

Service Manual

L100/L120 Series

Canon

Application

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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.

Introduction

The following rules apply throughout this Service Manual:

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

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

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

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

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

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

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

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Chapter 1 PRODUCT DESCRIPTION

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1.1 Product Specifications

1.1.1 Product Specifications

FAX-L100

0010-1870

Body installation method	Desktop
Exposure Method	Semi-conductor laser
Development Method	Toner projection
Transfer Method	Roller transfer
Fixing method	On-demand fixing
Delivery method	Facedown
Toner level detection function	Yes
Toner supply type	Toner cartridge replacement Cartridge FX-10
Document type	Sheet
Maximum document size	216 x 400 mm
Minimum document size	148 x 105 mm
ADF capacity	30 sheets (A4/Letter) or paper stack within 8 mm thickness including curled sheets (guaranteed). 10 sheets (Legal) or paper stack within 8 mm thickness including curled sheets (guaranteed).
Effective scanning width	208 mm (A4), 214 mm (LTR/LGL)
Scanning method	Contact sensor scanning method
Reading resolution	Facsimile: Standard: 8 dots/mm (203.2 dpi) x 3.85 line/mm (97.79 dpi) Fine: 8 dots/mm (203.2 dpi) x 7.7 line/mm (195.58 dpi) Super Fine: 8 dots/mm (203.2 dpi) x 15.4 line/mm (391.16 dpi)
Copying resolution	Scanning: 200 x 300 dpi
Printing resolution	600 x 600 dpi
Print speed (A4)	Approx. 12 pages/minute
Warm-up Time	Approx. 12 sec. (from when the machine is plugged in until the standby display appears) : Warm-up time may differ depending on the condition and environment of the machine.
First Copy Time	approx. 23 sec.
paper size	A4, Letter, Legal
paper type	Plain paper (64 to 90 g/m ²), Heavy paper (105 to 163 g/m ²), Transparency
paper capacity	if plain paper*, about 150 sheets (64, 75, 80g/m ²); if heavy paper*, about 120 sheets (90g/m ²); if heavy paper*, about 100 sheets (105g/m ²); if heavy paper H*, about 60 sheets (128g/m ²); if transparency, about 100 sheets * or paper stack within 15 mm thickness including curled sheets (guaranteed).
Continuous reproduction	99 sheets
Energy save mode	None
Operating environment (Temperature range)	15 to 30 deg C
Operating environment (Humidity range)	10 to 80 %RH
Operating noise	30 dB or less (Standby) 50 dB or less (Operation) (during printing; nominal noise rating based on ISO9296)

Power supply rating	200-240V, 50-60Hz
Power consumption	approx. 9 W (Standby) Max. 700 W (Copy)
Ozone	max.: 0.05 ppm or less; avr: 0.02 ppm or less
Dimensions	400 (W) x 580 (D) x 326 (H) mm (Tray open) 400 (W) x 386 (D) x 221 (H) mm (Tray folded)
Weight	approx. 9 kg (including cartridge)
Option	Handset (CT-25)
Applicable lines	Analog line (one line), -PSTN (public Switched Telephone Network)
Transmission method	Half-duplex
Transmission control protocol	ITU-T V.8 protocol V.34 protocol, ITU-T T.30 binary protocol
Modulation method	G3 image signals: ITU-T V.27ter (4.8k, 2.4k bps) ITU-T V.29 (9.6k, 7.2k bps) ITU-T V.17 (14.4k, 12.0k, TC9.6k, TC7.2k bps) ITU-T V.34 (33.6k, 31.2k, 28.8k, 26.4k, 24.0k, 21.6k, 19.2k, 16.8k, 14.4k, 12k, TC9.6k, TC7.2k, 9.6k, 7.2k, 4.8k, 2.4k bps) G3 procedure signals: ITU-T V.21 (No.2) 300 bps ITU-T V.8 300 bps ITU-T V.34 1200 bps, 600 bps
Transmission speed	33.6k, 31.2k, 28.8k, 26.4k, 24k, 21.6k, 19.2k, 16.8k, 14.4k, 12k, TC9.6k, TC7.2k, 9.6k, 7.2k, 4.8k, 2.4k bps With automatic fallback function
Coding method	MH, MR, MMR
Error correction method	ITU-T ECM
Minimum transmission time	10 msec. (MH/MR), 0 msec. (MMR)
Transmission output level	-4 to -15 dBm
Reception input level	V.34: -10 to -43 dBm V.17, V.27ter, V.29: -6 to -43 dBm
Modem	CONEXANT DFX336
Half tone	256-gradation error diffusion system
Printer function	None
Dialing	Manual dial: Numeric buttons Auto dial: max.50 digits (One-touch: 15, Coded dial: 100, Numeric: 1), Group dial: max.50
Broadcast transmission	Max. 131 destinations (One-touch: 15, Coded dial: 100, Numeric: 16)
Delayed transmission	No. of Destination: Max. 50
Subaddress transmission	Subaddress: Max. 20 digits Password: Max. 20 digits
Confidential transmission	Subaddress: Max. 20 digits Password: Max. 20 digits
Relay broadcast originating transmission	Subaddress: Max. 20 digits Password: Max. 20 digits
Relay broadcast transmission	None
Polling transmission	Direct transmission: None Memory transmission: Yes
FAX/TEL switching	Method:CNG detection Message: None Pseudo CI: None Pseudo ring: Yes Pseudo ringback tone: Yes
Answering machine connection	Yes

Remote reception	Method: ID call# (ID input method) Remote ID (with ID call#): 2 digits
Confidential reception	None
Polling reception	Subaddress: Max. 20 digits Password: Max. 20 digits
Closed network communication	None
Memory reception	Transmission memory: approx. 340 sheets (Canon FAX Standard Chart No.1) Reception memory: approx. 346 sheets (Canon FAX Standard Chart No.1)
System data backup	Flash ROM: dial registration data, user data, service data, activity management report Lithium battery: Clock
Image data backup	None
Activity management	User report: - ACTIVITY REPORT (every 60 communications), - TX/RX RESULT REPORT - 1-TOUCH SPEED DIAL LIST - CODED DIAL LIST - GROUP DIAL LIST - LOST REPORT - MEMORY DATA LIST - MEMORY IMAGE PRINT - MACHINE STATUS LIST Service report: - Service data list
Others	Directory function: Yes Transmitting terminal identification: None Completion stamp: None Summer time function: Yes Residual Cartridge detecting: Yes

1.1.2 Product Specifications

0010-2115

FAX-L120

Body installation method	Desktop
Exposure Method	Semi-conductor laser
Development Method	Toner projection
Transfer Method	Roller transfer
Fixing method	On-demand fixing
Delivery method	Facedown
Toner level detection function	Yes
Toner supply type	Toner cartridge replacement Cartridge FX-10
Document type	Sheet
Maximum document size	216 x 400 mm
Minimum document size	148 x 105 mm
ADF capacity	30 sheets (A4/Letter) or paper stack within 8 mm thickness including curled sheets (guaranteed). 10 sheets (Legal) or paper stack within 8 mm thickness including curled sheets (guaranteed).
Effective scanning width	208 mm (A4), 214 mm (LTR/LGL)
Scanning method	Contact sensor scanning method

Reading resolution	Facsimile: Standard: 8 dots/mm (203.2 dpi) x 3.85 line/mm (97.79 dpi) Fine: 8 dots/mm (203.2 dpi) x 7.7 line/mm (195.58 dpi) Super Fine: 8 dots/mm (203.2 dpi) x 15.4 line/mm (391.16 dpi)
Copying resolution	Scanning: 200 x 300 dpi
Printing resolution	600 x 600 dpi
Print speed (A4)	Approx. 12 pages/minute
Warm-up Time	Approx. 12 sec. (from when the machine is plugged in until the standby display appears) : Warm-up time may differ depending on the condition and environment of the machine.
First Copy Time	approx. 23 sec.
paper size	A4, B5, A5, Letter, Legal, Executive, Envelope (DL, ISO-C5, COM10, MONARCH), User-definable paper
paper type	Plain paper (64 to 90 g/m2), Heavy paper (105 to 163 g/m2), Transparency
paper capacity	if plain paper*, about 150 sheets (64, 75, 80g/m2); if heavy paper*, about 120 sheets (90g/m2); if heavy paper*, about 100 sheets (105g/m2); if heavy paper H*, about 60 sheets (128g/m2); if transparency, about 100 sheets; if Envelope*: about 10 sheets * or paper stack within 15 mm thickness including curled sheets (guaranteed)
Continuous reproduction	99 sheets
Energy save mode	None
Operating environment (Temperature range)	15 to 30 deg C
Operating environment (Humidity range)	10 to 80 %RH
Operating noise	30 dB or less (Standby) 50 dB or less (Operation) (during printing; nominal noise rating based on ISO9296)
Power supply rating	200-240V, 50-60Hz
Power consumption	approx. 9 W (Standby) Max. 700 W (Copy)
Ozone	max.: 0.05 ppm or less; avr: 0.02 ppm or less
Dimensions	400 (W) x 580 (D) x 326 (H) mm (Tray open) 400 (W) x 386 (D) x 221 (H) mm (Tray folded)
Weight	approx. 9 kg (including cartridge)
Option	Handset (CT-25)
Applicable lines	Analog line (one line), -PSTN (public Switched Telephone Network)
Transmission method	Half-duplex
Transmission control protocol	ITU-T V.8 protocol V.34 protocol, ITU-T T.30 binary protocol
Modulation method	G3 image signals: ITU-T V.27ter (4.8k, 2.4k bps) ITU-T V.29 (9.6k, 7.2k bps) ITU-T V.17 (14.4k, 12.0k, TC9.6k, TC7.2k bps) ITU-T V.34 (33.6k, 31.2k, 28.8k, 26.4k, 24.0k, 21.6k, 19.2k, 16.8k, 14.4k, 12.0k, TC9.6k, TC7.2k, 9.6k, 7.2k, 4.8k, 2.4k bps) G3 procedure signals: ITU-T V.21 (No.2) 300 bps ITU-T V.8 300 bps ITU-T V.34 1200 bps, 600 bps
Transmission speed	33.6k, 31.2k, 28.8k, 26.4k, 24k, 21.6k, 19.2k, 16.8k, 14.4k, 12k, TC9.6k, TC7.2k, 9.6k, 7.2k, 4.8k, 2.4k bps With automatic fallback function
Coding method	MH, MR, MMR

Error correction method	ITU-T ECM
Minimum transmission time	10 msec. (MH/MR), 0 msec. (MMR)
Transmission output level	-4 to -15 dBm
Reception input level	V.34: -10 to -43 dBm V.17, V.27ter, V.29: -6 to -43 dBm
Modem	CONEXANT DFX336
Half tone	256-gradation error diffusion system
Printer function	Yes
Dialing	Manual dial: Numeric buttons Auto dial: max.50 digits (One-touch: 15, Coded dial: 100, Numeric: 1), Group dial: max.50
Broadcast transmission	Max. 131 destinations (One-touch: 15, Coded dial: 100, Numeric: 16)
Delayed transmission	No. of Destination: Max. 50
Subaddress transmission	Subaddress: Max. 20 digits Password: Max. 20 digits
Confidential transmission	Subaddress: Max. 20 digits Password: Max. 20 digits
Relay broadcast originating transmission	Subaddress: Max. 20 digits Password: Max. 20 digits
Relay broadcast transmission	None
Polling transmission	Direct transmission: None Memory transmission: Yes
FAX/TEL switching	Method: CNG detection Message: None Pseudo CI: None Pseudo ring: Yes Pseudo ringback tone: Yes
Answering machine connection	Yes
Remote reception	Method: ID call# (ID input method) Remote ID (with ID call#): 2 digits
Confidential reception	None
Polling reception	Subaddress: Max. 20 digits Password: Max. 20 digits
Closed network communication	None
Memory reception	Transmission memory: approx. 340 sheets (Canon FAX Standard Chart No.1) Reception memory: approx. 346 sheets (Canon FAX Standard Chart No.1)
System data backup	Flash ROM: dial registration data, user data, service data, activity management report Lithium battery: Clock
Image data backup	None
Activity management	User report: - ACTIVITY REPORT (every 60 communications), - TX/RX RESULT REPORT - 1-TOUCH SPEED DIAL LIST - CODED DIAL LIST - GROUP DIAL LIST - LOST REPORT - MEMORY DATA LIST - MEMORY IMAGE PRINT - MACHINE STATUS LIST Service report: - Service data list

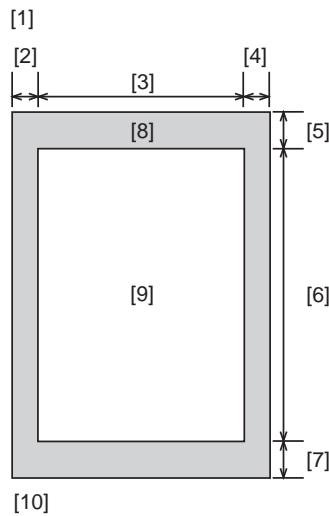
Others	Directory function: Yes Transmitting terminal identification: None Completion stamp: None Summer time function: Yes Residual Cartridge detecting: Yes
---------------	---

1.2 Detailed Specifications

1.2.1 Scanning Range (Transmission)

0010-2156

FAX-L100 / FAX-L120



F-1-1

T-1-1

- | | |
|------------------------------|-------------------------------|
| [1] Document leading edge | [6] Effective scanning length |
| [2] Left margin | [7] Bottom margin |
| [3] Effective scanning width | [8] Scanning drop out range |
| [4] Right margin | [9] Scanning range |
| [5] Top margin | [10] Document trailing edge |

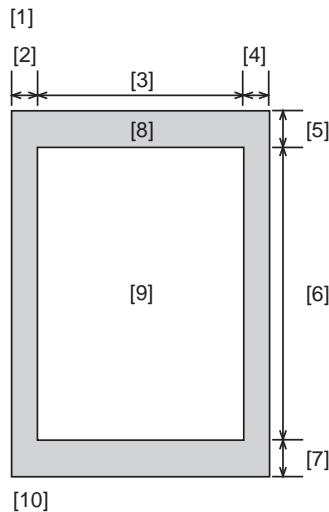
T-1-2

Item	A4	Letter	Legal
Effective scanning width	208 +1.0/-1.0 mm	214 +1.0/-1.0 mm	214 +1.0/-1.0 mm
Left margin	1.0 +2.0/-2.0 mm	1.0 +2.0/-2.0 mm	1.0 +2.0/-2.0 mm
Right margin	(1.0 mm)	(1.0 mm)	(1.0 mm)
Top margin (ADF)	2.0 +2.0/-2.0 mm	2.0 +2.0/-2.0 mm	2.0 +2.0/-2.0 mm
Bottom margin (ADF)	2.0 +2.0/-2.0 mm	2.0 +2.0/-2.0 mm	2.0 +2.0/-2.0 mm

1.2.2 Printing Range (Reception)

0010-2157

FAX-L100 / FAX-L120



F-1-2

T-1-3

- | | |
|------------------------------|-------------------------------|
| [1] Paper leading edge | [6] Effective printing length |
| [2] Left margin | [7] Bottom margin |
| [3] Effective printing width | [8] Printing drop out range |
| [4] Right margin | [9] Printing range |
| [5] Top margin | [10] Paper trailing edge |

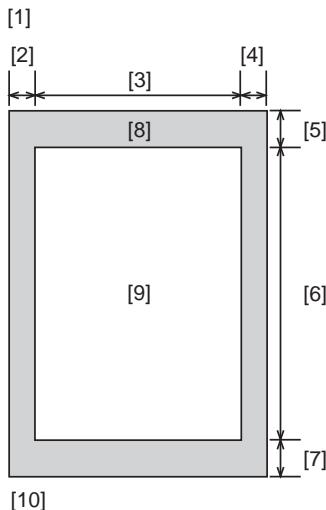
T-1-4

Item	A4	Letter	Legal
Effective printing width	206 +2.0/-2.0 mm	212 +2.0/-2.0 mm	212 +2.0/-2.0 mm
Effective printing length	290 +3.0/-3.0 mm	272.4 +3.0/-3.0 mm	348.6 +3.0/-3.0 mm
Left margin	2.0 +2.0/-2.0 mm	2.0 +2.0/-2.0 mm	2.0 +2.0/-2.0 mm
Right margin	(2.0 mm)	(2.0 mm)	(2.0 mm)
Top margin	2.0 +2.0/-2.0 mm	2.0 +2.0/-2.0 mm	2.0 +2.0/-2.0 mm
Bottom margin	5.0 +7.0/-4.0 mm	5.0 +7.0/-4.0 mm	5.0 +7.0/-4.0 mm

1.2.3 Printing Range (Printer)

0010-2159

FAX-L120



F-1-3

T-1-5

- | | |
|------------------------------|-------------------------------|
| [1] Paper leading edge | [6] Effective printing length |
| [2] Left margin | [7] Bottom margin |
| [3] Effective printing width | [8] Printing drop out range |
| [4] Right margin | [9] Printing range |
| [5] Top margin | [10] Paper trailing edge |

T-1-6

Item	A4	Letter	Legal
Left margin	4.0 +2.0/-2.0 mm	4.0 +2.0/-2.0 mm	4.0 +2.0/-2.0 mm
Right margin	4.0 +2.0/-2.0 mm	4.0 +2.0/-2.0 mm	4.0 +2.0/-2.0 mm
Top margin	5.0 +2.0/-2.0 mm	5.0 +2.0/-2.0 mm	5.0 +2.0/-2.0 mm
Bottom margin	6.0 +5.0/-5.0 mm	6.0 +5.0/-5.0 mm	6.0 +5.0/-5.0 mm

1.2.4 System Requirements for Printer Driver

0010-2162

FAX-L120

Operating System

Windows 98/98SE, Windows Me, Windows 2000 Professional, Windows XP

Computer

Any computer on which Windows 98/98SE, Windows Me, Windows 2000, or Windows XP runs properly.

T-1-7

OS	CPU	RAM	Available Free Disk Space
Windows 98/98SE	Intel 80486DX 66 MHz or greater	24 MB of RAM or greater is recommended	At least 355MB or greater is recommended
Windows Me	Intel Pentium 150 MHz or greater	32 MB of RAM or greater is recommended	At least 295MB or greater is recommended
Windows 2000* Professional	Intel Pentium 133 MHz or greater	64 MB of RAM or greater is recommended	At least 655MB or greater is recommended
Windows XP*	Pentium/Celeron series 300 MHz or greater	128 MB of RAM or greater is recommended	At least 1.5 GB or greater is recommended

*Log on as a user with administrator privileges is recommended.

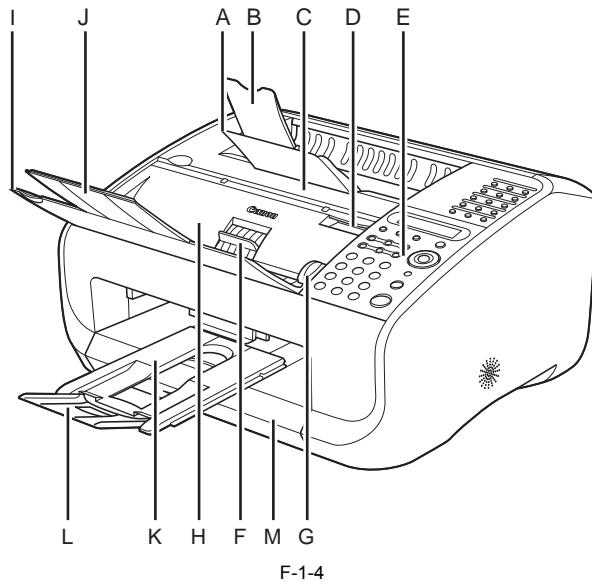
1.3 Names of Parts

1.3.1 External View

FAX-L100 / FAX-L120

0010-2174

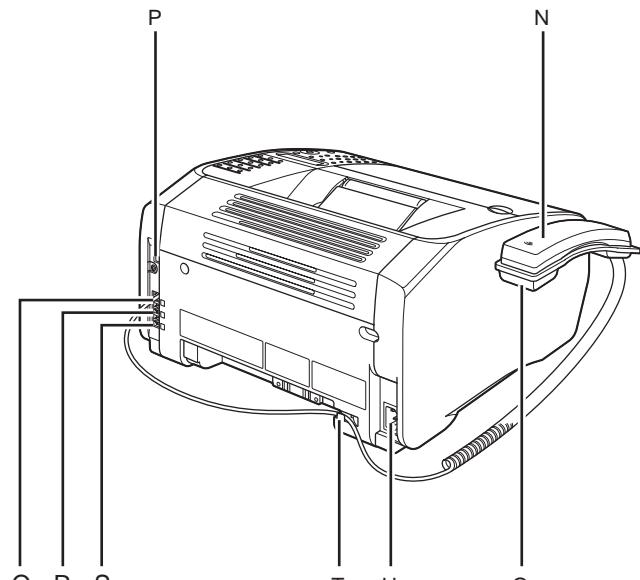
<Front View>



T-1-8

- | | |
|-----------------------------------|---|
| [A] Paper delivery tray | [H] Automatic document feeder
(ADF) |
| [B] Paper delivery tray extension | [I] Document feeder tray |
| [C] Cartridge cover | [J] Document feeder tray extention |
| [D] Notch | [K] Document delivery tray |
| [E] Operation panel | [L] Document delivery tray
extension |
| [F] Document release lever | [M] Paper stack cover |
| [G] Document guides | |

<Rear View>



F-1-5

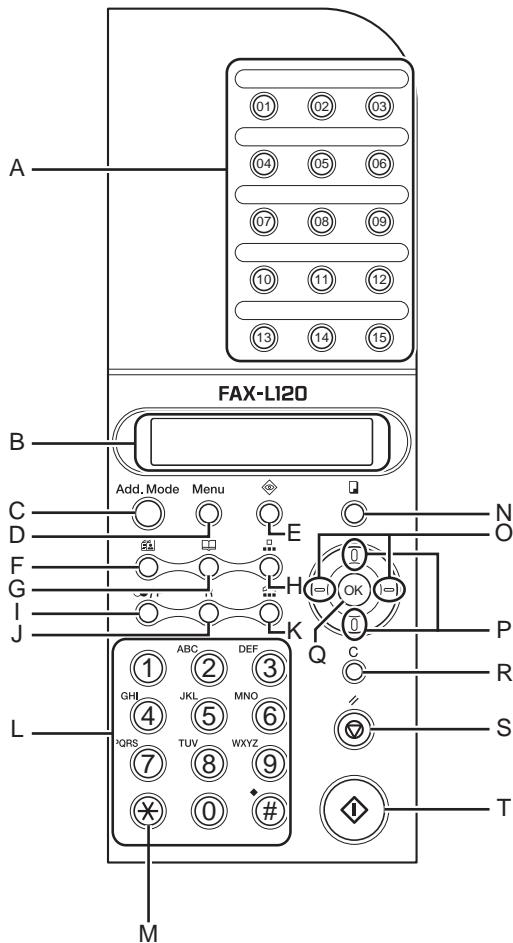
T-1-9

- | | |
|-------------------------------|----------------------------|
| [N] Handset (Optional) | [R] External device jack |
| [O] Handset cradle (Optional) | [S] Line jack |
| [P] USB port (L120 only) | [T] Handset cable retainer |
| [Q] Handset jack | [U] Power socket |

1.3.2 Operation panel

0010-2185

FAX-L100 / FAX-L120



F-1-6

T-1-10

- | | |
|------------------------------------|-----------------------|
| [A] One-touch speed dialing button | [K] Hook button |
| [B] LCD | [L] Numeric buttons |
| [C] Additional mode button | [M] Tone button |
| [D] Menu button | [N] Copy button |
| [E] Status button | [O] Left/Right button |
| [F] Image Quality button | [P] Up/Down button |
| [G] Directory button | [Q] OK button |
| [H] Coded dial button | [R] Clear button |
| [I] Redial/Pause button | [S] Stop/Reset button |
| [J] R button | [T] Start button |

1.4 Safety

1.4.1 Safety of Laser Light

0002-8615

FAX-L100 / FAX-L120

Laser radiation could be hazardous to the human body. For this reason, laser radiation emitted inside this machine is hermetically sealed within the protective housing and external cover. No radiation can leak from the machine in the normal operation of the product by the user.

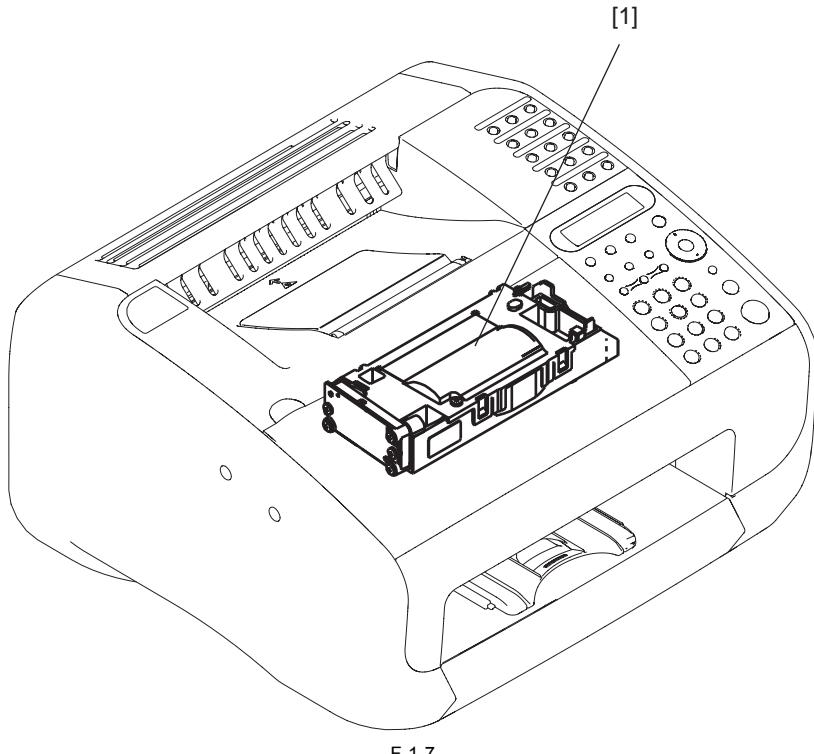
1.4.2 Handling the Laser Unit

0010-2219

FAX-L100 / FAX-L120

The laser scanner unit emits invisible laser light inside it. If exposed to laser light, the human eye can irreparably be damaged. Never attempt to disassemble the laser scanner unit. (It is not designed for servicing in the field).

The covers around the laser scanner unit are identified by the following label [1].



F-1-7

1.4.3 Safety of Toner

0002-8619

FAX-L100 / FAX-L120

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



Do not put the toner into fire. It may explode.

Toner on the Skin or Clothes

1. If your skin or clothes came into contact with toner, wash with water at once.
2. Do not use warm or hot water, which will cause the toner to jell, permanently fusing it with the fibers of the clothes.
3. Do not bring toner into contact with vinyl material. They are likely to react with each other.

1.4.4 Point to Note about Fire

0008-9702

FAX-L100 / FAX-L120

It is dangerous to throw lithium batteries and parts and components containing flammable substances, such as cartridges, etc., into fire. Such parts and components must be disposed of in accordance with local laws and regulations.

1.4.5 Point to Note about Battery Replacement

0008-9703

FAX-L100 / FAX-L120

The batteries must be replaced correctly to avoid explosion.

Do not replace any battery with one not indicated for the machine, i.e., use one of the same type or equivalent. Be sure to dispose of used batteries according to local laws and regulations.

Chapter 2 TECHNICAL REFERENCE

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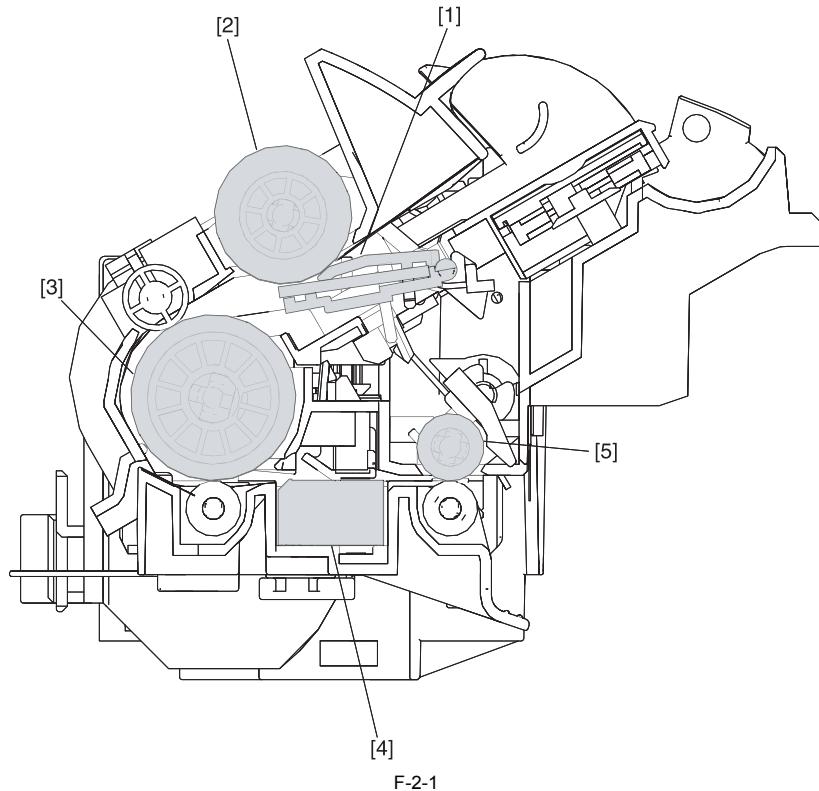
2.1 Document Feed and Exposure System

2.1.1 Overview/Configuration

2.1.1.1 Overview

FAX-L100 / FAX-L120

0010-3205



T-2-1

- | | |
|--------------------------|------------------------------|
| [1] Separation guide | [4] Contact sensor |
| [2] Separation roller | [5] Document delivery roller |
| [3] Document feed roller | |

Reading from the ADF

To avoid skew feeding, documents loaded on the document tray are retained in the horizontal direction by the slide guide. Then, the documents are separated one sheet each using differences in the coefficient of friction among the separation roller, documents, and separation guide. After that, the feeder roller feeds the document onto the reading glass, and the Contact sensor reads out image data of the document; then, the delivery roller delivers it to the delivery tray.

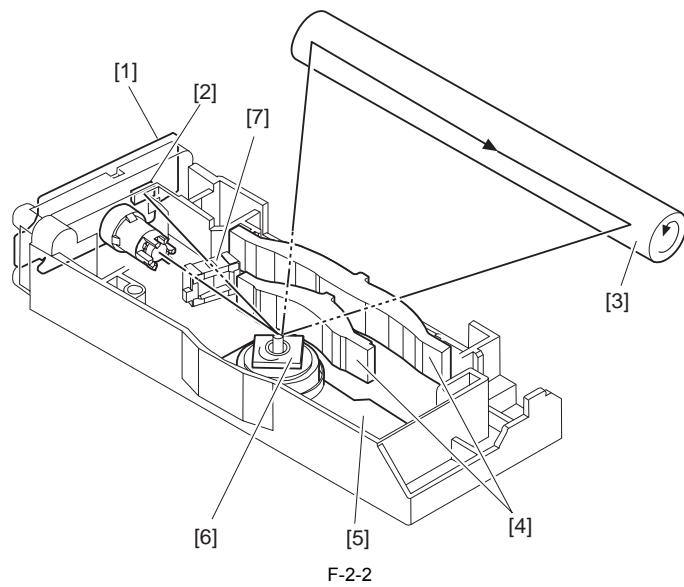
The document feed motor drives the various rollers of the ADF.

2.2 Laser Exposure

2.2.1 Overview/Configuration

2.2.1.1 Overview

FAX-L100 / FAX-L120

0010-2234

T-2-2

- | | |
|-------------------------|----------------------|
| [1] Laser driver PCB | [5] Scanner motor |
| [2] BD sensor | [6] 4-facet mirror |
| [3] Photosensitive drum | [7] Cylindrical lens |
| [4] Imaging lenses | |

The machine's laser scanner assembly consists of the laser driver and the scanner motor, which are driven by signals coming from the DCNT board. The laser driver serves to turn on the laser diode according to the laser control signal and video signals from the DCNT board.

The laser beam moves thorough the collimator less and the cylindrical lens to reach the 4-facet mirror rotating at a specific speed.

The leaser beam reflected by the 4-facet mirror moves through the imaging lens arranged in front of the 4-facet mirror to reach and focus on the photosensitive drum.

When the 4-facet mirror rotates at a specific speed, the laser beam scans the photosensitive drum in keeping with the mirror rotation, thus drawing static images on the photosensitive drum.

Memo:
BD Fault

The machine identifies a BD fault if it does not detect the /BDI signal within 0.1 sec after the scanner motor is forced to accelerate. It also detects a BD fault if it does not detect a specific interval of /BDI signals for 2 sec continuously after the scanner motor has reached a specific revolution (number of rotations).

Scanner Fault

If the machine does not detect the /BDI signal 1.5 sec after it has stopped forcing the scanner motor to accelerate, it extends the period of detection by 120 sec; if it still does not detect a specific interval of /BDI signals, it identifies a scanner fault.

BD Error

The machine identifies a BD error if it does not detect the /BDI signal at a specific interval while the /BDI signal is being generated. It, however, does not identify a BD error under the following condition:

-the door is identified as being open within 0.2 sec after detection of a BD error.



The laser/scanner unit contains parts that cannot be adjusted in the field. Do not attempt to disassemble the laser/scanner unit.

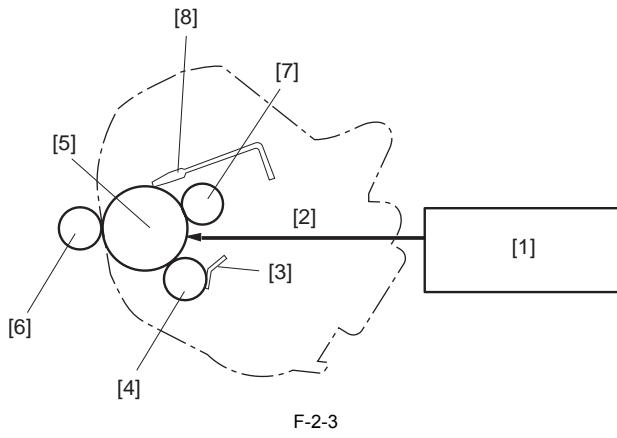
2.3 Image Formation

2.3.1 Overview/Configuration

2.3.1.1 Overview

0010-2240

FAX-L100 / FAX-L120



T-2-3

- | | |
|----------------------------|------------------------------|
| [1] Laser/scanner assembly | [5] Photosensitive drum |
| [2] Laser beam | [6] Transfer charging roller |
| [3] Blade | [7] Primary charging roller |
| [4] Developing cylinder | [8] Cleaning blade |

In response to a print command, the DCNT board turns on the main motor to drive the photosensitive drum, developing cylinder, primary charging roller, and transfer charging roller.

Thereafter, the machine uses the primary charging roller to charge the surface of the photosensitive drum to an even, negative potential and, at the same time, directs the laser beam across the surface of the photosensitive drum. (The laser beam is modulated according to the incoming video signals.) The image thus formed on the photosensitive drum is a static, latent image; it is turned into a visible image by means of the toner from the developing cylinder. The resulting toner image is then transferred to paper by the work of the transfer charging roller, and the paper is sent to the fixing assembly. The surface of the photosensitive drum is cleaned by the cleaning blade so that it is free of residual toner; after cleaning, the primary charging roller once again charges the surface to an even, negative potential to prepare for the formation of a new static, latent image.


Drum Cover Shutter

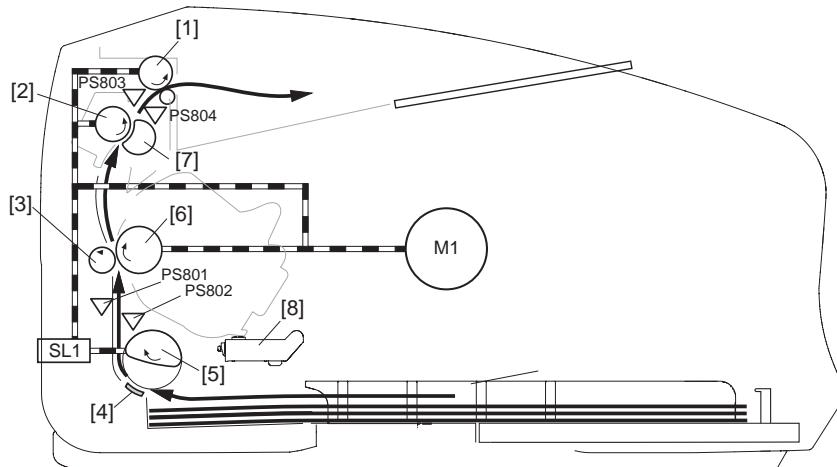
If the surface of the photosensitive drum is exposed to strong light, it develops what is known as "photo memory," which can cause white spots or black lines in images. To protect the drum against light, the machine is equipped with a drum cover shutter. The drum cover shutter must never be opened unless doing so proves to be absolutely necessary.

2.4 Pickup and Feed System

2.4.1 Overview/Configuration

2.4.1.1 Overview

FAX-L100 / FAX-L120

0010-2282

F-2-4

T-2-4

- | | |
|-------------------------------|-----------------------------------|
| [1] Face-down delivery roller | [8] Toner sensor |
| [2] Fixing pressure roller | [PS801] Paper leading edge sensor |
| [3] Transfer charging roller | [PS802] Paper width sensor |
| [4] Separation pad | [PS803] Delivery sensor |
| [5] Pickup roller | [PS804] Paper width 2 sensor |
| [6] Photosensitive drum | [M1] Main motor |
| [7] Fixing film unit | [SL1] Pickup solenoid |

Pickup and Feed Operation

The pickup/feed system consists of the main motor, solenoid, and various rollers.

The system operates as follows:

- 1) The DCNT board turns on the main motor (M1) immediately after it receives the print command from the SCNT board. In response, the rollers other than the pickup roller start to rotate.
- 2) When the initial rotation ready state (Note) starts, the pickup solenoid (SL1) goes on for about 0.2 sec, causing the rotation of the main motor to rotate the pickup roller.
- 3) The pickup cam starts to rotate in keeping with the rotation of the pickup roller. The shape of the cam causes the spring to push up the holding plate. The paper on the holding plate is picked up by the work of the pickup roller.
- 4) The DCNT board sends the laser beam detection signal (/BD) to the SCNT board a specific period of time after the leading edge sensor (PS801) detects the leading edge of print paper that has been picked up.
- 5) The SCNT board sends video signals to the laser/scanner assembly based on the /BD signal so as to form an image on the surface of the photosensitive drum, making sure that the leading edge of the image and the leading edge of the print paper will match.
- 6) The print paper is then moved to the face-down tray for delivery by the work of the pressure roller and the face-down delivery roller.



When the initial rotation ready state:

The machine is in an initial rotation ready state when the main motor is on and, in addition, the fixing assembly temperature has reached a specific level and the scanner motor has reached a specific revolution.

2.4.2 Detection Jams

2.4.2.1 Jam Detection Outline

2.4.2.1.1 Type of Jams

0010-2300

FAX-L100 / FAX-L120

The machine identifies the following types of jams:

Pickup Delay Jam

The paper leading edge sensor does not go on within a specific period of time after pickup starts.

Pickup Stationary Jam

The paper leading edge sensor goes on, but does not go off within a specific period of time.

Delivery Delay Jam

The paper leading edge sensor goes on, but the delivery sensor does not go on within a specific period of time.

Delivery Stationary Jam

The paper leading edge sensor goes off, but the delivery sensor does not go on within a specific period of time.

Wrap Jam

The delivery sensor goes on, but it goes off before a specific period of time passes.

Initial Jam

The paper leading edge sensor or the delivery sensor goes on while the main motor is starting to rotate.

Cover Open Jam

The machine identifies a condition in which the Cartridge cover is opened while it is moving paper.

2.4.2.2 Delay Jams

2.4.2.2.1 Pickup Delay Jam

0010-2309

FAX-L100 / FAX-L120

The CPU executes pickup operation twice if the paper leading edge sensor (PS801) does not detect the leading edge of print paper within about 1.4 sec after the pickup solenoid (SL1) goes on.

Thereafter, if the paper leading edge sensor (PS801) does not detect the leading edge of print paper within about 1.4 sec, the machine will assume the condition to indicate a pickup delay jam.

2.4.2.2.2 Delivery Delay Jam

0010-2313

FAX-L100 / FAX-L120

The CPU will assume the presence of a delivery delay jam if the delivery sensor (PS803) does not detect the leading edge of print paper about 1.8 sec after the paper leading edge sensor (PS801) has detected the leading edge of print paper.

2.4.2.3 Stationary Jams

2.4.2.3.1 Pickup Stationary Jam

0010-2315

FAX-L100 / FAX-L120

The CPU will detect the presence of a pickup stationary jam if the trailing edge of print paper is not detected about 4.6 sec after the paper leading edge sensor (PS801) has detected the leading edge of print paper.

Moreover, it will also assume the presence of a pickup stationary jam if the paper width sensor (PS802) does not detect the trailing edge of paper within 200 msec after the paper width sensor (PS802) has detected the leading edge of paper and the paper leading edge sensor (PS801) has detected the trailing edge of paper.

2.4.2.3.2 Delivery Stationary Jam

0010-2316

FAX-L100 / FAX-L120

The CPU will assume the presence of a delivery stationary jam if the delivery sensor (PS803) does not detect the leading edge of print paper during a period of about 2.0 sec after the paper leading edge sensor (PS801) has detected the trailing edge of print paper.

2.4.2.4 Other Jams

2.4.2.4.1 Wrap Jam

0010-2325

FAX-L100 / FAX-L120

The CPU will assume that paper has wrap jam if the delivery sensor (PS803) does not detect the leading edge of paper within about 1.3 sec after the delivery sensor (PS803) has detected the leading edge of print paper and then about 1.3 sec after the paper leading edge sensor (PS801) has detected the leading edge of print paper.

2.4.2.4.2 Initial Jam

0010-2328

FAX-L100 / FAX-L120

The CPU will identify a residual jam when the paper leading edge sensor (PS801) or the delivery sensor (PS803) detects print paper at the start of initial rotation.

2.4.2.4.3 Cover Open Jam

0010-2330

FAX-L100 / FAX-L120

The CPU will identify a cover open jam if the leading edge sensor (PS801) or the delivery sensor (PS803) detects print paper when the door is identified as being open.

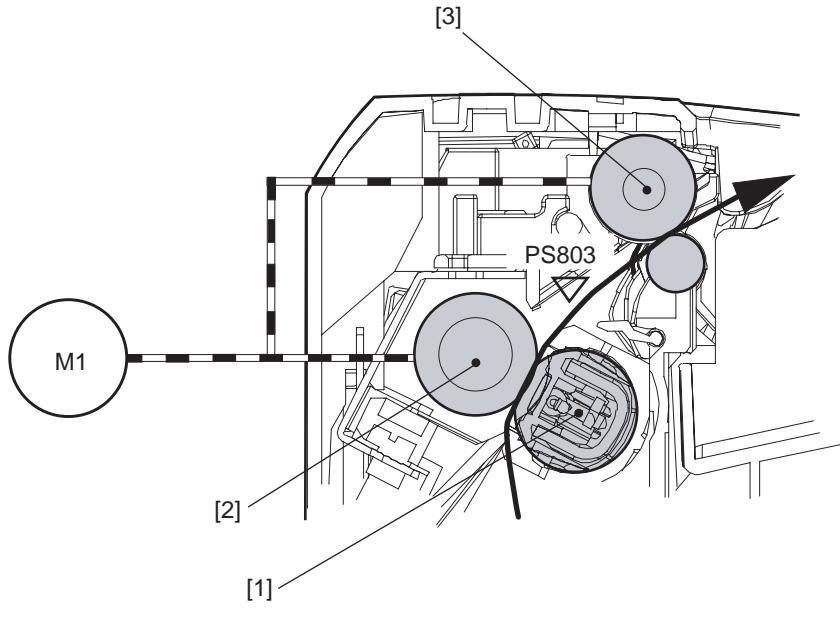
2.5 Fixing Unit

2.5.1 Overview/Configuration

2.5.1.1 Overview

FAX-L100 / FAX-L120

0010-2331



F-2-5

T-2-5

- | | |
|-------------------------------|-------------------------|
| [1] Fixing film unit | [PS803] Delivery sensor |
| [2] Pressure roller | [M1] Main motor |
| [3] Face-down delivery roller | |

The machine's fixing system is an on-demand type, and its fixing assembly consists of the fixing film unit: the fixing film has a built-in fixing heater, thermistor, and thermal fuse.

Its rollers are driven by the main motor (M1).

When print paper carrying a toner image arrives in the fixing assembly, the machine uses the heat from the fixing heater and the pressure from the pressure roller to permanently fuse the toner with the fibers of the print paper before it moves out of the fixing assembly.

Once outside the fixing assembly, the print paper is delivered to the delivery tray by the work of the face-down delivery roller upon detection by the delivery sensor (PS803).

2.5.2 Various Control Mechanisms

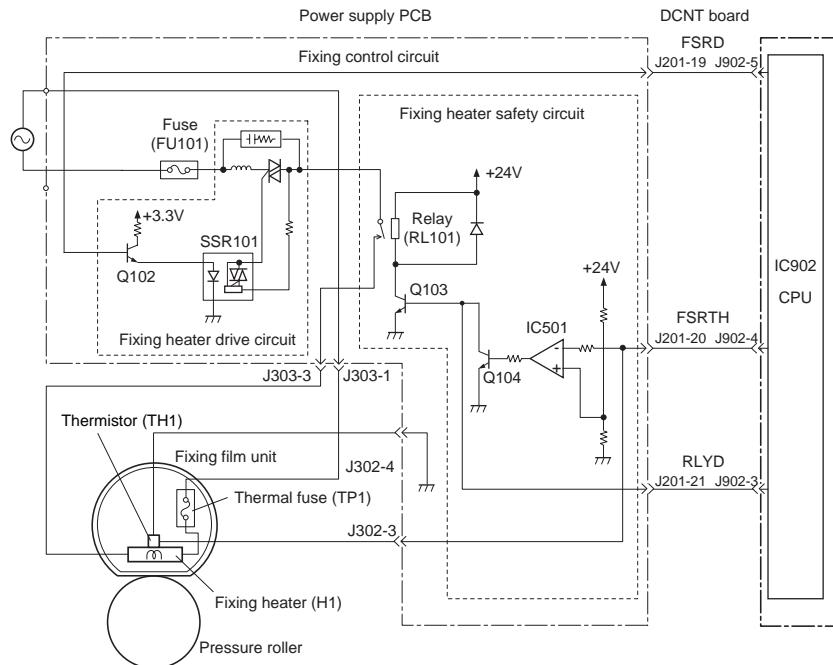
2.5.2.1 Controlling the Temperature of the Fixing Unit

2.5.2.1.1 Heater Temperature Control

0010-2348

FAX-L100 / FAX-L120

The heater temperature control mechanism consists in monitoring the surface temperature of the fixing heater and controlling the fixing heater drive signal so that the temperature of the fixing heater is identical to the target temperature.



F-2-6

The surface temperature of the fixing heater is monitored by the thermistor (TH1) that remains in contact with the fixing heater. The resistance of the thermistor decreases in response to increases in the surface temperature of the fixing heater, causing the voltage of the fixing heater temperature detection single (FSRTH) to change.

The CPU (IC902) found inside the DCNT board monitors the signal (FSRTH), and generates the fixing heater drive signal (FSRD) according to the voltage of the signal operating in conjunction with the CPU. The fixing heater drive circuit, on the other hand, uses the signal to control the fixing heater so that the temperature of the fixing heater remains at a specific level.

The machine executes the following 4 control mechanisms according to the temperature of the fixing heater and the size of the selected paper:

1) start-up temperature control; from when the print command arrives at the DCNT board to when the fixing heater reaches the target temperature.

2) paper passage temperature control; during printing so that the temperature of the fixing heater is identical the target temperature.

The target temperature may be any of 5 settings, used according to the selected fixing mode. Any of these modes is selected according to the settings of the paper size and the number of printouts.

The following shows the relationship between the fixing mode and fixing target temperature:

T-2-6

Paper type selected for driver	Fixing target temperature
Plain paper	165 to 175 deg C
Heavy paper	180 to 190 deg C
Heavy paper H	180 deg C
Transparency, plain paper L	150 deg C
Envelope	165 to 175 deg C

3) sheet-to-sheet temperature control; between sheets during continuous printing so that the temperature of the fixing heater is lower than the target temperature, thus preventing overheating of the fixing film.

4) down sequence; during continuous printing so as to prevent overheating of the edges of the heater.

In this control, the CPU of the DCNT board checks the length and width of paper; if the size of the paper matches a specific set of conditions, the machine is shifted to long narrow mode (Note) or small paper mode regardless of the settings of the driver.

In this mode, the CPU forces the printing speed to decrease conversely increasing the distance between sheets, thereby increasing the sensitivity of the thermistor located in the middle of the fixing heater and, consequently, preventing the edges of the heater from overheating.

The following shows the relationship between the printing speed and the conditions used to make a shift to this mode:

T-2-7

Down-sequence mode	Paper length	Power width	Printing speed (ppm)
No down sequence (normal state)	267.4 mm or more	197 mm or more	Number of printouts according to paper size
Small size paper mode	267.4 mm or less	197 mm or less	8-->6-->4
Long narrow paper mode	267.4 mm or more	197 mm or less	3



The term "long narrow paper" refers to a type of paper that is narrow in width and long in length.

2.5.3 Protective Function

2.5.3.1 Protective Mechanisms

0010-2351

FAX-L100 / FAX-L120

The machine is equipped with a protective mechanism in which the power to the heater is cut off upon detection of overheating of the fixing heater; the mechanism used may be any of the following 3:

- 1) protection by means of the CPU
- 2) protection by means of the fixing heater safety circuit
- 3) protection by means of a thermal fuse

Specifically, these protective mechanisms operate as follows:

1) Protection by the CPU

The CPU monitors the voltage of the fixing heater temperature detection signal (FSRTH) from the thermistor at all times; if the fixing temperature appreciably exceeds a specific level, it cuts off the power to the fixing heater.

In the event that the temperature of the fixing heater appreciably increases and the voltage of FSRTH is about 0.85 V or less (equivalent of 230 deg C) for 150 msec or if the level is about 1.17 V or less for 5 sec, the CPU causes the fixing heater drive signal (FSRD) to go Low to turn off the photo triac coupler (SSR101), thus cutting off the power to the fixing heater.

2) Protection by the Fixing Heater Safety Circuit

The fixing heater safety circuit monitors the voltage of the fixing heater temperature signal (FSRTH) from the thermistor at all times; if the fixing temperature appreciably exceeds a specific level, it cuts off the power to the fixing heater regardless of the instructions of the CPU.

In the event that the temperature of the fixing heater abnormally increases and the voltage of the fixing heater temperature detection signal (FSRTH) of the thermistor is about 0.57 V or less (equivalent of 265 deg C), the output of the comparator (IC501) goes Low to turn off the transistor (Q103). The fact will cause the relay (RL101) to go off to cut off the power to the fixing heater regardless of the state of the relay drive signal (RLYD) from the CPU.

3) Protection by a Thermal Fuse

If the temperature of the fixing heater abnormally increase and the temperature of the thermal fuse (FU1) exceeds about 30 deg C, the thermal fuse will melt to cut off the power to the fixing heater.

2.5.3.2 Detection of a Fault

0010-2353

FAX-L100 / FAX-L120

The CPU will assume the presence of a fault in the fixing assembly in response to any of the following 7 conditions; it will turn off the relay (RL101) to cut out the power to the heater and, at the same time, will communicate the fact to the SCNT board:

- 1) The temperature of the thermistor does not exceed 50 deg C within 1.47 sec after the start of temperature control.
- 2) It monitors the temperature of the thermistor every 5 msec; if the temperature of the thermistor is 230 deg C or more 30 times continuously.
- 3) It monitors the temperature of the thermistor every 5 msec; if the temperature is 100 deg C or less at time of normal temperature control (or 55 deg C or less at time of cleaning mode) 240 times continuously.
- 4) After the temperature of the thermistor has exceeded 50 deg C, it monitors the temperature of the thermistor every 5 msec; if it the temperature is less than 20 deg C 60 times continuously.
- 5) The temperature of the thermistor does not reach 100 deg C within 30 sec after supply of power to the fixing heater has started.
- 6) While the paper is retained by the fixing assembly, it monitors the temperature of the thermistor every 200 msec; if the temperature is 120 deg C or more 25 times continuously.
- 7) While the paper is retained in the fixing assembly; it monitors the temperature of the thermistor every 200 msec; if the temperature is less tan 135 deg C 150 times continuously.

2.6 External and Controls

2.6.1 Power Supply

2.6.1.1 Protection Function

2.6.1.1.1 Protective Mechanisms

0010-2389

FAX-L100 / FAX-L120

The protective mechanisms include an overcurrent protective circuit that uses a fuse. If short circuit or the like occurs because of some fault and, as a result, an overcurrent flows, the fuses will melt to cut off the power to the power supply circuit. The power supply circuit is equipped with 2 fuses (FU1, FU2); in the event an overcurrent flows into the AC line, either of these fuses will melt to cut out the current.

2.6.1.2 Backup Battery

2.6.1.2.1 Battery-backed up Data

0010-2411

FAX-L100 / FAX-L120

The machine is equipped with a battery used to back up the clock IC.

The lithium battery (BT1) on the SCNT starts to supply power to the clock IC when the jumper pin (CJ2) is shorted by a jumper plug.

The machine does not have a mechanism to back up image data. As such, loss of power (e.g., power outage or disconnected power cord) will lead to loss of images.

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3.1 EXTERNAL AND CONTROLS SYSTEM

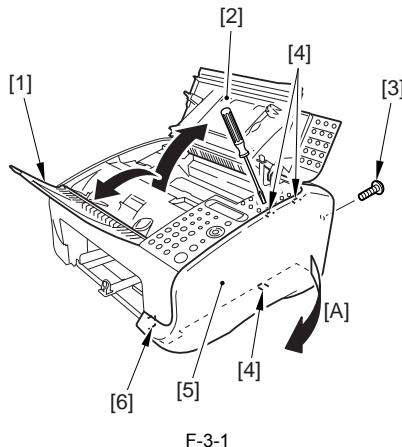
3.1.1 Front Cover

3.1.1.1 Removing the Right Cover

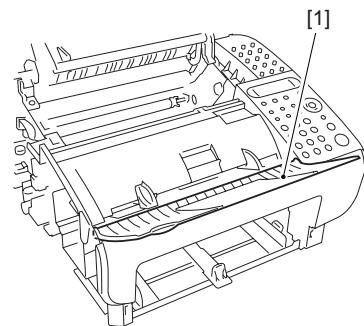
FAX-L100 / FAX-L120

0010-3370

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].

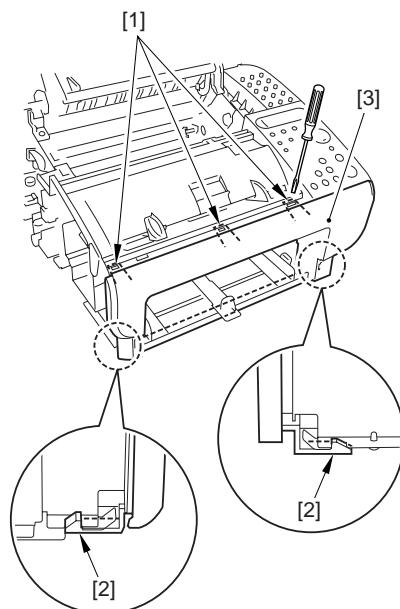


F-3-1



F-3-3

- 2) Free the 3 claws [1], and detach the front cover [3] while freeing the other 2 claws [2].



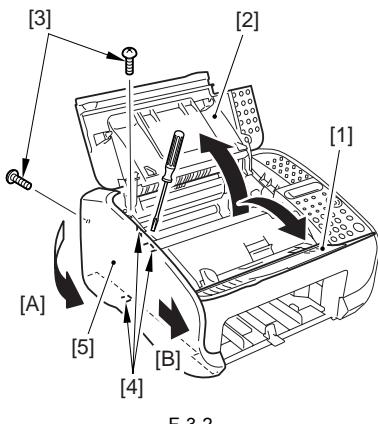
F-3-4

3.1.1.2 Removing the Left Cover

FAX-L100 / FAX-L120

0010-3371

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of the arrow [A]; then, slide it in the direction of the other arrow [B].



F-3-2

3.1.1.3 Removing the Front Cover

0010-3372

FAX-L100 / FAX-L120

- 1) Wrap the document feeder tray [1] slightly to detach.

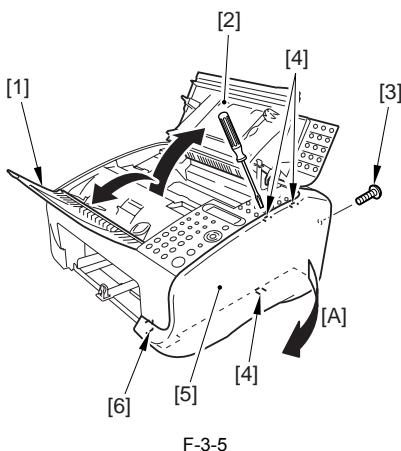
3.1.2 Rear Cover

3.1.2.1 Removing the Right Cover

0010-3373

FAX-L100 / FAX-L120

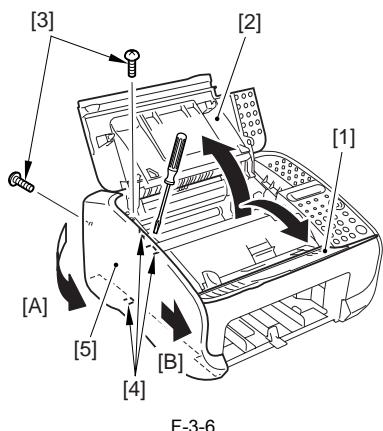
- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].



3.1.2.2 Removing the Left Cover

FAX-L100 / FAX-L120

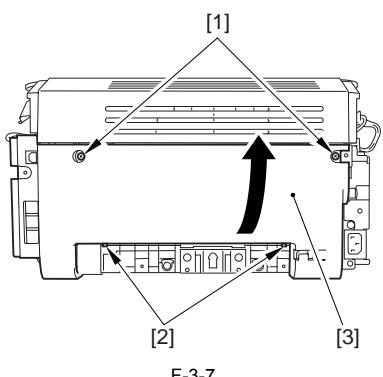
- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of the arrow [A]; then, slide it in the direction of the other arrow [B].



3.1.2.3 Removing the Rear Cover

FAX-L100 / FAX-L120

- 1) Remove the 2 screws [1].
- 2) Free the 2 claws [2], and detach the rear cover [3] while sliding it in the direction of the arrow.



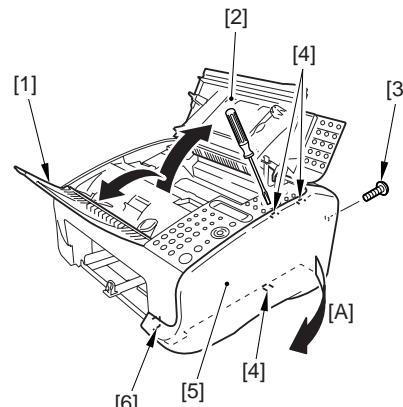
3.1.3 Right Cover

3.1.3.1 Removing the Right Cover

0010-3366

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].



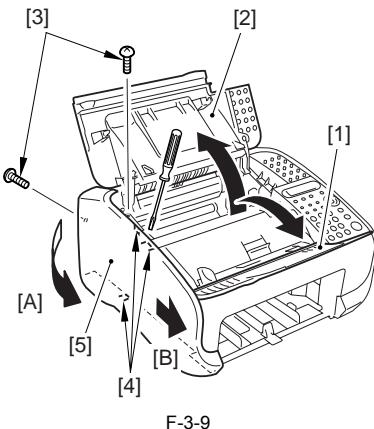
3.1.4 Left Cover

3.1.4.1 Removing the Left Cover

0010-3367

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of the arrow [A]; then, slide it in the direction of the other arrow [B].



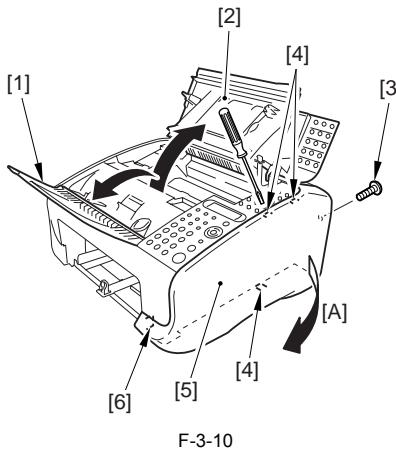
3.1.5 Upper Cover

3.1.5.1 Removing the Right Cover

0010-3464

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].

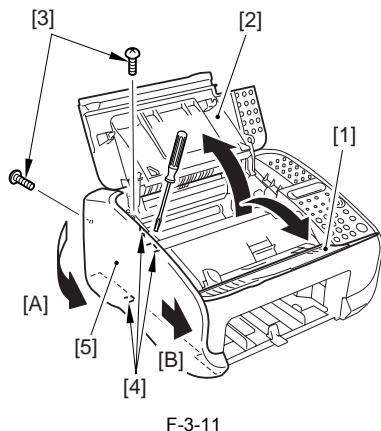
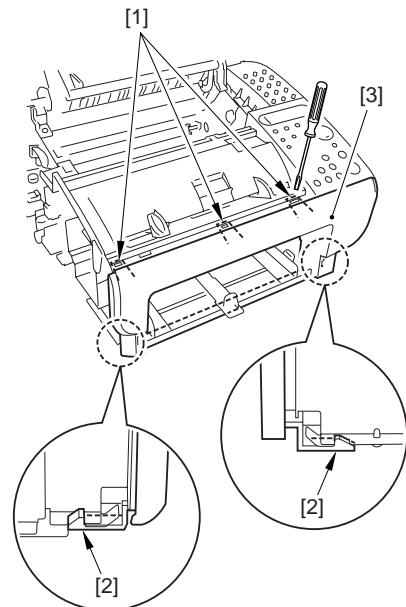


3.1.5.2 Removing the Left Cover

0010-3465

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of the arrow [A]; then, slide it in the direction of the other arrow [B].

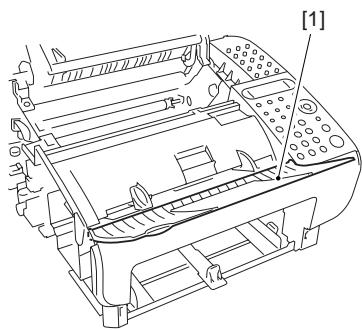


3.1.5.3 Removing the Front Cover

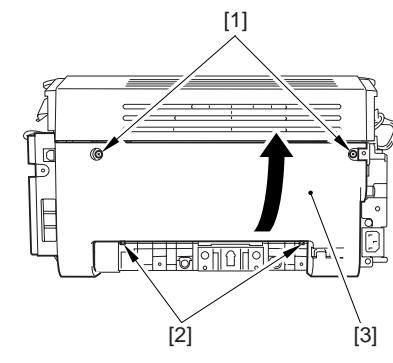
0010-3466

FAX-L100 / FAX-L120

- 1) Wrap the document feeder tray [1] slightly to detach.



- 2) Free the 3 claws [1], and detach the front cover [3] while freeing the other 2 claws [2].

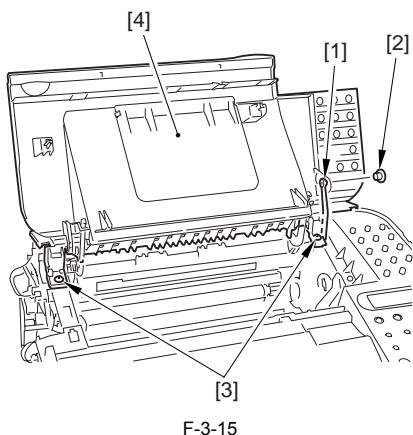


3.1.5.5 Removing the Cartridge Cover

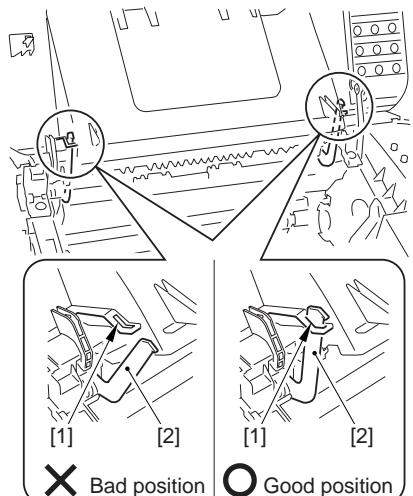
0010-3469

FAX-L100 / FAX-L120

- 1) Free the link stop [2] from the door link [1].
- 2) Remove the 2 screws [3], and detach the cartridge cover [4].



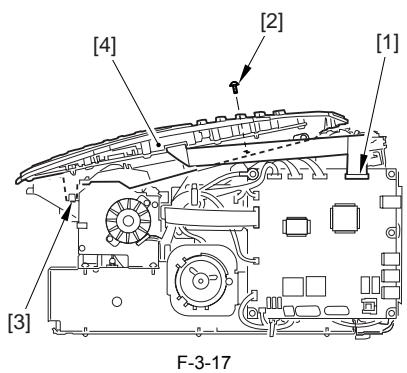
When mounting the cartridge cover, be sure to fit the 2 fixing assembly release hooks [2] in the 2 hook holes [1] found in the cartridge cover.



3.1.5.6 Removing the Operation Panel Unit

FAX-L100 / FAX-L120

- 1) Remove the flat cable [1].
- 2) Remove the screw [2].
- 3) Free the claw [3], and detach the operation panel unit [4].

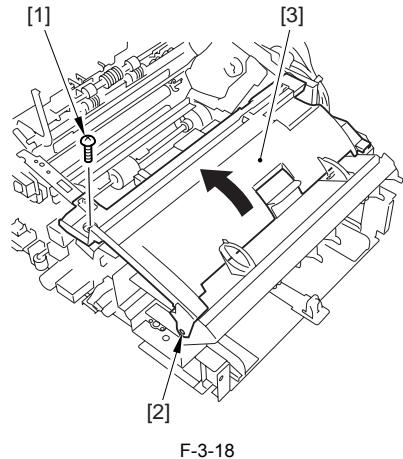


3.1.5.7 Removing the Upper Cover

0010-3481

FAX-L100 / FAX-L120

- 1) Remove the screw [1].
- 2) Free the claw [2], and detach the upper cover [3] in the direction of the arrow.



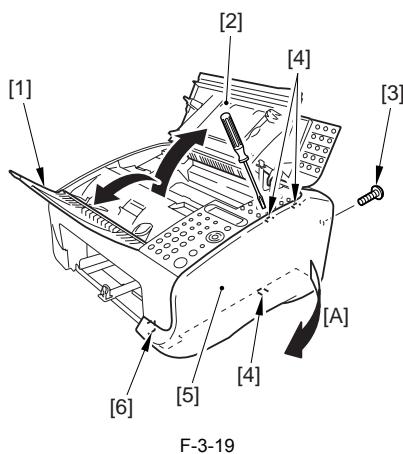
3.1.6 Cartridge Cover

3.1.6.1 Removing the Right Cover

0010-3461

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].

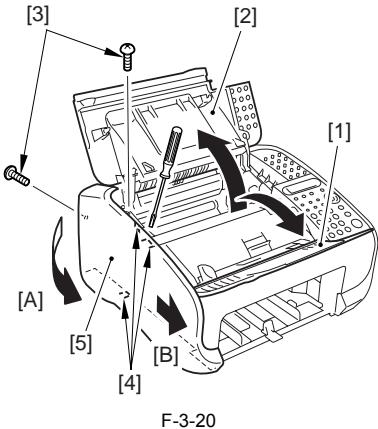


3.1.6.2 Removing the Left Cover

0010-3462

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of the arrow [A]; then, slide it in the direction of the other arrow [B].

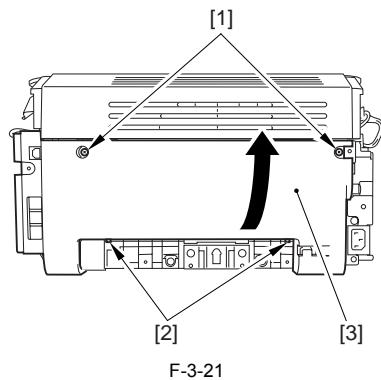


3.1.6.3 Removing the Rear Cover

FAX-L100 / FAX-L120

0010-3463

- 1) Remove the 2 screws [1].
- 2) Free the 2 claws [2], and detach the rear cover [3] while sliding it in the direction of the arrow.

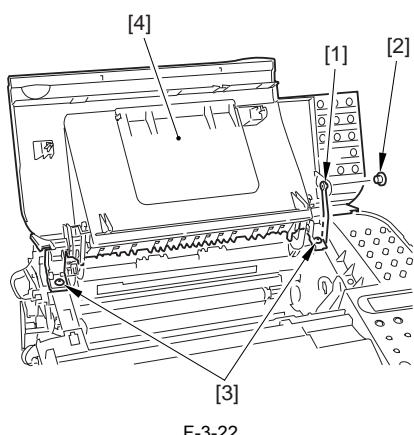


3.1.6.4 Removing the Cartridge Cover

FAX-L100 / FAX-L120

0010-3459

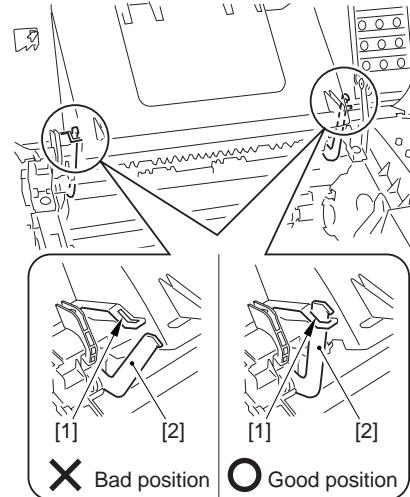
- 1) Free the link stop [2] from the door link [1].
- 2) Remove the 2 screws [3], and detach the cartridge cover [4].



F-3-22



When mounting the cartridge cover, be sure to fit the 2 fixing assembly release hooks [1] found in the cartridge cover.



F-3-23

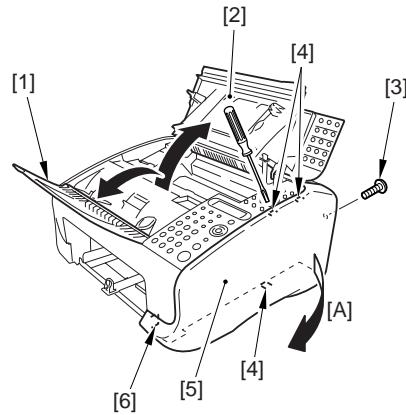
3.1.7 Operation Panel Unit

3.1.7.1 Removing the Right Cover

0010-3470

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].



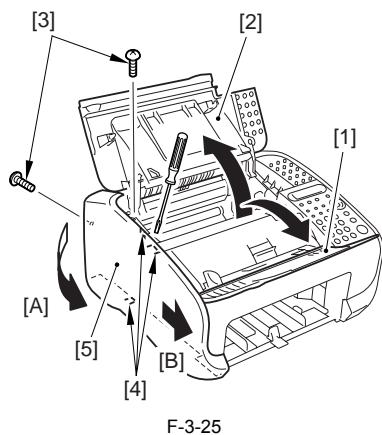
F-3-24

3.1.7.2 Removing the Left Cover

0010-3471

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of the arrow [A]; then, slide it in the direction of the other arrow [B].

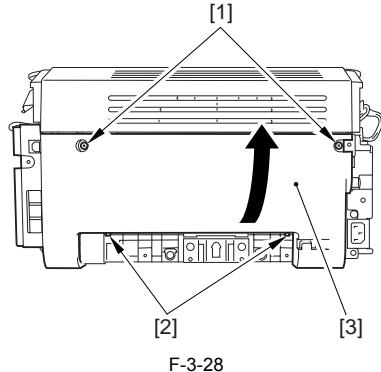


3.1.7.4 Removing the Rear Cover

0010-3473

FAX-L100 / FAX-L120

- 1) Remove the 2 screws [1].
- 2) Free the 2 claws [2], and detach the rear cover [3] while sliding it in the direction of the arrow.

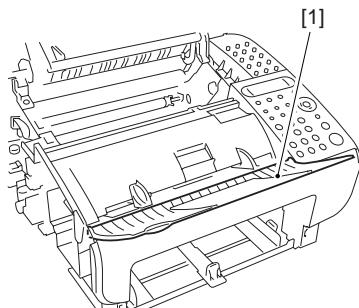


3.1.7.3 Removing the Front Cover

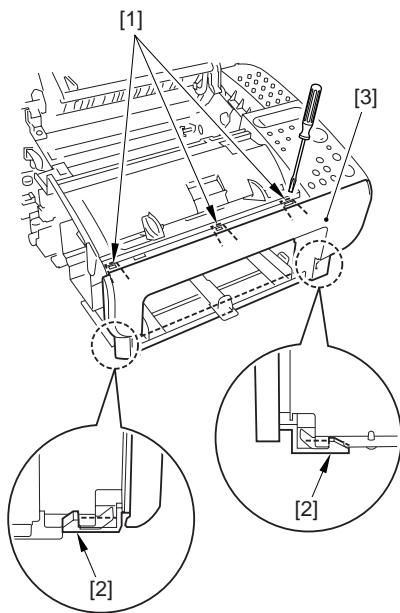
0010-3472

FAX-L100 / FAX-L120

- 1) Wrap the document feeder tray [1] slightly to detach.



- 2) Free the 3 claws [1], and detach the front cover [3] while freeing the other 2 claws [2].

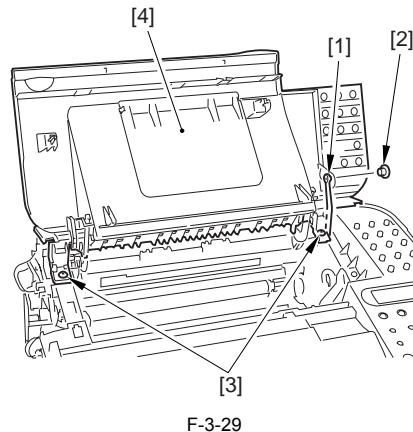


3.1.7.5 Removing the Cartridge Cover

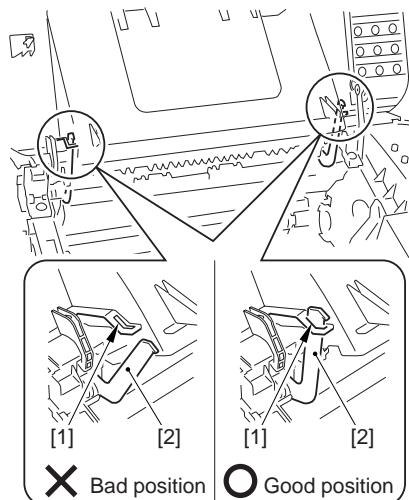
0010-3474

FAX-L100 / FAX-L120

- 1) Free the link stop [2] from the door link [1].
- 2) Remove the 2 screws [3], and detach the cartridge cover [4].



When mounting the cartridge cover, be sure to fit the 2 fixing assembly release hooks [2] in the 2 hook holes [1] found in the cartridge cover.

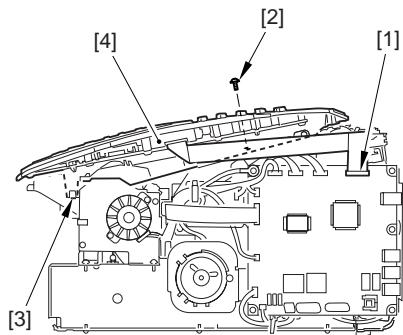


F-3-30

3.1.7.6 Removing the Operation Panel Unit

FAX-L100 / FAX-L120

- 1) Remove the flat cable [1].
- 2) Remove the screw [2].
- 3) Free the claw [3], and detach the operation panel unit [4].



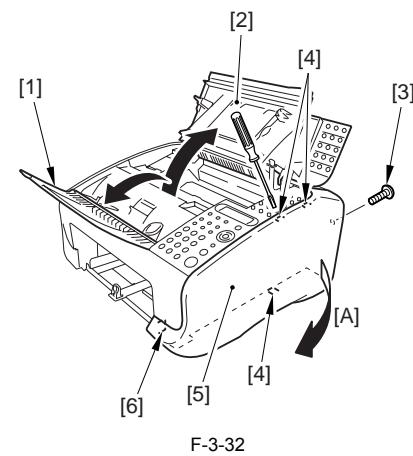
F-3-31

3.1.8 SCNT Board

3.1.8.1 Removing the Right Cover

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].

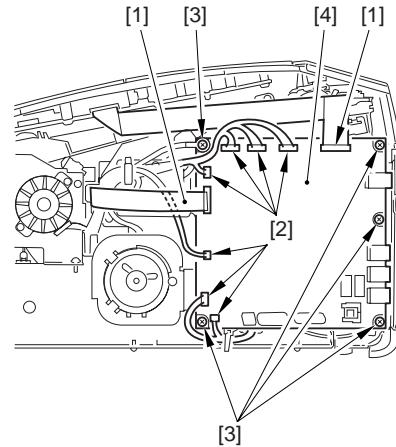


3.1.8.2 Removing the SCNT Board

0010-3655

FAX-L100 / FAX-L120

- 1) Remove the flat cable [1], and disconnect the 7 connectors [2].
- 2) Remove the 5 screws [3], and detach the SCNT board [4].



F-3-33

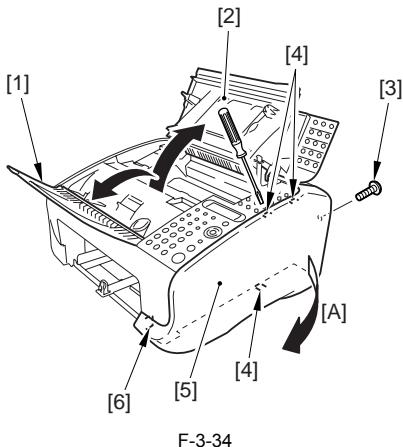
3.1.9 DCNT Board

3.1.9.1 Removing the Right Cover

0010-3592

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].



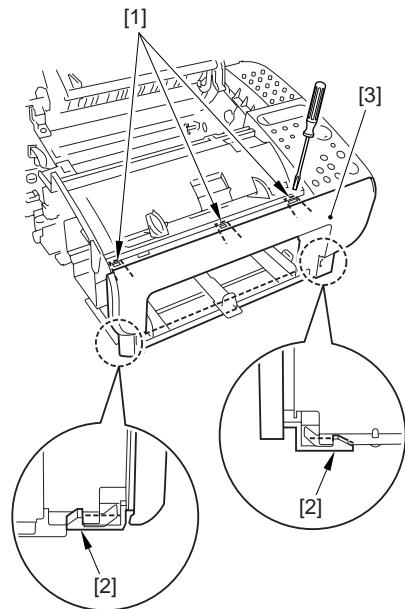
F-3-34

3.1.9.2 Removing the Left Cover

0010-3593

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of the arrow [A]; then, slide it in the direction of the other arrow [B].



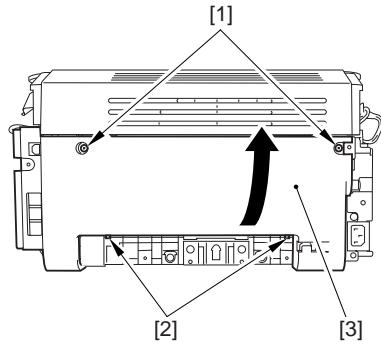
F-3-37

3.1.9.4 Removing the Rear Cover

0010-3595

FAX-L100 / FAX-L120

- 1) Remove the 2 screws [1].
- 2) Free the 2 claws [2], and detach the rear cover [3] while sliding it in the direction of the arrow.



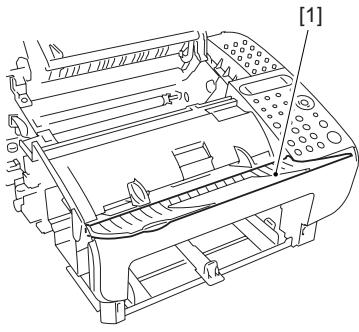
F-3-38

3.1.9.3 Removing the Front Cover

0010-3594

FAX-L100 / FAX-L120

- 1) Wrap the document feeder tray [1] slightly to detach.



F-3-36

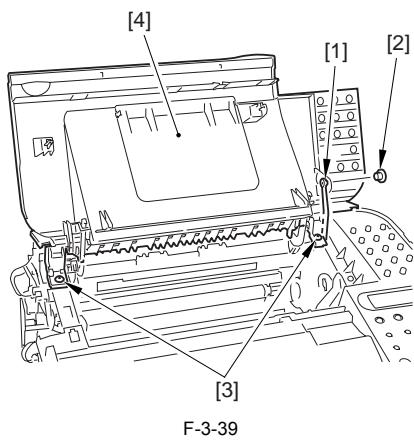
- 2) Free the 3 claws [1], and detach the front cover [3] while freeing the other 2 claws [2].

3.1.9.5 Removing the Cartridge Cover

0010-3596

FAX-L100 / FAX-L120

- 1) Free the link stop [2] from the door link [1].
- 2) Remove the 2 screws [3], and detach the cartridge cover [4].

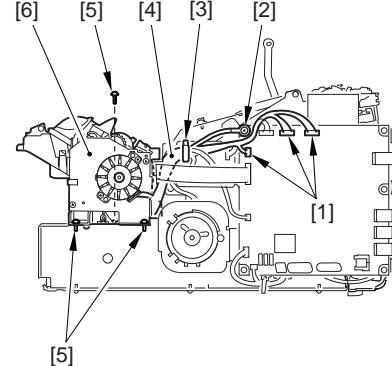


3.1.9.7 Removing the Reader Unit

0010-3607

FAX-L100 / FAX-L120

- 1) Disconnect the 3 connectors [1].
- 2) Remove the screw [2].
- 3) Free the harness [4] from the clamp [3].
- 4) Remove the 3 screws [5], and detach the reader unit [5].

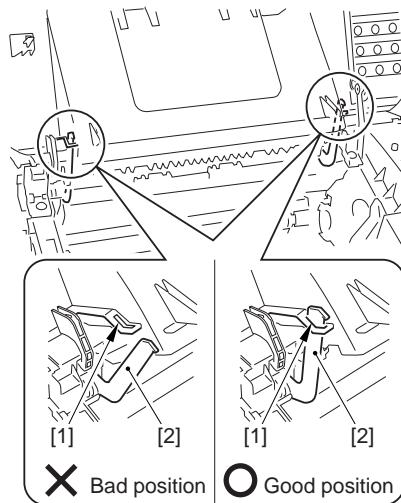


3.1.9.8 Removing the DCNT board

0010-3608

FAX-L100 / FAX-L120

- 1) Remove the 2 screws [1], and detach the DCNT cover 1 [2].
- 2) Remove the 2 screws [3], and detach the DCNT cover 2 [4].

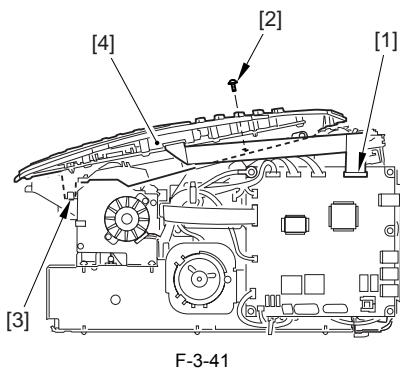


3.1.9.6 Removing the Operation Panel Unit

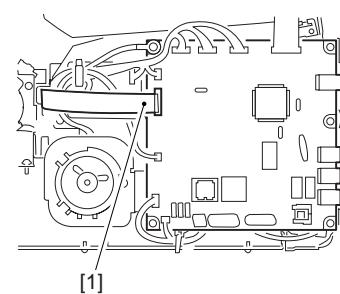
0010-3597

FAX-L100 / FAX-L120

- 1) Remove the flat cable [1].
- 2) Remove the screw [2].
- 3) Free the claw [3], and detach the operation panel unit [4].

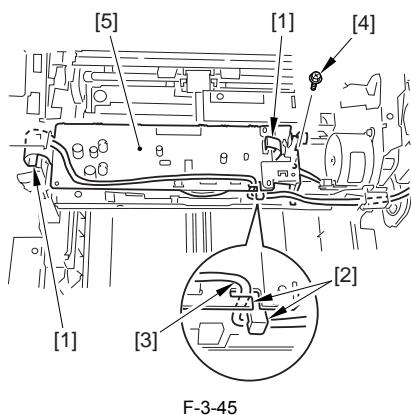


- 3) Remove the flat cable [1].

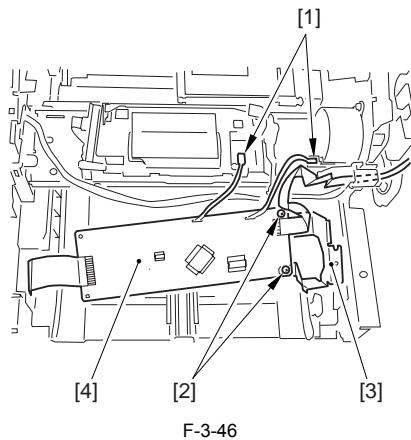


- 4) Remove the 2 flat cables [1].
- 5) Free the harness [3] from the guide [2].
- 6) Remove the screw [4], and turn over the DCNT board [5].

F-3-44



- 7) Disconnect the 2 connectors [1].
8) Remove the 2 screws [2], and detach the DCNT board [4] from the plate [3].



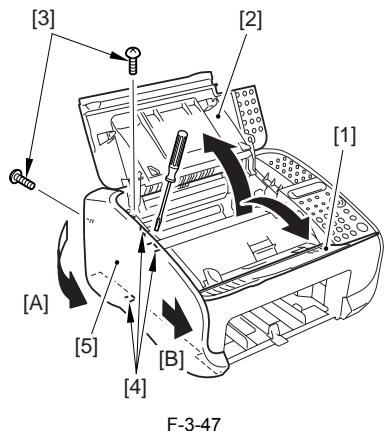
3.1.10 Power Supply PCB

3.1.10.1 Removing the Left Cover

FAX-L100 / FAX-L120

0010-3395

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of the arrow [A]; then, slide it in the direction of the other arrow [B].



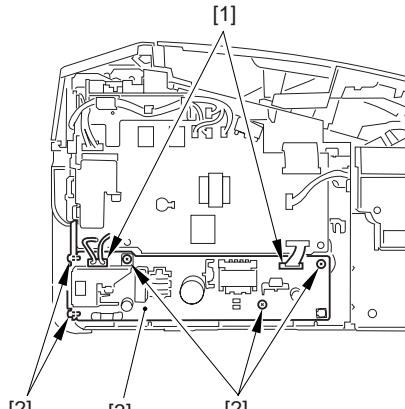
3-10

3.1.10.2 Removing the Power Supply Board

0010-3396

FAX-L100 / FAX-L120

- 1) Disconnect the 2 connectors [1].
- 2) Remove the 5 screws {2}, and detach the power supply board [3].



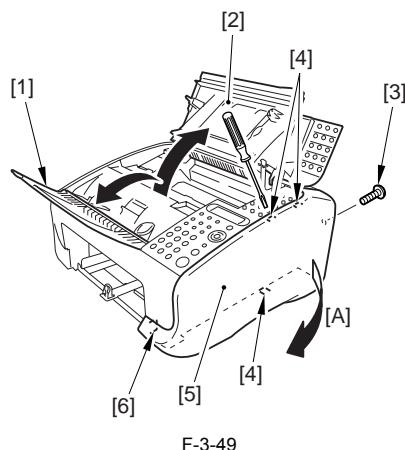
3.1.11 High-voltage Power Supply PCB

3.1.11.1 Removing the Right Cover

0010-3398

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].

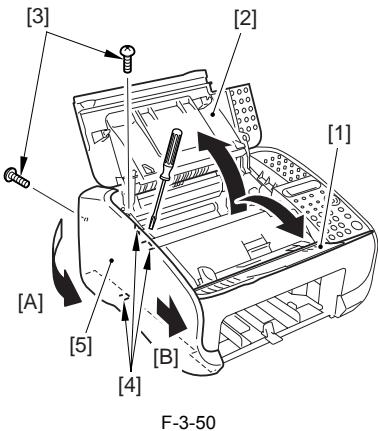


3.1.11.2 Removing the Left Cover

0010-3399

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of the arrow [A]; then, slide it in the direction of the other arrow [B].

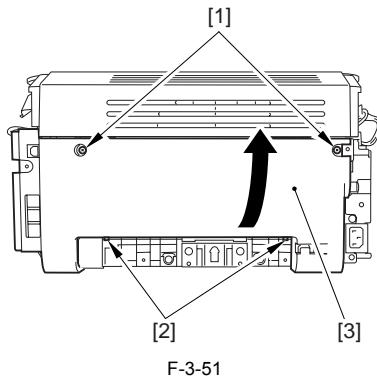


3.1.11.3 Removing the Rear Cover

FAX-L100 / FAX-L120

0010-3400

- 1) Remove the 2 screws [1].
- 2) Free the 2 claws [2], and detach the rear cover [3] while sliding it in the direction of the arrow.

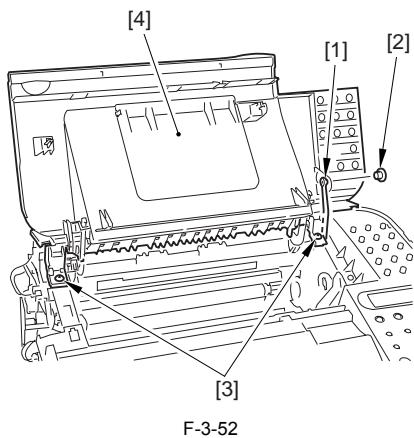


3.1.11.4 Removing the Cartridge Cover

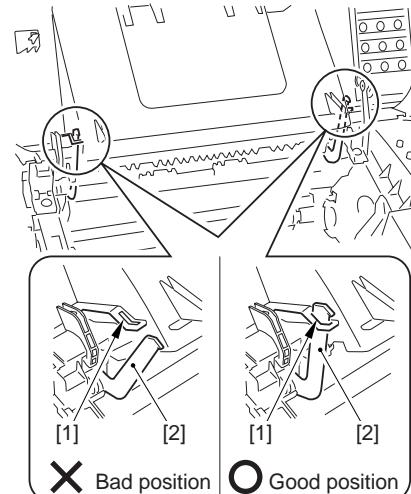
FAX-L100 / FAX-L120

0010-3482

- 1) Free the link stop [2] from the door link [1].
- 2) Remove the 2 screws [3], and detach the cartridge cover [4].



When mounting the cartridge cover, be sure to fit the 2 fixing assembly release hooks [2] in the 2 hook holes [1] found in the cartridge cover.

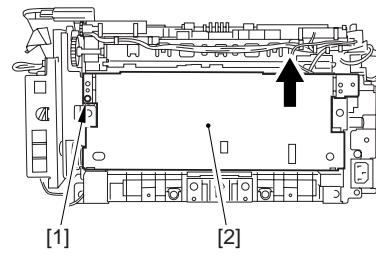


3.1.11.5 Removing the Rear Plate

FAX-L100 / FAX-L120

0010-3483

- 1) Remove the screw [1], and detach the rear plate [2] in the direction of the arrow.

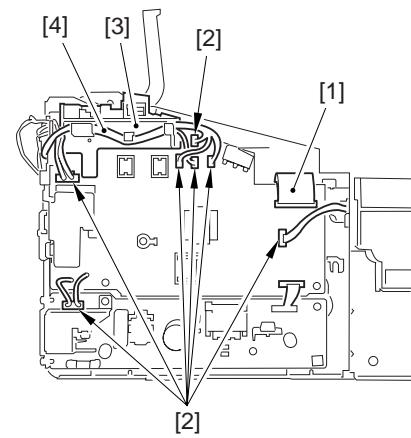


3.1.11.6 Removing the High-Voltage Power Supply Board

0010-3485

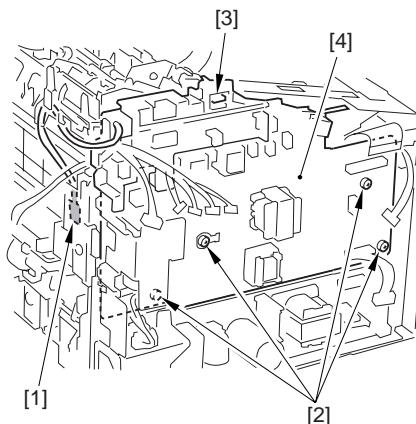
FAX-L100 / FAX-L120

- 1) Remove the flat cable [1].
- 2) Disconnect the 7 connectors [2].
- 3) Free the harness [4] connected to the cable guide [3].



- 4) Disconnect the connector [1].
- 5) Remove the 4 screws [2].

- 6) Free the claw [3], and detach the high-voltage power supply board [4].



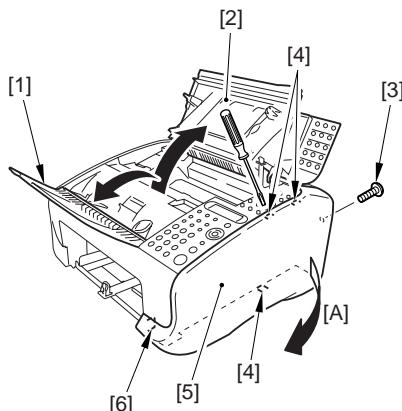
F-3-56

3.1.12 DC/DC Converter Board

3.1.12.1 Removing the Right Cover

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].



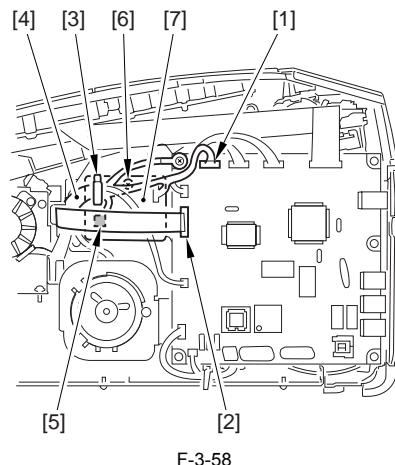
F-3-57

3.1.12.2 Removing the DC/DC converter board

0010-3611

FAX-L100 / FAX-L120

- 1) Disconnect the connector [1] and the flat cable [2].
- 2) Free the harness [4] from the clamp [3].
- 3) Disconnect the connector [5].
- 4) Remove the screw [6], and detach the DC/DC converter board [7].



F-3-58

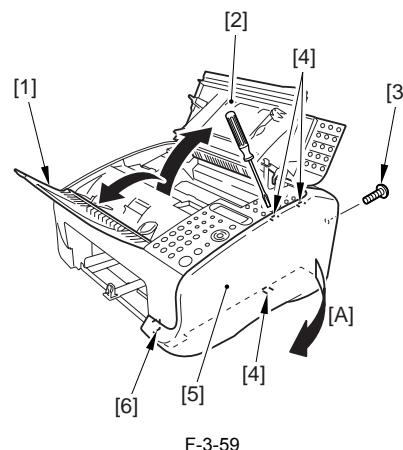
3.1.13 Top Sensor

3.1.13.1 Removing the Right Cover

0010-3634

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].



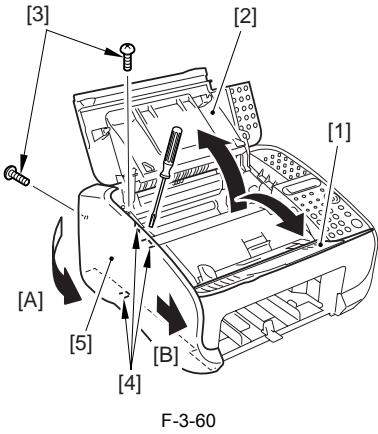
F-3-59

3.1.13.2 Removing the Left Cover

0010-3635

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of the arrow [A]; then, slide it in the direction of the other arrow [B].

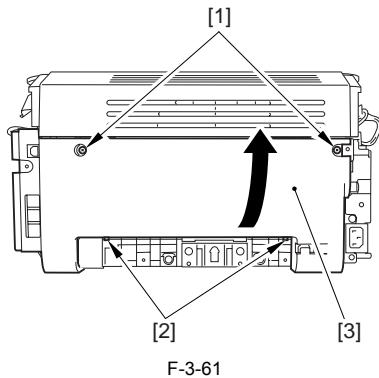


3.1.13.3 Removing the Rear Cover

FAX-L100 / FAX-L120

0010-3636

- 1) Remove the 2 screws [1].
- 2) Free the 2 claws [2], and detach the rear cover [3] while sliding it in the direction of the arrow.

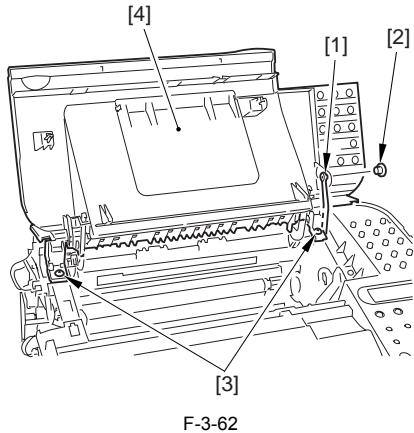


3.1.13.4 Removing the Cartridge Cover

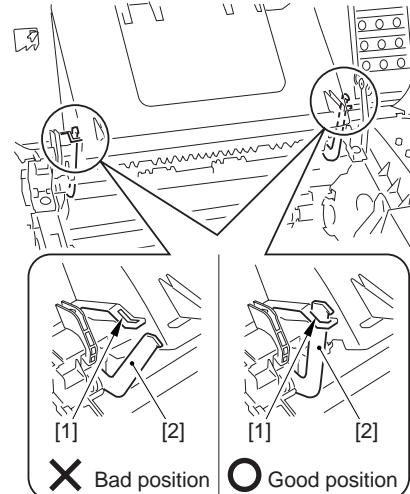
0010-3637

FAX-L100 / FAX-L120

- 1) Free the link stop [2] from the door link [1].
- 2) Remove the 2 screws [3], and detach the cartridge cover [4].



When mounting the cartridge cover, be sure to fit the 2 fixing assembly release hooks [1] found in the cartridge cover.

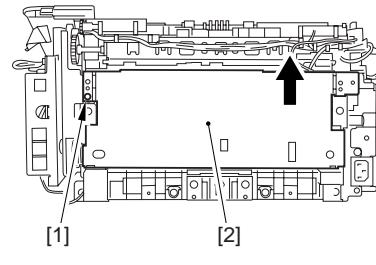


3.1.13.5 Removing the Rear Plate

0010-3638

FAX-L100 / FAX-L120

- 1) Remove the screw [1], and detach the rear plate [2] in the direction of the arrow.

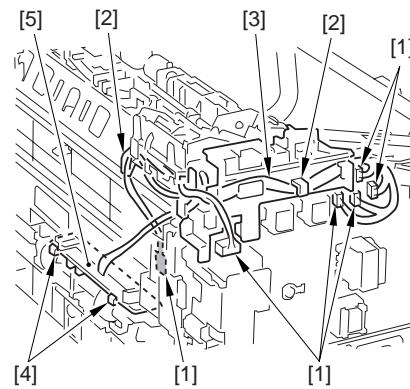


3.1.13.6 Removing the Paper Leading Edge/Paper Width Sensor PCB

0010-3639

FAX-L100 / FAX-L120

- 1) Disconnect the 6 connectors [1], and free the harness [3] from the harness guide [2].
- 2) Free the 2 claws [4], and detach the paper leading edge/paper width sensor PCB [5].

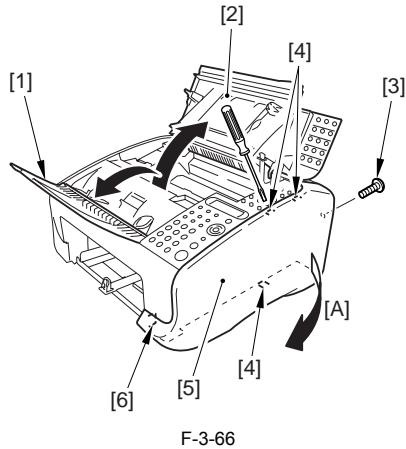


3.1.14 Paper Delivery Sensor

3.1.14.1 Removing the Right Cover

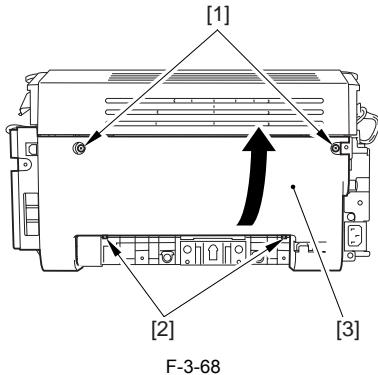
FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].



F-3-66

0010-3646



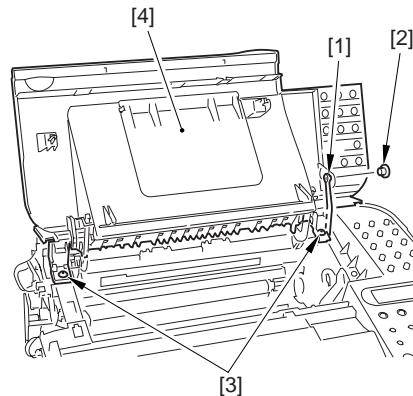
F-3-68

3.1.14.4 Removing the Cartridge Cover

0010-3649

FAX-L100 / FAX-L120

- 1) Free the link stop [2] from the door link [1].
- 2) Remove the 2 screws [3], and detach the cartridge cover [4].



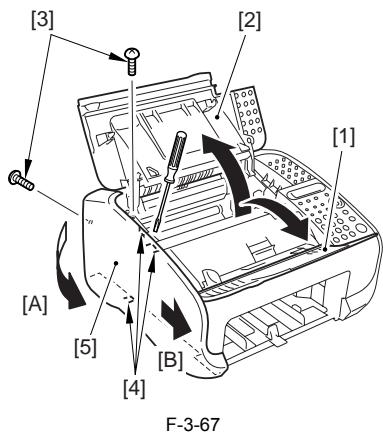
F-3-69

0010-3647

3.1.14.2 Removing the Left Cover

FAX-L100 / FAX-L120

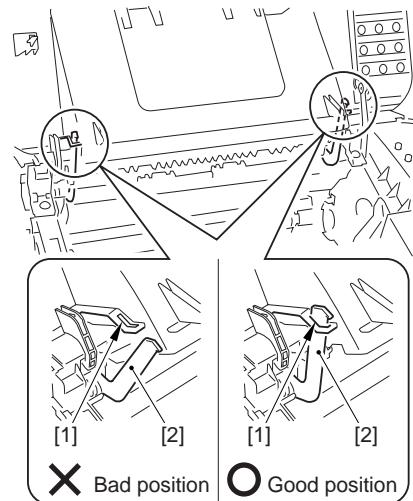
- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of the arrow [A]; then, slide it in the direction of the other arrow [B].



F-3-67



When mounting the cartridge cover, be sure to fit the 2 fixing assembly release hooks [2] in the 2 hook holes [1] found in the cartridge cover.



F-3-70

3.1.14.3 Removing the Rear Cover

0010-3648

FAX-L100 / FAX-L120

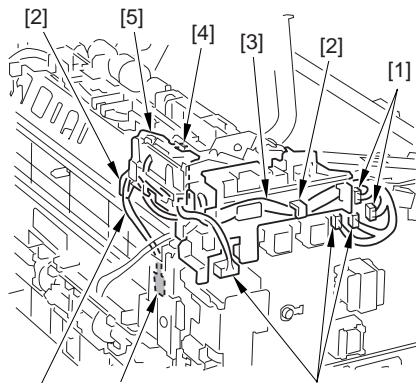
- 1) Remove the 2 screws [1].
- 2) Free the 2 claws [2], and detach the rear cover [3] while sliding it in the direction of the arrow.

3.1.14.5 Removing the Delivery Sensor PCB

FAX-L100 / FAX-L120

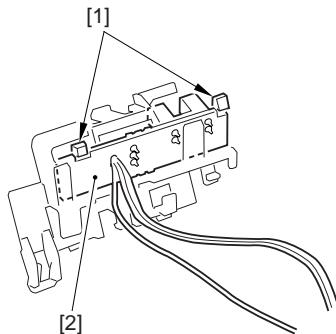
0010-3650

- 1) Disconnect the 6 connectors [1], and free the harness [3] from the harness guide [2].
- 2) Free the 4 claws [4], and detach the delivery sensor PCB [5] together with the gyude.



F-3-71

- 3) Free the 2 claws [1], and detach the delivery sensor PCB [2].



F-3-72

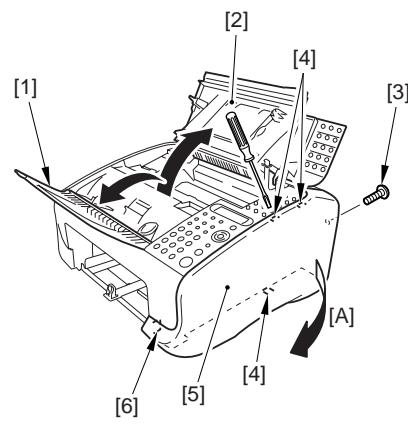
3.1.15 Toner Sensor

3.1.15.1 Removing the Right Cover

0010-3756

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].



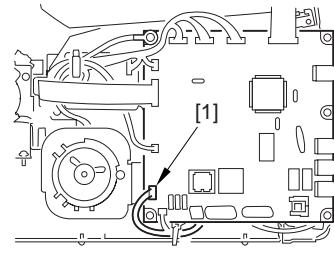
F-3-73

3.1.15.2 Removing the Toner Sensor

0010-3757

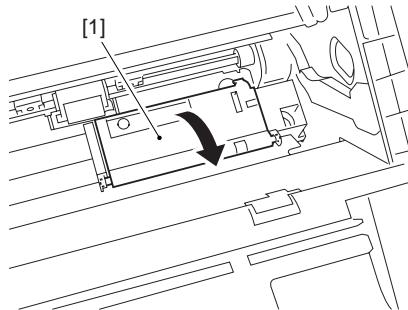
FAX-L100 / FAX-L120

- 1) Disconnect the connector [1].



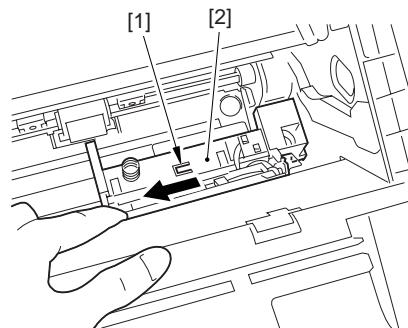
F-3-74

- 2) Open the Toner sensor [1].



F-3-75

- 3) Free the claw [1], and slide the toner sensor [2] in the direction of the arrow to detach.



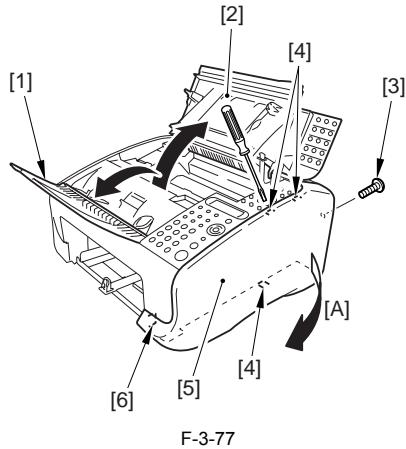
F-3-76

3.1.16 Paper Width Sensor

3.1.16.1 Removing the Right Cover

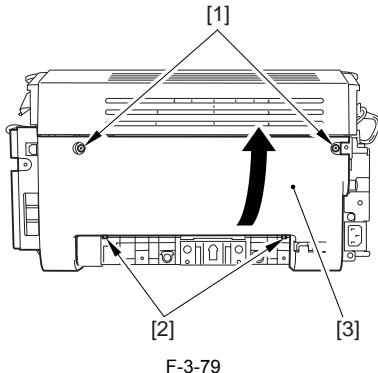
FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].



F-3-77

0010-3640



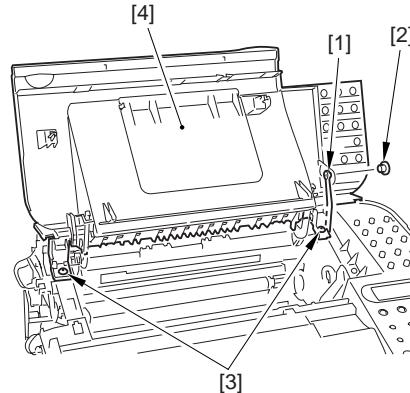
F-3-79

3.1.16.4 Removing the Cartridge Cover

0010-3643

FAX-L100 / FAX-L120

- 1) Free the link stop [2] from the door link [1].
- 2) Remove the 2 screws [3], and detach the cartridge cover [4].

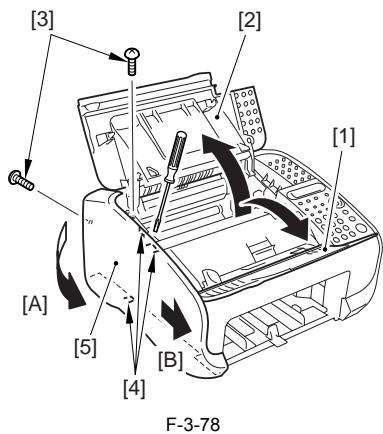


F-3-80

0010-3641

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of the arrow [A]; then, slide it in the direction of the other arrow [B].



F-3-78

3.1.16.3 Removing the Rear Cover

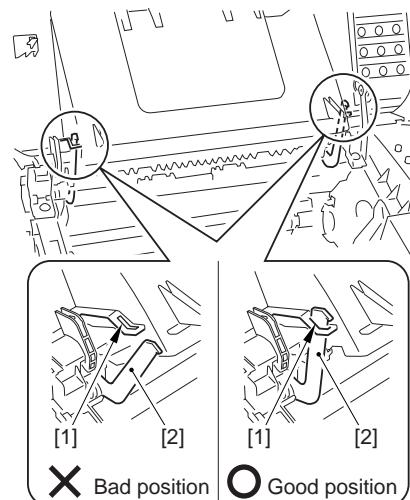
0010-3642

FAX-L100 / FAX-L120

- 1) Remove the 2 screws [1].
- 2) Free the 2 claws [2], and detach the rear cover [3] while sliding it in the direction of the arrow.



When mounting the cartridge cover, be sure to fit the 2 fixing assembly release hooks [2] in the 2 hook holes [1] found in the cartridge cover.



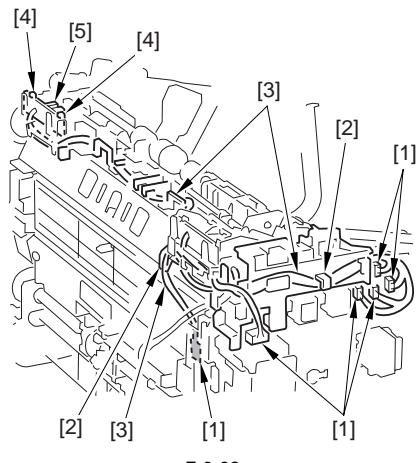
F-3-81

3.1.16.5 Removing the Paper Width Sensor PCB

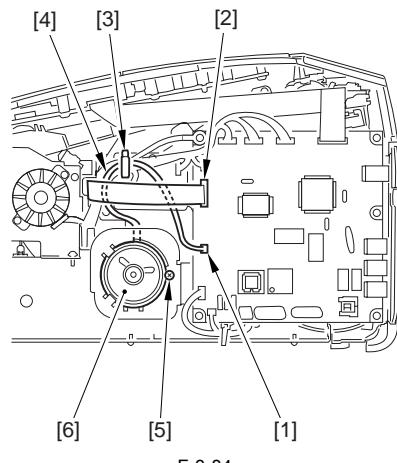
0010-3644

FAX-L100 / FAX-L120

- 1) Disconnect the 6 connectors [1], and free the harness [3] from the harness guide [2].
- 2) Free the 2 claws [4], and detach the paper width sensor PCB [5].



F-3-82



F-3-84

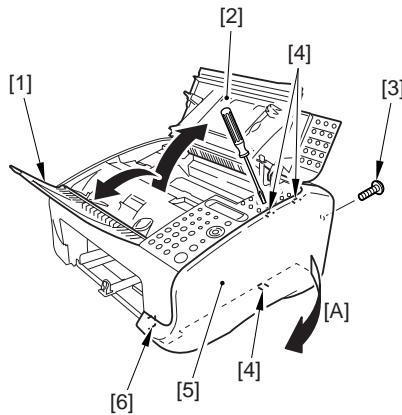
3.1.17 Speaker

3.1.17.1 Removing the Right Cover

0010-3401

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].



F-3-83

3.1.17.2 Removing the Speaker

0010-3402

FAX-L100 / FAX-L120

- 1) Disconnect the connector [1] and the flat cable [2].
- 2) Free the cable [4] from the clamp [3].
- 3) Remove the screw [5], and detach the speaker [6].

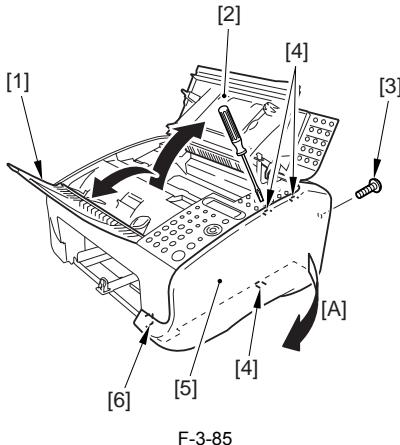
3.2 Document Feed/Exposure System

3.2.1 Separation Guide Unit

3.2.1.1 Removing the Right Cover

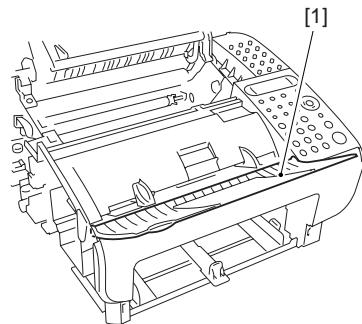
FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].



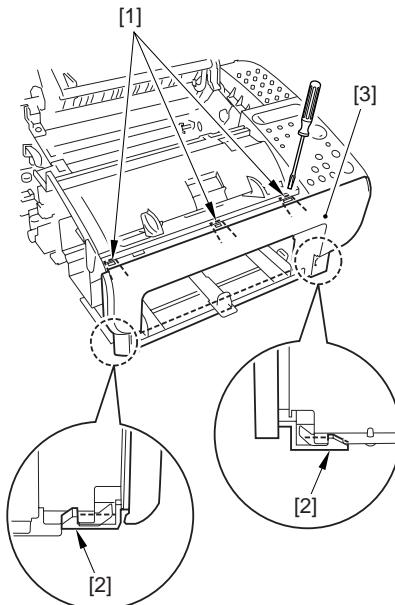
F-3-85

0010-3680



F-3-87

- 2) Free the 3 claws [1], and detach the front cover [3] while freeing the other 2 claws [2].



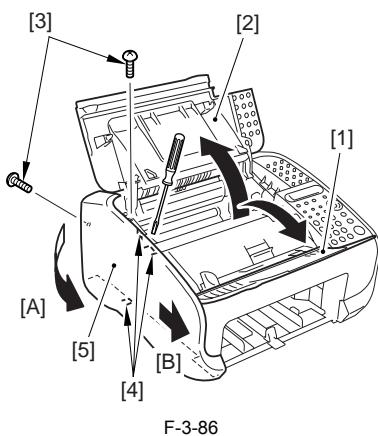
F-3-88

3.2.1.2 Removing the Left Cover

FAX-L100 / FAX-L120

0010-3681

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of the arrow [A]; then, slide it in the direction of the other arrow [B].



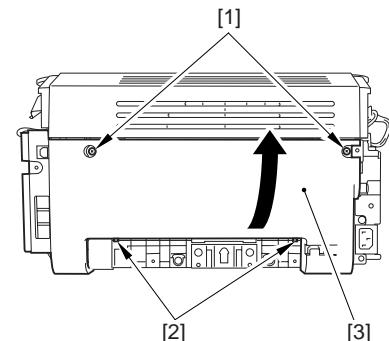
F-3-86

3.2.1.3 Removing the Front Cover

0010-3682

FAX-L100 / FAX-L120

- 1) Wrap the document feeder tray [1] slightly to detach.



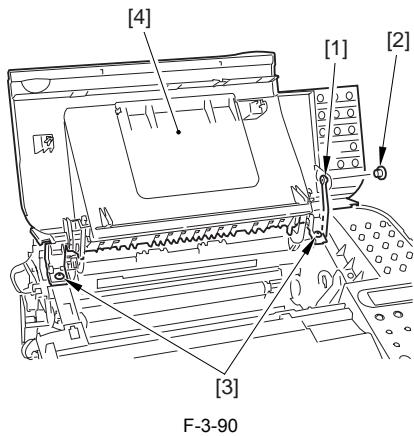
F-3-89

3.2.1.5 Removing the Cartridge Cover

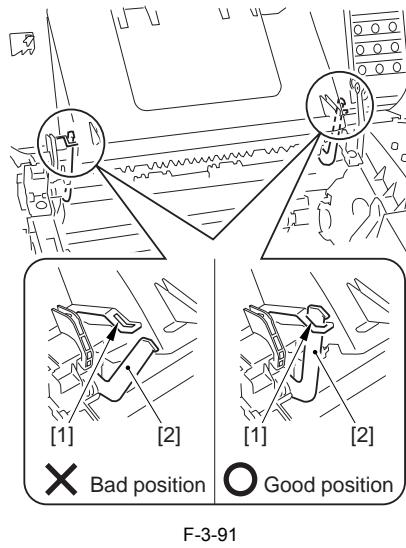
0010-3684

FAX-L100 / FAX-L120

- 1) Free the link stop [2] from the door link [1].
- 2) Remove the 2 screws [3], and detach the cartridge cover [4].



⚠
When mounting the cartridge cover, be sure to fit the 2 fixing assembly release hooks [2] in the 2 hook holes [1] found in the cartridge cover.

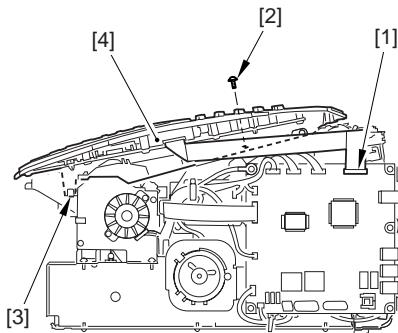


3.2.1.6 Removing the Operation Panel Unit

0010-3685

FAX-L100 / FAX-L120

- 1) Remove the flat cable [1].
- 2) Remove the screw [2].
- 3) Free the claw [3], and detach the operation panel unit [4].

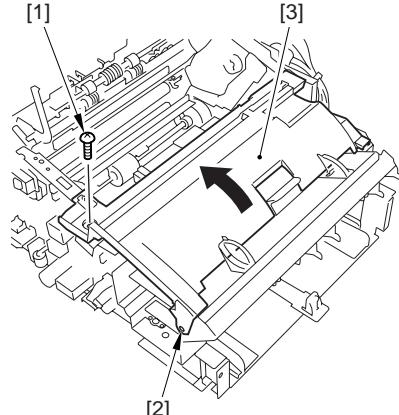


3.2.1.7 Removing the Upper Cover

0010-3686

FAX-L100 / FAX-L120

- 1) Remove the screw [1].
- 2) Free the claw [2], and detach the upper cover [3] in the direction of the arrow.

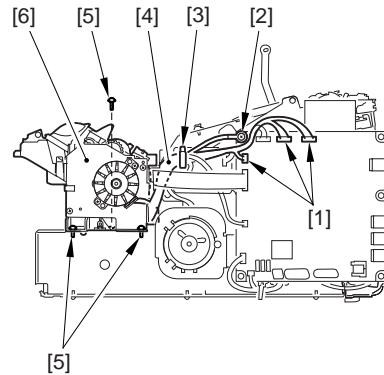


3.2.1.8 Removing the Reader Unit

0010-3687

FAX-L100 / FAX-L120

- 1) Disconnect the 3 connectors [1].
- 2) Remove the screw [2].
- 3) Free the harness [4] from the clamp [3].
- 4) Remove the 3 screws [5], and detach the reader unit [6].

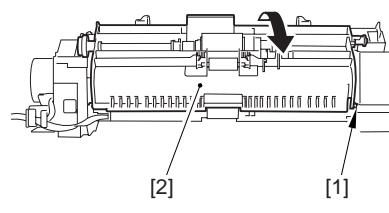


3.2.1.9 Removing the Upper Reader Unit Frame

0010-3788

FAX-L100 / FAX-L120

- 1) Free the claw [1], and detach the upper reader unit frame [2].

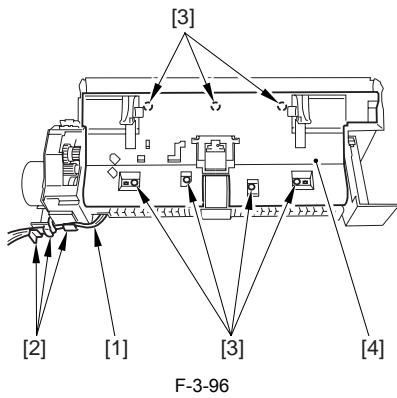


3.2.1.10 Removing the Separation Guide Unit

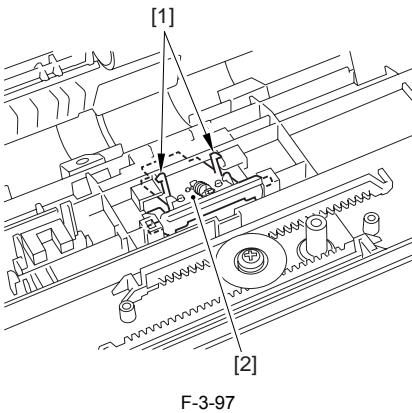
0010-3689

FAX-L100 / FAX-L120

- 1) Free the harness [1] from the cable guide [2].
- 2) Remove the 7 screws [3], and detach the cover [4].



- 3) Free the 2 claws [1], and detach the Separation guide unit [2].



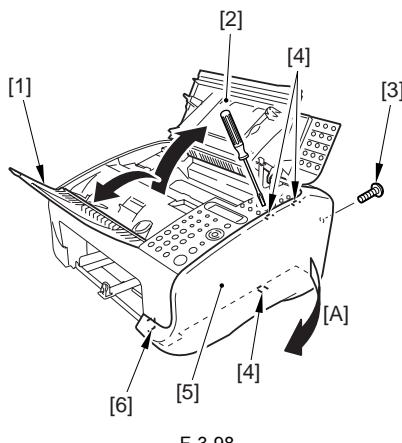
3.2.2 Contact Sensor

3.2.2.1 Removing the Right Cover

FAX-L100 / FAX-L120

[0010-3747](#)

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].

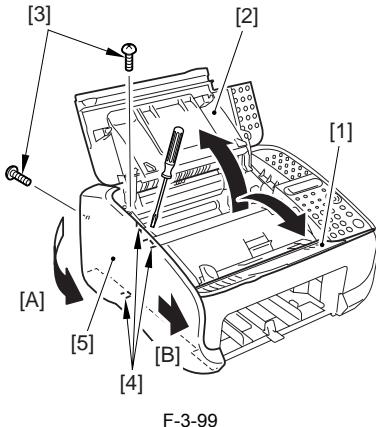


3.2.2.2 Removing the Left Cover

[0010-3748](#)

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of the arrow [A]; then, slide it in the direction of the other arrow [B].

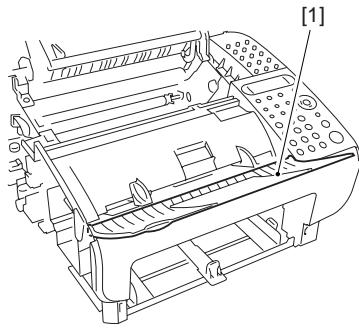


3.2.2.3 Removing the Front Cover

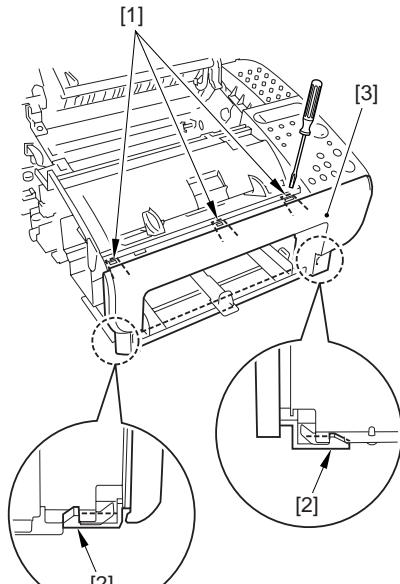
[0010-3749](#)

FAX-L100 / FAX-L120

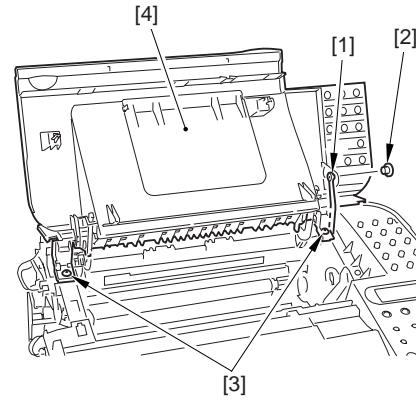
- 1) Wrap the document feeder tray [1] slightly to detach.



- 2) Free the 3 claws [1], and detach the front cover [3] while freeing the other 2 claws [2].



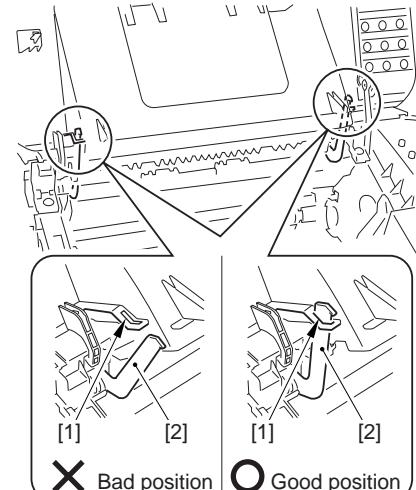
F-3-101



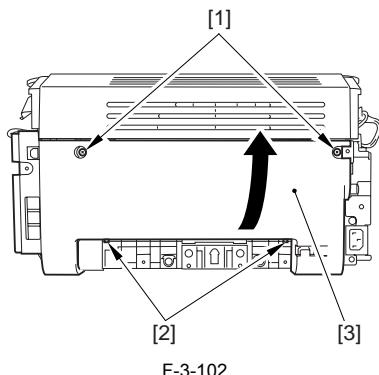
F-3-103



When mounting the cartridge cover, be sure to fit the 2 fixing assembly release hooks [2] in the 2 hook holes [1] found in the cartridge cover.



F-3-104



F-3-102

3.2.2.4 Removing the Rear Cover

0010-3750

FAX-L100 / FAX-L120

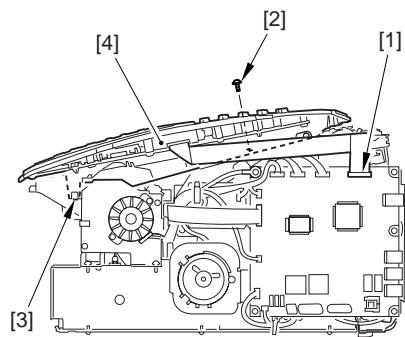
- 1) Remove the 2 screws [1].
- 2) Free the 2 claws [2], and detach the rear cover [3] while sliding it in the direction of the arrow.

3.2.2.6 Removing the Operation Panel Unit

0010-3752

FAX-L100 / FAX-L120

- 1) Remove the flat cable [1].
- 2) Remove the screw [2].
- 3) Free the claw [3], and detach the operation panel unit [4].



F-3-105

FAX-L100 / FAX-L120

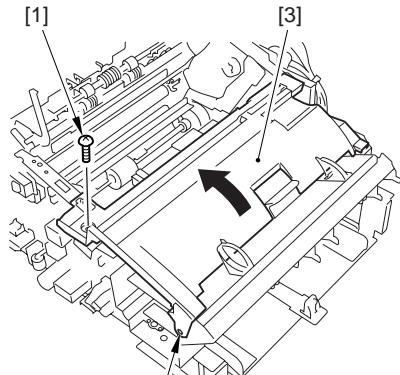
- 1) Free the link stop [2] from the door link [1].
- 2) Remove the 2 screws [3], and detach the cartridge cover [4].

3.2.2.7 Removing the Upper Cover

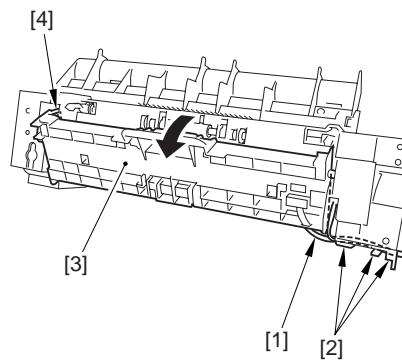
FAX-L100 / FAX-L120

0010-3753

- 1) Remove the screw [1].
- 2) Free the claw [2], and detach the upper cover [3] in the direction of the arrow.

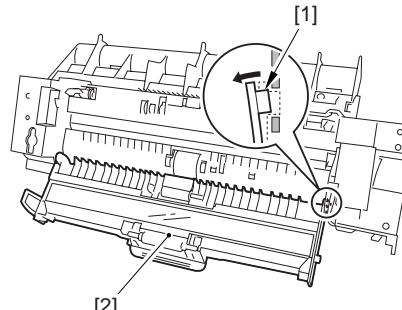


F-3-106



F-3-108

- 3) Free the claw [1], and detach the lower reader unit frame [2].



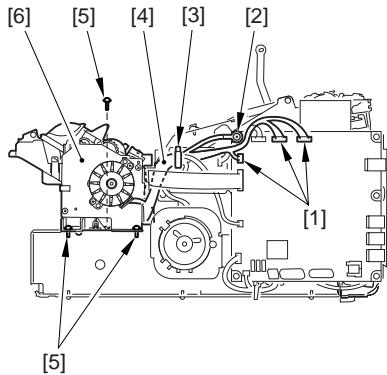
F-3-109

3.2.2.8 Removing the Reader Unit

FAX-L100 / FAX-L120

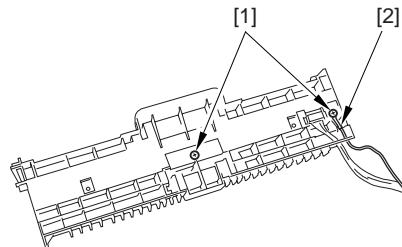
0010-3754

- 1) Disconnect the 3 connectors [1].
- 2) Remove the screw [2].
- 3) Free the harness [4] from the clamp [3].
- 4) Remove the 3 screws [5], and detach the reader unit [5].



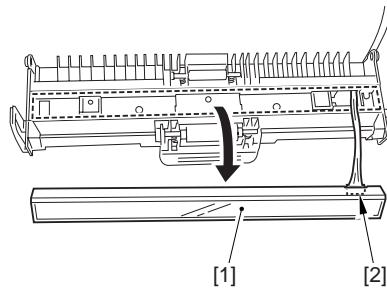
F-3-107

- 4) Remove the 2 screws [1], and remove the grounding wire [2].



F-3-110

- 5) Detach the contact sensor [1] from the lower reader unit frame, and disconnect the connector [2].



F-3-111

3.2.2.9 Removing the Contact Sensor

FAX-L100 / FAX-L120

0010-3755

- 1) Free the harness [1] from the cable guide [2].
- 2) Open the lower reader unit frame [3], and free the claw [4].

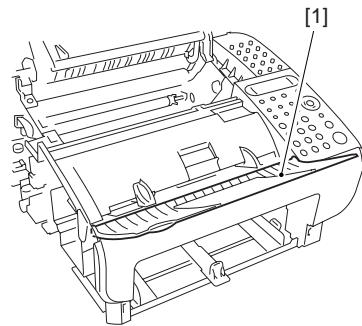
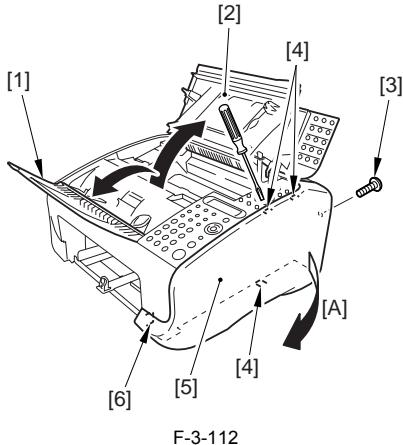
3.2.3 Separation Roller

3.2.3.1 Removing the Right Cover

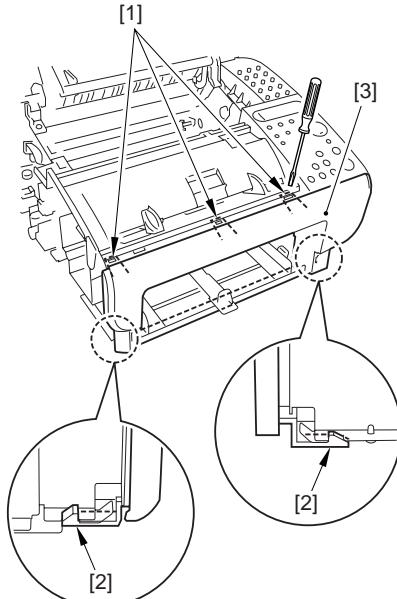
0010-3779

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].



- 2) Free the 3 claws [1], and detach the front cover [3] while freeing the other 2 claws [2].

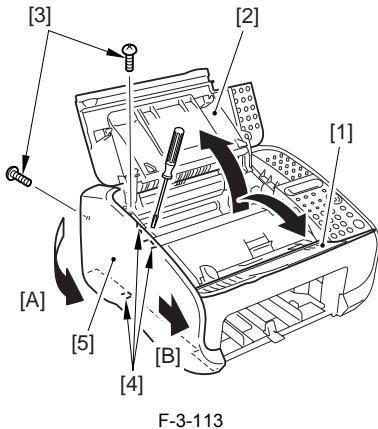


3.2.3.2 Removing the Left Cover

FAX-L100 / FAX-L120

0010-3780

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of the arrow [A]; then, slide it in the direction of the other arrow [B].



3.2.3.3 Removing the Front Cover

FAX-L100 / FAX-L120

0010-3781

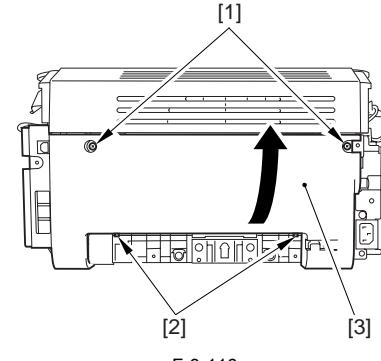
- 1) Wrap the document feeder tray [1] slightly to detach.

3.2.3.4 Removing the Rear Cover

0010-3782

FAX-L100 / FAX-L120

- 1) Remove the 2 screws [1].
- 2) Free the 2 claws [2], and detach the rear cover [3] while sliding it in the direction of the arrow.

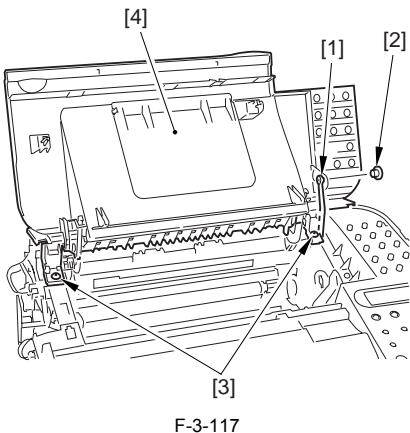


3.2.3.5 Removing the Cartridge Cover

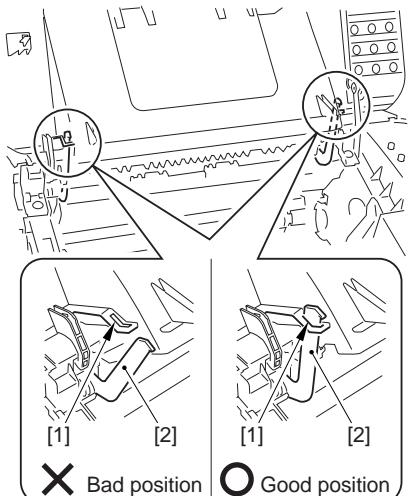
0010-3783

FAX-L100 / FAX-L120

- 1) Free the link stop [2] from the door link [1].
- 2) Remove the 2 screws [3], and detach the cartridge cover [4].



⚠
When mounting the cartridge cover, be sure to fit the 2 fixing assembly release hooks [2] in the 2 hook holes [1] found in the cartridge cover.

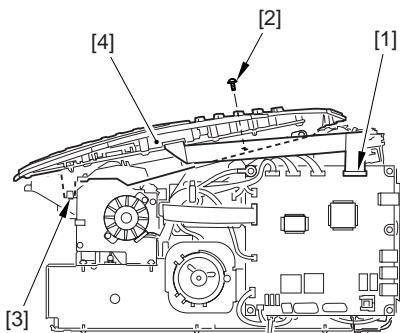


3.2.3.6 Removing the Operation Panel Unit

FAX-L100 / FAX-L120

0010-3784

- 1) Remove the flat cable [1].
- 2) Remove the screw [2].
- 3) Free the claw [3], and detach the operation panel unit [4].

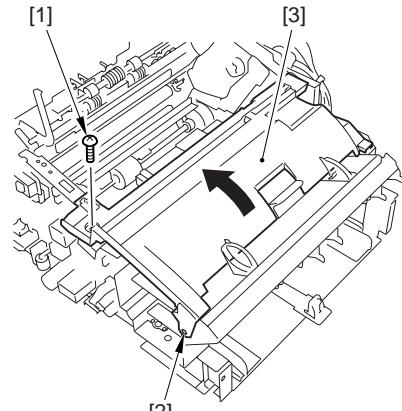


3.2.3.7 Removing the Upper Cover

0010-3785

FAX-L100 / FAX-L120

- 1) Remove the screw [1].
- 2) Free the claw [2], and detach the upper cover [3] in the direction of the arrow.

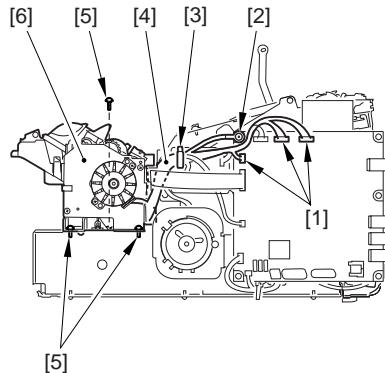


3.2.3.8 Removing the Reader Unit

0010-3786

FAX-L100 / FAX-L120

- 1) Disconnect the 3 connectors [1].
- 2) Remove the screw [2].
- 3) Free the harness [4] from the clamp [3].
- 4) Remove the 3 screws [5], and detach the reader unit [5].

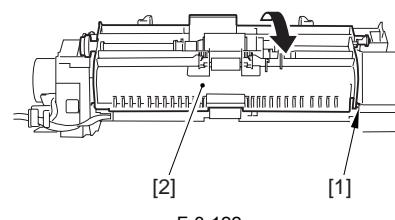


3.2.3.9 Removing the Upper Reader Unit Frame

0010-3787

FAX-L100 / FAX-L120

- 1) Free the claw [1], and detach the upper reader unit frame [2].

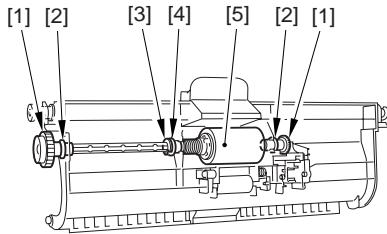


3.2.3.10 Removing the Separation Roller

0010-3778

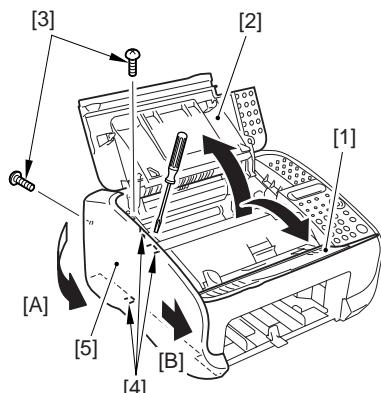
FAX-L100 / FAX-L120

- 1) While freeing the claw, detach the 2 gears [1].
- 2) Detach the 2 bushings [2].
- 3) Remove the E-ring [3], and detach the bushing [4].
- 4) Remove the separation roller [5] together with the shaft.



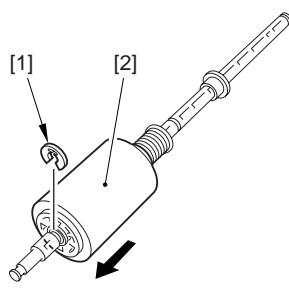
F-3-123

the arrow [A]; then, slide it in the direction of the other arrow [B].



F-3-126

- 5) Remove the E-ring [1], and detach the separation roller [2] from the shaft.



F-3-124

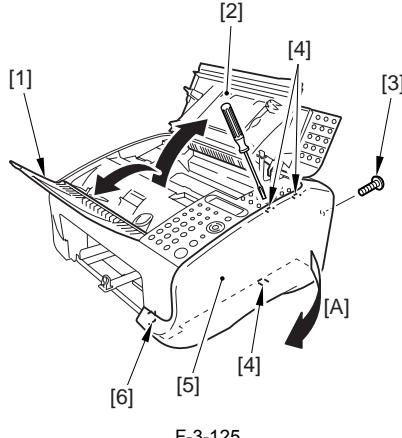
3.2.4 Feed Roller

3.2.4.1 Removing the Right Cover

0010-3698

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].



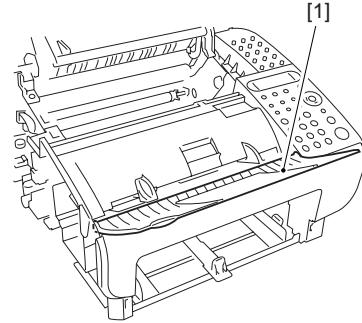
F-3-125

3.2.4.3 Removing the Front Cover

0010-3700

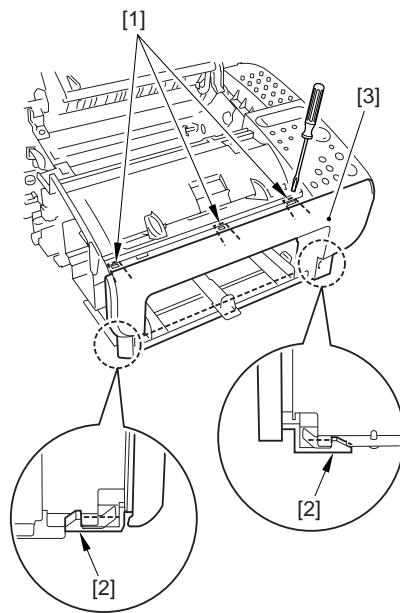
FAX-L100 / FAX-L120

- 1) Wrap the document feeder tray [1] slightly to detach.



F-3-127

- 2) Free the 3 claws [1], and detach the front cover [3] while freeing the other 2 claws [2].



F-3-128

3.2.4.2 Removing the Left Cover

0010-3699

FAX-L100 / FAX-L120

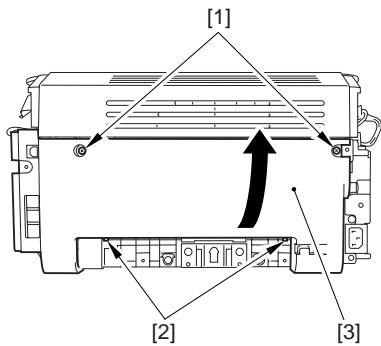
- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of

3.2.4.4 Removing the Rear Cover

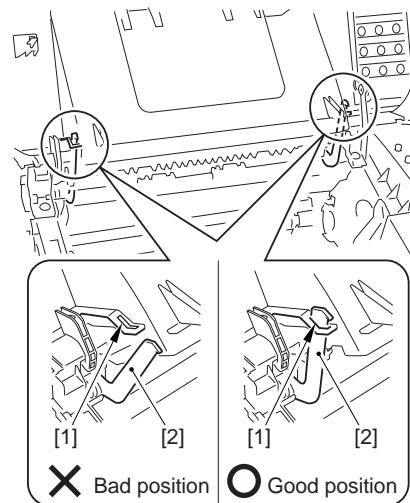
FAX-L100 / FAX-L120

0010-3701

- 1) Remove the 2 screws [1].
- 2) Free the 2 claws [2], and detach the rear cover [3] while sliding it in the direction of the arrow.



F-3-129



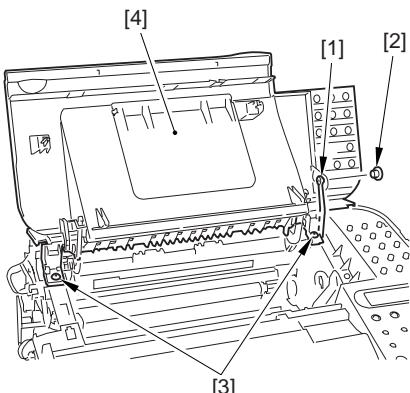
F-3-131

3.2.4.5 Removing the Cartridge Cover

FAX-L100 / FAX-L120

0010-3702

- 1) Free the link stop [2] from the door link [1].
- 2) Remove the 2 screws [3], and detach the cartridge cover [4].



F-3-130



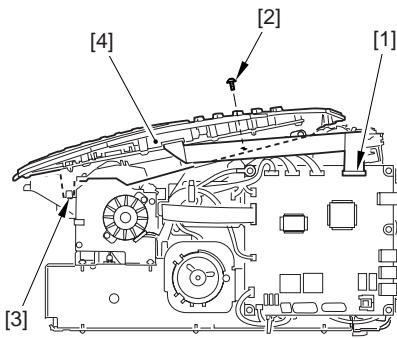
When mounting the cartridge cover, be sure to fit the 2 fixing assembly release hooks [2] in the 2 hook holes [1] found in the cartridge cover.

3.2.4.6 Removing the Operation Panel Unit

0010-3703

FAX-L100 / FAX-L120

- 1) Remove the flat cable [1].
- 2) Remove the screw [2].
- 3) Free the claw [3], and detach the operation panel unit [4].



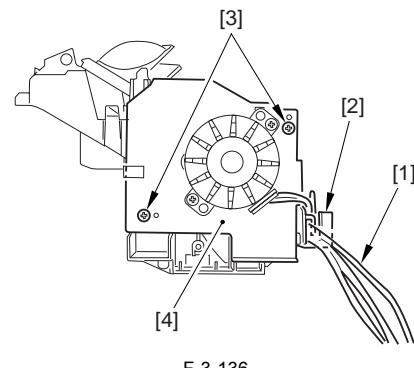
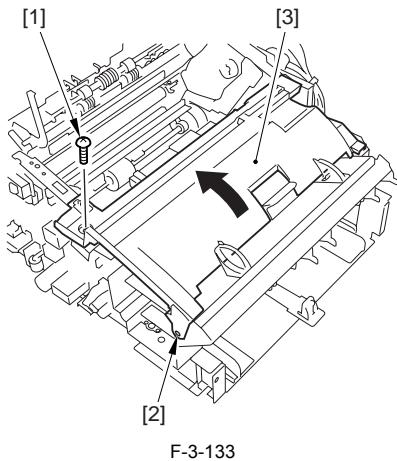
F-3-132

3.2.4.7 Removing the Upper Cover

0010-3704

FAX-L100 / FAX-L120

- 1) Remove the screw [1].
- 2) Free the claw [2], and detach the upper cover [3] in the direction of the arrow.



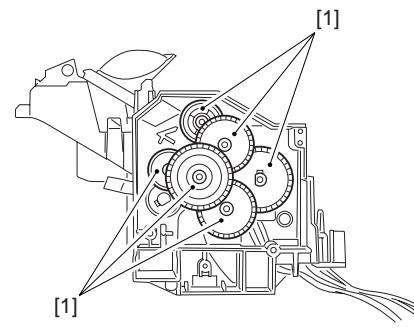
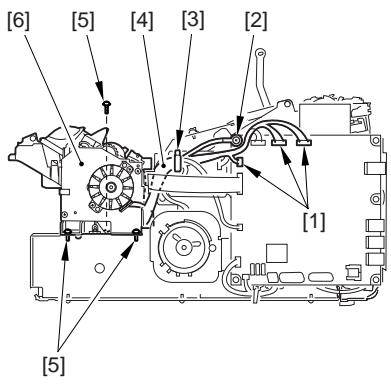
3) Remove the 6 gears [1].

3.2.4.8 Removing the Reader Unit

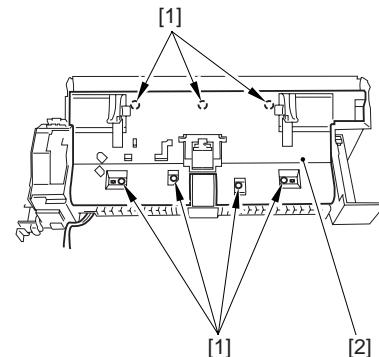
FAX-L100 / FAX-L120

0010-3705

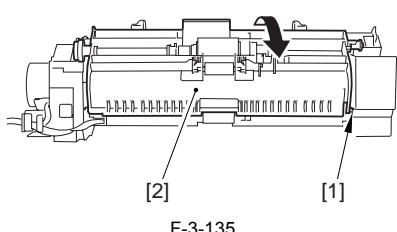
- 1) Disconnect the 3 connectors [1].
- 2) Remove the screw [2].
- 3) Free the harness [4] from the clamp [3].
- 4) Remove the 3 screws [5], and detach the reader unit [6].



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



- 5) Remove the bushing [1].
- 6) Remove the 2 E-rings [2], and detach the 2 bushings [3].
- 7) Remove the document feed roller [4] together with the shaft.

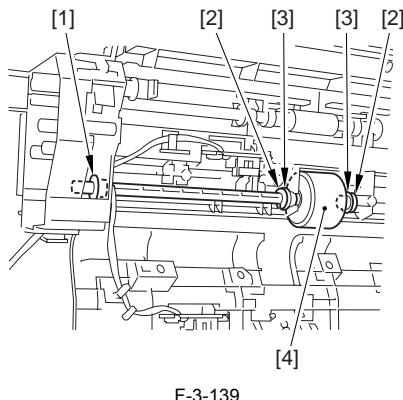


3.2.4.10 Removing the Document Feed Roller

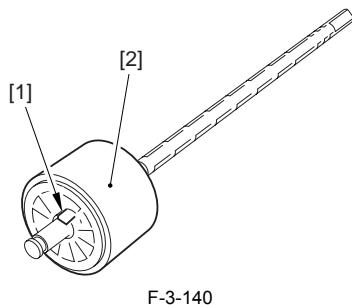
0010-3707

FAX-L100 / FAX-L120

- 1) Free the harness [1] from the cable guide [2].
- 2) Remove the 2 screws [3], and detach the side plate [4].



8) While feeding the claw [1], detach the document feed roller [2].

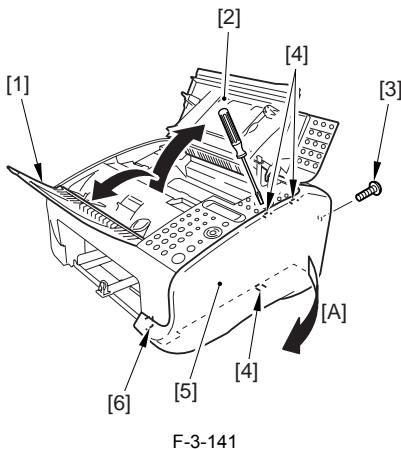


3.2.5 Reader Unit

3.2.5.1 Removing the Right Cover

0010-3599
FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].

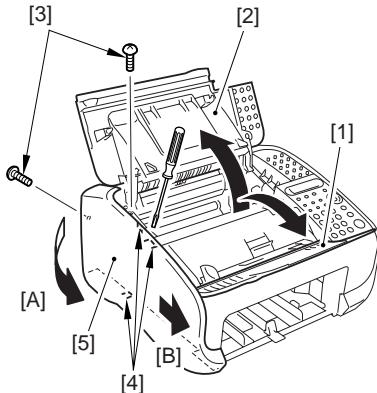


3.2.5.2 Removing the Left Cover

0010-3600
FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of

the arrow [A]; then, slide it in the direction of the other arrow [B].

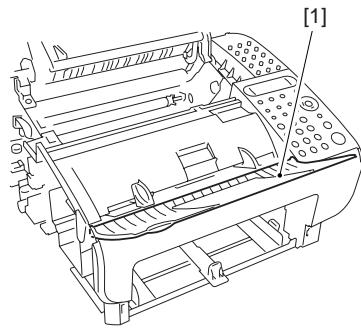


3.2.5.3 Removing the Front Cover

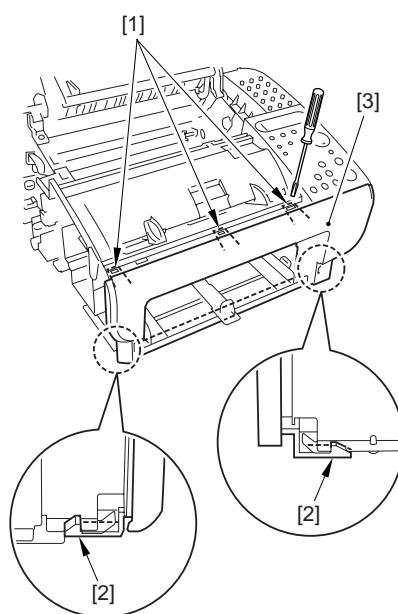
0010-3601

FAX-L100 / FAX-L120

- 1) Wrap the document feeder tray [1] slightly to detach.



- 2) Free the 3 claws [1], and detach the front cover [3] while freeing the other 2 claws [2].

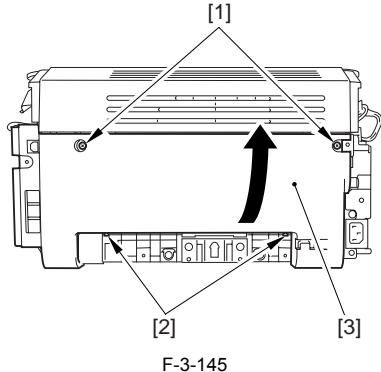


3.2.5.4 Removing the Rear Cover

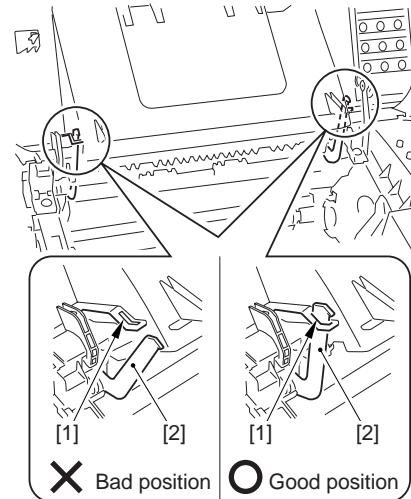
FAX-L100 / FAX-L120

0010-3602

- 1) Remove the 2 screws [1].
- 2) Free the 2 claws [2], and detach the rear cover [3] while sliding it in the direction of the arrow.



F-3-145



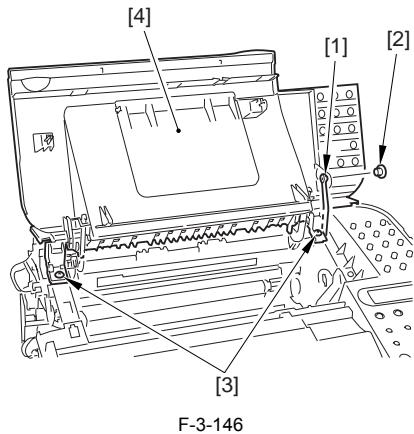
F-3-147

3.2.5.5 Removing the Cartridge Cover

FAX-L100 / FAX-L120

0010-3603

- 1) Free the link stop [2] from the door link [1].
- 2) Remove the 2 screws [3], and detach the cartridge cover [4].



F-3-146



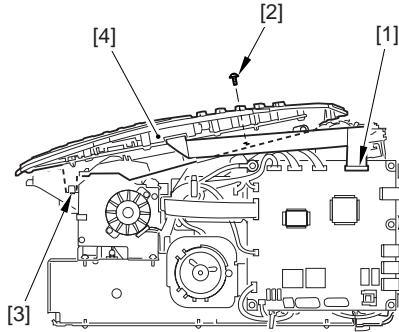
When mounting the cartridge cover, be sure to fit the 2 fixing assembly release hooks [2] in the 2 hook holes [1] found in the cartridge cover.

3.2.5.6 Removing the Operation Panel Unit

FAX-L100 / FAX-L120

0010-3604

- 1) Remove the flat cable [1].
- 2) Remove the screw [2].
- 3) Free the claw [3], and detach the operation panel unit [4].



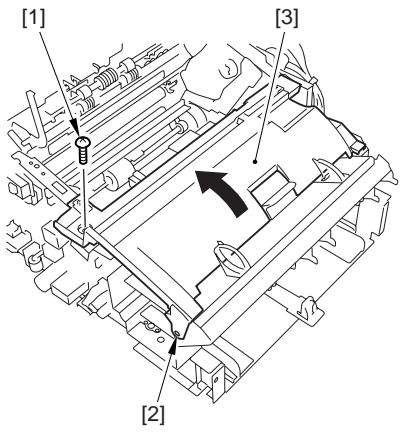
F-3-148

3.2.5.7 Removing the Upper Cover

0010-3605

FAX-L100 / FAX-L120

- 1) Remove the screw [1].
- 2) Free the claw [2], and detach the upper cover [3] in the direction of the arrow.

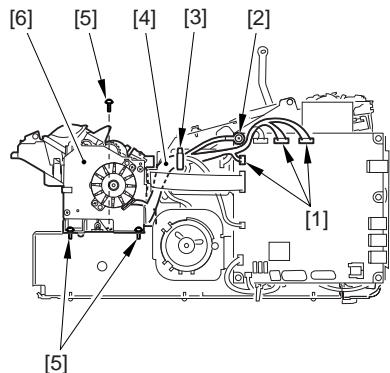


F-3-149

3.2.5.8 Removing the Reader Unit

FAX-L100 / FAX-L120

- 1) Disconnect the 3 connectors [1].
- 2) Remove the screw [2].
- 3) Free the harness [4] from the clamp [3].
- 4) Remove the 3 screws [5], and detach the reader unit [6].



F-3-150

3.2.6 Document Feed Motor

3.2.6.1 Removing the Right Cover

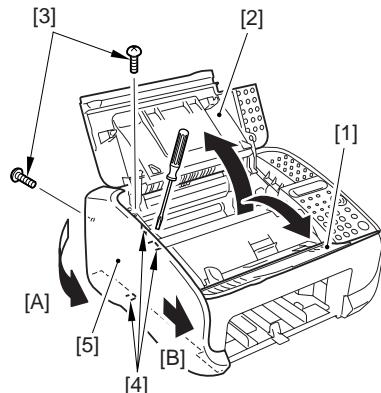
FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].

0010-3606

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of the arrow [A]; then, slide it in the direction of the other arrow [B].



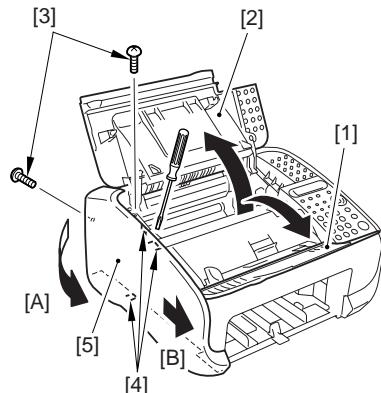
F-3-151

3.2.6.2 Removing the Left Cover

0010-3658

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of the arrow [A]; then, slide it in the direction of the other arrow [B].



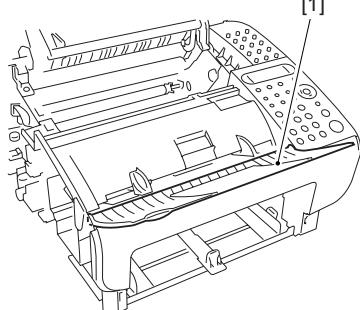
F-3-152

3.2.6.3 Removing the Front Cover

0010-3659

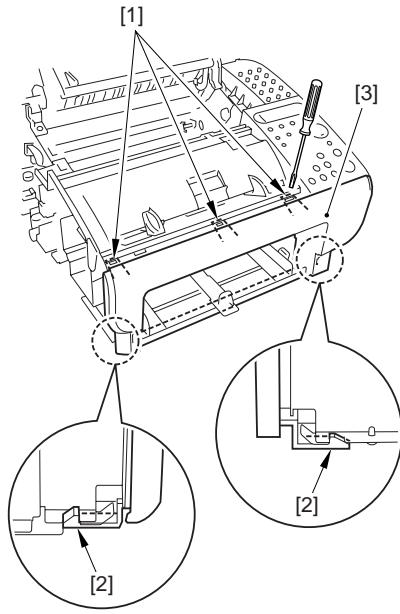
FAX-L100 / FAX-L120

- 1) Wrap the document feeder tray [1] slightly to detach.

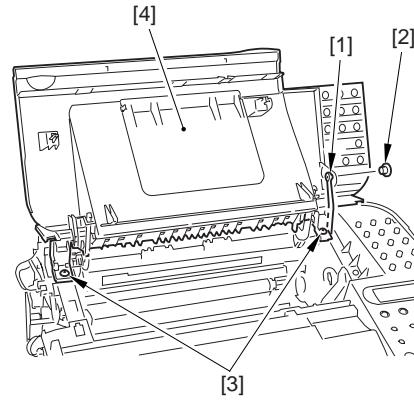


F-3-153

- 2) Free the 3 claws [1], and detach the front cover [3] while freeing the other 2 claws [2].



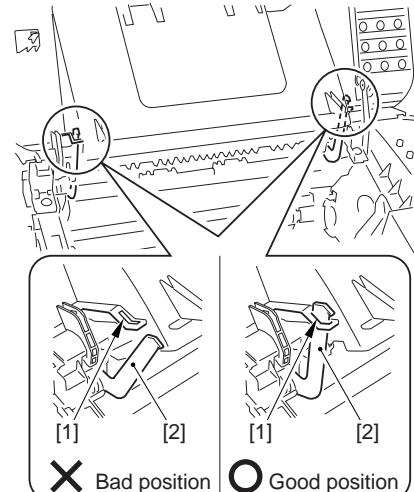
F-3-154



F-3-156



When mounting the cartridge cover, be sure to fit the 2 fixing assembly release hooks [2] in the 2 hook holes [1] found in the cartridge cover.



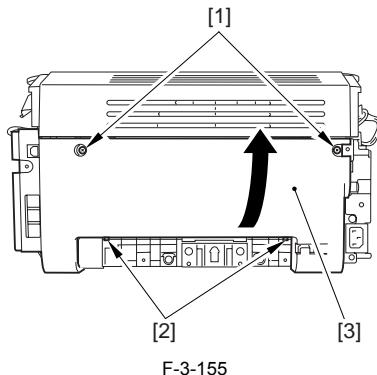
F-3-157

3.2.6.4 Removing the Rear Cover

0010-3660

FAX-L100 / FAX-L120

- 1) Remove the 2 screws [1].
- 2) Free the 2 claws [2], and detach the rear cover [3] while sliding it in the direction of the arrow.



F-3-155

3.2.6.5 Removing the Cartridge Cover

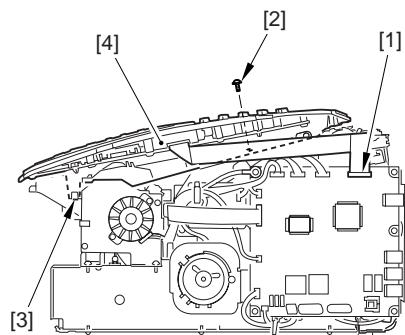
0010-3661

FAX-L100 / FAX-L120

- 1) Free the link stop [2] from the door link [1].
- 2) Remove the 2 screws [3], and detach the cartridge cover [4].

FAX-L100 / FAX-L120

- 1) Remove the flat cable [1].
- 2) Remove the screw [2].
- 3) Free the claw [3], and detach the operation panel unit [4].



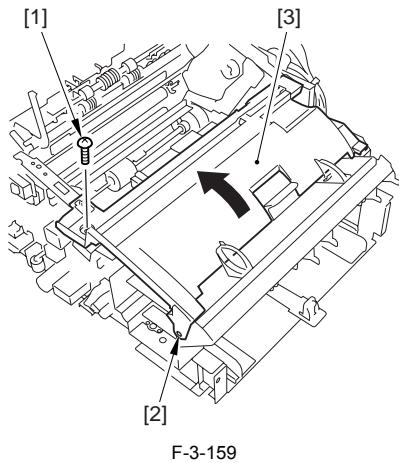
F-3-158

3.2.6.7 Removing the Upper Cover

0010-3663

FAX-L100 / FAX-L120

- 1) Remove the screw [1].
- 2) Free the claw [2], and detach the upper cover [3] in the direction of the arrow.

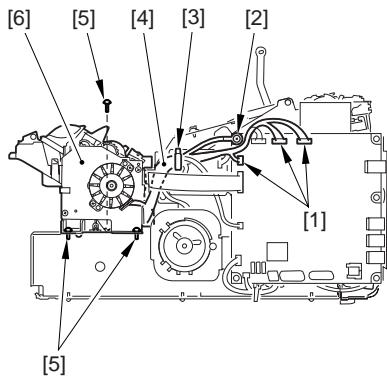


3.2.6.8 Removing the Reader Unit

0010-3664

FAX-L100 / FAX-L120

- 1) Disconnect the 3 connectors [1].
- 2) Remove the screw [2].
- 3) Free the harness [4] from the clamp [3].
- 4) Remove the 3 screws [5], and detach the reader unit [6].

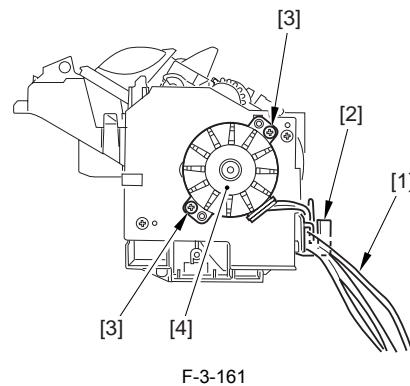


3.2.6.9 Removing the Document Feed Motor

0010-3665

FAX-L100 / FAX-L120

- 1) Free the harness [1] from the cable guide [2].
- 2) Remove the 2 screws [3], and detach the Document feed motor [4].



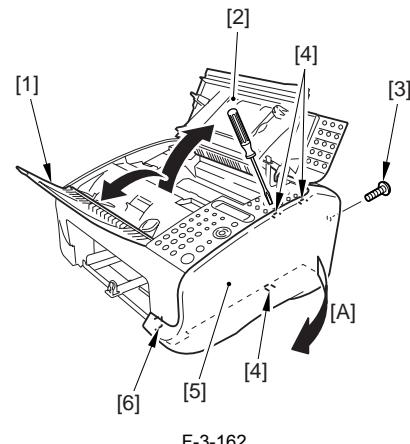
3.2.7 DS/DES Sensor

3.2.7.1 Removing the Right Cover

0010-3735

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].

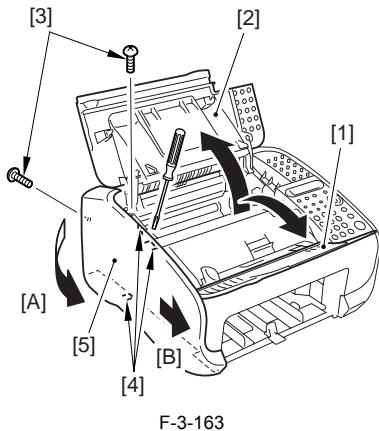


3.2.7.2 Removing the Left Cover

0010-3736

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of the arrow [A]; then, slide it in the direction of the other arrow [B].

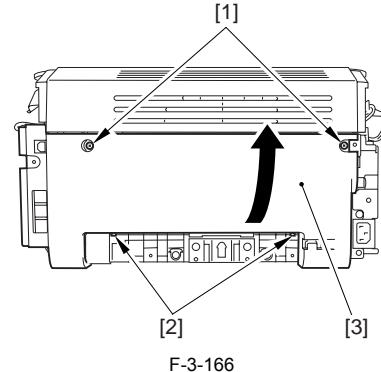


3.2.7.4 Removing the Rear Cover

0010-3738

FAX-L100 / FAX-L120

- 1) Remove the 2 screws [1].
- 2) Free the 2 claws [2], and detach the rear cover [3] while sliding it in the direction of the arrow.

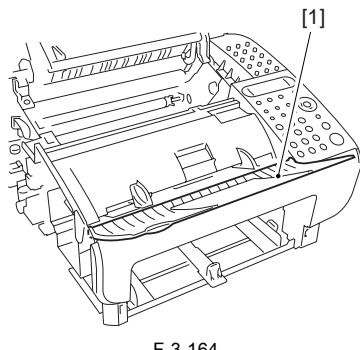


3.2.7.3 Removing the Front Cover

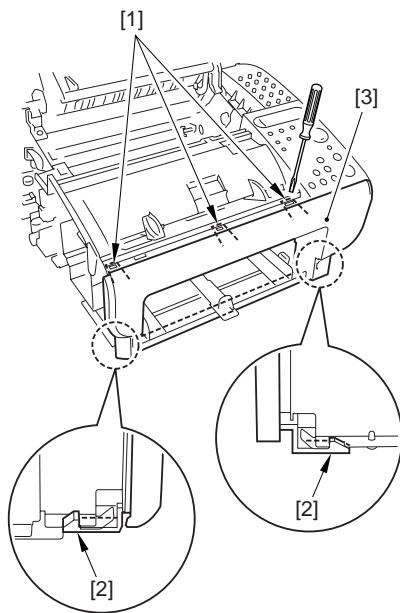
0010-3737

FAX-L100 / FAX-L120

- 1) Wrap the document feeder tray [1] slightly to detach.



- 2) Free the 3 claws [1], and detach the front cover [3] while freeing the other 2 claws [2].

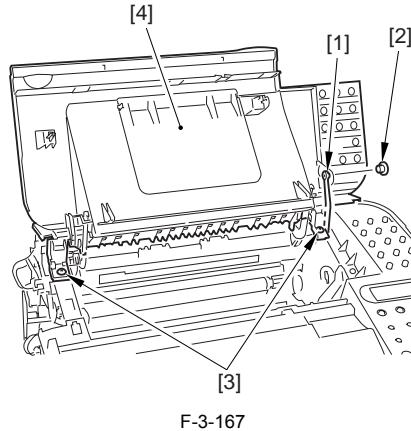


3.2.7.5 Removing the Cartridge Cover

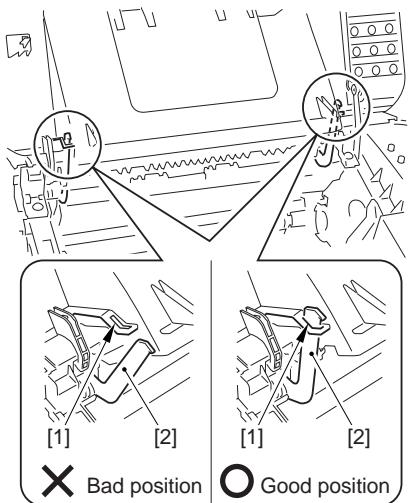
0010-3740

FAX-L100 / FAX-L120

- 1) Free the link stop [2] from the door link [1].
- 2) Remove the 2 screws [3], and detach the cartridge cover [4].



When mounting the cartridge cover, be sure to fit the 2 fixing assembly release hooks [2] in the 2 hook holes [1] found in the cartridge cover.



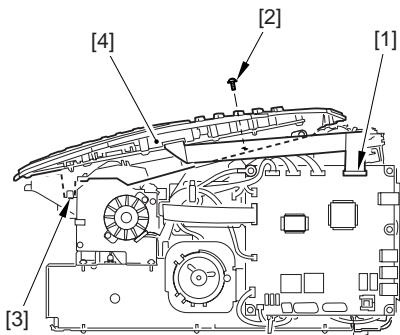
F-3-168

3.2.7.6 Removing the Operation Panel Unit

FAX-L100 / FAX-L120

[0010-3741](#)

- 1) Remove the flat cable [1].
- 2) Remove the screw [2].
- 3) Free the claw [3], and detach the operation panel unit [4].



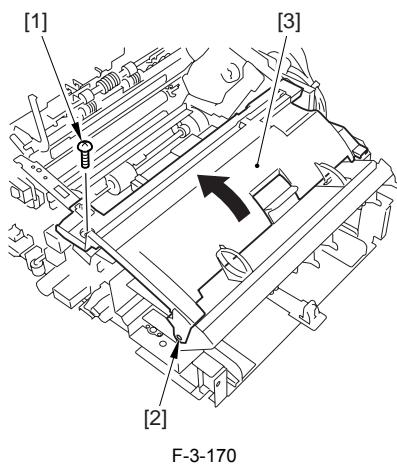
F-3-169

3.2.7.7 Removing the Upper Cover

FAX-L100 / FAX-L120

[0010-3742](#)

- 1) Remove the screw [1].
- 2) Free the claw [2], and detach the upper cover [3] in the direction of the arrow.



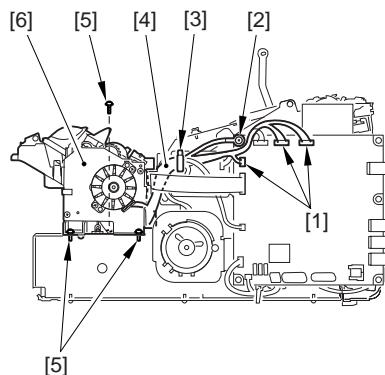
F-3-170

3.2.7.8 Removing the Reader Unit

[0010-3743](#)

FAX-L100 / FAX-L120

- 1) Disconnect the 3 connectors [1].
- 2) Remove the screw [2].
- 3) Free the harness [4] from the clamp [3].
- 4) Remove the 3 screws [5], and detach the reader unit [6].



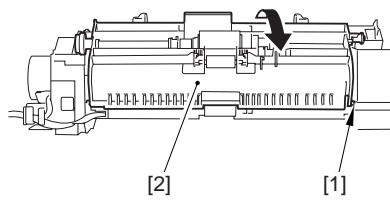
F-3-171

3.2.7.9 Removing the Upper Reader Unit Frame

[0010-3790](#)

FAX-L100 / FAX-L120

- 1) Free the claw [1], and detach the upper reader unit frame [2] in the direction of the arrow.



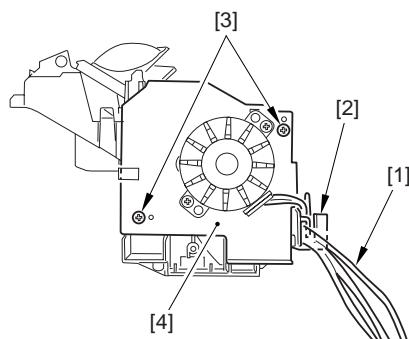
F-3-172

3.2.7.10 Removing the DS/DES Sensor

[0010-3745](#)

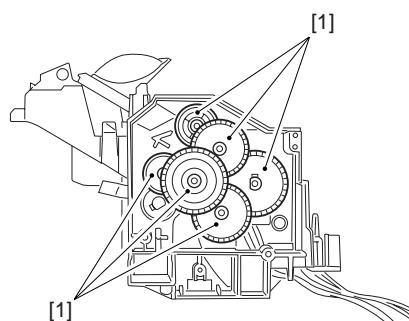
FAX-L100 / FAX-L120

- 1) Free the harness [1] from the cable guide [2].
- 2) Remove the 2 screws [3], and detach the side plate [4].



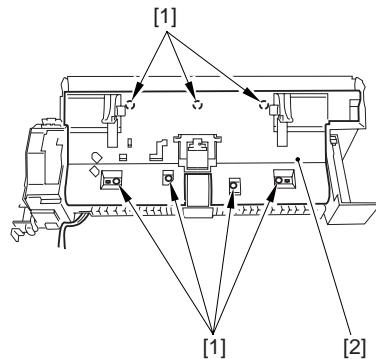
F-3-173

3) Remove the 6 gears [1].



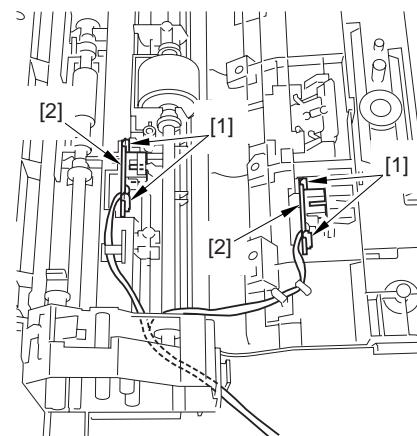
F-3-174

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



F-3-175

5) Free the 4 claws [1], and detach the DS/DES sensor [2].



F-3-176

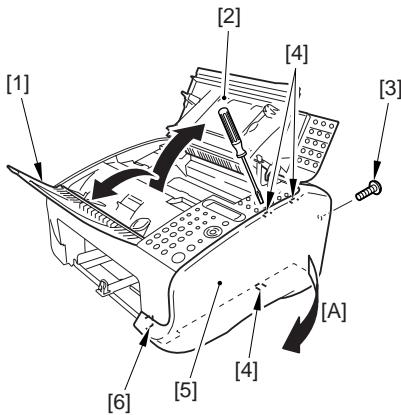
3.3 LASER EXPOSURE SYSTEM

3.3.1 Laser/Scanner Unit

3.3.1.1 Removing the Right Cover

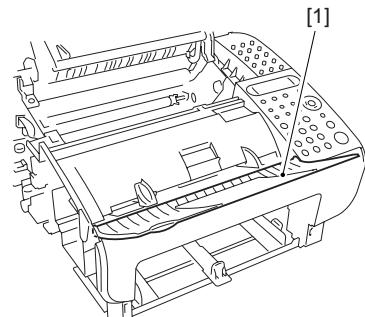
FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].



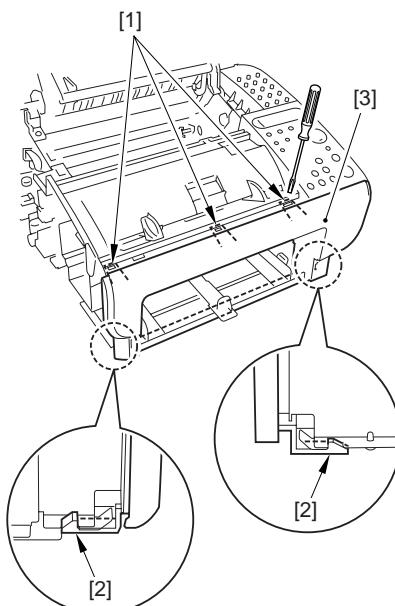
F-3-177

0010-3612



F-3-179

- 2) Free the 3 claws [1], and detach the front cover [3] while freeing the other 2 claws [2].

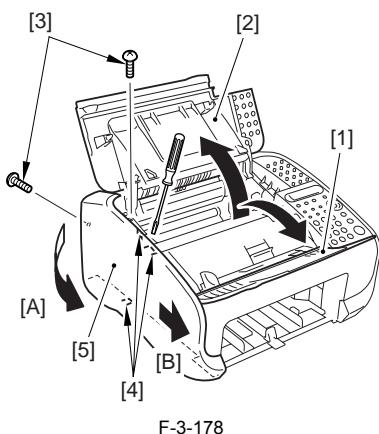


F-3-180

3.3.1.2 Removing the Left Cover

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of the arrow [A]; then, slide it in the direction of the other arrow [B].



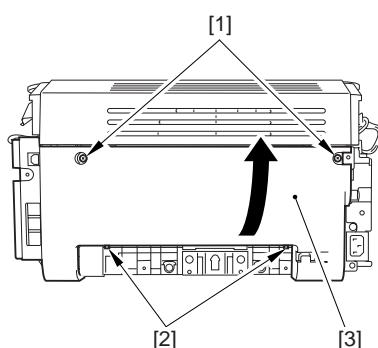
F-3-178

0010-3613

3.3.1.4 Removing the Rear Cover

FAX-L100 / FAX-L120

- 1) Remove the 2 screws [1].
- 2) Free the 2 claws [2], and detach the rear cover [3] while sliding it in the direction of the arrow.



F-3-181

3.3.1.3 Removing the Front Cover

0010-3614

FAX-L100 / FAX-L120

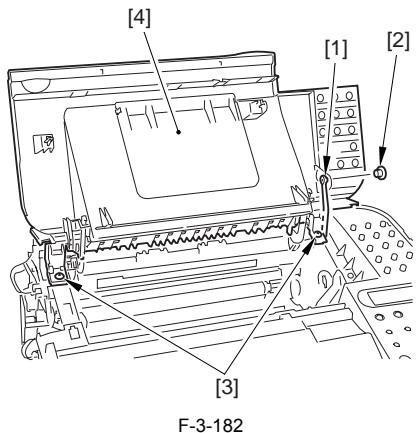
- 1) Wrap the document feeder tray [1] slightly to detach.

3.3.1.5 Removing the Cartridge Cover

0010-3616

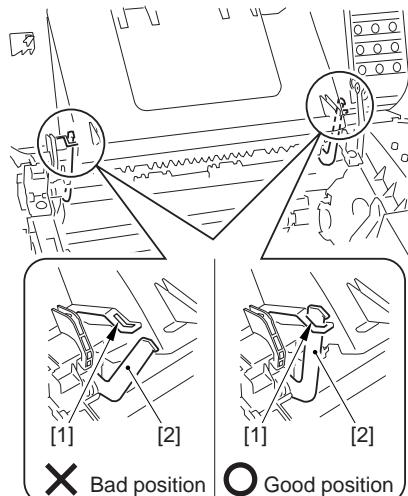
FAX-L100 / FAX-L120

- 1) Free the link stop [2] from the door link [1].
- 2) Remove the 2 screws [3], and detach the cartridge cover [4].



F-3-182

⚠
When mounting the cartridge cover, be sure to fit the 2 fixing assembly release hooks [2] in the 2 hook holes [1] found in the cartridge cover.



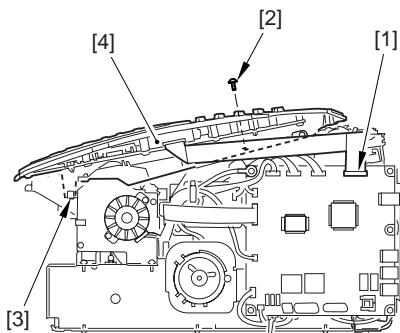
F-3-183

3.3.1.6 Removing the Operation Panel Unit

0010-3617

FAX-L100 / FAX-L120

- 1) Remove the flat cable [1].
- 2) Remove the screw [2].
- 3) Free the claw [3], and detach the operation panel unit [4].



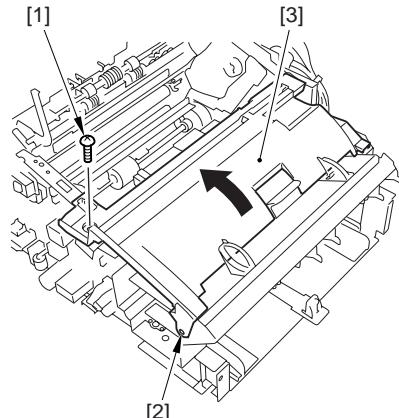
F-3-184

3.3.1.7 Removing the Upper Cover

0010-3618

FAX-L100 / FAX-L120

- 1) Remove the screw [1].
- 2) Free the claw [2], and detach the upper cover [3] in the direction of the arrow.



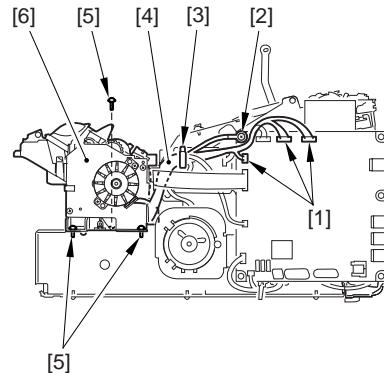
F-3-185

3.3.1.8 Removing the Reader Unit

0010-3619

FAX-L100 / FAX-L120

- 1) Disconnect the 3 connectors [1].
- 2) Remove the screw [2].
- 3) Free the harness [4] from the clamp [3].
- 4) Remove the 3 screws [5], and detach the reader unit [5].



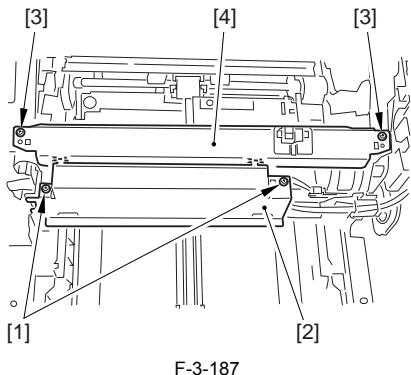
F-3-186

3.3.1.9 Removing the DCNT board

0010-3620

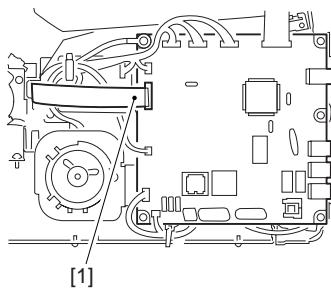
FAX-L100 / FAX-L120

- 1) Remove the 2 screws [1], and detach the DCNT cover 1 [2].
- 2) Remove the 2 screws [3], and detach the DCNT cover 2 [4].



F-3-187

3) Remove the flat cable [1].

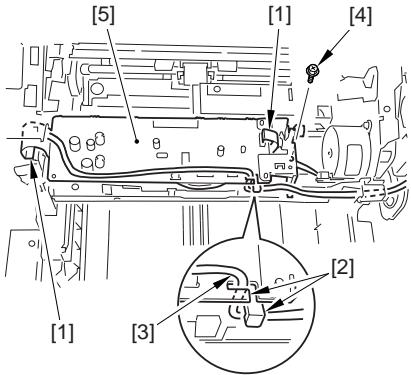


F-3-188

4) Remove the 2 flat cables [1].

5) Free the harness [3] from the guide [2].

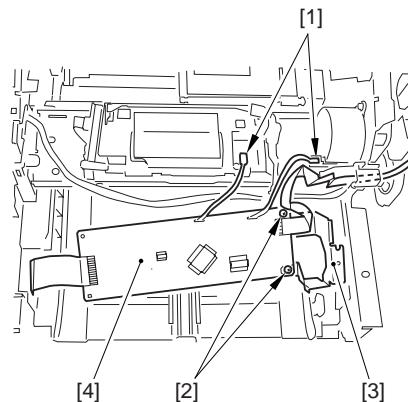
6) Remove the screw [4], and turn over the DCNT board [5].



F-3-189

7) Disconnect the 2 connectors [1].

8) Remove the 2 screws [2], and detach the DCNT board [4] from the plate [3].



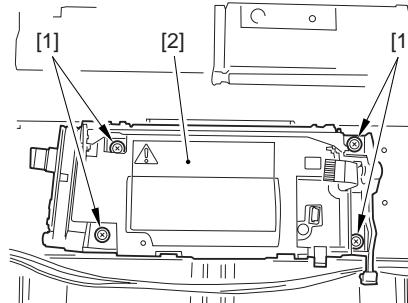
F-3-190

3.3.1.10 Removing the Laser/Scanner Unit

0010-3621

FAX-L100 / FAX-L120

1) Remove the 4 screws [1], and detach the Laser/Scanner unit [2].



F-3-191

3.4 IMAGE FORMATION SYSTEM

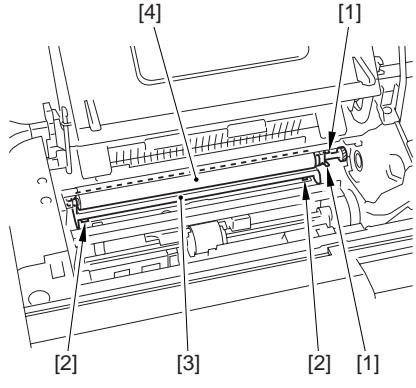
3.4.1 Transfer Charging Roller

3.4.1.1 Removing the Transfer Charging Roller

0010-3393

FAX-L100 / FAX-L120

- 1) Open the document feeder tray.
- 2) Open the cartridge cover.
- 3) Free the 2 claws [1] of the Transfer charging roller.
- 4) Free the 2 claws [2] of the Transfer guide.
- 5) Detach the Transfer charging roller [4] together with the transfer guide [3].
- 6) Detach the Transfer charging roller [4] from the transfer guide [3].



F-3-192



When removing the transfer roller from the machine, free its right side ([1] in the figure), and pull it out toward the right.

3.5 PICKUP AND FEEDING SYSTEM

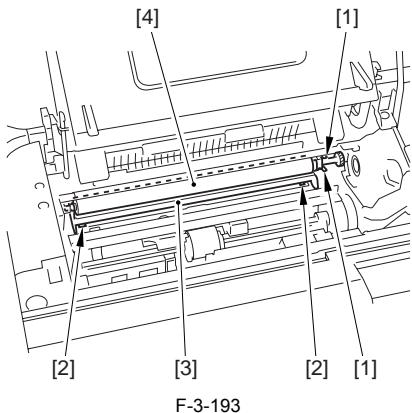
3.5.1 Pickup Unit

3.5.1.1 Removing the Transfer Charging Roller

FAX-L100 / FAX-L120

0010-3538

- 1) Open the document feeder tray.
- 2) Open the cartridge cover.
- 3) Free the 2 claws [1] of the Transfer charging roller.
- 4) Free the 2 claws [2] of the Transfer guide.
- 5) Detach the Transfer charging roller [4] together with the transfer guide [3].
- 6) Detach the Transfer charging roller [4] from the transfer guide [3].



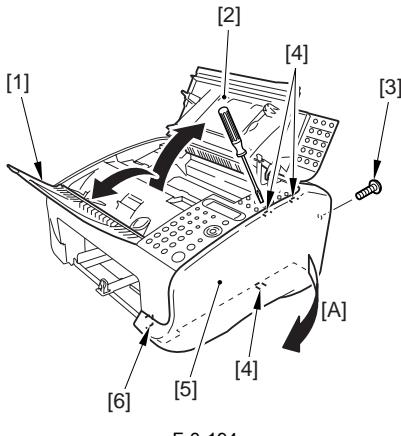
When removing the transfer roller from the machine, free its right side ([1] in the figure), and pull it out toward the right.

3.5.1.2 Removing the Right Cover

FAX-L100 / FAX-L120

0010-3537

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].

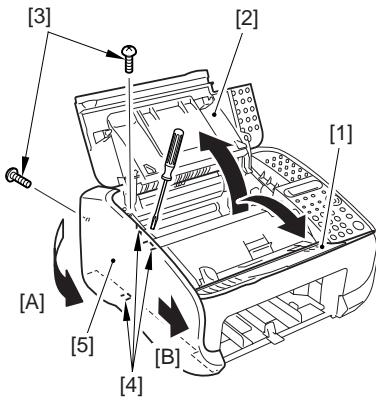


3.5.1.3 Removing the Left Cover

0010-3539

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of the arrow [A]; then, slide it in the direction of the other arrow [B].

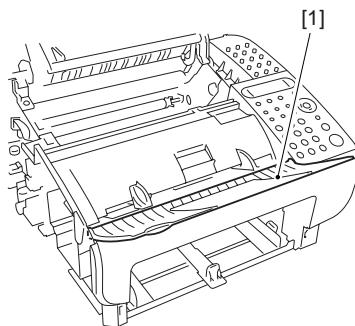


3.5.1.4 Removing the Front Cover

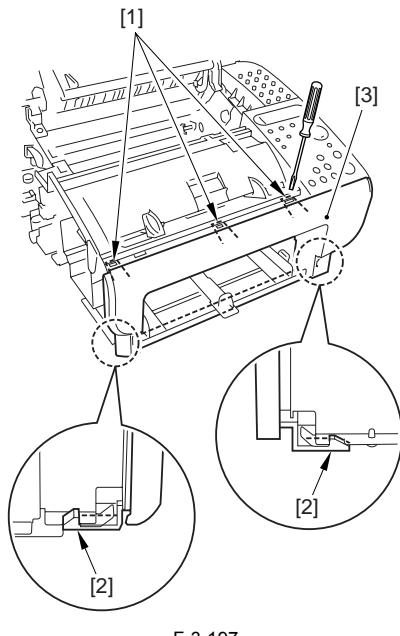
0010-3540

FAX-L100 / FAX-L120

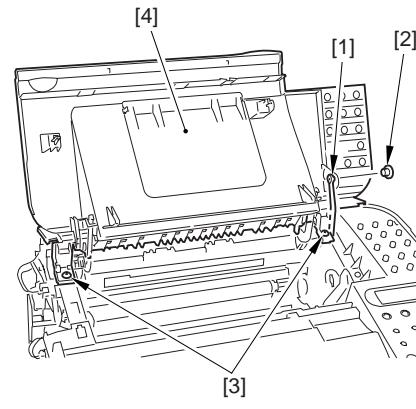
- 1) Wrap the document feeder tray [1] slightly to detach.



- 2) Free the 3 claws [1], and detach the front cover [3] while freeing the other 2 claws [2].



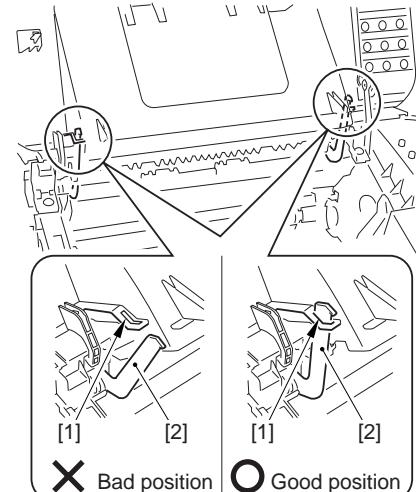
F-3-197



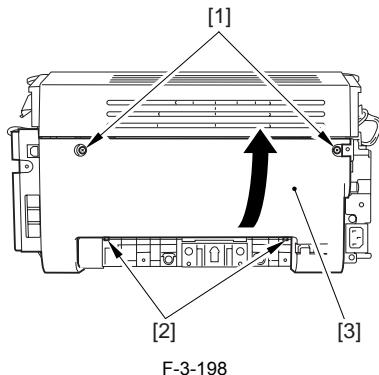
F-3-199



When mounting the cartridge cover, be sure to fit the 2 fixing assembly release hooks [2] in the 2 hook holes [1] found in the cartridge cover.



F-3-200



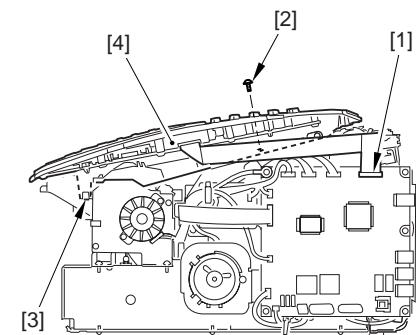
F-3-198

3.5.1.6 Removing the Cartridge Cover

0010-3545

FAX-L100 / FAX-L120

- 1) Free the link stop [2] from the door link [1].
- 2) Remove the 2 screws [3], and detach the cartridge cover [4].



F-3-201

3.5.1.7 Removing the Operation Panel Unit

0010-3547

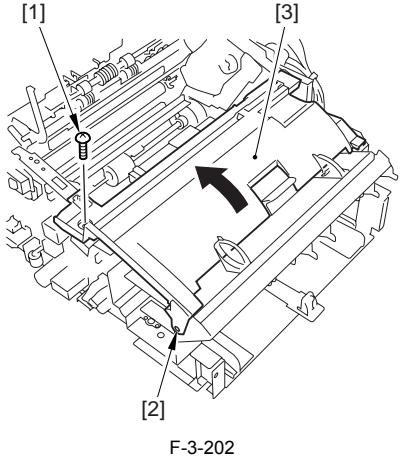
FAX-L100 / FAX-L120

- 1) Remove the flat cable [1].
- 2) Remove the screw [2].
- 3) Free the claw [3], and detach the operation panel unit [4].

3.5.1.8 Removing the Upper Cover

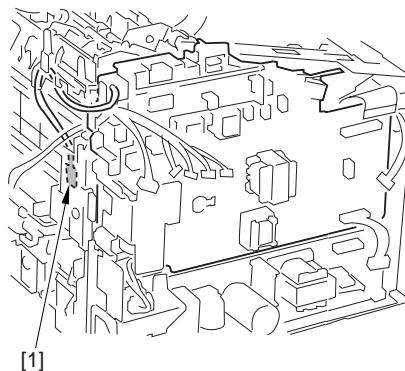
FAX-L100 / FAX-L120

- 1) Remove the screw [1].
- 2) Free the claw [2], and detach the upper cover [3] in the direction of the arrow.



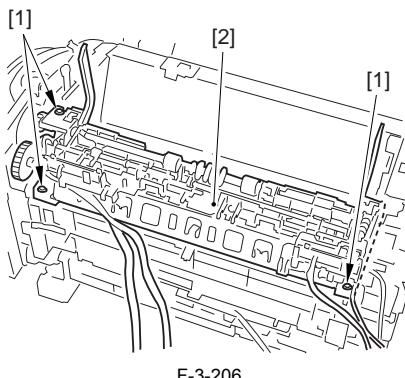
0010-3549

- 3) Disconnect the connector [1].



F-3-205

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

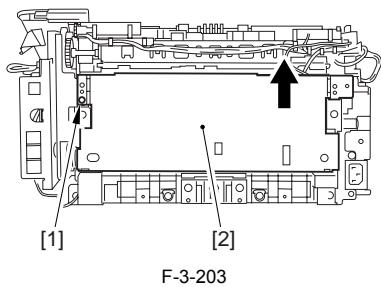


3.5.1.9 Removing the Rear Plate

FAX-L100 / FAX-L120

0010-3550

- 1) Remove the screw [1], and detach the rear plate [2] in the direction of the arrow.



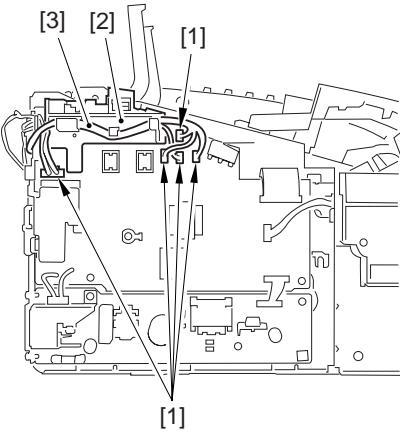
F-3-203

3.5.1.10 Removing the Fixing Assembly

FAX-L100 / FAX-L120

0010-3553

- 1) Disconnect the 5 connectors [1].
- 2) Free the harness [3] from the cable guide [2].



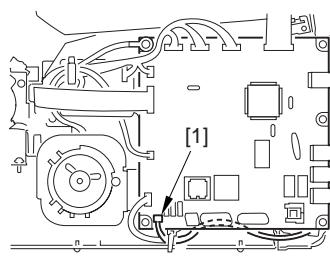
F-3-204

3.5.1.11 Removing the Pickup Assembly

0010-3555

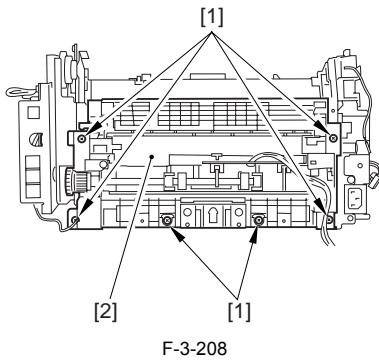
FAX-L100 / FAX-L120

- 1) Disconnect the connector [1].



F-3-207

- 2) Remove the 6 screws [1], and detach the Pickup assembly [2].



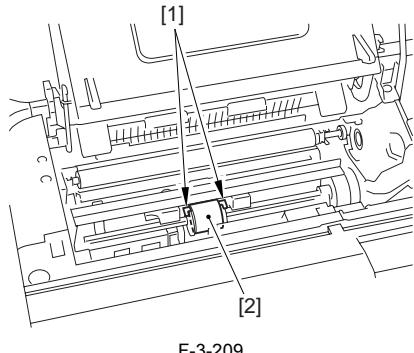
3.5.2 Cassette Pickup Roller

3.5.2.1 Removing the Pickup Roller

0010-3387

FAX-L100 / FAX-L120

- 1) Open the document feeder tray.
- 2) Open the cartridge cover.
- 3) While picking the 2 claws [1], detach the pickup roller [2].



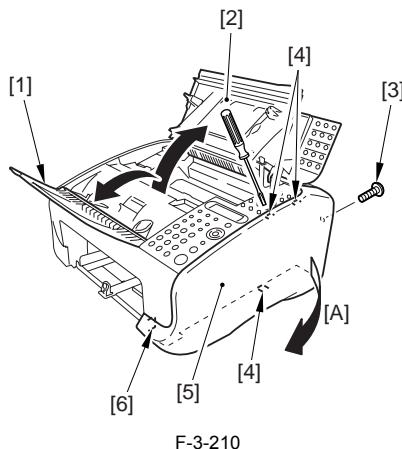
3.5.3 Cassette Pickup Solenoid

3.5.3.1 Removing the Right Cover

0010-3390

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].

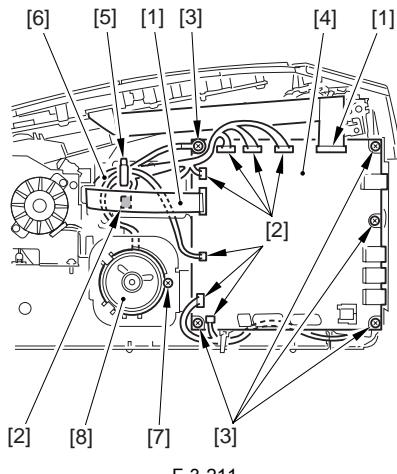


3.5.3.2 Removing the Pickup Solenoid

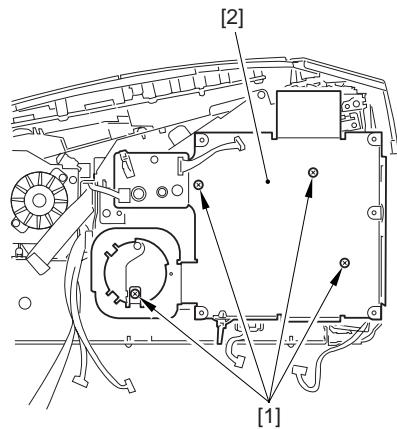
0010-3391

FAX-L100 / FAX-L120

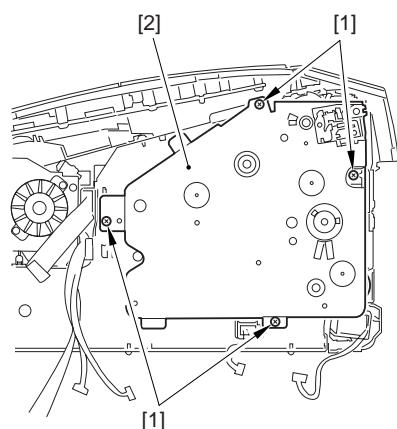
- 1) Remove the 2 flat cables [1].
- 2) Disconnect the 8 connectors [2].
- 3) Remove the 5 screws [3], and detach the SCNT board [4].
- 4) Free the harness [6] from the clamp [5].
- 5) Remove the screw [7], and detach the Speaker [8].



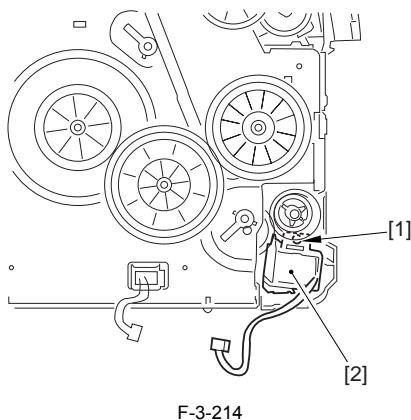
- 6) Remove the 4 screws [1], and detach the side plate [2].



- 7) Remove the 4 screws [1], and detach the gear side plate [2].



- 8) Remove the screw [1], and detach the Pickup solenoid [2].

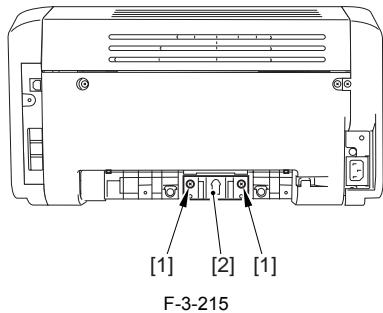


3.5.4 Cassette Separation Pad

3.5.4.1 Removing the Separation Pad

FAX-L100 / FAX-L120

- 1) Remove the 2 screws [1], and detach the Separation pad [2].

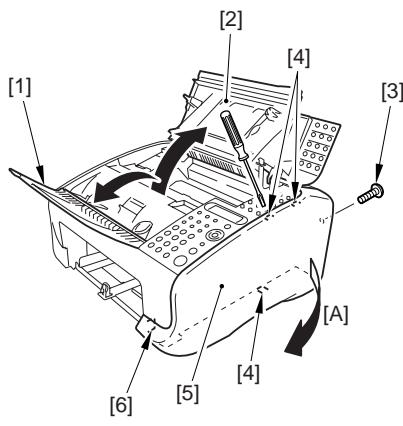


3.5.5 Main Motor

3.5.5.1 Removing the Right Cover

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].

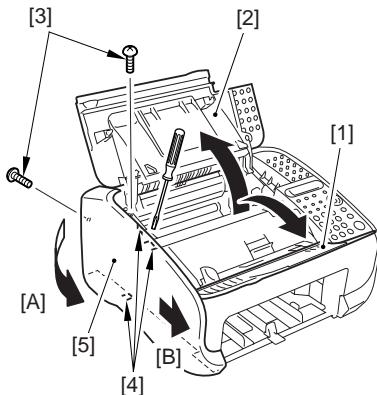


3.5.5.2 Removing the Left Cover

0010-3624

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of the arrow [A]; then, slide it in the direction of the other arrow [B].

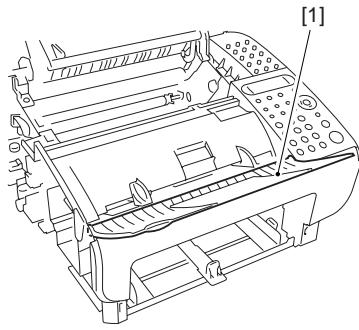


3.5.5.3 Removing the Front Cover

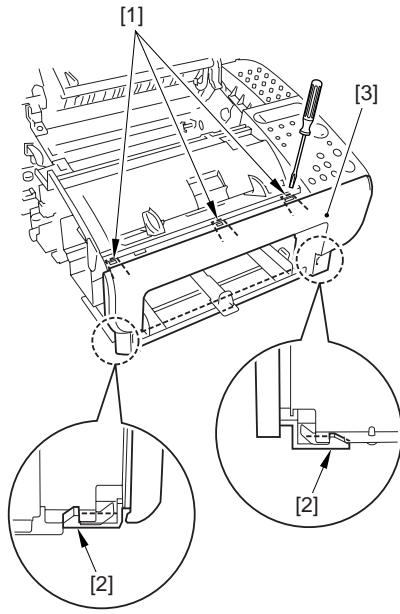
0010-3625

FAX-L100 / FAX-L120

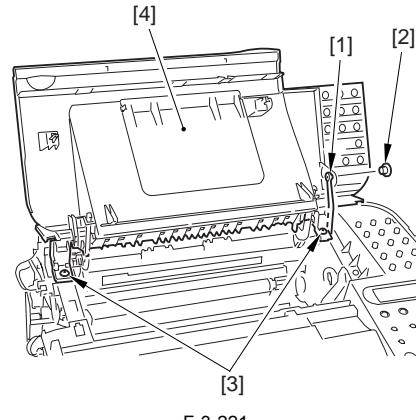
- 1) Wrap the document feeder tray [1] slightly to detach.



- 2) Free the 3 claws [1], and detach the front cover [3] while freeing the other 2 claws [2].



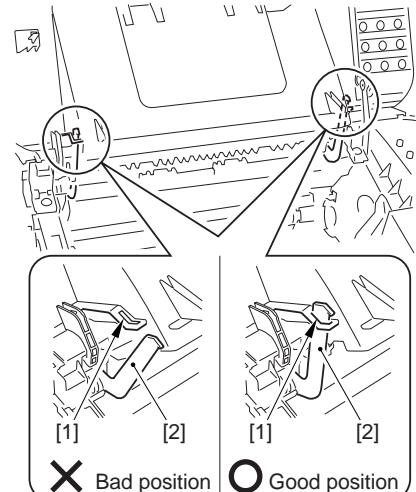
F-3-219



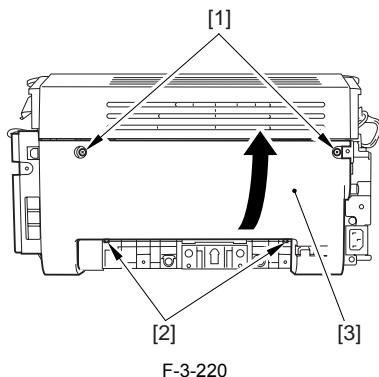
F-3-221



When mounting the cartridge cover, be sure to fit the 2 fixing assembly release hooks [2] in the 2 hook holes [1] found in the cartridge cover.



F-3-222



F-3-220

3.5.5.4 Removing the Rear Cover

0010-3626

FAX-L100 / FAX-L120

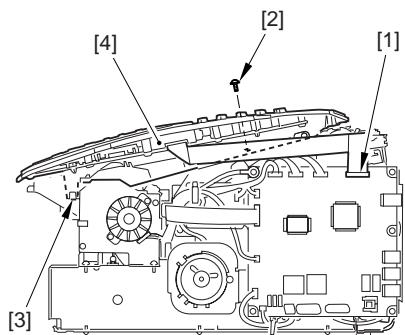
- 1) Remove the 2 screws [1].
- 2) Free the 2 claws [2], and detach the rear cover [3] while sliding it in the direction of the arrow.

3.5.5.6 Removing the Operation Panel Unit

0010-3628

FAX-L100 / FAX-L120

- 1) Remove the flat cable [1].
- 2) Remove the screw [2].
- 3) Free the claw [3], and detach the operation panel unit [4].



F-3-223

FAX-L100 / FAX-L120

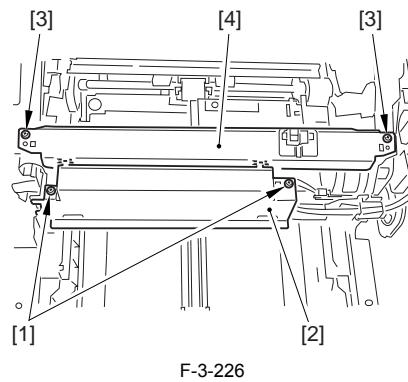
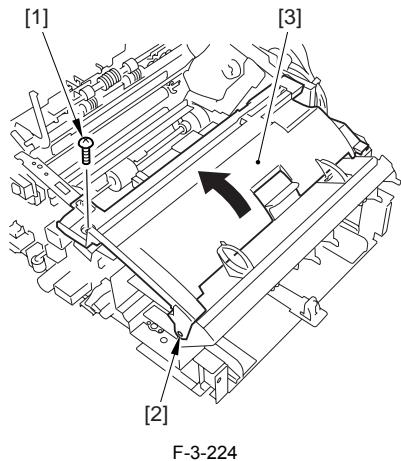
- 1) Free the link stop [2] from the door link [1].
- 2) Remove the 2 screws [3], and detach the cartridge cover [4].

3.5.5.7 Removing the Upper Cover

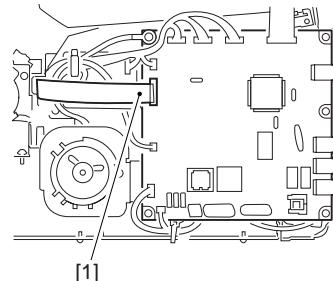
FAX-L100 / FAX-L120

0010-3629

- 1) Remove the screw [1].
- 2) Free the claw [2], and detach the upper cover [3] in the direction of the arrow.



- 3) Remove the flat cable [1].

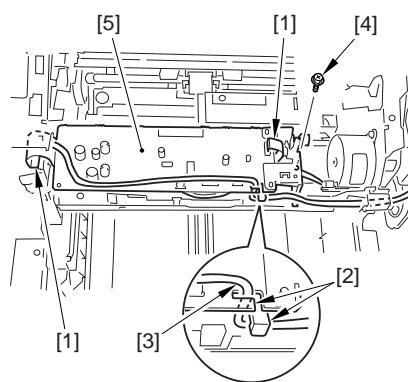
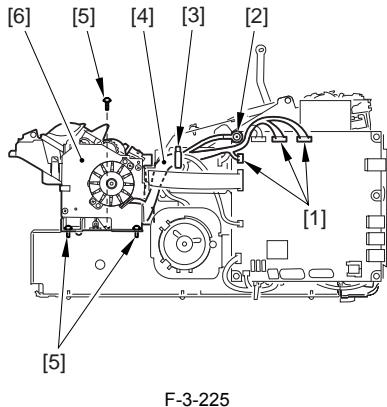


3.5.5.8 Removing the Reader Unit

FAX-L100 / FAX-L120

0010-3630

- 1) Disconnect the 3 connectors [1].
- 2) Remove the screw [2].
- 3) Free the harness [4] from the clamp [3].
- 4) Remove the 3 screws [5], and detach the reader unit [6].



- 4) Remove the 2 flat cables [1].
- 5) Free the harness [3] from the guide [2].
- 6) Remove the screw [4], and turn over the DCNT board [5].

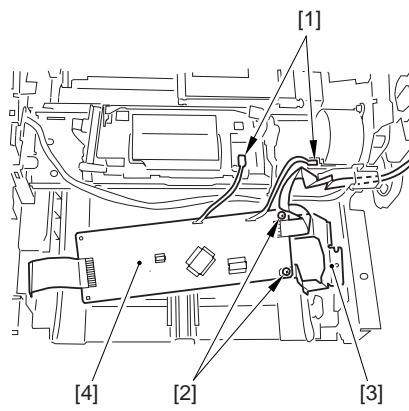
3.5.5.9 Removing the DCNT board

0010-3631

FAX-L100 / FAX-L120

- 1) Remove the 2 screws [1], and detach the DCNT cover 1 [2].
- 2) Remove the 2 screws [3], and detach the DCNT cover 2 [4].

- 7) Disconnect the 2 connectors [1].
- 8) Remove the 2 screws [2], and detach the DCNT board [4] from the plate [3].



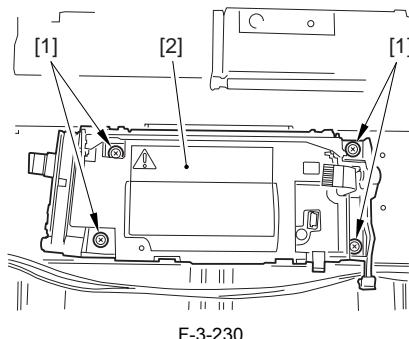
F-3-229

3.5.5.10 Removing the Laser/Scanner Unit

0010-3632

FAX-L100 / FAX-L120

- 1) Remove the 4 screws [1], and detach the Laser/Scanner unit [2].



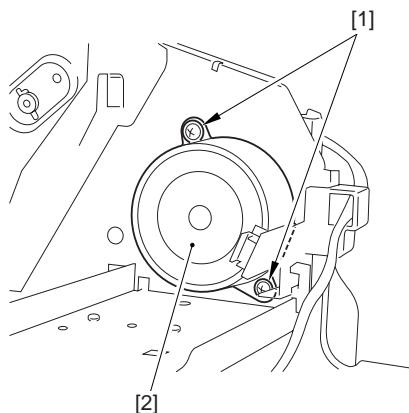
F-3-230

3.5.5.11 Removing the Main Motor

0010-3633

FAX-L100 / FAX-L120

- 1) Remove the 2 screws [1], and detach the Main motor [2].



F-3-231

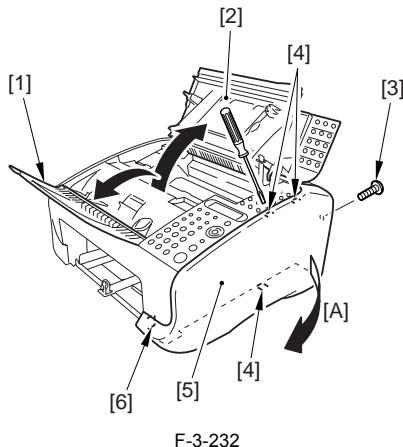
3.6 FIXING SYSTEM

3.6.1 Fixing Unit

3.6.1.1 Removing the Right Cover

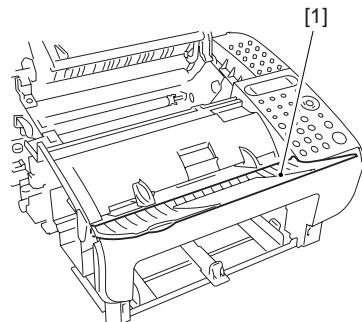
FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].



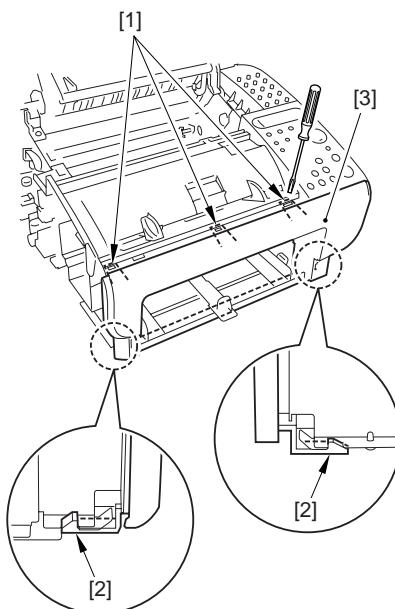
F-3-232

0010-3486



F-3-234

- 2) Free the 3 claws [1], and detach the front cover [3] while freeing the other 2 claws [2].



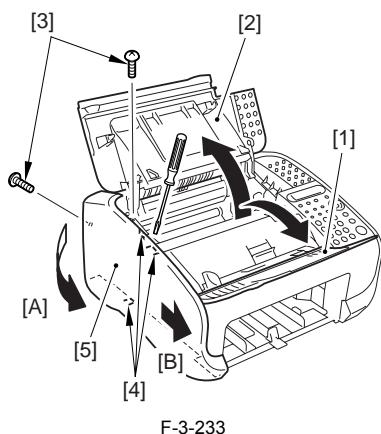
F-3-235

3.6.1.2 Removing the Left Cover

FAX-L100 / FAX-L120

0010-3487

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of the arrow [A]; then, slide it in the direction of the other arrow [B].



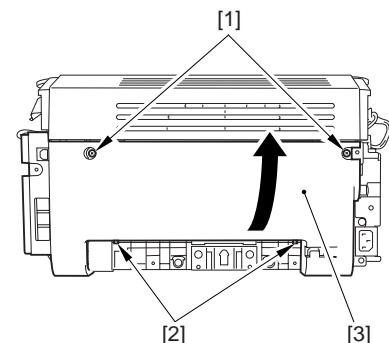
F-3-233

3.6.1.3 Removing the Front Cover

0010-3488

FAX-L100 / FAX-L120

- 1) Wrap the document feeder tray [1] slightly to detach.



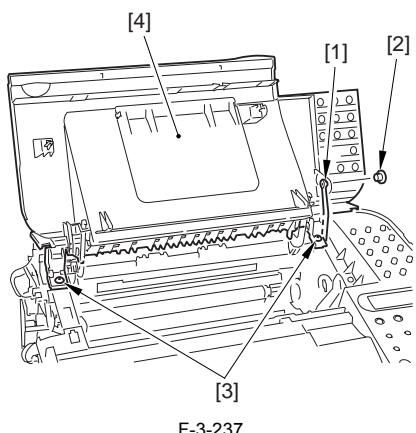
F-3-236

3.6.1.5 Removing the Cartridge Cover

0010-3490

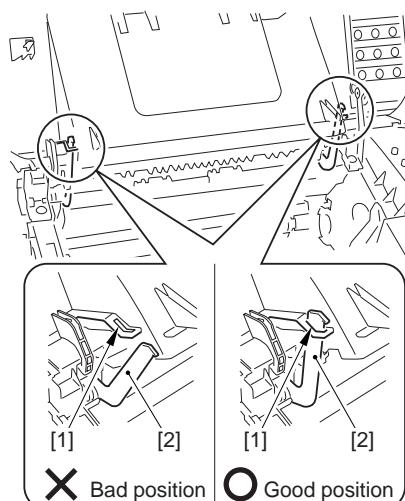
FAX-L100 / FAX-L120

- 1) Free the link stop [2] from the door link [1].
- 2) Remove the 2 screws [3], and detach the cartridge cover [4].



F-3-237

⚠
When mounting the cartridge cover, be sure to fit the 2 fixing assembly release hooks [2] in the 2 hook holes [1] found in the cartridge cover.



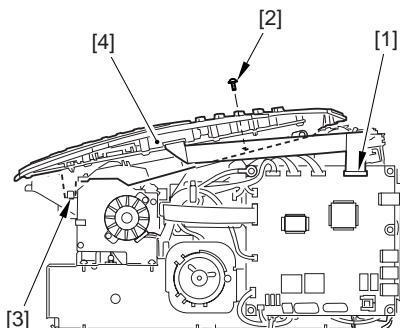
F-3-238

3.6.1.6 Removing the Operation Panel Unit

0010-3491

FAX-L100 / FAX-L120

- 1) Remove the flat cable [1].
- 2) Remove the screw [2].
- 3) Free the claw [3], and detach the operation panel unit [4].



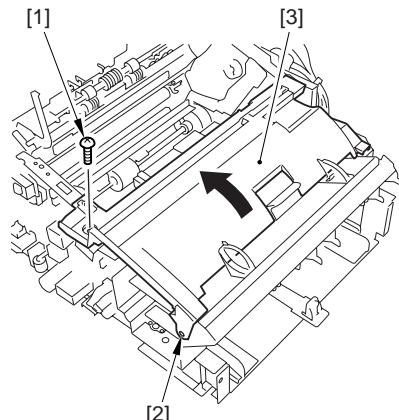
F-3-239

3.6.1.7 Removing the Upper Cover

0010-3492

FAX-L100 / FAX-L120

- 1) Remove the screw [1].
- 2) Free the claw [2], and detach the upper cover [3] in the direction of the arrow.



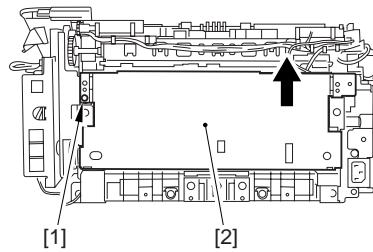
F-3-240

3.6.1.8 Removing the Rear Plate

0010-3494

FAX-L100 / FAX-L120

- 1) Remove the screw [1], and detach the rear plate [2] in the direction of the arrow.



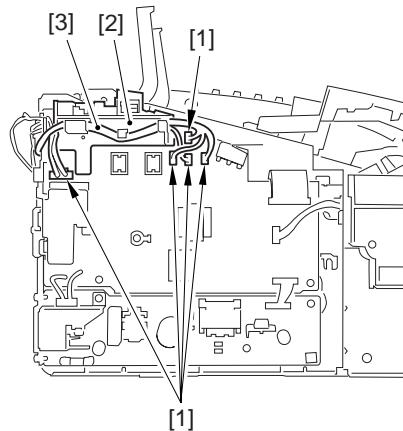
F-3-241

3.6.1.9 Removing the Fixing Assembly

0010-3533

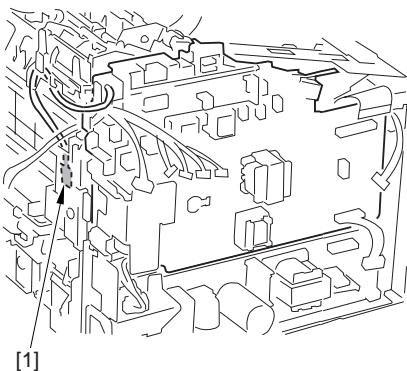
FAX-L100 / FAX-L120

- 1) Disconnect the 5 connectors [1].
- 2) Free the harness [3] from the cable guide [2].



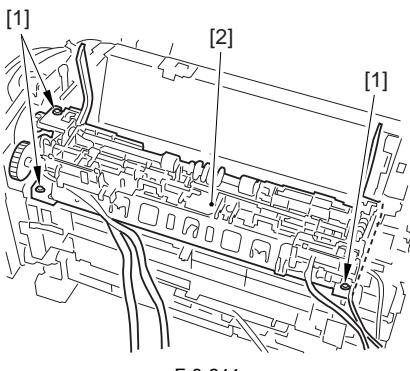
F-3-242

3) Disconnect the connector [1].



F-3-243

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



F-3-244

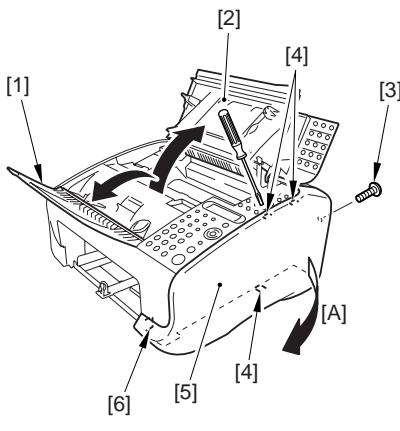
3.6.2 Fixing Film Unit

3.6.2.1 Removing the Right Cover

FAX-L100 / FAX-L120

0010-3570

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].



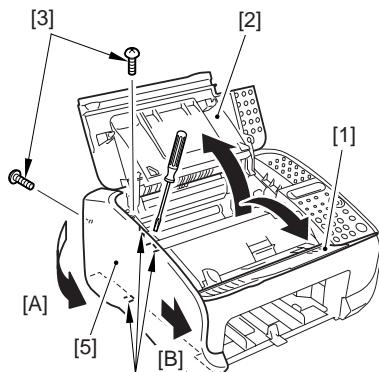
F-3-245

3.6.2.2 Removing the Left Cover

0010-3571

FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of the arrow [A]; then, slide it in the direction of the other arrow [B].



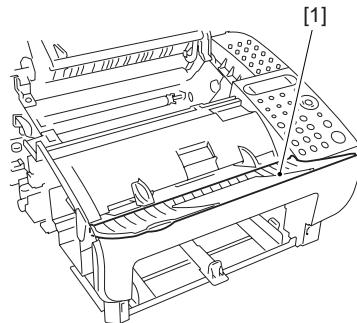
F-3-246

3.6.2.3 Removing the Front Cover

0010-3572

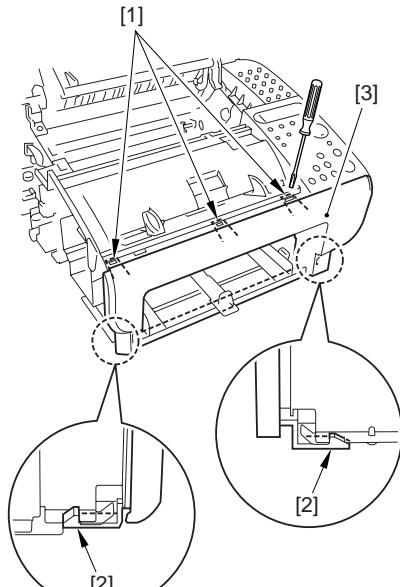
FAX-L100 / FAX-L120

- 1) Wrap the document feeder tray [1] slightly to detach.



F-3-247

- 2) Free the 3 claws [1], and detach the front cover [3] while freeing the other 2 claws [2].



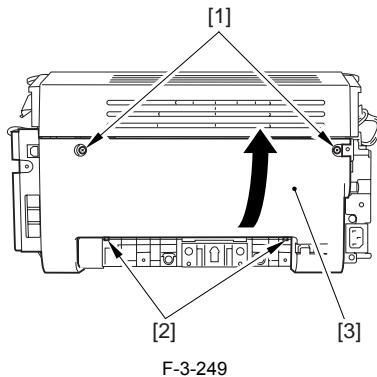
F-3-248

3.6.2.4 Removing the Rear Cover

0010-3573

FAX-L100 / FAX-L120

- 1) Remove the 2 screws [1].
- 2) Free the 2 claws [2], and detach the rear cover [3] while sliding it in the direction of the arrow.



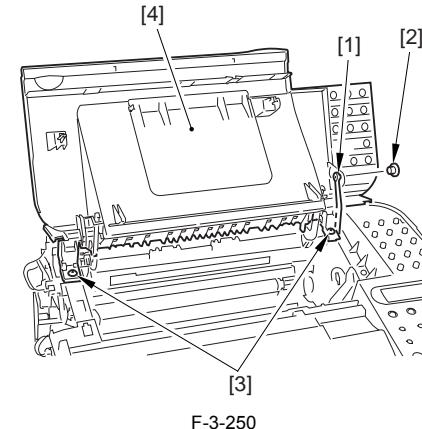
F-3-249

3.6.2.5 Removing the Cartridge Cover

0010-3574

FAX-L100 / FAX-L120

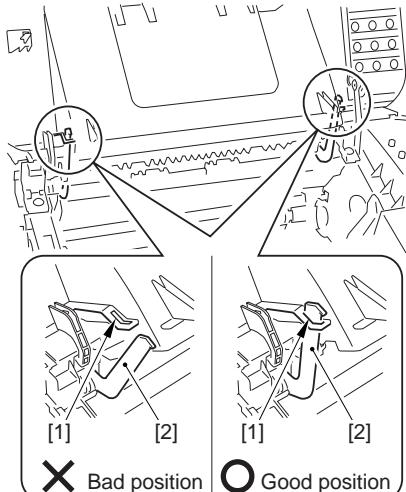
- 1) Free the link stop [2] from the door link [1].
- 2) Remove the 2 screws [3], and detach the cartridge cover [4].



F-3-250



When mounting the cartridge cover, be sure to fit the 2 fixing assembly release hooks [2] in the 2 hook holes [1] found in the cartridge cover.



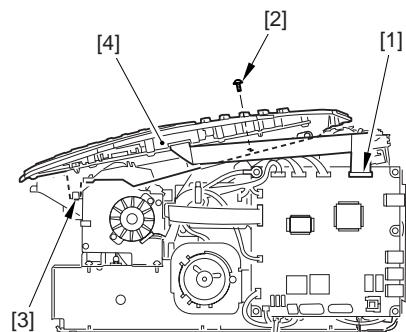
F-3-251

3.6.2.6 Removing the Operation Panel Unit

0010-3575

FAX-L100 / FAX-L120

- 1) Remove the flat cable [1].
- 2) Remove the screw [2].
- 3) Free the claw [3], and detach the operation panel unit [4].

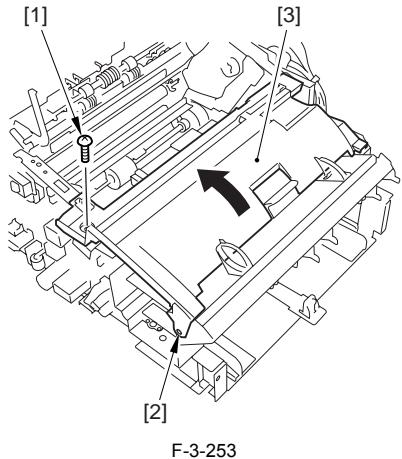


F-3-252

3.6.2.7 Removing the Upper Cover

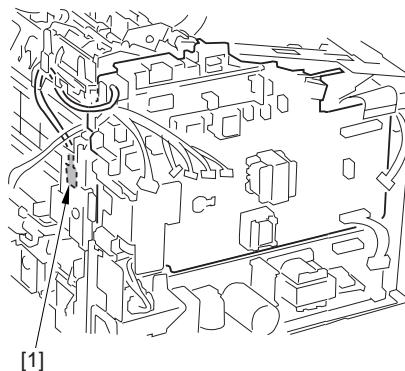
FAX-L100 / FAX-L120

- 1) Remove the screw [1].
- 2) Free the claw [2], and detach the upper cover [3] in the direction of the arrow.



0010-3576

- 3) Disconnect the connector [1].

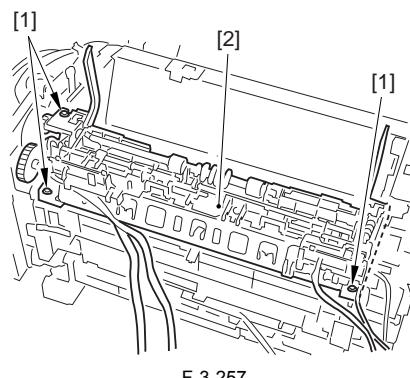
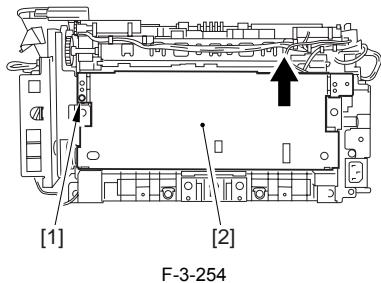


3.6.2.8 Removing the Rear Plate

FAX-L100 / FAX-L120

0010-3577

- 1) Remove the screw [1], and detach the rear plate [2] in the direction of the arrow.

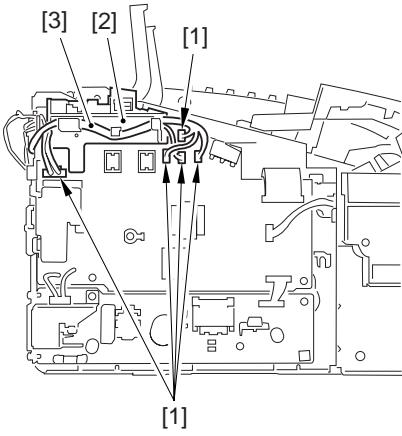


3.6.2.9 Removing the Fixing Assembly

FAX-L100 / FAX-L120

0010-3578

- 1) Disconnect the 5 connectors [1].
- 2) Free the harness [3] from the cable guide [2].

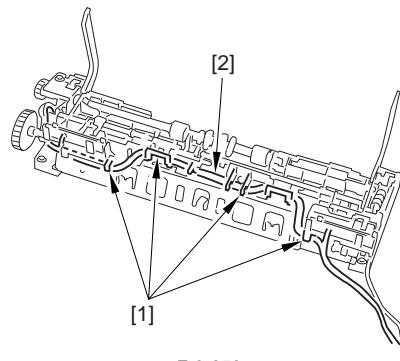


3.6.2.10 Removing the Fixing Film Unit

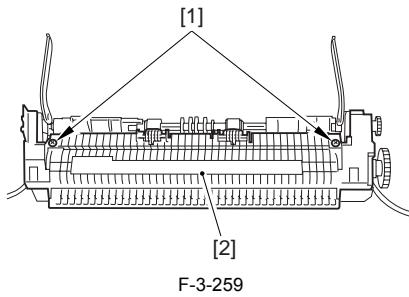
0010-3579

FAX-L100 / FAX-L120

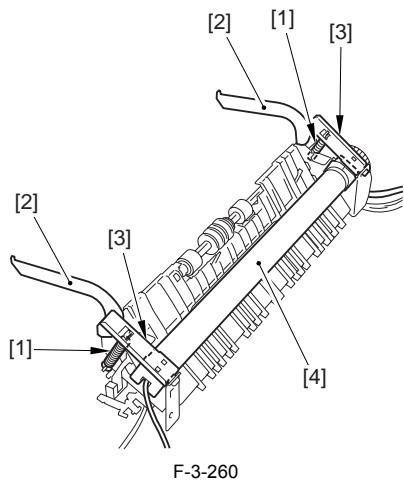
- 1) Free the harness [2] from the harness guide [1].



- 2) Remove the 2 screws [1], and detach the fixing cover [2].



- 3) Remove the 2 springs [1], and detach the 2 releasing levers [2].
- 4) Remove the 2 locking plate [3], and detach the fixing film unit [4].

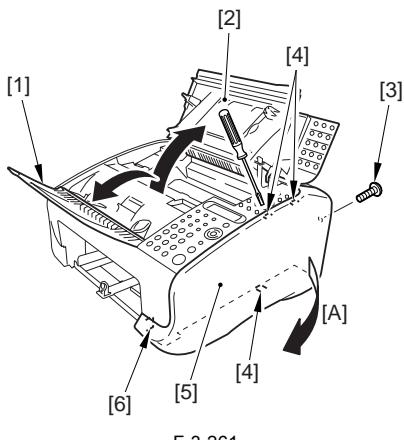


3.6.3 Fixing Pressure Roller

3.6.3.1 Removing the Right Cover

0010-3580
FAX-L100 / FAX-L120

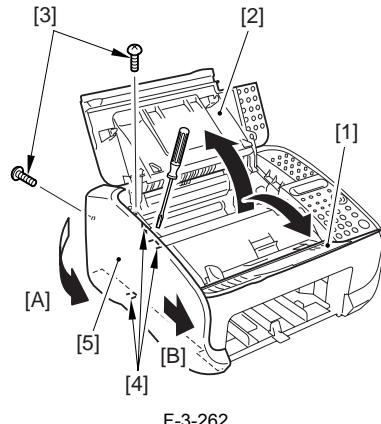
- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the screw [3].
- 4) Free the 3 claws [4], and open the right cover [5] in the direction of the arrow [A].
- 5) Free the claws [6], and detach the right cover [5].



3.6.3.2 Removing the Left Cover

0010-3581
FAX-L100 / FAX-L120

- 1) Open the document feeder tray [1].
- 2) Open the cartridge cover [2].
- 3) Remove the 2 screws [3].
- 4) Free the 4 claws [4], and detach the Left cover [5] in the direction of the arrow [A]; then, slide it in the direction of the other arrow [B].

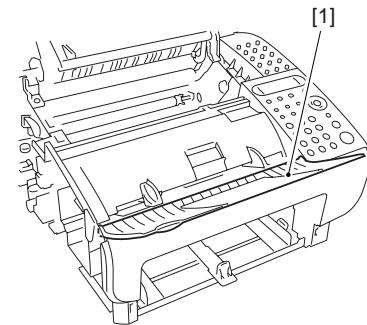


3.6.3.3 Removing the Front Cover

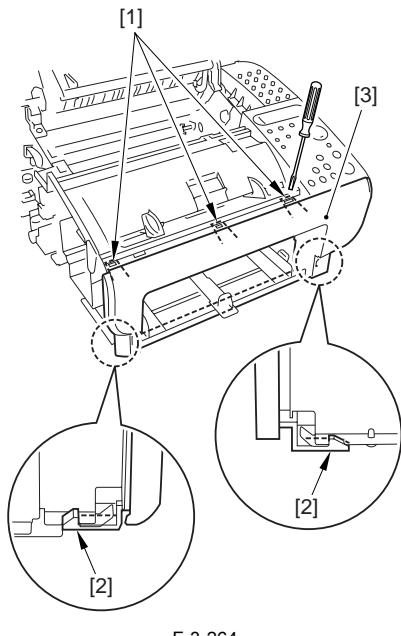
0010-3582

FAX-L100 / FAX-L120

- 1) Wrap the document feeder tray [1] slightly to detach.



- 2) Free the 3 claws [1], and detach the front cover [3] while freeing the other 2 claws [2].

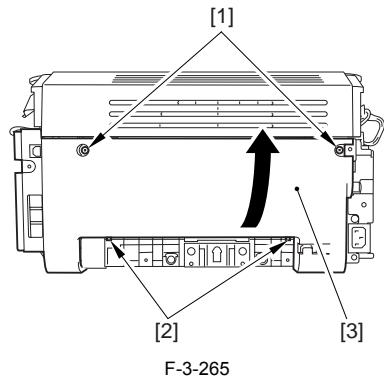


F-3-264

3.6.3.4 Removing the Rear Cover

FAX-L100 / FAX-L120

- 1) Remove the 2 screws [1].
- 2) Free the 2 claws [2], and detach the rear cover [3] while sliding it in the direction of the arrow.

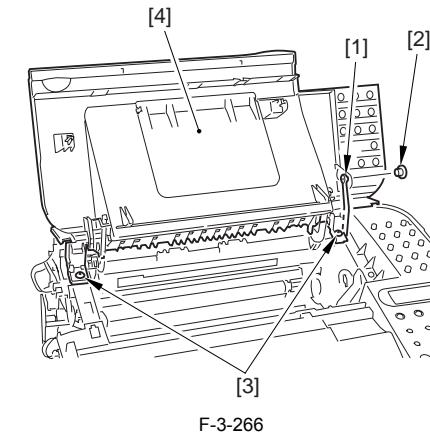


F-3-265

3.6.3.5 Removing the Cartridge Cover

FAX-L100 / FAX-L120

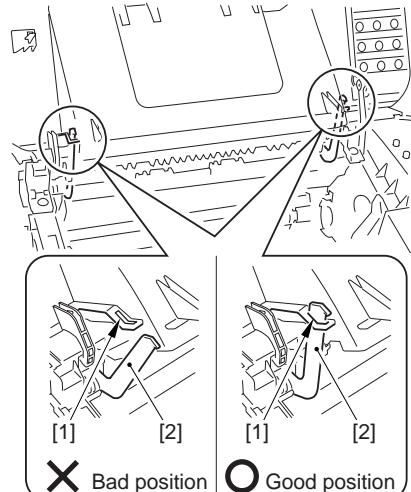
- 1) Free the link stop [2] from the door link [1].
- 2) Remove the 2 screws [3], and detach the cartridge cover [4].



F-3-266



When mounting the cartridge cover, be sure to fit the 2 fixing assembly release hooks [2] in the 2 hook holes [1] found in the cartridge cover.



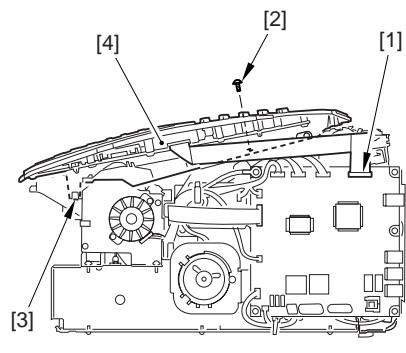
F-3-267

3.6.3.6 Removing the Operation Panel Unit

0010-3585

FAX-L100 / FAX-L120

- 1) Remove the flat cable [1].
- 2) Remove the screw [2].
- 3) Free the claw [3], and detach the operation panel unit [4].

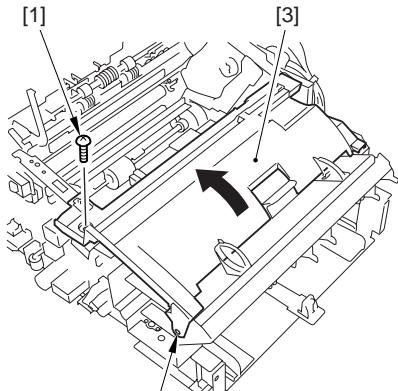


F-3-268

3.6.3.7 Removing the Upper Cover

FAX-L100 / FAX-L120

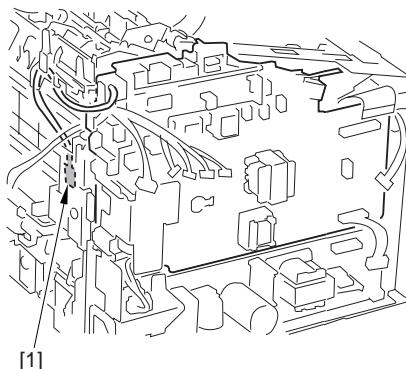
- 1) Remove the screw [1].
- 2) Free the claw [2], and detach the upper cover [3] in the direction of the arrow.



F-3-269

0010-3586

- 3) Disconnect the connector [1].



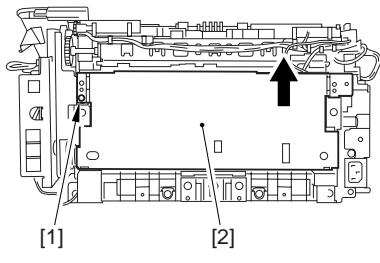
F-3-272

3.6.3.8 Removing the Rear Plate

FAX-L100 / FAX-L120

0010-3588

- 1) Remove the screw [1], and detach the rear plate [2] in the direction of the arrow.



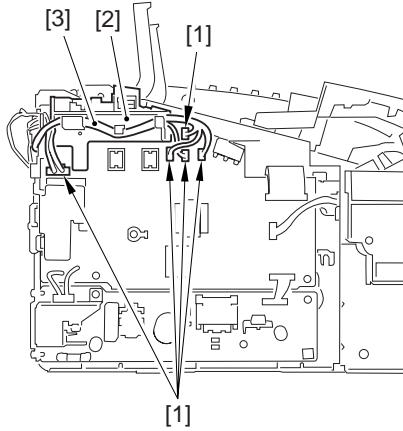
F-3-270

3.6.3.9 Removing the Fixing Assembly

FAX-L100 / FAX-L120

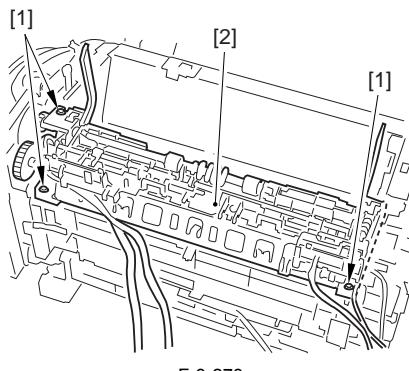
0010-3589

- 1) Disconnect the 5 connectors [1].
- 2) Free the harness [3] from the cable guide [2].



F-3-271

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



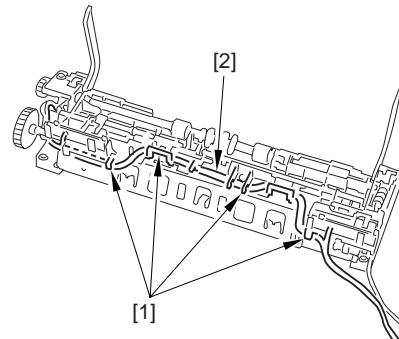
F-3-273

3.6.3.10 Removing the Fixing Film Unit

0010-3590

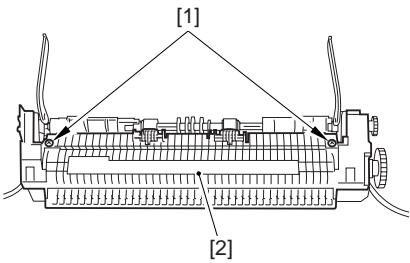
FAX-L100 / FAX-L120

- 1) Free the harness [2] from the harness guide [1].



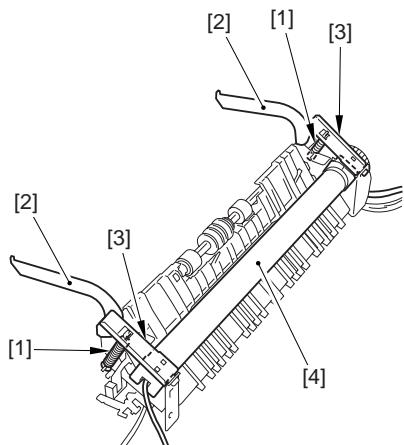
F-3-274

- 2) Remove the 2 screws [1], and detach the fixing cover [2].



F-3-275

- 3) Remove the 2 springs [1], and detach the 2 releasing levers [2].
- 4) Remove the 2 locking plate [3], and detach the fixing film unit [4].



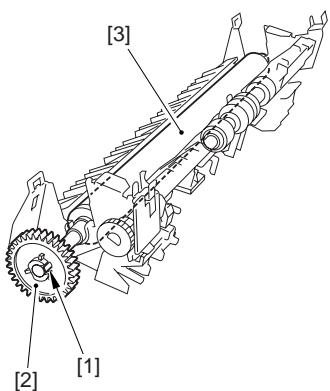
F-3-276

3.6.3.11 Removing the Pressure Roller

0010-3591

FAX-L100 / FAX-L120

- 1) Free the claw [1], and remove the gear [2]; then, detach the Pressure roller [3].



F-3-277

Chapter 4 MAINTENANCE AND INSPECTION

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4.1 Periodically Replaced Parts

4.1.1 Periodic Replacement Parts

FAX-L100 / FAX-L120

0003-0867

- No parts require periodic replacement in this printer.

4.2 Consumables

4.2.1 Consumable

0010-2420

FAX-L100 / FAX-L120

T-4-1

Work by	Item	Interval (guide)
User	Cartridge FX-10	When toner in the toner cartridge being used has run out.
Service Technician	None	

4.3 Cleaning

4.3.1 Items Requiring Cleaning

FAX-L100 / FAX-L120

0010-2483

T-4-2

Work by	Item	Intervals
User	External covers	As needed (when soiled)
	Scanning glass (Contact sensor)	When black vertical stripes appear in copied or transmitted images
	White sheet	When image scanned from the ADF becomes lighter
Service technician	Document pickup roller	When document pickup performance has lowered
	Document separation roller	When document separation and/or feed performance has lowered
	Separation guide	When document separation performance has lowered
	Document feed roller	When document feed performance has lowered
	Document delivery roller	When document feed performance has lowered
	Pickup roller	When paper pickup performance has lowered
	Separation pad	When paper separation performance has lowered
	Feed roller	When paper feed performance has lowered
	Transfer charging roller	When the back of paper tends to become soiled; or, when a white spot appears in the images at intervals of about 46 mm
	Static eliminator	When dots appear in images
	Fixing entrance guide	When paper tends to become soiled; when a black line appears vertically at irregular intervals; when paper jams; when paper wrinkles



- Be sure to disconnect the power plug before starting the cleaning work. The machine must remain without power to avoid fire hazards and electric shocks.

4.3.2 Cleaning Method (external covers)

0003-2119

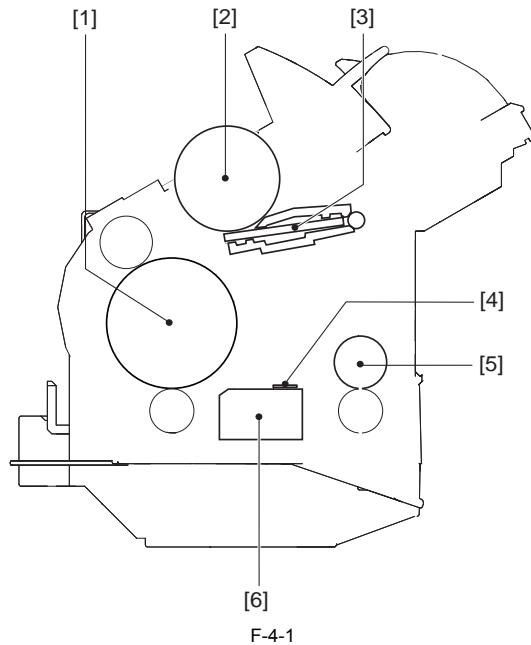
FAX-L100 / FAX-L120

Moisten a soft cloth with water or solution of mild detergent, making sure it is well wrung; then, wipe the soiling. If you have used detergent, be sure to remove its residue using a soft, moist cloth. After removing all soiling, dry wipe the area with a soft, dry cloth.

4.3.3 Cleaning Method (scanning unit)

0010-3808

FAX-L100 / FAX-L120

**[1] Document feed roller**

Open the Upper reader unit frame, and wipe off the dirt with a soft, dry cloth.

[2] Document separation roller

Open the Upper cover, and wipe off the dirt with a soft, dry cloth.

[3] Separation guide

Open the Upper reader unit frame, and wipe off the dirt with a soft, dry cloth.

[4] White sheet

Open the Lower reader unit frame, and wipe off the dirt with a soft, dry cloth.

[5] Document delivery roller

Open the Lower reader unit frame, and wipe off the dirt with a soft, dry cloth.

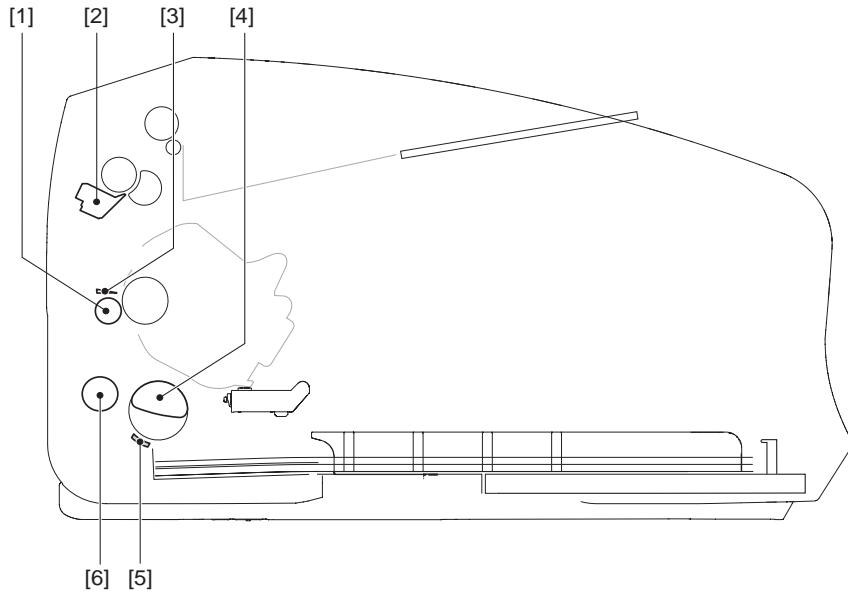
[6] Scanning Glass (Contact Sensor)

Open the Lower reader unit frame, and wipe off the dirt with a soft, dry cloth.

4.3.4 Cleaning (printer unit)

0010-3761

FAX-L100 / FAX-L120



Be sure to follow the instructions given below when cleaning the components as part of service work:

[1] Transfer Charging Roller

As a rule, do not touch or clean the part. If absolutely necessary, be sure to take full care not to touch the roller and bring solvent or oil into contact with the roller.

Cleaning must be dry-wiping with lint-free paper. Never use water or solvent.

[2] Fixing Entrance Guide

Dry wipe with lint-free paper.

[3] Static Eliminator

Clean with a brush.

[4] Pickup Roller

Dry wipe with lint-free paper.

[5] Separation Pad

Dry wipe the rubber portion with lint-free paper.

[6] Feed Roller

Dry wipe with lint-free paper.



* Do not touch the sponge portion of the transfer charging roller. Otherwise, the back of paper may become soiled or the image may suffer dropouts (white spots).

* Never use solvent.

* If the use of lint-free paper fails to remove dirt or the roller is deformed, replace

Chapter 5 TROUBLESHOOTING

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5.1 Phenomenon Table

5.1.1 Symptoms

FAX-L100 / FAX-L120

0010-5078

T-5-1

Level 1	Symptom
Image Faults	Image Faults Occurring at Specific Intervals Initial Offset in a Low Temperature/Humidity Environment Black Lines Caused by Drum Memory
Malfunction	The Session No. of Activity report is reset each time the power is turned off and then back on.
Transmission/Fax-Related	In response to a copy job while reception is under way, or if data arrives while making a copy, there will be an increase in the time required to output the received image

For details, see the instructions given as remedial action.

5.2 Measurement and Adjustment

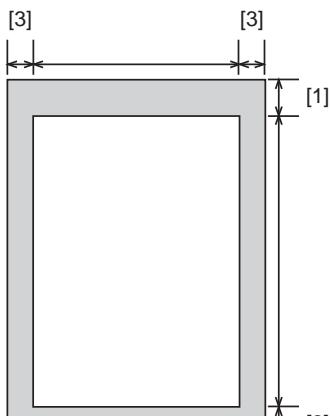
5.2.1 Image Adjustments

5.2.1.1 Adjusting the Paper Margin

FAX-L100 / FAX-L120

0010-2906

Press the menu button and then the # button to select SERVICE MODE; then, using the cursor button, select SERVICE'S CHOICE, and press the OK button.
Use the cursor button to select the item to adjust.
This item is enabled only when a copier function is being used.



F-5-1

T-5-2

[1] Leading edge erase	2mm (0-5)
[2] Trailing edge erase	2mm (0-5)
[3] Vertical edge erase	2mm (0-5)

5.2.1.2 Read Adjustment

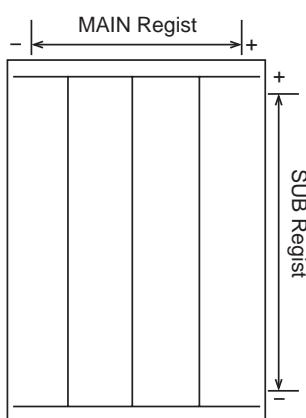
FAX-L100 / FAX-L120

0010-3250

Press the Menu button and then the # button to select ADJUST; then, click the OK button.
Using the cursor, select the item to adjust.

ADF SUB ZOOM

When selected, reduction will be only in sub scanning direction for reading documents picked up from the ADF.



F-5-2

T-5-3

Setting value	Contents
95	98.0%
96	98.4%
97	98.8%
98	99.2%
99	99.6%
100	100.0%
101	100.4%
102	100.8%
103	101.2%
104	101.6%
105	102.0%

ADF SUB REGIST

Use it to adjust the read start position when the ADF is used.

T-5-4

Setting value	Contents
90	-10 (-5.0 mm)
91	-9 (-4.5 mm)
92	-8 (-4.0 mm)
93	-7 (-3.5 mm)
94	-6 (-3.0 mm)
95	-5 (-2.5 mm)
96	-4 (-2.0 mm)
97	-3 (-1.5 mm)
98	-2 (-1.0 mm)
99	-1 (-0.5 mm)
100	0
101	+1 (+0.5 mm)
102	+2 (+1.0 mm)
103	+3 (+1.5 mm)
104	+4 (+2.0 mm)
105	+5 (+2.5 mm)
106	+6 (+3.0 mm)
107	+7 (+3.5 mm)
108	+8 (+4.0 mm)
109	+9 (+4.5 mm)
110	+10 (+5.0 mm)

5.2.1.3 Print Adjustment

0010-3254

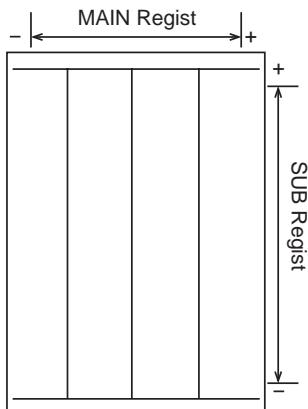
FAX-L100 / FAX-L120

Press the Menu button and then the # button to select ADJUST; then, click the OK button.

Using the cursor, select the item to adjust.

PRN MAIN REGIST

Use it to adjust the print start position in main scanning direction when a printer function is in use.



F-5-3

T-5-5

Setting value	Contents
96	-4 (-2.0 mm)
97	-3 (-1.5 mm)
98	-2 (-1.0 mm)
99	-1 (-0.5 mm)
100	0
101	+1 (+0.5 mm)
102	+2 (+1.0 mm)
103	+3 (+1.5 mm)
104	+4 (+2.0 mm)
105	+5 (+2.5 mm)
106	+6 (+3.0 mm)
107	+7 (+3.5 mm)
108	+8 (+4.0 mm)
109	+9 (+4.5 mm)
110	+10 (+5.0 mm)

Setting value	Contents
90	-10 (-5.0 mm)
91	-9 (-4.5 mm)
92	-8 (-4.0 mm)
93	-7 (-3.5 mm)
94	-6 (-3.0 mm)
95	-5 (-2.5 mm)
96	-4 (-2.0 mm)
97	-3 (-1.5 mm)
98	-2 (-1.0 mm)
99	-1 (-0.5 mm)
100	0
101	+1 (+0.5 mm)
102	+2 (+1.0 mm)
103	+3 (+1.5 mm)
104	+4 (+2.0 mm)
105	+5 (+2.5 mm)
106	+6 (+3.0 mm)
107	+7 (+3.5 mm)
108	+8 (+4.0 mm)
109	+9 (+4.5 mm)
110	+10 (+5.0 mm)

PRN SUB REGIST

Use it to adjust the print start position in sub scanning direction when a printer function is in use.

T-5-6

Setting value	Contents
90	-10 (-5.0 mm)
91	-9 (-4.5 mm)
92	-8 (-4.0 mm)
93	-7 (-3.5 mm)
94	-6 (-3.0 mm)
95	-5 (-2.5 mm)

5.3 Service Tools

5.3.1 Solvent/Oil List

0010-3815

FAX-L100 / FAX-L120

T-5-7

No.	Name	Use	Components	Remarks
1	Alcohol	Cleaning:plastic (note),rubber,metal,oil, and toner stains	Alcohol	-Flammable:keep away from flame -Purchase locally
2	Lubricant	Apply to gears, between shaft and bushing	Special oil Special solid lubricating material Lithium soap	-Tool No. HY9-0007
3	Lubricant	Apply between pressure roller shaft and grounding plate	High performance grease Carbon black Graphite	-Electricity grease -Tool No. CK-8007



When cleaning the external covers,use a firmly squeezed wet cloth.

5.4 Error Code

5.4.1 Outline

5.4.1.1 Error Code

FAX-L100 / FAX-L120

0010-6372

System error code

T-5-8

Error code	Major cause/detection	Remedy
E198	Flash ROM write error.	- Turn the power OFF and then back ON.. - Replace the SCNT board.
E674	Modem error.	- Turn the power OFF and then back ON.. - Replace the SCNT board.

Printer error code

T-5-9

Error code	Major cause/detection	Remedy
E000	The thermistor has an open circuit or a short circuit.	<ul style="list-style-type: none"> - Check the connector of the fixing film unit. - Replace the fixing film unit. - Replace the High-voltage power supply board. - Replace the DCNT board.
	The heater has an open circuit. The thermal fuse has blown.	
	The High-voltage power supply board has a fault.	
	The DCNT board has a fault.	
E100	The scanner assembly has a fault.	<ul style="list-style-type: none"> - Check the connector of the laser scanner assembly. - Replace the laser scanner assembly. - Replace the engine controller PCB.

Communication error code

T-5-10

Error Code	Description
0001	The sender may not be using a G3 fax machine.
0003	Received DIS after sending DIS signal
0004	Received DCN after sending DTC signal
0009	The sender may not be using a G3 fax machine.
0010	Received DCN signal after sending DTC signal in Polling Rx
0011	The number of re-transmissions of the procedure signal has been exceeded
0012	Remote side Password not match in Polling Rx
0013	The procedure signal cannot be received for 6 sec while in wait.
0014	Cannot receive signal after sending FTT signal
0016	DCN was received through a non-normal procedure
0017	Can't receive any response from remote side after sending type of (PPS/EOR) EOM signal
0018	Cannot detect energy within 6 sec after sending FTT command
0019	Received DCN signal sending CFR signal
001A	Fail to Receive Protocol for 6 Seconds when Waiting for Protocol during Reception
001D	Detect flag but nothing after sending CFR signal
001E	Timeout in V17 ECM Rx phase C
0020	Can't correct frame within 6 sec or in no-ECM mode, one decoding line over 6 sec
0021	Memory has overflowed when receiving images
0022	Owing to noise interference on the line, receiving side can't receive correct data within specified time (no ECM)
0023	Can't receive correct signal after sending CFR signal
0030	Can't receive any signal within 6 sec after sending MCF signal.
0031	Fault occurred in the communication procedure signal
0032	Can't receive carrier within 6 sec after sending MCF or RTP, RTN signal

Error Code	Description
0033	DCN was received through a non-normal procedure
0039	In non-ECM mode, when machine already received the data but next line data doesn't receive within 13.1 seconds
001F	Can't detect any G3 signal within 35 sec after sending DTC signal
003F	Remote side TSI not define in machine one touch or speed dial directory
0040	Can't receive carrier within 6 sec. after sending CTR signal.
0041	Can't receive carrier within 6 sec. after sending PPR signal.
0042	Can't receive correct signal after sending RNR signal
0043	Fault occurred in the communication procedure signal
0044	Can't receive carrier /FSK signal within 6 sec. after sending MCF signal in ECM mode
0047	Can't receive correct signal after sending ERR signal
0048	Can't receive correct signal after receive PPS_PRI_Q or PRI_Q, EOR_PRI_Q
004B	Can't detect correct FSK signal even through detected FSK tone within 6 sec
004C	Handshake fail during re-train or between page in V.34 Rx
004E	Receive DCN signal after sending DIS signal in V.34
004F	Remote side disconnected after sending ANSam in V.8
0050	Can't receive any correct signal after sending CJ signal in V.8
0051	Can't receive phase 3 signal after phase 2 within 20 seconds in V.34
0053	Modem disconnect after phase 4 in V.34
0054	Remote side disconnect after phase 4 in V.8
0055	Receive incorrect signal after sending DIS signal in V.34
0056	Modem disconnect after sending CFR in V.34
0058	Can't detect image signal within 6 sec after modem enter to primary phase in V.34
005A	Modem cannot detect any correct ECM frame with 3 minutes in phase C
005B	Modem can't detect control channel with 12 sec in phase C
005C	Detect busy tone within control channel after phase C
005D	Modem cannot detect any correct ECM frame with 12 sec in phase C
005E	Can't detect control channel signal after received RCP frame within 6 sec
005F	Can't detect silence after sending JM signal for polling Tx function
0060	There are no any bulletin files to be polled in V34
0061	Machine cannot detect V.21 or V.8 signal with 35 seconds
0062	Modem disconnect in phase D after our side sending out flags sequence in control channel
0063	Can't receive any flag sequence in control channel within 6 sec in phase D
0064	Can't detect any control channel signal in phase D within 60 seconds even through energy still on the line
0065	Can't detect any control channel signal within 60 seconds after detect silence in phase D
0066	Cannot receive signal or carrier after sending CFR in V.34
0069	Capability no match paper size after received is DCS signal
0070	Reception was manually canceled on the machine.
0071	The machine's memory is full.
0080	The recipient's machine did not respond within 35 seconds.
0081	Received DTC signal in transmission phase
0082	Transmitting unit receives a signal other than DIS or DTC. And DCN in phase B
0083	Detected FSK signal, but Can't receive any signal within 35 sec
0084	Detect DCN signal in phase B
0085	Transmitting unit sending DCS 3 times consecutively, but each time responds with DIS/DTC
0086	Detected responds signal other than DTC, DIS, FTT, DCN or CFR after sending DCS signal
0087	Training attempt has failed because speed unit can't adjust to low lower speed
0088	Received DCN signal after sending out DCS signal
008B	Receivers protocol of DIS is received, but it is not compatible with our machine
008C	Remote side not support SUB capability when relay initiate
008D	The recipient's machine has run out of paper.
008F	Modem not ready to receive V.34 data within 6 sec after received CFR signal
0090	Called side document not ready for our polling
0091	Sending out DCS+TCF signal 3 times consecutively but no signal in response from receiver
0093	Received DCN signal after sending out DCS signal for V34
0094	Time out during transmit ECM frame or RCP command
0095	Wrong ID number when polling Rx or Relay initial

Error Code	Description
0096	SUBADDRESS/PASSWORD capability not match in polling Rx mode
009A	Can't detect any signal after sending CI signal
009D	Remote side hang up before V34 modem enter phase 2 state in V34 polling Rx
009E	Manual Tx over 15 minutes whin in phase C by non-ECM mode
00A0	Transmission was manually canceled on the machine.
00A1	There is a document jam.
00AE	Can't finished V8 procedure or detect V21 signal after CM signal within 30 sec
00AF	Modem can't enter into control channel after Tx side sending out RCP signal for V34
00B1	Cannot finish V8 procedure or detect V21 signal after ANSam signal within 35sec
00B2	Can't detect phase 2 signal after our side sending CJ signal within 30 sec
00B3	Can't detect correct V21 or JM signal after sending CM signal
00B4	Can't detect correct phase 2 signal within 25 seconds after CM/JM signal exchange
00B5	Can't detect phase 3 signal after phase 2 within 25 seconds
00B6	Can't detect phase 4 signal within 25 seconds after CM/JM exchange
00B8	Remote side disconnect after our side sending DCS signal in V34
00BA	Cannot received correct signal after our side sending DTC signal in V34
00BB	Every time our side received DIS signal after sending DTC in V34
00BC	Modem can't ready within 10 second after entering primary channel in V34
00BD	Can't detect correct V.21 or JM signal after detected FSK frequency
00BE	Remote side no document to be polled after V8 handshaking
00BF	Capability no match after V8 handshaking
00C1	At phase D, transmitting units out EOP 3times consecutively, but receive no answer from receiving unit
00C2	Remote side disconnect after sending out CM signal
00C4	After sending MPS signal, the received is not one of MCF, RTN, PIP, PIN, RTP, DCN
00C5	Received DCN signal after sending MPS signal
00C9	At phase D, sending MPS 3 times consecutively, but no answer from receiveing unit
00CA	After sending EOP signal, the received is not one of MCF, RTN, PIP, PIN, PRI-EOP, DCN
00CB	After sending EOP signal, the received is DCN signal
00CF	Received incorrect signal after sending DTC signal for V34 polling
00D0	Received ERR signal after sending EOR_NULL
00D1	Received incorrect response after sending PPS_EOP signal in V34
00D2	Received DCN after sending PPS_EOP signal
00D3	Received DCN after sending PPS_NULL signal
00D8	Can't detect correct phase 3 signal for polling within 25 seconds
00D9	Can't detect correct phase 3 signal after detect silence after phase 2
00DA	Can't detect phase 4 signal within 30 seconds or remote side hang up over 6 seconds
00DB	Can't received any T30 signal within 15 seconds within phase 4
00DC	Received T30 signal in phase 4 other than DCS, DIS or DTC
00DE	Remote side no SUB capability in V34
00E0	At phase D, transmitting units out PPS_NULL 3 times consecutiverty but not answer
00E1	Received incorrect response after sending PPS_NULL signal
00E2	Can't receive any response in RR response procedure after sending PPS_NULL signal
00E4	At phase D, transmitting units out PPS_MPS 3 times consecutiverty but not answer
00E5	Received incorrect response after sending PPS_MPS signal
00E6	Can't receive any response in RR response procedure after sending PPS_MPS signal
00E7	Received DCN after sending PPS_MPS signal
00E8	At phase D, transmitting units out PPS_EOP 3 times consecutiverty but not answer
00E9	Receive PIN signal after sent last page 3 times
00EA	Can't receive any response in RR response procedure after sending PPS_EOP signal
00EE	At phase D, transmitting units out EOR_NULL 3 times consecutiverty but not answer
00EF	Received incorrect response after sending EOR_NULL signal
00F0	Can't receive any response procedure after sending EOR_NULL signal
00F1	At phase D, transmitting units out EOR_MPS 3 times consecutiverty but not answer

Error Code	Description
00F2	Received incorrect response after sending EOR_MPS signal
00F3	Received ERR signal after sending EOR_MPS signal
00F4	Can't receive any response in RR response procedure after sending PPS_MPS signal
00F5	At phase D, transmitting units out EOR_EOP 3 times consecutively but not answer
00F6	Received incorrect response after sending EOR_EOP signal
00F7	After received ERR, our side can't received response after sending EOR_EOP signal
00FC	Can't receive any response ather sending CTC signal
00FD	Can't speed down to lower speed in ECM mode
00FE	Memory full for transmission
00FF	All redialing attempts have failed.

5.5 Service Mode

5.5.1 Outline

5.5.1.1 Service Data Setting

0010-2821

FAX-L100 / FAX-L120

Service mode has the following service data items. These items can be checked/changed according to the menu on the display.

SERVICE'S CHOICE

Use it to select service data to suit the country/region of installation, to reset the user data, or to set the transmission/reception speed.

ADJUST

Use it to execute margin adjustment for printing or reading.

VERSION DISPLAY

Use it to indicate version information on the display.

SOFT SWITCH

Use it to make settings that relate to basic fax service functions, as for correcting communication problems.

REPORT

Use it to output reports on various service data.

CLEAR DATA

Various data are initialized by selecting one of these setting items.

FUNCTION

Use it to print out a print pattern or to test the ADF for paper transport.

H/W TEST

Use it to execute sensor testing or key testing.

5.5.1.2 Service Data Entry Method

0010-2835

FAX-L100 / FAX-L120

You can enter the Service Mode with the following operation.

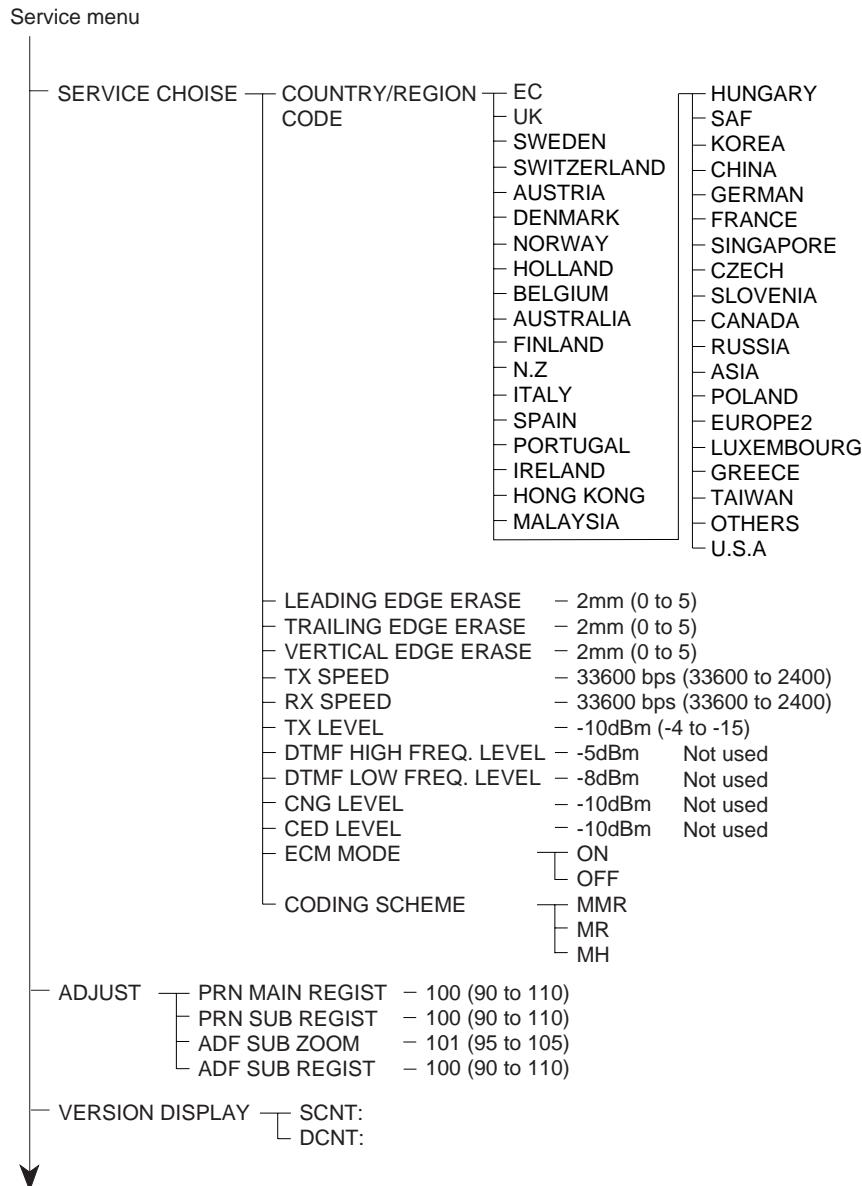


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5.5.1.3 Service Data Flowchart

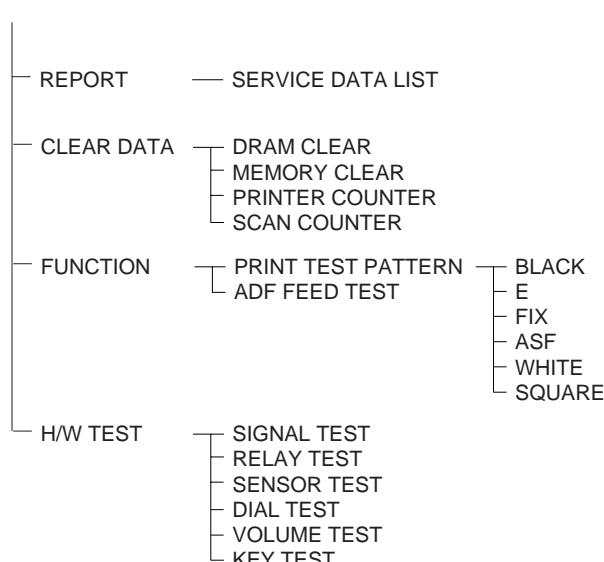
0010-2863

FAX-L100 / FAX-L120



	Bit	1 2 3 4 5 6 7 8
— SOFT SWITCH	SW01	----- Not used
	SW02	- 0 -----
		SW03~SW06: Not used
	SW07	----- Not used
	SW08	----- Not used
	SW09	----- Not used
	SW10	1 0 -----
		SW11~SW15: Not used
	SW16	- - 0 -----
	SW17	----- Not used
	SW18	----- Not used
	SW19	----- Not used
	SW20	----- Not used
	SW21	----- Not used
	SW22	----- Not used
	SW23	----- Not used
	SW24	----- Not used
		SW25~SW29: Not used
	SW30	----- 1 0
		SW31~SW36: Not used
	SW37	- - 0 0 0 - -
		SW38~SW50: Not used
	SW51	- - 0 0 -----
	SW52	----- Not used
	SW53	----- Not used
	SW54	----- 0 1 1
		SW55~SW64: Not used

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F-5-7

5.5.2 Default Settings

5.5.2.1 SSSW Default Settings

FAX-L100 / FAX-L120

0010-3816

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TYPE	EC	U.K.	SWEDEN	SWITZERLAND	AUSTRIA	DENMARK
SOFT SWITCH						
SW01	00000000	00000000	00000000	00000000	00000000	00000000
SW02	00000100	00000100	00000100	00000100	00000100	00000100
SW03	00001000	00001000	00000000	00001000	00001000	00001000
SW04	00000000	00000000	00000000	00000000	00000000	00000000
SW05	00000011	00000011	00001011	10000011	10000011	00000011
SW06	00000000	00000000	00000000	00000000	00000000	00000000
SW07	10100000	10100000	10100000	10100000	10100000	10100000
SW08	00000100	00000100	00000110	00000110	00000110	00000110
SW09	00000000	00000000	00000000	00000000	00000000	00000000
SW10	10000100	10000100	10000100	10000100	10001100	10000100
SW11	00000000	00000000	00000100	00000000	00000000	00000100
SW12	00110001	01110001	00110001	01110001	01110001	01110001
SW13	01001000	01001000	01001000	01001000	01001000	01001000
SW14	01000000	01000000	01000000	01000000	01000000	01000000
SW15	10110101	10110101	10110101	10110101	10110101	10110101
SW16	00000000	00000000	00000000	00000000	00000000	00000000
SW17	00000000	00000000	00000000	00000000	00000000	00000000
SW18	01000001	01000001	01000001	01000001	01000001	01000001
SW19	01011010	01011010	01011010	01011010	01011010	01011010
SW20	00000011	00000110	00000111	00000110	00000110	00000110
SW21	00000100	00000100	00000100	00000100	00000100	00000100
SW22	10101000	10101000	10101000	10101000	10101000	10101000
SW23	00010010	00010010	00010010	00010010	00010010	00010010
SW24	01000000	01000000	01000000	01000000	01000000	01000000
SW25	00000000	00100000	00000000	00000000	00000000	00000000
SW26	01000100	01000100	01000100	01000100	01000100	01000100
SW27	00000000	00000000	00000000	00000000	00000000	00000000
SW28	11100101	11100101	11100101	11100101	11100001	11100101
SW29	11110000	11110000	11110000	11110000	11110000	11110000
SW30	00010110	10011010	00010110	00010110	00010110	00010110
SW31	01010100	01010100	01010100	01010100	01010100	01010100
SW32	00000000	00000000	00000000	00000000	00000000	00000000
SW33	00000000	00000000	00000000	00000000	00000000	00000000
SW34	00000000	00000000	00000000	00000000	00000000	00000000
SW35	00000101	00000101	00000101	00000101	00000101	00000101
SW36	01010001	01010001	01010001	01010001	01010001	01010001
SW37	00000000	00000000	00000000	00000000	00000000	00000000
SW38	10000000	10000000	10000000	10000000	10000000	10000000
SW39	10000000	10000000	10000000	10000000	10000000	10000000
SW40	00000000	00000000	00000000	00000000	00000000	00000000
SW41	00000000	00000000	00000000	00000000	00000000	00000000
SW42	10000000	10000000	10000000	10000000	10000000	10000000
SW43	00000110	10101001	00000110	00000110	00010011	00000110
SW44	00001101	10101001	00001101	10110000	00101110	10110000
SW45	00000000	00000000	00000000	00000000	00000000	00000000
SW46	01010010	01010011	01010011	01010011	01010011	01010011
SW47	00000000	00000000	00000000	00000000	00000000	00000000
SW48	00100101	00100101	00100101	00100101	00000101	00100101
SW49	10001000	10001000	10001000	10001000	10001000	10001000
SW50	00000000	00000000	00000000	00000000	00000000	00000000
SW51	00000000	00000000	00000000	00000000	00000000	00000000
SW52	10000011	10000111	10000011	10000011	10000011	10000011
SW53	10000011	10000111	10000011	10000011	10000011	10000011
SW54	00000011	00000011	00000001	00000011	00000011	00000011
SW55	00000000	00000000	00000000	00000000	00000000	00000000
SW56	00000000	00000000	00000000	00000000	00000000	00000000
SW57	00000000	00000000	00000000	00000000	00000000	00000000
SW58	00000000	00000000	00000000	00000000	00000000	00000000

TYPE	EC	U.K.	SWEDEN	SWITZERLAND	AUSTRIA	DENMARK
SW59	00000000	00000000	00000000	00000000	00000000	00000000
SW60	00000000	00000000	00000000	00000000	00000000	00000000
SW61	11110000	11110000	11110000	11110000	11110000	11110000
SW62	00000000	00000000	00000000	00000000	00000000	00000000
SW63	00000000	00000000	00000000	00000000	00000000	00000000
SW64	00000000	00000000	00000000	00000000	00000000	00000000

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TYPE	NORWAY	HOLLAND	BELGIUM	AUSTRALIA	FINLAND	N.Z.
SOFT SWITCH						
SW01	00000000	00000000	00000000	00000000	00000000	00000000
SW02	00000100	00000100	00000100	00000100	00000100	00000100
SW03	00001000	00001000	00000000	00001000	00001000	00001000
SW04	00000000	00000000	00000000	00000000	00000000	00000000
SW05	00000111	00000011	00001011	00000011	10000011	00000111
SW06	00000000	00000000	00000000	00000000	00000000	00000000
SW07	10100000	10100000	10100000	10100000	10100000	10100000
SW08	00000110	00000110	00000110	00000100	00000110	00000110
SW09	00000000	00000000	00000000	00000000	00000000	00000000
SW10	10000100	10000100	10000100	10000100	10000100	10000100
SW11	00000100	00000100	00000100	10000000	00000000	10000000
SW12	00110001	00110001	00110001	00110001	01110001	00110001
SW13	01001000	01001000	01001000	01001000	01001000	01001000
SW14	01000000	01000000	01000000	01000000	01000000	01000000
SW15	10110101	10110101	10110101	10110001	10110101	10110011
SW16	00000000	00000000	00000000	00000000	00000000	00000000
SW17	00000000	00000000	00000000	00000000	00000000	00000000
SW18	01000001	01000001	01000001	01000001	01000001	01000001
SW19	01011010	01011010	01011010	01011010	01011010	01011010
SW20	00000110	00000110	00000110	00000110	00000111	00000110
SW21	00000100	00000100	00000100	00000100	00000100	00000100
SW22	10101000	10101000	10101000	10101000	10101000	10101000
SW23	00010010	00010010	00010010	00010010	00010010	00010010
SW24	01000000	01000000	01000000	01000000	01000000	01000000
SW25	00000000	00000000	00000000	00000000	00000000	00110000
SW26	01000100	01000100	01000100	01000100	01000100	01000100
SW27	00000000	00000000	00000000	00000000	00000000	00000000
SW28	11100101	11100101	11100101	11101011	11100001	11100101
SW29	11110000	11110000	11110000	11110000	11110000	11110000
SW30	00010110	00010110	00010110	11000110	00010110	00010110
SW31	01010100	01010100	01010100	01000100	01010100	01011000
SW32	00000000	00000000	00000000	00000000	00000000	00000000
SW33	00000000	00000000	00000000	00000000	00000000	00000000
SW34	00000000	00000000	00000000	00000000	00000000	00000000
SW35	00000101	00000101	00000101	00000101	00000101	00000101
SW36	01010001	01010001	01010001	01010001	01010001	01010001
SW37	00000000	00000000	00000000	00000000	00000000	00000000
SW38	10000000	10000000	10000000	10000000	10000000	10000000
SW39	10000000	10000000	10000000	10000000	10000000	10000000
SW40	00000000	00000000	00000000	00000000	00000000	00000000
SW41	00000000	00000000	00000000	00000000	00000000	00000000
SW42	10000000	10000000	10000000	00000000	10000000	00000000
SW43	00000110	00000110	10001100	00000110	00000110	00000110
SW44	00001101	00001101	00101110	00001101	00001101	00001101
SW45	00000000	00000000	00000000	00000000	00000000	00000000
SW46	01010011	01010011	01010011	01010011	01010011	01010011
SW47	00000000	00000000	00000000	00000000	00000000	00000000
SW48	00100101	00000101	00000101	00100101	00000101	00100101
SW49	10001000	10001000	10001000	10001000	10001000	10001000

TYPE	NORWAY	HOLLAND	BELGIUM	AUSTRALIA	FINLAND	N.Z.
SW50	00000000	00000000	00000000	00000000	00000000	00000000
SW51	00000000	00000000	00000000	00000000	00000000	00000000
SW52	10000011	10000011	10000011	10000011	10000011	10000011
SW53	10000011	10000011	10000011	10000011	10000011	10000011
SW54	00000011	00000011	00000011	00000011	00000011	00000011
SW55	00000000	00000000	00000000	00000000	00000000	00000000
SW56	00000000	00000000	00000000	00000000	00000000	00000000
SW57	00000000	00000000	00000000	00000000	00000000	00000000
SW58	00000000	00000000	00000000	00000000	00000000	00000000
SW59	00000000	00000000	00000000	00000000	00000000	00000000
SW60	00000000	00000000	00000000	00000000	00000000	00000000
SW61	11110000	11110000	11110000	11110000	11110000	11110000
SW62	00000000	00000000	00000000	00000000	00000000	00000000
SW63	00000000	00000000	00000000	00000000	00000000	00000000
SW64	00000000	00000000	00000000	00000000	00000000	00000000

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TYPE	ITALY	SPAIN	PORTUGAL	IRELAND	HONGKONG	MALAYSIA
SOFT SWITCH						
SW01	00000000	00000000	00000000	00000000	00000000	00000000
SW02	00000100	00000100	00000100	00000100	00000100	00000100
SW03	00001000	00001000	00000000	00000100	00001000	00001000
SW04	00000000	00000000	00000000	00000000	00000000	00000000
SW05	10000011	00000011	00000011	00000011	00000000	00000000
SW06	00000000	00000000	00000000	00000000	00000000	00000000
SW07	10100000	10100000	10100000	10100000	10100000	10100000
SW08	00000110	00000110	00000100	00000100	00000100	00000100
SW09	00000000	00000000	00000000	00000000	00000000	00000000
SW10	10001100	10000110	10000100	10000100	10000100	10000100
SW11	00000000	00000000	00000000	00000000	00000000	00000000
SW12	00110001	01110001	01110001	01110001	00110001	00110001
SW13	01001000	01001000	01001000	01001000	01001000	01001000
SW14	01000000	01000000	01000000	01000000	01000000	01000000
SW15	10110101	10110101	10110101	10110101	10110000	10110010
SW16	00000000	00000000	00000000	00000000	00000000	00000000
SW17	00000000	00000000	00000000	00000000	00000000	00000000
SW18	01000001	01000001	01000001	01000001	01000001	01000001
SW19	01011010	01011010	01011010	01011010	00011010	00011010
SW20	00000110	00000110	00000110	00000110	00000110	00000110
SW21	00000100	00000100	00000100	00000100	00000100	00000100
SW22	10101000	10101000	10101000	10101000	10101000	10101000
SW23	00010010	00010010	00010010	00010010	10100010	10100010
SW24	01000000	01000000	01000000	01000000	01000000	01000000
SW25	00000000	00000000	00010000	00000000	00010000	00000000
SW26	01000100	01000100	01000100	01000100	01000100	01000100
SW27	00000000	00000000	00000000	00000000	00000000	00000000
SW28	11101110	11101110	11100101	11100101	11100001	11100101
SW29	11110000	11110000	11110000	11110000	11110000	11110000
SW30	00010110	00010110	00010110	11000110	10011010	11000110
SW31	01010100	01010100	01010100	01010100	01010100	01010100
SW32	00000000	00000000	00000000	00000000	00000000	00000000
SW33	00000000	00000000	00000000	00000000	00000000	00000000
SW34	00000000	00000000	00000000	00000000	00000000	00000000
SW35	00000101	00000101	00000101	00000101	00000101	00000101
SW36	01010001	01010001	01010001	01010001	01010001	01010001
SW37	00000000	00000000	00000000	00000000	00000000	00000000
SW38	10000000	10000000	10000000	10000000	10000000	10000000
SW39	10000000	10000000	10000000	10000000	10000000	10000000
SW40	00000000	00000000	00000000	00000000	00000000	00000000
SW41	00000000	00000000	00000000	00000000	00000000	00000000

TYPE	ITALY	SPAIN	PORTUGAL	IRELAND	HONGKONG	MALAYSIA
SW42	10000000	10000000	10000000	10000000	00000000	00000000
SW43	00000110	00000110	11101101	00000110	00000110	00000110
SW44	00001101	00001101	00001100	00001101	00001101	00001101
SW45	00000000	00000000	00000000	00000000	00000000	00000000
SW46	01010011	01010011	01010011	01010011	01010000	01010000
SW47	00000000	00000000	00000000	00000000	00000000	00000000
SW48	00100101	00000101	00100101	00100101	00100101	00100101
SW49	10001000	10001000	10001000	10001000	10001000	10001000
SW50	00000000	00000000	00000000	00000000	00000000	00000000
SW51	00000000	00000000	00000000	00000000	00000000	00000000
SW52	10000011	10000011	10000011	10000011	10000011	10000011
SW53	10000011	10000011	10000011	10000011	10000011	10000011
SW54	00000011	00000011	00000001	00000011	00000011	00000011
SW55	00000000	00000000	00000000	00000000	00000000	00000000
SW56	00000000	00000000	00000000	00000000	00000000	00000000
SW57	00000000	00000000	00000000	00000000	00000000	00000000
SW58	00000000	00000000	00000000	00000000	00000000	00000000
SW59	00000000	00000000	00000000	00000000	00000000	00000000
SW60	00000000	00000000	00000000	00000000	00000000	00000000
SW61	11110000	11110000	11110000	11110000	11110000	11110000
SW62	00000000	00000000	00000000	00000000	00000000	00000000
SW63	00000000	00000000	00000000	00000000	00000000	00000000
SW64	00000000	00000000	00000000	00000000	00000000	00000000

T-5-14

TYPE	HUNGARY	SAF	KOREA	CHINA	GERMAN	FRANCE
SOFT SWITCH						
SW01	00000000	00000000	00000000	00000000	00000000	00000000
SW02	00000100	00000100	00000000	00000100	00000100	00000100
SW03	00001000	00001000	00000000	00001000	00001000	00001000
SW04	00000000	00000000	00000000	00000000	00000000	00000000
SW05	00000011	00000000	00000000	00000011	10000011	00000011
SW06	00000000	00000000	00000000	00000000	00000000	00000000
SW07	10100000	10100000	10100000	01000000	10100000	10100000
SW08	00000110	00000100	00000110	00000100	00000110	00000110
SW09	00000000	00000000	00000000	00000000	00000000	00000000
SW10	10000110	10000100	10000100	10000100	10000111	10001100
SW11	00000000	10000000	00000001	00000000	00000000	00000100
SW12	00110001	00110001	00110001	00110001	00110001	01110001
SW13	01001000	01001000	01001000	01001000	01001000	01001000
SW14	01000000	01000000	01000000	01000000	01000000	01000000
SW15	10110101	10110001	10110010	10110000	10110101	10110101
SW16	00000000	00000000	00000000	00000000	00000000	00000000
SW17	00000000	00000000	00000000	00000000	00000000	00000000
SW18	01000001	01000001	01000001	01000001	01000001	01000001
SW19	01011010	01011010	00011010	00010100	01011010	01011010
SW20	00000110	00000110	00000110	00000110	00000110	00000110
SW21	00000100	00000100	00000100	00000000	00000010	00000100
SW22	10101000	10101000	10101000	01001000	10101000	10101000
SW23	00010010	00010010	10100010	10100010	00010010	00010010
SW24	01000000	01000000	01000000	10100000	01000000	01000000
SW25	00000000	00000000	00000000	00000000	00000000	00010000
SW26	01000100	01000100	01000100	01000100	01000100	01000100
SW27	00000000	00000000	00000000	00000000	00000000	00000000
SW28	11100101	11100101	11100101	11100101	11100001	11100101
SW29	11110000	11110000	11110000	11110000	11110000	11110000
SW30	00010110	11000110	11000110	11000110	00010110	00010110
SW31	00010100	01010100	01011000	01011010	01010100	01010100
SW32	00000000	00000000	00000000	00000000	00000000	00000000
SW33	00000000	00000000	00000000	00000000	00000000	00000000

TYPE	HUNGARY	SAF	KOREA	CHINA	GERMAN	FRANCE
SW34	00000000	00000000	00000000	00000000	00000000	00000000
SW35	00000101	00000101	00000101	00000101	00000101	00000101
SW36	01010001	01010001	01010001	01010001	01010001	01010001
SW37	00000000	00000000	00000000	00000000	00000000	00000000
SW38	10000000	10000000	10000000	10000000	10000000	10000000
SW39	10000000	10000000	10000000	10000000	10000000	10000000
SW40	00000000	00000000	00000000	00000000	00000000	00000000
SW41	00000000	00000000	00000000	00000000	00000000	00000000
SW42	10000000	10000000	00000000	00000000	10000000	10000000
SW43	00000110	00000110	00000110	00000110	00000110	00000110
SW44	00001101	00001101	00001101	00001101	00001101	00001101
SW45	00000000	00000000	00000000	00000000	00000000	00000000
SW46	01010011	01010000	01010000	01010000	01010011	01010011
SW47	00000000	00000000	00000000	00000000	00000000	00000000
SW48	00100101	00100101	00100101	00100101	00000101	00000101
SW49	10001000	10001000	10000000	00001000	10001000	10001000
SW50	00000000	00000000	00000000	00000000	00000000	00000000
SW51	00000000	00000000	00000000	00000000	00000000	00000000
SW52	10000011	10000011	10000011	10000011	10000011	10000011
SW53	10000011	10000011	10000011	10000011	10000011	10000011
SW54	00000001	00000011	00000001	00000011	00000011	00000011
SW55	00000000	00000000	00000000	00000000	00000000	00000000
SW56	00000000	00000000	00000000	00000000	00000000	00000000
SW57	00000000	00000000	00000000	00000000	00000000	00000000
SW58	00000000	00000000	00000000	00000000	00000000	00000000
SW59	00000000	00000000	00000000	00000000	00000000	00000000
SW60	00000000	00000000	00000000	00000000	00000000	00000000
SW61	11110000	11110000	11110000	11110000	11110000	11110000
SW62	00000000	00000000	00000000	00000000	00000000	00000000
SW63	00000000	00000000	00000000	00000000	00000000	00000000
SW64	00000000	00000000	00000000	00000000	00000000	00000000

T-5-15

TYPE	SINGAPORE	CZECH	SLOVENIA	RUSSIA	ASIA	POLAND
SOFT SWITCH						
SW01	00000000	00000000	00000000	00000000	00000000	00000000
SW02	00000100	00000100	00000100	00000100	00000100	00000100
SW03	00001000	00001000	00000000	00001000	00001000	00001000
SW04	00000000	00000000	00000000	00000000	00000000	00000000
SW05	10000000	10000000	10000011	10000000	00000000	00000011
SW06	00000000	00000000	00000000	00000000	00000000	00000000
SW07	10100001	10100000	10100000	10101000	10100000	10100000
SW08	00000100	00000100	00000100	00000100	00000100	00000100
SW09	00000000	00000000	00000000	00000000	00000000	00000000
SW10	10000100	10000100	10000100	10000100	10000100	10000100
SW11	00000000	00000000	00000100	00000000	00000000	00000000
SW12	00110001	00110001	00110001	00110001	00110001	00110001
SW13	01001000	01001000	01001000	01001000	01001000	01001000
SW14	01000000	01000000	01000000	01000000	01000000	01000000
SW15	10110010	10110101	10110001	10110000	10110010	10110101
SW16	00000000	00000000	00000000	00000000	00000000	00000000
SW17	00000000	00000000	00000000	00000000	00000000	00000000
SW18	01000001	01000001	01000001	01000001	01000001	01000001
SW19	00011010	01011010	01011010	00011010	00011010	01011010
SW20	00000110	00000111	00000110	00000110	00000110	00000110
SW21	00000100	00000100	00000100	00000100	00000100	00000100
SW22	10101000	10101000	10100000	10101000	10101000	10101000
SW23	10100010	00010010	00010010	10100010	10100010	00010010
SW24	01000000	01000000	01000000	01000000	01000000	01000000
SW25	00000000	00000000	00000000	00000000	00000000	00000000

TYPE	SINGAPORE	CZECH	SLOVENIA	RUSSIA	ASIA	POLAND
SW26	01000100	01000100	01000100	01000100	01000100	01000100
SW27	00000000	00000000	00000000	00000000	00000000	00000000
SW28	11100101	11100101	11100101	11100101	11100001	11100101
SW29	11110000	11110000	11110000	11110000	11110000	11110000
SW30	11000110	11000110	11000110	11000110	11000110	11000110
SW31	01010100	01010100	01010100	01010100	01010100	01010100
SW32	00000000	00000000	00000000	00000000	00000000	00000000
SW33	00000000	00000000	00000000	00000000	00000000	00000000
SW34	00000000	00000000	00000000	00000000	00000000	00000000
SW35	00000101	00000101	00000101	00000101	00000101	00000101
SW36	01010001	01010001	01010001	01010001	01010001	01010001
SW37	00000000	00000000	00000000	00000000	00000000	00000000
SW38	10000000	10000000	10000000	10000000	10000000	10000000
SW39	10000000	10000000	10000000	10000000	10000000	10000000
SW40	00000000	00000000	00000000	00000000	00000000	00000000
SW41	00000000	00000000	00000000	00000000	00000000	00000000
SW42	00000000	10000000	10000000	10000000	00000000	10000000
SW43	00000110	00000110	00000110	00000110	00000110	00000110
SW44	00001101	00001101	00001101	00001101	00001101	00001101
SW45	00000000	00000000	00000000	00000000	00000000	00000000
SW46	01010000	01010011	01010011	01010011	01010010	01010011
SW47	00000000	00000000	00000000	00000000	00000000	00000000
SW48	00100101	00100101	00000101	00100101	00100101	00100101
SW49	10001000	10001000	10001000	10001000	10001000	10001000
SW50	00000000	00000000	00000000	00000000	00000000	00000000
SW51	00000000	00000000	00000000	00000000	00000000	00000000
SW52	10000011	10000011	10000011	10000011	10000011	10000011
SW53	10000011	10000011	10000011	10000011	10000011	10000011
SW54	00000011	00000011	00000001	00000011	00000011	00000011
SW55	00000000	00000000	00000000	00000000	00000000	00000000
SW56	00000000	00000000	00000000	00000000	00000000	00000000
SW57	00000000	00000000	00000000	00000000	00000000	00000000
SW58	00000000	00000000	00000000	00000000	00000000	00000000
SW59	00000000	00000000	00000000	00000000	00000000	00000000
SW60	00000000	00000000	00000000	00000000	00000000	00000000
SW61	11110000	11110000	11110000	11110000	11110000	11110000
SW62	00000000	00000000	00000000	00000000	00000000	00000000
SW63	00000000	00000000	00000000	00000000	00000000	00000000
SW64	00000000	00000000	00000000	00000000	00000000	00000000

T-5-16

TYPE	EUROPE2	LUXEMBOU RG	GREECE	TAIWAN	OTHERS
SOFT SWITCH					
SW01	00000000	00000000	00000000	00000000	00000000
SW02	00000100	00000100	00000100	00000100	00000100
SW03	00001000	00001000	00000000	00001000	00001000
SW04	00000000	00000000	00000000	00000000	00000000
SW05	00000000	00000011	10000011	00000000	00000011
SW06	00000000	00000000	00000000	00000000	00000000
SW07	10100000	10100000	10100000	10100000	10100000
SW08	00000100	00000100	00000100	00000110	00000100
SW09	00000000	00000000	00000000	00000000	00000000
SW10	10000100	10001100	10000100	10000100	10000100
SW11	00000000	00000000	00000100	00000000	00000000
SW12	00110001	00110001	00110001	00110001	00110001
SW13	01001000	01001000	01001000	01001000	01001000
SW14	01000000	01000000	01000000	01000000	01000000
SW15	10110000	10110101	10110101	10011000	10011101
SW16	00000000	00000000	00000000	00000000	00000000

TYPE	EUROPE2	LUXEMBOU RG	GREECE	TAIWAN	OTHERS
SW17	00000000	00000000	00000000	00000000	00000000
SW18	01000001	01000001	01000001	01000001	01000001
SW19	00011010	01011010	01011010	11011010	01011010
SW20	00000110	00000110	00000110	00000110	00000110
SW21	00000100	00000100	00000100	00000100	00000100
SW22	10101000	10101000	10101000	10101000	10101000
SW23	10100010	00010010	00010010	10010010	00010010
SW24	01000000	01000000	01000000	00100000	01000000
SW25	00000000	00000000	00000000	00000000	00000000
SW26	01000100	01000100	01000100	01000100	01000100
SW27	00000000	00000000	00000000	00000000	00000000
SW28	11100101	11100101	11100101	11100101	11100001
SW29	11110000	11110000	11110000	11110000	11110000
SW30	11000110	00010110	00010110	11000110	00010110
SW31	01010100	01010100	01010100	01010010	01010100
SW32	00000000	00000000	00000000	00000000	00000000
SW33	00000000	00000000	00000000	00000000	00000000
SW34	00000000	00000000	00000000	00000000	00000000
SW35	00000101	00000101	00000101	00000101	00000101
SW36	01010001	01010001	01010001	01010001	01010001
SW37	00000000	00000000	00000000	00000000	00000000
SW38	10000000	10000000	10000000	10000000	10000000
SW39	10000000	10000000	10000000	10000000	10000000
SW40	00000000	00000000	00000000	00000000	00000000
SW41	00000000	00000000	00000000	00000000	00000000
SW42	00000000	10000000	10000000	00000000	10000000
SW43	00000110	00000110	00000110	00000110	00000110
SW44	00001101	00001101	00001101	00001101	00001101
SW45	00000000	00000000	00000000	00000000	00000000
SW46	01010011	01010011	01010011	01010000	01010010
SW47	00000000	00000000	00000000	00000000	00000000
SW48	00100101	00100101	00100101	00100101	00100101
SW49	10001000	10001000	10001000	10001000	10001000
SW50	00000000	00000000	00000000	00000000	00000000
SW51	00000000	00000000	00000000	00000000	00000000
SW52	10000011	10000011	10000011	10000011	10000011
SW53	10000011	10000011	10000011	10000011	10000011
SW54	00000011	00000011	00000001	00000101	00000011
SW55	00000000	00000000	00000000	00000000	00000000
SW56	00000000	00000000	00000000	00000000	00000000
SW57	00000000	00000000	00000000	00000000	00000000
SW58	00000000	00000000	00000000	00000000	00000000
SW59	00000000	00000000	00000000	00000000	00000000
SW60	00000000	00000000	00000000	00000000	00000000
SW61	11110000	11110000	11110000	11110000	11110000
SW62	00000000	00000000	00000000	00000000	00000000
SW63	00000000	00000000	00000000	00000000	00000000
SW64	00000000	00000000	00000000	00000000	00000000

5.5.3 Service Soft Switch Settings (SSSW)

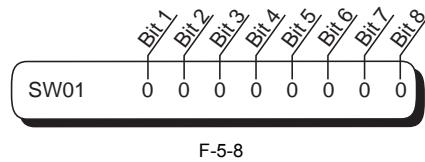
5.5.3.1 Outline

5.5.3.1.1 Explanation of SOFT SWITCH

0010-3882

FAX-L100 / FAX-L120

The items registered and set by each of these switches comprise 8-bit switches. The figure below shows which numbers are assigned to which bits. Each bit has a value of either 0 or 1.



F-5-8

Below are examples showing how to read bit switch tables.

Bit	Function	1	0	
0	Not used	-	-	
1	Not used	-	-	
2	Not used	-	-	
3	Document scan width	LETTER	A4*	Indicates the default settings.
4	Not used	-	-	
5	Not used	-	-	
6	Not used	-	-	
7	Not used	-	-	

F-5-9

Indicates that the setting is "1".

Indicates that the setting is "0".

5.5.3.2 SSSW-SW02:

5.5.3.2.1 List of Functions

0010-4064

FAX-L100 / FAX-L120

T-5-17

Bit	Function	1	0	
1	Not used	-	-	
2	RTN signal transmission condition	1	0*	
3	RTN signal transmission condition	1	0*	
4	Not used	-	-	
5	Not used	-	-	
6	Not used	-	-	
7	Not used	-	-	
8	Not used	-	-	

5.5.3.2.2 Details of Bit 2 and Bit 3

0010-4065

FAX-L100 / FAX-L120

During reception if frequent errors occur because of RTN signal transmission, raise these parameters to loosen the RTN signal transmission conditions. RTN signal transmission condition is the ratio of the number of error lines to the total number of lines per page of the received image. The combination of bit 2 and bit 3 will bring about the following:

T-5-18

- (Bit2, Bit3)= (0, 0) 10%
- (1, 0) 15%
- (0, 1) 20%
- (1, 1) 25%

5.5.3.3 SSSW-SW10

5.5.3.3.1 List of Functions

FAX-L100 / FAX-L120

0010-4072

T-5-19

Bit	Function	1	0
1	Sound alarm if ends in error	Sound*	Do not sound
2	Page timer for manual transmission	15 min	impose no limit*
3	Not used	-	-
4	Not used	-	-
5	Not used	-	-
6	Not used	-	-
7	Not used	-	-
8	Not used	-	-

5.5.3.3.2 Details of Bit 1

0010-4075

FAX-L100 / FAX-L120

If a transmission ends in error, sound the alarm for 3 sec. If not desired, change it to "Do not sound".

5.5.3.3.3 Details of Bit 2

0010-4076

FAX-L100 / FAX-L120

Use it to select a page timer setting for manual transmission.

5.5.3.4 SSSW-SW16

5.5.3.4.1 List of Functions

0010-4078

FAX-L100 / FAX-L120

T-5-20

Bit	Function	1	0
1	Not used	-	-
2	Not used	-	-
3	Document scan width	LETTER	A4*
4	Not used	-	-
5	Not used	-	-
6	Not used	-	-
7	Not used	-	-
8	Not used	-	-

5.5.3.4.2 Details of Bit 3

0010-4079

FAX-L100 / FAX-L120

The document reading width can be selected.

When selecting the "LTR" size, a "LTR" size document can be read in the "LTR" width (214 mm).

5.5.3.5 SSSW-SW30

5.5.3.5.1 List of Functions

0010-4098

FAX-L100 / FAX-L120

T-5-21

Bit	Function	1	0
1	Not used	-	-

Bit	Function	1	0
2	Not used	-	-
3	Not used	-	-
4	Not used	-	-
5	Not used	-	-
6	Not used	-	-
7	Pause time	1*	0
8	Pause time	1	0*

5.5.3.5.2 Details of Bit 7 and Bit 8

0010-4099

FAX-L100 / FAX-L120

Use it to set the length of a pause; the following will be true depending on the combination of bit 7 and bit 8:

T-5-22

- (Bit7, Bit8)= (0, 0) 2.0 sec.
- (1, 0) 2.5 sec.
- (0, 1) 3.0 sec.
- (1, 1) 3.5 sec.

5.5.3.6 SSSW-SW37

5.5.3.6.1 List of Functions

0010-4102

FAX-L100 / FAX-L120

T-5-23

Bit	Function	1	0
1	V.34 Baud rate (TX)	1	0*
2	V.34 Baud rate (TX)	1	0*
3	V.34 Baud rate (TX)	1	0*
4	V.34 Baud rate (RX)	1	0*
5	V.34 Baud rate (RX)	1	0*
6	V.34 Baud rate (RX)	1	0*
7	Not used	-	-
8	Not used	-	-

5.5.3.6.2 Details of Bit 0 through Bit 6

0010-4105

FAX-L100 / FAX-L120

Select the maximum baud rate for V.34 transmission: 3429, 3200, 3000, 2800, and 2400.
The following will be true depending on the combination of bit 1 through bit 6
at time of transmission

T-5-24

- (Bit1, Bit2, Bit3)= (0, 0, 0) 3429
- (1, 0, 0) 3200
- (0, 1, 0) 3000
- (1, 1, 0) 2800
- (0, 0, 1) 2400

at time of reception

T-5-25

- (Bit4, Bit5, Bit6)= (0, 0, 0) 3429
- (1, 0, 0) 3200
- (0, 1, 0) 3000

(1, 1, 0) 2800
 (0, 0, 1) 2400

5.5.3.7 SSSW-SW51

5.5.3.7.1 List of Functions

FAX-L100 / FAX-L120

0010-4182

T-5-26

Bit	Function	1	0
1	Not used	-	-
2	Not used	-	-
3	Protocol monitor report	1	0*
4	Protocol monitor report	1	0*
5	Not used	-	-
6	Not used	-	-
7	Not used	-	-
8	Not used	-	-

5.5.3.7.2 Details of Bit 3 and Bit 4

0010-4183

FAX-L100 / FAX-L120

Use it to select the mode of printing a protocol monitor report; the following will be true depending on the combination of bit 3 and bit 4:

T-5-27

(Bit3, Bit4)= (0, 0) Do not print
 (1, 0) Print
 (0, 1) Print if error
 (1, 1) Not used

5.5.3.8 SSSW-SW54

5.5.3.8.1 List of Functions

0010-4191

FAX-L100 / FAX-L120

T-5-28

Bit	Function	1	0
1	Not used	-	-
2	Not used	-	-
3	Not used	-	-
4	Not used	-	-
5	Not used	-	-
6	Date/time notation for report	1	0*
7	Date/time notation for report	1*	0
8	Month notation for report	1*	0

5.5.3.8.2 Details of Bit 6 and Bit 7

0010-4192

FAX-L100 / FAX-L120

Use it to select the date/time notation for reports; the following will be true depending on the combination of bit 6 and bit 7:

T-5-29

(Bit6, Bit7)= (0, 0) YYYY MM/DD
 (1, 0) MM/DD YYYY
 (0, 1) DD/MM YYYY

(1, 1) Not used

5.5.3.8.3 Details of Bit 8

0010-6003

FAX-L100 / FAX-L120

Use it to select the month notation for reports:

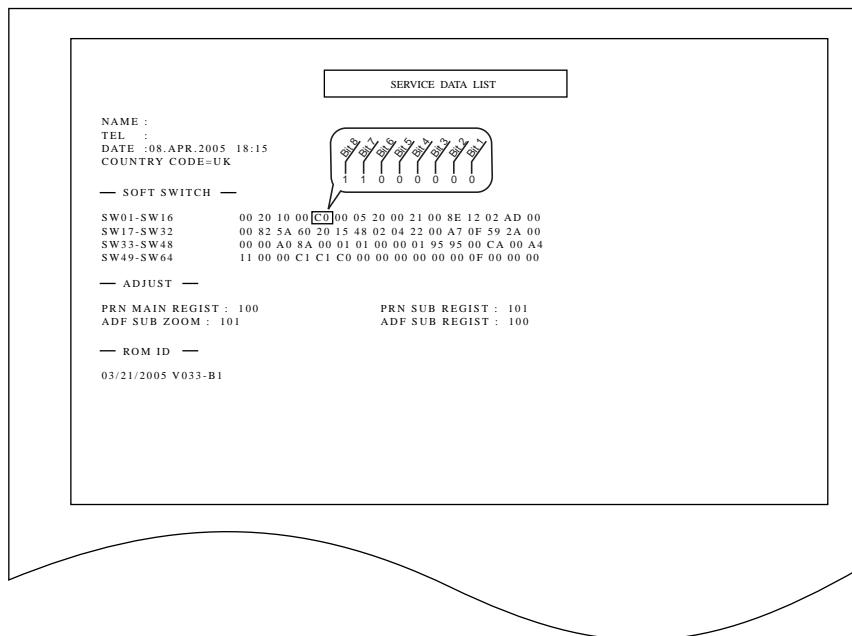
If [1] is selected, the month will be expressed in alphabet characters (e.g., 25.MAR.2005)
If [0] is selected, year, month, and day will all be expressed in numberals (e.g., 25.03.2005)

5.5.4 Report Output (REPORT)

5.5.4.1 SERVICE DATA LIST

0010-4674

FAX-L100 / FAX-L120



F-5-10

5.5.5 Test Mode (TEST)

5.5.5.1 Overview

5.5.5.1.1 Test Mode Overview

0010-2877

FAX-L100 / FAX-L120

The following test modes are available from the menu on the display.

FUNCTION

Use it to test the ADF operation or print out a test pattern within the print area.

H/W TEST

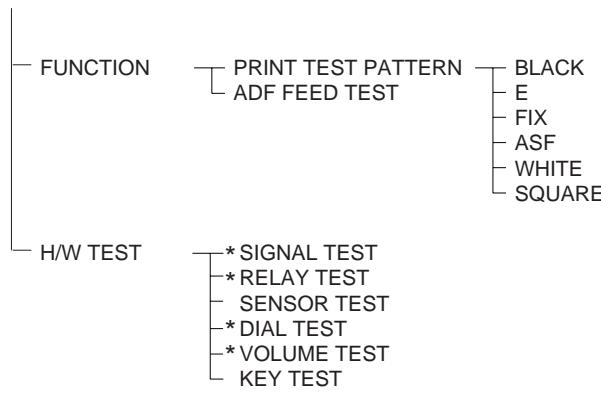
Use it to test the sensors and functions of the operation panel.

5.5.5.1.2 Test Mode Flowchart

0010-2876

FAX-L100 / FAX-L120

To operate the test mode, after pressing the Menu key, press the # key and select "SERVICE MODE". After this, select "TEST MODE" with the cursor keys, and press the OK key.
To come out of the test mode, after pressing the Stop key.



5.5.5.2 Faculty Test

5.5.5.2.1 PRINT TEST PATTERN

0010-3263

FAX-L100 / FAX-L120

From the FUNCTION menu, select PRINT TEST PATTERN.

In this test, the printer unit will be used to print various patterns. For service work, be sure to use the BLACK pattern and the SQUARE pattern. Use the BLACK print pattern to make sure that the printout is free of white lines and unevenness; on the other hand, use the SQUARE printout to make sure that the printout is free of image contraction, elongation, and soiling.

Memo

After completion of the print test, if the printing was normal, copy a document. If there is any defect in the copied image, there is a defect in the scan section.

5.5.5.2.2 ADF FEED TEST

0010-3269

FAX-L100 / FAX-L120

From the FUNCTION menu, select ADF FEED TEST.

Use the test to make sure that the ADF function of the sheet reader unit operates normally.

5.5.5.2.3 Sensor Tests

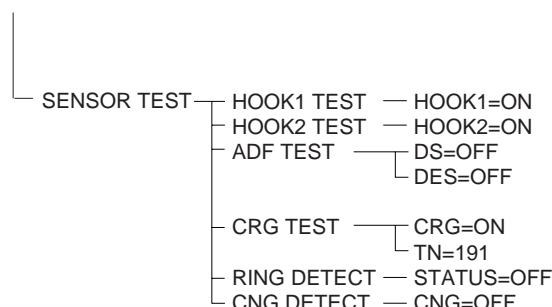
0010-3273

FAX-L100 / FAX-L120

From the H/W TEST menu, select SENSOR TEST.

In this test, you can check the status of each sensor of this fax in items 1 to 4 on the display.

You can also check if sensors that use actuators and microswitches are operating correctly by moving the actuator or microswitch.



5.5.5.2.4 Operation Panel Tests

0010-3338

FAX-L100 / FAX-L120

From the H/W TEST menu, select KEY TEST.

Use the test to make sure that the buttons on the operation panel operate normally.

Operation Key Test

In this test, a character disappears when its operation key is pressed. The list of characters and their operation keys is as follows. Check to make sure at this time that all characters properly disappear when their operation keys are pressed.

T-5-30

Character	Operation key	Character	Operation key
0-9,*,#	Numeric key	I	R button
A	Copy button	J	Hook button
B	Add.MODE button	K	UP button
C	MENU button	L	Right button
D	STATUS button	M	Down button
E	Image Quality button	N	Left button
F	Directory button	O	Start button
G	Coded Dial button	P	Clear button
H	Redial/Pause button		

One-Touch Dial Key Test

The one-touch dial key test starts once all characters disappear in the operation key test.

The characters a to o corresponding to 01 to 15 are displayed, and a character disappears when its one-touch key is pressed. Check to make sure at this time that all characters properly disappear when their one-touch keys are pressed.

8. H/W TEST
KEY TEST

↓ Press OK button.

0123456789*#ABCDEFGHIJ
JKLMNOP

When a key is pressed, the corresponding character goes out.

↓ When the entire display has gone out

abcdefghijklmno

When a one-touch speed dialing key is pressed, the corresponding letter goes out.

↓ When the entire display has gone out

OK

Press the Stop button to end the test.

F-5-13

Chapter 6 APPENDIX

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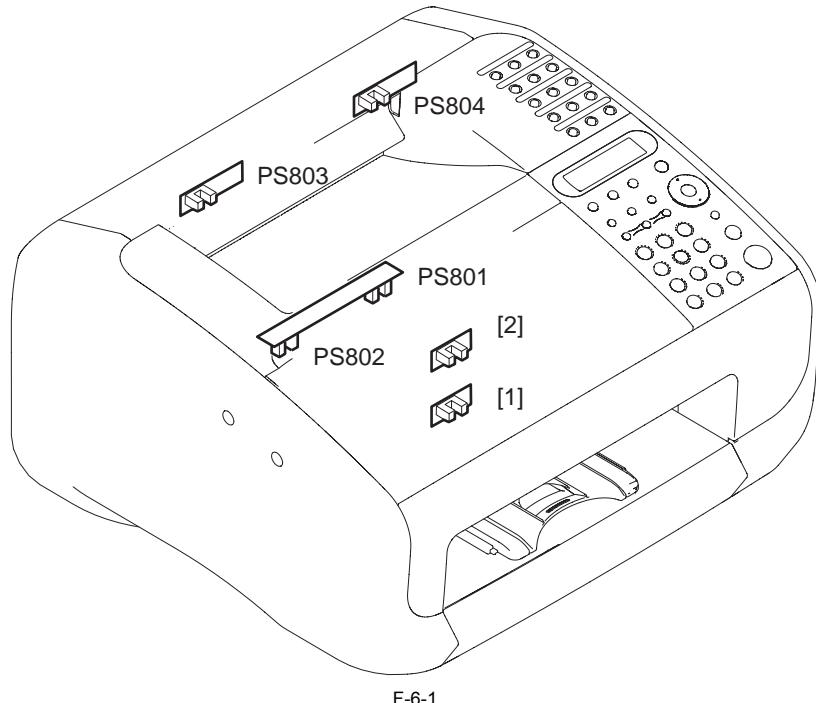
6.1 Outline of Electrical Components

6.1.1 Sensor

6.1.1.1 Arrangement of Sensors and Switches

FAX-L100 / FAX-L120

0010-4694



F-6-1

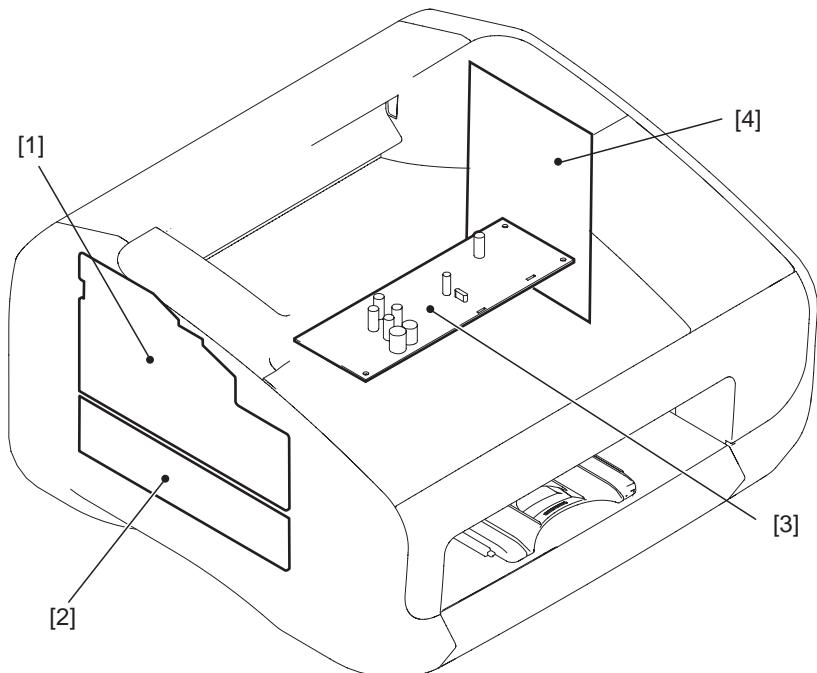
- [1] Document Sensor
- [2] Document Edge Sensor
- [PS801] Top of page sensor
- [PS802] Paper width sensor
- [PS803] Paper delivery sensor
- [PS804] Paper width sensor

6.1.2 PCBs

6.1.2.1 Arrangement of PCBs

FAX-L100 / FAX-L120

0010-4696



F-6-2

- [1] High-Voltage Power Supply Board
- [2] Power Supply Board
- [3] DCNT Board
- [4] SCNT Board

Jun 6 2005

Canon