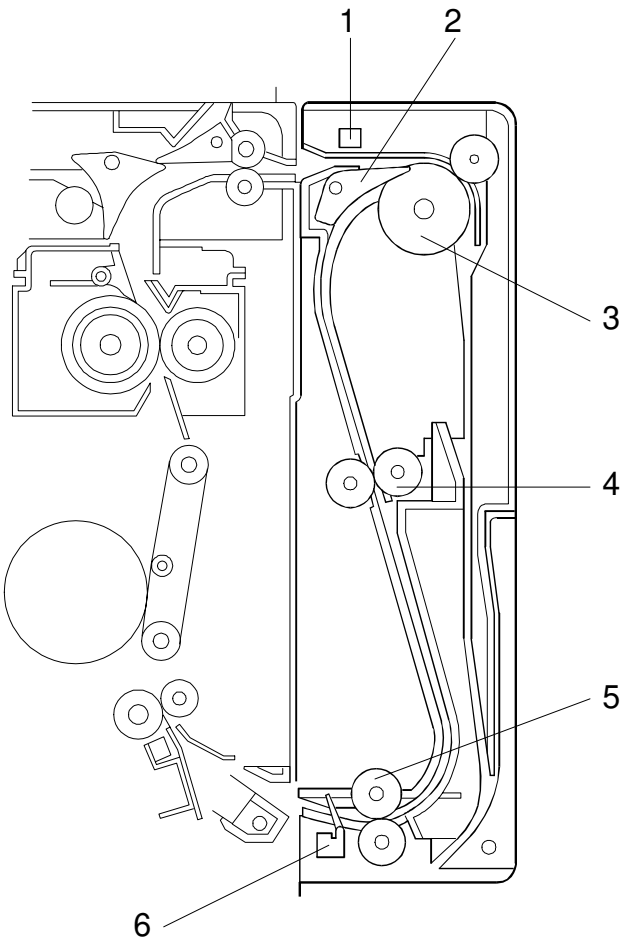
DUPLEX
(Machine Code: A687)

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

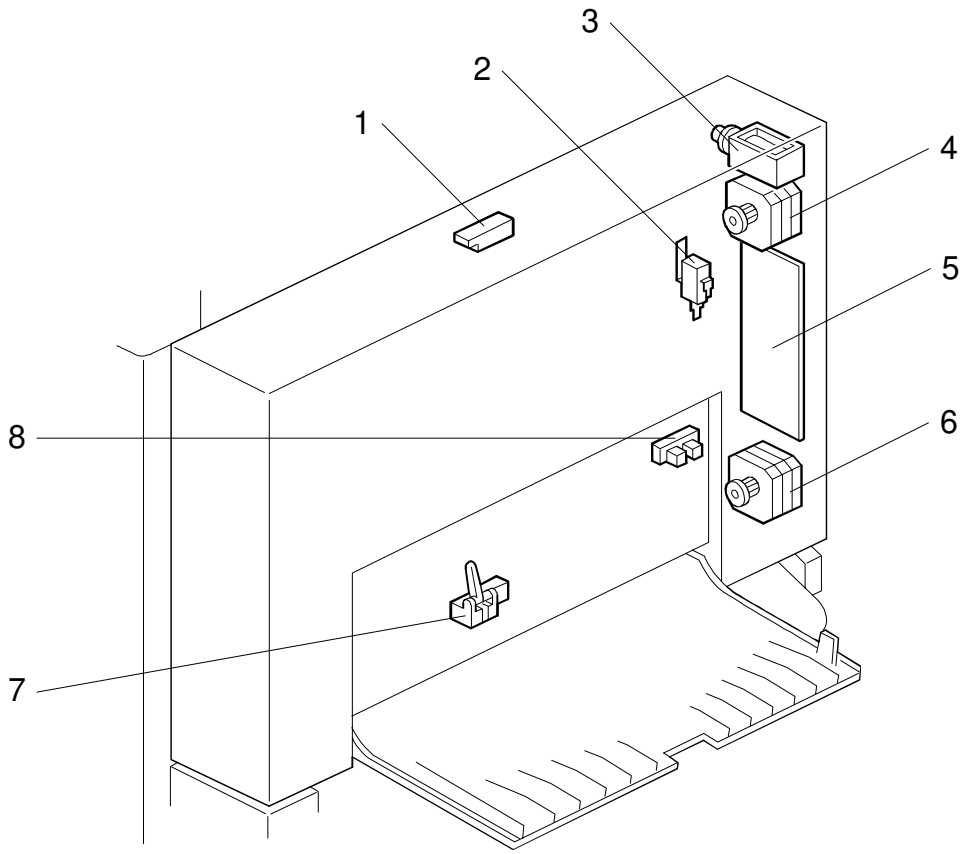
1.2 MECHANICAL COMPONENT LAYOUT



A687V500.WMF

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

1.3 ELECTRICAL COMPONENT LAYOUT



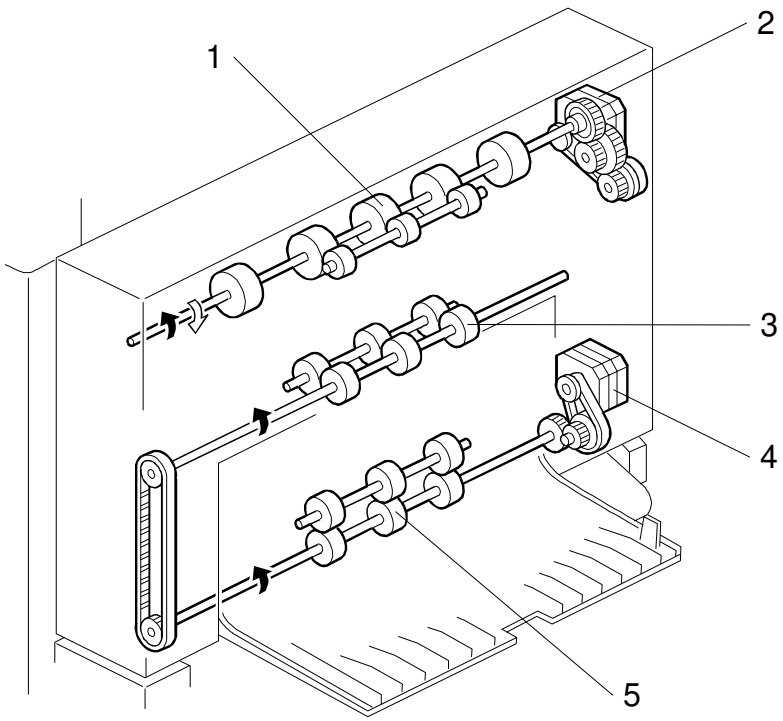
A687V501.WMF

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

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
2. Inverter Motor
3. Upper Transport Roller
4. Transport Motor
5. Lower Transport Roller

2. DETAILED DESCRIPTIONS

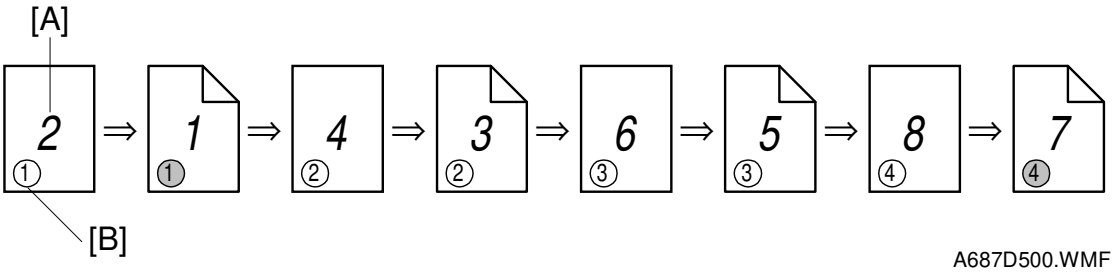
2.1 BASIC OPERATION

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

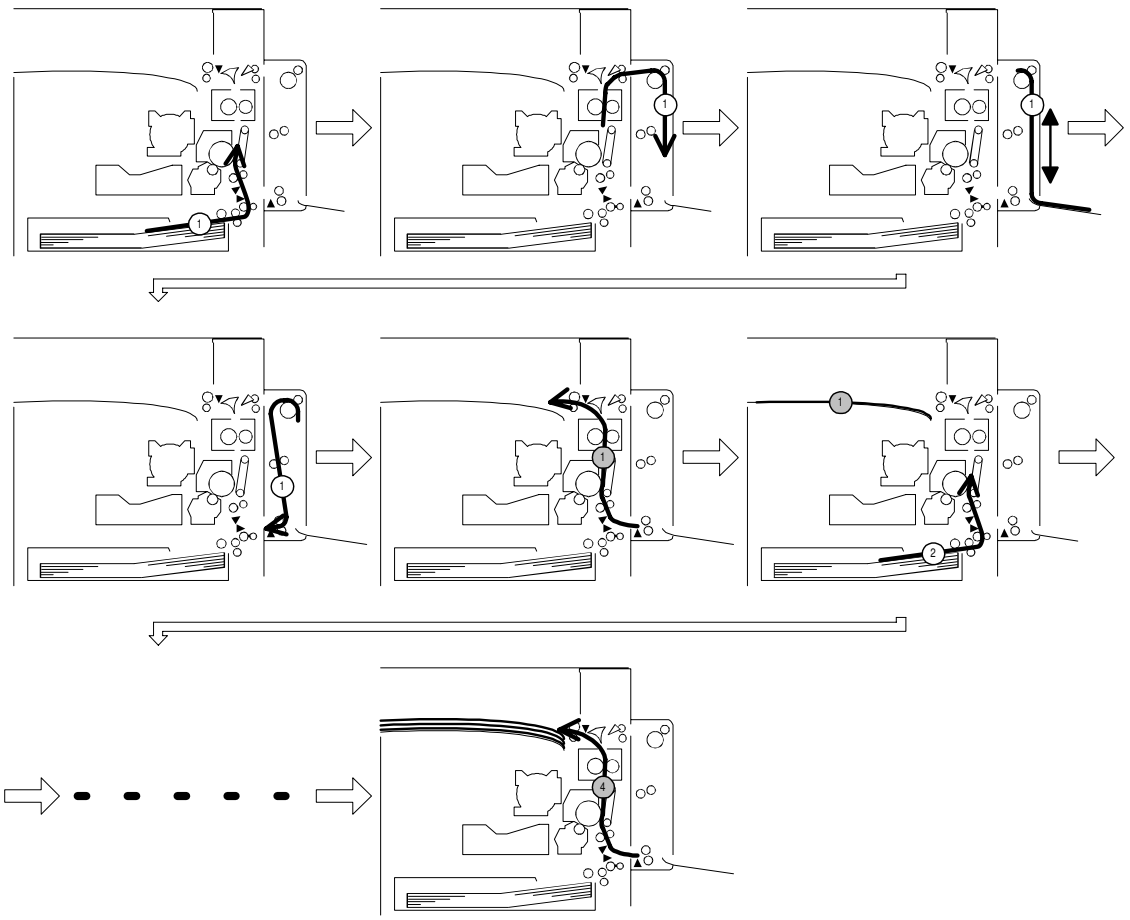
Larger than A4 lengthwise/LT lengthwise

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

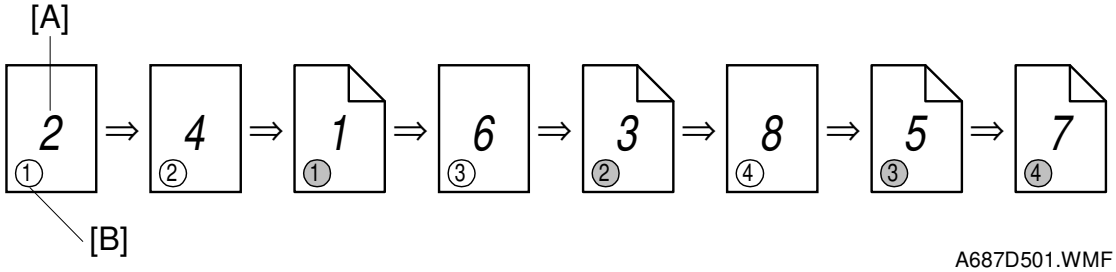


A687D504.WMF

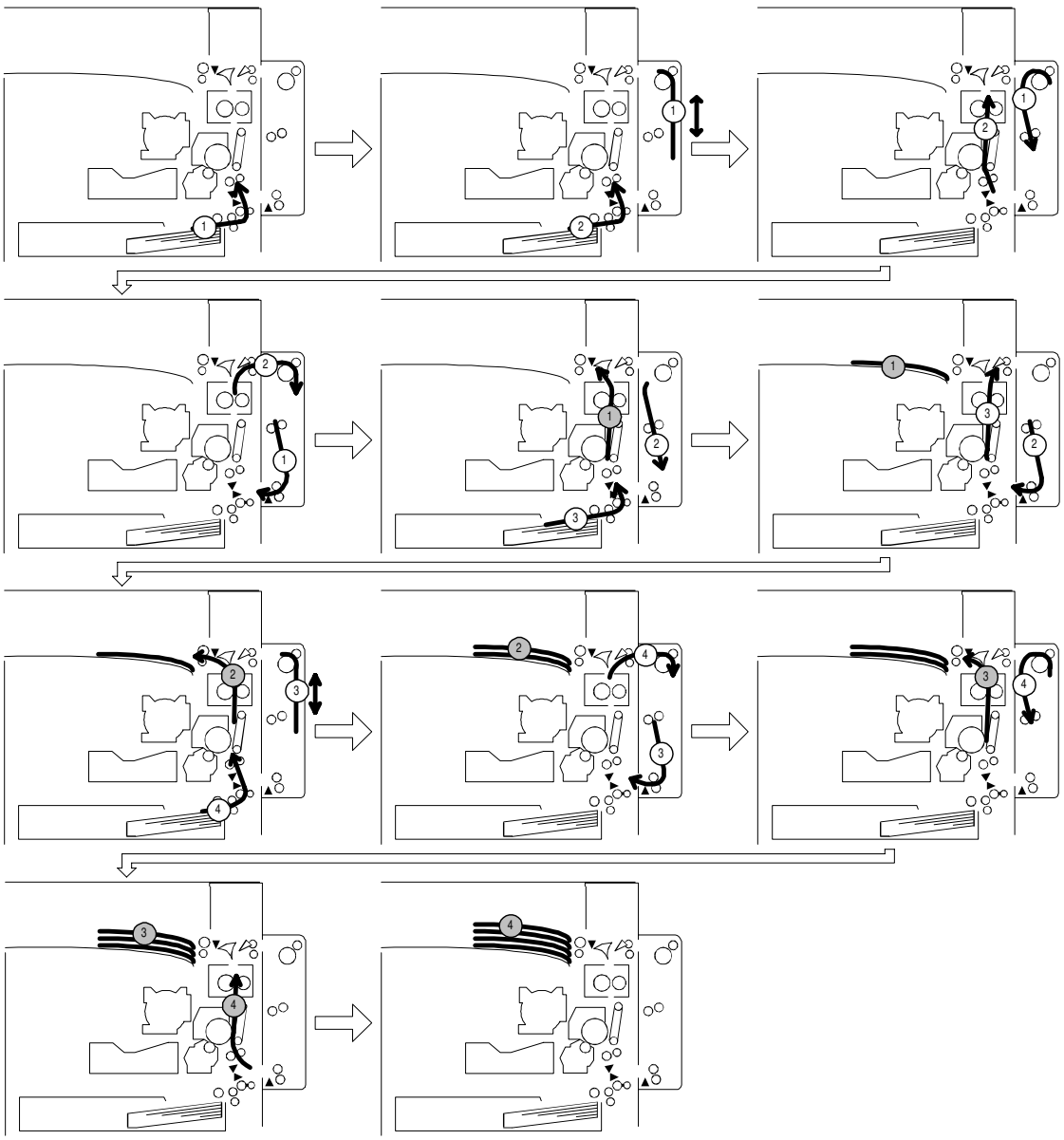
Up to A4 lengthwise/LT lengthwise

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).

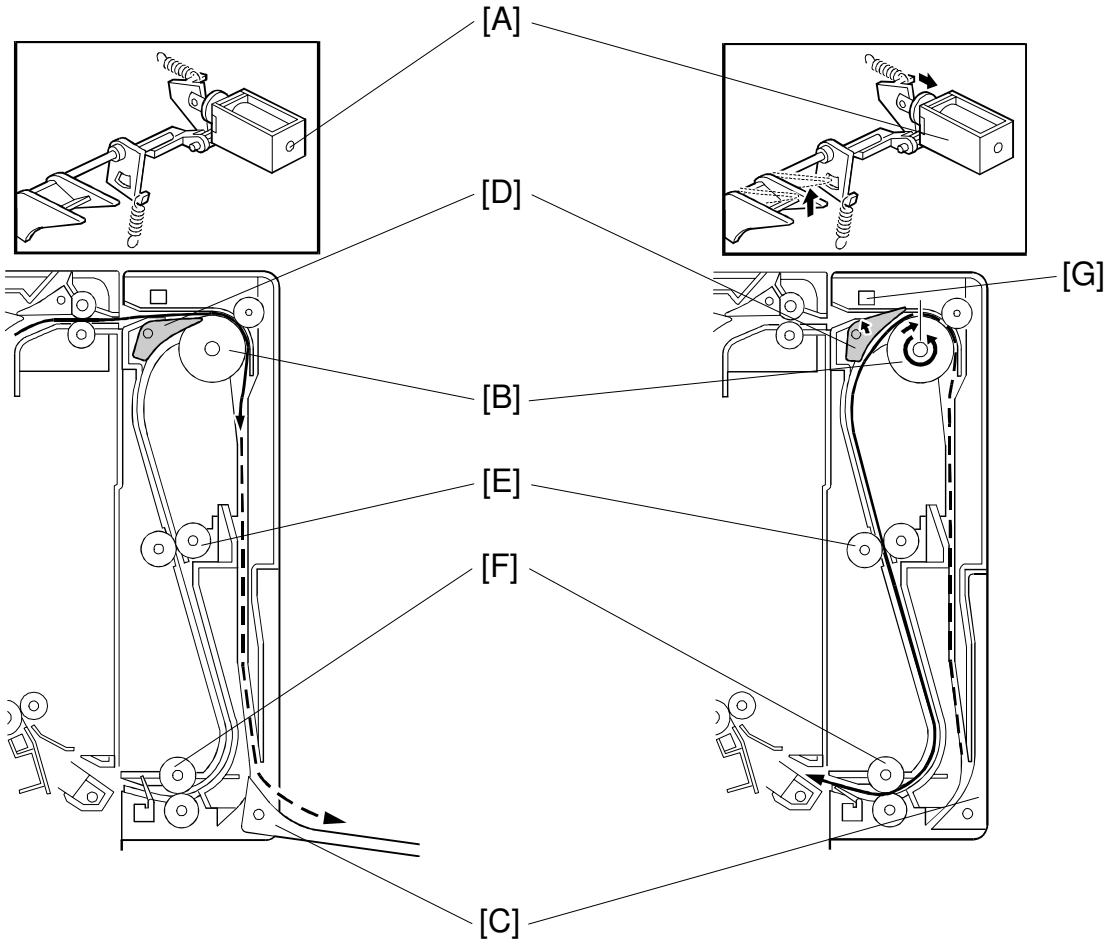


A687D501.WMF



A687D505.WMF

2.2 FEED IN AND EXIT MECHANISM



A687D502.WMF A687D503.WMF

Feed-in

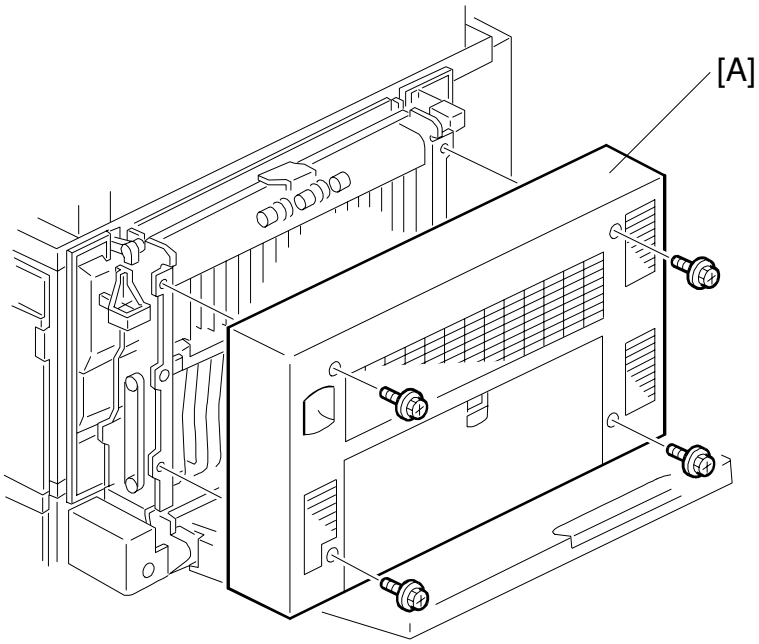
The inverter gate solenoid [A] stays off and the inverter roller [B] rotates clockwise. A sheet of paper is sent to the inverter section. The inverter section can stack sizes of up to A4 lengthwise when the cover guide [C] is closed. Therefore, the user must open the cover guide when using larger sizes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

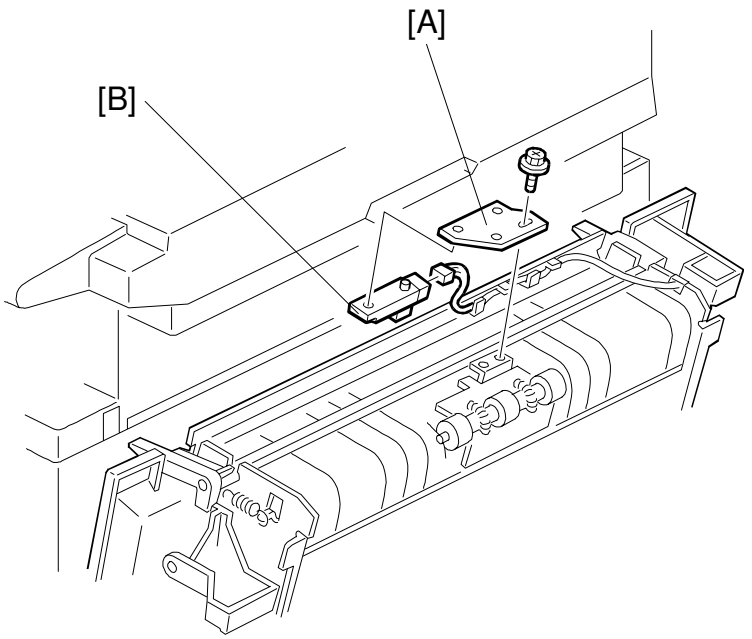
3.1 COVER REMOVAL



A687R500.WMF

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

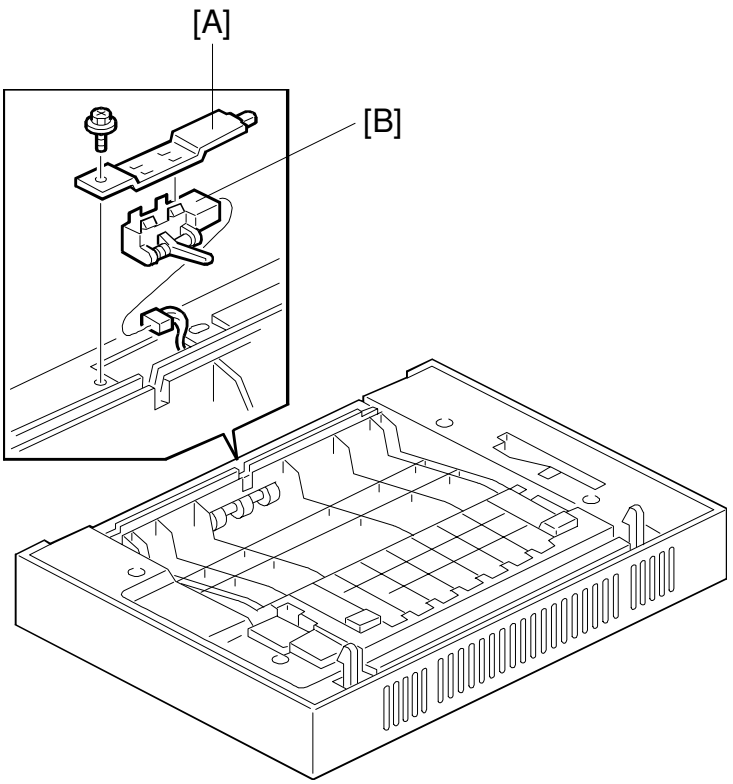
3.2 ENTRANCE SENSOR REPLACEMENT



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).