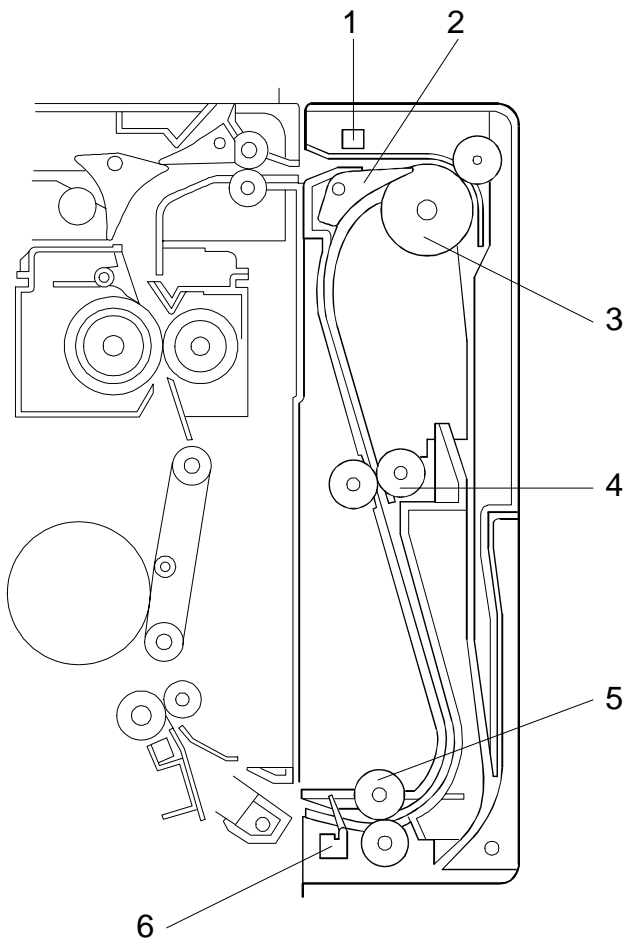# DUPLEX
(Machine Code: A687)

1. OVERALL MACHINE INFORMATION

1.1 SPECIFICATIONS

Paper Size:
Standard sizes
    A5 lengthwise to A3
    HLT to DLT
Non-standard sizes
    Width: 100 to 305 mm
    Length: 148 to 432 mm

Paper Weight: 64 g/m^2 ~ 105 g/m^2, 20 lb ~ 28 lb
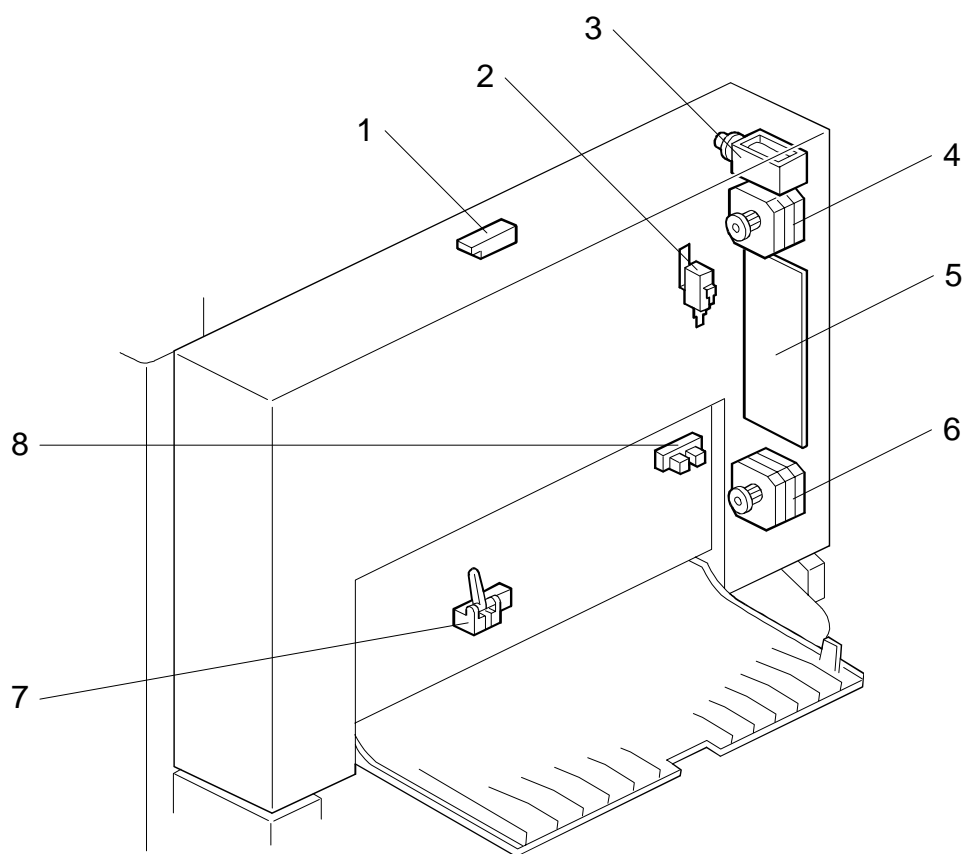
Tray Capacity: 1 sheet

Options

1.2 MECHANICAL COMPONENT LAYOUT

A687V500.WMF

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

1.3   ELECTRICAL COMPONENT LAYOUT

A687V501.WMF

1. Entrance Sensor
2. Duplex Unit Open Switch
3. Inverter Gate Solenoid
4. Inverter Motor

5. Main Board
6. Transport Motor
7. Exit Sensor
8. Cover Guide Sensor

Options

1.4 ELECTRICAL COMPONENT DESCRIPTION

Symbol	Name	Function	Index No.
Motors			
M1	Inverter	Drives the inverter roller.	4
M2	Transport	Drives the upper and lower transport rollers.	6
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.	7
S3	Cover Guide	Detects whether the cover guide is opened or not.	8
Switches			
SW1	Duplex Unit	Detects whether the duplex unit is opened or not.	2
Solenoids			
SOL1	Inverter Gate	Controls the inverter gate.	3
PCBs			
PCB1	Main	Controls the duplex unit and communicates with the copier.	5

1.5 DRIVE LAYOUT
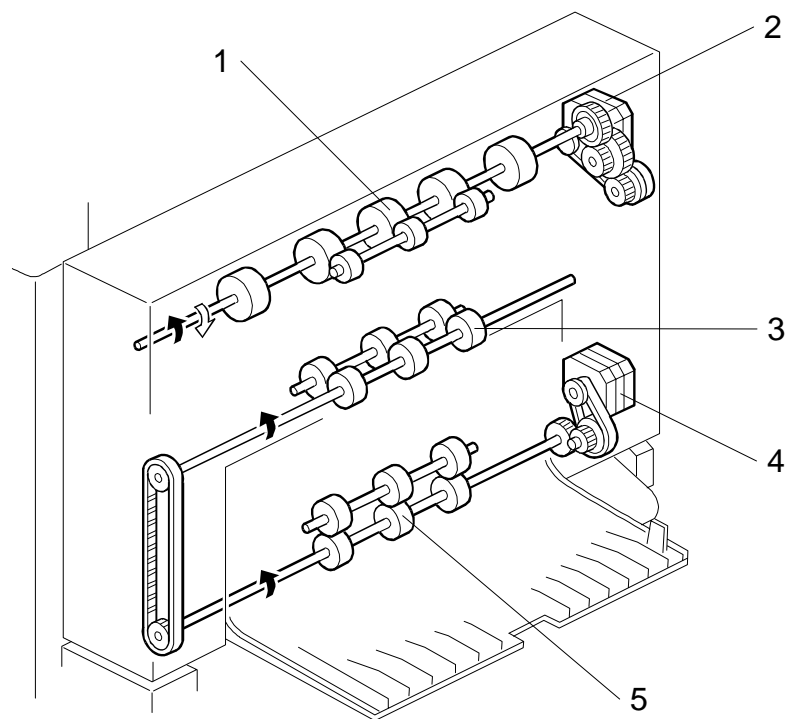
A687V502.WMF

1. Inverter Roller   4. Transport Motor

2. Inverter Motor   5. Lower Transport Roller

3. Upper Transport Roller

# 2. DETAILED DESCRIPTIONS

2.1 BASIC OPERATION

To increase the productivity of the duplex unit, copies are printed as follows.
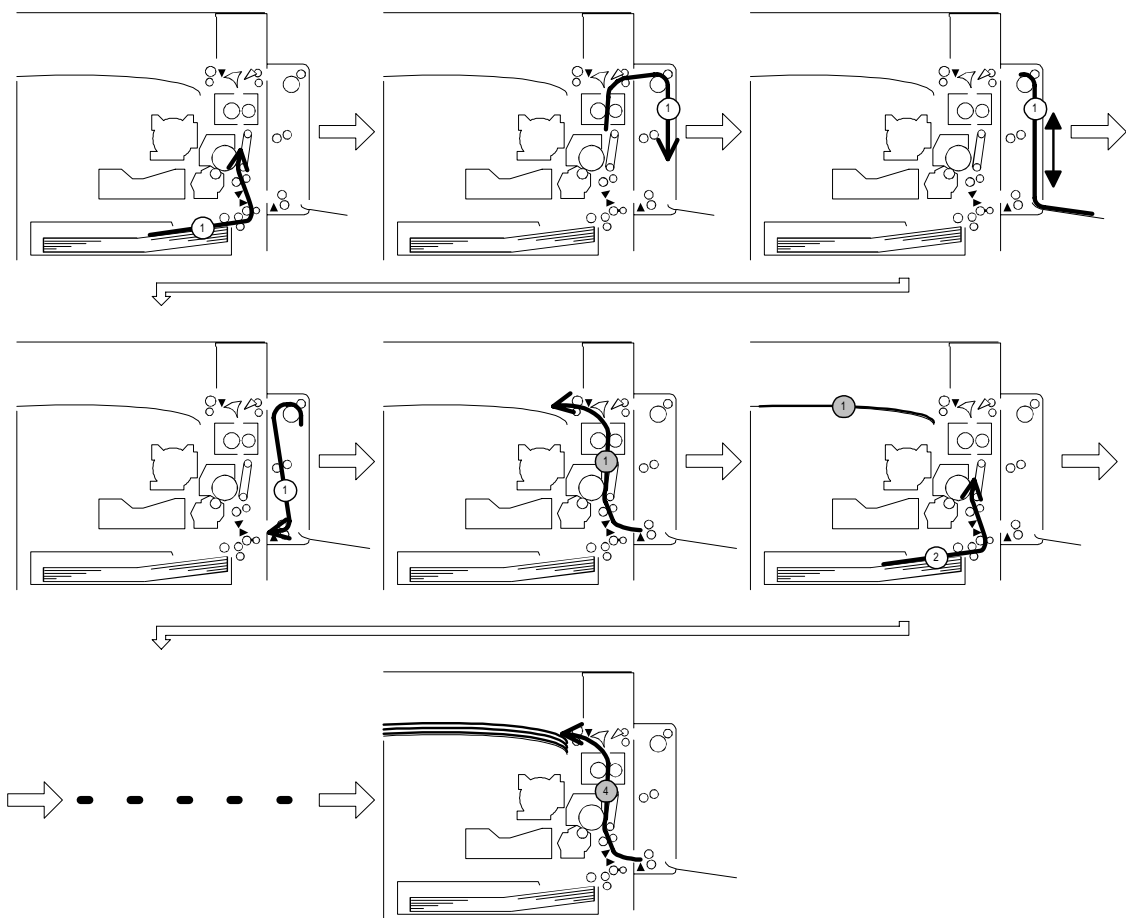
Larger than A4 lengthwise/LT lengthwise

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).
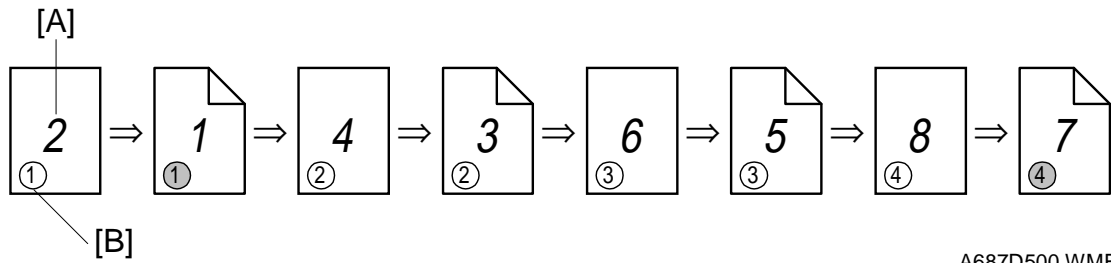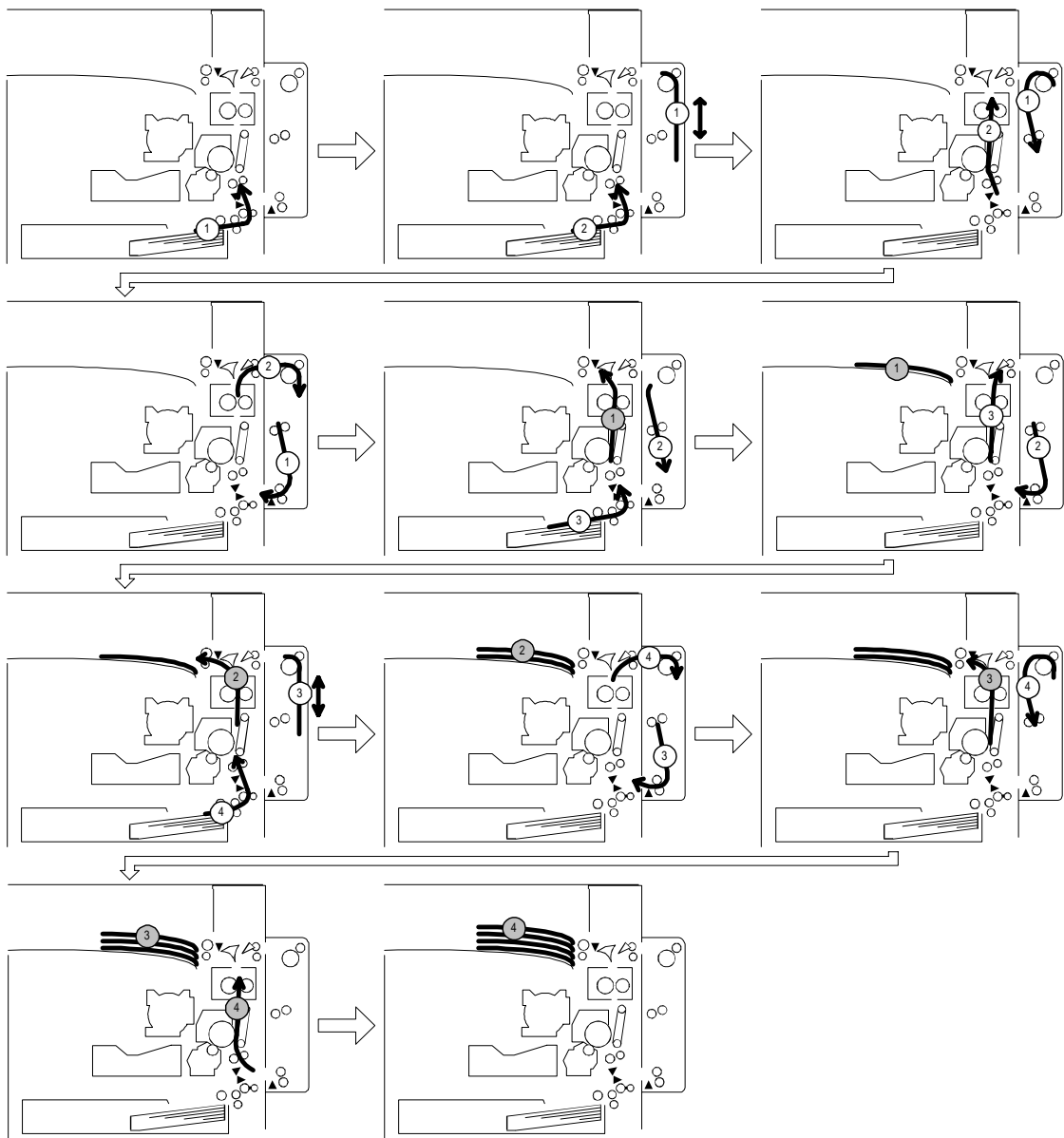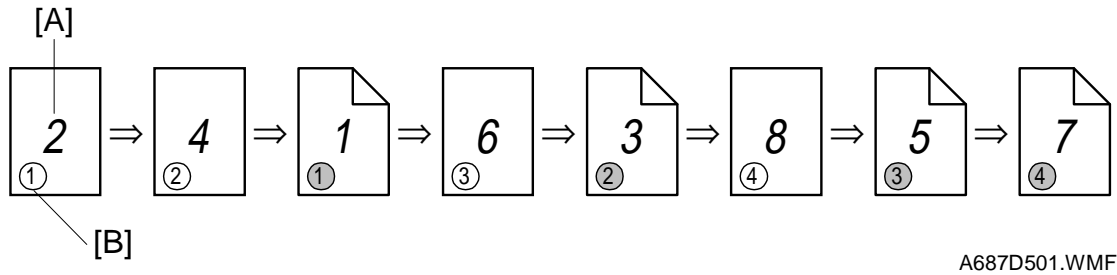

A687D500.WMF

A687D504.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).

[A]

2 ① ⇒ 4 ② ⇒ 1 ① ⇒ 6 ③ ⇒ 3 ② ⇒ 8 ④ ⇒ 5 ③ ⇒ 7 ④

[B]

A687D501.WMF

A687D505.WMF

Options

2.2 FEED IN AND EXIT MECHANISM
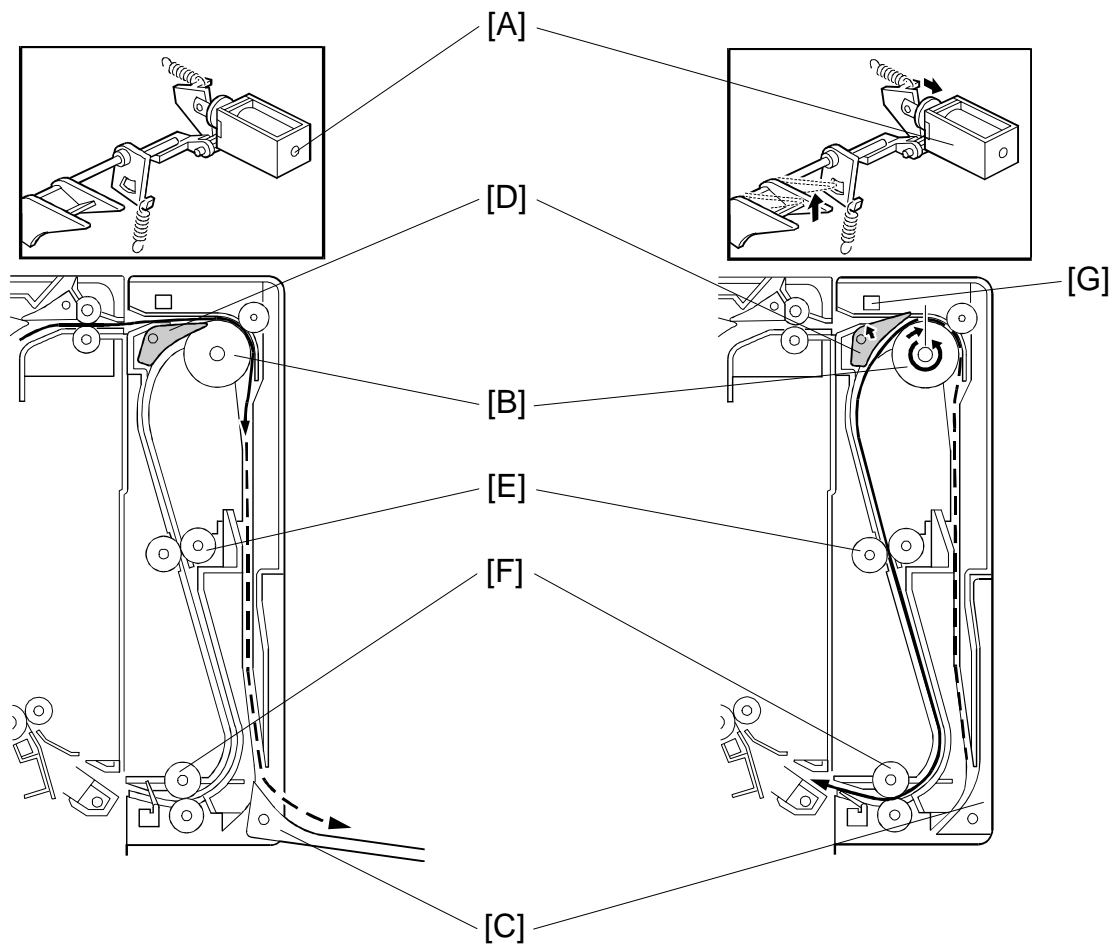
A687D502.WMF   A687D503.WMF

Feed-in

The inverter gate solenoid [A] stays off and the inverter roller [B] rotates clockwise. A sheet of paper is sent to the inverter section. The inverter section can stack sizes of up to A4 lengthwise when the cover guide [C] is closed. Therefore, the user must open the cover guide when using larger sizes of paper (longer than A4/LT lengthwise).

Inversion and Exit

The inverter gate solenoid turns on and the inverter motor turns on in reverse shortly after the trailing edge of the paper passes through the entrance sensor [G]. As a result, the inverter gate [D] is opened and the inverter roller rotates counterclockwise. The paper is sent to the copier through the upper and lower transport rollers [E, F].
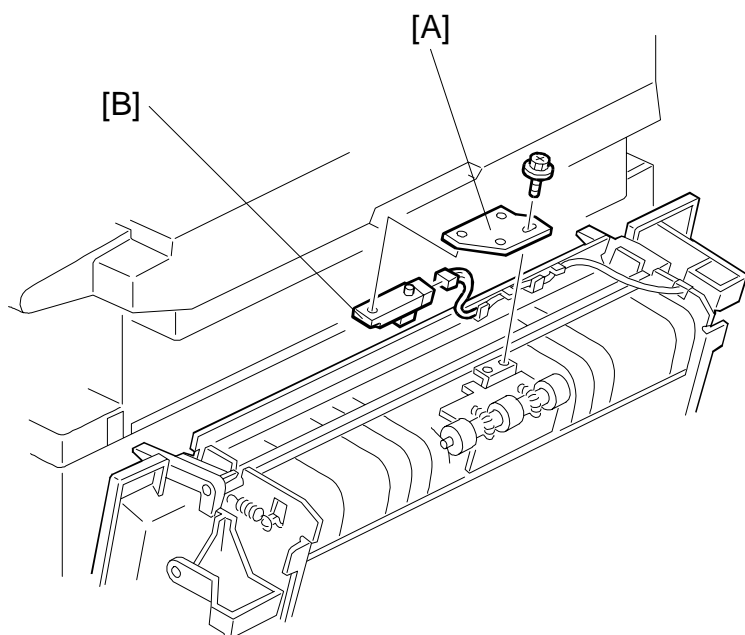
3. REPLACEMENT AND ADJUSTMENT

3.1 COVER REMOVAL
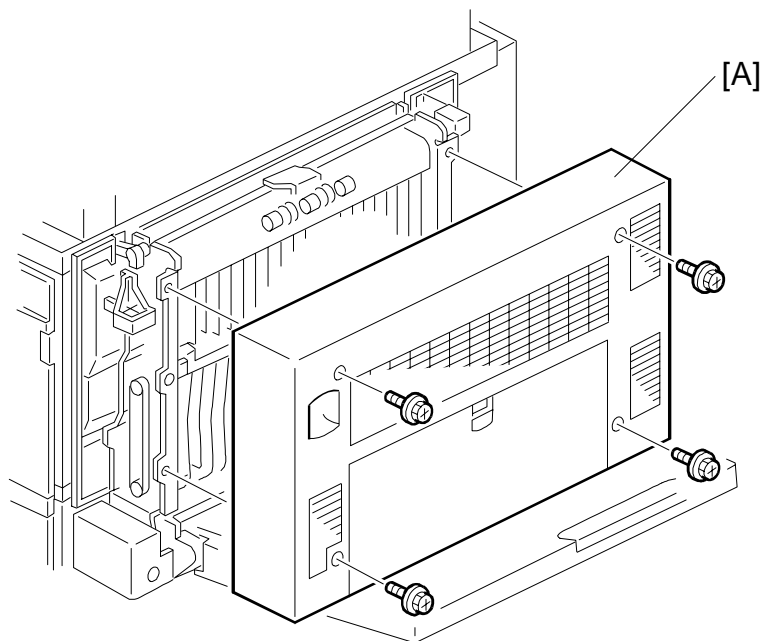
A687R500.WMF

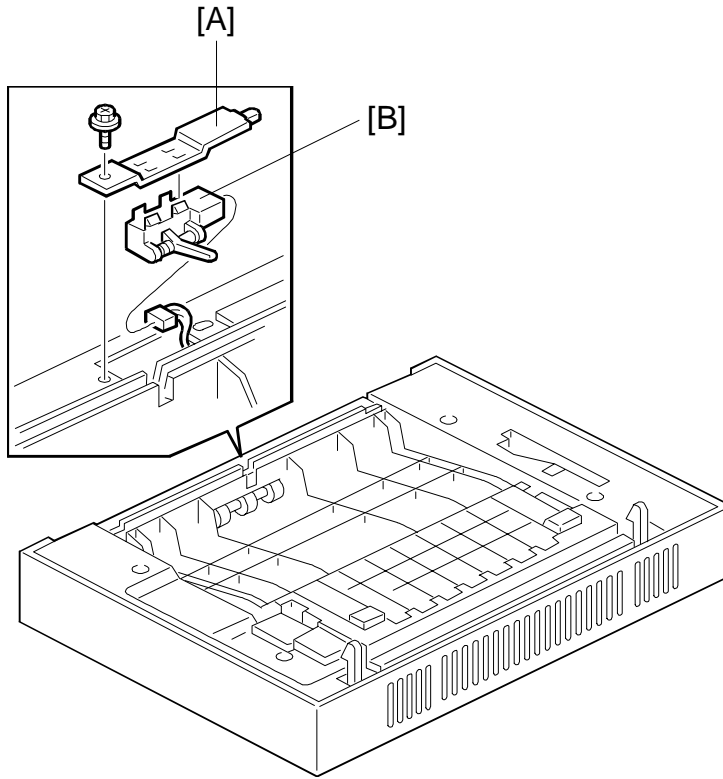1. Remove the duplex unit cover [A] (4 screws).

Options

3.2 **ENTRANCE SENSOR REPLACEMENT**

A687R501.WMF

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

3.3 EXIT SENSOR REPLACEMENT

A687R502.WMF

1. Remove the duplex unit.

2. Remove the sensor bracket [A] (1 screw).

3. Replace the exit sensor [B] (1 connector).

Options

A687-11