

Portable Manual

Paper Deck **Side Paper Deck-X1**

Canon

Application

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


Printed in Japan

Caution

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



Symbols Used

This documentation uses the following symbols to indicate special information:

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

The following rules apply throughout this Service Manual:

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

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

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

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

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

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

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

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Chapter 1 Maintenance and Inspection

1.1 Periodically Replaced Parts

1.1.1 Periodically Replaced Parts

The machine does not have parts that require periodical replacement.



A periodically replaced part is one that must be replaced on a periodical basis to ensure a specific level of machine performance; once it fails, it can affect machine functions considerably regardless of its external appearance. If possible, schedule the replacement to coincide with scheduled servicing.

1.2 Durables

1.2.1 Consumables and Durables

Some parts of the machine may require replacement once or more during the period of machine warranty because of deterioration or damage. Replace them when they fail.

T-1-1

No.	Part name	Part number	Q'ty	Life (sheets)	Remarks
1	Pickup roller (front)	FF5-7830-000	1	500,000	Actual number checked in service mode
2	Pickup roller (rear)	FF5-7829-000	1	500,000	Actual number checked in service mode
3	Pickup/feed roller	FF6-1975-000	1	500,000	Actual number checked in service mode
4	Separation roller	FB5-6586-000	1	500,000	Actual number checked in service mode



These values are estimates only, and are subject to change based on future data.

1.3 Periodical Servicing

1.3.1 Scheduled Servicing

T-1-2

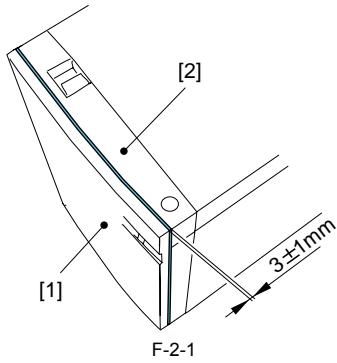
Location	Installation	Remarks
Deck feed roller	Clean	
Deck feed wheel	Clean	
Optical sensor	Clean	If high temperature/humidity, every 250,000 pages.
Prism	Clean	If high temperature/humidity, every 250,000 pages.

Chapter 2 Standards and Adjustments

2.1 Basic Adjustment

2.1.1 Position of the Front Cover

Be sure that the front cover [1] is mounted so that the gap between it and the front upper cover [2] is 3 ± 1 mm.

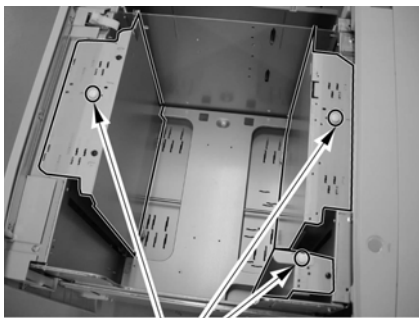


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2.1.2 Changing the Paper Size

If the paper size must be changed, perform the following:

- 1) Open the compartment, and remove all paper.
- 2) Detach the lifter sheet.
- 3) Remove the limit plate securing screws [1] and position the right/left limit plates and the paper end limit plate according to the new paper size.

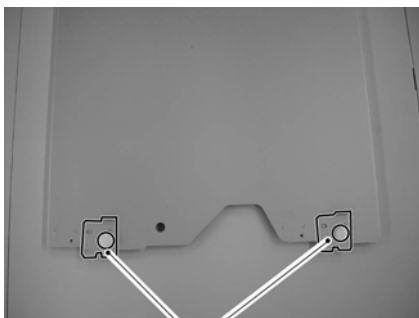


[1]

F-2-2

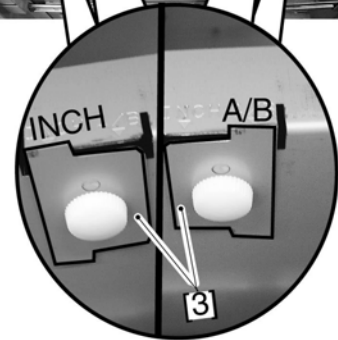
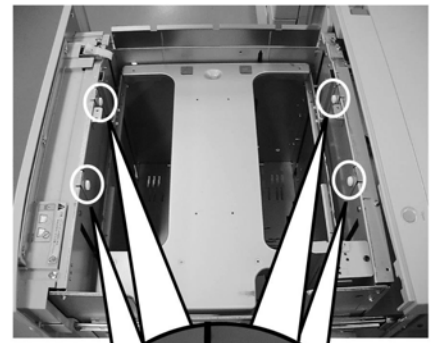


When changing the paper size from the A/B type to the inch type or changing the other way, position also the four switching plates [2] under the front/rear limit plates and four switching plates [3].



[2]

F-2-3



F-2-4

- 4) Place a lifter sheet for the new paper size on the lifer.



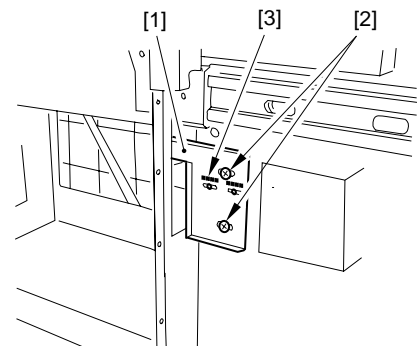
F-2-5

- 5) Set the user mode of the host machine according to the paper size (User Mode Key > Common Settings > Store Size for Side Paper Deck).

2.1.3 Adjusting the Registration

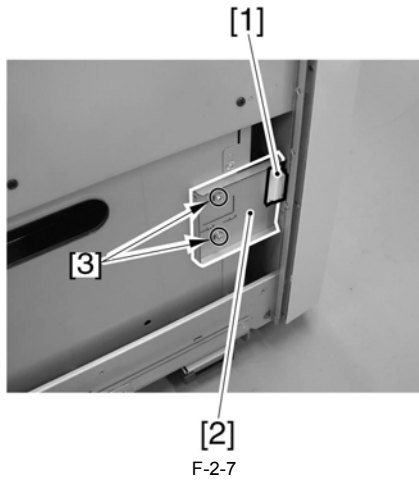
If the left/right registration (same as host machine) must be adjusted, perform the following:

- 1) Slide out the compartment, and turn the two screws [2] to adjust the position of the latch plate [1] of the compartment open solenoid (SL102). (At this time, refer to the index [3] on the latch plate to facilitate the work.)



F-2-6

- 2) Remove the front cover.
- 3) Adjust the position of the magnet mount [2] with the two screws [3] so that the magnet [1] may contact the deck rear frame when the storage is closed.

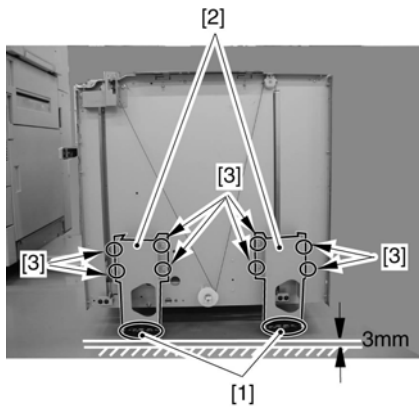


F-2-7

2.1.4 Adjusting the Position of the Roll

If the compartment cannot be opened/closed smoothly, thus requiring the adjustment of the position of the roll mounted to the machine's front, perform the following:

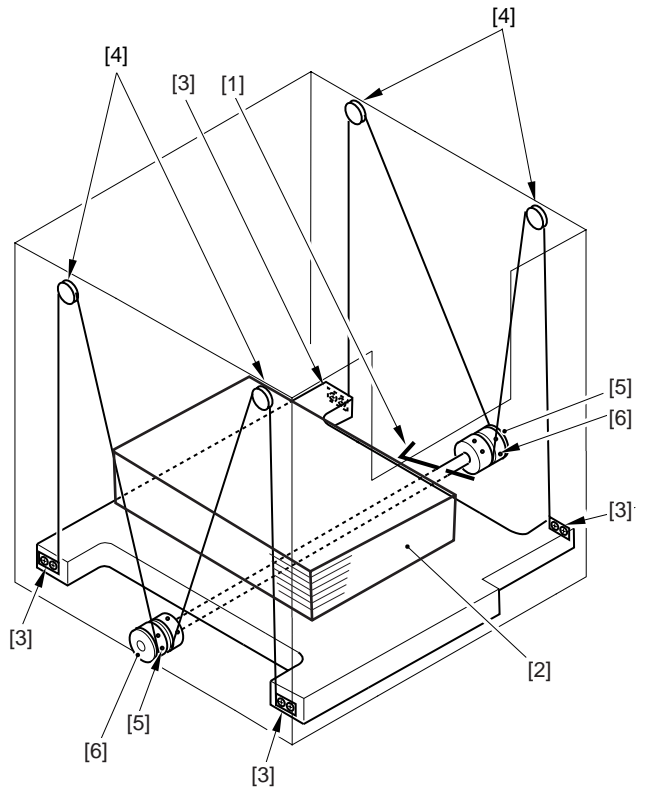
- 1) Open the compartment, and remove all paper.
- 2) Remove the front cover.
- 3) With the compartment fully slid out, turn the eight mounting screws [3] of the roll support plates [2] so that the roll [1] is about 3 mm from the floor. (At this time, refer to the index on the front side plate to facilitate the work.)



F-2-8

2.1.5 Routing the Lifter Cable

- 1) Insert the hex wrench [1] into the hole of the lifter drive shaft to fix the lifter drive shaft. (To prevent rotating)
- 2) Load papers [2] (approx. 500 sheets) on the lifter to fix the lifter.
- 3) Fix the cable fixing plate [3] to the lifter by the two screws.
- 4) Hook the lifter cable on the upper pulley [4].
- 5) Hook the ball of the lifter cable on the pulley [5] of the lifter drive shaft; then, wind it along the groove of the pulley about one time. At this time, be sure that the lifter cable is taut.
- 6) In this condition, secure the pulley to the lifter drive shaft using two set screws [6].
- 7) After securing all pulleys that have been removed to the lifter drive shaft, measure the distance from the bottom plate of the compartment to the top face of the lifter, and make sure that the lifter is level.

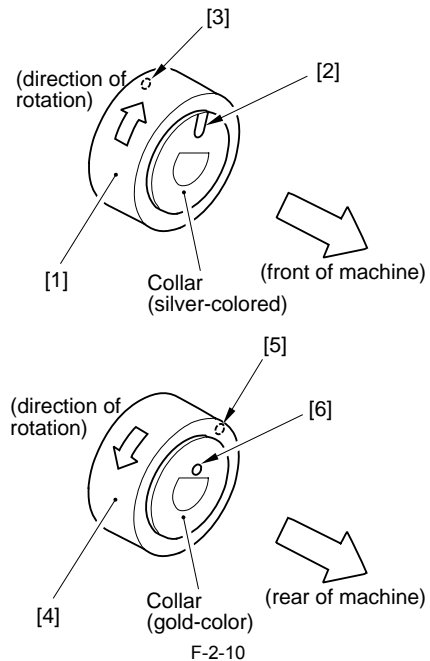


F-2-9

2.1.6 Orientation of the Deck Pickup Roller

When mounting the deck pickup roller [1] to the machine's front, be sure that the marking [2] on the collar (silver) is toward the front and the marking [3] on the side of the roller is toward the rear.

When moving the deck pickup roller [4] at the machine's rear, on the other hand, be sure that the marking [5] on the side of the roller and the marking [6] on the collar (silver) are toward the rear.

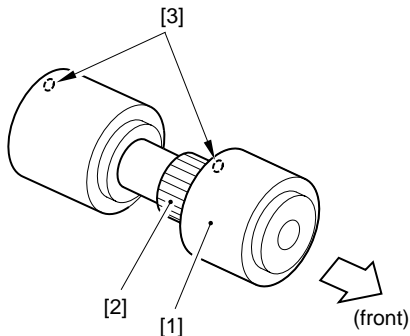


F-2-10

2.1.7 Orientation of the Deck Pickup/Feed Roller

When mounting the deck pickup/feed roller [1], be sure that the belt pulley [2] is toward the front.

When mounting the roller rubber to the roller shaft, be sure that the marking [3] is toward the rear.

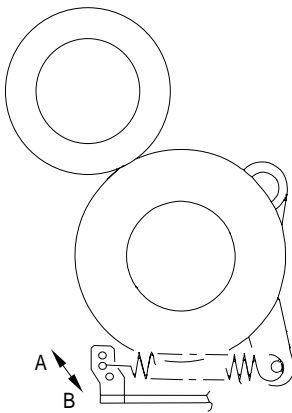


F-2-11

2.1.8 Adjusting the Pressure of the Deck Separation Roller

If pickup failure or double feeding occurs when the pickup is from the machine, change the location of the pressure spring of the deck separation roller, thereby adjusting the roller nip:

- If pickup failure occurs, move the spring in the direction of the arrow A.
- If double feeding occurs, move the spring in the direction of the arrow B.

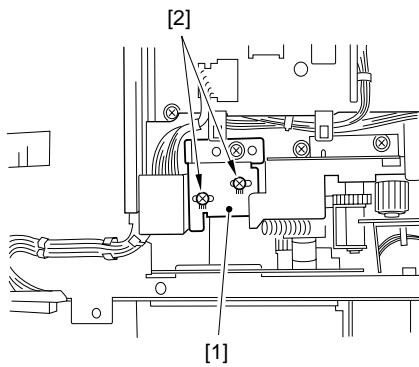


F-2-12

2.1.9 Position of the Deck Pickup Roller Release Solenoid (SL101)

Before removing the deck pickup roller release solenoid [1] from its support plate, take note of the positions of the two fixing screws [2] of the solenoid with reference to the index on the support plate. Or, mark the position of the solenoid on the support plate with a scribe.

If the solenoid must be mounted on its own, be sure to secure it in place where it was initially found.



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Chapter 3 Error Code

3.1 Overview

3.1.1 Outline

The machine communicates its state to its host machine as needed for diagnosis by the host machine' CPU. The host machine will indicate a code on its control panel upon detection of an error, the nature of which may be checked in the host machine' service code. The following table shows the applicable codes and faults associated with them together with the timing of detection:

3.1.2 Error Code

E043

T-3-1

Code	Cause	Description
E043	The deck main motor (M101) is faulty. The deck driver PCB is faulty. The host machine is faulty.	After the deck main motor drive signal has been generated, the PLL lock signal (DMPLK) remains '1' for 2 sec or more.

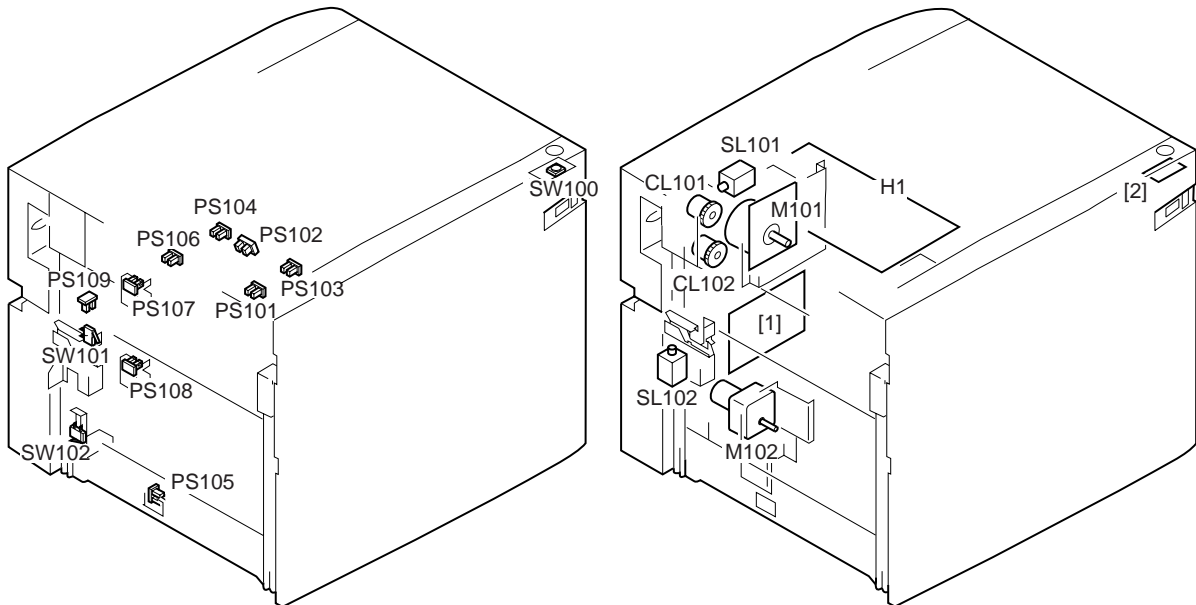
Chapter 4 Outline of Components

4.1 Outline of Electrical Components

4.1.1 Arrangement of Electric Parts

T-4-1

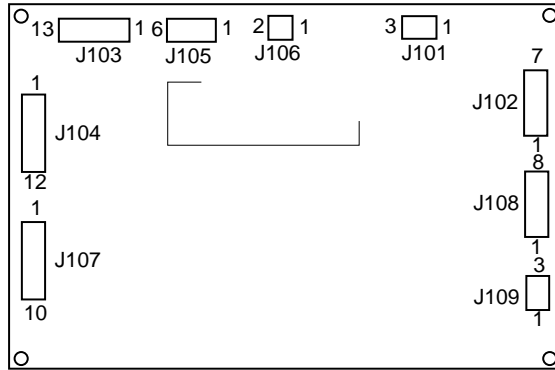
Notation	Name
PS101	Deck pickup sensor
PS102	Deck paper sensor
PS103	Deck lifter upper limit sensor
PS104	Deck lifter position sensor
PS105	Deck set sensor
PS106	Deck feed sensor
PS107	Deck paper supply position sensor
PS108	Deck paper level sensor
PS109	Compartment open sensor
SW100	Compartment open switch
SW101	Compartment open detecting switch
SW102	Deck lifter lower limit detecting switch
M101	Deck main motor
M102	Deck lifter motor
CL101	Deck feed clutch
CL102	Deck pickup clutch
SL101	Deck pickup roller release solenoid
SL102	Compartment open solenoid
H1	Deck heater (accessory)
[1]	Deck driver PCB
[2]	Open switch PCB



F-4-1

4.2 Variable Resistors (VR), Light-Emitting Diodes (LED), and Check Pins by PCB

4.2.1 Deck Driver PCB



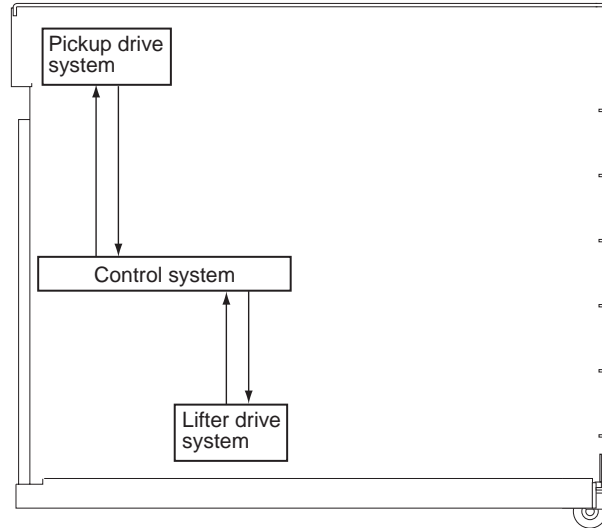
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Chapter 5 System Construction

5.1 Basic Construction

5.1.1 Functional Construction

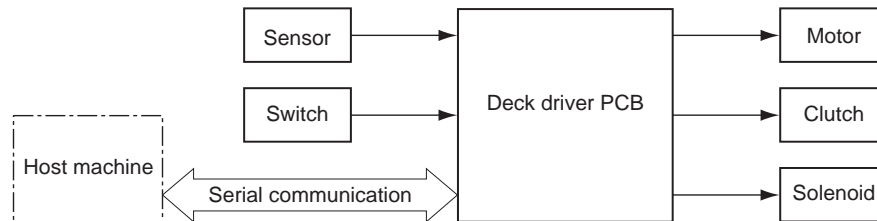
The machine may be divided into three functional blocks: lifter drive system, pickup drive system, and control system.



F-5-1

5.1.2 Outline of Electrical Circuitry

The machine's electric mechanisms are driven by the deck driver PCB.



F-5-2

5.2 Product Specifications

5.2.1 Specifications

T-5-1

Item	Description
Pickup method	Clawless (retard) method
Paper accommodation	Side tray method
Paper type	- Plain paper (64 to 90 g/m ²) - Cardboard (90 to 200 g/m ²)
Paper size	A3, B4, A4, B5, A4R, 279x432 mm (11x17), LGL, LTR, LTRR
Capacity	Stack high: 375.5 mm (approx. 3500 sheets of 80 g/m ² paper)
Paper size switching	By size guide plate in steps and input in user mode
Dimensions	593 (W) X 621 (D) X 574.5 (H) mm
Weight	46 kg (approx.)
Power supply	DC power supplied by host machine
[Operating Environment] Temperature/Humidity/Atmospheric pressure	Same as host machine

The above specifications are subject to change for product improvement.

Feb 7 2006

