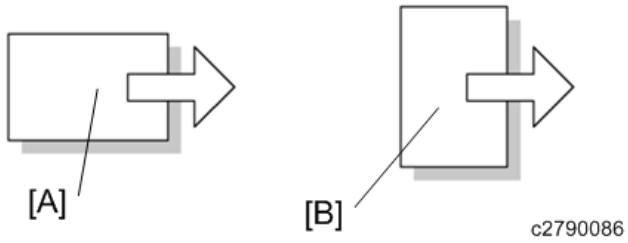
Buffer Pass Unit Type S6
D3D0
Field Service Manual
Ver 1.00

Latest Release: Jan, 2017
Initial Release: Jan, 2017

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)

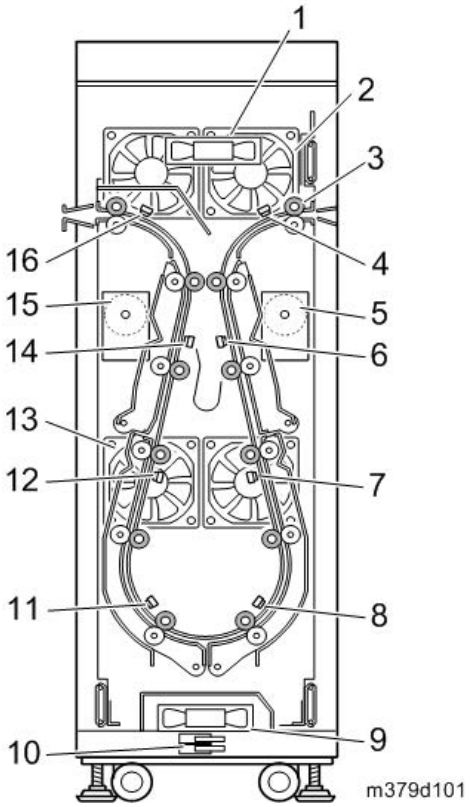
Table of Contents

1. Detailed Descriptions

Mechanism Descriptions

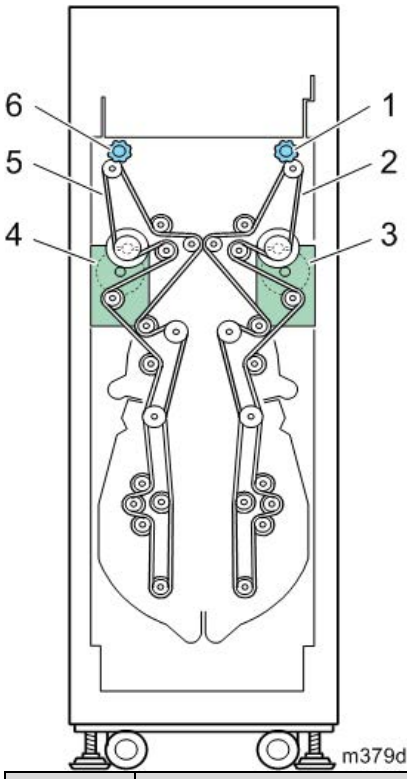
The buffer pass unit cools down printed paper before stacking to prevent toner adhesion and sticking that can compromise image quality.

Overview Layout



No.	Description	No.	Description
1	Upper Cooling Fans 1, 2	9	Lower Cooling Fans 1, 2
2	Upper Exhaust Fans 1, 2	10	Front Door Open/Closed Switch
3	Transport Roller	11	Transport Sensor 5
4	Transport Sensor 1	12	Transport Sensor 6
5	Right Transport Motor	13	Lower Exhaust Fans 1, 2
6	Transport Sensor 2	14	Transport Sensor 7
7	Transport Sensor 3	15	Left Transport Motor
8	Transport Sensor 4	16	Transport Sensor 8

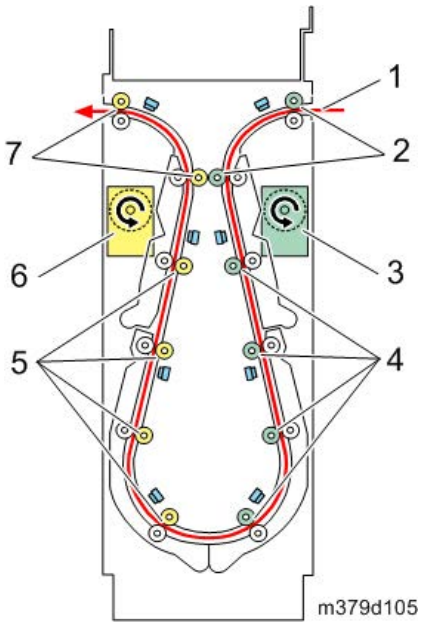
Drive Layout



No.	Description	No.	Description
1	Right Transport Knob	4	Left Transport Motor
2	Right Timing Belt	5	Left Timing Belt
3	Right Transport Motor	6	Left Transport Knob

Mechanism Details

Paper Path



1. Paper Path
2. Transport rollers driven by the right transport motor.
3. Right Transport Motor
4. Transport rollers driven by the right transport motor.
5. Transport rollers driven by the left transport motor.
6. Left Transport Motor
7. Transport rollers driven by the left transport motor.

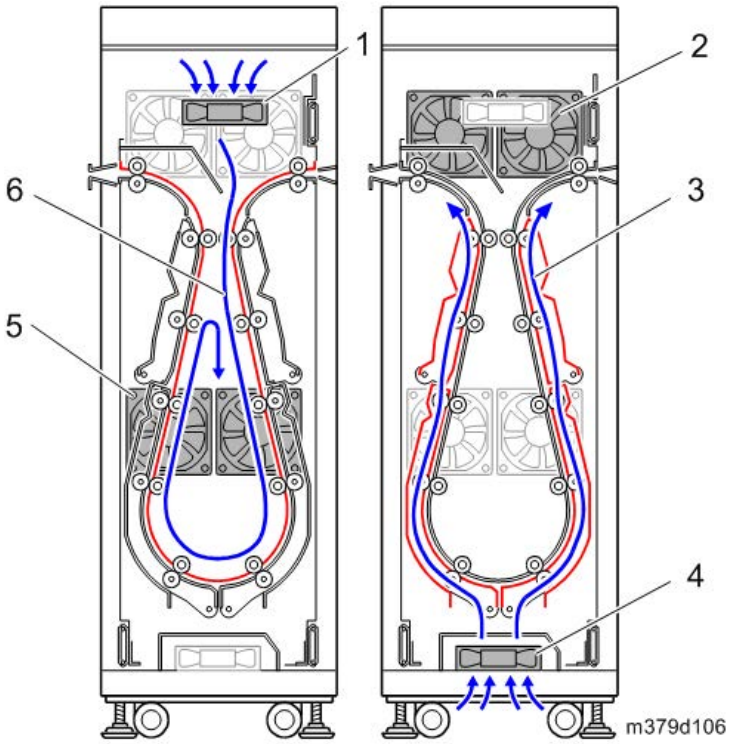
Paper that comes from the main machine passes to the entrance of the buffer pass unit.

The right transport motor (right) starts 1.05 seconds after the start of a copy or print job, and six transport rollers on the right side of the path rotate to transport paper to the left side.

The left transport motor (left) starts to rotate 1.05 seconds after the right transport motor starts and this rotates six transport rollers on the left side to send paper to the exit.

The buffer pass unit has eight sensors that detect jams; operation stops when a jam is detected.

Paper Cooling



No.	Description	No.	Description
1	Upper Cooling Fans 1, 2	4	Lower Cooling Fans 1, 2
2	Upper Exhaust Fans 1, 2	5	Lower Exhaust Fans 1, 2
3	Air Current	6	Air Current

The buffer pass unit includes two sets of two exhaust fans and two sets of two cooling fans. After copy job or a printer job is received, these fans start driving at 0.1 second intervals in the following order:

Upper Exhaust Fans > Lower Exhaust Fans > Upper Cooling Fans > Lower Cooling Fans

Air pulled in by the upper cooling fans passes through the inner side of the paper path, and goes out of the machine through the lower exhaust fan. Air pulled in by the lower cooling fan passes along the outer side of the paper path, and goes out of the machine through the upper exhaust fan. These air flows cool down both faces of the paper, then the paper goes to the exit.

SP1-932-001 allows the customer engineers to adjust the length of time that the fans operate after the end of a job. (0 min. to 60 min. / default: 1 min.) When the temperature outside the machine is high, extend the length of time that the fans operate after the end of a job.

2. Replacement and Adjustment

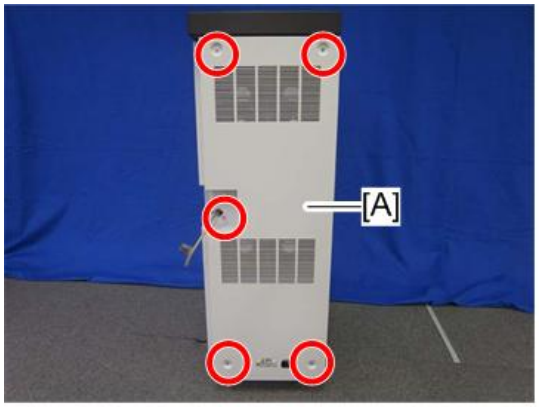
Exterior Covers

⚠CAUTION

- Disconnect the power cord from the inlet of the buffer pass unit and unplug the mainframe before starting the following procedure.
- Do not pull out the buffer pass unit drawer until this unit has been docked to the mainframe. Otherwise, the buffer pass unit can fall down.

Rear Cover

1. Rear cover [A] (x 5)



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Top Cover

1. Open the front door [A].

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2. Remove two screws on the front upper side (x 2)

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3. Rear cover (Rear Cover)
4. Push the top cover [A] to the front, and then remove it.

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Right Cover

1. Right cover [A] (x 6)

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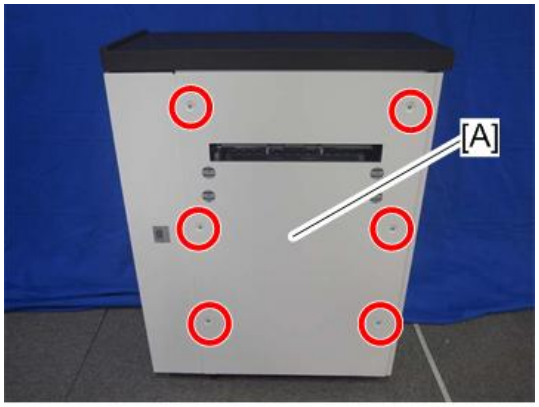
Left Cover

1. Left cover [A] (x 6)



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Drive Components

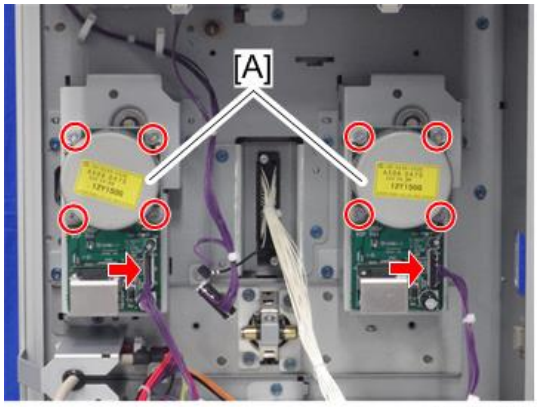
⚠CAUTION

- Disconnect the power cord from the inlet of the buffer pass unit and unplug the mainframe before starting the following procedure.
- Do not pull out the buffer pass unit drawer until this unit has been docked to the mainframe. Otherwise, the buffer pass unit can fall down.

Transport Motor

There are two transport motors (right and left) in the buffer pass unit. Both removal procedures are identical.

1. Rear cover (Rear Cover)
2. Controller board bracket (Controller Board)
3. Transport Motor [A] (x 4, x 1 for each motor)



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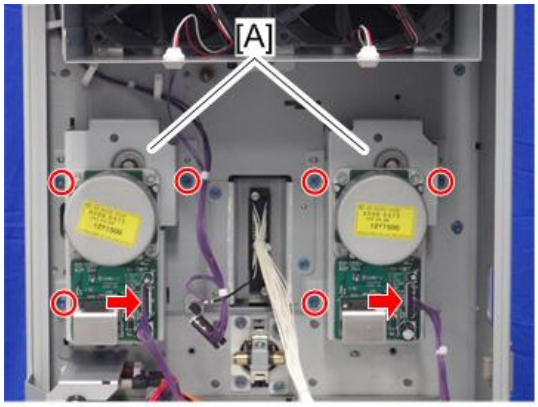
Transport Motor Unit

Removing the Transport Motor Unit

There are two transport motor units (right and left). Both removal procedures are identical.

1. Rear cover (Rear Cover)
2. Controller board bracket (Controller Board)
3. Transport Motor Unit [A] (x 3, x1 for each unit)



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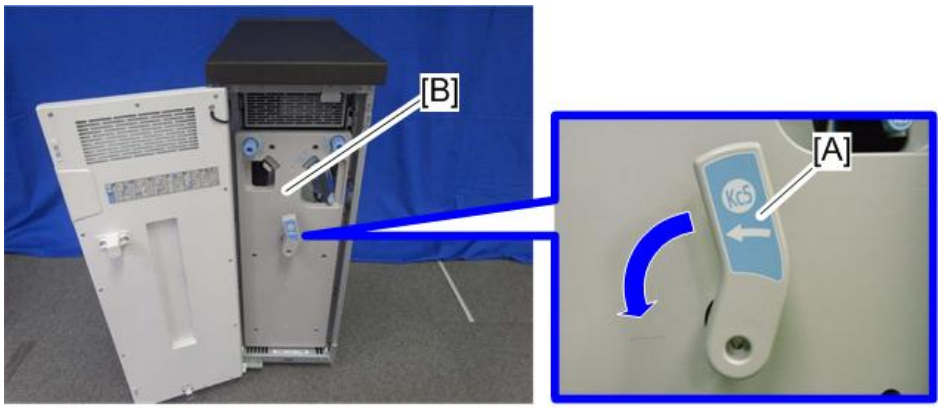
Reinstall the Transport Motor Unit

1. Open the front door.
2. Turn the Kc5 lever [A] completely counterclockwise, and then pull out the paper path unit [B] about 10 cm.



3. Install the transport motor unit. (x 3, x1)
4. Push in the paper path unit completely and close the front door.
5. Attach the rear cover.

Cooling and Exhaust Fans

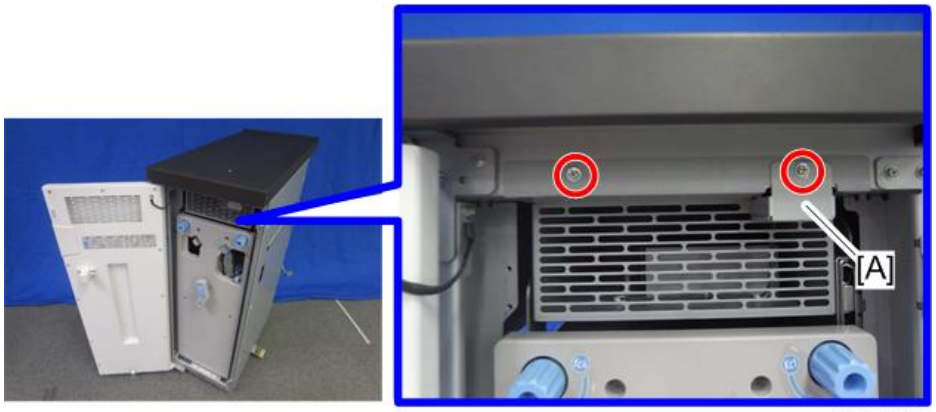
⚠CAUTION

- Disconnect the power cord from the inlet of the buffer pass unit and unplug the mainframe before starting the following procedure.
- Do not pull out the buffer pass unit drawer until this unit has been docked to the mainframe. Otherwise, the buffer pass unit can fall down.

Cooling Fans

Upper Cooling Fans 1, 2

1. Open the front door.
2. Remove two screws and the bracket [A].



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3. Disconnect the harness [A] (x 1).

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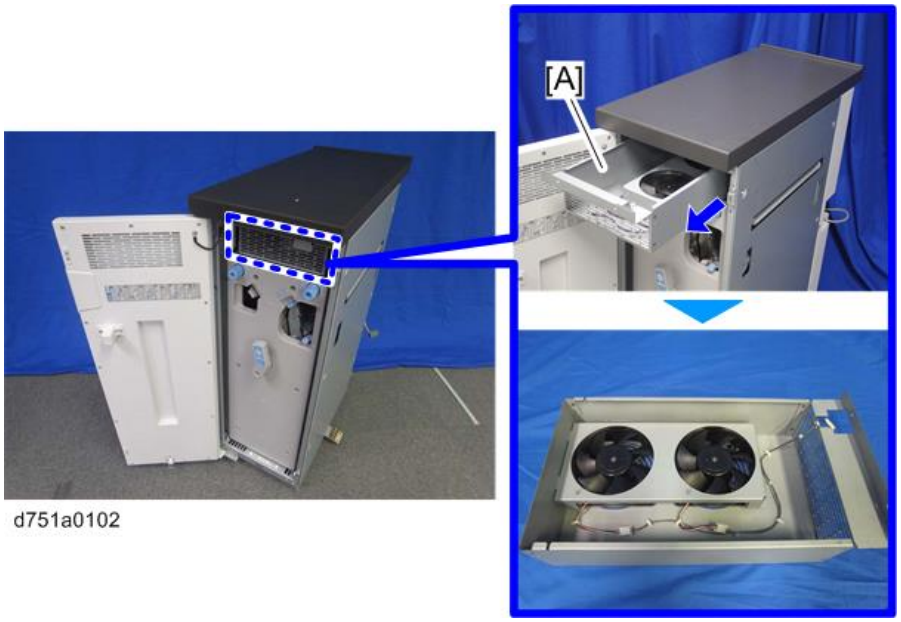
4. Pull out the upper cooling fan unit [A].



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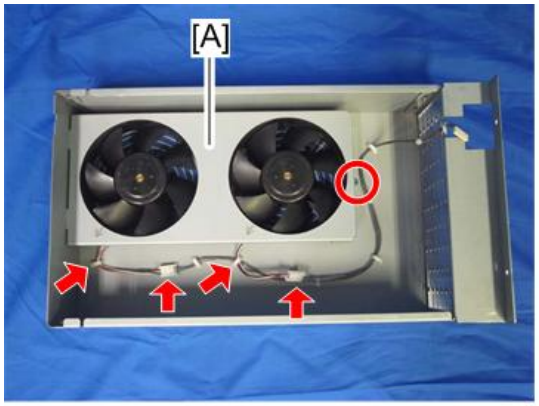
5. Upper cooling fan bracket [A] (x 1, x 2, x 2)



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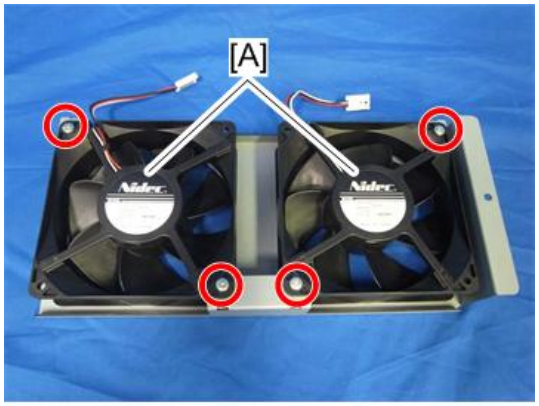
6. Upper cooling fans 1, 2 [A] (x 2 each)



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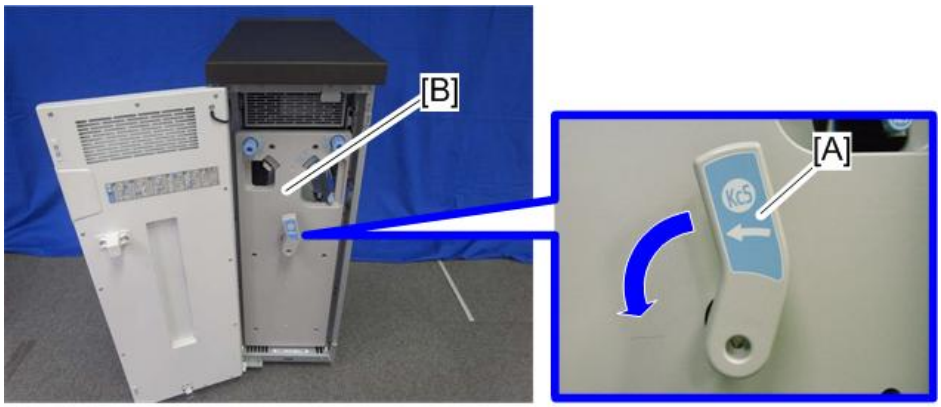
Note

- Make sure that the decals on the fans face downward when reinstalling the upper cooling fans.

Lower Cooling Fans 1, 2

1. Open the front door.

2. Turn the Kc5 handle [A] counter-clockwise, and then pull out the paper path unit [B].



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⚠CAUTION

- When you pull out the paper path unit, take care that the buffer pass unit does not fall down to the front. This is because the paper path unit is heavier than the buffer pass unit.

3. Left cover (Left Cover)
4. Lower cooling fan cover [A]. (x 2)

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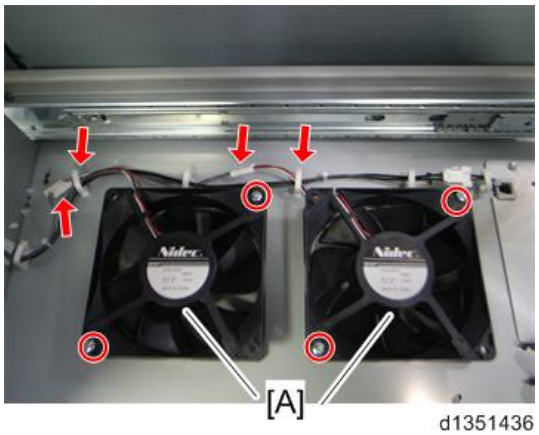
5. Lower cooling fans 1, 2 [A] (x 2 each, x 2, x 2)



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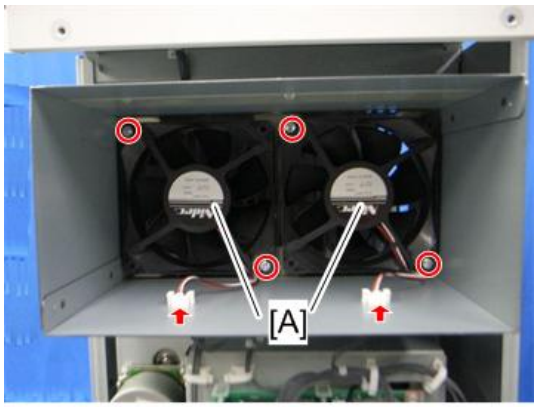
Note

- Make sure that the decals on the fans face downward when reinstalling the lower cooling fans.

Exhaust Fans

Upper Exhaust Fans 1, 2

1. Rear cover (Rear Cover)
2. Upper exhaust fans 1, 2 [A] (x 2, x 1 for each fan)



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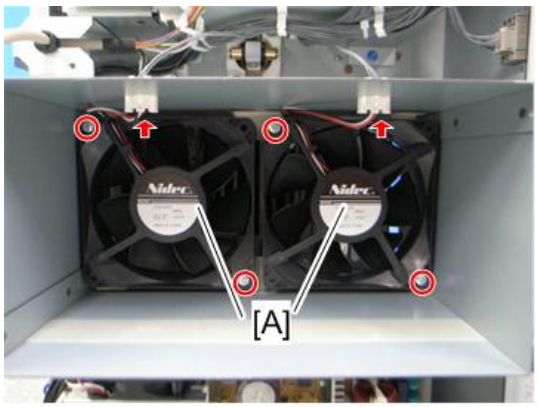
Note

- Make sure that the decals on the fans are upside down and face the rear side when reinstalling the upper exhaust fans.

Lower Exhaust Fans 1, 2

1. Rear cover (Rear Cover)
2. Lower exhaust fans 1, 2 [A] (x 2, x 1 for each fan)



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Note

- Make sure that the decals on the fans face the rear side when reinstalling the lower exhaust fans.

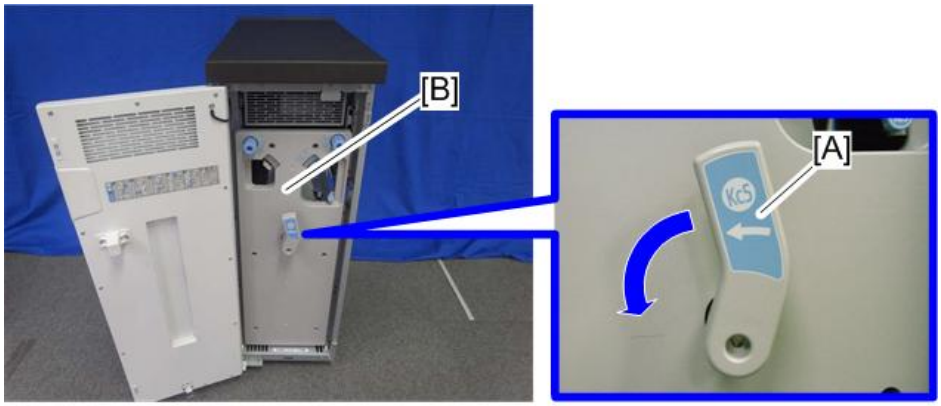
Sensors and Switches

⚠CAUTION

- Disconnect the power cord from the inlet of the buffer pass unit and unplug the mainframe before starting the following procedure.
- Do not pull out the buffer pass unit drawer until this unit has been docked to the mainframe. Otherwise, the buffer pass unit can fall down.

Transport Sensors

1. Open the front door.
2. Turn the Kc5 handle [A] counter-clockwise, and then pull out the paper path unit [B] about 10 cm.



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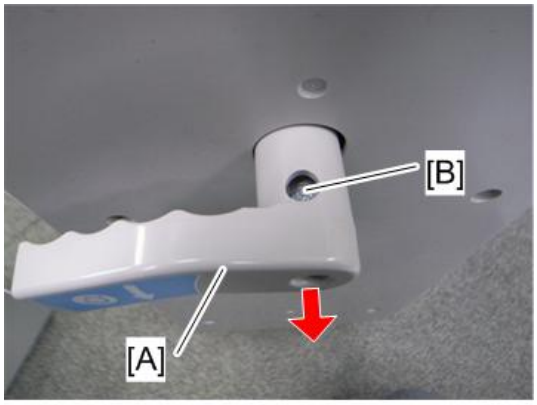
3. Kc5 handle [A] (🔩[B] x 1)



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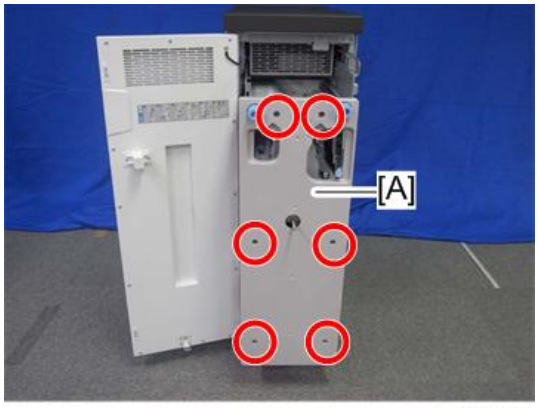
4. Front inner cover [A] (x 6)



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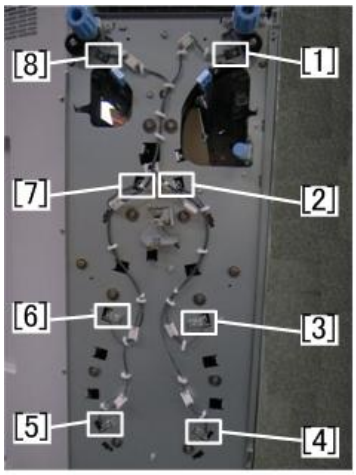
5. Remove sensors with their brackets (each x1, x1, x1)



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- [1] Transport Sensor 1
- [2] Transport Sensor 2
- [3] Transport Sensor 3
- [4] Transport Sensor 4
- [5] Transport Sensor 5
- [6] Transport Sensor 6
- [7] Transport Sensor 7
- [8] Transport Sensor 8

6. Transport sensor [A] (x 1)

You can replace Transport Sensors 1 to 8 with the same procedure.

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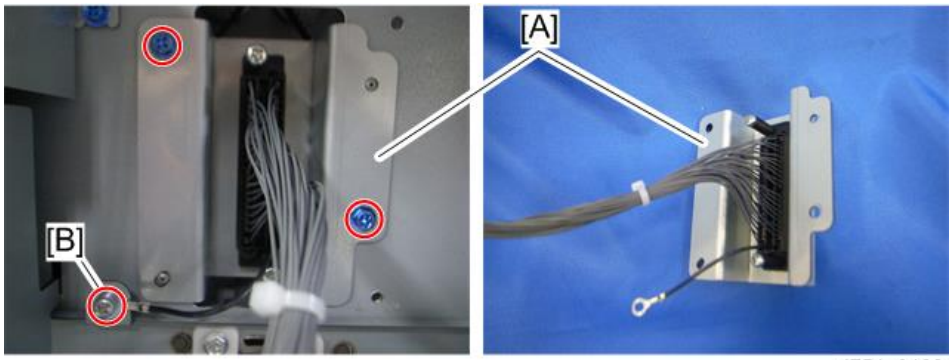
Switches

Paper Path Unit Set Switch

1. Rear cover (Rear Cover)
2. Controller board bracket (Controller Board)
3. Paper path unit set switch [A] (x3)

   The screw [B] is a ground screw.



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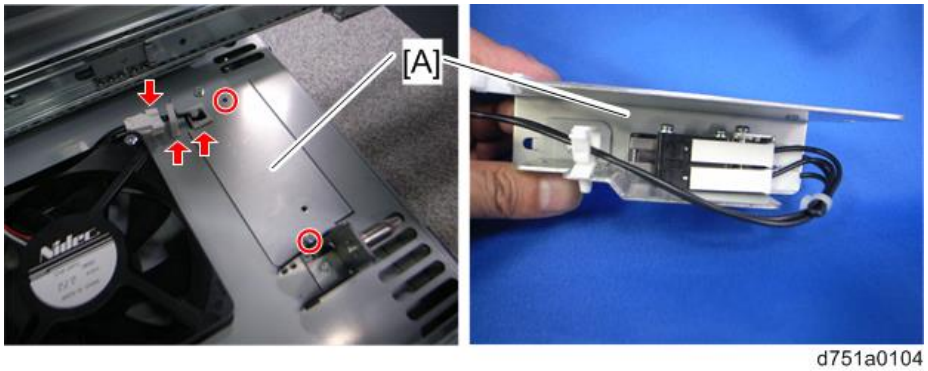
Front Door Switch

1. Left cover (Left Cover)
2. Lower cooling fan cover (Lower Cooling Fans 1, 2)
3. Front door switch assembly [A] (x 2, x 2, x 1)



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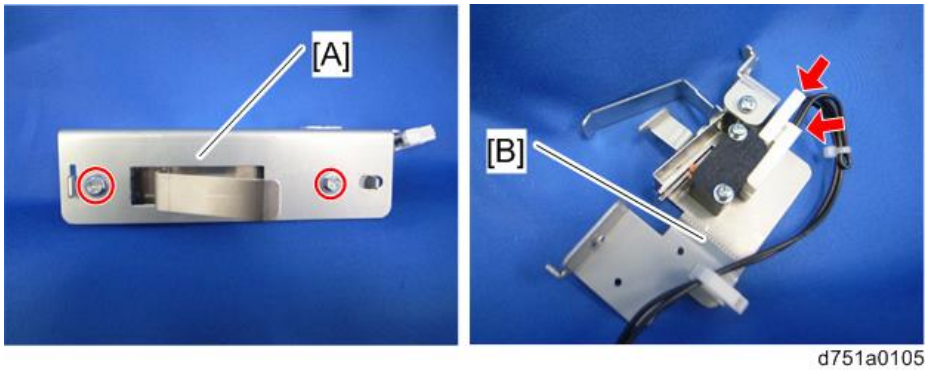
4. Front door switch bracket cover [A] (x 2, x 2)

5. Front door switch bracket [B]



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Electronic Components

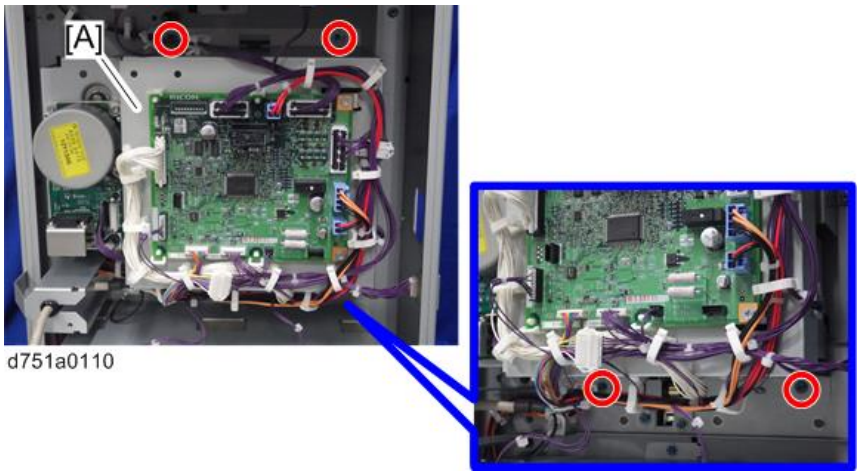
⚠CAUTION

- Disconnect the power cord from the inlet of the buffer pass unit and unplug the mainframe before starting the following procedure.
- Do not pull out the buffer pass unit drawer until this unit has been docked to the mainframe. Otherwise, the buffer pass unit can fall down.

Controller Board

Controller Board Bracket

1. Rear cover (Rear Cover)
2. Controller board bracket [A] (x 4, x 19, x all)



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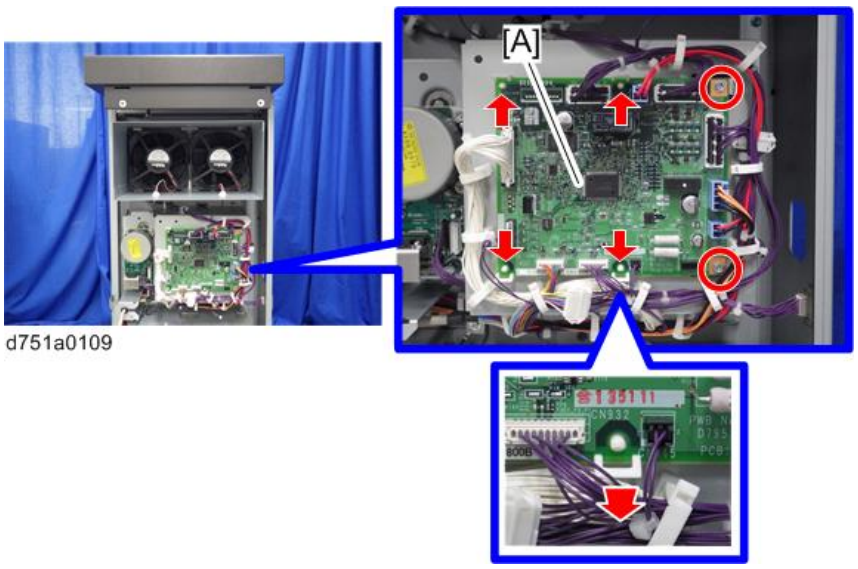
Controller Board

1. Rear cover (Rear Cover)
2. Controller board [A] (x 11, x 2, hook x 4)



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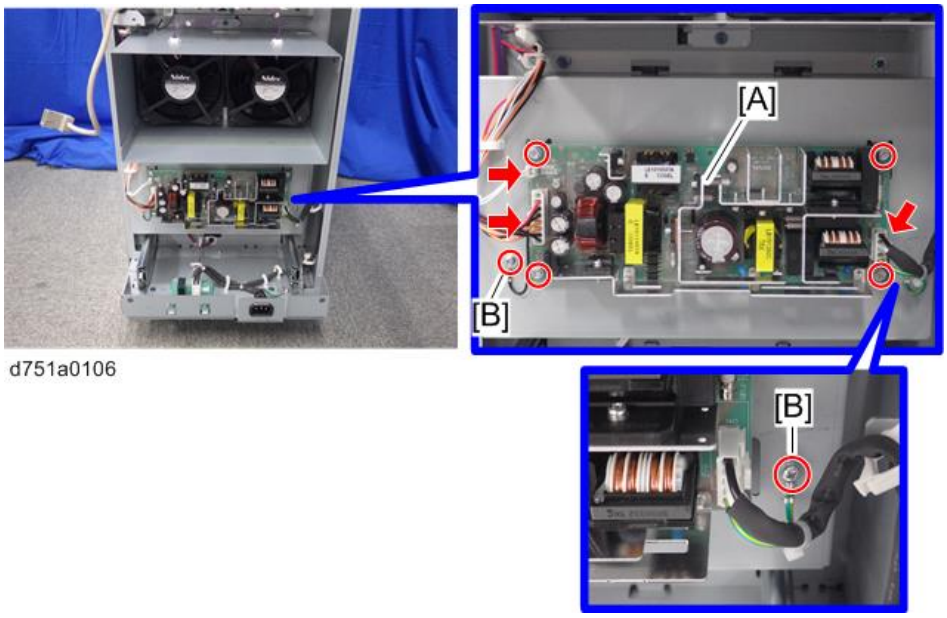
PSU

Removing the PSU

1. Rear cover (Rear Cover)
2. PSU bracket [A] (x 6, x 3)
   The two screws [B] are ground screws.



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PSU Fuse Rating

⚠CAUTION

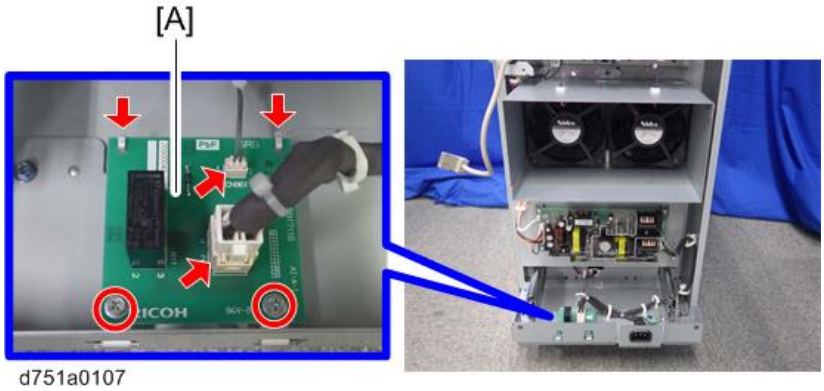
- For replacements, use only the correct fuses rated for use with the machine. Using replacement devices not designed for use with the machine could lead to a fire and personal injuries.

Fuse	Rating	
	115 V	210 to 230V
FU1	15A/125Vac	8A/250125Vac
FU2	8A/125125Vac	T4A L/250125Vac

SRB

1. Rear cover (Rear Cover)

2. SRB [A] (x2, x2, hook x 2)



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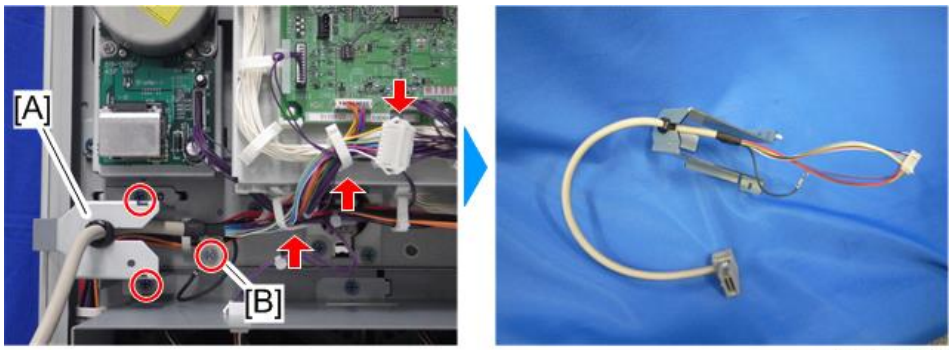
Interface Cable

1. Rear cover (Rear Cover)
2. Interface cable [A] (x3, x2, x1)

   The screw [B] is a ground screw.



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