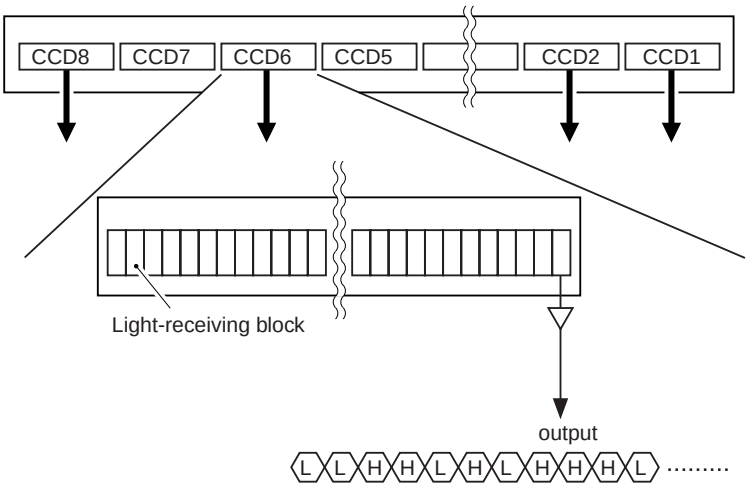
F-5-26

5.3.6.2 CCD Drive

0006-5931

iR2270 / iR2870 / iR3570 / iR4570

The machine's CCD sensor is a 1-line linear image sensor consisting of 7488 photocells. After completion of photoelectric conversion in the light-receiving block, the signals are output to the AP circuit in the reader controller circuit board in parallel for each channel (total eight channels) of the CCD array.



F-5-27

5.3.6.3 Gain Correction and Offset Correction of the CCD Output

0006-5932

iR2270 / iR2870 / iR3570 / iR4570

The analog video signal generated by the CCD is corrected so that it will have a specific level (gain correction); moreover, the output voltage occurring in the absence of incident light is also corrected so that it will have a specific

level (offset correction).

5.3.6.4 A/D Conversion of the CCD Output 0006-5933

iR2270 / iR2870 / iR3570 / iR4570

The analog video signal is further converted into a digital signal that is suited to the voltage level of individual pixels by the A/D converter.

5.3.6.5 Shading Correction (outline) 0006-5936

iR2270 / iR2870 / iR3570 / iR4570

The output of the CCD is not necessarily even for the following factors even when the density of the original is uniform:

1) Variation in the Sensitivity Among Pixels of the CCD
2) Variation in the Intensity of the Rod Lens Array

The machine executes shading correction to even out the output of the CCD. Shading correction may be shading adjustment executed at power-on or shading correction executed for each job.

5.3.6.6 Shading Adjustment 0006-5937

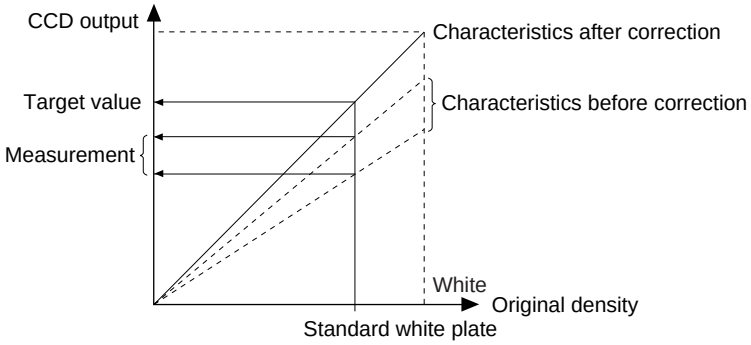
iR2270 / iR2870 / iR3570 / iR4570

In this adjustment, the machine measures the density of the standard while plate, and stores the results in memory as density data. It then performs computations on the shading data, and uses the result as the target value for shading correction.

5.3.6.7 Shading Correction 0006-5938

iR2270 / iR2870 / iR3570 / iR4570

The machine executes this correction for every scan made in main shading unit. It measures the density of the standard white plate, and compares the result against the target value stored in the shading correction circuit; the difference between the two will be held as the shading correction value for use in correcting variation among CCD pixels when scanning the original, thus evening out the density levels of the image.


CCD output
Characteristics after correction
Target value
Characteristics before correction
Measurement
White
Original density
Standard white plate

F-5-28

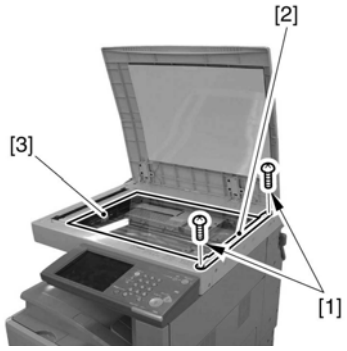
5.4 Parts Replacement Procedure

5.4.1 Copyboard glass

5.4.1.1 Removing the Copyboard Glass 0006-9714

iR2270 / iR2870 / iR3570 / iR4570

1) Open the copyboard cover (or ADF).
2) Remove the 2 screws [1], and detach the glass retainer [2]; then, detach the copyboard glass [3].

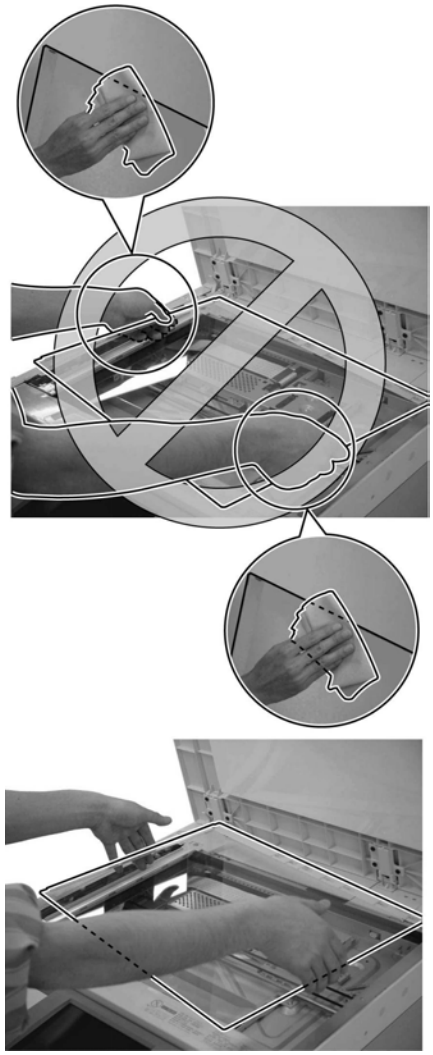


F-5-29

⚠

When removing the copyboard glass, take care not to touch the following:
- glass surface
- standard white plate

The presence of dirt can cause white/black lines in the images. If dirt is found, clean it with lint-free paper moistened with alcohol.

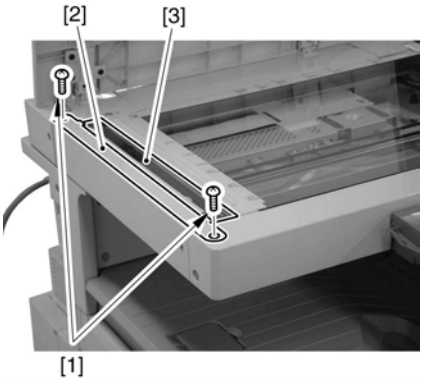


F-5-30

5.4.1.2 Removing the ADF Reading Glass 0006-9730

iR2270 / iR2870 / iR3570 / iR4570

1) Open the copyboard glass (or ADF).
2) Remove the 2 screws [1], and detach the glass retainer [2].
3) Remove the ADF reading glass [3].



F-5-31

⚠

When removing the ADF reading glass, take care not to touch the glass surface.The presence of dirt can cause white/black lines in the images. If dirt is found, be sure to clean it using lint-free paper moistened with alcohol.

5.4.2 Reader Controller PCB

5.4.2.1 Before Replacing the Reader Controller PCB 0007-0740

iR2270 / iR2870 / iR3570 / iR4570

⚠

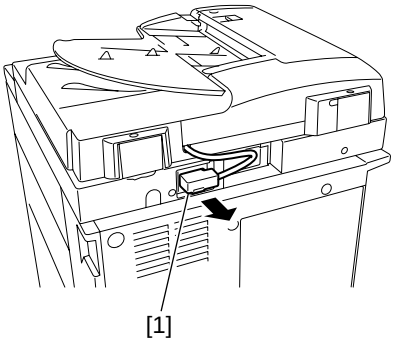
If an ADF is used, be sure to execute P-PRINT of service mode to obtain its printout:

COPIER>FUNCTION>MISC-P>P-PRINT

5.4.2.2 Removing the Reader Rear Cover 0007-0742

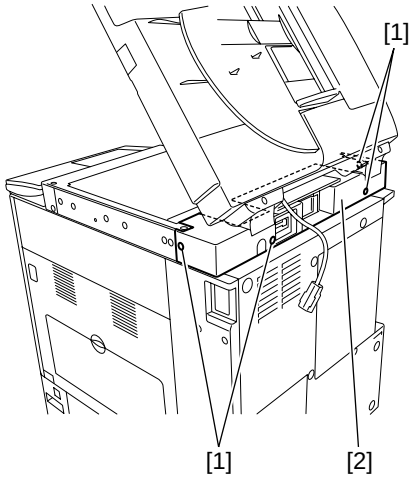
iR2270 / iR2870 / iR3570 / iR4570

1) Disconnect the ADF communications cable [1] (if equipped with an ADF)



F-5-32

2) Open the copyboard cover (or the ADF).
3) Remove the 4 screws [1], and detach the reader rear cover [2].

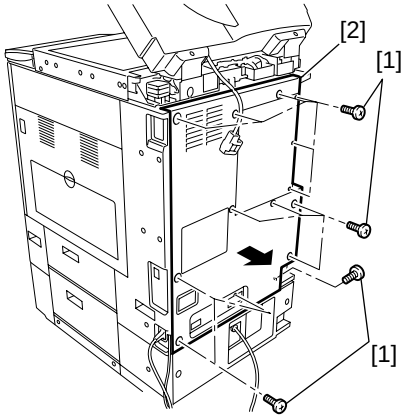


F-5-33

5.4.2.3 Removing the rear cover of the machine 0007-3565

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 14 screws [1], and detach the rear cover [2] of the machine.

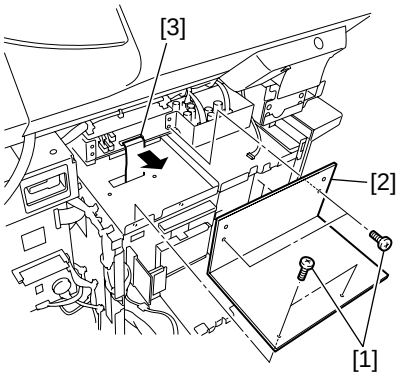


F-5-34

5.4.2.4 Removing the flexible cable cover 0007-3566

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 4 screws [1], and detach the flexible cable cover [2].
2) Disconnect the flexible cable [3] on the reader controller PCB.

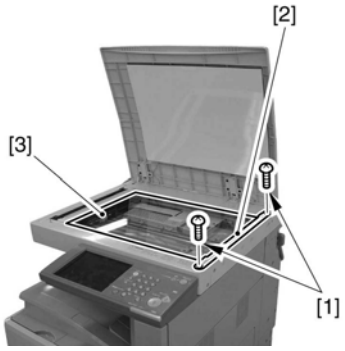


F-5-35

5.4.2.5 Removing the Copyboard Glass 0007-3420

iR2270 / iR2870 / iR3570 / iR4570

1) Open the copyboard cover (or ADF).
2) Remove the 2 screws [1], and detach the glass retainer [2]; then, detach the copyboard glass [3].

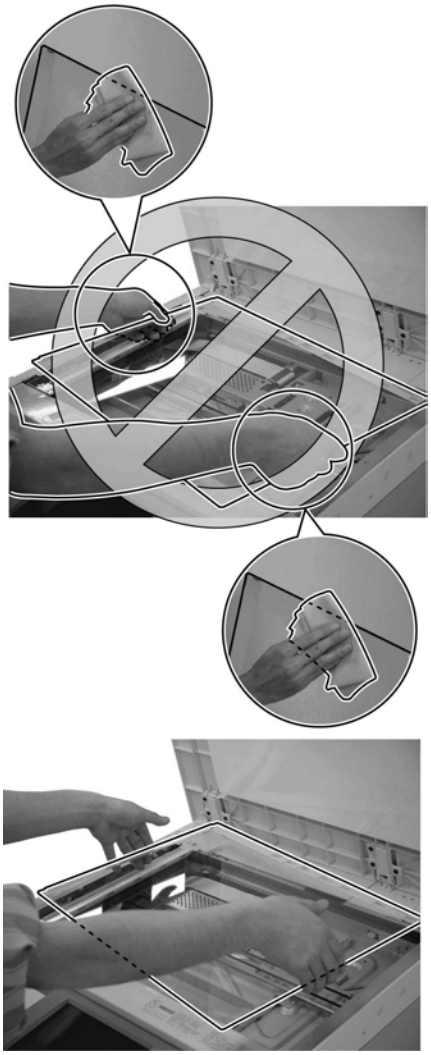


F-5-36

⚠

When removing the copyboard glass, take care not to touch the following:
- glass surface
- standard white plate

The presence of dirt can cause white/black lines in the images. If dirt is found, clean it with lint-free paper moistened with alcohol.

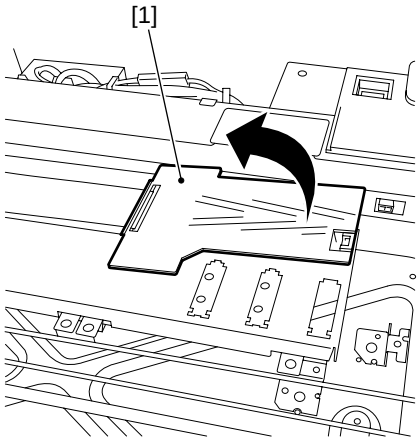


F-5-37

5.4.2.6 Removing the Reader Controller PCB 0007-0745

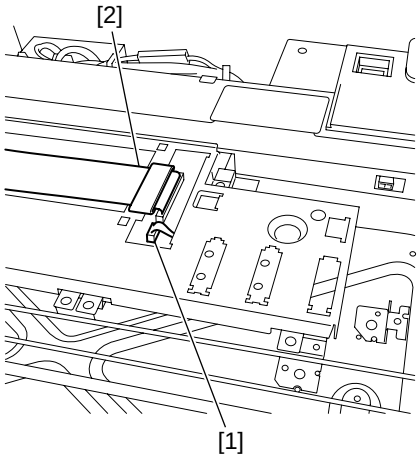
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the cover [1].



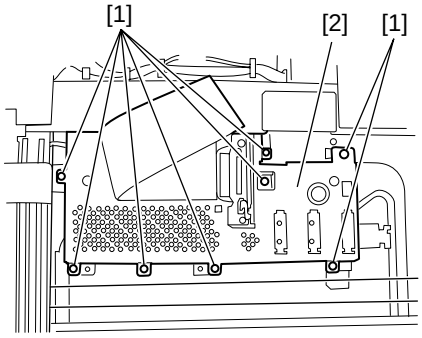
F-5-38

2) Disconnect the connector [1], and detach the flexible cable [2].



F-5-39

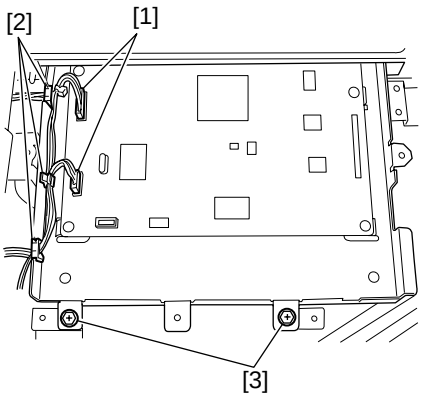
3) Remove the 8 screws [2], and detach the cover [3].



F-5-40

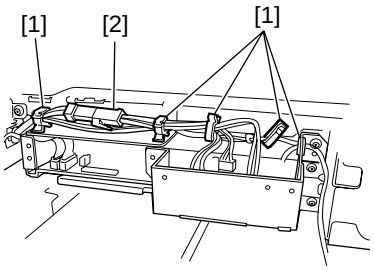
4) Disconnect the 2 connectors [1], and detach the 3

wire saddles [2]; then, remove the 2 screws [3].



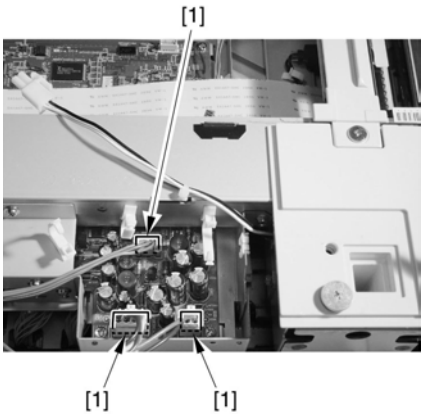
F-5-41

5) Go to the back of the machine, and free the cable from the 5 wire saddles [1]; then, disconnect the connector [2].



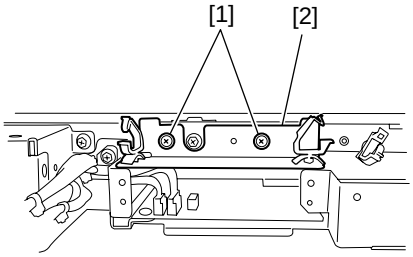
F-5-42

6) Disconnect the 3 connectors [1].



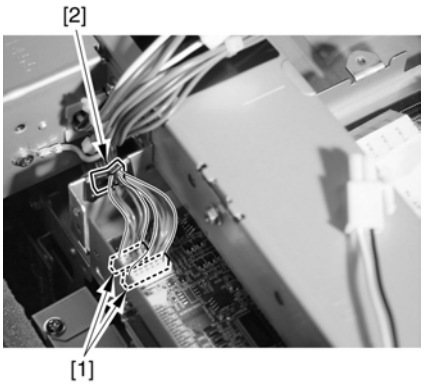
F-5-43

7) Remove the 4 screws [1], and detach the cover [2].



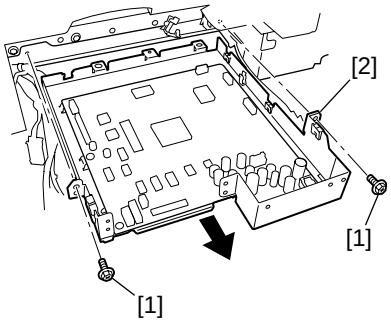
F-5-44

8) Disconnect the 2 connectors [1], and free the cable from the wire saddle [2].



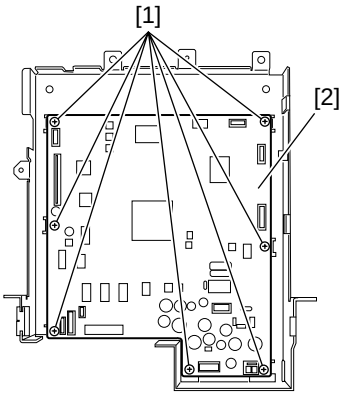
F-5-45

9) Remove the 2 screws [1], and pull out the reader controller PCB base [2].



F-5-46

10) Remove the 7 screws [1], and detach the reader controller PCB [2].



F-5-47

5.4.2.7 After Replacing the Reader Controller PCB or After Initializing the RAM 0007-0746

iR2270 / iR2870 / iR3570 / iR4570

⚠

- Before replacing the reader controller PCB, be sure to generate the latest P-PRINT printout.
  <if you are initializing the RAM of the reader controller without replacing the PCB>
- Using the SST, upload the reader controller backup data; after initializing the RAM, download the data, thus eliminating the need for the following adjustment.

1. Reader Unit-Related Adjustment

1) Using the SST, download the latest system software (R-CON).
2) Make the following selections in service mode: COPIER>FUNCTION>CLEAR>R-CON; then, press the OK key to initialize the RAM. Thereafter, turn off and then on the main power.
3) Enter the appropriate values using the following service mode items:

a. service label (behind reader unit left cover) values

a-1. CIS read position adjustment (fixed reading)

COPIER>ADJUST>ADJ-XY>ADJ-X

a-2. main scanning direction position adjustment (fixed reading)

COPIER>ADJUST>ADJ-XY>ADJ-Y

a-3. shading position adjustment (fixed reading)

COPIER>ADJUST>ADJ-XY>ADJ-S

a-4. main/sub scanning direction MTF value

COPIER>ADJUST>CCD>MTF-MG

⚠

If the value of the following was not 0 before the replacement of the reader controller PCB: COPIER>OPTION>BODY>CCD-LUT.

Set a value other than '0' once again, and make the following adjustments using the D-10 Chart.

COPIER>FUNCTION>CCD>LUT-ADJ2

2. ADF-Related Adjustment

⚠

The machine keeps ADF-related service mode data in the RAM of the reader controller; as such, you will have to make the appropriate adjustments if you have replaced the reader controller or initialized the RAM.

1) Enter the values indicated in the P-PRINT printout you have previously generated for the following:

a. main scanning direction position adjustment (stream reading)

COPIER>ADJSUT>ADJ-XY>ADJ-Y-DF

b. original stop position adjustment

FEEDER>ADJSUT>DOCST

c. original feed speed (magnification) adjustment

FEEDER>ADUST>LA-SPEED

2) Make adjustments using the following items:

a. tray width adjustment

FEEDER>FUNCTION>TRY-A4
FEEDER>FUNCTION>TRY-A5R
FEEDER>FUNCTION>TRY-LTR
FEEDER>FUNCTION>TRY-LTRR

b. CIS read position adjustment (stream reading)

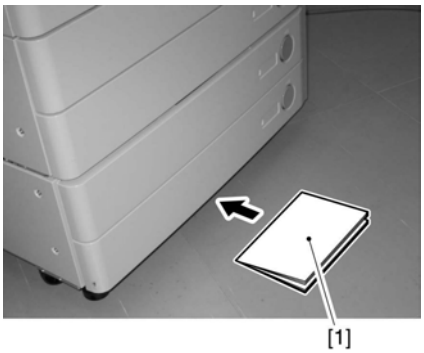
COPIER>FUNCTION>INSTALL>STRD-POS

c. white level adjustment

COPIER>FUNCTION>CCD>DF-WLVL1

COPIER>FUNCTION>CCD>DF-WLVL2

When you have finished the foregoing adjustments, put the P-PRINT printout [1] you have previously generated in the service book cassette to replace the old P-PRINT printout.



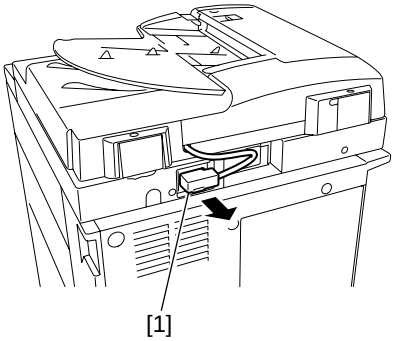
F-5-48

5.4.3 Scanner Motor

5.4.3.1 Removing the Reader Rear Cover 0007-3432

iR2270 / iR2870 / iR3570 / iR4570

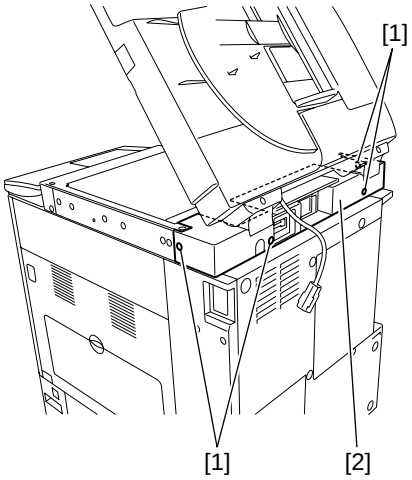
1) Disconnect the ADF communications cable [1] (if equipped with an ADF)



F-5-49

2) Open the copyboard cover (or the ADF).

3) Remove the 4 screws [1], and detach the reader rear cover [2].

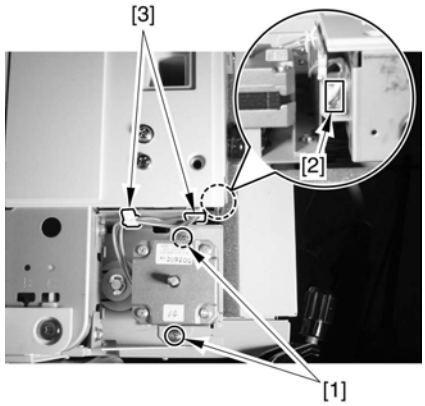


F-5-50

5.4.3.2 Removing the Scanner Motor 0006-9746

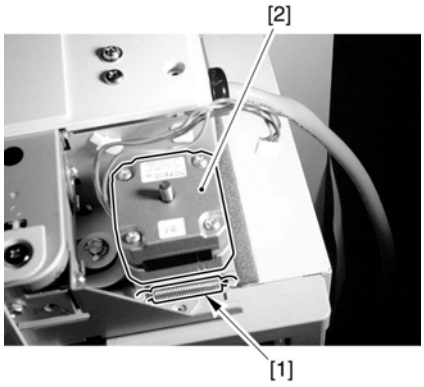
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws [1]; then, disconnect the connector [2], and detach the 2 wire saddles [3].



F-5-51

2) Remove the spring [1], and detach the scanner motor [2].



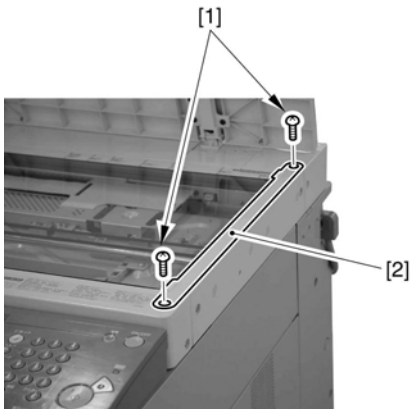
F-5-52

5.4.4 Contact sensor

5.4.4.1 Removing the Reader Front Cover 0006-9758

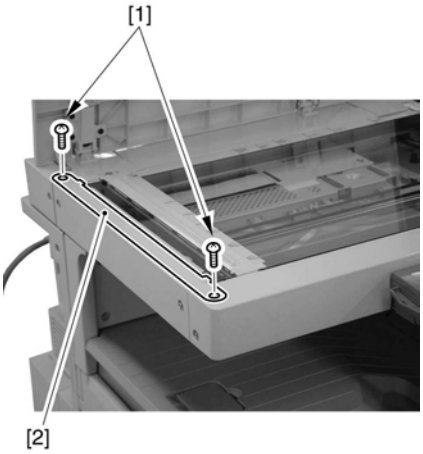
iR2270 / iR2870 / iR3570 / iR4570

1) Open the copyboard cover (or ADF).
2) Remove the 2 screws [1], and detach the copyboard glass retainer (right) [2].



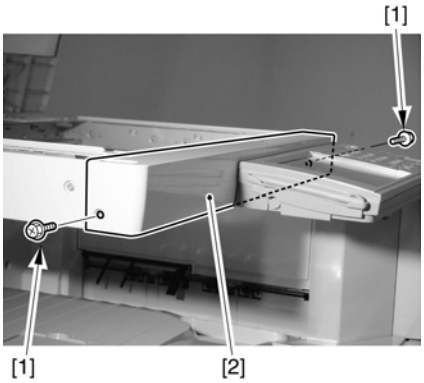
F-5-53

3) Remove the 2 screws [1], and detach the copyboard glass retainer (left) [2].



F-5-54

4) Remove the 2 screws [1], and detach the reader front cover [2].

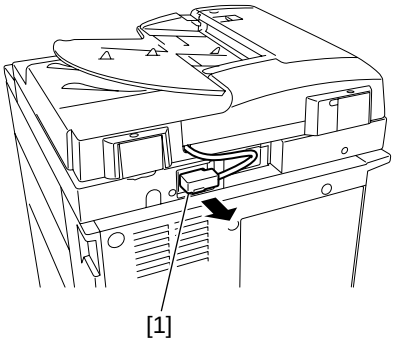


F-5-55

5.4.4.2 Removing the Reader Rear Cover 0007-3433

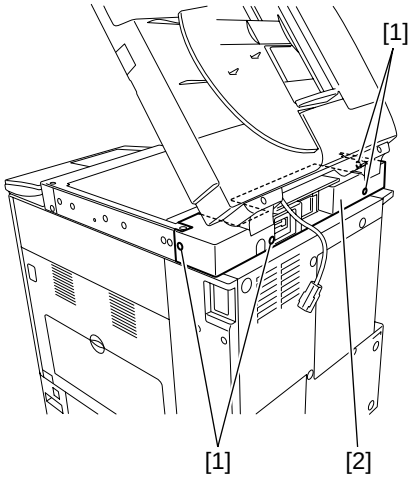
iR2270 / iR2870 / iR3570 / iR4570

1) Disconnect the ADF communications cable [1] (if equipped with an ADF)



F-5-56

2) Open the copyboard cover (or the ADF).
3) Remove the 4 screws [1], and detach the reader rear cover [2].

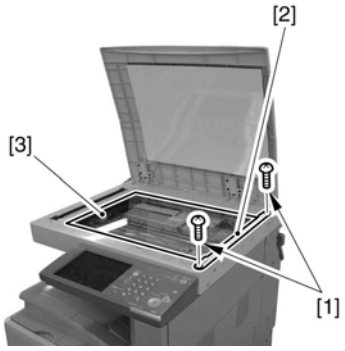


F-5-57

5.4.4.3 Removing the Copyboard Glass 0007-3421

iR2270 / iR2870 / iR3570 / iR4570

1) Open the copyboard cover (or ADF).
2) Remove the 2 screws [1], and detach the glass retainer [2]; then, detach the copyboard glass [3].

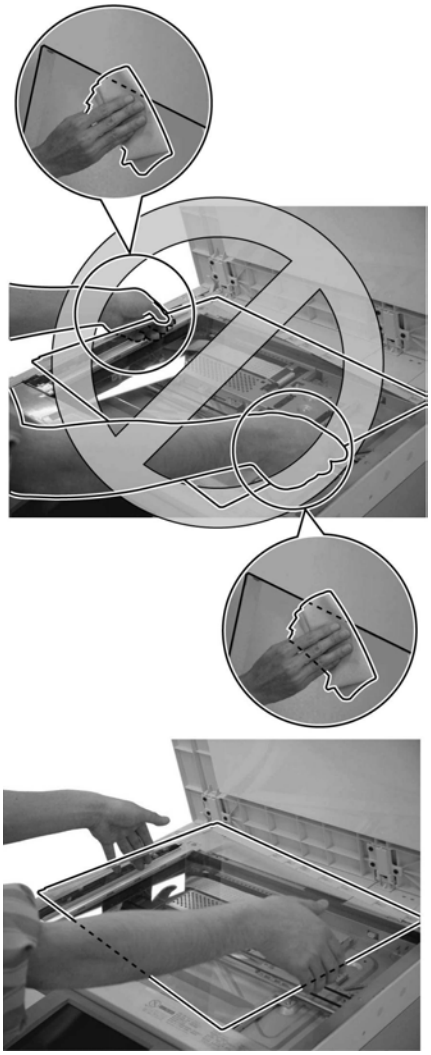


F-5-58

⚠

When removing the copyboard glass, take care not to touch the following:
- glass surface
- standard white plate

The presence of dirt can cause white/black lines in the images. If dirt is found, clean it with lint-free paper moistened with alcohol.

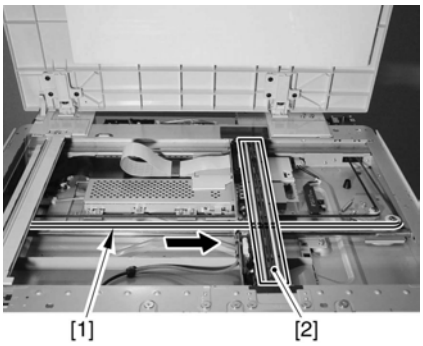


F-5-59

5.4.4.4 Removing the Contact Image Sensor (CIS) 0006-9762

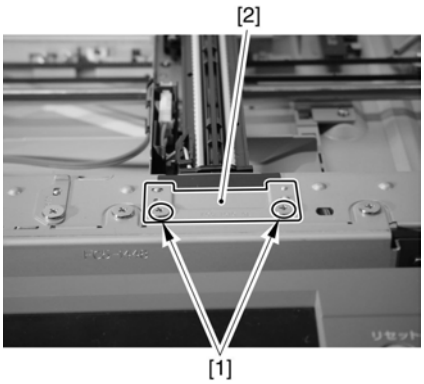
iR2270 / iR2870 / iR3570 / iR4570

1) Pull the drive belt (front) [1] in the direction of the arrow so that the contact image sensor (CIS) [2] will move where it is shown in the figure.



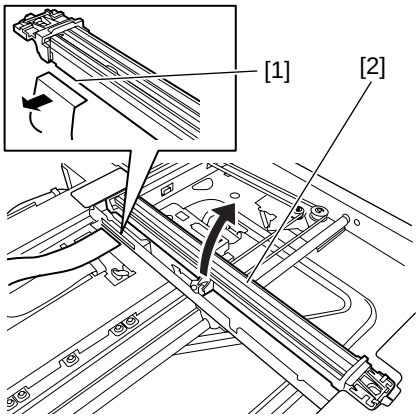
F-5-60

2) Remove the 2 screws [1], and detach the plate [2].



F-5-61

3) Remove the flexible cable [1], and detach the contact image sensor (CIS) [2].

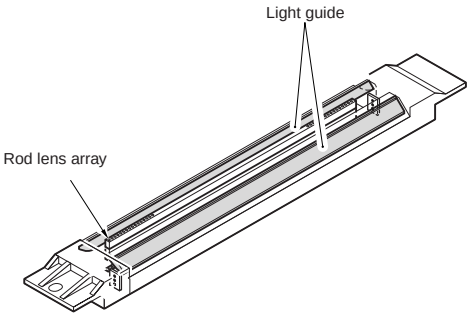


F-5-62

⚠

When detaching the contact sensor unit, take care not to touch the light guide assembly and the lens

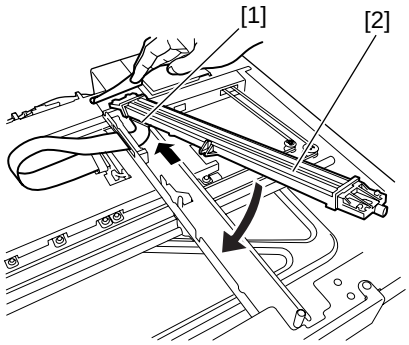
assembly.



F-5-63

⚠

When mounting it, be sure to connect the flexible cable [1] before fitting the contact image sensor (CIS) [2] to the machine.



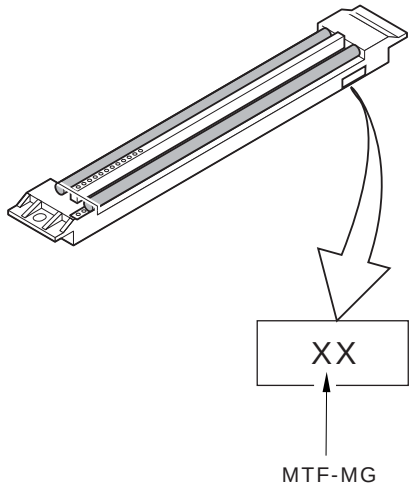
F-5-64

5.4.4.5 After Replacement of the CIS 0006-9764

iR2270 / iR2870 / iR3570 / iR4570

Be sure to enter the value indicated on the CIS label attached to the contact image sensor (CIS) using the following service mode item:

COPIER>ADJUST>CCD>MTF-MG
(main scanning direction MTR correction value)



F-5-65

Be sure also to update the value indicated on the service label found behind the left cover of the reader unit so that it is identical to the value indicated on the CIS label.

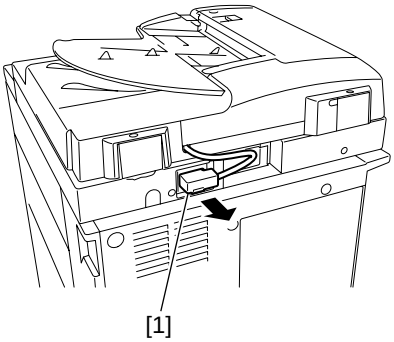
Reference:
At time of shipment from the factory, no CIS label is attached.

5.4.5 Copyboard Cover Open/Close Sensor

5.4.5.1 Removing the Reader Rear Cover 0007-3437

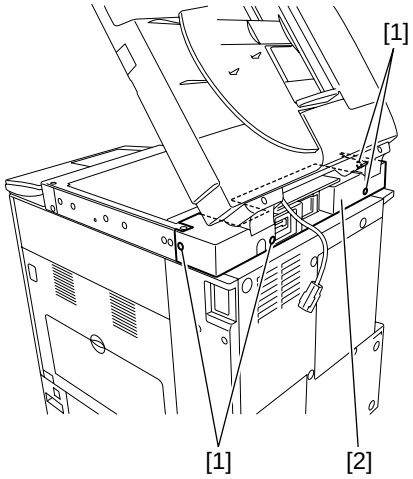
iR2270 / iR2870 / iR3570 / iR4570

1) Disconnect the ADF communications cable [1] (if equipped with an ADF)



F-5-66

2) Open the copyboard cover (or the ADF).
3) Remove the 4 screws [1], and detach the reader rear cover [2].

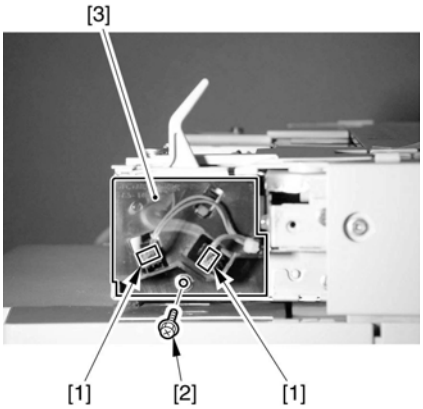


F-5-67

5.4.5.2 Removing the Copyboard Cover Open/ Closed Sensor (front/rear) 0007-0753

iR2270 / iR2870 / iR3570 / iR4570

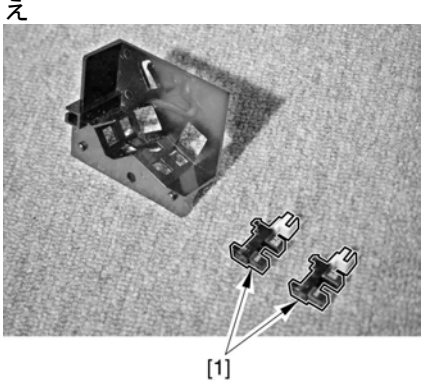
1) Disconnect the 2 connectors [1], and remove the screw [2]; then, detach the sensor base [3].



F-5-68

2) Detach the 2 sensors [1] from the sensor base.

え



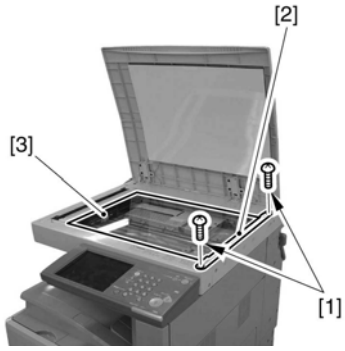
F-5-69

5.4.6 Contact Sensor HP Sensor

5.4.6.1 Removing the Copyboard Glass 0007-3439

iR2270 / iR2870 / iR3570 / iR4570

1) Open the copyboard cover (or ADF).
2) Remove the 2 screws [1], and detach the glass retainer [2]; then, detach the copyboard glass [3].



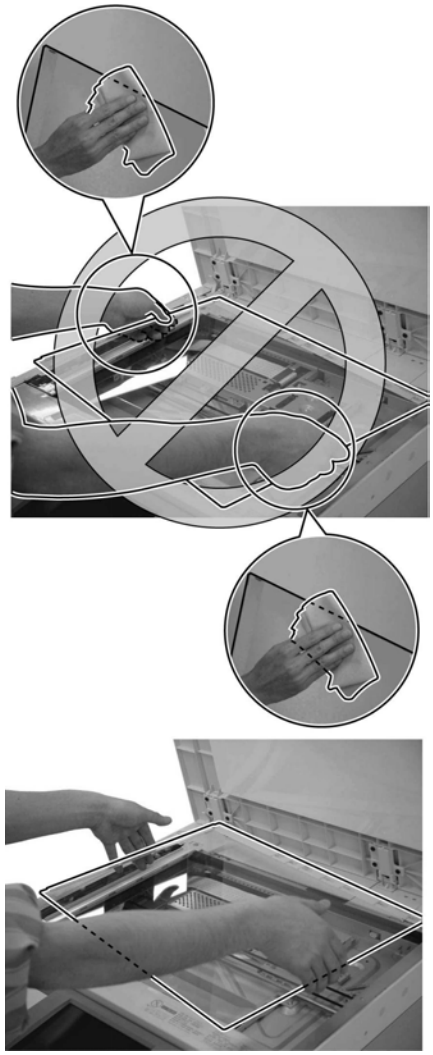
F-5-70

⚠

When removing the copyboard glass, take care not to touch the following:

- glass surface
- standard white plate

The presence of dirt can cause white/black lines in the images. If dirt is found, clean it with lint-free paper moistened with alcohol.

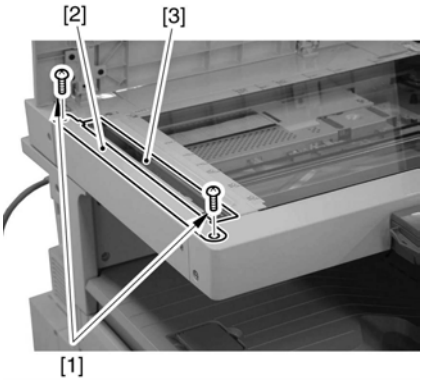


F-5-71

5.4.6.2 Removing the ADF Reading Glass 0007-3426

iR2270 / iR2870 / iR3570 / iR4570

1) Open the copyboard glass (or ADF).
2) Remove the 2 screws [1], and detach the glass retainer [2].
3) Remove the ADF reading glass [3].



F-5-72

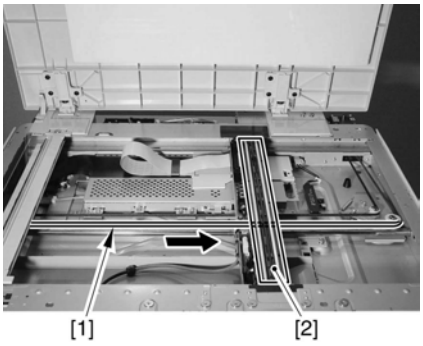
⚠

When removing the ADF reading glass, take care not to touch the glass surface.The presence of dirt can cause white/black lines in the images. If dirt is found, be sure to clean it using lint-free paper moistened with alcohol.

5.4.6.3 Removing the Contract Sensor Home Position Sensor 0007-0751

iR2270 / iR2870 / iR3570 / iR4570

1) Pull the drive belt [1] in the direction of the arrow so that the contact image sensor (CIS) [2] is where indicated in the figure.

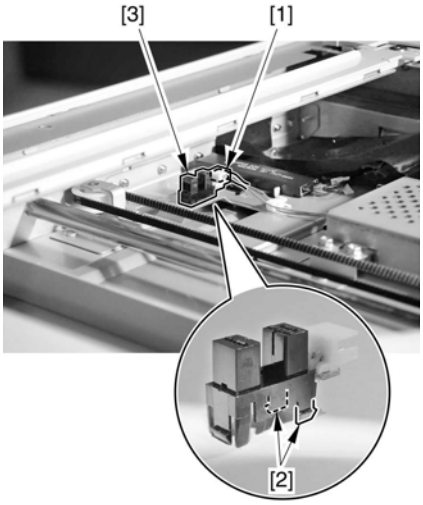


F-5-73

2) Disconnect the connector [1], and remove the CIS home position sensor [3].

⚠

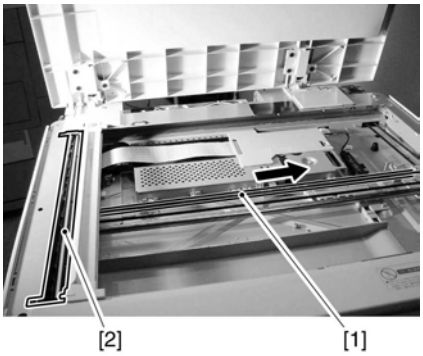
When detaching the sensor, do so as if to push it under the claw [2] found at the rear.



F-5-74

⚠

After replacing the sensor, pull the drive belt (rear) [1] in the direction of the arrow so that the contact image sensor (CIS) [2] is returned to the farthest left.



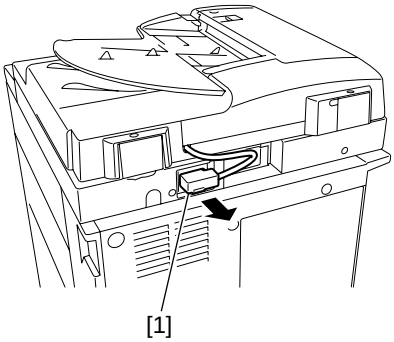
F-5-75

5.4.7 Original Size Sensor

5.4.7.1 Removing the Reader Rear Cover 0007-3440

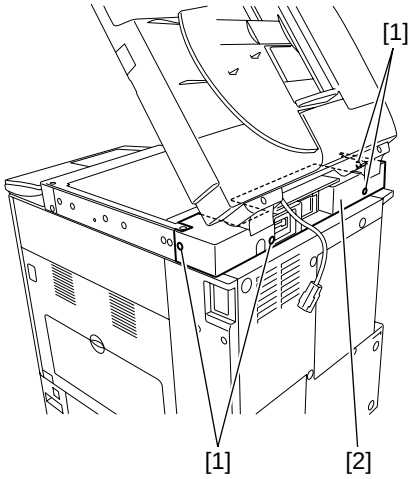
iR2270 / iR2870 / iR3570 / iR4570

1) Disconnect the ADF communications cable [1] (if equipped with an ADF)



F-5-76

2) Open the copyboard cover (or the ADF).
3) Remove the 4 screws [1], and detach the reader rear cover [2].

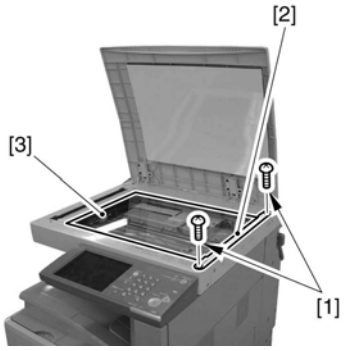


F-5-77

5.4.7.2 Removing the Copyboard Glass 0007-3425

iR2270 / iR2870 / iR3570 / iR4570

1) Open the copyboard cover (or ADF).
2) Remove the 2 screws [1], and detach the glass retainer [2]; then, detach the copyboard glass [3].

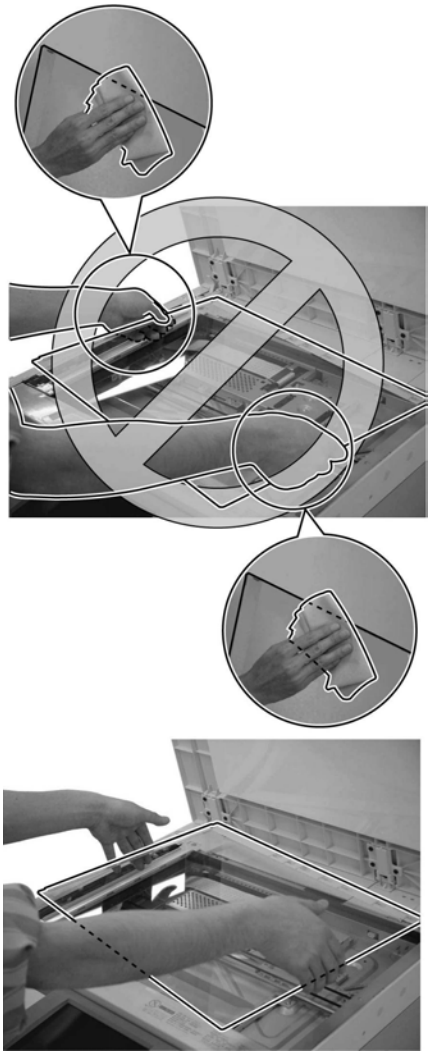


F-5-78

⚠

When removing the copyboard glass, take care not to touch the following:
- glass surface
- standard white plate

The presence of dirt can cause white/black lines in the images. If dirt is found, clean it with lint-free paper moistened with alcohol.

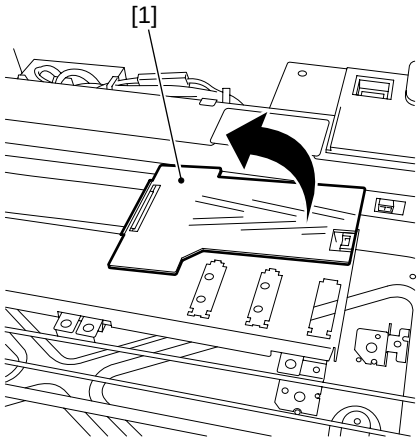


F-5-79

5.4.7.3 Removing the Original Size Sensor 0006-9774

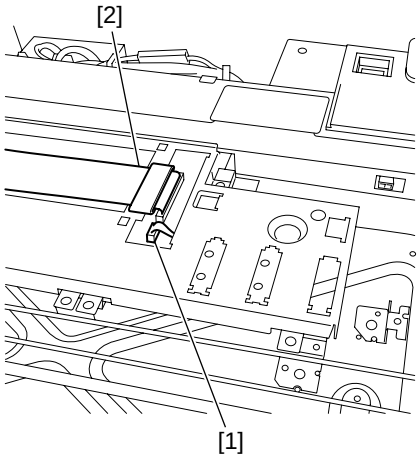
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the cover [1].



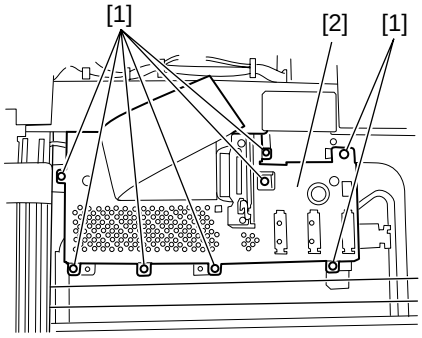
F-5-80

2) Disconnect the connector [1], and detach the flexible cable [2].



F-5-81

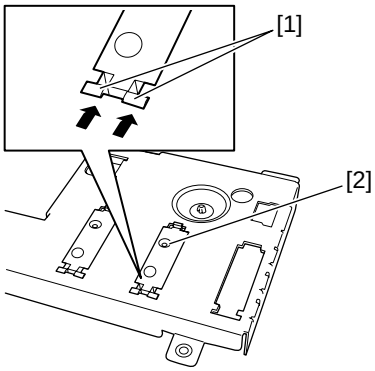
3) Remove the 8 screws [2], and detach the cover [3].



F-5-82

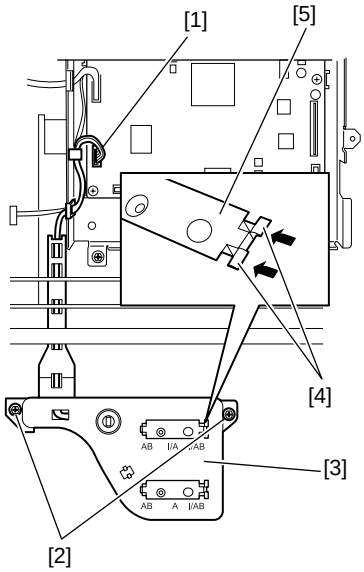
4) Free the hook [1], and detach the original sensor

[2].



F-5-83

5) Disconnect the connector [1].
6) Remove the 2 screws [2], and detach the cover [3].
7) Free the hook [4], and detach the original size sensor [5].



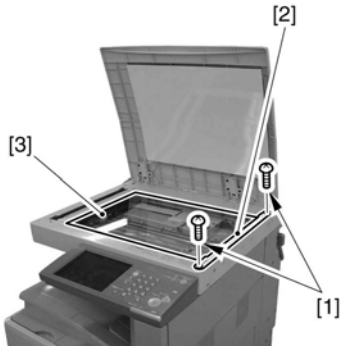
F-5-84

5.4.8 Reader Heater (option)

5.4.8.1 Removing the Copyboard Glass 0007-3423

iR2270 / iR2870 / iR3570 / iR4570

1) Open the copyboard cover (or ADF).
2) Remove the 2 screws [1], and detach the glass retainer [2]; then, detach the copyboard glass [3].

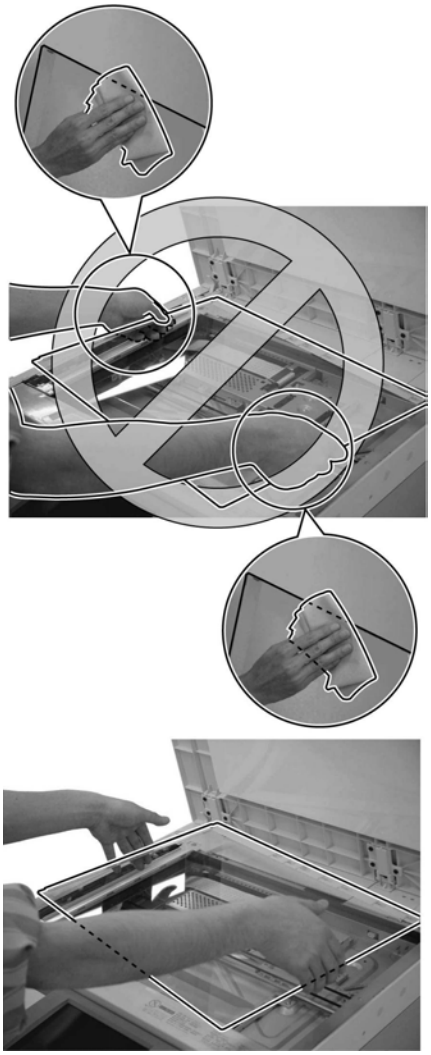


F-5-85

⚠

When removing the copyboard glass, take care not to touch the following:
- glass surface
- standard white plate

The presence of dirt can cause white/black lines in the images. If dirt is found, clean it with lint-free paper moistened with alcohol.

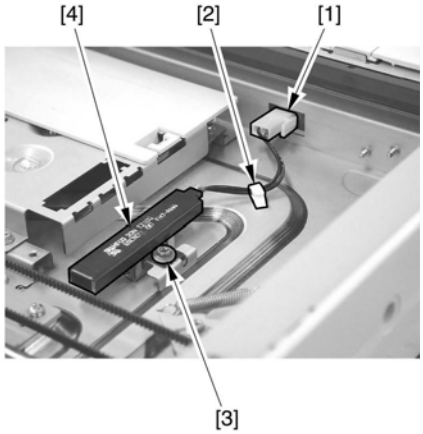


F-5-86

5.4.8.2 Removing the Reader Heater (right) 0007-0757

iR2270 / iR2870 / iR3570 / iR4570

1) Disconnect the connector [1], and free the cable from the wire saddle [2].
2) Remove the screw [3], and detach the reader heater (right) [4].

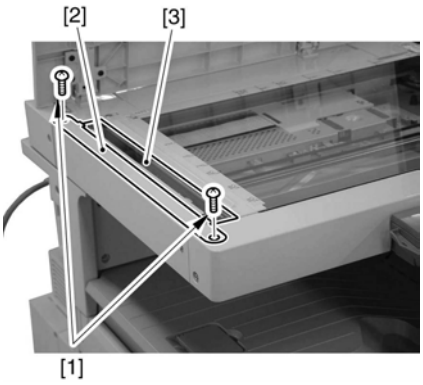


F-5-87

5.4.8.3 Removing the ADF Reading Glass 0007-3427

iR2270 / iR2870 / iR3570 / iR4570

1) Open the copyboard glass (or ADF).
2) Remove the 2 screws [1], and detach the glass retainer [2].
3) Remove the ADF reading glass [3].



F-5-88

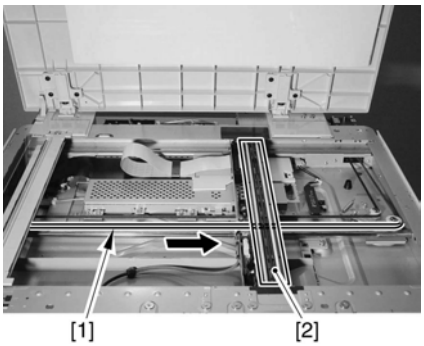
⚠

When removing the ADF reading glass, take care not to touch the glass surface.The presence of dirt can cause white/black lines in the images. If dirt is found, be sure to clean it using lint-free paper moistened with alcohol.

5.4.8.4 Removing the Reader Heater (left) 0007-0760

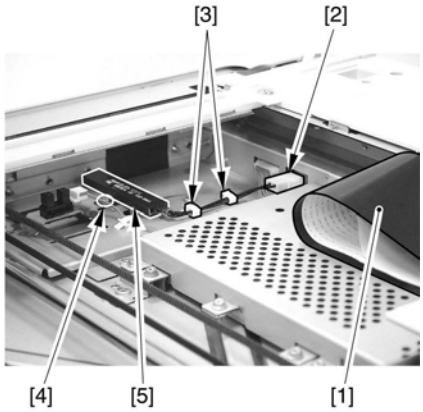
iR2270 / iR2870 / iR3570 / iR4570

1) Pull the drive belt (front) [1] in the direction of the arrow so that the contact image sensor (CIS) [2] is where it is indicated in the figure.



F-5-89

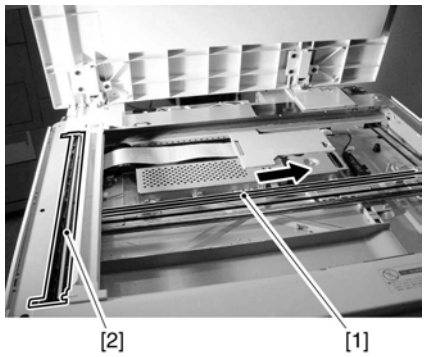
2) Peel the protective sheet [1], and disconnect the connector [2].
3) Free the cable from the wire saddle [3], and remove the screw [4]; then, detach the reader heater (left) [5].



F-5-90

⚠

After replacing the reader heater, pull the drive belt (rear) [1] in the direction of the arrow so that the contact image sensor is returned to the farthest left.



F-5-91

Chapter 6 Laser Exposure

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6.1 Construction

6.1.1 Specifications, Control Mechanism, and Functions

0006-9404

iR2270 / iR2870 / iR3570 / iR4570

Laser Light

T-6-1

Number of laser beams	2
Output	5mW (iR2270/iR2870) 10mW (iR3570/iR4570)
Wave length	785 nm - 800 nm (infrared light)

Scanner Motor

T-6-2

Type of motor	DC brushless motor
Number of revolutions	16000 rpm (approx.; single control) (iR2270/iR2870) 27000 rpm/16000 rpm (approx.; double control) (iR3570/iR4570)
Type of bearing	Oil

Polygon Mirror

T-6-3

Number of facets	6 (40-mm dia.)

Control Mechanism

T-6-4

Synchronous control	Main scanning direction
Light intensity control	APC
Others	Laser activation/deactivation

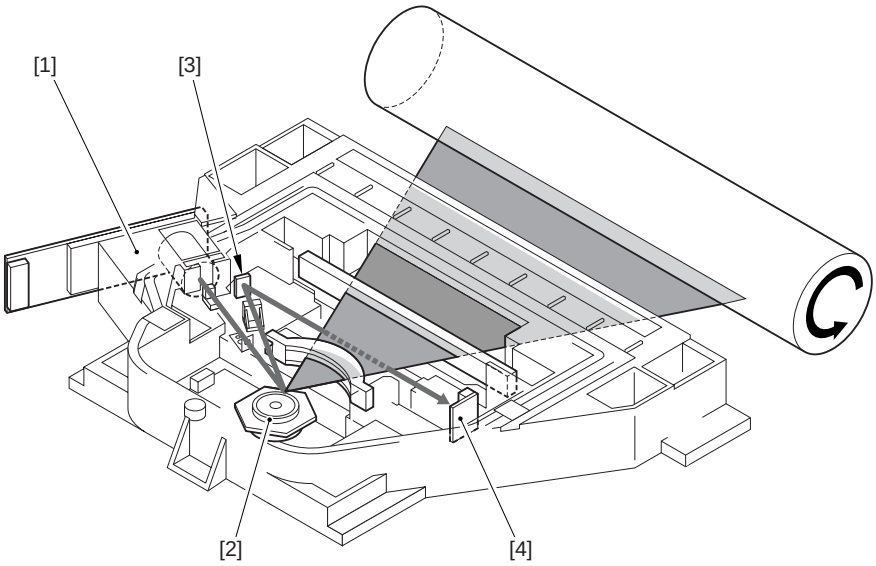
Laser scanner motor control

Laser shutter control

6.1.2 Major Components

0006-5970

iR2270 / iR2870 / iR3570 / iR4570



F-6-1

T-6-5

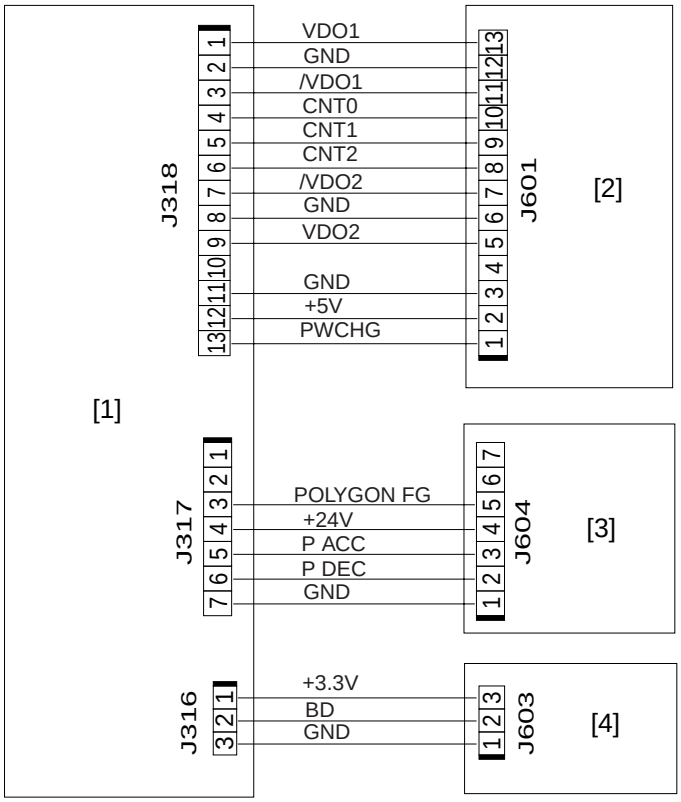
Name	Description
[1] Laser unit	Generates laser light
[2] Polygon mirror	Scans laser light in main scanning direction.
[3] BD mirror	Reflects laser light in the direction of the BD PCB.
[4] BD PCB	Generates the BD signal.

6.1.3 Construction of the Control System

0006-5971

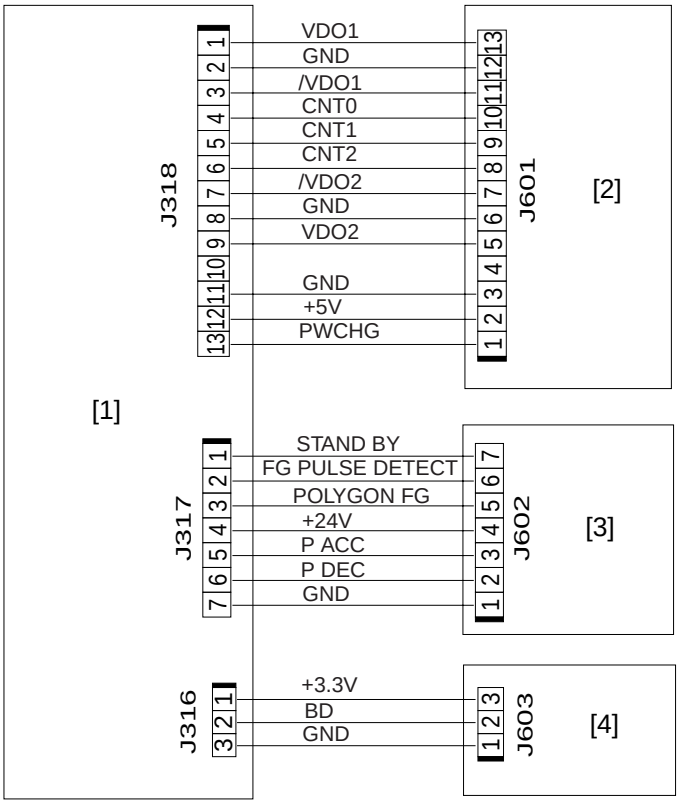
iR2270 / iR2870 / iR3570 / iR4570

The laser exposure system is primarily controlled by the DC controller PCB.


[1]
J318
1
2
3
4
5
6
7
8
9
10
11
12
13
VDO1
GND
/VDO1
CNT0
CNT1
CNT2
/VDO2
GND
VDO2
GND
+5V
PWCHG
J601
[2]
J317
POLYGON FG
+24V
P ACC
P DEC
GND
J604
[3]
J316
+3.3V
BD
GND
J603
[4]

F-6-2

iR3570/iR3570F/iR4570/iR4570F



F-6-3

[1]DC controller PCB
[2]Laser driver PCB
[3]Scanner motor PCB
[4]BD PCB

T-6-6

Single	Description
VDO1	Image data single input
CNT0	Laser driver control signal
CNT1	Laser driver control signal
CNT2	Laser driver control signal
VDO2	Image data signal input
PWCHG	Light intensify switchover signal
FG PULSE DETECT	FG PULSE detecting signal
POLYGON FG	FG output signal

Single	Description
P ACC	Motor acceleration signal
P DEC	Motor deceleration signal
BD	BD output level single

6.2 Basic Sequence

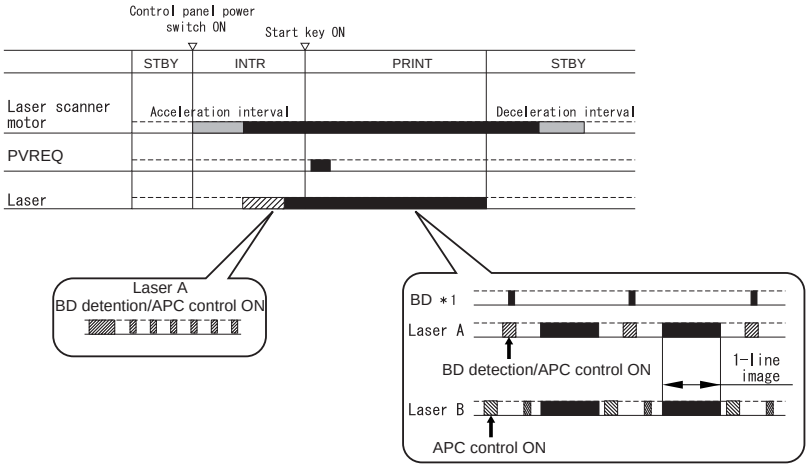
6.2.1 Basic Sequence

0006-5972

iR2270 / iR2870 / iR3570 / iR4570

When the control panel power switch is turned on, the laser scanner starts to rotate; when the motor rotation reaches its target revolution, the machine turns on the laser unit. Thereafter, when the Start key is turned on, the machine generates the image request signal (PVREQ) on the printer side, and turns on the laser beam with reference to the generated signal.

A4, 1 Copy



*1: The BD signal is generated in reference to the light from laser A. The BD sensor of the BD PCB receives light from laser A but not light from laser B.

F-6-4

6.3 Various Controls

6.3.1 Controlling the Laser Activation Timing

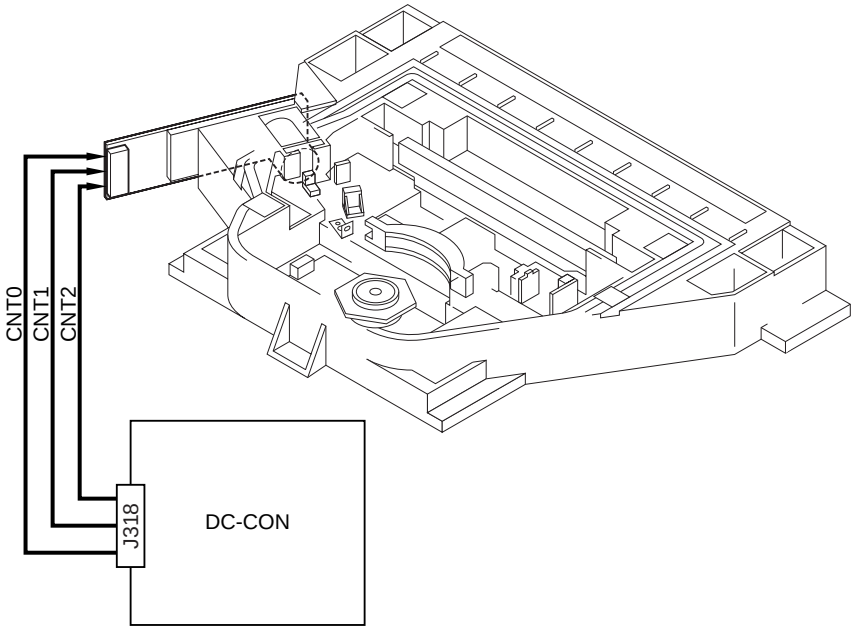
6.3.1.1 Turning On and off the Laser Light 0006-5973

iR2270 / iR2870 / iR3570 / iR4570

The laser light is turned on and off according to the combination of laser control signals (CNT0/1/2) from the DC controller PCB.

T-6-7

Laser control signal			Laser status	
CNT2	**CNT1**	**CNT0**	**Laser A**	**Laser B**
0	1	0	ON (for APC control)	OFF
0	1	1	OFF	OFF
0	0	1	OFF	ON (for APC control)
0	1	1	OFF	OFF
1	1	1	Video signal input enabled	Video signal input enabled
0	1	1	OFF	OFF
0	0	1	OFF	ON (for APC control)
0	1	1	OFF	OFF

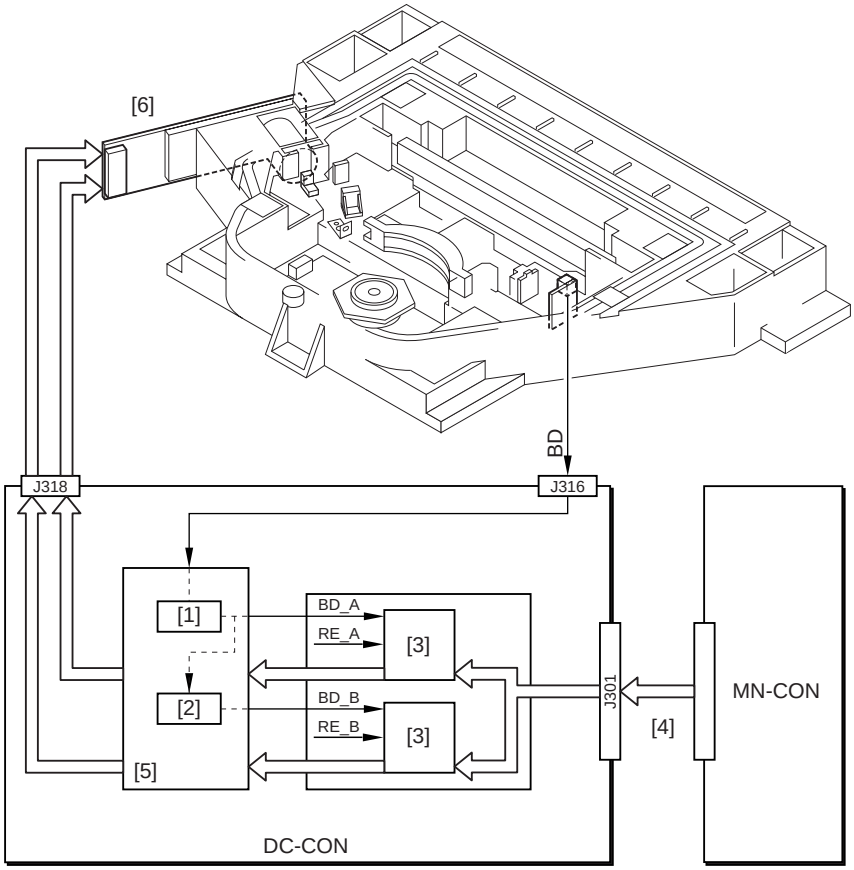


F-6-5

6.3.1.2 Main Scanning Synchronous Control 0006-5974

iR2270 / iR2870 / iR3570 / iR4570

The synchronous control in the main scanning direction is performed in the synch circuit based on the BD synch signal.
Using the BD signal generated based on the light from laser A, the DC controller PCB generates the BD synch signal for laser A and the BD synch signal for laser B.
The image data written to line memory is read out by the readout enable signal (RE_A, RE_B) generated based on the BD synch signal (BD_A, BD_B) for output to the laser driver PCB.



F-6-6

[1] Sync circuit
[2] Delay circuit
[3] Line memory
[4] VDO
[5] VDO signal processing block
[6] Laser driver PCB
BD_A/B : BD synch signal
RE_A/B : readout enable signal

Memo:
The BD sensor of the BD PCB receives light from laser A only, and is free of light from laser B, i.e., the BD signal is generated based on the light from laser A.

6.3.2 Controlling the Intensity of Laser Light

6.3.2.1 APC Control

0006-5976

iR2270 / iR2870 / iR3570 / iR4570

The laser light hitting the photodiode included in the laserdiode is monitored and is controlled so that it remains a

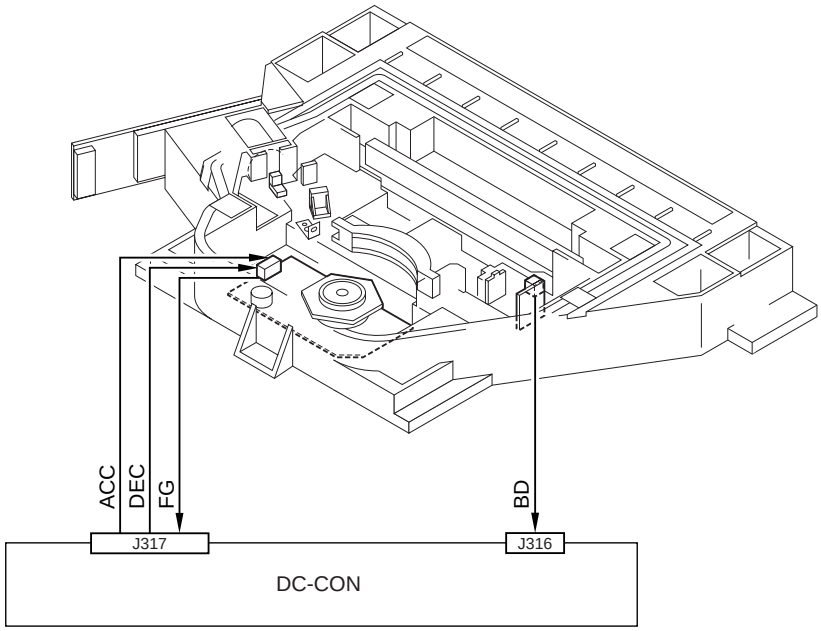
specific level at all times.

6.3.3 Controlling the Laser Scanner Motor

6.3.3.1 Controlling the Laser Scanner Motor 0006-5978

iR2270 / iR2870 / iR3570 / iR4570

The laser scanner motor is controlled with reference to the laser scanner motor revolution signal (FG signal).
The revolution of the laser scanner motor is controlled by means of the acceleration signal (ACC signal) and the deceleration signal (DEC signal).



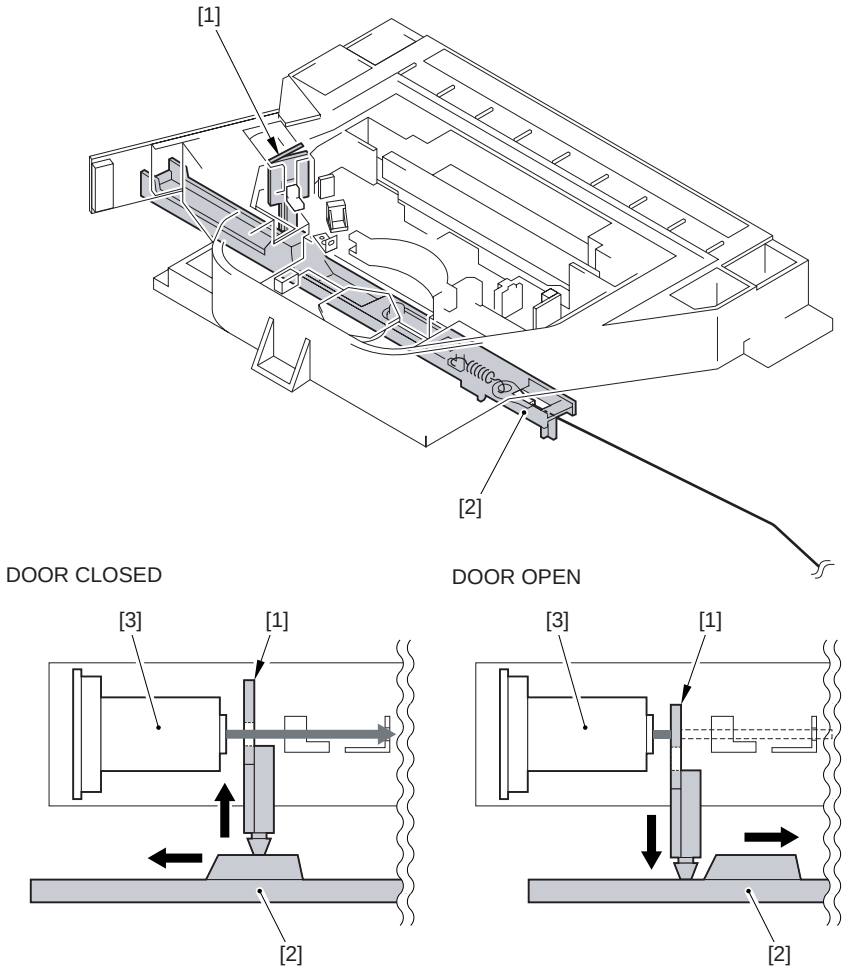
F-6-7

6.3.4 Controlling the Laser Shutter

6.3.4.1 Controlling the Laser Shutter 0006-5979

iR2270 / iR2870 / iR3570 / iR4570

When the right door is opened, the laser shutter link operating in conjunction with the cover causes the laser shutter to move down, thus blocking the path of the laser light. If the machine identifies the front cover or the right door as having been opened, it will turn off the laser scanner motor and the laser output.



F-6-8

[1] Laser shutter
[2] Laser shutter link (operates in conjunction with front cover)
[3] Laser unit

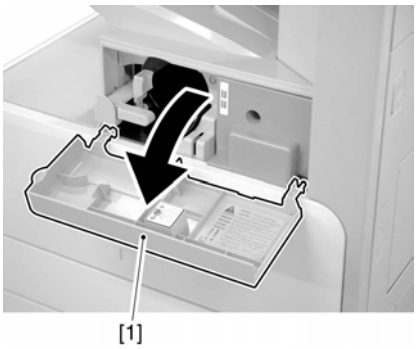
6.4 Parts Replacement Procedure

6.4.1 Laser Scanner Unit

6.4.1.1 Removing the Front Cover Unit 0007-8348

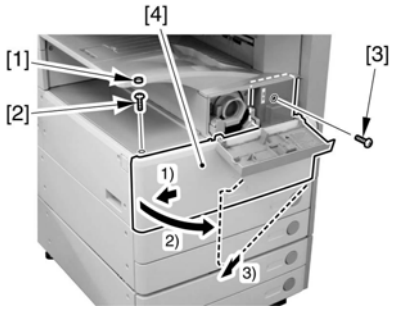
iR2270 / iR2870 / iR3570 / iR4570

1) Open the front cover [1].



F-6-9

2) Remove the face cover rubber [1].
3) Remove the binding screw [2].
4) Remove the RS tightening screw [3].
5) Detach the front cover unit [4] by moving it in the direction of the arrow.

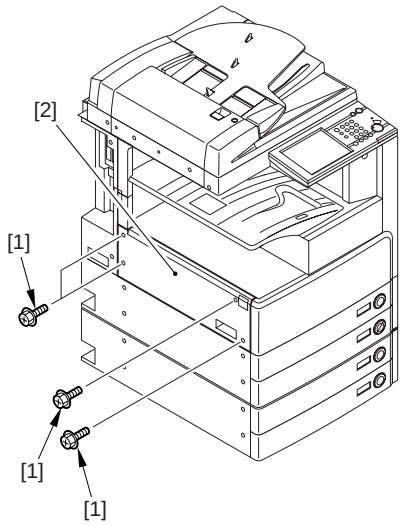


F-6-10

6.4.1.2 Removing the Left Cover 0007-8349

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 4 screws [1], and detach the left cover [2].

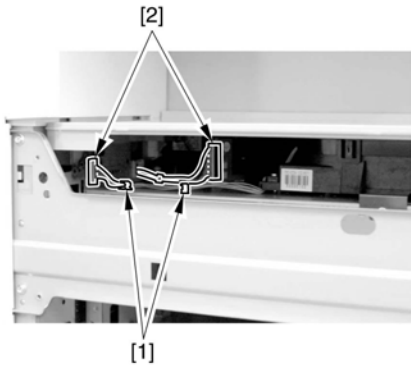


F-6-11

6.4.1.3 Removing the Laser Unit 0007-8350

iR2270 / iR2870 / iR3570 / iR4570

1) Open the 2 wire saddles [1], and disconnect the 2 connectors [2].



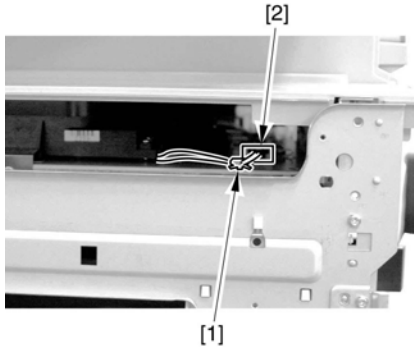
F-6-12

⚠

When you have disconnected the connector [1], be sure to take care so that it will not come into contact with the PCB that is mounted to the laser scanner unit. (The PCB is equipped with a laser intensity

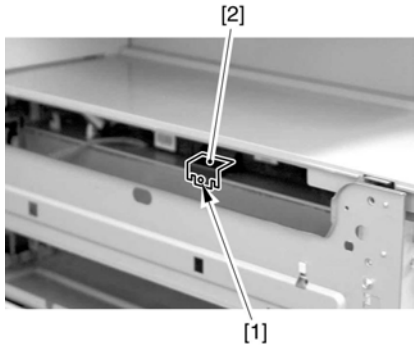
adjustment variable resistor. Contact with the PCB can change the adjustment setting.)

2) Open the wire saddle [1], and disconnect the connector [2].



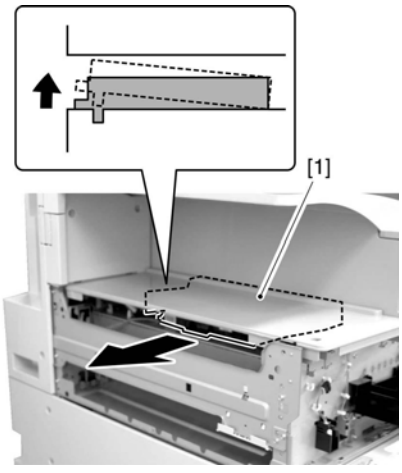
F-6-13

3) Remove the screw [1], and detach the fixing [2].



F-6-14

4) Lift the front of the laser unit [1], and slide it to the front.



F-6-15

⚠

When sliding out the laser scanner unit, be sure to take care not to touch the PCB mounted to the laser scanner unit. (The PCB is equipped with a laser scanner intensity adjustment variable resistor, and contact with the PCB can change the adjustment setting.)

Chapter 7 Image Formation

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7.1 Construction

7.1.1 Specifications of the Image Formation System

0006-6168

iR2270 / iR2870 / iR3570 / iR4570

T-7-1

Drum Unit Specifications

Photosensitive drum		
	Drum type	OPC
	Drum diameter	30 mm
	Cleaning mechanism	by cleaning blade
	Process speed	230 mm/sec (iR3570/iR4570) 137 mm/sec (iR2270/iR2870)
Primary charging		
	Charging method	by roller (AC + DC)
	Charging roller diameter	16 mm
	Cleaning mechanism	by brush roller (reciprocating mechanism)
Transfer charging		
	Charging method	by roller (DC)
	Charging roller diameter	16 mm

T-7-2

Pre-Exposure Unit Specifications

LED	12 pc.
Timing of light emission	in response to drum rotation

T-7-3

Developing Unit Specifications

Developing cylinder diameter	20 mm

Development method	by dry, single-component toner projection method (application of AC + DC)
Toner	single-component insulating magnetic toner
Toner level detection	by toner level sensor (inside sub hopper and developing assembly)

T-7-4

Toner Cartridge Specifications

Toner level detection	none
Toner variable resistor	1220 g (iR3570/iR4570) 1060 g (iR2270/iR2870)

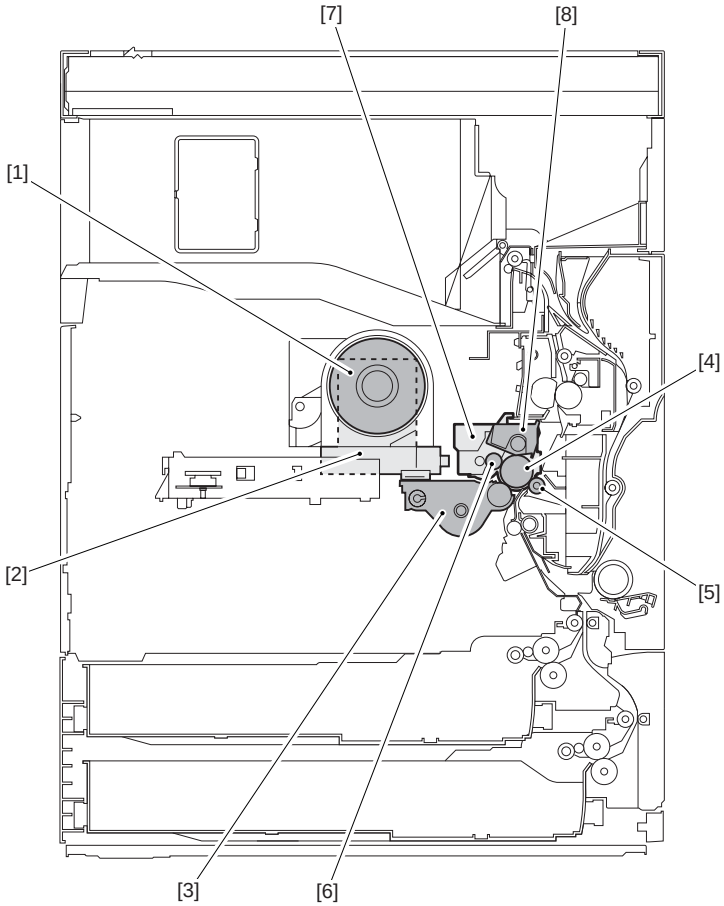
T-7-5

Others

separation method	by static eliminator + curvature
Waste toner	collection to waste toner case

7.1.2 Major Components of the Image Formation System 0006-5981

iR2270 / iR2870 / iR3570 / iR4570



F-7-1

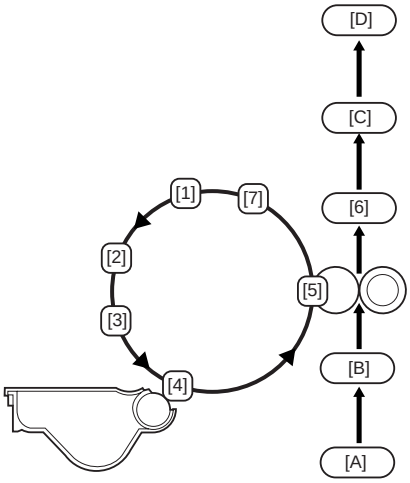
[1] Toner cartridge
[2] Sub hopper
[3] Developing unit
[4] Photosensitive drum
[5] Transfer roller
[6] Primary charging roller
[7] Drum unit
[8] Drum cleaning unit

7.2 Image Formation Process

7.2.1 Image Formation Process (outline)

0006-5983

iR2270 / iR2870 / iR3570 / iR4570



F-7-2

T-7-6

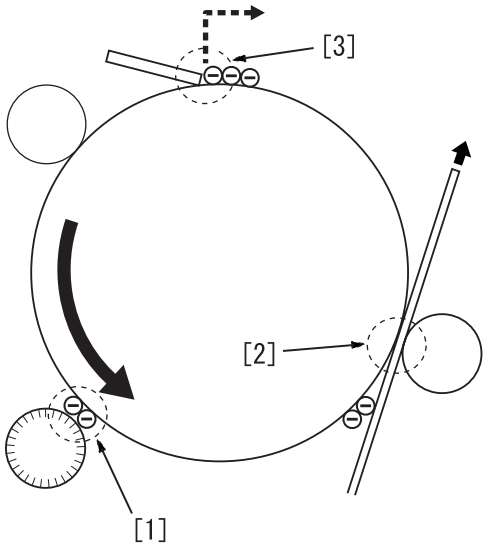
Item	Description
[1]Pre-exposure	removes residual charges from the drum.
[2]Primary charging	charges the surface of the photosensitive drum to a uniform negative potential.
[3]Laser exposure	forms a latent static image on the drum.
[4]Development	forms a visible image on the drum.
[5]Transfer	transfers images from the drum to paper.
[6]Separation	separates paper from the drum.
[7]Drum cleaning	removes toner from the drum.

[A]Pickup
[B]Registration
[C]Fixing
[D]Delivery

7.2.2 Image Formation Process (image formation)

0006-6411

iR2270 / iR2870 / iR3570 / iR4570



F-7-3

[1] The difference in potential between the drum surface and the developing sleeve causes toner to adhere to the latent static image on the drum, turning the image into a visible image.

[2] The bias voltage applied to the transfer roller causes the toner to move from the drum to paper.

[3] The cleaning blade in contact with the drum scrapes off the residual toner from the drum.

7.3 Basic Sequence

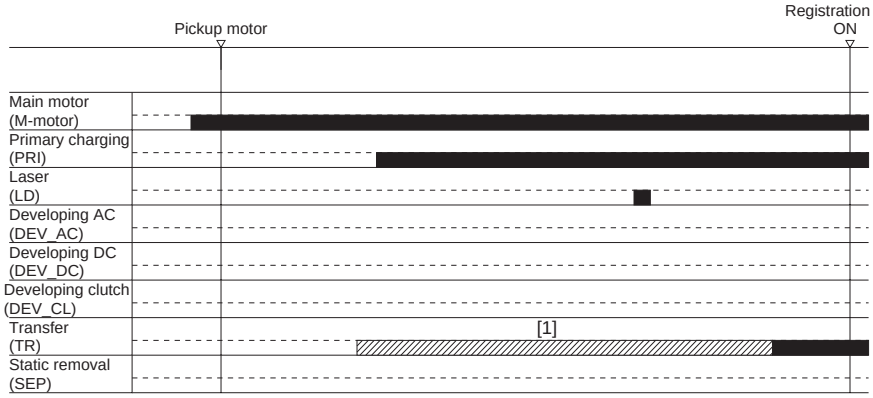
7.3.1 Sequence of Operation (initial rotation)

0006-6865

iR2270 / iR2870

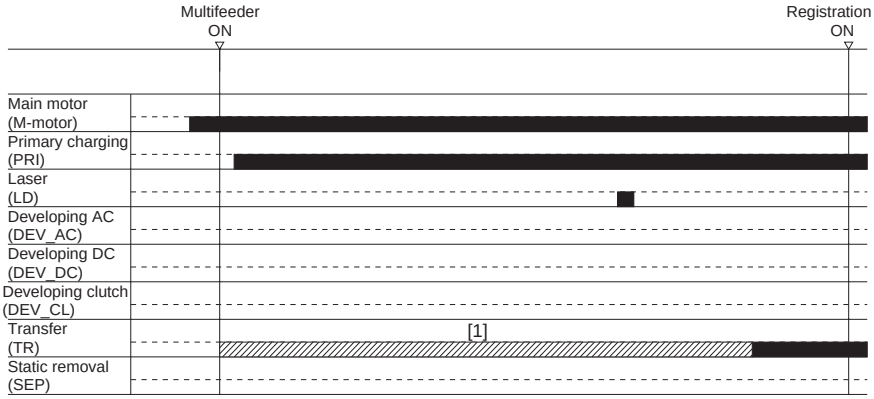
The sequence of operation of initial rotation is as follows:

Pickup from the Cassette



F-7-4

Pickup from the Manual Feeder



F-7-5

⚠

In [1] above, a cleaning bias (-2600 V) is applied.

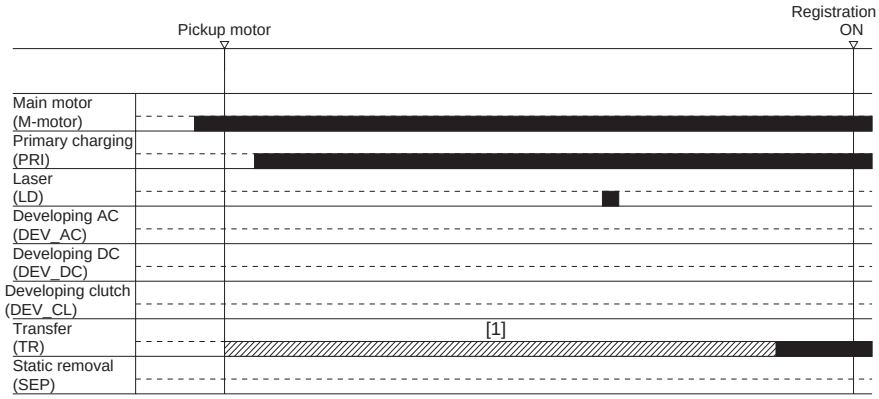
7.3.2 Sequence of Operation (initial rotation)

0006-6867

iR3570 / iR4570

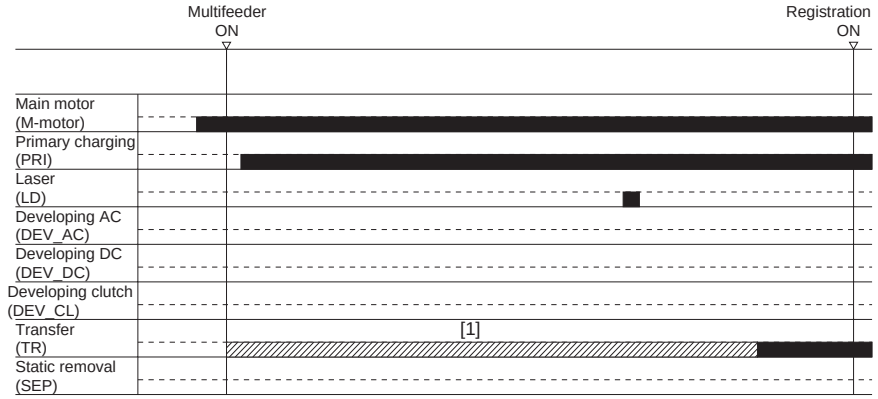
The following is the sequence of operation of initial rotation:

Pickup from the Cassette



F-7-6

Pickup from the Manual Feeder



F-7-7

⚠

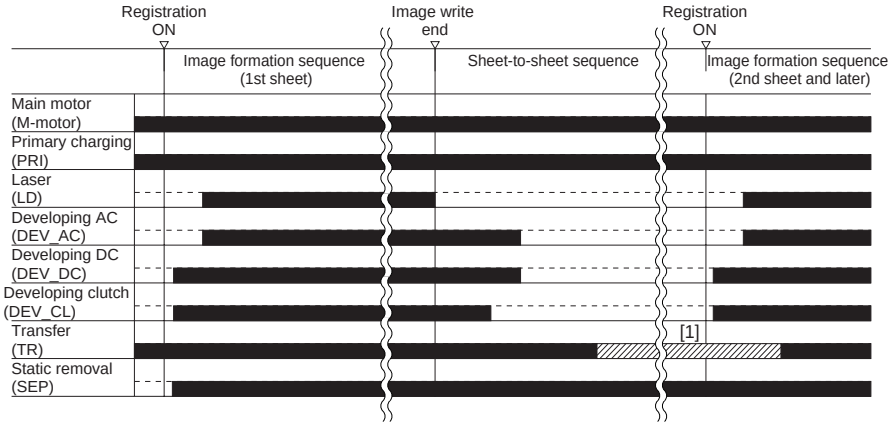
In [1] above, a cleaning bias (-2600 V) is applied.

7.3.3 Sequence of Operation (copying)

0006-6868

iR2270 / iR2870

The sequence of operation during copying is as follows:



F-7-8

⚠

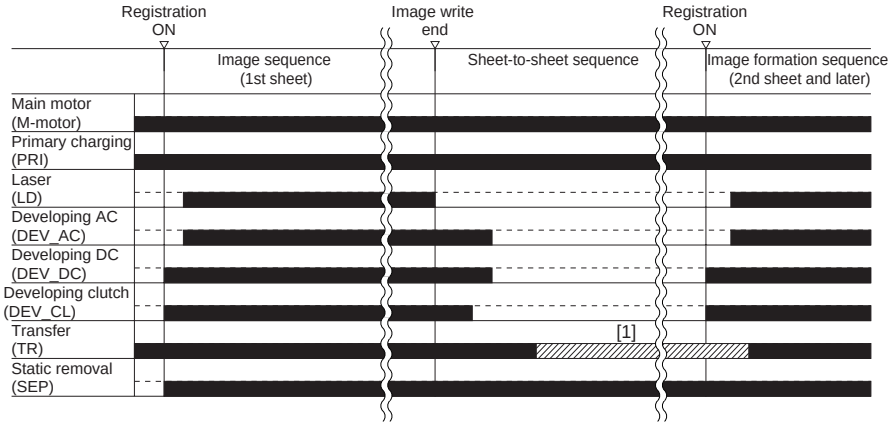
In [1] above, a cleaning bias (-2600 V) is applied.

7.3.4 Sequence of Operation (copying)

0006-6869

iR3570 / iR4570

The sequence of operation during copying is as follows:



F-7-9

⚠

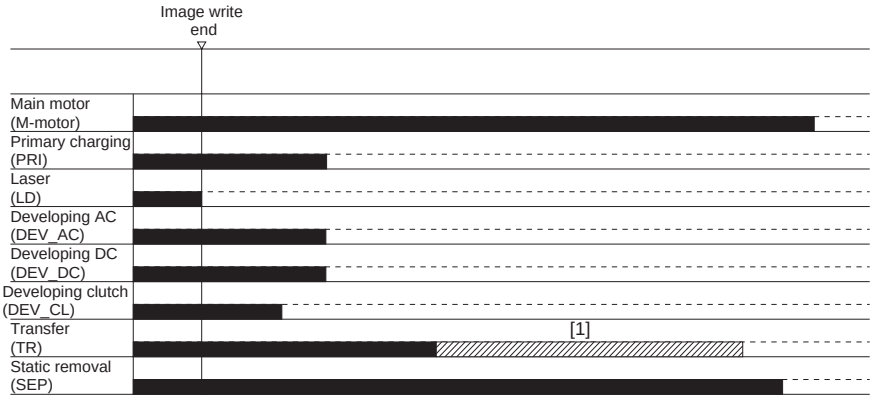
In [1] above, a cleaning bias (-2600 V) is applied.

7.3.5 Sequence of Operation (last rotation)

0006-6870

iR2270 / iR2870

The sequence of operation of last rotation is as follows:



F-7-10

⚠

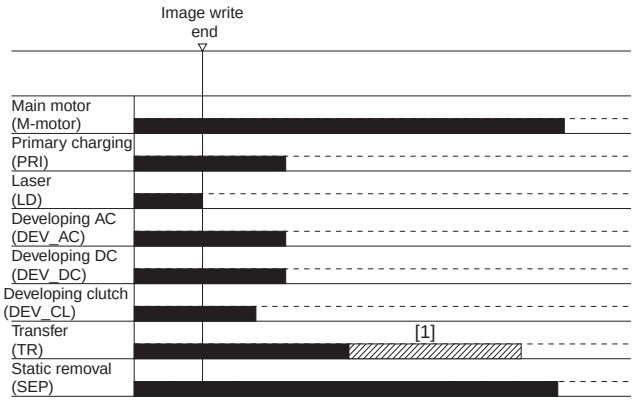
In [1] above, a cleaning bias (-2600 V) is applied.

7.3.6 Sequence of Operation (last rotation)

0006-6871

iR3570 / iR4570

The sequence of operation of last rotation is as follows:



F-7-11

⚠

In [1] above, a cleaning bias (-2600 V) is applied.

7.4 Image Stabilization Control

7.4.1 Overview

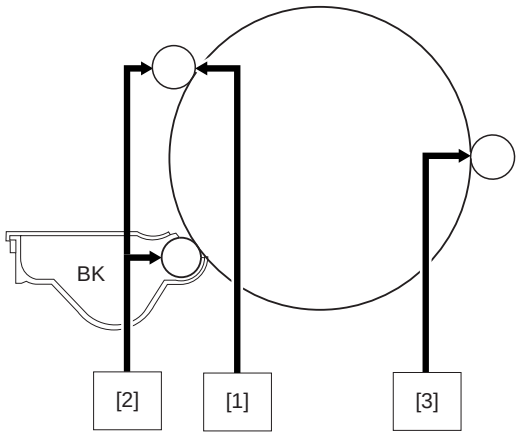
0006-5986

iR2270 / iR2870 / iR3570 / iR4570

At times, changes in the environment or wear on the machine can cause its image output to become unstable. To make sure that its output will remain stable at all times, the machine uses the following control mechanisms:

T-7-7

[1] Drum film thickness detection control	corrects the development contrast.
[2] Developing contrast control	determines the appropriate primary charging DC bias and developing DC bias.
[3] ATVC control	corrects the transfer bias.



F-7-12

7.4.2 APVC Control

0006-5987

iR2270 / iR2870 / iR3570 / iR4570

The term APVC stands for "auto primary voltage control," and it is a mechanism used to control the primary charging application voltage (DC component) to suit the film thickness of the machine's photosensitive drum. APVC is performed every 500 sheets while the machine is in operation. It is forcibly performed when the drum unit is replaced.

7.4.3 ATVC Control

0006-5989

iR2270 / iR2870 / iR3570 / iR4570

The machine is provided with a constant current control mechanism that can be enabled or disabled in service mode: COPIER>OPTION>BODY>TRANS-SW.

7.5 Drum Unit

7.5.1 Charging Mechanism

7.5.1.1 Controlling the Primary Charging Bias 0006-5991

iR2270 / iR2870 / iR3570 / iR4570

T-7-8

Primary Charging Bias

AC bias	2700 Vp-p (max.)
DC bias	-450 V to -850 V

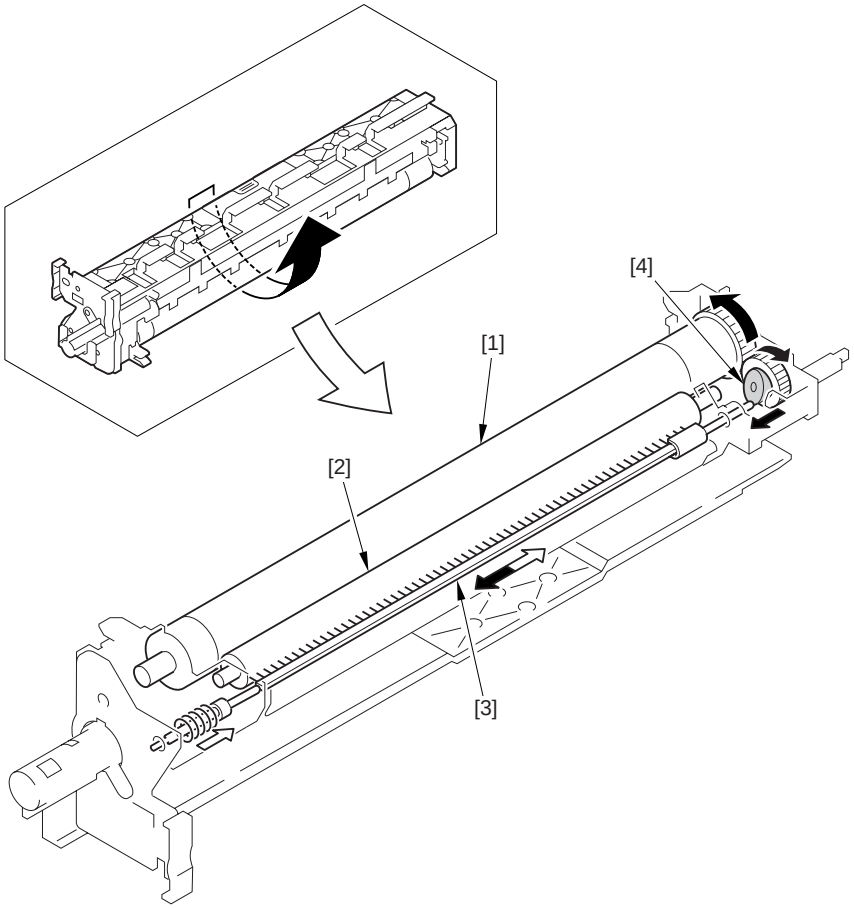
⚠

These AC and DC biases are applied between sheets while an image is being formed (until the end of the ongoing job).

7.5.1.2 Primary Charging Roller Cleaning Mechanism 0006-5992

iR2270 / iR2870 / iR3570 / iR4570

The machine uses a brush [3] to clean the primary charging roller [2], which remains in contact with the photosensitive drum [1]. The brush has a reciprocating mechanism and is driven by a cam [4], operating while the photosensitive drum is being driven.



F-7-13

7.6 Drum Cleaner Unit

7.6.1 Photosensitive Drum Cleaning

0007-5224

iR2270 / iR2870 / iR3570 / iR4570

The cleaning blade is kept in contact with the surface of the photosensitive drum. It serves to scrape off the residual toner left behind from transfer to paper for collection in the waste toner box.

7.7 Developing Unit

7.7.1 Controlling the Developing Bias

0006-6032

iR2270 / iR2870 / iR3570 / iR4570

T-7-9

Developing Bias

AC bias	800 Vp-p
DC bias	-450 V to -650 V

⚠

Both these AC and DC biases are applied while an image is being formed, but are not applied between sheets.

7.8 Toner Container

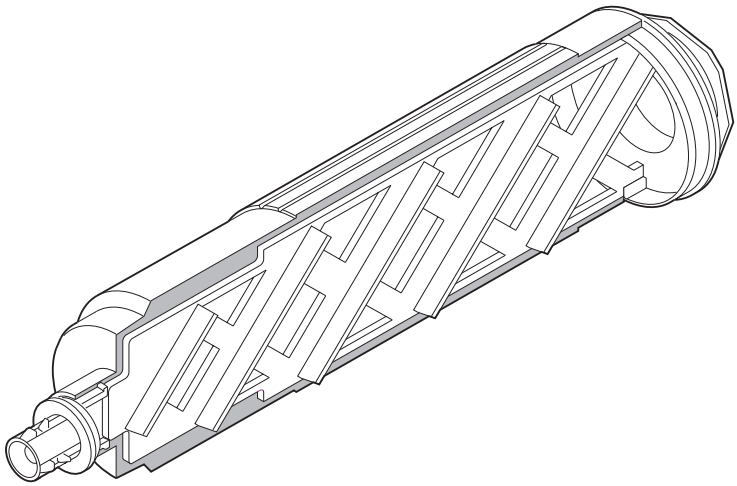
7.8.1 Overview

0006-6323

iR2270 / iR2870 / iR3570 / iR4570

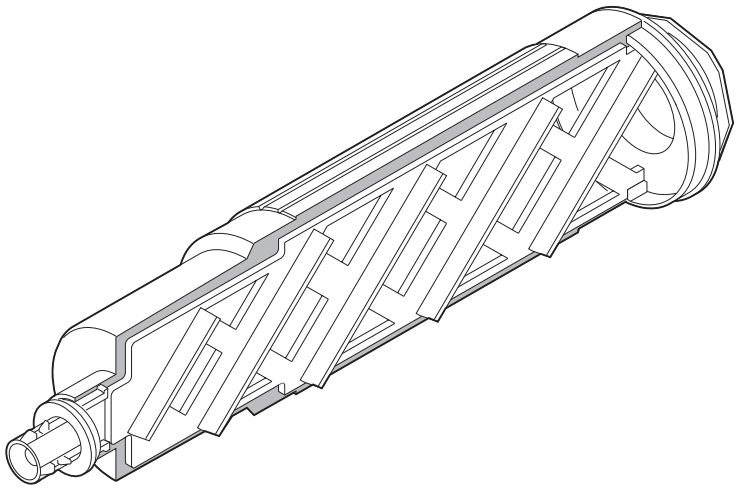
The toner cartridge is constructed as shown in the following figure. The cartridge is filled with 1-component insulating magnetic toner (if iR3570/4570, 1220 g; if iR2270/2870, 1060 g). When the sub hopper requests a supply of toner, the cartridge itself rotates to feed toner. The machine's toner cartridge serves as a hopper (as it is found in past models).

iR3570 / iR4570



F-7-14

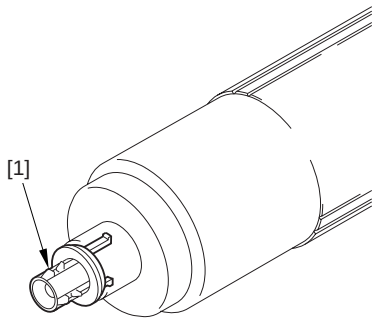
iR2270 / iR2870



F-7-15

⚠Points to Note on Handing the Toner Cartridge

1. Care should be taken not to bump the toner stop [1] against the covers or the like when and after removing the toner cartridge. Since the toner stop comes off easily, toner scattering may be resulted if it comes off by accident.
2. Keep the toner cartridge horizontal after removing. Since the toner stop [1] comes off easily as mentioned above, toner scattering may be resulted if the toner cartridge is placed with the toner stop side down.



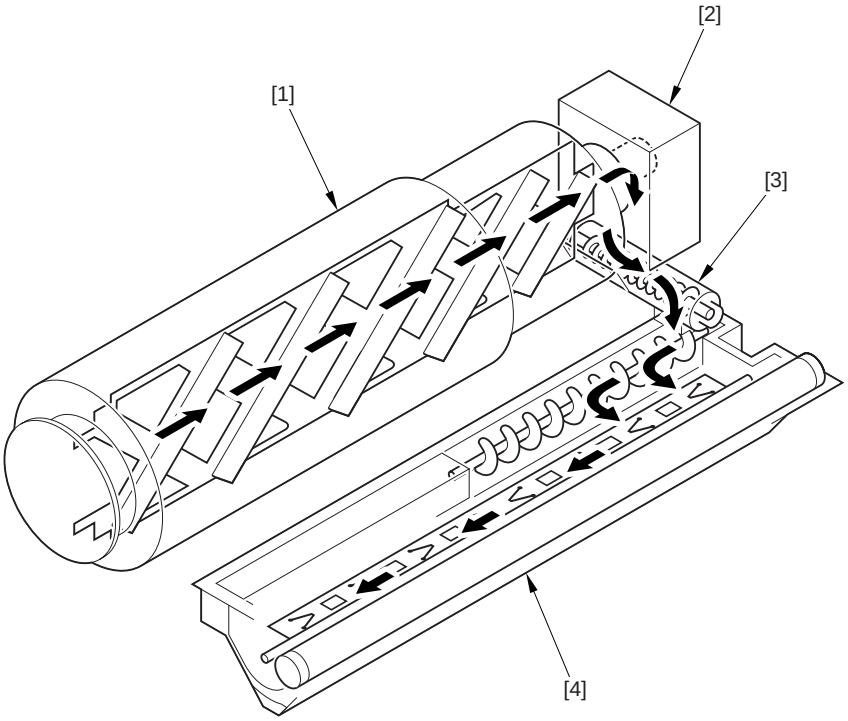
F-7-16

7.8.2 Route of Toner Supply

0006-6363

iR2270 / iR2870 / iR3570 / iR4570

When the user fits the toner cartridge [1] in place, toner is temporarily stored in the sub hopper [2], inside which is a sensor that makes sure that the amount of toner remains at a specific level at all times. When the developing assembly [4] requests a supply of toner, the machine rotates the feedscrew [3] to move toner from the sub hopper to the developing assembly.
The machine's toner cartridge serves as a hopper (as found in past models).



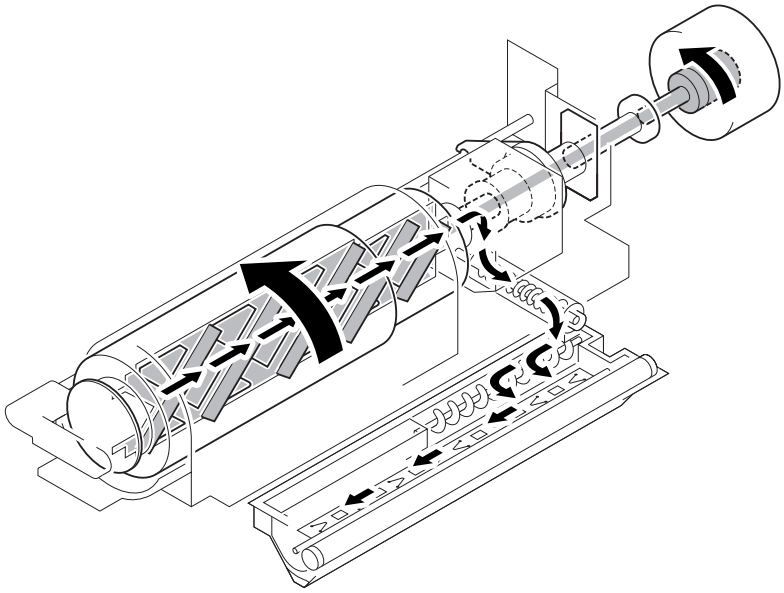
F-7-17

7.8.3 Controlling the Drive of the Toner Cartridge

0006-5996

iR2270 / iR2870 / iR3570 / iR4570

When a request is made for a supply of toner, the toner cartridge drive motor rotates in the direction shown in the following figure; its drive is transmitted from the drive motor to the toner cartridge, thus rotating the toner cartridge.



F-7-18

7.8.4 Toner Supply Control

0006-5995

iR2270 / iR2870 / iR3570 / iR4570

Supply of Toner from the Toner Bottle to the Sub Hopper

If the "absence of toner inside the sub hopper" is detected while the main motor is rotating, the bottle motor is rotated intermittently (on for 3 sec, off for 2 sec), and the length of time during which the absence is detected is checked using a counter that increases its count for each on-off cycle. When the count reaches 20 (about 100 sec), the machine will assume that the sub hopper has become empty, and will indicate the Add Toner message on its control panel. The counter is reset when the presence of toner inside the sub hopper is detected during any on-off cycle.

If the "absence of toner inside the developing assembly" is detected while the main motor is rotating and the developing clutch is on, the machine rotates the sub hopper feedscrew motor intermittently (on for 1 sec, off for 1 sec). The rotation is monitored by a counter that increases its count when the developing sensor state is off during a single on-off cycle; when its reading reaches 20 (about 40 sec), the machine will assume that its developing assembly is more or less empty (i.e., there is a possibility of the ongoing generating black prints if printing continues), and will issue a No Toner error, suspending image formation operation. The counter is reset when the presence of toner is detected inside the developing assembly.

⚠

E020-0000
If the absence of toner is detected by the developing assembly toner level sensor and the presence of toner is detected by the hopper toner level sensor, the route of supply from the sub hopper to the developing assembly may be clogged or the output of these toner sensors may be faulty.
This error code will be indicated when the soft counter reaches 194 (about 388 sec). The counter is designed to increase its count when the hopper sensor level is on during a single on-off cycle while toner is being supplied from the sub hopper to the developing assembly.

7.8.5 Recovery Sequence

0007-5234

iR2270 / iR2870 / iR3570 / iR4570

The machine is not equipped with a mechanism to detect the replacement of its toner cartridge, but is designed to execute toner recovery sequence in response to the following, assuming that the cartridge has been replaced:

1. the front cover has been opened and closed after the machine has detected the absence of toner inside the toner cartridge and the developing assembly.
2. the machine has been turned off and then on after it has detected the absence of toner inside the toner cartridge and the developing assembly.

The machine's recovery sequence is as follows:

1. the machine rotates the toner cartridge motor. (intermittently by rotating it for 3 sec and stopping it for 2 sec)
2. if the toner level sensor inside the sub hopper detects the "presence of toner," the machine stops the recovery sequence.
3. after repeating the foregoing intermittent operation 20 times and if the toner level sensor inside the sub hopper still

does not detect the "presence of toner," the machine will assumes that the toner cartridge has not been replaced and cause the toner cartridge motor to stop.

7.8.6 Toner Level Detection

0006-6350

iR2270 / iR2870 / iR3570 / iR4570

Detecting the Level of Toner Inside the Sub Hopper

The machine checks the level of the toner sensor located inside the sub hopper every 100 msec, and will assume the presence of toner inside the sub hopper if the sensor goes on twice or more continuously (200 msec or more).

If the machine detects the absence of toner 100 times or more (10 sc or more) as the result of its check on the sensor level made every 100 msec, the machine will assume that there is no toner inside the sub hopper.

The machine executes the foregoing detection at all times regardless of the state (on or off) of the main motor and the developing clutch.

Detecting the Level of Toner Inside the Developing Assembly

1. The machine samples the output of the toner level sensor located inside the developing assembly every 100 msec (only if the developing clutch is on).
2. The machine uses a period of 1.5 sec (15 times; cumulative sampling of periods when the clutch is on) as the unit of measurement: if the presence of toner is detected 3 times or more, it will assume that there is toner inside the developing assembly; if the presence of toner is detected less than 3 times, on the other hand, it will assume that there is no toner inside the developing assembly.

However, in the case of the iR3570/iR4570 Series machines, the drive of the main motor is controlled to 2 different speeds, and the toner inside the developing assembly is driven by the main motor (using a clutch), requiring a switchover of methods of detection as follows:

Normal Speed Mode

The machine uses a period of 1.5 sec (25 times; cumulative sampling of periods when the clutch is on) as the unit of measurement: if the presence of toner is detected 3 times or more, it will assume that there is toner inside the developing assembly.

Low-Speed Mode

The machine uses a period of 2.5 sec (42 times; cumulative sampling of periods when the clutch is on) as the unit of measurement: if it detects the presence of toner 5 times or more, it will assume that there is toner inside the developing assembly.

The machine converts the number of samplings and the number of times toner detection has been executed when switching over methods of detection. (The conversion is based on the speed-to-amount relationship.)

7.9 Transfer Unit

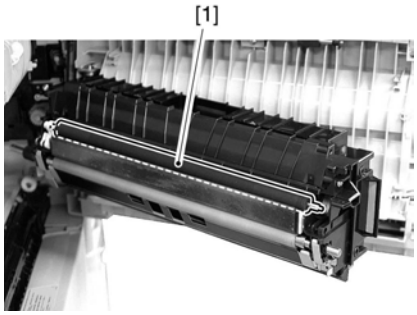
7.9.1 Outline of the Transfer Unit

7.9.1.1 Outline

0006-5997

iR2270 / iR2870 / iR3570 / iR4570

The transfer unit [1] consists of the transfer roller and the static eliminator.
The transfer roller rotates in connection with the photosensitive drum.
Bias is applied to the static eliminator so that sheets can be separated from the drum.



F-7-19

7.9.2 Controlling the Transfer Bias

7.9.2.1 Transfer Roller Bias Control

0006-5998

iR2270 / iR2870 / iR3570 / iR4570

The machine changes the output depending on the site environment (absolute moisture content), paper type, paper width, and source of paper.

Environment: 5 settings according to absolute moisture content
Paper type: plain paper, envelope, heavy paper, tracing paper, transparency, bond paper, label sheet
Paper width: size boundaries as defined by 2 points
Source of paper: if from cassette (including pedestal); if from multi-feeder, i.e., 1st side (half-speed), 2nd side (half-speed)

Transfer bias

Transfer bias: 1000 to 6000 V
Transfer bias for cleaning: -2600 V

⚠

The transfer bias is used at time of image formation, while a voltage of a specific level is applied between sheets for cleaning of the transfer roller.

7.9.3 Cleaning

7.9.3.1 Transfer Roller Cleaning Mechanism 0006-6318

iR2270 / iR2870 / iR3570 / iR4570

The machine uses the transfer roller cleaning mechanism to return the toner sticking to the transfer roller back to the photosensitive drum by applying a cleaning bias to the roller.
Once the toner reaches the drum, it is scraped by the photosensitive drum cleaning blade for collection in the waste toner box.

7.9.4 Separation Mechanism

7.9.4.1 Controlling the Static Eliminator Bias 0006-6001

iR2270 / iR2870 / iR3570 / iR4570

Static Eliminator Bias

1st side: -2300 V
2nd side: -3000 V

⚠

A DC bias is applied between sheets while an image is being formed. (It is applied until the ongoing job is over.)

7.10 Transfer Mechanism

7.10.1 Transfer Guide Bias

7.10.1.1 Transfer Guide Bias Control 0007-5295

iR2270 / iR2870 / iR3570 / iR4570

To prevent soiling of the transfer guide with toner or the photosensitive drum with toner images, the following transfer guide bias is applied to the transfer guide. The surface of the transfer guide is covered with an insulating sheet.

Transfer guide bias

1st side: -570 V

2nd side: -740 V

7.11 Photosensitive Drum Cleaning

7.11.1 Outline

0006-6033

iR2270 / iR2870 / iR3570 / iR4570

The photosensitive drum cleaning mechanism uses the photosensitive drum cleaning blade to scrape off the residual toner left behind from transfer; the toner thus collected is moved to the waste toner box.

7.11.2 Collection of Waste Toner

0006-6034

iR2270 / iR2870 / iR3570 / iR4570

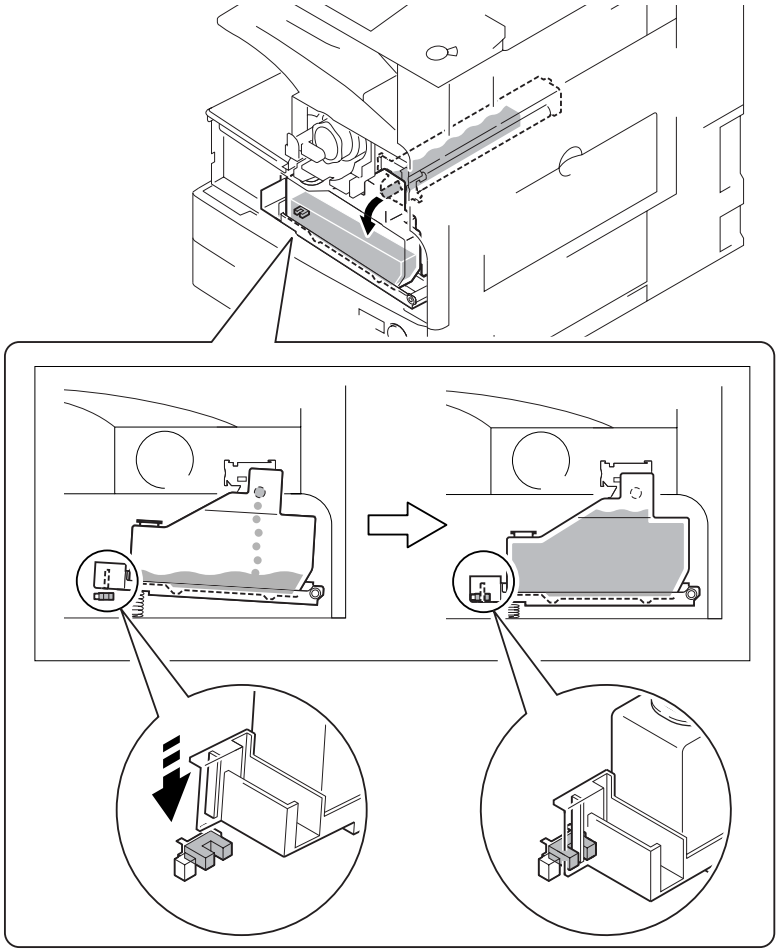
The waste toner scraped off by the cleaning blade is moved by the waste toner feedscrew to the waste toner box found at the front of the machine. The waste toner feedscrew is operated by the drive from the drum flange.

7.11.3 Checking the Waste Toner Box

0006-6036

iR2270 / iR2870 / iR3570 / iR4570

To prevent leakage of waste toner from the waste toner box or to prevent overloading the waste toner feedscrew, the machine is equipped with a waste toner detection mechanism. The waste toner box can hold about 2043 cc of toner, and the machine identifies the waste toner box as being full when there is about 1766 cc of toner or when the toner comes to weigh about 1050 g.
When the weight of waste toner increases, the waste toner case itself lowers on its own, thus causing the machine to assume that the case has become full.



F-7-20

⚠

E190-0000

When the machine identifies the waste toner full sensor as being continuously on for 2000 sheets, it will indicate a warning; if it then detects the activation of the sensor for 100 sheets continuously, it will indicate 'E190-000'. (The count is increased coinciding with delivery.)

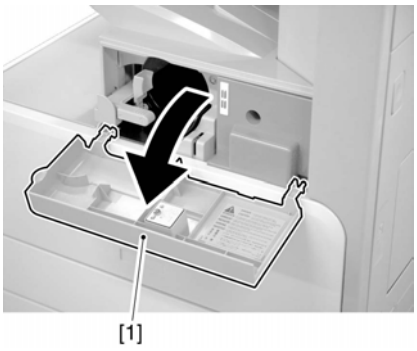
7.12 Parts Replacement Procedure

7.12.1 Pre-Exposure Lamp

7.12.1.1 Removing the Front Cover Unit 0007-8024

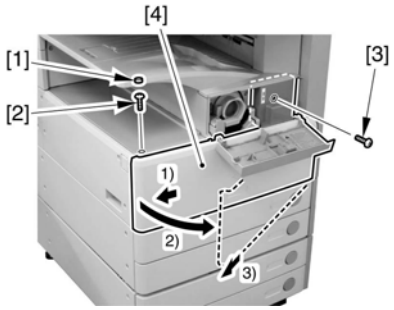
iR2270 / iR2870 / iR3570 / iR4570

1) Open the front cover [1].



F-7-21

2) Remove the face cover rubber [1].
3) Remove the binding screw [2].
4) Remove the RS tightening screw [3].
5) Detach the front cover unit [4] by moving it in the direction of the arrow.

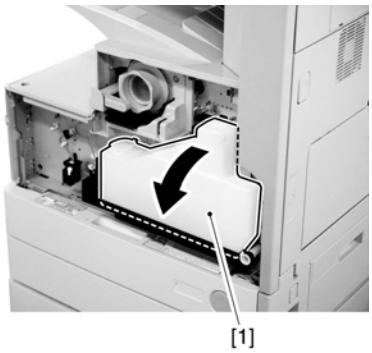


F-7-22

7.12.1.2 Removing the Waste Toner Case 0007-8031

iR2270 / iR2870 / iR3570 / iR4570

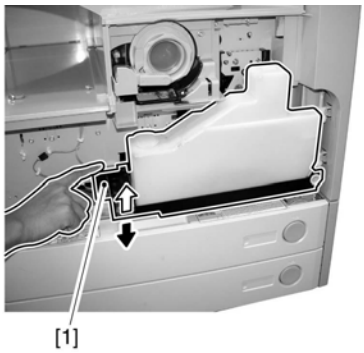
1) Remove the waste toner case [1].



F-7-23

⚠Point to note after attaching the waste toner receptacle

After attaching the waste toner receptacle, move the waste toner full detection lever [1] up and down to make sure that the lever is moved smoothly. Faulty detection may be resulted if the lever is caught in something and is not moved smoothly.

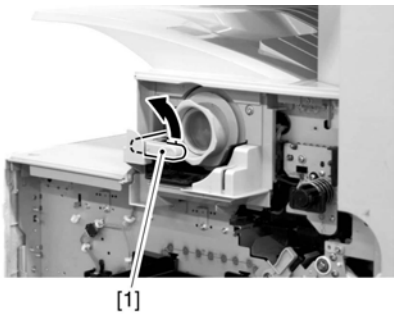


F-7-24

7.12.1.3 Removing the Toner Cartridge 0007-8342

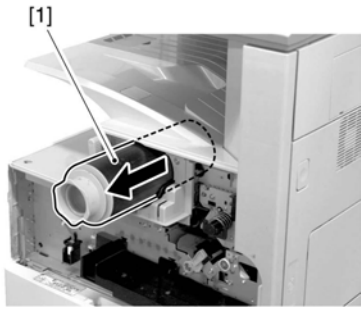
iR2270 / iR2870 / iR3570 / iR4570

1) Shift up the lever [1].



F-7-25

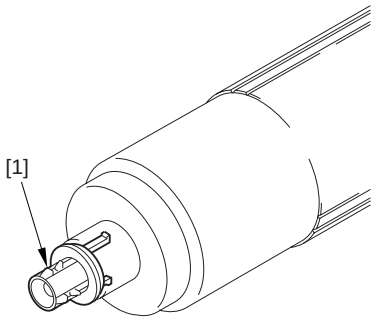
2) Remove the toner cartridge [1].



F-7-26

⚠Points to Note on Handing the Toner Cartridge

1. Care should be taken not to bump the toner stop [1] against the covers or the like when and after removing the toner cartridge. Since the toner stop comes off easily, toner scattering may be resulted if it comes off by accident.
2. Keep the toner cartridge horizontal after removing. Since the toner stop [1] comes off easily as mentioned above, toner scattering may be resulted if the toner cartridge is placed with the toner stop side down.



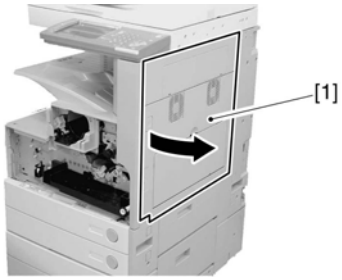
F-7-27

7.12.1.4 Removing the Drum Unit

0007-8343

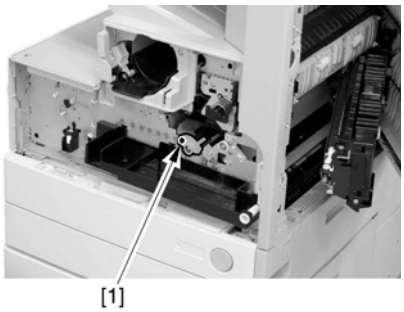
iR2270 / iR2870 / iR3570 / iR4570

1) Open the right door [1].



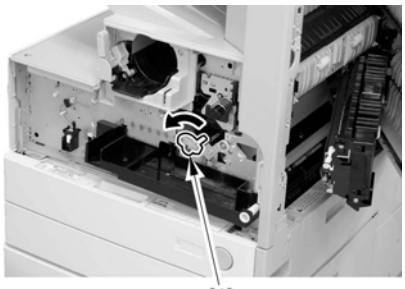
F-7-28

2) Remove the screw [1].



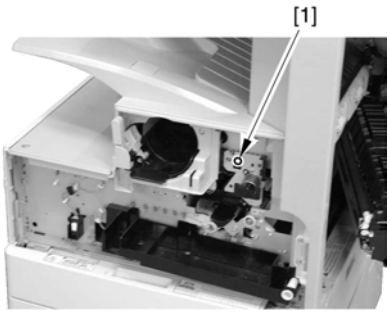
F-7-29

3) Shift the locking lever [1] to the left to release the developing assembly.



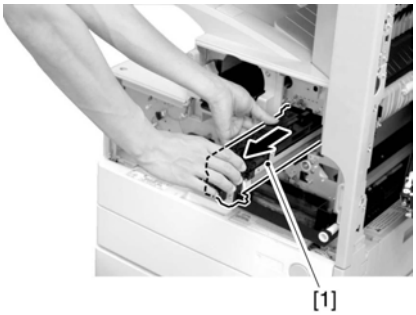
F-7-30

4) Remove the screw [1].



F-7-31

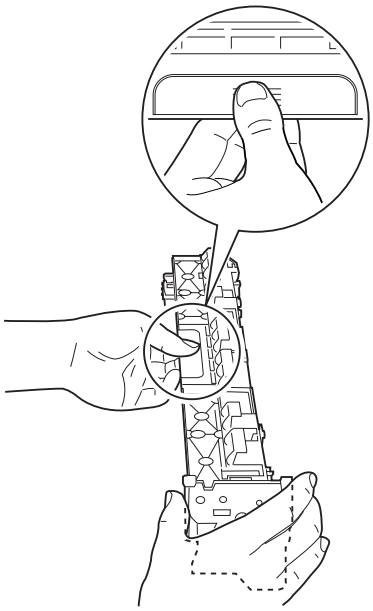
5) Remove the drum unit [1].



F-7-32

⚠

Be sure to hold the drum unit as shown.

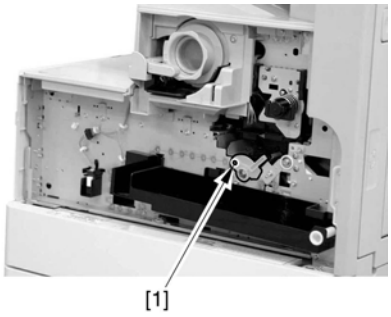


F-7-33

7.12.1.5 Removing the Developing Assembly 0007-8344

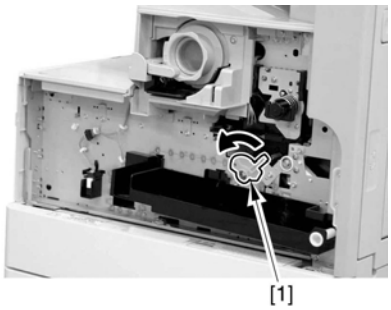
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the screw [1].



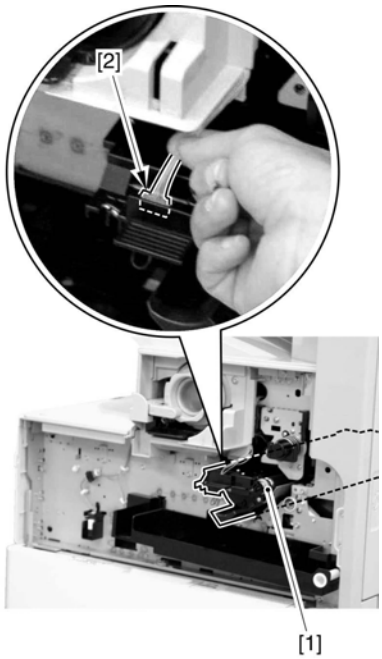
F-7-34

2) Shift the locking lever [1] to the left to release the developing assembly.



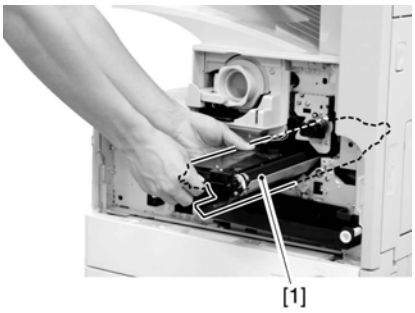
F-7-35

3) Slide the developing assembly [1] slightly to the front; then, disconnect the connector [2].



F-7-36

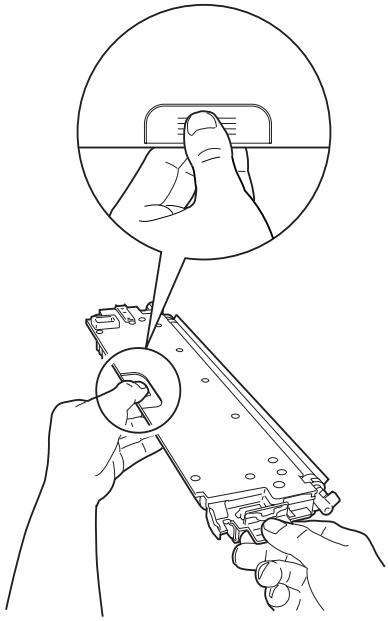
4) Remove the developing assembly [1].



F-7-37

⚠

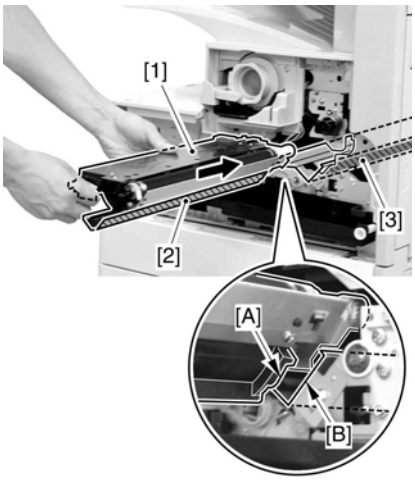
Be sure to hold the developing assembly as shown.



F-7-38

⚠

When fitting the developing assembly, be sure to fit the lower right segment [2] of the developing assembly [1] in the rail [3] of the machine. Thereafter, slide the developing assembly so that [A] of the developing assembly matches [B] of the rail.

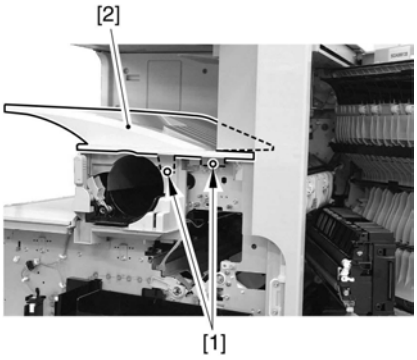


F-7-39

7.12.1.6 Removing the Upper Tray 0007-8345

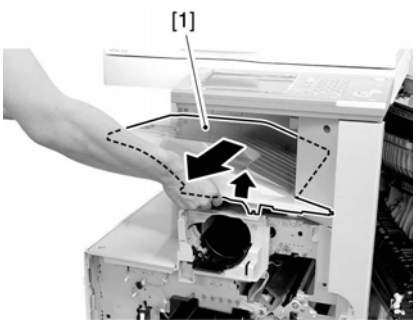
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws [1], and detach the upper tray [2].



F-7-40

Reference:
Lift the front of the upper tray [1], and detach it as if to slide it toward the front.

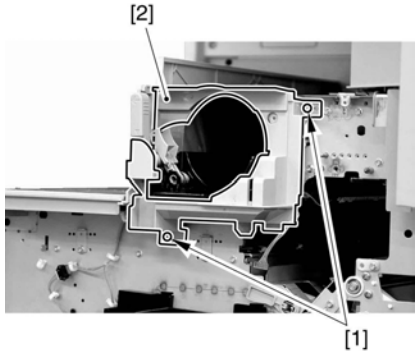


F-7-41

7.12.1.7 Removing the Toner Cartridge Cover 0007-8346

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws [1]; then, detach the toner bottle cover [2].

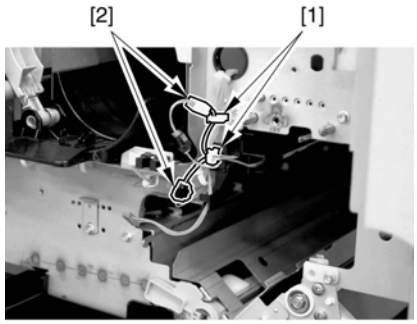


F-7-42

7.12.1.8 Removing the Pre-Exposure Lamp 0007-8347

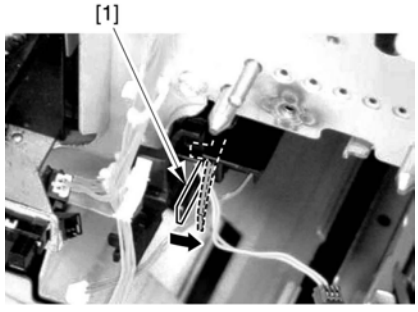
iR2270 / iR2870 / iR3570 / iR4570

1) Open the 2 wire saddles [1], and disconnect the 2 relay connectors [2].

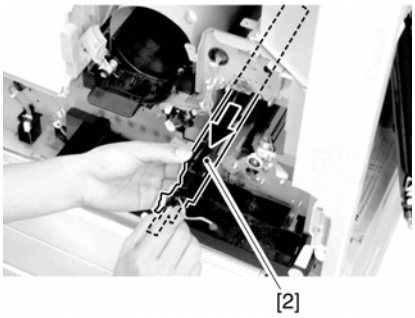


F-7-43

2) While freeing the lock [1] toward the right, detach the pre-exposure lamp [2].



F-7-44



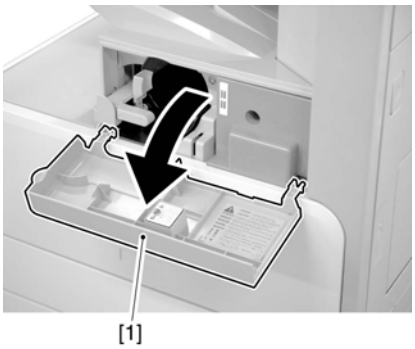
F-7-45

7.12.2 Drum Unit

7.12.2.1 Removing the Front Cover Unit 0007-8023

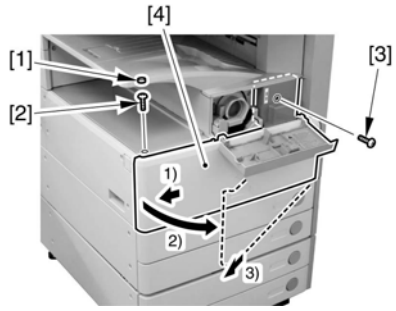
iR2270 / iR2870 / iR3570 / iR4570

1) Open the front cover [1].



F-7-46

2) Remove the face cover rubber [1].
3) Remove the binding screw [2].
4) Remove the RS tightening screw [3].
5) Detach the front cover unit [4] by moving it in the direction of the arrow.

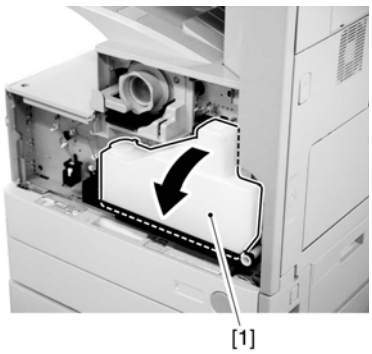


F-7-47

7.12.2.2 Removing the Waste Toner Case 0007-8030

iR2270 / iR2870 / iR3570 / iR4570

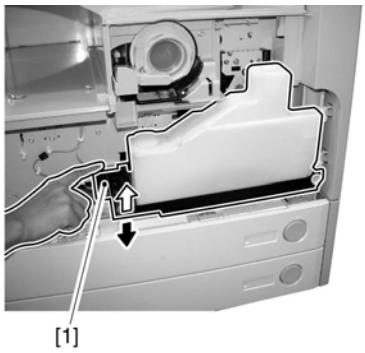
1) Remove the waste toner case [1].



F-7-48

⚠Point to note after attaching the waste toner receptacle

After attaching the waste toner receptacle, move the waste toner full detection lever [1] up and down to make sure that the lever is moved smoothly. Faulty detection may be resulted if the lever is caught in something and is not moved smoothly.

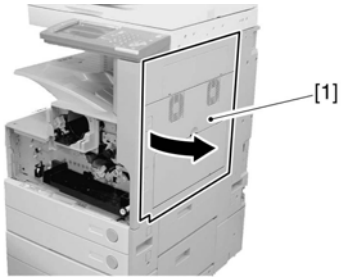


F-7-49

7.12.2.3 Removing the Drum Unit 0007-8341

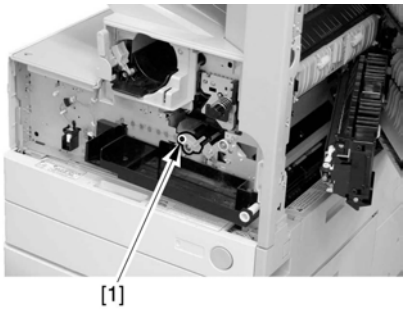
iR2270 / iR2870 / iR3570 / iR4570

1) Open the right door [1].



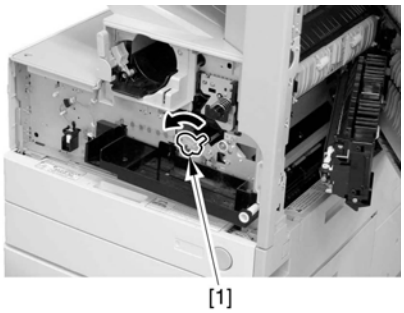
F-7-50

2) Remove the screw [1].



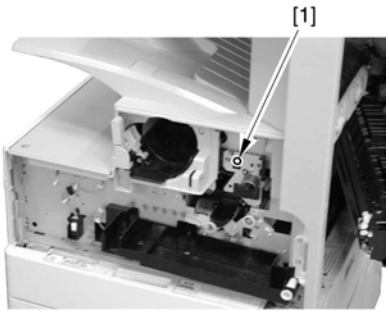
F-7-51

3) Shift the locking lever [1] to the left to release the developing assembly.



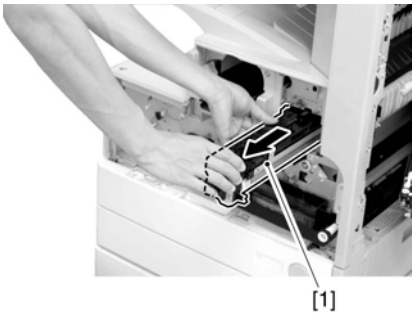
F-7-52

4) Remove the screw [1].



F-7-53

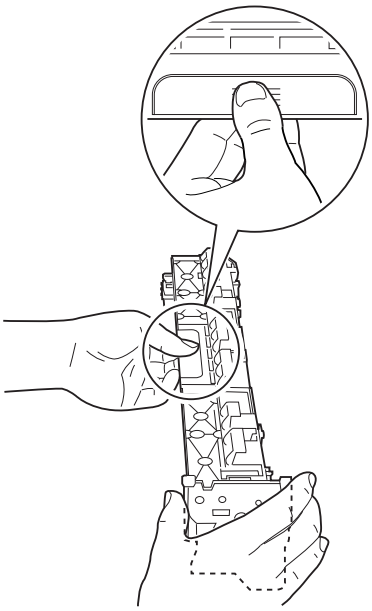
5) Remove the drum unit [1].



F-7-54

⚠

Be sure to hold the drum unit as shown.



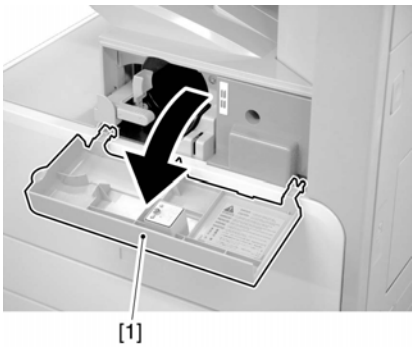
F-7-55

7.12.3 Hopper Assembly

7.12.3.1 Removing the Front Cover Unit 0007-8006

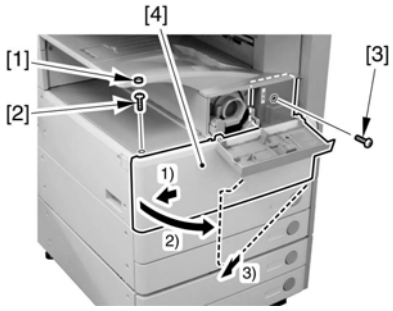
iR2270 / iR2870 / iR3570 / iR4570

1) Open the front cover [1].



F-7-56

2) Remove the face cover rubber [1].
3) Remove the binding screw [2].
4) Remove the RS tightening screw [3].
5) Detach the front cover unit [4] by moving it in the direction of the arrow.

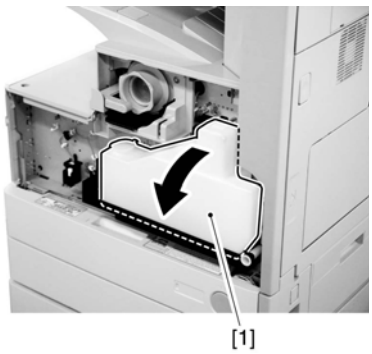


F-7-57

7.12.3.2 Removing the Waste Toner Case 0007-8017

iR2270 / iR2870 / iR3570 / iR4570

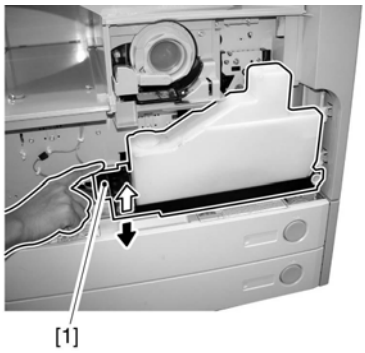
1) Remove the waste toner case [1].



F-7-58

⚠Point to note after attaching the waste toner receptacle

After attaching the waste toner receptacle, move the waste toner full detection lever [1] up and down to make sure that the lever is moved smoothly. Faulty detection may be resulted if the lever is caught in something and is not moved smoothly.

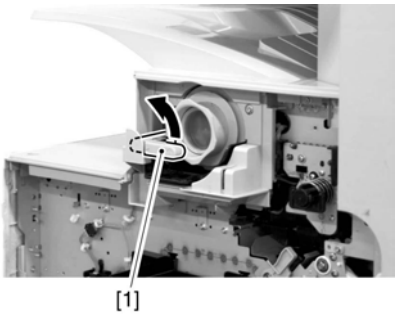


F-7-59

7.12.3.3 Removing the Toner Cartridge 0007-8351

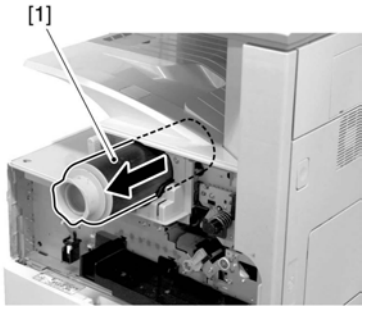
iR2270 / iR2870 / iR3570 / iR4570

1) Shift up the lever [1].



F-7-60

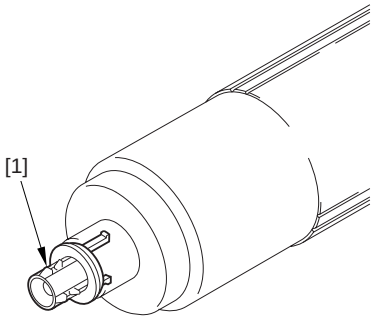
2) Remove the toner cartridge [1].



F-7-61

⚠Points to Note on Handing the Toner Cartridge

1. Care should be taken not to bump the toner stop [1] against the covers or the like when and after removing the toner cartridge. Since the toner stop comes off easily, toner scattering may be resulted if it comes off by accident.
2. Keep the toner cartridge horizontal after removing. Since the toner stop [1] comes off easily as mentioned above, toner scattering may be resulted if the toner cartridge is placed with the toner stop side down.



F-7-62

7.12.3.4 Removing the Drum Unit 0007-8352

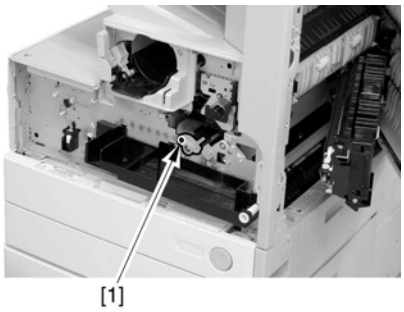
iR2270 / iR2870 / iR3570 / iR4570

1) Open the right door [1].



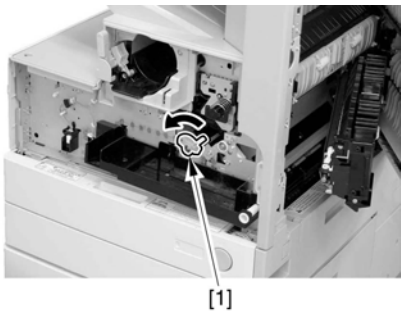
F-7-63

2) Remove the screw [1].



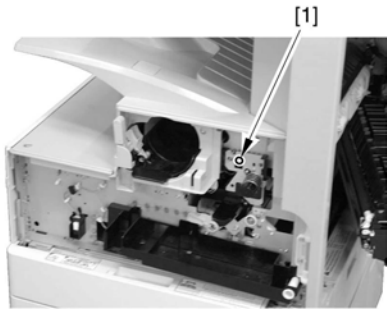
F-7-64

3) Shift the locking lever [1] to the left to release the developing assembly.



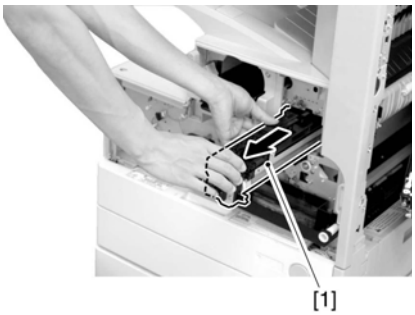
F-7-65

4) Remove the screw [1].



F-7-66

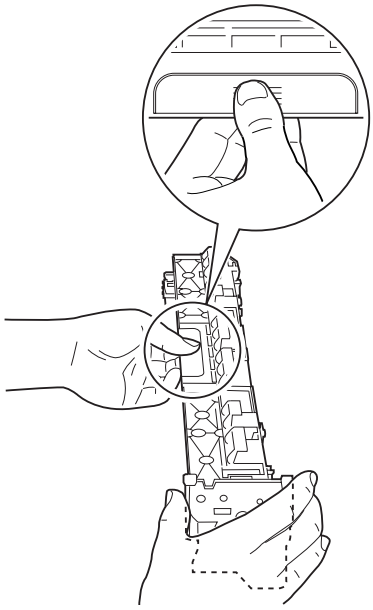
5) Remove the drum unit [1].



F-7-67

⚠

Be sure to hold the drum unit as shown.

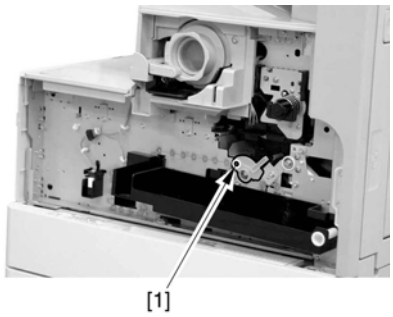


F-7-68

7.12.3.5 Removing the Developing Assembly 0007-8353

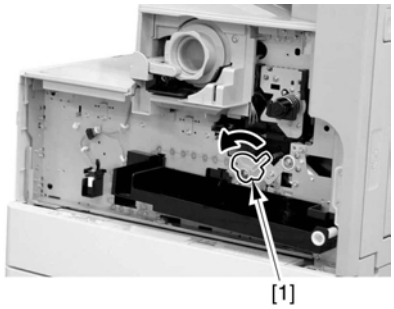
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the screw [1].



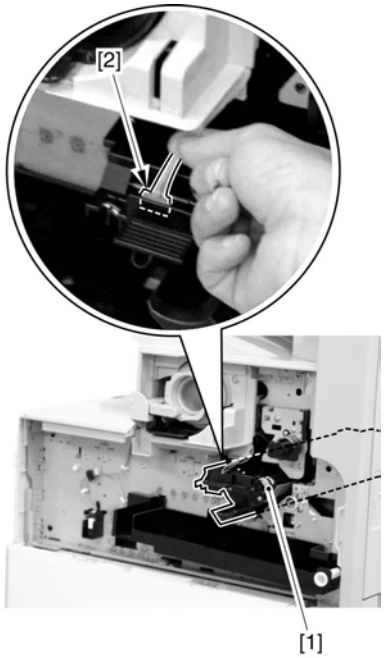
F-7-69

2) Shift the locking lever [1] to the left to release the developing assembly.



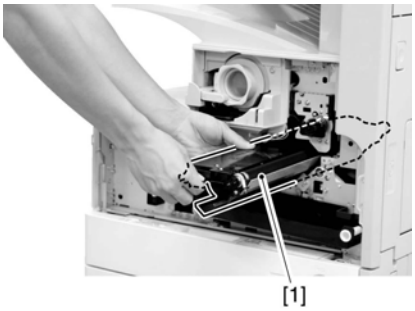
F-7-70

3) Slide the developing assembly [1] slightly to the front; then, disconnect the connector [2].



F-7-71

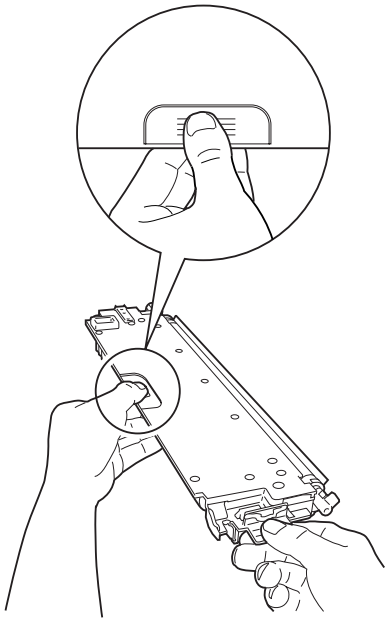
4) Remove the developing assembly [1].



F-7-72

⚠

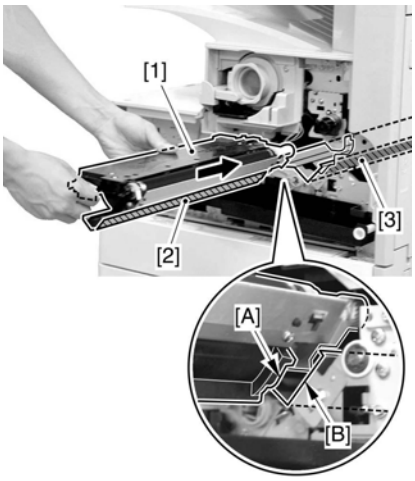
Be sure to hold the developing assembly as shown.



F-7-73

⚠

When fitting the developing assembly, be sure to fit the lower right segment [2] of the developing assembly [1] in the rail [3] of the machine. Thereafter, slide the developing assembly so that [A] of the developing assembly matches [B] of the rail.

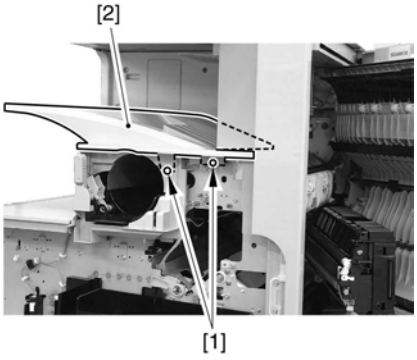


F-7-74

7.12.3.6 Removing the Upper Tray 0007-8354

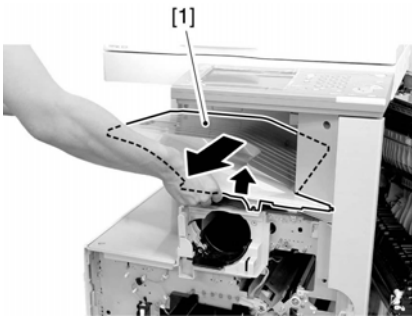
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws [1], and detach the upper tray [2].



F-7-75

Reference:
Lift the front of the upper tray [1], and detach it as if to slide it toward the front.

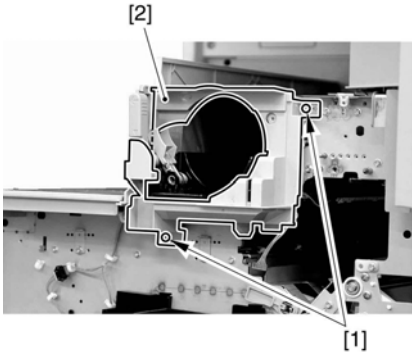


F-7-76

7.12.3.7 Removing the Toner Cartridge Cover 0007-8355

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws [1]; then, detach the toner bottle cover [2].

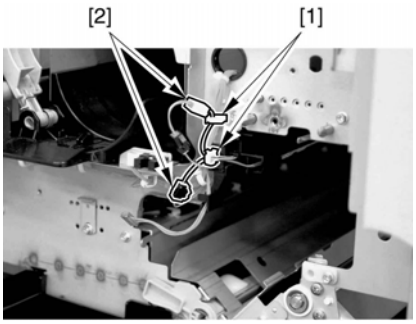


F-7-77

7.12.3.8 Removing the Pre-Exposure Lamp 0007-8357

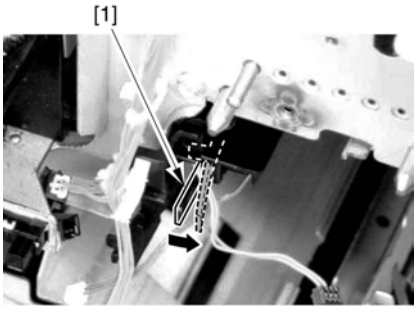
iR2270 / iR2870 / iR3570 / iR4570

1) Open the 2 wire saddles [1], and disconnect the 2 relay connectors [2].

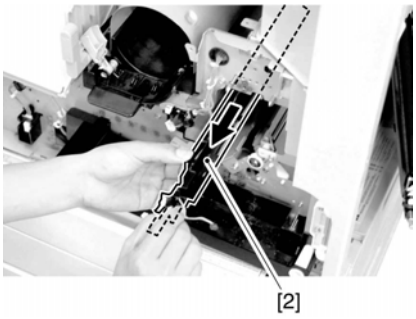


F-7-78

2) While freeing the lock [1] toward the right, detach the pre-exposure lamp [2].



F-7-79

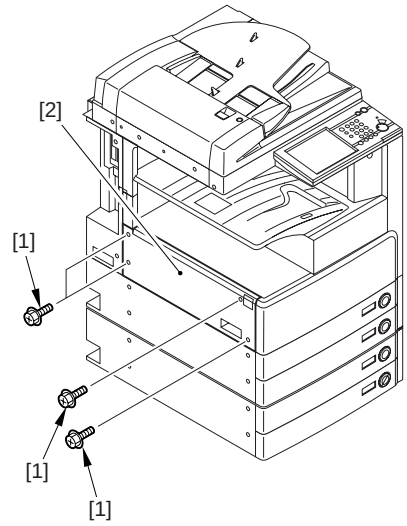


F-7-80

7.12.3.9 Removing the Left Cover 0007-8358

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 4 screws [1], and detach the left cover [2].

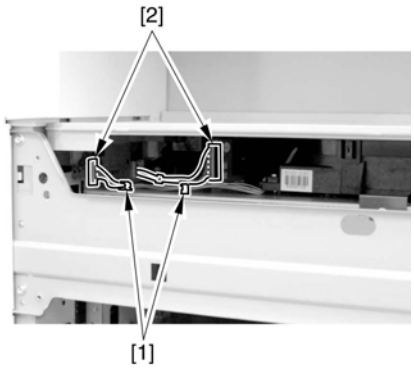


F-7-81

7.12.3.10 Removing the Laser Unit 0007-8359

iR2270 / iR2870 / iR3570 / iR4570

1) Open the 2 wire saddles [1], and disconnect the 2 connectors [2].



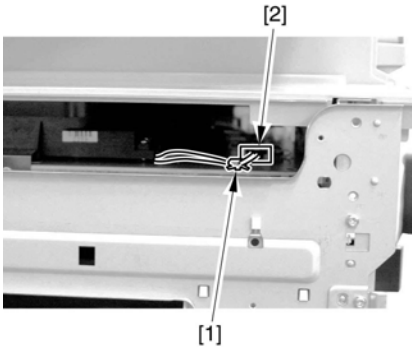
F-7-82

⚠

When you have disconnected the connector [1], be sure to take care so that it will not come into contact with the PCB that is mounted to the laser scanner unit. (The PCB is equipped with a laser intensity adjustment variable resistor. Contact with the PCB can change the adjustment setting.)

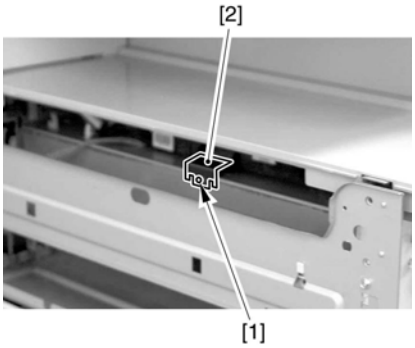
2) Open the wire saddle [1], and disconnect the

connector [2].



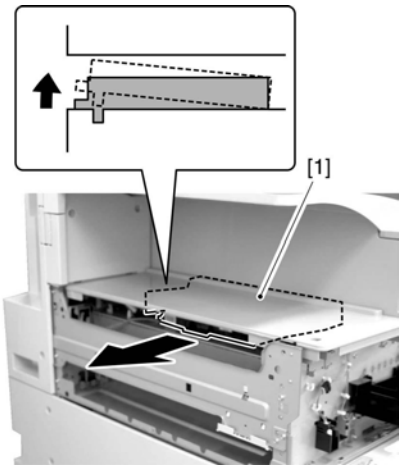
F-7-83

3) Remove the screw [1], and detach the fixing [2].



F-7-84

4) Lift the front of the laser unit [1], and slide it to the front.



F-7-85

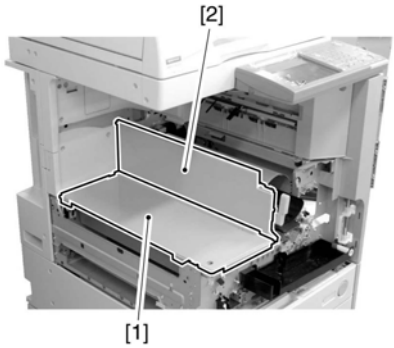


When sliding out the laser scanner unit, be sure to take care not to touch the PCB mounted to the laser scanner unit. (The PCB is equipped with a laser scanner intensity adjustment variable resistor, and contact with the PCB can change the adjustment setting.)

7.12.3.11 Removing the Hopper Assembly 0007-8360

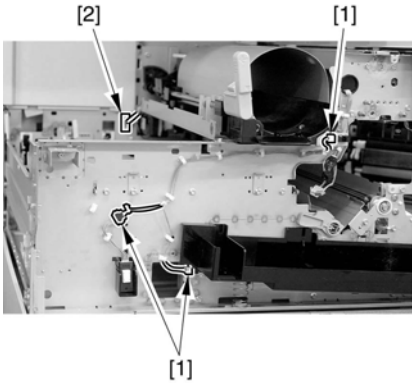
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the inside base cover [1] and the inside right color [2].



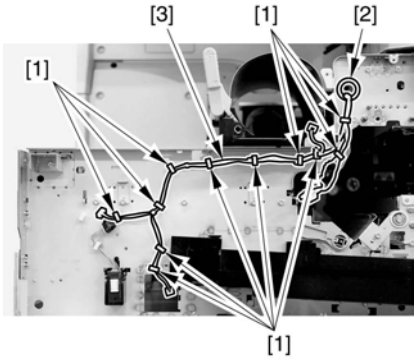
F-7-86

2) Disconnect the 3 connectors [1] found at the front and the connector [2] found at the rear.



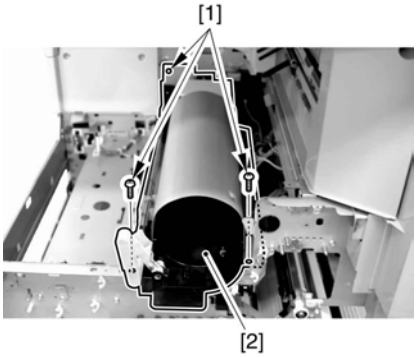
F-7-87

3) Open the 11 wire saddles [1], and pull out the harness [3] through the hole [2] in the plate.



F-7-88

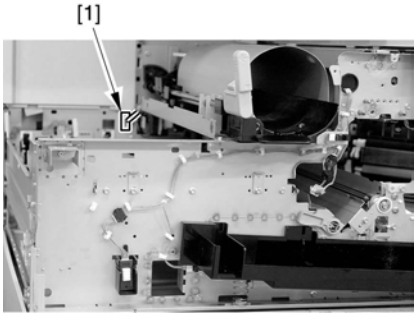
4) Remove the 3 screws [1], and detach the hopper assembly [2].



F-7-89

⚠

When fitting the hopper assembly to the machine, be sure that the connectors [1] are securely connected. If the connectors [1] are not connected, the environment heater will not be supplied with power, leading to image faults.



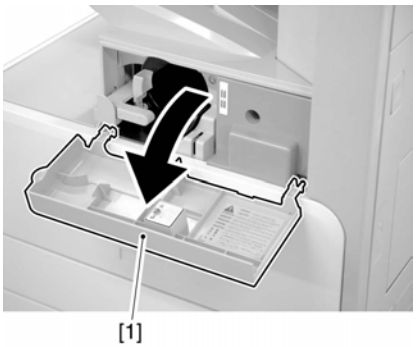
F-7-90

7.12.4 Sub Hopper

7.12.4.1 Removing the Front Cover Unit 0007-8020

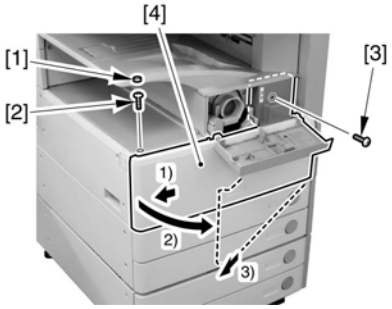
iR2270 / iR2870 / iR3570 / iR4570

1) Open the front cover [1].



F-7-91

2) Remove the face cover rubber [1].
3) Remove the binding screw [2].
4) Remove the RS tightening screw [3].
5) Detach the front cover unit [4] by moving it in the direction of the arrow.

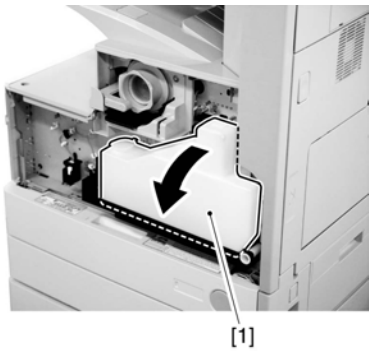


F-7-92

7.12.4.2 Removing the Waste Toner Case 0007-8027

iR2270 / iR2870 / iR3570 / iR4570

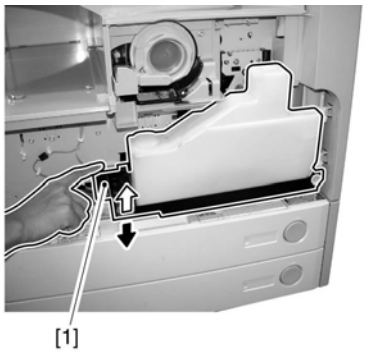
1) Remove the waste toner case [1].



F-7-93

⚠Point to note after attaching the waste toner receptacle

After attaching the waste toner receptacle, move the waste toner full detection lever [1] up and down to make sure that the lever is moved smoothly. Faulty detection may be resulted if the lever is caught in something and is not moved smoothly.

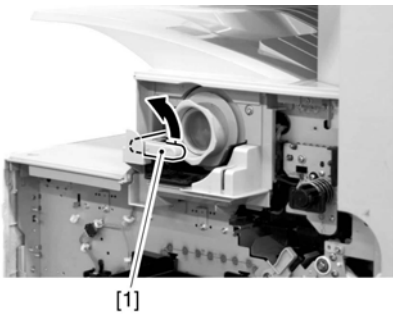


F-7-94

7.12.4.3 Removing the Toner Cartridge 0007-8386

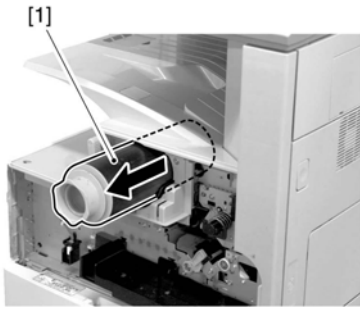
iR2270 / iR2870 / iR3570 / iR4570

1) Shift up the lever [1].



F-7-95

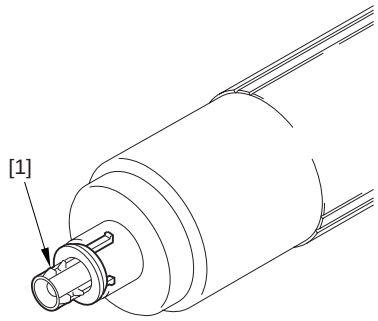
2) Remove the toner cartridge [1].



F-7-96

⚠**Points to Note on Handing the Toner Cartridge**

1. Care should be taken not to bump the toner stop [1] against the covers or the like when and after removing the toner cartridge. Since the toner stop comes off easily, toner scattering may be resulted if it comes off by accident.
2. Keep the toner cartridge horizontal after removing. Since the toner stop [1] comes off easily as mentioned above, toner scattering may be resulted if the toner cartridge is placed with the toner stop side down.

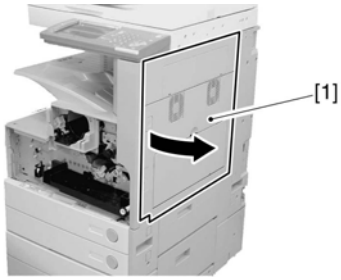


F-7-97

7.12.4.4 Removing the Drum Unit 0007-8387

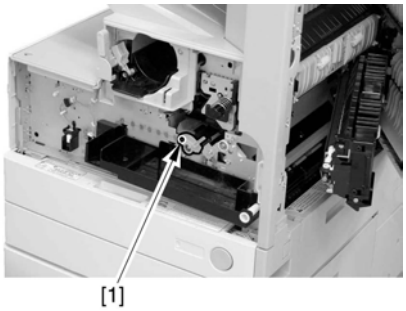
iR2270 / iR2870 / iR3570 / iR4570

1) Open the right door [1].



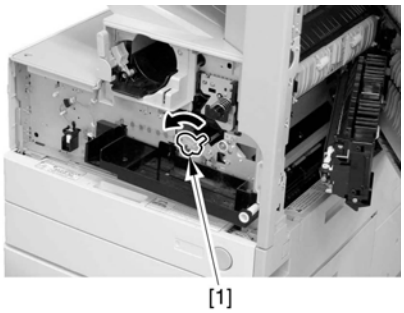
F-7-98

2) Remove the screw [1].



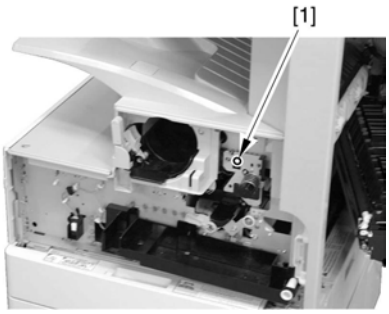
F-7-99

3) Shift the locking lever [1] to the left to release the developing assembly.



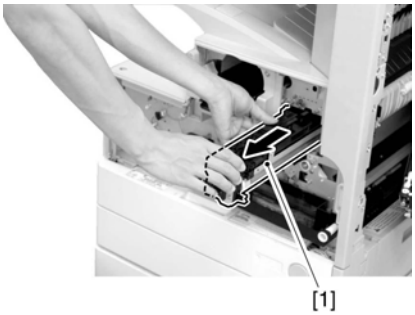
F-7-100

4) Remove the screw [1].



F-7-101

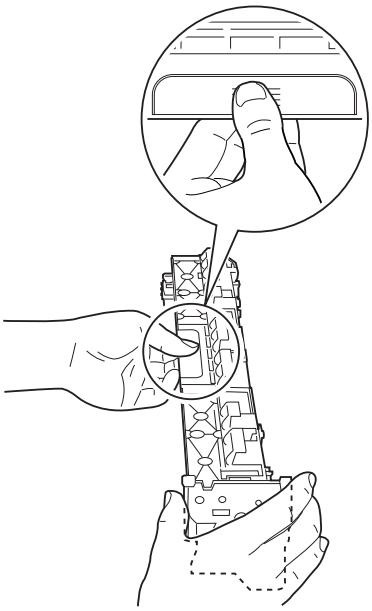
5) Remove the drum unit [1].



F-7-102

⚠

Be sure to hold the drum unit as shown.

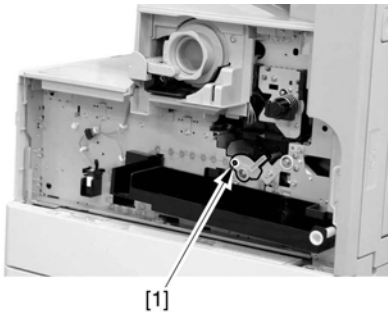


F-7-103

7.12.4.5 Removing the Developing Assembly 0007-8388

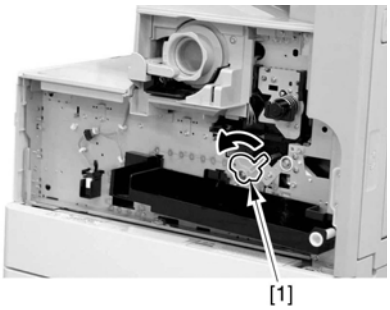
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the screw [1].



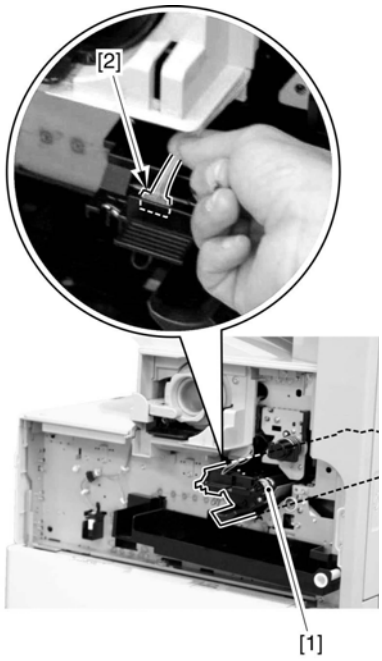
F-7-104

2) Shift the locking lever [1] to the left to release the developing assembly.



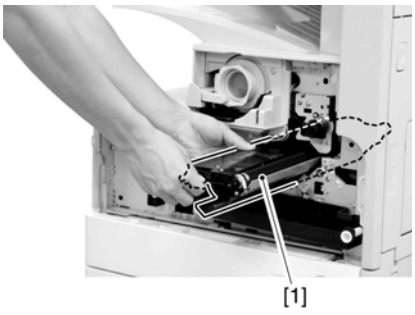
F-7-105

3) Slide the developing assembly [1] slightly to the front; then, disconnect the connector [2].



F-7-106

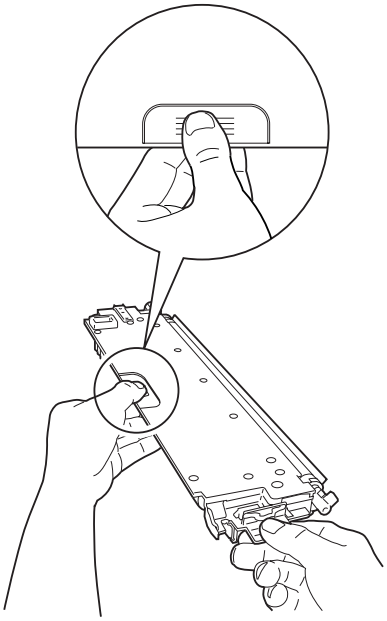
4) Remove the developing assembly [1].



F-7-107

⚠

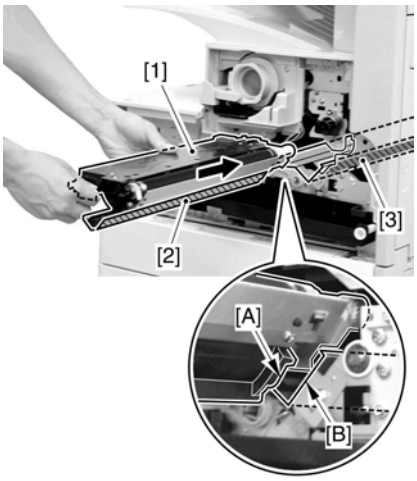
Be sure to hold the developing assembly as shown.



F-7-108

⚠

When fitting the developing assembly, be sure to fit the lower right segment [2] of the developing assembly [1] in the rail [3] of the machine. Thereafter, slide the developing assembly so that [A] of the developing assembly matches [B] of the rail.

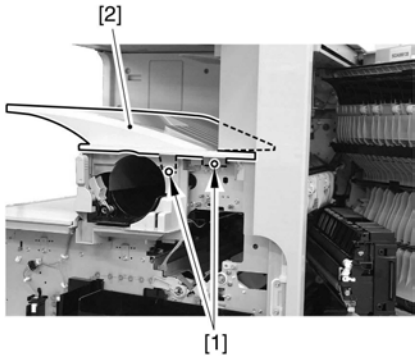


F-7-109

7.12.4.6 Removing the Upper Tray 0007-8389

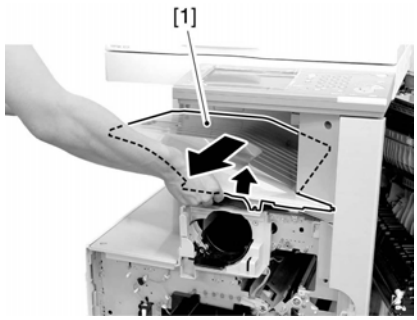
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws [1], and detach the upper tray [2].



F-7-110

Reference:
Lift the front of the upper tray [1], and detach it as if to slide it toward the front.

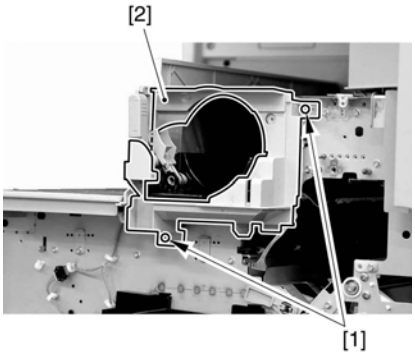


F-7-111

7.12.4.7 Removing the Toner Cartridge Cover 0007-8390

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws [1]; then, detach the toner bottle cover [2].

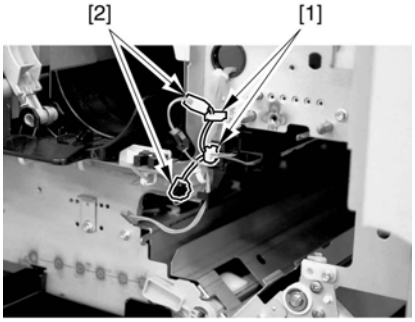


F-7-112

7.12.4.8 Removing the Pre-Exposure Lamp 0007-8391

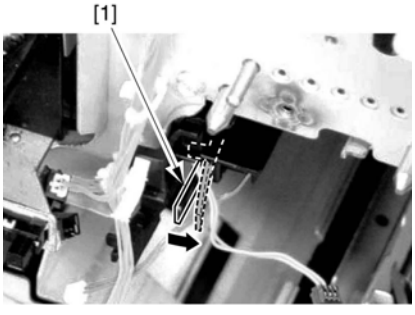
iR2270 / iR2870 / iR3570 / iR4570

1) Open the 2 wire saddles [1], and disconnect the 2 relay connectors [2].

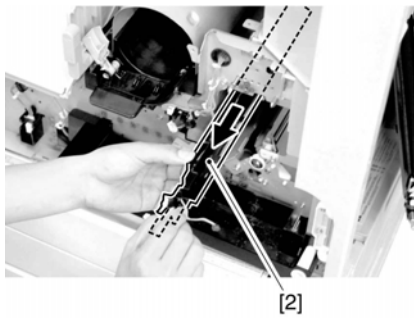


F-7-113

2) While freeing the lock [1] toward the right, detach the pre-exposure lamp [2].



F-7-114

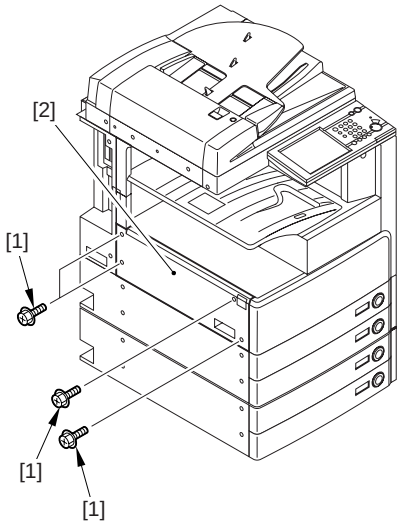


F-7-115

7.12.4.9 Removing the Left Cover 0007-8392

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 4 screws [1], and detach the left cover [2].

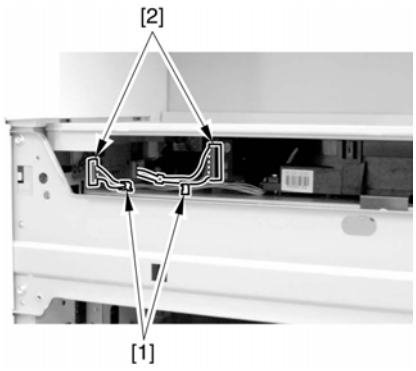


F-7-116

7.12.4.10 Removing the Laser Unit 0007-8393

iR2270 / iR2870 / iR3570 / iR4570

1) Open the 2 wire saddles [1], and disconnect the 2 connectors [2].

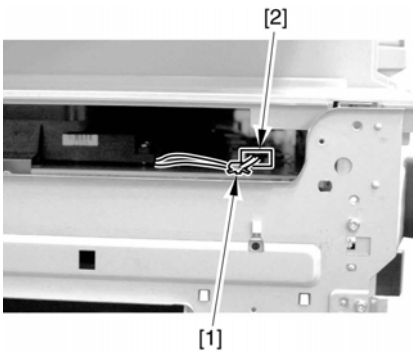


F-7-117

⚠

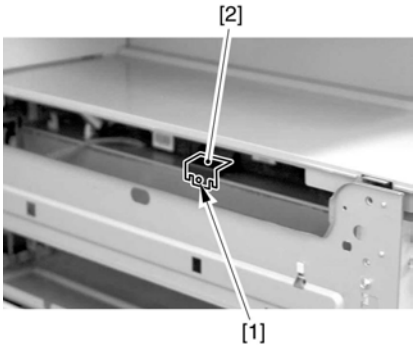
When you have disconnected the connector [1], be sure to take care so that it will not come into contact with the PCB that is mounted to the laser scanner unit. (The PCB is equipped with a laser intensity adjustment variable resistor. Contact with the PCB can change the adjustment setting.)

2) Open the wire saddle [1], and disconnect the connector [2].



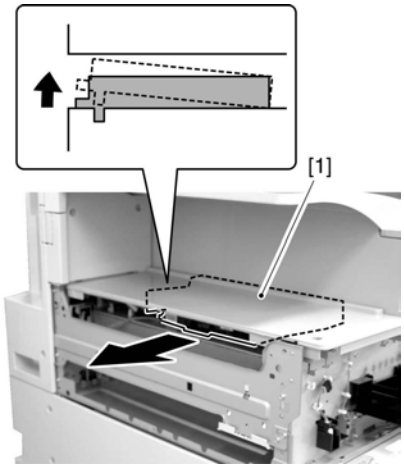
F-7-118

3) Remove the screw [1], and detach the fixing [2].



F-7-119

4) Lift the front of the laser unit [1], and slide it to the front.



F-7-120

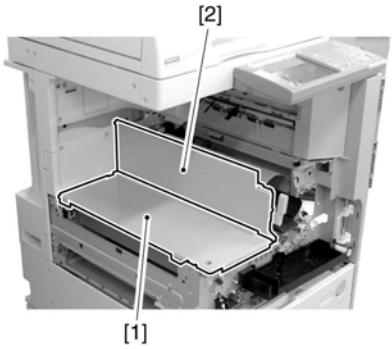
⚠

When sliding out the laser scanner unit, be sure to take care not to touch the PCB mounted to the laser scanner unit. (The PCB is equipped with a laser scanner intensity adjustment variable resistor, and contact with the PCB can change the adjustment setting.)

7.12.4.11 Removing the Hopper Assembly 0007-8394

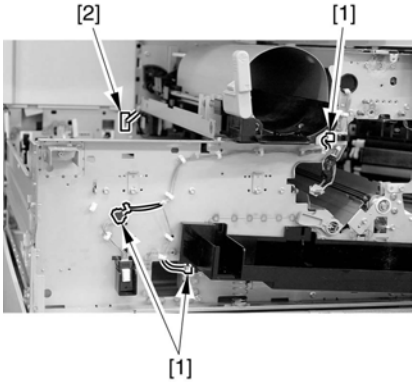
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the inside base cover [1] and the inside right color [2].



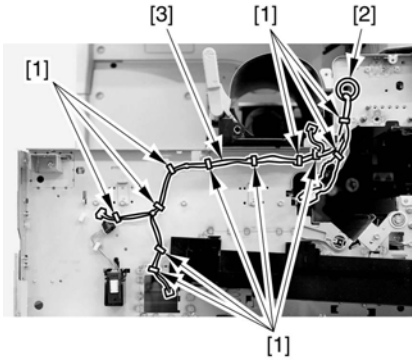
F-7-121

2) Disconnect the 3 connectors [1] found at the front and the connector [2] found at the rear.



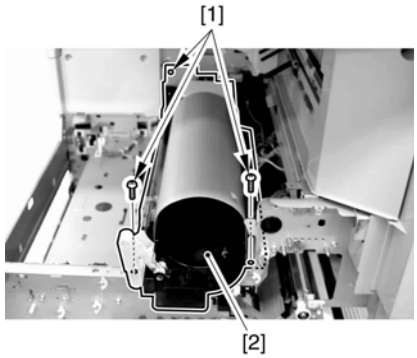
F-7-122

3) Open the 11 wire saddles [1], and pull out the harness [3] through the hole [2] in the plate.



F-7-123

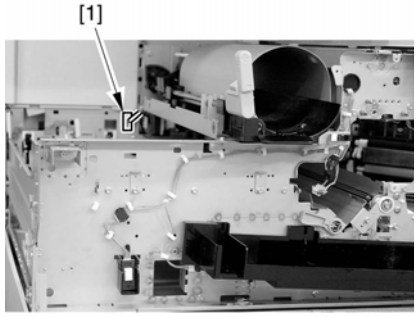
4) Remove the 3 screws [1], and detach the hopper assembly [2].



F-7-124

⚠

When fitting the hopper assembly to the machine, be sure that the connectors [1] are securely connected. If the connectors [1] are not connected, the environment heater will not be supplied with power, leading to image faults.

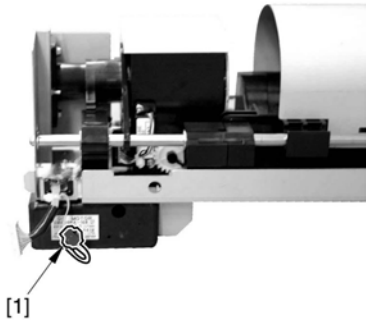


F-7-125

7.12.4.12 Removing the Toner Feedscrew Motor 0007-8395

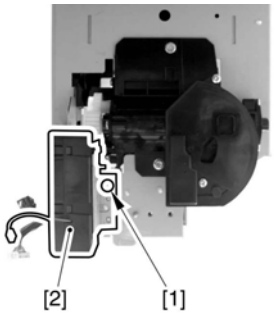
iR2270 / iR2870 / iR3570 / iR4570

1) Disconnect the connector [1].



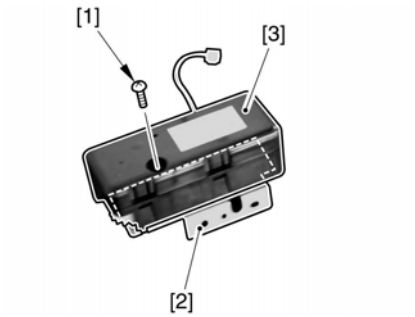
F-7-126

2) Remove the screw [1], and detach the toner feedscrew motor assembly [2].



F-7-127

3) Remove the screw [1], and detach the toner feedscrew motor [3] from the base.

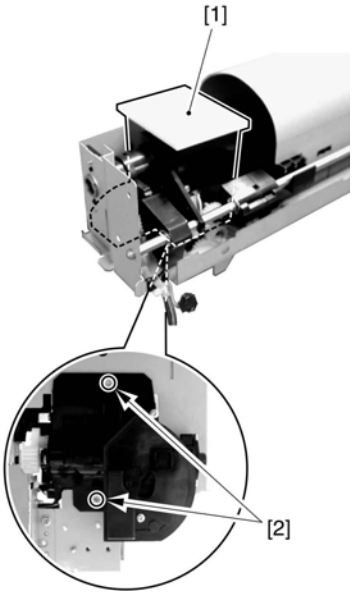


F-7-128

7.12.4.13 Removing the Sub Hopper 0007-8396

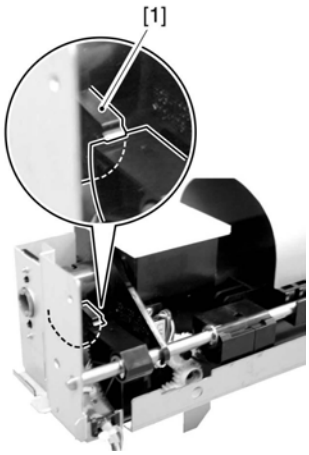
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws [2] from the back of the sub hopper [1].



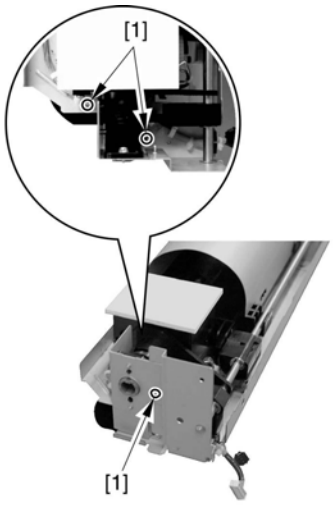
F-7-129

2) Check the phase of the gear [1] shown in the figure.



F-7-130

3) Remove the 3 screws [1].



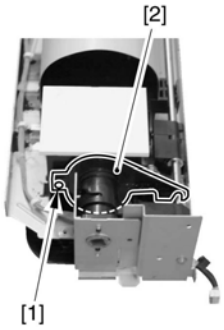
F-7-131

4) Free the cable from the edge saddle [1].



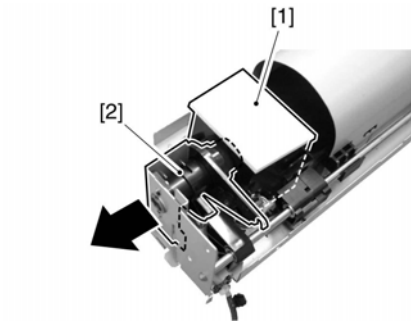
F-7-132

5) Remove the screw [1], and release the arm [2].



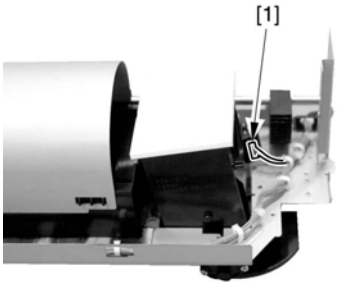
F-7-133

6) Remove the bushing unit [2] from the sub hopper [1].



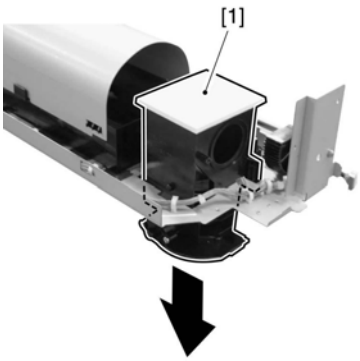
F-7-134

7) Disconnect the connector [1].



F-7-135

8) Detach the sub hopper [1] from the bottom.



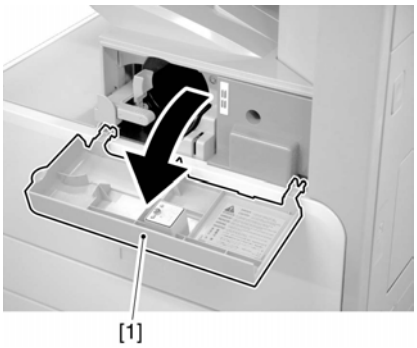
F-7-136

7.12.5 Developing Assembly

7.12.5.1 Removing the Front Cover Unit 0007-8022

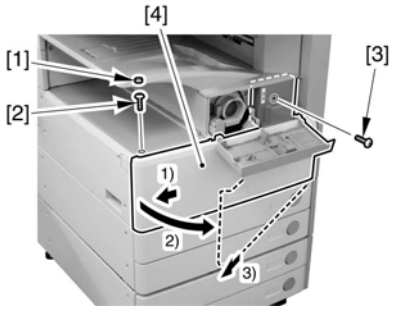
iR2270 / iR2870 / iR3570 / iR4570

1) Open the front cover [1].



F-7-137

2) Remove the face cover rubber [1].
3) Remove the binding screw [2].
4) Remove the RS tightening screw [3].
5) Detach the front cover unit [4] by moving it in the direction of the arrow.

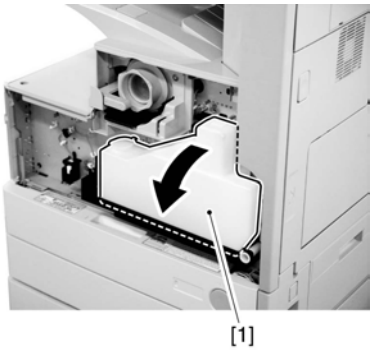


F-7-138

7.12.5.2 Removing the Waste Toner Case 0007-8029

iR2270 / iR2870 / iR3570 / iR4570

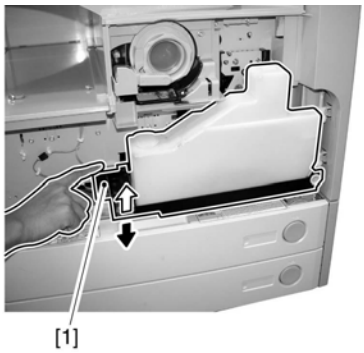
1) Remove the waste toner case [1].



F-7-139

⚠Point to note after attaching the waste toner receptacle

After attaching the waste toner receptacle, move the waste toner full detection lever [1] up and down to make sure that the lever is moved smoothly. Faulty detection may be resulted if the lever is caught in something and is not moved smoothly.

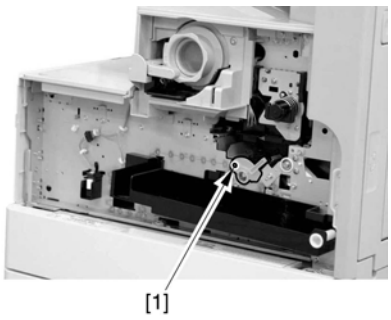


F-7-140

7.12.5.3 Removing the Developing Assembly 0007-8034

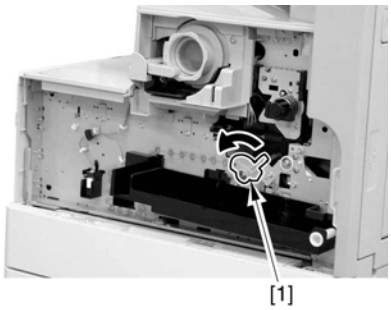
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the screw [1].



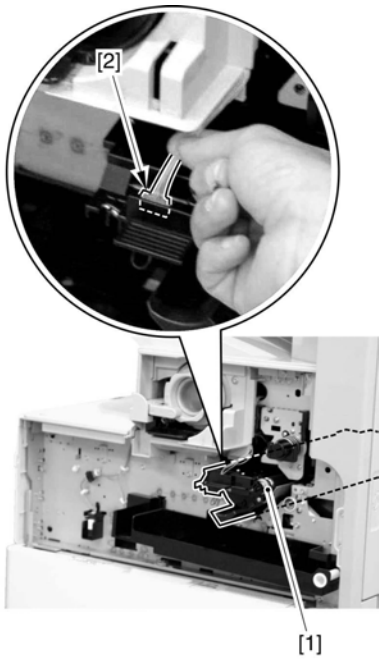
F-7-141

2) Shift the locking lever [1] to the left to release the developing assembly.



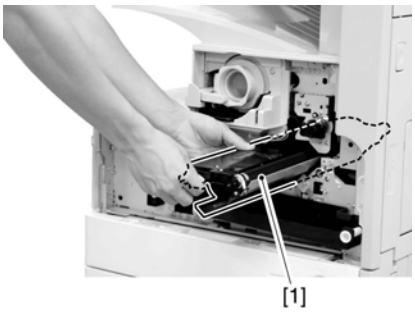
F-7-142

3) Slide the developing assembly [1] slightly to the front; then, disconnect the connector [2].



F-7-143

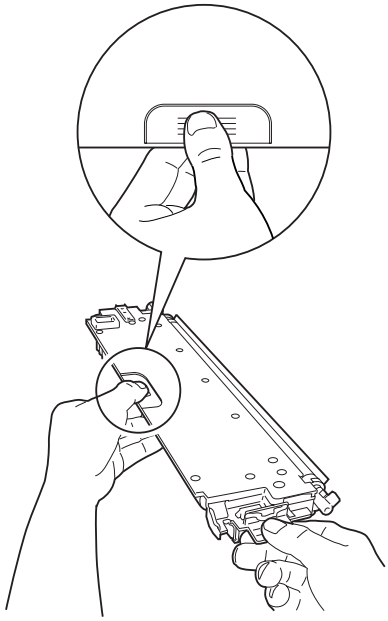
4) Remove the developing assembly [1].



F-7-144

⚠

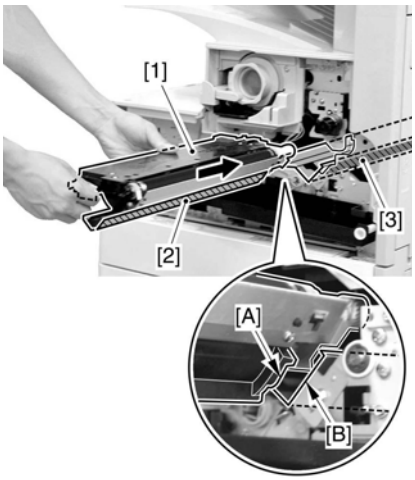
Be sure to hold the developing assembly as shown.



F-7-145

⚠

When fitting the developing assembly, be sure to fit the lower right segment [2] of the developing assembly [1] in the rail [3] of the machine. Thereafter, slide the developing assembly so that [A] of the developing assembly matches [B] of the rail.



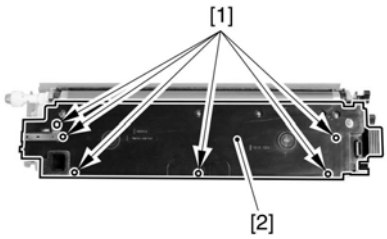
F-7-146

7.12.6 Developing Cylinder

7.12.6.1 Removing the Developing Cylinder 0008-0013

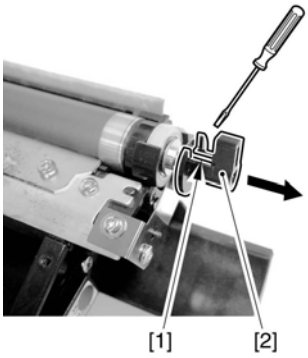
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 6 screws [1], and detach the top cover [2].



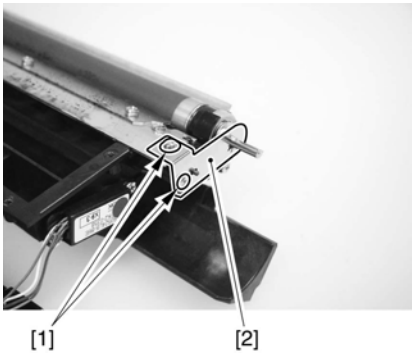
F-7-147

2) While freeing the claw [1], detach the sleeve front guide [2] in the direction of the arrow.



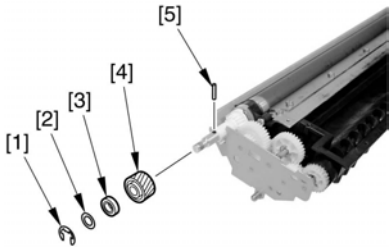
F-7-148

3) Remove the 2 screws [1], and detach the angle adjusting plate [2].



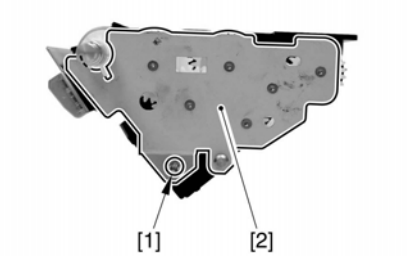
F-7-149

4) Remove the E-ring [1]; then, remove the washer [2], bearing [3], gear [4], and parallel pin [5].



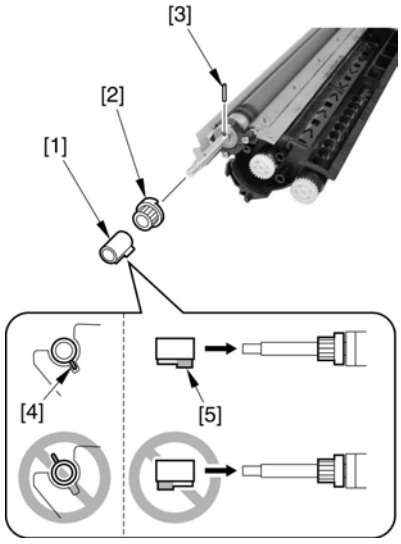
F-7-150

5) Remove the screw [1], and detach the gear unit [2].



F-7-151

6) Remove the sleeve bushing [1], gear [2], and parallel pin [3].



F-7-152

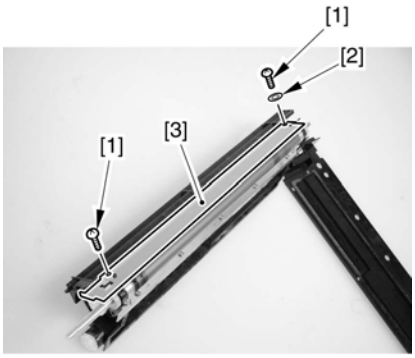
⚠

When fitting the sleeve bushing, be sure to take note of the following:

The protrusion [4] of the sleeve bushing must fit the recess in the gear unit side plate. (Otherwise, the protrusion can come into contact with the surface of the photosensitive drum.)

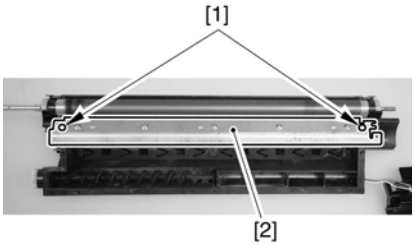
Pay attention to the orientation of the sleeve bushing. (Be sure that the longer protrusion [5] is on the developing cylinder side. Otherwise, you will not be able to fit the gear unit.)

7) Remove the 2 screws [1], and detach the washer [2]; then, detach the transfer upper guide [3].



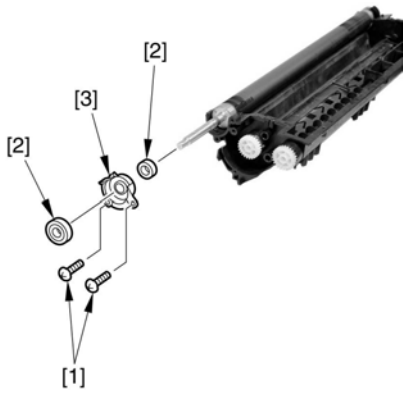
F-7-153

8) Remove the 2 screws [1], and detach the blade unit [2].



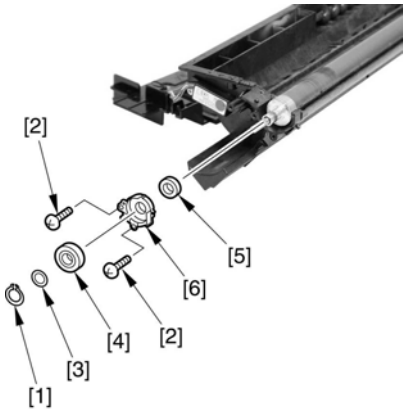
F-7-154

9) Remove the 2 screws [1]; then, remove the 2 bearings [2] and the sleeve holder (rear) [3].



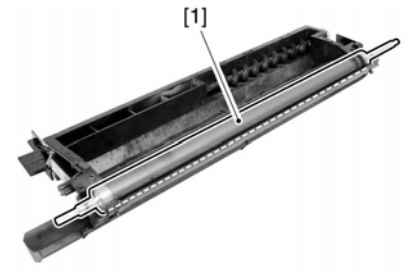
F-7-155

10) Remove the grip ring [1] and the screw [2]; then, remove the washer [3], bearings [4] [5], and sleeve holder (front) [6].



F-7-156

11) Remove the developing cylinder [1].



F-7-157

⚠

When detaching/attaching the developing cylinder from/to the developing unit, be sure of the following:

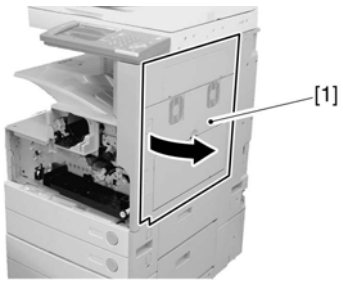
1. A good number of self-taping screws are used inside the developing unit. Be sure not to tighten these screws too tightly and damage the screw holes.
2. When removing the developing cylinder, be sure to remove the blade unit first.
3. When attaching the developing cylinder, be sure to fit it first to the developing unit.
4. Do not touch the developing cylinder or subject it to impact.

7.12.7 Transfer Charging Roller

7.12.7.1 Removing the Transfer Roller 0007-8431

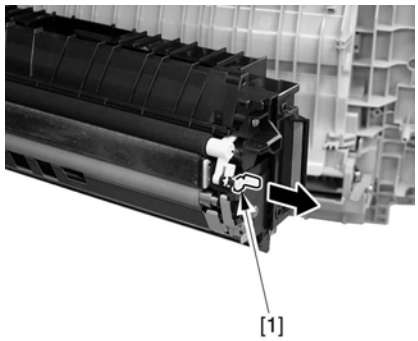
iR2270 / iR2870 / iR3570 / iR4570

1) Open the right door [1].



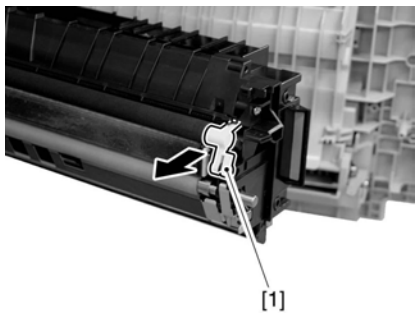
F-7-158

2) Pull off the pin [1] toward the front.



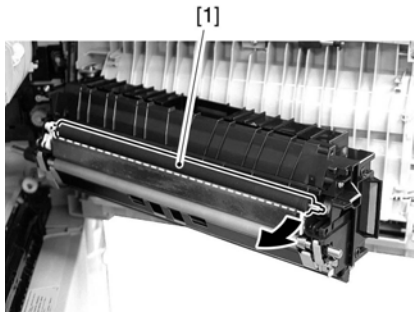
F-7-159

3) Remove the holder [1] from the front of the transfer roller.



F-7-160

4) Remove the transfer roller [1] toward the front.

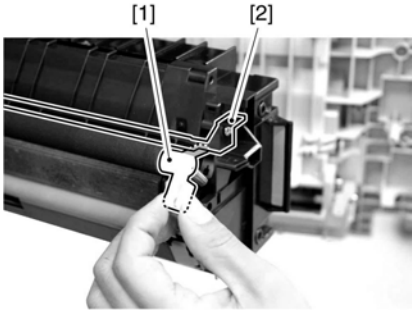


F-7-161

⚠

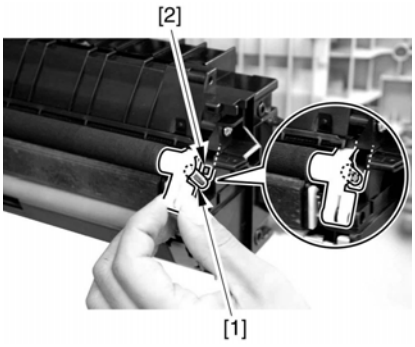
Points to Note When Attaching the Transfer Roller

Be sure that the top of the holder [1] is on the inside of the static eliminator [2].



F-7-162

Be sure that the spring [1] of the holder is against the butting point [2].



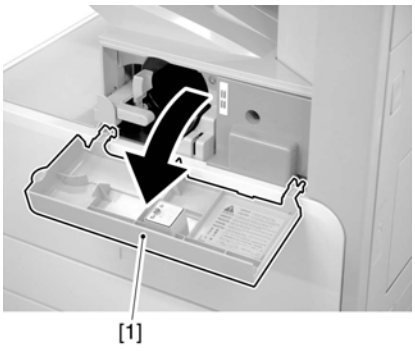
F-7-163

7.12.8 Waste Toner Box

7.12.8.1 Removing the Front Cover Unit 0007-8008

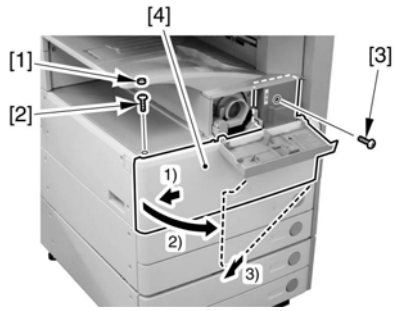
iR2270 / iR2870 / iR3570 / iR4570

1) Open the front cover [1].



F-7-164

2) Remove the face cover rubber [1].
3) Remove the binding screw [2].
4) Remove the RS tightening screw [3].
5) Detach the front cover unit [4] by moving it in the direction of the arrow.

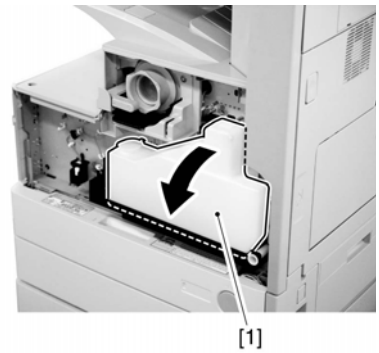


F-7-165

7.12.8.2 Removing the Waste Toner Case 0007-8015

iR2270 / iR2870 / iR3570 / iR4570

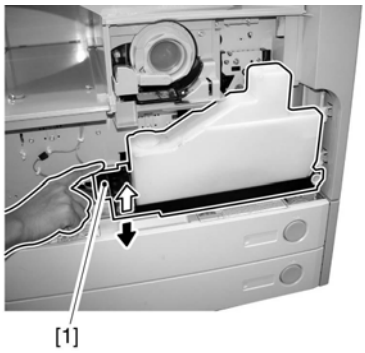
1) Remove the waste toner case [1].



F-7-166

⚠Point to note after attaching the waste toner receptacle

After attaching the waste toner receptacle, move the waste toner full detection lever [1] up and down to make sure that the lever is moved smoothly. Faulty detection may be resulted if the lever is caught in something and is not moved smoothly.



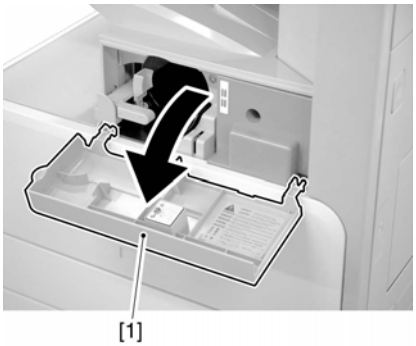
F-7-167

7.12.9 Toner Level Sensor

7.12.9.1 Removing the Front Cover Unit 0007-8018

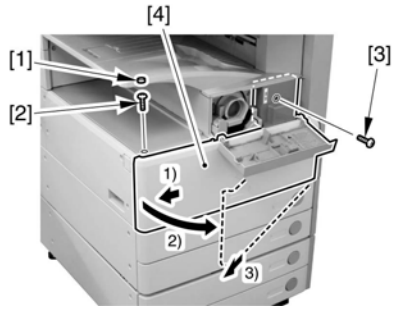
iR2270 / iR2870 / iR3570 / iR4570

1) Open the front cover [1].



F-7-168

2) Remove the face cover rubber [1].
3) Remove the binding screw [2].
4) Remove the RS tightening screw [3].
5) Detach the front cover unit [4] by moving it in the direction of the arrow.

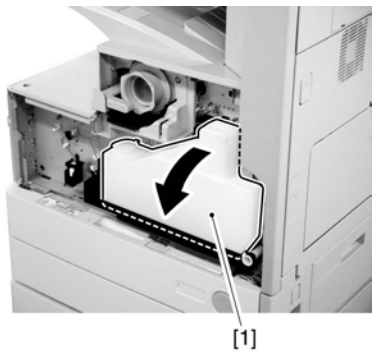


F-7-169

7.12.9.2 Removing the Waste Toner Case 0007-8025

iR2270 / iR2870 / iR3570 / iR4570

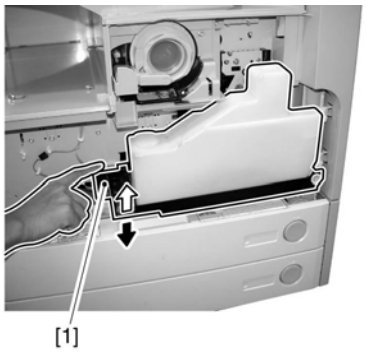
1) Remove the waste toner case [1].



F-7-170

⚠Point to note after attaching the waste toner receptacle

After attaching the waste toner receptacle, move the waste toner full detection lever [1] up and down to make sure that the lever is moved smoothly. Faulty detection may be resulted if the lever is caught in something and is not moved smoothly.

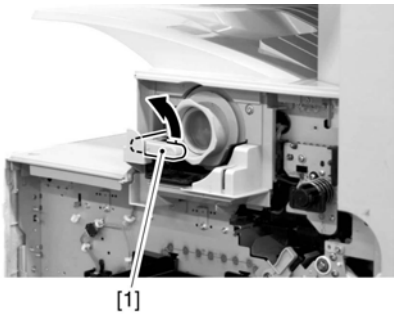


F-7-171

7.12.9.3 Removing the Toner Cartridge 0007-8364

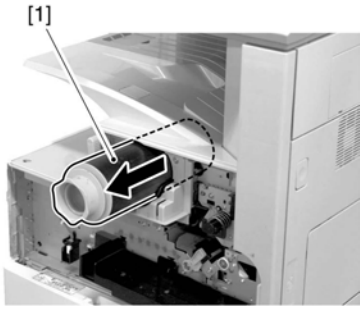
iR2270 / iR2870 / iR3570 / iR4570

1) Shift up the lever [1].



F-7-172

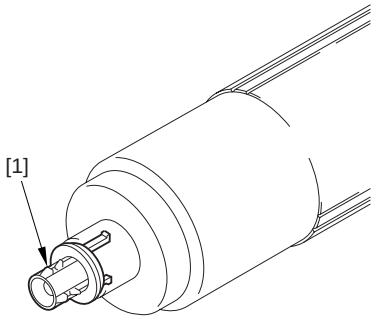
2) Remove the toner cartridge [1].



F-7-173

⚠Points to Note on Handing the Toner Cartridge

1. Care should be taken not to bump the toner stop [1] against the covers or the like when and after removing the toner cartridge. Since the toner stop comes off easily, toner scattering may be resulted if it comes off by accident.
2. Keep the toner cartridge horizontal after removing. Since the toner stop [1] comes off easily as mentioned above, toner scattering may be resulted if the toner cartridge is placed with the toner stop side down.

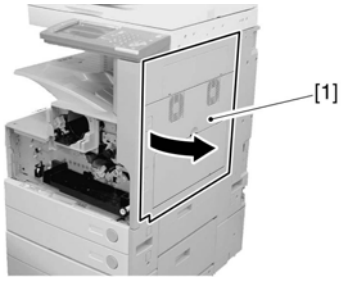


F-7-174

7.12.9.4 Removing the Drum Unit 0007-8365

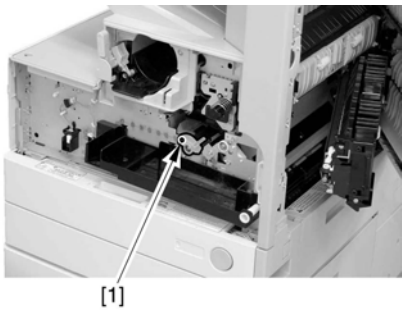
iR2270 / iR2870 / iR3570 / iR4570

1) Open the right door [1].



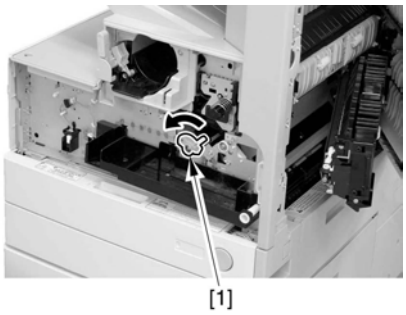
F-7-175

2) Remove the screw [1].



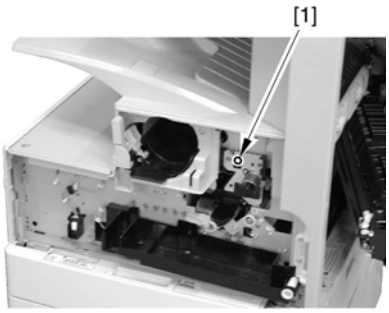
F-7-176

3) Shift the locking lever [1] to the left to release the developing assembly.



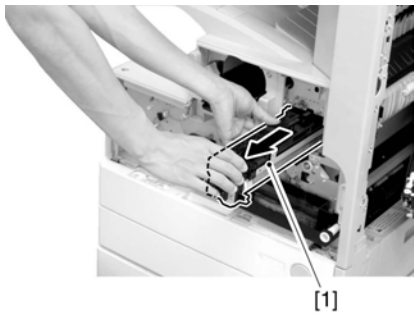
F-7-177

4) Remove the screw [1].



F-7-178

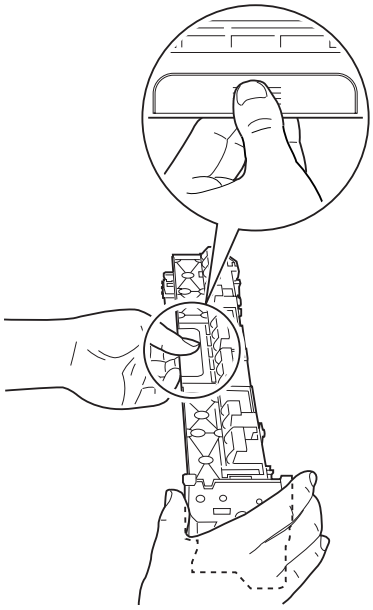
5) Remove the drum unit [1].



F-7-179

⚠

Be sure to hold the drum unit as shown.

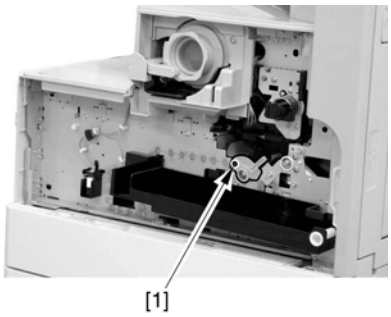


F-7-180

7.12.9.5 Removing the Developing Assembly 0007-8366

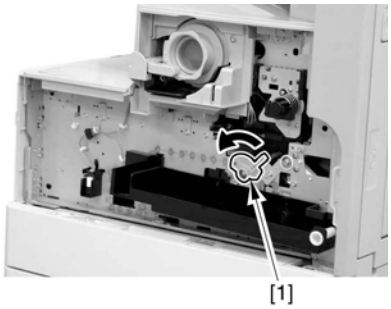
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the screw [1].



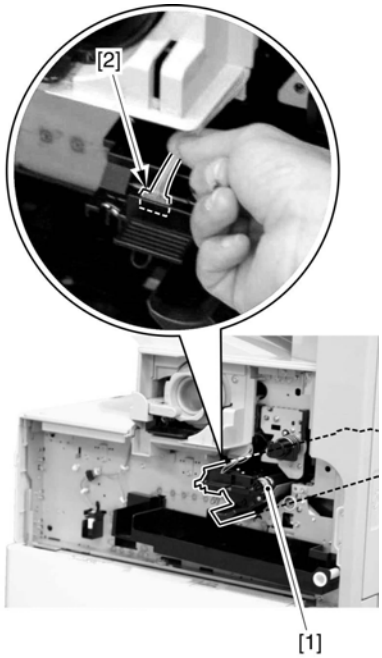
F-7-181

2) Shift the locking lever [1] to the left to release the developing assembly.



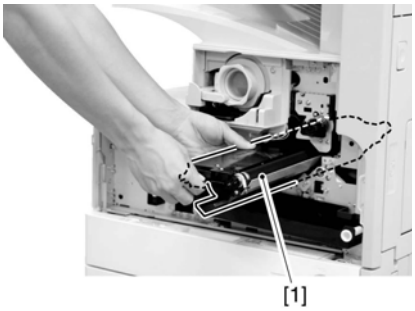
F-7-182

3) Slide the developing assembly [1] slightly to the front; then, disconnect the connector [2].



F-7-183

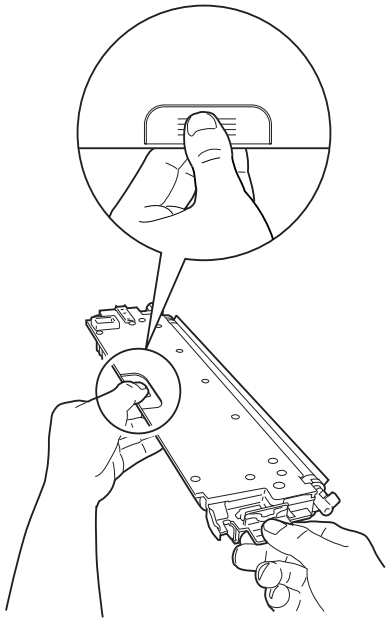
4) Remove the developing assembly [1].



F-7-184

⚠

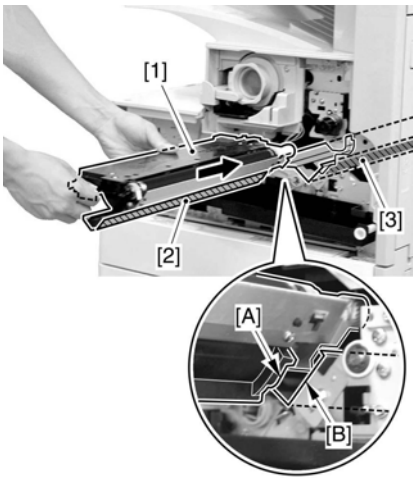
Be sure to hold the developing assembly as shown.



F-7-185

⚠

When fitting the developing assembly, be sure to fit the lower right segment [2] of the developing assembly [1] in the rail [3] of the machine. Thereafter, slide the developing assembly so that [A] of the developing assembly matches [B] of the rail.

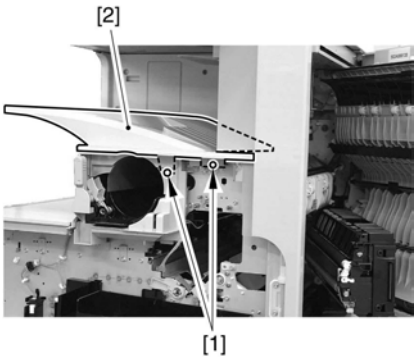


F-7-186

7.12.9.6 Removing the Upper Tray 0007-8367

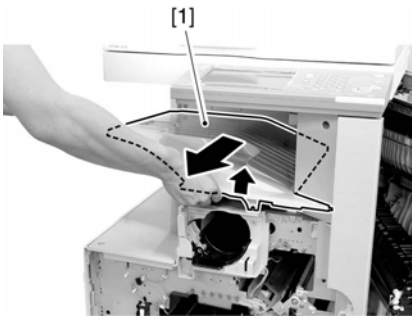
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws [1], and detach the upper tray [2].



F-7-187

Reference:
Lift the front of the upper tray [1], and detach it as if to slide it toward the front.

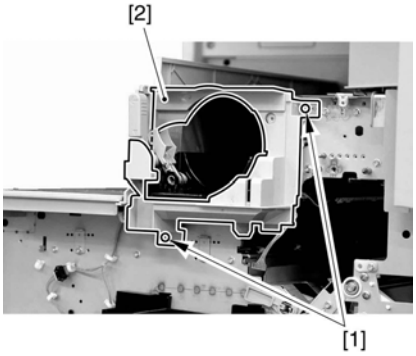


F-7-188

7.12.9.7 Removing the Toner Cartridge Cover 0007-8368

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws [1]; then, detach the toner bottle cover [2].

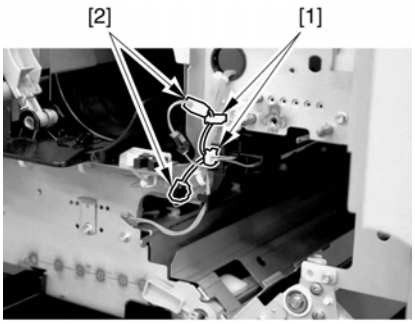


F-7-189

7.12.9.8 Removing the Pre-Exposure Lamp 0007-8369

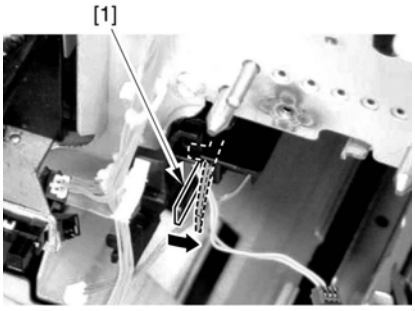
iR2270 / iR2870 / iR3570 / iR4570

1) Open the 2 wire saddles [1], and disconnect the 2 relay connectors [2].

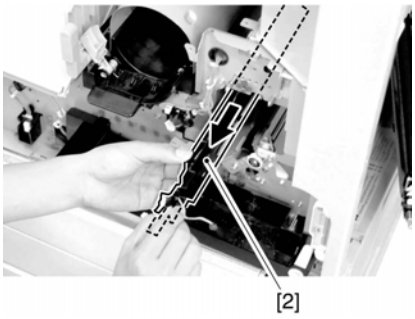


F-7-190

2) While freeing the lock [1] toward the right, detach the pre-exposure lamp [2].



F-7-191

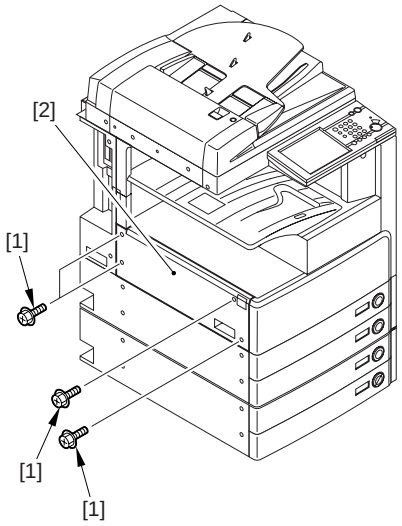


F-7-192

7.12.9.9 Removing the Left Cover 0007-8370

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 4 screws [1], and detach the left cover [2].

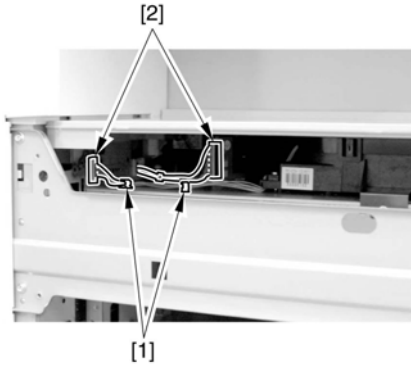


F-7-193

7.12.9.10 Removing the Laser Unit 0007-8371

iR2270 / iR2870 / iR3570 / iR4570

1) Open the 2 wire saddles [1], and disconnect the 2 connectors [2].



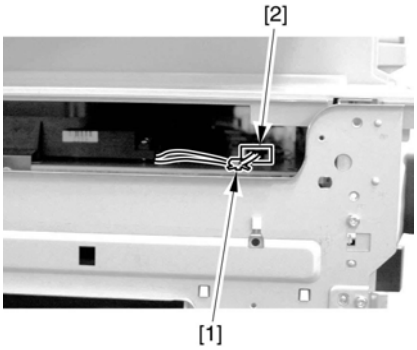
F-7-194

⚠

When you have disconnected the connector [1], be sure to take care so that it will not come into contact with the PCB that is mounted to the laser scanner unit. (The PCB is equipped with a laser intensity adjustment variable resistor. Contact with the PCB can change the adjustment setting.)

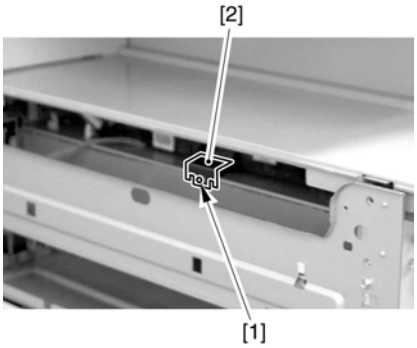
2) Open the wire saddle [1], and disconnect the

connector [2].



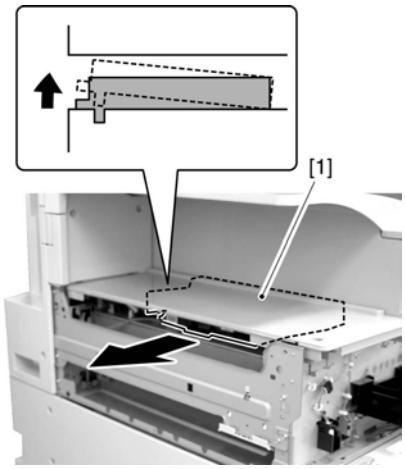
F-7-195

3) Remove the screw [1], and detach the fixing [2].



F-7-196

4) Lift the front of the laser unit [1], and slide it to the front.



F-7-197

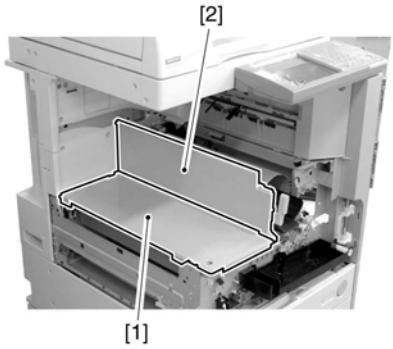


When sliding out the laser scanner unit, be sure to take care not to touch the PCB mounted to the laser scanner unit. (The PCB is equipped with a laser scanner intensity adjustment variable resistor, and contact with the PCB can change the adjustment setting.)

7.12.9.11 Removing the Hopper Assembly 0007-8372

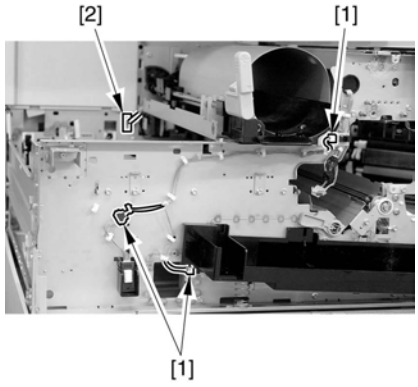
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the inside base cover [1] and the inside right color [2].



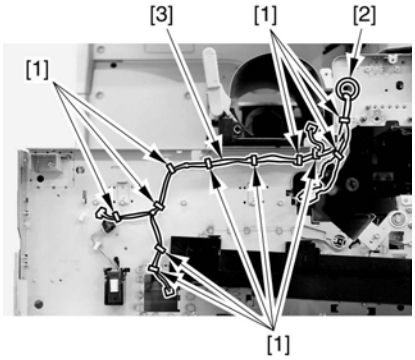
F-7-198

2) Disconnect the 3 connectors [1] found at the front and the connector [2] found at the rear.



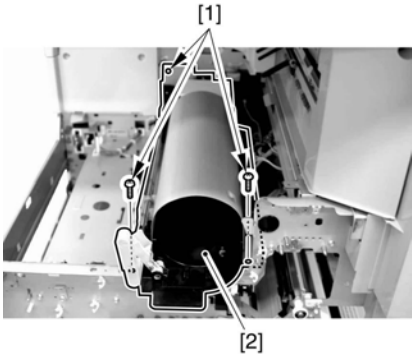
F-7-199

3) Open the 11 wire saddles [1], and pull out the harness [3] through the hole [2] in the plate.



F-7-200

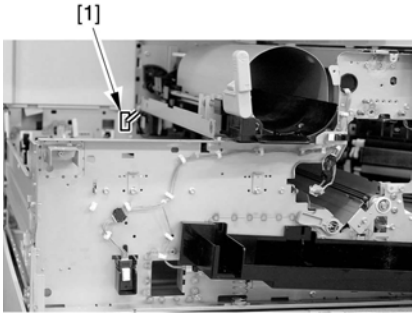
4) Remove the 3 screws [1], and detach the hopper assembly [2].



F-7-201

⚠

When fitting the hopper assembly to the machine, be sure that the connectors [1] are securely connected. If the connectors [1] are not connected, the environment heater will not be supplied with power, leading to image faults.

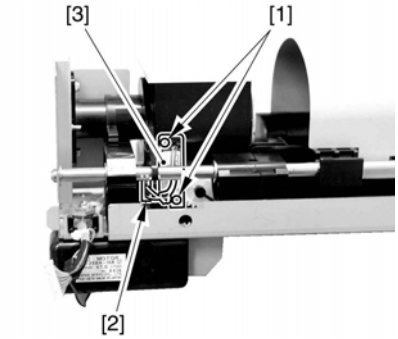


F-7-202

7.12.9.12 Removing the Toner Level Sensor 0007-8373

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws [1], and disconnect the connector [2]; then, detach the toner sensor [3].



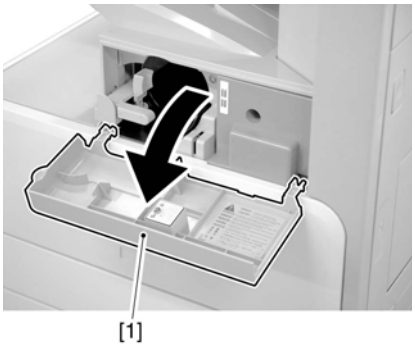
F-7-203

7.12.10 Toner Feedscrew Motor

7.12.10.1 Removing the Front Cover Unit 0007-8019

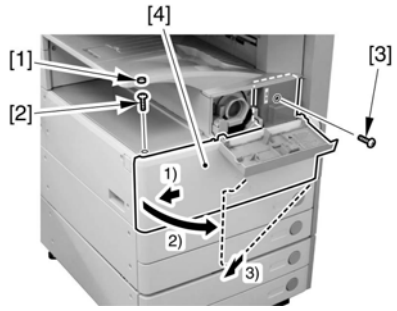
iR2270 / iR2870 / iR3570 / iR4570

1) Open the front cover [1].



F-7-204

2) Remove the face cover rubber [1].
3) Remove the binding screw [2].
4) Remove the RS tightening screw [3].
5) Detach the front cover unit [4] by moving it in the direction of the arrow.

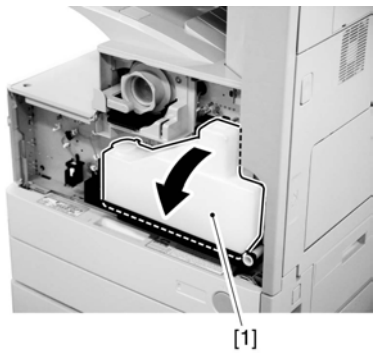


F-7-205

7.12.10.2 Removing the Waste Toner Case 0007-8026

iR2270 / iR2870 / iR3570 / iR4570

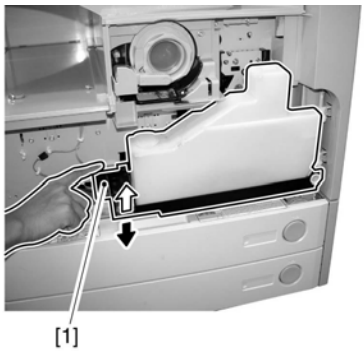
1) Remove the waste toner case [1].



F-7-206

⚠Point to note after attaching the waste toner receptacle

After attaching the waste toner receptacle, move the waste toner full detection lever [1] up and down to make sure that the lever is moved smoothly. Faulty detection may be resulted if the lever is caught in something and is not moved smoothly.

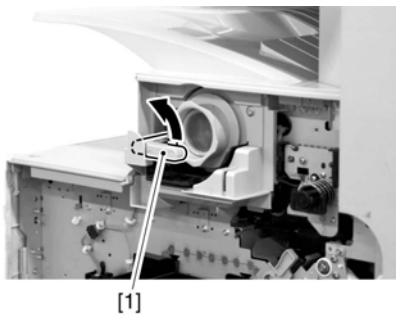


F-7-207

7.12.10.3 Removing the Toner Cartridge 0007-8375

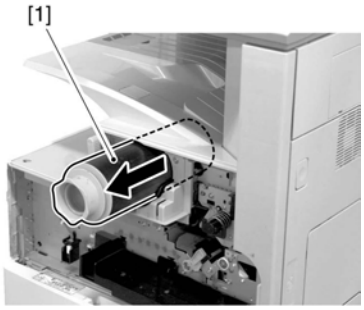
iR2270 / iR2870 / iR3570 / iR4570

1) Shift up the lever [1].



F-7-208

2) Remove the toner cartridge [1].



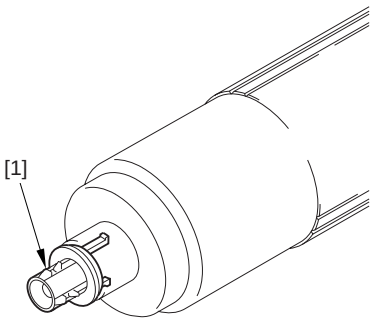
F-7-209

⚠**Points to Note on Handing the Toner Cartridge**

1. Care should be taken not to bump the toner stop [1]

against the covers or the like when and after removing the toner cartridge. Since the toner stop comes off easily, toner scattering may be resulted if it comes off by accident.

2. Keep the toner cartridge horizontal after removing. Since the toner stop [1] comes off easily as mentioned above, toner scattering may be resulted if the toner cartridge is placed with the toner stop side down.



F-7-210

7.12.10.4 Removing the Drum Unit

0007-8376

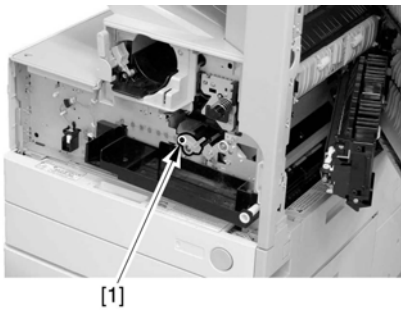
iR2270 / iR2870 / iR3570 / iR4570

1) Open the right door [1].



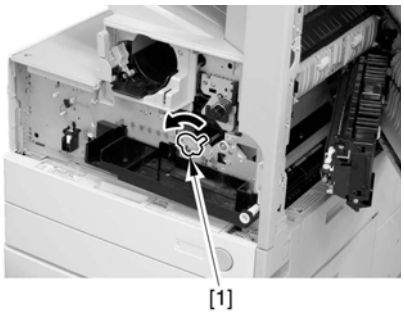
F-7-211

2) Remove the screw [1].



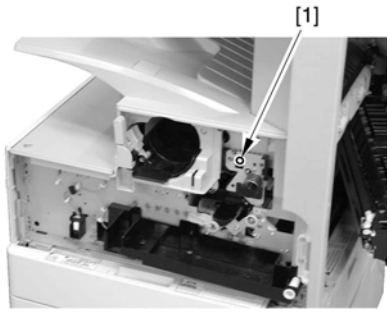
F-7-212

3) Shift the locking lever [1] to the left to release the developing assembly.



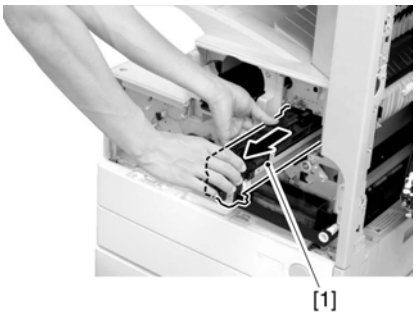
F-7-213

4) Remove the screw [1].



F-7-214

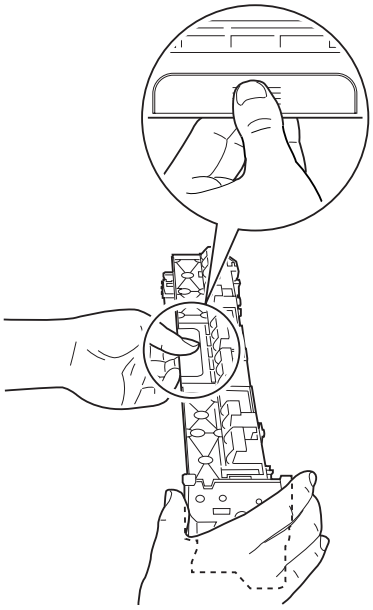
5) Remove the drum unit [1].



F-7-215

⚠

Be sure to hold the drum unit as shown.

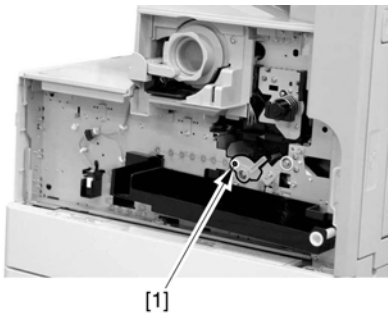


F-7-216

7.12.10.5 Removing the Developing Assembly 0007-8377

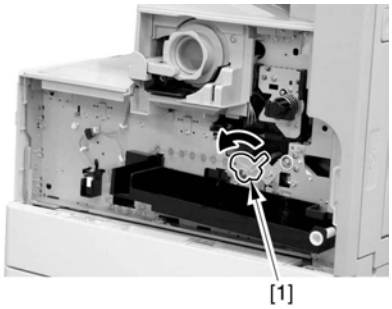
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the screw [1].



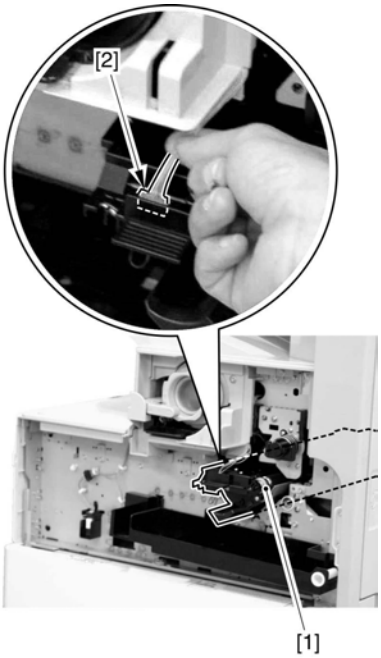
F-7-217

2) Shift the locking lever [1] to the left to release the developing assembly.



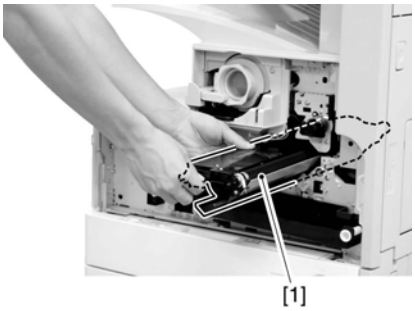
F-7-218

3) Slide the developing assembly [1] slightly to the front; then, disconnect the connector [2].



F-7-219

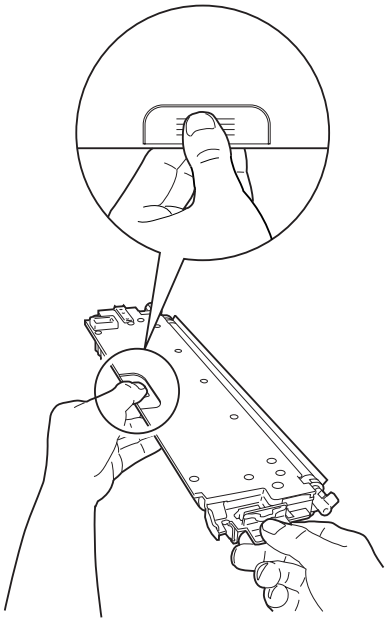
4) Remove the developing assembly [1].



F-7-220

⚠

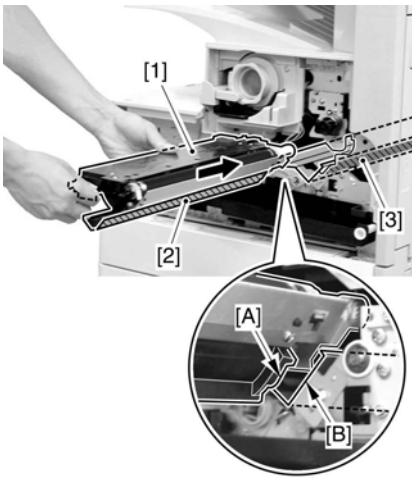
Be sure to hold the developing assembly as shown.



F-7-221

⚠

When fitting the developing assembly, be sure to fit the lower right segment [2] of the developing assembly [1] in the rail [3] of the machine. Thereafter, slide the developing assembly so that [A] of the developing assembly matches [B] of the rail.



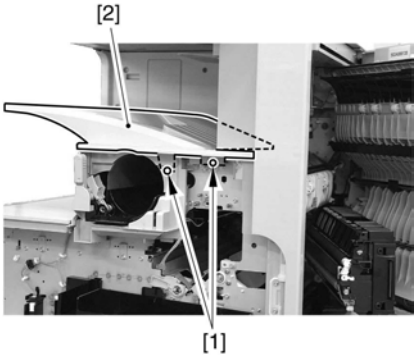
F-7-222

7.12.10.6 Removing the Upper Tray

0007-8378

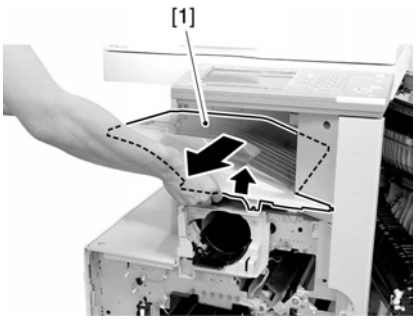
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws [1], and detach the upper tray [2].



F-7-223

Reference:
Lift the front of the upper tray [1], and detach it as if to slide it toward the front.

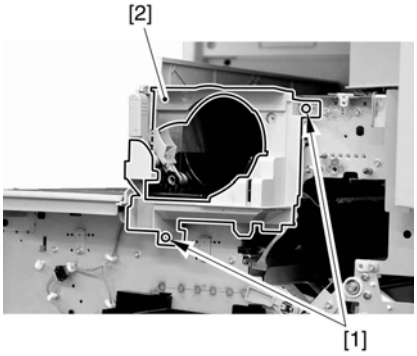


F-7-224

7.12.10.7 Removing the Toner Cartridge Cover 0007-8379

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws [1]; then, detach the toner bottle cover [2].

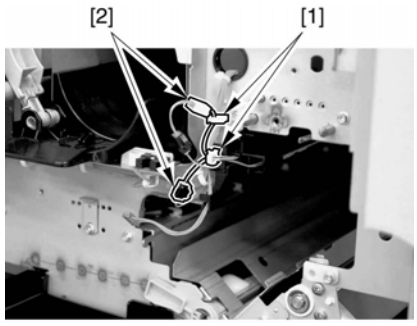


F-7-225

7.12.10.8 Removing the Pre-Exposure Lamp 0007-8381

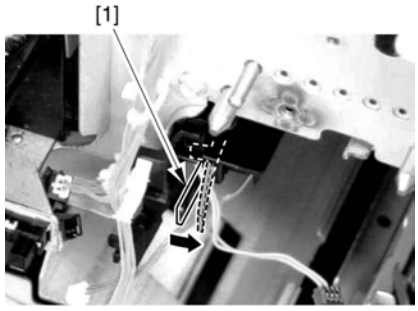
iR2270 / iR2870 / iR3570 / iR4570

1) Open the 2 wire saddles [1], and disconnect the 2 relay connectors [2].

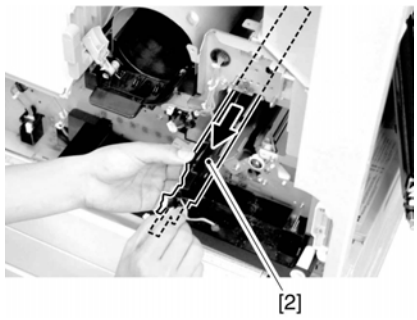


F-7-226

2) While freeing the lock [1] toward the right, detach the pre-exposure lamp [2].



F-7-227

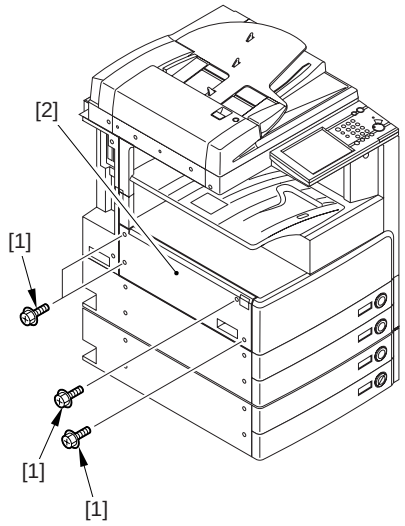


F-7-228

7.12.10.9 Removing the Left Cover 0007-8382

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 4 screws [1], and detach the left cover [2].



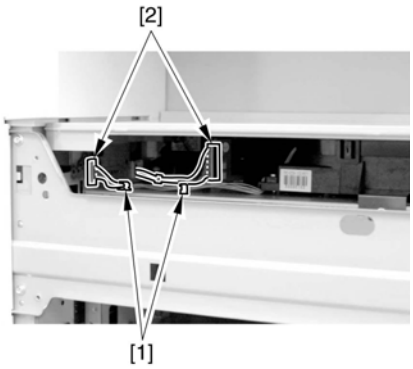
F-7-229

7.12.10.10 Removing the Laser Unit

0007-8383

iR2270 / iR2870 / iR3570 / iR4570

1) Open the 2 wire saddles [1], and disconnect the 2 connectors [2].

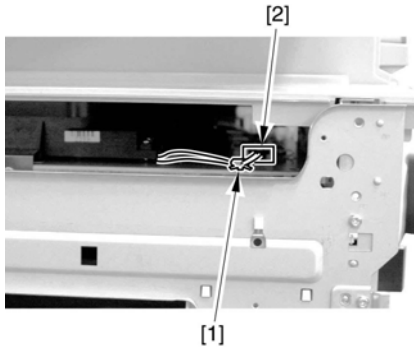


F-7-230

⚠

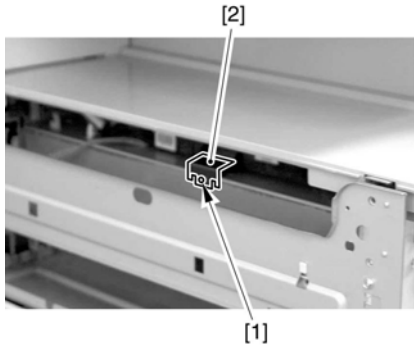
When you have disconnected the connector [1], be sure to take care so that it will not come into contact with the PCB that is mounted to the laser scanner unit. (The PCB is equipped with a laser intensity adjustment variable resistor. Contact with the PCB can change the adjustment setting.)

2) Open the wire saddle [1], and disconnect the connector [2].



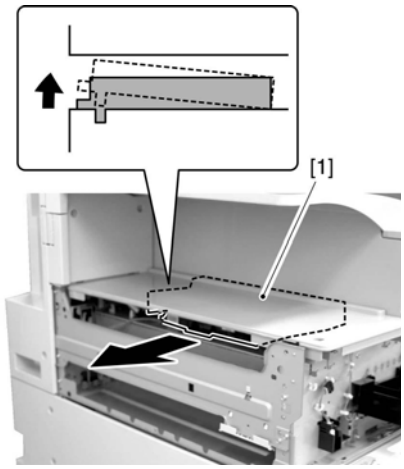
F-7-231

3) Remove the screw [1], and detach the fixing [2].



F-7-232

4) Lift the front of the laser unit [1], and slide it to the front.



F-7-233

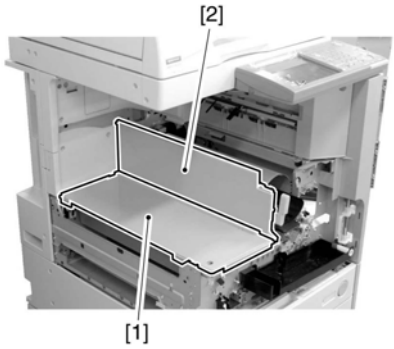
⚠

When sliding out the laser scanner unit, be sure to take care not to touch the PCB mounted to the laser scanner unit. (The PCB is equipped with a laser scanner intensity adjustment variable resistor, and contact with the PCB can change the adjustment setting.)

7.12.10.11 Removing the Hopper Assembly 0007-8384

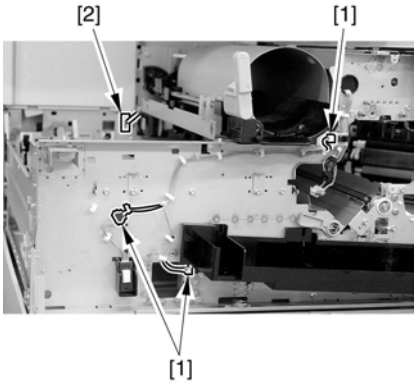
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the inside base cover [1] and the inside right color [2].



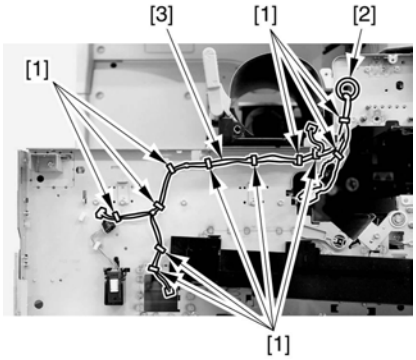
F-7-234

2) Disconnect the 3 connectors [1] found at the front and the connector [2] found at the rear.



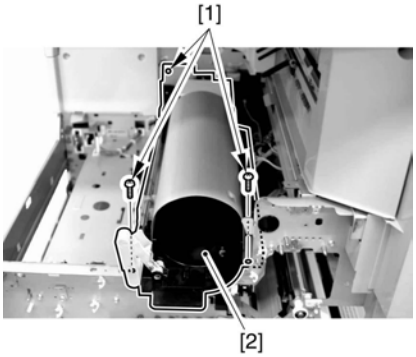
F-7-235

3) Open the 11 wire saddles [1], and pull out the harness [3] through the hole [2] in the plate.



F-7-236

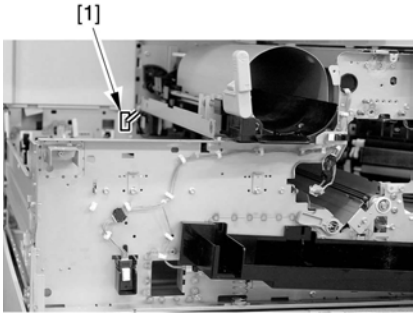
4) Remove the 3 screws [1], and detach the hopper assembly [2].



F-7-237

⚠

When fitting the hopper assembly to the machine, be sure that the connectors [1] are securely connected. If the connectors [1] are not connected, the environment heater will not be supplied with power, leading to image faults.

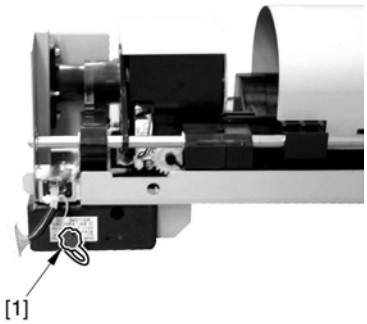


F-7-238

7.12.10.12 Removing the Toner Feedscrew Motor 0007-8385

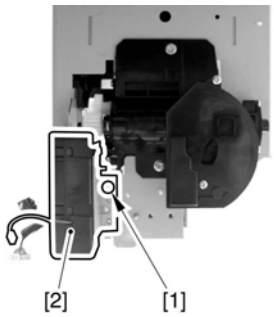
iR2270 / iR2870 / iR3570 / iR4570

1) Disconnect the connector [1].



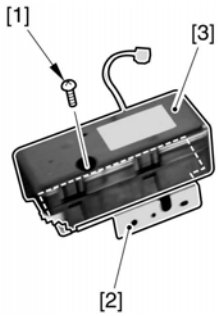
F-7-239

2) Remove the screw [1], and detach the toner feedscrew motor assembly [2].



F-7-240

3) Remove the screw [1], and detach the toner feedscrew motor [3] from the base.



F-7-241

7.12.11 Static Charge Eliminator

7.12.11.1 Removing the Static Eliminator 0007-8428

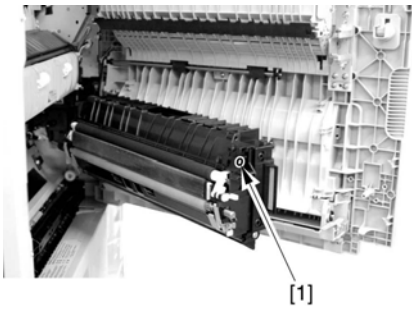
iR2270 / iR2870 / iR3570 / iR4570

1) Open the right door [1].



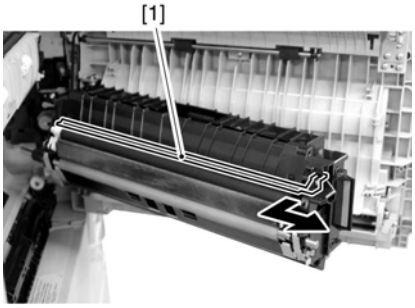
F-7-242

2) Remove the screw [1].



F-7-243

3) Detach the static eliminator [1] to the front.



F-7-244

Chapter 8 Pickup/ Feeding System

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8.1 Construction

8.1.1 Specifications, Controls, and Functions

0006-7400

iR2270 / iR2870 / iR3570 / iR4570

The major specifications, controls, and functions of the pickup/feeding system are as follows:

T-8-1

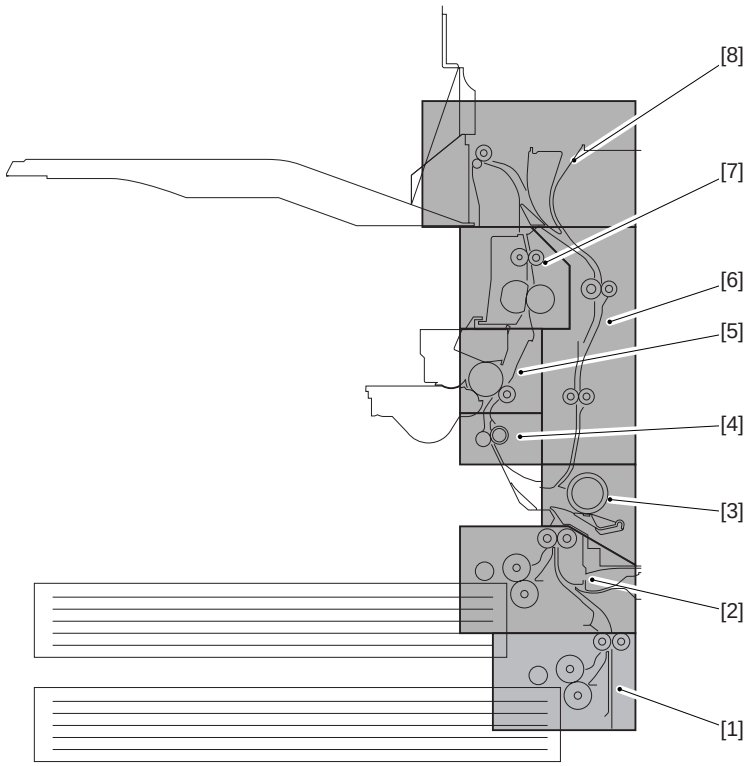
Item	Description	-
Paper compartment	front loading	
Pickup method	cassette	separation retard
	manual feeder	separation pad
Paper reference	center	
Paper volume	cassette 1/2	550 sheets (80 g/m2)
	manual feed tray	50 sheets (80 g/m2)
Paper size	cassette 1	B4, A4, B5, LGL, LTR, EXE, A4R, B5R, LTRR, A5R. STMTR,
	cassette 2	A3, B4, A4, B5, LGL, LTR, EXE, LDR, A4R, B5R, LTRR, A5R, STMTR
	manual feed tray	A3, B4, A4, B5, LDR, LGL, LTR, A4R, B5R, LTRR, A5R, STMTR, EXE, postcard, envelope, free size
Paper weight	cassette 1/2	64 to 80 g/m2 (single-sided)
		64 to 80 g/m2 (auto double-sided)
	manual feed tray	64 to 128 g/m2 (if double-sided, manual feeding only; no auto duplexing)
Paper size switch-over	cassette 1/2	by the user
	manual feed tray	by the user
Duplexing method	through path	
	envelopes: Com10, Monarch, DL, ISO-C5, ISO-B5	
	postcard: A6R non-default, A5R non-default, A4 non-default	
Speed of process	iR2270/2870	137 mm/sec

Item	Description	-
	iR3570/4570	230mm /sec (nomal mode)
		137mm /sec (low speed mode: manual feeding)
Delivery accessory	3 Way Unit-A1 (standard with iR4570/3570 model)	
	Inner 2-Way Tray-D1	
	Copy Tray-J1	
	Finisher-S1	
	Buffer Path Unit-E1	
	Finisher-Q3	
	Saddle Finisher-Q4	
	Inner Puncher Kit-Q1/R1/S1/T1	
	Punch Unit-L1/M1/N1/P1	
Pickup accessory	2-Cassette Pedestal-Y2	
	Side Paper Deck-Q1	
	Envelope Cassette Attachment-C1	

8.1.2 Division into Blocks

0006-7401

iR2270 / iR2870



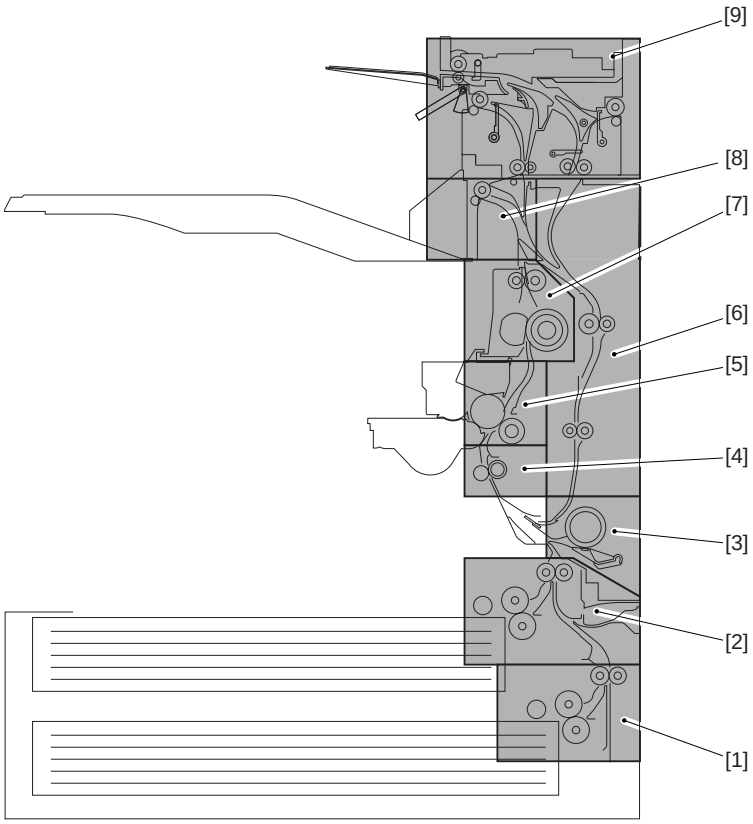
F-8-1

[1] Pickup assembly (cassette 2)
[2] Pickup assembly (cassette 1)
[3] Manual feed pickup assembly
[4] Registration roller assembly
[5] Transfer assembly
[6] Duplexing/feeding assembly
[7] Fixing assembly
[8] No.1 delivery assembly

8.1.3 Division into Blocks

0007-1444

iR3570 / iR4570



F-8-2

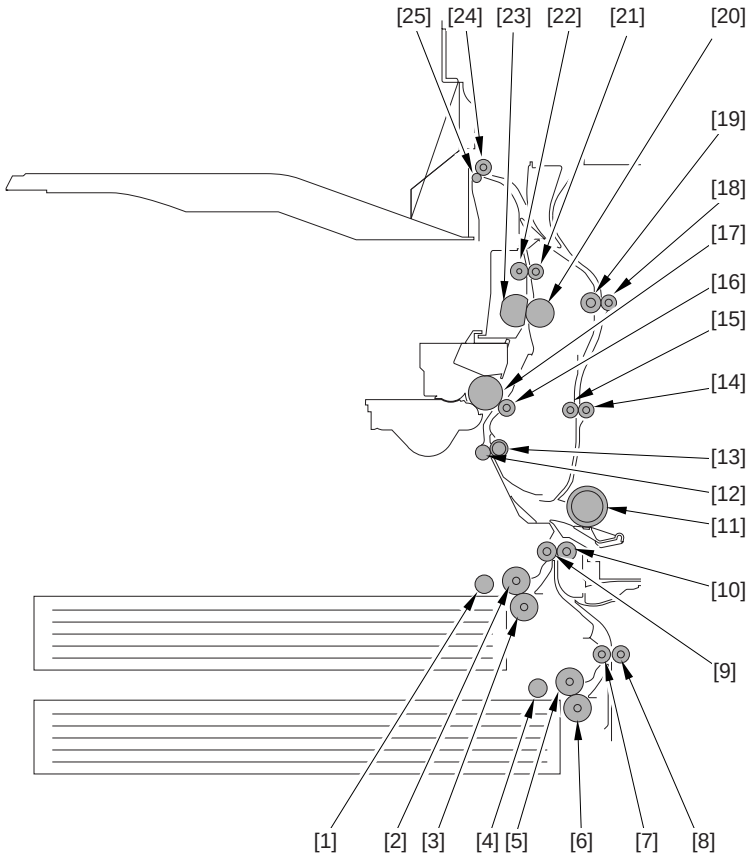
[1] Pickup assembly (cassette 2)
[2] Pickup assembly (cassette 1)
[3] Manual feed pickup assembly
[4] Registration roller assembly
[5] Transfer assembly
[6] Duplexing/feeding assembly
[7] Fixing assembly

[8] No.1 delivery assembly
[9] No.2/No.3 delivery assembly

8.1.4 Arrangement of Rollers

0006-7402

iR2270 / iR2870



F-8-3

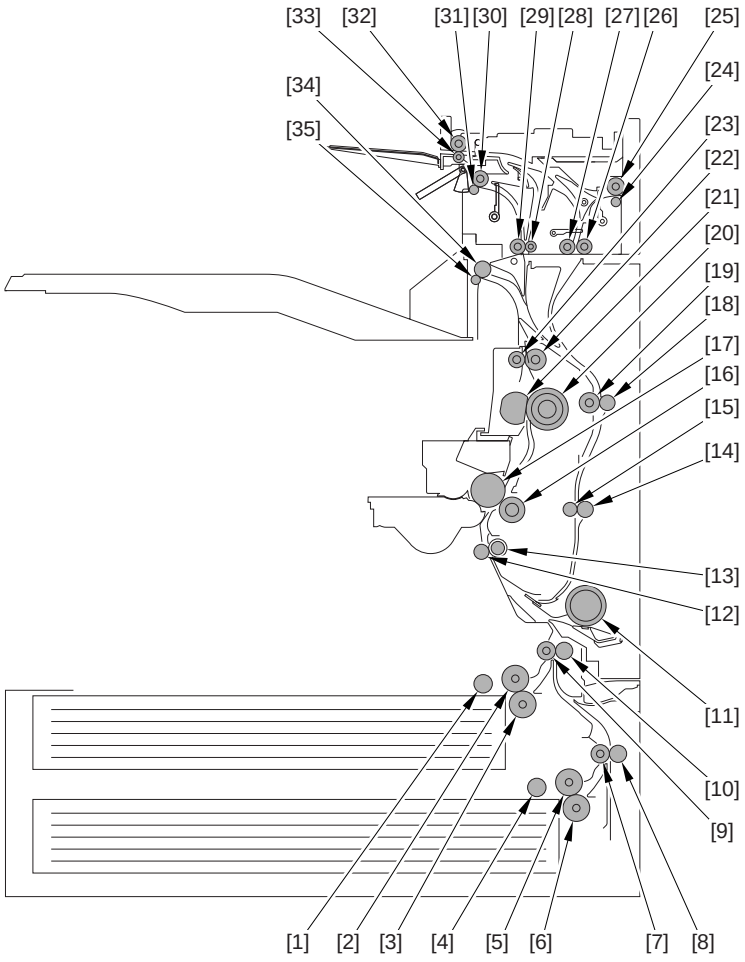
[1] Pickup roller (cassette 1)
[2] Feeding roller (cassette 1)
[3] Separation roller (cassette 1)
[4] Pickup roller (cassette 2)
[5] Feeding roller (cassette 2)
[6] Separation roller (cassette 2)
[7] Vertical path roller 2
[8] Vertical path slave roller 2
[9] Vertical path roller 1
[10] Vertical path slave roller 1
[11] Manual feed pickup roller
[12] Registration roller (inside)

[13] Registration roller (outside)
[14] Duplexing/feed roller 2
[15] Duplexing/feeding member 2
[16] Transfer roller
[17] Drum
[18] Duplexing/feed roller 1
[19] Duplexing/feeding member 1
[20] Pressure roller
[21] Fixing outlet roller
[22] Fixing outlet member
[23] Fixing film
[24] Delivery roller
[25] Delivery member

8.1.5 Arrangement of Rollers

0007-1461

iR3570 / iR4570

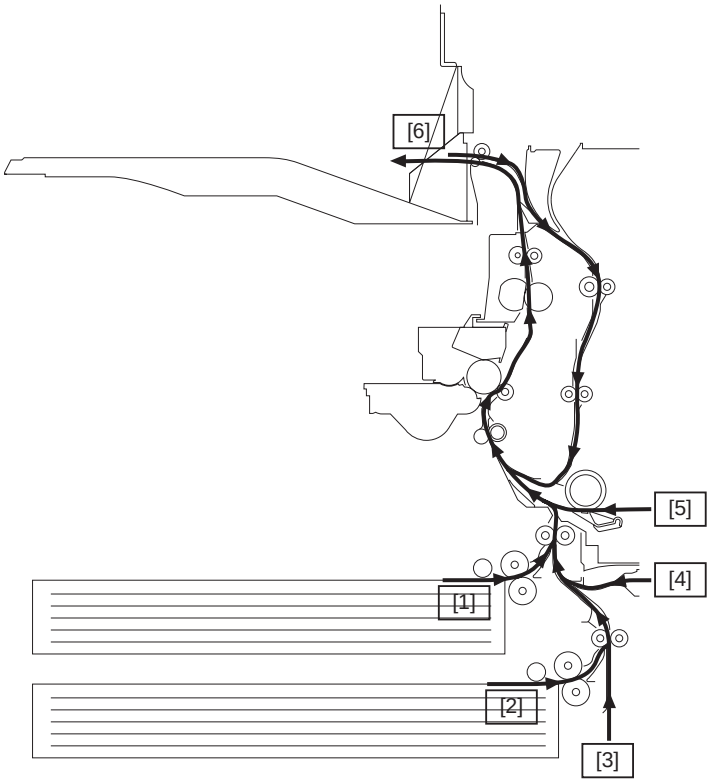


F-8-4

[1] Pickup roller (cassette 1)
[2] Feed roller (cassette 1)
[3] Separation roller (cassette 1)
[4] Pickup roller (cassette 2)
[5] Feed roller (cassette 2)
[6] Separation roller (cassette 2)
[7] Vertical path roller 2
[8] Vertical path slave roller 2
[9] Vertical path roller 1
[10] Vertical path slave roller 1
[11] Manual feed pickup roller
[12] Registration roller (inside)
[13] Registration roller (outside)
[14] Duplexing/feeding roller 2
[15] Duplexing/feeding member 2
[16] Transfer roller
[17] Drum
[18] Duplexing/feed roller 1
[19] Duplexing/feeding member 1
[20] Presser roller
[21] Fixing film
[22] Fixing outlet roller
[23] Fixing outlet roll
[24] Delivery roll (No.3 delivery assembly)
[25] Delivery roller (No.3 delivery assembly)
[26] Duplexing inlet roller
[27] Duplexing inlet member
[28] Vertical path slave roller 3
[29] Vertical path roller 3
[30] Delivery roller (No.2 delivery assembly)
[31] Delivery member (No.2 delivery assembly)
[32] Reversing roller
[33] Reversing member
[34] Delivery roller (No.1 delivery assembly)
[35] Delivery member (No.1 delivery assembly)

8.1.6 Diagram of Paper Paths (printer on its own) 0006-7403

iR2270 / iR2870



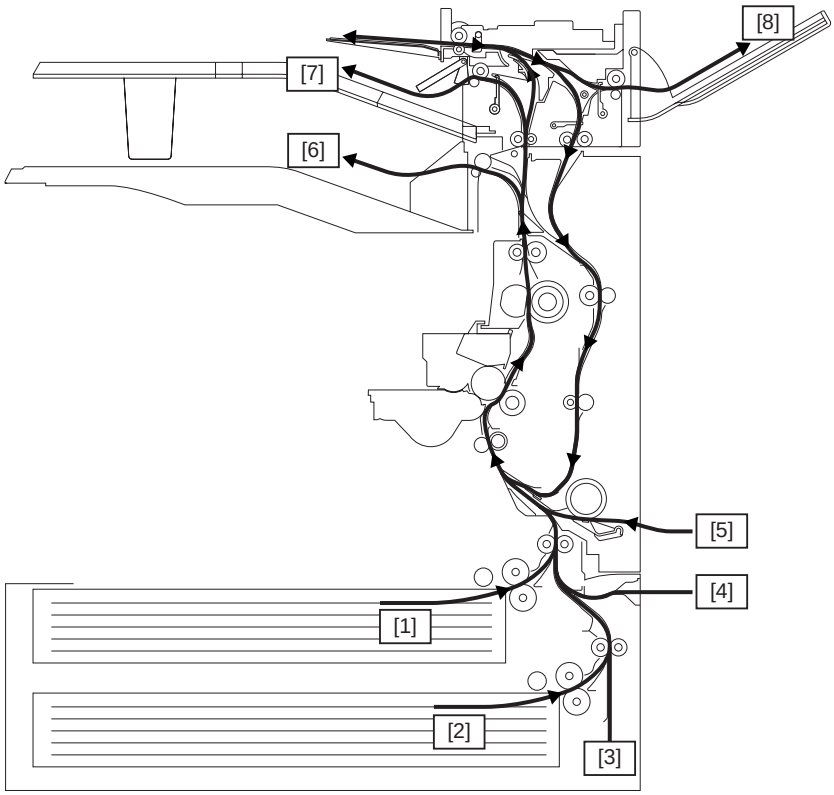
F-8-5

[1] Pickup from cassette 1
[2] Pickup from cassette 2
[3] Pickup from cassette pedestal
[4] Pickup from side paper deck
[5] Pickup from manual feeder
[6] Delivery from copy tray 1

8.1.7 Diagram of Paper Paths (w/ copy tray)

0007-1484

iR3570 / iR4570

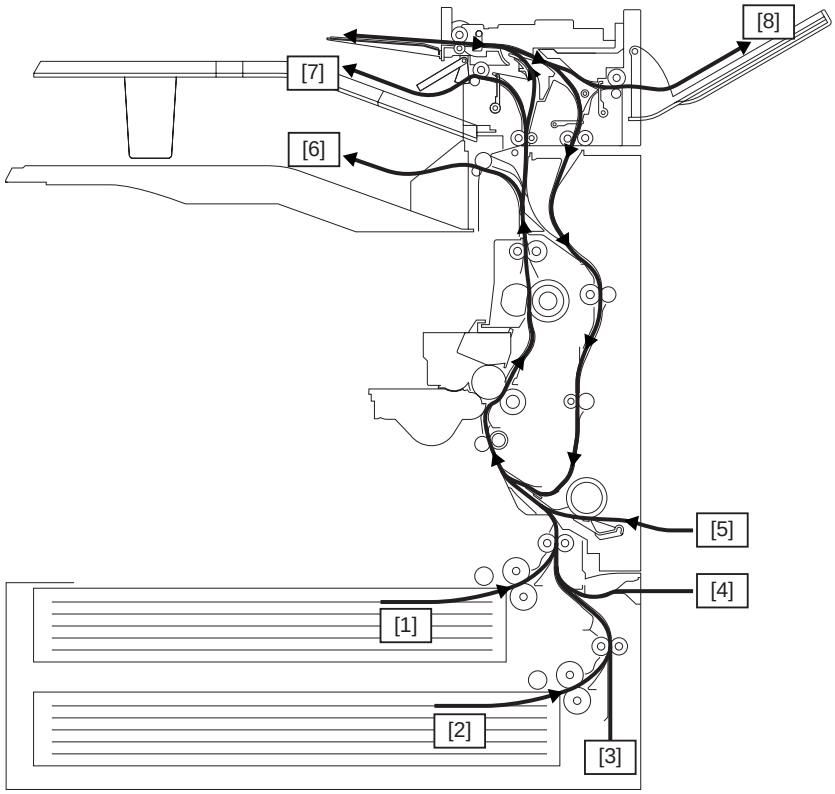


F-8-6

[1] Pickup from cassette 1
[2] Pickup from cassette 2
[3] Pickup from cassette pedestal (option)
[4] Pickup from side paper deck (option)
[5] Pickup from manual feeder
[6] Delivery to copy tray 1
[7] Delivery to copy tray 2 (option)
[8] Delivery to copy tray 3 (option)

8.1.8 Diagram of Paper Paths (w/ 3 Way Unit-A1 /copy tray) 0006-7404

iR2270 / iR2870



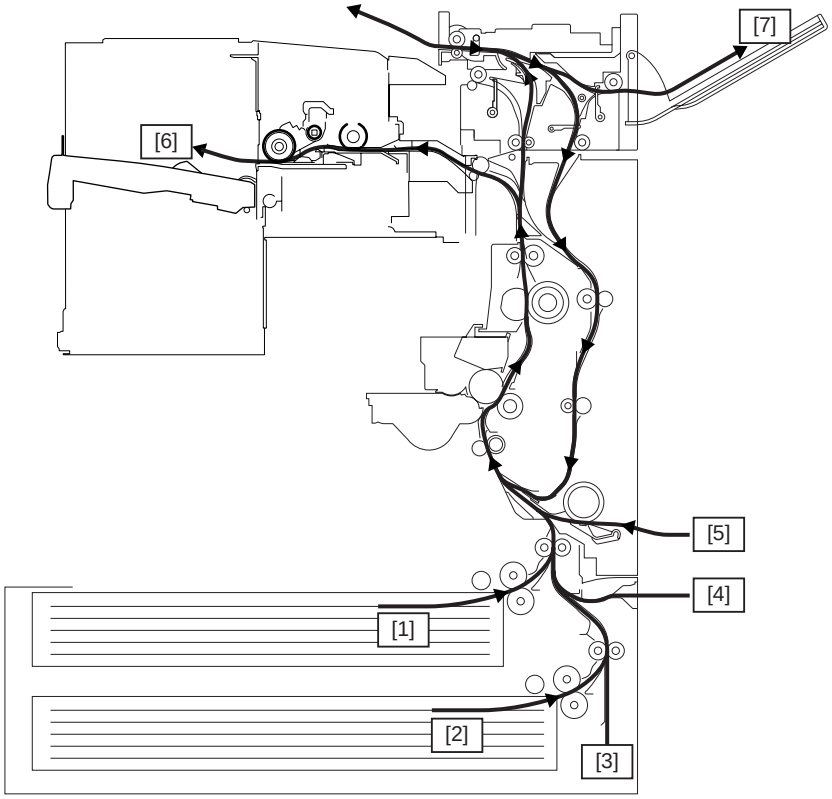
F-8-7

[1] Pickup from cassette 1
[2] Pickup from cassette 2
[3] Pickup from cassette pedestal (option)
[4] Pickup from side paper deck (option)
[5] Pickup from manual feeder
[6] Delivery to copy tray 1
[7] Delivery to copy tray 2 (option)
[8] Delivery to copy tray 3 (option)

8.1.9 Diagram of Paper Paths (w/ Finisher-S1/copy tray)

0006-7405

iR2270 / iR2870 / iR3570 / iR4570

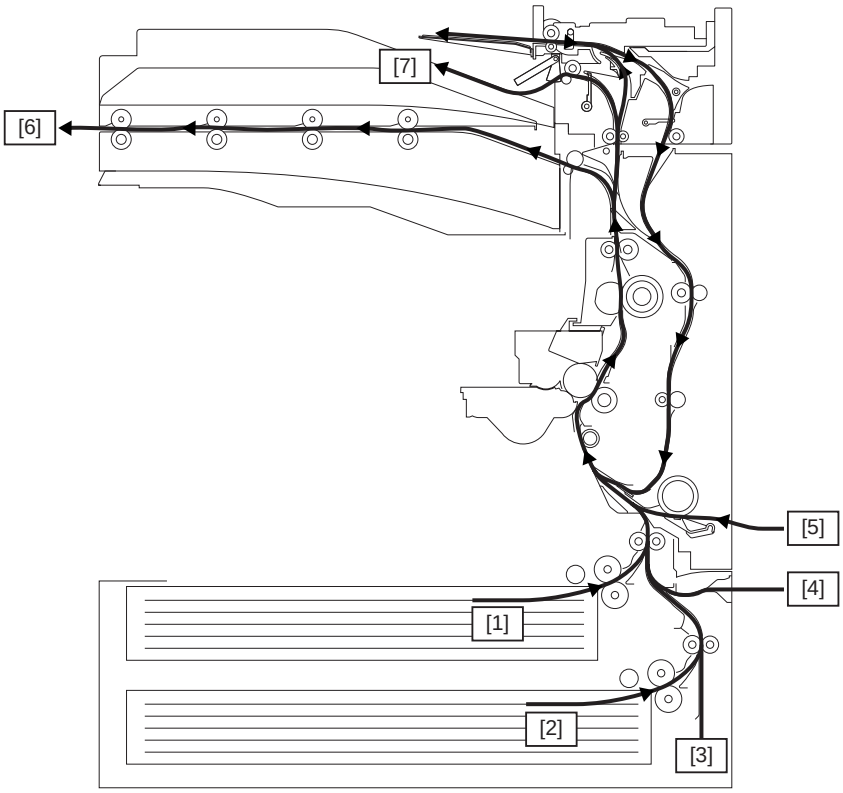


F-8-8

[1] Pickup from cassette 1
[2] Pickup from cassette 2
[3] Pickup from cassette pedestal (option)
[4] Pickup from paper deck (option)
[5] Pickup from manual feeder
[6] Delivery to Finisher-S1 (option)
[7] Delivery to copy tray 3 (option)

8.1.10 Diagram of Paper Paths (w/ Finisher-Q3/Saddle Finisher-Q4) 0006-7406

iR2270 / iR2870 / iR3570 / iR4570



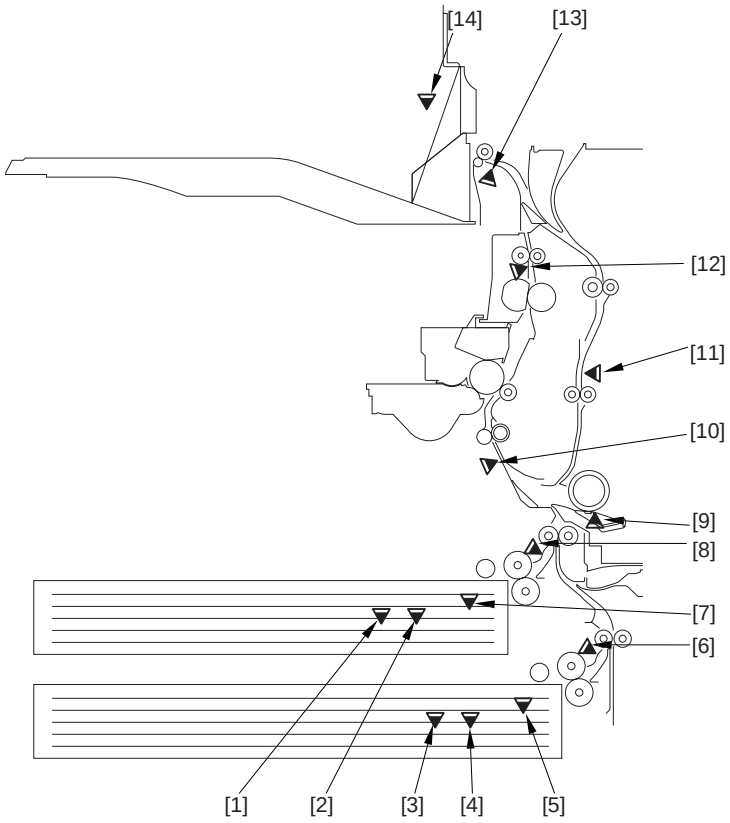
F-8-9

[1] Pickup from cassette 1
[2] Pickup from cassette 2
[3] Pickup from cassette pedestal (option)
[4] Pickup from paper deck (option)
[5] Pickup from manual feeder
[6] Delivery to Finisher-Q3/Saddle Finisher-Q4 (option)
[7] No.2 delivery assembly (option)

8.1.11 Arrangement of Sensors

0006-7408

iR2270 / iR2870



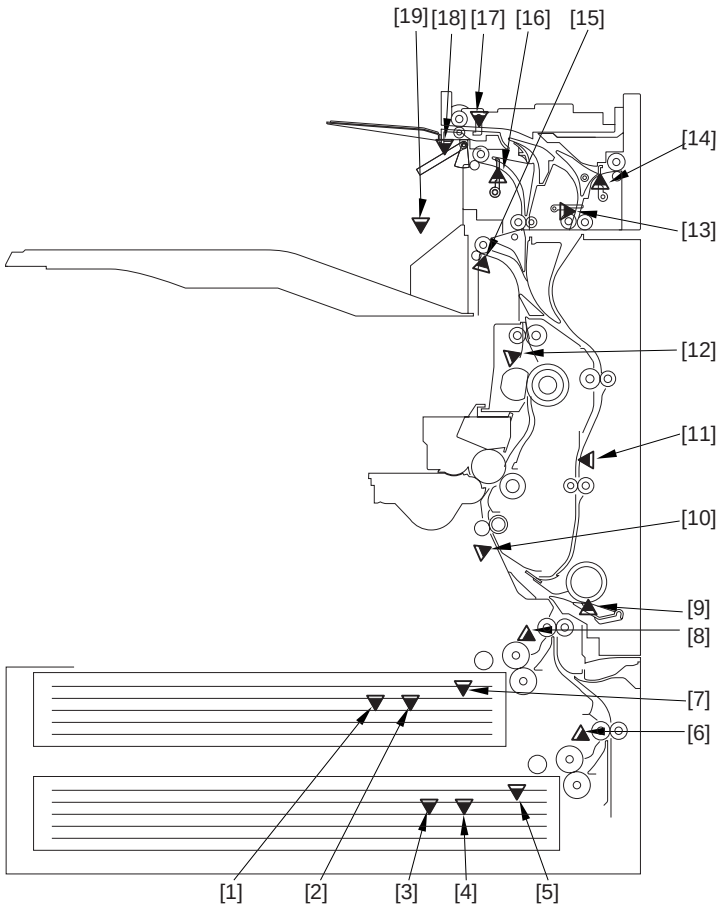
F-8-10

[1] Cassette 1 paper level sensor B (PS4)
[2] Cassette 1 paper level sensor A (PS3)
[3] Cassette 2 paper level sensor B (PS6)
[4] Cassette 2 paper level sensor A (PS5)
[5] Cassette 2 paper sensor (PS2)
[6] Cassette 2 retry sensor (PS11)
[7] Cassette 1 paper sensor (PS1)
[8] Cassette 1 retry sensor (PS10)
[9] Manual feeder paper sensor (PS7)
[10] Registration sensor (PS9)
[11] Duplexing/feed sensor (PS17)
[12] Fixing/delivery paper sensor (PS13)
[14] Delivery sensor 1 (PS14)
[15] Delivery paper full sensor 1 (PS15)

8.1.12 Arrangement of Sensors

0007-1487

iR3570 / iR4570



F-8-11

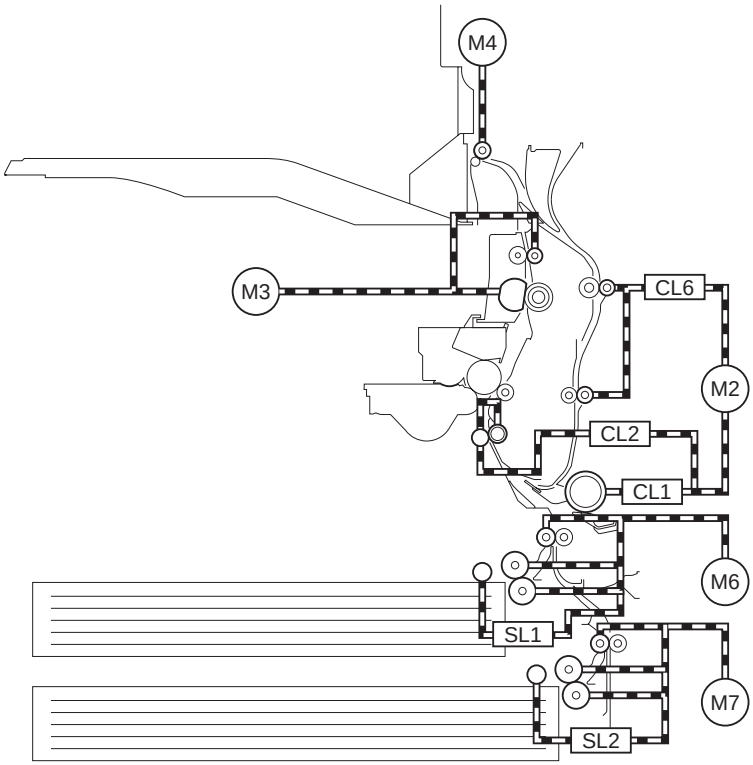
[1] Cassette 1 paper level sensor B (PS4)
[2] Cassette 1 paper level sensor A (PS3)
[3] Cassette 2 paper level sensor B (PS6)
[4] Cassette 2 paper level sensor A (PS5)
[5] Cassette 2 paper sensor (PS2)
[6] Cassette 2 retry sensor (PS11)
[7] Cassette 1 paper sensor (PS1)
[8] Cassette 1 retry sensor (PS10)
[9] Manual feed paper sensor (PS7)
[10] Registration sensor (PS9)
[11] Duplexing/feed sensor (PS17)
[12] Fixing/delivery sensor (PS13)
[13] Duplexing inlet sensor (PS3A)
[14] Delivery sensor 3 (PS5A)
[15] Delivery sensor 1 (PS14)
[16] Delivery sensor 2 (PS1A)
[17] Reversal sensor (PS4A)
[18] Delivery full sensor 2 (PS2A)

[19] Delivery full sensor 1 (PS15)

8.1.13 Route of Drive

0006-7411

iR2270 / iR2870



F-8-12

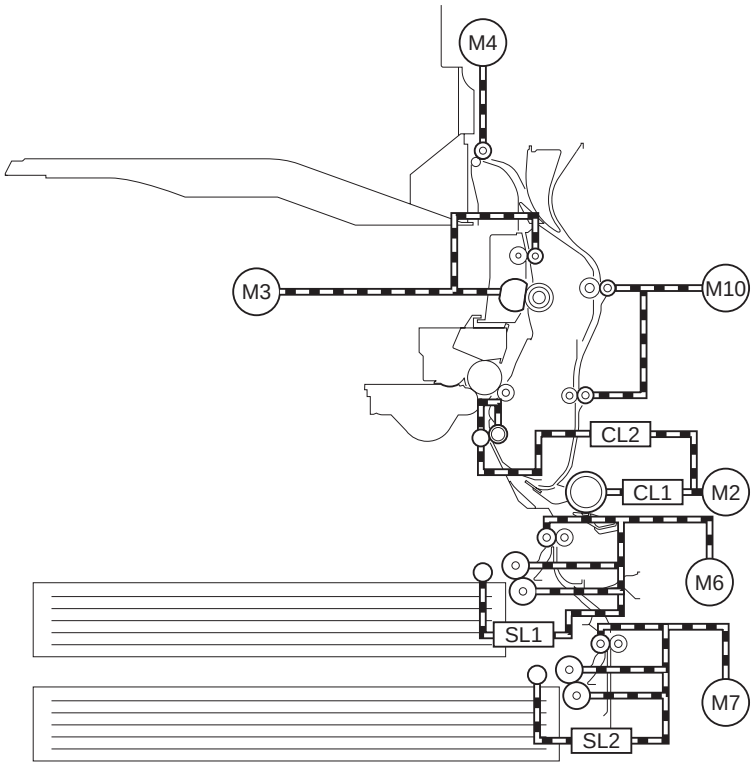
M2 Main motor
M3 Fixing motor
M4 No.1 delivery motor
M6 Cassette 1 pickup motor
M7 Cassette 2 pickup motor
SL1 Cassette 1 pickup solenoid
SL2 Cassette 2 pickup solenoid
CL1 Manual pickup clutch
CL2 Registration clutch
CL6 Duplexing clutch

8.1.14 Route of Drive

0007-9020

iR3570 / iR4570

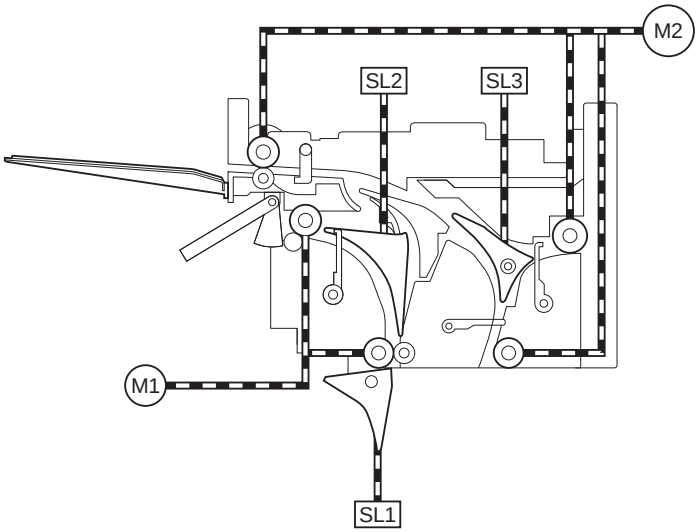
- Main Body



F-8-13

M2 Main motor
M3 Fixing motor
M4 No.1 delivery motor
M6 Cassette 1 pickup motor
M7 Cassette 2 pickup motor
M10 Duplexing motor
SL1 Cassette 1 pickup solenoid
SL2 Cassette 2 pickup solenoid
CL1 Manual pickup clutch
CL2 Registration clutch

- Expancion Delivery Unit



F-8-14

M1 No.2 delivery motor
M2 No.3 delivery motor
SL1 No.1 delivery solenoid
SL2 No.2 delivery solenoid
SL3 No.3 delivery solenoid

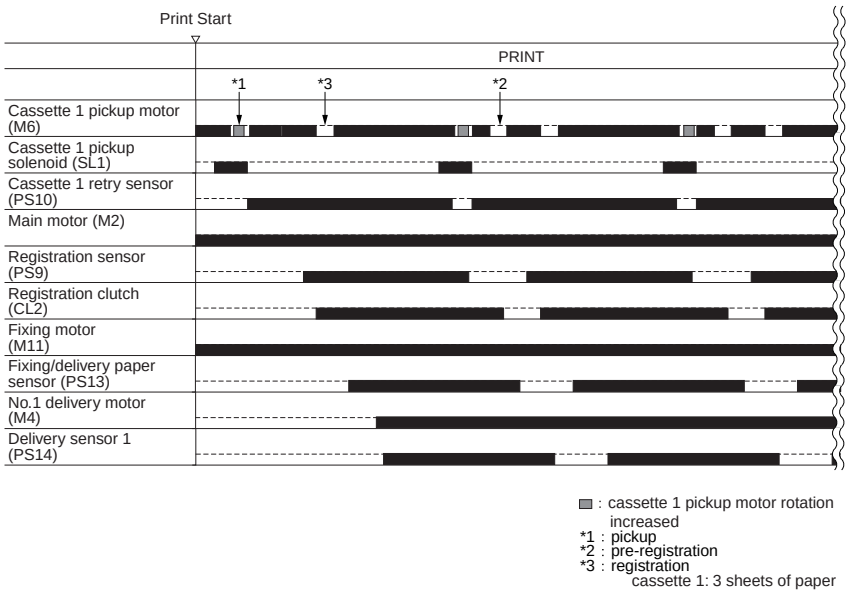
8.2 Basic Sequence

8.2.1 Basic Sequence

0007-2658

iR2270 / iR2870 / iR3570 / iR4570

- Basic Sequence of Operation for Making 3 Prints



F-8-15

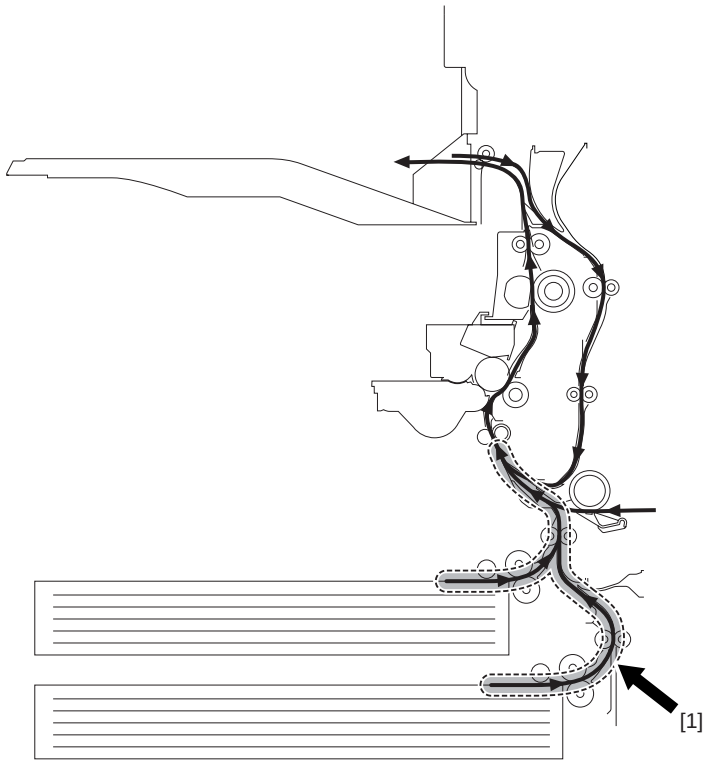
8.2.2 Increase in Speed

0007-2660

iR2270 / iR2870

The machine increases the speed of moving paper over specific intervals. An overview and the associated accessories for the increase in speed are as follows:

- No Delivery Accessory

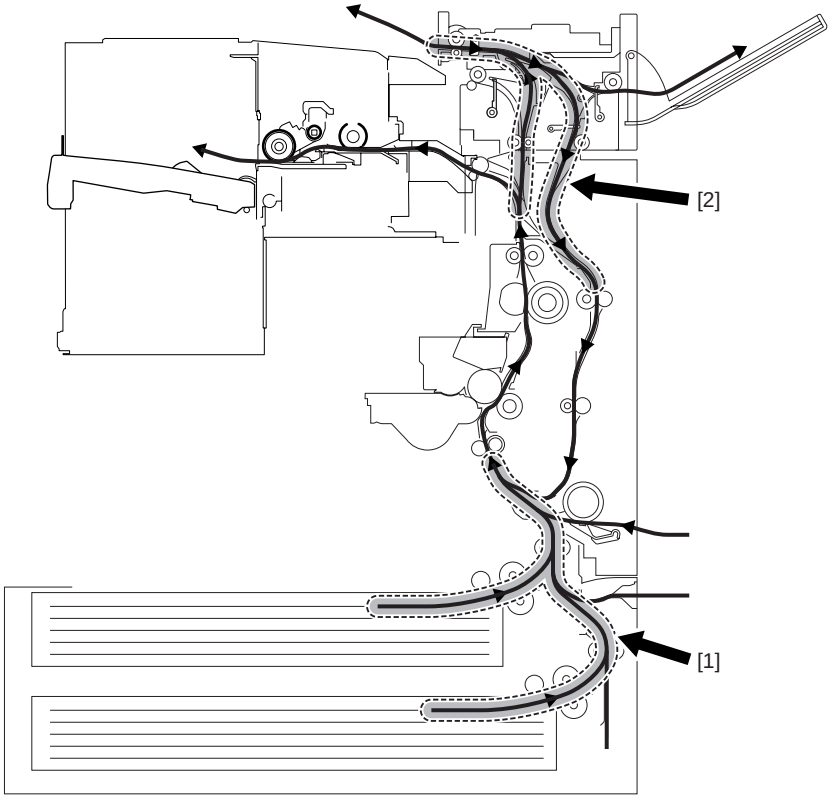


F-8-16

1. Increase in Speed for Pickup Operation

The speed is 1.5 times as high as the process speed (no increase if for manual feed pickup/in the case of the 1st sheet from cassette 1, accelerates to about twice as fast).

- Finisher-S1 in Use



F-8-17

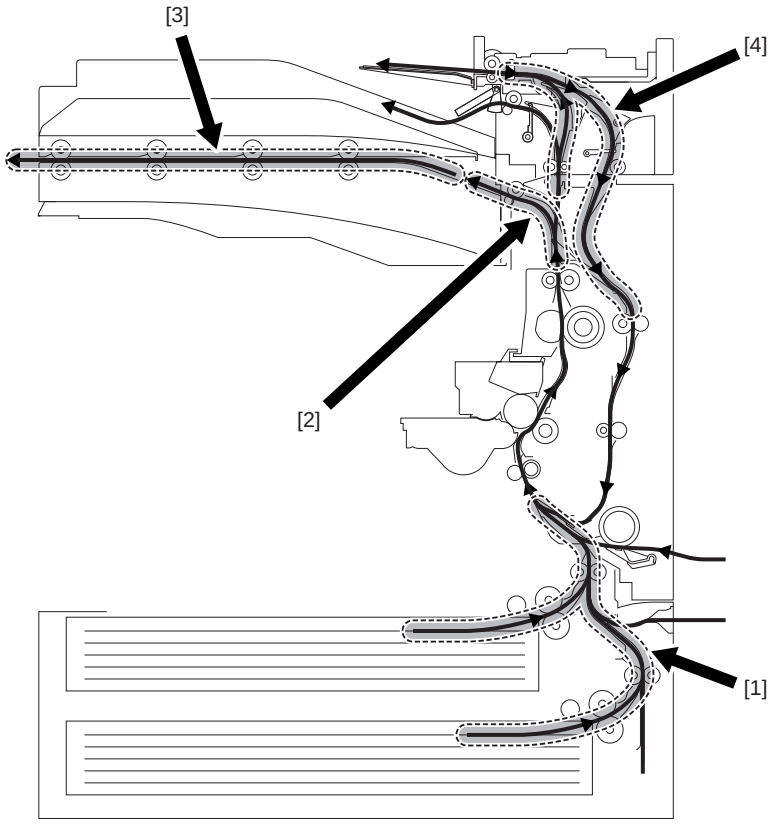
1. Increase in Speed for Pickup Operation

The speed is 1.5 times as high as the process speed (no increase if for manual feed pickup/in the case of the 1st sheet from cassette 1, accelerates to about twice as fast).

2. Increase in Speed for Reversal

The speed is 3.4 times as high as the process speed (no increase if for delivery to tray 3).

- Finisher-Q3/Q4 in Use



F-8-18

1. Increase in Speed for Pickup Operation
The speed is 1.5 times as high as the process speed (no increase if for manual feed pickup/in the case of the 1st sheet from cassette 1, accelerates to about twice as fast).

2. Increase in Speed After Fixing
The speed is 2.5 times as high as the process speed.

3. Increase in Speed for the Buffer Path
The speed is 2.5 times as high as the process speed (no increase if for delivery to saddle).

4. Increase in Speed for Reversal
The speed is 3.4 times as high as the process speed.

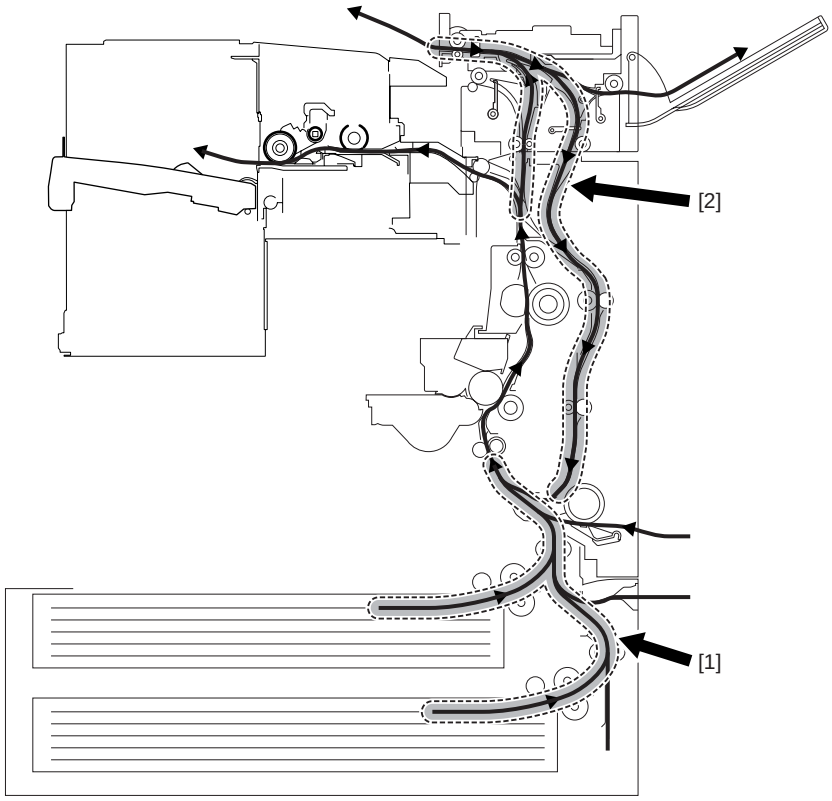
8.2.3 Increase in Speed

0007-8663

iR3570 / iR4570

The machine increases the speed of moving paper over specific intervals. An overview and the associated accessories for the increase in speed are as follows:

- Finisher-S1 in Use



F-8-19

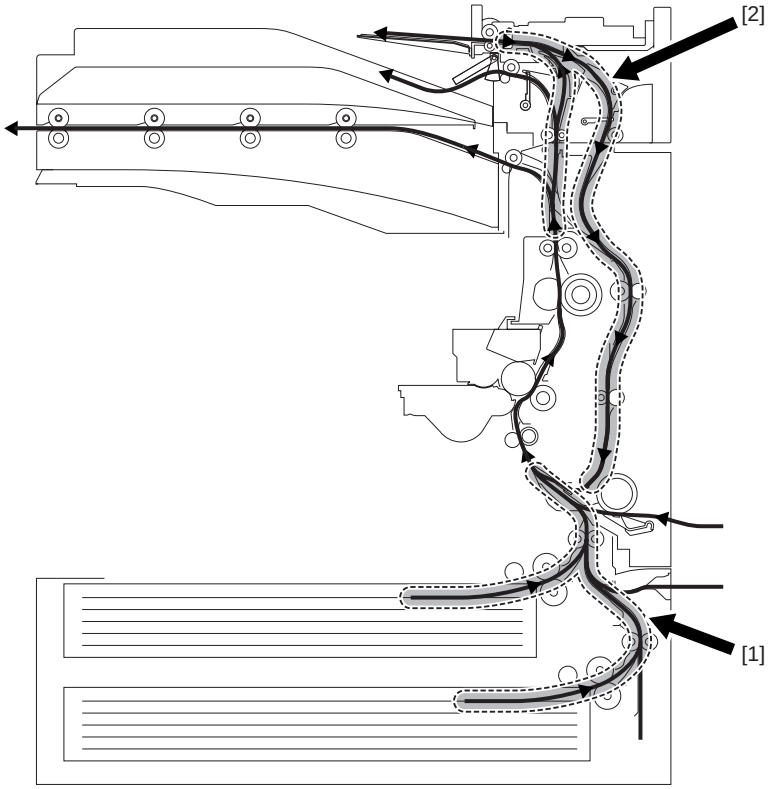
1. Increase in Speed for Pickup

The speed is 1.5 times as high as the process speed (in the case of manual feed, decelerates to about 0.6).

2. Increase in Speed for Reversal

The speed is 2 times as high as the process speed (no increase if for delivery to tray 3).

- Finisher-Q3/Q4 in Use



F-8-20

1. Increase in Speed for Pickup

The speed is 1.5 times as high as the process speed (in the cassette of manual feed, decelerates to about 0.6).

2. Increase in Speed for Reversal

The speed is 2 times as high as the process speed.

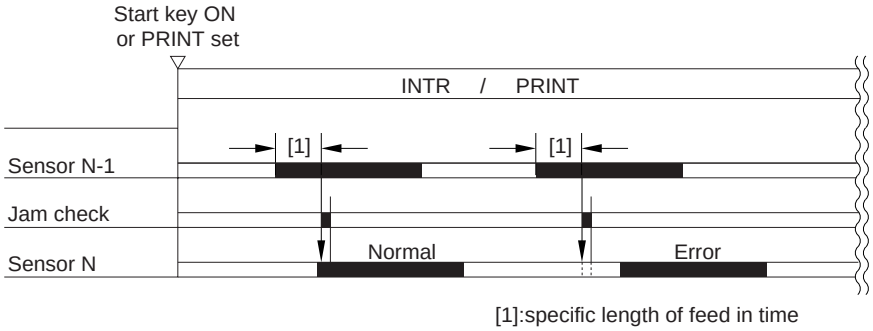
8.3 Detecting Jams

8.3.1 Delivery Jams

8.3.1.1 Delay Jam Outside the Cassette Pickup Assembly 0007-2663

iR2270 / iR2870 / iR3570 / iR4570

A delay jam outside the cassette pickup assembly is identified as follows:
The length of time it takes for paper to move from the sensor N-1 to the delay jam sensor N is kept under control; a delay jam is identified if the delay jam sensor does not go on within a specific length of time after the sensor N has gone on.



F-8-21

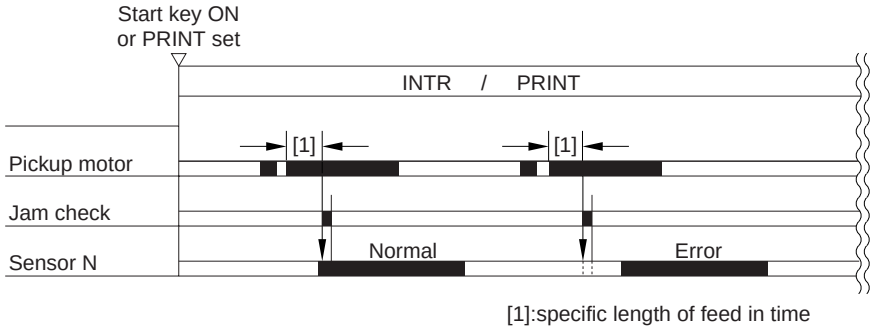
T-8-2

Sensor
Registration sensor (PS9)
Fixing delivery sensor (PS13)
No. 1 delivery sensor (PS14)
Duplex feed sensor (PS17)

8.3.1.2 Delay Jam in the Cassette Pickup Assembly 0007-2664

iR2270 / iR2870 / iR3570 / iR4570

The leading edge of paper does not reach the sensor after the cassette 1/2 pickup motor has started to rotate.



F-8-22

T-8-3

Source of paper	Motor	Sensor
Cassette 1	cassette 1 pickup motor	cassette 1 retry sensor (PS10)
Cassette 2	cassette 2 pickup motor	cassette 2 retry sensor (PS11)

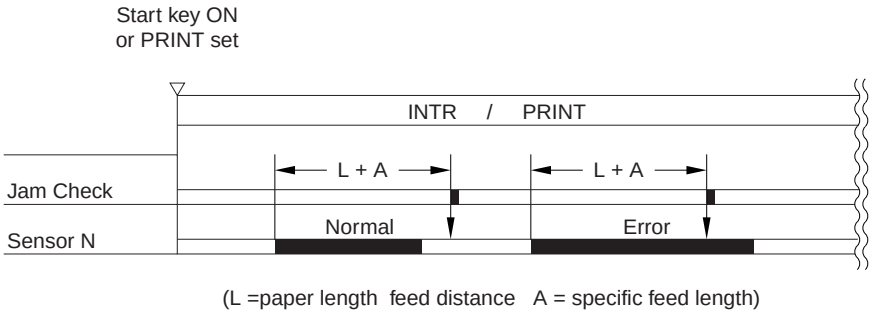
8.3.2 Stationary Jams

8.3.2.1 Common Stationary Jam

0007-2665

iR2270 / iR2870 / iR3570 / iR4570

The sensor N does not go off within a specific length of time after the sensor has gone on.



F-8-23

T-8-4

Sensor
Cassette 1 retry sensor (PS10)
Cassette 2 retry sensor (PS11)
Registration sensor (PS9)

Sensor
Fixing outlet sensor (PS13)
No. 1 delivery sensor (PS14)
Duplex feed sensor (PS17)

8.3.2.2 Stationary Jam at Power-On 0007-2666

iR2270 / iR2870 / iR3570 / iR4570

The machine makes a check to see that there is no paper over the following sensors before it starts initial multiple rotation at power-on:

T-8-5

Sensor
Cassette 1 retry sensor (PS10)
Cassette 2 retry sensor (PS11)
Registration sensor (PS9)
Fixing outlet sensor (PS13)
No. 1 delivery sensor (PS14)
Duplex feed sensor (PS17)

8.3.3 Other Jams

8.3.3.1 Door Open Jam 0007-2668

iR2270 / iR2870 / iR3570 / iR4570

A door open jam is identified when the machine detects the opening of the door while it is making copies/prints.

T-8-6

Sensor
Front cover open sensor (PS22)
Right cover open sensor (PS18)

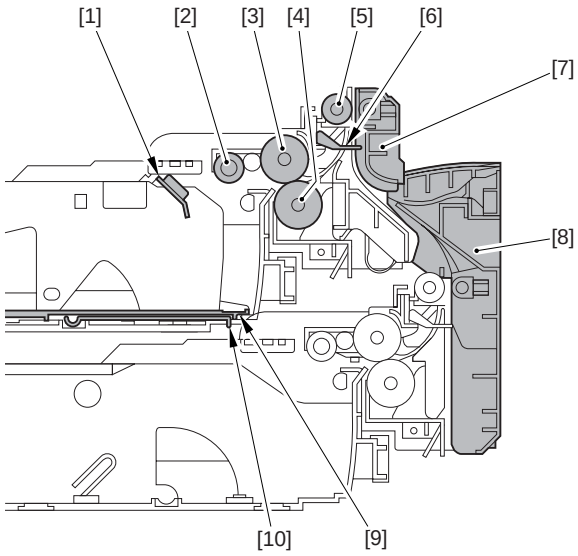
8.4 Cassette Pick-Up Unit

8.4.1 Overview

0007-2121

iR2270 / iR2870 / iR3570 / iR4570

The paper inside the cassette is held up by the lifter plate. When pickup takes place, the pickup roller moves down to come into contact with the surface of paper. The pickup roller is moved down when the pickup solenoid goes on. The feed roller and the separation roller serve to make sure that a single sheet of paper is moved to the feed path, and the paper is moved as far as the registration roller by the work of the vertical path roller.
The pickup vertical path roller, pickup roller, feed roller, and separation roller are driven by the cassette pickup motor.



F-8-24

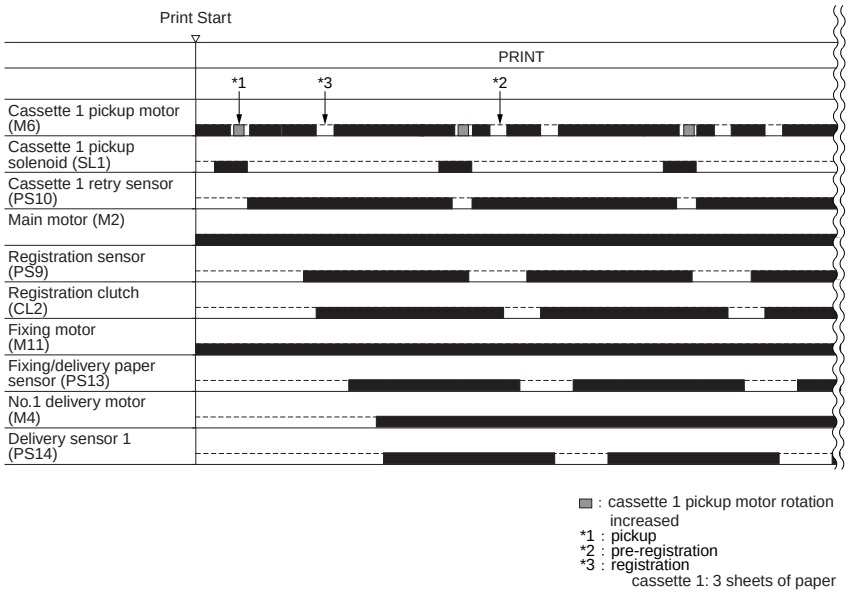
[1] Cassette paper sensor
[2] Pickup roller (roller A)
[3] Feed roller (roller B)
[4] Separation roller (roller C)
[5] Pickup vertical path roller
[6] Cassette retry paper sensor
[7] Vertical path guide
[8] Lower right cover
[9] Holding plate
[10] Lifter plate

8.4.2 Basic Sequence

0007-7947

iR2270 / iR2870 / iR3570 / iR4570

- Basic Sequence of Operation for Making 3 Prints



F-8-25

8.4.3 Identifying the Paper Size

0007-8700

iR2270 / iR2870 / iR3570 / iR4570

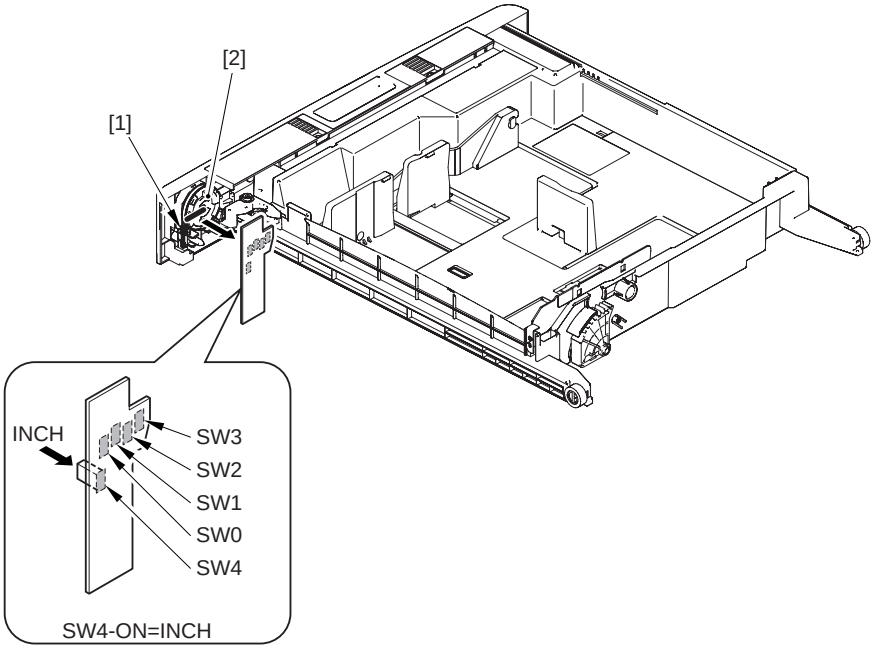
The size of paper inside the cassette is detected by the cassette size dial, and is communicated to the cassette size detection PCB.

As may as 15 positions may be detected with reference to the combinations of on and off states of the array of 4 actuators mounted to the cassette size detection PCB on the printer side and operating in conjunction with the cassette size dial.

In the absence of a cassette, all 4 actuators are off, causing the machine to assume there is no cassette.

AB/Inch Switch

The cassette size dial is equipped with a switch operated to change between AB and Inch configurations; the cassette size detecting switch will detect the configuration as soon as a cassette is fitted in the machine.



F-8-26

[1] AB/Inch switch
[2] Cassette size dial
[3] Cassette size detection PCB

T-8-7

AB-configuration

Size	SW0	SW1	SW2	SW3	SW4
(no cassette)	OFF	OFF	OFF	OFF	OFF
A5R	ON	OFF	ON	ON	OFF
A4	ON	ON	ON	ON	OFF
A4R	OFF	ON	ON	ON	OFF
A3	OFF	ON	OFF	ON	OFF
B5	ON	ON	OFF	ON	OFF
B5R	OFF	OFF	OFF	ON	OFF
B4	ON	OFF	OFF	ON	OFF
U1	OFF	ON	OFF	OFF	OFF
U2	OFF	ON	ON	OFF	OFF
Envelope	ON	OFF	ON	OFF	ON/OFF

AB-configuration

SW4 is used to detect the state of the AB/Inch-configuration switch.
The machine will assume the absence of a cassette if it detects a combination not found in the table. At this time, it does not move up the cassette lifter.
Since the paper size is not identified, there will be no indication of a paper size on the control panel; when the cassette in question is selected, the machine will indicate a message prompting the supply of paper.
If an envelope size is detected, an envelope cassette must be fitted.

T-8-8

Inch-configuration

Size	SW0	SW1	SW2	SW3	SW4
(no cassette)	OFF	OFF	OFF	OFF	OFF
STMTR	ON	OFF	ON	ON	ON
LTR	ON	ON	ON	ON	ON
LTRR	OFF	ON	ON	ON	ON
LGL	OFF	ON	OFF	ON	ON
11X17	ON	ON	OFF	ON	ON
EXEC	OFF	OFF	OFF	ON	ON
U3	OFF	ON	OFF	OFF	ON
U4	OFF	ON	ON	OFF	ON
Envelope	ON	OFF	ON	OFF	ON/OFF

SW4 is used to detect the state of the AB/Inch-configuration switch.
The machine will assume the absence of a cassette if it detects a combination not found in the table. At this time, it does not move up the cassette lifter.
Since the paper size is not identified, there will be no indication of a paper size on the control panel; when the cassette in question is selected, the machine will indicate a message prompting the supply of paper.
If an envelope size is detected, an envelope cassette must be fitted.

8.4.4 Setting Up the Universal Cassette

0007-8701

iR2270 / iR2870 / iR3570 / iR4570

The following are default sizes the machine will assume when U1 through U4 are detected:

T-8-9

U1	G-LTR
U2	FLSC
U3	G-LGL
U4	A-LTR

The following is a list of sizes that may be assigned in addition to default sizes in service mode:

T-8-10

Universal U1 Through U4

Size
FLSC
OFI
E-OFI
B-OFI
A-OFI
M-OFI
FOLI
A-FLS
G-LTR
G-LGL
A-LTR (LTR)
A-LTRR (LTRR)

8.4.5 Paper Level Sensor

0007-8702

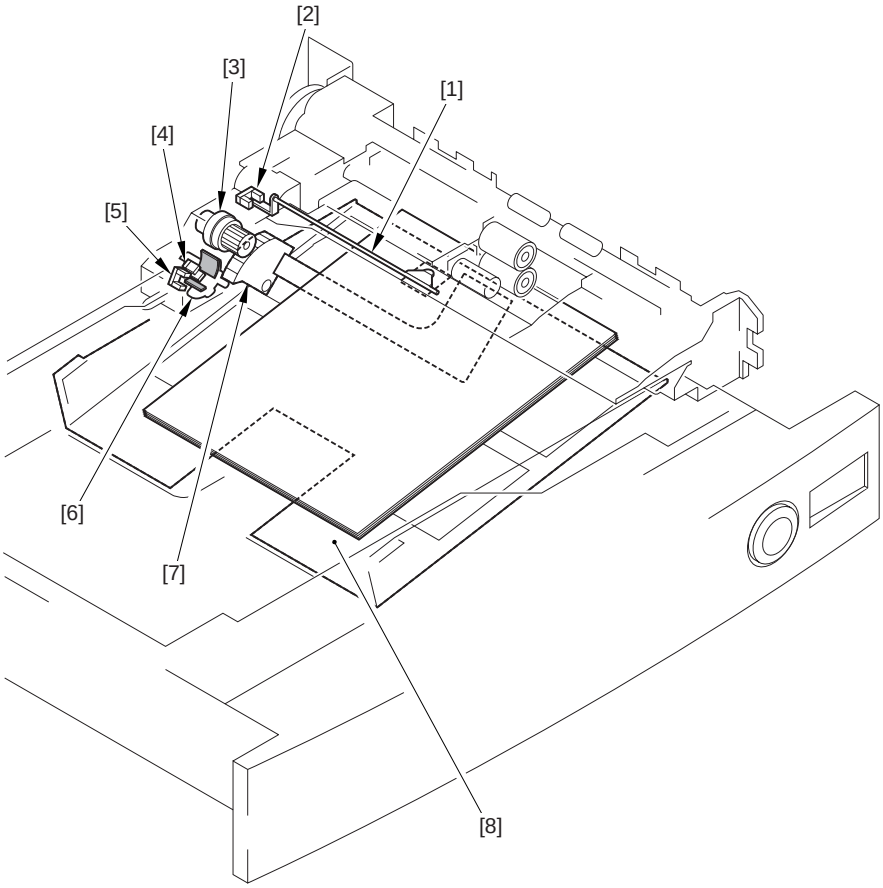
iR2270 / iR2870 / iR3570 / iR4570

The level of paper inside the cassette is checked using the following sensors:

T-8-11

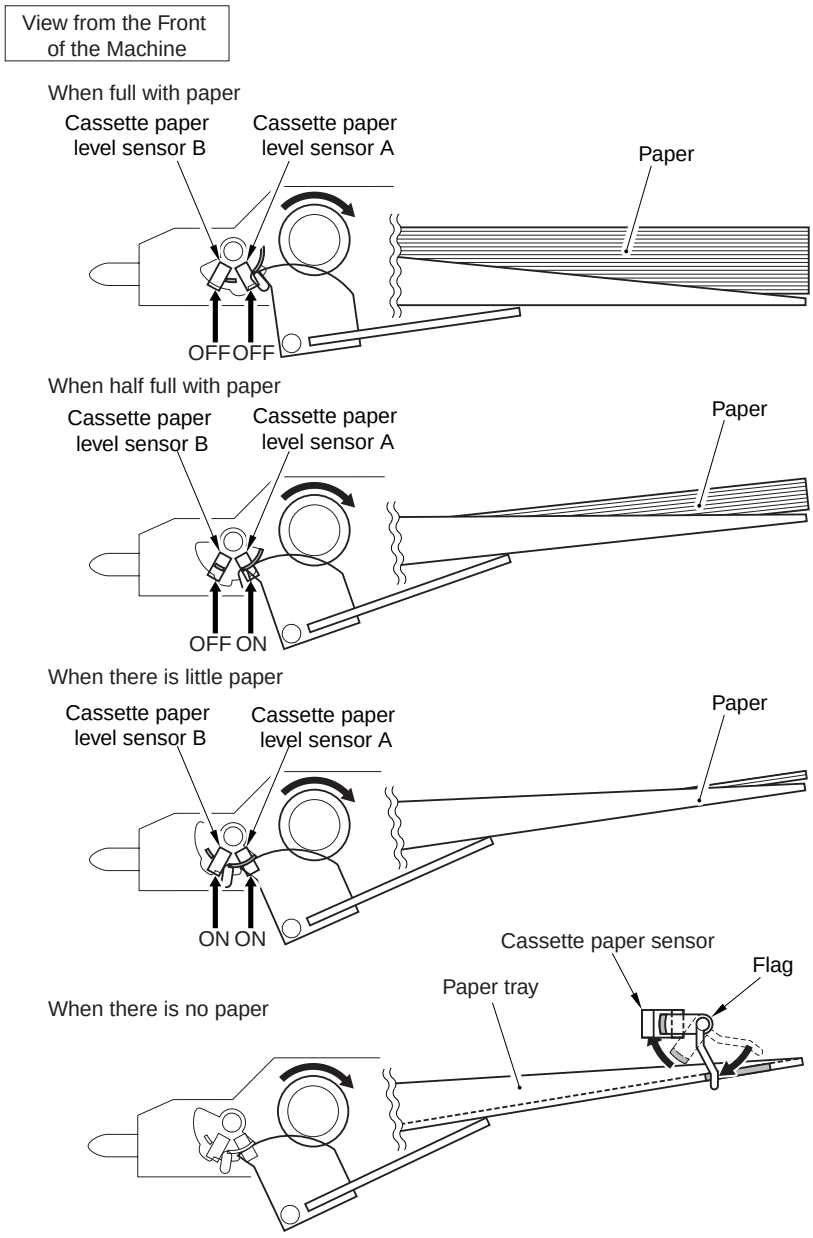
	Cassette 1	Cassette 2
Paper level sensor A	PS3	PS5

	Cassette 1	Cassette 2
Paper level sensor B	PS4	PS6
Paper sensor	PS1	PS2



F-8-27

[1] Flag
[2] Cassette paper sensor
[3] Lifter clutch
[4] Cassette paper level sensor A
[5] Cassette paper level sensor B
[6] Paper level sensor flag
[7] Lifter gear
[8] Tray



F-8-28

T-8-12

Paper level sensor A	Paper level sensor B	Paper sensor	Paper level	Control panel indication
OFF	OFF	OFF	100% to 50% of capacity	

Paper level sensor A	Paper level sensor B	Paper sensor	Paper level	Control panel indication
ON	OFF	OFF	50% to 50 sheets (approx.)	
ON	ON	OFF	50 sheets or less (approx.)	
---	---	ON	No paper	

8.5 Manual Feed Pickup Unit

8.5.1 Overview

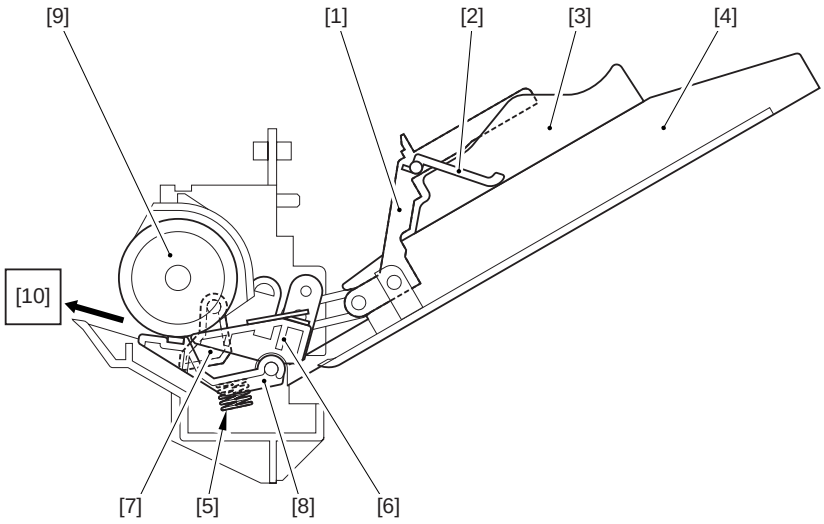
0007-2123

iR2270 / iR2870 / iR3570 / iR4570

The paper in the tray of the manual feed pickup unit is forced against the manual feed pickup roller by the work of the pickup guide plate; the manual feed pickup roller and the separation pad serve to make sure that only a single sheet of paper is separated and moved into the machine:

(1) the pickup guide plate is locked in place at all times, and does not require drive for pickup operation.

(2) multi-pickup roller is driven by the main motor (M2) through the manual feed pickup clutch (CL1).



F-8-29

[1] Upper guide
[2] Stopper plate
[3] Side guide
[4] Manual feed pickup tray
[5] Pressure spring
[6] Holding plate
[7] Manual feed paper sensor flag
[8] Separation pad
[9] Manual feed pickup roller
[10] (to registration roller assembly)

REF

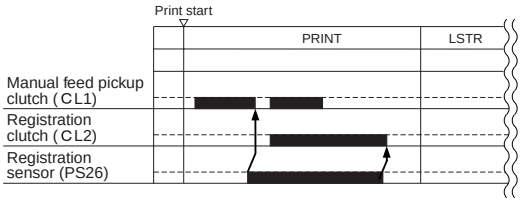
The machine's manual feed pickup unit is not equipped with a sensor that may detect the last sheet of paper.

8.5.2 Basic Sequence of Operation

0007-2124

iR2270 / iR2870 / iR3570 / iR4570

The multi-pickup roller starts to rotate when the manual pickup clutch (CL1) goes on to start upper separation to pick up a single sheet of paper. When the leading edge of the sheet reaches the registration sensor (PS26) and is moved a specific distance, the manual pickup clutch goes off, causing the sheet to arch in the registration roller area.
When the registration clutch (CL2) goes on, the manual feed pickup clutch (CL1) once again goes on to pick up paper. The manual feed pickup clutch (CL1) goes off immediately before the trailing edge of paper moves past the manual feed pickup roller; thereafter, the registration roller serves to pull off the paper.



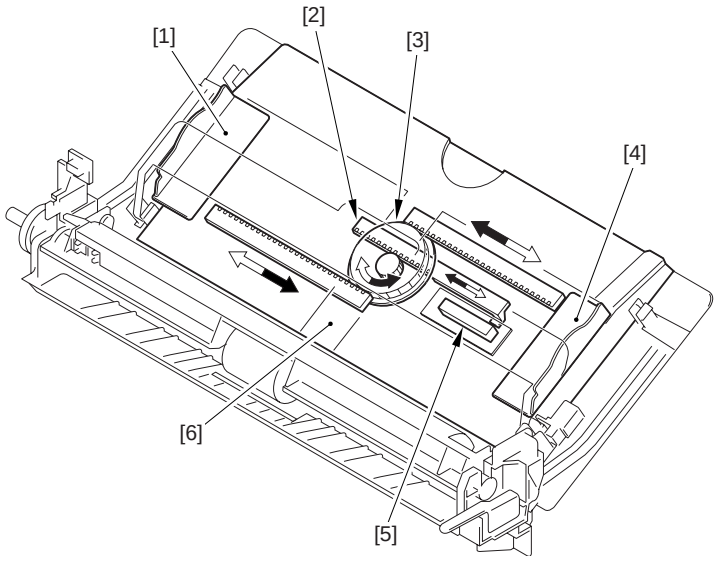
F-8-30

8.5.3 Identifying the Paper Size

0007-2187

iR2270 / iR2870 / iR3570 / iR4570

The width of paper is detected with reference to the output of the variable resistor (SVR1), which operates in conjunction with the movement of the side guide.
The side guide in the manual feed tray is set when the user moves it to place paper in the cassette.



F-8-31

[1] Side guide (rear)
[2] Stop arm

[3] Center gear
[4] Side guide (front)
[5] Variable resistor (SVR1)
[6] Manual feed tray

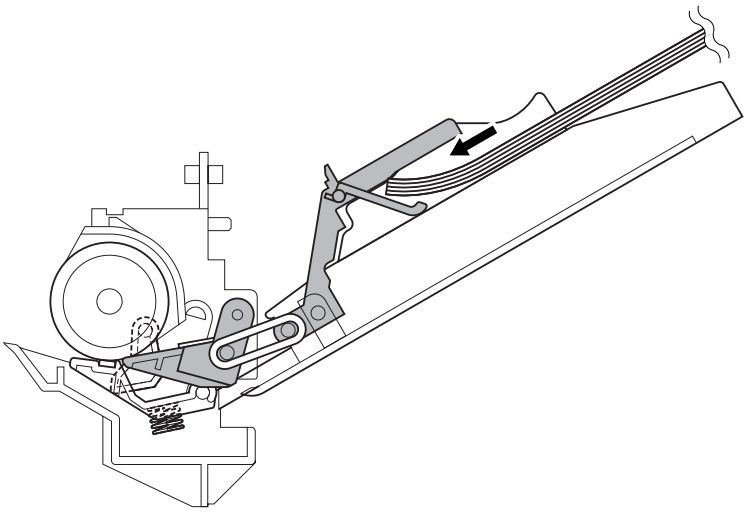
8.5.4 Paper Retaining Mechanism

0007-2189

iR2270 / iR2870 / iR3570 / iR4570

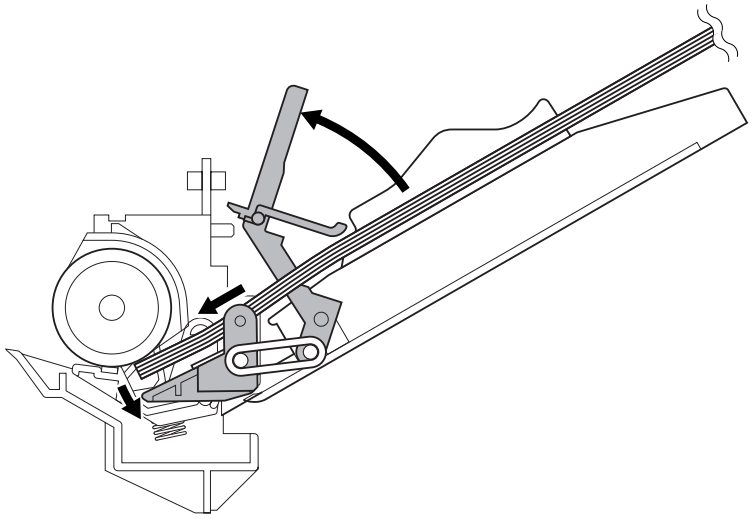
The holding plate of the machine's cassette is fixed in position at all times, and does not move up/down at time of pickup, and must temporarily be released when paper is set between it and the manual feed pickup roller. It is linked to the upper guide so that it opens when the user opens the guide; to prevent the user from placing paper without opening the upper guide, the guide is equipped with a stopper plate.

1. When the upper guide is closed,
   the holding plate is locked in place,
   and the stopper plate prevents the user from placing paper.



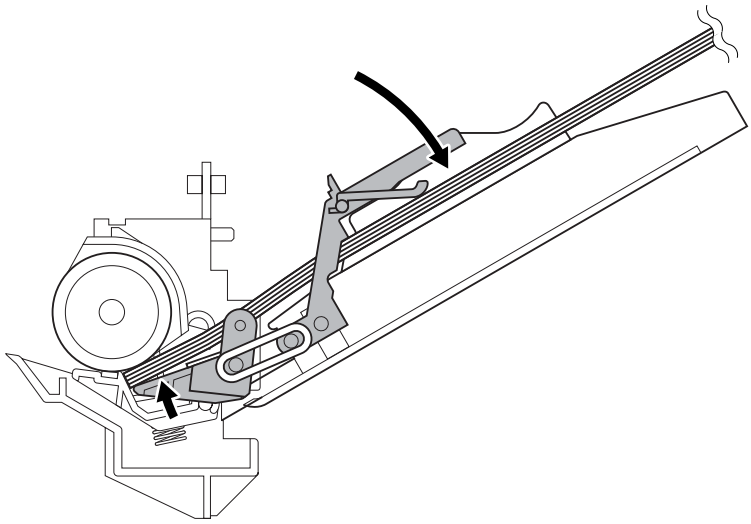
F-8-32

2. When the upper guide is open,
   the holding plate is freed,
   and the stopper plate opens, permitting the user to place paper.



F-8-33

3. When the upper guide is closed once again,
   the holding plate becomes locked in position once again.



F-8-34

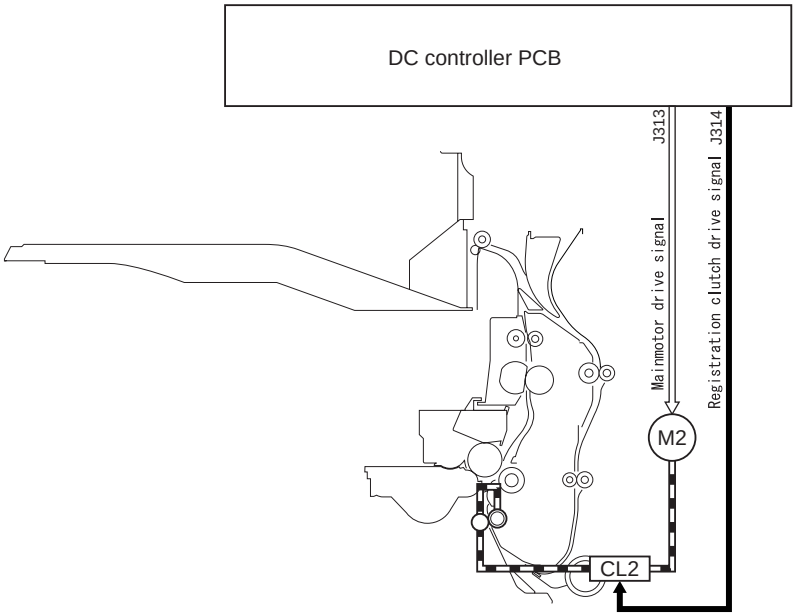
8.6 Registration Unit

8.6.1 Overview

0007-2213

iR2270 / iR2870 / iR3570 / iR4570

The registration roller is driven by the main motor (M2).
In between the registration roller and the main motor is the registration clutch (SL2), servicing to turn on and off the registration roller so that the paper will be matched in relation to the image on the drum at correct registration.



F-8-35

8.6.2 Checking Horizontal Registration

0007-2214

iR2270 / iR2870 / iR3570 / iR4570

The machine does not have a mechanism to check horizontal registration for both 1st and 2nd sides of a print. The point of horizontal registration for the 2nd side may be adjusted in service mode (i.e., the image write start position).

The degree of arching for registration on the 2nd side of a double-sided print must be adjusted separately from the adjustment for the 1st side to accommodate the fact that different feed paths are used up to the registration roller for 1st and 2nd sides.
Service Mode:

COPIER>ADJUST>FEED-ADJ>ADJ-REFE
Use it to adjust the horizontal registration for the 2nd side of small-size double-sided prints.

COPIER>ADJUST>FEED-ADJ>ADJ-RE-L

Use it to adjust the horizontal registration for the 2nd side of large-size double-sided prints.

COPIER>ADJUST>FEED-ADJ>LOOPREFE

Use it to adjust the degree of arching for the 2nd side of double-sided prints.

Reference:

small-size: A4, B5, and the like, whose side in paper feed direction is shorter than that of LTR.

Large-size: A3, A4R, B5R, and the like, whose side in feed direction is longer than that of LTR.

The term "2nd side of a double-sided print" as used in relation to the machine's service mode refers to the side that receives an image second in order; in other words, it corresponds to the 1st side of the original.

8.7 Duplex Feeding Unit

8.7.1 Overview

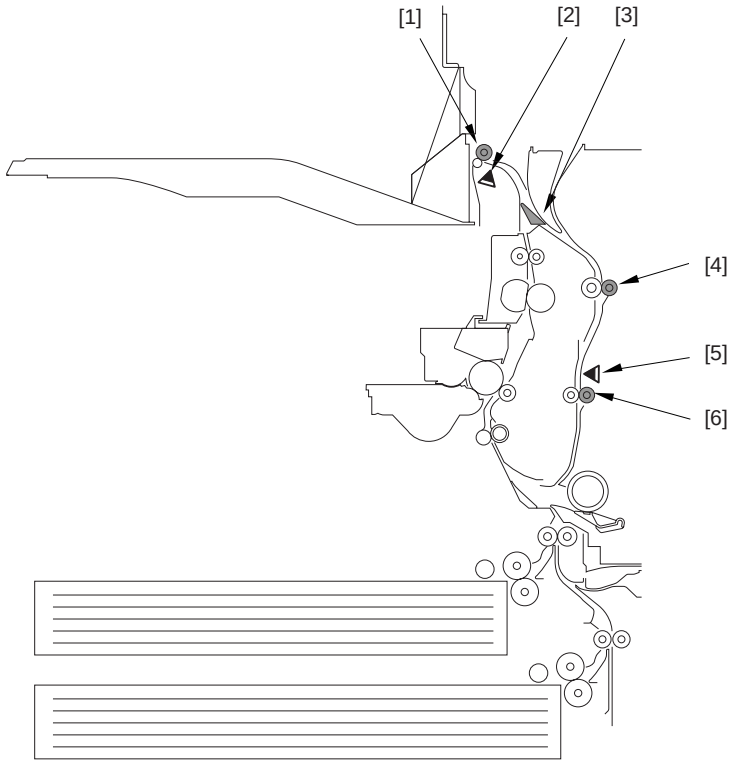
0007-2218

iR2270 / iR2870

Inside the duplexing assembly are found two sets of rollers that are driven by the main motor (M2) and the duplexing clutch (CL6).

Different sets of rollers are used to turn over the sheet for duplexing depending on whether or not the machine is equipped with a delivery accessory*:
If a delivery accessory is present, the reversing rollers are used to turn over the sheet.
If no delivery accessory is present, the delivery rollers are used to turn over the sheet.

*3 Way Unit-A1
Configuration of Components If Without a Delivery Accessory

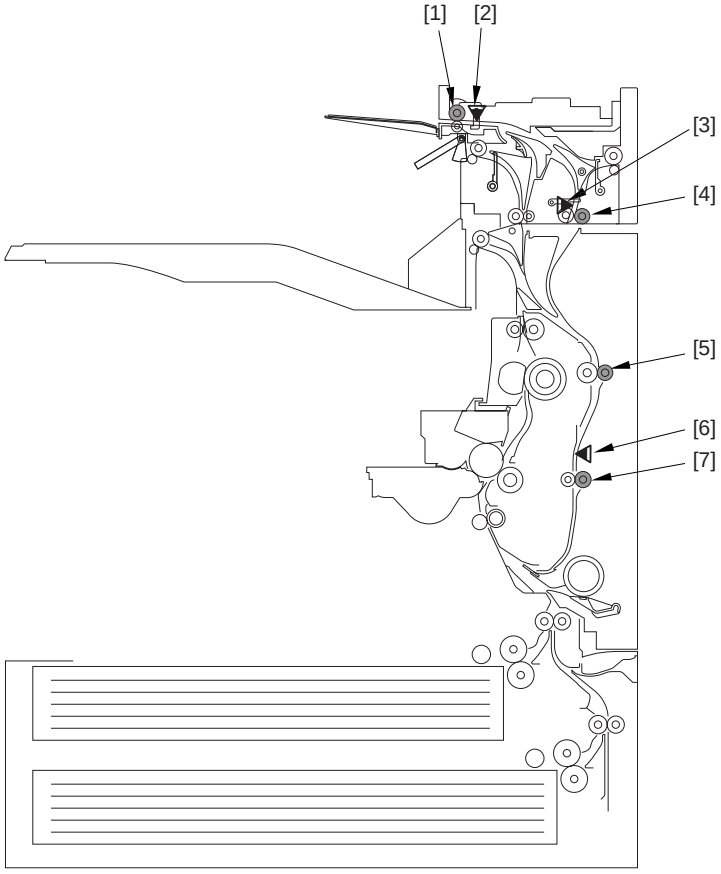


F-8-36

[1] Delivery roller
[2] Delivery sensor 1 (PS14)
[3] Reversing flapper
[4] Duplexing feeding roller 1
[5] Duplexing feed sensor (PS17)

[6] Duplexing feeding roller 1

Configuration of the Components If With a Delivery Accessory



F-8-37

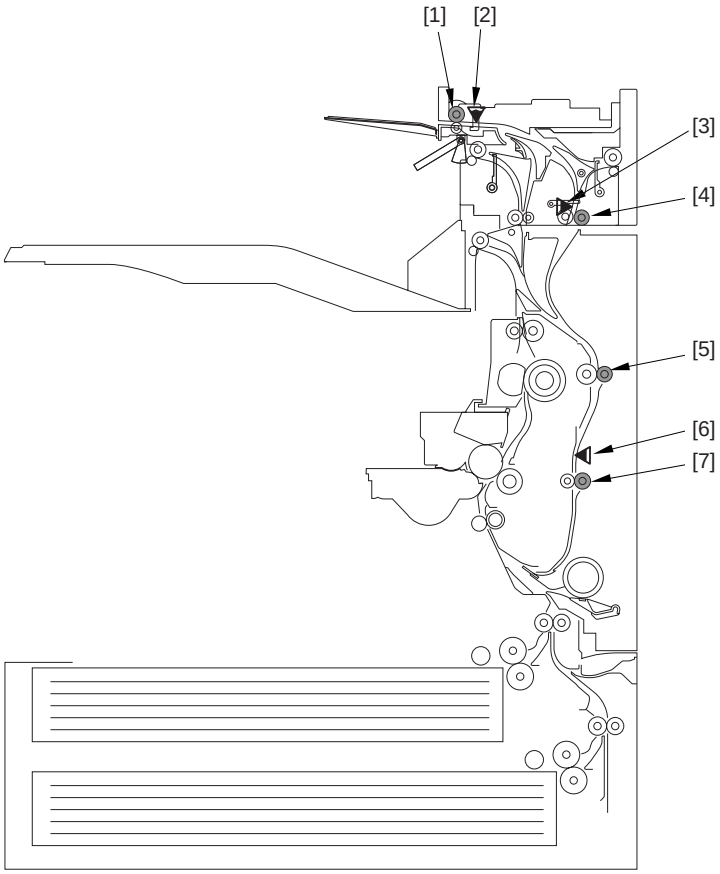
[1] Reversing roller
[2] Reversal sensor (PS4A)
[3] Duplexing inlet sensor (PS3A)
[4] Duplexing inlet roller
[5] Duplexing feeding roller 1
[6] Duplexing feed sensor (PS17)
[7] Duplexing feeding roller 2

8.7.2 Overview

0007-2221

iR3570 / iR4570

Inside the duplexing assembly are 2 sets of rollers that are driven by the duplexing motor (M10).



F-8-38

[1] Reversing roller
[2] Reversal sensor (PS4A)
[3] Duplexing inlet sensor (PS3A)
[4] Duplexing inlet roller
[5] Duplexing feeding roller 1
[6] Duplexing feed sensor (PS17)
[7] Duplexing feeding roller 2

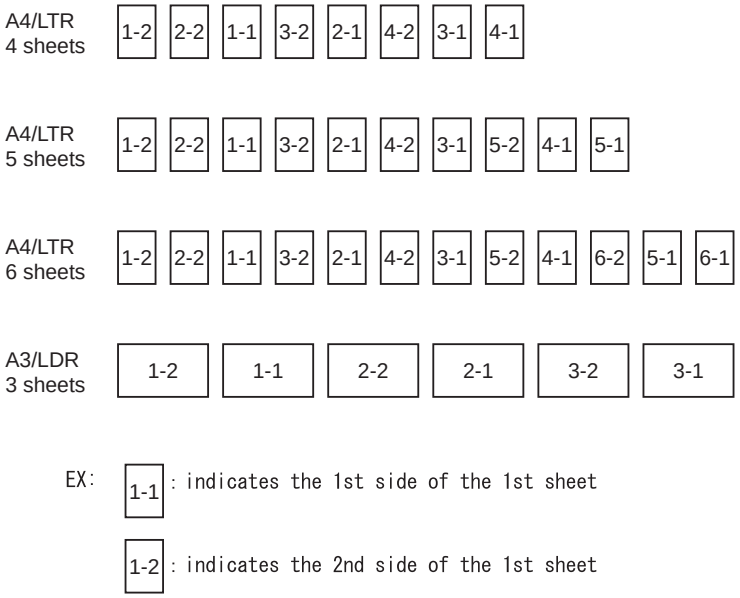
8.7.3 Sequence of Image Formation

0007-2223

iR2270 / iR2870 / iR3570 / iR4570

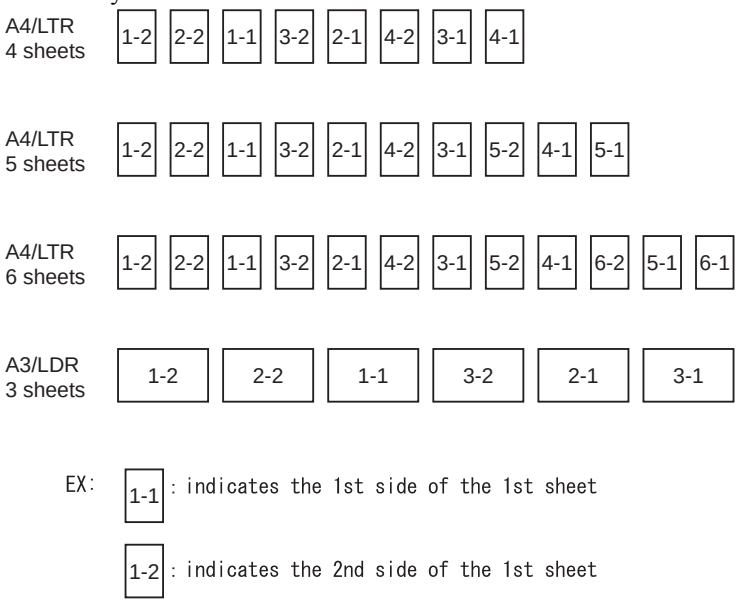
The machine goes thorough the following sequence to form images when making double-sided copies/prints:

- Configuration Without an Accessory Installed



F-8-39

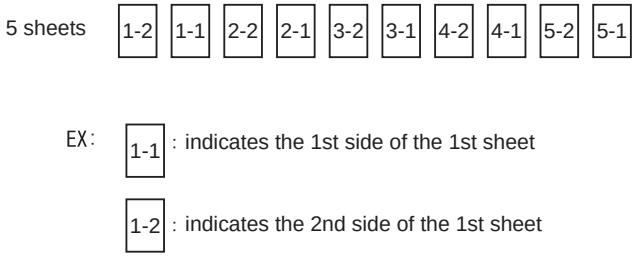
- Configuration with an Accessory Installed



F-8-40



However, in the case of delivery to tray 3 (outside), the machine uses single-sheet circulation.



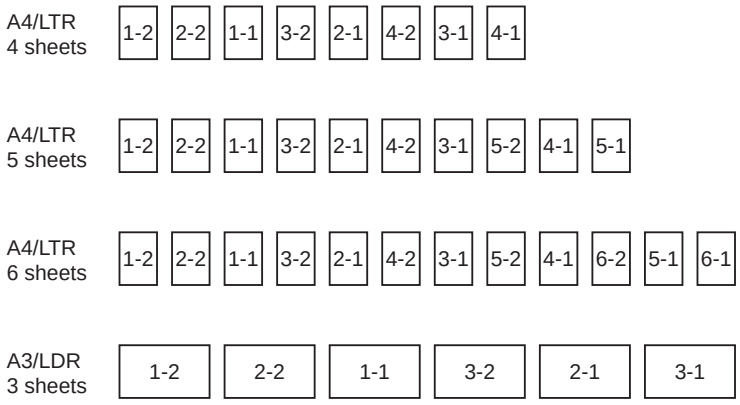
F-8-41

8.7.4 Sequence of Image Formation

0007-8703

iR3570 / iR4570

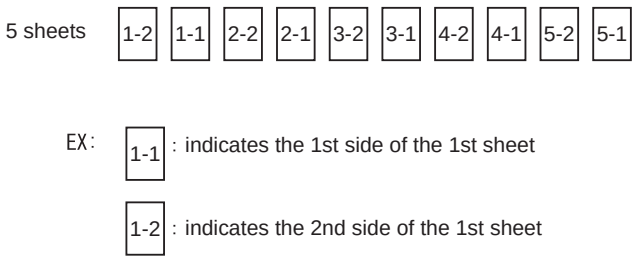
The machine goes thorough the following sequence to form images when making double-sided copies/prints:



F-8-42

⚠

However, in the case of delivery to tray 3 (outside), the machine uses single-sheet circulation.



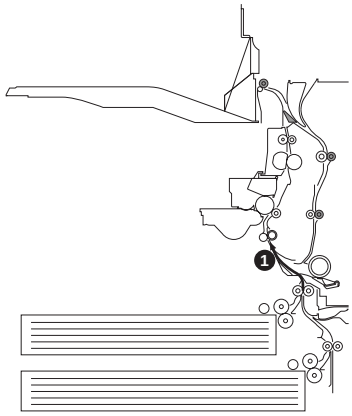
F-8-43

8.7.5 Flow of Paper (w/o/ delivery option)

0007-3125

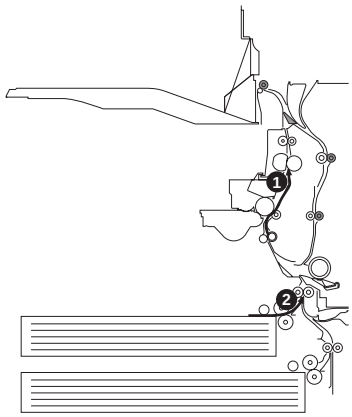
iR2270 / iR2870

A4/LTR, 5 Sheets
A number in a circle indicates the 1st side, while a number in a square indicates the 2nd side.



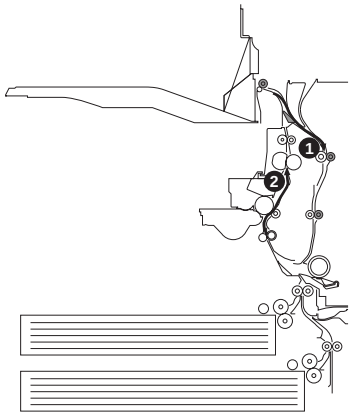
F-8-44

The 1st sheet is picked up.



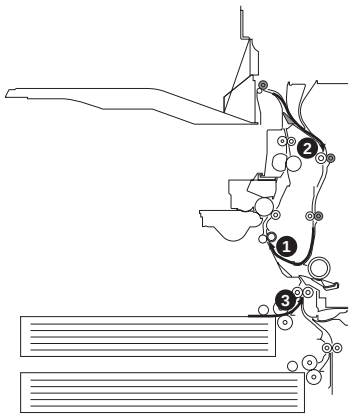
F-8-45

An image is formed for the 2nd side of the 1st sheet. The 2nd sheet is picked up.



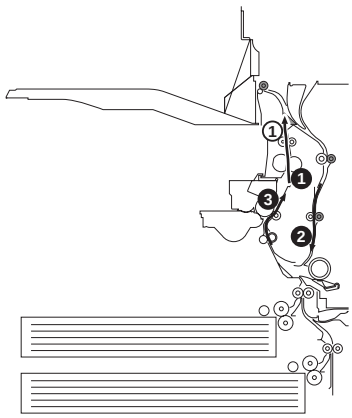
F-8-46

The 1st sheet is turned over and moved to duplexing registration. An image is formed for the 2nd side of the 2nd sheet.



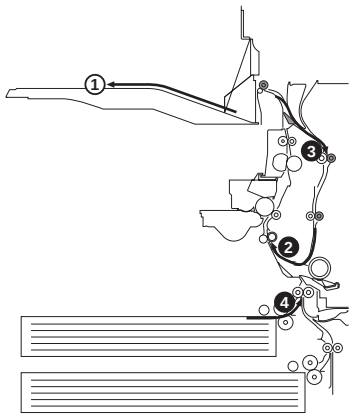
F-8-47

The 1st sheet is moved for registration once again. The 2nd sheet is turned over and moved for duplexing registration. The 3rd sheet is picked up.



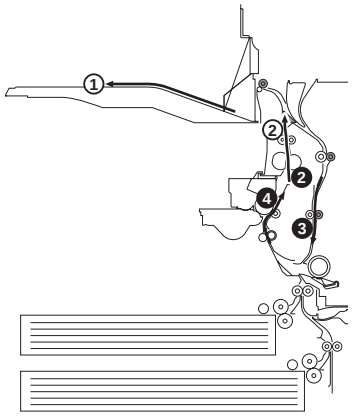
F-8-48

An image is formed for the 1st side of the 1st sheet and for the 2nd side of the 3rd sheet. The 2nd sheet is moved for duplexing.



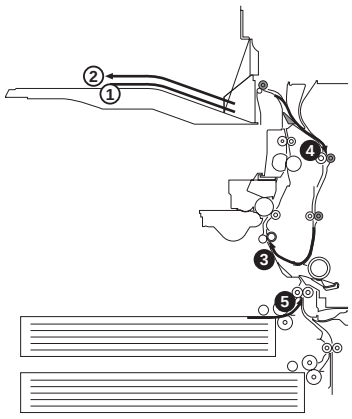
F-8-49

The 1st sheet is delivered. The 3rd sheet is turned over and moved for duplexing registration. The 2nd sheet is moved for registration once again. The 4th sheet is picked up.



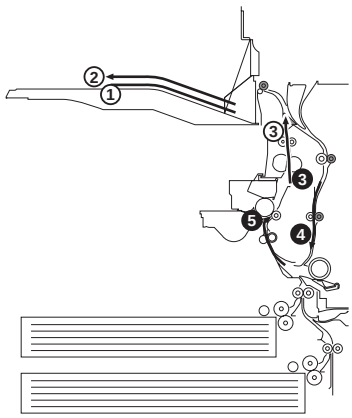
F-8-50

An image is formed for the 1st side of the 2nd sheet and for the 2nd side of the 4th sheet. The 3rd sheet is moved for duplexing.



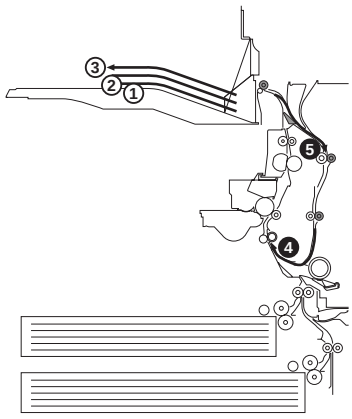
F-8-51

The 2nd sheet is delivered. The 4th sheet is reversed and is moved for duplexing registration. The 3rd sheet is picked for registration once again. The 5th sheet is picked up.



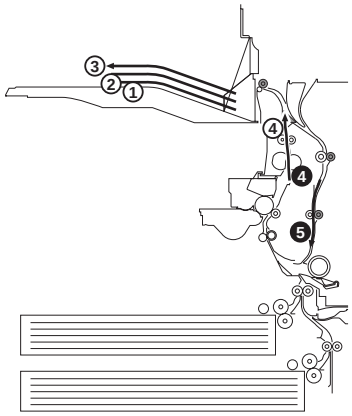
F-8-52

An image is formed for the 1st side of the 3rd sheet and for the 2nd side of the 5th sheet. The 4th sheet is moved for duplexing.



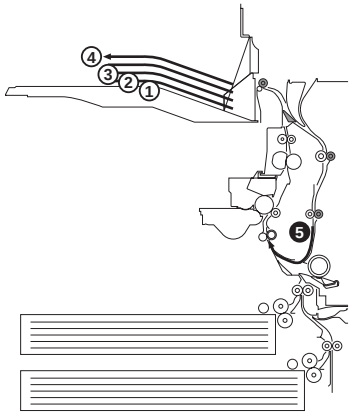
F-8-53

The 3rd sheet is delivered. The 5th sheet is turned over and moved for registration. The 4th sheet is moved for registration once again.



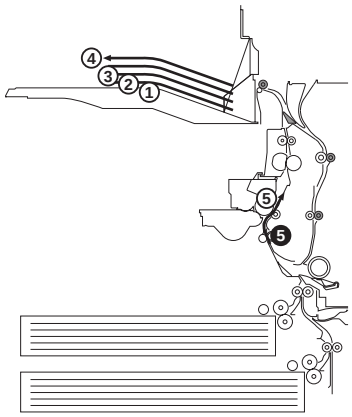
F-8-54

An image is formed for the 1st side of the 4th sheet. The 5th sheet is moved for duplexing.



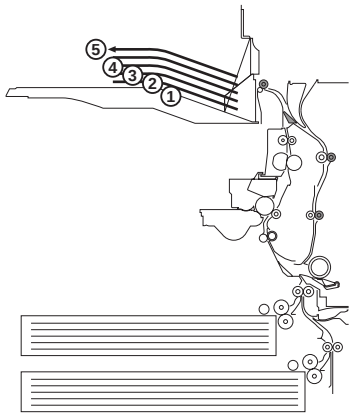
F-8-55

The 4th sheet is delivered. The 5th sheet is moved for registration once again.



F-8-56

An image is formed for the 1st side of the 5th sheet.



F-8-57

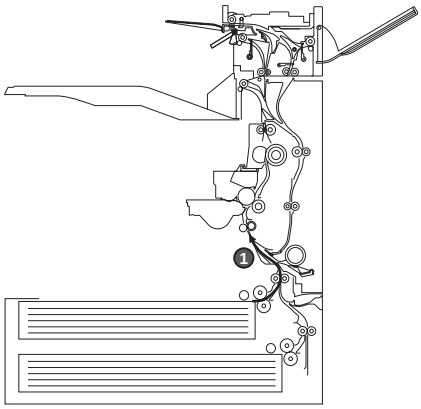
The 5th sheet is delivered.

8.7.6 Flow of Paper (w/ delivery option)

0007-3126

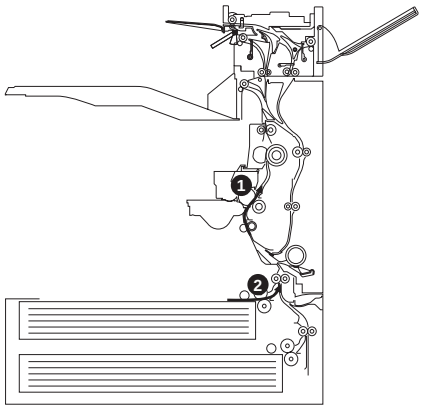
iR2270 / iR2870

A4/LTR, 5 Sheets, Delivery to Tray 1/2
A number in a circle indicates the 1st side, while a number in a square indicates the 2nd side.



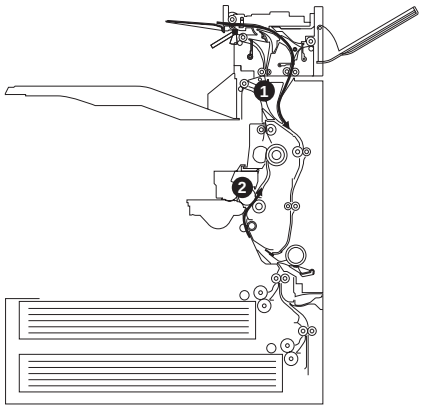
F-8-58

The 1st sheet is picked up.



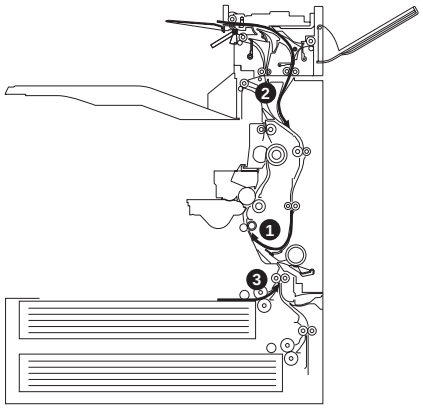
F-8-59

An image is formed for the 2nd side of the 1st sheet. The 2nd sheet is picked up.



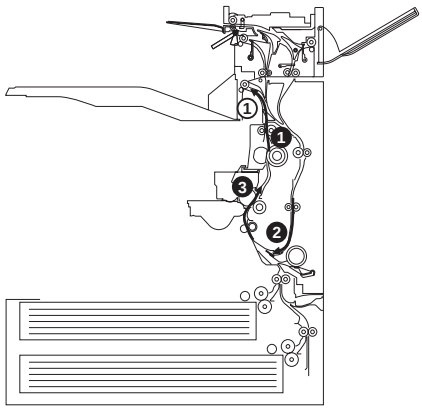
F-8-60

The 1st sheet is turned over, and is moved for duplexing registration. An image is formed for the 2nd side of the 2nd sheet.



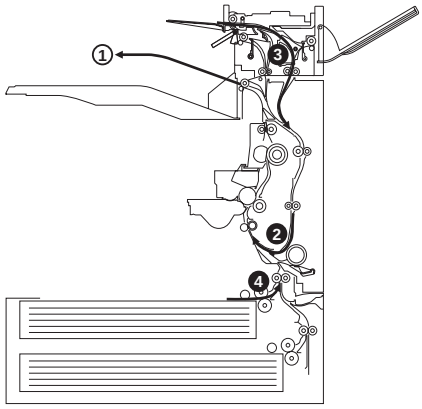
F-8-61

The 1st sheet is moved for registration once again. The 2nd sheet is turned over and moved for duplexing registration. The 3rd sheet is picked up.



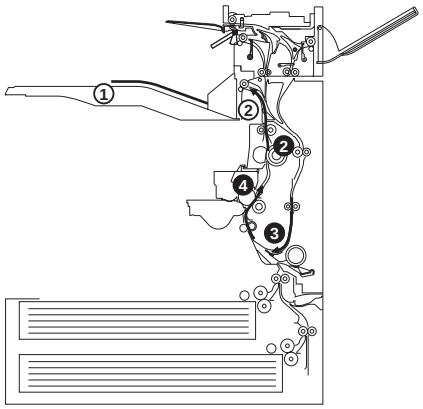
F-8-62

An image is formed for the 1st side of the 1st sheet and the 2nd side of the 3rd sheet. The 2nd sheet is moved for duplexing.



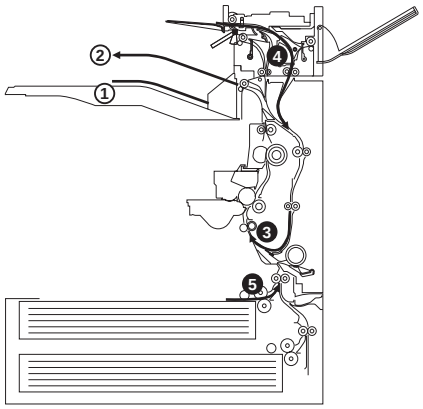
F-8-63

The 1st sheet is delivered. The 3rd sheet is turned over and is moved for duplexing registration. The 2nd sheet is moved for registration once again. The 4th sheet is picked up.



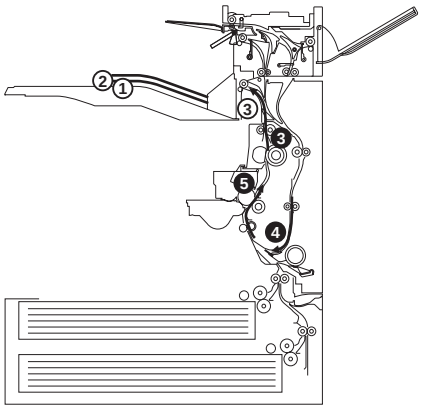
F-8-64

An image is formed for the 1st side of the 2nd sheet and for the 2nd side of the 4th sheet. The 3rd sheet is moved for duplexing.



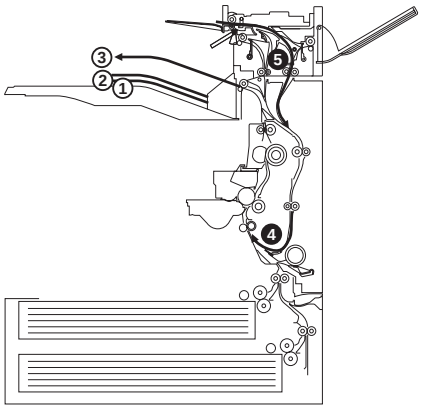
F-8-65

The 2nd sheet is delivered. The 4th sheet is turned over, and is moved for duplexing registration. The 3rd sheet is moved for registration once again. The 5th sheet is picked up.



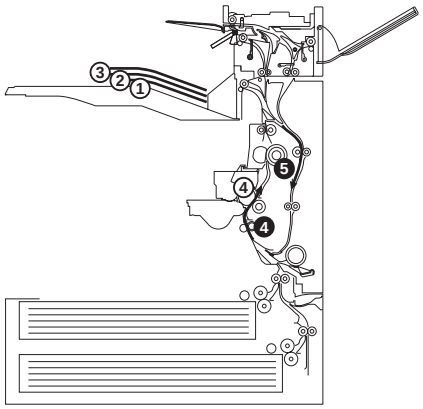
F-8-66

An image is formed for the 1st side of the 3rd sheet and for the 2nd side of the 5th sheet. The 5th sheet is moved for duplexing.



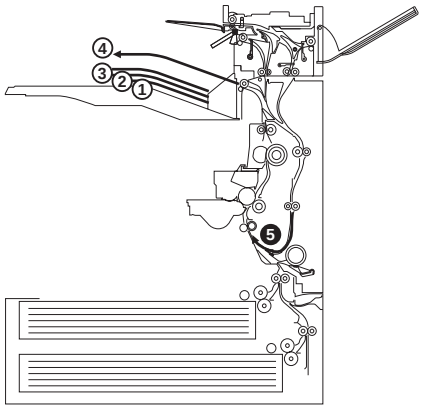
F-8-67

The 3rd sheet is delivered. The 5th sheet is turned over, and is moved for duplexing registration. The 4th sheet is moved for registration once again.



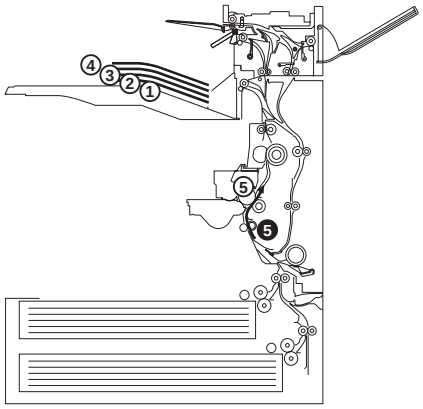
F-8-68

An image is formed for the 1st side of the 4th sheet. The 5th sheet is moved for duplexing.



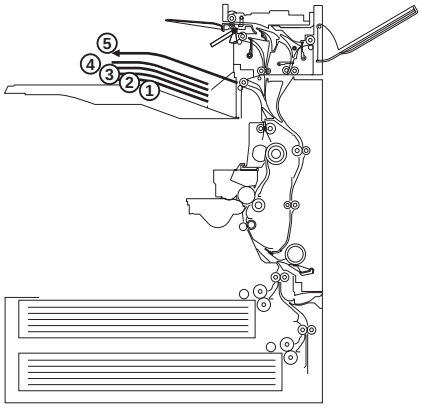
F-8-69

The 4th sheet is delivered. The 5th sheet is moved for registration once again.



F-8-70

An image is formed for the 1st side of the 5th sheet.



F-8-71

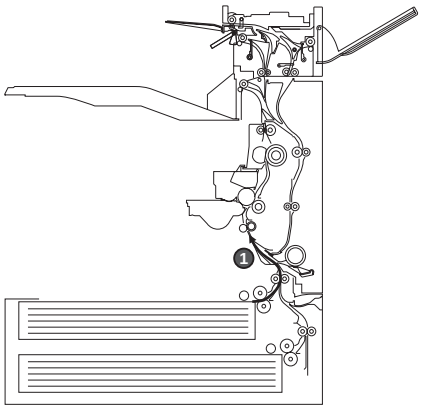
The 5th sheet is delivered.

8.7.7 Flow of Paper

0007-3407

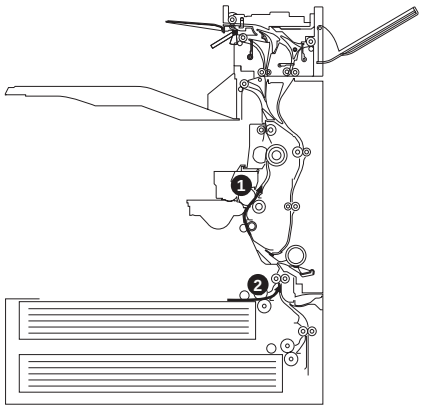
iR3570 / iR4570

A4/LTR, 5 Sheets, Delivery to Tray 1/2
A number in a circle indicates the 1st side, while a number in a square indicates the 2nd side.



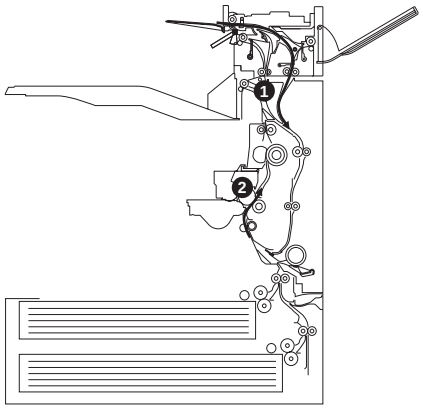
F-8-72

The 1st sheet is picked up.



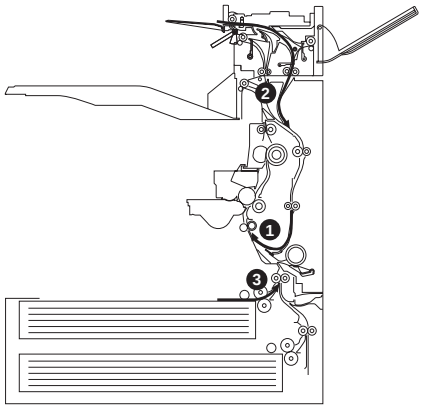
F-8-73

An image is formed for the 2nd side of the 1st sheet. The 2nd sheet is picked up.



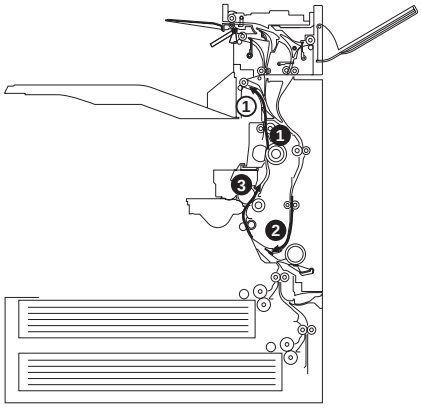
F-8-74

The 1st sheet is turned over, and is moved for duplexing registration. An image is formed for the 2nd side of the 2nd sheet.



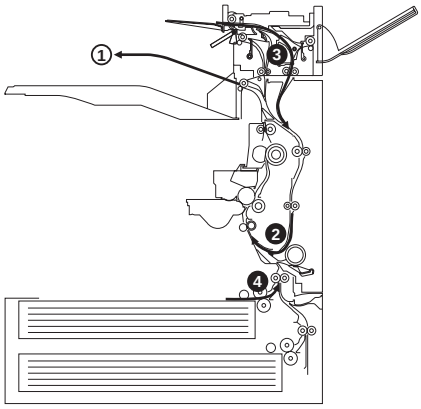
F-8-75

The 1st sheet is moved for registration once again. The 2nd sheet is turned over and moved for duplexing registration. The 3rd sheet is picked up.



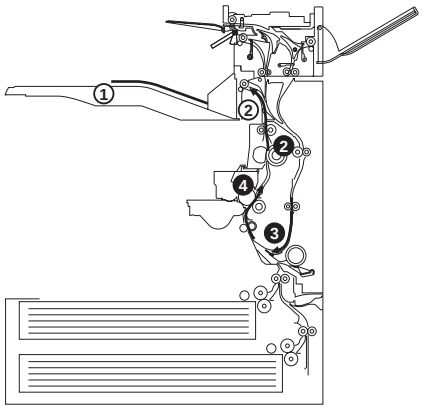
F-8-76

An image is formed for the 1st side of the 1st sheet and the 2nd side of the 3rd sheet. The 2nd sheet is moved for duplexing.



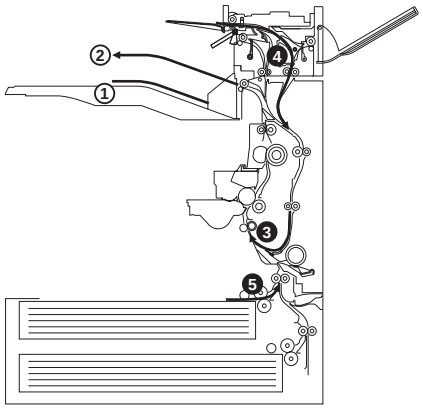
F-8-77

The 1st sheet is delivered. The 3rd sheet is turned over and is moved for duplexing registration. The 2nd sheet is moved for registration once again. The 4th sheet is picked up.



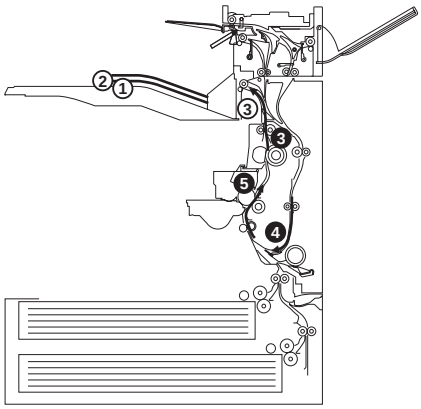
F-8-78

An image is formed for the 1st side of the 2nd sheet and for the 2nd side of the 4th sheet. The 3rd sheet is moved for duplexing.



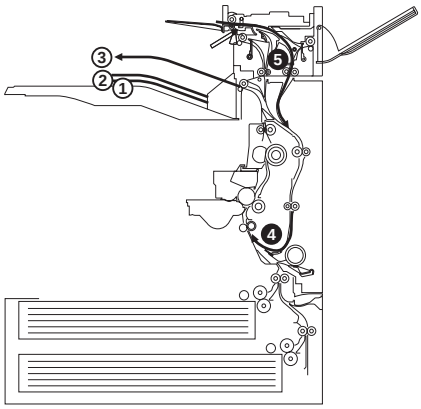
F-8-79

The 2nd sheet is delivered. The 4th sheet is turned over, and is moved for duplexing registration. The 3rd sheet is moved for registration once again. The 5th sheet is picked up.



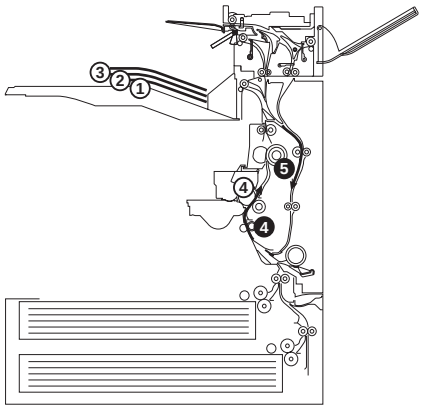
F-8-80

An image is formed for the 1st side of the 3rd sheet and for the 2nd side of the 5th sheet. The 5th sheet is moved for duplexing.



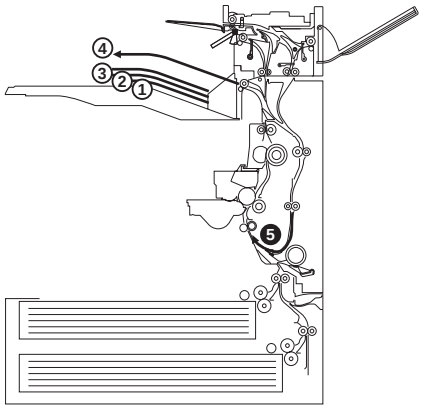
F-8-81

The 3rd sheet is delivered. The 5th sheet is turned over, and is moved for duplexing registration. The 4th sheet is moved for registration once again.



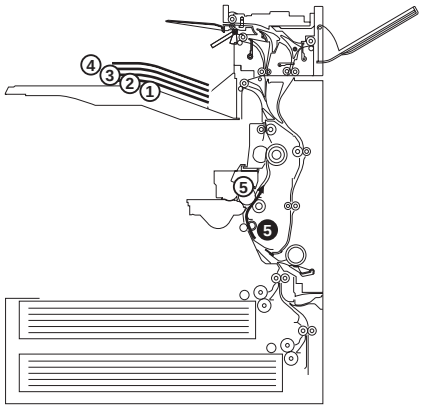
F-8-82

An image is formed for the 1st side of the 4th sheet. The 5th sheet is moved for duplexing.



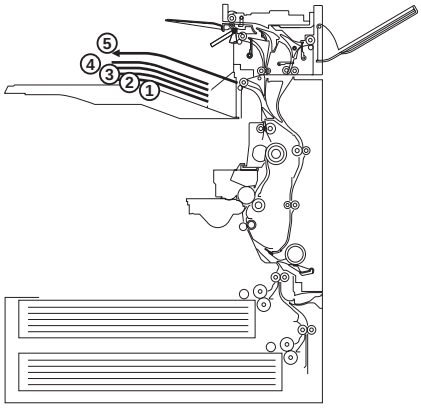
F-8-83

The 4th sheet is delivered. The 5th sheet is moved for registration once again.



F-8-84

An image is formed for the 1st side of the 5th sheet.



F-8-85

The 5th sheet is delivered.

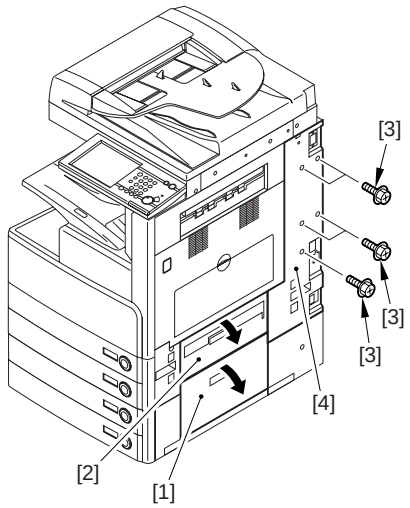
8.8 Parts Replacement Procedure

8.8.1 Pick-up Unit 1

8.8.1.1 Removing the Right Cover (rear) 0007-6551

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a 2-Cassette Pedestal-Y2)
2) Open the right lower door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].

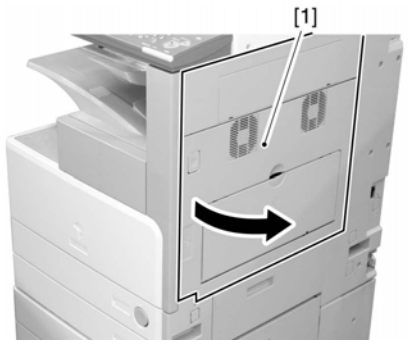


F-8-86

8.8.1.2 Removing the Right Door 0007-6552

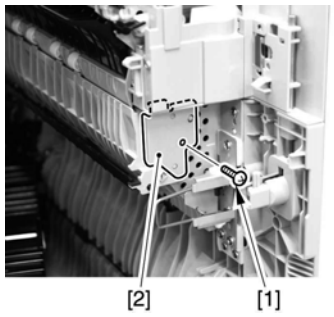
iR3570 / iR4570

1) Open the right door.



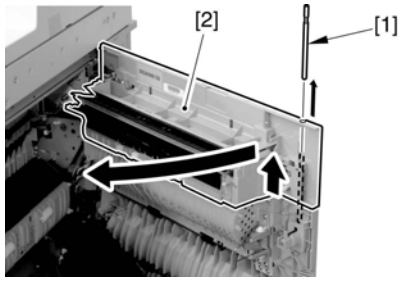
F-8-87

2) Remove the screw [1], and detach the fixing plate [2].



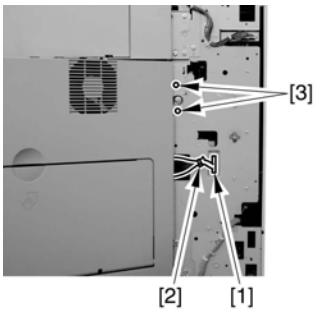
F-8-88

3) Remove the joint shaft [1], and free the extension delivery unit [2] from the right door.



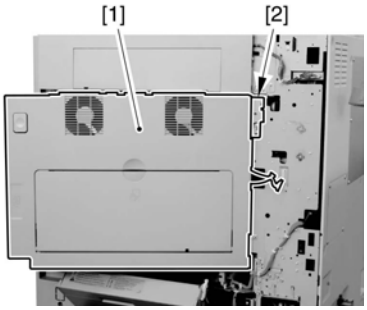
F-8-89

4) Disconnect the connector [1], and remove the reuse band [2]; then, remove the 2 screws (M4x8; RS tightening).



F-8-90

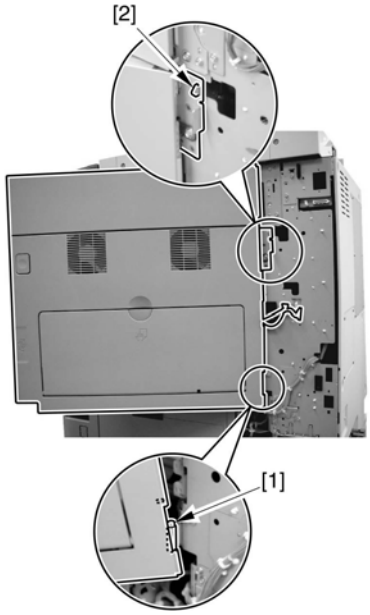
5) While freeing the hinge assembly [2], detach the right door.



F-8-91

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-92

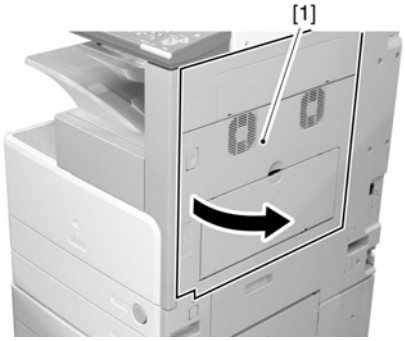
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.1.3 Removing the Right Door 0007-7329

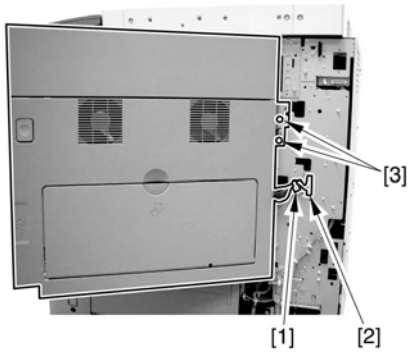
iR2270 / iR2870

1) Open the right door.



F-8-93

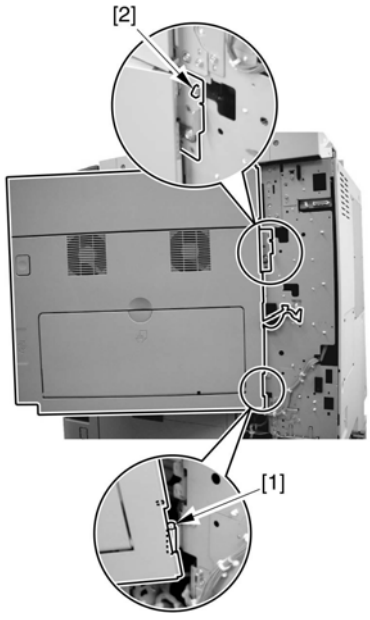
2) Remove the reuse band [1], and disconnect the connector [2].
3) Remove the 2 screws (M4x8; RS tightening), and detach the right door.



F-8-94

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-95

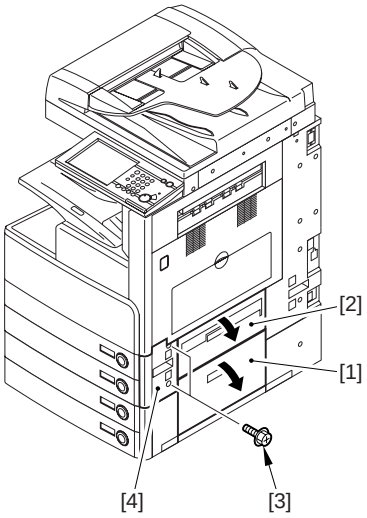
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.1.4 Removing the Right Cover (lower front) 0007-6553

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a Cassette Feeding Unit-Y2)
2) Open the lower right door [2].
3) Remove the 2 screws [3], and detach the right cover (lower front) [4].

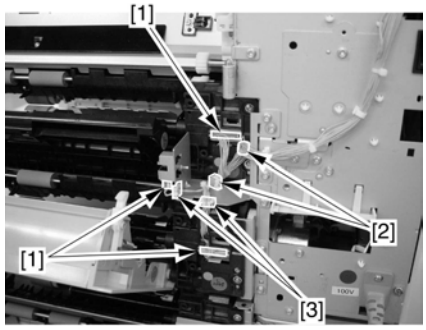


F-8-96

8.8.1.5 Removing the Pickup Assembly 1 0007-6554

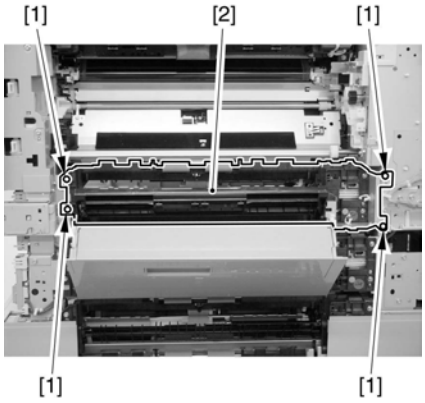
iR2270 / iR2870 / iR3570 / iR4570

1) Slide out the cassette 1/2.
2) Disconnect the 3 connectors [1]; then, free the harness from the 2 wire saddles [2] and the 2 clamps [3].



F-8-97

3) Remove the 4 screws [1], and take out the pickup unit 1 [2].



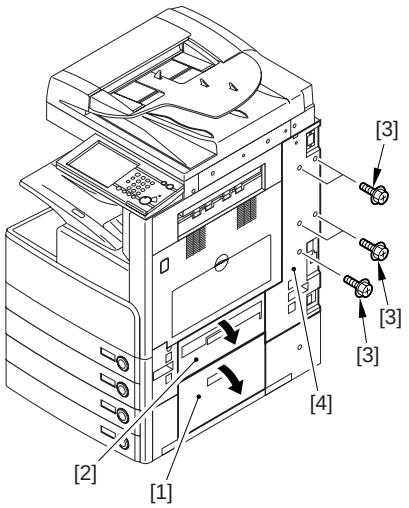
F-8-98

8.8.2 Pick-up Unit 2

8.8.2.1 Removing the Right Cover (rear) 0007-6555

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a 2-Cassette Pedestal-Y2)
2) Open the right lower door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].

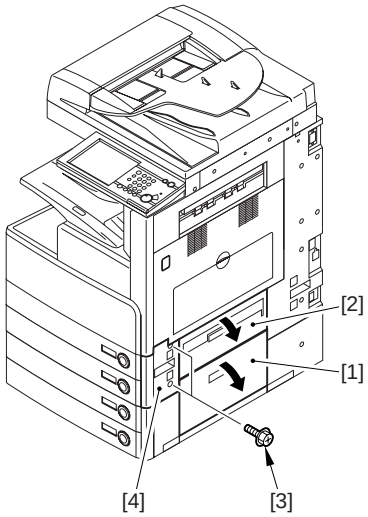


F-8-99

8.8.2.2 Removing the Right Cover (lower front) 0007-6556

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a Cassette Feeding Unit-Y2)
2) Open the lower right door [2].
3) Remove the 2 screws [3], and detach the right cover (lower front) [4].

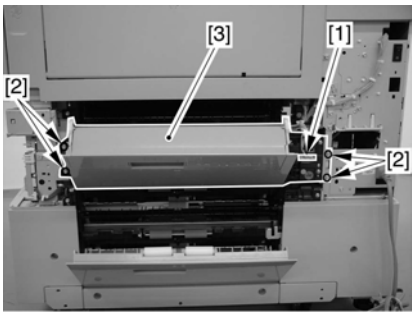


F-8-100

8.8.2.3 Removing the Pickup Assembly 2 0007-6557

iR2270 / iR2870 / iR3570 / iR4570

1) Slide out the cassette 1/2.
2) Disconnect the connector [1], and free the harness from the guide; then, remove the 4 screws [2], and detach the pickup assembly 2 [3].



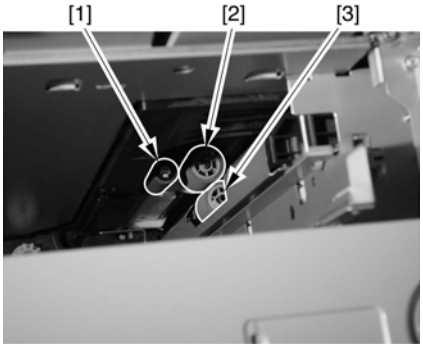
F-8-101

8.8.3 Pickup Roller

8.8.3.1 Removing the Pickup Roller/Feed Roller/ Separation Roller 0007-6569

iR2270 / iR2870 / iR3570 / iR4570

1) Slide out the cassette.
2) Open the right door (in the case of the separation roller).
3) Pick the tabs of the individual rollers, and detach the pickup roller [1], feed roller [2], and separation roller [3].



F-8-102

⚠

Point to Note When Replacing the Feed/Separation Roller 1

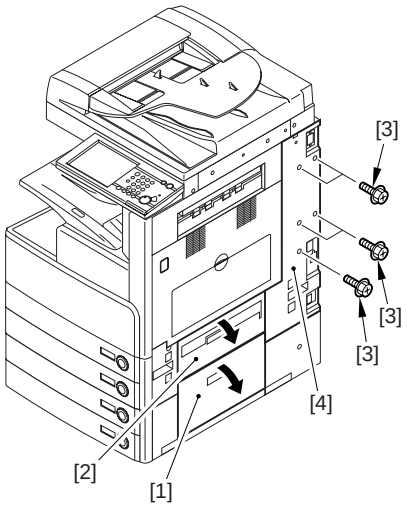
The collar (roller core) of the machine's feed/ separation roller is black.

8.8.4 Sensor Mount

8.8.4.1 Removing the Right Cover (rear) 0007-6558

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a 2-Cassette Pedestal-Y2)
2) Open the right lower door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].

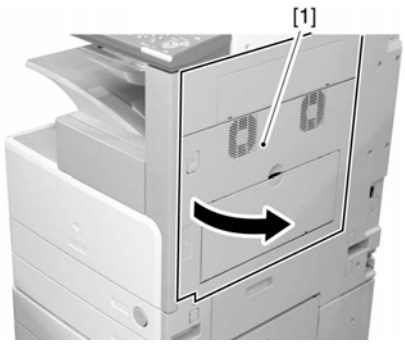


F-8-103

8.8.4.2 Removing the Right Door 0007-6563

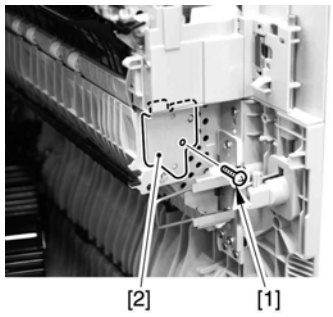
iR3570 / iR4570

1) Open the right door.



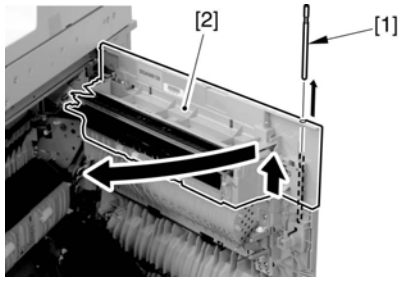
F-8-104

2) Remove the screw [1], and detach the fixing plate [2].



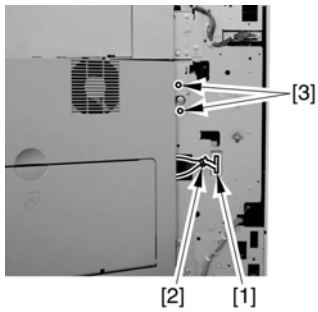
F-8-105

3) Remove the joint shaft [1], and free the extension delivery unit [2] from the right door.



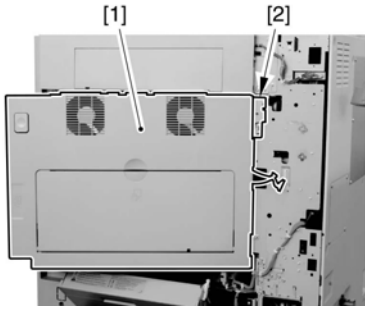
F-8-106

4) Disconnect the connector [1], and remove the reuse band [2]; then, remove the 2 screws (M4x8; RS tightening).



F-8-107

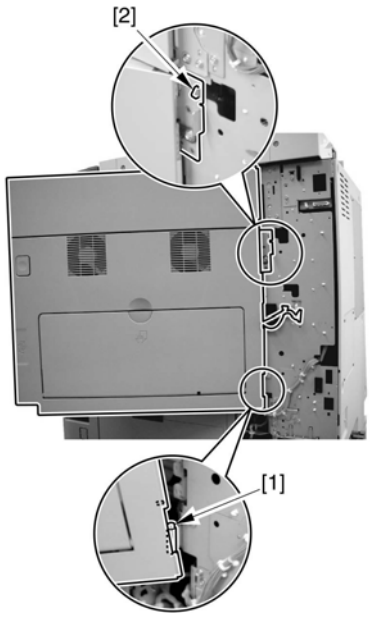
5) While freeing the hinge assembly [2], detach the right door.



F-8-108

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-109

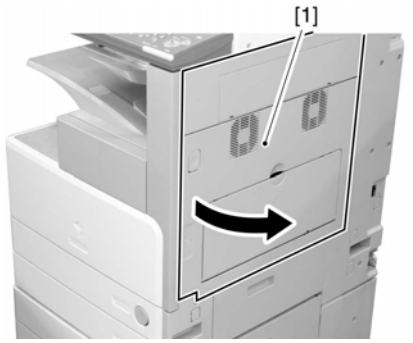
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.4.3 Removing the Right Door 0007-7331

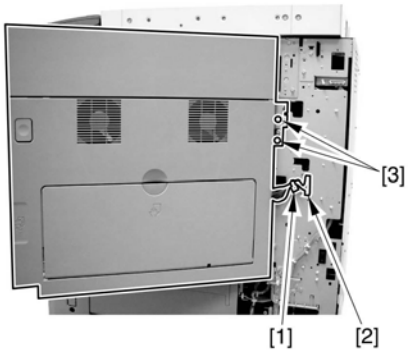
iR2270 / iR2870

1) Open the right door.



F-8-110

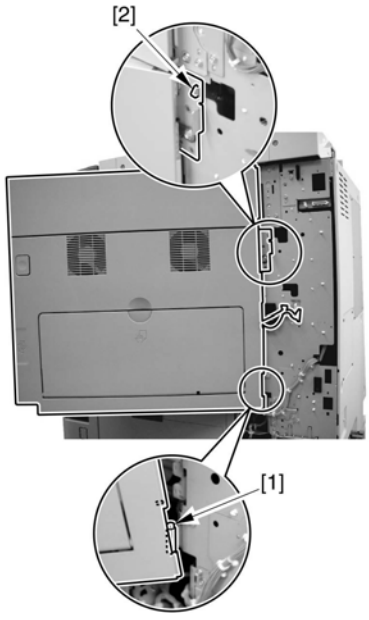
2) Remove the reuse band [1], and disconnect the connector [2].
3) Remove the 2 screws (M4x8; RS tightening), and detach the right door.



F-8-111

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-112

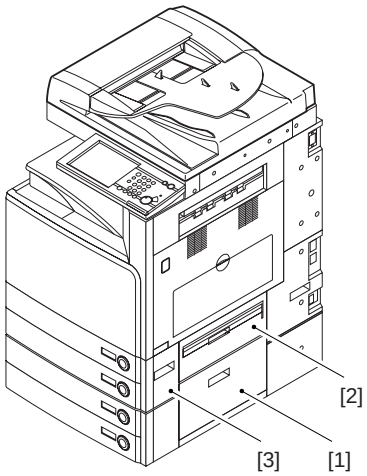
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.4.4 Removing the Right Cover (lower front) 0007-6562

iR2270 / iR2870 / iR3570 / iR4570

1) Open the right door [1] of the pedestal (if a 2-Cassette Pedestal-Y1 is installed).
2) Open the lower right cover [2].
3) Remove the 2 screws, and detach the right cover (lower front) [3].

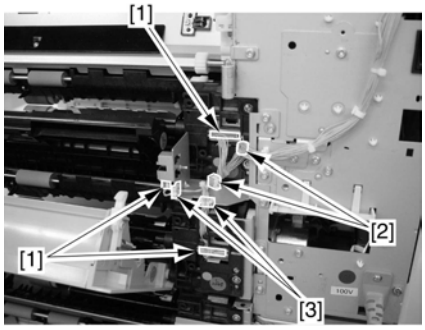


F-8-113

8.8.4.5 Removing the Pickup Assembly 1 0007-6564

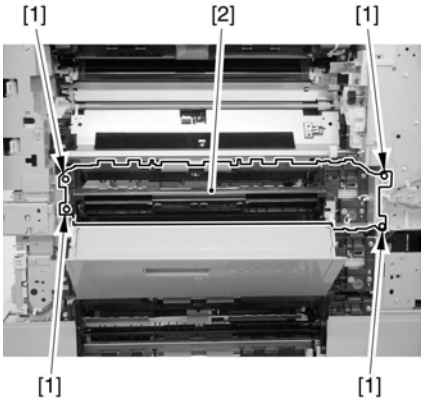
iR2270 / iR2870 / iR3570 / iR4570

1) Slide out the cassette 1/2.
2) Disconnect the 3 connectors [1]; then, free the harness from the 2 wire saddles [2] and the 2 clamps [3].



F-8-114

3) Remove the 4 screws [1], and take out the pickup unit 1 [2].

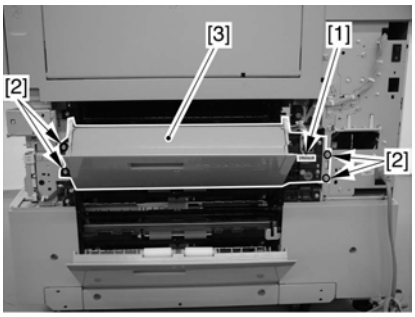


F-8-115

8.8.4.6 Removing the Pickup Assembly 2 0007-6565

iR2270 / iR2870 / iR3570 / iR4570

1) Slide out the cassette 1/2.
2) Disconnect the connector [1], and free the harness from the guide; then, remove the 4 screws [2], and detach the pickup assembly 2 [3].

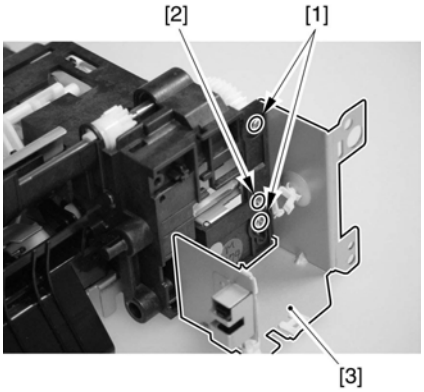


F-8-116

8.8.4.7 Removing the Sensor Mounting Plate 0007-6567

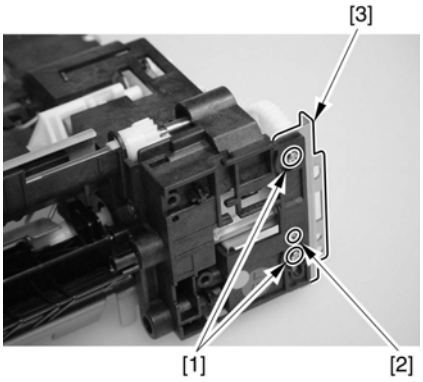
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 TP screws [1] and the binding screw [2] from the rear of the pickup assembly, and detach the bracket [3].



F-8-117

Pickup Unit 1

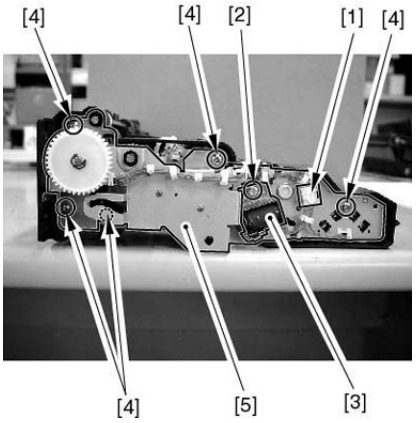


F-8-118

Pickup Unit 2

2) Disconnect the connector [1], and remove the screw; then, detach the cassette pickup solenoid [3].

3) Remove the bushing and the 5 screws [4]; then, detach the sensor base [5].



F-8-119

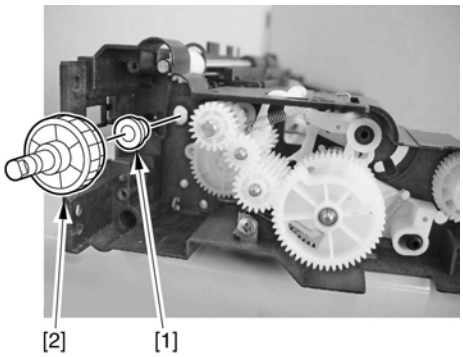
8.8.4.8 Mounting the Sensor Mounting Plate 0007-6568

iR2270 / iR2870 / iR3570 / iR4570

⚠

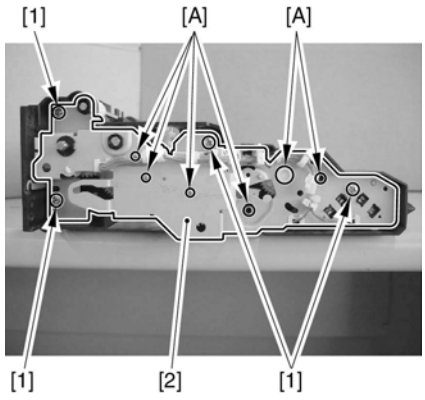
Take care not to orient the pickup unit facing down when mounting the sensor base; otherwise, the gears will fall out.

1) After fitting the bushing [1] to the frame, mount the gear shaft [2].



F-8-120

2) Fit the 6 points [A] indicated in the figure in the holes of the base; then, mount the sensor base [2] using 4 screws [1].



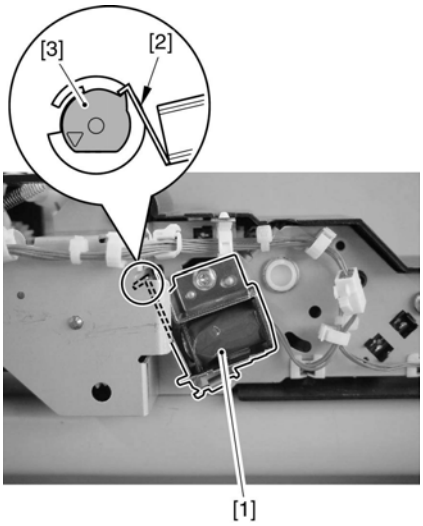
F-8-121

3) Mount the gear [1] and the E-ring [2].

⚠

Be sure not to leave out the pickup solenoid [1]. When mounting it, be sure that the stop [2] is fully engaged

with the cam gear [3].



F-8-122

⚠

Try turning the gears to be sure that they turn without resistance.

8.8.5 Cassette Pick-up Motor 1

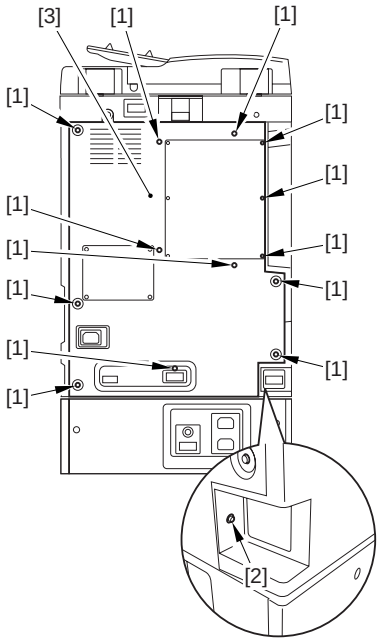
8.8.5.1 Removing the Rear Cover 0007-6571

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 13 screws [1] and then the other screw [2]; then, detach the rear cover [3].

⚠

If the left cover (lower) has already been detached, the screw [3] should also have been removed.

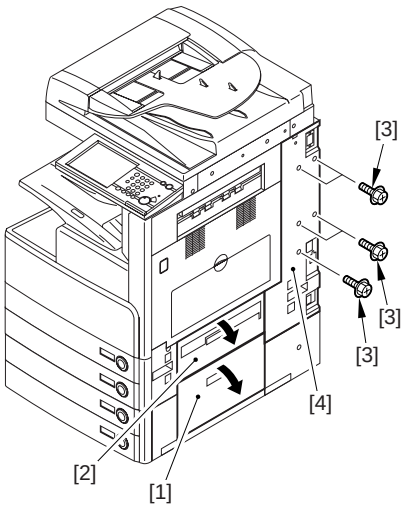


F-8-123

8.8.5.2 Removing the Right Cover (rear) 0007-6988

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a 2-Cassette Pedestal-Y2)
2) Open the right lower door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].

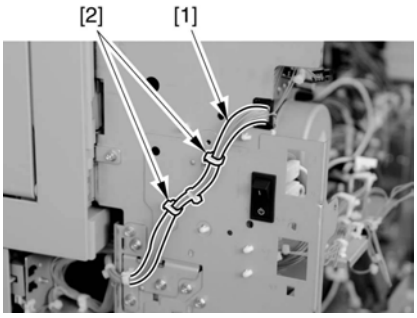


F-8-124

8.8.5.3 Removing the Pickup Motor Base 0007-6983

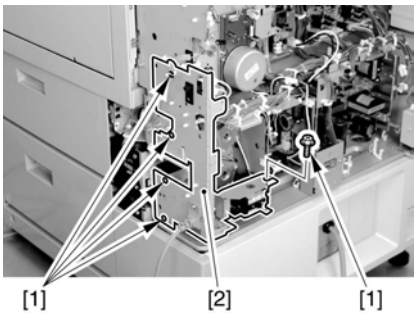
iR2270 / iR2870 / iR3570 / iR4570

1) Free the harness [1] from the 2 wire saddles [2].



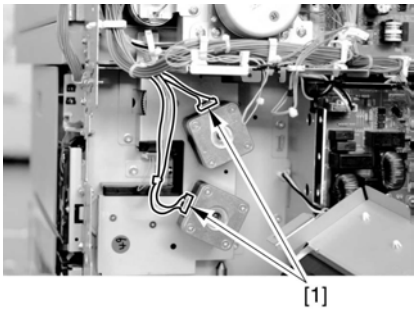
F-8-125

2) Remove the 5 screws [1]. Remove the power cord base [2].



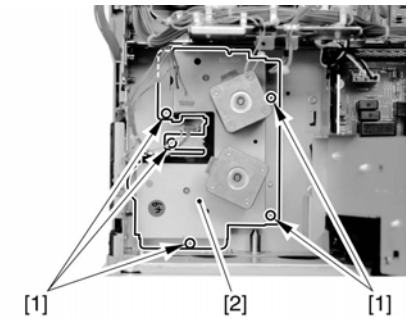
F-8-126

3) Disconnect the 2 connectors [1].



F-8-127

4) Remove the 5 screws [1], and detach the pickup motor base [2].

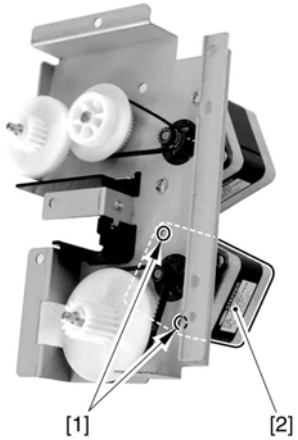


F-8-128

8.8.5.4 Removing the Cassette Pickup Motor 1 0007-6578

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws, and detach the cassette pickup motor 1 [2].



F-8-129

8.8.6 Cassette Pick-up Motor 2

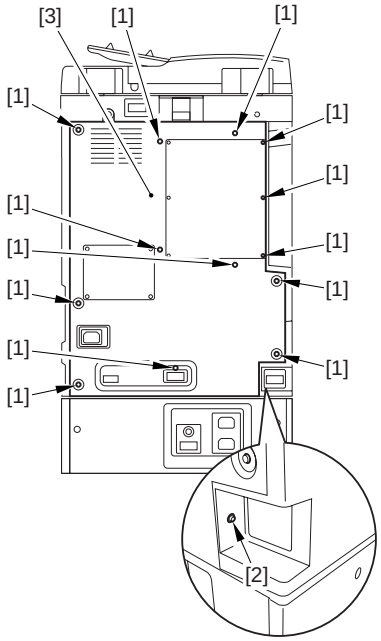
8.8.6.1 Removing the Rear Cover 0007-6598

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 13 screws [1] and then the other screw [2]; then, detach the rear cover [3].

⚠

If the left cover (lower) has already been detached, the screw [3] should also have been removed.

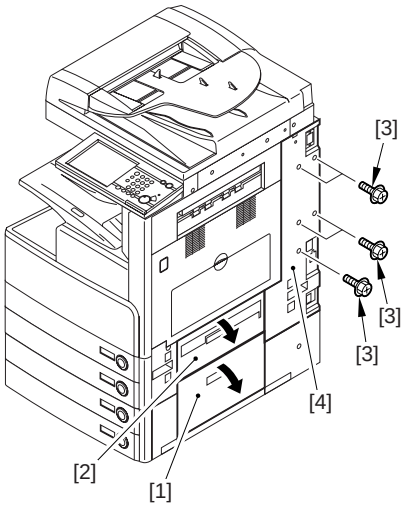


F-8-130

8.8.6.2 Removing the Right Cover (rear) 0007-6599

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a 2-Cassette Pedestal-Y2)
2) Open the right lower door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].

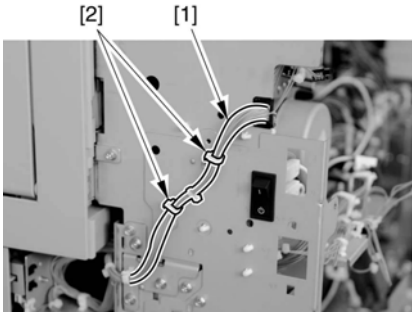


F-8-131

8.8.6.3 Removing the Pickup Motor Base 0007-6990

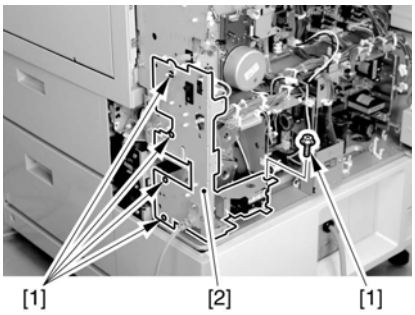
iR2270 / iR2870 / iR3570 / iR4570

1) Free the harness [1] from the 2 wire saddles [2].



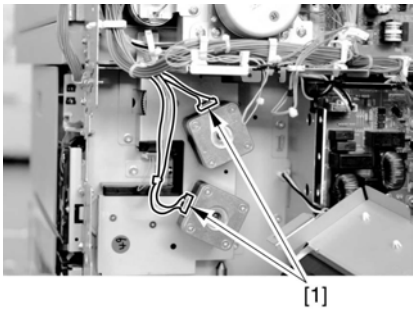
F-8-132

2) Remove the 5 screws [1]. Remove the power cord base [2].



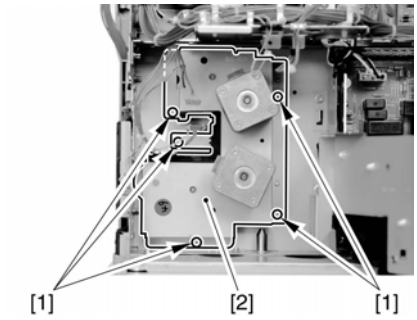
F-8-133

3) Disconnect the 2 connectors [1].



F-8-134

4) Remove the 5 screws [1], and detach the pickup motor base [2].

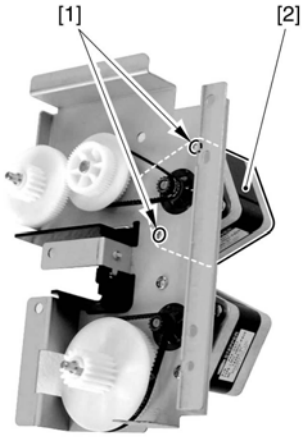


F-8-135

8.8.6.4 Removing the Cassette Pickup Motor 2 0007-6601

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws [1], and detach the cassette pickup motor 2 [2].



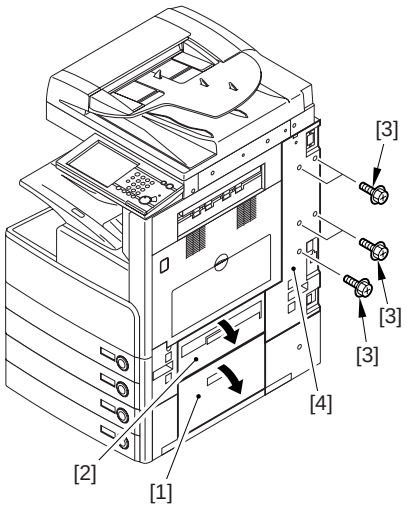
F-8-136

8.8.7 Cassette Size Sensor

8.8.7.1 Removing the Right Cover (rear) 0007-6602

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a 2-Cassette Pedestal-Y2)
2) Open the right lower door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].



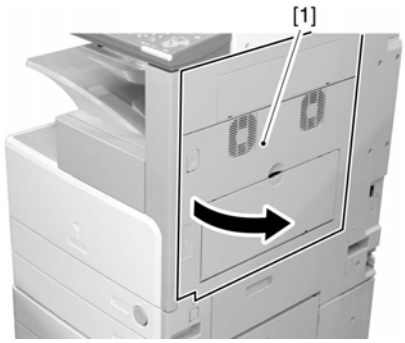
F-8-137

8.8.7.2 Removing the Right Door

0007-6603

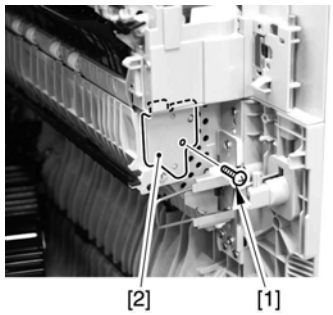
iR3570 / iR4570

1) Open the right door.



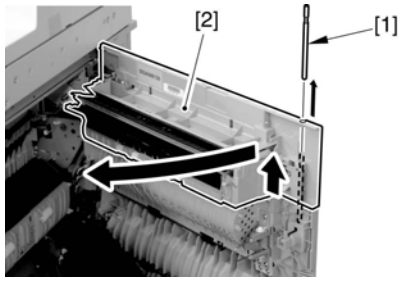
F-8-138

2) Remove the screw [1], and detach the fixing plate [2].



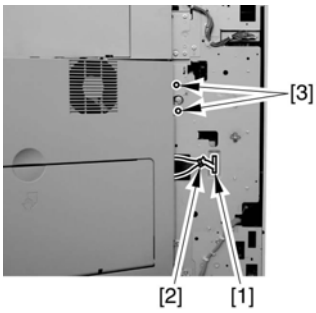
F-8-139

3) Remove the joint shaft [1], and free the extension delivery unit [2] from the right door.



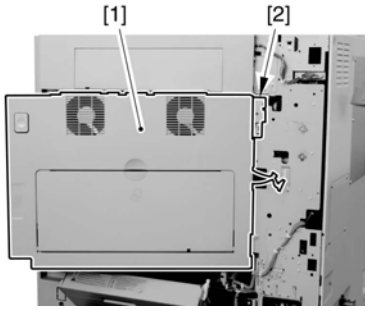
F-8-140

4) Disconnect the connector [1], and remove the reuse band [2]; then, remove the 2 screws (M4x8; RS tightening).



F-8-141

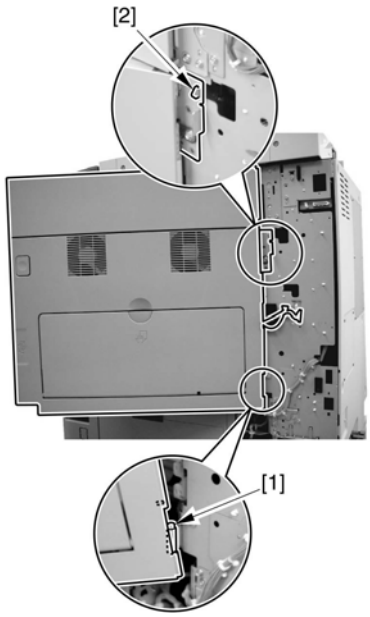
5) While freeing the hinge assembly [2], detach the right door.



F-8-142

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-143

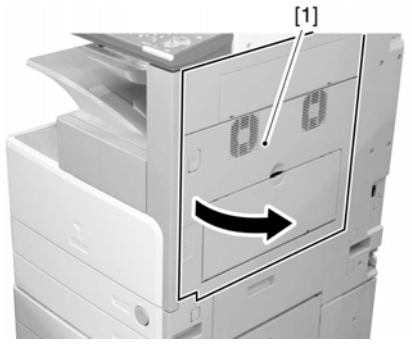
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.7.3 Removing the Right Door 0007-7332

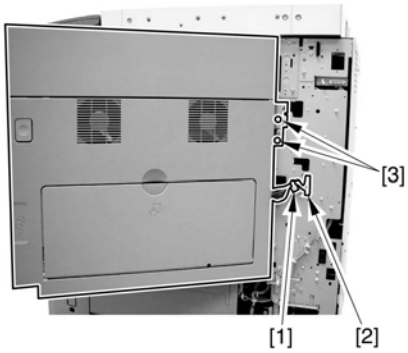
iR2270 / iR2870

1) Open the right door.



F-8-144

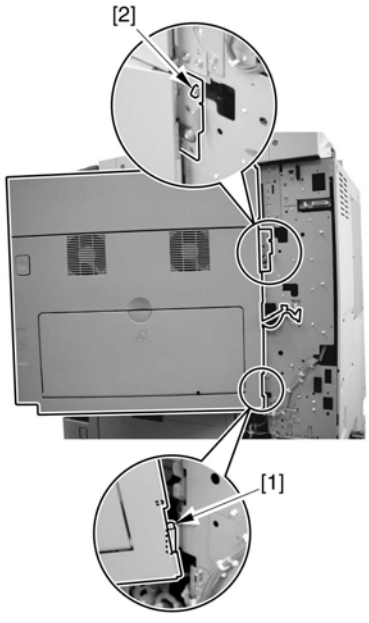
2) Remove the reuse band [1], and disconnect the connector [2].
3) Remove the 2 screws (M4x8; RS tightening), and detach the right door.



F-8-145

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-146

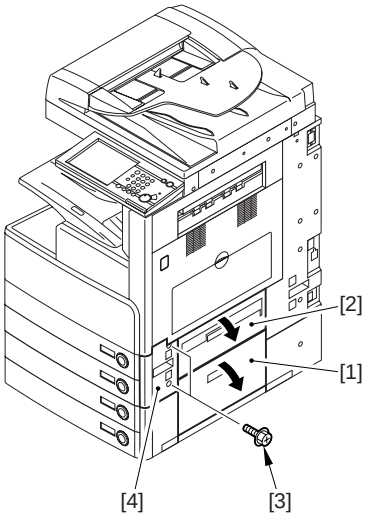
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.7.4 Removing the Right Cover (lower front) 0007-6606

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a Cassette Feeding Unit-Y2)
2) Open the lower right door [2].
3) Remove the 2 screws [3], and detach the right cover (lower front) [4].

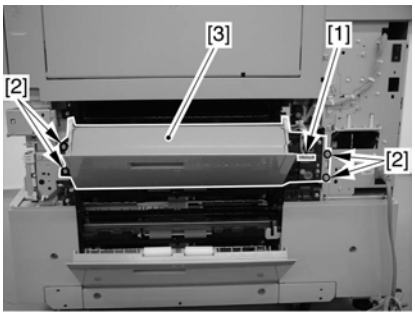


F-8-147

8.8.7.5 Removing the Pickup Assembly 2 0007-6608

iR2270 / iR2870 / iR3570 / iR4570

1) Slide out the cassette 1/2.
2) Disconnect the connector [1], and free the harness from the guide; then, remove the 4 screws [2], and detach the pickup assembly 2 [3].

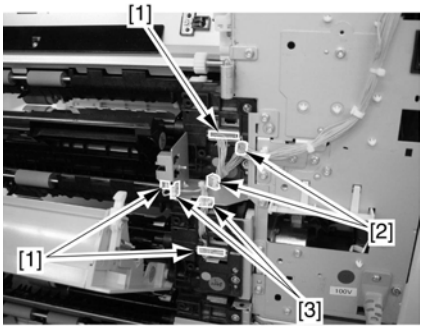


F-8-148

8.8.7.6 Removing the Pickup Assembly 1 0007-6609

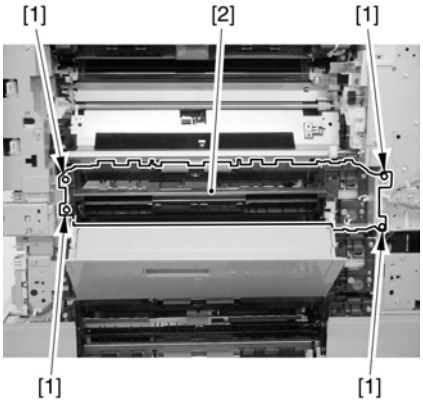
iR2270 / iR2870 / iR3570 / iR4570

1) Slide out the cassette 1/2.
2) Disconnect the 3 connectors [1]; then, free the harness from the 2 wire saddles [2] and the 2 clamps [3].



F-8-149

3) Remove the 4 screws [1], and take out the pickup unit 1 [2].

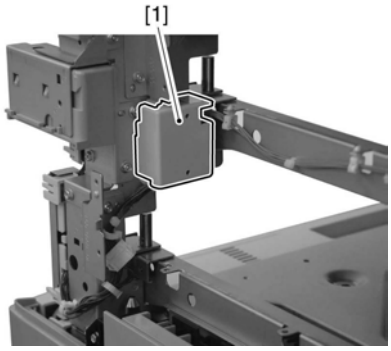


F-8-150

8.8.7.7 Removing the Cassette Size Sensor 0007-6610

iR2270 / iR2870 / iR3570 / iR4570

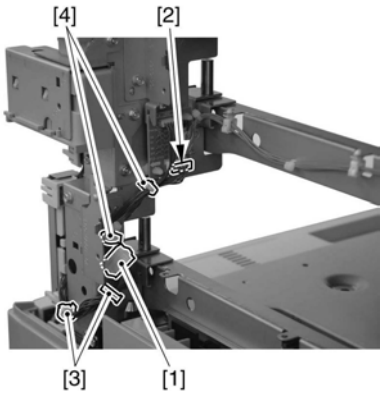
1) Remove the snap stop, and detach the PCB cover [1].



F-8-151

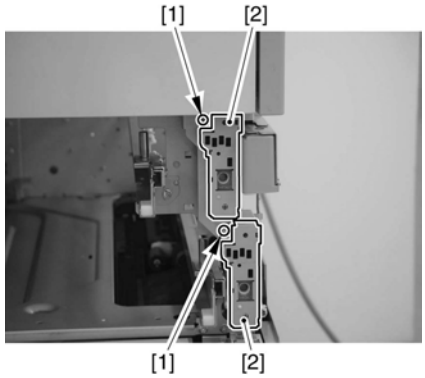
2) Disconnect the connector from the cassette size sensor relay PCB (in the case of the size sensor 1, disconnect the connector [1]; in the case of the size sensor 2, disconnect the connector [2]).

3) Free the harness from the clamp (in the case of the size sensor 1, the 2 clamps [3]; in the case of the size sensor 2, the 4 clamps [3] and [4]).



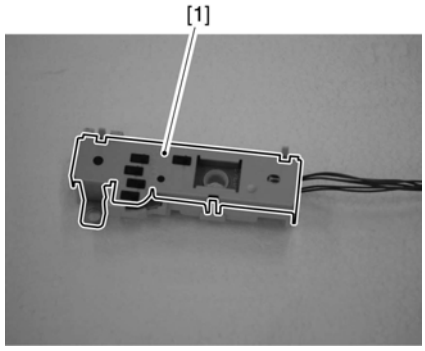
F-8-152

4) Remove the screw [1], and detach the cassette size sensor together with the PCB [2] (in the case of the size sensor 1, together with the size sensor 2; in the case of the size sensor 2, remove the sensor on its own).



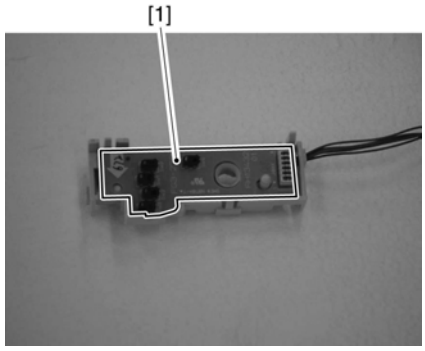
F-8-153

5) Detach the cover [1] from the PCB.



F-8-154

6) Detach the size sensor [1] from the PCB.



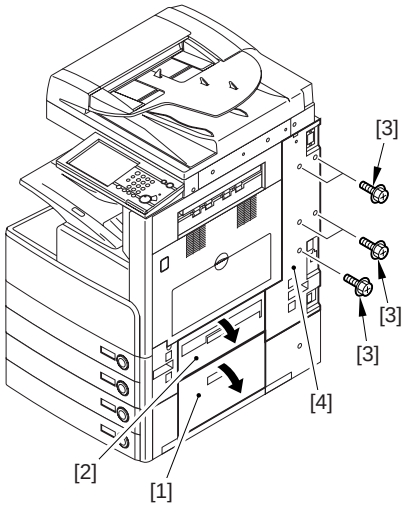
F-8-155

8.8.8 Cassette Retry Paper Sensor

8.8.8.1 Removing the Right Cover (rear) 0007-6611

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a 2-Cassette Pedestal-Y2)
2) Open the right lower door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].



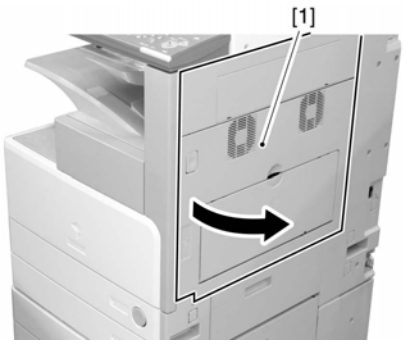
F-8-156

8.8.8.2 Removing the Right Door

0007-6612

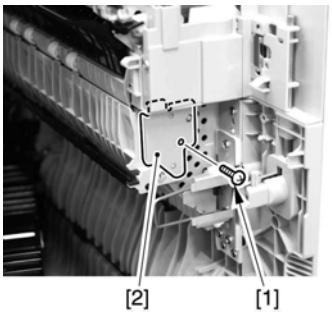
iR3570 / iR4570

1) Open the right door.



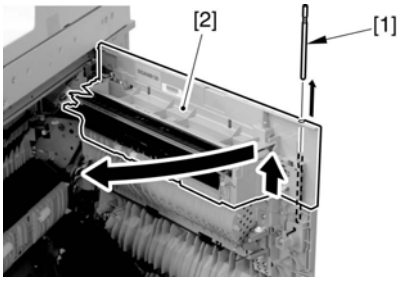
F-8-157

2) Remove the screw [1], and detach the fixing plate [2].



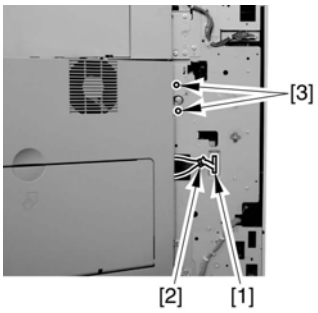
F-8-158

3) Remove the joint shaft [1], and free the extension delivery unit [2] from the right door.



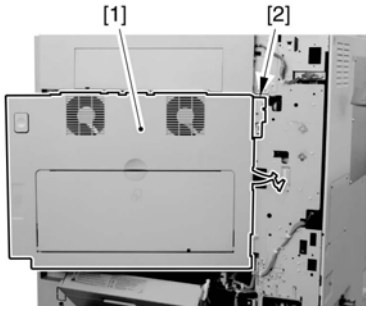
F-8-159

4) Disconnect the connector [1], and remove the reuse band [2]; then, remove the 2 screws (M4x8; RS tightening).



F-8-160

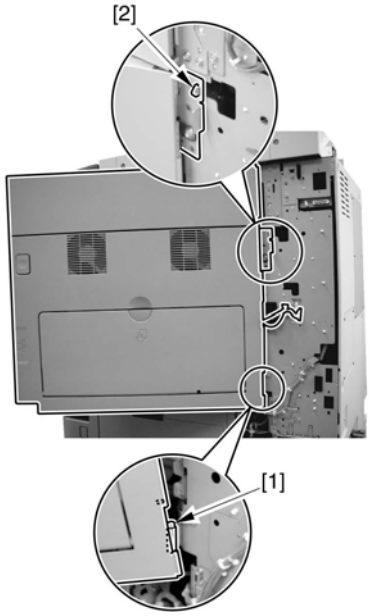
5) While freeing the hinge assembly [2], detach the right door.



F-8-161

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-162

⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.8.3 Removing the Right Door 0007-7337

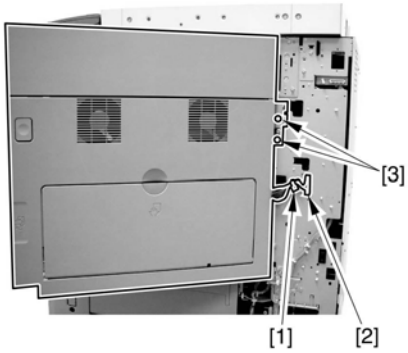
iR2270 / iR2870

1) Open the right door.



F-8-163

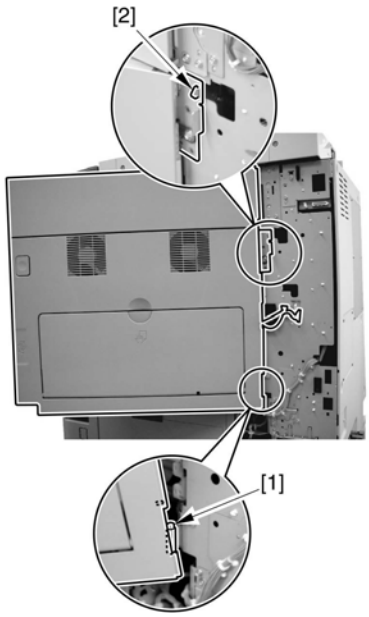
2) Remove the reuse band [1], and disconnect the connector [2].
3) Remove the 2 screws (M4x8; RS tightening), and detach the right door.



F-8-164

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-165

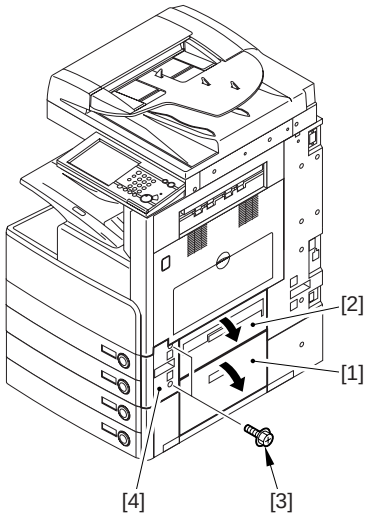
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.8.4 Removing the Right Cover (lower front) 0007-6613

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a Cassette Feeding Unit-Y2)
2) Open the lower right door [2].
3) Remove the 2 screws [3], and detach the right cover (lower front) [4].

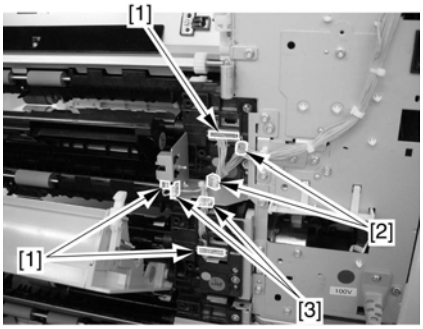


F-8-166

8.8.8.5 Removing the Pickup Assembly 1 0007-6614

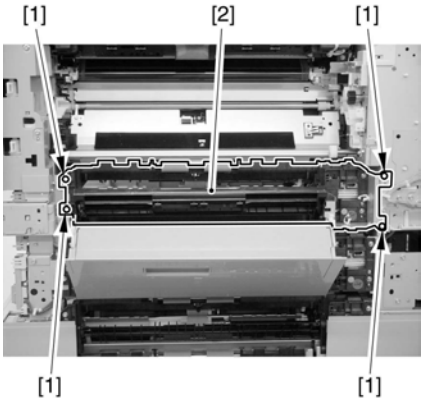
iR2270 / iR2870 / iR3570 / iR4570

1) Slide out the cassette 1/2.
2) Disconnect that 3 connectors [1]; then, free the harness from the 2 wire saddles [2] and the 2 clamps [3].



F-8-167

3) Remove the 4 screws [1], and take out the pickup unit 1 [2].

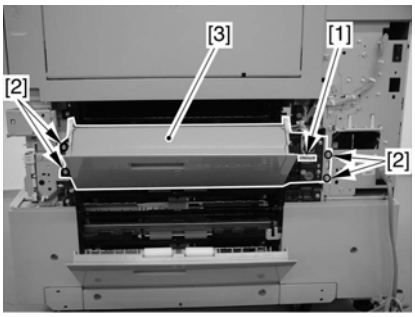


F-8-168

8.8.8.6 Removing the Pickup Assembly 2 0007-6615

iR2270 / iR2870 / iR3570 / iR4570

1) Slide out the cassette 1/2.
2) Disconnect the connector [1], and free the harness from the guide; then, remove the 4 screws [2], and detach the pickup assembly 2 [3].

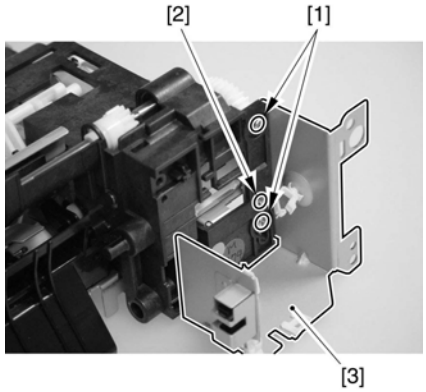


F-8-169

8.8.8.7 Removing the Sensor Mounting Plate 0008-1508

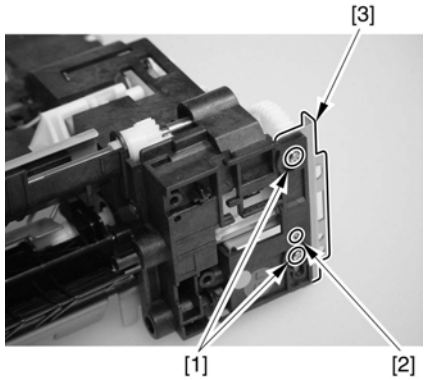
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 TP screws [1] and the binding screw [2] from the rear of the pickup assembly, and detach the bracket [3].



F-8-170

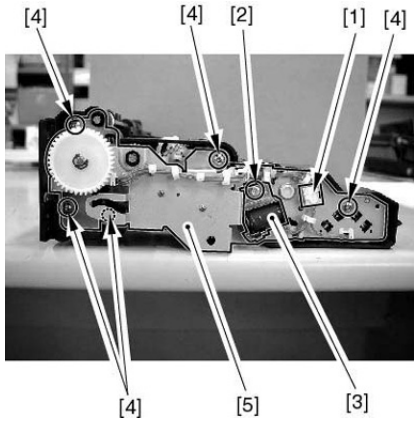
Pickup Unit 1



F-8-171

Pickup Unit 2

2) Disconnect the connector [1], and remove the screw; then, detach the cassette pickup solenoid [3].
3) Remove the bushing and the 5 screws [4]; then, detach the sensor base [5].

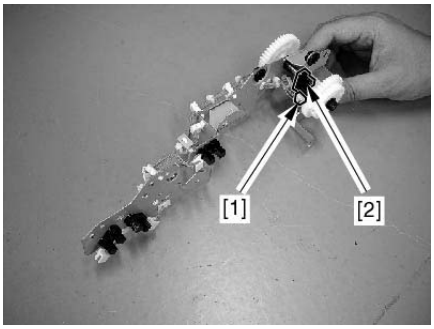


F-8-172

8.8.8.8 Removing the Cassette Retry Paper Sensor 0007-6617

iR2270 / iR2870 / iR3570 / iR4570

1) Disconnect the connector [1], and detach the cassette retry paper sensor [2].



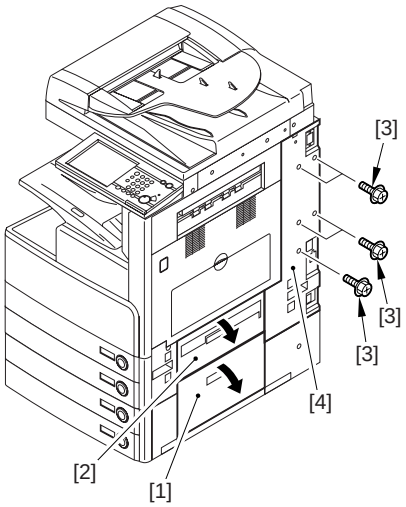
F-8-173

8.8.9 Cassette Paper Sensor

8.8.9.1 Removing the Right Cover (rear) 0007-6618

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a 2-Cassette Pedestal-Y2)
2) Open the right lower door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].

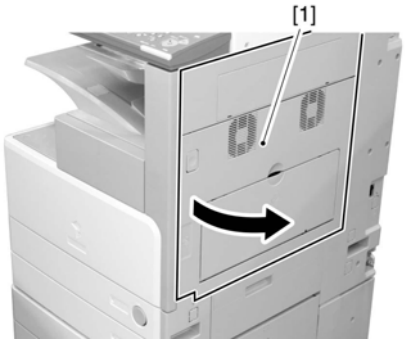


F-8-174

8.8.9.2 Removing the Right Door 0007-6658

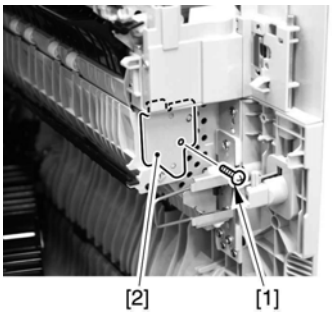
iR3570 / iR4570

1) Open the right door.



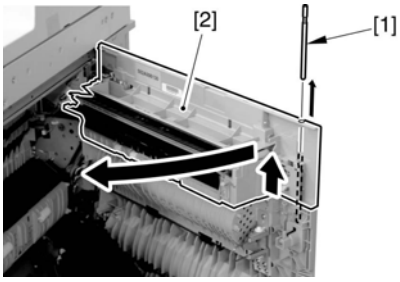
F-8-175

2) Remove the screw [1], and detach the fixing plate [2].



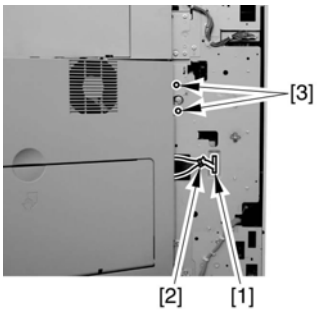
F-8-176

3) Remove the joint shaft [1], and free the extension delivery unit [2] from the right door.



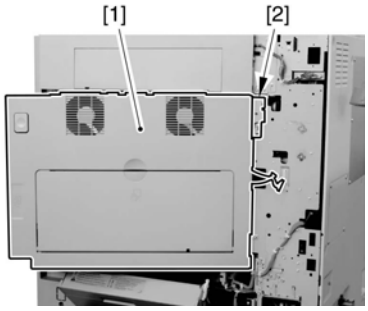
F-8-177

4) Disconnect the connector [1], and remove the reuse band [2]; then, remove the 2 screws (M4x8; RS tightening).



F-8-178

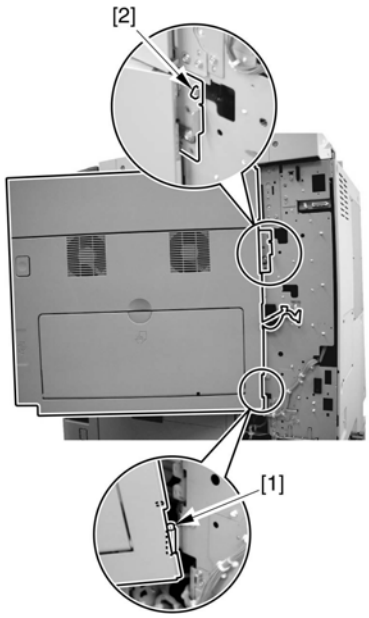
5) While freeing the hinge assembly [2], detach the right door.



F-8-179

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-180

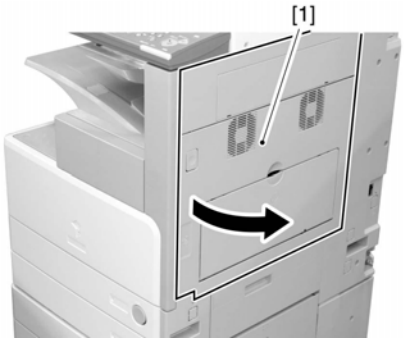
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.9.3 Removing the Right Door 0007-7339

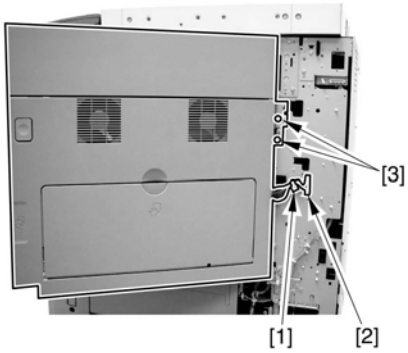
iR2270 / iR2870

1) Open the right door.



F-8-181

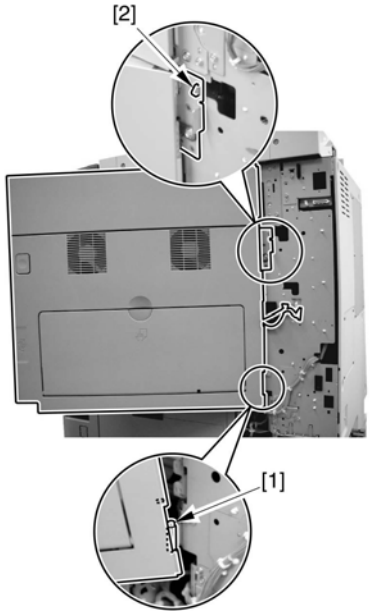
2) Remove the reuse band [1], and disconnect the connector [2].
3) Remove the 2 screws (M4x8; RS tightening), and detach the right door.



F-8-182

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-183

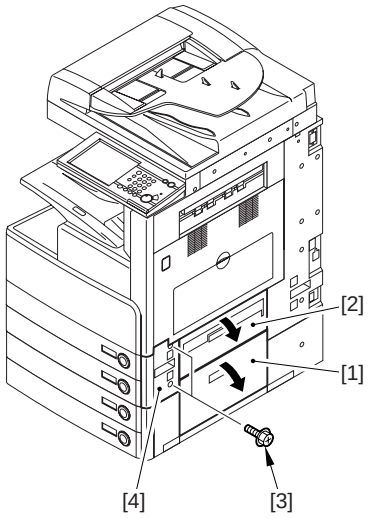
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.9.4 Removing the Right Cover (lower front) 0007-6620

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a Cassette Feeding Unit-Y2)
2) Open the lower right door [2].
3) Remove the 2 screws [3], and detach the right cover (lower front) [4].

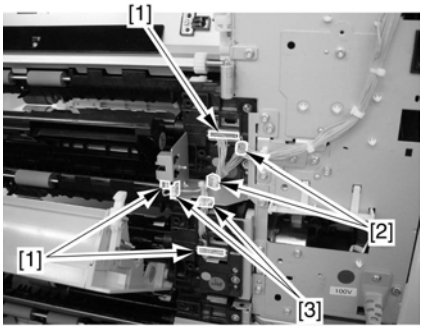


F-8-184

8.8.9.5 Removing the Pickup Assembly 1 0007-6623

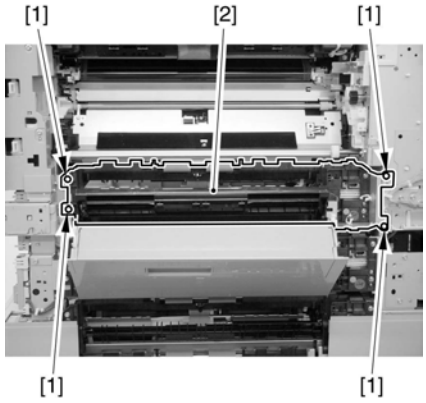
iR2270 / iR2870 / iR3570 / iR4570

1) Slide out the cassette 1/2.
2) Disconnect the 3 connectors [1]; then, free the harness from the 2 wire saddles [2] and the 2 clamps [3].



F-8-185

3) Remove the 4 screws [1], and take out the pickup unit 1 [2].

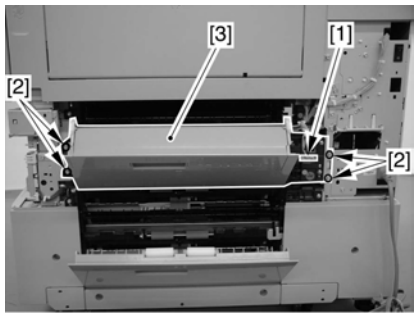


F-8-186

8.8.9.6 Removing the Pickup Assembly 2 0007-6624

iR2270 / iR2870 / iR3570 / iR4570

1) Slide out the cassette 1/2.
2) Disconnect the connector [1], and free the harness from the guide; then, remove the 4 screws [2], and detach the pickup assembly 2 [3].

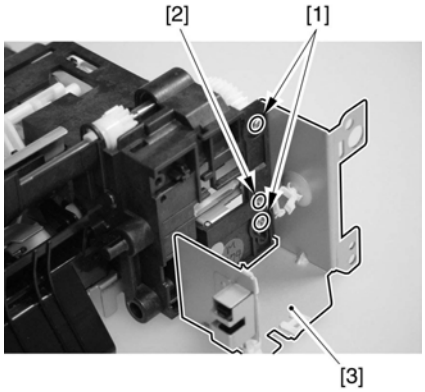


F-8-187

8.8.9.7 Removing the Sensor Mounting Plate 0007-6625

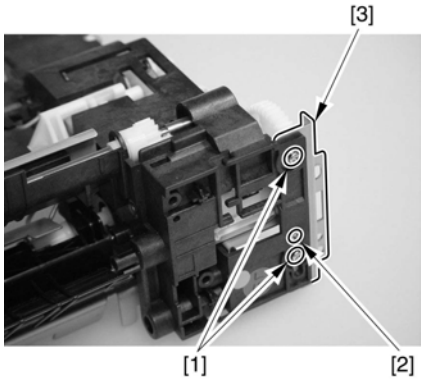
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 TP screws [1] and the binding screw [2] from the rear of the pickup assembly, and detach the bracket [3].



F-8-188

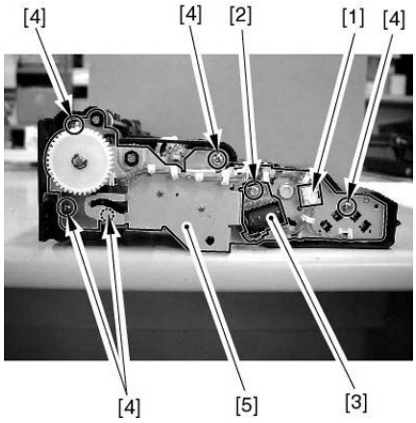
Pickup Unit 1



F-8-189

Pickup Unit 2

2) Disconnect the connector [1], and remove the screw; then, detach the cassette pickup solenoid [3].
3) Remove the bushing and the 5 screws [4]; then, detach the sensor base [5].

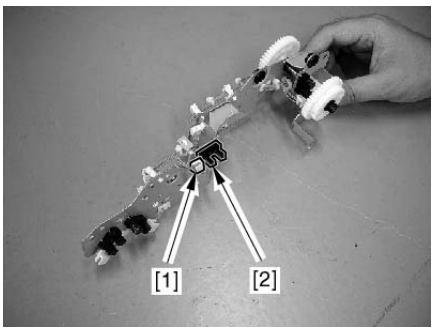


F-8-190

8.8.9.8 Removing the Cassette Paper Sensor 0007-6626

iR2270 / iR2870 / iR3570 / iR4570

1) Disconnect the connector [1], and detach the cassette paper sensor [2].



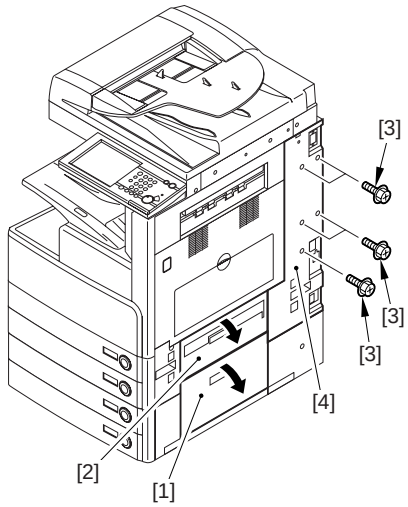
F-8-191

8.8.10 Cassette Paper Level Sensor (A/B)

8.8.10.1 Removing the Right Cover (rear) 0007-6627

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a 2-Cassette Pedestal-Y2)
2) Open the right lower door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].



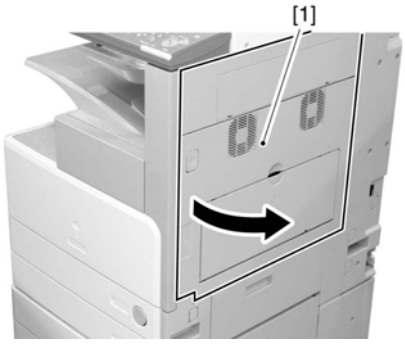
F-8-192

8.8.10.2 Removing the Right Door

0007-6656

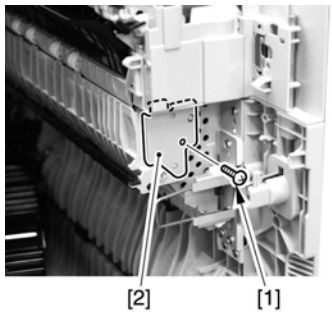
iR3570 / iR4570

1) Open the right door.



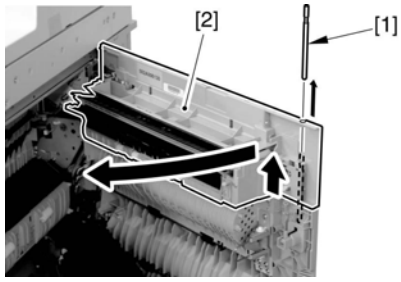
F-8-193

2) Remove the screw [1], and detach the fixing plate [2].



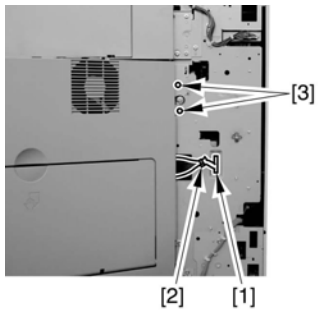
F-8-194

3) Remove the joint shaft [1], and free the extension delivery unit [2] from the right door.



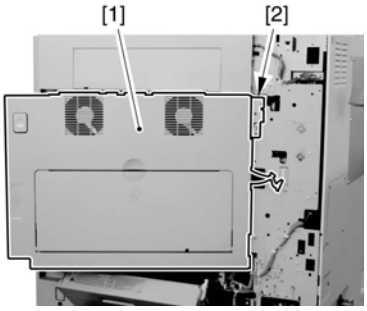
F-8-195

4) Disconnect the connector [1], and remove the reuse band [2]; then, remove the 2 screws (M4x8; RS tightening).



F-8-196

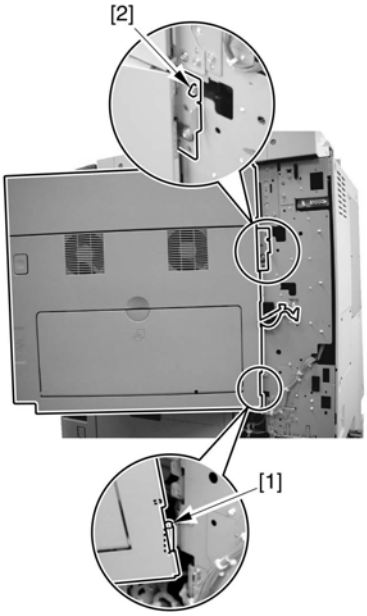
5) While freeing the hinge assembly [2], detach the right door.



F-8-197

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-198

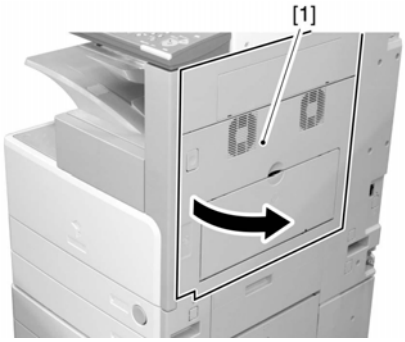
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.10.3 Removing the Right Door 0007-7340

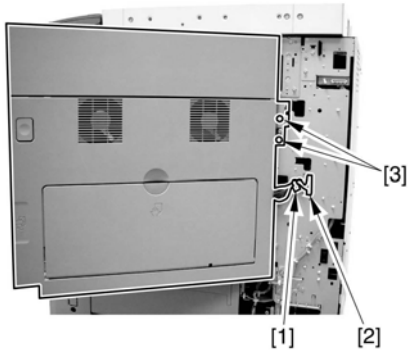
iR2270 / iR2870

1) Open the right door.



F-8-199

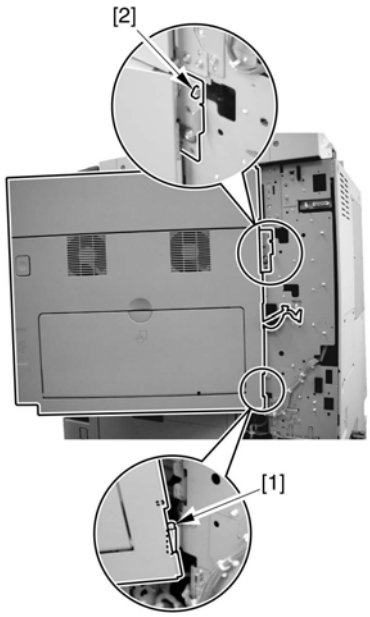
2) Remove the reuse band [1], and disconnect the connector [2].
3) Remove the 2 screws (M4x8; RS tightening), and detach the right door.



F-8-200

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-201

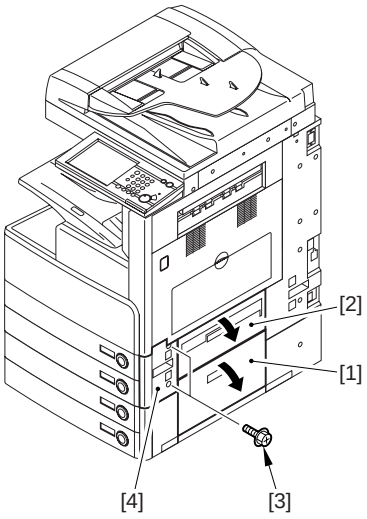
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.10.4 Removing the Right Cover (lower front) 0007-6632

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a Cassette Feeding Unit-Y2)
2) Open the lower right door [2].
3) Remove the 2 screws [3], and detach the right cover (lower front) [4].

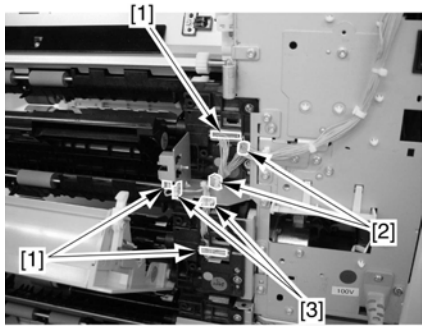


F-8-202

8.8.10.5 Removing the Pickup Assembly 1 0007-6634

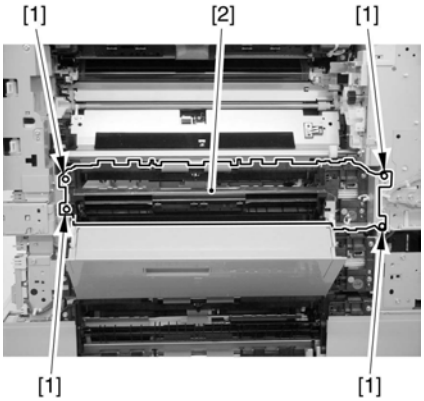
iR2270 / iR2870 / iR3570 / iR4570

1) Slide out the cassette 1/2.
2) Disconnect the 3 connectors [1]; then, free the harness from the 2 wire saddles [2] and the 2 clamps [3].



F-8-203

3) Remove the 4 screws [1], and take out the pickup unit 1 [2].

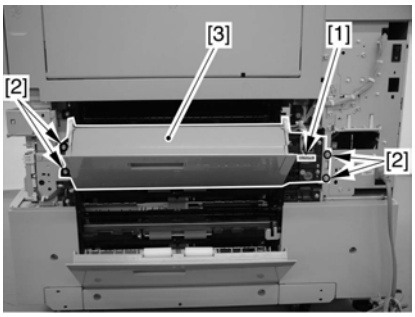


F-8-204

8.8.10.6 Removing the Pickup Assembly 2 0007-6635

iR2270 / iR2870 / iR3570 / iR4570

1) Slide out the cassette 1/2.
2) Disconnect the connector [1], and free the harness from the guide; then, remove the 4 screws [2], and detach the pickup assembly 2 [3].

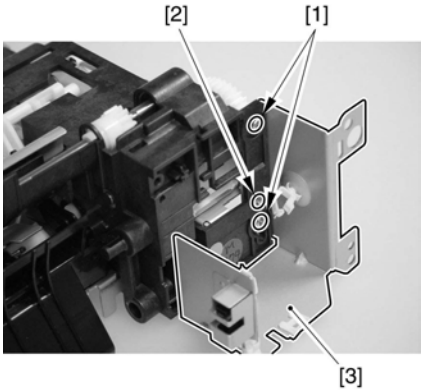


F-8-205

8.8.10.7 Removing the Sensor Mounting Plate 0007-6637

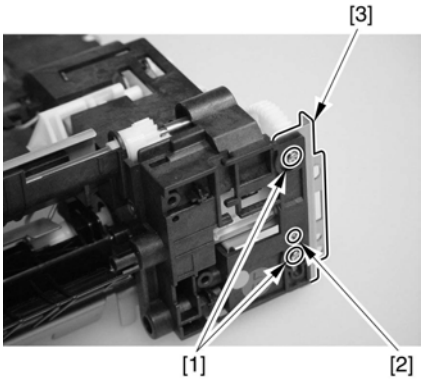
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 TP screws [1] and the binding screw [2] from the rear of the pickup assembly, and detach the bracket [3].



F-8-206

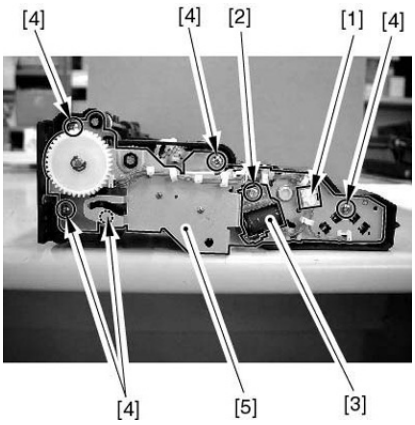
Pickup Unit 1



F-8-207

Pickup Unit 2

2) Disconnect the connector [1], and remove the screw; then, detach the cassette pickup solenoid [3].
3) Remove the bushing and the 5 screws [4]; then, detach the sensor base [5].

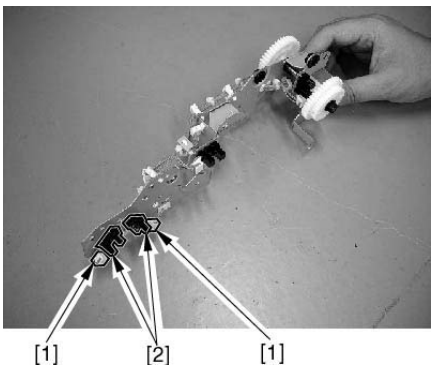


F-8-208

8.8.10.8 Removing the Cassette Paper Level Sensor (A/B) 0007-6639

iR2270 / iR2870 / iR3570 / iR4570

1) Disconnect the connector [1] (1 pc. each), and detach the cassette power level sensor (A/B) [2].



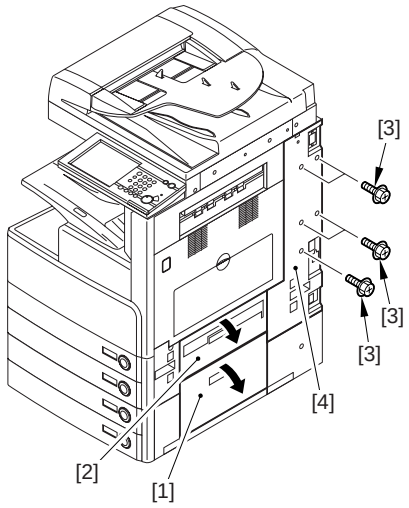
F-8-209

8.8.11 Slide Resistor

8.8.11.1 Removing the Right Cover (rear) 0007-6641

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a 2-Cassette Pedestal-Y2)
2) Open the right lower door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].

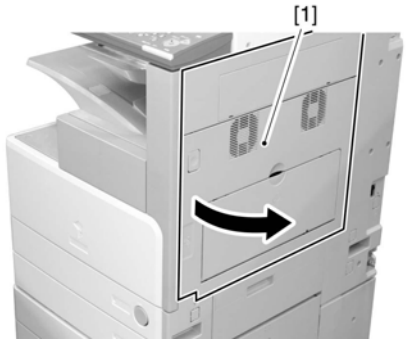


F-8-210

8.8.11.2 Removing the Right Door 0007-6657

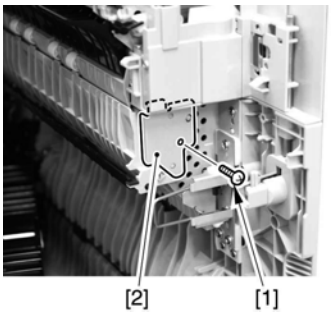
iR3570 / iR4570

1) Open the right door.



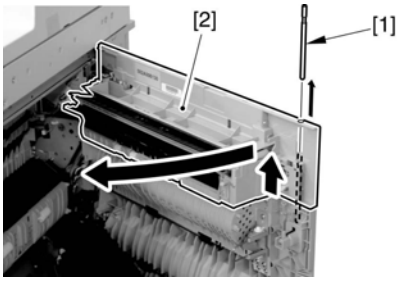
F-8-211

2) Remove the screw [1], and detach the fixing plate [2].



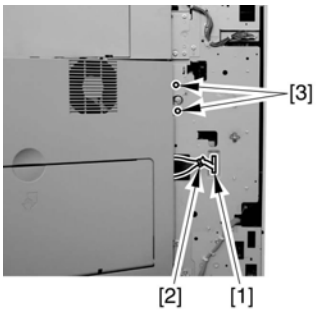
F-8-212

3) Remove the joint shaft [1], and free the extension delivery unit [2] from the right door.



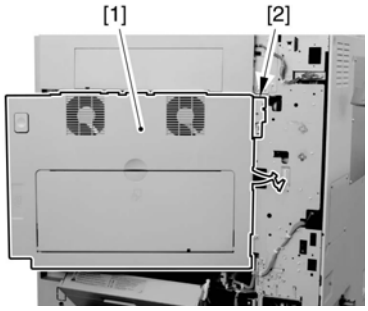
F-8-213

4) Disconnect the connector [1], and remove the reuse band [2]; then, remove the 2 screws (M4x8; RS tightening).



F-8-214

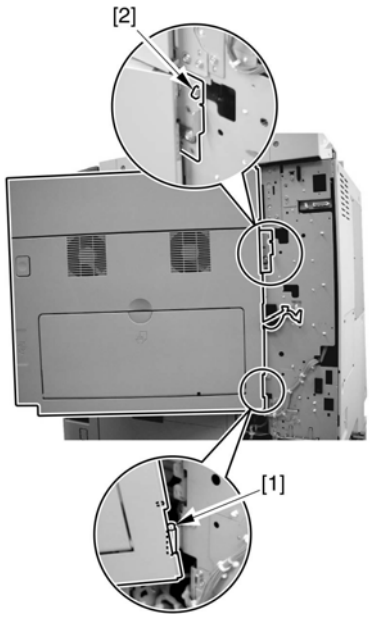
5) While freeing the hinge assembly [2], detach the right door.



F-8-215

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-216

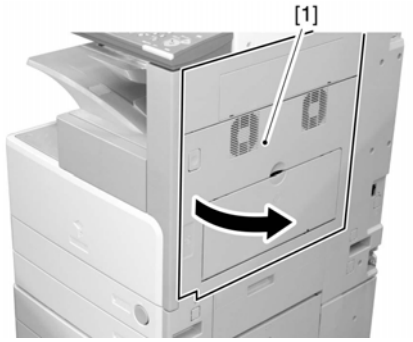
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.11.3 Removing the Right Door 0007-7343

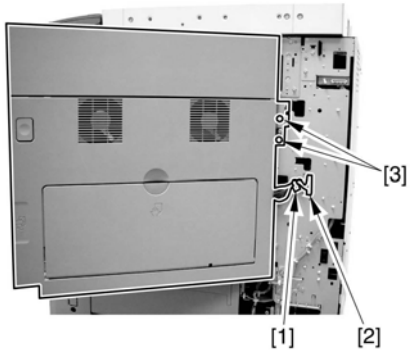
iR2270 / iR2870

1) Open the right door.



F-8-217

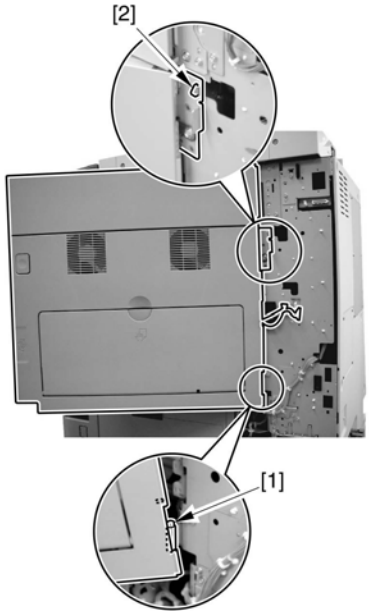
2) Remove the reuse band [1], and disconnect the connector [2].
3) Remove the 2 screws (M4x8; RS tightening), and detach the right door.



F-8-218

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-219

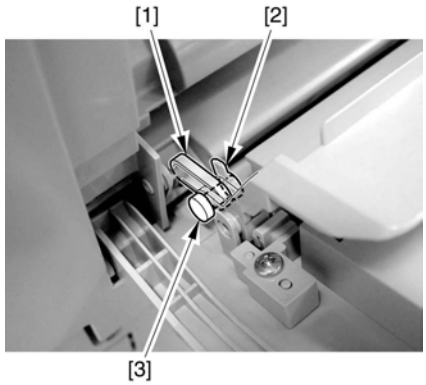
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.11.4 Removing the Manual Feed Unit 0007-6644

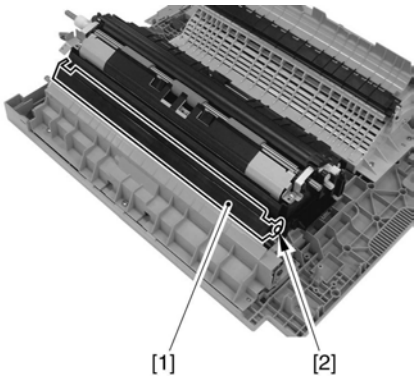
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the manual upper guide link [1] (plastic E-ring [2] and boss [3]).



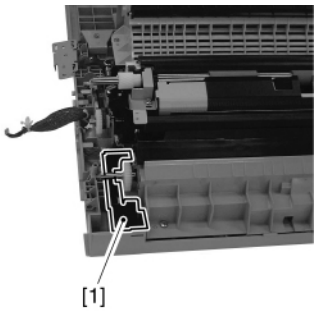
F-8-220

2) Remove the screw [2], and detach the manual feed guide [1].



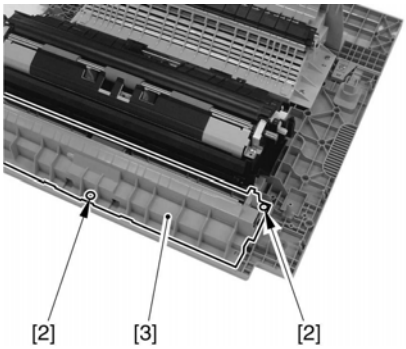
F-8-221

3) Remove the connector cover [1] (snap-on).

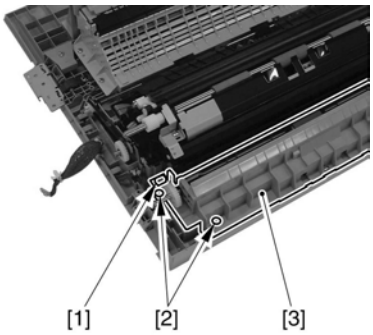


F-8-222

4) Disconnect the connector [1].
5) Remove the 4 screws [2], and detach the manual feed unit [3].



F-8-223



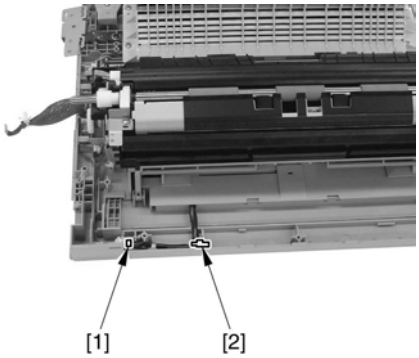
F-8-224

8.8.11.5 Removing the Manual Tray Unit

0007-6648

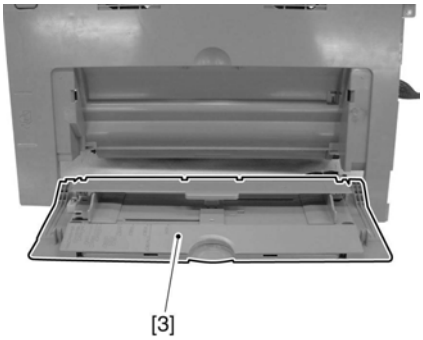
iR2270 / iR2870 / iR3570 / iR4570

1) Disconnect the connector [1].
2) Remove the tie-wrap [2].



F-8-225

3) Remove the manual feed tray unit [3].



F-8-226

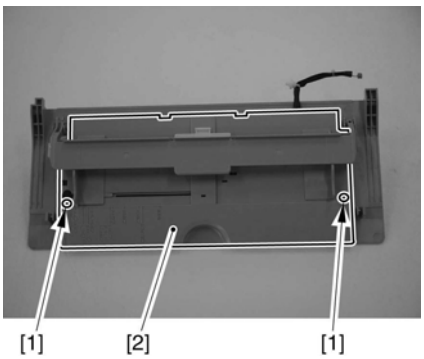
8.8.11.6 Removing the Slide Resistor 0007-6651

iR2270 / iR2870 / iR3570 / iR4570

1) Remove 2 screws [1], and detach the manual feed tray upper cover [2].

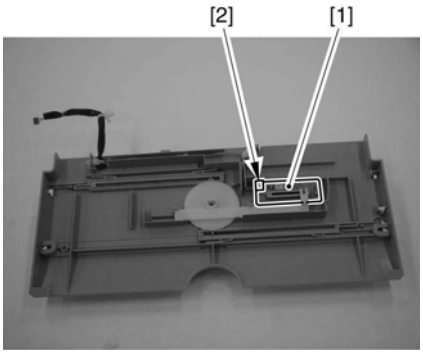
⚠

If possible, mark the position of the point of horizontal registration before removal.



F-8-227

2) Remove the slide resistor [1] (connector [2]).



F-8-228

8.8.12 Cassette Pickup Solenoid

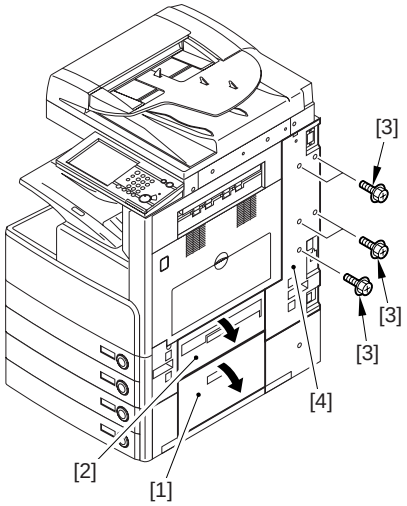
8.8.12.1 Removing the Right Cover (rear) 0007-6652

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a 2-Cassette Pedestal-Y2)

2) Open the right lower door [2].

3) Remove the 5 screws [3], and detach the right cover (rear) [4].

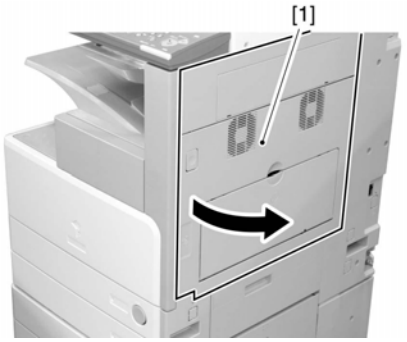


F-8-229

8.8.12.2 Removing the Right Door 0007-6654

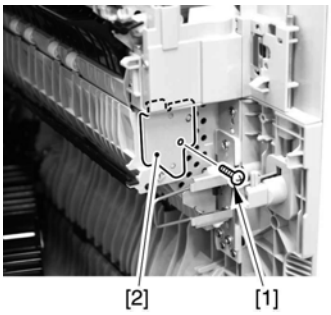
iR3570 / iR4570

1) Open the right door.



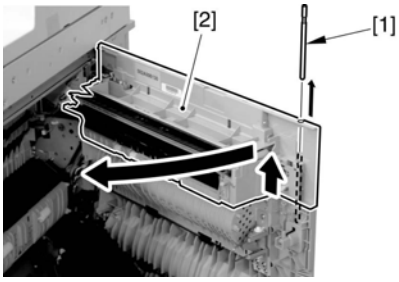
F-8-230

2) Remove the screw [1], and detach the fixing plate [2].



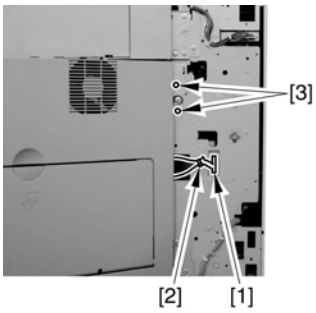
F-8-231

3) Remove the joint shaft [1], and free the extension delivery unit [2] from the right door.



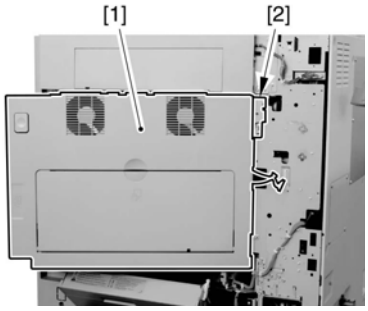
F-8-232

4) Disconnect the connector [1], and remove the reuse band [2]; then, remove the 2 screws (M4x8; RS tightening).



F-8-233

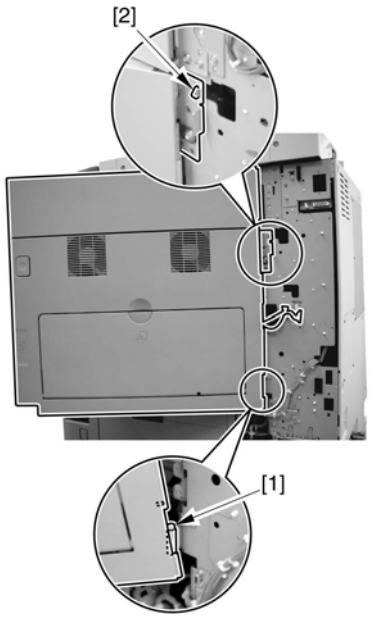
5) While freeing the hinge assembly [2], detach the right door.



F-8-234

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-235

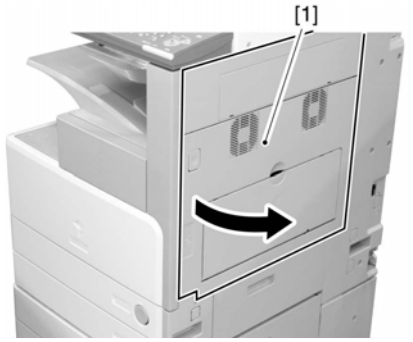
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.12.3 Removing the Right Door 0007-7344

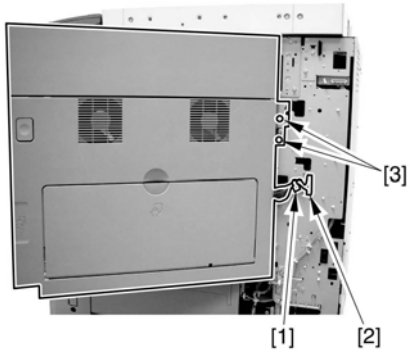
iR2270 / iR2870

1) Open the right door.



F-8-236

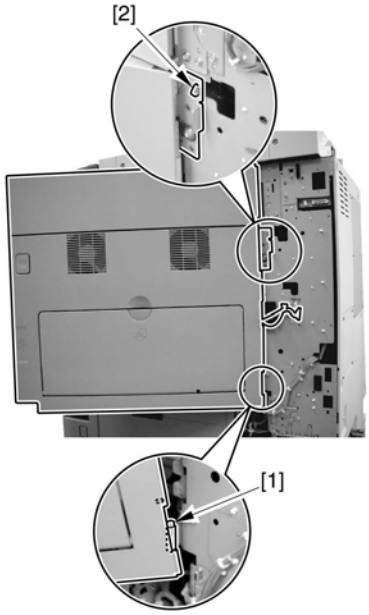
2) Remove the reuse band [1], and disconnect the connector [2].
3) Remove the 2 screws (M4x8; RS tightening), and detach the right door.



F-8-237

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-238

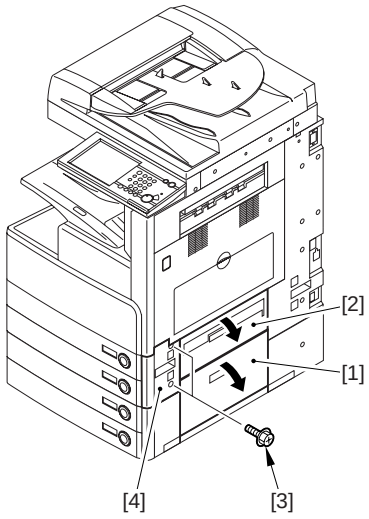
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.12.4 Removing the Right Cover (lower front) 0007-6659

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a Cassette Feeding Unit-Y2)
2) Open the lower right door [2].
3) Remove the 2 screws [3], and detach the right cover (lower front) [4].

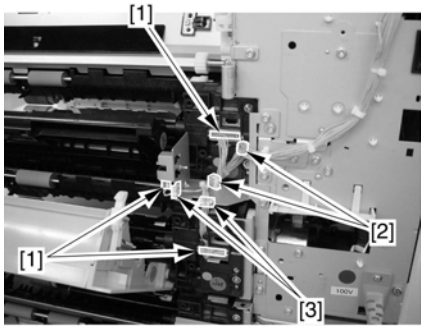


F-8-239

8.8.12.5 Removing the Pickup Assembly 1 0007-6661

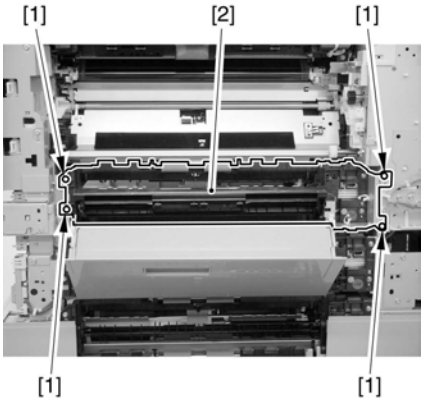
iR2270 / iR2870 / iR3570 / iR4570

1) Slide out the cassette 1/2.
2) Disconnect the 3 connectors [1]; then, free the harness from the 2 wire saddles [2] and the 2 clamps [3].



F-8-240

3) Remove the 4 screws [1], and take out the pickup unit 1 [2].

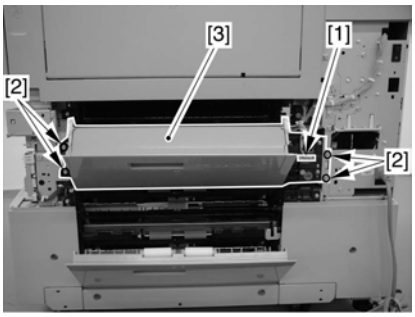


F-8-241

8.8.12.6 Removing the Pickup Assembly 2 0007-6662

iR2270 / iR2870 / iR3570 / iR4570

1) Slide out the cassette 1/2.
2) Disconnect the connector [1], and free the harness from the guide; then, remove the 4 screws [2], and detach the pickup assembly 2 [3].

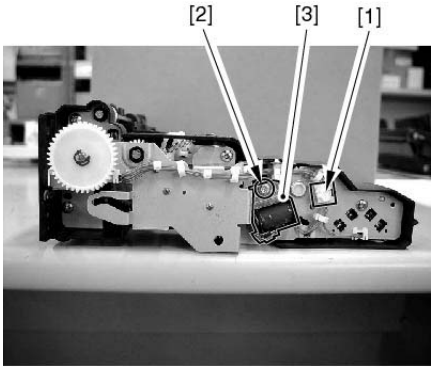


F-8-242

8.8.12.7 Removing the Cassette Pickup Solenoid 0007-6664

iR2270 / iR2870 / iR3570 / iR4570

1) Disconnect the connector [1], and remove the screw [2]; then, detach the cassette pickup solenoid [3].



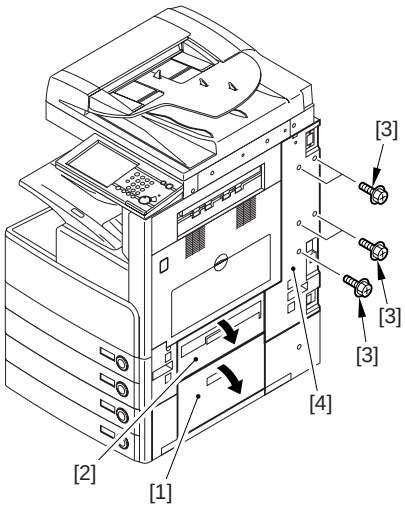
F-8-243

8.8.13 Cassette Size Sensor Relay PCB

8.8.13.1 Removing the Right Cover (rear) 0007-6667

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a 2-Cassette Pedestal-Y2)
2) Open the right lower door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].

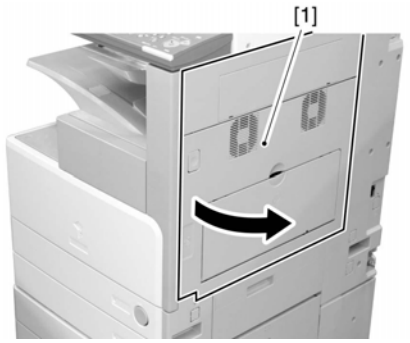


F-8-244

8.8.13.2 Removing the Right Door 0007-6668

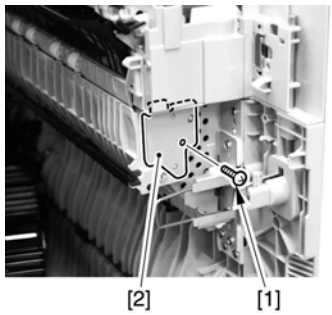
iR3570 / iR4570

1) Open the right door.



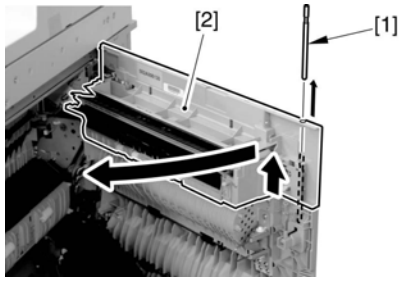
F-8-245

2) Remove the screw [1], and detach the fixing plate [2].



F-8-246

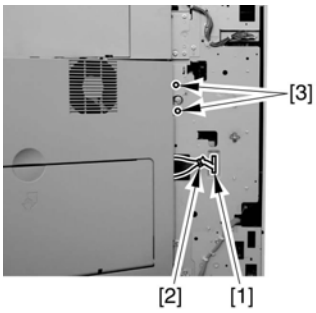
3) Remove the joint shaft [1], and free the extension delivery unit [2] from the right door.



F-8-247

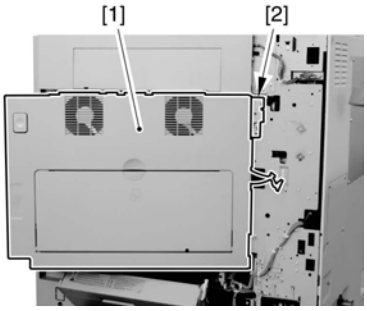
4) Disconnect the connector [1], and remove the reuse band [2]; then, remove the 2 screws (M4x8; RS

tightening).



F-8-248

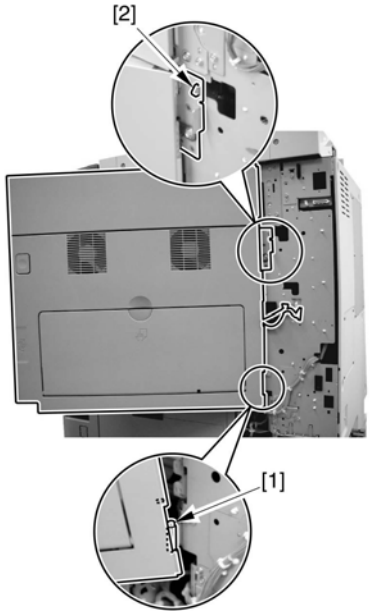
5) While freeing the hinge assembly [2], detach the right door.



F-8-249

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-250

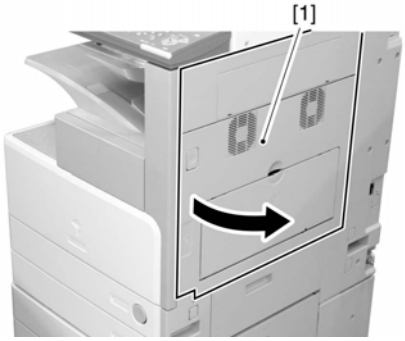
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.13.3 Removing the Right Door 0007-7347

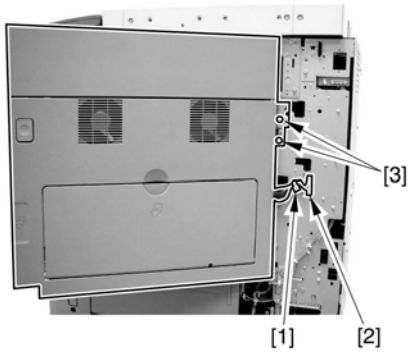
iR2270 / iR2870

1) Open the right door.



F-8-251

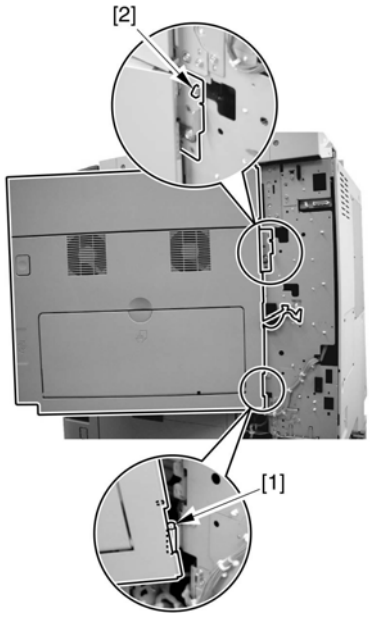
2) Remove the reuse band [1], and disconnect the connector [2].
3) Remove the 2 screws (M4x8; RS tightening), and detach the right door.



F-8-252

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-253

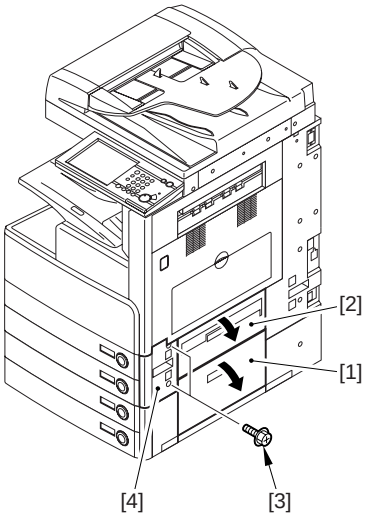
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.13.4 Removing the Right Cover (lower front) 0007-6669

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a Cassette Feeding Unit-Y2)
2) Open the lower right door [2].
3) Remove the 2 screws [3], and detach the right cover (lower front) [4].

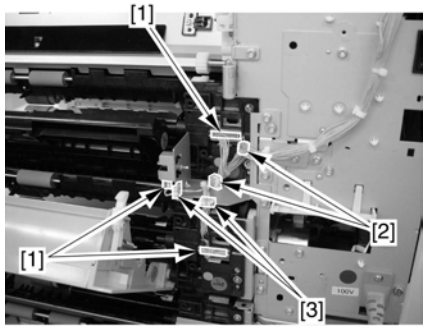


F-8-254

8.8.13.5 Removing the Pickup Assembly 1 0007-6670

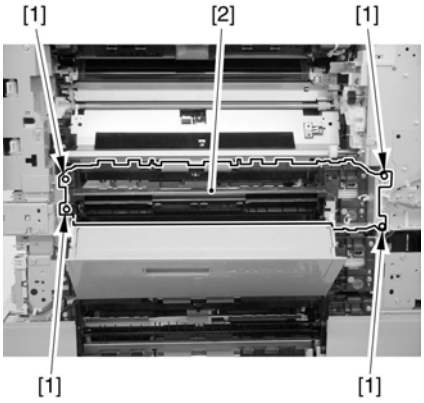
iR2270 / iR2870 / iR3570 / iR4570

1) Slide out the cassette 1/2.
2) Disconnect the 3 connectors [1]; then, free the harness from the 2 wire saddles [2] and the 2 clamps [3].



F-8-255

3) Remove the 4 screws [1], and take out the pickup unit 1 [2].

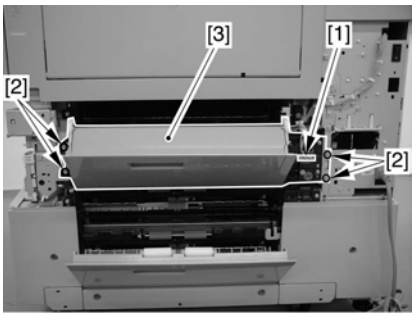


F-8-256

8.8.13.6 Removing the Pickup Assembly 2 0007-6671

iR2270 / iR2870 / iR3570 / iR4570

1) Slide out the cassette 1/2.
2) Disconnect the connector [1], and free the harness from the guide; then, remove the 4 screws [2], and detach the pickup assembly 2 [3].

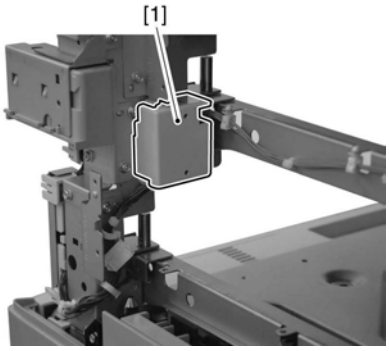


F-8-257

8.8.13.7 Removing the Cassette Size Sensor Relay PCB 0007-6672

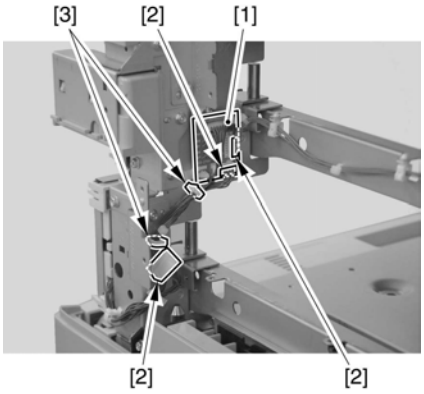
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the PCB cover [1] (snap-on).



F-8-258

2) Remove the cassette size sensor relay PCB [2] (3 connectors [2], 2 clamps [3]).



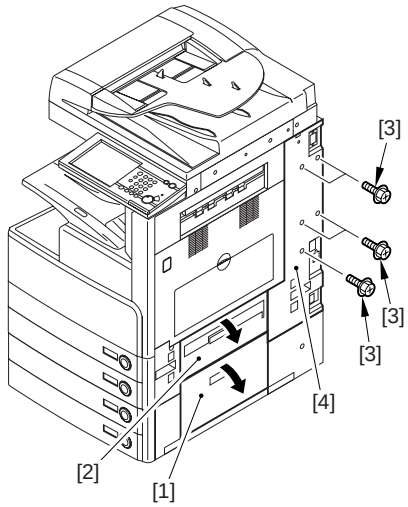
F-8-259

8.8.14 Manual Tray Assembly

8.8.14.1 Removing the Right Cover (rear) 0007-6697

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a 2-Cassette Pedestal-Y2)
2) Open the right lower door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].



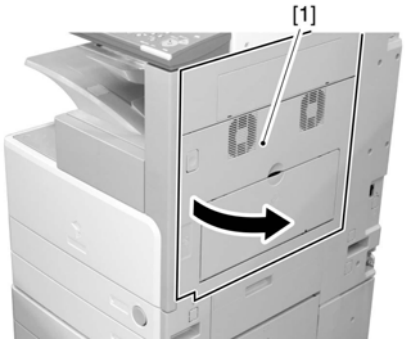
F-8-260

8.8.14.2 Removing the Right Door

0007-6698

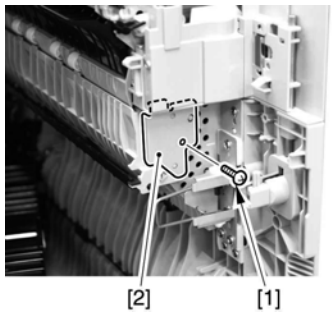
iR3570 / iR4570

1) Open the right door.



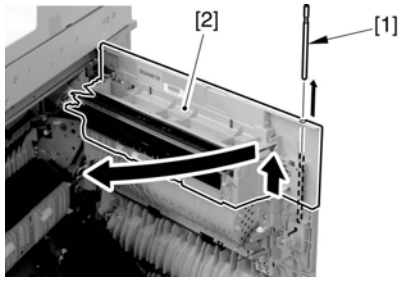
F-8-261

2) Remove the screw [1], and detach the fixing plate [2].



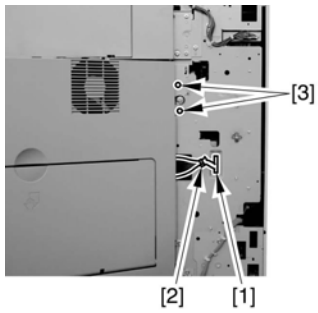
F-8-262

3) Remove the joint shaft [1], and free the extension delivery unit [2] from the right door.



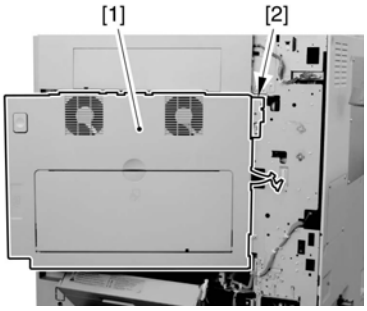
F-8-263

4) Disconnect the connector [1], and remove the reuse band [2]; then, remove the 2 screws (M4x8; RS tightening).



F-8-264

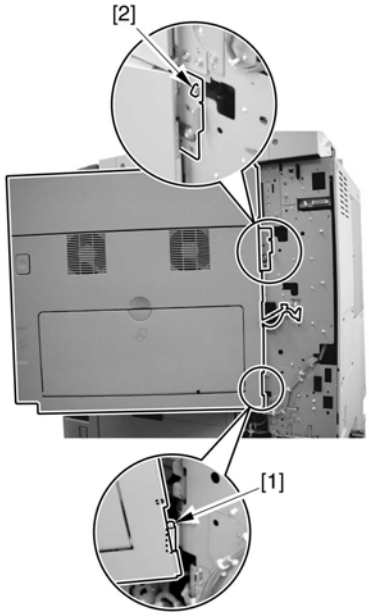
5) While freeing the hinge assembly [2], detach the right door.



F-8-265

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-266

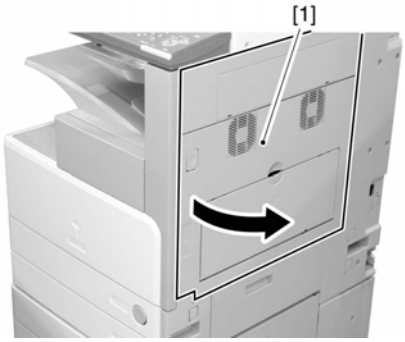
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.14.3 Removing the Right Door 0007-7348

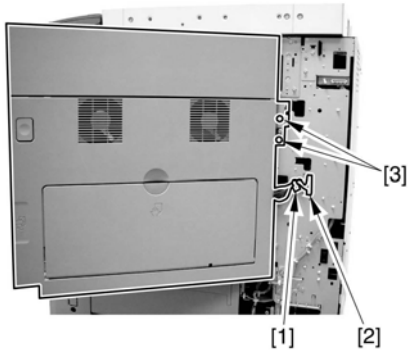
iR2270 / iR2870

1) Open the right door.



F-8-267

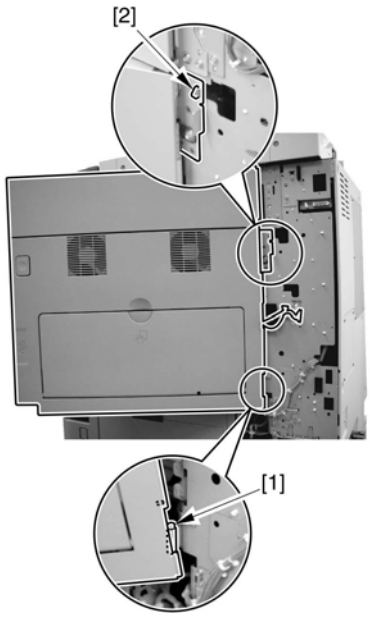
2) Remove the reuse band [1], and disconnect the connector [2].
3) Remove the 2 screws (M4x8; RS tightening), and detach the right door.



F-8-268

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-269

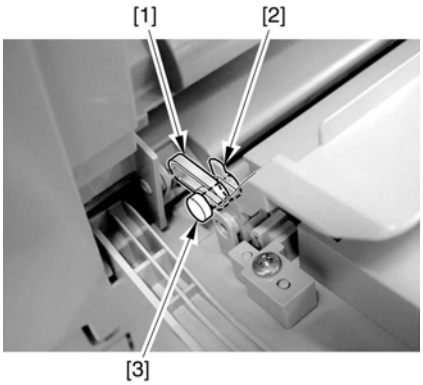
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.14.4 Removing the Manual Feed Unit 0007-6699

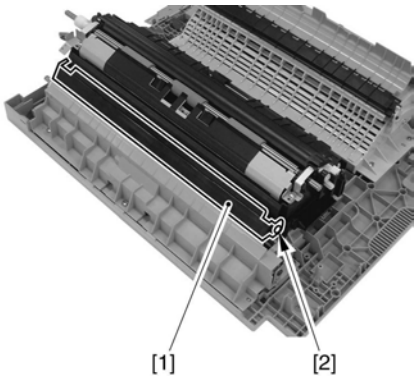
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the manual upper guide link [1] (plastic E-ring [2] and boss [3]).



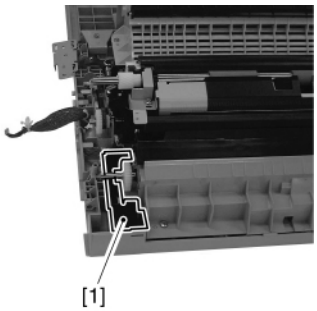
F-8-270

2) Remove the screw [2], and detach the manual feed guide [1].



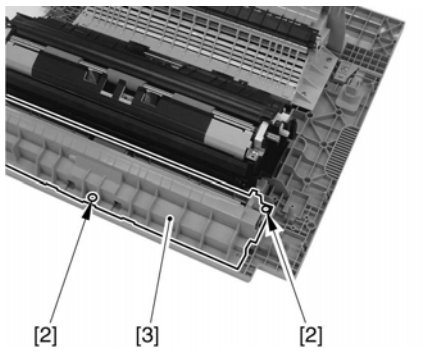
F-8-271

3) Remove the connector cover [1] (snap-on).

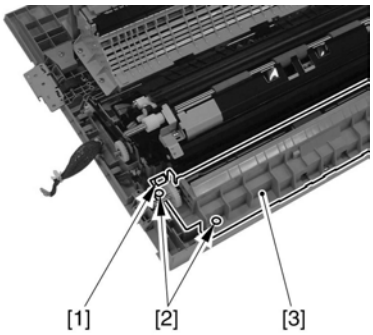


F-8-272

4) Disconnect the connector [1].
5) Remove the 4 screws [2], and detach the manual feed unit [3].



F-8-273

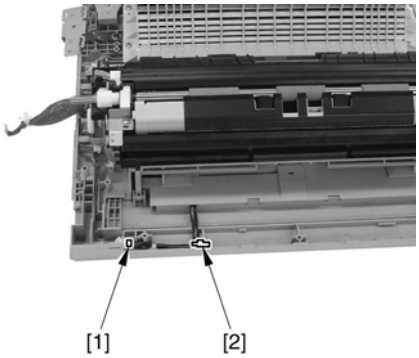


F-8-274

8.8.14.5 Removing the Manual Feed Tray Assembly 0007-6703

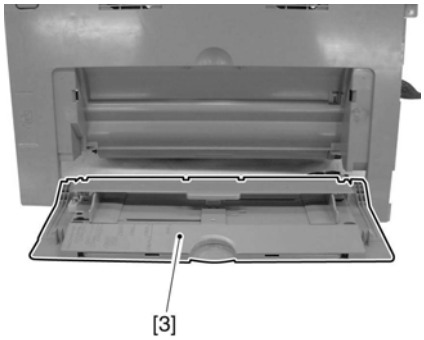
iR2270 / iR2870 / iR3570 / iR4570

1) Disconnect the connector [1].
2) Remove the tie-wrap [2].



F-8-275

3) Remove the manual feed tray unit [3].



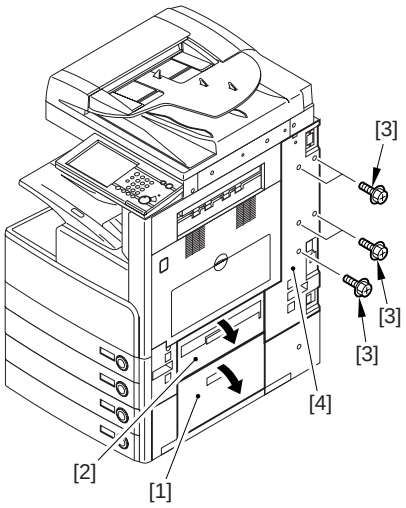
F-8-276

8.8.15 Manual Feed Unit

8.8.15.1 Removing the Right Cover (rear) 0007-6705

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a 2-Cassette Pedestal-Y2)
2) Open the right lower door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].



F-8-277

8.8.15.2 Removing the Right Door 0007-6707

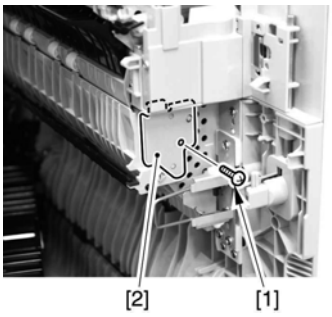
iR3570 / iR4570

1) Open the right door.



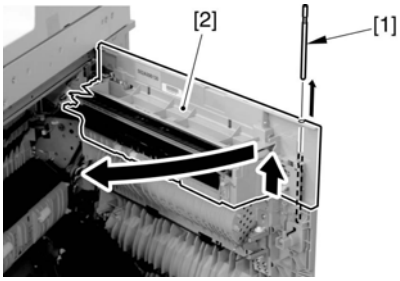
F-8-278

2) Remove the screw [1], and detach the fixing plate [2].



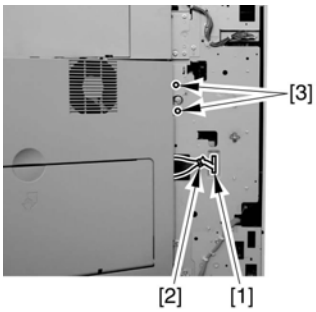
F-8-279

3) Remove the joint shaft [1], and free the extension delivery unit [2] from the right door.



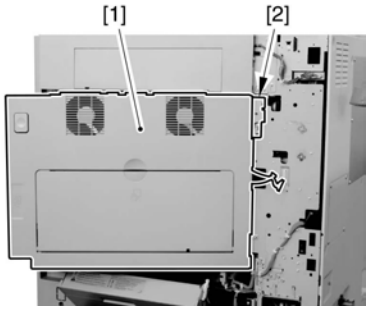
F-8-280

4) Disconnect the connector [1], and remove the reuse band [2]; then, remove the 2 screws (M4x8; RS tightening).



F-8-281

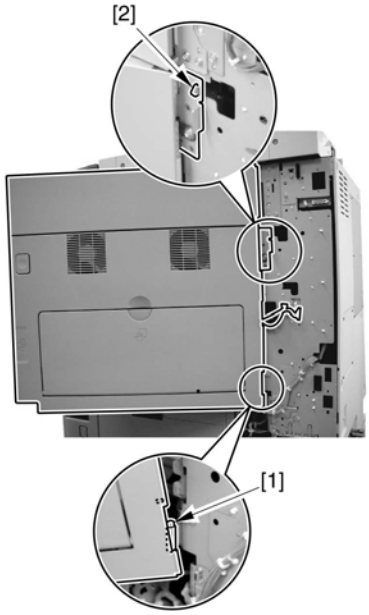
5) While freeing the hinge assembly [2], detach the right door.



F-8-282

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-283

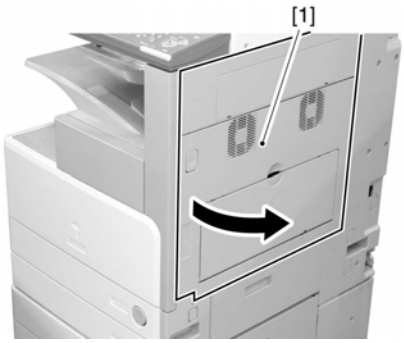
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.15.3 Removing the Right Door 0007-7352

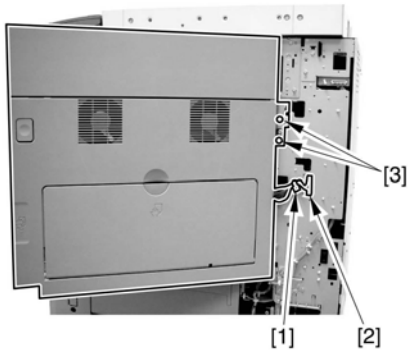
iR2270 / iR2870

1) Open the right door.



F-8-284

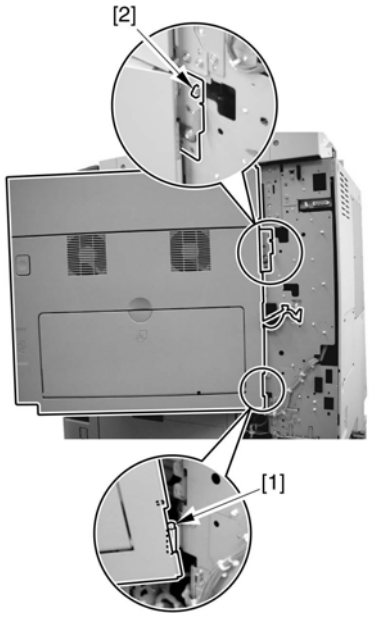
2) Remove the reuse band [1], and disconnect the connector [2].
3) Remove the 2 screws (M4x8; RS tightening), and detach the right door.



F-8-285

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-286

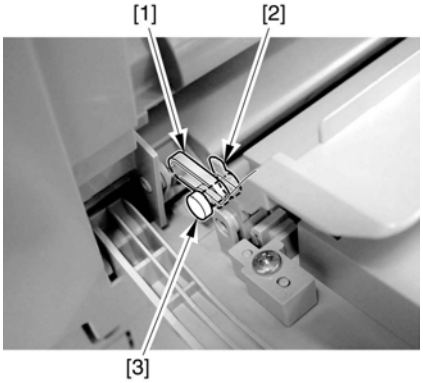
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.15.4 Removing the Manual Feed Unit 0008-1017

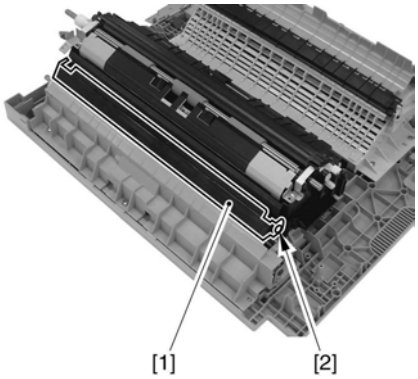
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the manual upper guide link [1] (plastic E-ring [2] and boss [3]).



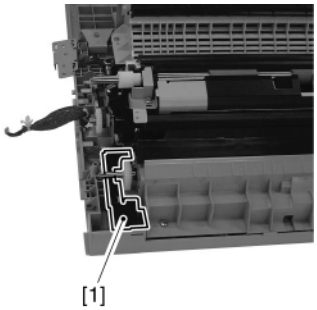
F-8-287

2) Remove the screw [2], and detach the manual feed guide [1].



F-8-288

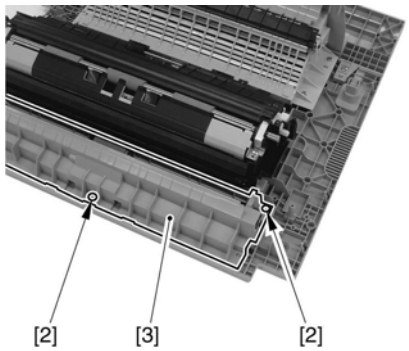
3) Remove the connector cover [1] (snap-on).



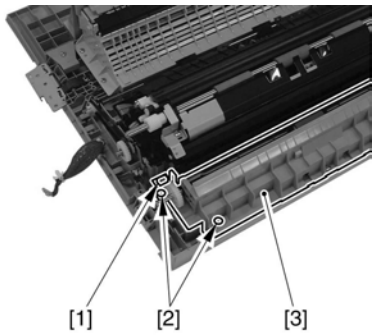
F-8-289

4) Disconnect the connector [1].

5) Remove the 4 screws [2], and detach the manual feed unit [3].



F-8-290



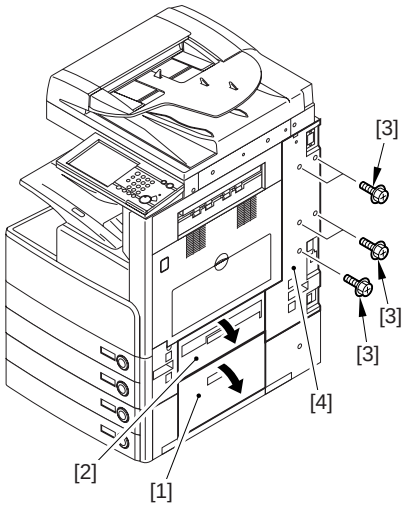
F-8-291

8.8.16 Manual Pickup Roller

8.8.16.1 Removing the Right Cover (rear) 0007-6709

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a 2-Cassette Pedestal-Y2)
2) Open the right lower door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].

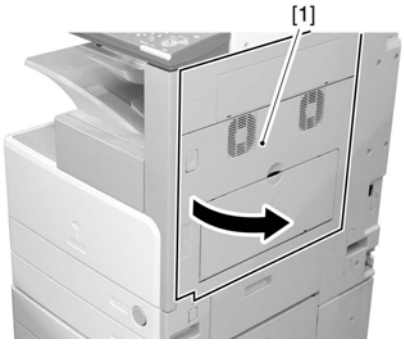


F-8-292

8.8.16.2 Removing the Right Door 0007-6710

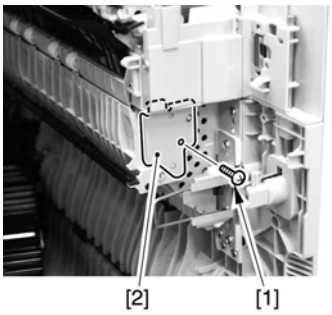
iR3570 / iR4570

1) Open the right door.



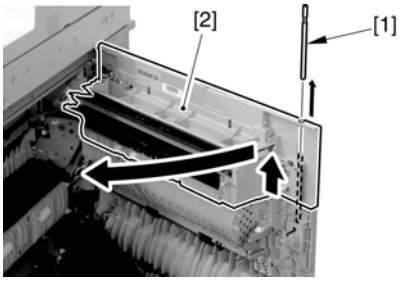
F-8-293

2) Remove the screw [1], and detach the fixing plate [2].



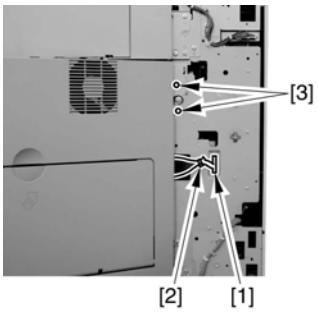
F-8-294

3) Remove the joint shaft [1], and free the extension delivery unit [2] from the right door.



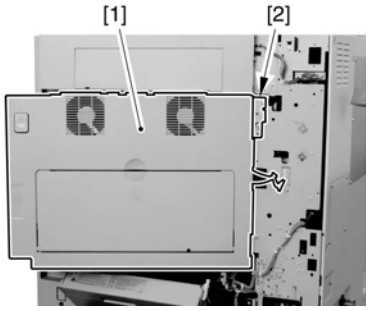
F-8-295

4) Disconnect the connector [1], and remove the reuse band [2]; then, remove the 2 screws (M4x8; RS tightening).



F-8-296

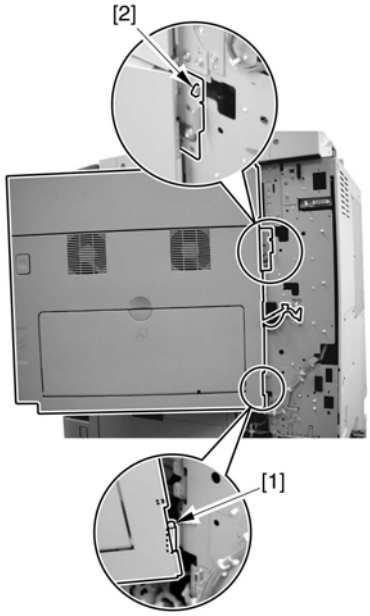
5) While freeing the hinge assembly [2], detach the right door.



F-8-297

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-298

⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.16.3 Removing the Right Door 0007-7354

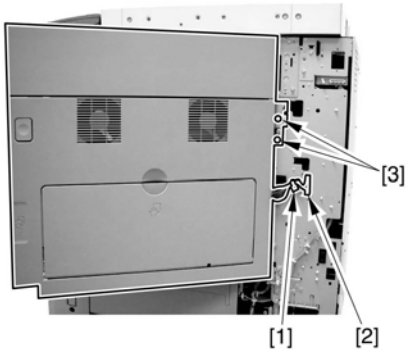
iR2270 / iR2870

1) Open the right door.



F-8-299

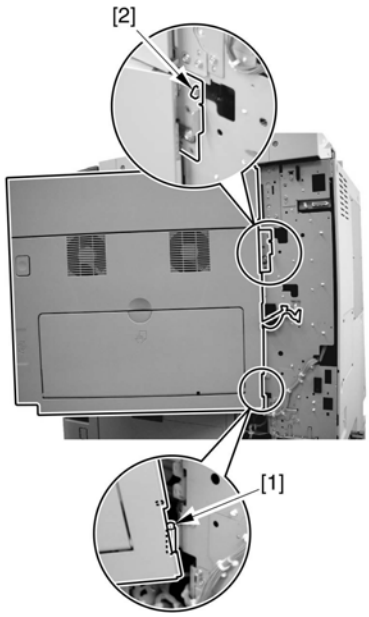
2) Remove the reuse band [1], and disconnect the connector [2].
3) Remove the 2 screws (M4x8; RS tightening), and detach the right door.



F-8-300

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-301

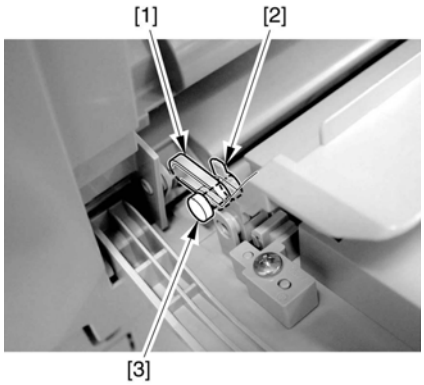
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.16.4 Removing the Manual Feed Unit 0007-6994

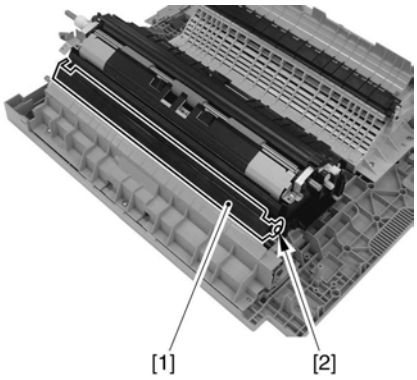
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the manual upper guide link [1] (plastic E-ring [2] and boss [3]).



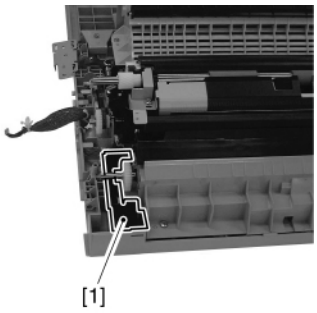
F-8-302

2) Remove the screw [2], and detach the manual feed guide [1].



F-8-303

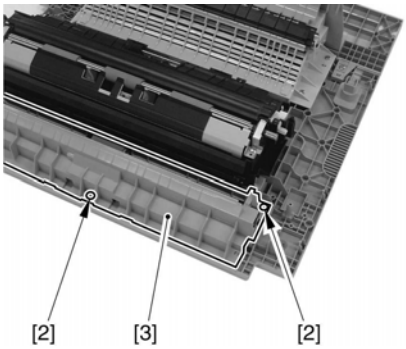
3) Remove the connector cover [1] (snap-on).



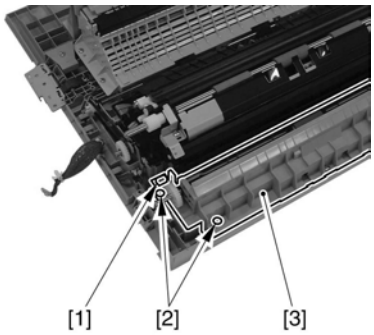
F-8-304

4) Disconnect the connector [1].

5) Remove the 4 screws [2], and detach the manual feed unit [3].



F-8-305

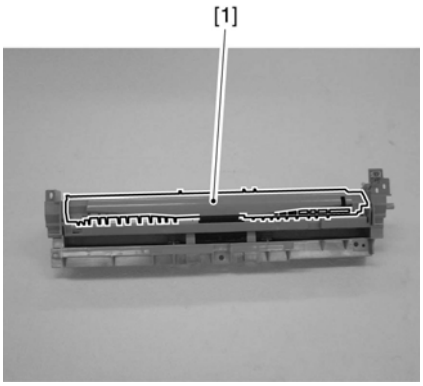


F-8-306

8.8.16.5 Removing the Manual Feed Pickup Roller 0007-6713

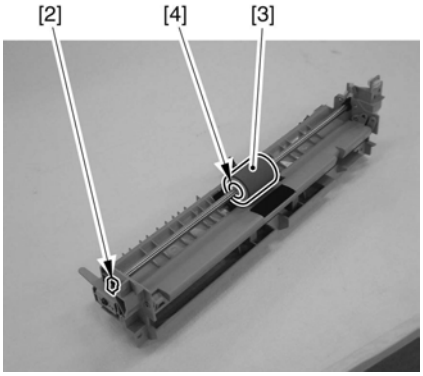
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the manual feed upper cover [1] (snap-on).



F-8-307

2) Remove the bush [2], and detach the manual feed pickup roller [3] together with the shaft.
3) Remove the plastic E-ring [4], and detach the manual feed pickup roller from shaft. Take care not to drop the parallel pin.



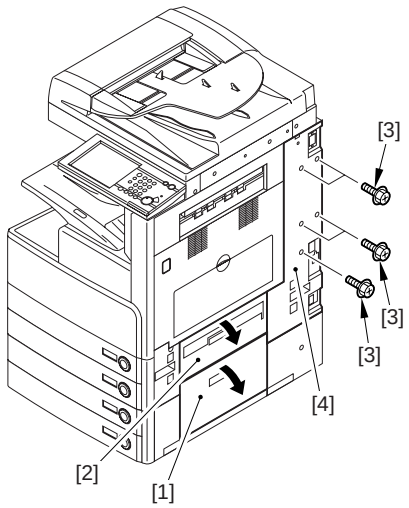
F-8-308

8.8.17 Manual Pick-up Clutch

8.8.17.1 Removing the Right Cover (rear) 0007-6675

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a 2-Cassette Pedestal-Y2)
2) Open the right lower door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].

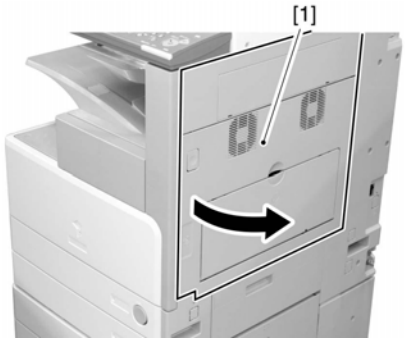


F-8-309

8.8.17.2 Removing the Right Door 0007-6676

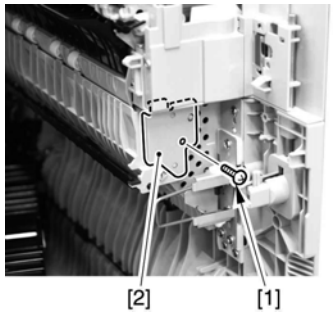
iR3570 / iR4570

1) Open the right door.



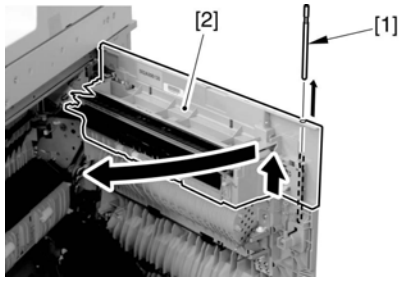
F-8-310

2) Remove the screw [1], and detach the fixing plate [2].



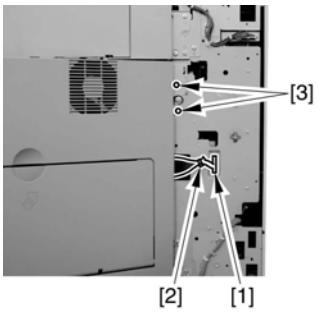
F-8-311

3) Remove the joint shaft [1], and free the extension delivery unit [2] from the right door.



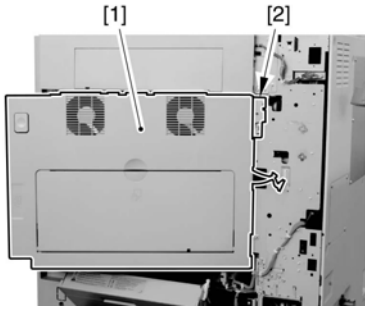
F-8-312

4) Disconnect the connector [1], and remove the reuse band [2]; then, remove the 2 screws (M4x8; RS tightening).



F-8-313

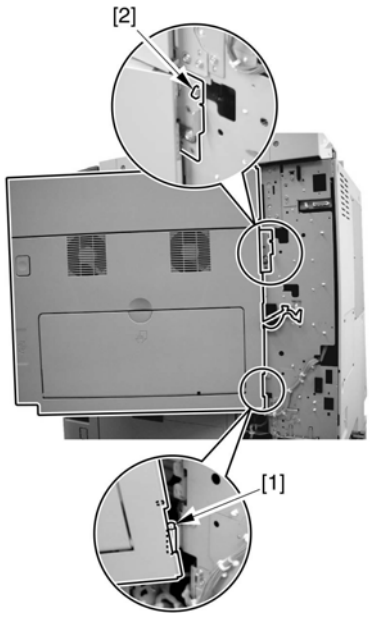
5) While freeing the hinge assembly [2], detach the right door.



F-8-314

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-315

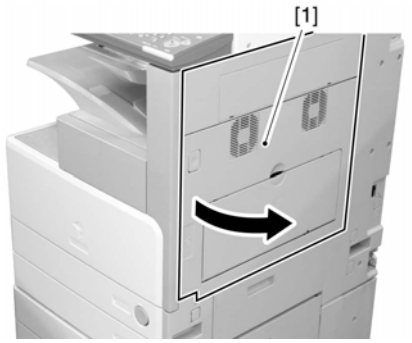
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.17.3 Removing the Right Door 0007-7355

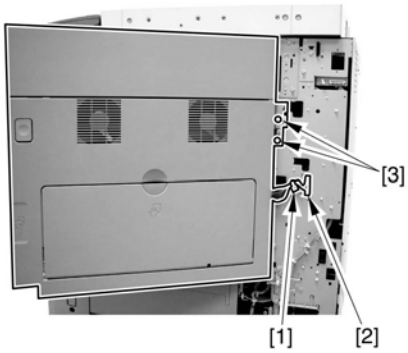
iR2270 / iR2870

1) Open the right door.



F-8-316

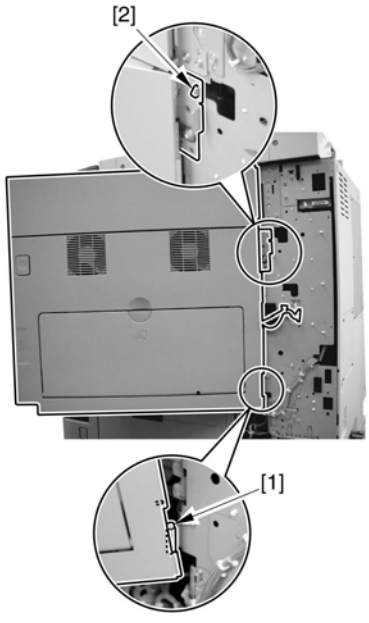
2) Remove the reuse band [1], and disconnect the connector [2].
3) Remove the 2 screws (M4x8; RS tightening), and detach the right door.



F-8-317

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-318

⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

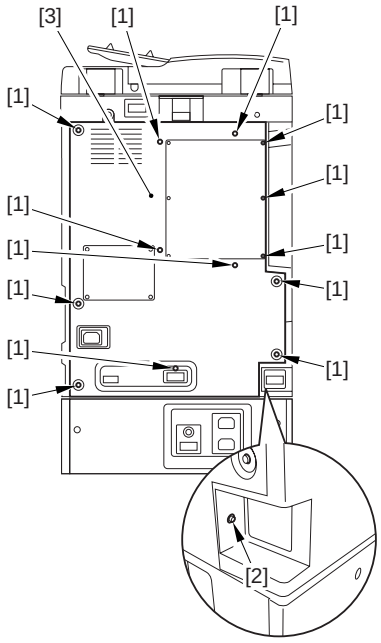
8.8.17.4 Removing the Rear Cover 0007-6677

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 13 screws [1] and then the other screw [2]; then, detach the rear cover [3].

⚠

If the left cover (lower) has already been detached, the screw [3] should also have been removed.

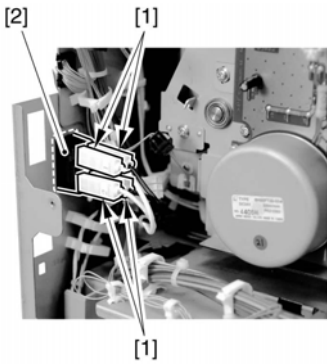


F-8-319

8.8.17.5 Removing the Main Power Switch 0007-6679

iR2270 / iR2870 / iR3570 / iR4570

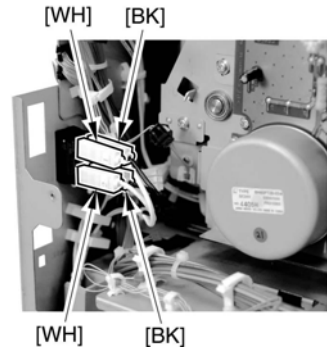
1) Remove the 4 fastons [1], and detach the main power switch [2]. (snap-on type)



F-8-320

⚠

When connecting the 4 fastons, be sure that they are located as indicated by their specific location numbers.

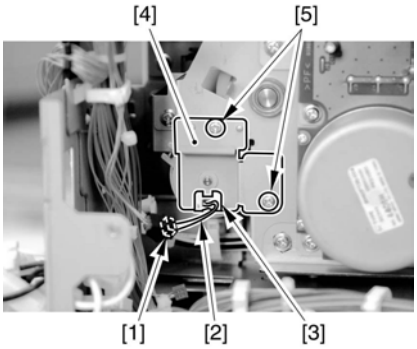


F-8-321

8.8.17.6 Removing the Manual Feed Pickup Clutch 0007-6681

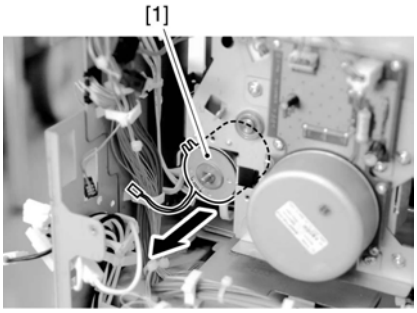
iR2270 / iR2870 / iR3570 / iR4570

1) Disconnect the connector (2P) [1].
2) Free the clutch cable [2] from the wire saddle [3].
3) Remove the fixing plate [4]. (2 screws [5])



F-8-322

4) Pull out the manual feed pickup clutch [1].



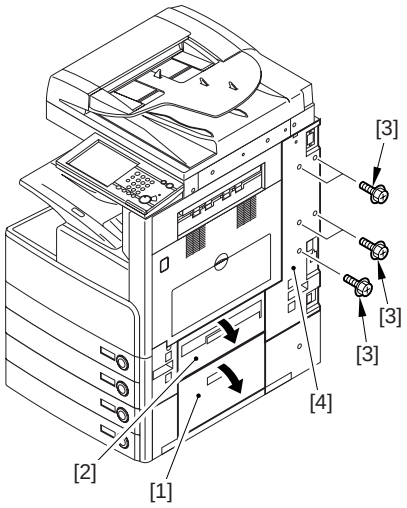
F-8-323

8.8.18 Manual Separation Pad

8.8.18.1 Removing the Right Cover (rear) 0007-6714

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a 2-Cassette Pedestal-Y2)
2) Open the right lower door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].

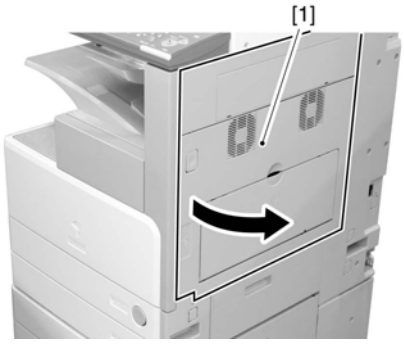


F-8-324

8.8.18.2 Removing the Right Door 0007-6715

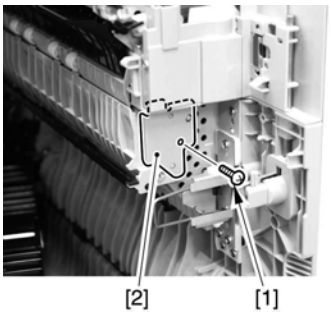
iR3570 / iR4570

1) Open the right door.



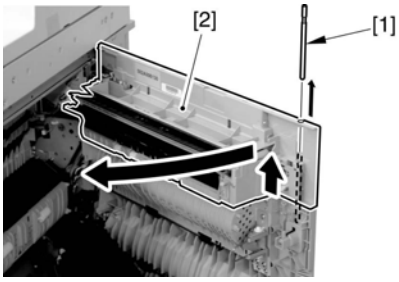
F-8-325

2) Remove the screw [1], and detach the fixing plate [2].



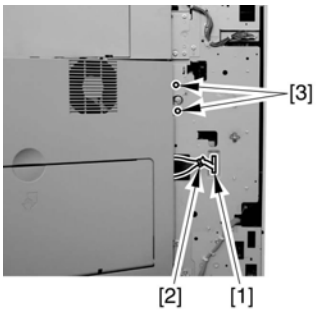
F-8-326

3) Remove the joint shaft [1], and free the extension delivery unit [2] from the right door.



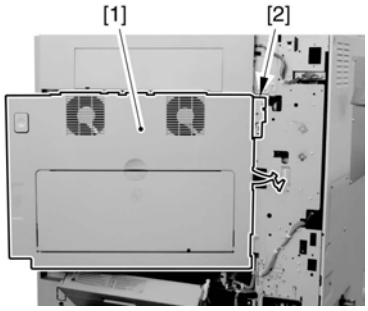
F-8-327

4) Disconnect the connector [1], and remove the reuse band [2]; then, remove the 2 screws (M4x8; RS tightening).



F-8-328

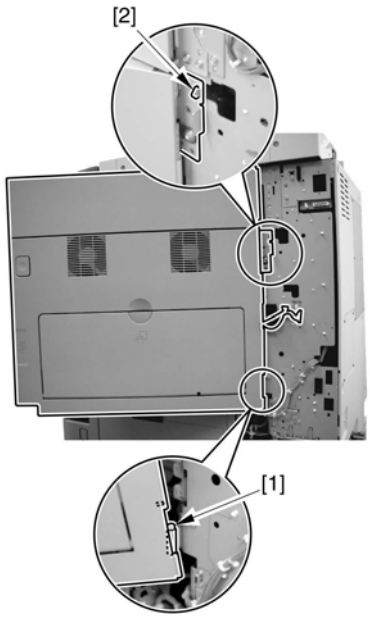
5) While freeing the hinge assembly [2], detach the right door.



F-8-329

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-330

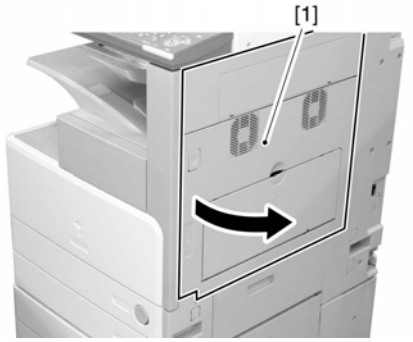
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.18.3 Removing the Right Door 0007-7358

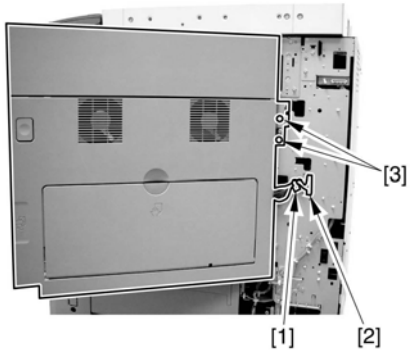
iR2270 / iR2870

1) Open the right door.



F-8-331

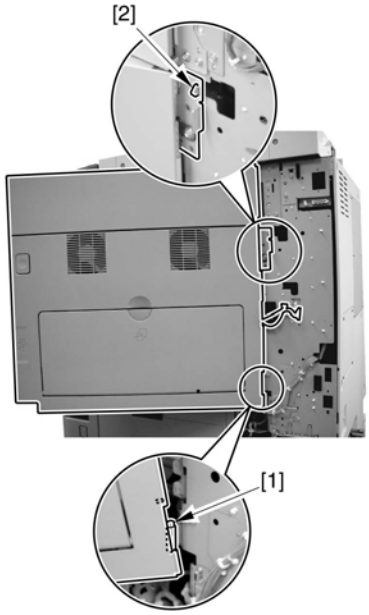
2) Remove the reuse band [1], and disconnect the connector [2].
3) Remove the 2 screws (M4x8; RS tightening), and detach the right door.



F-8-332

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-333

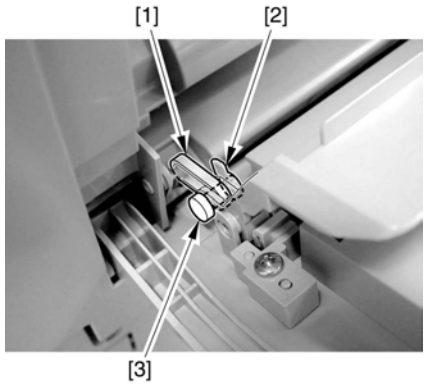
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.18.4 Removing the Manual Feed Unit 0007-6716

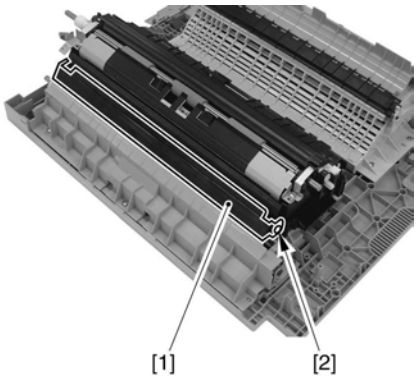
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the manual upper guide link [1] (plastic E-ring [2] and boss [3]).



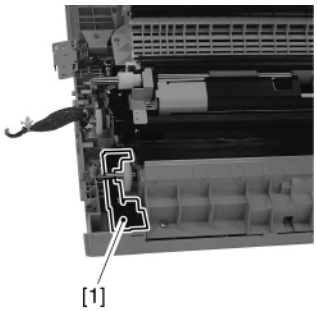
F-8-334

2) Remove the screw [2], and detach the manual feed guide [1].



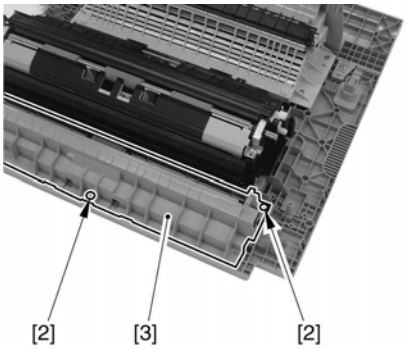
F-8-335

3) Remove the connector cover [1] (snap-on).

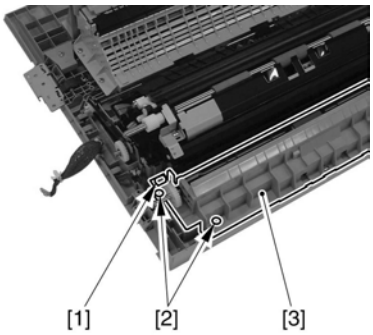


F-8-336

4) Disconnect the connector [1].
5) Remove the 4 screws [2], and detach the manual feed unit [3].



F-8-337

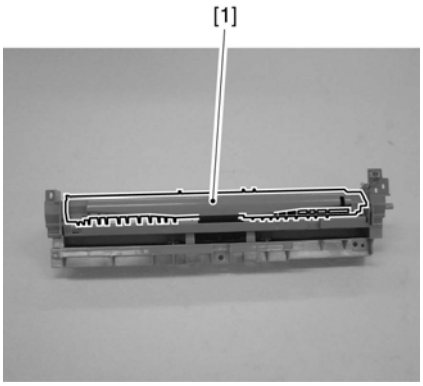


F-8-338

8.8.18.5 Removing the Manual Feed Pickup Roller 0007-6717

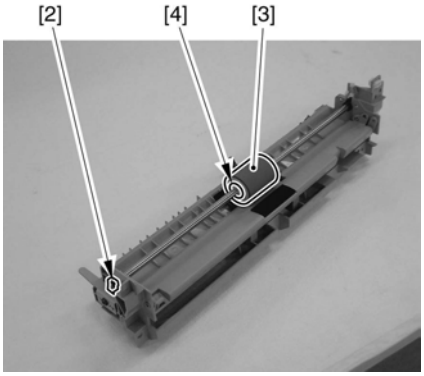
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the manual feed upper cover [1] (snap-on).



F-8-339

2) Remove the bush [2], and detach the manual feed pickup roller [3] together with the shaft.
3) Remove the plastic E-ring [4], and detach the manual feed pickup roller from shaft. Take care not to drop the parallel pin.

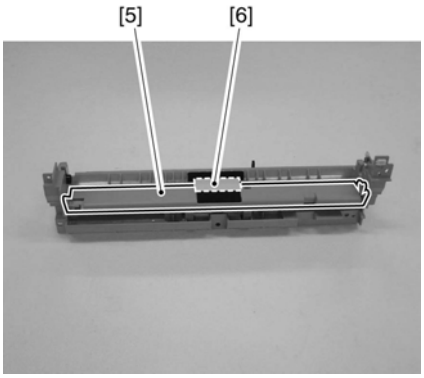


F-8-340

8.8.18.6 Removing the Manual Feed Separation pad 0007-6719

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the holding plate [5].
2) Remove the separation pad [6].



F-8-341

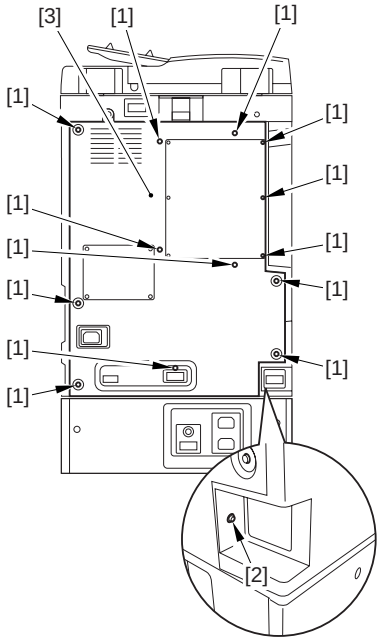
8.8.19 Registration Clutch

8.8.19.1 Removing the Rear Cover 0007-6720

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 13 screws [1] and then the other screw [2]; then, detach the rear cover [3].

If the left cover (lower) has already been detached, the screw [3] should also have been removed.

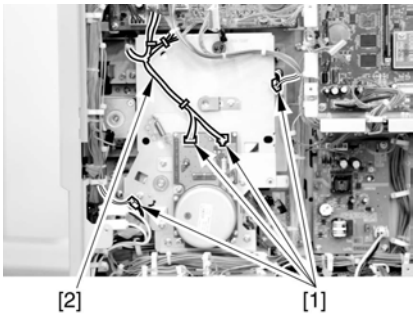


F-8-342

8.8.19.2 Removing the Main Drive Assembly 0007-6733

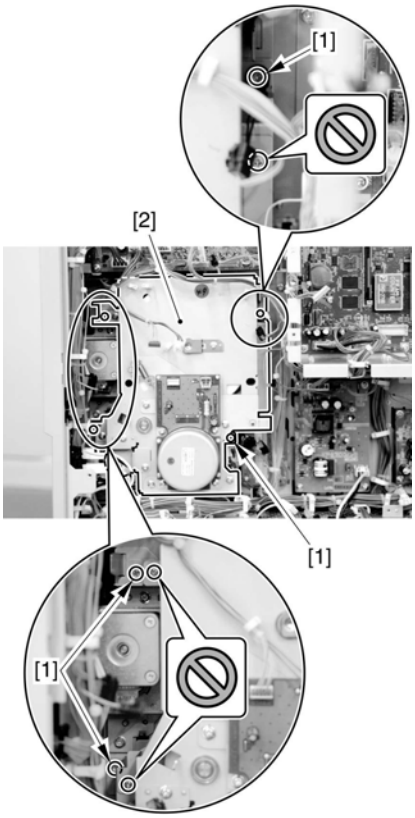
iR3570 / iR4570

1) Disconnect the connector [1], and free the harness [2] from the wire saddle.

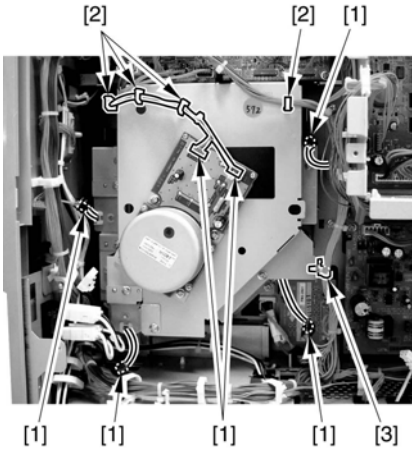


F-8-343

2) Remove the 4 screws [1], and detach the main drive assembly [2].

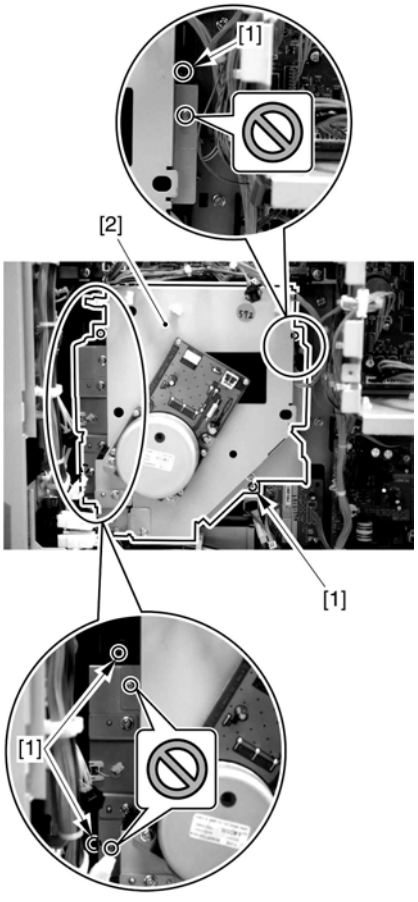


F-8-344



F-8-345

4) Remove the 4 screws [1], and detach the main drive assembly [2].



F-8-346

⚠

Do not touch the screws that are glued in place.

8.8.19.3 Removing the Main Drive Assembly 0007-7530

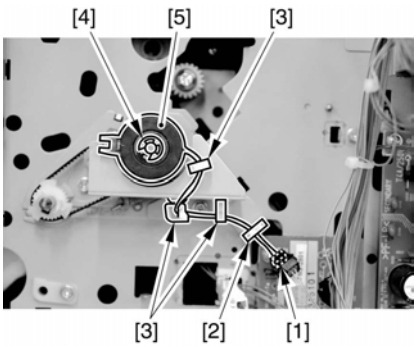
iR2270 / iR2870

1) Disconnect the 6 connectors [1].
2) Free the cable from the 6 cable clamps [2].
3) Remove the re-use band [3].

8.8.19.4 Removing the Registration Clutch 0007-6723

iR2270 / iR2870 / iR3570 / iR4570

1) Disconnect the connector (2P) [1], and free the cable from the edge saddle [2] and the 3 wire saddles [3].
2) Remove the E-ring [4], and detach the registration clutch [5].



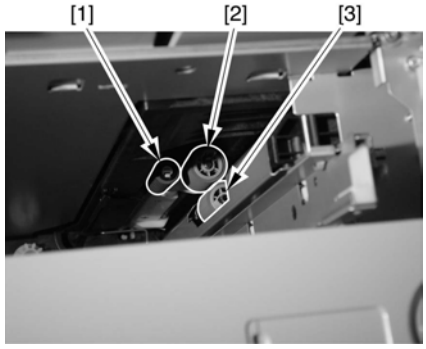
F-8-347

8.8.20 Feeding Roller

8.8.20.1 Removing the Pickup Roller/Feed Roller/ Separation Roller 0008-3154

iR2270 / iR2870 / iR3570 / iR4570

1) Slide out the cassette.
2) Open the right door (in the case of the separation roller).
3) Pick the tabs of the individual rollers, and detach the pickup roller [1], feed roller [2], and separation roller [3].



F-8-348

⚠

Point to Note When Replacing the Feed/Separation Roller 1

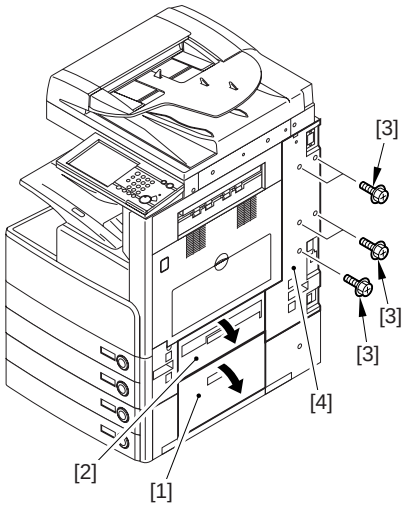
The collar (roller core) of the machine's feed/ separation roller is black.

8.8.21 Vertical Path Roller

8.8.21.1 Removing the Right Cover (rear) 0007-6736

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a 2-Cassette Pedestal-Y2)
2) Open the right lower door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].

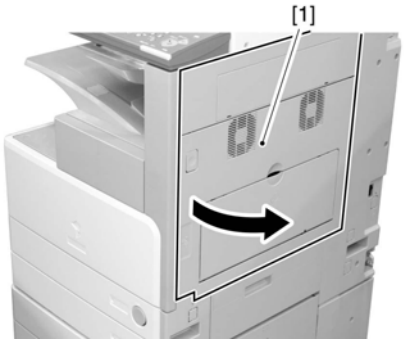


F-8-349

8.8.21.2 Removing the Right Door 0007-6737

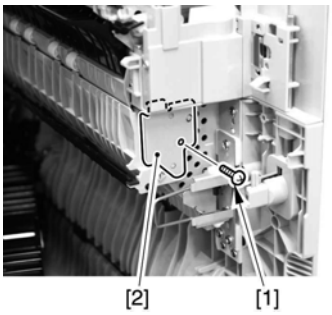
iR3570 / iR4570

1) Open the right door.



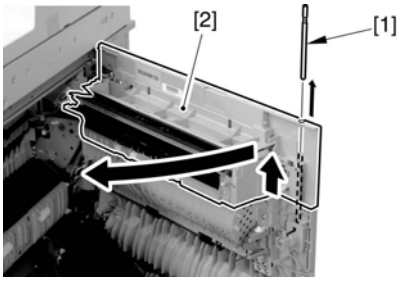
F-8-350

2) Remove the screw [1], and detach the fixing plate [2].



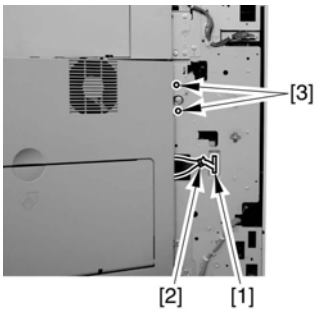
F-8-351

3) Remove the joint shaft [1], and free the extension delivery unit [2] from the right door.



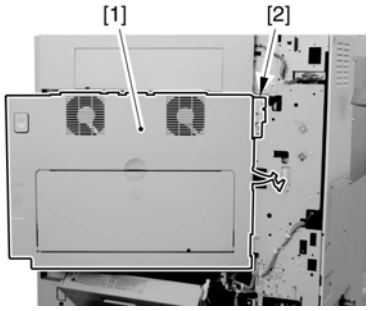
F-8-352

4) Disconnect the connector [1], and remove the reuse band [2]; then, remove the 2 screws (M4x8; RS tightening).



F-8-353

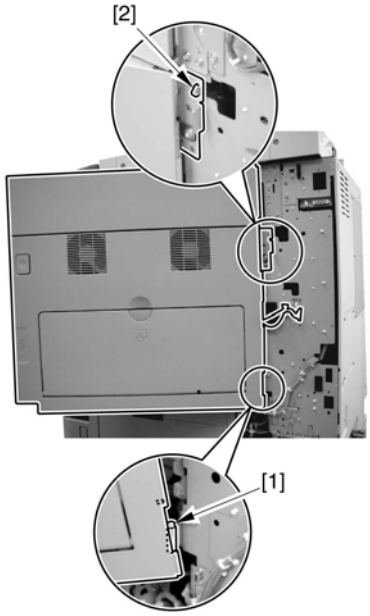
5) While freeing the hinge assembly [2], detach the right door.



F-8-354

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-355

⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.21.3 Removing the Right Door 0007-7359

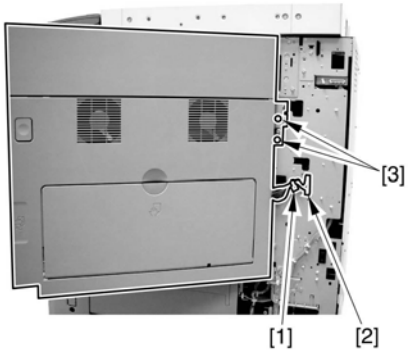
iR2270 / iR2870

1) Open the right door.



F-8-356

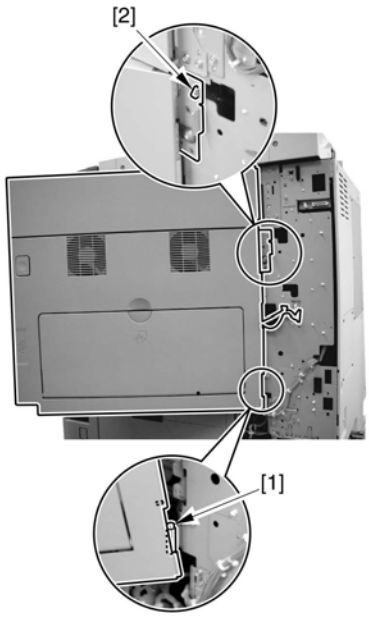
2) Remove the reuse band [1], and disconnect the connector [2].
3) Remove the 2 screws (M4x8; RS tightening), and detach the right door.



F-8-357

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-358

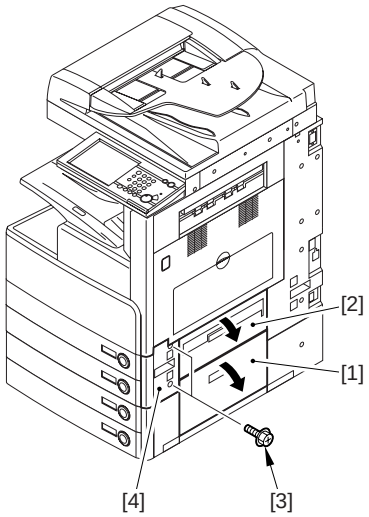
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.21.4 Removing the Right Cover (lower front) 0007-6739

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a Cassette Feeding Unit-Y2)
2) Open the lower right door [2].
3) Remove the 2 screws [3], and detach the right cover (lower front) [4].

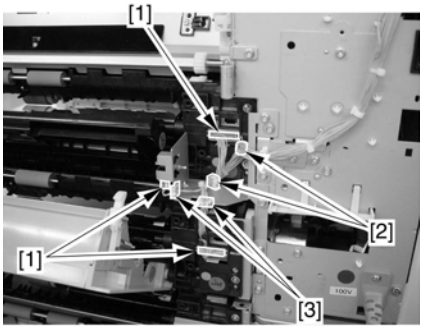


F-8-359

8.8.21.5 Removing the Pickup Assembly 1 0007-6740

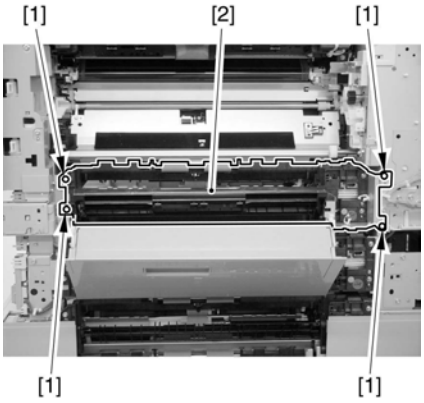
iR2270 / iR2870 / iR3570 / iR4570

1) Slide out the cassette 1/2.
2) Disconnect the 3 connectors [1]; then, free the harness from the 2 wire saddles [2] and the 2 clamps [3].



F-8-360

3) Remove the 4 screws [1], and take out the pickup unit 1 [2].

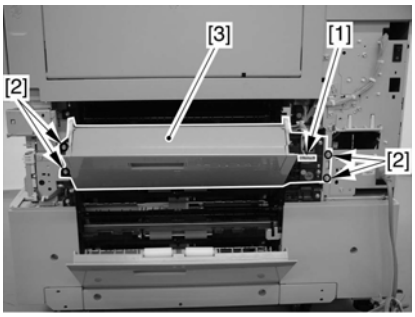


F-8-361

8.8.21.6 Removing the Pickup Assembly 2 0007-6741

iR2270 / iR2870 / iR3570 / iR4570

1) Slide out the cassette 1/2.
2) Disconnect the connector [1], and free the harness from the guide; then, remove the 4 screws [2], and detach the pickup assembly 2 [3].

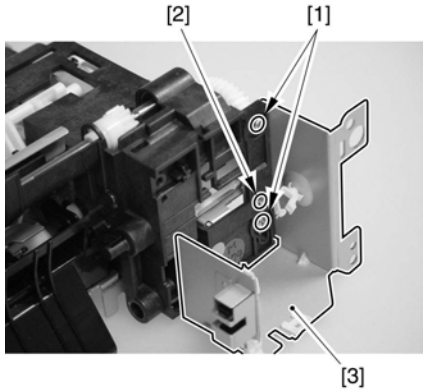


F-8-362

8.8.21.7 Removing the Sensor Mounting Plate 0007-6742

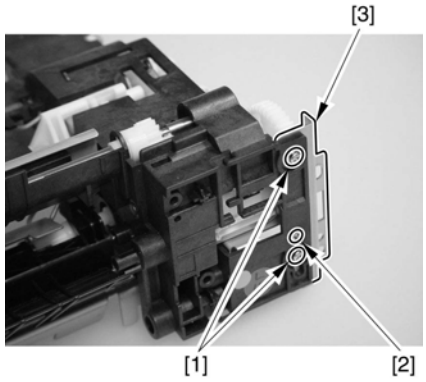
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 TP screws [1] and the binding screw [2] from the rear of the pickup assembly, and detach the bracket [3].



F-8-363

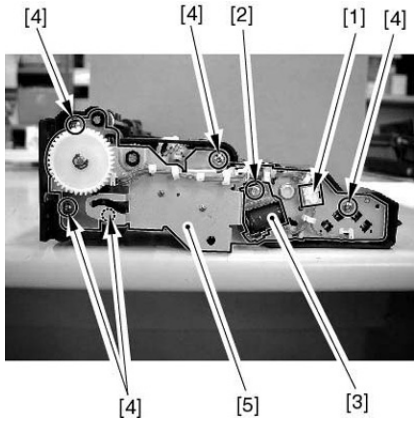
Pickup Unit 1



F-8-364

Pickup Unit 2

2) Disconnect the connector [1], and remove the screw; then, detach the cassette pickup solenoid [3].
3) Remove the bushing and the 5 screws [4]; then, detach the sensor base [5].

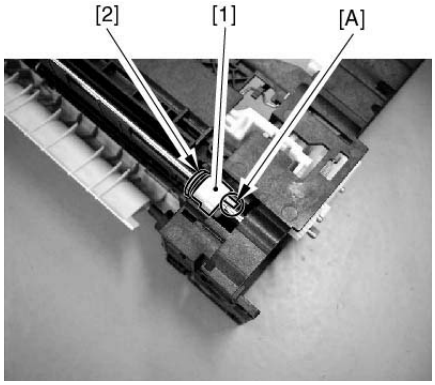


F-8-365

8.8.21.8 Removing the Vertical Path Roller 0007-6743

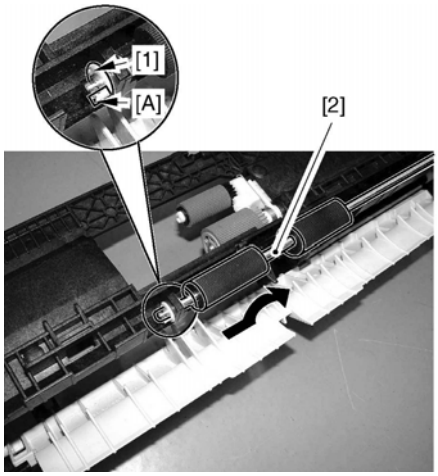
iR2270 / iR2870 / iR3570 / iR4570

1) Free the claw [A] of the gear [1] at the rear; then, detach the gear and the bushing [2].



F-8-366

2) Free the claw [A] of the bushing [1] at the front; then, shift it to the rear, and lift the vertical path roller [2] to detach.



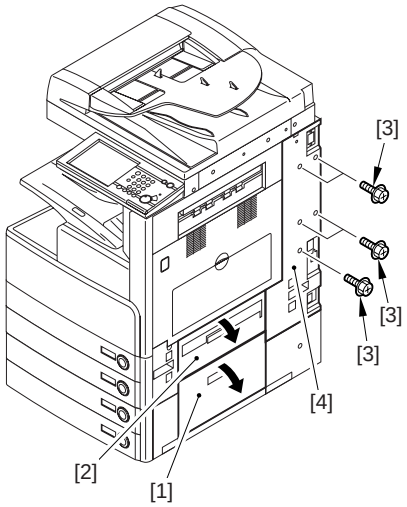
F-8-367

8.8.22 Duplex Feed Roller 2

8.8.22.1 Removing the Right Cover (rear) 0007-6744

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a 2-Cassette Pedestal-Y2)
2) Open the right lower door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].



F-8-368

8.8.22.2 Removing the Right Door 0007-6746

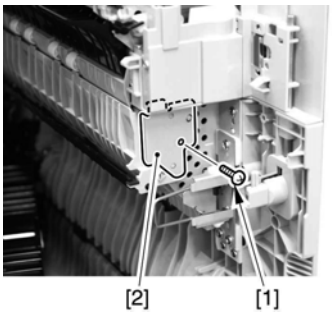
iR3570 / iR4570

1) Open the right door.



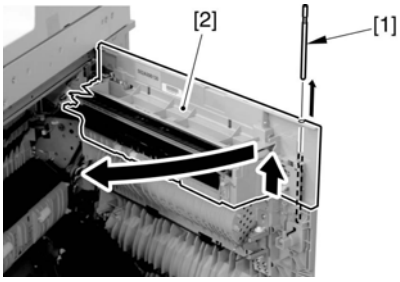
F-8-369

2) Remove the screw [1], and detach the fixing plate [2].



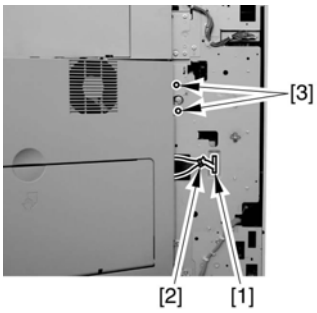
F-8-370

3) Remove the joint shaft [1], and free the extension delivery unit [2] from the right door.



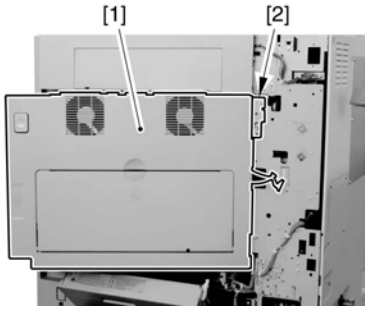
F-8-371

4) Disconnect the connector [1], and remove the reuse band [2]; then, remove the 2 screws (M4x8; RS tightening).



F-8-372

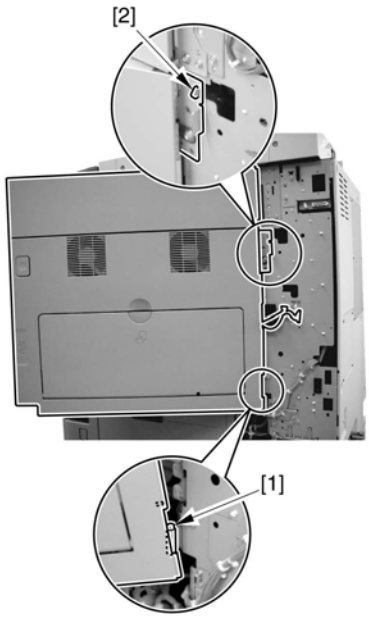
5) While freeing the hinge assembly [2], detach the right door.



F-8-373

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-374

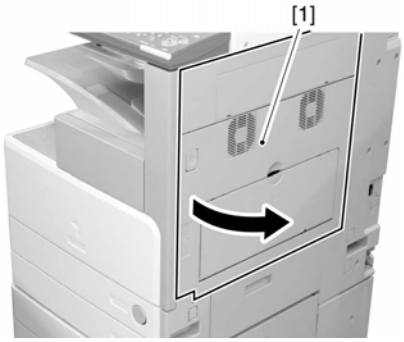
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.22.3 Removing the Right Door 0007-7362

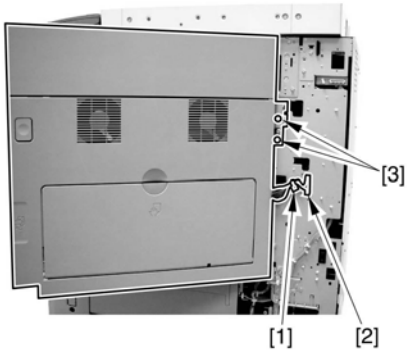
iR2270 / iR2870

1) Open the right door.



F-8-375

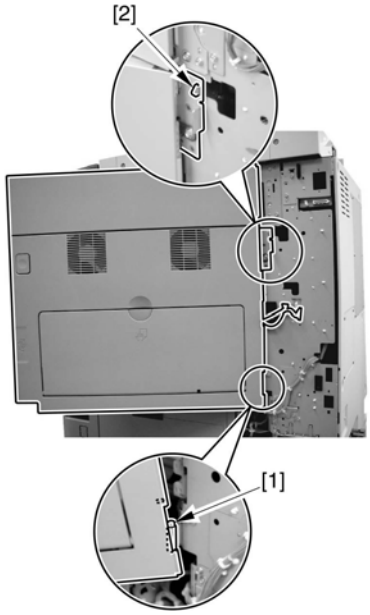
2) Remove the reuse band [1], and disconnect the connector [2].
3) Remove the 2 screws (M4x8; RS tightening), and detach the right door.



F-8-376

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-377

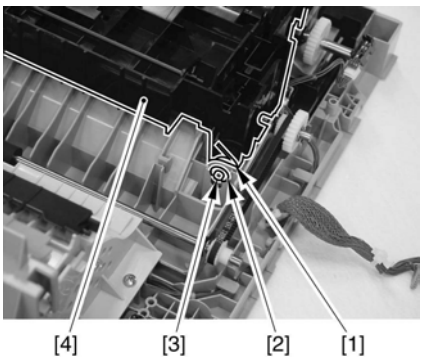
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.22.4 Removing the Duplex Feed Roller 2 0007-6748

iR2270 / iR2870 / iR3570 / iR4570

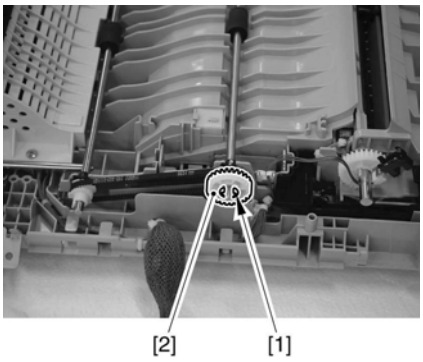
1) Free the coil spring [1] and, at the same time, remove the E-ring [2] to pull out the shaft [3]; then, detach the duplex feed frame [4].



F-8-378

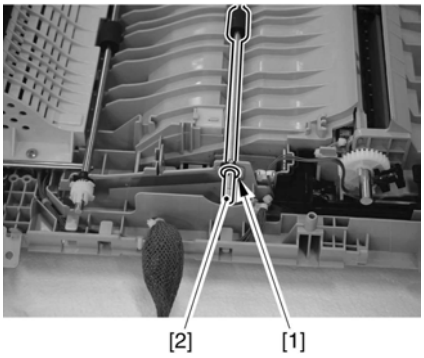
2) Remove the E-ring [1], and detach the one-way

gear [2].



F-8-379

3) Remove the E-ring [1], and detach the duplex feed roller 2 [2].



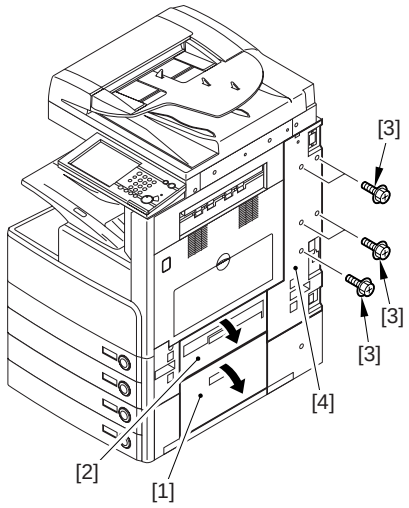
F-8-380

8.8.23 Duplex Feed Sensor

8.8.23.1 Removing the Right Cover (rear) 0007-6750

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a 2-Cassette Pedestal-Y2)
2) Open the right lower door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].

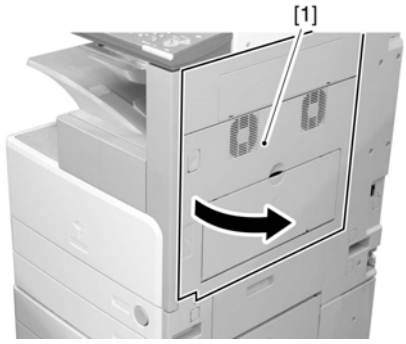


F-8-381

8.8.23.2 Removing the Right Door 0007-6751

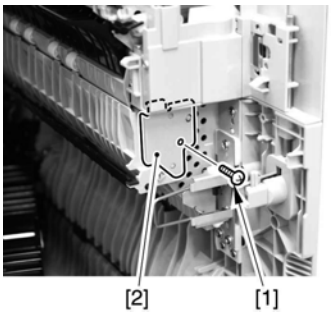
iR3570 / iR4570

1) Open the right door.



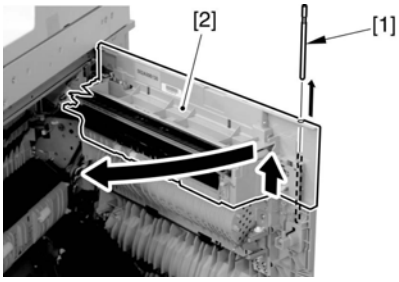
F-8-382

2) Remove the screw [1], and detach the fixing plate [2].



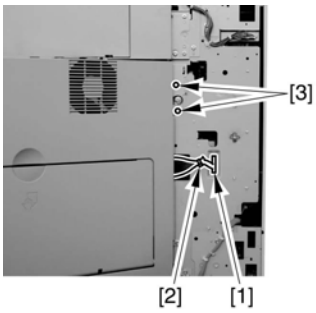
F-8-383

3) Remove the joint shaft [1], and free the extension delivery unit [2] from the right door.



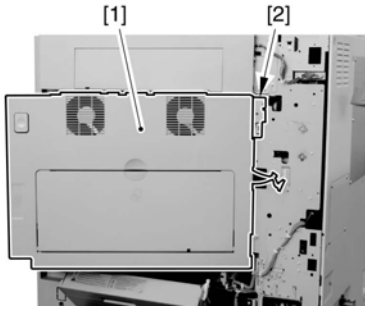
F-8-384

4) Disconnect the connector [1], and remove the reuse band [2]; then, remove the 2 screws (M4x8; RS tightening).



F-8-385

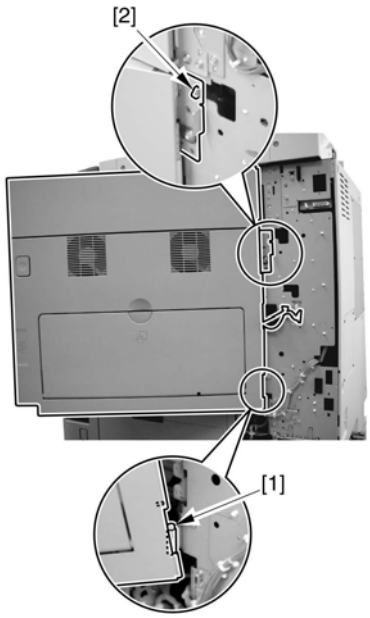
5) While freeing the hinge assembly [2], detach the right door.



F-8-386

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-387

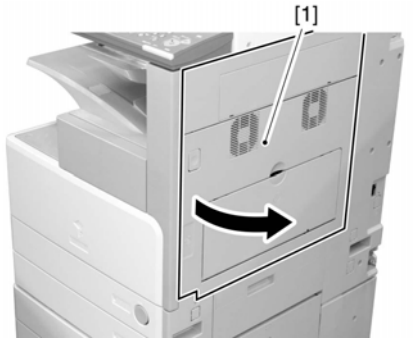
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.23.3 Removing the Right Door 0007-7366

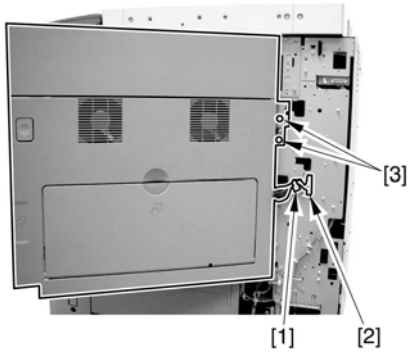
iR2270 / iR2870

1) Open the right door.



F-8-388

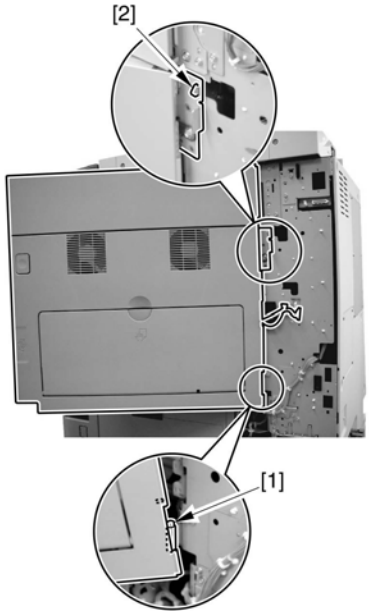
2) Remove the reuse band [1], and disconnect the connector [2].
3) Remove the 2 screws (M4x8; RS tightening), and detach the right door.



F-8-389

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-390

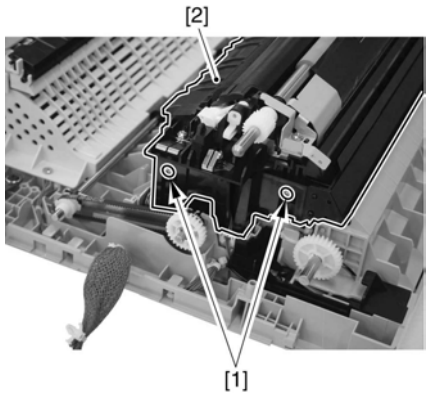
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.23.4 Removing the Duplex Feed Sensor 0007-6976

iR2270 / iR2870 / iR3570 / iR4570

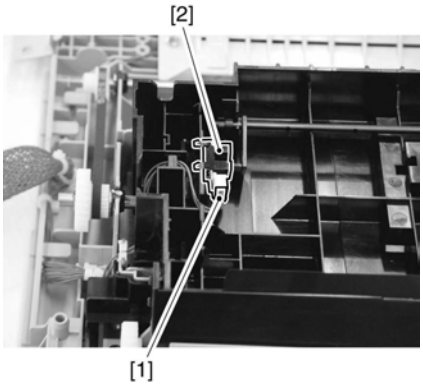
1) Remove the 2 screws (w/ collar) [1], and detach the transfer frame [2].



F-8-391

2) Disconnect the connector [1], and remove the

duplex feed sensor [2].



F-8-392

8.8.24 Duplex Feed Clutch

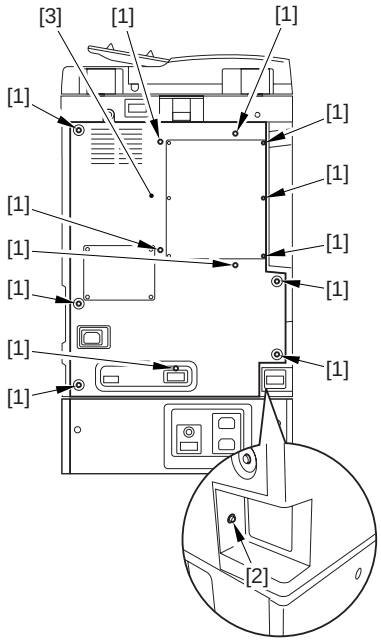
8.8.24.1 Removing the Rear Cover 0007-7324

iR2270 / iR2870

1) Remove the 13 screws [1] and then the other screw [2]; then, detach the rear cover [3].

⚠

If the left cover (lower) has already been detached, the screw [3] should also have been removed.

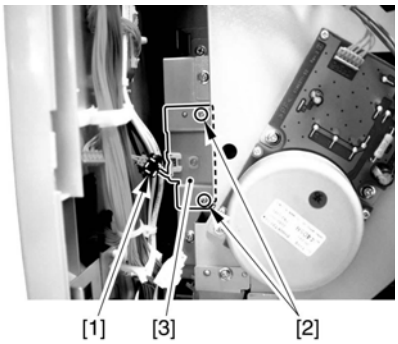


F-8-393

8.8.24.2 Removing the Duplex Feed Clutch 0007-7325

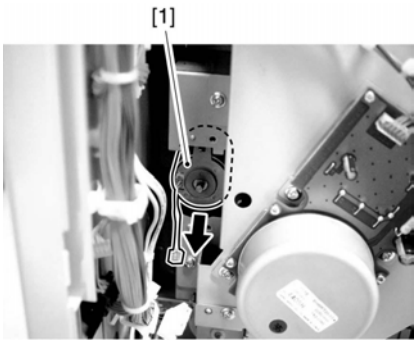
iR2270 / iR2870

1) Disconnect the connector [1], and remove the 2 screws [2]; then, detach the clutch fixing plate [3].



F-8-394

2) Remove the duplex feed clutch [1].



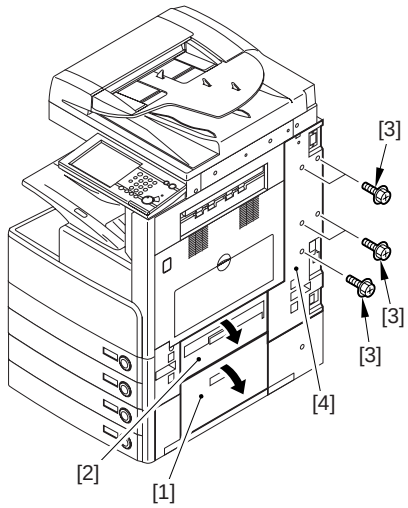
F-8-395

8.8.25 Delivery Assembly 1

8.8.25.1 Removing the Right Cover (rear) 0008-1512

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a 2-Cassette Pedestal-Y2)
2) Open the right lower door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].

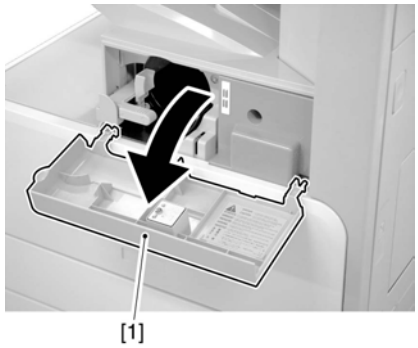


F-8-396

8.8.25.2 Removing the Front Cover Unit 0007-6763

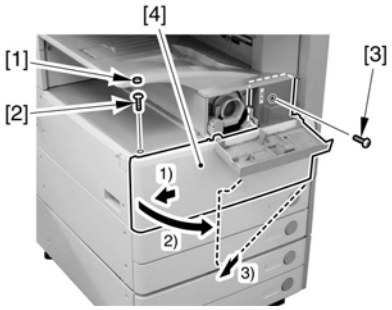
iR2270 / iR2870 / iR3570 / iR4570

1) Open the front cover [1].



F-8-397

2) Remove the face cover rubber [1].
3) Remove the binding screw [2].
4) Remove the RS tightening screw [3].
5) Detach the front cover unit [4] by moving it in the direction of the arrow.

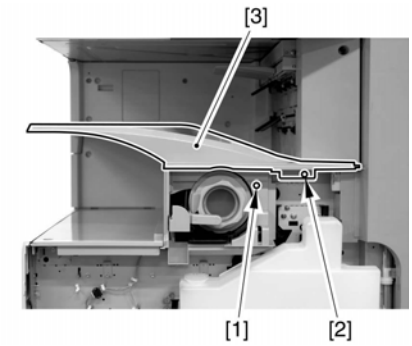


F-8-398

8.8.25.3 Removing the Delivery Tray 0007-6765

iR2270 / iR2870 / iR3570 / iR4570

1) Loosen the screw [1].
2) Remove the screw [2].
3) Detach the delivery tray [3].

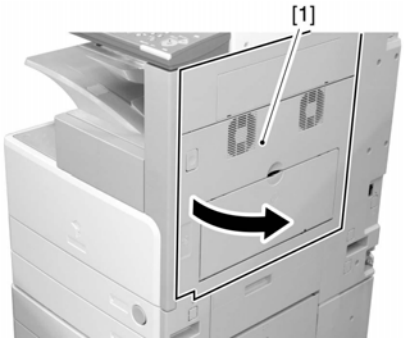


F-8-399

8.8.25.4 Removing the Right Door 0007-6766

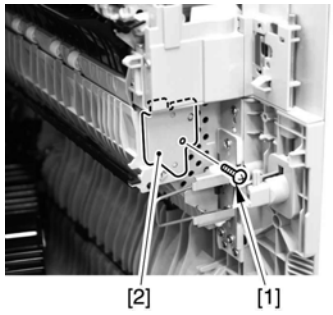
iR3570 / iR4570

1) Open the right door.



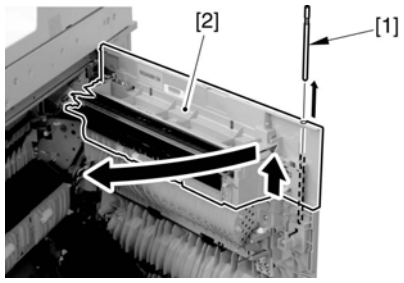
F-8-400

2) Remove the screw [1], and detach the fixing plate [2].



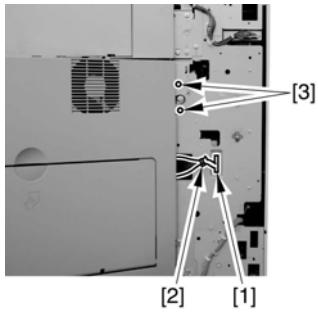
F-8-401

3) Remove the joint shaft [1], and free the extension delivery unit [2] from the right door.



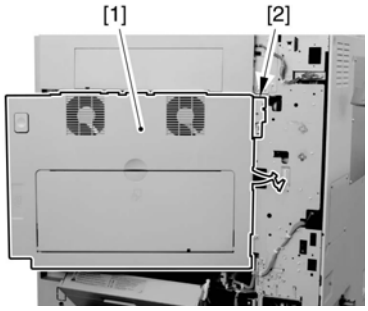
F-8-402

4) Disconnect the connector [1], and remove the reuse band [2]; then, remove the 2 screws (M4x8; RS tightening).



F-8-403

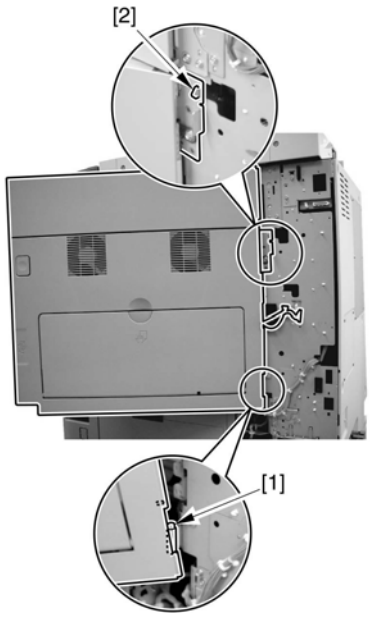
5) While freeing the hinge assembly [2], detach the right door.



F-8-404

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-405

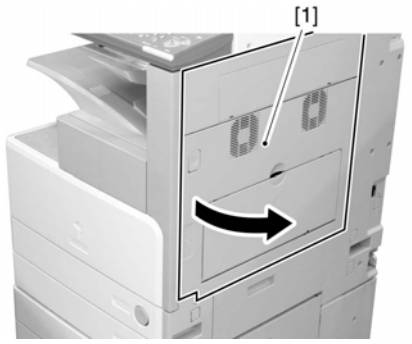
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.25.5 Removing the Right Door 0007-7363

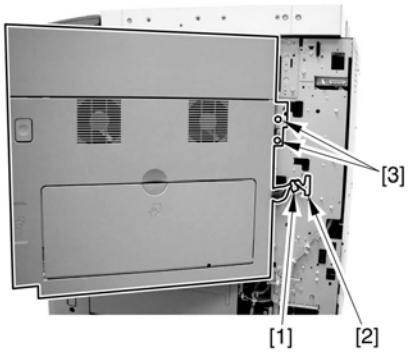
iR2270 / iR2870

1) Open the right door.



F-8-406

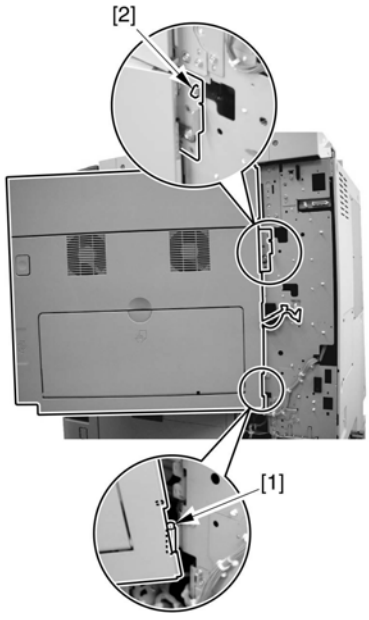
2) Remove the reuse band [1], and disconnect the connector [2].
3) Remove the 2 screws (M4x8; RS tightening), and detach the right door.



F-8-407

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-408

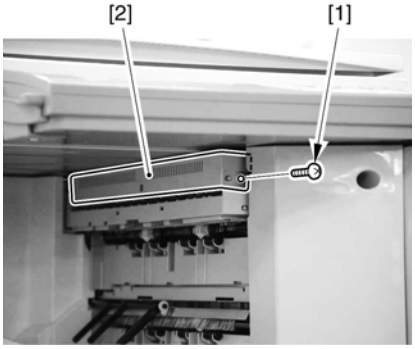
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.25.6 Removing the Extension Delivery Kit 0007-6767

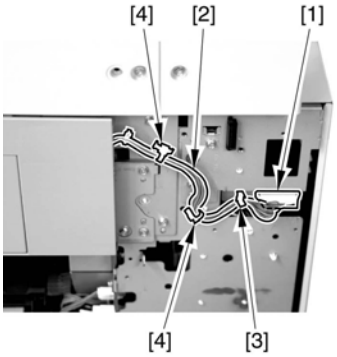
iR3570 / iR4570

1) Remove the self-tapping screw [1], and detach the upper inside cover [2].



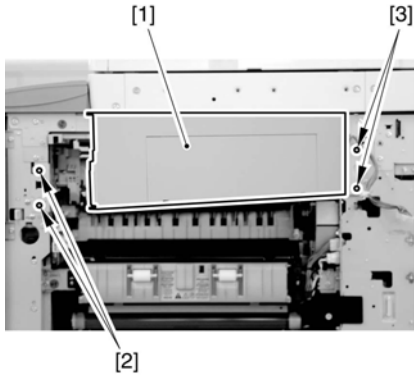
F-8-409

2) Free the harness [2] from the cable clamp [3], and detach the 2 re-use bands.
3) Disconnect the connector [1] from the machine terminal.



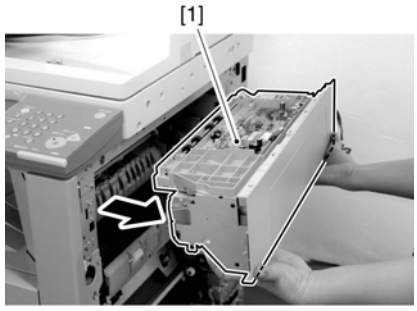
F-8-410

4) Open the Extension Delivery Kit [1].
5) Remove the 2 screws [3].
6) Remove the 2 screws [2], and close the Extension Delivery Kit.



F-8-411

7) Pull out the Extension Delivery Kit [1] from the machine.

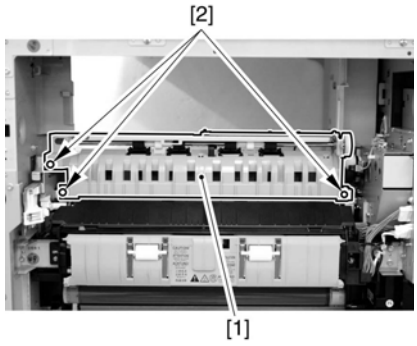


F-8-412

8.8.25.7 Removing the Delivery Assembly 1 0007-6776

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the delivery assembly 1 [1]. (3 screws [2]; 2 stepped screws on the left)



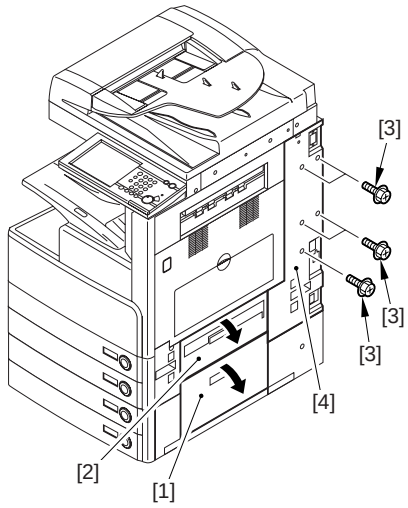
F-8-413

8.8.26 Fixing/ Delivery Drive Assembly

8.8.26.1 Removing the Right Cover (rear) 0008-1513

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a 2-Cassette Pedestal-Y2)
2) Open the right lower door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].

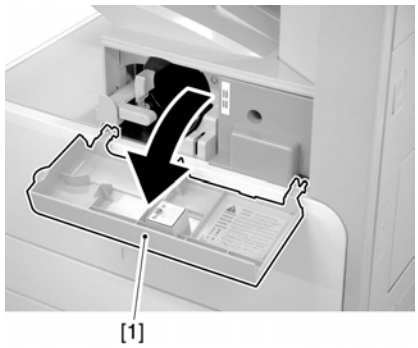


F-8-414

8.8.26.2 Removing the Front Cover Unit 0007-6781

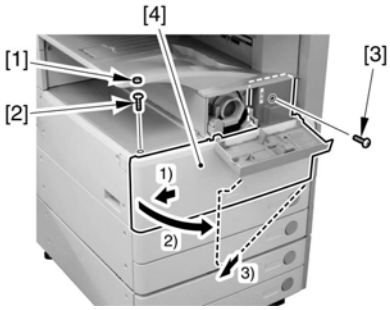
iR2270 / iR2870 / iR3570 / iR4570

1) Open the front cover [1].



F-8-415

2) Remove the face cover rubber [1].
3) Remove the binding screw [2].
4) Remove the RS tightening screw [3].
5) Detach the front cover unit [4] by moving it in the direction of the arrow.

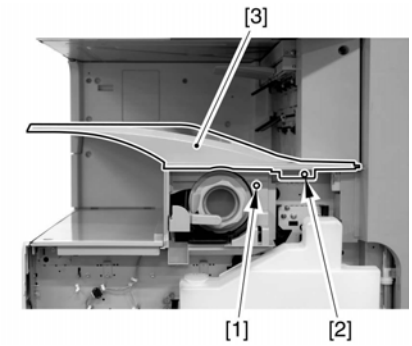


F-8-416

8.8.26.3 Removing the Delivery Tray 0007-6783

iR2270 / iR2870 / iR3570 / iR4570

1) Loosen the screw [1].
2) Remove the screw [2].
3) Detach the delivery tray [3].



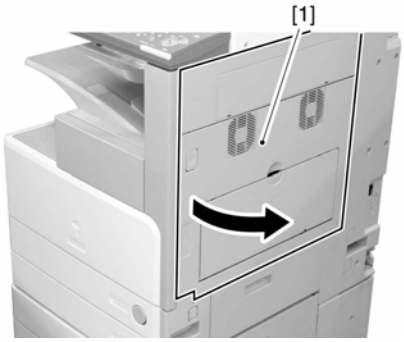
F-8-417

8.8.26.4 Removing the Right Door

0007-6785

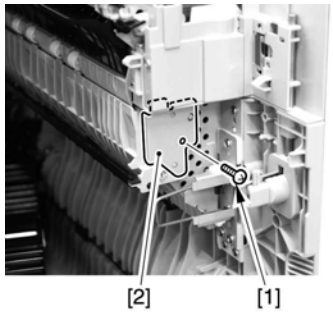
iR3570 / iR4570

1) Open the right door.



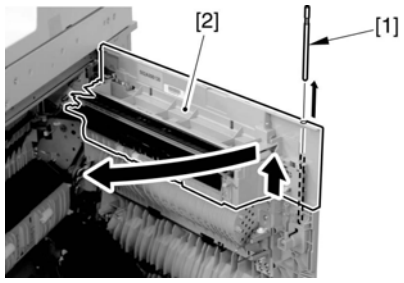
F-8-418

2) Remove the screw [1], and detach the fixing plate [2].



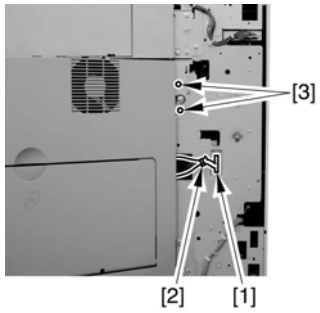
F-8-419

3) Remove the joint shaft [1], and free the extension delivery unit [2] from the right door.



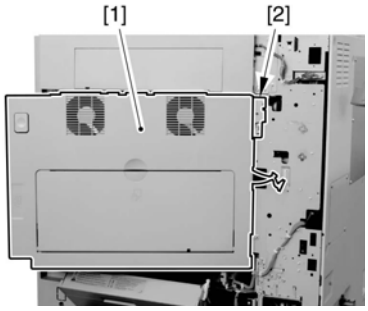
F-8-420

4) Disconnect the connector [1], and remove the reuse band [2]; then, remove the 2 screws (M4x8; RS tightening).



F-8-421

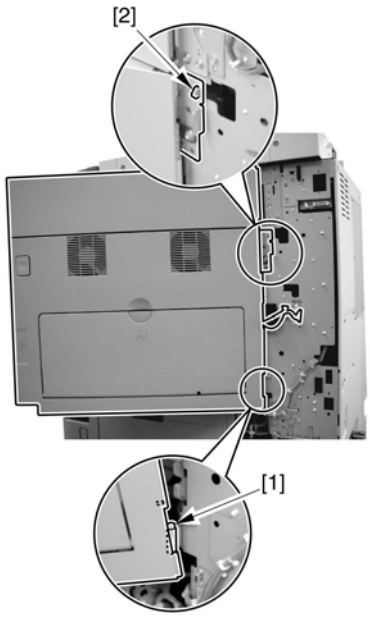
5) While freeing the hinge assembly [2], detach the right door.



F-8-422

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-423

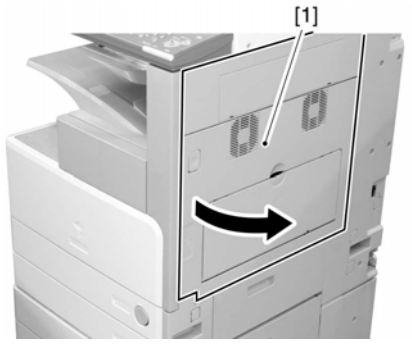
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.26.5 Removing the Right Door 0007-7327

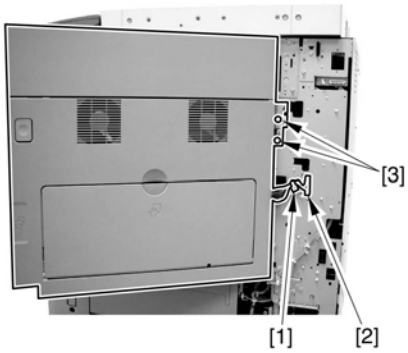
iR2270 / iR2870

1) Open the right door.



F-8-424

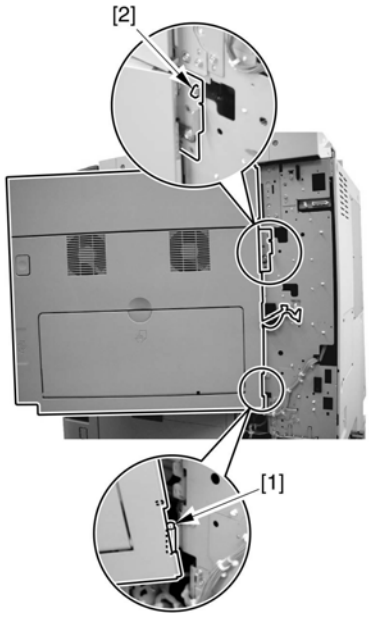
2) Remove the reuse band [1], and disconnect the connector [2].
3) Remove the 2 screws (M4x8; RS tightening), and detach the right door.



F-8-425

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-8-426

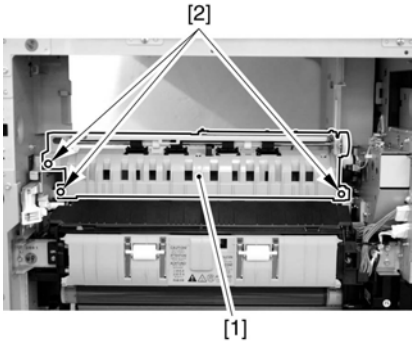
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

8.8.26.6 Removing the Delivery Assembly 1 0007-6787

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the delivery assembly 1 [1]. (3 screws [2]; 2 stepped screws on the left)



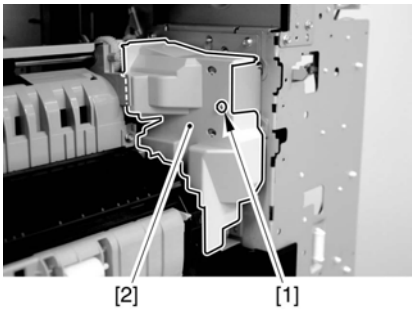
F-8-427

8.8.26.7 Removing the Fixing Unit

0007-8721

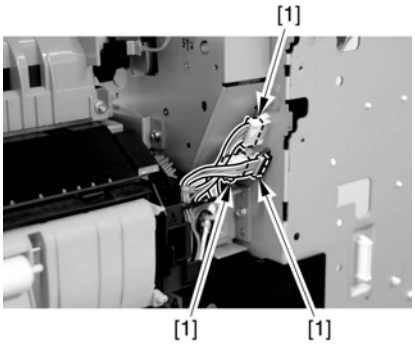
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the screw [1], and detach the harness cover [2].



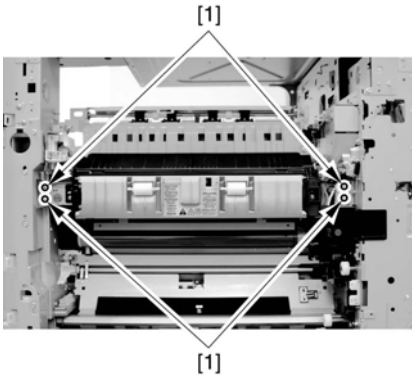
F-8-428

2) Disconcert the 3 connectors [1].



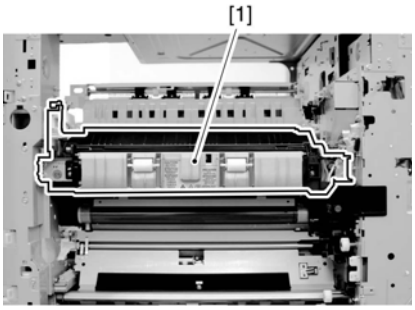
F-8-429

3) Remove the 4 screws [1].



F-8-430

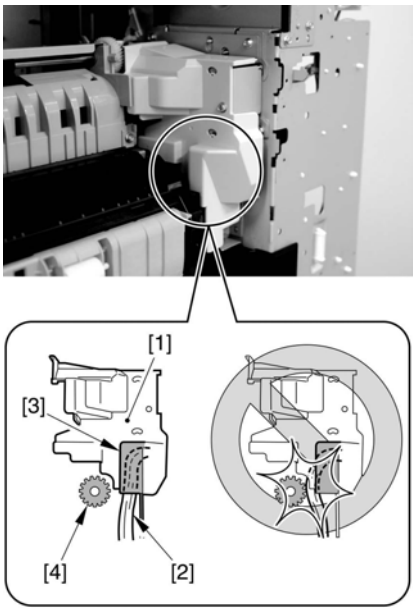
4) Detach the fixing unit [1] toward the front.



F-8-431

⚠

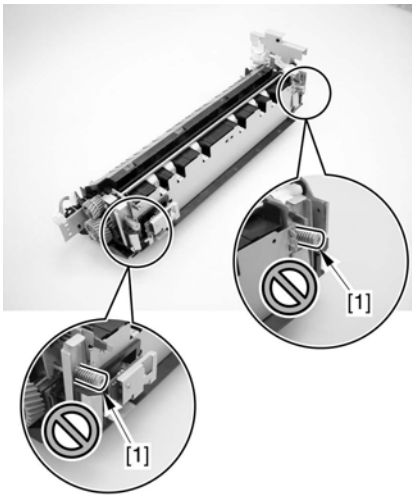
When mounting the harness cover [1], be sure to keep the harness [2] within the space [3] indicated in the figure so that the harness [2] will not come into contact with the gear [4].



F-8-432

⚠

Do not touch the screw [1]. Turning it will change the pressure of the fixing assembly, which cannot be adjusted in the field, necessitating the replacement of the fixing assembly.

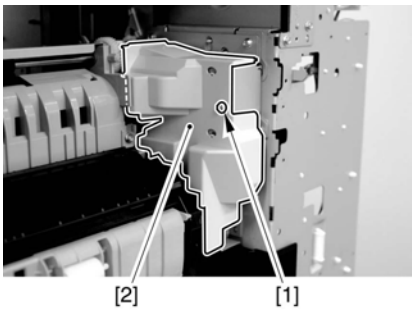


F-8-433

8.8.26.8 Removing the Fixing/ Delivery Drive Assembly 0007-6792

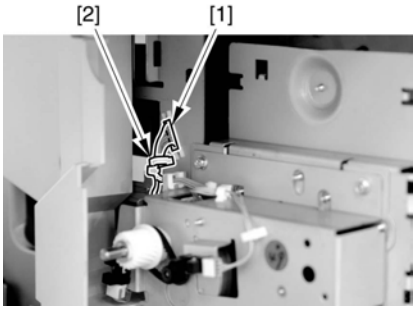
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the screw [1], and detach the harness cover [2].



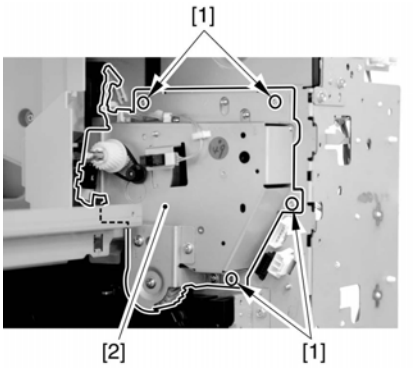
F-8-434

2) Disconnect the connector [1] of the harness, and free the harness from the cable clamp [2].



F-8-435

3) Remove the 4 screws [1], and detach the fixing/ delivery drive assembly 1 [2].



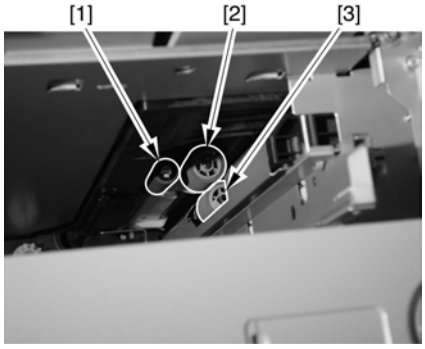
F-8-436

8.8.27 Separation Roller

8.8.27.1 Removing the Pickup Roller/Feed Roller/ Separation Roller 0008-3155

iR2270 / iR2870 / iR3570 / iR4570

1) Slide out the cassette.
2) Open the right door (in the case of the separation roller).
3) Pick the tabs of the individual rollers, and detach the pickup roller [1], feed roller [2], and separation roller [3].



F-8-437

⚠

Point to Note When Replacing the Feed/Separation Roller 1

The collar (roller core) of the machine's feed/ separation roller is black.

Chapter 9 Fixing System

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9.1 Construction

9.1.1 Specifications, Control Mechanisms, and Functions

0006-6002

iR2270 / iR2870 / iR3570 / iR4570

The machine's fixing system has the following major functions:

T-9-1

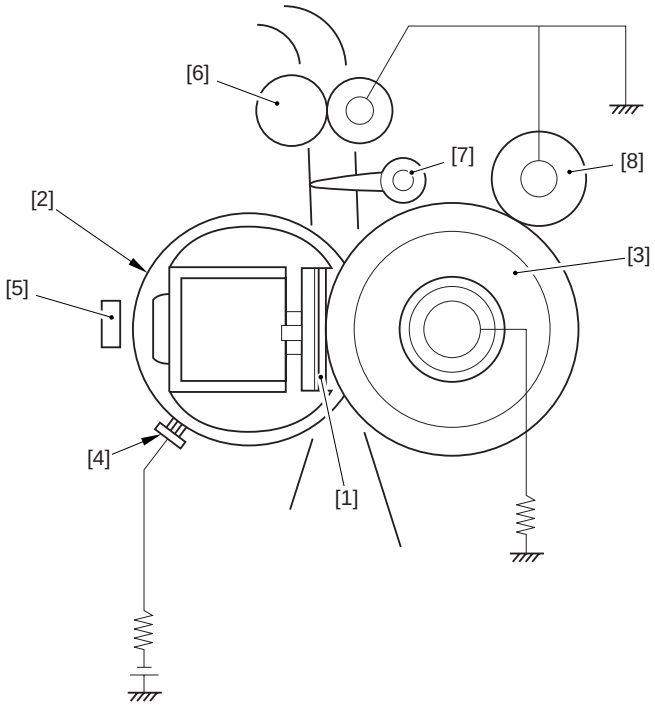
Item	Description
Fixing method	by fixing film + pressure roller
Fixing heater	plate-type heater
Control temperature	180 deg C (at PSTBY)
Fixing drive control	by control of fixing film speed
Fixing temperature detection	by main thermistor
Protective mechanism	by sub thermistor
Cleaning method	by cleaning roller

9.1.2 Major Components

0006-6003

iR2270 / iR2870 / iR3570 / iR4570

The machine's fixing system has the following major components:



F-9-1

[1] Fixing heater
[2] Fixing film unit
[3] Pressure roller
[4] Power supply brush
[5] Film sensor
[6] Delivery roller
[7] Fixing inside delivery sensor flag
[8] Cleaning roller

9.2 Basic Sequence

9.2.1 Power-On Sequence

0006-6005

iR2270 / iR2870 / iR3570 / iR4570

If the thermistor detection temperature is less than 100 deg C when the power is turned on or the sleep mode is released, the control described below is performed.

1. Increases the speed of the fixing motor in phases (1/4 speed to 1/2 speed and then to normal speed).
2. Performs the start-up current control.
3. Performs the temperature control at 200 deg C for 10 sec.
4. Stops the fixing motor. When the fixing motor is stopped, the fixing temperature control is also stopped, and the machine enters the stand-by mode.

⚠

When the print preparation request is received during wait time, the control described below is performed.

1. Increases the speed of the fixing motor in phases (1/4 speed to 1/2 speed and then to normal speed).
2. Performs the start-up current control.
3. Starts measuring the time passed after the machine reaches the target temperature T deg C.

Target temperature T deg C = 200 deg C (iR3570/iR4570): 190 deg C (iR2270/iR2870)

4. Starts feeding in the case of printing in plain paper mode.
5. Starts feeding when 5 sec have passed after the machine reached the target temperature in the case of printing in special paper mode.

9.2.2 Down Sequence

0006-6007

iR2270 / iR2870 / iR3570 / iR4570

Down sequence is to prevent the machine from operating when the temperature of the end portion of the fixing film exceeds a specific temperature as when using small-size paper continuously. The details of the control are described below:

1. The sub thermistor detection temperature is 275 deg C or more.
2. Reduces the number of sheets passed by increasing the paper interval.
3. Returns the number of sheets to the normal when the sub thermistor detection temperature is 265 deg C or less.

9.3 Various Control Mechanisms

9.3.1 Controlling the Speed of the Fixing Film

9.3.1.1 Controlling the Fixing Film Speed in Response to Low Temperature 0006-6037

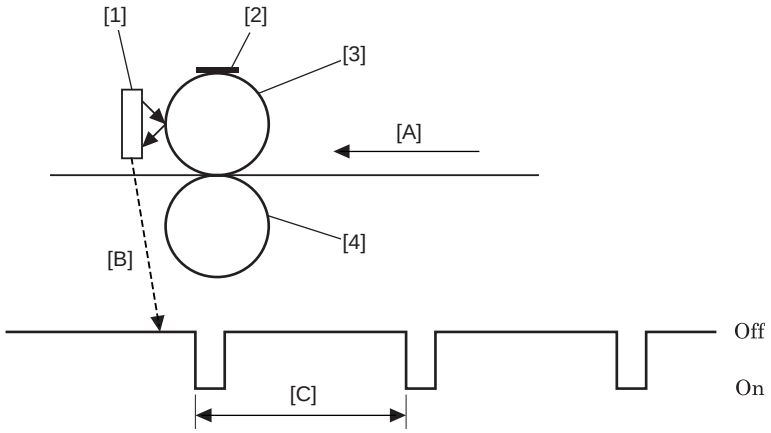
iR2270 / iR2870 / iR3570 / iR4570

As in the morning, driving the fixing film in a low-temperature environment without warm-up could cause the film to become displaced. In consideration of this fact, the fixing motor is started up in phases (1/4 speed to 1/2 speed and then to normal speed).

9.3.1.2 Controlling the Fixing Film Speed 0007-5124

iR2270 / iR2870 / iR3570 / iR4570

The rotation cycle of the fixing film is monitored to control the fixing motor to a specific speed.
When the fixing film rotates and, as a result, the reflecting member positioned in the loop of the film approaches the speed sensor, the machine detects the rotation of the fixing film.



F-9-2

[1]Speed sensor
[2]Reflecting member
[3]Fixing film (driven by fixing motor)
[4]Pressure roller
[A]Paper feed direction
[B]Speed sensor output
[C]1 rotation of fixing film

Timing of Control

The speed of fixing film rotation is monitored at all times after the fixing motor goes on and its speed reaches a specific value. The speed of the fixing motor is then controlled so that it remains at a specific level at all times.

9.3.2 Controlling the Fixing Film Temperature

9.3.2.1 Controlling the Power Supply in Response to Low Temperature 0007-5125

iR2270 / iR2870 / iR3570 / iR4570

In a low temperature environment, the heater is supplied with power before the fixing film is driven so as to soften the grease applied to the fixing film. The mechanism of control is as follows:
If the temperature of the fixing film detected by the thermistor is lower than a specific level, the heater is supplied with power for a specific period of time before a normal start-up mechanism is initiated.
If the temperature of the fixing film detected by the thermistor is higher than a specific level, the normal start-up mechanism is imitated.

9.3.2.2 Controlling the Feeding in Response to Low Temperature 0007-5401

iR2270 / iR2870 / iR3570 / iR4570

In a low temperature environment, the feeding timing is changed according to the temperature detected by the environment sensor so as to enhance the fixing capability. The details are described below.
When the environment sensor detection temperature is 13 deg C or less, the feeding timing is delayed by 5000 msec.

⚠

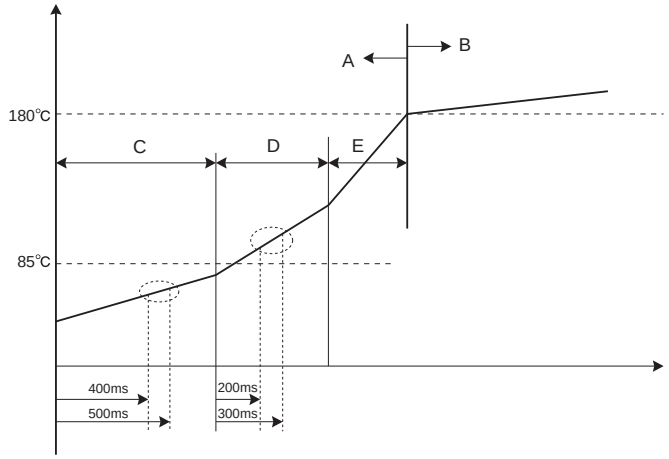
In thick paper mode, the feeding timing is not changed even if the environment sensor detection temperature is 13 deg C or less.

9.3.2.3 Controlling the Power Supply at Start-Up 0006-6583

iR2270 / iR2870 / iR3570 / iR4570

When the thermistor detection temperature is 180 deg C or less, the power control to compensate for the heater, (varying according to input voltage and a heater resistor value) is performed so as to raise the temperature of the fixing unit to the required temperature for fixing in a short time.

1. starts 65% power supply.
2. uses thermistor reading = T1 (deg C) occurring 400 msec after the start of 65% power supply.
3)uses thermistor reading = T2 (deg C) occurring 500 msec after the start of 65% power supply.
4. computes the difference between T2 and T1, refers to a power supply ratio table to compute a power supply ratio X (%), and uses the result.
5. uses the thermistor reading = T3 (deg C) occurring 200 msec after the start of X (%) power supply.
6. uses the thermistor reading = T4 (deg C) occurring 300 msec after the start of the X (%) power supply.
7. computes the difference between T4 and T2, refers to a power supply ratio table, computes a power supply ratio Y (%), and uses the result.
8. repeats step 5 through 7 until the start-up control target temperature is reached.
9. when the start-up control temperature is reached, shifts to copying temperature control.



F-9-3

A: start-up control
B: copying temperature control
C: 65 (%) power supply
D: X (%) power supply
E: Y (%) power supply

9.3.2.4 Copying Temperature Control 0006-6584

iR2270 / iR2870 / iR3570 / iR4570

The machine uses this mechanism to control the temperature of the fixing heater to an optimum level while a recording medium is passing through the fixing film assembly; specifically,

1.the machine varies the power ratio in relation to the difference between the temperature detected by the thermistor and the target control temperature.
2.if the temperature detected by the thermistor is higher than the target control temperature for a specific period of time (0.6 sec), the machine will decrease the power ratio; if lower, it will increase the power rate.

9.3.2.5 Changing the Fixing Film Control Temperature 0007-5452

iR2270 / iR2870 / iR3570 / iR4570

When a fixing failure occurs or creases appear, the fixing film control temperature can be changed in the service mode as shown below.

COPIER> OPTION> BODY> TEMP-CON (to switch the fixing temperature mode for heavy paper)
COPIER> OPTION> BODY> TEMPCON2 (to switch the fixing temperature mode)
0: OFF (default), 1: -10 deg C, 2: -6 deg C, 3: -3 deg C, 4: +3 deg C, 5: +6 deg C, 6: +10 deg C, 7: 15 deg C

9.3.2.6 Temperature Control in Response to Automatic Double-Sided Copy 0007-5453

iR2270 / iR2870 / iR3570 / iR4570

The second side of an automatic double-sided copy requires lower control temperature in comparison with the first side. For this reason, the control temperature is lowered for the second side of an automatic double-sided copy so as to prevent adverse effects such as rises in temperature.

9.3.2.7 Temperature Control in Response to Change of Paper Size 0007-5454

iR2270 / iR2870 / iR3570 / iR4570

The machine has a function to switch the paper size during continuous mode such as in rotation sort. When small-size paper is qenerated continuously, the temperature of the end portion of the fixing film rises. Immediately thereafter, if large-size paper is passed, high-temperature offset might occur at the end portion where the temperature is likely to have risen. To prevent high-temperature offset, the control temperature is changed when the paper size chanqes.

9.3.3 Cleaning

9.3.3.1 Fixing Film Cleaning 0007-5300

iR2270 / iR2870 / iR3570 / iR4570

Purpose

In the event of a jam or when wear on the fixing film advances, the fixing film is rotated idly for collection of toner from both the film and the pressure roller to the cleaning roller.

The timing of control is as follows:

1. If the reading of the cleaning counter has exceeded the interval (expressed in terms of the number of sheets), the machine starts cleaning with the fixing motor rotating at 1/4 speed. The length, timing, and intervals of cleaning may be set in service mode: COPIER>OPTION>BODY>FIX-CLN. Further, the cleaning counter reading is reset at the end of cleaning.

T-9-2

COPIER > OPTION > BODY > FIX-CLN

	0 (default)	**1**	**2**	**3**
Cleaning control temperature	0	225	225	225
Cleaning control time	0	60	60	60
Cleaning intervals	0	500	200	100

If a copy or print job arrives while cleaning is under way, the machine will not pick up paper until the ongoing cleaning ends.

If last rotation is under way in response to a rise in temperature at the film edge, the machine will hold cleaning until

the end of the ongoing last rotation.

2. If a jam has been removed, the machine starts cleaning at time of recovery, at 220 deg C and for 10 sec.

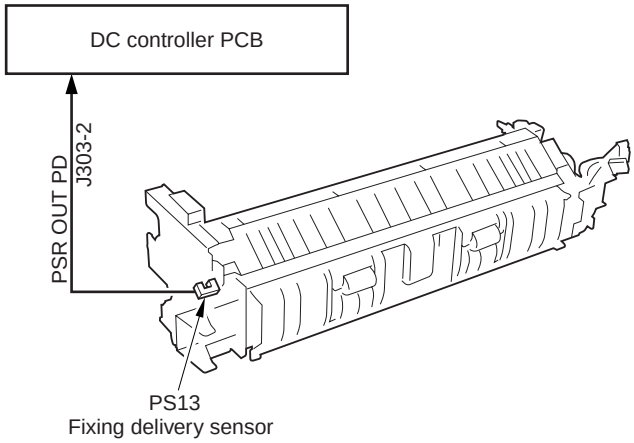
9.3.4 Detecting the Passage of Paper

9.3.4.1 Detecting the Passage of Paper

0006-6014

iR2270 / iR2870 / iR3570 / iR4570

The paper passage detection configuration in the fixing unit is shown below.



F-9-4

When a delay jam of the fixing delivery sensor (PS13) occurs, the fixing motor is stopped immediately so as to prevent paper from wrapping around the fixing roller.

The pressure of the fixing film and the pressure roller is released when a jam occurs so that jammed paper can be taken out easily.

9.4 Protective Functions

9.4.1 Protective Functions

0006-6009

iR2270 / iR2870 / iR3570 / iR4570

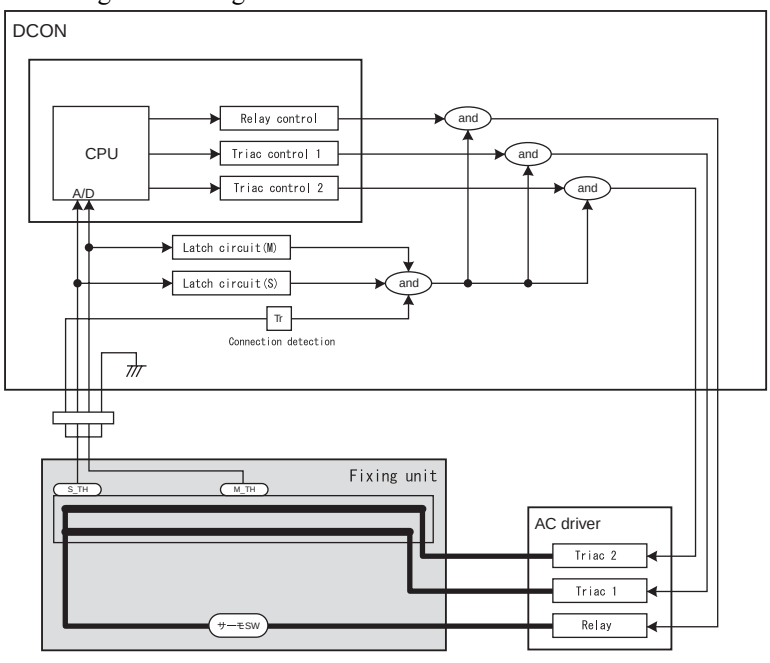
As part of its protective mechanism, the machine has a thermo switch, triacs, and a relay. Protective measures according to location are described below:

1. When the thermistor is out of order
Software detects a failure, and the triac and the relay are turned off.
The thermo switch is turned off.

2. When the CPU goes out of control
The latch circuit detects the excessive temperature rise, and the relay is turned off.
The thermo switch is turned off.

3. When the triac short-circuits
Software detects failure, and the relay is turned off.
The latch circuit detects the excessive temperature rise, and the relay is turned off.
The thermo switch is turned off.

Protective Circuit Block Configuration Diagram



F-9-5

9.4.2 Detecting an Error

0006-6013

iR2270 / iR2870 / iR3570 / iR4570

As part of its protective mechanism, the machine checks for the following error conditions:

T-9-3

Error code	Detail code	Symptom	Description
E000	0000	The fixing temperature fails to increase.	In the course of start-up control, the thermistor reading is less than 30 deg C 1 sec after the start of power supply or is less than 70 deg C 2 sec after the start of power supply; the machine will identify an error condition if any of the foregoing continues for 200 msec or more.
E001	0000	The thermistor detects overheating.	The thermistor detects 235 deg C for 200 msec or more continuously.
	0001	A hardware circuit detects overheating.	A hardware circuit detects overheating in relation to the thermistor (main or sub).
	0002	The sub thermistor detects overheating.	The thermistor detects 295 deg C or more for 200 msec or more continuously.
E002	0000	The fixing temperature fails to reach a specific level.	In the course of start-up control, the thermistor detects a temperature lower then 115 deg C for 200 msec continuously after it has detected 100 deg C; the thermistor detects a temperature less than 150 deg C for 200 msec or more continuously after it has detected 140 deg C; or, the thermistor detects a temperature lower than 165 deg C for 20 msec or more continuously 1 sec after it has detected 160 deg C.
E003	0000	The fixing temperature has dropped to an abnormally low level.	In the course of normal temperature control, the thermistor detects a temperature lower than 140 deg C for 20 msec or more continuously.

Error code	Detail code	Symptom	Description
E007	0000	The fixing film rotates in an abnormal way.	The reading of the main thermistor is in excess of 100 deg C with the fixing motor in a locked state and, in addition, the machine fails to detect the marker signal for 6 sec.
E014	0000	The machine detects a fixing motor error.	During operation, the machine detects an overload condition continuously for 3 sec or more.

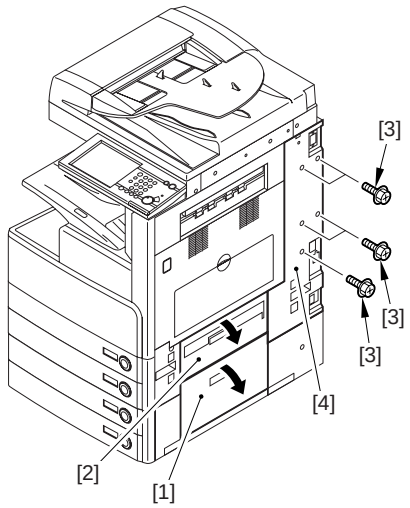
9.5 Parts Replacement Procedure

9.5.1 Fixing Unit

9.5.1.1 Removing the Right Cover (rear) 0007-7874

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a 2-Cassette Pedestal-Y2)
2) Open the right lower door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].

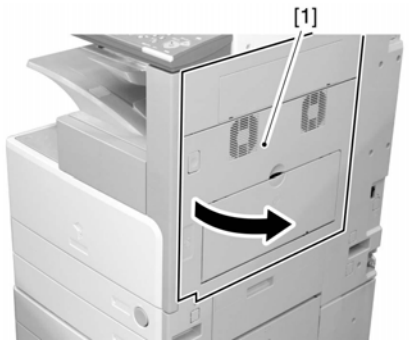


F-9-6

9.5.1.2 Removing the Right Door 0007-7879

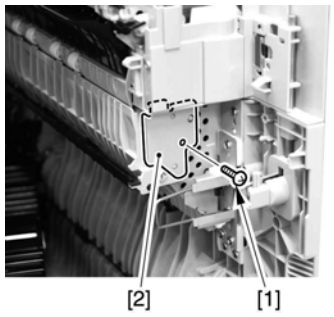
iR3570 / iR4570

1) Open the right door.



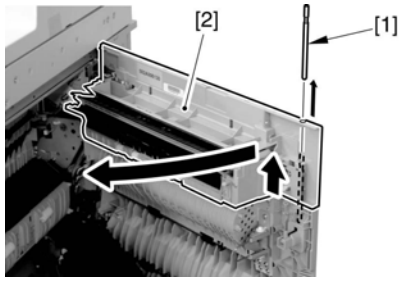
F-9-7

2) Remove the screw [1], and detach the fixing plate [2].



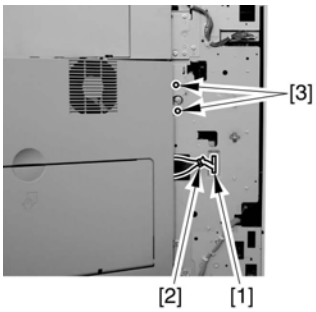
F-9-8

3) Remove the joint shaft [1], and free the extension delivery unit [2] from the right door.



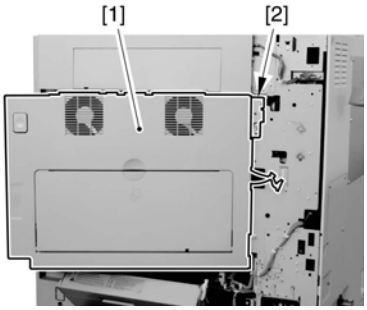
F-9-9

4) Disconnect the connector [1], and remove the reuse band [2]; then, remove the 2 screws (M4x8; RS tightening).



F-9-10

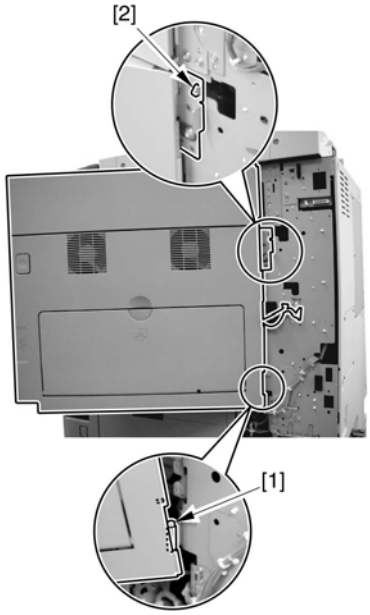
5) While freeing the hinge assembly [2], detach the right door.



F-9-11

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-9-12

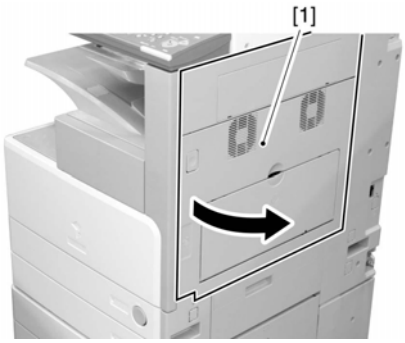
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

9.5.1.3 Removing the Right Door 0007-7882

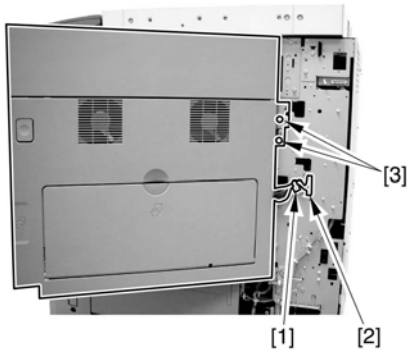
iR2270 / iR2870

1) Open the right door.



F-9-13

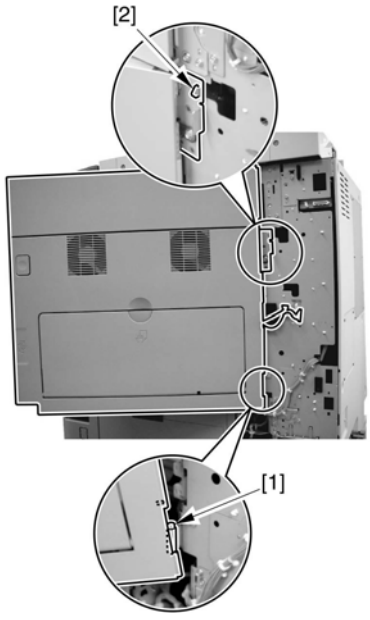
2) Remove the reuse band [1], and disconnect the connector [2].
3) Remove the 2 screws (M4x8; RS tightening), and detach the right door.



F-9-14

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-9-15

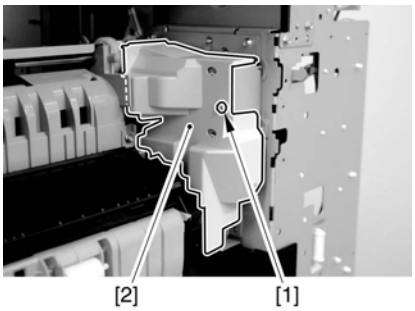
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

9.5.1.4 Removing the Fixing Unit 0007-7884

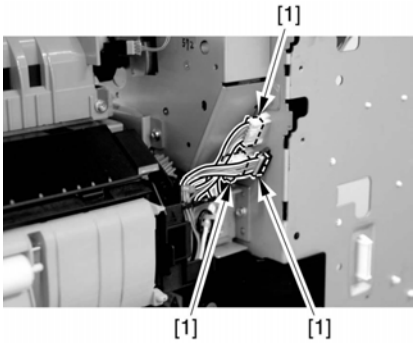
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the screw [1], and detach the harness cover [2].



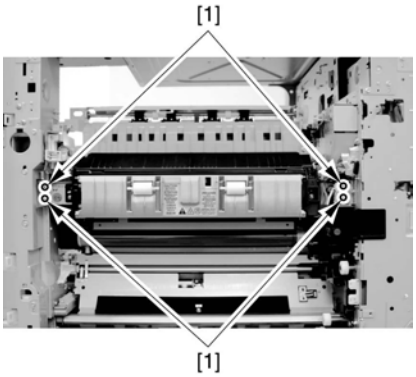
F-9-16

2) Disconcert the 3 connectors [1].



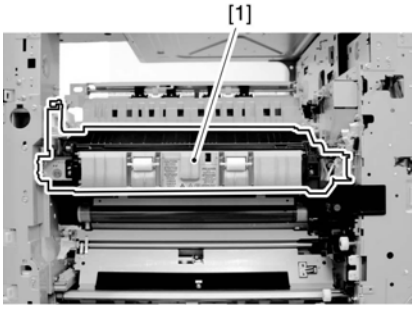
F-9-17

3) Remove the 4 screws [1].



F-9-18

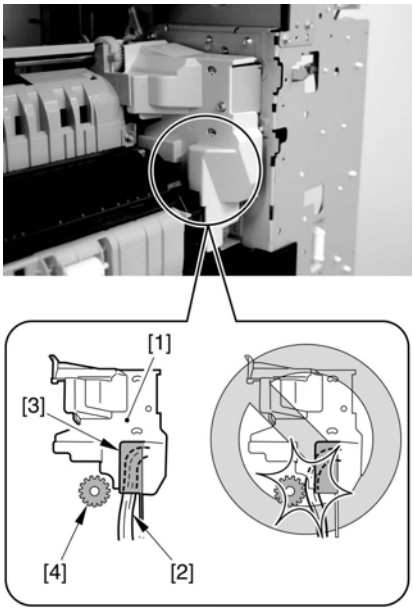
4) Detach the fixing unit [1] toward the front.



F-9-19

⚠

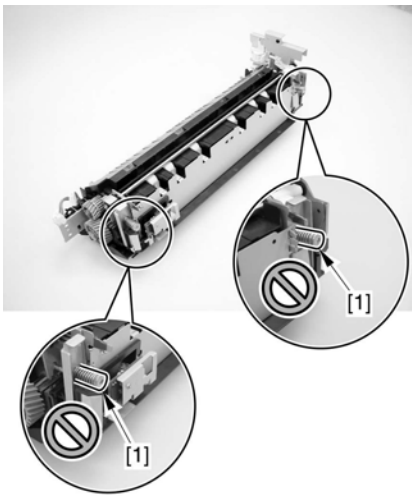
When mounting the harness cover [1], be sure to keep the harness [2] within the space [3] indicated in the figure so that the harness [2] will not come into contact with the gear [4].



F-9-20

⚠

Do not touch the screw [1]. Turning it will change the pressure of the fixing assembly, which cannot be adjusted in the field, necessitating the replacement of the fixing assembly.



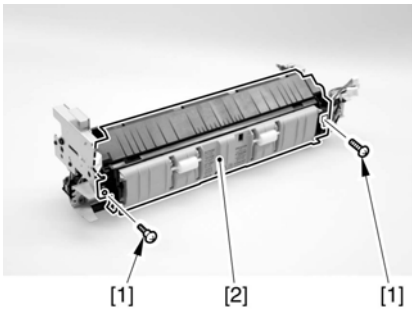
F-9-21

9.5.2 Pressure Roller

9.5.2.1 Removing the Inside Delivery Cover Unit 0007-7910

iR2270 / iR2870 / iR3570 / iR4570

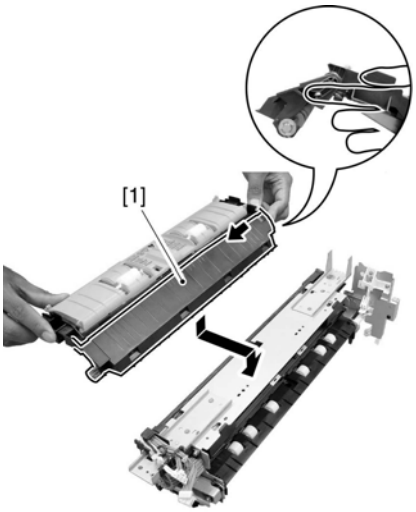
1) Remove the 2 screws [1], and detach the inside delivery cover unit [2].



F-9-22

⚠

If you are mounting the inside delivery cover while assembling the fixing assembly, be sure to keep the guide [1] butted during the work. After mounting it, check to make sure that the guide [1] rotates smoothly.

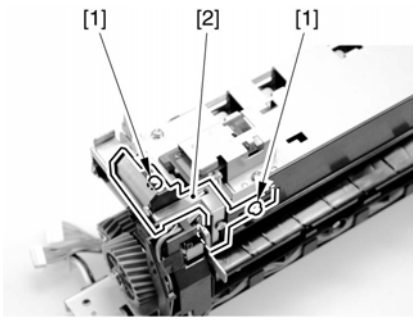


F-9-23

9.5.2.2 Removing the Grounding Plate 0007-7911

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws [1], and detach the grounding plate [2].

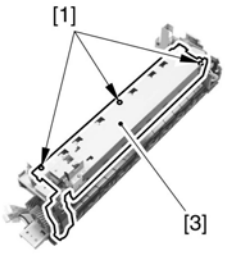


F-9-24

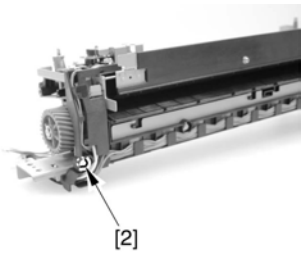
9.5.2.3 Removing the Fixing Film Cover 0007-7912

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 3 screws [1], and remove the self-tapping screw [2]; then, detach the fixing film cover [3].



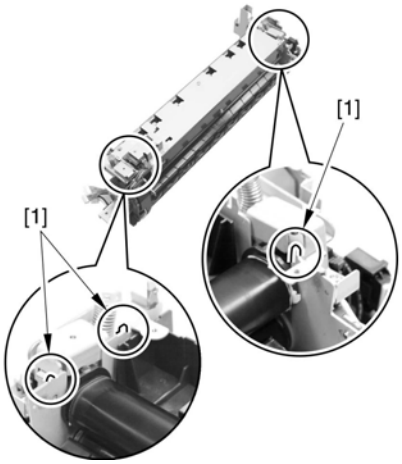
F-9-25



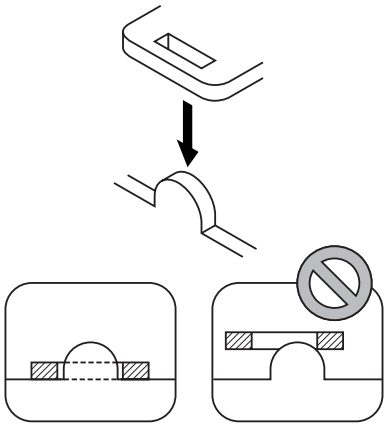
F-9-26

⚠

When mounting the fixing film cover unit, be sure to check that it has not ridden over the emboss [1] indicated by the arrow in the figure before tightening the screw.



F-9-27



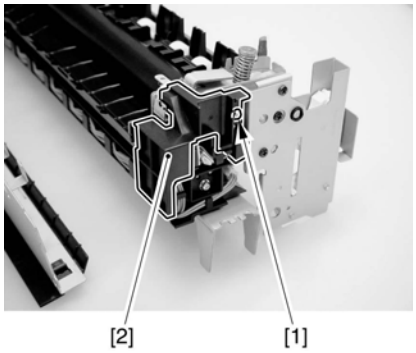
F-9-28

9.5.2.4 Removing the Left Side Plate

0007-7913

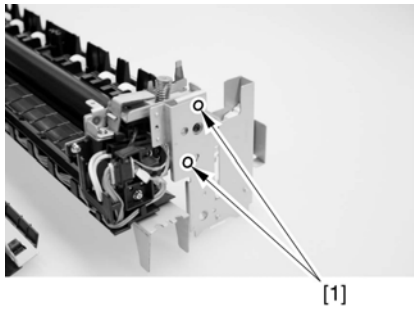
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the screw [1], and detach the left side plate cover [2].



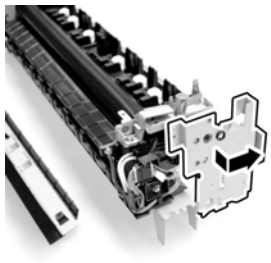
F-9-29

2) Remove the 2 screws [1].

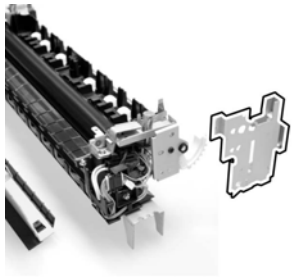


F-9-30

3) Slide the left side plate [1] in the direction of the arrow to detach.



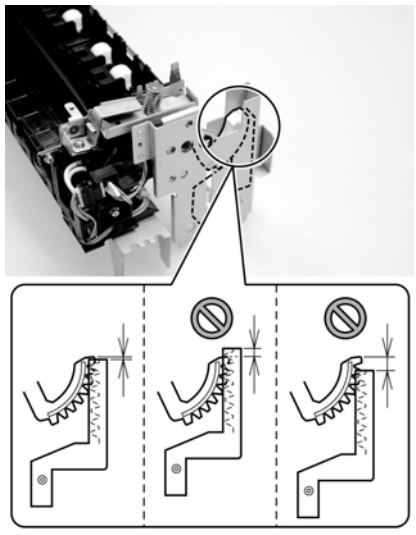
F-9-31



F-9-32

⚠

When mounting the left side plate, be sure that it is correctly positioned so that the locking lever and the teeth are correctly engaged. (See the figure.)

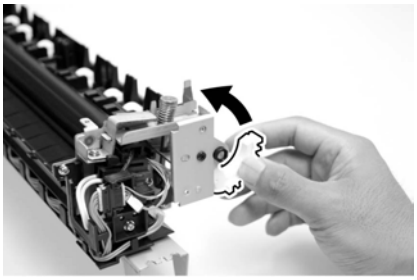


F-9-33

9.5.2.5 Releasing the Locking Plate 0007-7914

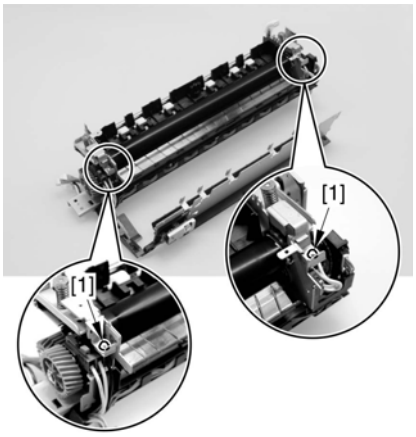
iR2270 / iR2870 / iR3570 / iR4570

1) Turn the locking gear [1] in the direction of the arrow to release the locking roller.



F-9-34

2) Remove the 2 screws [1].



F-9-35

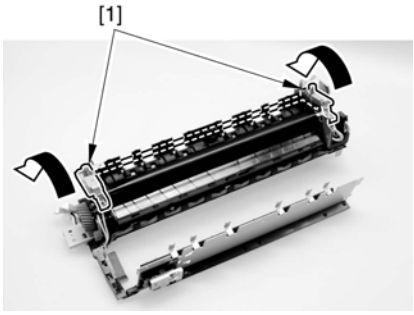
⚠

Do not touch the screw [1] used to keep the fixing assembly in place. Turning the screw will change the pressure of the fixing assembly, which cannot be adjusted in the field, necessitating the replacement of the fixing assembly.



F-9-36

3) Turn the locking plate [1] in the direction of the arrow to release it.

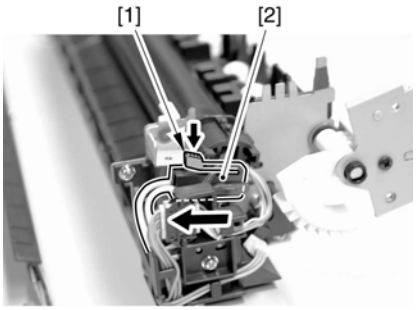


F-9-37

9.5.2.6 Removing the Fixing Film Unit 0007-7915

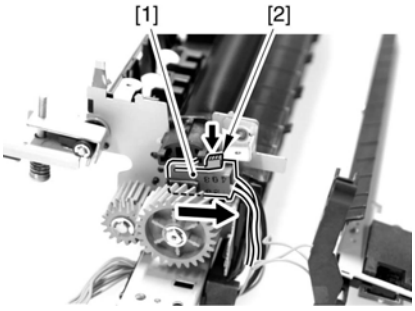
iR2270 / iR2870 / iR3570 / iR4570

1) While pushing down the release lever (front) [1], pull out the heater contact [2].



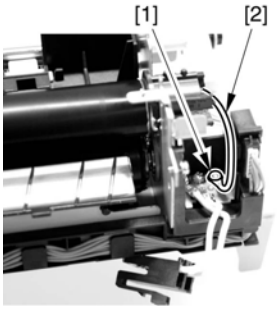
F-9-38

2) While pushing down the release lever (rear) [1], pull out the heater contact [2].



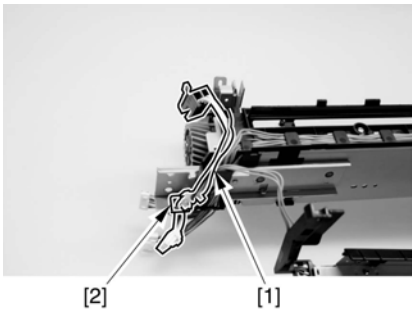
F-9-39

3) Remove the screw [1], and free the AC harness [2].



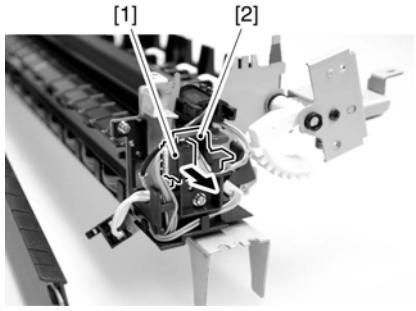
F-9-40

4) Free the AC harness [1] from the edge saddle [2].



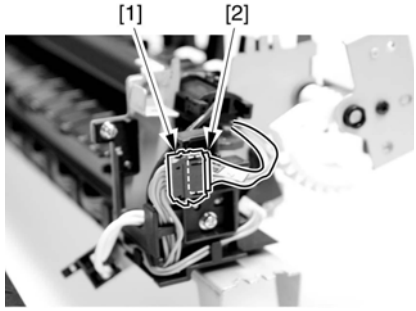
F-9-41

5) Free the relay connector [1] of the signal cable from the connector holder [2].



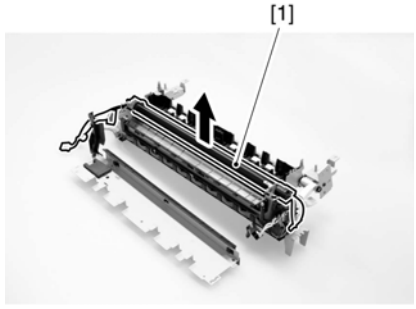
F-9-42

6) Disconnect the connector [2] from the relay connector [1].



F-9-43

7) Remove the fixing film unit [1].



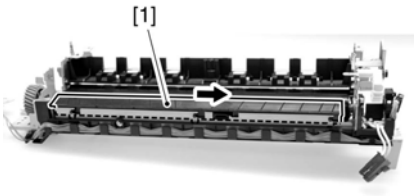
F-9-44

9.5.2.7 Removing the Inlet Guide

0007-7916

iR2270 / iR2870 / iR3570 / iR4570

1) Slide the inlet guide [1] in the direction of the arrow to detach.

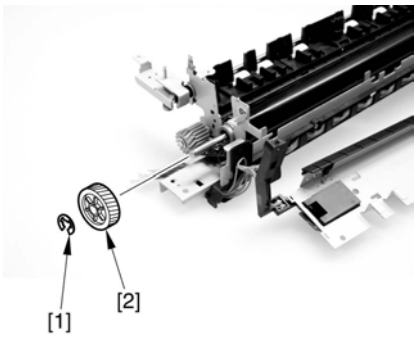


F-9-45

9.5.2.8 Removing the Pressure Roller 0007-7918

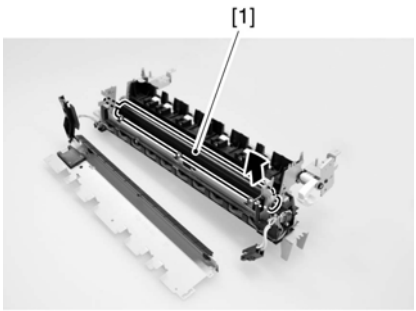
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the E-ring [1], and detach the drive gear [2].



F-9-46

2) Lift the front of the pressure roller [1].



F-9-47

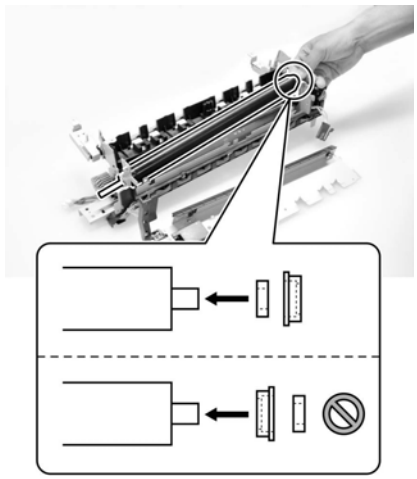
3) Push in the bush [1] found at the rear in the direction of the arrow to free it; then, detach the pressure roller.



F-9-48

⚠

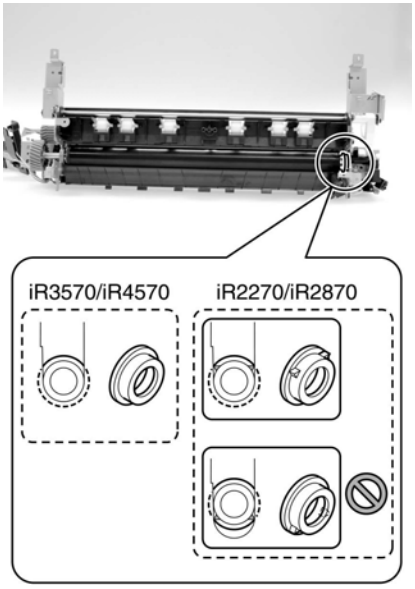
Be sure to pay attention to the position and the orientation of the insulating bush.



F-9-49

⚠

The insulating bush may be of 2 different shapes: one for the iR3570/4570 and the other for the iR2270/2870. If the machine is an iR2270/2870, be sure to pay attention to the direction of the protrusion of the insulating bush.



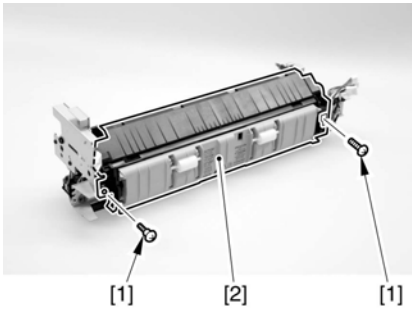
F-9-50

9.5.3 Cleaning Roller

9.5.3.1 Removing the Inside Delivery Cover Unit 0007-7890

iR2270 / iR2870 / iR3570 / iR4570

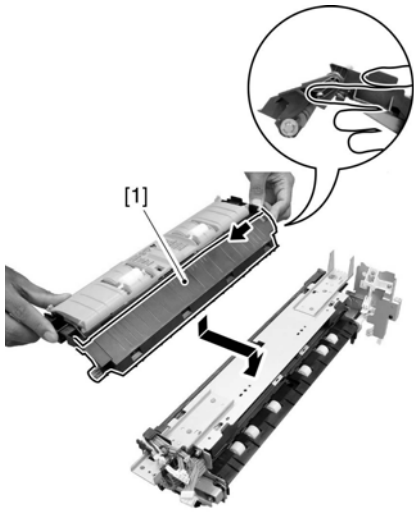
1) Remove the 2 screws [1], and detach the inside delivery cover unit [2].



F-9-51

⚠

If you are mounting the inside delivery cover while assembling the fixing assembly, be sure to keep the guide [1] butted during the work. After mounting it, check to make sure that the guide [1] rotates smoothly.

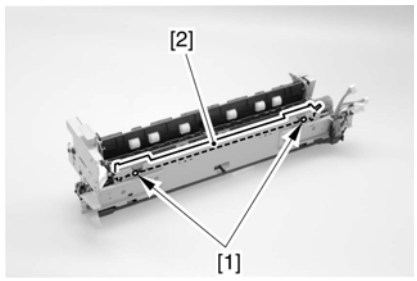


F-9-52

9.5.3.2 Removing the Cleaning Roller 0007-7891

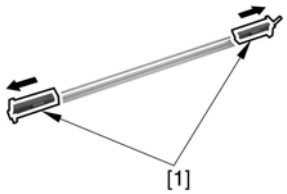
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 self-tapping screws [1], and detach the cleaning roller together with the cleaning roller holder [2].



F-9-53

2) Remove the cleaning roller holder [1].



F-9-54

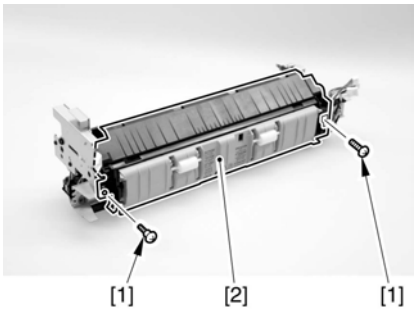
The foregoing steps assume that the fixing unit has already been removed from the machine. The cleaning roller may also be removed without first removing the fixing unit from the machine in the same way.

9.5.4 Fixing Film

9.5.4.1 Removing the Inside Delivery Cover Unit 0007-7898

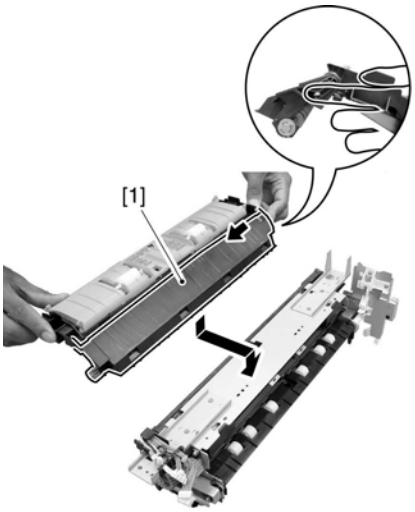
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws [1], and detach the inside delivery cover unit [2].



F-9-55

If you are mounting the inside delivery cover while assembling the fixing assembly, be sure to keep the guide [1] butted during the work. After mounting it, check to make sure that the guide [1] rotates smoothly.

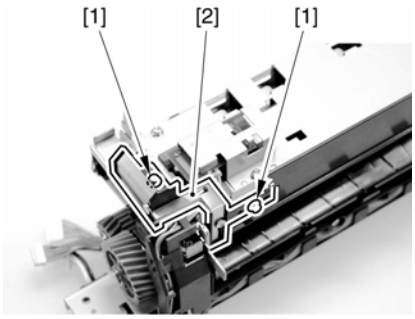


F-9-56

9.5.4.2 Removing the Grounding Plate 0007-7899

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws [1], and detach the grounding plate [2].

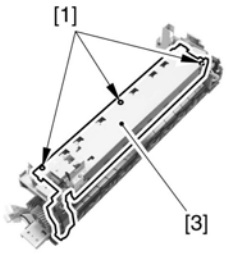


F-9-57

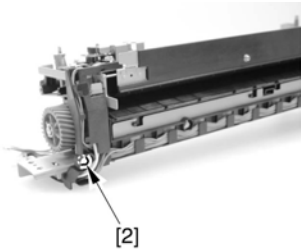
9.5.4.3 Removing the Fixing Film Cover 0007-7900

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 3 screws [1], and remove the self-tapping screw [2]; then, detach the fixing film cover [3].



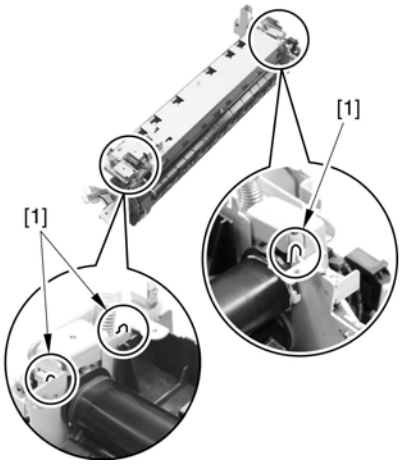
F-9-58



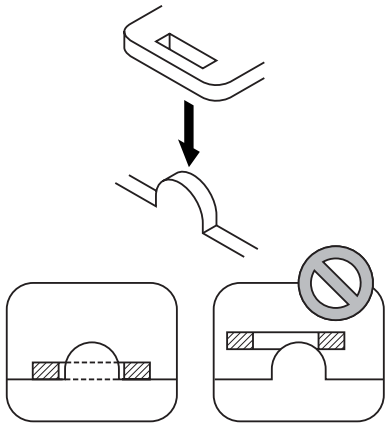
F-9-59

⚠

When mounting the fixing film cover unit, be sure to check that it has not ridden over the emboss [1] indicated by the arrow in the figure before tightening the screw.



F-9-60



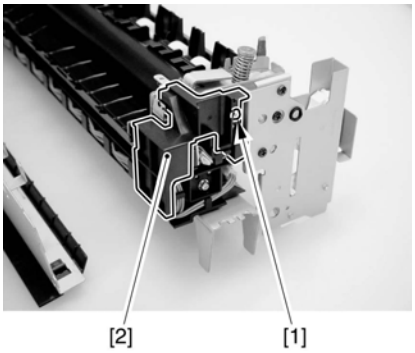
F-9-61

9.5.4.4 Removing the Left Side Plate

0007-7901

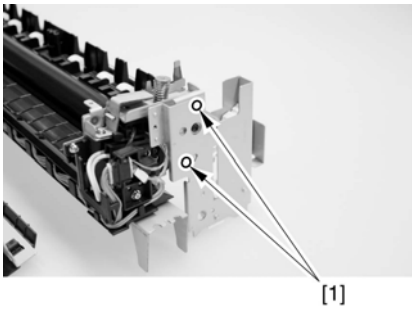
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the screw [1], and detach the left side plate cover [2].



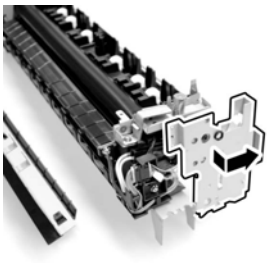
F-9-62

2) Remove the 2 screws [1].

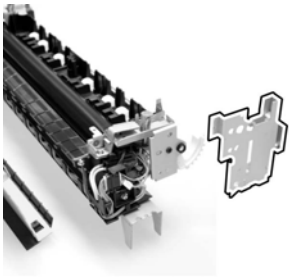


F-9-63

3) Slide the left side plate [1] in the direction of the arrow to detach.



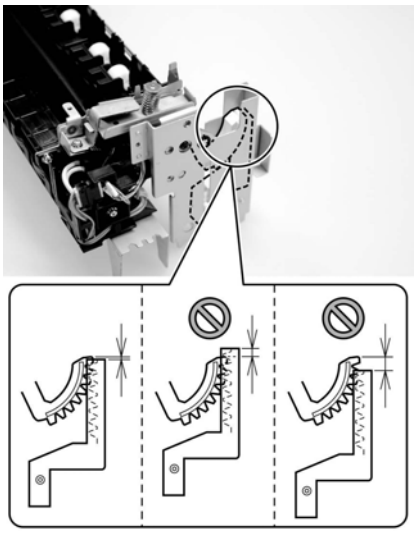
F-9-64



F-9-65

⚠

When mounting the left side plate, be sure that it is correctly positioned so that the locking lever and the teeth are correctly engaged. (See the figure.)



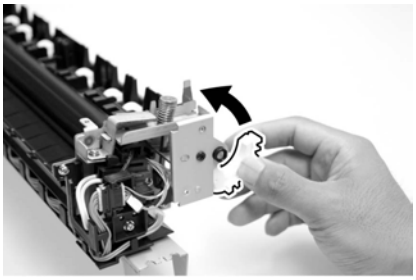
F-9-66

9.5.4.5 Releasing the Locking Plate

0007-7902

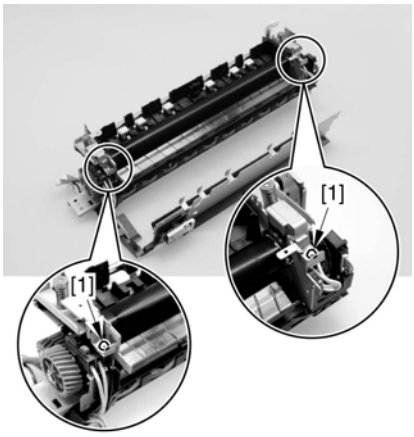
iR2270 / iR2870 / iR3570 / iR4570

1) Turn the locking gear [1] in the direction of the arrow to release the locking roller.



F-9-67

2) Remove the 2 screws [1].



F-9-68

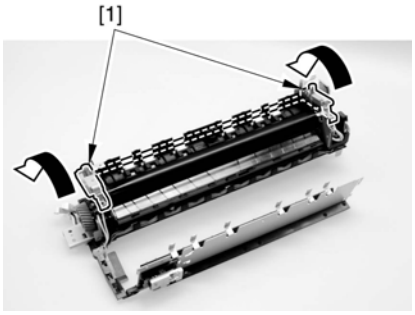
⚠

Do not touch the screw [1] used to keep the fixing assembly in place. Turning the screw will change the pressure of the fixing assembly, which cannot be adjusted in the field, necessitating the replacement of the fixing assembly.



F-9-69

3) Turn the locking plate [1] in the direction of the arrow to release it.

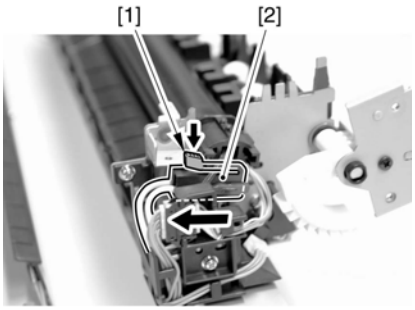


F-9-70

9.5.4.6 Removing the Fixing Film Unit 0007-7909

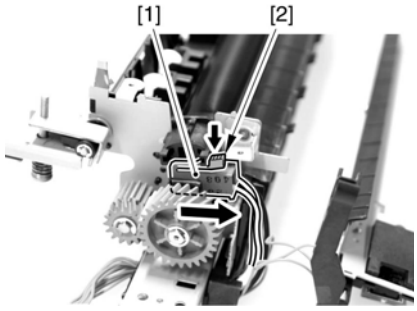
iR2270 / iR2870 / iR3570 / iR4570

1) While pushing down the release lever (front) [1], pull out the heater contact [2].



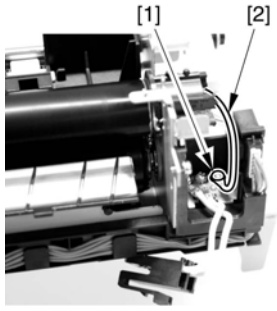
F-9-71

2) While pushing down the release lever (rear) [1], pull out the heater contact [2].



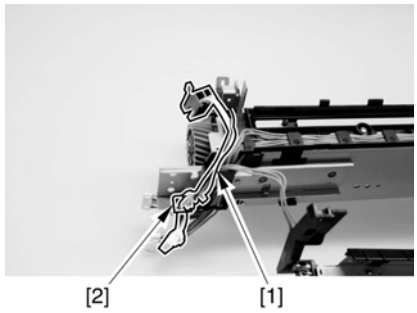
F-9-72

3) Remove the screw [1], and free the AC harness [2].



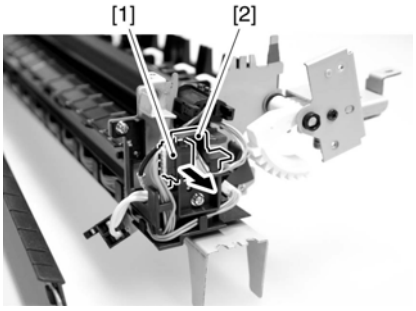
F-9-73

4) Free the AC harness [1] from the edge saddle [2].



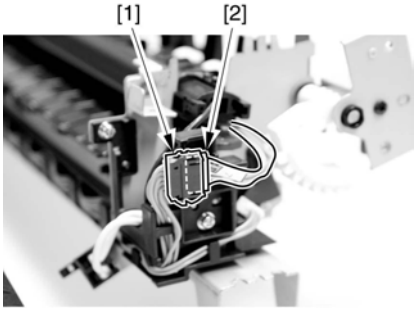
F-9-74

5) Free the relay connector [1] of the signal cable from the connector holder [2].



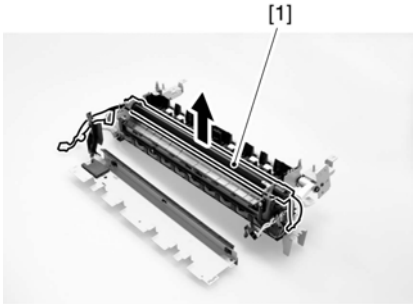
F-9-75

6) Disconnect the connector [2] from the relay connector [1].



F-9-76

7) Remove the fixing film unit [1].



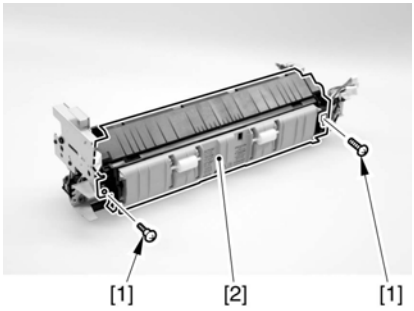
F-9-77

9.5.5 Internal Delivery Sensor

9.5.5.1 Removing the Inside Delivery Cover Unit 0007-7923

iR2270 / iR2870 / iR3570 / iR4570

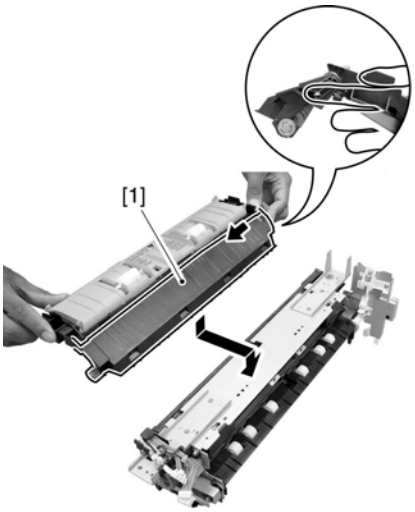
1) Remove the 2 screws [1], and detach the inside delivery cover unit [2].



F-9-78

⚠

If you are mounting the inside delivery cover while assembling the fixing assembly, be sure to keep the guide [1] butted during the work. After mounting it, check to make sure that the guide [1] rotates smoothly.

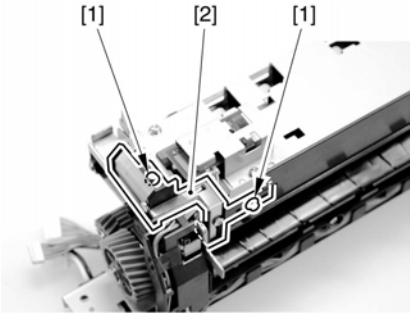


F-9-79

9.5.5.2 Removing the Grounding Plate 0007-7924

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws [1], and detach the grounding plate [2].

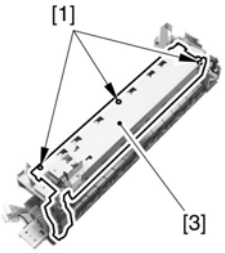


F-9-80

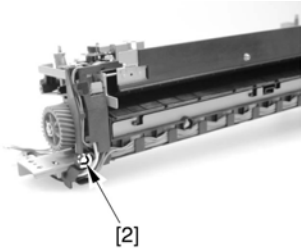
9.5.5.3 Removing the Fixing Film Cover 0007-7925

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 3 screws [1], and remove the self-tapping screw [2]; then, detach the fixing film cover [3].



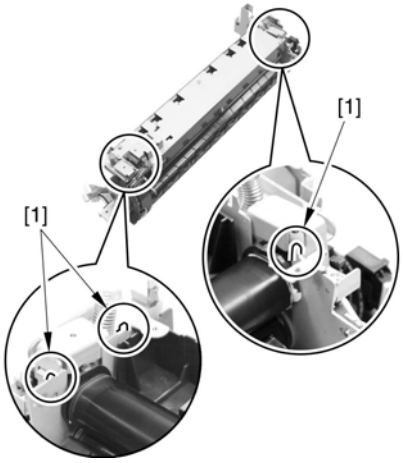
F-9-81



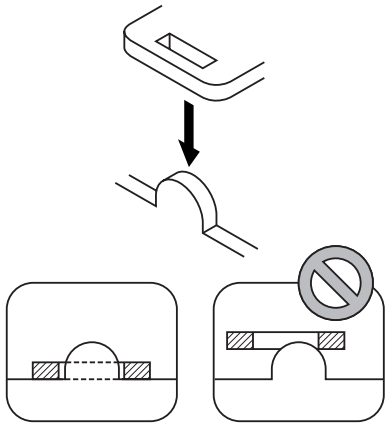
F-9-82

⚠

When mounting the fixing film cover unit, be sure to check that it has not ridden over the emboss [1] indicated by the arrow in the figure before tightening the screw.



F-9-83

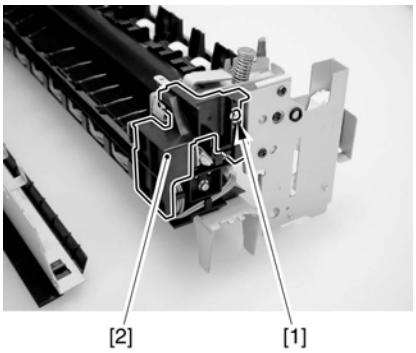


F-9-84

9.5.5.4 Removing the Left Side Plate 0007-7926

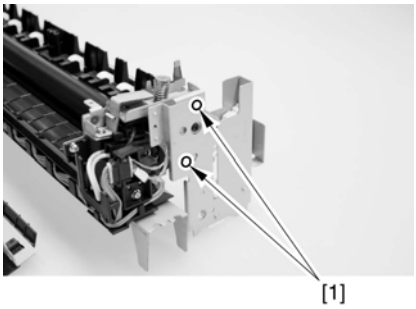
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the screw [1], and detach the left side plate cover [2].



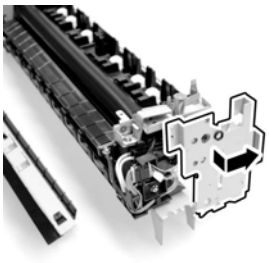
F-9-85

2) Remove the 2 screws [1].

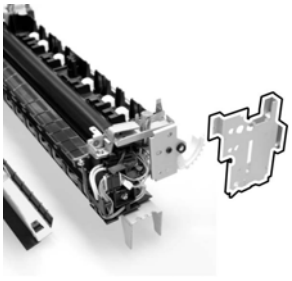


F-9-86

3) Slide the left side plate [1] in the direction of the arrow to detach.



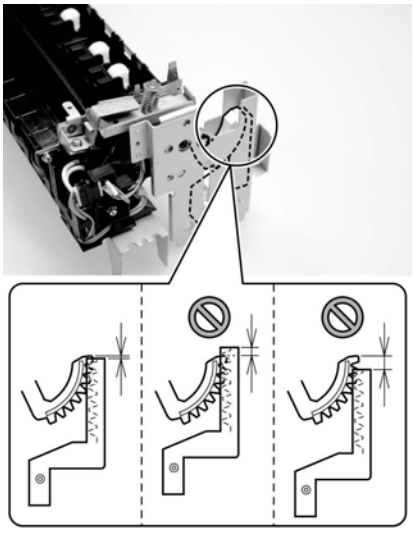
F-9-87



F-9-88

⚠

When mounting the left side plate, be sure that it is correctly positioned so that the locking lever and the teeth are correctly engaged. (See the figure.)



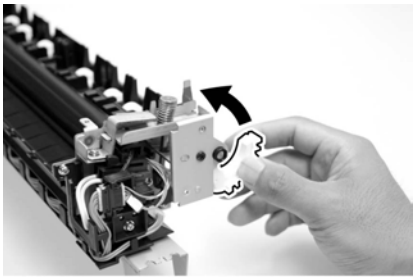
F-9-89

9.5.5.5 Releasing the Locking Plate

0007-7927

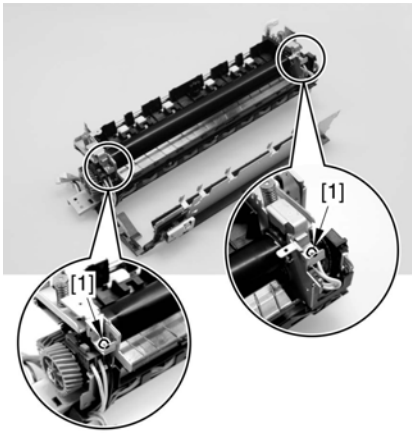
iR2270 / iR2870 / iR3570 / iR4570

1) Turn the locking gear [1] in the direction of the arrow to release the locking roller.



F-9-90

2) Remove the 2 screws [1].



F-9-91

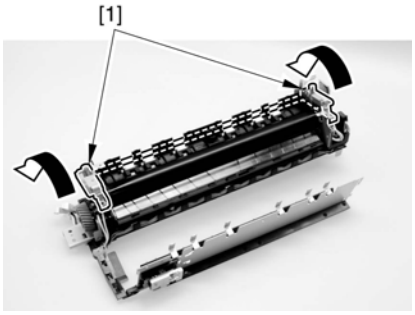
⚠

Do not touch the screw [1] used to keep the fixing assembly in place. Turning the screw will change the pressure of the fixing assembly, which cannot be adjusted in the field, necessitating the replacement of the fixing assembly.



F-9-92

3) Turn the locking plate [1] in the direction of the arrow to release it.

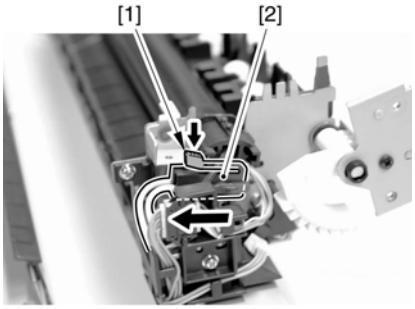


F-9-93

9.5.5.6 Removing the Fixing Film Unit 0007-7929

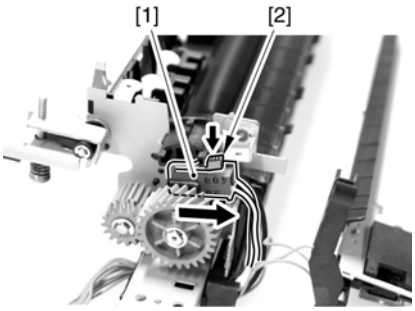
iR2270 / iR2870 / iR3570 / iR4570

1) While pushing down the release lever (front) [1], pull out the heater contact [2].



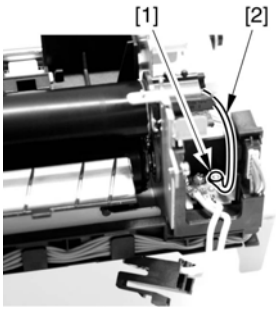
F-9-94

2) While pushing down the release lever (rear) [1], pull out the heater contact [2].



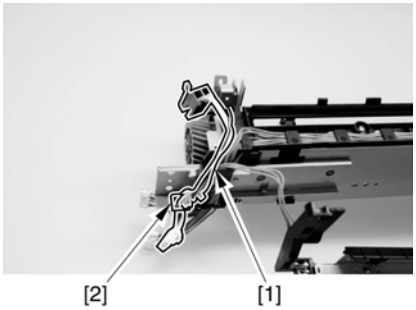
F-9-95

3) Remove the screw [1], and free the AC harness [2].



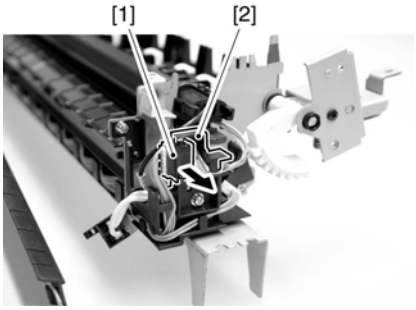
F-9-96

4) Free the AC harness [1] from the edge saddle [2].



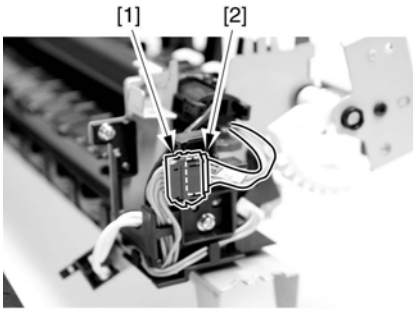
F-9-97

5) Free the relay connector [1] of the signal cable from the connector holder [2].



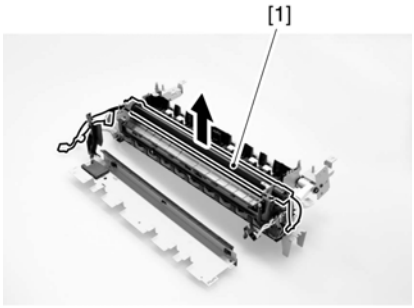
F-9-98

6) Disconnect the connector [2] from the relay connector [1].



F-9-99

7) Remove the fixing film unit [1].

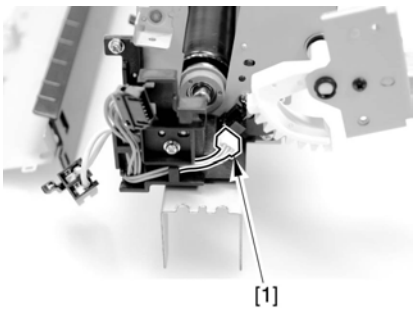


F-9-100

9.5.5.7 Removing the Inside Delivery Sensor 0007-7932

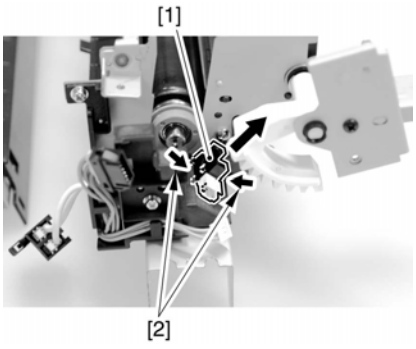
iR2270 / iR2870 / iR3570 / iR4570

1) Disconnect the connector [2] of the harness [1].



F-9-101

2) Remove the front latch [2] of the inside delivery sensor [1]; then, detach the inside delivery sensor.



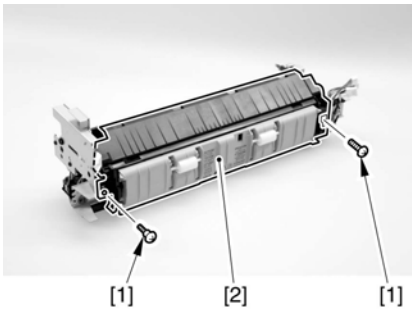
F-9-102

9.5.6 Fixing Film Sensor

9.5.6.1 Removing the Inside Delivery Cover Unit 0007-7895

iR2270 / iR2870 / iR3570 / iR4570

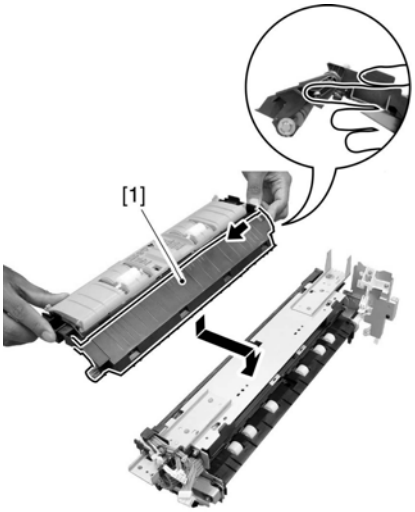
1) Remove the 2 screws [1], and detach the inside delivery cover unit [2].



F-9-103

⚠

If you are mounting the inside delivery cover while assembling the fixing assembly, be sure to keep the guide [1] butted during the work. After mounting it, check to make sure that the guide [1] rotates smoothly.

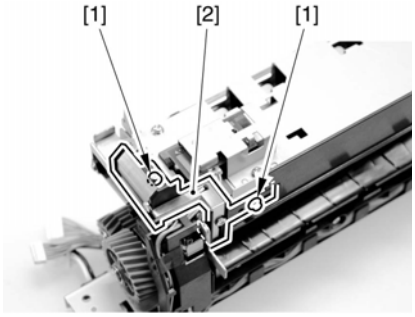


F-9-104

9.5.6.2 Removing the Grounding Plate 0007-7896

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws [1], and detach the grounding plate [2].

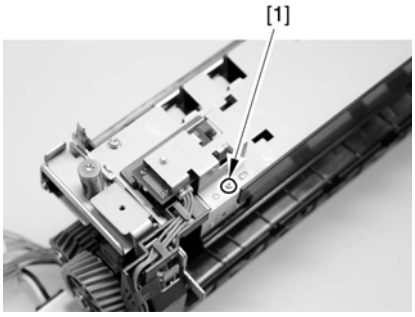


F-9-105

9.5.6.3 Removing the Fixing Film Sensor 0007-7897

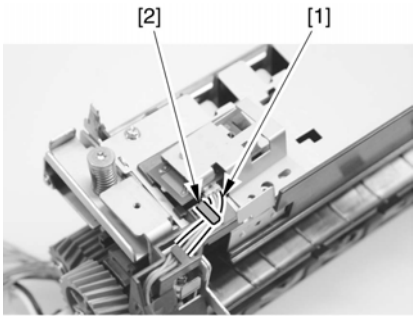
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the screw [1].



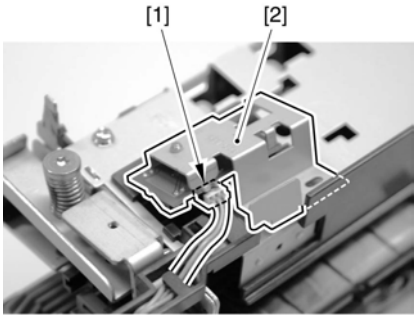
F-9-106

2) Detach the harness [1] from the guide [2].



F-9-107

3) Disconnect the connector [1], and detach the fixing film sensor [2].



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Chapter 10 External and Controls

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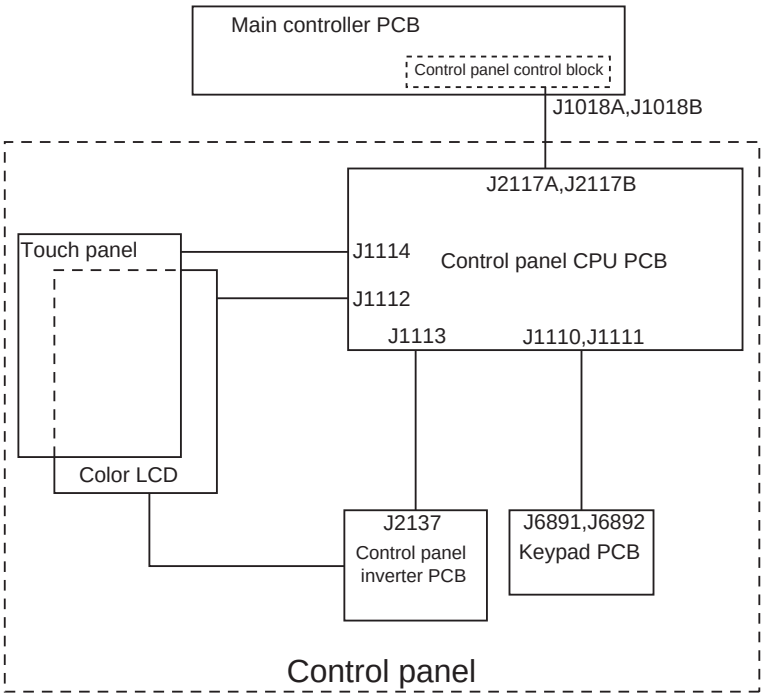
10.1 Control Panel

10.1.1 Overview

0006-6159

iR2270 / iR2870 / iR3570 / iR4570

The machine's control panel consists of the following PCBs, LCD, and touch panel:
The major functions of the control panel are as follows:
- LCD indication
- contrast adjustment
- touch switch input
- hardware key input



F-10-1

10.1.2 LCD Indication Processing

0006-6160

iR2270 / iR2870 / iR3570 / iR4570

The CPU on the main controlled PCB sends data (display data) to the control panel CPU PCB as instructed by the program.
The data is sent through the control panel PCB to reach the color LCD.

10.1.3 Adjustment of the LCD Contact

0006-6161

iR2270 / iR2870 / iR3570 / iR4570

The machine is equipped with a density adjustment volume (VR6801) on its keypad PCB for use by the user to adjust the contrast of the LCD screen.

10.1.4 Functions of the Control Panel CPU

0006-6162

iR2270 / iR2870 / iR3570 / iR4570

- Monitoring the Key Inputs
  It communicates the keypad and function key inputs to the CPU on the main controller PCB.
- Monitoring the Touch Panel Input
  It communicates the key inputs made on the touch panel to the CPU on the main controller PCB.
- Controlling the Buzzer Sound
- Controlling the Control Panel LED

Memo:
the color LCD is driven by the main controller, and the control panel CPU PCB serves to relay the drive signals.

10.2 Counters

10.2.1 Overview

0006-5378

iR2270 / iR2870 / iR3570 / iR4570

The machine is equipped with counters that keep track of printouts according to the type of printer unit. The counters are indicated in response to a press on the Check key on the control panel. The following shows the functions of the counter as set at time of shipment from the factory.

T-10-1

	Counter 1	**Counter 2**	**Counter 3**	**Counter 4**	**Counter 5**	**Counter 6**
Japan*1 ***	total 1	not indicated **	not indicated **	not indicated **	not indicated **	not indicated **
	101	**000**	**000**	**000**	**000**	**000**
Japan*1 ****	total 2	copy (total 2)	total A (total 2)	not indicated **	not indicated **	not indicated **
	102	**202**	**127**	**000**	**000**	**000**
120VTW *2	total 1	total (large)	copy (total 1)	copy (large)	not indicated **	not indicated **
	101	**103**	**201**	**203**	**000**	**000**
120V UL *3	total 1	total (large)	copy (total 1)	copy (large)	not indicated **	not indicated **
	101	**103**	**201**	**203**	**000**	**000**
230V *4	total 1	total (large)	copy (total 1)	copy (large)	not indicated **	not indicated **
	101	**103**	**201**	**203**	**000**	**000**
240V EUR *5	total 1	total (large)	total (small)	scan (total 1)	not indicated **	not indicated **
	101	**103**	**104**	**501**	**000**	**000**

	Counter 1	Counter 2	Counter 3	Counter 4	Counter 5	Counter 6
240V CA *6	total 1	total (large)	copy (total 1)	copy (large)	not indicated **	not indicated **
	101	**103**	**201**	**203**	**000**	**000**

<Guide to Symbols>
large: large-sized paper (in feed direction, 364 mm or longer; count x 1)
small: small-sized paper (in feed direction, 364 mm or less).
total: all (C + P); count x 1.
double-sided: in auto double-side copying count x 1; feed.
- The 3-digit symbol in the Counter column indicates the setting in the following service does item:
1 through 6 under COUNTER>OPTION>USER>COUNTER.
- Counters 2 through 6 may be changed in the following service mode mode item:
COPIER>OPTION>USER.
*1 :F14-3213/ 3223/ 3218/ 3211/ 3228/ 3221/ 3318/ 3311/ 3328/ 3321/ 3319/ 3312/ 6718/ 6711/ 6728/ 6721/ 6719/ 6712
*2 :None in particular
*3 :F14-3338/ 3331/ 6738/ 6731/ 5438/ 5431
*4 :F14-3248/ 3241/ 3348/ 3341/ 6748/ 6741/ 5448/ 5441
*5 :F14-3298/ 3291/ 3398/ 3391/ 6798/ 6791/ 5498/ 5491
*6 :F14-3268/ 3261/ 3368/ 3361/ 6768/ 6761/ 5468/ 5461
** by default, not indicated; may be changed in service mode.
*** '1' is set for the following service mode item: COPIER>OPTION>USE>CNT-SW.
**** '1' is set for the following service mode item: COPIER>OPTION>USER>CNT-SW.

10.2.2 Timing of Increasing the Count

0006-5385

iR2270 / iR2870 / iR3570 / iR4570

The timing at which the count is increased differs depending on the printing mode (single-sided or double-sided), target of delivery, and type of accessory:

1. Singe-Sided Printing, 2nd Side of a Double-Sided Print

In single-side printing or for the 2nd side of a double-sided print, the count is increased when the trailing edge of the sheet is discharged outside the machine in relation to the output of the following sensors:

T-10-2

Condition	Target of delivery	Sensor
Finisher absent	Tray 1	Delivery sensor (PS14)

Condition	Target of delivery	Sensor
	Tray 2	No. 2 delivery sensor (PS1A)
	Tray 3	No. 3 delivery sensor (PS5)
Finisher present		Delivery sensor of the finisher

2. 1st Side of a Double-Sided Print

When the double-sided print feed sensor (PS17) goes on, the machine will assume that printing on the 1st side has been completed, thereby increasing the count.

10.3 Fans

10.3.1 Overview

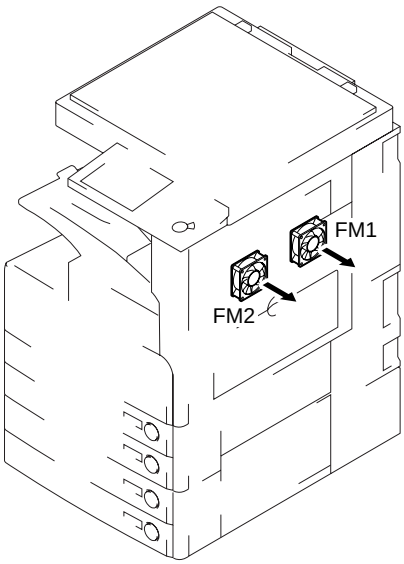
0006-5388

iR2270 / iR2870 / iR3570 / iR4570

The names and the functions of the fans used in the machine are as follows:

T-10-3

Notation	Name	Filter	2-speed control	Description
FM1	Heat discharge fan (rear)	Present	Used	Cools the fixing assembly.
FM2	Heat discharge fan (front)	Present	Used	Cools the fixing assembly.



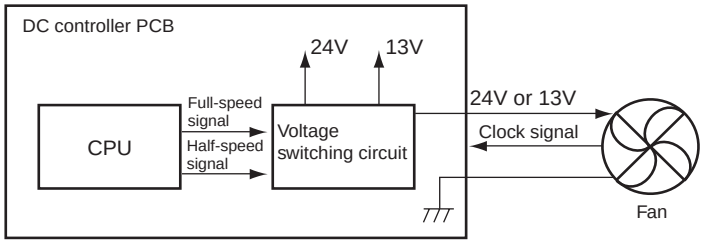
F-10-2

10.3.2 2-Speed Control

0006-5389

iR2270 / iR2870 / iR3570 / iR4570

The rotation of the 2 fans used in the machine is controlled to 2 different speeds by the voltage switchover circuit of the individual fans.



F-10-3

10.3.3 Sequence of Operation

0006-5390

iR2270 / iR2870 / iR3570 / iR4570

1. Standby Mode, Sleep Mode

In standby mode or sleep mode, the heat discharge fan (front, rear; FM1/2) is at rest.

2. Printing

While printing is under way, the fans are switched between full speed and half speed depending on whether the machine is in full speed mode or half speed mode and the reading of the environment sensor (HU1).

- Double-Side Printing

T-10-4

Environment sensor (HU1) reading	Full speed, half speed
25 deg C or more	Full speed
Less than 25 deg C	Half speed

- Single-Sided Printing

T-10-5

Environment sensor (HU1) reading	Full speed, half speed
30 deg C or ore	Full speed
Less hand 30 deg C	Half speed

Note 1:

While the machine is in continuous printing mode, the insertion of one or more double-sided prints will start the control used for double-sided printing.

Note 2:

The printing interval covers the interval up to when the fixing motor (M3) stops rotation.

10.4 Power Supply System

10.4.1 Power Supply

10.4.1.1 Route of Power Inside the Printer Unit 0008-0541

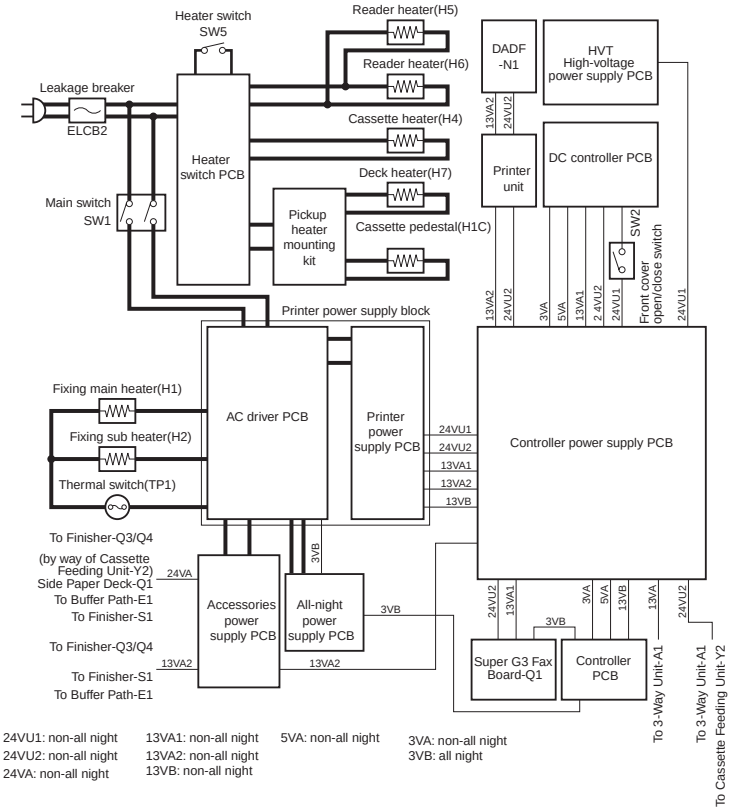
iR2270 / iR2870 / iR3570 / iR4570

The machine's DC power is controlled by the printer unit power supply PCB.
The following shows the functions of the individual power supply PCBs used or accessories and the distribution of power:

T-10-6

Name	Description	Remarks
Printer unit power supply PCB	Generates DC power (24 V, 13 V); supplies DC power to the controller power supply PCB and cassette pedestal.	
Accessories power supply PCB	Supplies power to the side paper deck, buffer path, and finisher.	
Main switch	Turns on/off the power to the AC driver PCB.	
Door switch	Turns on/off 24 VU1 to the DC controller PCB.	
Leakage breaker	Cuts power in the event of an error.	
Environment heater switch PCB	Turns on/off power to the cassette heater, printer unit heater, and deck heater.	Optional
High-voltage power supply PCB	Generate various high voltage.	
AC driver PCB	Supplies AC power to the printer unit power supply PCB, accessories power supply PCB, Supplies AC power to all-night power supply PCB; drives the fixing system.	
Controller power supply PCB	Supplies DC power to the 3-way unit, fax board, controller, HVT and DC controller PCB; generates DC power (13V, 5V, 3.3V). Generates DC power (5V,3.3V).	

Name	Description	Remarks
All-night power supply PCB	Generates and supplies all-night power (3 VB).	



F-10-4

10.4.1.2 Power Supply Route in the Reader Unit

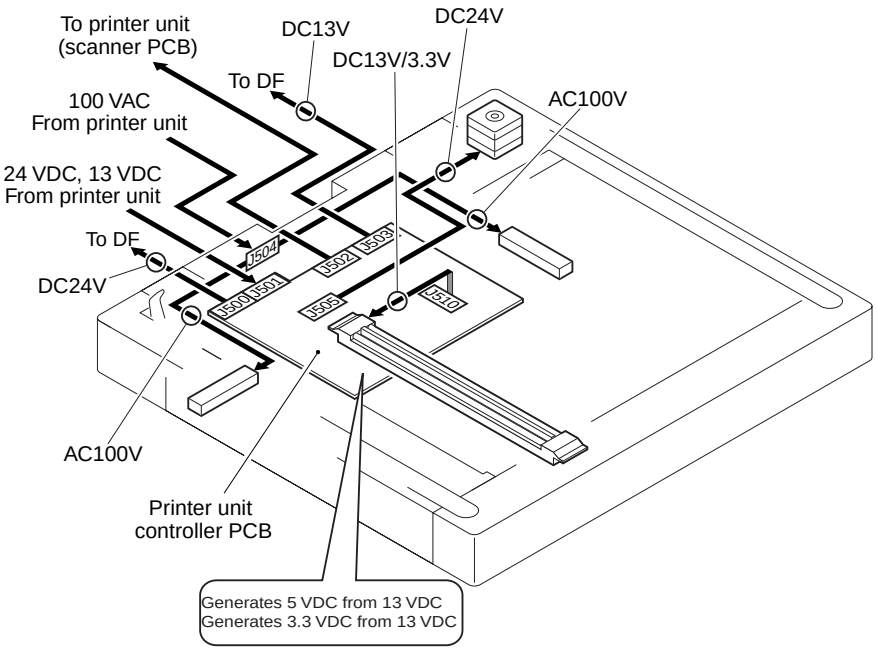
0006-5393

iR2270 / iR2870 / iR3570 / iR4570

The printer unit controller PCB generates the following DC voltages using the 13 VDC supplied by the printer unit:

- 24 VDC (for motor drive)
- 13 VDC (for LED array)
- 5 VDC (for sensor drive)
- 3.3 VDC (for IC drive/for CCD drive)

24 VDC power is used to drive the motors, while 13 VDC power is used to turn on the LED array for illumination of originals.



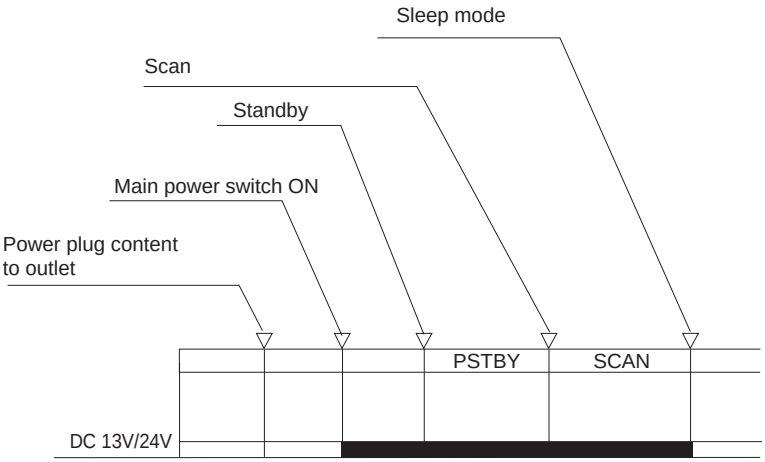
F-10-5

10.4.1.3 Timing of Supply to the Reader Unit

0006-5394

iR2270 / iR2870 / iR3570 / iR4570

The reader unit is supplied with 24 VDC/1.3 VDC by the printer unit at such times as described below.



F-10-6

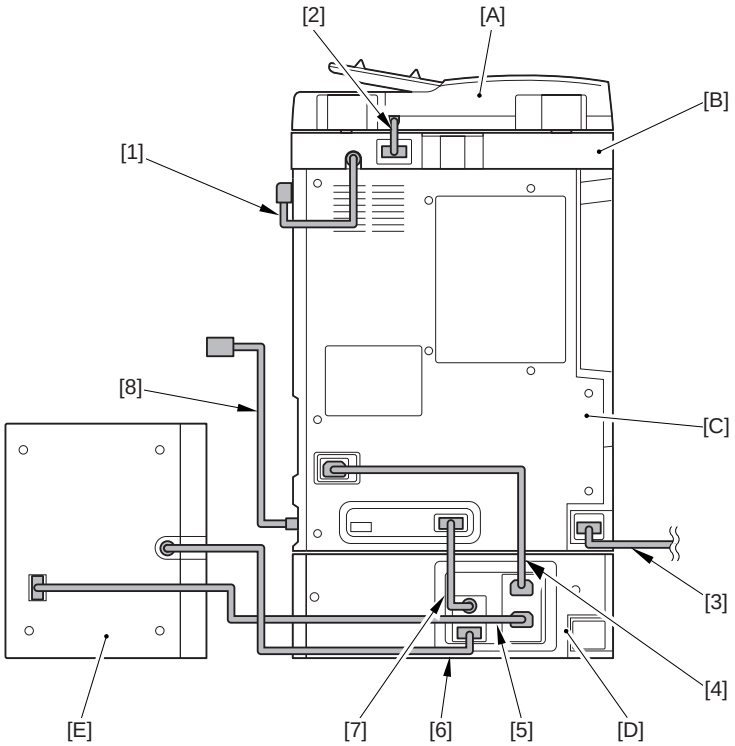
10.4.1.4 Connections to Various Accessories

0006-5395

iR2270 / iR2870 / iR3570 / iR4570

The following diagram shows the connections between the printer unit and the various accessories used for the

supply of power:



F-10-7

[1] Printer unit power cable
[2] DADF I/F cable
[3] Finisher-Q3, Saddle Finisher-Q4 I/F cable
[4] Pickup heater cable
[5] Side deck heater cable
[6] Side deck I/F cable
[7] Cassette pedestal I/F cable
[8] AC input

[A] DADF-N1
[B] Printer unit
[C] Printer unit
[D] 2-Cassette Pedestal-Y2
[E] Side Paper Deck-Q1

10.4.2 Rated Output of the DC Power Supply PCB

10.4.2.1 Rated Output of the Printer Unit Power Supply PCB 0006-5642

iR2270 / iR2870 / iR3570 / iR4570

The following are the ratings and the tolerances of the printer unit power supply PCB:

T-10-7

Output	13VA1	13VA2	13VB	24VU1	24VU2
All-night/ non-all night	non-all night	non-all night	non-all night	non-all night	
Rated output	13.2V	13.2V	13.2V	24V	
Power supply tolerance	+/-3%	+/-3%	+/-3%	+5, -5% (0.1 to 8A)	
				+8%, -6% (from 0A to 0.1 A, from 8A to 10A)	

10.4.2.2 Rated Output of the Controller Power Supply PCB 0006-5643

iR2270 / iR2870 / iR3570 / iR4570

The following are the ratings and the power supply tolerances of the controller power supply PCB:

T-10-8

Output	3VA	5VA
All-night/non-all night	non-all night	non-all night
Rated output	3.4V	5.1V
Power supply tolerance	+/-4%	+/-3%

10.4.2.3 Rated Output of the Accessories Power Supply PCB 0006-5644

iR2270 / iR2870 / iR3570 / iR4570

The following are the ratings and the power supply tolerances of the accessories power supply PCB:

T-10-9

Output	24VA
All night/non-all night	non -all night
Rated output	24V

Output	24VA
Power supply tolerance	+/-5% (from 0.1A to 6.5A) +8%,-6% (from 0A to 0.1A, from 6.5 to 12A)

10.4.2.4 Rated Output of the All-Night Power Supply PCB 0006-5646

iR2270 / iR2870 / iR3570 / iR4570

The following are the ratings and the power supply tolerances of the all-night power supply PCB:

T-10-10

Output	3VB
All-night/non-all night	all night
Rated output	3.4V
Power supply tolerance	+/-3%

10.4.3 Protection Function

10.4.3.1 Protective Mechanisms 0006-5396

iR2270 / iR2870 / iR3570 / iR4570

The machine's DC power supply PCB and accessories power supply PCB are equipped with an over-current protective mechanism and an over-voltage protective mechanism that will automatically shut off the output voltage to protect its electrical circuitry in the event of a short circuit or other fault in any of its loads causing over-current.
In the event of a fault in the 3 VB power (all-night power supply), all supplies of power will be shut off. A fault in other power supplies will shut off power to all loads except for 3 VB.
If a malfunction occurs in 3VB (all-night power supply), it is necessary to turn off the main power switch of the printer unit, remove the cause triggering the protection circuit, and replace the all-night power supply PCB. (The fuse of the all-night power supply PCB is likely to have blown.)
For other cases than above, the protection circuit can be reset by turning off the main power switch of the printer unit, removing the cause triggering the protection circuit, leaving the printer unit alone for more than 3 min, and tuning on the power again.

10.4.4 Backup Battery

10.4.4.1 Backup Battery 0008-0861

iR2270 / iR2870 / iR3570 / iR4570

The controller PCB and the DC controller PCB are equipped with a lithium battery (1 pc. each) to serve as a source of power, backing up various data in the even of power failure.

T-10-11

Controller PCB	manganese dioxide lithium battery (3 V, 1000 mAh)
DC controller PCB	lithium battery (3 V, 600 mAh)
Life	DC controller PCB: 7 yr or less Controller PCB: 8.8 yr or more (with the power plug disconnected)
Replacement	The batteries cannot be replaced on their own in the field.

⚠

Be sure to exercise care whenever you have to replace the battery. In certain cases, it may explode.
Do not use a battery which is not of a type specifically indicated (same name, or equivalent).
Dispose of any used battery according to the instructions of its manufacturer.

10.4.5 Energy-Saving Function

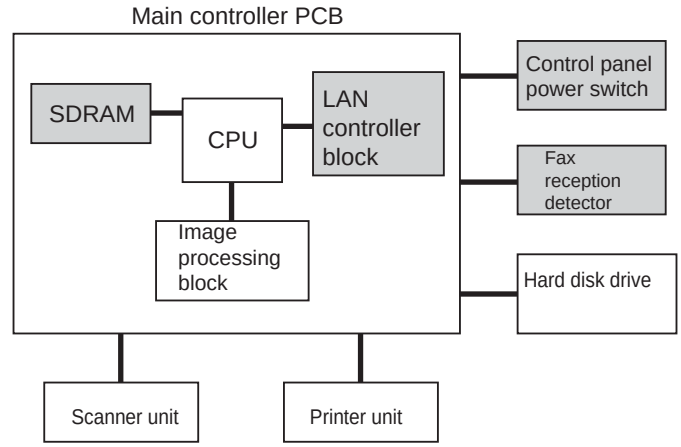
10.4.5.1 Overview 0006-5741

iR2270 / iR2870 / iR3570 / iR4570

1. Standby Mode
When the machine is in standby mode, all its power supplies are provided with power, and the machine is ready for immediate operation.
2. Sleep Mode
2-1. Sleep 1
When the machine is in sleep mode 1, its control panel remains off, and the polygon motor (M1) will not rotate even when any of the control panel keys is pressed. In this mode, the machine is provided with power as in standby mode.

2-2. Sleep 3
When the machine is in sleep mode 3, only 3 VB is available. The machine will move to standby mode from sleep 3 in response to any of the following:
- print job
- press on the control panel power switch
- incoming fax

The following shows the sections of the machine that are provided with power in sleep 3:



F-10-8

3. AC Off Mode

When the machine is in AC off mode, its power swish is off. All its power supplies and its heater control mechanism are off.

10.4.5.2 Machine as Supplied with Power

0006-6167

iR2270 / iR2870 / iR3570 / iR4570

- Standby Mode, Sleep Mode, AC Off Mode

T-10-12

			Stand-by mode	**Sleep mode**		**AC off mode**
				1	**3**	
		Remote 1	ON	ON	OFF	OFF
		Remote 2	ON	ON	OFF	OFF
Reader unit	non-all night	13VA2	ON	ON	OFF	OFF
	non-all night	24VU2	ON	ON	OFF	OFF

			Stand-by mode	Sleep mode		AC off mode
				1	3	
DC controller PCB	non-all night	3VA	ON	ON	OFF	OFF
	non-all night	5VA	ON	ON	OFF	OFF
	non-all night	13VA1	ON	ON	OFF	OFF
	non-all night	24VU1	ON	ON	OFF	OFF
	non-all night	24VU2	ON	ON	OFF	OFF
Main controller PCB	non-all night	3VA	ON	ON	OFF	OFF
	all night	3VB	ON	ON	ON	OFF
	non-all night	5VA	ON	ON	OFF	OFF
	non-all night	12VA	ON	ON	OFF	OFF
Fax	all night	5VS	ON	ON	ON	OFF
	non-all night	13VA1	ON	ON	OFF	OFF
	non-all night	24VU2	ON	ON	OFF	OFF

Memo:

The power supply output state is determined according to combinations of remote 1 and 2. States, i.e., remote 1 and 2, are output from the main controller PCB.

10.5 Parts Replacement Procedure

10.5.1 Main Drive Assembly

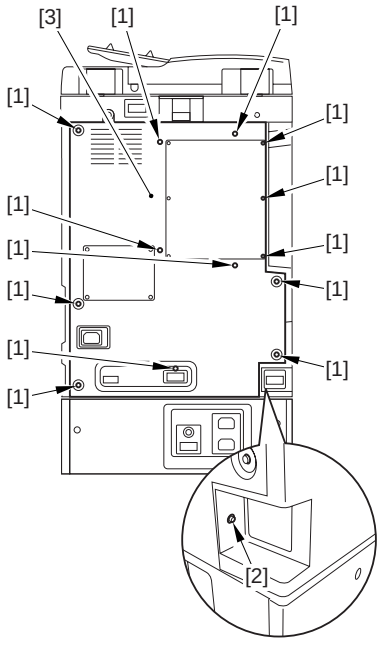
10.5.1.1 Removing the Rear Cover 0007-6423

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 13 screws [1] and then the other screw [2]; then, detach the rear cover [3].

⚠

If the left cover (lower) has already been detached, the screw [3] should also have been removed.

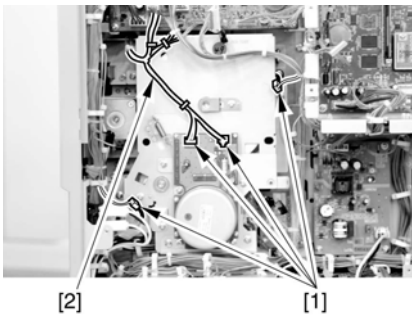


F-10-9

10.5.1.2 Removing the Main Drive Assembly 0007-6424

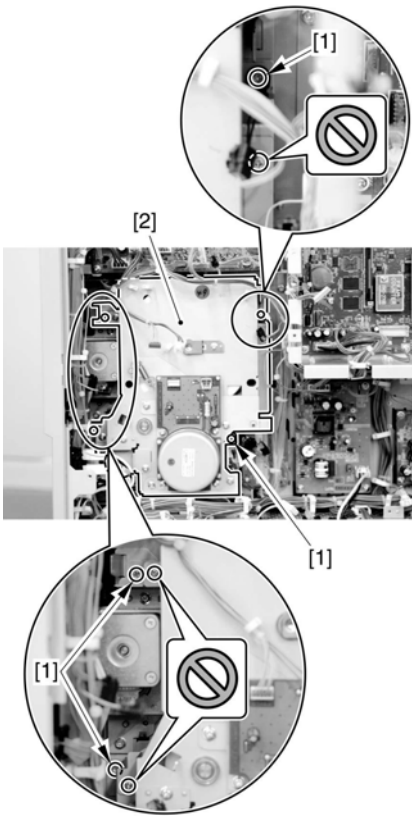
iR3570 / iR4570

1) Disconnect the connector [1], and free the harness [2] from the wire saddle.



F-10-10

2) Remove the 4 screws [1], and detach the main drive assembly [2].



F-10-11

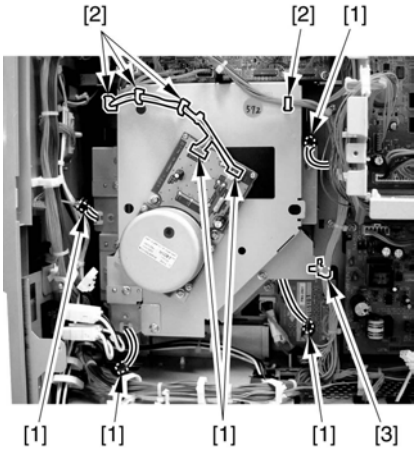
⚠

Do not touch the screws that are glued in place.

10.5.1.3 Removing the Main Drive Assembly 0007-7367

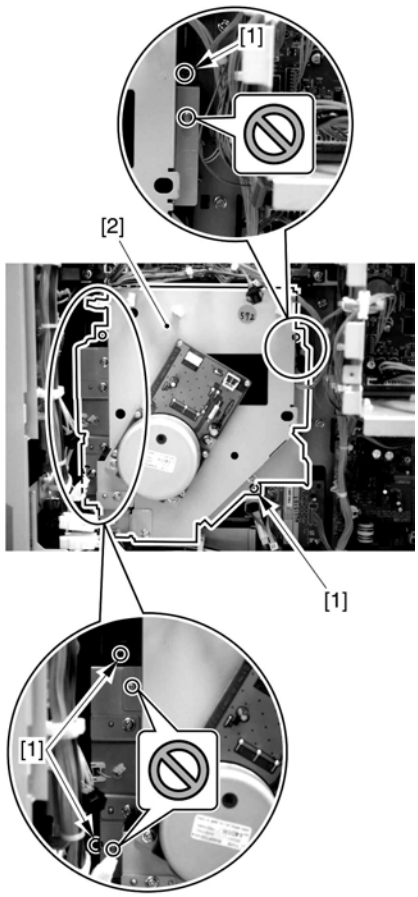
iR2270 / iR2870

1) Disconnect the 6 connectors [1].
2) Free the cable from the 6 cable clamps [2].
3) Remove the re-use band [3].



F-10-12

4) Remove the 4 screws [1], and detach the main drive assembly [2].



F-10-13

10.5.2 Power Supply Unit

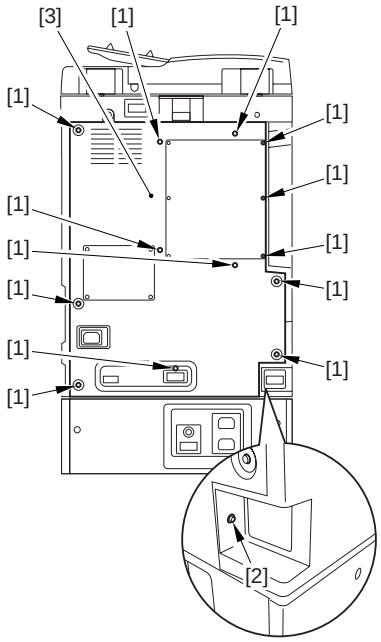
10.5.2.1 Removing the Rear Cover 0007-6375

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 13 screws [1] and then the other screw [2]; then, detach the rear cover [3].

⚠

If the left cover (lower) has already been detached, the screw [3] should also have been removed.



F-10-14

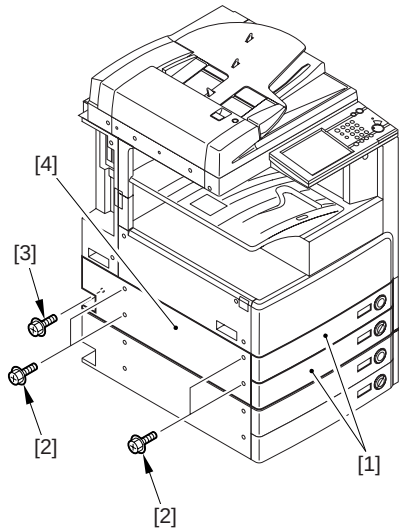
10.5.2.2 Removing the Left Cover (lower) 0007-6376

iR2270 / iR2870 / iR3570 / iR4570

1) Take out the cassettes 1 and 2 [1].
2) Remove the 4 screws [2] and the other screw [3]; then, detach the left cover (lower) [4].

⚠

If the rear cover has already been detached, the screw [3] should also have been removed.

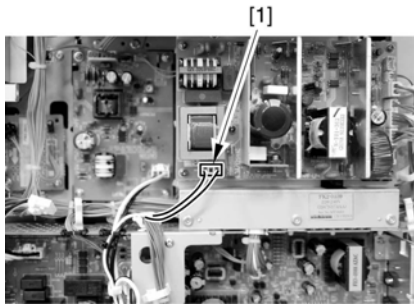


F-10-15

10.5.2.3 Removing the Accessories Power Supply PCB 0007-6378

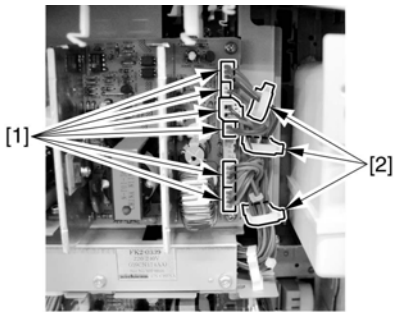
iR2270 / iR2870 / iR3570 / iR4570

1) Disconnect the connector J640 [1].



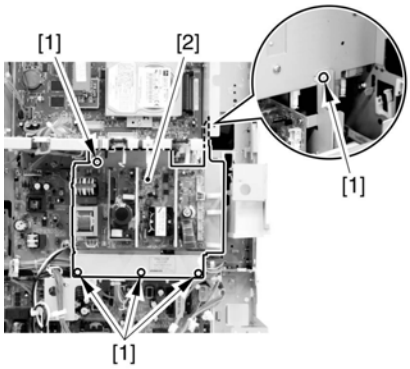
F-10-16

2) Remove the 6 connectors [1], and free the harness from the cable clamp [2].



F-10-17

3) Remove the 5 binding screws [1], and detach the accessories power supply PCB [2].

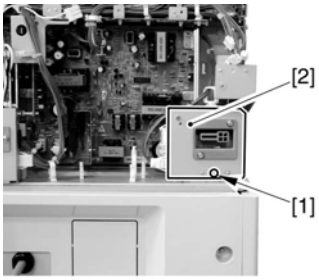


F-10-18

10.5.2.4 Removing the Main Power Supply 0007-6379

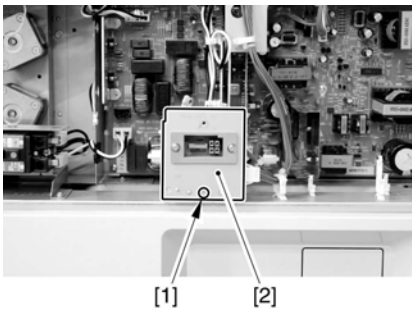
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the screw [1], and disconnect the finisher connector [2].



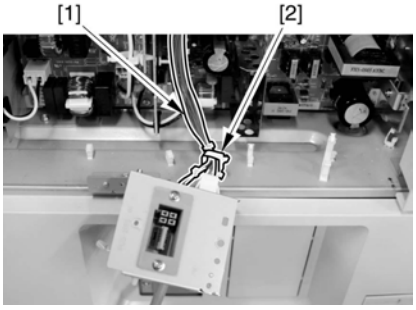
F-10-19

2) Remove the screw [1], and disconnect the pedestal connector [2].



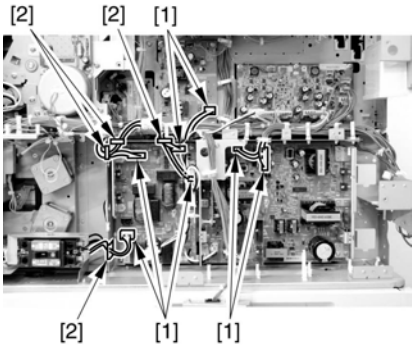
F-10-20

3) Free the harness [1] of the pedestal connector from the lamp [2].



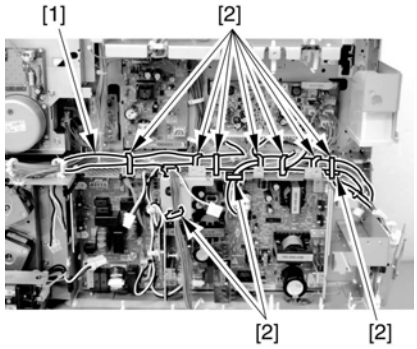
F-10-21

4) Disconnect the 7 connectors [1], and free the harness from the 4 clamps [2].



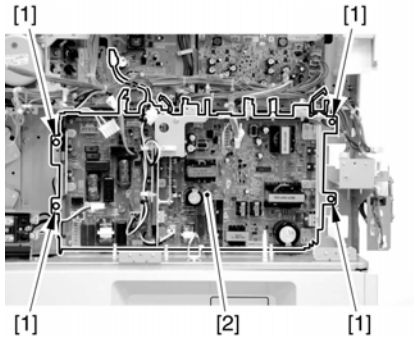
F-10-22

5) Free the harness [1] from the clamp [2].



F-10-23

6) Remove the 4 screws [1], and detach the main power supply [2].



F-10-24

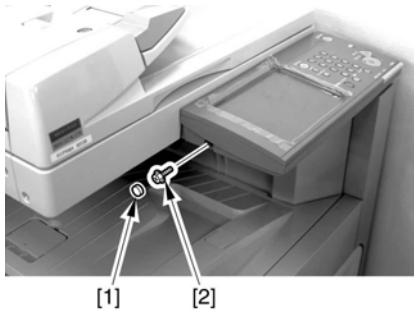
10.5.3 Control Panel

10.5.3.1 Removing the Control Panel

0007-6426

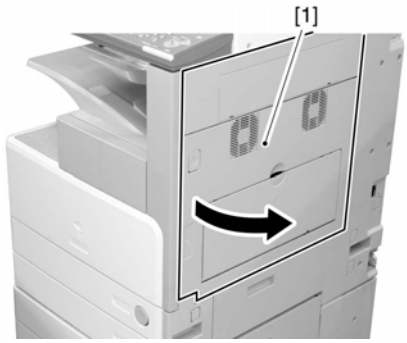
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the rubber cap [1], and remove the screw [2].



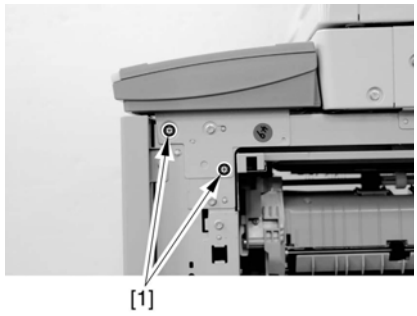
F-10-25

2) Open the right door [1].



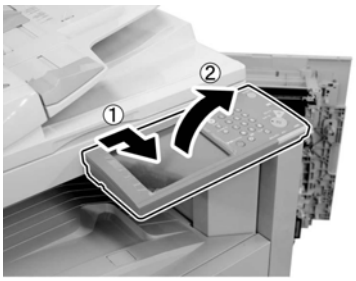
F-10-26

3) Remove the 2 screws [1].



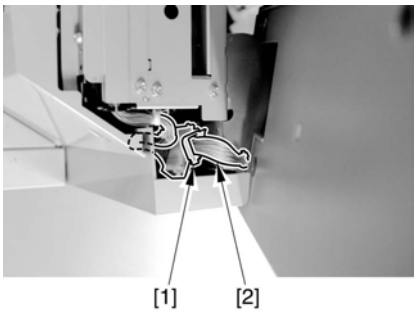
F-10-27

4) Slide the control panel [1] in the direction of the arrow.



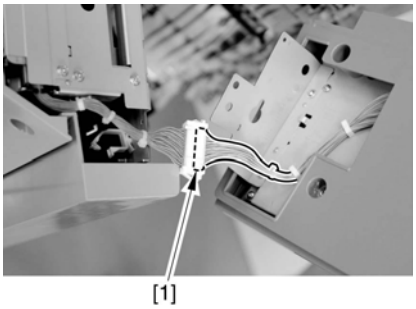
F-10-28

5) Free the harness [2] from the clamp [1].



F-10-29

6) Disconnect the connector [1], and detach the control panel.



F-10-30

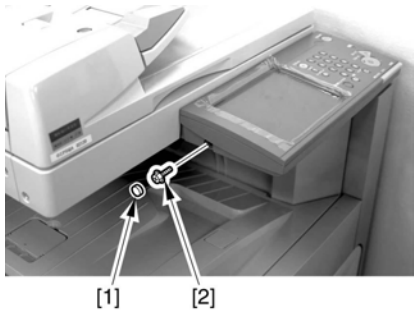
10.5.4 Control Panel LCD Unit

10.5.4.1 Removing the Control Panel

0007-7569

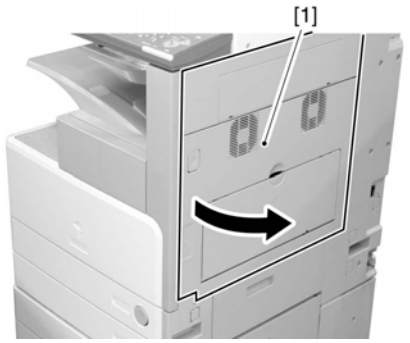
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the rubber cap [1], and remove the screw [2].



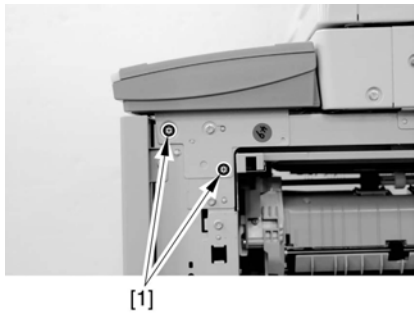
F-10-31

2) Open the right door [1].



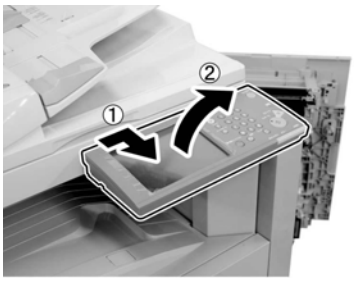
F-10-32

3) Remove the 2 screws [1].



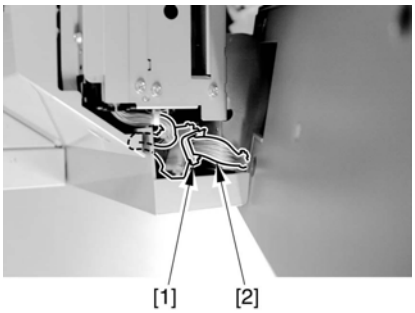
F-10-33

4) Slide the control panel [1] in the direction of the arrow.



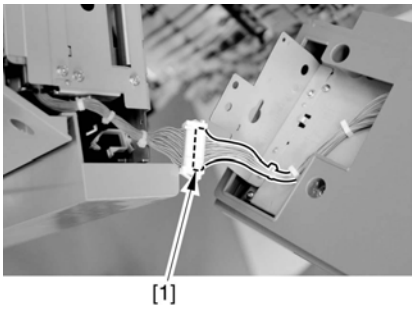
F-10-34

5) Free the harness [2] from the clamp [1].



F-10-35

6) Disconnect the connector [1], and detach the control panel.

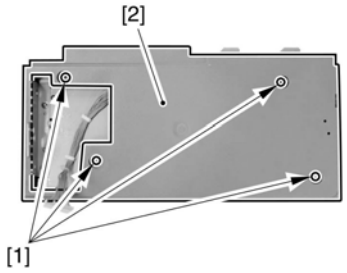


F-10-36

10.5.4.2 Removing the Control Panel Base Cover 0007-7571

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 4 screws [1], and detach the control panel base cover [2].



F-10-37

10.5.4.3 Removing the Control Panel Inside Frame 0007-7573

iR2270 / iR2870 / iR3570 / iR4570

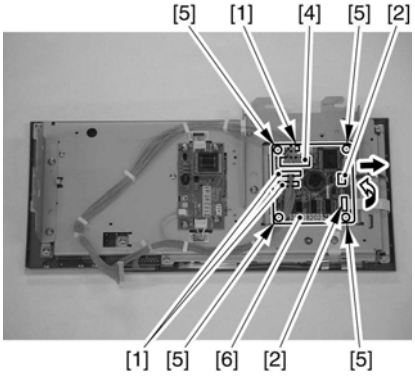
1) Disconnect the 2 connectors between the control panel PCB and the control panel key switch PCB; then, free the harness from the 2 clamps [2].
2) Disconnect the 2 connectors [3] between the control panel PCB and the control panel LCD.

⚠

Be sure to move the stopper in the direction of the arrow to detach. These 2 stoppers are moved in different directions.

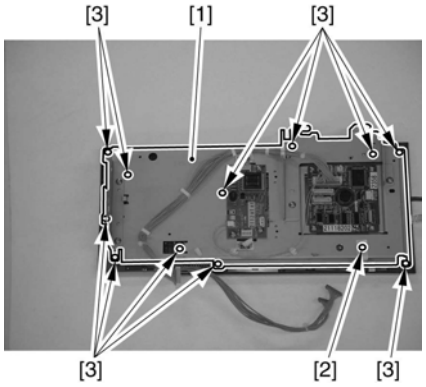
---

3) Disconnect the 2 connectors [3] between the control panel inverter PCB.



F-10-38

4) Remove the control panel inside frame [1]. (2 TP screws [2], and 11 self-tapping screws [3])

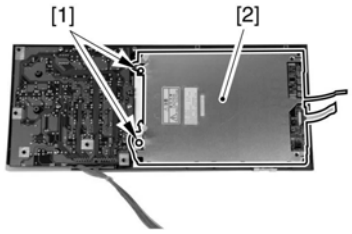


F-10-39

10.5.4.4 Removing the Control Panel LCD 0007-7575

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the screw [1], and detach the control panel LCD [2].



F-10-40

10.5.5 Removing the DC Controller PCB

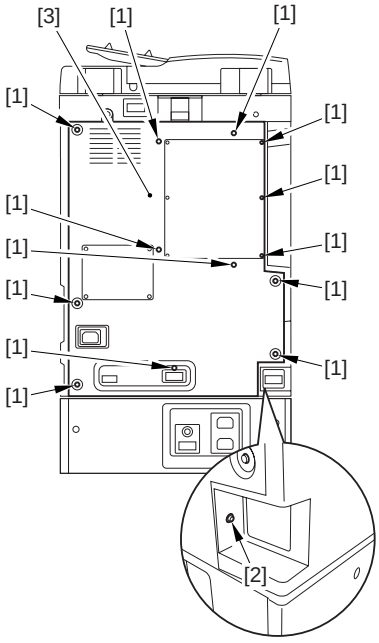
10.5.5.1 Removing the Rear Cover 0007-7370

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 13 screws [1] and then the other screw [2]; then, detach the rear cover [3].

⚠

If the left cover (lower) has already been detached, the screw [3] should also have been removed.

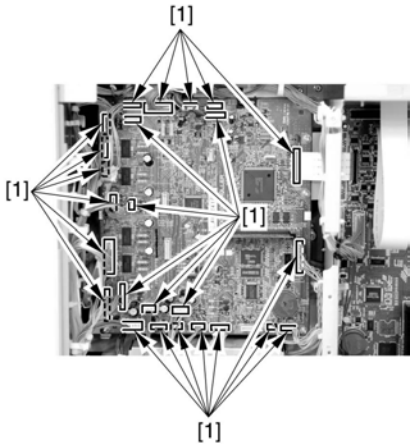


F-10-41

10.5.5.2 Removing the DC Controller PCB 0007-6398

iR2270 / iR2870 / iR3570 / iR4570

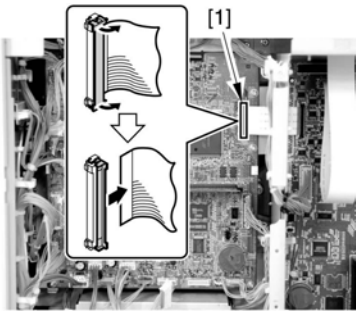
1) Disconnect the connector [1].



F-10-42

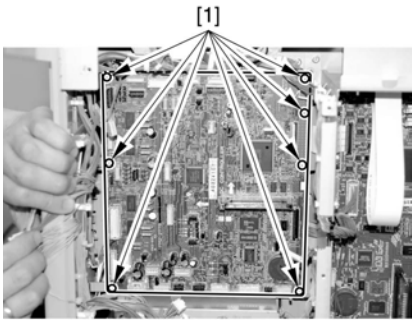
⚠

How to Remove the Flexible Cable [1]



F-10-43

2) Remove the screw [1], and detach the DC controller PCB.

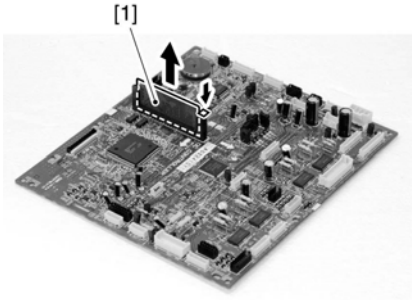


F-10-44

⚠

Points to Note When Replacing the DC Controller PCB

Be sure to remove the boot ROM [1] from the exiting DC controller PCB, and mount it to the new DC controller PCB.



F-10-45

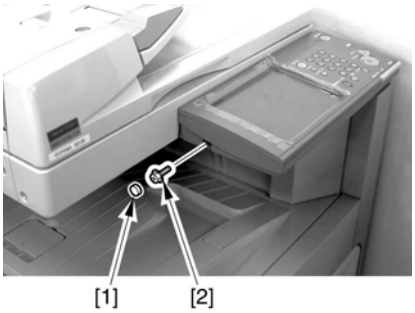
10.5.6 Control Panel Inverter PCB

10.5.6.1 Removing the Control Panel

0007-6428

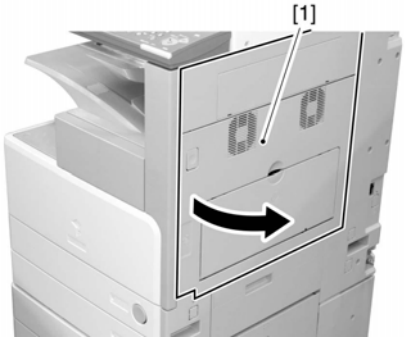
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the rubber cap [1], and remove the screw [2].



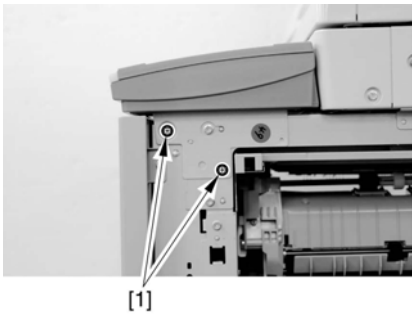
F-10-46

2) Open the right door [1].



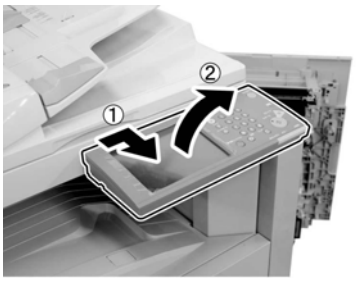
F-10-47

3) Remove the 2 screws [1].



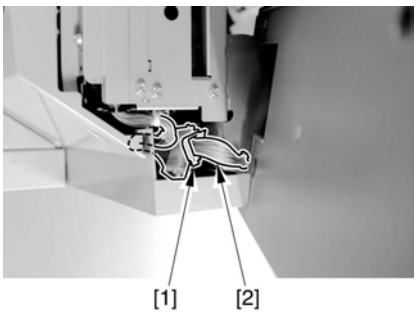
F-10-48

4) Slide the control panel [1] in the direction of the arrow.



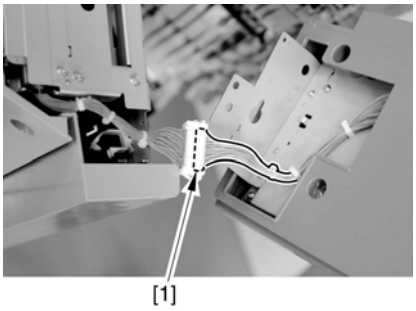
F-10-49

5) Free the harness [2] from the clamp [1].



F-10-50

6) Disconnect the connector [1], and detach the control panel.

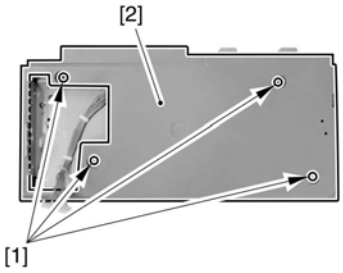


F-10-51

10.5.6.2 Removing the Control Panel Base Cover 0007-6430

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 4 screws [1], and detach the control panel base cover [2].

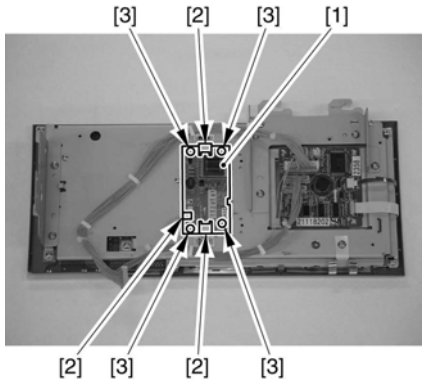


F-10-52

10.5.6.3 Removing the Control Panel Inverter PCB 0007-6466

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the control panel inverter PCB [1]. (3 connectors [2], 4 screws [3])



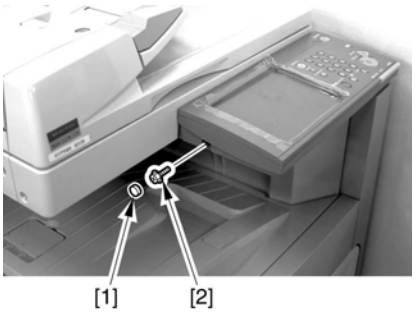
F-10-53

10.5.7 Control Panel Key Switch PCB

10.5.7.1 Removing the Control Panel 0007-6437

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the rubber cap [1], and remove the screw [2].



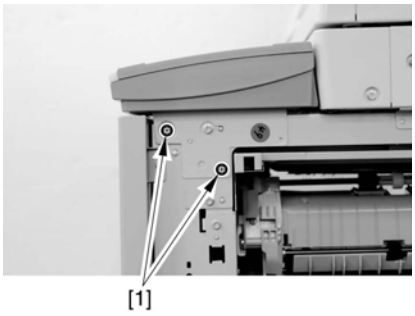
F-10-54

2) Open the right door [1].



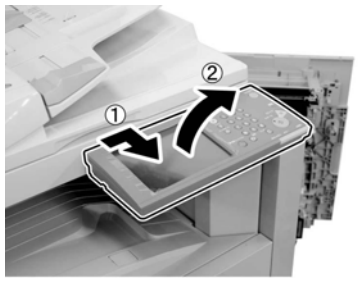
F-10-55

3) Remove the 2 screws [1].



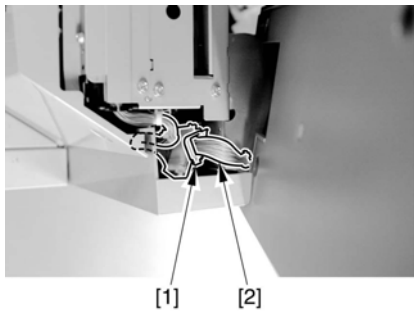
F-10-56

4) Slide the control panel [1] in the direction of the arrow.



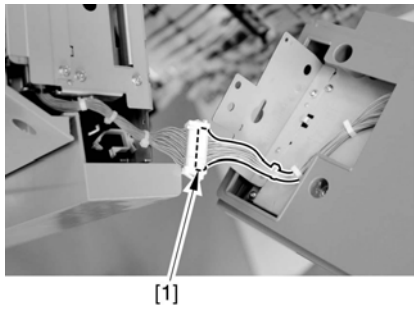
F-10-57

5) Free the harness [2] from the clamp [1].



F-10-58

6) Disconnect the connector [1], and detach the control panel.

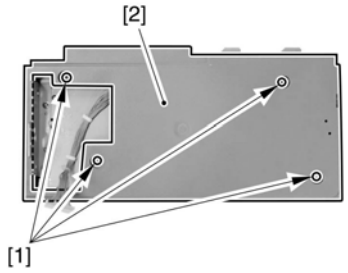


F-10-59

10.5.7.2 Removing the Control Panel Base Cover 0007-6438

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 4 screws [1], and detach the control panel base cover [2].



F-10-60

10.5.7.3 Removing the Control Panel Frame 0007-6456

iR2270 / iR2870 / iR3570 / iR4570

1) Disconnect the 2 connectors [1] between the control panel PCB and the control panel key switch PCB; then, free the harness front the 3 clamps [2].
2) Disconnect the 2 connectors [3] between the control panel PCB and the control panel LCD.

⚠

Be sure to move the stopper in the direction of the arrow. These 2 stoppers are moved in different directions.

3) Disconnect the 2 connectors [4] of the control panel inverter PCB.
4) Remove the control panel inside frame [1]. (1 TP screw [2]; 11 self-tapping screws [3])

10.5.7.4 Removing the Control Panel Key Switch PCB 0007-6451

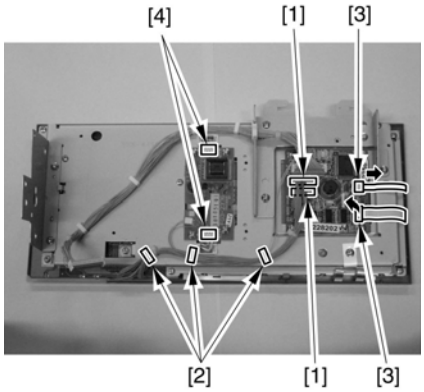
iR2270 / iR2870 / iR3570 / iR4570

1) Disconnect the 2 connectors [3] between the control panel PCB and the control panel LCD.

⚠

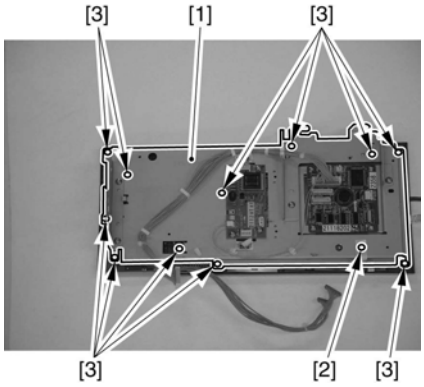
Be sure to move the stopper in the direction of the arrow. These 2 stoppers must be moved in different directions.

2) Disconnect the 2 connectors [4] between the control panel inverter PCB.



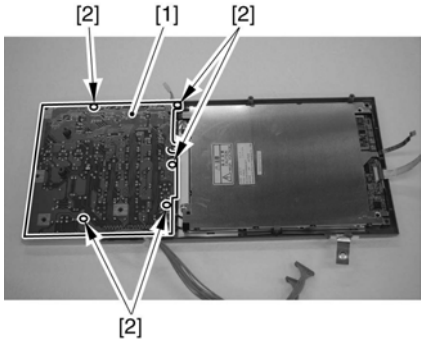
F-10-61

3) Remove the control panel inside frame [1]. (1 TP screw [2]; 11 self-tapping screws [3])



F-10-62

4) Remove the control panel key switch PCB [1]. (5 self-tapping screws [2])



F-10-63

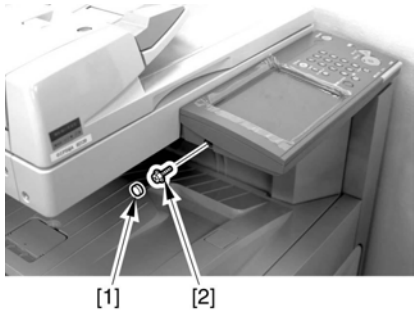
10.5.8 Control Panel CPU PCB

10.5.8.1 Removing the Control Panel

0007-7565

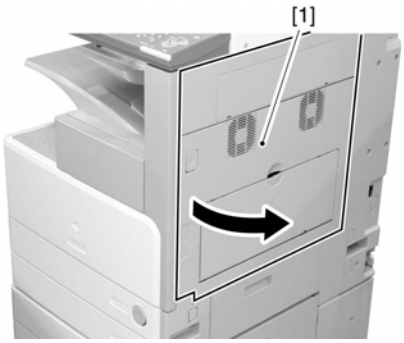
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the rubber cap [1], and remove the screw [2].



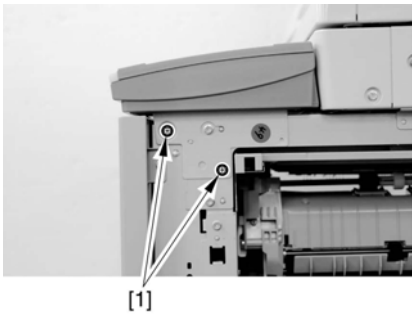
F-10-64

2) Open the right door [1].



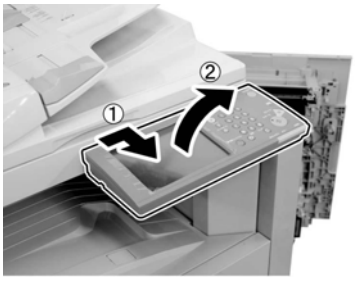
F-10-65

3) Remove the 2 screws [1].



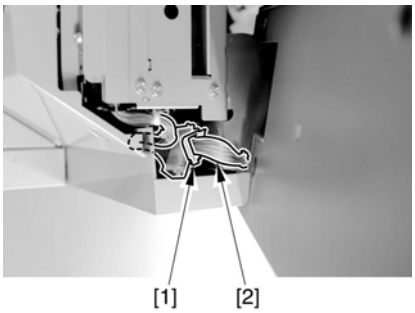
F-10-66

4) Slide the control panel [1] in the direction of the arrow.



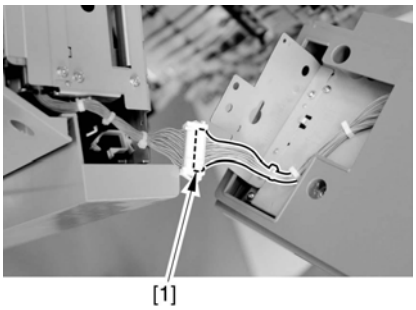
F-10-67

5) Free the harness [2] from the clamp [1].



F-10-68

6) Disconnect the connector [1], and detach the control panel.

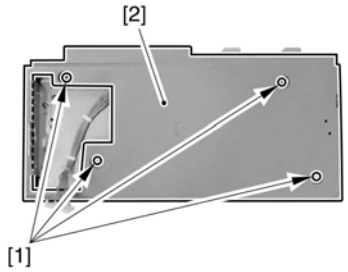


F-10-69

10.5.8.2 Removing the Control Panel Base Cover 0007-7566

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 4 screws [1], and detach the control panel base cover [2].



F-10-70

10.5.8.3 Removing the Controller Panel CPU PCB 0007-7567

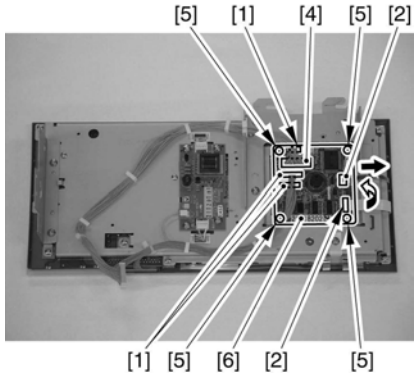
iR2270 / iR2870 / iR3570 / iR4570

1) Disconnect the 3 connectors [1] of the cable used between control panel PCB and the control panel key switch PCB.
2) Disconnect the 2 connectors [2] used between the control panel PCB and the control panel LCD.

⚠

Be sure to move the stopper in the direction of the arrow. Each of the 2 stoppers has its own direction of movement.

3) Disconnect the control panel cable [4].
4) Remove the 4 TP screws [5], and detach the control panel PCB [7].



F-10-71

10.5.9 All Night Power Supply PCB

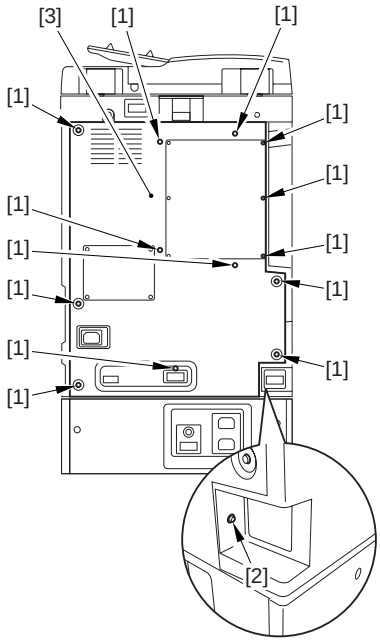
10.5.9.1 Removing the Rear Cover 0007-6385

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 13 screws [1] and then the other screw [2]; then, detach the rear cover [3].

⚠

If the left cover (lower) has already been detached, the screw [3] should also have been removed.

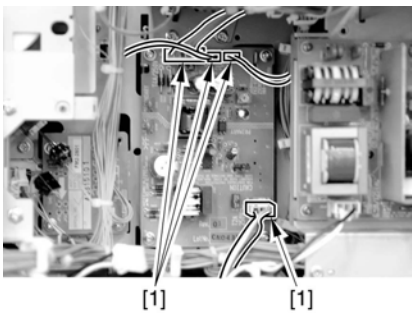


F-10-72

10.5.9.2 Removing the All-Night Power Supply PCB 0007-6386

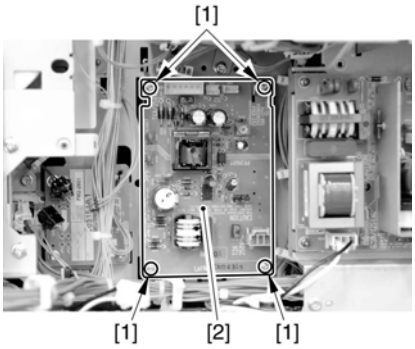
iR2270 / iR2870 / iR3570 / iR4570

1) Disconnect the 4 connectors [1].



F-10-73

2) Remove the 4 screws [1], and detach the all-night power supply PCB [2].



F-10-74

10.5.10 Controller Power Supply PCB

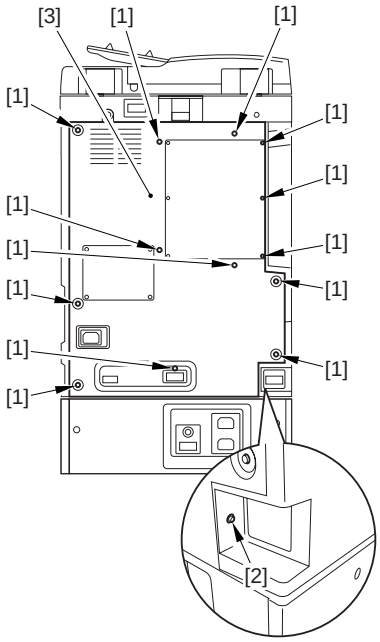
10.5.10.1 Removing the Rear Cover 0007-6380

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 13 screws [1] and then the other screw [2]; then, detach the rear cover [3].

⚠

If the left cover (lower) has already been detached, the screw [3] should also have been removed.



F-10-75

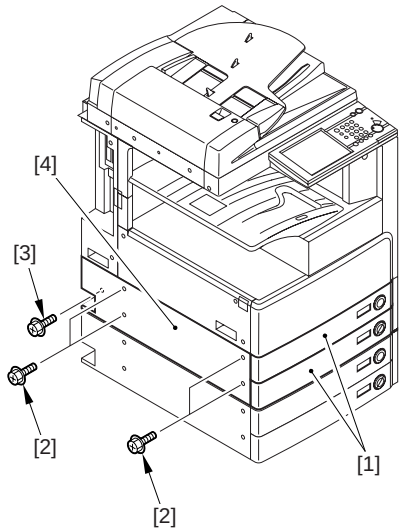
10.5.10.2 Removing the Left Cover (lower) 0007-6381

iR2270 / iR2870 / iR3570 / iR4570

1) Take out the cassettes 1 and 2 [1].
2) Remove the 4 screws [2] and the other screw [3]; then, detach the left cover (lower) [4].

⚠

If the rear cover has already been detached, the screw [3] should also have been removed.

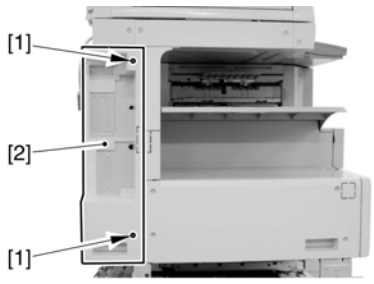


F-10-76

10.5.10.3 Removing the Left Cover (Rear) 0007-6382

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws [1]; then, detach the left cover (rear) [2].

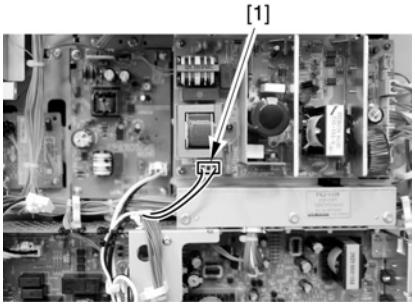


F-10-77

10.5.10.4 Removing the Accessories Power Supply PCB 0007-6383

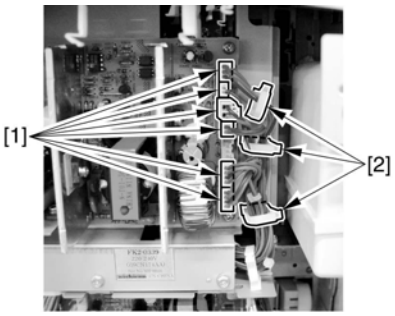
iR2270 / iR2870 / iR3570 / iR4570

1) Disconnect the connector J640 [1].



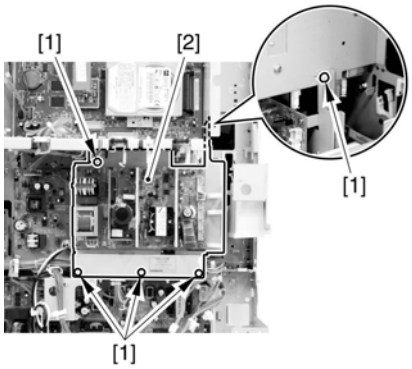
F-10-78

2) Remove the 6 connectors [1], and free the harness from the cable clamp [2].



F-10-79

3) Remove the 5 binding screws [1], and detach the accessories power supply PCB [2].

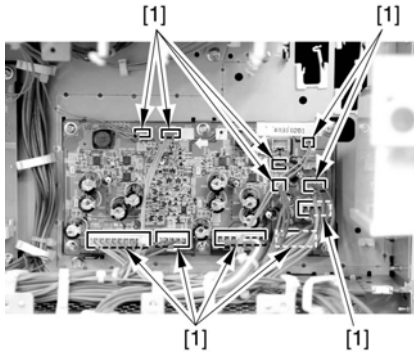


F-10-80

10.5.10.5 Removing the Controller Power Supply PCB 0007-6384

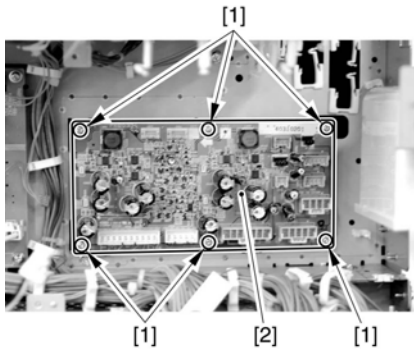
iR2270 / iR2870 / iR3570 / iR4570

1) Disconnect the connector [1].



F-10-81

2) Remove the 6 screws [1], and detach the controller power supply PCB [2].



F-10-82

10.5.11 Option Power Supply PCB

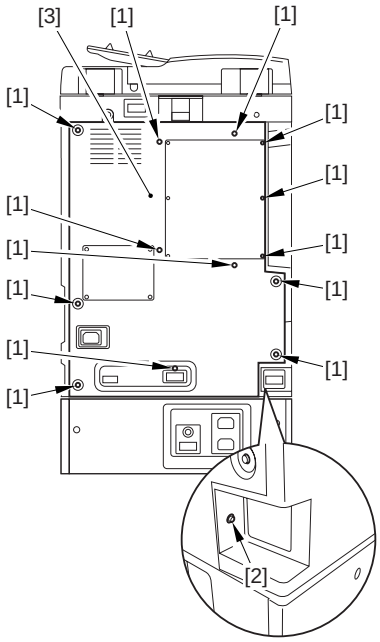
10.5.11.1 Removing the Rear Cover 0007-6370

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 13 screws [1] and then the other screw [2]; then, detach the rear cover [3].

⚠

If the left cover (lower) has already been detached, the screw [3] should also have been removed.



F-10-83

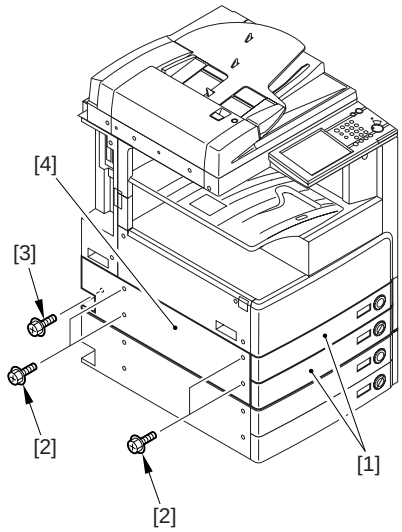
10.5.11.2 Removing the Left Cover (lower) 0007-6371

iR2270 / iR2870 / iR3570 / iR4570

1) Take out the cassettes 1 and 2 [1].
2) Remove the 4 screws [2] and the other screw [3]; then, detach the left cover (lower) [4].

⚠

If the rear cover has already been detached, the screw [3] should also have been removed.

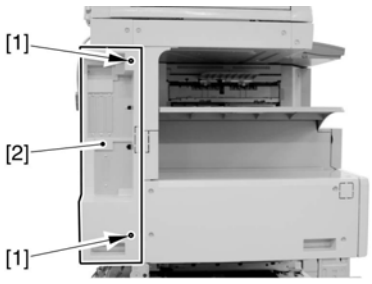


F-10-84

10.5.11.3 Removing the Left Cover (Rear) 0007-6372

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws [1]; then, detach the left cover (rear) [2].

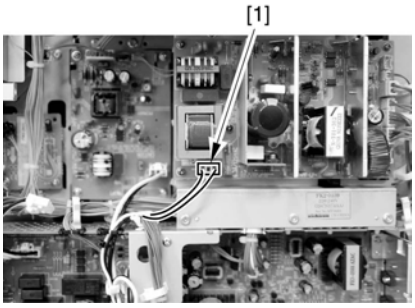


F-10-85

10.5.11.4 Removing the Accessories Power Supply PCB 0007-6373

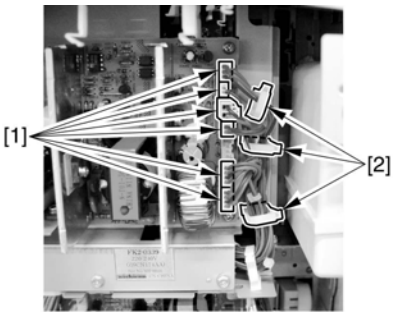
iR2270 / iR2870 / iR3570 / iR4570

1) Disconnect the connector J640 [1].



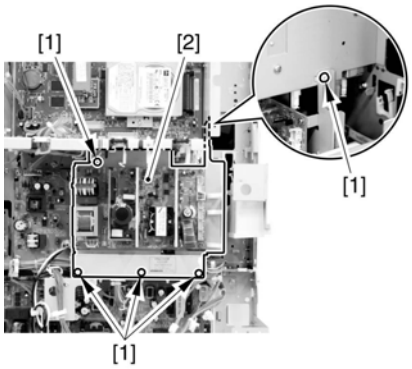
F-10-86

2) Remove the 6 connectors [1], and free the harness from the cable clamp [2].



F-10-87

3) Remove the 5 binding screws [1], and detach the accessories power supply PCB [2].



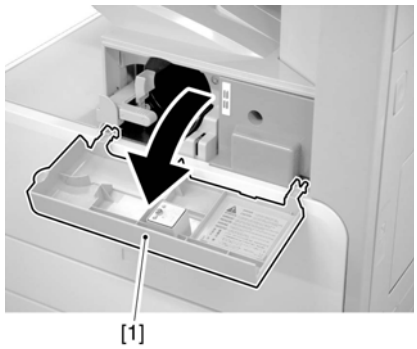
F-10-88

10.5.12 High-Voltage PCB

10.5.12.1 Removing the Front Cover Unit 0007-8021

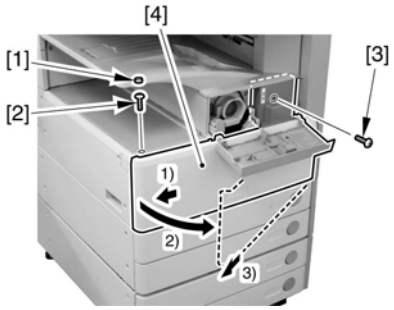
iR2270 / iR2870 / iR3570 / iR4570

1) Open the front cover [1].



F-10-89

2) Remove the face cover rubber [1].
3) Remove the binding screw [2].
4) Remove the RS tightening screw [3].
5) Detach the front cover unit [4] by moving it in the direction of the arrow.

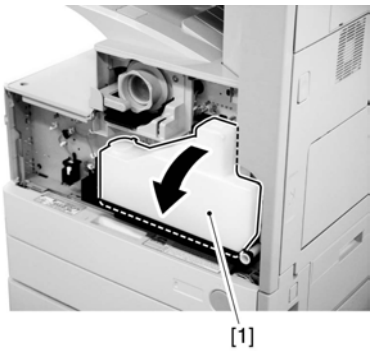


F-10-90

10.5.12.2 Removing the Waste Toner Case 0007-8028

iR2270 / iR2870 / iR3570 / iR4570

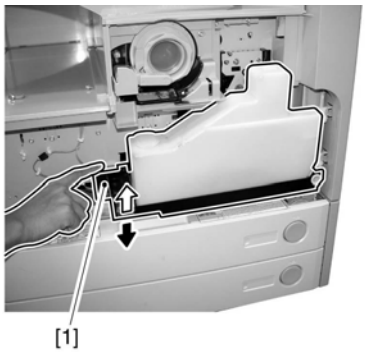
1) Remove the waste toner case [1].



F-10-91

⚠Point to note after attaching the waste toner receptacle

After attaching the waste toner receptacle, move the waste toner full detection lever [1] up and down to make sure that the lever is moved smoothly. Faulty detection may be resulted if the lever is caught in something and is not moved smoothly.

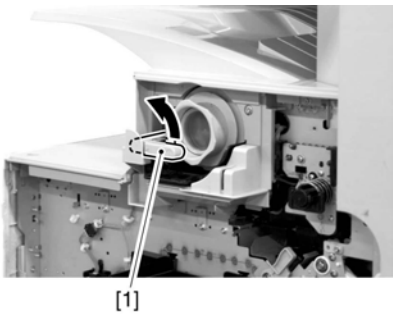


F-10-92

10.5.12.3 Removing the Toner Cartridge 0007-8400

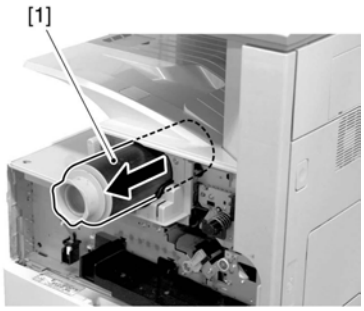
iR2270 / iR2870 / iR3570 / iR4570

1) Shift up the lever [1].



F-10-93

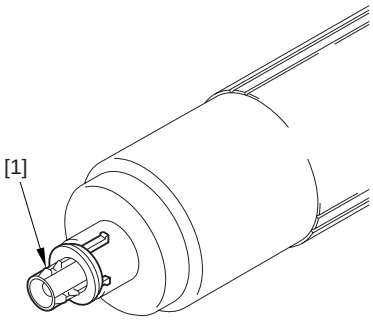
2) Remove the toner cartridge [1].



F-10-94

⚠**Points to Note on Handing the Toner Cartridge**

1. Care should be taken not to bump the toner stop [1] against the covers or the like when and after removing the toner cartridge. Since the toner stop comes off easily, toner scattering may be resulted if it comes off by accident.
2. Keep the toner cartridge horizontal after removing. Since the toner stop [1] comes off easily as mentioned above, toner scattering may be resulted if the toner cartridge is placed with the toner stop side down.



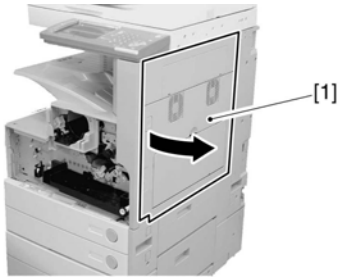
F-10-95

10.5.12.4 Removing the Drum Unit

0007-8401

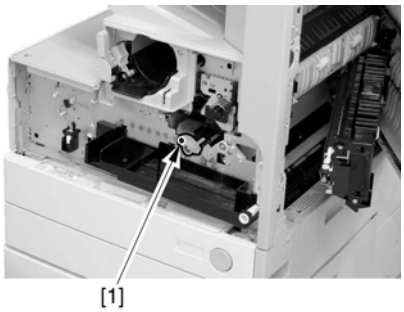
iR2270 / iR2870 / iR3570 / iR4570

1) Open the right door [1].



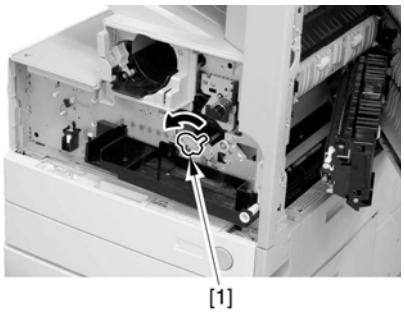
F-10-96

2) Remove the screw [1].



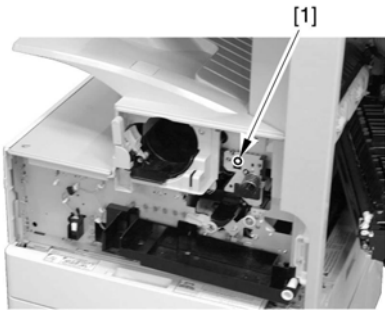
F-10-97

3) Shift the locking lever [1] to the left to release the developing assembly.



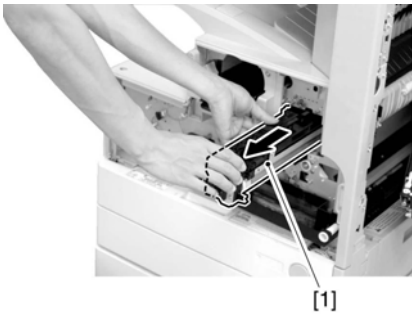
F-10-98

4) Remove the screw [1].



F-10-99

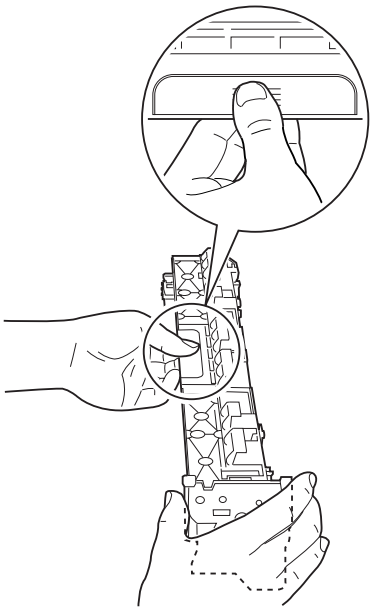
5) Remove the drum unit [1].



F-10-100

⚠

Be sure to hold the drum unit as shown.

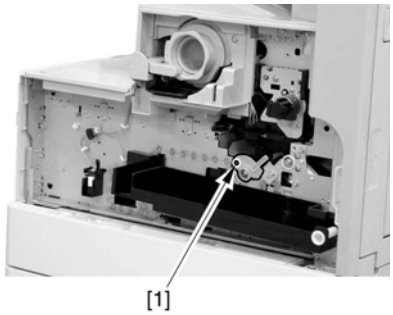


F-10-101

10.5.12.5 Removing the Developing Assembly 0007-8402

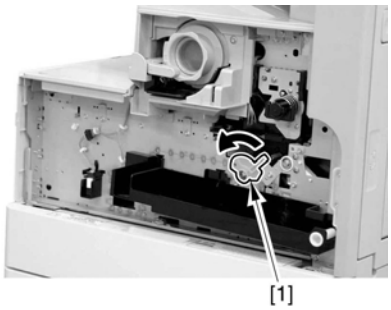
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the screw [1].



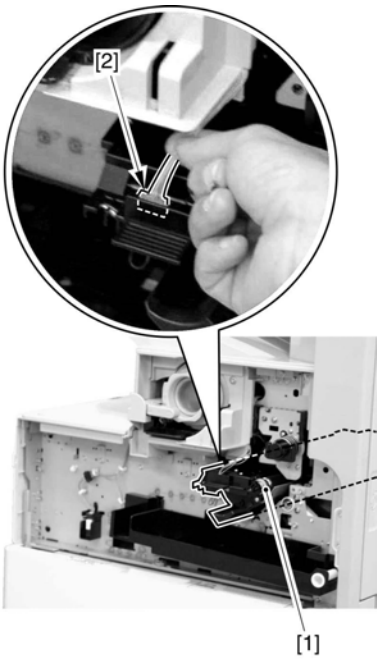
F-10-102

2) Shift the locking lever [1] to the left to release the developing assembly.



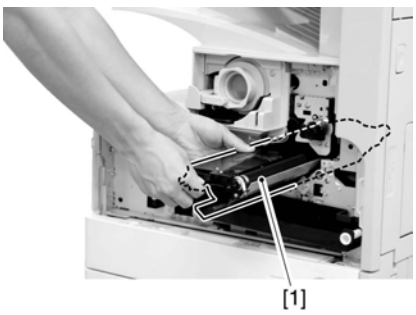
F-10-103

3) Slide the developing assembly [1] slightly to the front; then, disconnect the connector [2].



F-10-104

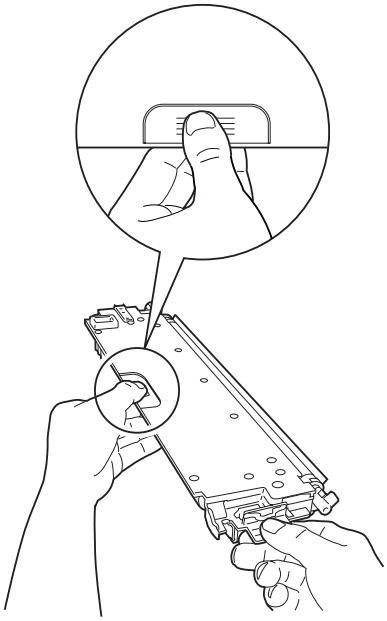
4) Remove the developing assembly [1].



F-10-105

⚠

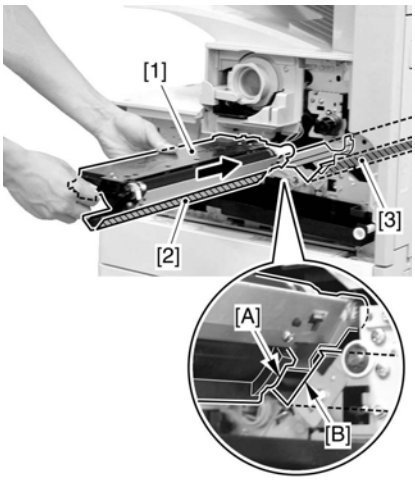
Be sure to hold the developing assembly as shown.



F-10-106

⚠

When fitting the developing assembly, be sure to fit the lower right segment [2] of the developing assembly [1] in the rail [3] of the machine. Thereafter, slide the developing assembly so that [A] of the developing assembly matches [B] of the rail.

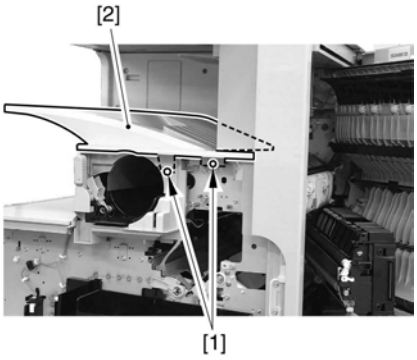


F-10-107

10.5.12.6 Removing the Upper Tray 0007-8403

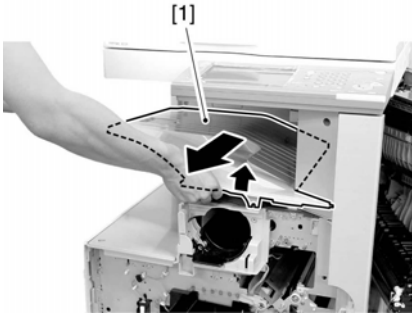
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws [1], and detach the upper tray [2].



F-10-108

Reference:
Lift the front of the upper tray [1], and detach it as if to slide it toward the front.

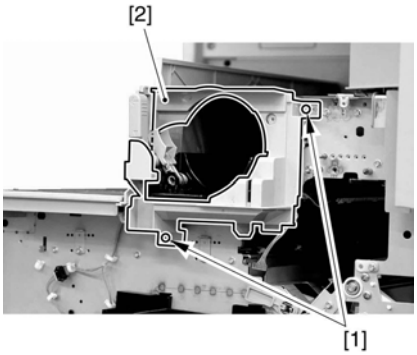


F-10-109

10.5.12.7 Removing the Toner Cartridge Cover 0007-8404

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws [1]; then, detach the toner bottle cover [2].

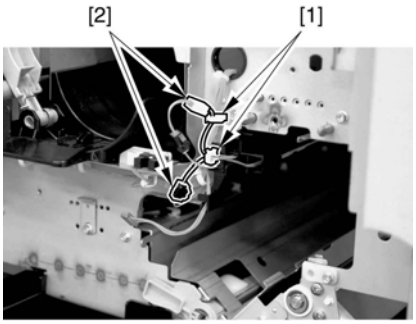


F-10-110

10.5.12.8 Removing the Pre-Exposure Lamp 0007-8405

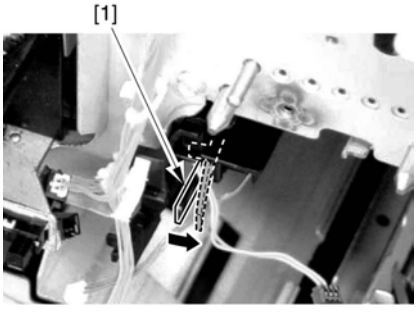
iR2270 / iR2870 / iR3570 / iR4570

1) Open the 2 wire saddles [1], and disconnect the 2 relay connectors [2].

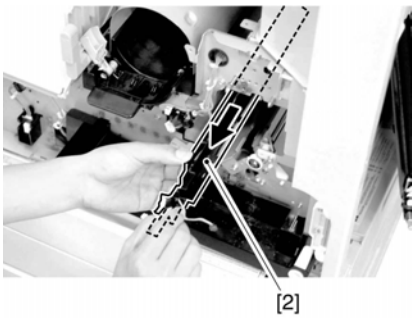


F-10-111

2) While freeing the lock [1] toward the right, detach the pre-exposure lamp [2].



F-10-112

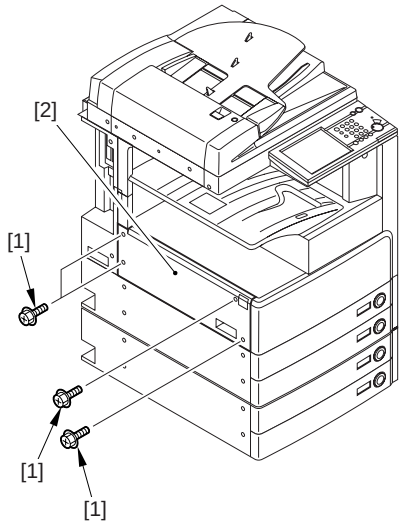


F-10-113

10.5.12.9 Removing the Left Cover 0007-8407

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 4 screws [1], and detach the left cover [2].

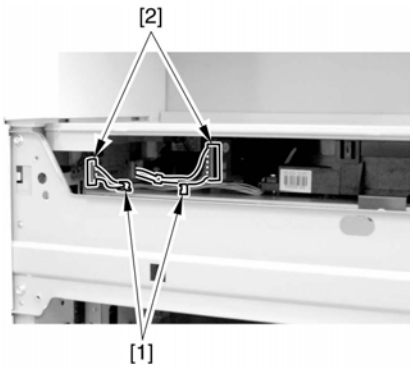


F-10-114

10.5.12.10 Removing the Laser Unit 0007-8409

iR2270 / iR2870 / iR3570 / iR4570

1) Open the 2 wire saddles [1], and disconnect the 2 connectors [2].

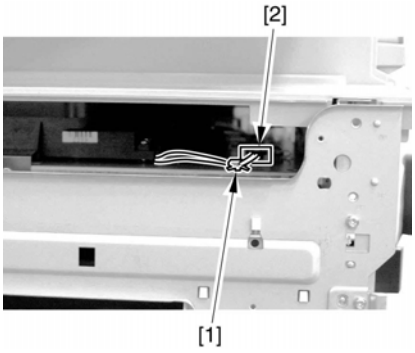


F-10-115

⚠

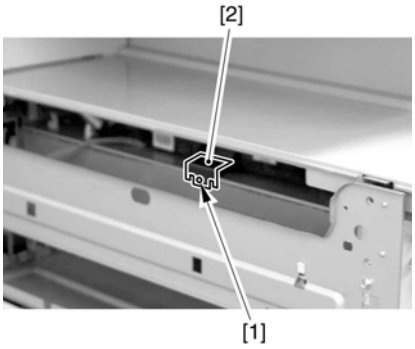
When you have disconnected the connector [1], be sure to take care so that it will not come into contact with the PCB that is mounted to the laser scanner unit. (The PCB is equipped with a laser intensity adjustment variable resistor. Contact with the PCB can change the adjustment setting.)

2) Open the wire saddle [1], and disconnect the connector [2].



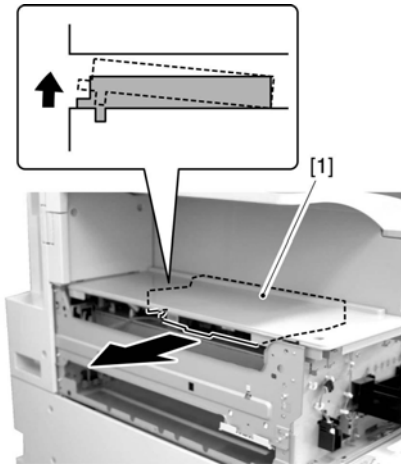
F-10-116

3) Remove the screw [1], and detach the fixing [2].



F-10-117

4) Lift the front of the laser unit [1], and slide it to the front.



F-10-118

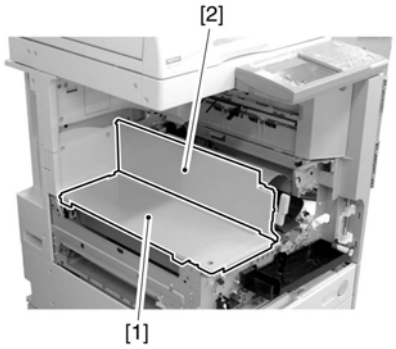
⚠

When sliding out the laser scanner unit, be sure to take care not to touch the PCB mounted to the laser scanner unit. (The PCB is equipped with a laser scanner intensity adjustment variable resistor, and contact with the PCB can change the adjustment setting.)

10.5.12.11 Removing the Hopper Assembly 0007-8411

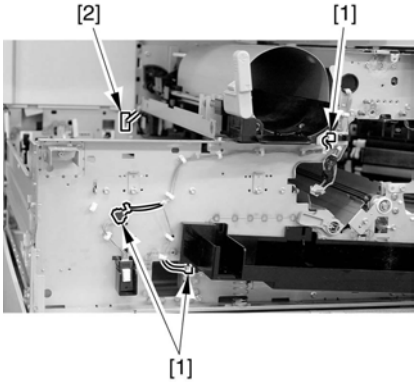
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the inside base cover [1] and the inside right color [2].



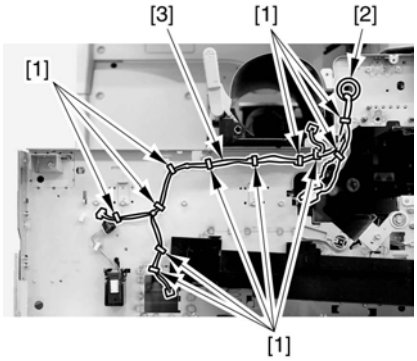
F-10-119

2) Disconnect the 3 connectors [1] found at the front and the connector [2] found at the rear.



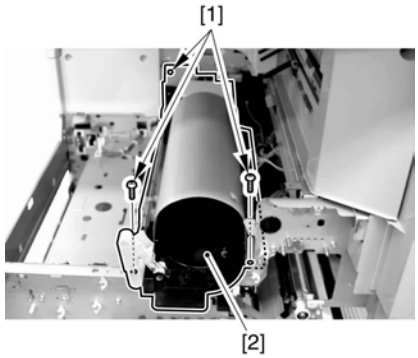
F-10-120

3) Open the 11 wire saddles [1], and pull out the harness [3] through the hole [2] in the plate.



F-10-121

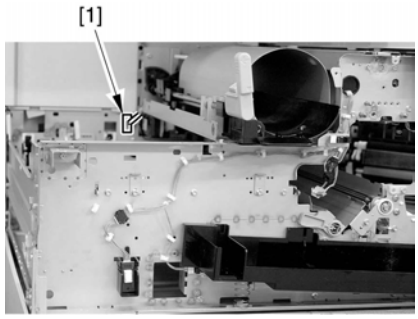
4) Remove the 3 screws [1], and detach the hopper assembly [2].



F-10-122

⚠

When fitting the hopper assembly to the machine, be sure that the connectors [1] are securely connected. If the connectors [1] are not connected, the environment heater will not be supplied with power, leading to image faults.

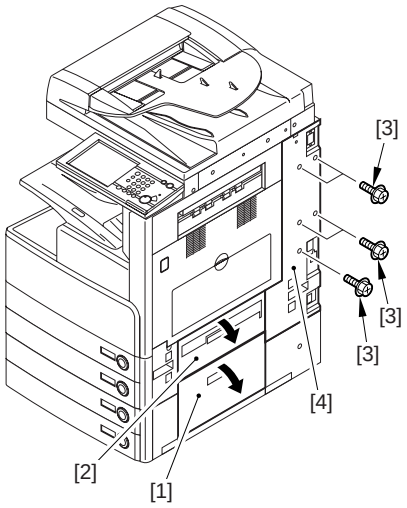


F-10-123

10.5.12.12 Removing the Right Cover (rear) 0007-8412

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a 2-Cassette Pedestal-Y2)
2) Open the right lower door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].



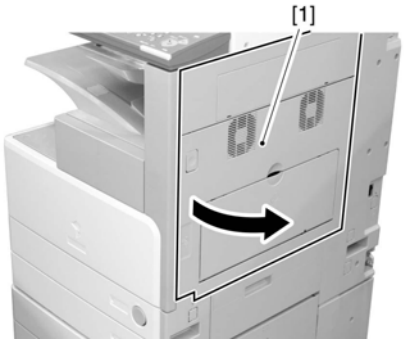
F-10-124

10.5.12.13 Removing the Right Door

0007-8413

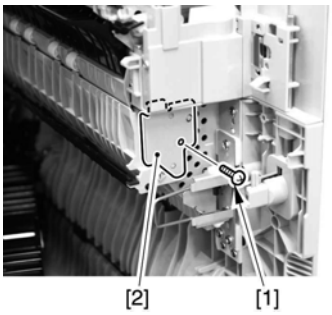
iR3570 / iR4570

1) Open the right door.



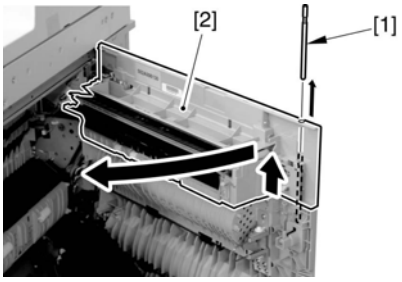
F-10-125

2) Remove the screw [1], and detach the fixing plate [2].



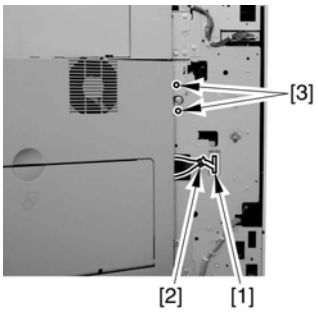
F-10-126

3) Remove the joint shaft [1], and free the extension delivery unit [2] from the right door.



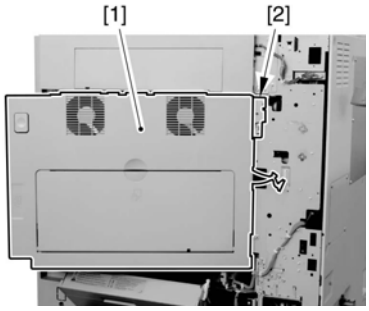
F-10-127

4) Disconnect the connector [1], and remove the reuse band [2]; then, remove the 2 screws (M4x8; RS tightening).



F-10-128

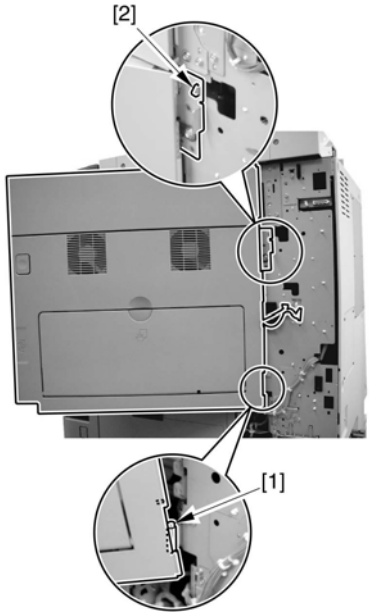
5) While freeing the hinge assembly [2], detach the right door.



F-10-129

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-10-130

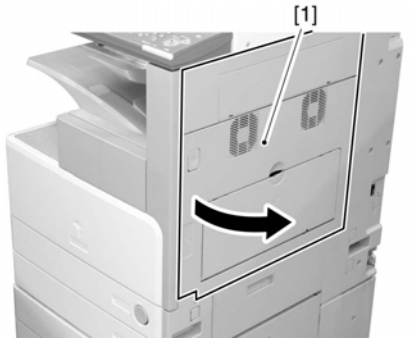
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

10.5.12.14 Removing the Right Door 0007-8416

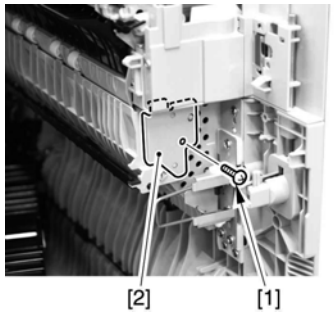
iR2270 / iR2870 / iR3570 / iR4570

1) Open the right door.



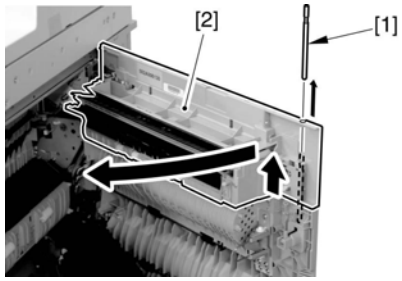
F-10-131

2) Remove the screw [1], and detach the fixing plate [2].



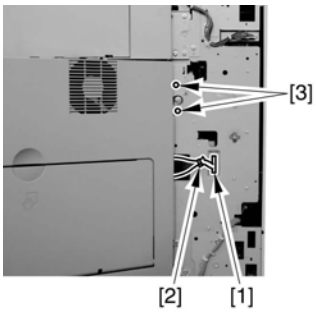
F-10-132

3) Remove the joint shaft [1], and free the extension delivery unit [2] from the right door.



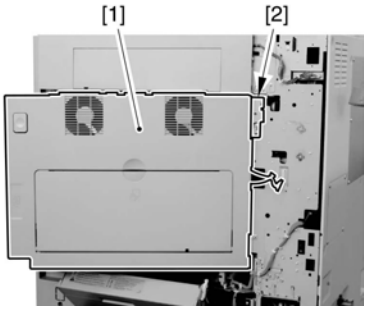
F-10-133

4) Disconnect the connector [1], and remove the reuse band [2]; then, remove the 2 screws (M4x8; RS tightening).



F-10-134

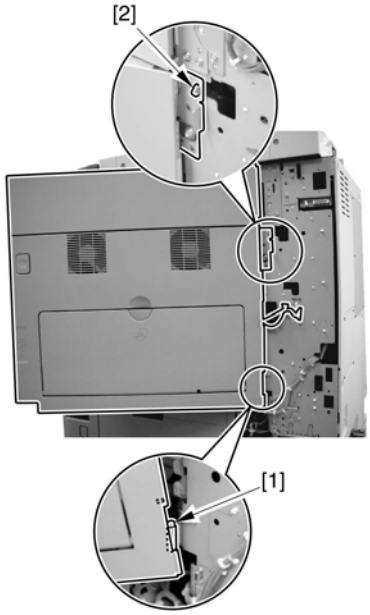
5) While freeing the hinge assembly [2], detach the right door.



F-10-135

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-10-136

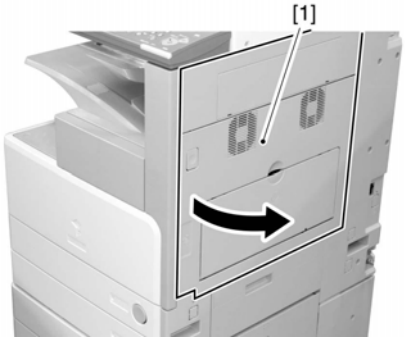
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

10.5.12.15 Removing the Right Door 0007-8417

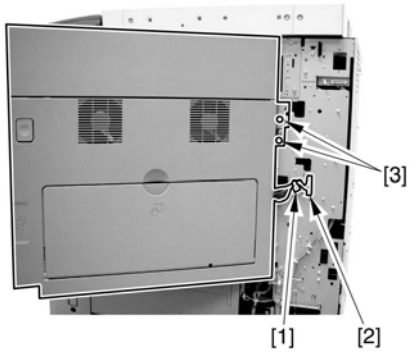
iR2270 / iR2870

1) Open the right door.



F-10-137

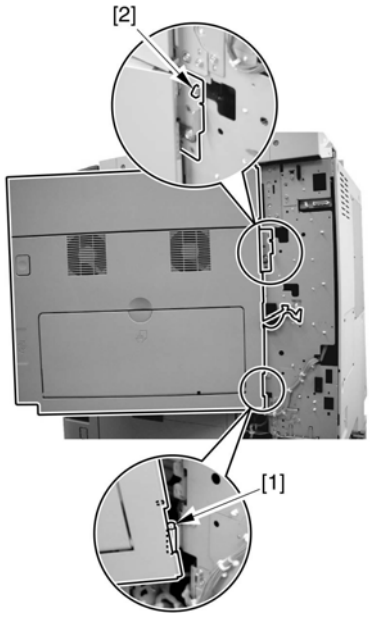
2) Remove the reuse band [1], and disconnect the connector [2].
3) Remove the 2 screws (M4x8; RS tightening), and detach the right door.



F-10-138

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-10-139

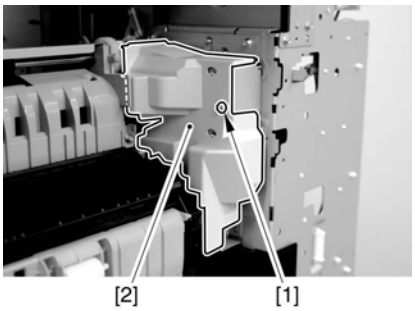
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

10.5.12.16 Removing the Fixing Unit 0007-8419

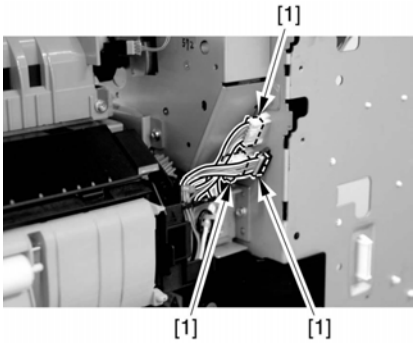
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the screw [1], and detach the harness cover [2].



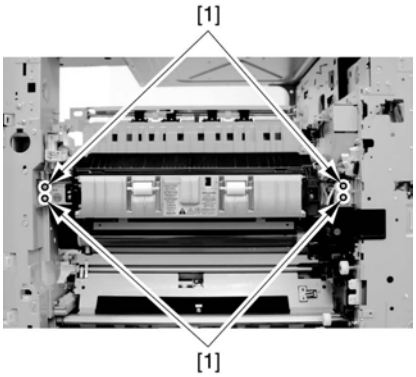
F-10-140

2) Disconcert the 3 connectors [1].



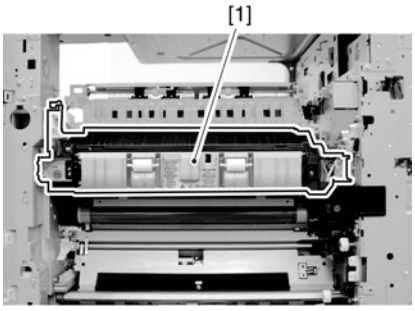
F-10-141

3) Remove the 4 screws [1].



F-10-142

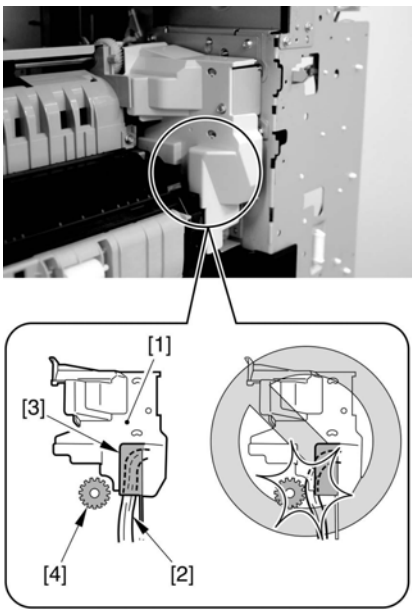
4) Detach the fixing unit [1] toward the front.



F-10-143

⚠

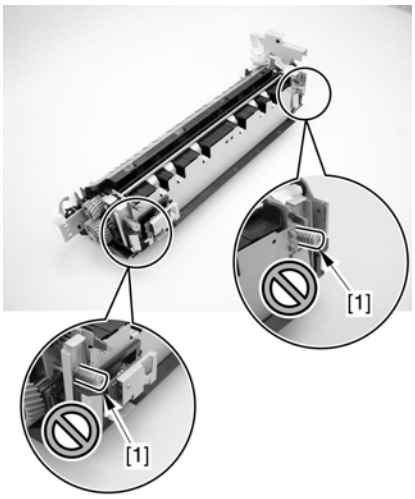
When mounting the harness cover [1], be sure to keep the harness [2] within the space [3] indicated in the figure so that the harness [2] will not come into contact with the gear [4].



F-10-144

⚠

Do not touch the screw [1]. Turning it will change the pressure of the fixing assembly, which cannot be adjusted in the field, necessitating the replacement of the fixing assembly.

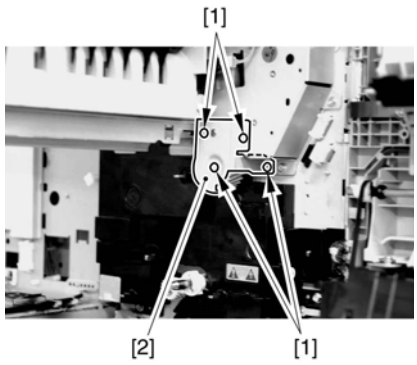


F-10-145

10.5.12.17 Removing the Gear 0007-8420

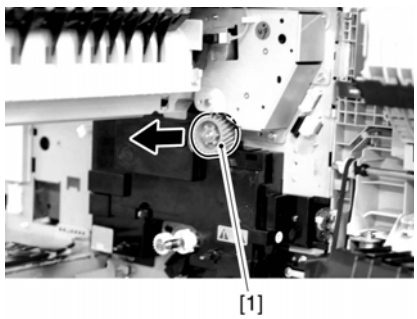
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 4 screws [1], and detach the gear cover [2].



F-10-146

2) Remove the gear [1].

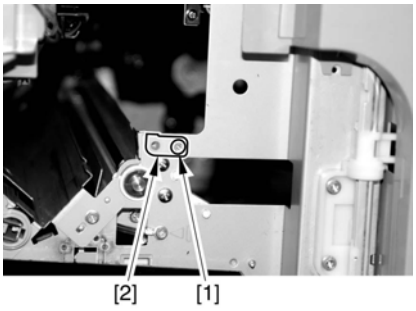


F-10-147

10.5.12.18 Removing the High-Voltage PCB 0007-8422

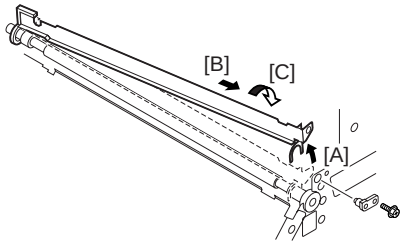
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the screw [1], and detach the fixing member [2].



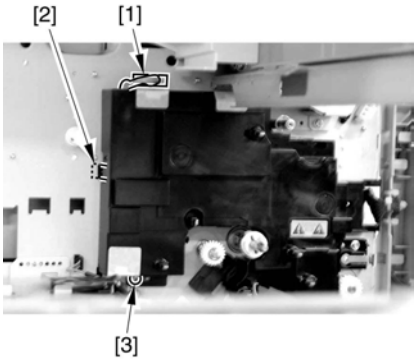
F-10-148

2) Slide the guide [1] as shown to detach.

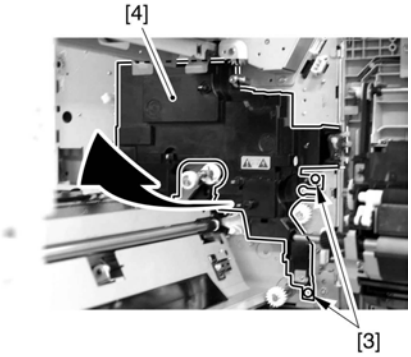


F-10-149

3) Disconnect the connector [1], and remove the latch [2] and 3 screws [3]; then, detach the high-voltage PCB [4].



F-10-150



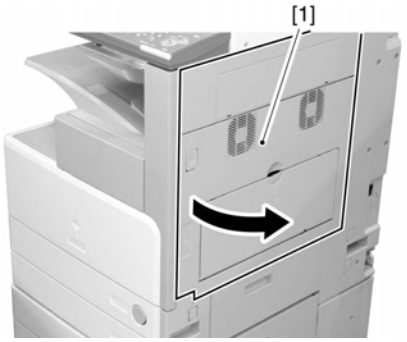
F-10-151

10.5.13 Exhaust Fan

10.5.13.1 Removing the Heat Discharge Fan 0007-6433

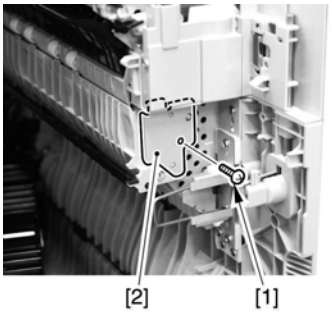
iR3570 / iR4570

1) Open the right door.



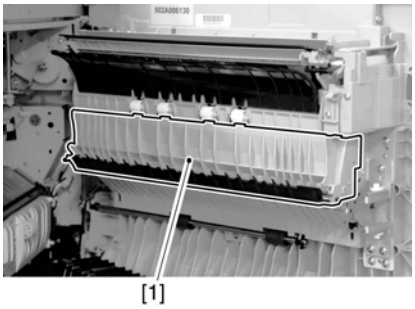
F-10-152

2) Remove the screw [1], and detach the fixing plate [2].



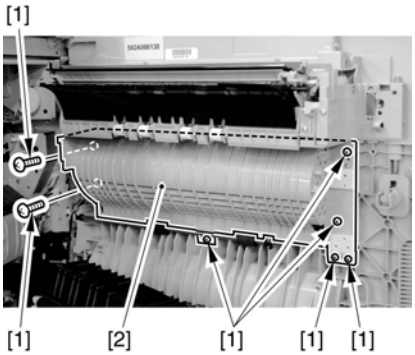
F-10-153

3) Remove the feed guide [1].



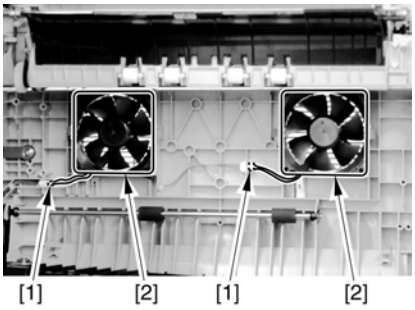
F-10-154

4) Remove the 7 screws [1], and detach the feed guide (lower) [2].



F-10-155

5) Disconnect the connector [1], and detach the heat discharge fan [2].

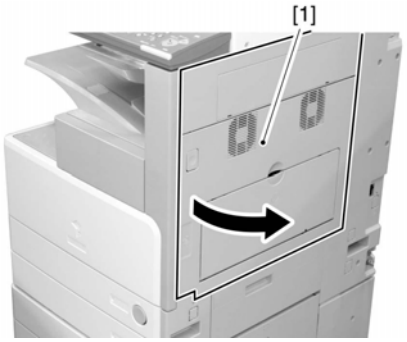


F-10-156

10.5.13.2 Removing the Heat Discharge Fan 0007-7531

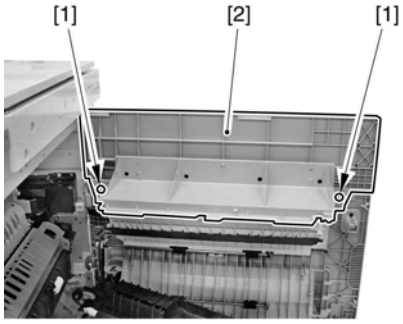
iR2270 / iR2870

1) Open the right door.



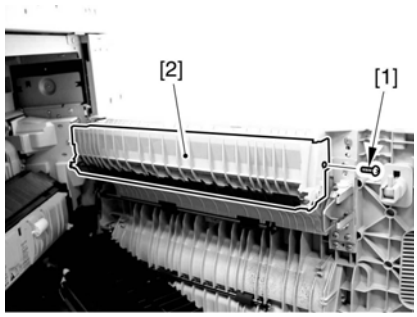
F-10-157

2) Remove the 2 self-tapping screws [2], and detach the upper right cover [1].



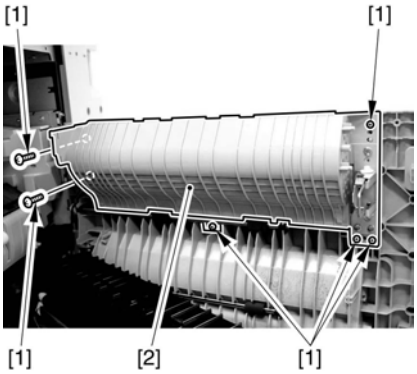
F-10-158

3) Remove the self-tapping screw [1], and detach the feed guide [2].



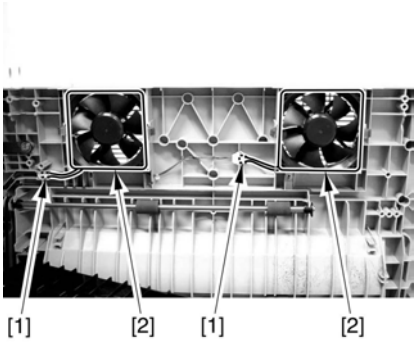
F-10-159

4) Remove the 7 screws [1], and detach the feed guide (lower) [2].



F-10-160

5) Disconnect the connector [1], and detach the heat discharge fan [2].



F-10-161

10.5.14 Motor of Main Drive Assembly

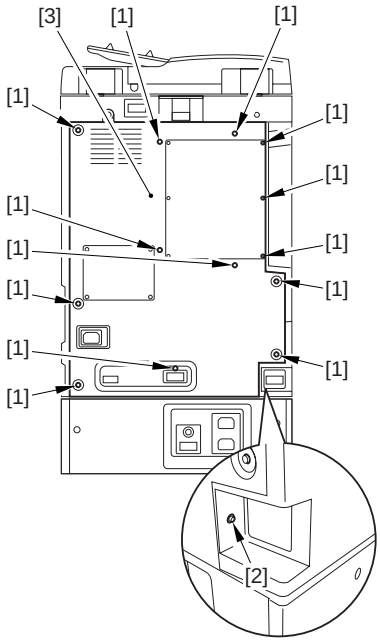
10.5.14.1 Removing the Rear Cover 0007-7368

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 13 screws [1] and then the other screw [2]; then, detach the rear cover [3].

⚠

If the left cover (lower) has already been detached, the screw [3] should also have been removed.

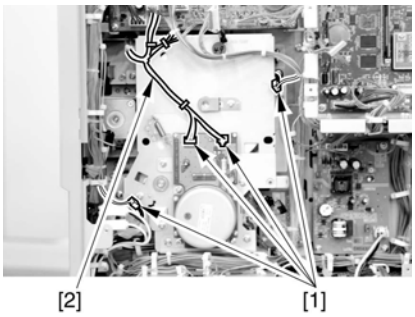


F-10-162

10.5.14.2 Removing the Main Drive Assembly 0007-6418

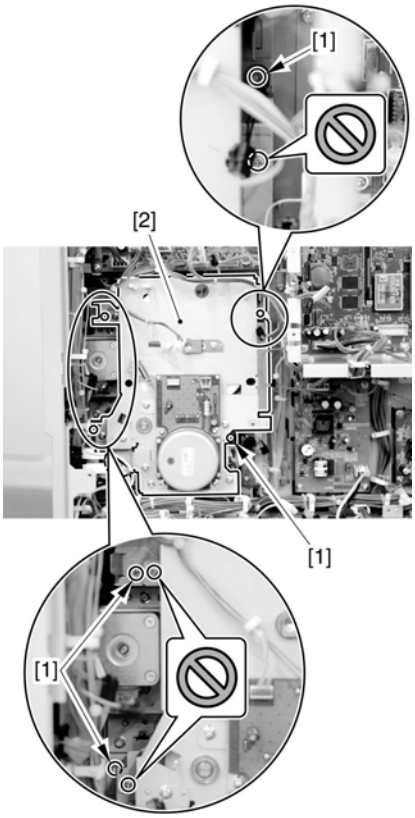
iR3570 / iR4570

1) Disconnect the connector [1], and free the harness [2] from the wire saddle.



F-10-163

2) Remove the 4 screws [1], and detach the main drive assembly [2].



F-10-164

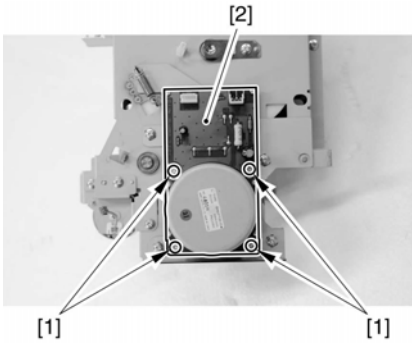
⚠

Do not touch the screws that are glued in place.

10.5.14.3 Removing the Main Drive Motor 0007-6421

iR3570 / iR4570

1) Remove the 4 screws [1], and detach the main drive motor [2].

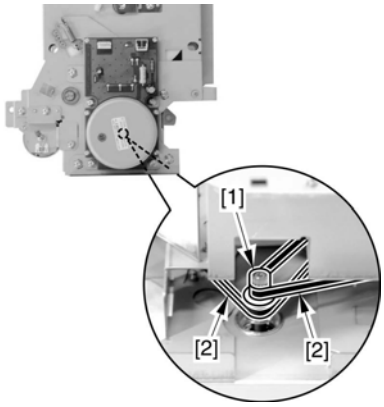


F-10-165

⚠

Points to Note During the Work

Be sure that the 2 timing belts [2] are fitted to the shaft [1] of the main drive motor as shown.

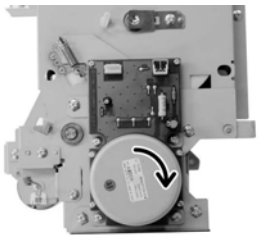


F-10-166

⚠

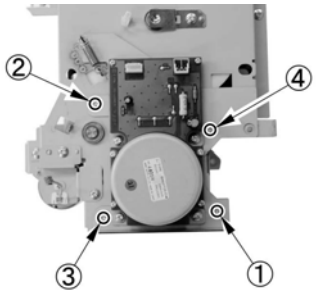
Adjusting the Tension of the Main Drive Motor

1) Temporarily fix the main drive motor in place to the main motor base.
2) So that the motor gear [1] and the teeth [2] of the pulley mesh correctly, move the motor in the direction of the arrow.



F-10-167

3) Tighten the screws [1] of the main drive motor in the order indicated.

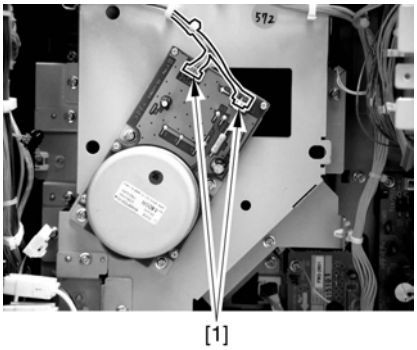


F-10-168

10.5.14.4 Removing the Main Drive Motor 0007-7369

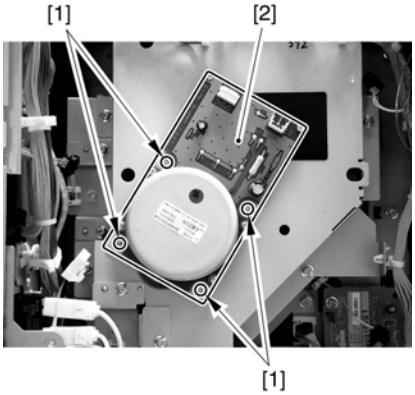
iR2270 / iR2870

1) Disconnect the 2 connectors [1].



F-10-169

2) Remove the 4 screws [1], and detach the main dive motor [2].



F-10-170

10.5.15 Fixing Driver Motor

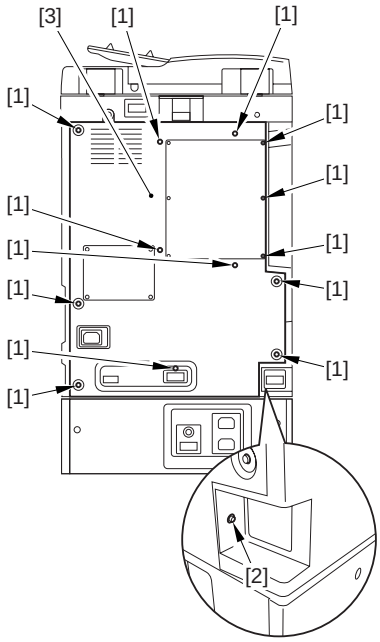
10.5.15.1 Removing the Rear Cover 0007-6403

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 13 screws [1] and then the other screw [2]; then, detach the rear cover [3].

⚠

If the left cover (lower) has already been detached, the screw [3] should also have been removed.

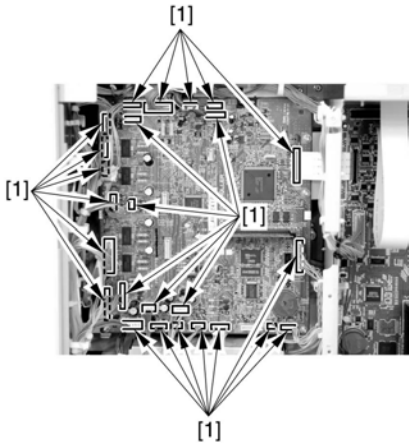


F-10-171

10.5.15.2 Removing the DC Controller PCB 0007-6404

iR2270 / iR2870 / iR3570 / iR4570

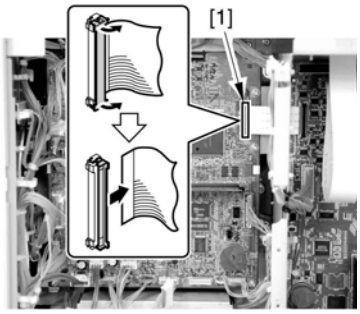
1) Disconnect the connector [1].



F-10-172

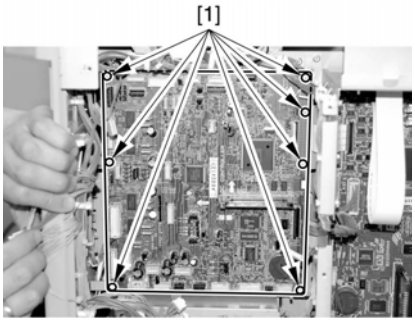
⚠

How to Remove the Flexible Cable [1]



F-10-173

2) Remove the screw [1], and detach the DC controller PCB.

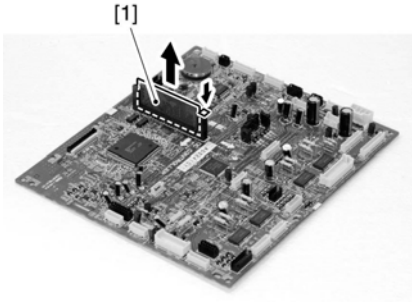


F-10-174

⚠

Points to Note When Replacing the DC Controller PCB

Be sure to remove the boot ROM [1] from the exiting DC controller PCB, and mount it to the new DC controller PCB.

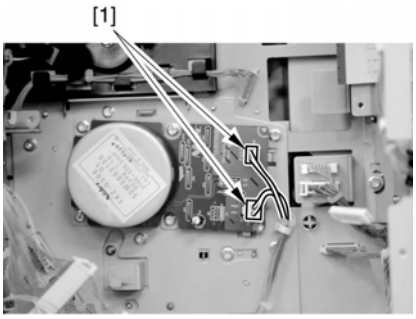


F-10-175

10.5.15.3 Removing the Fixing Drive Motor 0007-6405

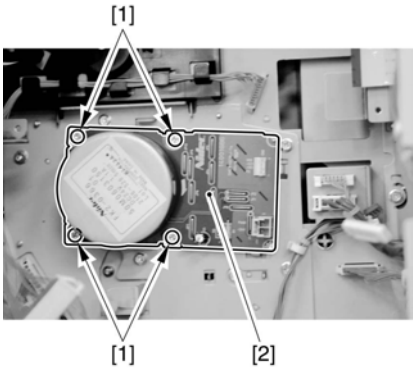
iR2270 / iR2870 / iR3570 / iR4570

1) Disconnect the 2 connectors [1].



F-10-176

2) Remove the 4 screws [1], and detach the fixing drive motor [2].



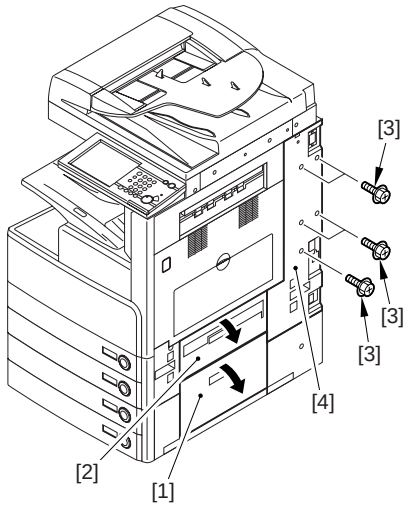
F-10-177

10.5.16 Right Door

10.5.16.1 Removing the Right Cover (rear) 0007-7020

iR2270 / iR2870 / iR3570 / iR4570

1) Open the pedestal right door [1]. (if equipped with a 2-Cassette Pedestal-Y2)
2) Open the right lower door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].

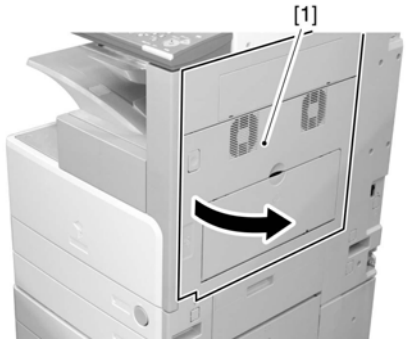


F-10-178

10.5.16.2 Removing the Right Door 0007-6444

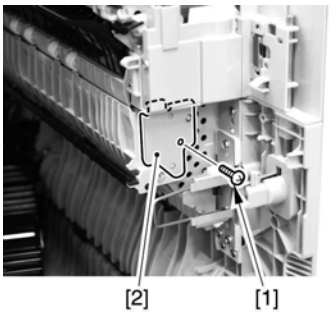
iR3570 / iR4570

1) Open the right door.



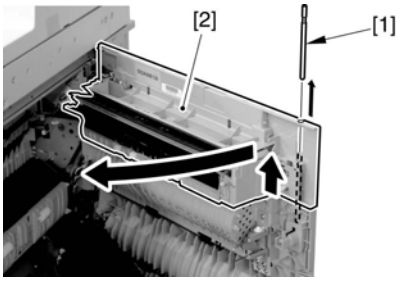
F-10-179

2) Remove the screw [1], and detach the fixing plate [2].



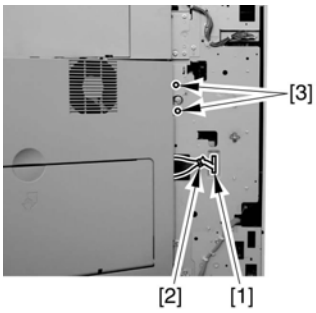
F-10-180

3) Remove the joint shaft [1], and free the extension delivery unit [2] from the right door.



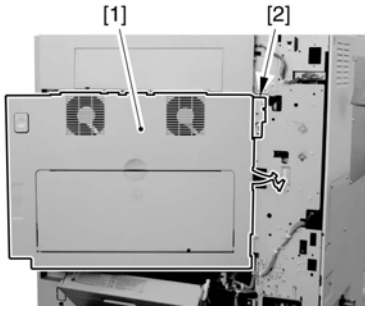
F-10-181

4) Disconnect the connector [1], and remove the reuse band [2]; then, remove the 2 screws (M4x8; RS tightening).



F-10-182

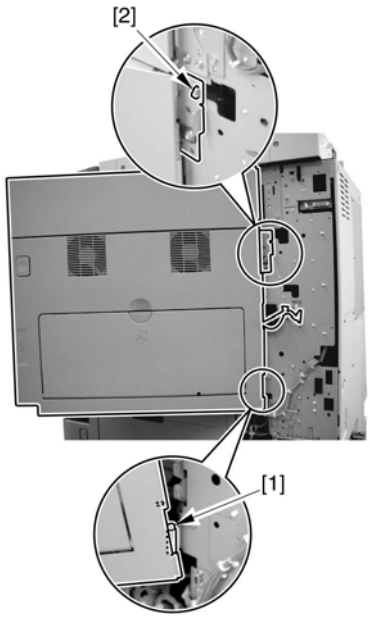
5) While freeing the hinge assembly [2], detach the right door.



F-10-183

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-10-184

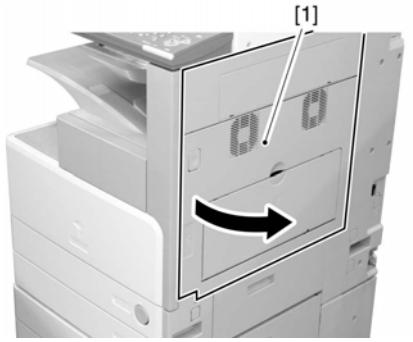
⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

10.5.16.3 Removing the Right Door 0007-7050

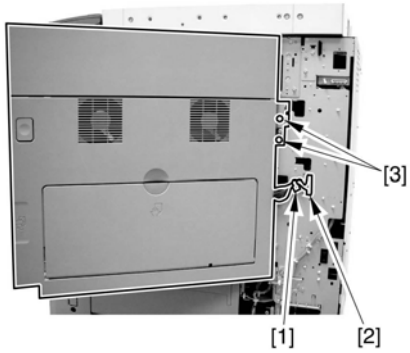
iR2270 / iR2870

1) Open the right door.



F-10-185

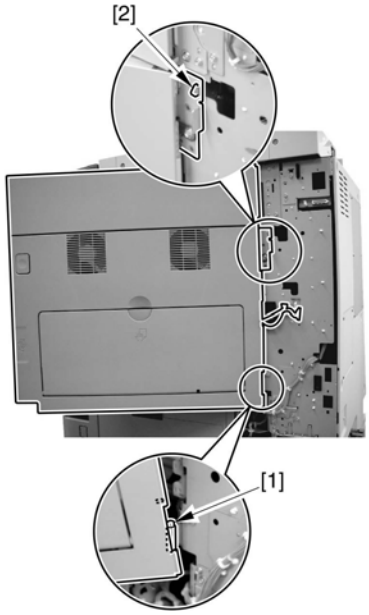
2) Remove the reuse band [1], and disconnect the connector [2].
3) Remove the 2 screws (M4x8; RS tightening), and detach the right door.



F-10-186

Attaching the Right Door

1) Match the hinge [1] found at the bottom of the right door against the lug.
2) Engage the hinge [2] found on the top of the right door with the hook found on the side plate.



F-10-187

⚠

When tightening the 2 screws used to fix the hinge in place, be sure to close the right door first.

10.5.17 Circuit Braker

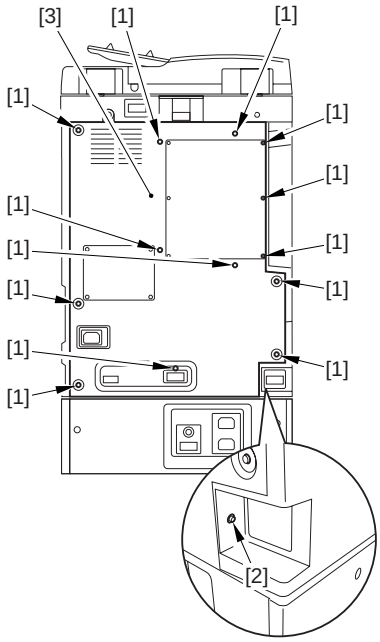
10.5.17.1 Removing the Rear Cover 0007-6388

iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 13 screws [1] and then the other screw [2]; then, detach the rear cover [3].

⚠

If the left cover (lower) has already been detached, the screw [3] should also have been removed.

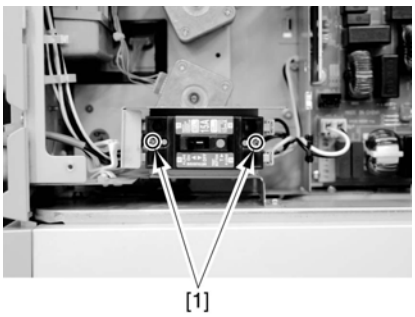


F-10-188

10.5.17.2 Removing the Circuit Breaker 0007-6389

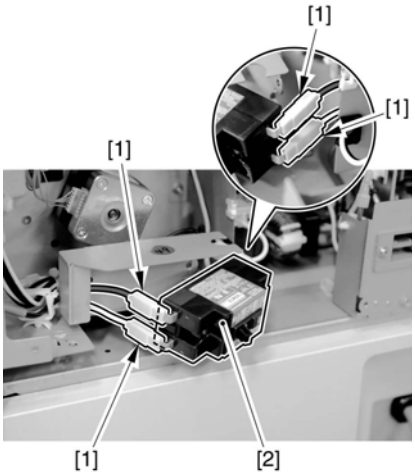
iR2270 / iR2870 / iR3570 / iR4570

1) Remove the 2 screws [1].



F-10-189

2) Remove the 4 fastons [1], and detach the circuit breaker [2].

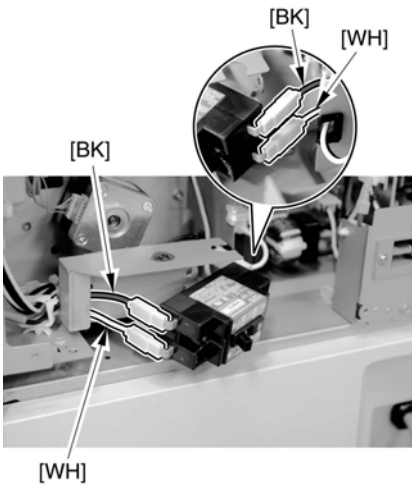


F-10-190

⚠

Points to Note When Mounting

When mounting the circuit breaker, be sure that the AC harness is identified correctly by color as shown.



F-10-191

Chapter 11 MEAP

Contents

11.1 Overview 11-1
11.2 MEAP Counter 11-2
11.3 Construction of the MEAP Platform 11-4

11.1 Overview

0008-1396

iR2270 / iR2870 / iR3570 / iR4570

The term MEAP stands for Multifunctional Embedded Application Platform, and is used to generically refer to a platform for software built into MFPs and peripheral equipment. The architecture is based on Java (J2ME, i.e., Java 2 Platform Micro Edition), and is designed to enable the execution of Java applications.
A MEAP application behaves independently from its host printer's system software, and may be installed or uninstalled using SMS (Service Management Service), which is an interface that runs as part of the browser on a PC. As long as the device supports MEAP, most MEAP applications may be added to the device in the field.

11.2 MEAP Counter

0008-1397

iR2270 / iR2870 / iR3570 / iR4570

In addition to the commonly found print counters, a device that supports MEAP is equipped with a counter mechanism used to keep track of which functions are used as well as how often they are used for individual MEAP applications that are installed. The MEAP counter readings may be checked by making the following selections on the device control panel: Counter Check Key>MEAP Counter Check. A device may possess the following MEAP counters, and which counter to use and, therefore, to display all depend on the application in question.
A counter reading may be of a type that is forced to increase as a job is expected or of a type that is increased when the application sends instructions; or, it may be of a type that increases independently of the host device, thus increasing solely in response to the application being run; specifics are as follows:

T-11-1

Type	**Count item**
forced	total
	total (black-and-white 1)
	total (black-and-while large)
	scan (total 1)
	black-and-white scan (total 1)
in response to instructions from application	black-and-white scan 1
	black-and-white scan 2
	black-and-white scan 3
	black-and-white scan 4
application-independent	free 1
	free 2
	free 3
	free 4
	free 5
	free 6
	free 7
	free 8
	free 9
	free 10
	free 11

Type	Count item
	free 12

Notes:
forced: the device forces the counter to increase its reading in response to execution of a job.
in response to instructions from application: the counter increases its reading only in response to instructions from the application.
application independent: the counter operates according to the specifications of the application.

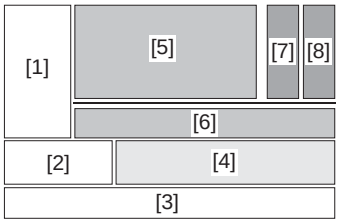
11.3 Construction of the MEAP Platform

0008-1398

iR2270 / iR2870 / iR3570 / iR4570

In addition to the installation of the system software, language file, and RUI, a printer equipped with MEAP functions calls for the installation of MEAP content, which offers functions (system services) needed to run MEAP applications and class libraries needed by the MEAP applications to control the device.
It is important that the version of the system software be fully compatible with the version of the MEAP content, calling for special care. (In the case of a mismatch, the device will not be able to run the MEAP application.) For version information, refer to the Service Information bulletin that is released in conjunction with the system software.

The following shows the components of a MEAP application:



F-11-1

[1] User Interface Control Bock
installed as part of the system software
[2] Device Control Block
installed as part of the system software
[3] Operating System
installed as part of the system software
[4] Java VM
installed as part of the system software
[5] MEAP System Services (includes SDL/SSO)
installed as part of MEAP content
[6] Device Control Class Library
installed as part of MEAP content
[7] internally developed application
[8] externally developed application

Chapter 12 Maintenance and Inspection

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12.2.2 Reader Unit 12-2
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12.1 Periodically Replaced Parts

12.1.1 Overview

0007-4595

iR2270 / iR2870 / iR3570 / iR4570

The machine has parts that must be replaced on a periodical basis to ensure a specific level of functional performance. (The loss of the function of any of these parts will significantly affect the machine performance, regardless of the presence/absence of external changes or damage.)
If possible, schedule the replacement so that it coincides with a scheduled service visit.

⚠

The timing of replacement may vary depending on the site environment or user habit.

12.1.2 Reader Unit

0007-4596

iR2270 / iR2870 / iR3570 / iR4570

The reader unit does not have parts that require periodical replacement.

12.1.3 Printer Unit

0007-9108

iR2270 / iR2870 / iR3570 / iR4570

The printer unit does not have parts that require periodical replacement.

12.2 Durables and Consumables

12.2.1 Overview

0007-4598

iR2270 / iR2870 / iR3570 / iR4570

The machine has parts that may require replacement once or more during the period of product warranty because of wear or damage. Replace them as needed by referring to their indicated estimated lives.

- Checking the Timing of Replacement

Use the following service mode item to check the timing of replacement:

- Copier

COPIER>COUNTER>DRBL-1

COPIER>COUNTER>MISC

- Accessory

COPIER>COUNTER>DRBL-2

12.2.2 Reader Unit

0007-4599

iR2270 / iR2870 / iR3570 / iR4570

The reader unit does not have parts that are classified as durables.

12.2.3 Printer Unit

0007-4600

iR2270 / iR2870 / iR3570 / iR4570

T-12-1

As of Sept. 2004

Ref.	Parts name	Parts No.	Q'ty	Life	Remarks
[1]	Transfer roller	FC6-2911-000	1	150,000 prints	
[2]	Static eliminator holder	FL2-0247-000	1	150,000 prints	
[3]	Developing cylinder	FL2-0290-000	1	480,000 prints	

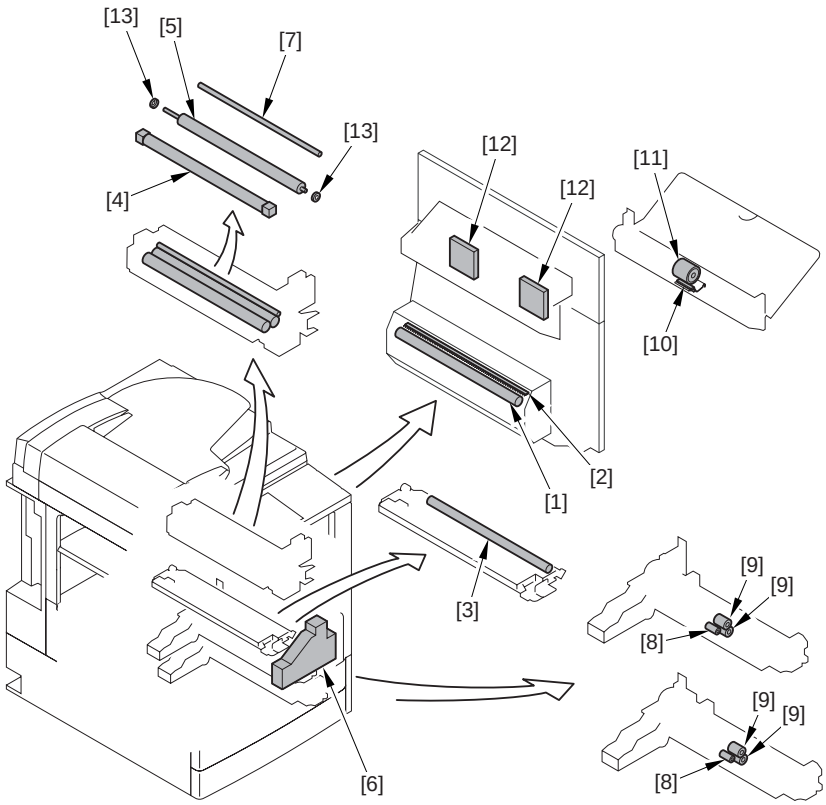
As of Sept. 2004

Ref.	Parts name	Parts No.	Q'ty	Life	Remarks
[4]	Fixing film unit	FM2-0293-000	1	150,000 prints	iR2270/2870 100V
	Fixing film unit	FM2-0358-000	1	150,000 prints	iR2270/2870 115V
	Fixing film unit	FM2-0359-000	1	150,000 prints	iR2270/2870 230V
	Fixing film unit	FM2-1792-000	1	240,000 prints	iR3570/4570 100V
	Fixing film unit	FM2-1793-000	1	240,000 prints	iR3570/4570 115V
	Fixing film unit	FM2-1794-000	1	240,000 prints	iR3570/4570 230V
[5]	Pressure roller	FC6-2942-000	1	150,000 prints	iR2270/2870
	Pressure roller	FC5-7207-000	1	240,000 prints	iR3570/4570
[6]	Waste toner box	FM2-0303-000	1	75,000 prints	iR2270/2870
	Waste toner box	FM2-0303-000	1	85,000 prints	iR3570/4570
[7]	Fixing heat discharge roller	FB5-4931-000	1	150,000 prints	iR2270/2870
	Fixing heat discharge roller	FB5-4931-000	1	240,000 prints	iR3570/4570
[8]	Pickup roller	FB6-3405-000	2	120,000 prints	
[9]	Feed/separation roller	FC5-6934-000	4	120,000 prints	
[10]	Manual feed separation pad	FC5-0488-000	1	240,000 prints	
[11]	Manual feed pickup roller	FB1-8581-000	1	240,000 prints	
[12]	Heat discharge fan filter	FC5-1546-000	2	100,000 prints	

As of Sept. 2004

Ref.	Parts name	Parts No.	Q'ty	Life	Remarks
[13]	Pressure roller bushing	RS5-1446-000	2	300,000 prints	iR2270/2870

⚠The value is the mean value collected from the results of evaluation. The parts number may change because of changes in design.



F-12-1

12.3 Scheduled Servicing Basic Procedure

12.3.1 Scheduled Servicing for the Reader Unit

0007-5055

iR2270 / iR2870 / iR3570 / iR4570

The reader unit does not have items that require scheduled servicing.

⚠

Be sure to clean the copyboard glass and the ADF reading glass during every service visit.

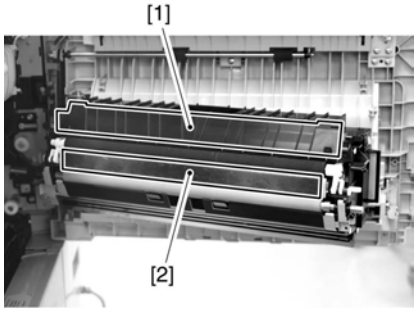
12.3.2 Scheduled Servicing for the Printer Unit

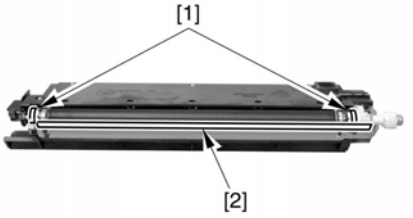
0007-5176

iR2270 / iR2870 / iR3570 / iR4570

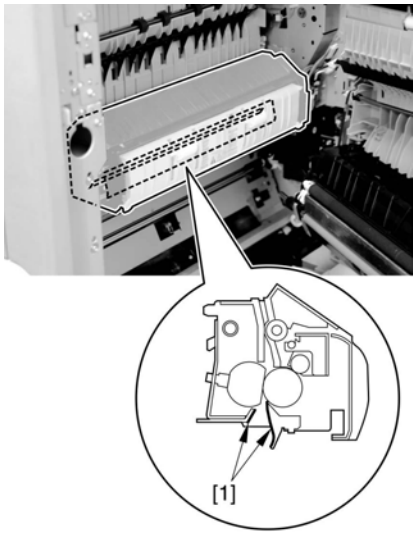
⚠Do not use solvents or oils other than those indicated.

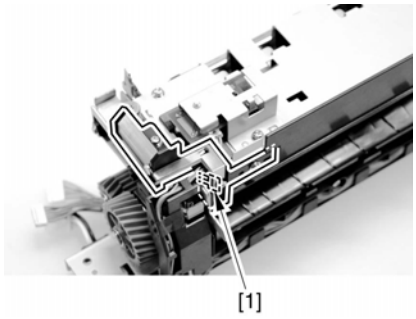
T-12-2

Transfer assembly	Location	Transfer/feed guide assembly
	Task	clean:(dry wiping)
	Interval	120,000 prints
	Remarks  [1]Feed guide [2]Transfer guide	

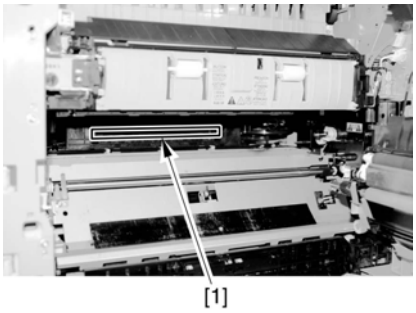
<table>
<tr><td rowspan="4">Developing assembly</td><td>Location</td><td>Photosensitive drum butting spacer/feed guide</td></tr>
<tr><td>Task</td><td>clean:(dry wiping)</td></tr>
<tr><td>Interval</td><td>120,000 prints</td></tr>
<tr><td colspan="2">Remarks
 

[1]Photosensitive drum butting spacer
[2]Feed guide</td></tr>
</table>

<table>
<tr><td rowspan="6">Fixing assembly</td><td>Location</td><td>Fixing inlet guide</td></tr>
<tr><td>Task</td><td>clean:(dry wiping/alcohol)</td></tr>
<tr><td>Interval</td><td>120,000 prints</td></tr>
<tr><td colspan="2">Remarks
 

[1]Fixing inlet guide</td></tr>
<tr><td>Location</td><td>Film bias static eliminator</td></tr>
<tr><td>Task</td><td>clean</td></tr>
<tr><td>Interval</td><td>150,000 prints (iR2270/2870)
240,000 prints (iR3570/4570)</td></tr>
<tr><td colspan="2">Remarks
 

[1]Film bias static eliminator</td></tr>
</table>

Laser scanner assembly	Location	Dust-blocking glass
	Task	clean:(dry wiping or alcohol)
	Interval	120,000 prints
	Remarks  [1]Dust-blocking glass	

⚠The foregoing values are estimates only, and are subject to change depending on future data.

12.3.3 Scheduled Servicing Basic Procedures

0007-5173

iR2270 / iR2870 / iR3570 / iR4570

⚠

- As a rule, perform scheduled servicing every 120,000 prints.
- Before setting out on a scheduled visit, check with the Service Book, and take parts for which replacement is expected.
- If the power plug is exposed to dust, humidity, or oily smoke, the resulting buildup can prove to be a fire hazard. (The buildup of dust, for instance, can absorb moisture and suffer insulating failure.) Be sure to disconnect the power plug on a periodical basis, and remove any buildup of dust and dirt with a dry cloth.

<Work Procedure>

1) Report to the person in change, and have an understanding of the situation.
2) Record the counter reading, and check the faulty prints.
3) Check the following items, and adjust or clean the parts as needed.

T-12-3

Item		
Test copy	image density	
	background (for soiling)	
	characters (for clarity)	
	margin	
	fixing	misregistration, soiled back
	margin (single-sided)	leading edge:2.5±1.5mm
		left:2.5±1.5mm
	margin (double-sided)	leading edge:2.5±2.0mm
		left edge:2.5±2.0mm
Laser exposure system	dust-blocking glass (cleaning)	
Feeding system	toner/feed guide	
	fixing inlet guide	
Developing system	developing butting spacer	

4) Check the waste toner collection case.
If the case is half full or more, empty it in an appropriate bag for collection. Or, replace the waste toner collection case.

⚠

- When disposing of the waste toner, be sure to follow all applicable regulations of the local government.
- Do not dispose of waste toner in fire. (Doing so can cause an explosion.)

---

5) Clean the copyboard glass and the reading glass.
6) Make test copies.
7) Make sample copies.
8) Check the operation of the leakage breaker.
While the machine is supplied with power (power switch ON), press the test switch of the leakage breaker to see if the breaker operates normally (i.e., the lever will shift to OFF to cut off the power).

If the leakage breaker fails to operate normally, replace the breaker, and make a check once again.
<Resetting>
When you have checked the operation of the leakage breaker, turn off the power switch, shift the lever to ON, and turn on the power switch.

9) Put the sample copies in order, and clean up the area around the machine.

10) Record the latest counter readings. At this time, be sure to also record the settings of the following: 'FX-UP-RL' and 'DV-UNIT-K'.

11) Fill out the form in the Service Book, and report to the person in charge. be sure also to indicate the check on the leakage breaker in the history of checks.

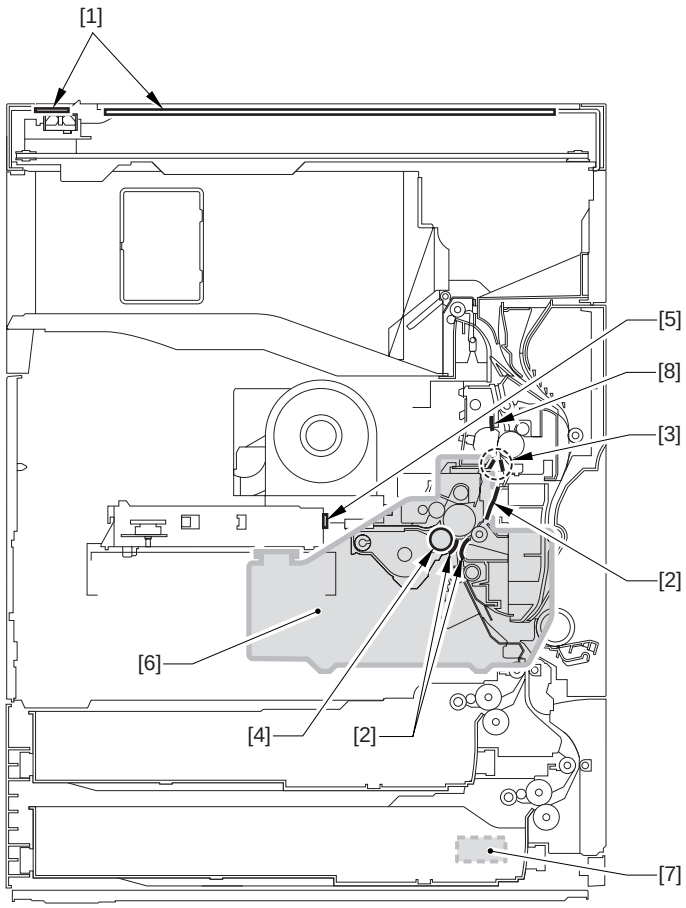
12.3.4 Points to Note About the Scheduled Servicing

0007-5177

iR2270 / iR2870 / iR3570 / iR4570

⚠

- If you used solvent, be sure that it has dried before putting the part back into the machine.
- Unless otherwise indicated, do not use a cloth moistened with water.
- Be sure to provide scheduled servicing at specific intervals.



F-12-2

[1]Copyboard glass, reading glass (clean, using water or mild detergent)

[2]Transfer/feed guide (clean; dry wiping)
[3]Fixing inlet guide (clean; dry wiping; alcohol)
[4]Photosensitive drum butting spacer (clean; dry wiping)
[5]Dust-blocking glass (clean; dry wiping or with alcohol)
[6]Waste toner collection case (check)
[7]Leakage breaker (check)
[8]Film bias static eliminator (clean)

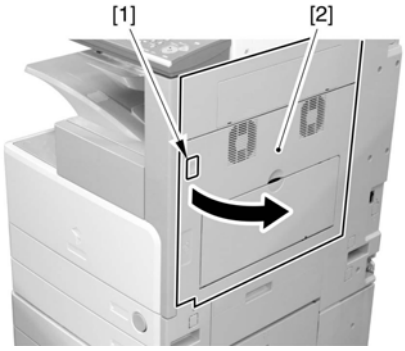
12.4 Cleaning

12.4.1 Cleaning the Transfer/Feed Guide

0007-5129

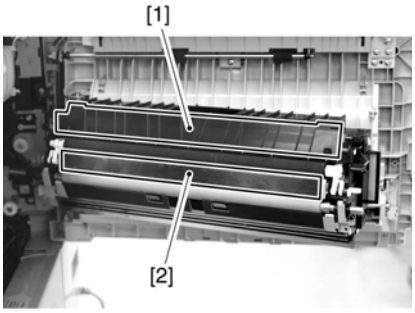
iR2270 / iR2870 / iR3570 / iR4570

1) Open the right door.



F-12-3

2) Clean (dry wipe) the feed guide [1] and the transfer guide [2].



F-12-4

3) Close the right door.

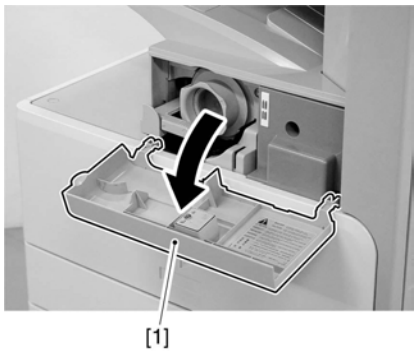
12.4.2 Cleaning the Developing Assembly Spacer, Feed Guide, Dust-Blocking Glass, and Fixing Inlet Guide

0007-5128

iR2270 / iR2870 / iR3570 / iR4570

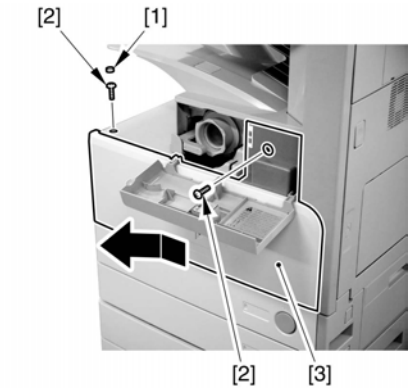
A. Preparatory Work

1) Open the upper front cover [1].



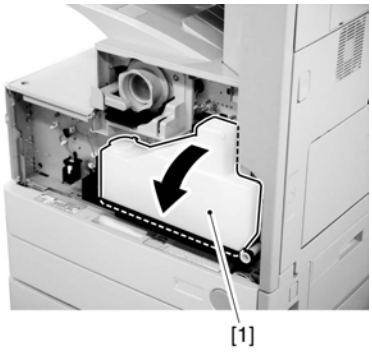
F-12-5

2) Remove the face rubber [1] and the 2 screws [2]; then, slide the front cover unit [3] to the left to detach.



F-12-6

3) Remove the waste toner box [1].



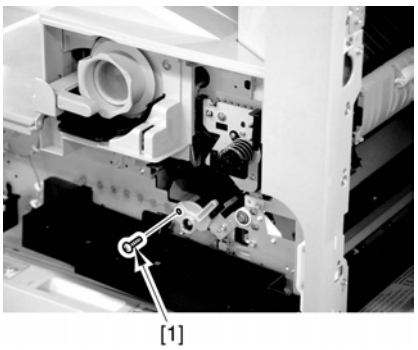
F-12-7

4) Open the right door [1].



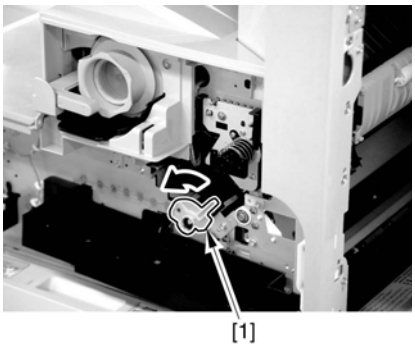
F-12-8

5) Remove the locking screw [1] of the pressure lever.



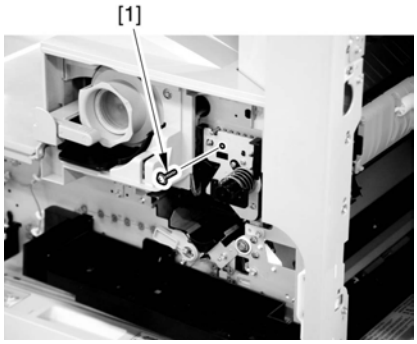
F-12-9

6) Shift the locking lever [1] of the developing assembly to the left to release the developing assembly.



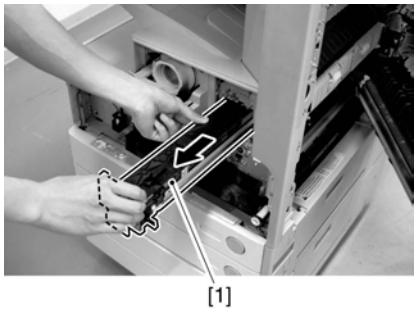
F-12-10

7) Remove the screw (M5) [1].



F-12-11

8) Remove the drum unit [1].

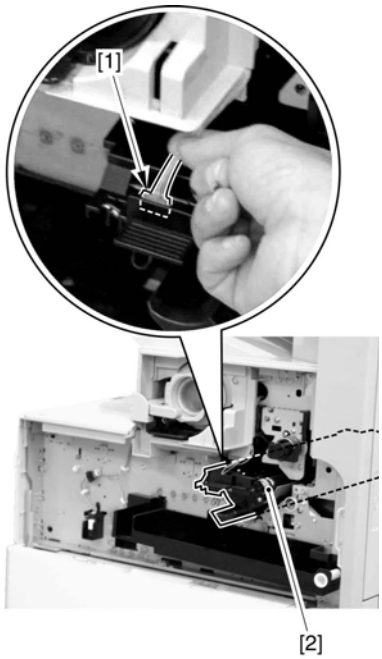


F-12-12

⚠

- Do not touch the surface of the photosensitive drum.
- Do not expose the surface of the photosensitive drum to light more than necessary.
- Do not touch the spur of the drum unit.

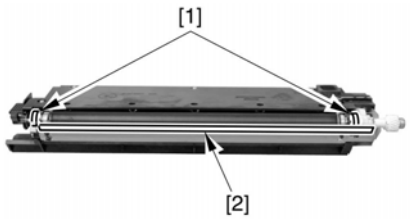
9) Disconnect the connector [1], and detach the developing assembly [2].



F-12-13

B. Cleaning the Developing Spacer and the Feed Guide

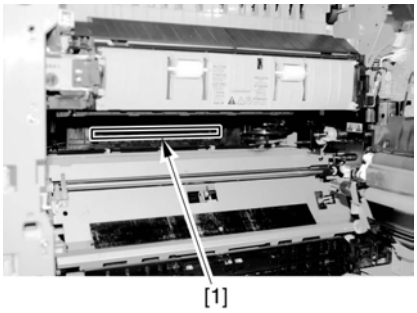
1) Clean the developing assembly spacer [1] and the feed guide [2]. (Dry wipe them using lint-free paper.)



F-12-14

C. Cleaning the Dust-Blocking Glass

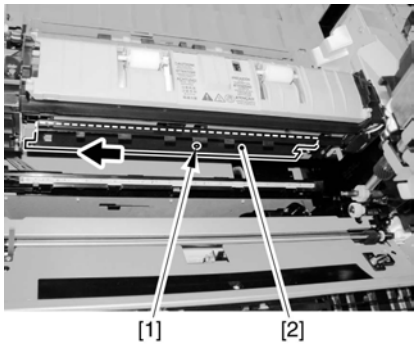
1) Clean the dust-blocking glass [1]. (Dry wipe it, or use alcohol.)



F-12-15

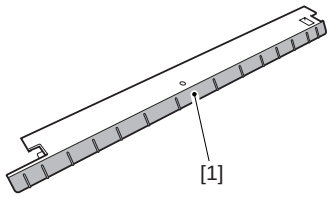
D. Cleaning the Fixing Inlet Guide

1) Remove the screw (w/ washer) [1], and detach the fixing inlet guide (upper) [2].



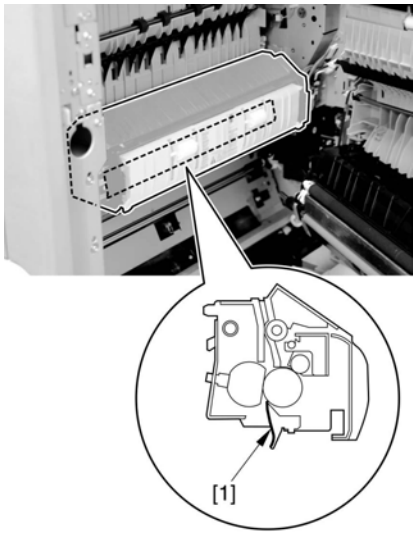
F-12-16

2) Clean the fixing inlet guide (upper) [1] with alcohol. Be sure to completely remove all toner sticking to the fixing inlet guide (upper).



F-12-17

3) Clean the fixing inlet guide (lower) [1] using lint-free paper.

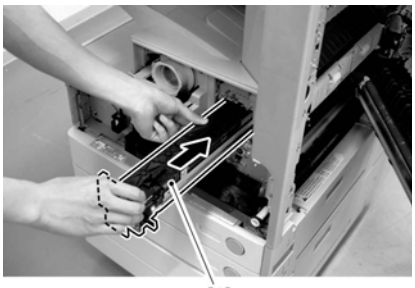


F-12-18

4) Mount the fixing inlet guide (upper) using a screw (w/ washer).

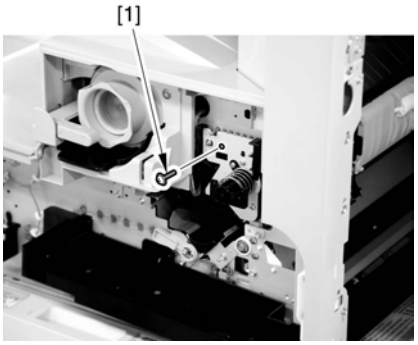
E. After the Work

1) Put the drum unit [1] in the machine.



F-12-19

2) Secure the drum unit in place using a screw (M5) [1].

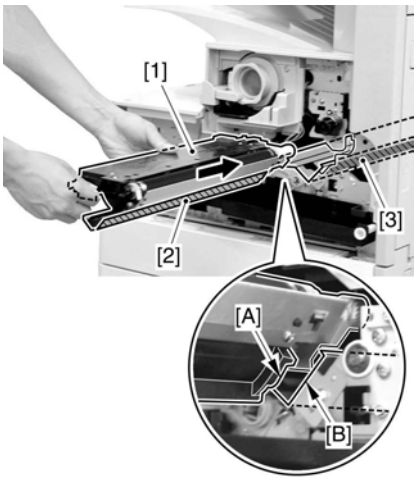


F-12-20

3) Put the developing unit in the machine.

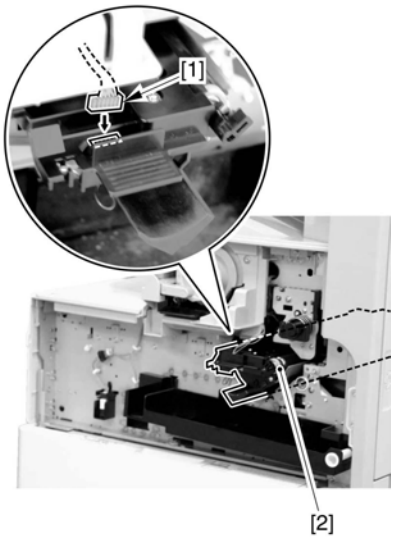
3-1) Place segment A of the developing assembly on segment B of the developing assembly rail.

3-2) By sliding the base [2] of the developing assembly [1] along the developing assembly rail [3], fit the assembly in place inside the machine.



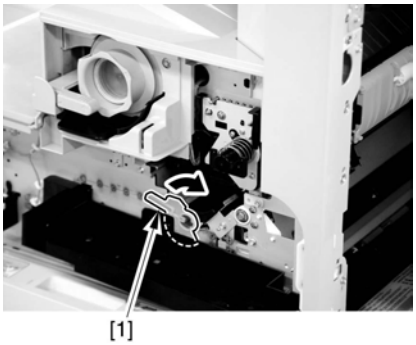
F-12-21

4) Connect the connector [1], and push the developing assembly [2] all the way in.



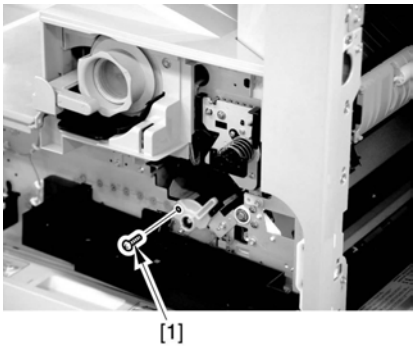
F-12-22

5) Shift back the locking lever [1] of the developing assembly to the right to lock the assembly in place.



F-12-23

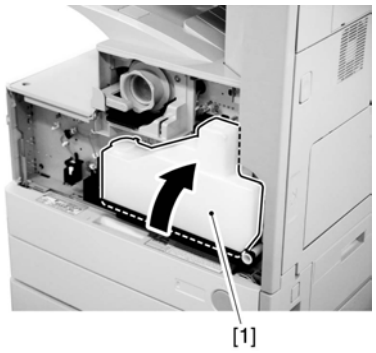
6) Fit and tighten the screw [1] of the locking lever.



F-12-24

7) Close the right door.

8) Fit the waste toner box [1].

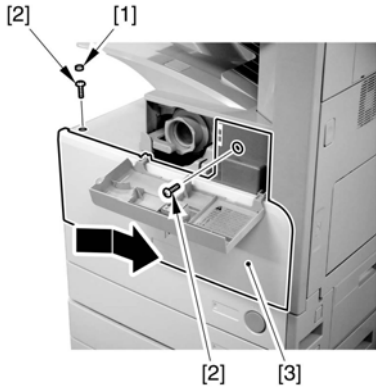


F-12-25

9) Mount the front cover unit [3] using 2 screws [2], and fit the face rubber [1].

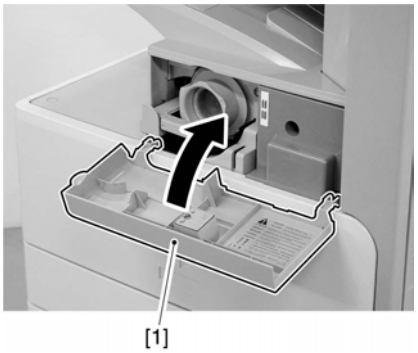
⚠

At this time, be sure to slide it to the right so that the claw of the front cover matches the machine.



F-12-26

10) Close the upper front cover [1].



F-12-27

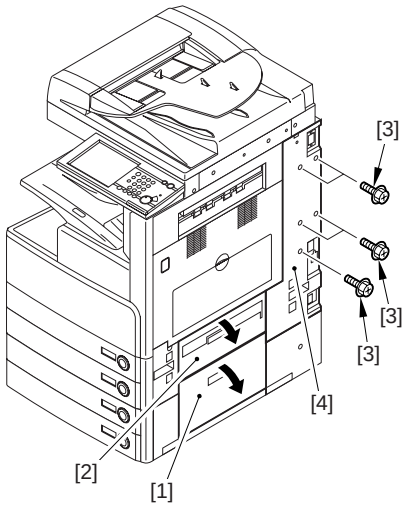
12.4.3 Cleaning the Film Bias Static Eliminator

0007-8642

iR3570 / iR4570

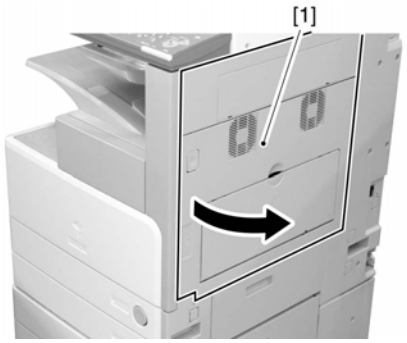
A. Removing the Right Door

1) Open the pedestal right door [1]. (if w/ Cassette Feeding Unit)
2) Open the lower right door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].



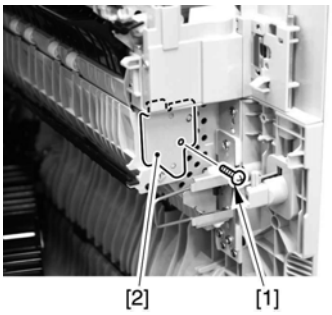
F-12-28

4) Open the right door.



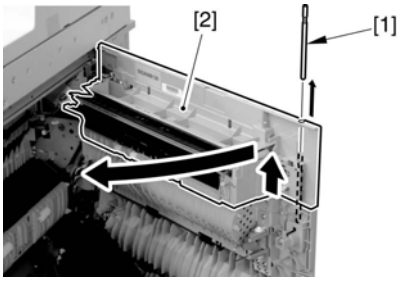
F-12-29

5) Remove the self-tapping screw [1], and detach the fixing plate [2].



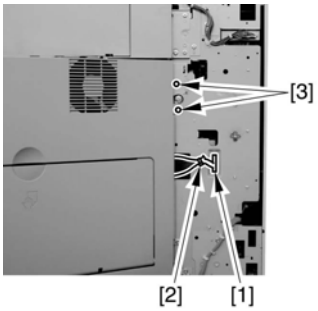
F-12-30

6) Remove the joint shaft [1], and detach the extension delivery unit [2] from the right door.



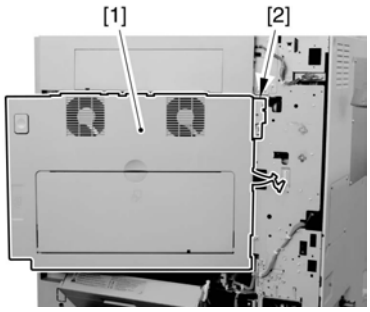
F-12-31

7) Disconnect the connector [1], and remove the reuse band [2]; then, remove the 2 screws (M4x8; RS tightening) [3].



F-12-32

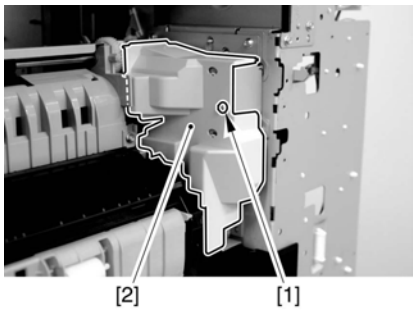
8) Free and detach the right door [1] from the hinge assembly [2].



F-12-33

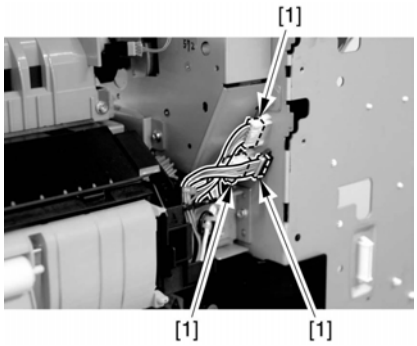
B. Removing the Fixing Assembly

1) Remove the screw [1], and detach the harness cover [2].



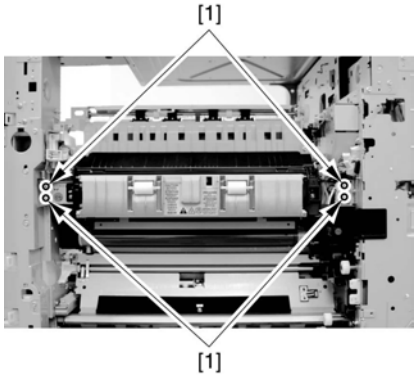
F-12-34

2) Disconnect the 3 connectors [1].



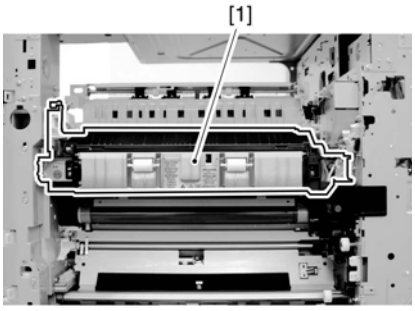
F-12-35

3) Remove the 4 screws [1].



F-12-36

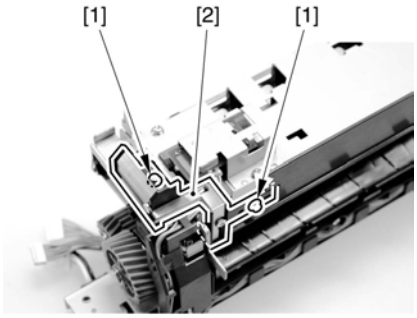
4) Remove the fixing unit [1] toward the front.



F-12-37

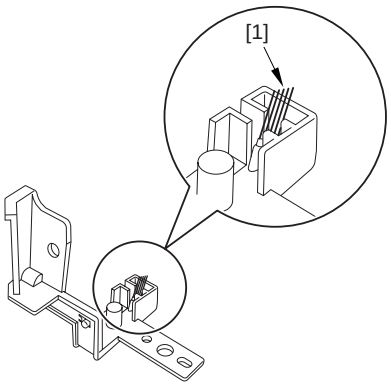
C. Cleaning the Film Bias Static Eliminator

1) Remove the 2 screws [1], and detach the grounding plate [2].



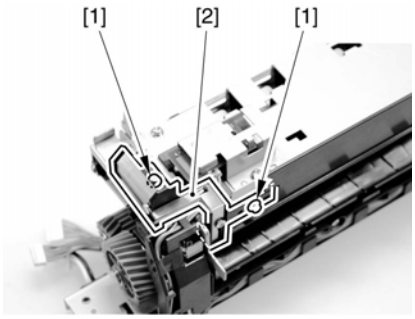
F-12-38

2) Clean the film bias static eliminator [1] found behind the grounding plate (to remove the cake of toner, if any, that may have collected on the static eliminator).



F-12-39

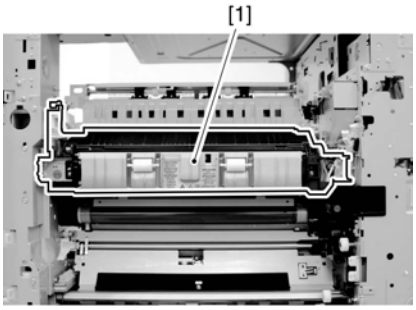
3) Mount the grounding plate [2] with 2 screws.



F-12-40

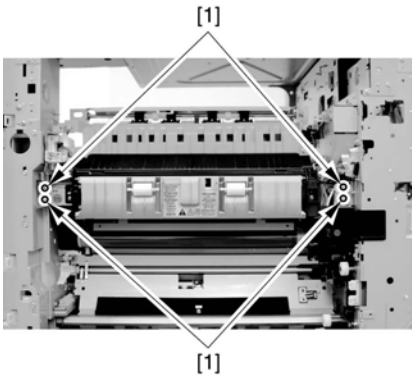
D. Mounting the Fixing Assembly

1) Mount the fixing unit [1] to the machine frame.



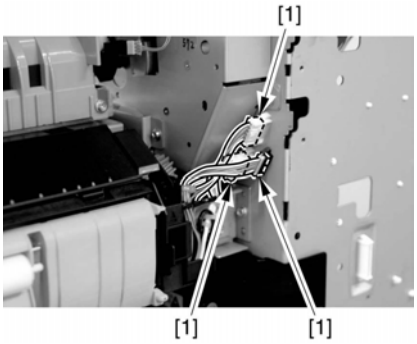
F-12-41

2) Secure the fixing assembly in place using 4 screws [1].



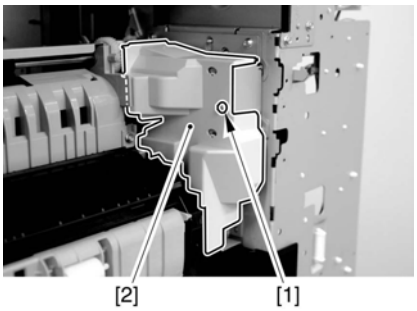
F-12-42

3) Connect the 3 connectors [1].



F-12-43

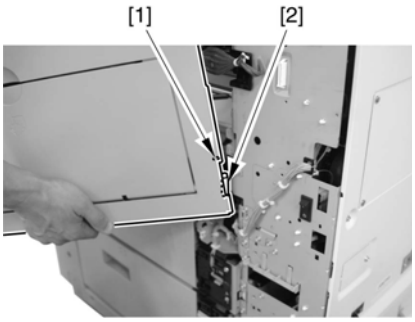
4) Mount the harness cover [2] using a screw [1].



F-12-44

E. Mounting the Right Door

1) Match the hole [1] of the right door bottom and the pin [2].

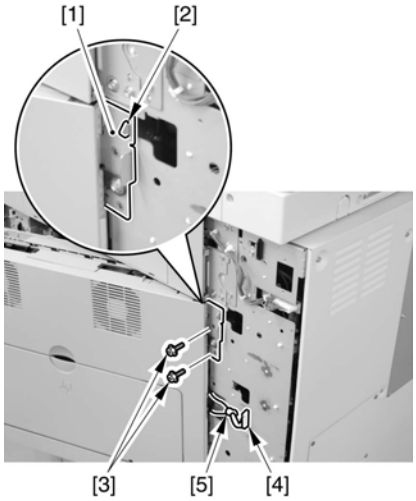


F-12-45

2) Match the mounting plate [1] of the right door top against the hook [2], and mount the right door.

3) Secure the mounting plate [1] using 3 screws [3].

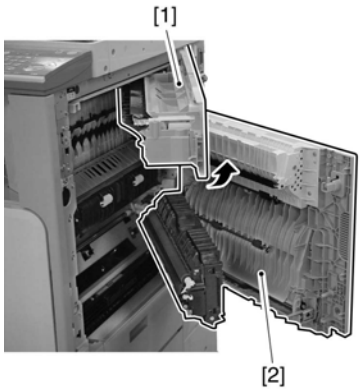
4) Connect the connector [4], and fit the reuse band [5] in place.



F-12-46

5) Open the expansion delivery kit [1].

6) Lift the expansion delivery kit [1] slightly to match it against the right door [2].



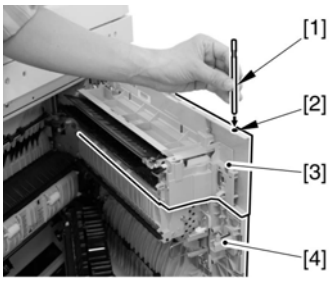
F-12-47

⚠

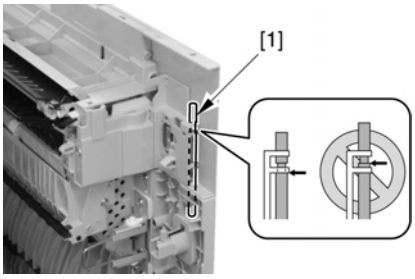
When matching the position, take care so that the expansion delivery kit will not open wider than 80 deg.

---

7) Push in the pin [1] through the hole [2] until it stops; then, connect the expansion delivery kit [3] to the right door [4].



F-12-48



F-12-49

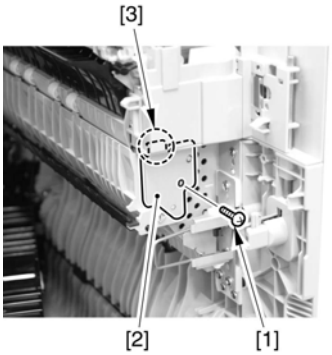
⚠

Check to be sure that the joint pin is fully fitted as shown in the figure.

8) Using the self-tapping screw [1] you removed in step A-5), fix the joint plate [2] in place.

⚠

Check to be sure that the protrusion [3] of the joint plate is fully in the mounting hole.

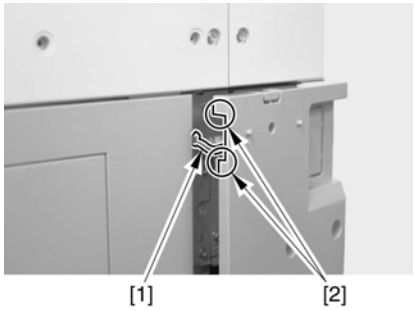


F-12-50

10) Mount the right cover (rear) using 5 screws.

⚠

Take care not to trap the harness [1] by the cut-off [2] of the right cover (rear).



F-12-51

11) Close the right door.

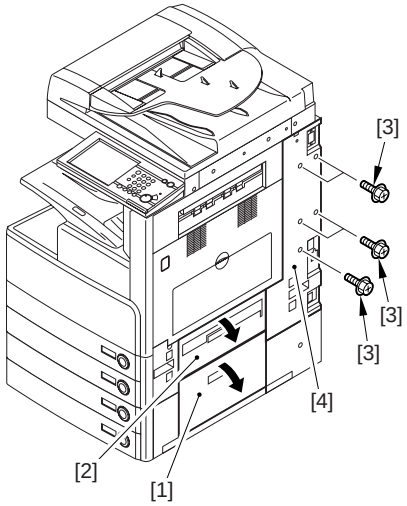
12.4.4 Cleaning the Film Bias Static Eliminator

0008-2928

iR2270 / iR2870

A. Removing the Right Door

1) Open the pedestal right door [1]. (if equipped with a Cassette Feeding Unit-Y2)
2) Open the lower right door [2].
3) Remove the 5 screws [3], and detach the right cover (rear) [4].



F-12-52

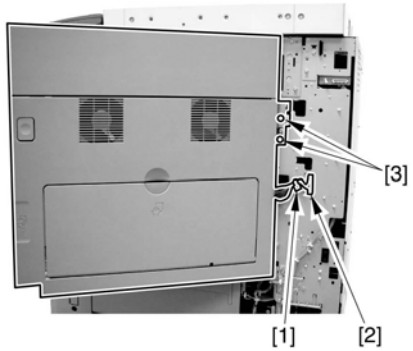
4) Open the right door.



F-12-53

5) Remove the reuse band [1], and disconnect the connector [2].

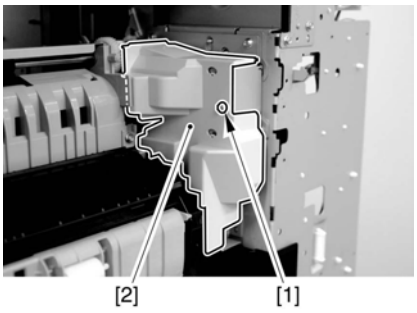
6) Remove the 2 screws (M4x8; RS tightening) [3]; then, detach the right door.



F-12-54

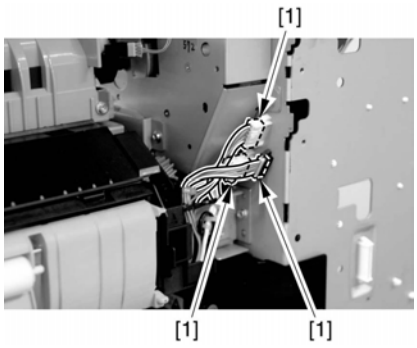
B. Removing the Fixing Assembly

1) Remove the screw [1], and detach the harness cover [2].



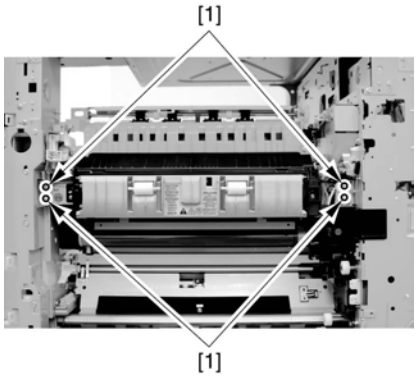
F-12-55

2) Disconnect the 3 connectors [1].



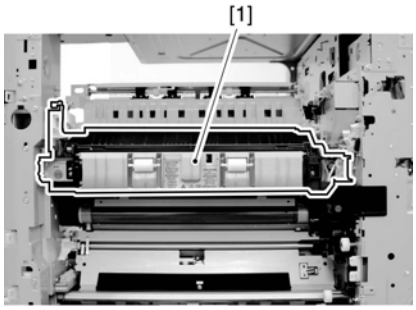
F-12-56

3) Remove the 4 screws [1].



F-12-57

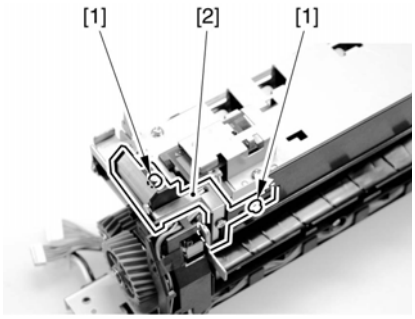
4) Slide out the fixing unit [1] toward the front.



F-12-58

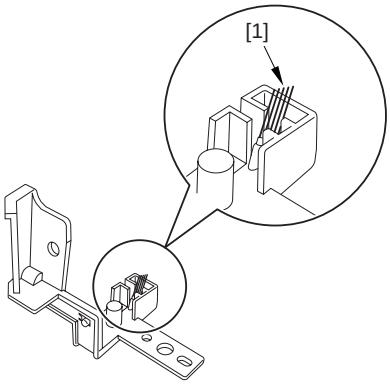
C. Cleaning the Film Bias Static Eliminator

1) Remove the 2 screws [1], and detach the grounding plate [2].



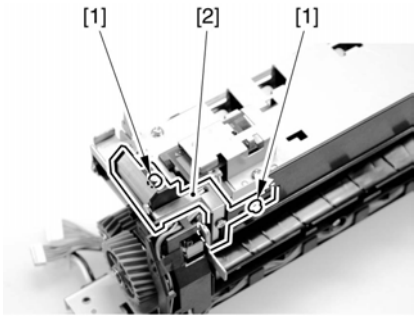
F-12-59

2) Clean the film bias static eliminator [1] found on the back of the grounding plate. (Be sure to remove the cake of toner that may have collected on the static eliminator.)



F-12-60

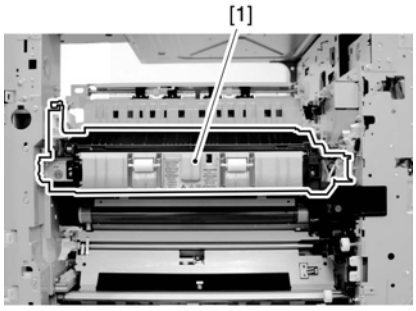
3) Fix the grounding plate [2] in place using 2 screws [1].



F-12-61

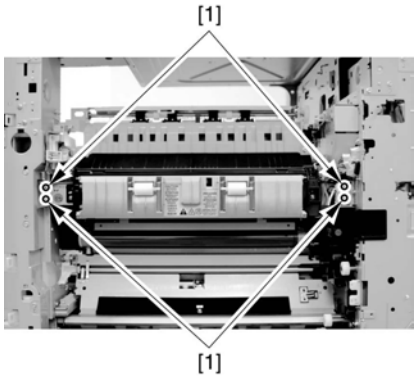
D. Mounting the Fixing Assembly

1) Fit the fixing unit [1] to the machine frame.



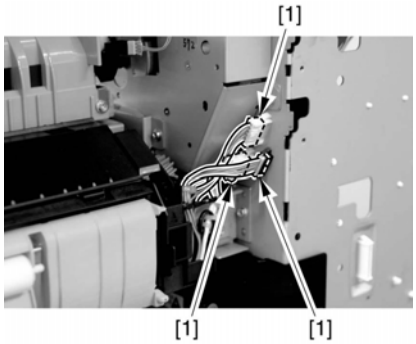
F-12-62

2) Secure the fixing assembly in place using 4 screws [1].



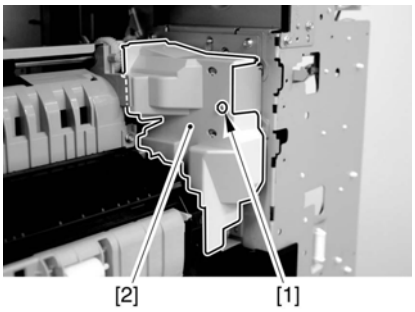
F-12-63

3) Connect the 3 connectors [1].



F-12-64

4) Mount the harness cover [2] using a screw [1].

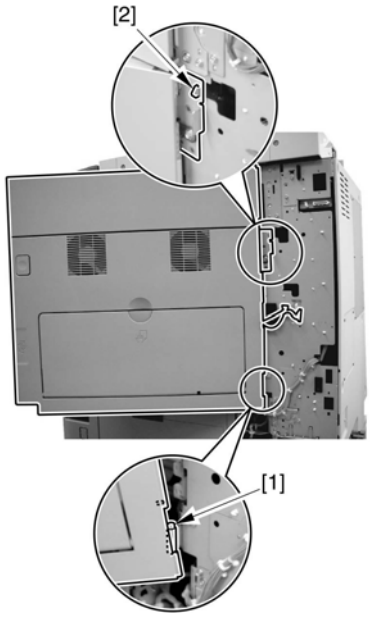


F-12-65

E. Mounting the Right Door

1) Match the hinge [1] found at the bottom of the right door against the protrusion.

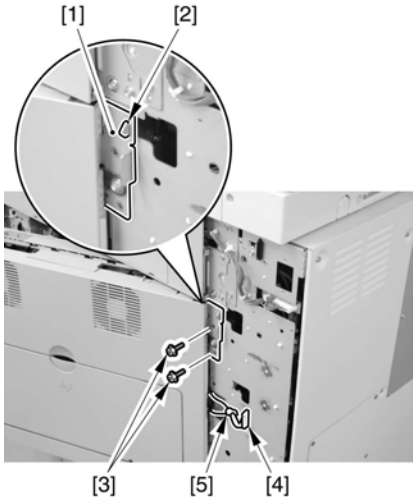
2) Engage the hinge [2] found at the top of the right door on the hook on the machine side plate.



F-12-66

3) Fix the mounting base [1] in place using 2 screws [3].

4) Connect the connector [4], and fit the reuse band [5] in place.

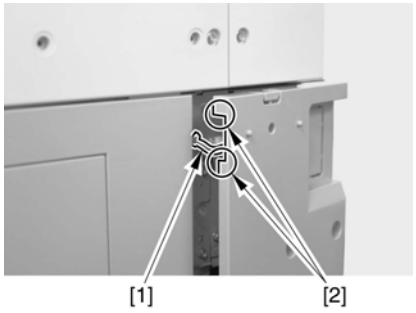


F-12-67

5) Mount the right cover (rear) using 5 screws.

⚠

Take care not to trap the harness [1] by the cut-off [2] of the right cover (re).



F-12-68

6) Close the right door.

Chapter 13 Standards and Adjustments

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13.1 Image Adjustments

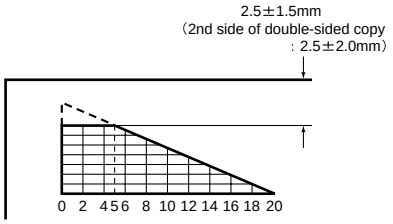
13.1.1 Standards for Image Position

0007-4812

iR2270 / iR2870 / iR3570 / iR4570

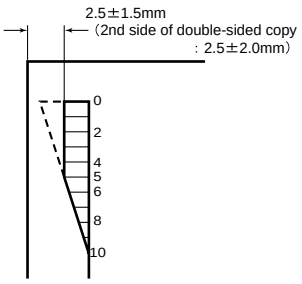
A print made at a magnification of 100% must meet the following standards for image margin/non-image width:

- Margin Along the Leading Edge



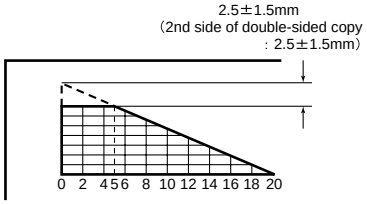
F-13-1

- Left/Right Image Margin



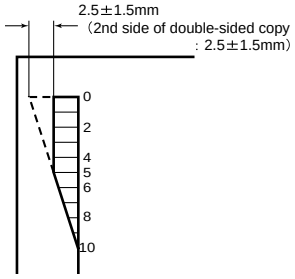
F-13-2

- Leading Edge Non-Image Width



F-13-3

- Left/Right Non-Image Width



F-13-4

13.1.2 Adjusting the Image Position

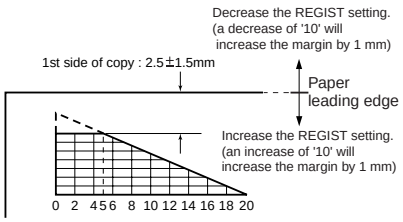
0007-4813

iR2270 / iR2870 / iR3570 / iR4570

Using the source of paper indicated, make 10 prints each to see if the image margin and the non-image margin are as indicated:
[1] Cassettes
[2] Manual feed tray
[3] Side paper deck

If not as indicated, adjust the image position as follows:

1.Adjusting the Leading Edge Image Margin (1st side)
Adjust the registration in service mode:
COPIER > ADJUST > FEED-ADJ > REGIST

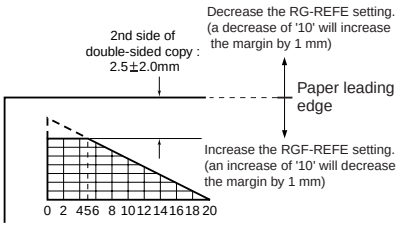


F-13-5

2. Adjusting the Left/Right Image (1st side)
Mechanical Horizontal Registration Adjustment

3. Adjusting the Leading Edge Image Margin (2nd side)
Adjust the registration in service mode:

COPIER>ADJUST>FEED-ADJ>RG-REFE.



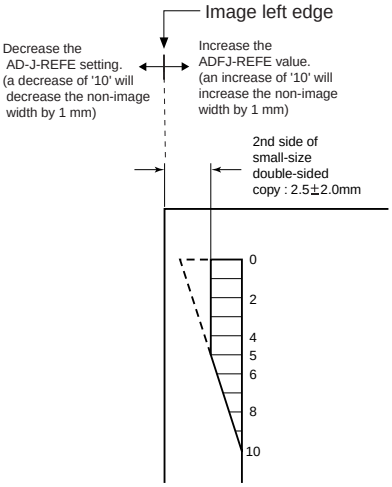
F-13-6

4. Adding the Left/Right Image Margin (2nd side)

Adjust the horizontal registration in service mode.

- Small Size

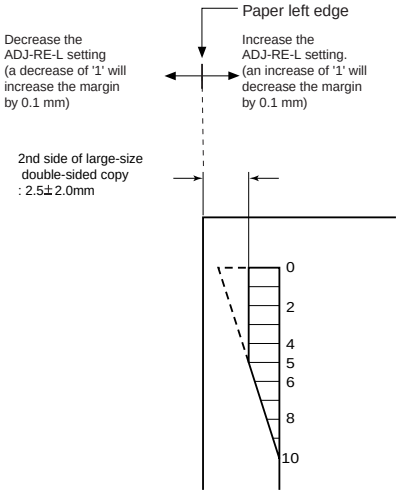
COPIER > ADJUST > FEED-ADJ > ADJ-REFE



F-13-7

- Large Size (longer than A4/LTR in feed direction)

COPIER > ADJUST > FEED-ADJ > ADJ-RE-L

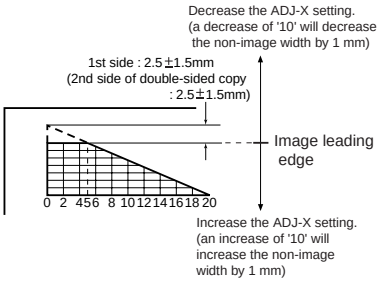


F-13-8

5. Adjusting the Leading Edge Non-Image Width

Use service mode to make adjustments:

COPIER > ADJUST > ADJ-XY > ADJ-X

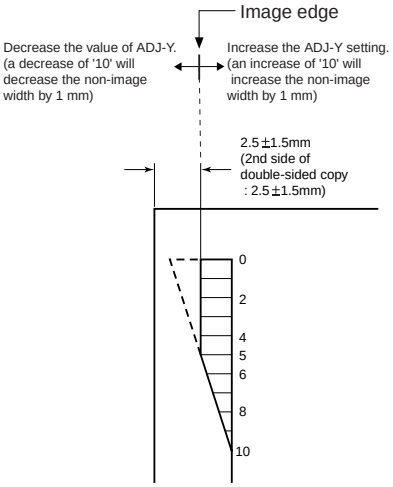


F-13-9

6. Adjusting the Left/Right Non-Image Width

Use service mode to make adjustments:

COPIER > ADJUST > ADJ-XY > ADJ-Y



F-13-10

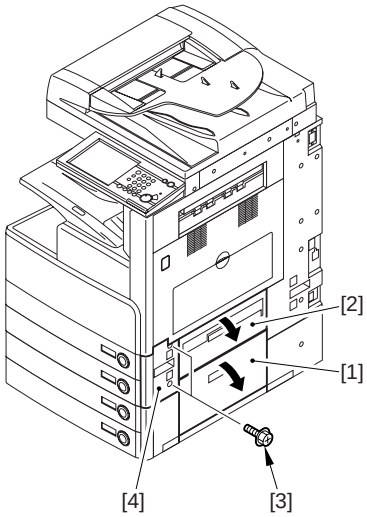
13.1.3 Cassette

0007-4907

iR2270 / iR2870 / iR3570 / iR4570

A. Adjusting the Left/Right Margin (1st side)

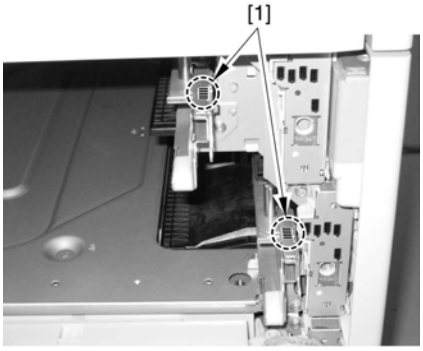
1) Open the pedestal lower right cover [1] and lower right color [2]; then, remove the 2 screws [3], and detach the cover (lower front) [4].



F-13-11

2) Take out the cassette 1 or 2.
(in the case of a 2-cassette pedestal, the cassette 3 or 4)

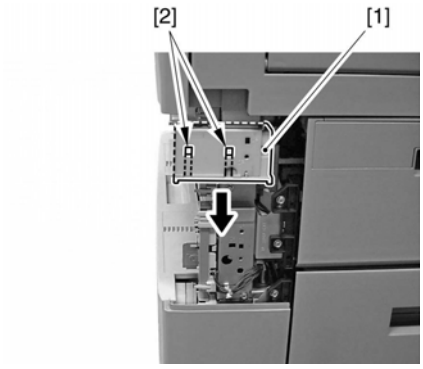
3) Check the index [1].
(the same applies to a 2-cassette pedestal.)



F-13-12

A-1. Adjusting the Cassette 1 (left/right image margin; 1st side)

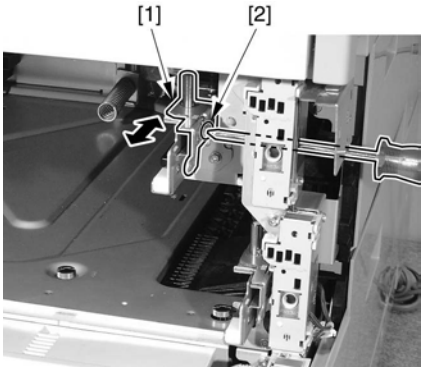
4) Remove the 2 claws [2], and detach the grip (right front) [1].



F-13-13

5) Loosen the fixing screw [2] on the horizontal registration adjusting plate [1] of the cassette.

6) While referring to the index you checked in step 3), move the horizontal registration adjusting plate back and forth. (Moving the plate toward the rear of the machine will increase the left/right image margin along the image front.)

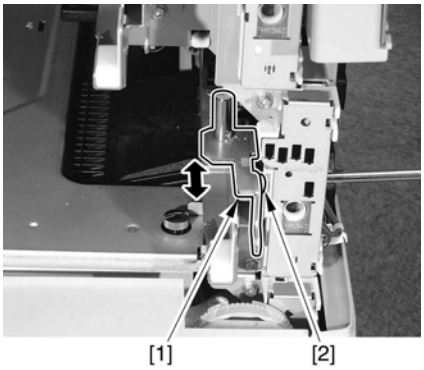


F-13-14

7) Loosen the fixing screw.
8) Put the cassette 1 back in place.
9) Make a copy using the cassette 1 as the source of paper, and check to make sure that the marking is as indicated.
10) Fit the grip (right front) in place.
11) Mount the right front cover of the machine.

A-2. Adjusting the Cassette 2 (left/right image margin; 1st side)

4) Loosen the fixing screw [2] of the horizontal registration adjusting plate [1] of the cassette.
5) While referring to the index you checked in step 3), move the horizontal registration adjusting plate back and forth. (Moving the plate toward the rear of the machine will increase the left/right image margin along the image front.)



F-13-15

6) Tighten the fixing screw.
7) Put the cassette 2 back in place.
8) Make a copy using the cassette 2 as the source of paper, and check to make sure that the margin is as indicated.
9) Mount the right front cover of the machine.

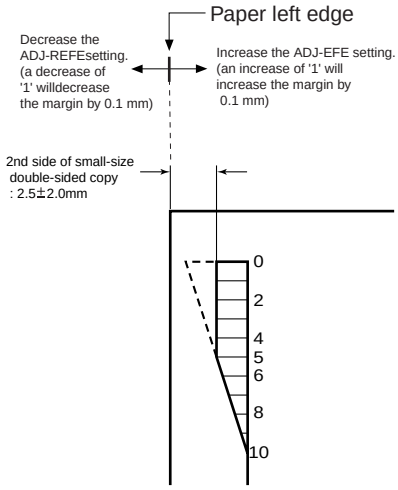
B. Adjusting the Left/Right Image Margin (2nd side)

B-1. 2nd Side of Small-Size Paper (left/right image margin)

1) If the margin is not as indicated, change the setting of the 2nd side left/right image margin of the cassette 1:

COPIER>ADJUST>FEED-ADJ>ADJ-REFE

An increase of '1' will decrease the left/right image margin along the front side by 0.1 mm.



F-13-16

B-2. 2nd Side of Large-Size Paper (left/right image margin)

1) Enter the same ADJ-REFE:

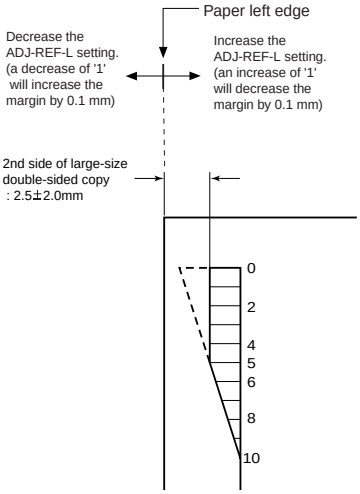
COPIER>ADJUST>FEED-ADJ>ADJ-RE-L

2) Make a double-sided copy using large-size paper, and check to make sure that the marking is as indicated.
3) If not as indicated, change the adjustment value for the 2nd side right/left image margin for large-size

paper:

COPIER>ADJUST>FEED-ADJ>ADJ-RE-L

An increase of '1' will decrease the left/right image margin on the front side by 0.1 mm.



F-13-17

4) Record the new setting on the service label:
   - ADJ-REFE
   - ADJ-RE-L
5) Press the Reset key twice to end service mode.

13.1.4 Manual Feed Tray 0007-4910

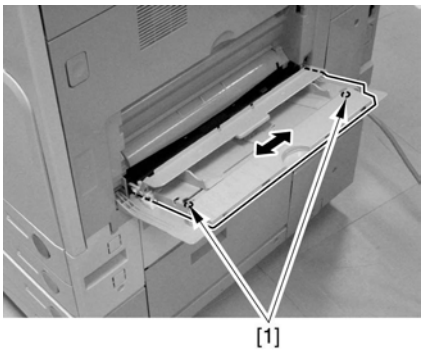
iR2270 / iR2870 / iR3570 / iR4570

A. Adjusting the Left/Right Image Margin (1st side; mechanical)

1) Put paper in the manual feed tray.
2) Make a copy using the manual feeder as the source of paper, and check to be sure that the left/right image margin is 2.5 +/-1.5 mm.

- If not as indicated, make the following adjustments:

3) Remove the paper from the manual feed tray.
4) Loosen the fixing screw [1] on the upper over of the manual feed d tray.



F-13-18

5) So that the margin is as indicated, move the top cover of the manual feed tray back and forth.

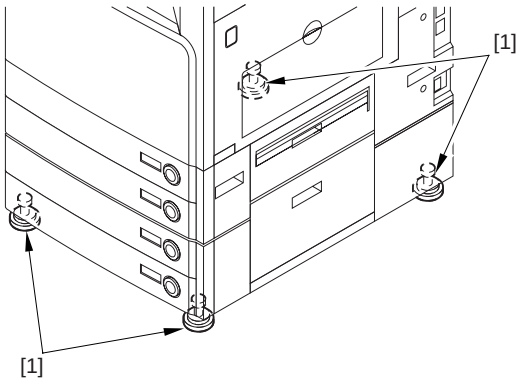
Moving the top cover of the manual feed tray toward the rear of the machine will decrease the left/right image margin along the front side.

6) Tighten fixing screw on the top cover of the manual feed tray.
7) Put paper in the manual feed tray.
8) Make a copy using the manual feed tray as the source of paper, and check to make sure that the margin is as indicated.

13.1.5 Side Paper Deck 0007-4911

iR2270 / iR2870 / iR3570 / iR4570

1) Check to make sure that the 4 adjusters [1] of the pedestal of the host machine are in contact with the floor.



F-13-19

2) Connect the power plug of the host machine, and turned on the power switch.
3) When the host machine has completed its wait period, open the machine using the paper deck as the source of paper to make sure that the operation is normal.

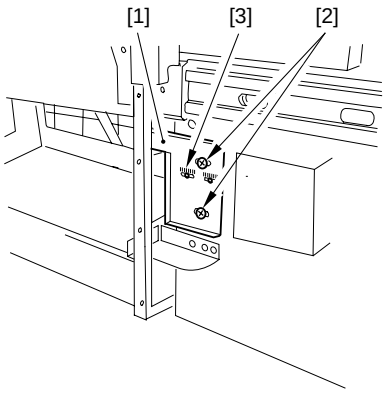
A. Adjusting the Let/Right Image Margin (1s side; mechanical adjustment)

1) Make a copy using the paper deck as the source of paper, and check to make sure that the left/right image margin in the image front direction is 2.5 +/-1.5 mm.

- If not as indicated, go through the following:
2) Slide out the compartment.
3) Turn the 2 screws [2] to adjust the mounting position of the latch plate [1] of the deck open solenoid (SL2D) found at the left rear.

⚠

At this time, use the index [3] of the latch plate as a reference.



F-13-20

13.2 Scanning System

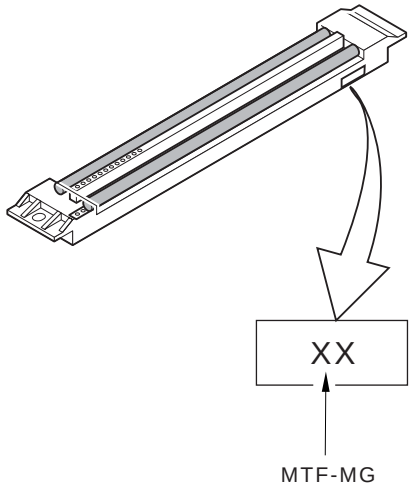
13.2.1 After Replacement of the CIS

0007-9838

iR2270 / iR2870 / iR3570 / iR4570

Be sure to enter the value indicated on the CIS label attached to the contact image sensor (CIS) using the following service mode item:

COPIER>ADJUST>CCD>MTF-MG
(main scanning direction MTR correction value)



F-13-21

Be sure also to update the value indicated on the service label found behind the left cover of the reader unit so that it is identical to the value indicated on the CIS label.

Reference:
At time of shipment from the factory, no CIS label is attached.

13.2.2 After Replacing the Reader Controller PCB or Initializing the RAM

0007-9839

iR2270 / iR2870 / iR3570 / iR4570

⚠ - Before replacing the reader controller PCB, be sure to print out the latest P-PRINT page.

<if you are executing RAM initialization for the reader controller without replacing the PCB>

- Using the SST, upload the backup data of the reader controller, and download it after initializing the RAM so that you need not perform the following:

1. Reader Unit-Related Adjustments

1) Using the SST, download the latest system software (R-CON).

2) Make the following selections in service mode: COPIER>FUNCTION>LEARN>R-CON. Then, press the OK key to initialize the RAM; thereafter, turn off and then on the main power.

3) Enter the following values in service mode:

a. values indicated on the service label (found behind the left cover of the reader unit)

a-1. CIS read position adjustment (for fixed reading)
COPIER>ADJUST>ADJ-XY>ADJ-X

a-2. main scanning direction position adjustment (for fixed reading)
COPIER>ADJUST>ADJ-XY>ADJ-Y

a-3. shading position adjustment (for fixed reading)
COPIER>ADJUST>ADJ-XY>ADJ-S

a-4. main scanning direction MTF
COPIER>ADJUST>CCD>MTF-MG

⚠If a value other than '0' is set before replacement of the reader controller PCB (COPIER>FUNCTION>BODY>CCD-LUT), set a value other than '0' once again, and make the following adjustments using the D-10 Chart.
COPIER>FUNCTION>CCD>LUT-ADJ2

2. ADF-Related Adjustments

⚠The machine is designed to retain ADF-related

service data in its reader controller RAM. As such, if you have replaced the reader controller or initialized the RAM, you will also have to make ADF-related adjustments.

1) Enter the following values by referring to the values indicated on the P-PRINT page you have previously printed out.

a. main scanning direction position adjustment (for stream reading)

COPIER>ADJSUT>ADJ-XY>ADJ-Y-DF

b. original stop position adjustment

FEEDER>ADJSUT>DOCST

c. original feed speed (magnification) adjustment

FEEDER>ADUST>LA-SPEED

2) Make adjustments using the following service mode items:

a. Tray Width Adjustment

FEEDER>FUNCTION>TRY-A4

FEEDER>FUNCTION>TRY-A5R

FEEDER>FUNCTION>TRY-LTR

FEEDER>FUNCTION>TRY-LTRR

b. CIS Read Position Adjustment (for stream reading)

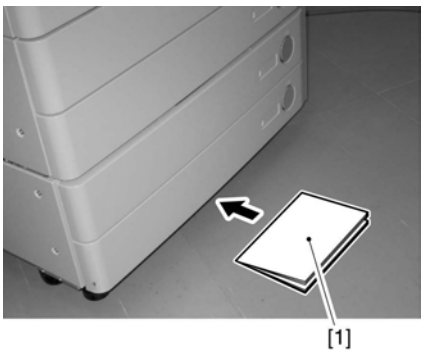
COPIER>FUNCTION>INSTALL>STRD-POS

c. White Level Adjustment

COPIER>FUNCTION>CCD>DF-WLVL1

COPIER>FUNCTION>CCD>DF-WLVL2

When you have made all the foregoing adjustments, put the P-PRINT page [1] in the service book case, and dispose of the previous printout.



F-13-22

13.3 Laser Exposure System

13.3.1 After Replacing the Laser Scanner Unit 0007-5178

iR2270 / iR2870 / iR3570 / iR4570

Enter the values recorded on the label on the laser scanner unit for the following in service mode:
- COPIER>ADJUST>LASER>LA-DELAY

13.4 Image Formation System

13.4.1 After Replacing the Developing Unit 0007-5179

iR2270 / iR2870 / iR3570 / iR4570

1) Execute the following service mode items:
- COPIER > FUNCTION > INSTALL > STIR-K
2) Initialize the following service mode items:
- COPIER > COUNTER > DRBL-1 > DVG-CYL

⚠A test copy that is made right after the toner has been stirred can be soiled on its back with a small amount of stray toner. The symptom will likely disappear when 3 or so copies are made.

13.4.2 After Replacing the Drum Unit (APVC correction) 0007-5181

iR2270 / iR2870 / iR3570 / iR4570

1) Connect the power plug to the power outlet, and turn on the main power unit.
2) In the host machine's service mode, make the following selections: COPIER>FUNCTION>DPC>D-GAMMA.
3) Press the OK key.
- The machine will pick up paper from cassette 1 (regardless of the size of the paper inside the cassette).
- If no paper exists in cassette 1, the machine will try to find paper in the lower cassettes in order.
- The paper will be discharged blank to end APVC correction.
4) Press the Reset key twice to end service mode.

13.5 Electrical Components

13.5.1 After Replacing the HDD

0007-8275

iR2270 / iR2870 / iR3570 / iR4570

1) Format the HDD.

Start up the machine in safe mode (i.e., while holding down the 2 and 8 keys, turn on the main power).

Using the HD format function of the SST, format all partitions ($); for details, see the descriptions given for upgrading.

2) Download the system software.

Using the SST, download the following: LANGUAGE, RUI, PS-FRONT, OCR dictionary, SSL coding key, SSL CA certificate, MEAP content.

Keep in mind that the machine may take about 5 min to start up after downloading.

13.5.2 After Replacing the DC Controller PCB

0007-4922

iR2270 / iR2870 / iR3570 / iR4570

⚠

- Before replacing the DC controller PCB, print out the latest P-PRINT page.

  COPIER>FUNCTION>MISC-P>P-PRINT

1) Using the SST, download the latest system software.

2) Using the following service mode item, initialize the memory of the DC controller PCB:

COPIER>FUNCTION>CLEAR>DC-CON

3) Using the following service mode items, enter the values indicated on the P-PRINT page:

- COPIER>ADJUST>LASER>**LA-DELAY/ LA-OFF/ POWER**
- COPIER>ADJUST>DEVELOP>**DE-OFST**
- COPIER>ADJUST>BLANK>**BLANK-T/ BLANK-B**
- COPIER>ADJUST>HV-RPRI>**OFST-DC/ OFST-AC**
- COPIER>ADJUST>HV-TR all items under
- COPIER>ADJUST>FEED-ADJ all items under
- COPIER>ADJUST>CST-ADJ all items under
- COPIER>ADJUST>FIXING all items under
- COPIER>ADJUST>MISC all items under

4) Execute the following service mode items:

- COPIER > FUNCTION > DPC > D-GAMMA

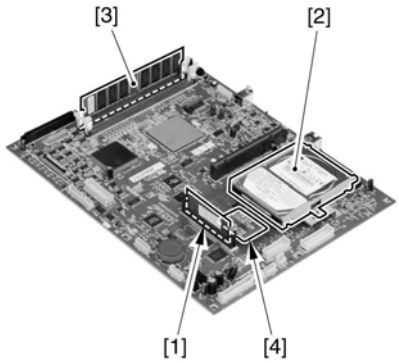
13.5.3 After Replacing the Main Controller PCB

0007-5188

iR2270 / iR2870 / iR3570 / iR4570

If you are replacing the main controller PCB, be sure to transfer the following components from the old to new PCB:

[1] boot ROM
[2] HDD
[3] image memory (SDRAM)
[4] counter memory PCB



F-13-23

If the user uses NetSpot Accountant (NSA) in Combination with a Card Reader

The SDRAM of the main controller retains card ID used by NSA. If you have replaced the main controller, you will have to download the card data from NSA once again to permit NSA to perform statistical operations.
If you have formatted the HDD and downloaded the system software, you will have to go through a specific set of steps:

1) Format the HDD.
2) Download the system software.
3) Make the following selections:
COPIER>FUNCTION>INSTALL>CARD.
4) Enter a card No.
Enter the first of the numbers that will be used for group control, and press the OK key (e.g., if you are planning to use cards from No. 1 thorough No. 100, enter '1').
5) turn off and then on the main power.
6) Check the count control mechanism in user mode.
system control setup>group ID control>count control
check to see as many as 'ID00000001 through ID00001000' have been prepared.
7) Set the IP address in user mode.
system control setup>network setup>TCP/IP setup>IP address
Set 'IP address', 'gateway address', and 'sub net mask'.
8) Enter a number of your choice in user mode.
system administrator info setup>system control group ID>system control ID No.
9) Hold down the control panel power switch for 3 sec or more.
10) Go through the instructions on the control panel for shut-down sequence so that the main power switch may be turned off.
11) Turn off the main power switch. Wait for 3 sec or more, and turn it back on.

⚠Unless you have registered 'system control group ID' and 'system control ID No.', you will not be able to register cards for the device in the course of Net Spot Accountant setup work.

12) Download the card ID.
Keep the machine in a standby state < and download the card ID to be used from the NSA>
13) Check the count control particulars in user mode.
system control setup>group ID control>count control
See that only the downloaded ID data is shown.
14) Check to see that the operation is normal.
Make copies using a user card that has been registered using the NSA, and check to see that the count of the card in question has been incremented correctly.

13.5.4 After Replacing the Reader Controller PCB 0007-9843

iR2270 / iR2870 / iR3570 / iR4570

⚠ - Before replacing the reader controller PCB, be sure to print out the latest P-PRINT page.
<if you are executing RAM initialization for the reader controller without replacing the PCB>
- Using the SST, upload the backup data of the reader controller, and download it after initializing the RAM so that you need not perform the following:
1. Reader Unit-Related Adjustments
1) Using the SST, download the latest system software (R-CON).
2) Make the following selections in service mode: COPIER>FUNCTION>LEARN>R-CON. Then, press the OK key to initialize the RAM; thereafter, turn off and then on the main power.
3) Enter the following values in service mode:
a. values indicated on the service label (found behind the left cover of the reader unit)

a-1. CIS read position adjustment (for fixed reading)
COPIER>ADJUST>ADJ-XY>ADJ-X
a-2. main scanning direction position adjustment

(for fixed reading)

COPIER>ADJUST>ADJ-XY>ADJ-Y

a-3. shading position adjustment (for fixed reading)

COPIER>ADJUST>ADJ-XY>ADJ-S

a-4. main scanning direction MTF

COPIER>ADJUST>CCD>MTF-MG

⚠If a value other than '0' is set before replacement of the reader controller PCB (COPIER>FUNCTION>BODY>CCD-LUT), set a value other than '0' once again, and make the following adjustments using the D-10 Chart.

COPIER>FUNCTION>CCD>LUT-ADJ2

2. ADF-Related Adjustments

⚠The machine is designed to retain ADF-related service data in its reader controller RAM. As such, if you have replaced the reader controller or initialized the RAM, you will also have to make ADF-related adjustments.

1) Enter the following values by referring to the values indicated on the P-PRINT page you have previously printed out.

a. main scanning direction position adjustment (for stream reading)

COPIER>ADJSUT>ADJ-XY>ADJ-Y-DF

b. original stop position adjustment

FEEDER>ADJSUT>DOCST

c. original feed speed (magnification) adjustment

FEEDER>ADUST>LA-SPEED

2) Make adjustments using the following service mode items:

a. Tray Width Adjustment

FEEDER>FUNCTION>TRY-A4

FEEDER>FUNCTION>TRY-A5R

FEEDER>FUNCTION>TRY-LTR

FEEDER>FUNCTION>TRY-LTRR

b. CIS Read Position Adjustment (for stream reading)

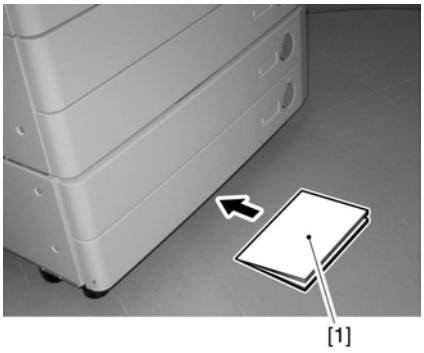
COPIER>FUNCTION>INSTALL>STRD-POS

c. White Level Adjustment

COPIER>FUNCTION>CCD>DF-WLVL1

COPIER>FUNCTION>CCD>DF-WLVL2

When you have made all the foregoing adjustments, put the P-PRINT page [1] in the service book case, and dispose of the previous printout.



F-13-24

13.6 Pickup/Feeding System

13.6.1 Adjusting the Horizontal Registration When Replacing the Cassette

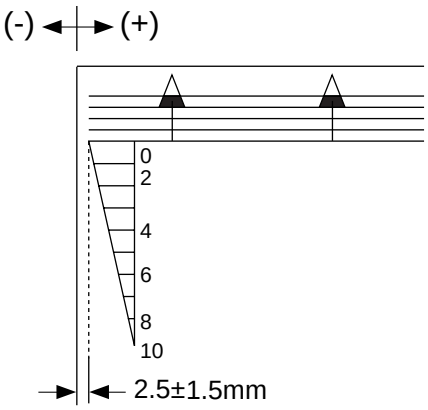
0007-4923

iR2270 / iR2870 / iR3570 / iR4570

- 1st Side Adjustment (mechanism)

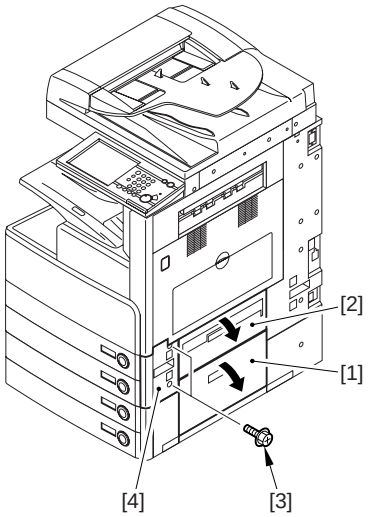
1) Make a copy using the cassette 1/2, and check to make sure that the front margin is 2.5 +/-1.5 mm.

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



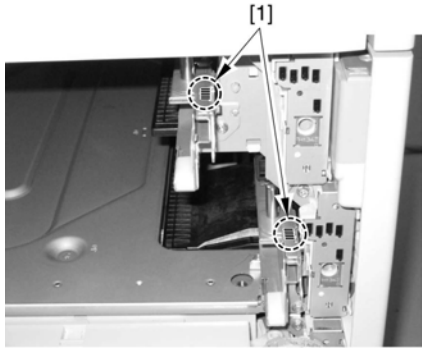
F-13-25

2) If a 2-Cassette Pedestal-Y2 is installed, open the right door [1] of the pedestal.
3) Open the lower right cover [2]; then, remove the 2 screws [3], and detach the cover (lower front) [4].



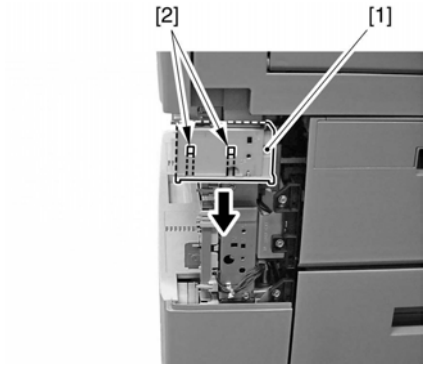
F-13-26

4) Take out the cassette 1 or 2.
5) Check the index [1] of the adjusting plate.



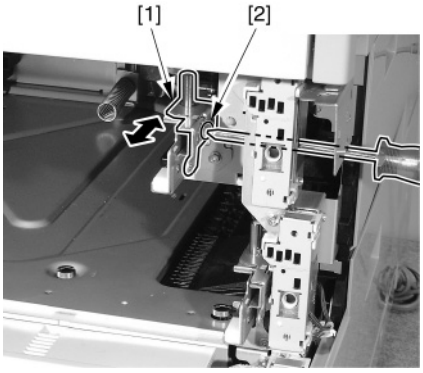
F-13-27

- Adjusting the Cassette 1
6) Remove the 2 claws [2], and detach the grip (right front) [1].



F-13-28

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

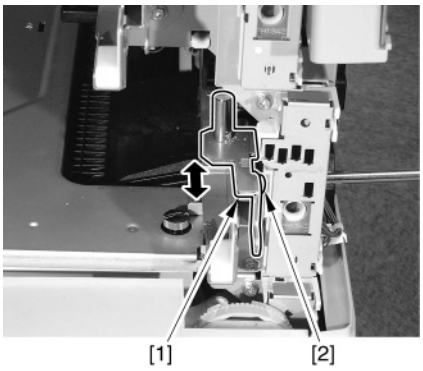


F-13-29

9) Tighten the fixing screw.
10) Put the cassette 1 back into the machine.
11) Make a copy using the cassette 1 as the source of paper; then, check to make sure that the margin in the image front direction is 2.5 +/-1.5 mm.
12) Fit the grip (right front) in place.
13) Mount the right front cover of the machine.

- Adjusting the Cassette 2

6) Loosen the fixing screws [2] on the horizontal registration adjusting plate [1] of the cassette.
7) While referring to the index you checked in step 5), move the adjusting plate back and forth. Moving the adjusting plate toward the rear of the machine will increase the margin along the image front.

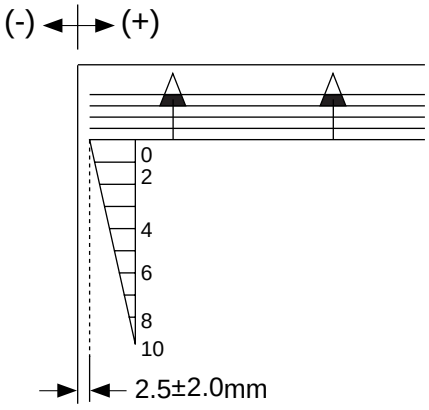


F-13-30

8) Tighten the fixing screw.
9) Put the cassette 2 back in place.
10) Make a copy using the cassette 2 as the source of paper, and check to make sure that the margin in the image front direction is 2.5 +/-1.5 mm.
11) Mount the right front cover.

- margin adjustment (2nd side; small-size)

1) Make a double-sided copy (small-size) using the cassette you have adjusted for the 1st side as the source of paper, and check to make sure that the front margin is 2.5 +/-2.0 mm.



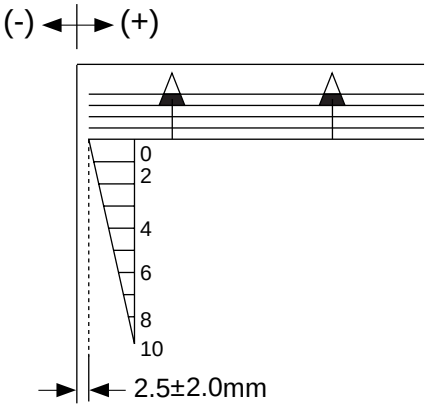
F-13-31

2) If the value is not as indicated, change the adjustment value of the 2nd side horizontal registration for small-size.
- COPIER>ADJUST>FEED-ADJ>ADJ-REFE
An increase of '1' will decrease the margin at the front

by 0.1 mm.
3) Record the new setting on the service label.
- ADJ-REFE

- margin adjustment (2nd side; large-size; A4/LTR or longer in feed direction)

1) Make a double-sided copy (large-size) using the cassette you have adjusted for the 1st side as the source of power, and check to make sure that the front margin is 2.5 +/-2.0 mm.



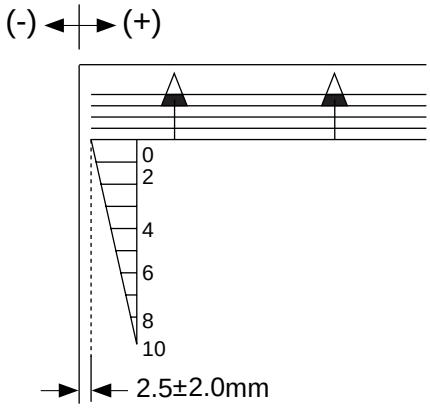
F-13-32

2) If the value is not as indicated, change the adjustment value for 2nd side horizontal registration for large-size.
- COPIER>ADJUST>FEED-ADJ>ADJ-RE-L
An increase of '1' will decrease the margin on the front by 0.1 mm.
3) Record the new setting on the service label.
- ADJ-RE-L

13.6.2 Adjusting the Horizontal Registration When Replacing the Duplex Unit 0007-4924

iR2270 / iR2870 / iR3570 / iR4570

1) Make double-sided small- and large-size copies, and check to make sure that the front margin is 2.5 +/-2.0 mm. A sheet is large-size if its length in feed direction is longer than A4/LTR.



F-13-33

2) If the value is not as indicated, change the adjustment value of the 2nd side horizontal registration for small-/large-size.
- COPIER>ADJUST>FEED-ADJ>ADJ-REFE(small-size)
- COPIER>ADJUST>FEED-ADJ>ADJ-RE-L(large-size)

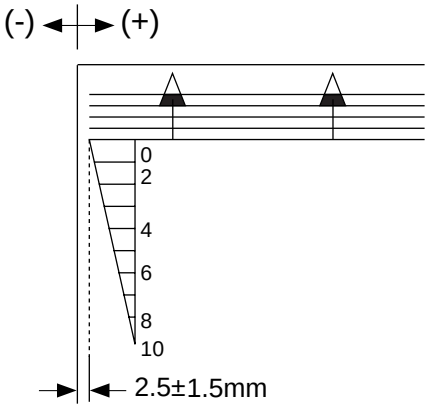
An increases of '1' will decrease the margin at the front by 0.1 mm.
3) Record the new setting on the service label.
- ADJ-REFE
- ADJ-RE-L

13.6.3 Adjusting the Manual Feed Pickup Horizontal Registration 0007-4925

iR2270 / iR2870 / iR3570 / iR4570

- 1st Side (mechanical)

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



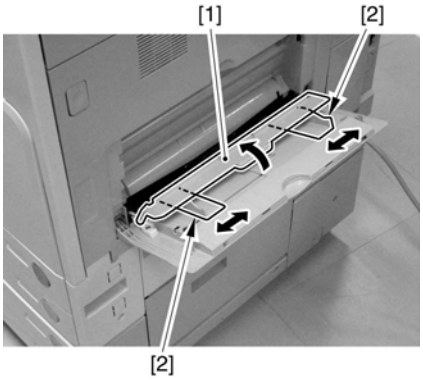
F-13-34

- If the value is not as indicated, make the following adjustments:

3) Remove paper from the manual feed tray.

4) Loosen the fixing screw [1] on the top cover of the manual feed tray.

5) While referring to the index you checked in step 2), move the top cover of the manual feed tray back and forth. Moving the top cover of the manual feed tray toward the rear of the machine will increase the front margin.



F-13-35

6) Tighten the fixing screw on the top cover of the manual feed tray.

7) Put paper in the manual feed tray.

8) Make a copy using the manual feeder as the source of paper, and check to make sure that the margin along the front is 2.5 +/-1.5 mm.

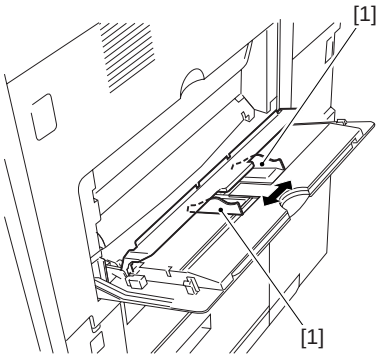
13.6.4 Registering the Paper Width Basic Value 0007-4926

iR2270 / iR2870 / iR3570 / iR4570

1) Turn on the main power switch.

2) Register the paper width basic value for A4R as follows:

2-1) Match the manual feed side guide [1] against the A4R marking.



F-13-36

2-2) Start service mode, and select 'register manual feed d A4R width'.

CPOIER>FUNCTION>CST>MF-A4R

2-3) Press the OK key to save the new A4R width.

3) Register the paper width basic value for A4 as follows:

3-1) Mach the manual feed guide against the A4 marking.

3-2) In service mode, select 'manual feed A4 width'.

CPOIER>FUNCTION>CST>MF-A4

3-3) Press the OK key to save the new A4 width.

4) Register the paper width basic value for A6R as follows:

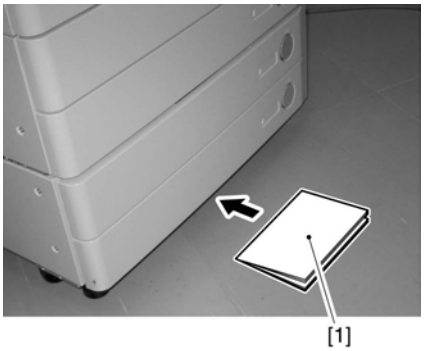
4-1) Match the manual feed side guide against the A6R marking.

4-2) In service mode, select 'register A6R width'.

CPOIER>FUNCTION>CST>MF-A6R

4-3) Press the OK key to save the new A6R width.

5) Press the Reset key twice to end service mode.
6) Hold down the control panel power switch for 3 sec or more.
7) Go through the steps for the shut-down sequence shown on the control panel so that the main power switch may be turned off.
8) Turn off the main power switch.
9) Wait for 3 sec or more; then, turn the main power switch back on.
10) Print out the latest P-ROINT page in service mode.
11) Put the printed P-PRINT page [1] in the service book case, and dispose of the previous printout.



F-13-37

Chapter 14 Correcting Faulty Images

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14.1 Making lnitial Checks

14.1.1 Site Environment

0007-9383

iR2270 / iR2870 / iR3570 / iR4570

a. There must be a source of power whose voltage is as specified (+/-10%). The power plug must never be disconnected day and night.
b. The machine must not be in an area subject to high humidity (near a water faucet, water boiler, humidifier). The site must not be too cold or subject to dust. The machine must not be near a source of fire.
c. The site must not be subject to ammonium gas.
d. The machine must not be exposed to the rays of the sun. As necessary, curtains must be provided.
e. The area must be well ventilated. The machine must be on a level floor.

In addition, be sure that there is a source of power that can be used by the machine at all times.

14.1.2 Checking the Paper

0007-9384

iR2270 / iR2870 / iR3570 / iR4570

a. Be sure the paper being used is of a type recommended by Canon.
b. Be sure that the paper is not moist. Try using paper fresh out of package.

14.1.3 Checking the Placement of Paper

0007-9385

iR2270 / iR2870 / iR3570 / iR4570

a. There must be paper in the cassette or the tray deposited within a specific limit.
b. If transparencies are used, be sure that they are placed in the manual feed tray in the correct orientation.

14.1.4 Checking the Durables

0007-9386

iR2270 / iR2870 / iR3570 / iR4570

Refer to the table of durables, and replace those that have reached the end of their lives.

14.1.5 Checking the Periodically Serviced Items

0007-9387

iR2270 / iR2870 / iR3570 / iR4570

Refer to the periodical servicing chart and the table of periodically replaced parts. As necessary, clean or replace parts.

14.1.6 Checking the Units and Functional Systems

0007-9388

iR2270 / iR2870 / iR3570 / iR4570

Reader Unit
- Check the scanner unit (contact sensor, white plate, copyboard glass) for scratches, dirt, and foreign matter.
- Check the contact sensor unit to see if it moves smoothly and if it is free of dirt.
- Check to see if the contact sensor is free of flickering.
- Check to see that the scanner system is free of condensation.

Process Components
- Check to see that the drum unit and the developing unit are properly fitted.
- Check to see that the photosensitive drum is free of scratches and dirt.

Transfer Components
- Check to see that the transfer roller is free of wear, scratches, dirt, and deformation.

Fixing Assembly
- Check to see if the fixing film and the pressure roller are free of wear, scratches, dirt, and deformation.
- Check to see that the fixing thermistor is free of an open circuit.
- Check to see if the thermal switch is free of disruption in its electrical continuity.

Paper Feed System
- Check to make sure that there is no paper lint or foreign matter.
- Check to make sure that there is no buildup of paper around the pickup, feed, and separation rollers. See that they are free of wear, scratches, dirt, and deformation.
- Check to make sure that the paper is free of a bent leading edge and is free of curling, waving, and excess moisture.
- Try using paper and transparency of a type recommended by Canon to see if the problem is corrected.

Mechanical
- Check to make sure that the load imposed on the drive system is not more than permitted.
- Check to make sure that the gears are free of wear and chipping.

Cassette
- Check to see that the cassette is correctly fitted. Check to see that the paper size is correctly set. Try replacing with a fault-free cassette to see if the problem is corrected.
- Check to see that the movement of the holding plate of the cassette is normal and the plate is free of deformation.
- Check to see that the side guide plate and the rear guide plate of the cassette are fitted correctly.
- Check to see if the switch of the cassette heater is turned on (only if a cassette heater is mounted).

Service Mode
- Check to see that the various adjustment settings of the CCD are as indicated on the service label. (COPIER>ADJUST>CCD>all items)
- Check to see if registration adjustment is executed.

(COPIER>ADJUST>FEED>ADJ>REGIST)
- Check to see if the image read start position adjustment is correct.
(COPIER>ADJUST>ADJ-XY>ADJ-X/ADJ-Y)
- Check to see if the setting of ADJUST/OPTION is identical to that indicated on the service label.
- Check to see if all errors have been reset.
(COPIER>FUNCTION>CLEAR-ERR)

General
- Check to see if the power plug is securely connected.
- Check to see if the power outlet provides a specific level of AC voltage.
- Check to see that that the sensors, clutches, motors, and solenoids are operating normally and all connectors are connected securely. (Be sure to check the power supply and signal routes by referring to the general circuit diagram.)
- Check to see that the leakage breaker and circuit breaker are operating normally.
- Check to see that there is no biting of wires and loosening of screws.
- Check to see that all external panels and covers have been correctly fitted.
- Check to see that the main power switch and the control panel power switch are turned on.
- Check to see that the power and signal cables are correctly routed.
- Check to see that the operation of the cover switch is normal.
- Check to see that none of the fuses on the PCBs have an open circuit.
- Check to see that the user has a correct understanding of how to use the machine and is using it correctly.

14.1.7 Others

0007-9389

iR2270 / iR2870 / iR3570 / iR4570

If a machine is brought from a cold to warm room, its inside can start to develop condensation, leading to various problems.
a. condensation on the BD sensor is likely to cause problems associated with E100
b. condensation on the dust-proof glass is likely to cause poor image density in sub scanning direction
c. condensation on the contact sensor of the reader unit or on the copyboard glass can cause light images
d. condensation on the pickup or feed guide can cause paper feed problems
If the problem given in d. above has occurred, dry wipe the units in the feed system. Do not open the package containing a toner cartridge, developing unit, or drum unit right after it has been brought in from a cold to warm place to avoid condensation. Be sure to leave it alone for a while (1 to 2 hr), opening it after it has become fully used to the temperature of the site.

14.2 Troubleshooting

14.2.1 Image Faults

14.2.1.1 Uneven Density

14.2.1.1.1 Uneven Density in Sub Scanning Direction 0007-7464

iR2270 / iR2870 / iR3570 / iR4570

<Description>

This fault can occur when the machine is left alone for about 10 min to 5 hr without removing a paper jam.

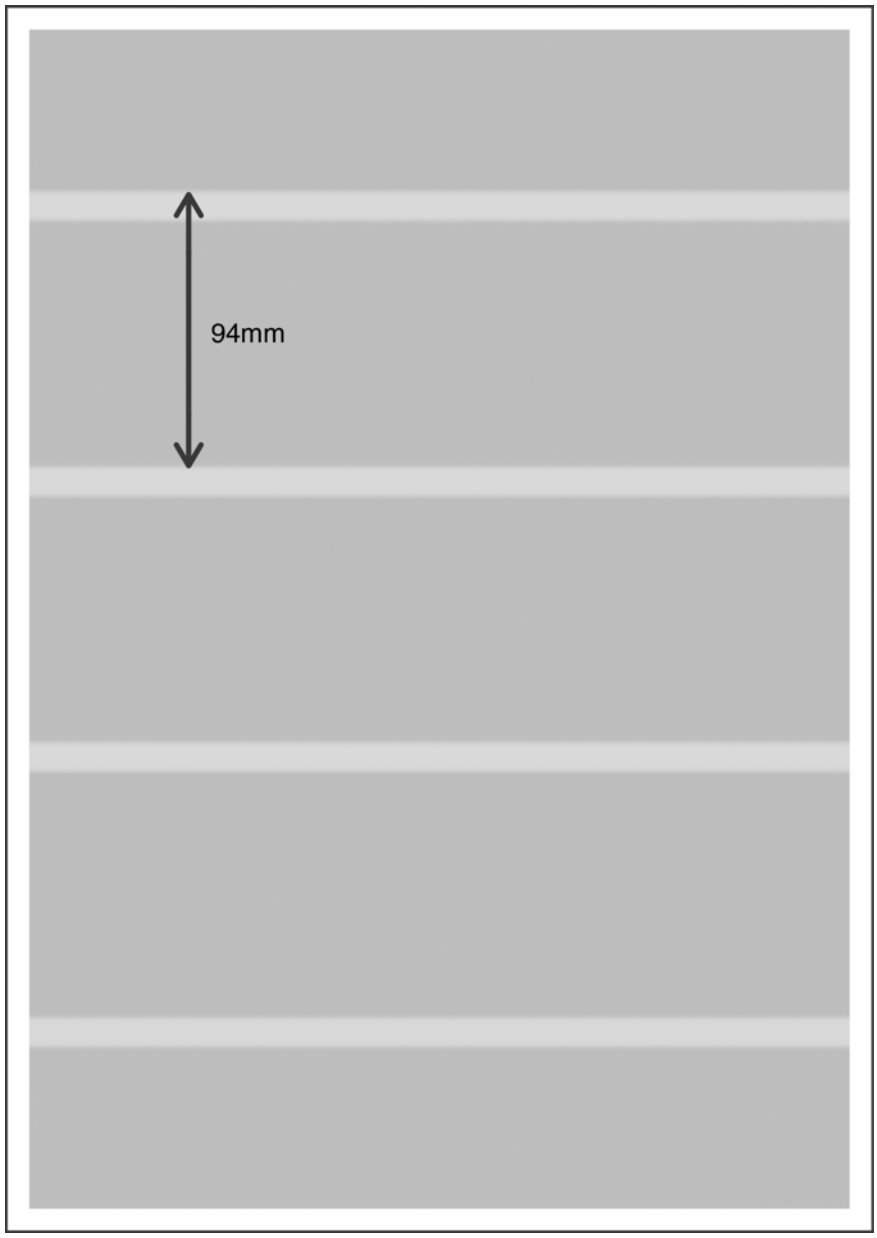
<Cause>

When a paper jam occurs, the machine forces the main motor to stop, thus stopping the operation without removing charges from the surface of the photosensitive drum. If the machine is left alone for a long time with the surface potential of its photosensitive drum uneven, potential memory tends to occur within a layer of the photosensitive drum, ultimately resulting in uneven density in sub scanning direction.

<Field Remedy>

To rid the surface of the photosensitive drum of potential memory, leave the machine alone for 30 min after removing the jam. There is no specific instructions as to how it may be left alone.

<Image Sample>



F-14-1

14.2.1.1.2 Uneven Density Caused by Irregular Rotation of the Main Motor 0007-9967

iR2270 / iR2870 / iR3570 / iR4570

<Symptom>

Uneven density at specific intervals tends to occur in sub scanning direction (from leading edge to trailing edge in relation to paper movement) when the main motor starts to rotate irregularly.

- iR2270/2870

  intervals of about 3.5 mm

- iR3570/4570
  intervals of about 6.3 mm

To facilitate a check, use a halftone test pattern.

<Remedy>

Replace the main motor.

14.2.1.2 Partially Blank/Streaked

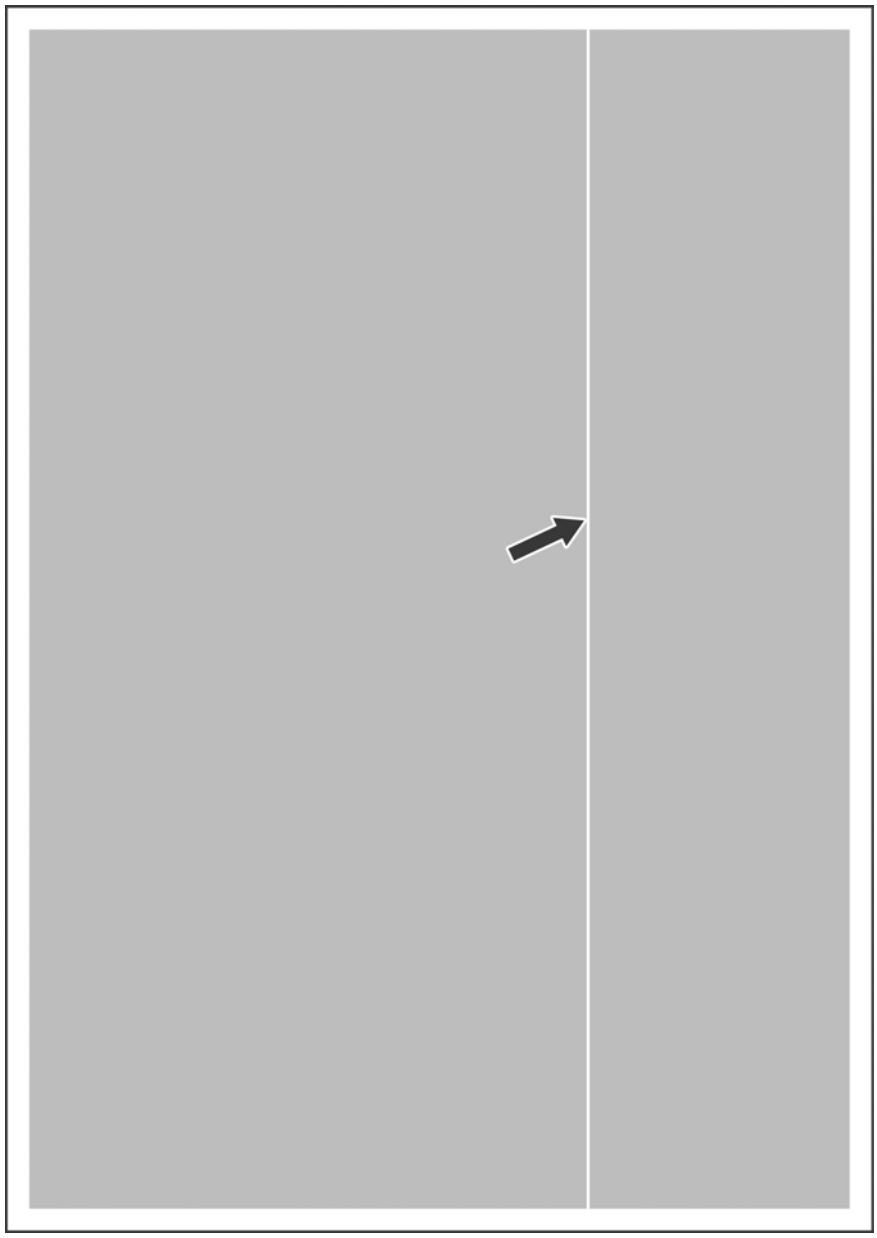
14.2.1.2.1 White lines appear in sub scanning direction on solid black and halftone images: Dust on top cover of Developing Assembly 0008-3408

iR2270 / iR2870 / iR3570 / iR4570

[Inspected by Canon Inc.]

Description

As a result of inspection, it was found this symptom occurred because the laser light was intercepted by dust on the top cover of the developing assembly. If the symptom occurs, remove the developing assembly and clean its top cover referring to the Service Manual [Maintenance and Inspection > Cleaning > Cleaning the Developing Assembly Spacer, Feed Guide, Dust-Blocking Glass and Fixing Inlet Guide].



F-14-2

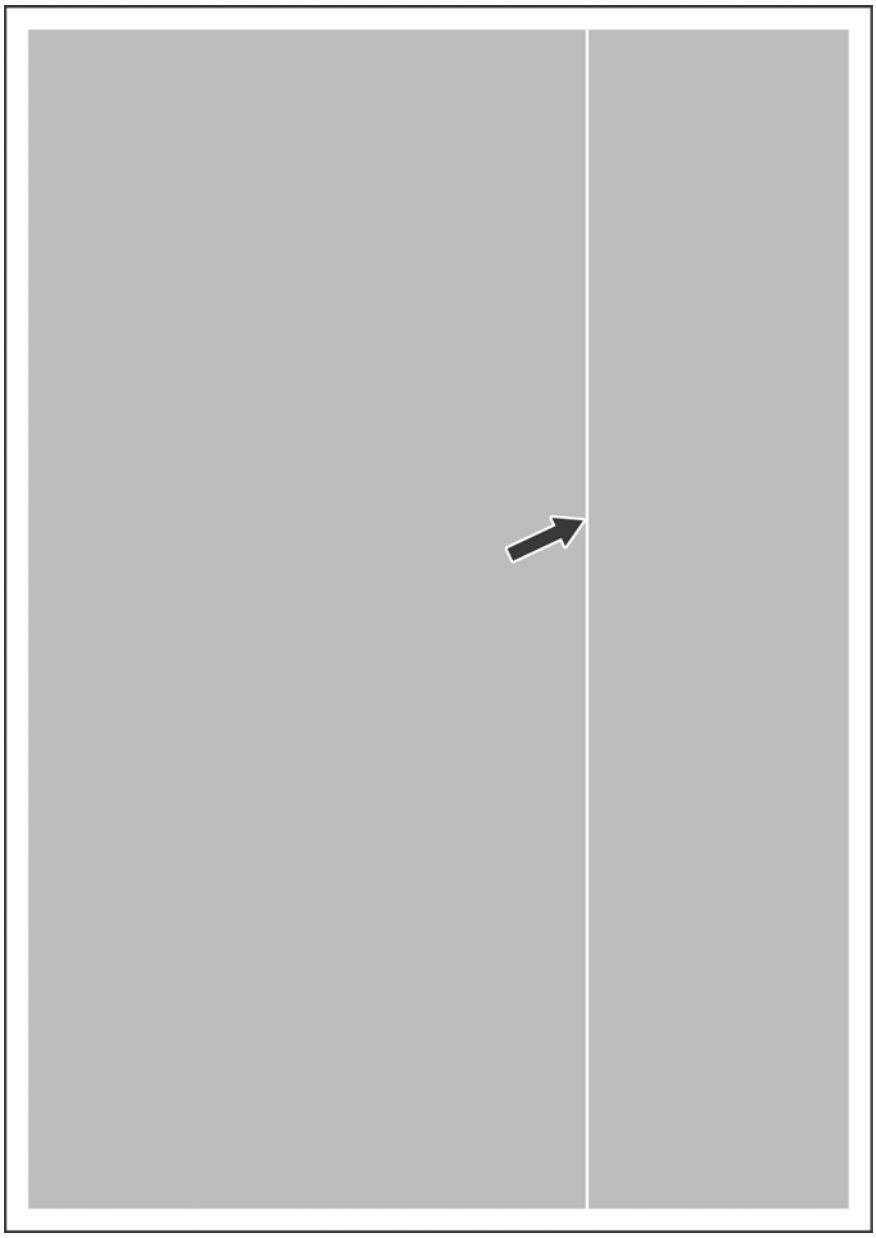
14.2.1.2.2 White lines appear in sub scanning direction on solid black and halftone images: Foreign substances adhere to edge of Feeder Guide 0008-3472

iR2270 / iR2870 / iR3570 / iR4570

[Inspected by Canon Inc.]

Description

As a result of inspection, it was found this symptom occurred because foreign substances on the edge of the feed guide of the developing assembly came into contact with the surface of the drum. If the symptom occurs, clean the feed guide referring to the Service Manual [Maintenance and Inspection > Cleaning > Cleaning the Developing Assembly Spacer, Feed Guide, Dust-Blocking Glass and Fixing Inlet Guide].



F-14-3

14.2.1.2.3 Horizontal Line/Blurring at Intervals of 94 to 95 mm 0007-7091

iR2270 / iR2870 / iR3570 / iR4570

<Cause>

The coefficient of friction on the surface of the photosensitive drum where the edge of the cleaning blade remains in contact tends to change, causing uneven rotation and thus blurring.

This problem tends to occur during the initial period of use (less than 10K), when the coefficient of friction is relatively even, or when a halftone image is generated after leaving the machine alone for 1 to 2 days. This problem, on the other hand, tends to disappear when about 10 printouts are made.

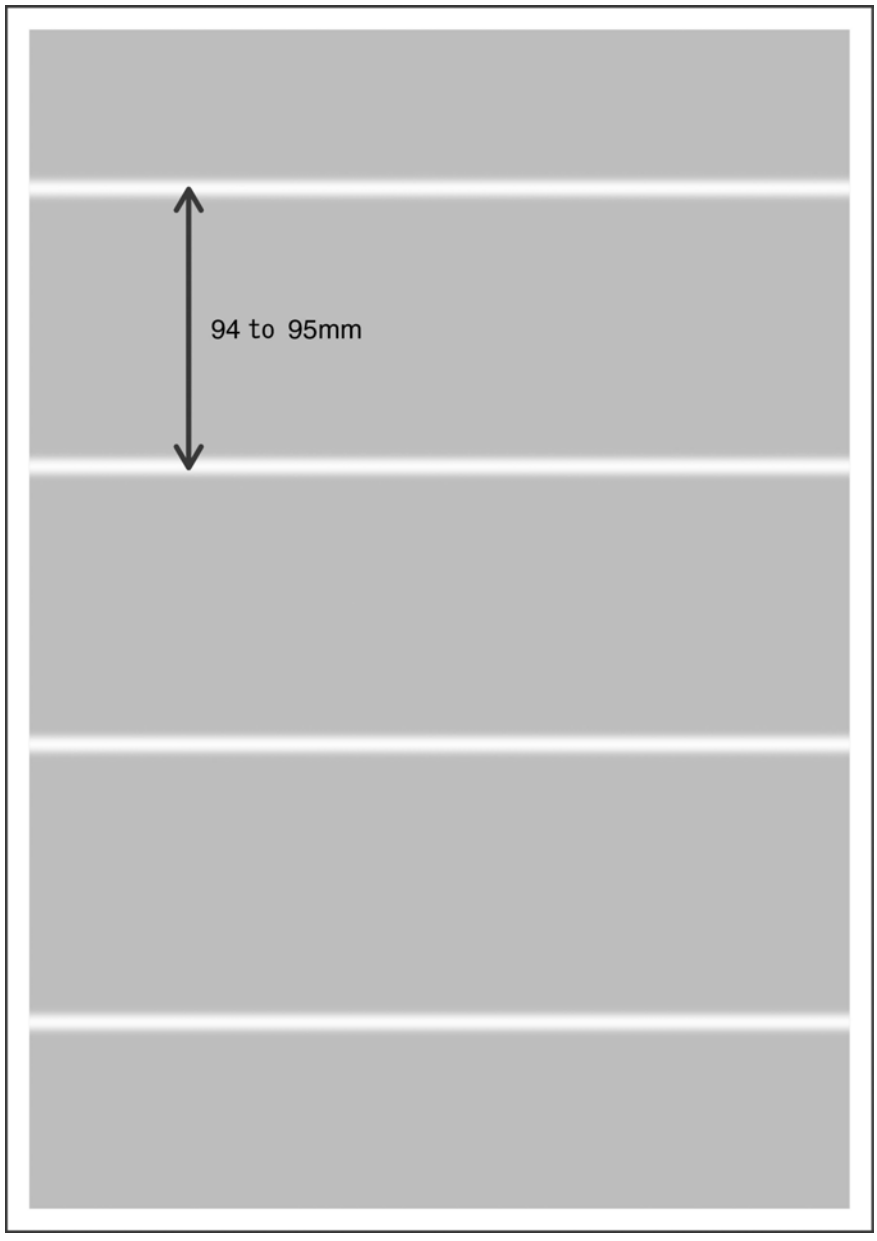
This problem can also occur when the drum unit is taken out of and put back in the machine, with the edge of the

cleaning blade forcing itself against the surface of the photopositive drum and increasing the friction.

<Field Remedy>

Make about 10 copies of the Test Chart.

<Image Sample>



F-14-4

14.2.1.2.4 White Lines in Sub Scanning Direction 0007-7465

iR2270 / iR2870 / iR3570 / iR4570

<Cause>

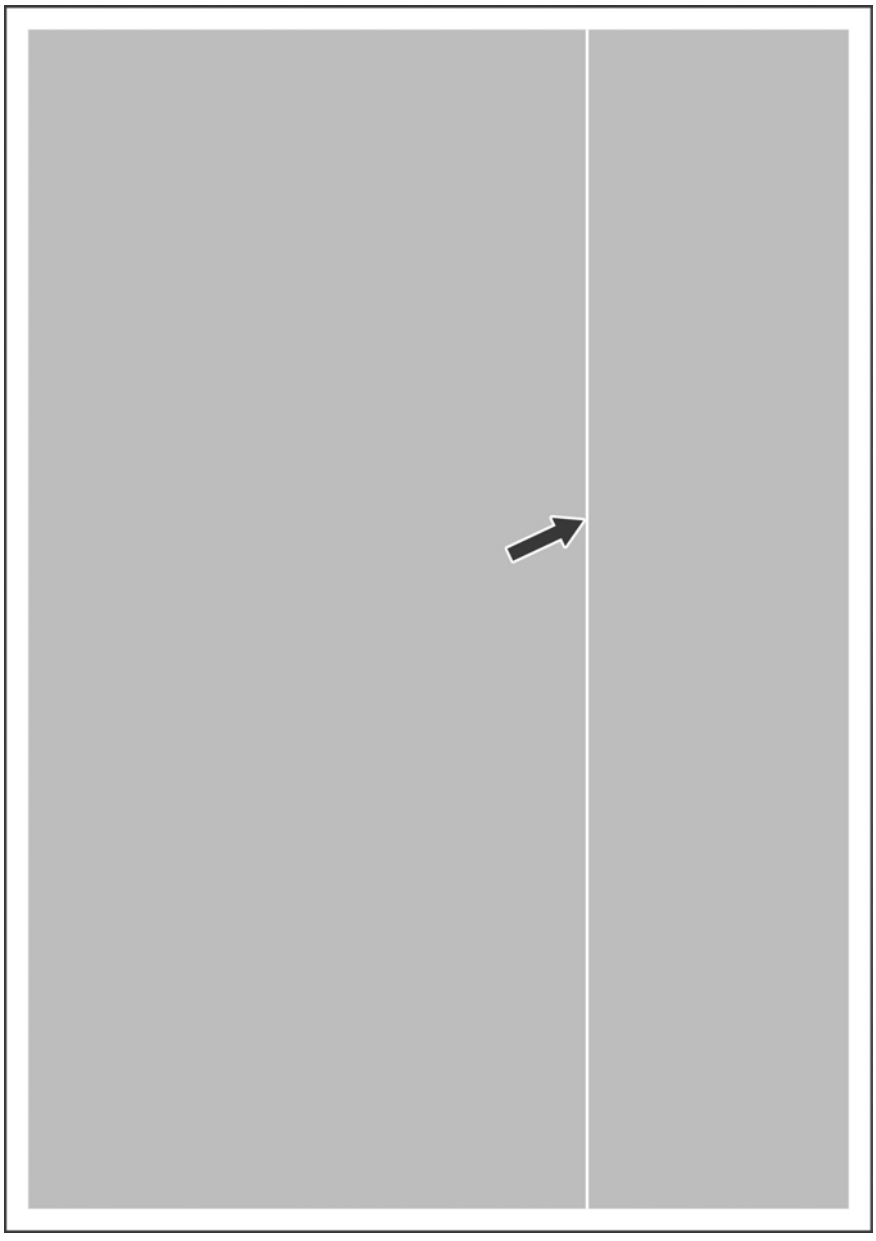
The presence of foreign matter inside the developing assembly can make its way to the developing cylinder,

preventing toner from being evenly deposited on the cylinder and, thus causing white lines.

<Field Remedy>

Replace the Developing Assembly

<Image Sample>



F-14-5

<Note>

If you remove the right door or the drum unit when replacing the fixing assembly and work with the developing assembly inside the machine, the developing cylinder will remain exposed and become subjected to dust or other foreign matter. For this reason, it is important to remove the developing assembly as well as the drum unit when disassembling and assembling the image formation or fixing system. This, however, does not apply if you are simply replacing the drum unit.

If you have removed the developing assembly, be sure to place it on a clean sheet of paper to protect it from dust.

14.2.1.3 Smudged/Streaked

14.2.1.3.1 Stray Toner Along Fine Lines

0007-7083

iR2270 / iR2870 / iR3570 / iR4570

<Cause>

The moisture held in paper evaporates in response to the heat from the fixing assembly, thus causing toner to fly astray. This problem tends to occur when paper has low resistance and in a high temperature/high humidity environment.

<Field Remedy>

Use the following service mode item to decrease the developing bias, thus suppressing the symptom:

COPIER>OPTION>BODY>FIX-SMR

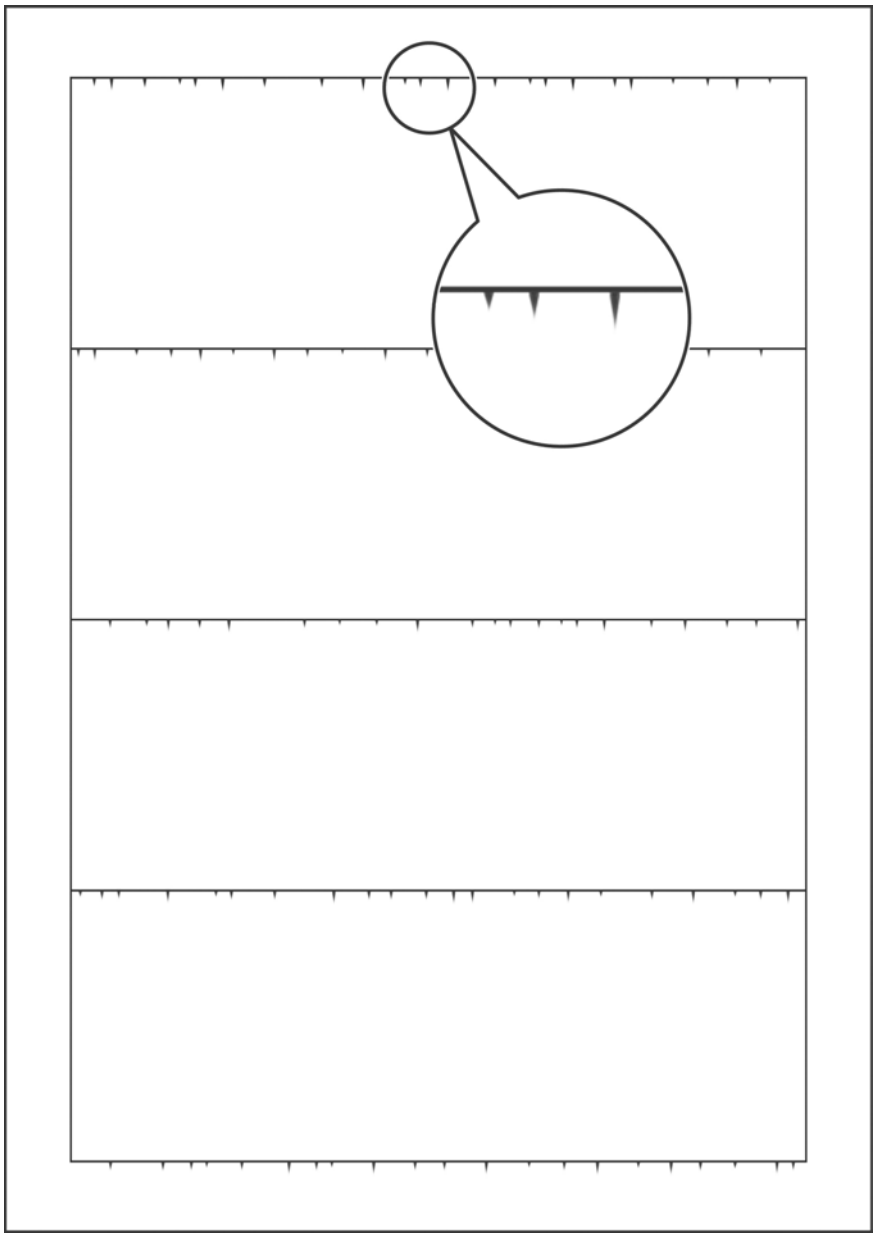
0: default

1: decrease the developing bias by a single step (-20 V)

2: decrease the developing bias by 2 steps (-40 V)

If '2' is selected, the lines can become thinner.

<Image Sample>



F-14-6

14.2.1.3.2 Soiled Image Leading Edge 0007-7089

iR2270 / iR2870 / iR3570 / iR4570

<Cause>

This problem occurs when paper moves between the photosensitive drum and the transfer roller. When the photopositive surface comes close to or into contact with the toner-coated surface of paper, the toner layer can become shifted toward the trailing edge of the paper. This problem tends to be conspicuous when the toner layer is relatively high against the width of lines (about 0.2 to 0.6 mm) and, in addition, when the lines are at a right angle to the feed direction (axial direction of the photosensitive drum).

<Field Remedy>

Use the following service mode item to decrease the developing bias, thus suppressing the symptom:

COPIER>OPTION>BODY>FIX-SMR

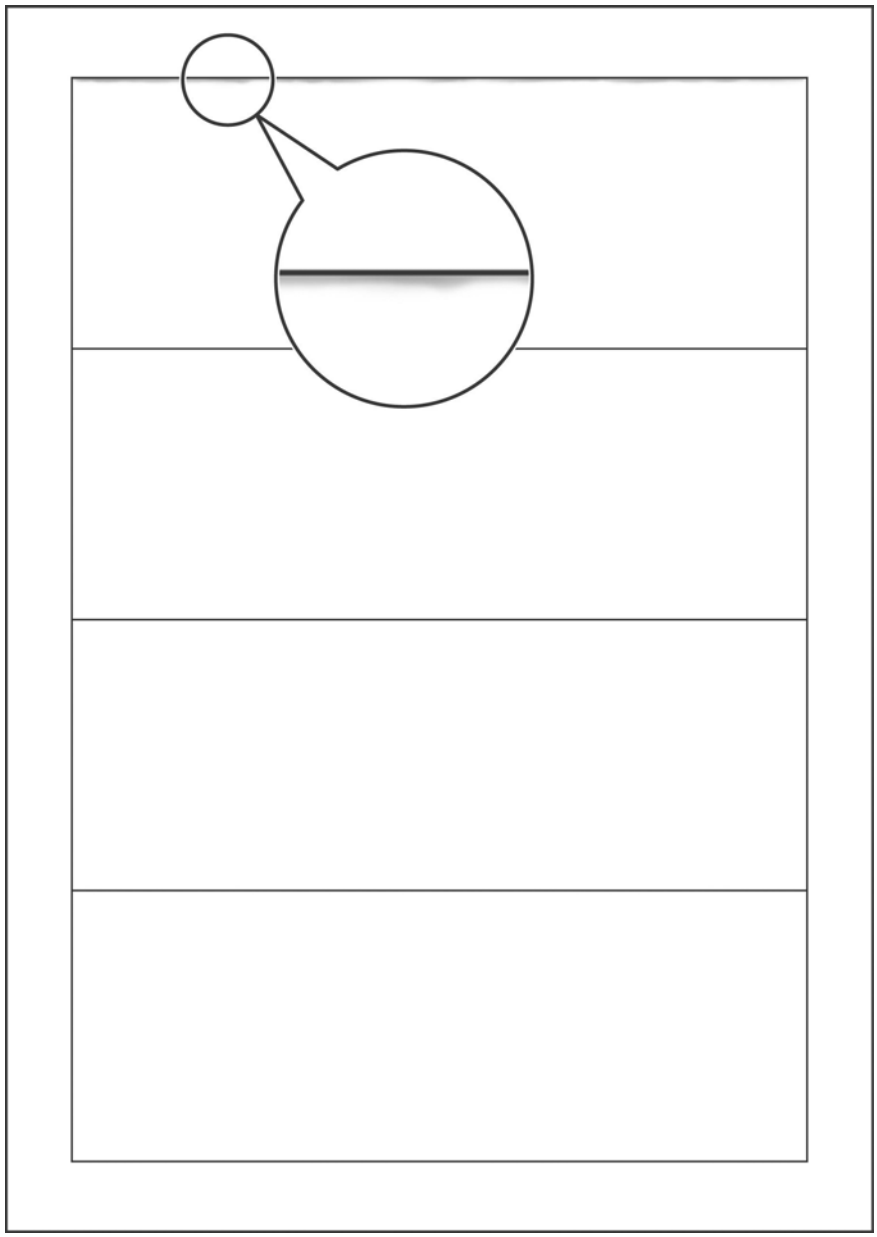
0: default

1: decrease the developing bias by a single step (-20 V)

2: decrease the developing bias by 2 steps (-40 V)

If '2' is selected, the lines can become thinner.

<Image Sample>



F-14-7

14.2.1.3.3 Black Dots

0007-7093

iR2270 / iR2870 / iR3570 / iR4570

<Cause>

On some types of paper (especially those with a high calcium carbonate content), toner offset to the fixing film can start to cake, moving from the fixing film or the pressure roller to the face or back of paper.

<Field Remedy>

Use the following service mode item to change the timing at which the fixing pressure roller is cleaned:

COPIER>OPTION>BODY>FIX-CLN

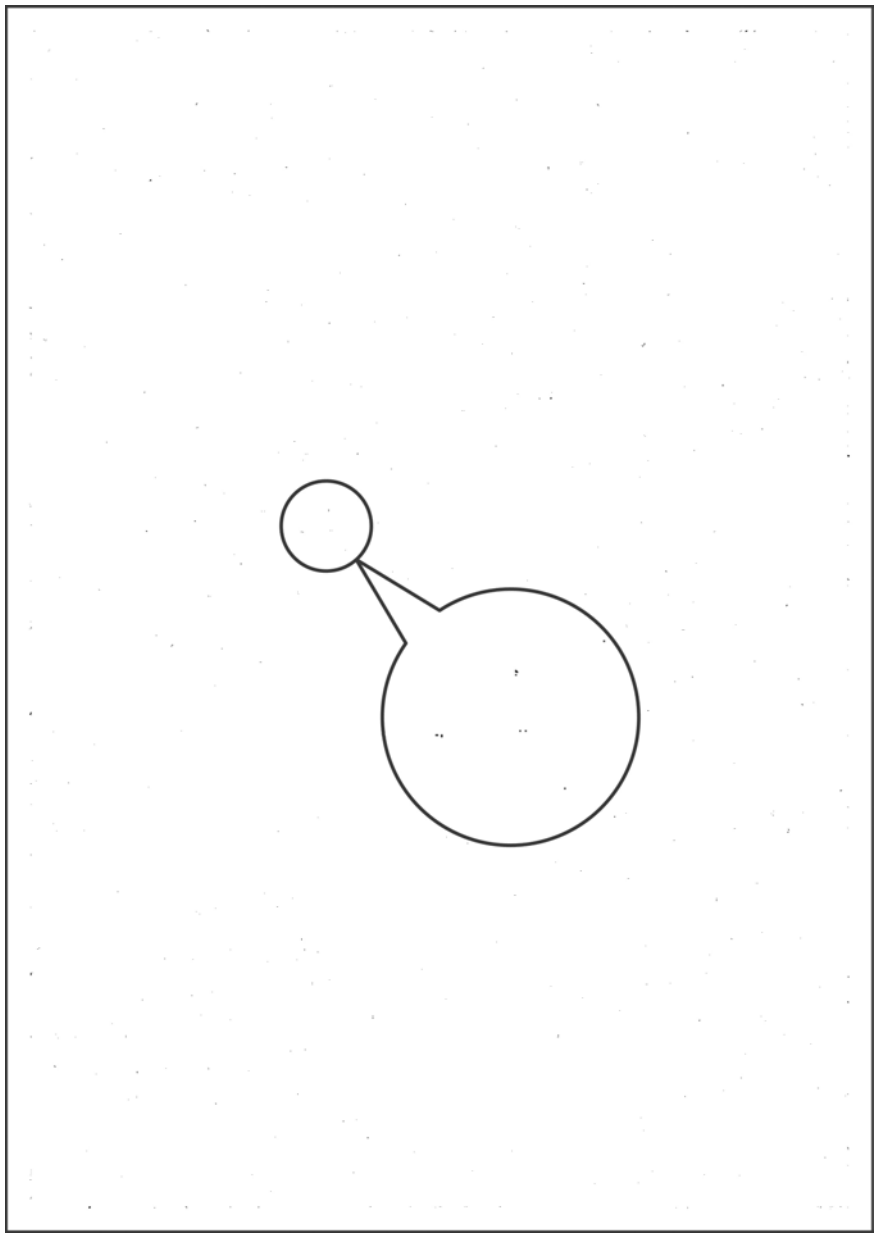
0: disable cleaning (default)

1: execute cleaning during last rotation every 500 printouts

2: execute cleaning during last rotation every 200 printouts

3: execute cleaning during last rotation every 100 printouts

<Image Sample>



F-14-8

14.2.1.4 Ghost/Memory

14.2.1.4.1 Ghost

0007-7096

iR2270 / iR2870 / iR3570 / iR4570

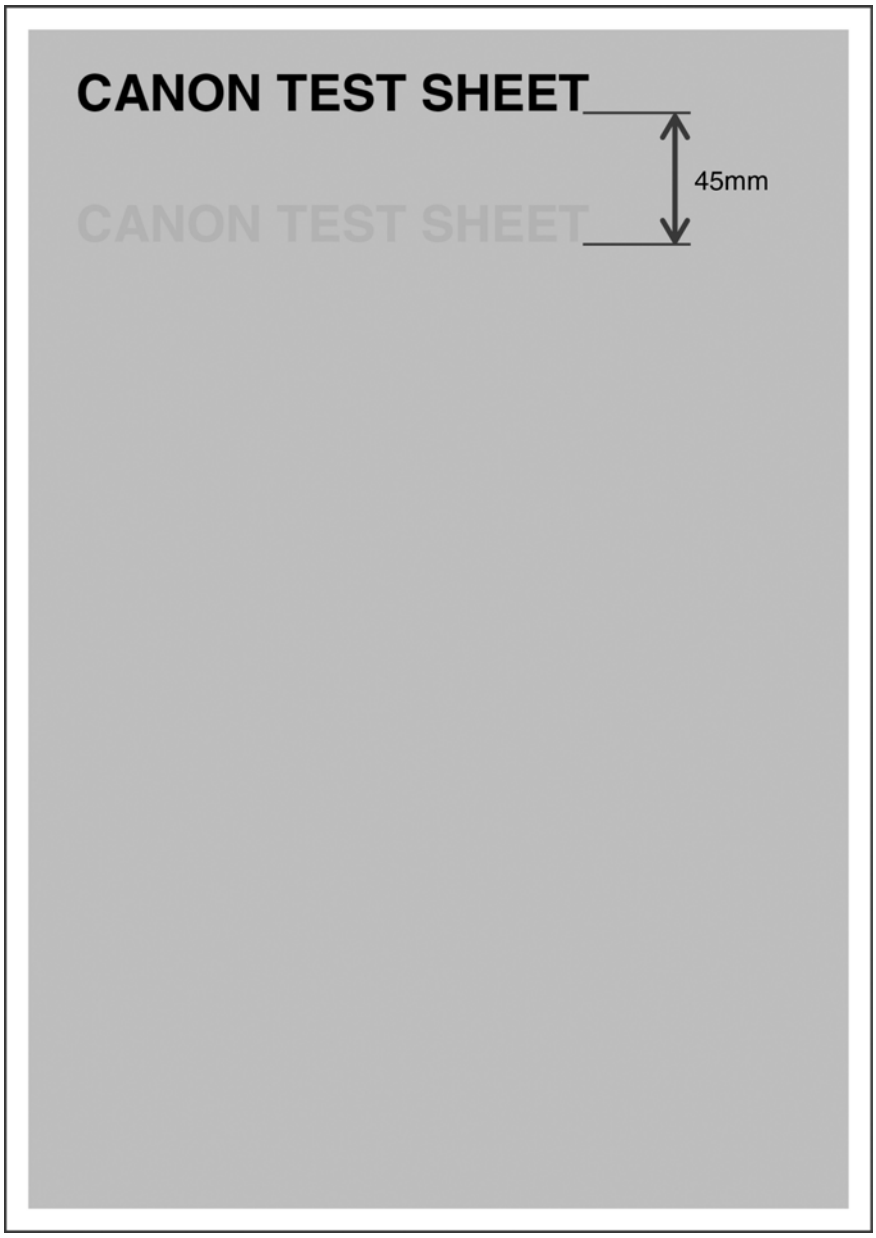
<Cause>

This problem tends to occur when there are both residual toner and fresh toner on the developing cylinder and, thus, difference in charge between these two kinds of toner.

<Field Remedy>

Make several copies of a solid image.

<Image Sample>



F-14-9

14.2.2 Malfunction

14.2.2.1 No Power

14.2.2.1.1 Upon installation, machine does not start up / LCD does not come on although main power indicator on control panel lights up: Poor connection of ROM/RAM 0008-3477

iR2270 / iR2870 / iR3570 / iR4570

[Inspected by Canon Inc.]

Field Remedy

In inspection, reinsertion of the ROM corrected the symptoms. If any of the symptoms mentioned above occurs during installation, reinsert the BOOTROM or the RAM.

14.2.2.2 Noise

14.2.2.2.1 Noise at Time of Pickup from the Cassette 0007-7052

iR2270 / iR2870 / iR3570 / iR4570

<Cause>

When double-feeding occurs at time of pickup, the contact between the sheets and the feed roller and the separation roller cause the separation roller assembly to vibrate.

<Field Remedy>

Replace the roller with a sponge retard roller (FB5-0873; to be used as needed; cassette only).

14.3 Outline of Electrical Components

14.3.1 Clutch/Solenoid

14.3.1.1 Clutches and Solenoids

0007-6833

iR2270 / iR2870 / iR3570 / iR4570

<Reader Unit>
The reader unit does not have a clutch or solenoid.
<Printer Unit>

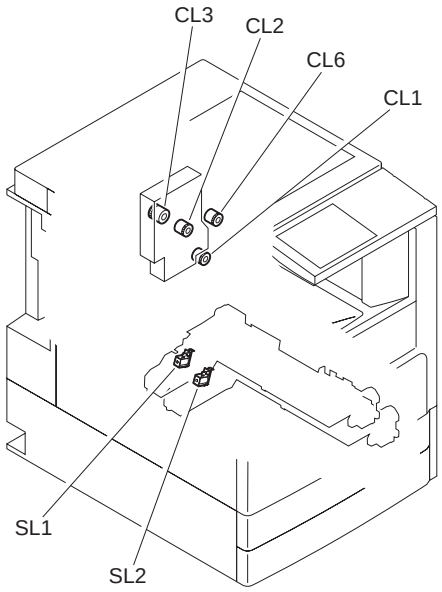
T-14-1

Notation	Name	Description	Remarks
CL1	manual feed pickup clutch	drives the manual feed pickup roller	
CL2	registration clutch	drives the registration roller	
CL3	developing sleeve clutch	drives the developing sleeve	
CL6	duplex feed clutch	drives the duplex roller 1/2	iR2270/2270F/2870/2870F
SL1	cassette 1 pickup solenoid	drives the cassette 1 pickup roller	
SL2	cassette 2 pickup solenoid	drives the cassette 2 pickup roller	

T-14-2

Notation	Parts No.	PART-CHK	DC controller PCB
CL1	FH6-5076	CL>1	J306
CL2	FH6-5075(iR2270/2270F/2870/2870F) FK2-0361(iR3570/3570F/4570/4570F)	CL>2	J313
CL3	FK2-0404	CL>3	J313
CL6	FH6-5005	CL>4	J306

Notation	Parts No.	PART-CHK	DC controller PCB
SL1	FK2-0408	SL>1	J308
SL2	FK2-0408	SL>2	J318



F-14-10

14.3.2 Motor

14.3.2.1 Motors

0007-6835

iR2270 / iR2870 / iR3570 / iR4570

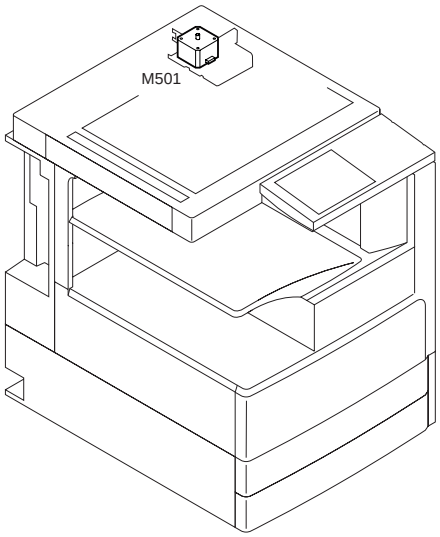
<Reader Unit>

T-14-3

Notation	Name	Description
M501	reader motor	drives the carriage

T-14-4

Notation	Parts No.	Reader controller PCB	Error
M501	FH5-1028	J505	E202



F-14-11

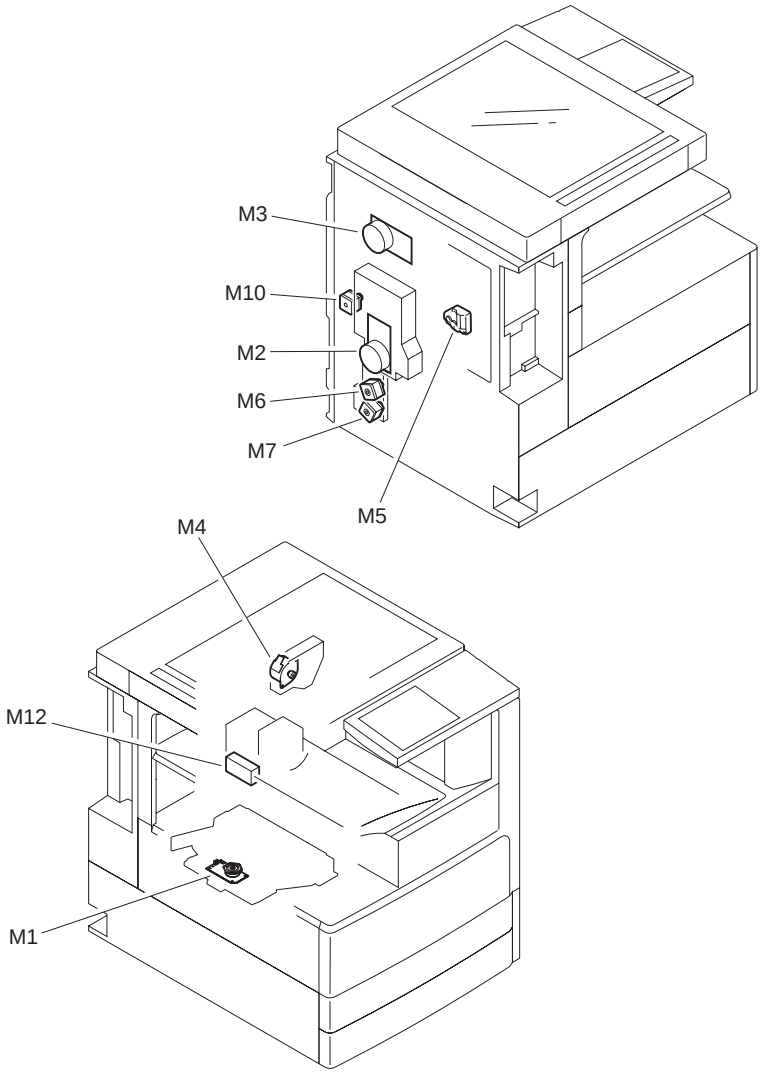
<Printer Unit>

T-14-5

Notation	Name	Description	Remarks
M1	polygon motor	drives the laser scanner	
M2	main motor	drives the major components of the printer unit	
M3	fixing motor	drives the fixing assembly	
M4	delivery motor 1	drives the delivery roller	
M5	bottle rotation motor	drives the rotation of the bottle	
M6	cassette 1 pickup motor	drives the pickup unit 1	
M7	cassette 2 pickup motor	drives the pickup unit 2	
M10	duplex feed motor	drives the duplex roller 1/2	iR3570/3570F/4570/ 4570F
M12	hopper motor	drives the hopper	

T-14-6

Notation	Parts No.	PART-CHK	DC controller PCB	Error
M1	scanner unit FM2-0276(iR2270/2270F/2870/2870F) FM2-0334(iR3570/3570F/4570/4570F)	MTR>1	J316	E110
M2	FK2-0385(iR2270/2270F/2870/2870F) FM2-0362 (iR3570/3570F/4570/4570F)	MTR>2	J312	E010
M3	FK2-0367	MTR>3	J311,J319	E014
M4	FK2-0365	MTR>4	J305	
M5	FK2-0015	MTR>5	J302A	E025
M6	FK2-0377	MTR>6	J307A	
M7	FK2-0377	MTR>7	J307A	
M10	FL2-3266	MTR>8	306	
M12	FK2-0379	MTR>9	J302A	E025



F-14-12

14.3.3 Fan

14.3.3.1 Fans

0007-6836

iR2270 / iR2870 / iR3570 / iR4570

<Reader Unit>

The reader unit does not have a fan.

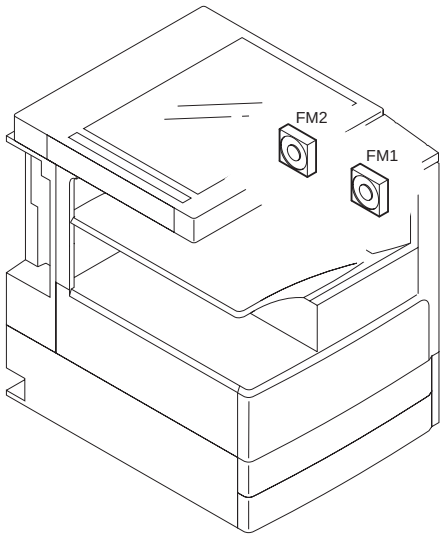
<Printer Unit>

T-14-7

Notation	Name	Description
FM1	heat discharge fan (front)	discharges heat from the fixing unit
FM2	heat discharge fan (rear)	discharges heat from the fixing unit

T-14-8

Notation	Parts No.	I/O		DC controller PCB	Error
FM1	FK2-0360	P020-6	1:ON	J307B	E805
FM2	FK2-0360	P023-2	1:ON	J307B	E805



F-14-13

14.3.4 Sensor

14.3.4.1 Sensors

0007-6837

iR2270 / iR2870 / iR3570 / iR4570

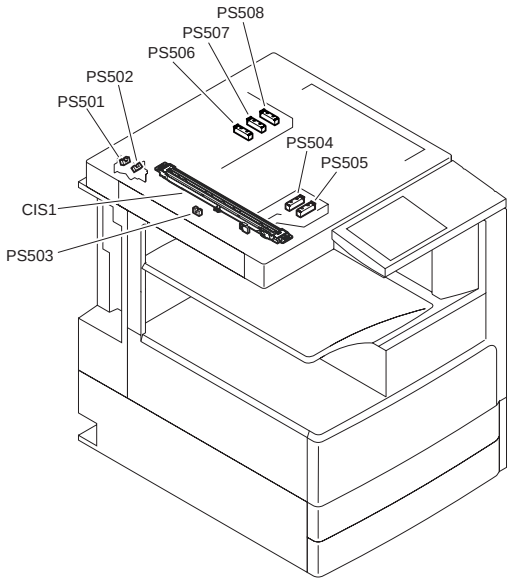
<Reader Unit>

T-14-9

Notation	Name	Description
PS501	copyboard cover open/ closed sensor (rear)	detects the state (open/closed) of the copyboard cover
PS502	copyboard cover open/ closed sensor (front)	detects the state (open/closed) of the copyboard cover
PS503	CIS HP sensor	detects the CIS home position
PS504	original sensor 1	detects original size (AB, Inch/A, Inch/AB)
PS505	original sensor 2	detects original size (AB, A, Inch/ AB)
PS506	original sensor 3	detects original size (for all countries)
PS507	original sensor 4	detects original size (AB, Inch/AB)
PS508	original sensor 5	detects original size (Inch/A)
CIS1	CIS	reads originals

T-14-10

Notation	Parts No.	I/O		Reader controller PCB	Jam/error code
PS501	WG8-5624	P006-7	1: copyboard cover closed	J506	
PS502	WG8-5624	P006-5	1: copyboard cover closed	J506	0090, 0091
PS503	WG8-5624	P006-6	1: HP	J506	E202
PS504	FH7-7569	P004-0	0: original present	J507	
PS505	FH7-7569	P004-1	0: original present	J507	
PS506	FH7-7569	P004-2	0: original present	J508	
PS507	FH7-7569	P004-3	0: original present	J508	
PS508	FH7-7569	P004-3	0: original present	J508	
CIS1	FL2-2997			J510	E225



F-14-14

<Printer Unit>

T-14-11

Notation	Name	Description
PS1	cassette 1 paper sensor	detects the presence/absence of cassette 1
PS2	cassette 2 paper sensor	detects the presence/absence of cassette 2
PS3	cassette 1 paper level sensor A	detects paper level A in cassette 1
PS4	cassette 1 paper level B sensor	detects paper level B in cassette 1
PS5	cassette 2 paper level A sensor	detects paper level A in cassette 2
PS6	cassette 2 paper level B sensor	detects paper level B in cassette 2
PS7	manual feeder paper sensor	detects paper in the manual feeder
PS8	fixing film speed sensor	detects the speed of the fixing film
PS9	pre-registration sensor	detects paper before registration
PS10	cassette 1 retry sensor	detects pickup retry in cassette 1
PS11	cassette 2 retry sensor	detects pickup retry in cassettes 2
PS13	fixing outlet sensor	detects paper at the fixing outlet
PS14	No. 1 delivery sensor	detects delivery
PS15	No. 1 delivery full sensor	detects a delivery full condition
PS16	waste toner sensor	detects a waste toner full condition
PS17	duplex feed sensor	detects duplex feed

Notation	Name	Description
PS18	feed cover sensor	detects the feed cover state
PS22	front cover sensor	detects the state (open/closed) of the front cover
HU1	environment sensor	detects the machine inside temperature
TS1	developing assembly toner sensor	detects the toner inside the developing assembly
TS2	sub hopper toner sensor	detects the tone inside the sub hopper
TH1	fixing main thermistor	detects the temperature of the fixing heater
TH2	fixing sub thermistor	detects the temperature of the fixing heater
TH3	drum thermistor	detects the temperature of the drum
TP1	thermal switch	cuts off the power to the heater in response to overheating

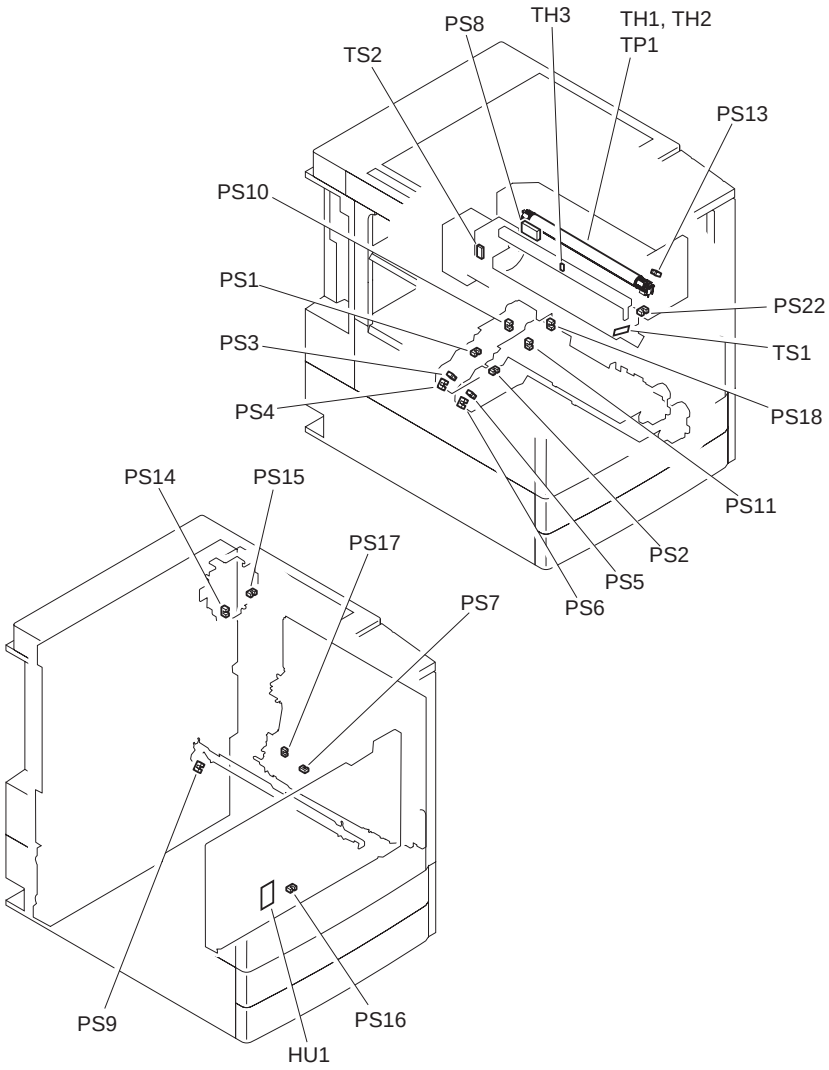
T-14-12

Notation	Parts No.	I/O		DC controller PCB	JAM
PS1	FH7-7312	P028-5	1: paper absent	J308	
PS2	FH7-7312	P019-5	1: paper absent	J318	
PS3	FH7-7312	P028-6	1: level about 50% or less	J308	
PS4	FH7-7312	P028-7	1: level about 50 sheets or less	J308	
PS5	FH7-7312	P019-6	1: level about 50% or less	J318	
PS6	FH7-7312	P019-7	1: level about 50 sheets or less	J318	
PS7	FH7-7312	P021-0	0: paper present	J307B	
PS8	FM2-2769			J303	
PS9	FK2-0149	P027-1	1: paper present	J313	xx05
PS10	FH7-7312	P030-4	1: detected	J308	xx01
PS11	FH7-7312	P019-4	1: detected	J318	xx02
PS13	FK2-0149	P029-2	1: paper present	J303	xx07
PS14	FK2-0149	P029-0	1: paper present	J305	xx08

Notation	Parts No.	I/O		DC controller PCB	JAM
PS15	FK2-0149	P029-1	0: paper present	J305	
PS16	FK2-0149	P023-4	0: full	J302B	
PS17	FK2-0149	P021-2	1: paper present	J307B	
PS18	FH7-7312			J308	
PS22	FK2-0149			J302B	
HU1	FK2-0160			J302A	
TS1	FK2-0358			J302B	
TS2	FK2-0358			J302A	

T-14-13

Notation	Parts No.	DC controller PCB	AC driver PCB
TH1,TH2	fixing film unit iR2270/2270F/2870/2870F	J304	
TP1	FM2-0293(100V) FM2-0358(120V) FM2-0359(230V) iR3570/3570F/4570/4570F FM2-1792(100V) FM2-1793(120V) FM2-1794(230V)		J202
TH3	FM2-2776	J302A	



F-14-15

14.3.5 Switch

14.3.5.1 Switches

0007-6838

iR2270 / iR2870 / iR3570 / iR4570

<Reader Unit>

The reader unit does not have a switch.

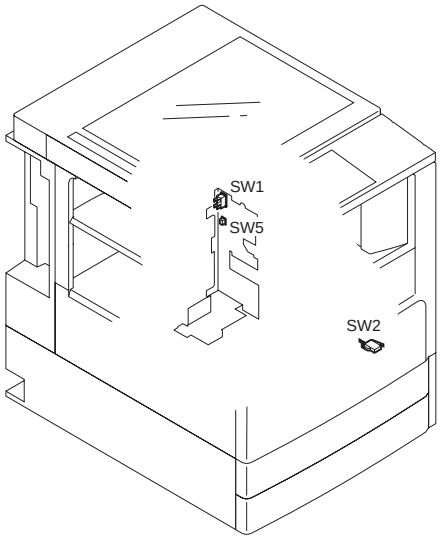
<Printer Unit>

T-14-14

Notation	Name	Description
SW1	main power switch	turns on/off the main power switch
SW2	door switch	checks the right door
SW5	environment heater switch	turns on/off the environment heater (option)

T-14-15

Notation	Parts No.	DC controller PCB	AC driver PCB
SW1	FK2-0140		J201
SW2	FK2-0384	J309	
SW5	WC1-5182		



F-14-16

14.3.6 Lamps, Heaters, and Others

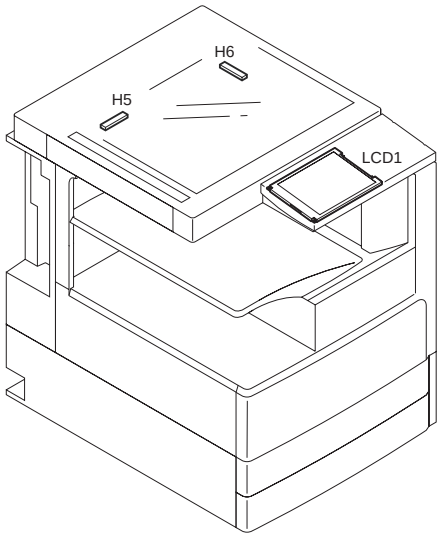
14.3.6.1 Lamps, Heaters, and Others 0007-6839

iR2270 / iR2870 / iR3570 / iR4570

<Reader Unit>

T-14-16

Notation	Name	Parts No.	Description
H5	reader heater (left)	NPN	prevents condensation on the reading glass
H6	reader heater (right)	NPN	prevents condensation on the copyboard glass
LCD1	LCD panel	FL2-1092	display on the control panel (touch panel)



F-14-17

<Printer Unit>

T-14-17

Notation	Name	Description
H1	fixing main heater	fixing main heater
H2	fixing sub heater	fixing sub heater
H4	cassette heater	prevents absorption of moisture by the paper inside the cassette
H7	deck heater	prevents absorption of moisture by paper inside the side deck
ELCB1	leakage breaker (100V)	leakage breaker

Notation	Name	Description
ELCB2	leakage breaker (230V)	leakage breaker
LA1	pre-exposure lamp	removes residual charges from the drum
VA1	varistor	varistor
HDD1	hard disk	stores programs and image data
SVR1	paper width detecting VR	detects the width of paper in the manual feeder
SP1	speaker	speaker (fax unit)

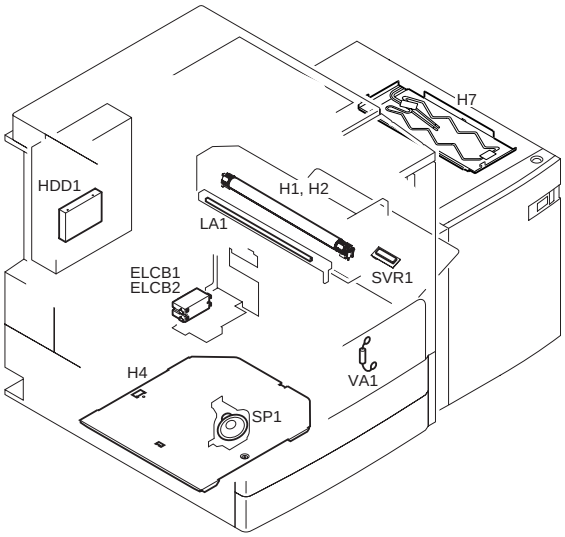
T-14-18

Notation	Parts No.	
H1,H2	fixing film unit iR2270/2270F/2870/2870F FM2-0293(100V) FM2-0358(120V) FM2-0359(230V)	fixing film unit iR3570/3570F/4570/4570F FM2-1792(100V) FM2-1793(120V) FM2-1794(230V)
H4	FK2-0375(100V) FK2-0376(230V)	
H7	NPN(100V) FH7-4585(230V)	
ELCB1	FH7-7626	
ELCB2	FH7-7625	

T-14-19

Notation	Parts No.	Main controller PCB	DC controller PCB
LA1	FK2-0368		J302B
VA1	FL2-3265		
HDD1	WM2-5216	J1026	

Notation	Parts No.	Main controller PCB	DC controller PCB
SVR1	FM2-2768		J302B
SP1	FM2-0342		



F-14-18

14.3.7 PCBs

14.3.7.1 PCBs

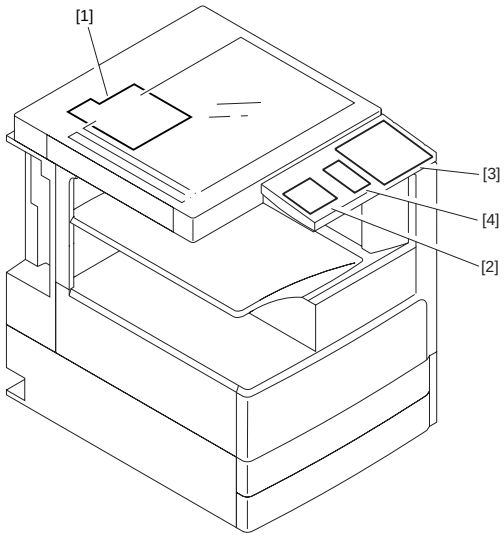
0007-9881

iR2270 / iR2870 / iR3570 / iR4570

<Reader Unit>

T-14-20

	Name	Part No.	Description
[1]	reader controller PCB	FG3-3765	controls the reader unit/ADF
[2]	control panel CPU PCB	FG6-8938	controls the control panel
[3]	control pen key PCB	FG3-2834	controls the inputs from the keypad keys
[4]	control panel inverter PCB	FG6-8939	controls the activation of the backlight of the LCD



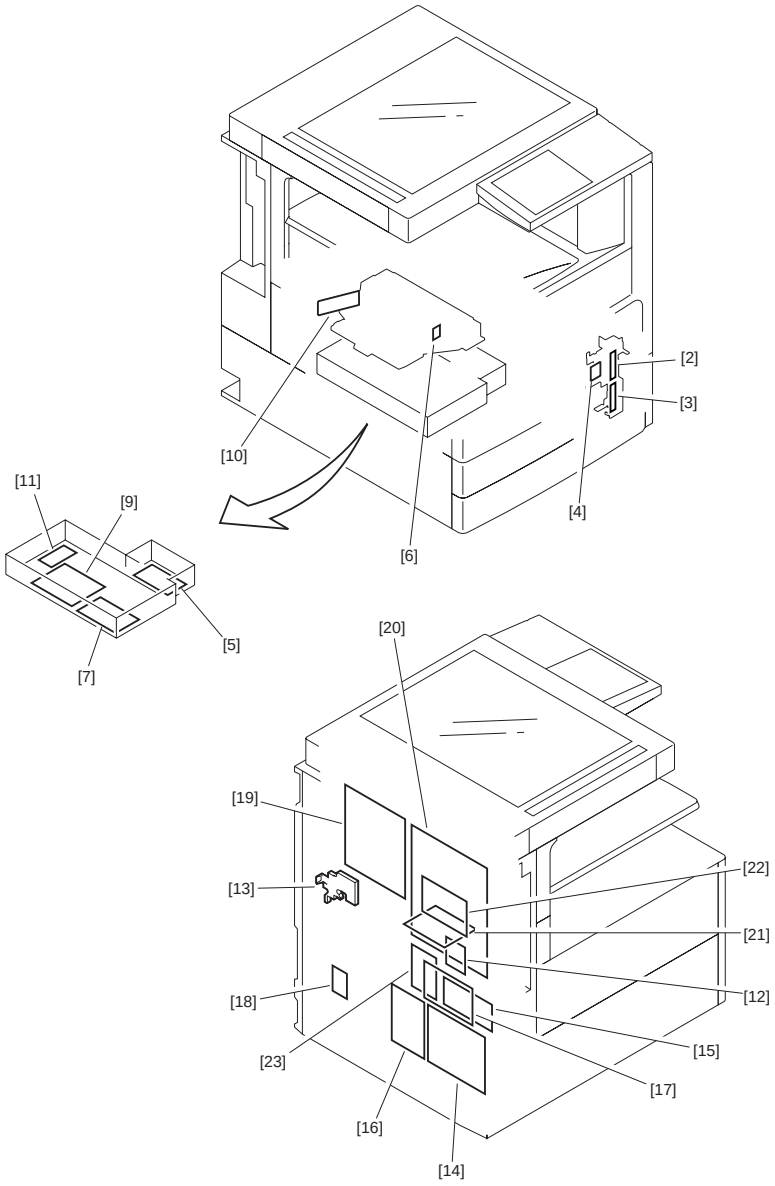
F-14-19

<Printer Unit>

T-14-21

	Name	Parts No.	Description
[2]	cassette 1 size detection PCB	FM2-2770	detects the size of cassette 1
[3]	cassette 2 size detection PCB	FM2-2770	detects the size of cassette 2
[4]	cassette size detection relay PCB	FM2-2771	relays data for cassette size
[5]	pseudo-CI PCB	FM2-2773	generates the pseudo CI signal
[6]	BD PCB	scanner unit FM2-0276(iR2270/ 2270F/2870/2870F) FM2-0334(iR3570/ 3570F/4570/4570F)	generates the BD signal
[7]	NCU PCB	FM2-2790	controls the line switching operation
[9]	fax board PCB	FM2-2789	control the fax unit
[10]	laser driver PCB	scanner unit FM2-0276(iR2270/ 2270F/2870/2870F) FM2-0334(iR3570/ 3570F/4570/4570F)	controls the laser unit drive
[11]	G3 fax power supply PCB	FM2-0860	G3 fax power supply
[12]	modular PCB	FM2-0343	line I/F

	Name	Parts No.	Description
[13]	high-voltage power supply PCB	FM2-0261	high-voltage power supply
[14]	printer power supply PCB	main power supply PCB unit FM2-0245	printer power supply
[15]	controller power supply PCB	FM2-2764	controller PCB
[16]	AC driver PCB	main power supply PCB FM2-0245	AC drive
[17]	accessories power supply PCB	FK2-0339	accessorizes power supply
[18]	environment switch PCB	FG3-2797	heater power supply switch
[19]	DC controller PCB	FM2-2767	controls the printer unit/ accessory
[20]	main controller PCB	FM2-3226	processes output image data for the printer unit
[21]	expansion bus PCB	FM2-2804	connection interface
[22]	USB board	FM2-3010	USB interface
[23]	all-night power supply PCB	FK2-0341	supplies power thorough day and night



F-14-20

14.3.8 Variable Resistors(VR), Light-Emitting Diodes(LED),and Check Pins by PCB

14.3.8.1 Variable Resistors (VR), Light-Emitting Diodes, and Check Pins by PCB 0007-6841

iR2270 / iR2870 / iR3570 / iR4570

Of the variable resistors (VR), light-emitting diodes (LED), and check pins found in the machine, those that are needed when servicing the machine in the field are discussed.

⚠

- Some LEDs carry current and emit light when they are off; this is a normal condition, and must be kept in mind.
- Take note of the following:

...VR that may be used in the field.

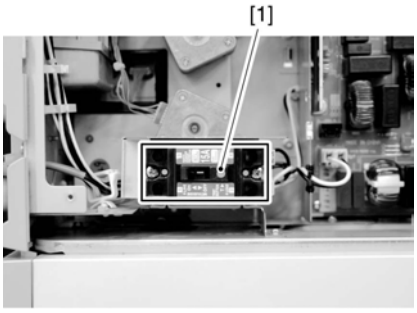
...VR that must not be used in the field.

14.3.8.2 Points to Note About the Leakage Breaker 0007-7795

iR2270 / iR2870 / iR3570 / iR4570

Points to Note When Checking the Output of a PCB

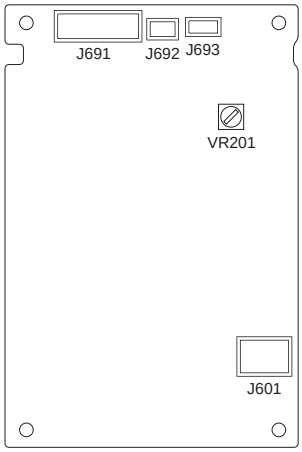
Normally, an AC voltage is applied to the terminal of the leakage breaker [1].
Take care not to touch it when making a check.



F-14-21

14.3.8.3 All-Night Power Supply PCB 0007-6843

iR2270 / iR2870 / iR3570 / iR4570



F-14-22

Notation	Description
VR201	for factory use

Chapter 15 Self Diagnosis

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15.1 Error Code Table

15.1.1 Error Code

0008-0942

iR2270 / iR2870 / iR3570 / iR4570

T-15-1

Code	Error name/description
E000	fixing overheating
E001	fixing assembly overheating
E002	fixing assembly low temperature
E003	post-standby fixing low temperature
E007	fixing film rotation error
E010	main motor rotation error
E014	fixing motor rotation error
E019	waste toner case full, waste toner case full sensor error
E020	toner clogging between sub hopper and developing assembly
E024	developing assembly connector disconnection
E025	hopper motor, bottle motor error
E032	NE controller counter error
E064	power supply voltage error (high-voltage)
E100	BD interval error
E110	scanner motor error
E191	communication error for high voltage power supply
E202	CIS home position detection error
E225	CIS light intensity error
E227	reader unit power supply error
E248	backup memory error
E261	zero-cross signal error
E315	image data error
E400	feeder communication error

Code	Error name/description
E490	wrong DF type
E500	finisher communication error
E503	finisher internal communication error
E505	finisher backup memory error
E514	stack delivery/trailing edge assist motor error
E519	gear change motor error
E530	rear alignment error
E531	stapling error
E532	stapler shift error
E535	swing error
E537	front alignment error
E540	stack tray ascent error/upper tray ascent error
E542	lower tray ascent error
E577	paddle error
E584	shutter error
E590	punching error
E591	puncher dust sensor error
E592	punch horizontal registration sensor error
E593	punch shift error
E5F0	saddle paper positioning error
E5F1	saddle paper folding error
E5F2	saddle guide error
E5F3	saddle alignment error
E5F4	saddle rear stapling error
E5F5	saddle front stapling error
E5F6	saddle butting error
E5F8	saddle connector error
E5F9	saddle switch error
E602	hard disk error

Code	Error name/description
E604	image memory error/shortage
E609	hard disk error
E610	herd disk coding key fault
E674	fax board communication error
E710	IPC initialization error
E711	IPC communication error
E713	communication error for finisher
E716	communication error for pedestal
E717	communication error for NE controller
E719	coin vendor error
E730	PDL software error
E732	scanner communication error
E733	printer communication error
E740	Ether board error
E743	DDI communication error
E744	language file/boot ROM error
E745	TokenRing board error
E746	accessories board wrong model error
E748	controller board and SDRAM size mismatch
E805	fan error

15.2 Error Code Details

15.2.1 Error Code Details

0008-1078

iR2270 / iR2870 / iR3570 / iR4570

T-15-2

Code	Cause	Remedy
E000	The temperature of the fixing assembly is abnormally high.	
0001	While startup control is under way, the reading of the main thermistor is less than 30 deg C continuously for 200 msec or more 1 sec after the start of power supply. While startup control is under way, the reading of the main thermistor is less than 70 deg C continuously for 200 msec or more 2 sec after the start of power supply. While startup control is under way, the reading of the main thermistor is less than 120 deg C continuously for 200 msec 6 sec after the start of power supply. The startup control does not end 30 sec after the start of power supply.	Reset the condition in service mode: COPIER>FUNCTION>CLEAR>ERR. Replace the main thermistor. Replace the DC controller PCB.
E001	The temperature of the fixing assembly is abnormally high.	
0000	The reading of the main thermistor is 250 deg C or more continuously for 200 msec.	Reset the condition in service mode: COPIER>FUNCTION>CLEAR>ERR. Replace the main thermistor. Replace the DC controller PCB.
0001	The hardware circuit detects overheating of the main or sub thermistor for 200 msec.	Reset the condition in service mode: COPIER>FUNCTION>CLEAR>ERR. Replace the DC controller PCB.

Code	Cause	Remedy
0002	The reading of the sub thermistor is 295 deg C or more continuously for 200 msec.	Reset the condition in service mode: COPIER>FUNCTION>CLEAR> ERR. Replace the sub thermistor. Replace the DC controller PCB.
E002	The rise in temperature of the fixing assembly is faulty.	
0000	While startup control is under way, the reading of the main thermistor is less than 115 deg C continuously for 400 msec 1.3 sec after it has indicated 100 deg C. While startup control is under way, the reading of the main thermistor is less than 150 deg C continuously for 400 msec 1.3 sec after it has indicated 140 deg C.	Reset the condition in service mode: COPIER>FUNCTION>CLEAR> ERR. Replace the main thermistor. Replace the DC controller PCB.
E003	The fixing temperature is too low after a standby state.	
0000	While regular temperature control is under way, the reading of the main thermistor is less than 140 deg C continuously for 400 msec or more.	Reset the condition in service mode: COPIER>FUNCTION>CLEAR> ERR. Replace the main thermistor. Replace the DC controller PCB.
E007	The rotation of the fixing film is faulty.	
0000	While the fixing motor is rotating, the marker signal is not detected for 6 sec with the reading of the main thermistor indicating 100 deg C or more.	Reset the condition in service mode: COPIER>FUNCTION>CLEAR> ERR. Replace the main thermistor. Replace the DC controller PCB.
E010	The rotation of the main motor is faulty.	
0001	Detection is executed every 100 msec after the start of motor rotation; however, the drive detection signal is absent for 2 sec.	Replace the main motor. Replace the DC controller PCB.

Code	Cause	Remedy
0002	During motor rotation, detection is executed every 100 msec; however, the drive signal is absent 5 times in sequence.	Replace the main motor. Replace the DC controller PCB.
E014	The rotation of the fixing motor is faulty.	
0001	Detection is executed every 100 msec after the start of motor rotation; however, the drive detection signal is absent for 2 sec.	Replace the fixing motor. Replace the DC controller PCB.
0002	During motor rotation, detection is executed every 100 msec; however, the drive signal is absent 5 times in sequence.	Replace the fixing motor. Replace the DC controller PCB.
E019	The waste toner case is full, or the waste toner case full sensor is faulty.	
0000	When the waste toner case is identified as being full for 2000 prints continuously, an alert is issued; thereafter, the case is identified as being full continuously for 100 prints.	Replace the waste toner sensor. Replace the DC controller PCB.
E020	The path between the sub hopper and the developing assembly is clogged with toner.	
0000	The developing assembly toner sensor detects the absence of toner, while the sub hopper toner sensor detects the presence of toner. With the developing clutch turned on, the hopper feedscrew motor is rotated for 1 sec intermittently 194 times; still, the developing assembly toner sensor does not detect the presence of toner.	Replace the developing assembly toner sensor. Replace the sub hopper toner sensor. Replace the DC control PCB.
E024	The developing assembly connector is disconnected.	
0000	The connection detection signal is absent continuously for 100 msec.	Replace the developing assembly toner sensor. Connect the connector. Replace the DC controller PCB.

Code	Cause	Remedy
E025	The hopper motor or the bottle motor is faulty.	
0000	The sub hopper toner sensor connection detection signal is absent for 100 msec 10 times in sequence.	Replace the sub hopper toner sensor. Connect the connector. Replace the detection PCB.
0001	While the hopper motor is rotating, the motor error lock signal is detected continuously 4 times every 56 msec. Or, while the bottle motor is rotating, the motor error lock signal is detected 22 times in sequence every 10 msec.	Replace the hopper motor. Replace the bottle motor. Replace the DC controller PCB.
E032	The NE controller counter malfunctions.	
0001	An open circuit is detected for the count pulse signal.	Turn off the main power, and check the cable for an open circuit; then, turn the main power back on.
E064	The voltage of the power supply is faulty (high-voltage error).	
0001	The value read from the EEPORM is outside a specific range.	Turn off and then back on the main power. Replace the EEPROM.
0002	While output is being generated, the AD value of the primary DC voltage is 230 (DEC) or more for 100 msec 2 times in sequence. (However, after output, it is not detected for 100 msec.)	Replace the high-voltage power supply. Replace the DC controller PCB.
0003	While output is being generated, the AD value of the developing DC voltage is 224 (DEC) or more for 10 msec 2 times in sequence. (However, after output, it is not detected for 100 msec.)	Replace the high-voltage power supply. Replace the DC controller PCB.

Code	Cause	Remedy
0004	While output is being generated, the AD value of the transfer output current is 205 (DEC) or more for 100 msec 2 times in sequence. (However, after output, it is not detected for 100 msec.)	Replace the high-voltage power supply. Replace the controller PCB.
0005	While output is being generated, the AD value of the transfer output voltage is 0 (DEC) for 100 msec 2 times in sequence. (However, after output, it is not detected for 100 msec.)	Replace the high-voltage power supply. Replace the DC controller PCB.
E100	The BD interval is outside a specific range.	
0001	After the machine has become ready for image formation (i.e., the scanner motor is ready for operation, and the laser has been turned on), an error has occurred 50 times or more (BD error).	Replace the laser unit. Replace the DC controller PCB. Check the wiring.
E110	The scanner motor is faulty.	
0001	The scanner motor speed lock signal does not indicate a locked state a specific period of time after the scanner motor has been started.	Replace the laser unit. Replace the DC controller PCB. Check the wiring.
0002	The speed lock signal indicates a deviation 10 times in sequence at intervals of 10 msec after the signal has indicated a locked state.	Replace the laser unit. Replace the DC controller PCB. Check the wiring.
0003	With the image clock switched over, the scanner motor speed lock signal does not indicate a locked state 6.5 sec after a switchover is made from low to normal speed or 8 sec after a switchover is made from normal to low speed.	Replace the laser unit. Replace the DC controller PCB. Check the wiring.

Code	Cause	Remedy
E191	There is an error in the communication with the high-voltage power supply.	
0000	The data transmission/reception does not end normally 500 msec after the most recent transmission/reception of data ended normally.	Replace the high-voltage power supply. Replace the DC controller PCB.
E202	There is an error in the detection of the CIS home position.	
0001	The attempt to detect the home position fails when the CIS is moved forward.	Disconnect and then connect the harness connector. Replace the following as necessary: scanner home position sensor, scanner motor, reader controller PCB.
0002	The attempt to detect the home position fails when the CIS is moved back.	Disconnect and then connect the harness connector. Replace the following as necessary: scanner home position sensor, scanner motor, reader controller PCB.
E225	The light intensity of the CIS is faulty.	
0001	During shading operation, the intensity is below a specific level.	Disconnect and then connect the flexible cable. Replace the following as necessary: flexible cable, CIS, reader controller PCB.
0002	During DF stream reading, the sheet-to-sheet light intensity is faulty.	Disconnect and then connect the flexible cable. Replace the following as necessary: flexible cable, CIS, reader controller PCB.
E227	The reader unit power supply is faulty.	
0001	At time of power-on, the 24-V port is off.	Disconnect and then connect the power supply harness connector. Replace the power supply.
0002	At the start of a job, the 24-V port is off.	Disconnect and then connect the power supply harness connector. Replace the power supply.
0003	At the end of a job, the 24-V port is off.	Disconnect and then connect the power supply harness connector. Replace the power supply.

Code	Cause	Remedy
0004	When a load is being driven, the 24-V port is off.	Disconnect and then connect the power supply harness. Replace the power supply.
E248	The backup memory is faulty.	
0000	[Cause] A check error has occurred on the backup SRAM board. [Location] bottom ROM [Timing of Detection] once when the boot ROM is started up	1. Check the presence/absence of a backup SRAM PCB. 2. Disconnect and then connect the backup SRAM PCB. 3. Replace the backup SRAM PCB with a new one.
0001	An error has occurred at power-on.	Replace the reader controller PCB.
0002	An error has occurred during a write operation.	Replace the reader controller PCB.
0003	An error has occurred during a read operation following a write operation.	Replace the reader controller PCB.
E261	The zero-cross signal is faulty.	
0000	When the relay is on, the zero-cross signal is not detected for 500 msec or more.	Replace the AC driver PCB. Replace the DC controller PCB.
E315	There is an error in image data.	
0007	There is an error in JBIG encoding.	Turn off and then back on the power.
000d	There is an error in JBIG decoding.	Turn off and then back on the power.
E602	There is an error on the hard disk.	

Code	Cause	Remedy
0001	[Cause] An HDD detection error has occurred. The HDD cannot be detected. The HDD does not become ready. The HDD returns an error. [Detection] while boot ROM is in session BARSAC startup, mounting (usrIde) [Timing of Detection] once at startup	See the details under 602.
0002	[Cause] There is no startup file. The program for the main CPU does not exist on the HDD or in BOOTDEV/BOOT, and so on. [Detection] while boot ROM is in use at time of system file loading (usrIde) [Timing of Detection] once at startup	See the details under 602.
0003	[Cause] An HD write abort error has occurred. The sectors for BOOTDEV on the HD cannot be read. [Detection] BARSAC (all; at time of bootable startup) [Timing of Detection] once at startup	See the details under 602.

Code	Cause	Remedy
0006	[Cause] A subbootable that matches the PDL type does not exit in BOOTDEV/BOOT. [Detection] during loading of sub boot in oclibroot [Timing of Detection] once at bootable startup	See the details under 602.
0007	[Cause] An ICC profile that matches the PDL type does not exist in BOOTDEV/PDL. [Detection] beginning of oclibroot; judgment based on functions of PDL team that are called in [Timing of Detection] once at bootable startup	See the details under 602.
01XX	/DOSDEV is faulty.	See the details under 602.
02XX	/FSTDEV is faulty.	See the details under 602.
03XX	/DOSDEV2 is faulty.	See the details under 602.
04XX	/FSTPDEV is faulty.	See the details under 602.
05XX	/DOSDEV3 is faulty.	See the details under 602.
06XX	/PDLDEV is faulty.	See the details under 602.
07XX	/DOSDEV4 is faulty.	See the details under 602.
08XX	/BOOTDEV is faulty.	See the details under 602.
09XX	/DOSDEV5 is faulty.	See the details under 602.

Code	Cause	Remedy
FFXX	There is an error in a partition that cannot be identified.	See the details under 602.
E604	The image memory is faulty or is inadequate.	
0000	The memory size does not match the model.	Increase the memory.
E609	There is an error on the HDD.	
0008	At startup, the HDD fails to reach a specific temperature level within a specific period of time.	Replace the hard disk. Replace the DC controller PCB.
0009	At time of sleep recovery, the temperature fails to reach a specific level.	Replace the hard disk. Replace the DC controller PCB.
E610	The HDD coding key is faulty.	
	The SRM/PCB is faulty. The battery has become exhausted, leading to loss of SRAM contents.	Try step 1); if it fails, try step 2). 1) Turn off and then back on the power switch to generate the key once again. 2) If the same error still continues, replace the board on which the SRAM is mounted. (Keep in mind that doing so will lead to loss of all user data.)
E674	An error has occurred in communication between the fax control PCB (2-line) and main controller PCB.	
0001	An attempt to set mode for the fax device has failed.	1. Check the connection of the cable between the fax control PCB (2-line) and the main controller PCB. 2. Replace the ROM DIMM of the fax control PCB (2-line). 3. Replace the fax control PCB (2-line). 4. Replace the main controller PCB.
E710	There is an error in the initialization of the IPC.	

Code	Cause	Remedy
0001	The machine fails to become ready 3 sec or less after the IPC chip startup.	Check the cable.
0002	When the main power is turned on, the communication IC (IPC) on the DC controller PCB cannot be initialized.	Check the cable.
E711	There is an error in the IPC communication.	
0001	The occurrence of an error has been recorded in the error register of the IPC chip 4 times or more within 1.5 sec.	Check the cable.
0002	The occurrence of an error has been recorded in the error register of the IPC chip 4 times or more within 2 sec.	Check the cable.
E713	There is an error in the communication with the finisher.	
0000	The communication with the finisher does not resume within 5 sec after it has been disrupted.	Check the cable. Replace the DC controller PCB. Replace the finisher controller PCB.
E716	There is an error in the communication with the pedestal.	
0000	After the presence of a pedestal has been detected, the communication fails to be normal for 5 sec.	Check the cable. Replace the DC controller PCB. Replace the pedestal drive PCB.
E717	There is an error in the communication with the NE controller.	
0001	The NE controller is not connected at power on, although it was connected before the power was turned off because of an error.	Check the cable; thereafter, reset the condition in service mode: COPIER>FUNCTION>CLEAR> ERR.
0002	An IPC error has occurred while the NE controller is in operation. There is an open circuit for the IPC. An error has occurred, and the IPC communication remains disabled.	Check the cable; thereafter, reset the condition in service mode: COPIER>FUNCTION>CLEAR> ERR.

Code	Cause	Remedy
E719	There is a coin vendor error.	
0001	The coin vendor is not connected when the power is turned on, although it was connected before the power was turned off because of an error.	Check the cable; thereafter, reset the condition in service mode: COPIER>FUNCTION>CLEAR> ERR.
0002	While the coin vendor is in operation, an IPC error has occurred, IPC has developed an open circuit, or an error preventing recovery of IPC communication has occurred. An open circuit has been detected in the line for the pickup/delivery signal. An illegal signal has been detected.	Check the cable; thereafter, reset the condition in service mode: COPIER>FUNCTION>CLEAR> ERR.
0003	While the unit price is being checked at startup, an error occurs in the communication with the coin vendor.	Check the cable; thereafter, reset the condition in service mode: COPIER>FUNCTION>CLEAR> ERR.
0011	An error has occurred at new card reader startup. The new card reader is not connected when the power is turned off, although it was connected when the power was turned off.	Check the cable; thereafter, reset the condition in service mode: COPIER>FUNCTION>CLEAR> ERR.
0012	An IPC error has occurred at new card reader startup. There is an IPC open circuit. An error has occurred that prevents recovery of IPC communication.	Check the cable; thereafter, reset the condition in service mode: COPIER>FUNCTION>CLEAR> ERR.
E730	There is a PDL software error.	
1001	An initialization error has occurred.	1. Execute PDL resetting. 2. Turn on the power once again.

Code	Cause	Remedy
100A	An error that may be critical to the system (e.g., failed initialization) has occurred.	1. Execute PDL resetting. 2. Turn on the power once again.
9004	There is an error in the communication (PAI) with an external controller.	1. Turn on the power once main. 2. Check the connection of the open I/F board and the cable. 3. Replace the board for the external controller open I/F. 4. Replace the main board.
9005	There is a fault in the connector of the vide cable to the external controller.	1. Turn on the power once main. 2. Check the connection of the open I/F board and the cable. 3. Replace the board for the external controller open I/F. 4. Replace the main board.
A006	The PDL board does not respond. A subbootable is faulty or absent.	1. Execute PDL resetting. 2. Turn on the power once again. 3. Check the connection of the SURF board. 4. Re-install the firmware. 5. Replace the main board.
A007	There is a mismatch between the control software of the machine and the PDL control software in regard to version.	1. Execute PDL resetting. 2. Turn on the power once again. 3. Execute system formatting (all), and reinstall the system.
B013	There is corruption in the font data.	1. Turn on the power once again. 2. Re-install the software. 3. Execute system formatting (all), and reinstall the system.
E732	There is an error in the communication with the scanner.	
0001	There is a DDI-S communication error.	1. Check the connector used to connect the scanner. 2. Check the power supply of the scanner (to see if initialization takes place at startup). 3. Replace the reader controller, scanner board, or main board as necessary.
E733	There is an error in the communication with the printer.	

Code	Cause	Remedy
0000	At startup, communication with the printer fails.	1. Check the connector used to connect to the printer. 2. Check the power supply of the printer (to see if initialization takes place at startup). 3. Replace the DC controller or the main board.
0001	There is a DDI-P communication error.	1. Check the connection with the printer. 2. Check the power supply of the printer (to see if initialization takes place at startup). 3. Replace the DC controller or the main board.
E740	There is an error on the Ether board.	
0002	The MAC address is illegal.	Replace the LAN card.
E743	There is an error in the DDI communication.	
0000	An SCI error has occurred. The received data is faulty. A reception timeout condition has occurred. An SEQ timeout error has occurred.	Disconnect and then connect the flexible cable used to connect the reader unit and the printer unit. Replace the following as necessary: flexible cable, reader controller PCB, main controller PCB.
E744	There is an error in the language file/boot ROM.	
0001	The version of the language file on the HDD and that of the bootable do not match.	Download a language file of the correct version.
0002	The size of the language file on the HDD is too large.	Download a language file of the correct version.
0003	There is no language file on the HDD indicated by config.txt for a switchover.	Download a language file of the correct version.
0004	An attempt to switchover to a language on the HDD fails.	Download a language file of the correct version.
1000	The boot ROM that is mounted is of the wrong type.	Replace the boot ROM with one of the model in question.

Code	Cause	Remedy
2000	The engine ID indicated by the software ID is illegal.	Replace it with a software ID of the correct model.
E745	There is a fault on the TokeRing board.	
0001	An attempt at PCI initialization has failed.	1. Disconnect and then connect the TokeRing board. 2. Replace the TokeRing board.
0002	The MAC address is faulty.	1. Replace the TokenRing board.
0003	There is an error in the acquisition/setting of board information.	1. Replace the TokenRing board.
0004	There is a connection error.	1. Check the connection of the cable. 2. Replace the cable. 3. Check the power source of the MAU. 4. Replace the MAU. 5. Replace the TokenRing board.
0005	Other Errors	
E746	The accessories board is of the wrong type.	
0003	At startup, a board for a different model has been detected.	Replace the UFR board of the correct type (model).
E748	There is a mismatch between controller board and SDRAM size.	
1001	There is a mismatch between the control board and the SDRAM.	Check the correct combination between board and SDRAM.
E805	There is a fan error.	
0000	While the fan is at rest, the lock signal has been detected for 5 sec. While the fan is in operation, the lock signal is not detected for 5 sec.	Replace the fan. Replace the DC controller PCB.

15.2.2 E602 in Detaill

0008-1182

iR2270 / iR2870 / iR3570 / iR4570

XX	YY	Description	Remedy
00	01	The HDD cannot be recognized. The startup partition (BOOTDEV) cannot be found at startup.	1. Turn off the main switch, and check the cable connector. Then, turn on the main switch. 2. Check to see if the HDD spins up when the main switch is turned on and if the 5V/12V power is supplied. 3. If the symptom still exists after the foregoing, replace the HDD, re-install the system software. If the symptom still exists, replace the main board.
00	02	The system software for the main CPU does not exist.	1. Start up in safe mode, and format the HDD using the SST (all); then, re-initial the system software (System, Language, RUI); then turn off and then back on the main power switch. 2. If the symptom still exists after the foregoing, suspect a fault on the HDD, and replace the HDD and re-install the system software.

XX	YY	Description	Remedy
00	03	Suspension of a write operation to the boot device has been detected.	1. Find the sector for which the write operation has been suspended; then, execute recovery operation. <in the case of black-and-white E code> 1-1 The machine will not permit the use of service mode; go through the following: 1-2 Turn off the power. Then, turn on the power while holding down on the 1 and 9 keys so that the repair routine for the sector for which the write operation was suspended will automatically start up and the screen will turn solid black. 1-3 Wait for about 40 to 50 min. There will soon be an indicator of progress of work. The screen will turn solid white when the routine ends. <if the spanner symbol is indicated> 1-1 Set 'CHK-TYPE-0', and execute 'HD-CHECK' (50 to 50 min); thereafter, turn off and then back on the main power switch. 2. If the symptom still exists after the foregoing, start up in safe mode; then, format the HDD (full) using the SST, and re-install the system software (System, Language, RUI), and turn off and then back on the main power switch. 3. If the symptom still exists after the foregoing, suspect a fault on the HDD, and replace the HDD and re-install the system software.
00	04	Symptom absent	
00	05	Symptom absent	
00	06	The system software of the sub CPU does not exist.	1. Start up in safe mode, and execute full formatting using the SST and re-install the system software (System, Language, RUI); then, turn off and then back on the main power. 2. If the symptom still exists after the foregoing, suspect a fault on the HDD, and replace the HDD and re-install the system software once again.

XX	YY	Description	Remedy
00	07	The IC profile does not exist.	1. Start up in safe mode, and execute full formatting using the SST and re-install the system software (System, Language, RUI); then, turn off and then on the main power. 2. If the symptom still exits after the foregoing, suspect a fault on the HDD, and replace the HDD and re-install the system software.

[E602-XXYY]

T-15-4

XX				YY					
XX	CHK-TYPE	Partition in question	Description	01	02	03	11, 21	13, 25	10, 12, 14, 22, 23, 24
				At startup			During routine operation		
				Remedy	Remedy	Remedy	Remedy	Remedy	Remedy
1	1	DOSDEV	General data storage area	*1	*5	*9	*10	*11	*12
2	1	FSTDEV	Image data storage area (e.g., Box)	*1	*5	*9	*10	*11	*12
3	1	DOSDEV2	Image thumbnail display data area (e.g., Box)	*1	*5	*9	*10	*11	*12
4	1	FSTPDEV	Image data storage area (e.g., Box)	*1	*5	*9	*10	*11	*12

XX				YY					
XX	CHK-TYPE	Partition in question	Description	01	02	03	11, 21	13, 25	10, 12, 14, 22, 23, 24
				At startup			During routine operation		
				Remedy	Remedy	Remedy	Remedy	Remedy	Remedy
5	2	DOSDEV3	General file storage area (user settings, logs, PDL spool, image data control info)	*1	*5	*9	*10	*11	*12
6	3	PDLDEV	PDL-related file storage area (font, registered form, ICC profile, color correction info file for PDL function)	*1	*5	*9	*10	*11	*12
7	4	DOSDEV4	Firmware storage area (address book, filter)	*2	*6	*9	*10	*11	*12
8	4	BOOTDEV	Firmware storage area (System, Language, RUI)	*3	*8	*9	*10	*11	*12

XX				YY					
XX	CHK-TYPE	Partition in question	Description	01	02	03	11, 21	13, 25	10, 12, 14, 22, 23, 24
				At startup			During routine operation		
				Reme-dy	Reme-dy	Reme-dy	Reme-dy	Reme-dy	Reme-dy
9	5	DOSDEV5	For future expansion	*1	*5	*9	*10	*11	*12
FF	0	Not identified	Entire HDD (check on faulty sector and recovery)	*4	*7	*9	*10	*11	*12

[HDD formatting]

T-15-5

XX	CHK-TYPE	Partition in question	Description	Typical item deleted	HDD formatting by HD-CLEAR	Normal mode + HDD formatting with SST	Safe mode + HDD formatting with SST
1	1	DOSDEV	General data storage area	Entire collection of image data (e.g., Box)	Possible (4 partitions, simul-taneously)	FSTDEV specified (4 partitions, simul-taneously)	Possible; however, selection of a specific partition is not allowed, requiring deletion of all data. After formatting, the system software must be downloaded.

XX	CHK-TYPE	Partition in question	Description	Typical item deleted	HDD formatting by HD-CLEAR	Normal mode + HDD formatting with SST	Safe mode + HDD formatting with SST
2	1	FSTDEV	Image data storage area (e.g., Box)	Entire collection of image data (e.g., Box)	Possible (4 partitions, simul-taneously)	FSTDEV specified (4 partitions, simul-taneously)	Possible; however, selection of a specific partition is not allowed, requiring deletion of all data. After formatting, the system software must be downloaded.
3	1	DOSDEV2	Image thumbnail display data area (e.g., Box)	Entire collection of image data (e.g., Box)	Possible (4 partitions, simul-taneously)	FSTDEV specified (4 partitions, simul-taneously)	Possible; however, selection of a specific partition is not allowed, requiring deletion of all data. After formatting, the system software must be downloaded.

XX	CHK-TYPE	Partition in question	Description	Typical item deleted	HDD formatting by HD-CLEAR	Normal mode + HDD formatting with SST	Safe mode + HDD formatting with SST
4	1	FSTPDEV	Image data storage area (e.g., Box)	Entire collection of image data (e.g., Box)	Possible (4 partitions, simul-taneously)	FSTDEV specified (4 partitions, simul-taneously)	Possible; however, selection of a specific partition is not allowed, requiring deletion of all data. After formatting, the system software must be downloaded.
5	2	DOSDEV3	General file storage area (user settings, logs, PDL spool, image data control info)	Items that are relatively less critical	Possible	DOSDEV 3 specified	Possible; however, selection of a specific partition is not allowed, requiring deletion of all data. After formatting, the system software must be downloaded.

XX	CHK-TYPE	Partition in question	Description	Typical item deleted	HDD formatting by HD-CLEAR	Normal mode + HDD formatting with SST	Safe mode + HDD formatting with SST
6	3	PDLDEV	PDL-related file storage area (font, registered form, ICC profile, color correction info file for PDL function)	User Font IccProfil	Possible	PDLDEV specified	Possible; however, selection of a specific partition is not allowed, requiring deletion of all data. After formatting, the system software must be downloaded.
7	4	DOSDEV4	Firmware storage area (address book, filter)	Address book	Not possible	DOSDEV 4 specified	Possible; however, selection of a specific partition is not allowed, requiring deletion of all data. After formatting, the system software must be downloaded.

XX	CHK-TYPE	Partition in question	Description	Typical item deleted	HDD formatting by HD-CLEAR	Normal mode + HDD formatting with SST	Safe mode + HDD formatting with SST
8	4	BOOTDEV	Firmware storage area (System, Language, RUI)	System software	Not possible	Not possible	Possible; however, selection of a specific partition is not allowed, requiring deletion of all data. After formatting, the system software must be downloaded.
9	5	DOSDEV5	For future expansion	None in particular	Possible	DOSDEV 5 specified	Possible; however, selection of a specific partition is not allowed, requiring deletion of all data. After formatting, the system software must be downloaded.
FF	0	Not identified	Entire HDD (check on faulty sector and recovery)	-	-	-	-

* When the machine starts up for the first time after its HDD has been formatted, it may take longer than usual to complete the startup session.

[Remedy]

	YY	Description	Remedy
*1	01	The ongoing write operation has been suspended (at startup).	1. Set '0' to TYPE-TYPE, and execute HDD-CHECK (50 to 50 min). Thereafter, turn off and then back on the power. 2. If the symptom still exists after the foregoing, type in TYPE-TYPE for the partition in question, and execute HDD-CLEAR. Thereafter, turn off and then back on the main switch.
*2	01	The ongoing operation has been suspended (at startup).	1. If possible, ask the user to back up the address book data using the RUI. 2. Set '0' to TYPE-TYPE, and execute HDD-CHECK (40 to 50 min). Thereafter, turn off and then back on the power. 3. If the symptom still exists after the foregoing, start download mode, and execute full formatting using the SST and re-install the system software (System, Language, RUI). Thereafter, turn off and then back on the main power.
*3	01	The ongoing write operation has been suspended (at startup).	To run a recovery session for the boot partition, you will have to use safe mode in combination with the SST. 1. Set '0' for TYPE-TYPE, and execute HDD-CHECK (40 to 50 min). Thereafter, turn off and the back on the power. 2. If the symptom still exits after the foregoing, start download mode, and execute full formatting using the SST, and re-install the system software (System, Language, RUI). Thereafter, turn off and then back on the power.
*4	01	The ongoing write operation has been suspended (at startup).	1. Set '0' for TYPE-TYPE, and execute HDD-CHECK (40 to 50 min). Thereafter, turn off and then back on the power. 2. If the symptom still exits after the foregoing, execute HDD-CLEAR using TYPE-TYPE=1, 2, 3, 5. Thereafter, turn off and then back on the power.

	YY	Description	Remedy
*5	02	A file system error has occurred.	1. Type in TYPE-TYPE of the partition in question, and execute HDD-CLEAR. Thereafter, turn off and then back on the main switch. 2. If the system still exits after the foregoing, suspect a fault on the HDD, and replace the HDD and re-install the system software.
*6	02	There is a file system error.	The system software is designed so that the information in this partition (e.g., address book, filter) is not deleted inadvertently; i.e., you will not the able to execute HDD-CLEAR from service mode. 1. If possible, ask the user to back up the address book data using the RUI. 2. From service mode, start download mode; then, execute full formatting using the SST and re-install the system software (System, Language, RUI). Thereafter, turn off and the back on the main power.
*7	02	A file system error has occurred.	This type of error is highly rare. 1. Using TYPE-TYPE=1, 2, 3, 5, execute HDD-CLEAR. Thereafter, turn off and then back on the power. 2. If the symptom still exits after the foregoing, suspect a fault on the HDD, and replace the HDD and re-install the system software.

	YY	Description	Remedy
*8	02	A file system error has occurred.	The system software is designed so that a recovery session will not run for the boot partition unless you use safe mode in combination with the SST. 1. Start up in safe mode, and execute full formatting using the SST and re-install the system software (System, Language, RUI). Thereafter, turn off and then on the main power. 2. If the symptom still exits after the foregoing, suspect a fault on the HDD, and replace the HDD and re-install the system software.
*9	03	There is poor contact of the HDD, or a v.x Works system error has occurred.	1. Check the cable and power supply connectors. 2. If the symptom still exits after the foregoing, start up in safe mode, and execute full formatting using the SST and re-install the system software (System, Language, RUI). Thereafter, turn off and then back on the main power. 3. If the symptom still exits after the foregoing, suspect a fault on the HDD, and replace the HDD and re-install the system software.
*10	11,21	The HDD has poor contact.	This type of error is highly rare in relation to read/write operations. 1. Check the cable and the power supply connectors. 2.If the symptom still exits after the foregoing, suspect a fault on the HDD, and replace the HDD and install the system software.

	YY	Description	Remedy
*11	13, 25	The ongoing write operation has been suspended.	There is a likelihood of the presence of damage to the file data on the HDD (e.g., Box). 1. Set '0' for TYPE-TYPE, and execute HDD-CHECK (40 to 50 min). Thereafter, turn off and then back on the power. 2. If the symptom still exits after the foregoing, set '1' for TYPE-TYPE, and execute HDD-CLEAR. (In the case of DOSDEV4 or BOOTDEV, execute formatting and re-installation once again.) 3. If the symptom still exists after the foregoing, suspect a fault on the HDD, and replace the HDD and re-install the system software.
*12	10, 12, 14, 22, 23, 24	There is a system error or a packet data error.	The data may be corrupted or there is a software bug. 1. Start up in safe mode, and execute full formatting using the SST and re-install the system software (System, Language, RUI). Thereafter, turn off and then back on the main power. 2. If the symptom still exits after the foregoing, suspect a fault on the HDD, and replace the HDD and re-install the system software.

⚠

- HD-CLEAR

When you have executed HD-CLEAR, all contents of the partition in question (files, sub directories) will be lost.
The actual formatting will take place when the machine is started up after it has been turned off upon execution of HD-CLEAN.
At this time, the Startup screen shows a progress bar, its edge reaching the end in about 5 min. Be sure not to turn off the power while the progress bar is moving.
This function (i.e., mode item) cannot be used for BOOTDEV and DOSDEV4; to re-format any of these 2 partitions, you will have to use the SST.
Keep in mind that formatting of the HDD in service mode will necessarily be full formatting.

- HD-CHECK

If the power is cut while data is being written to the HDD, the occurrence of a write-suspended sector is a possibility.

When HD-CHECK is run on such a sector, repairs will be made, but all data in the sector will be lost. A write-suspended sector may be repaired only by HDD-CHECK (0); if not TYPE-TYPE=0, the task will be limited to an FS level check.
If the write-suspended sector happens to be a critical sector that holds a control area, there is no way of repairing it; you will have to execute HDD formatting.

- Replacing the HDD
1. Turn off the main switch.
2. Connect the new HDD.
3. Start up the machine in safe mode.
4. Connect the SST, and execute full formatting.
5. Using the SST, download the system software (System, Language, RUI).
6. Turn off and then back on the power. (It may take about 5 min for the machine to start up).

15.3 Error Code (SEND)

15.3.1 Results of Self-Diagnosis

0008-0278

iR2270 / iR2870 / iR3570 / iR4570

T-15-7

Cause	Remedy
There is a shortage of TCP/IP resources. Try again later.	
While continuous transmission is under way or has ended in FTP or Windows (SMB), a shortage of TCP/IP resources has occurred, not permitting reference.	Wait a while; then, try again.
Set the IP address.	
The IP address of the machine has yet to be set.	In user mode, set the IP address; thereafter, turn off and then on the machine.
The server does not respond. Check the settings.	
The settings of the selected server are not correct, or the server has not been turned on. Or, there may be a shortage of resources.	Wait a while; then, try again. If browsing is still not permitted, select a different server.
NetWare is in use. Try again later.	
NetWare is printing using PSeve or NDSPServer, not permitting browsing.	Wait until NetWare finishes printing; then, try again.
The layer in question at the target is too deep to browse.	
The number of characters is in excess of the number allowed.	The layer in question cannot be specified. Specify a different address.
There is no response.	
The server is not ready for file transmission.	Check the target.
The network is cut for file transmission. (An attempt to connect to the target of transmission may have failed, or there is an open circuit in the middle.)	Check the network.
The tree name is not specified for NetWare transmission.	Type in the tree name.
An error has occurred for TCP/IP in the course of e-mail or i-fax transmission.	Check the condition of the network cable and the connector.
Check TCP/IP.	

Cause	Remedy
The machine's TCP/IP is not in operation.	In user mode, check the TCP/IP settings (IP address, DHCP, RARP, BOOTP).
The selected server cannot be found. Check the settings.	
The IP address in question cannot be identified.	1. In user mode, check the DNS settings. 2. On the DNS side, check the DNS data settings.
If the login information for the LDAP server is set to 'use (security authentication)', the host name in question cannot be identified.	In user mode, check the TCP/IP settings (DNS settings).
The selected server cannot be connected. Check the settings.	
An attempt to connect to the IP address/port in question fails.	1. In user mode, check the TCP/IP settings (gateway address of the IP address settings). 2. In user mode, check the LDAP server settings. 3. Check to see that the LDAP server is operating normally. 4. If the login information of the LDAP server is set to 'use (security authentication)', check to see if the UDP packet is blocked by a filter.
Check the user name, password, or the settings.	
If the login information of the LDAP server is set to 'use' or 'use (security authentication)', the user name or the password is wrong.	In user mode, check the LDAP server settings (user name, password).
If the login information of the LDAP server is set to 'use (security authentication)', the domain name is wrong.	In user mode, check the LDAP server settings (domain name).
A timeout condition has occurred, and a search cannot be completed. Check the settings.	
The search cannot be completed within the specified period of time.	In user mode, increase the length of time before a timeout condition occurs (part of LDAP server settings).
An upper limit for search results has been exceeded. If the desired address is not indicated in the results, change the search conditions.	
The number of matches has exceeded the number of results brought up in response to the search.	1. Narrow down the search conditions, and try again. 2. Try increasing the upper limit.
The search conditions include a character that cannot be used for the selected server.	
The symbol \ is used in the search condition.	Remove the symbol \ from the search condition, and try once again.

Cause	Remedy
The combination of characters used in the search condition fails to make up a correct search condition. There must be as many "s as there are "s The symbol * is not included within parentheses.	Check to be sure that the combination of characters is in keeping with the rule; then, try once again.
If LDAP of the server and the character code is version 2 (JIS), there is a character that is not part of the ASCII code (0x20-0x7E).	Remove any character that cannot be used; then, try once gain.
The version setting of the server is wrong, and the search cannot be initiated. Check the settings.	
In user mode, the LDAP server settings (server LDAP version and character code) is set for version 3; however, the LDAP server is operating for version 2.	In user mode, set the LDAP server settings so that the LDAP server version and the character code are both version 2.

15.3.2 Error Codes

0008-0315

iR2270 / iR2870 / iR3570 / iR4570

T-15-8

Cause	Remedy
# 001	
There is a paper or original jam.	Remove the jammed paper or original.
# 003	
A communication lasting longer than a specific period of time (64 min) will cause an error state.	1. Decrease the resolution for transmission. 2. In the case of reception, ask the source to decrease the resolution or divide the original.
# 005	
The target does not respond within 35 sec.	Check to be sure that the target is ready to communicate; then, try once again.
The target is a non-G3 model.	Check the target.
# 009	
There is no paper.	Supply paper.
The cassette is not fitted properly.	Fit the cassette correctly.
# 011	

Cause	Remedy
The original to be transmitted is not placed properly.	Start over from the beginning.
# 012	
The target is out of recording paper, and transmission has failed.	Ask the target to supply recording paper.
# 018	
There is no response to a redial attempt.	Check to make sure that the target is ready for communication; then, try once again.
The target is engaged for a different communication, and transmission has failed.	Check to make sure that the target is ready for communication; then, try once again.
The settings do not match the settings of the target, and the transmission has failed.	Check to make sure that the target is ready for communication; then, try once again.
# 022	
The particulars of the group address selected as the forwarding target may have been deleted, or there is no more than a user box, thus causing the transmission to fail.	Try transmitting once again.
The attempt to transmit to an address registered in the address book has failed because the address has been removed from the address table while in wait for transmission.	Try once again.
# 037	
There is a shortage of memory, not permitting reception.	Remove error files and unnecessary files to increase available memory.
# 080	
F code is not set on the target.	Check the F code of the target, and start over.
# 081	
The appropriate password is not set on the target.	Check the password of the target, and start over.
# 099	
The transmission has been suspended in the middle.	Start over.
# 102	
There is a mismatch of F code or password.	Check the F code and the password of the target, and start over.
# 107	

Cause	Remedy
There is a shortage of memory, not permitting transmission.	1. Decrease the resolution, and try once again. 2. Remove unnecessary files to increase available space.
# 701	
The group ID set when the job was introduced no longer exits. Or, the password has been changed.	Type in the correct group ID or the ID No. (using the keypad); then, start over.
# 702	
The memory is full, not permitting transmission.	1. Wait a while. Try again until the ongoing transmission of a job ends. 2. Try not to transmit to too many addresses at once; rather, try dividing the address into smaller groups.
# 703	
The memory image area is full, not permitting further writing.	1. Wait a while. Try transmitting after the ongoing transmission of a job ends. 2. Remove files from the Box; if the operation still fails to return to normal, turn off and then back on the main power.
# 704	
An error has occurred while an attempt is made to obtain address information from the address book.	Check the settings of the address, and try once again; if the operation is still not normal, try turning off and then back on the main power.
# 705	
The image data size is in excess of the upper limit imposed on transmission data size set in user mode, thus causing suspension of transmission.	Try changing the upper limit imposed on transmission data size as part of the communication control settings of system control settings (user mode). When selecting low resolution mode or using i-fax, try decreasing the number of images to send at one time so that the transmission will not be in excess of the upper limit imposed on transfer data size.
# 706	
An address table is being imported from or to the remote UI; or, a different transmission component is being used.	Start over once again.
# 711	
All memory of the Box is used.	Delete files from the Box.

Cause	Remedy
# 712	
The Box is full of files.	Remove file from the Box.
# 713	
The file has been removed from the Box before transmitting the URL.	Put the file in question back into the Box, and start over.
# 751	
The server is yet to start up. The network is disconnected. (The connection to the target may have failed, or the connection may have been cut in the middle.)	Check the target. Check the network.
# 752	
The SMTP server name of the e-main/i-fax in question may be wrong, or the server in question is yet to start up. Or, the appropriate domain name or e-mail address has not been set. Or, the network has been disconnected.	Using the network settings of the system control setup (user mode), check the SMTP server name, domain name, and e-mail address. Check to see that the SMTP server is operating normally. Check the connection of the network.
# 753	
A TCP/IP error has occurred in the course of e-mail transmission. (e.g., socket, select error)	Check the condition of the network cable and the connector. If the operation does not return to normal, try turning off and then back on the main power of the machine.
# 754	
The server has not been started up for transmission, or the network is disconnected. Or, the target settings are wrong.	Check the server and the network. Check the settings of the target.
# 755	
The TCP/IP settings are not operating normally, thus not permitting transmission.	In user mode, check the TCP/IP settings.
The appropriate IP address has not been set up.	In user mode, check the TCP/IP settings.
When the machine is started up, its IP address is not assigned by means of DHCP, RARP, or BOOTP.	In user mode, check the TCP/IP settings.
# 756	
In system control setup (user mode), 'use NetWare' is set to 'off' in NetWare settings.	In network settings of system control setup (user mode), set 'use NetWare' to 'on'.
# 801	

Cause	Remedy
While e-mail is being transmitted or i-fax is transmitted/received, the communication with the SMTP server encountered a timeout error because of a factor associated with the main server.	1. Check to see that SMTP is operating normally. 2. Check the condition of the network.
While an SMTP connection is being used, the SMTP server has returned an error. The address setting is not correct. When data is transmitted to the file server, an error has occurred owing to a factor associated with the server.	1. Check to see if SMTP is operating normally. 2. Check the condition of the network. 3. Check the address setting. 4. Check the condition of the file server and the setting.
An attempt has been made to transmit data to an address not authorized for a write operation.	Check the address setting.
In the course of transmitting data (file server), it was found that there is a file having the same name, and an overwrite operation to the file is prohibited.	Change the setting of the file server so that overwriting may be permitted.
In relation to transmission (file server), the folder name or the password that has been specified is wrong.	Check the address setting.
# 802	
In the system control setup (user mode), the settings of the SMTP server for e-mail/i-fax are wrong. The setting of the DNS server is wrong. The attempt to connect to the DNS server has failed.	In the network settings under system control settings (user mode), check the SMTP server name and the DNS server name. Check to see if the DNS server is operating normally.
# 803	
Before all pages have been transmitted, the target has cut off the network.	Try once again.
# 804	
When an attempt is made to transmit to the file server, it has been found that no match exits in the specified directory.	Check the address.
You are not authorized for access to the folder.	Set the server so that you will be authorized to access the folder.
# 806	
When an attempt to transmit to the file server is made, it has been found that the specified user name or password is wrong.	Change the user name or the password of the address.

Cause	Remedy
The address specified for e-mail/i-fax transmission is wrong.	Check the address of the e-mail/i-fax in question.
# 810	
When an attempt is made to receive i-fax, a POP server connection error has occurred.	1. In user mode, check the POP server name setting. 2. Check the operation of the POP server. 3. Check the condition of the network.
While a connection is made to the POP server, an error has been returned by the POP server.	1. In user mode, check the POP server name setting. 2. Check the operation of the POP server. 3. Check the condition of the network.
While a connection is made to the POP server, a timeout error has occurred owing to a factor associated with the server.	1. In user mode, check the POP server name setting. 2. Check the operation of the POP server. 3. Check the condition of the network.
# 815	
If a file that has been transmitted to the file server is being printed, you will not be able to log in to the server in question.	Wait a while, and then try once again. Or, change the NetWare server settings of the target, or stop PServer.
# 818	
The data that has been received is in a format that does not permit printing.	Ask the source to change the file format and transmit it once again.
# 819	
The data that has been received is of a type that cannot be handled (i.e., its MIME information is illegal).	Ask the target to check the settings and transmit it once again.
# 820	
The data that has been received is of a type that cannot be handled (i.e., BASE64 or Unicode is illegal).	Ask the source to check the settings and transmit it once again.
# 821	
The data that has been received is of a type that cannot be handled (i.e., TIFF interpretation error has occurred).	Ask the target to check the settings and transmit once again.
# 822	
The data that has been received is of a type that cannot be handled (i.e., the image cannot be decoded).	Ask the source to check the settings and transmit once again.
# 827	

Cause	Remedy
The data that has been received is of a type that cannot be handed (i.e., part of its MIME information is not supported).	Ask the source to check the settings and transmit once again.
# 828	
HTML data has been received.	Ask the source to use a format other than HTML.
# 829	
The data that is being received consists of 100 pages or more.	The machine is designed so that it removes data for the 100th and subsequent pages and prints or saves in memory up to the 999th page. Ask the source to transmit the remaining pages one again.
# 830	
A DSN error notice has been received because of the following: the i-fax address or the target settings are wrong, or the data of the file that has been transmitted is greater than the size permitted by the mail server.	1. Check the i-fax address and the target settings. 2. In user mode, decrease the upper limit imposed on the size of transmission data so that it is lower than the size permitted by the mail server. 3. Check the condition of the mail server, DNS server, and network.
# 831	
An attempt to receive i-fax in SMTP has failed because of the reception/printing range settings made as part of the IP address range setting in user mode.	Change the reception/printing range settings made as part of the IP address range setting in user mode.
# 832	
In user mode, the e-mail setting or the network setting is yet to be made, causing a mail server fault and, thus, preventing reception of MDN (transmission confirmation) mail.	1. In user mode, check the DNS setting, e-mail/ i-fax setting, and IP address made as part of the network settings. 2. Check the condition of the mail server and the DNS server.
# 833	
The network settings have not been made in user mode or there is a mail-server related fault, thus preventing the transmission of the mail (MDN; transmission acknowledgement).	1. In user mode, check the DNS setting, e-mail/ i-fax setting, and IP address made as part of the network settings. 2. Check the condition of the mail server and the DNS server.
# 834	

Cause	Remedy
The i-fax address or the condition settings of the target may be wrong, there may be a fault in the network or the mail server, or the target may have encountered a memory full condition, thus causing an MDS error notice.	Check the specified i-fax address and the target conditions.
# 835	
The number of text lines is more than the maximum number of lines permitted for i-fax.	Ask the target to decrease the number of text lines and try once again.
# 837	
A request has been made by a host that comes under the restrictions imposed by 'IP address range setting' in user mode.	Check the setting of the IP address range in user mode. The attempt to access in question may be illegal.
# 839	
The SMTP authentication (SMTPAUTH) user name or password for e-mail/i-fax (network settings) may be wrong.	Check the user name and password used for SMTP authentication (SMTPAUTH) as part of the network settings under system control settings (user mode).
# 841	
In relation to an attempt for transmission for e-mail/i-fax, there is no coding algorithm that may be used in common with the mail server.	1. Set 'SSL' to 'OFF' as part of the network settings under system control settings (user mode). 2. Add a coding algorithm that may be used in common (mail server settings).
# 842	
In relation to an attempt for transmission of e-mail/i-fax, a request has been made for the use of a client certificate by the mail server.	1. Set 'SSL' to 'OFF' as part of the network settings under the system control settings (user mode). 2. Change the mail server settings so that it will not request a client certificate.
# 843	
The time used by the KDC (key distribution center) server and the time used by the machine are different significantly.	1. Correct the time as part of the date/time settings under the system control settings (user mode). 2. Correct the time used by the KDC (key distribution center) server.
# 847	
The memory of the Box has been used up, not permitting the storage of the received file in the fax box.	Remove unnecessary files from the fax box or the system box.

Cause	Remedy
# 851	
The remaining memory of the machine is running short.	Check the remaining memory of the machine; then, remove unnecessary files for the Box.
There are more than 100 files in the specified box, not permitting additional storage.	Remove unnecessary files from the specified box.
# 852	
The main power switch has been turned off while a job is being executed, causing an error.	Check to see that the main power switch is on; as necessary, try once again.
# 899	
The transmission of e-mail or i-fax has ended. However, the transmission has gone through multiple servers, and there is no way of finding out whether the transmission has reached the target.	1. Check with the target to see if the transmission has arrived. 2. Check to see if an error notice has arrived.
# 995	
The reservation for the transmission has been cancelled.	As necessary, start over.

15.4 Jam Code

15.4.1 Jam Cover (printer unit)

0007-8207

iR2270 / iR2870 / iR3570 / iR4570

T-15-9

Code	Jam
01xx	delay jam
02xx	stationary jam
0Axx	residual jam

T-15-10

Code	Sensor	Sensor notation
xx01	cassette 1 tray sensor	PS10
xx02	cassette 2 retry sensor	PS11
xx03	cassette 3 retry sensor	PS1 (cassette pedestall)
xx04	cassette 4 retry sensor	PS2 (cassette pedestall)
xx05	registration sensor	PS9
xx06	---	---
xx07	fixing delivery sensor	PS13
xx08	No. 1 delivery sensor	PS14
xx09	No. 2 delivery sensor	PS1A (2/3 delivery unit)
xx0A	reversal sensor	PS4A (2/3 delivery unit)
xx0B	No. 3 delivery sensor	PS5A (2/3 delivery unit)
xx0C	duplexing assembly feed sensor	PS3A (2/3 delivery unit)
xx0D	duplex/feed sensor	PS17
xx0E	deck retry sensor	PS6D (side paper deck)
xx0F	deck pull-off sensor	PS1D (side paper deck)
xx11	buffer inlet sensor	PS1B (buffer path unit)
xx12	buffer outlet sensor	PS2B (buffer path unit)

15.4.2 Jam Code (finisher-related)

0008-0980

iR2270 / iR2870 / iR3570 / iR4570

- Finisher-Q3/Q4

T-15-11

Code	Jam	Sensor notation
1001	inlet path sensor feed delay jam	PI3
1002	punch path sensor (punch registration sensor) feed delay jam	LED5/PTR5
1004	delay path sensor feed delay jam	PI4
1101	inlet path sensor feed stationary jam	PI3
1102	punch path sensor (punch registration sensor) feed stationary jam	LED5/PTR5
1104	delivery path sensor feed stationary jam	PI4
1200	timing jam	PI3
1500	stapler jam	STP
1300	power-on jam	PI3,PI4
1400	door open jam	DOOR
1644	punch jam	LED5/PTR5
1645	punch power-on jam	LED5/PTR5
1791	saddle feed sensor feed delay jam	PI8S,PI19S,PI20S
1792	saddle delivery sensor feed delay jam	PI11S
1793	saddle inlet sensor feed delay jam	PI22S
17A1	saddle feed sensor feed stationary jam	P18S,PI19S,PI20S
17A2	saddle delivery sensor feed stationary jam	PI11S,PI17S
17A3	saddle inlet sensor feed stationary jam	PI22S
1786	saddle staple jam	S STP
1787	saddle power-on jam	PI11S,PI18S,PI19S,PI20S,PI22S
1788	saddle door open jam	DOOR

- Finisher-S1

T-15-12

Code	Jam	Sensor notation
1011	inlet path sensor feed delay jam	PI5
1121	inlet path sensor feed stationary jam	PI5
1F81	stack delivery jam	PI1
1506	staple jam	STP
1307	power-on jam	POWER ON
1408	door open jam (joint)	DOOR
1644	punch hole jam	SR2
1347	punch power-on jam	LED7/PTR7

15.4.3 Jam Code (ADF-related)

0008-0981

iR2270 / iR2870 / iR3570 / iR4570

T-15-13

Code	Jam	Sensor notation	Description
0003	registration sensor delay	PI2	The registration sensor does not detect paper with 1.5 sec after pickup. At time of reversal, the registration sensor does not detect paper even after the read motor has rotated for a specific period of time.
0004	registration sensor stationary	PI2	After the registration sensor has gone on, it does not go off even when the paper has been moved for 500 mm (700 mm if in extra length mode).
0005	read sensor delay	PI2,PI3	The read sensor does not detect paper even when the feed motor has rotated for a specific period of time after it has received the pickup request signal from the reader unit.

Code	Jam	Sensor notation	Description
0006	read sensor stationary	PI3	After the read sensor has gone on, it does not go off even when the paper has been moved 500 mm (700 mm if in extra length mode).
0007	delivery sensor delay	PI3,PI4	The delivery sensor does not detect paper even after the read motor has rotated for a specific period of time in response to the read request signal from the reader unit.
0008	delivery sensor stationary	PI4	After the delivery sensor has gone on, it does not go off even after the paper has been moved 500 mm (700 mm if in extra length mode).
0044	1st sheet registration sensor stationary	PI2	The 1st original has been identified as a registration sensor stationary jam.
0045	1st sheet read sensor delay	PI2,PI3	The 1st original has been identified as a read sensor delay jam.
0046	1st sheet read sensor stationary	PI3	The 1st original has been identified as a read sensor stationary jam.
0047	1st sheet delivery sensor delay	PI3,PI4	The 1st original has been identified as a delivery sensor delay jam.
0048	1st sheet delivery sensor stationary	PI4	The 1st original has been identified as a delivery sensor stationary jam.
0071	timing error	TIMING NG	The software sequence fails to end normally within a specific period of time.
0090	ADF open	reader unit sensor	The ADF has been opened while the machine is in operation (while the drive system is in operation).
0091	user ADF open	reader unit sensor	The ADF has been opened while the machine is in operation (while the drive system is at rest).
0092	ADF cover open	PI10	The ADF cover has been opened while the machine is in operation (while the drive system is in operation).
0093	user cover open	PI10	The ADF cover has been opened while the machine is in operation (while the drive system is at rest).

Code	Jam	Sensor notation	Description
0094	initial stationary	PI2,PI3,PI4	The presence of paper is detected inside the feeder when the 1st sheet is being picked up.
0095	pickup fault	PICKUP NG	With no original in the tray, the pickup signal is received for 2 sec.

15.5 Alarm Code

15.5.1 Alarm Code

0008-0978

iR2270 / iR2870 / iR3570 / iR4570

T-15-14

Location code	Description	
02 scanner system	0002	indication of soiling of glass in stream reading mode
04 pickup/feed system	0008	optional deck lifter error
	0011	1st cassette retry alarm
	0012	2nd cassette retry alarm
	0013	3rd cassette retry alarm
	0014	4th cassette retry alarm
	0018	optional deck retry alarm
61 finisher	0001	no staple
62 saddle stitcher	0001	no stitch staple
65 puncher	0001	punch waste case full

15.6 Finisher/Saddle Finisher Error Codes

15.6.1 Error Code in Detail (finisher, puncher)

0008-1518

iR2270 / iR2870 / iR3570 / iR4570

T-15-15

Code	Detail code	Name	Detection	Remedy
E500	0001	fault in communication with the finisher (common among all finishers)		Replace the finisher controller PCB. Replace the DC controller PCB.
E503	0002	fault in communication with the finisher (Finisher-Q3/ Q4)	fault in communication between finisher and saddle unit	Replace the finisher controller PCB. Replace the saddle controller PCB. Check the cable.
	0003		fault in communication between finisher and punch unit	Replace the finisher controller PCB. Replace the punch drive PCB. Check the cable.
E505	0001	fault in the backup memory of the finisher (common among all finishers)	fault in the data stored in backup memory	Turn off the main power. Check the wiring of the DC controller PCB and the finisher controller, and check the fuse of the 24-V power supply. Thereafter, turn the main power back on.
	0002		fault in the EEPROM data of the punch unit	Replace the punch driver PCB. Replace the finisher controller PCB.

Code	Detail code	Name	Detection	Remedy
E514	0001	fault in stack delivery motor (Finisher-S1)	When the stack retaining spacer is returned to home position, the belt escape home position sensor does not go on within 1.5 sec.	Replace the finisher controller PCB. Replace the stack delivery motor. Check the stack delivery drive mechanism.
	0002		When the stack retaining spacer is shifted from home position, the belt escape home position sensor does not go off within 1.5 sec.	
E514	0001	fault in trailing edge assist motor (Finisher-Q3/ Q4)	The home position sensor does not go off even when the trailing edge assist motor has rotated for a specific period of time.	Replace the finisher control PCB. Replace the trailing edge assist motor.
	0002		The home position sensor does not go on even after the trailing edge assist motor has rotated for a specific period of time.	

Code	Detail code	Name	Detection	Remedy
E519	0001	Gear change motor error (Finisher-Q3/ Q4)	The home position sensor does not go off even when the gear change motor has rotated for a specific period of time.	Replace the finisher controller PCB. Replace the gear change motor. Check the gear change mechanism.
	0002		The home position sensor does not go on even when the gear change motor has rotated for a specific period of time.	
E530	8001	Rear alignment error (Finisher-S1)	The home position sensor does not go on within 2000 msec after the start of operation when the rear aligning plate is shifted to home position.	Replace the finisher controlled PCB. Replace the rear alignment motor. Check the rear aligning plate drive mechanism. Check the rear alignment home position sensor.
	8002		The home position sensor does not go off within 1000 msec after the start of operation when the rear aligning plate is shifted from home position.	

Code	Detail code	Name	Detection	Remedy
E530	0001	Front alignment error (Finisher-Q3/ Q4)	The home position sensor does not go off even when the front alignment motor has been rotated for a specific period of time.	Replace the finisher controller PCB. Replace the front alignment motor. Check the front aligning plate drive mechanism. Check the front alignment home position sensor.
	0002		The home position sensor does not go on even when the front alignment motor has been rotated for a specific period of time.	
E531	8001	Stapler error (Finisher-S1)	At time of staple jam recovery, the home position sensor does not go on with 500 msec after the start of reverse rotation of the stapler motor.	Replace the finisher controller PCB. Replace the stapler. Check the harness.
	8002		The home position sensor does not go off within 500 msec after the stapler motor has been started.	

Code	Detail code	Name	Detection	Remedy
E531	0001	Stapler error (Finisher-Q3/ Q4)	The home position sensor does not go off even when the stapler motor has rotated for a specific period of time.	Replace the finisher controller PCB. Replace the stapler. Check the harness.
	0002		The home position sensor does not go on even when the stapler motor has rotated for a specific period of time.	
E532	8001	Stapler shift error (Finisher-S1)	The stapler slide home position sensor does not go on within 11 sec when the stapler is shifted to home position.	Replace the finisher controller PCB. Replace the stapler shift motor. Check the stapler shift home position sensor. Check the harness.
	8002		The stapler slide home position sensor does not go off within 1.0 sec when the stapler is shifted from home position.	

Code	Detail code	Name	Detection	Remedy
E532	0001	Stapler shift error (Finisher-Q3/ Q4)	The home position sensor does not go off even after the stapler shift motor has rotated for a specific period of time.	Replace the finisher controller PCB. Replace the stapler shift motor. Check the stapler shift home position sensor. Check the harness.
	0002		The home position sensor does not go on even when the stapler shift motor has rotated for a specific period of time.	
E535	0001	Swing cam error (Finisher-S1)	The home position sensor does not go off within 1000 msec after the start of operation when the swing arm is shifted from home position.	Replace the finisher controller PCB. Replace the swing cam motor. Check the swing cam home position sensor. Check the harness.
	0002		The home position sensor does not go off within 1.0 sec when the stack delivery roller swing arm is moved from home position.	

Code	Detail code	Name	Detection	Remedy
E535	0001	Swing cam error (Finisher-Q3/ Q4)	The home position sensor does not go off even when the swing motor has rotated for a specific period of time.	Replace the finisher controller PCB. Replace the swing cam motor. Check the swing cam home position sensor. Check the harness.
	0002		The home position sensor does not go on even when the swing motor has rotated for a specific period of time.	
E537	8001	Front alignment error (Finisher-S1)	The home position sensor does not go on within 2.0 sec when the front aligning plate is moved to home position.	Replace the finisher controller PCB. Replace the front alignment motor. Check the front aligning plate drive mechanism. Check the front alignment home position sensor.
	8002		The home position sensor dos not go off within 1.0 sec when the front aligning plate is shifted from home position.	

Code	Detail code	Name	Detection	Remedy
E537	0001	Rear alignment error (Finisher-Q3/ Q4)	The home position sensor does not go on within 2000 msec after the start of operation when the read aligning plate is moved to home position.	Replace the finisher controller PCB. Replace the rear alignment motor. Check the rear aligning plate drive mechanism. Check the rear alignment home position sensor.
	0002		The home position sensor does not go off within 1000 msec after the start of operation when the rear aligning plate is moved form home position.	
E540	8002	Stack tray motor error (Finisher-S1)	The operation to detect the paper surface of the stack tray does not end within 1.0 sec.	Replace the finisher controller PCB. Replace the tray ascent/ descent motor. Check the stack tray drive mechanism. Check the paper surface sensor.
	8003		An abnormal combination of sensor states has been detected.	Replace the finisher controller PCB. Check the stack tray upper limit sensor. Check the stack tray lower limit sensor. Check the stack tray upper paper surface sensor. Check the stack tray lower paper surface sensor.

Code	Detail code	Name	Detection	Remedy
E540	0002	Upper tray ascent/descent motor error (Finisher -Q3/ Q4)	Upper tray ascent/descent motor clock error	Replace the No. 1 tray shift motor. Replace the finisher controller PCB. Check the tray ascent/descent mechanism.
	0003		Area error	Replace the No. 1 tray area sensor PCB. Replace the finisher controller PCB.
	0004		Safety switch activation	Check the No. 1 tray closed detecting switch. Replace the finisher controller PCB.
E542	0002	Lower tray ascent/descent motor error (Finisher-Q3/ Q4)	Lower tray ascent/descent motor clock error	Replace the No. 2 tray shift motor. Replace the finisher controller PCB. Check the tray ascent/descent mechanism.
	0003		Area error	Replace the No. 2 tray shift area sensor PCB. Replace the finisher controller PCB.

Code	Detail code	Name	Detection	Remedy
E577	8001	Paddle error (Finisher-S1)	The paddle home position sensor does not go on within 1.5 sec when the paddle is shifted to home position.	Check the paddle motor. Check the paddle home position sensor. Replace the finisher controller PCB.
	8002		The paddle home position sensor does not go off within 1.0 sec when the paddle is moved to home position.	
E584	0001	Shutter unit error (Finisher-Q3/ Q4)	The shutter open sensor does not go off (i.e., the shutter does not close).	Check the stack edging motor. Check the open/ close clutch. Check the shutter home position sensor. Replace the finisher controller PCB.
	0002		The shutter open sensor does not go on (i.e., the shutter does not open).	

Code	Detail code	Name	Detection	Remedy
E590	0001	Punch motor error	The punching home position is not detected even when the puncher motor has been driven for 20 msec.	Check the punch motor. Check the punch motor clock sensor. Check the punch driver PCB. Replace the finisher controller PCB.
	0002		The punch home position sensor is not defected even after the motor has stopped at time of punch motor initial operation.	
E591	0001	Punch dust sensor error	Error in light-receiving voltage while light is emitted	Check the waste paper case full sensor. Check the punch driver PCB. Replace the finisher controller PCB.
	0002		Error in light-receiving voltage while light is not emitted	
E592	0001	Paper trailing edge sensor/ horizontal sensor error	Error in light-receiving voltage when light is emitted (trailing edge sensor)	Check the paper trailing edge sensor. Check the horizontal registration sensor. Check the punch driver PCB. Replace the finisher controller PCB.
E592	0002	paper trailing edge sensor/ registration sensor error	Error in light-receiving voltage when light is not emitted (trailing edge sensor)	Check the paper trailing edge sensor. Check the horizontal registration sensor. Check the punch drive PCB. Replace the finisher controller PCB.

Code	Detail code	Name	Detection	Remedy
E592	0003	Power trailing edge sensor/ registration sensor	Error in light-receiving voltage when light is emitted (horizontal registration sensor 1)	Check the paper trailing edge sensor. Check the horizontal registration sensor. Check the punch driver PCB. Replace the finisher controller PCB.
E592	0004	Paper trailing edge sensor/ registration sensor error	Error in light-receiving voltage when light is not emitted (horizontal registration sensor 1)	Check the paper trailing edge sensor. Check the horizontal registration sensor. Check the punch driver PCB. Replace the finisher controller PCB.
E592	0005	Paper trailing edge sensor/ registration sensor error	Error in light-receiving voltage when light is emitted (horizontal registration sensor 2)	Check the paper training edge sensor. Check the horizontal registration sensor. Check the punch driver PCB. Replace the finisher controller PCB.
E592	0006	Paper trailing edge sensor/ registration sensor error	Error in light-receiving voltage when light is not emitted (horizontal registration sensor 2)	Check the paper training edge sensor. Check the horizontal registration sensor. Check the punch driver PCB. Replace the finisher controller.
E592	0007	Paper trailing edge sensor/ registration sensor error	Error in light-receiving voltage when light is emitted (horizontal registration sensor 3)	Check the paper trailing edge sensor. Check the horizontal registration sensor. Check the punch driver PCB. Replace the finisher controller PCB.

Code	Detail code	Name	Detection	Remedy
E592	0008	Paper trailing edge sensor/ registration sensor error	Error in light-receiving voltage when light is not emitted (horizontal registration sensor 3)	Check the paper trailing edge sensor. Check the horizontal registration sensor. Check the punch drive PCB. Replace the finisher controller PCB.
E592	0009	Paper trailing edge sensor/ registration sensor error	Error in light-receiving voltage when light is not emitted (horizontal registration sensor 4)	Check the paper trailing edge sensor. Check the horizontal registration sensor. Check the punch driver PCB. Replace the finisher controller PCB.
E592	000A	Paper trailing edge sensor/ registration sensor error	Error in light-receiving voltage when light is not emitted (horizontal registration sensor 4)	Check the paper trailing edge sensor. Check the horizontal registration sensor. Check the punch drive PCB. Replace the finisher controller PCB.
E593	0001	Punch shift motor error	The light-receiving voltage home position sensor does not go off when light is emitted.	Check the horizontal registration motor. Check the horizontal registration home position sensor. Check the punch driver PCB. Replace the finisher controller PCB. Check the punch shift mechanism.
	0002		The light-receiving voltage home position sensor does not go on when light is not emitted.	

Code	Detail code	Name	Detection	Remedy
E5F0	0001	Saddle paper positioning plate error	The paper positioning plate home position sensor does to go on when the paper positioning motor has been driven for 1.33 sec. Paper positioning plate motor (M4S)/paper positioning plate home position sensor (P17S)	Check the paper positioning plate motor. Check the paper positioning plate home position sensor. Replace the finisher controller PCB. Check the paper positioning plate drive mechanism.
	0002		The paper positioning plate home position sensor doest not go off when the paper positioning plate motor has been driven for 1 sec. Paper positioning plate motor (M4S)/paper positioning plate home position sensor (P17S)	

Code	Detail code	Name	Detection	Remedy
E5F1	0001	Saddle paper folding error	The number of detection pulses of the paper folding motor clock sensor has dropped below a specific value. Paper folding motor (M2S)/ paper folding motor clock sensor (P14S)	Check the paper folding motor. Check the paper folding motor clock sensor. Replace the finisher controller PCB. Check the paper folding plate drive mechanism.
	0002		The state of the paper folding home position sensor doest not change when the paper folding motor has been driven for 3 sec. Paper folding motor (M2S)/ paper folding motor clock sensor (P14S)	

Code	Detail code	Name	Detection	Remedy
E5F2	0001	Saddle guide error	The guide home position sensor does not go on when the guide motor has been driven for 0.455 sec. Guide motor (M3S)/guide home position sensor (PI13S)	Check the guide motor. Check the guide home position sensor. Replace the finisher controller PCB. Check the guide drive mechanism.
	0002		The guide home position sensor does not go off when the guide motor has been driven for 1 sec. Guide motor (M3S)/guide home position sensor (PI13S)	

Code	Detail code	Name	Detection	Remedy
E5F3	0001	saddle alignment error	The aligning plate home position sensor does not go on when the alignment motor has been driven for 0.5 sec. (at time of initialization, 1.67 sec.) Alignment motor (M5S)/ aligning plate home position sensor (PI5S)	Check the alignment motor. Check the alignment home position sensor. Check the aligning plate drive mechanism. Replace the finisher controller PCB.
	0002		The aligning plate home position sensor does not go off when the alignment motor has been driven for 1 sec. Alignment motor (M5S)/ aligning plate home position sensor (PI5S)	

Code	Detail code	Name	Detection	Remedy
E5F4	0001	Saddle rear stapling error	The stitching home position sensor does not go on when the stitch motor (rear) has been rotated in reverse for 0.5 sec or more. Stitch motor (rear; M6S)/ stitching home position sensor (rear; MS5S)	Replace the stitcher (rear). Check the harness. Replace the finisher controller PCB.
	0002		The stitching home position sensor does not go off when the stitch motor (rear) has been rotated in normal direction for 0.5 sec or more. Stitch motor (rear; MS)/ stitching home position sensor (rear; MS5S)	

Code	Detail code	Name	Detection	Remedy
E5F5	0001	Saddle front stapling error	The stitching home position sensor does not go on when the stitch motor (front) has been rotated in reverse for 0.5 sec or more. Stitch motor (front; M7S)/ stitching home position sensor (front; MS7S)	Replace the stitcher (front). Check the harness. Replace the finisher controller PCB.
	0002		The stitching home position sensor does not go off when the switch motor (front) has been rotated in normal direction for 0.5 sec or more. Stitch motor (front; M7S)/ stitching home position sensor (front; MS7S)	

Code	Detail code	Name	Detection	Remedy
E5F6	0001	Saddle butting error	The paper butting plate home position sensor does not go on when the paper butting plate motor has been driven for 0.3 sec. Paper butting plate motor (M8S)/paper butting plate home position sensor (PI14S)	Check the paper butting plate motor. Check the paper butting plate home position sensor. Replace the finisher controller PCB.
E5F6	0002	Saddle butting error	The paper butting plate home position sensor does not go off when the paper butting plate motor has been driven for 80 msec or more. Paper butting plate motor (M8S)/paper butting plate home position sensor (PI14S)	

Code	Detail code	Name	Detection	Remedy
E5F6	0003	Saddle butting error	The number of detection pulses of the paper butting plate motor has dropped below a specific value. paper butting plate motor (M8S)/paper butting plate motor clock sensor (PI1S)	Check the paper butting plate motor. Check the paper butting plate motor clock sensor. Replace the finisher controller PCB.

Code	Detail code	Name	Detection	Remedy
E5F6	0004	Saddle butting error	The paper butting plate leading edge sensor does not go off when the paper butting plate motor has been driven for 80 msec. Paper butting plate motor (M8S)/paper butting plate leading edge sensor (PI15S)	Check the paper butting plate motor. Check the paper butting plate leading edge sensor. Replace the finisher controller PCB.
E5F6	0005	Saddle butting error	The paper butting plate leading edge sensor does not go on when the paper butting plate motor has been driven for 0.3 sec. Paper butting plate more (M8S)/paper butting plate leading edge sensor (PI15S)	

Code	Detail code	Name	Detection	Remedy
E5F8	0001	Saddle connector error	The connector of the paper butting plate home position sensor has been identified as being disconnected. Connector of guide home position sensor (PI13S)	Connect the connector of the guide home position sensor. Check the harness. Replace the finisher controller PCB.
	0002		The connector of the paper butting plate home position sensor has been identified as being disconnected. Connector of paper butting plate home position sensor (PI14S)	Connect the connector of the paper butting plate home position sensor. Check the harness. Replace the finisher controller PCB.
	0003		The connector of the paper butting plate leading edge sensor has been identified as being disconnected. Connector of paper butting plate leading edge sensor (PI15S)	Connect the connector of the paper butting plate leading edge sensor. Check the harness. Replace the finisher controller PCB.

Code	Detail code	Name	Detection	Remedy
E5F	0001	Saddle switch error	The inlet cover switch has been identified as being open for 1 sec or more after the start of printing or the start of initial rotation with the following sensors identifying their respective covers as being closed: - inlet cover sensor (PI9S) - nt cover open/closed sensor (PI2S) - delivery cover sensor (PI3S) Or, the front over switch (MS2S) or the delivery cover switch (MS3S) is open. Inlet cover switch (MS1S)/front cover switch (MS2S)/ delivery cover switch (MS3S)	Check the inlet cover switch. Check the inlet cover sensor. Check the front cover open/ closed sensor. Check the delivery cover sensor. Replace the finisher controller PCB.

Code	Detail code	Name	Detection	Remedy
E5F	0002	Saddle switch error	The front cover switch has been identified as being open from the start of printing or the start of initial rotation with the following sensors identifying their respective covers as being closed. - inlet cover sensor (PI9S) - front cover open/closed sensor (PI2S) - delivery cover sensor (PI3S) - front cover switch (MS2S)/ delivery cover switch (MS3S)	Check the front cover switch. Check the inlet cover sensor. Check the front cover open/ closed sensor. Check the delivery cover sensor. Replace the finisher controller PCB.

Code	Detail code	Name	Detection	Remedy
E5F	0003	Saddle switch error	The delivery cover switch has been identified as being open after the start of printing or the start of initial rotation of the host machine with the following sensors identifying their respective covers as being closed: - inlet cover sensor (PI9S) - front cover open/closed sensor (PI2S) - delivery cover sensor (PI3S) - delivery cover switch (MS3S)	Check the delivery cover switch. Check the inlet cover sensor. Check the inlet cover sensor. Check the front cover open/closed sensor. Check the delivery cover sensor. Replace the finisher controller PCB.

15.7 DADF Error Codes

15.7.1 Error Code in Detail (DF)

0008-1517

iR2270 / iR2870 / iR3570 / iR4570

T-15-16

Code	Detail code	Description	Type	Remedy
E400	0001	DF communication error	Check sum error	Disconnect and then connect the connector. Replace the reader controller PCB. Replace the ADF controller PCB.
	0002		Reception status error	Disconnect and then connect the connector. Replace the reader control PCB. Replace the ADF control PCB.
	0003		Reception interrupt error	Disconnect and then connect the connector. Replace the reader controlled PCB. Replace the ADF controller PCB.
E490	0001	Wrong DF	The installed DF is not of a supported type.	Install an ADF that is compatible with the machine.

Chapter 16 Service Mode

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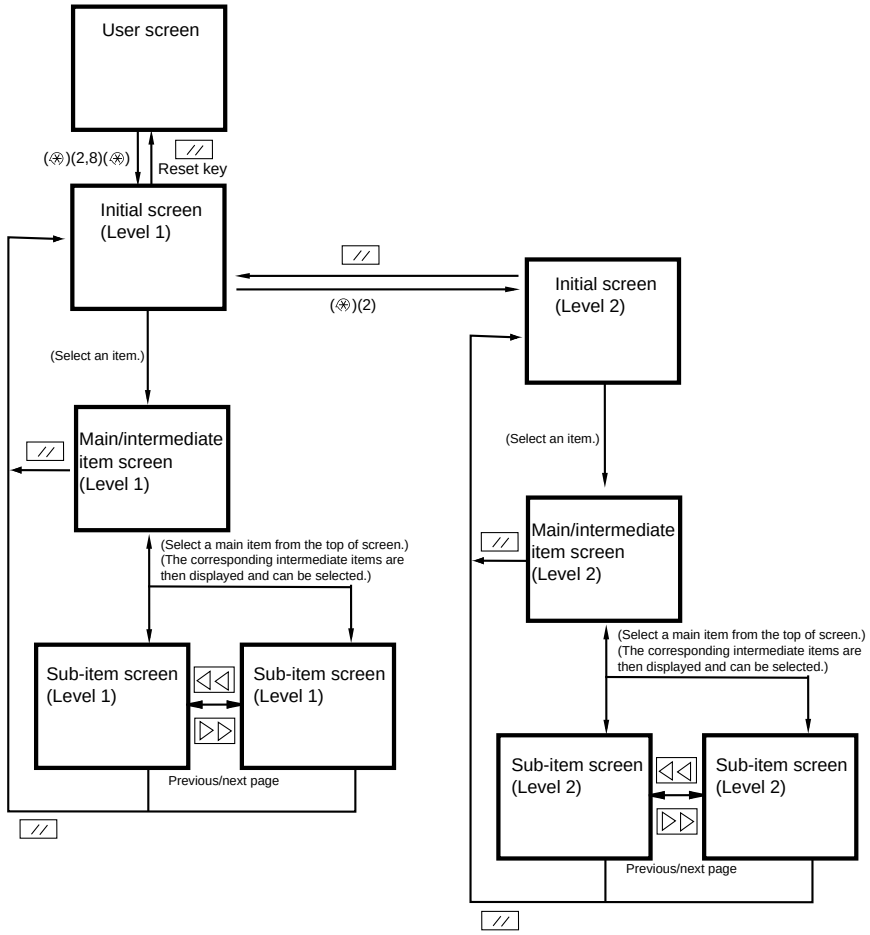
16.1 Outline

16.1.1 Construction of Service Mode

0007-8133

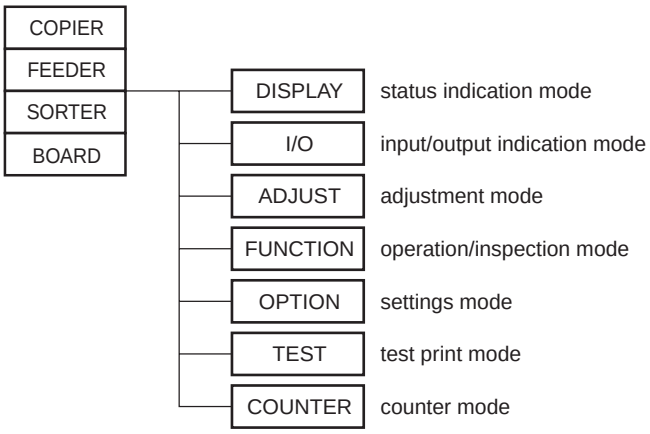
iR2270 / iR2870 / iR3570 / iR4570

The machine's service mode has a 3-layer screen construction: Initial screen, Level 1/2 screen, and Level 3 screen. Its mode items are grouped into those used in regular maintenance work (Level 1 items) and those used in response to faults (Level 2 items).



F-16-1

The machine's service mode is divided into the following 7 types:



F-16-2

16.1.2 Starting Service Mode and Making Selections

0007-8135

iR2270 / iR2870 / iR3570 / iR4570

⚠If you want to execute a machine operation using a service mode item, be sure to disconnect all cables from an external controller or a network before starting service mode. Particularly, if you are using a FUNCTION (operation/inspection) mode item, the arrival of a print job from an external source can cause the machine to malfunction, leading to damage.

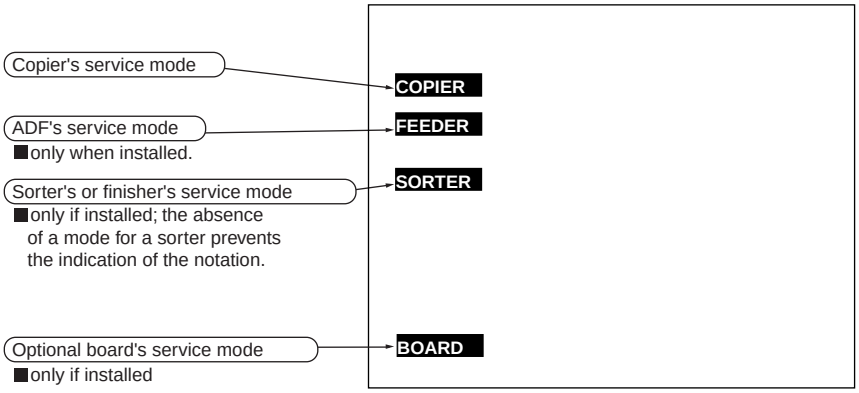
---

1) Press the asterisk key "✳" on the control panel.

2) Press the 2 and 8 keys of the keypad at the same time.

3) Press the asterisk key "✳" on the control panel.

In response to the foregoing key operations, the machine will bring up the following Initial screen:



F-16-3

16.1.3 Ending Service Mode

0007-8136

iR2270 / iR2870 / iR3570 / iR4570

A press on the Reset key will bring back the Service Mode Initial screen.
Another press on the Reset key will end service mode, and bring back the User screen (standard screen).

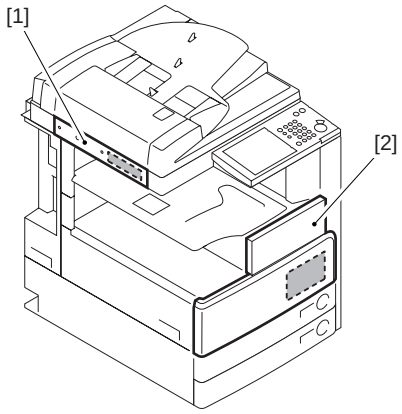
⚠If you used service mode (ADJUST, FUNCTION, OPTION), be sure to turn off and then on the main power switch after ending service mode.

16.1.4 Back-Up

0007-8137

iR2270 / iR2870 / iR3570 / iR4570

At time of shipment from the factory, all machines are adjusted individually, and adjustment values are recorded in their respective service labels.
If you have replaced the reader controller PCB or the DC controller PCB, or if you have initialized the RAM, the adjustment values (for ADJUST and OPTION) will return to their default settings. If there has been any change in a service mode item, be sure to update its setting indicated on the service label. As necessary, make use of the space in the service label (as when recording an item not found on the label).
- Service Label for the Reader Controller PCB (behind the left cover [1] of the reader unit)
- Service Label [2] for the Main Controller PCB/DC controller PCB (behind the front cover unit of the printer unit)

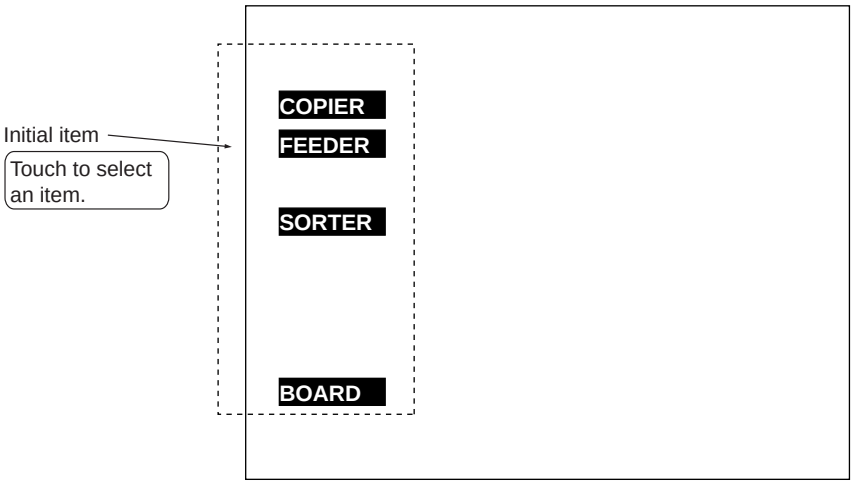


F-16-4

16.1.5 Initial Screen

0007-8138

iR2270 / iR2870 / iR3570 / iR4570

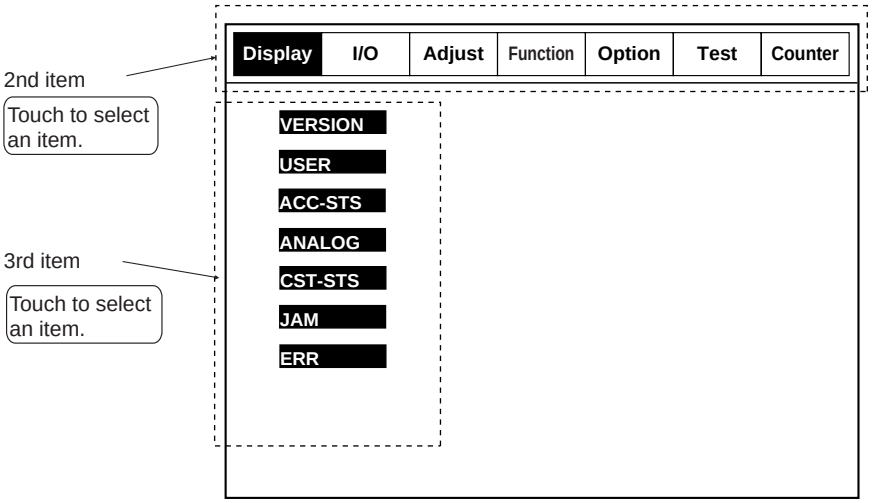


F-16-5

16.1.6 2nd/3rd Item Screen

0007-8139

iR2270 / iR2870 / iR3570 / iR4570

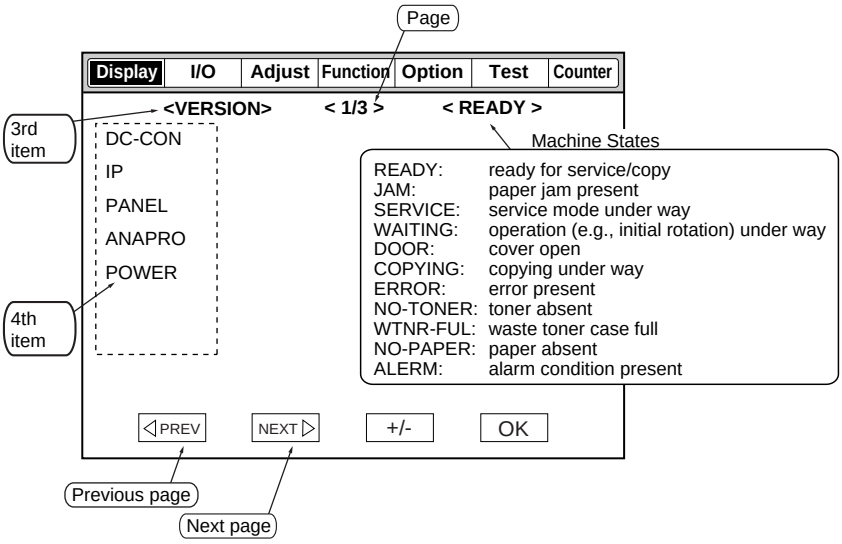


F-16-6

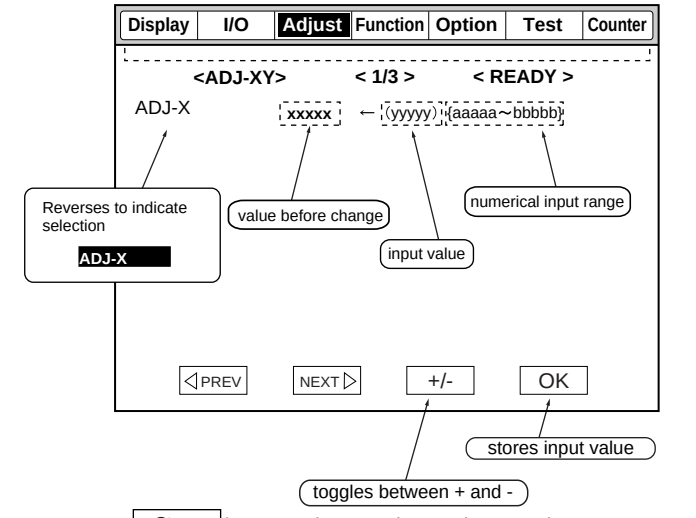
16.1.7 4th Item Screen

0007-8140

iR2270 / iR2870 / iR3570 / iR4570



F-16-7



Stop key: press it to stop the ongoing operation.

Clear key: press to clear an input.

Start key: press to start copying without leaving service mode.

F-16-8

16.2 DISPLAY（Status Display Mode）

16.2.1 COPIER

16.2.1.1 Copier List

0007-9077

iR2270 / iR2870 / iR3570 / iR4570

<VERSION>

T-16-1

COPIER > DISPLAY > VERSION		
Sub-item	**Description**	**Level**
ROM version of each circuit board Marking style<R-CON XX.YY> XX : Version number ,YY : Development control number - <--.--> if no circuit boards are connected.		
DC-CON	ROM version of the DC controller circuit board	1
R-CON	ROM version of the reader controller circuit board	1
PANEL	ROM version of the CPU circuit of the operator panel	1
POWER	ROM version of the composite power circuit board	1
FEEDER	ROM version of the DADF controller circuit board	1
SORTER	ROM version of the finisher controller circuit board	1
FAX	ROM version of the fax board	1
NIB	Version of the network software	1
SDL-STCH	ROM version of the saddle stitcher controller circuit board	1
MN-CONT	ROM version of the main controller circuit board	1
DIAG-DVC	ROM version of the self-diagnostic device	1
RUI	Version of the remote UI	1
PUNCH	Version of the punch unit	1
LANG-EN	Version of the English language file	1
LANG-FR	Version of the French language file	1
LANG-DE	Version of the German language file	1
LANG-IT	Version of the Italian language file	1
LANG-JP	Version of the Japanese language file	1
JAVA-VM	Version of JavaVM in bootable	1
MEAP	Version of the MEAP Description on the hard disk	1

COPIER > DISPLAY > VERSION		
Sub-item	**Description**	**Level**
OCR-CN	Version of the simple-font Chinese OCR	1
OCR-JP	Version of the Japanese OCR	1
OCR-KR	Version of the Korean OCR	1
OCR-TW	Version of the full-font Chinese OCR	1
BOOTROM	Boot ROM version of the main controller circuit board Marking style: xx.yy_z z indicates the boot ROM type.	1
LANG-CS	Version of the Czech language file	2
LANG-DA	Version of the Danish language file	2
LANG-EL	Version of the Greek language file	2
LANG-ES	Version of the Spanish language file	2
LANG-ET	Version of the Estonian language file	2
LANG-FI	Version of the Finnish language file	2
LANG-HU	Version of the Hungarian language file	2
LANG-KO	Version of the Korean language file	2
LANG-NL	Version of the Dutch language file	2
LANG-NO	Version of the Norwegian language file	2
LANG-PL	Version of the Polish language file	2
LANG-PT	Version of the Portuguese language file	2
LANG-RU	Version of the Russian language file	2
LANG-SL	Version of the Swedish language file	2
LANG-SV	Version of the Slovenian language file	2
LANG-TW	Version of the full-font Chinese language file	2
LANG-ZH	Version of the simple-font Chinese language file	2
LANG-BU	Version of the Bulgarian language file	2
LANG-CR	Version of the Croatian language file	2
LANG-RM	Version of the Rumanian language file	2
LANG-SK	Version of the Slovak language file	2
LANG-TK	Version of the Turkish language file	2

<ACC-STS>

T-16-2

COPIER > DISPLAY > ACC-STS		
Sub-item	**Description**	**Level**
FEEDER	DADF connection status 0: Not connected 1: Connected	1
SORTER	Finisher and punch unit connection status Sorter type 0: None 1: Finisher 2: Saddle finisher Punch type 0: None 1: 2 holes 2: 2/3 holes 3: 4 holes (fr) 4: 4 holes (sw)	1
DECK	Paper deck connection status 0: Not connected 1: Connected	1
CARD	Card reader connection status 0: Card reader connected with no card inserted 1: Card reader not connected or connected with card inserted (1: Ready to copy, 0: Not ready to copy)	1
DATA-CON	Copy data controller connection status 0: Not connected 1: Connected	1
RAM	Capacity of the memory on the main controller circuit board 256 MB, 512 MB	1
COINROBO	Coin vendor connection status 0: Not connected 1: Connected	1
NIB	Network board connection status 0: No board connected 1: Ethernet board connected 2: Token ring board connected 3: Ethernet board and token ring board connected	1
PS/PCL	Not used	1
NETWARE	Netware firmware installation status 0: Not installed 1: Installed	1
SEND	Send function addition status 0: Send function not added 1: Send function added	1
PDL-FNC1/2	Valid PDL 0000 0000 0000 0000 to 1111 1111 1111 1111 (0:OFF,1:ON) b31 to b16 for PDL-FNC1 b15 to b0 for PDL-FNC2 b31: BDL, b30: PS, b29: PCL, b28: PDF, b27: LIPS, b26: N201, b25: I5577, b24: ESC/P, b23: HPGL, b22: HPGL2, b21: IMAGING, b20: KS, b19 to b0: Reserved	1
HDD	Model name of the hard disk drive	1

COPIER > DISPLAY > ACC-STS		
Sub-item	**Description**	**Level**
PCI1/2/3	PCI1/2/3 board name Not connected: Hyphen (-) displayed Connected: Board name displayed	1

<ANALOG>

T-16-3

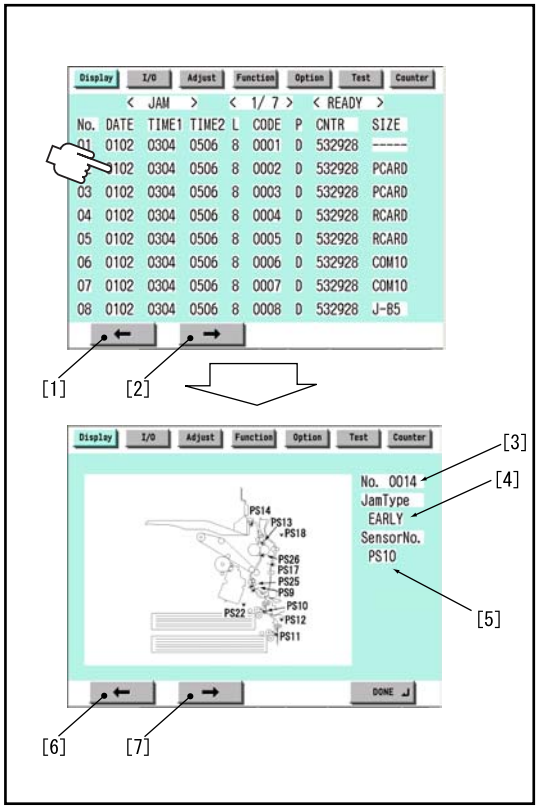
COPIER > DISPLAY > ANALOG		
Sub-item	**Description**	**Level**
TEMP	In-machine temperature (environment sensor): Unit: deg C	1
HUM	In-machine humidity (environment sensor): Unit: %RH	1
ABS-HUM	Water content (environment sensor): Unit: g	1
DR-TEMP	Photoconductor drum ambient temperature (drum sensor): Unit: deg C	1
FIX-C	Fixing heater temperature (main thermistor): Unit: deg C	1
FIX-E	Fixing heater edge temperature (sub-thermistor): Unit: deg C	1

<CST-STS>

T-16-4

COPIER > DISPLAY > CST-STS		
Sub-item	**Description**	**Level**
WIDTH-MF	Paper width on the manual feedtray Unit: mm	2

<JAM>



F-16-9

Touch an arbitrary jam display screen to see details about the jam.

(1) To previous page

(2) To next page

(3) Jam sequential number

(4) Jam type

(5) Corresponding sensor

(6) To next jam screen

(7) To previous jam screen

<No.> Jam sequential number: 1 to 50 (The oldest jam has the greatest number.)

<DATE> Jam occurrence date

<TIME1> Jam occurrence time

<TIME2> Jam reset time

<L>Location of the jam: 0 - 2 (0:host machine, 1:Feeder, 2:Finisher)

<CODE>Jam Code

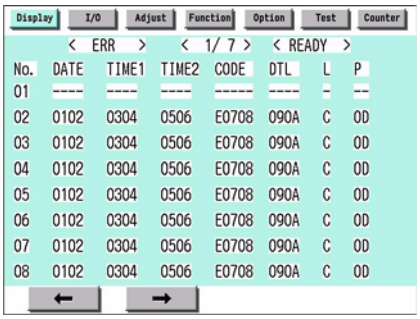
<P> Paper feed position

1: Cassette 1, 2: Cassette 2, 3: Cassette 3, 4: Cassette 4, 5: Side paper deck, 6: Manual feed tray, 7: Duplex section

<CNTR> Software counter value of the paper feed stage

<SIZE> Paper size

<ERR>



F-16-10

<No.> Error sequential number: 1 to 50 (The oldest error has the greatest number.)
<DATE> Error occurrence date
<TIME1> Error occurrence time
<TIME2> Error reset time
<CODE> Error code
<DTL> Error detail code (0000 for none)
<1> Error location
0: Main controller 1: DADF 2: Finisher 3: Not used 4: Reader unit 5: Printer unit
6: Various PDL board 7: Fax board
<P> Not used

<HV-STS>

T-16-5

COPIER > DISPLAY > HV-STS		
Sub-item	**Description**	**Leve**
PRIMARY	Primary charge current at photoconductor drum Registrationance detection control (APVC) Unit: uA	1
TR	Transfer current setting for the job executed last Unit: uA	1
BIAS	Developing bias setting for the job executed last Unit: V	1
TR-V	Voltage at transfer charging roller Registrationance detection control (ATVC) Unit: V	1

<CCD>

T-16-6

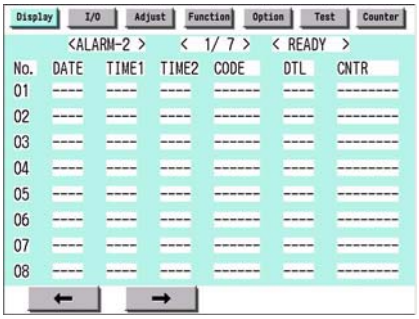
COPIER > DISPLAY > CCD		
Sub-item	**Description**	**Level**
TARGET-R	Red shooting target value	2
OFST	CCD offset level adjustment value	2
GAIN	CCD gain level adjustment value	2
MFIL	Main-scan MTF correction index	2
SFIL	Subscan MTF correction index	2

<SENSOR>

T-16-7

COPIER > DISPLAY > SENSOR		
Sub-item	**Description**	**Level**
DOC-SZ	Document size detected by the document size sensor	2

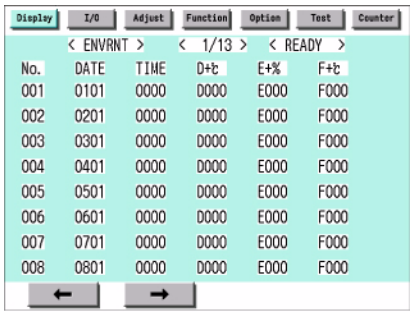
<ALARM-2>



F-16-11

<No.> Alarm sequential number: 1 to 50 (The oldest alarm has the greatest number.)
<DATE> Alarm occurrence date
<TIME1> Alarm occurrence time
<TIME2> Alarm reset time
<CODE> Alarm location code and alarm code
<DTL> Alarm detail code
<CNTR> Total counter value at alarm occurrence
<ENVRNT>
Environmental log display
Changes of [In-machine temperature (deg C)/humidity (%) / Fixing roller surface (center) temperature (deg C) are displayed as log data.

Remarks: The data acquisition cycle can be set at COPIER>OPTION>BODY>ENVP-INT in Service Mode.



F-16-12

T-16-8

Item	Description
No.	Error sequential number: (The oldest error has the greatest number.)
DATE	Data acquisition date
TIME	Data acquisition time
D+deg C	In-machine temperature
E+%	In-machine humidity
F+deg C	Fixing roller surface temperature

16.2.2 FEEDER

16.2.2.1 Feeder List

0007-9922

iR2270 / iR2870 / iR3570 / iR4570

FEEDER >DISPLAY

T-16-9

FEEDER >DISPLAY		
Sub-item	Description	Level
FEEDSIZE	Document size detected by the feeder	1
TRY-WIDE	Distance between document width detection slides (Paper width detection [mm])	1

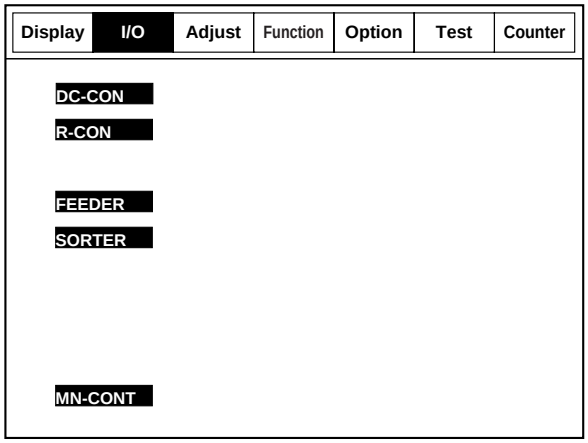
16.3 I/O （I/O Display Mode）

16.3.1 Outline

0008-0893

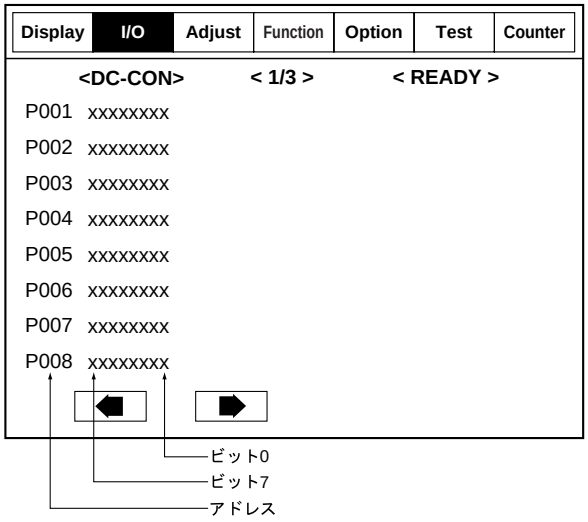
iR2270 / iR2870 / iR3570 / iR4570

The figures below show the COPIER>I/O screen and the next pages describe the items (necessary items for market services only).



F-16-13

<Screen interpretation>



F-16-14

16.3.2 <DC-CON>

0008-1403

iR2270 / iR2870 / iR3570 / iR4570

T-16-10

Address	Bit	Display contents	Remarks
P001	0-1	For development	
	2	Fixing motor FG output signal	-
	3	Polygon motor FG output signal	-
	4-7	For development	
	8-15	Not used	
P002	0-1	For development	
	2-3	Not used	
	4-5	For development	
	6	Thermistor: Overheat	0:Relay OFF
	7	High-voltage board high voltage reset detection	0:High voltage reset detection
	8-15	Not used	
P003	0-7	For development	
	8-15	Not used	
P004	0-7	For development	
	8-15	Not used	
P005	0-5	Not used	
	6	High-voltage board high voltage reset request	0:High voltage reset request
	7	For development	
	8-15	Not used	

P006	0	Cassette 1 feed motor current switching 0	-
	1	Cassette 1 feed motor current switching 1	-
	2	Cassette 1 feed motor current switching 2	-
	3	Cassette 1 feed motor current switching 3	-
	4	Fixing motor deceleration signal	-
	5	Fixing motor acceleration signal	-
	6	Thermistor pull-up resistor switching	1:At low temperature
	7	Fan half-speed switching signal	1:Half speed
	8-15	Not used	
P007	0-15	Not used	
P008	0-2	For development	
	3	Laser power select	-
	4	Main motor	1:ON
	5-7	For development	
	8-15	Not used	
P009	0-5	Not used	
	6	Polygon motor acceleration signal	-
	7-15	For development	
P010	0-7	Not used	
P011	0-7	Not used	
P012	0-7	Not used	
P013	0-7	Not used	
P014	0-7	Not used	
P015	0-7	Not used	
P016	0-7	Not used	
P017	0-7	For development	
P018	0-7	For development	

P019	0	Manual feed clutch	1:ON
	1	Registration clutch	1:ON
	2	Sleeve clutch	1:ON
	3	Duplex transport clutch (iR2270/2270F/2870/2870F model only)	1:ON
	4	Cassette 2 retry sensor	1:Detected
	5	Cassette 2 paper sensor	1:No paper
	6	Cassette 2 paper level A sensor	1Half or less
	7	Cassette 2 paper level B sensor	1:About 50 sheets or less
P020	0	Polygon motor standby signal	1:STBY
	1	Bottle rotation motor	1:ON
	2	Hopper screw motor	1:ON
	3	Pre-exposure board	1:Pre-exposure with large quantity of light
	4	First paper ejection motor current switching 0	-
	5	First paper ejection motor current switching 1	-
	6	Heat exhaust fan F	1:ON
	7	Pre-exposure light quantity switching	1:Pre-exposure with medium quantity of light
P021	0	Manual feed detection sensor	0:Paper present
	1	Toner detection	1:Toner remaining
	2	Duplex transport sensor	1:Detected
	3	Heat exhaust fan F lock detection	0:Locked
	4-7	For development	
P022	0-7	For development	
P023	0	Duplex motor current switching 10	-
	1	Duplex motor current switching 11	-
	2	Heat exhaust fan R	1:ON
	3	For development	-
	4	Waste toner sensor	0:Full
	5	For development	
	6	Pre-exposure switching	1:Pre-exposure with small quantity of light
	7	For development	

P024	0-7	For development	
P025	0-3	For development	
	4	Pickup 1 solenoid	1:ON
	5	Pickup 2 solenoid	1:ON
	6-7	For development	
P026	1-7	For development	
P027	0	Door switch	1:OPEN
	1	Pre-registration sensor	1:etected
	2	For development	
	3	Heat exhaust fan R lock detection	0:Locked
	4	For development	
	5	Main motor lock detection	0:Locked
	6	Bottle power supply overcurrent detection	-
	7	For development	
P028	0-4	For development	
	5	Cassette 1 paper sensor	1:No paper
	6	Cassette 1 paper level A sensor	1:Half or less
	7	Cassette 1 paper level B sensor	1:About 50 sheets or less
P029	0	First paper ejection sensor	1:Detected
	1	First paper ejection full sensor	0:Full
	2	Fused paper ejection sensor	1:Detected
	3	Front door sensor	0:OPEN
	4-7	For development	
P030	0-1	For development	
	2	Paper feed door sensor	0:OPEN
	3	Hopper level sensor	0:No toner
	4	Cassette 1 retry sensor	1:Detected
	5-7	For development	
P031	0-7	Not used	
P032	0-7	Not used	
P033	0-7	Not used	
P034	0-7	Not used	
P035	0-7	Not used	

16.3.3 <R-CON>

0008-1274

iR2270 / iR2870 / iR3570 / iR4570

T-16-11

Address	Bit	Address	Remarks
P001	0	Not used	
	1	For development	
	2	For development	
	3	For development	
	4	For development	
	5	Not used	
	6	For development	
	7	Size sensor drive signal	1:ON
P002	0	Not used	
	1	24V power supply monitor signal	0:Normal
	2	Optical motor drive signal	1: Forward 0: Reverse
	3	For development	
	4	For development	
	5	13V power supply monitor signal	0:Normal
	6	Not used	
	7	For development	
P003	0	For development	
	1	For development	
	2	For development	
	3	For development	
	4	LED control signal	1:ON
	5	For development	
	6	None	
	7	None	
P004	0	Document size detection 0	0:Document present

Address	Bit	Address	Remarks
	1	Document size detection1	0:Document present
	2	Document size detection2	0:Document present
	3	Document size detection3	0:Document present
	4	Not used	
	5	For development	
	6	For development	
	7	Not used	
P005	0-3	For development	
	4-7	None	
P006	0	Not used	
	1	For development	
	2	For development	
	3	For development	
	4	ADF sensor interrupt input	0:In operation
	5	Platen sensor interrupt input 0	1:Platen closed
	6	HP sensor interrupt input	1:HP
	7	Platen sensor interrupt input 1	1:Platen closed
P007	0	For development	
	1	For development	
	2	For development	
	3	For development	
	4	Optical motor driver power saving	0:active
	5	ADF feed motor clock interrupt input	Repetition of 0/1
	6	ADF read motor clock interrupt input	Repetition of 0/1
	7	Not used	
P008	0	Lamp ON signal	1:ON
	1	CIS drive ON signal	1:ON
	2	For development	
	3	For development	
	4	For development	
	5	For development	

Address	Bit	Address	Remarks
	6	For development	
	7	For development	
P009	0-4	For development	
	5-7	None	

16.3.4 <FEEDER>

0008-1275

iR2270 / iR2870 / iR3570 / iR4570

T-16-12

Address	Bit	Display contents	Remarks
P001	0	Read sensor	1:Detected
	1	Pre-registration sensor	1:Detected
P002	0	-	
	1	-	
	2	-	
	3	-	
	4	Stamp solenoid	1:ON
	5	Clutch	1:ON
	6	Document load LED	1:ON
	7	-	
P003	0-7	-	
P004	0	Document detection sensor	1:Document present
	1	Cover sensor	1:Closed
	2	-	
	3	-	
	4	-	
	5	For development	
	6	For development	
	7	For development	
P005	0	End sensor	1:Paper present

Address	Bit	Display contents	Remarks
	1	Length sensor 2	1:Paper present
	2	Length sensor 1	1:Paper present
	3	A4/LTR judgment sensor	1:Paper present
	4	-	
	5	-	
	6	Paper ejection sensor	1:Paper present
	7	-	
P006	0-7	For development	
P007	0-7	-	
P008	0-7	-	
P009	0-7	-	
P010	0-7	For development	
P011	0-7	For development	

16.3.5 <SORTER>

0008-1276

iR2270 / iR2870 / iR3570 / iR4570

T-16-13

Address	Controller	Bit	Display contents	Remarks
P001	STACKER	0	Entry transport motor A	
		1	Entry transport motor B	
		2	Entry transport motor A-	
		3	Entry transport motor B-	
		4	Entry transport motor current switching 0	0:ON
		5	Entry transport motor current switching 1	0:ON
		6	Entry transport/bundle ejection motor standby signal	1:ON
		7	Common solenoid ON signal	0:ON
P002	STACKER	0	Punch transport motor A	

Address	Controller	Bit	Display contents	Remarks
		1	Punch transport motor A-	
		2	Punch transport motor B	
		3	Punch transport motor B-	
		4	Punch transport motor current switching 0	1:ON
		5	Punch transport motor current switching 1	1:ON
		6	Tray 2 motor clock	
		7	Tray 1 motor clock	
P003	STACKER	0	For development	
		1	For development	
		2	For development	
		3	For development	
		4	Not used	
		5	Not used	
		6	Not used	
		7	Not used	
P004	STACKER	0	Saddle connection detection signal	0:ON
		1	Not used	
		2	Oscillating HP sensor	1:ON
		3	Top cover sensor	0:ON
		4	Front cover sensor	0:ON
		5	Front cover interlock sensor	1:ON
		6	Gear change HP sensor	1:ON
		7	Not used	
P005	STACKER	0	For development	
		1	For development	
		2	Punch send request signal	0:ON
		3	Saddle 13VON signal	1:ON
		4	Not used	
		5	Not used	
		6	Not used	
		7	Not used	

Address	Controller	Bit	Display contents	Remarks
P006	STACKER	0	Punch connection sensor	0:ON
		1	Not used	
		2	Not used	
		3	Punch motor standby	1:ON
		4	Entry sensor(IRQ0)	1:ON
		5	Paper rear end sensor(IRQ1)	1:ON
		6	Punch communication input(IRQ2)	0:ON
		7	Not used	
P007	STACKER	0	Tray proximity sensor	0:ON
		1	Tray 2 area sensor 1	0:ON
		2	Tray 2 area sensor 2	0:ON
		3	Tray 2 area sensor 3	0:ON
		4	Tray 2 paper detection sensor	1:ON
		5	Tray 2 paper surface sensor	1:ON
		6	Entry motor clock input	
		7	Bundle ejection motor clock input	
P008	STACKER	0	Tray 3 paper detection sensor	1:ON
		1	Tray 3 connection sensor	0:ON
		2	High-quality paper sensor	1:ON
		3	Tray 1 interlock detection sensor	1:ON
		4	Tray 1 area sensor 1	0:ON
		5	Tray 1 area sensor 2	0:ON
		6	Tray 1 area sensor 3	0:ON
		7	Tray 1 paper detection sensor	1:ON
P009	STACKER	0	Tray 1 shift motor CW	0:ON
		1	Tray 1 shift motor enable	1:ON
		2	Tray 1 shift motor power switching 0	0:ON
		3	Tray 1 shift motor power switching 1	0:ON
		4	Tray 2 shift motor CW	0:ON
		5	Tray 2 shift motor enable	1:ON
		6	Tray 2 shift motor power switching 0	0:ON
		7	Tray 2 shift motor power switching 1	0:ON

Address	Controller	Bit	Display contents	Remarks
P010	STACKER	0	Not used	
		1	Oscillating pressure motor power switching 0	0:ON
		2	Oscillating pressure motor phase-A pulse output	
		3	Oscillating pressure motor phase-B pulse output	
		4	Not used	
		5	Not used	
		6	Not used	
		7	Not used	
P011	STACKER	0	Entry roller spaced solenoid	1:ON
		1	For development	
		2	For development	
		3	Buffer roller spaced solenoid	1:ON
		4	Transport path sensor	1:ON
		5	Not used	
		6	Not used	
		7	Not used	
P012	STACKER	0	Gear change phase A	
		1	Gear change phase B	
		2	Gear change motor current switching 0	0:ON
		3	Gear change motor current switching 1	0:ON
		4	Not used	
		5	For development	
		6	For development	
		7	For development	
P013	STACKER	0	For development	
		1	Pre-alignment HP sensor	1:ON
		2	Pre-alignment HP sensor	1:ON
		3	Processing tray paper detection sensor	1:ON
		4	Rear-end assist HP sensor	1:ON
		5	Not used	

Address	Controller	Bit	Display contents	Remarks
		6	Not used	
		7	Not used	
P014	STACKER	0	Post-alignment motor phase A	
		2	Post-alignment motor phase B	
		3	Post-alignment motor current switching 0	0:ON
		4	Not used	
		5	Not used	
		6	Not used	
		7	Not used	
P015	STACKER	0	Pre-alignment phase A	
		1	Pre-alignment phase B	
		2	Pre-alignment motor current switching 0	0:ON
		3	Not used	
		4	Not used	
		5	Not used	
		6	Not used	
		7	Not used	

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Address	Controller	Bit	Display contents	Remarks
P016	STACKER	0	Rear-end assist phase A	
		1	Rear-end assist phase B	
		2	Rear-end assist motor current switching 0	0:ON
		3	Rear-end assist motor current switching 1	0:ON
		4	Rear-end assist standby	1:ON
		5	Not used	
		6	Not used	
		7	Not used	

Address	Controller	Bit	Display contents	Remarks
P017	STACKER	0	Stapler slide standby	1:ON
		1	Stapler CW	1:ON
		2	Stapler CCW	1:ON
		3	Not used	
		4	Stapler slide phase A	
		5	Stapler slide phase B	
		6	Not used	
		7	Not used	
P018	STACKER	0	Not used	
		1	Not used	
		2	Stapler HP sensor	1:ON
		3	Staple Ready signal	1:ON
		4	Staple Present signal	1:ON
		5	Stapler connection signal	0:ON
		6	Stapler slide HP sensor	1:ON
		7	Stapler - alignment plate interference sensor	1:ON
P019	STACKER	0	Stapler slide current switching 0	0:ON
		1	Stapler slide current switching 1	0:ON
		2	Under-bundle roller clutch	1:ON
		3	Shutter clutch	1:ON
		4	First paper ejection roller spaced solenoid	1:ON
		5	Buffer paper rear-end press solenoid	1:ON
		6	Bundle-out motor current switching 1	0:ON
		7	Bundle-out motor current switching 0	0:ON
P020	STACKER	0	Bundle-out motor phase A	
		1	Bundle-out motor phase B	
		2	Bundle-out motor phase A-	
		3	Bundle-out motor phase B-	
		4	Ejection-position paper detection sensor	1:ON
		5	Scalable interlock	1:ON
		6	Shutter HP sensor	1:ON

Address	Controller	Bit	Display contents	Remarks
		7	Oscillating guide interlock	1:ON
P021	STACKER	0	DIPSW_8	0:ON
		1	DIPSW_7	0:ON
		2	DIPSW_6	0:ON
		3	DIPSW_5	0:ON
		4	DIPSW_4	0:ON
		5	DIPSW_3	0:ON
		6	DIPSW_2	0:ON
		7	DIPSW_1	0:ON
P022	STACKER	0	PUSU switch 1	0:ON
		1	PUSU switch 2	0:ON
		2	PUSU switch 3	0:ON
		3	Not used	
		4	5V detection signal	1:ON
		5	24V detection signal	0:ON
		6	Not used	
		7	Fan error detection signal	0:ON
P023	STACKER	0	FAN ON	1:ON
		1	LED1	0:ON
		2	LED2	0:ON
		3	LED3	0:ON
		4	FIN internal power supply ON	0:ON
		5	Not used	
		6	Not used	
		7	Return roller spaced solenoid	0:ON
P024	SADDLE	0	Guide motor phase A	
		1	Guide motor phase B	
		2	Guide motor current switching	0:ON
		3	Saddle transport motor current switching	
		4	Saddle transport motor phase A	
		5	Saddle transport motor phase B	
		6	Saddle transport motor phase A-	

Address	Controller	Bit	Display contents	Remarks
		7	Saddle transport motor phase B-	
P025	SADDLE	0	Alignment motor phase A	
		1	Alignment motor phase B	
		2	Alignment motor current switching	0:ON
		3	Paper positioning motor current switching	0:ON
		4	Paper positioning motor phase A	
		5	Paper positioning motor phase B	
		6	For development	
		7	For development	
P026	SADDLE	0	Not used	
		1	For development	
		2	Not used	
		3	For development	
		4	Not used	
		5	Not used	
		6	Not used	
		7	Not used	
P027	SADDLE	0	Stapler current detection signal	1:ON
		1	Stapler current detection signal	1:ON
		2	Paper ejection cover sensor connector open	0:ON
		3	Front cover sensor connector open	0:ON
		4	Butting plate HP connector open	0:ON
		5	Folding roller guide HP connector open	0:ON
		6	Saddle stapler unit connector open	0:ON
		7	Butting plate TOP connector open	0:ON
P028	SADDLE	0	Inside staple detection	1:ON
		1	Front staple detection	1:ON
		2	Front stapler motor reverse rotation signal	0:ON
		3	Transport motor driver standby signal	0:ON
		4	Not used	

Address	Controller	Bit	Display contents	Remarks
		5	Not used	
		6	Not used	
		7	Not used	
P029	SADDLE	0	Front cover open - 24V down detection	1:ON
		1	Entry cover open - 24V down detection	1:ON
		2	Folding motor forward rotation signal	1:ON
		3	Folding motor reverse rotation signal	1:ON
		4	Folding motor clock sensor	1:ON
		5	Butting motor clock sensor	1:ON
		6	Stapler HP sensor	1:ON
		7	Stapler HP sensor	1:ON
P030	SADDLE	0	Paper positioning plate HP sensor	0:ON
		1	Folding roller guide HP sensor	1:ON
		2	Entry cover open detection	0:ON
		3	Saddle stapler open detection	1:ON
		4	Butting plate HP sensor	1:ON
		5	Butting plate TOP sensor	1:ON
		6	Not used	
		7	Transport clock	

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Address	Controller	Bit	Display contents	Remarks
P031	SADDLE	0	Saddle tray paper detection sensor	0:ON
		1	Paper positioning section paper detection sensor	0:ON
		2	Crescent roller HP sensor	0:ON
		3	Saddle paper ejection path sensor	0:ON
		4	Saddle path (upstream) sensor	1:ON
		5	Saddle path (midstream) sensor	1:ON
		6	Saddle path (downstream) sensor	1:ON
		7	Saddle path sensor	1:ON
P032	SADDLE	0	Butting motor enable signal	1:ON

Address	Controller	Bit	Display contents	Remarks
		1	Butting motor forward rotation signal	1:ON
		2	Butting motor reverse rotation signal	1:ON
		3	Folding roller HP sensor	1:ON
		4	Front door open detection sensor	0:ON
		5	Paper ejection cover open detection sensor (photosensor)	0:ON
		6	Saddle alignment HP sensor	0:ON
		7	Paper ejection cover open and 24V down detection	1:ON
P033	SADDLE	0	Entry flapper solenoid	1:ON
		1	Saddle path switching flapper 1	1:ON
		2	Saddle path switching flapper 2	1:ON
		3	Intermediate transport solenoid	1:ON
		4	Not used	
		5	Not used	
		6	Entry path sensor	1:ON
		7	Not used	
P034	SADDLE	0	Inside stapler motor forward rotation	0:ON
		1	Inside stapler motor reverse rotation	0:ON
		2	Front stapler motor forward rotation	0:ON
		3	Not used	
		4	Folding roller HP connector open	0:ON
		5	Not used	
		6	Not used	
		7	Not used	
P035	SADDLE	0	DIPSW_1	0:ON
		1	DIPSW_2	0:ON
		2	DIPSW_3	0:ON
		3	DIPSW_4	0:ON
		4	DIPSW_5	0:ON
		5	DIPSW_6	0:ON
		6	DIPSW_7	0:ON
		7	DIPSW_8	0:ON

Address	Controller	Bit	Display contents	Remarks
P036	SADDLE	0	Not used	
		1	Not used	
		2	Push switch 1	0:ON
		3	5V detection signal	0:ON
		4	24V detection signal	0:ON
		5	Not used	
		6	Not used	
		7	Not used	
P037	SADDLE	0	POWER_ON	1:ON
		1	LED1	1:ON
		2	LED2	1:ON
		3	LED3	1:ON
		4	LEDY	0:ON
		5	TRAY_MTR_CUR	0:ON
		6	TRAY_MTR_B	0:ON
		7	TRAY_MTR_A	0:ON
P038	PUNCHER	0	DIPSW1	0:ON
		1	DIPSW2	0:ON
		2	DIPSW3	0:ON
		3	-	
		4	PCH-OUT	
		5	Rear-end sensor	1:ON
		6	Punch encoder clock	
		7	Punch HP sensor	0:ON
P039	PUNCHER	0	For development	
		1	For development	
		2	For development	
		3	-	
		4	-	
		5	-	
		6	-	
		7	-	

Address	Controller	Bit	Display contents	Remarks
P040	PUNCHER	0	For development	
		1	For development	
		2	For development	
		3	For development	
		4	Horizontal registration HP sensor	1:ON
		5	Horizontal registration motor STB	0:ON
		6	Punch motor CCW	0:ON
		7	Punch motor CW	0:ON
P041	PUNCHER	0	-	
		1	-	
		2	-	
		3	-	
		4	DIPSW4	0:ON
		5	Horizontal registration motor CUR	0:ON
		6	For development	
		7	-	
P042	PUNCHER	0	LED1	0:ON
		1	For development	
		2	For development	
		3	LED2	0:ON
		4	Front cover sensor	0:ON
		5	For development	
		6	PUSHSW2	0:ON
		7	PUSHSW1	0:ON
P043	PUNCHER	0	-	
		1	-	
		2	-	
		3	-	
		4	-	
		5	Top cover sensor	0:ON
		6	-	
		7	-	

16.4 ADJUST（Adjustment Mode）

16.4.1 COPIER

16.4.1.1 Copier List

0007-9190

iR2270 / iR2870 / iR3570 / iR4570

<AE>

T-16-16

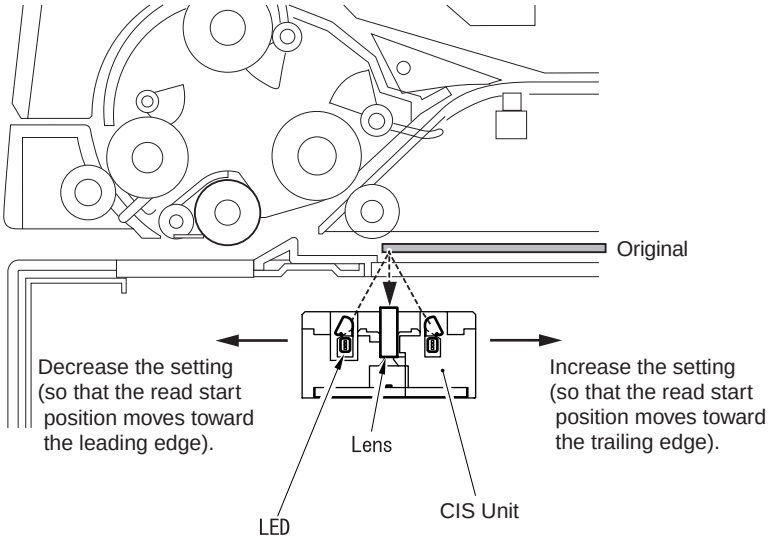
COPIER > ADJUST > AE		
Sub-item	**Description**	**Level**
AE-TBL	Adjusting the character density at image density adjustment	1
	<Setting range> 1 to 9 (Default: 5) Setting a greater value makes characters darker. Setting a smaller value makes characters lighter. If RAM on the reader controller circuit board has been cleared, enter the value from the service label.	

<ADJ-XY>

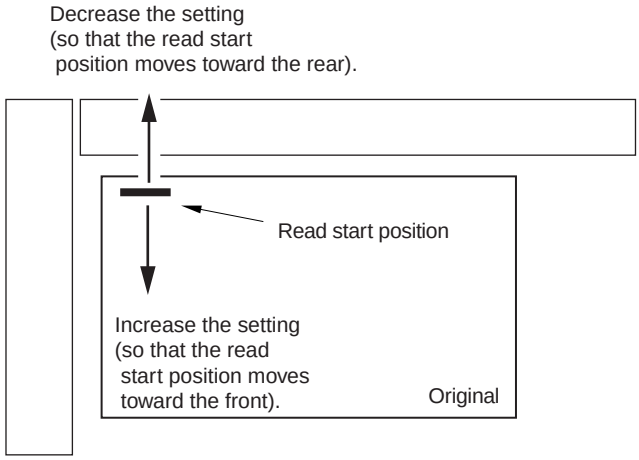
T-16-17

COPIER > ADJUST > ADJ-XY		
Sub-item	**Description**	**Level**
Adjusting the mage read start position - If RAM on the reader controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label. - If the setting of this item has been changed, enter the new value into the service label.		
ADJ-X	Adjusting the optical image head position (image read start position in the subscan direction)	1
	<Setting range> 1 to 100 (Default: 20) Increasing the value by 1 shifts the image read start position 0.1 mm backward.	

COPIER > ADJUST > ADJ-XY		
Sub-item	**Description**	**Level**
ADJ-Y	Adjusting the CCD read start cell position (image read start position in the main scan direction)	1
	<Setting range> 85 to 169 (Default: 144) Increasing the value by 1 shifts the image read start position 0.1 mm outward.	
ADJ-S	Adjusting the optical shading measuring position	1
	<Setting range> 20 to 200 (Default: 40) Increasing the value by 1 shifts the shading measuring position 0.1 mm forward.	
ADJ-Y-DF	Adjusting the main scan position at DF flow read	1
	<Setting range> 50 to 250 (Default: 144) Increasing the value by 1 shifts the image read start position 0.1 mm outward.	
STRD_POS	Adjusting the CCD read start position at DF flow read	1
	<Setting range> 1 to 200 (Default: 100) Increasing the value by 1 shifts the image read start position 0.1 mm to left.	



F-16-15



F-16-16

<CCD>

T-16-18

COPIER > ADJUST > CCD		
Sub-item	**Description**	**Level**
MTF-MG	Entering a main-scan MTF correction value	1
	<Setting range> 0 to 99 (Default: 0) - If the CIS unit has been replaced, enter the value from the label affixed to the CIS unit. - If RAM on the reader controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label. - If the setting of this item has been changed, enter the new value into the service label.	
DFTAR-R	Entering a shading target value (red) when DF is in use (Ordinary document read position)	1
	<Setting range> 1 to 2047 (Default: 1106) If an image error (attributable to a dirty chart or other) has occurred after the execution of COPIER>FUNCTION>DF-WLVL1/DF-WLVL2, enter factory measurement data in this mode.	
DFTAR2-R	Entering a shading target value (red) when DF is in use (Secondary document read position)	1
	<Setting range> 1 to 2047 (Default: 1138) If an image error (attributable to a dirty chart or other) has occurred after the execution of COPIER>FUNCTION>DF-WLVL2, enter factory measurement data in this mode.	

<LASER>

T-16-19

COPIER > ADJUST > LASER		
Sub-item	**Description**	**Level**
LA-OFF	Adjusting the rear-end laser OFF position	1
	<Setting range> -128 to 127 (Default: 0) If RAM on the DC controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label.	
LA-DELAY	Entering a delay value after laser unit displacement (Matching the laser main scan)	1
	<Setting range> 360 to 440 Enter the delay value peculiar to the unit affixed to the unit at laser unit replacement.	
POWER	Adjusting the laser power	1
	<Setting range> -128 to 127 (Default: 0) If RAM on the DC controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label.	

<DEVELOP>

T-16-20

COPIER > ADJUST > DEVELOP		
Sub-item	**Description**	**Level**
DE-OFST	Entering an offset value for the developing bias DC	1
	<Setting range> -128 to 127 (Default: 0) Setting a greater value increases the density.	

<DENS>

T-16-21

COPIER > ADJUST > DENS		
Sub-item	**Description**	**Level**
DENS-ADJ	Correcting the image (copy/print) density The F-value table is corrected if an image becomes fogged or blurred.	1
	<Setting range> 1 to 9 (Default: 5) Setting a greater value reduces fogging. Setting a smaller value reduces blurring. If RAM on the DC controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label.	

<BLANK>

T-16-22

COPIER > ADJUST > BLANK		
Sub-item	**Description**	**Level**
BLANK-T	Entering an adjustment value for the chipping width at the front of an image	1
	<Setting range> -128 to 127 (Default: 0) Setting a greater value increases the chipping width. If RAM on the DC controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label.	
BLANK-B	Entering an adjustment value for the chipping width at the rear of an image	1
	<Setting range> -128 to 127 (Default: 0) Setting a greater value increases the chipping width. If RAM on the DC controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label.	

<HV-PRI>

T-16-23

COPIER > ADJUST > HV-PRI		
Sub-item	**Description**	**Level**
OFST1-DC	Entering an adjustment value for primary charge DC offset 1	1
	<Setting range> -128 to 127 (Default: 0) If RAM on the DC controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label. Note: If the compound power circuit board has been replaced, enter the value from the label affixed to the casing of the new compound power circuit board.	
OFST1-AC	Entering an adjustment value for primary charge AC offset 1	1
	<Setting range> -128 to 127 (Default: 0) If RAM on the DC controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label. Note: If the compound power circuit board has been replaced, enter the value from the label affixed to the casing of the new compound power circuit board.	

<HV-TR>

T-16-24

COPIER > ADJUST > HV-TR		
Sub-item	**Description**	**Level**
TR-OFST	Entering an output adjustment value for transfer charge current offset	1
	<Setting range> -128 to 127 (Default: 0) If RAM on the DC controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label.	
TR-SPP	Entering an output adjustment value for thick-paper transfer bias (for simplex printing on thick paper and duplex printing on the 1/2 side) - Increasing the value is very effective.	1
	<Setting range> -128 to 127 (Default: 0) If RAM on the DC controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label.	
TR-TP-TM	Adjusting the time of applying weak bias to the transfer tip	1
	<Setting range> 0 to 127 (Default: 0) (Unit: 2 ms) If RAM on the DC controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label.	

COPIER > ADJUST > HV-TR		
Sub-item	**Description**	**Level**
TR-TP-LV	Adjusting the level of applying weak bias to the transfer tip	1
	<Setting range> -50 to 50 (Default: 0) (Unit: %) If RAM on the DC controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label.	
2TR-TGT1 to 2TR-TGT8	Setting an offset value for the paper sharing voltage in ATVC	2
	<Setting range> -10 to 10 (Value at shipping: Factory adjustment value / Value after RAM clearance: 0)	
TR-PPR1 to TR-PPR8	Setting a paper type at ATVC setting	2
	<Setting range> 1 to 8 (Value at shipping: Factory adjustment value / Value after RAM clearance: 0) 1: Plain paper (Default), 2: thick paper, 3: envelope, 4: tracing paper, 5: OHP transparency, 6: Postcard, 7: Label paper, 8: Bond paper	
TR-ENV1 to TR-ENV8	Setting environment at ATVC setting	2
	<Setting range> 1 to 3 1: Category A (low temperature) (Default), 2: Category B (room temperature), 3: Category C (high temperature)	
TR-DUP1 to TR-DUP8	Setting simplex paper feed mode at ATVC setting	2
	<Setting range> 1to 4 1: Simplex (Default), 2: Auto duplex feed, 3: Multiple simplex feed, 4: Multiple duplex feed	

<FEED-ADJ>

T-16-25

COPIER > ADJUST > FEED-ADJ		
Sub-item	**Description**	**Level**
REGIST	Adjusting the registration roller clutch ON timing	1
	<Setting range> -128 to 127 (Default: 0) Increasing the value by 1 shifts the image 0.1 mm forward. If RAM on the DC controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label.	

COPIER > ADJUST > FEED-ADJ		
Sub-item	**Description**	**Level**
LOOP-CST	Adjusting the registration loop amount at cassette paper feed	1
	<Setting range> -128 to 127 (Default: 63) If RAM on the DC controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label.	
LOOP-MF	Adjusting the registration loop amount at cassette paper feed	1
	<Setting range> -128 to 127 (Default: 45) If RAM on the DC controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label.	
ADJ-REFE	Adjusting the horizontal registration at paper re-feed (Small paper) - If the image is deviated to this side, increase the value.	1
	<Setting range> -128 to 127 (Default: 0) If RAM on the DC controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label.	
LOOPREFE	Adjusting the registration loop amount at duplex paper feed	1
	<Setting range> -128 to 127 (Default: 45) If RAM on the DC controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label.	
RG-HF-SP	Adjusting the registration clutch ON timing	1
	<Setting range> -128 to 127 (Default: 0) If RAM on the DC controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label.	
ADJ-RE-L	Adjusting the horizontal registration at paper re-feed (Large paper) - If the image is deviated to this side, increase the value.	1
	<Setting range> -128 to 127 (Default: 0) If RAM on the DC controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label.	
LOOP-THK	Adjusting the registration loop amount at thick-paper feed	2
	<Setting range> -128 to 127 (Default: 0)	
LOOP-SP	Adjusting the registration loop amount at special-paper feed	2
	<Setting range> -128 to 127 (Default: 0)	

COPIER > ADJUST > FEED-ADJ		
Sub-item	**Description**	**Level**
LOOP-ENV	Adjusting the registration loop amount at envelope feed from a cassette	2
	<Setting range> -128 to 127 (Default: 0)	

<CST-ADJ>

T-16-26

COPIER > ADJUST > CST-ADJ		
Sub-item	**Description**	**Level**
MF-A4R	Entering the basic paper width of the manual feed tray (A4R)	1
	<Setting range> 0 to 1024 (Default: 516) If RAM on the DC controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label. For replacing the paper with detection VR or registering a new value for the firs time, this service mode shall be executed by FUNCTION>CST.	
MF-A6R	Entering the basic paper width of the manual feed tray (A6R)	1
	<Setting range> 0 to 1024 (Default: 175) If RAM on the DC controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label. For replacing the paper with detection VR or registering a new value for the firs time, this service mode shall be executed by FUNCTION>CST.	
MF-A4	Entering the basic paper width of the manual feed tray (A4)	1
	<Setting range> 0 to 1024 (Default: 791) If RAM on the DC controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label. For replacing the paper with detection VR or registering a new value for the firs time, this service mode shall be executed by FUNCTION>CST.	

<FIXING>

T-16-27

COPIER > ADJUST > FIXING		
Sub-item	**Description**	**Level**
FX-FL-SP	Entering a fine adjustment value for the fixing film speed when plain paper is used. Make a fine adjustment of the target control speed for the fixing film speed when plain paper is used.	2
	<Setting range> -3 to 3 (Default: 0) (Unit: ms) If RAM on the DC controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label.	
FX-FL-TH	Entering a fine adjustment value for the fixing film speed when thick paper is used. Make a fine adjustment of the target control speed for the fixing film speed when thick paper is used.	2
	<Setting range> -3 to 3 (Default: 0) (Unit: ms) If RAM on the DC controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label.	
FX-FL-LW	Entering a fine adjustment value for the fixing film speed when low-speed plain paper is used. Make a fine adjustment of the target control speed for the fixing film speed when low-speed plain paper is used.	2
	<Setting range> -3 to 3 (Default: 0) (Unit: ms) If RAM on the DC controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label.	

<MISC>

T-16-28

COPIER > ADJUST > MISC		
Sub-item	**Description**	**Level**
IMG-DLY	Entering a fine adjustment value for the image delay in the subscan direction Make a fine adjustment of the image delay in the subscan direction when image data is transferred from the controller board to the DCON board.	1
	<Setting range> -128 to 127 iR2270/2270F/2870/2870F: +23 (Default) iR3570/3570F/4570/4570F: +35 (Default) If RAM on the DC controller circuit board has been cleared or the board itself has been replaced, enter the value from the service label.	

COPIER > ADJUST > MISC		
Sub-item	**Description**	**Level**
C1/2/3/4-ADJ-Y	Entering a horizontal registration adjustment value for Cassette 1/2/3/4 Enter a laser write start position for paper fed from Cassette 1/2/3/4 according to the registered numeric value.	2
	<Setting range> -128 to 127 (Default: 0)	
MF-ADJ-Y	Entering a horizontal registration adjustment value for the multiple manual feed tray Enter a laser write start position for paper fed from the multiple manual feed tray according to the registered numeric value.	2
	<Setting range> -128 to 127 (Default: 0)	
DK-ADJ-Y	Entering a horizontal registration adjustment value for the side paper deck Enter a laser write start position for paper fed from the side paper deck according to the registered numeric value.	2
	<Setting range> -128 to 127 (Default: 0)	
FRAME-X	Entering a fine adjustment value in the subscan direction for zooming Enter an image zooming value in the subscan direction according to the registered numeric value.	2
	<Setting range> -10 to 10 (-1% to 1%)	
FRAME-Y	Entering a fine adjustment value in the main scan direction for zooming Enter an image zooming value in the main scan direction according to the registered numeric value.	2
	<Setting range> -10 to 10 (-1% to 1%)	

16.4.2 FEEDER

16.4.2.1 FEEDER List

0007-9921

iR2270 / iR2870 / iR3570 / iR4570

FEEDER >ADJUST

T-16-29

FEEDER >ADJUST		
Sub-item	Description	Level

DOCST	Adjusting the front position of document image <Adjustment method> Setting a greater value delays the image front timing.	1
	<Setting range> -50 to 50 (Value at shipping: Factory adjustment value / Value after RAM clearance: 0)	
LA-SPEED	Adjusting the document transport speed at feeder flow read <Adjustment method> Setting a greater value increases the speed (Reducing the image)	1
	<Setting range> -30 to 30 (Value at shipping: Factory adjustment value / Value after RAM clearance: 0)	

16.4.3 SORTER

16.4.3.1 Sorter List

0007-9953

iR2270 / iR2870 / iR3570 / iR4570

SORTER > ADJUST

T-16-30

SORTER > ADJUST		
Sub-item	Description	Level
PNCH-HLE	Adjusting the distance from the paper end to the punched hole position	1
	<Setting range> -4 to 2 (Value at shipping / Value after RAM clearance: 0)	

16.5 FUNCTION （Operation/Inspection Mode）

16.5.1 COPIER

16.5.1.1 Copier List

0007-9317

iR2270 / iR2870 / iR3570 / iR4570

<INSTALL>

T-16-31

COPIER > FUNCTION > INSTALL		
Sub-item	**Description**	**Level**
TONER-S	Stirring toner in the developer at installation	1
	<Operating procedure> 1. Select an item to reverse its display. 2. "Check the Developer" is displayed. Check that the developer connector is connected. 3. Press the OK key to start operation. The operation automatically stops after count-down. **<Reference>** "Check the Developer" is displayed to prevent the connector from being disconnected when the developer is replaced. Therefore, this message is not necessary when the machine is shipped with the developer for installation.	
STRD-POS	Automatically adjusting the CCD read position at flow read - This is necessary when DF is installed and when ADF is removed and mounted again.	1
	<Operating procedure> 1) Select an item to reverse its display. Then press the OK key. - Adjustment automatically starts and stops. 2) Since the value is updated in the service mode, COPIER>ADJUST>ADJ-XY>STRD-POSenter the value into the service label.	
CARD	Installing and setting the card reader	1
	<Operating procedure> Enter the card number (1 to 2001) and press the OK key. (One thousand cards can be used from the input card number.) Then the card management information (department ID and PIN) is initialized.	
E-RDS	for future expansion	1

COPIER > FUNCTION > INSTALL		
Sub-item	**Description**	**Level**
RGW-PORT	for future expansion	1
COM-TEST	for future expansion	1
COM-LOG	for future expansion	1
RGW-ADR	for future expansion	1

<CCD>

T-16-32

COPIER > FUNCTION > CCD		
Sub-item	**Description**	**Level**
CCD-ADJ	Automatically adjusting CCD **<Operating procedure>** 1) Place about 10 or more sheets of standard white paper (whitest paper used by the user, excluding color print paper) on the document table. 2) Select <CCD-ADJ> to reverse its display. Then press the OK key. 3) Adjustment is executed automatically (about 15 seconds). During adjustment, <ACTIVE> is displayed at the upper right of the screen. 4) The LED lamp (for document lighting) lights twice and the automatic adjustment ends with <OK> displayed on the screen. 5) Since all items are updated in this service mode (COPIER>ADJUST>CCD), enter the values into the service label.	1
DF-WLVL1/2	Adjusting the ADF white level (Platen scan/Flow read scan) **<Operating procedure>** 1) Place the user's usual paper on the document table and execute COPIER>FUNCTION>CCD>DF-WLVL1: Read the white level in Book mode (to check the transparency of the glass for Book mode). 2) Load the user's usual paper on DF and execute COPIER>FUNCTION>CCD>DF-WLVL2: Read the white level in DF (flow read) mode (to check the transparency of the glass for flow read). (Reading both sides of the chart) Front side read: Calculating DFTAR-R Back side read: Calculating DFTAR2-R Note: Both items shall be executed simultaneously.	1
LUT-ADJ2	Data 2 for CCD link correction	2

<DENS>

T-16-33

COPIER > FUNCTION > DENS		
Sub-item	**Description**	**Level**
WHITE-ME	Automatically correcting the white level	1
	<Operating procedure> 1) Place about 10 or more sheets of standard white paper (the user's usual paper) on the document table. 2) Select <WHITE-ME> to reverse the display. Then press the OK key. 3) The document lighting lamp scans once and the operation terminates.	
PD-DENS	Outputting a print pattern for automatic density adjustment in Character mode Note: Since binarizing is supported by the PD method in Character mode, execute this mode to adjust the density automatically.	1
	<Operating procedure> 1) Select <PD-DENS> to reverse its display. Then press the OK key. 2) Paper is fed from Cassette 2 and a 17-tone print pattern is output. This print pattern is used by	
PD-ME	Automatically adjusting the density in Character mode (Reading PD-DENS output pattern)	1
	<Operating procedure> 1) Set the PD-DENS output pattern on the document table by noting the following: - Face the print side down. - Orient the white (light) side of the 17-tone chart toward the vertical size plate. - Align the output pattern with the index inside left of the document table. 2) Select <PD-ME> to reverse its display. Then press the OK key. 3) The document lighting lamp is turned ON and OFF for 13 automatic scans.	

<DPC>

T-16-34

COPIER > FUNCTION > DPC		
Sub-item	**Description**	**Level**
D-GAMMA	Controlling photoconductor drum resistance measurement (APVC) Note: Execute this mode only in the following cases and skip it when unnecessary. - Adjustment if the drum unit has been replaced - Fault isolation if automatic copy density adjustment (PD-ME) has ended abnormally - Reference for checking the drum endurance	1
	<Operating procedure> 1) Select an item and press the OK key. 2) Automatic control terminates after outputting one blank copy. 3) Select DISPLAY>HV-STS>PRIMARY to display the measurement results.	

<CST>

T-16-35

COPIER > FUNCTION > CST		
Sub-item	**Description**	**Level**
MF-A4R MF-A6R MF-A4	Registering the basic paper width of the manual feeder (DADF) A4R width: 210 mm, A6R width: 105 mm, A4 width: 297 mm For micro adjustment after basic width registration, select MF-A4R, MF-A6R, or MF-A4 from COP. COPIER>ADJUST>CST-ADJ.	1
	<Operating procedure> 1) Place an A4R size document on the manual feed and align the size guide with the A4R width. 2) Select (MF-A4R) in this service mode to reverse its display. Press the OK key to register the numeric value after automatic adjustment. 3) Also about the A6R and A4 sizes, register the basic width by following the steps of 1) and 2).	

<FIXING>

T-16-36

COPIER > FUNCTION > FIXING		
Sub-item	**Description**	**Level**
NIP-CHK	Making output for measuring the fixing nip width automatically	1
	<Operating procedure> 1) Register Plain Paper or Recycled Paper for the manual feed tray. (User mode: Setting Common Specifications>Registering Paper Type). 2) Place plain paper or recycled paper of the A4 (LTR) size on the manual feed tray. 3) Select this service mode and press the OK key (to feed paper from the manual feed tray). 4) The fed paper is held once by the fixing roller and ejected after about 10 seconds. 5) Check that the nip width of the ejected paper conforms to the standard. Note: This machine does not allow nip width adjustment. This item is used for nip width checking only.	

<PANEL>

T-16-37

COPIER > FUNCTION > PANEL		
Sub-item	**Description**	**Level**
LCD-CHK	Checking the LCD display for missing dots	1
	<Operating procedure> 1) Select this item and press the OK key to start operation. The front of the panel lights repeatedly in order of white, black, red, green, and blue. (Check this lighting.) 2) Press the Stop key to terminate the operation.	
LED-CHK	Checking LED lighting in the operating section	1
	<Operating procedure> 1) Select this item and press the OK key to start operation. The LED lamps light sequentially. 2) Press LED-OFF to terminate the operation.	
LED-OFF	Checking LED lighting in the operating section	1
	<Operating procedure> 1) Select this item to terminate LED-CHK operation.	

COPIER > FUNCTION > PANEL		
Sub-item	**Description**	**Level**
KEY-CHK	Checking key input	1
	<Operating procedure> 1) Select KEY-CHK to display the input key numbers and names. 2) Press a key to check. If the key is normal, the touchpanel displays the corresponding key. (See the attached table.) 3) Select KEY-CHK again to exit from key input check.	
TOUCHCHK	Adjusting the coordinate positions on the analog touchpanel	1
	<Operating procedure> - Align the press positions on the touchpanel and the coordinate positions on the LCD section. - If the LCD section has been replaced, execute this service mode. 1) Select TOUCHCHK to reverse its display. Then press the OK key. 2) Press sequentially the nine positive signs (+) that appear on the touchpanel in order.	

<Input Key Numbers and Names>

T-16-38

Key	**Screen Display**
0 to 9, #, and *	0 to 9, #, and *
Reset	RESET
Stop	STOP
User Mode	USER
Start	START
Clear	CLEAR
PIN	ID
Help	?
Counter Check	BILL

<PART-CHK>

COPIER > FUNCTION > PART-CHK		
Sub-item	**Description**	**Level**
CL	Specifying a clutch to check its operation (Range: 1 to 6)	1
	<Operating procedure> 1) Select this item. 2) Enter the code of the clutch from the ten-key pad. 3) Press the OK key. 4) Press CL-ON to check its operation.	
CL-ON	Starting the clutch operation check	1
	<Operating procedure> 1) Select this item and press the OK key to repeat ON and OFF in the following pattern: 0.5-second ON ->10-second OFF -> 0.5-second ON -> 10-second OFF -> 0.5-second ON -> OFF	
MTR	Specifying a motor to check its operation (Range: 1 to 16)	1
	<Operating procedure> 1) Select this item. 2) Enter the code of the motor from the ten-key pad. 3) Press the OK key. 4) Press MTR-ON to check its operation.	
MTR-ON	Starting the motor operation check	1
	<Operating procedure> 1) Select this item and press the OK key to repeat ON and OFF in the following pattern: 20-second ON -> OFF	
SL	Specifying a solenoid to check its operation (Range: 1 to 9)	1
	<Operating procedure> 1) Select this item. 2) Enter the code of the solenoid from the ten-key pad. 3) Press the OK key. 4) Press SOL-ON to check its operation.	
SL-ON	Starting the solenoid operation check	1
	<Operating procedure> 1) Select this item and press the OK key to repeat ON and OFF in the following pattern: 0.5-second ON -> 5-second OFF -> 0.5-second ON -> 5-second OFF -> 0.5-second ON -> OFF	

T-16-40

- Designation numbers and corresponding clutches

1	Multiple paper feed clutch (CL1)	4	Duplex transport clutch (iR2270/2270F/2870/ 2870F only) (CL6)
2	Registration clutch (CL2)	5	Extraction clutch (deck) (CL1)
3	Developing sleep clutch (CL3)	6	Paper feed clutch (deck) (CL2)

T-16-41

- Designation numbers and corresponding motors

1	Polygon motor (M1)	9	Hopper screw motor (M12)
2	Main motor (M2)	10	Cassette 3 paper feed motor (cassette pedestal) (M1)
3	Fixing motor (M3)	11	Cassette 4 paper feed motor (cassette pedestal) (M2)
4	First paper ejection motor (M4)	12	Deck paper feed motor (deck) (M1)
5	Bottle rotation motor (M5)	13	Deck lifter motor (deck) (M2)
6	Cassette 1 paper feed motor (M6)	14	Second paper ejection motor (2/3 paper ejection) (M1)
7	Cassette 2 paper feed motor (M7)	15	Third paper ejection motor (2/3 paper ejection) (M2)
8	Duplex motor (iR3570/3570F/4570/ 4570F only) (M10)	16	Buffer pass motor (M1)

T-16-42

- Designation numbers and corresponding solenoids

1	Cassette 1 pickup solenoid (CL1)	6	Storage open solenoid (deck) (SL2)
2	Cassette 2 pickup solenoid (SL2)	7	First flapper solenoid (SL1)
3	Cassette 3 pickup solenoid (cassette pedestal) (SL2)	8	Second flapper solenoid (2/3 paper ejection) (SL2)
4	Cassette 4 pickup solenoid (cassette pedestal) (SL2)	9	Second flapper solenoid (2/3 paper ejection) (SL3)
5	Pickup solenoid (deck) (SL1)		

<CLEAR>

T-16-43

COPIER > FUNCTION > CLEAR		
Sub-item	**Description**	**Level**
ERR	Clearing an error code (Object error code: E000/E001/E002/E003)	1
	<Operating procedure> 1) Select this item and press the OK key. 2) Turn the main power switch OFF and ON.	
DC-CON	Clearing RAM on the DC controller circuit board The RAM is cleared when the main power switch is turned OFF and ON.	1
	<Operating procedure> 1) Select COPIER>FUNCTION>MISC-P>P-PRINT to print out the contents of the service mode. 2) Select this item and press the OK key. 3) Turn the main power switch OFF and ON. 4) Enter the P-PRINT output data as required.	
R-CON	Clearing RAM on the reader controller circuit board The RAM is cleared when the main power switch is turned OFF and ON.	1
	<Operating procedure> 1) Select COPIER>FUNCTION>MISC-P>P-PRINT to print out the contents of the service mode. 2) Select this item and press the OK key. 3) Turn the main power switch OFF and ON. 4) Enter the P-PRINT output data as required.	
JAM-HIST	Clearing the jam history The jam history is cleared when the OK key is pressed.	1
	<Operating procedure> 1) Select this item and press the OK key.	
ERR-HIST	Clearing the error history The error history is cleared when the OK key is pressed.	1
	<Operating procedure> 1) Select this item and press the OK key.	
PWD-CLR	Clearing the password of the system administrator set in user mode The password is cleared when the OK key is pressed.	1
	<Operating procedure> 1) Select this item and press the OK key.	

COPIER > FUNCTION > CLEAR		
Sub-item	**Description**	**Level**
ADRS-BK	Clearing the address book on the reader controller circuit board The address book is cleared when the main power switch is turned OFF and ON.	1
	<Operating procedure> 1) Select this item and press the OK key. 2) Turn the main power switch OFF and ON.	
CNT-MCON	Clearing the service counter incremented by the main controller circuit board The password is cleared when the OK key is pressed.	1
	<Operating procedure> 1) Select this item and press the OK key.	
CNT-DCON	Clearing a service counter incremented by the DC controller circuit board The password is cleared when the OK key is pressed. This applies to SORT, FIN-STPR, SADDLE, and SDL-STPL under COPIER>COUNTER>DRBL-2.	1
	<Operating procedure> 1) Select this item and press the OK key.	
OPTION	Resetting a service mode (OPTION) to default (values after RAM clearance) The service mode is reset when the OK key is pressed. This clears data in the main controller, DC controller, and reader controller.	1
	<Operating procedure> 1) Select COPIER>FUNCTION>MISC-P>P-PRINT to print the contents of the service mode. 2) Select this item and press the OK key.	
MMI	Clearing the following settings in User mode - Backup data (user-defined values) for copy operations - Backup data (user-defined values) of common settings - Various backup data (user-defined values), excluding fax The settings are cleared when the main power switch is turned OFF and ON.	1
	<Operating procedure> 1) Select this item and press the OK key. 2) Turn the main power switch OFF and ON.	

COPIER > FUNCTION > CLEAR		
Sub-item	**Description**	**Level**
MN-CON	Clearing RAM on the main controller circuit board The RAM is cleared when the main power switch is turned OFF and ON.	1
	<Operating procedure> 1) Select COPIER>FUNCTION>MISC-P>P-PRINT to print the contents of the service mode. 2) Select this item and press the OK key. 3) Turn the main power switch OFF and ON. 4) Enter the P-PRINT output data as required.	
CARD	Clearing the card ID (department) related data The card ID related data is cleared when the main power switch is turned OFF and ON.	1
	<Operating procedure> 1) Select this item and press the OK key. 2) Turn the main power switch OFF and ON.	
ALARM	Clearing the alarm log The alarm log is cleared when the main power switch is turned OFF and ON.	1
	<Operating procedure> 1) Select this item and press the OK key. 2) Turn the main power switch OFF and ON.	
SLT-CLR	Clearing the salutation setting	1
	<Operating procedure> 1) Select this item and press the OK key.	
SND-STUP	Clearing the send-read settings The send-read settings are cleared when the main power switch is turned OFF and ON.	1
	<Operating procedure> 1) Select this item and press the OK key. 2) Turn the main power switch OFF and ON.	
CA-KEY	Clearing the CA certificate and key pair The CA certificate and key pair are cleared when the main power switch is turned OFF and ON.	2
	<Operating procedure> 1) Select this item and press the OK key. 2) Turn the main power switch OFF and ON.	

<MISC-R>

T-16-44

COPIER > FUNCTION > MISC-R		
Sub-item	**Description**	**Level**
SCANLAMP	Lighting the LED lamp (for document lighting)	1
	<Operating procedure> 1) Select this item. 2) Press the OK key. The LED lamp (for document lighting) is lit for three seconds.	

<MISC-P>

T-16-45

COPIER > FUNCTION > MISC-P		
Sub-item	**Description**	**Level**
P-PRINT	Printing out the service mode settings	1
	<Operating procedure> 1) Select this item. 2) Press the OK key to start printing.	
USER-PRT	Printing out the user mode list	1
	<Operating procedure> 1) Select this item. 2) Press the OK key to start printing.	
LBL-PRNT	Printing out the service label	1
	<Operating procedure> 1) Load A4 or LTR paper on Cassette 1. 2) Select this item. 3) Press the OK key to start printing.	
PRE-EXP	Checking the pre-exposure lamp (LED)	1
	<Operating procedure> 1) Press this item to reverse its display. 2) Press the OK key. After executing each operation for several seconds, the machine stops automatically. (All lit) 3) Press the OK key to start printing. Reference If the lighting of the pre-exposure lamp gives a problem to the photoconductor drum, rotate the drum.	

COPIER > FUNCTION > MISC-P		
Sub-item	**Description**	**Level**
D-PRINT	Printing out the service mode (DISPLAY) contents This mode outputs only the DISPLAY items (excluding ones output by P-RPINT/LBL-PRINT/HIST-PRINT and ALARM).	1
	<Operating procedure> 1) Select this item. 2) Press the OK key to start printing.	
ENV-PRT	Printing out the in-machine temperature & humidity and fixing temperature change log Changes of the in-machine temperature & humidity and the fixing temperature (center) are printed as log data.	1
	<Operating procedure> 1) Select this item. 2) Press the OK key to start printing.	
KEY-HIST	Printing out the operating section key input history	2
	<Operating procedure> 1) Select this item. 2) Press the OK key to start printing.	
HIST-PRT	Printing out the jam history and error history	2
	<Operating procedure> 1) Select this item. 2) Press the OK key to start printing.	
TRS-DATA	Transferring memory received data to the box	2
	<Operating procedure> 1) Select this item. 2) Press the OK key to start data transfer.	

<SYSTEM>

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COPIER > FUNCTION > SYSTEM		
Sub-item	**Description**	**Level**
DOWNLOAD	Switching to Download mode	1
	<Operating procedure> 1) Select this item. 2) Press the OK button to enter Download mode.	

COPIER > FUNCTION > SYSTEM		
Sub-item	**Description**	**Level**
CHK-TYPE	Specifying a partition number for executing HD-CHK **<Operating procedure>** 1) Select this item. 2) Select a partition number with the ten-key pad. 0: Entire HDD 1: Image accumulation area 2: General-purpose file (user-defined data/various log data/PDL spool data/image data management information) storage area 3: PDL-related file storage area 4: Firmware/address book/file storage area 5: MEAP area 6: Address book area Remarks: HD-CLEAR shall be indispensable for 4 and 6.	1
HD-CHECK	Checking and restoring the partition specified by CHK-TYPE **<Operating procedure>** 1) Select this item. 2) Press the OK key. 3) The result (1:OK, 2:NG (hardware), 3:NG (software) restored/ alternative sector) is displayed.	1
HD-CLEAR	Initializing the partition specified by CHK-TYPE **<Operating procedure>** 1) Select this item. 2) Press the OK key.	1

16.5.2 FEEDER

16.5.2.1 Feeder List

0007-9924

iR2270 / iR2870 / iR3570 / iR4570

FEEDER >FUNCTION

FEEDER >FUNCTION		
Sub-item	**Description**	**Level**
MTR-CHK	Checking the ADF motor and other individually **<Operating procedure>** 1) Press MTR-CHK to reverse its display. 2) Enter a part corresponding number from the ten-key pad. 3) Press the OK key. 4) Press MTR-ON to check the motor operation. **<Setting range>** 0 to 1	1
TRY-A4	Automatically adjusting document width detection by DF (A4 width)	1
TRY-A5R	Automatically adjusting document width detection by DF (A5R width)	1
TRY-LTR	Automatically adjusting document width detection by DF (LTR width)	1
TRY-LTRR	Automatically adjusting document width detection by DF (LTRR width)	1
FEED-CHK	Checking ADF paper feed operation **<Operating procedure>** 1) Press FEED-CHK to reverse its display. 2) Enter a part corresponding number from the ten-key pad. 3) Press the OK key. 4) Press FEED-ON to check ADF paper feed operation. Paper feed mode 0: Simplex feed 1: Duplex feed 2: Simplex feed with stamping 3: Duplex feed with stamping [Value at shipping: Factory adjustment value / Value after RAM clearance: 0]	1

FEEDER >FUNCTION		
Sub-item	**Description**	**Level**
CL-CHK	Checking DF clutch operation	1
	<Operating procedure> 1) Press CL-CHK to reverse its display. 2) Enter a part corresponding number from the ten-key pad. 3) Press the OK key. 4) Press CL-ON to check DF clutch operation.	
CL-ON	Starting clutch operation	1
	Press CL-ON. Then press the OK key to start clutch operation. Press the OK key again to stop the operation. (The operation stops automatically in two seconds but the status changes to STOP only when the OK key is pressed again.)	
SL-CHK	Checking ADF solenoid operation	1
	<Operating procedure> 1) Press SL-CHK to reverse its display. 2) Enter a part corresponding number from the ten-key pad. 3) Press the OK key. 4) Press SL-ON to check ADF solenoid operation. Part corresponding number 0: Pressurizing solenoid 1: Stamping solenoid [Value at shipping: Factory adjustment value / Value after RAM clearance: 0]	
SL-ON	Starting solenoid operation	1
	<Operating procedure> Operation specifications shall differ depending on the model. 1) Press SL to reverse its display. Then press the OK key to start solenoid operation. 2) Press the OK key again to stop the operation. (The operation stops automatically in five seconds but the status changes to STOP only when the OK key is pressed again.)	

FEEDER >FUNCTION		
Sub-item	**Description**	**Level**
MTR-ON	Starting motor operation	1
	<Operating procedure> Operation specifications shall differ depending on the model. 1) Press MTR-ON to reverse its display. Then press the OK key to start motor operation. 2) Press the OK key again to stop the operation. (The operation stops automatically in five seconds but the status changes to STOP only when the OK key is pressed again.)	
ROLL-CLN	Cleaning the ADF roller	1
	While the roller is being rotated automatically by a motor, press alcohol-moistened lens cleaning paper against the roller for cleaning. <Operating procedure> 1) Press ROLL-CLN to reverse its display. 2) While the roller is rotating, press alcohol-moistened lens cleaning paper against the roller for cleaning. 3) Press ROLL-CLN to reverse its display. Press the OK key to stop the roller.	
FEED-ON	Checking ADF paper feed operation	1
	<Operating procedure> 1) Press FEED-ON and then the OK key to start paper feed in the operation mode set by FEED-CHK.	

16.6 OPTION （Machine Settings Mode）

16.6.1 COPIER

16.6.1.1 Copier List

0007-9547

iR2270 / iR2870 / iR3570 / iR4570

<BODY>

T-16-48

COPIER > OPTION > BODY		
Sub-item	**Description**	**Level**
MODEL-SZ	Switching regular resized display and ADF document size detection	1
	<Setting range> 0: AB (6R5E) [Default] 1: INCH (5R4E) 2: A (3R3E) 3: AB/INCH (6R5E)	
FIX-TEMP	Switching the plain paper down sequence table	1
	Setting range 0: OFF [Default] 1: Priority to productivity, control temperature fixed at -10deg C 2: Control temperature fixed at -6deg C 3: Control temperature fixed at -3deg C 4: Priority to fixing, control temperature fixed at +3deg C 5: Control temperature fixed at +6deg C 6: Control temperature fixed at +10deg C 7: Control temperature fixed at +15deg C	
TRANS-SW	Switching transfer high-voltage control from constant current control to constant voltage control	1
	<Setting range> 0: No switching [Default], 1: Constant voltage mode 1, 2: Constant voltage mode 2	

COPIER > OPTION > BODY		
Sub-item	**Description**	**Level**
TEMP-CON	Switching thick-paper fixing temperature mode	1
	<Setting range> 0: OFF [Default] 1: Priority to productivity, control temperature fixed at -10deg C 2: Control temperature fixed at -6deg C 3: Control temperature fixed at -3deg C 4: Priority to fixing, control temperature fixed at +3deg C 5: Control temperature fixed at +6deg C 6: Control temperature fixed at +10deg C 7: Control temperature fixed at +15deg C	
PRIAC-SW	Improving the image quality in case of a drum charging fault Note: This setting is cleared if APVC is executed with a new drum unit or if a service mode (FUNCTION>D-GAMMA) is executed.	1
	<Setting range> 0: No UP [Default], 1: 50 mA UP, 2: 100 mA UP	
TEMPCON2	Improving fixing (Increasing the fixing temperature) Note: Valid for iR3570/3570F/4570/4570F only	1
	<Setting range> 0: OFF [Default] 1: Priority to productivity, control temperature fixed at -10deg C 2: Control temperature fixed at -6deg C 3: Control temperature fixed at -3deg C 4: Priority to fixing, control temperature fixed at +3deg C 5: Control temperature fixed at +6deg C 6: Control temperature fixed at +10deg C 7: Control temperature fixed at +15deg C	

COPIER > OPTION > BODY		
Sub-item	**Description**	**Level**
CONFIG	Selecting several types of firmware installed on the hard disk and switching the country, language, and paper size type of this machine	1
	<Adjustment method> XXYYZZAAXX: Country (UP), YY: Language (ja), ZZ(00) Destination, AA(00): Paper size type The display contents conform to the display method of (COPIER>DISPLAY>USER>LANGUAGE). Enclosed in the brackets are defaults. The country and language are only displayed. <Operating procedure> 1) Select <CONFIG>. 2) Select an item to reverse its display. Then press the + or - key to change the contents. 3) Each time the + or - key is pressed, the contents change sequentially. 4) Display the intended contents at all items and press the OK key. 5) Turn the main power switch OFF and ON.	
W/SCNR	Setting whether a scanner is present (Copy model)	1
	<Setting range> 0: Printer model [Default] 1: Model with scanner	
FTPTXPN	Specifying the send destination port (FTP) number	1
	<Setting range> 0 to 65535 (Default: 21)	
DFDST-L1	Adjusting the dust detection level when DF is used (Inter-paper correction) Setting a greater value makes it easy to detect even small particles.	1
	<Setting range> 0 to 255 (0 to set this mode OFF) (Default: 205)	
DFDST-L2	Adjusting the dust detection level when DF is used (Post-job detection) Setting a greater value makes it easy to detect even small particles.	1
	<Setting range> 0 to 255 (0 to set this mode OFF) (Default: 205)	
CCD-LUT	Setting whether or not to use LUT for gain correction	1
	0: Do not use (Default) 1: Use (One-point correction) 2: Do not use (Three-point correction)	

COPIER > OPTION > BODY		
Sub-item	**Description**	**Level**
ENVP-INT	Setting the in-machine temperature & humidity and fixing temperature log acquisition cycle Select COPIER>FUNCTION>MISC-P>ENV-PRT and COPIER>DISPLAY>ENVRNT to set the log acquisition cycles.	1
	<Setting range> 0 to 480 <minute> (0 for no log acquisition) Default: 60	
BASE-SW	Switching from the MEAP-Full mode to the Base model	1
	<Setting range> 0: OFF (Base model), 1: ON (Full model)	
FIX-LOW	Improving fixing at low temperature Note: Valid for iR3570/3570F/4570/4570F only	1
	<Setting range> 0: OFF [Default], 1: Low-temperature fixing improvement mode ON	
SC-L-CNT	Switching the threshold value of the paper size (Large/Small) of the scan counter	1
	<Setting range> 0: Count B4 as the small size [Default] 1: Count B4 as the large size	
FIX-CLN	Setting the timing at which the fixing pressure roller is cleaned	2
	<Setting range> 0: No cleaning(Default), 1: Once every 500 sheets at 225deg C regulated temperature and 60-second idling, 2: Once every 200 sheets at 225deg C regulated temperature and 60-second idling, 3: Once every 100 sheets at 225deg C regulated temperature and 60-second idling	
CPMKP-SW	Turning ON and OFF the sequence of reducing the copy speed to maintain the fixing performance for copy images	2
	<Setting range> 0: OFF, 1: ON	
HUM-SW	Changing the charge output setting by humidity sensor	2
	<Setting range> 0: Automatic control by humidity sensor [Default] 1 to 5: Fixed environment and deemed control corresponding to the parameters of charging, development, and transfer	

COPIER > OPTION > BODY		
Sub-item	**Description**	**Level**
SCANSLCT	Turning ON or OFF the function of calculating a scan area from the selected paper size	2
	<Setting range> 0: OFF (Determining the scan area by document detection) 1: ON (Determining the scan area by paper size)	
SENS-CNF	Setting the arrangement of document detection sensors	2
	<Setting range> 0: AB type [Default] 1: Inch type 2: A type	
RAW-DATA	Setting whether or not to print out received data with no change If a received image has a problem, the problem is used to isolate the data contents and image processing.	2
	<Setting range> 0: Usual operation [Default] 1: Print out with no change	
SHARP	Changing the sharpness level (Setting the central value)	2
	<Setting range> 1 to 5 [Default: 3]	
COTDPC-D	Saving the toner (Potential (VD) low)	2
	<Setting range> 0: No saving [Default] 1: Down about 10% 2: Down about 20% 3: Down about 30%	
RMT-LANG	Changing the remote UI language from web	2
	<Adjustment method> Select a language code with the + or - key.	
IFAX-LIM	Limiting the number of output lines when a large amount of data has been received by IFAX.	2
	<Setting range> 0: No limit 0 to 999 [Default: 500]	

COPIER > OPTION > BODY		
Sub-item	**Description**	**Level**
DF-BLINE	Taking corrective measures against a black line caused by dust on the platen at flow read	2
	<Setting range> 0: No corrective measures [Default] 1: Corrective measures	
TEMP-TBL	Reserved	2
FIX-SMR	Taking corrective measures against smearing at fixing	2
	<Setting range> 1: Lower the absolute value of developing bias Vdc by 20 V 2: Lower the absolute value of Vdc by 40 V 3: (Reserved)	
FAN-EXTN	Setting the post-job fan extension mode	2
	<Setting range> 0: OFF [Default] 1: ON	
SMTPTXPN	Changing the SMTP send port number	2
	<Setting range> 0 to 65535 (units of 1) [Default: 25]	
SMTPRXPN	Changing the SMTP send port number	2
	<Setting range> 0 to 65535 (units of 1) [Default: 25]	
POP3PN	Changing the POP receive port number	2
	<Setting range> 0 to 65535 (units of 1) [Default: 110]	
RUI-DSP	Setting whether to display a copy screen for RUI (Option switch conforming to the Disability Law)	2
	<Setting range> 0: Do not display [Default] 1: Display	

COPIER > OPTION > BODY		
Sub-item	**Description**	**Level**
ORG-LGL	Setting a special paper size that cannot be recognized by DF This is targeted at LGL notified of by DF.	2
	<Setting range> 0: LEGAL [Default] 1: FOOLSCAP 2: A-FOOLSCAP 3: FORIO 4: G-LEGAL 5: OFFICIO 6: E-OFFICIO 7: A-OFFICIO 8: B-OFFICIO 9: A-LEAGAL 10: M-OFFICIO 11: LEGAL	
ORG-LTR	Setting a special paper size that cannot be recognized by DF This is targeted at LTR notified of by DF. DF	2
	<Setting range> 0: LTR [Default] 1:G-LTR 2:A-LTR 3:EXECTIVE 4:LTR	
ORG-LTRR	Setting a special paper size that cannot be recognized by DF This is targeted at LTR-R notified of by DF.	2
	<Setting range> 0: LTR-R [Default] 1:G-LTR-R 2:A-LTR-R 3:OFFICIO 4:E-OFFICIO 5:EXECTIVE-R 6:LTR-R	
ORG-LDR	Setting a special paper size that cannot be recognized by DF This is targeted at LDR notified of by DF.	2
	<Setting range> 0: LDR [Default] 1:A-LETTER 2:LDR	

COPIER > OPTION > BODY		
Sub-item	**Description**	**Level**
ORG-B5	Setting a special paper size that cannot be recognized by DF This is targeted at B5 notified of by DF.	2
	<Setting range> 0: B5 [Default] 1: K-LEAGAL 2:B5	
UI-BOX	Setting whether or not to display the box screen of the operating section	2
	<Setting range> 0: Do not display 1: Display [Default]	
UI-SEND	Setting whether or not to display the send screen of the operating section	2
	<Setting range> 0: Do not display 1: Display [Default]	
UI-FAX	Setting whether or not to display the fax screen of the operating section	2
	<Setting range> 0: Do not display 1: Display [Default]	
UI-EXT	Setting whether or not to display the extended screen of the operating section	2
	<Setting range> 0: Do not display 1: Display [Default]	
NEGA-GST	Making additional setting about the pre-exposure sequence (excluding laser)	2
	<Setting range> 0: Environmental control [Default] 1: Full 2: Slightly weak 3: Weak	
NW-SPEED	Selecting the data transfer speed at service network connection	2
	<Setting range> 0: Auto [Default] 1: 100Base-TX 2: 100Base-T	

COPIER > OPTION > BODY		
Sub-item	**Description**	**Level**
STS-PORT	Turning the TOT synchronous command communication port ON or OFF The port for Inquiry/Response (synchronous) command communication in TUIF over TCP/IP is turned ON or OFF.	2
	<Setting range> 0: OFF [Default] 1: ON	
CMD-PORT	Turning the TOT asynchronous status communication port ON or OFF The port for asynchronous status communication in TUIF over TCP/IP is turned ON or OFF.	2
	<Setting range> 0: OFF [Default] 1: ON	
NS-CMD5	Limiting the use of CRAM-MD5 in SMTP authentication This is set to limit the use of CRAM-MD5 in SMTP authentication	2
	<Setting range> 0: Dependent on the SMTP server [Default] 1: Do not use	
NS-GSAPI	Limiting the use of GSSAPI in SMTP authentication This is set to limit the use of GSSAPI in SMTP authentication.	2
	<Setting range> 0: Dependent on the SMTP server [Default] 1: Do not use	
NS-NTLM	Limiting the use of NTLM in SMTP authentication This is set to limit the use of NTLM in SMTP authentication.	2
	<Setting range> 0: Dependent on the SMTP server [Default] 1: Do not use	
NS-PLNWS	Limiting the use of PLAIN and LOGIN for SMTP authentication in an environment of communication packet encryption This is set to limit the use of PLAIN and LOGIN for SMTP authentication in an environment where communication packets are encrypted	2
	<Setting range> 0: Dependent on the SMTP server [Default] 1: Do not use	

COPIER > OPTION > BODY		
Sub-item	**Description**	**Level**
NS-PLN	Limiting the use of PLAIN and LOGIN for SMTP authentication in an environment This is set to limit the use of PLAIN and LOGIN for SMTP authentication in an environment where communication packets are not encrypted.	2
	<Setting range> 0: Dependent on the SMTP server [Default] 1: Do not use	
NS-LGN	Limiting the use of LOGIN for SMTP authentication This is set to limit the use of LOGIN for SMTP authentication in an environment where communication packets are encrypted	2
	<Setting range> 0: Dependent on the SMTP server [Default] 1: Do not use	
MEAP-PN	Changing the HTTP port number of the MEAP application	2
	<Setting range> 0 to 65535 (Default: 8000)	
SVMD-ENT	Switching how to enter service mode	2
	0: [User mode key] -> Simultaneous press of [2] and [*]-> [User mode] (Default) 1: [User mode key] -> Simultaneous press of [4] and [9]-> [User mode]	
SSH-SW	Turning the SSH server function ON or OFF	2
	<Setting range> 0: OFF [Default] 1: ON	
RMT-LGIN	Turning remote login to the SSH server ON or OFF	2
	<Setting range> 0: OFF [Default] 1: ON	
RE-PKEY	Turning the regeneration of the SSH server key ON or OFF	2
	<Setting range> 0: OFF [Default] 1: ON	
U-NAME	Setting a user name for connection to the SSH server	2
	Setting value: Up to 8 characters (half-size alphanumeric)	

COPIER > OPTION > BODY		
Sub-item	**Description**	**Level**
U-PASWD	Setting a user password for connection to the SSH server	2
	Setting value: Up to 8 characters (half-size alphanumerics)	
DA-PORT	Turning the TOT asynchronous status communication port ON or OFF	2
	<Setting range> 0: CLOSE [Default] 1: OPEN (when DA is attached)	
DA-CNCT	Setting DA connection	2
	<Setting range> 0: OFF [Default] 1: ON	
CHNG-STS	Setting the TOT status connection port number	2
	<Setting range> 1 to 65535 [Default: 20010]	
CHNG-CMD	Setting the TOT status connection port number	2
	<Setting range> 1 to 65535 [Default: 20000]	
MEAP-DSP	Turning screen transition from MEAP to Native ON or OFF	2
	<Setting range> 0: OFF (Transition to the Native screen) [Default] 1: ON (No transition to the Native screen)	
ANIM-SW	Turn MEAP application error/jam screen display ON or OFF	2
	<Setting range> 0: OFF (Display warning screen) [Default] 1: ON (Do not display warning screen)	
MEAP-SSL	Setting the MEAP HTTPS port	2
	<Setting range> 0 to 65535 (same as the setting of another network port system) [Default: 8443]	
CCD-TYPE	Setting the CCD unit type	2
	<Setting range> 0: Initial CCD unit [Default] 1: Revised CCD unit	

<USER>

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COPIER > OPTION >USER		
Sub-item	**Description**	**Level**
COPY-LIM	Changing the upper limit of copy count	1
	<Setting range> 1 to 9999 [Default: 999]	
SLEEP	Turning the sleep function ON or OFF	1
	<Setting range> 0: OFF 1: ON [Default] The sleep function is set with Timer in User Mode.	
COUNTER1	Setting Software counter 1 on the User mode screen	1
	<Setting value> 101: Total 1 [Value at shipping / Value after RAM clearance = 101 -> Cannot be changed]	
COUNTER2to6	Setting Software counters 2 to 6 on the User mode screen	1
	<Setting range> 0 to 999	
CONTROL	Limiting the user of a control card for a PDL job	1
	<Setting range> 0: Do not use [Default] 1: Use	
B4-L-CNT	Setting whether to count B4 as the large size or the small size on Software counters 1 to 6	1
	<Setting range> 0: Small size [Default] 1: Large size	
COPY-JOB	Prohibiting copy job reservation when a card reader and a coin robot are used	1
	<Setting range> 0: Copy job reserved [Default] 1: Copy job not reserved	

COPIER > OPTION >USER		
Sub-item	**Description**	**Level**
PR-PSESW	Setting whether or not to display the print pause function switch	1
	<Setting range> 0: No print pause function [Default] The user screen does not display the print pause function. (Conventional specification) 1: Print pause function [Default] The user screen does not display the print output stop and restart settings.	
IDPRN-SW	Switching the count-up job type about the department management counter	1
	<Setting range> 0: Counting BoxPrint, ReportPrint, SendLocalPrint, and PDLPrint in the PRINT category 1: Counting ReportPrint, SendLocalPrint, and PDLPrint in the PRINT category	
CNT-SW	Switching the charging counter and default display items	1
	<Setting range> - When the set value is 0 [Default] 101: Total 1 - When the set value is 1 102: Total 2 202: Copy total 2 127: Total A Total 2 - When the set value is 2 101: Total 1 104: Total small 103: Total large 501: Scan total 1	
REMPNL	Turning the remote panel function ON or OFF	1
	<Setting range> 0: OFF [Default] 1: ON	
BCNT-AST	Switching the job type of counting box prints by ASSIST	1
	<Setting range> 0: Count as PDL job [Default] 1: Count as Copy job	

COPIER > OPTION >USER		
Sub-item	**Description**	**Level**
DOC-REM	Setting whether or not to display the document removal message	1
	<Setting range> 0: Do not display [Default 1] 1: Display	
SIZE-DET	Turning the document size detection function ON or OFF	2
	<Setting range> 0: OFF (When the platen is opened, the user will not be dazzled because the lamp does not light.) 1: ON [Default]	
DATE-DSP	Switching the date display format	2
	<Setting range> 0: YYMM/DD 1: DD/MM/YY 2: MM/DD/YY	
MB-CCV	Limiting the mailbox control card user	2
	<Setting range> 0: No [Default] 1: Yes	
TRY-STP	Setting output or no output in the tray full state	2
	<Setting range> 0: Ordinary mode (Interrupt when the finisher tray is full) [Default] 1: Interrupt by height detection only	
MF-LG-ST	Setting the long mode key	2
	<Setting range> 0: Ordinary [Default] 1: Display a long mode key on the corresponding mode screen	
CNT-DISP	Setting whether or not to display a serial number when the counter confirmation key is pressed	2
	<Setting range> 0: Display a serial number [Default] 1: Do not display a serial number	
PH-D-SEL	Setting the number of lines for printing in Photo mode	2
	<Setting range> 0: 141 lines [Default] 1: 134 lines	

COPIER > OPTION >USER		
Sub-item	**Description**	**Level**
OP-SZ-DT	Turning document size detection in Book mode ON or OFF Copying with the platen open is switched to the manual document size input mode (conventional) or the automatic document size detection mode.	2
	<Setting range> 0: Manual document size input mode [Default] 1: Automatic document size detection mode	
NW-SCAN	Enabling or disabling the network scan function	2
	<Setting range> 0: Network scan function disabled [Default] 1: Network scan function enabled Notes: Not changeable for anything in Japan Always 1 for PSPCL outside Japan Changeable for other outside Japan	
HDCR-DSP	Setting whether or not display HDD clearance in User mode and changing the contents of clearance	2
	<Setting range> 1: Clear once with 0 [Default] 2: Clear once with random data 3: Clear three times with random data	
JOB-INVL	Setting the job interval at interrupt	2
	<Setting range> 0: Output the next job continuously in interrupt copying (Standard) [Default] 1: Start outputting the next job after the last paper of the interrupted copy job is output 2: Start outputting the next job after the last paper of all jobs is output	
LGSW-DSP	Setting whether or not to display [Log display ON/OFF] on the User mode screen	2
	[Default] 0: Do not display [Log display ON/OFF] [Default] 1: Display [Log display ON/OFF]	

COPIER > OPTION >USER		
Sub-item	**Description**	**Level**
PCL-COPY	Supporting the PCL command [COPIES Meru/Pinatubo/Hood]	2
	<Setting range> 0: Control each page according to the command of the COPIES command specified to the page [Default] 1: Meru/Pinatubo/Hood compatible mode 2 to 65535: Reserved	
PRJOB-CP	Setting the CCV count pulse at reception and report output	2
	<Setting range> 0: Do not output count pulse [Default] 1: Output count pulse	
DPT-ID-7	Registering the department ID and entering 7 digits for authentication	2
	<Setting range> 0: Conventional [Default] 1: 7-digit input	
RUI-RJT	Disconnecting the HTTP port from RUI by three authentication failures	2
	<Setting procedure> 0: Invalid [Default] 1: Valid	
CTM-S06	Setting whether or not to erase the password from the export file of the file send address	2
	<Setting range> 0: Do not erase the password from the export file. [Default] 1: Erase the password from the export file.	
CTM-S07	Setting whether or not to erase the RUI address display or the send password source display on the edit screen	2
	<Setting range> 0: Do not erase the send password source display on the edit screen. [Default] 1: Erase the send password source display on the edit screen.	
FREG-SW	Setting whether or not to display the free section of the MEAP counter (SEND)	2
	<Setting range> 0: Do not display [Default] 1: Display	

COPIER > OPTION >USER		
Sub-item	**Description**	**Level**
MEAPSAFE	Turning the MEAP Safe mode ON or OFF	
	<Setting range> 0: OFF [Default] 1: ON (Safe mode)	
IFAX-SZL	Enabling or disabling the send size limit in IFAX transmission (not via server only)	2
	<Setting range> 0: Send size limit enabled (via server/not via server) 1: Send size limit disabled (not via server only) [Default]	
IFAX-PGD	Setting whether or not to permit split send in pages (only beyond the upper limit of the send data size)	2
	<Setting range> 0: Do not permit split send in IFAX Simple mode transmission [Default] 1: Permit split send in IFAX Simple mode transmission	
AFN-PSWD	Limiting access in User mode	2
	<Setting range> 0: OFF (Transition to the User mode screen with no password request) [Default] 1: ON (Transition to the User mode screen after password matching)	
PTJAM-RC	Turning PDL jam recovery ON or OFF	2
	<Setting range> 0: OFF (Do not recover) 1: ON (Recover) [Default]	
SLP-SLCT	Setting whether or not to use a network application supporting BW2 (CL1)	2
	<Setting range> 0: Do not use (1w(2w) sleep possible) [Default] 1: Use (1w(2w) sleep not possible) [Default]	
PS-MODE	Setting PS internal mode	2
	<Setting range> 0 to 65535 0: Not compatible [Default] 1: PS Type 3 Halftone command compatible (conventional) (Dither growth forward and reverse) 2 to 65535: Reserved	

Software counter specifications

100 - 199: Total
200 - 299: Copy (001 to 099 added in case of shortage)
300 - 399: Print
400 - 499: Copy and print
500 - 599: Scan
600 - 699: Box print
700 - 799: Receive print
800 - 899: Report print
900 - 999: Send

Explanations of symbols and terms in the table
- YES: Counter valid in this machine
- Large size: Paper greater than B4
- Small size: Paper of B4 or smaller
- Counter Description: Numerals 1 and 2 indicate the counts of large size paper.

In service mode (COPIER>OPTION>USER>B4-L-CNT), B4 or greater can be set as the large size.
- Total A: Total excluding local and remote copies
- Total B: Total excluding local and remote copies and box prints
- Copy: Local and remote copies
- Copy A: Local and remote copies and box prints
- Print: PDL, report, and box prints
- Print A: PDL and report prints
- Scan: Black-and-white and color scans

T-16-50

No.	Counter Description	Support
101	Total 1	yes
102	Total 2	yes
103	Total (Large)	yes
104	Total (Small)	yes
105	Total (Full-color 1)	
106	Total (Full-color 2)	
108	Total (Black-and-white 1)	yes
109	Total (Black-and-white 2)	yes
110	Total (Monochrome / Large)	
111	Total (Monochrome / Small)	
112	Total (Black-and-white / Large)	yes
113	Total (Black-and-white / Small)	yes
114	Total 1 (Duplex)	yes
115	Total 2 (Duplex)	yes

No.	Counter Description	Support
116	Large (Duplex)	yes
117	Small (Duplex)	yes
118	Total (Monochrome 1)	
119	Total (Monochrome 2)	
120	Total (Full-color / Large)	
121	Total (Full-color / Small)	
122	Total (Full-color + Monochrome / Large)	
123	Total (Full-color + Monochrome / Small)	
124	Total (Full-color + Monochrome 2)	
125	Total (Full-color + Monochrome 1)	
126	Total A1	yes
127	Total A2	yes
128	Total A (Large)	yes
129	Total A (Small)	yes
130	Total A (Full-color 1)	
131	Total A (Full-color 2)	
132	Total A (Black-and-white 1)	yes
133	Total A (Black-and-white 2)	yes
134	Total A (Monochrome / Large)	
135	Total A (Monochrome / Small)	
136	Total A (Black-and-white / Large)	yes
137	Total A (Black-and-white / Small)	yes
138	Total A1 (Duplex)	
139	Total A2 (Duplex)	
140	Large A (Duplex)	
141	Small A (Duplex)	
142	Total A (Monochrome 1)	
143	Total A (Monochrome 2)	
144	Total A (Full-color / Large)	
145	Total A (Full-color / Small)	
146	Total A (Full-color + Monochrome / Large)	
147	Total A (Full-color + Monochrome / Small)	
148	Total A (Full-color + Monochrome 2)	

No.	Counter Description	Support
149	Total A (Full-color + Monochrome 1)	
150	Total B1	yes
151	Total B2	yes
152	Total B (Large)	yes
153	Total B (Small)	yes
154	Total B (Full-color 1)	
155	Total B (Full-color 2)	
156	Total B (Black-and-white 1)	yes
157	Total B (Black-and-white 2)	yes
158	Total B (Monochrome / Large)	
159	Total B (Monochrome / Small)	
160	Total B (Black-and-white / Large)	yes
161	Total B (Black-and-white / Small)	yes
162	Total B1 (Duplex)	
163	Total B2 (Duplex)	
164	Large B (Duplex)	
165	Small B (Duplex)	
166	Total B (Monochrome 1)	
167	Total B (Monochrome 2)	
168	Total B (Full-color / Large)	
169	Total B (Full-color / Small)	
170	Total B (Full-color + Monochrome / Large)	
171	Total B (Full-color + Monochrome / Small)	
172	Total B (Full-color + Monochrome 2)	
173	Total B (Full-color + Monochrome 1)	
201	Copy (Total 1)	yes
202	Copy (Total 2)	yes
203	Copy (Large)	yes
204	Copy (Small)	yes
205	Copy A (Total 1)	yes
206	Copy A (Total 2)	yes
207	Copy A (Large)	yes
208	Copy A (Small)	yes

No.	Counter Description	Support
209	Local copy (Total 1)	yes
210	Local copy (Total 2)	yes
211	Local copy (Large)	yes
212	Local copy (Small)	yes
213	Remote copy (Total 1)	yes
214	Remote copy (Total 2)	yes
215	Remote copy (Large)	yes
216	Remote copy (Small)	yes
217	Copy (Full-color 1)	
218	Copy (Full-color 2)	
219	Copy (Monochrome 1)	
220	Copy (Monochrome 2)	
221	Copy (Black-and-white 1)	yes
222	Copy (Black-and-white 2)	yes
223	Copy (Full-color / Large)	
224	Copy (Full-color / Small)	
225	Copy (Monochrome / Large)	
226	Copy (Monochrome / Small)	
227	Copy (Black-and-white / Large)	yes
228	Copy (Black-and-white / Small)	yes
229	Copy (Full-color + Monochrome / Large)	
230	Copy (Full-color + Monochrome / Small)	
231	Copy (Full-color + Monochrome / 2)	
232	Copy (Full-color + Monochrome / 1)	
233	Copy (Full-color / Large / Duplex)	
234	Copy (Full-color / Small / Duplex)	
235	Copy (Monochrome / Large / Duplex)	
236	Copy (Monochrome / Small / Duplex)	
237	Copy (Black-and-white / Large / Duplex)	
238	Copy (Black-and-white / Small / Duplex)	
245	Copy A (Full-color 1)	
246	Copy A (Full-color 2)	
247	Copy A (Monochrome 1)	

No.	Counter Description	Support
248	Copy A (Monochrome 2)	
249	Copy A (Black-and-white 1)	yes
250	Copy A (Black-and-white 2)	yes
251	Copy A (Full-color / Large)	
252	Copy A (Full-color / Small)	
253	Copy A (Monochrome / Large)	
254	Copy A (Monochrome / Small)	
255	Copy A (Black-and-white / Large)	yes
256	Copy A (Black-and-white / Small)	yes
257	Copy A (Full-color + Monochrome / Large)	
258	Copy A (Full-color + Monochrome / Small)	
259	Copy A (Full-color + Monochrome / 2)	
260	Copy A (Full-color + Monochrome / 1)	
261	Copy A (Full-color / Large / Duplex)	
262	Copy A (Full-color / Small / Duplex)	
263	Copy A (Monochrome / Large / Duplex)	
264	Copy A (Monochrome / Small / Duplex)	
265	Copy A (Black-and-white / Large / Duplex)	
266	Copy A (Black-and-white / Small / Duplex)	
273	Local copy (Full-color 1)	
274	Local copy (Full-color 2)	
275	Local copy (Monochrome 1)	
276	Local copy (Monochrome 2)	
277	Local copy (Black-and-white 1)	yes
278	Local copy (Black-and-white 2)	yes
279	Local copy (Full-color / Large)	
280	Local copy (Full-color / Small)	
281	Local copy (Monochrome / Large)	
282	Local copy (Monochrome / Small)	
283	Local copy (Black-and-white / Large)	yes
284	Local copy (Black-and-white / Small)	yes
285	Local copy (Full-color + Monochrome / Large)	
286	Local copy (Full-color + Monochrome / Small)	

No.	Counter Description	Support
287	Local copy (Full-color + Monochrome / 2)	
288	Local copy (Full-color + Monochrome / 1)	
289	Local copy (Full-color / Large / Duplex)	
290	Local copy (Full-color / Small / Duplex)	
291	Local copy (Monochrome / Large / Duplex)	
292	Local copy (Monochrome / Small / Duplex)	
293	Local copy (Black-and-white / Large / Duplex)	
294	Local copy (Black-and-white / Small / Duplex)	
002	Remote copy (Full-color 1)	
003	Remote copy (Full-color 2)	
004	Remote copy (Monochrome 1)	
005	Remote copy (Monochrome 2)	
006	Remote copy (Black-and-white 1)	yes
007	Remote copy (Black-and-white 2)	yes
008	Remote copy (Full-color / Large)	
009	Remote copy (Full-color / Small)	
010	Remote copy (Monochrome / Large)	
011	Remote copy (Monochrome / Small)	
012	Remote copy (Black-and-white / Large)	yes
013	Remote copy (Black-and-white / Small)	yes
014	Remote copy (Full-color + Monochrome / Large)	
015	Remote copy (Full-color + Monochrome / Small)	
016	Remote copy (Full-color + Monochrome / 2)	
017	Remote copy (Full-color + Monochrome / 1)	
018	Remote copy (Full-color / Large / Duplex)	
019	Remote copy (Full-color / Small / Duplex)	
020	Remote copy (Monochrome / Large / Duplex)	
021	Remote copy (Monochrome / Small / Duplex)	
022	Remote copy (Black-and-white / Large / Duplex)	
023	Remote copy (Black-and-white / Small / Duplex)	
301	Print (Total 1)	yes
302	Print (Total 2)	yes
303	Print (Large)	yes

No.	Counter Description	Support
304	Print (Small)	yes
305	Print A (Total 1)	yes
306	Print A (Total 2)	yes
307	Print A (Large)	yes
308	Print A (Small)	yes
309	Print (Full-color 1)	
310	Print (Full-color 2)	
311	Print (Monochrome 1)	
312	Print (Monochrome 2)	
313	Print (Black-and-white 1)	yes
314	Print (Black-and-white 2)	yes
315	Print (Full-color / Large)	
316	Print (Full-color / Small)	
317	Print (Monochrome / Large)	
318	Print (Monochrome / Small)	
319	Print (Black-and-white / Large)	yes
320	Print (Black-and-white / Small)	yes
321	Print (Full-color + Monochrome / Large)	
322	Print (Full-color + Monochrome / Small)	
323	Print (Full-color + Monochrome / 2)	
324	Print (Full-color + Monochrome / 1)	
325	Print (Full-color / Large / Duplex)	
326	Print (Full-color / Small / Duplex)	
327	Print (Monochrome / Large / Duplex)	
328	Print (Monochrome / Small / Duplex)	
329	Print (Black-and-white / Large / Duplex)	
330	Print (Black-and-white / Small / Duplex)	
331	PDL print (Total 1)	yes
332	PDL print (Total 2)	yes
333	PDL print (Large)	yes
334	PDL print (Small)	yes
335	PDL print (Full-color 1)	
336	PDL print (Full-color 2)	

No.	Counter Description	Support
339	PDL print (Black-and-white 1)	yes
340	PDL print (Black-and-white 2)	yes
341	PDL print (Full-color / Large)	
342	PDL print (Full-color / Small)	
345	PDL print (Black-and-white / Large)	yes
346	PDL print (Black-and-white / Small)	yes
351	PDL print (Full-color / Large / Duplex)	
352	PDL print (Full-color / Small / Duplex)	
355	PDL print (Black-and-white / Large / Duplex)	
356	PDL print (Black-and-white / Small / Duplex)	
401	Copy + Print (Full-color / Large)	
402	Copy + Print (Full-color / Small)	
403	Copy + Print (Monochrome / Large)	
404	Copy + Print (Monochrome / Small)	
405	Copy + Print (Monochrome 2)	
406	Copy + Print (Monochrome 1)	
407	Copy + Print (Full-color + Monochrome / Large)	
408	Copy + Print (Full-color + Monochrome / Small)	
409	Copy + Print (Full-color + Monochrome / 2)	
410	Copy + Print (Full-color + Monochrome / 1)	
411	Copy + Print (Large)	
412	Copy + Print (Small)	
413	Copy + Print (2)	
414	Copy + Print (1)	
415	Copy + Print (Monochrome / Large)	
416	Copy + Print (Monochrome / Small)	
417	Copy + Print (Full-color / Large / Duplex)	
418	Copy + Print (Full-color / Small / Duplex)	
419	Copy + Print (Monochrome / Large / Duplex)	
420	Copy + Print (Monochrome / Small / Duplex)	
421	Copy + Print (Black-and-white / Large / Duplex)	
422	Copy + Print (Black-and-white / Small / Duplex)	
501	Scan (Total 1)	yes

No.	Counter Description	Support
502	Scan (Total 2)	yes
503	Scan (Large)	yes
504	Scan (Small)	yes
505	Black-and-white scan (Total 1)	yes
506	Black-and-white scan (Total 2)	yes
507	Black-and-white scan (Large)	yes
508	Black-and-white scan (Small)	yes
509	Color scan (Total 1)	
510	Color scan (Total 2)	
511	Color scan (Large)	
512	Color scan (Small)	
601	Box print (Total 1)	yes
602	Box print (Total 2)	yes
603	Box print (Large)	yes
604	Box print (Small)	yes
605	Box print (Full-color 1)	
606	Box print (Full-color 2)	
607	Box print (Monochrome 1)	
608	Box print (Monochrome 2)	
609	Box print (Black-and-white 1)	yes
610	Box print (Black-and-white 2)	yes
611	Box print (Full-color / Large)	
612	Box print (Full-color / Small)	
613	Box print (Monochrome / Large)	
614	Box print (Monochrome / Small)	
615	Box print (Black-and-white / Large)	yes
616	Box print (Black-and-white / Small)	yes
617	Box print (Full-color + Monochrome / Large)	
618	Box print (Full-color + Monochrome / Small)	
619	Box print (Full-color + Monochrome / 2)	
620	Box print (Full-color + Monochrome / 1)	
621	Box print (Full-color / Large / Duplex)	
622	Box print (Full-color / Small / Duplex)	

No.	Counter Description	Support
623	Box print (Monochrome / Large / Duplex)	
624	Box print (Monochrome / Small / Duplex)	
625	Box print (Black-and-white / Large / Duplex)	
626	Box print (Black-and-white / Small / Duplex)	
701	Receive print (Total 1)	yes
702	Receive print (Total 2)	yes
703	Receive print (Large)	yes
704	Receive print (Small)	yes
705	Receive print (Full-color 1)	
706	Receive print (Full-color 2)	
707	Receive print (Gray-scale 1)	
708	Receive print (Gray-scale 2)	
709	Receive print (Monochrome 1)	yes
710	Receive print (Monochrome 2)	yes
711	Receive print (Full-color / Large)	
712	Receive print (Full-color / Small)	
713	Receive print (Gray-scale / Large)	
714	Receive print (Gray-scale / Small)	
715	Receive print (Monochrome / Large)	yes
716	Receive print (Monochrome / Small)	yes
717	Receive print (Full-color + Gray-scale / Large)	
718	Receive print (Full-color + Gray-scale / Small)	
719	Receive print (Full-color + Gray-scale 2)	
720	Receive print (Full-color + Gray-scale 1)	
721	Receive print (Full-color / Large / Duplex)	
722	Receive print (Full-color / Small / Duplex)	
723	Receive print (Gray-scale / Large / Duplex)	
724	Receive print (Gray-scale / Small / Duplex)	
725	Receive print (Monochrome / Large / Duplex)	
726	Receive print (Monochrome / Small / Duplex)	
801	Report print (Total 1)	yes
802	Report print (Total 2)	yes
803	Report print (Large)	yes

No.	Counter Description	Support
804	Report print (Small)	yes
805	Report print (Full-color 1)	
806	Report print (Full-color 2)	
807	Report print (Gray-scale 1)	
808	Report print (Gray-scale 2)	
809	Report print (Monochrome 1)	yes
810	Report print (Monochrome 2)	yes
811	Report print (Full-color / Large)	
812	Report print (Full-color / Small)	
813	Report print (Gray-scale / Large)	
814	Report print (Gray-scale / Small)	
815	Report print (Monochrome / Large)	yes
816	Report print (Monochrome / Small)	yes
817	Report print (Full-color + Gray-scale / Large)	
818	Report print (Full-color + Gray-scale / Small)	
819	Report print (Full-color + Gray-scale 2)	
820	Report print (Full-color + Gray-scale 1)	
821	Report print (Full-color / Large / Duplex)	
822	Report print (Full-color / Small / Duplex)	
823	Report print (Gray-scale / Large / Duplex)	
824	Report print (Gray-scale / Small / Duplex)	
825	Report print (Monochrome / Large / Duplex)	
826	Report print (Monochrome / Small / Duplex)	
901	Copy scan total 1 (Color)	
902	Copy scan total 1 (Black-and-white)	
903	Copy scan total 2 (Color)	
904	Copy scan total 2 (Black-and-white)	
905	Copy scan total 3 (Color)	
906	Copy scan total 3 (Black-and-white)	
907	Copy scan total 4 (Color)	
908	Copy scan total 4 (Black-and-white)	
909	Local copy scan (Color)	
910	Local copy scan (Black-and-white)	

No.	Counter Description	Support
911	Remote copy scan (Color)	
912	Remote copy scan (Black-and-white)	
913	Send scan total 1 (Color)	
914	Send scan total 1 (Black-and-white)	
915	Send scan total 2 (Color)	
916	Send scan total 2 (Black-and-white)	yes
917	Send scan total 3 (Color)	
918	Send scan total 3 (Black-and-white)	yes
919	Send scan total 4 (Color)	
920	Send scan total 4 (Black-and-white)	
921	Send scan total 5 (Color)	
922	Send scan total 5 (Black-and-white)	yes
929	Send scan total 6 (Color)	
930	Send scan total 6 (Black-and-white)	yes
931	Send scan total 7 (Color)	
932	Send scan total 7 (Black-and-white)	
933	Send scan total 8 (Color)	
934	Send scan total 8 (Black-and-white)	
935	Universal send scan total (Color)	
936	Universal send scan total (Black-and-white)	
937	Box scan (Color)	
938	Box scan (Black-and-white)	
939	Remote scan (Color)	
940	Remote scan (Black-and-white)	yes
941	Send scan / FAX (Color)	
942	Send scan / FAX (Black-and-white)	
943	Send scan / IFAX (Color)	
944	Send scan / IFAX (Black-and-white)	
945	Send scan / E-mail (Color)	
946	Send scan / E-mail (Black-and-white)	
947	Send scan / FTP (Color)	
948	Send scan / FTP (Black-and-white)	
949	Send scan / SMB (Color)	

No.	Counter Description	Support
950	Send scan / SMB (Black-and-white)	
951	Send scan / IPX (Color)	
952	Send scan / IPX (Black-and-white)	
953	Send scan / Database (Color)	
954	Send scan / Database (Black-and-white)	
955	Send scan / Local print (Color)	
956	Send scan / Local print (Black-and-white)	
957	Send scan / Box (Color)	
958	Send scan / Box (Black-and-white)	

<CST>

T-16-51

COPIER > OPTION > CST		
Sub-item	**Description**	**Level**
ENV1/2	Registering Envelope cassette ENV1/2	1
	<Setting range> 21: ISO-C5 [Default], 22: COM10, 23: Monarch, 24: DL, 25: ISO-B5, 26: Western style No.4	
U1-NAMEto U4-NAME	Setting whether or not to display a paper name when a paper size group (U1 to U4) has been detected	2
	<Setting range> 0: Display U1, U2, U3, or U4 on the touchpanel. 1: Display the paper name set in service mode (CST-U1/U2/U3/U4).	

COPIER > OPTION > CST		
Sub-item	**Description**	**Level**
CST-U1/U2/ U3/U4	Specifying paper names for use in paper size groups If the following special paper sizes are set to U1, U2, U3, and U4, paper of the sizes can be handled on the universal cassette as special size paper.	2
	<Setting range> 24: FOOLSCAP (CST-U2: Default) 25: Australian FOOLSCAP 26: OFFICIO 27: Ecuadorian OFFICIO 28: Bolivian OFFICIO 29: Argentine LETTER (U4: Default) 30: Argentine LETTER-R 31: Governmental LETTER (U1: Default) 32: Governmental LETTER-R 34: Governmental LEGAL (U3: Default) 35: FOLIO 36: Argentine OFFICIO 37: Mexican OFFICIO 38: EXECUTIVE	

<ACC>

T-16-52

COPIER > OPTION > ACC		
Sub-item	**Description**	**Level**
COIN	Switching the coin vendor Set whether the coin vendor management mode can be entered or not.	1
	<Setting range> 0: OFF [Default] 1: ON	
DK-P	Setting a paper size for use on a paper deck (option)	1
	<Setting range> 0: A4 [Default] 1: B5 2: LTR	

COPIER > OPTION > ACC		
Sub-item	**Description**	**Level**
OUT-TRAY	Setting whether or not to use the third paper ejection tray (mainly when the second and third paper ejection units are mounted)	1
	<Setting range> 0: Do not use [Default] 1: Use	
IN-TRAY	Setting whether or not to use an inner paper ejection tray	1
	<Setting range> 0: Do not use [Default] 1: Use	
CC-SPSW	Setting whether or not to support the control card (CC IV /CCV) interface	2
	<Setting range> 0: Do not support [Default] 1: Support	

<INT-FACE>

T-16-53

COPIER > OPTION > INT-FACE		
Sub-item	**Description**	**Level**
IMG-CONT	Setting the EFI controller connection	1
	<Setting range> 0: Usual operation [Default]	
AP-OPT	Permitting or prohibiting printing from the PrintMe application installed in the PS print server unit	2
	<Setting range> 0: Permit printing by a specified account 1: Permit printing, irrespective of the account [Default] 2: Prohibit printing (except by specified department ID	
AP-ACCNT	Setting a department ID for a print job from the PrintMe application installed in the PS print server unit	2
	<Setting range> 0 to 99999999 [Default: 0]	
AP-CODE	Setting a CPCA path for a print job from the PrintMe application installed in the PS print server unit	2
	<Setting range> 0 to 99999999 [Default: 0]	

<COMBO>

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COPIER >OPTION > COMBO		
Sub-item	**Description**	**Level**
PPR-SLCT	Setting a paper type for weak bias to the transfer tip	1
	<Setting range> 1: Plain paper [Default] 2: Thick paper 3: Envelope 4: tracing paper 5: OHP transparency 6: Postcard 7: Label paper 8: Bond paper	
MOD-SLCT	Setting a paper mode for weak bias to the transfer tip	1
	<Setting range> 1: Simplex [Default] 2: Automatic duplex feed - Second side (Cassette feed) 3: Manual duplex feed - Second side (Manual feed)	
ENV-SLCT	Setting the environment for weak bias to the transfer tip	1
	<Setting range> 1 to 5 [Default: 3]	
TR-SW1/2/3/4/5	Turning weak bias to the transfer tip ON or OFF	1
	<Setting range> 0: OFF [Default] 1: ON	

<LCNS-TR>

Example of display: ST-XXXX 1 ( ) {0 to 0}

[1] [2]

[1] Status display 0: Not installed [Default] 1: Installed

[2] Invalidation 0: Invalidate (Only 0 can be entered.)

Transfer invalidation procedure

1. Select ST-XXXX, enter 0, and press the OK key.
2. A transfer license number (24 digits) is displayed at TR-XXXX.

T-16-55

COPIER >OPTION >LCNS-TR		
Sub-item	**Description**	**Level**
ST-SEND	Displaying the send function installation status in transfer invalidation and executing transfer invalidation	2

COPIER >OPTION >LCNS-TR		
Sub-item	**Description**	**Level**
TR-SEND	Acquiring a transfer license key for the send function in transfer invalidation	2
ST-ENPDF	Displaying the encrypted PDF send function installation status in transfer invalidation and executing transfer invalidation	2
TR-ENPDF	Acquiring a transfer license key for the encrypted PDF send function in transfer invalidation	2
ST-SPDF	Displaying the searchable PDF send function installation status in transfer invalidation and executing transfer invalidation	2
TR-SPDF	Acquiring a transfer license key for the searchable PDF send function in transfer invalidation	2
ST-EXPDF	Displaying the PDF extension kit (compound function of encrypted PDF and searchable PDF) installation status in transfer invalidation and executing transfer invalidation	2
TR-EXPDF	Acquiring a transfer license key for the PDF extension kit (compound function of encrypted PDF and searchable PDF) installation status in transfer invalidation	2
ST-LIPS	Displaying the LIPS installation status in transfer invalidation and executing transfer invalidation	2
TR-LIPS	Acquiring a transfer license key for LIPS in transfer invalidation	2
ST-PDFDR	Displaying the PDF direct function installation status in transfer invalidation and executing transfer invalidation	2
TR-PDFDR	Acquiring a transfer license key for the PDF direct function in transfer invalidation	2
ST-SCR	Displaying the encrypted secure print function installation status in transfer invalidation and executing transfer invalidation	2
TR-SCR	Acquiring a transfer license key for the encrypted secure print function in transfer invalidation	2
ST-HDCLR	Displaying the HDD encryption/complete erasure function installation status in transfer invalidation and executing transfer invalidation	2
TR-HDCLR	Acquiring a transfer license key for the HDD encryption/complete erasure function in transfer invalidation	2
ST-BRDIM	Displaying the BarDIMM installation status in transfer invalidation and executing transfer invalidation	2
TR-BRDIM	Acquiring a transfer license key for BarDIMM in transfer invalidation	2

16.6.2 FEEDER

16.6.2.1 Feeder List

0007-9937

iR2270 / iR2870 / iR3570 / iR4570

FEEDER>OPTION

T-16-56

FEEDER > OPTION		
Sub-item	Description	Level
SIZE-SW	Setting whether or not to detect a mixed document of A/B size and inch size	1
	<Setting value> 0: Do not detect [Default] 1: Detect	

16.6.3 SORTER

16.6.3.1 Sorter List

0007-9957

iR2270 / iR2870 / iR3570 / iR4570

SORTER > OPTION>

T-16-57

SORTER > OPTION		
Sub-item	**Description**	**Level**
BLNK-SW	Setting the margin width (W) on each side of the folding position when the saddle stitcher is used	1
	<Setting value> 0: Ordinary width (5 mm) 1: Large width (10 mm) [Value at shipping/Value after RAM clearance: 1]	
MD-SPRTN	Setting the finisher function limit	1
	<Setting value> 0: Usual 1: Degenerated [Value at shipping/Value after RAM clearance: 0]	

16.6.4 BOARD

16.6.4.1 Board List

0007-9959

iR2270 / iR2870 / iR3570 / iR4570

BOARD > OPTION

T-16-58

BOARD > OPTION		
Sub-item	**Description**	**Level**
FONTDL	Setting whether or not to display the font service setting screen for list display by the PS kanji font downloader	1
	<Setting value> 0: Do not display [Default] 1: Display	
MENU-1 to MENU-4	Setting whether or not to display Levels 1 to 4 of the printer setting menu	2
	<Setting value> 0: Do not display 1: Display [Value at shipping/Value after RAM clearance: 0]	

16.7 TEST （Test Print Mode）

16.7.1 COPIER

16.7.1.1 Copier List

0008-0571

iR2270 / iR2870 / iR3570 / iR4570

<PG>

T-16-59

COPIER>TEST>PG		
Sub-item	**Description**	**Level**
TYPE	Enter a test print type number and press the Start key for test printing. (After test printing, be sure to return the number to 0.) 0: Image from CCD (Ordinary print) 1: Checker 2: 17 tones (Error diffusion method [T0BIC]) 3: 17 tones (Dither screen method) 4: Totally white 00H 5: Halftone 80H (Error diffusion method [T0BIC]) 6: Halftone 80H (Dither screen method) 7: Totally black FFH 8: Horizontal line (space: 27 dots, line width: 40 dots) 9: Horizontal line (space: 50 dots, line width: 60 dots) 10: Horizontal line (space: 3 dots, line width: 2 dots) 11: Halftone 60H (Error diffusion method [T0BIC]) 12: Halftone 60H (Dither screen method) 13: Halftone 30H (Error diffusion method [T0BIC]) 14: Halftone 30H (Dither screen method) 15 - 20: For development	1
TXPH	Reserved	1
PG-PICK	Selecting an output stage for test printing 1: Cassette 1 2: Cassette 2 3: Cassette 3 4: Cassette 4 5: Side deck 6: Manual feed 7 - 8: Not used	1

COPIER>TEST>PG		
Sub-item	**Description**	**Level**
2-SIDE	Setting the output mode for test printing 0: Simplex [Default] 1: Duplex	1
PG-QTY	Setting the number of pages for test printing 1 to 999 [Default: 1]	1

<NETWORK>

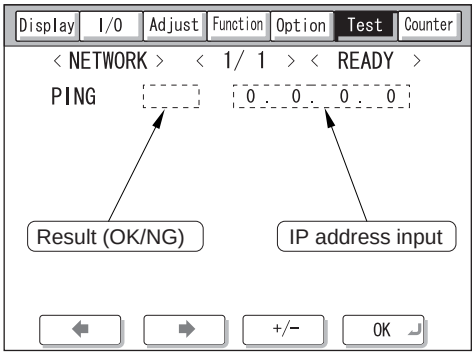
T-16-60

COPIER>TEST>NETWORK		
Sub-item	**Description**	**Level**
PING	Checking the connection from this machine to the network (TCP/IP only) The network connection is checked when the machine has been installed and when the connection has become faulty.	1

1) Press the switch at the operating section long for the shutdown sequence and turn the main power switch OFF.
2) Connect the network cable to this machine and turn the main power switch ON.
3) Notify the system administrator that the machine has been installed to request network setup.
4) Notify the system administrator of the network connection check plan and check the PING remote host address (IP address of a PC terminal in the user network).
5) Select the service mode (COPIER>TEST>NETWORK>PING), enter the IP address checked at Step 4 from the ten-key pad of the operating section, and press the OK key and the Start key.
   - Once the network has been connected normally, OK is displayed. (End)
   - If NG is displayed, check the connection of the network cable first. If the network cable is connected normally, do Step 6 and later. If the network cable is not connected normally, repeat Step 5.
6) Select the service mode (COPIER>TEST>NETWORK>PING), enter the loopback address *(127.0.0.1), and press the OK key and the Start key.
   - If NG is displayed, the TCP/IP setting of the local machine may be wrong. Return to Step 3 and check the setting again.
   - If OK is displayed, the TCP/IP setting of the local machine seems correct but the network controller (main controller circuit board) may be faulty. Check the controller at Step 7.
   *: Since the loopback address signal is returned before the network controller, the TCP/IP setting of the local machine can be checked.
7) Select the service mode (COPIER>TEST>NETWORK>PING), enter the local host address (IP address of the local machine), and press the OK key.
   - If NG is displayed, the IP address of the local machine may be wrong or the network controller may be faulty. Check the IP address with the system administrator or replace the main controller circuit board.

- If OK is displayed, there seem to be no problems about the network setting of the local machine or the network controller.

Then the problem may be attributable to the user network environment. Report this to the system administrator and request action.



F-16-17

16.8 COUNTER （Counter Mode）

16.8.1 COPIER

16.8.1.1 Copier List

0008-0599

iR2270 / iR2870 / iR3570 / iR4570

<TOTAL>

T-16-61

COPIER>COUNTER>TOTAL		
Sub-item	**Description**	**Level**
SERVICE1	Total service counter 1 This counter is incremented when paper is ejected out of the printer. Irrespective of the paper size, large or small, the increment is one. After 99999999, the count returns to 00000000.	1
SERVICE2	Total service counter 2 This counter is incremented when paper is ejected out of the printer. The increment is 2 for the large size and 1 for the small size. After 99999999, the count returns to 00000000.	1
COPY	Total copy counter This counter is incremented when a copy is created and ejected out of the printer. After 99999999, the count returns to 00000000.	1
PDL-PRT	PDL print counter This counter is incremented with the charging counter when a print is ejected out of the machine or loaded again for printing the other side in PDL printing. The increment is 0 for blank print and 5 each for a large or small print. After 99999999, the count returns to 00000000.	1
FAX-PRT	FAX receive print counter This counter is incremented with the charging counter when a print is ejected out of the machine or loaded again for printing the other side in fax reception. The increment is 0 for blank print and 1each for a large or small print. The count can be cleared. After 99999999, the count returns to 00000000.	1

COPIER>COUNTER>TOTAL		
Sub-item	**Description**	**Level**
RMT-PRT	Remote print counter This counter is incremented with the charging counter when a print is ejected out of the machine or loaded again for printing the other side in remote printing. The increment is 0 for blank print and 1each for a large or small print. The count can be cleared. After 99999999, the count returns to 00000000.	1
BOX-PRT	Box print counter This counter is incremented with the charging counter when a print is ejected out of the machine or loaded again for printing the other side in box printing. The increment is 0 for blank print and 1each for a large or small print. The count can be cleared. After 99999999, the count returns to 00000000.	1
RPT-PRT	Report print counter This counter is incremented with the charging counter when a print is ejected out of the machine or loaded again for printing the other side in report printing. The increment is 0 for blank print and 1each for a large or small print. The count can be cleared. After 99999999, the count returns to 00000000.	1
2-SIDE	Duplex copy/print counter This counter is incremented with the charging counter when a duplex copy/print is ejected out of the machine or loaded again for printing the other side in remote printing. The increment is 0 for blank copy/print and 1each for a large or small copy/print. The count can be cleared. After 99999999, the count returns to 00000000.	1
SCAN	Scan counter This counter is incremented at the end of a scan. The increment is 1each for the large or small size. The count can be cleared. After 99999999, the count returns to 00000000.	1

<PICK-UP>

T-16-62

COPIER>COUNTER>PICK-UP		
Sub-item	**Description**	**Level**
C1/2/3/4	Cassette 1/2/3/4 paper feed total counter The number of sheets fed from Cassette 1/2/3/4 is displayed. Irrespective of the paper size, large or small, this counter is incremented one. After 99999999, the count returns to 00000000.	1
MF	Manual feed total counter The number of sheets fed from the manual paper feed unit is displayed. Irrespective of the paper size, large or small, this counter is incremented one. After 99999999, the count returns to 00000000.	1
DK	Deck paper feed total counter The number of sheets fed from the deck paper feed unit is displayed. Irrespective of the paper size, large or small, this counter is incremented one. After 99999999, the count returns to 00000000.	1
2-SIDE	Duplex paper feed total counter The number of duplex fed sheets is displayed. Irrespective of the paper size, large or small, this counter is incremented one. After 99999999, the count returns to 00000000.	1

<FEEDER>

T-16-63

COPIER>COUNTER>FEEDER		
Sub-item	**Description**	**Level**
FEED	ADF document feed total counter The number of documents fed from ADF is displayed. Irrespective of the paper size, large or small, this counter is incremented one. After 99999999, the count returns to 00000000.	1
DFOP-CNT	ADF hinge open-close counter The ADF hinge open-close count is displayed. After 99999999, the count returns to 00000000.	1

<JAM>

T-16-64

COPIER>COUNTER>JAM		
Sub-item	**Description**	**Level**
TOTAL	Copier total jam counter	1
FEEDER	Feeder total jam counter	1
SORTER	Finisher total jam counter	1
2-SIDE	Duplex unit jam counter	1
MF	Manual paper feed jam counter	1
C1/2/3/4	Cassette 1/2/3/4 jam counter	1
DK	Side paper deck jam counter	1

<MISC>

T-16-65

COPIER>COUNTER>MISC		
Sub-item	**Description**	**Level**
LSR-MTR	Scanner motor counter This counter counts motor rotations. If the time until the motor run become stable is shorter than the average, however, this counter is not incremented. Average time iR2230/2870: About 1.3 seconds iR3570/4570: About 3.3 seconds	1

<DRBL-1>

T-16-66

COPIER>COUNTER>DRBL-1		
Sub-item	**Description**	**Level**
TR-ROLL	Transfer roller counter Irrespective of the paper size, large or small, this counter is incremented one.	1
SP-SC-EL	Separate discharge needle high-voltage ON counter Irrespective of the paper size, large or small, this counter is incremented one.	1

COPIER>COUNTER>DRBL-1		
Sub-item	**Description**	**Level**
DVG-CYL	Developing cylinder rotation counter Irrespective of the paper size, large or small, this counter is incremented one.	1
C1/2/3/4-PU-RL	Cassette 1/2/3/4 feed roller counter This counter is incremented two for the large size and one for the small size.	1
C1/2/3/4-SP-RL	Cassette 1/2/3/4 separation roller counter This counter is incremented two for the large size and one for the small size.	1
C1/2/3/4-FD-RL	Cassette 1/2/3/4 transport roller counter This counter is incremented two for the large size and one for the small size.	1
M-PU-RL	Manual paper feed roller counter This counter is incremented two for the large size and one for the small size.	1
M-SP-PD	Manual separation pad counter This counter is incremented two for the large size and one for the small size.	1
FX-LW-RL	Lower fixing roller counter This counter is incremented two for the large size and one for the small size.	1
FX-FILM	Fixing film counter This counter is incremented two for the large size and one for the small size.	1
FX-CL-RL	Fixing cleaning roller counter This counter is incremented two for the large size and one for the small size.	1
FX-LW-BR	Pressurizing roller bearing counter This counter is incremented two for the large size and one for the small size.	1
FL-WD	Fixing unit counter by paper size (Wide paper) This counter is incremented one when paper of 279.4 mm or greater main scan width has passed.	1
FL-NRW	Fixing unit counter by paper size (Narrow paper) This counter is incremented one when paper of main scan width smaller than 279.4 mm has passed.	1

COPIER>COUNTER>DRBL-1		
Sub-item	**Description**	**Level**
OZ-FIL-1	Ozone filter (FM1) fan counter This counter is incremented two for the large size and one for the small size.	1

<DRBL-2>

T-16-67

COPIER>COUNTER>DRBL-2		
Sub-item	**Description**	**Level**
DF-PU-RL	ADF paper feed roller counter Irrespective of the paper size, large or small, this counter is incremented one for each read document (not side) both in simplex mode and duplex mode.	1
DF-SP-PL	ADF separator counter The large and small sizes are not distinguished from each other.	1
DF-SP-PD	ADF separation pad counter Irrespective of the paper size, large or small, this counter is incremented one for each read document (not side) both in simplex mode and duplex mode.	1
DF-FD-RL	ADF transport roller counter Irrespective of the paper size, large or small, this counter is incremented one for each document in simplex mode and three for each read document (front, back, and idle transfer) in duplex mode.	1
LNT-TAPE	ADF dust collection tape counter Irrespective of the paper size, large or small, this counter is incremented one for each read document (not side) both in simplex mode and duplex mode.	1
PD-PU-RL	Paper deck feed roller counter This counter is incremented two for the large size and one for the small size.	1
PD-SP-RL	Paper deck separation roller counter This counter is incremented two for the large size and one for the small size.	1
PD-FD-RL	Paper deck transport roller counter This counter is incremented two for the large size and one for the small size.	1

COPIER>COUNTER>DRBL-2		
Sub-item	**Description**	**Level**
SORT	Sort counter The large and small sizes are not distinguished from each other.	1
FIN-STPR	Stacker stapling counter	1
SADDLE	Saddle paper transport counter The large and small sizes are not distinguished from each other.	1
SDL-STPL	Saddle stapling counter	1
PUNCH	Punching counter	1
FN-BFFRL	Buffer roller counter The large and small sizes are not distinguished from each other.	1

Chapter 17 Service Tools

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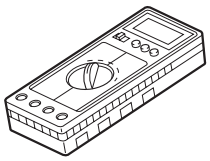
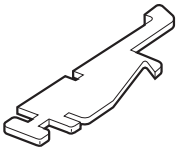
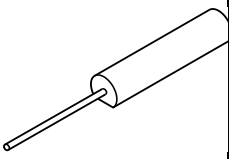
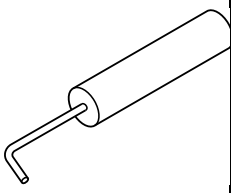
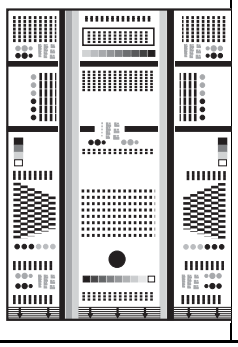
17.1 Special Tools

0007-6516

iR2270 / iR2870 / iR3570 / iR4570

In addition to the standard tools set, you will need the following special tools for servicing of the machine:

T-17-1

Tool name	Tool No.	Rank	Shape	Uses
Digital multimeter	FY9-2002	A		For making electrical checks.
Cover switch	TKN-0093	A		
Tester extension pin	FY9-3038	A		As an addition when making an electrical check.
Tester extension pin (L-shipped)	FY9-3039	A		As an addition when making an electrical check.
NA-3 Test Chart	FY9-9196	A		For checking and adjusting images.

Key to Notation (rank)

A: each service engineer is expected to carry one.

B: each group of 5 service engineers is expected to carry one.

C: each workshop is expected to carry one.

iR2270 / iR2870 / iR3570 / iR4570

T-17-2

Name	Uses	Composition	Remarks
Alcohol	cleaning; e.g., glass, plastic, rubber; external covers	fluoride-family hydrocarbon alcohol surface activating agent water	- Do not bring near fire. - Procure locally. - IPA (isopropyl alcohol) may be substituted.
Solvent	cleaning; e.g., metal; soiling with oil or toner	fluorine-family hydrocarbon chlorine-family hydrocarbon alcohol	- Do not bring near fire. - Procure locally. - MEK may be substituted.
Lubricant		mineral oil (paraffin family)	- CK-0524 (100 cc)
Lubricant	drive mechanism, sliding mechanism	silicone oil	- CK-0551 (20 g)
Lubricant (EM-50L)	gear	special oil special solid lubricating agent lithium soap	- HY9-0007
Lubricant	scanner rail	silicone oil	- KF96SS (300CS) - FY9-6011 (50 cc)

Oct 8 2004

Canon

Canon iR3570/4570, 2270/2870 Series

Parts Catalog

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FC5-0496-000	140 - 38	FC5-0637-000	301 - 17	FC5-0957-000	100 - 18
FC5-0497-000	315 - 8	FC5-0641-000	102 - 3	FC5-0958-000	102 - 49
FC5-0520-000	315 - 2	FC5-0652-000	140 - 6	FC5-0959-000	103 - 1
FC5-0521-000	140 - 2	FC5-0653-020	140 - 7	FC5-0972-000	140 - 16
FC5-0522-000	140 - 3	FC5-0655-000	810 - 26	FC5-0974-000	353 - 5
FC5-0524-000	140 - 4	FC5-0657-000	140 - 42	FC5-0976-000	354 - 14
FC5-0525-000	140 - 5	FC5-0658-000	140 - 43	FC5-0977-000	354 - 10
FC5-0526-000	315 - 9	FC5-0659-000	140 - 8	FC5-0978-020	351 - 3
FC5-0527-000	315 - 10	FC5-0673-000	101 - 7	FC5-0985-000	352 - 20
FC5-0529-000	140 - 30	FC5-0674-000	140 - 10	FC5-0987-000	352 - 1
FC5-0530-000	315 - 17	FC5-0676-000	140 - 11	FC5-0988-000	352 - 2
FC5-0539-000	102 - 38	FC5-0677-000	140 - 12	FC5-0989-020	352 - 3
FC5-0540-000	102 - 39	FC5-0682-000	140 - 13	FC5-0991-000	352 - 21
FC5-0541-000	315 - 11	FC5-0685-000	140 - 14	FC5-0992-000	351 - 4
FC5-0542-000	140 - 32	FC5-0686-000	101 - 8	FC5-0996-000	353 - 6
FC5-0543-000	140 - 31	FC5-0687-000	101 - 9	FC5-0997-000	353 - 7
FC5-0544-000	315 - 18	FC5-0688-000	101 - 10	FC5-0998-000	353 - 18
FC5-0546-000	315 - 15	FC5-0689-000	101 - 11	FC5-1003-000	354 - 15
FC5-0547-000	102 - 40	FC5-0690-000	140 - 15	FC5-1005-000	354 - 16
FC5-0548-000	141 - 1	FC5-0691-000	140 - 44	FC5-1006-000	354 - 17
FC5-0549-000	141 - 13	FC5-0697-000	810 - 32	FC5-1009-000	354 - 11
FC5-0567-000	102 - 17	FC5-0703-000	140 - 46	FC5-1010-000	354 - 30
FC5-0568-000	102 - 18	FC5-0792-000	210 - 5	FC5-1011-000	354 - 31
FC5-0576-000	100 - 2	FC5-0798-000	350 - 2	FC5-1012-000	354 - 3
FC5-0583-000	300 - 11	FC5-0799-000	350 - 3	FC5-1013-000	352 - 22
FC5-0583-000	301 - 11	FC5-0800-000	350 - 4	FC5-1013-000	354 - 18
FC5-0584-000	301 - 13	FC5-0803-000	100 - 35	FC5-1014-000	354 - 19
FC5-0585-000	300 - 12	FC5-0805-000	353 - 17	FC5-1017-000	353 - 8
FC5-0588-000	145 - 2	FC5-0806-000	350 - 6	FC5-1019-020	351 - 5
FC5-0590-000	145 - 4	FC5-0807-000	100 - 36	FC5-1020-020	354 - 4
FC5-0591-000	300 - 13	FC5-0812-000	100 - 17	FC5-1023-000	354 - 5
FC5-0592-000	145 - 5	FC5-0859-000	351 - 1	FC5-1024-000	354 - 35
FC5-0593-000	145 - 6	FC5-0860-000	100 - 43	FC5-1025-000	352 - 4
FC5-0594-000	145 - 7	FC5-0862-000	354 - 9	FC5-1038-000	352 - 5
FC5-0595-000	310 - 25	FC5-0870-000	352 - 8	FC5-1053-000	353 - 9
FC5-0595-000	311 - 25	FC5-0871-000	353 - 19	FC5-1054-000	354 - 36
FC5-0596-000	104 - 3	FC5-0872-000	354 - 2	FC5-1056-000	130 - 3
FC5-0598-000	300 - 14	FC5-0873-000	353 - 20	FC5-1057-000	130 - 13
FC5-0598-000	301 - 14	FC5-0888-000	351 - 2	FC5-1059-000	130 - 14
FC5-0605-000	301 - 16	FC5-0889-000	100 - 20	FC5-1061-000	130 - 16
FC5-0622-000	300 - 15	FC5-0942-000	100 - 21	FC5-1064-000	130 - 17

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FC5-1065-000	130 - 18	FC5-1251-000	640 - 21	FC5-1446-000	210 - 13
FC5-1066-000	130 - 19	FC5-1262-000	102 - 30	FC5-1447-000	210 - 14
FC5-1067-000	130 - 1	FC5-1265-000	621 - 12	FC5-1473-000	210 - 15
FC5-1093-000	100 - 33	FC5-1268-000	621 - 33	FC5-1492-000	210 - 28
FC5-1094-000	100 - 28	FC5-1269-000	621 - 30	FC5-1499-000	210 - 16
FC5-1100-000	100 - 24	FC5-1274-000	621 - 13	FC5-1506-000	130 - 15
FC5-1101-000	100 - 5	FC5-1277-000	100 - 12	FC5-1516-000	106 - 4
FC5-1103-000	100 - 6	FC5-1278-000	100 - 13	FC5-1517-000	106 - 5
FC5-1104-000	100 - 7	FC5-1280-000	100 - 22	FC5-1518-000	106 - 6
FC5-1106-000	100 - 8	FC5-1282-000	100 - 14	FC5-1527-000	141 - 16
FC5-1108-000	100 - 9	FC5-1307-000	101 - 5	FC5-1535-000	101 - 17
FC5-1109-000	100 - 10	FC5-1341-000	810 - 3	FC5-1535-000	104 - 8
FC5-1111-000	100 - 29	FC5-1343-000	810 - 54	FC5-1536-000	141 - 8
FC5-1113-000	101 - 1	FC5-1345-000	810 - 57	FC5-1539-000	102 - 23
FC5-1114-000	100 - 19	FC5-1346-000	810 - 50	FC5-1540-000	102 - 24
FC5-1115-000	100 - 25	FC5-1348-000	810 - 51	FC5-1541-000	102 - 25
FC5-1117-000	100 - 11	FC5-1351-000	810 - 4	FC5-1545-000	102 - 26
FC5-1118-000	101 - 20	FC5-1353-000	810 - 52	FC5-1546-000	140 - 60
FC5-1120-000	141 - 2	FC5-1354-000	140 - 17	FC5-1552-000	141 - 14
FC5-1124-000	141 - 4	FC5-1356-000	810 - 21	FC5-1558-000	141 - 9
FC5-1125-000	141 - 5	FC5-1358-000	810 - 6	FC5-1559-000	141 - 10
FC5-1126-000	141 - 6	FC5-1360-000	810 - 7	FC5-1560-000	141 - 17
FC5-1127-000	141 - 7	FC5-1367-000	810 - 8	FC5-1562-000	102 - 34
FC5-1130-000	104 - 1	FC5-1368-000	810 - 9	FC5-1564-000	102 - 41
FC5-1131-000	810 - 2	FC5-1382-000	810 - 53	FC5-2804-000	164 - 21
FC5-1146-000	102 - 52	FC5-1383-000	810 - 10	FC5-4264-000	161 - 8
FC5-1152-000	100 - 30	FC5-1384-000	810 - 11	FC5-4273-020	161 - 33
FC5-1168-000	110 - 1	FC5-1400-000	130 - 21	FC5-4274-000	161 - 29
FC5-1201-000	621 - 29	FC5-1407-000	103 - 2	FC5-4278-000	161 - 34
FC5-1205-000	621 - 24	FC5-1413-000	101 - 2	FC5-4279-000	161 - 4
FC5-1206-000	621 - 25	FC5-1420-000	102 - 15	FC5-4280-000	161 - 18
FC5-1208-000	621 - 1	FC5-1422-020	300 - 18	FC5-4281-000	161 - 19
FC5-1209-000	621 - 2	FC5-1422-020	301 - 18	FC5-4285-030	161 - 24
FC5-1210-000	621 - 10	FC5-1423-000	300 - 19	FC5-4286-000	161 - 21
FC5-1211-000	621 - 11	FC5-1423-000	301 - 19	FC5-4287-000	161 - 22
FC5-1214-000	621 - 9	FC5-1424-020	300 - 20	FC5-4289-000	161 - 39
FC5-1215-000	621 - 31	FC5-1424-020	301 - 20	FC5-4291-000	161 - 25
FC5-1217-000	621 - 32	FC5-1425-000	300 - 21	FC5-4292-000	161 - 28
FC5-1218-000	621 - 34	FC5-1425-000	301 - 21	FC5-4293-000	161 - 26
FC5-1221-000	621 - 3	FC5-1426-000	210 - 8	FC5-4295-000	161 - 20
FC5-1239-000	640 - 2	FC5-1427-000	210 - 9	FC5-4302-000	162 - 15
FC5-1243-000	102 - 29	FC5-1439-000	210 - 10	FC5-4305-000	162 - 2
FC5-1246-000	640 - 3	FC5-1442-000	210 - 52	FC5-4306-000	162 - 3
FC5-1249-000	640 - 4	FC5-1443-000	210 - 53	FC5-4307-000	162 - 4

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FC5-4308-000	162 - 6	FC5-5089-000	900 - 10	FC6-2797-000	164 - 34
FC5-4309-000	162 - 20	FC5-5457-000	130 - 21	FC6-2798-000	164 - 37
FC5-4323-000	163 - 2	FC5-5472-000	991 - 1	FC6-2899-000	621 - 39
FC5-4324-000	163 - 3	FC5-5473-000	991 - 2	FC6-2900-000	621 - 37
FC5-4326-000	163 - 5	FC5-5474-000	353 - 10	FC6-2902-000	140 - 18
FC5-4327-000	163 - 7	FC5-6003-000	352 - 24	FC6-2903-000	130 - 21
FC5-4329-000	163 - 8	FC5-6003-000	354 - 12	FC6-2904-000	106 - 2
FC5-4336-000	163 - 9	FC5-6004-000	352 - 27	FC6-2909-000	640 - 5
FC5-4338-000	163 - 26	FC5-6006-000	354 - 6	FC6-2911-000	141 - 3
FC5-4341-000	163 - 24	FC5-6008-000	354 - 20	FC6-2915-000	350 - 13
FC5-4353-000	164 - 23	FC5-6010-000	352 - 9	FC6-2915-000	353 - 2
FC5-4354-000	164 - 8	FC5-6011-000	351 - 6	FC6-2915-000	354 - 27
FC5-4356-000	164 - 24	FC5-6012-000	354 - 32	FC6-2918-000	101 - 18
FC5-4358-000	164 - 17	FC5-6014-000	353 - 21	FC6-2920-000	810 - 13
FC5-4359-000	164 - 18	FC5-6019-000	354 - 21	FC6-2924-000	810 - 14
FC5-4362-000	164 - 32	FC5-6540-000	100 - 15	FC6-2925-000	810 - 15
FC5-4363-000	164 - 25	FC5-6578-000	102 - 47	FC6-2927-000	810 - 16
FC5-4365-000	164 - 65	FC5-6934-000	310 - 19	FC6-2928-000	810 - 45
FC5-4367-000	164 - 59	FC5-6934-000	311 - 19	FC6-2929-000	810 - 17
FC5-4368-000	164 - 48	FC5-7156-000	810 - 33	FC6-2937-000	640 - 6
FC5-4372-020	164 - 64	FC5-7160-000	810 - 12	FC6-2941-000	810 - 22
FC5-4373-000	164 - 61	FC5-7182-000	810 - 56	FC6-2942-000	810 - 5
FC5-4374-000	164 - 62	FC5-7206-000	621 - 37	FC6-2943-000	810 - 23
FC5-4376-000	164 - 26	FC5-7208-000	261 - 4	FC6-4624-000	103 - 9
FC5-4381-000	164 - 27	FC5-7210-000	100 - 38	FC6-4627-000	810 - 49
FC5-4382-000	164 - 33	FC5-7211-000	100 - 38	FC6-4815-000	140 - 9
FC5-4391-000	161 - 43	FC5-7212-000	100 - 38	FC6-4820-000	103 - 8
FC5-4396-000	161 - 44	FC5-7213-000	100 - 38	FC6-4824-000	101 - 21
FC5-4399-000	161 - 27	FC5-7214-000	100 - 38	FC6-4832-000	100 - 38
FC5-4400-000	161 - 3	FC5-7215-000	100 - 38	FC6-4833-000	100 - 38
FC5-4402-000	161 - 41	FC5-7216-000	300 - 31	FC6-4834-000	100 - 38
FC5-4406-000	162 - 19	FC5-7216-000	301 - 31	FC6-4837-000	100 - 38
FC5-4408-000	161 - 42	FC5-7217-000	315 - 19	FC6-4838-000	100 - 38
FC5-4410-000	160 - 7	FC5-7228-000	810 - 50	FC6-4839-000	100 - 38
FC5-4421-000	162 - 7	FC5-7413-000	145 - 12	FC6-5067-000	100 - 41
FC5-4422-000	162 - 8	FC6-2759-000	210 - 2	FC6-5075-000	100 - 40
FC5-4424-000	163 - 10	FC6-2763-000	210 - 35	FC6-5076-000	100 - 40
FC5-4424-000	164 - 73	FC6-2764-000	210 - 38	FC6-5085-000	810 - 20
FC5-4425-000	163 - 11	FC6-2765-000	210 - 3	FC6-5087-000	621 - 36
FC5-4425-000	164 - 74	FC6-2778-000	161 - 10	FC6-7207-000	810 - 5
FC5-4427-000	160 - 1	FC6-2781-000	164 - 5	FF3-4303-000	164 - 39
FC5-4427-000	210 - 51	FC6-2784-000	163 - 25	FF3-4306-000	161 - 11
FC5-4428-000	161 - 17	FC6-2785-000	164 - 1	FF3-4526-000	110 - 6
FC5-4458-000	130 - 2	FC6-2791-000	164 - 6	FF3-4527-000	110 - 7

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FF3-4529-000	103 - 5	FG6-8939-000	130 - 12	FK2-0149-000	621 - 4
FF3-4607-000	161 - 14	FH2-6552-000	100 - 16	FK2-0149-000	810 - 18
FF3-4608-000	161 - 2	FH2-7037-000	130 - 4	FK2-0160-000	101 - 6
FF3-4609-000	162 - 9	FH2-7061-000	104 - 16	FK2-0216-000	161 - 32
FF6-0345-000	350 - 5	FH2-7072-000	992 - 2	FK2-0246-000	130 - 5
FF6-2058-000	310 - 26	FH2-7174-000	210 - 17	FK2-0338-000	105 - 2
FF6-2058-000	311 - 26	FH4-1429-000	931 - IC522	FK2-0339-000	105 - 2
FF6-2059-000	310 - 27	FH4-6145-000	900 - IC1005	FK2-0340-000	105 - 1
FF6-2059-000	311 - 27	FH4-6204-000	930 - IC2	FK2-0341-000	105 - 1
FF6-2064-000	300 - 22	FH4-6204-000	994 - IC10	FK2-0358-000	621 - 14
FF6-2064-000	301 - 22	FH4-6218-000	900 - IC1006	FK2-0358-000	640 - 7
FF6-2363-000	310 - 13	FH4-6300-000	900 - IC1003	FK2-0360-000	140 - 20
FF6-2363-000	311 - 13	FH4-6300-000	930 - IC8	FK2-0361-000	102 - 7
FG3-2302-000	310 - 28	FH4-6302-000	900 - IC1009	FK2-0362-000	251 - 2
FG3-2302-000	311 - 28	FH4-6313-000	931 - IC520	FK2-0365-000	281 - 2
FG3-2826-000	992 - 1	FH5-1021-010	352 - 10	FK2-0367-000	106 - 1
FG3-2834-000	130 - 7	FH5-1028-000	210 - 48	FK2-0368-000	103 - 6
FG3-2835-000	130 - 8	FH5-1108-010	352 - 11	FK2-0379-000	621 - 5
FG3-2836-000	130 - 9	FH5-1128-000	164 - 71	FK2-0384-000	102 - 27
FG3-3125-000	161 - 16	FH5-1129-000	164 - 70	FK2-0385-000	250 - 2
FG3-3152-000	210 - 26	FH5-3550-000	991 - 3	FK2-0404-000	250 - 8
FG3-3153-000	210 - 29	FH6-5005-000	250 - 7	FK2-0404-000	251 - 7
FG3-3153-000	210 - 44	FH6-5075-000	102 - 7	FK2-0405-000	900 - 9
FG3-3158-000	210 - 45	FH6-5076-000	250 - 1	FK2-0407-000	900 - 8
FG3-3178-020	105 - 3	FH6-5076-000	251 - 1	FK2-0408-000	310 - 29
FG3-3187-000	315 - 1	FH6-5128-000	164 - 7	FK2-0408-000	311 - 29
FG3-3188-000	140 - 27	FH7-7312-000	310 - 30	FK2-0643-000	001 - 2
FG3-3189-000	140 - 19	FH7-7312-000	311 - 30	FK2-0646-000	001 - 3
FG3-3294-000	351 - 7	FH7-7569-000	210 - 20	FK2-0695-000	001 - 4
FG3-3295-000	354 - 7	FH7-7625-000	110 - 3	FK2-0696-000	001 - 5
FG3-3297-000	351 - 8	FH7-7626-000	110 - 3	FK2-0920-000	001 - 1
FG3-3299-000	353 - 11	FH7-9334-000	210 - 31	FK2-0921-000	001 - 2
FG3-3301-000	351 - 9	FK2-0015-000	106 - 12	FK2-0923-000	001 - 3
FG3-3303-000	164 - 40	FK2-0140-000	110 - 4	FK2-0930-000	001 - 5
FG3-3757-000	162 - 18	FK2-0146-000	110 - 9	FL2-0101-000	140 - 29
FG3-3758-000	162 - 5	FK2-0148-000	110 - 8	FL2-0106-000	140 - 1
FG3-3765-000	931 -	FK2-0149-000	101 - 16	FL2-0116-000	102 - 21
FG3-3766-000	210 - 46	FK2-0149-000	102 - 44	FL2-0126-000	145 - 3
FG3-3767-000	210 - 39	FK2-0149-000	140 - 28	FL2-0127-000	210 - 21
FG3-3768-000	210 - 34	FK2-0149-000	281 - 1	FL2-0128-000	210 - 22
FG3-3793-000	210 - 39	FK2-0149-000	351 - 10	FL2-0143-000	140 - 45
FG3-3794-000	210 - 39	FK2-0149-000	352 - 6	FL2-0178-000	350 - 8
FG3-3795-000	210 - 34	FK2-0149-000	353 - 12	FL2-0203-000	101 - 19
FG3-3965-000	130 - 11	FK2-0149-000	354 - 22	FL2-0203-000	106 - 14

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FL2-0237-000	100 - 31	FL2-0982-000	110 - 5	FM2-0296-000	810 - 28
FL2-0245-000	102 - 42	FL2-1092-000	130 - 6	FM2-0299-000	810 - 35
FL2-0246-000	141 - 18	FL2-1200-000	352 - 23	FM2-0300-000	810 - 38
FL2-0247-000	141 - 11	FL2-1201-000	353 - 13	FM2-0303-000	101 - 4
FL2-0250-000	141 - 12	FL2-1202-000	353 - 14	FM2-0334-000	460 -
FL2-0251-000	141 - 15	FL2-1203-000	353 - 15	FM2-0338-000	106 - 7
FL2-0267-000	101 - 3	FL2-1205-000	354 - 37	FM2-0339-000	106 - 3
FL2-0279-000	210 - 25	FL2-1206-000	354 - 8	FM2-0342-000	991 -
FL2-0290-000	640 - 10	FL2-1207-000	354 - 23	FM2-0343-000	990 - 2
FL2-0291-000	640 - 8	FL2-1208-000	354 - 13	FM2-0353-000	110 -
FL2-0292-000	640 - 9	FL2-1209-000	354 - 24	FM2-0354-000	110 -
FL2-0295-000	621 - 26	FL2-1210-000	354 - 33	FM2-0355-000	140 - 58
FL2-0298-000	140 - 59	FL2-1212-030	353 - 16	FM2-0356-000	810 -
FL2-0303-000	640 - 22	FL2-1517-000	102 - 8	FM2-0357-000	810 -
FL2-0307-000	621 - 15	FL2-1518-000	102 - 13	FM2-0358-000	810 - 19
FL2-0308-000	621 - 27	FL2-2942-000	210 - 23	FM2-0359-000	810 - 19
FL2-0309-000	621 - 6	FL2-2943-000	210 - 24	FM2-0360-000	130 -
FL2-0313-000	621 - 16	FL2-2944-000	210 - 24	FM2-0361-000	130 -
FL2-0314-000	102 - 50	FL2-2945-000	210 - 24	FM2-0362-000	130 -
FL2-0315-000	100 - 26	FL2-2946-000	210 - 24	FM2-0384-000	110 -
FL2-0322-000	500 - 1	FL2-2952-000	164 - 9	FM2-0387-000	315 -
FL2-0330-000	102 - 48	FL2-2954-000	161 - 6	FM2-0389-000	102 - 14
FL2-0352-000	100 - 39	FL2-2997-000	210 - 18	FM2-0860-000	992 - 8
FL2-0941-000	161 - 12	FL2-2999-000	210 - 4	FM2-1116-000	130 - 20
FL2-0943-000	161 - 35	FL2-3265-000	102 - 45	FM2-1328-000	352 -
FL2-0945-000	161 - 30	FL2-3266-000	261 - 2	FM2-1335-000	354 -
FL2-0946-000	161 - 31	FM2-0111-000	140 - 21	FM2-1340-000	354 - 26
FL2-0947-000	161 - 13	FM2-0131-000	145 -	FM2-1577-000	310 -
FL2-0948-000	163 - 12	FM2-0177-000	350 - 14	FM2-1578-000	311 -
FL2-0949-000	162 - 10	FM2-0241-000	250 -	FM2-1771-000	281 -
FL2-0950-000	162 - 11	FM2-0242-000	281 -	FM2-1772-000	251 -
FL2-0951-000	162 - 1	FM2-0244-000	992 -	FM2-1774-000	810 -
FL2-0952-000	162 - 12	FM2-0245-000	910 -	FM2-1786-000	810 -
FL2-0953-000	163 - 13	FM2-0250-000	140 -	FM2-1787-000	810 -
FL2-0955-000	163 - 14	FM2-0252-000	141 -	FM2-1792-000	810 - 19
FL2-0958-000	164 - 29	FM2-0260-000	910 -	FM2-1793-000	810 - 19
FL2-0959-000	164 - 30	FM2-0261-000	104 - 14	FM2-1794-000	810 - 19
FL2-0960-000	164 - 31	FM2-0276-000	460 -	FM2-2758-000	130 - 10
FL2-0961-000	161 - 7	FM2-0286-000	621 -	FM2-2764-000	105 - 7
FL2-0962-000	164 - 51	FM2-0287-000	640 -	FM2-2767-000	930 - 1
FL2-0963-000	164 - 52	FM2-0289-000	640 - 11	FM2-2768-000	315 - 14
FL2-0964-000	164 - 53	FM2-0290-000	621 - 7	FM2-2769-000	810 - 40
FL2-0965-000	164 - 16	FM2-0292-000	810 -	FM2-2770-000	102 - 16
FL2-0968-000	164 - 58	FM2-0293-000	810 - 19	FM2-2771-000	102 - 22

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FM2-2774-000	930 - 2	FM2-3120-000	990 - 6	FS6-8992-000	100 - 46
FM2-2776-000	103 - 7	FM2-3122-000	992 - 3	FS7-2660-000	161 - 36
FM2-2779-000	930 - 1	FM2-3123-000	992 - 5	FS7-2662-000	161 - 5
FM2-2789-000	992 - 12	FM2-3124-000	992 - 6	FS7-2663-000	163 - 16
FM2-2790-000	992 - 10	FM2-3127-000	992 - 7	FS7-2664-000	164 - 66
FM2-2799-000	900 - 1	FM2-3128-000	992 - 9	FS7-2666-000	164 - 43
FM2-2815-000	105 - 13	FM2-3129-000	990 - 7	FS7-2788-000	104 - 5
FM2-2816-000	281 - 3	FM2-3130-000	990 - 8	FS7-2788-000	145 - 9
FM2-2817-000	107 - 1	FM2-3221-000	994 -	FS7-2797-000	310 - 36
FM2-2818-000	106 - 13	FM2-3226-000	900 - 2	FS7-2797-000	311 - 36
FM2-2819-000	105 - 9	FM2-3265-000	350 - 1	FS7-2798-000	310 - 37
FM2-2820-000	105 - 10	FM2-4471-000	353 -	FS7-2798-000	311 - 37
FM2-2824-000	105 - 8	FS1-1205-000	310 - 32	FS7-2800-000	310 - 38
FM2-2826-000	107 - 2	FS1-1205-000	311 - 32	FS7-2800-000	311 - 38
FM2-2830-000	105 - 11	FS1-1213-000	310 - 33	FS7-2801-000	310 - 39
FM2-2831-000	104 - 9	FS1-1213-000	311 - 33	FS7-2801-000	311 - 39
FM2-2833-000	105 - 11	FS1-1512-000	810 - 55	FS7-2802-000	310 - 40
FM2-2838-000	261 - 3	FS1-9009-020	810 - 27	FS7-2802-000	311 - 40
FM2-2839-000	621 - 35	FS1-9010-020	164 - 63	FS7-2803-000	310 - 41
FM2-2840-000	105 - 12	FS2-1014-000	621 - 17	FS7-2803-000	311 - 41
FM2-2841-000	105 - 12	FS2-9010-000	164 - 60	FS7-2805-000	300 - 24
FM2-2842-000	250 - 3	FS5-1209-000	140 - 33	FS7-2805-000	301 - 24
FM2-2842-000	251 - 3	FS5-1377-000	354 - 25	FS7-2859-000	353 - 24
FM2-2843-000	105 - 4	FS5-1595-000	104 - 4	FS7-2859-000	354 - 34
FM2-2845-000	102 - 51	FS5-1595-000	145 - 8	FS7-5909-000	310 - 42
FM2-2847-000	810 - 43	FS5-1597-000	310 - 34	FS7-5909-000	311 - 42
FM2-2851-000	102 - 9	FS5-1597-000	311 - 34	FS7-5910-000	310 - 43
FM2-2853-000	102 - 53	FS5-1943-000	350 - 9	FS7-5910-000	311 - 43
FM2-2856-000	100 - 44	FS5-1943-000	352 - 25	FS7-8143-020	100 - 48
FM2-2857-000	810 - 44	FS5-1943-000	353 - 22	FU3-0280-000	310 - 44
FM2-2858-000	102 - 46	FS5-1943-000	354 - 38	FU3-0280-000	311 - 44
FM2-2859-000	100 - 47	FS5-1945-000	810 - 36	FU3-0282-000	310 - 45
FM2-2862-000	101 - 14	FS5-1947-000	250 - 4	FU3-0282-000	311 - 45
FM2-2863-000	990 - 5	FS5-1947-000	251 - 4	FU3-0283-000	310 - 46
FM2-2868-000	110 - 2	FS5-6448-000	640 - 12	FU3-0283-000	311 - 46
FM2-2954-000	163 -	FS5-6488-000	353 - 23	FU3-0284-000	310 - 47
FM2-2955-000	163 - 15	FS5-9227-020	210 - 11	FU3-0284-000	311 - 47
FM2-2956-000	163 - 27	FS5-9664-000	104 - 15	FU3-0285-000	106 - 8
FM2-2957-000	163 - 23	FS6-1063-000	310 - 35	FU3-0288-000	310 - 48
FM2-2958-000	163 - 18	FS6-1063-000	311 - 35	FU3-0288-000	311 - 48
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FM2-2961-000	164 - 14	FS6-2791-000	140 - 35	FU3-0289-000	311 - 49
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FU3-0291-000	310 - 51	FU5-0628-000	163 - 20	FU5-2104-000	300 - 29
FU3-0291-000	311 - 51	FU5-0629-000	164 - 44	FU5-2104-000	301 - 29
FU3-0292-000	310 - 52	FU5-0630-000	164 - 45	FU5-2105-000	210 - 41
FU3-0292-000	311 - 52	FU5-0633-000	162 - 17	FU5-2364-000	164 - 41
FU3-0293-000	300 - 25	FU5-1006-000	140 - 49	FU5-2611-000	141 - 22
FU3-0293-000	301 - 25	FU5-1026-000	640 - 18	FU5-2652-000	102 - 10
FU3-0294-000	300 - 26	FU5-1028-000	102 - 36	FU5-2653-000	104 - 11
FU3-0294-000	301 - 26	FU5-1029-000	102 - 35	FU5-3016-000	140 - 51
FU3-0347-000	310 - 53	FU5-1030-000	102 - 31	FU5-3018-000	354 - 39
FU3-0347-000	311 - 53	FU5-1031-000	640 - 19	FU5-3019-000	353 - 26
FU3-0349-000	310 - 54	FU5-1168-000	163 - 19	FU5-3020-000	352 - 15
FU3-0349-000	311 - 54	FU5-1169-000	164 - 46	FU5-3020-000	353 - 27
FU3-0350-000	310 - 55	FU5-1170-000	164 - 47	FU5-3021-000	352 - 26
FU3-0350-000	311 - 55	FU5-1171-000	164 - 42	FU5-3021-000	354 - 40
FU3-0352-000	310 - 56	FU5-1172-000	163 - 21	FU5-3022-000	352 - 16
FU3-0352-000	311 - 56	FU5-1172-000	164 - 72	FU5-3030-000	210 - 49
FU5-0006-000	140 - 48	FU5-1173-000	161 - 37	FU5-3146-000	164 - 50
FU5-0054-000	352 - 12	FU5-2030-000	145 - 10	FU5-3147-000	164 - 35
FU5-0061-000	140 - 36	FU5-2032-000	300 - 27	FU5-3148-000	164 - 36
FU5-0062-000	315 - 12	FU5-2033-000	301 - 27	FU5-3149-000	164 - 69
FU5-0063-000	315 - 13	FU5-2034-000	140 - 37	FU5-3150-000	164 - 38
FU5-0076-000	353 - 25	FU5-2035-000	102 - 43	FU5-3178-000	102 - 11
FU5-0077-000	352 - 13	FU5-2037-000	141 - 20	FU5-3179-000	102 - 12
FU5-0078-000	352 - 14	FU5-2038-000	104 - 10	FU5-3180-000	102 - 20
FU5-0087-000	250 - 9	FU5-2044-000	140 - 55	FU5-3328-000	210 - 43
FU5-0087-000	251 - 8	FU5-2045-000	140 - 56	FU5-3333-000	163 - 17
FU5-0095-000	281 - 4	FU5-2057-000	210 - 42	FU5-3336-000	164 - 67
FU5-0096-000	281 - 5	FU5-2063-000	140 - 50	FU5-3337-000	164 - 54
FU5-0097-000	281 - 6	FU5-2064-000	101 - 12	FU5-6014-000	140 - 57
FU5-0098-000	250 - 10	FU5-2066-000	104 - 13	FU5-8001-000	210 - 36
FU5-0098-000	251 - 9	FU5-2067-000	140 - 47	FU5-8003-000	210 - 36
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FU5-0108-000	621 - 18	FU5-2073-000	810 - 34	FU5-8007-000	210 - 36
FU5-0109-000	621 - 19	FU5-2074-000	350 - 12	FU5-8011-000	145 - 11
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FU5-0111-000	640 - 14	FU5-2079-000	250 - 11	FU5-8550-000	210 - 50
FU5-0112-000	640 - 15	FU5-2079-000	251 - 10	FU5-8551-000	210 - 50
FU5-0113-000	640 - 16	FU5-2089-000	621 - 21	FU5-8552-000	210 - 50
FU5-0114-000	640 - 17	FU5-2090-000	102 - 32	FU5-8553-000	210 - 50
FU5-0115-000	621 - 20	FU5-2096-000	101 - 15	FU5-9006-020	210 - 30
FU5-0126-000	281 - 8	FU5-2097-000	300 - 28	FU5-9139-000	160 - 2
FU5-0127-000	810 - 48	FU5-2097-000	301 - 28	FU5-9140-000	160 - 3
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FU6-0021-000	810 - 48	VS1-7177-004	210 - 54	XA9-1415-000	210 - 32
FU6-0023-000	810 - 24	VS1-7177-006	210 - 55	XA9-1468-000	102 - 5
FU6-0024-000	261 - 5	VT2-5018-000	900 - 4	XB1-2300-306	161 - 504
FU6-0029-000	261 - 6	WA7-3296-000	900 - 5	XB1-2300-306	164 - 506
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FU6-2009-000	102 - 28	WE8-5764-000	900 - 7	XB1-2300-405	354 - 502
FU6-2010-000	141 - 19	WG8-5624-000	162 - 13	XB1-2300-407	103 - 4
FU6-2011-000	102 - 33	WG8-5624-000	164 - 56	XB1-2300-409	810 - 501
FU6-2012-000	621 - 38	WG8-5624-000	210 - 19	XB1-2300-605	210 - 504
FU6-2014-000	141 - 23	WM2-5216-000	900 - 3	XB1-2300-607	106 - 501
FU6-2016-000	101 - 22	WT2-5565-000	315 - 16	XB1-2300-607	310 - 501
FU6-2021-000	810 - 47	X71-9310-000	640 - 20	XB1-2300-607	311 - 501
FU6-2236-000	210 - 40	XA9-0265-000	105 - 5	XB1-2300-607	900 - 503
HH2-2830-000	990 - 4	XA9-0465-000	900 - 6	XB1-2301-407	102 - 503
NPN	001 -	XA9-0605-000	100 - 42	XB1-2400-603	110 - 501
NPN	100 -	XA9-0656-000	311 - 60	XB1-2400-606	164 - 505
NPN	101 -	XA9-0702-000	810 - 31	XB1-2400-607	310 - 508
NPN	102 -	XA9-0874-000	160 - 4	XB1-2400-607	311 - 508
NPN	103 -	XA9-0894-000	140 - 39	XB1-2400-807	100 - 502
NPN	104 -	XA9-0894-000	161 - 15	XB1-2401-406	161 - 507
NPN	105 -	XA9-0894-000	164 - 75	XB1-2402-007	110 - 502
NPN	106 -	XA9-0962-000	310 - 60	XB1-2500-603	110 - 505
NPN	107 -	XA9-1164-000	104 - 17	XB1-3300-607	310 - 502
NPN	160 -	XA9-1164-000	250 - 5	XB1-3300-607	311 - 502
NPN	161 -	XA9-1164-000	251 - 5	XB2-8300-607	300 - 501
NPN	210 -	XA9-1164-000	281 - 9	XB2-8300-607	301 - 501
NPN	261 -	XA9-1297-000	141 - 24	XB2-8300-607	900 - 501
NPN	300 -	XA9-1386-000	100 - 34	XB2-8300-805	210 - 501
NPN	301 -	XA9-1386-000	101 - 13	XB3-6300-600	310 - 503
NPN	350 -	XA9-1386-000	102 - 6	XB3-6300-600	311 - 503
NPN	351 -	XA9-1386-000	103 - 3	XB4-5300-607	141 - 501
NPN	500 -	XA9-1386-000	104 - 12	XB4-5300-607	621 - 501
NPN	900 -	XA9-1386-000	105 - 6	XB4-5300-607	640 - 501
NPN	930 -	XA9-1386-000	106 - 11	XB4-5300-607	810 - 502
NPN	990 -	XA9-1386-000	140 - 52	XB4-5300-805	351 - 502
RB1-6539-000	310 - 57	XA9-1386-000	210 - 12	XB4-5300-805	354 - 501
RB1-6539-000	311 - 57	XA9-1386-000	310 - 31	XB4-5300-806	161 - 502
RB1-8945-000	310 - 58	XA9-1386-000	351 - 11	XB4-5300-806	163 - 502
RB1-8945-000	311 - 58	XA9-1386-000	352 - 17	XB4-5300-807	300 - 502
RS1-1087-000	810 - 25	XA9-1386-000	354 - 41	XB4-5300-807	301 - 502
RS5-1446-000	810 - 41	XA9-1386-000	621 - 22	XB4-5301-007	130 - 501
RS5-1567-000	310 - 59	XA9-1386-000	990 - 3	XB4-5400-807	101 - 501
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XB4-5401-207	310 - 505	XD2-1100-502	351 - 501	XF2-4107-940	353 - 28
XB4-5401-207	311 - 505	XD2-1100-502	352 - 501	XF2-4108-240	352 - 19
XB4-7300-809	162 - 501	XD2-1100-502	353 - 503	XF2-4109-240	354 - 42
XB6-2300-409	250 - 501	XD2-1100-502	354 - 504	XF2-4112-240	140 - 53
XB6-2300-409	251 - 503	XD2-1100-502	640 - 507	XF2-4606-740	210 - 503
XB6-7300-000	900 - 502	XD2-1100-502	810 - 503	XF9-0727-000	164 - 4
XB6-7300-407	210 - 507	XD2-1100-642	102 - 504	XF9-0743-000	210 - 33
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XB6-7300-607	130 - 502	XD2-1100-642	261 - 502	XG9-0520-000	353 - 29
XB6-7300-607	261 - 501	XD2-1100-642	281 - 503	XG9-0521-000	640 - 510
XB6-7300-607	640 - 502	XD2-1100-642	621 - 504	XH9-0125-000	102 - 4
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100V	F14-3218-000KBR00001-
100V	F14-3221-000KGH00001-
100V	F14-3228-000KBS00001-
120V UL	F14-3231-000KGJ00001-
120V UL	F14-3238-000KBT00001-
230V	F14-3241-000KGM00001-
230V	F14-3248-000KBX00001-
230V CA	F14-3261-000KGN00001-
230V CA	F14-3268-000KBY00001-
230V EUR	F14-3291-000KGL00001-
230V EUR	F14-3298-000KBU00001-
100V	F14-3311-000KFZ00001-
100V	F14-3318-000KBK00001-
100V	F14-3321-000KGB00001-
100V	F14-3328-000KBL00001-
120V UL	F14-3331-000KGC00001-
120V UL	F14-3338-000KBM00001-
230V	F14-3341-000KGE00001-
230V	F14-3348-000KBP00001-
230V CA	F14-3361-000KGF00001-
230V CA	F14-3368-000KBQ00001-
230V EUR	F14-3391-000KGD00001-
230V EUR	F14-3398-000KBN00001-
100V	F14-5411-000KFM00001-
100V	F14-5418-000KAW00001-

100V	F14-5421-000KFN00001-
100V	F14-5428-000KAX00001-
120V UL	F14-5431-000KFP00001-
120V UL	F14-5438-000KAY00001-
230V	F14-5441-000KFR00001-
230V	F14-5448-000KBB00001-
230V CA	F14-5461-000KFS00001-
230V CA	F14-5468-000KBC00001-
230V EUR	F14-5491-000KFQ00001-
230V EUR	F14-5498-000KAZ00001-
100V	F14-6711-000KFT00001-
100V	F14-6718-000KBD00001-
100V	F14-6721-000KFU00001-
100V	F14-6728-000KBE00001-
120V UL	F14-6731-000KFV00001-
120V UL	F14-6738-000KBF00001-
230V	F14-6741-000KFX00001-
230V	F14-6748-000KBH00001-
230V CA	F14-6761-000KFY00001-
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350	PAPER DELIVERY ASSEMBLY	2-126
351	2ND 3RD DELIVERY ASSEMBLY	2-129
352	2ND UPPER DELIVERY ASSEMBLY	2-132
353	2ND DELIVERY FRAME ASSEMBLY	2-136
354	3RD DELIVERY FRAME ASSEMBLY	2-141
460	LASER SCANNER ASSEMBLY	2-146
500	DRUM CARTRIDGE ASSEMBLY	2-147
621	HOPPER ASSEMBLY	2-149
640	DEVELOPING ASSEMBLY	2-153
810	FIXING ASSEMBLY	2-156
900	CONTROLLER BOX ASSEMBLY	2-161
910	MAIN POWER SUPPLY PCB ASSEMBLY	2-163
930	DC CONTROLLER PCB ASSEMBLY	2-164
931	READER CONTROLLER PCB ASSEMBLY	2-165
990	FAX ASSEMBLY (Japan and Australia Model only)	2-167
991	SPEAKER ASSEMBLY (Japan and Australia Model only)	2-170
992	FAX BOARD PCB ASSEMBLY (Japan and Australia Model only)	2-173
994	DELIVERY CONTROLLER PCB ASS'Y	2-175

FIGURE A
ASSEMBLY LOCATION DIAGRAM

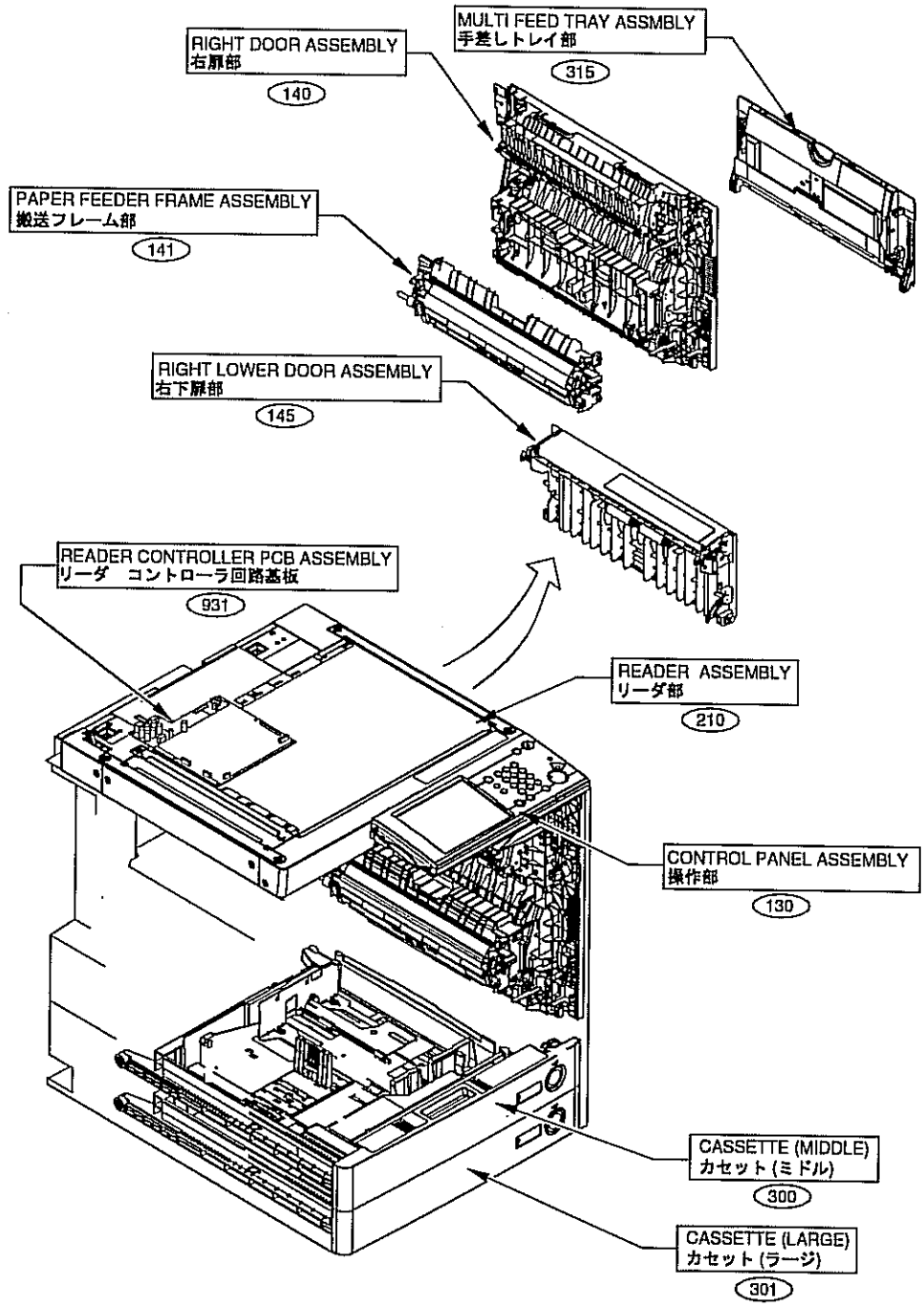


FIGURE A
ASSEMBLY LOCATION DIAGRAM

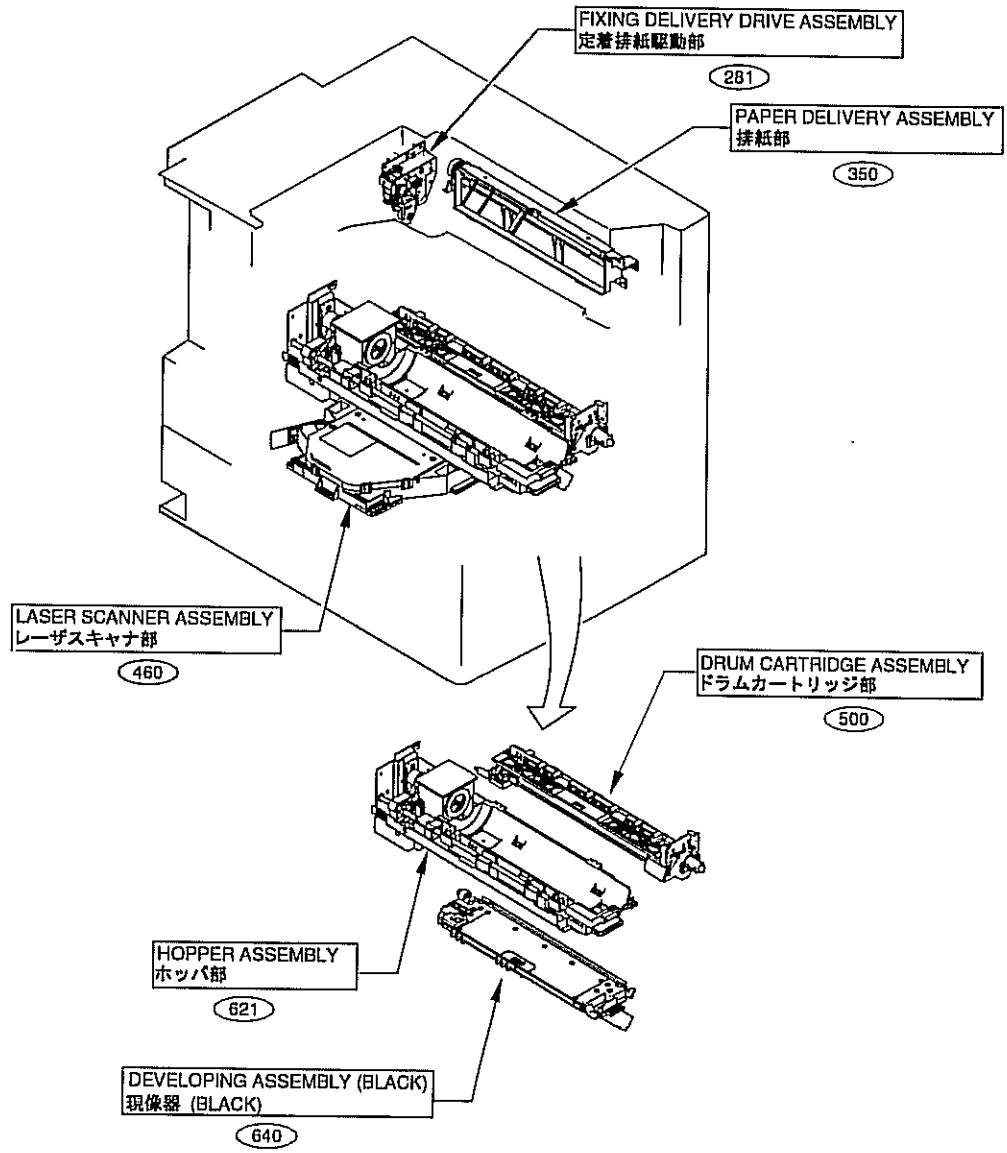


FIGURE A
ASSEMBLY LOCATION DIAGRAM

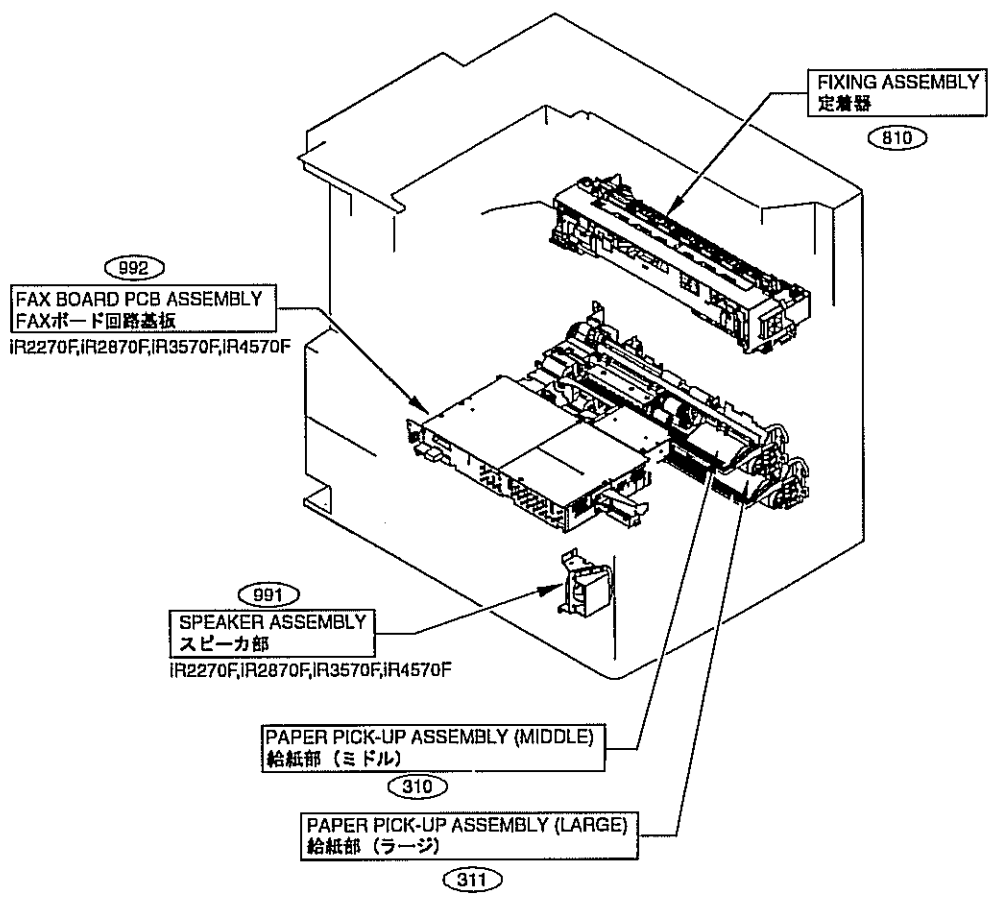


FIGURE A
ASSEMBLY LOCATION DIAGRAM

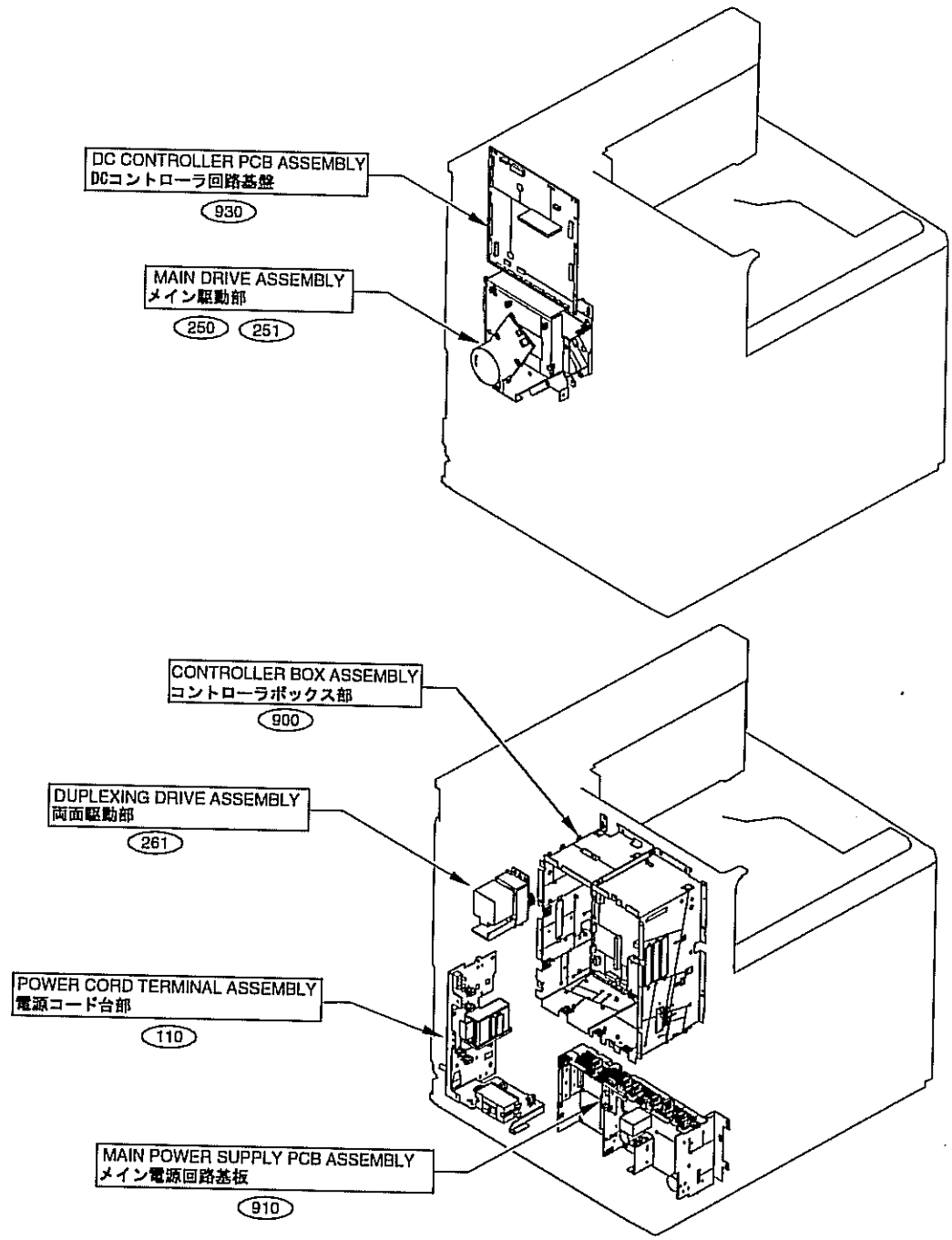


FIGURE A
ASSEMBLY LOCATION DIAGRAM

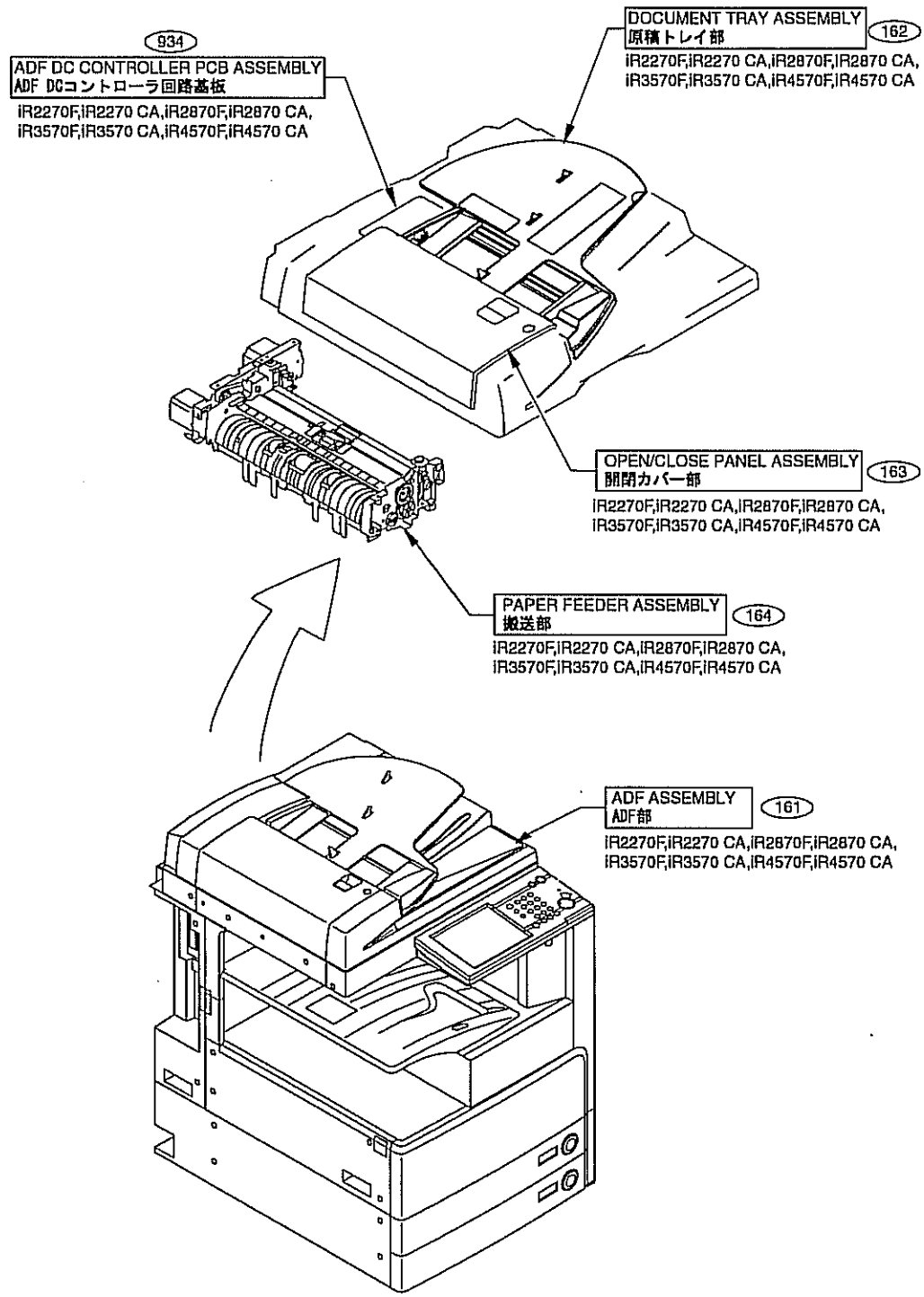


FIGURE A
ASSEMBLY LOCATION DIAGRAM

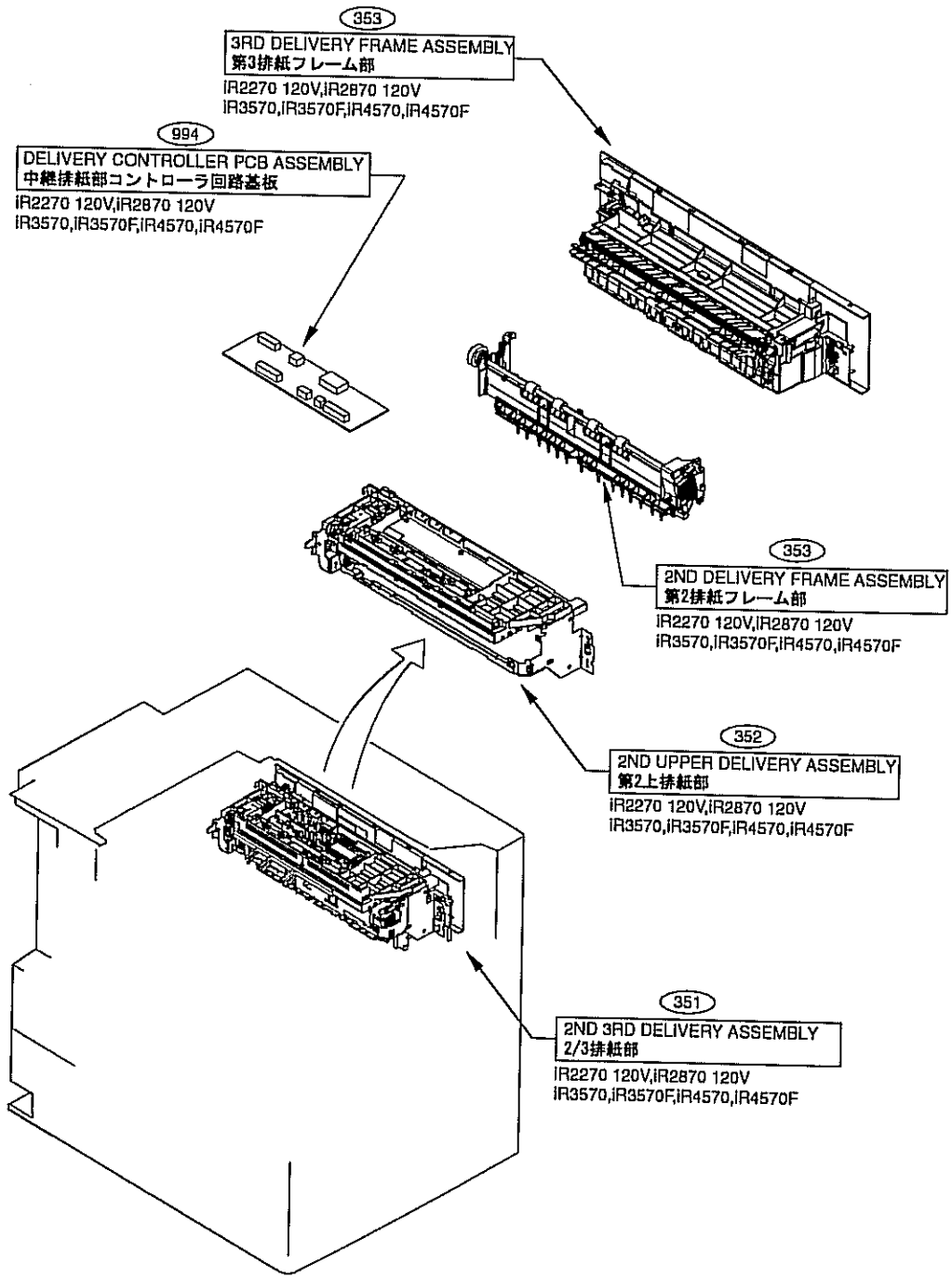
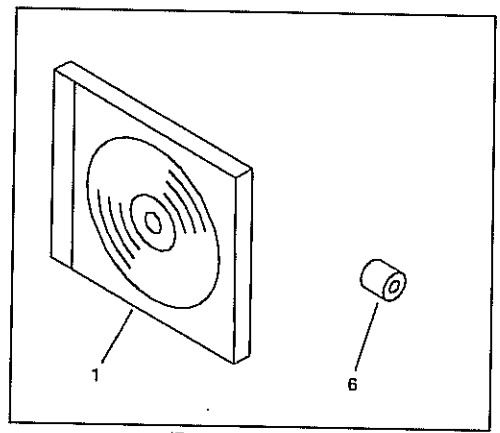
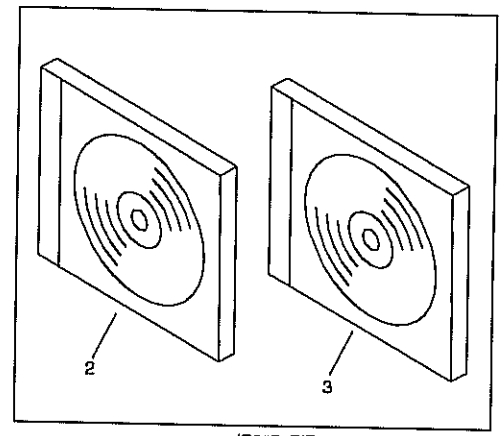


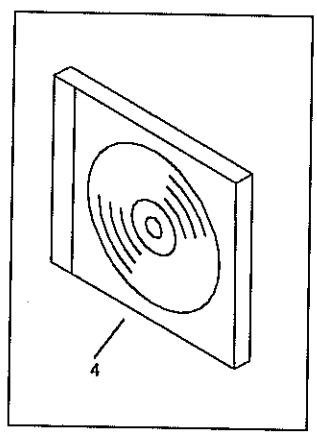
FIGURE 001
ACCESSORIES



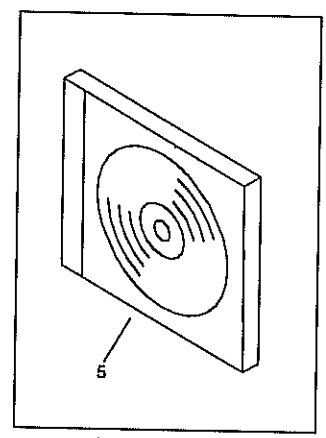
IR2270 100V,IR2270F,IR2870 100V,IR2870F
IR4570 100V,IR4570F,IR3570 100V,IR3570F



IR2270F,IR2870F,IR4570F,IR3570F



IR2270,IR2270F,IR2870F,IR4570,IR4570F,IR3570,IR3570F



IR2270,IR2870,IR4570,IR3570

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.001	NPN		RF	ACCESSORIES		
1	FK2-0920-000		1	MEAP SOFTWARE CD-ROM	iR2270 100V&iR2270F&iR2870 100V&iR2870F&iR4570 100V&iR4570F&iR3570 100V&iR3570F	
2	FK2-0643-000		1	BDL SOFTWARE CD-ROM	iR2270F&iR2870F&iR457 0F&iR3570F	
2	FK2-0921-000		1	BDL SOFTWARE CD-ROM	iR2270F&iR2870F&iR457 0F&iR3570F	
3	FK2-0923-000		1	FAX SOFTWARE CD-ROM	iR2270F&iR2870F&iR457 0F&iR3570F	
3	FK2-0646-000		1	FAX SOFTWARE CD-ROM	iR2270F&iR2870F&iR457 0F&iR3570F	
4	FK2-0695-000		1	MEAP SOFTWARE CD-ROM	iR2270&iR2270F&iR2870 F&iR4570&iR4570F&iR35 70&iR3570F	
5	FK2-0930-000		1	MEAP SOFTWARE CD-ROM	iR2270&iR2870&iR4570&i R3570	
5	FK2-0696-000		1	MEAP SOFTWARE CD-ROM	iR2270&iR2870&iR4570&i R3570	
6	WE8-5689-000		1	CORE, FERRITE	iR2270&iR2270F&iR2870 &iR2870F&iR4570&iR457 0F&iR3570&iR3570F	

FIGURE 100
EXTERNAL COVERS, PANELS, ETC.

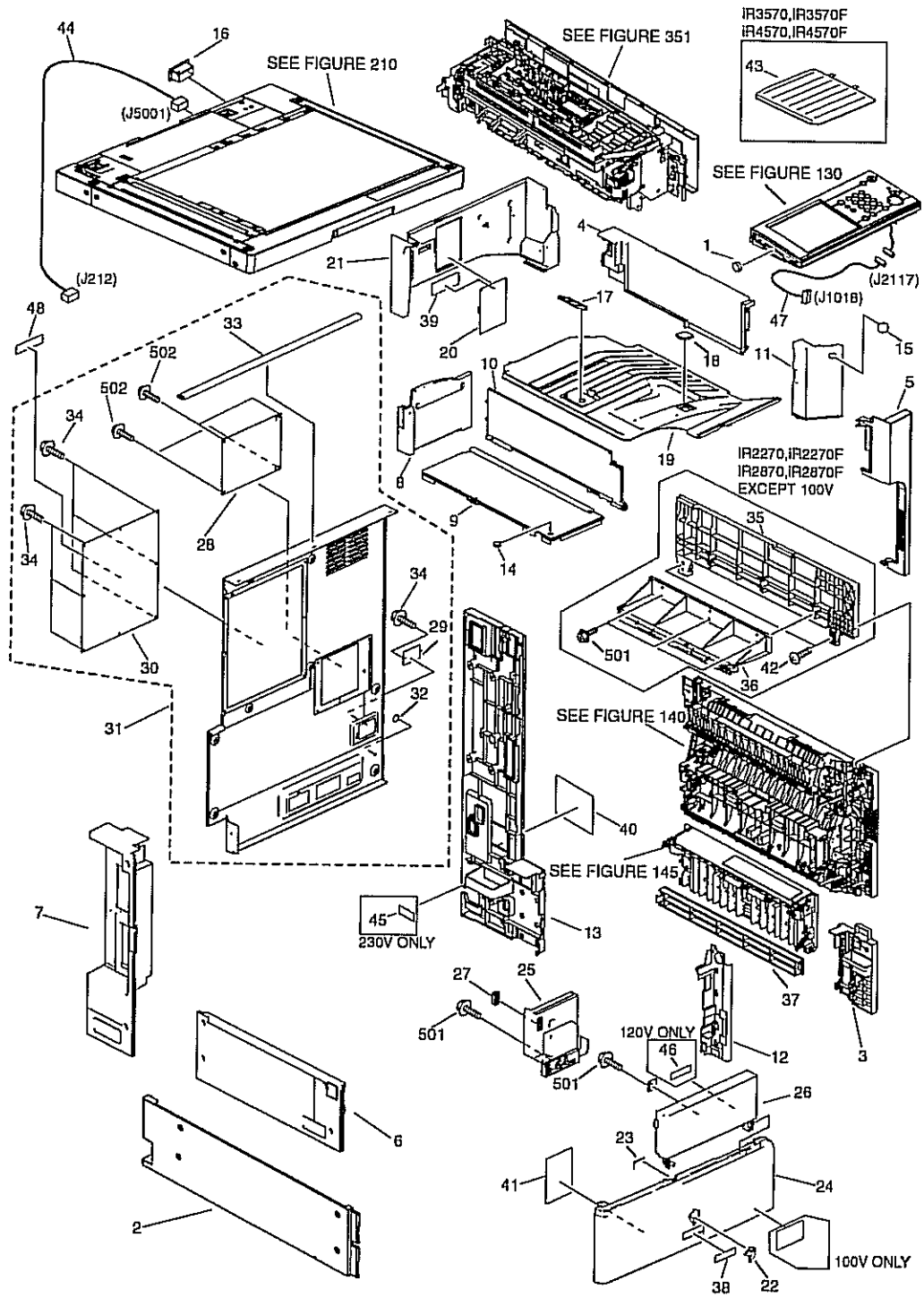


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.100	NPN		RF	EXTERNAL COVERS, PANELS, ETC.		
1	FA9-3988-000		1	RUBBER, COVER		
2	FC5-0576-000		1	PANEL, LEFT		
3	FC5-0953-000		1	PANEL, RIGHT, FRONT LOWER		
4	FC5-0956-000		1	PANEL, INNER, RIGHT MIDDLE		
5	FC5-1101-000		1	PANEL, RIGHT, FRONT		
6	FC5-1103-000		1	PANEL, LEFT, MIDDLE		
7	FC5-1104-000		1	PANEL, LEFT, REAR		
8	FC5-1106-000		1	PANEL, INNER, REAR LOWER		
9	FC5-1108-000		1	PANEL, INNER, LEFT LOWER		
10	FC5-1109-000		1	PANEL, INNER, MIDDLE		
11	FC5-1117-000		1	PANEL, INNER, RIGHT		
12	FC5-1277-000		1	PANEL, INNER, RIGHT		
13	FC5-1278-000		1	PANEL, RIGHT, REAR		
14	FC5-1282-000		1	RUBBER, COVER		
15	FC5-6540-000		1	COVER, SCREW		
16	FH2-6552-000		1	COVER, CONNECTOR		
17	FC5-0812-000		1	STOPPER, PUSHING		
18	FC5-0957-000		1	CAP, INTERNAL PAPER DELIVERY		
19	FC5-1114-000		1	COVER, INTERNAL PAPER DELIVERY		
20	FC5-0889-000		1	COVER, BLANKING		
21	FC5-0942-000		1	PANEL, INNER, REAR		
22	FC5-1280-000		1	EMBLEM		
23	FB3-2224-000		1	PIN, HINGE		
24	FC5-1100-000		1	COVER, FRONT		
25	FC5-1115-000		1	COVER, FRONT, SMALL		
26	FL2-0315-000		1	DOOR, SUPPLY		
27	XZ9-0582-000		1	CATCH, MAGNET		
28	FC5-1094-000		1	LID, ASSIST		
29	FC5-1111-000		1	COVER, OUTLET		
30	FC5-1152-000		1	PANEL, CONTROLLER BOX		
31	FL2-0237-000		1	COVER, REAR		

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
32	FC5-0166-000		1	SEAL, BLANKING		
33	FC5-1093-000		1	SEAL		
34	XA9-1386-000		4	SCREW, RS, M3X8		
35	FC5-0803-000		1	PANEL, RIGHT UPPER	iR2270&iR2270F&iR2870 &iR2870F EXCEPT 100V	
36	FC5-0807-000		1	GUIDE, 1ST DELIVERY FIXING	iR2270&iR2270F&iR2870 &iR2870F EXCEPT 100V	
37	FC5-0954-000		1	PANEL, RIGHT, LOWER		
38	FC6-4832-000		1	PLATE, NAME	iR2270	
38	FC6-4834-000		1	PLATE, NAME	iR2270	
38	FC6-4833-000		1	PLATE, NAME	iR2270F	
38	FC6-4837-000		1	PLATE, NAME	iR2870	
38	FC6-4839-000		1	PLATE, NAME	iR2870	
38	FC6-4838-000		1	PLATE, NAME	iR2870F	
38	FC5-7210-000		1	PLATE, NAME	iR3570	
38	FC5-7212-000		1	PLATE, NAME	iR3570	
38	FC5-7211-000		1	PLATE, NAME	iR3570F	
38	FC5-7213-000		1	PLATE, NAME	iR4570	
38	FC5-7215-000		1	PLATE, NAME	iR4570	
38	FC5-7214-000		1	PLATE, NAME	iR4570F	
39	FL2-0352-000		1	SHEET, PETAINING		
40	FC6-5076-000		1	LABEL, SHUT, DOWN B	iR2270&iR2270F&iR2870 &iR2870F&iR3570&iR357 0F&iR4570&iR4570F	
40	FC6-5075-000		1	LABEL, SHUT, DOWN A	iR2270&iR2870&iR3570&i R4570	
41	FC6-5067-000		1	LABEL, TONER BOTTLE CAUTION		
42	XA9-0605-000		2	SCREW, M4X8	iR2270&iR2270F&iR2870 &iR2870F EXCEPT 100V	
43	FC5-0860-000		1	GUIDE, REVERSE BACK END	iR3570&iR3570F&iR4570 &iR4570F	
44	FM2-2856-000		1	CABLE, READER AC	J212,5001	
45	FU5-8021-000		1	LABEL, GROUNDING CAUTION	230V ONLY	
46	FS6-8992-000		1	LABEL, GENUINE	120V ONLY	
47	FM2-2859-000		1	CABLE, CONTROL PANEL		

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
48	FS7-8143-020		1	LABEL, COUNTER		
501	XB4-5401-007		5	SCREW, M4X10		
502	XB1-2400-807		4	SCREW, M4X8		

FIGURE 101
MACHINE FRONT PLATE

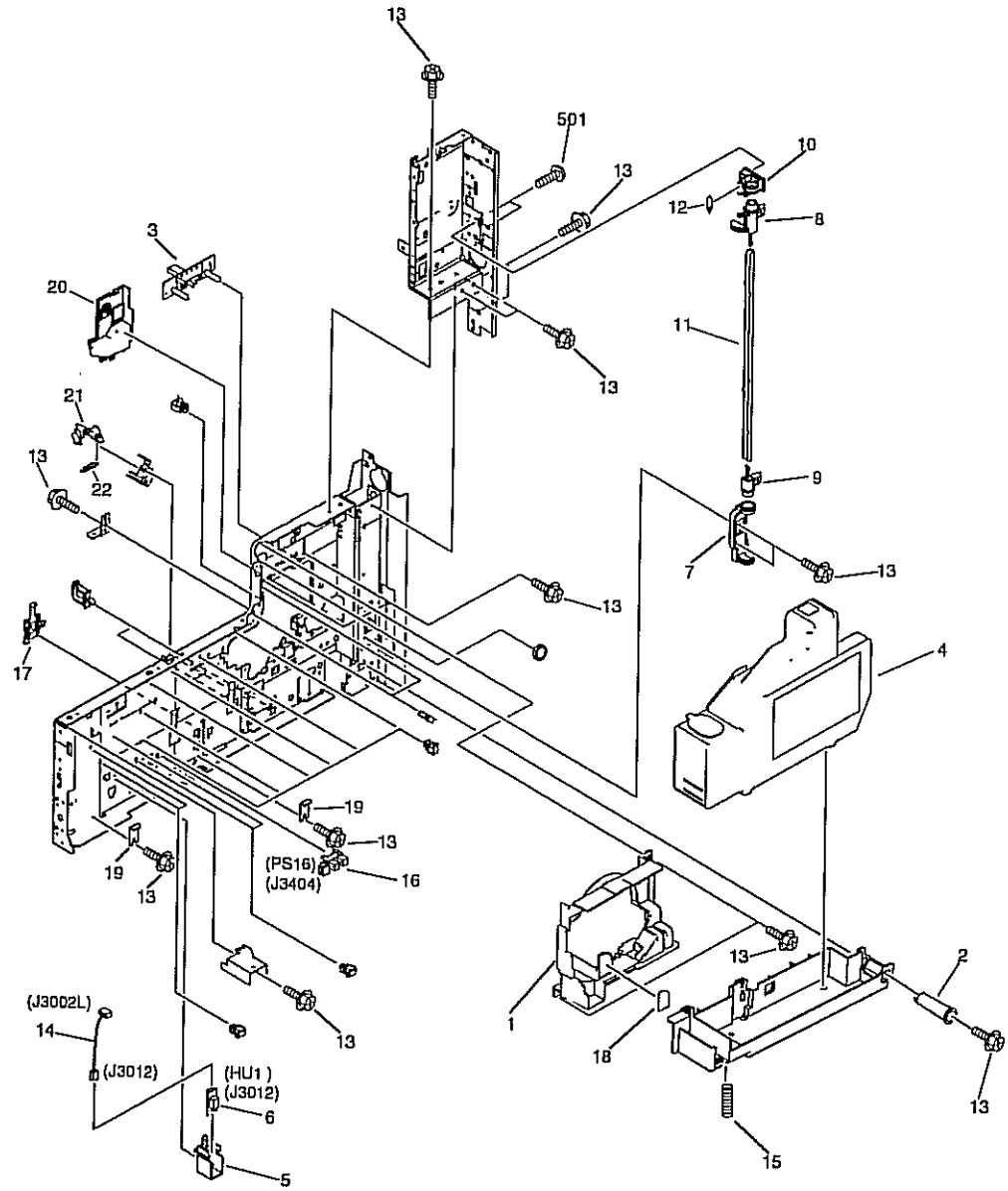


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.101	NPN		RF	MACHINE FRONT PLATE		
1	FC5-1113-000		1	PANEL,INNER		
2	FC5-1413-000		1	PIN STAY		
3	FL2-0267-000		1	PIN, POSITIONING		
4	FM2-0303-000		1	BOX, WASTE TONER		
5	FC5-1307-000		1	MOUNT, ENVIRONMENT SENSOR		
6	FK2-0160-000		1	ENVIRONMENTAL SENSOR UNIT	HUI J3012	
7	FC5-0673-000		1	SUPPORT, HOOK POSITIONING		
8	FC5-0686-000		1	HOOK, RIGHT DOOR, UPPER		
9	FC5-0687-000		2	HOOK, RIGHT DOOR, LOWER		
10	FC5-0688-000		1	BUSHING		
11	FC5-0689-000		1	SHAFT, HOOK		
12	FU5-2064-000		1	SPRING, TENSION		
13	XA9-1386-000		19	SCREW, RS, M3X8		
14	FM2-2862-000		1	CABLE, ENVIRONMENT HEATER	J3002L,3012	
15	FU5-2096-000		1	SPRING		
16	FK2-0149-000		1	PHOTO-INTERRUPTRE, TLP1253(C6)	PS16 J3404	
17	FC5-1535-000		1	GUIDE, WIRE		
18	FC6-2918-000		1	LABEL, LOCK UNLOCK		
19	FL2-0203-000		2	PIN, POSITIONING		
20	FC5-1118-000		1	COVER, RIGHT IN, SMALL		
21	FC6-4824-000		1	STOPPER, BOX		
22	FU6-2016-000		1	SPRING, STOPPER		
501	XB4-5400-807		2	SCREW, P, M4X8		

FIGURE 102
INTERNAL COMPONENTS 1

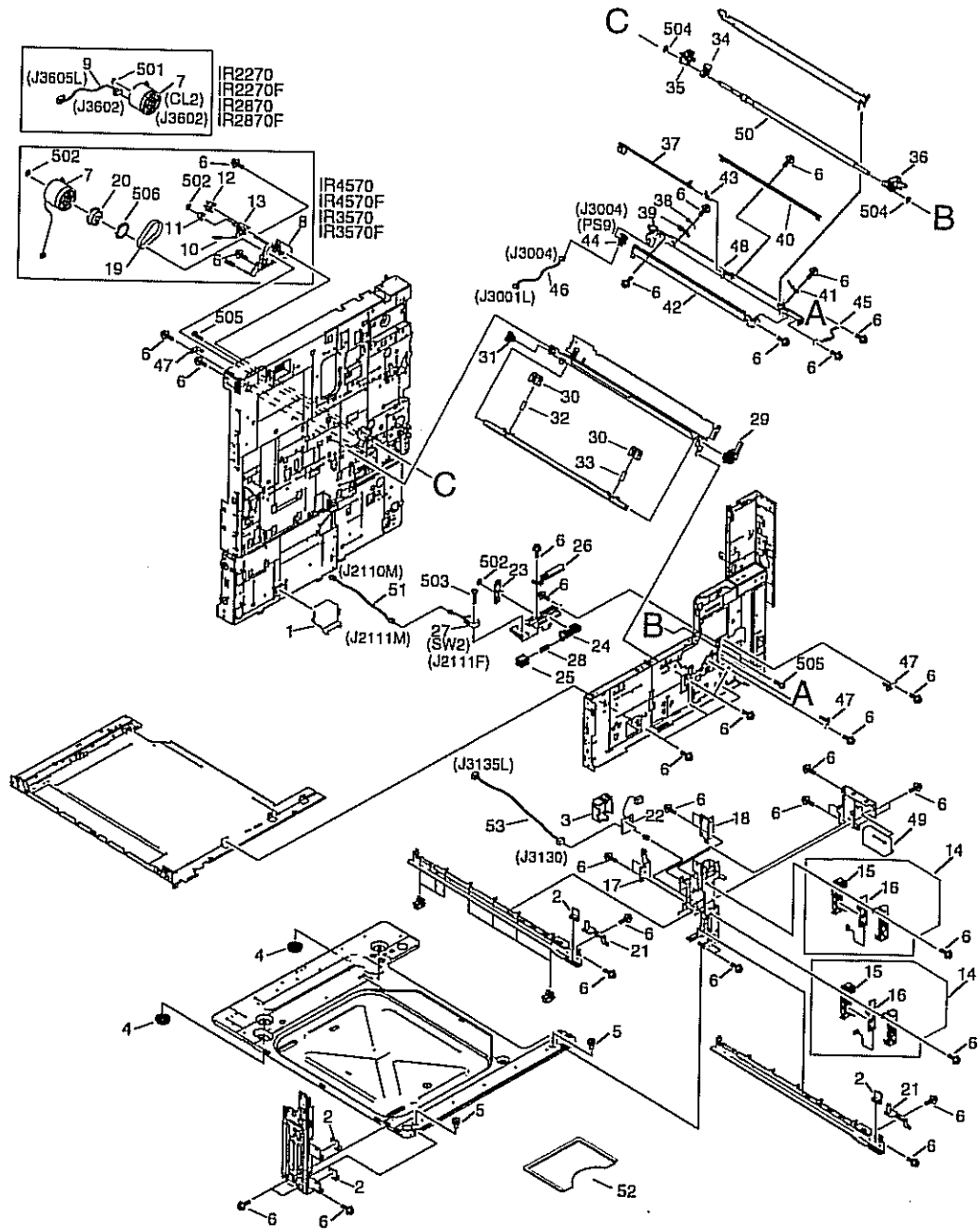


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.102	NPN		RF	INTERNAL COMPONENTS 1		
1	FB3-3192-020		1	COVER, HEATER CONNECTOR		
2	FB6-3507-000		4	BLOCK, SWING		
3	FC5-0641-000		1	COVER, PCB		
4	XH9-0125-000		2	FOOT		
5	XA9-1468-000		2	SCREW, KNURLED, M6X10		
6	XA9-1386-000		40	SCREW,RS,M3X8		
7	FH6-5075-000		1	CLUTCH, ELECTROMAGNETIC	iR2270&iR2270F&iR2870 &iR2870F CL2 J3602	
7	FK2-0361-000		1	CLUTCH,ELECTROMAGNETIC	iR4570&iR4570F&iR3570 &iR3570F	
8	FL2-1517-000		1	SUPPORT, REGIST. CLUTCH	iR4570&iR4570F&iR3570 &iR3570F	
9	FM2-2851-000		1	CABLE, REGISTRATION CLUTCH	iR2270&iR2270F&iR2870 &iR2870F J3602,3605L	
10	FU5-2652-000		1	SPRING	iR4570&iR4570F&iR3570 &iR3570F	
11	FU5-3178-000		1	PULLEY, 20T	iR4570&iR4570F&iR3570 &iR3570F	
12	FU5-3179-000		1	PULLEY, 28T	iR4570&iR4570F&iR3570 &iR3570F	
13	FL2-1518-000		1	SUPPORT, REGIST. TENSION	iR4570&iR4570F&iR3570 &iR3570F	
14	FM2-0389-000		2	CASSETTE SIZE DETECT ASSEMBLY		
15	FC5-1420-000		2	HOLDER, SIZE DETECT		
16	FM2-2770-000		2	SIZE SENSOR PCB ASSEMBLY		
17	FC5-0567-000		1	PLATE, PICK-UP ASS'Y MOUNT, U		
18	FC5-0568-000		1	PLATE, PICK-UP ASS'Y MOUNT, L		
19	XF2-1608-860		1	BELT, TIMING	iR4570&iR4570F&iR3570 &iR3570F	
20	FU5-3180-000		1	PULLEY,36T	iR4570&iR4570F&iR3570 &iR3570F	
21	FL2-0116-000		2	PIN, SIDE REGIST. POSITIONING		
22	FM2-2771-000		1	SIZE DETECT CONNECT PCB ASS'Y		
23	FC5-1539-000		1	PLATE, ACTUATOR		
24	FC5-1540-000		1	SLIDER		
25	FC5-1541-000		1	BLOCK, SWITCH PRESSURE		

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
26	FC5-1545-000		1	GUIDE, ACTUATOR		
27	FK2-0384-000		1	SWITCH, MICRO	SW2 J2111F	
28	FU6-2009-000		1	SPRING, LEAF		
29	FC5-1243-000		1	HANDLE, PRESSURE		
30	FC5-1262-000		2	CAM, DEVELOPING PRESSURE		
31	FU5-1030-000		1	BUSHING		
32	FU5-2090-000		1	SPRING		
33	FU6-2011-000		1	SPRING		
34	FC5-1562-000		1	HOLDER, TRANSFER GUIDE, UPPER		
35	FU5-1029-000		1	BUSHING		
36	FU5-1028-000		1	BUSHING		
37	FC5-0484-000		1	FLAG, PRE-REGISTRATION SENSOR		
38	FC5-0539-000		1	SPRING, GROUNDING		
39	FC5-0540-000		1	HOLDER, GROUNDING SPRING		
40	FC5-0547-000		1	GUIDE, PRE-REGISTRATION PAPER		
41	FC5-1564-000		1	SPRING, LEAF		
42	FL2-0245-000		1	SHEET, PAPER DUST RELEASE		
43	FU5-2035-000		1	SPRING, TORSION		
44	FK2-0149-000		1	PHOTO-INTERRUPTER, TLP1253(C6)	PS9 J3004	
45	FL2-3265-000		1	H.V. RESISTOR UNIT		
46	FM2-2858-000		1	CABLE, PRE-REGISTRATION SENSOR	J3004,3001L	
47	FC5-6578-000		3	PIN, POSITIONING		
48	FL2-0330-000		1	GUIDE, PRE-REGIST. MAIN BODY		
49	FC5-0958-000		1	GRIP, RIGHT FRONT		
50	FL2-0314-000		1	ROLLER, REGISTRATION HARD		
51	FM2-2845-000		1	CABLE, I.L. SWITCH CONNECT	J2110M,2111M	
52	FC5-1146-000		1	HOLDER, SERVICE BOOK		
53	FM2-2853-000		1	CABLE,CST. SIZE DETECT CONNECT	J3130,3135L	
501	XD2-1100-402		1	RETAINING RING (E-TYPE)		
502	XD2-1100-502		3	RETAINING RING (E-TYPE)		
503	XB1-2301-407		1	SCREW, MACH.,TRUS HEAD, M3X14		
504	XD2-1100-642		2	RING,E		

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
505	XB4-5400-807		4	SCREW,P,M4X8		
506	XD1-1108-215		1	WASHER,COP		

FIGURE 103
INTERNAL COMPONENTS 2

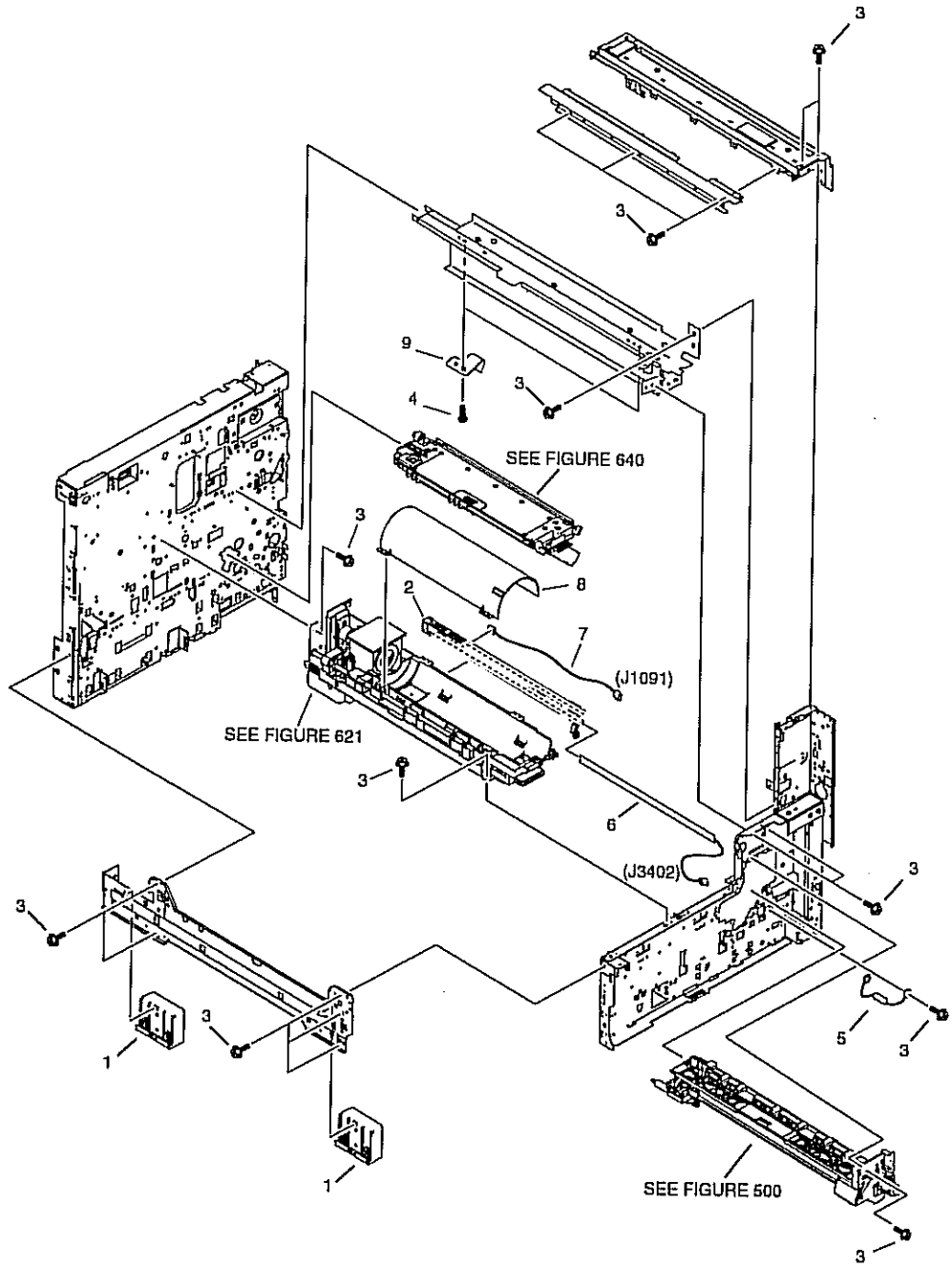


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.103	NPN		RF	INTERNAL COMPONENTS 2		
1	FC5-0959-000		2	GRIP, LEFT		
2	FC5-1407-000		1	HOLDER, PRECONDITIONING		
3	XA9-1386-000		8	SCREW,RS,M3X8		
4	XB1-2300-407		2	SCREW, BH3X4 (S)		
5	FF3-4529-000		1	CABLE, VARISTOR		
6	FK2-0368-000		1	LED ARRAY	J3402	
7	FM2-2776-000		1	BOARD, DRUM THERMISTOR	J1091	
8	FC6-4820-000		1	COVER, BOTTLE		
9	FC6-4624-000		2	SPRING,LEAF		

FIGURE 104
INTERNAL COMPONENTS 3

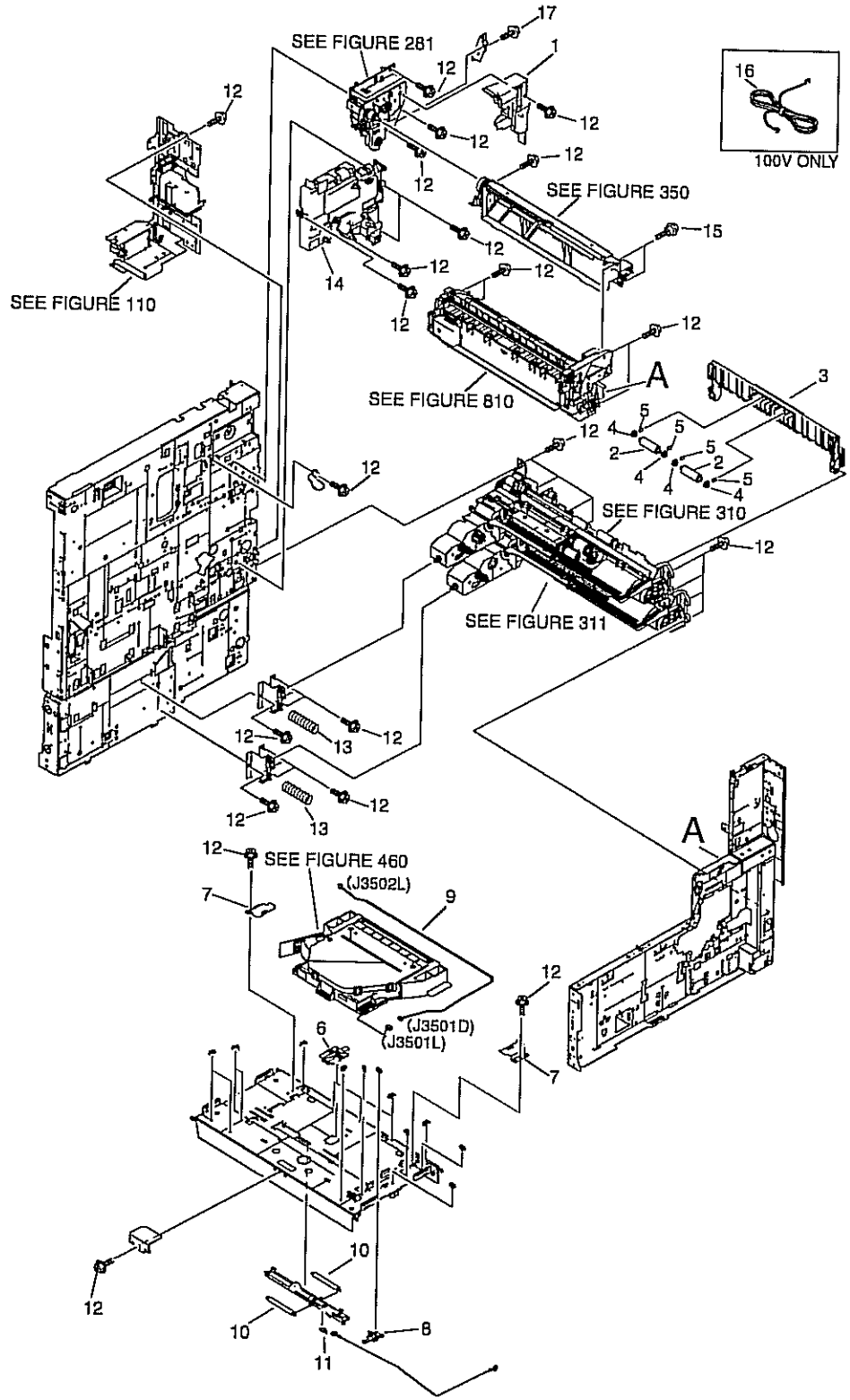


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.104	NPN		RF	INTERNAL COMPONENTS 3		
1	FC5-1130-000		1	COVER, FIXING CONNECTOR		
2	FB6-3313-000		2	ROLLER, PAPER FEED		
3	FC5-0596-000		1	DOOR, RIGHT LOWER INNER		
4	FS5-1595-000		4	BUSHING, VERTICAL ROLLER		
5	FS7-2788-000		4	SPRING, COMPRESSION		
6	FC5-0191-000		1	GUIDE, POSITIONING		
7	FC5-0195-000		2	SPRING, LEAF		
8	FC5-1535-000		1	GUIDE, WIRE		
9	FM2-2831-000		1	CABLE, BEAM DETECTOR DOCKING	J3501D,3502L	
10	FU5-2038-000		2	SPRING, TORSION		
11	FU5-2653-000		1	SPRING		
12	XA9-1386-000		33	SCREW, RS, M3X8		
13	FU5-2066-000		2	SPRING, COMPRESSION		
14	FM2-0261-000		1	H.V. TRANSFER PCB ASSEMBLY		
15	FS5-9664-000		2	SCREW,RS STEPPED,M3		
16	FH2-7061-000		1	CORD, GROUNDING	100V ONLY	
17	XA9-1164-000		1	SCREW, RS, M3X6.5		

FIGURE 105
MACHINE REAR PLATE 1

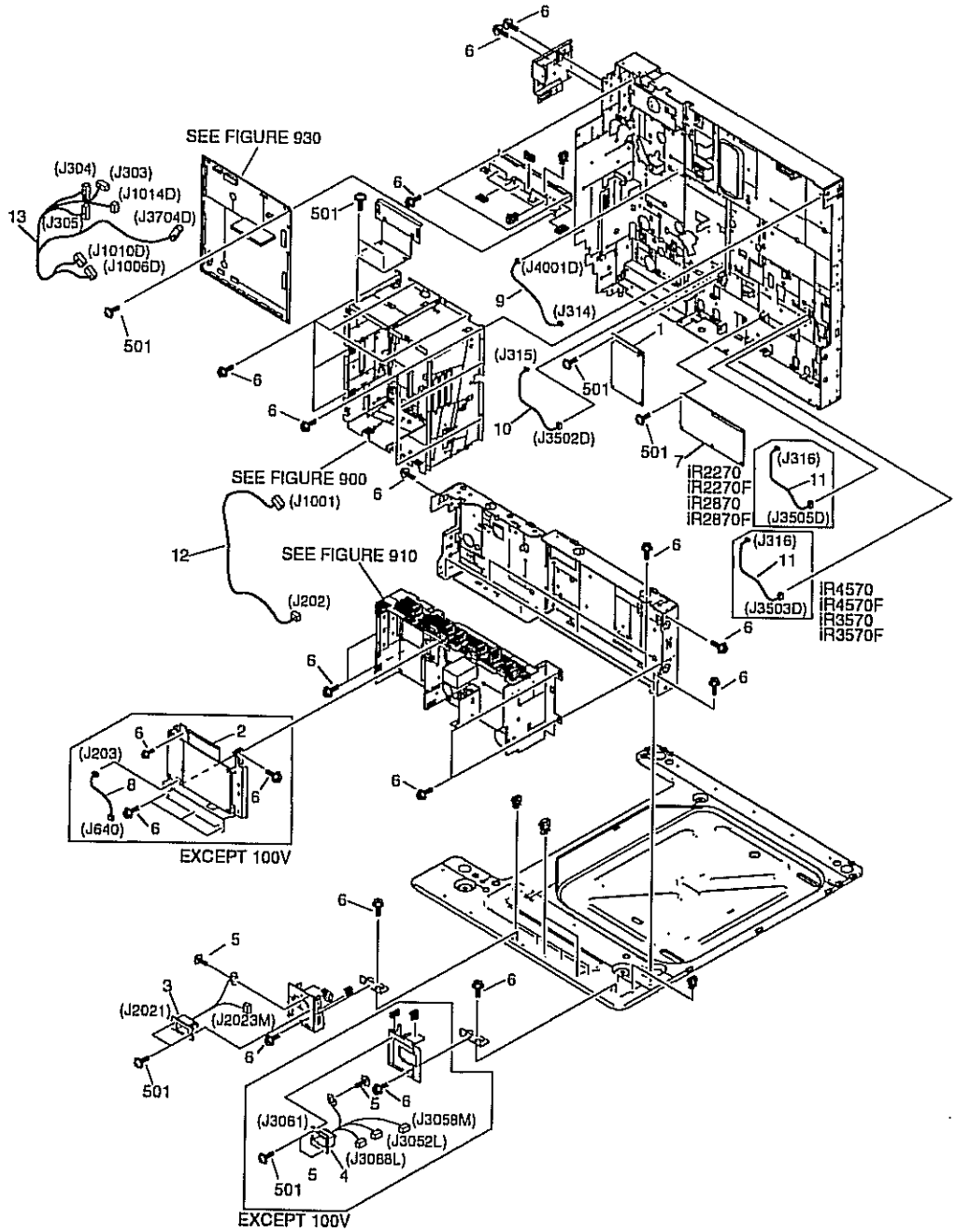


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.105	NPN		RF	MACHINE REAR PLATE 1		
1	FK2-0340-000		1	ALL DAY POWER PCB ASSEMBLY	100V&120V	
1	FK2-0341-000		1	ALL DAY POWER PCB ASSEMBLY	230V	
2	FK2-0338-000		1	ACC POWER SUPPLY UNIT	120V	
2	FK2-0339-000		1	ACC POWER SUPPLY UNIT	230V	
3	FG3-3178-020		1	CABLE, LATTICE	J2021,2023M	
4	FM2-2843-000		1	CABLE, FINISHER LATTICE	EXCEPT 100V J3061,3052L,3088L,3058M	
5	XA9-0265-000		2	SCREW, W/TOOTHED WASHER, (S)		
6	XA9-1386-000		33	SCREW,RS,M3X8		
7	FM2-2764-000		1	PS CONTROLLER ASSEMBLY		
8	FM2-2824-000		1	CABLE,ACCESSORY POWER SUPPLY	EXCEPT 100V J203,640	
9	FM2-2819-000		1	CABLE, HIGH VOLTAGE CONNECT	J314,4001D	
10	FM2-2820-000		1	CABLE, BEAM DETECTOR DOCKING	J315,3502D	
11	FM2-2833-000		1	CABLE, POLYGON	iR2270&iR2270F&iR2870&iR2870F J316,3505D	
11	FM2-2830-000		1	CABLE, POLYGON	iR4570&iR4570F&iR3570&iR3570F J316,3503D	
12	FM2-2841-000		1	CABLE, FIXING AC	iR2270&iR2270F&iR2870&iR2870F	
12	FM2-2840-000		1	CABLE, FIXING AC	iR4570&iR4570F&iR3570&iR3570F J202,1001M	
13	FM2-2815-000		1	CABLE, FIXING CONNECT	J303,304,305,1006D,1010D,1014D,3704D	
501	XB6-7300-607		AR	SCREW, TP, M3X6		

FIGURE 106
MACHINE REAR PLATE 2

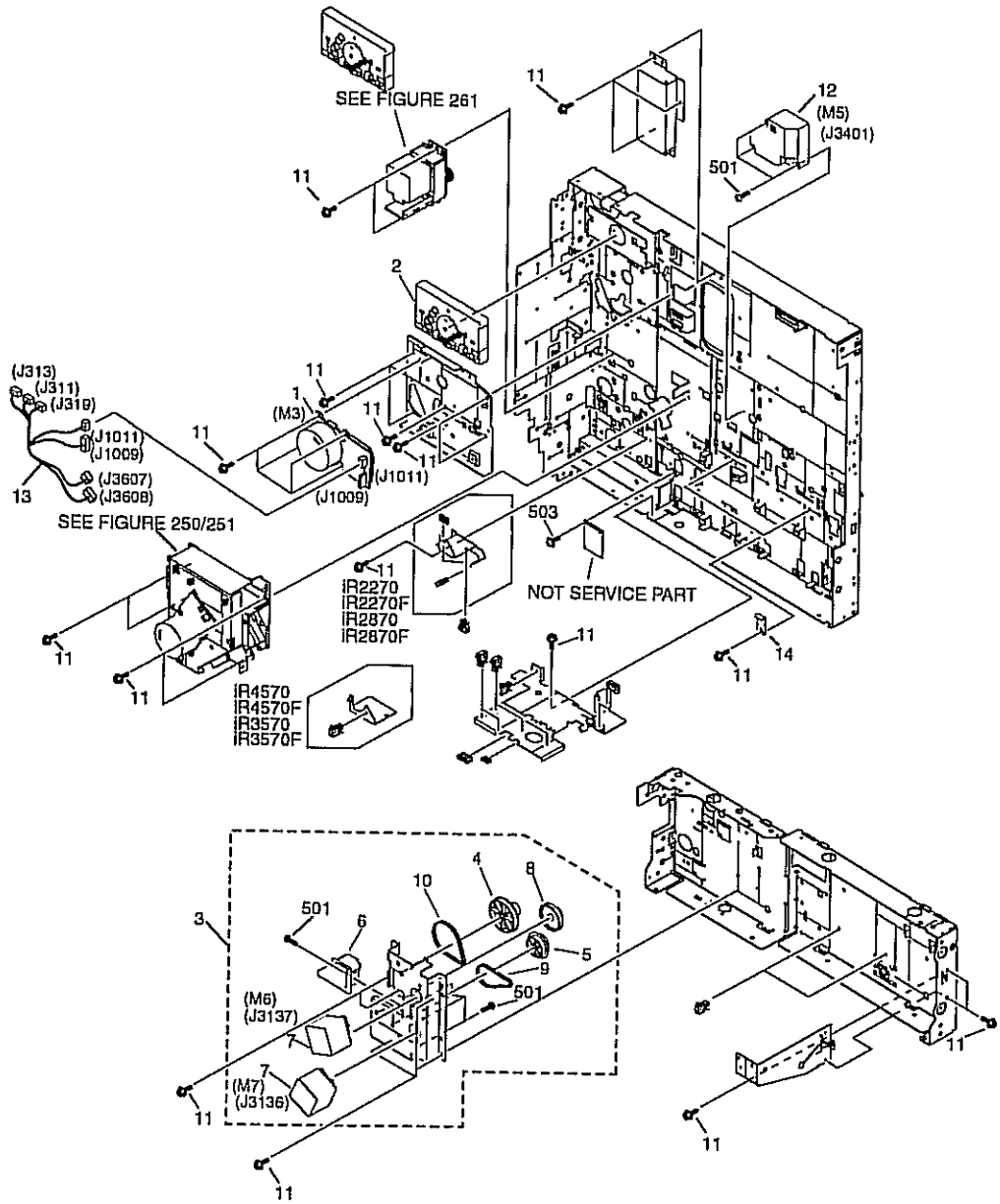


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.106	NPN		RF	MACHINE REAR PLATE 2		
1	FK2-0367-000		1	MOTOR, DC	M3 J1009,1011	
2	FC6-2904-000		0	COVER, DC NETWORK BACK		
3	FM2-0339-000		1	PAPER PICK-UP MOTOR UNIT		
4	FC5-1516-000		1	PULLEY, 80T		
5	FC5-1517-000		1	PULLEY, 50T		
6	FC5-1518-000		1	COVER, PICK-UP MOTOR SUPPORT		
7	FM2-0338-000		2	MOTOR, DC	M6,7 J3136,3137	
8	FU3-0285-000		1	GEAR, 80T/16T		
9	XF2-1607-840		1	BELT, TIMING		
10	XF2-1609-040		1	BELT,TIMING		
11	XA9-1386-000		34	SCREW,RS,M3X8		
12	FK2-0015-000		1	MOTOR, DC24V	M5 J3401	
13	.FM2-2818-000		1	CABLE, MOTOR	J311,313,319,1009,1011, 3607,3608	
14	FL2-0203-000		2	PIN, POSITIONING		
501	XB1-2300-607		AR	SCREW, BH3X6(S)		
503	XB6-7300-607		AR	SCREW, TP, M3X6		

FIGURE 107
MACHINE REAR PLATE 3

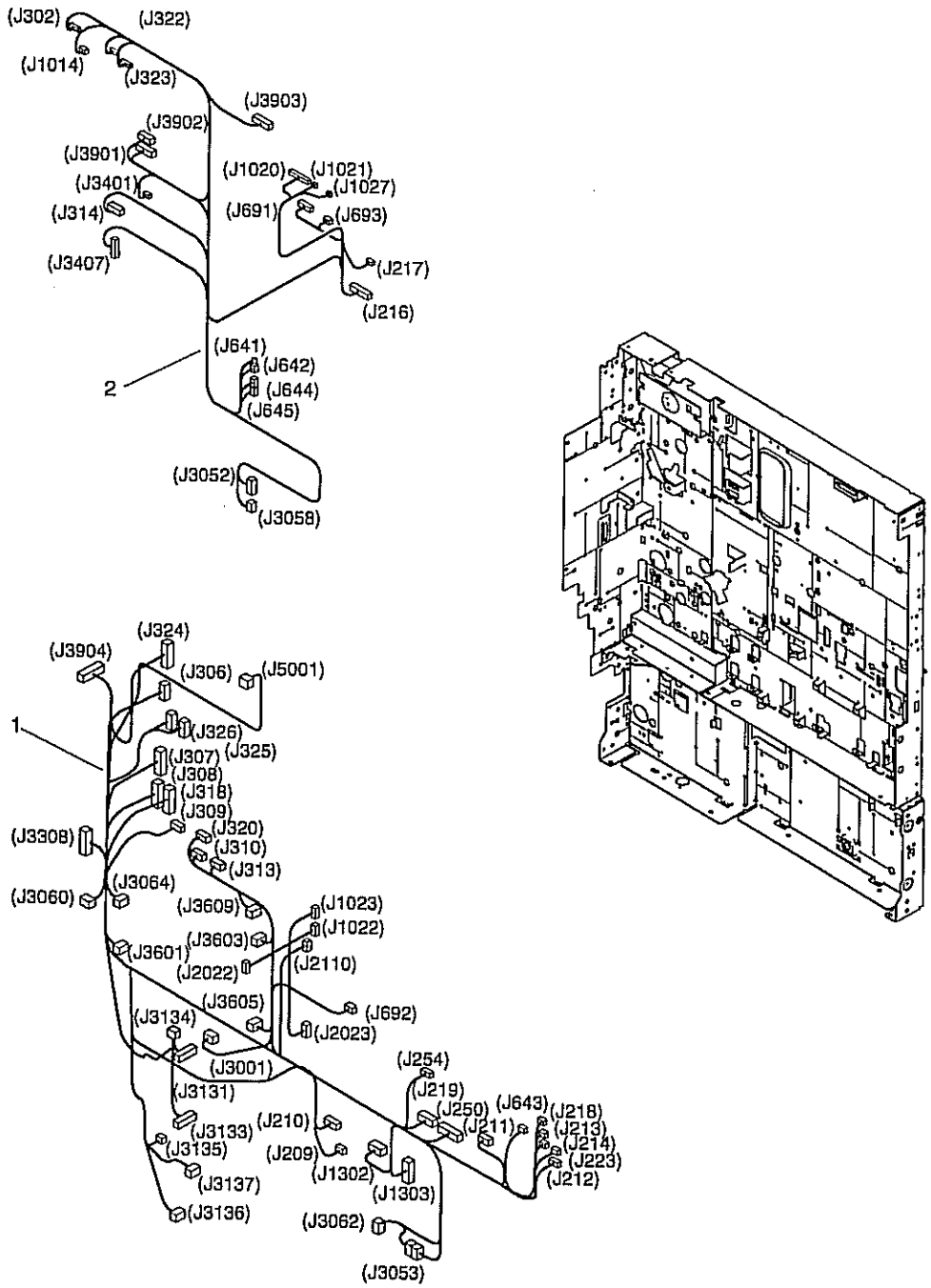


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.107	NPN		RF	MACHINE REAR PLATE 3		
1	FM2-2817-000		1	CABLE, MAIN		
2	FM2-2826-000		1	CABLE, CONTROLLER		

FIGURE 110
POWER CORD TERMINAL ASSEMBLY

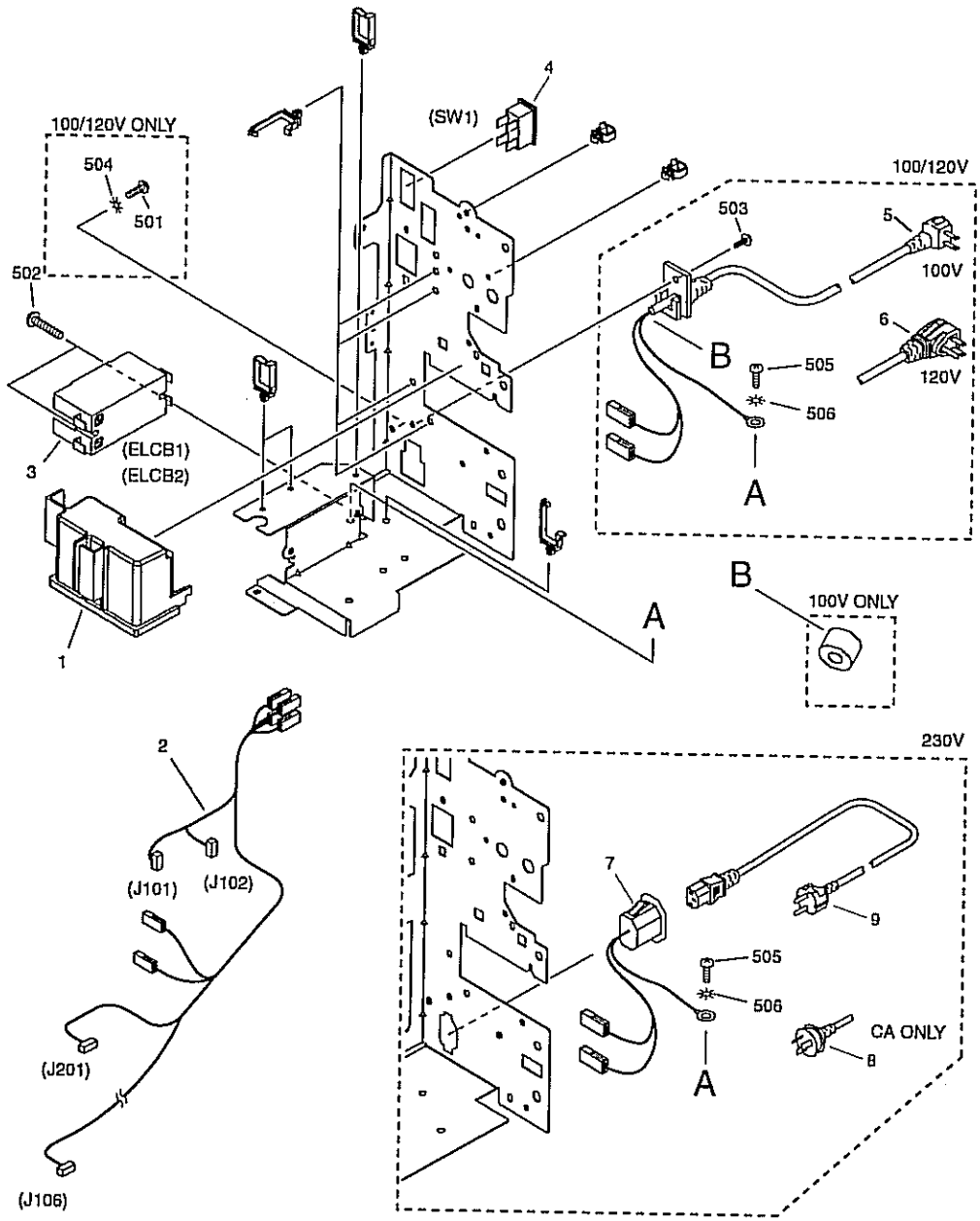


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.110	FM2-0384-000		1	POWER CORD TERMINAL ASSEMBLY	100V	
Fig.110	FM2-0353-000		1	POWER CORD TERMINAL ASSEMBLY	120V	
Fig.110	FM2-0354-000		1	POWER CORD TERMINAL ASSEMBLY	230V	
1	FC5-1168-000		1	HANDLE, RIGHT REAR		
2	FM2-2868-000		1	CABLE,AC POWER SUPPLY	J101,102,201,106	
3	FH7-7626-000		1	BREAKER,ELECTRIC LEAKAGE	100V&120V	
3	FH7-7625-000		1	BREAKER,ELECTRIC LEAKAGE	230V	
4	FK2-0140-000		1	SWITCH, TOGGLE		
5	FL2-0982-000		1	CORD, POWER SUPPLY	100V	
6	FF3-4526-000		1	CORD, POWER SUPPLY	120V	
7	FF3-4527-000		1	CABLE, SOCKET	230V	
8	FK2-0148-000		1	CORD, POWER SUPPLY	230V CA ONLY	
9	FK2-0146-000		1	CORD, POWER SUPPLY	230V	
501	XB1-2400-603		1	SCREW, MACHINE M4X6 (COP)	100V&120V	
502	XB1-2402-007		2	SCREW, BH4X20 (S)		
503	XB6-7300-607		1	SCREW, TP, M3X6	100V&120V	
504	XD1-4200-402		1	WASHER, TOOTHED LOCK, M4	100V&120V	
505	XB1-2500-603		1	SCREW, MACHINE M5X6 (COP)	120V&230V	
506	XD1-4200-502		1	WASHER, TOOTHED LOCK, M5	120V&230V	

FIGURE 130
CONTROL PANEL ASSEMBLY

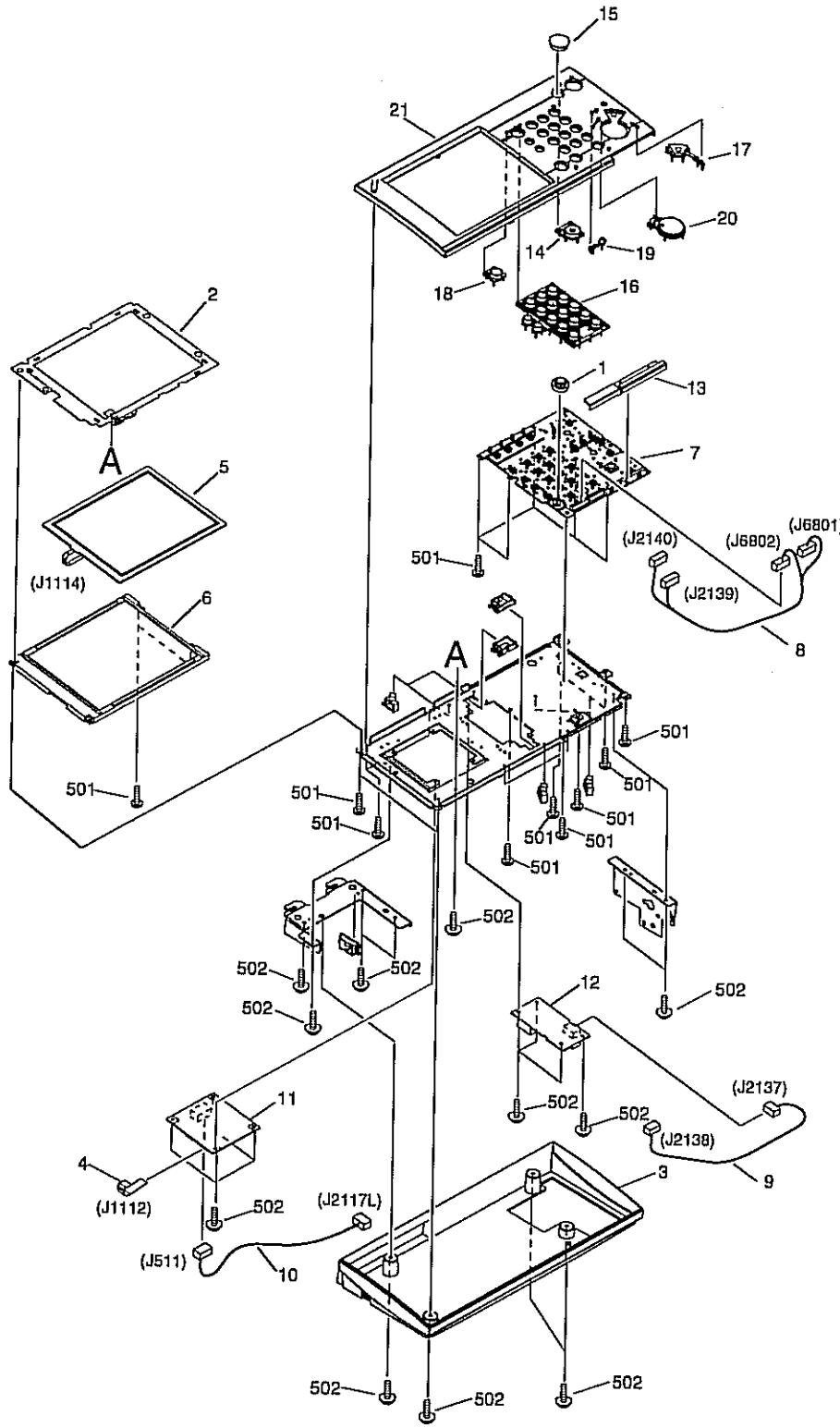
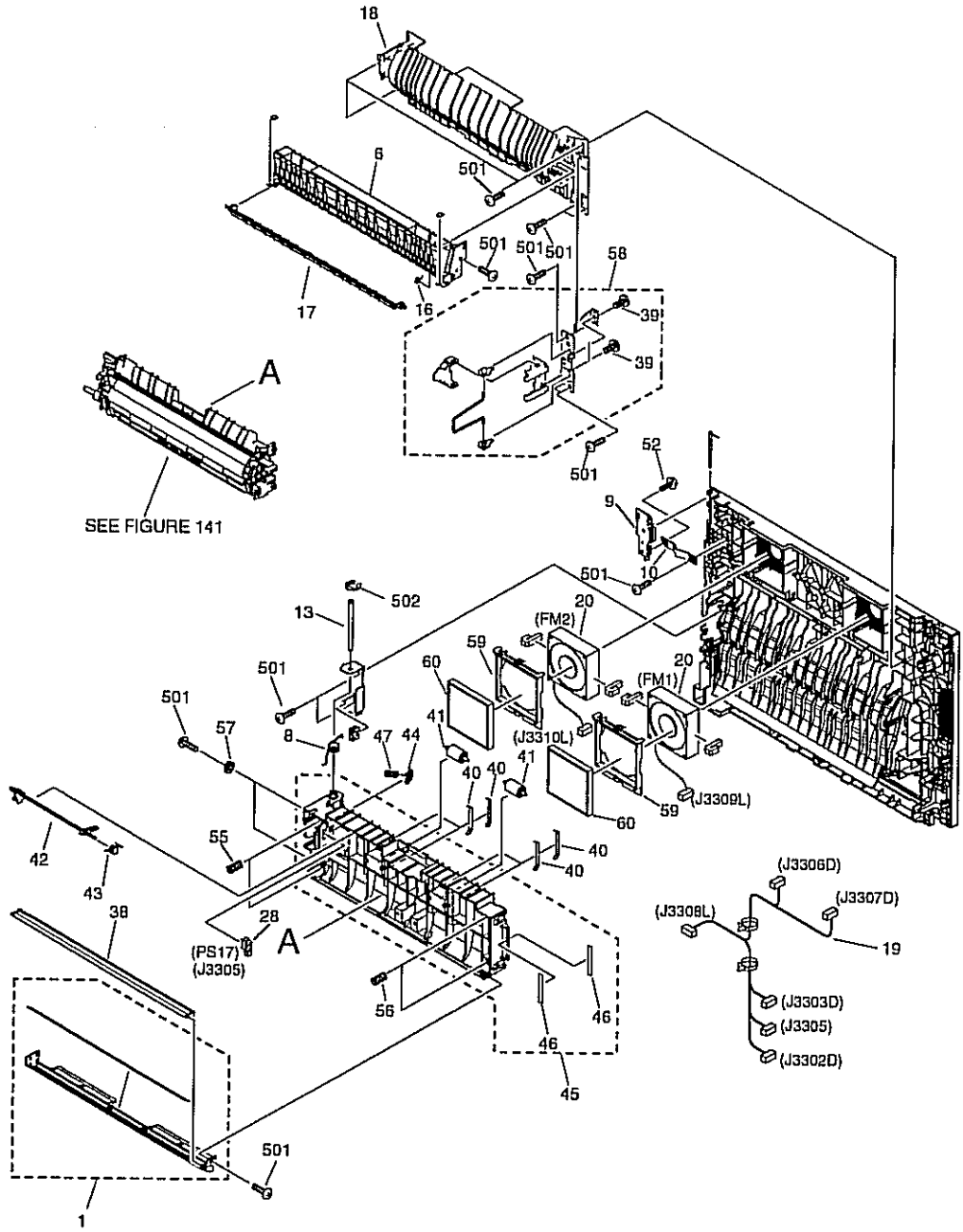


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.130	FM2-0360-000		1	CONTROL PANEL ASSEMBLY	100V	
Fig.130	FM2-0361-000		1	CONTROL PANEL ASSEMBLY	120V	
Fig.130	FM2-0362-000		1	CONTROL PANEL ASSEMBLY	230V	
1	FC5-1067-000		1	KNOB, VOLUME		
2	FC5-4458-000		2	SHEET, LCD ELECTROSTATIC		
3	FC5-1056-000		1	COVER, CONTROL PANEL, LOWER		
4	FH2-7037-000		1	CABLE, FLAT	J1112	
5	FK2-0246-000		1	ANALOG TOUCH PANEL UNIT	J1114	
6	FL2-1092-000		1	LCD CONTROL PANEL UNIT		
7	FG3-2834-000		1	PANEL SWITCH PCB ASSEMBLY		
8	FG3-2835-000		1	CABLE, SWITCH	J2139,2140,6801,6802	
9	FG3-2836-000		1	CABLE, PANEL INVERTER	J2137,2138	
10	FM2-2758-000		1	CABLE, CONTROL PANEL CONNECT	J511,2117L	
11	FG3-3965-000		1	CONTROL PANEL CPU PCB ASSEMBLY		
12	FG6-8939-000		1	C. PANEL INVERTER PCB ASSEMBLY		
13	FC5-1057-000		1	WINDOW, LAMP		
14	FC5-1059-000		1	KEY TOP, POWER SUPPLY		
15	FC5-1506-000		1	CAP, ENERGY SAVE		
16	FC5-1061-000		1	KEY TOP, NUMBERS		
17	FC5-1064-000		1	KEY TOP, STOP		
18	FC5-1065-000		1	KEY TOP, RESET		
19	FC5-1066-000		1	KEY TOP, COUNTER		
20	FM2-1116-000		1	START KEY TOP ASSEMBLY		
21	FC6-2903-000		1	PANEL, CONTROL PANEL	100V	
21	FC5-1400-000		1	PANEL, CONTROL PANEL	120V	
21	FC5-5457-000		1	PANEL, CONTROL PANEL	230V	
501	XB4-5301-007		18	SCREW,P,M3X10		
502	XB6-7300-607		19	SCREW, TP, M3X6		

FIGURE 140
RIGHT DOOR ASSEMBLY



NOTE : This assembly includes the assemblies shown in Figure 141 and 315.
注 ： このユニットはFigure 141, 315のユニットを含みます。

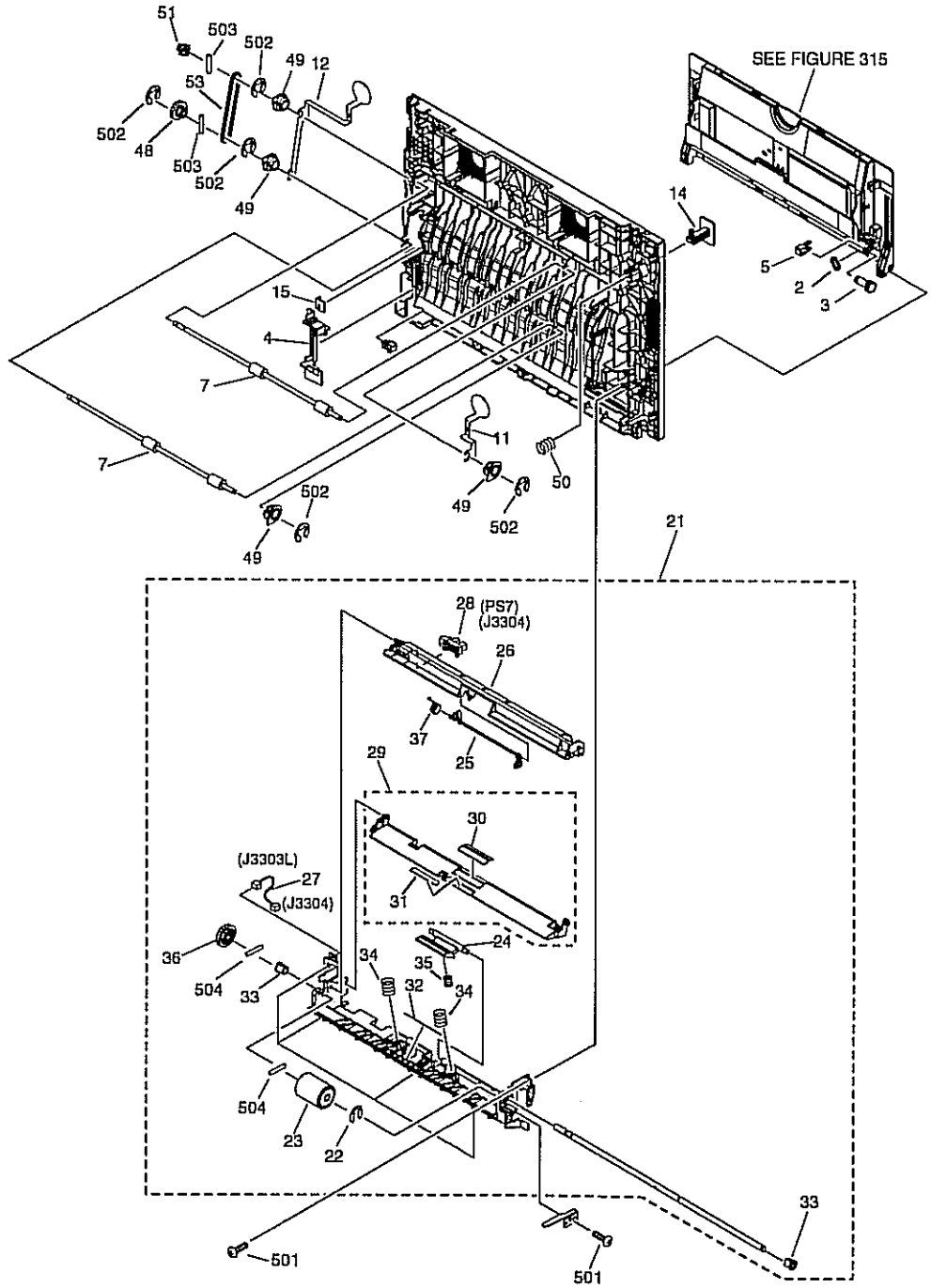
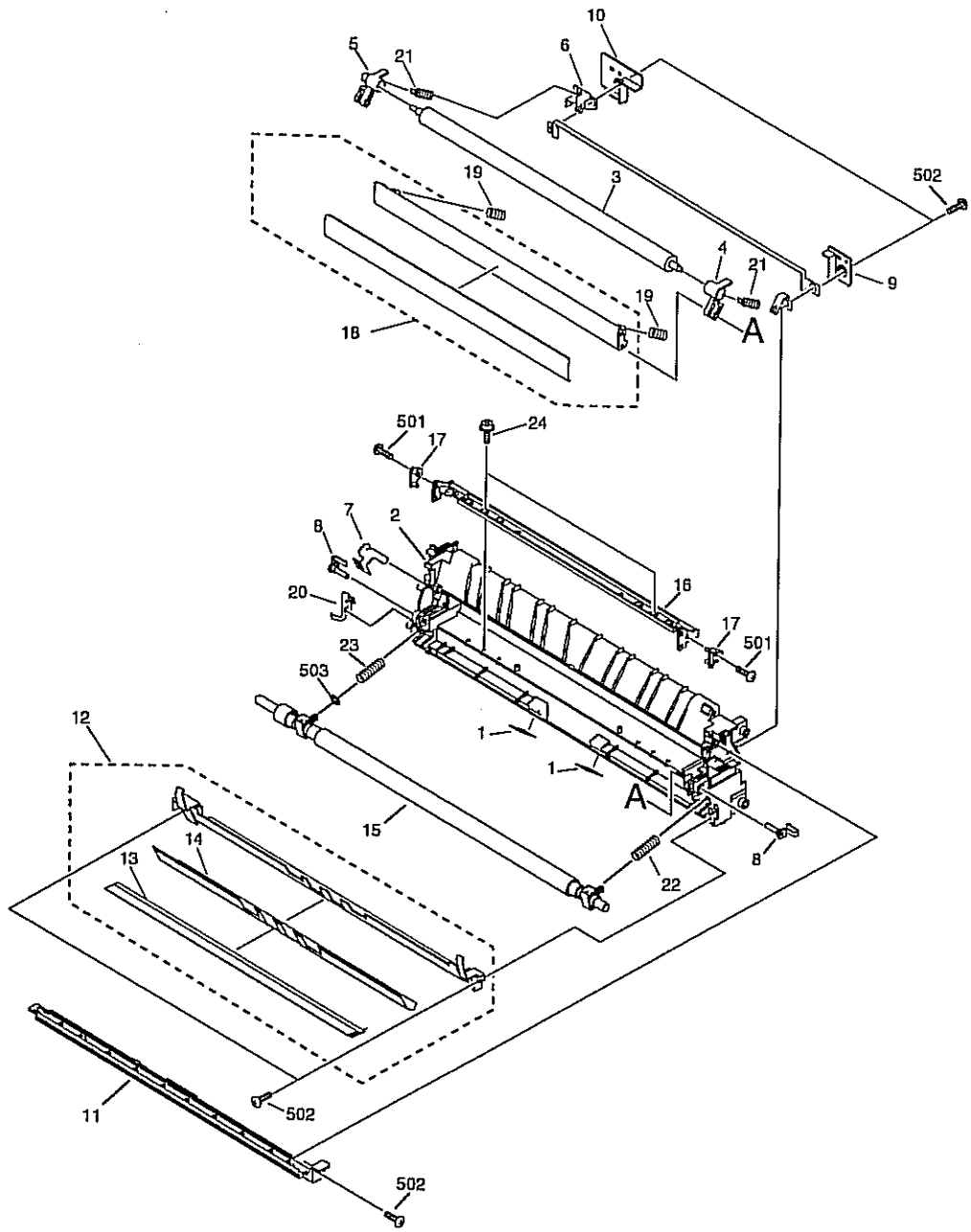

SEE FIGURE 315
(PS7)
(J3304)
(J3303L)
(J3304)

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.140	FM2-0250-000		1	RIGHT DOOR ASSEMBLY	SEE NOTE	
1	FL2-0106-000		1	GUIDE, PRE-REGIST. AUXILIARY		
2	FC5-0521-000		1	LINK, MULTI FEED HAND LEVER		
3	FC5-0522-000		1	PIN, LEVER HINGE		
4	FC5-0524-000		1	COVER, MULTI FEED CONNECTOR		
5	FC5-0525-000		1	RING, RETAINING		
6	FC5-0652-000		1	GUIDE, DUPLEXING FEEDER, 2		
7	FC5-0653-020		2	ROLLER, DUPLEXING FEEDER		
8	FC5-0659-000		1	SPRING, TORSION		
9	FC6-4815-000		1	PLATE, HINGE, UPPER		
10	FC5-0674-000		1	STRAP, RIGHT DOOR		
11	FC5-0676-000		1	PLATE, GROUNDING		
12	FC5-0677-000		1	PLATE, GROUNDING		
13	FC5-0682-000		1	PIN, INNER DOOR HINGE		
14	FC5-0685-000		1	BUTTON, RIGHT DOOR		
15	FC5-0690-000		1	PLATE, SHOCK ABSORBER		
16	FC5-0972-000		1	SPRING, TORSION		
17	FC5-1354-000		1	FLAPPER, FIXING DELIVERY REV.		
18	FC6-2902-000		1	GUIDE, DUPLEXING FEEDER		
19	FG3-3189-000		1	CABLE, RIGHT DOOR UNIT	J3305,3302D,3303D,3306 D,3307D,3308L	
20	FK2-0360-000		2	FAN	FM1,2 J3309L,3310L	
21	FM2-0111-000		1	MULTI FEED FRAME ASSEMBLY		
22	FA4-1159-000		1	RETAINING RING		
23	FB1-8581-000		1	ROLLER		
24	FC5-0488-000		1	PAD, MULTI FEED SEPARATION		
25	FC5-0489-000		1	FLAG, MULTI FEED SENSOR		
26	FC5-0490-000		1	COVER, MULTI FEED ROLLER		
27	FG3-3188-000		1	CABLE, MULTI SENSOR	J3304,3303L	
28	FK2-0149-000		2	PHOTO-INTERRUPTER, TLP1253(C6)	PS7,17 J3304,3305	
29	FL2-0101-000		1	PLATE, MULTI FEED, LIFTER		
30	FC5-0529-000		1	SHEET, SEPARATION		

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
31	FC5-0543-000		1	SHEET, SEPARATION		
32	FC5-0542-000		1	SHEET, MULTI FEED OUTLET		
33	FS5-1209-000		2	BUSHING		
34	FS6-2790-000		2	SPRING, COMPRESSION		
35	FS6-2791-000		1	SPRING, COMPRESSION		
36	FU5-0061-000		1	GEAR, 31T		
37	FU5-2034-000		1	SPRING, TORSION		
38	FC5-0496-000		1	GUIDE, PRE-REGIST. AUX., UPPER		
39	XA9-0894-000		3	SCREW,M3X6		
40	FB4-2930-000		8	SPRING, LEAF		
41	FB5-4773-000		2	ROLLER, DUPLEXING		
42	FC5-0657-000		1	FLAG, DUPLEXING FEEDER SENSOR		
43	FC5-0658-000		1	SPRING, TORSION		
44	FC5-0691-000		1	STOPPER, DOOR		
45	FL2-0143-000		1	GUIDE, DUPLEXING INTERNAL		
46	FC5-0703-000		2	LABEL, RIGHT INSIDE DOOR GRIP		
47	FU5-2067-000		1	SPRING, COMPRESSION		
48	FU5-0006-000		1	GEAR, 26T/PULLEY, 24T		
49	FU5-1006-000		4	BUSHING		
50	FU5-2063-000		1	SPRING, COMPRESSION		
51	FU5-3016-000		1	PULLEY, 24T		
52	XA9-1386-000		1	SCREW,RS,M3X8		
53	XF2-4112-240		1	BELT, TIMING, COGGED		
55	FU5-2044-000		2	SPRING, COMPRESSION		
56	FU5-2045-000		2	SPRING, COMPRESSION		
57	FU5-6014-000		2	COLLAR		
58	FM2-0355-000		1	HOOK HOLDER UNIT		
59	FL2-0298-000		2	HOLDER, FILTER		
60	FC5-1546-000		2	FILTER, VOC		
501	XB4-5401-007		20	SCREW, M4X10		
502	XD2-1100-422		5	RETAINING RING (E-TYPE)		
503	XD3-2200-102		2	PIN, PARALLEL		

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
504	XD3-2160-162		2	PIN,DOWEL		

FIGURE 141
PAPER FEEDER FRAME ASSEMBLY



NOTE : This assembly is included in the assembly shown in Figure 140.
注 ： このユニットはFigure 140のユニットに含まれます。

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.141	FM2-0252-000		1	PAPER FEEDER FRAME ASSEMBLY	SEE NOTE	
1	FC5-0548-000		2	SHEET, PRE-REGISTRATION		
2	FC5-1120-000		1	FRAME, FEEDER		
3	FC6-2911-000		1	ROLLER, TRANSFER		
4	FC5-1124-000		1	ARM, TRANSFER, FRONT		
5	FC5-1125-000		1	ARM, TRANSFER, REAR		
6	FC5-1126-000		1	PLATE, TRANSFER ELECTRODE, R.		
7	FC5-1127-000		1	PLATE, STATIC CHARGE ELECTRODE		
8	FC5-1536-000		2	PIN, TRANSFER HINGE		
9	FC5-1558-000		1	COVER,ELECTRODE PLATE,FRONT		
10	FC5-1559-000		1	COVER,ELECTRODE PLATE,REAR		
11	FL2-0247-000		1	HOLDER,STATIC CHARGE ELIMI.		
12	FL2-0250-000		1	GUIDE, PRE-REGIST. DOOR SIDE		
13	FC5-0549-000		1	ELIMINATOR, STATIC CHARGE		
14	FC5-1552-000		1	SHEET, PRE-REGIST. DOOR SIDE		
15	FL2-0251-000		1	ROLLER, REGISTRATION SOFT		
16	FC5-1527-000		1	GUIDE, SWING LOWER, LOWER		
17	FC5-1560-000		2	HOLDER, SWING GUIDE, LOWER		
18	FL2-0246-000		1	GUIDE, SWING LOWER, UPPER		
19	FU6-2010-000		2	SPRING		
20	FU5-2037-000		1	PLATE, GROUNDING		
21	FU5-2076-000		2	SPRING		
22	FU5-2611-000		1	SPRING, COMPRESSION		
23	FU6-2014-000		1	SPRING, COMPRESSION		
24	XA9-1297-000		2	SCREW, M3X10		
501	XB4-5300-607		2	SCREW,P,M3X6		
502	XB4-5401-007		5	SCREW, M4X10		
503	XD1-1106-219		1	SHIM, CIRCULAR		

FIGURE 145
RIGHT LOWER DOOR ASSEMBLY

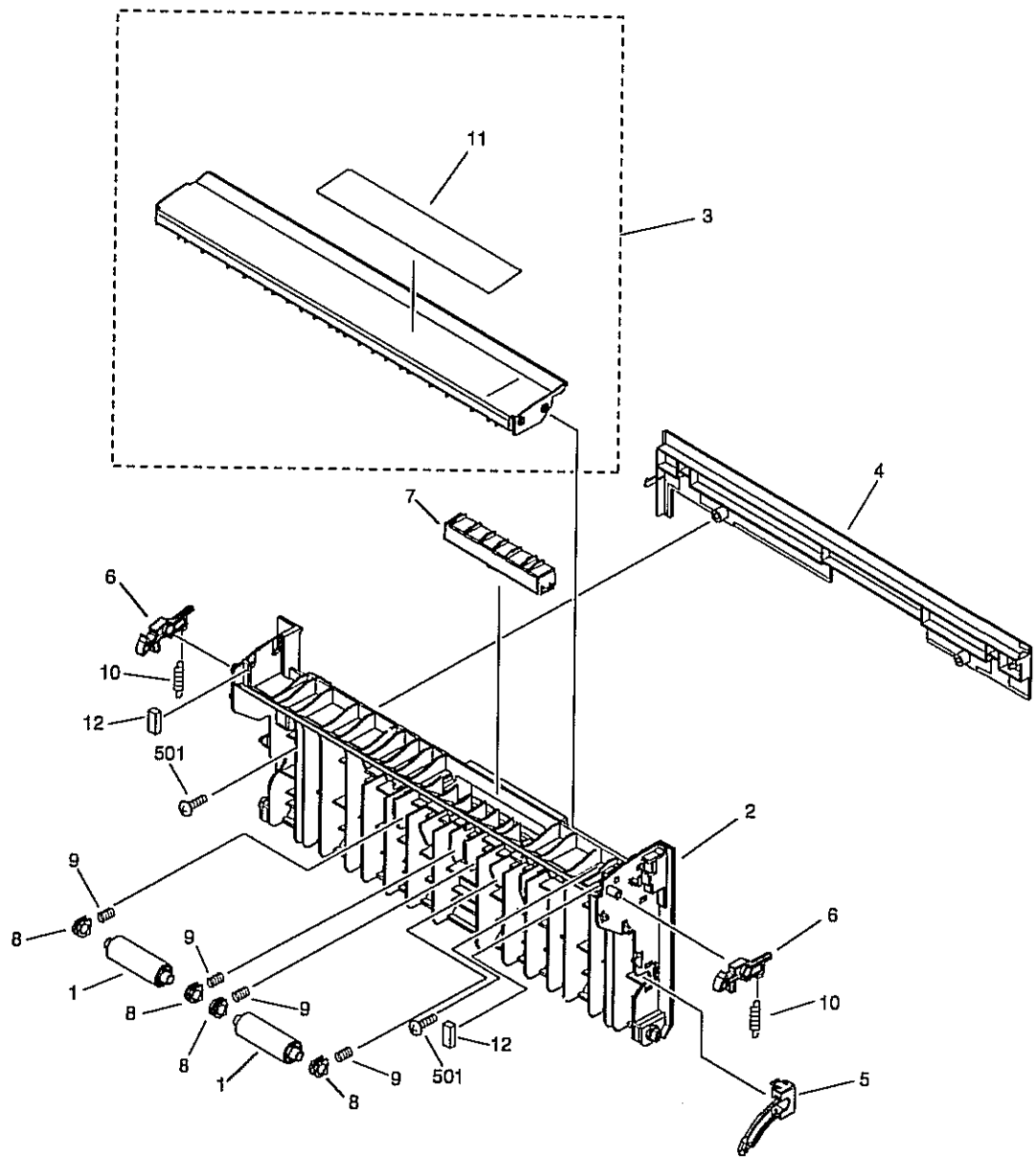
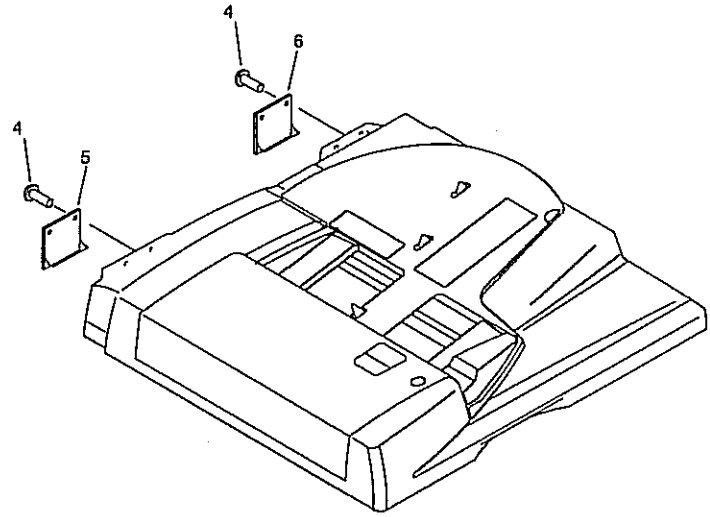


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.145	FM2-0131-000		1	RIGHT LOWER DOOR ASSEMBLY		
1	FB6-3313-000		2	ROLLER, PAPER FEED		
2	FC5-0588-000		1	DOOR, RIGHT LOWER		
3	FL2-0126-000		1	GUIDE, DECK PATH		
4	FC5-0590-000		1	PANEL, BLANKING		
5	FC5-0592-000		1	STOPPER, RIGHT LOWER DOOR		
6	FC5-0593-000		2	HOOK, RIGHT LOWER DOOR		
7	FC5-0594-000		1	GRIP, RIGHT LOWER DOOR		
8	FS5-1595-000		4	BUSHING, VERTICAL ROLLER		
9	FS7-2788-000		4	SPRING, COMPRESSION		
10	FU5-2030-000		2	SPRING, TENSION		
11	FU5-8011-000		1	LABEL, LASER CAUTION		
12	FC5-7413-000		2	SHEET, RIGHT LOWER DOOR		
501	XB4-5400-807		2	SCREW,P,M4X8		

FIGURE 160 (Japan and Australia Model only)
DADF MOUNTING HARDWARE



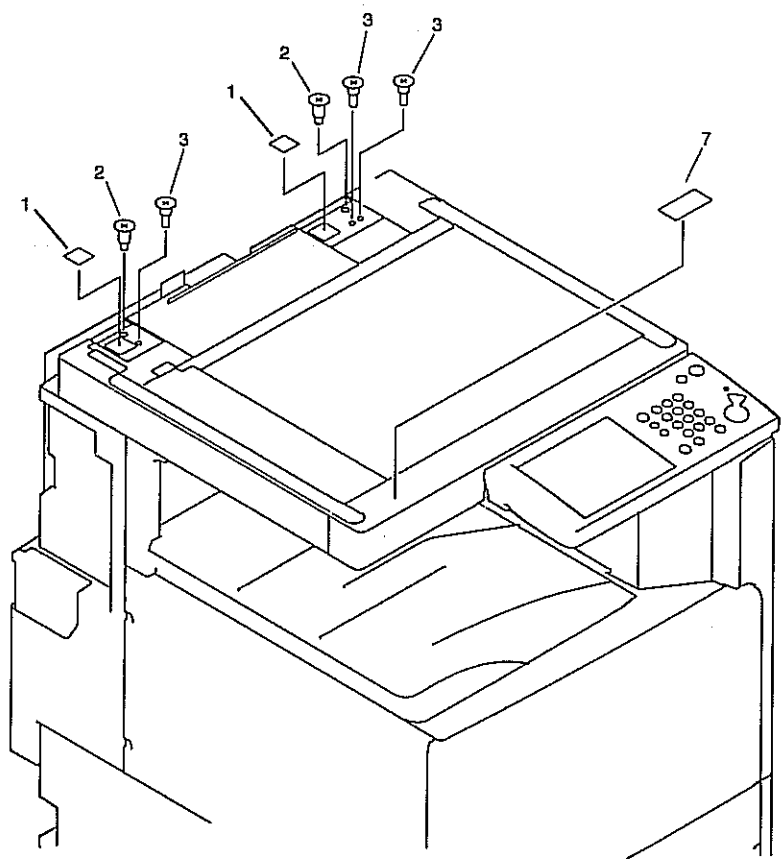
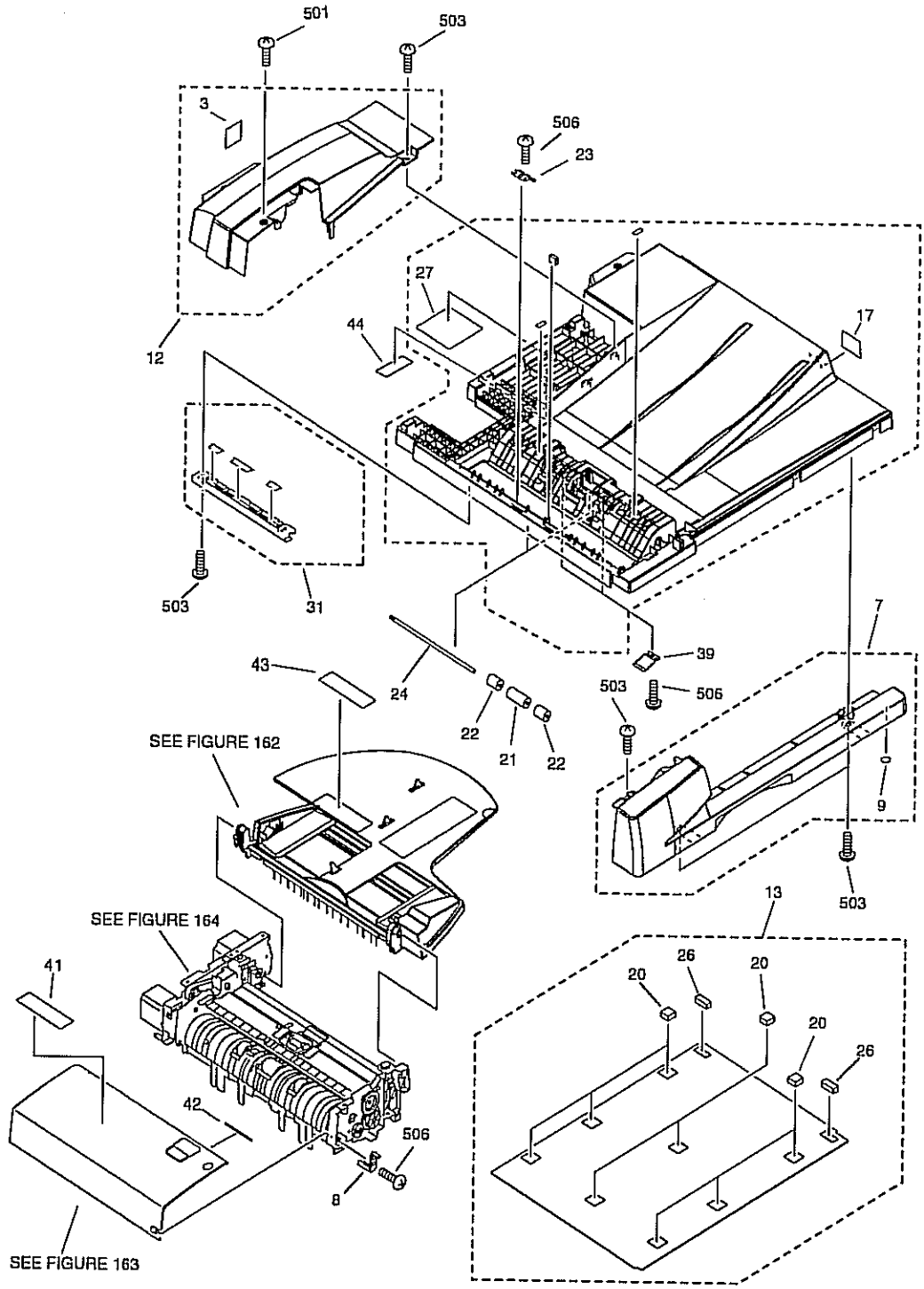


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.160	NPN		1	DADF MOUNTING HARDWARE	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
1	FC5-4427-000		2	SHEET, BLANKING	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
2	FU5-9139-000		2	SCREW, STEPPED, 5X6	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
3	FU5-9140-000		3	SCREW, STEPPED, M4X10	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
4	XA9-0874-000		4	SCREW, M3X8	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
5	FB5-9504-000		1	SHEET,HINGE GUIDE,LEFT	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
6	FB5-9505-000		1	SHEET, HINGE GUIDE, RIGHT	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
7	FC5-4410-000		1	LABEL, CLEANING	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	

FIGURE 161 (Japan and Australia Model only)
DADF ASSEMBLY



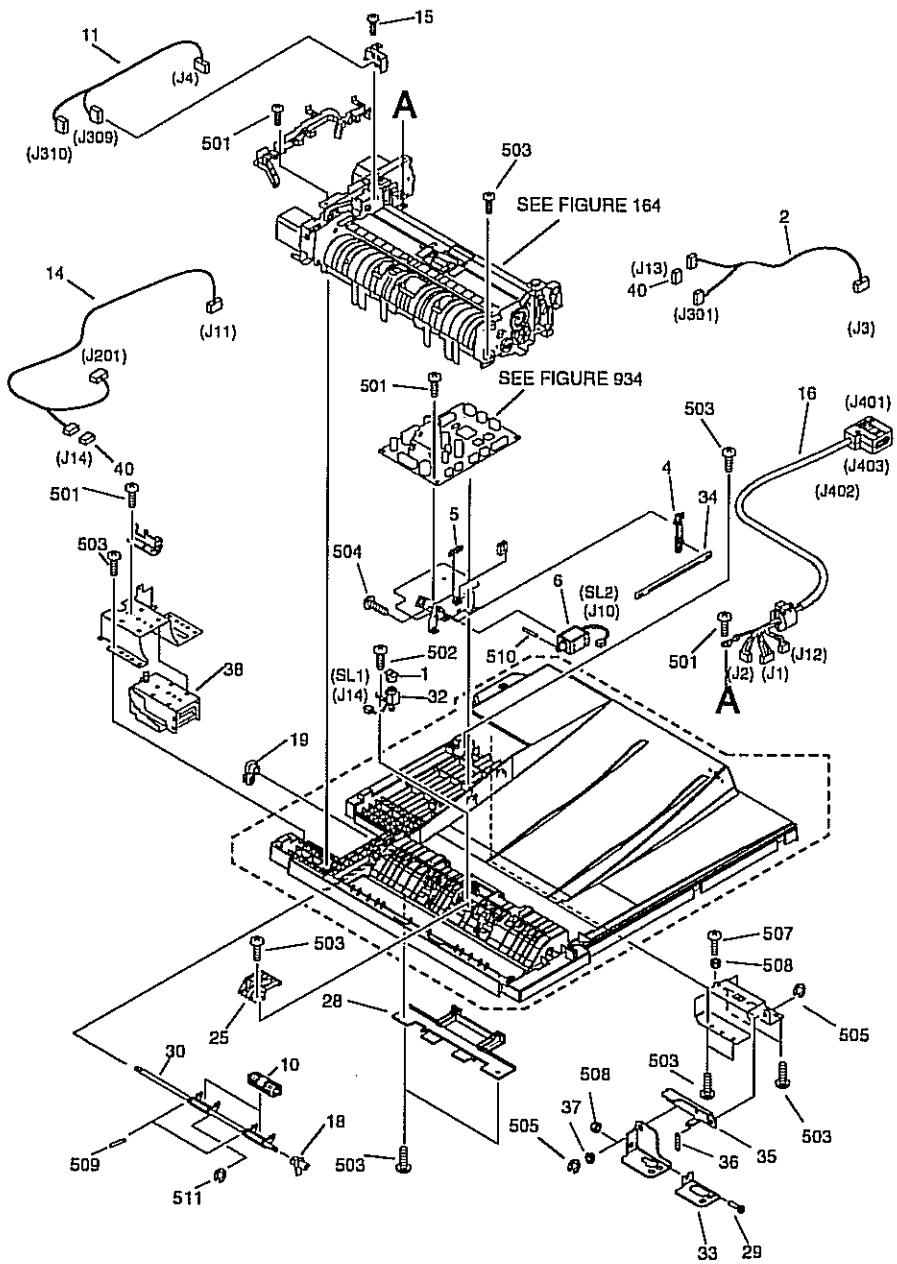

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11
(J4)
(J310)
(J309)
501
A
503
SEE FIGURE 164
2
(J13)
40
(J301)
(J3)
14
(J11)
(J201)
(J14)
40
501
SEE FIGURE 934
503
16
(J401)
(J403)
(J402)
4
34
5
504
6
(SL2)
(J10)
501
(J12)
(J2) (J1)
A
502
(SL1)
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(J14)
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FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.161	NPN		1	DADF ASSEMBLY	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
1	FB5-9410-000		1	STAMPER	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
2	FF3-4608-000		1	CABLE, JOINT	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA PI2,3,4 J3,13,302,303,304	
3	FC5-4400-000		1	LABEL, HINGE CAUTION	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
4	FC5-4279-000		1	LEVER, SOLENOID	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
5	FS7-2662-000		1	SPRING, TENSION	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
6	FL2-2954-000		1	SOLENOID	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA SL2 J10	
7	FL2-0961-000		1	PANEL, FRONT	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
8	FC5-4264-000		1	SHAFT, OPEN/CLOSE	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
9	XH9-0126-000		1	SHEET, CLEAR DAMPER	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
10	FC6-2778-000		2	ROLLER, DELIVERY REVERSE	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
11	FF3-4306-000		1	CABLE, COVER/CLOSE SENSOR	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA PI9,10 J4,309,310	

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
12	FL2-0941-000		1	PANEL, REAR	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
13	FL2-0947-000		1	PANEL, COPYBOARD	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
14	FF3-4607-000		1	CABLE, SOLENOID LED	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA SL2 J11,14,201	
15	XA9-0894-000		1	SCREW,M3X6	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
16	FG3-3125-000		1	CABLE, INTERFACE	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA J1,2,12,401,402,403	
17	FC5-4428-000		1	SHEET, BLANKING	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
18	FC5-4280-000		1	BUSHING	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
19	FC5-4281-000		1	BUSHING	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
20	FC5-4295-000		8	SHEET, COPYBOARD COVER, LARGE	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
21	FC5-4286-000		2	ROLLER, PAPER FEED, 1	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
22	FC5-4287-000		4	ROLLER, PAPER FEED, 2	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
23	FB5-9401-000		2	SPRING, LEAF	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
24	FC5-4285-030		2	SHAFT, PAPER FEED ROLLER	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
25	FC5-4291-000		1	GUIDE, STAMP	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
26	FC5-4293-000		2	SPONGE, COPYBOARD PANEL	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
27	FC5-4399-000		1	LABEL, HINGE CAUTION	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
28	FC5-4292-000		1	GUIDE, PAPER FEED ROLLER, 2	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
29	FC5-4274-000		1	SCREW, ADJUSTMENT, M4	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
30	FL2-0945-000		1	SHAFT, DELIVERY REVERSE ROLLER	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
31	FL2-0946-000		1	GUIDE, PAPER FEED ROLLER, 1	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
32	FK2-0216-000		1	SOLENOID	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA SL1 J14	
33	FC5-4273-020		1	PLATE, RIGHT HINGE ADJUSTMENT	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
34	FC5-4278-000		1	LINK, SOLENOID	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
35	FL2-0943-000		1	ARM, RIGHT HINGE	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
36	FS7-2660-000		1	SPRING, TENSION	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
37	FU5-1173-000		1	BUSHING	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
38	FB6-2703-040		1	LEFT HINGE UNIT	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
39	FC5-4289-000		2	SPRING, LEAF	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
40	VS1-7177-002		2	CONNECTOR, SNAP TIGHY, BK	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
41	FC5-4402-000		1	LABEL, DOCUMENT PROHIBITION	AB SIZE iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
42	FC5-4408-000		1	LABEL,DOCUMENT SIZE	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
43	FC5-4391-000		1	LABEL, DOCUMENT SIZE	AB SIZE iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
44	FC5-4396-000		1	LABEL, HINGE CAUTION	AB SIZE iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
501	XBI-2400-606		5	SCREW,MACH,TRUSS HEAD,M4X6	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
502	XB4-5300-806		1	SCREW,P,M3X8	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
503	XB4-5401-205		11	SCREW,P,M4X12	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
504	XB1-2300-306		2	SCREW,MACH.,TRUSS HEAD,M3X3	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
505	XD2-1100-502		2	RETAINING RING (E-TYPE)	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
506	XB4-5400-809		4	SCREW,P,M4X8	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
507	XB1-2401-406		2	BINDING HEAD MACHINE SCREW	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
508	XB7-2100-405		2	NUT, HEX M4	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
509	XD3-1200-102		2	SPRING PIN	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
510	XD3-1300-162		1	PIN,SPRING	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
511	XD2-1100-402		1	RETAINING RING (E-TYPE)	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	

FIGURE 162 (Japan and Australia Model only)
DOCUMENT TRAY ASSEMBLY

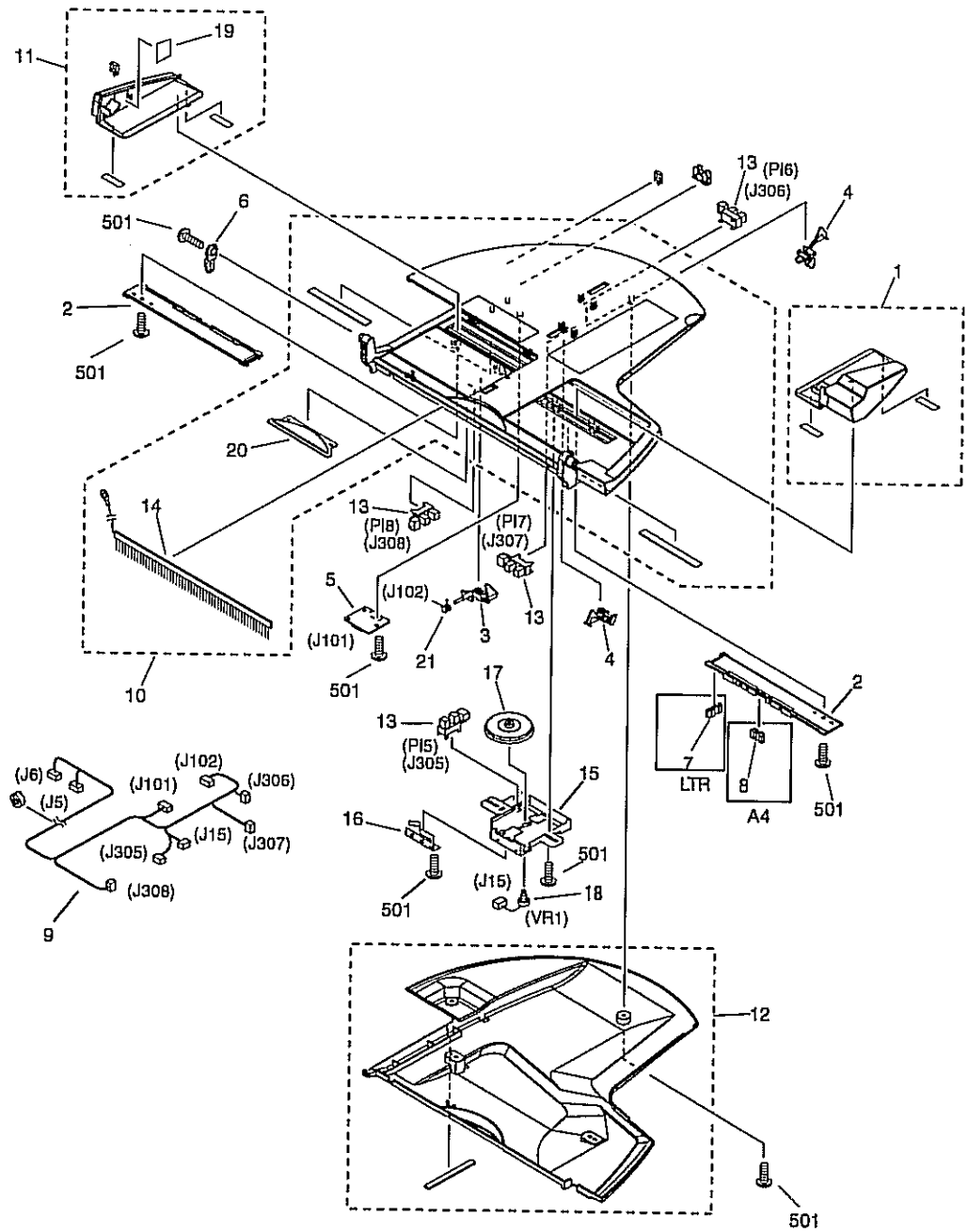


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.162	FM2-2964-000		1	DOCUMENT TRAY ASSEMBLY	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
1	FL2-0951-000		1	GUIDE, DOCUMENT, FRONT	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
2	FC5-4305-000		2	RACK, DOCUMENT SIDE GUIDE	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
3	FC5-4306-000		1	FLAG, CYCLE END	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
4	FC5-4307-000		2	FLAG, DOCUMENT LENGTH SENSOR	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
5	FG3-3758-000		1	CONNECTING PCB UNIT	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA J101,102	
6	FC5-4308-000		1	HOLDER, DOCUMENT TRAY	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
7	FC5-4421-000		1	RACK	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA LTR	
8	FC5-4422-000		1	RACK	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA A4	
9	FF3-4609-000		1	CABLE, DOCUMENT TRAY	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA PI5,6,7,8 VR1 J5,6,101,102,305,306,307,308,15	
10	FL2-0949-000		1	TRAY, DOCUMENT, UPPER	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
11	FL2-0950-000		1	GUIDE, DOCUMENT, REAR	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
12	FL2-0952-000		1	GUIDE, DOCUMENT TRAY, LOWER	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
13	WG8-5624-000		4	IC, PHOTO INTERRUPTER	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA P15,16,17,18 J305,306,307,308	
14	FB5-9414-000		1	ELIMINATOR, STATIC CHARGE	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
15	FC5-4302-000		1	HOLDER, VOLUME	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
16	FB5-9417-000		1	SPRING, LEAF	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
17	FU5-0633-000		1	GEAR, 62T	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
18	FG3-3757-000		1	VARIABLE RESISTOR UNIT	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA VR1 J15	
19	FC5-4406-000		1	LABEL, DOCUMENT HEIGHT LIMIT	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
20	FC5-4309-000		1	WINDOW, DOCUMENT TRAY	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
21	FB5-9427-000		1	SPRING, TORSION	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
501	XB4-7300-809		AR	SCREW,TAP,BINDING HEAD,M3X8	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	

FIGURE 163 (Japan and Australia Model only)
OPEN/CLOSE PANEL ASSEMBLY

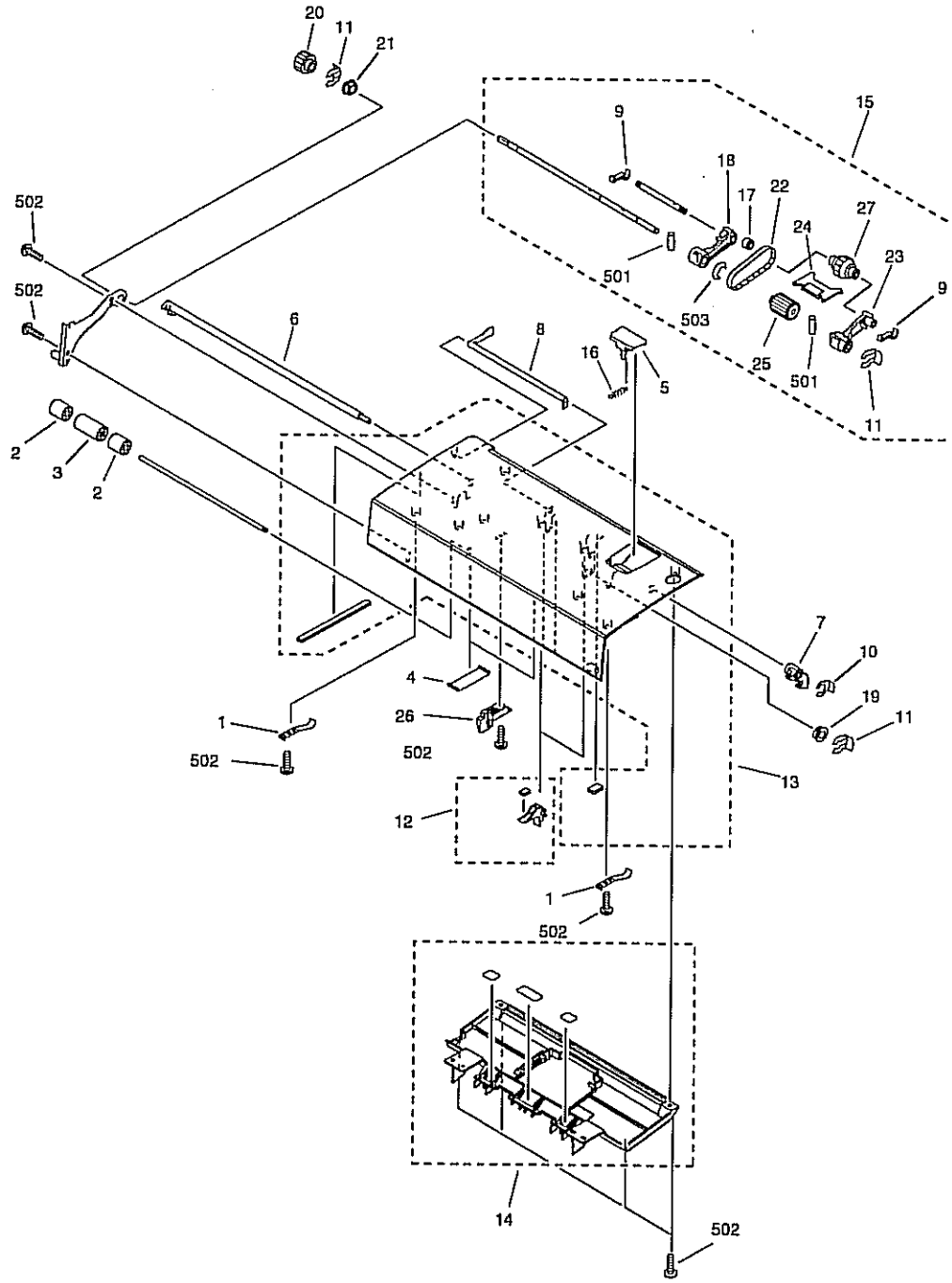


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.163	FM2-2954-000		1	OPEN/CLOSE PANEL ASSEMBLY	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
1	FB5-9434-000		2	SPRING, LEAF	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
2	FC5-4323-000		2	ROLLER, REGISTRATION, 1	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
3	FC5-4324-000		1	ROLLER, REGISTRATION, 2	IR2770F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
4	FB5-9438-000		2	SPRING, LEAF	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
5	FC5-4326-000		1	LEVER, OPEN/CLOSE	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
6	FB5-9440-000		1	SHAFT, LATCH	IR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
7	FC5-4327-000		1	LEVER, LATCH	IR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
8	FC5-4329-000		1	FLAG, DOCUMENT SENSOR	IR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
9	FC5-4336-000		2	LEVER, STOP	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
10	FC5-4424-000		1	CLIP	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
11	FC5-4425-000		3	CLIP	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
12	FL2-0948-000		2	SHUTTER	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
13	FL2-0953-000		1	PANEL, OPEN/CLOSE	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
14	FL2-0955-000		1	GUIDE, OPEN/CLOSE	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
15	FM2-2955-000		1	SEPARATION ROLLER ASSEMBLY	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
16	FS7-2663-000		1	SPRING, TENSION	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
17	FU5-3333-000		1	PULLEY	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
18	FM2-2958-000		1	PICK-UP ARM UNIT,REAR	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
19	FU5-1168-000		1	BUSHING	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
20	FU5-0628-000		1	GEAR, 18T	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
21	FU5-1172-000		1	BUSHING	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
22	XF2-1606-135		1	BELT, TIMING	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
23	FM2-2957-000		1	PICK-UP ARM UNIT,FRONT	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
24	FC5-4341-000		1	GUIDE, SEPARATION ROLLER	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
25	FC6-2784-000		1	ROLLER, PAPER SEPARATION	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
26	FC5-4338-000		1	COVER, REGISTRATION ADJUSTMENT	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
27	FM2-2956-000		1	PICK-UP ROLLER ASSEMBLY	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
501	XD3-2200-102		2	PIN, PARALLEL	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
502	XB4-5300-806		9	SCREW,TAPPING, TRUSS HEAD M3X8	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
503	XD2-1200-502		1	RETAINING RING(E-TRPE)	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	

FIGURE 164 (Japan and Australia Model only)
PAPER FEEDER ASSEMBLY

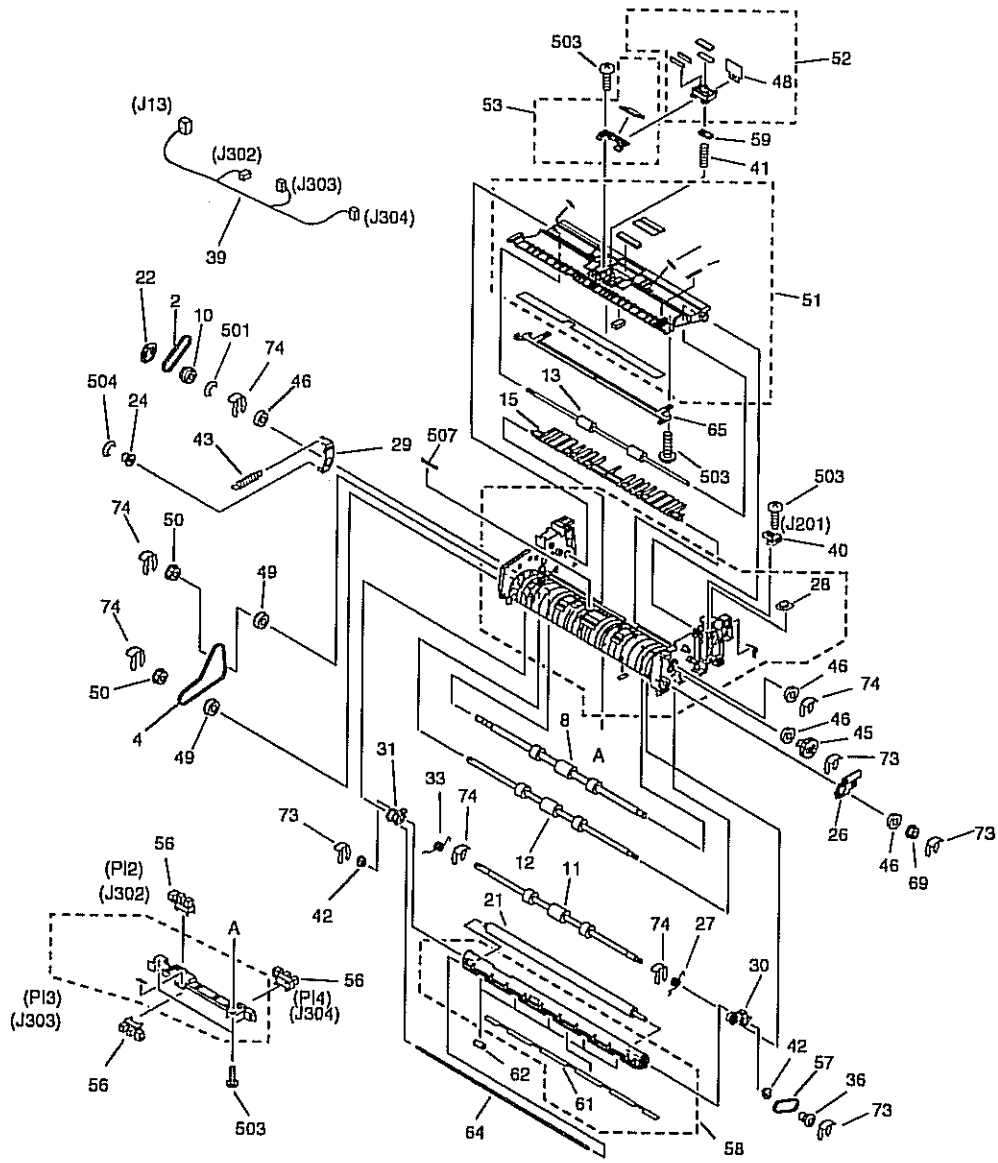


FIGURE 164 (Japan and Australia Model only)
PAPER FEEDER ASSEMBLY

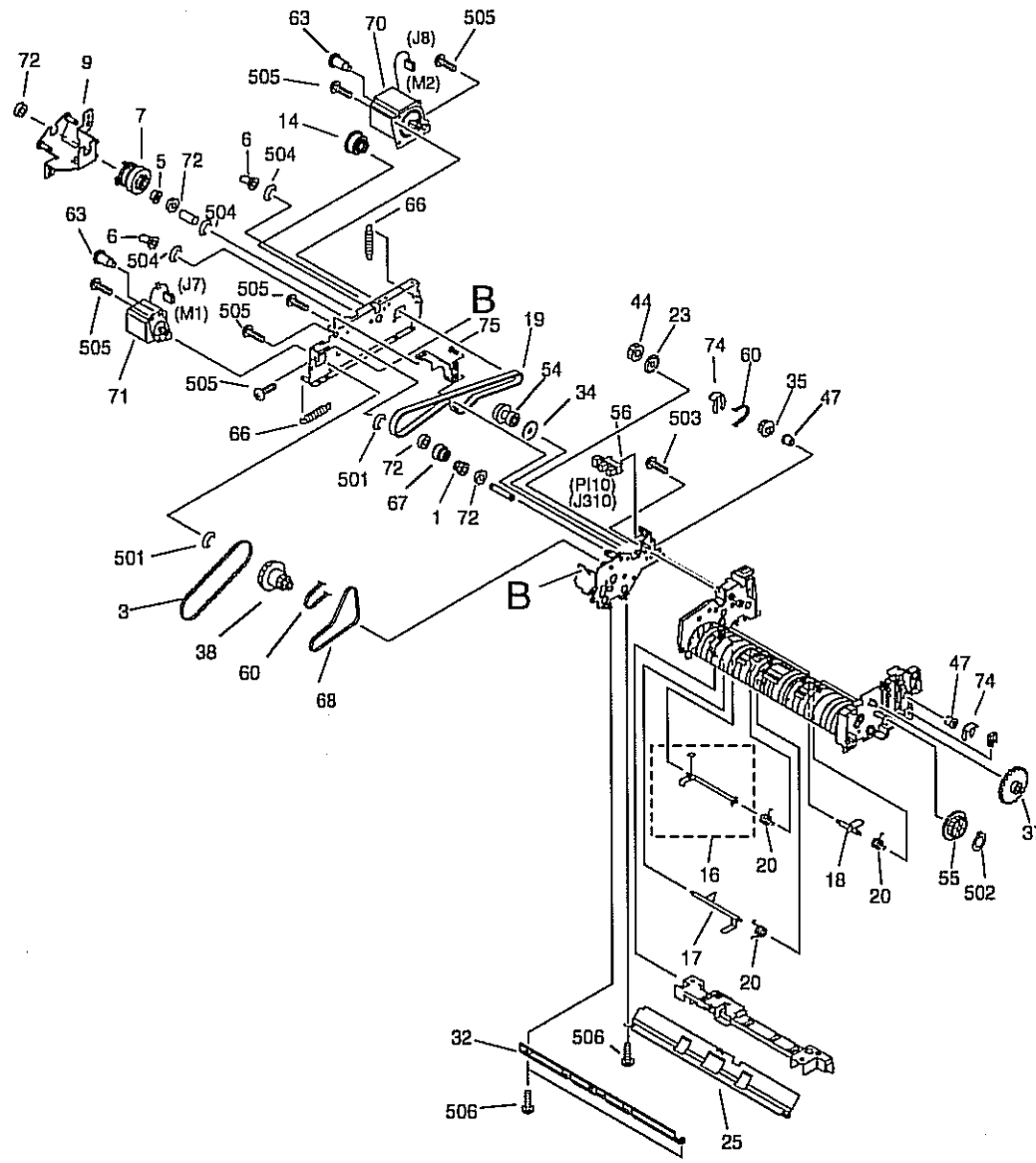


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.164	FM2-2959-000		1	PAPER FEEDER ASSEBLY	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
1	FC6-2785-000		1	GEAR, 17T	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
2	XF2-1605-940		1	BELT, TIMING	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
3	XF2-1607-440		1	BELT, TIMING	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
4	XF9-0727-000		1	BELT, TIMING	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
5	FC6-2781-000		1	PULLEY, 28T	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
6	FC6-2791-000		2	TENSIONER	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
7	FH6-5128-000		1	CLUTCH	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
8	FC5-4354-000		1	ROLLER, REGISTRATION	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
9	FL2-2952-000		1	CLUTCH	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
10	FB5-9466-000		1	PULLEY, ONE-WAY	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
11	FB5-9467-020		1	ROLLER, PAPER FEEDER, 1	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
12	FB5-9468-020		1	ROLLER, PAPER FEEDER, 2	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
13	FB5-9469-020		1	ROLLER, PAPER DELIVERY	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
14	FM2-2961-000		1	ESTRANGEMENT CLT ASSEMBLY	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
15	FB5-9471-009		1	DEFLECTOR, PAPER	iR2770F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
16	FL2-0965-000		1	FLAG, REGISTRATION SENSOR	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
17	FC5-4358-000		1	FLAG, READ SENSOR	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
18	FC5-4359-000		1	FLAG, PAPER DELIVERY SENSOR	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
19	XF2-3616-660		1	BELT	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
20	FB5-9477-000		3	SPRING, TORSION	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
21	FC5-2804-000		1	ROLLER, PLATEN	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
22	FB6-2705-000		1	RING,E,FRANGE	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
23	FC5-4353-000		1	FLANGE, BELT	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
24	FC5-4356-000		1	PULLEY, TENSIONER	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
25	FC5-4363-000		1	GUIDE, PLATEN ROLLER, RIGHT	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
26	FC5-4376-000		1	GUIDE, PLATEN	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
27	FC5-4381-000		1	SPRING, TORSION	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
28	FB5-9460-009		1	WINDOW, LED	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
29	FL2-0958-000		1	PLATE, TENSIONER	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
30	FL2-0959-000		1	ARM, SWING BUSHING, FRONT	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
31	FL2-0960-000		1	ARM, SWING BUSHING, REAR	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
32	FC5-4362-000		1	GUIDE, PLATEN ROLLER, LEFT	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
33	FC5-4382-000		1	SPRING, TORSION	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
34	FC6-2797-000		1	FLANGE	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
35	FU5-3147-000		1	PULLEY, 28T	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
36	FU5-3148-000		1	PULLEY, 18T	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
37	FC6-2798-000		1	KNOB, JAM CLEARING	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
38	FU5-3150-000		1	PULLEY, 56T/29T/21T	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
39	FF3-4303-000		1	CABLE, PATH SENSOR	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA J13,302,303,304	
40	FG3-3303-000		1	LED PCB UNIT	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA J201	
41	FU5-2364-000		1	SPRING, COMPRESSION	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
42	FU5-1171-000		2	BUSHING	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
43	FS7-2666-000		1	SPRING, TENSION	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
44	FU5-0629-000		1	GEAR, 19T	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
45	FU5-0630-000		1	GEAR, 30T	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
46	FU5-1169-000		4	BUSHING	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
47	FU5-1170-000		2	BUSHING	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
48	FC5-4368-000		1	PAD, PAPER SEPARATION	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
49	XG9-0507-000		2	BEARING, BALL, MF128ZZ	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
50	FU5-3146-000		2	PULLEY, 27T	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
51	FL2-0962-000		1	GUIDE, PAPER SEPARATION	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
52	FL2-0963-000		1	HOLDER, SEPARATION PAD,1	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
53	FL2-0964-000		1	HOLDER, SEPARATION PAD, 2	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
54	FU5-3337-000		1	PULLEY, 28T,GEAR, 15T	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
55	FU6-0673-000		1	GEAR, 54T/39T	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
56	WG8-5624-000		4	IC, PHOTO INTERRUPTER	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA PI2,3,4 J302,303,304	
57	XF2-1604-435		1	BELT, TIMING	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
58	FL2-0968-000		1	HOLDER, GUIDE ROLLER	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
59	FC5-4367-000		1	MOUNT, SPRING, PAD	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
60	FS2-9010-000		1	BELT, TIMING	iR2270F&iR2870F&iR457 0F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
61	FC5-4373-000		1	SHEET, PAPER FEED	iR2270F&iR2870F&iR457 0F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
62	FC5-4374-000		5	ROLLER, GUIDE	iR2270F&iR2870F&iR457 0F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
63	FS1-9010-020		2	SCREW, STEPPED, M3	iR2270F&iR2870F&iR457 0F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
64	FC5-4372-020		1	SHAFT, GUIDE ROLLER	iR2270F&iR2870F&iR457 0F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
65	FC5-4365-000		1	PLATE, SEPARATION GUIDE	iR2270F&iR2870F&iR457 0F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
66	FS7-2664-000		2	SPRING, TENSION	iR2270F&iR2870F&iR457 0F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
67	FU5-3336-000		1	PULLEY,36T/28T	iR2270F&iR2870F&iR457 0F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
68	XF2-1607-640		1	BELT, TIMING	iR2270F&iR2870F&iR457 0F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
69	FU5-3149-000		1	PULLEY, 23T	iR2270F&iR2870F&iR457 0F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
70	FH5-1129-000		1	MOTOR, STEPPING, DC	iR2270F&iR2870F&iR457 0F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA M2 J8	
71	FH5-1128-000		1	MOTOR, STEPPING, DC	iR2270F&iR2870F&iR457 0F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA M1 J7	

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
72	FU5-1172-000		4	BUSHING	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
73	FC5-4424-000		4	CLIP	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
74	FC5-4425-000		8	CLIP	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
75	XA9-0894-000		1	SCREW,M3X6	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
501	XD2-1100-642		3	RING,E	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
502	XD2-2100-502		1	GRIP RING	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
503	XB4-5400-809		4	SCREW, TAP, BINDING HEAD, M3X8	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
504	XD2-1100-322		4	RETAINING RING (E-TYPE)	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
505	XB1-2400-606		6	SCREW, MACHINE MX6	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
506	XB1-2300-306		2	SCREW,MACH.,TRUSS HEAD,M3X3	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	
507	XD3-2200-102		1	PIN, PARALLEL	iR2270F&iR2870F&iR4570F&iR3570F&iR2270 CA&iR2870 CA&iR3570 CA&iR4570 CA	

FIGURE 210
READER ASSEMBLY

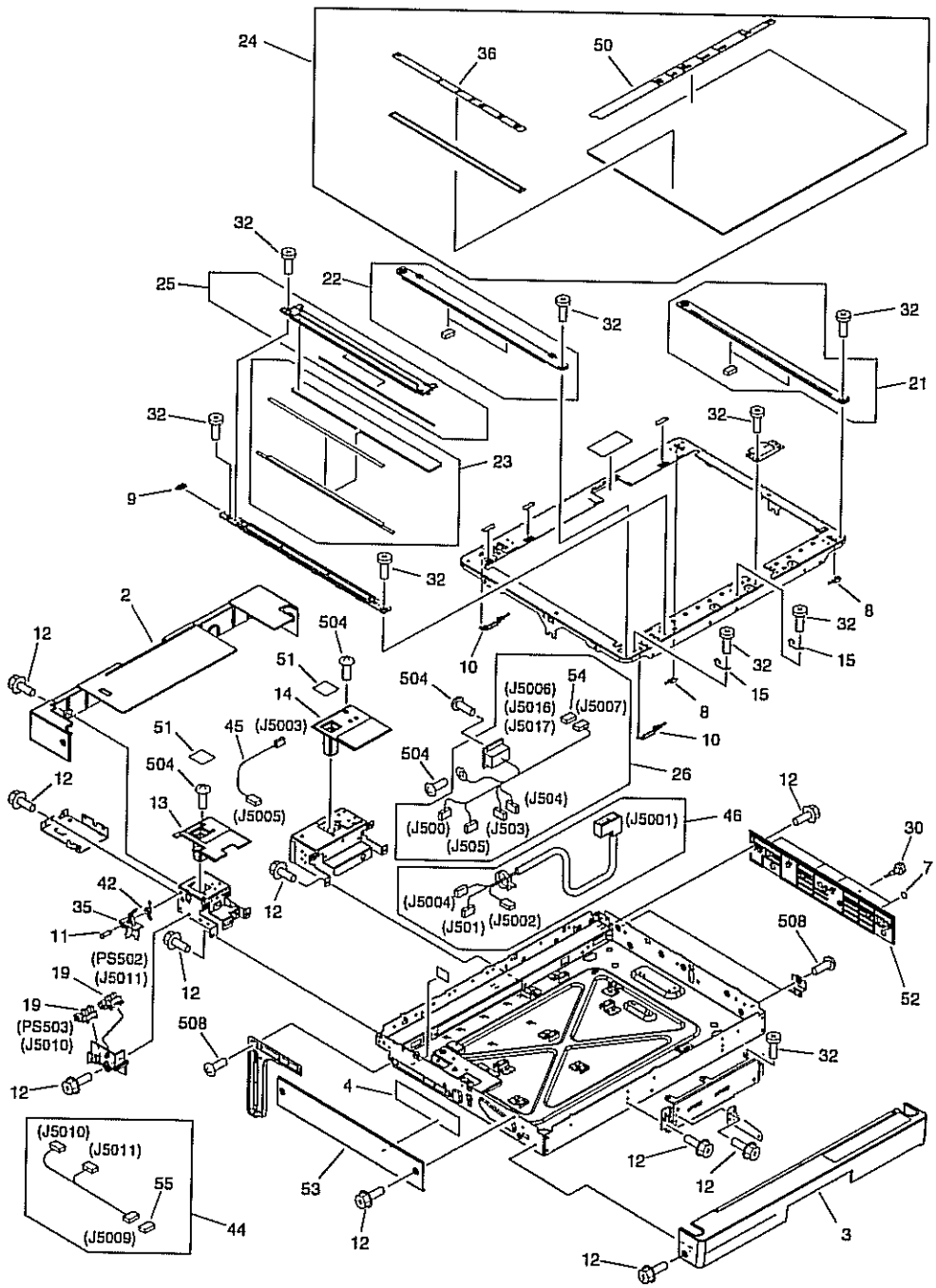


FIGURE 210
READER ASSEMBLY

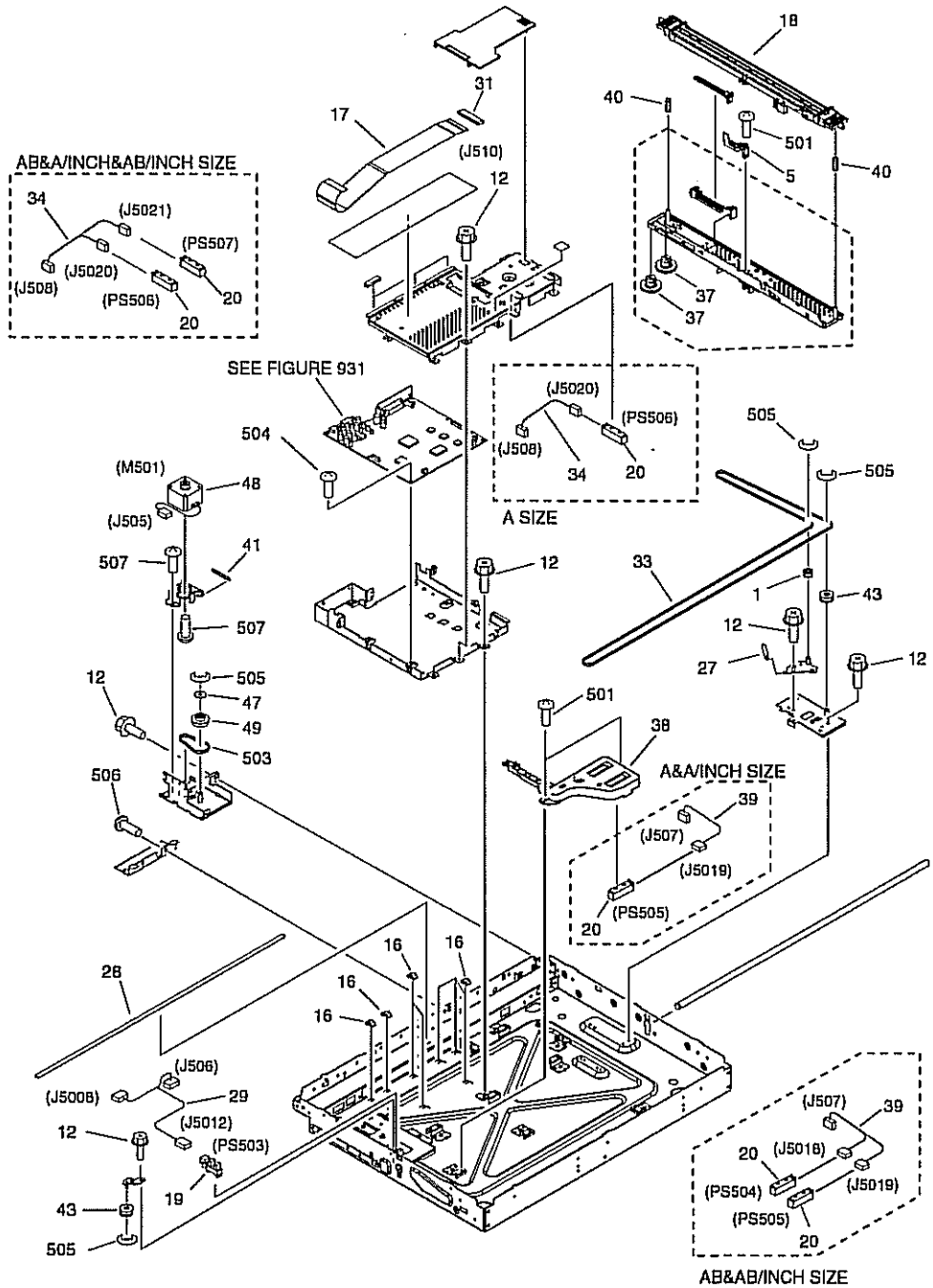


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.210	NPN		RF	READER ASSEMBLY		
1	FB6-1321-000		1	PULLEY, TENSION		
2	FC6-2759-000		1	PANEL, READER, REAR		
3	FC6-2765-000		1	PANEL, READER, FRONT		
4	FL2-2999-000		1	LABEL, SERVICE		
5	FC5-0792-000		1	RETAINER, BELT		
7	FC5-0166-000		4	SEAL, BLANKING		
8	FC5-1426-000		2	GUIDE, CARRIAGE, RIGHT		
9	FC5-1427-000		1	COVER, EDGE		
10	FC5-1439-000		2	GUIDE, CARRIAGE, LEFT		
11	FS5-9227-020		1	SCREW, STEPPED, M4		
12	XA9-1386-000		69	SCREW, RS, M3X8		
13	FC5-1446-000		1	PANEL, DF SUPPORT, LEFT		
14	FC5-1447-000		1	PANEL, DF SUPPORT, RIGHT		
15	FC5-1473-000		2	RETAINER, GLASS		
16	FC5-1499-000		7	PLATE, GROUNDING		
17	FH2-7174-000		1	CABLE, FLEXIBLE FLAT		
18	FL2-2997-000		1	CONTACT IMAGE SENSOR UNIT		
19	WG8-5624-000		3	IC, PHOTO INTERRUPTER		
20	FH7-7569-000		4	DOCUMENT SIZE SENSOR UNIT		
21	FL2-0127-000		1	RETAINER, GLASS, RIGHT		
22	FL2-0128-000		1	RETAINER, GLASS, LEFT		
23	FL2-2942-000		1	GLASS, READER		
24	FL2-2944-000		1	GLASS, COPYBOARD	A INCH SIZE	
24	FL2-2945-000		1	GLASS, COPYBOARD	A SIZE	
24	FL2-2946-000		1	GLASS, COPYBOARD	AB INCH SIZE	
24	FL2-2943-000		1	GLASS, COPYBOARD	AB SIZE	
25	FL2-0279-000		1	GUIDE, PAPER		
26	FG3-3152-000		1	CABLE, READER		
27	FU5-2103-000		1	SPRING, TENSION		
28	FC5-1492-000		1	PLATE, RAIL		
29	FG3-3153-000		1	CABLE, HOME POSITION SENSOR		

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
30	FU5-9006-020		1	SCREW, FIXED, M4		
31	FH7-9334-000		1	CORE, FERRITE		
32	XA9-1415-000		15	SCREW, FLAT HEAD, M4		
33	XF9-0743-000		1	BELT, TIMING		
34	FG3-3795-000		1	CABLE, SIZE DETECT	A SIZE	
34	FG3-3768-000		1	CABLE, SIZE DETECT	AB SIZE&A INCH SIZE&AB INCH SIZE	
35	FC6-2763-000		1	FLAG, SENSOR		
36	FU5-8003-000		1	PLATE, WIDTH INDEX	A INCH SIZE	
36	FU5-8005-000		1	PLATE, WIDTH INDEX	A SIZE	
36	FU5-8007-000		1	PLATE, WIDTH INDEX	AB INCH SIZE	
36	FU5-8001-000		1	PLATE, WIDTH INDEX	AB SIZE	
37	FB3-2411-000		2	PIN, SLIDE		
38	FC6-2764-000		1	HOLDER, SIZE DETECT		
39	FG3-3793-000		1	CABLE, MAIN SIZE DETECT	A INCH SIZE	
39	FG3-3794-000		1	CABLE, MAIN SIZE DETECT	A SIZE	
39	FG3-3767-000		1	CABLE, MAIN SIZE DETECT	AB SIZE&AB INCH SIZE	
40	FU6-2236-000		2	SPRING, OMPRESSION		
41	FU5-2105-000		1	SPRING, TENSION		
42	FU5-2057-000		1	SPRING, TORSION		
43	FU5-3328-000		2	PULLEY,FOLLOWER		
44	FG3-3153-000		1	CABLE, HOME POSITION SENSOR		
45	FG3-3158-000		1	CABLE, HEATER CONNECTING		
46	FG3-3766-000		1	CABLE, POWER SUPPLY		
47	FB6-1339-000		1	FLANGE		
48	FH5-1028-000		1	MOTOR, STEPPING, DC		
49	FU5-3030-000		1	PULLEY, 24T/41T		
50	FU5-8551-000		1	PLATE, LENGTH INDEX	A INCH SIZE	
50	FU5-8552-000		1	PLATE, LENGTH INDEX	A SIZE	
50	FU5-8553-000		1	PLATE, LENGTH INDEX	AB INCH SIZE	
50	FU5-8550-000		1	PLATE, LENGTH INDEX	AB SIZE	
51	FC5-4427-000		1	SEAT, BLANKING		

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
52	FC5-1442-000		1	PANEL, READER, RIGHT		
53	FC5-1443-000		1	PANEL, READER, LEFT		
54	VS1-7177-004		1	CONNECTOR, SNAP TIGHT, BK		
55	VS1-7177-006		1	CONNECTOR, SNAP TIGHT, BK		
501	XB2-8300-805		1	SCREW, MACH, PAN HEAD, M3X8		
503	XF2-4606-740		1	BELT, TIMING, COGGED		
504	XB1-2300-605		3	SCREW, MACHINE M3X6		
505	XD2-1100-502		4	RETAINING RING (E-TYPE)		
507	XB6-7300-407		4	SCREW, TP, M3X4		

FIGURE 250
MAIN DRIVE ASSEMBLY

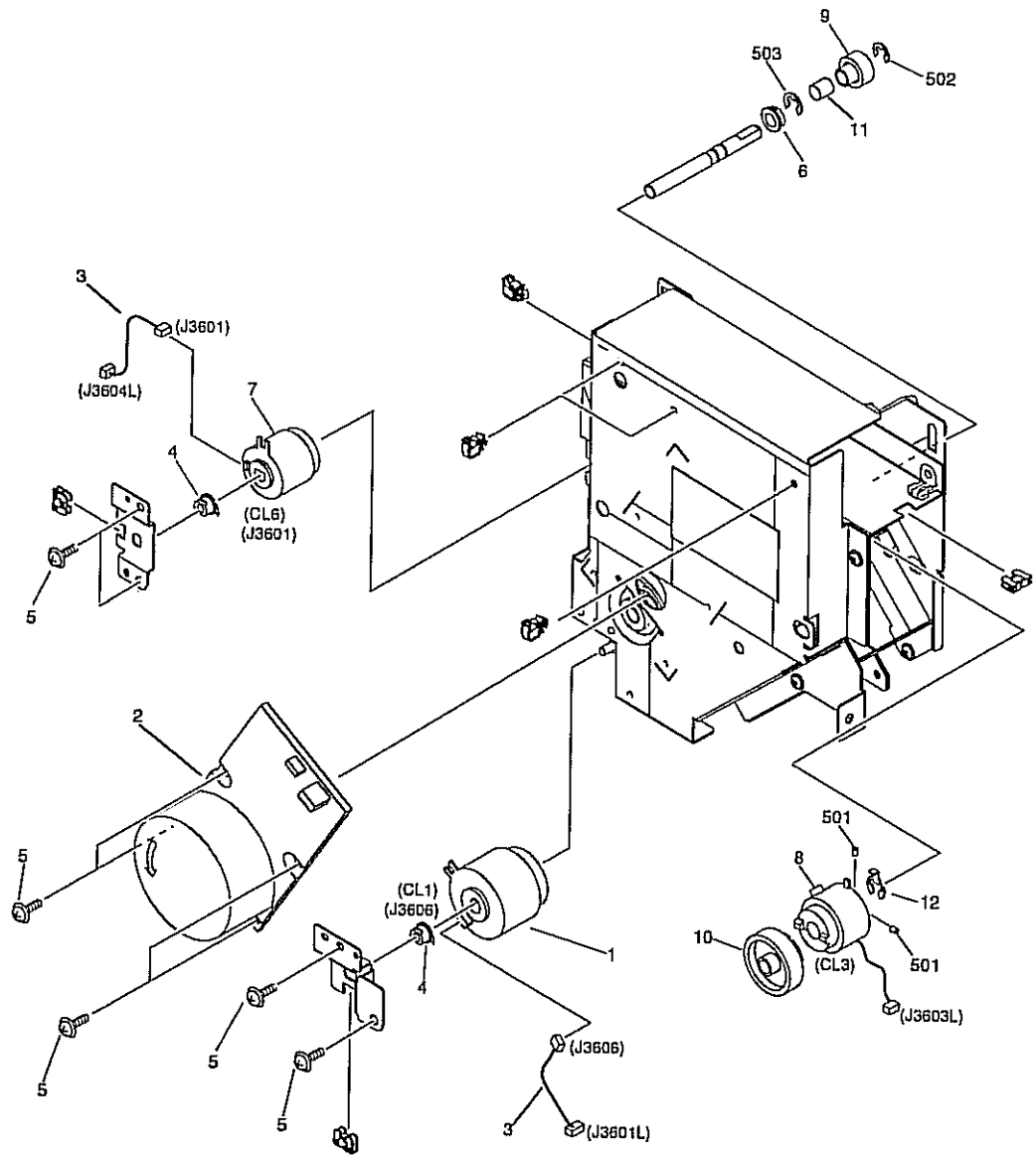


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.250	FM2-0241-000		1	MAIN DRIVE ASSEMBLY		
1	FH6-5076-000		1	CLUTCH, ELECTRO MAGNETIC	CL1 J3606	
2	FK2-0385-000		1	MOTOR, DC		
3	FM2-2842-000		2	CABLE, CLUTCH	J3606,3601L,3601,3604L	
4	FS5-1947-000		2	BUSHING		
5	XA9-1164-000		8	SCREW, RS, M3X6.5		
6	FA9-2112-000		1	BUSHING, PL		
7	FH6-5005-000		1	CLUTCH, ELECTRO MAGNETIC	CL6 J3601	
8	FK2-0404-000		1	CLUTCH, ELECTRO MAGNETIC	CL3 J3603L	
9	FU5-0087-000		1	GEAR, 20T		
10	FU5-0098-000		1	GEAR, 43T		
11	FU5-2079-000		1	SPRING		
12	FB5-5039-000		1	RING, E		
501	XB6-2300-409		2	SETSCREW, M3X4		
502	XD2-1100-502		1	RETAINING RING(E-TYPE)		
503	XD2-1100-642		1	RING, E		

FIGURE 251
MAIN DRIVE ASSEMBLY

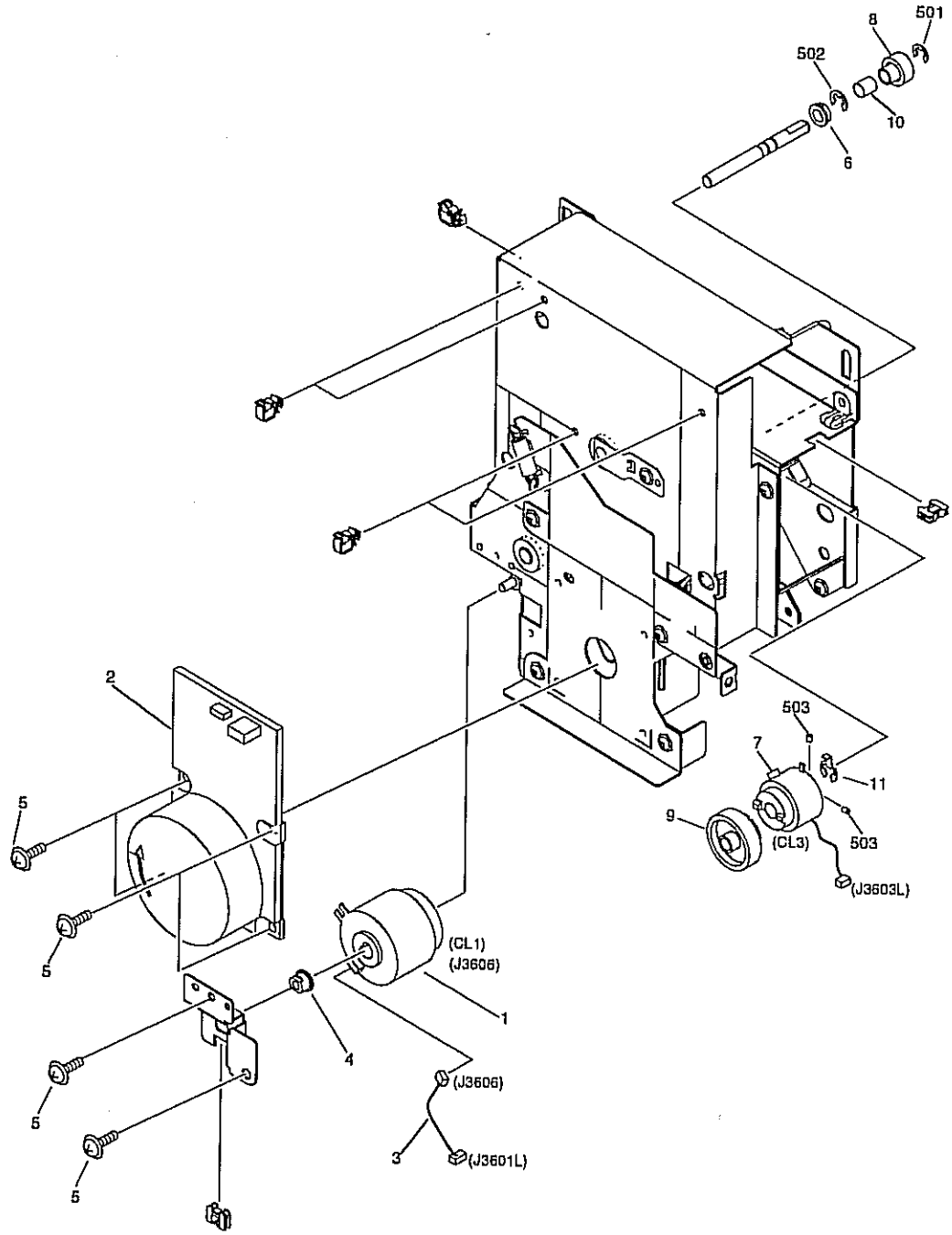


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.251	FM2-1772-000		1	MAIN DRIVE ASSEMBLY		
1	FH6-5076-000		1	CLUTCH, ELECTRO MAGNETIC	CL1 J3606	
2	FK2-0362-000		1	MOTOR, DC		
3	FM2-2842-000		1	CABLE, CLUTCH	J3606,3601L	
4	FS5-1947-000		1	BUSHING		
5	XA9-1164-000		6	SCREW, RS, M3X6.5		
6	FA9-2112-000		1	BUSHING, PL		
7	FK2-0404-000		1	CLUTCH, ELECTRO MAGNETIC	CL3 3603L	
8	FU5-0087-000		1	GEAR, 20T		
9	FU5-0098-000		1	GEAR, 43T		
10	FU5-2079-000		1	SPRING		
11	FB5-5039-000		1	RING, E		
501	XD2-1100-502		1	RETAINING RING(E-TYPE)		
502	XD2-1100-642		1	RING, E		
503	XB6-2300-409		2	SETSCREW, M3X4		

FIGURE 261
FIXINGPAPERDELIVERY,DRIVEASS'Y

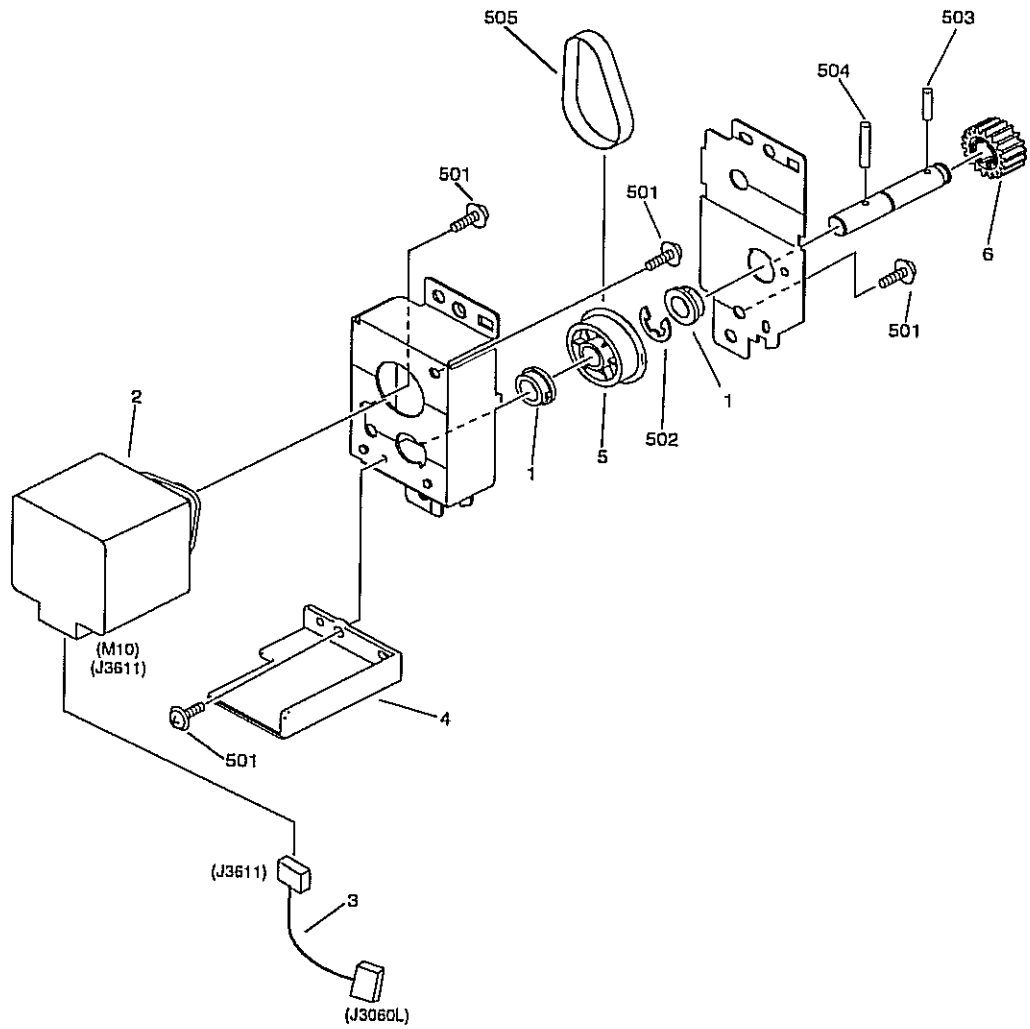


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.261	NPN		RF	FIXINGPAPERDELIVERY,DRIVEASS'Y		
1	FA9-2112-000		2	BUSHING, PL	iR4570&iR4570F&iR3570 &iR3570F	
2	FL2-3266-000		1	MOTOR, STEPPING, DC	iR4570&iR4570F&iR3570 &iR3570F M10 J3611	
3	FM2-2838-000		1	CABLE, DUPLEXING MOTOR	iR4570&iR4570F&iR3570 &iR3570F J3060L,3611	
4	FC5-7208-000		1	COVER, DUPLEX CONNECTOR	iR4570&iR4570F&iR3570 &iR3570F	
5	FU6-0024-000		1	PULLEY, 40T	iR4570&iR4570F&iR3570 &iR3570F	
6	FU6-0029-000		1	GEAR, 18T	iR4570&iR4570F&iR3570 &iR3570F	
501	XB6-7300-607		4	SCREW, TP, M3X6	iR4570&iR4570F&iR3570 &iR3570F	
502	XD2-1100-642		1	RING,E	iR4570&iR4570F&iR3570 &iR3570F	
503	XD3-2200-122		1	PIN, DOWEL	iR4570&iR4570F&iR3570 &iR3570F	
504	XD3-2200-182		1	PIN, DOWEL	iR4570&iR4570F&iR3570 &iR3570F	
505	XF2-1605-760		1	BELT, TIMING	iR4570&iR4570F&iR3570 &iR3570F	

FIGURE 281
FIXING DELIVERY DRIVE ASSEMBLY

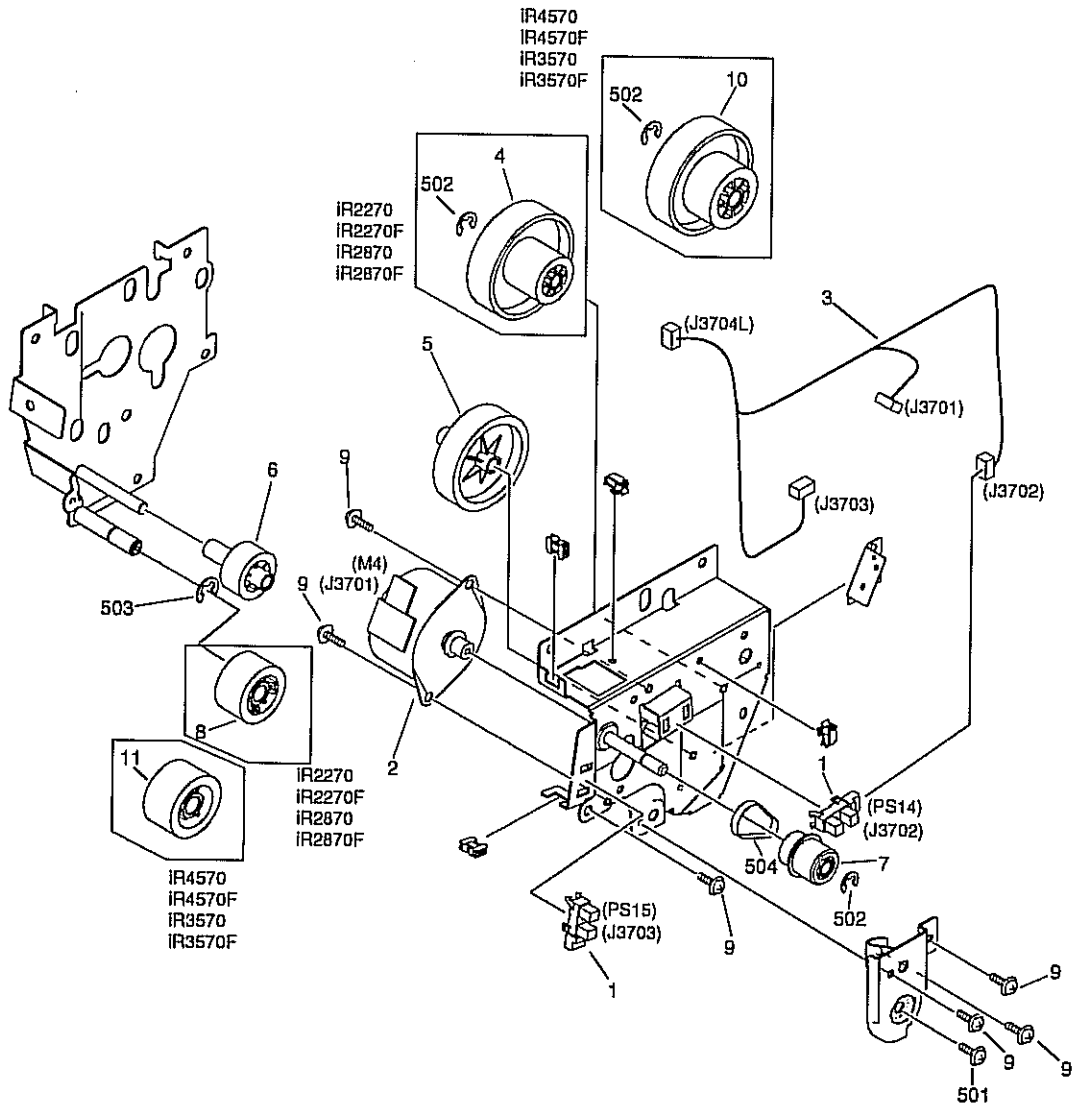


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.281	FM2-0242-000		1	FIXING DELIVERY DRIVE ASSEMBLY	iR2270&iR2270F&iR2870 &iR2870F	
Fig.281	FM2-1771-000		1	FIXING DELIVERY DRIVE ASSEMBLY	iR4570&iR4570F&iR3570 &iR3570F	
1	FK2-0149-000		2	PHOTO-INTERRUPTER, TLP1253(C6)	PS14 J3702,PS15 J3703	
2	FK2-0365-000		1	MOTOR, STEPPING, DC	M4 J3701	
3	FM2-2816-000		1	CABLE, FIXING DRIVE	J3701,3702,3703,3704L	
4	FU5-0095-000		1	GEAR, 17T/103T	iR2270&iR2270F&iR2870 &iR2870F	
5	FU5-0096-000		1	GEAR, 36T		
6	FU5-0097-000		1	GEAR, 17T		
7	FU5-0101-000		1	GEAR, 20T/PULLEY 28T		
8	FU5-0126-000		1	GEAR, 21T	iR2270&iR2270F&iR2870 &iR2870F	
9	XA9-1164-000		6	SCREW,RS,M3X6.5		
10	FU6-0019-000		1	GEAR, 24T/103T	iR4570&iR4570F&iR3570 &iR3570F	
11	FU6-0020-000		1	GEAR, 24T	iR4570&iR4570F&iR3570 &iR3570F	
501	XB6-7300-609		1	SCREW, MACH,PAN HEAD, M3X8		
502	XD2-1100-502		2	RETAINING RING(E-TYPE)		
503	XD2-1100-642		1	RING,E		
504	XF2-4104-040		1	BELT, TIMING		

FIGURE 300
CASSETTE(MIDDLE)

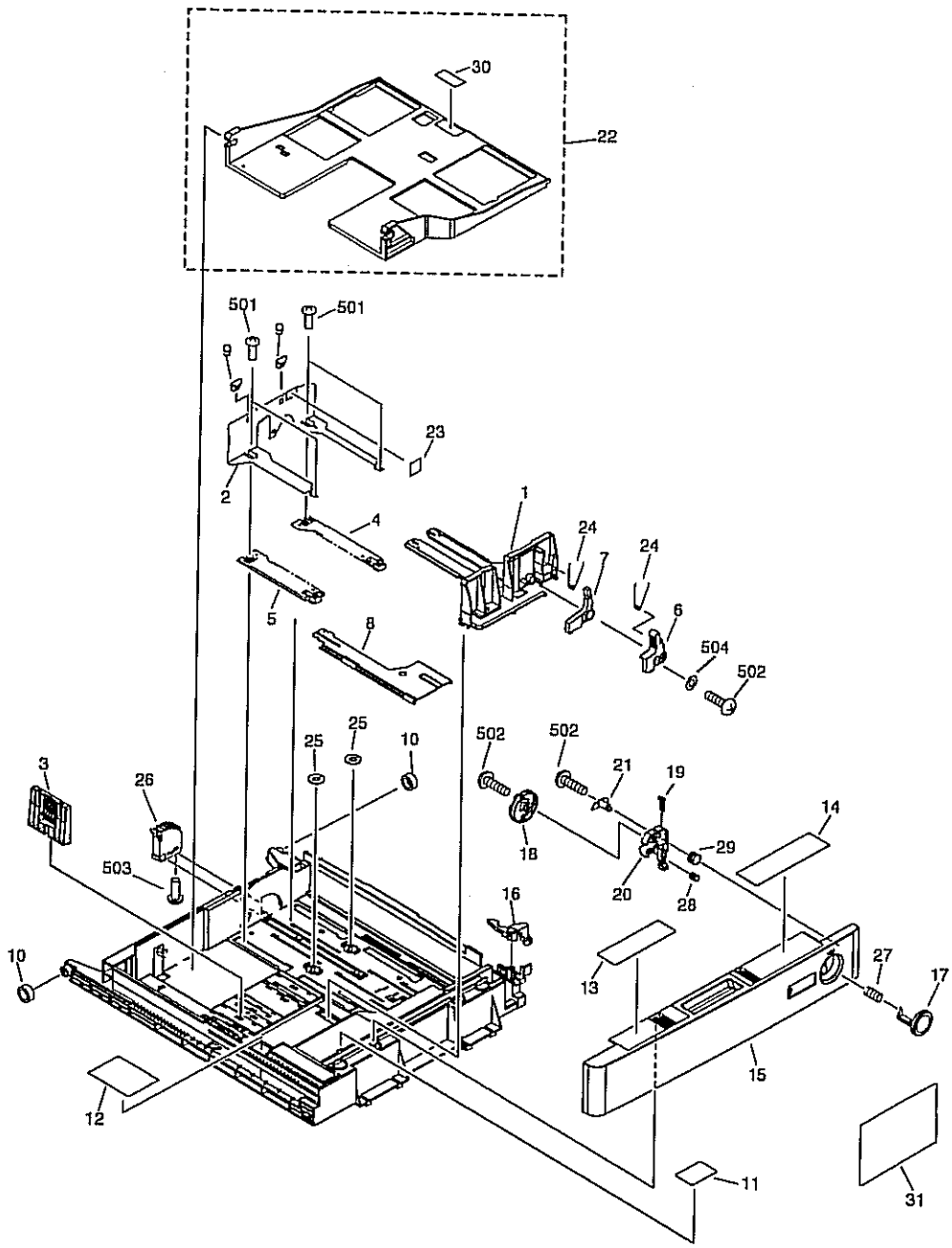


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.300	NPN		RF	CASSETTE	MIDDLE	
1	FB6-3478-000		1	PLATE, SIDE GUIDE, FRONT		
2	FB6-3479-000		1	PLATE, SIDE GUIDE, REAR		
3	FB6-3480-000		1	PLATE, END GUIDE		
4	FB6-3481-000		1	RACK, 1		
5	FB6-3482-000		1	RACK, 2		
6	FB6-3483-000		1	KNOB, SIDE GUIDE PLATE, 1		
7	FB6-3484-000		1	KNOB, SIDE GUIDE PLATE, 2		
8	FB6-3486-000		1	PLATE, LIFTER		
9	FB6-3490-000		2	CLAW, SIDE PLATE GUIDE		
10	FB6-3506-000		2	COLLAR, CASSETTE SWING		
11	FC5-0583-000		1	LABEL, PAPER SET		
12	FC5-0585-000		1	LABEL, PAPER SET CAUTION		
13	FC5-0591-000		1	LABEL, SIZE CHANGE		
14	FC5-0598-000		1	LABEL, DIAL SET		
15	FC5-0622-000		1	PANEL, CASSETTE FRONT		
16	FC5-0635-000		1	ARM, LOCK		
17	FC5-0636-000		1	BUTTON, PUSH		
18	FC5-1422-020		1	DIAL, SIZE DETECT		
19	FC5-1423-000		1	SLIDER, CONVERT		
20	FC5-1424-020		1	HOLDER, DIAL		
21	FC5-1425-000		1	PIN, FLOAT GUIDE		
22	FF6-2064-000		1	PLATE, PAPER LIFTING		
23	FS6-8116-000		1	LABEL, 'PAPER HEIGHT'		
24	FS7-2805-000		2	SPRING, TORSION		
25	FU3-0293-000		2	GEAR, 16T		
26	FU3-0294-000		1	GEAR, 7T		
27	FU5-2032-000		1	SPRING, COMPRESSION		
28	FU5-2097-000		1	SPRING, COMPRESSION		
29	FU5-2104-000		1	SPRING, COMPRESSION		
30	FB6-3499-000		1	SHEET, SEPARATION		
31	FC5-7216-000		1	LABEL, CASSETTE SIZE, DIAL		

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
501	XB2-8300-607		4	SCREW, M3X6, S		
502	XB4-5300-807		3	SCREW, P, M3X8		
503	XB6-7300-807		1	SCREW, TP, M3X8		
504	XD1-1104-135		1	WASHER,COP		

FIGURE 301
CASSETTE (LARGE)

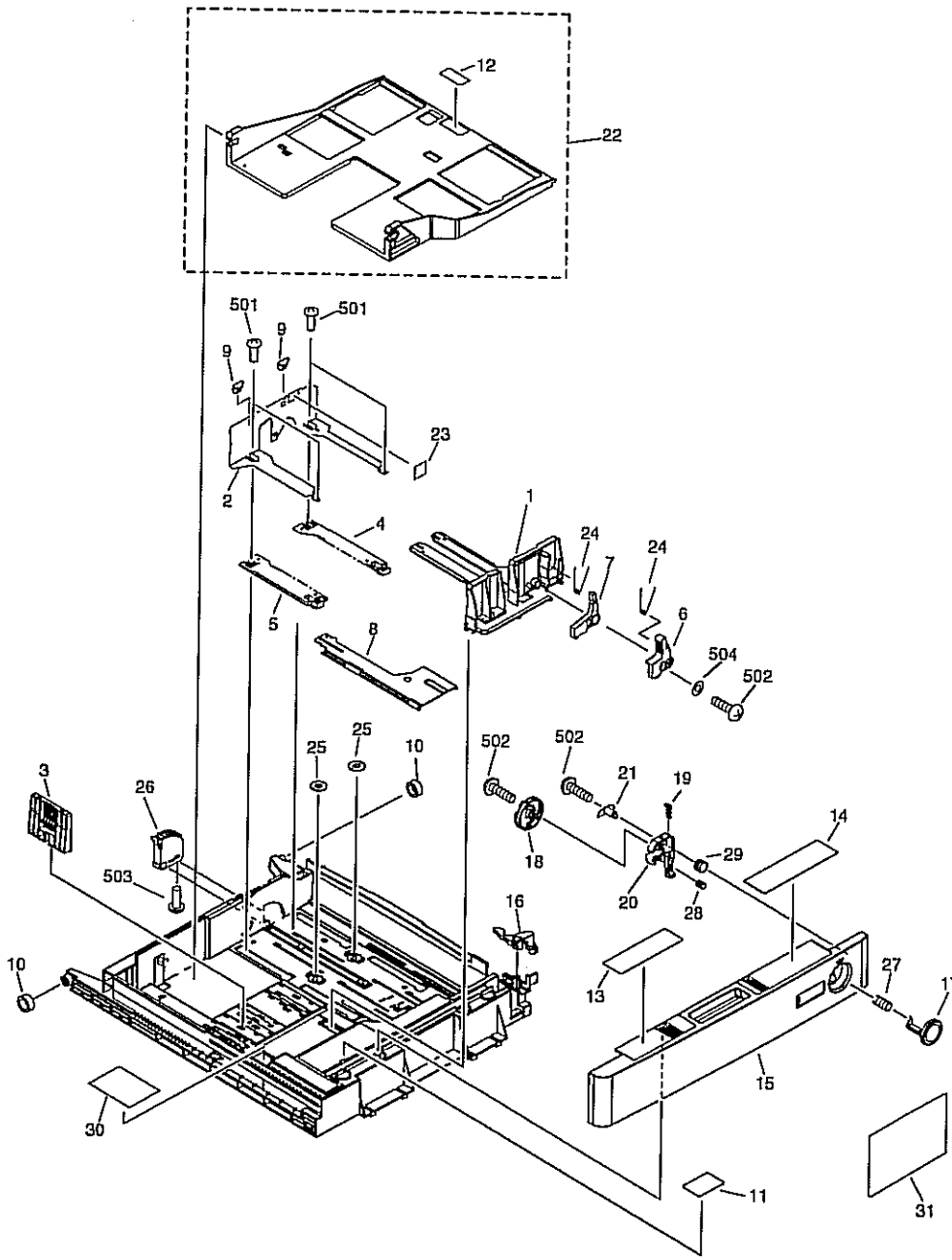


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.301	NPN		RF	CASSETTE	LARGE	
1	FB6-3478-000		1	PLATE, SIDE GUIDE, FRONT		
2	FB6-3479-000		1	PLATE, SIDE GUIDE, REAR		
3	FB6-3480-000		1	PLATE, END GUIDE		
4	FB6-3481-000		1	RACK, 1		
5	FB6-3482-000		1	RACK, 2		
6	FB6-3483-000		1	KNOB, SIDE GUIDE PLATE, 1		
7	FB6-3484-000		1	KNOB, SIDE GUIDE PLATE, 2		
8	FB6-3486-000		1	PLATE, LIFTER		
9	FB6-3490-000		2	CLAW, SIDE PLATE GUIDE		
10	FB6-3506-000		2	COLLAR, CASSETTE SWING		
11	FC5-0583-000		1	LABEL, PAPER SET		
12	FB6-3499-000		1	SHEET, SEPARATION		
13	FC5-0584-000		1	LABEL, SIZE CHANGE		
14	FC5-0598-000		1	LABEL, DIAL SET		
15	FC5-0624-000		1	PANEL, CASSETTE FRONT		
16	FC5-0605-000		1	ARM, LOCK		
17	FC5-0637-000		1	BUTTON, PUSH		
18	FC5-1422-020		1	DIAL, SIZE DETECT		
19	FC5-1423-000		1	SLIDER, CONVERT		
20	FC5-1424-020		1	HOLDER, DIAL		
21	FC5-1425-000		1	PIN, FLOAT GUIDE		
22	FF6-2064-000		1	PLATE, PAPER LIFTING		
23	FS6-8116-000		1	LABEL, 'PAPER HEIGHT'		
24	FS7-2805-000		2	SPRING, TORSION		
25	FU3-0293-000		2	GEAR, 16T		
26	FU3-0294-000		1	GEAR, 7T		
27	FU5-2033-000		1	SPRING, COMPRESSION		
28	FU5-2097-000		1	SPRING, COMPRESSION		
29	FU5-2104-000		1	SPRING, COMPRESSION		
30	FB6-3524-000		1	LABEL, PAPER SIZE SELECT		
31	FC5-7216-000		1	LABEL, CASSETTE SIZE, DIAL		

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
501	XB2-8300-607		4	SCREW, M3X6, S		
502	XB4-5300-807		3	SCREW, P, M3X8		
503	XB6-7300-807		1	SCREW, TP, M3X8		
504	XD1-1104-135		1	WASHER,COP		

FIGURE 310
PAPER PICK-UP ASSEMBLY (MIDDLE)

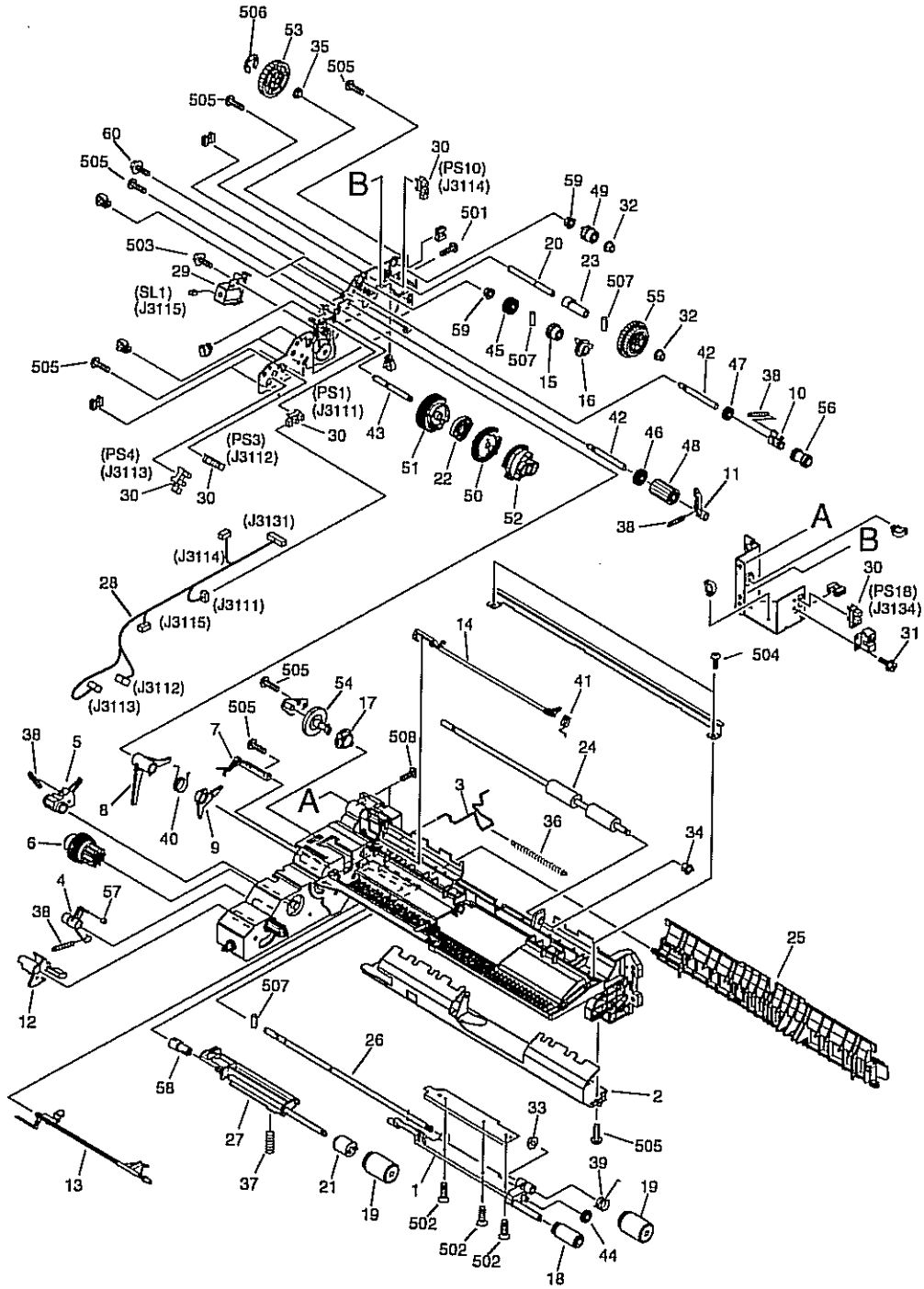


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.310	FM2-1577-000		1	PAPER PICK-UP ASSEMBLY	MIDDLE	
1	FB6-3380-000		1	HOLDER, PAPER PICK-UP ROLLER		
2	FB6-3386-000		1	GUIDE, RETARD		
3	FB6-3388-000		1	ROD, SEPARATION ROLLER RELEASE		
4	FB6-3389-000		1	CLAW, PICK-UP		
5	FB6-3390-000		1	CLAW, PAPER PICK-UP		
6	FB6-3391-000		1	GEAR, RATCHET		
7	FB6-3392-000		1	SPRING, LEAF		
8	FB6-3393-000		1	ARM, PICK-UP		
9	FB6-3394-000		1	ARM, LIFTING		
10	FB6-3395-000		1	ARM, PAPER FEED SHAFT		
11	FB6-3396-010		1	LOCK, PICK-UP		
12	FB6-3397-000		1	FLAG, PAPER SENSOR		
13	FF6-2363-000		1	FLAG, PAPER DETECT SENSOR		
14	FB6-3399-000		1	FLAG, REGISTRATION SENSOR		
15	FB6-3402-000		1	GEAR, RATCHET		
16	FB6-3403-000		1	COUPLING, FEED SHAFT STOP		
17	FB6-3404-000		1	COUPLING, SEPARATION SHAFT		
18	FB6-3405-000		1	ROLLER, PAPER PICK-UP		
19	FC5-6934-000		2	ROLLER, FEED/SEPARATION		
20	FB6-3408-000		1	SHAFT, PAPER PICK-UP DRIVE		
21	FB6-3410-000		1	LIMITER, TORQUE		
22	FB6-3411-000		1	CAM, LOCK		
23	FB6-3413-000		1	COLLAR, PAPER PICK-UP SHAFT		
24	FB6-4852-000		1	ROLLER, VERTICAL PATH		
25	FC5-0595-000		1	GUIDE, VERTICAL PATH		
26	FF6-2058-000		1	SHAFT, PAPER FEED ROLLER		
27	FF6-2059-000		1	HOLDER, SEPARATION ROLLER		
28	FG3-2302-000		1	CABLE, PAPER PICK-UP	J3111,3112,3113,3114,3115,3131	
29	FK2-0408-000		1	SOLENOID	SL1 J3115	

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS
30	FH7-7312-000		5	IC, EE-SX4235A-P2,	PS1,3,4,10,18 J3111,3112,3113,3114,3134
31	XA9-1386-000		1	SCREW,RS,M3X8	
32	FS1-1205-000		2	BUSHING	
33	FS1-1213-000		1	BUSHING	
34	FS5-1597-000		1	BUSHING	
35	FS6-1063-000		1	BUSHING	
36	FS7-2797-000		1	SPRING, TENSION	
37	FS7-2798-000		1	SPRING, COMPRESSION	
38	FS7-2800-000		4	SPRING, TENSION	
39	FS7-2801-000		1	SPRING, TORSION	
40	FS7-2802-000		1	SPRING, TORSION	
41	FS7-2803-000		1	SPRING, TORSION	
42	FS7-5909-000		2	SHAFT, IDLER, 2	
43	FS7-5910-000		1	SHAFT, IDLER, 3	
44	FU3-0280-000		1	GEAR, 15T	
45	FU3-0282-000		1	GEAR, 21T	
46	FU3-0283-000		1	GEAR, 21T	
47	FU3-0284-000		1	GEAR, 16T	
48	FU3-0288-000		1	GEAR, 21T	
49	FU3-0289-000		1	GEAR, 14T	
50	FU3-0290-000		1	GEAR, 46T	
51	FU3-0291-000		1	GEAR, 51T	
52	FU3-0292-000		1	GEAR, 42T	
53	FU3-0347-000		1	GEAR, 41T	
54	FU3-0349-000		1	GEAR, 41T	
55	FU3-0350-000		1	GEAR, 41T/41T	
56	FU3-0352-000		1	GEAR, 16T/16T	
57	RB1-6539-000		1	DAMPER	
58	RB1-8945-000		1	JOINT	
59	RS5-1567-000		2	BUSHING	
60	XA9-0962-000		1	SCREW, RS, M3X10	

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
501	XB1-2300-607		1	SCREW, BH3X6(S)		
502	XB1-3300-607		3	SCREW, FTH3X6		
503	XB3-6300-600		2	SCREW,RS,M3X6		
504	XB4-5400-807		2	SCREW,P,M4X8		
505	XB4-5401-207		7	SCREW,P,M4X12		
506	XD2-1100-502		1	RETAINING RING (E-TYPE)		
507	XD3-2200-122		3	PIN, DOWEL		
508	XB1-2400-607		2	SCREW, CROSS-RECESS, FCH		

FIGURE 311
PAPER PICK-UP ASSEMBLY (LARGE)

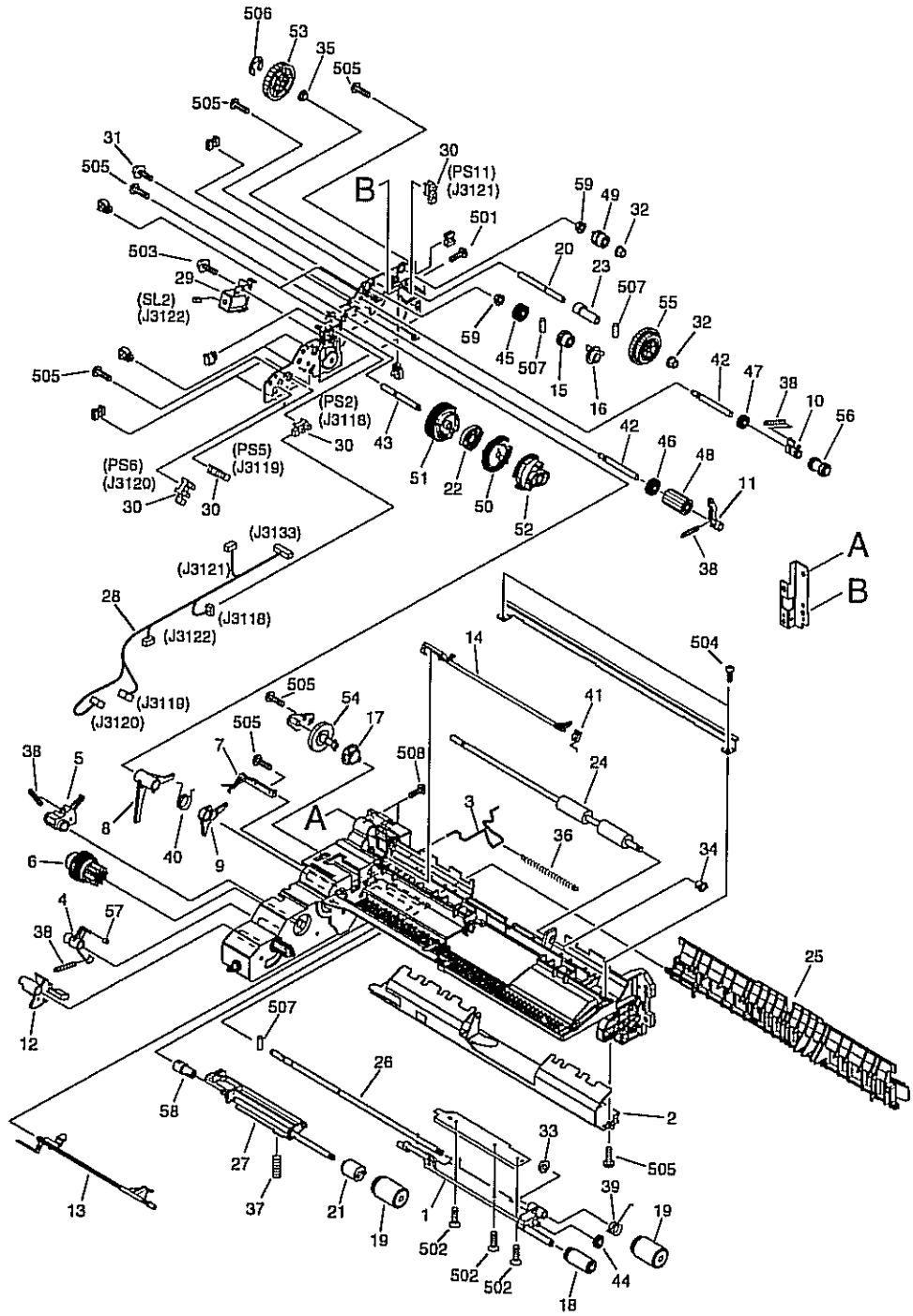
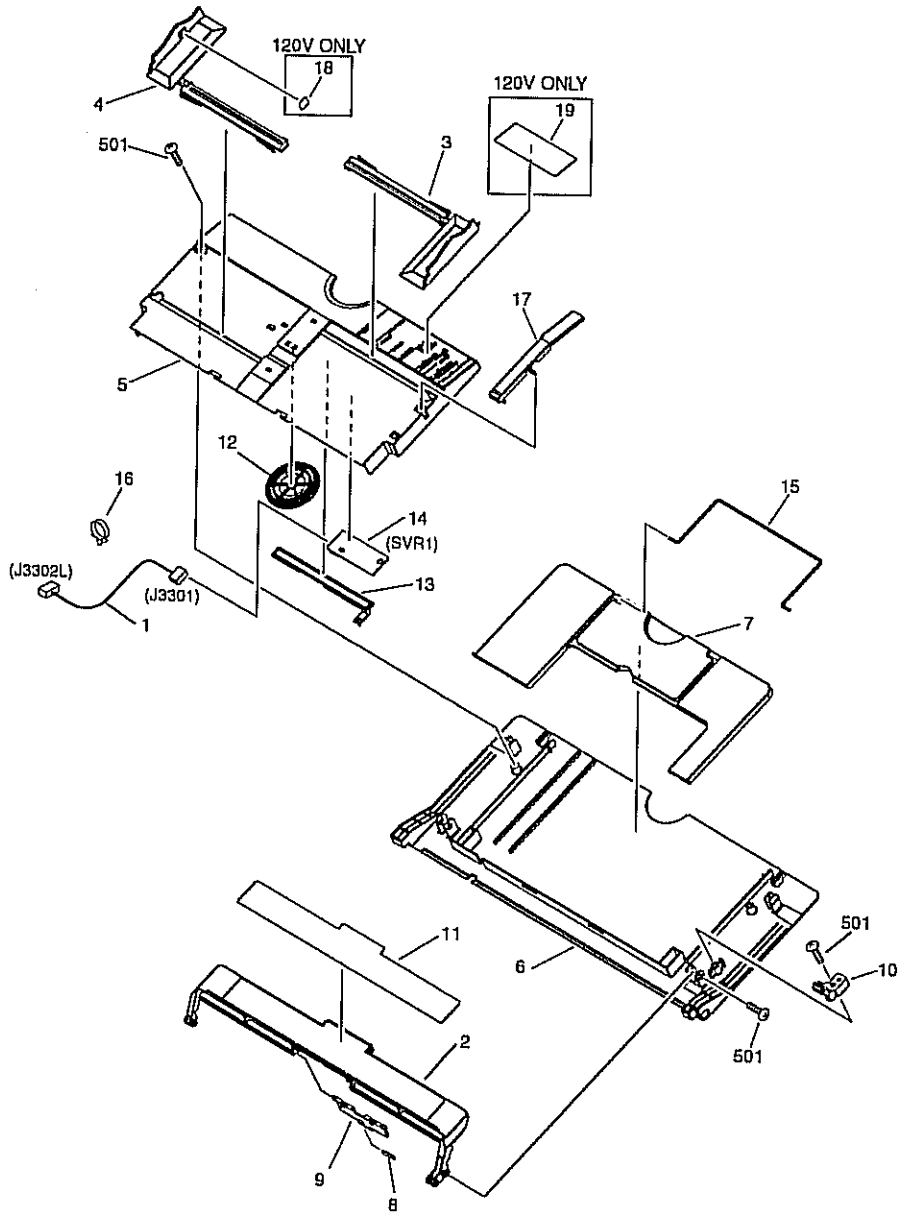


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.311	FM2-1578-000		1	PAPER PICK-UP ASSEMBLY	LARGE	
1	FB6-3380-000		1	HOLDER, PAPER PICK-UP ROLLER		
2	FB6-3386-000		1	GUIDE, RETARD		
3	FB6-3388-000		1	ROD, SEPARATION ROLLER RELEASE		
4	FB6-3389-000		1	CLAW, PICK-UP		
5	FB6-3390-000		1	CLAW, PAPER PICK-UP		
6	FB6-3391-000		1	GEAR, RATCHET		
7	FB6-3392-000		1	SPRING, LEAF		
8	FB6-3393-000		1	ARM, PICK-UP		
9	FB6-3394-000		1	ARM, LIFTING		
10	FB6-3395-000		1	ARM, PAPER FEED SHAFT		
11	FB6-3396-010		1	LOCK, PICK-UP		
12	FB6-3397-000		1	FLAG, PAPER SENSOR		
13	FF6-2363-000		1	FLAG, PAPER DETECT SENSOR		
14	FB6-3399-000		1	FLAG, REGISTRATION SENSOR		
15	FB6-3402-000		1	GEAR, RATCHET		
16	FB6-3403-000		1	COUPLING, FEED SHAFT STOP		
17	FB6-3404-000		1	COUPLING, SEPARATION SHAFT		
18	FB6-3405-000		1	ROLLER, PAPER PICK-UP		
19	FC5-6934-000		2	ROLLER, FEED/SEPARATION		
20	FB6-3408-000		1	SHAFT, PAPER PICK-UP DRIVE		
21	FB6-3410-000		1	LIMITER, TORQUE		
22	FB6-3411-000		1	CAM, LOCK		
23	FB6-3413-000		1	COLLAR, PAPER PICK-UP SHAFT		
24	FB6-4852-000		1	ROLLER, VERTICAL PATH		
25	FC5-0595-000		1	GUIDE, VERTICAL PATH		
26	FF6-2058-000		1	SHAFT, PAPER FEED ROLLER		
27	FF6-2059-000		1	HOLDER, SEPARATION ROLLER		
28	FG3-2302-000		1	CABLE, PAPER PICK-UP	J3118,3119,3120,3121,3122,3133	
29	FK2-0408-000		1	SOLENOID	SL2 J3122	
30	FH7-7312-000		4	IC, EE-SX4235A-P2,	PS2,5,6,11 J3118,3119,3120,3121	

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
32	FS1-1205-000		2	BUSHING		
33	FS1-1213-000		1	BUSHING		
34	FS5-1597-000		1	BUSHING		
35	FS6-1063-000		1	BUSHING		
36	FS7-2797-000		1	SPRING, TENSION		
37	FS7-2798-000		1	SPRING, COMPRESSION		
38	FS7-2800-000		4	SPRING, TENSION		
39	FS7-2801-000		1	SPRING, TORSION		
40	FS7-2802-000		1	SPRING, TORSION		
41	FS7-2803-000		1	SPRING, TORSION		
42	FS7-5909-000		2	SHAFT, IDLER, 2		
43	FS7-5910-000		1	SHAFT, IDLER, 3		
44	FU3-0280-000		1	GEAR, 15T		
45	FU3-0282-000		1	GEAR, 21T		
46	FU3-0283-000		1	GEAR, 21T		
47	FU3-0284-000		1	GEAR, 16T		
48	FU3-0288-000		1	GEAR, 21T		
49	FU3-0289-000		1	GEAR, 14T		
50	FU3-0290-000		1	GEAR, 46T		
51	FU3-0291-000		1	GEAR, 51T		
52	FU3-0292-000		1	GEAR, 42T		
53	FU3-0347-000		1	GEAR, 41T		
54	FU3-0349-000		1	GEAR, 41T		
55	FU3-0350-000		1	GEAR, 41T/41T		
56	FU3-0352-000		1	GEAR, 16T/16T		
57	RB1-6539-000		1	DAMPER		
58	RB1-8945-000		1	JOINT		
59	RS5-1567-000		2	BUSHING		
60	XA9-0656-000		1	SCREW,RS,M3X10		
501	XB1-2300-607		1	SCREW, BH3X6(S)		
502	XB1-3300-607		3	SCREW, FTH3X6		
503	XB3-6300-600		2	SCREW,RS,M3X6		

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
504	XB4-5400-807		2	SCREW,P,M4X8		
505	XB4-5401-207		7	SCREW,P,M4X12		
506	XD2-1100-502		1	RETAINING RING (E-TYPE)		
507	XD3-2200-122		3	PIN, DOWEL		
508	XB1-2400-607		2	SCREW, CROSS-RECESS, FCH		

FIGURE 315
MULTI FEED TRAY ASSEMBLY



NOTE 1 : This assembly is included in the assembly shown in Figure 140.
NOTE 2 : This assembly does not include the part shown with key No. 17,18 and 19.
注 1 ： このユニットはFigure 140のユニットに含まれます。
注 2 ： このユニットにKey No. 17, 18, 19の部品は含まれません。

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.315	FM2-0387-000		1	MULTI FEED TRAY ASSEMBLY	SEE NOTE 1	
1	FG3-3187-000		1	CABLE, PAPER WIDTH SENSOR	J3301,3302L	
2	FC5-0520-000		1	LEVER, MULTI FEED		
3	FC5-0477-000		1	PLATE, PAPER SIDE END, FRONT		
4	FC5-0478-000		1	PLATE, PAPER SIDE END, REAR		
5	FC5-0479-000		1	TRAY, MULTI FEED, UPPER		
6	FC5-0480-000		1	TRAY, MULTI FEED, LOWER		
7	FC5-0481-000		1	TRAY, MULTI FEED AUXILIARY		
8	FC5-0497-000		1	ROLLER, NEEDLE		
9	FC5-0526-000		1	STOPPER, MULTI FEED SHEET		
10	FC5-0527-000		1	STOPPER, MULTI FEED HANDLE		
11	FC5-0541-000		1	LABEL, PAPER SET INDICATION		
12	FU5-0062-000		1	GEAR, 18T/62T		
13	FU5-0063-000		1	RACK, MULTI FEED SIZE DETECT		
14	FM2-2768-000		1	MULTI FEED SIZE PCB ASSEMBLY	SVR1	
15	FC5-0546-000		1	TRAY, WIRE AUXILIARY		
16	WT2-5565-000		1	CLAMP, CABLE		
17	FC5-0530-000		1	COVER	SEE NOTE 2	
18	FC5-0544-000		1	LABEL, MAXIMUM LOAD	SEE NOTE 2 120V ONLY	
19	FC5-7217-000		1	LABEL, PAPER SIZE	SEE NOTE 2 120V ONLY	
501	XB4-5401-007		3	SCREW, M4X10		

FIGURE 350
PAPER DELIVERY ASSEMBLY

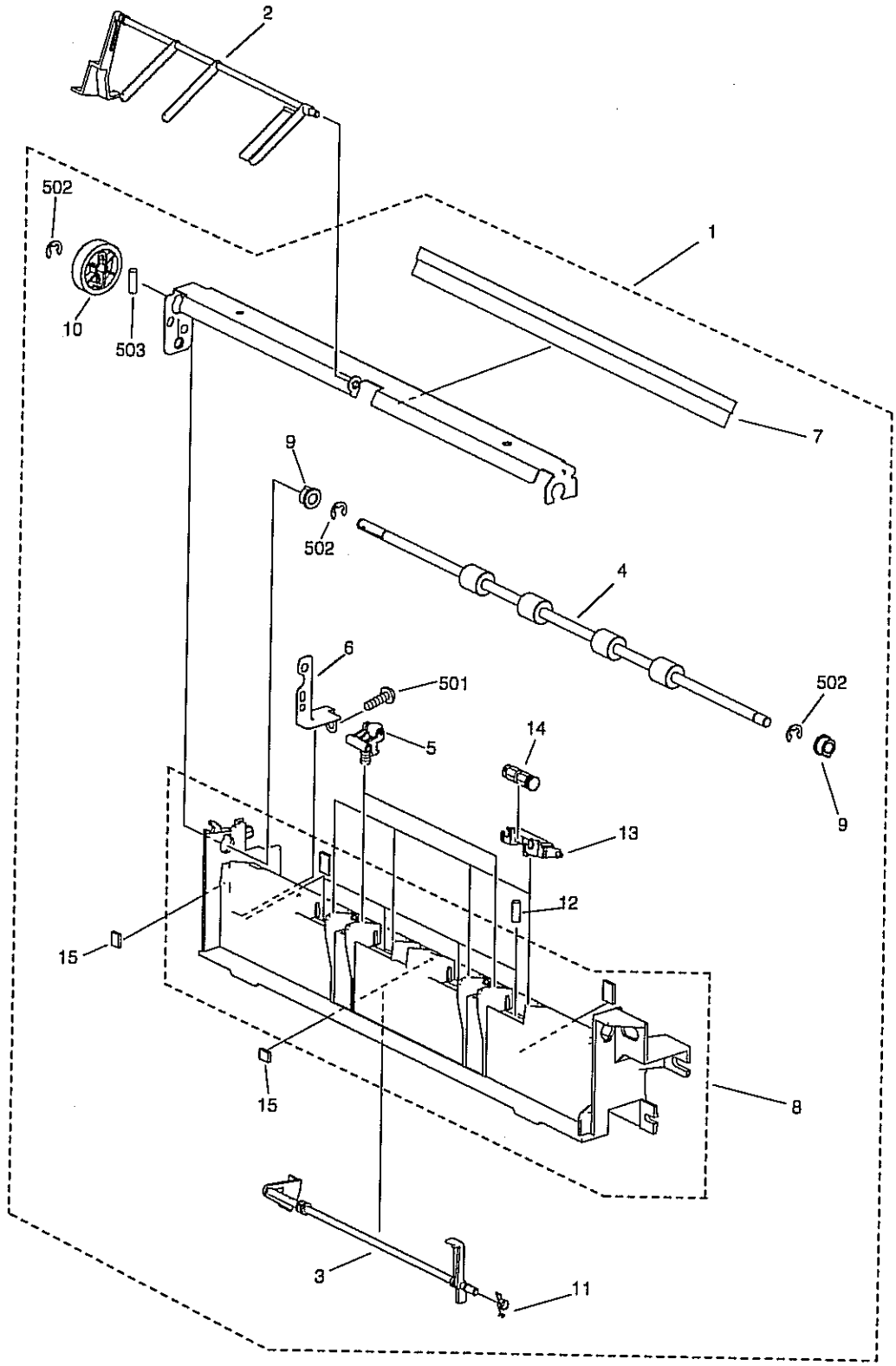


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.350	NPN		RF	PAPER DELIVERY ASSEMBLY		
1	FM2-3265-000		1	PAPER DELIVERY ASSEMBLY		
2	FC5-0798-000		1	FLAG, FULL DETECT		
3	FC5-0799-000		1	FLAG, 1ST DELIVERY SENSOR		
4	FC5-0800-000		1	ROLLER, PAPER DELIVERY		
5	FF6-0345-000		2	DELIVERY COLLAR UNIT		
6	FC5-0806-000		1	PLATE, GROUNDING		
7	FB5-4858-000		1	ELIMINATOR, STATIC CHARGE		
8	FL2-0178-000		1	GUIDE, PAPER DELIVERY		
9	FS5-1943-000		2	BUSHING		
10	FU5-0128-000		1	GEAR, 35T		
11	FU5-2068-000		1	SPRING, TORSION		
12	FU5-2074-000		4	SPRING, COMPRESSION		
13	FC6-2915-000		4	HOLDER,ROLLER		
14	FM2-0177-000		4	O RING ROLLER UNIT		
15	FB5-5150-000		2	RUBBER, NOISE PREVENTION		
501	XB4-5400-807		1	SCREW, P, M4X8		
502	XD2-1100-502		3	RETAINING RING(E-TYPE)		
503	XD3-2200-162		1	PIN, PARALLEL		

FIGURE 351
2ND 3RD DELIVERY ASSEMBLY

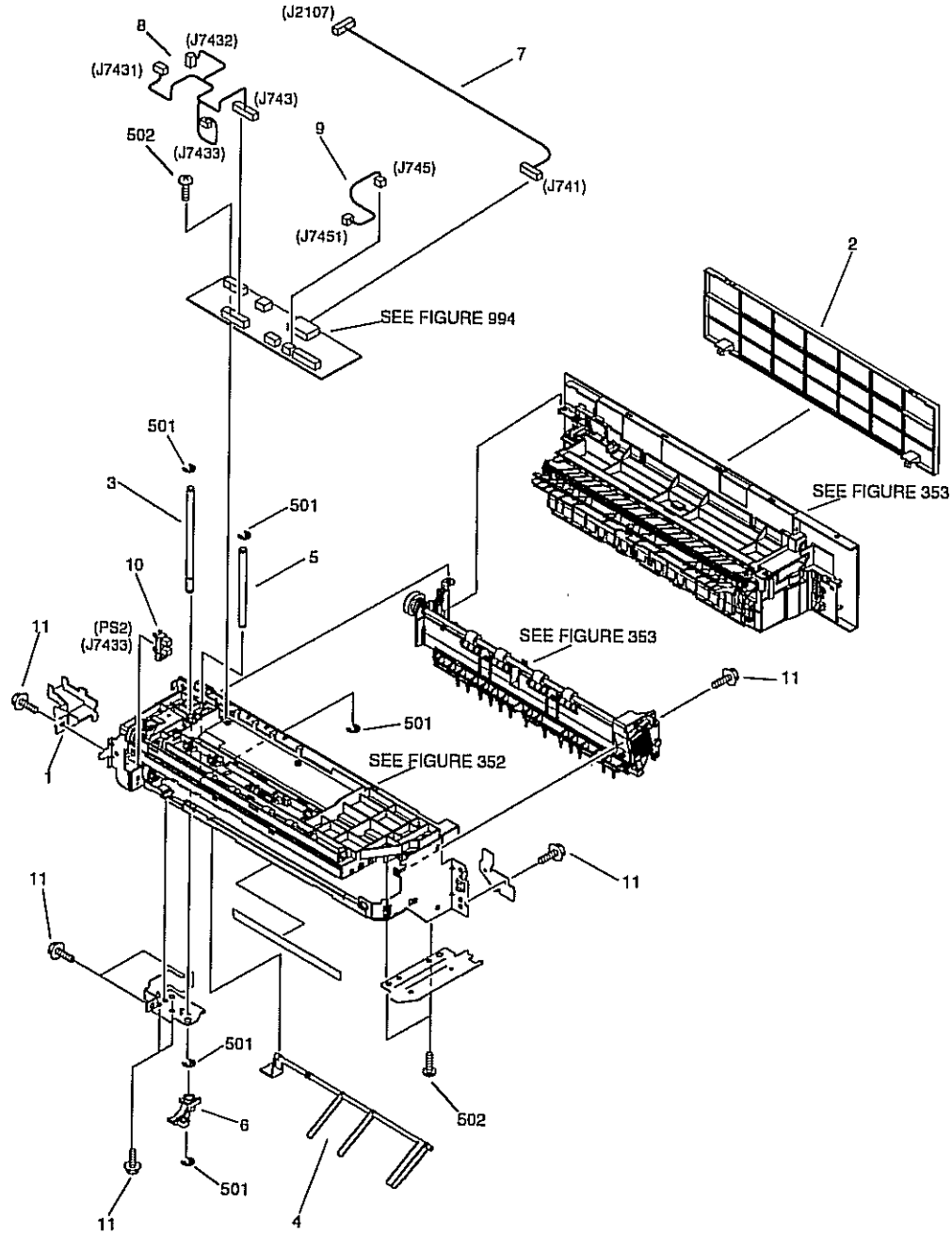


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.351	NPN		RF	2ND 3RD DELIVERY ASSEMBLY		
1	FC5-0859-000		1	COVER, CONNECTOR	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
2	FC5-0888-000		1	PANEL, 2ND DELIVERY BLANKING	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
3	FC5-0978-020		1	SHAFT, 2ND DELIVERY HINGE	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
4	FC5-0992-000		1	FLAG, PAPER FULL SENSOR	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
5	FC5-1019-020		1	SHAFT, 3RD DELIVERY HINGE	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
6	FC5-6011-000		1	COVER, GEAR	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
7	FG3-3294-000		1	CABLE, INTERFACE	J741,2107 iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
8	FG3-3297-000		1	CABLE, MOTOR	J743,7431,7432,7433 iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
9	FG3-3301-000		1	CABLE, SENSOR	J745,7451 iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
10	FK2-0149-000		1	PHOTO-INTERRUPTER, TLP1253(C6)	PS2 J7433 iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
11	XA9-1386-000		5	SCREW, RS, M3X8	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
501	XD2-1100-502		5	RING, E	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
502	XB4-5300-805		4	SCREW, P, M3X8	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	

FIGURE 352
2ND UPPER DELIVERY ASSEMBLY

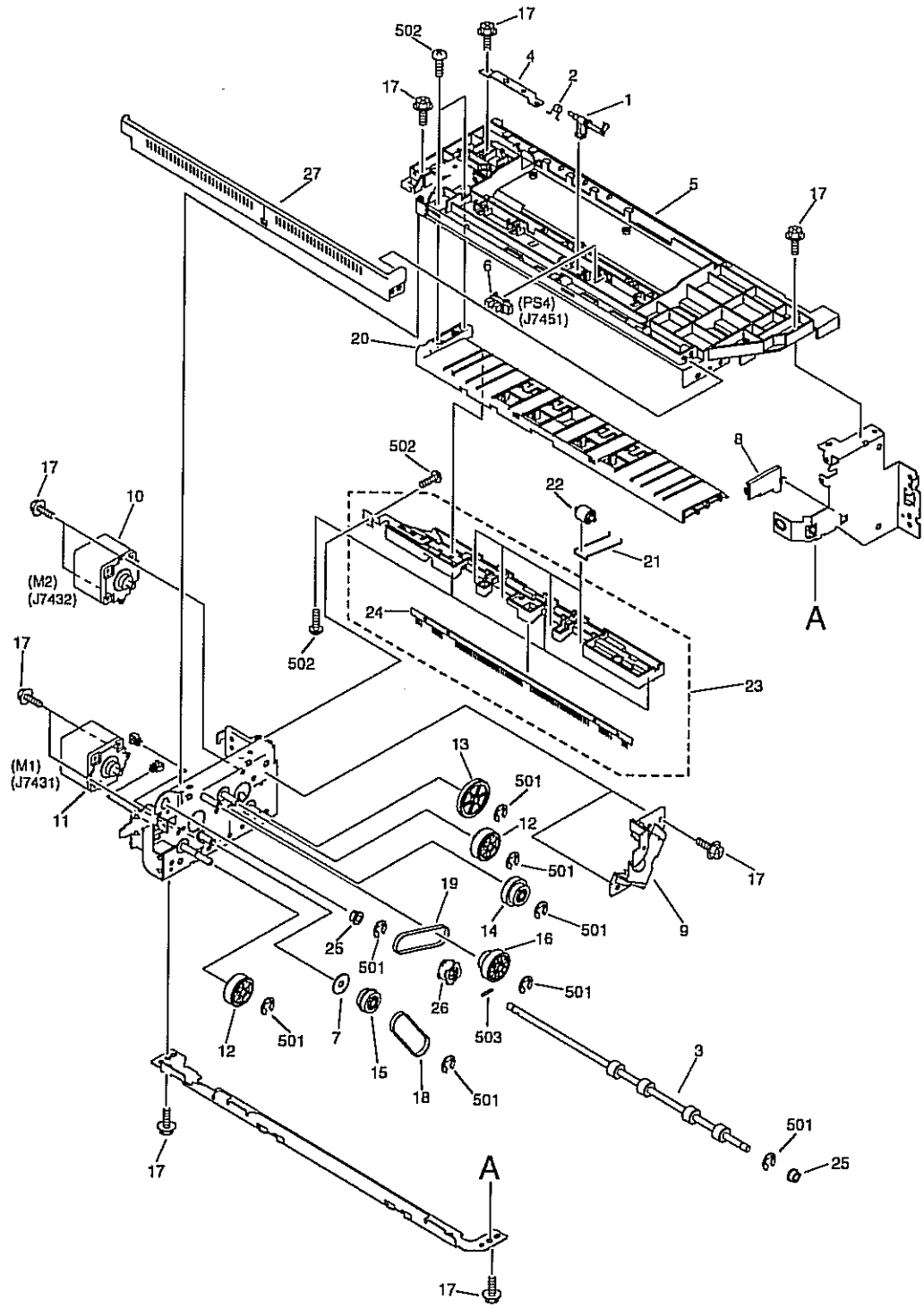


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.352	FM2-1328-000		1	2ND UPPER DELIVERY ASSEMBLY	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
1	FC5-0987-000		1	FLAG, REVERSE SENSOR	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
2	FC5-0988-000		1	SPRING, TORSION	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
3	FC5-0989-020		1	ROLLER, REVERSE	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
4	FC5-1025-000		1	PLATE, GROUNDING	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
5	FC5-1038-000		1	GUIDE, 2ND DELIVERY, UPPER	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
6	FK2-0149-000		1	PHOTO-INTERRUPTER, TLP1253(C6)	PS4 J7451 iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
7	FB5-4754-000		1	SPACER	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
8	FC5-0870-000		1	GUIDE, SLIDE	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
9	FC5-6010-000		1	COVER, GEAR, 1	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
10	FH5-1021-010		1	MOTOR, STEPPING, AC	M2 J7432 iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
11	FH5-1108-010		1	MOTOR, STEPPING, AC	M1 J7431 iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
12	FU5-0054-000		2	GEAR, 35T	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
13	FU5-0077-000		1	GEAR, 46T	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
14	FU5-0078-000		1	GEAR, 30T/24T	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
15	FU5-3020-000		1	GEAR, 24T/PULLEY, 30T	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
16	FU5-3022-000		1	PULLEY, 30T/GEAR, 35T	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
17	XA9-1386-000		12	SCREW, RS, M3X8	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
18	XF2-4104-240		1	BELT, TIMING, COGGED	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
19	XF2-4108-240		1	BELT, TIMING, COGGED	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
20	FC5-0985-000		1	GUIDE, REVERSE LOWER	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
21	FC5-0991-000		4	SPRING	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
22	FC5-1013-000		4	ROLLER	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
23	FL2-1200-000		1	GUIDE, REVERSE LOWER AUXILIARY	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
24	FC5-6003-000		1	ELIMINATOR, STATIC-CHARGE	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
25	FS5-1943-000		2	BUSHING	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
26	FU5-3021-000		1	PULLEY, 30T	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
27	FC5-6004-000		1	COVER, PROTECTIVE	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
501	XD2-1100-502		8	RING, E	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
502	XB4-5401-205		6	SCREW, P, M4X12	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
503	XD3-2200-122		1	PIN, DOWEL	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	

FIGURE 353
2ND DELIVERY FRAME ASSEMBLY

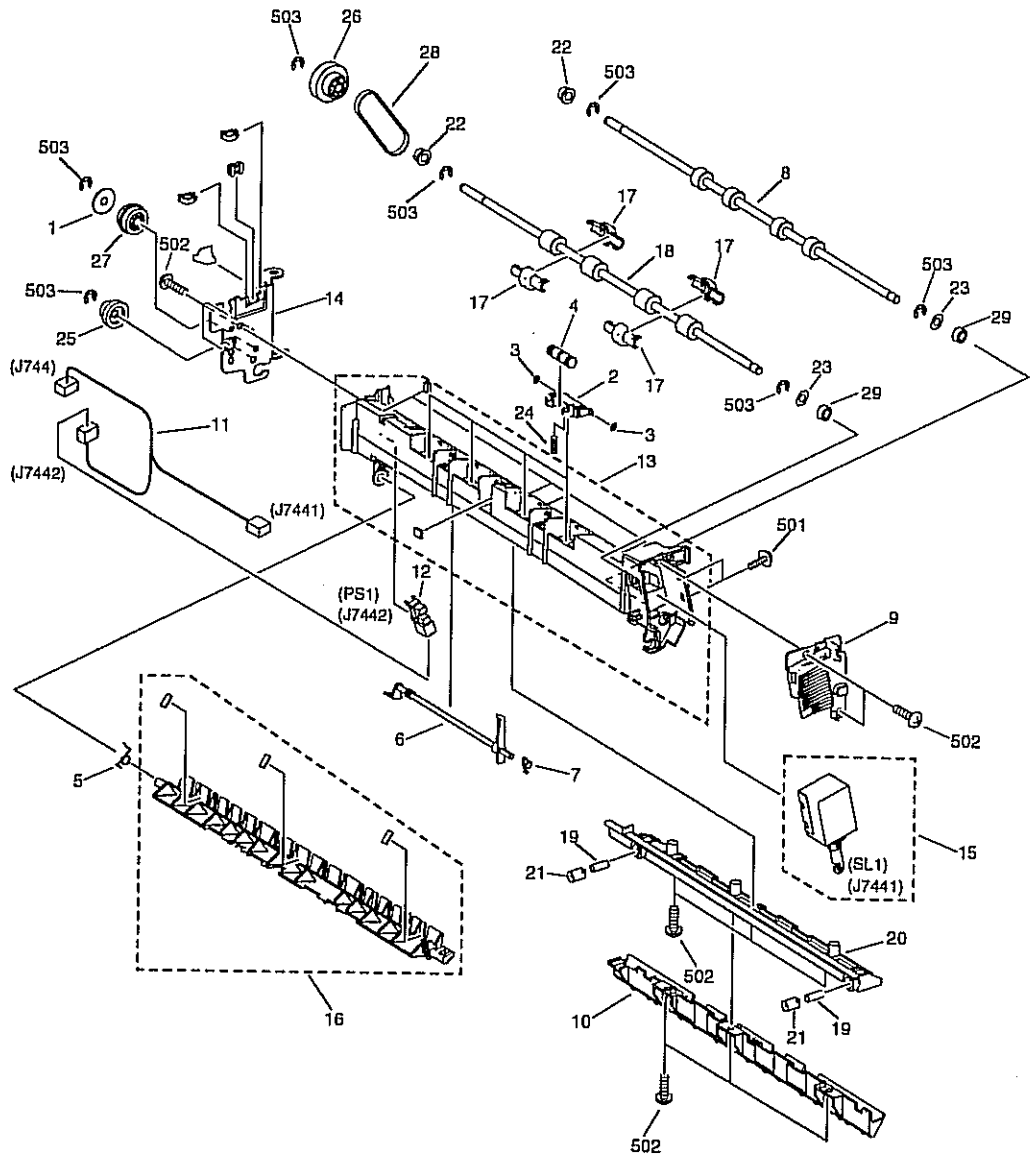


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.353	FM2-4471-000		1	2ND DELIVERY FRAME ASSEMBLY	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
1	FB5-4754-000		1	SPACER	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
2	FC6-2915-000		4	HOLDER, ROLLER	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
3	FB5-9803-000		8	RING	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
4	FB6-5796-000		4	ROLLER, PAPER DELIVERY	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
5	FC5-0974-000		1	SPRING, TORSION	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
6	FC5-0996-000		1	FLAG, 2ND DELIVERY SENSOR	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
7	FC5-0997-000		1	SPRING, TORSION	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
8	FC5-1017-000		1	ROLLER, 2ND VERTICAL PATH	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
9	FC5-1053-000		1	COVER, SOLENOID, 1	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
10	FC5-5474-000		1	GUIDE, 2ND DELIVERY ENTRANCE	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
11	FG3-3299-000		1	CABLE, 2ND PAPER DELIVERY	J744,7441,7442 iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
12	FK2-0149-000		1	PHOTO-INTERRUPTER, TLP1253(C6)	PS1 J7442 iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
13	FL2-1201-000		1	GUIDE, 2ND PAPER DELIVERY	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
14	FL2-1202-000		1	HINGE, 2ND DELIVERY	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS
15	FL2-1203-000		1	SOLENOID	SL1 L7441 iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F
16	FL2-1212-030		1	FLAPPER, 1ST PAPER DELIVERY	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F
17	FC5-0805-000		4	ROLLER, REFORM	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F
18	FC5-0998-000		1	ROLLER, 2ND PAPER DELIVERY	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F
19	FC5-0871-000		2	SPRING, COMPRESSION	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F
20	FC5-0873-000		1	COVER, 2ND DELIVERY FRAME	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F
21	FC5-6014-000		2	CAP, SPRING	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F
22	FS5-1943-000		2	BUSHING	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F
23	FS5-6488-000		2	WASHER	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F
24	FS7-2859-000		4	SPRING, COMPRESSION	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F
25	FU5-0076-000		1	GEAR, 24T	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F
26	FU5-3019-000		1	PULLEY, 30T/GEAR, 35T	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F
27	FU5-3020-000		1	GEAR, 24T/PULLEY, 30T	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F
28	XF2-4107-940		1	BELT, TIMING. COGGED	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F
29	XG9-0520-000		2	BEARING, BALL	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
501	XB1-2300-405		2	SCREW, MACH, BH, M3X4	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
502	XB4-5401-205		11	SCREW, P, M4X12	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
503	XD2-1100-502		7	RING, E	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	

FIGURE 354
3RD DELIVERY FRAME ASSEMBLY

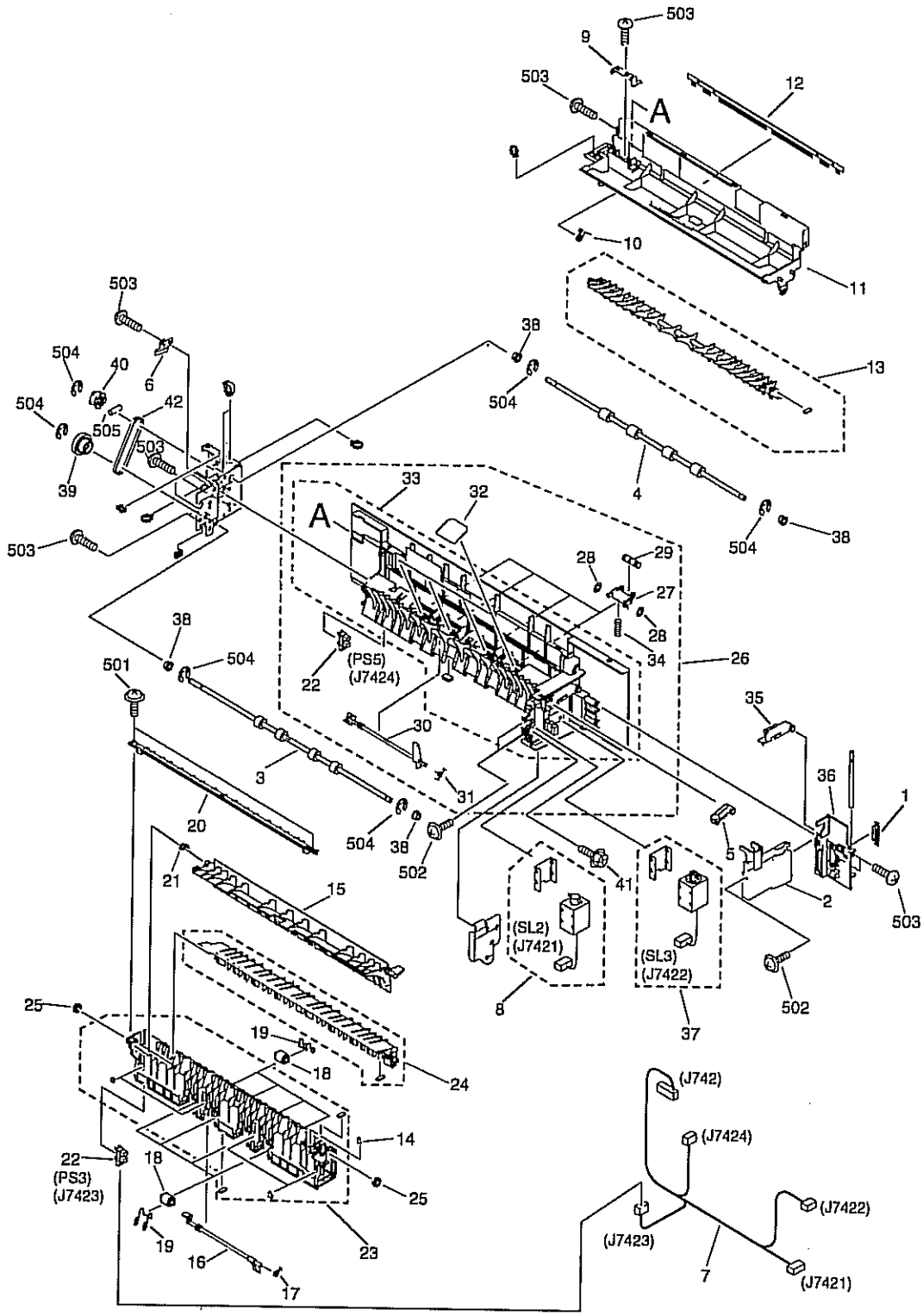


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.354	FM2-1335-000		1	3RD DELIVERY FRAME ASSEMBLY	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
1	FB5-9325-000		1	MAGNET, 3RD	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
2	FC5-0872-000		1	COVER, DELIVERY SOLENOID, 2	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
3	FC5-1012-000		1	ROLLER, DUPLEXING ENTRANCE	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
4	FC5-1020-020		1	ROLLER, 3RD DELIVERY	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
5	FC5-1023-000		1	ARM, SOLENOID, 2	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
6	FC5-6006-000		1	PLATE, GROUNDING	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
7	FG3-3295-000		1	CABLE, 3RD DELIVERY	J742,7421,7422,7423,7424 iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
8	FL2-1206-000		1	SOLENOID	SL2 J7421 iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
9	FC5-0862-000		1	PLATE, GROUNDING	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
10	FC5-0977-000		1	SPRING, TORSION	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
11	FC5-1009-000		1	GUIDE, 3RD DELIVERY, UPPER	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
12	FC5-6003-000		1	ELIMINATOR, STATIC-CHARGE	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
13	FL2-1208-000		1	FLAPPER, 3RD PAPER DELIVERY	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
14	FC5-0976-000		1	SPRING, TENSION	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
15	FC5-1003-000		1	FLAPPER, 2ND PAPER DELIVERY	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
16	FC5-1005-000		1	FLAG, DUPLEX ENTRANCE SENSOR	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
17	FC5-1006-000		1	SPRING, TORSION	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
18	FC5-1013-000		8	ROLLER	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
19	FC5-1014-000		8	SPRING	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
20	FC5-6008-000		1	GUIDE, DUPLEXING ENTRANCE, 2	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
21	FC5-6019-000		1	SPRING, TORSION	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
22	FK2-0149-000		2	PHOTO-INTERRUPTER, TLP1253(C6)	PS3 J7423,PS5 J7424 iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
23	FL2-1207-000		1	GUIDE, DUPLEXING ENTRANCE	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
24	FL2-1209-000		1	FLAPPER, REVERSE	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
25	FS5-1377-000		2	BUSHING	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
26	FM2-1340-000		1	3RD DELIVERY FRAME ASSEMBLY	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
27	FC6-2915-000		4	ROLLER, PAPER DELIVERY	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
28	FB5-9803-000		8	RING	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
29	FB6-5796-000		4	ROLLER. PAPER DELIVERY	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
30	FC5-1010-000		1	FLAG, 3RD DELIVERY SENSOR	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
31	FC5-1011-000		1	SPRING, TORSION	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
32	FC5-6012-000		4	SHEET, HOLDER	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
33	FL2-1210-000		1	FRAME, 3RD DELIVERY	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
34	FS7-2859-000		4	SPRING, COMPRESSION	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
35	FC5-1024-000		1	ARM, SOLENOID, 3	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
36	FC5-1054-000		1	COVER, DELIVERY SOLENOID, 1	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
37	FL2-1205-000		1	SOLENOID	SL3 J7422 iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
38	FS5-1943-000		4	BUSHING	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
39	FU5-3018-000		1	PULLEY, 30T/GEAR, 35T	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
40	FU5-3021-000		1	PULLEY, 30T	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
41	XA9-1386-000		1	SCREW, RS, M3X8	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
42	XF2-4109-240		1	BELT, TIMING, COGGED	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
501	XB4-5300-805		2	SCREW, P, M3X8	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
502	XB1-2300-405		3	SCREW, MACH, BH, M3X4	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	S V C
503	XB4-5401-205		10	SCREW, P, M4X12	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
504	XD2-1100-502		6	RING, E	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
505	XD3-2200-122		1	PIN. DOWEL	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	

FIGURE 460
LASER SCANNER ASSEMBLY

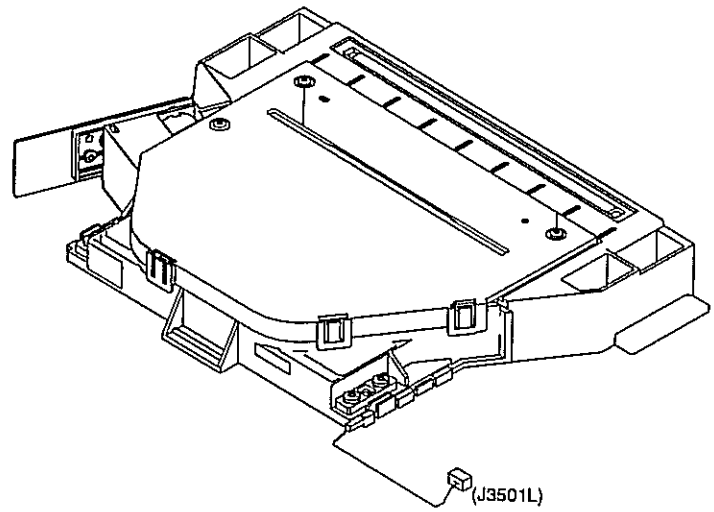


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.460	FM2-0276-000		1	LASER SCANNER ASSEMBLY	iR2270&IR2270F&IR2870 &IR2870F J3501L	
Fig.460	FM2-0334-000		1	LASER SCANNER ASSEMBLY	iR4570&IR4570F&IR3570 &iR3570F J3501L	

FIGURE 500
DRUM CARTRIDGE ASSEMBLY

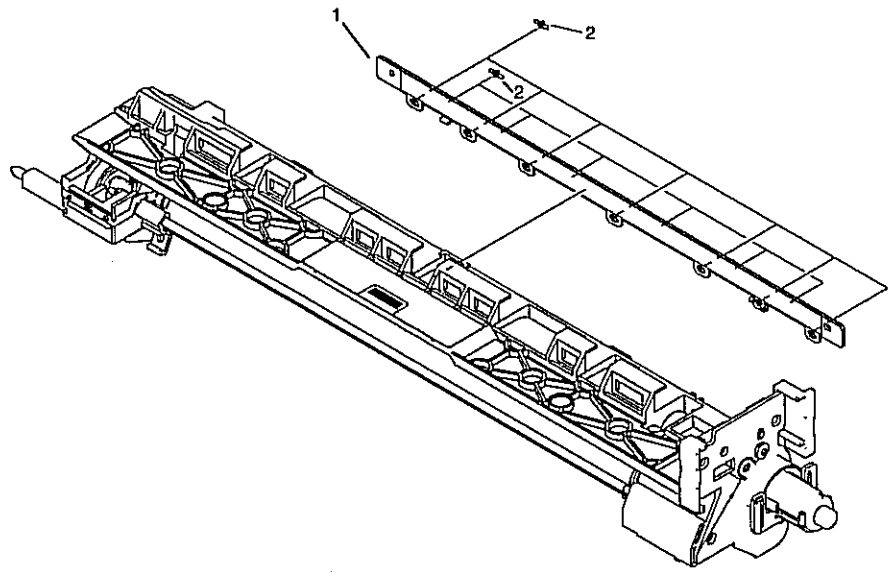


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.500	NPN		RF	DRUM CARTRIDGE ASSEMBLY		
1	FL2-0322-000		1	MOUNT, ROWEL		
2	FB5-5279-000		13	ROWEL, 4		

FIGURE 621
HOPPER ASSEMBLY

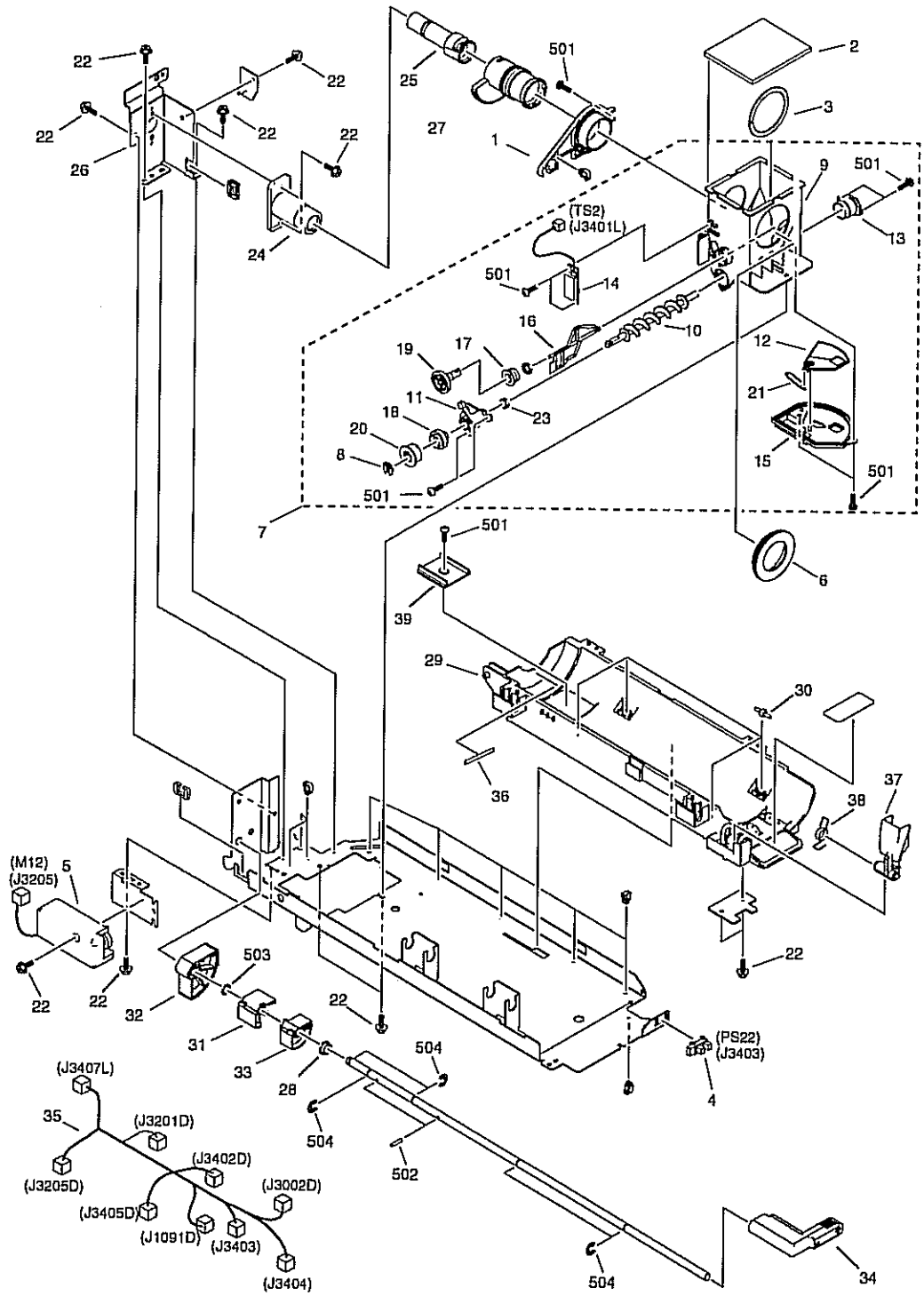


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.621	FM2-0286-000		1	HOPPER ASSEMBLY		
1	FC5-1208-000		1	HOLDER, GUIDE		
2	FC5-1209-000		1	COVER, HOPPER		
3	FC5-1221-000		1	RING, SEAL		
4	FK2-0149-000		1	PHOTO-INTERRUPTER, TLP1253(C6)	PS22 J3403	
5	FK2-0379-000		1	MOTOR, DC	M12 J3205	
6	FL2-0309-000		1	BASE, SEAL		
7	FM2-0290-000		1	SUB HOPPER UNIT		
8	FA3-8727-000		1	RETAINING RING		
9	FC5-1214-000		1	HOPPER, SUB		
10	FC5-1210-000		1	SCREW		
11	FC5-1211-000		1	FRANGE, SCREW		
12	FC5-1265-000		1	SHUTTER		
13	FC5-1274-000		1	CAP, SCREW		
14	FK2-0358-000		1	SENSOR, TONER	TS2 J3201L	
15	FL2-0307-000		1	MOUNT, SHUTTER		
16	FL2-0313-000		1	ROD, STIRRING		
17	FS2-1014-000		1	BUSHING, PL		
18	FU5-0108-000		1	GEAR, 18T		
19	FU5-0109-000		1	GEAR, 22T		
20	FU5-0115-000		1	GEAR, 17T		
21	FU5-2089-000		1	SPRING		
22	XA9-1386-000		10	SCREW,RS,M3X8		
23	XG9-0111-000		1	SEAL, OIL		
24	FC5-1205-000		1	BUSHING		
25	FC5-1206-000		1	SHAFT, COUPLING		
26	FL2-0295-000		1	MOUNT, BUSHING		
27	FL2-0308-000		1	HOLDER, RELEASE		
28	FA9-2112-000		2	BUSHING, PL		
29	FC5-1201-000		1	BASE, BOTTLE		
30	FC5-1269-000		4	ROLLER		
31	FC5-1215-000		1	CAM, BOTTLE SLIDE		

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS
32	FC5-1217-000		1	GEAR,	
33	FC5-1268-000		1	CAM, BOTTLE SLIDE	
34	FC5-1218-000		1	LEVER, SET	
35	FM2-2839-000		1	HARNESS HOPPER	J1091D,J3002D,J3201D,J3205D,J3402D,J3403,J3404,J3405D,J3407L
36	FC6-5087-000		1	SHEET, BOTTLE LIMIT	
37	FC5-7206-000		1	ARM, LOCK	iR2270&iR2270F&iR2870&iR2870F
37	FC6-2900-000		1	ARM, LOCK	iR4570&iR4570F&iR3570&iR3570F
38	FU6-2012-000		1	SPRING	
39	FC6-2899-000		1	BASE, BOTTLE	iR2270&iR2270F&iR2870&iR2870F
501	XB4-5300-607		10	SCREW,P,M3X6	
502	XD3-2300-142		2	PIN, DOWEL	
503	XD1-1108-218		1	SHIM	
504	XD2-1100-642		5	RING,E	

FIGURE 640
DEVELOPING ASSEMBLY

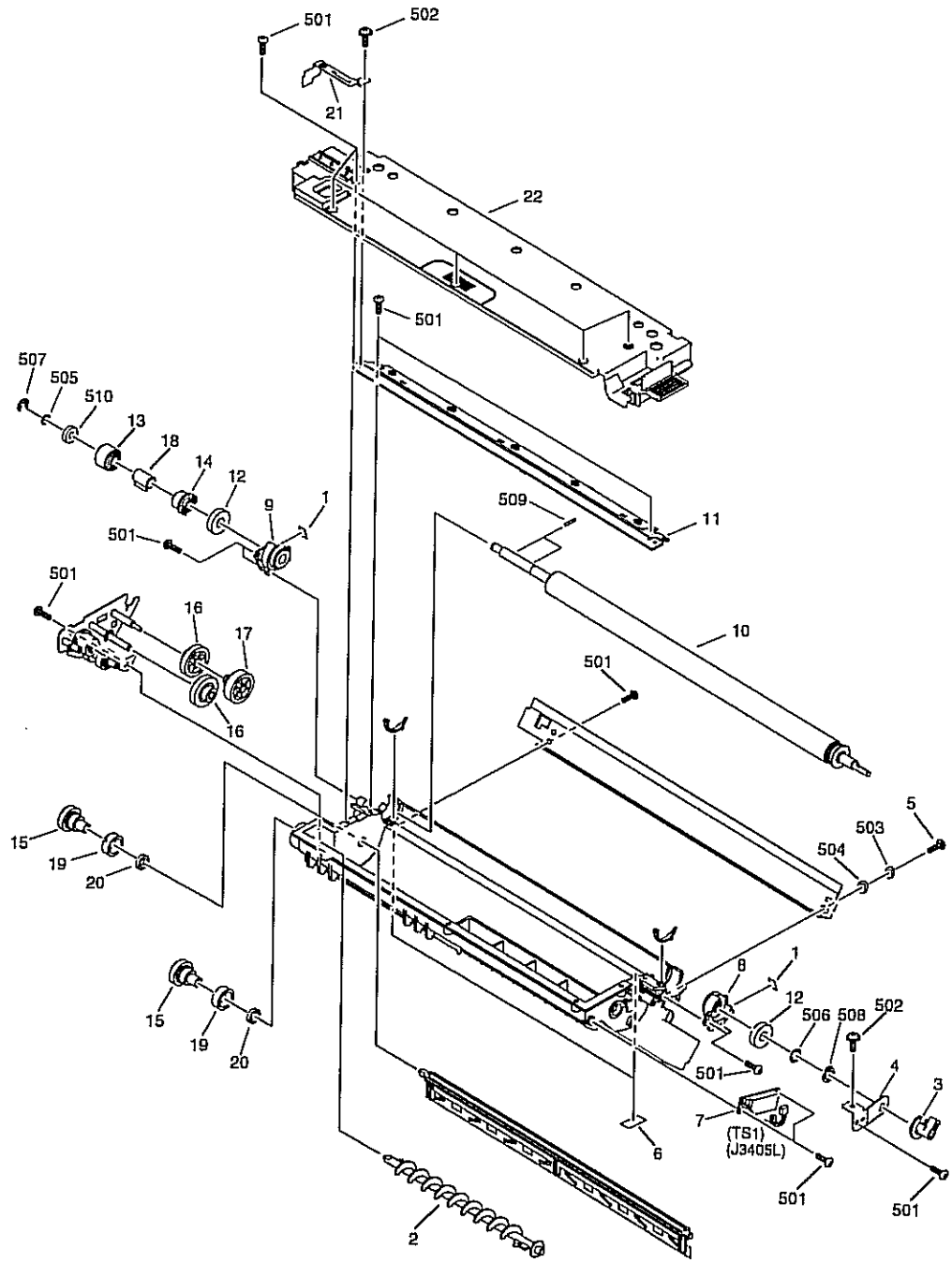


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.640	FM2-0287-000		1	DEVELOPING ASSEMBLY		
1	FB1-6715-000		2	SHEET		
2	FC5-1239-000		1	SCREW		
3	FC5-1246-000		1	GUIDE, SLEEVE, FRONT		
4	FC5-1249-000		1	PLATE, ANGLE ADJUSTMENT		
5	FC6-2909-000		1	SCREW, STEPPED, M3		
6	FC6-2937-000		2	TAPE,PLATE END SEAL		
7	FK2-0358-000		1	SENSOR, TONER	TS1 J3405L	
8	FL2-0291-000		1	HOLDER, SLEEVE, FRONT		
9	FL2-0292-000		1	HOLDER, SLEEVE, REAR		
10	FL2-0290-000		1	DEVELOPING CYLINDER UNIT		
11	FM2-0289-000		1	BLADE UNIT		
12	FS5-6448-000		2	ROLLER, 1		
13	FU5-0110-000		1	GEAR, 20T		
14	FU5-0111-000		1	GEAR, 16T		
15	FU5-0112-000		2	GEAR, 24T		
16	FU5-0113-000		2	GEAR, 31T/13T		
17	FU5-0114-000		1	GEAR, 31T/13T		
18	FU5-1026-000		1	BUSHING		
19	FU5-1031-000		2	BUSHING		
20	X71-9310-000		2	SEAL, OIL		
21	FC5-1251-000		1	PLATE, DEVELOPING CONTACT		
22	FL2-0303-000		1	COVER, TOP		
501	XB4-5300-607		16	SCREW,P,M3X6		
502	XB6-7300-607		2	SCREW, TP, M3X6		
503	XD1-1104-634		1	WASHER,COP		
505	XD1-1106-215		1	WASHER,COP		
506	XD1-1108-215		1	WASHER,COP		
507	XD2-1100-502		1	RETAINING RING (E-TYPE)		
508	XD2-2100-802		1	GRIP RING (D=8)		
509	XD3-2200-142		1	PIN, PARALLEL		
510	XG9-0521-000		1	BALL BEARING, MR126ZZ		

FIGURE 810
FIXING ASSEMBLY

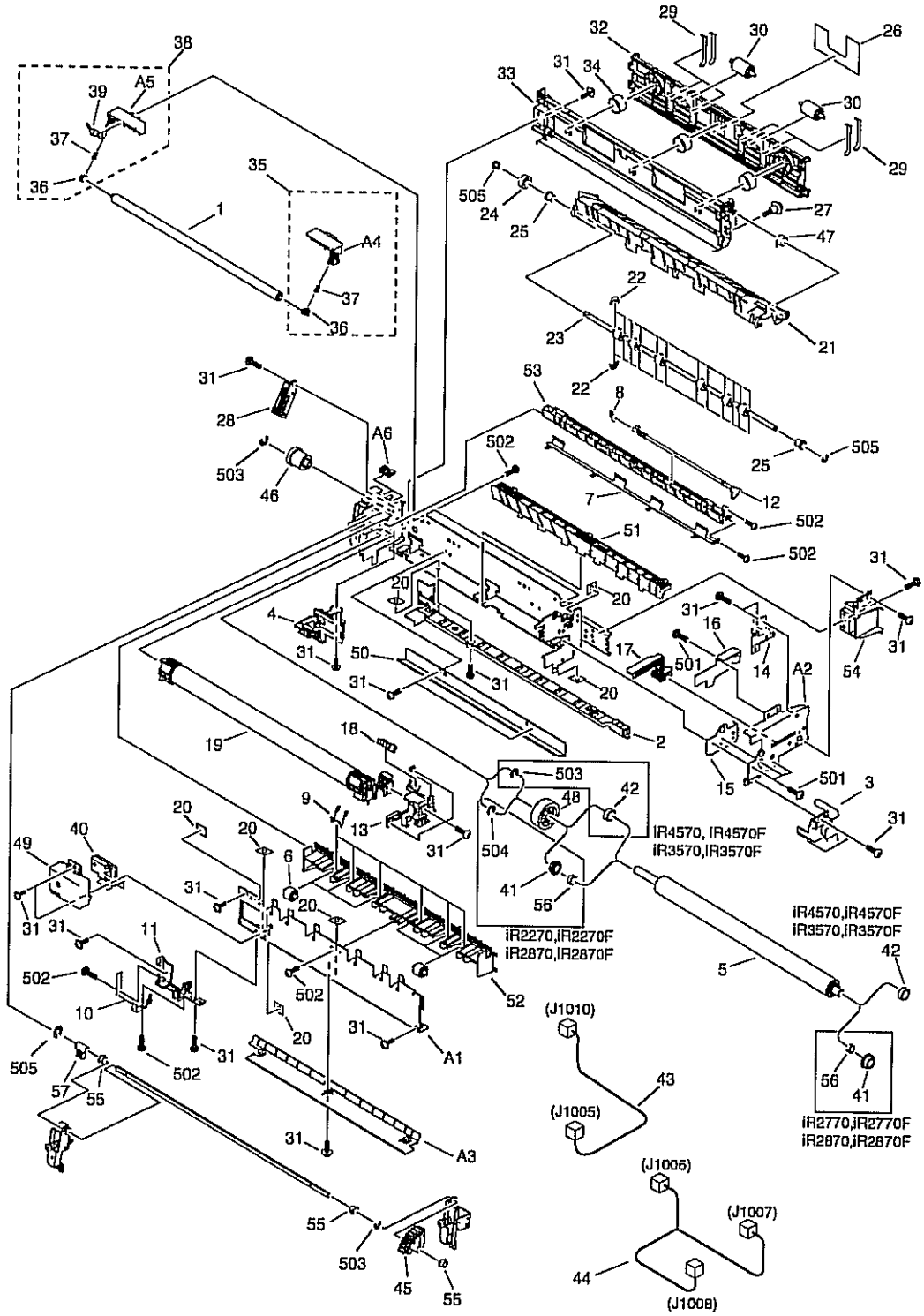


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.810	FM2-0292-000		1	FIXING ASSEMBLY	iR2270&iR2270F&iR2870 &iR2870F&100V	
Fig.810	FM2-0356-000		1	FIXING ASSEMBLY	iR2270&iR2870&120V	
Fig.810	FM2-0357-000		1	FIXING ASSEMBLY	iR2270&iR2870&230V	
Fig.810	FM2-1786-000		1	FIXING ASSEMBLY	iR4570&iR3570&120V	
Fig.810	FM2-1787-000		1	FIXING ASSEMBLY	iR4570&iR3570&230V	
Fig.810	FM2-1774-000		1	FIXING ASSEMBLY	iR4570&iR4570F&iR3570 &iR3570F&100V	
1	FB5-4931-000		1	ROLLER, FIXING HEATSINK		
2	FC5-1131-000		1	GUIDE, FIXING CABLE, LOWER		
3	FC5-1341-000		1	GUIDE, FIXING CABLE, FRONT		
4	FC5-1351-000		1	GUARD, FILM SENSOR		
5	FC6-2942-000		1	ROLLER, PRESSURE	iR2270&iR2270F&iR2870 &iR2870F	
5	FC6-7207-000		1	ROLLER, PRESSURE	iR4570&iR4570F&iR3570 &iR3570F	
6	FC5-1358-000		6	COLLAR, FIXING DELIVERY		
7	FC5-1360-000		1	ELIMINATOR, STATIC CHARGE		
8	FC5-1367-000		1	SPRING,SENSOR LEVER		
9	FC5-1368-000		6	SPRING		
10	FC5-1383-000		1	BRUSH, FILM BIAS		
11	FC5-1384-000		1	GUIDE, FILM BIAS		
12	FC5-7160-000		1	LEVER, SENSOR		
13	FC6-2920-000		1	COVER, AC CONNECTOR		
14	FC6-2924-000		1	GUIDE, RELEASE		
15	FC6-2925-000		1	PLATE, PRESSURE ADJUST, SMALL		
16	FC6-2927-000		1	PLATE, RACK AUXILIARY		
17	FC6-2929-000		1	RACK, PRESSURE RELEASE		
18	FK2-0149-000		1	PHTO-INTERRUPTER, TLP1253(C6)		
19	FM2-0293-000		1	FIXING FILM UNIT	iR2270&iR2270F&iR2870 &iR2870F&100V	
19	FM2-0358-000		1	FIXING FILM UNIT	iR2270&iR2870&120V	
19	FM2-0359-000		1	FIXING FILM UNIT	iR2270&iR2870&230V	
19	FM2-1793-000		1	FIXING FILM UNIT	iR4570&iR3570&120V	

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS
19	FM2-1794-000		1	FIXING FILM UNIT	iR4570&iR3570&230V
19	FM2-1792-000		1	FIXING FILM UNIT	iR4570&iR4570F&iR3570 &iR3570F&100V
20	FC6-5085-000		7	CAP, DUST	
21	FC5-1356-000		1	GUIDE, FIXING DELIVERY, LOWER	
22	FC6-2941-000		24	ROLLER	
23	FC6-2943-000		1	ROLLER, FIXING DELIVERY	
24	FU6-0023-000		1	GEAR, 15T	
25	RS1-1087-000		1	BUSHING	
26	FC5-0655-000		1	LABEL, HIGH TEMP. CAUTION	
27	FS1-9009-020		1	SCREW, STEPPED, M3	
28	FM2-0296-000		1	RESISTOR HOLDER MOUNTING UNIT	
29	FB4-2930-000		8	SPRING, LEAF	
30	FB5-4773-000		2	ROLLER, DUPLEXING	
31	XA9-0702-000		20	SCREW, W/WASHER, M3X6	
32	FC5-0697-000		1	GUIDE, DUPLEXINNG FEEDER, UPPE	
33	FC5-7156-000		1	MOUNT, DUPLEXING FEEDER	
34	FU5-2073-000		3	SPRING, COMPRESSION	
35	FM2-0299-000		1	CLEANING ROLLER MOUNT UNIT,F.	
36	FS5-1945-000		2	BUSHING	
37	FU5-2102-000		2	SPRING	
38	FM2-0300-000		1	CLEANING ROLLER MOUNT UNIT,R.	
39	FB5-4930-000		1	PLATE, CLEANING ROLLER	
40	FM2-2769-000		1	FIXING SPEED SENSOR PCB UNIT	
41	RS5-1446-000		2	BUSHING	iR2270&iR2270F&iR2870 &iR2870F
42	XG9-0387-000		2	BEARING, BALL, L-1680HH LY13	iR4570&iR4570F&iR3570 &iR3570F
43	FM2-2847-000		1	CABLE, THERMISTOR CONNECTING	J1010,J1005
44	FM2-2857-000		1	CABLE, FIXING	J1006,J1007,J1008
45	FC6-2928-000		1	GEAR, 36T	
46	FU5-0129-000		1	GEAR, 17T/19T	
47	FU6-2021-000		1	SPRING, FIXING GUIDE, LOWER	

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
48	FU5-0127-000		1	GEAR, 27T	iR2270&iR2270F&iR2870 &iR2870F	
48	FU6-0021-000		1	GEAR, 27T	iR4570&iR4570F&iR3570 &iR3570F	
49	FC6-4627-000		1	COVER, SENSOR		
50	FC5-1346-000		1	ELIMINATOR, STATIC CHARGE	iR2270&iR2270F&iR2870 &iR2870F	
50	FC5-7228-000		1	ELIMINATOR, STATIC CHARGE	iR4570&iR4570F&iR3570 &iR3570F	
51	FC5-1348-000		1	GUIDE, FIXING INLET		
52	FC5-1353-000		1	GUIDE, FIXING DELIVERY, UPPER		
53	FC5-1382-000		1	GUIDE, FIXING DELIVERY FIX, L.		
54	FC5-1343-000		1	COVER, FIXING FRAME		
55	FS1-1512-000		3	BUSHING, PL		
56	FC5-7182-000		2	HOUSING, BEARING		
57	FC5-1345-000		1	LEVER, PRESSURE		
501	XB1-2300-409		6	SCREW, MACHINE M3X4		
502	XB4-5300-607		7	SCREW,P,M3X6		
503	XD2-1100-502		3	RETAINING RING (E-TYPE)		
504	XD2-1100-642		1	RING,E	iR2270&iR2270F&iR2870 &iR2870F	
505	XD2-1100-242		3	WASHER, RETAININING		

FIGURE 900
CONTROLLER BOX ASSEMBLY

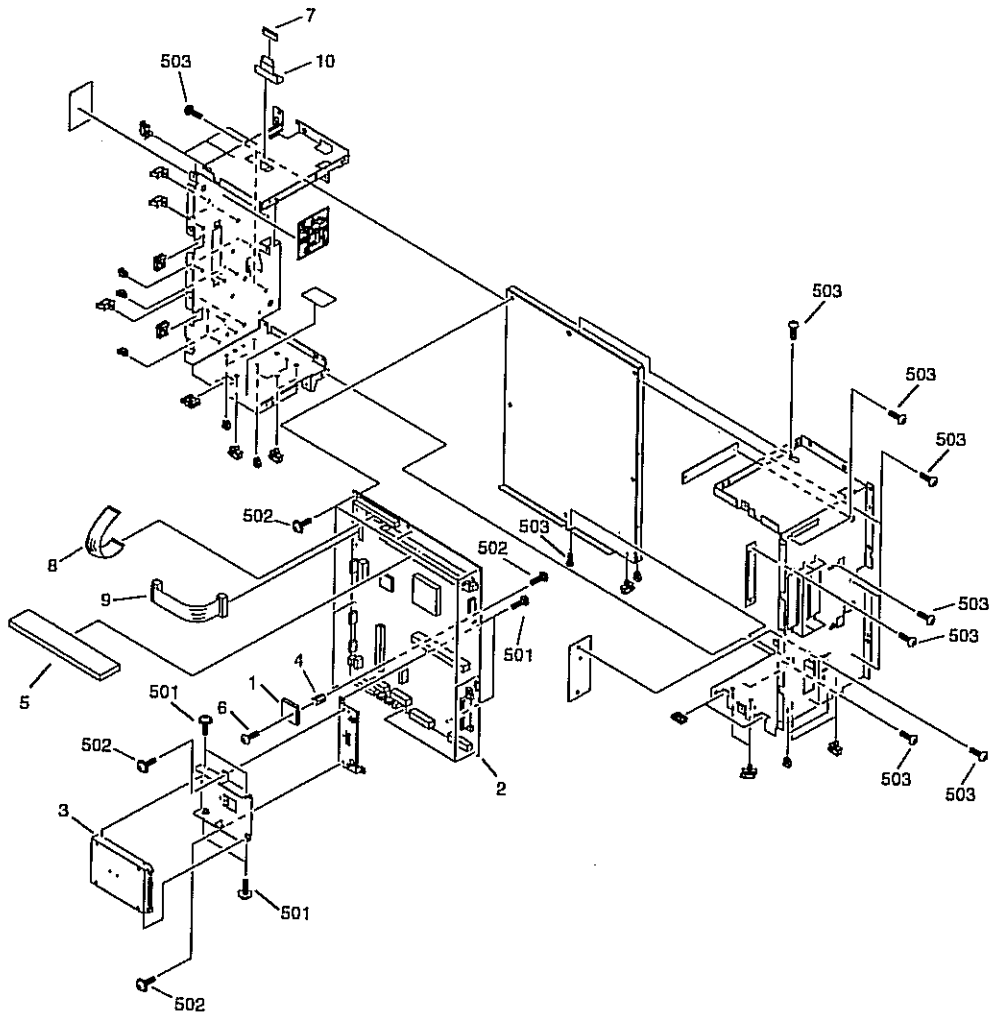


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.900	NPN		RF	CONTROLLER BOX ASSEMBLY		
1	FM2-2799-000		1	COUNTER PCB ASSEMBLY		
2	FM2-3226-000		1	BOARD, BW3 CONTROLLER		
3	WM2-5216-000		1	HDD, HTS541020G9AT00		
4	VT2-5018-000		1	SPACER		
5	WA7-3296-000		2	DIMM, MT8LSDT3264AY-133, SDRAM	J1004	
6	XA9-0465-000		1	SCREW, W/WASHER, M3X4		
7	WE8-5764-000		1	CORE, FERRITE		
8	FK2-0407-000		1	CABLE, FLAT		
9	FK2-0405-000		1	CABLE, FLAT		
10	FC5-5089-000		1	SHEET, CORE SUPPORT		
501	XB2-8300-607		4	SCREW, M3X6, S		
502	XB6-7300-000		11	SCREW, TP, M3X6		
503	XB1-2300-607		25	SCREW, BH3X6(S)		
IC1003	FH4-6300-000		1	IC, M38871M2-010GP, MCU		
IC1005	FH4-6145-000		1	IC, GATE ARRAY		
IC1006	FH4-6218-000		1	IC, UPD89410S1, STANDARD CELL		
IC1009	FH4-6302-000		1	IC,S1L50552F32L000,ASIC		

FIGURE 910
MAIN POWER SUPPLY PCB ASSEMBLY

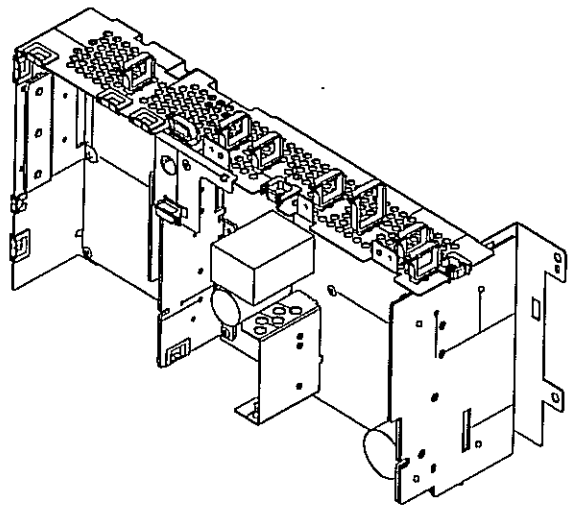


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.910	FM2-0260-000		1	MAIN POWER SUPPLY PCB ASSEMBLY	100V&120V	
Fig.910	FM2-0245-000		1	MAIN POWER SUPPLY PCB ASSEMBLY	230V	

FIGURE 930
DC CONTROLLER PCB ASSEMBLY

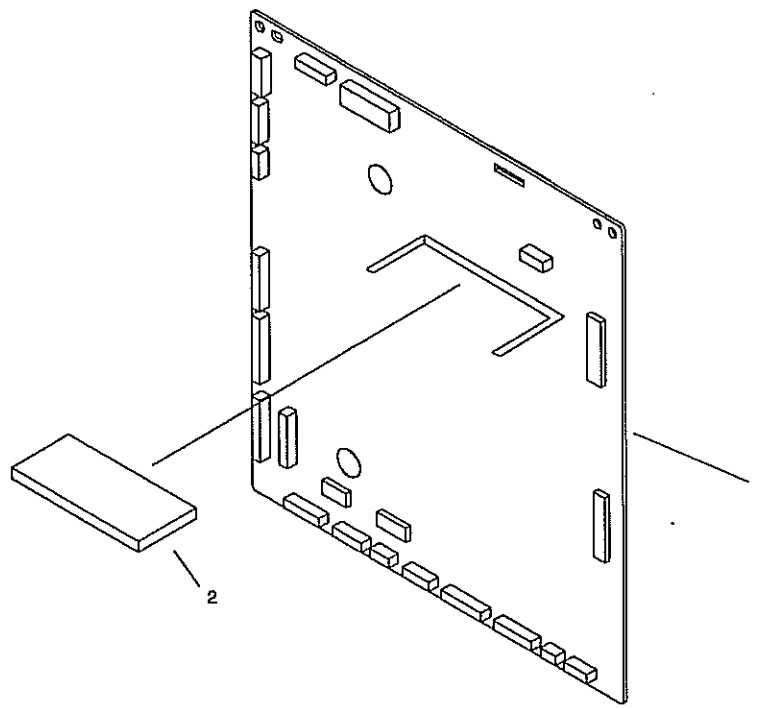


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.930	NPN		RF	DC CONTROLLER PCB ASSEMBLY		
1	FM2-2767-000		1	DC CONTROLLER PCB ASSEMBLY	iR2270&iR2270F&iR2870 &iR2870F	
1	FM2-2779-000		1	DC CONTROLLER PCB ASSEMBLY	iR4570&iR4570F&iR3570 &iR3570F	
2	FM2-2774-000		1	FLASH DIMM PCB ASSEMBLY	J381	
IC2	FH4-6204-000		1	IC, S1L50993F22H000,GATE-ARRAY		
IC8	FH4-6300-000		1	IC, M38871M2-010GP, MCU		

FIGURE 931
READER CONTROLLER PCB ASSEMBLY

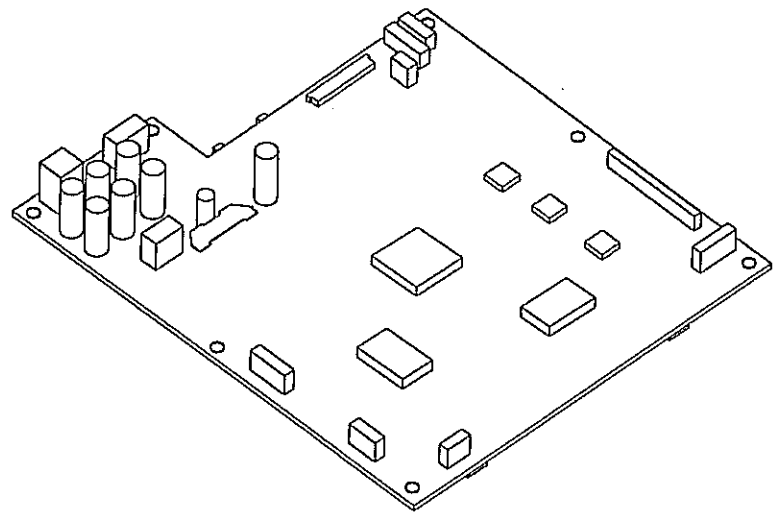


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.931	FG3-3765-000		1	READER CONTROLLER PCB ASSEMBLY		
IC520	FH4-6313-000		1	IC,MB87M4560PMT, ASIC		
IC522	FH4-1429-000		1	IC, HD6432323A01F, MCU		

FIGURE 990 (Japan and Australia Model only)
FAX ASSEMBLY

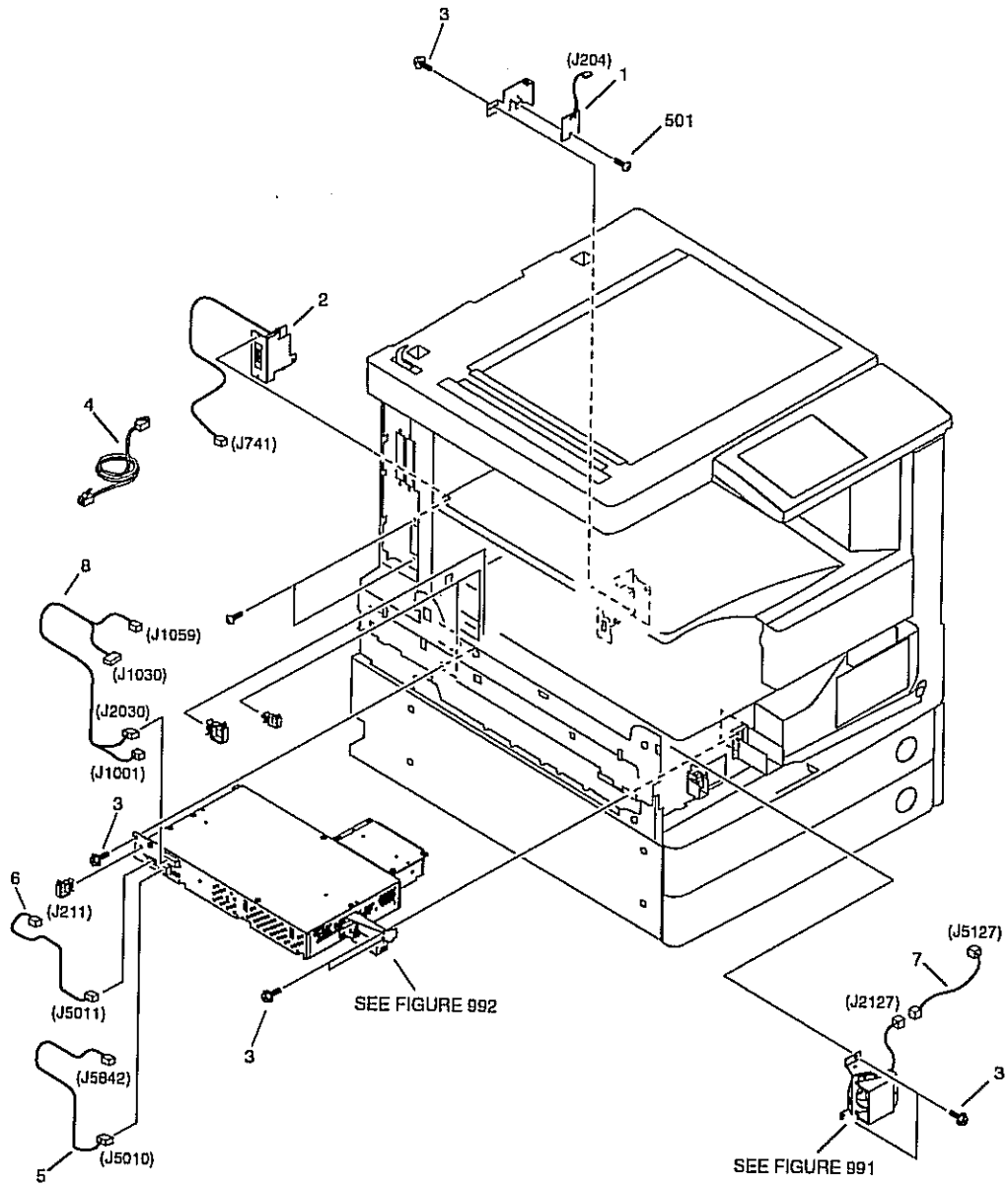


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.990	NPN		RF	FAX ASSEMBLY	iR2270F&iR2870F&iR4570F&iR3570F	
1	FM2-2973-000		1	ARRESTER PCB ASSEMBLY	iR2270F&iR2870F&iR4570F&iR3570F J204	
2	FM2-0343-000		1	G3 MODULAR PCB ASSEMBLY	iR2270F&iR2870F&iR4570F&iR3570F J741	
3	XA9-1386-000		5	SCREW,RS,M3X8	iR2270F&iR2870F&iR4570F&iR3570F	
4	HH2-2830-000		1	CORD, MODULAR	iR2270F&iR2870F&iR4570F&iR3570F	
5	FM2-2863-000		1	CABLE, POWER SUPPLY	iR2270F&iR2870F&iR4570F&iR3570F J5010,5842	
6	FM2-3120-000		1	CABLE, FAX INNER ARRESTER/MJ	iR2270F&iR2870F&iR4570F&iR3570F J211,5011	
7	FM2-3129-000		1	CABLE, SPEAKER CONNECT	iR2270F&iR2870F&iR4570F&iR3570F J2127,5127	
8	FM2-3130-000		1	CABLE, FAX INNER CONTROL	iR2270F&iR2870F&iR4570F&iR3570F J1001,1030,1059,2030	
501	XB6-7300-607		1	SCREW, TP, M3X6	iR2270F&iR2870F&iR4570F&iR3570F	

FIGURE 991 (Japan and Australia Model only)
SPEAKER ASSEMBLY

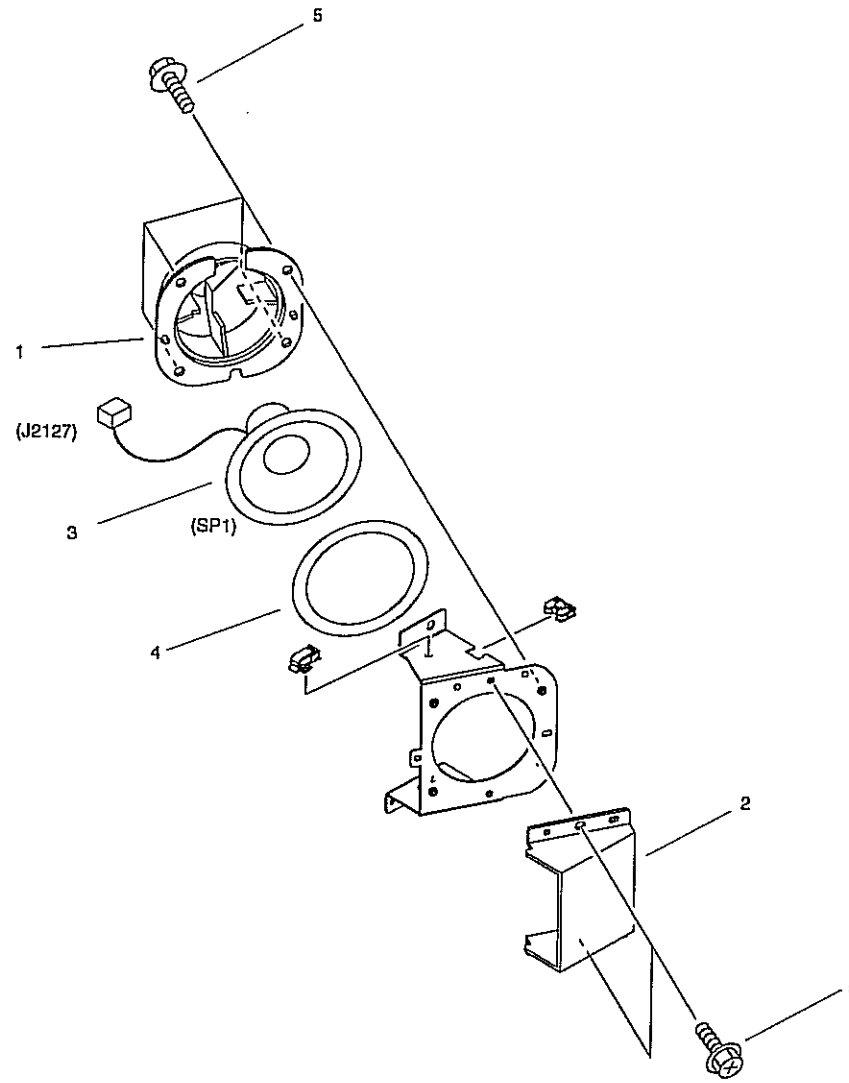


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.991	FM2-0342-000		1	SPEAKER ASSEMBLY	iR2270F&iR2870F&iR4570F&iR3570F	
1	FC5-5472-000		1	HOLDER, SPEAKER	iR2270F&iR2870F&iR4570F&iR3570F	
2	FC5-5473-000		1	DUCT, SPEAKER	iR2270F&iR2870F&iR4570F&iR3570F	
3	FH5-3550-000		1	SPEAKER	iR2270F&iR2870F&iR4570F&iR3570F SP1 J2127	
4	FB5-5130-000		1	DAMPER, RUBBER	iR2270F&iR2870F&iR4570F&iR3570F	
5	XA9-1386-000		6	SCREW,RS,M3X8	iR2270F&iR2870F&iR4570F&iR3570F	

FIGURE 992 (Japan and Australia Model only)
FAX BOARD PCB ASSEMBLY

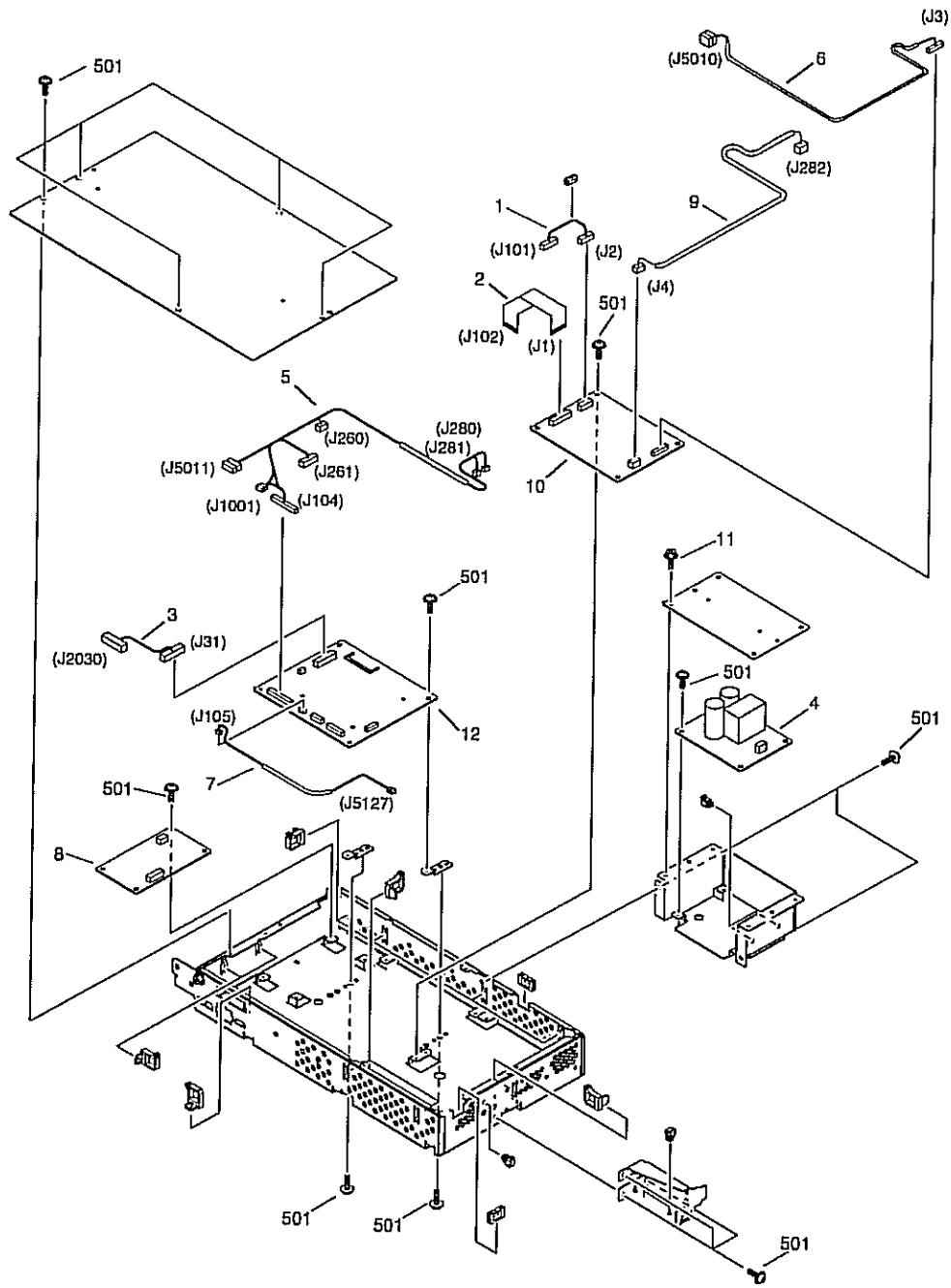


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.992	FM2-0244-000		1	FAX BOARD PCB ASSEMBLY	iR2270F&iR2870F&iR4570F&iR3570F	
1	FG3-2826-000		1	CABLE, G3 ANALOG	iR2270F&iR2870F&iR4570F&iR3570F J2,101	
2	FH2-7072-000		1	CABLE, FLEXIBLE	iR2270F&iR2870F&iR4570F&iR3570F J1,102	
3	FM2-3122-000		1	CABLE, MODEM	iR2270F&iR2870F&iR4570F&iR3570F J31,2030	
4	FM2-2773-000		1	PSEUDO CI PCB ASSEMBLY	iR2270F&iR2870F&iR4570F&iR3570F	
5	FM2-3123-000		1	CABLE, FAX INNER POWER SUPPLY	iR2270F&iR2870F&iR4570F&iR3570F J104,260,261,280,281,1001,5011	
6	FM2-3124-000		1	CABLE, FAX INNER M.J.	iR2270F&iR2870F&iR4570F&iR3570F J3,5010	
7	FM2-3127-000		1	CABLE, SPEAKER	iR2270F&iR2870F&iR4570F&iR3570F J105,5127	
8	FM2-0860-000		1	G3 FAX PS PCB ASSEMBLY	iR2270F&iR2870F&iR4570F&iR3570F	
9	FM2-3128-000		1	CABLE, PSEUDO CI HIGH VOLTAGE	iR2270F&iR2870F&iR4570F&iR3570F J4,282	
10	FM2-2790-000		1	NCU PCB ASSEMBLY	iR2270F&iR2870F&iR4570F&iR3570F	
11	XA9-1386-000		5	SCREW,RS,M3X8	iR2270F&iR2870F&iR4570F&iR3570F	
12	FM2-2789-000		1	MODEM PCB ASSEMBLY	iR2270F&iR2870F&iR4570F&iR3570F	
501	XB6-7300-607		28	SCREW, TP, M3X6	iR2270F&iR2870F&iR4570F&iR3570F	

FIGURE 994
DELIVERY CONTROLLER PCB ASS'Y

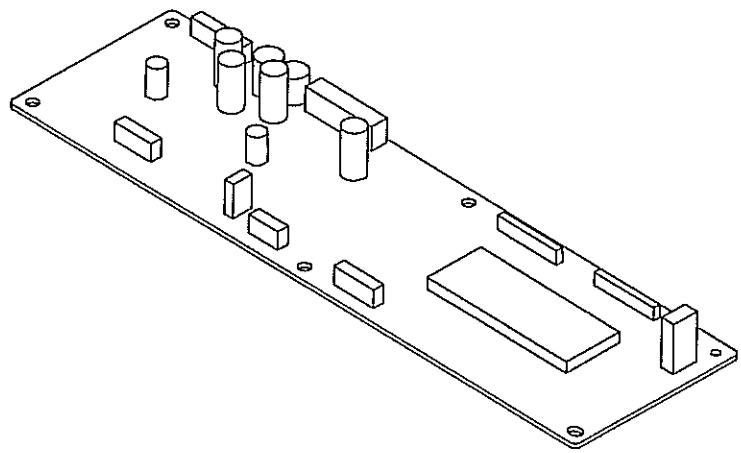


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.994	FM2-3221-000		1	DELIVERY CONTROLLER PCB ASS'Y	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	
IC10	FH4-6204-000		1	IC, S1L50993F22H000, GATE-ARRA	iR2270 120V&iR2870 120V&iR3570&iR3570F&iR4570&iR4570F	

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Z11	INTERNAL COMPONENTS	2-3
Z14	RIGHT DOOR ASSEMBLY	2-6
Z20	DRIVE ASSEMBLY	2-7
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Z40	PAPER PICK-UP ASSEMBLY	2-11
Z90	PEDESTAL DRIVER PCB ASSEMBLY	2-15
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Cassette Feeding Unit-Y1/Y2

PARTS NUMBER	FIGURE & KEY NO.	PARTS NUMBER	FIGURE & KEY NO.	PARTS NUMBER	FIGURE & KEY NO
FB2-5500-000	Z11 - 19	FC5-0584-000	Z30 - 13	FM2-1496-000	Z40 -
FB3-3192-020	Z11 - 23	FC5-0592-000	Z14 - 2	FM2-3539-000	Z20 -
FB5-3540-000	Z11 - 9	FC5-0598-000	Z30 - 14	FS1-1205-000	Z40 - 32
FB6-3313-000	Z14 - 1	FC5-0605-000	Z30 - 16	FS5-1595-000	Z14 - 6
FB6-3380-000	Z40 - 1	FC5-0624-000	Z30 - 15	FS5-1597-000	Z40 - 34
FB6-3386-000	Z40 - 2	FC5-0626-000	Z14 - 3	FS5-1943-000	Z40 - 33
FB6-3387-000	Z40 - 25	FC5-0627-000	Z10 - 2	FS6-1063-000	Z40 - 35
FB6-3388-000	Z40 - 3	FC5-0628-000	Z10 - 3	FS6-8116-000	Z30 - 23
FB6-3389-000	Z40 - 4	FC5-0629-000	Z10 - 4	FS7-2788-000	Z14 - 7
FB6-3390-000	Z40 - 5	FC5-0630-000	Z14 - 4	FS7-2797-000	Z40 - 36
FB6-3391-000	Z40 - 6	FC5-0631-000	Z14 - 5	FS7-2798-000	Z40 - 37
FB6-3392-000	Z40 - 7	FC5-0633-000	Z10 - 5	FS7-2800-000	Z40 - 38
FB6-3393-000	Z40 - 8	FC5-0637-000	Z30 - 17	FS7-2801-000	Z40 - 39
FB6-3394-000	Z40 - 9	FC5-1420-000	Z11 - 20	FS7-2802-000	Z40 - 40
FB6-3395-000	Z40 - 10	FC5-1422-020	Z30 - 18	FS7-2803-000	Z40 - 41
FB6-3396-010	Z40 - 11	FC5-1423-000	Z30 - 19	FS7-2805-000	Z30 - 24
FB6-3397-000	Z40 - 12	FC5-1424-020	Z30 - 20	FS7-5909-000	Z40 - 42
FB6-3399-000	Z40 - 14	FC5-1425-000	Z30 - 21	FS7-5910-000	Z40 - 43
FB6-3402-000	Z40 - 15	FC5-6934-000	Z40 - 19	FU3-0280-000	Z40 - 44
FB6-3403-000	Z40 - 16	FC6-5022-000	Z20 - 3	FU3-0282-000	Z40 - 45
FB6-3404-000	Z40 - 17	FE9-0290-000	Z11 - 21	FU3-0283-000	Z40 - 46
FB6-3405-000	Z40 - 18	FF6-2058-000	Z40 - 26	FU3-0284-000	Z40 - 47
FB6-3408-000	Z40 - 20	FF6-2059-000	Z40 - 27	FU3-0285-000	Z20 - 2
FB6-3410-000	Z40 - 21	FF6-2064-000	Z30 - 22	FU3-0288-000	Z40 - 48
FB6-3411-000	Z40 - 22	FF6-2363-000	Z40 - 13	FU3-0289-000	Z40 - 49
FB6-3413-000	Z40 - 23	FG3-2302-000	Z40 - 28	FU3-0290-000	Z40 - 50
FB6-3478-000	Z30 - 1	FG3-2798-000	Z11 - 14	FU3-0291-000	Z40 - 51
FB6-3479-000	Z30 - 2	FG3-3203-000	Z90 - 1	FU3-0292-000	Z40 - 52
FB6-3480-000	Z30 - 3	FG3-3206-020	Z11 - 7	FU3-0293-000	Z30 - 25
FB6-3481-000	Z30 - 4	FG3-3207-020	Z11 - 8	FU3-0294-000	Z30 - 26
FB6-3482-000	Z30 - 5	FG3-3208-000	Z11 - 5	FU3-0347-000	Z40 - 53
FB6-3483-000	Z30 - 6	FG3-3212-000	Z11 - 6	FU3-0349-000	Z40 - 54
FB6-3484-000	Z30 - 7	FH4-6203-000	Z90 - IC3	FU3-0350-000	Z40 - 55
FB6-3486-000	Z30 - 8	FK2-0149-000	Z11 - 16	FU3-0352-000	Z40 - 56
FB6-3490-000	Z30 - 9	FK2-0149-000	Z40 - 30	FU5-2033-000	Z30 - 27
FB6-3499-000	Z30 - 12	FK2-0408-000	Z40 - 29	FU5-2060-000	Z14 - 8
FB6-3506-000	Z30 - 10	FL2-0116-000	Z11 - 12	FU5-2066-000	Z11 - 15
FB6-3507-000	Z11 - 11	FL2-0122-000	Z11 - 1	FU5-2097-000	Z30 - 28
FB6-3524-000	Z30 - 31	FL2-0123-000	Z11 - 2	FU5-2104-000	Z30 - 29
FB6-4852-000	Z40 - 24	FM2-0146-000	Z14 -	NPN	Z10 -
FC5-0503-000	Z30 - 30	FM2-0147-000	Z20 -	NPN	Z11 -
FC5-0575-000	Z11 - 17	FM2-0305-000	Z11 - 13	NPN	Z30 -
FC5-0576-000	Z10 - 1	FM2-0338-000	Z20 - 1	NPN	Z90 -
FC5-0583-000	Z30 - 11	FM2-1495-000	Z20 - 1	NPN	ZB -

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PARTS NUMBER	FIGURE & KEY NO.	PARTS NUMBER	FIGURE & KEY NO.	PARTS NUMBER	FIGURE & KEY NO
NPN	ZB - J331	VS1-6321-003	ZB - J333	XA9-1386-000	Z10 - 6
NPN	ZB - J332	VS1-6321-003	ZB - J334	XA9-1386-000	Z11 - 22
NPN	ZB - J333	VS1-6321-003	ZB - J341	XB1-2300-507	Z20 - 501
NPN	ZB - J334	VS1-6321-003	ZB - J342	XB1-2300-807	Z40 - 501
NPN	ZB - J335	VS1-6321-003	ZB - J343	XB1-2400-607	Z40 - 508
NPN	ZB - J336	VS1-6321-003	ZB - J344	XB1-3300-607	Z40 - 502
NPN	ZB - J341	VS1-6321-003	ZB - J351	XB2-8300-607	Z30 - 501
NPN	ZB - J342	VS1-6741-006	ZB - J301	XB2-8300-807	Z90 - 501
NPN	ZB - J343	VS1-6741-008	ZB - J301	XB3-6300-600	Z40 - 503
NPN	ZB - J344	VS1-6757-006	ZB - J732	XB4-5300-807	Z14 - 501
NPN	ZB - J345	VS1-6757-007	ZB - J725	XB4-5300-807	Z30 - 502
NPN	ZB - J346	VS1-7173-014	Z40 - 60	XB4-5400-807	Z10 - 501
NPN	ZB - J351	VS1-7173-014	ZB - J321	XB4-5400-807	Z40 - 504
PCB	ZB - J324	VS1-7173-014	ZB - J322	XB4-5401-207	Z11 - 501
PCB	ZB - J325	VS1-7177-002	Z40 - 31	XB4-5401-207	Z40 - 505
PCB	ZB - J721	VS1-7177-002	ZB - J335	XB6-7300-607	Z11 - 502
PCB	ZB - J722	VS1-7177-002	ZB - J345	XB6-7300-807	Z30 - 503
PCB	ZB - J723	VS1-7178-006	ZB - J324	XD1-1104-135	Z30 - 504
PCB	ZB - J724	VS1-7178-006	ZB - J325	XD2-1100-502	Z40 - 506
PCB	ZB - J725	VS1-7178-012	ZB - J728	XD3-2200-122	Z40 - 507
PCB	ZB - J726	VS1-7208-006	ZB - J302	XF2-1104-940	Z20 - 4
PCB	ZB - J727	VS1-7208-006	ZB - J722	XZ1-1400-305	Z30 - 32
PCB	ZB - J728	VS1-7208-008	ZB - J302	XZ9-0575-000	Z11 - 10
PCB	ZB - J729	VS1-7208-008	ZB - J730		
PCB	ZB - J730	VS1-7208-009	ZB - J729		
PCB	ZB - J732	VS1-7440-006	Z11 - 4		
PCB	ZB - J733	VS1-7440-006	ZB - J324		
RB1-6539-000	Z40 - 57	VS1-7440-006	ZB - J325		
RB1-8945-000	Z40 - 58	VS3-0143-006	ZB - J336		
RS5-1567-000	Z40 - 59	VS3-0143-006	ZB - J346		
SYS	ZB - J301	WS3-1105-000	ZB - J336		
SYS	ZB - J302	WS3-1105-000	ZB - J346		
VS1-6225-002	ZB - J721	WS3-5680-000	ZB - J723		
VS1-6302-002	ZB - J724	WS3-5680-000	ZB - J724		
VS1-6302-003	ZB - J723	WS3-5721-000	ZB - J725		
VS1-6314-003	ZB - J733	WS3-5721-000	ZB - J732		
VS1-6314-014	ZB - J321	WS3-5729-000	ZB - J301		
VS1-6314-014	ZB - J322	WS3-5816-000	ZB - J301		
VS1-6314-014	ZB - J727	WS3-5817-000	ZB - J302		
VS1-6314-015	ZB - J726	WS3-5891-000	ZB - J301		
VS1-6321-002	ZB - J335	WS3-5892-000	ZB - J302		
VS1-6321-002	ZB - J345	WT8-5099-000	Z11 - 3		
VS1-6321-003	ZB - J331	XA9-0265-000	Z11 - 18		
VS1-6321-003	ZB - J332	XA9-0656-000	Z40 - 61		

Cassette Feeding Unit-Y1/Y2

F36-3602-000KFL00001-
F36-3611-000JKJ00001-

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ZB	LIST OF CONNECTORS	2-20

FIGURE ZA
ASSEMBLY LOCATION DIAGRAM

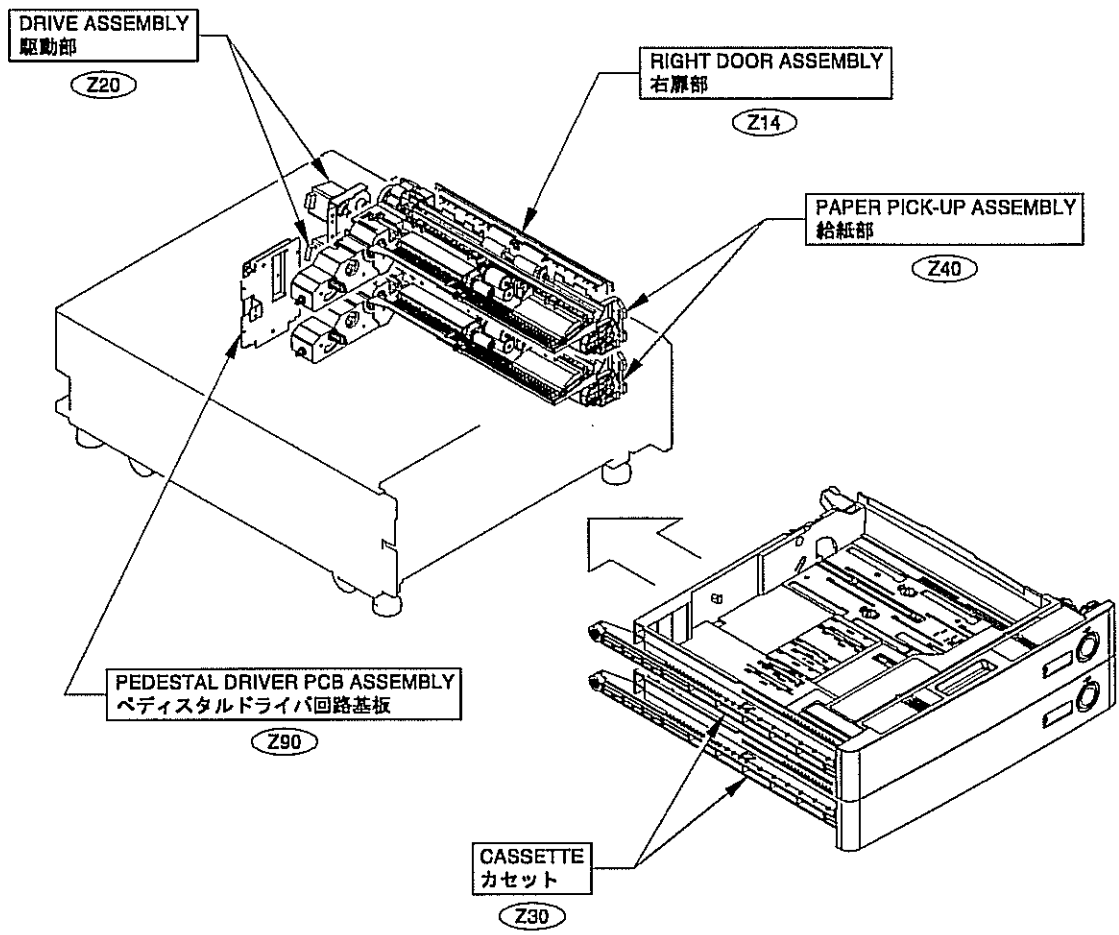


FIGURE Z10
EXTERNAL COVERS, PANELS, ETC.

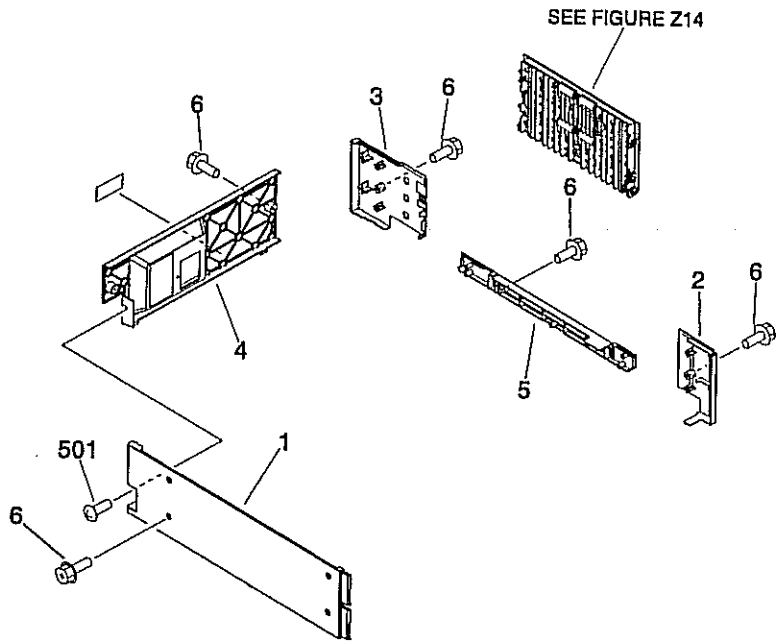


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.Z10	NPN		RF	EXTERNAL COVERS, PANELS, ETC.		
1	FC5-0576-000		1	PANEL, LEFT		
2	FC5-0627-000		1	PANEL, RIGHT, FRONT		
3	FC5-0628-000		1	PANEL, RIGHT, REAR		
4	FC5-0629-000		1	PANEL, REAR		
5	FC5-0633-000		1	PANEL, RIGHT		
6	XA9-1386-000		6	SCREW,RS,M3X8		
501	XB4-5400-807		AR	SCREW,P,M4X8		

FIGURE Z11
INTERNAL COMPONENTS

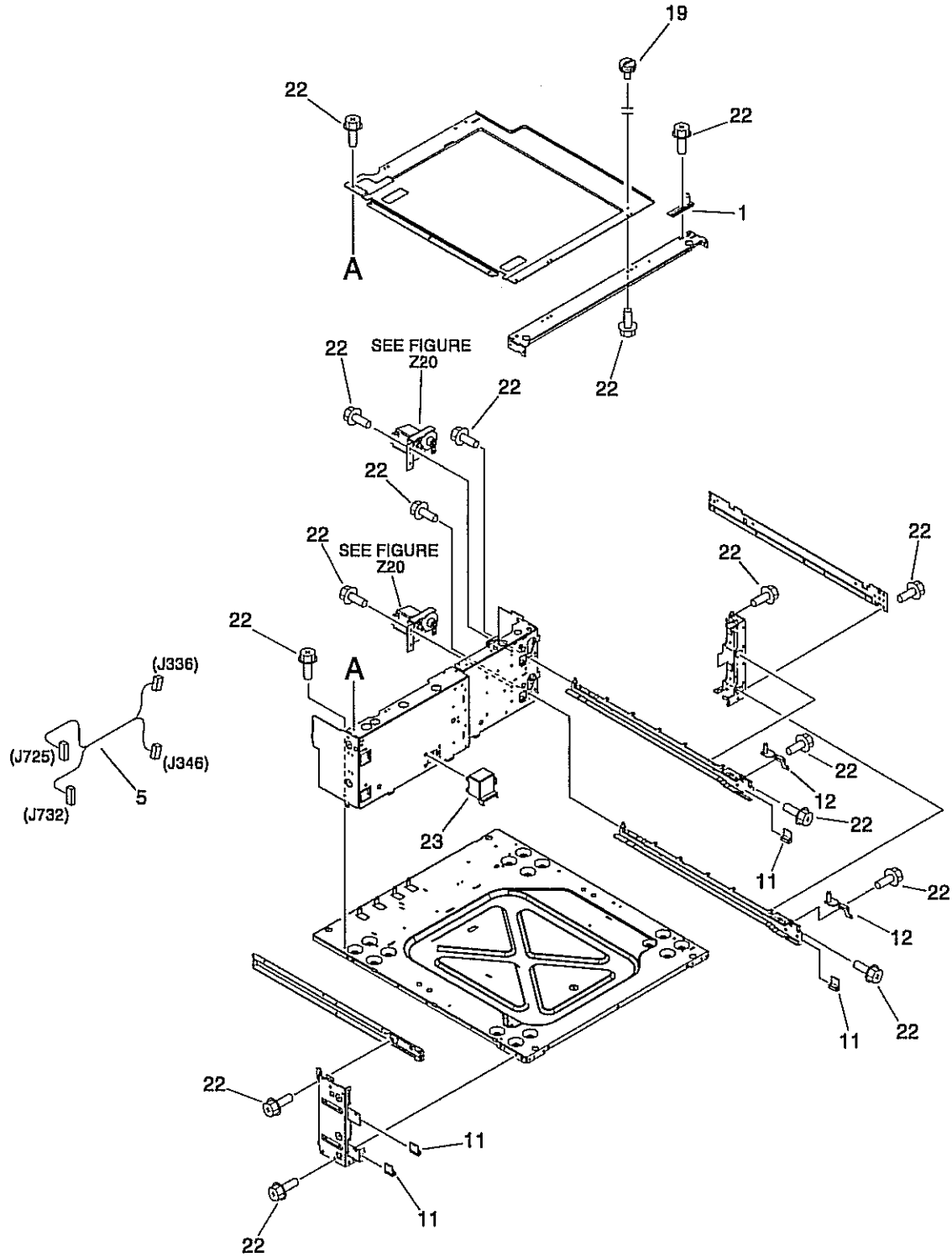


FIGURE Z11
INTERNAL COMPONENTS

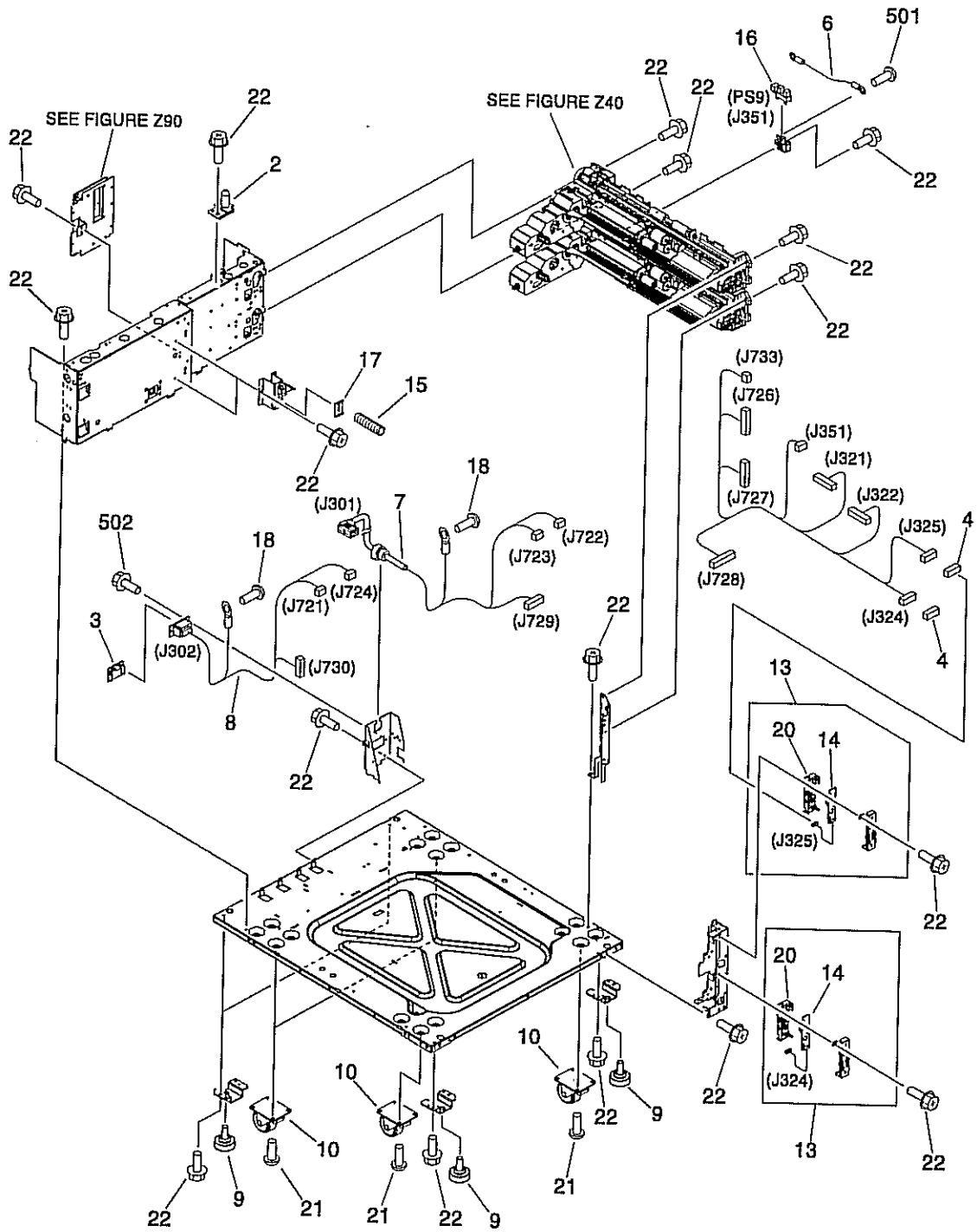


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.Z11	NPN		RF	INTERNAL COMPONENTS		
1	FL2-0122-000		1	PIN, POSITIONING, FRONT		
2	FL2-0123-000		1	PIN, POSITIONING, REAR		
3	WT8-5099-000		1	COVER, DUST		
4	VS1-7440-006		2	CONNECTOR, SNAP TIGHT		
5	FG3-3208-000		1	CABLE, PAPER PICK-UP MOTOR	J336,346,725,732	
6	FG3-3212-000		1	CABLE, GROUNDING		
7	FG3-3206-020		1	CABLE, LATTICE	J301,722,723,729	
8	FG3-3207-020		1	CABLE, LATTICE	J302,721,724,730	
9	FB5-3540-000		4	ADJUSTER		
10	XZ9-0575-000		4	CASTER		
11	FB6-3507-000		4	BLOCK, SWING		
12	FL2-0116-000		2	PIN, SIDE REGIST. POSITIONING		
13	FM2-0305-000		2	CASSETTE SIZE SENSOR ASSEMBLY		
14	FG3-2798-000		2	SIZE SENSOR PCB ASSEMBLY	J324,325	
15	FU5-2066-000		2	SPRING, COMPRESSION		
16	FK2-0149-000		1	PHOTO-INTERRUPTER	PS9 J351	
17	FC5-0575-000		2	SUPPORT, SPRING		
18	XA9-0265-000		2	SCREW,W/WASHER,TRUSS HEAD		
19	FB2-5500-000		1	SCREW, M4X12		
20	FC5-1420-000		2	HOLDER, SIZE DETECT		
21	FE9-0290-000		16	SCREW, W/WASHER		
22	XA9-1386-000		92	SCREW,RS,M3X8		
23	FB3-3192-020		1	COVER, HEATER CONNECTOR		
501	XB4-5401-207		AR	SCREW,P,M4X12		
502	XB6-7300-607		AR	SCREW,TP,M3X6		

FIGURE Z14
RIGHT DOOR ASSEMBLY

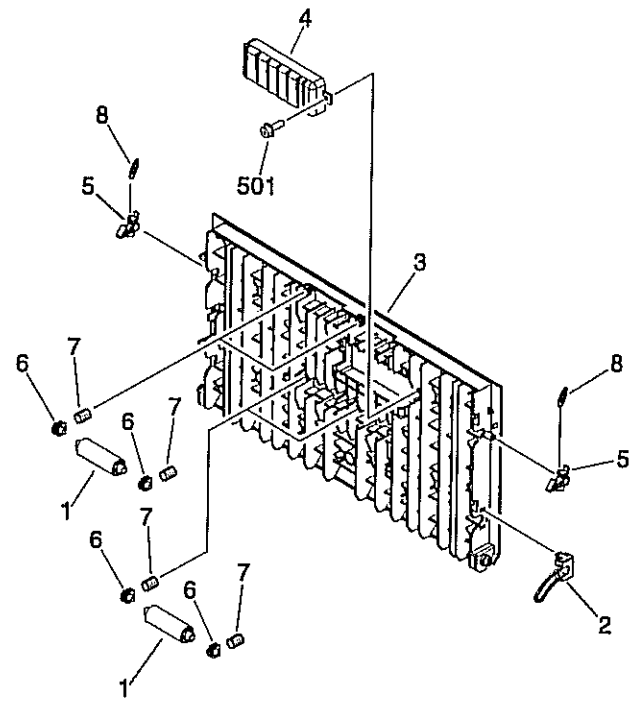


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.Z14	FM2-0146-000		1	RIGHT DOOR ASSEMBLY		
1	FB6-3313-000		4	ROLLER, PAPER FEED		
2	FC5-0592-000		1	STOPPER, RIGHT LOWER DOOR		
3	FC5-0626-000		1	DOOR, RIGHT		
4	FC5-0630-000		1	GRIP, RIGHT DOOR		
5	FC5-0631-000		2	HOOK, RIGHT DOOR		
6	FS5-1595-000		8	BLOCK, ROLLER		
7	FS7-2788-000		8	SPRING, COMPRESSION		
8	FU5-2060-000		2	SPRING, TENSION		
501	XB4-5300-807		AR	SCREW,P,M3X8		

FIGURE Z20
DRIVE ASSEMBLY

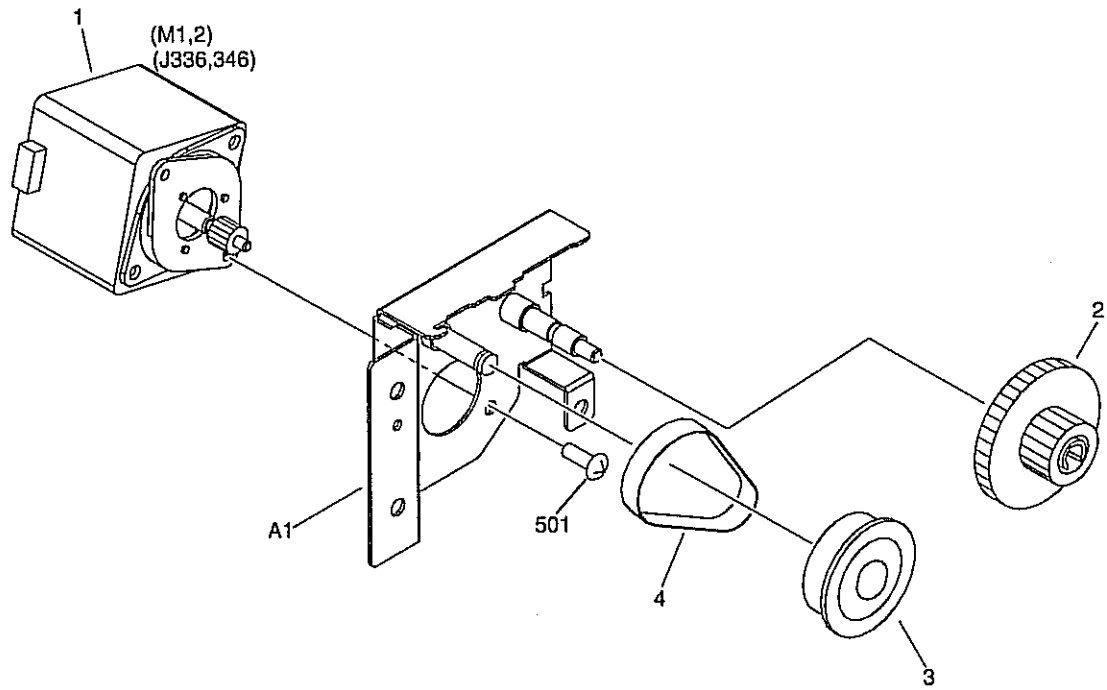


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.Z20	FM2-0147-000		2	DRIVE ASSEMBLY		
Fig.Z20	FM2-3539-000		2	DRIVE ASSEMBLY		
1	FM2-1495-000		2	MOTOR, STEPPING, DC	Y1 M1,2 J336,346	
1	FM2-0338-000		2	MOTOR, STEPPING, DC	Y2 M1,2 J336,346	
2	FU3-0285-000		2	GEAR, 80T/16T		
3	FC6-5022-000		1	PULLEY, 34T	Y2	
4	XF2-1104-940		1	BELT, TIMING	Y2	
501	XB1-2300-507		AR	SCREW,MACH.,TRUSS HEAD,M3X5		

FIGURE Z30
CASSETTE

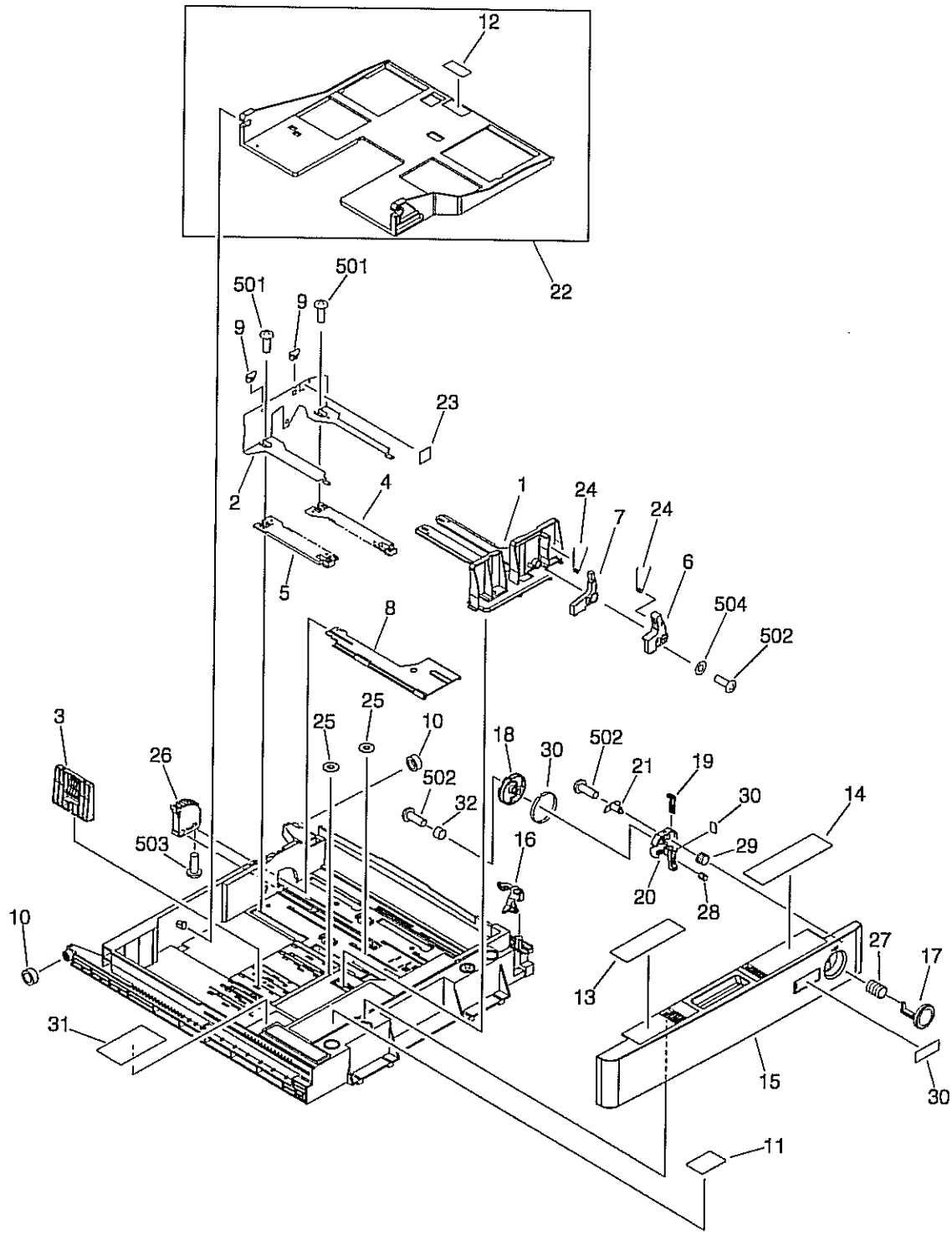


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.Z30	NPN		RF	CASSETTE	LARGE	
1	FB6-3478-000		2	PLATE, SIDE GUIDE, FRONT		
2	FB6-3479-000		2	PLATE, SIDE GUIDE, REAR		
3	FB6-3480-000		2	PLATE, END GUIDE		
4	FB6-3481-000		2	RACK, 1		
5	FB6-3482-000		2	RACK, 2		
6	FB6-3483-000		2	KNOB, SIDE GUIDE PLATE, 1		
7	FB6-3484-000		2	KNOB, SIDE GUIDE PLATE, 2		
8	FB6-3486-000		2	PLATE, LIFTER		
9	FB6-3490-000		4	CLAW, SIDE PLATE GUIDE		
10	FB6-3506-000		4	COLLAR, CASSETTE SWING		
11	FC5-0583-000		2	LABEL, PAPER SET		
12	FB6-3499-000		2	SHEET, SEPARATION		
13	FC5-0584-000		2	LABEL, SIZE CHANGE		
14	FC5-0598-000		2	LABEL, DIAL SET		
15	FC5-0624-000		2	PANEL, CASSETTE FRONT		
16	FC5-0605-000		2	ARM, LOCK		
17	FC5-0637-000		2	BUTTON, PUSH		
18	FC5-1422-020		1	DIAL, SIZE DETECT		
19	FC5-1423-000		2	SLIDER, CONVERT		
20	FC5-1424-020		1	HOLDER, DIAL		
21	FC5-1425-000		2	PIN, FLOAT GUIDE		
22	FF6-2064-000		2	PLATE, PAPER LIFTING		
23	FS6-8116-000		2	LABEL, 'PAPER HEIGHT'		
24	FS7-2805-000		4	SPRING, TORSION		
25	FU3-0293-000		4	GEAR, 16T		
26	FU3-0294-000		2	GEAR, 7T		
27	FU5-2033-000		2	SPRING, COMPRESSION		
28	FU5-2097-000		2	SPRING, COMPRESSION		
29	FU5-2104-000		2	SPRING, COMPRESSION		
30	FC5-0503-000		1	LABEL, CASSETTE SIZE, DIAL		
31	FB6-3524-000		2	LABEL, PAPER SIZE SELECT		

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS
32	XZ1-1400-305		1	COLLAR	
501	XB2-8300-607		AR	SCREW,W/WASHER,M3X6	
502	XB4-5300-807		AR	SCREW,P,M3X8	
503	XB6-7300-807		AR	SCREW,TP,M3X8	
504	XD1-1104-135		AR	SHIM	

FIGURE Z40
PAPER PICK-UP ASSEMBLY

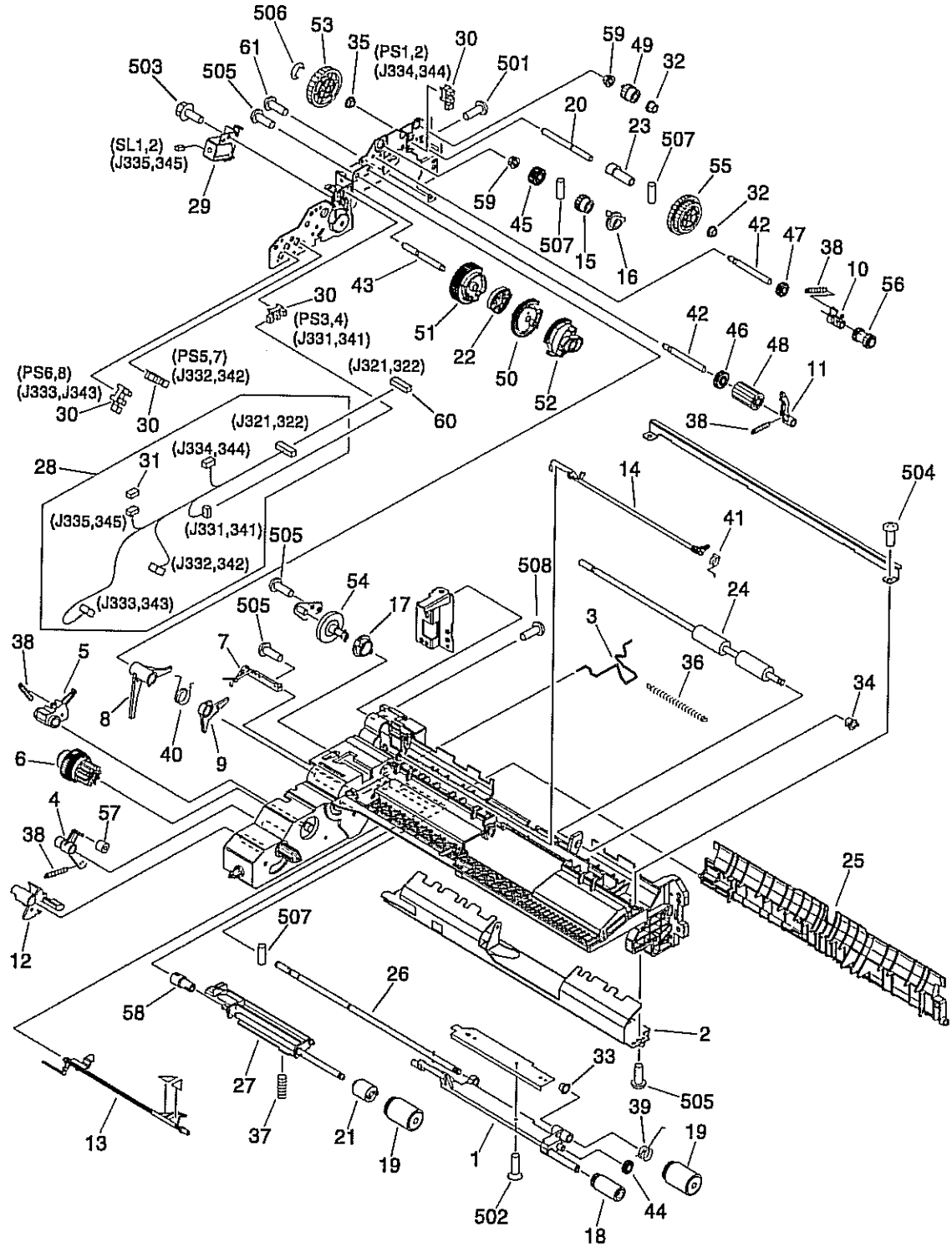


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.Z40	FM2-1496-000		2	PAPER PICK-UP ASSEMBLY		
1	FB6-3380-000		2	HOLDER, PAPER PICK-UP ROLLER		
2	FB6-3386-000		2	GUIDE, RETARD		
3	FB6-3388-000		2	ROD, SEPARATION ROLLER RELEASE		
4	FB6-3389-000		2	CLAW, PICK-UP		
5	FB6-3390-000		2	CLAW, PAPER PICK-UP		
6	FB6-3391-000		2	GEAR, RATCHET		
7	FB6-3392-000		2	SPRING, LEAF		
8	FB6-3393-000		2	ARM, PICK-UP		
9	FB6-3394-000		2	ARM, LIFTING		
10	FB6-3395-000		2	ARM, PAPER FEED SHAFT		
11	FB6-3396-010		1	LOCK, PICK-UP		
12	FB6-3397-000		2	FLAG, PAPER SENSOR		
13	FF6-2363-000		1	FLAG, PAPER DETECT SENSOR		
14	FB6-3399-000		2	FLAG, REGISTRATION SENSOR		
15	FB6-3402-000		2	GEAR, RATCHET		
16	FB6-3403-000		2	COUPLING, FEED SHAFT STOP		
17	FB6-3404-000		2	COUPLING, SEPARATION SHAFT		
18	FB6-3405-000		2	ROLLER, PAPER PICK-UP		
19	FC5-6934-000		4	ROLLER, FEED/SEPARATION		
20	FB6-3408-000		2	SHAFT, PAPER PICK-UP DRIVE		
21	FB6-3410-000		2	LIMITER, TORQUE		
22	FB6-3411-000		2	CAM, LOCK		
23	FB6-3413-000		2	COLLAR, PAPER PICK-UP SHAFT		
24	FB6-4852-000		2	ROLLER, VERTICAL PATH		
25	FB6-3387-000		2	GUIDE, VERTICAL PATH		
26	FF6-2058-000		2	SHAFT, PAPER FEED ROLLER		
27	FF6-2059-000		2	HOLDER, SEPARATION ROLLER		
28	FG3-2302-000		2	CABLE, PAPER PICK-UP	J321,322,331-335 J341-345	
29	FK2-0408-000		2	SOLENOID	SL1,SL2 J335,345	

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS
30	FK2-0149-000		8	PHOTO-INTERRUPTER	PS1-8 J334,344,331,341,332 J333,342,343
31	VS1-7177-002		2	CONNECTOR, SNAP TIGHT	J335,345
32	FS1-1205-000		4	BUSHING	
33	FS5-1943-000		1	BUSHING	
34	FS5-1597-000		2	BUSHING	
35	FS6-1063-000		2	BUSHING	
36	FS7-2797-000		2	SPRING, TENSION	
37	FS7-2798-000		2	SPRING, COMPRESSION	
38	FS7-2800-000		8	SPRING, TENSION	
39	FS7-2801-000		2	SPRING, TORSION	
40	FS7-2802-000		2	SPRING, TORSION	
41	FS7-2803-000		2	SPRING, TORSION	
42	FS7-5909-000		4	SHAFT, IDLER, 2	
43	FS7-5910-000		2	SHAFT, IDLER, 3	
44	FU3-0280-000		2	GEAR, 15T	
45	FU3-0282-000		2	GEAR, 21T	
46	FU3-0283-000		2	GEAR, 21T	
47	FU3-0284-000		2	GEAR, 16T	
48	FU3-0288-000		2	GEAR, 21T	
49	FU3-0289-000		2	GEAR, 14T	
50	FU3-0290-000		2	GEAR, 46T	
51	FU3-0291-000		2	GEAR, 51T	
52	FU3-0292-000		2	GEAR, 42T	
53	FU3-0347-000		2	GEAR, 41T	
54	FU3-0349-000		2	GEAR, 41T	
55	FU3-0350-000		2	GEAR, 41T/41T	
56	FU3-0352-000		2	GEAR, 16T/16T	
57	RB1-6539-000		2	DAMPER	
58	RB1-8945-000		2	JOINT	
59	RS5-1567-000		4	BUSHING	
60	VS1-7173-014		2	CONNECTOR, SNAP TIGHT	J321,322

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
61	XA9-0656-000		2	SCREW,RS,M3X10		
501	XB1-2300-807		AR	SCREW,MACH.,TRUSS HEAD,M3X8		
502	XB1-3300-607		AR	SCREW,MACH.,C.S.HEAD,M3X6		
503	XB3-6300-600		AR	SCREW,RS,M3X6		
504	XB4-5400-807		AR	SCREW,P,M4X8		
505	XB4-5401-207		AR	SCREW,P,M4X12		
506	XD2-1100-502		AR	RING,E		
507	XD3-2200-122		AR	PIN,DOWEL		
508	XB1-2400-607		AR	SCREW,MACH.,TRUSS HEAD,M4X6		

FIGURE Z90
PEDESTAL DRIVER PCB ASSEMBLY

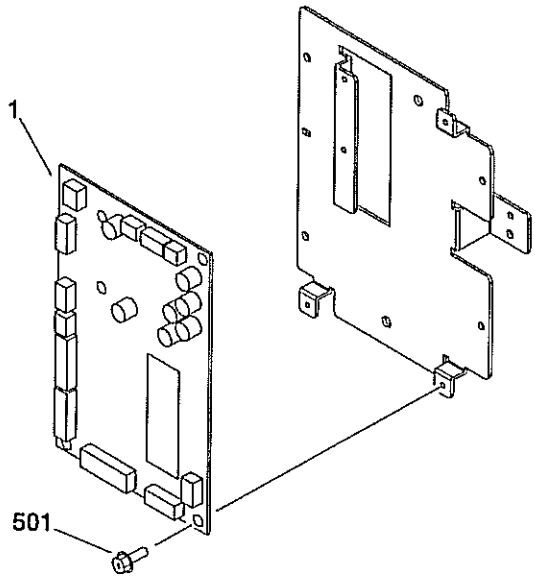


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.Z90	NPN		RF	PEDESTAL DRIVER PCB ASSEMBLY		
1	FG3-3203-000		1	PEDESTAL DRIVER PCB ASSEMBLY		
501	XB2-8300-807		AR	SCREW,W/WASHER,M3X8		
IC3	FH4-6203-000		1	IC, TC200G04AN-0021,GATE-ARRAY		

FIGURE ZB
LIST OF CONNECTORS

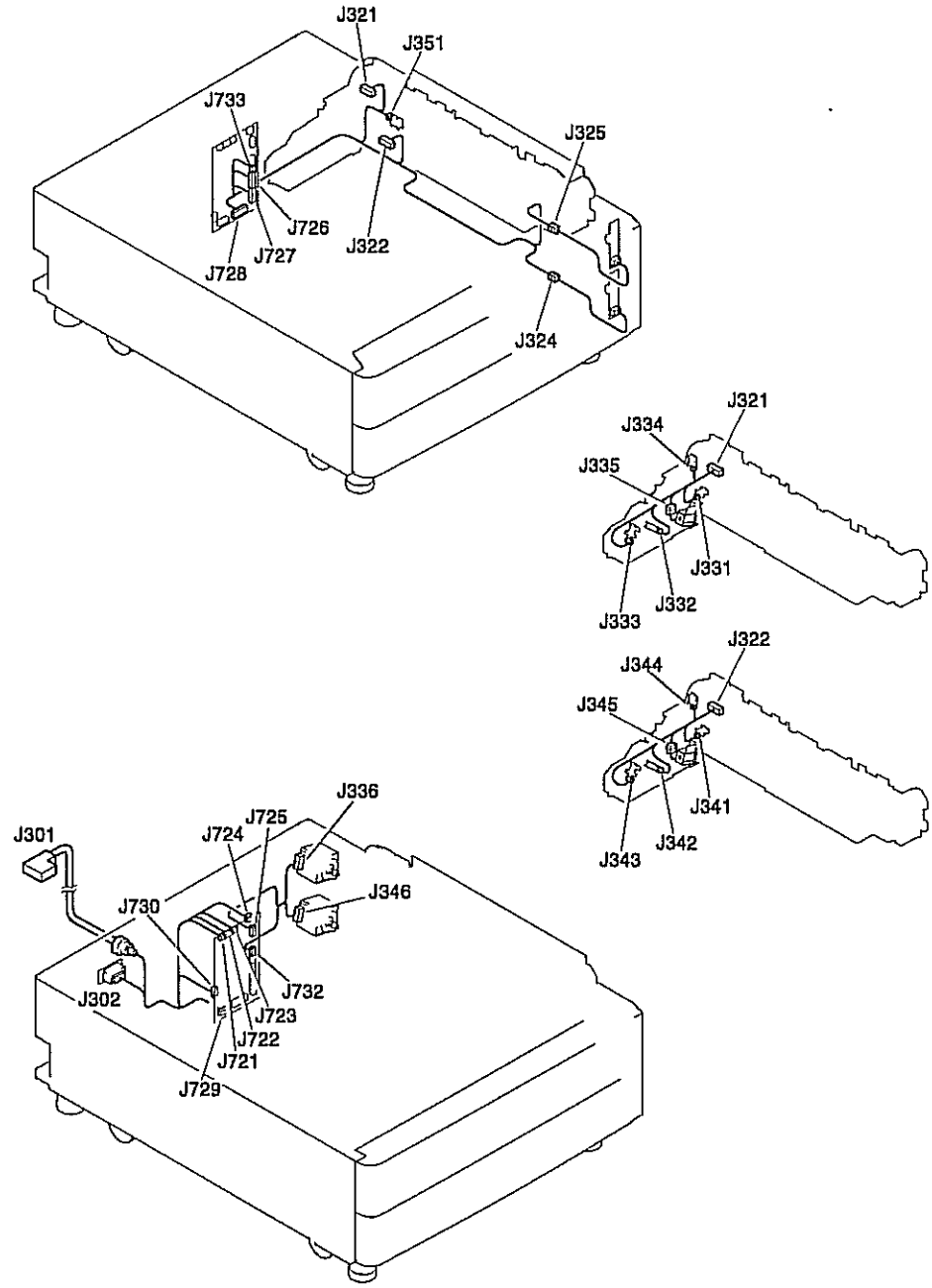


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.ZB	NPN		RF	LIST OF CONNECTORS		
J301	SYS			TO PRINTER		
J301	VS1-6741-006		1	CONNECTOR, 6P, FEMALE		
J301	VS1-6741-008		1	CONNECTOR, 8P, FEMALE		
J301	WS3-5729-000		14	SOCKET CONTACT, 24-28AWG		
J301	WS3-5816-000		4	CONTACT, PIN, 16-20AWG		
J301	WS3-5891-000		1	CONNECTOR, 18P, MALE, W		
J302	SYS			TO 2.5K PAPER DECK		
J302	VS1-7208-006		1	CONNECTOR, 6P, FEMALE		
J302	VS1-7208-008		1	CONNECTOR, 8P, FEMALE		
J302	WS3-5817-000		3	CONTACT, SOCKET, 16-20AWG		
J302	WS3-5892-000		1	CONNECTOR, 4P, FEMALE, GRY		
J321	VS1-6314-014		2	CONNECTOR, 14P, MALE		
J321	VS1-7173-014		1	CONNECTOR, SNAP TIGHT		
J322	VS1-6314-014		2	CONNECTOR, 14P, MALE		
J322	VS1-7173-014		1	CONNECTOR, SNAP TIGHT		
J324	PCB			CASSETTE 4 CASSETTE SENSING		
J324	VS1-7178-006		1	CONNECTOR, 6P, FEMALE		
J324	VS1-7440-006		1	CONNECTOR, SNAP TIGHT		
J325	PCB			CASSETTE 3 CASSETTE SENSING		
J325	VS1-7178-006		1	CONNECTOR, 6P, FEMALE		
J325	VS1-7440-006		1	CONNECTOR, SNAP TIGHT		
J331	NPN			CASSETTE 3 PAPER YES/NO SENSOR	PS3	
J331	VS1-6321-003		1	CONNECTOR, 3P, FEMALE		
J332	NPN			CASSETTE 3 PAPER LEV. A SENSOR	PS5	
J332	VS1-6321-003		1	CONNECTOR, 3P, FEMALE		
J333	NPN			CASSETTE 3 PAPER LEV. B SENSOR	PS6	
J333	VS1-6321-003		1	CONNECTOR, 3P, FEMALE		
J334	NPN			CASSETTE 3 RETRY SENSOR	PS1	
J334	VS1-6321-003		1	CONNECTOR, 3P, FEMALE		
J335	NPN			PICK-UP 3 SOLENOID	SL1	
J335	VS1-7177-002		1	CONNECTOR, SNAP TIGHT		

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
J335	VS1-6321-002		1	CONNECTOR, 2P, FEMALE		
J336	NPN			CASSETTE 3 PAPER PICK-UP MOTOR	M1	
J336	VS3-0143-006		1	CONNECTOR, 6P, FEMALE		
J336	WS3-1105-000		4	SOCKET CONTACT		
J341	NPN			CASSETTE 4 PAPER YES/NO SENSOR	PS4	
J341	VS1-6321-003		1	CONNECTOR, 3P, FEMALE		
J342	NPN			CASSETTE 4 PAPER LEV. A SENSOR	PS7	
J342	VS1-6321-003		1	CONNECTOR, 3P, FEMALE		
J343	NPN			CASSETTE 4 PAPER LEV. B SENSOR	PS8	
J343	VS1-6321-003		1	CONNECTOR, 3P, FEMALE		
J344	NPN			CASSETTE 4 RETRY SENSOR	PS2	
J344	VS1-6321-003		1	CONNECTOR, 3P, FEMALE		
J345	NPN			PICK-UP 4 SOLENOID	SL2	
J345	VS1-7177-002		1	CONNECTOR, SNAP TIGHT		
J345	VS1-6321-002		1	CONNECTOR, 2P, FEMALE		
J346	NPN			CASSETTE 4 PAPER PICK-UP MOTOR	M2	
J346	VS3-0143-006		1	CONNECTOR, 6P, FEMALE		
J346	WS3-1105-000		4	SOCKET CONTACT		
J351	NPN			DOOR OPEN/CLOSE SENSOR	PS9	
J351	VS1-6321-003		1	CONNECTOR, 3P, FEMALE		
J721	PCB			CASSETTE PEDESTAL CONTROLLER		
J721	VS1-6225-002		1	CONNECTOR, 2P, FEMALE, W		
J722	PCB			CASSETTE PEDESTAL CONTROLLER		
J722	VS1-7208-006		1	CONNECTOR, 6P, FEMALE		
J723	PCB			CASSETTE PEDESTAL CONTROLLER		
J723	VS1-6302-003		1	CONNECTOR, 3P, FEMALE		
J723	WS3-5680-000		3	SOCKET CONTACT, 20-24AWG		
J724	PCB			CASSETTE PEDESTAL CONTROLLER		
J724	VS1-6302-002		1	CONNECTOR, 2P, MALE		
J724	WS3-5680-000		2	SOCKET CONTACT, 20-24AWG		
J725	PCB			CASSETTE PEDESTAL CONTROLLER		
J725	VS1-6757-007		1	CONNECTOR, 7P, FEMALE		

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
J725	WS3-5721-000		4	SOCKET CONTACT		
J726	PCB			CASSETTE PEDESTAL CONTROLLER		
J726	VS1-6314-015		1	CONNECTOR, 15P, FEMALE		
J727	PCB			CASSETTE PEDESTAL CONTROLLER		
J727	VS1-6314-014		1	CONNECTOR, 14P, MALE		
J728	PCB			CASSETTE PEDESTAL CONTROLLER		
J728	VS1-7178-012		1	CONNECTOR, 12P, FEMALE		
J729	PCB			CASSETTE PEDESTAL CONTROLLER		
J729	VS1-7208-009		1	CONNECTOR, 9P, FEMALE		
J730	PCB			CASSETTE PEDESTAL CONTROLLER		
J730	VS1-7208-008		1	CONNECTOR, 8P, FEMALE		
J732	PCB			CASSETTE PEDESTAL CONTROLLER		
J732	VS1-6757-006		1	CONNECTOR, 6P, FEMALE		
J732	WS3-5721-000		4	SOCKET CONTACT		
J733	PCB			CASSETTE PEDESTAL CONTROLLER		
J733	VS1-6314-003		1	CONNECTOR, 3P, MALE		

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INNER 2 WAY TRAY-D1

PARTS NUMBER	FIGURE & KEY NO.	PARTS NUMBER	FIGURE & KEY NO.	PARTS NUMBER	FIGURE & KEY NO
FC5-0812-000	Q22 - 1				
FL2-1211-000	Q22 - 2				
NPN	Q22 -				

INNER 2 WAY TRAY-D1

F26-3512-000

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FIGURE QA
ASSEMBLY LOCATION DIAGRAM

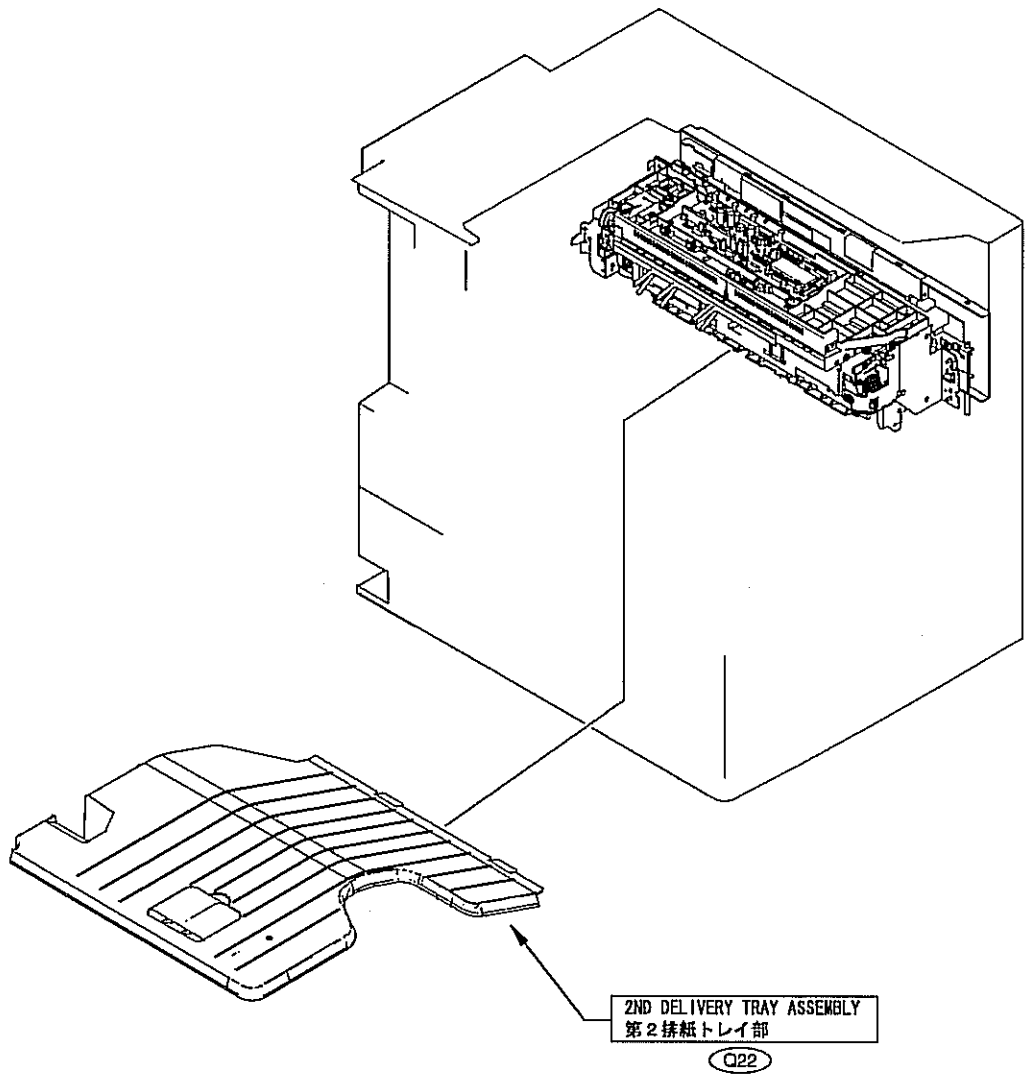


FIGURE Q22
2ND DELIVERY TRAY ASSEMBLY

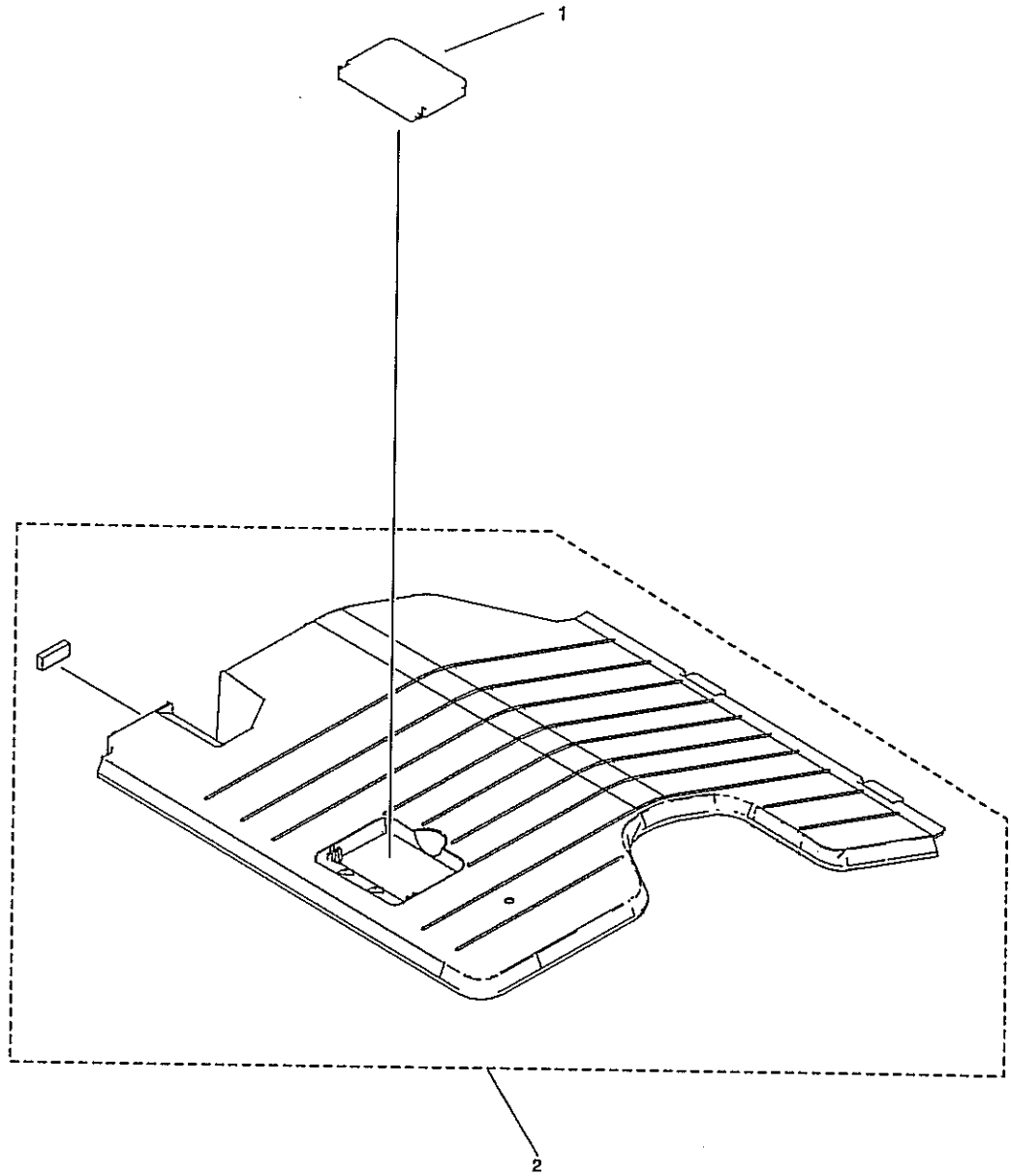


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.Q22	NPN		RF	2ND DELIVERY TRAY ASSEMBLY		
1	FC5-0812-000		1	STOPPER, PUSHING		
2	FL2-1211-000		1	TRAY, 2ND PAPER DELIVERY		

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Q37	2ND UPPER DELIVERY ASSEMBLY	2-4
Q38	2ND DELIVERY FRAME ASSEMBLY	2-6
Q39	3RD DELIVERY FRAME ASSEMBLY	2-9
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NUMERICAL INDEX
3WAY UNIT-A1

PARTS NUMBER	FIGURE & KEY NO.	PARTS NUMBER	FIGURE & KEY NO.	PARTS NUMBER	FIGURE & KEY NO
FB5-4754-000	Q37 - 7	FC5-1038-000	Q37 - 5	FS5-1377-000	Q39 - 25
FB5-4754-000	Q38 - 1	FC5-1053-000	Q38 - 9	FS5-1943-000	Q37 - 25
FB5-9325-000	Q39 - 1	FC5-1054-000	Q39 - 36	FS5-1943-000	Q38 - 22
FB5-9803-000	Q38 - 3	FC5-5474-000	Q38 - 10	FS5-1943-000	Q39 - 38
FB5-9803-000	Q39 - 28	FC5-6003-000	Q37 - 24	FS5-6488-000	Q38 - 23
FB6-5796-000	Q38 - 4	FC5-6003-000	Q39 - 12	FS7-2859-000	Q38 - 24
FB6-5796-000	Q39 - 29	FC5-6004-000	Q37 - 27	FS7-2859-000	Q39 - 34
FC5-0805-000	Q38 - 17	FC5-6006-000	Q39 - 6	FU5-0054-000	Q37 - 12
FC5-0859-000	Q11 - 1	FC5-6008-000	Q39 - 20	FU5-0076-000	Q38 - 25
FC5-0862-000	Q39 - 9	FC5-6010-000	Q37 - 9	FU5-0077-000	Q37 - 13
FC5-0870-000	Q37 - 8	FC5-6011-000	Q11 - 6	FU5-0078-000	Q37 - 14
FC5-0871-000	Q38 - 19	FC5-6012-000	Q39 - 32	FU5-3018-000	Q39 - 39
FC5-0872-000	Q39 - 2	FC5-6014-000	Q38 - 21	FU5-3019-000	Q38 - 26
FC5-0873-000	Q38 - 20	FC5-6019-000	Q39 - 21	FU5-3020-000	Q37 - 15
FC5-0888-000	Q11 - 2	FC6-2915-000	Q38 - 2	FU5-3020-000	Q38 - 27
FC5-0974-000	Q38 - 5	FC6-2915-000	Q39 - 27	FU5-3021-000	Q37 - 26
FC5-0976-000	Q39 - 14	FG3-3294-000	Q11 - 7	FU5-3021-000	Q39 - 40
FC5-0977-000	Q39 - 10	FG3-3295-000	Q39 - 7	FU5-3022-000	Q37 - 16
FC5-0978-020	Q11 - 3	FG3-3297-000	Q11 - 8	NPN	Q11 -
FC5-0985-000	Q37 - 20	FG3-3299-000	Q38 - 11	XA9-1386-000	Q11 - 11
FC5-0987-000	Q37 - 1	FG3-3301-000	Q11 - 9	XA9-1386-000	Q37 - 17
FC5-0988-000	Q37 - 2	FH4-6204-000	Q94 - IC10	XA9-1386-000	Q39 - 41
FC5-0989-020	Q37 - 3	FH5-1021-010	Q37 - 10	XB1-2300-405	Q38 - 501
FC5-0991-000	Q37 - 21	FH5-1108-010	Q37 - 11	XB1-2300-405	Q39 - 502
FC5-0992-000	Q11 - 4	FK2-0149-000	Q11 - 10	XB4-5300-805	Q11 - 502
FC5-0996-000	Q38 - 6	FK2-0149-000	Q37 - 6	XB4-5300-805	Q39 - 501
FC5-0997-000	Q38 - 7	FK2-0149-000	Q38 - 12	XB4-5401-205	Q37 - 502
FC5-0998-000	Q38 - 18	FK2-0149-000	Q39 - 22	XB4-5401-205	Q38 - 502
FC5-1003-000	Q39 - 15	FL2-1200-000	Q37 - 23	XB4-5401-205	Q39 - 503
FC5-1005-000	Q39 - 16	FL2-1201-000	Q38 - 13	XD2-1100-502	Q11 - 501
FC5-1006-000	Q39 - 17	FL2-1202-000	Q38 - 14	XD2-1100-502	Q37 - 501
FC5-1009-000	Q39 - 11	FL2-1203-000	Q38 - 15	XD2-1100-502	Q38 - 503
FC5-1010-000	Q39 - 30	FL2-1205-000	Q39 - 37	XD2-1100-502	Q39 - 504
FC5-1011-000	Q39 - 31	FL2-1206-000	Q39 - 8	XD3-2200-122	Q37 - 503
FC5-1012-000	Q39 - 3	FL2-1207-000	Q39 - 23	XD3-2200-122	Q39 - 505
FC5-1013-000	Q37 - 22	FL2-1208-000	Q39 - 13	XF2-4104-240	Q37 - 18
FC5-1013-000	Q39 - 18	FL2-1209-000	Q39 - 24	XF2-4107-940	Q38 - 28
FC5-1014-000	Q39 - 19	FL2-1210-000	Q39 - 33	XF2-4108-240	Q37 - 19
FC5-1017-000	Q38 - 8	FL2-1212-030	Q38 - 16	XF2-4109-240	Q39 - 42
FC5-1019-020	Q11 - 5	FM2-1328-000	Q37 -	XG9-0520-000	Q38 - 29
FC5-1020-020	Q39 - 4	FM2-1335-000	Q39 -		
FC5-1023-000	Q39 - 5	FM2-1340-000	Q39 - 26		
FC5-1024-000	Q39 - 35	FM2-3221-000	Q94 -		
FC5-1025-000	Q37 - 4	FM2-4471-000	Q38 -		

3WAY UNIT-A1

F26-3502-000KBZ00001-

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FIGURE QA
ASSEMBLY LOCATION DIAGRAM

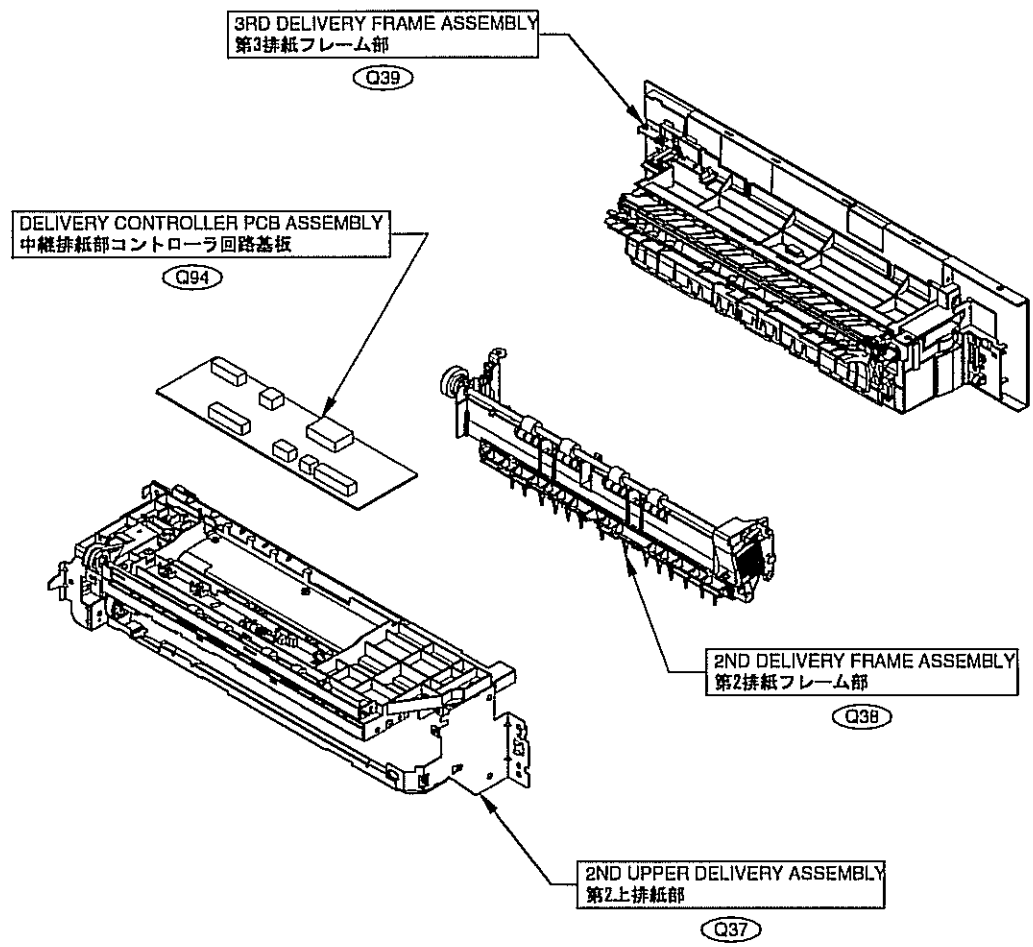


FIGURE Q11
INTERNAL DELIVERY MAIN BODY

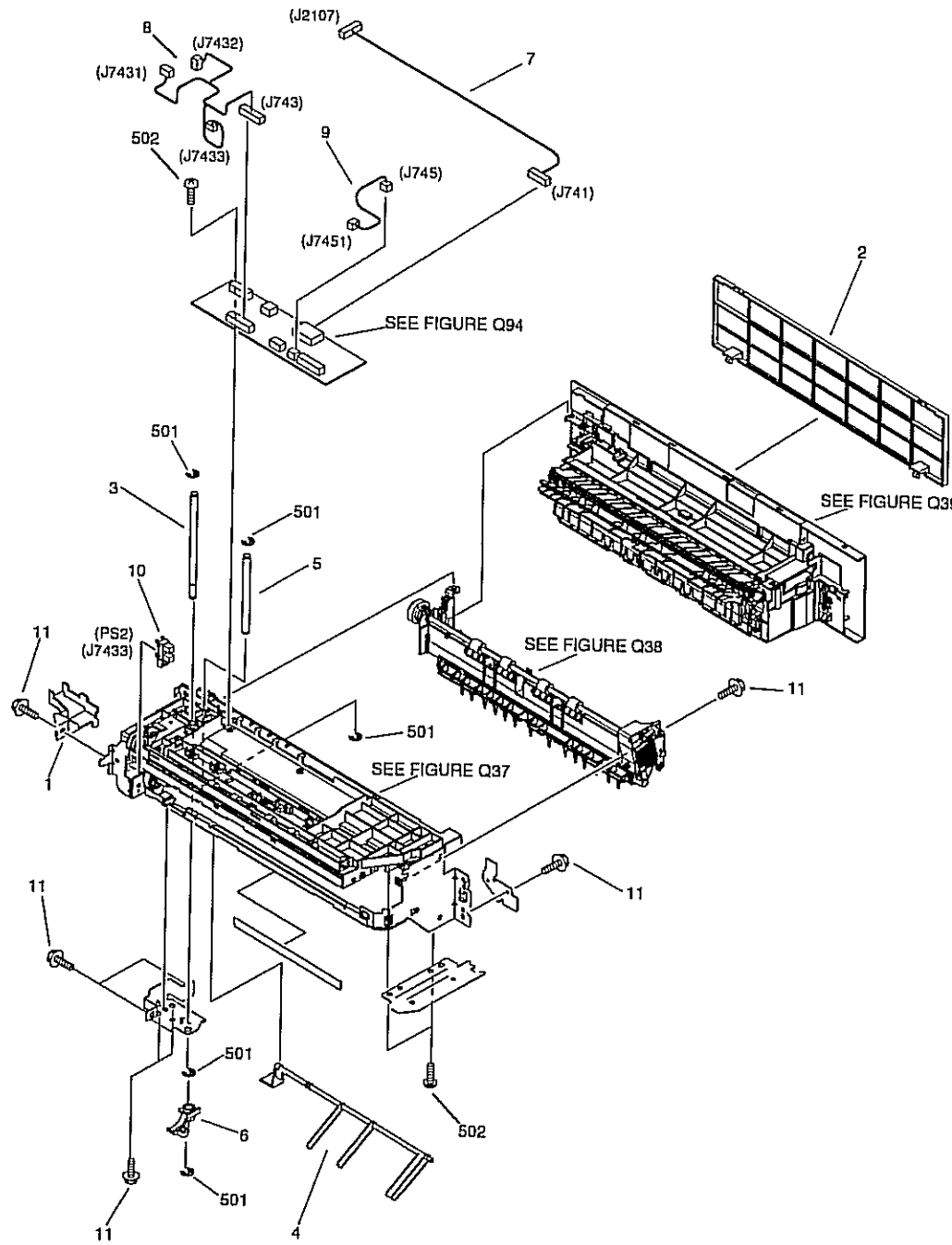


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.Q11	NPN		RF	INTERNAL DELIVERY MAIN BODY		
1	FC5-0859-000		1	COVER, CONNECTOR		
2	FC5-0888-000		1	PANEL, 2ND DELIVERY BLANKING		
3	FC5-0978-020		1	SHAFT, 2ND DELIVERY HINGE		
4	FC5-0992-000		1	FLAG, PAPER FULL SENSOR		
5	FC5-1019-020		1	SHAFT, 3RD DELIVERY HINGE		
6	FC5-6011-000		1	COVER, GEAR		
7	FG3-3294-000		1	CABLE, INTERFACE	J741,2107	
8	FG3-3297-000		1	CABLE, MOTOR	J743,7431,7432,7433	
9	FG3-3301-000		1	CABLE, SENSOR	J745,7451	
10	FK2-0149-000		1	PHOTO-INTERRUPTER, TLP1253(C6)	PS2 J7433	
11	XA9-1386-000		5	SCREW, RS, M3X8		
501	XD2-1100-502		5	RING, E		
502	XB4-5300-805		4	SCREW, P, M3X8		

FIGURE Q37
2ND UPPER DELIVERY ASSEMBLY

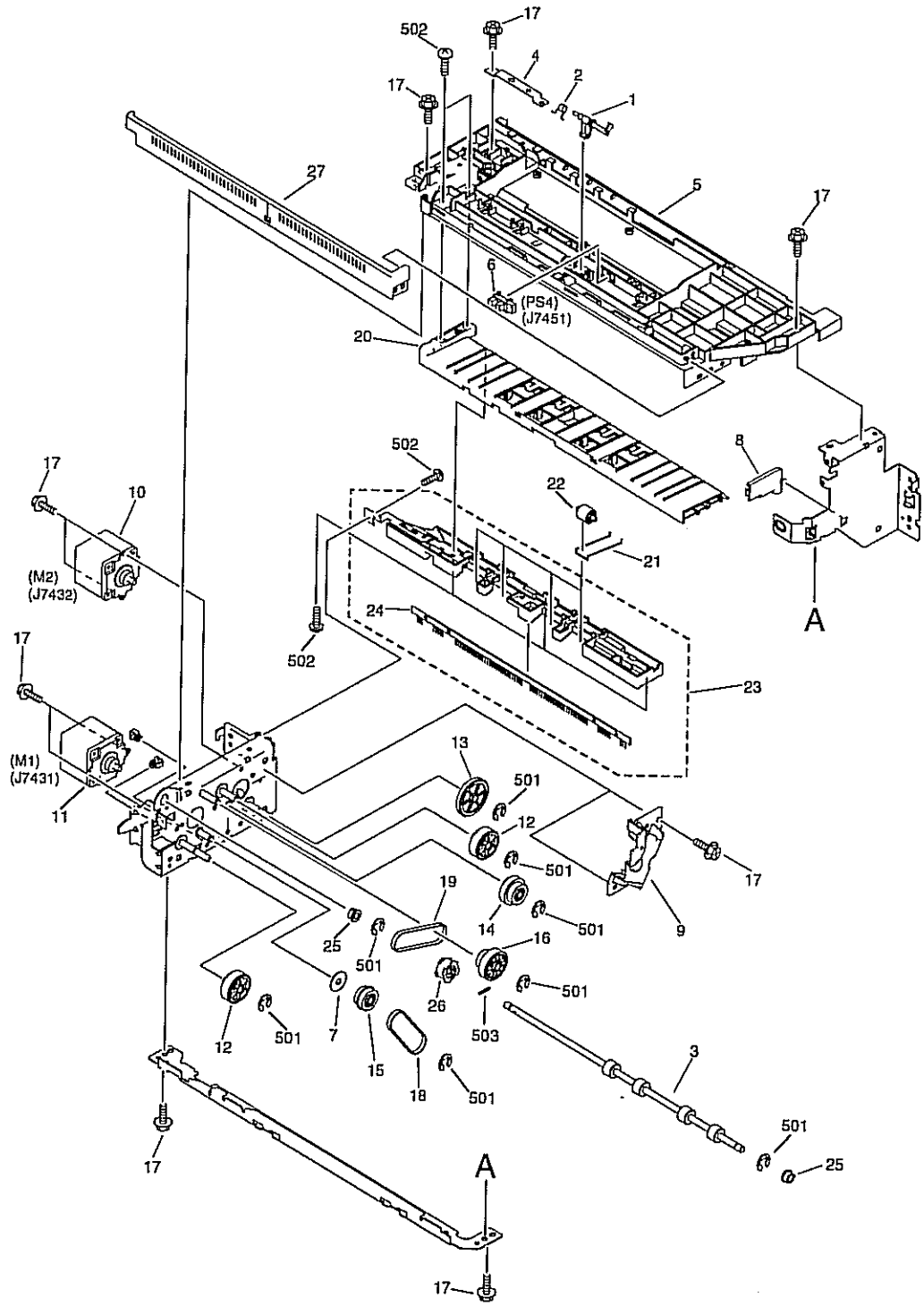


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.Q37	FM2-1328-000		1	2ND UPPER DELIVERY ASSEMBLY		
1	FC5-0987-000		1	FLAG, REVERSE SENSOR		
2	FC5-0988-000		1	SPRING, TORSION		
3	FC5-0989-020		1	ROLLER, REVERSE		
4	FC5-1025-000		1	PLATE, GROUNDING		
5	FC5-1038-000		1	GUIDE, 2ND DELIVERY, UPPER		
6	FK2-0149-000		1	PHOTO-INTERRUPTER, TLP1253(C6)	PS4 J7451	
7	FB5-4754-000		1	SPACER		
8	FC5-0870-000		1	GUIDE, SLIDE		
9	FC5-6010-000		1	COVER, GEAR, 1		
10	FH5-1021-010		1	MOTOR, STEPPING, AC	M2 J7432	
11	FH5-1108-010		1	MOTOR, STEPPING, AC	M1 J7431	
12	FU5-0054-000		2	GEAR, 35T		
13	FU5-0077-000		1	GEAR, 46T		
14	FU5-0078-000		1	GEAR, 30T/24T		
15	FU5-3020-000		1	GEAR, 24T/PULLEY, 30T		
16	FU5-3022-000		1	PULLEY, 30T/GEAR, 35T		
17	XA9-1386-000		12	SCREW, RS, M3X8		
18	XF2-4104-240		1	BELT, TIMING, COGGED		
19	XF2-4108-240		1	BELT, TIMING, COGGED		
20	FC5-0985-000		1	GUIDE, REVERSE LOWER		
21	FC5-0991-000		4	SPRING		
22	FC5-1013-000		4	ROLLER		
23	FL2-1200-000		1	GUIDE, REVERSE LOWER AUXILIARY		
24	FC5-6003-000		1	ELIMINATOR, STATIC-CHARGE		
25	FS5-1943-000		2	BUSHING		
26	FU5-3021-000		1	PULLEY, 30T		
27	FC5-6004-000		1	COVER, PROTECTIVE		
501	XD2-1100-502		8	RING, E		
502	XB4-5401-205		6	SCREW, P, M4X12		
503	XD3-2200-122		1			

FIGURE Q38
2ND DELIVERY FRAME ASSEMBLY

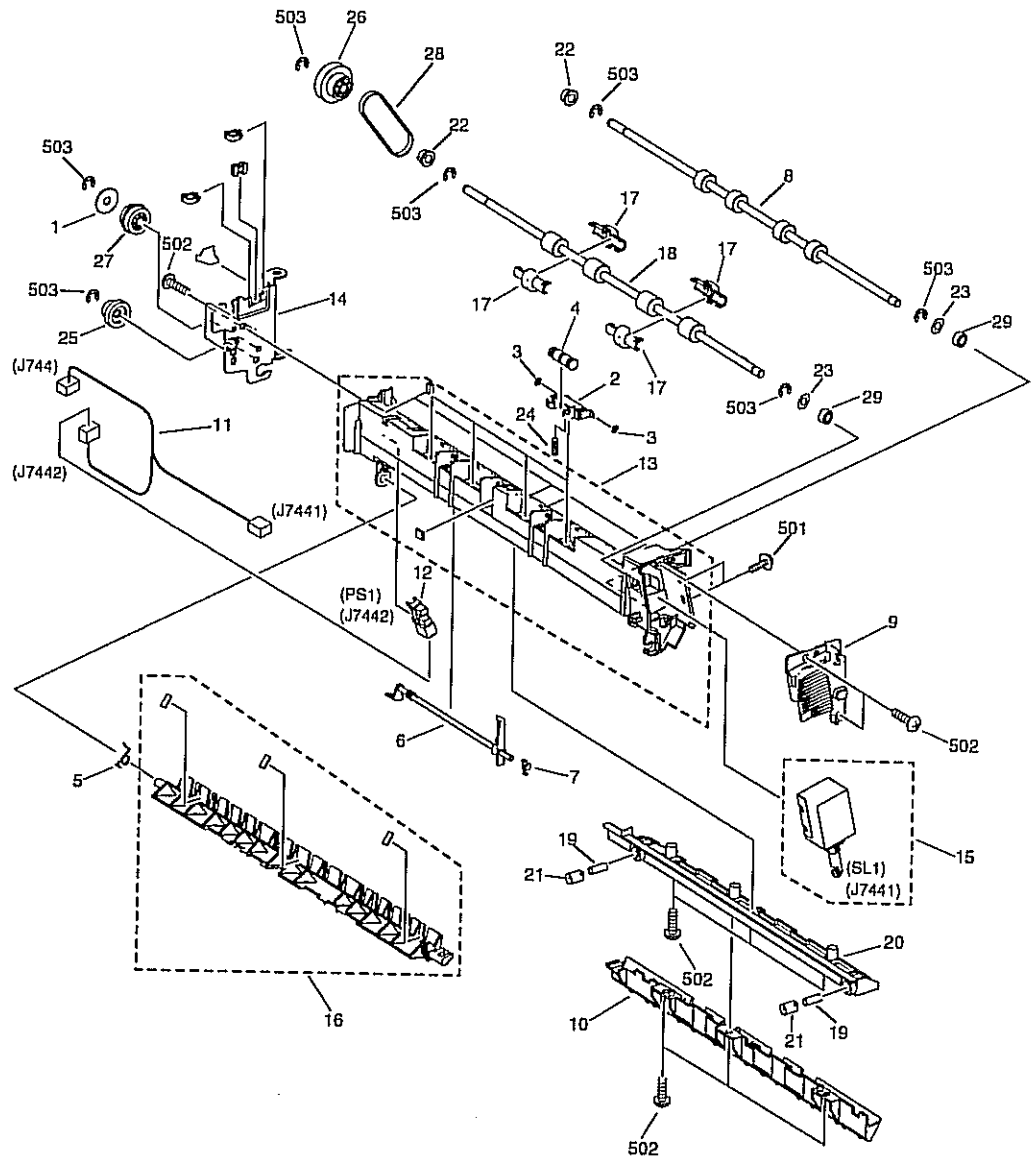


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.Q38	FM2-4471-000		1	2ND DELIVERY FRAME ASSEMBLY		
1	FB5-4754-000		1	SPACER		
2	FC6-2915-000		4	HOLDER, ROLLER		
3	FB5-9803-000		8	RING		
4	FB6-5796-000		4	ROLLER, PAPER DELIVERY		
5	FC5-0974-000		1	SPRING, TORSION		
6	FC5-0996-000		1	FLAG, 2ND DELIVERY SENSOR		
7	FC5-0997-000		1	SPRING, TORSION		
8	FC5-1017-000		1	ROLLER, 2ND VERTICAL PATH		
9	FC5-1053-000		1	COVER, SOLENOID, 1		
10	FC5-5474-000		1	GUIDE, 2ND DELIVERY ENTRANCE		
11	FG3-3299-000		1	CABLE, 2ND PAPER DELIVERY	J744,7441,7442	
12	FK2-0149-000		1	PHOTO-INTERRUPTER, TLP1253(C6)	PS1 J7442	
13	FL2-1201-000		1	GUIDE, 2ND PAPER DELIVERY		
14	FL2-1202-000		1	HINGE, 2ND DELIVERY		
15	FL2-1203-000		1	SOLENOID	SL1 L7441	
16	FL2-1212-030		1	FLAPPER, 1ST PAPER DELIVERY		
17	FC5-0805-000		4	ROLLER, REFORM		
18	FC5-0998-000		1	ROLLER, 2ND PAPER DELIVERY		
19	FC5-0871-000		2	SPRING, COMPRESSION		
20	FC5-0873-000		1	COVER, 2ND DELIVERY FRAME		
21	FC5-6014-000		2	CAP, SPRING		
22	FS5-1943-000		2	BUSHING		
23	FS5-6488-000		2	WASHER		
24	FS7-2859-000		4	SPRING, COMPRESSION		
25	FU5-0076-000		1	GEAR, 24T		
26	FU5-3019-000		1	PULLEY, 30T/GEAR, 35T		
27	FU5-3020-000		1	GEAR, 24T/PULLEY, 30T		
28	XF2-4107-940		1	BELT, TIMING. COGGED		
29	XG9-0520-000		2	BEARING, BALL		
501	XB1-2300-405		2	SCREW, MACH, BH, M3X4		
502	XB4-5401-205		11	SCREW, P, M4X12		

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
503	XD2-1100-502		7	RING, E		

FIGURE Q39
3RD DELIVERY FRAME ASSEMBLY

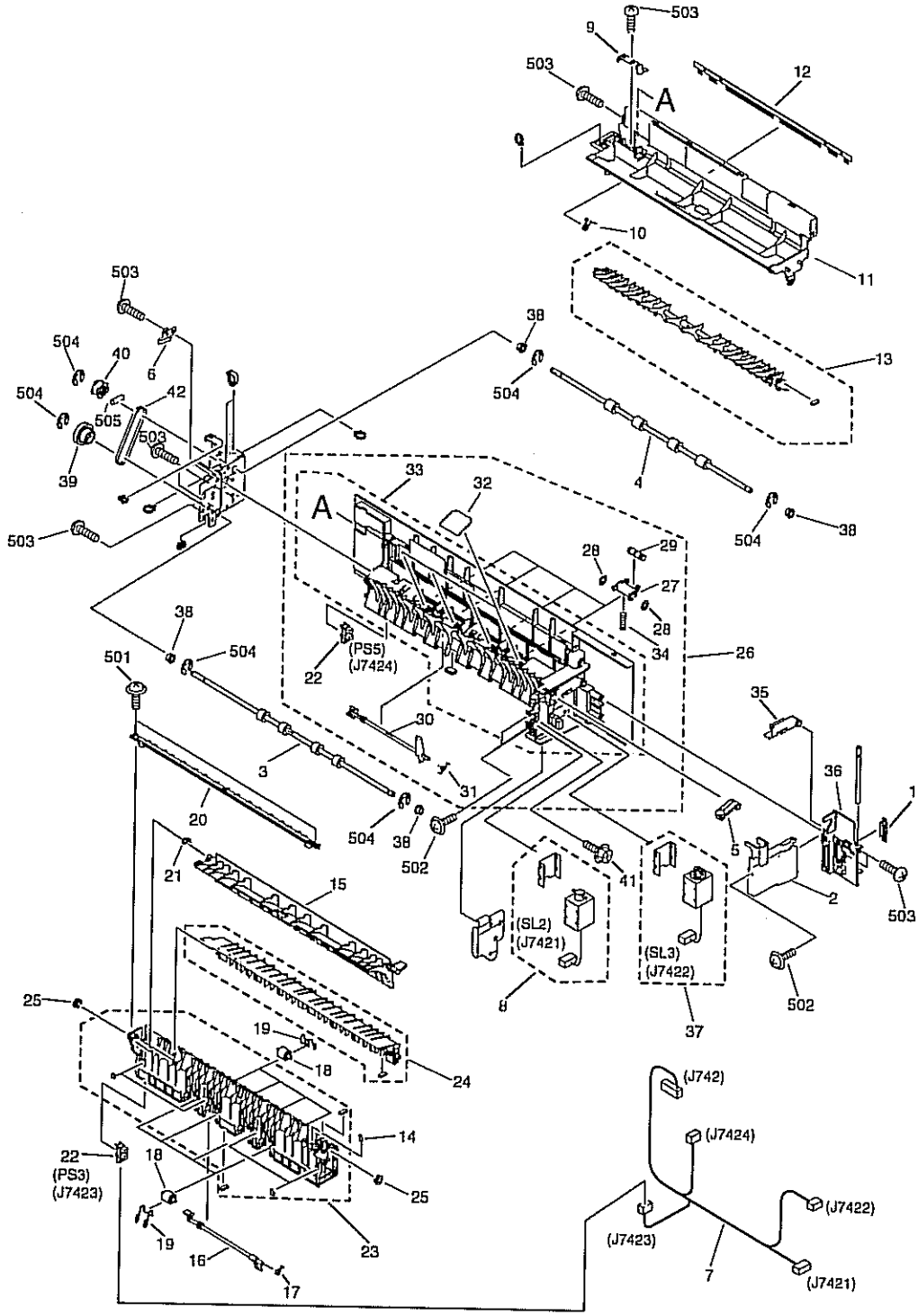


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.Q39	FM2-1335-000		1	3RD DELIVERY FRAME ASSEMBLY		
1	FB5-9325-000		1	MAGNET, 3RD		
2	FC5-0872-000		1	COVER, DELIVERY SOLENOID, 2		
3	FC5-1012-000		1	ROLLER, DUPLEXING ENTRANCE		
4	FC5-1020-020		1	ROLLER, 3RD DELIVERY		
5	FC5-1023-000		1	ARM, SOLENOID, 2		
6	FC5-6006-000		1	PLATE, GROUNDING		
7	FG3-3295-000		1	CABLE, 3RD DELIVERY	J742,7421,7422,7423,7424	
8	FL2-1206-000		1	SOLENOID	SL2 J7421	
9	FC5-0862-000		1	PLATE, GROUNDING		
10	FC5-0977-000		1	SPRING, TORSION		
11	FC5-1009-000		1	GUIDE, 3RD DELIVERY, UPPER		
12	FC5-6003-000		1	ELIMINATOR, STATIC-CHARGE		
13	FL2-1208-000		1	FLAPPER, 3RD PAPER DELIVERY		
14	FC5-0976-000		1	SPRING, TENSION		
15	FC5-1003-000		1	FLAPPER, 2ND PAPER DELIVERY		
16	FC5-1005-000		1	FLAG, DUPLEX ENTRANCE SENSOR		
17	FC5-1006-000		1	SPRING, TORSION		
18	FC5-1013-000		8	ROLLER		
19	FC5-1014-000		8	SPRING		
20	FC5-6008-000		1	GUIDE, DUPLEXING ENTRANCE, 2		
21	FC5-6019-000		1	SPRING, TORSION		
22	FK2-0149-000		2	PHOTO-INTERRUPTER, TLP1253(C6)	PS3 J7423,PS5 J7424	
23	FL2-1207-000		1	GUIDE, DUPLEXING ENTRANCE		
24	FL2-1209-000		1	FLAPPER, REVERSE		
25	FS5-1377-000		2	BUSHING		
26	FM2-1340-000		1	3RD DELIVERY FRAME ASSEMBLY		
27	FC6-2915-000		4	ROLLER, PAPER DELIVERY		
28	FB5-9803-000		8	RING		
29	FB6-5796-000		4	ROLLER. PAPER DELIVERY		
30	FC5-1010-000		1	FLAG, 3RD DELIVERY SENSOR		

FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
31	FC5-1011-000		1	SPRING, TORSION		
32	FC5-6012-000		4	SHEET, HOLDER		
33	FL2-1210-000		1	FRAME, 3RD DELIVERY		
34	FS7-2859-000		4	SPRING, COMPRESSION		
35	FC5-1024-000		1	ARM, SOLENOID, 3		
36	FC5-1054-000		1	COVER, DELIVERY SOLENOID, 1		
37	FL2-1205-000		1	SOLENOID	SL3 J7422	
38	FS5-1943-000		4	BUSHING		
39	FU5-3018-000		1	PULLEY, 30T/GEAR, 35T		
40	FU5-3021-000		1	PULLEY, 30T		
41	XA9-1386-000		1	SCREW, RS, M3X8		
42	XF2-4109-240		1	BELT, TIMING, COGGED		
501	XB4-5300-805		2	SCREW, P, M3X8		
502	XB1-2300-405		3	SCREW, MACH, BH, M3X4		
503	XB4-5401-205		10	SCREW, P, M4X12		
504	XD2-1100-502		6	RING, E		
505	XD3-2200-122		1			

FIGURE Q94
DELIVERY CONTROLLER PCB ASSEMBLY

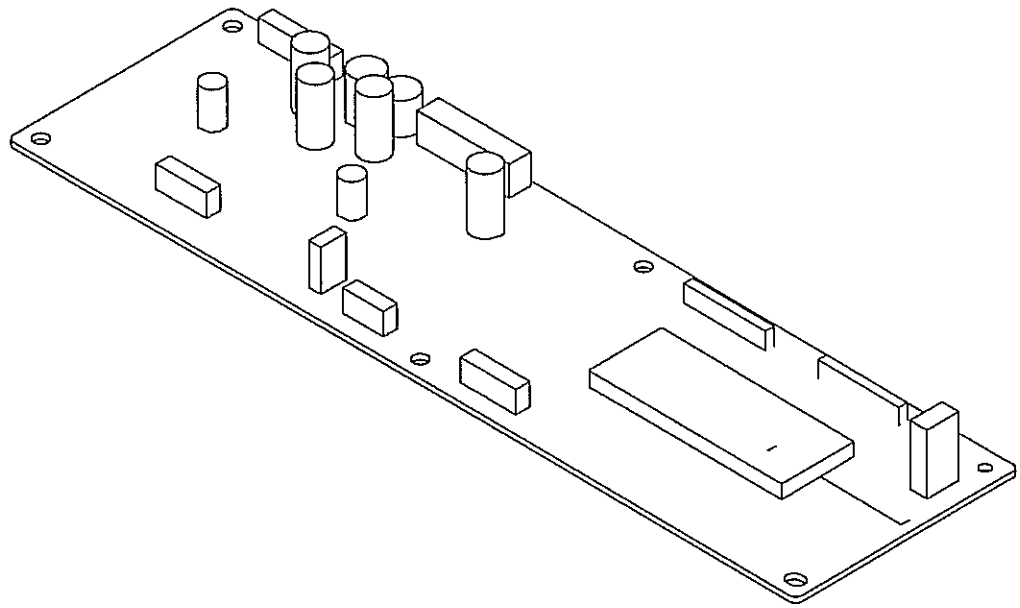


FIGURE & KEY NO.	PARTS NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/ REMARKS	SVC
Fig.Q94	FM2-3221-000		1	DELIVERY CONTROLLER PCB ASS'Y		
IC10	FH4-6204-000		1	IC, S1L50993F22H000, GATE-ARRA		

Canon