LCIT PB3260
Machine Code: M496
Field Service Manual
Ver 1.0

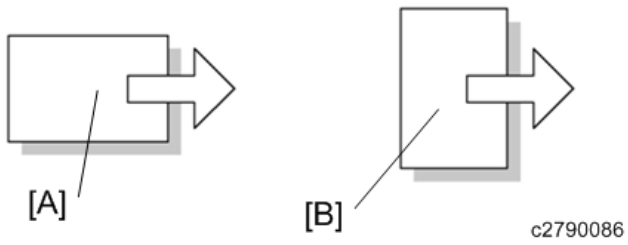
Latest Release: Sep, 2016
Initial Release: Sep, 2016

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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- Windows® Internet Explorer® 7
- Windows® Internet Explorer® 8

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- The product names of Windows Vista are as follows:

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Microsoft® Windows Vista® Home Basic

Microsoft® Windows Vista® Enterprise

- The product names of Windows 7 are as follows:

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Microsoft® Windows® 7 Enterprise

- The product names of Windows 8 are as follows:

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- The product names of Windows Server 2012 R2 are as follows:

Microsoft® Windows Server® 2012 R2 Foundation

Microsoft® Windows Server® 2012 R2 Essentials

Microsoft® Windows Server® 2012 R2 Standard

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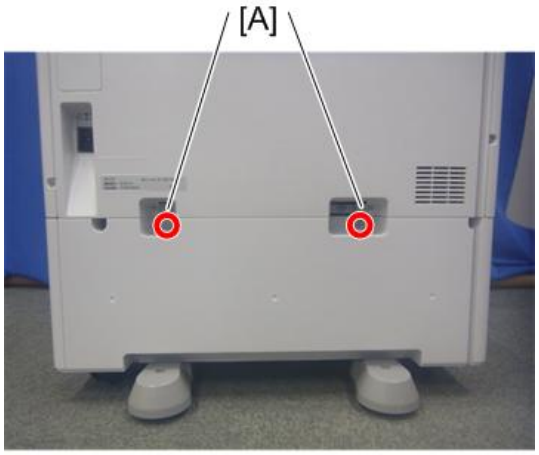
1. Replacement and Adjustment

Precautions Concerning Stabilizers

Stabilizers are necessary for meeting the requirements of IEC60950-1, the international standard for safety.
The aim of these components is to prevent the products, which are heavy, from toppling as a result of people running into or leaning onto them, which can lead to serious accidents such as persons becoming trapped under the product. (U.S.: UL60950-1, Europe: EN60950-1)
Therefore, removal of such components must always be with the consent of the customer.
Do not remove them under your own judgment.

Rear Cover

1. Remove the connecting brackets [A] (2 brackets, ×2).



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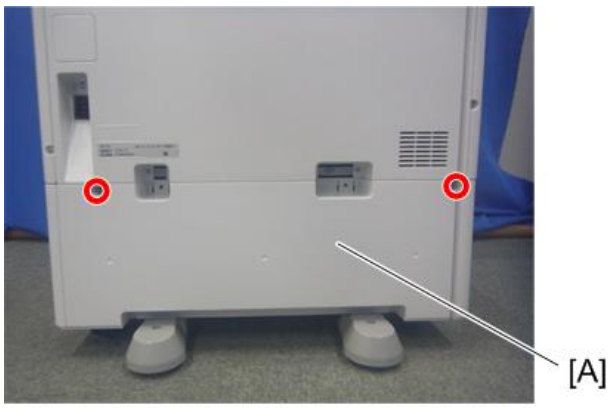
2. Remove the rear cover [A] (×2).



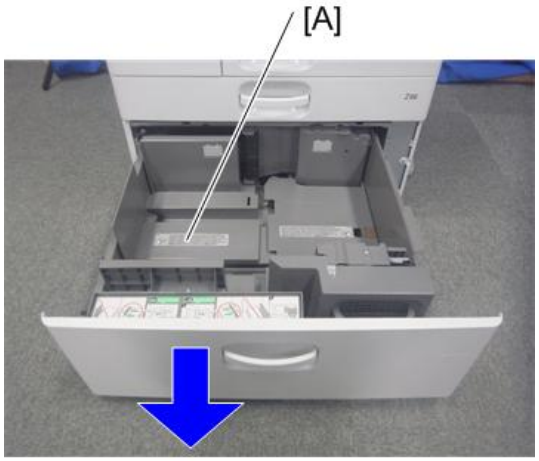
d1462746

Left and Right Trays

1. Open the paper tray [A].

d1462747

2. Remove the left tray [A].



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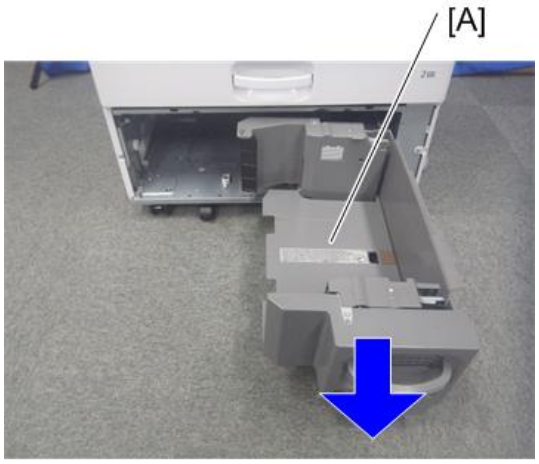
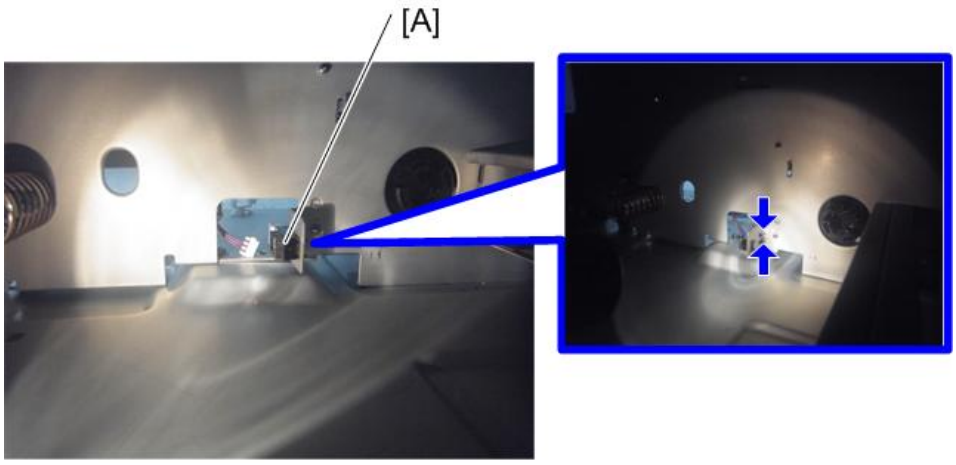
3. Remove the right tray [A].



d1462749

Left Tray Paper Sensor

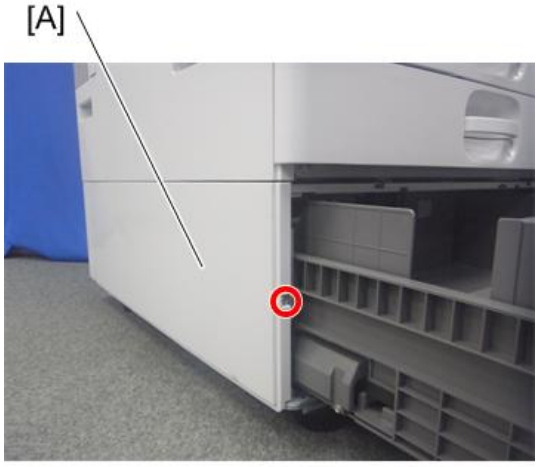
1. Remove the left tray. (Left and Right Trays)
2. Remove the rear cover. (Rear Cover)
3. Remove the left tray paper sensor [A] (×1).



d1462750

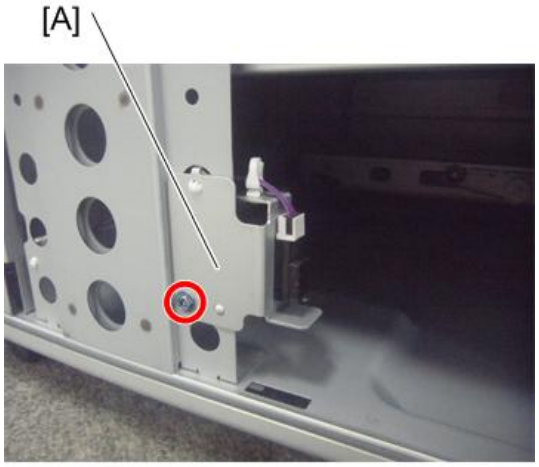
Paper Transfer Home Position Sensor

1. Open the paper tray.
2. Remove the left cover [A] (×1).



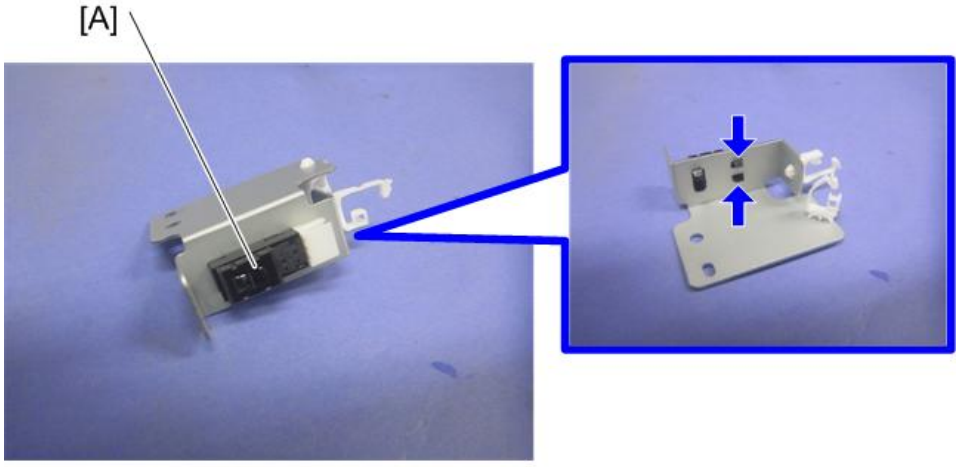
d1462751

3. Remove the paper transfer home position sensor unit [A] (×1, ×1, ×2).



d1462752

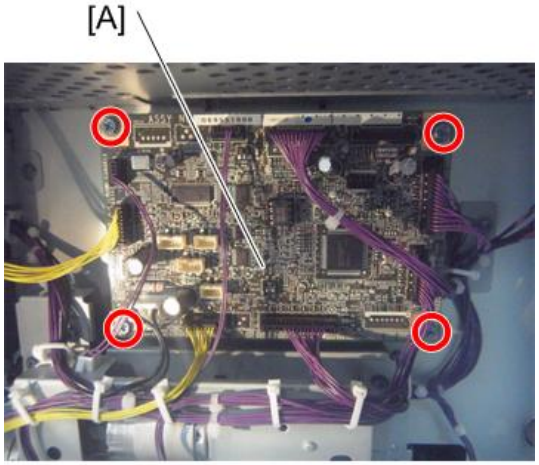
4. Remove the paper transfer home position sensor [A].



d1462753

Controller Board

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



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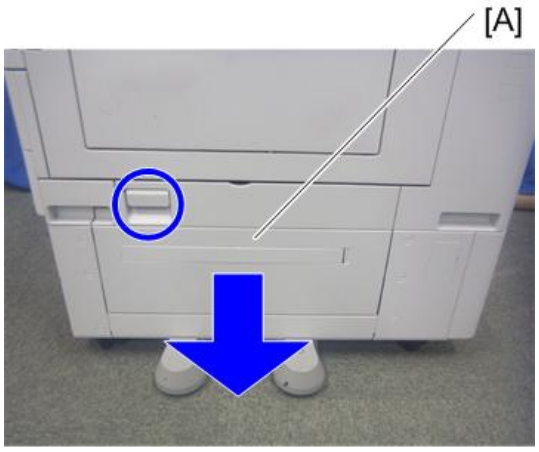
Paper Feed Unit

1. Open the paper tray.
2. Open the paper transport cover [A].



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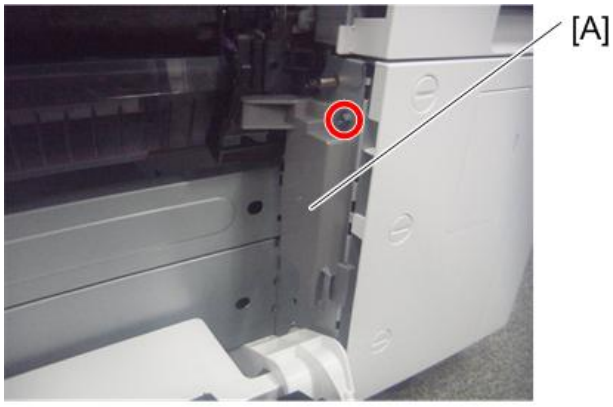
3. Remove the interlock switch cover [A] (×1).

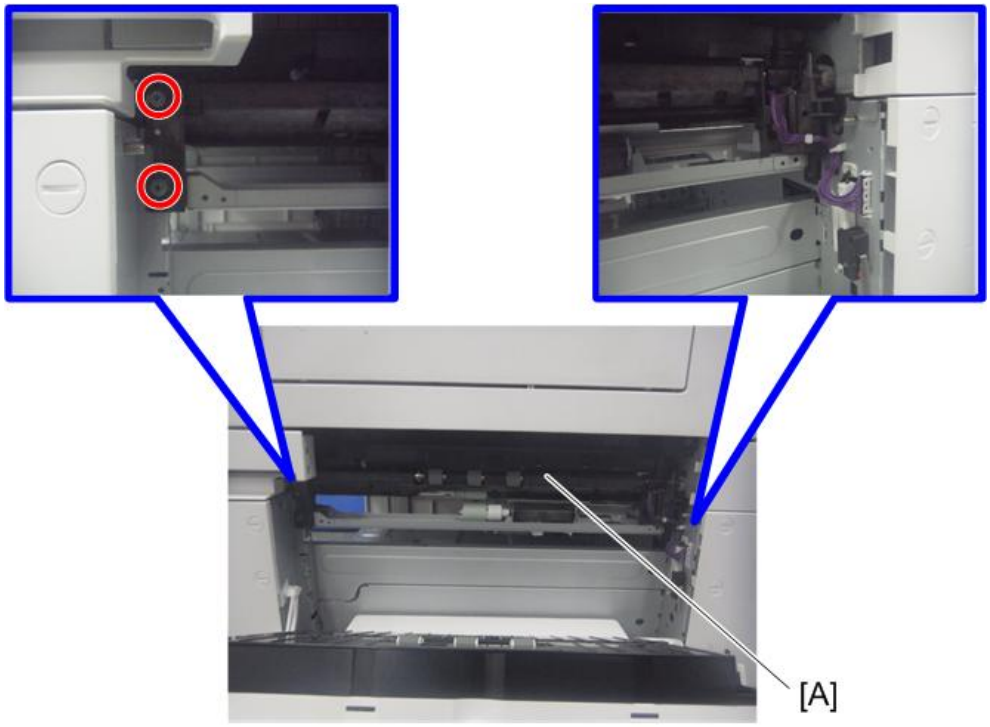


d1462768

4. Remove the paper feed guide plate [A].

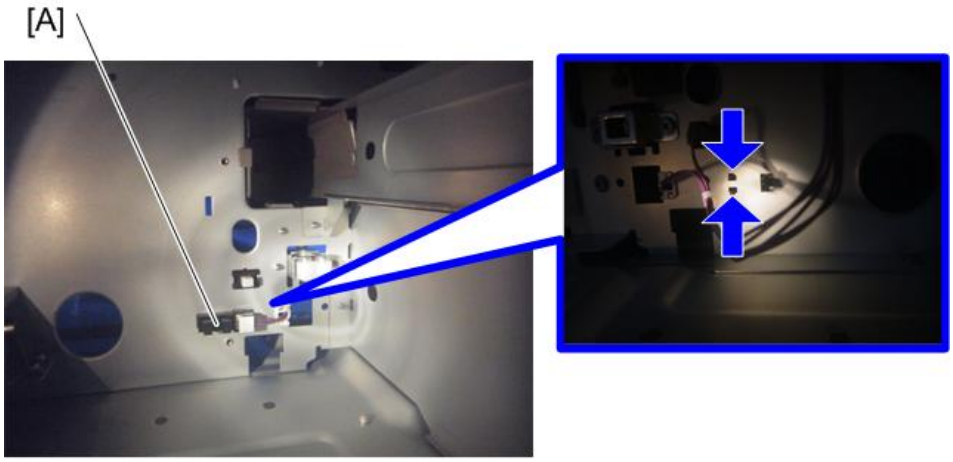
d1462769

5. Remove the paper feed unit [A] (×2, ×1, ×1).



Lower Limit Sensor

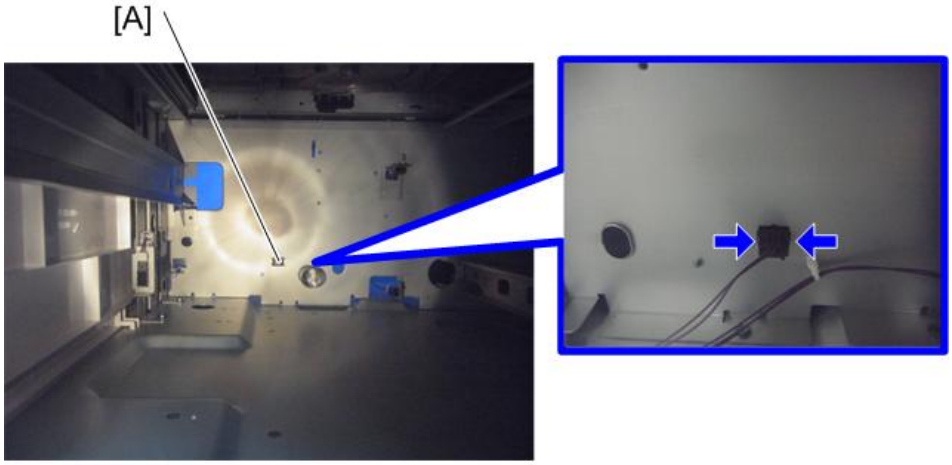
1. Remove the right tray. (Left and Right Trays)
2. Remove the rear cover. (Rear Cover)
3. Remove the tray lift/paper transfer unit. (Tray Lift/Paper Transfer Unit)
4. Remove the lower limit sensor [A] (×1).



d1462762

Left Tray Set Sensor Switch

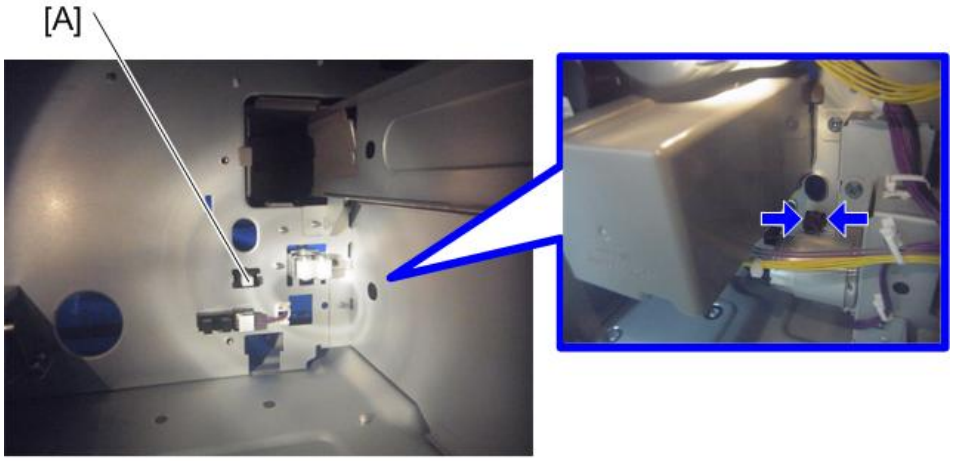
1. Remove the left tray. (Left and Right Trays)
2. Remove the rear cover. (Rear Cover)
3. Remove the left tray set sensor switch [A] (×1).



d1462763

Right Tray Set Sensor Switch

1. Remove the right tray. (Left and Right Trays)
2. Remove the rear cover. (Rear Cover)
3. Remove the right tray set sensor switch [A] (×1).



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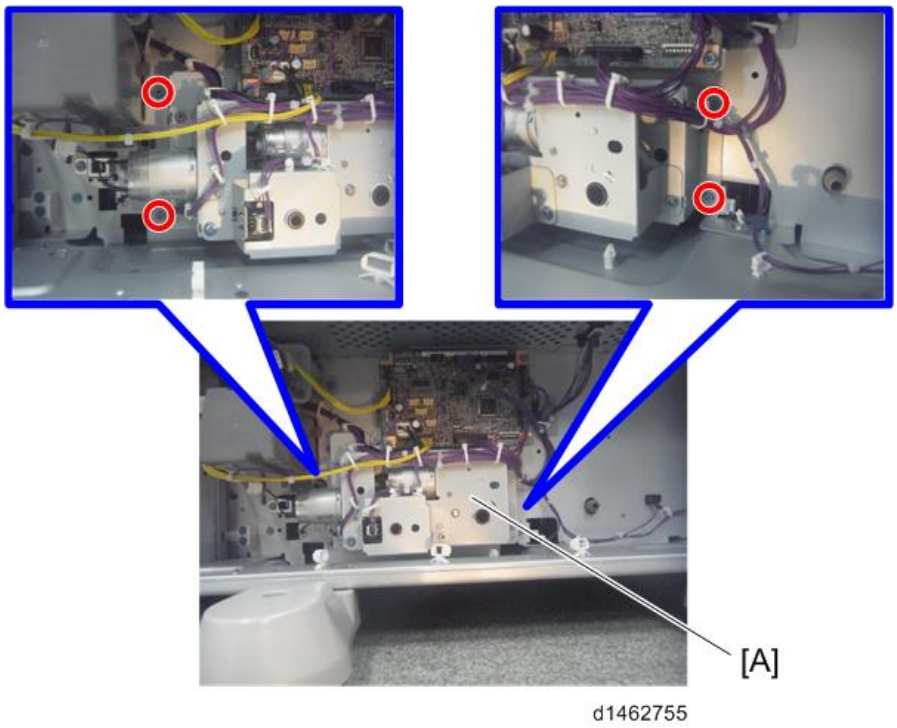
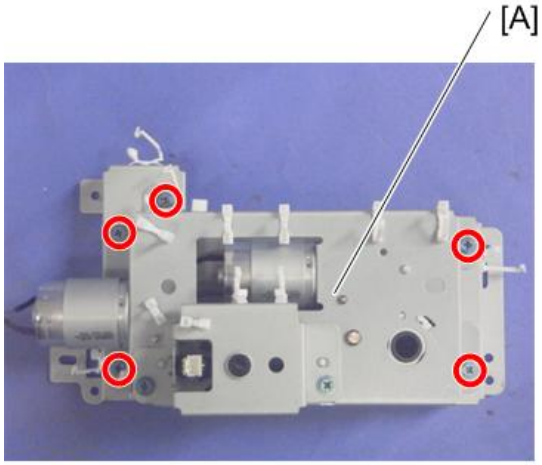
Tray Lift/Paper Transfer Unit

1. Remove the rear cover. (Rear Cover)
2. Remove the tray lift/paper transfer unit [A] (×4, ×3, ×14).



Tray Lift Motor

1. Remove the tray lift/paper transfer unit. (Tray Lift/Paper Transfer Unit)
2. Remove the tray motor unit [A] (×5).



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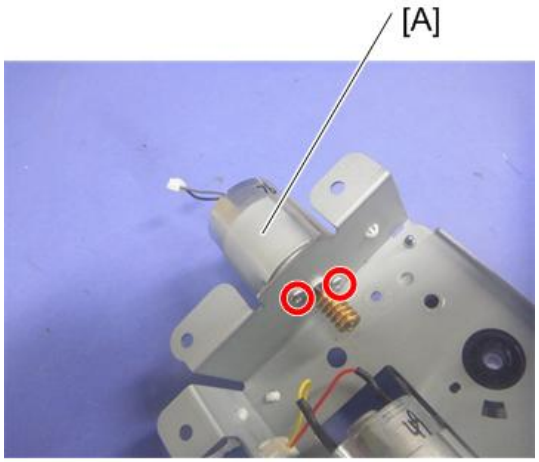
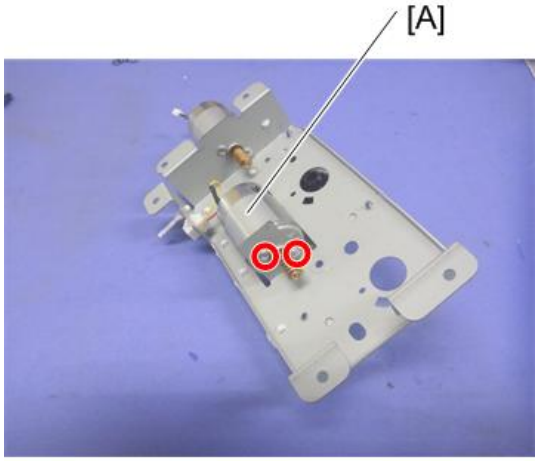
3. Remove the tray lift motor [A] (×2).



d1462757

Paper Transfer Motor

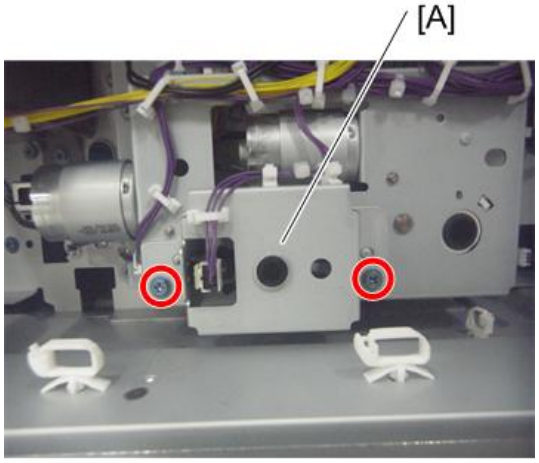
1. Remove the tray motor unit. (Tray Lift Motor)
2. Remove the paper transfer motor [A] (×2, ×1).



d1462758

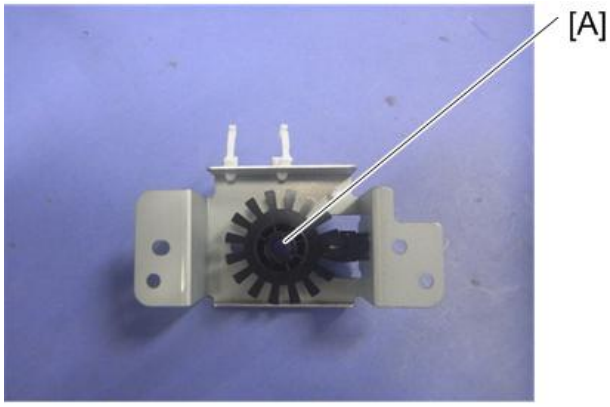
Remaining Paper Sensor

1. Remove the rear cover. (Rear Cover)
2. Remove the remaining paper sensor unit [A] (×2, ×1, ×3).



d1462759

3. Remove the actuator [A].



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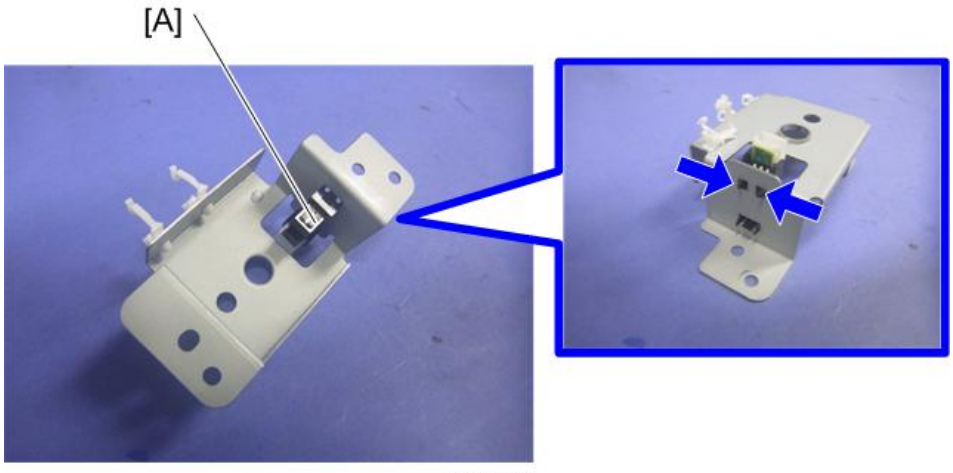
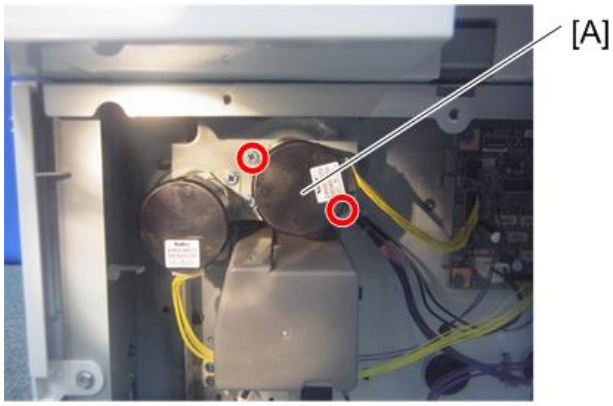
4. Remove the remaining paper sensor [A].



d1462761

Paper Feed Motor

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



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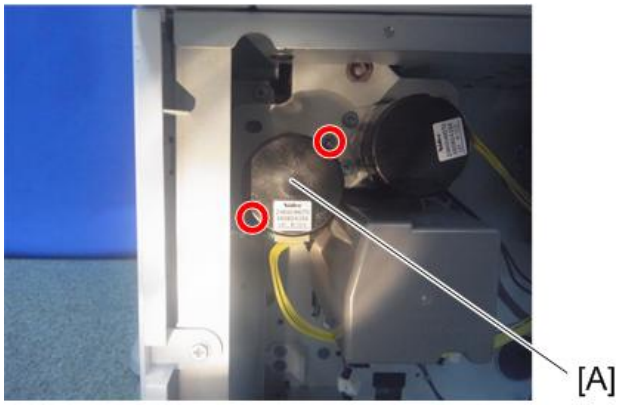
Paper Transport Motor

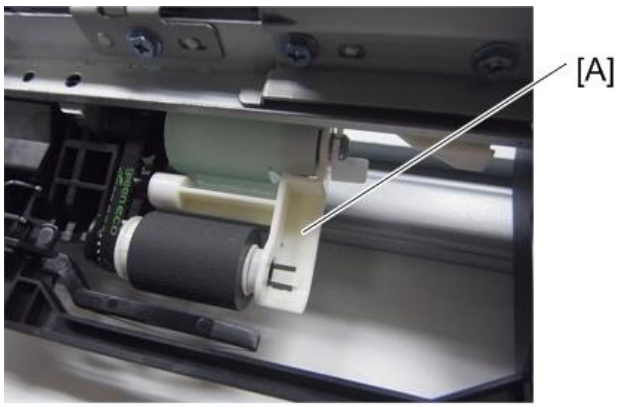
1. Remove the rear cover. (Rear Cover)
2. Remove the paper transport motor [A] (×2, ×1).



d1462766

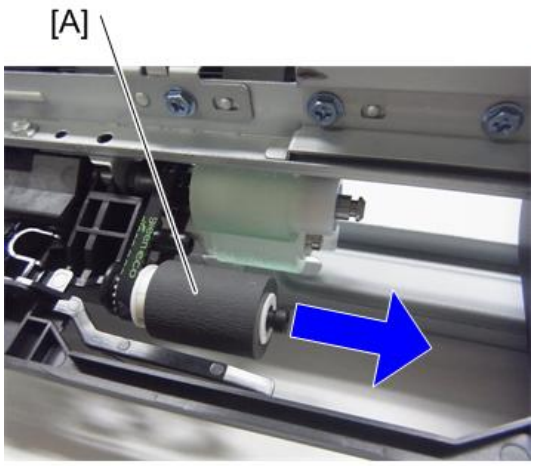
Pick-up Roller, Feed Roller, Friction Roller

1. Remove the paper feed unit. (Paper Feed Unit)
2. Remove the holder [A] (×1).



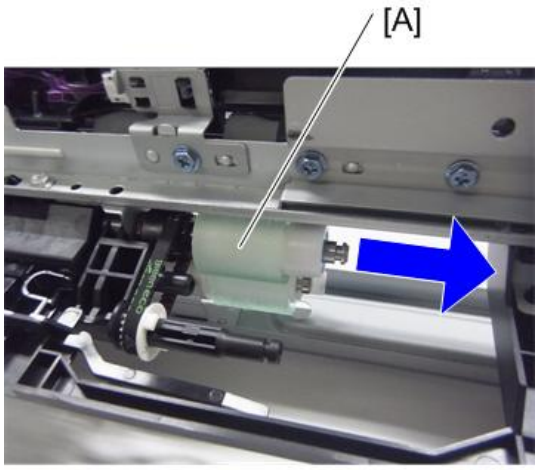
d1462188

3. Remove the pick-up roller [A].



d1462189

4. Remove the feed roller [A].



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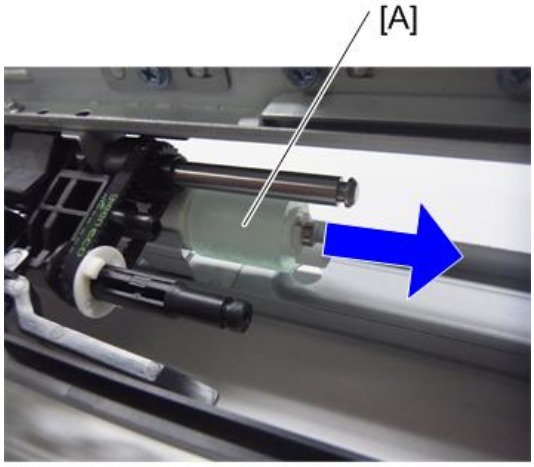
5. Remove the friction roller [A] (×1).



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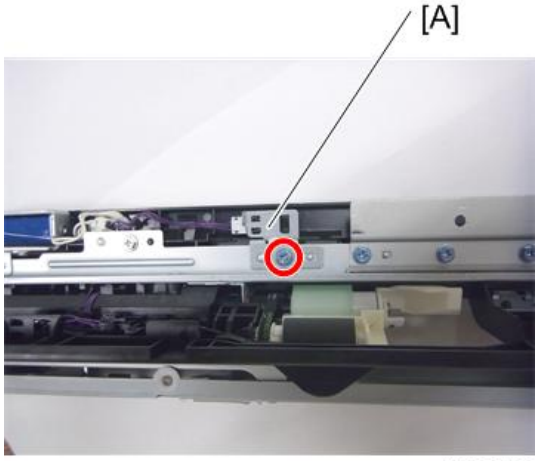
Paper Transport Sensor, Paper Feed Sensor, Paper End Sensor, Upper Limit Sensor

1. Remove the paper feed unit. (Paper Feed Unit)
2. Remove the paper transport sensor unit [A] (×1, ×1).



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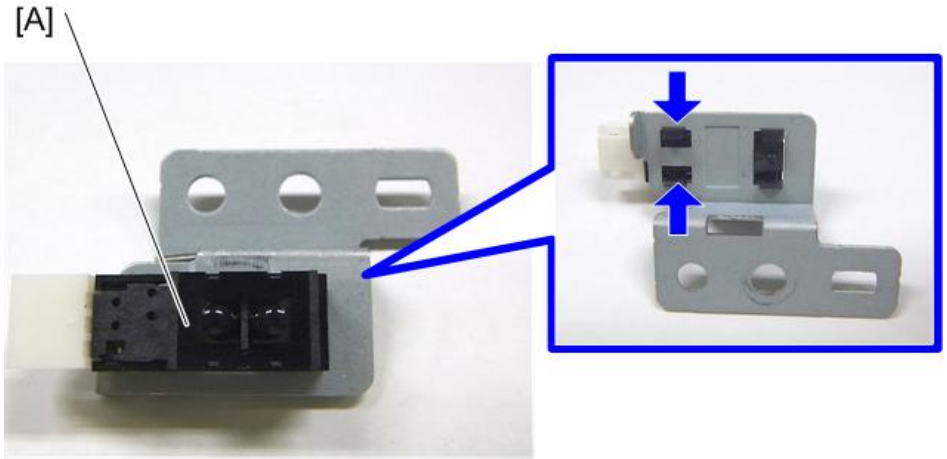
3. Remove the paper transport sensor [A].



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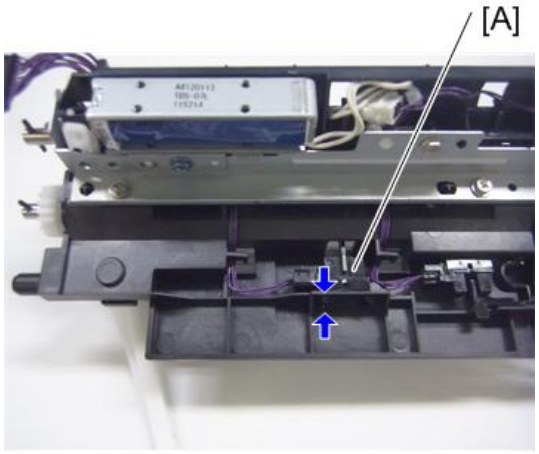
4. Remove the paper feed sensor unit [A] (×1).



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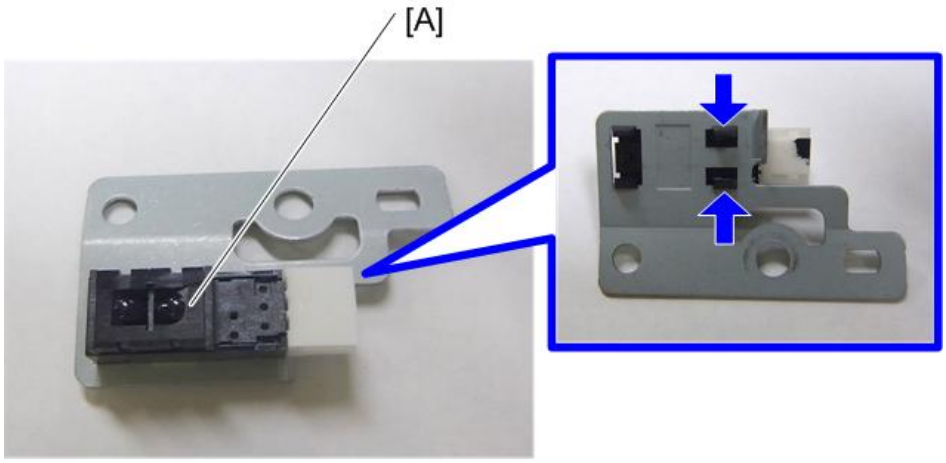
5. Remove the paper feed sensor [A].



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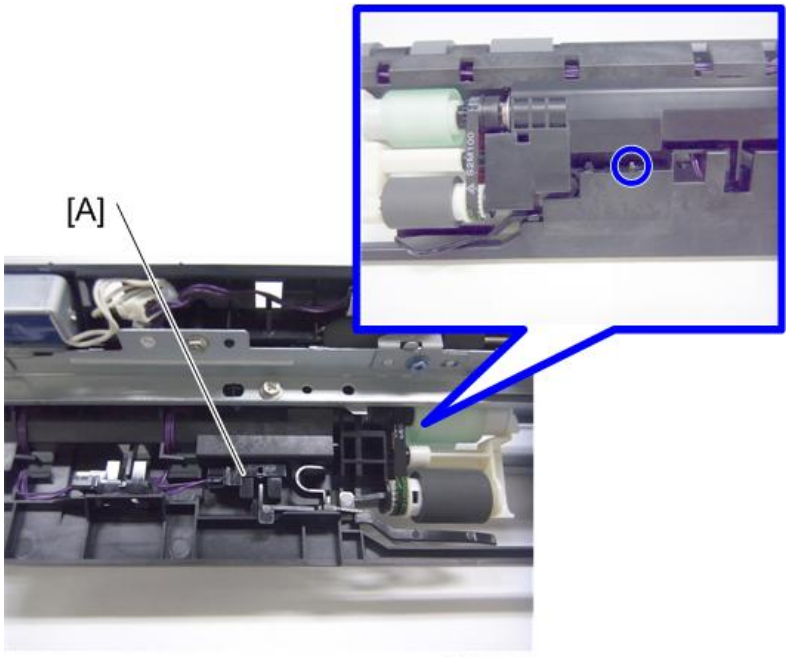
6. Press the claw shown by the blue circle, and remove the paper end sensor [A] (×1).



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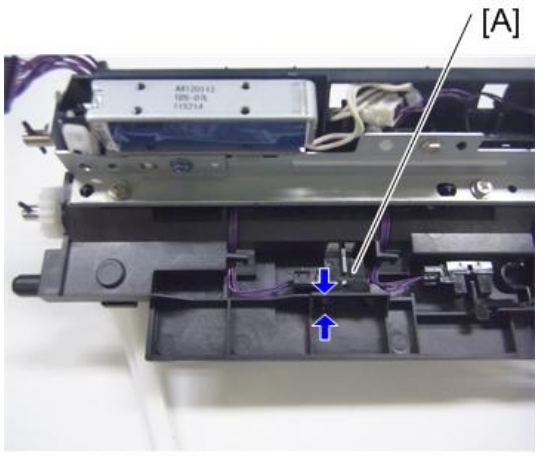
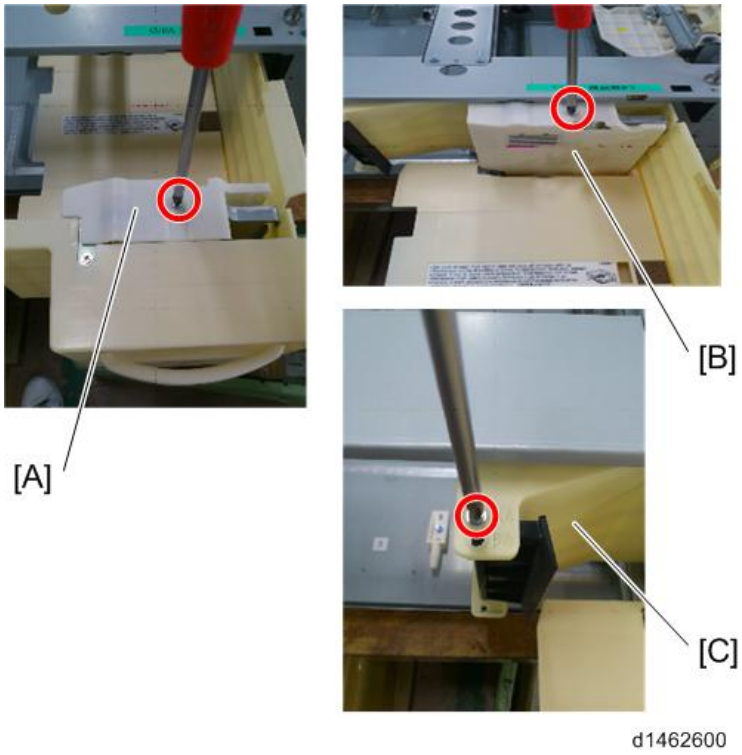
7. Remove the upper limit sensor [A] (×1).



d1462198

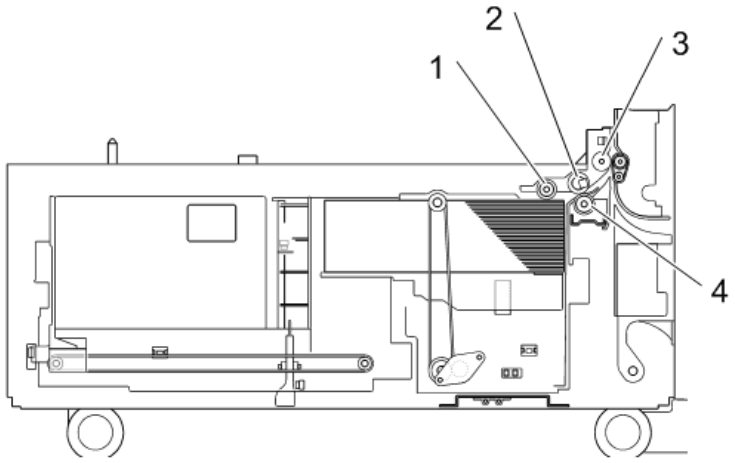
Right Tray Side Fence

1. Open the left and right trays.
2. Remove the right tray side fence (front) [A], right tray side fence (rear) [B], and right tray end fence [C] (×3).

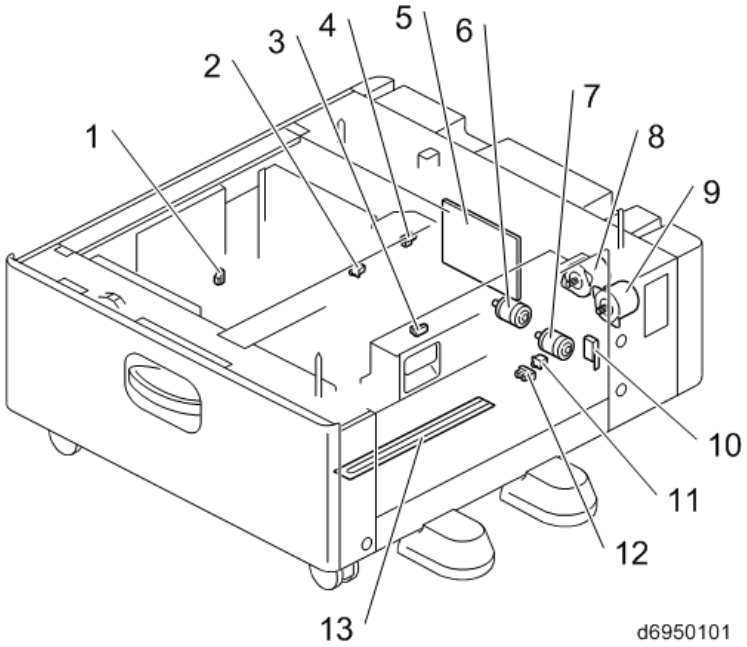


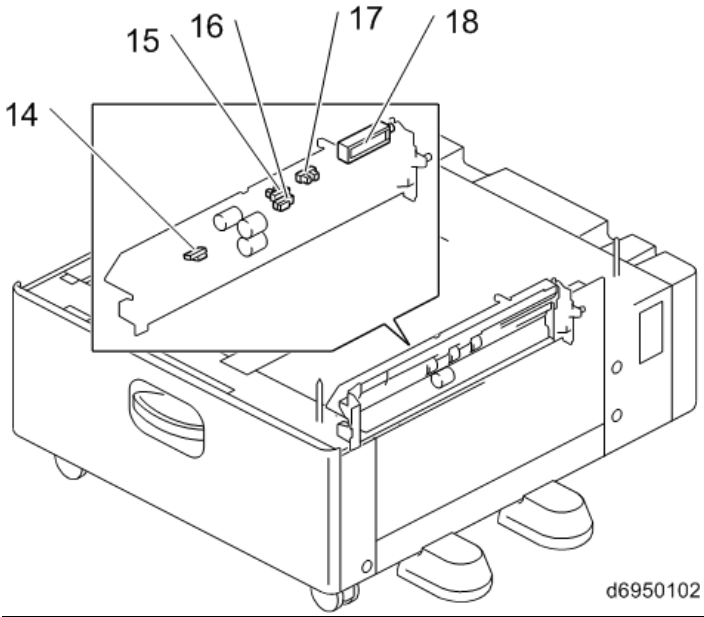
2. Detailed Descriptions

Parts Layout



No.	Description	No.	Description
1	Pick-up roller	3	Paper transport roller
2	Feed roller	4	Friction roller





No.	Description	No.	Description
1	Paper transfer home position sensor	10	Paper transport cover open/closed switch
2	Left tray set switch	11	Right tray set switch
3	Left tray paper end sensor	12	Lower limit sensor
4	Transfer fence home position sensor	13	Anti-condensation heater
5	Controller board	14	Paper feed sensor
6	Paper transfer motor	15	Paper end sensor
7	Paper lift motor	16	Paper transport sensor
8	Paper feed motor	17	Upper limit sensor
9	Paper transport motor	18	Pick-up solenoid

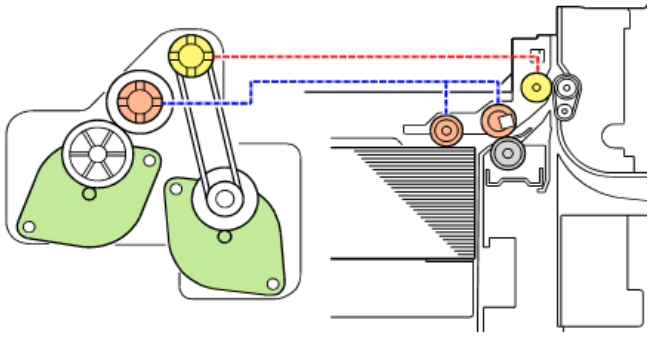
Mechanism

Paper feed separation mechanism

The feed system is a RF paper feed system. The paper feed unit has a pick-up roller, feed roller, and friction roller. The feed roller and friction roller are high durability rollers.

Drive mechanism

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



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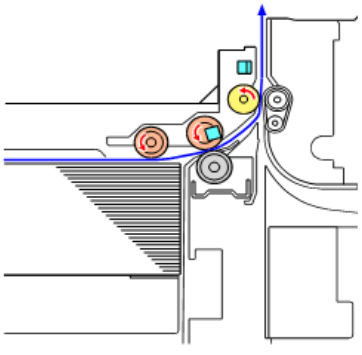
Friction roller/pick-up roller release mechanism

When the right tray is set, the friction roller comes in contact with the feed roller. The pick-up roller touches the top sheet of paper that is to be fed.
When the right tray is opened, contact between the feed roller and friction roller, and contact between the pick-up roller and paper are released.

Paper feed transport mechanism

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.



d6950202

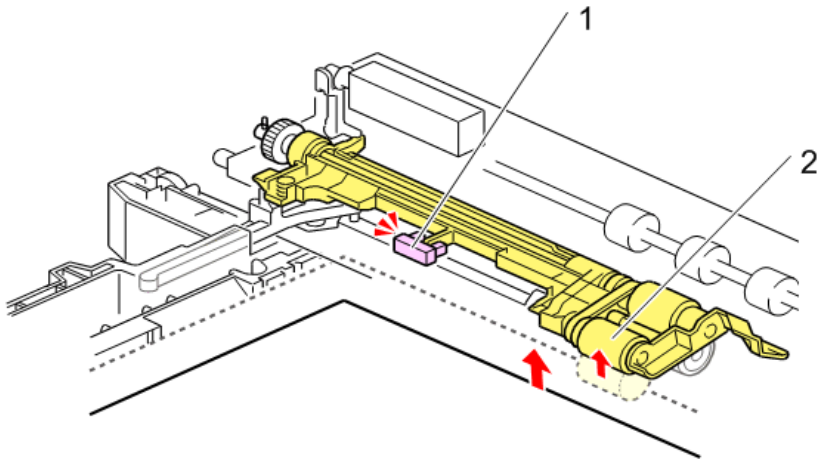
Tray lift/descent mechanism

Tray lift

When the right tray is set, the tray set switch on the rear plate turns ON, and the tray lift motor starts rotating. Simultaneously, the remaining paper sensor performs a pulse count to determine the amount of paper in the tray. The tray lift motor and rotation shaft are joined by a coupling, so that when the rotation shaft rotates, the tray bottom plate rises. The tray bottom plate rises until the actuator turns OFF the upper limit sensor (the sensor is blocked). If there is paper, lifting stops. If there is no paper, the tray bottom plate descends.

Note

- After the right tray is set, if the upper limit sensor is OFF, it will turn ON. The tray descends until the lower limit sensor turns OFF. After stopping temporarily, the tray bottom plate then rises to the upper limit.

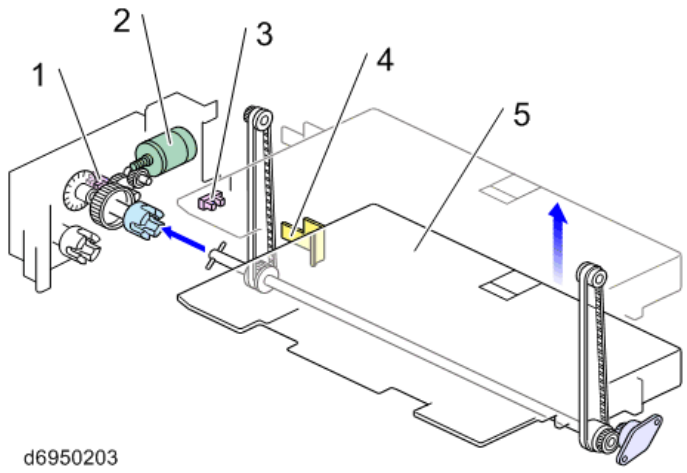


d1359609

No.	Description
1	Upper limit sensor
2	Pick-up roller

Tray descent

If there is no paper when the upper limit operation is completed, the tray bottom plate descends until the lower limit sensor turns OFF (the sensor is blocked). The tray bottom plate will descend if paper end is detected during paper transport.



No.	Description
1	Remaining paper sensor (inside lift/transfer unit)
2	Tray lift motor (inside lift/transfer unit)
3	Lower limit sensor
4	Actuator
5	Tray bottom plate

Left tray transfer fence mechanism

After the right tray has finished descending, if there is paper in the left tray, the left tray transfer fence shifts, and the paper in the left tray is transferred to the paper feed tray. When the paper has been transferred to the right tray, the left tray transfer fence returns to its original position, until the transfer home position sensor turns OFF (the sensor is blocked).

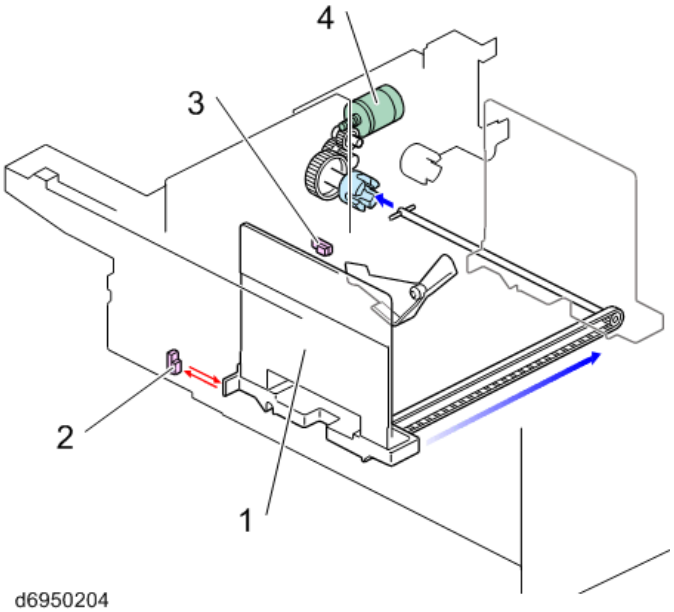
The left tray end fence is moved by the transfer motor (DC motor inside the lift/transfer unit).

When the right tray has finished descending, the transfer motor is driven, and the left tray transfer fence begins to shift.

After the left tray paper sensor detects no paper (detection is by a feeler), the left tray transfer fence shifts for a certain time that depends on the paper size. After shifting, the transfer motor turns OFF.

Note

- The time for which the left tray transfer fence shifts is set for either A4 or LT paper, so that the paper stops at the feed position of the right tray



d6950204

No.	Description
1	Left tray transfer fence
2	Paper transfer home position sensor
3	Left tray paper sensor
4	Paper transfer motor (inside lift transfer unit)

Remaining paper detection

Right tray remaining paper detection

The remaining paper sensor in the lift/transfer unit performs a pulse count.

Left tray remaining paper detection

The left tray paper sensor is turned ON/OFF using a feeler.

If there is paper in the left tray, paper end will not be displayed even if there is no paper in the right tray.

Remaining paper	Left tray paper sensor	Display
100%	OFF	4 bars
Paper end	ON	None