

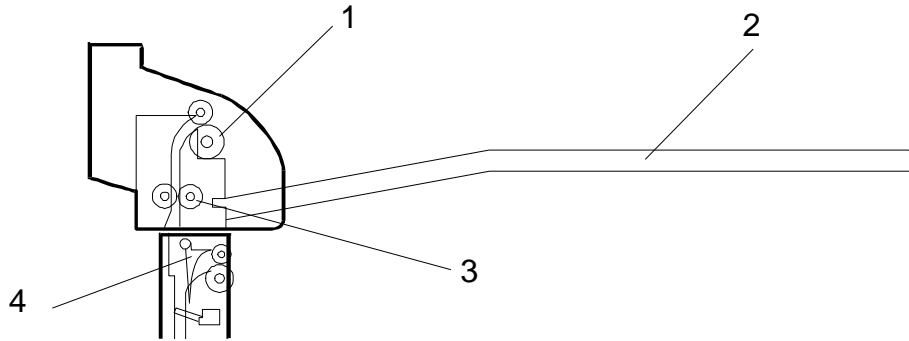
1-BIN SORTER (A629)

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

2. COMPONENT LAYOUT

2.1 MECHANICAL COMPONENT LAYOUT

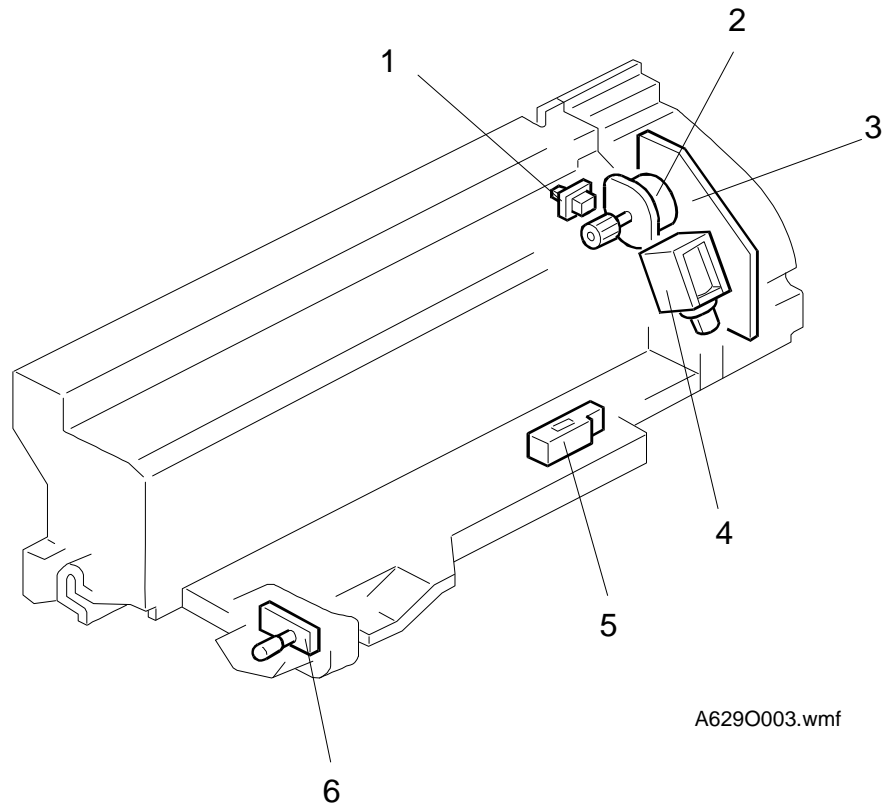


A629O005.wmf

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

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

2.2 ELECTRICAL COMPONENT LAYOUT



A629O003.wmf

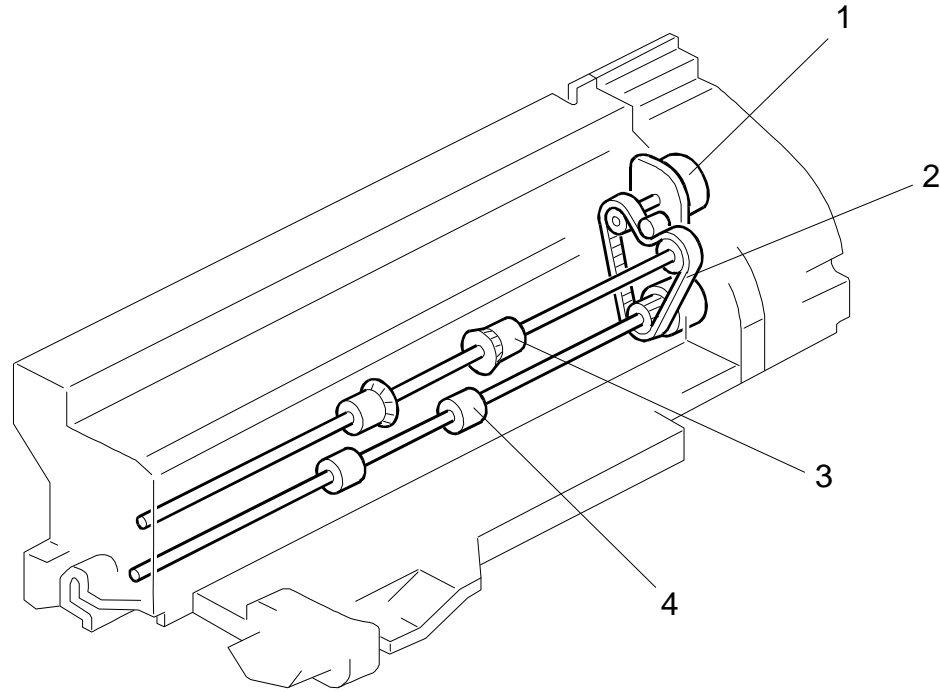
- | | |
|-----------------------------------|----------------------------------|
| 1. Sorter Vertical Guide Door Sw. | 4. Sorter Junction Gate Solenoid |
| 2. Sorter Transport Motor | 5. Sorter Paper Sensor |
| 3. Sorter Sorter Drive Board | 6. Sorter Paper Indicator |

Options

2.3 ELECTRICAL COMPONENT DESCRIPTION

Symbol	Name	Function	
Motors			
M1	Sorter Transport	Drives all the rollers.	2
Sensors			
S1	Sorter Paper	Detects when there is paper on the receiving tray.	5
Switches			
SW1	Sorter Vertical Guide Door	Detects whether the vertical guide door is opened or not.	1
Solenoid			
SOL1	Sorter Junction Gate	Controls the sorter junction gate.	4
PCBs			
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



A629O004.wmf

1. Sorter Transport Motor

3. Sorter Exit Roller

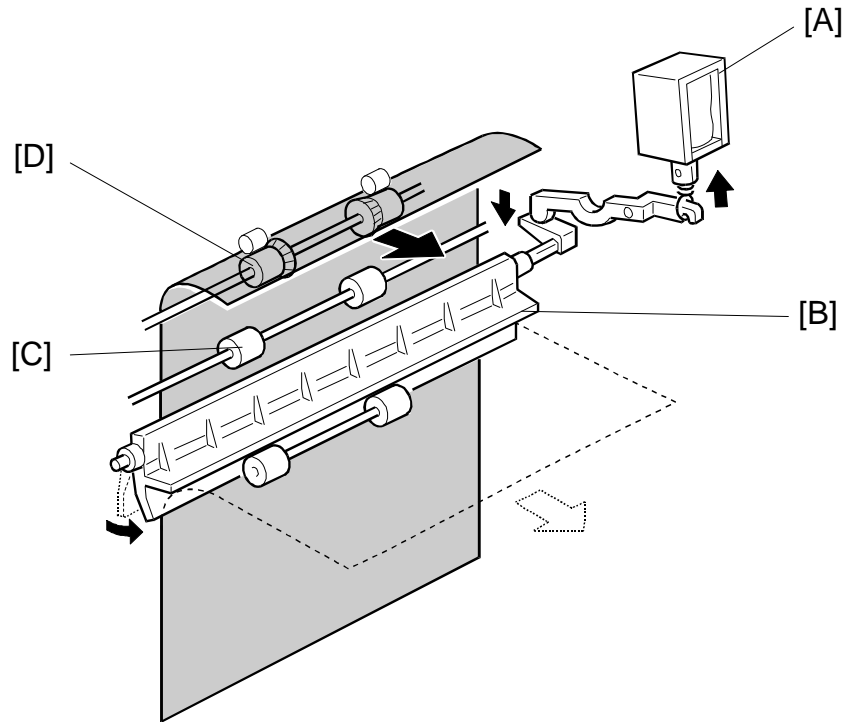
2. Timing Belt

4. Sorter Transport Roller

Options

3. DETAILED DESCRIPTIONS

3.1 BIN JUNCTION GATE AND PAPER TRANSPORT MECHANISM

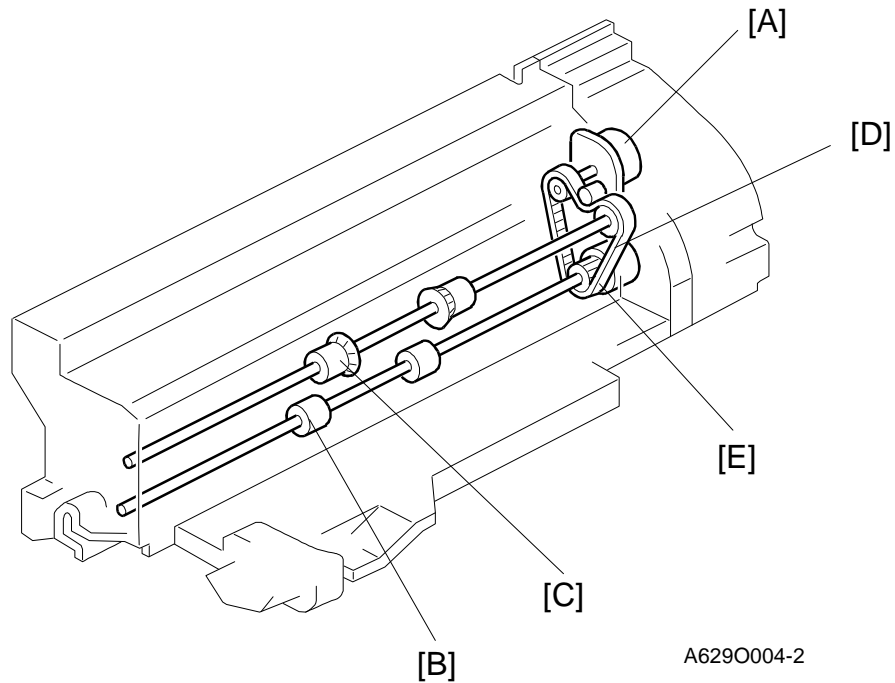


A629O006.wmf

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

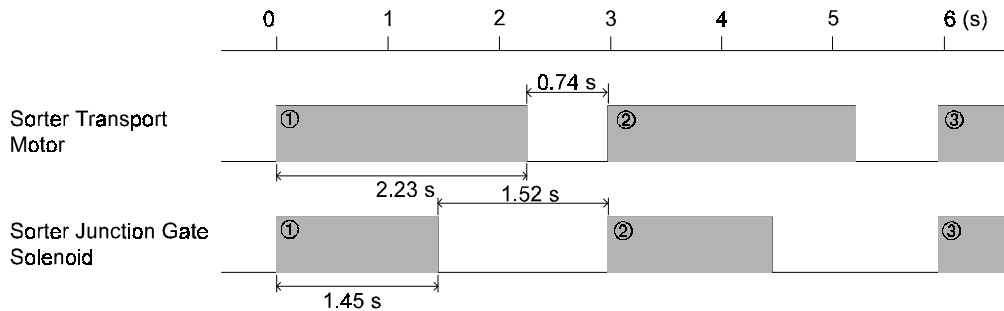


The sorter transport motor [A] drives sorter transport roller [B] and exit roller [C].

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.

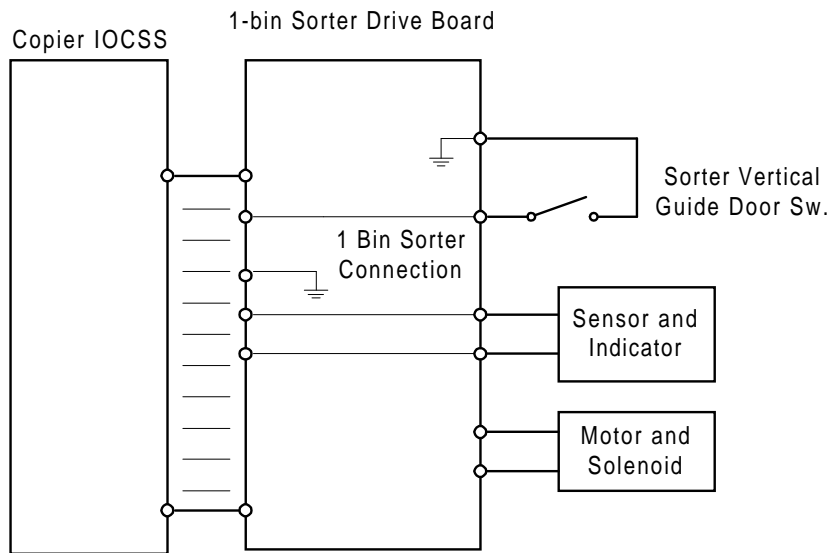
3.3 TIMING CHART

A4 (sideways, memory)



A629O500.wmf

3.4 OVERALL ELECTRICAL CIRCUIT



A629O501.wmf

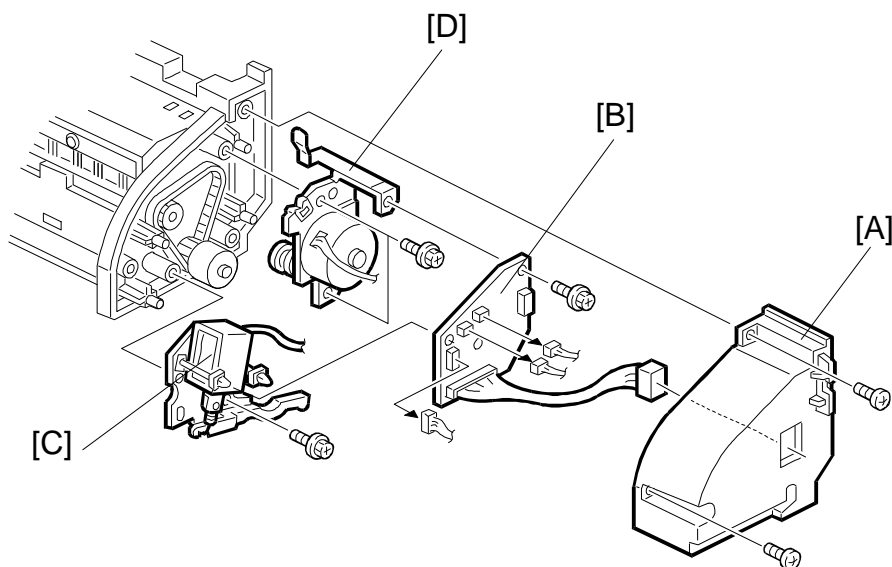
The sorter paper sensor, paper indicator, and vertical guide door switch are directly connected to the copier through the 1-bin sorter drive board.

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.

4. REPLACEMENT AND ADJUSTMENT

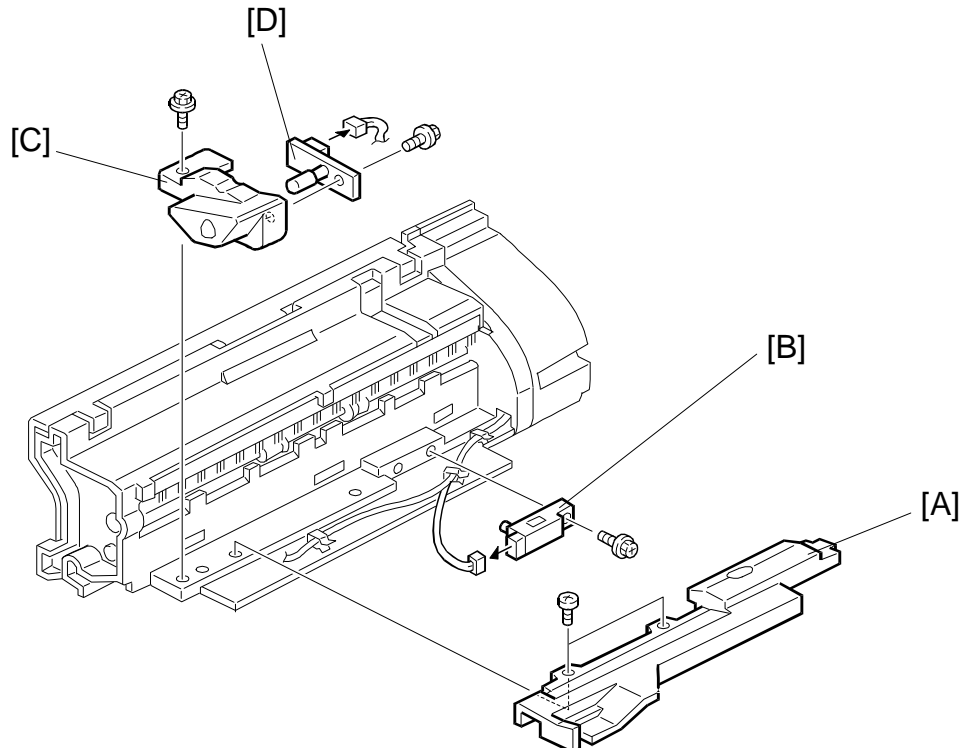
4.1 BIN JUNCTION GATE SOLENOID, TRANSPORT MOTOR AND SORTER DRIVE BOARD REMOVAL



A629O009.wmf

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).

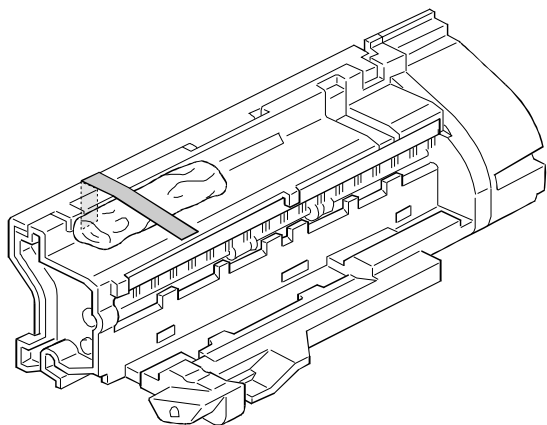
- Sorter Paper Sensor -

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

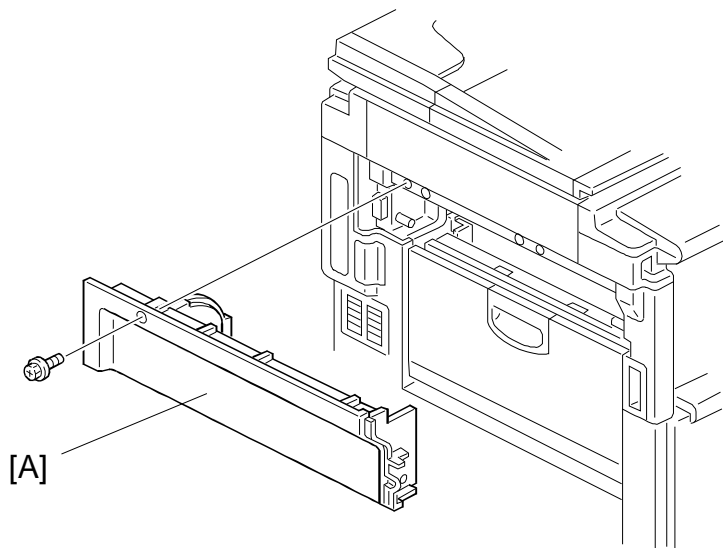
- Sorter Paper Indicator -

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



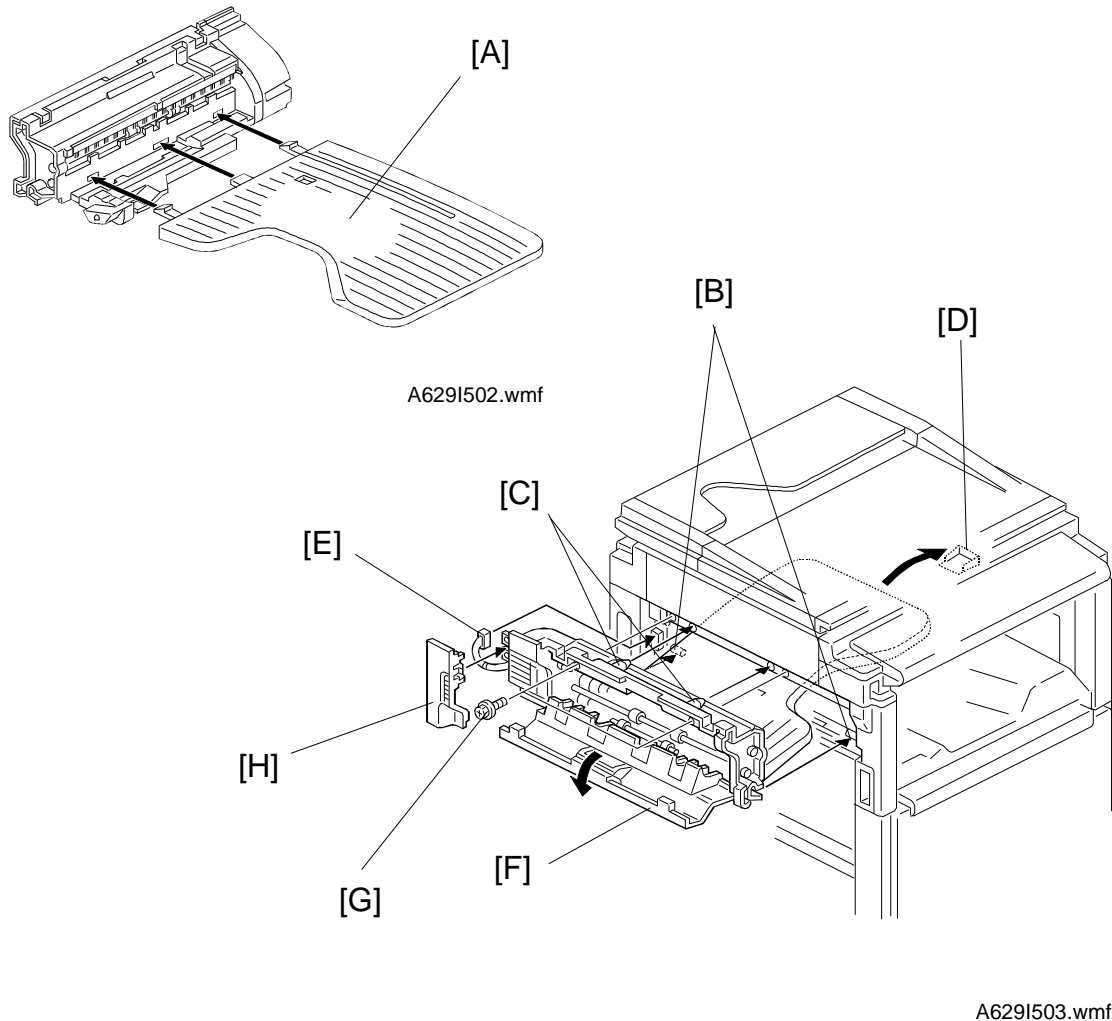
A629I500.wmf



A629I501.wmf

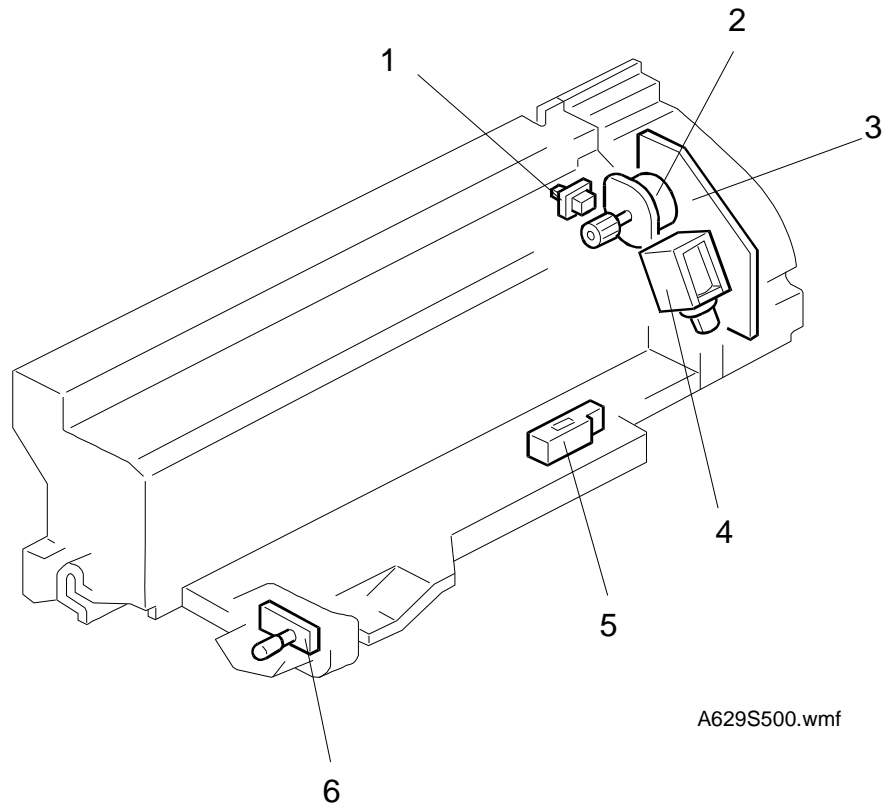
⚠ CAUTION**Unplug the copier power cord before starting the following procedure.**

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



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)
Motors			
M1	2	Sorter Transport	O18
Sensors			
S1	5	Sorter Paper	Q18
Switches			
SW1	1	Sorter Vertical Guide Door	P18
Solenoid			
SOL1	4	Sorter Junction Gate	Q18
PCBs			
PCB1	3	Sorter Sorter Drive	P17
PCB2	6	Sorter Paper Indicator	P18