1-BIN TRAY
(Machine Code: D339)

SERVICE MANUAL

March, 2007
Subject to change

Safety and Symbols

Replacement Procedure Safety

⚠CAUTION

- Turn off the main power switch and unplug the machine before beginning any of the replacement procedures in this manual.

Symbols Used in this Manual

This manual uses the following symbols.

☛: See or Refer to

: Screws

: Connector

: Clip ring

: E-ring

TABLE OF CONTENTS

Safety and Symbols....1
Replacement Procedure Safety....1
Symbols Used in this Manual....1

1. Replacement and Adjustment

Electrical Components....3
Tray Open Switch....3
Paper Sensor....6
Exit Sensor....6

2. Detailed Section Descriptions

Component Layout....7
Component Layout....7
Settings....9
Settings....9
Limitation....9
Paper Transport....10
Paper Handling....10
Junction Gate....10
Paper-Size Limitation....11
Exit Tray LED....12
Tray Open Switch....13

3. Troubleshooting

Paper Jam....15
Paper Jam....15
Paper-Jam Handling....16
Component-Related Paper Jam....17

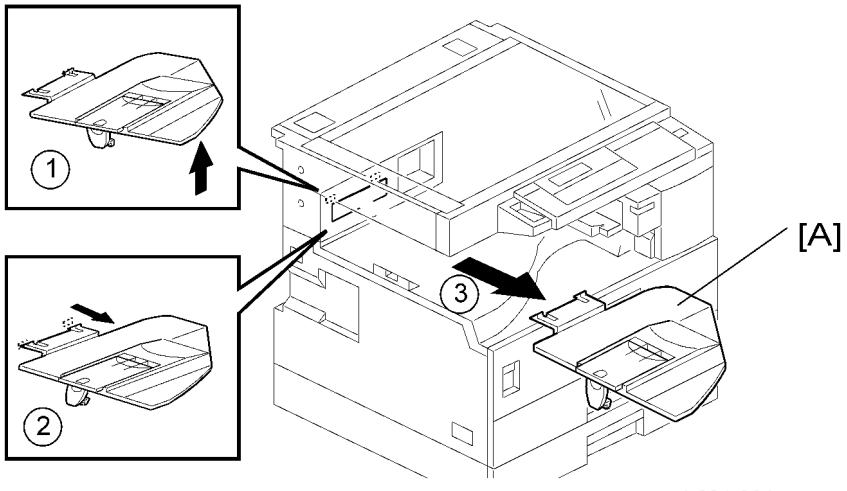
1. Replacement and Adjustment

Electrical Components

⚠CAUTION

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

Tray Open Switch



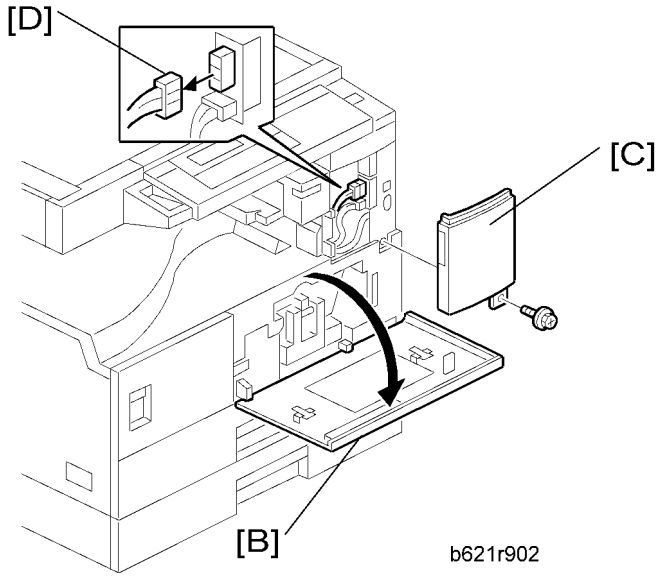
b621r901

1. Remove the tray [A] as follows:

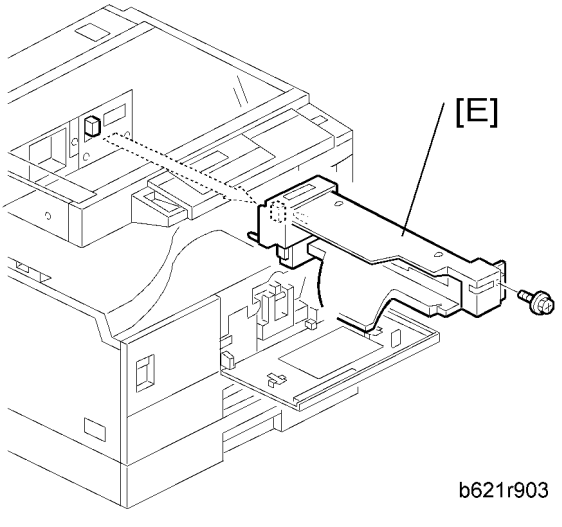
   ① Lift the front end of the tray.

   Pull the right hook off the copier.

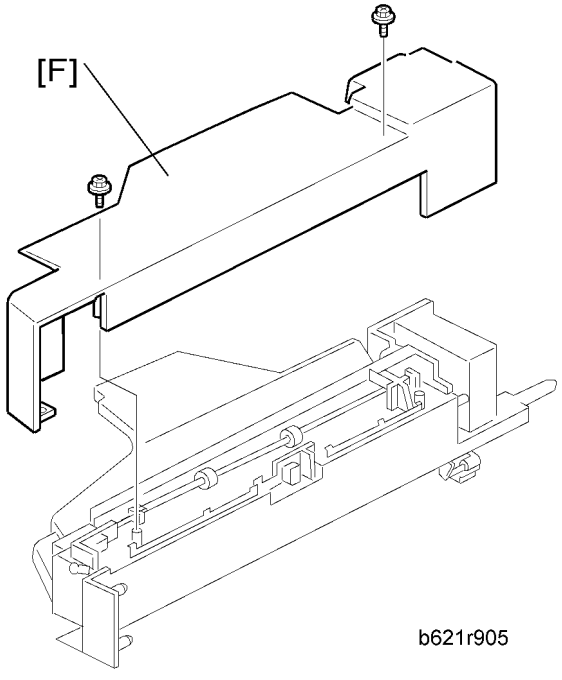
   ③ Pull the whole tray off the copier.



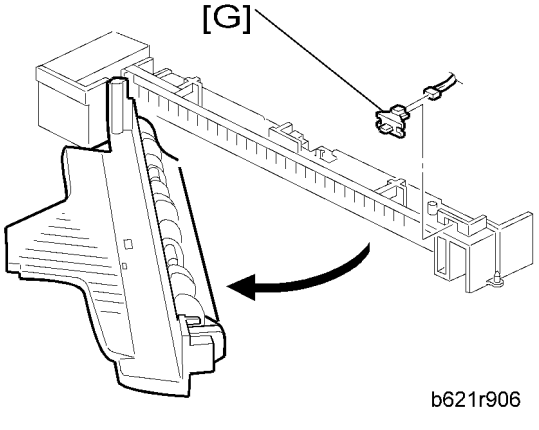
2. Open the front cover [B].
3. Front right cover [C] (x 1)
4. Disconnect the connector [D].



5. Base unit [E] (x 1)

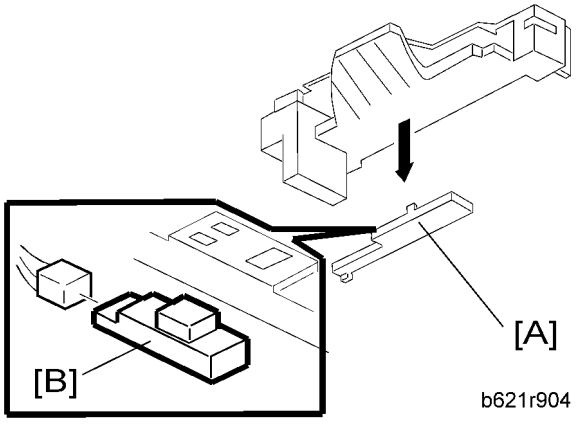


6. Top cover [F] (x 2)



7. Open switch [G] (x 1)

Paper Sensor

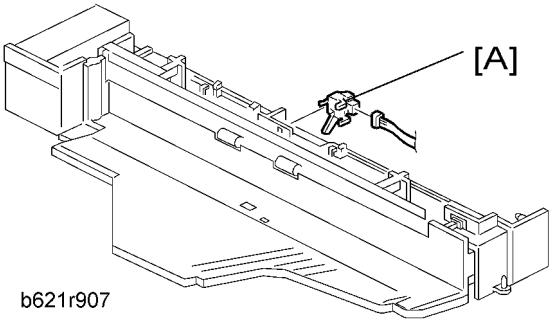


1. Base unit (☛ "Tray Open Switch")
2. Sensor cover [A]
3. Paper sensor [B] (✋ x 1)

Note

- When reassembling, place the sensor cable inside the sensor cover.

Exit Sensor

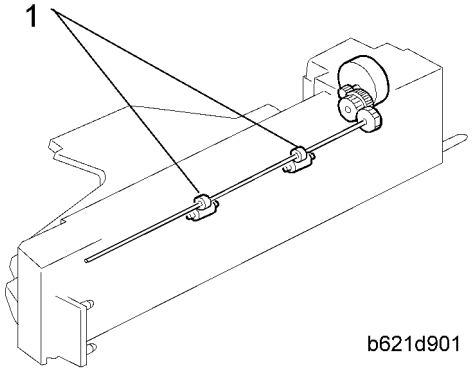


1. Top cover (☛ "Top Cover")
2. Exit sensor [A] (✋ x 1)

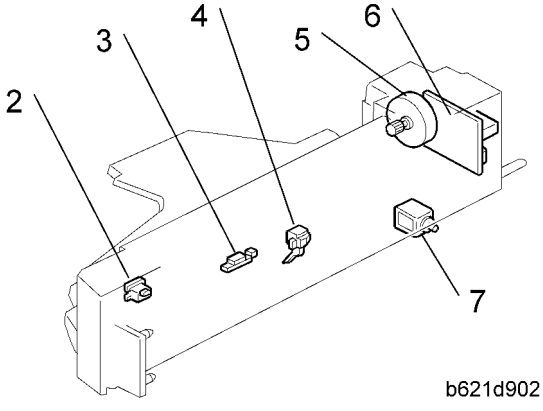
2. Detailed Section Descriptions

Component Layout

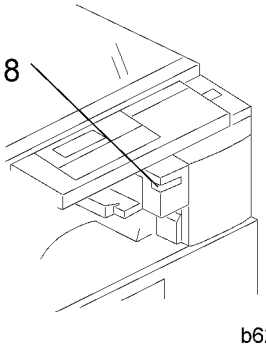
Component Layout



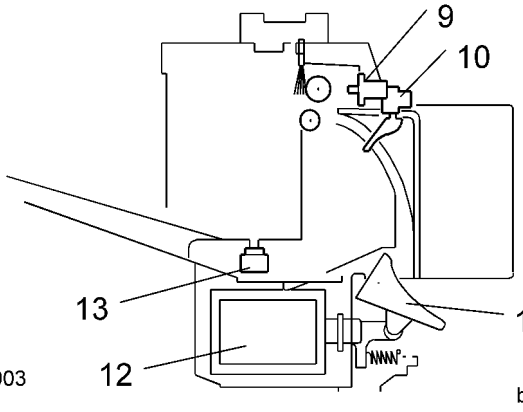
b621d901



b621d902



b621d903



b621d907

1. Exit rollers	8. Exit tray LED
2. Tray open switch	9. Tray open switch
3. Paper sensor	10. Exit sensor
4. Exit sensor	11. Junction gate
5. Tray motor	12. Junction gate solenoid

6. 1-bin tray board 7. Junction gate solenoid	13. Paper sensor

Settings

Settings

Use the User Tools to specify which application program (the copy, printer, or fax application program) uses the 1-bin tray. Locate the user tool as follows: U > System Settings > General Features > Output: Copier, Output: Facsimile, Output: Printer.

Limitation

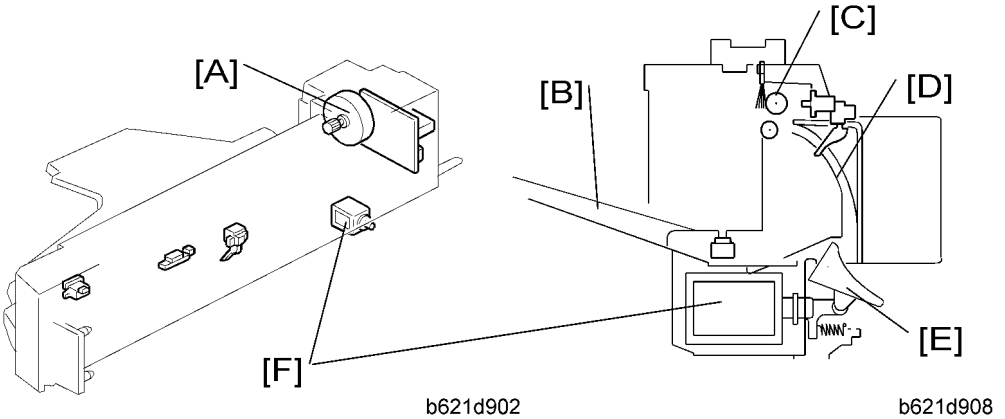
The machine can output to the 1-bin tray if the paper is fed from a regular tray or from an optional tray. Paper fed from the by-pass tray is not output to the 1-bin tray.

Setting	Paper source	Actual output
1-bin tray	Regular tray	1-bin tray
1-bin tray	Optional tray	1-bin tray
1-bin tray	By-pass tray	Copier tray

The paper source setting takes precedence over the paper exit setting. As a result, paper fed from the by-pass tray is output to the copier exit tray even if you have specified the 1-bin tray as the exit. In a case like this, no warning or message is displayed.

Paper Transport

Paper Handling



b621d902 b621d908

When the paper has passed the registration sensor (of the copier) and a predefined time (not adjustable) has elapsed, the tray motor [A] starts and the junction gate solenoid [F] turns on. The tray motor drives the exit rollers [C] and the junction gate solenoid opens the junction gate [E].

The junction gate feeds the leading edge of the paper upwards [D]. The paper, transported by the exit rollers of the copier, travels up to the exit rollers of the 1-bin tray base unit. The exit rollers transport the paper to the one-bin tray [B]. When the last sheet of paper has been output, the tray motor stops and the junction gate solenoid turns off.

Junction Gate

The junction gate is kept open (the junction gate solenoid remains on) under either of the following conditions:

- Condition 1

  The copier is executing single-sided printing.

  The copier is outputting two sheets of paper or more.

- Condition 2

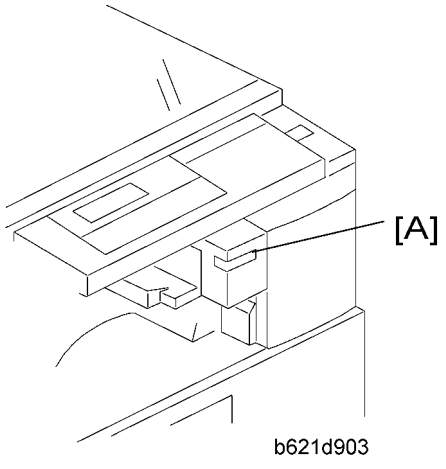
  The copier is executing duplex printing.

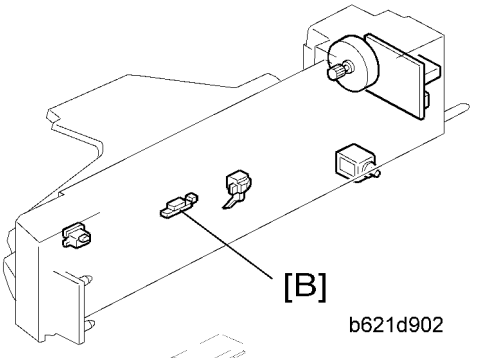
  The copier is outputting the last two sheets of paper.

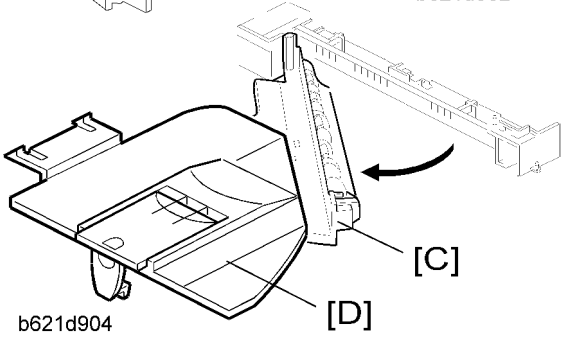
Paper-Size Limitation

The 1-bin tray unit does not have any limitation on paper size. The 1-bin tray unit can handle all paper sizes that the copier outputs. However, it cannot handle very thick paper, so the bypass tray cannot feed to the one-bin tray.

Exit Tray LED



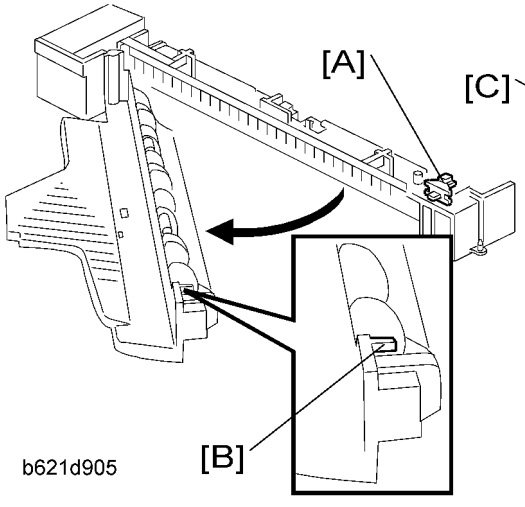


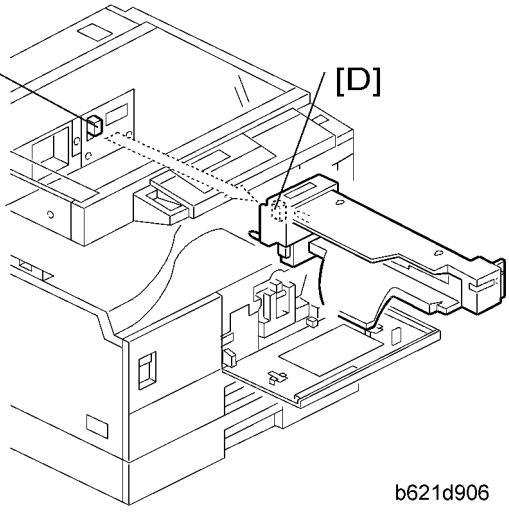


The exit tray LED [A] lights whenever the paper sensor [B] detects paper.

When you open the base unit to remove jammed paper, the exit tray LED may light. This is because the paper sensor [C] detects the tray [D].

Tray Open Switch





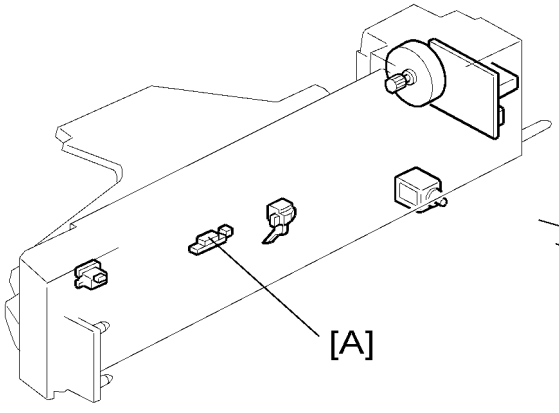
The tray open switch [A] detects the mechanical link [B] at the front end. When you open the base unit, the message "Cover Open" is displayed with a diagram indicating the location.

The message "Cover Open" is also displayed when the connector of the one-bin tray base unit [D] disconnects from the connector of the copier [C]. In this case, the message is not cleared until you install the base unit correctly.

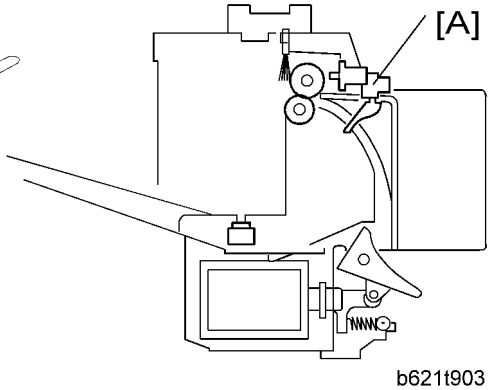
3. Troubleshooting

Paper Jam

Paper Jam



b621t905



b621t903

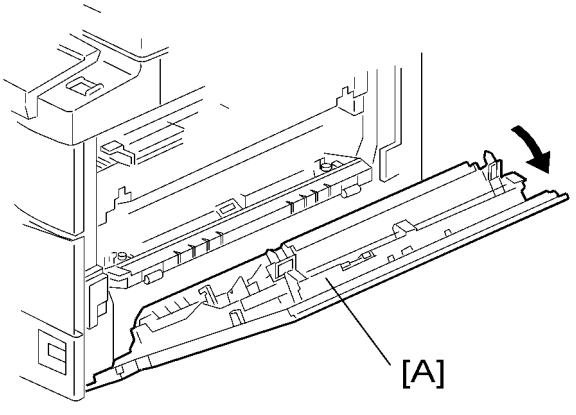
The paper-jam sign is displayed under either of the following conditions:

- Condition 1
  1. The paper has passed the registration sensor (of the copier), and
  2. The exit sensor [A] does not detect the paper in ① the predefined time (not adjustable).
- Condition 2
  1. The paper has passed the registration sensor (of the copier), and
  2. The exit sensor detects the paper in the predefined time (not adjustable), and
  3. The exit sensor keeps detecting the paper for a longer time than ③ the predefined time (not adjustable).

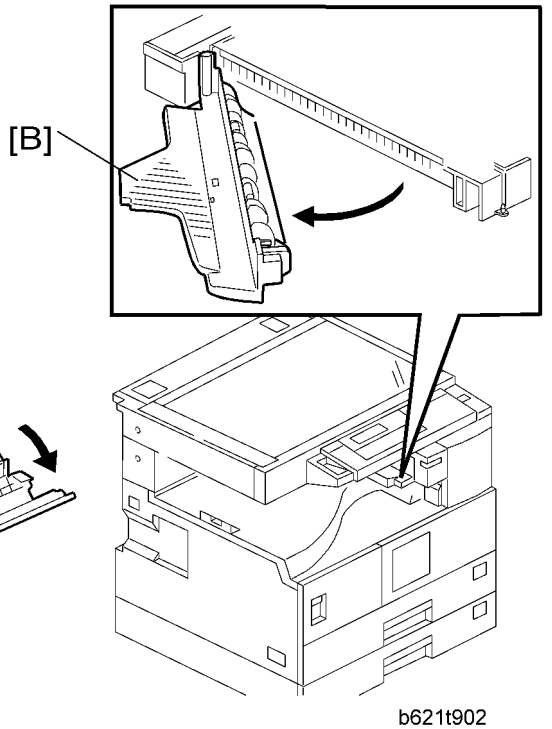
Note that ① and are the same predefined time and that ③ is different from the other two.

Paper-Jam Handling

Resetting the Copier



b621t901



b621t902

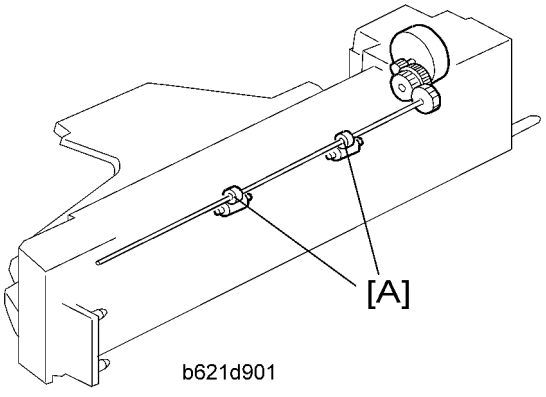
The paper-jam sign is displayed when one of the two conditions (☛ "Paper Jam") is met. To get the copier ready for normal operation, you must:

1. Remove the paper.
2. Open and close the right cover [A] of the copier.
3. Open and close the base unit [B].

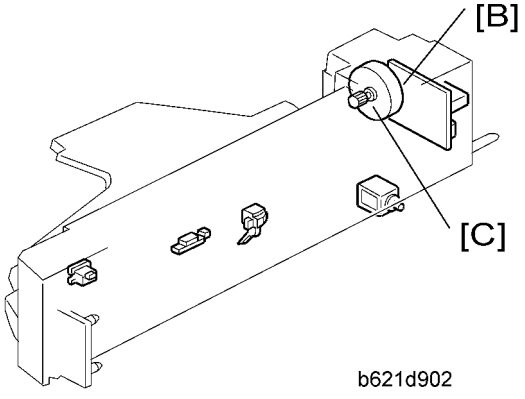
Note that you must open and close the right cover of the copier to reset the copier when the 1-bin tray unit has caused a paper jam.

Component-Related Paper Jam

Motor-Related Paper Jam



b621d901



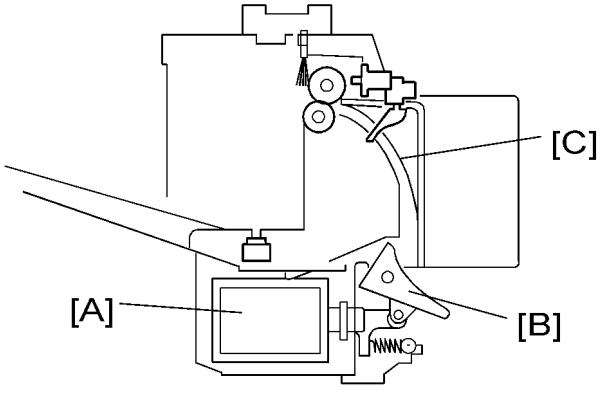
b621d902

The 1-bin tray unit does not know if the tray motor [C] is working properly. No error message is displayed even when, for example, the tray-motor cable comes off the 1-bin tray board [B].

When the tray motor does not work properly, the leading edge of the paper is caught by the exit rollers [A]. The paper stays between the exit rollers (of the 1-bin tray unit) and the fusing unit. In this case, the copier controller detects that the paper jam has occurred in the copier (not in the 1-bin tray unit). To get the copier ready for normal operation, you must:

1. Remove the paper.
2. Open and close the right cover of the copier.

Solenoid-Related Paper Jam



b621t903

The 1-bin base unit does not know if the junction gate solenoid [A] is working properly. No error message is displayed even when, for example, the solenoid cable comes off the 1-bin tray board.

When the junction gate solenoid does not work properly, the junction gate [B] does not lead the paper to the paper path [C]. The paper stays between the paper exit rollers of the copier. In this case, the copier controller detects that the paper jam has occurred in the 1-bin base unit. To get the copier ready for normal operation, you must:

1. Remove the paper.
2. Open and close the right cover of the copier.
3. Open and close the base unit.

MEMO

MEMO