

Portable Manual

Paper Deck

Paper Deck-V1

Canon

Feb 21 2005

Application

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

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Caution

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

Symbols Used

This documentation uses the following symbols to indicate special information:

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

The following rules apply throughout this Service Manual:

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

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

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

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

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

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

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

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Chapter 1 Maintenance and Inspection

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1.1 Periodically Replaced Parts

1.1.1 Periodically Replaced Parts

0009-2147

The Side Paper Deck-V1 does not have parts that must be replaced on a periodical basis.

1.2 Durables

1.2.1 Durables

0009-2148

Some parts of the machine may need replacement once or more over the period of product warranty because of wear or damage. Replace them as necessary by referring to the following table.

T-1-1

No.	Parts name	Parts number	Q'ty	Life (sheets)	Remarks
[1]	Pickup roller (front)	FF5-1220-000	1	250,000	the actual number of copies made
[2]	Pickup roller (rear)	FF5-1221-000	1	250,000	the actual number of copies made
[3]	Pickup/feed roller	FF5-9779-000	1	250,000	the actual number of copies made
[4]	Separation roller	FB2-7777-020	1	250,000	the actual number of copies made

 The above values are estimates only and are subject to change based on future data.

1.3 Periodical Servicing

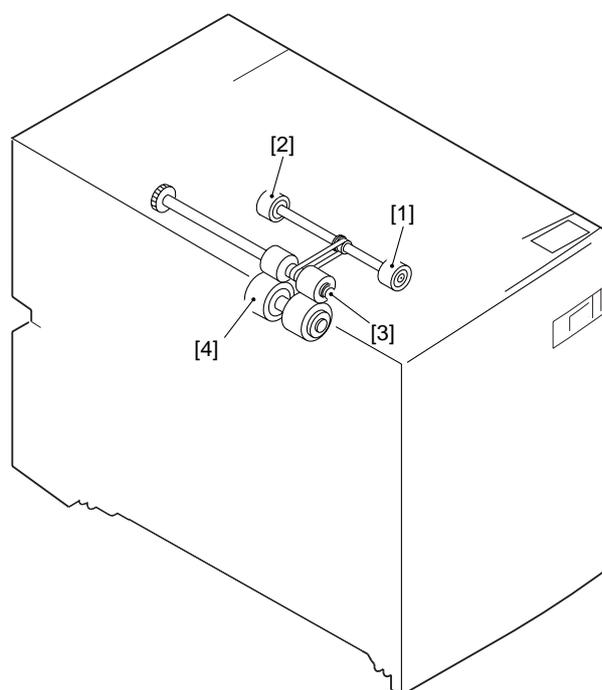
1.3.1 Periodical Servicing

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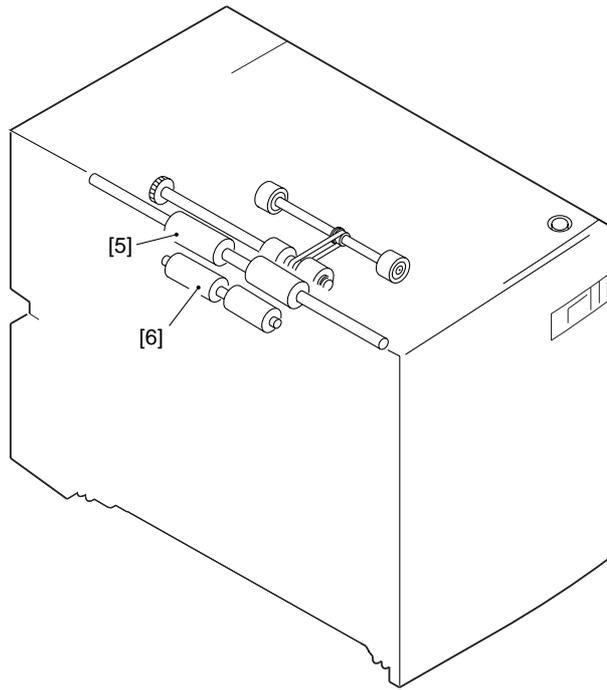
T-1-2

Ref.	Parts name	Periodical servicing	Remarks
250,000			
1	pickup roller (front)	replace	
2	pickup roller (rear)	replace	
3	pikcup/feed roller	replace	
4	separation roller	replace	
5	Vertical path roller	clean	
6	Vertical path collar	clean	

The following figure shows the locations of the parts that require scheduled servicing:



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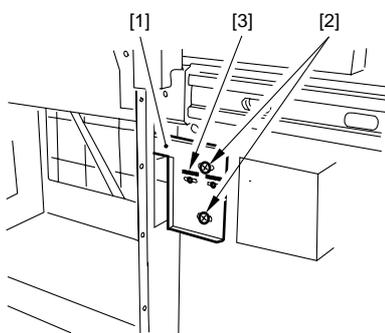
2.1 Basic Adjustment

2.1.1 Adjusting the Registration

0009-4816

If the left/right registration (0 +/- 1.5 mm) must be adjusted, perform the following:

1) Slide out the compartment, and adjust the position of the latch plate [1] of the deck open solenoid by turning the two screws [2]. (Use the scale [3] on the latch plate as a guide)



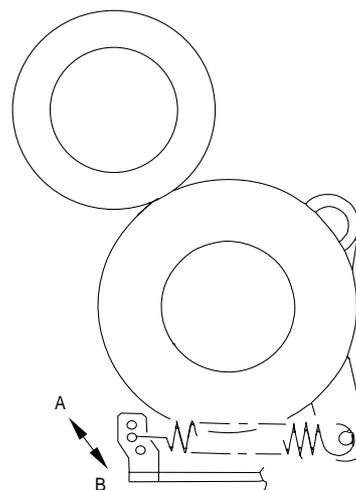
F-2-1

2.1.2 Adjusting the Pressure of the Deck Separation Roller

0009-4915

If pickup faults or double feeding occurs when the deck is used as the source of paper, relocate the pressure spring [2] of the deck separation roller [1]:

- if pickup faults occur, move the spring in the direction of arrow A.
- if double-feeding occurs, move the spring in the direction of arrow B.



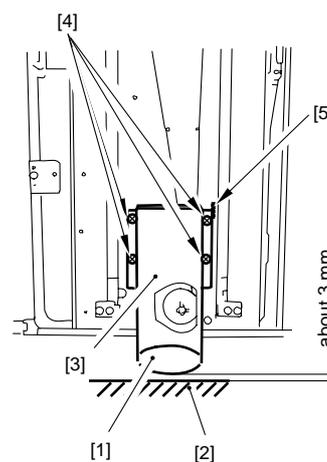
F-2-2

2.1.3 Adjusting the Position of the Roll

0009-4916

If the compartment cannot be opened/closed smoothly, requiring adjustment of the roll located at the front of the deck, perform the following:

- 1) Remove the front cover.
- 2) Slide out the compartment fully to the front of the paper deck. Then, secure the roller support plate [3] in place with 4 screws [4] so that the roller [1] is about 3 mm (A) from the floor. (At this time, use the index [5] on the front side plate as a reference.)



F-2-3

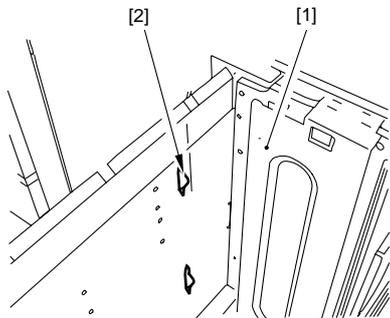
2.1.4 Switching the Paper

Size of the Deck

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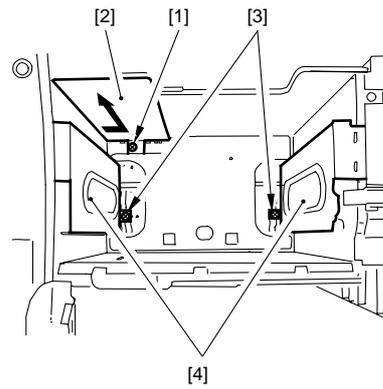
If the deck paper size configuration must be changed to suit the needs of the user, perform the following:

- 1) Open the compartment [1] of the paper deck, and remove all copy paper.
- 2) If the lifter of the paper deck is in up position, turn on the host machine's power switch, and push the lever of the paper supply level sensor [2] inside the compartment so that the lifter will move down to its lower limit.



F-2-4

- 3) Remove the screw [1], and move the paper trailing edge guide plate [2] to suit the new paper size; then secure it in place with a screw. (The rear end guide plate will not be used for LTR size. The paper sizes are marked on the bottom deck.)
- 4) Detach the front cover of the paper deck.
- 5) Remove the screws (one each) [3], and mount the left right guide plates [4] to suit the new paper size.
- 6) Mount the front cover of the paper deck.
- 7) Set COPIER>OPTION>ACC>DK-P in the host machine's service mode.(0:A4, 1:B5, 2:LTR)



F-2-5

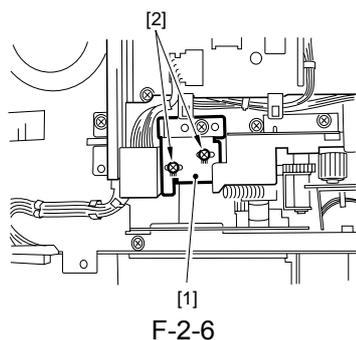
2.2 Adjustment at Time of Parts Replacement

2.2.1 Adjusting the Position of the Deck Pickup Roller Releasing Solenoid (SL101)

0009-2155

Take note of the positions of the two fixing screws [2] of the solenoid with reference to the index on the support plate before removing the deck pickup roller releasing solenoid [1] from the support plate; or, mark the position of the solenoid on the support plate with a scribe.

If the solenoid is to be mounted on its own, be sure to locate it in its initial position.



F-2-6

2.2.2 Stringing the Lifter

Cable

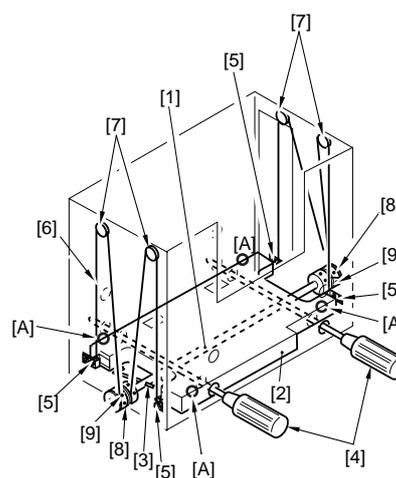
0009-4912

- 1) Check to make sure that the lifter drive shaft [1] and the lifter [2] are fixed in place using a hex wrench [3] and 2 long screwdrivers [4], respectively.
- 2) Fix the 4 cable fixing plates [5] in place to the lifter using 2 screws each.
- 3) Hook the lifer cable [6] on the 4 pulleys [7] above.
- 4) Hook the ball of the lifter cable on the 2 front/rear pulleys [8] of the lifter drive shaft; then, wind it about 1.5 times along the groove of the pulley.

At this time, be sure to keep the lifter cable taut so that the long drivers used to keep the lifter are slightly

lifted by the cable.

- 5) Fix the 2 pulleys [5] in place to the lifter drive shaft with a set screw [9] (1 pc. each).
- 6) Fit all removed pulleys to the lifter shaft; then, measure the height A from the base plate of the compartment to the top face of the lifter, thus making sure that the lifter is level.



F-2-7

2.2.3 Points to Note When Mounting the Deck Pickup Roller

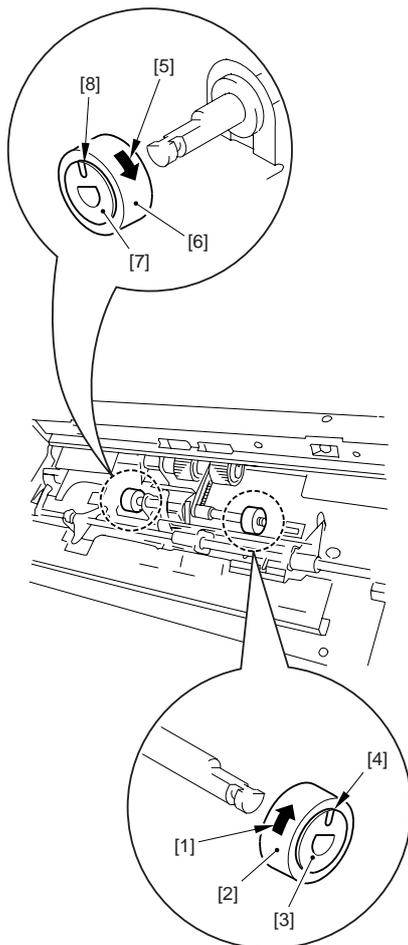
0009-4911

Front of the Machine (collar [3]; silver-colored)

It has its own direction of rotation [1]; when mounting the deck pickup roller [2] to the front of the machine, be sure that the marking [4] found on the collar [3] is to the front of the machine.

Rear of the Machine (collar [7]; gold-cover)

It has its own direction of rotation [6]; when mounting the deck pickup roller [6] to the rear of the machine, be sure that the marking [8] found on the collar [7] is to the rear of the machine.

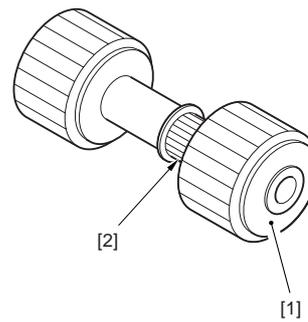


F-2-8

2.2.4 Points to Note When Mounting the Deck Pickup/Feed Roller

0009-4910

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

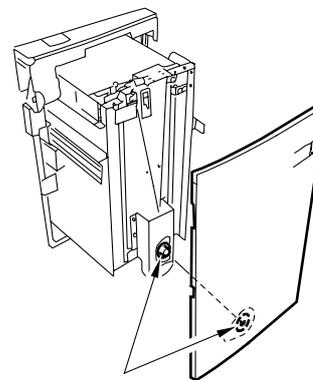


F-2-9

2.2.5 Points to Note When Mounting the Front Cover

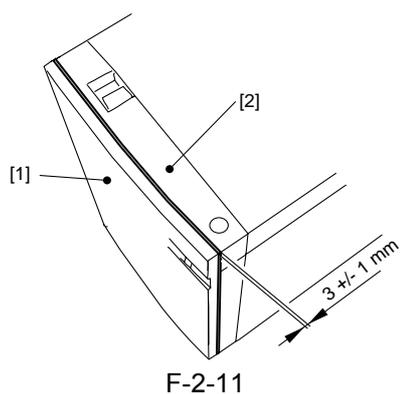
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⚠ When mounting the front cover to the deck, be sure to match it against the coupling for the paper level indicator.



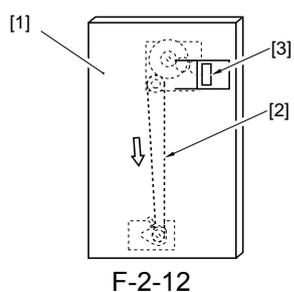
F-2-10

⚠ Be sure to mount the front cover [1] so that the gap between the front over [1] and the upper front cover [2] is 3 +/-1 mm.



⚠ If you inadvertently moved the paper level indicator belt [2] behind the front cover [1] when removing the front cover, or moved the deck lifter, move the deck lifter to its lower limit, and then move the arrow (shown in the figure to the right) until it stops so that the area [3] of white increase; then, mount the front cover.

(If the deck is operated without matching the paper level indicator and the deck lifter position, the drive mechanisms of the paper level indicator can suffer damage.)



Chapter 3 Outline of Components

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3.1 Outline of Electrical Components

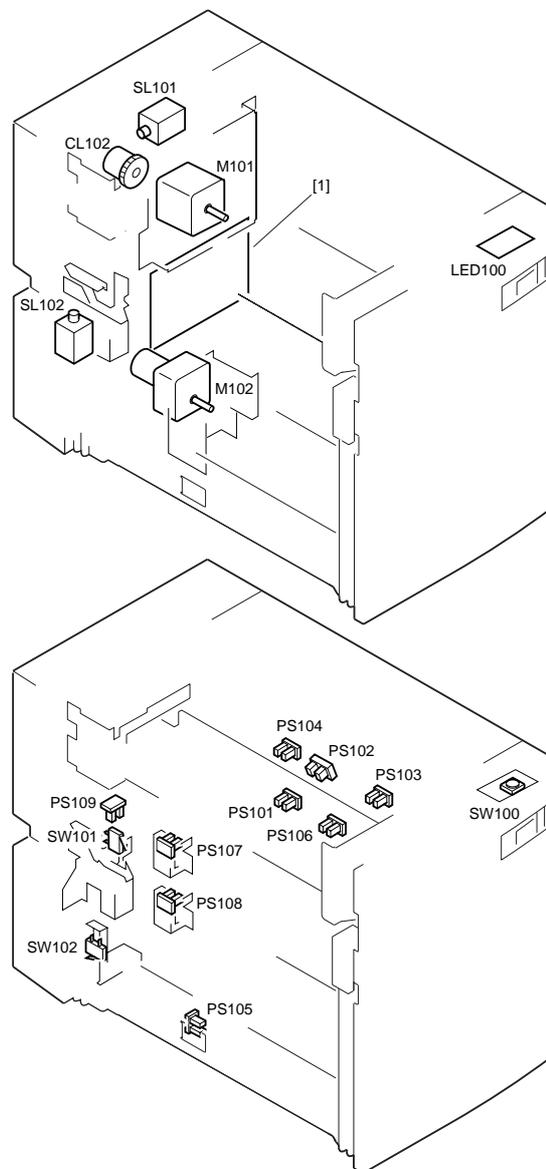
3.1.1 Sensor, Motor, Clutch, Solenoid, PCB, Others

0009-2156

T-3-1

Notation	Name	Parts No.	PART-CHK	Connector No.
M101	Deck main motor	FK2-1156	MTR>1 1	J01
M102	Deck lifter motor	FK2-0262	MTR>2 9	J08
CL102	Deck pickup clutch	FH7-5826	CL>3	J05
SL101	Deck pickup roller releasing solenoid	FK2-0126	SL>6	J05
SL102	Deck open solenoid	FK2-0127		J09
SW101	Deck open detecting switch	WC4-5153		J10
SW102	Deck lifter lower limit detecting switch	WC4-0153		J08
SW100	Deck open switch	FM2-0856		J04
LED100	Deck open indicator	FM2-0856		J04
PS101	Deck feed sensor	FK2-0149		J05
PS102	Deck paper sensor	FK2-0149		J04
PS103	Deck lifter upper limit sensor	FK2-0149		J04
PS104	Deck lifter position sensor	FK2-0149		J04
PS105	Deck set sensor	FK2-0149		J09
PS106	Deck pickup sensor	FK2-0149		J05

Notation	Name	Parts No.	PART-CHK	Connector No.
PS107	Deck paper supply position sensor	FK2-0149		J08
PS108	Deck paper level sensor	FK2-0149		J08
PS109	Deck open sensor	FK2-0149		J09
[1]	Deck driver PCB	FM2-4553		



F-3-1

Chapter 4 System Construction

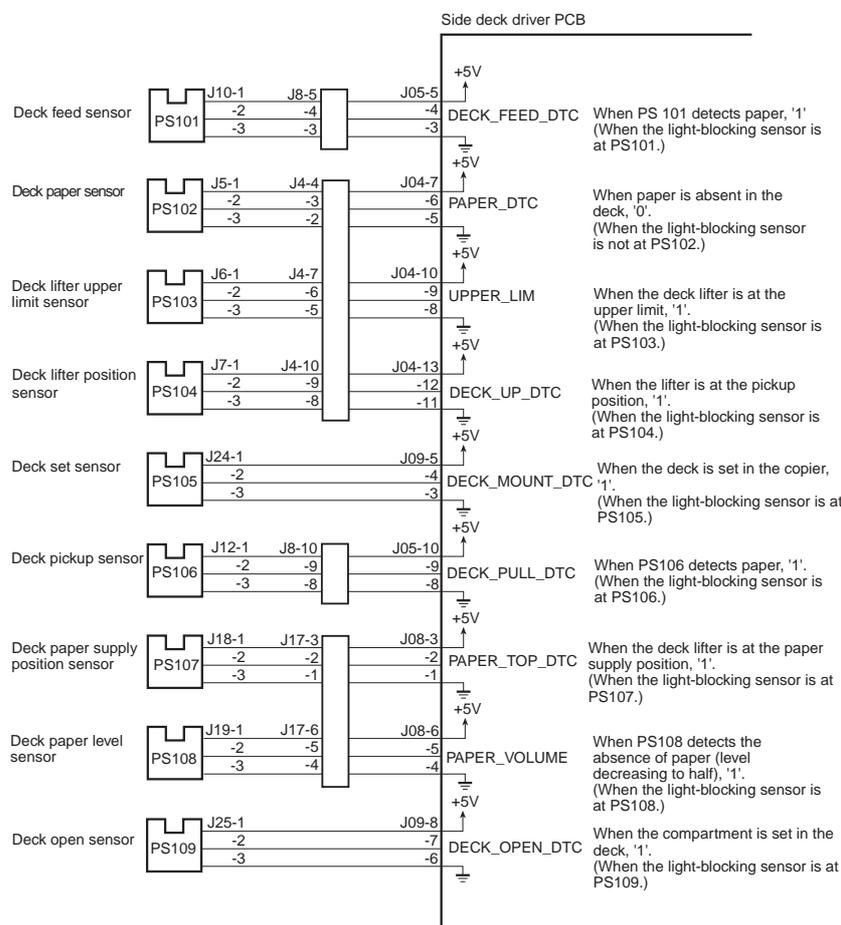
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4.1 Basic Construction

4.1.1 Inputs to the Side Paper Deck (1/2)

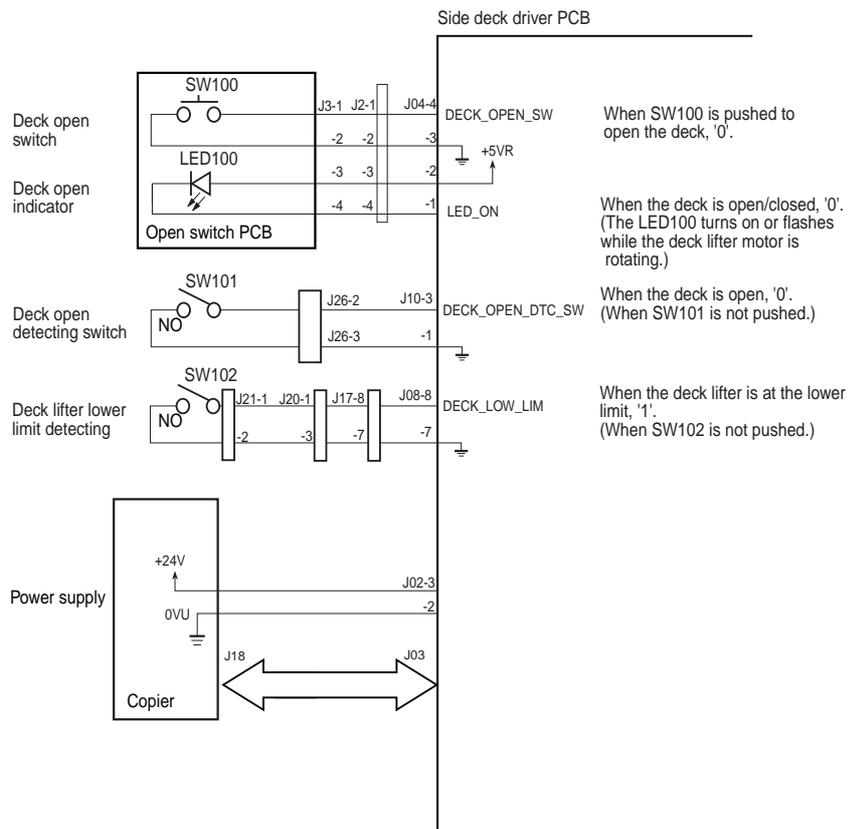
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F-4-1

4.1.2 Inputs to the Side Paper Deck (2/2)

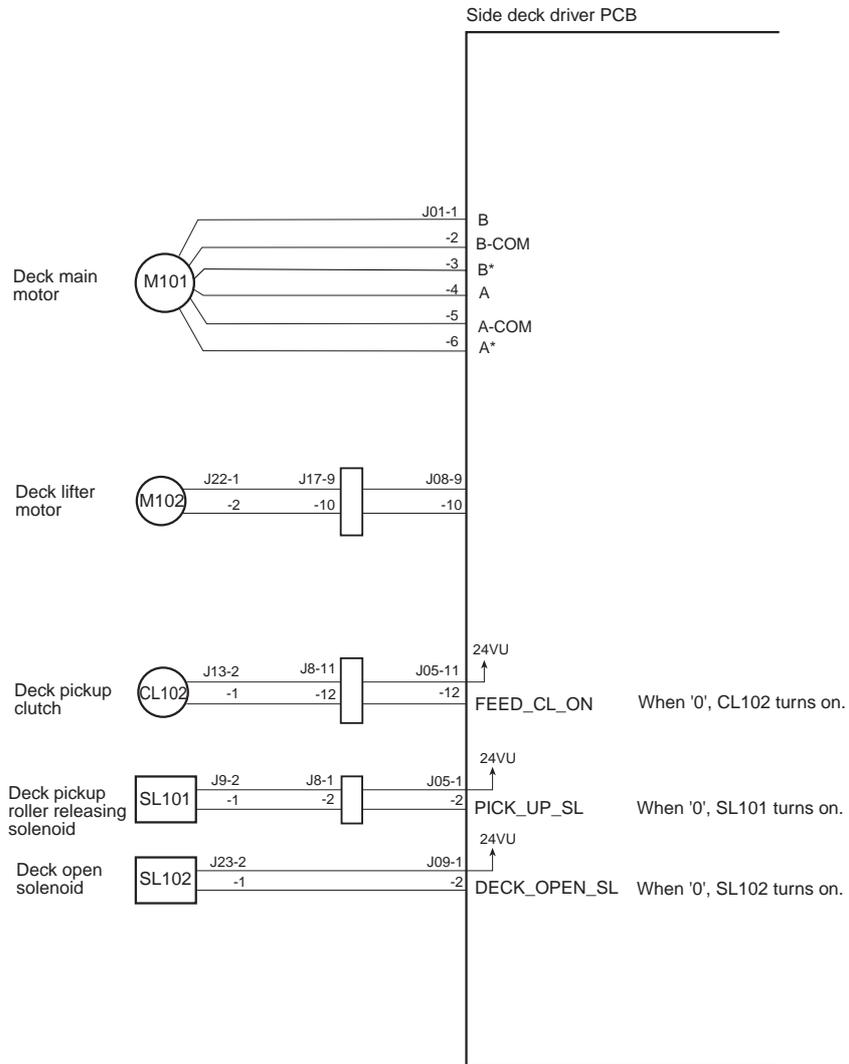
0009-2045



F-4-2

4.1.3 Outputs from the Side Paper Deck (1/1)

0009-2046



F-4-3

4.2 Product Specifications

4.2.1 Specifications

0009-2042

T-4-1

Item	Specifications
Pickup	Clawless (retard)
Paper accommodation	Side tray
Copy paper type	Plain paper (64 to 90 g/m ²), thick paper (91 to 200g/m ²), colored paper, recycled paper, eco paper
Reproduction size	A4, B5, LTR
Paper stack	Height: 385 mm (approximate height of stack; about 3,500 sheets of 80 g/m ²)
Paper size switch	By size guide plate (in steps), in service mode (OPTION)
Dimensions	323 (W) x 583 (D) x 574 (H) mm/ 12.7 (W) x 23.0 (D) x 22.6 (H) in
Weight	46 kg (approx.)/101.4 lb (approx.)
Power supply	DC from host machine
Operating environment	Same as host machine

The specifications are subject to change for product improvement.

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