LCIT RT3040
Machine Code: D3G1
Field Service Manual
Ver. 1.0

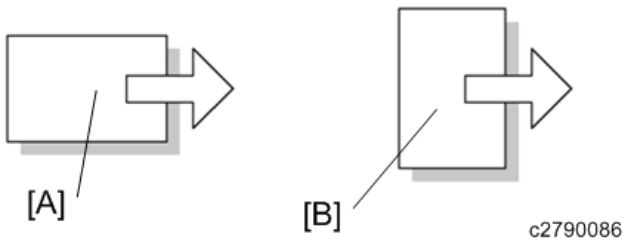
Latest Release: December, 2018
Initial Release: December, 2018

Symbols, Abbreviations and Trademarks

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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Table of Contents

1. Detailed Descriptions

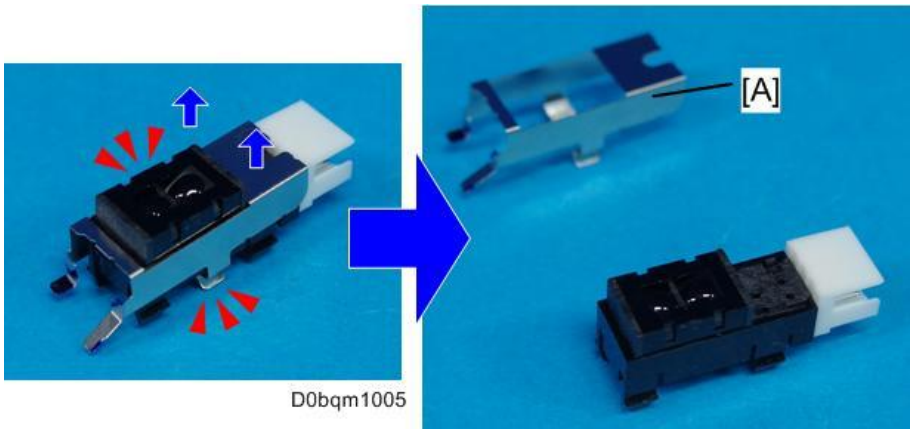
Changes from the Previous Machine

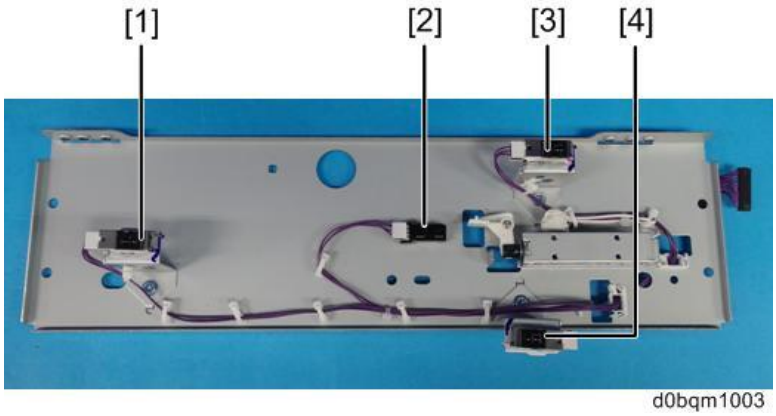
- **Antistatic Control**

  Metal cover [A] for antistatic control has been added to the following sensors:

  - Paper Feed Sensor
  - Transport Sensor
  - Paper End Sensor

When replacing the those sensors, this cover will also be used after replacement, so remove it from the old sensors. When you do so, be careful not to deform or damage anything.





1: Paper Feed Sensor

2: Upper Limit Sensor

3: Paper End Sensor

4: Transport Sensor

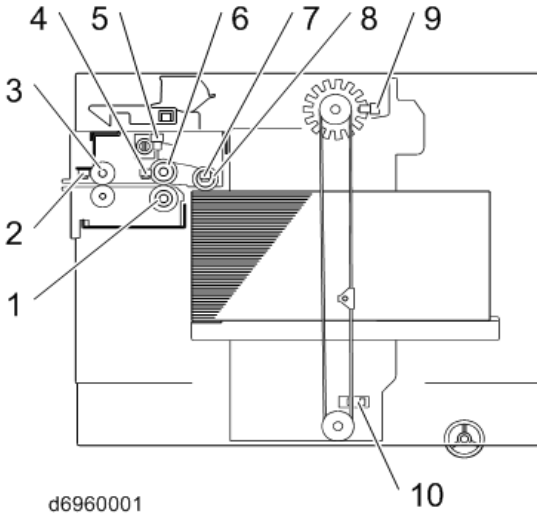
- **Dehumidification Heater**

  An optional dehumidification heater (attached to the side of the tray) is available.

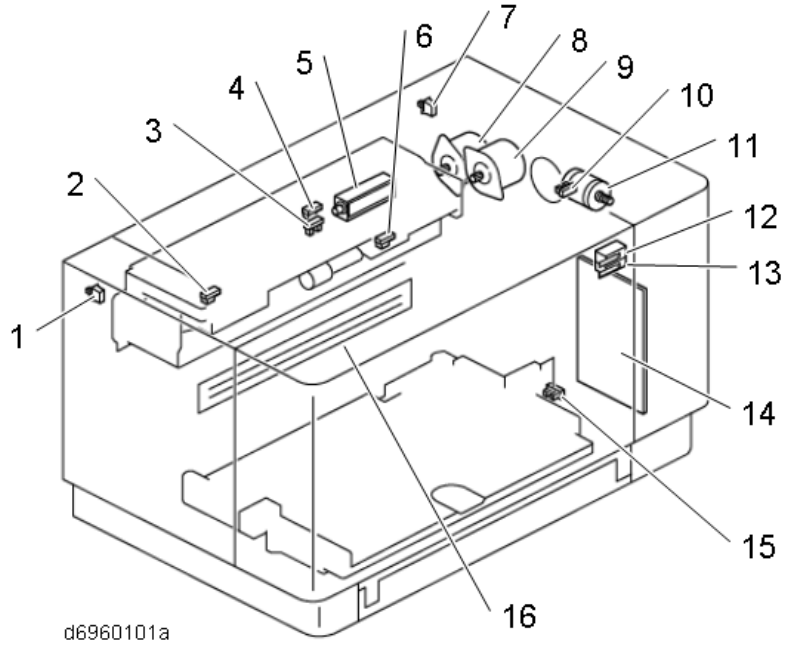
Specifications

Item	Specifications
Paper size:	A4 LEF, B5 JIS LEF, 8 1/2 x 11 LEF
Paper weight:	52–300 g/m^2 (14 lb. Bond–110 lb. Cover)
Paper capacity (80 g/m^2, 20 lb. Bond):	1,500 sheets
Power consumption:	13 W (Power is supplied from the main unit.)
Dimensions (W x D x H):	340 × 544.5 × 290 mm (13.4 × 21.4 × 11.5 inches)
Weight:	Approx. 11 kg (24.3 lb.)

Parts Layout



No.	Description	No.	Description
1	Friction roller	6	Feed roller
2	Transport sensor (S2)	7	Paper end sensor (S3)
3	Transport roller	8	Pickup roller
4	Paper feed sensor (S1)	9	Remaining paper sensor (S6) (inside lift unit)
5	Upper limit sensor (S4)	10	Lower limit sensor (S5)



No.	Description	No.	Description
1	Tray set switch (front) (SW1)	9	Paper feed motor (M2)
2	Paper feed sensor (S1)	10	Remaining paper sensor (S6) (inside lift unit)
3	Upper limit sensor (S4)	11	Tray lift motor (M3) (inside tray lift unit)
4	Transport sensor (S2)	12	Interlock switch 1 (SW3)
5	Pick-up roller solenoid (SOL1)	13	Interlock switch 2 (SW4)

No.	Description	No.	Description
6	Paper end sensor (S3)	14	Controller board (PCB1)
7	Tray set switch (rear) (SW2)	15	Lower limit sensor (S5)
8	Transport motor (M1)	16	Dehumidification heater (Option) (H1)

Mechanism

Paper Feed Separating Mechanism

The tray unit and paper feed transport unit are integrated. The pick-up roller, feed roller and reverse roller are common with the main frame's paper feed unit. Both paper feed and paper separation mechanisms use the same RF paper feed system.

In order to feed the paper at regular intervals, there is a paper feed sensor between the pick-up roller and the feed roller, and this sensor is used to adjust the paper feed timing.

1. The paper feed motor (M2) turns ON, and feeds the first sheet of paper.

2. To prevent the next sheet from being transported, the pick-up solenoid (SOL1) turns ON just before the trailing edge of the first sheet passes through the pick-up roller, and the pick-up roller leaves the paper surface.

3. Just before the trailing edge of the first sheet leaves the paper feed roller, the paper feed motor (M2) turns OFF.

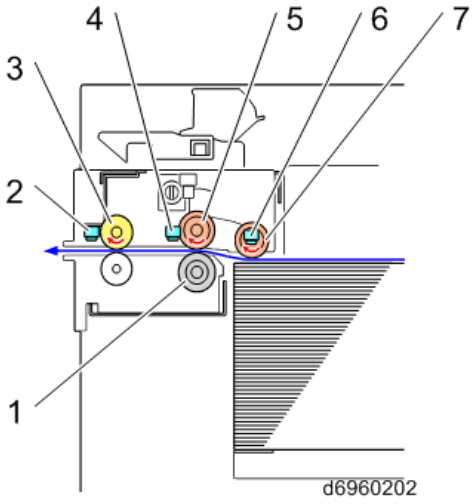
However, at this time, if the paper feed sensor (S1) does not detect paper (the second sheet is not transported to the paper feed sensor position), the paper feed motor (M2) does not turn OFF. Pre-feed is performed as follows:

1. The pick-up solenoid (SOL1) turns OFF, and the second sheet of paper is transported to the paper feed sensor position.
2. When the trailing edge of the second sheet passes the feed roller, the paper feed motor (M2) is turned OFF. The pick-up solenoid (SOL1) remains OFF.

4. Just before the trailing edge of the first sheet passes the feed roller, the pick-up solenoid (SOL1) turns OFF. The pick-up roller is brought into contact with the paper surface.

If paper is pre-fed, the pick-up solenoid (SOL1) will remain OFF, and this operation will not performed.

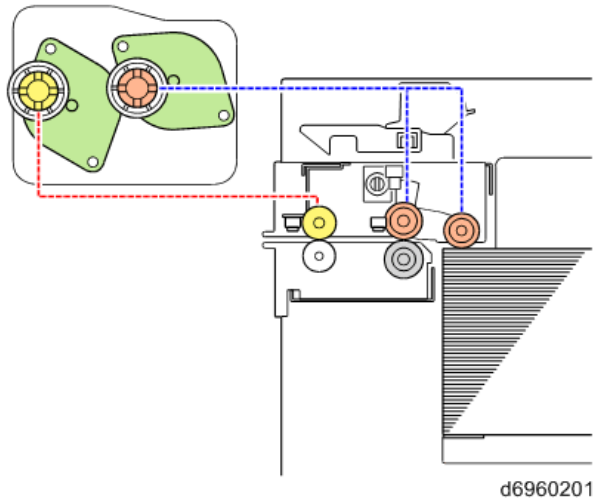
5. When the first sheet is transported a specified distance by the downstream transport roller, the paper feed motor (M2) turns ON to feed the second sheet.



No.	Description	No.	Description
1	Friction roller	5	Feed roller
2	Transport sensor (S2)	6	Paper end sensor (S3)
3	Transport roller	7	Pick-up roller
4	Paper feed sensor (S1)	-	-

Drive Mechanism

The pick-up roller and feed roller are driven by the paper feed motor (M2). The transport roller is driven by the transport motor (M1). The friction roller is not driven.



Tray Lift/Descent Mechanism

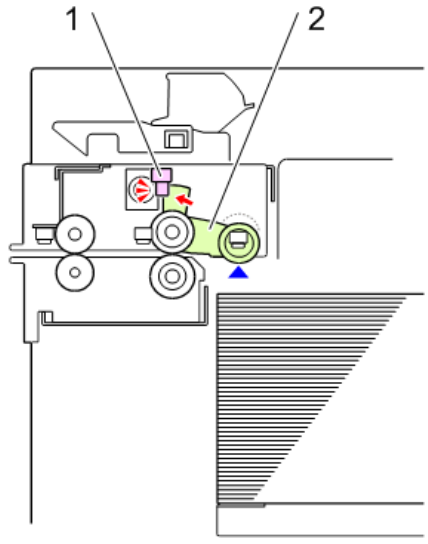
The tray lift motor (M3) is coupled with the lift shaft, so that when the shaft rotates, the tray bottom plate rises.

Conditions for tray lift

- The main power is turned ON.
- During copying, the upper limit sensor (S4) is ON (the sensor is not blocked)
- The top cover is closed and the upper limit sensor (S4) is ON.
- The main machine recovers from low power mode.

Note

- The tray lifts until the upper limit sensor (S4) turns OFF (the sensor is blocked).



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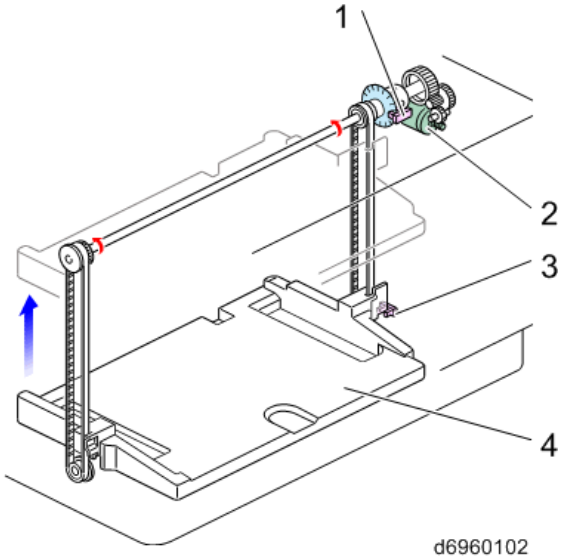
No.	Description
1	Upper limit sensor (S4)
2	Actuator

Conditions for tray descent

- The right cover is opened.
- Paper end is detected.

Note

- The tray descends until the lower limit sensor (S5) turns OFF (the sensor is blocked).



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No.	Description
1	Remaining paper sensor (S6) (inside lift unit)
2	Tray lift motor (M3)
3	Lower limit sensor (S5)
4	Tray

Remaining Paper / Paper End Detection

Remaining paper detection

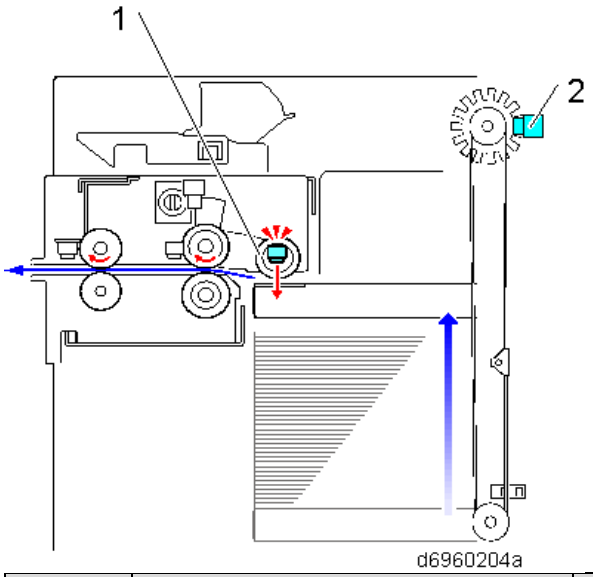
Remaining paper in the paper feed tray is detected using a pulse count by the remaining paper sensor.

The paper remaining is displayed on the control panel.

Remaining paper	Paper end sensor	Control panel display
100%	OFF	4 bars
70%	OFF	3 bars
30%	OFF	2 bars
10%	OFF	1 bar
Paper end	ON	None

Paper end detection

There is a reflector-type sensor in the upper stay that detects the upper surface of the paper in the tray.

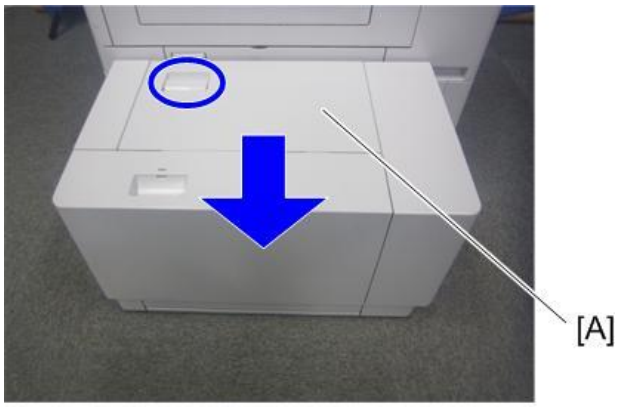


No.	Description	No.	Description
1	Paper end sensor	2	Remaining paper sensor

2. Replacement and Adjustment

Rear Cover

1. Pull out the LCT [A].



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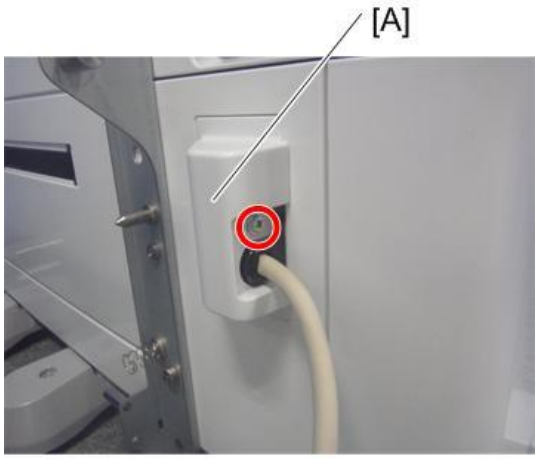
2. Remove the cable cover [A] (×1).



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3. Remove the cable bracket [A] (×1, ×1).

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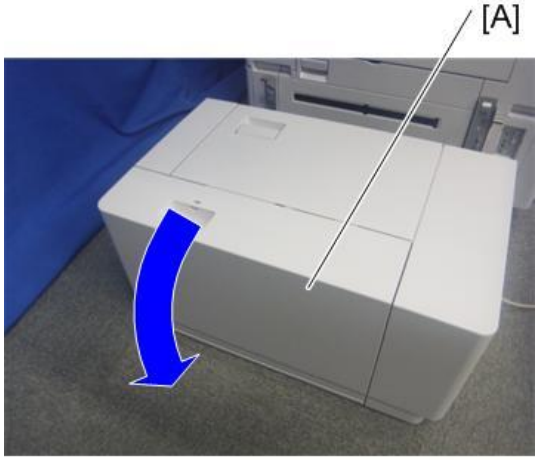
4. Open the right cover [A].



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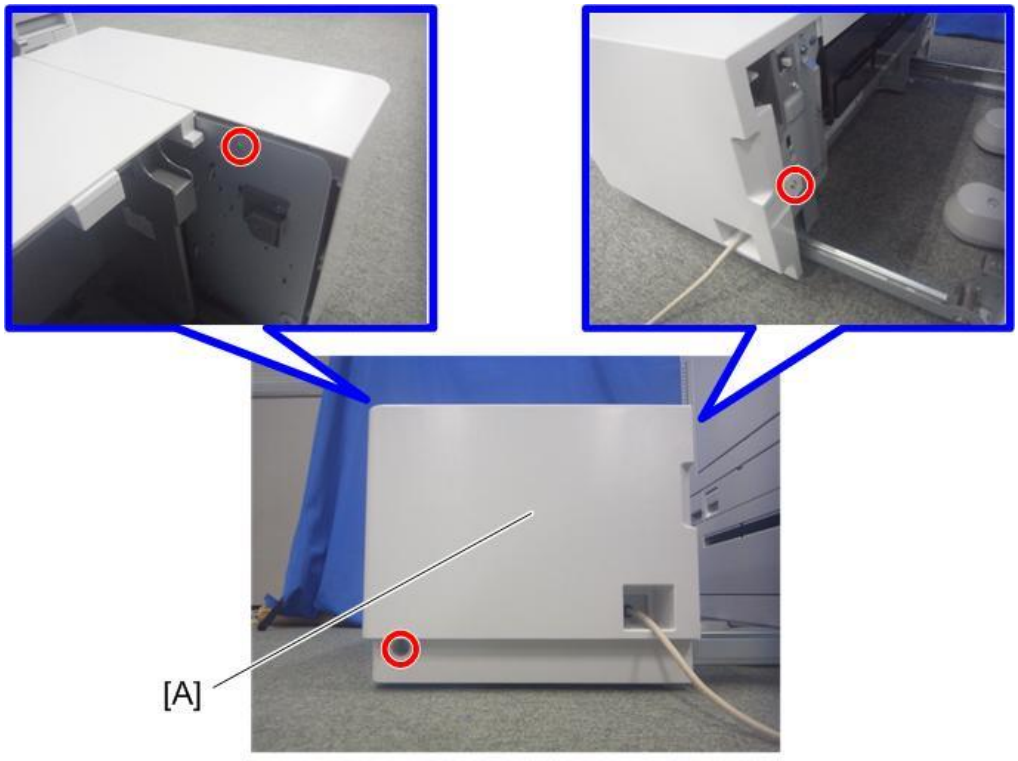
5. Remove the rear cover [A] (×3).



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Front Cover

1. Open the right cover (Right Cover)
2. Remove the front cover [A] (×4).

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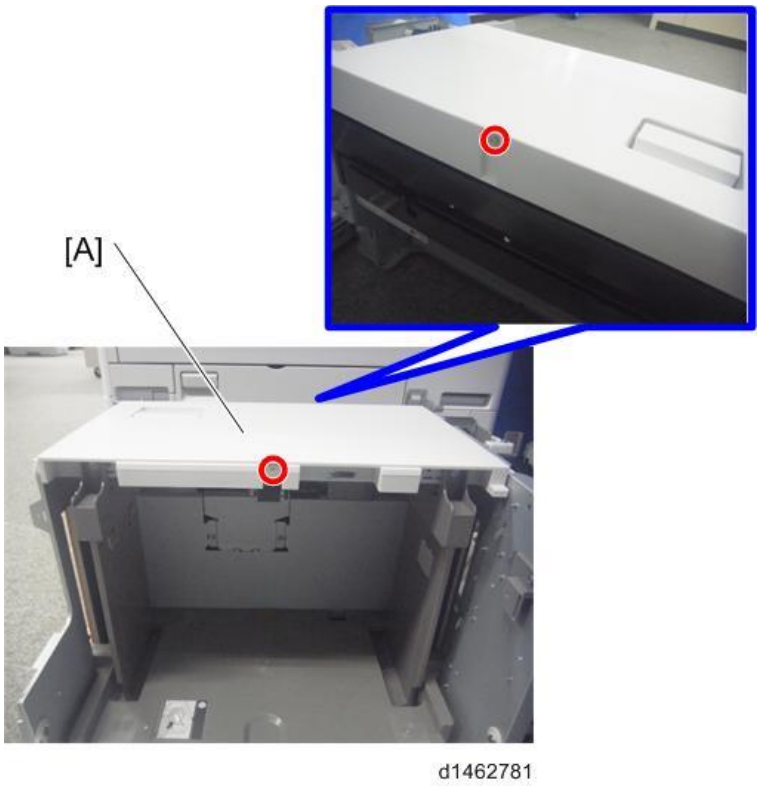
Upper Cover

1. Remove the front cover. (Front Cover)
2. Remove the rear cover. (Rear Cover)
3. Remove the upper cover [A] (×2).



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Right Cover

1. Remove the front cover. (Front Cover)
2. Remove the right cover [A] (×1,×1).

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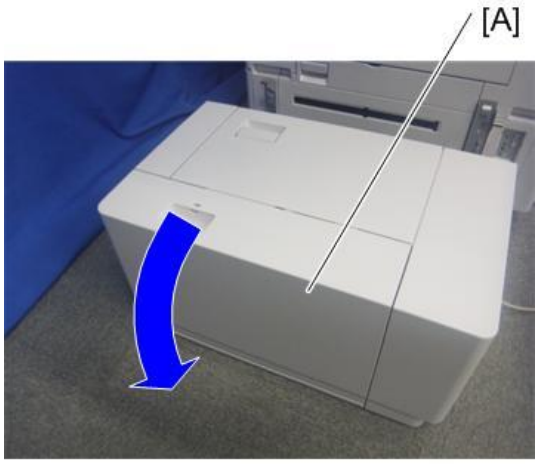
Pick-up Roller, Feed Roller, Friction Roller

1. Open the right cover [A].



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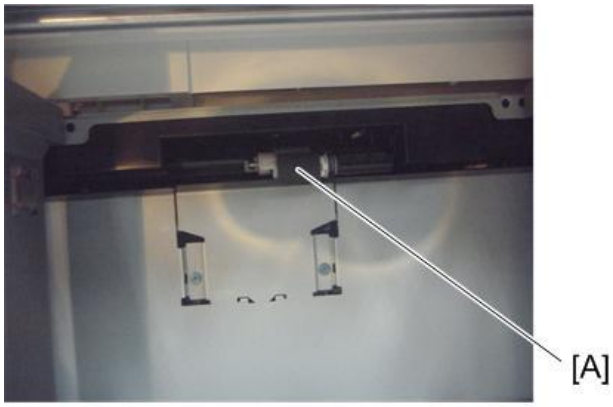
2. Remove the pick-up roller [A] (×1).



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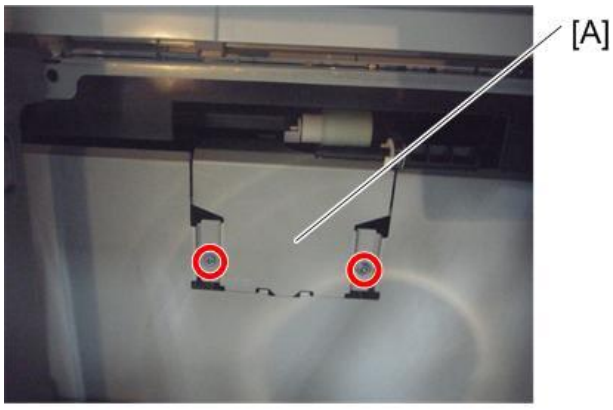
3. Remove the sensor bracket [A] (×2).



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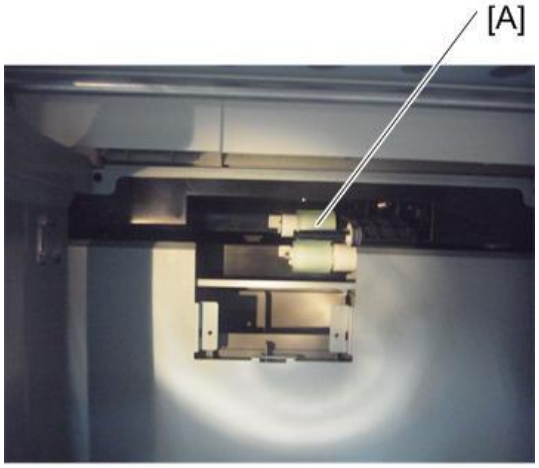
4. Remove the feed roller [A] (×1).



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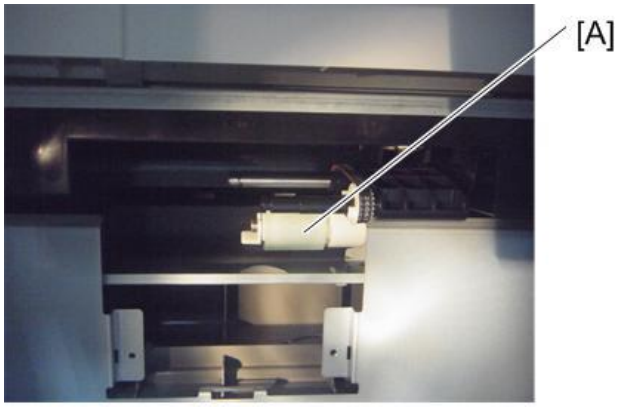
5. Remove the friction roller [A] (×1).



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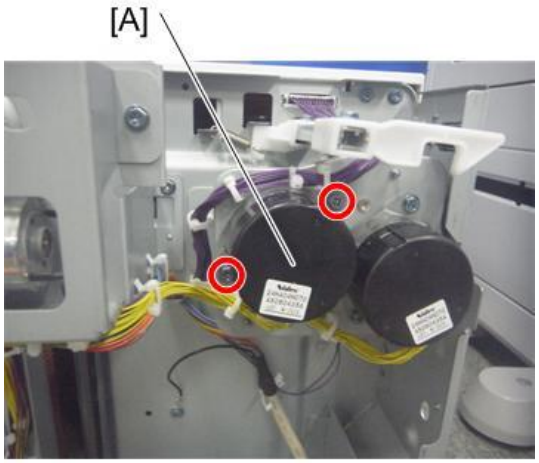
Paper Feed Motor (M2)

1. Remove the rear cover. (Rear Cover)
2. Remove the paper feed motor (M2) [A] (×2, ×1).



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Transport Motor (M1)

1. Remove the rear cover. (Rear Cover)
2. Remove the transport motor (M1) [A] (×2, ×1).

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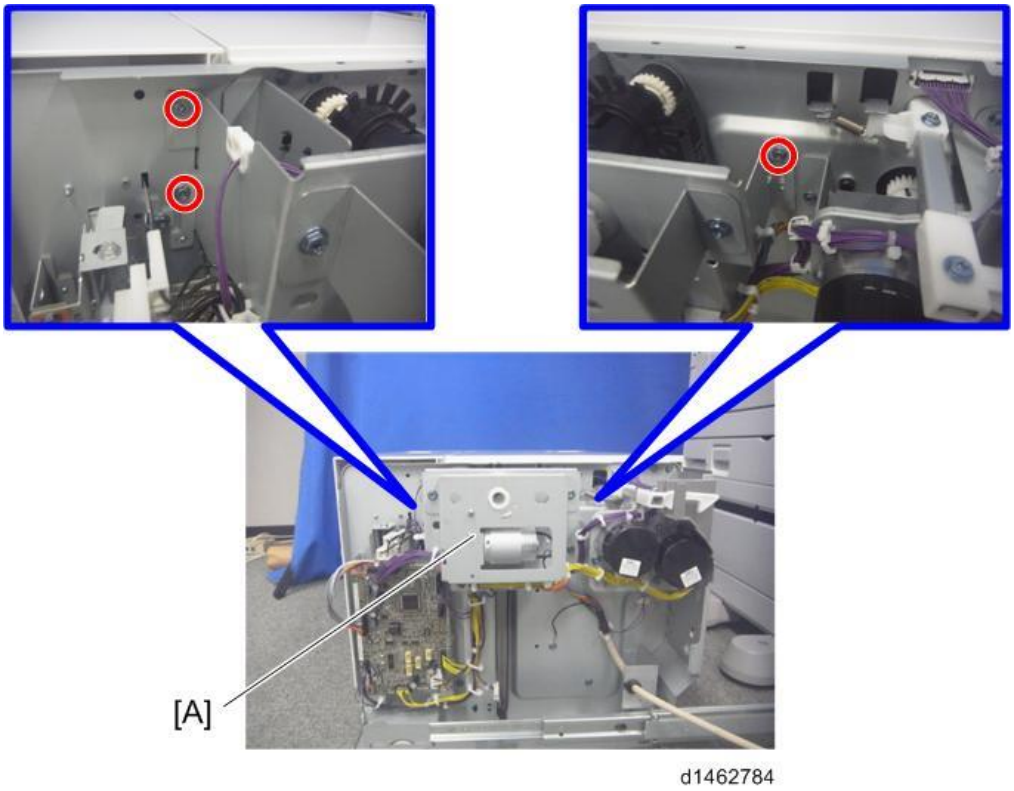
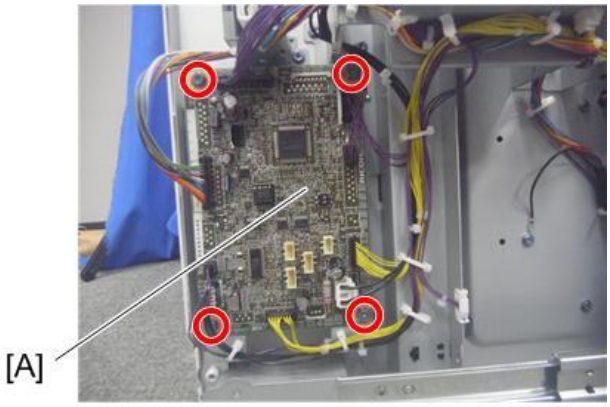
Tray Lift Unit

1. Remove the rear cover. (Rear Cover)
2. Remove the tray lift unit [A] (×3, ×1, ×10).



Controller Board (PCB1)

1. Remove the rear cover. (Rear Cover)
2. Remove the controller board (PCB1) [A] (×4, ×9, ×2).



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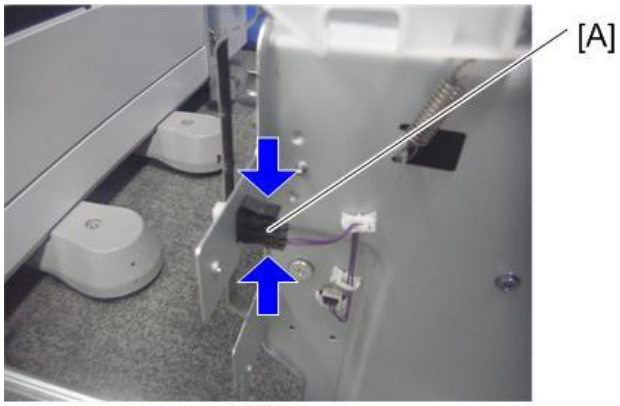
Tray Set Switch (Front) (SW1)

1. Remove the front cover. (Front Cover)
2. Remove the tray set switch (front) (SW1) [A] (×1).



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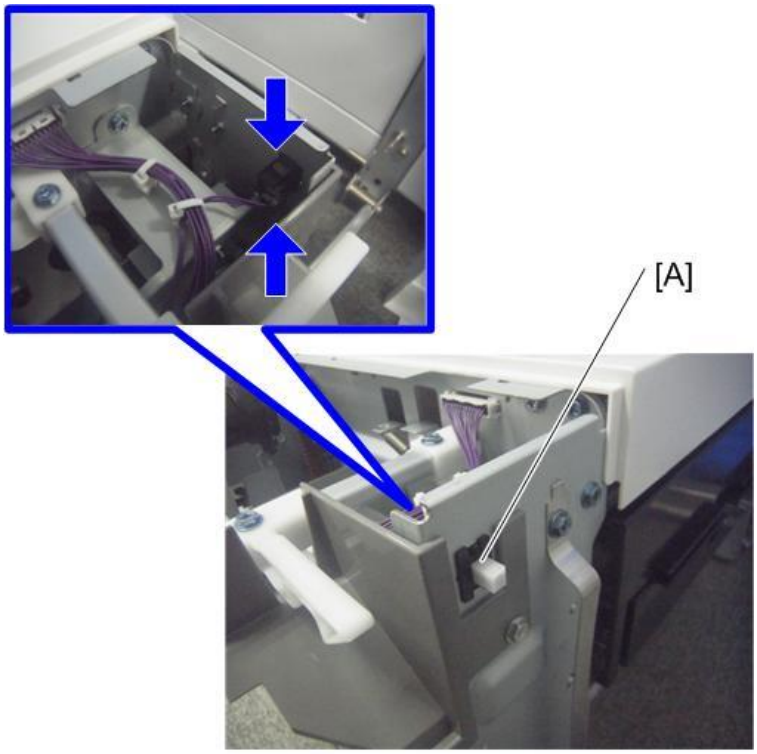
Tray Set Switch (Rear) (SW2)

1. Remove the front cover. (Front Cover)
2. Remove the tray set switch (rear) (SW2) [A] (×1).



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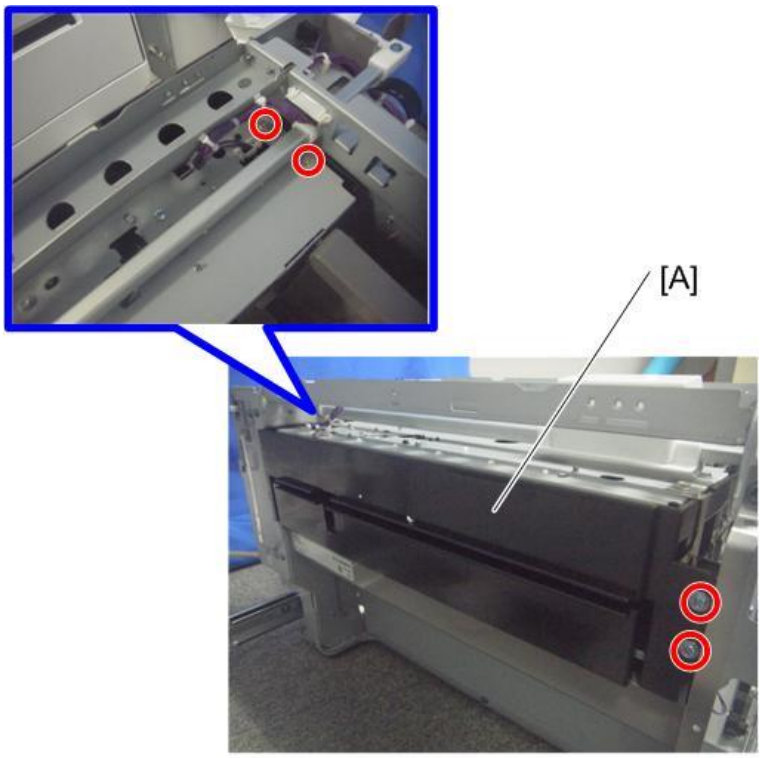
Paper Feed Sensor (S1), Paper End Sensor (S3), Upper Limit Sensor (S4), Transport Sensor (S2)

1. Remove the upper cover. (Upper Cover)
2. Remove the paper feed unit [A] (×4, ×1, ×2).



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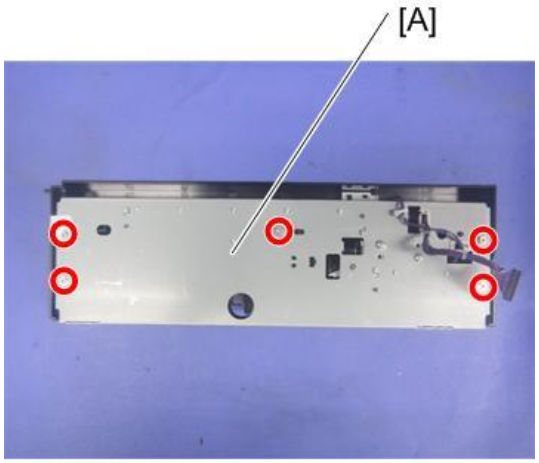
3. Remove the paper feed unit cover [A] (×5).



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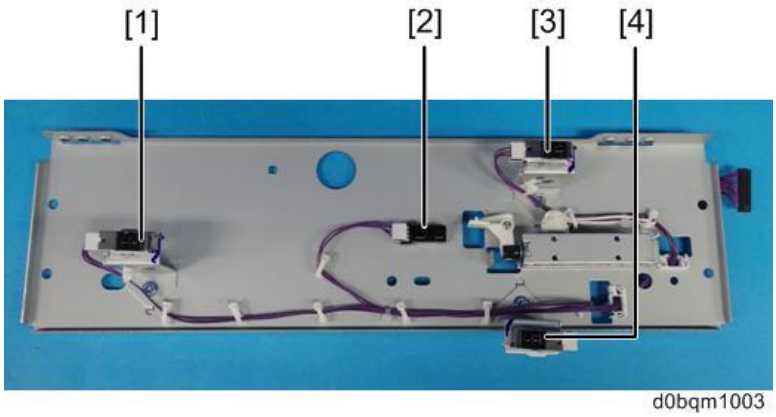


[1]: Paper feed sensor (S1)

[2]: Upper limit sensor (S4)

[3]: Paper end sensor (S3)

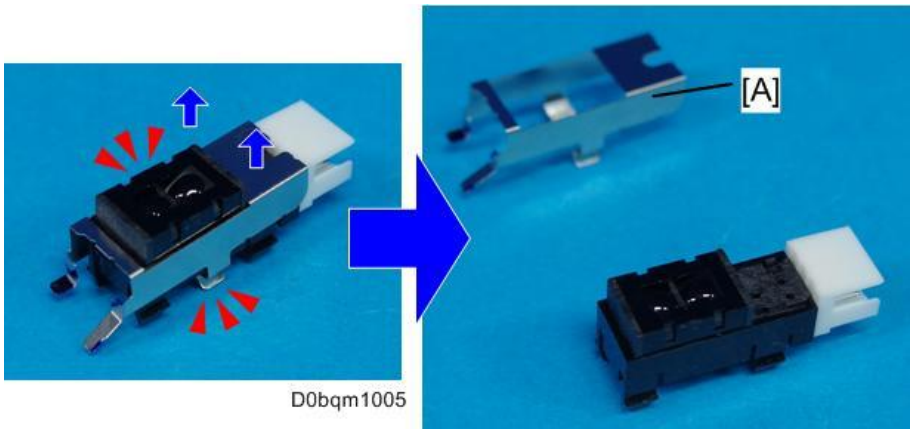
[4]: Transport sensor (S2)

Each sensor except for the tray upper limit sensor is common part.

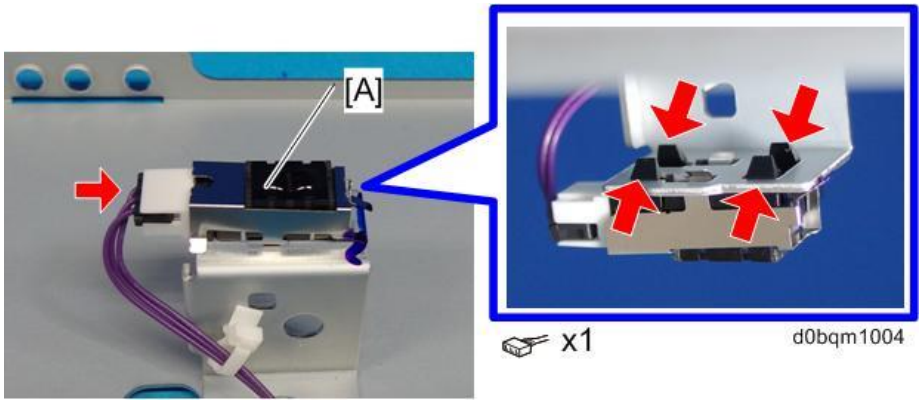
Metal cover [A] for antistatic control has been added to the following sensors:

- Paper Feed Sensor (S1)
- Transport Sensor (S2)
- Paper End Sensor (S3)

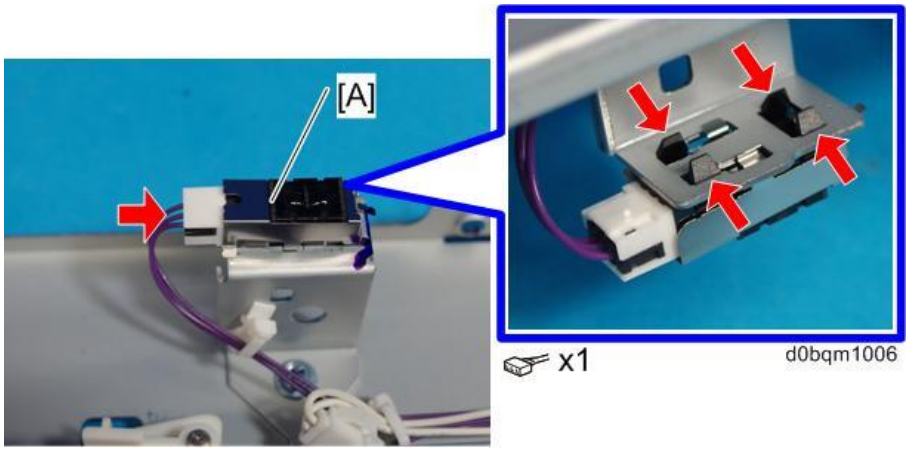
When replacing the those sensors, this cover will also be used after replacement, so remove it from the old sensors. When you do so, be careful not to deform or damage anything.



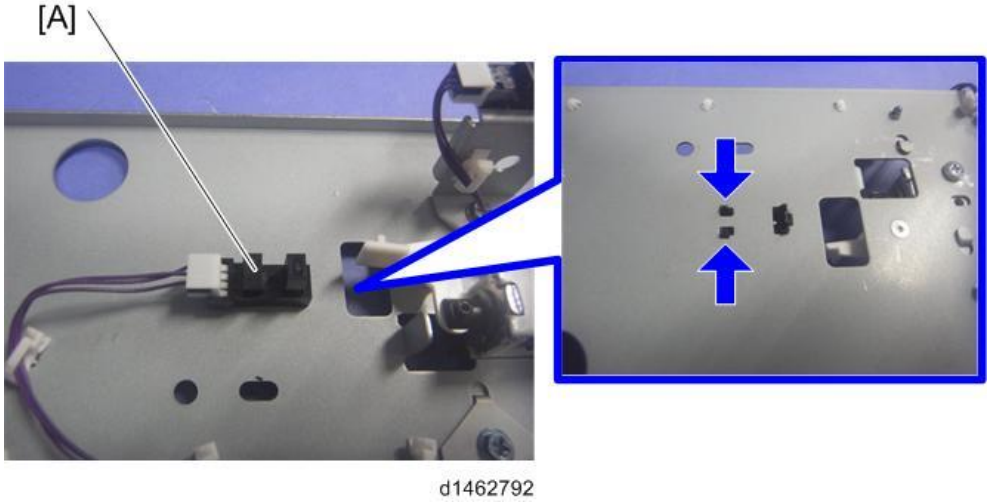
4. Remove the paper feed sensor [A].



5. Remove the paper end sensor [A].



6. Remove the upper limit sensor [A] (×1).



7. Remove the transport sensor [A].