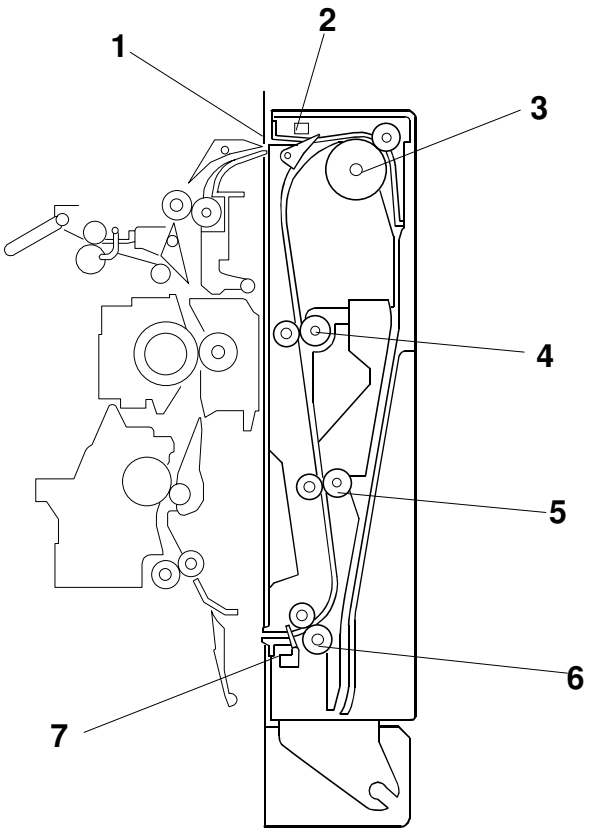
DUPLEX
(Machine Code: A896)

1. OVERALL MACHINE INFORMATION

1.1 SPECIFICATIONS

Paper Size:	Standard sizes A5 lengthwise to A3 HLT to DLT Non-standard sizes Width: 140 to 297 mm Length: 182 to 432 mm
Paper Weight:	64 g/m^2 ~ 105 g/m^2, 20 lb ~ 28 lb
Tray Capacity:	1 sheet
Power Consumption:	40 W
Power Source:	DC 24 V, 5 V
Dimensions (W x D x H):	90 x 495 x 452 mm
Weight:	6 kg

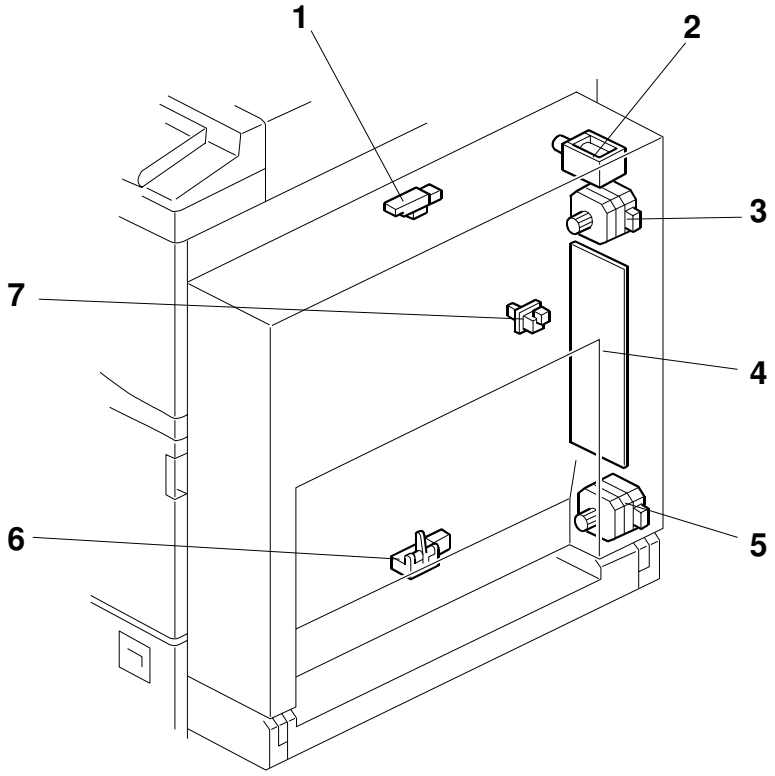
1.2 MECHANICAL COMPONENT LAYOUT



A896V500.WMF

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



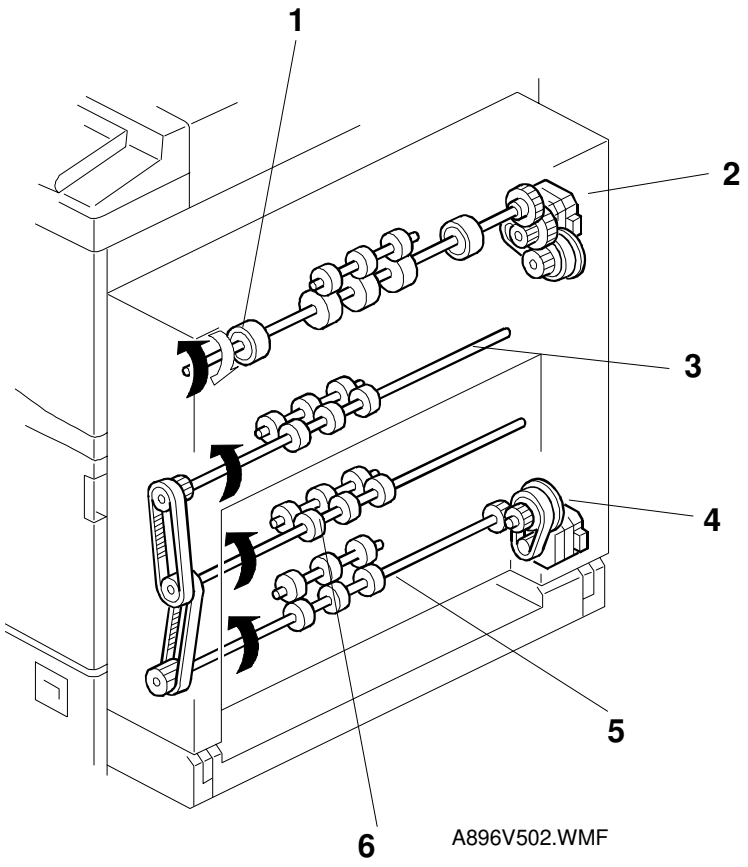
A896V501.WMF

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 copy 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 copier.	4

1.5 DRIVE LAYOUT



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

2. DETAILED DESCRIPTIONS

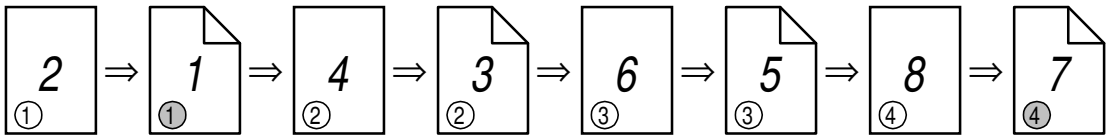
2.1 BASIC OPERATION

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

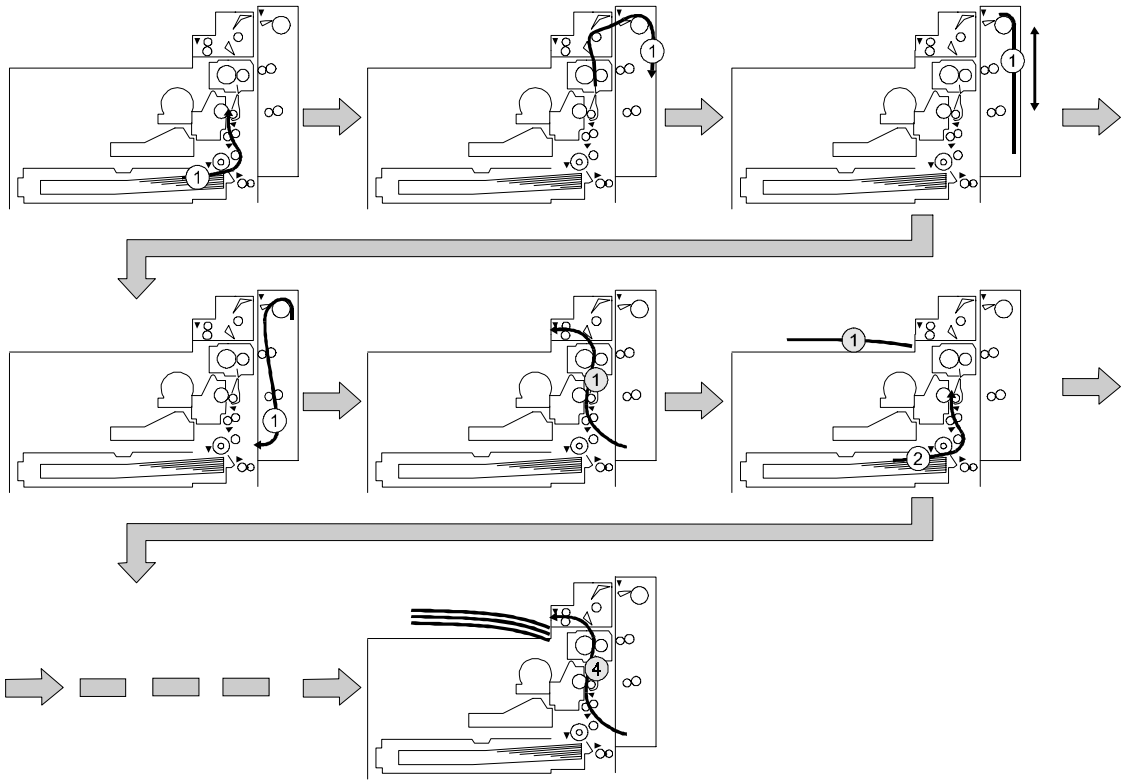
Larger than A4 lengthwise/LT lengthwise

The duplex unit can store only one sheet of copy 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 copy paper (if shaded, this indicates the second side).



A267D519.WMF

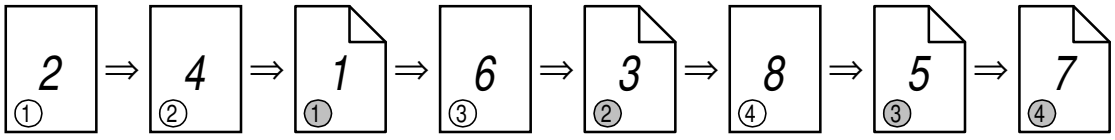


A267D518.WMF

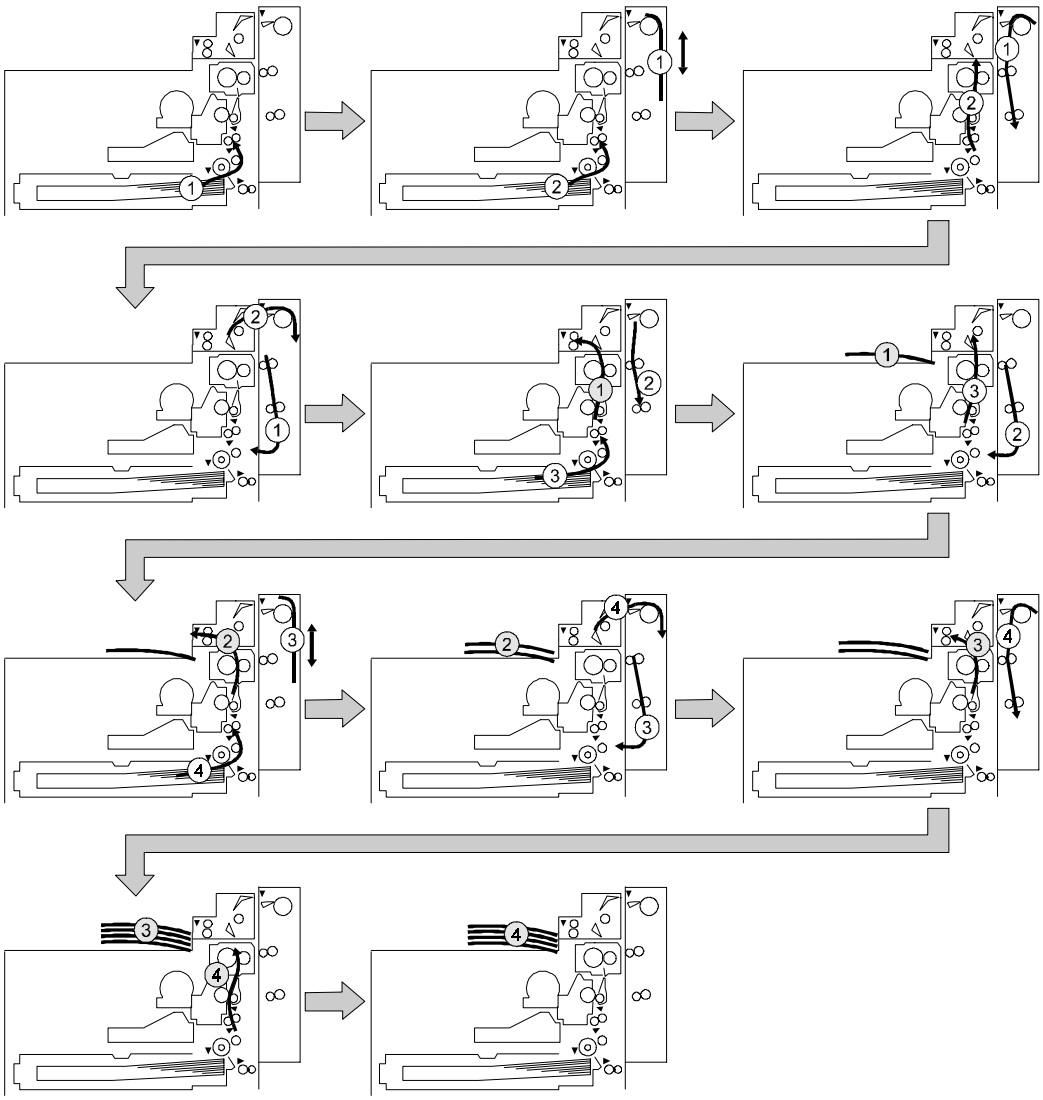
Up to A4 lengthwise/LT lengthwise

The duplex unit can store two sheets of copy 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 copy paper (if shaded, this indicates the second side).

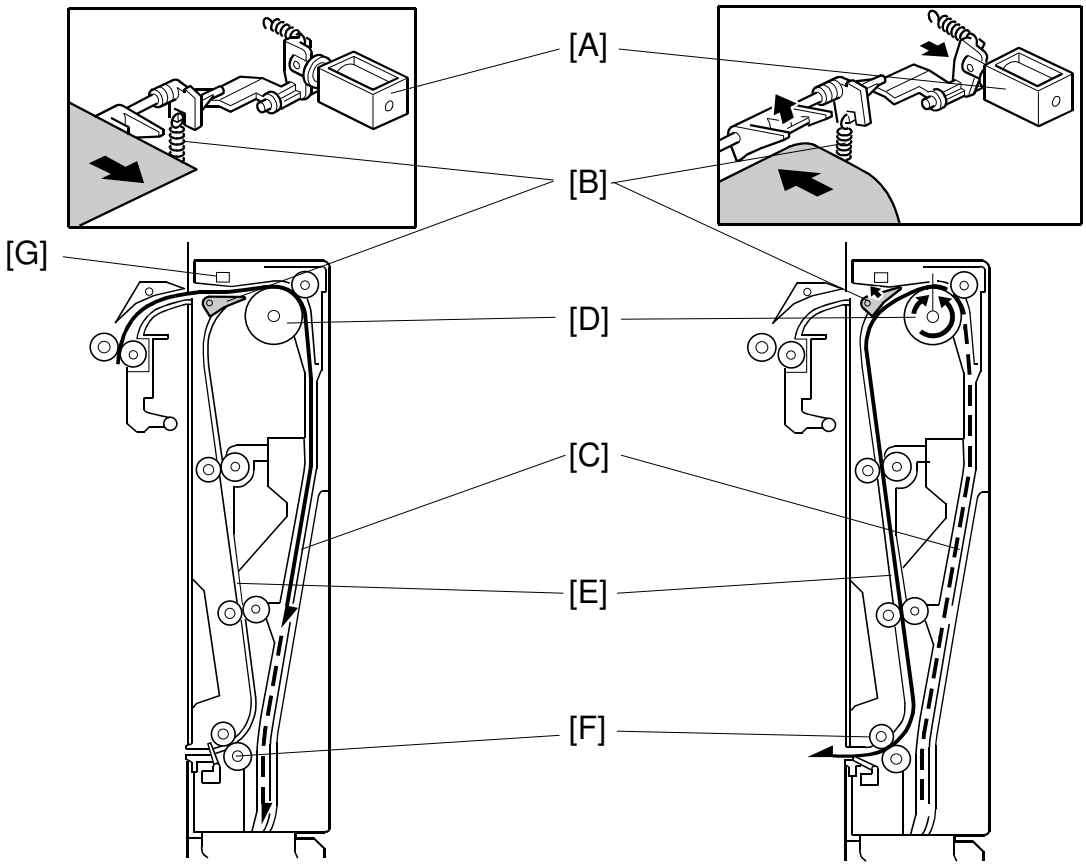


A267D520.WMF



A267D517.WMF

2.2 FEED IN AND EXIT MECHANISM



A896D504.WMF A896D505.WMF

When paper is fed into duplex unit:

As soon as the paper arrives from the interchange unit, it is sent to the inverter section [C] (the inverter gate solenoid [A] remains off during this process).

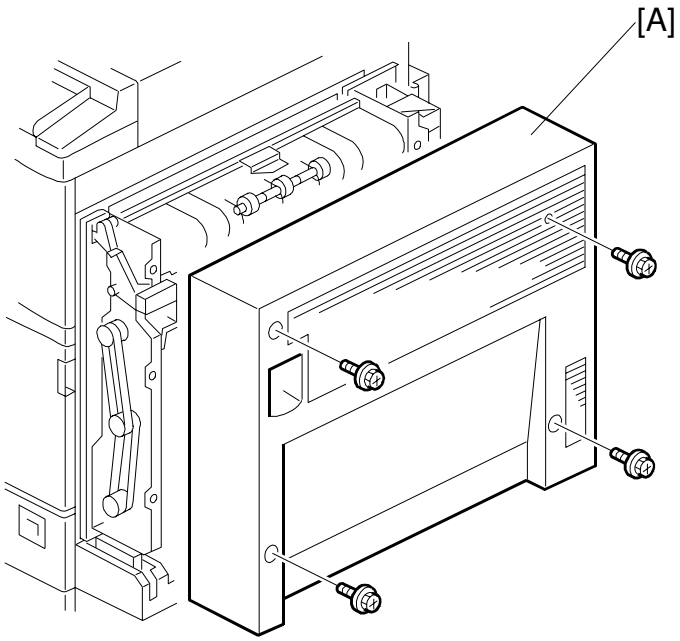
The inverter section can hold a sheet of paper up to A3 size. Because of this, the cover guide used in the previous model has become obsolete and has been eliminated from the design.

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 copier via the transport rollers.

3. REPLACEMENT AND ADJUSTMENT

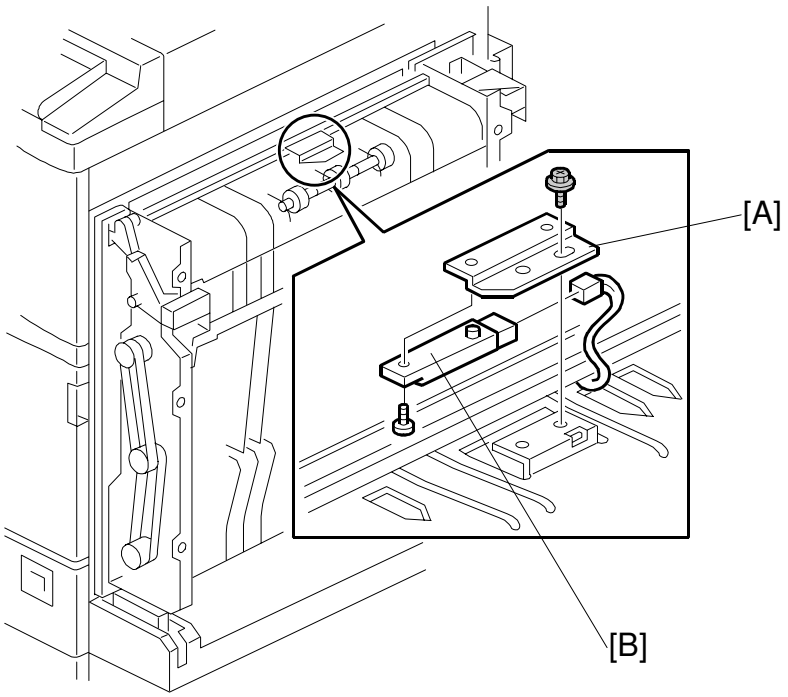
3.1 COVER REMOVAL



A896R501.WMF

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

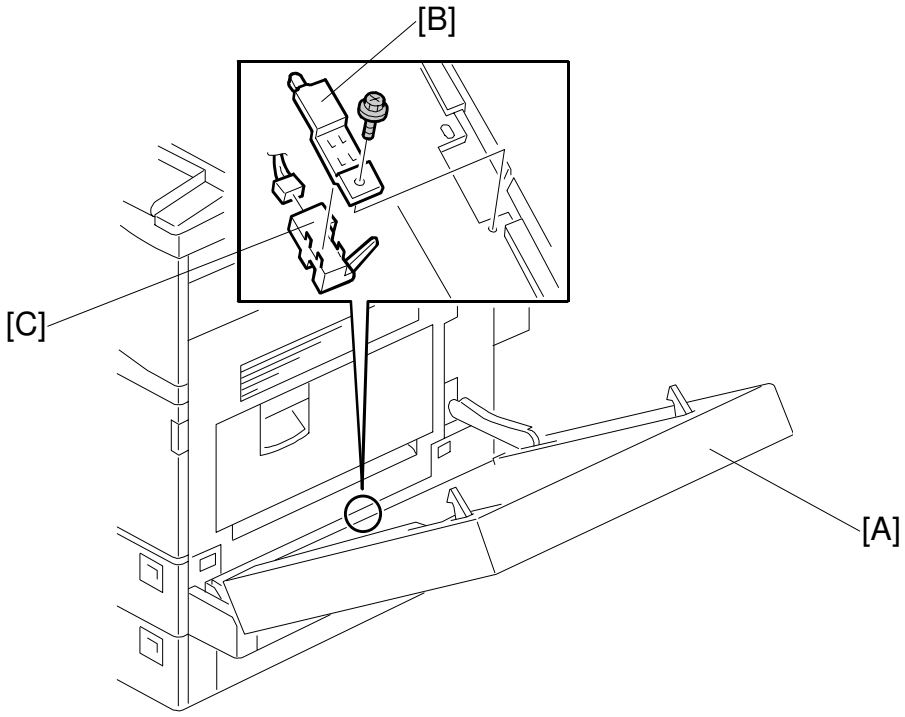
3.2 ENTRANCE SENSOR REPLACEMENT



A896R502.WMF

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



A896R503.WMF

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