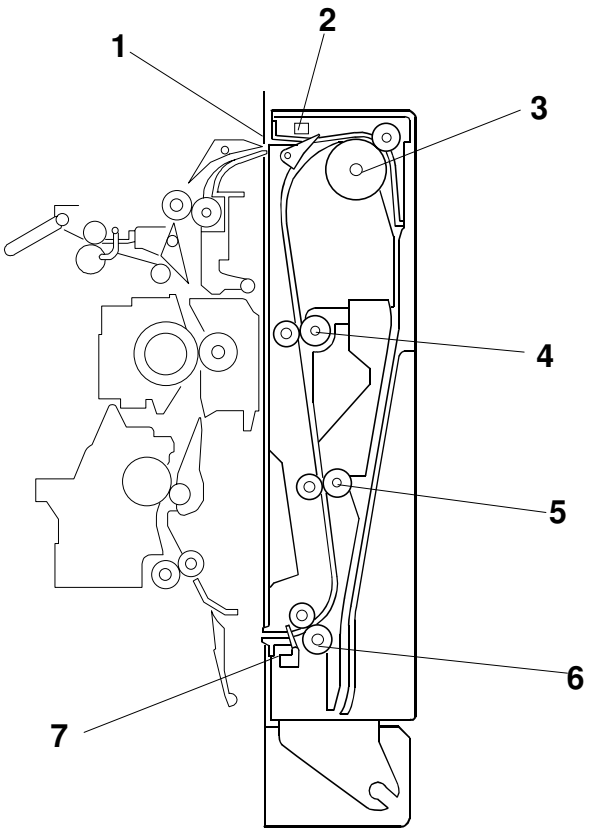
DUPLEX UNIT
(Machine Code: G529/G582)

1. OVERALL MACHINE INFORMATION

1.1 SPECIFICATIONS

Paper Size:	Standard sizes A5 SEF to A3 HLT to DLT Non-standard sizes Width: 100 to 305 mm Length: 148 to 432 mm
Paper Weight:	60 g/m^2 ~ 105 g/m^2, 16 lb ~ 28 lb
Tray Capacity:	1 sheet
Power Consumption:	40 W
Power Source:	DC 24 V, 5 V (from the printer)
Dimensions (W x D x H):	90 x 495 x 452 mm
Weight:	6 kg (13.2 lbs)

1.2 MECHANICAL COMPONENT LAYOUT



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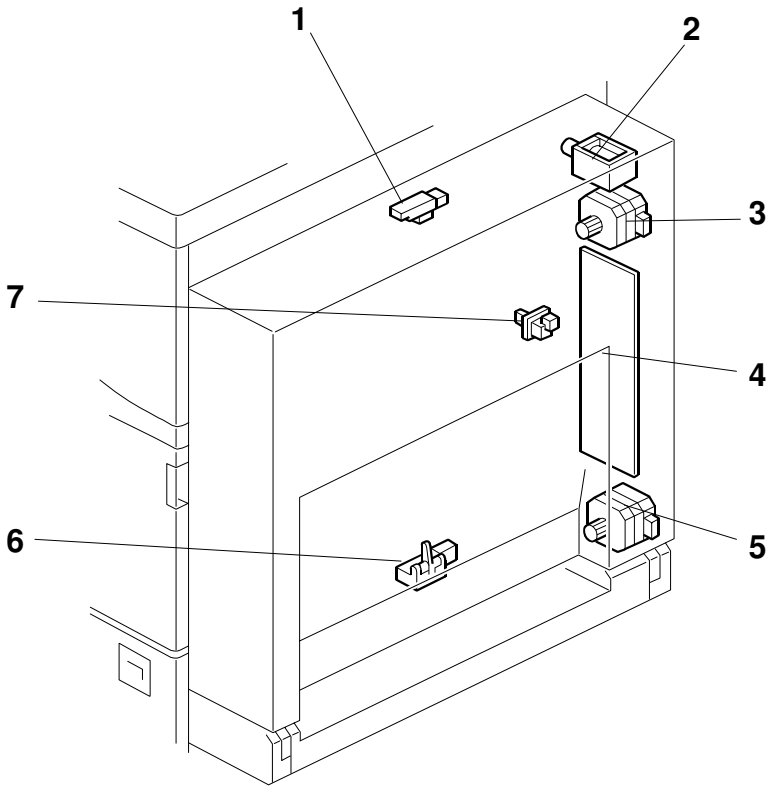
1. Inverter Gate
2. Entrance Sensor
3. Inverter Roller
4. Upper Transport Roller
5. Middle Transport Roller
6. Lower Transport Roller
7. Exit Sensor

1.3 ELECTRICAL COMPONENT LAYOUT



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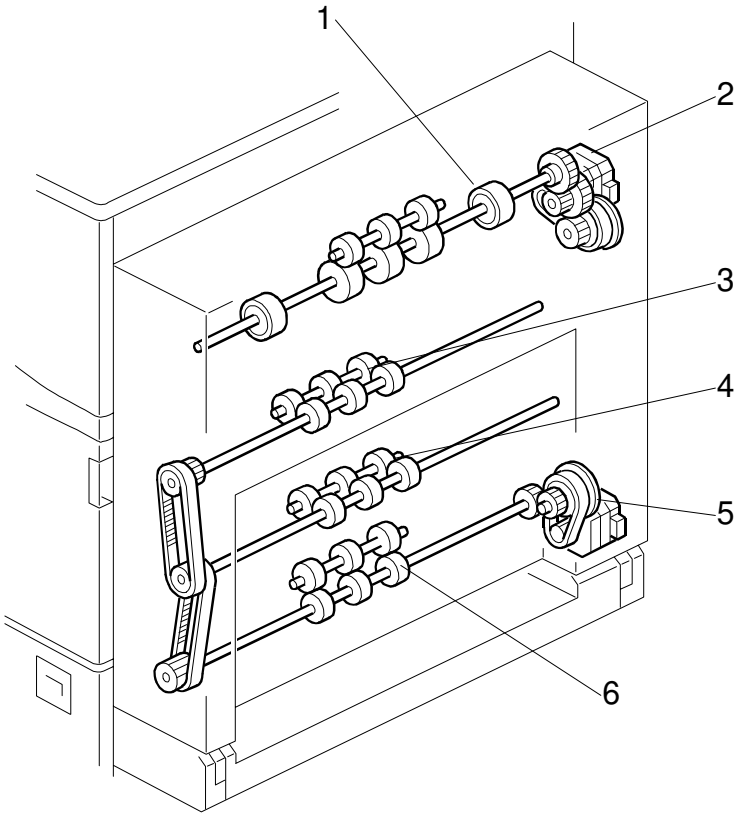
1. Entrance Sensor
2. Inverter Gate Solenoid
3. Inverter Motor
4. Main Board
5. Transport Motor
6. Exit Sensor
7. Duplex Unit Open Switch

1.4 ELECTRICAL COMPONENT DESCRIPTION

Symbol	Name	Function	Index No.
Motors			
M1	Inverter	Drives the inverter roller.	3
M2	Transport	Drives the upper and lower transport rollers.	5
Sensors			
S1	Entrance	Detects the trailing edge of the print paper to turn on the inverter gate solenoid and turn on the inverter motor in reverse. Checks for misfeeds.	1
S2	Exit	Checks for misfeeds.	6
Switches			
SW1	Duplex Unit Open	Detects whether the duplex unit is opened or not.	7
Solenoids			
SOL1	Inverter Gate	Controls the inverter gate.	2
PCBs			
PCB1	Main	Controls the duplex unit and communicates with the printer.	4

1.5 DRIVE LAYOUT



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1. Inverter Roller
2. Inverter Motor
3. Upper Transport Roller
4. Middle Transport Roller
5. Transport Motor
6. Lower Transport Roller

2. DETAILED DESCRIPTIONS

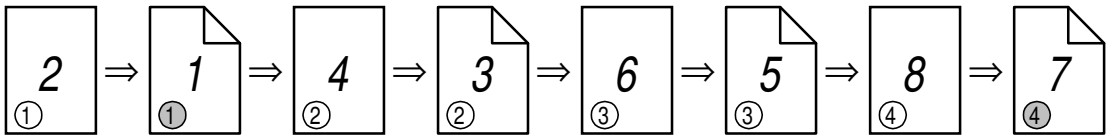
2.1 BASIC OPERATION

To increase the productivity of the duplex unit, printouts are printed as follows.

Larger than A4 lengthwise/LT lengthwise

The duplex unit can store only one sheet of print paper.

Example: 8 pages. The number [A] in the illustration shows the order of pages. The number [B] in the illustration shows the order of sheets of print paper (if shaded, this indicates the second side).



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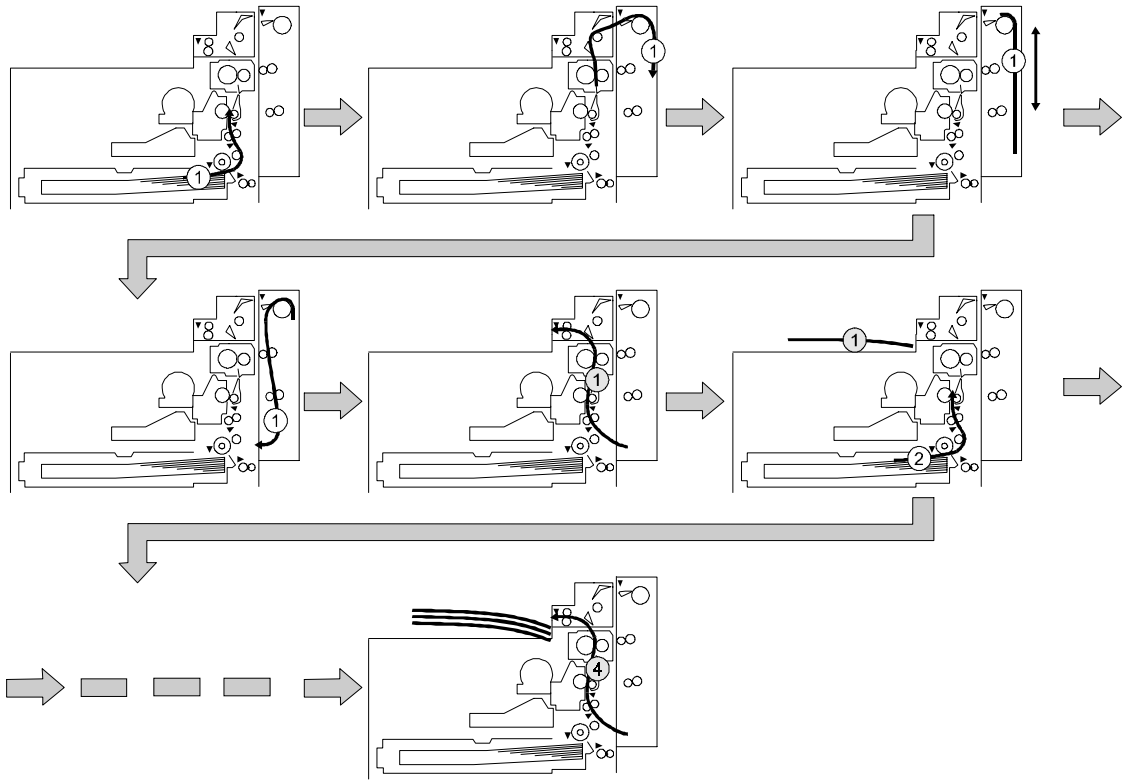

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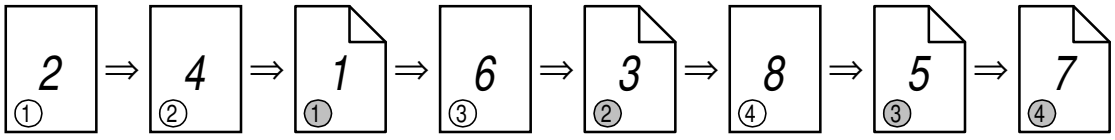
Up to A4 lengthwise/LT lengthwise

The duplex unit can store two sheets of print paper

Example: 8 pages. The number [A] in the illustration shows the order of pages. The number [B] in the illustration shows the order of sheets of print paper (if shaded, this indicates the second side).



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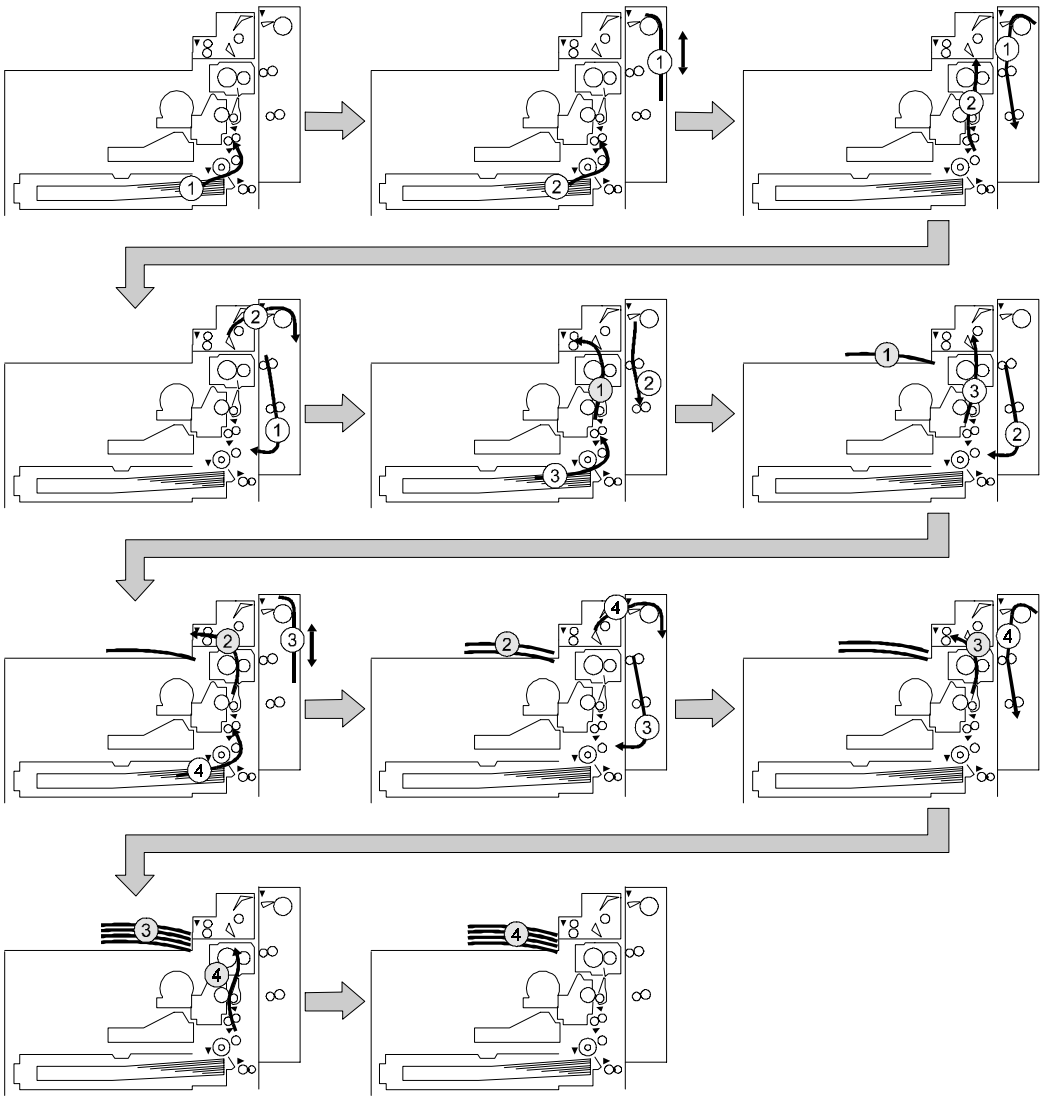

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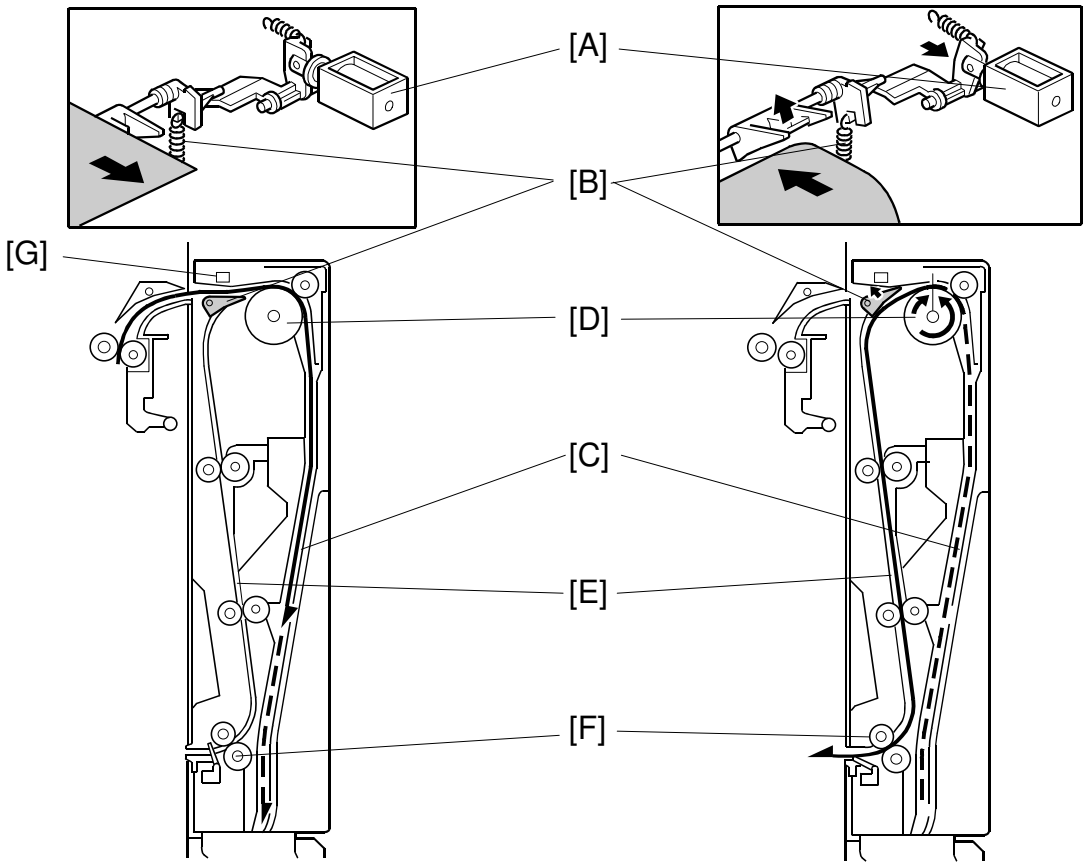
Options

2.2 FEED IN AND EXIT MECHANISM



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When paper is fed into duplex unit:

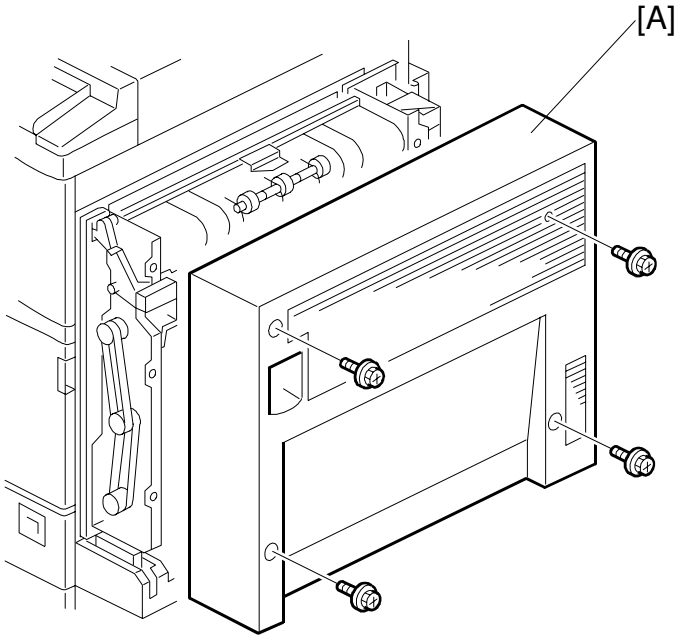
As soon as the paper is fed from the interchange unit, it is sent to the inverter section [C] (the inverter gate solenoid [A] remains off during this process). The inverter section can hold a sheet of paper up to A3 size

Inversion and Exit:

Shortly after the trailing edge of the paper passes the entrance sensor [G], the inverter gate solenoid [A] switches on and the inverter gate [B] switches over to direct the paper to the exit path [E]. The inverter roller [D] then changes its rotation direction and the paper goes to the exit transport area [F]. The paper is then sent to the registration rollers in the main unit by the transport rollers.

3. REPLACEMENT AND ADJUSTMENT

3.1 COVER REMOVAL



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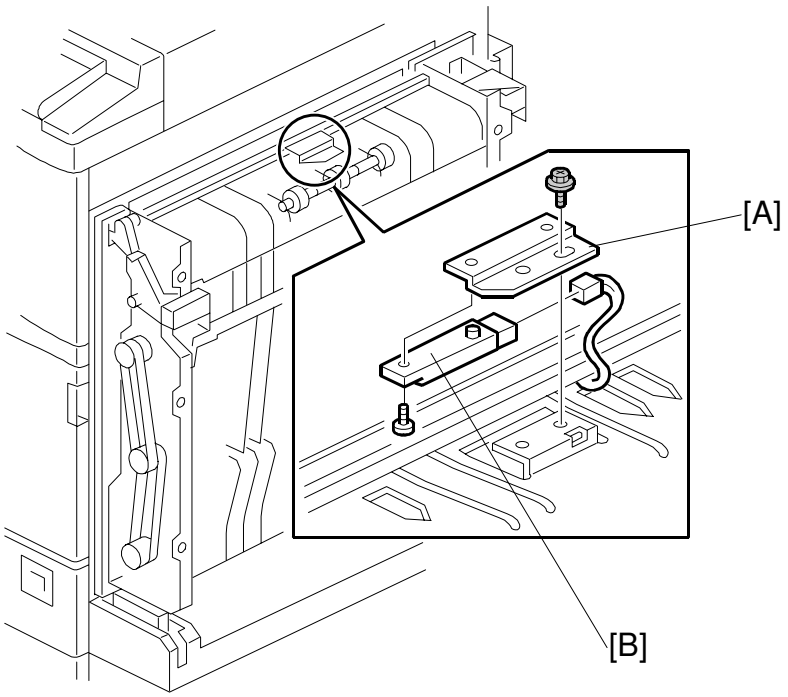
1. Remove the duplex unit cover [A] (4 screws).

3.2 ENTRANCE SENSOR REPLACEMENT



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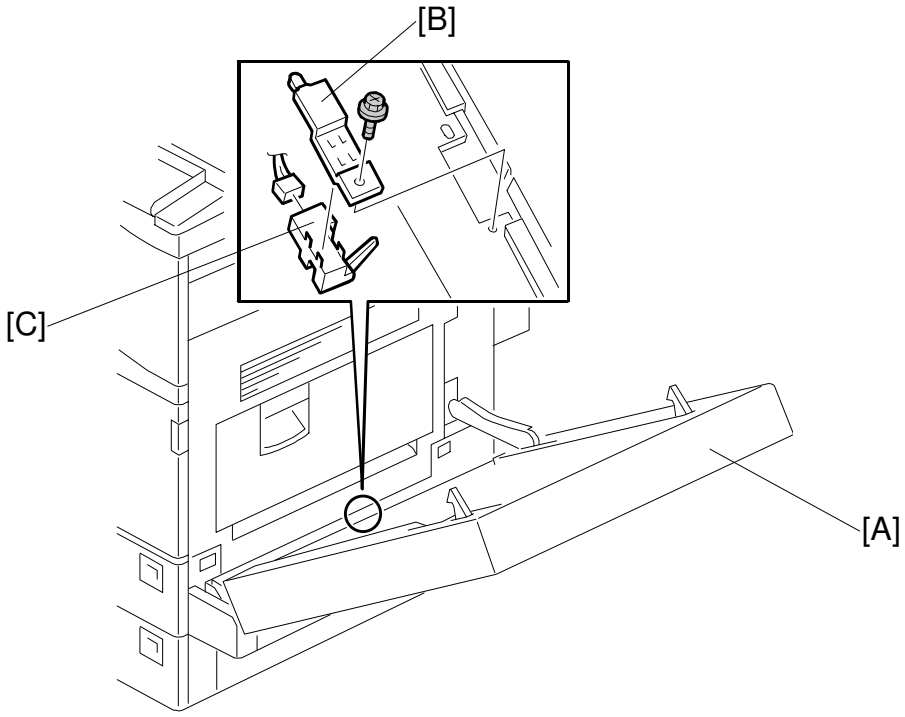
1. Remove the duplex unit cover. (Refer to section 3.1.)
2. Remove the sensor holder [A] (1 screw).
3. Replace the entrance sensor [B] (1 connector, 1 screw).

3.3 EXIT SENSOR REPLACEMENT



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1. Open the duplex unit [A].
2. Remove the sensor bracket [B] (1 screw).
3. Replace the exit sensor [C] (1 connector).