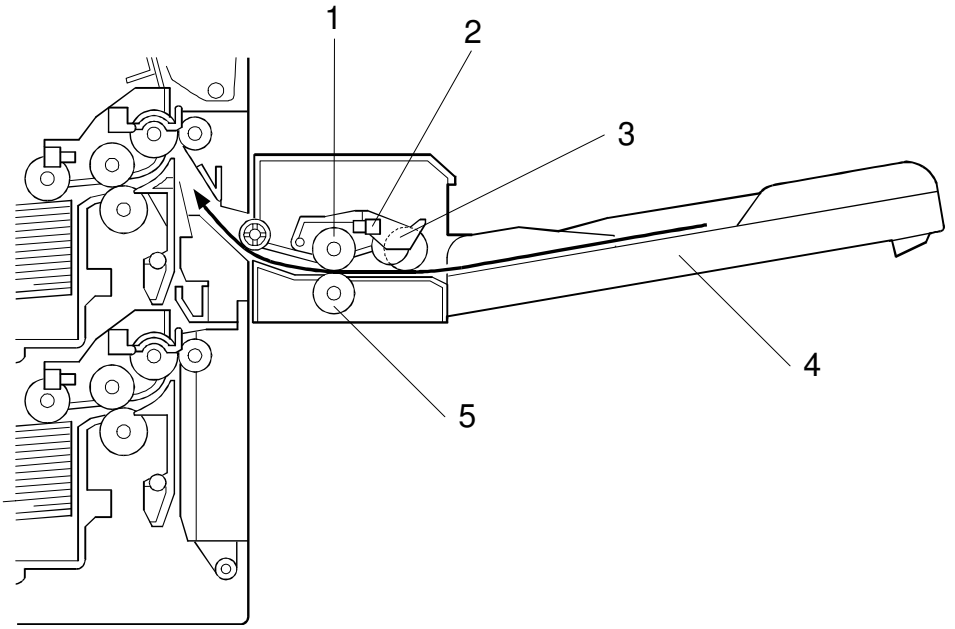
BY-PASS
(Machine Code: A689)

1 OVERALL MACHINE INFORMATION

1.1 SPECIFICATIONS

Paper Size:	Standard sizes A6 lengthwise to A3 HLT lengthwise to DLT Non-standard sizes Width: 100 to 305 mm Length: 148 to 432 mm
Paper Weight:	52 g/m^2 ~ 157 g/m^2, 16 lb ~ 42 lb
Tray Capacity:	50 sheets (80 g/m^2, 20 lb)
Paper Feed System:	FRR

1.2 MECHANICAL COMPONENT LAYOUT



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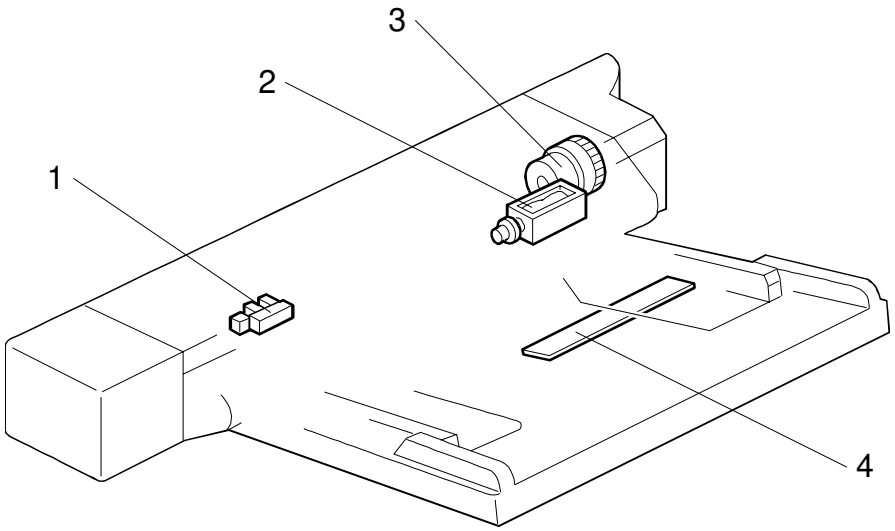
1. Paper Feed Roller
2. Paper End Sensor
3. Pick-up Roller
4. By-pass Tray
5. Separation Roller

1.3 ELECTRICAL COMPONENT LAYOUT



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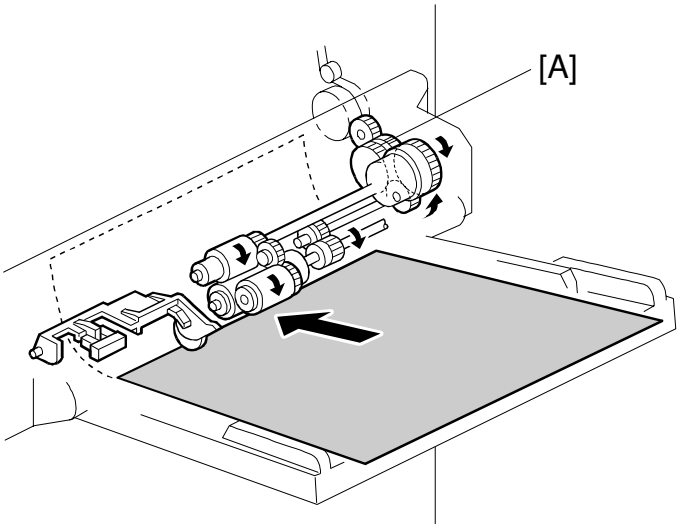
1. Paper End Sensor
2. Pick-up Solenoid
3. Paper Feed Clutch
4. Paper Size Sensor Board

1.4 ELECTRICAL COMPONENT DESCRIPTION

Symbol	Name	Function	Index No.
Sensors			
S1	Paper End	Informs the copier when the by-pass tray runs out of paper.	1
S2	Paper Size Sensor Board	Detects the paper width.	4
Solenoids			
SOL1	Pick-up	Moves the pick-up roller to contact the paper.	2
Magnetic Clutches			
MC1	Paper Feed	Starts paper feed from the by-pass tray.	3

2 DETAILED DESCRIPTIONS

2.1 BASIC OPERATION



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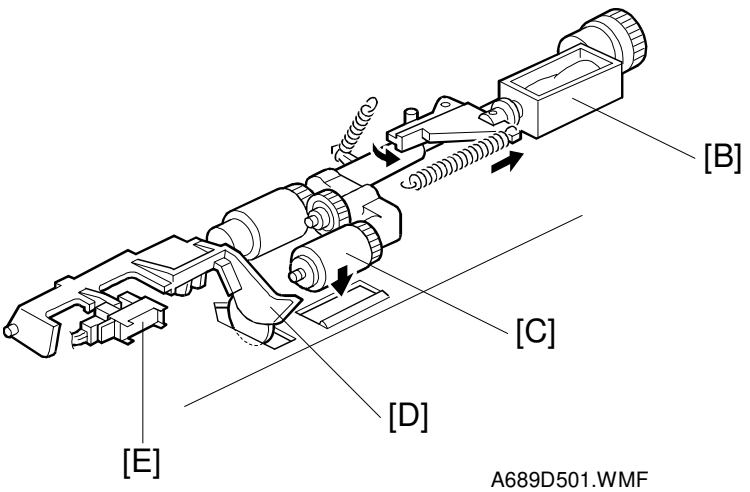

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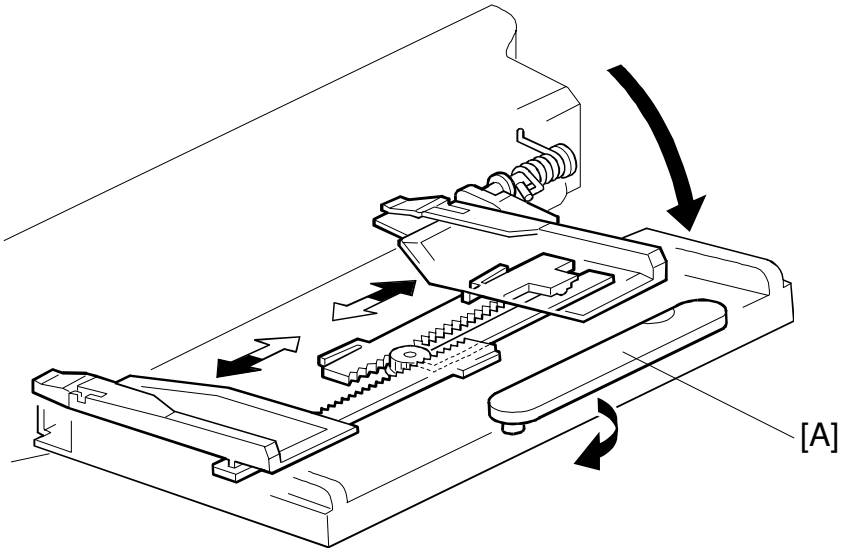
This unit is directly driven by the copier through gear [A].

When the print key is pressed, the pick-up solenoid [B] turns on and the pick-up roller [C] moves onto the paper.

When the by-pass tray runs out of paper, the paper end feeler [D] drops into the cutout in the by-pass tray and the paper end sensor [E] is activated.

2.2 PAPER SIZE DETECTION



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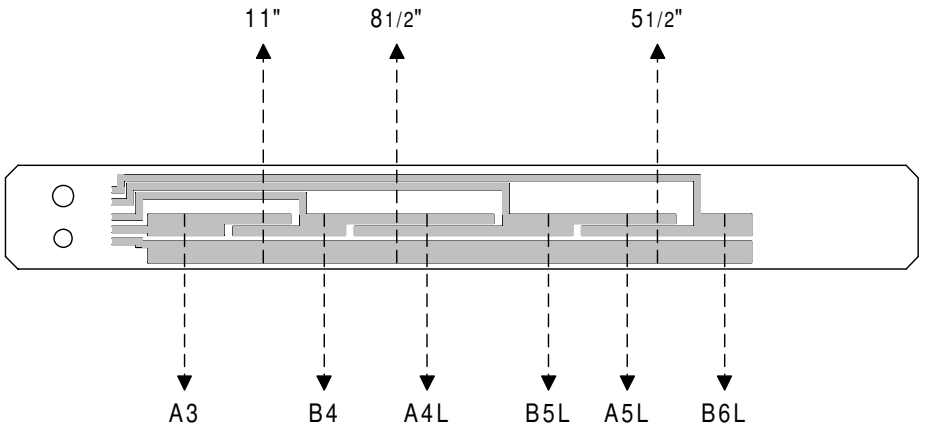

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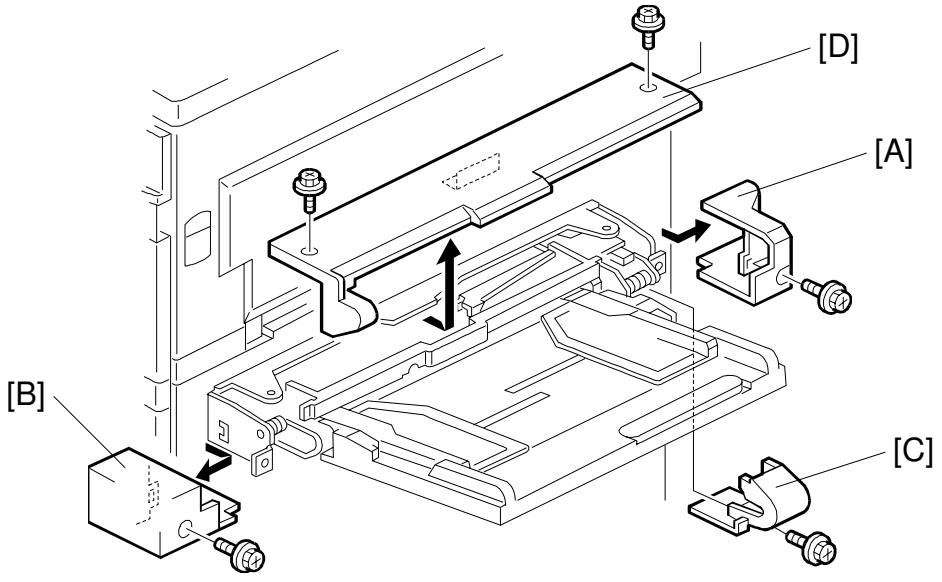
The paper size sensor board [A] monitors the paper width. The rear side fence is connected to the terminal plate. The pattern for each paper width is unique. Therefore, the copier determines which paper has been placed in the by-pass tray by the signal output from the board. However, the copier will not determine the paper length from the bypass tray hardware.

3 REPLACEMENT AND ADJUSTMENT

3.1 COVER REPLACEMENT



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Rear Cover

1. Remove the rear cover [A] (1 screw).

Front Cover

1. Remove the front cover [B] (1 screw).

Hinge Cover

1. Remove the hinge cover [C] (1 screw).

Upper Cover

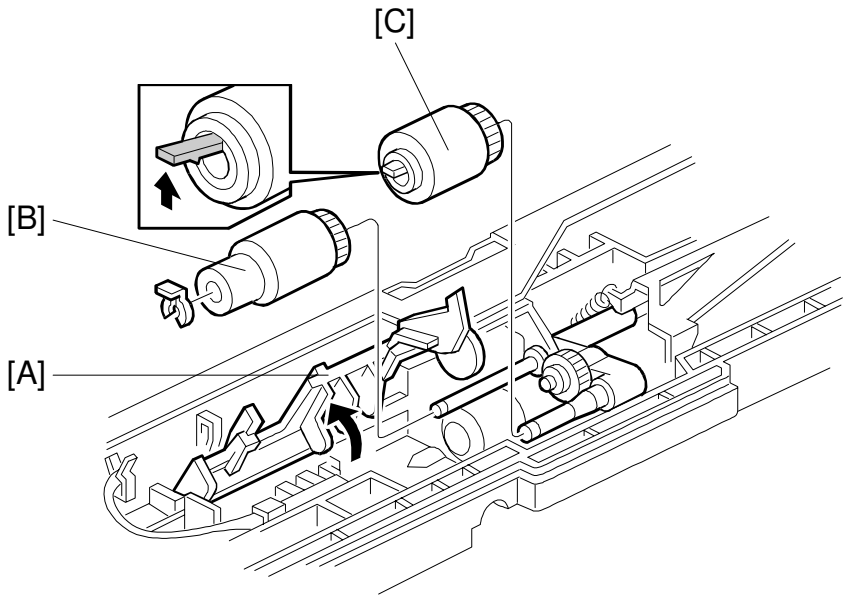
- No duplex unit -

1. Remove the upper cover [D] (2 screws).

- With duplex unit -

1. Remove the hinge cover.
2. Open the duplex unit.
3. Remove two screws for the upper cover.
4. Close the duplex unit and pull out the upper cover.

3.2 PAPER FEED AND PICK-UP ROLLER REPLACEMENT



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1. Remove the upper cover.
2. Lift up the paper end feeler [A].
   NOTE: When lifted, the paper end feeler locks into position. Therefore, make sure to move it back to its original position before reinstalling the upper cover.

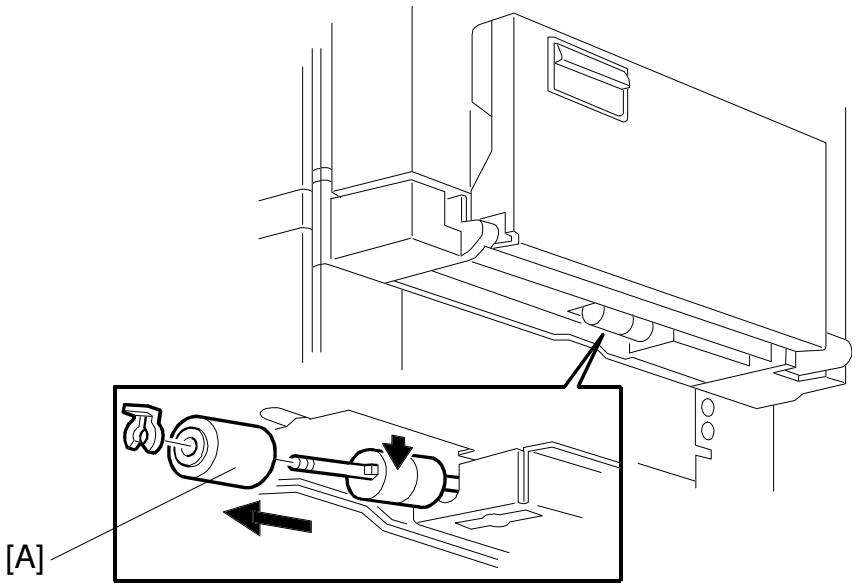
Paper Feed Roller

3. Replace the paper feed roller [B] (1 snap ring).

Pick-up Roller

3. Replace the pick-up roller [C].

3.3 SEPARATION ROLLER REPLACEMENT



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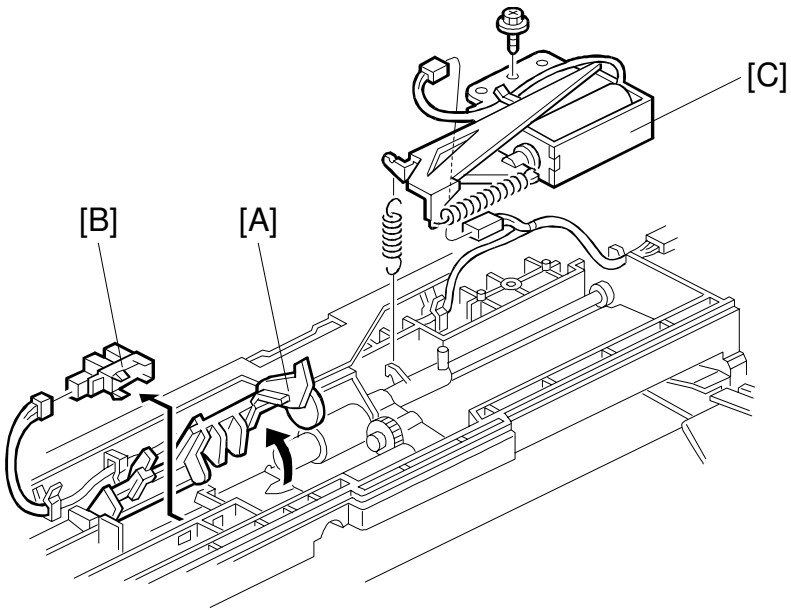
1. Close the by-pass table.
2. Remove the separation roller [A] from the bottom (1 snap ring).

3.4 PAPER END SENSOR AND PICK-UP SOLENOID REPLACEMENT



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1. Remove the upper cover.

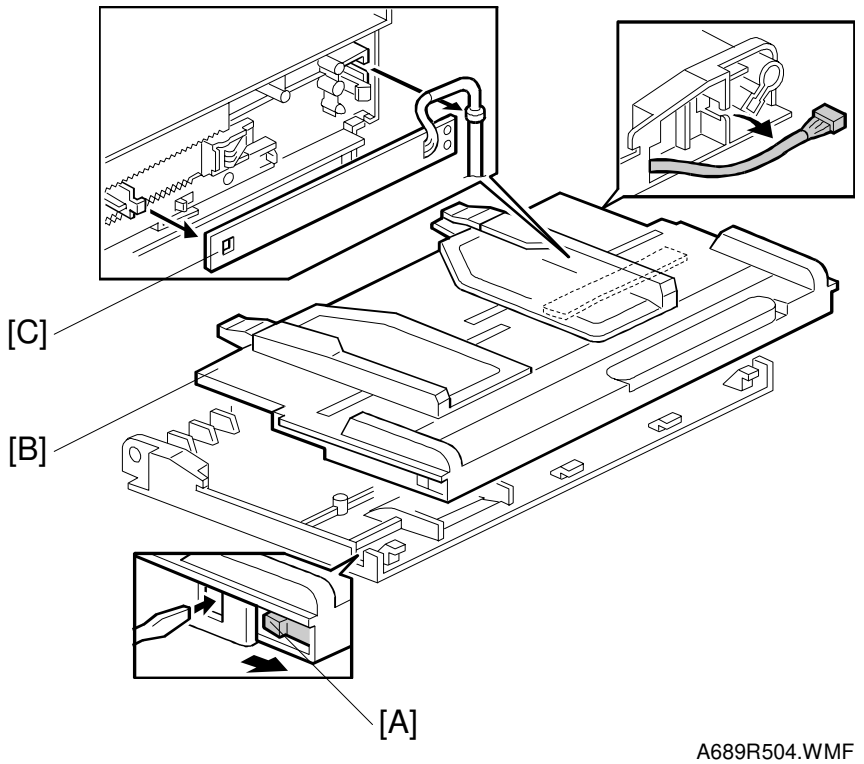
Paper End Sensor

2. Lift up the paper end feeler [A].
   NOTE: When lifted, the paper end feeler locks into position. Therefore, make sure to move it back to its original position before reinstalling the upper cover.
3. Replace the paper end sensor [B] (1 connector).

Pick-up Solenoid

2. Remove the pick-up solenoid [C] (1 screw, 1 spring, 1 connector).

3.5 PAPER SIZE SENSOR BOARD REPLACEMENT



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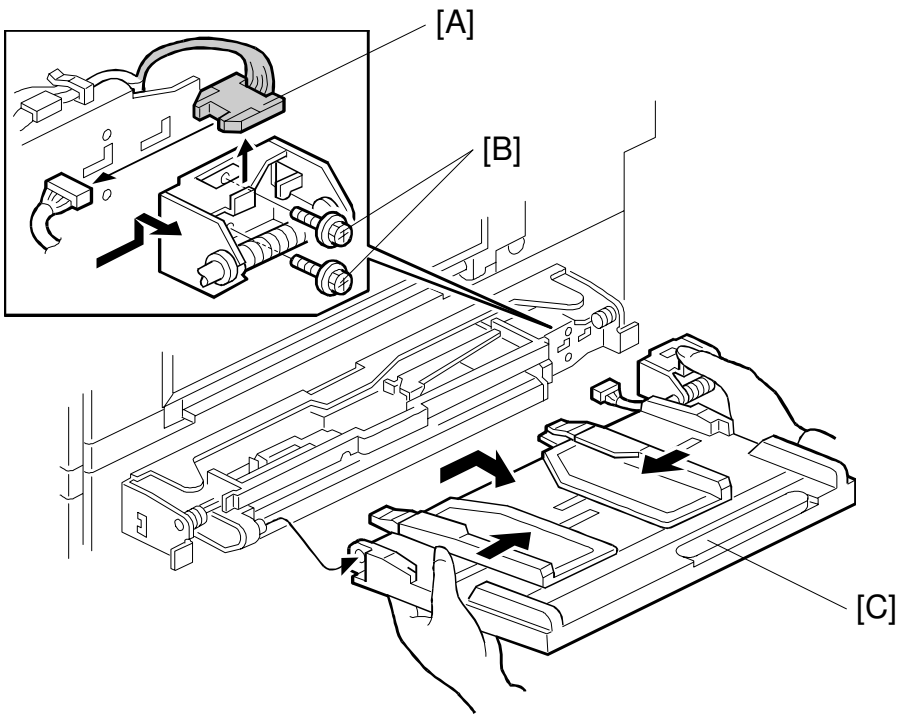
1. Release the hook [A] and remove the paper tray [B] (1 connector).
2. Replace the paper size sensor board [C].
   NOTE: When removing the paper size sensor board, be careful not to break its hook.

3.6 BY-PASS TABLE REMOVAL



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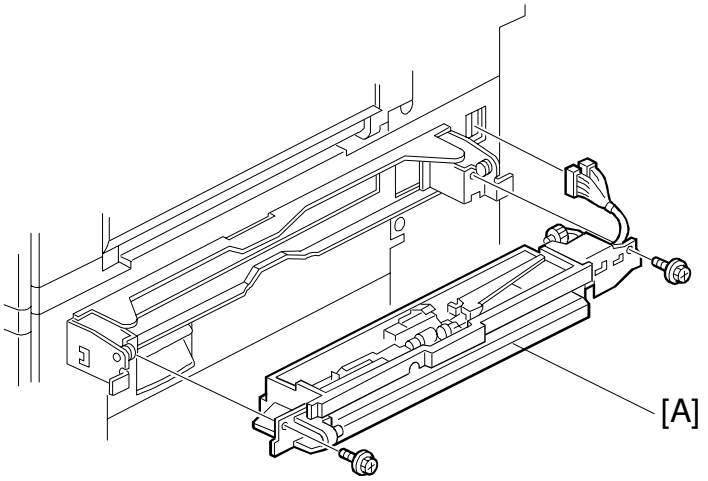
1. Remove the hinge cover.
2. Disconnect the connector [A].
3. Remove the two screws [B]
4. Hold the spring bracket and remove the by-pass table [C].

CAUTION: Pressure is applied to the spring bracket, so when removing the by-pass tray, hold the spring bracket by hand as shown.

3.7 PAPER FEED CLUTCH REPLACEMENT



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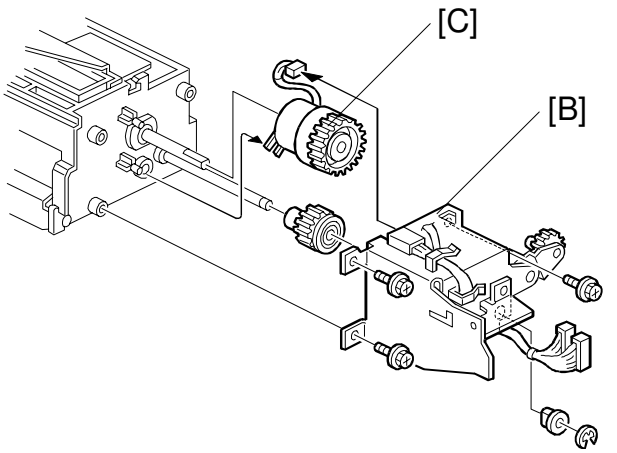

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1. Remove the by-pass tray.
2. Remove the paper feed unit [A] (2 screws, 1 connector).
3. Remove the rear bracket [B] (3 screws, 1 clip, 1 bushing).
4. Replace the paper feed clutch [C] (1 connector)