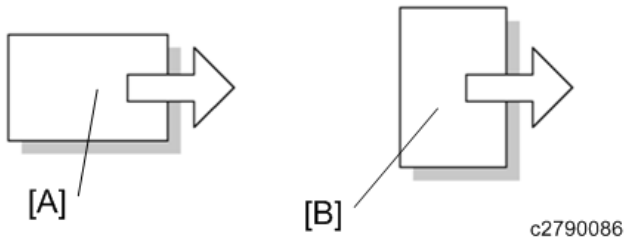
LCIT RT5130
Machine Code: D3GB
Field Service Manual
Ver 1.0

Latest Release: Mar, 2019
Initial Release: Mar, 2019

Symbols, Abbreviations

This manual uses several symbols and abbreviations. The meaning of those symbols and abbreviations are as follows:

Symbol	What it means
	Clip ring
	Screw
	Connector
	Clamp
	E-ring
	Flat Flexible Cable
	Timing Belt
SEF	Short Edge Feed
LEF	Long Edge Feed
K	Black
C	Cyan
M	Magenta
Y	Yellow
B/W, BW	Black and White
FC	Full color



[A] Short Edge Feed (SEF)

[B] Long Edge Feed (LEF)

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1. Overview and Components

Basic Specifications

Items	Specification
Power consumption	210 W (Power supplied from the main unit)
Dimensions (W × D × H)	540 × 730 × 1,000 mm (21.3 × 28.8 × 39.4 inches) (Except protruding parts)
Weight	106 kg (233.7 lb.) or less

Paper Specifications

LCT (Trays 4 and 5)

Paper Type and Weight	Paper Size	Paper Capacity
52.3–216.0 g/m2 (14.0 lb. Bond–79.9 lb. Cover) Paper Weight 1–Paper Weight 5	Select the paper size using the paper size selector: A4 LEF, A5 LEF/SEF, B5 JIS LEF, 8 1/2 × 11 LEF, 5 1/2 × 8 1/2 LEF/SEF	1,000 sheets
Translucent paper	A4 LEF, B5 JIS LEF	*1
Label paper*2 52.3–216.0 g/m2 (14.0 lb. Bond–79.9 lb. Cover) Paper Weight 1–Paper Weight 5	A4 LEF, 8 1/2 × 11 LEF	*1
Transparencies	A4 LEF, 8 1/2 × 11 LEF	*1
Tab stock*3 52.3–216.0 g/m2 (14.0 lb. Bond–79.9 lb. Cover) Paper Weight 1–Paper Weight 5	A4 LEF, 8 1/2 × 11 LEF	*1

*1 Do not stack paper over the limit mark. The maximum number of sheets you can set at once depends on the paper's thickness and condition.

*2 You can load paper into Tray 5 only.

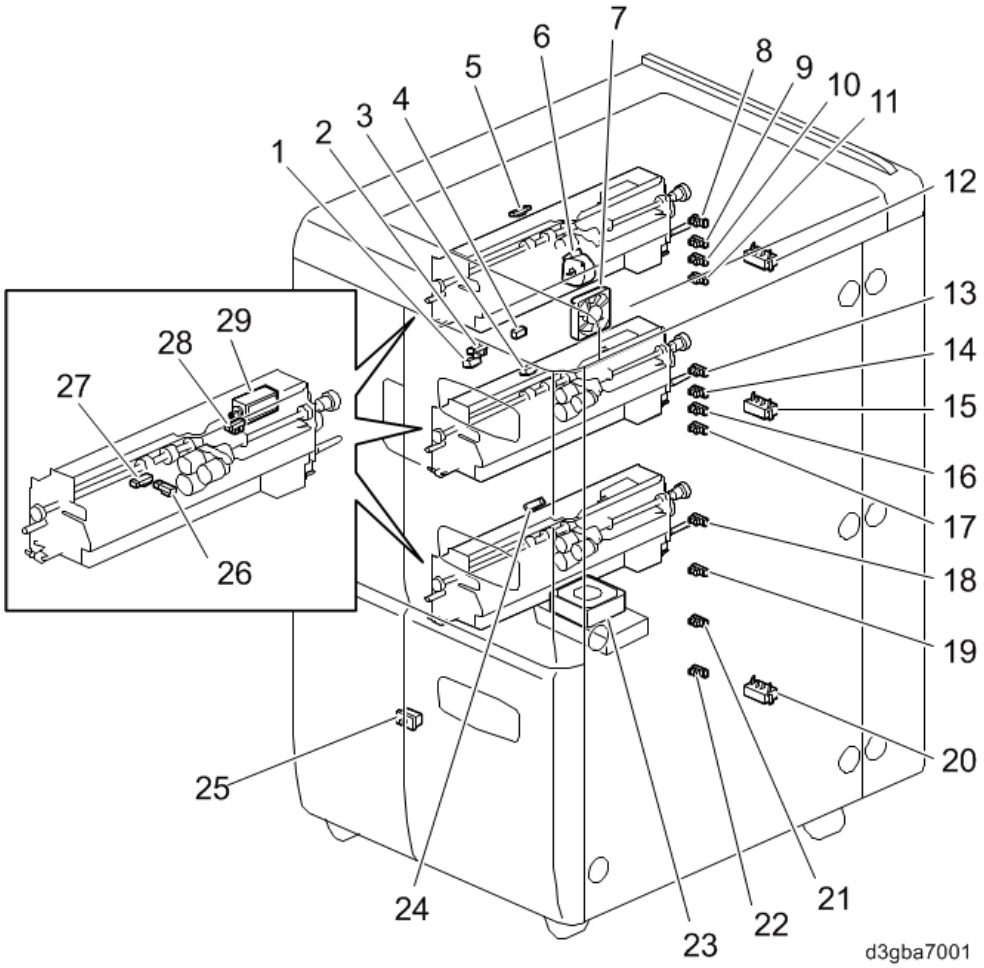
*3 The tab sheet holder is required.

LCT (Tray 6)

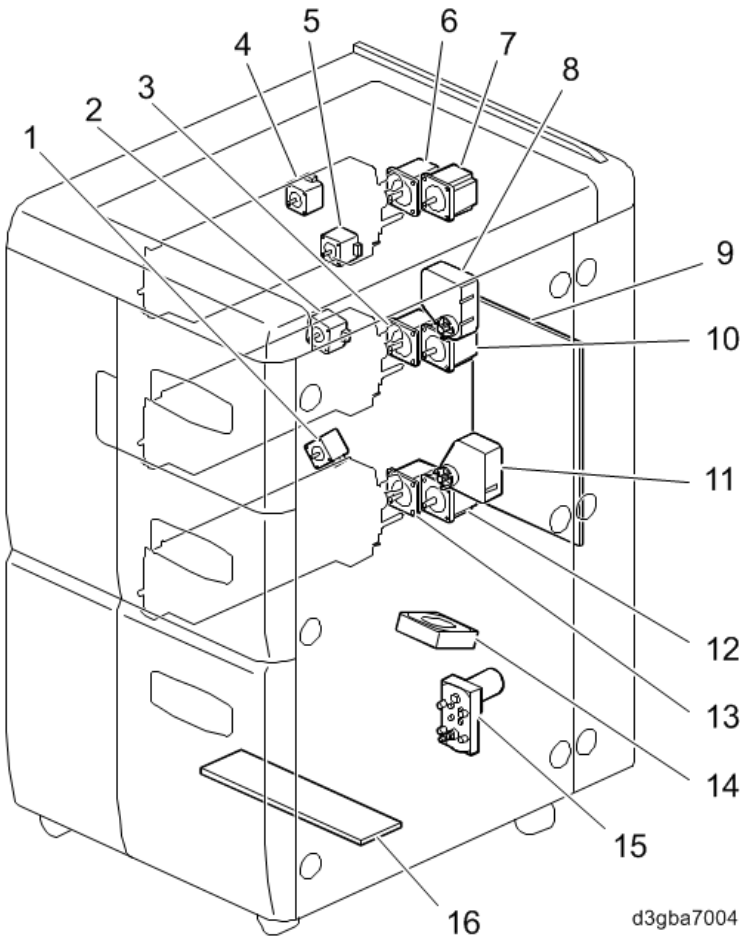
Paper Type and Weight	Paper Size	Paper Capacity
52.3–163.0 g/m2 (14.0 lb. Bond–60.0 lb. Cover) Paper Weight 1–Paper Weight 4	• Mainly Europe and Asia: A4 LEF • Mainly North America: 8 1/2 × 11 LEF	2,550 sheets
52.3–163.0 g/m2 (14.0 lb. Bond–60.0 lb. Cover) Paper Weight 1–Paper Weight 4	• Mainly Europe and Asia: A5 LEF/SEF, B5 JIS LEF, 8 1/2 × 11 LEF, 5 1/2 × 8 1/2 LEF/SEF • Mainly North America: A4 LEF, A5 LEF/SEF, B5 JIS LEF, 5 1/2 × 8 1/2 LEF/SEF	2,550 sheets
Translucent paper	A4 LEF, B5 JIS LEF	*1
Transparencies	A4 LEF, 8 1/2 × 11 LEF	*1

*1 Do not stack paper over the limit mark. The maximum number of sheets you can set at once depends on the paper's thickness and condition.

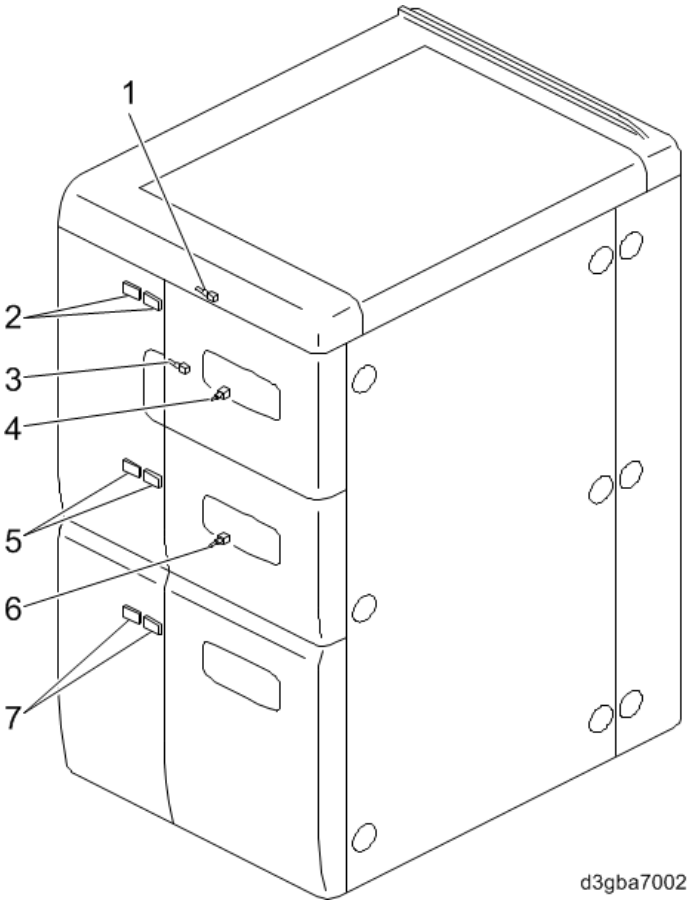
Electrical Component and Drive Layout



No.	Name	No.	Name
1	Exit Sensor	16	Tray 5th Paper Height Sensor 3
2	Release HP Sensor	17	Tray 5th Paper Height Sensor 4
3	Tray 5th Transport Sensor	18	Tray 6th Paper Height Sensor 1
4	Relay Sensor	19	Tray 6th Paper Height Sensor 2
5	Tray 4th Transport Sensor	20	Tray 6th Paper Size Switch
6	LCT Exit Separation Motor	21	Tray 6th Paper Height Sensor 3
7	LCT Cooling Fan 2	22	Tray 6th Paper Height Sensor 4
8	Tray 4th Paper Height Sensor 1	23	LCT Cooling Fan 3
9	Tray 4th Paper Height Sensor 2	24	Tray 6th Transport Sensor
10	Tray 4th Paper Height Sensor 3	25	Door Safety Switch
11	Tray 4th Paper Height Sensor 4	26	Paper End Sensor
12	Tray 4th Paper Size Switch	27	Paper Feed Sensor
13	Tray 5th Paper Height Sensor 1	28	Lift Sensor
14	Tray 5th Paper Height Sensor 2	29	Pick-up Solenoid
15	Tray 5th Paper Size Switch		

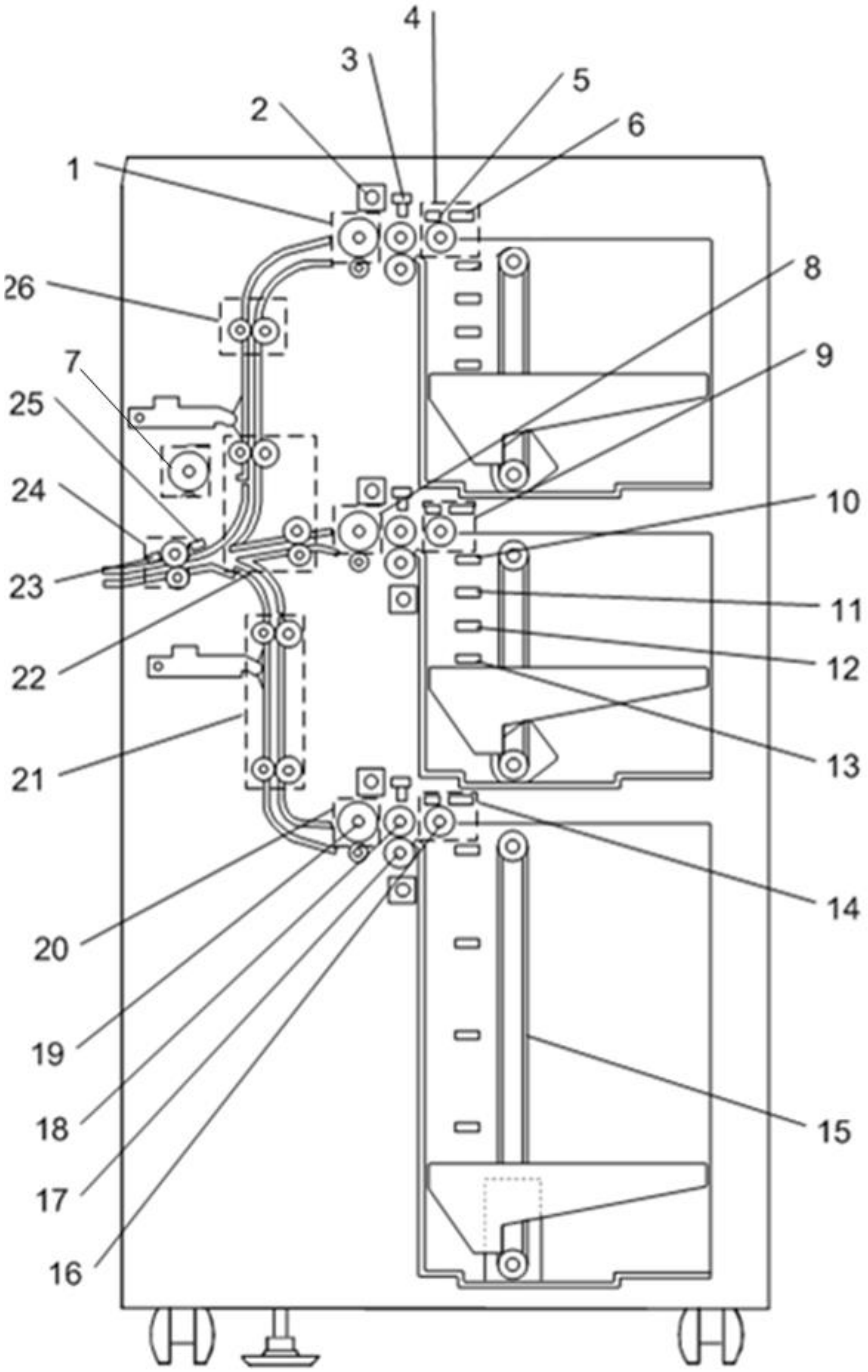


No.	Name	No.	Name
1	Tray 6th Vertical Transport motor	9	Main Controller Board
2	Tray 5th Vertical Transport motor	10	Tray 5th Paper Feed Motor
3	Tray 5th Transport Motor	11	Tray 5th Lift Motor
4	Tray 4th Vertical Transport motor	12	Tray 6th Paper Feed Motor
5	LCT Exit Motor	13	Tray 6th Transport Motor
6	Tray 4th Transport Motor	14	LCT Cooling Fan 1
7	Tray 4th Paper Feed Motor	15	Tray 6th Lift Motor
8	Tray 4th Lift Motor	16	Anti-Condensation Heaters (Option)



No.	Name	No.	Name
1	Tray 4th Paper Feed Unit LED	5	Tray 5th _LED1,2
2	Tray 4th _LED1,2	6	Tray 6th Paper Feed Unit
3	LCT Exit LED	7	Tray 6th _LED1,2
4	Tray 5th Paper Feed Unit LED	-	-

Structural Overview



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No.	Name	No.	Name
1	Tray 4th Transport Motor	14	Tray 6th Paper Feed Motor
2	Pick-up Solenoid	15	Tray Driving Belt
3	Lift Sensor	16	Pickup Roller
4	Tray 4th Paper Feed Motor	17	Separation Roller
5	Paper Feed Sensor	18	Paper Feed Roller

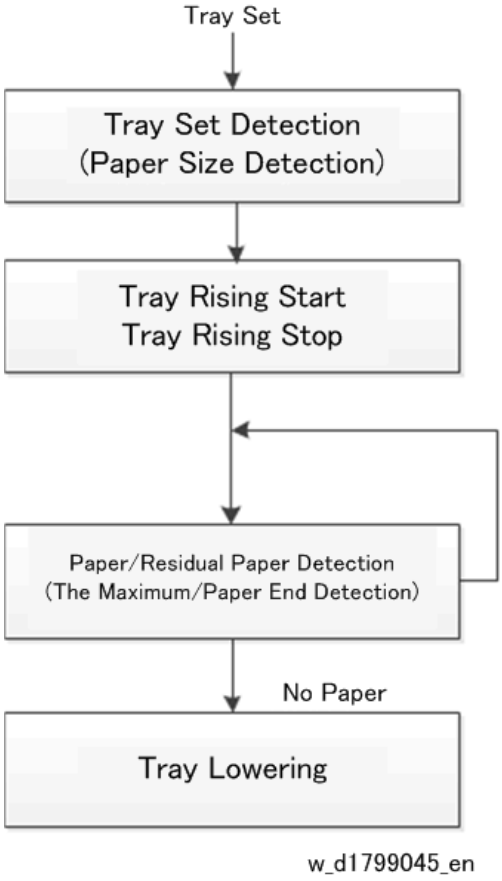
No.	Name	No.	Name
6	Paper End Sensor	19	Grip Roller
7	LCT Exit Separation Motor	20	Tray 6th Transport Motor
8	Tray 5th Transport Motor	21	Tray 6th Vertical Transport Motor
9	Tray 5th Paper Feed Motor	22	Tray 5th Vertical Transport Motor
10	Paper Height Sensor 1	23	Release HP Sensor
11	Paper Height Sensor 2	24	LCT Exit Motor
12	Paper Height Sensor 3	25	Exit Sensor
13	Paper Height Sensor 4	26	Tray 4th Vertical Transport Motor

Mechanism Overview

Mechanism	Description
Paper Feed/Separation	RR system with non-contact magnet type maintenance-free torque limiter
Tray Set (Size) Detection	Three switches detect paper size. Paper size is fixed by the side fence. Trays 4 and 5 are determined by the movement of the detector. Tray 6 can be changed in SP mode.
Tray Lifting/ Lowering	Tray is lifted by the lift motor and timing belt. It is lowered using a free fall system.
Remaining Paper Detection	Feeler and four photo interrupters detect remaining paper.
Paper End Detection	Detected by a reflex type sensor on the upper stay.
Stepping Motor Drive	The clutch is abolished; this is now controlled by a combination of pre-feed and main feed based on imaging timing.
Dehumidification	Service option (AC, 15W×2, PTC heater)
Overloading	When the tray is overloaded, a bracket stops it from being set in.

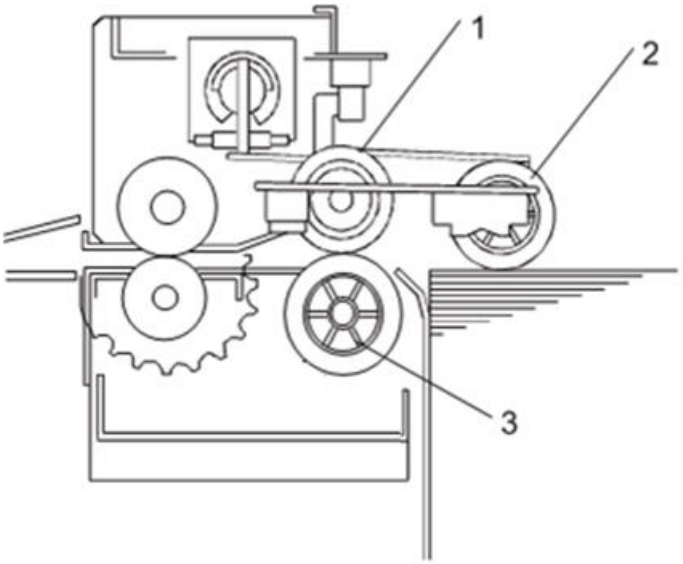
Operation Flow

LCIT RT5130 is controlled by the main machine. When the main power is turned ON, this machine detects connection. If LCIT RT5130 is connected, this machine always checks tray set and paper, and controls the movement of the LCT.



Paper Feed/ Separation Mechanism

All three trays are the same. Each has a FRR paper feed system made up of the pickup roller, the paper feed roller, and the separation roller, and a grip transport roller. There is a magnet type torque limiter at the rear of the separation roller, . The reverse pressure release mechanism releases reverse pressure when the tray is opened, and applies pressure when the tray is set.



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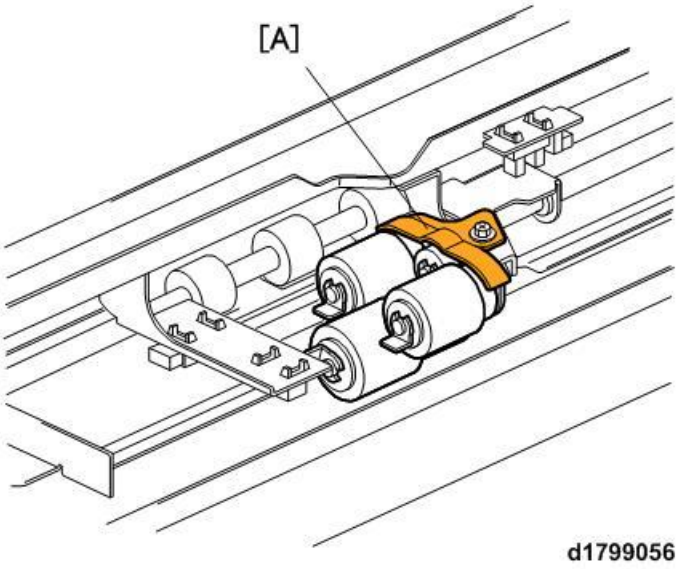
No.	Name	No.	Name
1	Paper Feed Roller	3	Separation Roller (with built-in torque limiter)
2	Pickup Roller	-	-



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[A] The Cover of the Paper Feed Roller

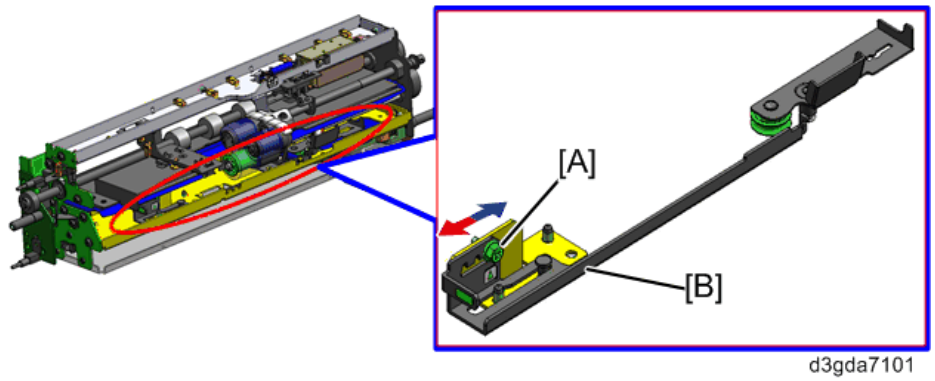
Adjusting Separation Pressure

The screw [A] is used to adjust the separation pressure for the reverse roller. Moving the adjustment plate [B] changes the pressure.

Standard position of the screw: right edge

Moving the screw to the right increases the separation pressure.

If sheets are not delivered, increasing the separation pressure is effective, but this may lead to double-feed.



Paper Feed/ Separation

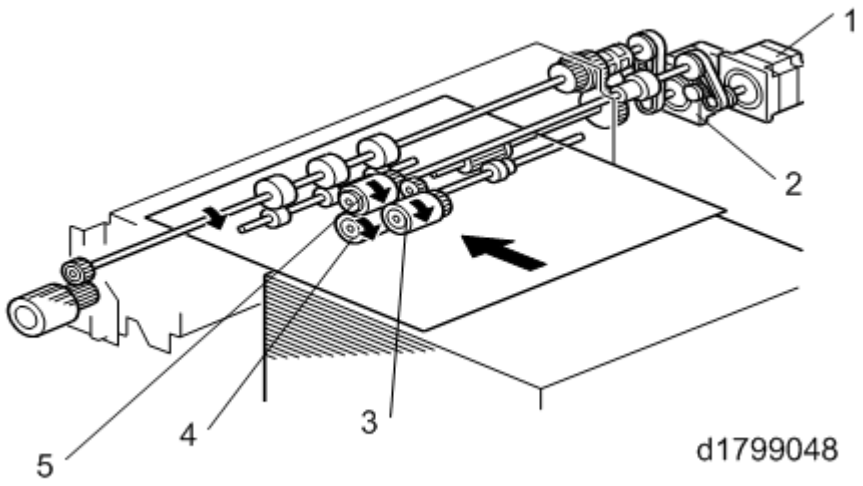
After the transport motor turns on, the pick-up solenoid turns on. The paper feed roller is driven by the paper feed motor. The pickup roller is also rotated by the relay gear, to pick up and feed the top sheet of paper. Friction against the paper feed roller exceeding the torque of the separation roller causes both the separation roller and paper feed roller to rotate.

When two or more sheets are fed, the separation roller rotates such that the second sheet is pushed back. When the paper feed sensor (reflex type sensor) detects a sheet of paper, the pick-up solenoid goes off, and then the pickup roller is raised to reduce the pressure on the paper.

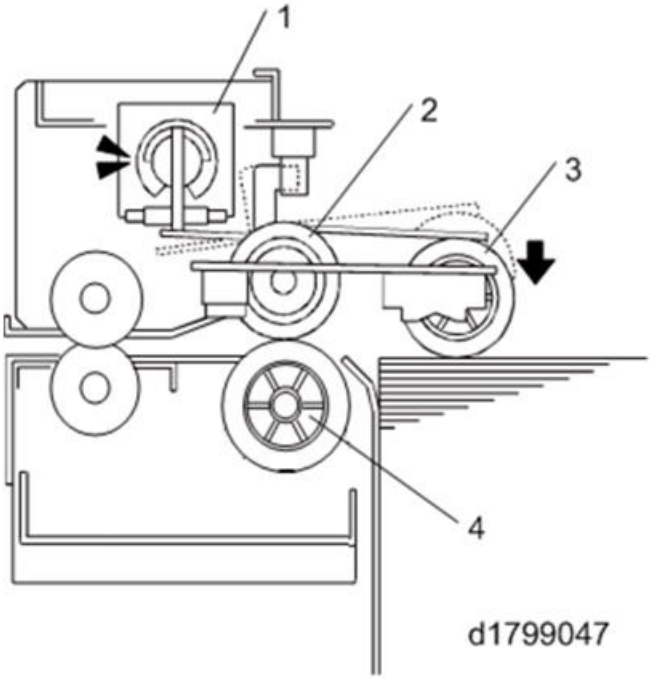
Separation Roller Release

The separation roller is separated from the paper feed roller. Only when feeding paper, the reverse release solenoid applies pressure to the separation roller. This mechanism has the following advantages.

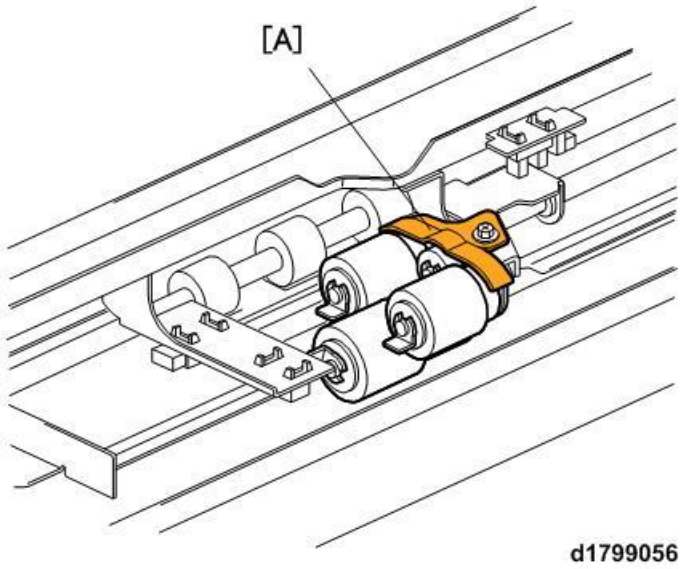
- Pressure is applied to the separation roller only when paper is fed. This helps to prolong the life of the roller.
- Because the separation roller is released, it is easier to remove paper.



No.	Name	No.	Name
1	Paper Feed Motor	4	Separation Roller
2	Transport Motor	5	Paper Feed Roller
3	Pickup Roller	-	-



No.	Name	No.	Name
1	Pick-up Solenoid	3	Pickup Roller
2	Paper Feed Roller	4	Separation Roller

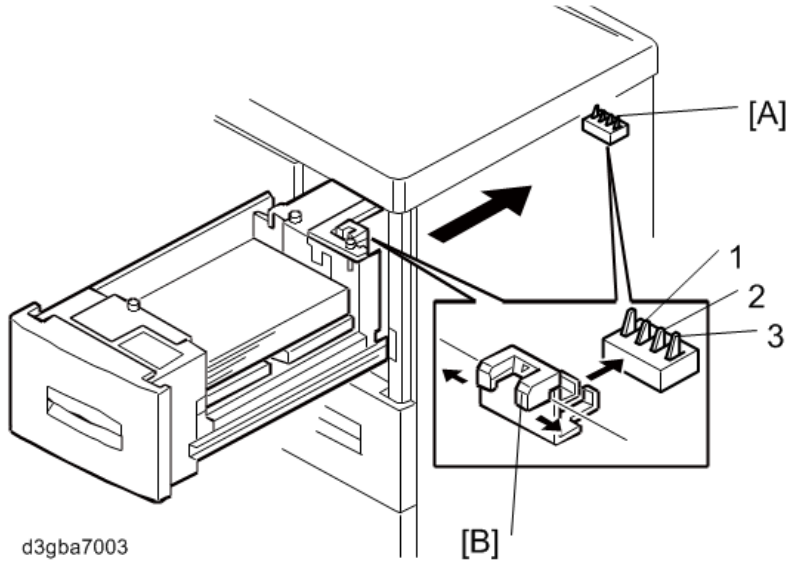


[A] The cover of the paper feed roller

Tray Set (Size) Detection

Detection Timing

Trays 4 and 5 are set when one of SWs 1, 2, or 3 of the four-way push switch turns to “LOW” (the push switch also detects paper size). Tray 6 is set when SW1 turns to “LOW”.



[A] Size Sensor

[B] Size Detection Plate

Size Detection

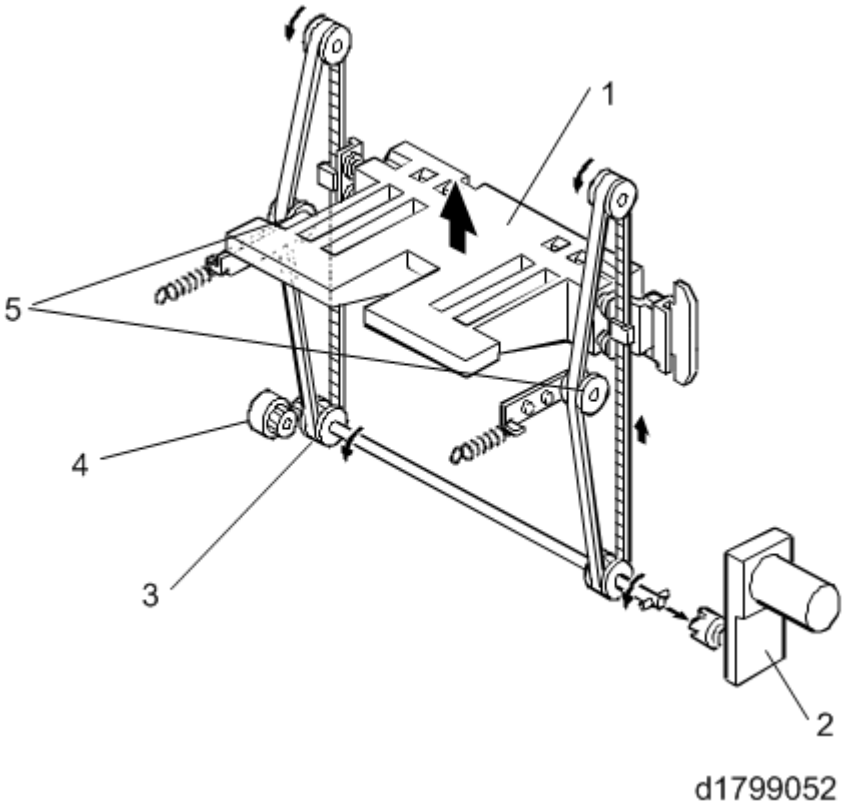
Trays 4 and 5 detect the position of the size lever using a three-way push switch. This can be changed by users. Tray 6 can be changed using the SP mode. Tray 6 has a push switch similar to that of Trays 4 and 5, but the one in Tray 6 is only for set detection (not size).

SW	A4-LEF	B5-LEF	A5-LEF	A5-SEF	LT-LEF	HLT-LEF	HLT-SEF
1	Low	Hi	Low	Low	Low	Hi	Hi
2	Hi	Low	Hi	Low	Low	Low	Hi
3	Hi	Hi	Low	Hi	Low	Low	Low

Tray Lifting/ Lowering

Lifting (Upper Limit Detection)

The rotation of the lift motor coupling at the rear of the tray lifts the tray via the pulley and belt on the axis of the belt driving.



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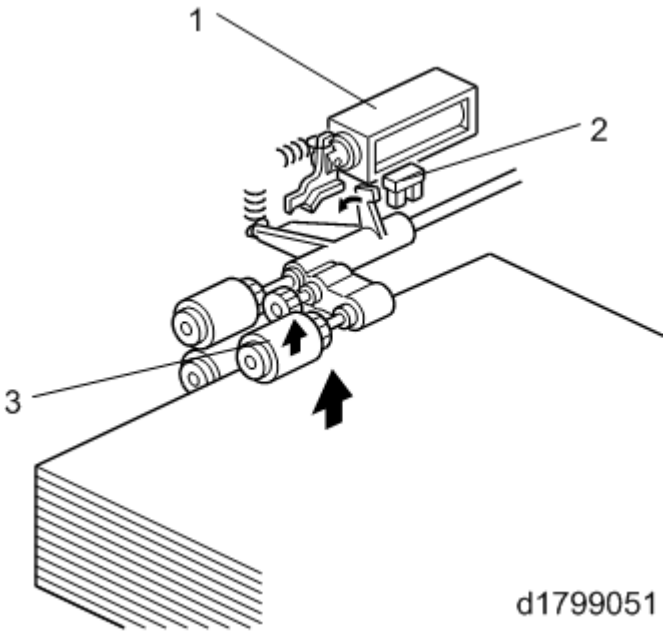
No.	Name	No.	Name
1	Tray	4	Oil Damper (third tray only)
2	Lift Motor	5	Tensioner (third tray only)
3	Tray Pulley	-	-

When a specified period of time (first tray: 500 msec, second tray: 750 msec, third tray: 1000 msec) has elapsed after the paper is fed, the pick-up solenoid goes on, and the pickup roller comes in contact with the paper. If the lift sensor does not detect the upper limit when the pickup roller is down, the machine turns the lift motor on, and the motor starts lifting the bottom plate of the tray. When the tray rises, the top sheet of paper pushes the pickup roller upward. This opens the lift sensor, and the lift motor is turned off. Subsequently, for more accurate lifting of the bottom plate, after waiting 10 msec after the lift motor has stopped, it is moved in the direction of the brake for 1 sec (brake control). If the upper limit has been reached when the pickup roller is down, the bottom plate is not lifting, and the tray goes directly into brake control. When copying/ printing, the height of the paper drops and the lift sensor is blocked; the lift motor rotates to lift the bottom plate so as to raise the paper stack.



No.	Name
1	Pick-up Solenoid
2	Lift Sensor
3	Pickup Roller

Lowering

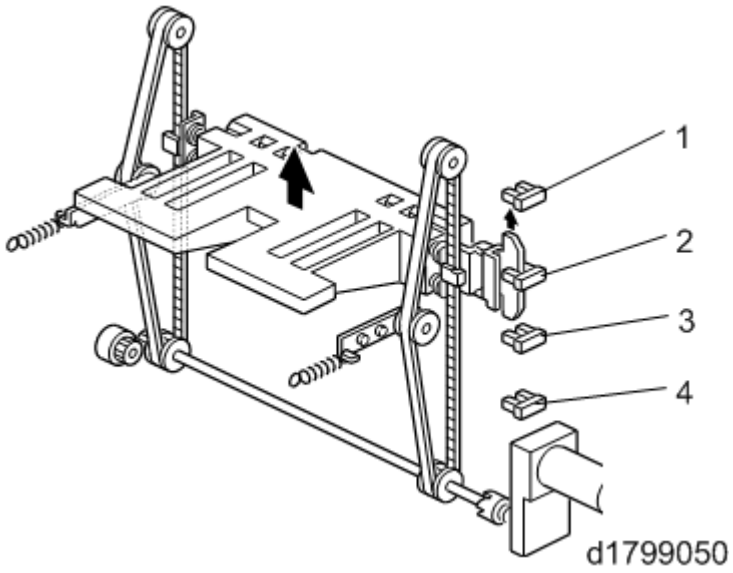
When the tray is pulled out, it becomes detached from the coupling of the lift motor, and drops by its own weight. Only Tray 6 has an oil damper to absorb impact when the tray drops down.

Error Detection

- If the pick-up solenoid is off (the pick-up roller does not lower) and the lift sensor does not detect the upper limit, the machine will stop operating as a result of tray error (sensor error). (SCs 504 to 506)
- If the lift sensor does not turn on (does not detect the upper limit) when 10 seconds (Tray 6: 20 sec) have elapsed after the lift motor turned on, the machine will stop operating as a result of tray error (lift motor error), The lift motor will rotate backwards for 3 seconds, and the tray having problems cannot be used.

Remaining Paper Detection

The amount of paper is detected using four photo interrupters. Remaining paper is displayed on the display of the operation panel.



No.	Name	No.	Name
1	Paper Height Sensor 1	3	Paper Height Sensor 3
2	Paper Height Sensor 2	4	Paper Height Sensor 4

Relationship Between the State of the Sensor and the Amount of Paper Remaining

Paper Amount	State of the Sensor			
	Paper Height Sensor 1	Paper Height Sensor 2	Paper Height Sensor 3	Paper Height Sensor 4
100%	Open	Open	Open	Open
75%	Open	Open	Open	Closed
50%	Open	Open	Closed	-
25%	Open	Closed	-	-
Near End	Closed	Open	-	-
End	-	-	-	-

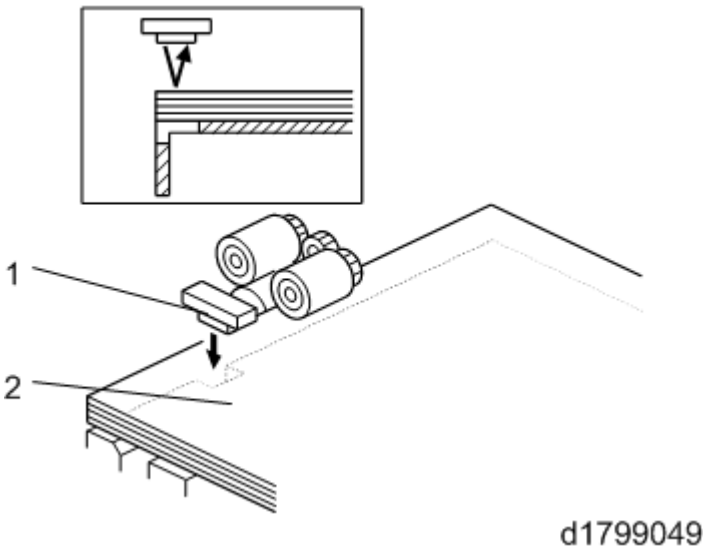
Paper End Detection

The upper side stay has a paper end sensor (reflex type sensor). This sensor detects paper end by detecting the face of the paper. When paper end is detected, the lift motor rotates backward to lower the bottom plate of the tray.

Reverse Time

Tray 4 and 5: three seconds

Tray 6: six seconds



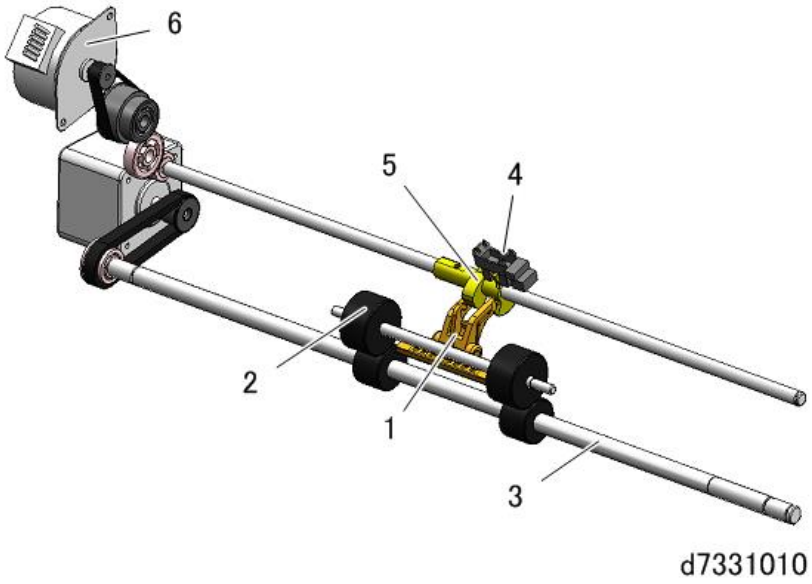
1: Paper End Sensor

2: Paper

Exit Roller Contact/Separation

The paper exit has a contact mechanism. The exit rollers must be separated when paper registration is performed in the registration unit of the main machine.

The LCT exit separation motor turns on, and the cam at the rotation axis is rotated via gears. The roller contact arm that is interlocked with the cam moves up and down to separate the driven exit roller from the driving exit roller. The release HP sensor detects contact/ separation.



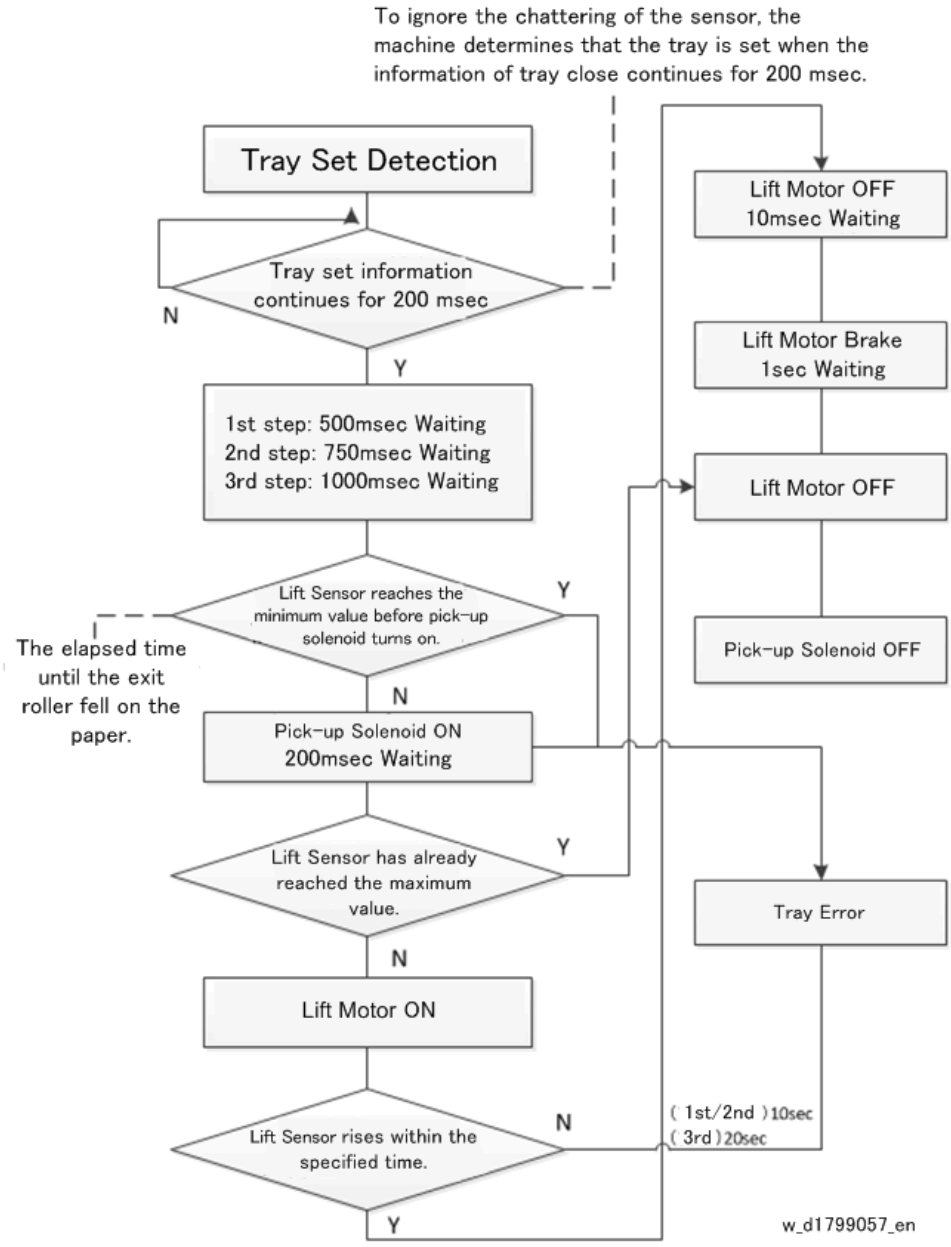
No.	Name	No.	Name
1	Roller Contact Arm	4	Release HP Sensor
2	Driven Exit Roller	5	Cam
3	Driving Exit Roller	6	LCT Exit Separation Motor

Dehumidification

If it is necessary, anti-condensation heaters can be installed to the bottom of the LCT to dehumidify it. The anti-condensation heaters remain on even when the power is off.

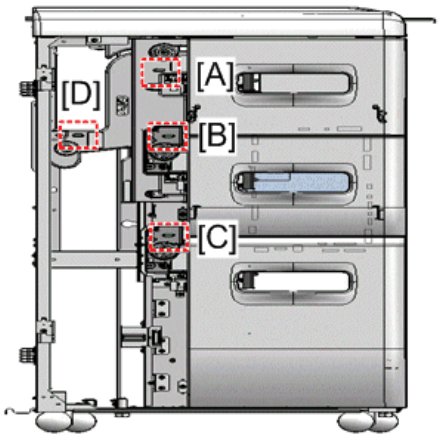
Notes on Tray Lifting Control Flow

To ignore the chattering of the sensor, the machine deems that the tray is set when information of tray close (shut) lasted for 200 msec.



Jam Detection LED

There are jam detection LEDs on the inner cover.



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[A]: 1st tray jam LED

[B]: 2nd tray jam LED

[C]: 3rd tray jam LED

[D]: Paper exit jam LED

Jam LED Specifications

- The corresponding LED flashes when a jam (including initial jams) occurs. A sensor detects the position of the jammed paper.
- The LED flashes when the front door is opened.
- If multiple jams occurred in different locations, all corresponding LEDs will flash simultaneously.

F: Flashing

-: Not flashing

Sensor	1st Tray Jam LED	2nd Tray Jam LED	3rd Tray Jam LED	Paper Exit Jam LED
1st Paper Feed Sensor	**F**	-	-	-
1st Transport Sensor	**F**	-	-	-
1st Relay Sensor 1	-	-	-	-
1st Relay Sensor 2	-	-	-	-
2nd Paper Feed Sensor	-	**F**	-	-
2nd Transport Sensor	-	**F**	-	-
2nd Relay Sensor	-	-	-	-
3rd Paper Feed Sensor	-	-	**F**	-
3rd Transport Sensor	-	-	**F**	-

Sensor	1st Tray Jam LED	2nd Tray Jam LED	3rd Tray Jam LED	Paper Exit Jam LED
3rd Relay Sensor	-	-	-	-
LCT Exit Sensor	-	-	-	**F**

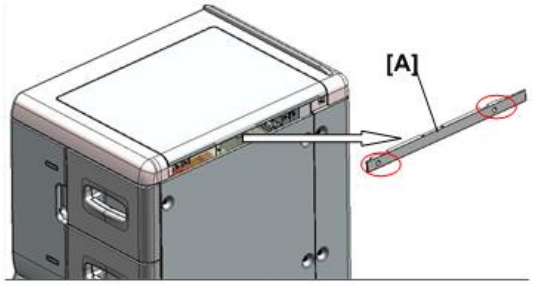
2. Replacement and Adjustment

Doors and Covers

Front Door and Covers

Top Covers, Rear Cover

1. Remove the top right edge cover (x2).



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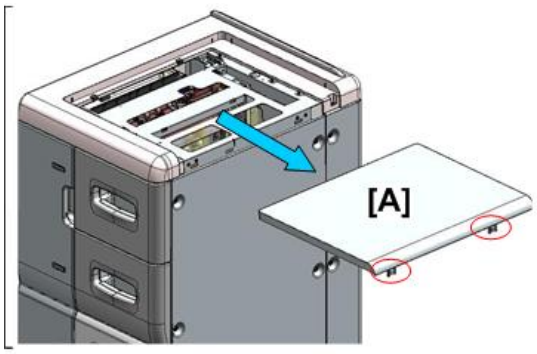
2. Disconnect the top flat cover [A] and slide it in the direction of the arrow (x2).



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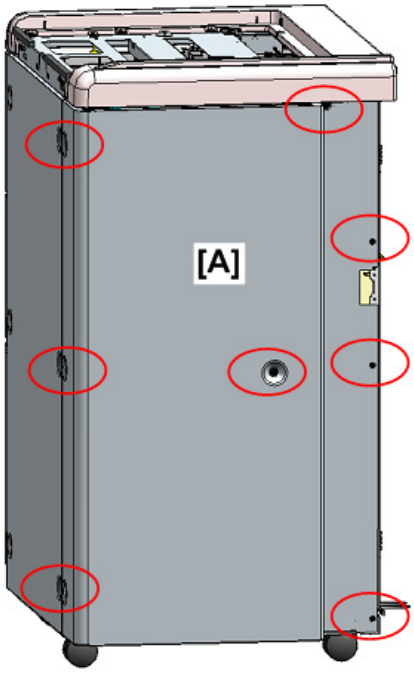
3. Remove the rear cover [A] (x8).



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4. Remove the left edge cover [A] (x11).

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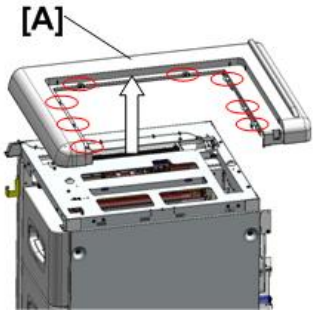
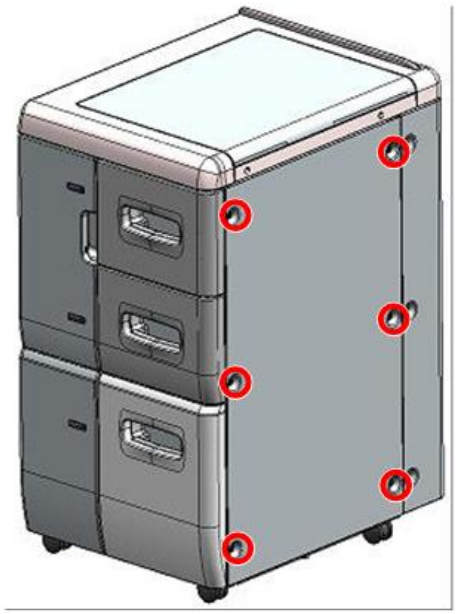


Right Cover

1. Remove the right cover (x6)



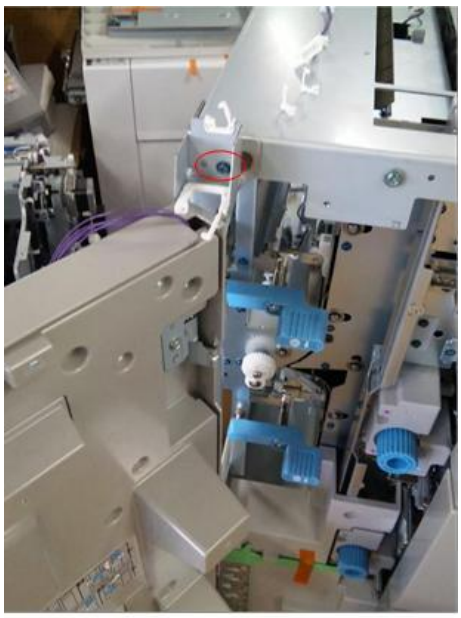
d7331005

Door

1. Remove the top covers. (Top Covers, Rear Cover)
2. Free the harness, and then disconnect it (x2, x1).

d7331006

3. Remove the bracket screw (x1).



d7331007

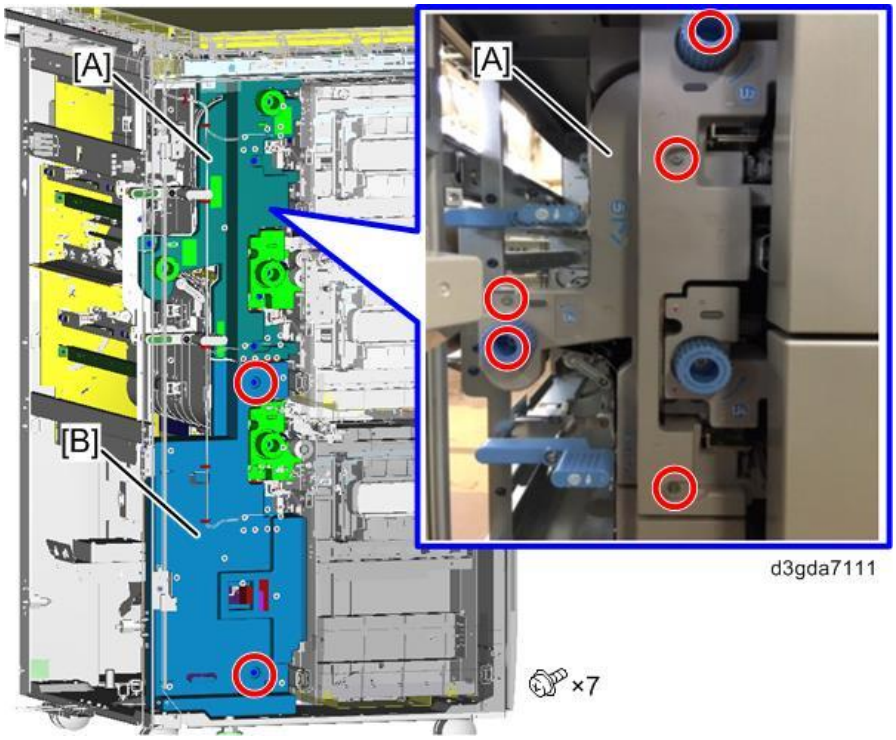
4. Lift the door off its hinges, and then remove it.

d7331008

Inner Covers

1. Remove the inner cover [A] (x3, Knobs x3).

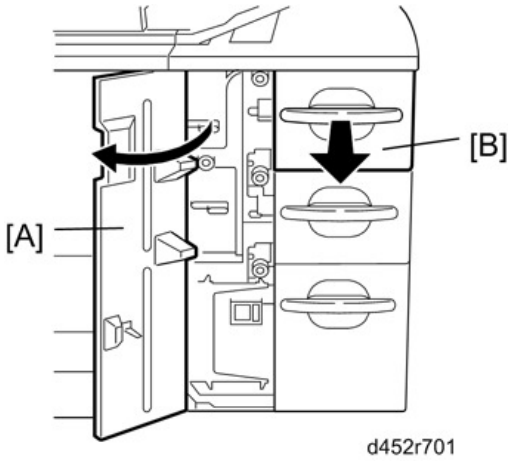
2. Remove the inner cover [B] (x2, Knob x1).



Trays

Top Tray (Tray 4)

1. Open the front door [A].
2. Pull open the top tray [B] until it stops.



d452r701

3. Lift the top tray [A] out of the drawer (x 4).

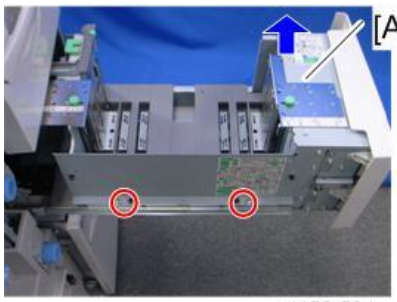
d0bxa8064

Middle Tray (Tray 5)

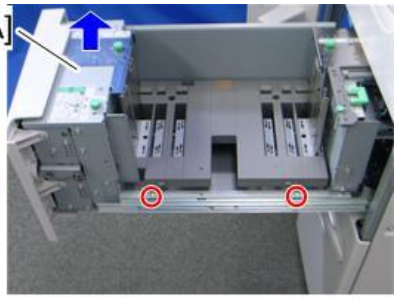
1. Open the front door.
2. Pull open the middle tray [A] until it stops.

d0bxa8053

3. Lift the middle tray [A] out of the drawer (x 4, x 2).



d452r504

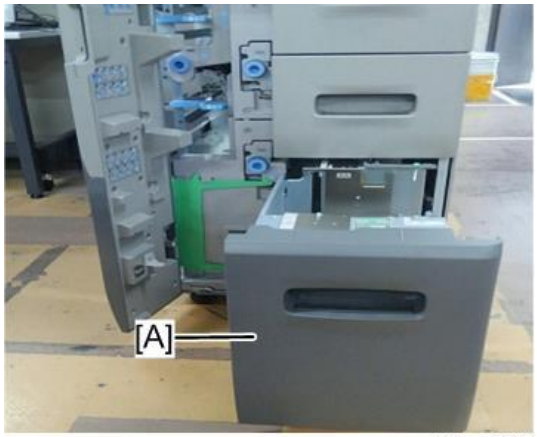


d452r505

Bottom Tray (Tray 6)

1. Open the front door.

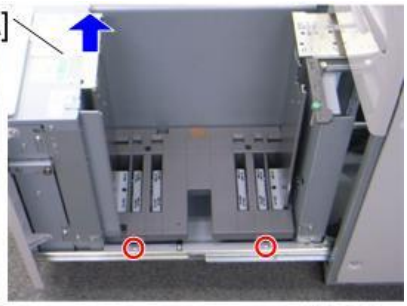
2. Pull open the bottom tray [A] until it stops.



d0bxa8054

3. Lift the bottom tray [A] out of the drawer (x 4, x 2).

d452r507



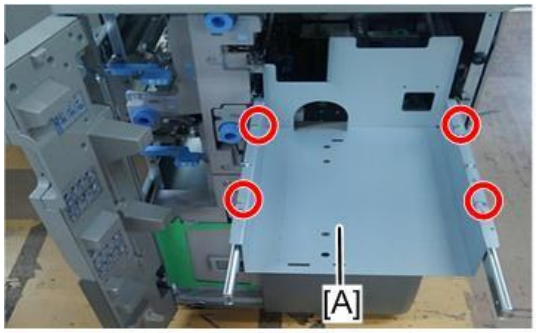
d452r508

Paper Feed

Paper Feed Units

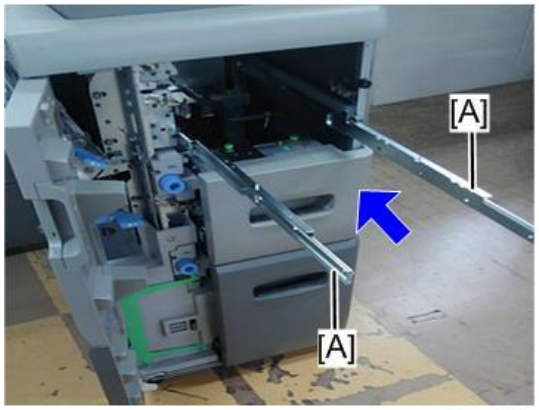
Top Tray Paper Feed Unit

1. Remove the rear cover. (Front Door and Covers)
2. Remove the right cover.(Front Door and Covers)
3. Remove the inner cover. (Inner Covers)
4. Remove the top tray. (Top Tray (Tray 4))
5. Remove the bracket [A] (x 4)



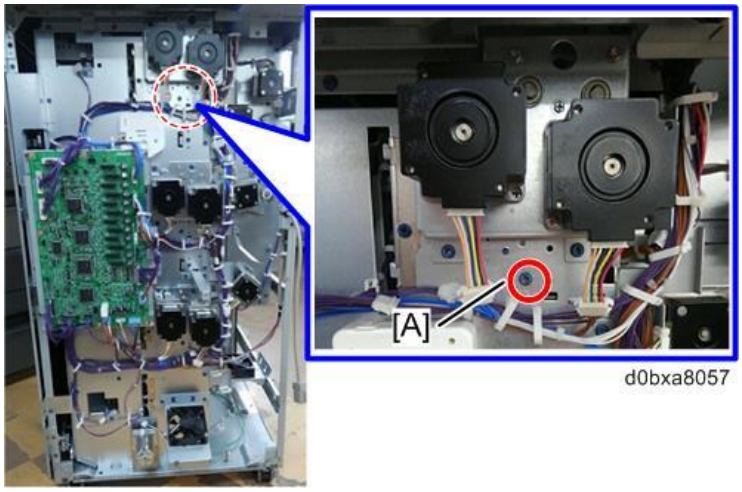
d0bxa8055

6. Push the slide rails [A] into the machine.



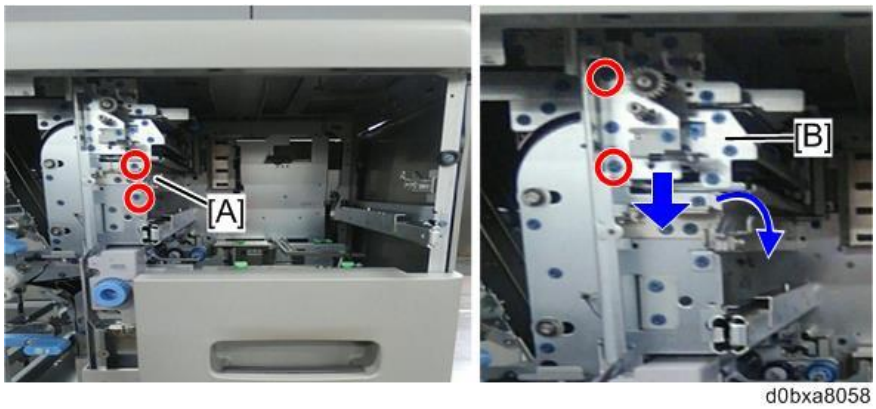
d0bxa8056

7. Remove the screw [A] at the rear.

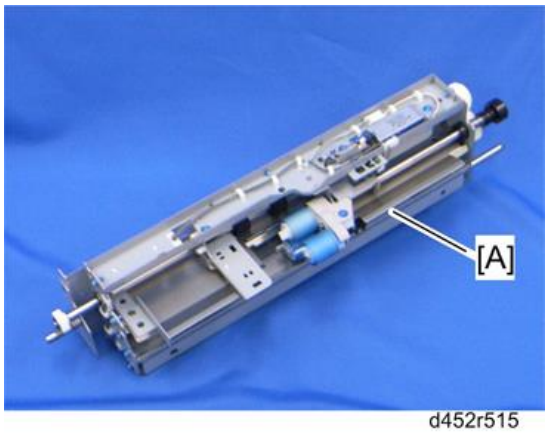


8. Remove the stay [A] (x 2)

9. Pull the paper feed unit [B], and then move it to the lower right side (x 2).



10. Remove the paper feed unit [A]



Middle Tray Paper Feed Unit

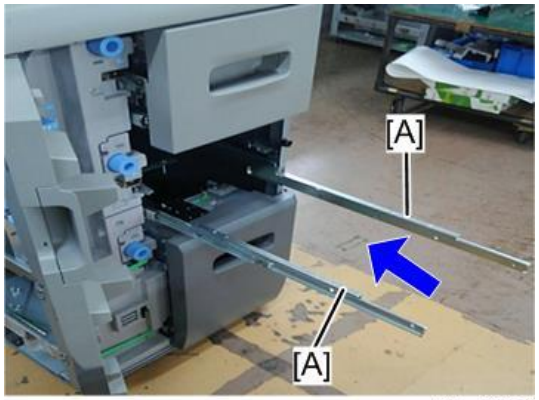
1. Remove the rear cover. (Front Door and Covers)

2. Remove the right cover.(Front Door and Covers)

3. Remove the inner cover. (Inner Covers)

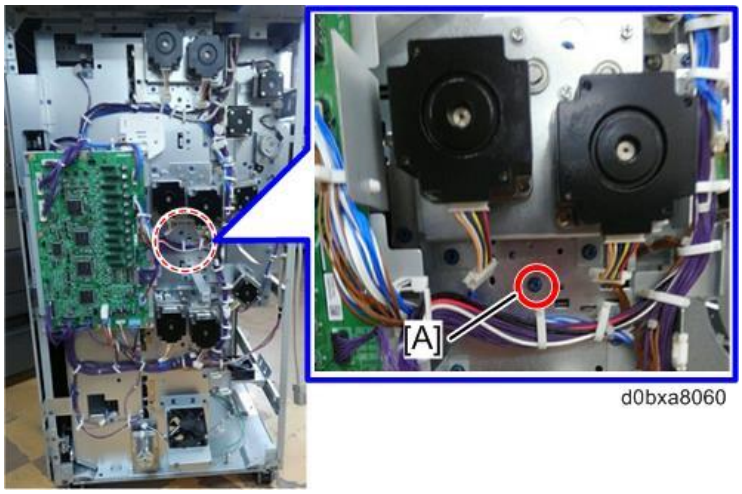
4. Remove the middle tray. (Middle Tray (Tray 5))

5. Push the slide rails [A] into the machine.



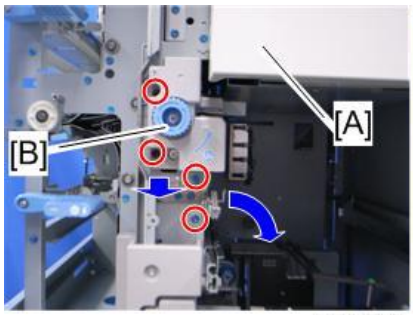
d0bxa8059

6. Remove the screw [A] at the rear.

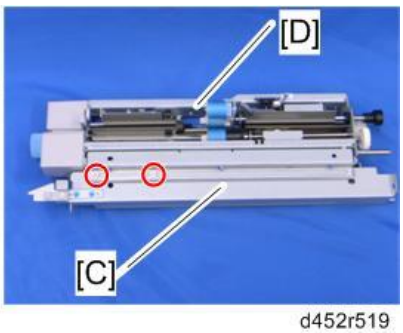


d0bxa8060

7. Pull out the top tray [A].
8. Pull the paper feed unit with stay [B], and then move it to the lower right side (x 2, x 2).
9. Remove the stay [C] (x 2)
10. Remove the paper feed unit [D]



d452r518

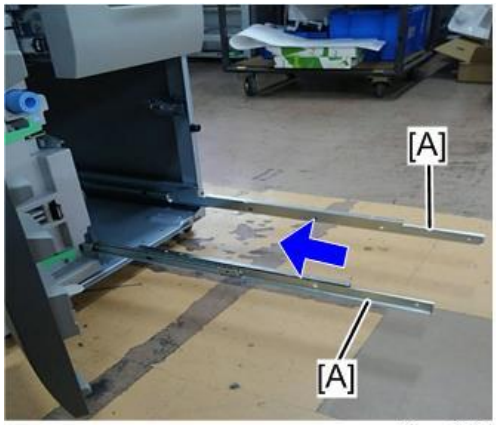


d452r519

Bottom Tray Paper Feed Unit

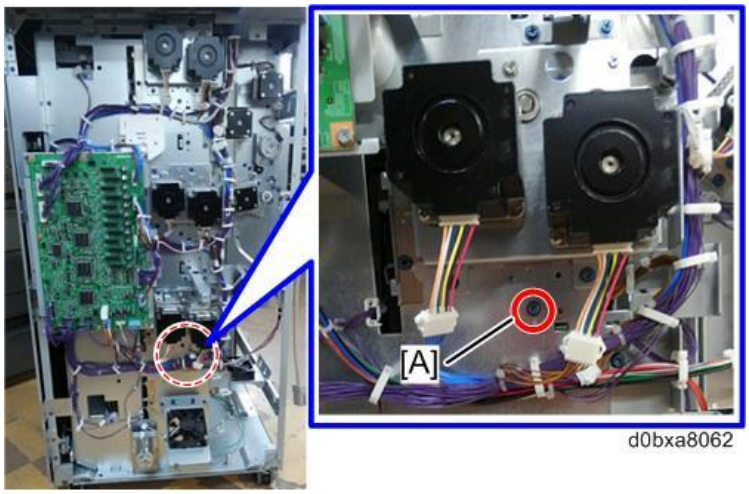
1. Remove the rear cover (Front Door and Covers).
2. Remove the right cover (Front Door and Covers).
3. Remove the inner cover (Inner Covers).
4. Remove the bottom tray (Bottom Tray (Tray 6)).

5. Push the slide rails [A] into the machine.



d0bxa8061

6. Remove the screw [A] at the rear.



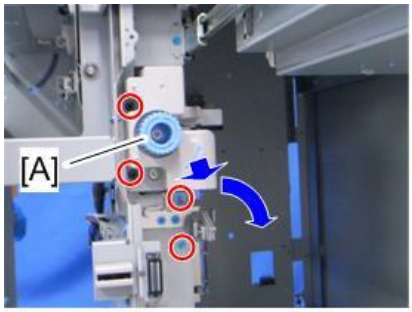
d0bxa8062

7. Pull out the middle tray.

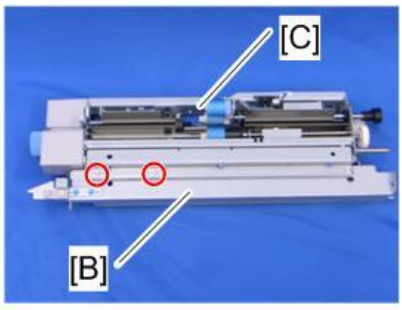
8. Pull the paper feed unit with stay [A], and then move it to the right-lower side (x 2, x 2).

9. Remove the stay [B] (x 2)

10. Remove the paper feed unit [C]



d452r522



d452r519

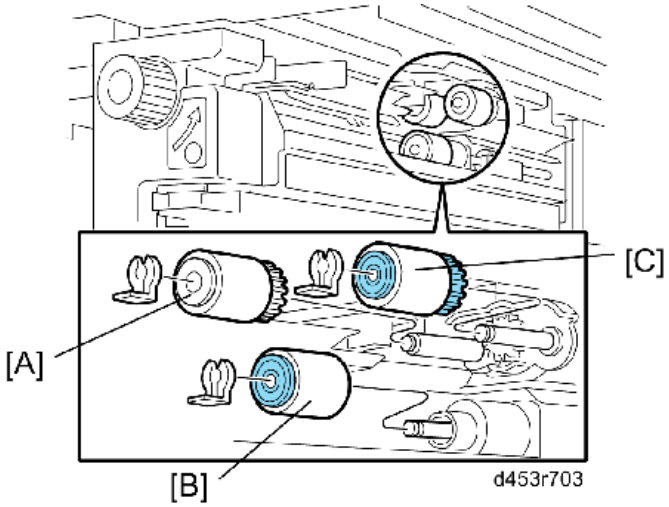
Paper Feed, Separation and Pickup Rollers

⚠CAUTION

- Before doing this procedure, turn OFF the power of the main machine, and disconnect it from its power source.

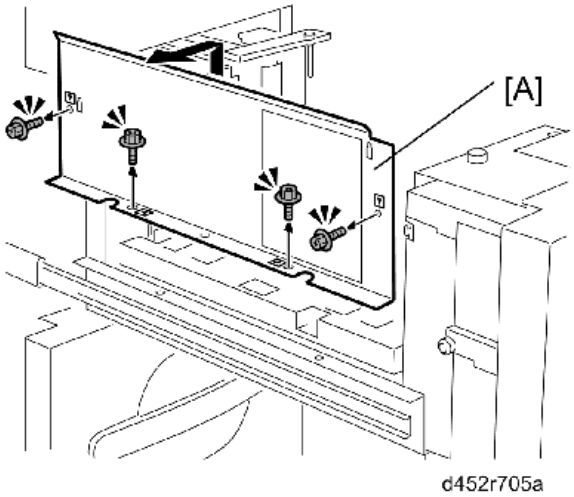
Top Tray

1. Remove the top tray. (Top Tray (Tray 4))
2. Remove the following rollers:
   [A]: Paper feed roller (x 1)
   [B]: Separation roller (x 1)
   [C]: Pickup roller (x 1)

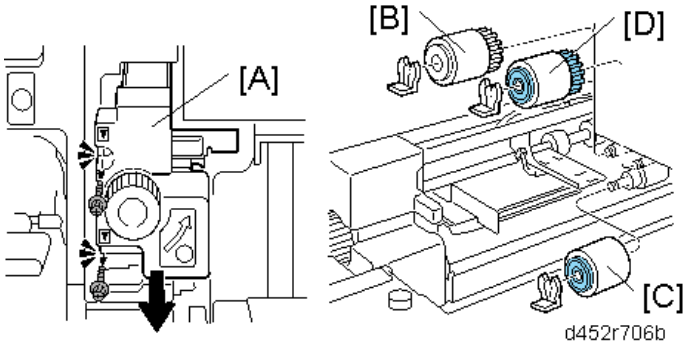


Middle, Bottom Tray

1. Remove the middle tray or bottom tray.
2. Remove the inner upper cover of the middle tray or bottom tray (Inner Covers)
3. Remove the tray side plate [A] (x 4).



4. Pull the paper feed unit [A].
5. Remove the following:
   [B]: Paper feed roller (x 1)
   [C]: Separation roller (x 1)
   [D]: Pickup roller (x 1)


[A]
[B]
[D]
[C]
d452r706b

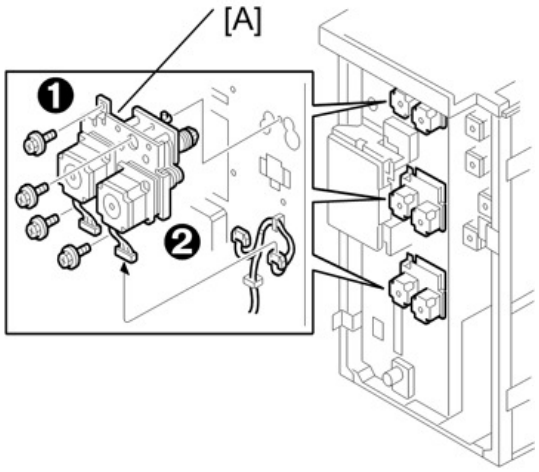
Motors

Paper Feed and Transport Motors

Each paper feed unit has a paper feed motor ① and a transport motor ②.

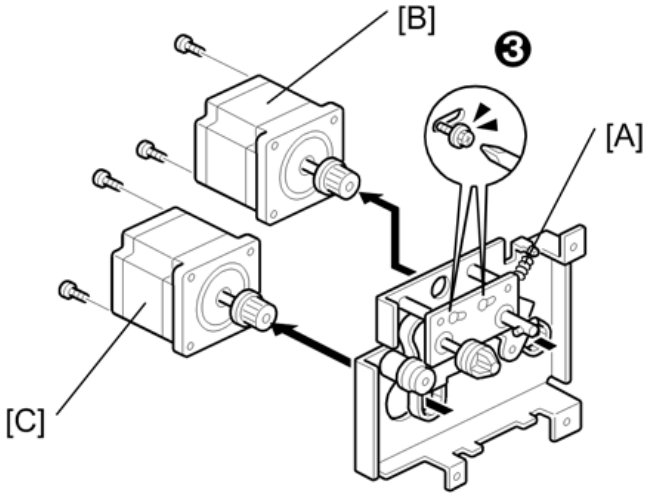
The removal procedure is the same for each feed tray.

1. Remove the rear cover. (Front Door and Covers)
2. Remove the motor unit [A] (x4, x2)



B832R109

3. Remove the springs [A] (x 2) First, loosen the screws ③ (x2)
   Remove the paper feed motor [B] (x2).
   Remove the transport motor [C] (x2).



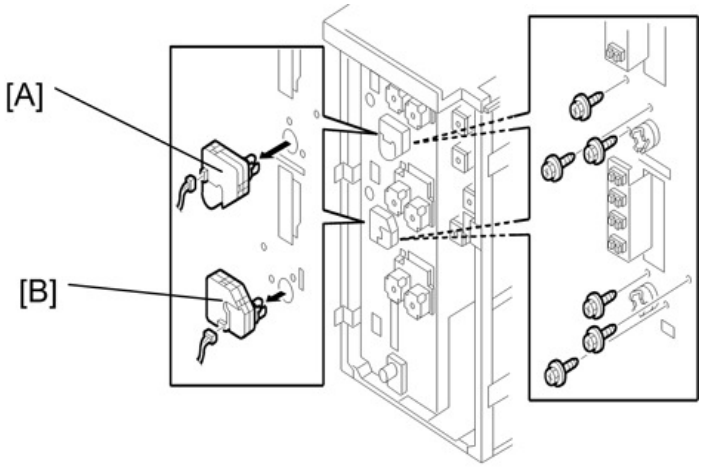
B832R109A

Reinstallation

Attach the tension spring, and then tighten the screws ③ to tighten the belts.

Tray 4th, 5th Lift Motors

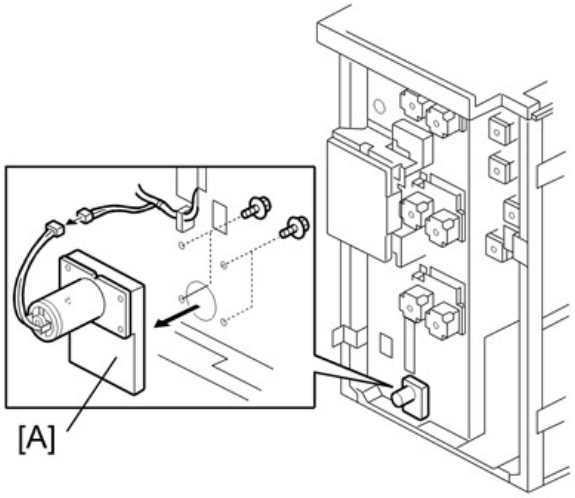
1. Remove the rear cover. (Front Door and Covers)
2. Remove the main control board bracket (Main Control Board)
3. Remove Tray 4th lift motor [A] (x3, x 1)
   Remove Tray 5th lift motor [B] (x3, x 1)



B832R109L

6th Lift Motor

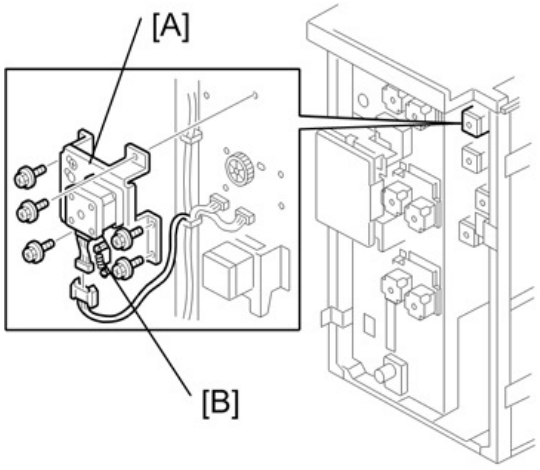
1. Remove the rear and right covers. (Front Door and Covers)
2. Remove the 6th lift motor [A] (x 4, x1)



B832R109B

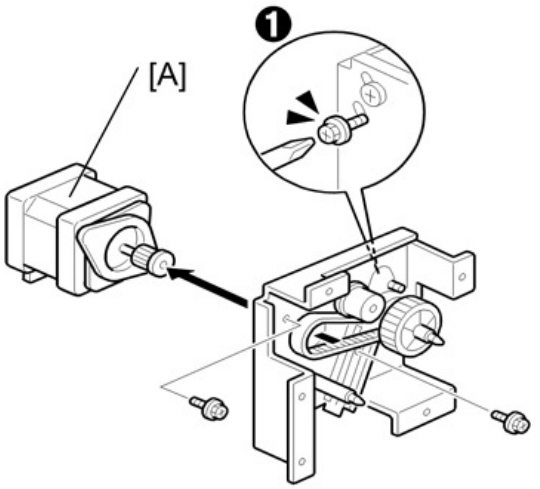
Vertical Transport Motor

1. Remove the rear cover (Front Door and Covers)
2. Remove the vertical transport motor unit [A] (x 5, x 1).
   Remove the spring (x1) [B]. First, loosen the screw ① (x 1).



B832R109C

3. Remove the vertical transport motor [A] (x2, x1)



B832R109D

Re-installation

Make sure that the tension spring is connected, then tighten the screw ①.

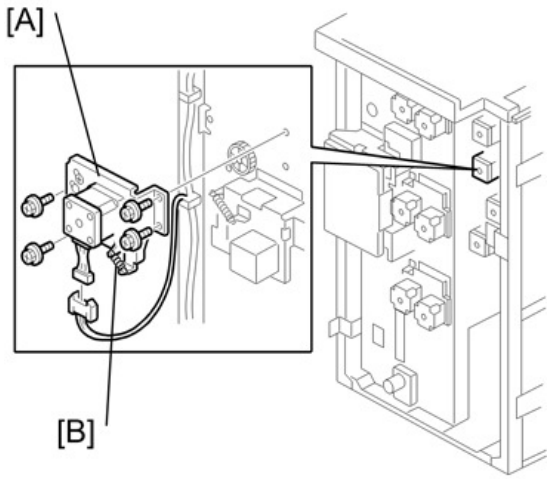
5th Transport Motor

Remove:

- Rear cover (Front Door and Covers)

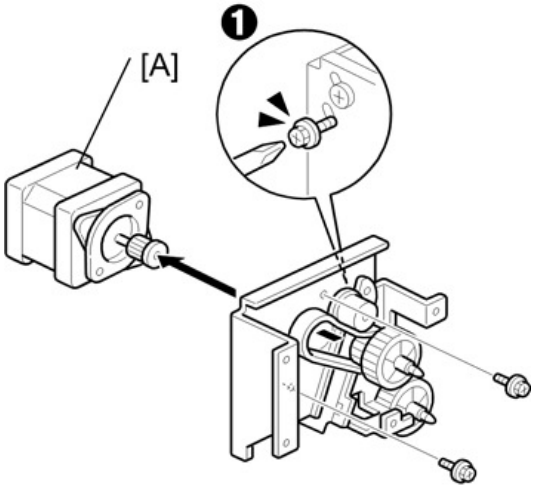
[A] Motor unit (x4, x 1).

[B] Spring (x1). First, loosen screw ① (x 1).



B832R109E

[A] 5th Transport motor (x2, x1)



B832R109F

Reinstallation

- Be sure that the tension spring is connected, then tighten the screw ①.

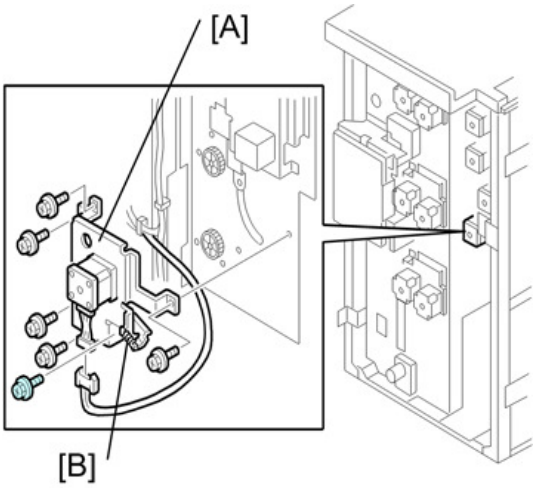
6th Transport Motor

Remove:

- Rear cover (Front Door and Covers)

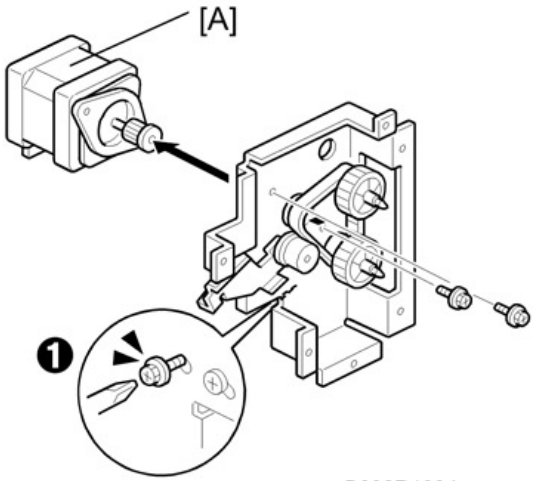
[A] Motor unit (x6, x 1).

[B] Spring (x1). First, loosen screw ① (x 1).



B832R109I

[A] LCT exit motor (x2, x1)



B832R109J

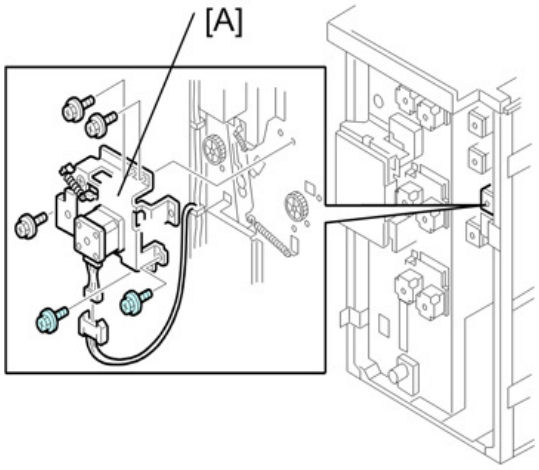
Reinstallation

- Be sure that the tension spring is connected, then tighten the screw ①.

LCT Exit Separation Motor

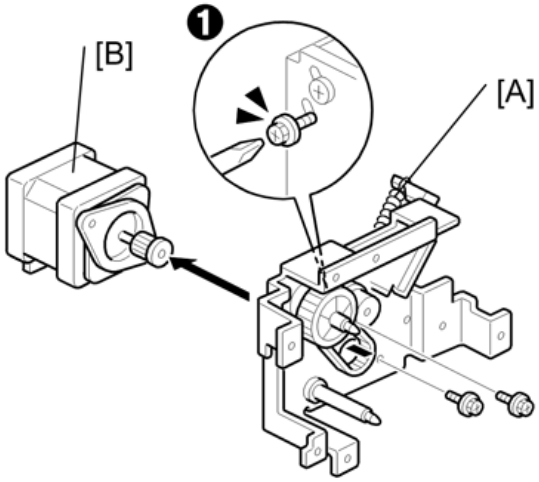
1. Remove the rear cover. (Front Door and Covers)

2. Remove the motor unit [A] (x6, x 1).



B832R109G

3. Remove the spring (x1) [A]. First, loosen screw ① (x 1).
Remove the LCT exit separation motor [B] (x2, x1)



B832R109H

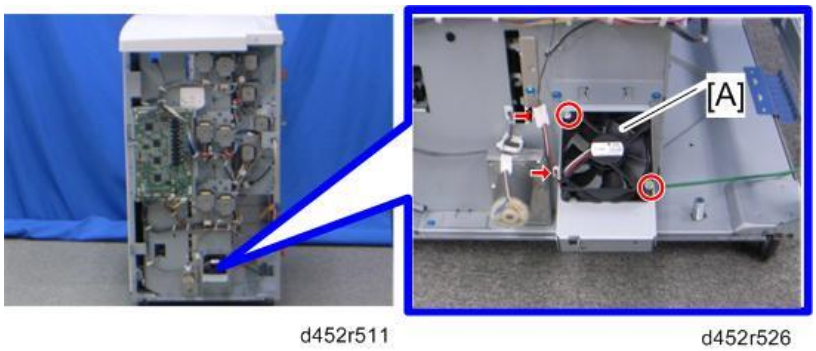
Re-installation

Make sure that the tension spring is connected, then tighten the screw ①.

Cooling Fan 1

1. Remove the rear cover. (Front Door and Covers)

2. Remove the cooling fan [A] (x 2, x 1, x 1)

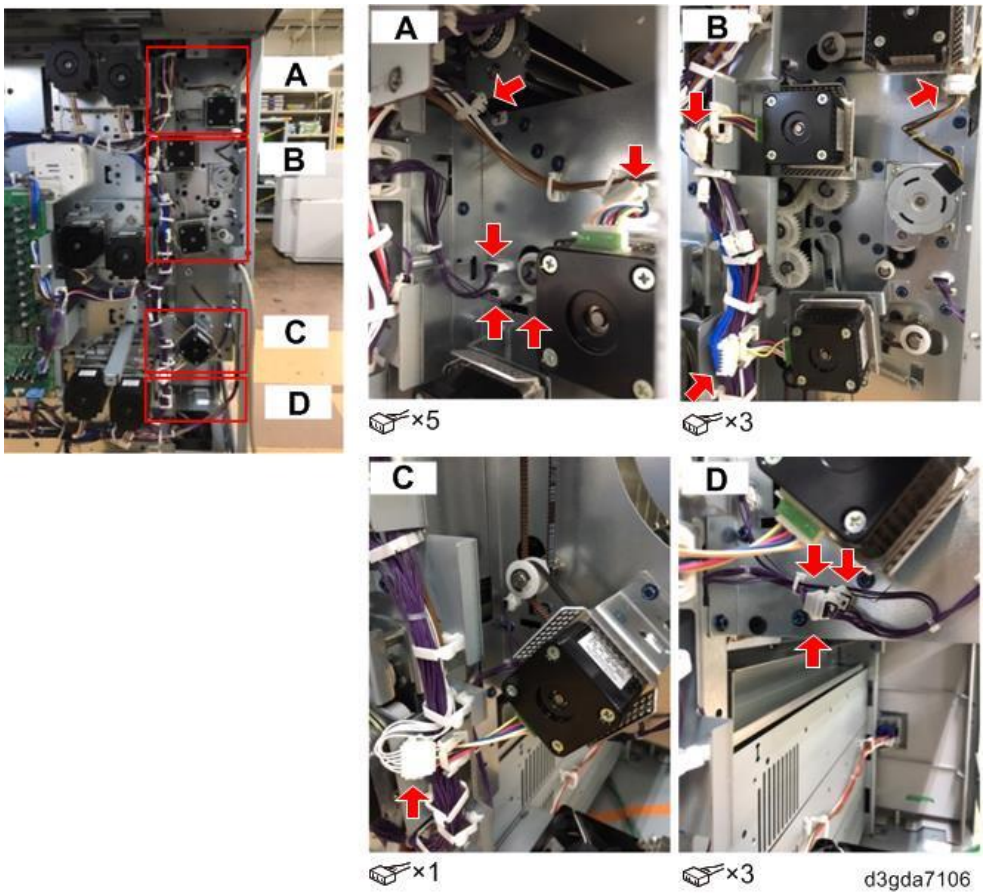


Important

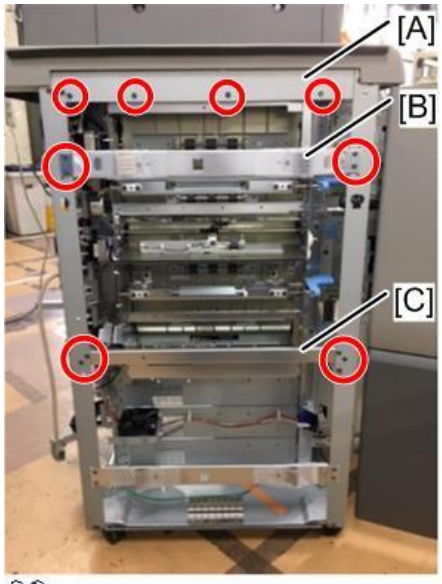
- When reinstalling the cooling fan, make sure that the cooling fan is installed with its decals facing upward.

Cooling Fan 2

1. Remove the rear cover (Front Door and Covers).
2. Remove the inner cover (upper/lower) (Inner Covers).
3. Disconnect the connectors at each section [A] [B] [C] [D] to remove the transport unit.

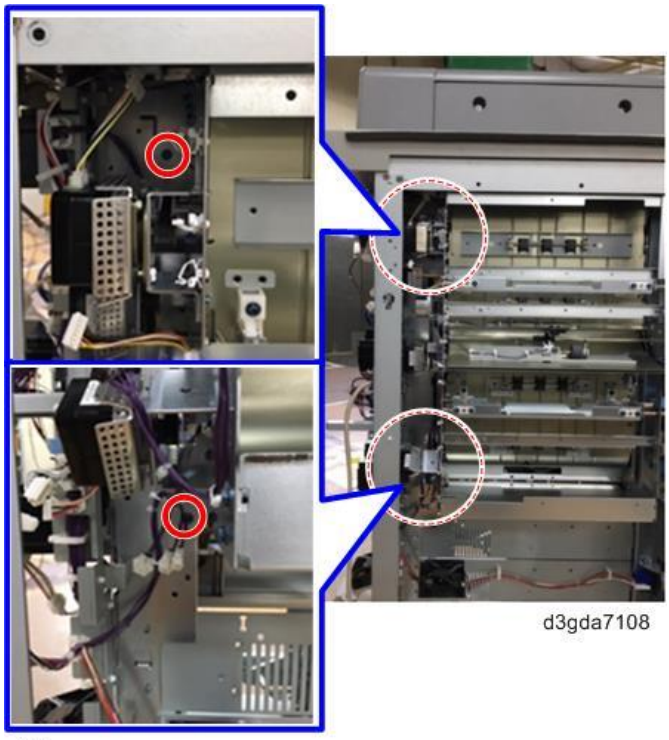


4. Remove the brackets [A], [B], and [C].



×12 d3gda7107

5. Remove the screws from the left side of the transport unit.



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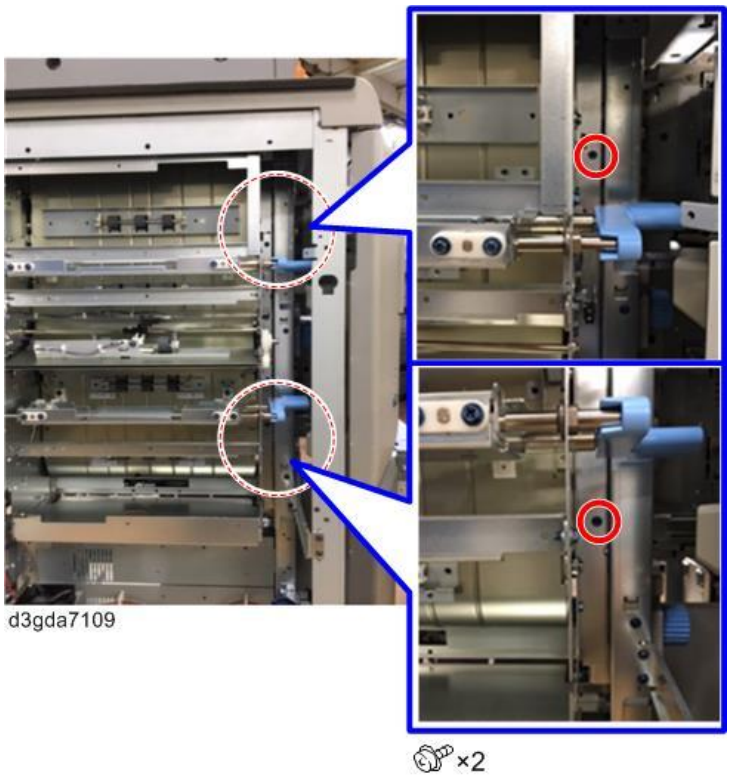
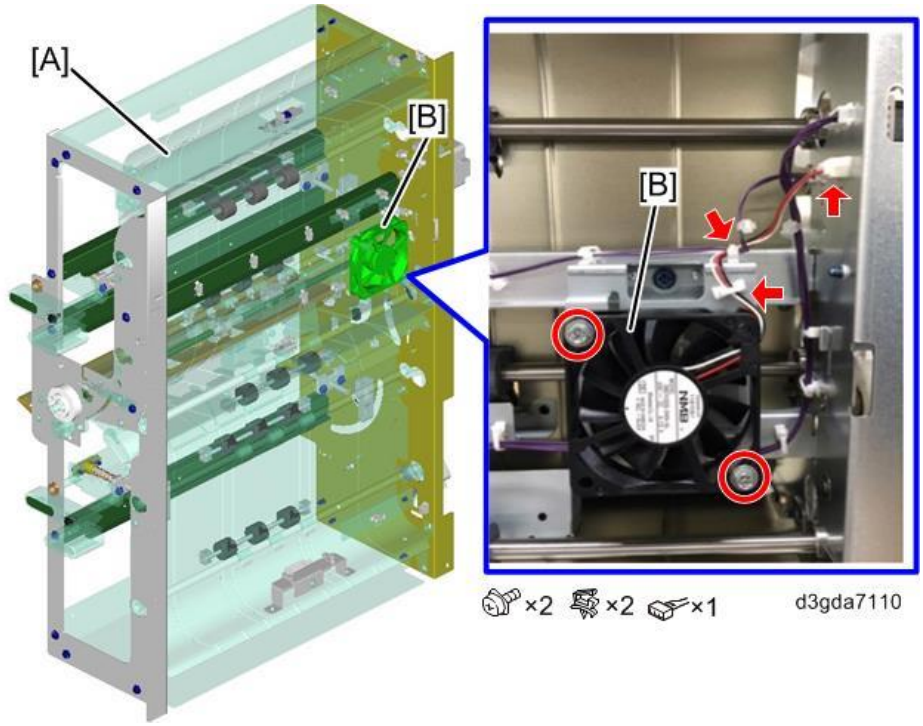
×2

6. Remove the screws from the right side of the transport unit.

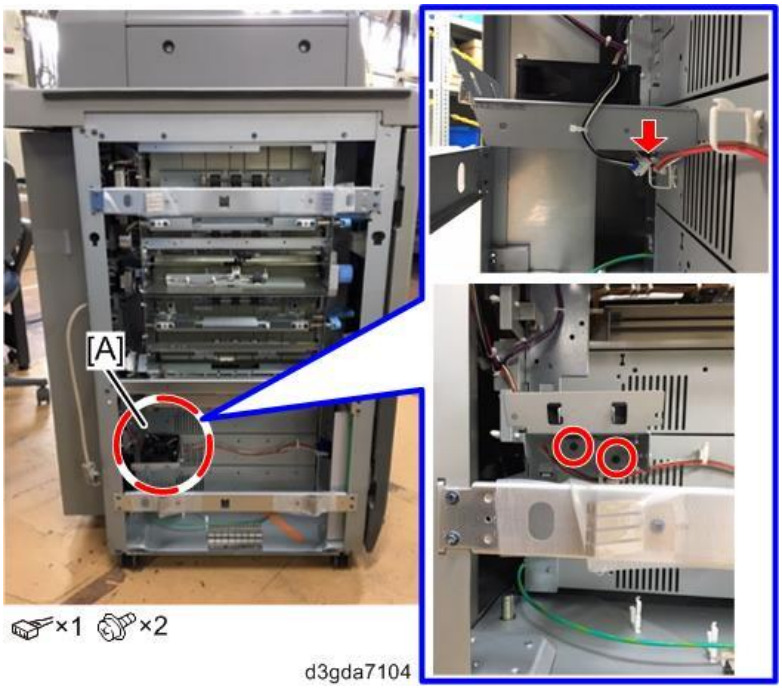


7. Remove the transport unit [A], and remove the cooling fan 2 [B].

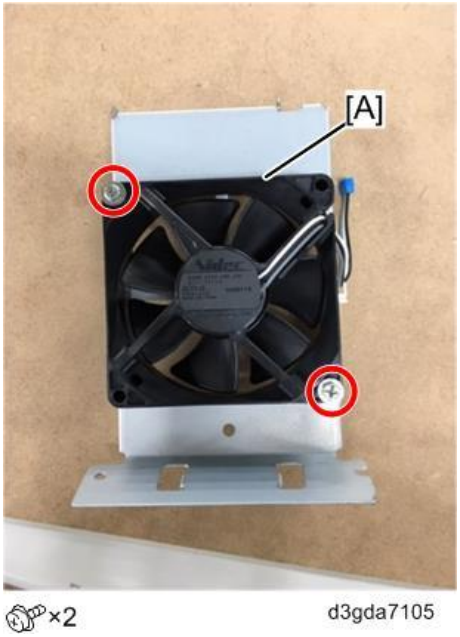


Cooling Fan 3

1. Remove the cooling fan 3 [A] with the bracket.



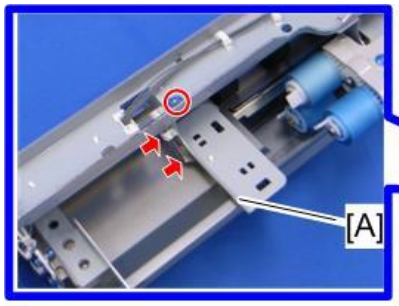
2. Remove the cooling fan 3 [A].



Electrical Components

Paper Feed and End Sensors

1. Remove the paper feed unit (Paper Feed Units)
2. Remove the sensor bracket [A] (x 1, x 3, x 1)



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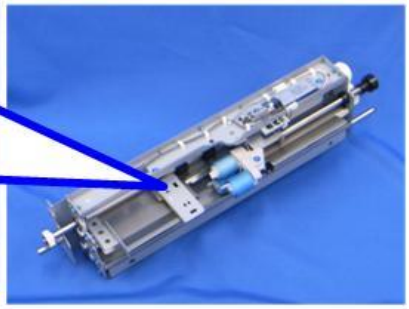

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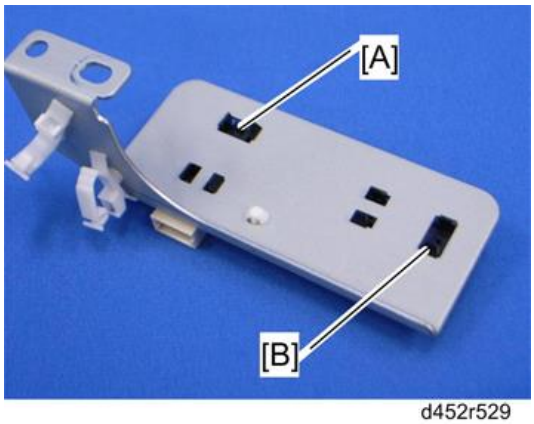
3. Remove the following:
   [A]: Paper feed sensor (hooks)
   [B]: Paper end sensor (hooks)



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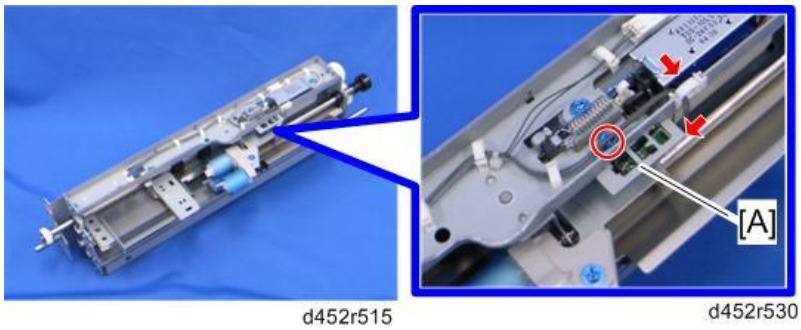
When reinstalling the sensor bracket

- Make sure that the white connector is connected to the paper feed sensor, and the red connector is connected to the paper end sensor.

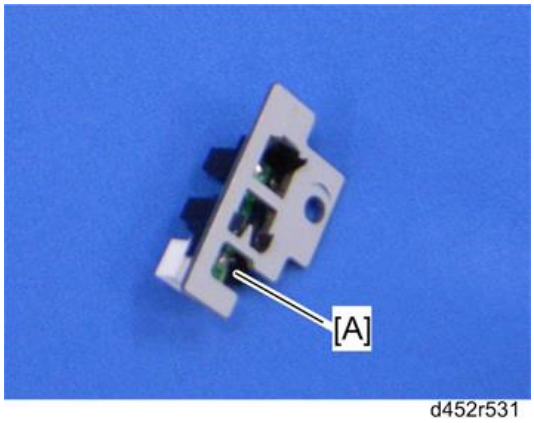
Lift Sensor

1. Remove the paper feed unit (Paper Feed Units)

2. Remove the sensor bracket [A] (x 1, x 1, x 1)

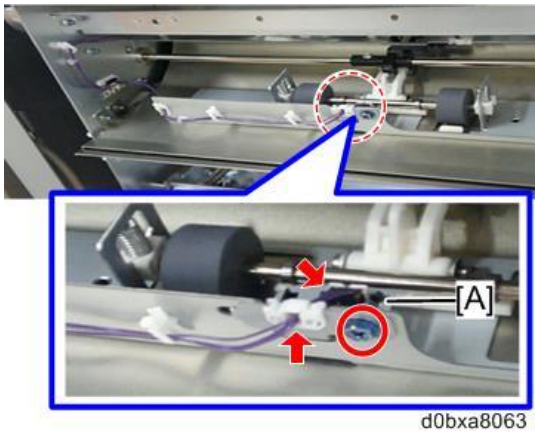


3. Remove the lift sensor [A] ( )



Exit Sensor

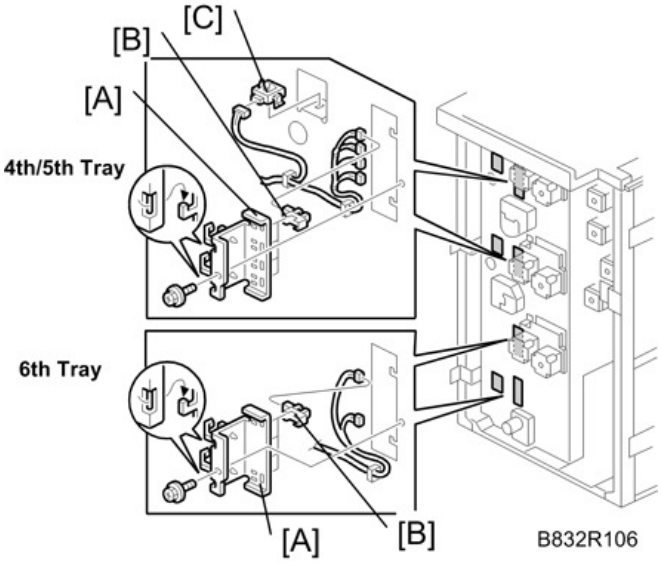
1. Remove the exit sensor [A] (x1, x1, x1).



Paper Height Sensors, Paper Size Sensors

1. Remove the rear cover. (Front Door and Covers)
2. Remove the right cover. (Front Door and Covers)
3. Remove the main control board bracket. (Main Control Board Bracket)
4. Remove the paper height sensor unit [A] x2, x 1, x 4).
   Remove the paper height sensors [B] (x 4 each).

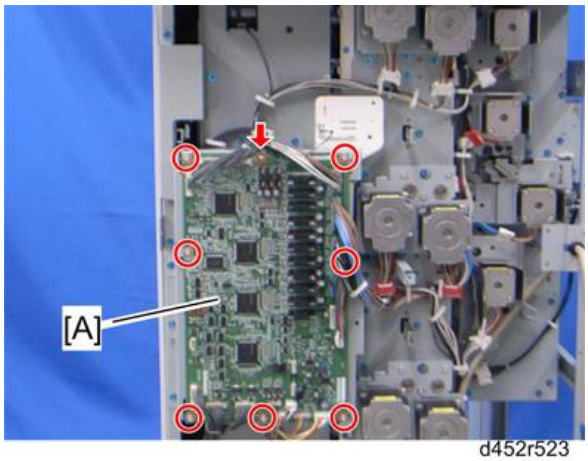
Remove the paper size sensors [C] (x 1 each).



Main Control Board

Main Board

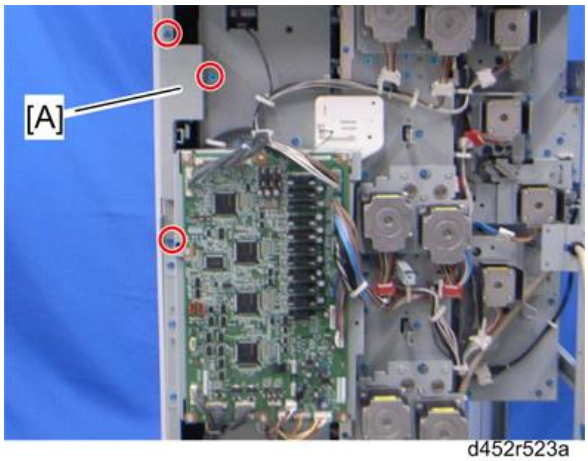
1. Remove the rear cover (Front Door and Covers)
2. Remove the main control board [A] (x 7, x 1, x All)



Main Control Board Bracket

1. Remove the rear cover (Front Door and Covers)

2. Remove the bracket [A] (x 3)



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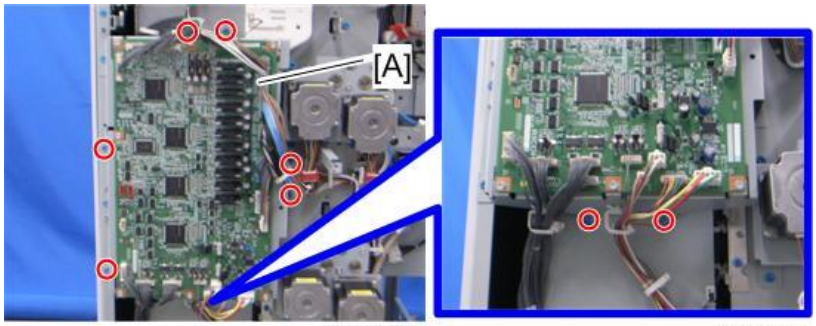
3. Remove the main control board bracket [A] (x 8, x 3, x All)



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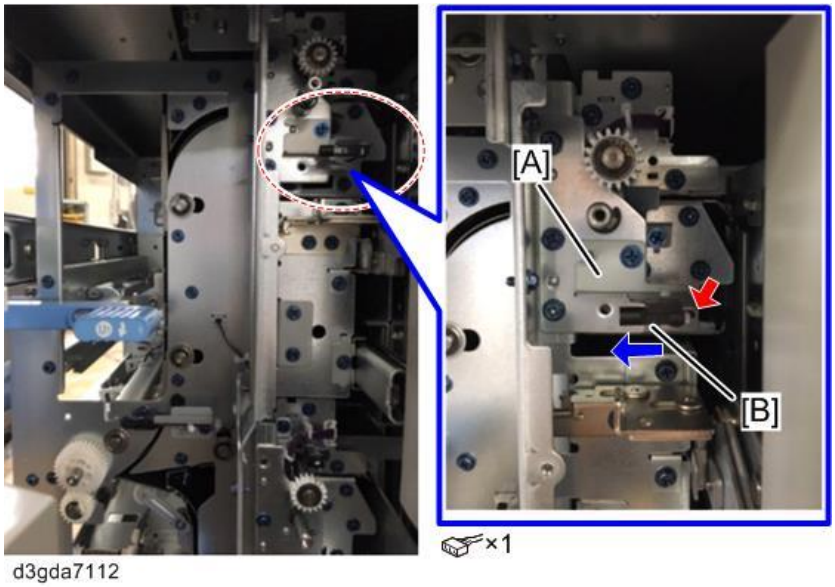
Tray 4th Paper Feed Unit LED

1. Remove the inner cover (upper). (Inner Covers)

2. Remove the tray 4th paper feed unit LED [B] from the bracket [A].

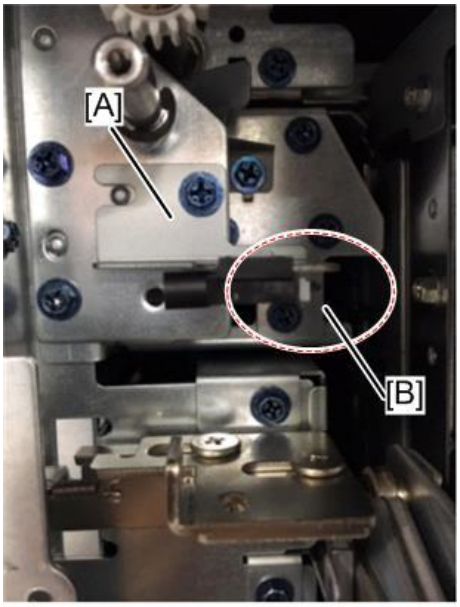


d3gda7112

Note

- When attaching the tray 4th paper feed unit LED, set the LED connector [B] to the rear

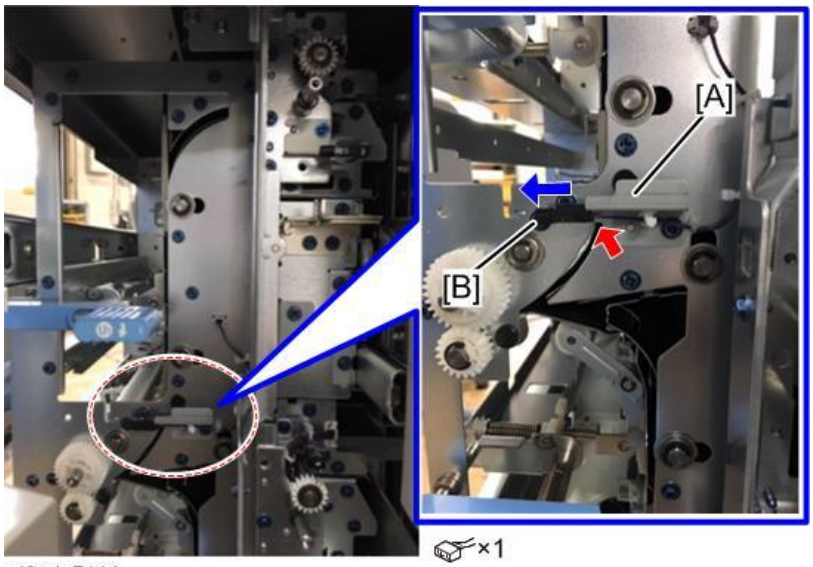
side of the bracket [A].



d3gda7113

LCT Exit LED

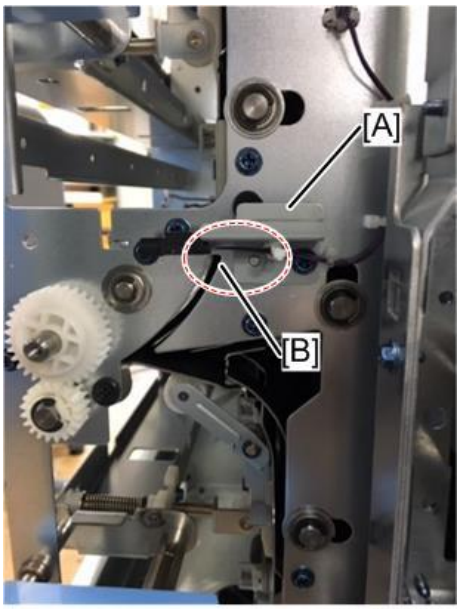
1. Remove the inner cover (upper). (Inner Covers)
2. Remove the tray LCT exit LED [B] from the bracket [A].



d3gda7114

Note

- When attaching the LCT exit LED, set the LED connector [B] to the rear side of the bracket [A].



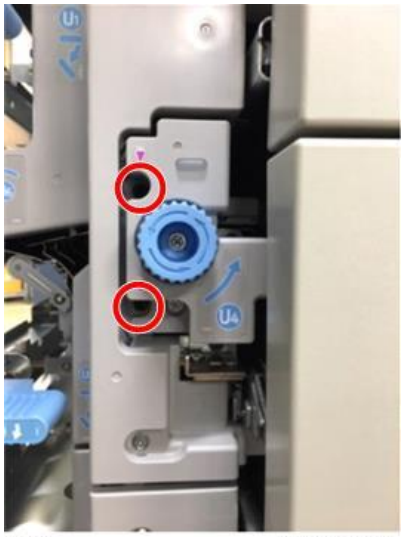
d3gda7115

Tray 5th Paper Feed Unit LED/ Tray 6th Paper Feed Unit LED

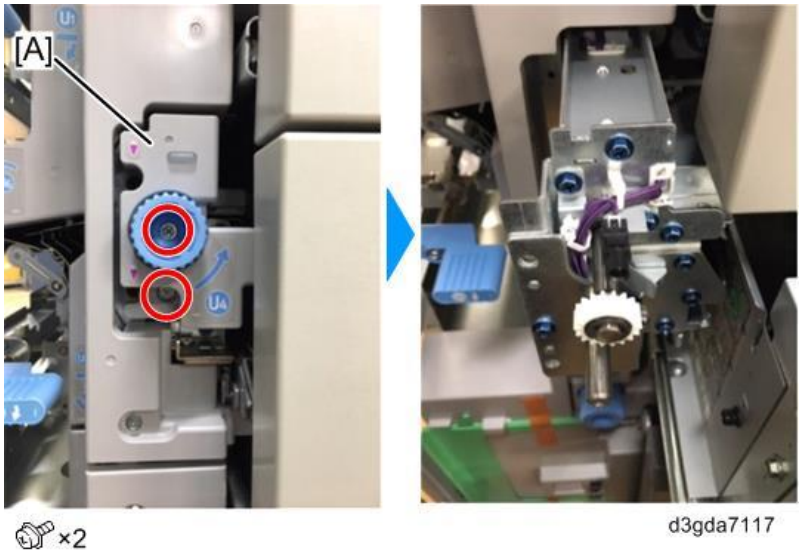
The replacement procedure is the same for both LEDs.

The procedure for the tray 5th paper feed unit LED is explained below.

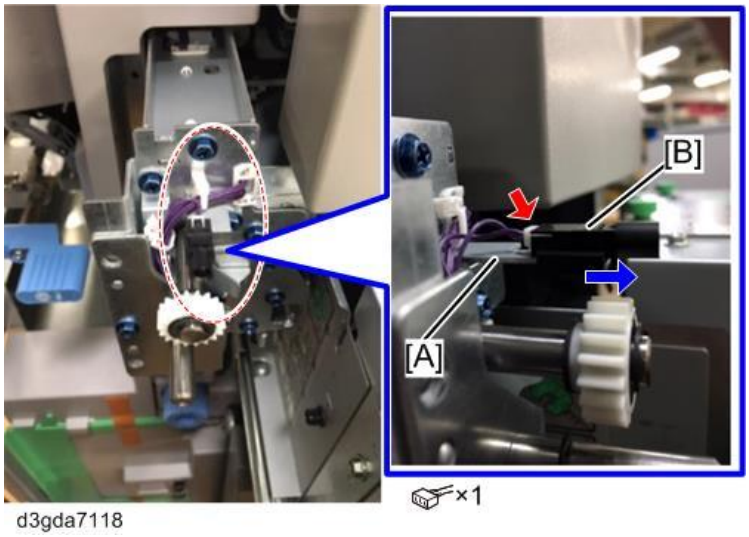
1. Remove the fixing screws of the tray 5th paper feed unit.


×2 d3gda7116

2. Pull the paper feed tray and paper feed unit toward you, and remove the inner cover [A].

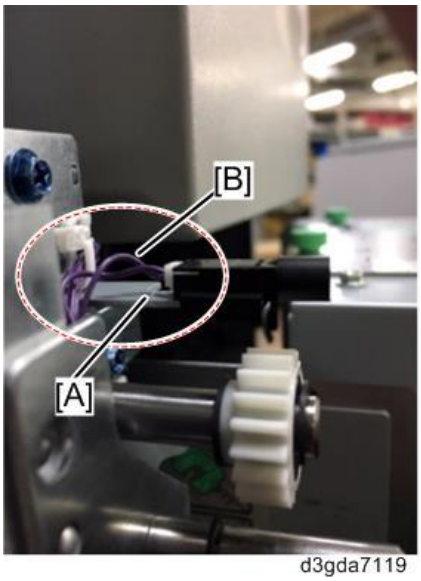


3. Remove the tray 5th paper feed unit LED [B] from the bracket [A].



Note

- When attaching the tray 5th paper feed unit LED, set the LED connector [B] to the rear side of the bracket [A].



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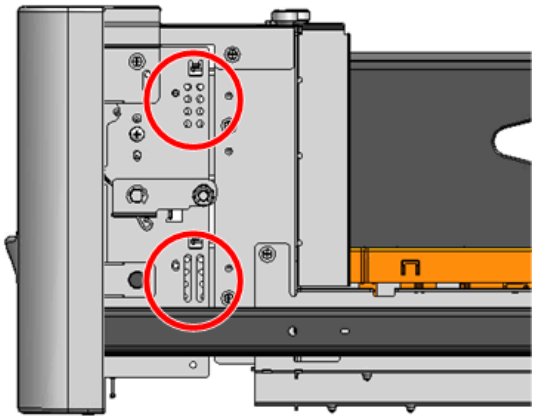
Adjustments

Side Registration Adjustment

Normally, the side registration of the image can be adjusted with SP1002 004-006 (Side-to-Side Registration – Tray 4, 5, 6).

When the punch hole positions are not aligned when feeding from a particular tray, adjust the side registration by changing the tray cover position for the tray as described below. Then adjust the side registration of the image with using the SP setting.

1. Pull out the tray.
2. Change the positions of the screws in the red circles on both the right and left sides as shown.



d3gda7103

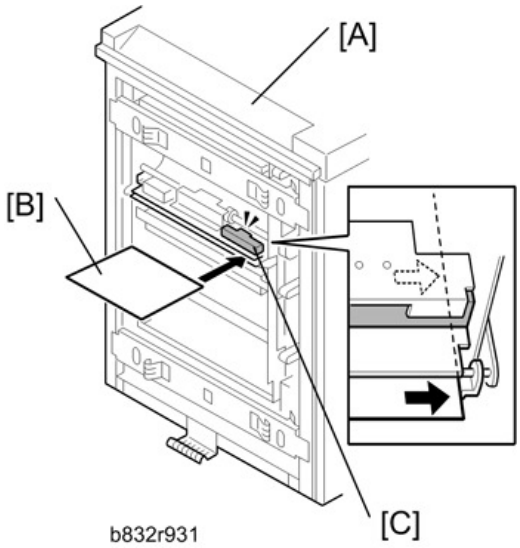
Important

- Adjustment range: 0 ± 2.0 mm adjustment step: 0.5 mm/step.

Adjusting Image Position Sensor Strength and Side-To-Side Registration

1. Turn off the main power of the main machine.
2. Disconnect the LCT from the main machine.
3. With the LCT [A] separated from the main machine, reconnect the LCT cable to the main machine.
4. Turn ON the main power of the main machine.
5. Insert one sheet of plain white paper [B] into the paper path.

6. Make sure that the paper covers the entire area below the image position sensor (CIS) [C].



7. Enter the SP mode. Execute SP1910-002 (CIS Image Position Adjustment: LED Strength - LCT). This calibrates the amount of light to be emitted from the CIS.

8. Execute SP1909 002 (CIS Image Position Adjustment: PWM After Adjustment - LCT).

- If the displayed value is between Ah (10) and 28h (40), the CIS is calibrated successfully. (The display is in hexadecimal code.)
- If the value is outside the above range, execute SP 1910-002 and 1909-002 again. If the value does not come between Ah and 28h, the CIS may be defective.

9. Exit the SP mode.

10. Re-attach the LCT to the main machine.

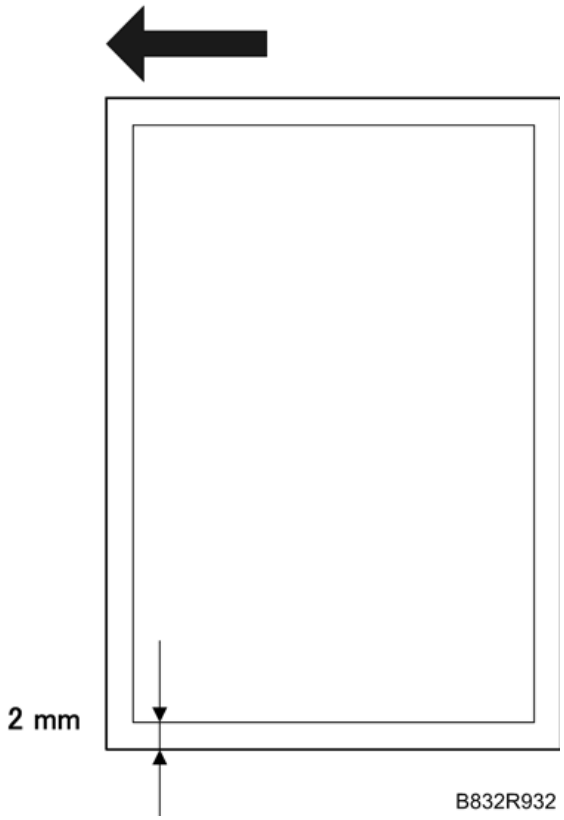
11. Select [User Tools]> [Adjust Settings for Operators].

12. Execute "0111-4 to -7" for Trays 4, 5, 6, 7 and set the value for each tray to "Off".

13. Exit from [User Tools] > [Adjust Settings for Operators] and return to the SP mode menu.

14. Adjust the image positions in the main scan direction.

- Execute SP2902-003. Select Pattern 27, then print the trimming pattern.
- Execute SP1002. Adjust the image position in the main scan direction for Trays 4, 5, 6, and 7.
- Print the trimming pattern from each tray of the LCT and from the bypass tray (if installed).
- The distance of the test pattern line from the paper edge for each tray must be 2 mm. If it is not 2 mm, adjust with SP1002-004 to -007, depending on which tray is not within the specified 2 mm.



15. Execute SP1912-002 (CIS Image Position Adjustment: Normal Paper).
    This sets the CIS for operation with standard copy paper.
16. Exit the SP mode.
17. Select [User Tools]> [Adjust Settings for Operators].
18. Once again execute "0111-4 to -7" (CIS Image Position Adjustment: Feed Setting) and reset the values for Trays 4, 5, 6, and 7 to "On".

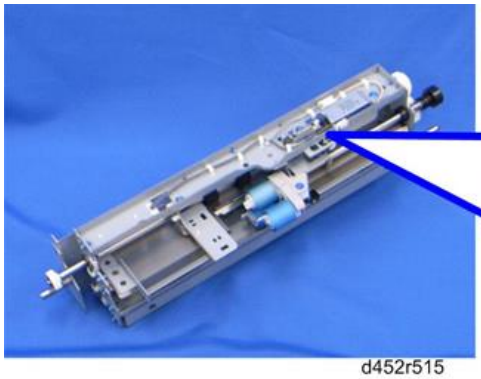
Double Feed Problem With the LCT

If double feed occurs several times when paper is fed from the LCT, try changing the upper limit of the paper stack in the tray

Changing the upper limit can improve paper separation.

1. Remove the paper feed unit of the LCT unit (Paper Feed Units)
2. Loosen the screw on the lift sensor bracket [A].
3. Move the bracket 0.7 mm in the arrow direction as shown below.

4. Tighten the screw on the lift sensor bracket [A].



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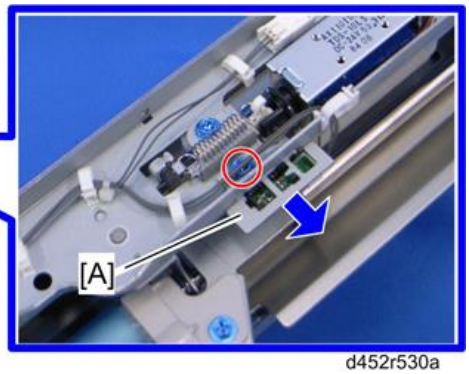

d452r530a

Important

- To return the upper limit position to the default position, move the paper lift sensor bracket 0.7 mm to the opposite side.
- Return the upper limit position to the default if a paper jam occurs at the paper feed sensor in the LCT.