

DR-7080C

SERVICE MANUAL

FIRST EDITION

Canon

MAR. 2004

MY8-13A2-000

COPYRIGHT © 2004 CANON ELECTRONICS INC.

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

This Service Manual describes necessary basic information for field service and maintenance for maintaining the product quality and functions of the DR-7080C.

Contents

Chapter 1: General description

Features, specifications, name of parts, operation method

Chapter 2: Functions and operation

Description of operation of machine system and electrical system by function

Chapter 3: Disassembly and reassembly

Disassembly method, reassembly method

Chapter 4: Installation and maintenance

Installation method, maintenance method

Chapter 5: Troubleshooting

Service modes and troubleshooting

Appendix: General circuit diagrams, etc.

Information in this manual is subject to change. Notification of such changes will be given in Service Information Bulletins.

Thoroughly read the information contained in this Service Manual and the Service Information Bulletins to gain a correct and deeper understanding of the machine. This is one way of fostering response for ensuring prolonged quality and function, and for investigating the cause of trouble during troubleshooting.

Quality Assurance Center
Canon Electronics Inc.

CONTENTS

CHAPTER 1 GENERAL DESCRIPTION

I. FEATURES	1-1	IV. NAME OF PARTS.....	1-7
II. SPECIFICATIONS	1-2	V. EXPLANATION OF OPERATION.....	1-10
III. PRECAUTIONS	1-6	VI. REGULAR INSPECTION BY USERS....	1-14

CHAPTER 2 FUNCTIONS & OPERATION

I. OUTLINE.....	2-1	V. OPTION.....	2-72
II. FEEDER.....	2-5	VI. ELECTRICAL PARTS LAYOUT	2-75
III. READER	2-34	VII. LISTS OF CONNECTORS/SW/LED	
IV. CONTROLLER.....	2-50	OF EACH PCB.....	2-79

CHAPTER 3 DISASSEMBLY & REASSEMBLY

I. MAIN UNIT.....	3-1	III. READER	3-35
II. FEEDER.....	3-5	IV. CONTROLLER.....	3-52

CHAPTER 4 INSTALLATION & MAINTENANCE

I. SELECTION OF LOCATION.....	4-1	IV. PERIODICALLY REPLACED PARTS	4-8
II. UNPACKING AND INSTALLATION	4-2	V. CONSUMABLE PARTS AND	
III. STAMP UNIT INSTALLATION		CONSUMABLES.....	4-9
PROCEDURE	4-6	VI. PERIODIC SERVICING	4-11

CHAPTER 5 TROUBLESHOOTING

I. ERROR DISPLAY AND REMEDY.....	5-1	V. AFTER REPLACING PARTS	5-46
II. SERVICE MODE	5-4	VI. OPERATION TROUBLESHOOTING	5-50
III. USER MODES	5-34	VII. IMAGE TROUBLESHOOTING	5-54
IV. FEEDER ADJUSTMENT	5-35		

APPENDIX

I. GENERAL DIAGRAM.....	A-1	IV. SIGNAL NAMES LIST	A-7
II. READER DIAGRAM.....	A-3	V. SPECIAL TOOLS LIST	A-10
III. FEEDER DIAGRAM	A-5		

CHAPTER 1

GENERAL DESCRIPTION

I. FEATURES	1-1	IV. NAME OF PARTS	1-7
II. SPECIFICATIONS.....	1-2	V. EXPLANATION OF OPERATION	1-10
III. PRECAUTIONS	1-6	VI. REGULAR INSPECTION BY USERS....	1-14

I. FEATURES

- 1. Universal document scanner with ADF and flatbed (FB) for A3 size**
Support for black and white, grayscale, and color output
- 2. High speed scanning**
Using ADF, A4 simple: Max. 70 pages/minute, A4 duplex: Max. 36 images/minute
- 3. New functions**
Job function and MultiStream function by bundled software
- 4. Using the new product from Office Imaging Products Group of Canon Inc.**
Common ADF and Reader, and exclusive Controller

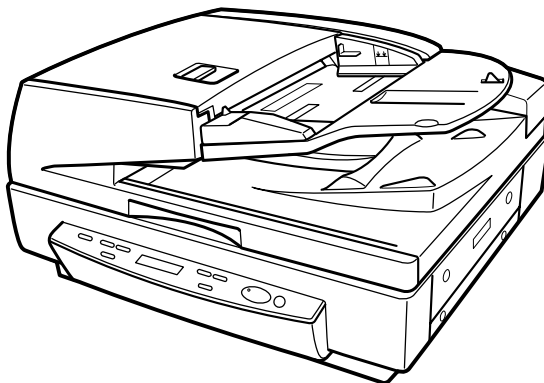


Figure 1-101

“Windows” is a trademark of Microsoft Corporation in the U.S. and other countries. Other company names and product names mentioned in this document are registered trademarks or trademarks of the respective companies.

II. SPECIFICATIONS

1. Appearance/Installation

No.	Item	Specifications
1	Type	Desktop type flatbed scanner with ADF
2	Product models	1) for Japan: 100 VAC, 50/60 Hz 2) for American region: 120 VAC, 60 Hz 3) for European region: 220 to 240 VAC, 50/60 Hz 4) for others
3	Rating power consumption/current	1) 100 V model: 151 W 2) 120 V model: 1.23 A 3) 220 to 240 V model: 0.74 A Note: "EnergyStar" available.
4	Performance-guaranteed environment	15 to 27.5°C (59 to 81.5°F) 25 to 75% RH Note: No condensation allowed.
5	Noise	1) Sound power level In standby mode: 40 dB or less In operating mode: 78 dB or less (100 to 300 dpi) 75 dB or less (400 to 600 dpi) 2) Sound pressure level: Bystanders In standby mode: 40 dB or less In operating mode: 63 dB or less
6	Dimensions	575 (W) × 602 (D) × 300 (H) mm
7	Weight	Approx. 34 kg
8	Interface	1) SCSI-3 (Ultra SCSI compatible) 2) USB 2.0 (Hi-Speed compatible)
9	Expected product life	One of the following two items, whichever comes first. 1) 5 years 2) ADF mode: Sheets fed: 4,000,000 sheets (A4 size) 3) FB mode: 200,000 scans There are parts needed to replace.
10	Installation	By service technician
11	Option	1) Stamp unit 2) Network scanning adapter: NSA-01

Table 1-201

2. Document Reading

No.	Item	Specifications				
1	Method of scan	1) FB: Mirror moving 2) ADF: Sheet feeding (mirror fixing)				
2	Type of sensor	3-lines CCD				
3	Picture element	Density of element: 600 dpi, Effective elements: 7350				
4	Light source	Xenon tube				
5	Dropout color	Available (R/G/B)				
6	Color-emphasize mode	Available (R/G/B)				
7	Reading side	ADF: Simplex (front), Duplex FB: Simplex				
8	Reading size (typical)	1) L series: LDR / LGL / LTR / LTR-R 2) A series: A3 / A4 / A4R / A5 / A5R 3) B series: B4 / B5 / B5R				
9	Reading g size (atypical)	1) Available pixel unit setting 2) Main-scanning direction: Min. 139.7 mm, Max. 298 mm 3) Sub-scanning direction: Min. 128 mm, Max. 432 mm				
10	Output mode	1) Binary (Black & White / Error diffusion Advanced text enhancement) 2) Grayscale (8 bit) 3) Color (24 bit)				
11	Output resolution	1) 100 × 100 dpi 2) 150 × 150 dpi 3) 200 × 200 dpi 4) 240 × 240 dpi 5) 300 × 300 dpi 6) 400 × 400 dpi 7) 600 × 600 dpi				
12	Scanning speed (ADF)	A4 size		Black & White	Gray	Color
		Simplex (pages/min.)	200 dpi	70 ppm	70 ppm	70 ppm
			300 dpi	70 ppm	68 ppm	44 ppm
			400 dpi	50 ppm	40 ppm	28 ppm
			600 dpi	50 ppm	19 ppm	13 ppm
		Duplex (images/min.)	200 dpi	36 ipm	36 ipm	36 ipm
			300 dpi	36 ipm	36 ipm	36 ipm
			400 dpi	32 ipm	32 ipm	28 ipm
			600 dpi	32 ipm	19 ipm	13 ipm
		Note: Grayscale and color mean JPEG in this case. It differs depending on the setting, computer performance, or other conditions.				

Table 1-202

3. Documents Feed (ADF)

No.	Item	Specifications
1	Document size	1) Width: 139.7 to 304.8 mm 2) Length: 128 to 432 mm Note: At Long document mode, Max. 630 mm length, added color and 600 dpi mode, Max. 540 mm length.
2	Document weight (thickness)	1) Simplex black & white document AB series: 42 to 128 g/m ² (0.06 to 0.15 mm) L series: 50 to 128 g/m ² (0.07 to 0.15 mm) 2) Duplex black & white document 50 to 128 g/m ² (0.07 to 0.15 mm) 3) Color document 64 to 128 g/m ² (0.08 to 0.15 mm) 4) Black & white document at black & white and color mixed 50 to 128 g/m ² (0.07 to 0.15 mm) Note: At Long document mode, 60 to 90 g/m ² .
3	Document requirements	1) Pressure-sensitive paper: Available (document weight: 50 to 128 g/m ²) 2) Carbon-backed document: None 3) Perforated paper for binder: Only 2 / 3 / 4 holes can be fed. 4) Folded paper File folded: Length 15 mm Max. / Height 10 mm Max. Staple folded: Length 20 mm Max. / Height 10 mm Max. 5) Creased paper: Can be fed, but crease must be straightened.
4	Pickup storage	1) 100 pages Max. (at document weight 80 g/m ²) Available adding in progress. 2) 13mm Max. at height Note: At Long document mode, one sheet only.
5	Delivery storage	100 pages Max. (at document weight 80 g/m ²)
6	Delivery face direction	Face down
7	Feeding speed	1) 100/150/200/240/300 dpi: 468 mm/sec 2) 400/600 dpi: 234 mm/sec

Table 1-203

4. Image Processing/Others

No.	Item	Specifications
1	Image processing	1) Brightness adjustment: 255 levels 2) Contrast adjustment: 7 levels 3) Automatic brightness adjustment (AE): ABC processing 4) Shading correction: Standard white plate built in the scanner. 5) Smoothing: Available 6) Gamma correction: Standard / Custom 7) Edge emphasis: 5 steps 8) Image data compression: JPEG module built-in 9) MultiStream function: Available 10) Automatic size detection: Available 11) Skew correction: Available
2	Other function	1) Long document mode 2) Pre-scan 3) Count-only 4) Patch code 5) New file 6) Job function 7) Counter: stored in the memory 8) Self-diagnosis function
3	Bundled software	ISIS/TWAIN driver, CapturePerfect 2.0 Job registration tool

Table 1-204

The specifications above are subject to change for improvement of the product.

III. PRECAUTIONS

This section describes items that require particular care, for example, regarding human safety. These precautions must be observed. Explain to the user items that relate to user safety, and instruct the user to take appropriate actions.

1. Power OFF in Emergency

When such abnormalities as abnormal noise, smoke, heat and odor occur, turn the power off immediately and unplug the power cord.

As it may cause injury, be careful not to get clothing (ties, long hair, etc.) caught in the machine. If this happens, turn the power off immediately.

Also, do not insert your fingers in the feed section while feeding documents.

2. Electromagnetic Wave Interference Countermeasures

This machine complies with the electromagnetic wave interference standards (VCCI-A, FCC-A, etc.). However, the user might have to carry out countermeasures if the machine causes electromagnetic wave interference.

Do not change nor modify this machine. If this has been carried out, its use may be forcibly discontinued on site. If this machine's specifications shall be changed, or the machine shall be disassembled and reassembled, follow the instructions described in this manual or in Service Information Bulletins.

The "CAUTION LABEL" is affixed on the rear of the machine.

<p>This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.</p>	<p>This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.</p> <p>Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.</p>
--	--

CAUTION LABEL

3. User Manual

Read the user manual thoroughly before using this machine.

4. Disposal

Following local regulations when disposing of the product and parts.

5. Movement

The machine weighs approximately 34 kg. Hold it firmly from both sides with two persons, and move the main body carefully. Do not try to lift it alone.

IV. NAME OF PARTS

1. Feeder

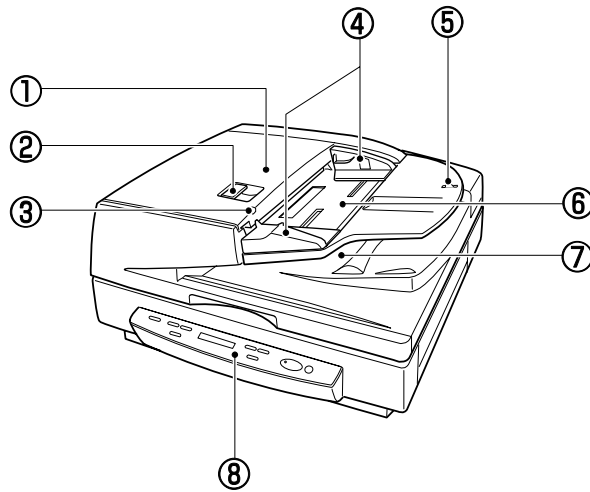


Figure 1-401

- ① Feeder cover
- ② Opening lever
- ③ Document set indicator
- ④ Slide guide (Document guide)
- ⑤ Large-size document detection sensor (LGL sensor)
- ⑥ Document feeder tray
- ⑦ Document delivery tray
- ⑧ Operation panel

2. Flatbed

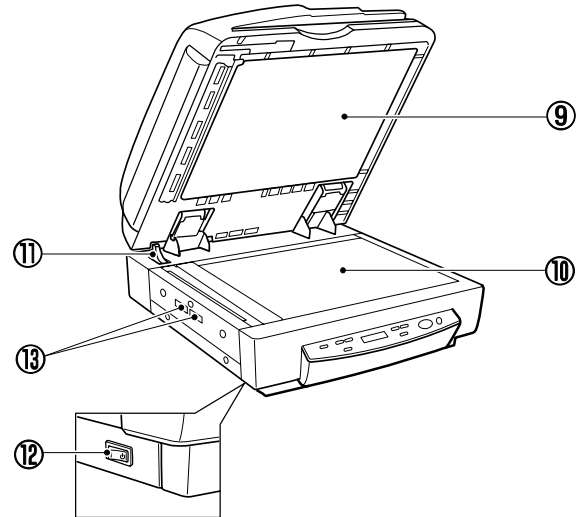


Figure 1-402

- ⑨ Pressure board (black)
- ⑩ Flatbed (Platen glass)
- ⑪ Opening sensor
- ⑫ Power switch
- ⑬ Air vents

3. Rear View

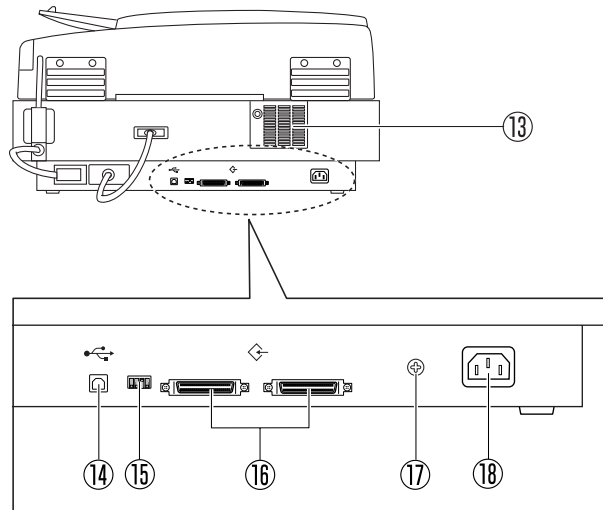


Figure 1-403

- ⑬ Air vents
- ⑭ USB connector
- ⑮ DIP switches
- ⑯ SCSI connectors
- ⑰ Grounding terminal
- ⑱ Power cord connector

Note: Take care to ensure that the vents never become blocked. Blocked vents can lead to heat build-up inside the scanner and create the risk of failure.

4. Operation Panel

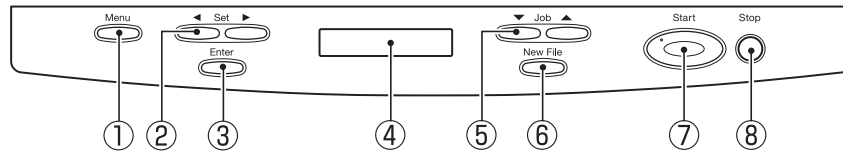


Figure 1-404

- ① Menu key
- ② Set keys
- ③ Enter key
- ④ Display panel
- ⑤ Job keys
- ⑥ New File key
- ⑦ Start key
- ⑧ Stop key

V. EXPLANATION OF OPERATION

For details, refer to user manuals of the DR-7080C and the software to be used.

1. Basic Operation

The basic operation for operating the DR-7080C is as follows.

- 1) Turn the DR-7080C ON.
- 2) Turn the computer ON.
- 3) Start the software.
- 4) Set the document.
- 5) Execute operation.
- 6) End operation.
- 7) Quit the software.
- 8) Turn the computer OFF.
- 9) Turn the DR-7080C OFF.

2. Operation Screen

The basic operation screens are shown below for reference.

The bundled "CapturePerfect2.0" uses the "TWAIN" driver.

1) CapturePerfect2.0

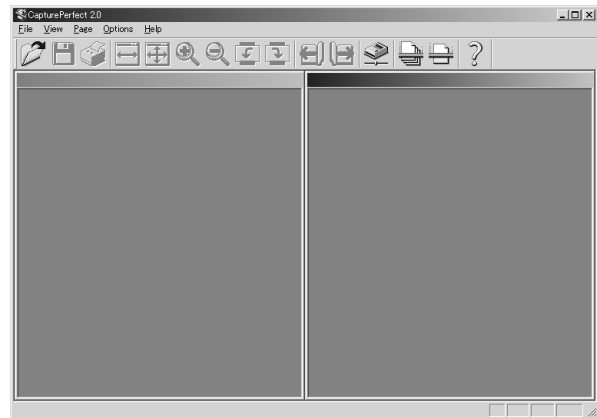


Figure 1-501

2) Scanner Setting



Figure 1-502

3) Advanced Settings

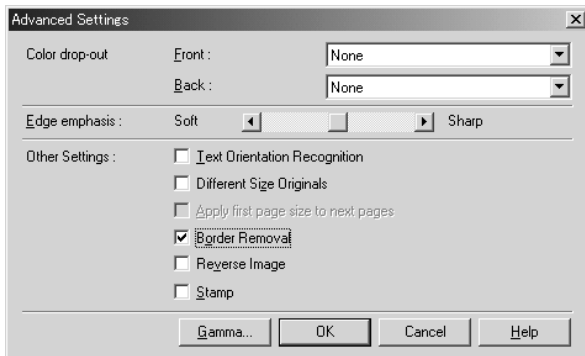


Figure 1-503

4) Job Registration

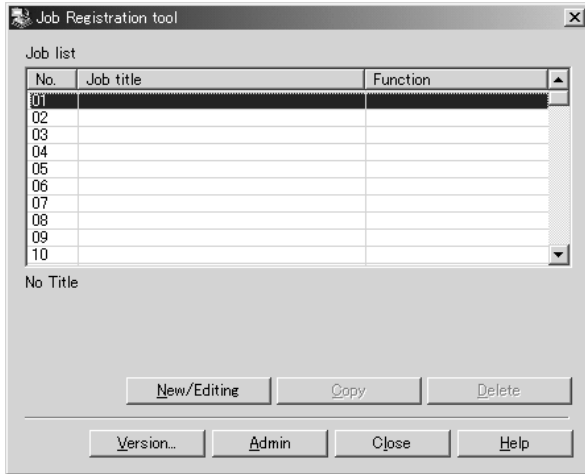


Figure 1-504

5) MultiStream

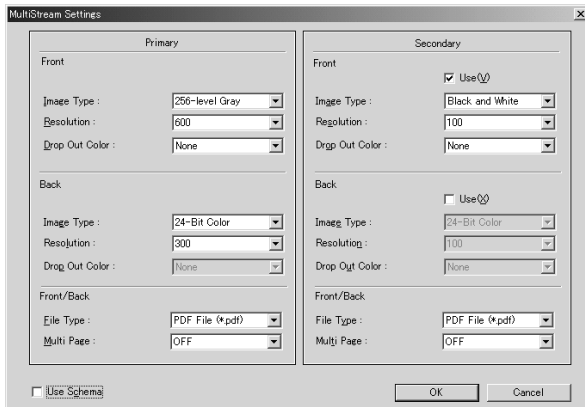


Figure 1-505

6) Version Indication



Figure 1-506

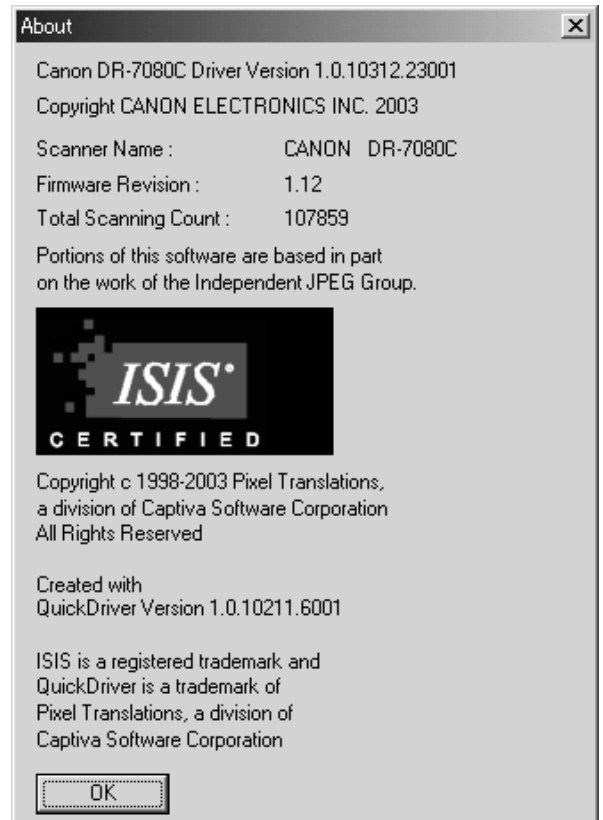


Figure 1-507

3. Jam Cleaning

- 1) Remove all document pages from the document feeder tray and the document delivery tray.
- 2) Open the feeder cover. Operate the opening lever, and then slowly raise the feeder cover it stops.

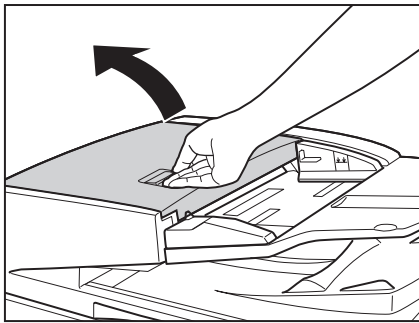


Figure 1-508

- 3) Remove the jammed document.

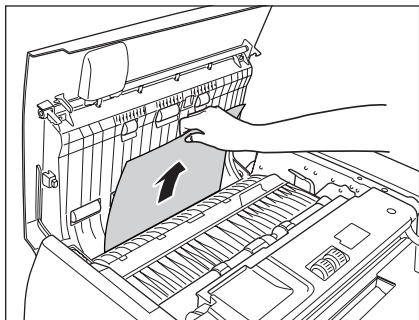


Figure 1-509

- 4) Grasping the tab inside the scanner, open the feeder guide.

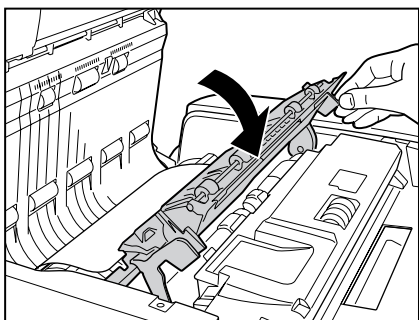


Figure 1-510

- 5) Rotate the dial on your side of the scanner to remove any document jammed inside the feeder.

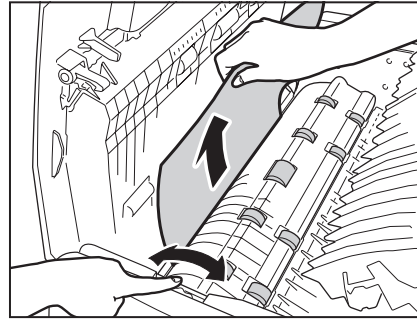


Figure 1-511

- 6) Close the feeder guide.

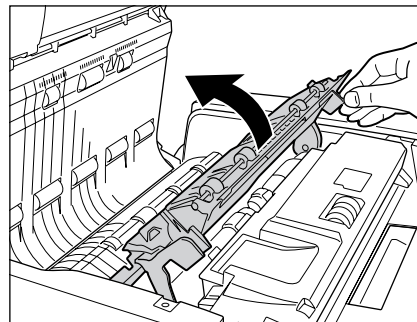


Figure 1-512

- 7) Close the feeder cover.

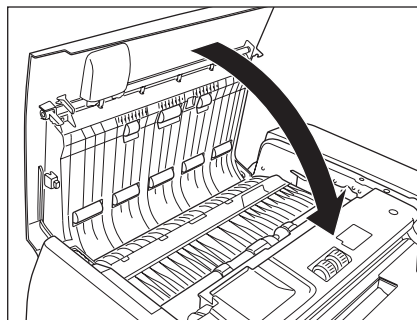


Figure 1-513

8) Open the feeder.

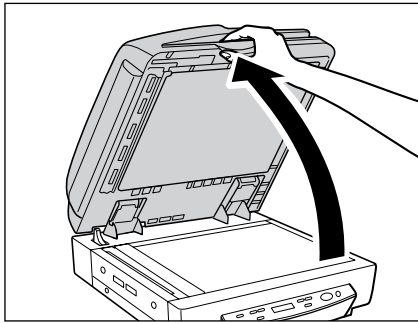


Figure 1-514

9) Remove the document jammed in the feeder.

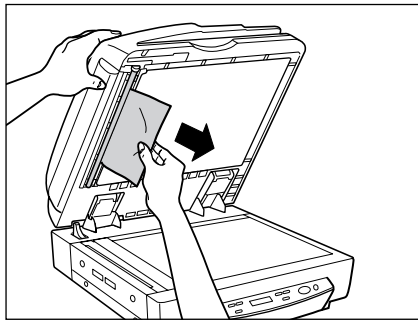


Figure 1-515

10) Close the feeder.

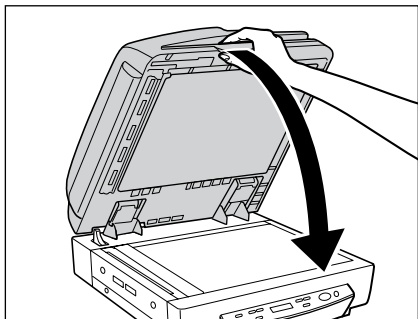


Figure 1-516

VI. REGULAR INSPECTION BY USERS

Instruct the user that the following locations must be cleared about once a week.

For the details, refer to the user manual.

1. Exterior

Wipe the covers with a cloth tightly wrung with water or neutral detergent soaked, and then wipe dry.

2. Glass, pressure board

Wipe the platen glass, ADF reading glass, and black pressure board with a cloth tightly wrung with water and then wipe dry.

3. Roller

Wipe the following rollers with a cloth tightly wrung with water and then wipe dry:

- 1) No. 1 registration roller
- 2) No. 2 registration roller
- 3) No. 1 registration roller follower
- 4) No. 2 registration roller follower
- 5) Reversal upper roller
- 6) Reversal lower roller
- 7) Platen roller

4. Power Cord

After the power cord is plugged in to the outlet for a long period of time, dust will collect on the connected part and could cause a fire or electric shocks. To prevent this, clean it regularly.

CHAPTER 2

FUNCTIONS & OPERATION

I. OUTLINE.....	2-1	V. OPTION.....	2-72
II. FEEDER.....	2-5	VI. ELECTRICAL PARTS LAYOUT	2-75
III. READER	2-34	VII. LISTS OF CONNECTORS/SW/LED	
IV. CONTROLLER.....	2-50	OF EACH PCB	2-79

I. OUTLINE

1. System Configuration

Figure 2-101 shows the system configuration.

For the computer specifications and other operating environment details, refer to the user manual.

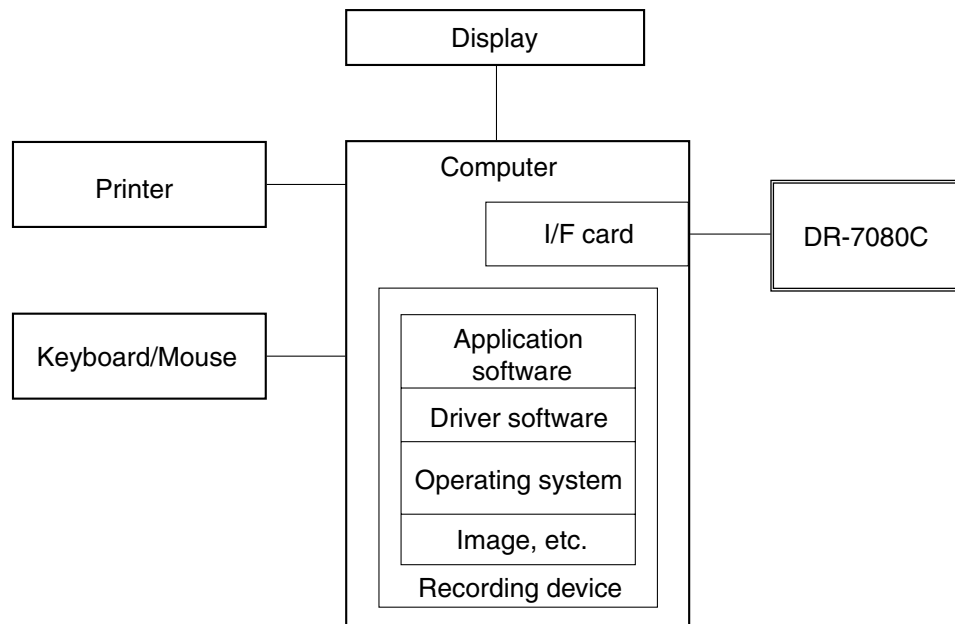


Figure 2-101

2. Overall Configuration

Figure 2-102 shows the overall configuration.

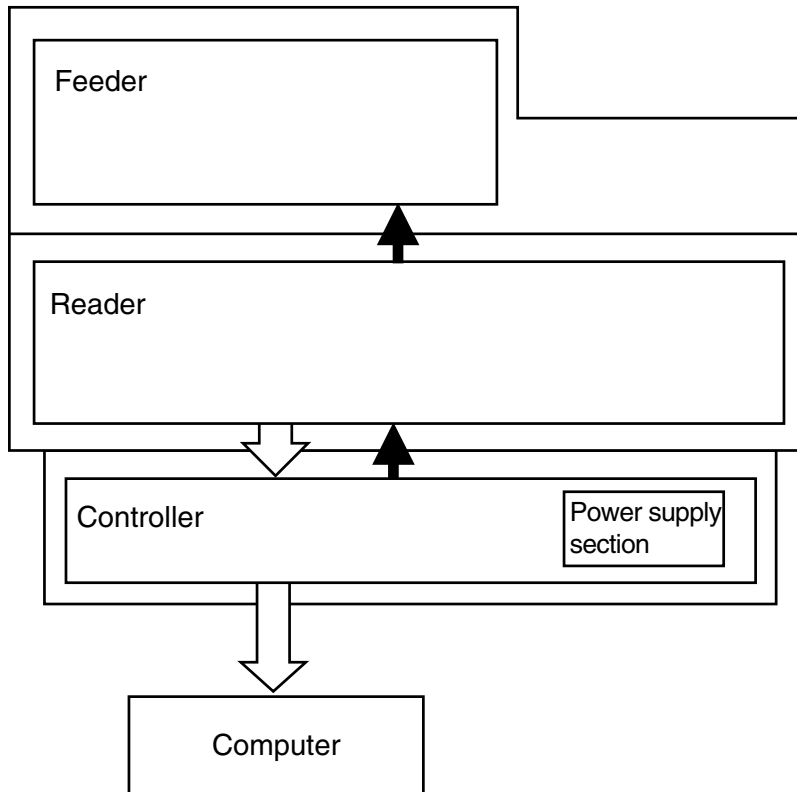


Figure 2-102

- | | |
|--|---|
| <p>1) Feeder
The feeder picks up and delivers documents.</p> | <p>3) Controller
The controller processes the image and performs the interface with the computer. However, image processing can also be performed from the computer. The controller is also provided with a power supply block.</p> |
| <p>2) Reader
The reader scans image data with a CCD and controls the feeder.</p> | |

3. Motor Drive

The reader of this machine includes a scanner motor (M501) for moving the mirror unit, a pickup motor (M1) for transporting documents in the feeder, a feed motor (M2), a delivery reversal motor (M3), and a pressure motor (M4) which presses the reader roller follower 1 to the read roller.

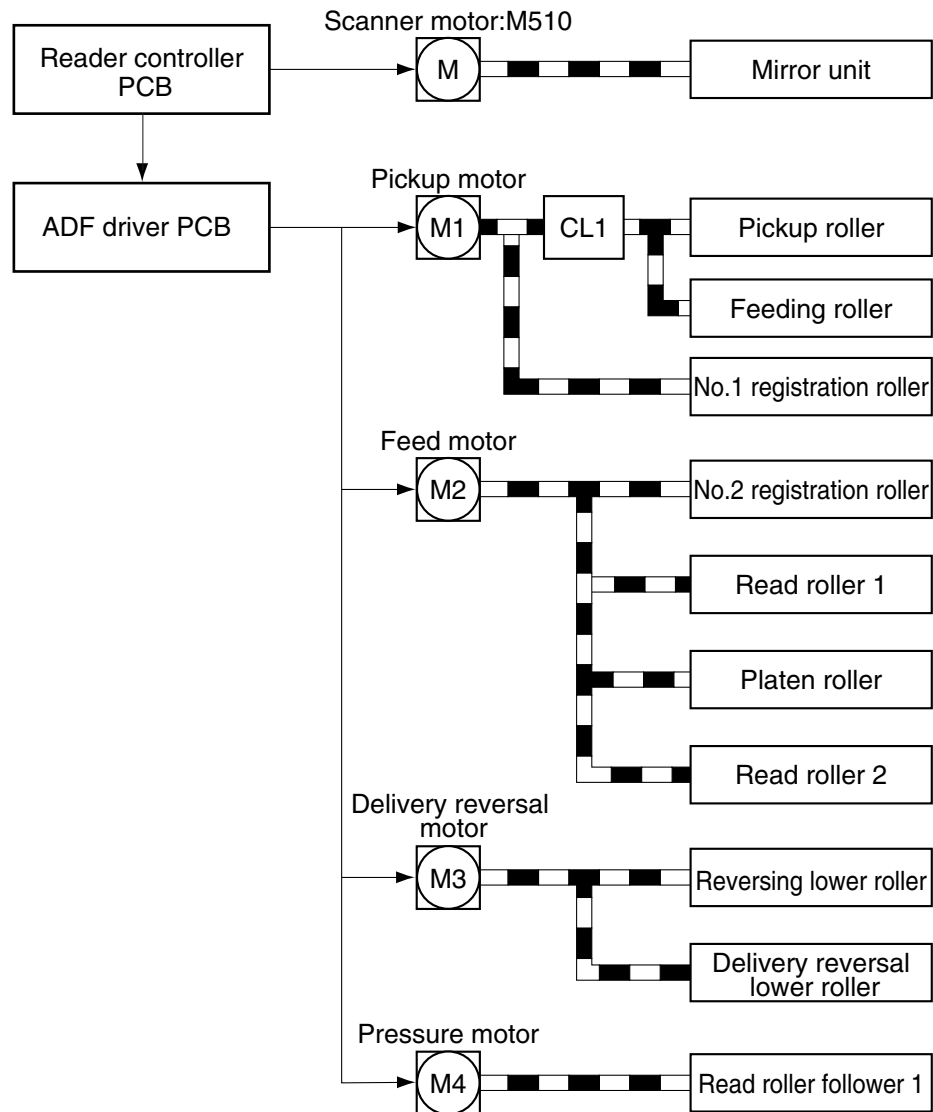


Figure 2-103

4. Electric Circuit

Figure 2-104 shows the electrical circuit block diagram

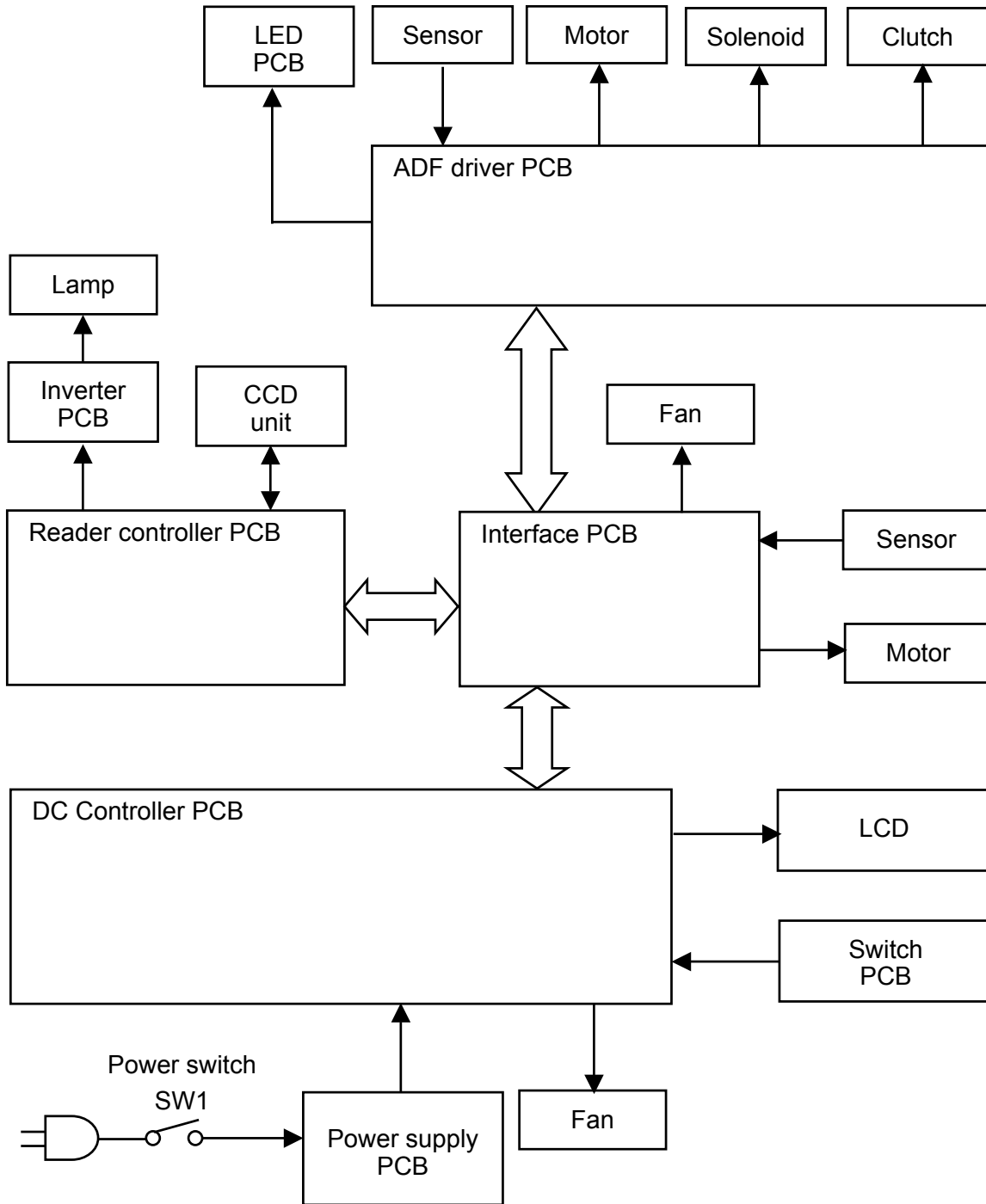


Figure 2-104

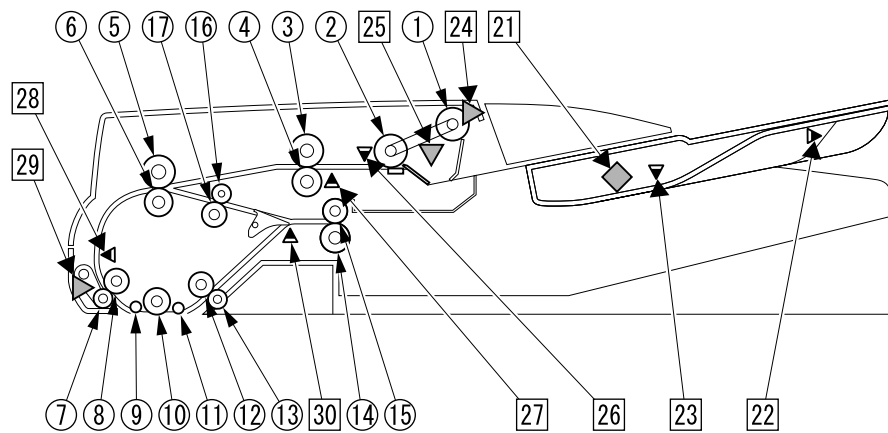
II. FEEDER

1. Basic Construction

1) Outline of the feeder system

Figure 2-201 shows the cross section of the feeder system.

The platen roller is black. The pressure board for the platen glass is also black. This color has been selected to facilitate image processing such as automatic size detection, which is described later.



- | | |
|--|----------------------------------|
| ① Pickup roller | ⑮ Delivery reversal upper roller |
| ② Feeding roller | ⑯ Reversal upper roller |
| ③ No. 1 registration roller follower | ⑰ Reversal lower roller |
| ④ No. 1 registration roller | ⑳ Document width volume |
| ⑤ No. 2 registration roller follower | ㉑ LGL sensor |
| ⑥ No. 2 registration roller | ㉒ A4R/LTRR sensor |
| ⑦ Read roller follower 1 (Pressure roller) | ㉓ Feeder cover sensor |
| ⑧ Read roller 1 | ㉔ Document set sensor |
| ⑨ Platen roller follower 1 | ㉕ Post-separation sensor |
| ⑩ Platen roller | ㉖ Registration sensor |
| ⑪ Platen roller follower 2 | ㉗ Read sensor |
| ⑫ Read roller 2 | ㉘ Pressure HP sensor |
| ⑬ Read roller follower 2 | ㉙ Delivery reversal sensor |
| ⑭ Delivery reversal lower roller | |

Figure 2-201

2) Outline of the electrical circuitry

The feeder is controlled by the reader controller PCB in the reader, which serves as a CPU (IC1).

The CPU interprets signals from sensors and the reader to generate signals used to drive DC loads (e.g., motor, solenoid) with the help of the CPU (IC9) of the ADF driver PCB.

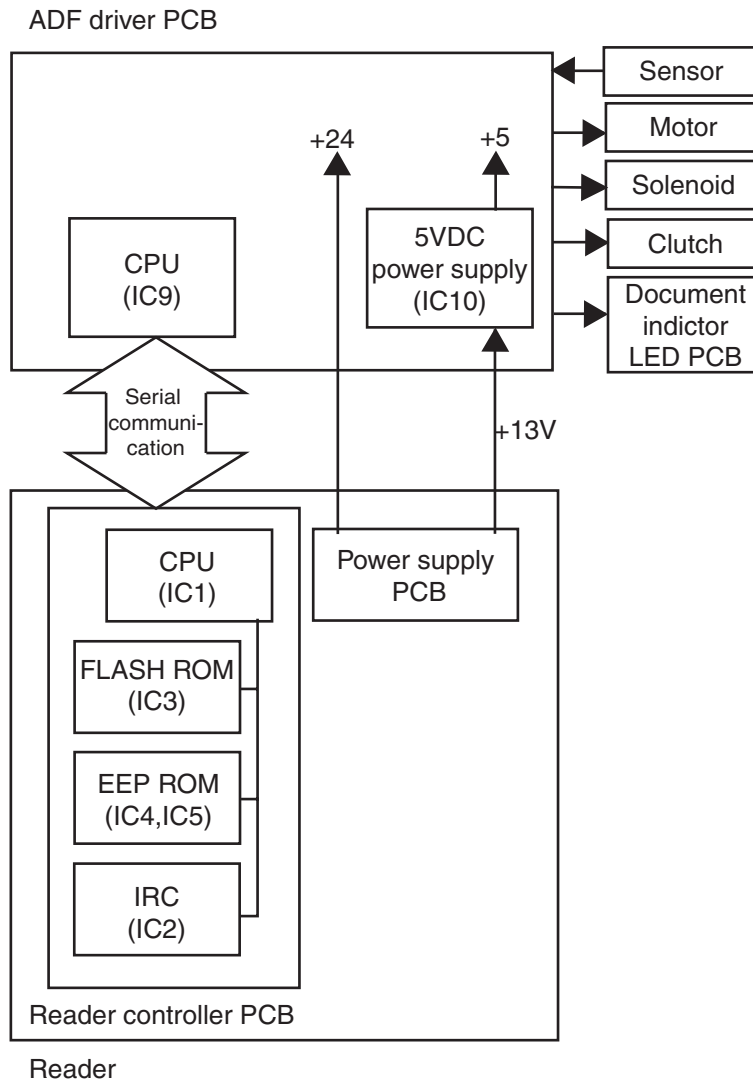


Figure 2-202

3) Inputs to the ADF driver PCB

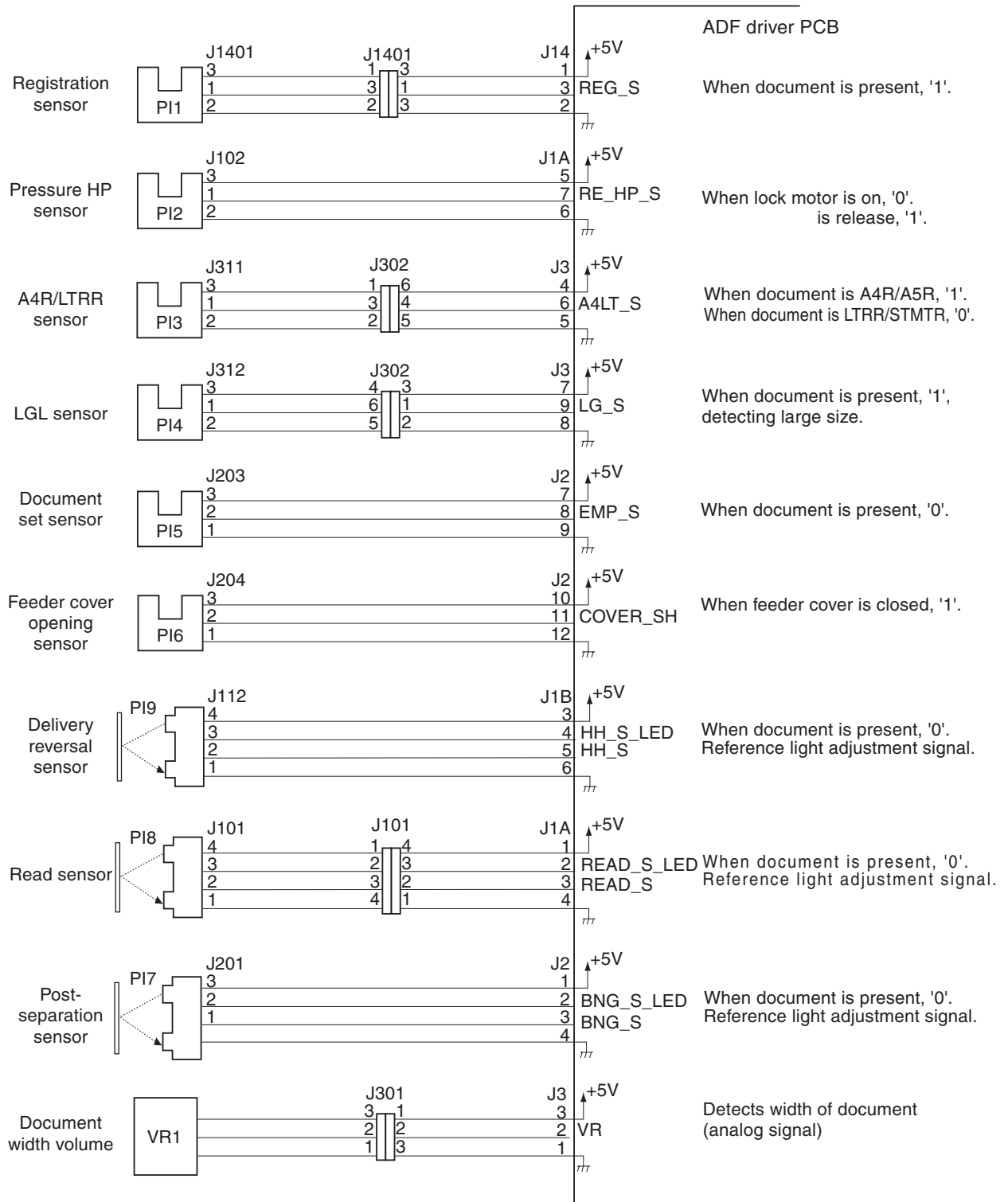


Figure 2-203

4) Outputs from the ADF driver PCB

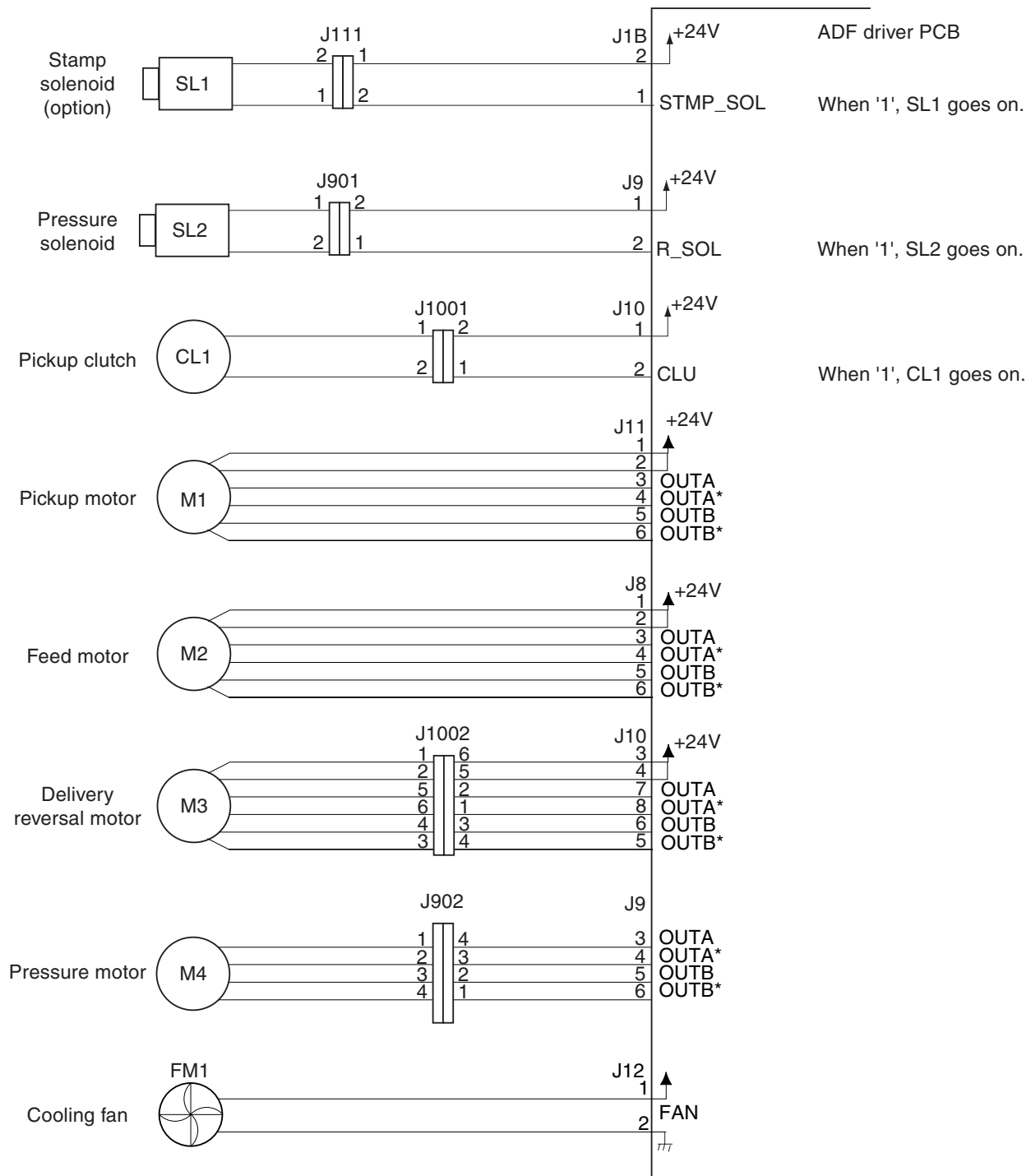


Figure 2-204

2. Basic Sequence of Operation

1) Routes of drive

The feeder uses 4 motors and 1 clutch to control the movement of documents.

Name	Symbol	Description
Pickup motor	M1	Picks up/feeds documents.
Feed motor	M2	Feeds documents.
Delivery reversal motor	M3	Delivers or reverses documents.
Pressure motor	M4	Pressures/separates the pressure roller
Pickup clutch	CL1	Cuts the drive from the pickup motor (M1) to the pickup roller and the feeding roller.

Table 2-201

The following is a diagram of the feeder routes of drive:

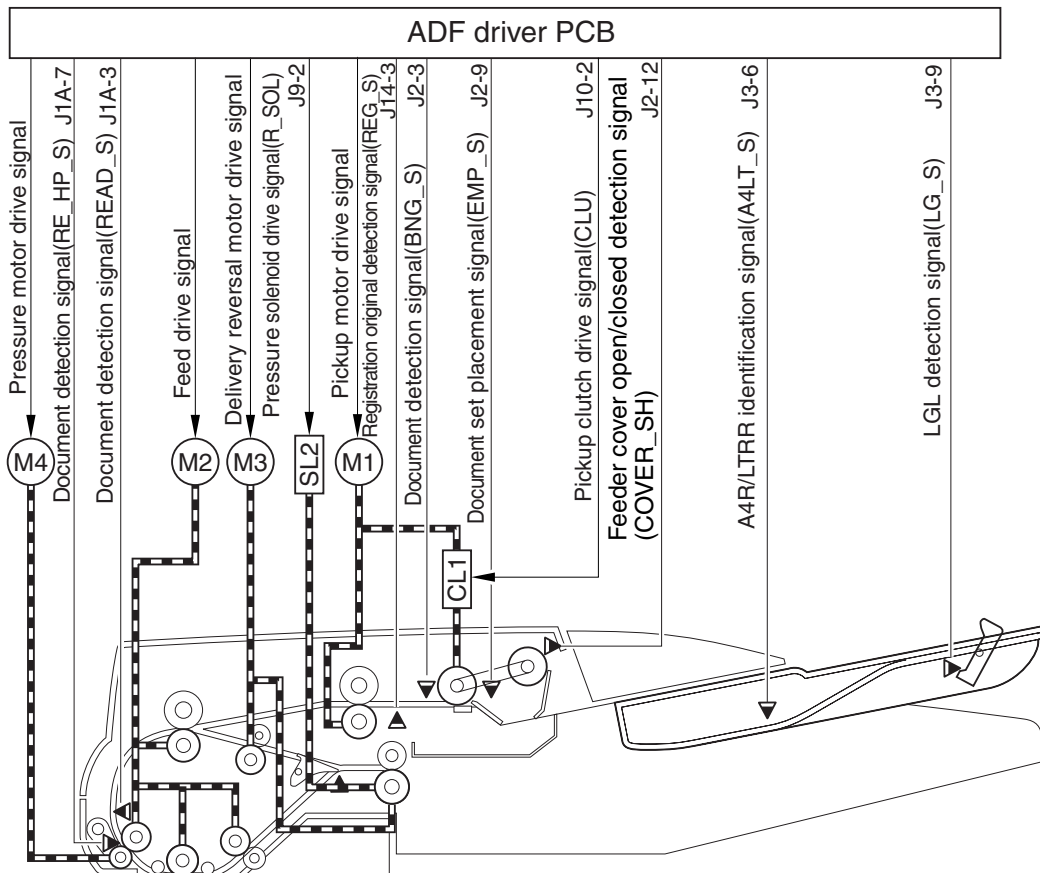


Figure 2-205

2) Overview of operation modes

The feeder executes the following 4 types of operation mode, executing individual modes according to the instructions from the host machine for reading.

The following table shows these operation modes, outlines of the modes, and corresponding reading modes:

No.	Operation mode	Outline of operation	Corresponding reading mode
①	Normal rotation pickup/delivery • simplex mode	Picks up a document, and delivers it after it has been read	Simplex reading
②	Normal rotation pickup/reversal delivery • low-speed duplex mode (small) • low-speed duplex mode (large) • high-speed duplex mode	Picks up a document, and reverses and delivers it after it has been read.	Duplex reading

Table 2-202

Document is identified as follows in terms of size:

- small-size: A5R, A5, A4, B5, LTR, STMT
- large-size: A4R, A3, B5R, B4, LTRR, LGL, LDR (11"×17")

3) Normal rotation pickup/delivery operation (simplex mode)

The following shows the flow of documents:

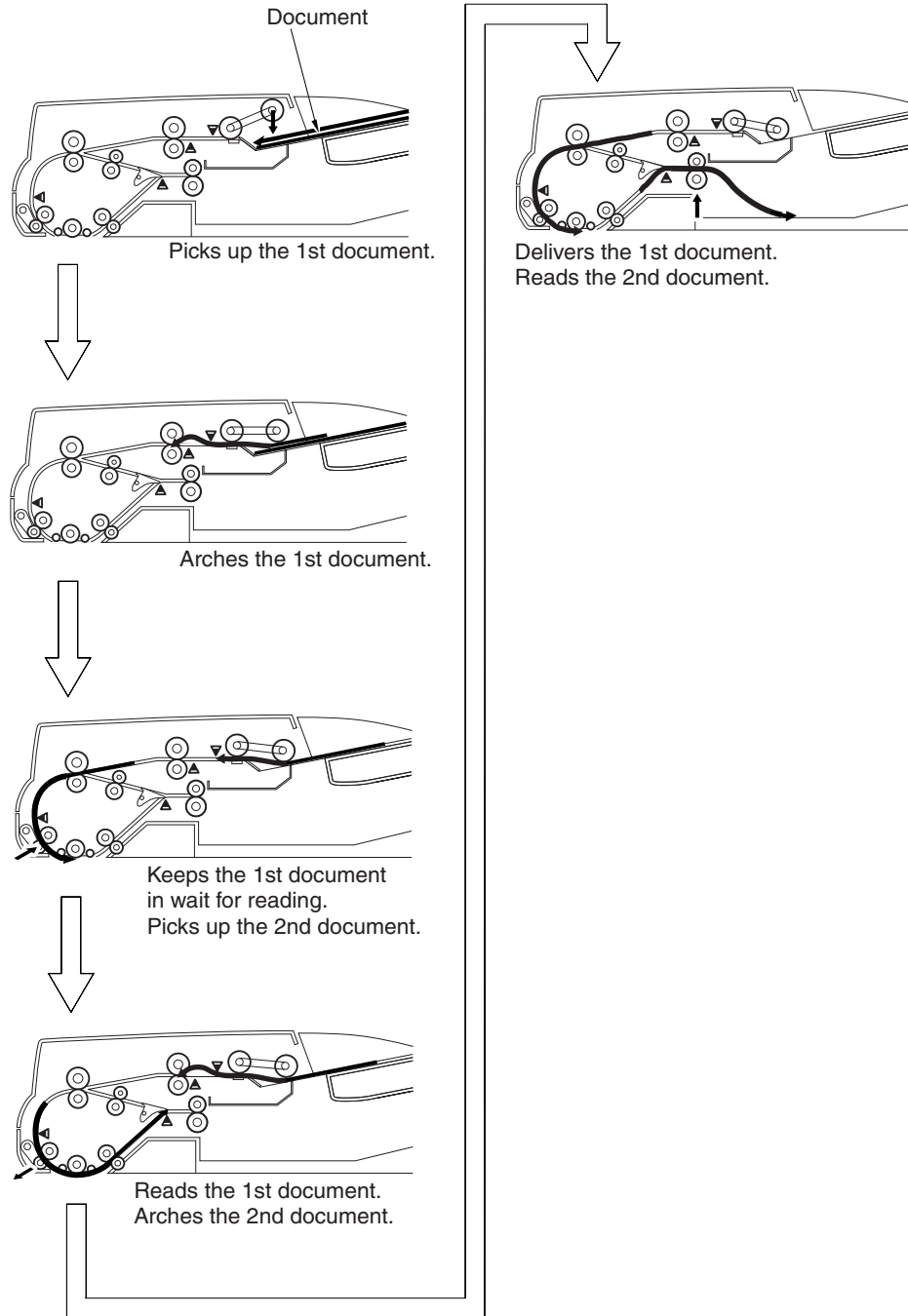


Figure 2-206

4) Normal rotation pickup/reversal delivery (duplex mode)

The following shows the flow of documents:

- a) Low-speed duplex mode
 - Small-size

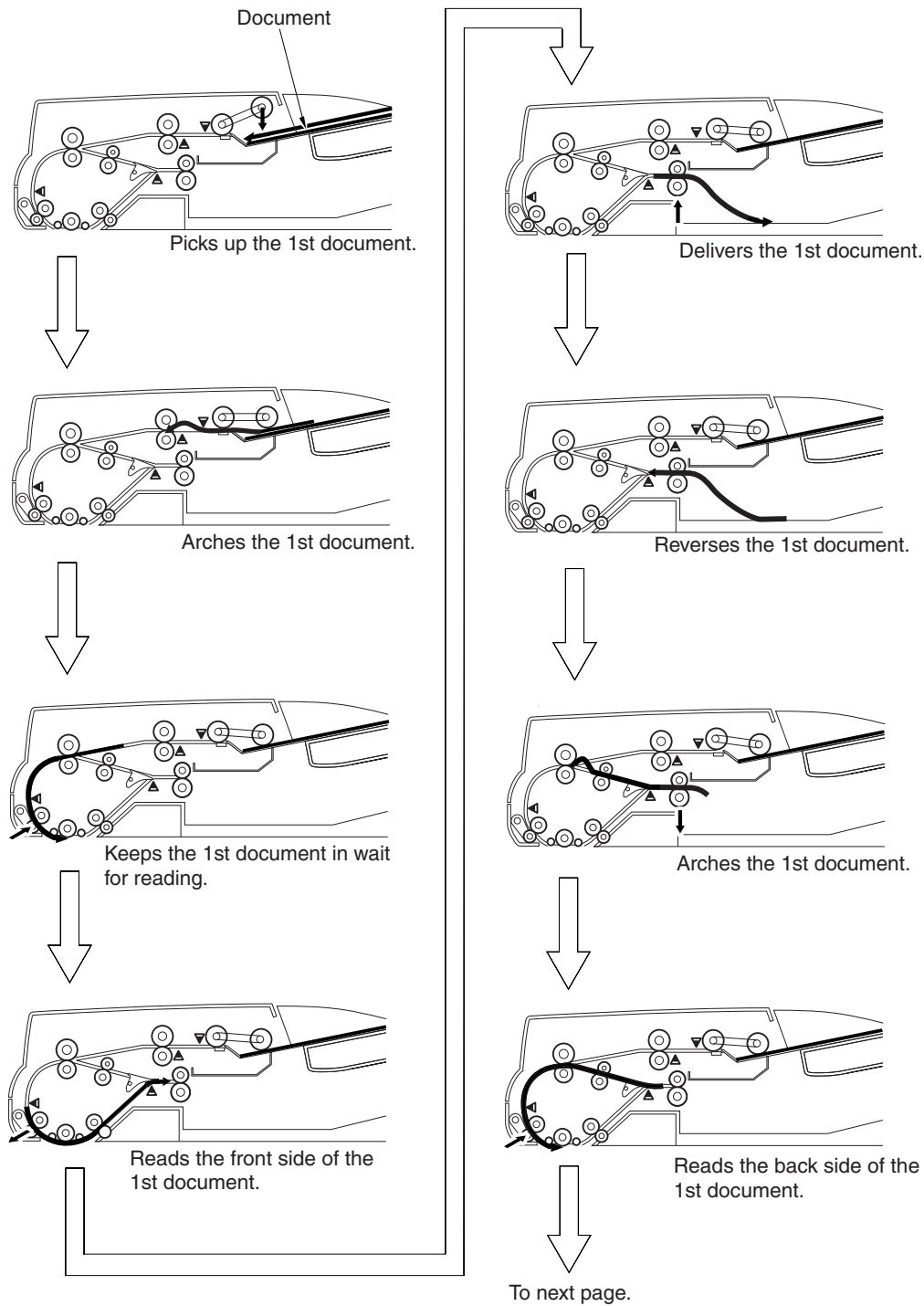


Figure 2-207

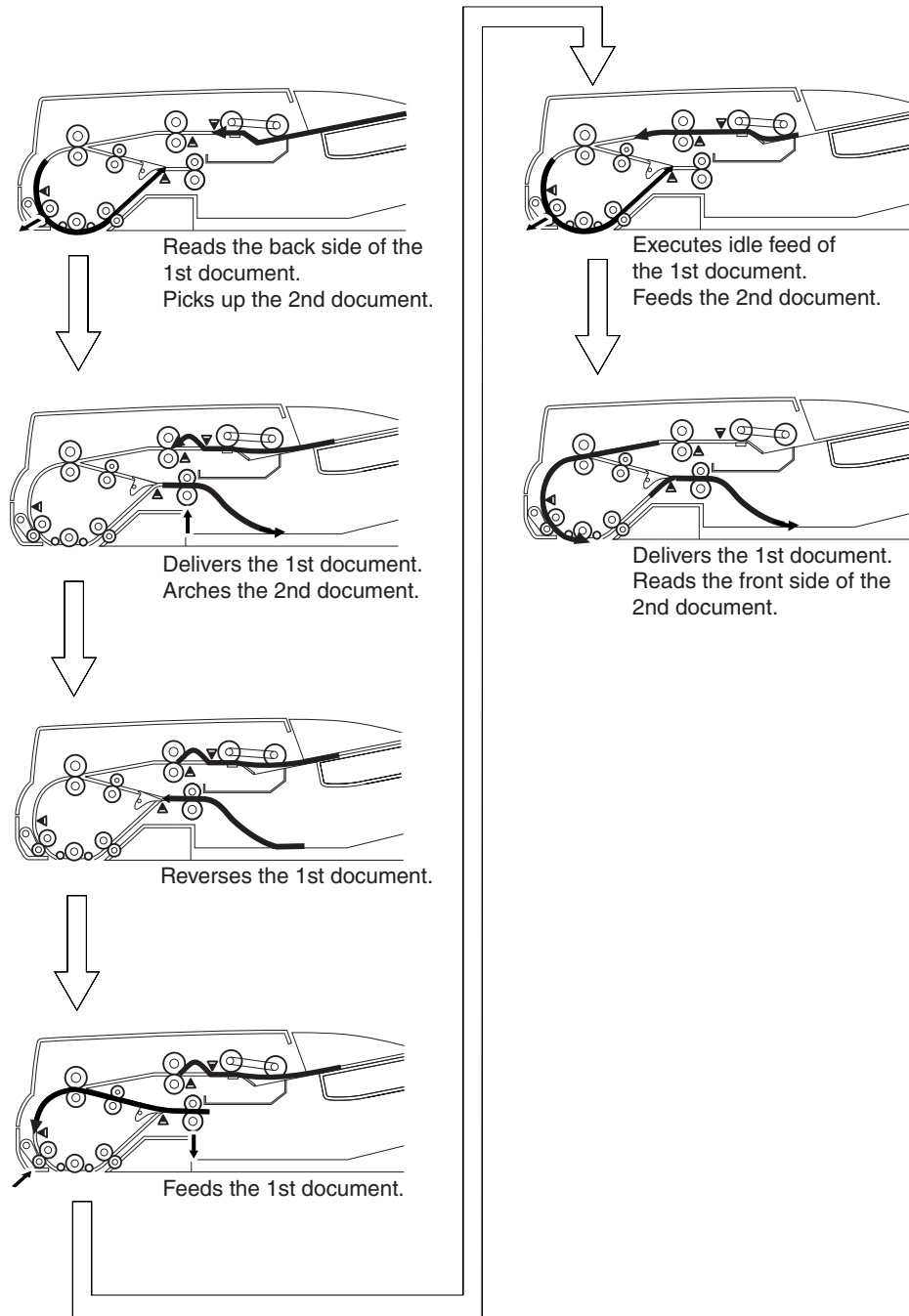


Figure 2-208

• Large-size

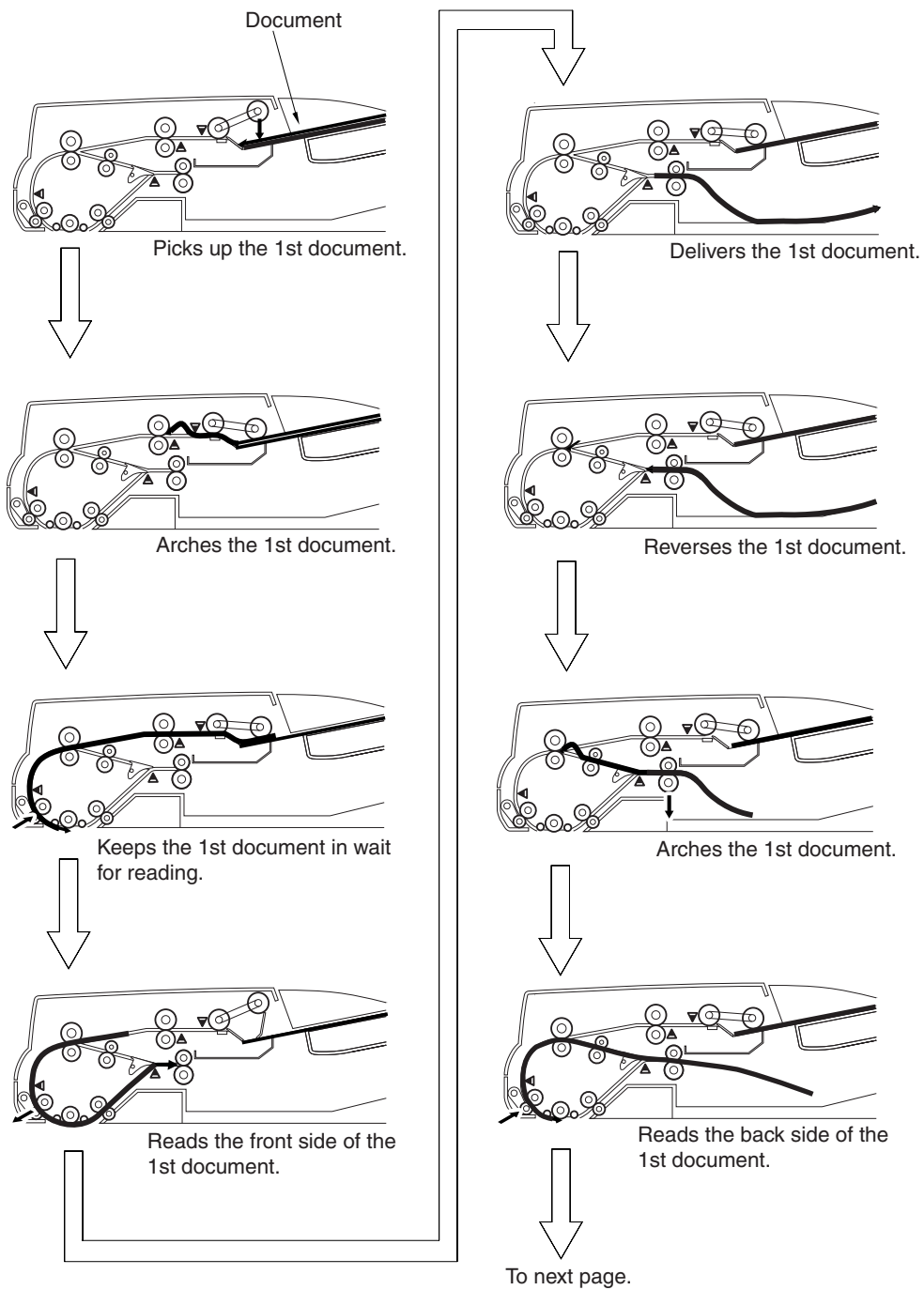


Figure 2-209

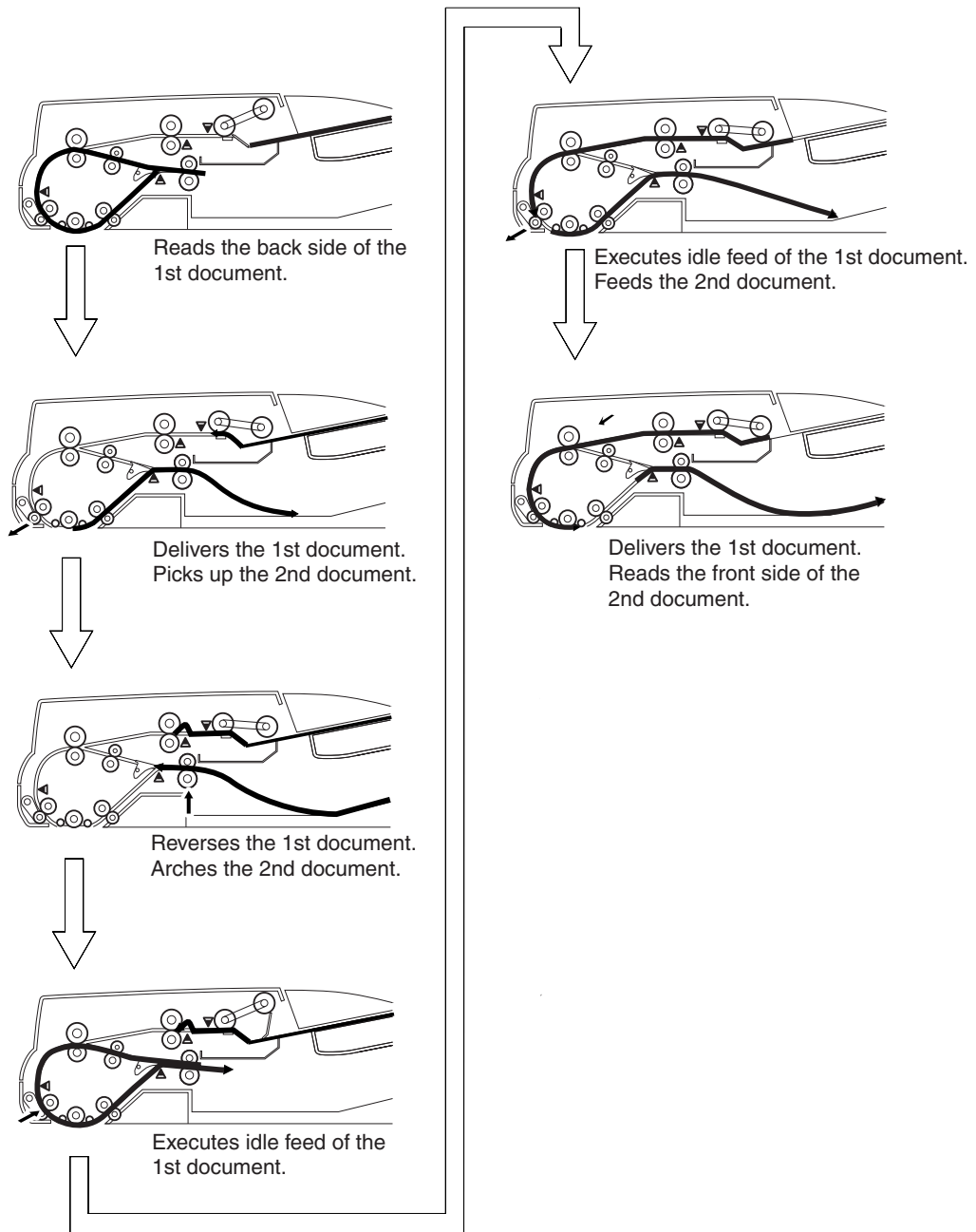


Figure 2-210

b) High-speed duplex mode (A4/LTR only)

The high-speed duplex mode may be enabled only when the document size is A4/LTR.

The high-speed duplex mode may be enabled or disabled in service mode:
FEEDER>OPTION>SL-DBL.

The default is set to ON (high-speed mode).

If the user tends to use documents not suited to high-speed duplex mode, be sure to select OFF (disabled).

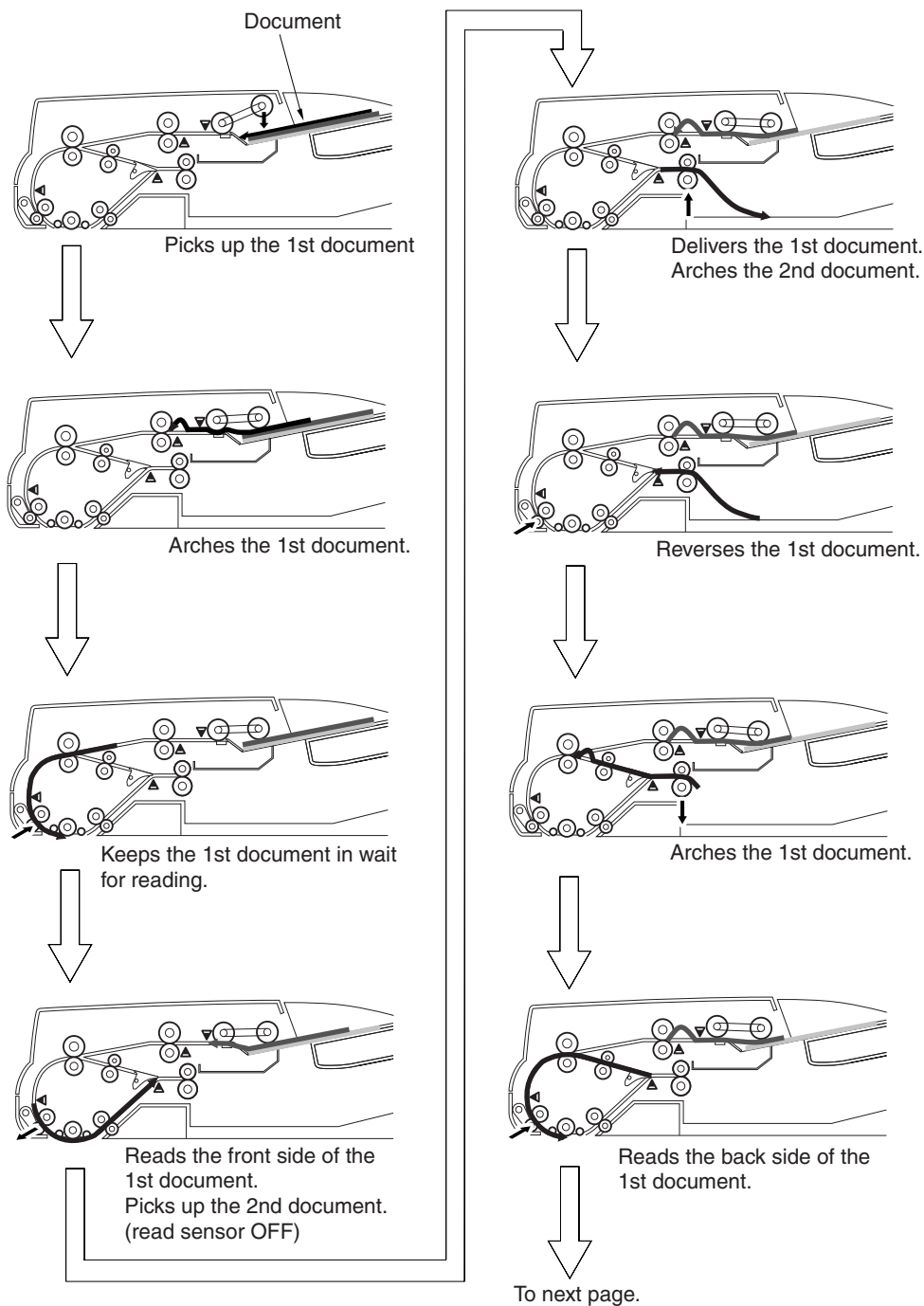


Figure 2-211

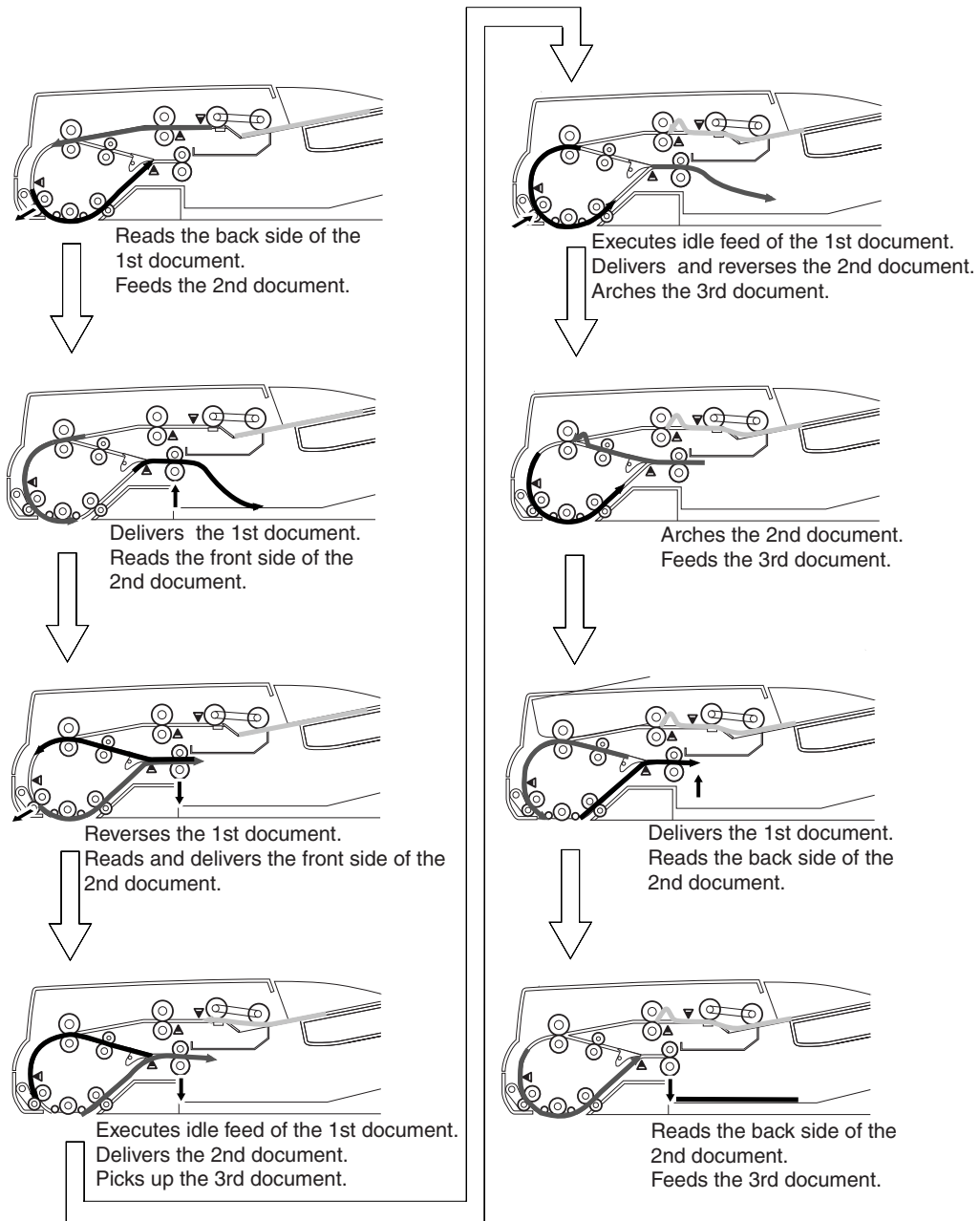


Figure 2-212

Note:The high-speed duplex mode is a feed operation mode whereby the scan speed (number of scanned images per minute) for the standard A4/LTR size using a resolution of 400/600 dpi is faster than that for the regular small size.

The following conditions are required to execute this mode.

- Pre-read scan: ON
- Long document mode: OFF
- Stamp: OFF
- Different size documents: OFF
- Specification of number of scan sheets: OFF

3. Detecting the Documents

1) Overview

The feeder provides presence/absence of document detection and document size detection functions. Their details and the sensors they use are listed in Table 2-203.

The document size detection during different size documents, automatic size defection, and long document mode is special. Refer to the relevant sections.

Item	Description	Sensor used (notation)
Presence/absence of document detection	Identifies the presence/absence of a document in the document pickup tray	Document set sensor (PI5)
Document size detection		
Feed direction	Identifies whether the length of documents placed in the document pickup tray is longer than LGL.	LGL sensor (PI4)
	Identifies the state of the post-separation sensor (ON/OFF) after the read sensor goes ON to identify the document as being small or large.	Post-separation sensor (PI7), read sensor (PI8)
	Detects the time from post-separation sensor OFF until read sensor ON (A4R/LTR identification).	
Width direction	Detects the width of the document placed in the document pickup tray	Document width volume (VR1)
	Identification between A4R and LTRR	A4R/LTRR sensor (PI3)

Table 2-203

2) Detecting the presence/absence of a document

The machine uses the document set sensor (PI5) to detect the presence/absence of a document in the document pickup tray.

When a document is placed on the tray, the detection lever operates in conjunction with the light-blocking plate, during which the light-blocking plate blocks the light of the photo interrupter.

As a result, the document set sensor (PI5) generates the document detection signal (EMP_S), which will cause the ADF driver PCB to turn on the document set indicator.

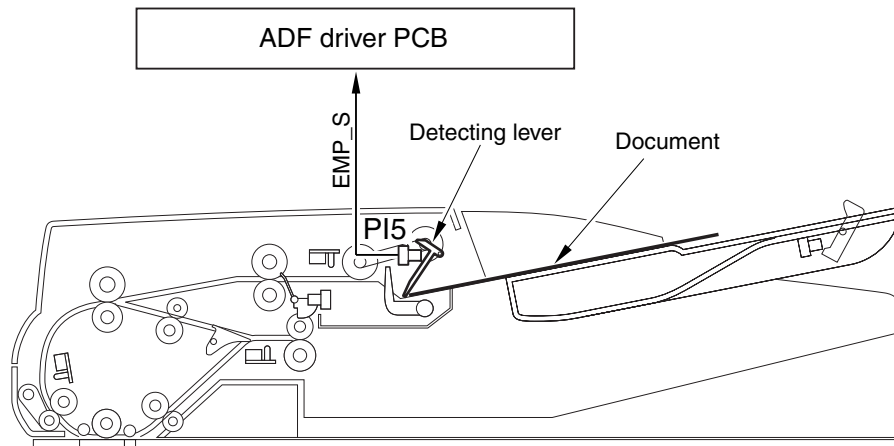


Figure 2-213

3) Document size detection

The document size is detected using the combination of size detection (width, length) in the document pickup tray and size detection (length) during feeding.

As a result, the size of the set document is

identified as large size, small size, or A4/LTR. The feed operation mode best suited to the size of the document is executed. Table 2-204 lists the various document sizes and the detection results.

Document	Dimensions (mm)		LGL sensor	Post-separation sensor	Guide position No.	Judgment
	Width	Feed				
LDR	279	432	ON	ON	2	Large
A3	297	420	ON	ON	1	Large
B4 (JIS)	257	364	ON	ON	3	Large
LGL	216	356	ON	ON	4	Large
A4R	210	297	OFF	ON	5	Large
LTRR	216	279	OFF	ON	4	Large
B5R	182	257	OFF	ON	6	Large
LTR	279	216	OFF	OFF	2	Small*
A5R	148	210	OFF	OFF	7	Small
A4	297	210	OFF	OFF	1	Small*
B5 (JIS)	257	182	OFF	OFF	3	Small
A5	210	148	OFF	OFF	5	Small
STMT	216	140	OFF	OFF	4	Small

Table 2-204

Note:"Post-separation sensor" indicates the status of the post-separation sensor when the read sensor is ON. "Guide position No." indicates the document guide position. "1" indicates that the deployed position of the guides.

a) Feed direction (length)

The size of the document in the feed direction is judged through LGL sensor ON/OFF detection, and post-separation sensor ON/OFF detection when the read sensor is ON, or the time from post-separation sensor OFF until read sensor ON.

However, if automatic size detection is selected, the length data calculated from

read sensor ON/OFF is used.

For details, refer to the relevant sections. If the post-separation sensor is ON when the document is fed and the read sensor (PI8) detects the document, a large size is judged. If the post-separation sensor is OFF at this time, a small size is judged.

Refer to Figure 2-214.

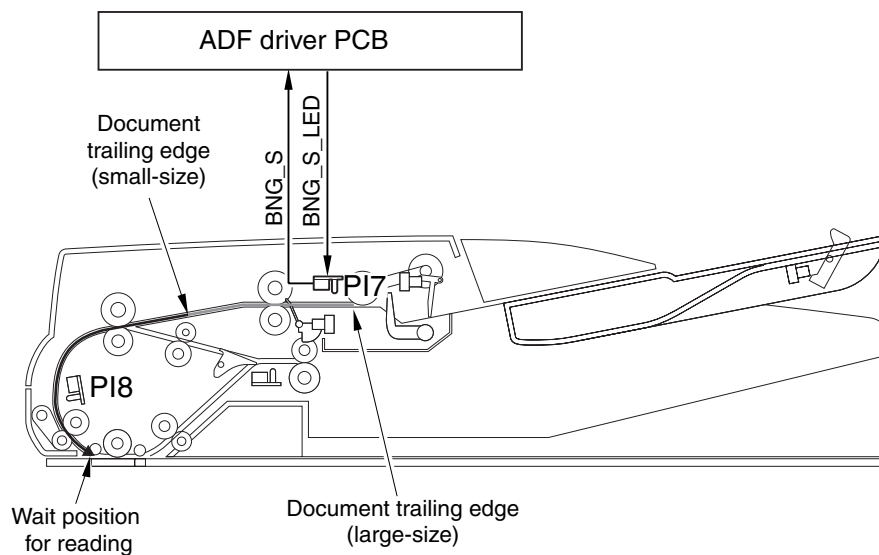


Figure 2-214

To execute the high-speed duplex mode for A4 or LTR, when the document guide is set to A4 or LTR, the machine measures the time from post-separation

sensor OFF until read sensor ON, and judges if the document size is A4 or LTR. Refer to Table 2-205.

Document	Sensor	Timing	Judgment
A3	Post-separation Read		Large
A4	Post-separation Read		Small* A4
A5	Post-separation Read		Small

Table 2-205

When a document of LTR or larger size is placed in the document pickup tray, the LGL sensor detection lever actuates the light-blocking plate, and the light-blocking plate blocks off the light to

the photo interrupter. Thus the fact that the document is a large size can be detected before feeding starts. Refer to Figure 2-215.

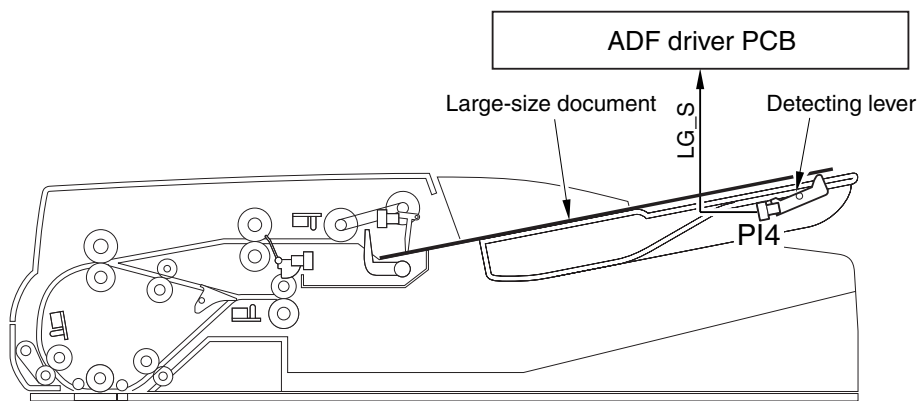


Figure 2-215

b) Width direction

The width direction of a document is detected using the document width detecting volume (VR1) found inside the document pickup tray. The volume operates in conjunction with the document guides, its resistance changing (analog) as the guides are moved. The ADF driver PCB reads these changes in resistance as the document size signal (WIDTH), and recognizes them as specific widths.

To make sure that the document width of A4R and LTRR can be correctly detected, a special A4R/LTRR sensor (PI3) is used inside the document pickup tray; the sensor goes '1' (A4R signal) when the width of the document is 197 mm or more and less than 214 mm. The A4R document width is 210 mm.

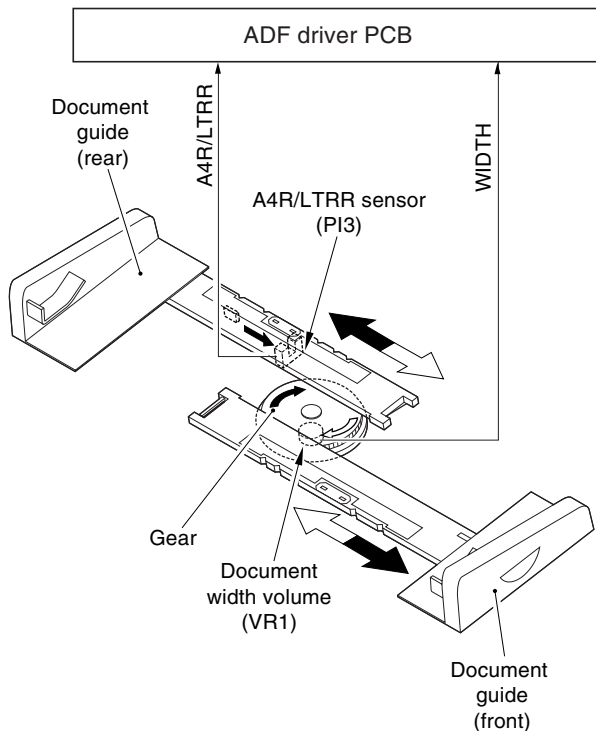


Figure 2-216

The track of the document guides is given a groove so that the guides may stop at specific default sizes. Some sizes, however, are extremely close to each other, possibly causing the document guides to stop at the wrong point. To make sure that the document slide stops at the correct stops, the document guides are provided with a positioning parts ①, which restricts the stops as follows:

The front marking is set to A4 and there are two grooves at the factory setting.

Marking on document guides positioning parts (front)	Document guide stop position	
	1 groove	2 grooves
A4R	A4R	A4R LTRR
INCH	LTRR	A4R LTRR

Table 2-204

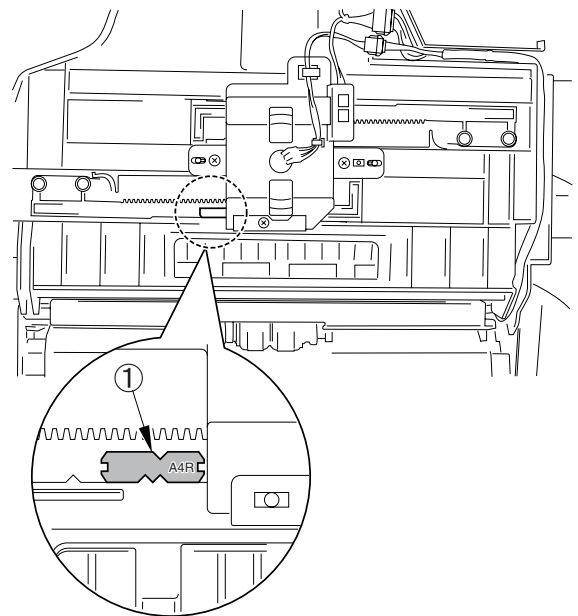


Figure 2-217

c) Long document mode, automatic size detection

To read document images that exceed 432 mm in length, it is necessary to set both the long document mode and automatic size detection to ON. In the case of automatic size detection, the document size in the feed direction is detected from read sensor ON until read sensor OFF, and the width direction is detected during image processing.

The platen roller is black to enable image processing in width direction so that the background of documents may be read as black. For details, refer to "IV. CONTROLLER".

When the long document mode or automatic size detection is ON, the feed operation does not switch to the high-speed duplex mode even when the document size is A4 or LTR.

d) Different size documents mode

When the different size documents mode is set to ON, A4 or LTR detection is not performed during feed direction size detection, and the feed operation mode does not switch to the high-speed duplex mode.

When this mode is OFF and the current conditions allow switching to the high-speed duplex mode, an error is judged and feeding is stopped when the first document of the batch is either A4 or LTR, but the 2nd and subsequent documents that are fed have a different size in the feed direction.

If the second or subsequent document size is longer than the first document, a different size document error is displayed, and if it is shorter, document jam is displayed.

4. Picking Up and Feeding

1) Basic operation

a) Picking up

When the pickup motor (M1) rotates in reverse and the pickup clutch (CL1) goes ON, the pickup roller unit moves

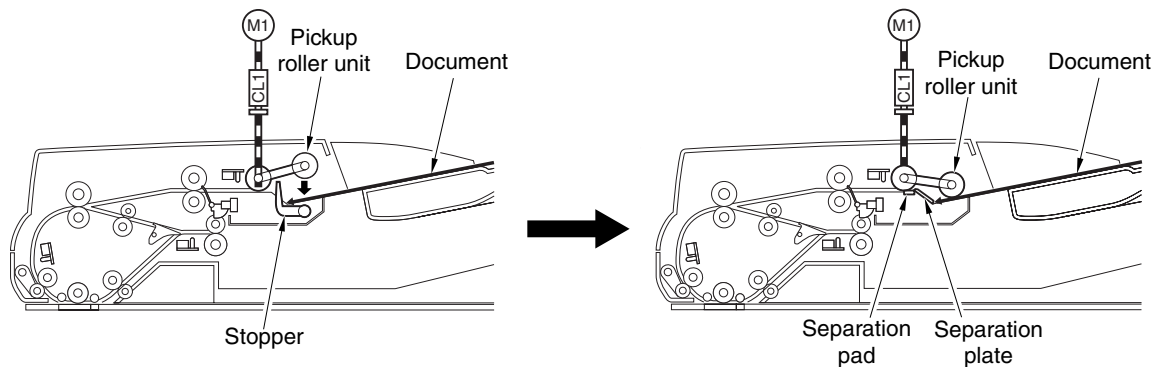


Figure 2-218

b) Arching

When the document has been moved for a specific number of pulses after the registration sensor has gone ON, the document is caused to arch at the No. 1 registration roller so that it becomes free of any skew.

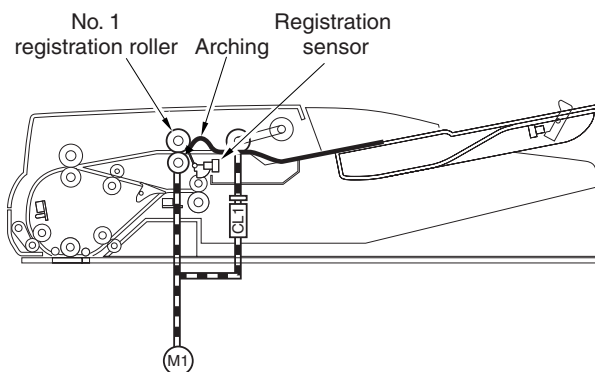


Figure 2-219

down to start pickup operation. The separation plate and the separation pad are used to prevent multiple feeding of documents. After the 2nd document, the pickup unit remains in down position.

c) Sheet-to-sheet distance

Set the pickup clutch to OFF, drive the pickup motor in normal rotation, and drive the feed motor (M2) to feed the document.

While the document is between the No. 1 registration roller and the No. 2 registration roller, its movement is accelerated so that there will be a sheet-to-sheet distance at the time it reaches the No. 2 registration roller for reading. The normal rotation maximum speed of the pickup motor is 750 mm/sec; it decelerates to reading speed at a point 23 mm in front of the No. 2 registration roller to move the document to the No. 2 registration roller.

(Refer to Figure 2-220)

d) Feeding

The document from the No.2 registration roller is fed by the feed motor (M2). The pressure motor (M4) is driven and pressed before the leading edge of the document reaches the reading roller 1. When the document reaches the point of deceleration before reading, the machine checks whether the READY signal is on, in which case it will feed the document ahead to the point of reading; if the signal is off, the machine keeps the document in wait for reading.

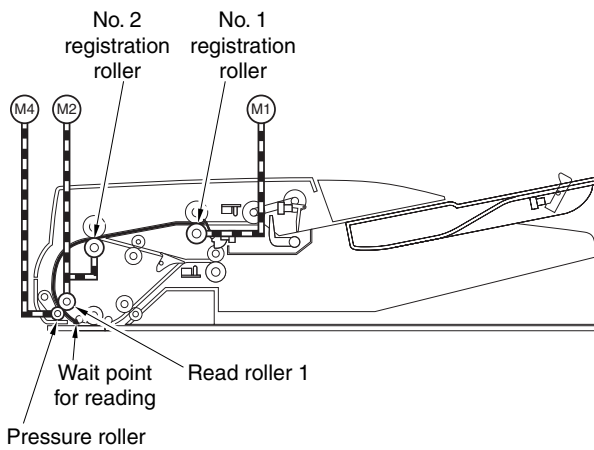


Figure 2-220

e) Start of reading

The machine identifies the document position with reference to the pulses generated by the feed motor after the read sensor goes ON. When the leading edge of the document reaches the point of reading, the machine sends the image leading signal to the reader so that the reader can start reading operation. The reading is executed by fixing the scanner of the reader in place and moving the documents on the reading glass.

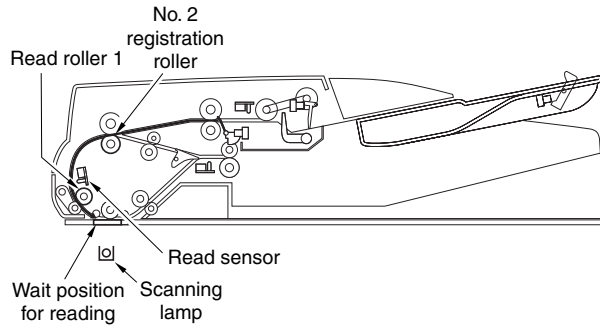


Figure 2-221

2) Pickup unit and the stopper

The pickup unit consists of a pickup roller and a feeding roller. When the document pickup signal arrives, the pickup clutch (CL1) goes ON, the pickup motor (M1) starts to rotate in reverse to move down the pickup unit, and the pickup roller and

the feeding roller start to rotate to pick up a document. The separation pad and the separation plate are used to make sure that no more than one document is picked up and fed at time of pickup.

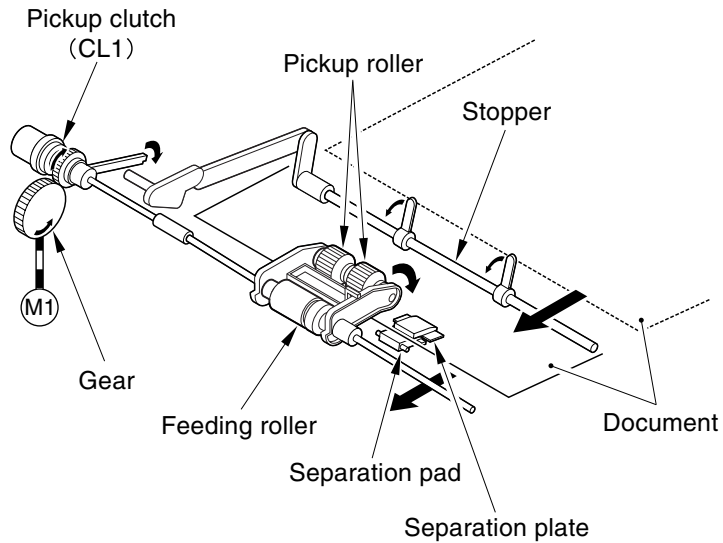


Figure 2-222

3) Sequence of operation

The figure shows sequence of pickup operation (small-size).

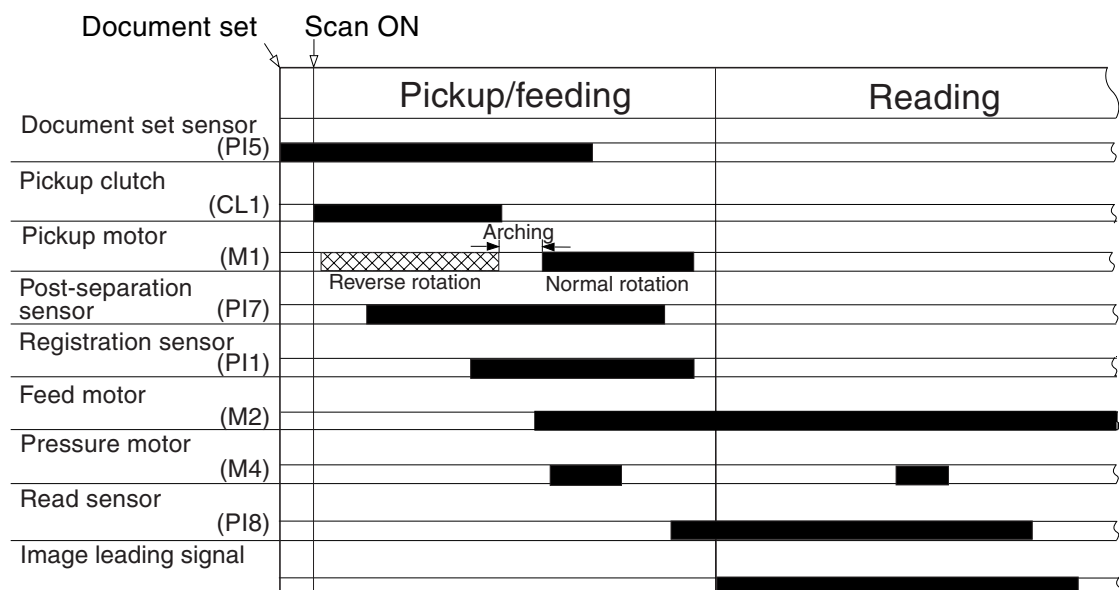


Figure 2-223

4) Controlling the pickup motor (M1)

The following is a diagram of the circuit used to control the pickup motor (M1). The pickup motor is a 4-phase stepping motor, and the circuit serves the following functions:

- Controlling the current values of the motor
- Controlling the rotation direction of the motor
- Controlling the rotation speed of the motor

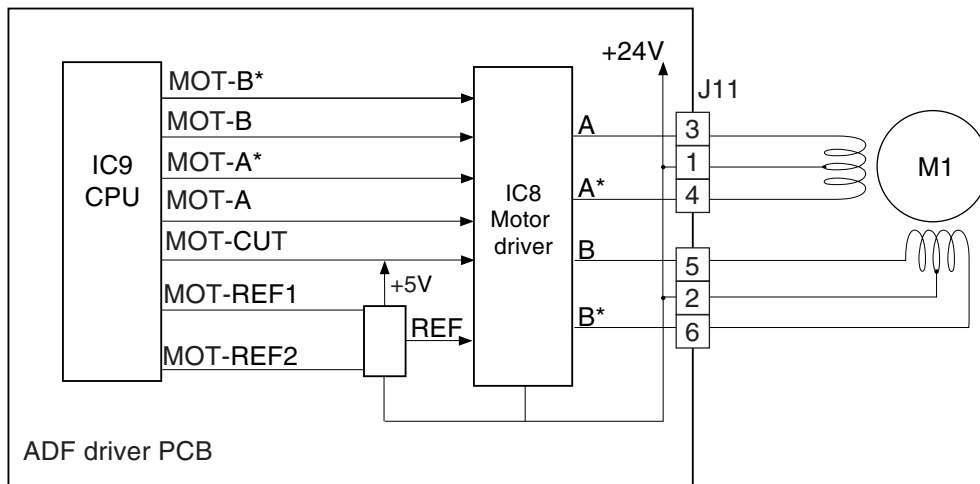


Figure 2-224

IC9 on the ADF driver PCB receives data (command) of the rotation direction and current values and drive pulses from the reader; in response, it generates drive pulses to drive the pickup motor (M1).

The pickup motor (M1) is a stepping motor, and its direction and speed of rotation are varied by changing the order and the frequency of drive pulses (A, A*, B, B*).

5) Controlling the feed motor (M2)

The following is a diagram of the circuit used to control the feed motor (M2). The feed motor (M2) is a 4-phase stepping motor, and the circuit has the following functions:

- Controlling the ON/OFF of the motor
- Controlling the rotation direction of the motor
- Controlling the rotation speed of the motor

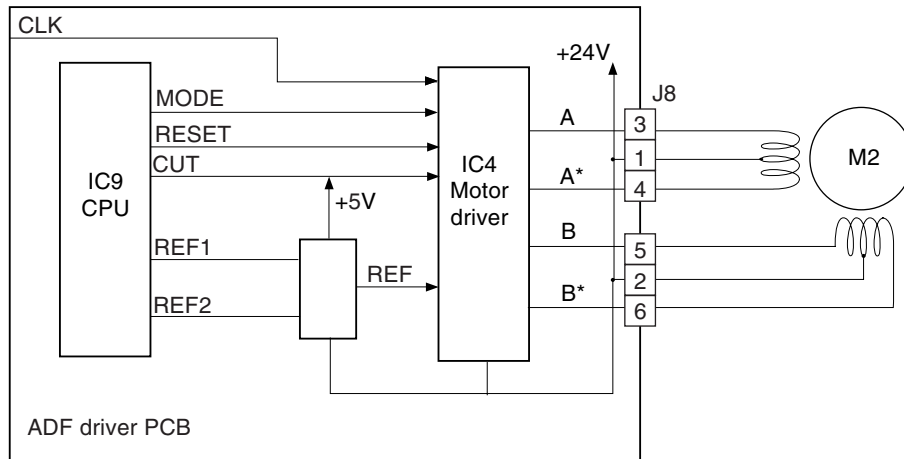


Figure 2-225

6) Controlling the pressure motor (M4)

The following is a diagram of the circuit used to control the pressure motor, and the circuit has the following function:

- Controlling the ON/OFF of the motor
- Controlling the rotation speed of the motor

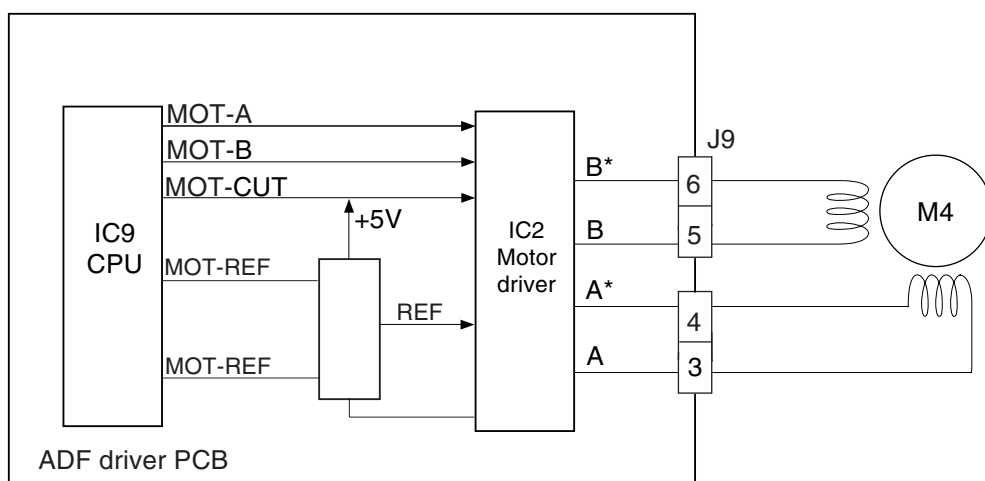


Figure 2-226

5. Reading/reversing

The document reversing is performed in case of the duplex reading mode.

1) Basic sequence of operation

a) Reading

The platen roller rotates using the drive from the feed motor (M2) for reading the document. The machine keeps count of pulses from the feed motor to monitor the movement of the document; and, before the trailing edge of the document leaves the read roller 1, the machine drives the pressure motor (M4) for a specific number of pulses to move the pressure roller away (i.e., to prevent the

impact otherwise occurring when the trailing edge of the document leaves the roller).

Moreover, the machine turns ON the delivery reversal sensor (PI9) to drive the delivery reversal motor (M3) and deliver the document. It also turns ON the pressure solenoid (SL2) to press the delivery reversal lower roller before the trailing edge of the document leaves the read roller 2. The machine accelerates the delivery reversal motor when the trailing edge of the document leaves the read roller 2.

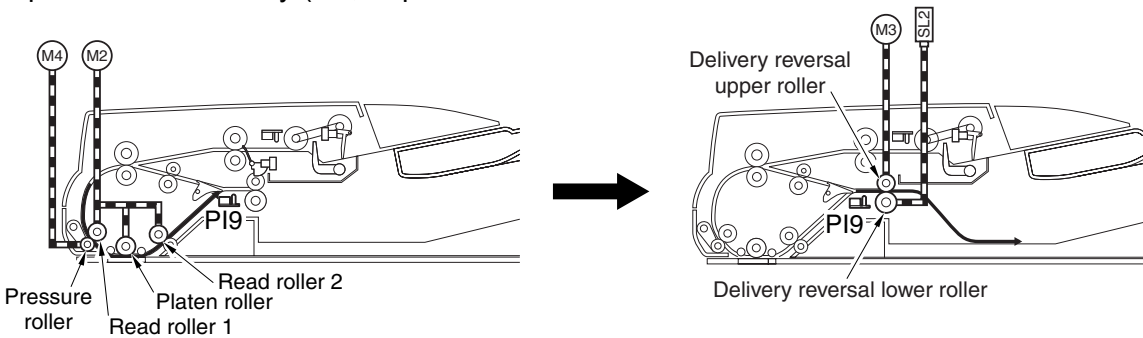


Figure 2-227

b) Reversing/feeding 1

The delivery reversal motor (M3) stops when the trailing edge of the document moves past the delivery reversal sensor (PI9); immediately thereafter, the delivery reversal motor starts to rotate in

reverse so that the document will arch against the No. 2 registration roller. At the same time, the pressure solenoid goes OFF to move the delivery reversal lower roller away.

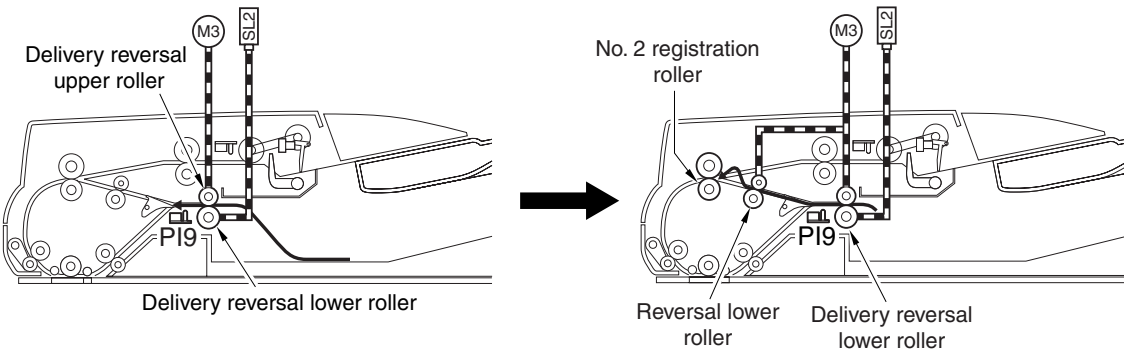


Figure 2-228

c) Reversing/feeding 2

The machine rotates the feed motor (M2) in normal direction and the delivery reversal motor (M3) in reverse to feed documents at the same time. The machine stops the delivery reversal

motor when the documents have fed a specific distance. The machine then drives the pressure motor for a specific number of pulses to press the pressure roller in place.

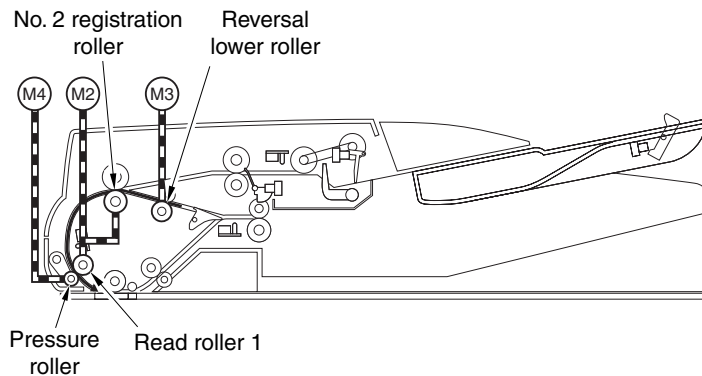


Figure 2-229

2) Sequence of operation

The figure shows sequence of operation (small-size, reversal).

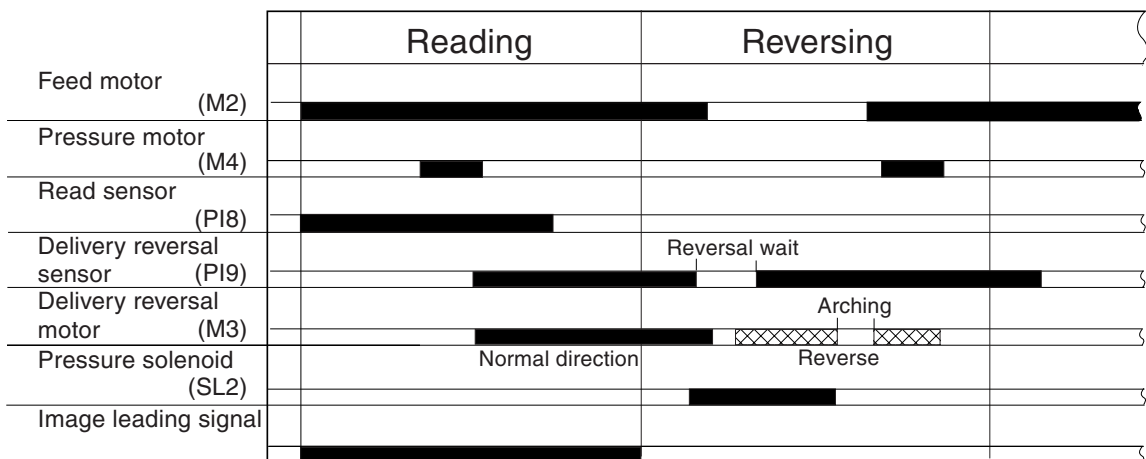


Figure 2-230

3) Controlling the delivery reversal motor (M3)

The following is a diagram of the circuit used to control the delivery reversal motor (M3). The delivery reversal motor is a 4-phase stepping motor, and the circuit

has the following functions:

- Controlling the ON/OFF of the motor
- Controlling the rotation direction of the motor
- Controlling the rotation speed of the motor

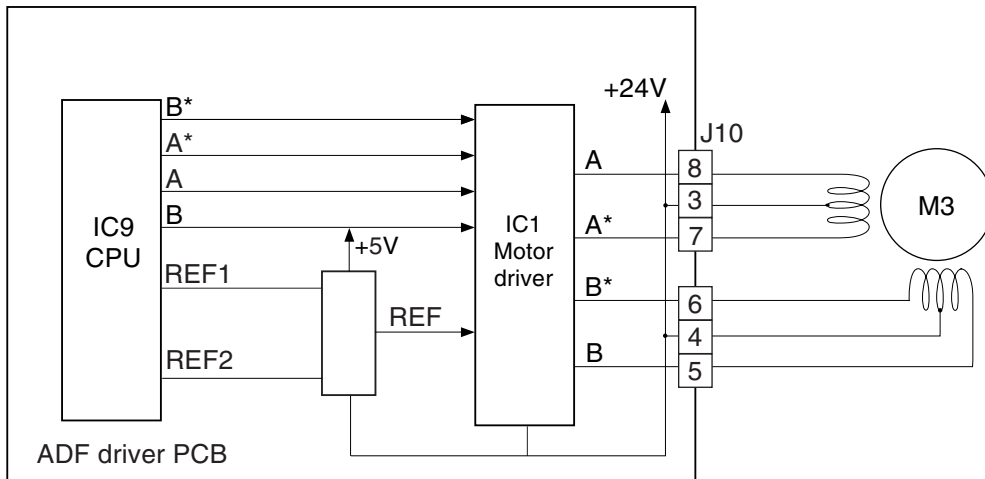


Figure 2-231

6. Moving and Delivering

1) Basic sequence of operation

The machine turns ON the pressure solenoid (SL2) before the trailing edge of the document leaves the read roller to

press the delivery reversal lower roller in place. It then accelerates the delivery reversal motor (M3) when the trailing edge of the document leaves the read roller for delivery.

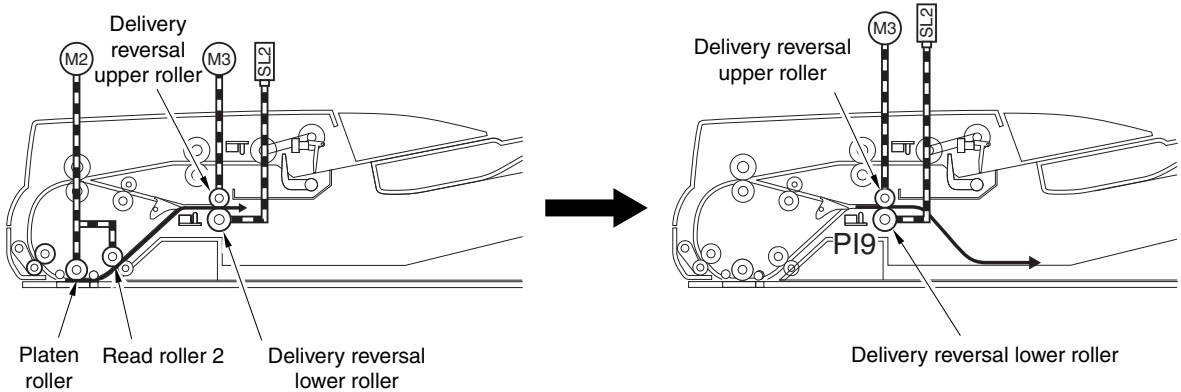


Figure 2-232

2) Sequence of operation

The figure shows sequence of operation (small-size, delivery).

	Reading	Delivering
Feed motor (M2)	[Active]	
Pressure motor (M4)	[Active]	
Read sensor (PI8)	[Active]	
Delivery reversal sensor (PI9)		[Active]
Delivery reversal motor (M3)		[Active]
Pressure solenoid (SL2)		[Active]
Image leading signal	[Active]	

Figure 2-233

III. READER

1. Basic Construction

1) Major components

The reader consists of the following major components:

Item	Notation	Description
Scanning lamp	LA1	Xenon lamp: 77,500 lx
Scanner motor	M501	2-phase pulse motor: pulse control
Cooling fan	FM501	Cools the reader
Scanner HP sensor	PS501	Detects the home position of the scanner.
ADF opening sensor 1	PS502	Detects the state (open/closed) of the ADF using the ADF opening sensor (5 deg).
ADF opening sensor 2	PS503	Detects the size with the ADF at 25 deg (not used)
Mirror	---	No. 1, No. 2, No. 3 mirror

Table 2-301

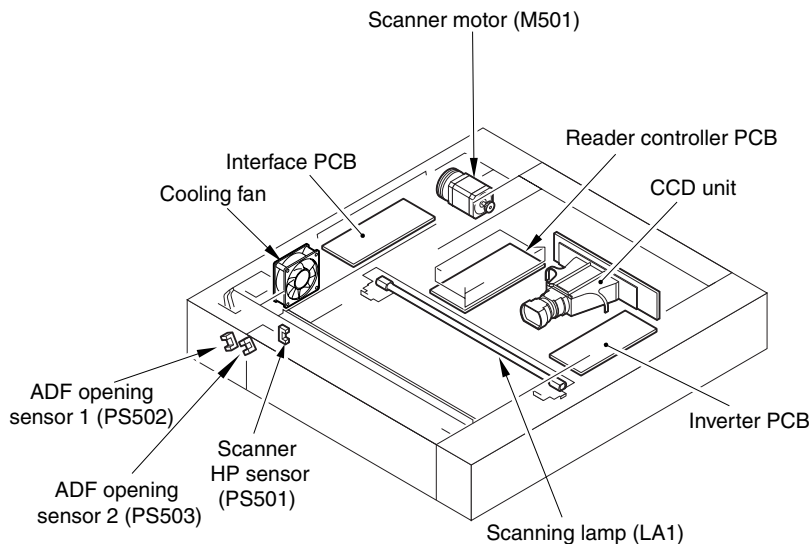


Figure 2-301

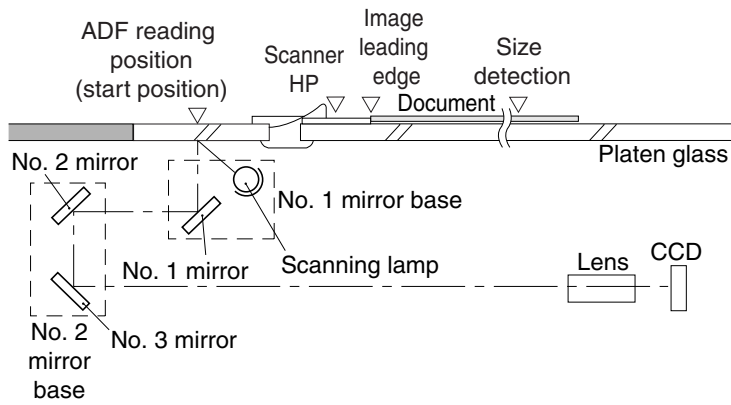


Figure 2-302

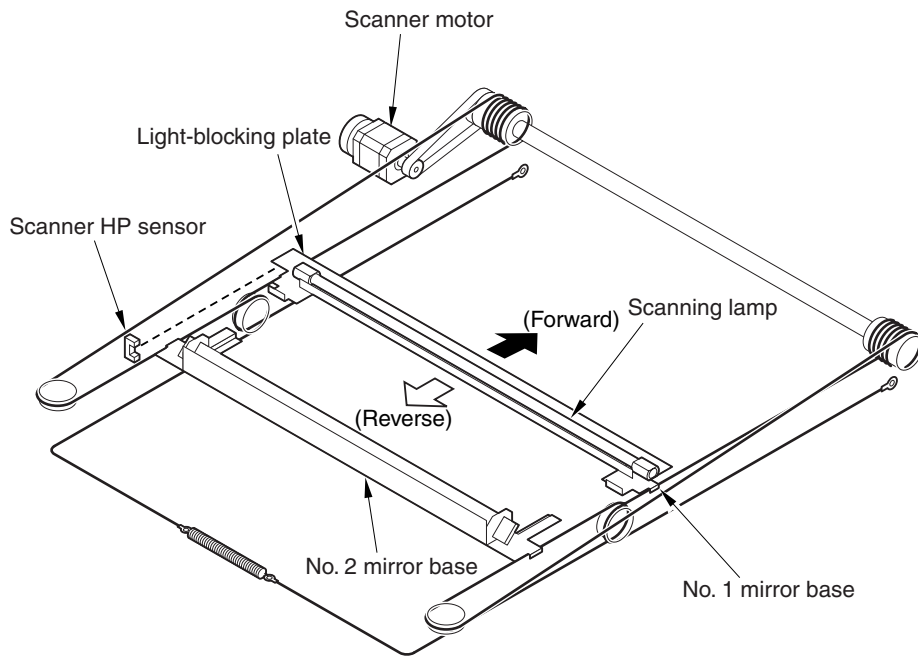


Figure 2-303

2) Construction of the control system

The following shows the construction of the control system of the reader:

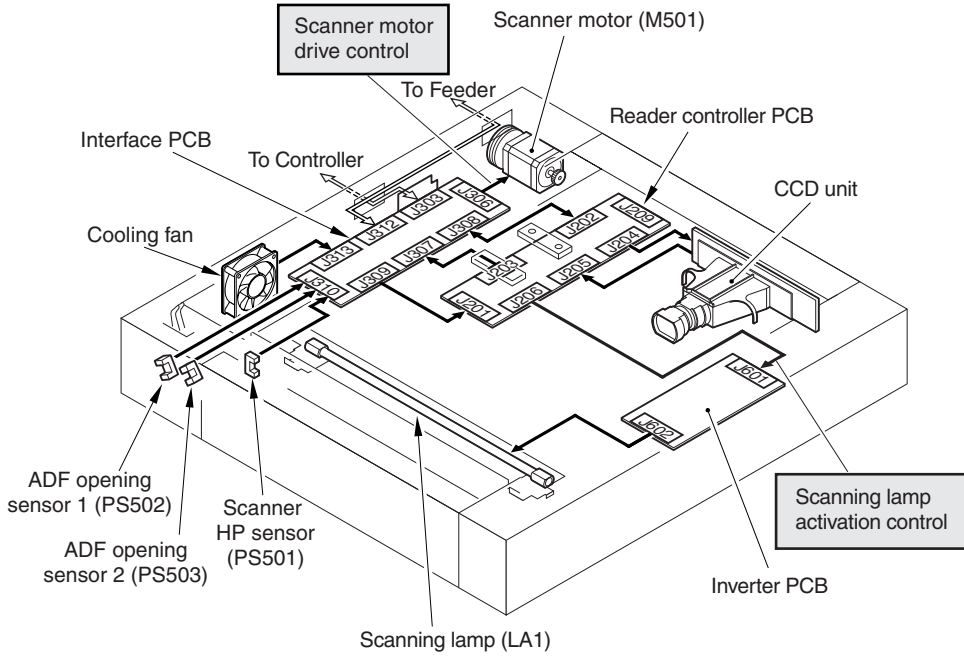


Figure 2-304

The following shows the functional construction of the reader controller PCB:

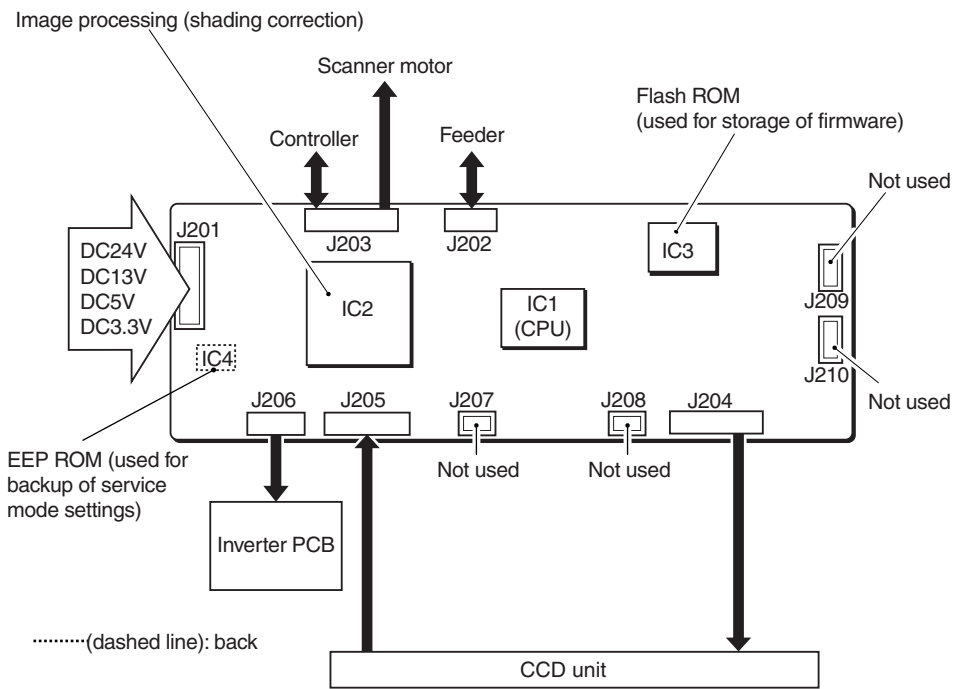


Figure 2-305

Jack No.	Description
J201	Used for the power from the controller
J202	Used for communications with the ADF
J203	Used for communications with the controller Used for connection with the scanner motor
J204	Used for connection with the CCD unit
J205	Used for connection with the CCD unit
J206	Used for connection with the inverter PCB

Table 2-302

IC No.	Description
IC1	CPU (holds boot program)
IC2	ASCI (built-in RAM)
IC3	Flash ROM (stores firmware)
IC4	EEPROM (backs up service mode settings)

Table 2-303

2. Basic Sequence of Operation

1) Basic sequence of operation at power-on

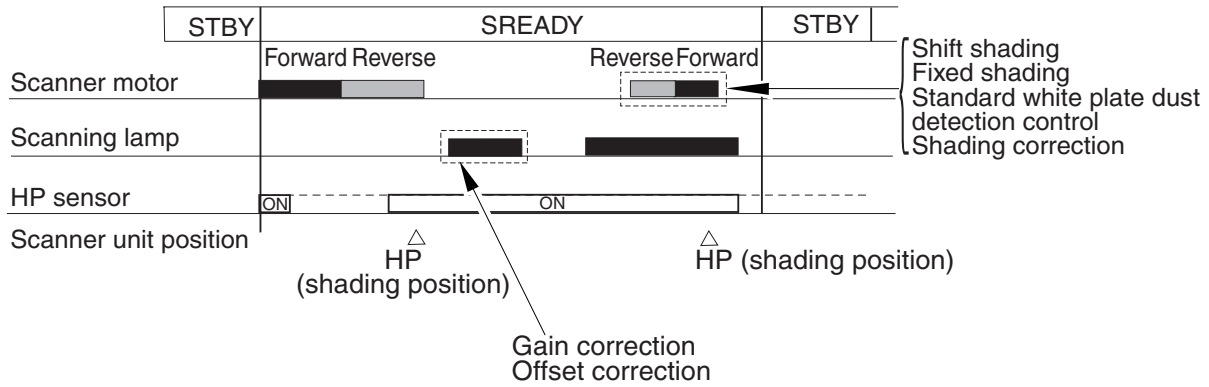
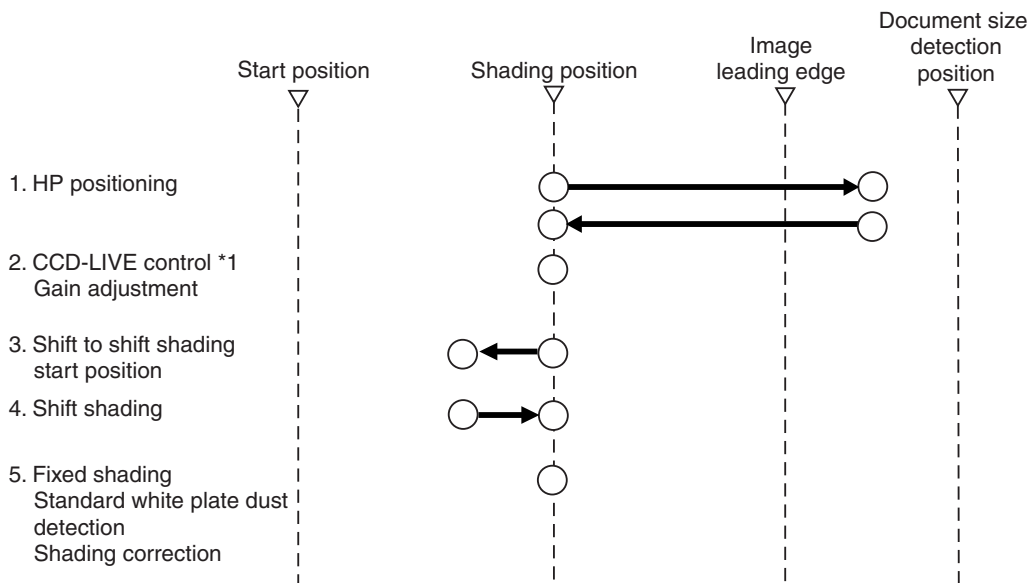


Figure 2-306



*1: Turns on/off the power for the CCD and its peripheral circuits to prevent overheating and to enable power saving.

Figure 2-307

2) Basic sequence of scanning

- FB mode; 1 document

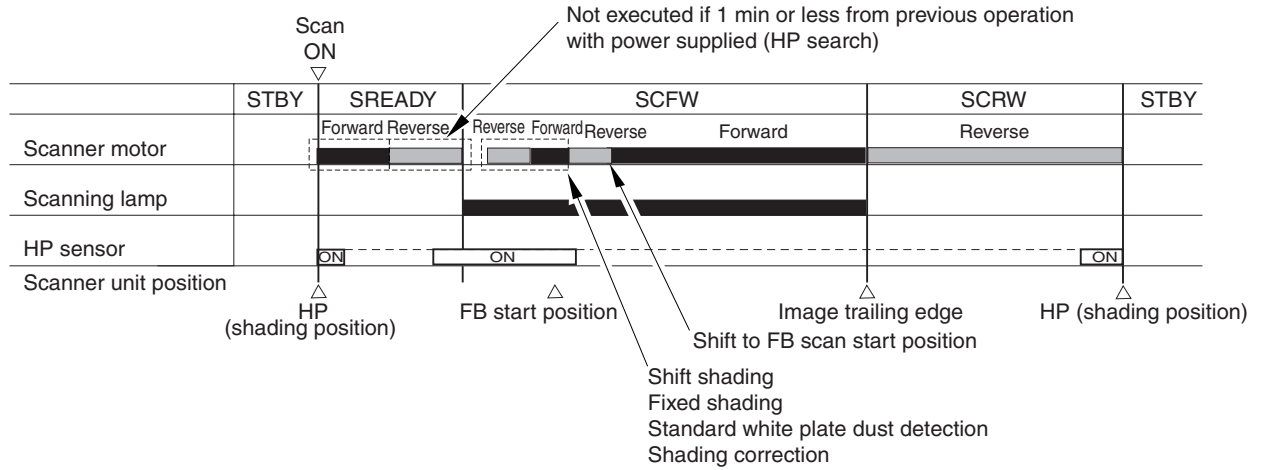
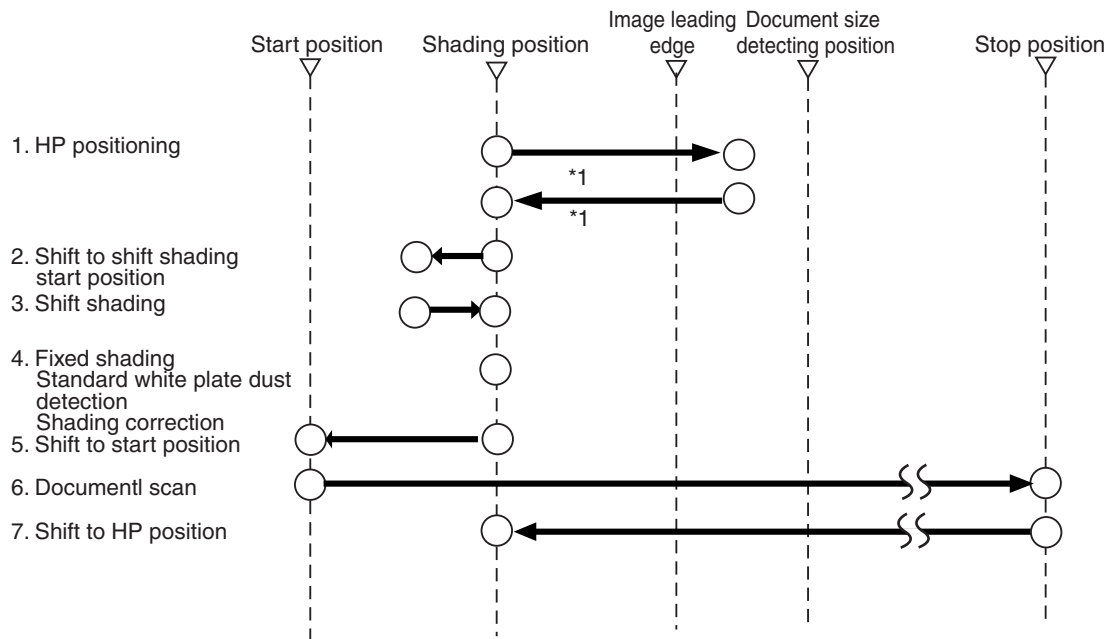


Figure 2-308



*1: Executes only if 1 min or more has passed with power supplied.

Figure 2-309

• ADF mode; 1 document

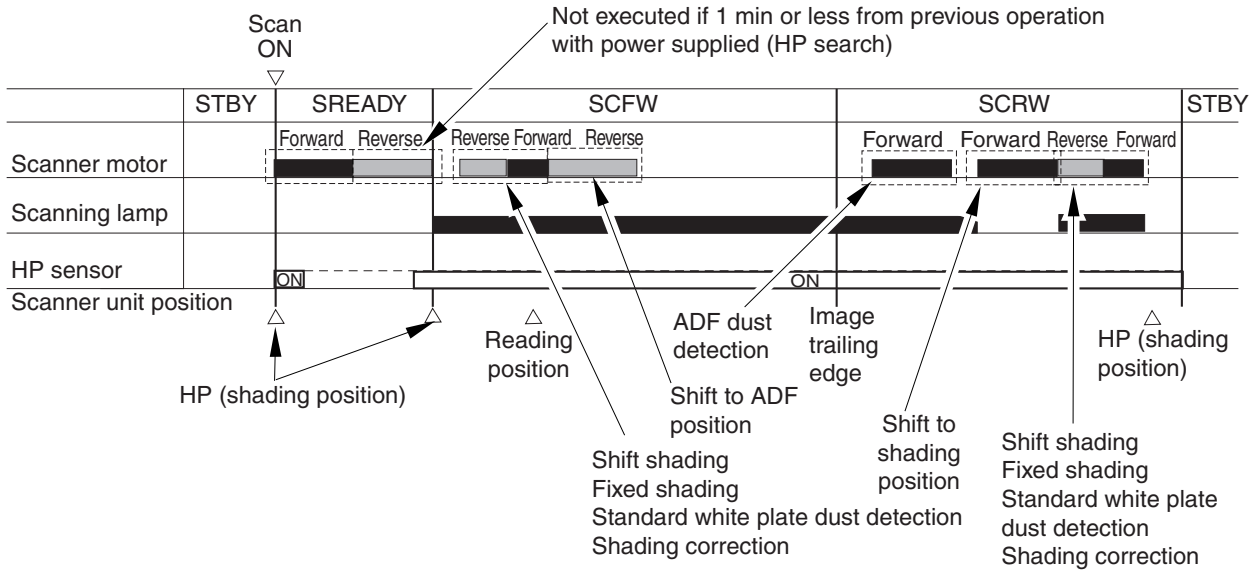
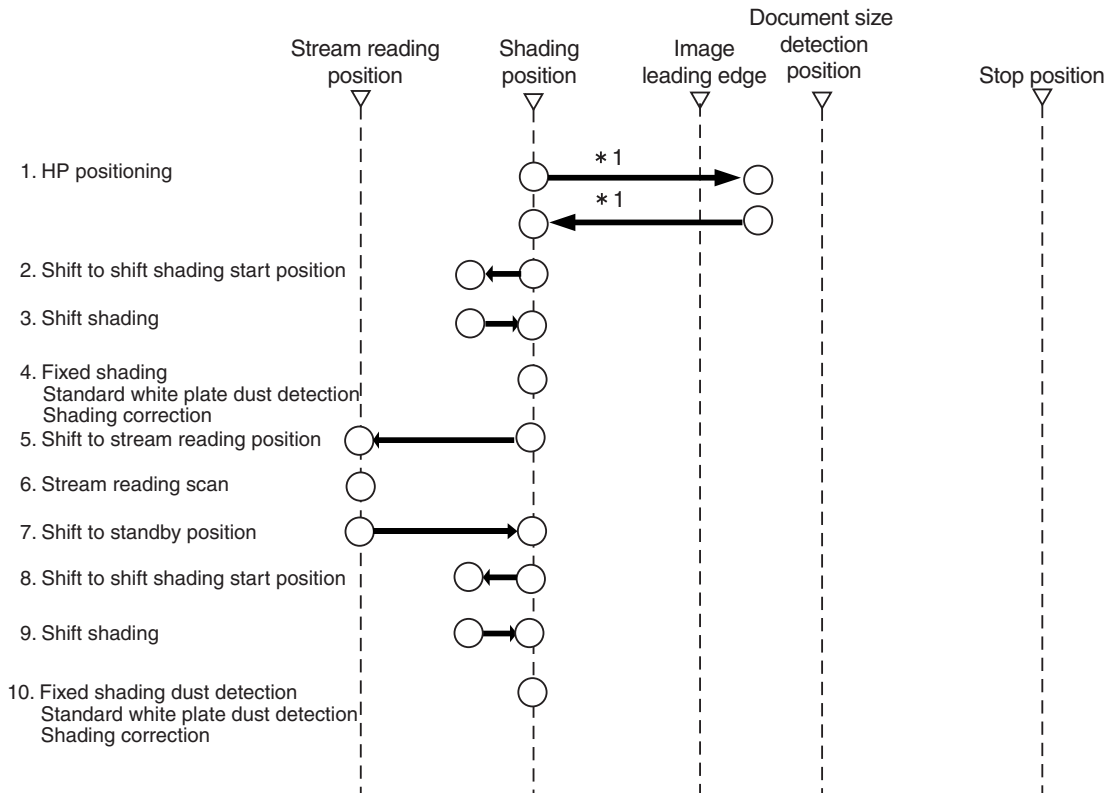


Figure 2-310



*1: Executes only if 1 min or more has passed with power supplied from the previous operation.

Figure 2-311

3. Drive of the Scanner

1) Overview

The following shows the arrangement of the components associated with the drive of the scanner:

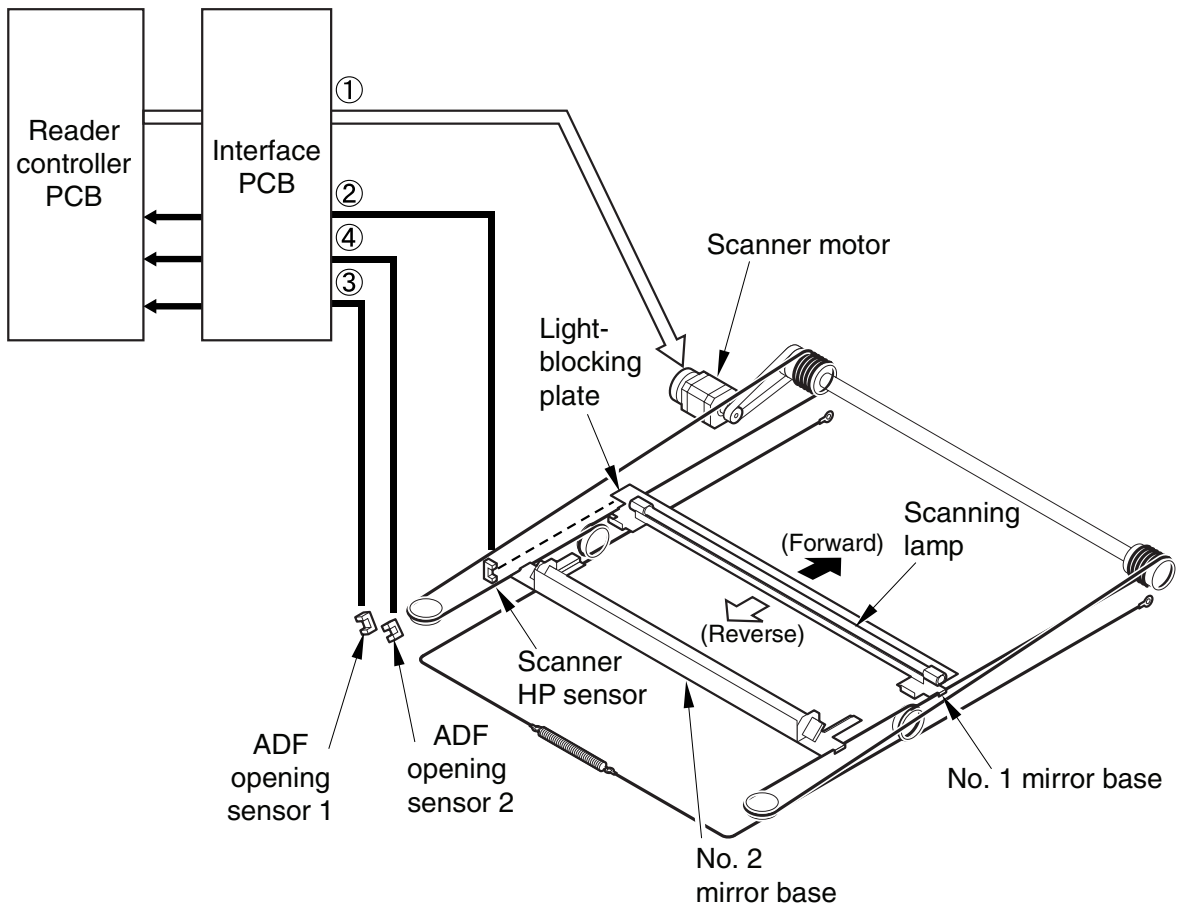


Figure 2-312

No.	Signal	Function
①	Scanner motor drive signal	Controls the activation/deactivation of the motor and the direction and speed of the motor.
②	Scanner HP sensor detection signal	Used in reference to the detection of the No. 1 mirror base at its home position.
③	ADF opening sensor 1 detection signal	Used in reference to the detection of the state (open/closed) of the ADF. (5 deg)
④	ADF opening sensor 2 detection signal	Used in reference to the detection of the state (open/closed) of the ADF. (25 deg)

Table 2-304

2) Controlling the scanner motor

The following shows the construction of the scanner motor control.

The motor driver on the interface PCB controls the rotation (activation/deactivation) of the scanner motor and its direction and speed of rotation according to the signals from the CPU.

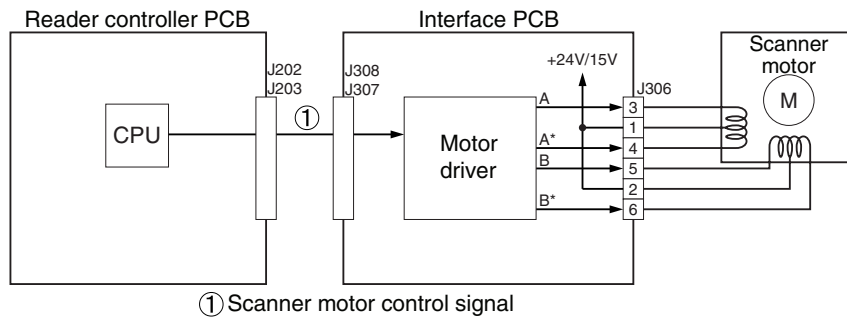
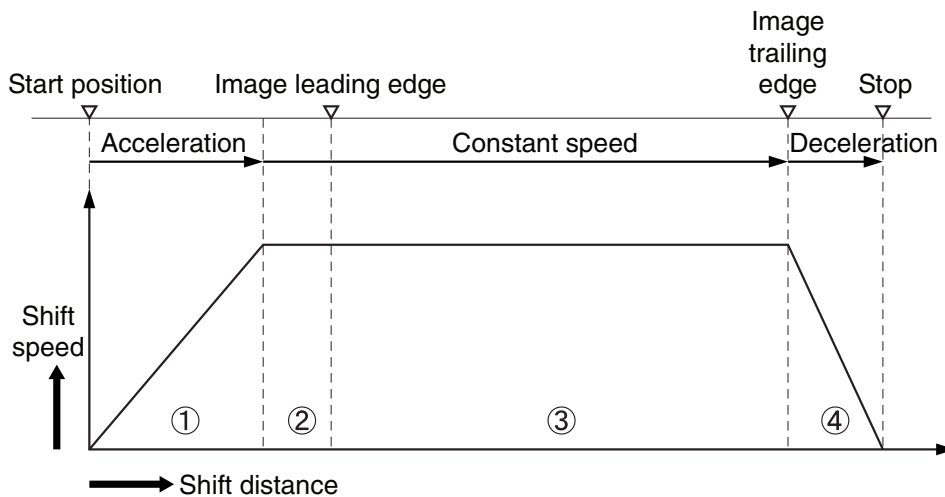


Figure 2-313

The forward operation of the No. 1 mirror base unit during scanning in the FB mode is shown below.

When the resolution is 300 dpi or lower, the scan speed is 468 mm/sec, and in the case of 400/600 dpi, it is 234 mm/sec.

After an image scan, the No. 1 mirror base is moved in reverse to shading position at 234 mm/sec regardless of the selected resolution.



- ① Acceleration Area : Accelerates the scanner to the speed corresponding to the resolution.
- ② Preparatory Area : Serves as a margin for speed stabilization.
- ③ Image Read Area: Reads the image at a specific speed.
- ④ Deceleration Area : Decelerates and stops as soon as reaching the original trailing edge.

Figure 2-314

4. Scanning Lamp

1) Overview

The controlled items and control system configuration related to the scanning lamp are indicated as follows:

a) Turning On and Off the Scanning Lamp

The scanning lamp is turned on or off by the drive signal (XE-ON) generated by the CPU of the reader controller PCB. When the signal is generated, the inverter PCB generates high-frequency high voltage using the activation control circuit from the drive voltage (+24V) supplied by the reader controller PCB, thus turning on the scanning lamp.

b) Detection Error Activation

The machine detects a fault in the intensity of the lamp as an activation error caused by a fault in the intensity of the lamp at time of initial activation (shading correction).

Error code: E2250001

- The reader controller PCB is faulty.
- The inverter PCB is faulty.
- The scanning lamp is faulty.
- The cable has poor contact.

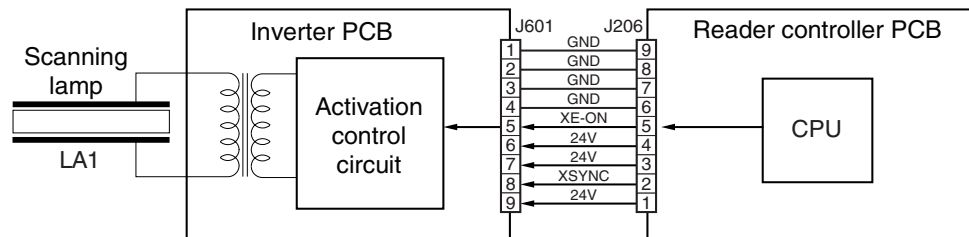


Figure 2-315

2) Scanning Lamp

The machine's scanning lamp is a xenon lamp, which uses xenon gas sealed inside. On the outside of the glass tube, 2 electrodes are arranged in parallel with the tube; the inside of the tube, on the other hand, is coated with fluorescent material. When a high-frequency high voltage is applied to the electrodes, the gas inside the tube starts to discharge, causing the fluorescent material to emit light.

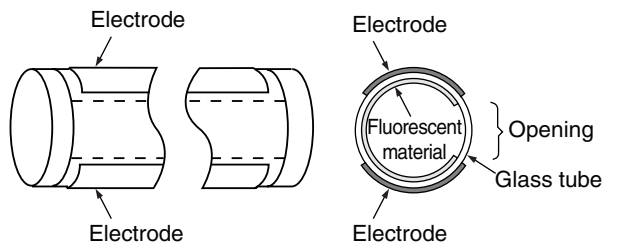


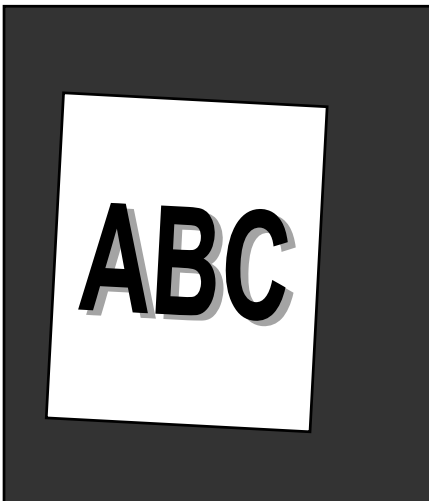
Figure 2-316

5. Document Size Detection

The scan area is selected by software. When either "Standard Size" or "Specify Area" is selected, regardless of the size and position of the set document, the software's selections are used.

When "Automatic Detection" is selected, the size of the document is detected by processing the scanned image data.

- In case the background is black



The pressure board and platen roller are black. Since the background of documents can be read as black, automatic detection by image processing is possible.

For details, refer to "IV. CONTROLLER".

- In case the background is white

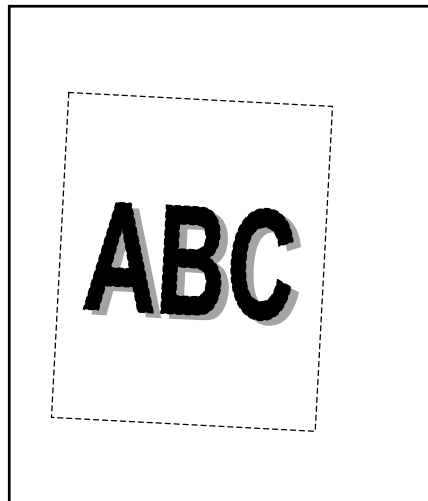


Figure 2-317

6. Standard white plate Dust Detection

1) Overview

The machine uses a fan to cool the inside of the reader unit to prevent overheating otherwise caused by the xenon lamp in the ADF mode. The fact, however, can cause stray dust inside the reader unit to collect on the standard white plate that is attached on the rear side of the platen glass, showing up as lines in output images.

2) Timing of control

The standard white plate dust detection and correction are performed when the power is ON and also at the beginning and end of scanning.

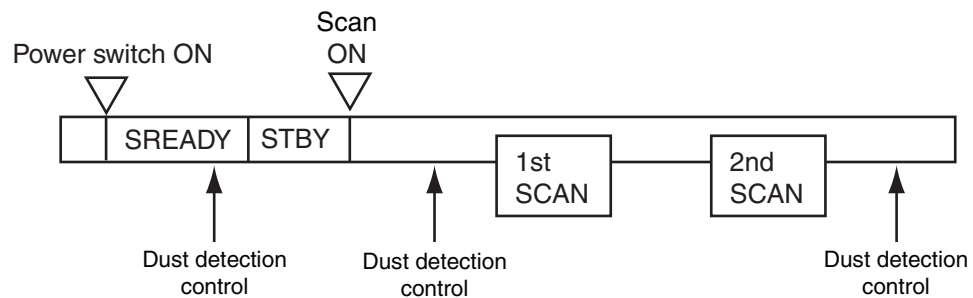


Figure 2-318

3) Particulars of control

• Standard white plate Dust Detection

The machine compares the shading coefficient obtained from shift shading and the shading coefficient obtained from fixed shading to identify the presence/absence of dust and, if any, coordinates and width of the area.

• Standard white plate Dust Correction

If the machine detects dust as a result of standard white plate dust detection, it corrects the shading coefficient of the area using the shading coefficient of both sides so as to decrease the effects of the presence of dust. It executes shading correction using the coefficient it obtains after correction.

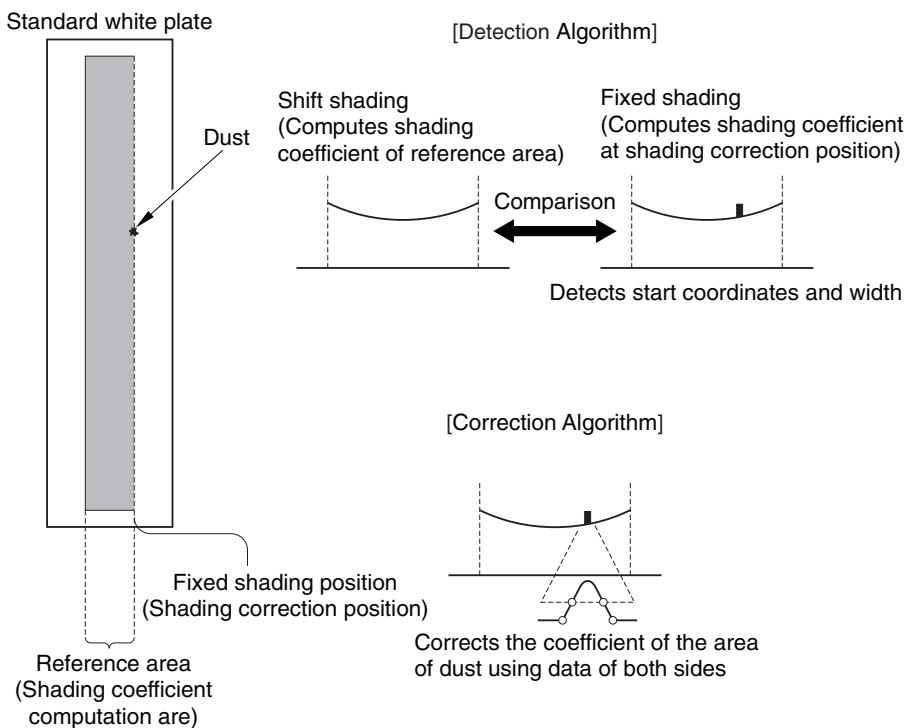


Figure 2-319

7. Reading

1) Outline

Reading by this machine is done using the CCD in the CCD unit.

The image data read with the CCD is subjected to a first stage of image data

processing using the CCD/AP PCB on which the CCD is mounted, and is then output to the reader controller circuit. After that, it is output to the controller.

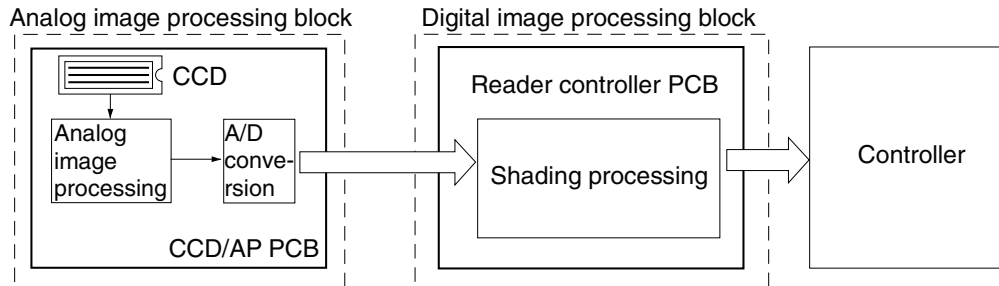


Figure 2-320

2) CCD

The machine's CCD is a linear image sensor consisting of 3 lines (R, G, B, 1 line each), each line composed of 7350 photo cells.

The signal that has been put through photo-conversion in the light-receiving segment is divided into 2 analog signals of 2 channels for output: even-numbered pixels (EVEN) and odd-numbered pixels (ODD).

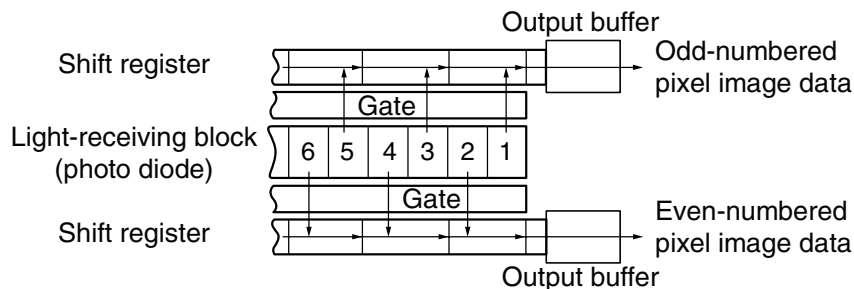


Figure 2-321

3) Image data processing

Following the execution of offset adjustment, gain adjustment, and A/D conversion by the CCD/AP PCB, shading correction is performed by the reader controller PCB.

Figure 2-322 shows the block diagram of the image processing performed by the CCD/AP PCB, and Figure 2-323 shows the block diagram of the image processing performed by the reader controller PCB.

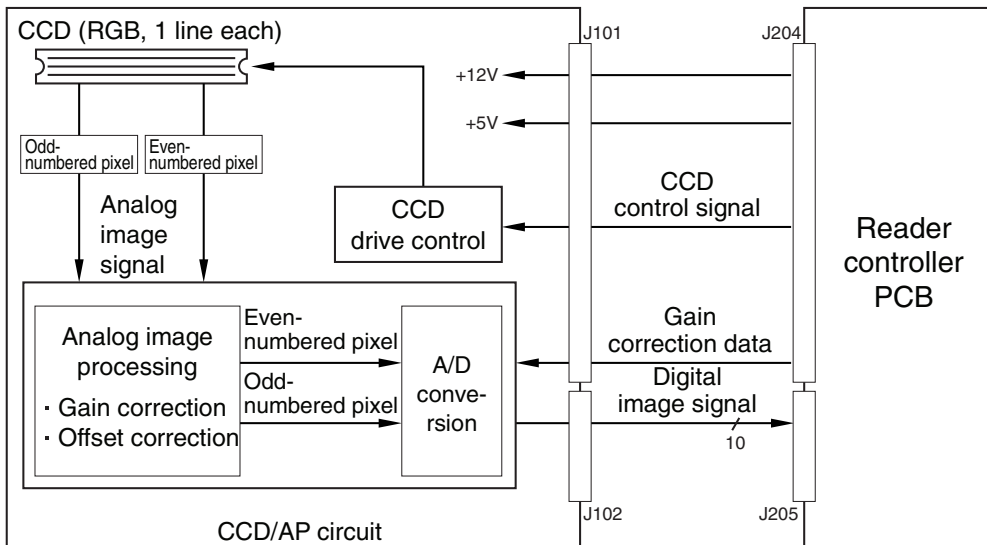


Figure 2-322

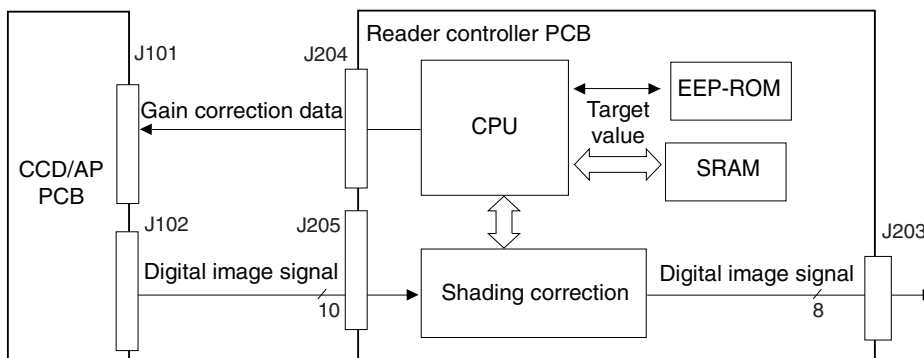


Figure 2-323

4) Shading correction

The CCD output is not constant even when the document density is the same, due to variations in the sensitivity of the CCD's pixels and the light intensity of the scanning lamp. The processing performed to compensate these aspects is called shading correction. Shading correction is performed for digital signals following A/D conversion. This processing is performed every time scanning is performed.

The target values used for shading correction are determined by measuring the density of the normal white paper and the standard white plate in the machine in the service mode. This is called "shading adjustment".

The machine directs the light from the scanning lamp against the standard white plate each time it scans a document, and converts the reflected light into a digital signal by the analog image processing block on the CCD/AP PCB. The result (i.e., a digital signal representing the intensity of the reflected light) is sent to the shading correction circuit of the reader controller PCB as a shading coefficient of the individual pixels of the CCD. The shading correction circuit in turn compares the coefficient against the target value it holds, and offers the difference as the shading correction value.

The machine uses the shading correction value to correct the variation that may exist among the individual pixels of the CCD, thereby keeping the image density to a specific level at all times.

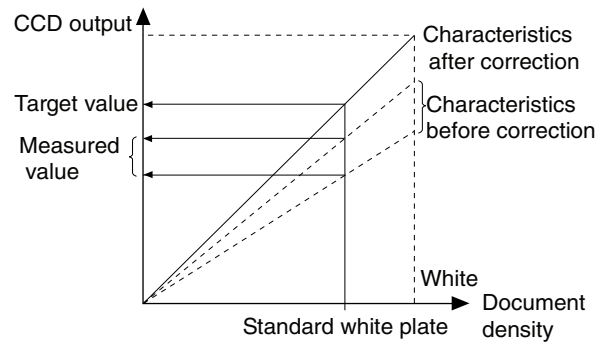


Figure 2-324

IV. CONTROLLER

1. Outline

The main functions of the controller are image processing and interfacing with the computer.

However, image processing can also be performed with the first-stage reader, or the computer following output.

Moreover, a power supply block is provided in the controller. This power supply block converts the AC power supply input from external and supplies the appropriate power to the reader and feeder.

Figure 2-401 shows the block diagram of the controller.

The feeder and reader used in the machine are the same as those employed in copiers, but the controller is a dedicated controller specifically designed for this machine.

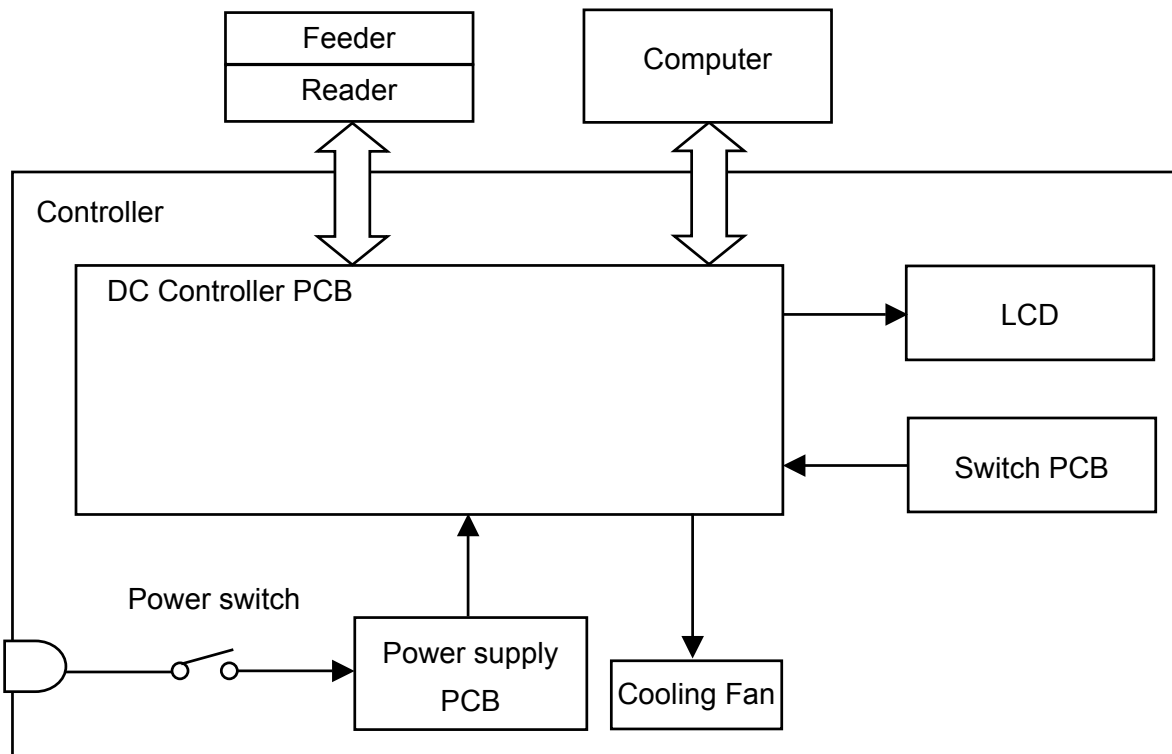


Figure 2-401

2. DC Controller PCB

Figure 2-402 shows the block diagram of the DC controller PCB, and Table 2-401 lists the functions of the ICs in the block diagram.

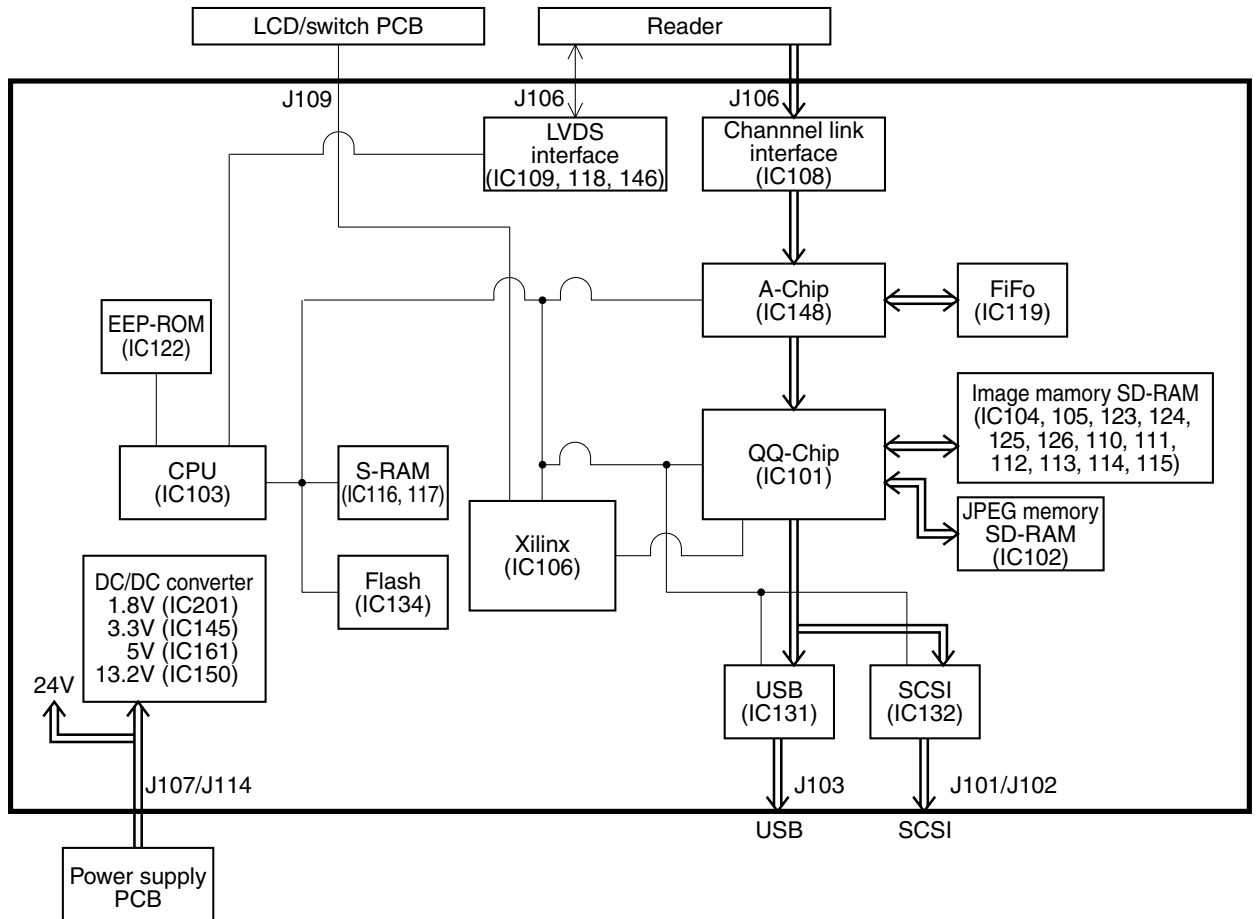


Figure 2-402

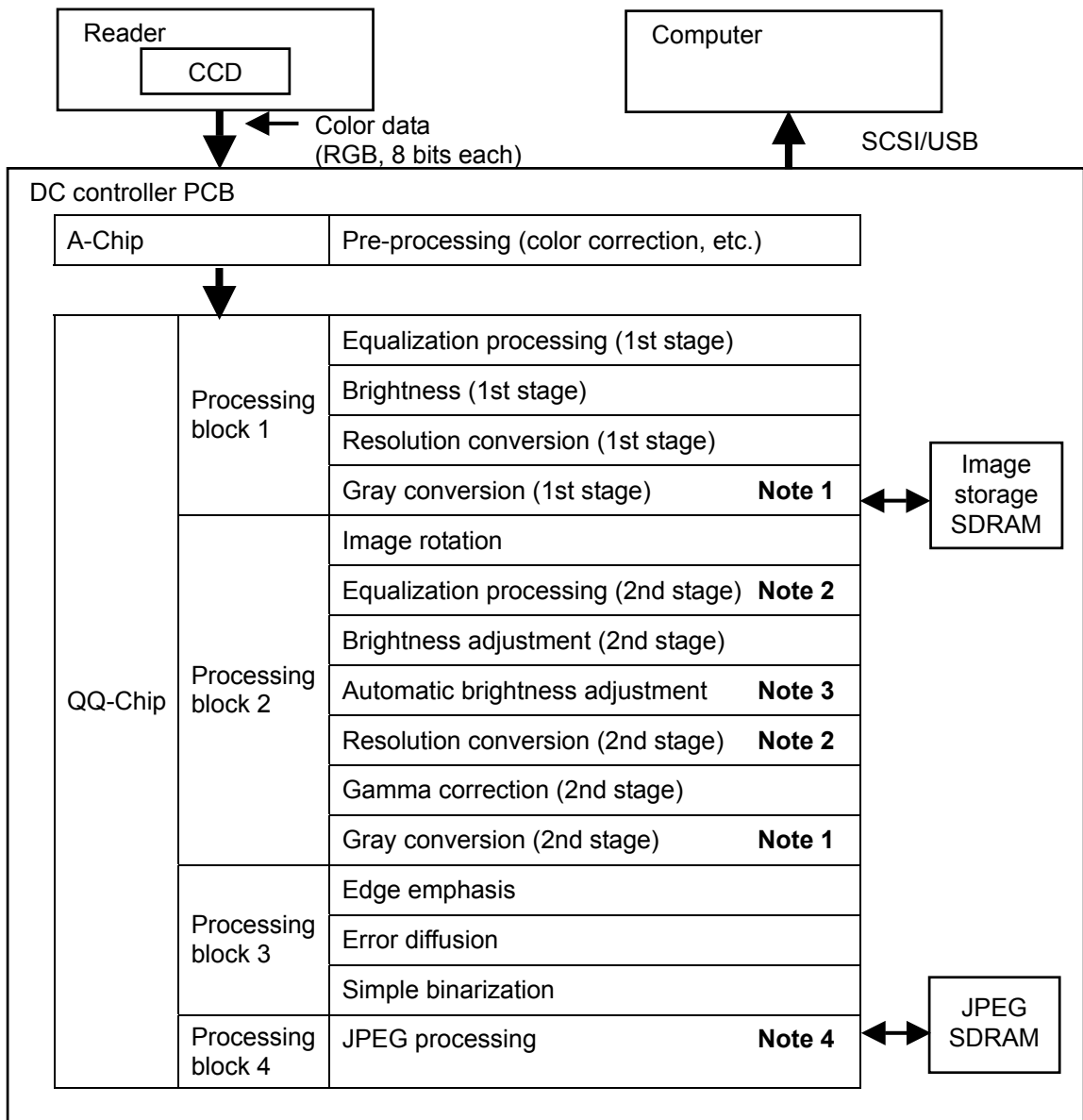
IC No.	Name	Function
IC101	QQ-Chip	Image processing, JPEG compression, DMA transfer
IC102	JPEG memory (SDRAM)	JPEG compression memory
IC103	CPU	Controller control
IC104	Image memory (SDRAM)	Image storage memory
IC105	Image memory (SDRAM)	Image storage memory
IC106	Xilinx	DMA control, etc.
IC108	Channel link interface	Image signal input
IC109	LVDS interface	Command/status
IC110	Image memory (SDRAM)	Image storage memory
IC111	Image memory (SDRAM)	Image storage memory
IC112	Image memory (SDRAM)	Image storage memory
IC113	Image memory (SDRAM)	Image storage memory
IC114	Image memory (SDRAM)	Image storage memory
IC115	Image memory (SDRAM)	Image storage memory
IC116	S-RAM	For CPU work
IC117	S-RAM	For CPU work
IC118	LVDS interface	Command/status
IC119	FiFo	Image processing FiFo memory
IC122	EEP-ROM	Log record parameters
IC123	Image memory (SDRAM)	Image storage memory
IC124	Image memory (SDRAM)	Image storage memory
IC125	Image memory (SDRAM)	Image storage memory
IC126	Image memory (SDRAM)	Image storage memory
IC131	USB	USB interface
IC132	SCSI	SCSI interface
IC134	Flash	Firmware
IC145	DC-DC converter	+3.3VDC generation
IC146	LVDS interface	Command/status
IC148	A-Chip	Image processing
IC150	DC-DC converter	+13.2VDC generation
IC161	DC-DC converter	+5VDC generation
IC201	DC-DC converter	+1.8VDC generation

Table 2-401

3. Image Processing

1) Outline

Figure 2-403 shows the block diagram of the image processing performed by the DC controller PCB.



Note 1: If the output mode is other than color, the color data is converted to the grayscale data.

Note 2: This processing is performed when resolution conversion is requested by the MultiStream function.

Note 3: This processing is performed when automatic brightness is selected for the simple binarization (black & white) output mode.

Note 4: This processing is performed when a JPEG format is requested at the color or grayscale mode.

Figure 2-403

The main image processing of the controller is performed by the IC101 (QQ-chip) on the DC controller PCB.

As described in the section covering the reader, the document is read by the CCD in the reader, and after the basic processing has been performed, the data is input to the DC controller PCB as main-scan 600 dpi color data (RGB, 8 bits each).

The image data is first input to the A-chip, and after undergoing basic adjustments such as color correction, it is input to the QQ-chip.

The QQ-chip supports the MultiStream function. MultiStream is a function for outputting data of two different modes at a single scan. Use of the MultiStream function requires application software that supports this function.

CapturePerfect 2.0, which is bundled in this machine, supports this function.

Therefore, two image processing blocks that can perform brightness adjustment and resolution conversion in the QQ-chip are provided to achieve higher processing speed.

Processing block 1, which is the first stage, performs processing using conditions involving a small data amount within the range covering the requested output conditions. For example, if the requested resolutions are 100 dpi and 300 dpi, the resolution is converted from 600 dpi to 300 dpi.

Averaging, which is the pre-processing done before resolution conversion, is also called "smoothing". It helps minimize the moire effect during conversion to a low resolution.

Averaging can be performed for all output modes (binary, grayscale, color).

The image data processed in processing block 1 is stored in image storage SDRAM.

Processing block 2 performs image processing according to the various requested output conditions based on the data stored in image processing SDRAM. The data is then output to processing block 3.

Following edge emphasis, processing block 3 performs error diffusion or simple binarization according to the requested output mode. The data whose image processing has been completed is output to the computer via the SCSI or USB interface.

However, if the file format request is JPEG, the data is sent to processing block 4 following edge emphasis. Once JPEG processing has been performed in processing block 4, the data is sent to the computer via the SCSI or USB interface. When JPEG processing is performed in the machine, the data amount is reduced, so the time required for transfer to the computer is shorter, and thus a larger number of sheets can be scanned in a given time, compared to when JPEG processing is performed in the computer. Part of the image processing is also performed in the computer. In some cases, image processing is also performed in the controller in order to make the data suitable for image processing in the computer. For details, refer to the other relevant sections.

2) MultiStream

As described previously, MultiStream is a function that outputs data in two different modes at a single scan.

Figure 2-404 shows a screen where 600 dpi resolution for grayscale and 100 dpi for black & white have been set for CapturePerfect 2.0, and the resulting outputs.

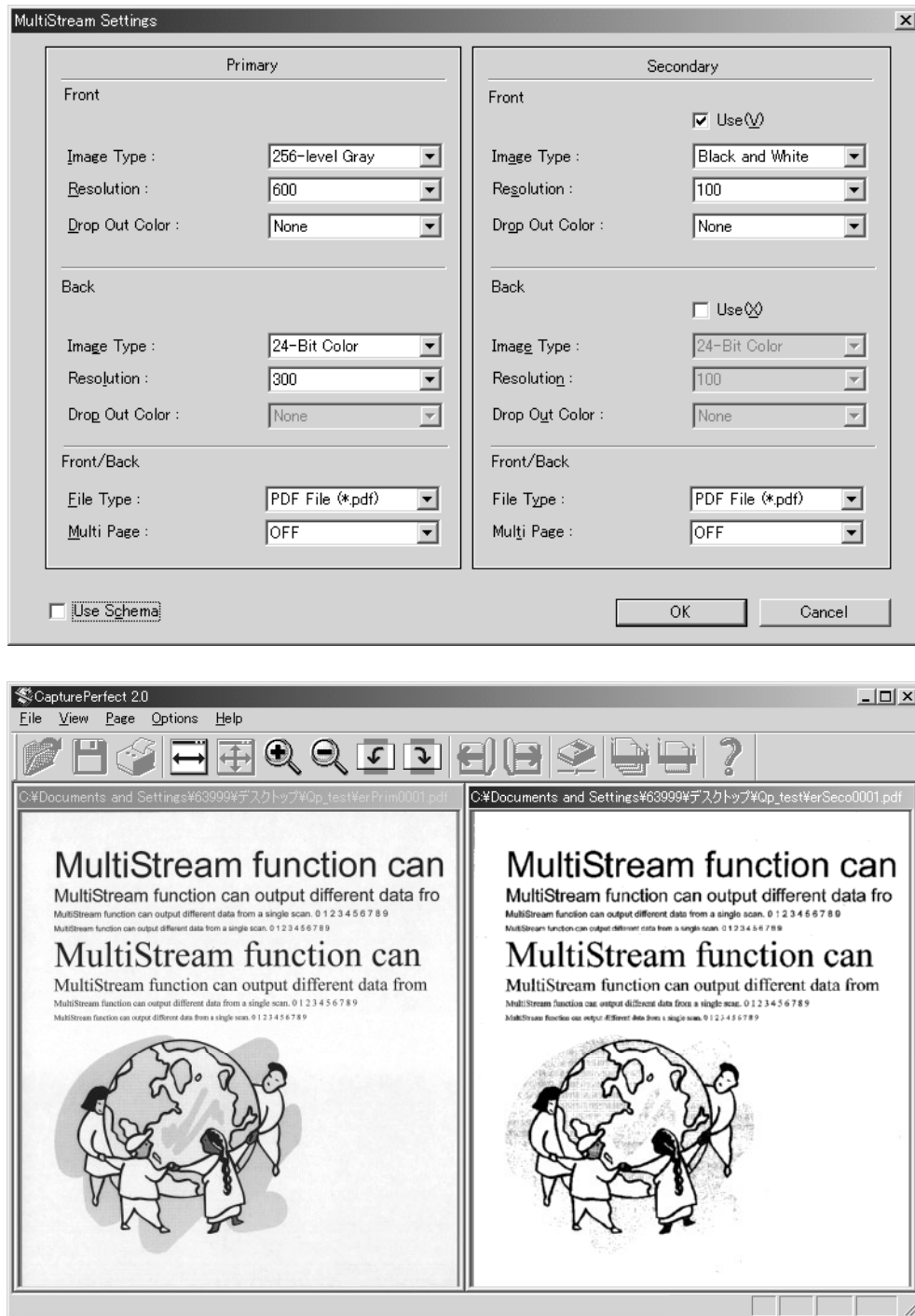


Figure 2-404

3) Resolution conversion/ averaging

Resolution conversion for the main-scan direction in the machine is done through pixel thinning, and resolution conversion in the sub-scan direction is done through pixel thinning and changing the feeding speed. However, pixel thinning results in a moire effect that lowers image quality. Equalization processing is done to prevent this effect.

The resolution in the main-scan direction for image data input to the controller from the reader is always 600 dpi. The sub-scan direction resolution varies according to the feed speed. It is 600 dpi (low-speed feed) and 300 dpi (high-speed feed).

The cases for 400 dpi resolution output only and both 300 dpi and 200 dpi resolution output using the MultiStream function are described below.

a) 400 dpi only

Averaging (1st stage)
Brightness adjustment (1st stage)
Resolution conversion (1st stage)
Grayscale conversion (1st stage)
Image rotation
Averaging (2nd stage)
Brightness adjustment (2nd stage)
Automatic brightness adjustment
Resolution conversion (2nd stage)
Gamma correction (2nd stage)
Grayscale conversion (2nd stage)

• Input data [600 × 600 dpi]

A1	B1	C1	D1	E1	F1
A2	B2	C2	D2	E2	F2
A3	B3	C3	D3	E3	F3

• After averaging [600 × 600 dpi]

$\frac{A1+B1}{2}$	$\frac{B1+C1}{2}$	$\frac{C1+D1}{2}$	$\frac{D1+E1}{2}$	$\frac{E1+F1}{2}$	$\frac{F1+G1}{2}$
$\frac{A2+B2}{2}$	$\frac{B2+C2}{2}$	$\frac{C2+D2}{2}$	$\frac{D2+E2}{2}$	$\frac{E2+F2}{2}$	$\frac{F2+G2}{2}$
$\frac{A3+B3}{2}$	$\frac{B3+C3}{2}$	$\frac{C3+D3}{2}$	$\frac{D3+E3}{2}$	$\frac{E3+F3}{2}$	$\frac{F3+G3}{2}$

• After resolution conversion [400 × 400 dpi]

$\frac{A1+B1}{2}$	$\frac{B1+C1}{2}$	$\frac{D1+E1}{2}$	$\frac{E1+F1}{2}$
$\frac{A2+B2}{2}$	$\frac{B2+C2}{2}$	$\frac{D2+E2}{2}$	$\frac{E2+F2}{2}$
$\frac{A4+B4}{2}$	$\frac{B4+C4}{2}$	$\frac{D4+E4}{2}$	$\frac{E4+F4}{2}$

Figure 2-405

b) 300 dpi and 200 dpi

The resolution during controller input is [600 × 300 dpi].

Since the data resolution is converted to [300 × 300 dpi] during image processing in the 1st stage, averaging and resolution conversion are not performed during image processing of 300 dpi data during the 2nd stage.

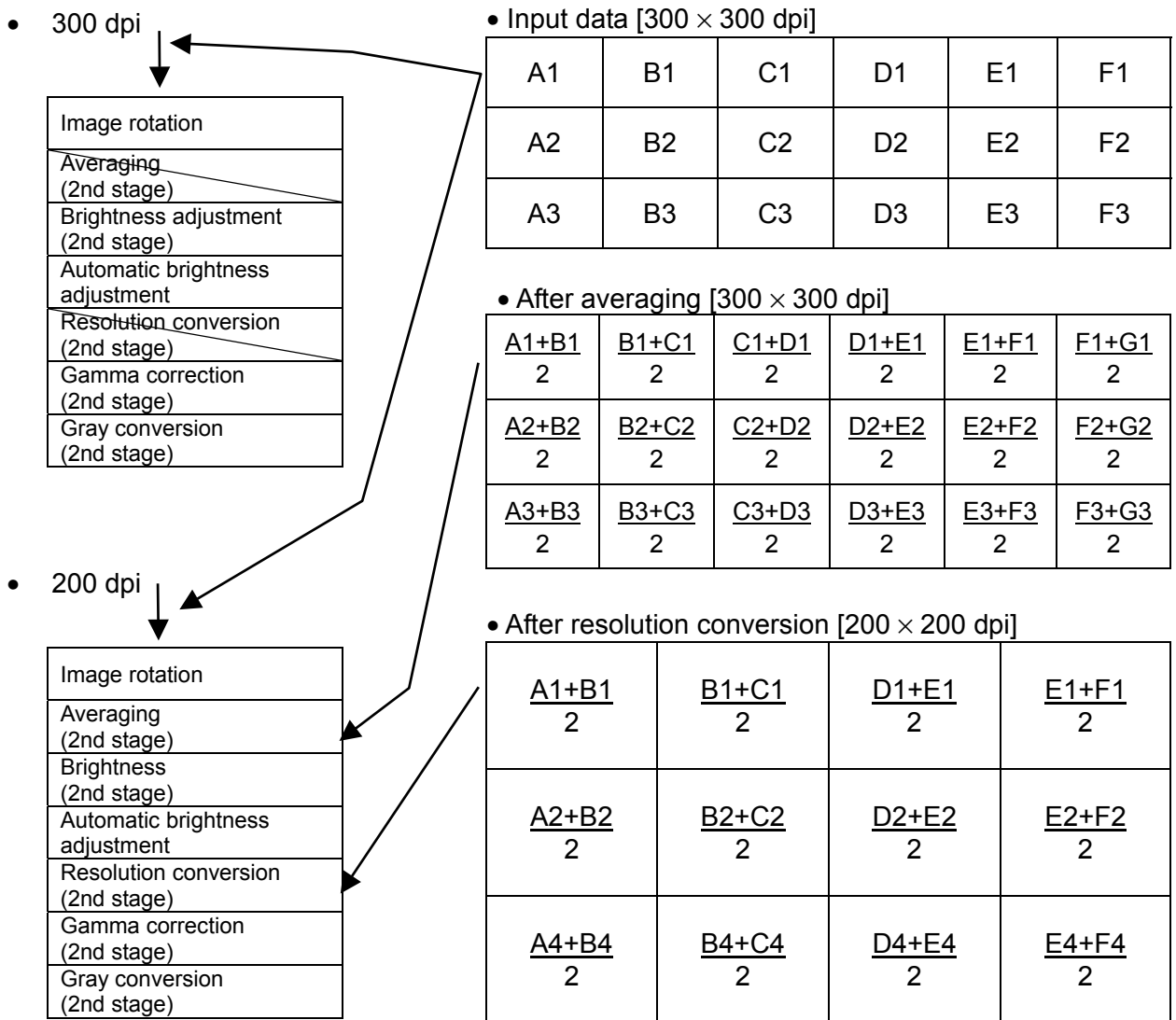


Figure 2-406

4) Data conversion

To improve the reproducibility of documents and modify the acquired image as required by the user, it is possible to convert the document image data using conversion tables. This machine provides various conversion tables adjusted for image mode and setting value.

However, there are several adjustment items not available for image mode and other conditions. For details, refer to the driver software "Help" function.

The conversion tables below are for fundamental items and may be different from actual items.

a) Brightness adjustment

This adjusts the overall brightness of the scanned image. The image brightness increases as the setting value becomes larger, and decreases as the value becomes smaller.

For automatic brightness adjustment in Black & White mode, refer to the "Binarizing" section.

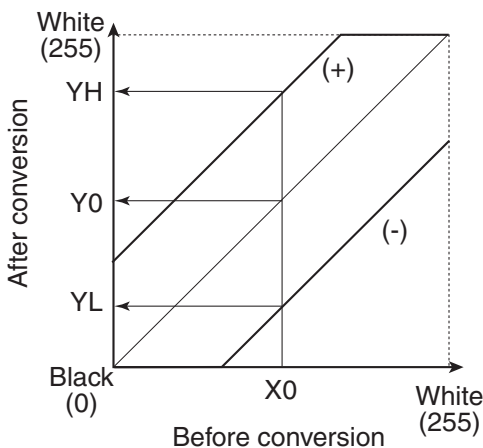


Figure 2-407

b) Contrast adjustment

This adjusts the contrast of the scanned image. The image contrast increases as the setting value becomes larger, and decreases as the value becomes smaller.

In this machine, this processing is performed at the gamma correction location in the image processing block diagram.

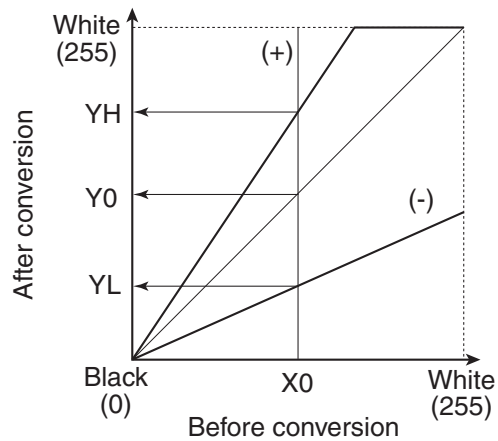


Figure 2-408

c) Gamma correction

This is used when data conversion other than brightness and contrast adjustments is required.

It is possible for the user to use a custom conversion table for converting the gamma curve to the document image data. In this case, the brightness and contrast adjustments become invalid.

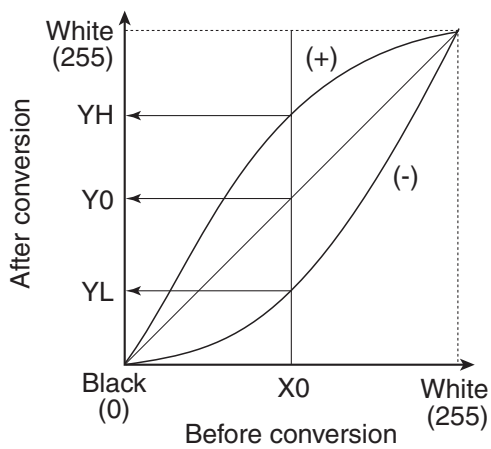


Figure 2-409

5) Edge emphasis

Edge emphasis is a kind of processing which emphasizes light and shade in order to make the image appear sharp. (Figure 2-410)

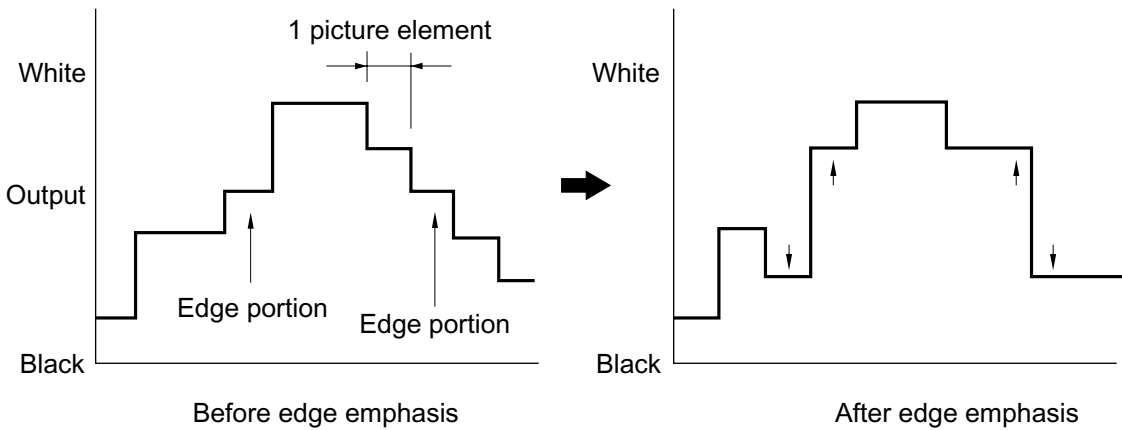


Figure 2-410

Density processing is performed by comparing the data in the conversion table provided for performing edge emphasis, with the target picture element. (Refer to Figure 2-411.)

If the density of the target picture element is increased fourfold and the density of the other four points multiplied by -1, the overall density will remain unchanged.

The stages in edge emphasis can be changed by changing the conversion table and reproduction ratio (B) of the conversion table.

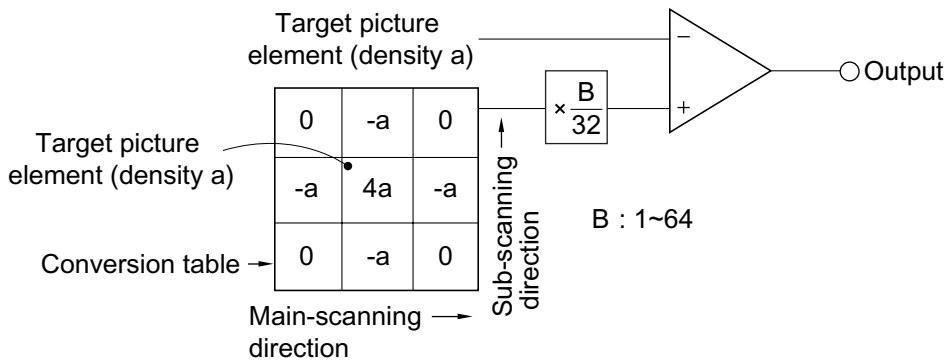


Figure 2-411

6) Binarizing

Image binarizing is described below. For the "Advanced text enhancement," refer to the section entitled "Image Processing in the Computer."

a) Simple Binarizing

Binary image data can only express picture elements as either "black" or "white."

In order to separate the picture elements into black and white, signals corresponding to the image density of the document must be cut off at a certain level, so that anything above that level is judged as "white" and anything below as "black." This is called simple binarizing. This is useful for text documents. Simple binarizing for this machine is called "Black and White" mode.

The level at which picture elements are to be divided into white or black is called the "slice level" (or threshold value).

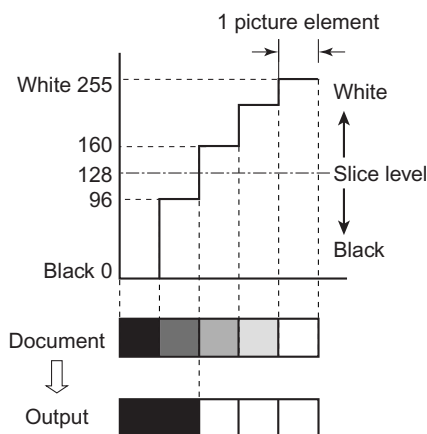


Figure 2-412

b) Error diffusion

Error diffusion processing is used to binarize documents containing gray levels, such as pictures and photos.

A sample case is shown below, where the output is set to 4 bits and the slice level is set to 8.

The value of 1 picture element of input image data is compared with the slice level. When it is smaller than the slice level, it is output as "0" and when it is

bigger than the slice level, it is output as "15". The difference between the values of the input and output picture elements is then added to the next picture element to be processed.

First, when processing the first row of Line 1, since the data "12" is larger than the slice level "8", the output data becomes "15", and the resultant error becomes $-3(=12-15)$. (Refer to Figure 2-413.)

First row of line 1

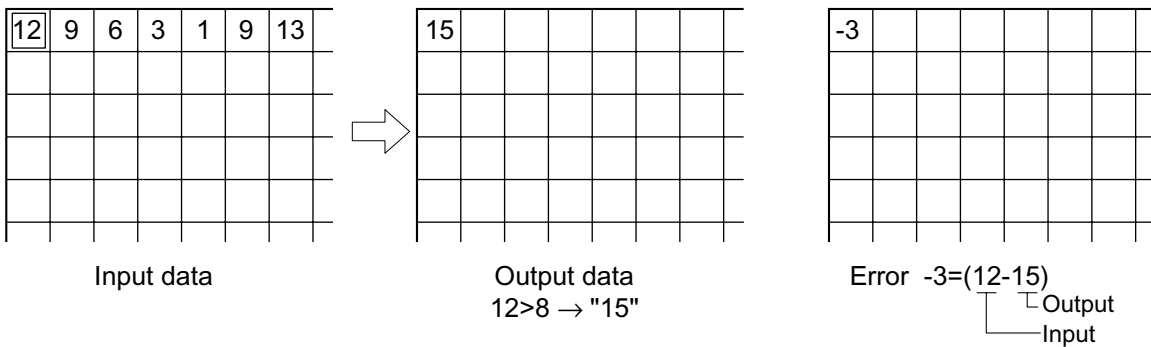


Figure 2-413

Next, when processing the second row of Line 1, since the error is diffused to the right, the data of the picture element of the second row of Line 1 becomes "6" ($=9-3$).

As this value is smaller than the slice level, the output data is "0" and the error becomes "+6" ($=(9-3)-0$). (Refer to Figure 2-414.)

The third row of Line 1 and later are processed similarly.

Second row of line 1

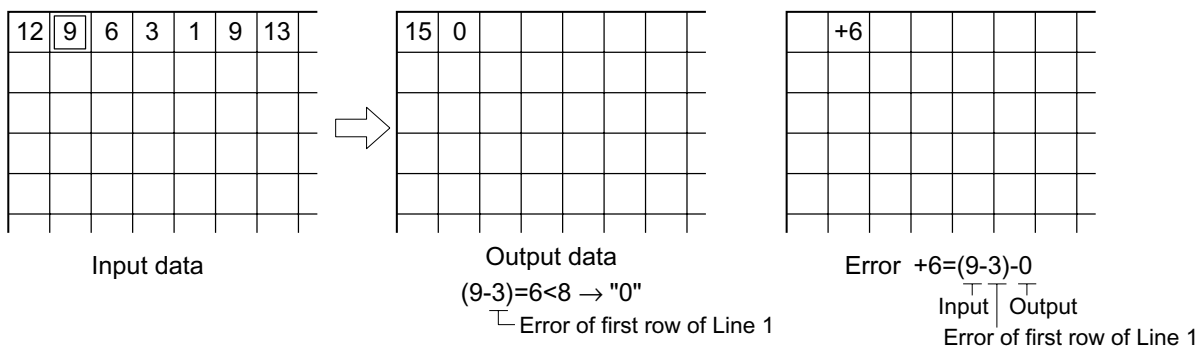


Figure 2-414

Line 2 is processed using the first row of Line 2 as a reference. If the rest is processed similarly, the data becomes as shown in Figure 2-415.

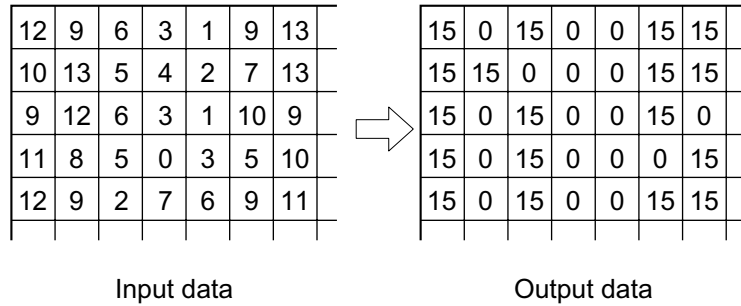


Figure 2-415

Figure 2-416 shows a comparison of binarizing with error diffusion processing, and binarizing without error diffusion processing (simple binarizing).

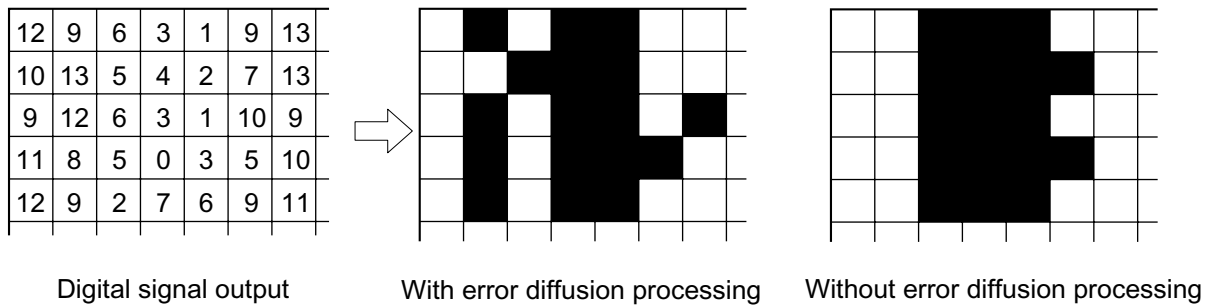


Figure 2-416

c) Automatic brightness adjustment

This adjustment automatically controls the brightness of the scanned image according to the density of the document's background in the simple binary mode.

The brightness is adjusted by assessing the brightness line by line, and adjusting the level for the next line to be scanned.

This process is known as ABC (Auto Back-ground Control).

When the number of pixels of specified brightness in a line exceeds the predetermined value for the document size, the brightest output is transformed gradually, line by line.

Figure 2-417 shows the difference in output when reading a text document with a colored background.

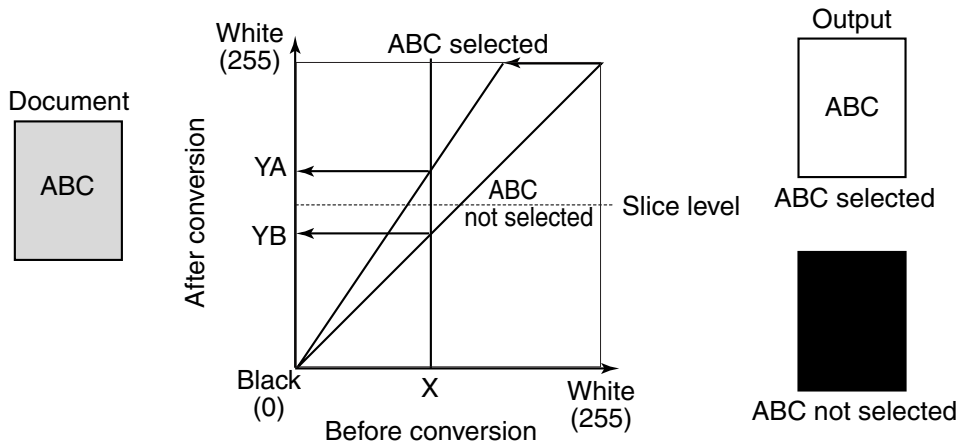


Figure 2-417

4. Image Processing in the Computer

Various types of image processing can be executed in the computer, in addition to the processing executed in this machine.

- Advanced text enhancement
- Automatic size detection
- Skew correction (deskew)
- Erase black border, etc.

The main types of image processing are described below. For others, refer to the driver software "Help".

1) Advanced text enhancement

In this mode, a histogram of brightness level for each block within the scanned data is calculated, and an optimum slice level is determined to binarize the pixels. Binarizing in this way removes the background, for example, from behind text printed on a background.

For example, as shown in the image in Figure. 2-418, a histogram for each block is calculated, and the optimum slice level is determined to binarize the pixels.

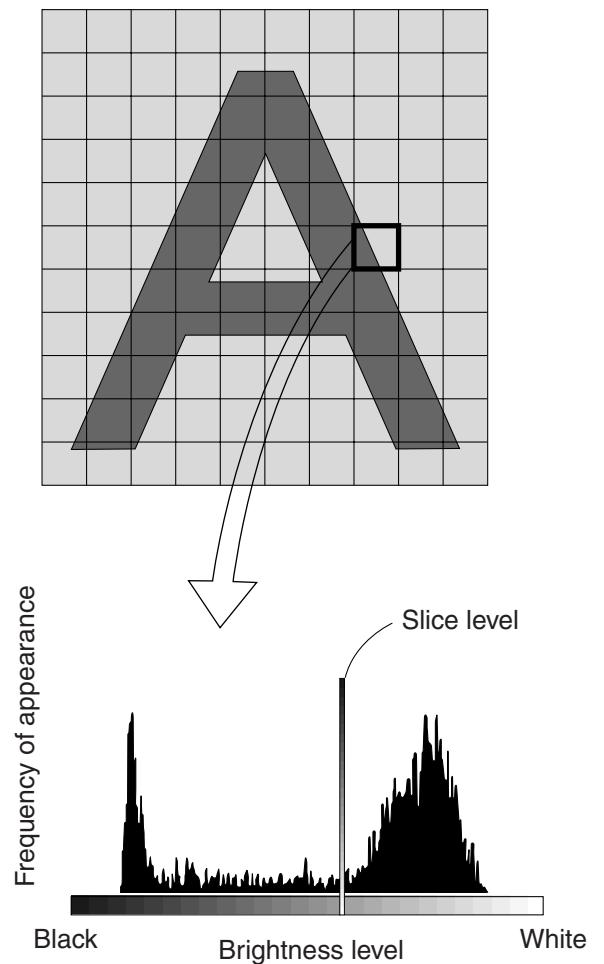


Figure 2-418

2) Automatic size detection

When automatic size detection is selected, images are scanned using the maximum size. Next, in processing block 2 of the QQ-chip in the controller in this machine (for 2nd stage), the image data is converted into 100 dpi black & white data to facilitate processing in the computer. This data is then processed in the computer and the maximum outer frame points of the image are calculated. The result is fed back to the controller, only the data corresponding to the square area formed by the maximum outer frame points is again image processed according to the user's selected conditions, and this data is then output to the computer.

However, since what is used are the maximum outer frame points, the square that is calculated includes any existing skew of the document.

Moreover, if the document is fed using the feeder, the size of the document in the sub-scan (length) direction is determined according to the data of the read sensor (PI8).

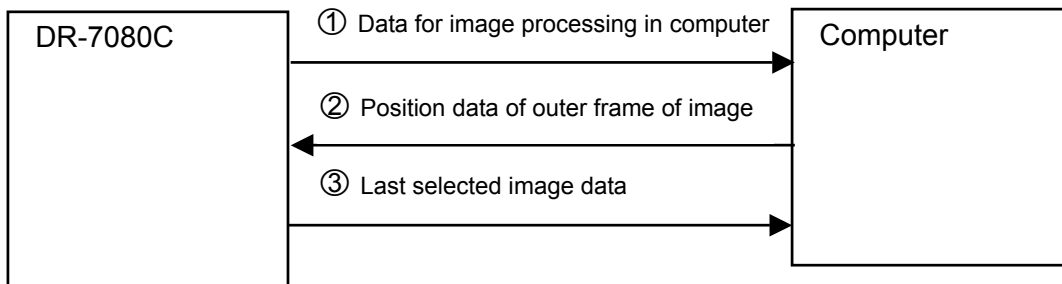


Figure 2-419

• Before processing

• After processing

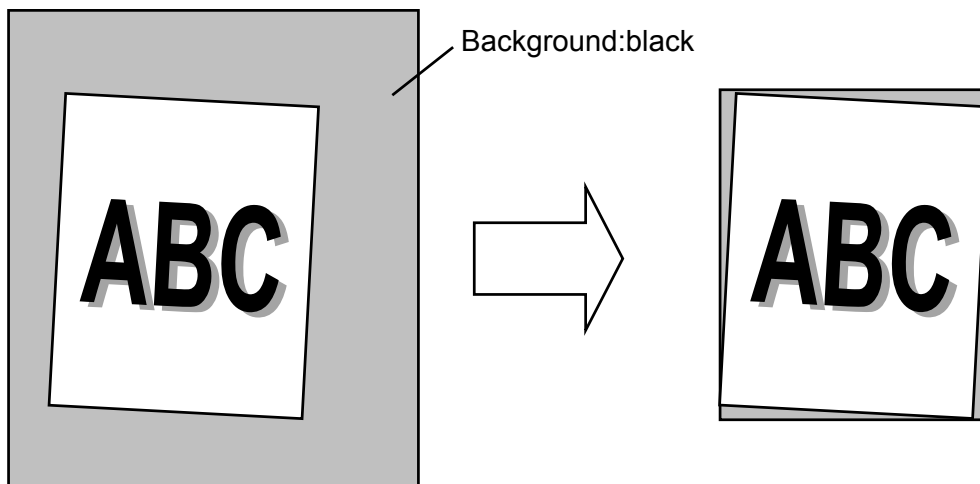


Figure 2-420

3) Skew correction (Deskew)

When image skew correction (deskew) is enabled, the driver detects the angle of skew from the black frame that is formed. Then image data is loaded at a size slightly larger than the user-specified paper size. The skew angle is corrected for, so that the image data is restored to the set image size.

However, skew correction may not work properly if the document has dark areas on its left and right edges or if the brightness setting is incorrect.

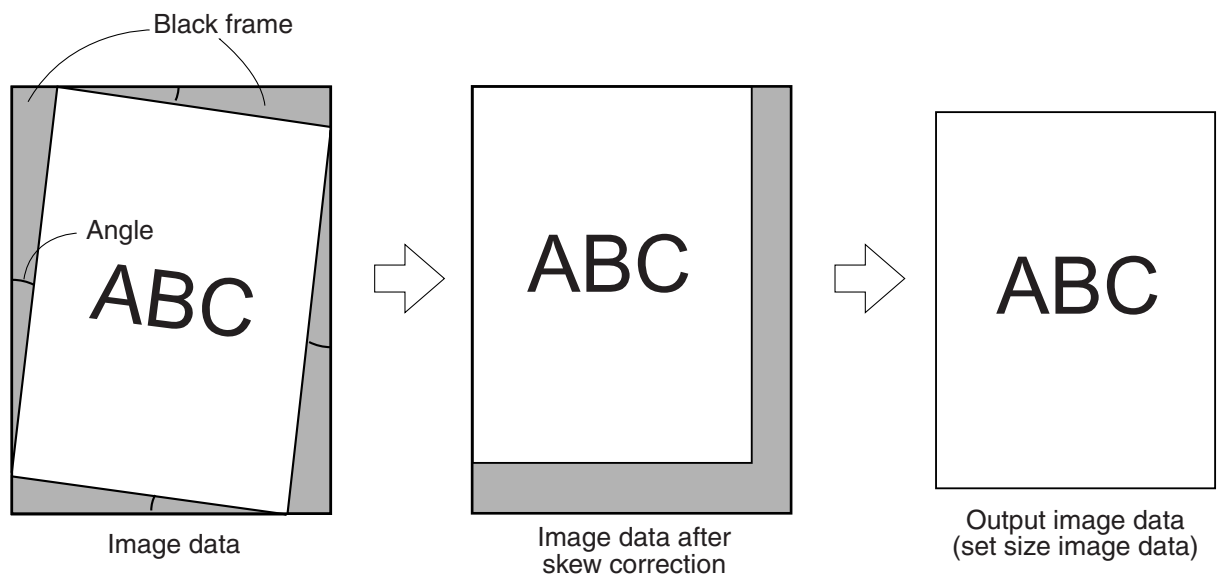


Figure 2-421

5. Power supply

1) Outline

The power supply PCB of this machine is capable of handling power input of 100 to 240 VAC.

Figure 2-422 shows a block diagram of the power supply PCB.

AC power is supplied to the power supply PCB by turning on the power switch.

The 100 to 240 VAC power is converted by a rectifying bridge to unsmoothed 100 to 240 VUN and sent to the booster assembly. At the booster assembly, the power is temporarily raised to 380VDC and then converted to 24VDC.

A fuse is used in the power supply PCB to protect against over-current situations. 24VDC is output from the power supply PCB to the DC controller PCB. The necessary voltage is generated by each regulator on the DC controller PCB. (Refer to Figure 2-423)

24V and 13V are supplied to the reader and feeder from a DC controller PCB. The required voltage is generated within the reader and feeder.

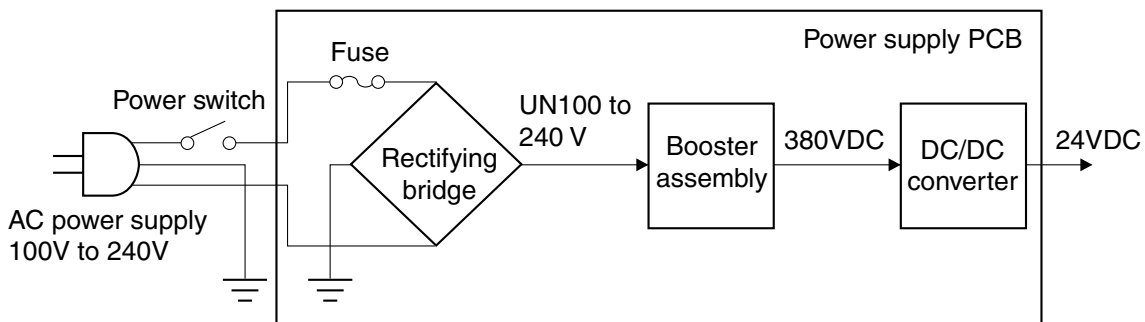


Figure 2-422

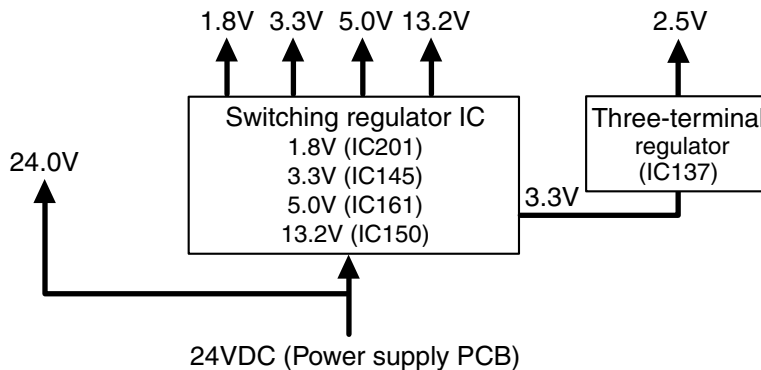


Figure 2-423

2) Protection function

The power supply PCB is a switching regulator type.

If the load is shorted and there is an over-current situation, the protection function is activated and the output is stopped.

Once the output stops, it can be automatically restored by turning the power switch off, eliminating the cause of the short circuit, discharging the capacitor (for about 10 minutes) and then turning on the power switch.

A fuse is used for protection on each PCB. If an excessive current flows into the DC/DC converter, the fuse blows and stops the power supply to the PCB.

Note, however, that this machine supplies power to each motor even when the feeder cover is open.

3) Power saving mode

This machine will shift into the power saving mode if no key or pickup operation takes place for 10 minutes or more, when the power is on. In the power saving mode, power consumption is minimized and the electrical circuits enter the "sleep" state. The CPUs, however, do not shift into power saving mode.

The machine shifts back to the ready mode when any communication is carried out on the computer side or when any key on the operation panel is pressed.

Setting the power saving mode is carried out in the user mode.

6. Interface

When sending data from this unit to a computer, the data is transmitted over an interface. This unit provides both SCSI-3 and USB 2.0 interfaces.

1) SCSI-3

SCSI-3 (Small Computer System Interface-3) is a Parallel Interface standard. This unit supports Ultra SCSI and the data transfer rate between the machine and the personal computer is up to 20 MB/sec.

Figure 2-424 shows the data input/output between the machine and the computer, when connected with SCSI-3. Table 2-402 gives the signal descriptions for the SCSI connector.

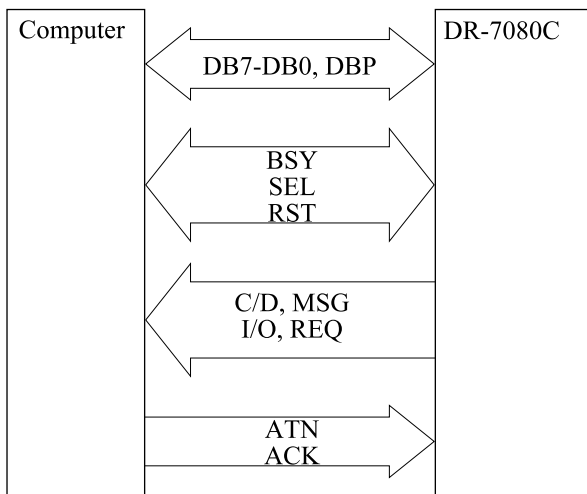


Figure. 2-424

Pin No.	Signal	Remarks
1-12	GND	(Ground)
13	OPEN	(Non-connection)
14-25	GND	(Ground)
26	DB0*	(Data Bit 0)
27	DB1*	(Data Bit 1)
28	DB2*	(Data Bit 2)
29	DB3*	(Data Bit 3)
30	DB4*	(Data Bit 4)
31	DB5*	(Data Bit 5)
32	DB6*	(Data Bit 6)
33	DB7*	(Data Bit 7)
34	DBP*	(Odd Parity Data Bit)
35-37	GND	(Ground)
38	TERMPWR	(Termination Power)
39-40	GND	(Ground)
41	ATN*	(Attention)
42	GND	(Ground)
43	BSY*	(Busy)
44	ACK*	(Acknowledge)
45	RST*	(Reset)
46	MSG*	(Message)
47	SEL*	(Select)
48	C/D*	(Control/Data)
49	REQ*	(Request)
50	I/O*	(Input/Output)

The asterisk "*" at the end of the signal name denotes the signal is low-active.

Table 2-402

The SCSI bus is made up of data signals (1 byte + parity bit = 9 signals) and control signals (9 signals) for a total of 18 lines.

2) USB 2.0

USB 2.0 (Universal Serial Bus 2.0) is a serial interface standard, and provides fast data transmission.

This machine supports Hi-Speed USB 2.0, and the data transfer rate between the unit and the computer is up to 480 Mbits/sec.

Figure 2-425 shows the data input/output between the machine and the computer when connected with USB. Table 2-403 gives the signal descriptions for the USB connector.

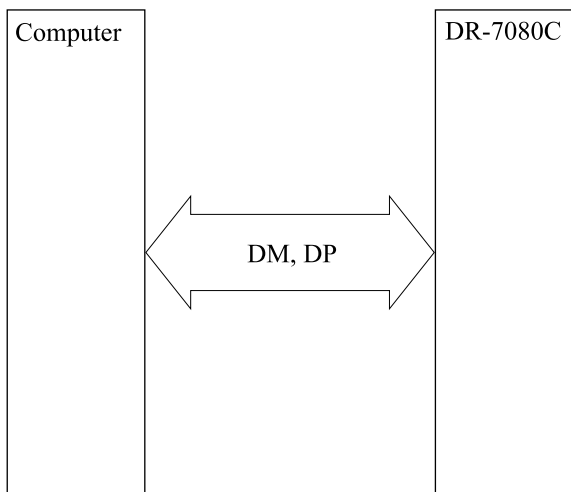


Figure. 2-425

Pin No.	Signal	Remarks
1	VBUS	Vcc (+5V)
2	DM	Differential signal (-)
3	DP	Differential signal (+)
4	GND	Ground

Table 2-403

USB is also referred to as a differential interface, and uses 2 signal lines for a single signal.

V. OPTION

1. Stamp

This option is used to stamp documents scanned with the feeder as "scanned". A stamper is provided at the tip of the stamp solenoid.

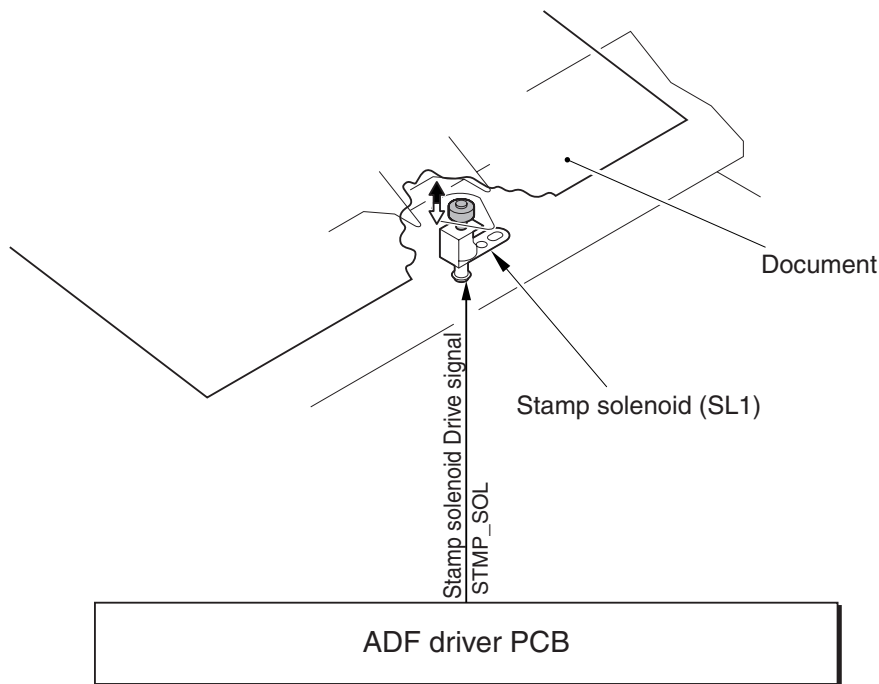


Figure 2-501

Feeding stops 100 ms after the trailing edge of the document clears the platen roller. During this time, the stamp solenoid (SL1) is switched ON and the document is stamped.

In the case of the duplex mode, both sides of the document are stamped. Figure 2-502 shows the stamping location.

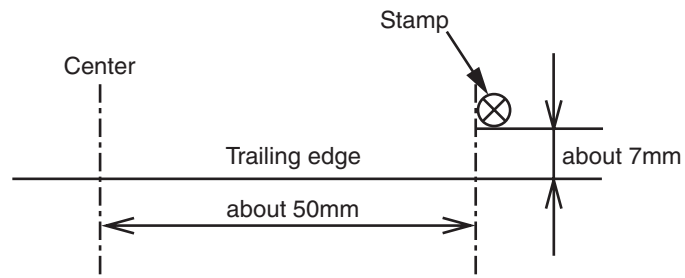


Figure 2-502

After the stamper is replaced with a new one, approximately 7,000 documents can be stamped.

When installing a stamp, be sure to valid Feeder > OPTION > STAMP-SW for the service mode, in order to make the machine recognize the stamp.

Refer to "CHAPTER 4 INSTALLATION & MAINTENANCE" for installation of the stamp solenoid.

2. Network Scanning Adapter: NSA-01

This option is a scanner control box for using the scanner as a network scanner. By connecting the NSA-01 to the DR-7080C, it is possible to send image data from a control computer to another computer, etc., use the document scanning network. For details, refer to the NSA-01 user manual and the Service Information. Note, however, that the NSA-01 must be a version that supports DR-7080C.

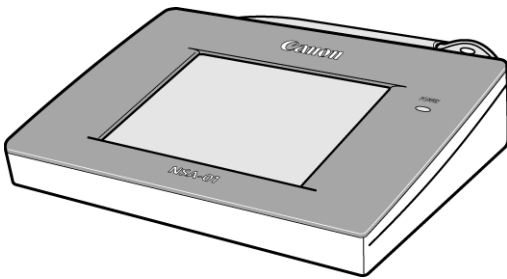


Figure 2-503

VI. ELECTRICAL PARTS LAYOUT

1. Feeder

1) Sensors

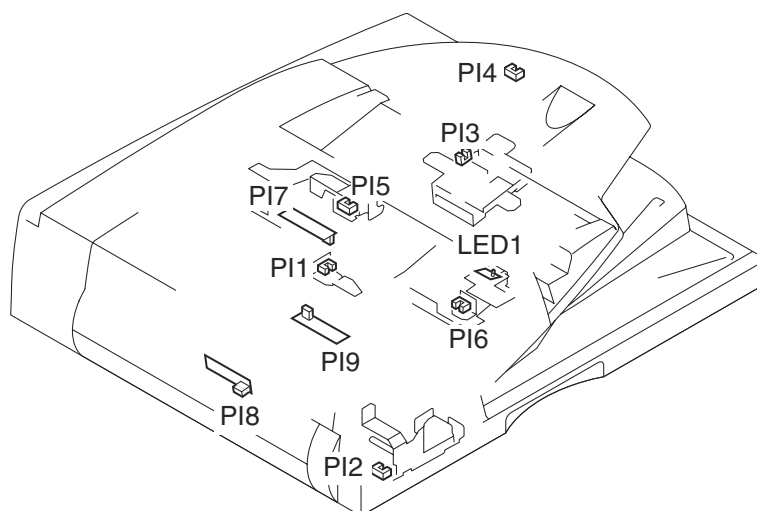


Figure 2-601

Category	Symbol	Name
Photo interrupter	PI1	Registration sensor
	PI2	Pressure HP sensor
	PI3	A4R/LTRR sensor
	PI4	LGL sensor
	PI5	Document set sensor
	PI6	Feeder cover opening sensor
Sensor PCB	PI7	Post-separation sensor
	PI8	Read sensor
	PI9	Delivery reversal sensor
LED	LED1	Document set display

Table 2-601

2) Motor, PCB, others

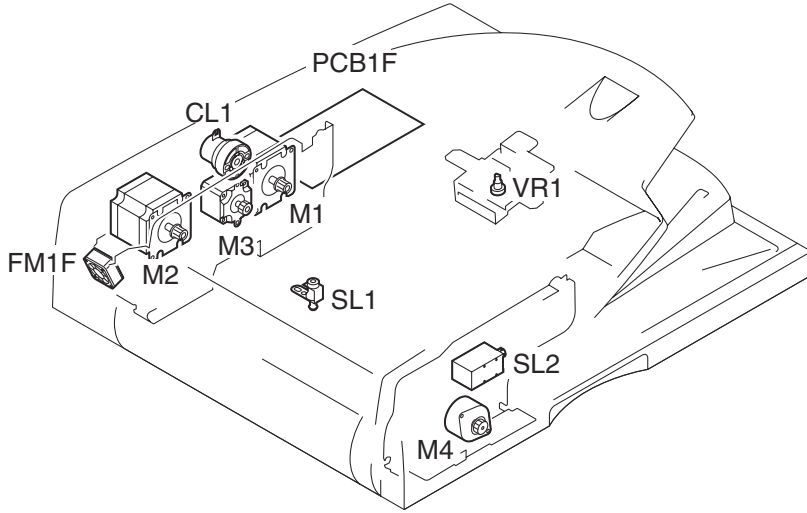


Figure 2-602

Category	Symbol	Name
Motor	M1	Pickup motor
	M2	Feed motor
	M3	Delivery reversal motor
	M4	Pressure motor
Clutch	CL1	Pickup clutch
Solenoid	SL1	Stamp solenoid (option)
	SL2	Pressure solenoid
Fan	FM1F	Cooling fan
PCB	PCB1F	ADF driver PCB
Volume	VR1	Document width volume

Table 2-602

2. READER

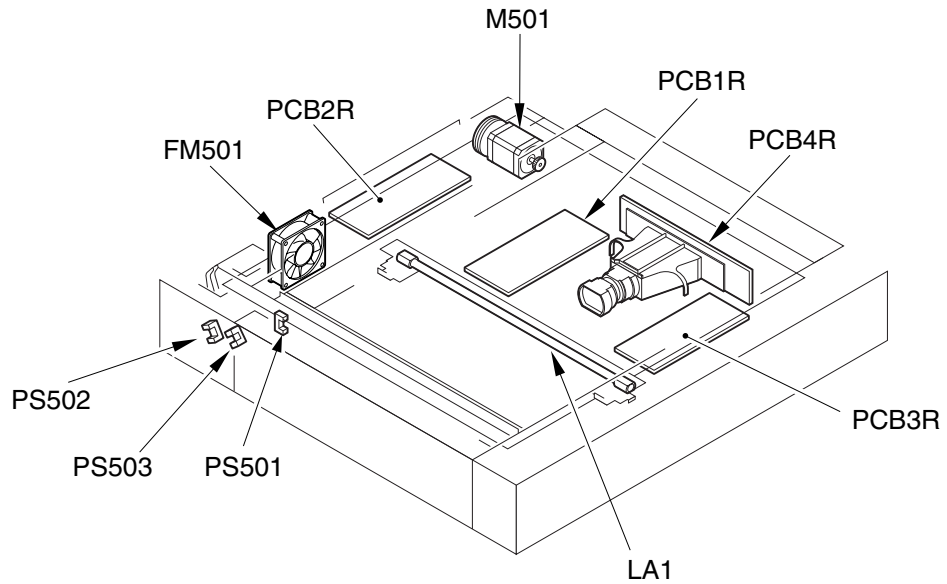


Figure 2-603

Category	Symbol	Name
Photo interrupter	PS501	Scanner HP sensor
	PS502	ADF opening sensor 1
	PS503	ADF opening sensor 2
Lamp	LA1	Scanning lamp
Motor	M501	Scanner motor
Fan	FM501	Cooling fan
PCB	PCB1R	Reader controller PCB
	PCB2R	Interface PCB
	PCB3R	Inverter PCB
	PCB4R	CCD/AP PCB

Table 2-603

3. CONTROLLER

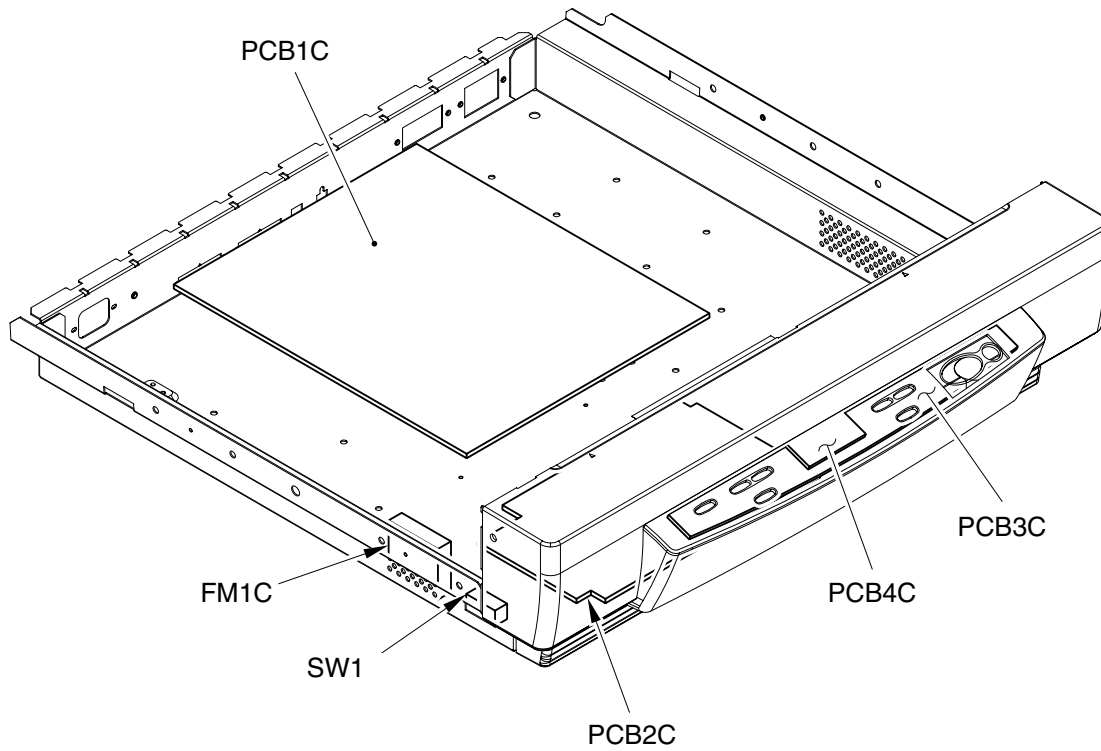


Figure 2-604

Category	Symbol	Name
Switch	SW1	Power switch
Fan	FM1C	Cooling fan
PCB	PCB1C	DC controller PCB
	PCB2C	Power supply PCB
	PCB3C	Switch PCB
	PCB4C	LCD

Table 2-604

VII. LISTS OF CONNECTORS/SW/LED OF EACH PCB

Items that are not listed in the lists and items that are specified as usage prohibited must not be procured in the market.

A. Controller

1. DC Controller PCB

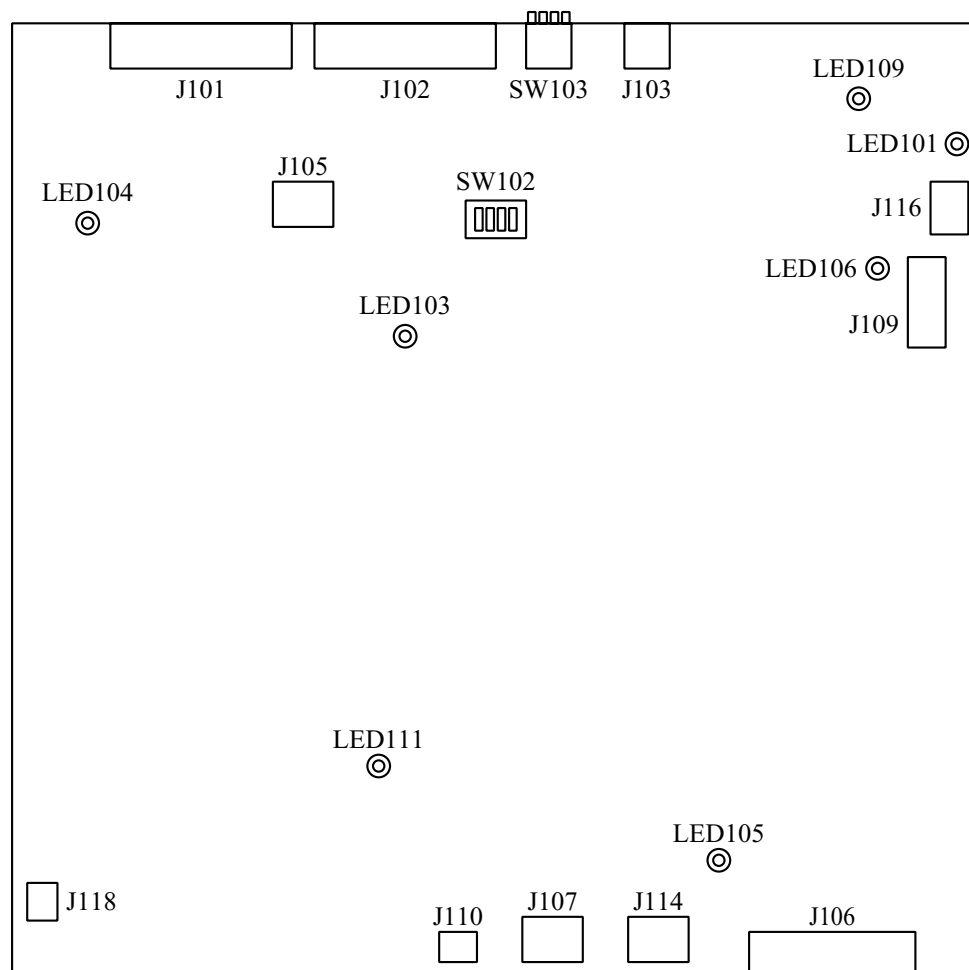


Figure 2-701

Connector		Description
J101	50P	SCSI I/F
J102	50P	SCSI I/F
J103	4P	USB I/F
J105	4P	(For factory/design)
J106	36P	Image data
J107	4P	24VDC power supply input
J109	32P	Operation panel
J110	2P	Power supply standby signal
J114	4P	24VDC power supply input
J116	4P	DC power supply output
J118	3P	Cooling fan

Table 2-701

LED	Description
LED101	24VDC supply: Lit*
LED103	CPU (SH1) normal operation: Flashing
LED104	IC (XILINX) normal operation: Flashing
LED105	3.3VDC supply: Lit
LED106	13VDC supply: Lit*
LED109	5VDC supply: Lit
LED111	1.8VDC supply: Lit*

Note:LED101/106 are extinguished during sleep.
LED111 is dark.

Table 2-703

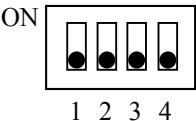
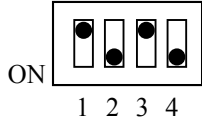
Switch	Description																																				
SW102	<ul style="list-style-type: none"> For factory/design Do not use in market. <p>Setting at shipping</p> 																																				
SW103	<ul style="list-style-type: none"> For SCSI setting <p>1 to 3: SCSI ID setting 4: Terminator setting</p> <p>At shipping SCSI ID: 2 Terminator: ON</p> <table border="1"> <thead> <tr> <th></th> <th>1</th> <th>2</th> <th>3</th> </tr> </thead> <tbody> <tr> <td>ID0</td> <td>OFF</td> <td>OFF</td> <td>OFF</td> </tr> <tr> <td>ID1</td> <td>ON</td> <td>OFF</td> <td>OFF</td> </tr> <tr> <td>ID2</td> <td>OFF</td> <td>ON</td> <td>OFF</td> </tr> <tr> <td>ID3</td> <td>ON</td> <td>ON</td> <td>OFF</td> </tr> <tr> <td>ID4</td> <td>OFF</td> <td>OFF</td> <td>ON</td> </tr> <tr> <td>ID5</td> <td>ON</td> <td>OFF</td> <td>ON</td> </tr> <tr> <td>ID6</td> <td>OFF</td> <td>ON</td> <td>ON</td> </tr> <tr> <td>ID7</td> <td>ON</td> <td>ON</td> <td>ON</td> </tr> </tbody> </table> 		1	2	3	ID0	OFF	OFF	OFF	ID1	ON	OFF	OFF	ID2	OFF	ON	OFF	ID3	ON	ON	OFF	ID4	OFF	OFF	ON	ID5	ON	OFF	ON	ID6	OFF	ON	ON	ID7	ON	ON	ON
	1	2	3																																		
ID0	OFF	OFF	OFF																																		
ID1	ON	OFF	OFF																																		
ID2	OFF	ON	OFF																																		
ID3	ON	ON	OFF																																		
ID4	OFF	OFF	ON																																		
ID5	ON	OFF	ON																																		
ID6	OFF	ON	ON																																		
ID7	ON	ON	ON																																		

Table 2-702

2. Power Supply PCB



Figure 2-702

Connector		Description
CN1	4P	24DVC power supply output
CN3	4P	24DVC power supply output
CN6	3P	Power supply standby signal
CN7	3P	AC power supply input

Table 2-704

3. Switch PCB

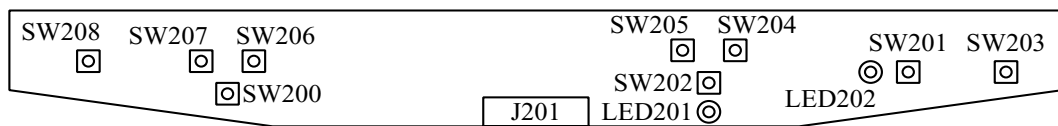


Figure 2-703

Connector		Description
J201	14P	SW/LED signal

Table 2-705

Note: For details on the switches (SW200 to SW208), refer to "CHAPTER 1 GENERAL DESCRIPTION" or to the user manual.

LED	Description
LED201	For new file
LED202	For start

Table 2-706

B. READER

1. Reader Controller PCB

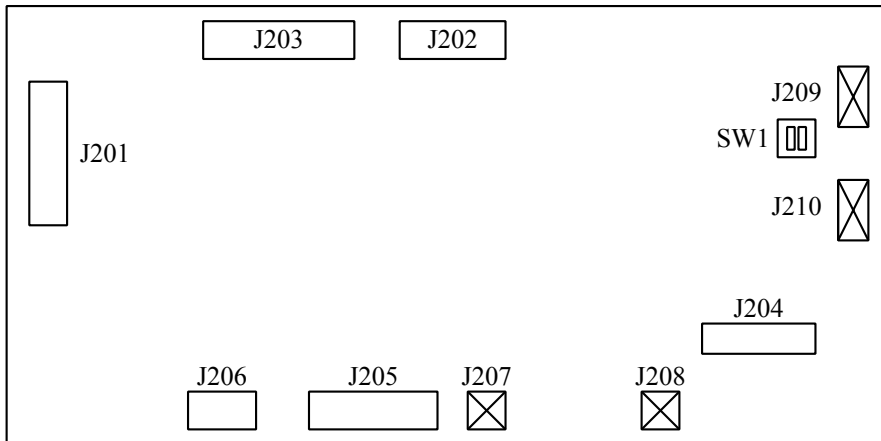


Figure 2-704

Connector		Description
J201	8P	DC power supply input
J202	35P	Feeder system signal
J203	50P	Controller system signal, scanner motor signal
J204	50P	Communication with CCD
J205	40P	Communication with CCD
J206	9P	Connected to inverter PCB

Note: J207, 208, 209, and 210 are not used.

Table 2-707

Switch	Description
SW1	<ul style="list-style-type: none"> For factory/design Do not use in market. <p>Setting at shipping</p>

Table 2-708

2. Interface PCB

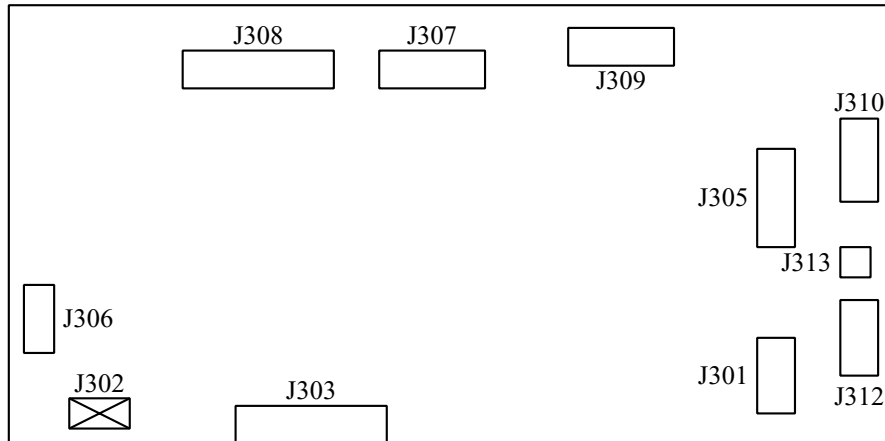


Figure 2-705

Connector		Description
J301	4P	DC power supply input
J303	36P	Communication with controller
J305	14P	Communication with feeder
J306	6P	Scanner motor
J307	50P	Communication with reader controller PCB
J308	35P	Communication with reader controller PCB
J309	9P	DC power supply output to reader controller PCB
J310	9P	Sensor (3 pcs)
J312	2P	DC power supply output to ADF driver PCB
J313	3P	Cooling fan

Note: J302 is not used.

Figure 2-709

3. Inverter PCB

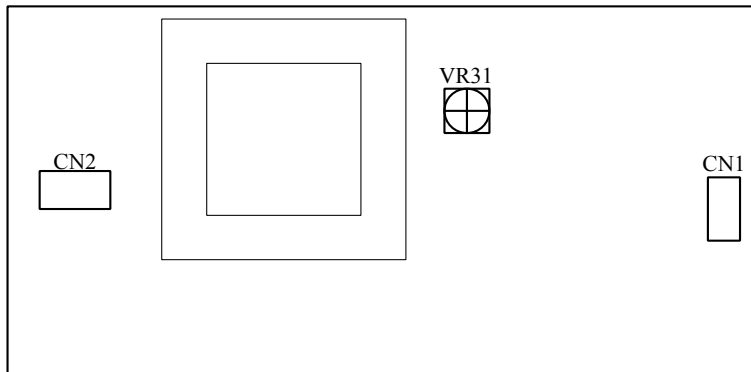


Figure 2-706

Connector		Description
CN1	9P	Connected to reader controller PCB
CN2	4P	Scanning lamp

Note: CN2 carries a high voltage and caution is therefore required.

Table 2-710

Note: In the market, do not touch the volume (VR31).

C. FEEDER

1. ADF Driver PCB

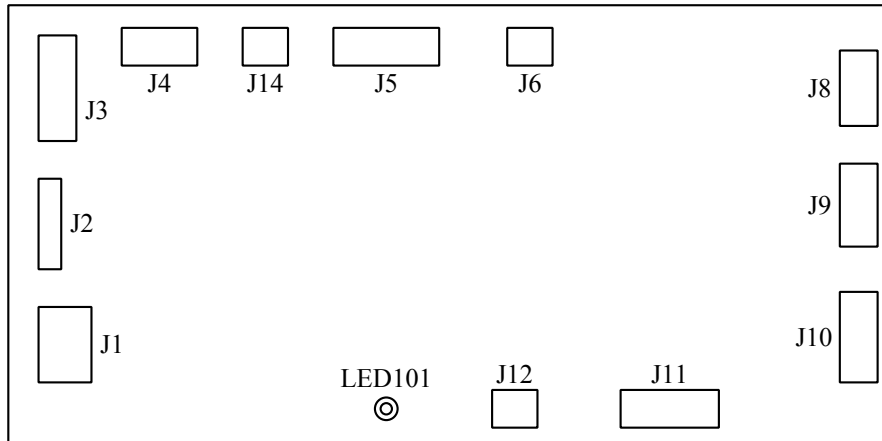


Figure 2-707

Connector		Description
J1	16P	Read sensor, pressure HP sensor, delivery reversal sensor, stamp solenoid
J2	12P	Post-separation sensor, document set sensor, feeder cover sensor, document set LED
J3	9P	Document width volume, A4R/LTRR sensor, LGL sensor
J4	7P	Communication with reader
J5	8P	Communication with reader
J6	2P	24VDC power supply input
J8	7P	Feed motor
J9	6P	Pressure solenoid, pressure motor
J10	8P	Pickup clutch, delivery reversal motor
J11	6P	Pickup motor
J12	3P	Cooling fan
J14	3P	Registration sensor

Table 2-711

LED	Description
LED101	24VDC supply: Lit*

Note: LED101/106 are extinguished during sleep.

Table 2-712

CHAPTER 3

DISASSEMBLY & REASSEMBLY

I. MAIN UNIT	3-1	III. READER.....	3-35
II. FEEDER.....	3-5	IV. CONTROLLER.....	3-52

I. MAIN UNIT

When disassembling the main unit a preparation should be made to determine locations of units after disassembly. Since each of the units is heavy, it should be handled carefully to prevent damage and accidents. The feeder weighs approximately 15 kg, the reader, approximately 14 kg, and the controller, approximately 5 kg.

1. Feeder

- 1) Remove the cable (with locks) ①
Flip open the rubber covers of the left and right hinge parts, remove the screws ② (2 each on the left and right), and remove the angle guide plate ③.
Open the feeder to 90 degrees.

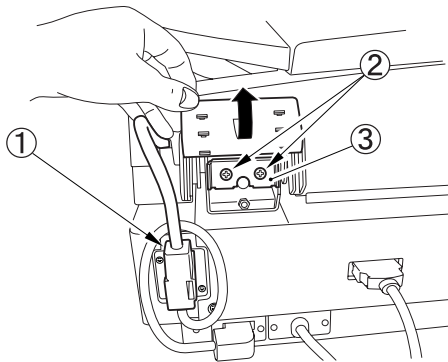


Figure 3-101

Note:When the feeder is opened to 90 degrees, the center of gravity moves backwards, so open it gently.

- 2) Remove the 3 knurling screws ① and slide the feeder ② toward the rear, releasing it from the stoppers ③, and lift it away.

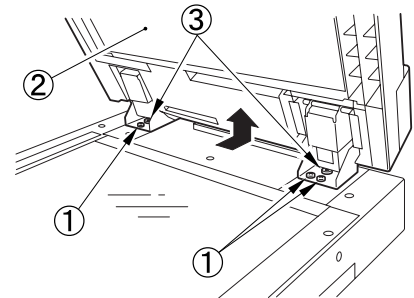


Figure 3-102

Note:The feeder weighs approximately 15 kg, so handle it with care when removing it and placing it back. If necessary, perform such work with the assistance of another person.

Note:If the failures such as the image right angle and so on occur after installing the feeder, adjust the position of feeder. Refer to "CHAPTER 5 IV. FEEDER ADJUSTMENT" for details.

2. Reader/Controller

- 1) Remove the feeder.
- 2) Remove the 2 cables (with locks) ①.

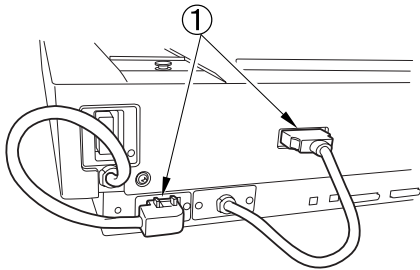


Figure 3-103

- 3) Remove the screws ② holding the operating panel assembly ① (1 each on the left and right).

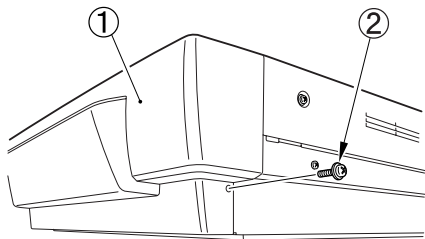


Figure 3-104

- 4) Remove the 2 fitting parts ① (marked with Δ) using a tool with a flat and thin tip, and detach the operation panel assembly ②.

Disconnect the connector that connects the operation panel assembly and controller.

Note: Take care to prevent damage to the platen glass.

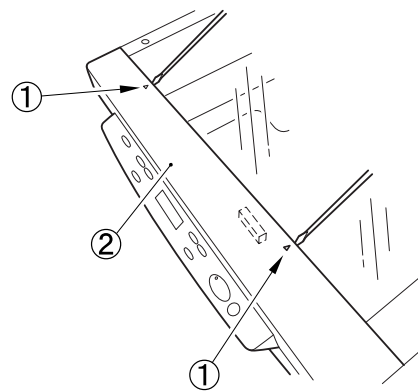


Figure 3-105

Note: When assembling the operation panel assembly, insert the pasted sheet ① under the platen glass.

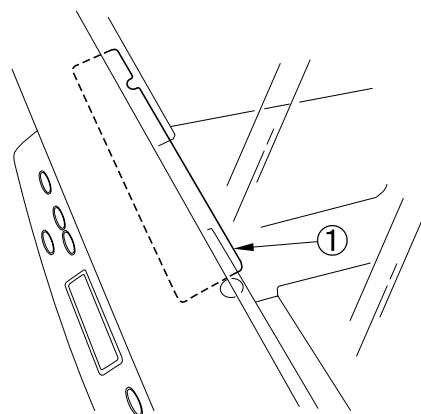


Figure 3-106

- 5) Remove the screws ① (2 each on the left and right), and remove the left and right bottom covers ②.

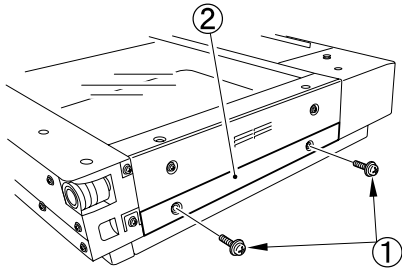


Figure 3-107

- 6) Remove the 12 screws ① (4 each on the left and right, 4 in front).

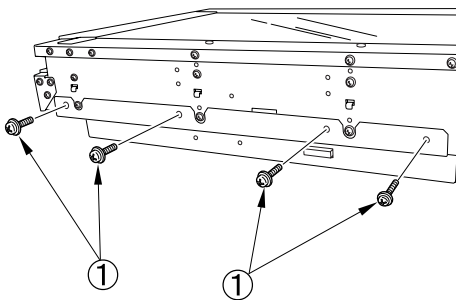
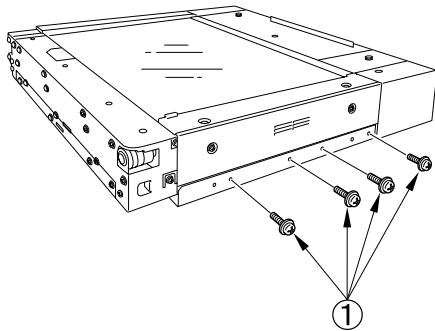


Figure 3-108

- 7) Remove the 5 screws ①, release the left and right hooks ②, and detach the reader rear cover ③.

Note: Take care to prevent damage the ADF opening sensor arm ④.

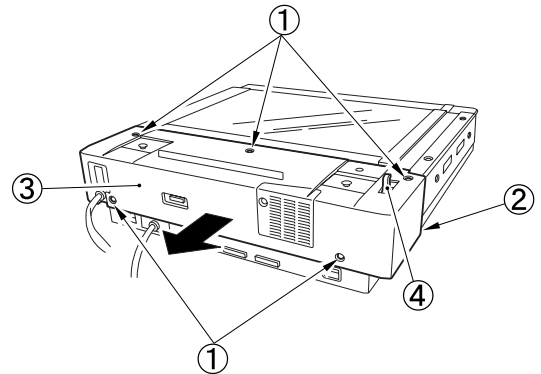


Figure 3-109

Note: When installing the reader rear cover, insert the pasted sheet under the platen glass. See the "Reader Rear Cover" Section for details.

- 8) Slide the reader ① slightly to the rear. It stops soon because there is an emboss ② on the left. Release the emboss through the opening in the side plate. Lift the rear of the reader slightly and slide it to the position where your hand can be put into the front side.

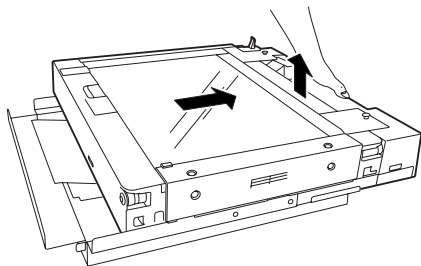
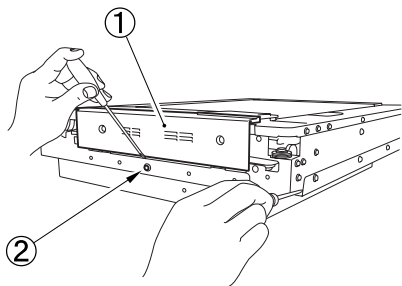


Figure 3-110

- 9) Hold tightly the reader and lift it up.

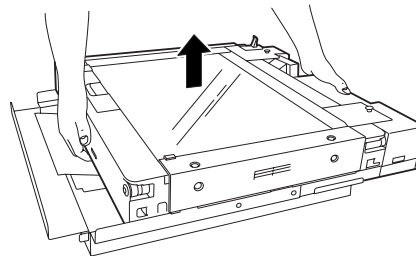


Figure 3-111

Note: The reader weighs approximately 14 kg and the controller approximately 5 kg, total 19 kg, so proceed with care when removing them and placing them back. In particular, be careful not to get your fingers pinched. If necessary, use the assistance of another person.

Reference: How to remove the reader without sliding

The reader can also be removed as follows in place of performing steps 7 to 9. However, it should be done with care because you hold less areas.

Hold diagonal corners of the reader ① from bottom and lift the reader.

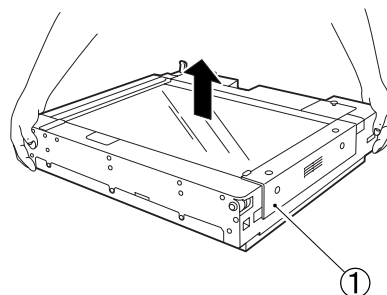


Figure 3-112

II. FEEDER

Take care not to damage the platen glass. It is recommended that you put a protective sheet on the platen glass. When the feeder is opened slightly, it is automatically and fully opened.

A. External Covers

1. Front Cover

- 1) Remove the 3 screws ①, and detach the front cover ② in the direction of the arrow.

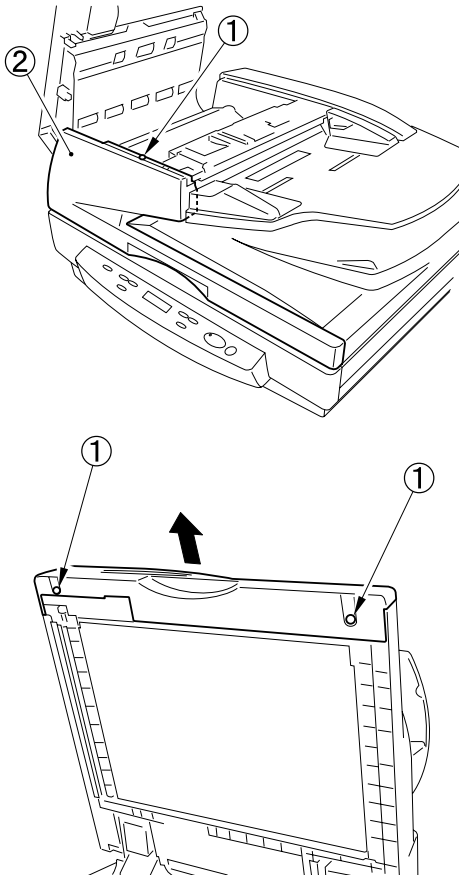


Figure 3-201

2. Rear Cover

- 1) Open the feeder cover ① and the document pickup tray ②; then, remove the 4 screws ③. Widen the right side slightly, release the hook ④ and detach the rear cover ⑤.

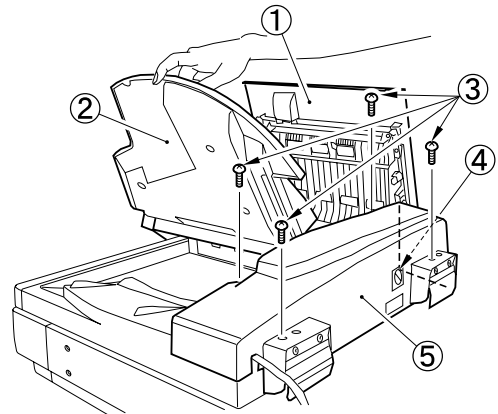


Figure 3-202

3. Lower Left Cover

- 1) Remove the front cover.
- 2) Remove the 2 screws ①, and detach the lower left cover ②.

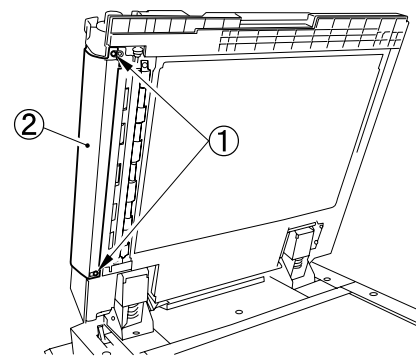


Figure 3-203

4. Feeder Cover

- 1) Remove the front cover.
- 2) Remove the E-ring ①.

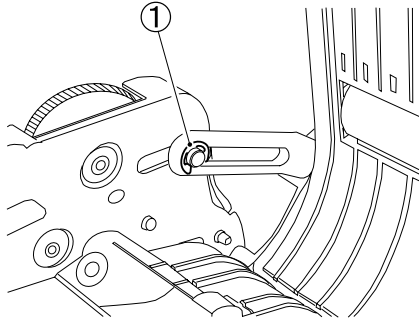


Figure 3-204

- 3) Remove the screw ① and the positioning pin ② ; then, detach the feeder cover ③.

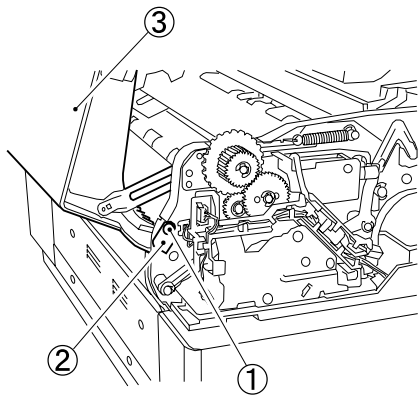


Figure 3-205

5. Inside Cover

- 1) Open the feeder cover, remove the 2 screws ①, and remove the fitting part ②; then, detach the inside cover ③.

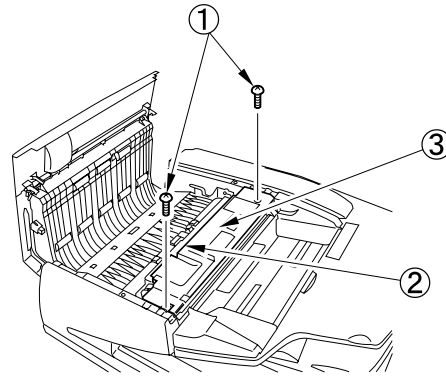


Figure 3-206

B. Drive System

1. Pickup Motor

- 1) Remove the rear cover.
- 2) Disconnect the connector ①, and remove the 2 screws ②; then, detach the pickup motor ③.

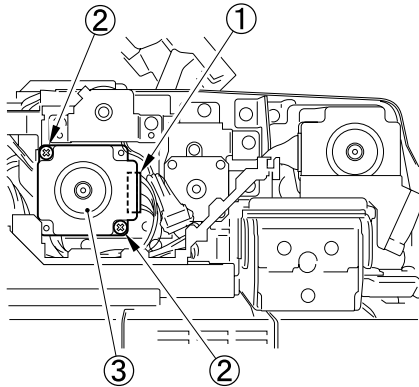


Figure 3-207

Note: When mounting it, be sure that the timing belt ① is securely fitted to the pulley. For this purpose, the pickup clutch or drive unit must be removed.

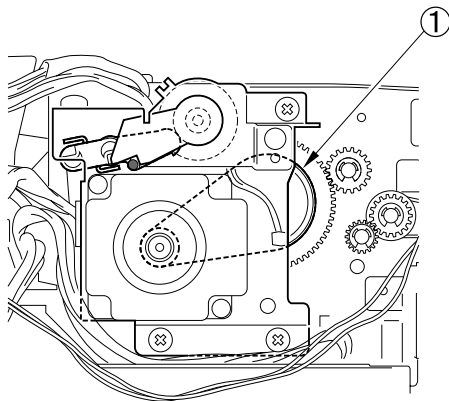


Figure 3-208

2. Feed Motor

- 1) Remove the rear cover.
- 2) Remove the screw ①, and free the cooling fan ②.

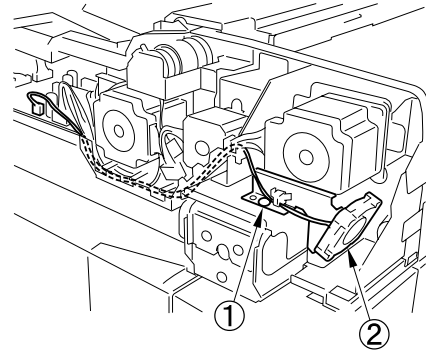


Figure 3-209

- 3) Loosen the 2 screws ①, move the feed motor ② downwards, and tighten the 2 screws ①.

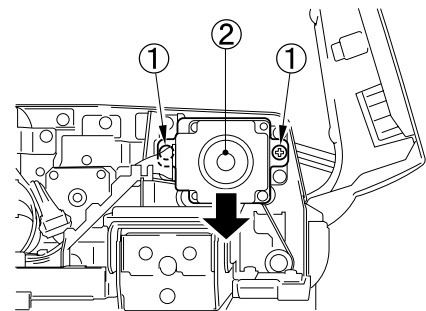


Figure 3-210

Note: When mounting it, loosen the screws and return the feed motor to its original position.

- 4) Disconnect the connector ① and remove the 2 screws ②; then, detach the feed motor ③.

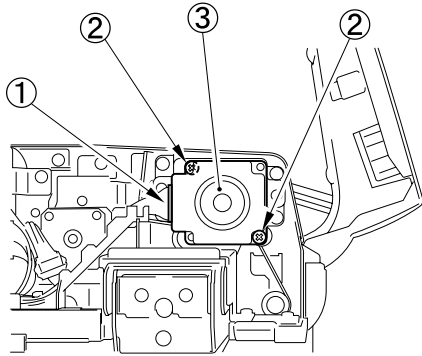


Figure 3-211

Note: When mounting it, be sure that the timing belt ① is securely fitted to the pulley.

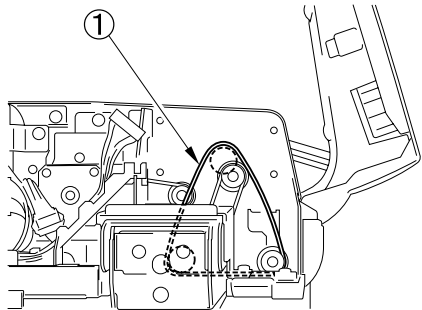


Figure 3-212

Note: The feed motor can be distinguished from the pickup motor by shaft length. The feed motor has a longer shaft than the pickup motor.

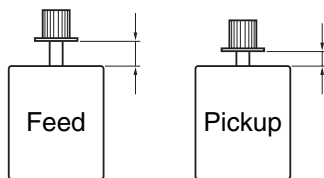


Figure 3-213

3. Delivery Reversal Motor

- 1) Remove the rear cover.
- 2) Remove the 2 screws ①, and disconnect the connector ②; then, detach the delivery reversal motor ③.

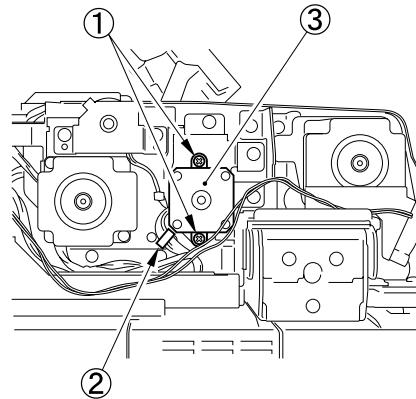


Figure 3-214

Note: If it is difficult to remove or tighten the lower screw holding the motor, remove the harness guide.

4. Pressure Motor

- 1) Remove the front cover.
- 2) Remove the screw ①, and disconnect the 2 connectors ②; then, free the harness guide ③.

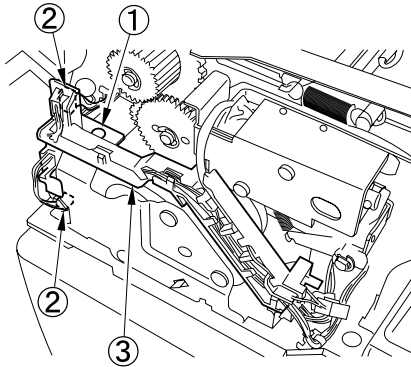


Figure 3-215

- 3) Remove the 3 screws ①, and disconnect the connector ②; then, detach the pressure motor drive unit ③.

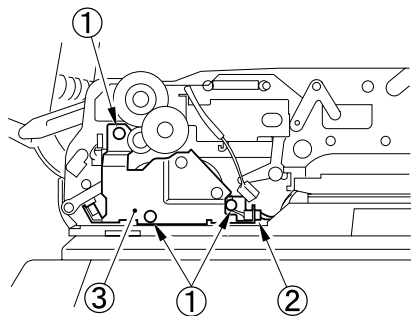


Figure 3-216

- 4) Remove the 2 screws ①, and the fitting part ②; then, free the pressure motor assembly.

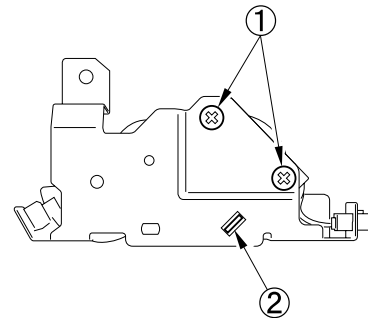


Figure 3-217

- 5) Remove the 2 screws ①, disconnect the connector ②, and remove the timing belt ③; then, detach the pressure motor ④.

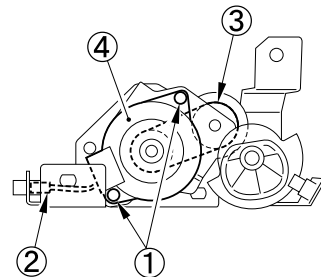


Figure 3-218

Note: When installing the pressure motor drive unit ①, place the pressure lever ② on the upper part of the driving cam.

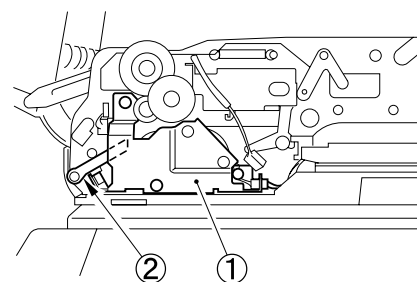


Figure 3-219

5. Drive Unit

- 1) Remove the rear cover.
- 2) Remove the inside cover.
- 3) Remove the screw ①, and disconnect the 4 connectors ②; then, detach the harness guide ③ from the harness.

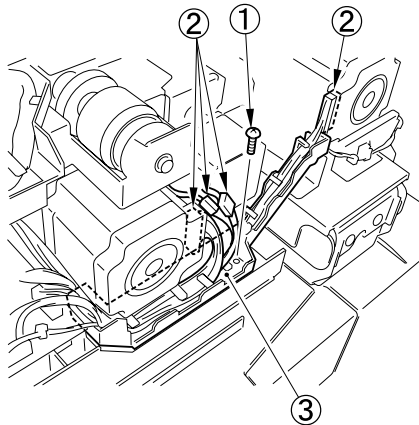


Figure 3-220

- 5) Remove the 2 screws ① and free the harness guide ②.

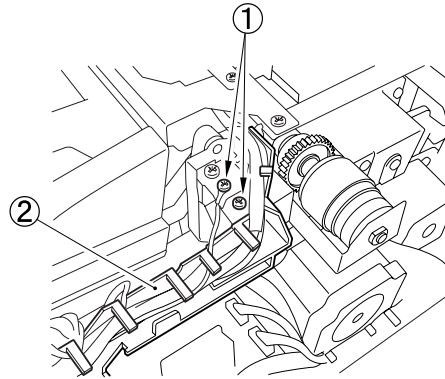


Figure 3-222

- 4) Remove the 3 screws ①, and detach the delivery reversal roller unit ②.

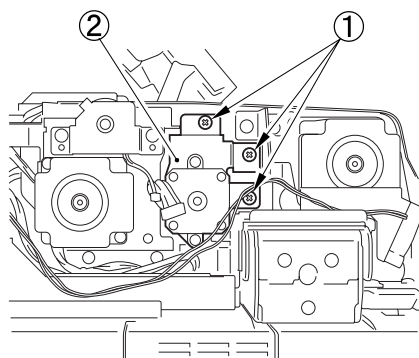


Figure 3-221

- 6) Remove the 4 screws ①, remove the hook of the connection guide ② and detach the drive unit ③.

Note: Be sure to free the harness from the wire saddle ④. Do not catch the cable that is located below the drive unit. Be careful not to lose the bearing of the pickup clutch shaft.

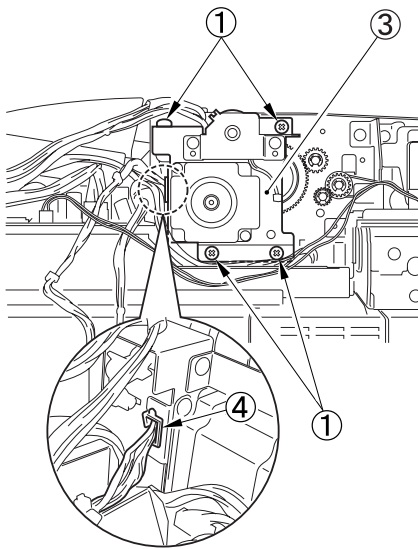


Figure 3-223

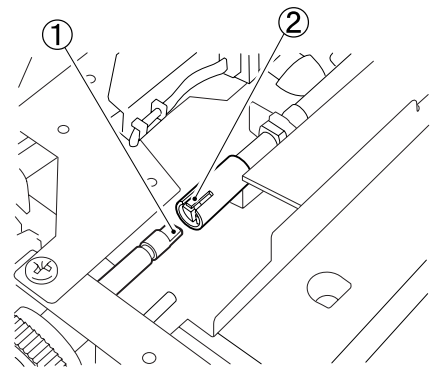
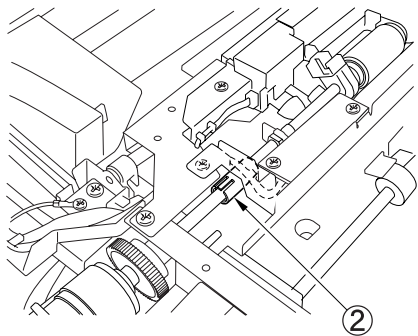


Figure 3-224

- 1) Be careful not to get cables caught or pinched.
- 2) Install the connection guide for the pickup unit by aligning groove direction and shaft end shape. Align the flat part ① of the shaft and the hook position ② of the connection guide.
- 3) Make sure that the arm ① of the pickup clutch is above the pin ②. Be sure that the timing belt ③ is securely fitted to the pulley.

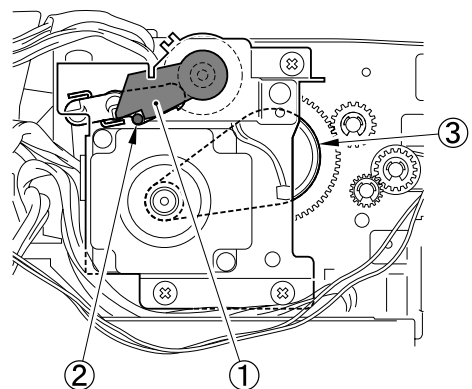


Figure 3-225

C. Feeding System

1. Pickup Roller Unit

- 1) Open the feeder cover and detach the inside cover.
- 2) Remove the 2 plastic E-rings ① and 2 bushings ②; then, detach the pickup roller unit ③.

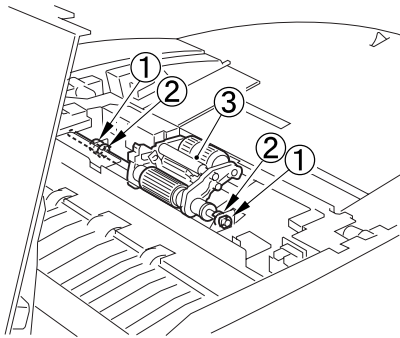


Figure 3-226

2. Pickup Roller/Feeding Roller

- 1) Remove the pickup roller unit.
- 2) Remove the 3 plastic E-rings ①, and detach the pickup roller support base ②.

Note: The pin ③ will come off upon detachment. Take care not to lose it.

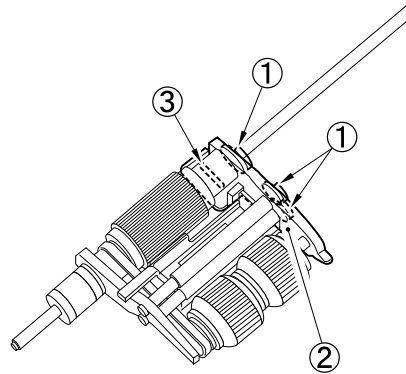


Figure 3-227

- 3) Remove the pin ① and detach the feeding roller ②.

Then, remove the plastic E-ring ③ and the pickup roller ④.

Note: Pay attention to the installation direction of the pickup roller and the feeding roller. Install the pre-separation guide ⑤ at the fitting part for the roller support base by flexing it.

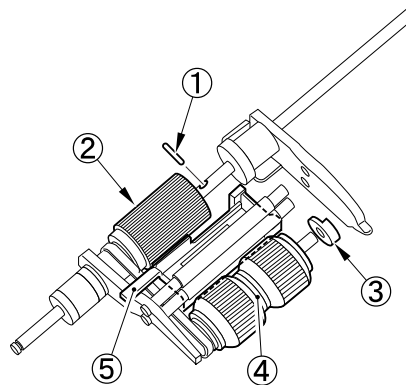


Figure 3-228

3. Separation Pad/ Separation Plate

- 1) Remove the inside cover
- 2) Remove the pickup roller unit.
- 3) Remove the 2 screws ①, push down the top of the separation pad assembly ②, release the fitting part, and remove the assembly.

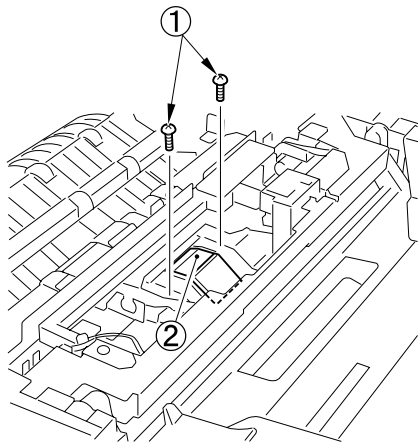


Figure 3-229

- 4) Remove the two springs ① and one pressure adjustment block ② on the back of the separation pad assembly.

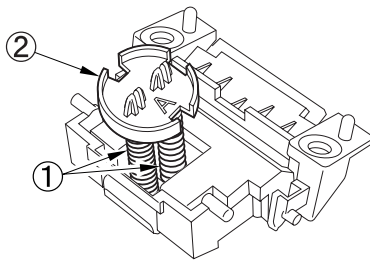


Figure 3-230

- 5) Push down the two hooks ② on the separation pad B ① and detach the separation pad B. At this time, the separation pad ③ and separation plate ④ will come off.

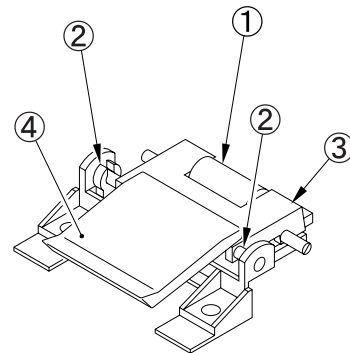


Figure 3-231

Notes on reassembly:

- 1) Before installing the separation pad B, install the separation pad on the separation plate.
- 2) Take care not to mistake the installation positions of the springs. Install the spring ① with a fold so that it is upstream to the feed direction.

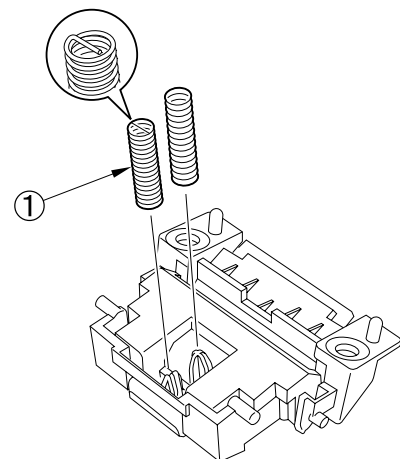


Figure 3-232

Reference: Separation pressure adjustment

This adjustment should be performed in case of the double feed. Normally, it is not required.

Pressure adjustment block	Separation pressure
Side A	Small
Side B	Large

Table 3-201

- 1) Turn the pressure adjustment block ① installed on the spring over, and install it. (From side A to side B)

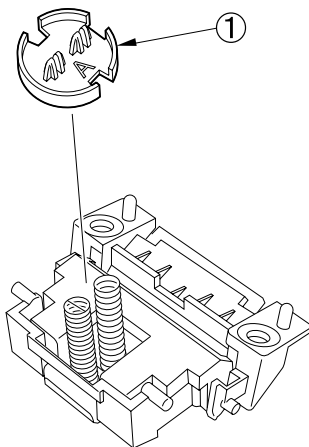


Figure 3-233

4. No. 1 Registration Roller Follower

- 1) Remove the front cover.
- 2) Remove the feeder cover.
- 3) Remove the 4 screws ① and detach the cover ②.

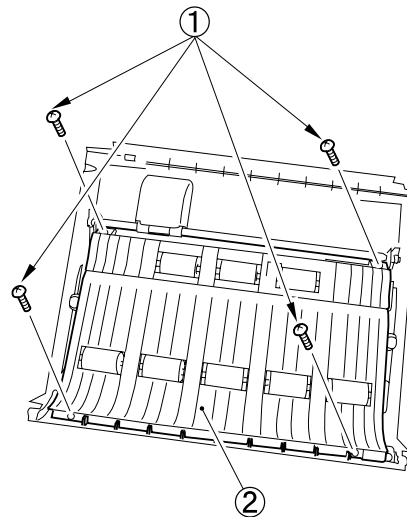


Figure 3-234

- 4) Remove the screw ①, and remove the support plate; then, detach the No. 1 registration roller follower ②.

Note: 4 coil springs may come off upon detachment. Be careful not to lose them.

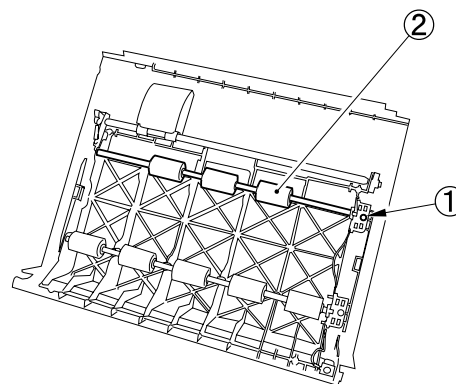


Figure 3-235

5. No. 1 Registration Roller

- 1) Remove the front cover.
- 2) Remove the rear cover.
- 3) Remove the screw ①, and disconnect the 2 connectors ②; then, free the harness guide ③.

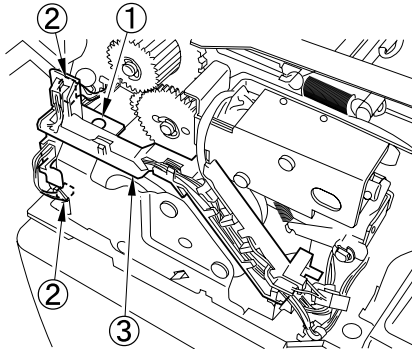


Figure 3-236

- 4) Remove the 2 screws ①, and remove the spring ②; then, detach the pressure solenoid unit ③.

Note: It may be difficult to remove the unit because a cushioning rubber sheet has been attached to the rear of the solenoid mounting plate.

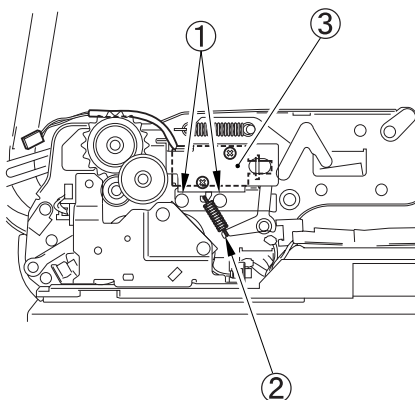


Figure 3-237

Note: Upon assembly, insert the solenoid plunger into the arm notch.

- 5) Remove the 3 screws ① and detach the delivery reversal roller unit ②.

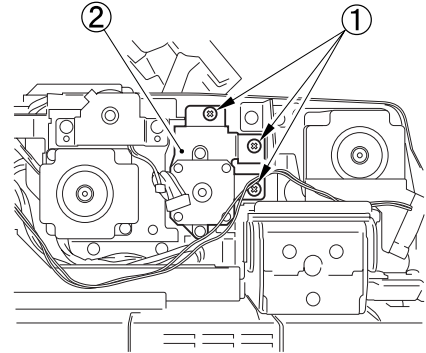


Figure 3-238

- 6) Remove the 2 screws ①, and detach the pre-registration guide ②.

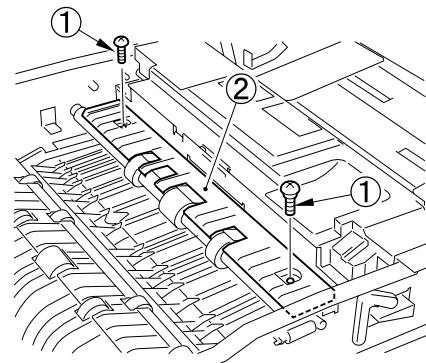


Figure 3-239

- 7) Remove the E-ring ① and bushing ② on the front side.

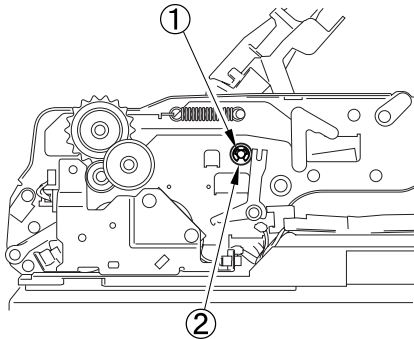


Figure 3-240

- 8) Remove the E-ring ①, gear ②, and bushing ③ on the rear side.

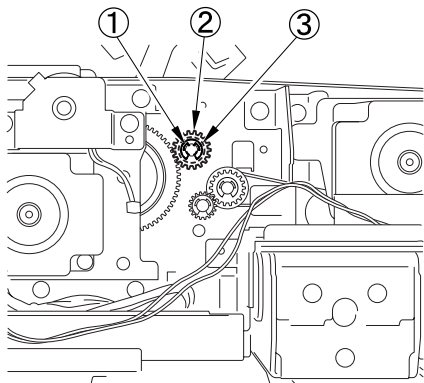


Figure 3-241

- 9) Remove the No. 1 registration roller ①.

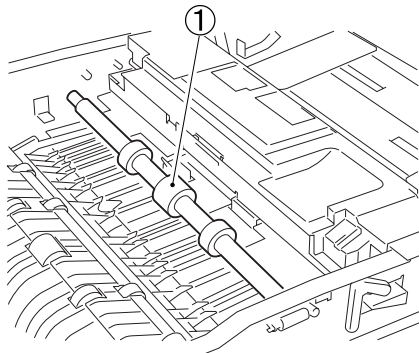


Figure 3-242

6. No. 2 Registration Roller Follower

- 1) Remove the front cover.
- 2) Remove the feeder cover.
- 3) Remove the 4 screws ① and remove the cover ②.

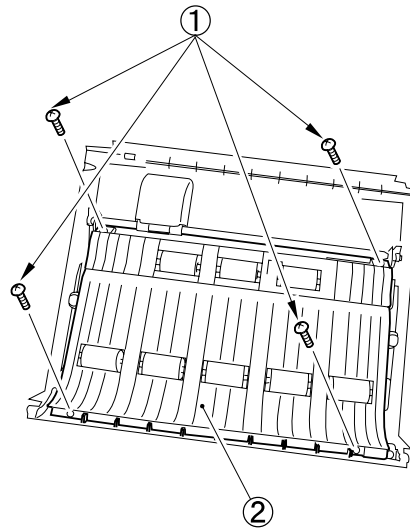


Figure 3-243

- 4) Remove the screw ①, and remove the support plate; then, detach the No. 2 registration roller follower ②.

Note: 4 coil springs may come off upon detachment. Be careful not to lose them.

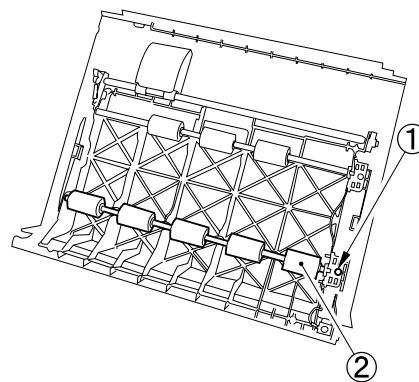


Figure 3-244

7. No. 2 Registration Roller

- 1) Remove the front cover.
- 2) Remove the rear cover.
- 3) Remove the screw ① and free the cooling fan ②.

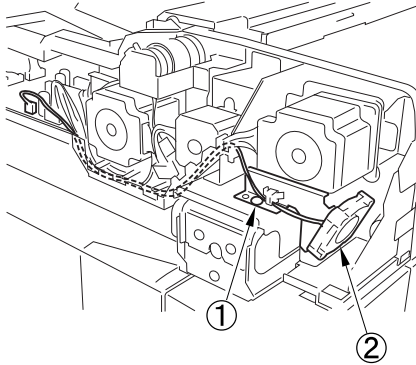


Figure 3-245

- 4) Loosen the 2 screws ①, move the feed motor ② downwards, and tighten the 2 screws ①.

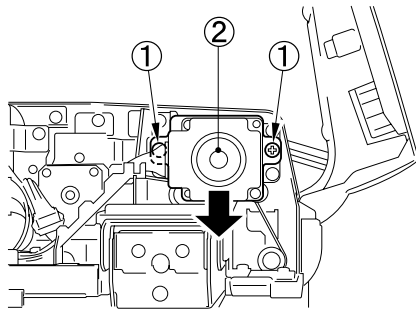


Figure 3-246

Note: When mounting it, loosen the screws and return the feed motor to its original position.

- 5) Remove the 4 screws ①, and disconnect the connector ②; then, detach the feed motor unit ③.

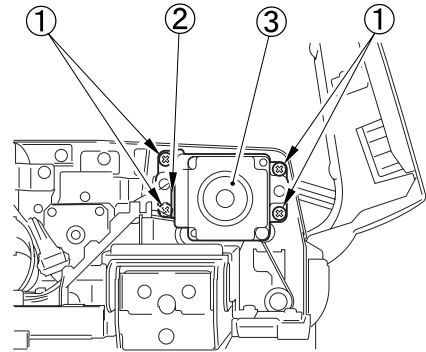


Figure 3-247

- 6) Remove the 3 E-rings ①, the 3 gears ②, and the 2 bushings ③; then, open the roller cover ④ and detach the No. 2 registration roller ⑤.

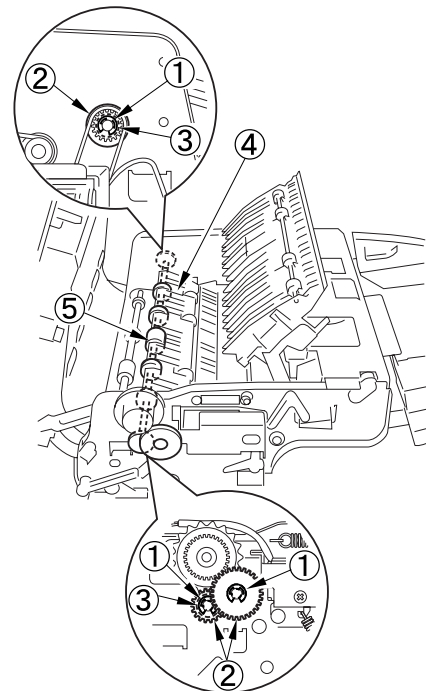


Figure 3-248

Note: Upon installation, install the timing belt on the feed roller side at its original position.

8. Delivery Reversal Upper Roller

- 1) Remove the front cover.
- 2) Remove the rear cover.
- 3) Remove the 3 screws ①, and detach the delivery reversal roller unit ②.

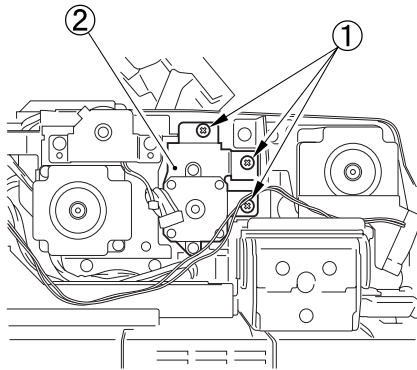


Figure 3-249

Note:For precautions on drive unit installation, see the "B. Drive System, 5. Drive Unit".

- 5) Remove the E-ring ① and the bushing ② on the front side.

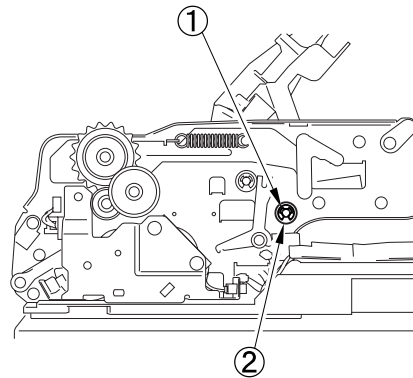


Figure 3-251

- 4) Remove the 4 screws ① and detach the drive unit ②.

Note:Be sure to free the harness from the wire saddle ③. When mounting it, be sure to route the harness through the wire saddle.

- 6) Remove the E-ring ①, gear ②, and bushing ③ on the rear side.

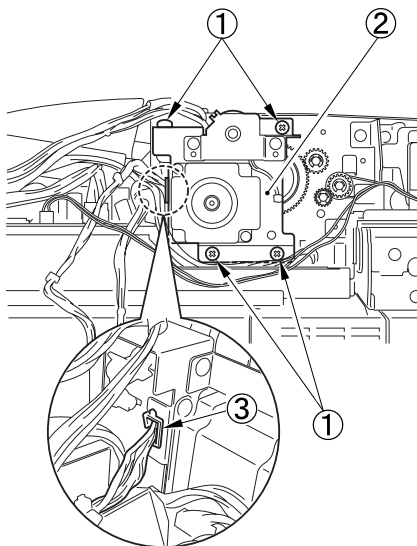


Figure 3-250

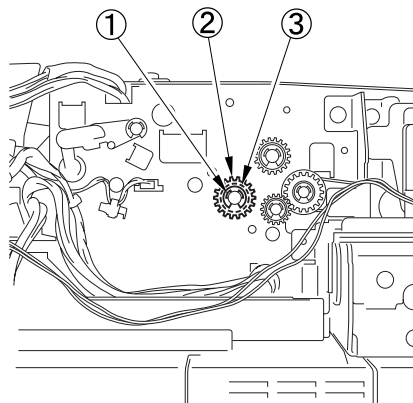


Figure 3-252

- 7) Remove the delivery reversal upper roller
①.

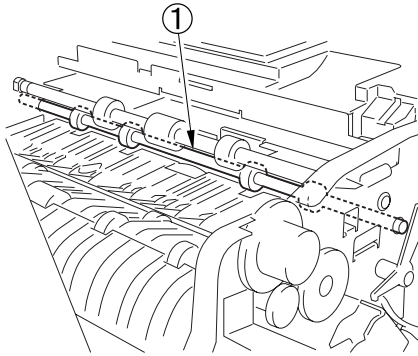


Figure 3-253

9. Read Roller 1

- 1) Remove the front cover.
- 2) Remove the rear cover.
- 3) Remove the feeder cover.
- 4) Remove the screw ①, and disconnect the 2 connectors ②; then, detach the harness guide ③.

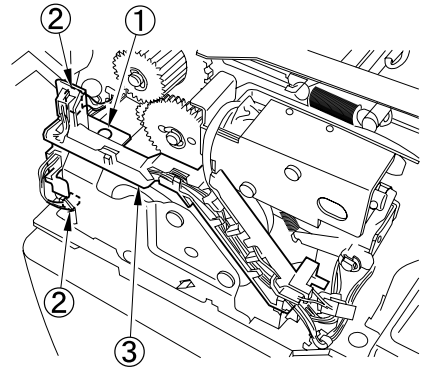


Figure 3-254

- 5) Remove the 3 screws ①, and disconnect the connector ②; then, detach the pressure motor drive unit ③.

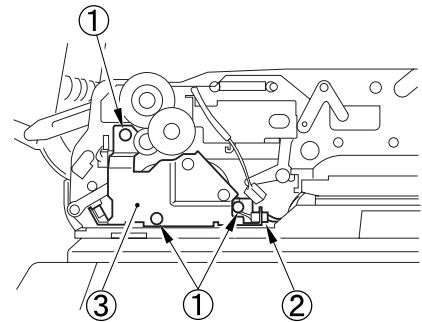


Figure 3-255

- 6) Remove the screw ①, and disconnect the connector ②; then detach the cooling fan ③.

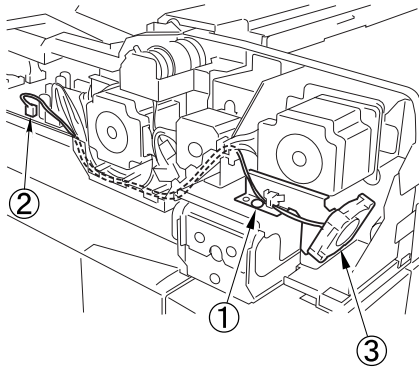


Figure 3-256

- 8) Remove the 4 screws ①, and disconnect the connector ②; then, detach the feed motor unit ③.

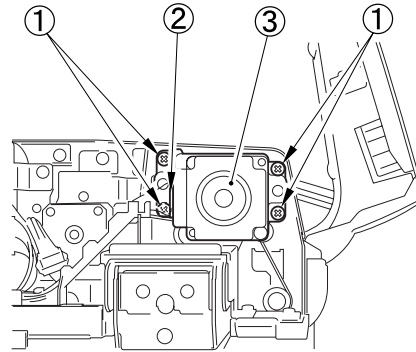


Figure 3-258

- 7) Loosen the 2 screws ①, move the feed motor ② downwards, and tighten the 2 screws ①.

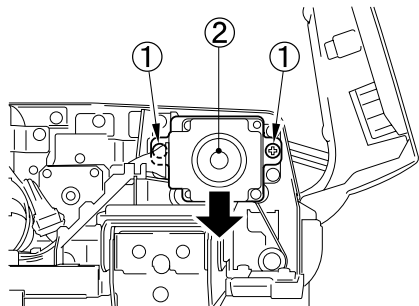


Figure 3-257

- Note:** When mounting it, be sure that the timing belt ① is securely fitted to the pulley.

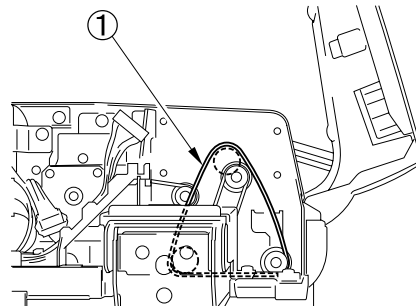


Figure 3-259

- Note:** When mounting it, loosen the screws and return the feed motor to its original position.

- 8) Remove the platen roller. See the "Platen Roller" Section for details.

- 9) Open the opening guide ①, remove the two screws ②, and remove the feed guide ③ by freeing its bottom slightly from the read roller.

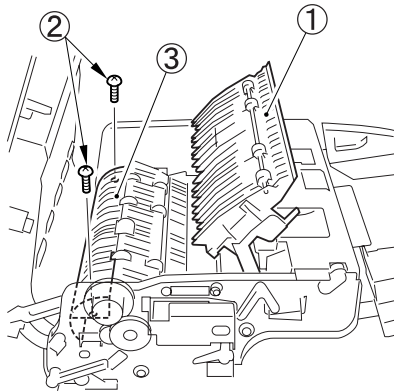


Figure 3-260

Note:When installing the feed guide, secure it so that (both) projections ① touch the metal plate ② to keep the clearance for document feeding constant.

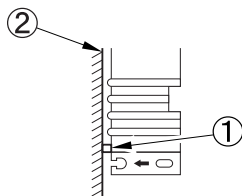


Figure 3-261

- 10) Remove the E-ring ①, gear ②, and bushing ③ on the front side.

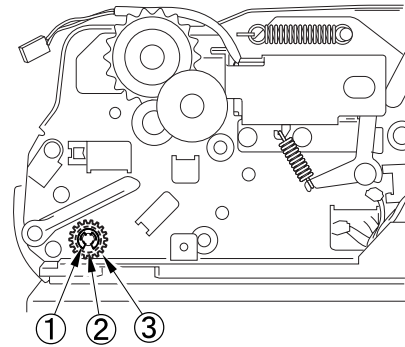


Figure 3-262

- 11) Remove the E-ring ①, gear ②, and bearing ③ on the rear side.

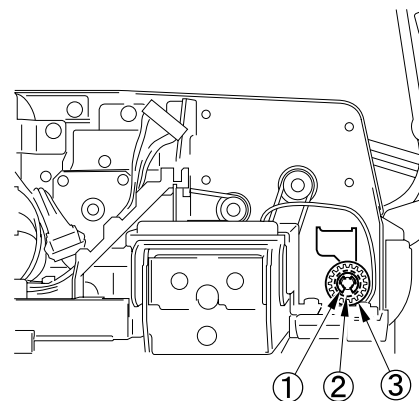


Figure 3-263

12) Release the pressure spring ①.

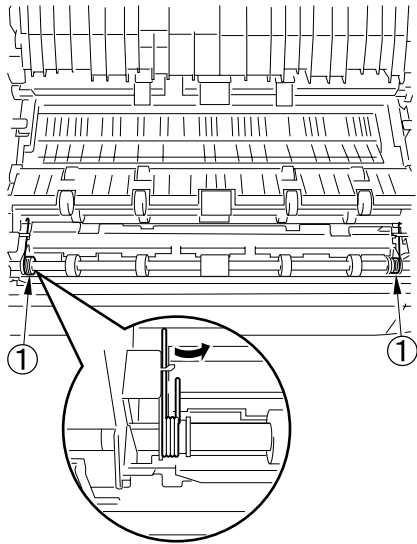


Figure 3-264

Note: When installing the pressure spring, install it at its correct position so that both ends of it do not project to the outside.

13) Remove the 2 E-rings ①.

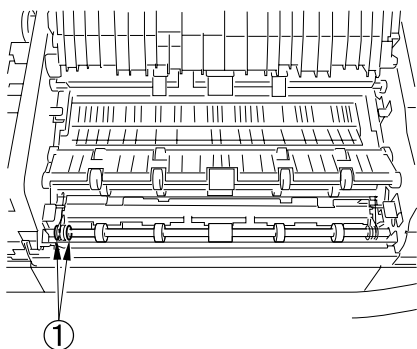


Figure 3-265

14) Slide the bushing ① (equipped with a plate) to the rear to detach the platen roller follower 1 unit ②.

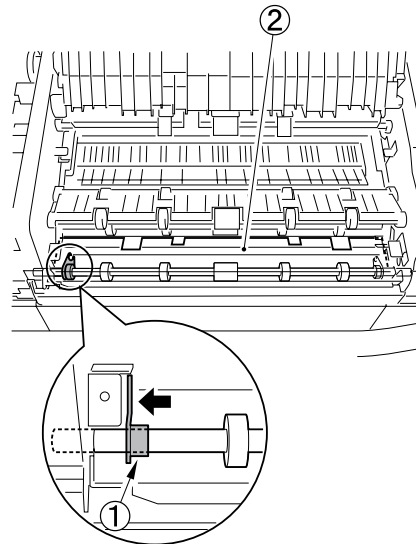


Figure 3-266

Note: When the roller shaft of the unit is removed, the platen roller follower 1 unit falls. Be careful not to lose it. When reinstalling it, insert both ends of the roller shaft into the holes in the bushings with a plate.

- 15) Open the feeder, and push down the read roller 1 unit ①, and remove it.

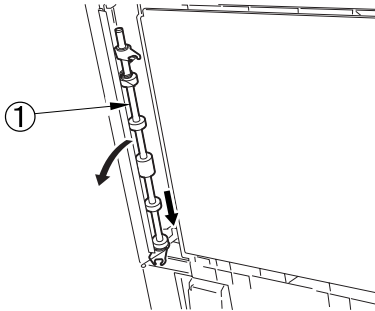


Figure 3-267

- 16) Remove the 2 E-rings ①, the 2 pressure springs ②, and the 2 bushings ③ with a plate; then, detach the read roller 1 ④.

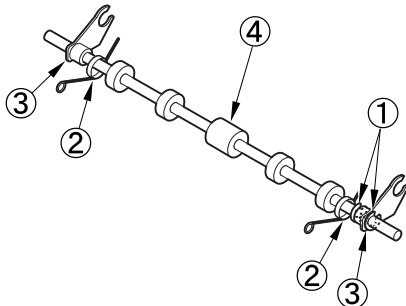


Figure 3-268

10. Platen Roller

- 1) Remove the screw (self-tapping) ①, slide the platen roller follower 2 unit ② upwards, and remove the fitting part ③. Then, remove the platen roller downstream.

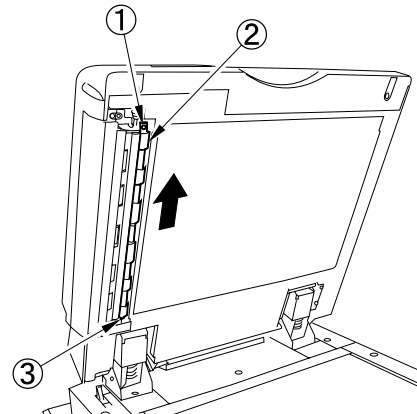


Figure 3-269

Note: Upon installation, push in the platen roller follower 2 unit.

- 2) Detach the belt ①, and remove the 2 plastic E-rings ②, and the 2 bushings ③; then, detach the platen roller ④.

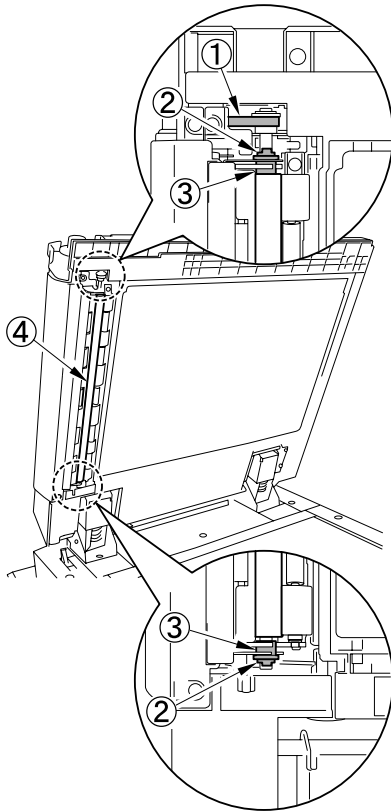


Figure 3-270

Note: Upon installation, align the metal and plastic bushing insertion position with the bushing notch position to install the bushing.

11. Delivery Reversal Lower Roller

- 1) Open the feeder cover, and detach the inside cover.
- 2) Open the opening guide ① slightly and remove the section A, open it widely and slide it, remove the opposite fitting part.

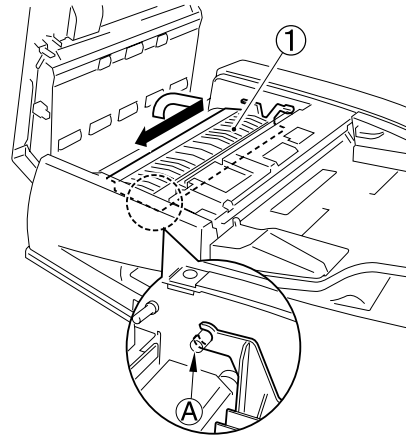


Figure 3-271

- 3) Remove the 2 screws ①, and detach the reversal guide ②.

Note: Cables are connected to the rear of the reversal guide.

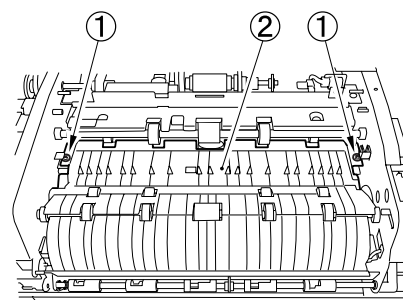


Figure 3-272

- 4) Push down the roller guide ①, and push down and detach the delivery reversal lower roller ②.

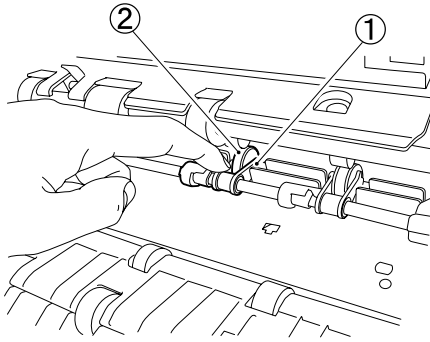


Figure 3-273

Note: When installing the delivery reversal lower roller, align the roller shaft with the roller guide groove, then turn the roller.

12. Reversal Upper Roller

- 1) Remove the opening guide.
- 2) Remove the E-ring ①, and remove the shaft ②; then, detach the reversal upper roller ③.

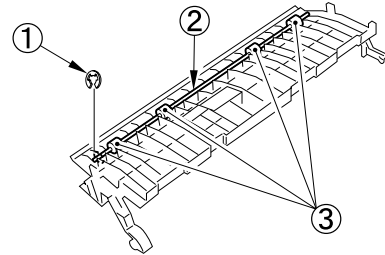


Figure 3-274

Note: 2 coil springs will come off. Be careful not to lose them.

13. Reversal Lower Roller

- 1) Remove the front cover.
- 2) Remove the rear cover.
- 3) Remove the screw ①, and disconnect the 2 connectors ②; then, free the harness guide ③.

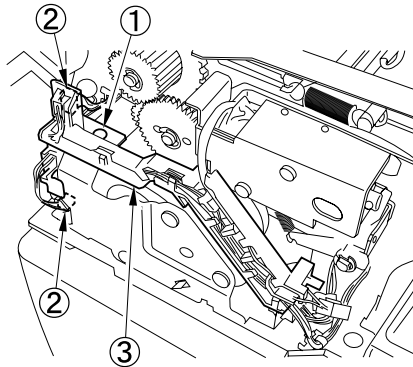


Figure 3-275

- 4) Remove the 3 screws ①, and disconnect the connector ②; then, detach the pressure motor drive unit ③.

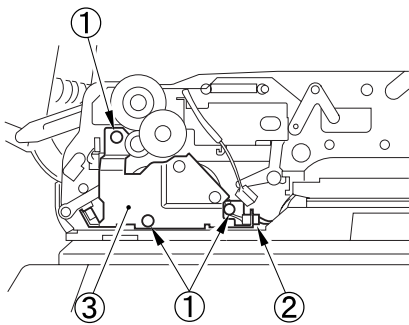


Figure 3-276

- 5) Remove the screw ①, and free the cooling fan ②.

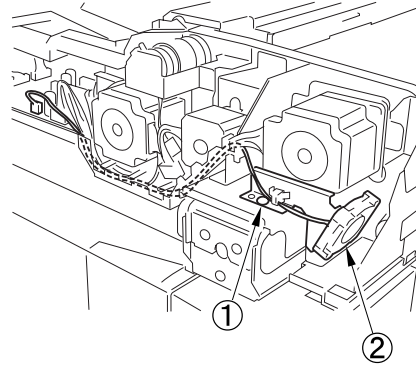


Figure 3-277

- 6) Loosen the 2 screws ①, move the feed motor ② downwards, and tighten the 2 screws ①.

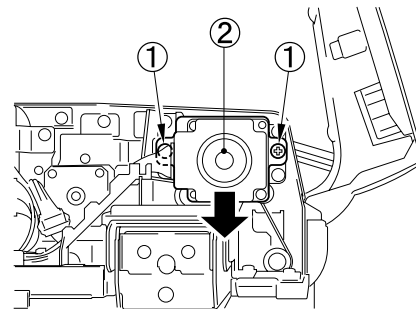


Figure 3-278

Note: When mounting it, loosen the screws and return the feed motor to its original position.

- 7) Remove the 4 screws ①, and disconnect the connector ②; then, detach the feed motor unit ③.

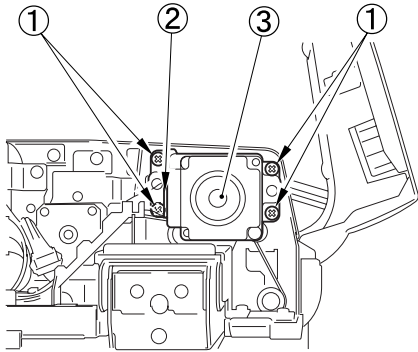
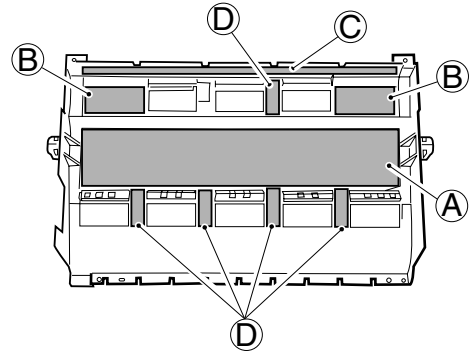


Figure 3-279

14. Dust-Collecting Tape

- 1) Remove the dust-collecting tapes ①, ②, ③, ④, and ⑤; then, attach new dust-collecting tapes over the same locations ①, ②, ③, ④, and ⑤.



- 8) Remove the 2 E-rings ①, gear ②, and 2 bushings ③; then, detach the reversal lower roller ④.

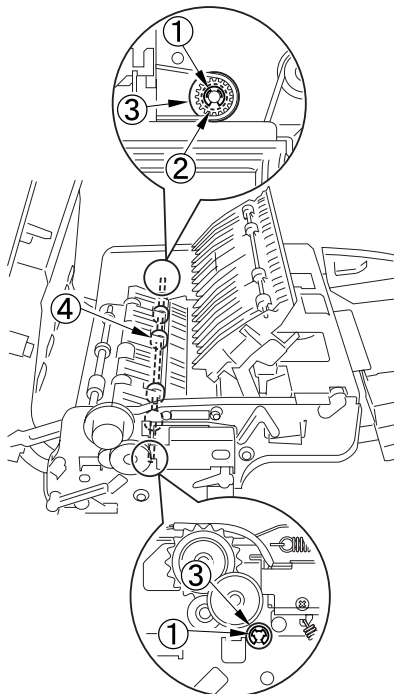


Figure 3-280

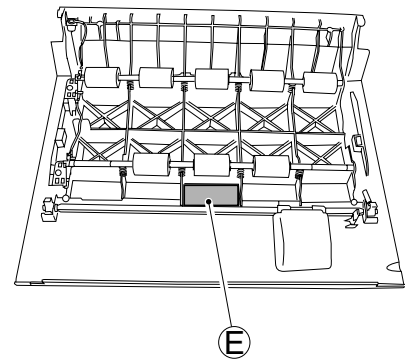


Figure 3-281

D. Control System

1. ADF Driver PCB

- 1) Remove the rear cover.
- 2) Remove the 3 screws ①, and disconnect the 7 connectors ②; then, detach the harness guide ③.

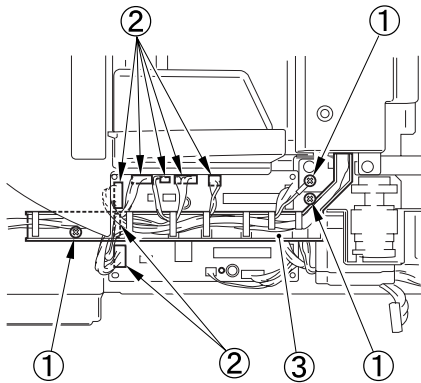


Figure 3-282

- 3) Disconnect the 5 connectors ①, and remove the 2 screws ②; then, detach the ADF driver PCB ③.

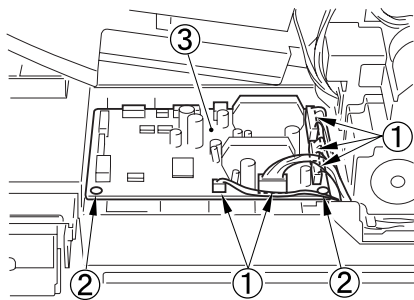


Figure 3-283

2. Document Width Volume

- 1) Open the feeder cover and detach the inside cover.
- 2) Shift up the document pickup tray; then, remove the 3 screws ①, and detach the document pickup tray cover ②.

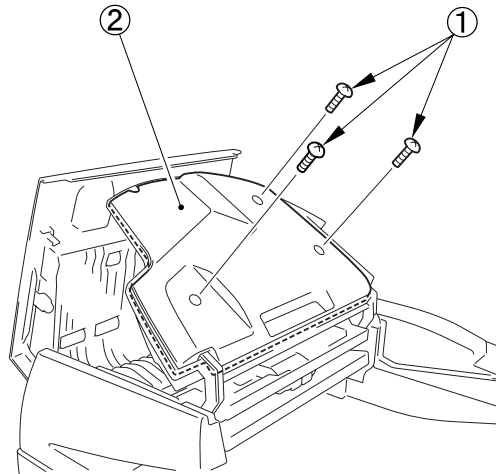


Figure 3-284

- 3) Disconnect the 3 connectors ①, and remove the 2 screws ②; then, detach the document width volume ③.

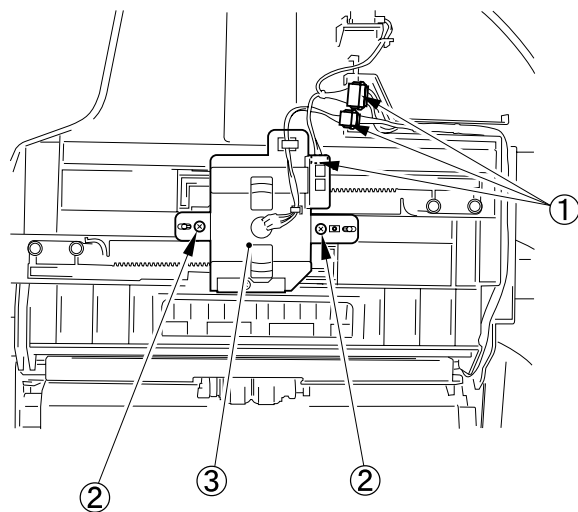


Figure 3-285

Note: Mounting

Widen the document guide ① to its maximum width. Next, fully rotate the gear ② counterclockwise so that the arrows ③ meet up.

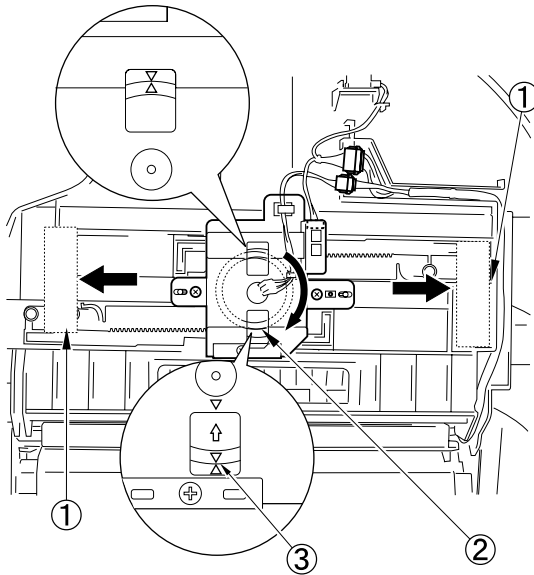


Figure 3-286

3. Post-Separation Sensor

- 1) Open the feeder cover and remove the inside cover.
- 2) Remove the two screws ①, and disconnect the connector on the back; then, detach the post-separation sensor ②.

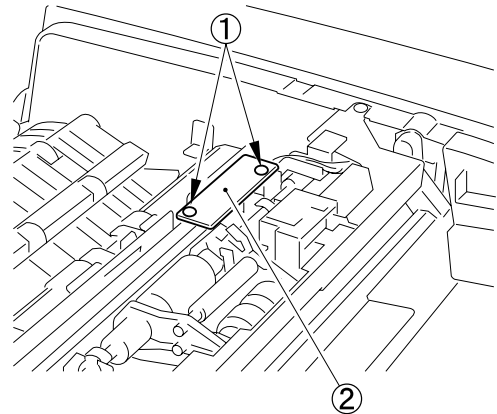


Figure 3-287

Note: After sensor replacement, sensor adjustment must be performed. See the "AFTER REPLACING PARTS" section for details.

4. Read Sensor

- 1) Remove the front cover.
- 2) Open the opening guide ①, remove the two screws ② and connector ③, and remove the feed guide ④ by freeing its bottom slightly from the read roller.

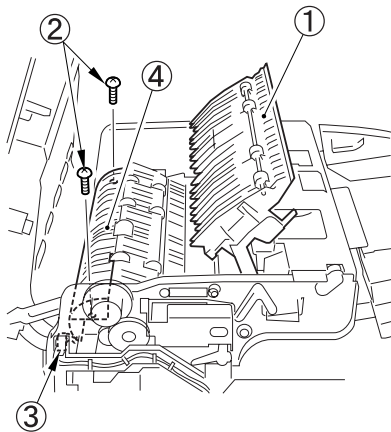


Figure 3-288

Note:When installing the feed guide, secure it so that (both) projections ① touch the metal plate ② to keep the clearance for document feeding constant.

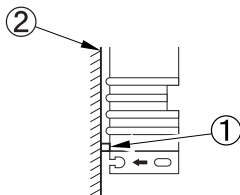


Figure 3-289

- 3) Remove the 2 screws ①, and disconnect the connector ②; then, detach the read sensor ③.

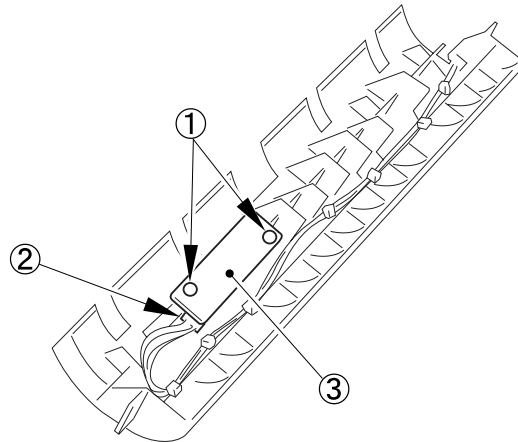


Figure 3-290

Note:After sensor replacement, sensor adjustment must be performed. See the "AFTER REPLACING PARTS" section for details.

5. Delivery Reversal Sensor

- 1) Open the opening guide ① slightly and remove the section A, open it widely and slide it, remove the opposite fitting part, and remove the opening guide.

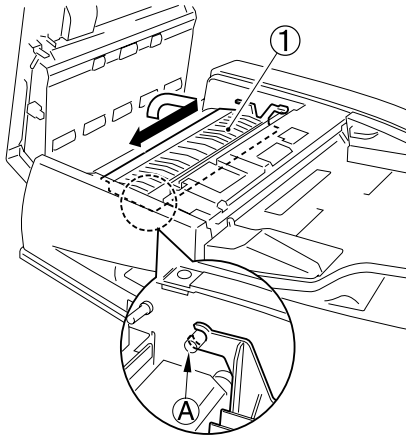


Figure 3-291

- 2) Remove the 2 screws ①, and turn the delivery guide ② over.

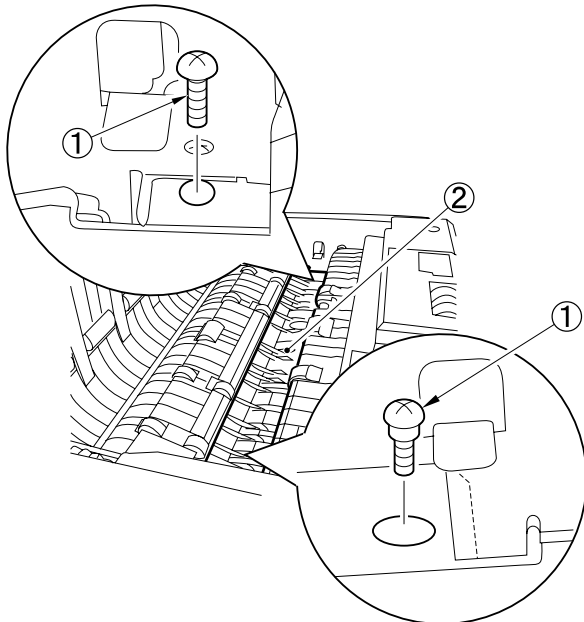


Figure 3-292

- 3) Remove the 2 screws ①, and disconnect the connector ②; then, detach the delivery reversal sensor ③.

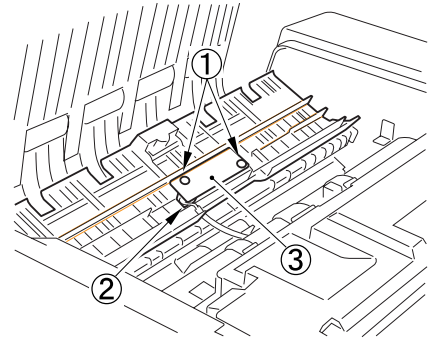


Figure 3-293

Note: After sensor replacement, sensor adjustment must be performed. See the "AFTER REPLACING PARTS" section for details.

6. Pressure Solenoid

- 1) Remove the front cover.
- 2) Remove the screw ①, and disconnect the 2 connectors ②; then, free the harness guide ③.

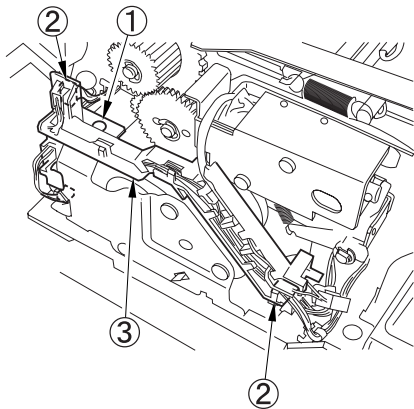


Figure 3-294

- 4) Remove the 2 screws ①, and detach the pressure solenoid ②.

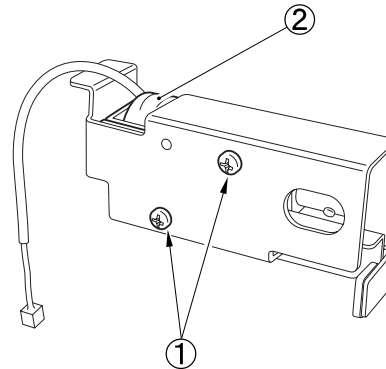


Figure 3-296

- 3) Remove the 2 screws ①, and remove the spring ②; then, detach the pressure solenoid unit ③.

Note: It may be difficult to remove the unit because a cushioning rubber sheet has been attached to the rear of the solenoid mounting plate.

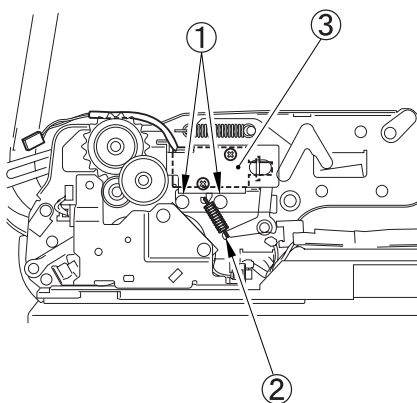


Figure 3-295

Note: Upon assembly, insert the solenoid plunger into the arm notch.

7. Pickup Clutch Unit

- 1) Remove the 2 screws ①, disconnect the connector ②, and detach the mounting plate ③.

Note: The bushing attached to the mounting plate will also come off. Be careful not to lose it.

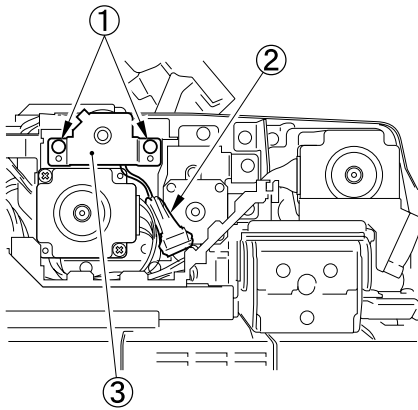


Figure 3-297

- 2) Slide the pickup clutch unit ① slightly toward you, and release the hook ② of the connection guide. Detach the pickup clutch unit while moving it so that the clutch arm ③ does not strike any other parts.

Note: The bushing attached to the clutch shaft will also come off. Be careful not to lose it.

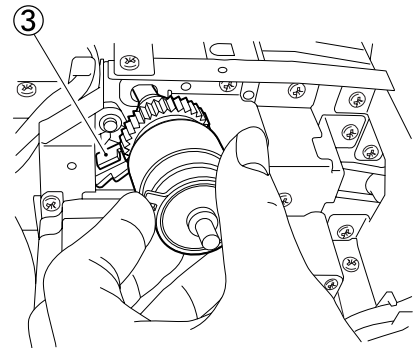
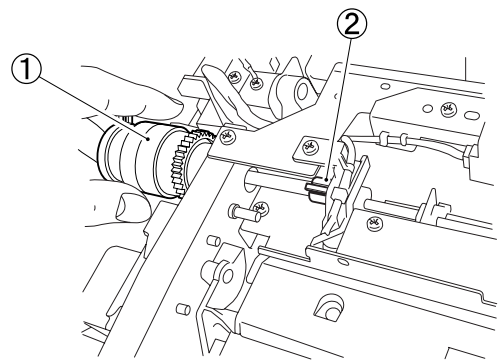
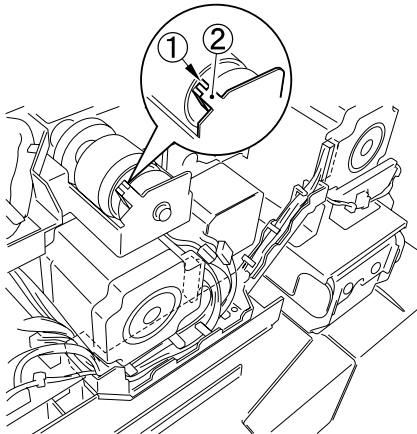


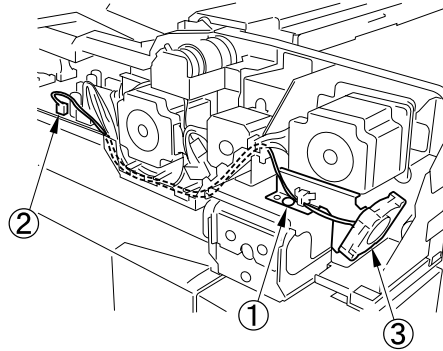
Figure 3-298

Precautions on assembly

- 1) Align the connection guide position with the clutch shaft position for assembly. Pay attention to the clutch arm position. See the "Drive Unit" section for details.
- 2) Insert the projection ② on the mounting plate into the groove ① for clutch positioning.

**Figure 3-299****8. Cooling Fan**

- 1) Remove the rear cover.
- 2) Remove the screws ①, and disconnect the connector ②; then, detach the cooling fan ③.

**Figure 3-300**

III. READER

A. Exterior

1. Platen Glass

- 1) Remove the 2 screws ①, and detach the right glass retainer ②; then, detach the platen glass ③.

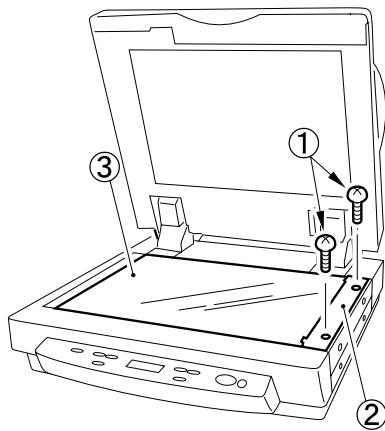


Figure 3-301

Note: When detaching the platen glass, take care not to touch the standard white plate attached to its back. If soiled, clean it.

2. ADF Reading Glass

- 1) Remove the 2 screws ①, and detach the glass retainer ②.

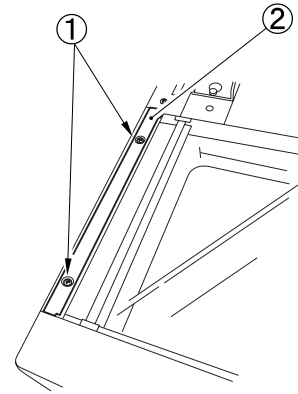


Figure 3-302

- 2) Pull out the ADF reading glass ①.

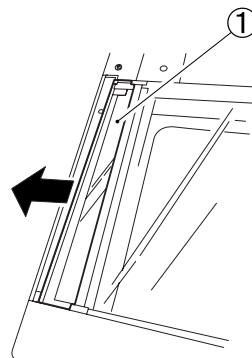


Figure 3-303

3. Operation Panel Assembly

- 1) Remove the 2 screws ① (1 each on the left and right).

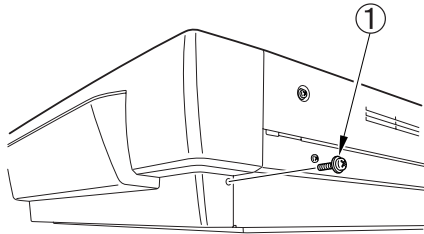


Figure 3-304

- 2) Remove the 2 fitting parts ① (marked with Δ) using a tool with a flat and thin tip, and detach the operation panel assembly ②.

Disconnect the connector that connects the operation panel assembly and controller.

Note: Take care to prevent damage to the platen glass.

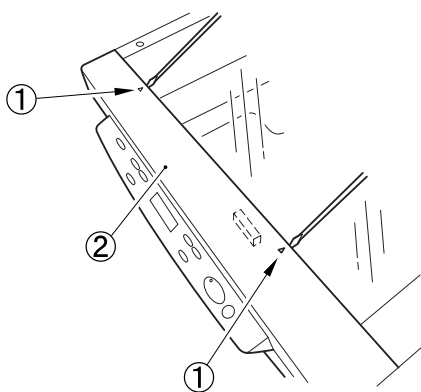


Figure 3-305

Note: When assembling the operation panel assembly, insert the pasted sheet ① under the platen glass.

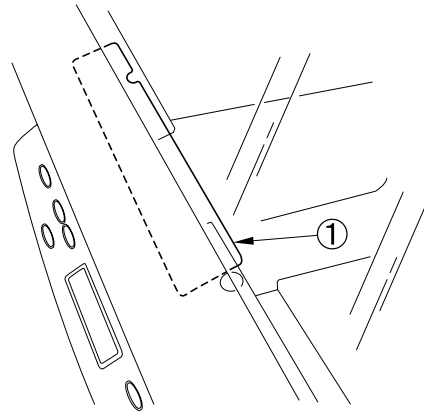


Figure 3-306

4. Reader Left/Right Covers

- 1) Remove the 2 screws ①, and detach the reader right cover ②.

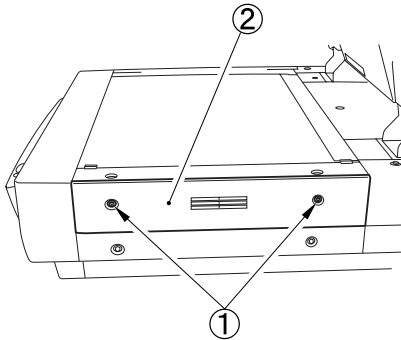


Figure 3-307

5. Reader Rear Cover

- 1) Disconnect the 2 connectors ① (with locks) and remove the 2 screws ②.

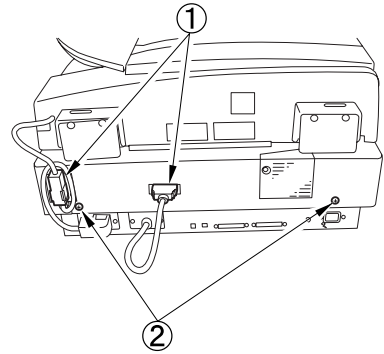


Figure 3-309

- 2) Remove the 2 screws ①, and detach the reader left cover ②.

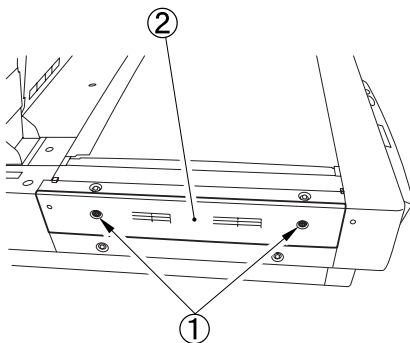


Figure 3-308

- 2) Flip open the rubber covers ① of the left and right hinge parts, remove the screws ② (2 each on the left and right), and detach the 2 angle control plates ③.

Note: This work is performed to easily remove screws in step 3 below.

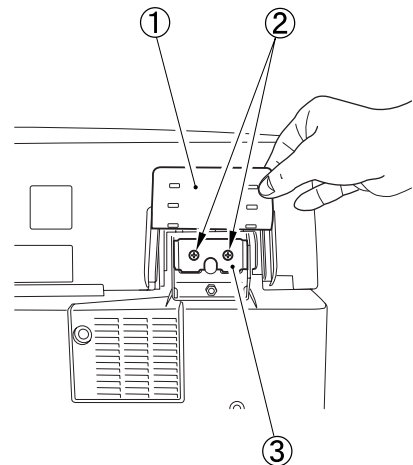


Figure 3-310

- 3) Remove the 3 screws ①, and slide the reader rear cover ② toward the rear to detach.

Note: Take care not to damage the ADF opening sensor arm ③.

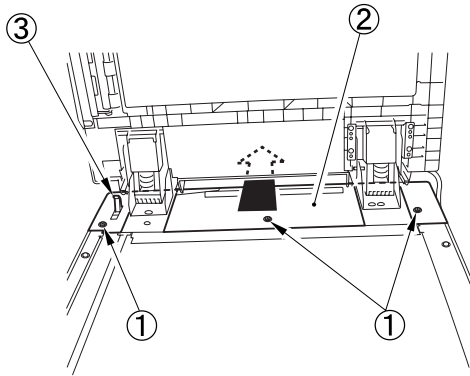


Figure 3-311

Note: When installing the reader rear cover, insert the sheet ① pasted to the cover under the platen glass.

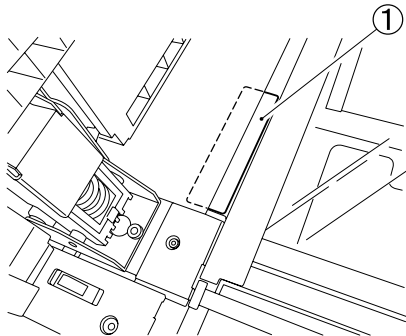


Figure 3-312

B. Drive/Control System

1. CCD Unit Cover

- 1) Detach the platen glass, reader right cover.
- 2) Remove the 9 screws ①, release the 2 hooks ②, and detach the CCD unit cover ③.

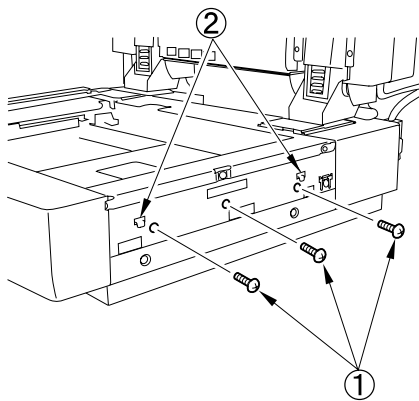
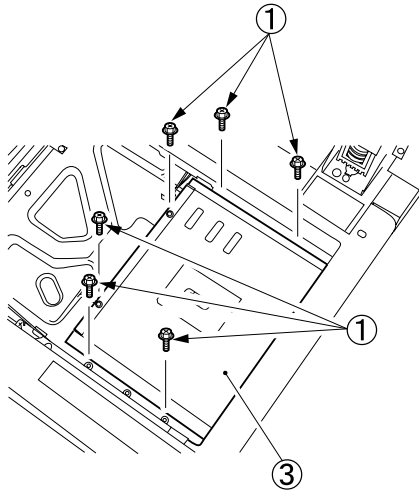


Figure 3-313

2. Scanning Lamp

- 1) Remove the platen glass and other external covers.
- 2) Detach the CCD unit cover.
- 3) Disconnect the connector ①, release the hook of cable stopper ②, and free the cable ③ from the cable guide ④.

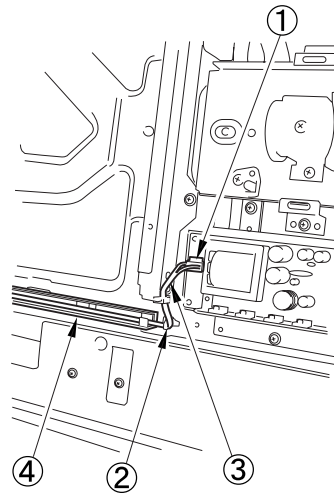


Figure 3-314

- 4) Slide the No. 1 mirror base ① to the right to match it against the cut-off ② of the frame.

Note: When sliding the No. 1 mirror base, be sure to hold it by the cut-up tab (A) of the mirror stay.

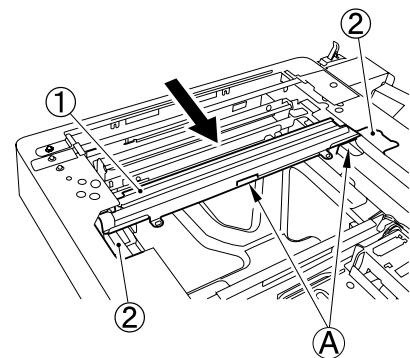


Figure 3-315

- 5) Remove the 2 screws ①, and detach the scanning lamp ②.

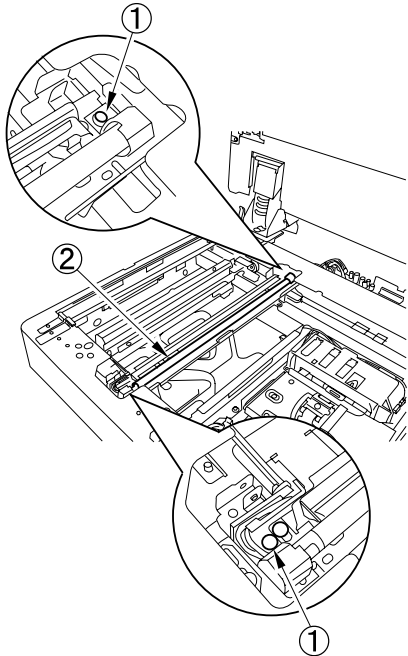


Figure 3-316

3. Reader Controller PCB

- 1) Remove the platen glass and reader right cover.
- 2) Detach the CCD unit cover.
- 3) Disconnect the 5 flat cables ① and the connector ② then, remove the 4 screws ③, and detach the reader controller PCB ④.

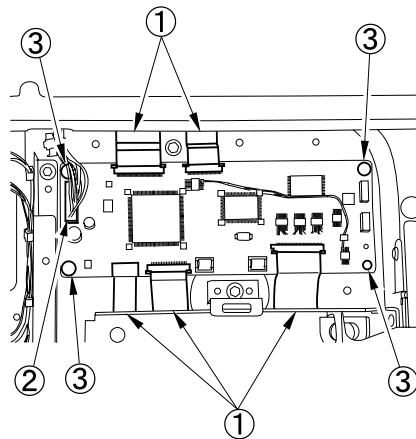


Figure 3-317

Note: Disconnecting the flat cable

Slide the locking lever ① to the direction of the arrow; then, disconnect the flat cable ②.

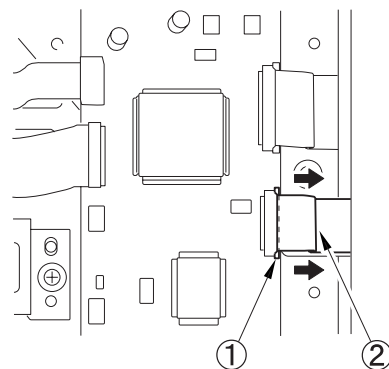


Figure 3-318

Note: For a measure to be taken after replacing the reader controller PCB, see the "AFTER REPLACING PARTS" section.

4. Interface PCB

- 1) Remove the reader rear cover.
- 2) Remove the 4 RS tightening screws ①, and remove the 2 binding screws ②; then, detach the interface PCB cover ③.

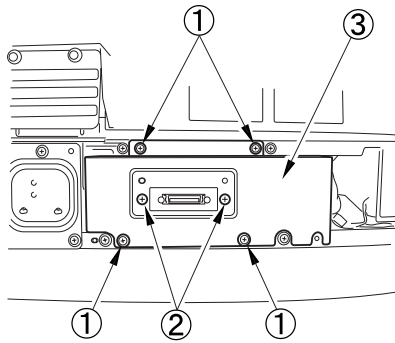


Figure 3-319

- 4) Remove the 9 screws ①, and detach the interface PCB ②.

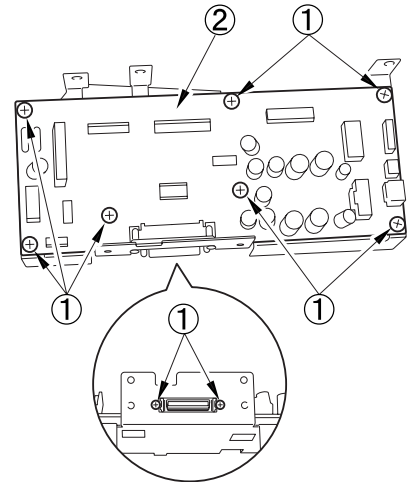


Figure 3-321

- 3) Disconnect the 7 connectors ①, detach the 2 flat cables ②, and remove the 5 screws ③; then, detach the interface PCB unit ④.

Note:The connectors for the flat cables have the locking lever.

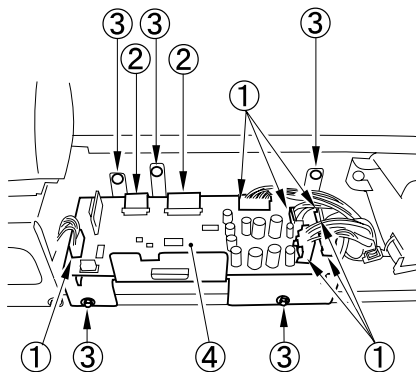


Figure 3-320

Note:When installing the interface PCB, place the tie-wrap ① closer to the PCB than to the wire guide ② so that the harness does not touch the scanner motor.

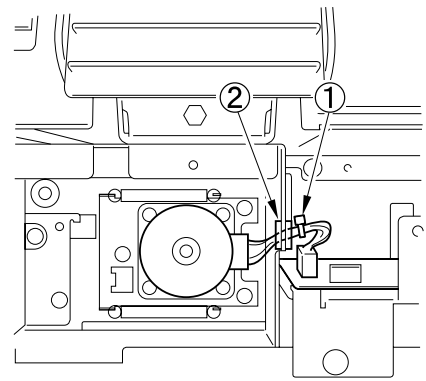


Figure 3-322

5. Inverter PCB

- 1) Remove the platen glass and reader right cover.
- 2) Detach the CCD unit cover.
- 3) Disconnect the connector ① and the flat cable ②; then, remove a screw ③, free the 2 PCB supports ④, and detach the inverter PCB ⑤.

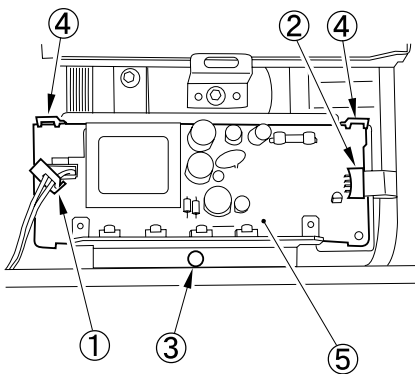


Figure 3-323

Note:For a measure to be taken after replacing the inverter PCB, see the "AFTER REPLACING PARTS" section.

6. CCD Unit

- 1) Remove the platen glass and reader right cover.
- 2) Detach the CCD unit cover.
- 3) Disconnect the 2 flat cables ① from the reader controller PCB; then, remove the 2 screws ②, detach the 2 leaf springs ③, and detach the CCD unit ④.

Note:The connectors for the flat cables have the locking lever.

Note:Do not loose the other screws for positioning the CCD unit.

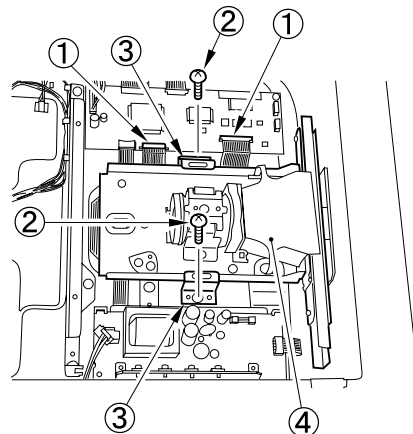


Figure 3-324

Note:For a measure to be taken after replacing the CCD unit PCB, see the "AFTER REPLACING PARTS" section.

7. Scanner Motor

- 1) Remove the reader rear cover.
- 2) Remove the 4 screws ①, and detach the cover ②.

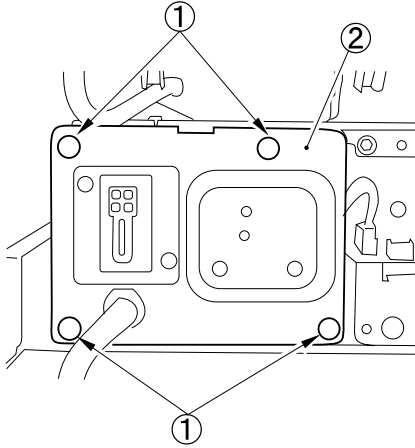


Figure 3-325

- 3) Release the 2 hooks of the cable stoppers ①, and free the cover ②.

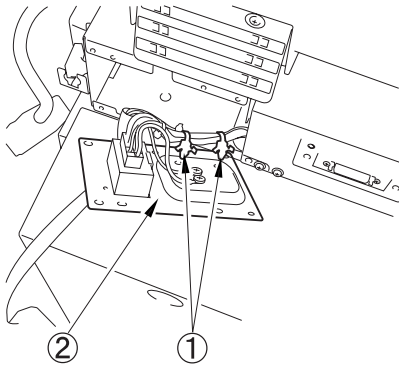


Figure 3-326

- 4) Remove the 3 screws ① and the 2 springs ②, and slide the scanner motor ③ toward the arrow.

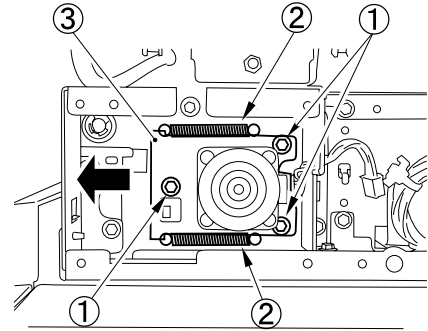


Figure 3-327

- 5) Disconnect the connector ①, and detach the scanner motor ②.

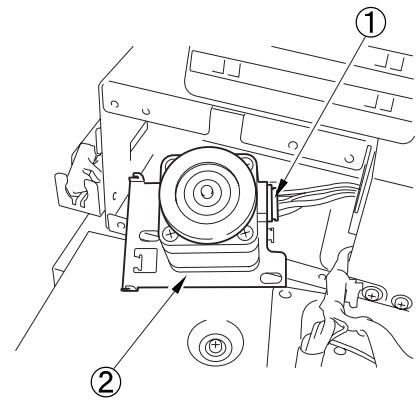


Figure 3-328

Note:When mounting the scanner motor, be sure that the timing belt ③ is securely attached to the scanner pulley ① and the motor shaft ②.

Since the tension of the timing belt is adjusted with the force of 2 springs, install the springs, then secure the screws.

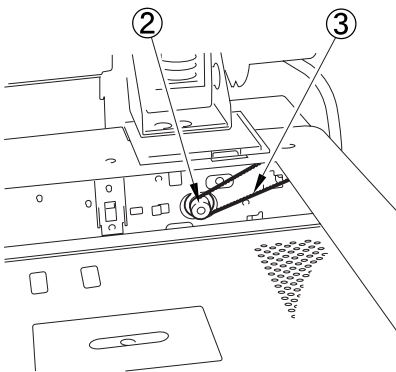
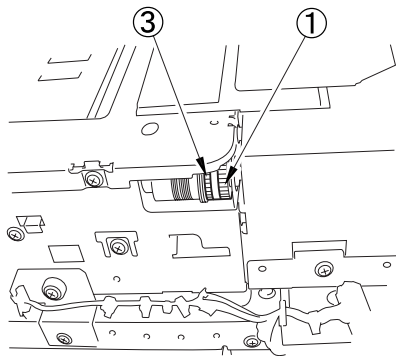


Figure 3-329

Note:When installing the scanner motor, place the tie-wrap ① closer to the interface PCB than to the wire guide ② so that the harness does not touch the scanner motor.

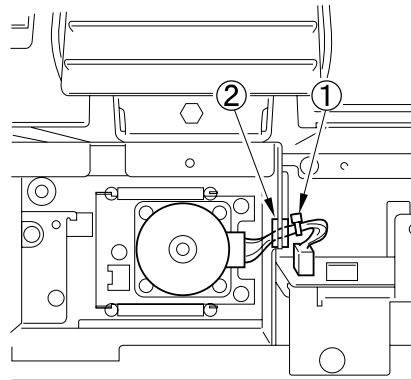


Figure 3-330

8. ADF Opening Sensor

- 1) Remove the reader rear cover.
- 2) Remove the 2 connectors ①.

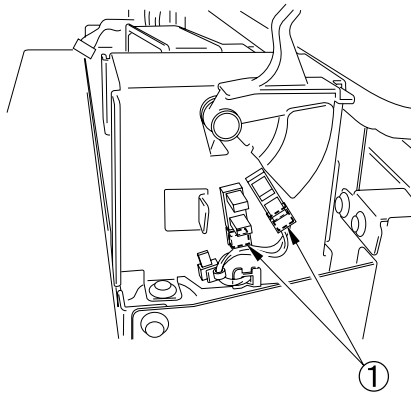


Figure 3-331

- 3) Remove the 4 screws ①, and detach the reinforcing plate ②.

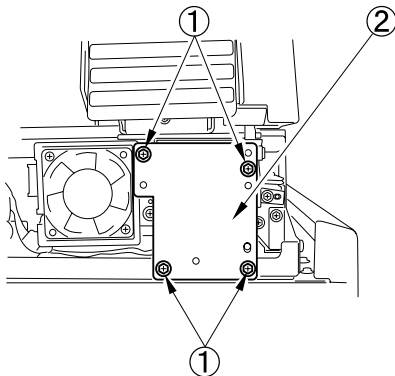


Figure 3-332

- 4) Free the hook ①, and detach the ADF opening sensor (1, 2).

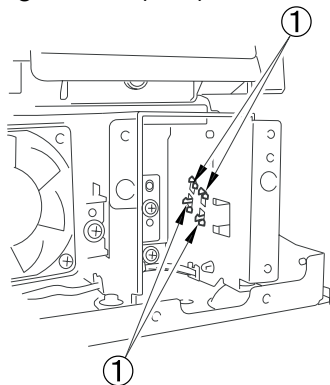


Figure 3-333

9. Scanner HP Sensor

- 1) Remove the reader rear cover.
- 2) Remove the 4 screws ①, and detach the cover ②.

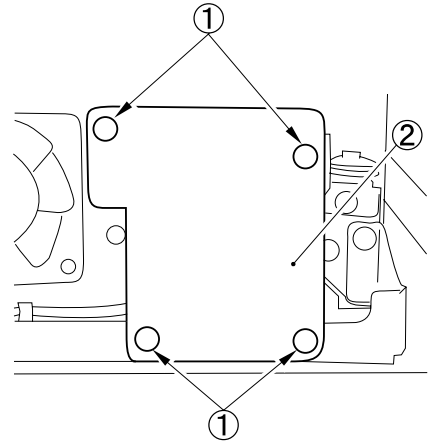


Figure 3-334

- 3) Remove the screw ①, and detach the sensor mounting plate ②.

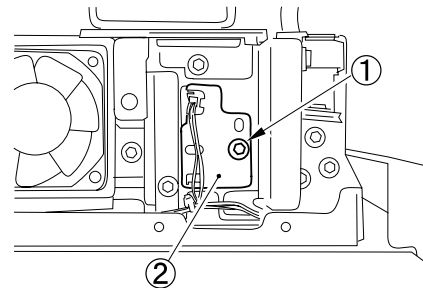


Figure 3-335

- 4) Remove the screw ①, and detach the scanner HP sensor ②.

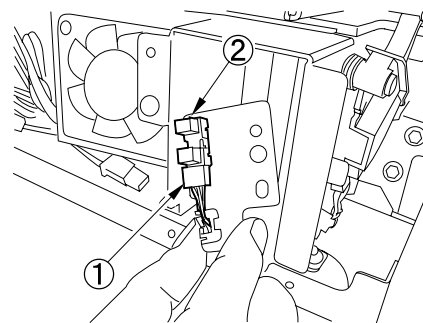


Figure 3-336

10. Cooling Fan

- 1) Remove the reader rear cover.
- 2) Remove the screw ① and 2 screws ②, and detach the cooling fan ③.

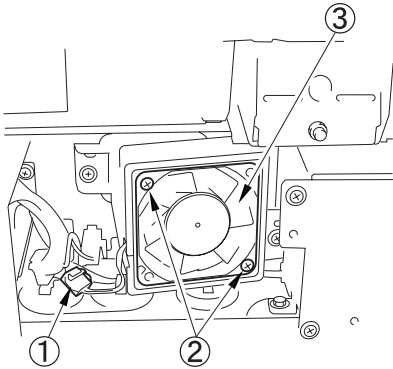


Figure 3-337

11. Scanner Drive Cable

Note: Since this is a complicated disassembly, do it only when required. Special tools are required for assembly. Prepare for the following tools before disassembly:

- Mirror positioning tool (front, rear)
FY9-3009-040

- 1) Remove the feeder.
- 2) Remove the platen glass.
- 3) Remove the other external covers.
- 4) After removing the 2 screws ① and detaching the ADF glass retainer ②, remove the ADF reading glass ③. And remove the 2 screws ④, and detach the left glass retainer ⑤.

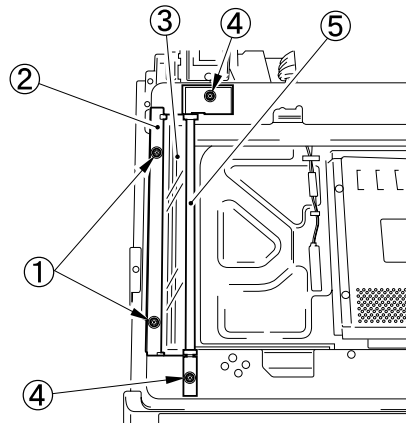


Figure 3-338

- 5) Remove the screw ①, and detach the ADF right screw cover ②.

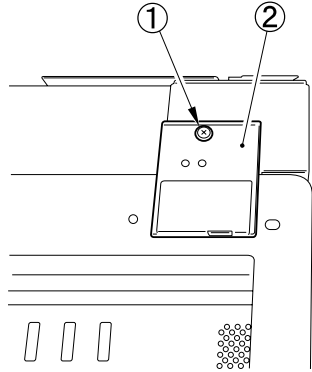


Figure 3-339

- 8) Disconnect the 9 connectors ①, and remove the 5 screws ②; then, detach the interface PCB ③ together with its base.

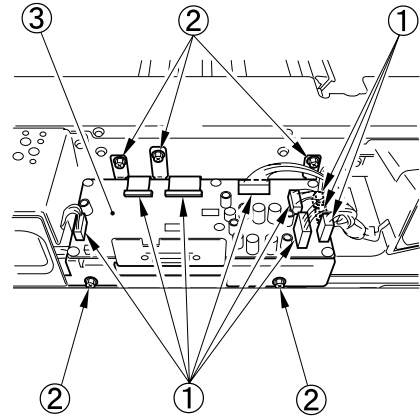


Figure 3-342

- 6) Remove the screw ①, and detach the ADF left screw cover ②.

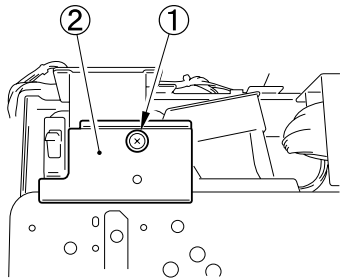


Figure 3-340

- 9) Disconnect the connector ①, and open the 3 wire saddles ②. And remove the 4 screws ③, and detach the motor cover ④ together with the harness.

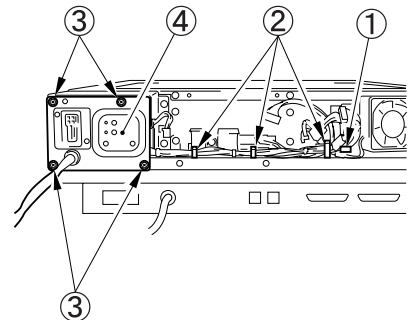


Figure 3-343

- 7) Remove the 6 screws ①, and detach the interface PCB cover ②.

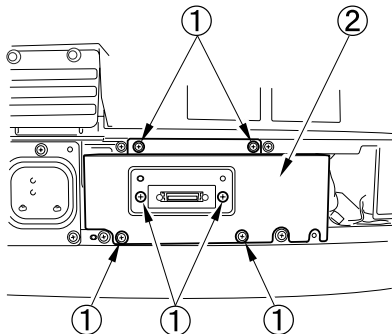


Figure 3-341

- 10) Free the harness from the wire saddle ①, and remove the 6 screws ②; then, detach the motor frame ③.

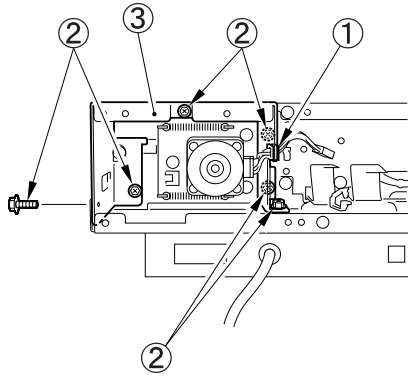


Figure 3-344

- 12) Disconnect the 2 connectors ①, and detach the snap-open band ②; then, free the harness from the wire saddle ③.

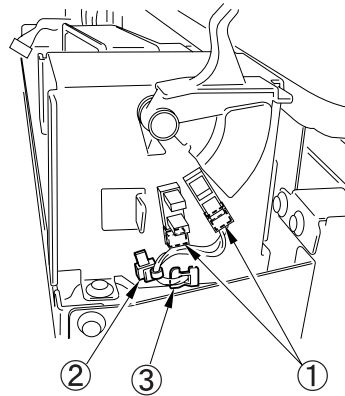


Figure 3-346

- 11) Remove the 4 screws ①, and detach the ADF opening sensor cover ②.

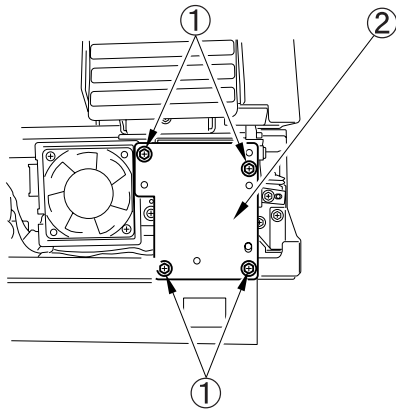


Figure 3-345

- 13) Free the harness from the wire saddle ①, and remove the 6 screws ②; then, detach the ADF opening sensor base ③.

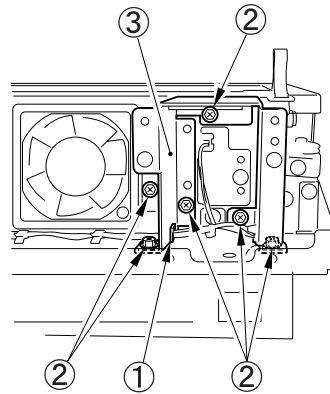


Figure 3-347

- 14) Remove the 24 screws ①, and detach the reader upper frame ②.

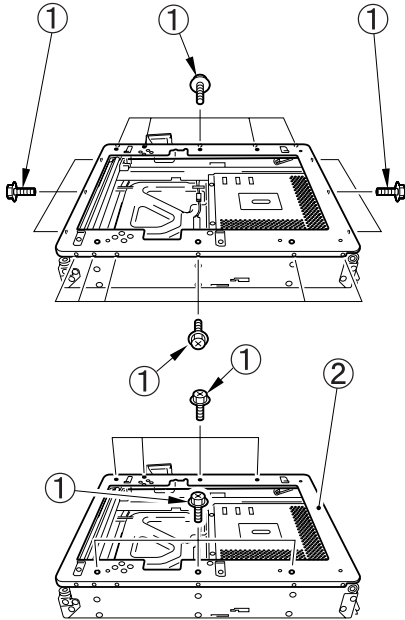


Figure 3-348

- 15) Remove the 2 cable fixing screws ② of the No. 1 mirror base ①. Remove the spring ③ used to hold the cable in place. Free the 2 hooks ④ of the cable from the right side of the reader frame. Then, free the cable from the pulleys.

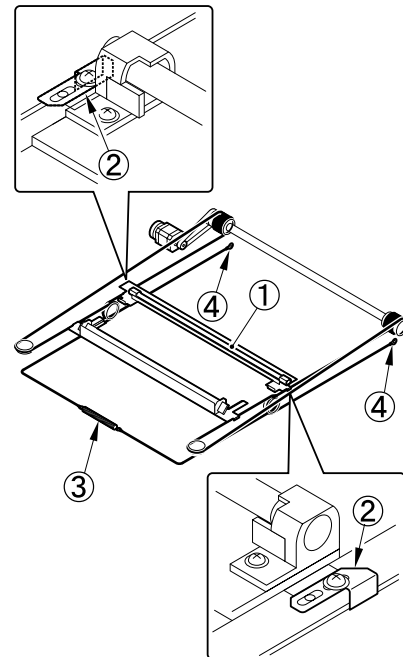


Figure 3-349

Note: Mounting

- 1) Fit the ball of the cable in the hole of the drive pulley ①, and wind the cable (4 times inside, 5 times outside); then, fix it in place using tape or the like. At this time, be sure that the cable fixing ② is on the inside. Next, engage the cable on the pulleys; then, engage one end of the cable on the hook ③ of the left side and the other end on the hook ④ of the right side. And temporarily fix the cable fixing plate ② in place to the No. 1 mirror base ⑤. After that, mount the reader upper frame.

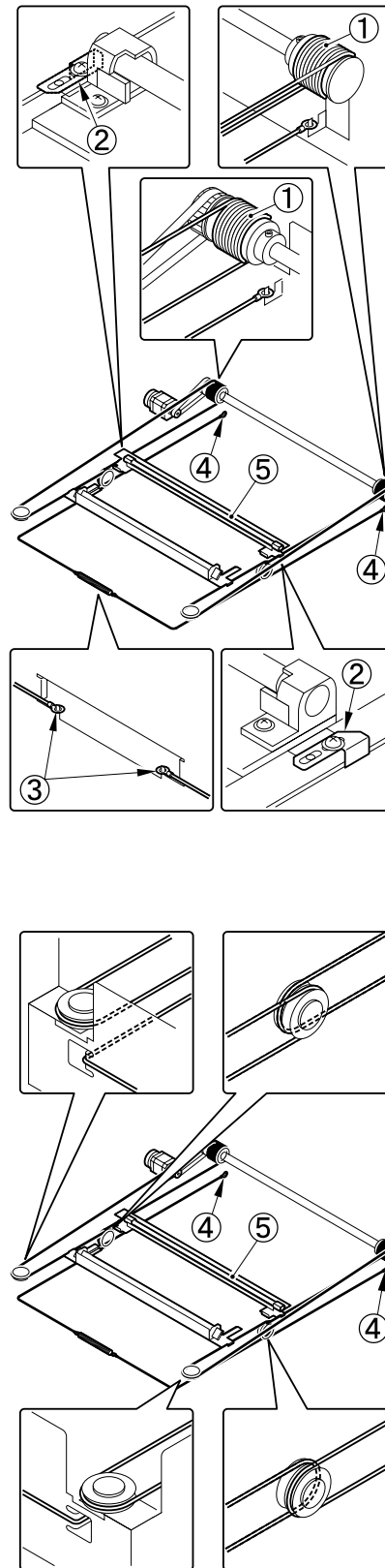


Figure 3-350

- 2) Set the pins at the rear of the mirror positioning tool (FY9-3009-040) in such a way so that the tool may be used for the machine.

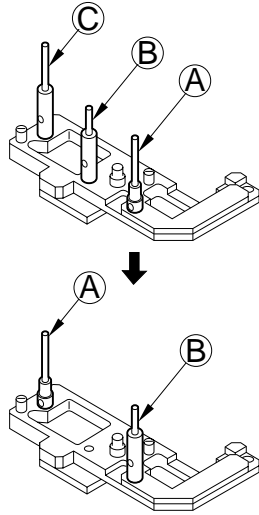


Figure 3-351

- 3) Set the pins at the front of the mirror positioning tool in such a way so that the tool may be used for the machine.

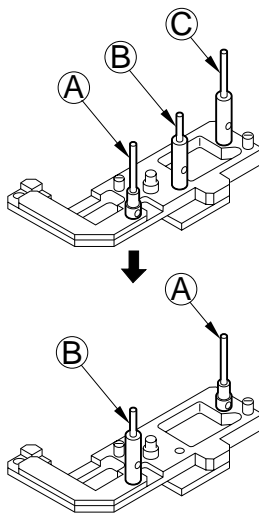


Figure 3-352

- 4) Fit the pins of the mirror positioning tool (front ② ; rear ③) of the mirror positioning tool into the holes ① of the No. 1 mirror base, No. 2 mirror base, and rail.

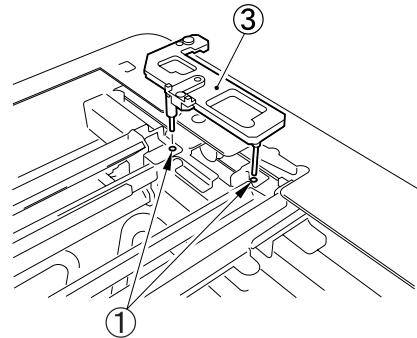
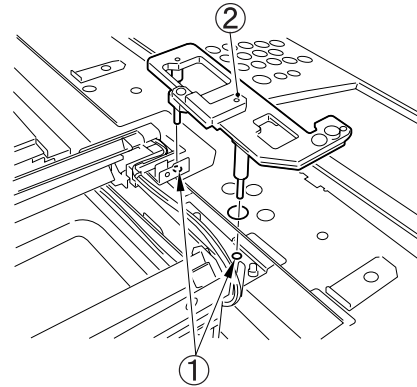


Figure 3-353

- 5) Fully secure the ends of the cable (you have temporarily fixed to the hooks of the reader frame previously).
- 6) Tighten the screws for cable fixing plates.
- 7) Detach the mirror positioning tool (front, rear).
- 8) Put back the parts by reversing the steps used to detach them.

IV. CONTROLLER

1. DC Controller PCB

- 1) Remove the controller.
- 2) Remove all the connectors connected to the DC controller PCB ①.
Remove the 12 screws ②, the 4 screws (M2.5) ③, and then remove the DC controller PCB.

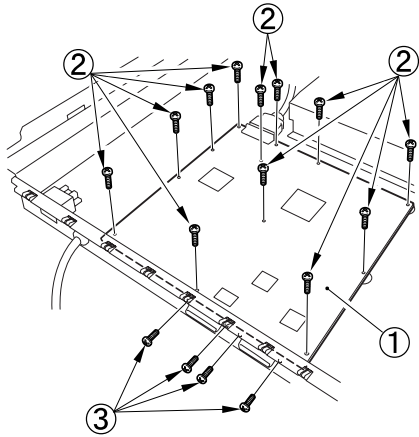


Figure 3-401

Note: Be careful not to get any screws caught between the PCB and the base plate.

2. Power Supply PCB

- 1) Remove the controller.
- 2) Remove the 2 screws (M3 × 5) ① and flip away the protection sheet ②.

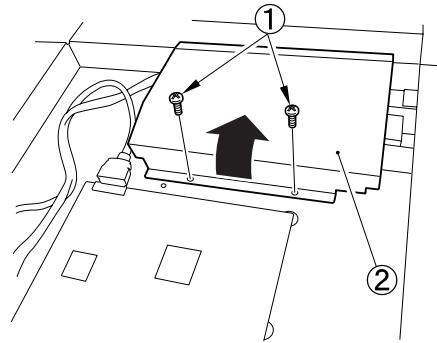


Figure 3-402

- 3) Remove all the connectors connected to the power supply PCB ①.
Remove the 6 screws ② and then remove the power supply PCB.

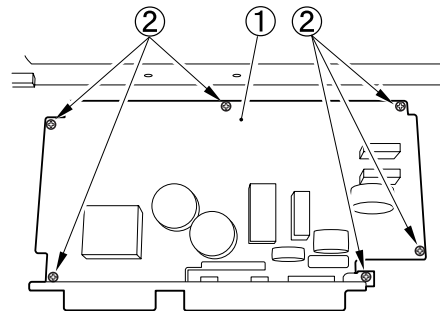


Figure 3-403

Note: Be careful not to get any screws caught between the PCB and the base plate.

3. Cooling Fan

- 1) Remove the controller.
- 2) Remove the 2 screws ① for the protection sheet.

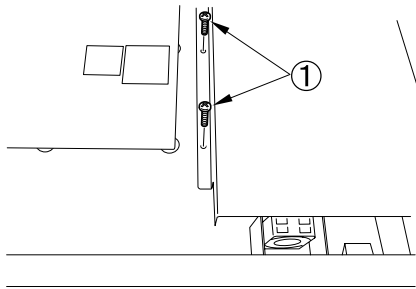


Figure 3-404

- 3) Remove the 2 screws ① and then remove the cooling fan (with mounting plate).

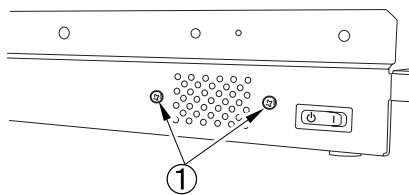


Figure 3-405

- 4) Remove the connector ① and the 2 screws ②, then remove the cooling fan ③.

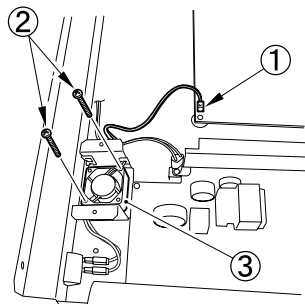


Figure 3-406

4. Operation Panel Assembly

- 1) Remove the 2 screws ① (1 each on the left and right).

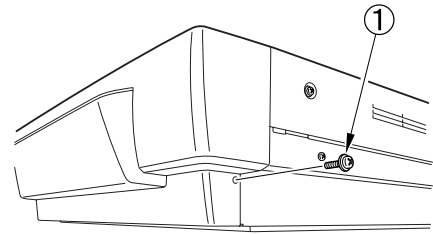


Figure 3-407

- 3) Remove the 2 fitting parts ① (marked with Δ) using a tool with a flat and thin tip, and detach the operation panel assembly ②.

Disconnect the connector that connects the operation panel assembly and controller.

Note: Take care to prevent damage to the platen glass.

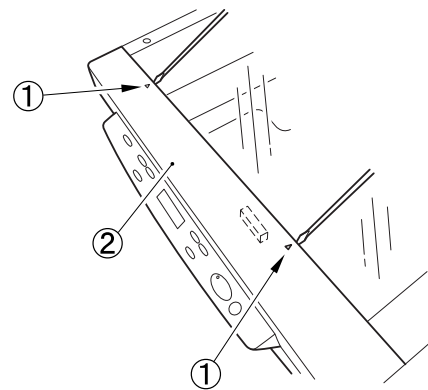


Figure 3-408

Note:When assembling the operation panel assembly, insert the pasted sheet ① under the platen glass.

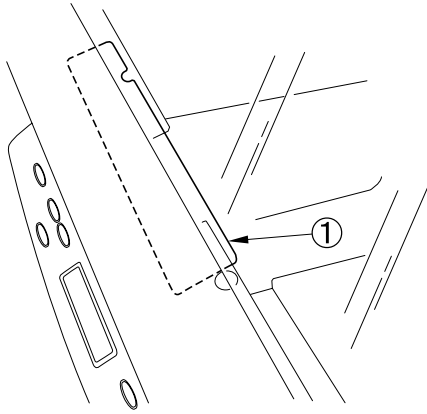


Figure 3-409

5. Operation Panel Cover/Panel Case Unit

- 1) Remove the operation panel assembly.
- 2) Remove the 5 screws ① (self-tapping screws), and then separate the operation panel cover ② and the panel case unit ③.

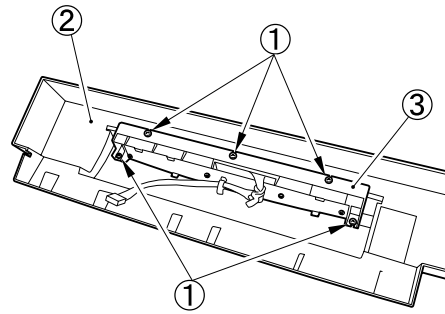


Figure 3-410

6. Switch PCB/LCD Unit

- 1) Remove the operation panel assembly.
- 2) Remove the panel case unit.
- 3) Remove the 4 screws ① (self-tapping screws), and then remove the assembly part ③ while pulling away the 2 hooks ②.

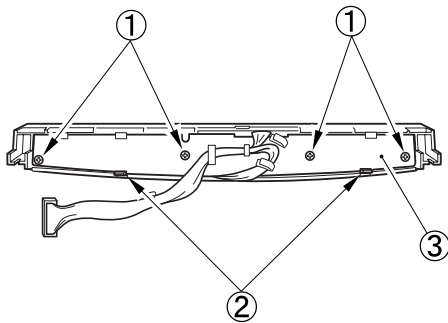


Figure 3-411

- 4) Remove the connector ① and separate the switch PCB ② and LCD unit ③.

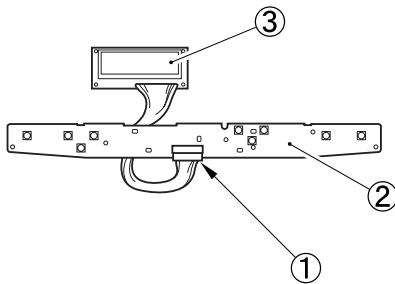


Figure 3-412

Note: Be careful not to lose the key tops embedded in the panel case.

CHAPTER 4

INSTALLATION & MAINTENANCE

I. SELECTION OF LOCATION.....4-1	IV. PERIODICALLY REPLACED PARTS .....4-8
II. UNPACKING AND INSTALLATION .....4-2	V. CONSUMABLE PARTS AND
III. STAMP UNIT INSTALLATION	CONSUMABLES.....4-9
PROCEDURE .....4-6	VI. PERIODIC SERVICING .....4-11

I. SELECTION OF LOCATION

The installation location of DR-7080C should meet the following requirements.

The service technician must personally inspect the user's premises before installing the DR-7080C.

- The power supply should be connected to an outlet capable of supplying the voltage shown on the rating plate plus or minus 5%. A grounding plug must be used.

Ground Items

- 1) Power outlet ground terminal
- 2) Lead that has been grounded for office equipment

- Do not install DR-7080C on a weak table, a tilted or unstable surface. The main body weighs approx. 34 kg.

- The theoretical temperature is between 15 to 30°C, and theoretical relative humidity between 25 to 80% RH. However, the temperature should be between 15 to 27.5°C, and relative humidity between 25 to 75% RH to guarantee performance.

In particular, do not install the machine near water faucets, humidifiers, hot water heaters, and refrigerators.

- DR-7080C should not be exposed to open flame, dust, ammonia or other corrosive gases, direct sunlight, intensive vibration or near machinery that generates electromagnetic waves.

* Prevent cigarette smoke from coming into direct contact with DR-7080C.

* At the places where installation of DR-7080C in the direct sunlight is unavoidable, a heavy curtain should be installed on the windows to protect DR-7080C.

- Maintain sufficient space around DR-7080C during operation and maintenance, and to allow ventilation.

* The rear panel has a power cord and ventilation holes, therefore do not press it against a wall.

* There must be a sufficient space on both sides of DR-7080C so that it can be held with hands when it is moved.

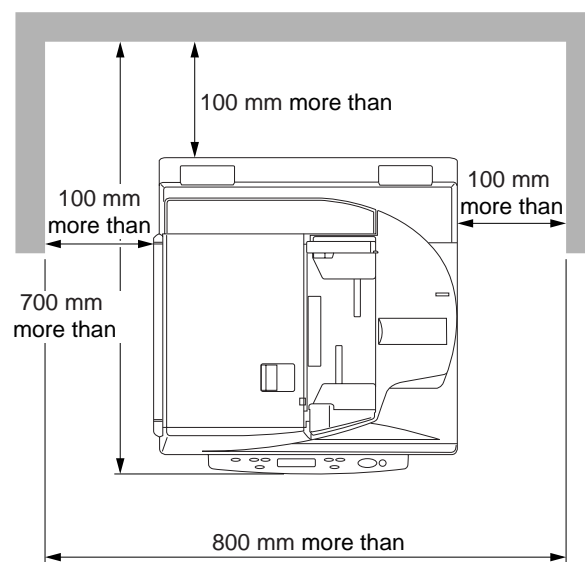
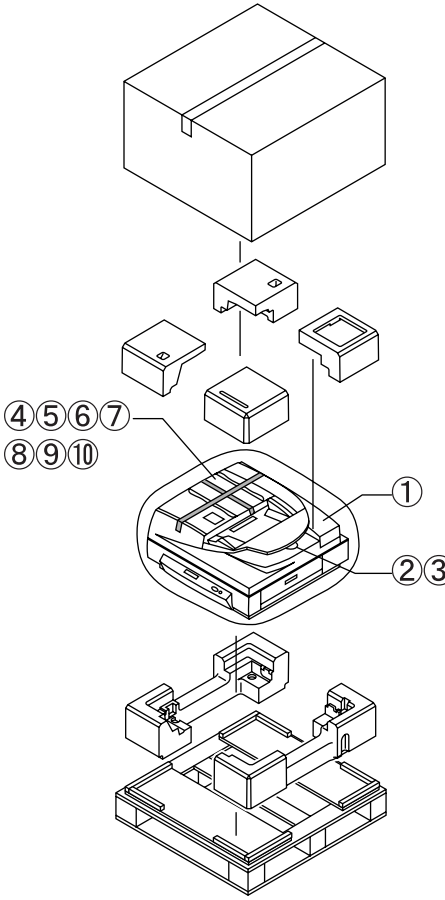


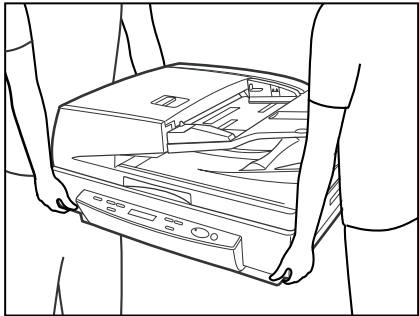
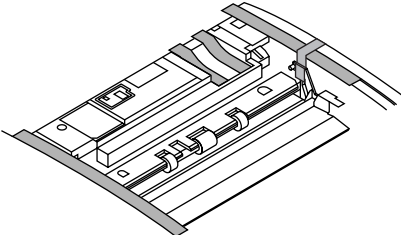
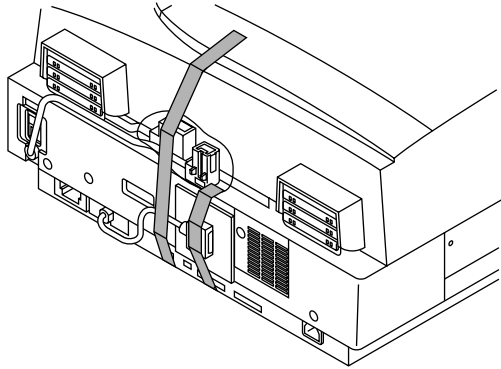
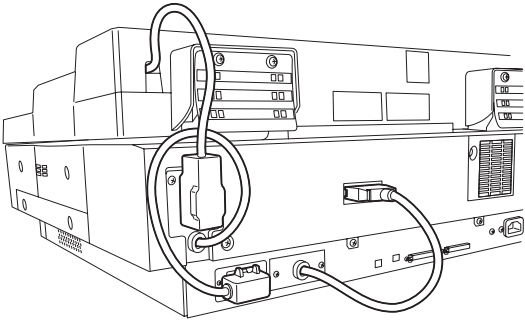
Figure 4-101

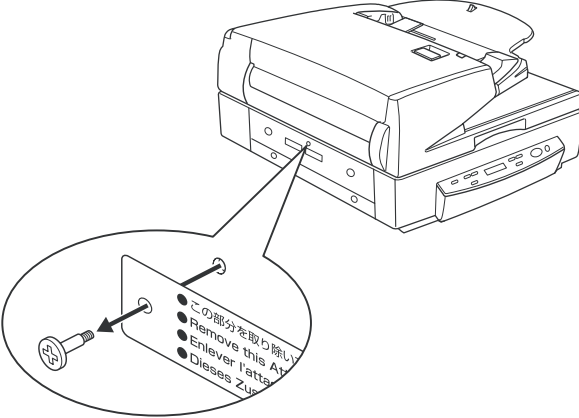
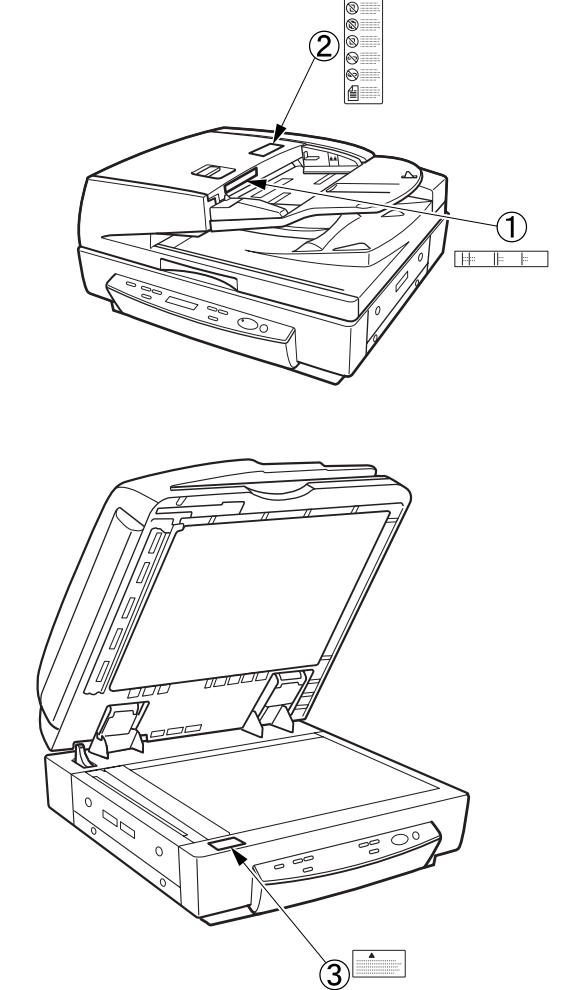
II. UNPACKING AND INSTALLATION

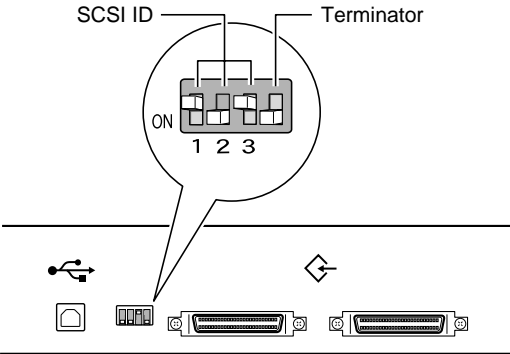
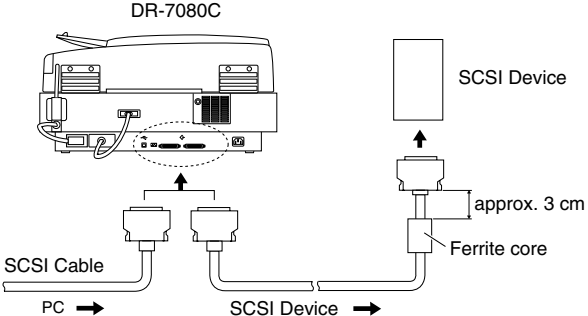
Water droplets sometimes form on the surface of metal parts when the machine is brought into a warm place from a cold place. This phenomenon is called "condensation." Using DR-7080C when condensation has occurred might cause machine trouble.

At least one hour should be allowed for DR-7080C to warm up to room temperature before the shipping container is opened after it has been moved to a warm place from a cold place.

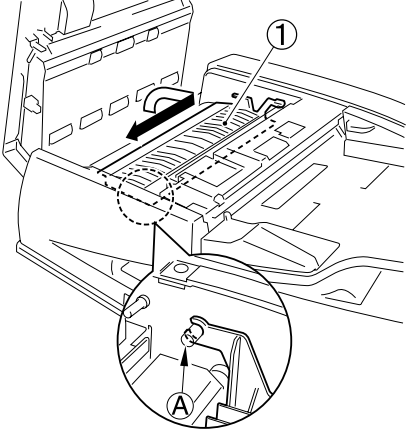
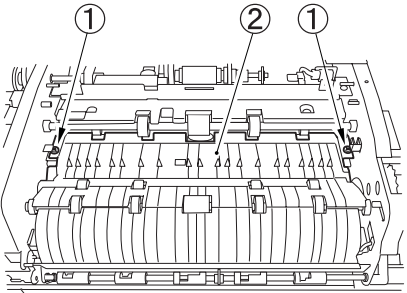
No.	Procedure	Check Items/Remarks
1	<p>Open the outer packaging box and take out the main body and other items packed with it. Two persons are required to take out the main body. Check that there are no missing items. The packed weight is approx. 47 kg, and the external dimensions are approx. 740 (W) × 780 (D) × 600 (H) mm.</p> <ul style="list-style-type: none"> ① Main body ② Power cord ③ Grounding cord (only for 100 V model) ④ Document size label ⑤ Cleaning caution label (only for 120 V model and 220-240 V models) ⑥ Ferrite core (only for 220-240 V models) ⑦ Quick reference guide ⑧ Setup disk (CD-ROM) ⑨ User manual ⑩ Warranty card (only for 100 V and 120 V models) <p>Note: The main body weighs approx. 34 kg. Hold it firmly from both sides with two persons. See the figure in step 2.</p>	

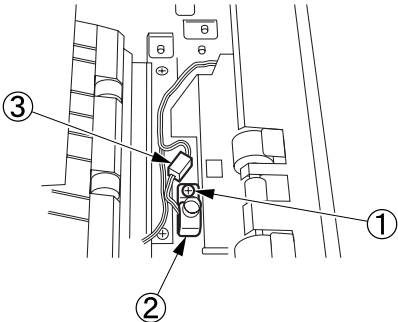
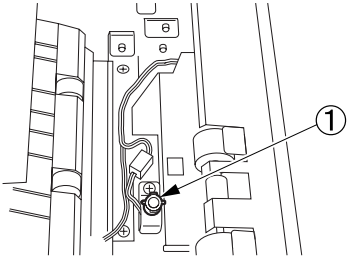
No.	Procedure	Check Items/Remarks
2	<p>Move the main body to the desired installation location.</p> <p>Note: When moving the main body, hold it firmly from both sides with two persons. A moveable cart may be used. The main body weighs approx. 34 kg.</p>	
3	<p>Peel off all the protective tapes securing the various parts.</p> <p>Remove the protective sheet of the platen glass.</p> <p>Check the covers for damage during shipping.</p>	<ul style="list-style-type: none"> • Inside the feeder  <ul style="list-style-type: none"> • Cable 
4	<p>Connect the units of the machine with cables.</p>	

No.	Procedure	Check Items/Remarks
5	<p>Remove the screw for transportation.</p> <p>Note: If the power is turned ON without removing this screw, "Please wait..." is kept displaying on the operation panel. Turn the power OFF, then remove the screw.</p> <p>When transporting DR-7080C, be sure to fix the mirror unit with the screw for transportation. Refer to the "SERVICE MODE" section for details.</p>	
6	<p>Attach labels as required.</p> <p>① Document size label Attach a label to the front as well so that a person in a wheelchair can adjust document size position easily. Select the best one of four types of labels.</p> <p>② Cleaning caution label (only 120 V model and 220-240 V models) Caution labels associated with glass staining in ADF mode. There are six kinds of labels. Select the one on which the language appropriate for the region is displayed.</p>	
7	<p>Connect the power cord.</p> <p>In the case of the 100 V model, connect also the grounding cord.</p>	

No.	Procedure	Check Items/Remarks																																				
8	<p>Connect the computer to DR-7080C using an SCSI cable or a USB cable. If the computer is connected to DR-7080C using an SCSI cable, change the SCSI ID and terminator settings as necessary. If DR-7080C is connected to the end of the daisy chain, turn the terminator ON.</p>	 <table border="1"> <thead> <tr> <th>SCSI ID</th> <th>SW1</th> <th>SW2</th> <th>SW3</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>OFF</td> <td>OFF</td> <td>OFF</td> </tr> <tr> <td>1</td> <td>ON</td> <td>OFF</td> <td>OFF</td> </tr> <tr> <td>2</td> <td>OFF</td> <td>ON</td> <td>OFF</td> </tr> <tr> <td>3</td> <td>ON</td> <td>ON</td> <td>OFF</td> </tr> <tr> <td>4</td> <td>OFF</td> <td>OFF</td> <td>ON</td> </tr> <tr> <td>5</td> <td>ON</td> <td>OFF</td> <td>ON</td> </tr> <tr> <td>6</td> <td>OFF</td> <td>ON</td> <td>ON</td> </tr> <tr> <td>7</td> <td>ON</td> <td>ON</td> <td>ON</td> </tr> </tbody> </table>	SCSI ID	SW1	SW2	SW3	0	OFF	OFF	OFF	1	ON	OFF	OFF	2	OFF	ON	OFF	3	ON	ON	OFF	4	OFF	OFF	ON	5	ON	OFF	ON	6	OFF	ON	ON	7	ON	ON	ON
SCSI ID	SW1	SW2	SW3																																			
0	OFF	OFF	OFF																																			
1	ON	OFF	OFF																																			
2	OFF	ON	OFF																																			
3	ON	ON	OFF																																			
4	OFF	OFF	ON																																			
5	ON	OFF	ON																																			
6	OFF	ON	ON																																			
7	ON	ON	ON																																			
9	<p>For 220-240 V models, if a SCSI device is connected to DR-7080C, attach a ferrite core to the cable on the SCSI device side. Note: This is to satisfy radio interference requirements for 220-240 V models.</p>																																					
10	<p>After turning DR-7080C ON, turn the computer ON. Note: Confirm that "Ready" is displayed on DR-7080C operation panel before the computer is turned ON.</p>																																					
11	<p>Install the driver and application software in the computer. Refer to the user manual for details.</p>																																					
12	<p>Check if DR-7080C operates normally. Refer to the user manual for details.</p>																																					

III. STAMP UNIT INSTALLATION PROCEDURE

No.	Procedure	Check Items/Remarks
1	Open the package, take out the contents, and check if there are any missing parts. ① Stamp solenoid ② Ink cartridge ③ Screw (BH, M3×6) ④ Installation procedure Note: The packed "Installation procedure" is a Japanese version for copiers. Follow the procedure instructions in this service manual for installation.	
2	Open the feeder cover.	
3	Open the opening guide ① slightly, remove part A, open the guide widely and slide it, remove the opposite fitting part and take out the guide.	
4	Remove the 2 screws ① and remove the reversal guide ②. Note: A cable is connected to the back of the reversal guide.	

No.	Procedure	Check Items/Remarks
5	Install the solenoid ② with the screw ① supplied and connect the connector ③.	 <p>The diagram shows a close-up of the solenoid assembly. A screw (1) is being used to secure the solenoid (2) to the frame. A connector (3) is shown being plugged into the solenoid's wiring harness.</p>
6	Insert the cartridge ① into the end of the solenoid. Note: Push the cartridge until it clicks.	 <p>The diagram shows the cartridge (1) being inserted into the end of the solenoid assembly.</p>
7	Return the reversal guide and the opening guide to their original positions and close the feeder cover.	
8	Enter the service mode and enable "Feeder>OPTION>STAMP-SW".	
9	Set the appropriate paper on the feeder and check operation.	

IV. PERIODICALLY REPLACED PARTS

There are no parts that must be replaced periodically. However, there are consumable parts and consumables.

Reference: Differences between periodically replaced parts, consumable parts, and consumables.

1. Periodically replaced parts are the parts which are usually assigned as service parts and shall be replaced by service technicians. However, if the storage period is limited, parts are assigned as commercially available products.
2. Consumable parts are the parts which are assigned as service parts and shall be replaced (by users or service technicians) when becoming no good.
3. Consumables are the parts which are assigned as commercially available products and shall be replaced (usually by users) when becoming no good.

V. CONSUMABLE PARTS AND CONSUMABLES

Consumable parts and consumables are listed below.

Have a service technician perform replacements of all parts except "stamp cartridge".

No.	Part Name	Part No.	Q'ty	Replacement Cycle	Remark
1	Pickup roller	MA2-7046	1	400,000 sheets	Unique parts, Note 2
2	Feeding roller	MA2-7047	1	400,000 sheets	Unique parts, Note 2
3	Pre-separation base	MF1-4291	1	400,000 sheets	Unique parts, Note 2
4	Separation pad holder	MF1-4292	1	400,000 sheets	Unique parts, Note 2
5	Separation pad holder B	MF1-4293	1	400,000 sheets	Unique parts, Note 2
6	Dust-collecting tape A	MA2-7048	1	400,000 sheets	Unique parts, Note 2
7	Dust-collecting tape B	MA2-7049	1	400,000 sheets	Unique parts, Note 2
8	Dust-collecting tape C	MA2-7050	1	400,000 sheets	Unique parts, Note 2
9	Dust-collecting tape D	MA2-7051	2	400,000 sheets	Unique parts, Note 2
10	Dust-collecting tape E	MA2-7052	5	400,000 sheets	Unique parts, Note 2
11	No. 1 registration roller	FC5-2994	1	1,000,000 sheets	
12	No. 2 registration roller	FC5-2995	1	1,000,000 sheets	
13	Read roller 1	FC5-2997	1	2,000,000 sheets	
14	Read roller 2	FC5-2998	1	2,000,000 sheets	
15	Platen roller	FC5-3027	1	2,000,000 sheets	Unique parts
16	Reversal lower roller	FC5-3010	1	2,000,000 sheets	
17	Delivery reversal upper roller	FC5-2996	1	2,000,000 sheets	
18	Pickup clutch	FK2-0209	1	2,000,000 sheets	
19	Pressure solenoid	FK2-0210	1	2,000,000 sheets	
20	Scanning lamp	FK2-0224	1	2,000,000 sheets	500 hours lit
21	Stamp solenoid	Note 3	1	300,000 stamps	Option
22	Stamp ink cartridge	Note 4	1	7,000 stamps	Option

Table 4-501

Note 1: The values on this list are approximations and may be changed according to empirical data.

Note 2: For the parts No. 1 to 10 with replacement cycles of 400,000 documents, "Exchange Kit" are also available instead of service parts. Their product code is "9664A002AA".

- Note 3:** The product name is "Stamp unit A1".
The code for Japan is "9011A001BA",
and the code for other regions is
"9664A001AA". It has a stamp ink
cartridge.
- Note 4:** The product name is "Stamp ink
cartridge B1". The code is
"6776001AA".

VI. PERIODIC SERVICING

1. Periodic Servicing List

Table 4-601 gives a periodic servicing list. The maintenance intervals are replacement cycles of consumable parts.

If paper dust or dirt attach to rollers or scrapers, black lines may appear on images. Therefore, clean rollers and scrapers carefully.

Note: Use only specified solvents/oils.

[△: Cleaning, ●: Replace, ☆: Lubricate, □: Adjust, ◎: Check]

Unit name	Location/Parts	Intervals			Remarks
		0.4 million	one million	two millions	
Feeder	Pickup roller	●			If replacement is unnecessary, clean as follows: wipe with cloth slightly moistened with water, then wipe dry.
	Feeding roller	●			
	Separation pad assembly (3 parts)	●			
	Dust-collecting tape	●			
	No. 1 registration roller	△	●		Wipe with cloth slightly moistened with water, then wipe dry.
	No. 2 registration roller	△	●		
	Read roller 1	△		●	
	Platen roller	△		●	
	Read roller 2	△		●	
	Reversal lower roller	△		●	
	Delivery reversal lower roller	△		●	
	Delivery reversal upper roller	△			
	No. 1 registration roller follower	△			
	No. 2 registration roller follower	△			
	Read roller follower 1	△			
	Platen roller follower 1	△			
Platen roller follower 2	△				

Figure 4-601a

Unit name	Location/Parts	Intervals			Remarks
		0.4 million	one million	two millions	
Feeder	Read roller follower 2	△			Wipe with cloth slightly moistened with water, then wipe dry.
	Reversal upper roller	△			
	Document pass parts of feed guide, etc.	△			
	Scraper of feed guide, etc.	△			
	Black pressure board	△			
	White sheet of platen parts	△			
	Post-separation sensor	△			Clean the detection part and prism with an air blower.
	Read sensor	△			
	Delivery reversal sensor	△			
	Pickup clutch			●	
	Pressure solenoid			●	
	Feeder height	□			See the "Chapter 5 IV. FEEDER ADJUSTMENT" for details.
Reader	Platen glass (Clean the back side as required.)	△			Wipe with cloth slightly moistened with water, then wipe dry.
	ADF reading glass (Clean the back side as required.)	△			Apply silicon oil to the "ADF reading glass" as required. See the other section for details.
	Scanning lamp			●	

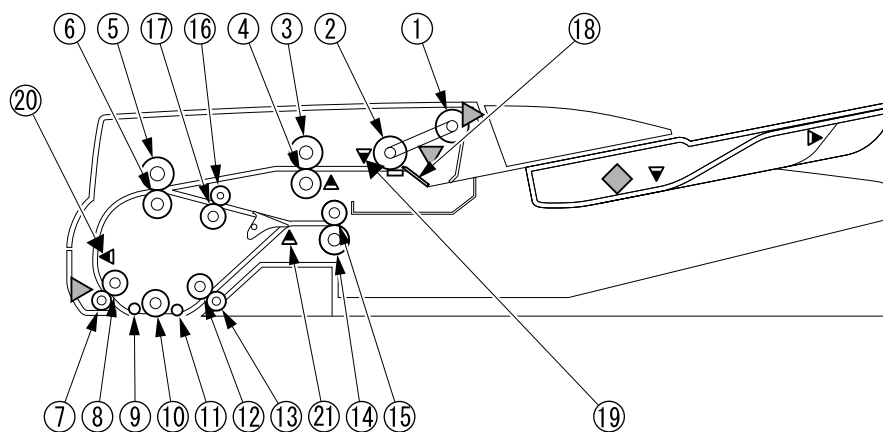
Figure 4-601b

Note 1: If stain is not removed, alcohol may be used.

Note 2: If parts are very dirty, "customer maintenance" should be instructed.

2. Layout Plan

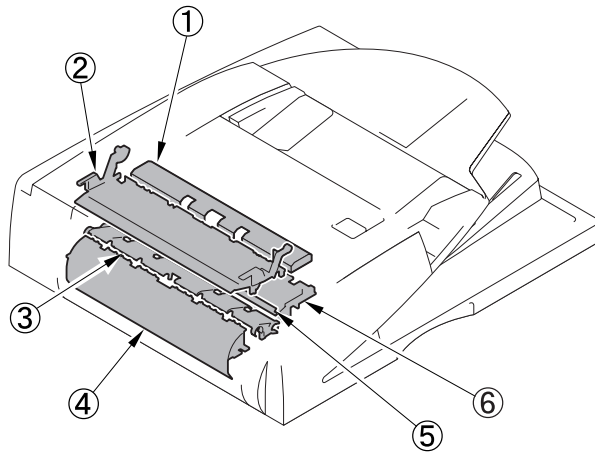
1) Rollers and sensors related



- | | |
|--------------------------------------|-------------------------------------|
| ① Pickup roller | ⑪ Platen roller follower 2 |
| ② Feeding roller | ⑫ Read roller 2 |
| ③ No. 1 registration roller follower | ⑬ Read roller 2 follower |
| ④ No. 1 registration roller | ⑭ Delivery reversal lower roller |
| ⑤ No. 2 registration roller follower | ⑮ Delivery reversal upper roller |
| ⑥ No. 2 registration roller | ⑯ Reversal upper roller |
| ⑦ Read roller 1 follower | ⑰ Reversal lower roller |
| ⑧ Read roller 1 | ⑱ Separation pad assembly (3 parts) |
| ⑨ Platen roller follower 1 | ⑲ Post-separation sensor |
| ⑩ Platen roller | ⑳ Read sensor |
| | ㉑ Delivery reversal sensor |

Figure 4-601

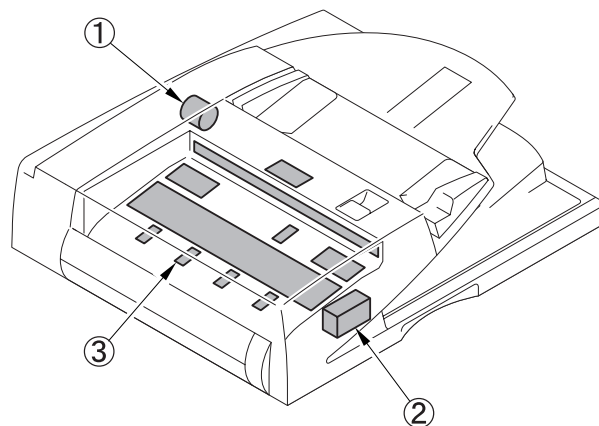
2) Feed guide related



- | | |
|--------------------------|--------------------|
| ① Pre-registration guide | ④ Feed guide |
| ② Opening guide | ⑤ Reversal flapper |
| ③ Reversal guide | ⑥ Delivery guide |

Figure 4-602

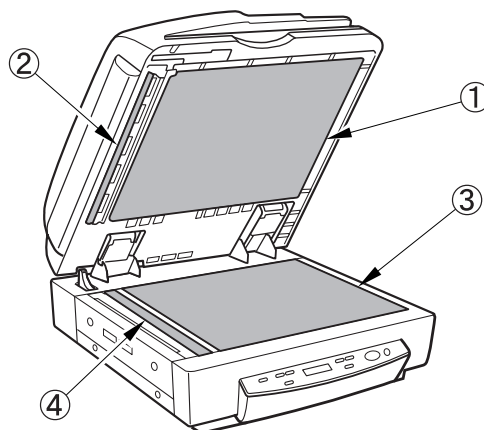
3) Dust-collection tape, clutch, solenoid
 Dust-collection tape is located inside the feeder cover.



- | |
|--|
| ① Pickup clutch |
| ② Lock solenoid |
| ③ Dust-collecting tape (Total 10 sheets) |

Figure 4-603

- 4) Black pressure board, platen glass, etc.



- ① Black pressure board
- ② White sheet
- ③ Platen glass
- ④ ADF reading glass

Figure 4-604

3. Silicon Oil Application

If the document does not move smoothly on the ADF reading glass, apply silicon oil to the ADF reading glass.

* Items to Prepare

- Silicone oil
(Tool number: FY9-6013-000)



Figure 4-605

- Cleaning tissue
(Tool number: FC5-4430-000)

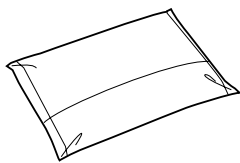


Figure 4-606

* Procedure

- 1) Wipe the ADF reading glass ① using cleaning tissue.

Note: Here, do not use silicone oil on the cleaning tissue.

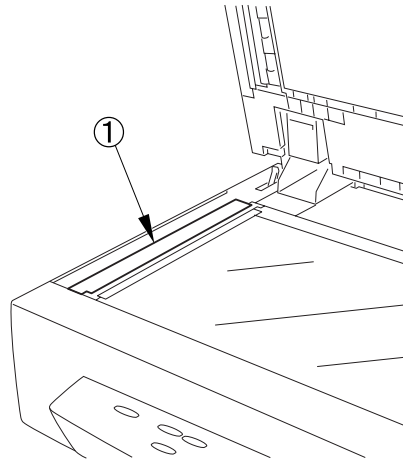


Figure 4-607

- 2) Squeeze the bottle ① of silicone oil 2 to 3 times to moisten cleaning tissue ② with silicone oil.

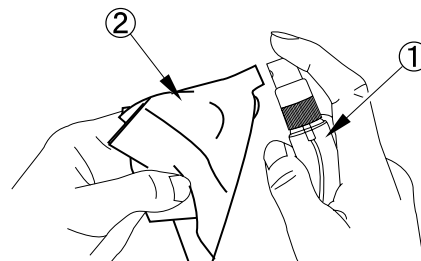


Figure 4-608

- 3) Apply the silicone oil on the reading glass with the cleaning tissue.
- 4) Dry wipe the reading glass with cleaning tissue (so as to even out the oil).

CHAPTER 5

TROUBLESHOOTING

I. ERROR DISPLAY AND REMEDY	5-1	V. AFTER REPLACING PARTS	5-46
II. SERVICE MODE.....	5-4	VI. OPERATION TROUBLESHOOTING	5-50
III. USER MODES	5-34	VII. IMAGE TROUBLESHOOTING.....	5-54
IV. FEEDER ADJUSTMENT.....	5-35		

I. ERROR DISPLAY AND REMEDY

1. Feeder

If a document jam occurs, the document set display of the feeder flashes. In this case, remove the jammed document.

2. DR-7080C Operation Panel

When an error occurs in the DR-7080C, an error message is displayed in the operation panel display. Refer to Table 5-101.

Users are to implement actions for all error messages other than service calls. However, if a user implemented action does not handle the problem, a service technician is to service the DR-7080C.

No.	Display	Cause → Action
1	C o v e r O p e n 0 1	The feeder cover is open. → Close the feeder cover.
2	C o v e r O p e n 0 2	The feeder is open. → Close the feeder.
3	F e e d i n g M i s s	Pickup error → Check the document and try again. If the document does not go through the ADF, scan it using the FB.
4	J a m x x x x	Jam → Handle the jam and remove the document. Note: "XXXX" indicates the type of jam. For details, refer to Table 5-102.
5	S e n d f a i l e d	Transmission error in job function → Check the settings with a job registration tool and try again.
6	D e t e c t M i x D o c .	Different size documents have been detected. → After checking the front and back sides of the delivered document, set the different size documents mode to ON and perform the operation again.
7	E r r o r E x x x x x x x	An anomaly occurred inside the main unit (service call). → Reset the machine. If the error is still displayed, switch the power OFF. → A service technician should take measures. For details, refer to Table 5-103.
8	W a i t . .	An anomaly occurred inside the main unit. → Same action as the above service call.
	Display does not change from above message to "Ready".	

Table 5-101

Code	Cause	Code	Cause
JAM 0001	Document is not reached to post-separation sensor	JAM 0067	1st document is not reached to registration sensor
JAM 0002	Document is stagnated in post-separation sensor	JAM 0068	1st document is stagnated in registration sensor
JAM 0003	Document is not reached to registration sensor	JAM 0069	1st document is not reached to read sensor
JAM 0004	Document is stagnated in registration sensor	JAM 0070	1st document is stagnated in read sensor
JAM 0005	Document is not reached to read sensor	JAM 0071	1st document is not reached to delivery reversal sensor
JAM 0006	Document is stagnated in read sensor	JAM 0072	1st document is stagnated in delivery reversal sensor
JAM 0007	Document is not reached to delivery reversal sensor	JAM 0113	Timing anomaly
JAM 0008	Document is stagnated in delivery reversal sensor	JAM 0115	Pressure sensor anomaly
JAM 0066	1st document is stagnated in post-separation sensor	JAM 0144	Feeder open
		JAM 0146	Feeder cover open
		JAM 0148	Initial stagnation
		JAM 0149	Pickup error

Table 5-102

Code	Cause	Problem location
Error E2020001	Scanner HP sensor detects positioning forward error	Scanner motor, scanner HP sensor related
Error E2020002	Scanner HP sensor detects positioning backward error	
Error E2250001	Light intensity at power ON below reference level	Scanning lamp related
Error E2270001	24V port OFF at power ON	24 VDC power supply related
Error E2270002	24V port OFF at job start	
Error E2270003	24V port OFF at job end	
Error E2270004	24V port OFF during load driving	
Error E2480001	Error at EEPROM power ON	Reader controller PCB related
Error E2480002	Error during EEPROM write	
Error E2480003	Error during EEPROM read	
Error E4000001	Feeder communication check-sum error	Feeder and reader connection related, ADF driver PCB related
Error E4000002	Feeder communication status error	
Error E4000003	Feeder communication receive interrupt error	
Error E4130001	Feeder pressure motor HP sensor open error	Pressure motor, pressure HP sensor related
Error E4130002	Feeder pressure motor HP sensor close error	
Error E7430000	Reader communication error	Reader and controller connection related
Error E3000000	Controller cooling fan error	Cooling fan related

Table 5-103

3. Computer

Error messages are displayed to the display connected to the computer. The content of these messages vary according to the software that is used.

The majority of error messages are related to user operation errors or document jams. Moreover, they may duplicate error messages displayed to the operation panel.

The user is to implement handling actions as directed in the error message. However, if the problem is not resolved as the result of user handling, it must be handled by a service technician.

Figure 5-101 shows the main error messages displayed when using "CapturePerfect 2.0. "

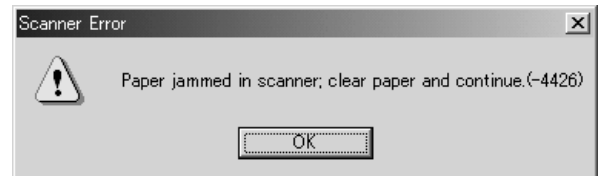


Figure 5-101

II. SERVICE MODE

1. Outline

The service mode of the DR-7080C can be executed by installing the service mode software on the computer for service. The service mode software is located in the setup disk provided with the DR-7080C.

The system conditions for the computer to be used are the same as those described in the user manual. The lower the CPU performance or memory capacity, the longer the processing time, but the service mode can still be used.

Figure 5-201 shows the service screen.



Figure 5-201

The service screen displays the buttons for selecting the various modes. Each service mode is started from this screen.

- 1) Copier
Service mode related to reader
- 2) Feeder
Service mode related to feeder
- 3) Counter Set
Counter change
- 4) Panel Check
Operation panel check
- 5) Controller Firm Load
Controller firmware change
- 6) Reader Firm Load
Reader and feeder firmware change
- 7) Mirror
To move the mirror unit to a fixed position for transport.

In addition to the above buttons, counters and the version information are also displayed.

2. Installation Procedure

The service mode software installation procedure is described below. Do not install the service mode software on the user's computer.

- 1) Power ON the computer for service and start up the OS (Windows).
- 2) Set the setup disk supplied with the DR-7080C.
- 3) Copy the "\Driver\Tools" folder in the setup disk to one of the drives of the computer for service.

Note: To check the operation of the DR-7080C with the service computer, the required software must be installed. For how to install the software provided with the DR-7080C, refer to the user manual.

However, for the specifications, such as the maximum number of documents that can be scanned at one time, see the computer system conditions described in the user manual.

3. Starting Up and Exiting Service Mode

The procedure for starting up the service mode is described below.

- 1) Connect the computer with the DR-7080C using a SCSI cable or a USB cable.
- 2) After powering ON the DR-7080C, power ON the computer.
- 3) Check if the operation panel of the DR-7080C has changed to "Ready".
- 4) Open the installed "Tools" folder and start up the "QPTool.exe" file. (See Figure 5-202.)
- 5) The password screen is displayed, so after inputting "qp", select [OK]. (See Figure 5-203.)
- 6) The service screen is displayed.

To exit the service mode, select [OK] in the service screen.



Figure 5-202

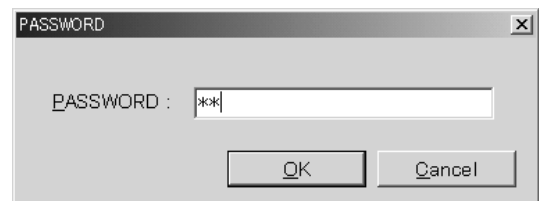


Figure 5-203

Note: After the DR-7080C is connected to the computer and the computer is powered ON for the first time, a screen requesting installation of "New Hardware" or a "Device Driver" is displayed. In this case, perform the following procedure.

- a) If only the service mode software has been installed, first click [Cancel] to close the screen.
- b) If the driver provided with the DR-7080C has been installed, perform the actions indicated in the user manual.

Note: Before starting the service mode file: "QPTool.exe", quit all scanner applications, such as "CapturePerfect". Also, start QPTool.exe only after checking that the operation panel of the DR-7080C displays "Ready". If scanning is attempted before "Ready" or while "Stand-by Mode" is displayed, software hangup will occur.

Note: To execute the service mode with the user's computer, start up "\Driver\Tools\QPTool.exe" on the setup disk supplied with the DR-7080C. Do not copy this program to the user's computer. Do not let the user know the folder name and password to be used.

Note: The version screen is displayed by right-clicking the title bar of the service screen and selecting "About Service Tool". Alternatively, the version can also be displayed in "QPTool.exe" properties.

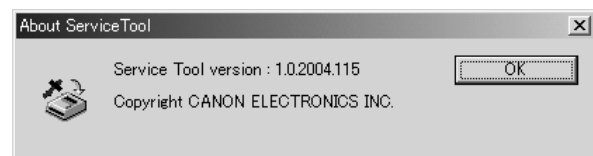


Figure 5-204

4. Service Mode List

There is a large number of service mode items related to the reader and feeder, as listed below.

For more details about the contents, operation method, etc., refer to the relevant sections.

Configuration/Name		Description	
Copier		Service mode related to reader	
|	Display	Control display mode	
	| CCD	Display of measurement values related to CCD	
	| TARGET-B	BLUE shading target value (4-digit display in decimal)	
	| TARGET-G	GREEN shading target value (4-digit display in decimal)	
	| TARGET-R	RED shading target value (4-digit display in decimal)	
	| GAIN-OB	Gain level value of blue odd bits of CCD (for color)	
	| GAIN-OG	Gain level value of green odd bits of CCD (for color)	
	| GAIN-OR	Gain level value of red odd bits of CCD (for color)	
	| GAIN-EB	Gain level value of blue even bits of CCD (for color)	
	| GAIN-EG	Gain level value of green even bits of CCD (for color)	
	| GAIN-ER	Gain level value of red even bits of CCD (for color)	
	I/O		PCB I/O port display mode
	| R-CON	I/O port of reader controller PCB	
	| Port1	Port 1, 8 bits	
	| Port2	Port 2, 8 bits	
	| Port3	Port 3, 8 bits	
	| Port4	Port 4, 8 bits	
	| Port5	Port 5, 8 bits	
	| Port6	Port 6, 8 bits	
| Port7	Port 7, 8 bits		
| Port8	Port 8, 8 bits		
| Port9	Port 9, 8 bits		
| FEEDER	I/O port of ADF driver PCB		
| Port1	Port 1, 8 bits		
| Port2	Port 2, 8 bits		
| Port3	Port 3, 8 bits		
| Port4	Port 4, 8 bits		
| Port5	Port 5, 8 bits		
| Port6	Port 6, 8 bits		
| Port7	Port 7, 8 bits		
| Port8	Port 8, 8 bits		
| Port9	Port 9, 8 bits		
| Port10	Port 10, 8 bits		
| Port11	Port 11, 8 bits		

Table 5-201a

Configuration/Name		Description
	Adjust	Adjustment mode (Changes are enabled by power RESET of machine.)
	ADJ-XY	Image scanning start position adjustment
	ADJ-X	Image scanning start position adjustment (X = sub-scan direction) during the FB mode. Adjustment range: 1 to 100 (Default: 20), 0.1 mm displacement when value is changed by 1.
	ADJ-Y	Image scanning start position adjustment (Y = main-scan direction) during the FB mode. Adjustment range: 47 to 131 (Default: 90), 0.1 mm displacement when value is changed by 1.
	ADJ-S	Shading position manual adjustment Note: No adjustment in market required. Used during manual adjustment when white lines or black lines caused by dust on the white plate occur, regardless of automatic adjustment. Adjustment range: 20 to 200 (Default: 50), 0.1 mm displacement when value is changed by 1.
	ADJ-Y-DF	Image scanning start position adjustment (Y = main-scan direction) during the ADF mode. Adjustment range: 21 to 106 (Default: 53), 0.1 mm displacement when value is changed by 1.
	STRD-POS	Image scanning start position adjustment (X = sub-scan direction) during the ADF mode. Adjustment range: 1 to 200 (Default: 100), 0.1 mm displacement when value is changed by 1.
	CCD	CCD, shading related adjustment
	W-PLT-X	X signal data of white plate. Perform setting again after replacing platen glass, reader controller PCB. Setting range: 1 to 9999 (Default: 8271)
	W-PLT-Y	Y signal data of white plate. Perform setting again after replacing platen glass, reader controller PCB. Setting range: 1 to 9999 (Default: 8735)
	W-PLT-Z	Z signal data of white plate. Perform setting again after replacing platen glass, reader controller PCB. Setting range: 1 to 9999 (Default: 9418)
	CCDU-RG	Color shift correction value in sub-scan direction between CCD unit dependent RG. Also set when replacing the CCD unit, the reader controller PCB. Setting range: -9 to 9 (Default: 0)
	CCDU-GB	Color shift correction value in sub-scan direction between CCD unit dependent GB. Also set when replacing the CCD unit, the reader controller PCB. Setting range: -9 to 9 (Default: 0)

Table 5-201b

Configuration/Name	Description
FCCDU-RG	Color shift correction value in sub-scan direction between CCD unit dependent RG at plant shipment. Perform setting again after replacing reader controller PCB. Note: No adjustment in market required. Adjustment range: -9 to 9 (Default: 0)
FCCDU-GB	Color shift correction value in sub-scan direction between CCD unit dependent GB at plant shipment. Perform setting again after replacing reader controller PCB. Note: No adjustment in market required. Adjustment range: -9 to 9 (Default: 0)
50-RG	Color shift (R-G) offset value display during FB mode/50% scanning Setting range: -256 to 256 (Default: 0)
50-GB	Color shift (G-B) offset value display during FB mode/50% scanning Setting range: -256 to 256 (Default: 0)
50DF-RG	Color shift (R-G) offset value display during ADF mode/50% scanning Setting range: -256 to 256 (Default: 0)
50DF-GB	Color shift (G-B) offset value display during ADF mode/50% scanning Setting range: -256 to 256 (Default: 0)
100-RG	Color shift (R-G) offset value display during FB mode/100% scanning Setting range: -256 to 256 (Default: 0)
100-GB	Color shift (G-B) offset value display during FB mode/100% scanning Setting range: -256 to 256 (Default: 0)
100DF-RG	Color shift (R-G) offset value display during ADF mode/100% scanning Setting range: -256 to 256 (Default: 0)
100DF-GB	Color shift (G-B) offset value display during ADF mode/100% scanning Setting range: -256 to 256 (Default: 0)
DFTAR-R	Red shading target value display during the ADF mode Setting range: 1 to 2047 (Default: 1159)
DFTAR-G	Green shading target value display during the ADF mode Setting range: 1 to 2047 (Default: 1189)
DFTAR-B	Blue shading target value display during the ADF mode Setting range: 1 to 2047 (Default: 1209)

Table 5-201c

Configuration/Name		Description
	PASCAL	Automatic gradation correction control adjustment
	OFST-P-Y	Setting of high-density parts and Y target value during automatic gradation correction. Perform setting again after replacing reader controller PCB. Note: Adjustments other than above resetting not required in market. Adjustment range: -128 to 128 (Default: 0)
	OFST-P-M	Setting of high-density parts and M target value during automatic gradation correction. Perform setting again after replacing reader controller PCB. Note: Adjustments other than above resetting not required in market. Adjustment range: -128 to 128 (Default: 0)
	OFST-P-C	Setting of high-density parts and C target value during automatic gradation correction. Perform setting again after replacing reader controller PCB. Note: Adjustments other than above resetting not required in market. Adjustment range: -128 to 128 (Default: 0)
	OFST-P-K	Setting of high-density parts and K target value during automatic gradation correction. Perform setting again after replacing reader controller PCB. Note: Adjustments other than above resetting not required in market. Adjustment range: -128 to 128 (Default: 0)
Function		Operation/inspection mode
	CCD	CCD/shading related automatic adjustment
	DF-WLVL1	White level adjustment during the FB mode. Scan white paper on the platen glass and adjust white level. Execute after replacing reader controller PCB.
	DF-WLVL2	White level adjustment during the ADF mode Scan white paper set on the document pickup tray and adjust white level. Execute after replacing reader controller PCB.
CLEAR		Clears RAM/OPTION
	R-CON	Clears RAM of reader controller PCB. Execute after replacing reader controller PCB.
	OPTION	Clears option backup data. Note: This function need not be executed for DR-7080C.
MISC-R		Service mode related to other readers
	SCANLAMP	Scanning lamp lighting check When this function is executed, the scanning lamp lights for 3 seconds.

Table 5-201d

Configuration/Name		Description
Option		Specification setting mode (Changes are enabled by power RESET of machine.)
BODY		Settings related to selection of specifications related to machine
	SENS-CNF	Selection of location of document detection sensor Note: No change required in DR-7080C. AB system/Inch system (Default: AB system)
	MODELSZ2	Global support through document detection during FB mode (AB/INCH mixed detection) Note: No change required in DR-7080C. None/Detect (Default: None)
	SZDT-SW	Switching from CCD detection to photo size detection during document size detection in the FB mode. Note: No change required in DR-7080C. None/Detect (Default: None)
	SPECK-SW	Dust detection timing switch Switch the method of setting value for detecting white plate dust at each job, in order to prevent image degradation (lines) due to dust that adheres to the white plate following startup. Note: No change required in DR-7080C. None/Detect (Default: None)
	DFDST-L1	Adjustment of dust detection level when using ADF (sheet-to-sheet correction) 0: Switches OFF this mode. Note: No adjustment in market required. Setting range: 0 to 255 (Default: 0)
	DFDST-L2	Adjustment of dust detection level when using ADF (detection after job) 0: Switches OFF this mode. Note: No adjustment in market required. Setting range: 0 to 255 (Default: 0)
USER		Selection of main unit related specifications related to the user mode
	SIZE-DET	Selects the document size detection function during the FB mode. Note: No execution required in DR-7080C. None/Detect (Default: None)

Table 5-201e

Configuration/Name		Description
Feeder		Service mode related to feeder
DISPLAY		Control display mode
	TRY-WIDE	Amount of document guide opening (Unit: 0.1 mm) Displays the distance between slides detecting the document width of the document pickup tray (distance between 2 points)
	SPSN-LMN	Post-separation sensor light intensity Displays the light emission voltage of the post-separation sensor.
	SPSN-RCV	Post-separation sensor light receiving intensity Displays the light receiving voltage of the post-separation sensor.
	RDSN-LMN	Read sensor light emission intensity Displays the light emission voltage for the read sensor.
	RDSN-RCV	Read sensor light receiving intensity Displays the light receiving intensity of the read sensor.
	DRSN-LMN	Delivery reversal sensor light emission intensity Displays the light emission voltage of the delivery reversal sensor.
	DRSN- RCV	Delivery reversal sensor light reception intensity Displays the light reception voltage of the delivery reversal sensor.
ADJUST		Adjustment mode
	DOCST	Document stop position adjustment during the ADF mode (leading edge registration adjustment) The image reading timing is delayed when a larger value is set. Perform setting again after replacing reader controller PCB. Note: Adjustments other than above resetting not required in market. Adjustment range: -50 to 50 (Unit: 0.1 mm)
	LA-SPEED	Document feed speed adjustment during the ADF mode (magnification adjustment) The speed slows down when a larger value is set. (The image becomes smaller.) Perform setting again after replacing reader controller PCB. Note: Adjustments other than above resetting not required in market. Adjustment range: -30 to 30 (Unit: 0.1%)
FUNCTION		Various automatic adjustments, operation check, cleaning mode
	SENS-INT	Adjustment of sensitivity of various feeder sensors (post-separation, read, delivery reversal sensors) Execute after replacing various sensors, and reader controller PCB.
	MTR-ON	Motor operation check Operates the selected motor. Motor selection is done with [MTR-CHK].
	MTR-CHK	Motor selection 0: Pickup motor 1: Feed motor 2: Delivery reversal motor 3: Pressure motor
	SL-ON	Solenoid operation check Operates the selected solenoid. Solenoid selection is done with [SL-CHK].
	SL-CHK	Solenoid selection 0: Pressure solenoid 1: Stamp solenoid

Table 5-201f

Configuration/Name		Description
	FEED-ON	Feed operation check Executes the selected feed mode. Feed mode selection is done with [FEED-CHK].
	FEED-CHK	Feed mode selection 0: Simplex feed 1: Duplex feed 2: Simplex feed with stamp 3: Duplex feed with stamp
	FAN-ON	Fan operation check Operates the selected fan. Fan selection is done with [FAN-CHK].
	FAN-CHK	Fan selection 0: Cooling fan of feeder
	CL-ON	Clutch operation check Operates the selected clutch. Clutch selection is done with [CL-CHK].
	CL-CHK	Clutch selection 0: Pickup clutch
	TRY-A4	Automatic adjustment of paper width detection reference point 1 in document pickup tray (A4) Records a value when A4 paper is set in document pickup tray. Then, following execution of this item, execute TRY-A5R. Execute after replacing reader controller PCB.
	TRY-A5R	Automatic adjustment of paper width detection reference point 2 in document pickup tray (A5R) Records a value when A5R paper is set in document pickup tray. Execute after replacing reader controller PCB.
	TRY-LTR	Automatic adjustment of paper width detection reference point 1 in document pickup tray (LTR) Records a value when LTR paper is set in document pickup tray. Then, following execution of this item, execute TRY-LTRR. Execute after replacing reader controller PCB.
	TRY-LTRR	Automatic adjustment of paper width detection reference point 2 in document pickup tray (LTRR) Records a value when LTRR paper is set in document pickup tray. Execute after replacing reader controller PCB.
	ROLL-CLN	Roller cleaning mode This mode automatically drives the drive rollers with motors. When cleaning the rollers, use this mode instead of turning the rollers by hand. However, the pickup, feed, and reversal rollers are not rotated in this mode.
	OPTION	Specification setting using feeder function
	LS-DBL	ON/OFF switch for high-speed duplex mode The OFF mode is provided to support users who use a document not suitable for the high-speed duplex mode. ON/OFF (Default: ON)
	STAMP-SW	Stamp option installation setting Set when stamp solenoid is attached as option. None/Stamp (Default: None)

Table 5-201g

5. Copier

1) Screen

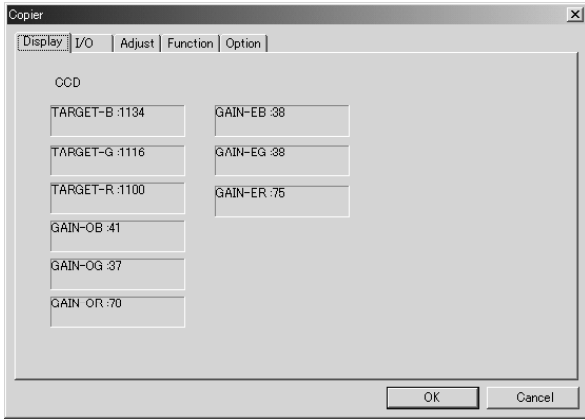


Figure 5-205a

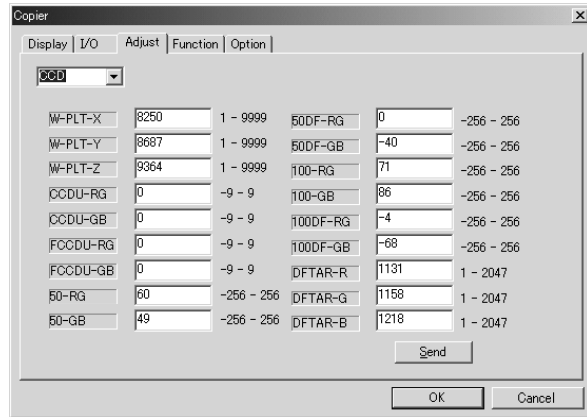


Figure 5-205d

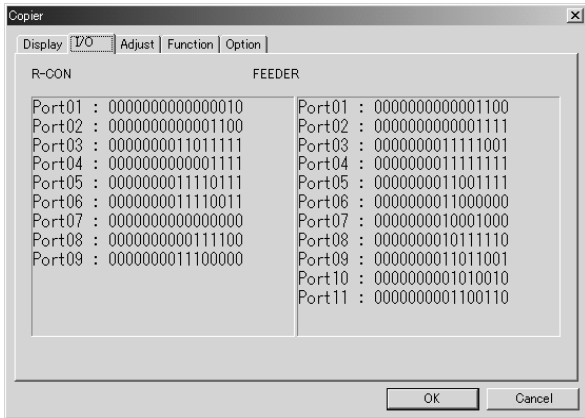


Figure 5-205b

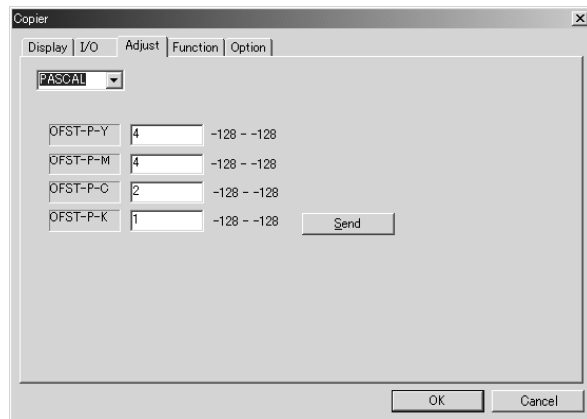


Figure 5-205e



Figure 5-205c

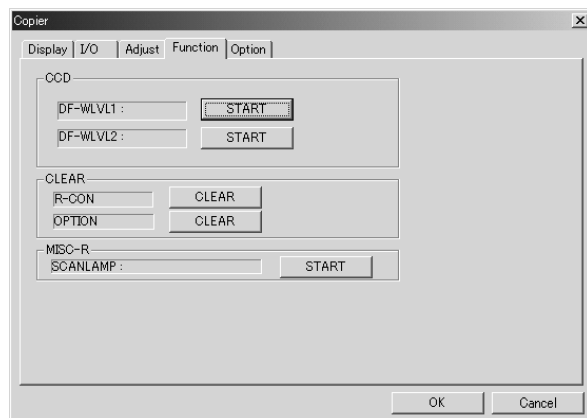


Figure 5-205f

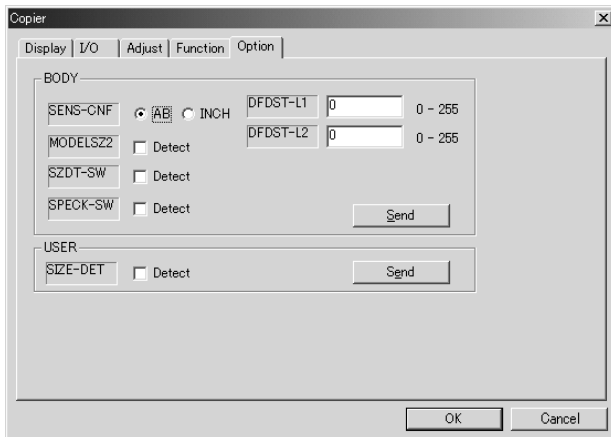


Figure 5-205g

2) Copier>I/O

This operation indicates the I/O port statuses of the reader controller PCB and ADF driver PCB.

Basically, this mode is for factory/design, but since the sensor operation status, etc., of the ADF driver PCB marked [FEEDER] is known, these contents are indicated.

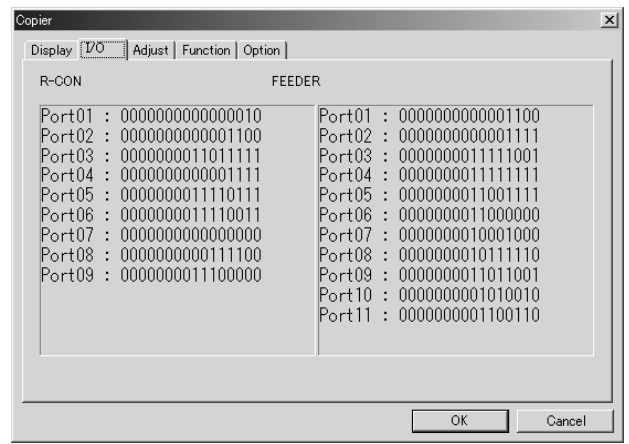
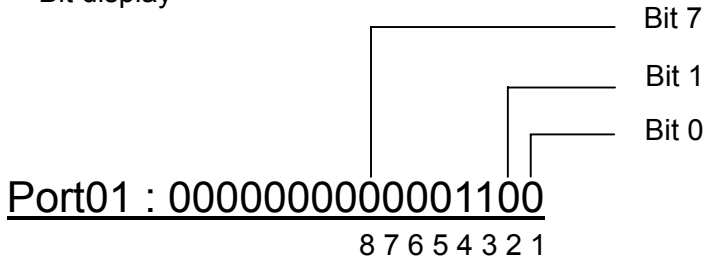


Figure 5-206

* Bit display



Port	Bit	Name	Remarks
P1	0	Read sensor	0: Document supplied
	1	Registration sensor	0: Document supplied
	2	Delivery reversal sensor	0: Document supplied
	3	ADF opening sensor	0: Opened
	4	Unused	
	5	Unused	
	6	Unused	
	7	Unused	
P2	0	Delivery reversal motor current 1	
	1	Delivery reversal motor current 2	
	2	Pressure motor current setting 1	
	3	Pressure motor current setting 2	
	4	Stamp solenoid drive	1: ON
	5	Clutch drive	1: ON
	6	Document detection LED	1: ON
	7	Cooling fan drive	1: ON
P3	0	Pickup motor current cut	
	1	Read motor current cut	
	2	Pressure motor current setting	
	3	Read motor mode setting	
	4	Read motor current setting 1	
	5	Read motor current setting 2	
	6	Pickup motor current setting 1	
	7	Pickup motor current setting 2	

Port	Bit	Name	Remarks
P4	0	Feeder cover sensor	0: Opened
	1	Unused	
	2	Unused	
	3	Unused	
	4	Unused	
	5	Unused	
	6	Unused	
P5	7	Stamp	1: Supplied
	0	Unused	
	1	Pressure HP sensor	1: Released
	2	Delivery reversal sensor	0: Document supplied
	3	Post-separation sensor	0: Document supplied
	4	LGL sensor	1: Document supplied
	5	A4R/LTRR sensor	1: AB system
6	Unused		
P6-P11	7	Document set sensor	0: Document supplied
	P6	0-7	For design
	P7	0-7	For design
	P8	0-7	For design
	P9	0-7	For design
	P10	0-7	For design
	P11	0-7	For design

Table 5-202

3) Copier>Adjust>ADJ-XY

This mode adjusts the image read start position. The DR-7080C having been adjusted at factory, it can basically be used as is in the market, but if the reader controller PCB is replaced, the DR-7080C must be reset to the factory setting values. Moreover, this adjustment is used if for some reason, such as following disassembly and assembly, read images have defects, or if fine adjustments are required.

However, keep the value of "ADJ-S: Manual adjustment of shading position" the same as the factory setting value and do not adjust it in the market.

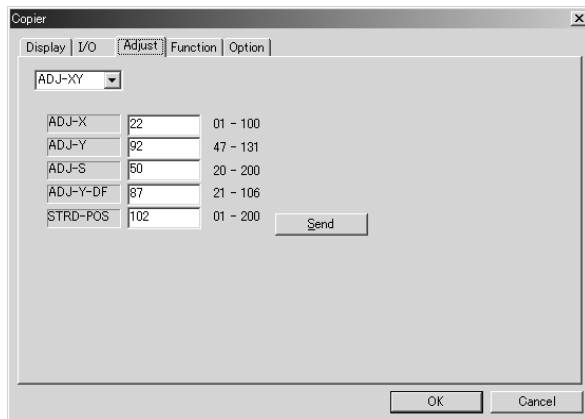


Figure 5-207

- ADJ-X: Adjustment of sub-scan direction start position in FB mode (X direction)
- ADJ-Y: Adjustment of main scan direction start position in FB mode (Y direction)
- ADJ-Y-DF: Adjustment of main scan direction start position in ADF mode (Y direction)
- STRD-POS: Adjustment of sub-scan direction start position in ADF mode (X direction)

• Operation Procedure

- Change the value according to the image.
Changing the value by 1 results in movement of 0.1 mm.
- Click the [Send] button.
- When transmission of the input data has been completed, the [Success] screen is displayed. Click the [OK] button.

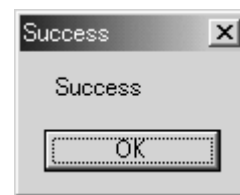


Figure 5-208

- End the service mode.
- Execute power supply reset. If power supply reset is not executed, some items will not be enabled.
- Check the image after changes have been made.

- Direction in FB mode

Document set status \longrightarrow Read image

Left rear of platen glass = origin

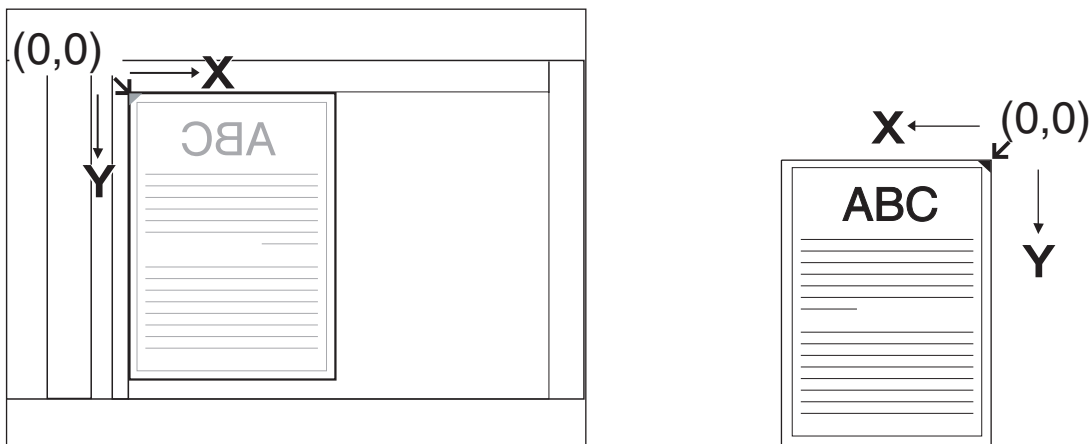


Figure 5-209

When the [ADJ-X] value is reduced, the read start position in the X direction enters the minus side, and when the [ADJ-X] value is increased, it enters the plus side.

In the example shown below, the right side of the read image was cut off, so the [ADJ-X] value was reduced to improve the image.

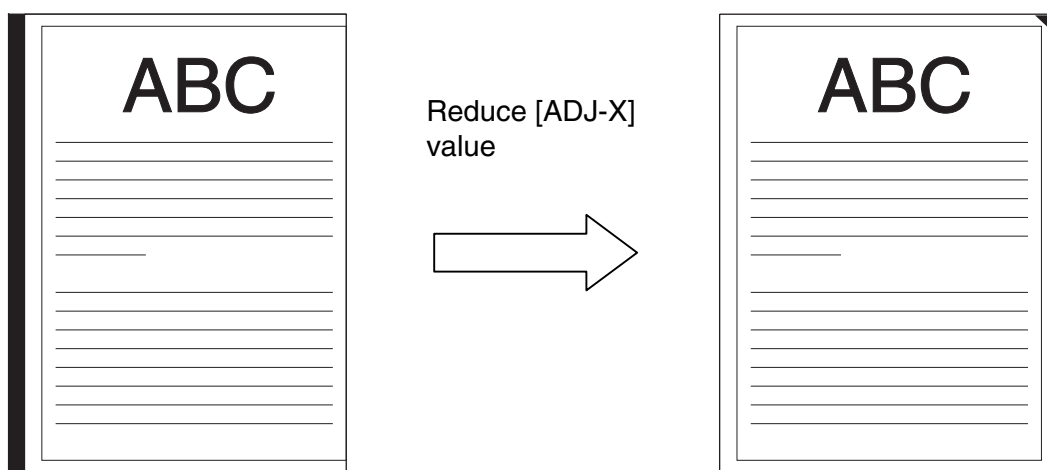


Figure 5-210

When the [ADJ-Y] value is reduced, the read start position in the Y direction enters the minus side, and when the [ADJ-Y] value is increased, it enters the plus side.

In the example shown below, the top side of the read image was cut off, so the [ADJ-Y] value was reduced to improve the image.

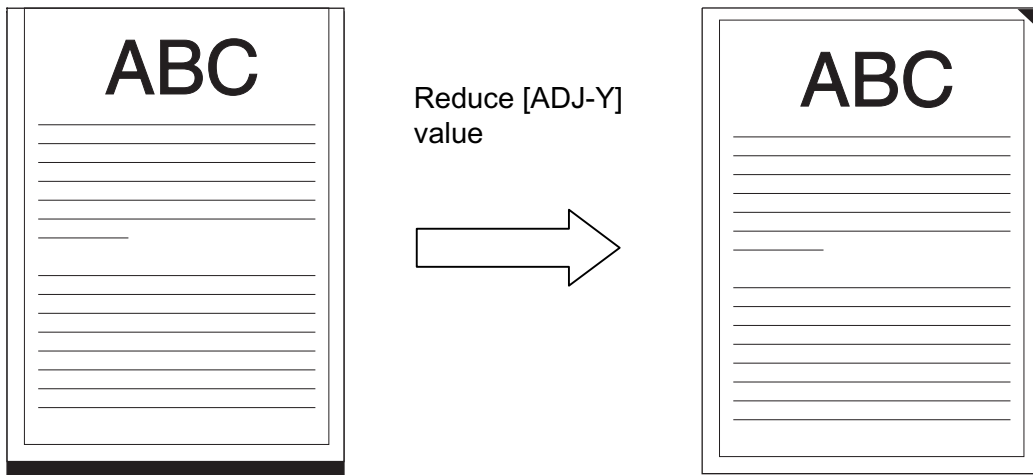


Figure 5-211

- Direction in ADF mode
 Document read status → Read image
 Center rear of ADF reading glass = origin

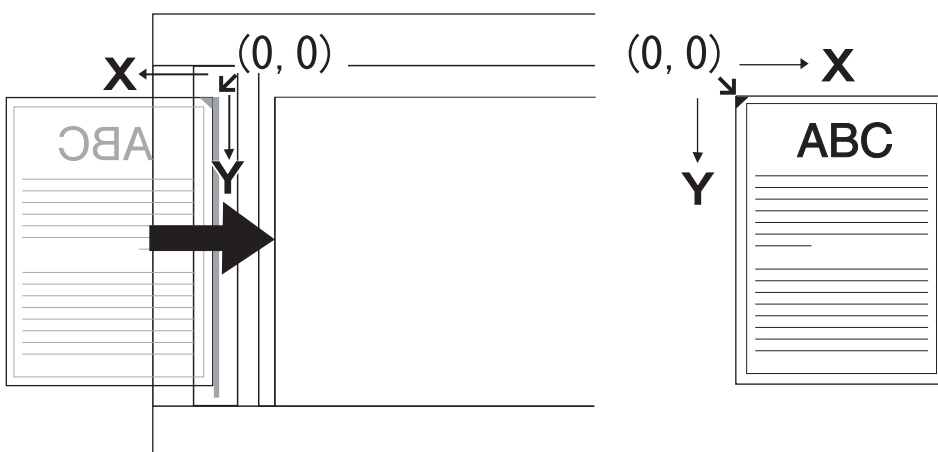


Figure 5-212

When the [STRD-POS] value is reduced, the read start position in the X direction enters the plus side, and then the [STRD-POS] value is increased, it enters the minus side.

In the example shown below, the right side of the read image was cut off, so the [STRD-POS] value was reduced to improve the image.

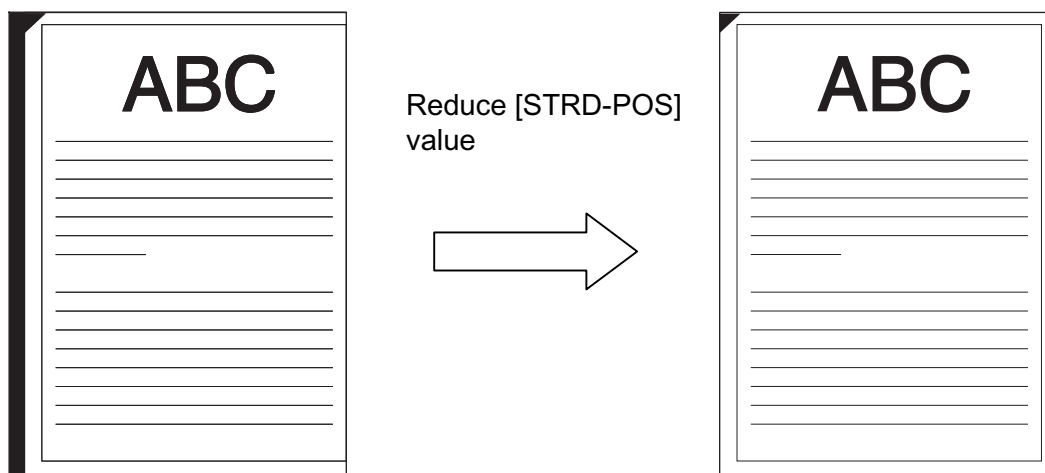


Figure 5-213

When the [ADJ-Y-DF] value is reduced, the read start position in the Y direction enters the plus side, and when the [ADJ-Y-DF] value is increased, it enters the minus side.

In the example shown below, the top side of the read image was cut off, so the [ADJ-Y-DF] value was increased to improve the image.

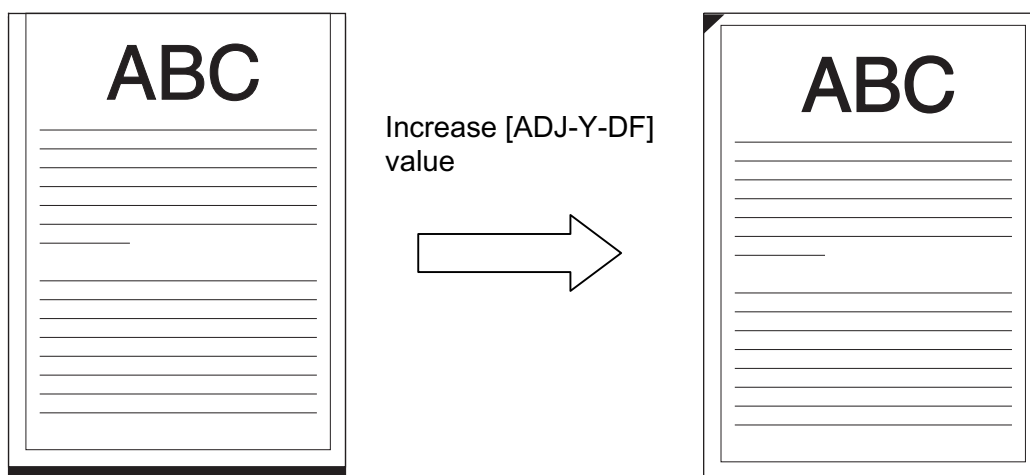


Figure 5-214

4) Copier>Adjust>CCD

This mode adjusts the CCD and shading-related data values. However, except for the [DFTAR-R], [DFTAR-G], and [DFTAR-B] values, all the values should remain the factory setting values, and if related parts are replaced in the market, the values should be adjusted again to the factory setting values. For details, refer to "AFTER REPLACING PARTS".

Note: The results of executing [Copier>Function>CCD] are displayed for the [DFTAR-R], [DFTAR-G], and [DFTAR-B] values.

If image anomalies occur for these values, set the factory setting values. For details, refer to [Copier>Function>CCD].

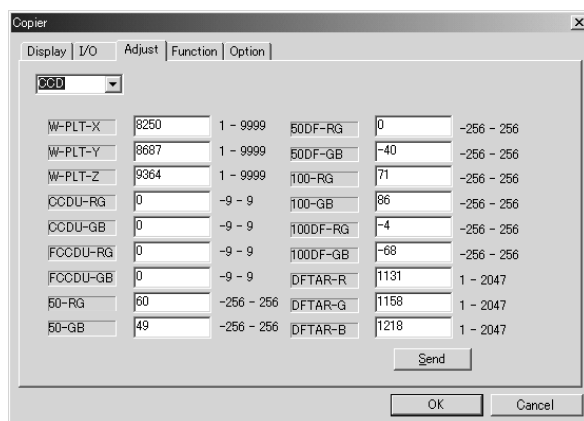


Figure 5-215

• Operation Procedure

- Input the factory setting value.
- Click the [Send] button.
- When transmission of the input data has been completed, the [Success] screen is displayed. Click the [OK] button.

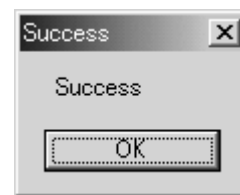


Figure 5-216

- End the service mode.
- Execute power supply reset.
If power supply reset is not executed, some items will not be enabled.
- Check the image after changes have been made.

5) Copier>Adjust>PASCAL

This mode adjusts the data values related to automatic gradation correction. However, leave all the values at their factory setting, and if the reader controller PCB is replaced in the market, set the values back to the factory setting values. For details, refer to "AFTER REPLACING PARTS".

The operation procedure is the same as [Copier>Adjust>CCD].

6) Copier>Function>CCD

This mode automatically adjusts the CCD's white level.

Execute this mode after replacing the reader controller PCB.

Both [DF-WLVL1] and [DF-WLVL2] must be executed.

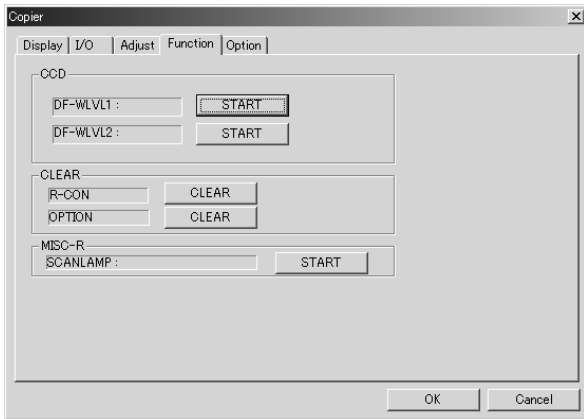


Figure 5-217

• Operation Procedure

- a) Clean the platen glass and the rollers.
- b) Set a blank A4 or LTR sized sheet of copy paper on the platen glass and click the [START] button of [DF-WLVL1].

Note:Execute [DF-WLVL1] first.

- c) Scanning is automatically performed. When completed, the [Success] screen is displayed, so click the [OK] button.

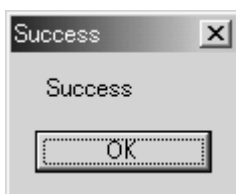


Figure 5-218

- d) Set the same copy paper in the document pickup tray and click the [START] button of [DF-WLVL2].

- e) Duplex scanning is automatically executed. When completed, the [Success] screen is displayed. Click the [OK] button.

- f) End the service mode and check the image.

By executing this mode, the target value for white level is calculated at the actual read position taking into consideration the transparency of the glass. The calculated value is displayed in [DFTAR-R], [DFTAR-G], and [DFTAR-B] of [Copier>Adjust>CCD].

If the copy paper that is used is soiled, anomalies such as streaks and color irregularities may occur in the image after this mode is executed. In this case, after cleaning the DR-7080C, execute this mode again using clean copy paper. If the problem persists, input the factory setting values in [DFTAR-R], [DFTAR-G], and [DFTAR-B].

The standard white plate data that serves as the reference for white level adjustment is measured for every platen glass and is input to [W-PLT-X], [W-PLT-Y], and [W-PLT-Z] of [Copier>Adjust>CCD]. This value is described on the platen glass and service label.

- 7) Copier>Function>CLEAR
 [R-CON] performs RAM clear for the reader controller PCB. Execute this mode in the market after replacing the reader controller PCB. Since related items need to be reset after this mode is executed, be careful not to perform this mode by mistake. For details, refer to "AFTER REPLACING PARTS".
 [OPTION] performs option-related data clear. However, this mode need not be performed for the DR-7080C.

- Operation Procedure
 - a) Click the [CLEAR] button.
 - b) The [Confirm] screen is displayed, so click the [Yes] button.

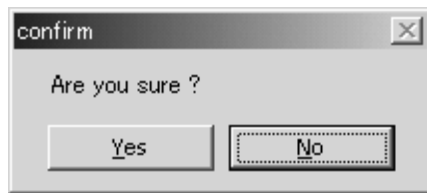


Figure 5-219

- c) When RAM clear is completed, the [Success] screen is displayed. Click the [OK] button.

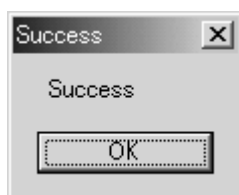


Figure 5-220

- d) End the service mode.
- e) Execute power supply reset.
- f) Enter the service mode again and set again related items.

- 8) Copier>Function>MISC-R
 [SCANLAMP] lights the scanning lamp. The scanning lamp lights approx. 3 seconds after [SCANLAMP] is executed. [SCAN LAMP] is not used only to check lighting, but also during feeder height adjustment.

- Operation Procedure
 - a) Click the [START] button. The lamp lights.
 - b) While the lamp is lit, the [Wait] screen is displayed.

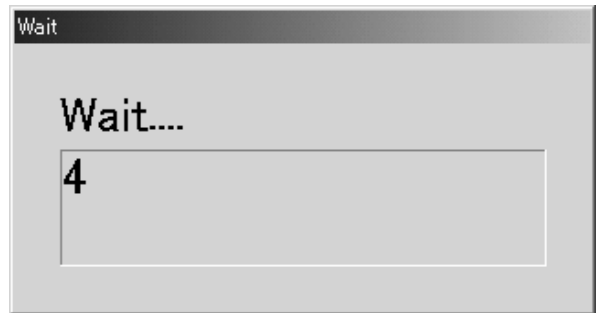


Figure 5-221

- c) The lamp goes out after approx. 3 seconds, and the [Success] screen is displayed. Click the [OK] button.

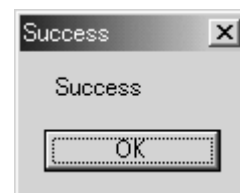


Figure 5-222

- d) End the service mode.

6. Feeder

1) Operation screen

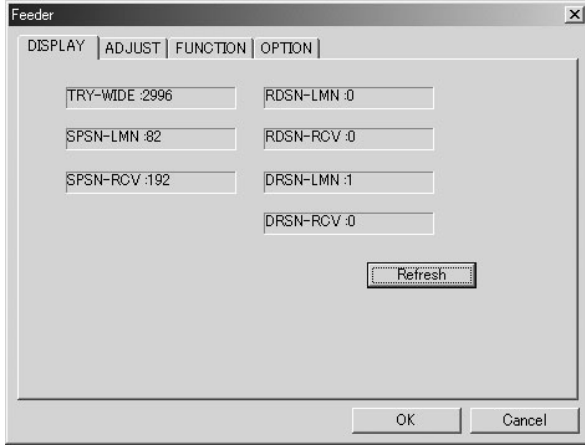


Figure 5-223a

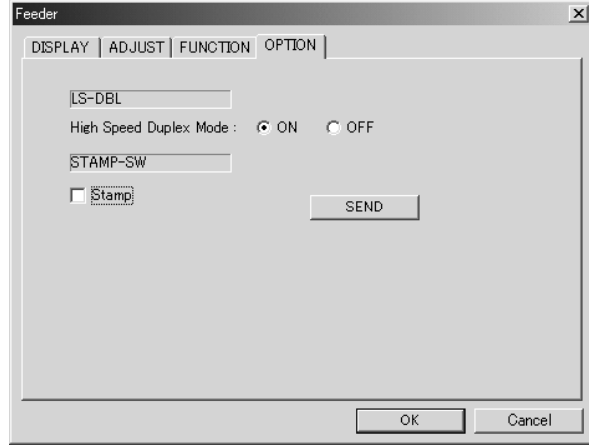


Figure 5-223d

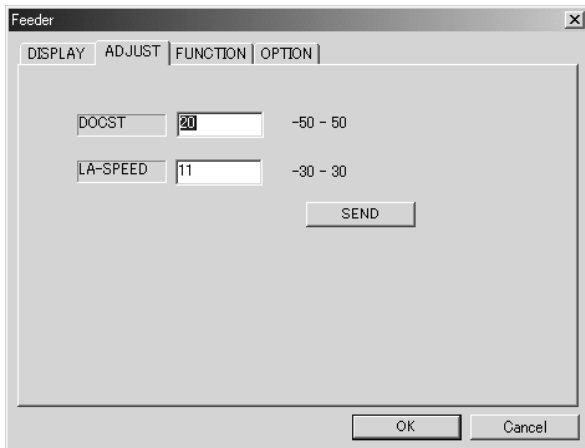


Figure 5-223b

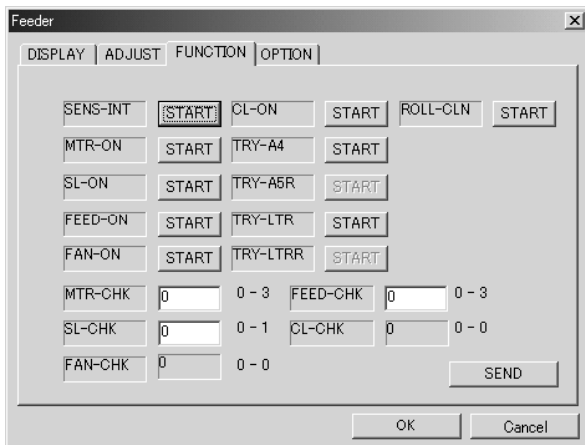


Figure 5-223c

2) Feeder>DISPLAY

This mode displays the document guide and sensors (post-separation, read, delivery reversal) status. Each status is displayed when [Feeder] is selected. Also, each status is displayed when the [Refresh] button is clicked. When the [Refresh] button is clicked after the amount of opening of the document guide is changed or the relevant sensor detection status is changed, that change can be checked with data.

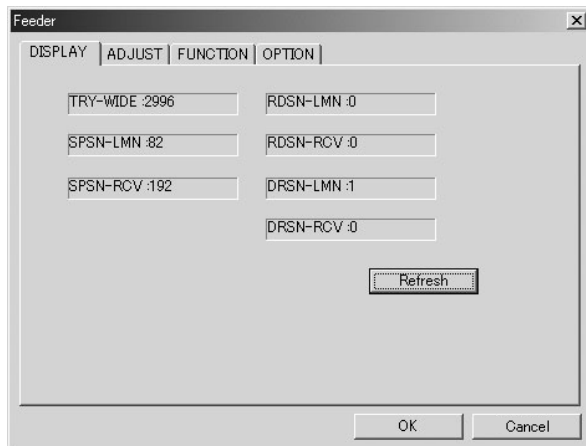


Figure 5-224

- TRY-WIDE: Document guide opening amount (Unit: 0.1 mm)
- SPSN-LMN: Post-separation sensor light-emission voltage
- SPSN-RCV: Post-separation sensor light-reception voltage
- RDSN-LMN: Read sensor light-emission voltage
- RDSN-RCV: Read sensor light-reception voltage
- DRSN-LMN: Delivery reversal sensor light-emission voltage
- DRSN-RCV: Delivery reversal sensor light-reception voltage

3) Feeder>ADJUST

This mode performs adjustments related to document feeding. The DR-7080C having been adjusted at factory, it can basically be used as is in the market, but if the reader controller PCB is replaced, the DR-7080C must be reset to the factory setting values.

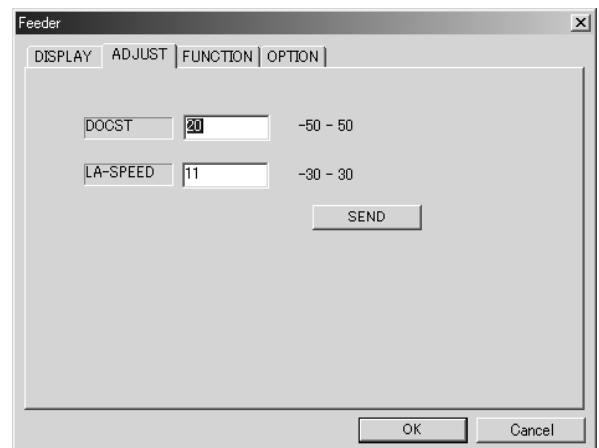


Figure 5-225

- DOCST: Adjustment of document stop position in ADF mode (leading edge registration adjustment)
- LA-SPEED: Adjustment of document feed speed in ADF mode (magnification adjustment)

- Operation Procedure
 - a) Input the value.
 - b) Click the [Send] button.
 - c) When transmission of the input data has been completed, the [Success] screen is displayed. Click the [OK] button.

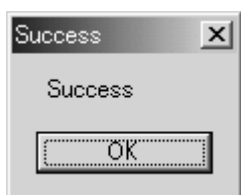


Figure 5-226

- d) End the service mode.
- 4) Feeder>FUNCTION
- This mode automatically adjusts the document guide and sensors (post-separation, read, delivery reversal), checks the operation of the motor, etc., and executes the roller cleaning mode. For the respective details, refer to the relevant sections.

- 5) Feeder>FUNCTION>SENS-INT
- This mode adjusts the sensitivity of sensors (post-separation, read, delivery reversal). Execute this mode after replacing sensors and the reader controller PCB.

- Operation Procedure
 - a) When the [START] button is clicked, the mode is automatically executed.

Note: Be sure to close the feeder cover.

 - b) When execution of the mode is completed, the [Success] screen is displayed. Click the [OK] button.



Figure 5-228

- c) End the service mode.

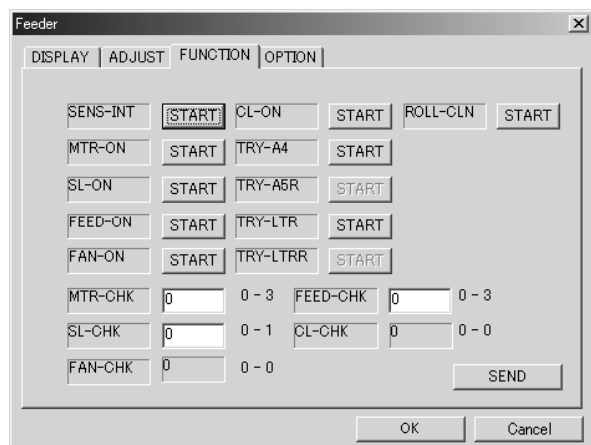


Figure 5-227

6) Feeder>FUNCTION>MTR-ON

How to check the various operations, including those of the motor and other driving parts, is explained here.

The following table lists the mode names and the targets they cover.

No.	Mode Name	Target
1	MTR-ON MTR-CHK	0: Pickup motor 1: Feed motor 2: Delivery reversal motor 3: Pressure motor
2	SL-ON SL-CHK	0: Pressure solenoid 1: Stamp solenoid
3	FEED-ON FEED-CHK	0: Simplex feed 1: Duplex feed 2: Simplex feed, stamp 3: Duplex feed, stamp
4	FAN-ON FAN-CHK	0: Cooling fan of feeder
5	CL-ON CL-CHK	0: Pickup clutch

Table 5-203

Each mode is used by setting [ON] and [CHK] for that mode.

The motor operation procedures are indicated below. Refer to these procedures for the solenoid, fan, and clutch operation procedures.

- Motor Operation Procedure

- Input the target number in [MTR-CHK] and then click the [SEND] button.
- When transmission of the input data has been completed, the [Success] screen is displayed. Click the [OK] button.

- When the [START] button to the right of [MTR-ON] is clicked, the corresponding motor operates. At the same time, the button display changes to [STOP].
- When the [STOP] button is clicked, the operation stops. At the same time, the button display changes to [START].

Note:The operation stops automatically approx. 5 seconds after the [START] button is selected. In this case, the button display remains [STOP].

- End the service mode.

- Feed Operation Procedure

- Set the documents to be fed in the document pickup tray.
- Input the target number in [FEED-CHK] and then click the [SEND] button.
- When transmission of the input data has been completed, the [Success] screen is displayed. Click the [OK] button.
- Click the [START] button to the right of [FEED-ON] to start the targeted feed operation.
- The feed operation ends when no more of the set documents are left.
- End the service mode.

Note:Even if [Feeder>OPTION>STAMP-SW] is OFF, the stamp operation is executed as long as the stamp solenoid is attached.

7) Feeder>FUNCTION>TRY-A4

This section describes automatic adjustment of the document guide including [TRY-A4].

Execute automatic adjustment of the document guide after replacing the reader controller PCB. At this time, either the combination of [TRY-A4] and [TRY-A5R], or [TRY-LTR] and [TRY-LTRR], can be executed.

The operation procedure for the [TRY-A4] and [TRY-A5R] combination is described below. Use this as reference for the operation procedure for the [TRY-LTR] and [TRY-LTRR] combination.

- Operation Procedure

- Adjust the document guide to A4 size.
- When the [START] button to the right of [TRY-A4] is clicked, the opening amount data for the document guide is transmitted.

Note:Execute [TRY-A4] first.

- When transmission has been completed, the [Success] screen is displayed. Click the [OK] button.

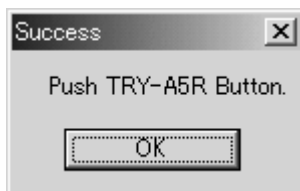


Figure 5-229

- Adjust the document guide to A5R size.
- When the [START] button to the right of [TRY-A5R] is clicked, the opening amount data for the document guide is transmitted.
- When transmission has been completed, the [Success] screen is displayed. Click the [OK] button.
- Check the opening amount value for the document guide in [Feeder>DISPLAY>TRY-WIDE].
- End the service mode.

8) Feeder>FUNCTION>ROLL-CLN

This is a convenient mode for cleaning rollers. Executing this mode causes the rollers to rotate.

However, the pickup, feed, and reversal rollers do not rotate due to the structure of the transmission system and to avoid pinching of hands.

- Operation Procedure

- When the [START] button to the right of [ROLL-CLN] is clicked, the drive rollers rotate. At the same time, the button display changes to [STOP].
- Clean the rollers while they are rotating.
- Click the [STOP] button to stop the rollers.

Note:The rollers also stop rotating when the feeder cover is opened or closed, and upon feeder open/close detection.

- End the service mode.

9) Feeder>OPTION

This mode executes the high-speed duplex mode and stamp settings.

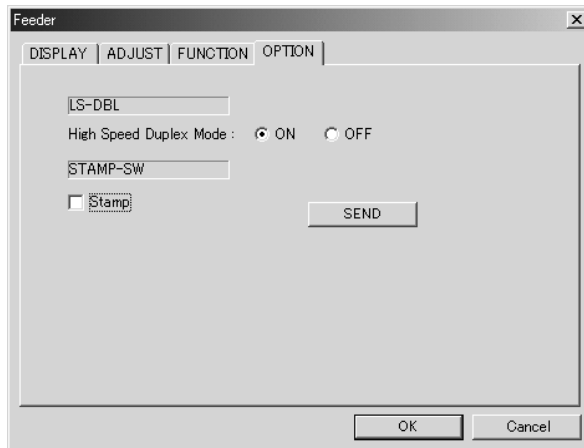


Figure 5-230

- [LS-DBL]: Setting of high-speed duplex mode
This setting is [ON] at factory.
Normally the [ON] setting is good, but when using documents for which feed problems often occur in the high-speed duplex mode, select the [OFF] setting.
- [STAMP-SW]: Setting of stamp
This setting is [OFF] at factory. Set this setting to [ON] after the optional stamp solenoid has been installed.

- High-Speed Duplex Mode Operation Procedure
 - a) Click the radio buttons corresponding to the desired settings.
"ON" : ON OFF
"OFF": ON OFF
 - b) Click the [Send] button.
 - c) When transmission of the data has completed, the [Success] screen is displayed. Click the [OK] button.
 - d) End the service mode.
- Stamp Operation Procedure
 - a) To change the setting, click the checkbox to the left of [Stamp].
"ON" : Stamp
"OFF": Stamp
 - b) Click the [Send] button.
 - c) When transmission of the data has been completed, the [Success] screen is displayed. Click the [OK] button.
 - d) End the service mode.
 - e) Execute power supply reset.
Note: If power supply reset is not executed, the settings will not be enabled.
 - f) Check that the operation is performed as set.

7. Counter Set

1) Outline

Counter Set is used to change the values of the various counters. These values are used for counter display such as the service mode screen.

These data are saved to the DC controller PCB. Therefore, as these values are changed when the DC controller PCB is replaced, it is necessary to restore the pre-replacement values following DC controller PCB replacement. However, if the pre-replacement values are not known, estimated values can be used.

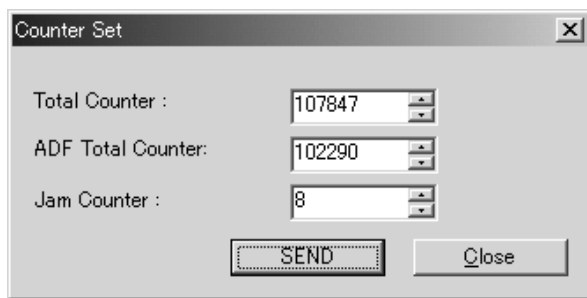


Figure 5-231

- Total Counter
Total number of scanned sheets for both ADF and FB
- ADF Total Counter
Total number of scanned (= fed) sheets for ADF
- Jam Counter
Total number of document jam error occurrences

However, since the [ADF Total Counter] value is expressed as number of sheets, in the case of duplex scan, the counter is incremented by "1" each time both the front and back sides of a sheet are scanned. The first document scan (front side in the case of duplex scan) at the time of pickup and feed is not added to the [Jam Counter] value.

Moreover, the [Total Counter] and [ADF Total Counter] values are saved in the temporary memory of the DC controller PCB for an increase of up to 10 sheets, and to regular ROM if the increase exceeds 10 sheets. Therefore, when the power supply of this machine is switched off when the increase is 10 or fewer sheets, the increase portion gets deleted. However, regarding [Jam Counter], the count value is written to the regular ROM each time it is incremented.

2) Usage Method

The operation procedure is as follows.

- a) Input the new value in the box to the right of the desired item.
- b) When input of all the items has been completed, click the [SEND] button.
- c) When transmission of the data has been completed, the [Success] screen is displayed. Click the [OK] button.
- d) End the service mode.

8. Panel Check

1) Outline

Panel Check is used to check the operation panel keys, LEDs, and the LCD panel operation.

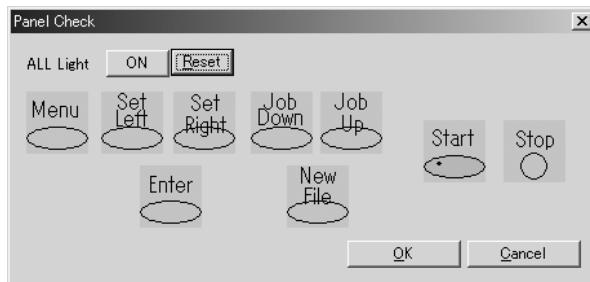


Figure 5-232

2) Usage Method

- Keys

When an operation panel key is pressed, the corresponding mark lights.

- LED, LCD

When the [ON] button at the right side of [ALL Lights] is clicked, all the LEDs and LCDs lights up. LEDs are provided for the Start key and New File key. When the [ON] button is clicked, the button display changes to [OFF]. When the [OFF] button is clicked, all the LEDs go out. When the [Reset] button is clicked, normal display is returned.

9. Firm Load

"Controller Firm Load" and "Scanner Firm Load" are used when changing the respective firmware.

For details, refer to the service information issued when changing the firmware. Do not use this mode by mistake.

- Outline of operation procedure

- 1) Select the [Firm Load] to be changed.
- 2) The screen for selecting the file where the firmware is saved is displayed.
- 3) Specify and open the file.
- 4) The firmware is loaded to the DR-7080C.

Note: If the firmware has been changed, write the number on the [ROM Version] label attached to the left of the DR-7080C.

10. Mirror

This mode is used to move the mirror unit to a fixed position for transport.

The mirror unit must be fixed with a special screw if the DR-7080C needs to be transported (by car, plane, etc.) after it has been installed. For this screw, refer to "CHAPTER 4, II. UNPACKING AND INSTALLATION".

- Operation Procedure
 - 1) Click the [Mirror] button.
 - 2) After the mirror unit has been fixed, the [Success] screen is displayed. Click the [OK] button.

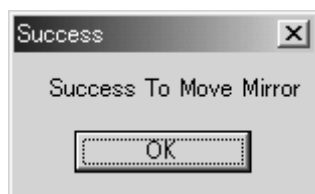


Figure 5-233

- 3) End the service mode.
- 4) Fix the mirror unit with a special screw.
- 5) Switch OFF the power supply.

Note:The DR-7080C cannot function when the mirror unit is in a fixed position. After executing this mode, remove a screw and execute power supply reset before using the DR-7080C.

11. Service Label

In order to allow re-input the required adjustment values after replacing a part, a "service label" containing the factory setting values is pasted on the rear side of the document pickup tray.

Figure 5-234 shows this service label.

The various items of the service label indicate the service mode item names. The corresponding factory setting values are indicated in the "Factory" column.

When parts (platen glass, CCD unit, etc.) are replaced in the market, change the corresponding value.

COPIER > ADJUST		Factory	1	2	COPIER > ADJUST		Factory	1	2	COPIER > ADJUST		Factory	1	2
ADJ-XY	ADJ-X	20			CCD	CCDU-RG	3			PASCAL	OFST-P-Y	1		
	ADJ-Y	91				CCDU-GB	1				OFST-P-M	3		
	ADJ-S	50				FCCDU-RG	0				OFST-P-C	-2		
	STRD-POS	118				FCCDU-GB	1				OFST-P-K	1		
	ADJ-Y-DF	72				100_RG	77			FEEDER > ADJUST				
CCD	W-PLT-X	8198				100_GB	38				LA-SPEED	10		
	W-PLT-Y	8658				100DF-RG	-13				DOCST	4		
	W-PLT-Z	9352				100DF-GB	-12							
	DFTAR-R	1180				50-RG	55							
	DFTAR-G	1228				50-GB	18							
	DFTAR-B	1296				50DF-RG	3							
No. xxxxxx	Date. yy/mm/dd	FC5-0829				50DF-GB	-10							

Figure 5-234

III. USER MODES

Table 5-301 lists the various user modes. For details, refer to the user manual.

No.	Item	Factory Setting
1	Count Only Mode	OFF
2	Long Document Mode	OFF
3	Stand-by Mode	ON
4	Display Language Mode	100 V: Japanese Other: English
5	Display Contrast Mode	Center
6	Setting SCSI Transfer Mode	20 MB/sec

Table 5-301

- **Operation Procedure**

- 1) Press the [Menu] key on the operation panel to display the user mode screen.
- 2) Press the [Menu] key to change the item.
- 3) Press the [Set] key to change the setting.
- 4) Press the [Enter] key.
- 5) Press the [Stop] key.

Note: If the SCSI transfer speed has been changed, also execute power supply reset. If power supply reset is executed in the Count Only Mode, the setting returns to the [OFF] at factory setting.

IV. FEEDER ADJUSTMENT

1. Outline

The feeder adjustment procedure must be performed after removing and reinstalling the feeder, after replacing the feeder, or when a feed problem or image problem has occurred.

The adjustment consists of the sequence described below. Items that are not a problem can be skipped.

Regarding items that use the service mode, refer to "SERVICE MODE". Moreover, if the factory setting values printed on the service label are changed at the time of adjustment, write down the new values on the label.

- ① Opening angle (90°)
- ② Tray width adjustment*1
- ③ Sensor output*1
- ④ Tilt correction
- ⑤ Height adjustment
- ⑥ Right angle adjustment (skew adjustment)
- ⑦ Opening angle (70°)
- ⑧ Magnification adjustment*1
- ⑨ Horizontal registration adjustment*1
- ⑩ Leading edge registration adjustment*1
- ⑪ White level adjustment*1

*1: Service mode is used for these adjustments.

Note: Be sure to clean the rollers, glasses, etc. before the image adjustments are preformed.

2. Opening Angle (90°)

Set the feeder opening angle to 90° before performing the following adjustments.

- 1) Flip over the rubber cover ①, remove the 2 mounting screws ②, and detach the angle guide plate ③.

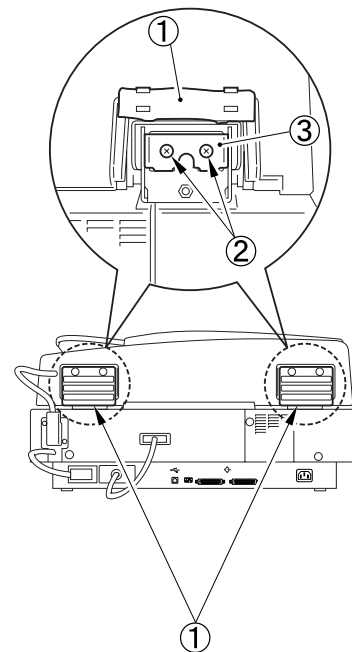


Figure 5-401

3. Tray Width Adjustment

Adjust the tray width if there are feed mode related problems.

In the DR-7080C, the document guide opening amount data is used to determine the feed mode, but it is not used to determine the size of scanned images.

For example, in the case of a document size of A4 or LTR, and scanning performed under conditions that enable the high-speed duplex mode, the tray width adjustment must be performed if performing feed in the low-speed duplex mode.

Execute the service mode [Feeder>FUNCTION>TRY-A4, TRY-A5R] or [Feeder>FUNCTION>TRY-LTR, TRY-LTRR].

4. Sensor Output Adjustment

Perform this adjustment after replacing the post-separation sensors, read sensors, and delivery reversal sensors.

Note: Also perform this adjustment after replacing the reader controller PCB of the reader.

- Adjustment Procedure
 - 1) Clean the sensors and the corresponding prisms.
 - 2) Check that there is no document inside the feeder.
 - 3) Execute the service mode [Feeder>FUNCTION>SENS-INT].

5. Tilt Correction

- 1) Loosen the nut ① behind the left hinge, turn the hex socket head bolt ②, moving the fixing member ③ until the line marking ④.

Rotate bolt clockwise to move member forward.

Rotate bolt counterclockwise to move member backward.

Then, tighten the nut and fix it.

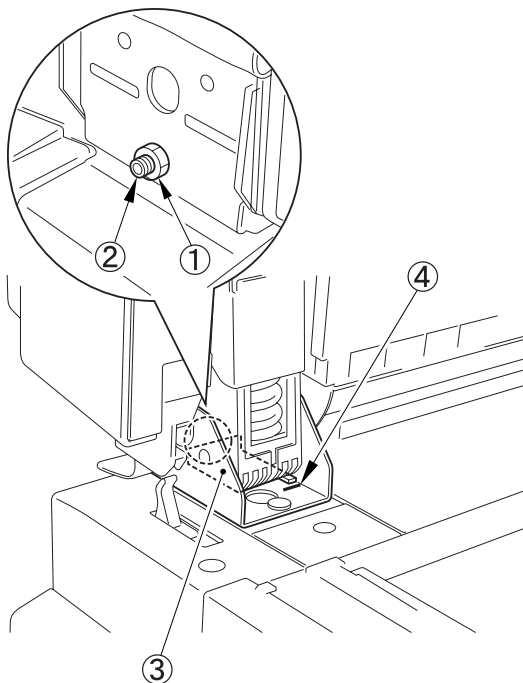


Figure 5-402

6. Height Adjustment

- 1) Check if the height adjusting blocks ① at the front left and rear are in contact with the reading glass ② when the feeder is closed.

Note: Contact check is done either by performing actual scanning, or by lighting the scanning lamp with service mode [Copier>FUNCTION>MISC-R>SCANLANP].

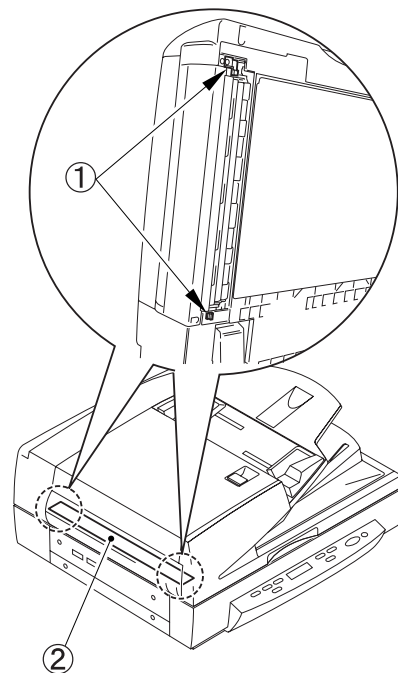


Figure 5-403

[When not contacted]

If the height adjusting blocks at the front left and rear are not in contact with the reading glass, adjust them by turning the fixing screw ① at the top of the left hinge.

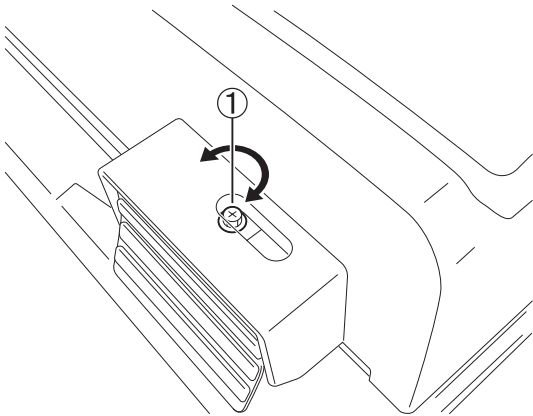


Figure 5-404

7. Right Angle Adjustment (Skew Adjustment)

This adjustment is performed to adjust the right angle of the scanner system of the reader and the feeder's document feed direction.

The skew adjustment is also described.

If the feeder is installed in a slanted position in relation to the reader, the read images will not be exactly at a right angle. Figure 5-405 shows an extreme example.

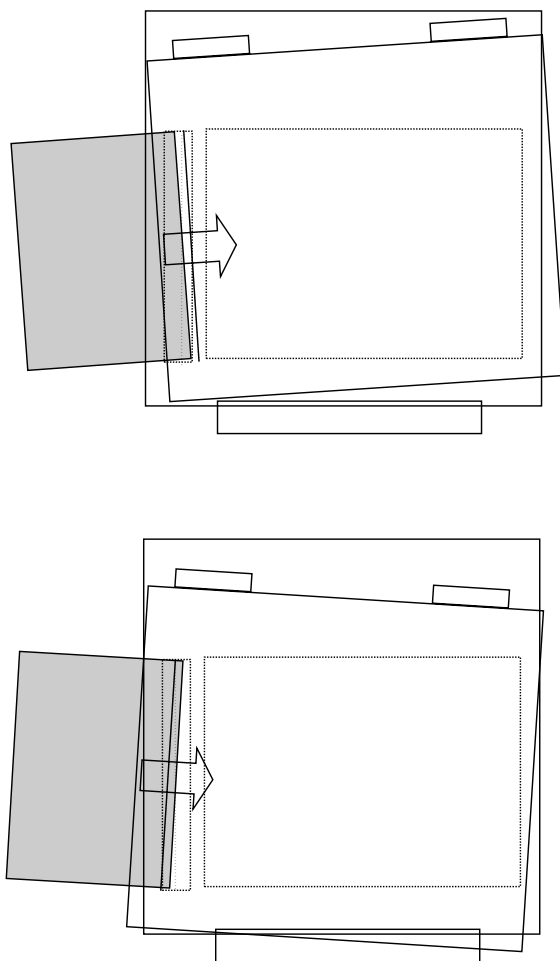


Figure 5-405

- 1) Set the test chart on the document pickup tray and read the image. Correctly adjust the document guide.

Note: Use a test chart with an A4 or LTR size frame as the test chart. No settings are provided for service tools, so create your own.

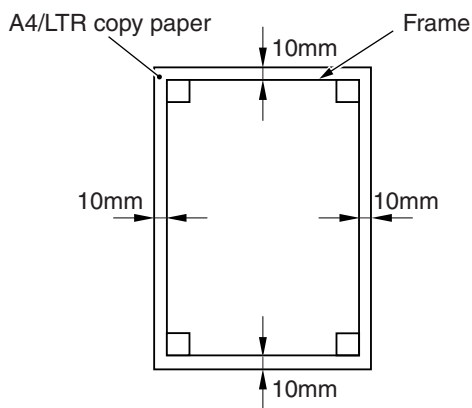


Figure 5-406

- 2) Check the right angle of leading edge A of the image. If adjustments are necessary, perform adjustments from step 3.

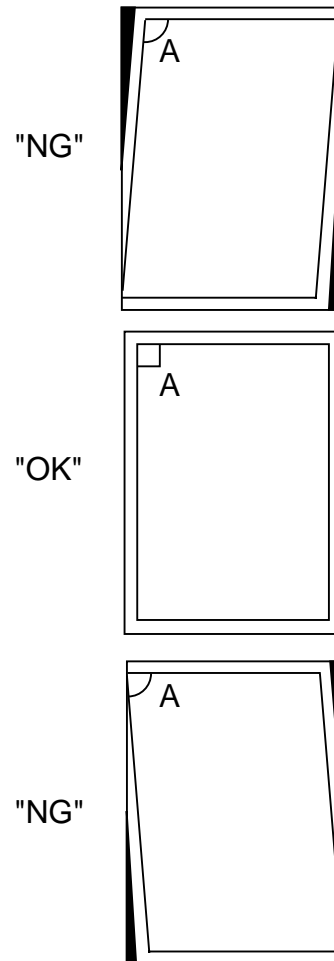


Figure 5-407

- 3) Loosen the 2 knurling screws ① at the front of the right hinge unit.
Next, flip over the rubber cover ② at the rear of the right hinge unit and loosen the fixing nut ③, then turn the hex socket head bolt ④ to make adjustment.
If $A > 90^\circ$, turn counterclockwise.
If $A < 90^\circ$, turn clockwise.

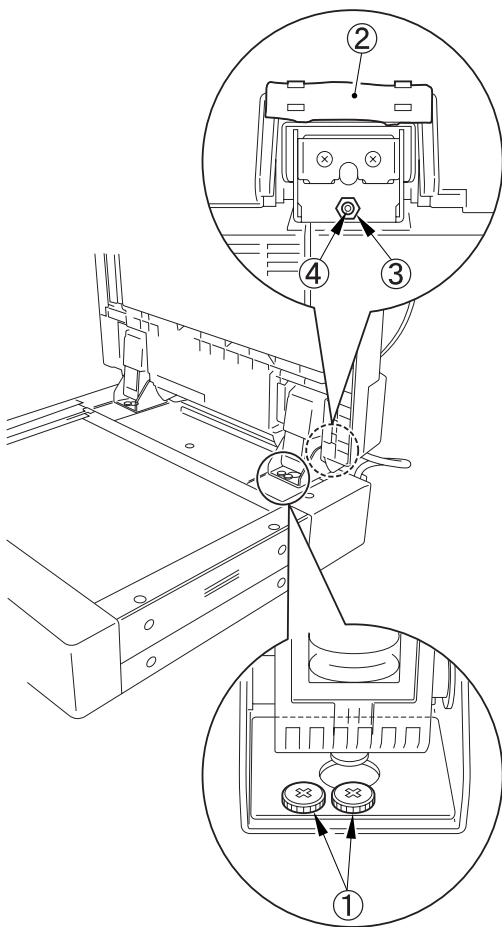


Figure 5-408

- 4) After performing the adjustment, fix the hex socket head bolt by tightening the fixing nut. Then tighten the two knurling screws.
- 5) Scan again the test chart and check that part A is at a right angle. If not, do the same actions from the step 3.

* Skew adjustment

If the image is skewed as shown below even when right angle adjustment is performed, perform skew adjustment. And if the skewed image is caused by the skew failure not right angle failure, make a skew adjustment.

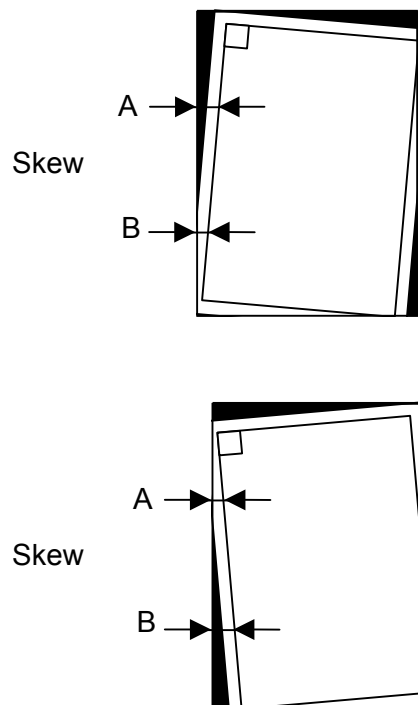


Figure 5-409

- Adjustment Procedure
 - 1) Open the feeder cover.
 - 2) Remove the screw ① of the No. 1 registration roller follower from the positioning hole, and gently tighten the screw through the adjustment slotted hole so that the stopper plate ③ can move along the adjustment slotted hole ②.

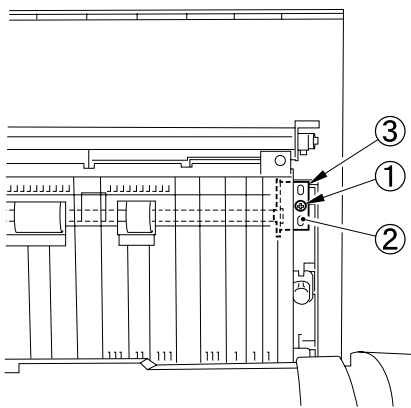


Figure 5-410

- 3) If $A > B$, move the stopper plate downward and then tighten the screw. If $A < B$, move the stopper plate upward and then tighten the screw.

Note: Be careful not to move the stopper plate too far so that the rollers come against the edge of the cover opening, as this will prevent the rollers from turning freely.

- 4) Scan again the test chart and check that the adjustment has been properly made.

Note: Properly adjust the document guide.

8. Opening Angle (70°)

Set the feeder opening angle to 70° before performing the following adjustments.

- 1) Flip over the rubber cover ① and attach the angle guide plate ③ with the two screws ②.

Note: Check that the feeder opening angle is approximately 70°.

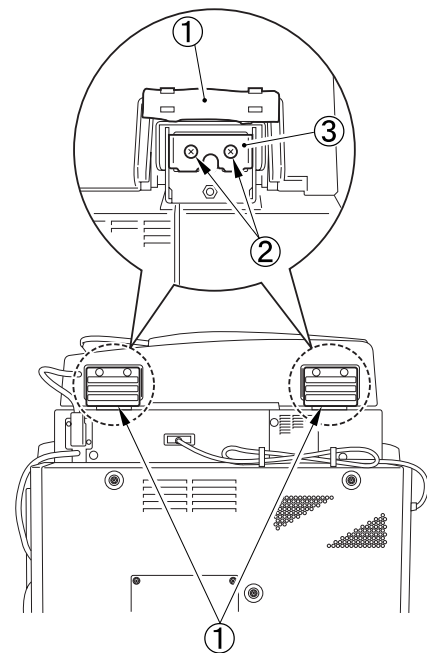


Figure 5-411

9. Magnification Adjustment

- 1) Prepare a test chart.
- 2) Set the test chart on the platen glass and scan the image. Use this image as the FB image.
- 3) Correctly set the same test chart on the document pickup tray and scan the image. Use this image as the ADF image.
- 4) Compare the lengths in the feed direction of the FB image and the ADF image, and if dimension A is approximately 1 mm or more, proceed to step 5.

Note: The rated value for the magnification error is 0.75% or less.

- 5) Select service mode [Feeder>ADJUST>LA-SPEED] and perform adjustment by changing the value.

If ADF image is too short → Decrease the value (slows the feed speed).

If ADF image is too long → Increase the value (speeds the feed speed).

[Unit: 0.1%]

<<Adjustment range: -30 to 30: -3 to +3%>>

- 6) Scan the test chart again and check that the image has been properly adjusted.

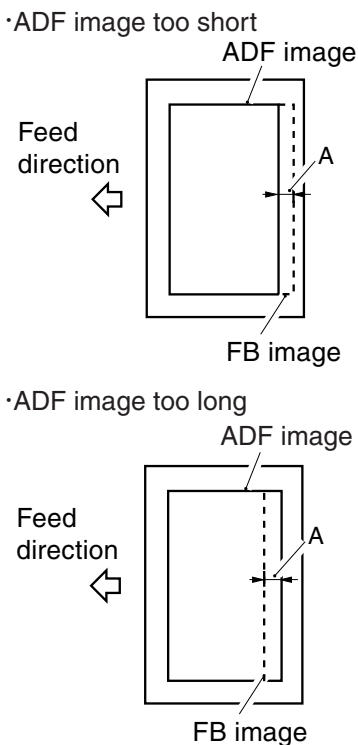


Figure 5-412

10. Horizontal Registration Adjustment

This adjustment adjusts the position of the document guide when adjustments have been performed in the service mode but were unsuccessful.

- Adjustment Using Service Mode

- 1) Prepare a test chart.
- 2) Correctly set the test chart on the document pickup tray and scan it.
- 3) Check the position of top side of the image obtained in step 2. If dimension [A] differs from the test chart dimension by more than approximately 1.5 mm, proceed to step 4 to make an adjustment.

Note: The rated value for horizontal registration is 1.8 mm or less for each side.

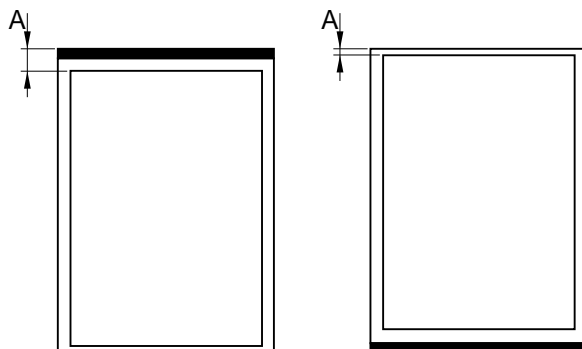


Figure 5-413

- 4) Select service mode [Copier>ADJUST >ADJ-XY>ADY-Y-DF] and perform adjustment by changing the value. Increasing the value increases dimension [A].
[Unit: 0.1 mm]
<<Adjustment range: 21 to 106>>
- 5) Scan the test chart again and check that the image has been properly adjusted.

- Document guide position adjustment
- 1) Open the feeder cover and remove the internal cover.
 - 2) Remove the three fixing screws ① and remove the cover ②.

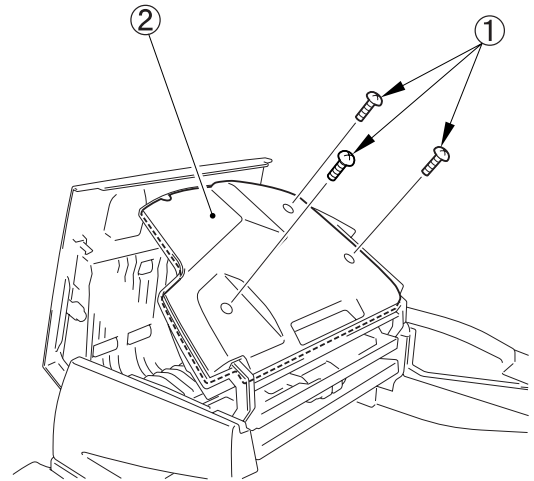


Figure 5-414

- 3) Loosen the screw ①, remove the screws ② from the positioning hole ③, and gently tighten the screw through the adjustment slotted hole so that the volume unit ④ can move along the adjustment slotted hole.

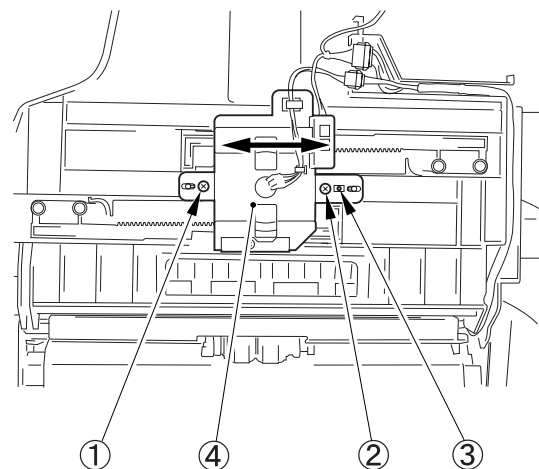


Figure 5-415

- 4) If image dimension [A] is too large, move the volume unit to the left. If it is too small, move it to the right.
- 5) Tighten the loosened screw ① and the screw ② attached to the adjustment slotted hole ③.
- 6) Return the removed cover to its original position.
- 7) Scan the test chart again and check that the image has been properly adjusted.

11. Leading Edge Registration Adjustment

- 1) Prepare a test chart.
- 2) Correctly set the test chart in the document pickup tray and scan it.
- 3) Check the position of the left side of the image obtained in step 2. If Dimension [A] differs from the test chart dimension by more than approximately 1.5 mm, proceed to step 4 to make an adjustment.

Note: The rated value for horizontal registration is 1.8 mm or less for each side.

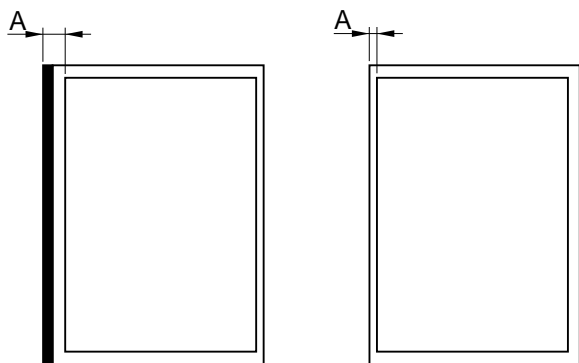


Figure 5-416

- 4) Select service mode [Feeder>ADJUST>DOCST] and perform adjustment by changing the value.
Increasing the value reduces the margin of dimension [A].
[Unit: 0.1 mm]
<<Adjustment range: -50 to +50: -5 to +5 mm>>
- 5) Scan the test chart again and check that the image has been properly adjusted.

12. White Level Adjustment

Perform this adjustment if you perform any of the adjustments described above.

Execute service mode [Copier>Function>CCD]. For details, refer to the section on service mode [Copier>Function>CCD].

Note:Execute [DF-WLVL1] for FB first.

13. Hinge Pressure Adjustment

This adjustment is executed in case of a change request from the user regarding closing (position and speed) of the feeder under its own weight.

The feeder is designed to slowly close under its own weight between 10 and 20 cm as shown in the following figure. However, the closing performance of the feeder will change over time. This adjustment adjusts the closing performance of the feeder by adjusting the hinge pressure as needed.

- * To lower the closing start position or reduce the closing speed, turn clockwise with an hex wrench.
- * To increase the closing start position or increase the closing speed, turn counterclockwise with an hex wrench.

Note:Use an hex wrench with face-to-face dimensions of 8 mm. If a commercially available hex wrench cannot be procured, purchase service tool CK-0540.

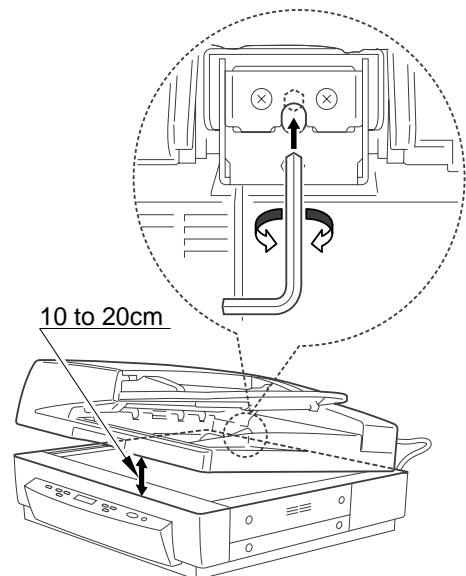


Figure 5-417

V. AFTER REPLACING PARTS

1. Outline

Feed and image checks must be performed after replacing parts.

The parts used in the DR-7080C include parts that require the execution of adjustments and settings following replacement. Table 5-501 lists these parts.

If the entire feeder is replaced, refer to "FEEDER ADJUSTMENTS" section.

For position adjustments following replacement of the scanner drive cable, refer to "CHAPTER 3 DISSASSEMBLY AND REASSEMBLY".

Item	Part	Reader Controller PCB	DC Controller PCB	CCD unit	Sensors (3 types)	Document width volume	Platen glass
1	RAM clear	Clear	---	---	---	---	---
2	Standard white plate data	Input (label)	---	---	---	---	Input (label)
3	FB read start position	Input (label)	---	---	---	---	---
4	FB shading position	Input (label)	---	---	---	---	---
5	ADF horizontal registration	Input (label)	---	---	---	---	---
6	ADF read position	Input (label)	---	---	---	---	---
7	CCD unit color shift	Input (label)	---	Input (label)	---	---	---
8	CCD unit factory setting color shift	Input (label)	---	---	---	---	---
9	Automatic gradation correction	Input (label)	---	---	---	---	---
10	ADF leading edge registration	Input (label)	---	---	---	---	---
11	ADF magnification	Input (label)	---	---	---	---	---
12	Sensor output	Automatic adjustment	---	---	Automatic adjustment	---	---
13	Tray width	Automatic adjustment	---	---	---	Automatic adjustment	---
14	White level	Automatic adjustment	---	---	---	---	---
15	SCSI setting	---	Manual setting	---	---	---	---
16	Counter	---	Input	---	---	---	---
17	User mode	---	Manual setting	---	---	---	---

Table 5-501

2. Reader Controller PCB

1) Version upgrade

First, check the reader firmware version in the service screen.

Look at the location where [SCANNER] is displayed.

If necessary, replace the firmware with the latest firmware corresponding to the unit. Use service mode [Reader Firm Load] to perform this change. For details, refer to the related service information.

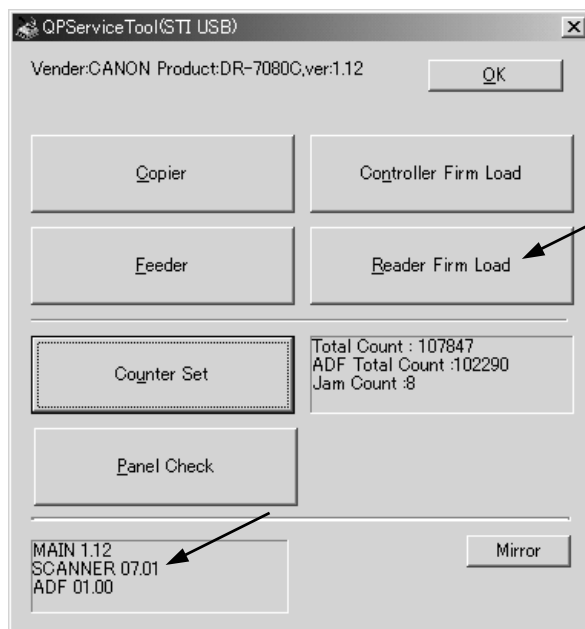


Figure 5-501

2) RAM clear

Execute service mode [Copier>Function>CLEAR>R-CON].

Upon completion, execute power supply reset.

3) Adjustment value re-input

Input the values indicated on the service label for the following items in the service mode.

- Standard white plate data
Copier>Adjust>CCD>W-PLT-X, Y, Z
- FB read start position
Copier>Adjust>ADJ-XY>ADJ-X, Y
- FB shading position
Copier>Adjust>ADJ-XY>ADJ-S
- ADF horizontal registration (Main scan position)
Copier>Adjust>ADJ-XY>ADJ-Y-DF
- ADF read position
Copier>Adjust>ADJ-XY>STRD-POS
- CCD unit color shift
Copier>Adjust>CCD>CCDU>RG, GB
- CCD unit factory setting color shift
Copier>Adjust>CCD>FCCDU>RG, GB
- Automatic gradation correction
Copier>Adjust>PASCAL>OFSET-P-Y, M, C, K
- ADF leading edge registration (stop position)
Feeder>ADJUST>DOCST
- ADF magnification (feed speed)
Feeder>ADJUST>LA-SPEED

4) Re-adjustments

Re-adjust the following items in the service mode.

- Sensor output
Feeder>FUNCTION>SENS-INT
- Tray width
Feeder>FUNCTION>TRY-A4, A5R
Feeder>FUNCTION>TRY-LTR, LTR-R
- White level
Copier>Function>CCD>DF-WLVL1,
WLVL2

3. DC Controller PCB

1) Version upgrade

First, check the controller firmware version in the service screen.

Look at the location where [MAIN] is displayed.

If necessary, replace the firmware with the latest firmware corresponding to the unit. Use service mode [Controller Firm Load] to perform this change. For details, refer to the related service information.

If the version number indicated on the [ROM Version] label pasted on the left side of the unit is different, correct the version number information on the label.

2) SCSI setting

Make the setting of the SCSI setting switch (SW103) on the DC controller PCB the same as the setting prior to replacement. If the pre-replacement setting is not known, ask to the user.

3) Counter

Re-input the counter value in service mode [Counter Set].

4) User mode

Make the user mode settings on the operation panel of the unit the same as the settings prior to replacement. If the pre-replacement settings are not known, ask to the user.

4. Other Parts

1) CCD unit

Input the values indicated on the labels attached to the CCD unit in service mode [Copier>Adjust>CCD>CCDU>RG, GB]. Be sure to also change the service label values.

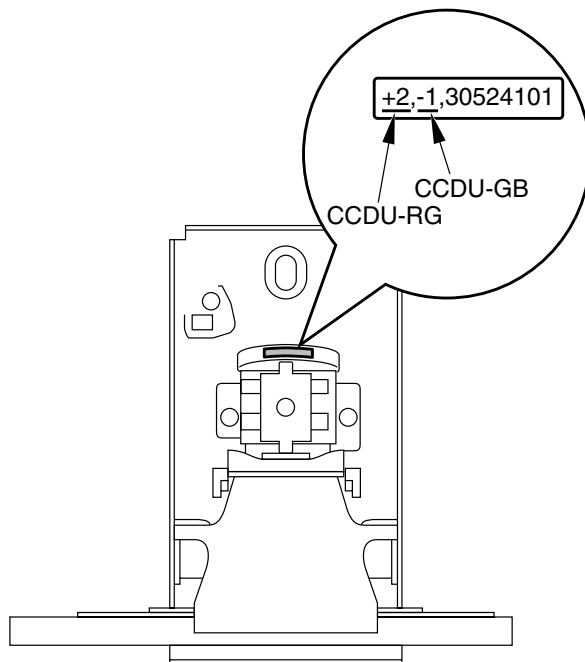


Figure 5-502

2) Sensors

After replacing the post-separation sensors, read sensors, or delivery reversal sensors, execute service mode [Feeder>FUNCTION>SENS-INT].

3) Document width volume

Execute service mode [Feeder>FUNCTION>SENS-INT].

4) Platen glass

Input the values indicated on the label attached to the platen glass in service mode [Copier>Adjust>CCD>W-PLT-X, Y, Z]. Be sure to also change the service label values.

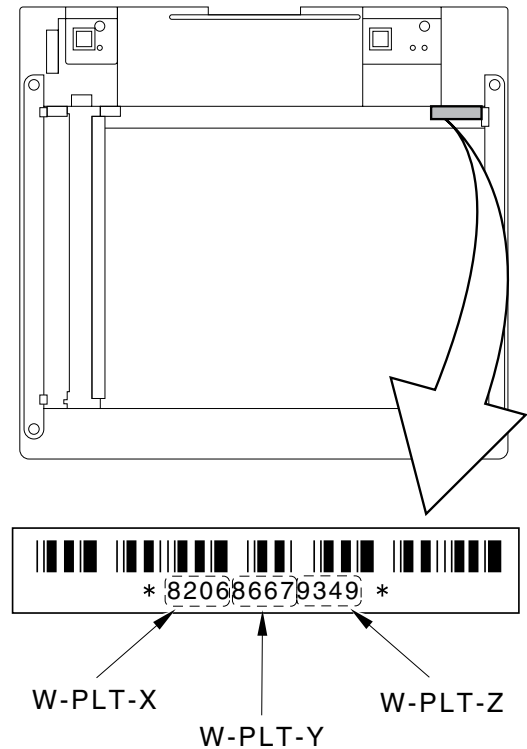


Figure 5-503

VI. OPERATION TROUBLESHOOTING

Note 1: If a problem occurs, check the operation panel display of the DR-7080C and the screen display of the computer.

1	AC power does not come on
---	----------------------------------

Nothing is displayed on the operation panel of the DR-7080C.

Cause/Fault Location	Step	Check Item	Result	Action
Power cord connection	1	Is power cord correctly connected?	NO	Correctly connect power cord.
Power switch ON	2	Is power switch ON?	NO	Set power switch to ON.
Connector connection (Operation panel)	3	Is connector on operation panel properly connected?	NO	Properly connect connector.
AC power supply voltage	4	Is the proper voltage supplied to the outlet?	NO	Explain to user that a problem is not with DR-7080C.
Connector connection (DC power supply)	5	Is connector on PCB properly connected?	NO	Properly connect connector.
Power supply PCB	6	Does LED light on DC controller PCB?	NO	Replace power supply PCB.
DC controller PCB	7	Is problem solved when DC controller PCB replaced?	YES	End.

Table 5-601

2	Computer does not detect DR-7080C
----------	--

The error message "Can't locate device; Check the cable and power supply." is displayed on the display connected to the computer.

Cause/Fault Location	Step	Check Item	Result	Action
I/F cable connection	1	Is I/F cable correctly connected?	NO	Connect I/F cable correctly.
Power supply	2	Is DR-7080C powered on? Is the order of turning power ON correct?	NO	Power ON again DR-7080C and computer, starting with DR-7080C.
I/F card	3	Are specifications of I/F card suitable?	NO	Use I/F card with suitable specifications.
	4	Is the I/F card installed correctly? Is the I/F card recognized by the computer?	NO	Install the I/F card correctly.
SCSI ID (In case of SCSI connection)	5	Is SCSI ID setting appropriate?	NO	Perform correct setting.

Table 5-602

3 Scanning does not occur, no documents are fed. (Hardware failure)

Check the error code that is displayed on the operation panel.

See "ERROR DISPLAY AND REMEDY" for details.

Cause/Fault Location	Step	Check Item	Result	Action
DC power supply	1	Does LED101 light on ADF driver PCB?	NO	Check connector connection from ADF driver PCB to DC controller PCB.
Connector connection (Motors)	2	Are connectors of motors, solenoids and clutches connected correctly?	NO	Connect connectors correctly.
Drive transmission system	3	Is motor transmission system connected correctly?	NO	Connect motor transmission system correctly.
	4	Are gears, belt and other parts normal?	NO	Replace defective parts.
Scanner motor	5	Is problem solved when scanner motor is replaced?	NO	Check scanner HP sensor operation.
Feed related motor	6	Is problem solved when feed related motor is replaced?	NO	Check feed related sensor operation.
Scanning lamp	7	Is connector connected correctly?	NO	Connect connector correctly.
	8	Is problem solved when scanning lamp is replaced?	YES	End.
Reader controller PCB	9	Is problem solved when reader controller PCB is replaced?	YES	End.
DC controller PCB	10	Is problem solved when DC controller PCB is replaced?	YES	End.

Table 5-603

4	Document feed problem (jam, double feed, creases)
---	--

Cause/Fault Location	Step	Check Item	Result	Action
Document	1	Do documents match specifications? (thickness, size, crease, curls, etc.)	NO	Use documents that match specifications or scan in FB mode.
Rollers	2	Are rollers clean? (Stain, wear)	NO	Clean or replace rollers.
Separation pad	3	Is separation pad clean? (Stain, wear)	NO	Clean or replace separation pad.
Scraper	4	Is scraper clean? (Dirt, deformation)	NO	Clean or replace scraper.
Feed guide	5	Is feed guide installed correctly?	NO	Install feed guide correctly.
	6	Is the surface that touches documents clean?	NO	Clean or replace feed guide.
Drive transmission system	7	Turning smoothly? Are gears broken or belt loose?	YES	Perform assembly adjustment or replace defective parts.

Table 5-604

VII. IMAGE TROUBLESHOOTING

Note 1: Image problems may be caused by the display and the printer used by the user. In such a case, the problem cannot be corrected on the DR-7080C.

Note 2: Depending on the type of image and on the setting, document reproducibility becomes poor. In such a case, the image may be improved by changing the setting items.

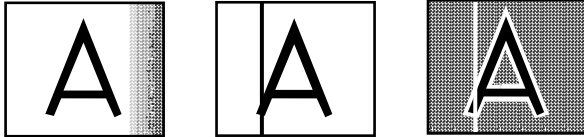
1	Image is not output (completely white, completely black, all gray)
---	---



Cause/Fault Location	Step	Check Item	Result	Action
Reading surface setting (Completely black)	1	Are documents set on document pickup tray and is reading side set to "flat bed"?	YES	Change the setting.
"Brightness" setting	2	Is "Brightness" setting good?	NO	Change the setting. Also change the "Contrast" setting if necessary.
Connector connection (Images)	3	Are reader and controller connected correctly?	NO	Connect reader and controller correctly
Platen glass (Standard white plate)	4	Is standard white plate on the back of the platen glass clean?	NO	Clean standard white plate. Take special care after disassembly or parts replacement.
CCD unit connection	5	Is flat cable correctly connected?	NO	Correctly connect cable.
CCD adjustment value	6	Is [Copier>Adjust>CCD]-related setting the same as the service label value?	NO	Change it to the service label value.
CCD unit	7	Is problem solved when CCD unit is replaced?	YES	End.
Reader controller PCB	8	Is problem solved when reader controller PCB is replaced?	YES	End.
DC controller PCB	9	Is problem solved when DC controller PCB is replaced?	YES	End.

Table 5-701

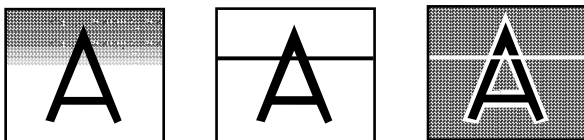
2 Uneven density, streak (main scanning direction)



Cause/Fault Location	Step	Check Item	Result	Action
Platen glass (FB mode)	1	Is platen glass clean? (Stain, damage)	NO	Clean or replace platen glass. Also clean the back if necessary.
ADF reading glass (ADF mode)	2	Is ADF reading glass clean? (Stain, damage)	NO	Clean or replace ADF reading glass. Apply "silicon oil" if necessary.
Roller	3	Is roller clean? (Stain, wear)	NO	Clean or replace roller.
Drive transmission system	4	Turning smoothly? Are gears broken or belt loose?	NO	Perform assembly adjustment or replace defective parts.
Feed related motor	5	Is problem solved when feed related motor is replaced?	YES	End.

Table 5-702

3 Uneven density, streak (sub scanning direction)



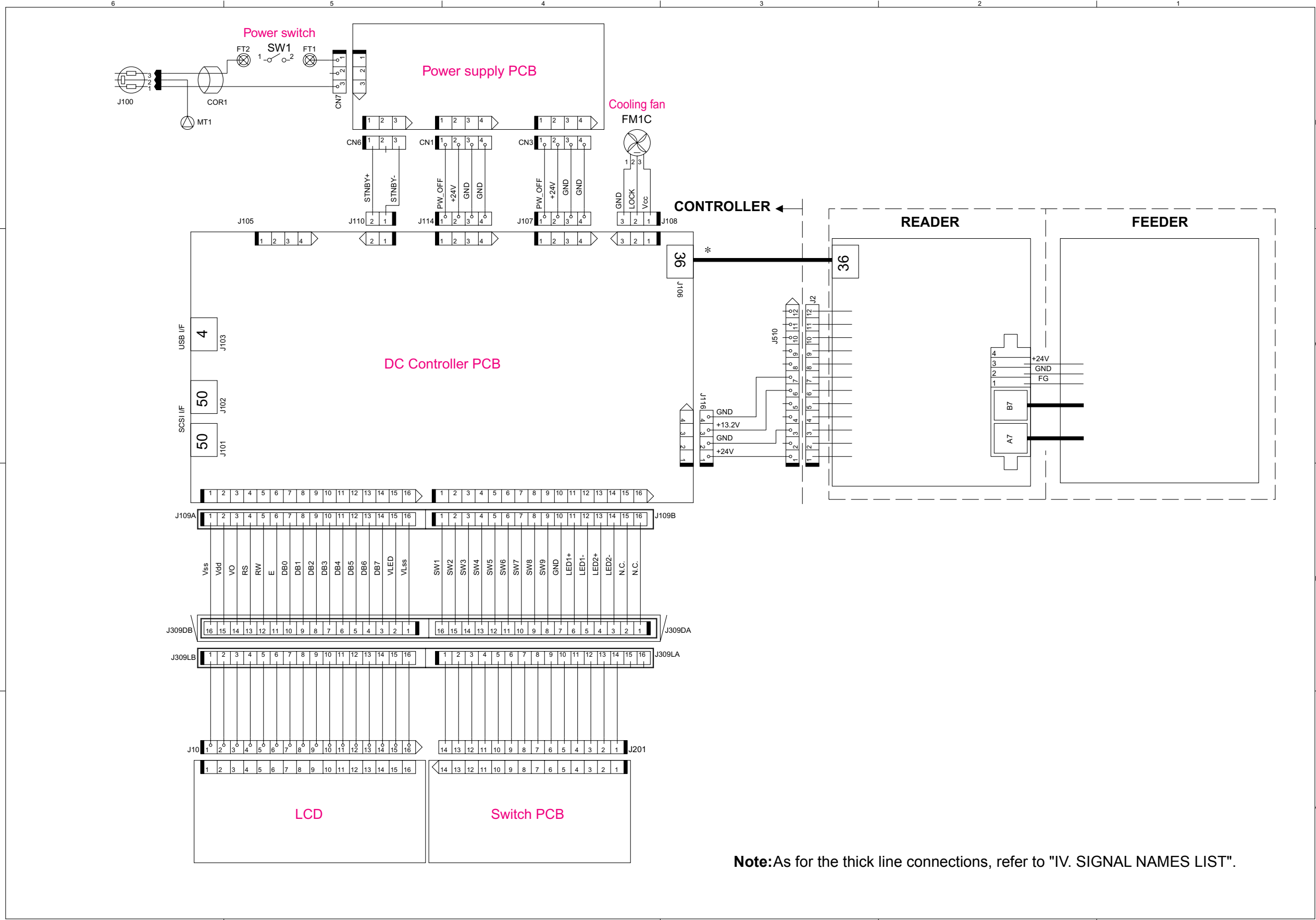
Cause/Fault Location	Step	Check Item	Result	Action
Platen glass	1	Is platen glass clean? (Stain, damage)	NO	Clean or replace platen glass. Also clean the back if necessary. (Including standard white board)
ADF reading glass (ADF mode)	2	Is ADF reading glass clean? (Stain, damage)	NO	Clean or replace reading glass. Also clean the back if necessary.
White level adjustment	3	Is problem solved when service mode is executed? Copier>Function>CCD>DF-WLVL1,DF-WLVL2	YES	End. See the "Service Mode" section for details.
CCD unit	4	Is problem solved when CCD unit is replaced?	YES	End.

Table 5-703

APPENDIX

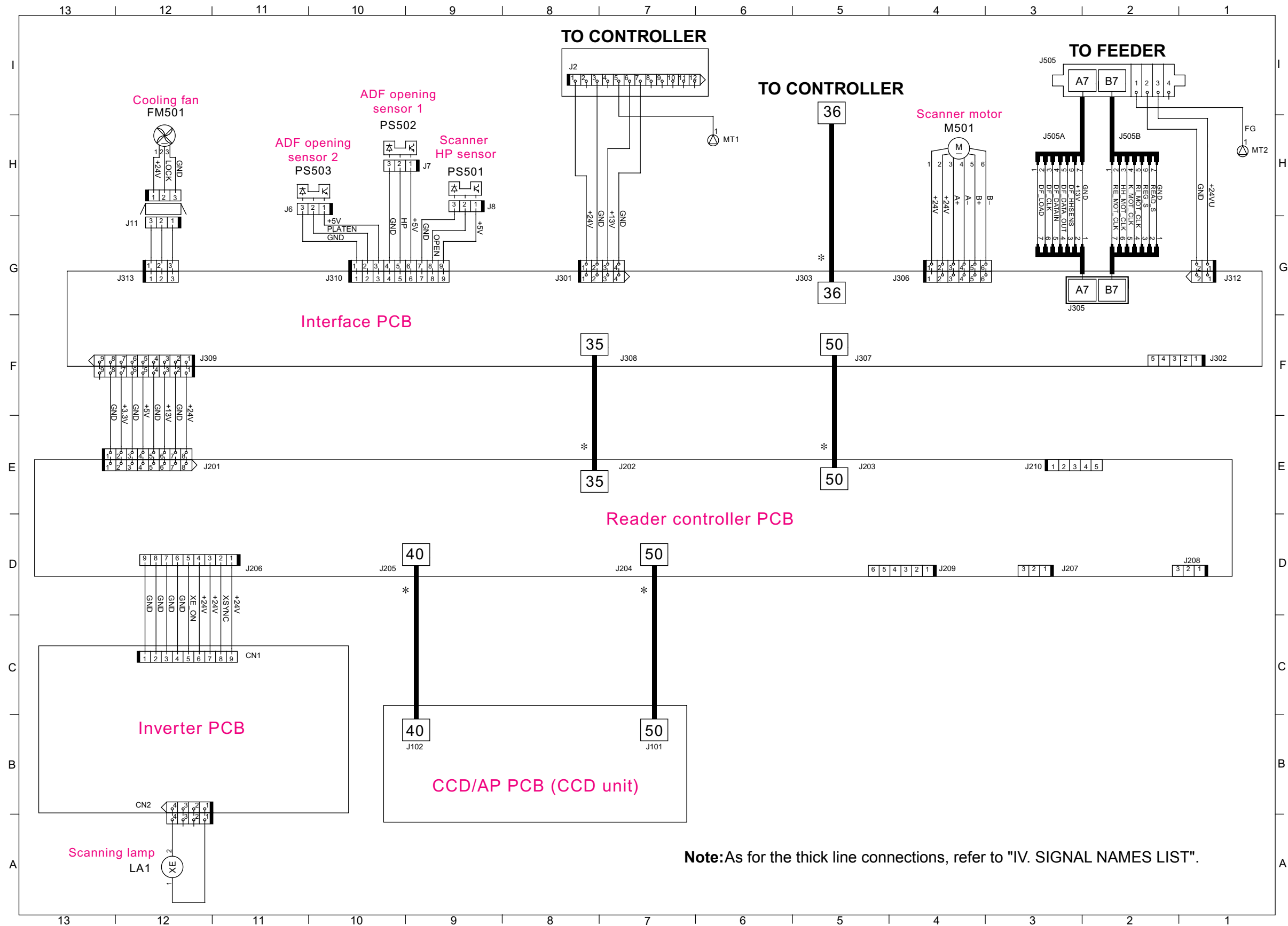
I. GENERAL DIAGRAM	A-1	IV. SIGNAL NAMES LIST	A-7
II. READER DIAGRAM	A-3	V. SPECIAL TOOLS LIST	A-10
III. FEEDER DIAGRAM.....	A-5		

I. GENERAL DIAGRAM

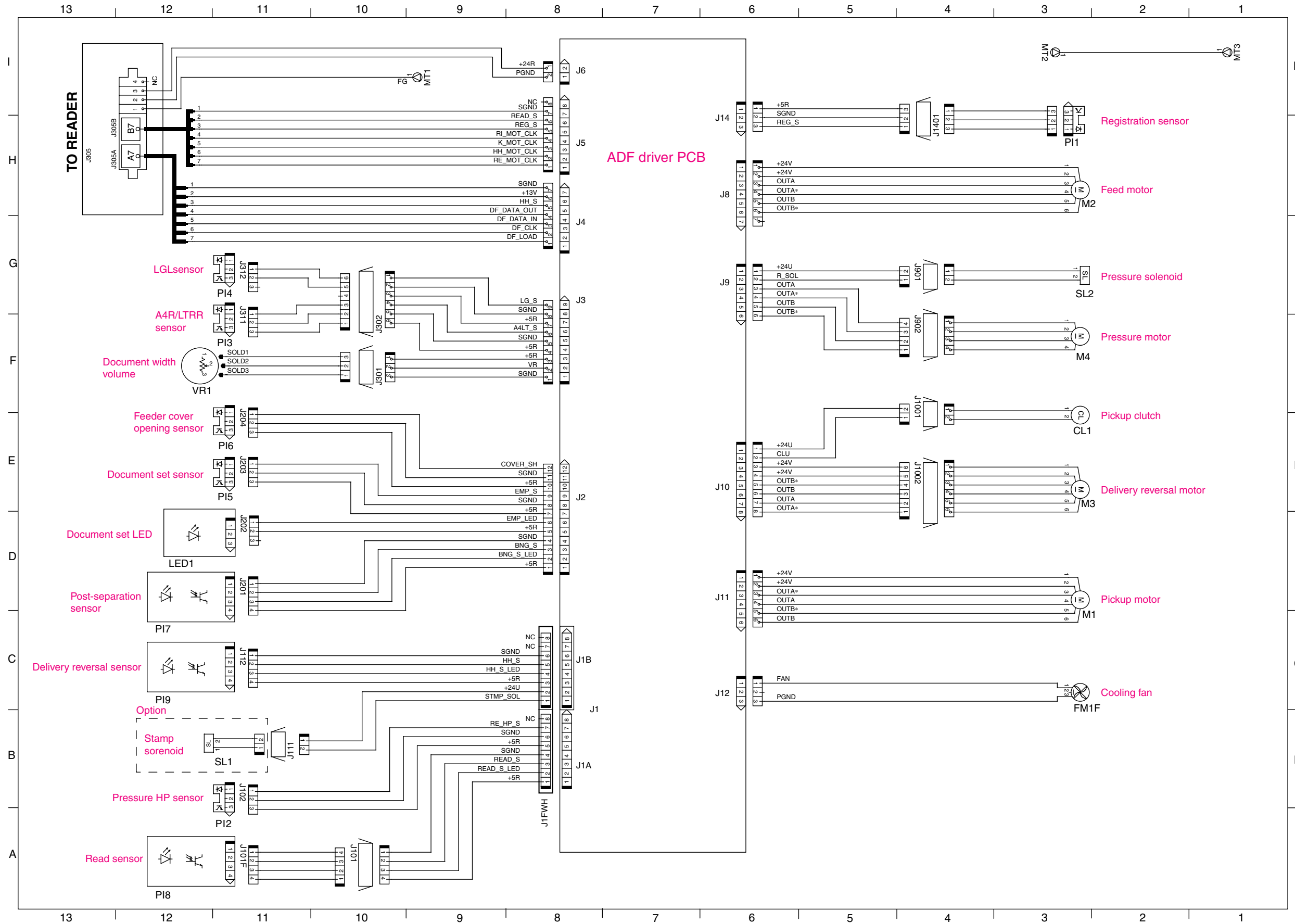


Note: As for the thick line connections, refer to "IV. SIGNAL NAMES LIST".

II. READER DIAGRAM



III. FEEDER DIAGRAM



IV. SIGNAL NAMES LIST

The list of signal names that could not be included in the circuit diagram is shown below.

• Table 1

DC Controller PCB	Signal Name	Interface PCB
J106	36 *SPOWER	1
	35 SCMD+	2
	34 SCMD-	3
	33 *SSCNST+	4
	32 *SSCNST-	5
	31 GND	6
	30 TxOUT1-	7
	29 TxOUT1+	8
	28 GND	9
	27 TxCLKOUT-	10
	26 TxCLKOUT+	11
	25 GND	12
	24 *SPRTST-	13
	23 *SPRTST+	14
	22 SCTS-	15
	21 SCTS+	16
	20 SPO1+	17
	19 SPO1-	18
	18 *SPBD-	19
	17 *SPBD+	20
	16 SRTS-	21
	15 SRTS+	22
	14 TxOUT0-	23
	13 TxOUT0+	24
	12 GND	25
	11 TxOUT2-	26
	10 TxOUT2+	27
	9 GND	28
	8 TxOUT3-	29
	7 TxOUT3+	30
	6 *SPRDY	31
	5 SSTS+	32
	4 SSTS-	33
	3 *SLIVEWAKE	34
	2 *SDOWNLOAD	35
	1 *SCPRDY	36

• Table 2

Interface PCB	Signal Name	Reader Controller PCB
J308	35 GND	1
	34 STM_VREF	2
	33 GND	3
	32 PC_RxD	4
	31 PC_TxD	5
	30 GND	6
	29 SCPRDY	7
	28 SPO_1	8
	27 SDOWNLOAD (SPO_0+)	9
	26 SLIVEWAKE (SPO_0-)	10
	25 GND	11
	24 SCTS*	12
	23 SSTS*	13
	22 GND	14
	21 SPRDY	15
	20 GND	16
	19 SRTS	17
	18 SCMD	18
	17 GND	19
	16 DF_LOAD	20
	15 DF_DATA_IN	21
	14 DF_DATA_OUT	22
	13 GND	23
	12 DF_CLK	24
	11 GND	25
	10 DF_HHMCK	26
	9 DF_KSMCK	27
	8 DF_RDMCK	28
	7 DF_RKMCK	29
	6 GND	30
	5 FAN_ON	31
	4 FAN_LOCK	32
	3 HP	33
	2 PLATEN	34
	1 GND	35

• Table 3

Interface PCB		Signal Name	Reader Controller PCB	
J307	50	GND	1	J203
	49	STM_CLOCK	2	
	48	GND	3	
	47	STM_STROBE	4	
	46	STM_DATAA	5	
	45	STM_DATAB	6	
	44	GND	7	
	43	SVSYNC	8	
	42	GND	9	
	41	SVCLK*	10	
	40	GND	11	
	39	SHSYNC	12	
	38	GND	13	
	37	SVDO16	14	
	36	SVDO17	15	
	35	SVDO18	16	
	34	SVDO19	17	
	33	GND	18	
	32	SVDO20	19	
	31	SVDO21	20	
	30	SVDO22	21	
	29	SVDO23	22	
	28	GND	23	
	27	SVDO8	24	
	26	SVDO9	25	
	25	SVDO10	26	
	24	SVDO11	27	
	23	GND	28	
	22	SVDO12	29	
	21	SVDO13	30	
20	SVDO14	31		
19	SVDO15	32		
18	GND	33		
17	SVDO0	34		
16	SVDO1	35		
15	SVDO2	36		
14	SVDO3	37		
13	GND	38		
12	SVDO4	39		
11	SVDO5	40		
10	SVDO6	41		
9	SVDO7	42		
8	GND	43		
7	GMKFLAG (SPI_0)	44		
6	SPI_1	45		
5	DF_RDSENS	46		
4	DF_RMAESENS	47		
3	DF_HHSENS	48		
2	DF_OPEN	49		
1	GND	50		

• Table 4

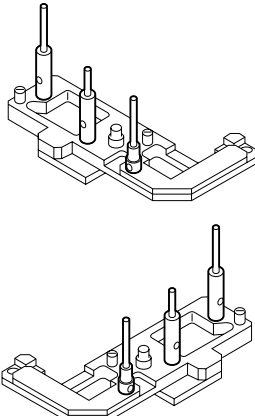
Reader Controller PCB		Signal Name	CCD/AP PCB	
J204	50	GND	1	J101
	49	GND	2	
	48	AP_SCLK*	3	
	47	AP_SDATA*	4	
	46	AP_SLOAD	5	
	45	GND	6	
	44	AP_ACLP*	7	
	43	GND	8	
	42	AP_MCLK	9	
	41	GND	10	
	40	FCP	11	
	39	SG	12	
	38	GND	13	
	37	FRS	14	
	36	GND	15	
	35	CK1*	16	
	34	GND	17	
	33	CK2*	18	
	32	GND	19	
	31	GND	20	
	30	SW3*	21	
	29	SW2*	22	
	28	SW1*	23	
	27	GND	24	
	26	ST4*	25	
	25	ST3*	26	
	24	ST2*	27	
	23	ST1*	28	
	22	GND	29	
	21	TG4*	30	
20	TG3*	31		
19	TG2*	32		
18	TG1*	33		
17	GND	34		
16	SH3*	35		
15	SH2*	36		
14	SH1*	37		
13	CLR*	38		
12	SG	39		
11	GND	40		
10	GND	41		
9	+12V	42		
8	N.C.	43		
7	+5V	44		
6	+5V	45		
5	+5V	46		
4	N.C.	47		
3	GND	48		
2	GND	49		
1	GND	50		

• Table 5

Reader Controller PCB		Signal Name	CCD/AP PCB	
J205	40	GND	1	J102
	39	CCD1	2	
	38	CCD2	3	
	37	CCD3	4	
	36	GND	5	
	35	CCD4	6	
	34	CCD5	7	
	33	CCD6	8	
	32	CCD7	9	
	31	GND	10	
	30	CCD8	11	
	29	CCD9	12	
	28	CCD10	13	
	27	GND	14	
	26	CCD11	15	
	25	CCD12	16	
	24	CCD13	17	
	23	GND	18	
	22	CCD14	19	
	21	CCD15	20	
	20	CCD16	21	
	19	CCD17	22	
	18	GND	23	
	17	CCD18	24	
	16	CCD19	25	
	15	CCD20	26	
	14	GND	27	
	13	CCD21	28	
	12	CCD22	29	
	11	CCD23	30	
	10	GND	31	
9	CCD24	32		
8	CCD25	33		
7	CCD26	34		
6	CCD27	35		
5	GND	36		
4	CCD28	37		
3	CCD29	38		
2	CCD30	39		
1	GND	40		

V. SPECIAL TOOLS LIST

The special tools required for performing the services of this machine are listed below.

No.	Tool Name	Tool No.	Shape	Rank	Use/Remark
1	Mirror positioning tool	FY9-3009-040		C	Attachment of scanner drive cable

References: Rank symbols

A = Tool one of which is owned by each service technician

B = Tool one of which can be owned by a group of approx. 5 persons

C = Tool one of which can be owned by each workshop

Prepared by

**Quality Assurance Center
Canon Electronics Inc.**

**1248 Shimokagemori, Chichibu-shi
Saitama 369-1892, Japan**

FIRST EDITION (MAR. 2004) [63999]

Canon

DR-7080C

PARTS CATALOG

内部用

FIRST EDITION

DR-7080C	100V	50/60Hz	M11-0491
	120V	60Hz	M11-0493
	220-240V	50/60Hz	M11-0494

DR-7080C
Draft version

Part No. 変更あり

1) P11-11

FL2-0728 FL2-1305

2) 210-18

FL2-0625 FL2-0645

Canon

MAR. 2004

MY8-31A1-000

序

このパーツ・カタログは、DR-7080Cに対するサービス部品調達の手引として発行します。
サービス部品の要求は、キヤノン販売営業所にお問い合わせください。
製品に大きな変更がある場合は、改訂版のパーツ・カタログを発行しますが、その他の場合は随時新しい情報をお届けします。
このパーツ・カタログは当社品質保証部品質推進課が発行管理を行っています。

キヤノン電子株式会社
品質保証部 品質推進課

PREFACE

This Parts Catalog contains listings of parts used in the DR-7080C.
Diagrams are provided with the listings to aid the service technician in identifying clearly, the item to be ordered.

Whenever ordering parts, consult this Parts Catalog for all of the information pertaining to each item. Be sure to include in the Parts Request, the full item description, the item part number and the quantity.

Quality Assurance Center
Canon Electronics Inc.

版權所有，無斷轉載，引用を禁ず。
Copyright © 2004 Canon Electronics Inc

本マニュアルについては、機密保持等その取扱には十分注意して下さい。
万一取扱を誤りますと法律で処罰されることがあります。

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

目 次

A	主要部品配置図
P11	フィーダ外装カバー部
P12	原稿トレイ部
P31	開閉カバー部
P41	搬送部
001	ADF付属品
210	リーダー部
211	リーダーフレーム部
194	スキャナ冷却ファン部
420	第1ミラー台部
430	第2ミラー台部
510	操作パネル部
520	コントローラ部

部品索引表

CONTENTS



A	ASSEMBLY LOCATION DIAGRAM
P11	FEEDER EXTERNAL COVERS
P21	DOCUMENT TRAY ASSEMBLY
P31	OPEN/CLOSE PANEL ASSEMBLY
P41	PAPER FEEDER ASSEMBLY
001	ADF ACCESSORY
210	READER ASSEMBLY
211	READER FRAME ASSEMBLY
194	SCANNER COOLING FAN ASSEMBLY
420	MIRROR ASSEMBLY 1
430	MIRROR ASSEMBLY 2
510	OPERATION PANEL ASSEMBLY
520	CONTROLLER ASSEMBLY

NUMERICAL INDEX

パーツカタログの見方

主要部品配置図について

部品図番号 (Figure No.) および各アセンブリの位置を捜すとき、主要部品配置図を用います。

図中  内は部品図名称,  内は部品図番号を示しています。

部品番号の探し方

どのアセンブリに使用されている部品かを、主要部品配置図で調べその部品図番号 (Figure No.) のページをめくります。

部品図の中からその部品をみつけ、そのキーNo.を部品番号リストの中から探し出せば、部品番号・部品名称を知ることができます。

注：電源電圧・周波数等の仕様が異なる場合は、同一のキーNo.に複数の部品番号が記されているので“REMARKS”欄を注意して見るようにしてください。

部品番号リストについて

部品番号リストの内容項目は次のとおりです。

(1) 部品図番号およびキーNo. (FIGURE & KEY No.)

部品図番号は、各部品番号リスト欄の左上に示しており、各部品図に対応しています。

また、キーNo. は、部品図中に示してある個々の部品に対応します。

(2) 部品番号 (PART NUMBER)

リストの2番目の欄には、部品番号が示してあります。部品を発注する際は、必ずこの番号を明示してください。NPNと記載されている部品はサービスパーツに設定されていません。

注：部品番号の末尾3桁を訂番といいます。部品改良等の目的で部品の一部が変更になった場合、訂番が変わることがあります。これらの変更については、技術情報 (Service Information) で随時連絡されますので、常にこれらの情報も注意深く読むよう心がけてください。

(3) ランク (RANK)

Nと記載されている部品はサービスパーツに設定されていますが、在庫はされていません。注文を受けてからの受注生産になります。

(4) 使用個数 (Q'TY)

4番目の使用個数欄に示してある数字は、各部品図中における各部品の使用数量を示しています。

使用個数欄には数字の他に以下のアルファベット文字も表示されています。

AR 数量を限定せず、組立時に必要に応じた数量を使用するもの、および個数の明記できないもの

(5) 部品名称 (DESCRIPTION)

個々の部品の名称が英文と和文で記されています。

部品発注の際、部品名称も必ず明示してください。

電気部品等の主な仕様・型番は、英文の末尾に記しているものもあります。

(6) 備考 (REMARKS)

電源電圧・周波数等の仕様の違いがある場合に、表示しています。

これらの表示のないものについてはすべての機械に適用できます。

部品索引表 (NUMERICAL INDEX)

部品番号の索引が巻末にあります。



部品番号がわかっていて、使用場所を調べる場合に活用できます。

索引表の左の欄が部品番号 (PART No.)、中央の欄が部品図番号 (FIGURE No.) とキーNo. (KEY No.)、右の欄が使用個数 (Q'TY) を示しています。

HOW TO USE PARTS CATALOG

Assembly Location Diagrams

These diagrams show Figure Number and the locations of major assemblies of the machine.

Figure names are identified in rectangular boxes , and Figure numbers are identified in elliptic boxes .

Finding a Parts Number

Refer to the Assembly Location Diagrams and find out the Figure Number. Turn to the page (s), and find its Key Number. Refer to the Parts List, and find the Key Number, Part Number and Description.

Note : While looking for a Part Number, pay particular attention to the voltage listed in the “REMARKS” column to ensure that the Part Number selected is for your type of machine.

Part List pages

The Parts List pages contain the following columns and information.

(1) Figure and Key Number.

The first column shows the Figure Number of the illustration corresponding to the Parts List, and the Key Number that identifies the part on the illustration.

(2) Part Number.

The second column shows the Part Number for the part. This Number must be used when ordering replacement parts or assemblies. Parts marked “NPN” are not service parts.

Note : The last three digits (suffix) of the Parts Number are called the Revision Number. The Revision Number is changed of the part is modified. Information regarding such changes will be provided by Service Information Bulletins. These Bulletins should be read carefully.

(3) Rank.

Parts marked “N” are service parts, but are not stock items. They are produced on a special-order basis.

(4) Quantity (Q'ty).

The quantity shown in this column is the number of parts used in the figure.

This column indicates the following alphabets as well as numeric characters.

AR This indicates that the quantity of a part is not specified, allowing the use of the number of parts needed for assembly and that the quantity cannot be mentioned clearly.

(5) Description.

The Description column lists the description in Japanese and in English. When ordering the part, such description should be use as well as the part number. Some major specifications and type numbers are described at the end of the description in English.

(6) Remarks.

When there are differences in the specifications of power supply voltage or others, the differences are described in this column.

If there are not such differences, the part is available for all machines.

Numerical Index

There is a Numerical Index at the end of this catalog. It can be used when looking for the location where the part is used, if you know the part number. The first column shows the Part Number, the second column lists the Figure and Key Number and the third column shows the used quantities.

FIGURE A-1

ASSEMBLY LOCATION DIAGRAM-1 主要部品配置図-1

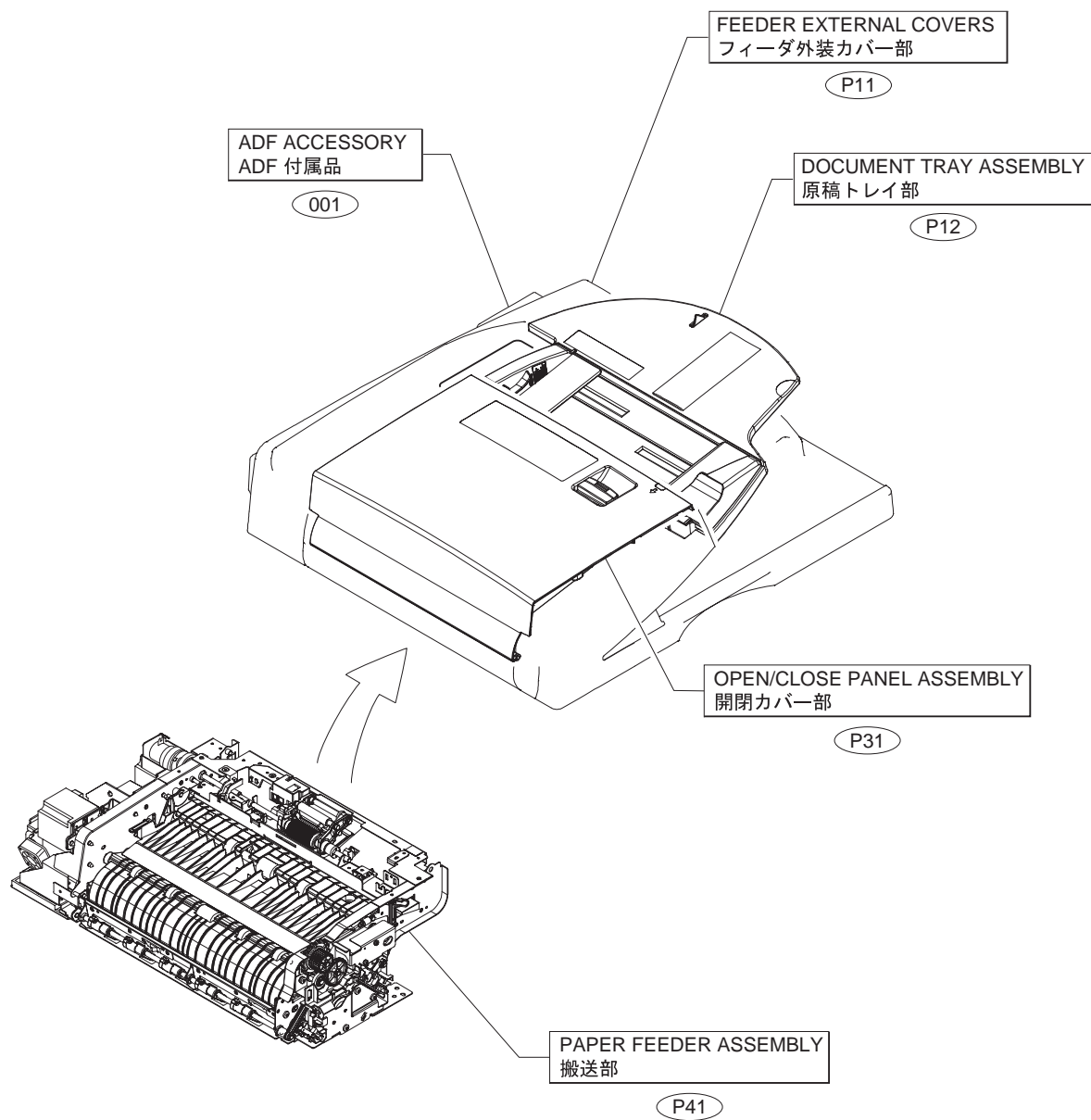


FIGURE A-2 ASSEMBLY LOCATION DIAGRAM-2
主要部品配置図-2

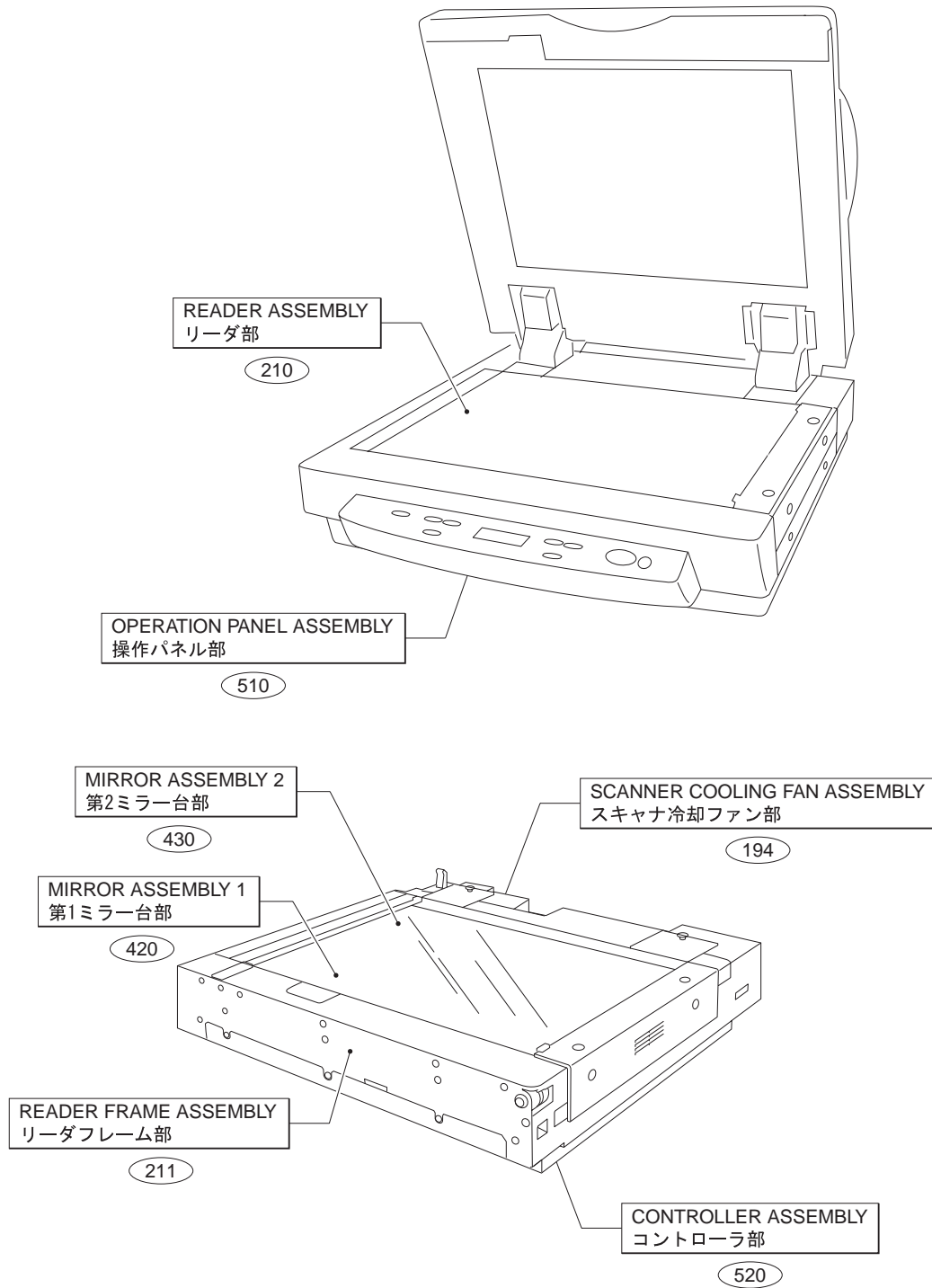


FIGURE P11 (1/2)

FEEDER EXTERNAL COVERS フィーダ外装カバー部

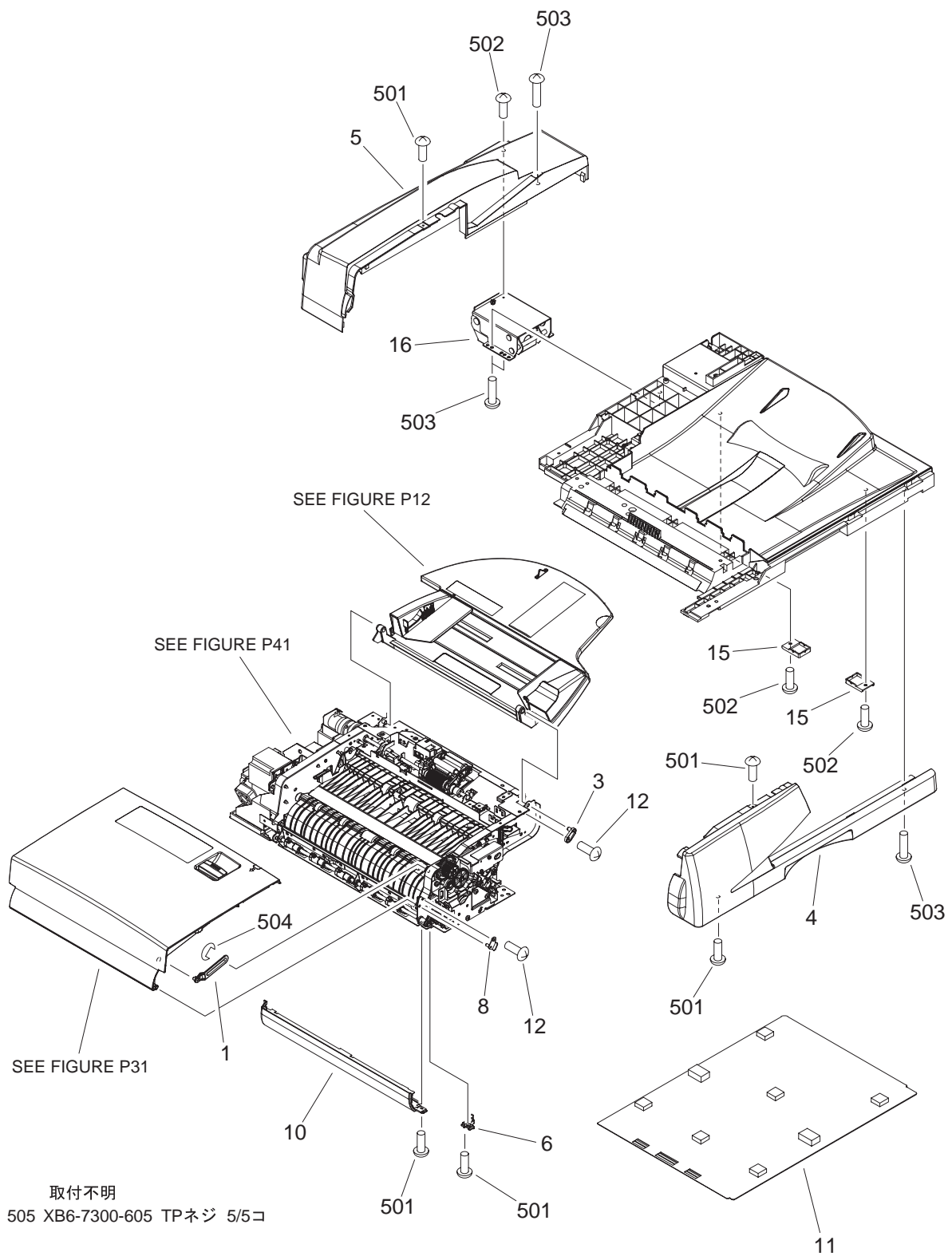
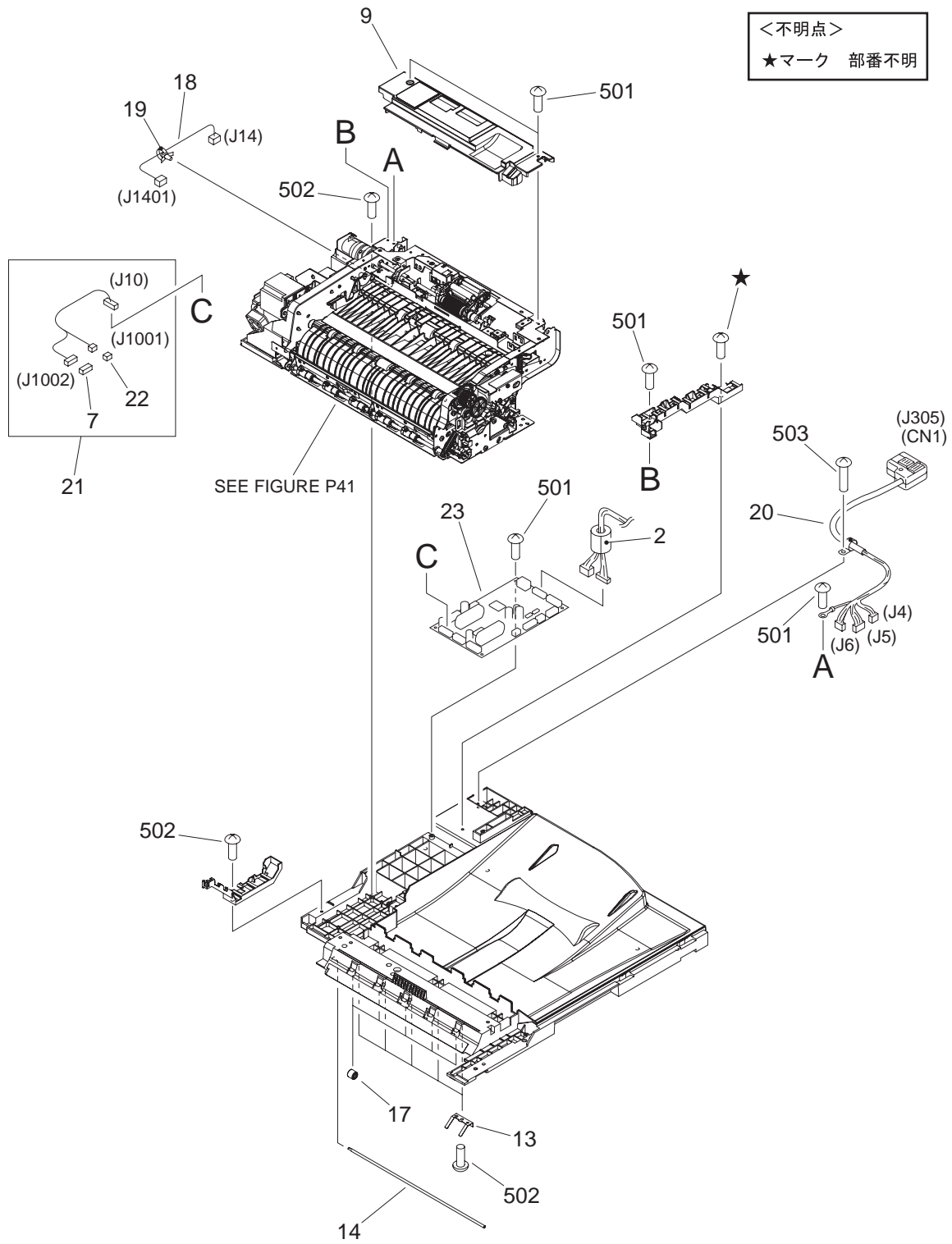


FIGURE P11 (2/2)

FEEDER EXTERNAL COVERS フィーダ外装カバー部



Note: 「*」印の部品は DR-7080C 専用部品です。その他は複写機流用部品です。

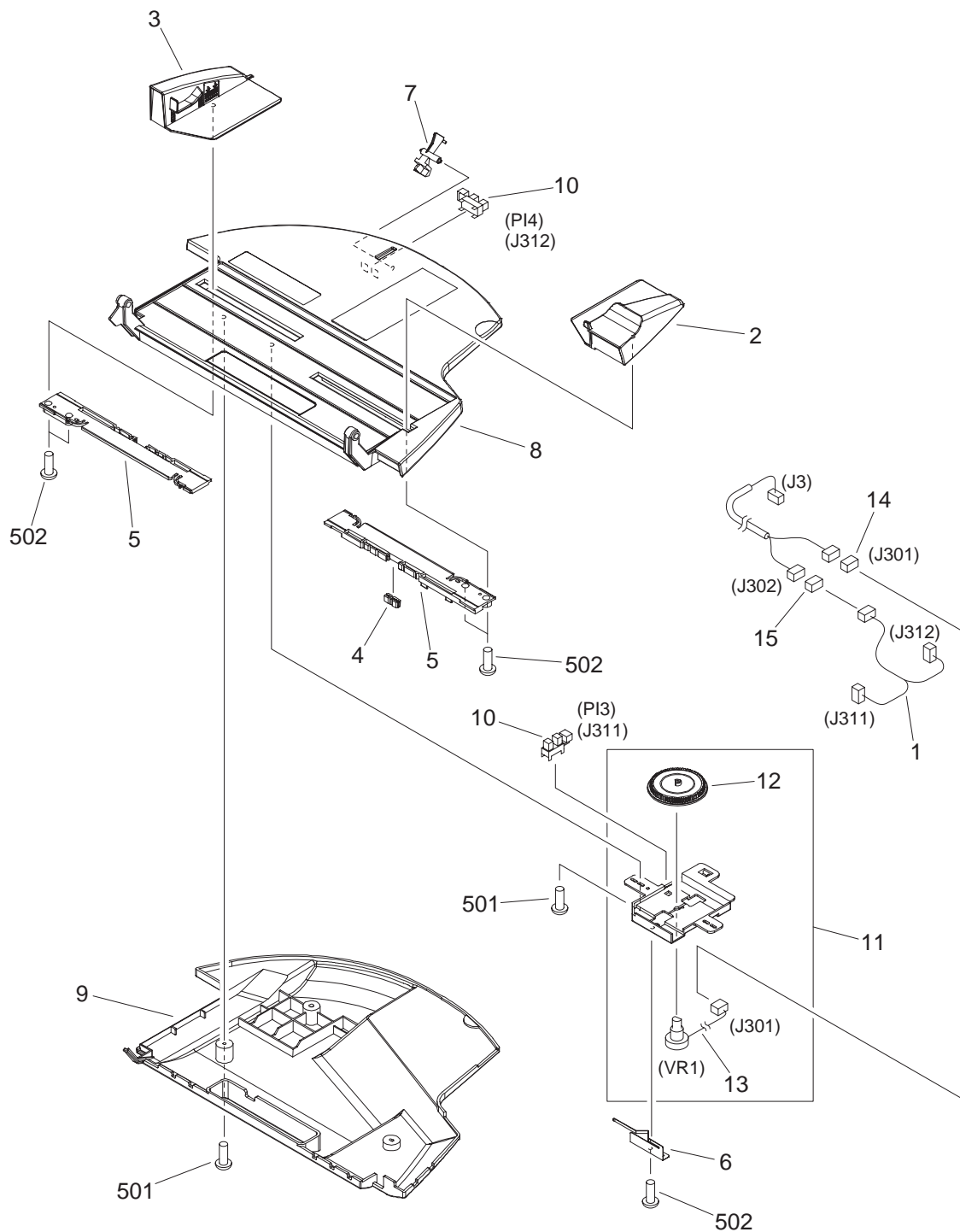
The parts marked "*" mean the unique parts of DR-7080C. The others are the commoned parts of Copier.

FIGURE & KEY NO.	PART NUMBER *	RANK	QTY	DESCRIPTION	REMARKS
P11 -	1 FC5-3015-000		1	ARM, OPEN/CLOSE PANEL STOPPER 開閉カバー ストップ アーム	
	2 WE8-5256-000		1	CLAMP, FERRITE フェライト クランプ	
	3 FC5-3102-000		1	PIN, POSITIONING 位置決めピン	
	4 FC5-3202-000		1	PANEL, FRONT 前カバー	
	5 FL2-1303-000		1	PANEL, REAR 後カバー	
6	FC5-3214-000		1	BLOCK, HEIGHT 高さコマ	
7	VS1-7177-006		1	CONNECTOR, SNAP TIGHT, BK 中継コネクタ	
8	FL2-0725-000		1	PLATE, OPEN/CLOSE SHAFT 開閉支軸板	
9	FL2-0726-000		1	PANEL, CENTER 中カバー	
10	FL2-0727-000		1	PANEL, SIDE サイド カバー	
11	FL2-0728-000 *		1	PANEL, COPYBOARD 原稿台カバー	
12	XA9-1031-000		7	SCREW, MACH., TRUSS HEAD, M4X8 バインド ネジ	
13	FC5-3211-000		5	SPRING, LEAF 板 バネ	
14	FC5-3212-000		1	SHAFT, PAPER READ ROLLER リード コロ軸	
15	FC5-3221-000		2	SUPPORT, COPYBOARD PANEL 原稿台カバー支持板	
16	FC5-3226-000		1	HINGE, RIGHT 右ヒンジ	
17	FU5-6073-000		5	ROLLER, FEED 搬送コロ	
18	FM2-1028-000		1	CABLE, REGISTRATION SENSOR レジスト センサ束線	
19	WT2-5565-000		1	CLAMP, CABLE ソクセン オサエ	
20	FM2-1032-000		1	CABLE, INTERFACE インターフェース ケーブル	
21	FM2-1034-000		1	CABLE, MOTOR/CLUTCH CONNECTING モータ/クラッチ中継束線	
22	VS1-7177-002		1	CONNECTOR, SNAP TIGHT, BK 中継コネクタ	
23	FM2-1021-000		1	ADF CONTROLLER PCB ASSEMBLY ADFコントローラ回路基板	
501	XB1-2300-605		7	SCREW, MACH., TRUSS HEAD, M3X6 バインド ネジ	
502	XB4-5400-805		15	SCREW, P, M4X8 P タイト ネジ	
503	XB4-5401-205		7	SCREW, P, M4X12 P タイト ネジ	
504	XD2-1100-502		1	RING, E E リング	
505	XB6-7300-605		5	SCREW, TP, M3X6 TP ネジ	

FIGURE P12

DOCUMENT TRAY ASSEMBLY

原稿トレイ部



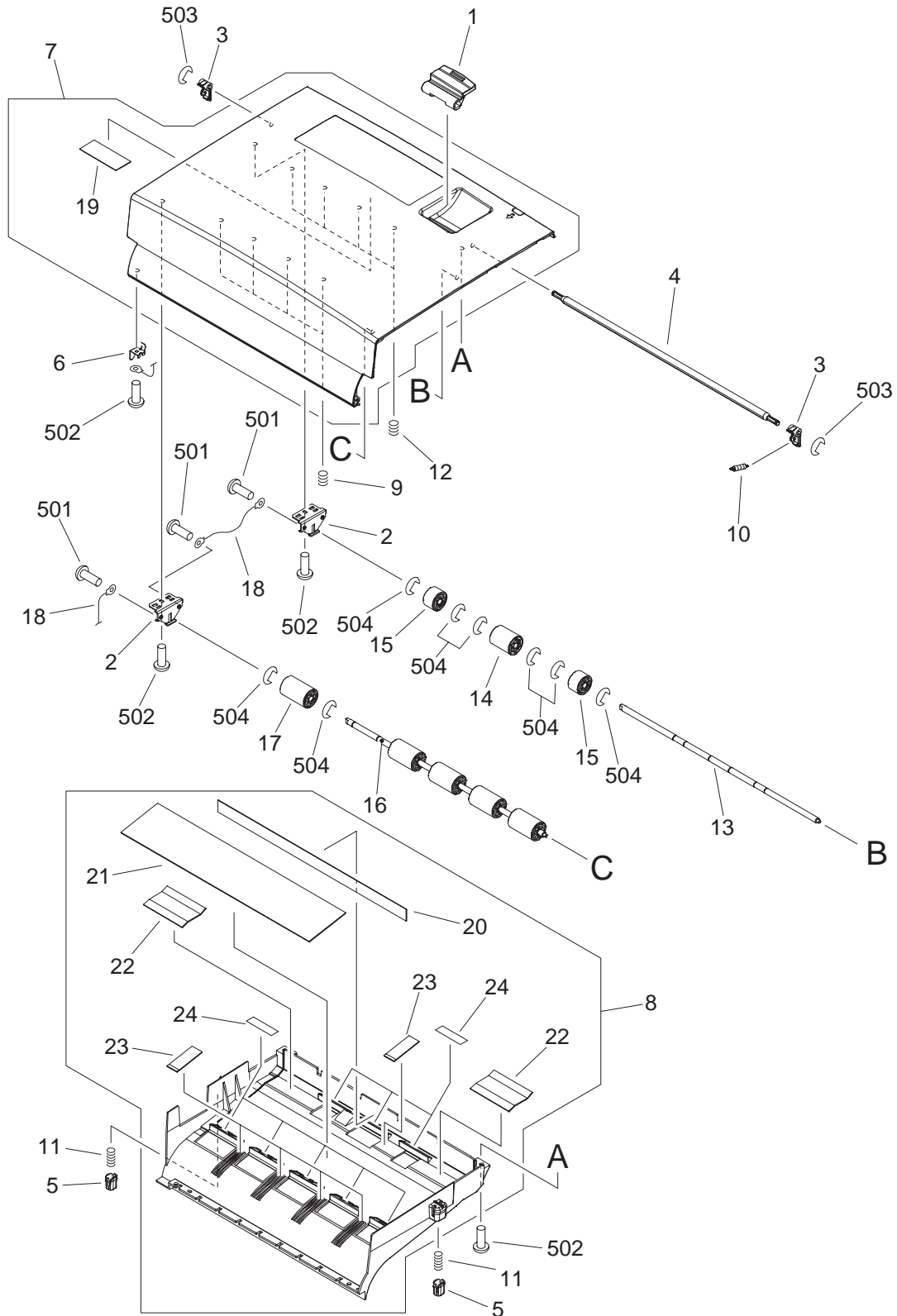
Note: 「*」印の部品は DR-7080C 専用部品です。その他は複写機流用部品です。

The parts marked "*" mean the unique parts of DR-7080C. The others are the commoned parts of Copier.

FIGURE & KEY NO.	PART NUMBER *	RANK	QTY	DESCRIPTION	REMARKS
P12 -	1 FM2-1031-000		1	CABLE, DOCUMENT TRAY CONNECT 原稿トレイ中継束線	
	2 FC5-3106-000		1	GUIDE, DOCUMENT SIDE, FRONT 原稿サイド ガイド(前)	
	3 FL2-1304-000		1	GUIDE, DOCUMENT SIDE, REAR 原稿サイド ガイド(後)	
	4 FC5-3108-000		1	RACK ラック	
	5 FC5-3111-000		2	RACK, DOCUMENT SIDE GUIDE 原稿サイド ガイド ラック	
6	FC5-3113-000		1	SPRING, LEAF 板 バネ	
7	FC5-3137-000		1	FLAG, DOCUMENT LENGTH SENSOR 原稿長さ検知フラグ	
8	FL2-0735-000		1	TRAY, DOCUMENT, UPPER 原稿トレイ(上)	
9	FL2-0736-000		1	TRAY, DOCUMENT, LOWER 原稿トレイ(下)	
10	WG8-5593-000		2	PHOTO INTERRUPTER TLP1242 フォトインタラプタ	
11	FM2-0696-000		1	VOLUME HOLDER ASSEMBLY ボリューム ホルダ部	
12	FU5-0342-000		1	GEAR, 68T 68T ギア	
13	FM2-1024-000		1	VARIABLE RESISTOR UNIT 可変抵抗ユニット	
14	VS1-7177-003		1	CONNECTOR, SNAP TIGHT, BK 中継コネクタ	
15	VS1-7177-006		1	CONNECTOR, SNAP TIGHT, BK 中継コネクタ	
501	XB4-7300-805		6	SCREW, TAPPING, TRUSS HEAD, M3X8 バインド タッピン ネジ	
502	XB4-7401-005		4	SCREW, TAPPING, TRUSS HEAD, M4X10 バインド タッピン ネジ	

FIGURE P31

OPEN/CLOSE PANEL ASSEMBLY 開閉カバー部



Note: 「*」印の部品は DR-7080C 専用部品です。その他は複写機流用部品です。

The parts marked "*" mean the unique parts of DR-7080C. The others are the commoned parts of Copier.

FIGURE & KEY NO.	PART NUMBER *	RANK	QTY	DESCRIPTION	REMARKS
P31 -	1 FC5-2953-000		1	LEVER, OPEN/CLOSE 開閉レバー	
	2 FC5-2956-000		2	PLATE, REGISTRATION ADJUSTMENT レジスト調整板	
	3 FC5-2957-000		2	LEVER, LATCH ラッチ レバー	
	4 FC5-2958-000		1	SHAFT, LATCH ラッチ軸	
	5 FC5-2963-000		2	RETAINER, OPEN/CLOSE GUIDE 開閉ガイド押え	
6	FC5-3014-000		1	SPRING, LEAF 板バネ	
7	FL2-0733-000		1	PANEL, OPEN/CLOSE 開閉カバー	
8	FL2-0734-000		1	GUIDE, OPEN/CLOSE 開閉ガイド	
9	FU5-2234-000		4	SPRING, COMPRESSION 圧縮バネ	
10	FU5-2235-000		1	SPRING, TENSION 引っ張りバネ	
11	FU5-2236-000		2	SPRING, COMPRESSION 圧縮バネ	
12	FU5-2250-000		4	SPRING, COMPRESSION 圧縮バネ	
13	FC5-3025-000		1	SHAFT, REGISTRATION ROLLER, 1 レジスト ローラ軸(1)	
14	FU5-6075-000		1	ROLLER, REGISTRATION, 1 レジスト ローラ(1)	
15	FU5-6079-000		2	ROLLER, REGISTRATION, 2 レジスト ローラ(2)	
16	FC5-2962-000		1	SHAFT, REGISTRATION ROLLER, 2 レジスト ローラ軸(2)	
17	FU5-6074-000		5	ROLLER, REGISTRATION, 3 レジスト ローラ(3)	
18	FM2-1035-000		2	WIRE, GROUNDING アース ワイヤ	
19	MA2-7050-000 *		1	SHEET, CLEANING(C) クリーニング シート	
20	MA2-7048-000 *		1	SHEET, CLEANING(A) クリーニング シート	
21	MA2-7049-000 *		1	SHEET, CLEANING(B) クリーニング シート	
22	MA2-7051-000 *		2	SHEET, CLEANING(D) クリーニング シート	
23	MA2-7052-000 *		5	SHEET, CLEANING(E) クリーニング シート	
24	FC5-2954-000		8	SCRAPER スクレーパ	
501	XB1-2300-605		3	SCREW, MACH., TRUSS HEAD, M3X6 バインド ネジ	
502	XB4-5300-809		7	SCREW, P, M3X8 P タイト ネジ	
503	XD2-1100-402		2	RING, E E リング	
504	XD2-1100-502		16	RING, E E リング	

FIGURE P41 (1/3)

PAPER FEEDER ASSEMBLY 搬送部

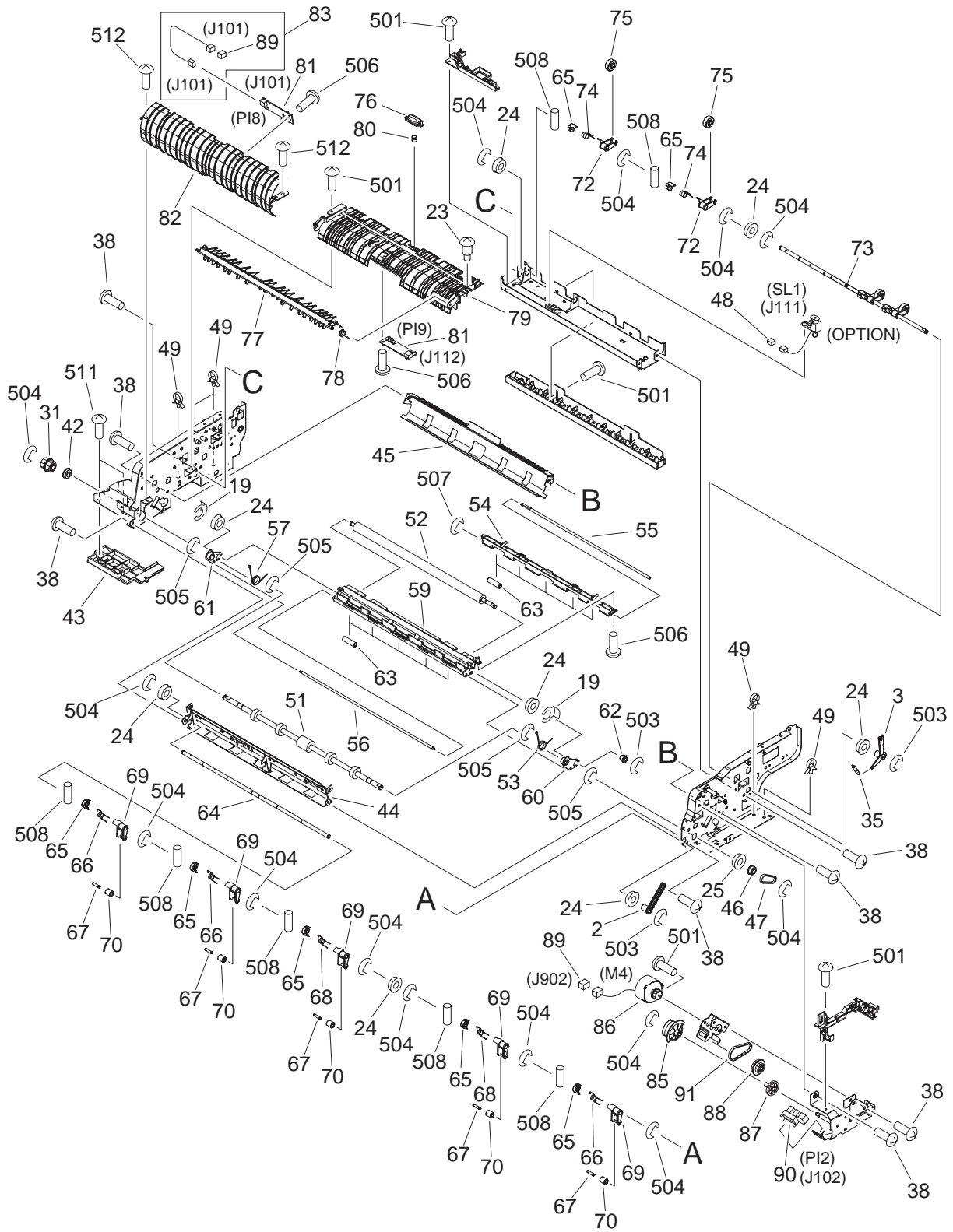


FIGURE P41 (2/3)

PAPER FEEDER ASSEMBLY 搬送部

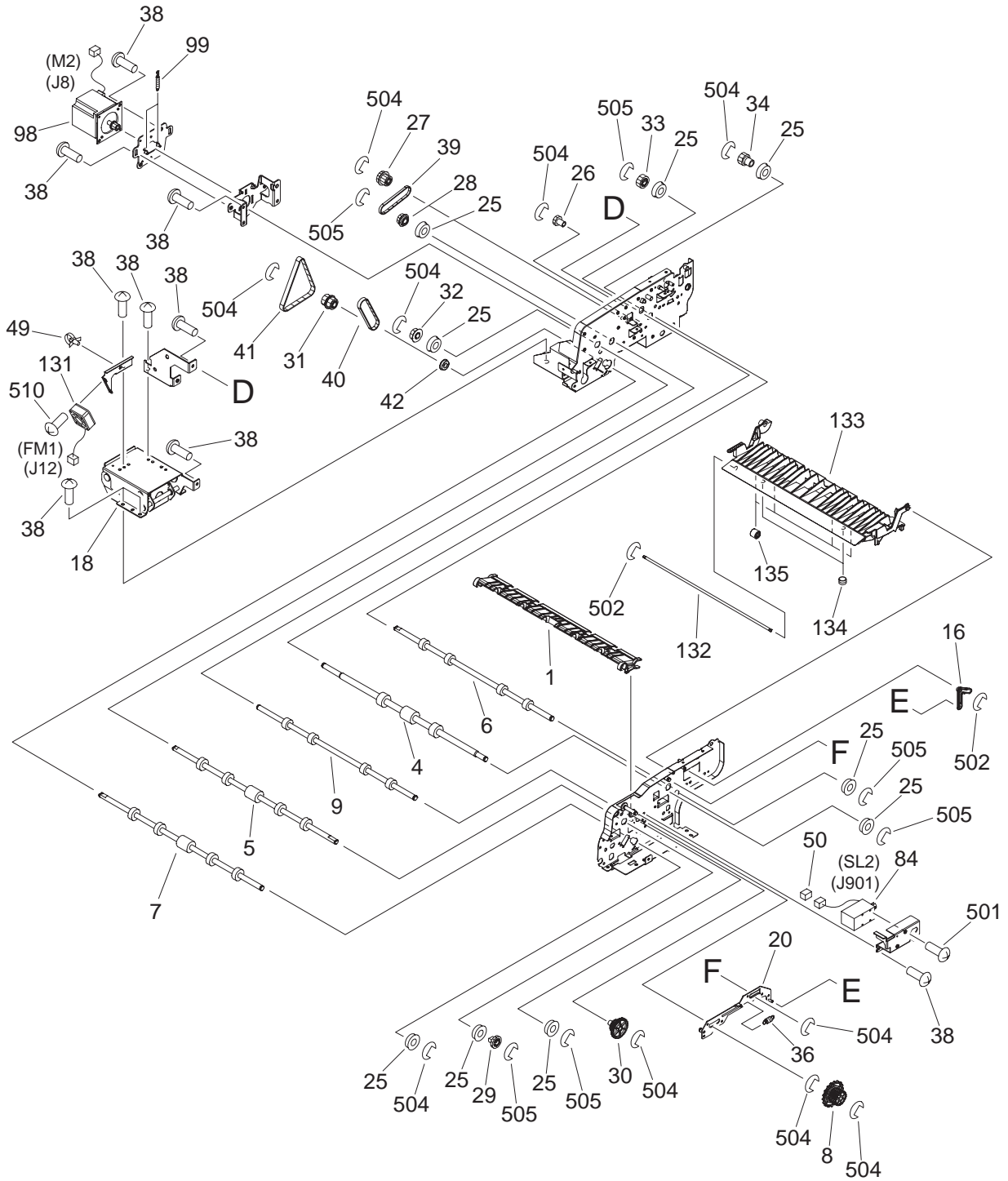
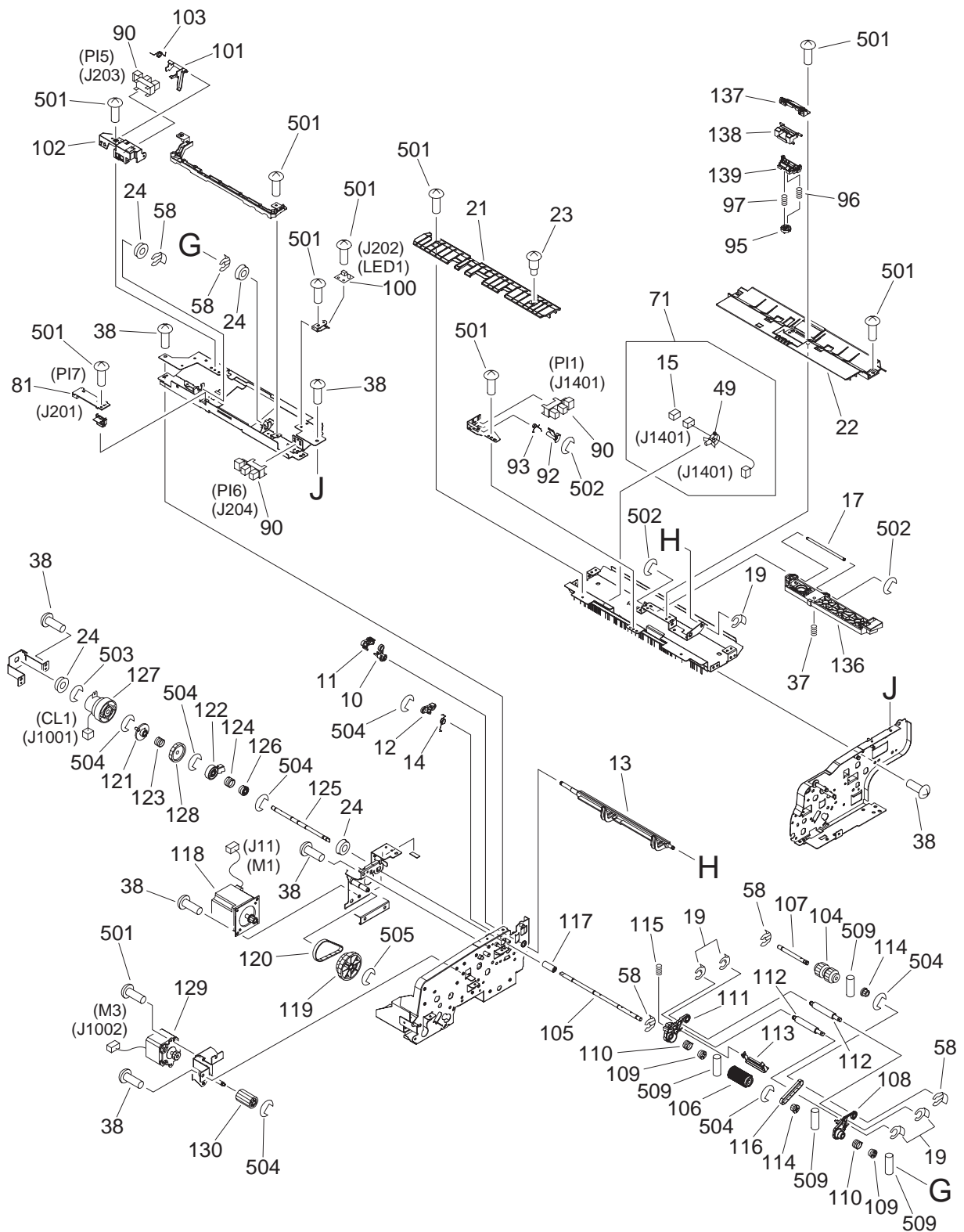


FIGURE P41 (3/3)

PAPER FEEDER ASSEMBLY 搬送部



Note: 「*」印の部品は DR-7080C 専用部品です。その他は複写機流用部品です。

The parts marked "*" mean the unique parts of DR-7080C. The others are the commoned parts of Copier.

FIGURE & KEY NO.	PART NUMBER *	R A N K	Q' T Y	DESCRIPTION	REMARKS
P41 -	1		1	GUIDE, REVERSE 反転ガイド	
	2		1	ARM, RELEASE 解除アーム	
	3		1	ARM, RELEASE 解除アーム	
	4		1	ROLLER, REGISTRATION, 1 レジスト ローラ(1)	
	5		1	ROLLER, REGISTRATION, 2 レジスト ローラ(2)	
	6		1	ROLLER, PAPER DELIVERY 排紙ローラ	
	7		1	ROLLER, PAPER READ リード ローラ	
	8		1	KNOB, JAM CLEARING ジャム処理ノブ	
	9		1	ROLLER, PAPER FEEDER 搬送ローラ	
	10		1	LEVER, LOCK ロック レバー	
	11		1	LEVER, LOCK ロック レバー	
	12		1	LEVER, LOCK ロック レバー	
	13		1	SHUTTER, DOCUMENT 原稿シャッター	
	14		1	SPRING, TORSION ねじりバネ	
	15		1	CONNECTOR, SNAP TIGHT, BK 中継コネクタ	
	16		1	LINK, PRESSURE RELEASE 加圧解除リンク	
	17		1	SHAFT, PRESSURE RELEASE LINK 加圧解除リンク軸	
	18		1	HINGE, LEFT 左ヒンジ	
	19		7	CLIP クリップ	
	20		1	LINK, PRESSURE RELEASE 加圧解除リンク	
	21		1	GUIDE, REGISTRATION レジスト ガイド	
	22		1	GUIDE, SEPARATION LOWER 分離下ガイド	
	23		2	SCREW, STEPPED, M4 ダンビス	
	24		12	BUSHING ブッシング	
	25		10	BUSHING ブッシング	
	26		1	GEAR, 18T 18T ギア	
	27		1	GEAR, 24T/PULLEY, 28T 24T ギア/28T プーリ	
	28		1	PULLEY, 28T 28T プーリ	
	29		1	GEAR, 24T 24T ギア	
	30		1	GEAR, 42T/24T 42T/24T ギア	
	31		2	PULLEY, 30T 30T プーリ	
	32		1	PULLEY, 30T 30T プーリ	
	33		1	GEAR, 24T 24T ギア	
	34		1	GEAR, 22T 22T ギア	
	35		1	SPRING, TENSION 引っ張りバネ	

Note: 「*」印の部品は DR-7080C 専用部品です。その他は複写機流用部品です。

The parts marked "*" mean the unique parts of DR-7080C. The others are the commoned parts of Copier.

FIGURE & KEY NO.	PART NUMBER *	R A N K	Q' T Y	DESCRIPTION	REMARKS
P41 -	36		1	SPRING, TENSION 引っ張りバネ	
	37		1	SPRING, COMPRESSION 圧縮バネ	
	38		51	SCREW, MACH., TRUSS HEAD, M4X8 バインド ネジ	
	39		1	BELT, TIMING タイミング ベルト	
	40		1	BELT, TIMING, COGGED タイミング ベルト	
	41		1	BELT, TIMING, COGGED タイミング ベルト	
	42		2	BEARING, BALL ベアリング	
	43		1	COVER, PAPER FEEDER FRAME 搬送フレーム カバー	
	44		1	GUIDE, PAPER FEEDER, 1 搬送ガイド(1)	
	45		1	GUIDE, PAPER FEEDER, 2 搬送ガイド(2)	
	46		1	PULLEY, 23T 23T プーリ	
	47		1	BELT, TIMING, COGGED タイミング ベルト	
	48		1	CONNECTOR, SNAP TIGHT, BK 中継コネクタ	
	49		7	CLAMP, CABLE ソクセン オサエ	
	50		1	CONNECTOR, SNAP TIGHT, BK 中継コネクタ	
	51		1	ROLLER, PAPER READ リード ローラ	
	52	*	1	ROLLER, PLATEN プラテン ローラ	
	53		1	SPRING, TORSION ねじりバネ	
	54		1	GUIDE, PLATEN, 2 プラテン ガイド(2)	
	55		1	SHAFT, PLATEN ROLLER, 1 プラテン コロ軸(1)	
	56		1	SHAFT, PLATEN ROLLER, 2 プラテン コロ軸(2)	
	57		1	SPRING, TORSION ねじりバネ	
	58		5	CLIP クリップ	
	59		1	GUIDE, PLATEN, 1 プラテン ガイド(1)	
	60		1	ARM, SWING BUSHING, FRONT 揺動ブッシング アーム(前)	
	61		1	ARM, SWING BUSHING, REAR 揺動ブッシング アーム(後)	
	62		1	PULLEY, 18T 18T プーリ	
	63		10	ROLLER, PLATEN プラテン コロ	
	64		1	SHAFT, PAPER READ ROLLER リード コロ軸	
	65		9	RETAINER, ROLLER コロ押え	
	66		3	SPRING, TORSION ねじりバネ	
	67		5	SHAFT, PAPER FEEDER ROLLER 搬送コロ軸	
	68		2	SPRING, TORSION ねじりバネ	
	69		5	HOLDER, PAPER FEEDER ROLLER 搬送コロ ホルダ	
	70		5	ROLLER, PAPER FEEDER 搬送コロ	

Note: 「*」印の部品は DR-7080C 専用部品です。その他は複写機流用部品です。

The parts marked "*" mean the unique parts of DR-7080C. The others are the commoned parts of Copier.

FIGURE & KEY NO.	PART NUMBER *	R A N K	Q' T Y	DESCRIPTION	REMARKS
P41 -	71		1	CABLE, REGISTRATION CONNECTING レジスト中継束線	
	72		4	HOLDER, PAPER DELIVERY ROLLER 排紙コロ ホルダ	
	73		1	SHAFT, PAPER DELIVERY ROLLER 排紙コロ軸	
	74		4	SPRING, TORSION ねじりバネ	
	75		4	ROLLER, PAPER DELIVERY 排紙コロ	
	76		1	GUIDE, REFORM 腰付けガイド	
	77		1	DEFLECTOR, REVERSE 反転フラツパ	
	78		1	SPRING, TORSION ねじりバネ	
	79		1	GUIDE, PAPER DELIVERY 排紙ガイド	
	80		1	SPRING, COMPRESSION 圧縮バネ	
	81		3	SENSOR PCB UNIT センサ回路基板	
	82		1	GUIDE, PAPER FEEDER, 3 搬送ガイド(3)	
	83		1	CABLE, PAPER FEEDER SENSOR 搬送センサ束線	
	84		1	SOLENOID ソレノイド	
	85		1	CAM, READ ROLLER RELEASE リード ローラ解除カム	
	86		1	MOTOR, STEPPING, DC ステッピングDC モータ	
	87		1	GEAR, 31T 31T ギア	
	88		1	PULLEY, 40T/GEAR, 20T 40T プーリ/20T ギア	
	89		2	CONNECTOR, SNAP TIGHT, BK 中継コネクタ	
	90		4	PHOTO INTERRUPTER TLP1242 フォトインタラプタ	
	91		1	BELT, TIMING, COGGED タイミング ベルト	
	92		1	FLAG, REGISTRATION SENSOR レジスト センサ フラグ	
	93		1	SPRING, TORSION ねじりバネ	
	95		1	BLOCK, PRESSURE RELEASE 加圧解除コマ	
	96		1	SPRING, COMPRESSION 圧縮バネ	
	97		1	SPRING, COMPRESSION 圧縮バネ	
	98		1	MOTOR, STEPPING, DC ステッピングDC モータ	
	99		2	SPRING, TENSION 引っ張りバネ	
	100		1	LED PCB UNIT LED 回路基板	
	101		1	FLAG, EMPTY SENSOR エンプティ センサ フラグ	
	102		1	HOLDER, SENSOR センサ ホルダ	
	103		1	SPRING, TORSION ねじりバネ	
	104		1	ROLLER, PICK-UP キュウシ ローラ	
	105		1	SHAFT, SEPARATION ROLLER 分離ローラ軸	
	106		1	ROLLER, SEPARATION 分離ローラ	

Note: 「*」印の部品は DR-7080C 専用部品です。その他は複写機流用部品です。

The parts marked “*” mean the unique parts of DR-7080C. The others are the commoned parts of Copier.

FIGURE & KEY NO.	PART NUMBER *	R A N K	Q' T Y	DESCRIPTION	REMARKS
P41 -	107		1	SHAFT, PICK-UP ARM ピックアップ アーム軸	
	108		1	ARM, PICK-UP, FRONT 給紙アーム(前)	
	109		2	BUSHING ブッシング	
	110		2	SPRING, CLUTCH クラッチ バネ	
	111		1	ARM, PICK-UP, REAR 給紙アーム(後)	
	112		2	SHAFT, PAPER PICK-UP WEIGHT 給紙ウエイト軸	
	113		1	GUIDE, PAPER PICK-UP ピックアップ ガイド	
	114		2	PULLEY, 18T 18T プーリ	
	115		1	SPRING, COMPRESSION 圧縮バネ	
	116		1	BELT, TIMING タイミング ベルト	
	117		1	JOINT ジョイント	
	118		1	MOTOR, STEPPING, DC ステッピングDC モータ	
	119		1	PULLEY, 60T/GEAR, 60T 60T プーリ/60T ギア	
	120		1	BELT, TIMING タイミング ベルト	
	121		1	JOINT ジョイント	
	122		1	LEVER, SHUTTER シャッター レバー	
	123		1	SPRING, CLUTCH クラッチ バネ	
	124		1	SPRING, CLUTCH クラッチ バネ	
	125		1	SHAFT, CLUTCH クラッチ軸	
	126		1	BUSHING ブッシング	
	127		1	CLUTCH, ELECTROMAGNETIC 電磁クラッチ	
	128		1	GEAR, 40T 40T ギア	
	129		1	MOTOR, STEPPING, DC ステッピングDC モータ	
	130		1	GEAR, 24T 24T ギア	
	131		1	FAN ファン	
	132		1	SHAFT, PAPER FEEDER ROLLER 搬送コロ軸	
	133		1	GUIDE, OPEN/CLOSE 開閉ガイド	
	134		2	SPRING, COMPRESSION 圧縮バネ	
	135		4	ROLLER, FEED 搬送コロ	
	136		1	GUIDE, PRESSURE RELEASE 加圧解除ガイド	
	137		1	HOLDER, SEPARATION PAD, 2 分離パッド ホルダ(2)	
	138		1	HOLDER, SEPARATION PAD, 1 分離パッド ホルダ(1)	
	139		1	HOLDER, SEPARATION PAD, 3 分離パッド ホルダ(3)	
	501		26	SCREW, MACH., TRUSS HEAD, M3X6 バインド ネジ	
	502		5	RING, E E リング	

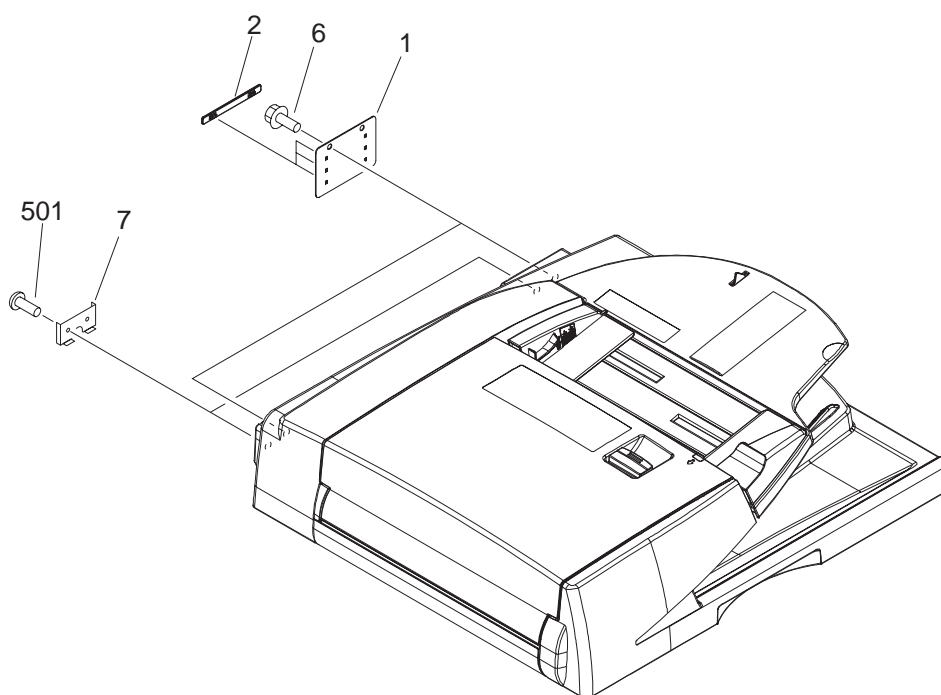
Note: 「*」印の部品は DR-7080C 専用部品です。その他は複写機流用部品です。

The parts marked "*" mean the unique parts of DR-7080C. The others are the commoned parts of Copier.

FIGURE & KEY NO.	PART NUMBER *	R A N K	Q' T Y	DESCRIPTION	REMARKS
P41 -	503		4	RING, E E リング	
	504		33	RING, E E リング	
	505		11	RING, E E リング	
	506		5	SCREW, TAPPING, TRUSS HEAD, M3X8 バインド タッピン ネジ	
	507		1	RING, E E リング	
	508		9	PIN, DOWEL ヘイコウ ピン	
	509		4	PIN, DOWEL ヘイコウ ピン	
	510		2	SCREW, MACH., PAN HEAD, M3X12 ナベ ネジ	
	511		2	SCREW, P, M4X8 P タイム ネジ	
	512		2	SCREW, TP, M3X6 TP ネジ	

FIGURE 001

ADF ACCESSORY
ADF付属品

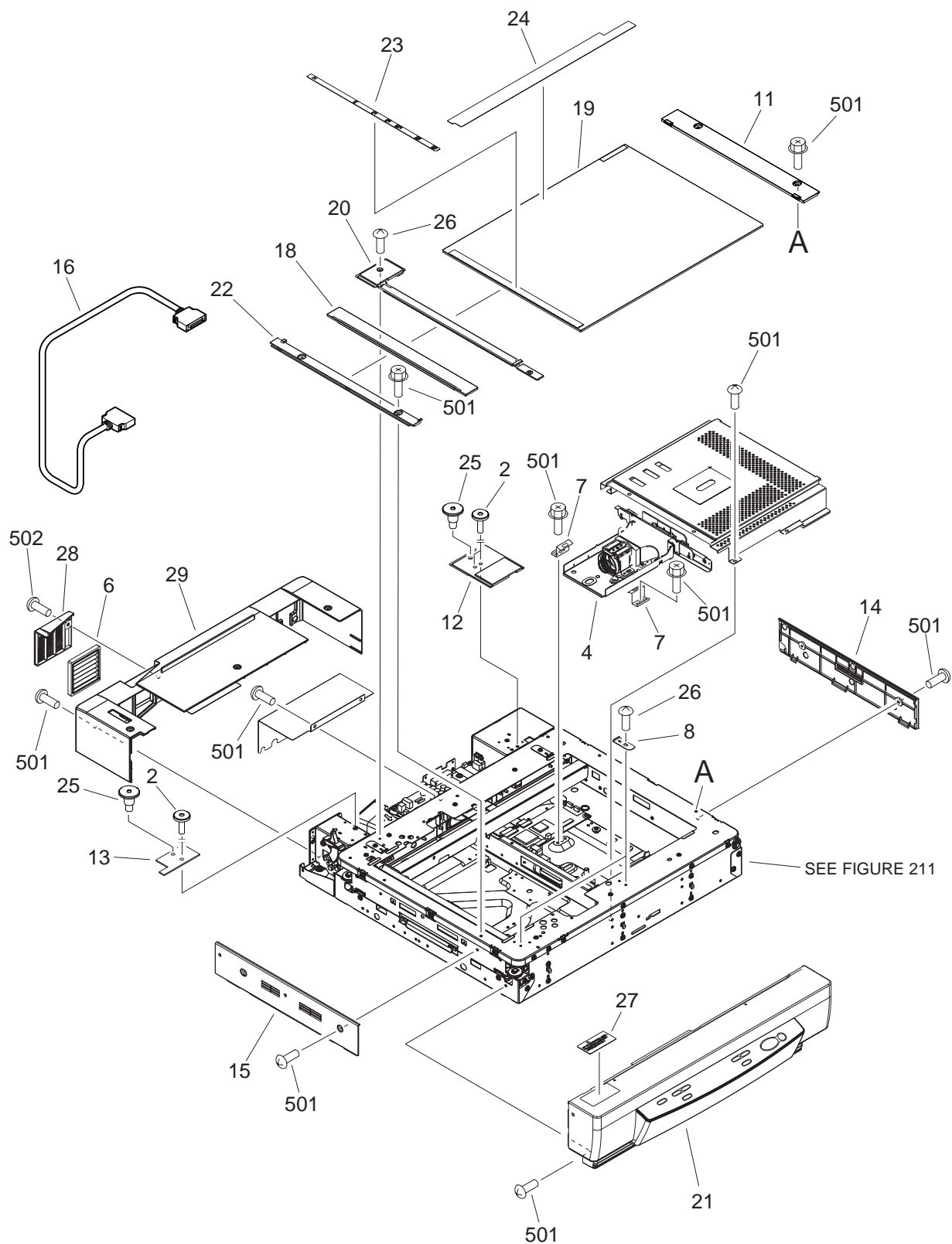


Note: 「*」印の部品は DR-7080C 専用部品です。その他は複写機流用部品です。

The parts marked “*” mean the unique parts of DR-7080C. The others are the commoned parts of Copier.

FIGURE & KEY NO.	PART NUMBER *	R A N K	Q' T Y	DESCRIPTION	REMARKS
001 -	1 FC5-3207-000		2	COVER, HINGE ヒンジ カバー	
	2 FC5-3223-000		6	PLATE, HINGE COVER ヒンジ カバー板	
	3 FC5-3060-000		1	LABEL, DOCUMENT SIZE (DIS) 原稿サイズ ラベル	
	4 FC5-3050-000		1	LABEL, SIZE (AB) サイズ ラベル	100V
	FC5-3051-000		1	LABEL, SIZE (INCH/A) サイズ ラベル	120V
5	FC5-3052-000		1	LABEL, SIZE (A) サイズ ラベル	220-240V
	FC5-3053-000		1	LABEL, SIZE (INCH/AB) サイズ ラベル	
	FC5-3055-000		1	LABEL, PROHIBITION DOCUMENT (JPN) 禁止原稿ラベル	100V
	FC5-3056-000		1	LABEL, PROHIBITION DOCUMENT (EFSP) 禁止原稿ラベル	120V
	FC5-3057-000		1	LABEL, PROHIBITION DOCUMENT (EFIGS) 禁止原稿ラベル	220-240V
6	XA9-0874-000		4	SCREW, M3X8 B タイト ネジ	
7	FC5-3227-000		2	PLATE, ANGLE CONTROL 角度規制板	
501	XB1-2400-605		4	SCREW, MACH., TRUSS HEAD, M4X6 バインド ネジ	

FIGURE 210 READER ASSEMBLY リーダ部



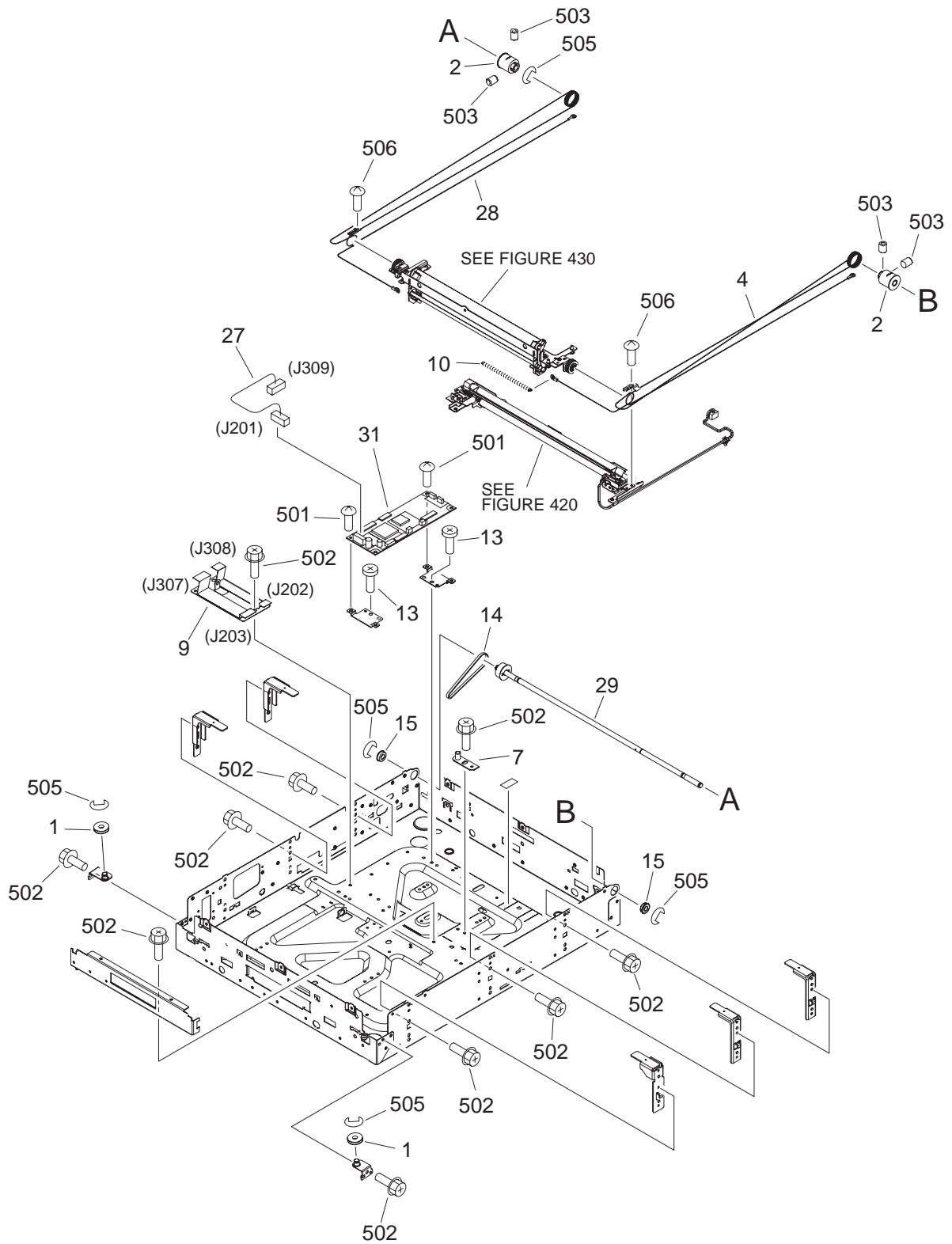
Note: 「*」印の部品は DR-7080C 専用部品です。その他は複写機流用部品です。

The parts marked “*” mean the unique parts of DR-7080C. The others are the commoned parts of Copier.

FIGURE & KEY NO.	PART NUMBER *	RANK	QTY	DESCRIPTION	REMARKS
210 -	2 FU5-9167-000		3	SCREW, FIXED, M4 固定ネジ	
	4 FM2-0617-000		1	CCD UNIT CCD ユニット	
	6 FL2-0644-000		1	FILTER, AIR エア フィルタ	
	7 FB4-0726-000		2	SPRING, LEAF イタ バネ	
	8 FC5-2792-000		2	PLATE, GLASS SUPPORT ガラス突き当て板	
	9 FC5-2891-000		4	DAMPER, READER リーダ ダンパ	
	11 FC5-2927-000		1	PANEL, RIGHT UPPER 右上カバー	
	12 FC5-2929-000		1	SPACER, DF MOUNTING, RIGHT DF取付台スペーサ(右)	
	13 FC5-2930-000		1	SPACER, DF MOUNTING, LEFT DF取付台スペーサ(左)	
	14 FC5-2937-000		1	PANEL, RIGHT 右カバー	
	15 FC5-2938-000		1	PANEL, LEFT 左カバー	
	16 FH2-7036-000		1	CABLE, DDI-S SERIAL DDI-Sシリアル ケーブル	
	18 FL2-0625-000 *		1	GLASS, READER, FRONT LEFT 流し読みガラス(前左)	
	19 FL2-0627-000		1	GLASS, COPYBOARD 原稿台ガラス	
	20 FL2-0628-000		1	MOUNT, JUMP ジャンプ台	
	22 FL2-0646-000		1	PANEL, LEFT UPPER 左上カバー	
	23 FU5-8264-000		1	PLATE, WIDTH SIZE (AB) 縦サイズ プレート	100V
	FU5-8265-000		1	PLATE, WIDTH SIZE (INCH/A) 縦サイズ プレート	120V
	FU5-8266-000		1	PLATE, WIDTH SIZE (A) 縦サイズ プレート	220-240V
	24 FU5-8268-000		1	PLATE, LENGTH SIZE (AB) 横サイズ プレート	100V
	FU5-8269-000		1	PLATE, LENGTH SIZE (INCH/A) 横サイズ プレート	120V
	FU5-8270-000		1	PLATE, LENGTH SIZE (A) 横サイズ プレート	220-240V
	25 FU5-9168-000		2	SCREW, STEPPED, M5 段ビス	
	26 XA9-1521-000		13	SCREW, RS, M3X6 RSタイト ネジ	
	27 MA2-7054-000 *		1	LABEL, GLASS CLEANING POSITION (JPN) ガラス 清掃位置ラベル	100V
	MA2-7055-000 *		1	LABEL, GLASS CLEANING POSITION (EFIGSP) ガラス 清掃位置ラベル	120V, 220-240V
	28 FC5-2934-000		1	COVER, FILTER フィルタ カバー	
	29 FL2-0643-000		1	PANEL, REAR 後カバー	
	501 XB3-6400-805		31	SCREW, RS, M4X8 RS タイト ネジ	
	502 XB4-5400-806		1	SCREW, P, M4X8 P タイト ネジ	

FIGURE 211 (1/2)

READER FRAME ASSEMBLY リーダフレーム部



Note: 「*」印の部品は DR-7080C 専用部品です。その他は複写機流用部品です。

The parts marked "*" mean the unique parts of DR-7080C. The others are the commoned parts of Copier.

FIGURE & KEY NO.	PART NUMBER *	RANK	QTY	DESCRIPTION	REMARKS
211 -	1		2	PULLEY プーリ	
	2		2	PULLEY プーリ	
	3		2	PLATE, GLASS SUPPORT ガラス突き当て板	
	4		1	WIRE, FRONT ワイヤ(前)	
	5		1	INVERTER, XENON LAMP キセノン ランプ インバータ	
	6		1	CABLE, FLAT フラット ケーブル	
	7		1	PLATE, POSITIONING 位置決め板	
	8		3	SCREW, HEIGHT ADJUSTING 高さ調整ネジ	
	9		1	CABLE, FLEXIBLE FLAT フレキシブル フラット ケーブル	
	10		1	SPRING, TENSION 引っ張りバネ	
	11		2	SPRING, TENSION 引っ張りバネ	
	12		9	SCREW, RS, M3X6 RS タイト ネジ	
	13		2	SCREW, FLAT HEAD, M4 特平ネジ	
	14		1	BELT, TIMING タイミング ベルト	
	15		2	BEARING, BALL, F688ZZ ボール ベアリング	
	16		6	CLAMP, CABLE ソクセン オサエ	
	17		1	BUSHING ブッシング	
	18		2	SCREW, W/WASHER, TRUSS HEAD ザツキ バインド ネジ	
	19		1	CABLE, READER POWER SUPPLY リーダ電源束線	
	20		1	CABLE, ADF LATTICE CONNECTOR ADF ラティス コネクタ束線	
	21		3	PHOTO-INTERRUPTER, TLP1253 (C6) フォトインタラプタ	
	22		1	SPRING, TORSION ネジリ バネ	
	23		1	LEVER, SENSOR センサ レバー	
	24		1	MOTOR, STEPPING, DC ステッピングDC モータ	
	25		1	SCREW, STEPPED, M4 段ビス	
	26		1	ADF INTERFACE PCB ASSEMBLY ADF インターフェース回路基板	
	27		1	CABLE, READER POWER SUPPLY リーダ コントローラ電源ケーブル	
	28		1	WIRE, RIGHT ワイヤ(右)	
	29		1	SHAFT, DRIVE 駆動軸	
	30		1	CABLE, SENSOR センサ束線	
	31		1	READER CONTROLLER PCB ASSEMBLY リーダ コントローラ回路基板	
	501		17	SCREW, MACH., TRUSS HEAD, M4X6 バインド ネジ	
	502		86	SCREW, RS, M4X8 RS タイト ネジ	
	503		4	SETSCREW, M4X5 ロツカク アナツキ トメネジ	
	504		3	NUT, HEX, M4 ロツカク ナット	

FIGURE 194 SCANNER COOLING FAN ASSEMBLY
スキャナ冷却ファン部

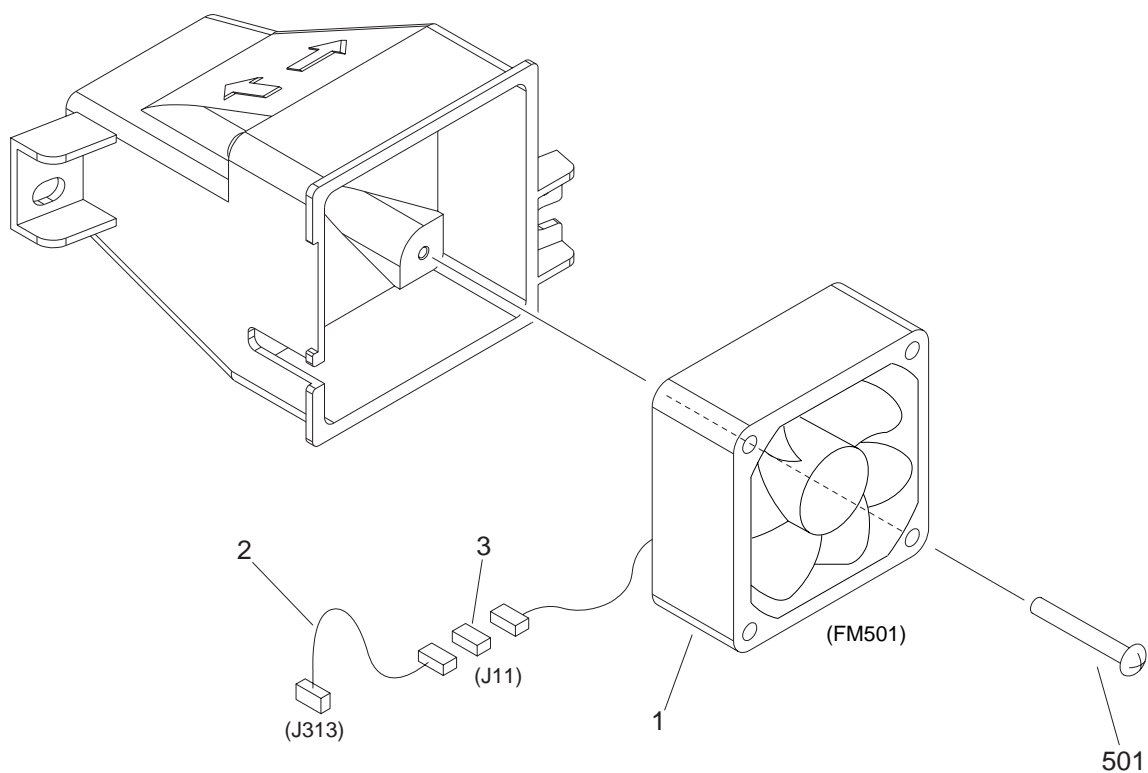


FIGURE 420

MIRROR ASSEMBLY 1
第1ミラー台部

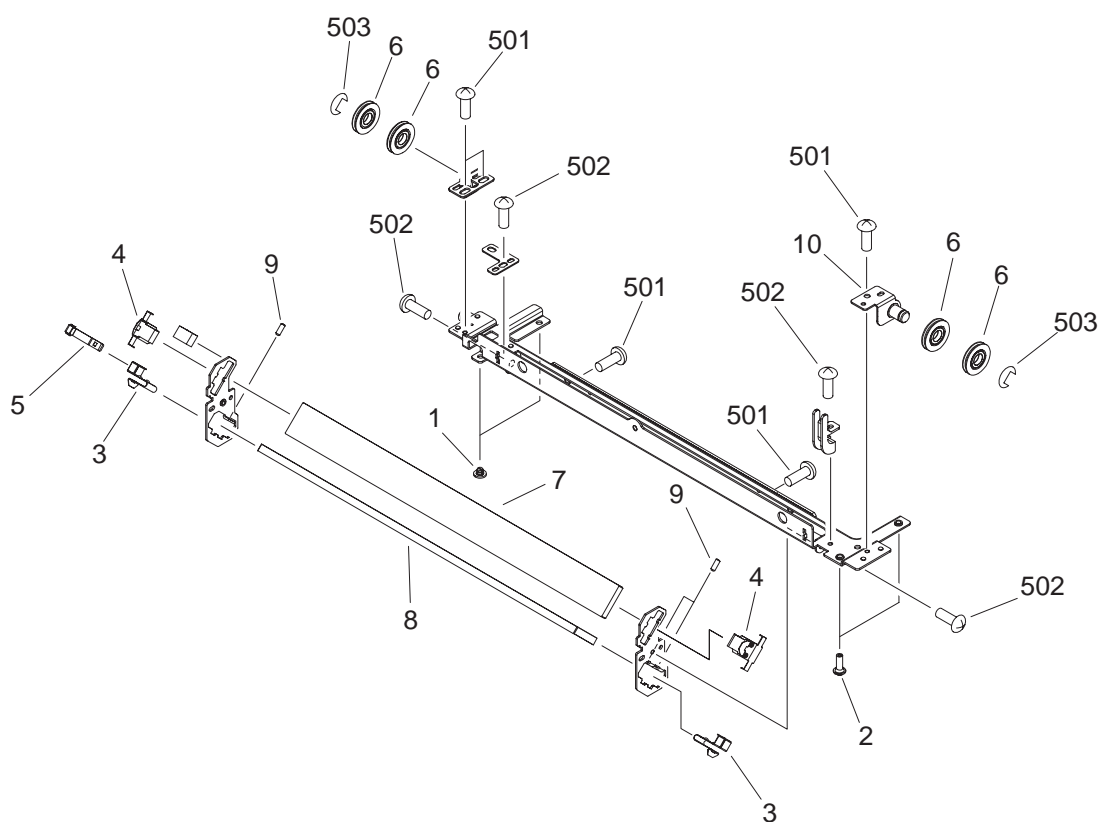
Note: 「*」印の部品は DR-7080C 専用部品です。その他は複写機流用部品です。

The parts marked “*” mean the unique parts of DR-7080C. The others are the commoned parts of Copier.

FIGURE & KEY NO.	PART NUMBER *	RANK	QTY	DESCRIPTION	REMARKS
420 -	1 FC5-0127-000		4	PIN, SLIDER スライダ ビン	
	2 FC5-0128-000		1	REFLECTOR 反射笠	
	3 FC5-2835-000		2	SPRING, LEAF, MIRROR ミラー押さえバネ	
	4 FK2-0224-000		1	LAMP, XENON キセノン ランプ	
	5 FK2-0239-000		1	HOLDER, XENON LAMP キセノン ランプ ホルダ	
6	FL2-0641-000		1	MIRROR, 1 第1ミラー	
7	WT2-5565-000		1	CLAMP, CABLE ソクセン オサエ	
501	XB2-8300-607		4	SCREW, W/WASHER, M3X6 パネツキ ネジ	

FIGURE 430

MIRROR ASSEMBLY 2 第2ミラー台部



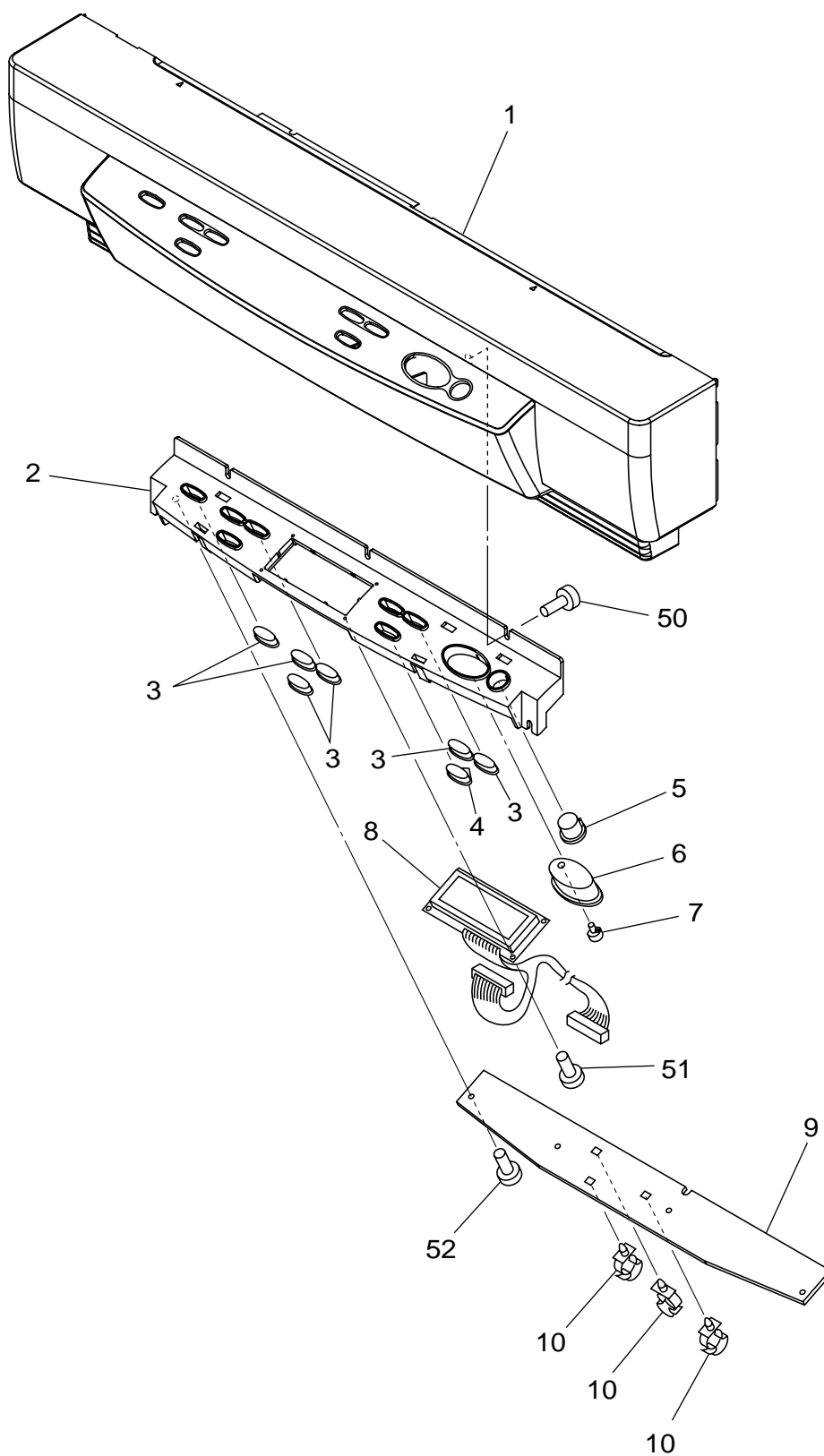
Note: 「*」印の部品は DR-7080C 専用部品です。その他は複写機流用部品です。

The parts marked "*" mean the unique parts of DR-7080C. The others are the commoned parts of Copier.

FIGURE & KEY NO.	PART NUMBER *	RANK	QTY	DESCRIPTION	REMARKS
430 -	1 FC5-0127-000		2	PIN, SLIDER スライダ ビン	
	2 FC5-0136-000		2	PIN, SLIDER スライダ	
	3 FC5-0165-000		2	SPRING, LEAF, MIRROR ミラー押さえバネ	
	4 FC5-2840-000		2	SPRING, LEAF, MIRROR ミラー押さえバネ	
	5 FC5-2843-000		1	SPRING, LEAF 板バネ	
6	FL2-0647-000		4	PULLEY プーリ	
7	FN7-4012-000		1	MIRROR, 2 第2ミラー	
8	FN7-4013-000		1	MIRROR, 3 第3ミラー	
9	XA9-0425-000		3	SETSCREW, HEX SOCKET ロツカク アナツキ トメネジ	
10	FL2-0639-000		1	MOUNT, PULLEY, FRONT プーリ台 (前)	
501	XB1-2300-406		5	SCREW, MACH., TRUSS HEAD, M3X4 バインド ネジ	
502	XB2-8300-607		4	SCREW, W/WASHER, M3X6 バネツキ ネジ	
503	XD2-1100-642		2	RING, E E リング	

FIGURE 510

OPERATION PANEL ASSEMBLY 操作パネル部



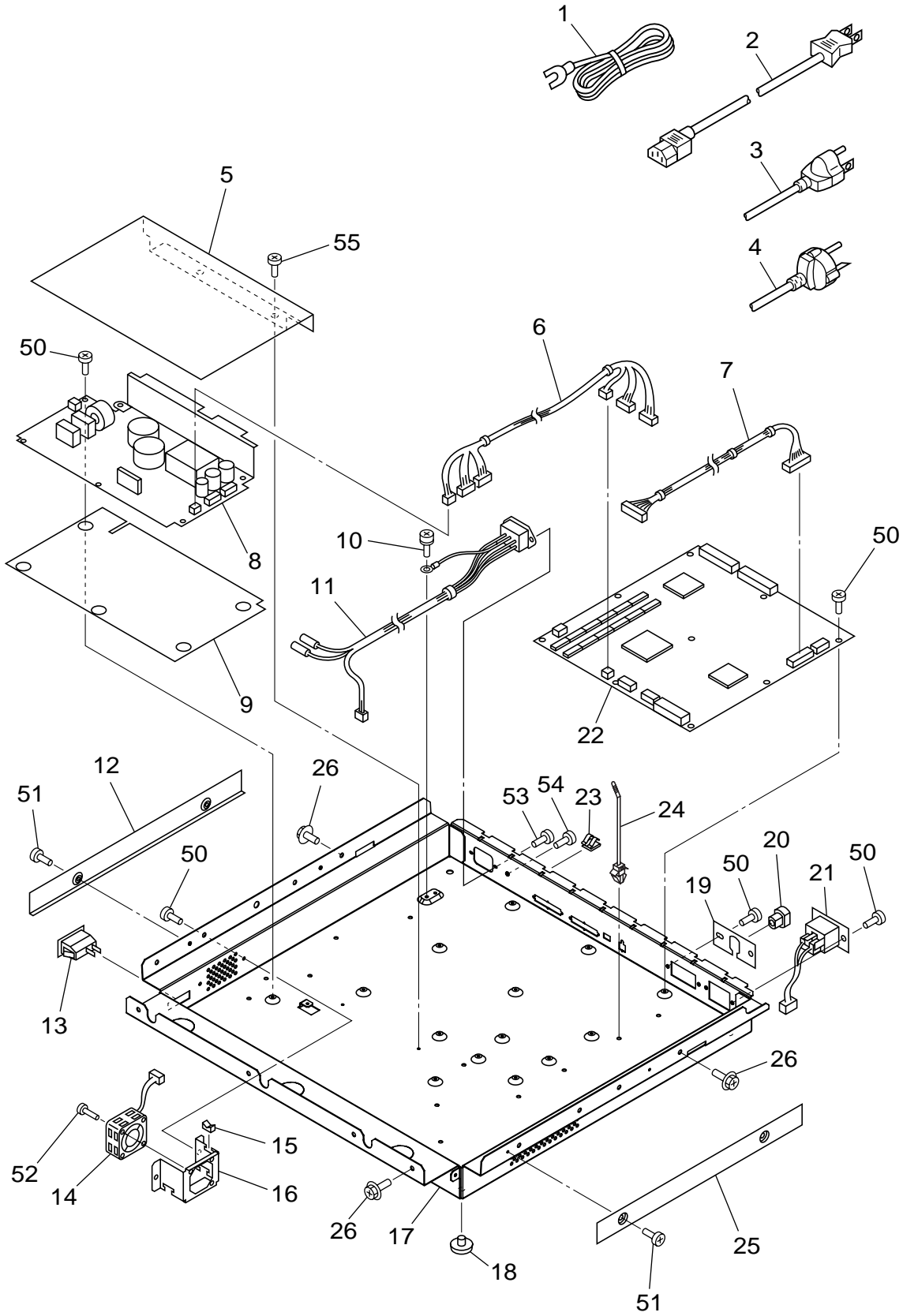
Note: 「*」印の部品は DR-7080C 専用部品です。その他は複写機流用部品です。

The parts marked "*" mean the unique parts of DR-7080C. The others are the commoned parts of Copier.

FIGURE & KEY NO.	PART NUMBER *	RANK	QTY	DESCRIPTION	REMARKS
510 -	1 MF1-4274-000 *		1	COVER, OPERATION ソウサ パネル カバー	
	2 MA2-6948-000 *	N	1	CASE, PANEL パネル ケース	
	3 MA2-6949-000 *	N	6	KEY TOP, OPERATION ソウサ キー	
	4 MA2-6950-000 *	N	1	KEY TOP, FILE ファイル キー	
	5 MA2-6951-000 *	N	1	KEY TOP, STOP ストップ キー	
6	MA2-6952-000 *	N	1	KEY TOP, START スタート キー	
7	MA2-6953-000 *	N	1	GUIDE, LIGHT ライト ガイド	
8	MG1-3575-000 *		1	LCD UNIT LCD ユニット	
9	MG1-3569-000 *		1	PCB ASSEMBLY, SWITCH スイッチ カイロ キバン	
10	WT2-5134-000		3	CLAMP, CABLE ワイヤー ホルダー	
50	XB4-7300-609		5	SCREW, TAPPING, BH M3x6 B タイト M3 L6	
51	XB1-2250-405		4	SCREW, BH M2.5x4 バインド M2.5 L4	
52	XB1-2300-605		4	SCREW, BH M3x6 バインド M3 L6	

FIGURE 520

CONTROLLER ASSEMBLY コントローラ部



Note: 「*」印の部品は DR-7080C 専用部品です。その他は複写機流用部品です。

The parts marked “*” mean the unique parts of DR-7080C. The others are the commoned parts of Copier.

FIGURE & KEY NO.	PART NUMBER *	RANK	QTY	DESCRIPTION	REMARKS
520 -	1		1	CORD, GROUNDING アース コード	100V
	2		1	POWER CORD デンゲン コード 100V	100V
	3		1	POWER CORD デンゲン コード 120V	120V
	4		1	POWER CORD デンゲン コード 230V	220-240V
	5	MA2-6960-000 *	N	1	INSULATOR, UPPER デンゲンヨウ ゼツエン シート(ウエ)
6	MG1-3571-000 *		1	CABLE ASSEMBLY, DC IN DC IN ケーブル	
7	MG1-3574-000 *		1	CABLE ASSEMBLY, OPERATION ソウサ ケーブル	
8	MH3-2059-000 *		1	PCB ASSEMBLY, POWER デンゲン	
9	MA2-6961-000 *	N	1	INSULATOR, LOWER デンゲンヨウ ゼツエン シート (シタ)	
10	FA9-2113-000		1	SCREW, W/TOOTH WASHER M4x8 キクザツキ バインド ビス	
11	MG1-3570-000 *		1	CABLE ASSEMBLY, AC AC ケーブル	
12	MA2-6962-000 *		1	COVER, LOWER LEFT ヒダリ シタ カバー	
13	MH7-6010-000 *		1	SWITCH, POWER SUPPLY シーソー スイッチ	
14	MG1-3576-000 *		1	FAN ASSEMBLY DC ファン	
15	WT2-5056-000		1	CLIP, CABLE エッジ サドル	
16	MA2-6959-000 *	N	1	PLATE, FAN ファン トリツケ パン	
17	MA2-6956-000 *	N	1	BOX, BOTTOM デンゲン シャーシ	
18	XH9-0133-000 *	N	4	FOOT, PLASTIC プラスチック	
19	MA2-6958-000 *	N	1	PLATE, DDI CABLE DDI ケーブル トリツケ パン	
20	WT2-0313-000		1	BUSHING, CABLE ブッシュ	
21	MG1-3573-000 *		1	CABLE ASSEMBLY, DC OUT DC OUT ケーブル	
22	MG1-3568-000 *		1	PCB ASSEMBLY, CONTROL DCON カイロ キパン	
23	MH7-9020-000 *	N	9	PLATE, GROUNDING フィンガー	
24	WT2-5178-000		4	CLIP, CABLE スナップ バンド	
25	MA2-6963-000 *		1	COVER, LOWER RIGHT ミギ シタ カバー	
26	XA9-0633-000 *		12	SCREW, W/WASHER M4x8 RS タイト ザガネツキ M4 L8	
50	XB1-2300-605		27	SCREW, BH M3x6 バインド M3 L6	
51	XB4-7300-609		4	SCREW, TAPPING, BH M3x6 B タイト M3 L6	
52	XB1-2302-509		2	SCREW, BH M3x25 バインド M3 L25	
53	XB1-2400-605		2	SCREW, BH M4x6 バインド M4 L6	
54	XB2-4400-605		1	SCREW, W-WASHER M4x6 ダブル セムス M4 L6	
55	XB1-2300-409		2	SCREW, BH M3x4 バインド M3 L4	

〒369-1892

埼玉県秩父市下影森1248番地

キヤノン電子株式会社

品質保証部 品質推進課

2004年 3月 第1版発行

Prepared by

QUALITY ASSURANCE CENTER

CANON ELECTRONICS INC.

1248 Shimokagemori, Chichibu-shi, Saitama 369-1892, Japan

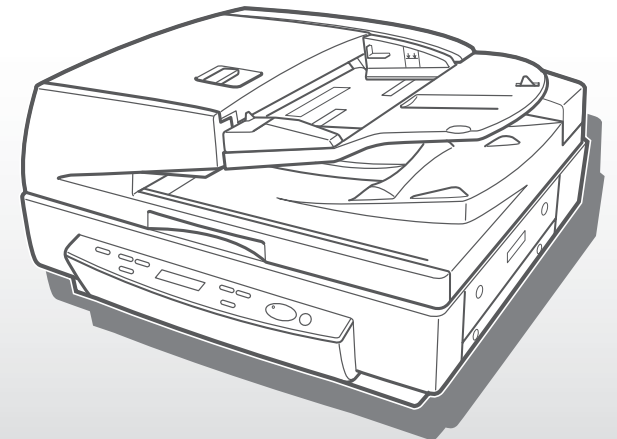
FIRST EDITION (MAR.2004)

Canon

Canon

Document Scanner DR-7080C

INSTRUCTIONS
INSTRUCTIONS
BEDIENUNGSANLEITUNG
INSTRUCCIONES
ISTRUZIONI
INSTRUCTIES



Canon DR-7080C

INSTRUCTIONS

Canon

CANON ELECTRONICS INC.

1248, SHIMOKAGEMORI, CHICHIBU-SHI, SAITAMA 369-1892, JAPAN

CANON U.S.A. INC.

ONE CANON PLAZA, LAKE SUCCESS, N.Y.11042, U.S.A.

CANON CANADA INC.

6390 DIXIE ROAD, MISSISSAUGA, ONTARIO L5T 1P7, CANADA

CANON EUROPA N.V.

BOVENKERKERWEG 59-61, P.O.BOX 2262 AMSTELVEEN, THE NETHERLANDS

CANON LATIN AMERICA, INC.

703 WATERFORD WAY SUITE 400 MIAMI, FLORIDA 33126 U.S.A.

CANON AUSTRALIA PTY. LTD.

1 THOMAS HOLT DRIVE, NORTH RYDE, SYDNEY. N.S.W, 2113. AUSTRALIA

CANON SINGAPORE PTE. LTD.

1 HARBOUR FRONT AVENUE #04-01 KEPPEL BAY TOWER SINGAPORE 098632

CANON HONGKONG COMPANY LTD.

9/F., THE HONG KONG CLUB BUILDING, 3A CHARTER ROAD, CENTRAL, HONG KONG.



CE-IM-440

FCC REGULATIONS (For 120V/220-240V models)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Do not make any changes or modifications to the equipment unless otherwise specified in the manual. If such changes or modifications should be made, you could be required to stop operation of the equipment.

RADIO INTERFERENCE REGULATIONS (For 120V models)

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus as set out in the Interference-causing equipment standard entitled "Digital Apparatus", ICES-003 of the Industry Canada.

RÈGLEMENT SUR LE BROUILLAGE RADIOÉLECTRIQUE (For 120V models)

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe A prescrites dans la norme sur le matériel brouilleur: "Appareils Numériques", NMB-003 édictée par l'Industrie Canada.

Für EMVG

Dieses Produkt ist zum Gebrauch im Wohnbereich, Geschäfts-und Gewerbebereich sowie in Kleinbetrieben vorgesehen.

MODEL NAMES

Model DR-7080C is identical to model M11049.

Model DR-7080C is the sales name of model M11049.

READ CAREFULLY BEFORE OPENING THE SEALED DISK PACKAGE

CANON SOFTWARE LICENSE AGREEMENT

IMPORTANT-READ THIS AGREEMENT BEFORE OPENING THE SEALED DISK PACKAGE! BY OPENING THE SEALED DISK PACKAGE, YOU ARE DEEMED TO AGREE TO BE BOUND BY THIS AGREEMENT.

This legal document is a license agreement between you and Canon Electronics Inc. ("Canon"). BY OPENING THE SEALED DISK PACKAGE, YOU ARE DEEMED TO AGREE TO BE BOUND BY THE TERMS OF THIS AGREEMENT. IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, DO NOT OPEN THE SEALED DISK PACKAGE AND PROMPTLY RETURN THE CANON SCANNER, THE DISK PACKAGE CONTAINING SCANNER DRIVER SOFTWARE PROGRAMS AND/OR SCANNER UTILITY SOFTWARE PROGRAM PROPRIETARY TO CANON OR ITS LICENSOR (THE "SOFTWARE") AND THE ACCOMPANYING DOCUMENTATION AND OTHER ITEMS TO THE PLACE WHERE YOU OBTAINED THEM FOR A REFUND BEFORE THEY ARE USED OR OPENED OR UNPACKED.

In consideration of the right to use the SOFTWARE, you agree to abide by the terms and conditions of this Agreement.

1. GRANT OF LICENSE: Canon grants you the personal, non-exclusive right to use the SOFTWARE only on a single computer. You may physically transfer the SOFTWARE from one computer to another provided that the SOFTWARE is used on only one computer at any time.

You shall not assign, sublicense, sell, rent, lease, loan, convey or transfer to any third party, or send or bring the SOFTWARE out of the country where you originally obtain it to other countries without required authorization of applicable governments, or copy, duplicate, translate or convert to another programming language the SOFTWARE or accompanying documentation, except as expressly provided herein.

Except as expressly permitted under the applicable law, you shall not alter, modify, disassemble, decompile or otherwise reverse engineer the SOFTWARE or accompanying documentation and you also shall not have any third party to do so.

2. BACK-UP COPY: You may make one copy of the SOFTWARE solely for a back-up purpose or copy the SOFTWARE onto the permanent storage device (e.g. a hard disk) of your computer and retain the original for a back-up purpose. Except as expressly permitted under the applicable law, any other copying of the SOFTWARE is a violation of this Agreement. You must reproduce and include the copyright notice on the back-up copy.

3. SUPPORT AND UPDATE: Canon, Canon's affiliate, their distributor or dealer is not responsible for maintaining or helping you to use the SOFTWARE. No updates, fixes or support will be made available for the SOFTWARE.

4. LIMITED WARRANTY AND DISCLAIMER OF INDEMNITY: Canon, Canon's affiliate, their distributor or dealer will not guarantee uninterrupted service, or absence or correction of errors. Therefore, the SOFTWARE is licensed on an "AS IS" basis without warranty of any kind. The diskette on which the SOFTWARE is recorded is warranted against defective material or workmanship under normal use for a period of ninety (90) days from the date you purchased the same as evidenced by a receipt or otherwise. The limited warranty does not apply if the failure of the diskette resulted from accident, abuse or misapplication of the SOFTWARE and shall not extend to anyone other than the original user of the SOFTWARE.

CANON, CANON'S AFFILIATE, THEIR DISTRIBUTOR OR DEALER DISCLAIMS ALL IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE SOFTWARE OR ACCOMPANYING DOCUMENTATION.

NEITHER CANON, CANON'S AFFILIATE, THEIR DISTRIBUTOR NOR DEALER IS LIABLE FOR ANY LOSS OR DAMAGE INCLUDING CONSEQUENTIAL OR INCIDENTAL LOSS OR DAMAGE SUCH AS LOSS OF PROFITS, EXPENSE OR INCONVENIENCE, WHATSOEVER CAUSED BY OR ARISING OUT OF THE SOFTWARE, ACCOMPANYING DOCUMENTATION OR THE USE THEREOF.

CANON, CANON'S AFFILIATE, THEIR DISTRIBUTOR OR DEALER SHALL HAVE NO OBLIGATION TO INDEMNIFY YOU AGAINST ANY CLAIM OR SUIT BROUGHT BY A THIRD PARTY ALLEGING THAT THE SOFTWARE, ACCOMPANYING DOCUMENTATION OR THE USE THEREOF INFRINGES ANY INTELLECTUAL PROPERTY OF SUCH THIRD PARTY.

THE ABOVE IS CANON'S ENTIRE LIABILITY AND YOUR EXCLUSIVE REMEDY IN CONNECTION WITH THE SOFTWARE AND ACCOMPANYING DOCUMENTATION.

5. TERM: This Agreement is effective upon opening the sealed disk package and remains in effect until terminated. You may terminate this Agreement by destroying the SOFTWARE and any copy thereof. This Agreement will also terminate if you fail to comply with any of the terms of this Agreement. In addition to Canon enforcing its respective legal rights, you must then promptly destroy the SOFTWARE and any copy thereof.

6. U.S. GOVERNMENT RESTRICTED RIGHTS NOTICE: The SOFTWARE is provided with RESTRICTED RIGHTS. Use, duplication or disclosure is subject to restrictions as set forth in either subparagraph (c) (1) (ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013 or subparagraph (c) (1) and (2) of the Commercial Computer Software Restricted Rights Clause at FAR 52.227-19, as applicable.

7. SEVERABILITY: In the event that provision of this Agreement is declared or found to be illegal by any court or tribunal of competent jurisdiction, such provision shall be null and void with respect to the jurisdiction of that court or tribunal and all the remaining provisions of this Agreement shall remain in full force and effect.

8. ACKNOWLEDGEMENT: BY OPENING THE SEALED DISK PACKAGE, YOU ACKNOWLEDGE THAT YOU HAVE READ THIS AGREEMENT, UNDERSTOOD IT, AND AGREE TO BE BOUND BY ITS TERMS AND CONDITIONS. YOU ALSO AGREE THAT THIS AGREEMENT IS THE COMPLETE AND EXCLUSIVE STATEMENT OF AGREEMENT BETWEEN YOU AND CANON CONCERNING THE SUBJECT MATTER HEREOF AND SUPERSEDES ALL PROPOSALS OR PRIOR AGREEMENTS, VERBAL OR WRITTEN, AND ANY OTHER COMMUNICATIONS BETWEEN YOU AND CANON RELATING TO THE SUBJECT MATTER HEREOF. NO AMENDMENT TO THIS AGREEMENT SHALL BE EFFECTIVE UNLESS SIGNED BY A DULY AUTHORIZED REPRESENTATIVE OF CANON.

Should you have any questions concerning this Agreement, or if you desire to contact Canon for any reason, please write to Canon's local affiliate.

A LIRE ATTENTIVEMENT AVANT D'OUVRI

CONTRAT DE LICENCE D'UTILISATION D'UN LOGICIEL CANON

Important — VEUILLEZ LIRE LE PRESENT CONTRAT avant d'ouvrir l'emballage scellé contenant la DISQUETTE. EN OUVRANT CET EMBALLAGE SCELLE, VOUS ACCEPTEZ D'ETRE LIE PAR LE PRESENT CONTRAT.

Le présent acte juridique est un contrat de licence entre Canon Electronics Inc. (« Canon ») et vous-même. L'OUVERTURE DE L'EMBALLAGE SCELLE DE LA DISQUETTE INDIQUERA VOTRE ACCEPTATION DE VOUS LIER PAR LES DISPOSITIONS DU PRESENT CONTRAT. SI VOUS N'ACCEPTEZ PAS LES TERMES DU PRESENT CONTRAT, N'OUVREZ PAS L'EMBALLAGE SCELLE DE LA DISQUETTE ET RETOURNEZ RAPIDEMENT LE SCANNER CANON, L'EMBALLAGE AVEC LA DISQUETTE CONTENANT LES PROGRAMMES LOGICIELS PILOTES DE SCANNER ET/OU L'UTILITE-DE SCANNER PROPRIETE DE CANON OU DE SON CONCEDANT (CI-APRES DENOMMES LE « LOGICIEL ») AINSI QUE LA DOCUMENTATION ET LES AUTRES ARTICLES QUI L'ACCOMPAGNENT OU VOUS LES AVEZ ACHETES POUR EN OBTENIR LE REMBOURSEMENT AVANT UTILISATION, OUVERTURE OU DEBALLAGE.

En contrepartie du droit d'utiliser le Logiciel, vous acceptez de respecter les termes et conditions du présent Contrat.

1. CONCESSION DE LICENCE : Canon vous octroie le droit personnel et non exclusif d'utiliser ce LOGICIEL sur un ordinateur unique. Le LOGICIEL peut être physiquement transféré d'un ordinateur à un autre à condition qu'il ne soit utilisé que sur un ordinateur à la fois.

Vous n'êtes pas autorisé à céder, consentir une sous-licence, vendre, donner à bail, louer, prêter, transmettre à un tiers le LOGICIEL, ni à l'envoyer ou l'emmener hors du pays où vous vous l'êtes procuré sans l'autorisation nécessaire des autorités compétentes, ni à copier, dupliquer, traduire ou convertir dans un autre langage de programmation le LOGICIEL ou la documentation qui l'accompagne, à l'exception de ce qui est expressément prévu aux présentes.

Sauf autorisation expresse conforme a la legislation en vigueur, vous ne pouvez pas alterer, modifier, désassembler, décompiler ou effectuer des opérations d'ingénierie inverse de quelque sorte que ce soit sur le LOGICIEL, ni autoriser une tierce personne a le faire.

2. COPIE DE SAUVEGARDE : Vous êtes autorisé à faire une copie du LOGICIEL uniquement à des fins de sauvegarde, ou à l'installer sur la mémoire permanente (disque dur par exemple) de votre ordinateur et à conserver l'original uniquement comme sauvegarde. Sauf autorisation expresse conforme a la legislation en vigueur, toute autre copie du LOGICIEL est une violation du présent contrat. L'avis sur les droits d'auteur doit être reproduit et inclus avec la copie de sauvegarde.

3. AIDE ET MISE A JOUR : Canon, sa filiale, leur distributeur ou revendeur ne sont pas responsables de la mise à jour ou de l'aide à l'utilisation du LOGICIEL. Aucune mise à jour, correction ni aide ne seront disponibles pour ce LOGICIEL.

4. EXCLUSION DE GARANTIE ET D'INDEMNISATION : Canon, sa filiale, leur distributeur ou revendeur ne garantissent pas un fonctionnement ininterrompu, ni l'absence ou la correction des erreurs. La licence est par conséquent concédée pour le LOGICIEL « en l'état », sans garantie de quelque nature que ce soit. La disquette contenant le LOGICIEL est garantie contre tout défaut de fabrication ou de main d'oeuvre pour autant qu'un usage normal en soit fait et ce pendant une période de quatre-vingt-dix (90) jours à compter de la date d'achat, reçu ou autre preuve d'achat faisant foi. La garantie limitée ne s'applique pas si la défaillance de la disquette résulte d'un accident, d'une utilisation abusive ou erronée du LOGICIEL et ne couvre en aucun cas une personne autre que le premier utilisateur du LOGICIEL.

CANON, SA FILIALE, LEUR DISTRIBUTEUR OU REVENDEUR EXCLUENT TOUTES GARANTIES, Y COMPRIS TOUTE GARANTIE DE QUALITE MARCHANDE OU DE CONVENANCE A UNE UTILISATION SPECIFIQUE, EN CE QUI CONCERNE LE LOGICIEL OU LA DOCUMENTATION QUI L'ACCOMPAGNE.

NI CANON, NI SA FILIALE, NI LEUR DISTRIBUTEUR OU REVENDEUR NE SONT RESPONSABLES D'AUCUN DOMMAGE OU PERTE INDIRECT OU ACCESSOIRE, Y COMPRIS D'UN MANQUE A GAGNER, DE FRAIS OU DE PERTURBATIONS, QUELS QU'ILS SOIENT, CAUSES PAR OU PROVENANT DU LOGICIEL, DE LA DOCUMENTATION QUI L'ACCOMPAGNE OU DE LEUR UTILISATION.

CANON, SA FILIALE, LEUR DISTRIBUTEUR OU REVENDEUR NE SERONT TENUS D'AUCUNE OBLIGATION D'INDEMNISATION À VOTRE EGARD RELATIVE A UNE QUELCONQUE RECLAMATION OU ACTION EN JUSTICE FORMEE PAR UN TIERS PRETENDANT QUE LE LOGICIEL, LA DOCUMENTATION QUI L'ACCOMPAGNE OU LEUR UTILISATION CONSTITUERAIENT LA CONTREFACON D'UN QUELCONQUE DROIT DE PROPRIETE INTELLECTUELLE DE CE TIERS.

CE QUI PRECEDE CONSTITUE L'INTEGRALITE DES OBLIGATIONS DE CANON ET REPRESENTE VOTRE SEUL RECOURS EN CE QUI CONCERNE LE LOGICIEL ET LA DOCUMENTATION QUI L'ACCOMPAGNE.

5. DUREE : Le présent Contrat entrera en vigueur au moment où vous ouvrirez l'emballage scellé de la disquette et demeurera applicable jusqu'à sa résiliation. Vous pouvez résilier le présent Contrat en détruisant le LOGICIEL et toute copie de ce dernier. Le présent Contrat sera également résilié si vous violez l'une des dispositions du présent Contrat. Outre l'application de ses droits propres par Canon, vous devrez alors détruire rapidement le Logiciel et toute copie de ce dernier.

6. NOTICE RELATIVE AUX DROITS RESTREINTS IMPOSES PAR L'ADMINISTRATION FEDERALE AMERICAINE : Le LOGICIEL est fourni avec des DROITS RESTREINTS. Son usage, sa reproduction ou sa divulgation sont soumis aux restrictions énoncées soit au sous-paragraphe (c) (1) (ii) de l'article 252.227-7013 du DFARS relatif aux Droits sur les données techniques et les logiciels informatiques, soit au sous-paragraphe (c) (1) et (2) de l'article 52.227-19 du FAR relatif aux Droits restreints sur les logiciels informatiques à caractère commercial, selon le cas.

7. DIVISIBILITE : Au cas où une disposition du présent Contrat serait déclarée ou considérée comme illégale par un tribunal ou une juridiction ayant compétence, cette disposition sera nulle et non avenue au regard de ce tribunal ou de cette juridiction, et toutes les dispositions subsistantes du présent Contrat conserveront leur plein et entier effet.

8. RECONNAISSANCE : EN OUVRANT L'EMBALLAGE SCELLE DE LA DISQUETTE, VOUS RECONNAISSEZ AVOIR LU LE PRESENT CONTRAT, L'AVOIR COMPRIS, ET ACCEPTEZ D'ETRE LIE PAR SES TERMES ET CONDITIONS. VOUS ACCEPTEZ EGALEMENT QUE LE PRESENT CONTRAT CONSTITUE L'ACCORD INTEGRAL ET EXCLUSIF ENTRE CANON ET VOUS-MEME CONCERNANT L'OBJET DES PRESENTES ET SE SUBSTITUE A TOUTES LES PROPOSITIONS OU ENGAGEMENTS ANTERIEURS, VERBAUX OU ECRITS, ET TOUTES AUTRES COMMUNICATIONS ENTRE LES PARTIES RELATIVES A L'OBJET DES PRESENTES. AUCUNE MODIFICATION DU PRESENT CONTRAT NE POURRA EMPORTER EFFET A MOINS D'ETRE SIGNEE PAR UN RESPONSABLE DUMENT AUTORISE DE CANON.

Si vous aviez des questions concernant le présent Contrat, ou si vous désiriez entrer en contact avec Canon pour quelque motif que ce soit, veuillez écrire à la filiale locale de Canon la plus proche de votre domicile.

VOR DEM ÖFFNEN DER VERSIEGELTEN DISKETTENPACKUNG BITTE AUFMERKSAM LESEN

CANON SOFTWARE-LIZENZVERTRAG

WICHTIG - LESEN SIE DIESEN VERTRAG, BEVOR SIE DIE VERSIEGELTE DISKETTENPACKUNG ÖFFNEN! DURCH ÖFFNEN DER VERSIEGELTEN DISKETTENPACKUNG ERKLÄREN SIE SICH MIT DIESEN VERTRAGSBEDINGUNGEN EINVERSTANDEN.

Dieses juristische Dokument ist ein Lizenzvertrag zwischen Ihnen und Canon Electronics Inc. (im folgenden "Canon"). DURCH ÖFFNEN DER VERSIEGELTEN DISKETTENPACKUNG ERKLÄREN SIE SICH DAMIT EINVERSTANDEN; DIE BESTIMMUNGEN DIESES LIZENZVERTRAGES EINZUHALTEN; WENN SIE MIT DIESEN VERTRAGSBESTIMMUNGEN NICHT EINVERSTANDEN SIND, SO DÜRFEN SIE DIE DISKETTENPACKUNG NICHT ÖFFNEN. GEBEN SIE IN DIESEM FALL DEN CANON SCANNER UND DIE UNGEÖFFNETE DISKETTENPACKUNG MIT DEN CANON-EIGENEN BZW. DEM LIZENZNEHMER GEHÖRENDEN SCANNERTREIBER-SOFTWAREPROGRAMMEN UND/ODER SCANNER UTILITY SOFTWARE PROGRAM (IM FOLGENDEN "SOFTWARE") UND DIE DAZUGEHÖRIGE DOKUMENTATION SOWIE ALLE ANDEREN TEILE DES ERWORBENEN PRODUKTS UNVERZÜGLICH DA, WO SIE DAS PRODUKT ERWORBEN HABEN, ZURÜCK; DER ERWERBSPREIS WIRD IHNEN VOLL ZURÜCKERSTATTET, SOLANGE DIE VERSIEGELUNG UNBESCHÄDIGT IST.

In Anbetracht des Rechts, die SOFTWARE zu benutzen, erklären Sie sich mit den folgenden Bestimmungen dieses Vertrags einverstanden.

1. LIZENZERTEILUNG: Canon gewährt Ihnen das einfache, nicht-ausschließliche und persönliche Recht, die beiliegende Kopie der SOFTWARE nur auf einem einzelnen Computer zu benutzen. Als Lizenznehmer dürfen Sie die SOFTWARE in physikalischer Form von einem Computer auf einen anderen Computer übertragen, vorausgesetzt, daß sie zu irgendeinem Zeitpunkt immer nur auf einem einzelnen Computer genutzt wird.

Sie dürfen die SOFTWARE weder weitergeben, unterlizensieren, verkaufen, vermieten, verleasen, verleihen, an einen Dritten übergeben oder einem Dritten sonstige zugänglich machen oder die SOFTWARE aus dem Land, in dem sie ursprünglich erworben wurde in ein anderes Land senden oder bringen, ohne die erforderliche Genehmigung der entsprechenden Regierung einzuholen. Die SOFTWARE und das zugehörige schriftliche Material darf weiterhin nicht kopiert, dupliziert, übersetzt oder in eine andere Programmiersprache konvertiert werden, außer, dies wird hierin ausdrücklich festgelegt.

Änderung, Disassemblierung, Dekompilierung oder Reverse Engineering der SOFTWARE sowie der zugehörigen Dokumentation durch den Lizenznehmer oder durch Dritte sind untersagt. Falls diese Bestimmung nicht der gängigen Rechtsprechung entspricht, ist sie gegenstandslos.

2. SICHERUNGSKOPIE: Das Anfertigen einer einzigen Reservekopie der SOFTWARE nur zu Sicherungszwecken oder das Anfertigen einer Kopie der SOFTWARE auf dem permanenten Datenträger (z. B. Festplatte) Ihres Computers und das Behalten des Originals zu Sicherungszwecken ist erlaubt. Falls diese Bestimmung nicht der gängigen Rechtsprechung entspricht, ist sie gegenstandslos, jegliches weitere Kopieren der SOFTWARE stellt eine Verletzung dieses Vertrags dar. Sie sind verpflichtet, auf der Reservekopie den Urheberrechtsvermerk anzubringen bzw. ihn darin aufzunehmen.

3. SUPPORT UND AKTUALISIERUNG: Canon, Canon- Geschäftsstelle, der Verkäufer oder Händler ist nicht verantwortlich für die Pflege der SOFTWARE oder Unterstützung des Kunden bezüglich der Verwendung der SOFTWARE. Für die SOFTWARE werden weder Aktualisierungen, Reparaturen noch Support angeboten.

4. GEWÄHLEISTUNGSAUSSCHLUB UND HAFTUNGSBESCHRÄNKUNG: Canon, Canon- Geschäftsstelle, der Verkäufer oder Händler können nicht garantieren, daß ein ununterbrochener Service möglich ist oder daß keine Fehler auftreten bzw. diese Fehler korrigiert werden. Aus diesem Grunde wird die SOFTWARE im "Ist-Zustand" ohne jegliche Garantie lizenziert. Sollte die Diskette, auf der die SOFTWARE aufgezeichnet ist, fehlerhaft sein, so kann der Erwerber Ersatzlieferung während der Gewährleistungszeit von neunzig (90) Tagen ab Kaufdatum verlangen, wobei das Kaufdatum durch eine Rechnung oder Quittung belegt werden muß. Die eingeschränkte Garantie gilt nicht, wenn die Beschädigung der Diskette auf einen Unfall, Mißbrauch oder falsche Anwendung der SOFTWARE zurückzuführen ist und darf sich nicht auf eine andere Person als den ursprünglichen Benutzer der SOFTWARE ausdehnen.

CANON, CANON - GESCHÄFTSSTELLE, DER VERKÄUFER ODER HÄNDLER ÜBERNEHMEN KEINERLEI STILLSCHWEIGENDE GARANTIE, DARUNTER GARANTIE ZUR HANDELSÜBLICHEN BRAUCHBARKEIT ODER NUTZBARKEIT ZU EINEM BESTIMMTEN ZWECK BEZÜGLICH DER SOFTWARE ODER DES ZUGEHÖRIGEN SCHRIFTLICHEN MATERIALS.

WEDER CANON, CANON - GESCHÄFTSSTELLE, DER VERKÄUFER NOCH DER HÄNDLER KANN HAFTBAR GEMACHT WERDEN FÜR VERLUSTE ODER SCHÄDEN, EINSCHLIESSLICH FOLGESCHÄDEN ODER SONSTIGEN VERLUSTEN WIE ENTGANGENE GEWINNE, AUSGABEN ODER UNANNEHMlichkeiten, DIE EVENTUELL DURCH DIE SOFTWARE VERURSACHT WURDEN ODER DARAU RESULTIEREN.

CANON, CANON - GESCHÄFTSSTELLE, DER VERKÄUFER ODER HÄNDLER IST KEINESFALLS VERPFLICHTET, SIE GEGEN JEGLICHE ANSPRÜCHE ODER DURCH DRITTE PARTEIEN ANGESTRENGTE GERICHTSVERFAHREN SCHADLOS ZU HALTEN, WENN ES DARUM GEHT, DASS DIE SOFTWARE ODER DAS ZUGEHÖRIGE SCHRIFTLICHE MATERIAL ODER DEREN VERWENDUNG DAS GEISTIGE EIGENTUM DIESER DRITTEN PARTEI ANGEBLICH VERLETZT.

DAS OBEN GESAGTE UMFASST CANONS GESAMTE HAFTUNG UND DEN EXKLUSIVEN RECHTSBEHELFF DES LIZENZNEHMERS IN VERBINDUNG MIT DER SOFTWARE UND DEM ZUGEHÖRIGEN SCHRIFTLICHEN MATERIAL.

5. DAUER DES VERTRAGS: Dieser Vertrag tritt nach Öffnen der versiegelten Diskettenpackung in Kraft und bleibt in Kraft, bis er beendet wird. Sie können diesen Vertrag beenden, indem Sie die SOFTWARE und alle Kopien vernichten. Dieser Vertrag endet ebenfalls, wenn eine Bedingung dieses Vertrags verletzt wird. Außerdem müssen Sie anschließend sofort die SOFTWARE und alle Kopien vernichten, damit Canon seine entsprechenden Rechte gerichtlich durchsetzen kann.

6. HINWEIS AUF EINGESCHRÄNKTE RECHTE DER US-REGIERUNG: Die SOFTWARE wird mit EINGESCHRÄNKTEN RECHTEN geliefert. Verwendung, Vervielfältigung oder Offenlegung unterliegt den Einschränkungen, die dargelegt sind in Unterabschnitt (c) (1) (ii) der Klausel "Rights in Technical Data and Computer Software" in DFARS 252.227-7013 oder Unterabschnitt (c)(1) und (2) der "Commercial Computer Software Restricted Rights Clause" in FAR 52.227-19, je nach Anwendbarkeit.

7. TEILNICHTIGKEIT: Falls eine Bedingung dieses Vertrags von einem Gericht oder Tribunal kompetenter Rechtsprechung für rechtswidrig erklärt oder befunden wird, ist diese Bedingung null und nichtig bezüglich der Rechtssprechung dieses Gerichts oder Tribunals, und die restlichen Bedingungen dieses Vertrags behalten volle Gültigkeit und bleiben in Kraft.

8. BESTÄTIGUNG: DURCH ÖFFNEN DER VERSIEGELTEN DISKETTENPACKUNG BESTÄTIGEN SIE, DASS SIE DIESEN VERTRAG GELESEN UND VERSTANDEN HABEN UND DIE BEDINGUNGEN DES VERTRAGS EINHALTEN. SIE SIND EBENFALLS EINVERSTANDEN, DASS DIESER VERTRAG DIE VOLLSTÄNDIGE UND EXKLUSIVE EINVERSTÄNDNISERKLÄRUNG ZWISCHEN IHNEN UND CANON BEZÜGLICH DIESER ANGELEGENHEIT DARSTELLT UND DASS ER ALLE VORSCHLÄGE UND VORHERIGEN VERTRÄGE - GANZ GLEICH OB MÜNDLICH ODER SCHRIFTLICH - UND ALLE ANDEREN ABSPRACHEN ZWISCHEN IHNEN UND CANON BEZÜGLICH DIESER ANGELEGENHEIT AUSSER KRAFT SETZT. KEINE ERGÄNZUNG ZU DIESEM VERTRAG IST WIRKSAM, WENN SIE NICHT VON EINEM ORDNUNGSGEMÄSS BESTELLTEN VERTRETER VON CANON UNTERZEICHNET WURDE.

Falls Sie Fragen zu diesem Vertrag haben oder Canon aus einem anderen Grunde ansprechen wollen, wenden Sie sich bitte an die zuständige Canon-Geschäftsstelle, die in der Dokumentation zur Software aufgelistet ist.

LEA ATENTAMENTE ESTA ADVERTENCIA ANTES DE ABRIR EL PAQUETE SELLADO QUE CONTIENE LOS DISCOS

CONTRATO DE LICENCIA DE SOFTWARE DE CANON

IMPORTANTE: LEA ESTE CONTRATO ANTES DE ABRIR EL PAQUETE SELLADO QUE CONTIENE LOS DISCOS. AL ABRIRLO, SE CONSIDERA QUE ACEPTA LAS CLÁUSULAS DE ESTE CONTRATO.

Este documento es un contrato de licencia entre usted y Canon Electronics Inc. ("Canon"). AL ABRIR EL PAQUETE SELLADO QUE CONTIENE LOS DISCOS, SE ENTIENDE QUE USTED ACEPTA LAS CLÁUSULAS DE ESTE CONTRATO. SI NO ESTÁ DE ACUERDO CON LAS CLÁUSULAS DE ESTE CONTRATO, NO ABRA EL PAQUETE SELLADO QUE CONTIENE LOS DISCOS Y DEVUELVA INMEDIATAMENTE, ANTES DE UTILIZARLOS, ABRIRLOS O DESEMPAQUETARLOS, EL ESCÁNER CANON, EL PAQUETE DE DISCOS QUE CONTIENE LOS PROGRAMAS DE SOFTWARE DEL CONTROLADOR DEL ESCÁNER PROGRAMA DE UTILIDAD DEL ESCANER Y/ O CANON O DE QUIEN LE OTORGÓ LA LICENCIA (EL "SOFTWARE") Y LA DOCUMENTACIÓN QUE LO ACOMPAÑA, JUNTO CON CUALQUIER OTRO ELEMENTO QUE HAYA RECIBIDO, AL LUGAR DONDE LOS HAYA ADQUIRIDO, A EFECTOS DE UN REEMBOLSO TOTAL.

En contrapartida por el derecho de utilización del SOFTWARE, usted se compromete a cumplir los términos y condiciones de este contrato.

1. OTORGAMIENTO DE LICENCIA. Canon le otorga el derecho personal, no exclusivo, de utilizar el SOFTWARE en un solo ordenador. Está autorizado a transferir físicamente el SOFTWARE de un ordenador a otro, siempre que el SOFTWARE se utilice sólo en un ordenador a la vez.

No está autorizado a asignar, otorgar sublicencias, vender, alquilar, prestar, ceder ni transferir el SOFTWARE a terceros, ni a enviarlo ni llevarlo fuera del país donde lo adquirió originalmente sin obtener las autorizaciones que fueran necesarias de los gobiernos involucrados, ni a copiar, duplicar, traducir ni convertir a otro lenguaje de programación el SOFTWARE ni la documentación que lo acompaña, a menos que se establezca expresamente en este contrato.

Excepto bajo aquellas condiciones permitidas expresamente por las leyes aplicables, no podrá alterar, modificar, desmontar, descompilar o de cualquier otra forma invertir la ingeniería del SOFTWARE o la documentación adjunta ni encargar a un tercero que lo realice.

2. COPIA DE SEGURIDAD. Usted está autorizado a hacer una copia del SOFTWARE con el único propósito de guardar una copia de seguridad, o copiar el SOFTWARE en un dispositivo de almacenamiento permanente (por ejemplo, un disco duro) de su ordenador y mantener el original como copia de seguridad. Excepto bajo aquellas condiciones permitidas expresamente por las leyes aplicables, cualquier otra copia que se haga del SOFTWARE se considerará una violación de este contrato. La nota de derechos de autor debe reproducirse e incluirse en la copia de seguridad.

3. SOPORTES Y ACTUALIZACIÓN. Canon, la afiliada de Canon, el distribuidor o representante no son responsables del mantenimiento ni de enseñarle a utilizar el SOFTWARE. No se pondrán a su disposición actualizaciones, arreglos ni soporte para el SOFTWARE.

4. GARANTÍA LIMITADA E INDEMNIZACIÓN. Canon, la afiliada de Canon, el distribuidor o representante no garantizarán el servicio ininterrumpido, ni la ausencia ni la corrección de errores. Por lo tanto, la licencia para la utilización del SOFTWARE se entrega "TAL CUAL" sin garantías de ninguna índole. El disquete en el cual se entrega el SOFTWARE tiene garantía por defectos de material o de mano de obra en condiciones normales de uso por un período de noventa (90) días a partir de la fecha de compra según conste en el recibo u otro documento similar. Esta garantía limitada no se aplica a los errores del disquete que se deban a un accidente, abuso o mala utilización del SOFTWARE y no son aplicables a ninguna otra persona que no sea el otro usuario original del SOFTWARE.

CANON, LA AFFILIADA DE CANON, EL DISTRIBUIDOR O EL REPRESENTANTE NO SE HACEN RESPONSABLES DE NINGUNA GARANTÍA IMPLÍCITA, INCLUYENDO CUALQUIER TIPO DE GARANTÍA DE COMERCIALIZACIÓN O ADECUACIÓN PARA UN PROPÓSITO DETERMINADO, RESPECTO AL SOFTWARE O A LA DOCUMENTACIÓN ADJUNTA.

CANON, LA AFFILLADA DE CANON, EL DISTRIBUIDOR Y EL REPRESENTANTE NO SE HACEN RESPONSABLES DE NINGÚN DAÑO O PÉRDIDA, INCLUYENDO CUALQUIER TIPO DE DAÑO O PÉRDIDA INCIDENTAL O QUE PUDIERA DERIVARSE, COMO UNA PÉRDIDA DE BENEFICIOS, POSIBLES GASTOS O INCONVENIENTES, SEA CUAL FUERE LA CAUSA O DERIVADOS DEL SOFTWARE, LA DOCUMENTACIÓN ADJUNTA O EL USO.

CANON, LA AFFILIADA DE CANON, EL DISTRIBUIDOR Y EL REPRESENTANTE NO TIENEN NINGUNA OBLIGACIÓN DE INDEMNIZARLE POR NINGUNA RECLAMACIÓN REALIZADA POR TERCEROS QUE ALEGUEN QUE EL SOFTWARE, LA DOCUMENTACIÓN ADJUNTA O SU USO INFRINJA CUALQUIER PROPIEDAD INTELECTUAL DE ESOS TERCEROS.

TODO LO ANTERIORMENTE EXPUESTO ES LA ÚNICA RESPONSABILIDAD QUE ASUME CANON, Y CONSTITUYE EL ÚNICO DERECHO DE REPARACIÓN QUE USTED PUEDE RECLAMAR EN RELACIÓN AL SOFTWARE Y LA DOCUMENTACIÓN ADJUNTA.

5. TÉRMINO. Este Contrato entrará en vigor a partir del momento en que se abra el paquete de discos sellado y seguirá en vigor hasta que lo finalice. Puede finalizar este Contrato destruyendo el SOFTWARE y todas sus copias. Este Contrato también finalizará si usted no cumple algunos de sus términos. Además de cumplir los derechos legales de Canon, en ese caso usted deberá destruir el SOFTWARE y todas sus copias de forma inmediata.

6. NOTA SOBRE LOS DERECHOS RESTRINGIDOS DEL GOBIERNO DE LOS EE.UU. Este SOFTWARE se entrega con DERECHOS RESTRINGIDOS. El uso, copia o difusi—n están sujetos a las restricciones que se establecen en el subapartado (c) (1) (ii) de la cláusula de Derechos de datos técnicos y software informático de DFAR 252.227-7013 o en el subapartado (c) (1) y (2) de la cláusula Derechos restringidos de software informático comercial de FAR 52.227-19, según proceda.

7. RESERVA. En el caso de que la provisi—n de este Contrato se declare o considere ilegal por parte de cualquier tribunal o comisi—n de jurisdicci—n competente, esa provisi—n será nula respecto a la jurisdicci—n de ese tribunal o comisi—n y las demás provisiones de este Contrato conservarán toda su vigencia.

8. RECONOCIMIENTO. AL ABRIR EL PAQUETE DE DISCOS SELLADO, USTED RECONOCE QUE HA LEÍDO ESTE ACUERDO, LO HA ENTENDIDO Y ESTÁ DE ACUERDO CON SUS CLÁUSULAS Y CONDICIONES. TAMBIÉN CONSIDERA QUE ESTE CONTRATO CONSTITUYE LOS TÉRMINOS DEL CONTRATO COMPLETOS Y EXCLUSIVOS ENTRE USTED Y CANON REFERENTE AL TEMA QUE NOS IMPLICA, Y REEMPLAZA TODAS LAS PROPUESTAS O CONTRATOS ANTERIORES, YA SEAN VERBALES O ESCRITOS, Y CUALQUIER OTRO TIPO DE COMUNICACIÓN ENTRE USTED Y CANON RELACIONADA CON ESTE TEMA. NINGUNA RECTIFICACIÓN DE ESTE ACUERDO SERÁ EFECTIVA A MENOS QUE ESTÉ FIRMADA POR UN REPRESENTANTE DE CANON DEBIDAMENTE AUTORIZADO.

En caso de que desee plantear alguna pregunta sobre este Contrato, o desee ponerse en contacto con Canon por cualquier motivo, escriba a la afiliada local de Canon.

LEGGERE ATTENTAMENTE PRIMA DI APRIRE LA CONFEZIONE SIGILLATA

CONTRATTO DI LICENZA SOFTWARE CANON

IMPORTANTE: LEGGERE IL SEGUENTE CONTRATTO PRIMA DI APRIRE LA CONFEZIONE SIGILLATA. L'APERTURA DELLA CONFEZIONE SIGILLATA CONTENENTE IL SOFTWARE COMPORTA L'ACCETTAZIONE DEL CONTRATTO.

Il presente documento costituisce il contratto di licenza tra l'utente e Canon Electronics Inc. ("Canon"). L'APERTURA DELLA CONFEZIONE SIGILLATA COMPORTA L'ACCETTAZIONE DEI TERMINI DEL PRESENTE CONTRATTO. QUALORA NON SI INTENDESSE ADERIRE ALLE CONDIZIONI DEL PRESENTE CONTRATTO, NON APRIRE LA CONFEZIONE SIGILLATA E RESTITUIRE PRONTAMENTE LO SCANNER CANON, LA CONFEZIONE SIGILLATA CONTENENTE I DRIVER DELLO SCANNER E/O PROGRAMMA SOFTWARE UTILITY SCANNER DI PROPRIETÀ DI CANON O DEL SUO LICENZIATARIO ("SOFTWARE"), LA RELATIVA DOCUMENTAZIONE ED ALTRI COMPONENTI PRESSO IL LUOGO DI ACQUISTO PER IL RIMBORSO CHE VERRÀ CORRISPOSTO UNICAMENTE NEL CASO IN CUI I SUDDETTI COMPONENTI NON SIANO STATI USATI, APERTI O DISIMBALLATI.

Al fine di poter usufruire del diritto di utilizzare il SOFTWARE, l'utente accetta di rispettare i termini e le condizioni del presente Contratto.

1. CONCESSIONE DELLA LICENZA: Canon concede all'utente il diritto personale non esclusivo di usare il SOFTWARE unicamente su un solo computer. L'utente può trasferire fisicamente il SOFTWARE da un computer ad un altro, purché il SOFTWARE venga usato soltanto su una macchina alla volta.

L'utente non può assegnare, offrire in licenza, vendere, affittare, noleggiare, prestare, trasferire o cedere a terze parti, né spedire o esportare il SOFTWARE in un paese diverso da quello in cui è stato ottenuto originariamente senza la necessaria autorizzazione dei governi interessati, né copiare, duplicare, tradurre o convertire in un altro linguaggio di programmazione il SOFTWARE o la relativa documentazione, se non nei casi ivi espressamente previsti.

[Ad eccezione di quanto espressamente dichiarato dalle leggi in vigore] L'utente non può alterare, modificare, disassemblare, decompilare o altrimenti assemblare all'inverso il SOFTWARE o la relativa documentazione, né può autorizzare terze parti a fare quanto sopra descritto.

2. COPIA DI RISERVA: L'utente può creare una copia del SOFTWARE esclusivamente a scopo di archiviazione o copiare il SOFTWARE su un'unità di memorizzazione permanente (ad esempio, un disco fisso) del proprio computer e conservare la copia originale come copia di riserva. [Ad eccezione di quanto espressamente dichiarato dalle leggi in vigore] Qualsiasi altra copia del SOFTWARE costituisce una violazione del presente Contratto. L'utente è tenuto a includere le informazioni di copyright sulla copia di riserva.

3. SUPPORTO ED AGGIORNAMENTO: Canon, la consociata Canon, il loro distributore o rivenditore non sono responsabili della manutenzione o della prestazione di assistenza per l'uso del SOFTWARE. Per il SOFTWARE, non verranno resi disponibili aggiornamenti, correzioni o supporto di alcun genere.

4. GARANZIA LIMITATA: Canon, la consociata Canon, il loro distributore o rivenditore non garantiscono la prestazione continuata, né la mancanza o la correzione di errori. Di conseguenza, il SOFTWARE viene fornito in licenza "COSÌ COM'È", senza alcuna garanzia. Il minidisco su cui il SOFTWARE è memorizzato è garantito da difetti di fabbricazione in condizioni di uso normale per un periodo di novanta (90) giorni dalla data di acquisto, come comprovato dalla necessaria documentazione. La garanzia limitata non è applicabile nel caso in cui il minidisco venga danneggiato accidentalmente o in caso di uso improprio del SOFTWARE e sarà comunque a solo beneficio dell'utente originale del SOFTWARE.

CANON, LA CONSOCIATA CANON, IL LORO DISTRIBUTORE O RIVENDITORE NON RICONOSCE ALCUNA GARANZIA IMPLICITA, IVI COMPRESA LA GARANZIA DI COMMERCIALIZZABILITÀ OD IDONEITÀ PER UNO SCOPO PARTICOLARE.

NÉ CANON, NÉ LA CONSOCIATA CANON, NÉ IL LORO DISTRIBUTORE O RIVENDITORE SARANNO IN NESSUN CASO RESPONSABILI DI ALCUNA PERDITA O DANNO, COMPRESA QUALESIVOGLIA PERDITA O DANNO CONSEGUENZIALE OVVERO ACCIDENTALE, QUALE, AD ESEMPIO, MANCATO GUADAGNO, SPESA OD INCONVENIENTE IN QUALESIVOGLIA MODO DERIVANTE O PROVOCATO DAL SOFTWARE, DALLA DOCUMENTAZIONE CHE LO ACCOMPAGNA O DALL'UTILIZZO DI DETTO SOFTWARE O DETTA DOCUMENTAZIONE.

CANON, LA CONSOCIATA CANON, IL LORO DISTRIBUTORE O RIVENDITORE NON AVRÀ ALCUN OBBLIGO DI INDENNIZZO NEI CONFRONTI DELL'UTENTE RELATIVAMENTE A RIVENDICAZIONI SOLLEVATE O PROCEDIMENTI LEGALI INTENTATI DA TERZI CONTRO L'UTENTE MEDESIMO A CAUSA DELLA PRESUNTA VIOLAZIONE DELLA PROPRIETÀ INTELLETTUALE DI DETTI TERZI DERIVANTE DAL SOFTWARE, DALLA DOCUMENTAZIONE CHE LO ACCOMPAGNA O DALL'UTILIZZO DI DETTO SOFTWARE O DETTA DOCUMENTAZIONE.

QUANTO SOPRA COSTITUISCE L'INTERA DICHIARAZIONE DI RESPONSABILITÀ DI CANON ED IL RIMEDIO ESCLUSIVO DELL'UTENTE IN RELAZIONE AL SOFTWARE ED ALLA DOCUMENTAZIONE CHE LO ACCOMPAGNA.

5. DURATA: Il presente Contratto entra in vigore all'atto dell'apertura del pacchetto sigillato e rimane in vigore fino a rescissione avvenuta. Il presente Contratto può essere rescisso distruggendo questo SOFTWARE ed ogni copia del medesimo. Il presente Contratto viene anche rescisso qualora l'utente manchi di ottemperare a qualsivoglia clausola del Contratto medesimo. Oltre ad onorare tutti gli obblighi legali nei confronti di Canon, l'utente è altresì tenuto a distruggere questo SOFTWARE ed ogni copia del medesimo.

6. NOTA SULLA LIMITAZIONE DEI DIRITTI SANCTA DAL GOVERNO U.S.A.: Questo SOFTWARE viene fornito con LIMITAZIONE DEI DIRITTI. L'utilizzo, la duplicazione o la diffusione è soggetta a limitazioni ai sensi del subparagrapho (c) (1) (ii) della clausola Rights in Technical Data and Computer Software, DFAR 252.227-7013, ovvero del subparagrapho (c) (1) e (2) della clausola Commercial Computer Software Restricted Rights, FAR 52.227-19, secondo applicabilità.

7. STRALCIABILITÀ: Nel caso in cui una disposizione del presente Contratto venga ritenuta o dichiarata illegale da qualsivoglia corte o tribunale avente giurisdizione, detta disposizione sarà considerata nulla e senza effetto nell'ambito giurisdizionale di detta corte o detto tribunale, mentre tutte le altre disposizioni del presente Contratto continueranno ad avere piena validità ed effetto.

8. DICHIARAZIONE DI ACCETTAZIONE: L'APERTURA DEL PRESENTE PACCHETTO SIGILLATO COSTITUISCE IL RICONOSCIMENTO IMPLICITO DI AVER LETTO E COMPRESO IL PRESENTE CONTRATTO E DI AVERNE ACCETTATO I TERMINI E LE DISPOSIZIONI. L'UTENTE RICONOSCE ALTRESÌ CHE IL PRESENTE CONTRATTO RAPPRESENTA IL COMPLETO ED ESCLUSIVO ATTO DI INTESA TRA CANON E L'UTENTE MEDESIMO RELATIVAMENTE ALL'OGGETTO DEL CONTRATTO E CHE IL PRESENTE CONTRATTO SOSTITUISCE QUALESIVOGLIA PROPOSTA OD ACCORDO PRECEDENTE, SIA SCRITTO CHE ORALE, E QUALESIVOGLIA ALTRA COMUNICAZIONE INTERCORSA TRA CANON E L'UTENTE IN MERITO ALL'OGGETTO DEL CONTRATTO. NESSUN EMENDAMENTO AL PRESENTE CONTRATTO SARÀ RITENUTO VALIDO, SE NON SOTTOSCRITTO DA UN RAPPRESENTANTE DI CANON DEBITAMENTE AUTORIZZATO.

Se si desidera avere dei chiarimenti in merito al presente Contratto o si desidera contattare Canon per qualunque altra ragione, scrivere alla consociata locale.

LEES DEZE INFORMATIE ZORGVULDIG ALVORENS DE VERZEGELDE VERPAKKING VAN DE DISK TE OPENEN

LICENTIEOVEREENKOMST VOOR SOFTWARE VAN CANON

BELANGRIJK - LEES DEZE OVEREENKOMST ALVORENS DE VERZEGELDE VERPAKKING VAN DE DISK TE OPENEN! DOOR DE VERZEGELDE VERPAKKING VAN DE DISK TE OPENEN WORDT U GEACHT AKKOORD TE GAAN MET DEZE OVEREENKOMST.

Dit juridische document is een licentieovereenkomst tussen u en Canon Electronics Inc. ("Canon"). DOOR DE VERZEGELDE VERPAKKING VAN DE DISK TE OPENEN WORDT U GEACHT AKKOORD TE GAAN MET DE VOORWAARDEN VAN DEZE OVEREENKOMST. ALS U HIERMEE NIET AKKOORD WILT GAAN OPEN DE VERZEGELDE VERPAKKING VAN DE DISK DAN NIET EN BRENG DE CANON SCANNER, DE VERPAKKING VAN DE DISK MET DE SCANNERBESTURINGSSOFTWARE EN/OF DE HULPPROGRAMMA'S VOOR DE SCANNER DIE EIGENDOM ZIJN VAN CANON OF VAN DEGENE DIE AAN CANON LICENTIE VERLEEND HEEFT (DE "SOFTWARE") EN DE BIJBEHORENDE DOCUMENTATIE EN OVERIGE ARTIKELEN ONGEBRUIKT, ONGEOPEND EN ONUITGEPAKT TERUG NAAR DE PLEK WAAR U ZE GEKOCHT HEBT EN VRAAG UW GELD TERUG.

Als tegenprestatie voor het recht de SOFTWARE te mogen gebruiken, verklaart u zich aan de voorwaarden van deze overeenkomst te zullen houden.

1. LICENTIEVERLENING: Canon verleent u het persoonlijke, niet-exclusieve recht de SOFTWARE op slechts één enkele computer te gebruiken. Het is u toegestaan de SOFTWARE fysiek over te brengen van de ene computer naar een andere computer op voorwaarde dat de SOFTWARE nooit op meer dan één computer tegelijk gebruikt wordt.

Het is u niet toegestaan de SOFTWARE aan derden toe te wijzen, in sublicentie te geven, te verkopen, te verhuren, te leasen, uit te lenen of over te dragen of de SOFTWARE uit het land waar u deze oorspronkelijk gekocht hebt te vervoeren naar andere landen zonder de vereiste toestemming van de desbetreffende overheden, dan wel de SOFTWARE of de bijbehorende documentatie te kopiëren, vermenigvuldigen, vertalen of in een andere programmeertaal om te zetten tenzij dit uitdrukkelijk in de SOFTWARE of documentatie toegestaan wordt.

Behoudens uitdrukkelijke toestemming onder het toepasselijk recht, is het u niet toegestaan de SOFTWARE of de bijbehorende documentatie te wijzigen, aan te passen, te decompileren of anderszins de broncode ervan te herleiden of dit door een derde te laten doen.

2. RESERVEKOPIE: Het is u toegestaan één kopie van de SOFTWARE te maken als back-up of de SOFTWARE op het permanente opslagapparaat (bijv. een harde schijf) van uw computer te kopiëren en de originele disk te bewaren als back-up. Tenzij uitdrukkelijk toegestaan krachtens het toepasselijk recht betekenen alle andere vormen van kopiëren van de SOFTWARE een schending van deze overeenkomst. U moet de copyrightvermelding kopiëren en aangeven op de back-up.

3. ONDERSTEUNING EN UPDATES: Canon, met Canon gelieerde ondernemingen, distributeurs of dealers daarvan zijn niet verantwoordelijk voor het onderhoud van de SOFTWARE of hulpverlening aan u voor het gebruik van de SOFTWARE. Er worden geen updates, verbeterde versies dan wel ondersteuning verstrekt voor de SOFTWARE.

4. BEPERKTE GARANTIE EN NIET-AANSPRAKELIJKHEIDSVERKLARING: Canon, met Canon gelieerde ondernemingen, distributeurs of dealers daarvan verstrekken geen garanties over probleemloze werking of het ontbreken of verhelpen van storingen. De SOFTWARE-licentie wordt daarom verstrekt op basis van de actuele staat van de SOFTWARE bij aflevering zonder enige garanties. De diskette waarop de SOFTWARE is opgenomen wordt bij normaal gebruik gedurende een periode van negentig (90) dagen vanaf de aankoopdatum gegarandeerd tegen ondegdelijk materiaal of vakmanschap. De aankoopdatum dient aangetoond te worden met een kassabon of een vergelijkbaar bewijsstuk. De beperkte garantie geldt niet indien een defecte diskette het resultaat is van een ongeluk, misbruik of het verkeerde gebruik van de SOFTWARE en geldt uitsluitend voor de oorspronkelijke gebruiker van de SOFTWARE.

CANON, MET CANON GELIEERDE ONDERNEMINGEN, DISTRIBUTEURS OF DEALERS DAARVAN GEVEN GEEN ENKELE STILZWIJGENDE GARANTIE, WAARONDER GARANTIES BETREFFENDE DE VERHANDELBAARHEID OF GESCHIKTHEID VOOR EEN SPECIFIEK DOEL, MET BETREKKING TOT DE SOFTWARE OF DE BIJBEHORENDE DOCUMENTATIE.

NOCH CANON, NOCH MET CANON GELIEERDE ONDERNEMINGEN, DISTRIBUTEURS OF DEALERS DAARVAN ZIJN AANSPRAKELIJK VOOR EVENTUELE SCHADE WAARONDER VERVOLGSCHADE, WINSTDERIVING, KOSTEN OF ONGEMAK VAN ENIGERLEI AARD, ALS GEVOLG VAN OF VOORTVLOEIEND UIT DE SOFTWARE, DE BIJBEHORENDE DOCUMENTATIE OF HET GEBRUIK DAARVAN.

CANON, MET CANON GELIEERDE ONDERNEMINGEN, DISTRIBUTEURS OF DEALERS DAARVAN ZIJN NIET GEHOUDEN U TE VRIJWAREN VAN OF SCHADELOOS TE STELLEN VOOR EVENTUELE CLAIMS OF JURIDISCHE PROCEDURES DIE ZIJN INGEDIEND OF AANHANGIG GEMAAKT DOOR EEN DERDE OP GROND VAN DE BEWERING DAT DE SOFTWARE, DE BIJBEHORENDE DOCUMENTATIE OF HET GEBRUIK DAARVAN INBREUK ZOU MAKEN OP DE EVENTUELE INTELLECTUELE EIGENDOM VAN DE DESBETREFFENDE DERDE.

HETGEEN HIERBOVEN VERMELD IS, BEHELST DE VOLLEDIGE AANSPRAKELIJKHEID VAN CANON EN UW ENIGE VERHAALSRECHT IN VERBAND MET DE SOFTWARE EN DE BIJBEHORENDE DOCUMENTATIE.

5. DUUR: Deze overeenkomst wordt van kracht op het moment dat de verzegelde verpakking van de disk geopend wordt en blijft van kracht tot het moment van beëindiging. U kunt deze overeenkomst beëindigen door de SOFTWARE en eventuele kopieën daarvan te vernietigen. Deze overeenkomst eindigt ook als u niet voldoet aan een of meer bepalingen van deze overeenkomst. In dat geval kan Canon haar desbetreffende juridische rechten afdwingen en dient u de SOFTWARE en eventuele kopieën daarvan onmiddellijk te vernietigen.

6. OPMERKING VAN DE AMERIKAANSE OVERHEID BETREFFENDE BEPERKTE RECHTEN: De SOFTWARE wordt verstrekt met BEPERKTE RECHTEN. Voor het gebruik, de vermenigvuldiging of de openbaarmaking ervan gelden de beperkingen die vastgelegd zijn in subparagraaf (c) (1) (ii) van de Rights in Technical Data and Computer Software Clause in DFAR's 252.227-7013 dan wel subparagraaf (c) (1) en (2) van de Commercial Computer Software Restricted Rights Clause in FAR 52.227-19, zoals in het desbetreffende geval van toepassing is.

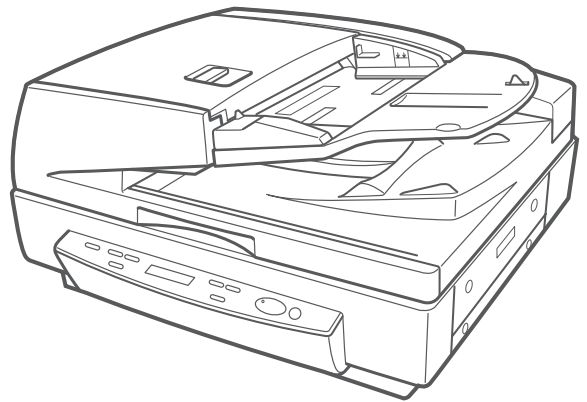
7. ONGELDIGHEID VAN LOSSE BEPALINGEN: Ingeval een bepaling van deze overeenkomst ongeldig, onwettig of nietig is of verklaard wordt door een bevoegd gerecht of tribunaal, vervalt de werking van de desbetreffende bepaling met betrekking tot de jurisdictie van het desbetreffende gerecht of tribunaal en wordt de geldigheid van de overige bepalingen van deze overeenkomst daardoor niet aangetast.

8. VERKLARING: DOOR DE VERZEGELDE VERPAKKING VAN DE DISK TE OPENEN VERKLAART U DEZE OVEREENKOMST GELEZEN EN BEGREPEN TE HEBBEN EN ERMEE AKKOORD TE GAAN. VERDER VERKLAART U DAT DEZE OVEREENKOMST DE VOLLEDIGE EN UITSLUITENDE OVEREENKOMST TUSSEN U EN CANON IS BETREFFENDE HET ONDERWERP VAN DEZE OVEREENKOMST EN DAT DEZE OVEREENKOMST ALLE EVENTUELE VOORSTELLEN OF EERDERE, MONDELINGE OF SCHRIFTELIJKE, OVEREENKOMSTEN EN ANDERE BERICHTGEVING TUSSEN U EN CANON MET BETREKKING TOT HET ONDERWERP VAN DEZE OVEREENKOMST VERVANGT. WIJZIGINGEN OP OF AANVULLINGEN VAN DEZE OVEREENKOMST ZIJN NIET GELDIG TENZIJ ZE ONDERTEKEND ZIJN DOOR EEN RECHTSGELDIGE VERTEGENWOORDIGER VAN CANON.

Indien u nog vragen hebt over deze overeenkomst of om andere redenen contact wilt opnemen met Canon, verzoeken wij u naar de plaatselijke vestiging van Canon te schrijven.

Canon

Document Scanner **DR-7080C** **INSTRUCTIONS**



Please read this manual before operating this unit. After you finish reading this manual, store it in a safe place for future reference.

International ENERGY STAR® Office Equipment Program



As an ENERGY STAR partner, Canon Electronics Inc. has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

The International ENERGY STAR Office Equipment Program is an international program that promotes energy saving through the use of computers and other office equipment. The program backs the development and dissemination of products with functions that effectively reduce energy consumption. It is an open system in which business proprietors can participate voluntarily. The targeted products are office equipment such as computers, monitors, printers, fax machines, copiers and scanners. Their standards and logos are uniform among the participating nations.

NOTICE

- ① Copyright 2004 by CANON ELECTRONICS INC. All rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual, or otherwise, without the prior permission of CANON ELECTRONICS INC.
- ② The contents of this manual are subject to change without notice.
- ③ Every effort has been made to ensure the accuracy of information presented in this manual. However, Canon Electronics Inc. and the subsidiaries on the back cover assume no responsibility for any errors or their consequences.
- ④ We do not assume any responsibility for damage resulting from operations regardless of item ③.

Trademarks and Registered Trademarks

- ENERGY STAR is a United States registered mark.
- Microsoft Windows® and Microsoft Windows NT® are registered trademarks of Microsoft Corporation in the United States and in other countries.
- Product names mentioned herein are for identification purposes only and may be trademarks and/or registered trademarks of their respective companies.

INTRODUCTION

Thank you for purchasing the Canon Document Scanner DR-7080C. Please read this manual thoroughly before operating the machine in order to familiarize yourself with its capabilities, and to make the most of its many functions. After reading this manual, store it in a safe place for future reference.

Conventions

This manual uses the following symbols and indications. Before you start reading this manual, read the following and familiarize yourself with their meanings.



Warnings are provided for your safety and contain extremely important information. Failure to observe the instructions provided in a warning could result in death or serious injury to yourself or your coworkers.



Caution notices are also provided for your safety and contain important information. Failure to observe the instructions provided in a caution notice could result in serious injury to yourself or your coworkers or damage to the equipment.



These important notes contain important information on procedures that must be followed or actions that must be avoided. Failure to observe a request could result in damage to the equipment or a malfunction.



Notes provide additional tips or advice that can save you time and effort in using the scanner.

CONTENTS

INTRODUCTION	1
Conventions	1
Safety Precautions	5
Safe Operation	5
Installation Location	7
Power Supply	8
Opening and Closing the Feeder	8
Carrying	9

Chapter 1 Getting Ready

1.1 Features of the DR-7080C	12
1.2 Before Getting Started	14
Unpacking	14
Removing the Transportation Screw	15
Ferrite Core	15
1.3 Part Names	16
Feeder	16
Flatbed	17
Rear	18
Operation Panel	19
1.4 Job Function	20
1.5 Optional Products	21
Stamp Unit	21

Chapter 2 Connecting to a Computer

2.1 Checking Your Operating Environment	24
2.2 Connecting to a Computer	25
SCSI Connections	25
◆ SCSI Cards	25
◆ Connecting the SCSI Cable	26
◆ Attaching the Ferrite Core	26
◆ Setting the SCSI ID and Terminator	27
◆ Setting the SCSI Transfer Speed	29

USB Connections	29
◆ USB 2.0 Interface Cards	29
◆ Connecting a USB Interface Cable	30
Connecting the Power Cord	30
2.3 Turning ON or OFF the Power	31
Turning ON the Power	31
Recognizing the Scanner	32
Turning OFF the Power	34

Chapter 3 Using the Software

3.1 About the Software	36
3.2 Installing the Software	37
3.3 How to Use the Software	39
How to Display the ISIS/TWAIN Driver Help File	39
How to Start CapturePerfect	40
How to Start the Job Registration Tool	41
3.4 Uninstalling the Software	43

Chapter 4 Using the Scanner

4.1 Documents	46
Types of Documents	46
Feeder Capacity	47
4.2 Placing Documents onto the Scanner	48
Loading a Document into the Feeder	48
Positioning a Document on the Flatbed (Platen Glass)	51
4.3 Document Feeding and Scanning	54
Scan Procedure	54
◆ Standard Feeding	55
◆ Panel Feeding	56
◆ Automatic Feeding	57
4.4 Other Scanning Techniques	59
Using the Job Mode for Scanning	59
◆ Setting the Event Function	60
Using the Count Only Mode	63
Using Patch Code Sheets	64
◆ Patch Code Sheets	64
◆ Types of Patch Code Patterns	65
◆ How to Use Patch Code Sheets	66

Chapter 5 User Modes

5.1 About the User Modes	70
User Mode Functions	70
How to Set the User Modes	72

Chapter 6 Troubleshooting

6.1 When the Scanner Is Not Recognized	74
SCSI Connections	74
USB Connections	76
6.2 Clearing Paper Jams	77
Clearing a Paper Jam	77
Paper Jam Causes	81
6.3 When the Scanned Image Is Not Normal	82
6.4 Display Messages	83
Error Messages	83
Scanner Status Messages	85
6.5 Troubleshooting	86

Chapter 7 User Maintenance

7.1 Changing the Stamp Cartridge	90
7.2 Daily Cleaning	92
Cleaning the Main Unit	92
Cleaning the Flatbed (Platen Glass) and Pressure Board (Black)	93
Cleaning the Feeder	94
Cleaning the Power Plug	98

Appendix

Specifications	100
Specification for the Scanner	100
Options	101
Consumables	101
Exterior Dimensions	102
Index	103

Safety Precautions

Safe Operation

When you are working around the scanner, follow these precautions to avoid the hazards of fire and electrical shock:



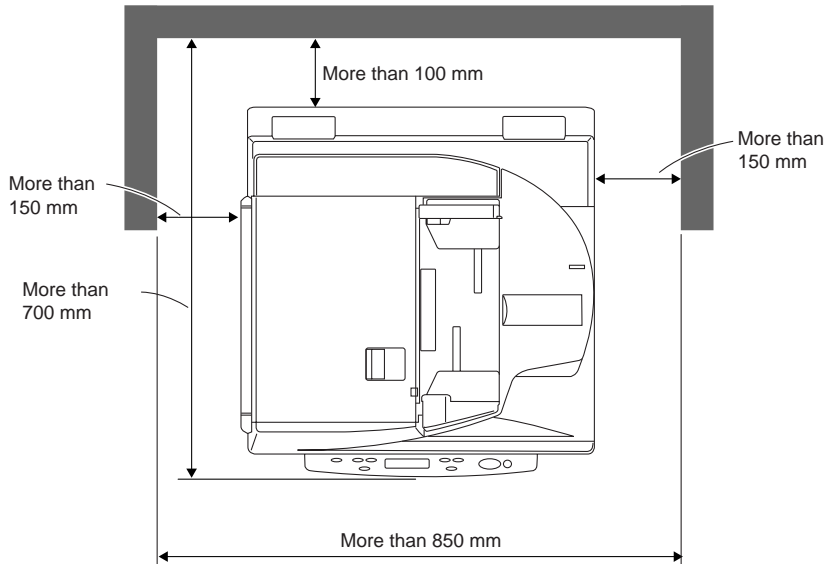
- Never install and operate the scanner near flammable substances such as alcohol, paint thinner, benzene, or any other type of volatile solution.
- Never damage or modify the power cord, and never place heavy objects on the power cord.
- Always make sure that your hands are dry when you are handling the power cord or plug. Never grasp the plug when your hands are wet.
- Never plug the scanner into a multiplug power strip.
- Never bundle, wrap, or tie the power cord around itself or another object. Connect the plug securely to the power source.
- Use only the power cord and plug provided with the scanner.
- Never attempt to disassemble or modify the scanner.
- Never use flammable aerosol products near the scanner.
- Before you clean the scanner, turn OFF the power and disconnect the power cord from the power outlet.
- To clean the scanner exterior, use a firmly wrung cloth moistened slightly with water or mild detergent. Never use any type of volatile solution such as alcohol, benzene, or paint thinner.
- If you hear a strange sound, detect smoke or abnormal heat, sense vibration, or smell odd odors around the scanner, turn OFF the power immediately and disconnect the power cord from the power outlet. Call for service immediately.
- Handle the scanner with care. Avoid shocks and vibrations to the scanner caused by reckless handling. If you suspect the scanner has been accidentally damaged, turn OFF the power immediately and disconnect the power cord from the power outlet. Call for service immediately.
- Before you move the scanner, always turn OFF the power and disconnect the power cord from the power outlet.
- The scanner weighs 33.6 kg. Two people must carry the scanner. You may drop the scanner, or pinch your fingers if you attempt to carry it by yourself.
- **Notice to Cardiac Pacemaker Users**
This product generates a weak magnetic field. If you use a cardiac pacemaker, move away from product in the event that you notice any unusual symptoms. Also, please consult a cardiologist.



CAUTION

- To avoid damage to the scanner, never place the scanner on an unstable or vibrating surface. The scanner may tip or fall over, and cause an injury.
- To avoid overheating and causing a fire, never block the air vents on the rear and side of the scanner.
- Keep all liquids, beverages, or any type of liquid, and clips, staples, necklaces, or other metal objects away from the scanner. If you accidentally spill liquid or drop a metal object into the scanner, turn OFF the power immediately and disconnect the power cord from the power outlet. Call for service immediately.
- Never install the scanner in humid or dusty locations. Doing so might cause a fire or electrical shock.
- Never place heavy objects on top of the scanner. Such objects may tip or fall over, and cause an injury.
- When you remove the power cord, grip it by the plug head. Never attempt to disconnect the power cord from the power outlet by pulling on the power cord. Doing so might expose or break the core leads, damage the power cord, and cause a fire or electrical shock.
- Keep the area around the power outlet clear of all obstacles so you can disconnect the power cord easily at all times.
- Never spill water or any type of volatile solution (alcohol, benzene, paint thinner) into the scanner. Doing so might cause a fire or electrical shock.
- When the scanner is not being used for a long time, disconnect the power cord from the power outlet.
- Avoid wearing loose fitting clothing, dangling jewelry, long ties, or even long hair that could become entangled with moving parts, especially the rollers that feed the scanner. If such objects become entangled, immediately disconnect the power plug from the power outlet to stop the scanner.
- Be very careful when you are loading a document or removing a paper jam. You may be injured unexpectedly. For example, the paper edges may cut your fingers.
- Do not open the feeder cover while the scanner is operating. Doing so might result in a malfunction or injury.
- Do not directly touch the pins and contacts on the scanner connector with your hands. Doing so might result in a malfunction.
- Open the feeder carefully and slowly, taking care to avoid letting it fall over backwards. Failure to do so might result in a malfunction or personal injury.
- Close the feeder carefully and slowly, taking care to avoid pinching your hands. Failure to do so might result in a malfunction or personal injury.
- When scanning a thick book or similar item from the flatbed (platen glass), avoid pressing down hard on the feeder. Doing so might damage the glass and create the risk of a malfunction or personal injury.
- Never place any object other than documents to be scanned onto the scanner's flatbed (platen glass). Doing so might result in a malfunction or personal injury.

Installation Location



ENGLISH

For operation, maintenance and ventilation, make sure that there is enough space around the scanner, as shown in the illustration above.

Avoid placing the scanner in the following places. Doing so may cause a malfunction and adversely affect the scanner or your computer.

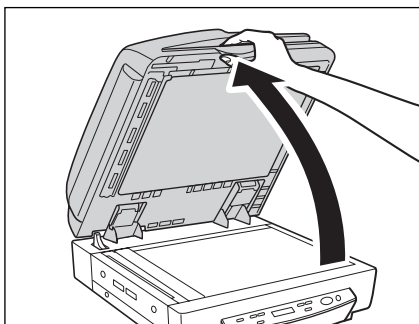
- Places exposed to direct sunlight
If installation in such places is unavoidable, provide a curtain or similar object to shade the scanner.
- Places subject to dust and fumes
Dust and cigarette fumes adversely affect the components inside the scanner.
- Near running water, a heat source, water vapor, or in an area such as a laboratory exposed to ammonia gas, paint thinner, or other volatile chemicals.
- Places subject to vibration and strong shock
- Places subject to rapid changes in temperature or humidity
Condensation occurring inside the scanner may impair scan image quality. Place the scanner in a room that is well within the following range:
Room temperature 15°C to 30°C (59°F to 86°F)
Relative humidity 25% to 80% RH
- Near electronic equipment or heavy equipment that generates a strong magnetic field, such as a speaker, TV, or radio.

Power Supply

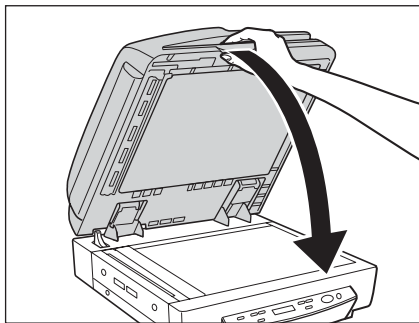
- Be sure to connect to an AC 220-240 V (50/60 Hz) power supply, according to your region's requirement.
- Ensure that the scanner is connected to an independent power outlet. Do not plug the scanner into an outlet shared with another device. If you use an extension cord, pay attention to the total amperage of the cord.
- If you are unsure of anything relating to the power supply, contact your service representative or the power company.
- Never place an object on top of the power cord or step on the power cord.
- Never bundle the power cord or wrap the cord around an object, such as a table leg.
- Do not tug the power cord. When you remove the power cord, grip it by the plug head.
- Keep the area around the power outlet free of obstacles.

Opening and Closing the Feeder

- Open the feeder carefully and slowly, taking care to avoid letting the feeder fall over backwards.

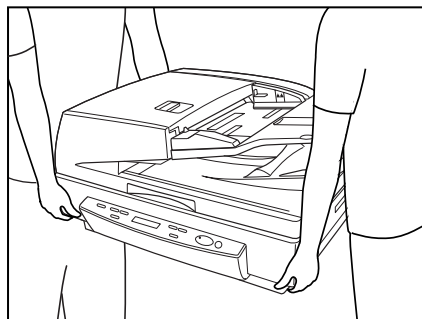


- Close the feeder carefully and slowly, taking care to avoid pinching your fingers.



Carrying

Take care when moving the scanner. Two people should hold the scanner firmly on opposite sides when lifting it.



WARNING

- The scanner weighs 33.6 kg. Two people must carry the scanner. You may drop the scanner, or pinch your fingers if you attempt to carry it by yourself.
- When moving the scanner, be sure to turn OFF the power and remove any cables. If the cables are not removed before moving the scanner, you may damage the plugs or connectors by forcibly pulling them out.
- **Notice to Cardiac Pacemaker Users**
This product generates a weak magnetic field. If you use a cardiac pacemaker, move away from product in the event that you notice any unusual symptoms. Also, please consult a cardiologist.

Chapter 1

Getting Ready

This chapter describes the features of the scanner, what's in the box, and the names and functions of parts on the scanner.

1.1 Features of the DR-7080C	12
1.2 Before Getting Started	14
Unpacking	14
Removing the Transportation Screw	15
Ferrite Core	15
1.3 Part Names	16
Feeder	16
Flatbed	17
Rear	18
Operation Panel	19
1.4 Job Function	20
1.5 Optional Products	21
Stamp Unit	21



Features of the DR-7080C

The DR-7080C is a desktop ADF/flatbed scanner for high-speed scanning of large volume documents. The following are the main features of the DR-7080C.

- **Black and white, grayscale, and 24-bit color output**
Support for black and white, grayscale, and 24-bit color output.
- **High-speed scanning**
The feeder supports scanning of A4/LTR-size documents at speeds up to 70 pages per minute.
- **Duplex (two-side) scanning**
When scanning both sides of document pages with the feeder, the front is scanned first. After that the page is turned over automatically and the back is scanned.
- **Flatbed scanning**
Flatbed scanning is also supported for thin paper, paper that does not feed properly, magazines, bound documents, and other documents that cannot be scanned using the feeder.
- **Large capacity, reliable feeding**
 - A large capacity paper feed tray allows loading of up to 100 A4/LTR-size document pages.
 - The document size is detected and adjusted automatically, which eliminates the need for troublesome manual settings. Document pages of different sizes can be mixed together and loaded for a single scan operation.
- **Job Function^{*1}**
To begin scanning, you need only to select a job with the [Job] keys of the scanner, and then press the [Start] key. Scanned images can be sent directly to a specific folder, printer, or e-mail address. (See “Job Function,” on p. 20.)
- **Skew correction**
This feature automatically detects when a document page is fed unevenly, and automatically straightens it.
- **Text Orientation Recognition**
The DR-7080C can detect the text orientation in scanned images and rotate the images in 90° increments to normalize text orientation.

- **High durability**

A highly durable design provides scanning for up to 4 million scans.

- **Advanced Text Enhancement**

This feature eliminates the background surrounding the text. This makes it easier to read the text on documents that are printed on a light colored background, or are written in pencil, or if the text is a color other than black.

- **Dropout color**

This feature lets you skip ("drop out") a specific color when scanning.

- **Stamping (option)**

This feature automatically marks the trailing edge of a scanned document page with a stamp to indicate that it has been scanned. (See "Optional Products," on p. 21.)

*1 This function is not supported on a computer that is running Windows NT.

1.2

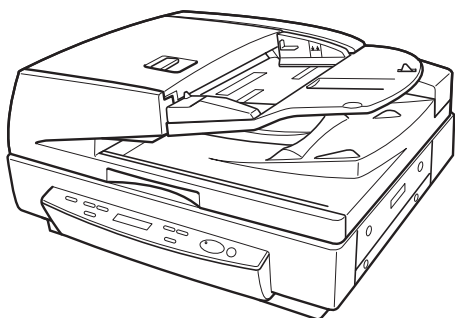
Before Getting Started

Make sure you perform the following procedures before using the DR-7080C for the first time.

- Unpacking
- Removing the Transportation Screw
- Attaching the Ferrite Core

Unpacking

Make sure that you have everything. Check every item you have removed from the box. If any items are missing, contact your sales representative.



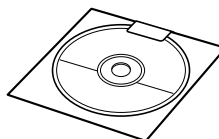
DR-7080C



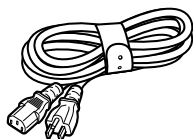
Instructions (this manual)



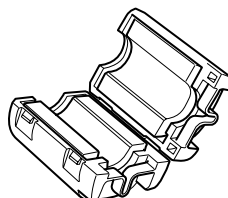
Quick Reference



Setup Disc



Power Cord*

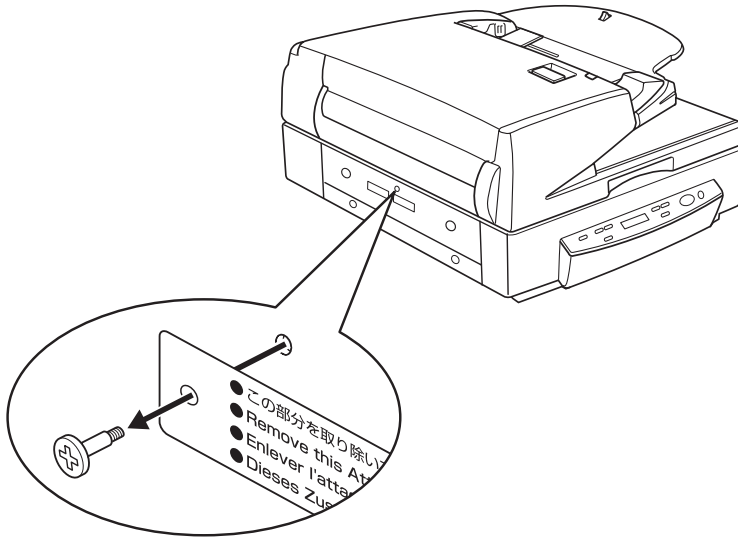


Ferrite Core

* The power cord varies according to country of purchase.

Removing the Transportation Screw

A transportation screw is installed at the factory to lock the scanner's optical unit in place and protect it against damage caused by vibration and other forces during shipment. You must remove the transportation screw before trying to use the scanner.



Important

- If the transportation screw is not removed, then when the scanner is turned ON "Please wait" appears on the display panel and remains there unchanged. Turn OFF the scanner and remove the transportation screw.

Ferrite Core

When connecting to another SCSI device sequentially for use after connecting a SCSI cable to the scanner, attach the supplied ferrite core to the SCSI cable. (See "Attaching the Ferrite Core," on p. 26.)



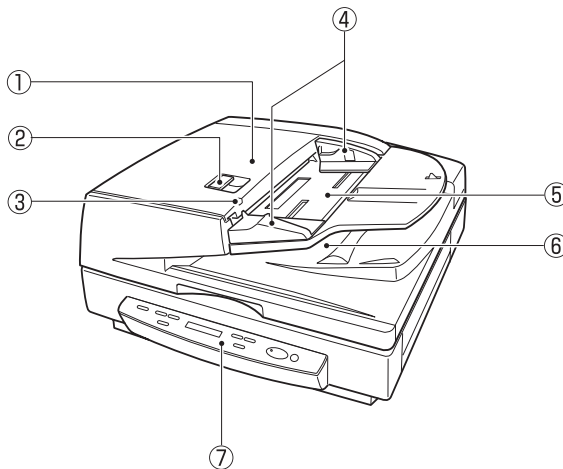
CAUTION

- When connecting to another SCSI device sequentially after connecting a SCSI cable to the scanner, be sure to attach the ferrite core to the SCSI cable. If you use the scanner without attaching the ferrite core, radio wave interference may occur.

1.3 Part Names

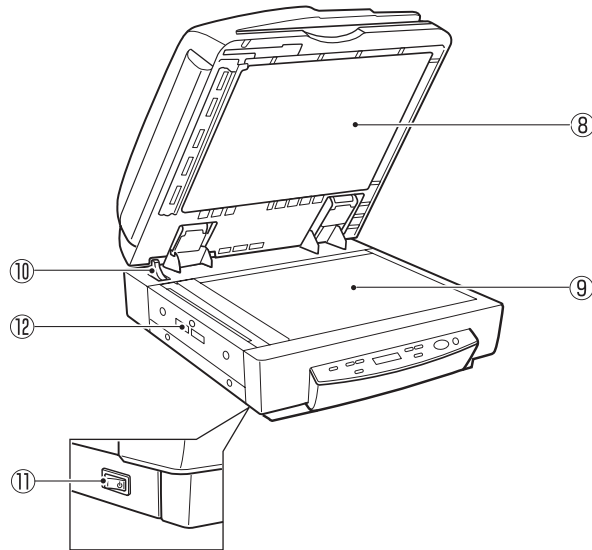
This section describes the names and functions of each part. Before you connect the DR-7080C, take a few minutes to familiarize yourself with the main parts.

Feeder



- ① **Feeder Cover**
Open this cover to clear document jams and clean the rollers. (See pp. 77, 90.)
- ② **Opening Lever**
Operate this release lever when opening or closing the feeder cover.
- ③ **Document Set Indicator**
This indicator lights when there is a document in the document feeder tray. (See p. 49.)
- ④ **Slide Guide**
Adjust this guide to the marking on the document size label that indicates the applicable document size. (See p. 48.)
- ⑤ **Document Feeder Tray**
Load documents to be scanned here. (See p. 49.)
- ⑥ **Document Eject Tray**
Scanned documents are ejected here. Raise the document feeder tray to remove ejected documents. (See p. 50.)
- ⑦ **Operation Panel**
(See p. 19.)

Flatbed



ENGLISH

⑧ Pressure Board (Black)

This board presses the document page against the glass during scanning.
(See p. 89.)

⑨ Flatbed (Platen Glass)

When placing the document onto the platen glass, align it with the arrow in the upper left corner of the glass. (See p. 51.)

⑩ Opening Sensor

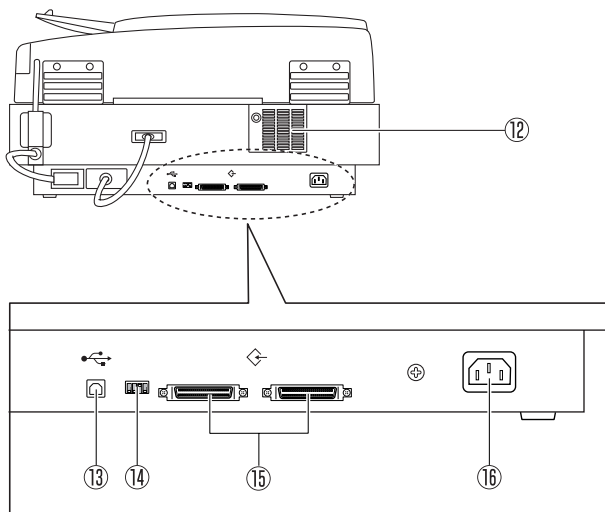
This sensor detects whether the feeder is open or closed. (See p. 51.)

⑪ Power Switch

(See p. 31.)

⑫ Air Vents

Rear



12 Air Vents

13 USB Connector

Connect a Hi-Speed USB 2.0 compatible USB cable here. (See p. 30.)

14 DIP Switches

Configure these switches to specify the SCSI ID or terminator ON or OFF. (See p. 26.)

15 SCSI Connectors

Connect a SCSI cable (50-pin half pitch, pin type) here. (See p. 26.)

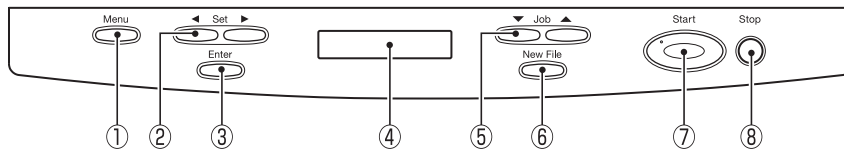
16 Power Cord Connector

Connect the provided power cord here.



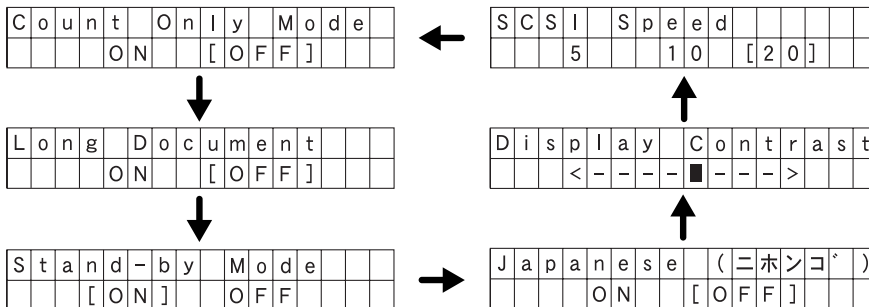
- Never touch the cables on the left side of the back panel. Disconnection of cables can cause a malfunction of the scanner.
- Take care to ensure that the vents never become blocked. Blocked vents can lead to heat build-up inside the scanner and create the risk of fire.

Operation Panel



① Menu Key

Press this key to cycle the display through the various user modes, as shown below. (See “About the User Modes,” on p. 68.)



② Set Keys

Use these keys to change the setting of the currently displayed user mode. (See p. 72.)

③ Enter Key

Press this key to register the currently displayed user mode setting. (See p. 72.)

④ Display Panel

Displays the number of scanned pages, error codes, etc.

⑤ Job Keys

Use these keys to scroll through registered job numbers (01 through 99) on the display panel. (See “Job Function,” on p. 20.) Pressing the [Start] key while a job number is displayed starts scanning of the document and forwards the scanned image to the registered job.

⑥ New File Key

This key is active for applications that support batch separation. This key lights when pressed or in accordance with the application's batch separation settings. Scanning the next document while this key is lit causes the scanned image to be stored in a different file or folder than the previously scanned document.

⑦ Start Key

The Start key lamp lights when the key is enabled by the Count Only Mode or the application's settings. Pressing the [Start] key while its lamp is lit causes scanning to start.

⑧ Stop Key

Pressing this key stops an ongoing scanning operation. This key is also used to cancel a mode setting and clear an error indicator from the counter display area.

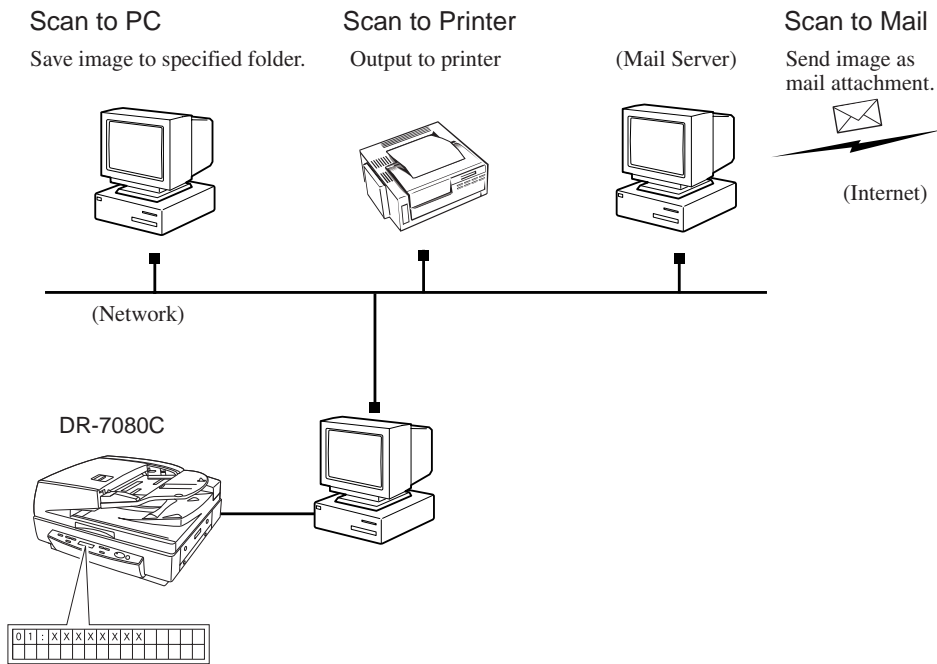
1.4 Job Function

The DR-7080C comes with a “Job function” that makes it possible to perform scanning without starting a scanning application. The Job function lets you use the operation panel to perform scanning and forward image files to destinations in accordance with the currently selected job.

The Job function has the capabilities listed below, and jobs can be registered using Job Registration Tool. (See “How to Start the Job Registration Tool,” on p. 41.)

- Images can be saved to a shared folder or other specified folder (Scan to PC).
- Images can be sent as e-mail attachments (Scan to Mail).
- Images can be output to a specified printer (Scan to Printer).

For details about using the Job function, see “Using the Job Mode for Scanning,” on page 59.



Note

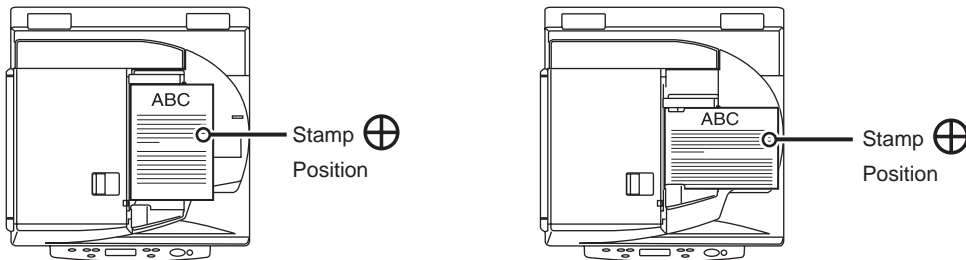
The Job function is not supported on a computer that is running Windows NT.

1.5 Optional Products

The following options can be purchased and used on the DR-7080C, if they are necessary. Contact your sales representative.

Stamp Unit

The stamp unit affixes a “scanned” stamp on document pages that are scanned using the feeder. The application can be used to turn stamping on or off. The stamp is a circle that has a diameter of about 3 mm, with a cross in the center. It is stamped on the scanned side of the document page, about 7 mm from the trailing edge of the document page.



Note

- The stamp pattern is fixed and cannot be changed.
- In the case of duplex scanning, both sides of the document page are stamped.
- The cross in the center of the stamp rotates during stamping.

Chapter 2

Connecting to a Computer

This chapter describes how to connect the scanner to a computer, and includes information about what you need to do to get Windows to recognize the scanner.

2.1 Checking Your Operating Environment	24
2.2 Connecting to a Computer	25
SCSI Connections	25
USB Connections	29
Connecting the Power Cord	30
2.3 Turning ON or OFF the Power	31
Turning ON the Power	31
Recognizing the Scanner	32
Turning OFF the Power	34

2.1

Checking Your Operating Environment

Your computer system must meet the following conditions to use the DR-7080C.

- **IBM PC/AT or compatible machines that meet the following specifications:**
 - Intel Celeron 733 MHz or faster
 - 256 MB main memory or more (recommended)
 - 100 MB or more of free space on the hard disk
- **SCSI card that is compatible with this scanner or Hi-Speed USB 2.0 interface card (See “Connecting to a Computer,” on p. 25.)**
- **Monitor that can display at a resolution of 1024 x 768 (XGA) or greater is recommended.**
- **One of the following operating systems:**
 - For SCSI**
 - Microsoft Windows 98SE
 - Microsoft Windows Me
 - Microsoft Windows NT 4.0 Workstation SP6
 - Microsoft Windows 2000 Professional SP4
 - Microsoft Windows XP SP1
 - For USB**
 - Microsoft Windows 98SE
 - Microsoft Windows Me
 - Microsoft Windows 2000 Professional SP4
 - Microsoft Windows XP SP1
- **Either an ISIS (compatible) or a TWAIN (compatible) application that operates on one of the operating systems noted above.**



- The DR-7080C does not support operation under Windows 95.
- The Job function is not supported on a computer that is running Windows NT. If you want to use the Job function, run the scanner with a computer running a supported operating system other than Windows NT.
- Use the latest USB 2.0 driver when using USB connections. Contact your sales representative.
- If the CPU, memory, SCSI card, or USB interface card does not meet the recommended specifications, the scanning speed may slow down or the time required to transfer data may increase.

2.2 Connecting to a Computer

There are two ways to connect the scanner to your computer, SCSI or USB. Use the method that is compatible with your computer system.



CAUTION

- Do not turn OFF the scanner or remove any interface cables when an application is running.
- Do not connect both SCSI and USB interface cables at the same time.
- When connecting to another SCSI device sequentially after connecting a SCSI cable to the scanner, be sure to attach the ferrite core to the SCSI cable. If you use the scanner without attaching the ferrite core, radio wave interference may occur.
- Turn OFF the computer and the scanner before changing the cable format.

ENGLISH

SCSI Connections

Connect the scanner to the computer.



Note

To connect the scanner with a SCSI cable, you will need the following items that are not included in the package:

- SCSI card
 - Check that the SCSI card is installed on your computer.
 - Use one of the recommended SCSI cards.
- SCSI cable
 - The scanner's SCSI connector is a half-pitch 50-pin (pin type) connector. Check the shape of the connector on your computer's SCSI card or on the SCSI device connected to your computer, and prepare a SCSI cable that is compatible with the connector that can be connected to the scanner.

◆ SCSI Cards

Be sure to use one of the recommended SCSI cards when connecting the scanner with a SCSI cable. The recommended SCSI cards are listed below.

Recommended SCSI cards

Manufacturer: Adaptec

Product names: AHA-2930U, AHA-2940AU, ASC-19160, ASC-29160, APA-1480



Important

Be sure to follow the installation procedure in your computer's operation manual when installing the SCSI card on your computer.

◆ Connecting the SCSI Cable

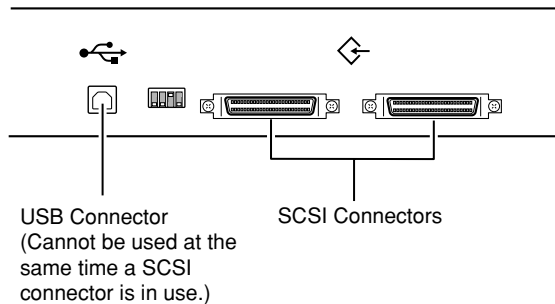


CAUTION

- The SCSI cable should only be as long as the rating for the SCSI card being used. If the SCSI cable is longer than the rated length, the scanner may not operate correctly.
- Before you connect the SCSI cable, make sure that the scanner and the computer are turned OFF.
- Do not connect both SCSI and USB interface cables at the same time.

Connect your computer to the scanner using the SCSI cable.

Two SCSI connectors are located on the rear of the scanner. Insert the SCSI cable from the computer into one of the connectors on the bottom of the scanner. To connect another SCSI device to the computer, insert the other SCSI cable into the vacant SCSI connector on the rear of the scanner, and connect the other end of the SCSI cable into the SCSI device in a daisy chain.



◆ Attaching the Ferrite Core

When connecting to another SCSI device sequentially for use after connecting a SCSI cable to the scanner in a daisy chain, attach the supplied ferrite core at the specified location. (See "Location for attaching ferrite core," on p. 27.)

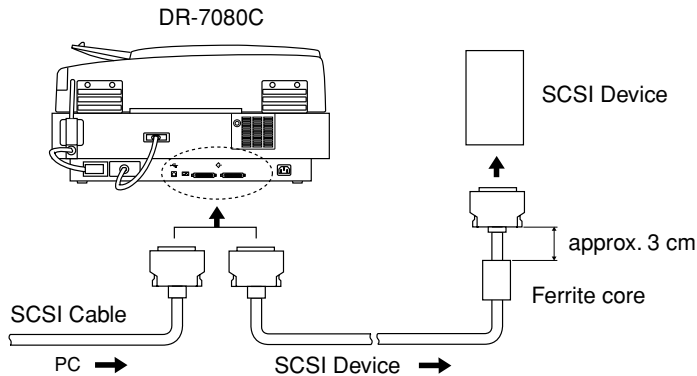


CAUTION

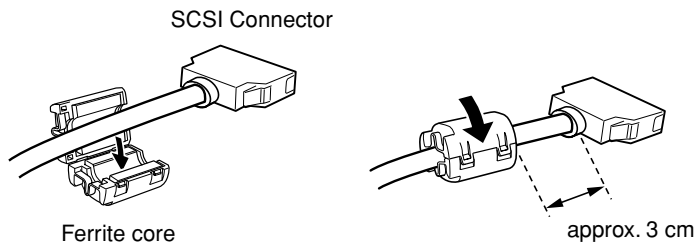
- When connecting to another SCSI device sequentially after connecting a SCSI cable to the scanner, be sure to attach the ferrite core to the SCSI cable. If you use the scanner without attaching the ferrite core, radio wave interference may occur.

Location for attaching ferrite core

Attach the ferrite core to the SCSI cable connecting the scanner to the next SCSI device.



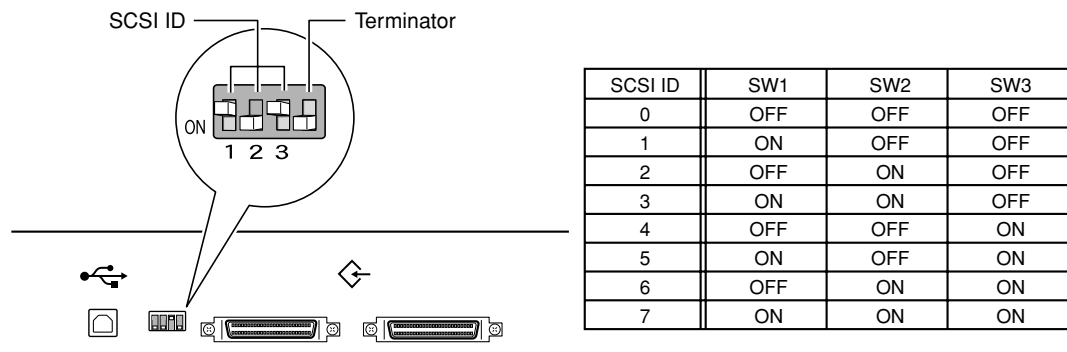
Clamp the ferrite core on the SCSI cable approximately 3 cm from the connector of the next SCSI device to be connected, closing it until you hear a clicking sound.



◆ Setting the SCSI ID and Terminator

Set the SCSI ID and the terminator on the DIP switches located between the SCSI connectors and the USB connector.

Move the DIP switch up to turn it OFF and move it down to turn it ON.



Set the SCSI ID referring to the table above.

Set unique SCSI IDs to any other built-in SCSI devices or SCSI devices connected to the computer.



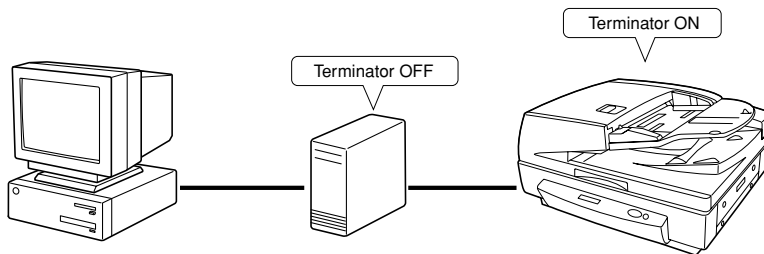
- The SCSI ID default is set to 2.
- Assign SCSI ID numbers ranging from 0 to 7 for each SCSI device. Do not select 7 as this is normally assigned to the SCSI controller. If a SCSI hard disk is mounted, do not use 0 and 1. Normally 0 and 1 are assigned for hard disks.

Set the terminator on the last SCSI device on a daisy chain to ON.

<When only the scanner is connected to your computer, or when another SCSI device is connected on a daisy chain and the scanner is the last SCSI device on the end of the daisy chain>

Set the terminator switch on the scanner to ON.

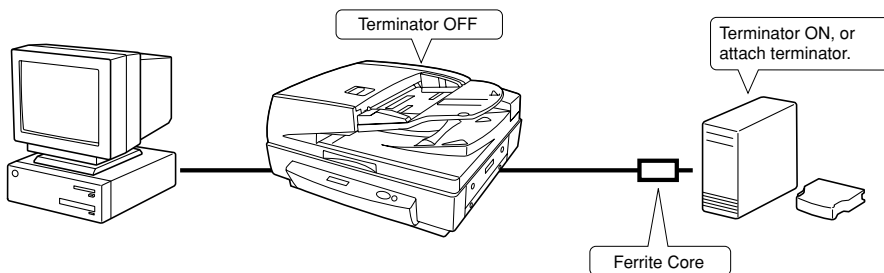
In such a connection, be sure to set the terminator on all other SCSI devices to OFF.



<When another SCSI device is connected as the last device of the daisy chain>

Set the terminator switch on the scanner to OFF.

In such a connection, set the terminator on the SCSI device connected as the end device to ON.



When connecting to another SCSI device sequentially after connecting a SCSI cable to the scanner, be sure to attach the ferrite core to the SCSI cable. If you use the scanner without attaching the ferrite core, radio wave interference may occur.

◆ Setting the SCSI Transfer Speed

When the scanner is hooked up with a SCSI cable, the scanner may not operate correctly depending on the length of the cable and the SCSI card being used. In this case, change the scanner's transfer speed in the user modes. (See "About the User Modes," on p. 70.)

USB Connections

Connect the scanner to the computer.



Important

- To connect the scanner with a USB interface cable, you will need the following items that are not included in the package.
 - USB interface cable
Use an interface cable that supports Hi-Speed USB 2.0.
 - USB interface card
Use an extended USB interface card that is compatible with Hi-Speed USB 2.0 and operationally tested by Canon.
- Turn the SCSI terminator on, even if you are using USB cables. If you use the scanner with the SCSI terminator turned OFF, the scanner might not operate correctly. (See "Setting the SCSI ID and Terminator," on p. 27.)

◆ USB 2.0 Interface Cards

Be sure to use one of the recommended USB 2.0 interface cards when connecting the scanner with a USB interface cable. The recommended USB 2.0 interface cards are listed below.

Recommended USB 2.0 interface cards

Manufacturer: Adaptec
 Product: USB 2 Connect 2000LP (AUA-2000)
 USB 2 Connect 3100 (AUA-3100LP)
 USB 2 Connect 5100 (AUA-5100)
 USB 2 Connect for Notebooks (AUA-1420)



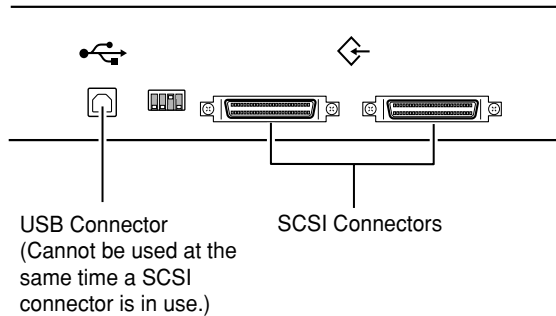
Important

- Be sure to follow the installation procedure in your computer's operation manual when installing the USB 2.0 interface card on your computer.
- Use the most recent USB 2.0 driver provided by Adaptec or Microsoft.
- Windows NT operating system does not support USB. Use a SCSI cable to connect the scanner to computers with the Windows NT operating system.
- Use a USB hub that supports USB 2.0 if you need to use a USB hub.
- This scanner has passed the Hi-Speed USB 2.0 verification test. However, it may not function properly even when Hi-Speed USB 2.0 is built-in to a computer as standard.
- Scan speed may slow down when Hi-Speed USB 2.0 is not supported.

◆ Connecting a USB Interface Cable



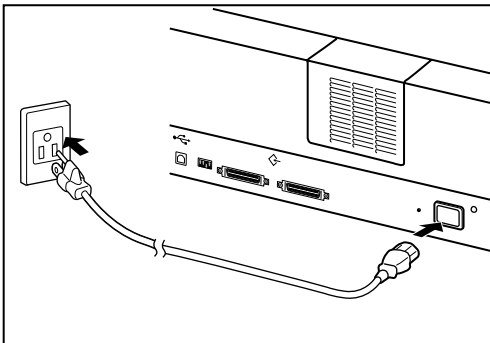
Do not connect both a SCSI cable and USB interface cable at the same time.



Connecting the Power Cord

Connect the power cord.

Be sure to use only the power cord provided with the scanner.



When connecting the power cord, follow these precautions. Failure to do so might cause a fire or electrical shock.

- Never grasp the plug when your hands are wet.
- Never plug the scanner into a multiplug power strip.
- Never bundle or tie the power cord around itself or another object. Connect the plug securely to the power source.
- Use only the power cord and plug provided with the scanner.
- Before you connect the power cord, be sure to turn OFF the power.
- Be sure to connect to an AC 220-240 V (50/60 Hz) power supply, according to your region's requirement.
- Do not plug the scanner into an outlet shared with another device. If you use an extension cord, pay attention to the total amperage of the cord.

Recognizing the Scanner

If you are using Windows 98/Me or Windows 2000/XP, then the first time that you turn ON your computer after connecting this scanner to your computer, Windows Plug and Play function automatically displays a screen prompting you to install the scanner driver. Follow the instructions on the screen to proceed with the installation. (The name of the installation dialog varies depending on the Windows operating system.)

- **If you are using Windows 98SE, the [Add New Hardware Wizard] dialog box appears.**
 1. Click the [Next] button.
 2. Select [Search for the best driver for your device. (Recommended).], and then click the [Next] button.
 3. Insert the setup disc into the computer's CD-ROM drive.
 4. Select [Specify a location], enter "D:\INF" (assuming that "D" is assigned to your CD-ROM drive), and then click the [Next] button.
 5. Click the [Next] button.
 6. Click the [Finish] button.

- **If you are using Windows Me, the [Add New Hardware Wizard] dialog box appears.**
 1. Select [Specify the location of the driver (Advanced)], and then click the [Next] button.
 2. Insert the setup disc into the computer's CD-ROM drive.
 3. Select [Search for the best driver for your device. (Recommended).], and then select [Specify a location]. Enter "D:\INF" (assuming that "D" is assigned to your CD-ROM drive), and then click the [Next] button.
 4. Click the [Next] button.
 5. Click the [Finish] button.

- **If you are using Windows 2000 Professional, the [Found New Hardware Wizard] dialog box appears.**
 1. Click the [Next] button to proceed to the [Install Hardware Device Drivers] screen.
 2. Select [Search for a suitable driver for my device (recommended)], and then click the [Next] button to proceed to the [Locate Driver Files] screen.
 3. Select [Specify a location], and then click the [Next] button.
 4. Insert the setup disc into the computer's CD-ROM drive.
 5. Enter "D:\INF" (assuming that "D" is assigned to your CD-ROM drive), and then click the [OK] button.
 6. In the [Driver Files Search Results] screen, click the [Next] button.
 7. If the message "Digital Signature Not Found" appears, click [Yes] to continue installation.
 8. On the [Completing the Found New Hardware Wizard] screen, click the [Finish] button.

● **If you are using Windows XP, the [Found New Hardware Wizard] dialog box appears.**

1. Insert the setup disc into the computer's CD-ROM drive.
2. In the [Welcome to the Found New Hardware Wizard] screen, select [Install from a list or specific location (Advanced)], and then click the [Next] button.
3. Select [Search for the best driver in these locations], and then clear the [Search removable media (floppy, CD-ROM...)] check box. Select [Include this location in the search], enter "D:\INF" (assuming that "D" is assigned to your CD-ROM drive), and then click the [Next] button.
4. Click the [Continue Anyway] button in the [Hardware Installation] dialog box.
5. Click the [Finish] button in the [Completing the Found New Hardware Wizard] screen.



Note

- Although a message appears in the [Hardware Installation] dialog box indicating that the driver "has not passed Windows logo testing," this is not a problem.
- The DR-7080C will be registered as "CANON DR-7080C SCSI" or "CANON DR-7080C USB" in the "Imaging Device" directory.
- Note that the SCSI connection device name is different from the USB connection device name. If you change from one type of connection to another, Windows will have to recognize the scanner again. The first time you turn ON the computer after changing the connection method, perform the device driver installation procedure from the beginning again.



Important

If you cancel device driver installation part way through, you will not be able to use the Job function. (See "Job Function," on p. 20.) Always perform the entire device driver installation procedure all the way to the end.

Turning OFF the Power

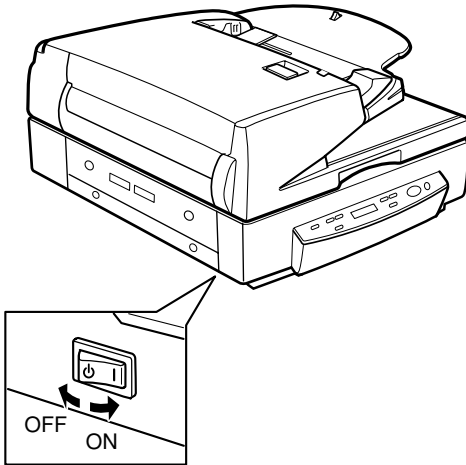


Important

If you are using a SCSI connection, turn OFF the computer first, before turning OFF the scanner.

1 Turn OFF the computer.

2 Turn OFF the scanner.



CAUTION

- Wait at least 10 seconds before turning ON the scanner again.
- For your safety, disconnect the power plug from the power outlet if you are not using the scanner for a long time.

Chapter 3

Using the Software

This chapter describes how to install and use the ISIS/TWAIN driver, CapturePerfect, and Job Registration Tool that come packaged with the scanner.

3.1 About the Software	36
3.2 Installing the Software	37
3.3 How to Use the Software	39
How to Display the ISIS/TWAIN Driver Help File	39
How to Start CapturePerfect.....	40
How to Start the Job Registration Tool	41
3.4 Uninstalling the Software	43

3.1

About the Software

The following software applications are provided on the setup disc that is packaged with the scanner. Be sure to open and read the Readme.txt file on the setup disc before installing the software.

- **ISIS/TWAIN driver**

This driver allows the scanner to use ISIS (Image and Scanner Interface Specification) compatible applications or TWAIN (Tool Without An Interesting Name) compatible applications to scan documents. Be sure to install the ISIS/TWAIN driver to use this scanner.

- **CapturePerfect**

This is a TWAIN compatible application for scanning images. Install it if necessary.

- **Job Registration Tool**

Job Registration Tool is a TWAIN-compliant application for registering the jobs used by the Job function. Note, however, that the Job function is not supported on a computer that is running Windows NT. If you want to use the Job function, run the scanner with a computer running a supported operating system other than Windows NT. (See “Job Function,” on p. 20.)



- CapturePerfect and the Job Registration Tool use the TWAIN Driver. Be sure to install the ISIS/TWAIN Driver before you install CapturePerfect or the Job Registration Tool.
- The ISIS/TWAIN driver provided with the scanner does not necessarily operate all ISIS compatible applications or all TWAIN compatible applications. Contact your sales representative for further information.
- Some functions mentioned in this manual may not operate in some applications.

3.2

Installing the Software

This section describes how to install the ISIS/TWAIN driver, CapturePerfect, and Job Registration Tool that are used when operating the scanner. CapturePerfect and the Job Registration Tool use the TWAIN Driver. Install the software in the order of the ISIS/TWAIN Driver, CapturePerfect, and then the Job Registration Tool.



Important

- The Job function is not supported on a computer that is running Windows NT. If you want to use the Job function, run the scanner with a computer running a supported operating system other than Windows NT.
- If another ISIS compatible driver is already installed on the computer, be sure to make a backup of the following file. The content of this file may be overwritten when the ISIS/TWAIN driver is installed.
 C:\Windows\PixTran*. *
 C:\Windows\System\pix*.dll
- The names of the “\Windows” and “\Windows\System” folders are different, depending on which Windows operating system you are using. The names of the above folders are representative and should be replaced by the name of the folder used in your operating system.

1 Turn ON your computer and start Windows.



Important

Be sure to log on as an administrator if your system is Windows NT 4.0 Workstation, Windows 2000 Professional, or Windows XP.

2 Insert the setup disc into the CD-ROM drive.

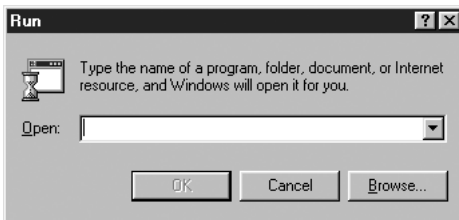
This manual assumes that “D” is assigned to your CD-ROM drive.

3 Click the [Start] button, and then select [Run].

The screen depends on which Windows operating system you are using.



4 Enter “D:*****\setup.exe” in the [Open] field, and then click [OK].



Note

- In this example, the CD-ROM drive name is D:.
- ***** stands for the name of the folder where you will install the applicable software.
 ISIS/TWAIN Driver: **D:\Driver\setup.exe**
 CapturePerfect: **D:\CapturePerfect\setup.exe**
 Job Registration Tool: **D:\JobTool\setup.exe**

5 This starts the installer. Follow the instructions that appear on your computer screen to complete the installation.

6 When the installation completes, restart your computer.

3.3

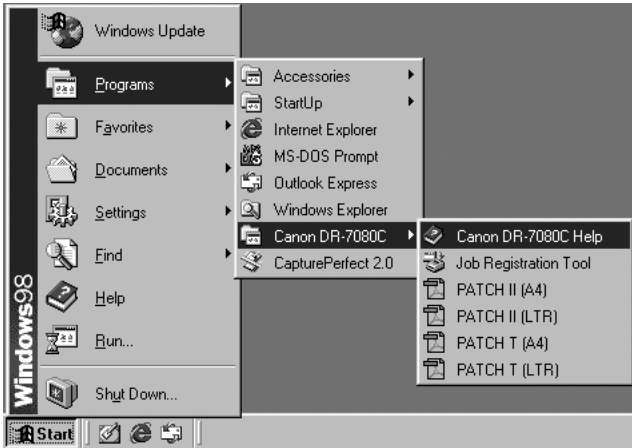
How to Use the Software

This section describes how to use CapturePerfect and Job Registration Tool for scanning. Read the “ISIS/TWAIN Driver HELP” for information on using the ISIS/TWAIN driver.

ENGLISH

How to Display the ISIS/TWAIN Driver Help File

The explanation on how to use the ISIS/TWAIN driver is in the ISIS/TWAIN driver help file. To view the help file, click the [Start] button, and then click [Programs] - [Canon DR-7080C] - [Canon DR-7080C Help].

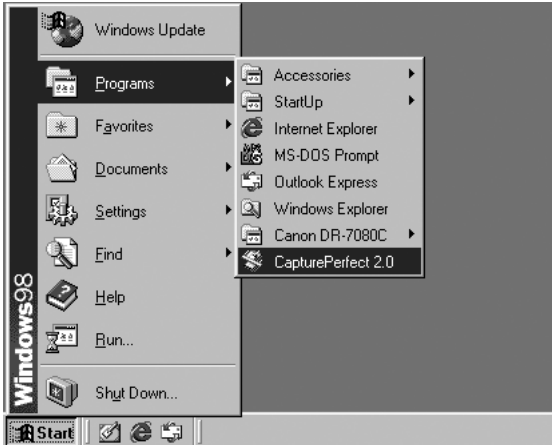


How to Start CapturePerfect

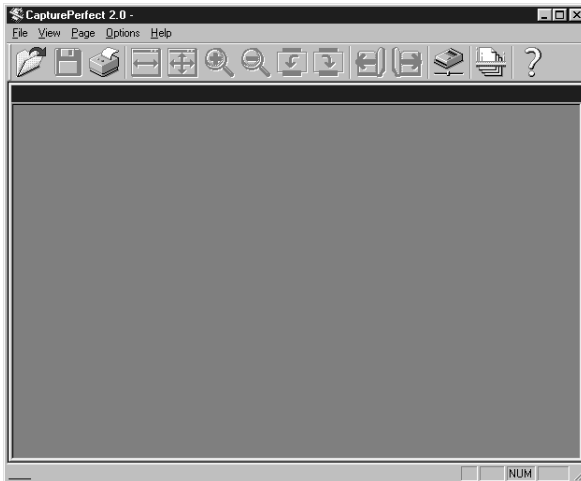
This section describes the procedure to start and exit CapturePerfect. See [Help] in CapturePerfect for information on how to use CapturePerfect.

1 Click the [Start] button, and then click [Programs] - [CapturePerfect 2.0].

Click [All Programs] - [CapturePerfect 2.0] if your OS is Windows XP.



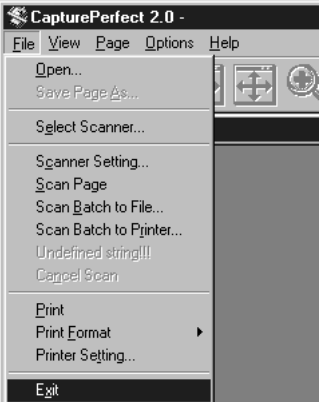
2 This starts CapturePerfect.



Note

The basic operation of CapturePerfect is noted in the CapturePerfect help file. To view the explanation, select [Help] from the [Help] menu on the menu bar in CapturePerfect.

3 Select [Exit] from the [File] menu.



ENGLISH

How to Start the Job Registration Tool

This section describes the procedure to start and end the Job Registration Tool. See [Help] in the Job Registration Tool for information on how to use the Job Registration Tool. Alternatively, for information on scanning procedures using the Job function, see "Using the Job Mode for Scanning," on p. 59.

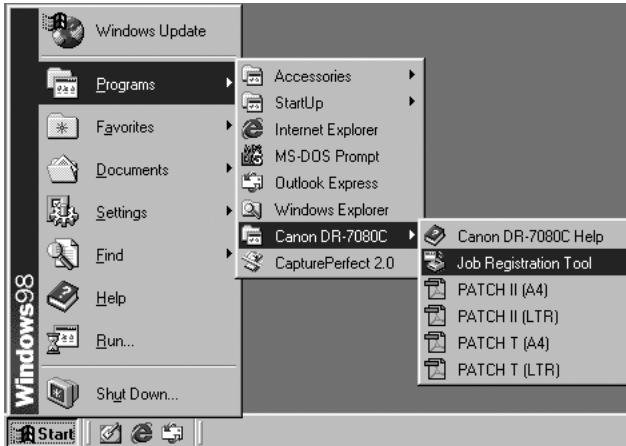


Important

- If you are using Windows 2000 or Windows XP, be sure to log on as an Administrator.
- The Job function is not supported on a computer that is running Windows NT. If you want to use the Job function, run the scanner with a computer running a supported operating system other than Windows NT.

1 Click the [Start] button, and then click [Programs] - [Canon DR-7080C] - [Job Registration Tool].

In the case of Windows XP, click [All Programs] - [DR-7080C] -[Job Registration Tool].



2 This starts Job Registration Tool.



Note

- See the Job Registration Tool help file for information about how to use the Job Registration Tool. To view the help file, click the [Help] button.
- The last page of this manual is "Job Title Record." Use it to record the titles of jobs that you register with the Job Registration Tool.

3.4 Uninstalling the Software

This section explains how to uninstall the software.

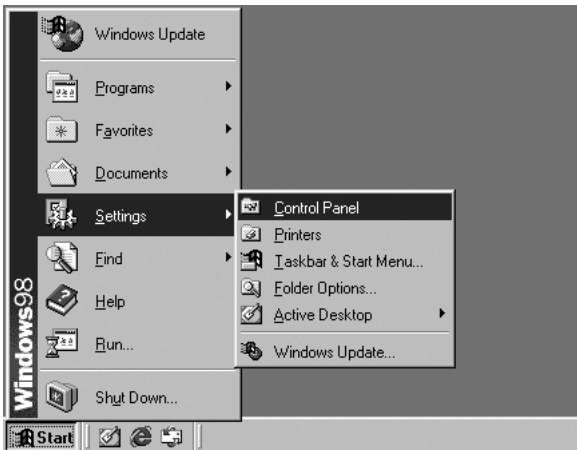


Important

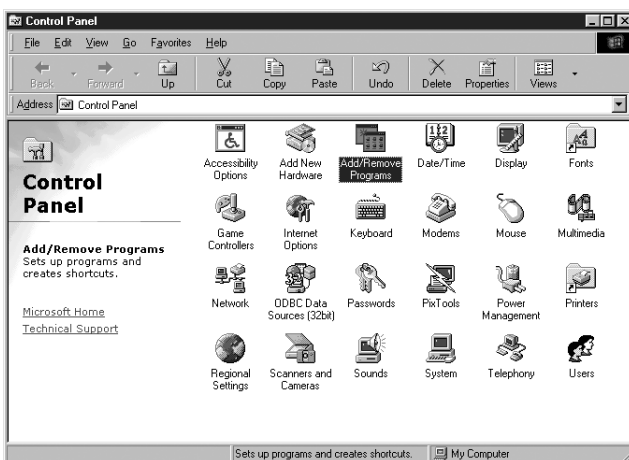
- Be sure to log on as an administrator if your system is Windows NT 4.0 Workstation, Windows 2000 Professional, or Windows XP.
- The dialogs and button names in Windows XP are different from those used in the explanations in this manual. Refer to the Windows XP “Help and Support Center” to uninstall the software.

ENGLISH

1 Click the [Start] button, and then click [Settings] - [Control Panel].

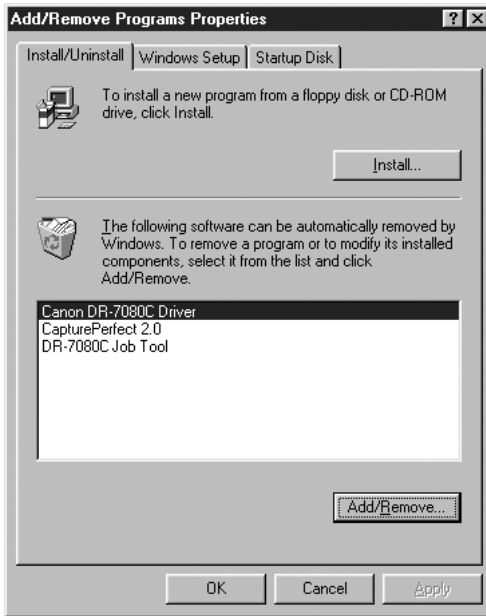


2 Double click on the [Add/Remove Programs] icon.

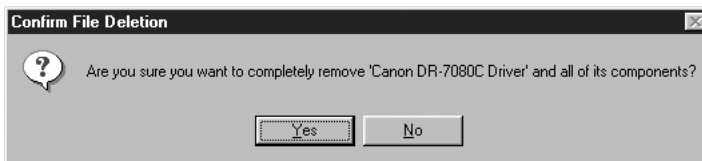


The [Add/Remove Programs Properties] dialog box appears.

- 3 From the list in the dialog box, select the name of the application you want to remove, and then click the [Add/Remove] button.**



- 4 This displays a [Confirm File Deletion] dialog box for the application you are removing.**



If you selected "Canon DR-7080C Driver," the above dialog box appears.

- 5 Click the [Yes] button, and the uninstaller starts.**
Follow the instructions on the screen to finish uninstalling the software.

Chapter 4

Using the Scanner

This chapter describes precautions regarding documents that can be handled on this scanner and scanning operations.

4.1 Documents	46
Types of Documents	46
Feeder Capacity	47
4.2 Placing Documents onto the Scanner	48
Loading a Document into the Feeder	48
Positioning a Document on the Flatbed (Platen Glass)	51
4.3 Document Feeding and Scanning	54
Scan Procedure	54
4.4 Other Scanning Techniques	59
Using the Job Mode for Scanning	59
Using the Count Only Mode	63
Using Patch Code Sheets	64

4.1

Documents

This section describes the various types of documents that can be scanned with the feeder.



Handle documents with care. Improper handling of paper can cause paper cuts or other personal injury.

Types of Documents

The following are the dimensions of the documents that can be fed by the feeder:

- Width: 139.7 mm to 304.8 mm
- Length: 128 mm to 432 mm (Normal Mode)
128 mm to 630 mm (Long Document Mode)
128 mm to 540 mm (Long Document Mode/Color 600 dpi Mode)

Document Thickness

Black-and-white Documents

- Simplex: 0.06 mm to 0.15 mm
- Duplex: 0.07 mm to 0.15 mm

Black-and-white/Color Documents Mixed

0.07 mm to 0.15 mm

Color Documents

0.08 mm to 0.15 mm

Document Weight

Black-and-white Documents

- Simplex: 42 to 128 g/m²
- Duplex: 50 to 128 g/m²

Black-and-white/Color Documents Mixed

50 to 128 g/m²

Color Documents

64 to 128 g/m²

Follow these guidelines when you prepare a document for scanning:

- When scanning long documents, turn the Long Document Mode "ON" in the user mode. (See "About the User Modes," on p. 70)
- Before scanning documents that contain pasted artwork, make sure that the ink or paste on the pages is thoroughly dry. If the documents are scanned with the ink or paste still wet, the scanner may malfunction.
- If you scan a document written in pencil, the letters may not scan properly or the pencil may rub off onto the rollers and stain subsequent documents. Before you scan this kind of document, make a copy and then scan the copy. After scanning a document written in pencil or some other soft writing material, be sure to clean the scanning rollers. (See "Cleaning the Feeder," on p. 94.)
- If you scan thin paper in the Duplex mode, the ink printed on the back side may be scanned. In this case, adjust the scanning density.

- If you scan documents with a rough surface, friction between the documents may cause a paper jam. In this case, select [Flatbed], and then scan the documents one page at a time.
- When you scan a batch of NCR documents, make sure that they are not stuck together. If a jam occurs, change the scanning side setting to "Flatbed," and then scan the document one page at a time.
- To avoid paper jams, damage to documents, and a scanner malfunction, do not feed the following types of paper. For such documents, scan one page at a time from the flatbed (platen glass).



Wrinkled or creased paper



Carbon-backed paper



Curled paper



Coated paper



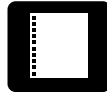
Torn paper



Extremely thin paper



Paper with clips or staples



Paper with binding holes

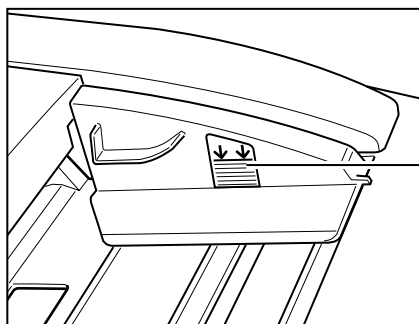
**Note**

- Note that mixing documents of different thicknesses and sizes may cause a malfunction during feeding.
- Documents containing text or pictures within 5 mm of its edges or documents with a color background may cause erroneous skew detection or automatic size detection.

Feeder Capacity

Note the following rules when loading a document into the feeder.

- Make sure the top of the document stack is not higher than the load limitation mark. Overloading the feeder can cause jamming.
- The feeder is designed to hold approximately 100 sheets of A4/LTR-size standard copy paper (80 g/m²).



Load Limitation Mark

4.2

Placing Documents onto the Scanner

This section describes how to load documents into the feeder and how to position a document page on the flatbed (platen glass) for scanning.

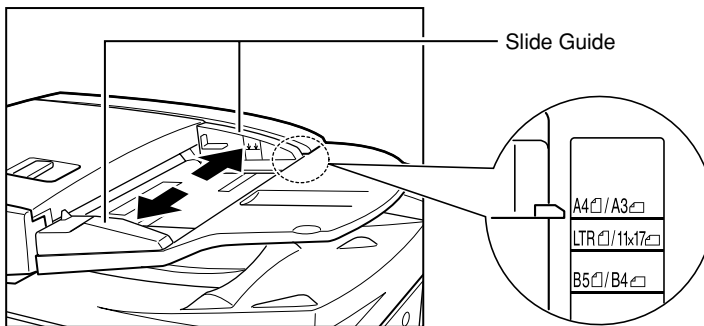


Handle documents with care. Improper handling of paper can cause paper cuts or other personal injury.

Loading a Document into the Feeder

Perform the following steps to load the pages of a document into the feeder for scanning.

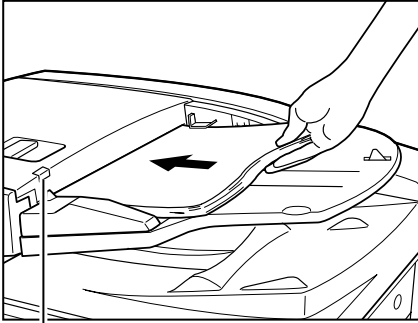
- 1 Adjust each slide guide so its pointer is aligned with the corresponding paper size on the document size label.**



Use both hands to adjust both the left and right slide guides. Adjusting only one slide guide can lead to a malfunction.

2 Align the edges of the document stack on a flat surface, and then load the stack into the feeder with the scanning side facing upwards.

Insert the stack into the feeder as far as it will go, until the document set indicator lights.

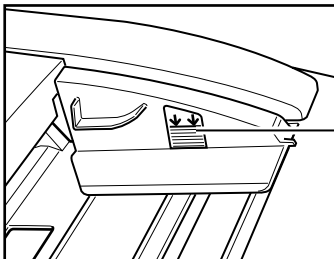


Document Set Indicator



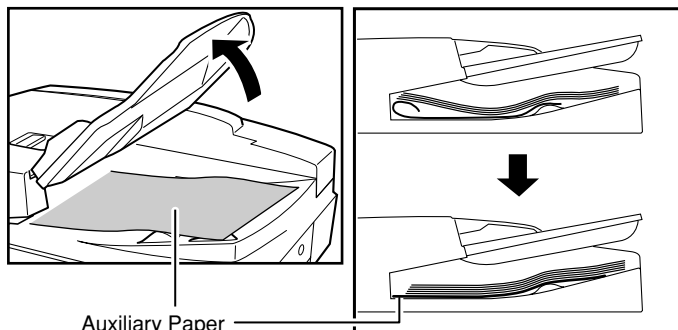
Important

- Make sure the top of the document stack is not higher than the load limitation mark. Overloading the feeder can cause jamming.
- The feeder is designed to hold approximately 100 sheets of A4/LTR-size standard copy paper (80g/m²).



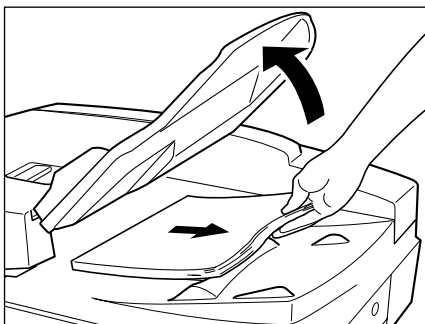
Load Limitation Mark

- When scanning NCR paper that is A3/11" x 17" or other large sizes, as well as paper that is very thin, the document may occasionally get caught in the paper eject mechanism. In this case, place some paper (auxiliary paper) in the document eject tray before scanning the document.



Auxiliary Paper

- 4** After scanning is complete, lift the document feeder tray, and then remove the document from the document eject tray.

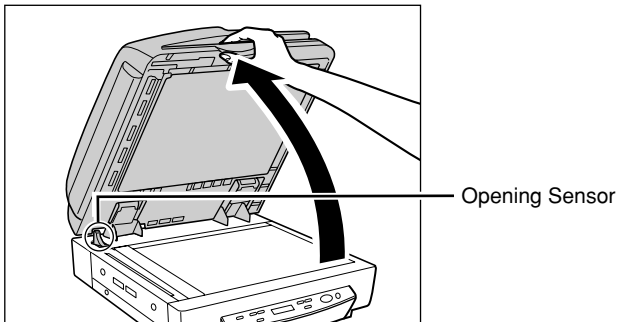


- Leaving a document in the document eject tray and scanning another document can cause jamming.
- Raise the document feeder tray only as much as you need to remove the ejected document pages. Trying to forcibly raise the document feeder tray can cause a malfunction.

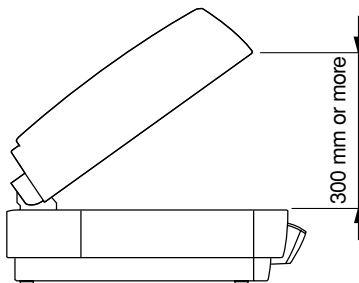
Positioning a Document on the Flatbed (Platen Glass)

Use the following procedure to scan on the flatbed (platen glass) when scanning a book, thick document, very thin document, an OHP (Overhead Transparency) transparency, or any other document that cannot be scanned using the feeder.

1 Raise the feeder.

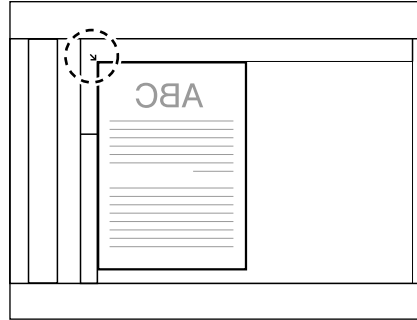
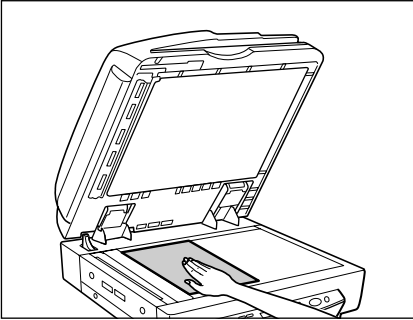


- Lower the feeder slowly, taking care to avoid pinching your fingers. Failure to do so might result in personal injury.
- When scanning on the flatbed (platen glass), raise the feeder at least 300 mm until the opening sensor unit is disengaged.

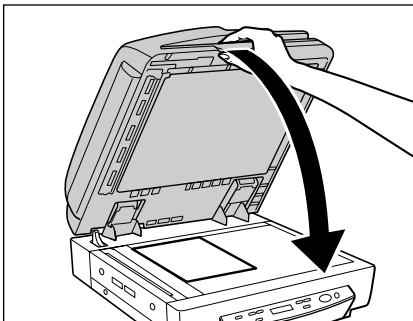


2 Place the document onto the flatbed (platen glass) with the scanning side facing downwards.

With the scanning side of the document facing downwards, align its corner with the arrow mark in the upper left corner of the flatbed (platen glass).



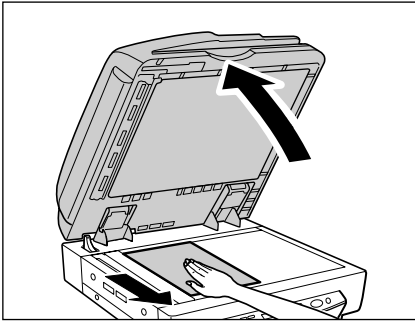
3 Slowly and carefully lower the feeder back down.



CAUTION

- Lower the feeder slowly, taking care to avoid pinching your fingers. Failure to do so might result in personal injury.
- When scanning a thick book or similar item on the flatbed (platen glass), avoid pressing down hard on the feeder. Doing so might damage the glass and create the risk of malfunction or personal injury.

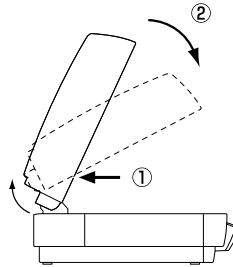
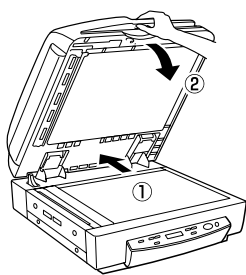
4 Raise the feeder and remove the document from the flatbed (platen glass).



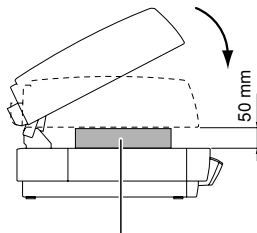
Important

- Raise the feeder carefully and slowly, taking care to avoid letting the feeder fall over backwards.
- Leave the feeder raised when scanning thick documents like books, or operate the feeder as shown in the procedure below.

1. Raise the feeder.
2. While pressing on the bottom of the feeder ①, pull the feeder down and forward ②.

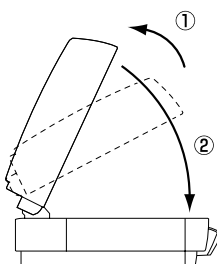


3. Set the thick document or book on the flatbed (platen glass) and hold the feeder lightly while scanning.



Book or Thick Document

4. To return the feeder to its original position, raise it all the way ①, then close it carefully and slowly. ②



4.3

Document Feeding and Scanning

This section describes the various different document feeding modes that are available, and the basic steps to use each mode for scanning.



- Avoid wearing loose fitting clothing, dangling jewelry, long ties, or even long hair that could become entangled with moving parts, especially the rollers that feed the paper. If such objects become entangled, immediately disconnect the power plug from the power outlet to stop the scanner.
- Check the stack and remove all clips, staples, pins, or any other type of metal or plastic fastener. They may damage the document, cause a paper jam, or scanner malfunction.

Scan Procedure

The ISIS/TWAIN driver “Feeding Option” setting allows you to select from among the three feeding modes described below. The procedure you should use depends on the currently selected feeding mode.

- **Standard Feeding (See p. 55.)**

With this mode, you start and stop scanning from an application on your computer. After placing the document onto the scanner, instruct the scanner from your computer to start scanning.

- **Panel Feeding (See p. 56.)**

Panel feeding comes in handy when using the feeder for continuous scanning, for scanning page-by-page from a book, etc. After placing the document page onto the scanner, press the scanner’s [Start] key to start scanning. When scanning is complete, place the next document page onto the scanner, and then press the [Start] key again.

- **Automatic Feeding (See p. 57.)**

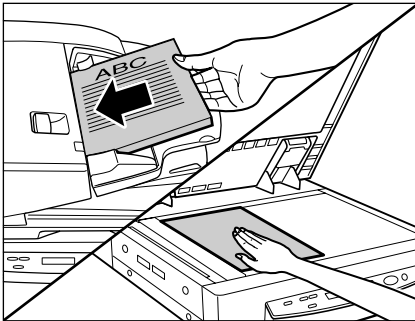
Use this mode for scanning a stack of document pages with the feeder. The scanner will start scanning automatically when it detects a document in the document feeder tray. Scanning stops when the document feeder tray is empty. Loading the next document into the document feeder tray restarts scanning.

◆ Standard Feeding

To use the standard feeding mode, instruct the scanner to start from the application.

1 Select [Standard Feeding] in [Feeding Option] on the ISIS/TWAIN driver's settings screen.

2 Place the document onto the scanner.



Important

See "Placing Documents onto the Scanner," on page 48 for information about placing documents onto the scanner.

3 From the application you are using, execute the required command to start scanning.

⇒ This starts scanning.

4 When scanning of the document is complete, the application goes into the Ready Mode.



Note

If paper feeding stops during scanning due to a system error or paper jam, make sure that the last page of the document was recorded properly before continuing to scan.

- 5 If you want to scan another document, place it onto the scanner, and then execute the required command from the application to resume scanning. To finish scanning, execute the required command from the application.**

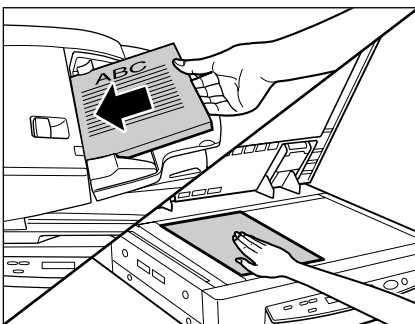


If you are using the feeder for scanning, be sure to remove ejected document pages from the document eject tray before scanning another document. Leaving a document in the document eject tray and scanning another document can cause a paper jam.

◆ Panel Feeding

With panel feeding, you execute the scan command from your application, and then use the scanner's [Start] and [Stop] keys to control the scanning operation.

- 1 Select [Panel-Feeding] in [Feeding Option] on the ISIS/TWAIN driver's settings screen.**
- 2 From the application you are using, execute the required command to start scanning.**
 - ➔ This causes the [Start] key lamp to light green.
- 3 Place the document onto the scanner.**



See "Placing Documents onto the Scanner," on page 48 for information about placing documents onto the scanner.

- 4 Press the [Start] key.**

5 When scanning of the document is complete, the scanner goes into the Ready Mode.



Note

If paper feeding stops during scanning due to a system error or paper jam, make sure that the last page of the document was recorded properly before continuing to scan.

6 If you want to scan another document, place it onto the scanner, and then press the [Start] key again to resume scanning. To finish scanning, press the [Stop] key.



Important

If you are using the feeder for scanning, be sure to remove ejected document pages from the document eject tray before scanning another document. Leaving a document in the document eject tray and scanning another document can cause a paper jam.

◆ Automatic Feeding

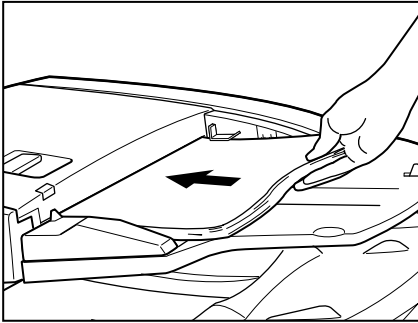
Automatic feeding can be used when feeding a document from the feeder. After you execute the scan start command from the application, the scanner starts scanning automatically whenever it detects a document loaded into the feeder.

1 Select [Automatic Feeding] in [Feeding Option] on the ISIS/TWAIN driver's settings screen.

2 From your application, execute the command to start scanning.

⇒ This causes the [Start] key lamp to light green.

3 Load the document into the document feeder tray.



➔ The scanner detects the documents, and scanning starts.



See “Placing Documents onto the Scanner,” on page 48 for information about placing documents onto the scanner.

4 When scanning of the document is complete, the scanner goes into the Ready Mode.

5 Raise the document feeder tray to remove the ejected document pages.



Be sure to remove ejected document pages from the document eject tray before scanning another document. Leaving a document in the document eject tray and scanning another document can cause a paper jam.

6 Loading another document into the document feeder tray causes scanning to start automatically. After you finish scanning, press the [Stop] key.

4.4 Other Scanning Techniques

This section describes how to scan using the Job Mode and how to use the Count Only Mode to count the number of document pages. It also includes information about how to use the patch code sheet to perform automatic batch separation.

Using the Job Mode for Scanning



Important

The Job function is not supported on a computer that is running Windows NT. If you want to use the Job function, run the scanner with a computer running a supported operating system other than Windows NT.

1 Set the Event function.

(See "Setting the Event Function," on p. 60.)

2 Use Job Registration Tool to register a job.

(See "How to Start the Job Registration Tool," on p. 41.)

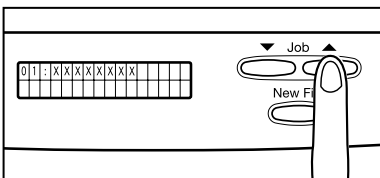


Note

See [Help] in the Job Registration Tool for information on how to register jobs with the Job Registration Tool.

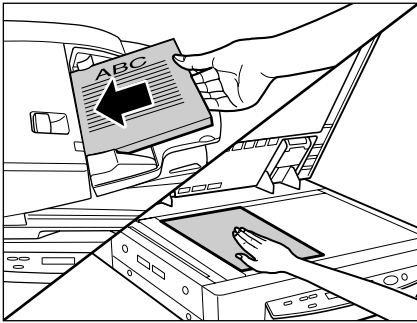
3 Press the Job [▲] key to enter the Job Mode.

➡ This causes the job number screen to appear on the display panel.



4 Use the Job [▲] and [▼] keys to select the number of the job (01 through 99) you want.

5 Place the document onto the scanner.



See “Placing Documents onto the Scanner,” on page 48 for information about placing documents onto the scanner.

6 Press the [Start] key.

➔ The image file is forwarded in accordance with the selected job.

7 When scanning of the document is complete, press the [Stop] key to exit the Job Mode.

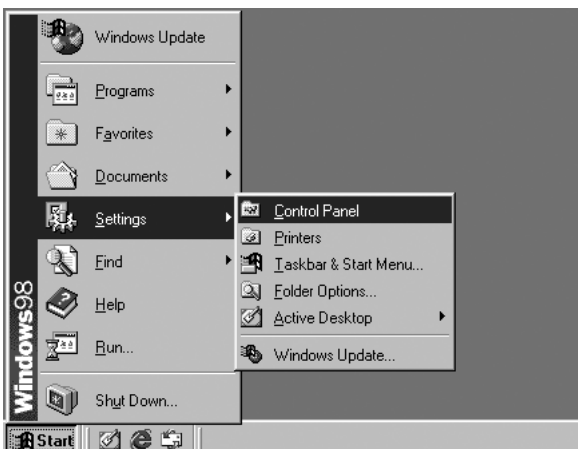


If you cannot get the Job Mode to operate correctly, see “Troubleshooting,” on page 86.

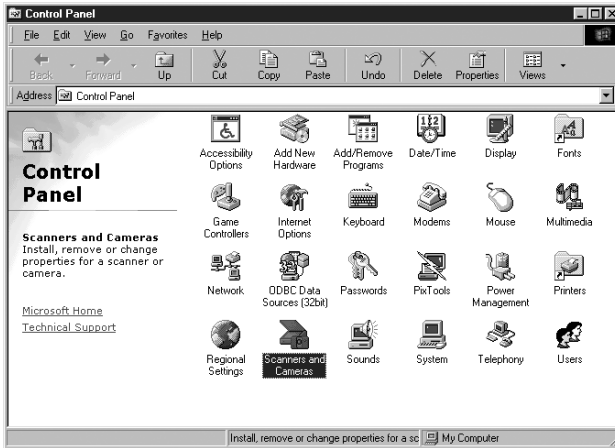
◆ Setting the Event Function

The Job function does not function when [DR7080C Job Tool] has not been specified in the scanner's Event function. Before using the Job function, set the scanner's event according to the following procedure.

1 Click the [Start] button, then click [Settings] - [Control Panel].



2 Double click [Scanners and Cameras].



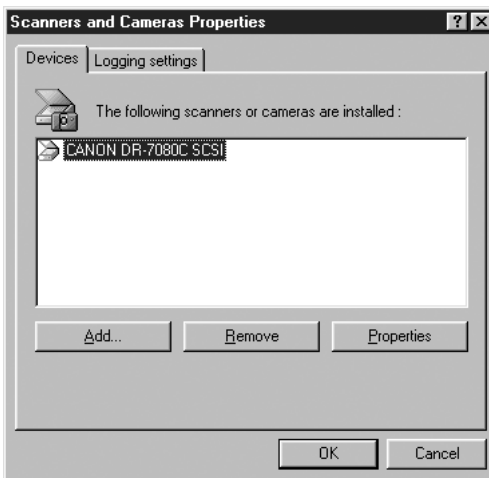
This displays the [Scanners and Cameras] dialog box.



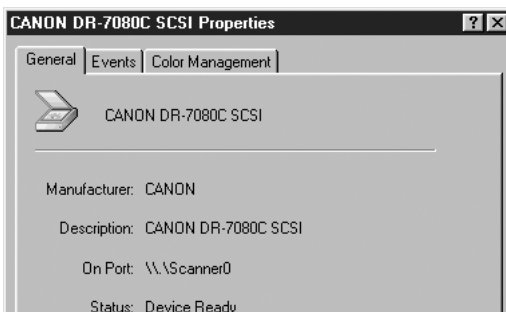
Note

The dialog box that appears differs according to what version of Windows is running on the computer.

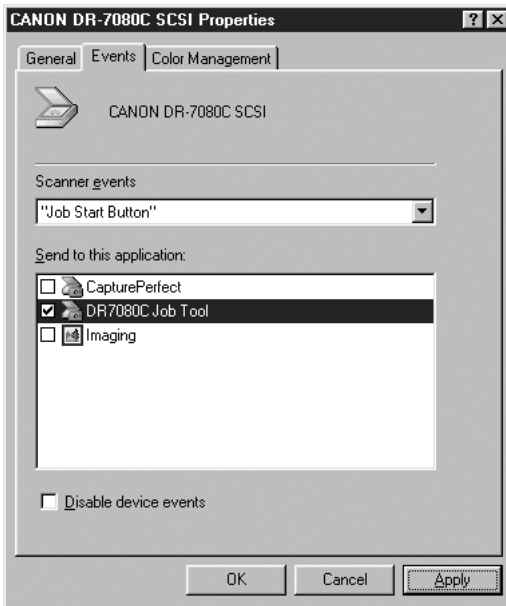
3 Select [Canon DR-7080C SCSI], and then click [Properties].



4 Click the [Events] tab.



5 Specify [Job Start Button] in the [Scanner events] field.



6 Uncheck all the items in the [Send to this application] field except for [DR7080C Job Tool].

7 Click the [Apply] button.



Important

You cannot use the Job function if the [Disable device events] check box is checked.

8 Click the [OK] button.

9 Restart Windows.

Using the Count Only Mode

In the Count Only Mode, document pages are sent through the feeder in order to count them. The document is not scanned. You can perform Count Only Mode operations on the scanner, without using your computer.

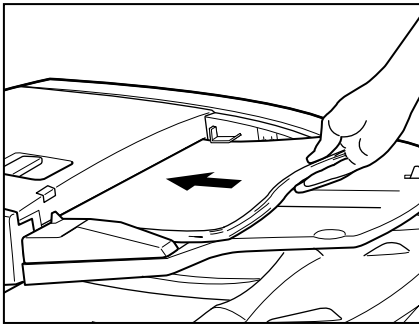
1 Use the user modes to enter the scanner's Count Only Mode.

(See “How to Set the User Modes,” on p. 72.)

C	o	u	n	t		O	n	l	y		M	o	d	e	
											0	0	0	0	0

⇒ This causes the Start key lamp to light green.

2 Load the document into the feeder, and then press the [Start] key.



⇒ This sends the pages of the document through the feeder and counts them.

3 After all of the document pages are fed, exit the Count Only Mode.

(See “How to Set the User Modes,” on p. 72.)

To clear the page count from the display panel, hold down the [Stop] key for approximately two seconds.

Using Patch Code Sheets

Patch code sheets are sheets of paper on which a special pattern is printed so that files can be separated without stopping the scanning operation. The scanner can recognize the pattern on these sheets, which allows files to be separated.

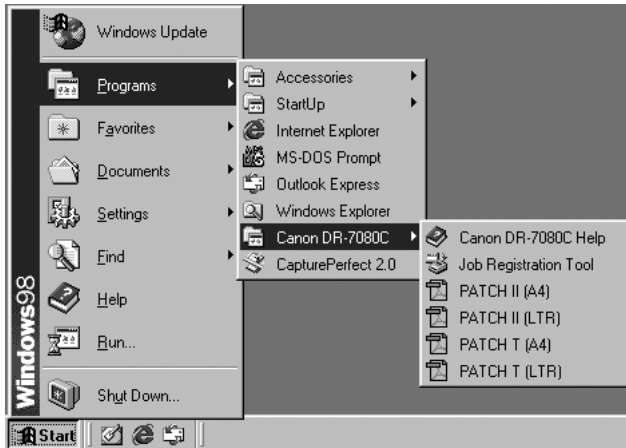


Note

- Refer to “ISIS/TWAIN Driver HELP” when using patch code sheets.
- Patch code sheets are enabled only when the application being used for scanning supports file separation.

◆ Patch Code Sheets

Patch code sheets are PDF (portable document format) data of which there are four types: [PATCH II (A4)], [PATCH II (LTR)], [PATCH T (A4)], and [PATCH T (LTR)]. Click the [Start] button in Windows, and then click [Programs] – [Canon DR-7080C] – [PATCH X(XX)], and use the document that is printed.



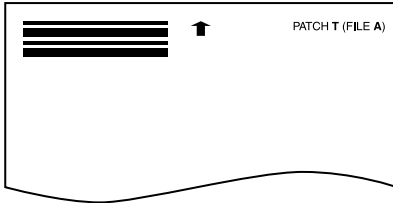
Note

You need CapturePerfect or an application that can open PDF (portable document format) files.

◆ Types of Patch Code Patterns

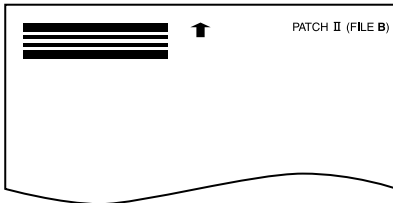
There are two patch code patterns as shown below. The result varies depending on the pattern.

● PATCH T (FILE A)



When this sheet is recognized, the document following the sheet is saved to a separate file.

● PATCH II (FILE B)



When this sheet is recognized, the file is separated after this sheet. This sheet is saved as an image, even if the patch code recognition setting is set not to save this sheet as an image.

◆ How to Use Patch Code Sheets

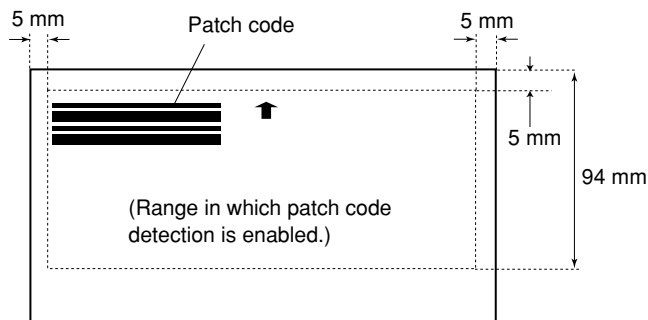
1 Print the patch code sheet on the following paper size:

- Print [PATCH II (A4)] and [PATCH T (A4)] on A4-size paper.
- Print [PATCH II (LTR)] and [PATCH T (LTR)] on letter size paper.



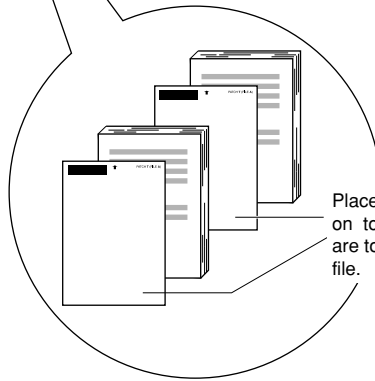
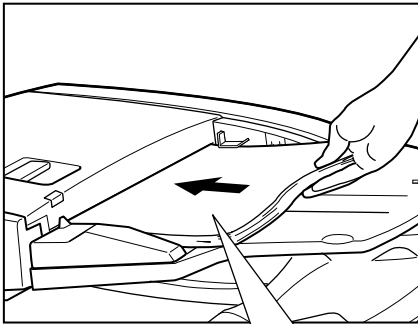
Note

- Patch code patterns are detected within the enabled range shown below. When you make a copy of the patch code sheet, adjust the position of the image so that it appears in the range in which detection is enabled.



- When copying the patch code sheets, use the same size paper and the same density as the original patch code sheet. If the copied sheet is not dense enough, or if it is too dense, the scanner may not be able to recognize it correctly.
- Be careful not to let the patch code sheet get dirty, particularly for the range in which patch code detection is enabled. Do not bend or wrinkle the patch code sheet. This could prevent the scanner from recognizing the sheet.
- When the patch code sheet is being scanned, if it is not dense enough, or if it is too dense, the scanner may not be able to recognize it correctly.

- 2 Place the patch code sheet on top of the documents that are to be saved to a separate file, and then scan the documents.**



Place the patch code sheet on top of the documents that are to be saved to a separate file.

- 3 Set the scanning conditions, and then start scanning.**

Chapter 5

User Modes

This chapter describes the user modes, which you can use to configure the scanner settings.

5.1 About the User Modes	70
User Mode Functions	70
How to Set the User Modes	72

5.1

About the User Modes

You can configure the scanner settings with the user modes described below.

User Mode Functions

User mode functions are as follows:

● Count Only Mode

C	o	u	n	t		O	n	l	y		M	o	d	e	
						O	N				[	O	F	F]

ON: Count Only Mode (See “Using the Count Only Mode,” on p. 63.)

OFF: Normal Mode (default)

● Long Document Mode

L	o	n	g		D	o	c	u	m	e	n	t			
						O	N				[	O	F	F]

ON: Enables detection of documents up to 630 mm long for auto document size detection. (See “Documents,” on p. 46.)

OFF: Enables detection of documents up to 432 mm long for auto document size detection (default).



Note

- If you scan using Long Document Mode, the scanning speed may slow down.
- If a document page is not aligned correctly when using the Long Document Mode, it might come into contact with the two sides of the feeder, which can damage the page. Take care to make sure that document pages are aligned correctly.

● Stand-by Mode

S	t	a	n	d	-	b	y		M	o	d	e			
						[	O	N	]			O	F	F	

ON: Scanner enters Stand-by Mode after 10 minutes of non-use (default).

OFF: Scanner does not enter Stand-by Mode.

● Display Language Mode

J	a	p	a	n	e	s	e		(	ニ	ホ	ン	コ	ス)
						O	N				[	O	F	F]

ON: Japanese

OFF: English (default)

● Display Contrast Mode

D	i	s	p	a	y	C	o	n	t	r	a	s	t
			<	-	-	-	■	-	-	-	>		

Use the Set [**◀**] and [**▶**] keys to move the pointer (■) to the left for lighter contrast or to the right for darker contrast.

● Setting SCSI Transfer Speed

S	C	S	I	S	p	e	e	d					
			5			1	0		[	2	0]	

Set the maximum value for synchronous transfer speed for the SCSI interface.

[5]: 5 Mbyte/sec

[10]: 10 Mbyte/sec (First SCSI)

[20]: 20 Mbyte/sec (Ultra SCSI) (default)

If the scanner does not operate correctly when the output speed is set to [20 Mbyte/sec], reduce the transfer speed to [10 Mbyte/sec] or [5 Mbyte/sec].



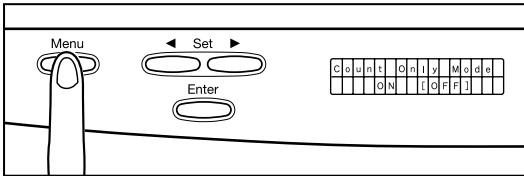
Important

If you change the setting for the SCSI transfer speed, turn OFF the scanner, and then turn it ON.

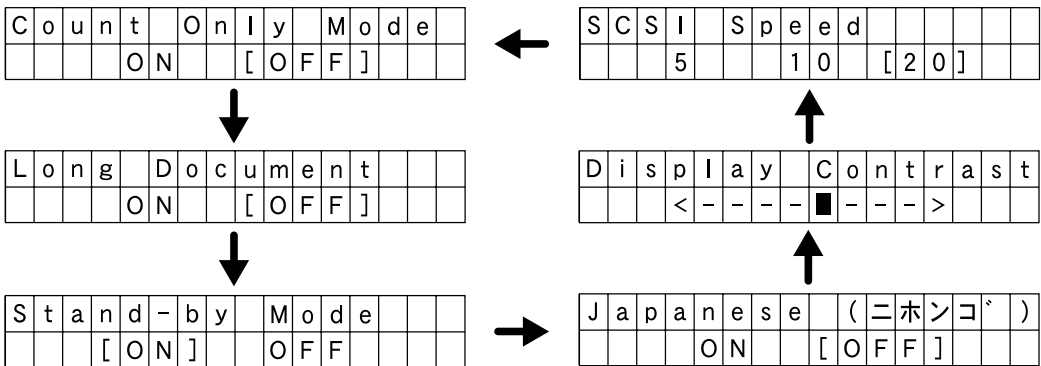
How to Set the User Modes

Use the following procedure to configure user mode settings.

1 Press the [Menu] key to display the user mode screens.



➡ Use the [Menu] key to cycle through the user modes in the sequence shown below.



2 Use the Set [◀] and [▶] keys to change the currently displayed setting.

3 Press the [Enter] key to register the displayed setting.

4 To exit the user mode screens, press the [Stop] key.

Chapter 6

Troubleshooting

This chapter describes the trouble that may occur on the DR-7080C and how to correct it.

6.1 When the Scanner Is Not Recognized	74
SCSI Connections	74
USB Connections	76
6.2 Clearing Paper Jams	77
Clearing a Paper Jam	77
Paper Jam Causes	81
6.3 When the Scanned Image Is Not Normal	82
6.4 Display Messages	83
Error Messages	83
Scanner Status Messages	85
6.5 Troubleshooting	86



When the Scanner Is Not Recognized

The following describes possible causes of your computer not recognizing the scanner. Remedy the problem by following the procedure for the respective cause.

SCSI Connections

Cause **The scanner is not correctly connected.**

Remedy Connect the SCSI cables to the scanner in the correct way.

Cause **The SCSI card is not correctly recognized.**

Remedy Correctly connect the SCSI card referring to the SCSI card manual. Also, check the following according to the OS that your computer is running on.

<Windows 98 and Windows Me>

Click [Start]-[Settings]-[Control Panel]-[System], and then open [Device Manager] and check if “SCSI Controller” has an “x” or “!” on it. If you can see one of these, then refer to the SCSI card’s operator’s manual to reset the SCSI card.

<Windows NT 4.0 Workstation>

Click [Start]-[Settings]-[Control Panel], and then open [SCSI adapter] and check if the “SCSI card” is being recognized correctly. If it is not correctly recognized, then refer to the SCSI card’s operator’s manual to reset the SCSI card.

<Windows 2000 Professional>

Click [Start]-[Settings]-[Control Panel]-[System]-[Hardware], and then open [Device Manager] and check if “SCSI controller” has an “x” or “!” on it. If you can see one of these, then refer to the SCSI card’s operator’s manual to reset the SCSI card.

<Windows XP>

Click [Start]-[Control Panel]-[Performance and Maintenance]-[System]-[Hardware], and then open [Device Manager] and check if “SCSI controller” has an “x” or “!” on it. If you can see one of these, then refer to the SCSI card’s operator’s manual to reset the SCSI card.

Cause **Same SCSI ID is used for other SCSI devices.**

Remedy Check the SCSI ID of all connected SCSI devices, and make sure that the same SCSI ID is not set to two or more devices. Reset the SCSI IDs if the same SCSI ID is set. (See p. 27.)

Cause **The terminator is not correctly connected.**

Remedy Connect the terminator to the last SCSI device on the end of the daisy chain. Enable the terminator function if the SCSI device has a built-in terminator function. (See p. 27.)

Cause **The scanner was turned ON after the computer.**

Remedy Turn OFF the computer and scanner. Then, turn ON the scanner, and then turn ON the computer. (See p. 31.)

Cause **The scanner is OFF.**

Remedy Turn OFF the computer. Then, turn ON the scanner, and then turn ON the computer. (See p. 31.)

Cause **The scanner's power cord is disconnected from the scanner or the AC power outlet.**

Remedy Turn OFF the computer, and correctly connect the scanner's power cord. Then, turn ON the scanner, and then turn ON the computer. (See p. 30.)

Cause **The scanner does not support the SCSI card.**

Remedy Replace with a SCSI card compatible with the driver application. (See p. 25.)

USB Connections

Cause Scanner is not correctly connected.

Remedy Connect the scanner correctly with a cable that supports USB 2.0. (See p. 29.)

Cause The USB 2.0 interface card is not correctly installed on the computer.

Remedy Refer to the USB 2.0 interface card operation manual and install it correctly. Also, check if the USB 2.0 interface card is being recognized by Windows in the operating system you are using.

Cause The scanner is OFF.

Remedy Check the connections with the computer, and then turn ON the scanner. (See p. 31.)

Cause The USB 2.0 interface card does not support the scanner.

Remedy Use one of the recommended USB 2.0 interface cards. (See p. 29.)

6.2 Clearing Paper Jams

A paper jam is indicated when scanning stops unexpectedly and the message shown below appears on the display panel. Use the procedure below to clear a paper jam.

F	e	e	d	i	n	g	M	i	s	s				

Clearing a Paper Jam



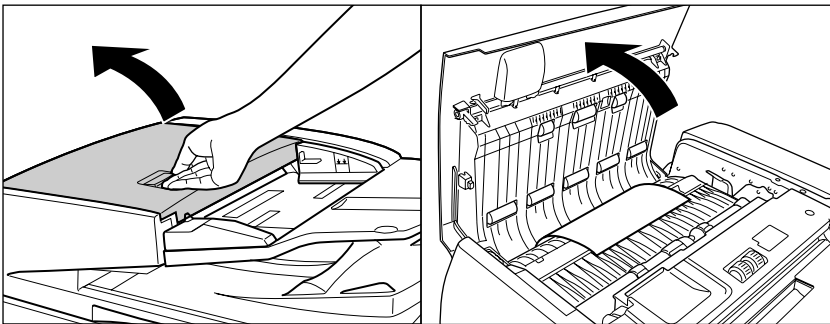
CAUTION

- Be careful when you clear a paper jam. You may be injured unexpectedly. For example, the paper edges may cut your fingers, or the document may be damaged.
- Remove all jammed sheets of paper. Paper scraps left inside the scanner may be drawn into the scanner again, causing another paper jam or malfunction.
- When opening or closing the feeder, take care not to get your fingers caught.

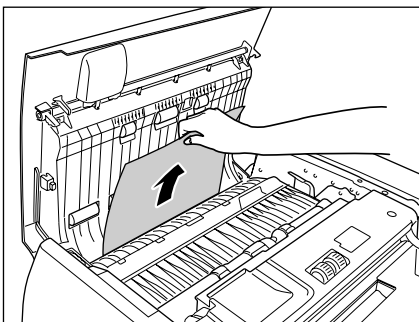
1 Remove all document pages from the document feeder tray and the document eject tray.

2 Open the feeder cover.

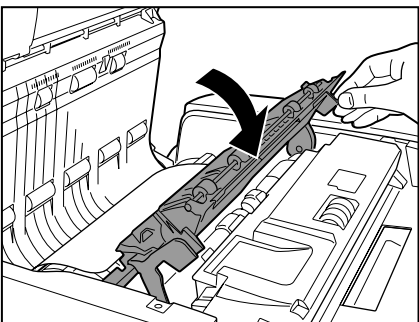
Operate the opening lever, and then slowly raise the cover until it stops.



3 Remove the jammed paper.



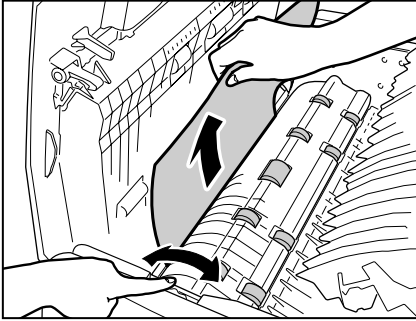
4 If the document is jammed under the feeder guide, grasp the tab inside the scanner to open the feeder guide.



Note

If you are duplex scanning, the document may be jammed under the feeder guide.

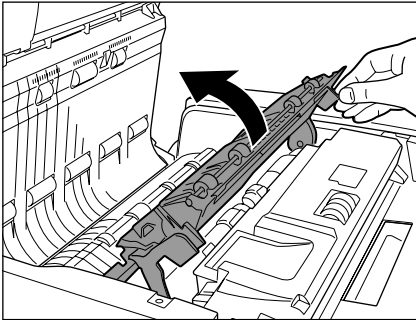
5 Rotate the dial on your side of the scanner to remove any paper jammed inside the feeder.



Note

- Rotating the dial to the right reverse feeds any paper jammed inside the feeder. Gently pull the paper from the feeder as you rotate the dial.
- Rotating the dial to the left forward feeds jammed paper into the document eject tray. After feeding the paper, raise the document feeder tray and remove the paper.

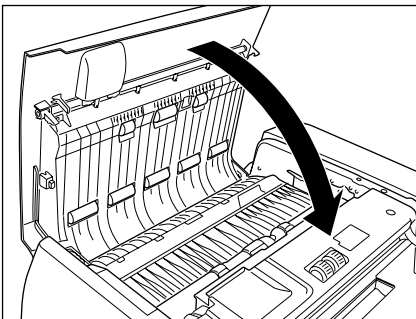
6 Close the feeder guide.



CAUTION

Take care to avoid pinching your fingers when closing the feeder guide.

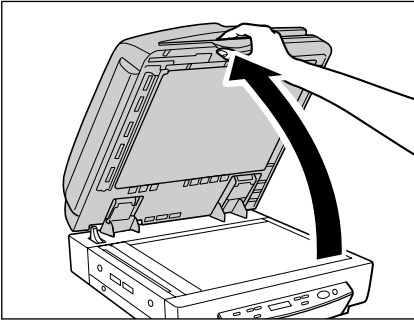
7 Close the feeder cover.



CAUTION

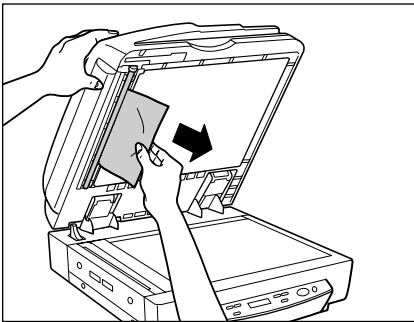
Take care to avoid pinching your fingers when closing the feeder cover.

8 Raise the feeder.

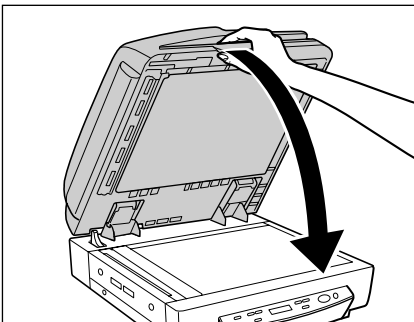


Open the feeder carefully and slowly, taking care to avoid letting the feeder fall over backwards.

9 Remove any paper jammed inside the feeder.



10 Slowly and carefully lower the feeder back down.



Lower the feeder slowly, taking care to avoid pinching your fingers. Failure to do so might result in personal injury.

Paper Jam Causes

Any of the following factors can cause paper to jam. If you experience paper jams, check the following points and take the required action:

- **What to check:** Is the document size or thickness outside the range supported by the feeder, or is the document paper of substandard quality?
What to do: See “Documents,” on p. 46 for information about required document properties.
- **What to check:** Is a jam being caused by document paper that is not sliding properly?
What to do: Scan such paper from the flatbed (platen glass), one page at a time. (See p. 51.)
- **What to check:** Are the rollers inside the feeder dirty or worn?
What to do: If the rollers are dirty, clean them. (See p. 93.) If the rollers are worn, contact your service representative to have them replaced.

6.3

When the Scanned Image Is Not Normal

If there is a problem on the scanned image (image is not sharp or stripes appear on the image), one of the following may be a probable cause. Check the following points and take the appropriate action.

- **The scanning glass or rollers in the scanner are dirty.**

If the scanning glass or rollers in the scanner are dirty, that dirt will appear on the scanned image.

→ Clean the scanning glass and rollers. For details, see “Daily Cleaning,” on p. 92.

- **The scan conditions are inappropriate.**

When the scan condition setup is inappropriate, the scanned image will not be sharp or will appear darkish.

→ Check the brightness and other scanner settings.

If the scanned image is foggy or the document is not scanned at all, a probable cause is that the brightness is set too high.

If the scanned image appears darkish, a probable cause is that the brightness is set too low.

Also, check the settings on the driver and the application.

- **The driver or application does not run correctly.**

If the document cannot be scanned correctly even if the scan conditions are adjusted, a probable cause is that the driver or the application is not functioning correctly.

→ Uninstall and then reinstall the driver or application.

For details on how to install the driver, see “Installing the Software,” on p. 37.

For details on how to install the application, see the instruction manual for the application in use.

- **Other Causes**

Even if the computer is correctly recognizing the scanner, and the driver and the application are installed correctly, scanning may not be performed correctly. A probable cause is that the interface card is not compatible. Use the recommended interface card.

If the above remedies do not rectify the problem, contact your service representative.

6.4 Display Messages

This section explains the error messages and scanner status messages that appear on the display panel.

Error Messages

The following are the messages that appear to indicate errors.

Display C o v e r O p e n 0 1

Cause **The feeder cover is open.**

Remedy Close the feeder cover.

Display C o v e r O p e n 0 2

Cause **The feeder is raised.**

Remedy Lower the feeder back down.

Display F e e d i n g M i s s

Cause **Jam**

Remedy Check the document and try again. If this error continues to appear, scan the document from the flatbed (platen glass).

Display J a m x x x x

Cause **Paper is jammed in the feeder.**

Remedy Use the procedure under “Clearing a Paper Jam,” on p. 77 to clear the jammed paper.

Display S e n d f a i l e d .

Cause **Scan to Mail send error occurs when sending images using the Job Registration Tool.**

Remedy Check the configuration of the Job Registration Tool settings and try again.

Display

D	e	t	e	c	t		M	i	x		D	o	c	.		

Cause

You are attempting to scan a document that contains mixed page sizes while the Different Size Originals Mode is off.

Remedy

Confirm the front/rear sides of the ejected document, then turn on the Different Size Originals Mode and scan the document again.

Display

E	r	r	o	r			E	x	x	x	x	x	x	x		

Cause

This is a “service call error,” which indicates that the scanner has an internal problem.

Remedy

This error requires servicing from your service representative. Turn off the scanner. With the displayed error code on hand, contact your sales representative or your service representative.

Scanner Status Messages

The following messages indicate the current status of the scanner:

Display

P	I	e	a	s	e	w	a	i	t	.	.	.		

Status

The scanner is performing some process. Please wait.

Display

R	e	a	d	y										
										0	0	0	0	0

Status

The scanner is in the Ready Mode. The scanner will go into the Stand-by Mode if you do not perform any operation for approximately 10 minutes.

Display

S	t	a	n	d	-	b	y	M	o	d	e			

Status

The scanner is in the Stand-by Mode. A signal from the computer or an operation panel key operation will recover the scanner to Ready Mode.

Display

C	o	u	n	t	O	n	l	y	M	o	d	e		
										0	0	0	0	0

Status

The scanner is in the Count Only Mode. (See "Using the Count Only Mode," on p. 63.)

Display

0	1	=	X	X	X	X	X	X	X	X	X			

Status

The scanner is in the Job Mode. Press the [Start] key to start scanning or the [Stop] key to exit the Job Mode. (See "Using the Job Mode for Scanning," on p. 59.)

6.5 Troubleshooting

Check the following points when you have problems with the scanner operation:

- **Display panel messages are in a different language.**
Cause: The user mode language setting is not configured correctly.
Remedy: Display the user mode language setting and select the correct language. (See “About the User Modes,” on p. 70.)

- **Display panel is too dark or too bright.**
Cause: The display panel brightness is not adjusted correctly.
Remedy: Adjust the display panel brightness in the user modes. (See “About the User Modes,” on p. 70.)

- **Cannot scan with the feeder.**
Cause: The ISIS/TWAIN driver “Scanning Side” setting is “Flatbed.”
Remedy: Change the “Scanning Side” setting to something other than “Flatbed.”

- **Job titles do not appear when the [Job] keys are pressed.**
Cause 1: There are no jobs registered with the Job Registration Tool.
Remedy 1: Use the Job Registration Tool to register a job. (See “How to Start the Job Registration Tool,” on p. 41.)

Cause 2: The computer is turned OFF or it is not connected to the scanner.
Remedy 2: Job data is stored on the computer. Make sure the computer is connected properly and turned ON. (See “Connecting to a Computer,” on p. 25.)

- **The Job function does not work when the [Start] key is pressed after selecting a job.**
Cause 1: The computer is running an operating system that does not support the Job function.
Remedy 1: The Job function is not supported under Windows 95 or NT. Use a computer running another operating system when you want to use the Job function. (See “Checking Your Operating Environment,” on p. 24.)

Cause 2: The Windows Event function is not configured to start DR-7080C Job Tool.
Remedy 2: On the Windows Control Panel, double-click [Scanners and Cameras] to open DR-7080C SCSI properties. Specify “DR-7080C Job Tool” as the “Event” startup application. (See “Setting the Event Function,” on p. 60.)

- **The Job function does not work when the [Start] key is pressed after selecting a job, and [Scan Error] is displayed.**
 - Cause 1: Another application is using the DR-7080C ISIS/TWAIN Driver.**
Remedy 1: Close the other application that is using the DR-7080C ISIS/TWAIN Driver.
 - Cause 2: Feeding is specified from the feeder, and a document is not loaded in the feeder.**
Remedy 2: Reload a document into the feeder.

- **Cannot scan with USB cable connections.**
 - Cause: The SCSI terminator has not been turned ON.**
Remedy: For this scanner to operate normally, the SCSI terminator needs to be turned ON even when using USB connections. Be sure to turn ON the SCSI terminator. (See "Checking Your Operating Environment," on p. 24.)

- **The feeder does not close completely.**
 - Cause: The feeder is in the book scanning position.**
Remedy: Raise the feeder all the way, and then close it carefully and slowly. (See "Positioning a Document on the flatbed (platen glass)," on p. 51.)

Chapter 7

User Maintenance

This chapter describes daily cleaning of the scanner.

7.1 Changing the Stamp Cartridge	90
7.2 Daily Cleaning	92
Cleaning the Main Unit	92
Cleaning the Flatbed (Platen Glass) and Pressure Board (Black)	93
Cleaning the Feeder	94
Cleaning the Power Plug	98

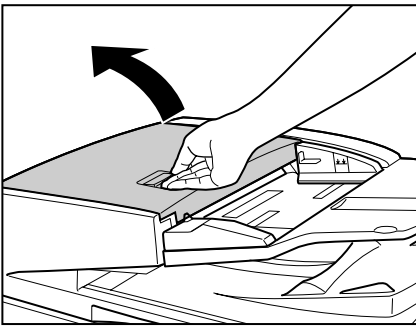
7.1

Changing the Stamp Cartridge

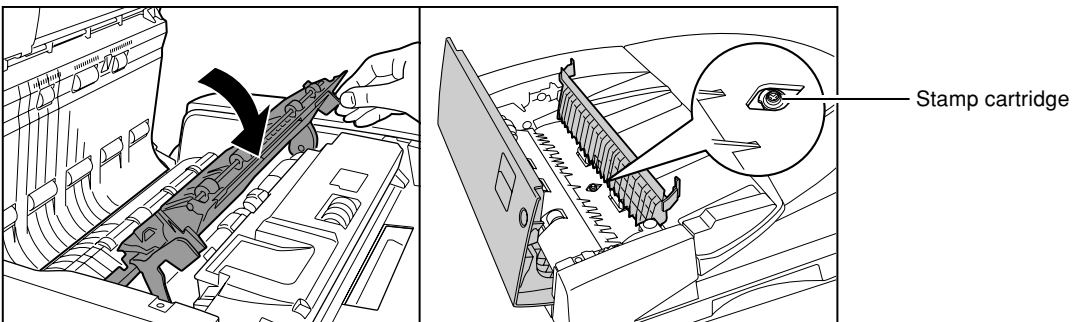
When using the optional stamp unit (see p. 21) to stamp scanned documents, you should use the following procedure to replace the stamp cartridge whenever the stamp mark becomes smudged or faint. Contact your sales representative or service representative to purchase a new stamp cartridge.

1 Open the feeder cover.

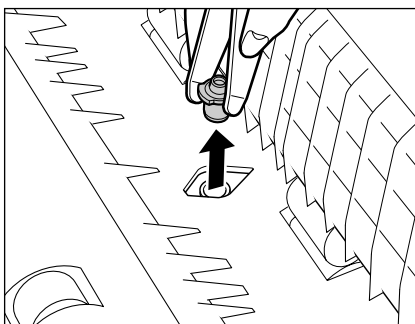
Operate the opening lever, and then slowly raise the cover until it stops.



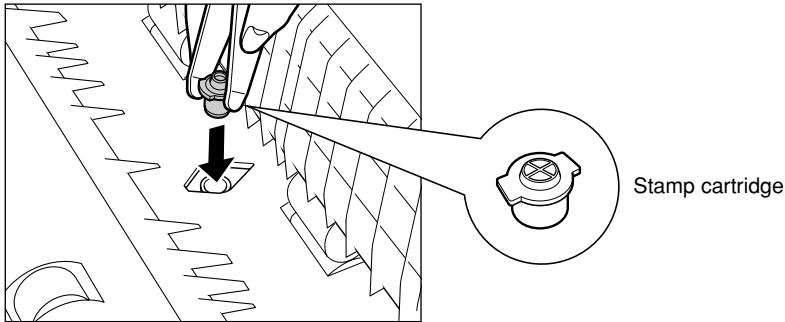
2 Grasping the tab inside the scanner, open the feeder guide.



3 Use a pair of tweezers or some similar tool to remove the old stamp cartridge.



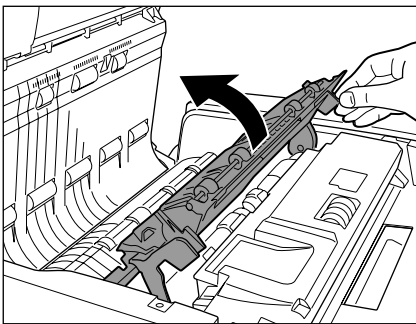
4 Insert a new stamp cartridge.



Important

- When installing the stamp cartridge, make sure that the stamp does not protrude outside the hole.
- Improperly installing the stamp cartridge can cause paper jams.

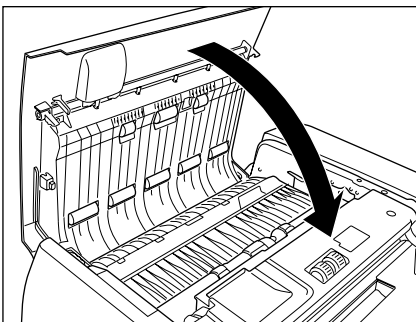
5 Close the feeder guide.



CAUTION

Take care to avoid pinching your fingers when closing the feeder guide.

6 Close the feeder cover.



CAUTION

Take care to avoid pinching your fingers when closing the feeder cover.

7.2 Daily Cleaning

To maintain high-quality scanning, you should periodically clean the following:

- Main unit
- Flatbed (Platen glass)
- Pressure Board (Black)
- Feeder

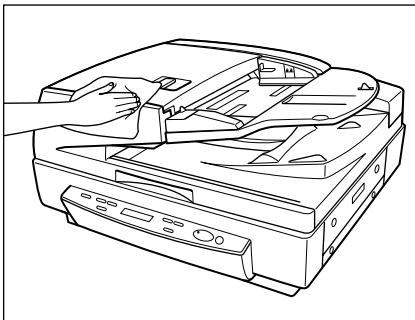


CAUTION

- Before you clean the scanner, turn OFF the scanner and computer and disconnect the power cord from the power outlet. Otherwise, an electrical shock may result.
- Never clean the scanner with any kind of organic solvent, such as alcohol, benzene, or paint thinner. It might cause a fire and electrical shock, or cause the exterior of the scanner to disfigure or discolor.
- Never spray detergent or water directly onto the flatbed (platen glass). Sprayed liquid can get inside the scanner and soil the light source and lens.
- Overuse of water and allowing the scanner to become too wet during cleaning can damage scanned documents and cause malfunction of the scanner.

Cleaning the Main Unit

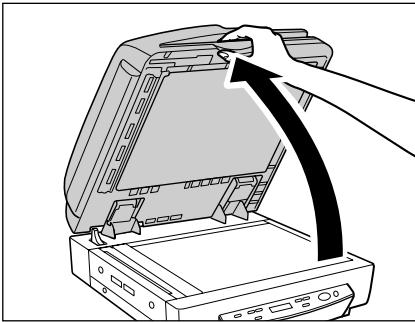
Wipe the scanner with a firmly wrung cloth moistened slightly with water or mild detergent. Then wipe off with a clean, dry cloth.



Cleaning the Flatbed (Platen Glass) and Pressure Board (Black)

A dirty flatbed (platen glass) or pressure board (black) can cause soiling of scanned images, or document size detection errors. Clean the flatbed (platen glass) and pressure board (black) periodically.

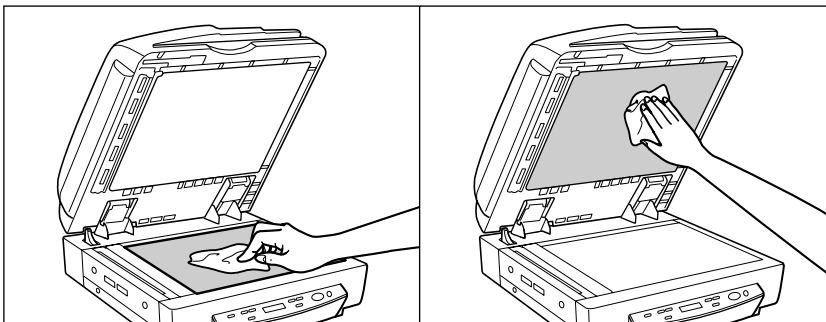
1 Raise the feeder.



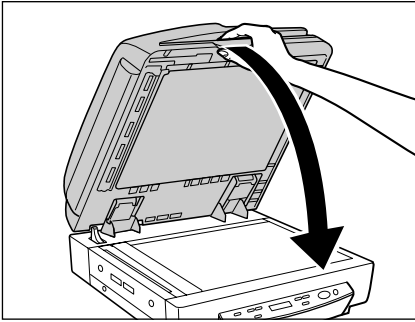
CAUTION

Open the feeder carefully and slowly, taking care to avoid letting the feeder fall over backwards.

2 Wipe the flatbed (platen glass) and pressure board (black) with a cloth moistened with plain water and thoroughly wrung out. Next, wipe the flatbed (platen glass) and pressure board (black) with a soft, dry cloth.



3 Slowly and carefully lower the feeder back down.



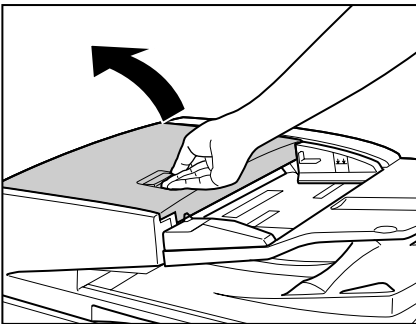
Lower the feeder slowly, taking care to avoid pinching your fingers. Failure to do so might result in personal injury.

Cleaning the Feeder

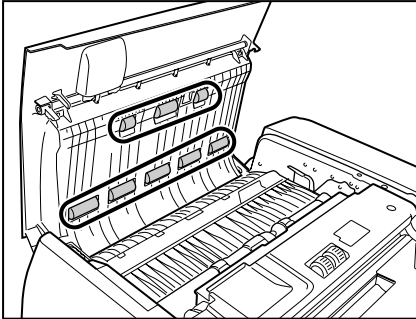
Without periodical cleaning, a problem may be caused on the scanned image or the document may become soiled. Clean the feeder periodically.

1 Open the feeder cover.

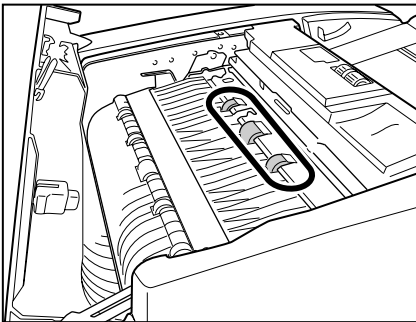
Operate the opening lever, and then slowly raise the cover until it stops.



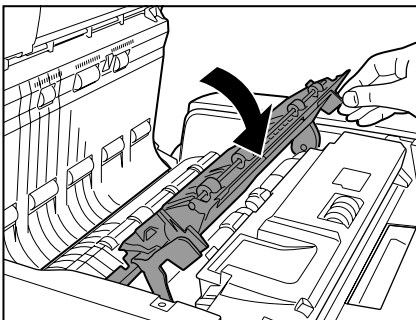
- 2** Wipe the eight rollers inside the feeder cover with a cloth moistened with plain water and thoroughly wrung out. Next, wipe the rollers dry with a soft, dry cloth.



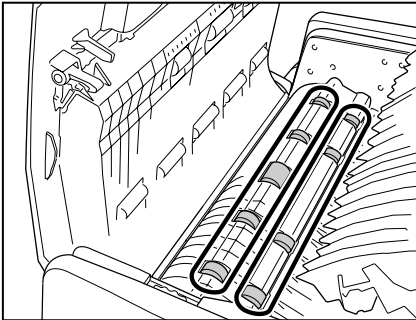
- 3** Wipe the three rollers on the feeder guide with a cloth moistened with plain water and thoroughly wrung out. Next, wipe the rollers dry with a soft, dry cloth.



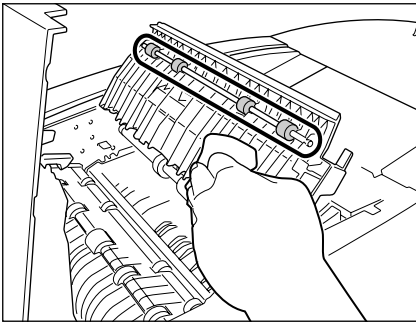
- 4** Grasping the tab inside the scanner, open the feeder guide.



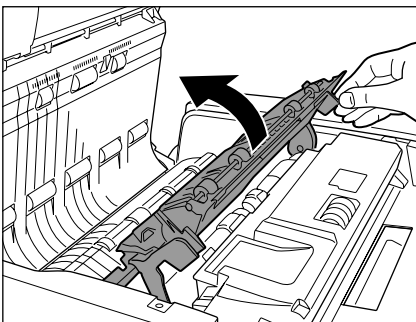
- 5** Wipe the nine rollers with a cloth moistened with plain water and thoroughly wrung out. Next, wipe the rollers dry with a soft, dry cloth.



- 6** Wipe the four rollers inside the feeder guide with a cloth moistened with plain water and thoroughly wrung out. Next, wipe the rollers dry with a soft, dry cloth.

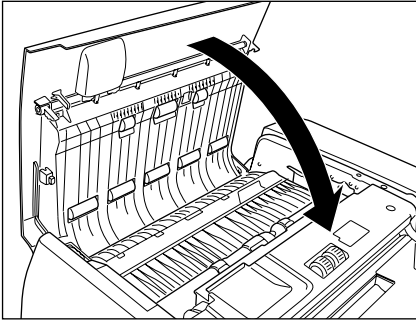


- 7** Close the feeder guide.



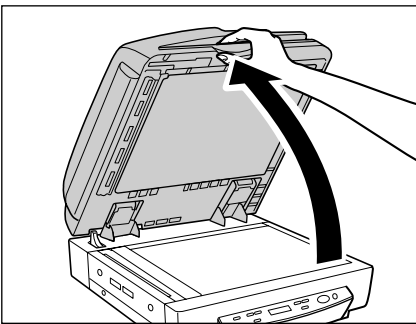
Take care to avoid pinching your fingers when closing the feeder guide.

8 Close the feeder cover.



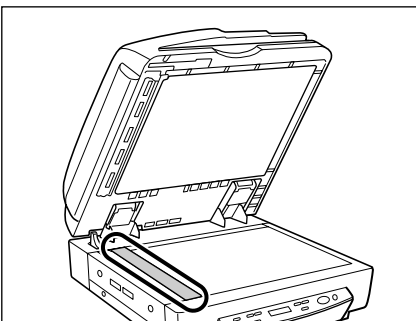
Take care to avoid pinching your fingers when closing the feeder cover.

9 Raise the feeder.

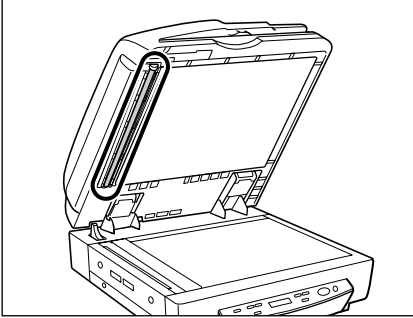


Open the feeder carefully and slowly, taking care to avoid letting the feeder fall over backwards.

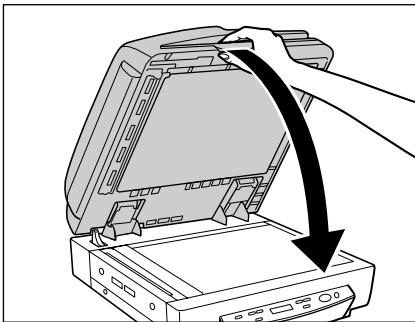
10 Wipe the scanning glass (narrow strip of glass) to the left of the flatbed (platen glass) with a cloth moistened with plain water and thoroughly wrung out. Next, wipe the glass dry with a soft, dry cloth.



- 11** Wipe the metal next to the rubber rollers with a cloth moistened with plain water and thoroughly wrung out. Next, wipe the metal dry with a soft, dry cloth.



- 12** Slowly and carefully lower the feeder back down.



CAUTION

Lower the feeder slowly, taking care to avoid pinching your fingers. Failure to do so might result in personal injury.

Cleaning the Power Plug

If you leave the power plug connected to the power outlet for a long period of time, dust may accumulate at the power outlet, and cause a fire or electrical shock. Clean the power plug periodically.

Appendix

This appendix contains the specifications and index.

Specifications	100
Specifications for the Scanner	100
Options	101
Consumables	101
Exterior Dimensions	102
Index	103

Specifications

Specifications for the Scanner

Type	Desktop ADF/flatbed scanner
Document Size	Width: 139.7 mm to 304.8 mm Length: 128 mm to 432 mm (Normal Mode) 128 mm to 630 mm (Long Document Mode) 128 mm to 540 mm (Long Document Mode/Color 600 dpi Mode)
Document Thickness	Black-and-white Documents • Simplex: 0.06 mm to 0.15 mm • Duplex: 0.07 mm to 0.15 mm Black-and-white/Color Documents Mixed 0.07 mm to 0.15 mm Color Documents 0.08 mm to 0.15 mm
Document Weight	Black-and-white Documents • Simplex: 42 to 128 g/m ² • Duplex: 50 to 128 g/m ² Black-and-white/Color Documents Mixed 50 to 128 g/m ² Color Documents 64 to 128 g/m ²
Document Feeding	Feeder/Flatbed
Scanning Method	3-line CCD
Light Source	Xenon lamp
Scanning Side	Simplex (automatic inversion of document for duplex scanning)
Scanning Mode	Black-and-white, advanced text enhanced, error diffusion, 256-level grayscale, 24-bit color
Scanning Resolution (primary scan lines x secondary scan lines)	600 x 600 dpi/400 x 400 dpi/300 x 300 dpi/ 240 x 240 dpi/200 x 200 dpi/150 x 150 dpi/ 100 x 100 dpi
Scanning Speed (portrait LTR/A4-size document):	
Black-and-White	Simplex 300 x 300 dpi 70 ppm Duplex 300 x 300 dpi 36 ipm
256-level grayscale	Simplex 300 x 300 dpi 68 ppm Duplex 300 x 300 dpi 36 ipm
24-bit color	Simplex 150 x 150 dpi 70 ppm Duplex 150 x 150 dpi 36 ipm
Automatic Feed	Max. 100 sheets (80g/m ²) or stack 13 mm or less
Interface	SCSI-III/Hi-Speed USB 2.0
Other Functions	Automatic paper size detection, Dropout color, Count Only Mode, Job function

Dimensions	300 mm (H) x 575 mm (W) x 602 mm (D)
Weight	Approximately 33.6 kg
Power Requirement	AC 220-240V (50/60 Hz), 0.6 A (max)
Power Consumption	Operating: 0.74 A maximum Ready: Under 0.23 A
Noise	Less than 78 dB
Operating Environment	Temperature: 15°C to 30°C (59°F to 86°F) Humidity: 25% to 80% RH

- You can use the functions noted above if the software supports them.
- They may not work depending on your computer's capabilities and the software you are using.

Specifications are subject to change without notice.

Options

Stamp Unit	Stamps a mark on the surface of a document to indicate it has been scanned. (See "Stamp Unit," on p. 21.)
-------------------	---

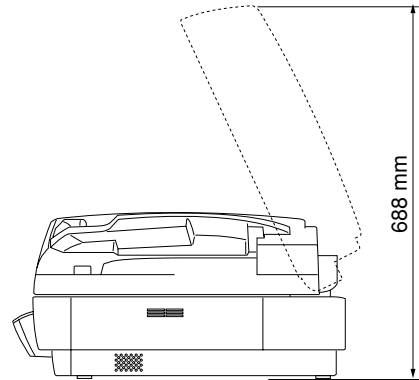
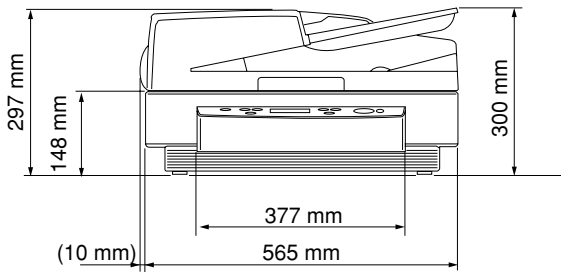
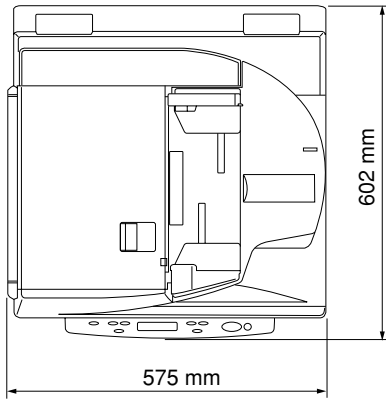
Consumables

Stamp Cartridge	For replenishing the stamp unit.
------------------------	----------------------------------

- For details about options and consumables, contact your sales representative or your service representative.

Exterior Dimensions

Units: millimeters



Index

- A -

Air vents	18
Automatic feeding	57
Auxiliary paper	49

- B -

Batch separation	59
Before getting started	14

- C -

CapturePerfect	36
-How to start CapturePerfect	40
-How to start the Job Registration Tool	41
-Installation	37
Carrying	9
Cleaning	
-Feeder	90
-Main unit	92
-Platen glass	93
-Power plug	98
-Pressure board (Black)	93
-Rollers	95
Connecting to a computer	25
Consumables	101

- D -

Daily cleaning	92
Desktop ADF/flatbed scanner	100
DIP switch	26
Documents	
-Capacity	47
-Placing	48
-Type	46
Document eject tray	14, 49
Document set indicator	49
Document feeder tray	14
Display Contrast Mode	71

- E -

Enter key	71
Error messages	83
Event function	60
Exterior dimensions	102

- F -

Features of DR-7080C	12
Feeder	16
-Document eject tray	16
-Document feeder tray	16
-Document set indicator	16
-Feeder cover	16
-Opening lever	16
-Slide guide	16
Ferrite Core	15
File separation	64
Flatbed	17, 50
-Opening sensor	17
-Platen glass	17
-Power switch	17
-Pressure board (Black)	17

- I -

Installation location	7
ISIS/TWAIN drivers	36
-How to display the ISIS/TWAIN driver Help file	39
-Installation	37

- J -

Job function	20
Job key	59
Job Mode	59
Job Registration Tool	36

- L -

Long Document Mode	70
Load limitation mark	47

- M -

Messages	83
----------------	----

- N -

New File key	19
--------------------	----

- O -

Operating environment	24
Operation panel	16, 19
-Enter key	19

- Job keys 19
- Menu key 19
- New File key 19
- Set keys 19
- Start key 19
- Stop key 19
- Options 21, 101

- P -

- Panel feeding 56
- Paper jams 77
 - Clearing a paper jam 77
 - Paper jam causes 81
- Part names 16
- Patch code patterns 65
- Patch code sheets 64
 - How to use patch code sheets 66
- PATCH II 65
- PATCH T 65
- Power cord 30
- Power cord connector 18
- Power supply 8

- R -

- Rear
 - Air vents 18
 - DIP switch 18
 - SCSI connectors 18
 - Power cord connector 18
- Recommended SCSI cards 25
- Recommended USB 2.0 interface cards 29
- Recognizing the scanner 32
- Rubber roller 96

- S -

- Safe operation 5
- Scan procedure 54
 - Automatic feeding 57
 - Panel feeding 56
 - Standard feeding 55
- SCSI cable 26
- SCSI cards 25
- SCSI connections
 - Connecting to a computer 25
 - Operating environment 24

- SCSI connectors 25
- SCSI ID 26
- SCSI Transfer Speed 29
- Set key 72
- Setup disc 14
- Slide guide 48
- Software 36
 - How to use the software 39
 - Installation 37
 - Uninstallation 43
- Specifications 100
- Stamp cartridge 90
- Stamp unit 21
- Standard feeding 55
- Stand-by Mode 70
- Start key 19
- Stop key 19

- T -

- Terminator 27
- Transportation screw 15
- Troubleshooting 86
- Turning OFF the power 34
- Turning ON the power 31

- U -

- Unpacking 14
- USB 2.0 interface cable 30
- USB 2.0 interface card 29
- USB connections
 - Connecting to a computer 25
 - Operating environment 24
- User modes 69
 - Functions 70
 - How to set the user modes 72

