

**DUPLEX UNIT**  
**(Machine Code: B509)**

# 1. REPLACEMENT AND ADJUSTMENT

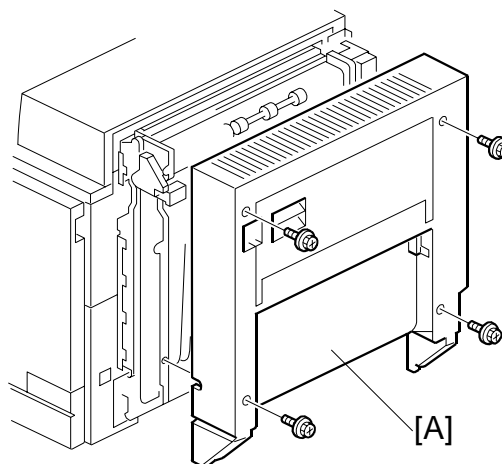
**⚠ CAUTION**  
 Turn off the main power switch and unplug the machine before beginning any of the procedures in this section.

**NOTE:** This manual uses the following symbols.

- ☛ : See or Refer to    
 🔩 : Screws    
 🔌 : Connector    
 🔗 : Clip ring  
Ⓢ : E-ring

## 1.1 EXTERIOR COVER

1. Exterior cover [A] (🔩 x 4)



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## 1.2 ENTRANCE/EXIT SENSORS

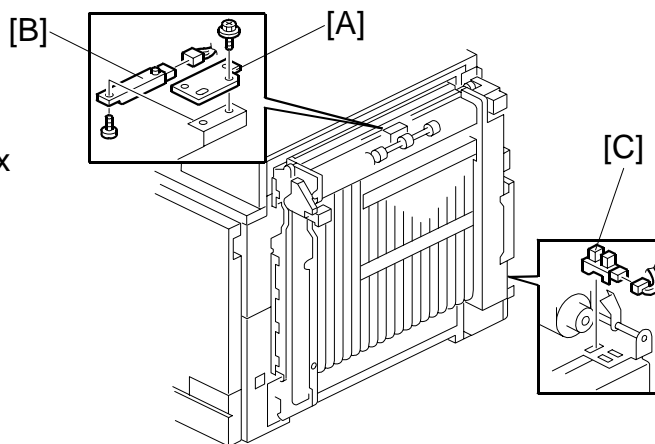
1. Exterior cover (☛ 1.1)

**Entrance Sensor**

2. Sensor bracket [A] (🔩 x 1)
3. Entrance sensor [B] (🔌 x 1, 🔩 x 1)

**Exit Sensor**

4. Exit sensor [C] (🔌 x 1)

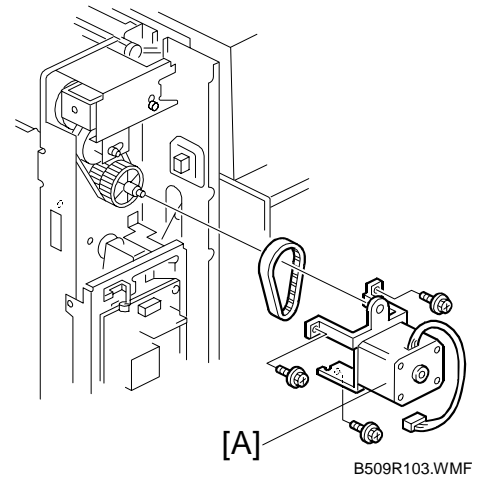


B509R102.WMF

Peripherals

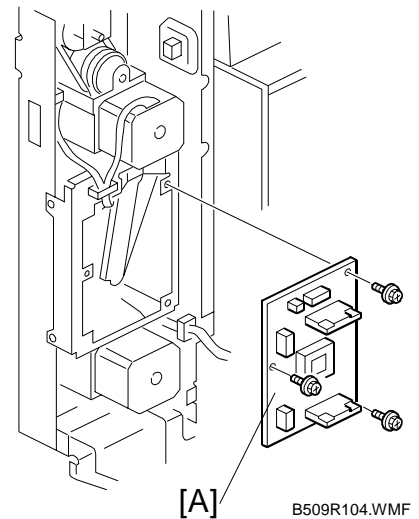
### 1.3 INVERTER MOTOR

1. Exterior cover (☛ 1.1)
2. Inverter motor [A] (☛ x 1, ⚙ x 3)



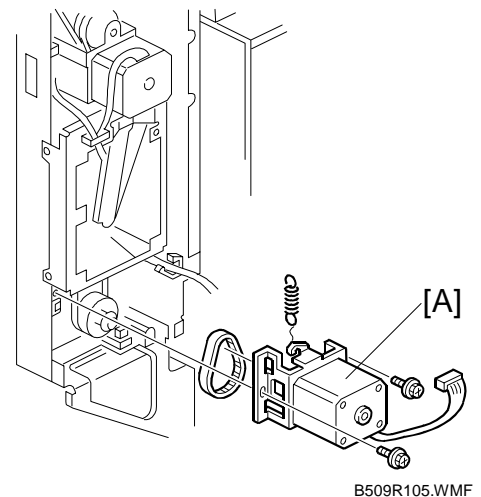
### 1.4 CONTROLLER BOARD

1. Exterior cover (☛ 1.1)
2. Controller board [A] (☛ x 5, ⚙ x 3)



### 1.5 TRANSPORT MOTOR

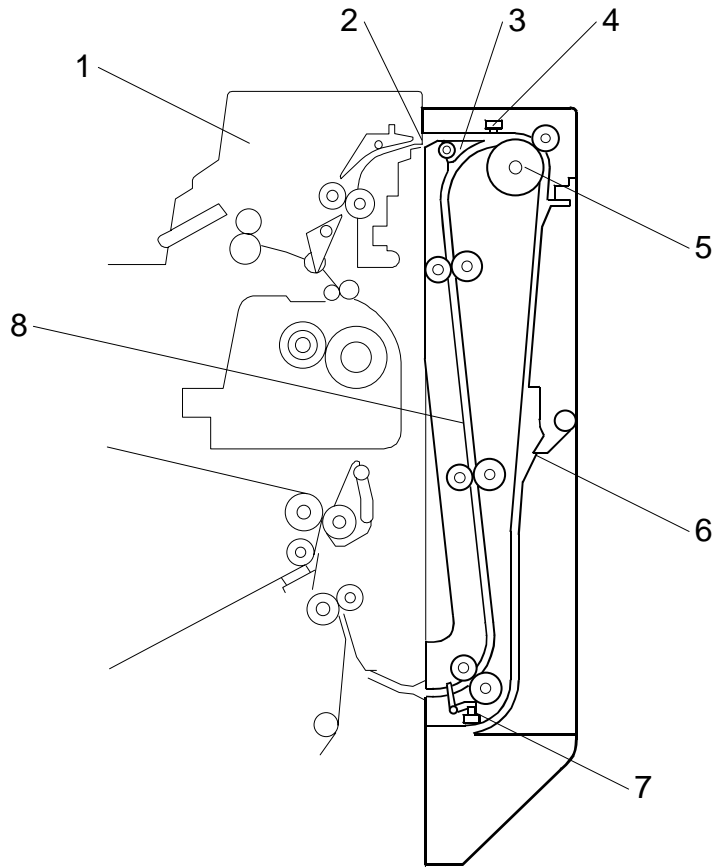
1. Exterior cover (☛ 1.1)
2. Controller board (☛ 1.4)
3. Transport motor [A] (1 spring, ☛ x 1, ⚙ x 2)



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## 2. DETAILED DESCRIPTIONS

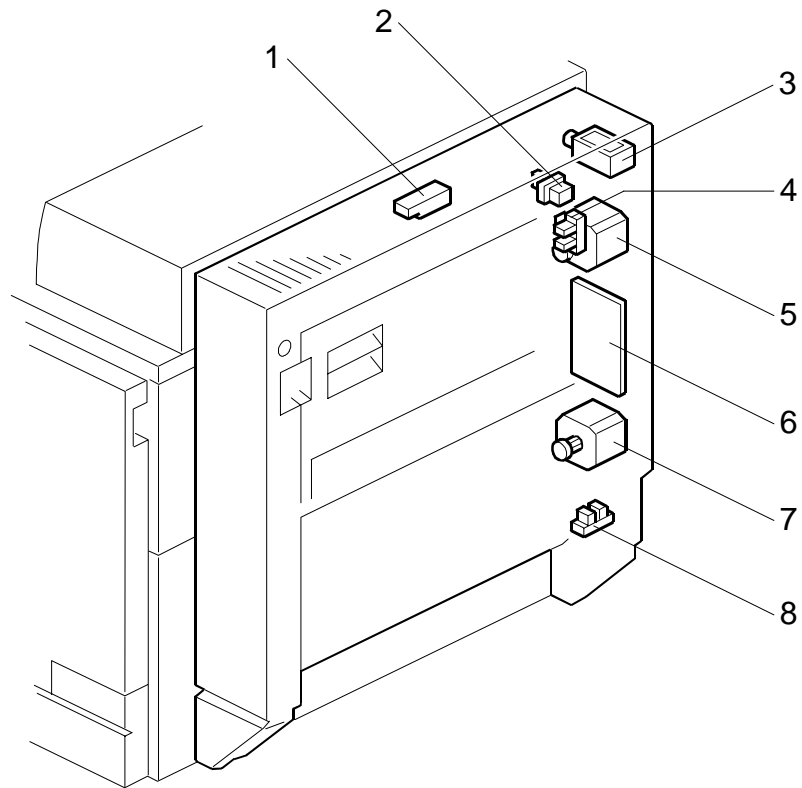
### 2.1 OVERVIEW



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- |                     |                     |
|---------------------|---------------------|
| 1. Interchange unit | 5. Inverter roller  |
| 2. Paper entrance   | 6. Inverter section |
| 3. Inverter gate    | 7. Exit sensor      |
| 4. Entrance sensor  | 8. Paper exit path  |

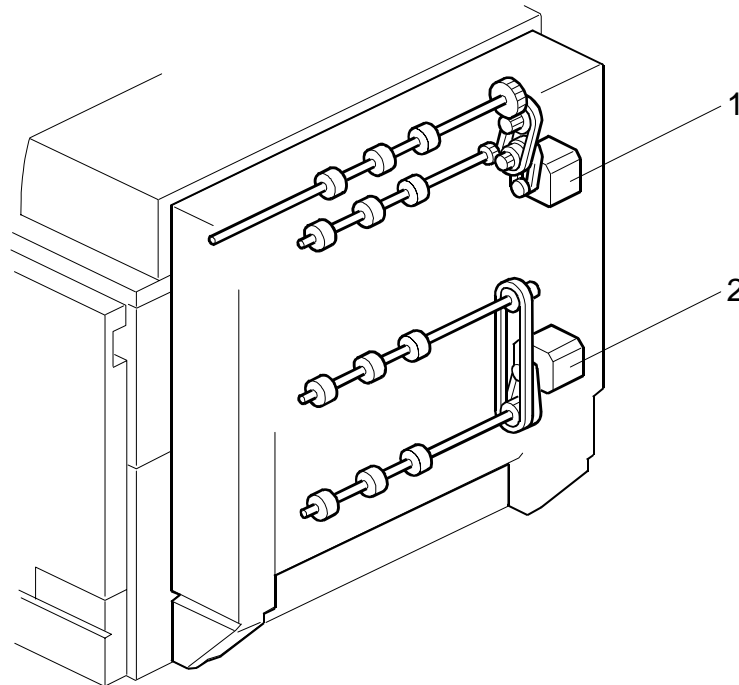
## 2.2 ELECTRICAL COMPONENT LAYOUT



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- |                            |                     |
|----------------------------|---------------------|
| 1. Entrance sensor         | 5. Inverter motor   |
| 2. Duplex unit open switch | 6. Controller board |
| 3. Inverter gate solenoid  | 7. Transport motor  |
| 4. Cover sensor            | 8. Exit sensor      |

## 2.3 DRIVE LAYOUT



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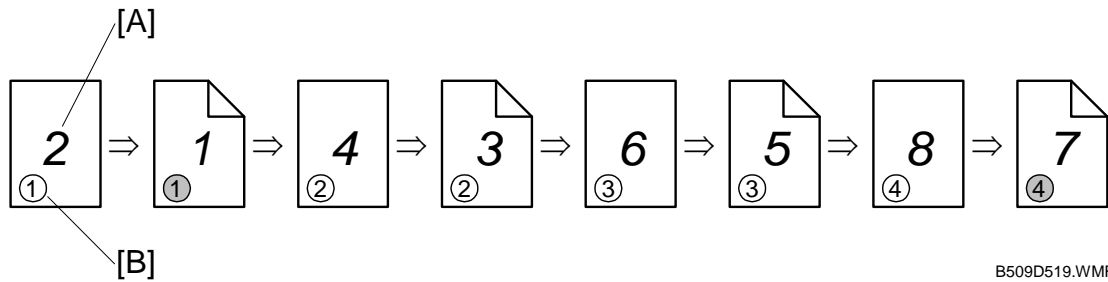
1. Inverter motor
2. Transport motor

## 2.4 DUPLEX PAPER FEED ORDER

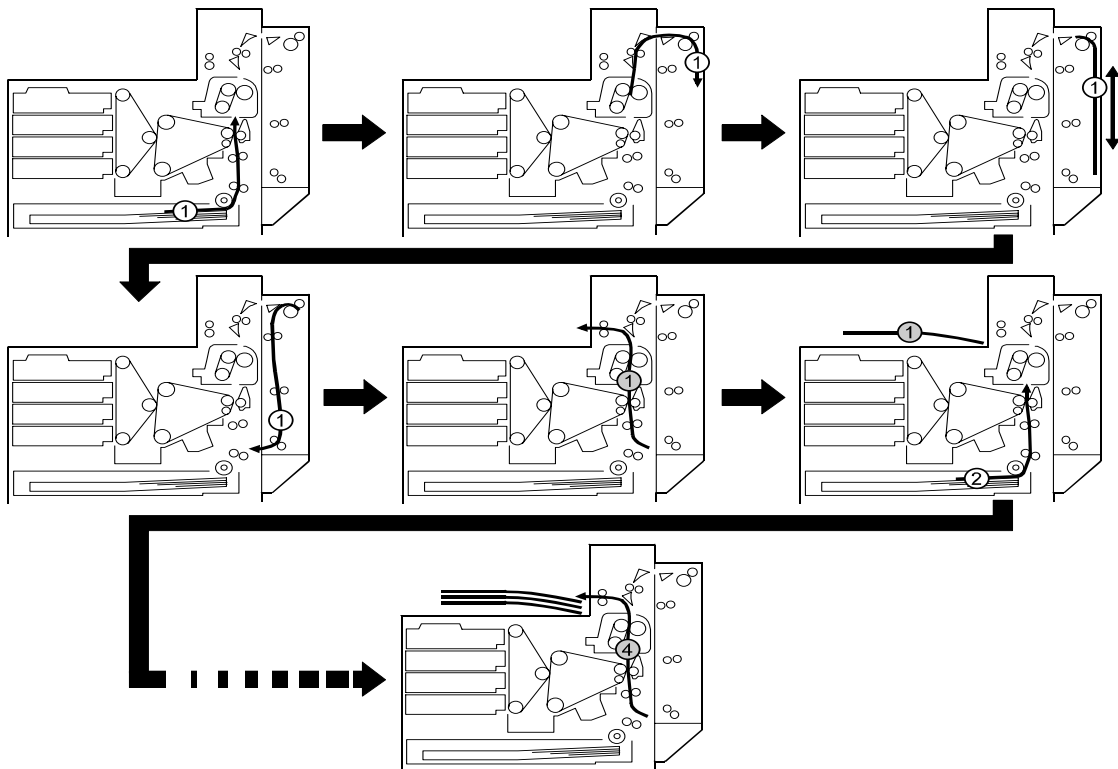
### 2.4.1 LONGER THAN A4/LT LEF

The feed path through the duplex unit can only hold one sheet of paper.

The example below shows how the paper is handled to print out 8 pages in mono color mode: The number [A] in the illustration shows the order of pages. The number [B] in the illustration shows the order of sheets of paper (if shaded, this indicates the second side).



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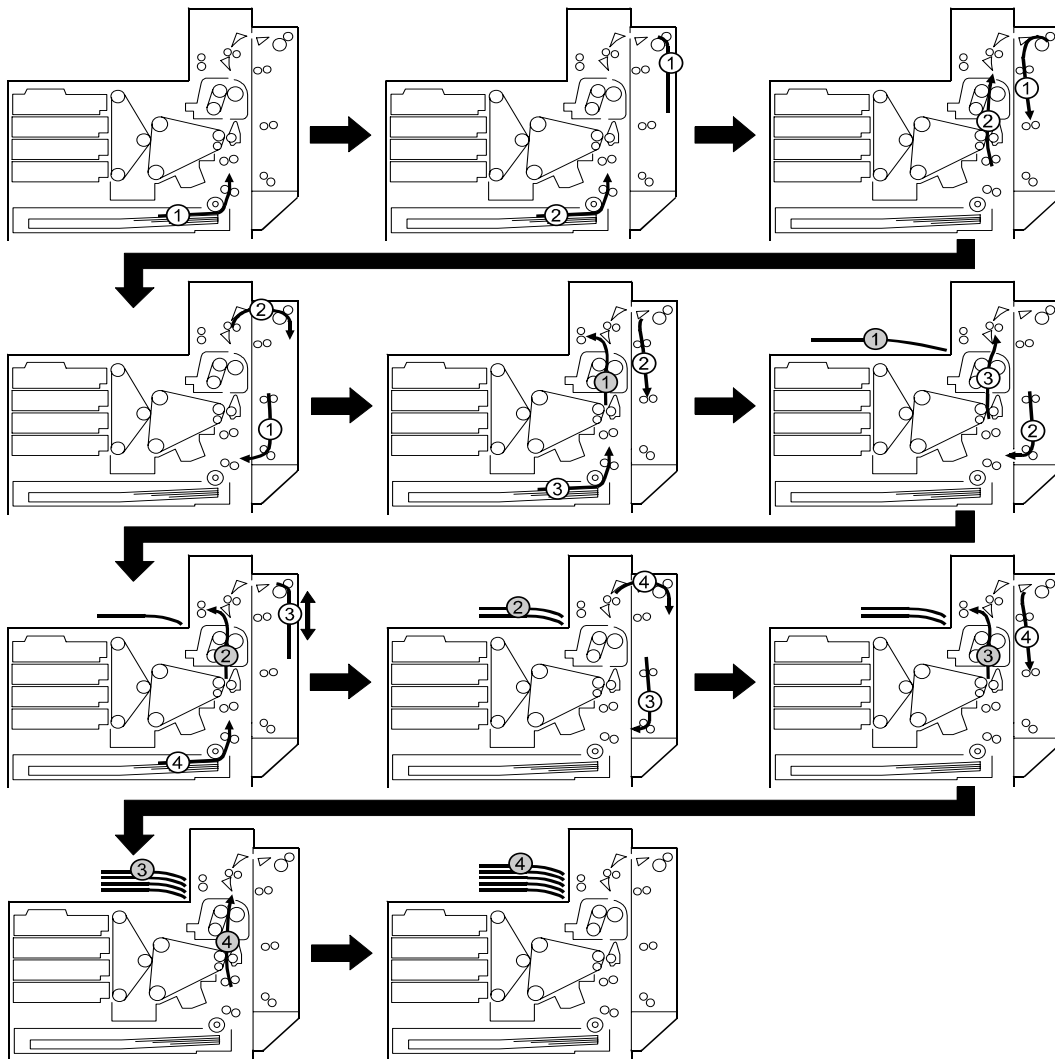
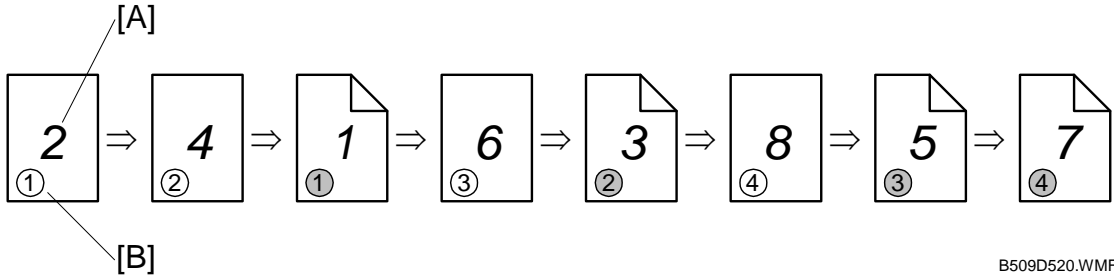


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### 2.4.2 UP TO A4/LT LEF

The feed path through the duplex unit can hold 2 sheets of paper

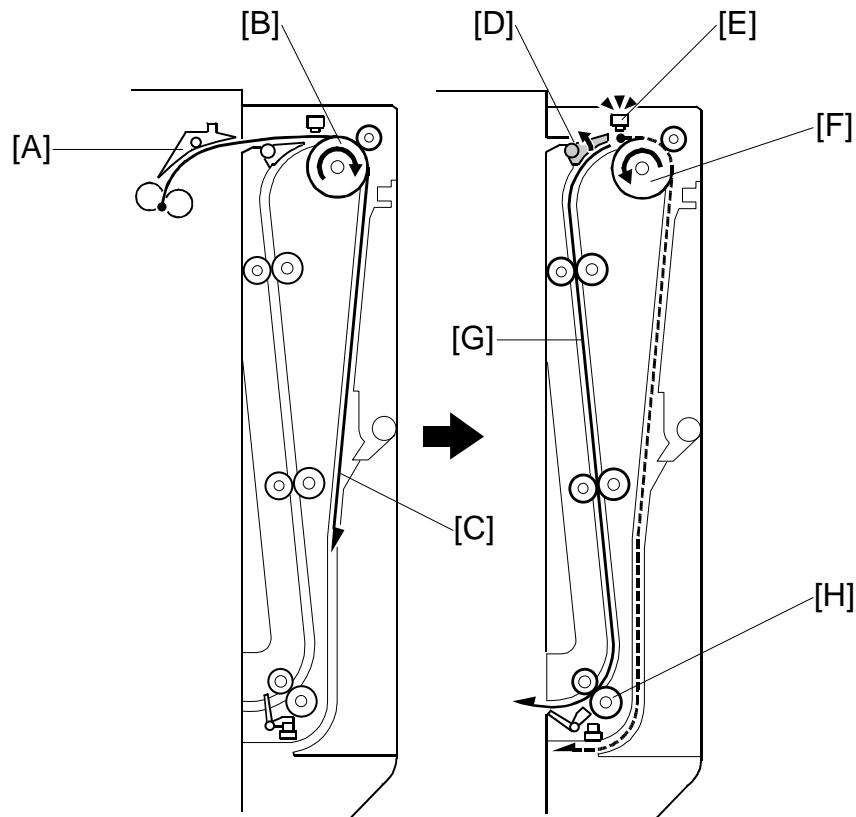
The example below shows how the paper is handled to print out 8 pages in mono color mode: The number [A] in the illustration shows the order of pages. The number [B] in the illustration shows the order of sheets of print paper (if shaded, this indicates the second side).



Peripherals



## 2.5 REVERSE MECHANISM



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The duplex unit starts when the entrance sensor [E] detects paper coming in.

1. **Duplex junction gate [A] in the interchange unit**  
Directs the paper to the duplex unit (up to A3 SEF)
2. **Inverter roller [B]**  
Sends the paper to the inverter section [C]
3. **Entrance sensor [E]**  
Detects the trailing edge of the paper
4. **Inverter gate solenoid (behind [D])**  
Activates the inverter gate [D]
5. **Inverter gate [D]**  
Switches the paper path
6. **Inverter roller [F]**  
Changes its rotation direction (sends the paper to the exit path [G])
7. **Transport roller [H]**  
Sends the paper to the main unit registration roller