

## **1-BIN SORTER (A629)**

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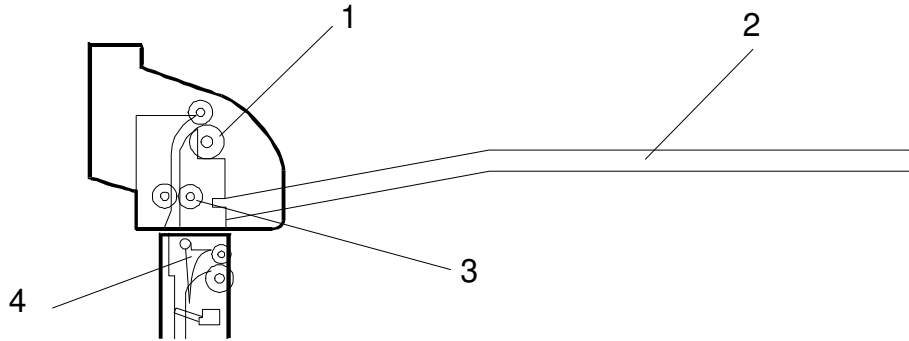
## 1. SPECIFICATIONS

Copy Paper Size :	A3 to A5 sideways
Paper Weight :	60 g to 90 g
Tray Capacity :	125 sheets (A4, 80 g)
Power Source :	24 and 5 Vdc from the copier
Power Consumption :	29 W
Dimensions (W x D x H) :	486 x 442 x 106 mm
Weight :	2 kg

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## 2. COMPONENT LAYOUT

### 2.1 MECHANICAL COMPONENT LAYOUT

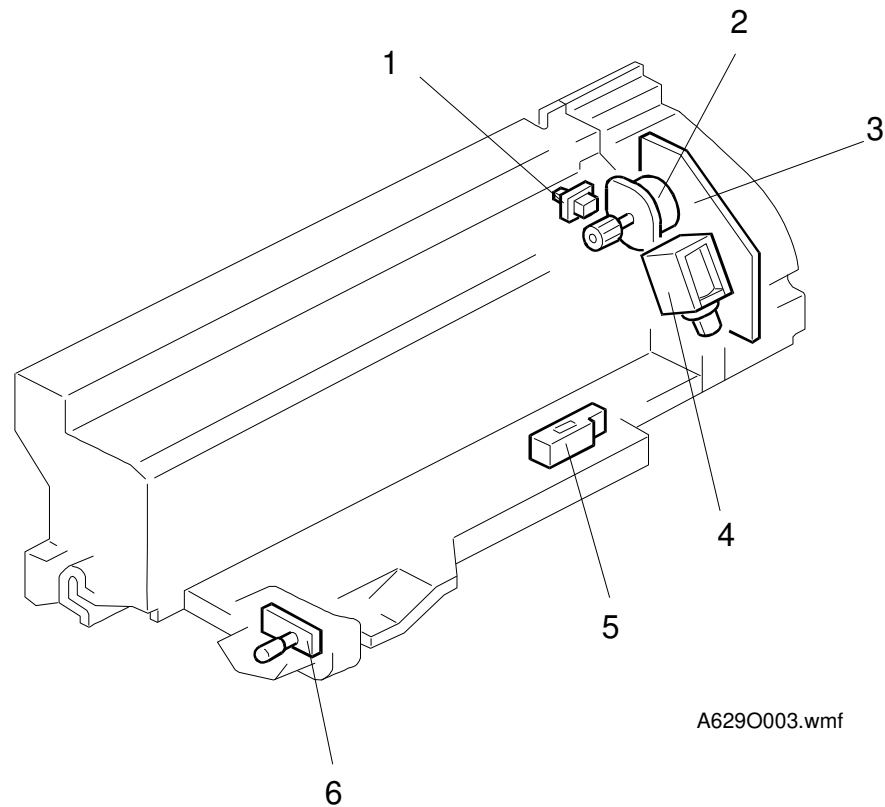


A629O005.wmf

- 1. Sorter Exit Roller
- 2. Sorter Receiving Tray

- 3. Sorter Transport Roller
- 4. Sorter Junction Gate

## 2.2 ELECTRICAL COMPONENT LAYOUT

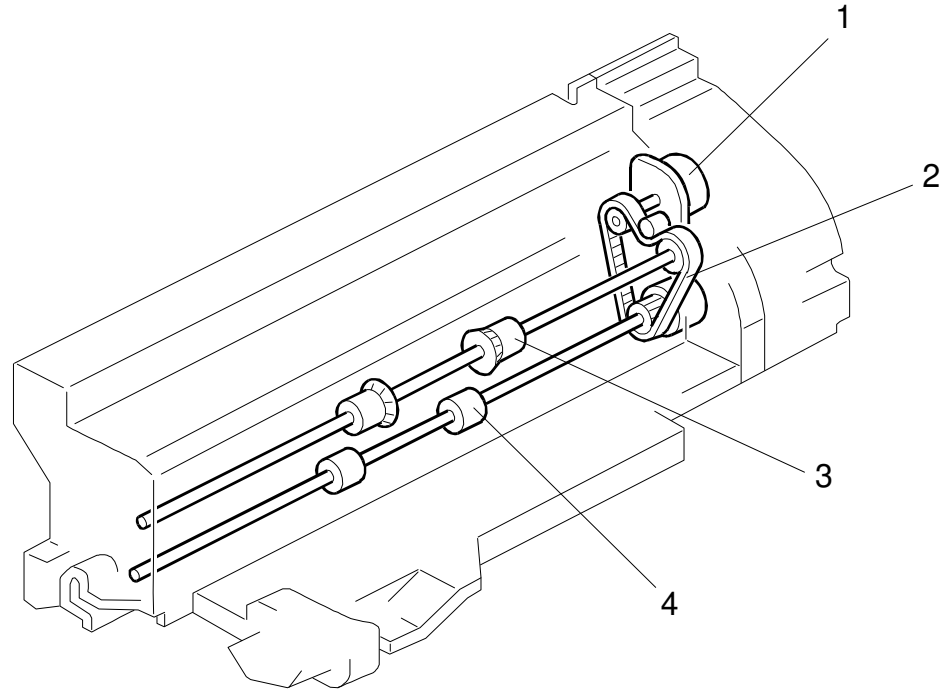


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|-----------------------------------|----------------------------------|
| 1. Sorter Vertical Guide Door Sw. | 4. Sorter Junction Gate Solenoid |
| 2. Sorter Transport Motor         | 5. Sorter Paper Sensor           |
| 3. Sorter Sorter Drive Board      | 6. Sorter Paper Indicator        |

## 2.3 ELECTRICAL COMPONENT DESCRIPTION

Symbol	Name	Function	
<b>Motors</b>			
M1	Sorter Transport	Drives all the rollers.	2
<b>Sensors</b>			
S1	Sorter Paper	Detects when there is paper on the receiving tray.	5
<b>Switches</b>			
SW1	Sorter Vertical Guide Door	Detects whether the vertical guide door is opened or not.	1
<b>Solenoid</b>			
SOL1	Sorter Junction Gate	Controls the sorter junction gate.	4
<b>PCBs</b>			
PCB1	Sorter Sorter Drive	Controls the overall sorter operation.	3
PCB2	Sorter Paper Indicator	Indicates when there is paper on the receiving tray.	6

## 2.4 DRIVE LAYOUT



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1. Sorter Transport Motor

3. Sorter Exit Roller

2. Timing Belt

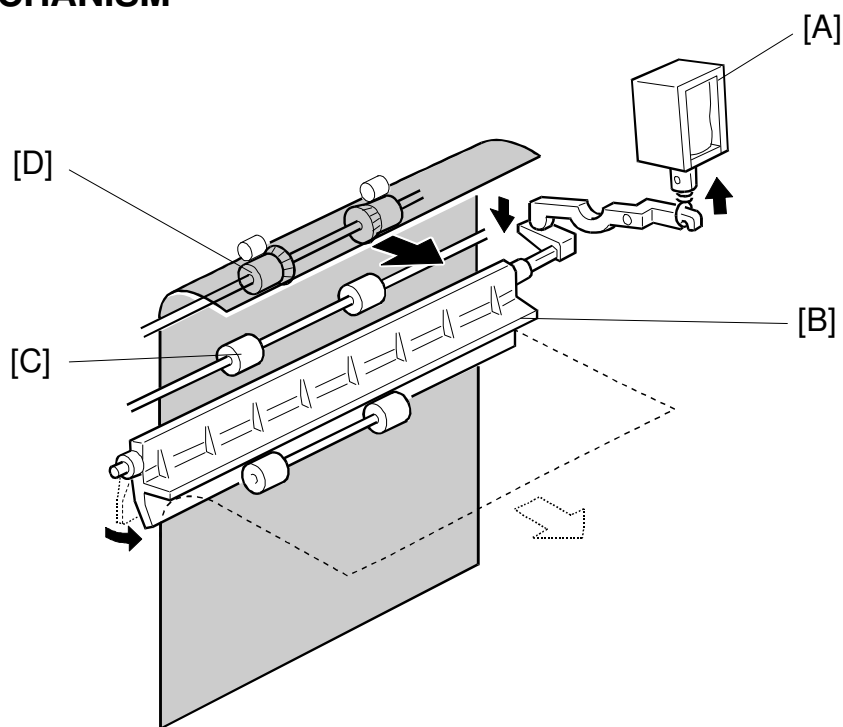
4. Sorter Transport Roller

Options

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## 3. DETAILED DESCRIPTIONS

### 3.1 BIN JUNCTION GATE AND PAPER TRANSPORT MECHANISM

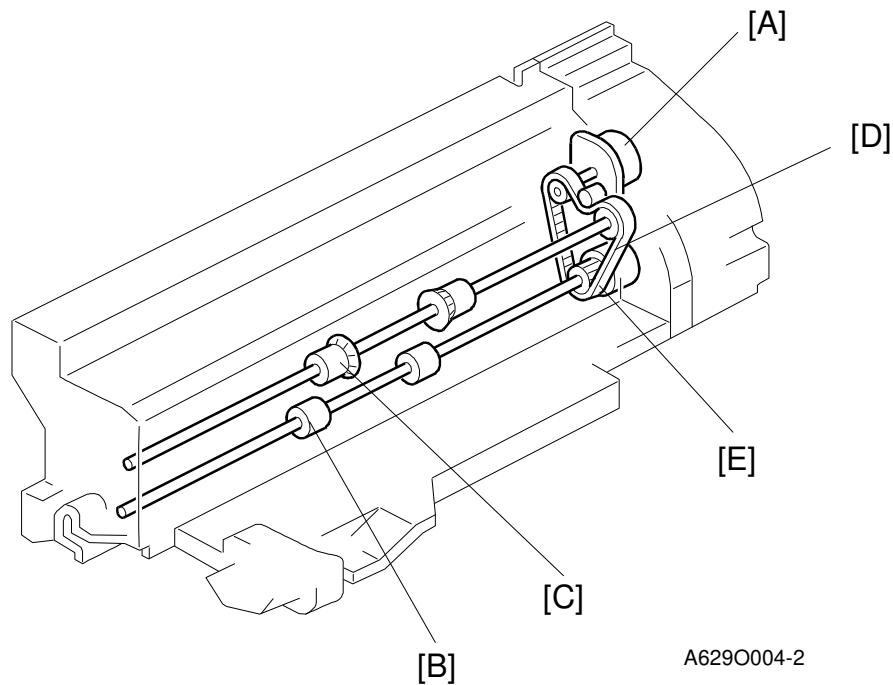


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When the leading edge of the paper turns on the exit sensor in the copier, the sorter junction gate solenoid [A] turns on and the sorter junction gate [B], which is mounted on the copier, is opened. The paper is sent upwards to the 1-bin sorter.

The paper is fed out by the sorter transport roller [C] and exit roller [D].

### 3.2 DRIVE MECHANISM



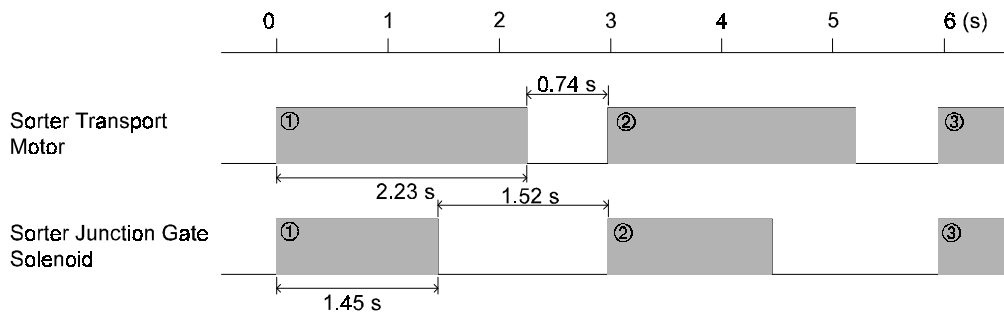
The sorter transport motor [A] drives sorter transport roller [B] and exit roller [C].

Because the paper transport speed of the sorter is different from the copier, the sorter transport roller gear [D] and sorter exit roller gear [E] each have a torque limiter to prevent roller marks on the copy.



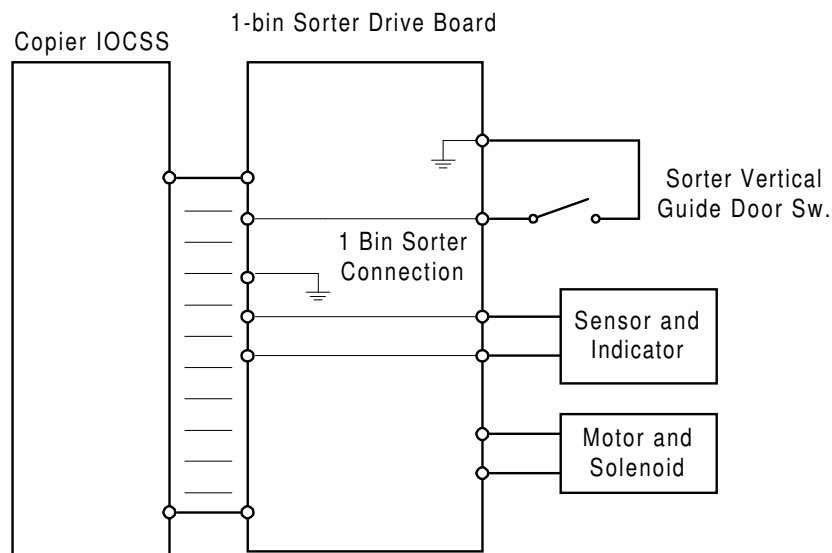
### 3.3 TIMING CHART

A4 (sideways, memory)



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### 3.4 OVERALL ELECTRICAL CIRCUIT



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The sorter paper sensor, paper indicator, and vertical guide door switch are directly connected to the copier through the 1-bin sorter drive board.

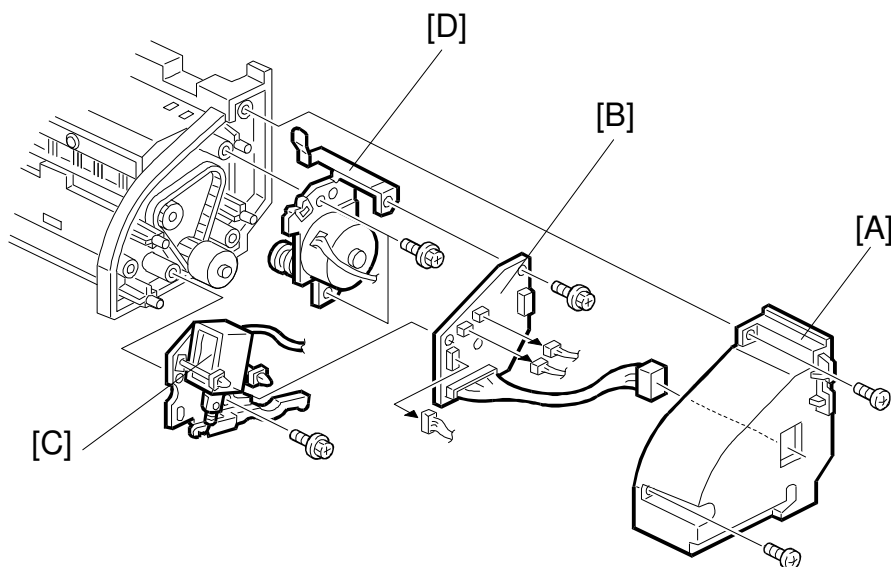
The motor and solenoid are controlled by the 1-bin sorter drive board.

When the 1-bin sorter connector is connected to the copier, the connection signal to the copier is grounded. Then, the copier detects that the 1-bin sorter is installed.

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## 4. REPLACEMENT AND ADJUSTMENT

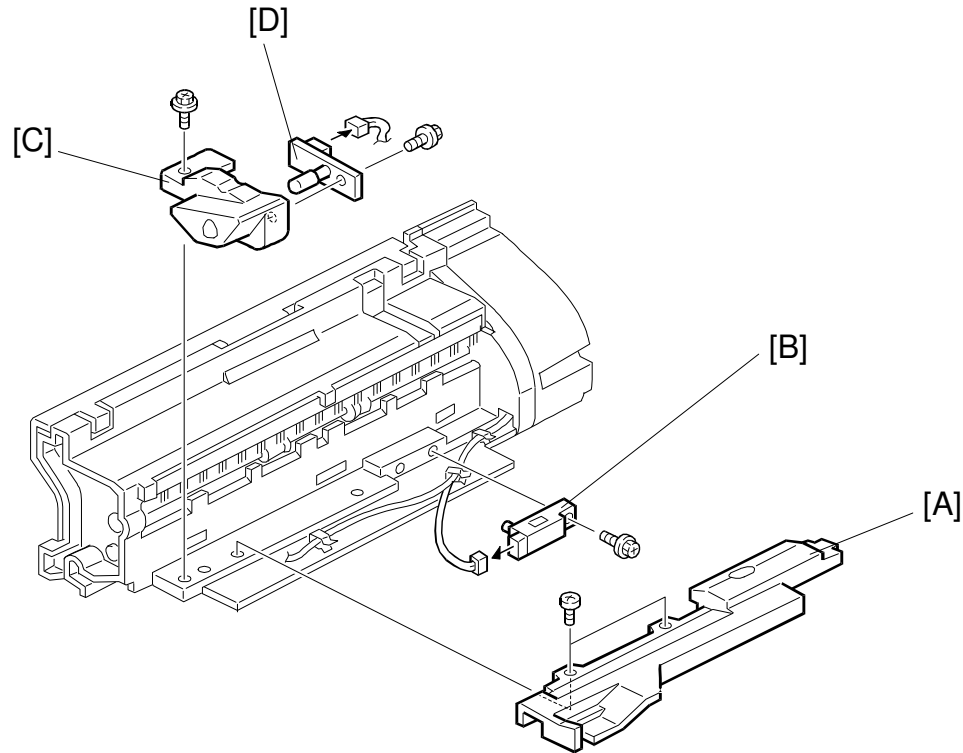
### 4.1 BIN JUNCTION GATE SOLENOID, TRANSPORT MOTOR AND SORTER DRIVE BOARD REMOVAL



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1. Remove the 1-bin sorter unit (2 screws, 1 connector).
2. Remove the rear cover [A] (2 screws).
3. Remove (replace) the 1-bin sorter drive board [B] (1 screw, 2 hooks, 4 connector).
4. Replace the sorter junction gate solenoid [C] (1 screw).  
Replace the sorter transport motor [D] (2 screw).

## 4.2 BIN PAPER SENSOR AND INDICATOR REPLACEMENT



A629O010.wmf

1. Remove the 1-bin sorter unit (2 screws, 1 connector).
2. Remove the harness cover [A] (2 screws).

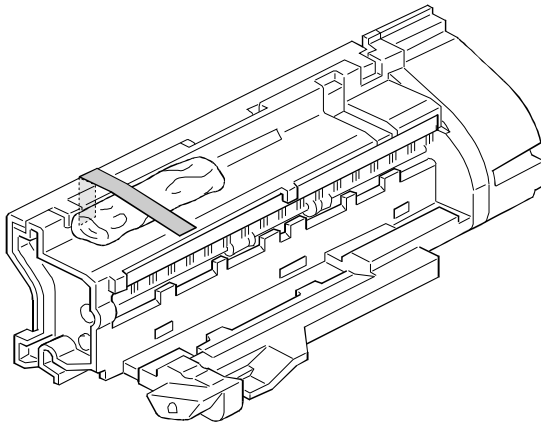
### - Sorter Paper Sensor -

3. Replace the sorter paper sensor [B] (1 screw, 1 connector).

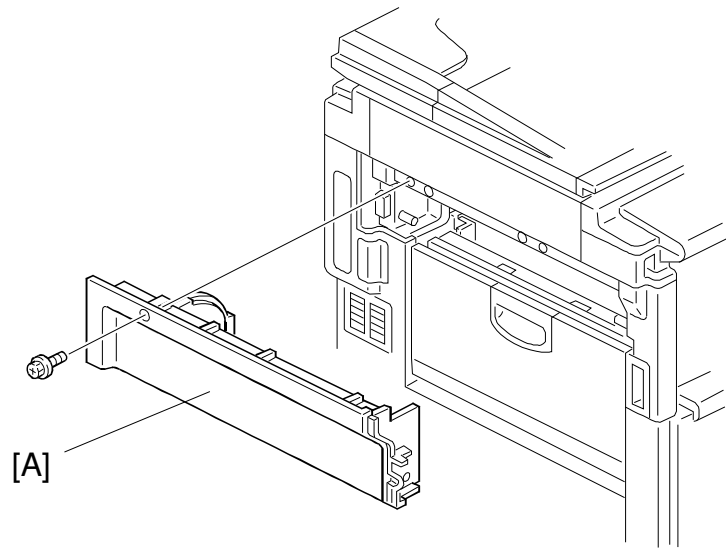
### - Sorter Paper Indicator -

3. Remove the sorter paper indicator and cover [C] (1 screw).
4. Replace the sorter paper indicator [D] (1 screw, 1 connector)

## 1-BIN SORTER INSTALLATION



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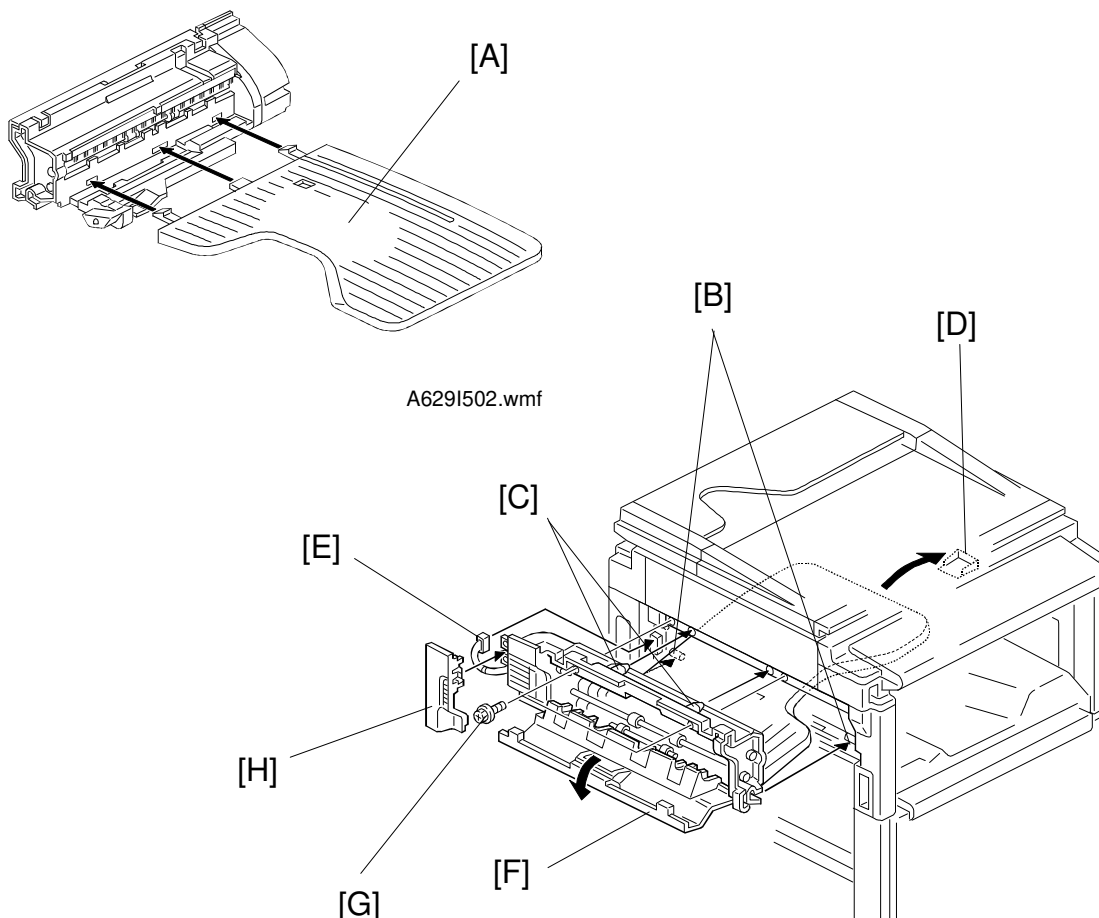


A629I501.wmf

**⚠ CAUTION**

**Unplug the copier power cord before starting the following procedure.**

1. Unpack the copy tray and remove the tape.
2. Remove the left upper cover [A] (1 screw).



Installation

3. Insert the hooks on the 1-bin sorter tray into the slots in the sorter unit [A].
4. Hook the clips on the 1-bin sorter unit onto the stud pins [B] on the copier.
5. Insert the pins [C] into the pin holes in the copier. Make sure to rest the 1-bin sorter tray on the tray support [D].

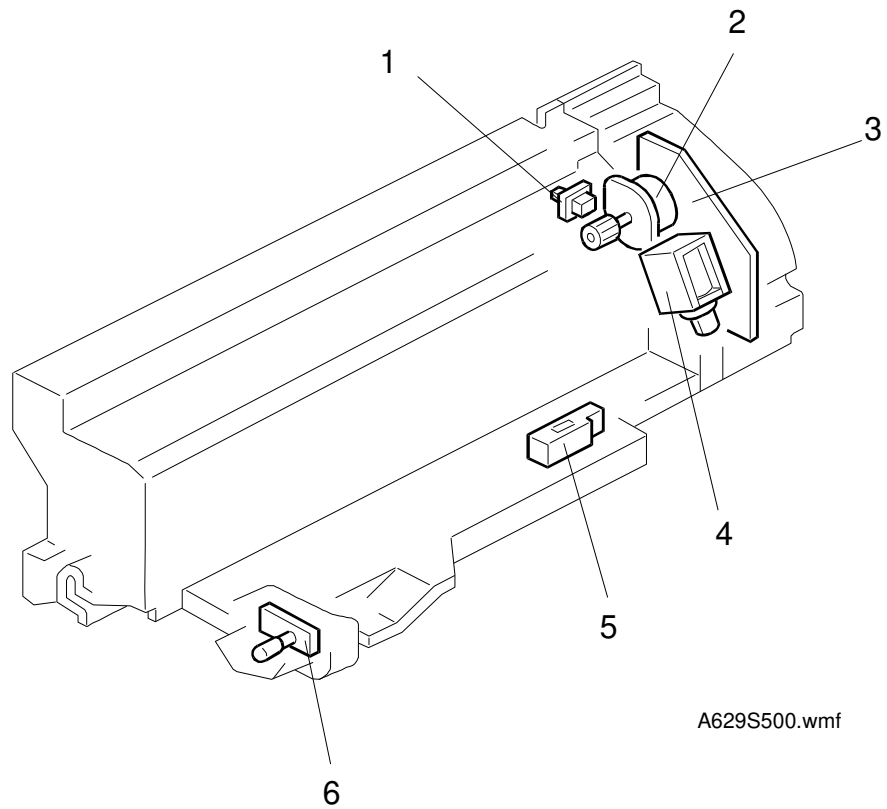
**NOTE:** Do not pinch the I/F harness [E].

6. Open the left cover [F] and secure the unit (2 screws [G]).

**NOTE:** Use the screw which was removed in step 2 and the other screw which is packed.

7. Couple the I/F cable connector with the copier.
8. Install the connector cover [H].
9. Turn the ac and main switches on and check if copies are delivered to the 1-bin sorter properly.

## 1 Bin Sorter (A629)



A629S500.wmf

## 1 Bin Sorter (A629)

Symbol	Index. No.	Description	P to P (1/2)
<b>Motors</b>			
M1	2	Sorter Transport	O18
<b>Sensors</b>			
S1	5	Sorter Paper	Q18
<b>Switches</b>			
SW1	1	Sorter Vertical Guide Door	P18
<b>Solenoid</b>			
SOL1	4	Sorter Junction Gate	Q18
<b>PCBs</b>			
PCB1	3	Sorter Sorter Drive	P17
PCB2	6	Sorter Paper Indicator	P18