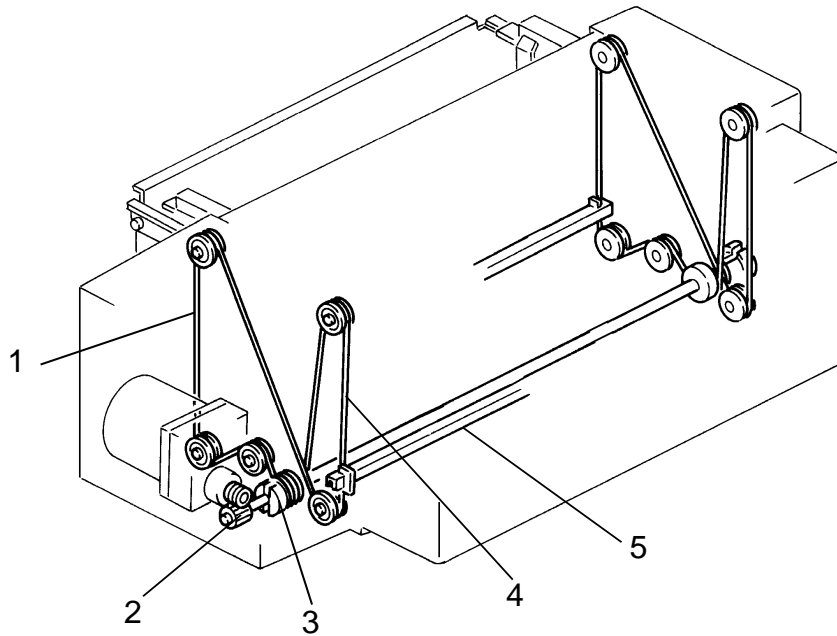

1. SPECIFICATIONS

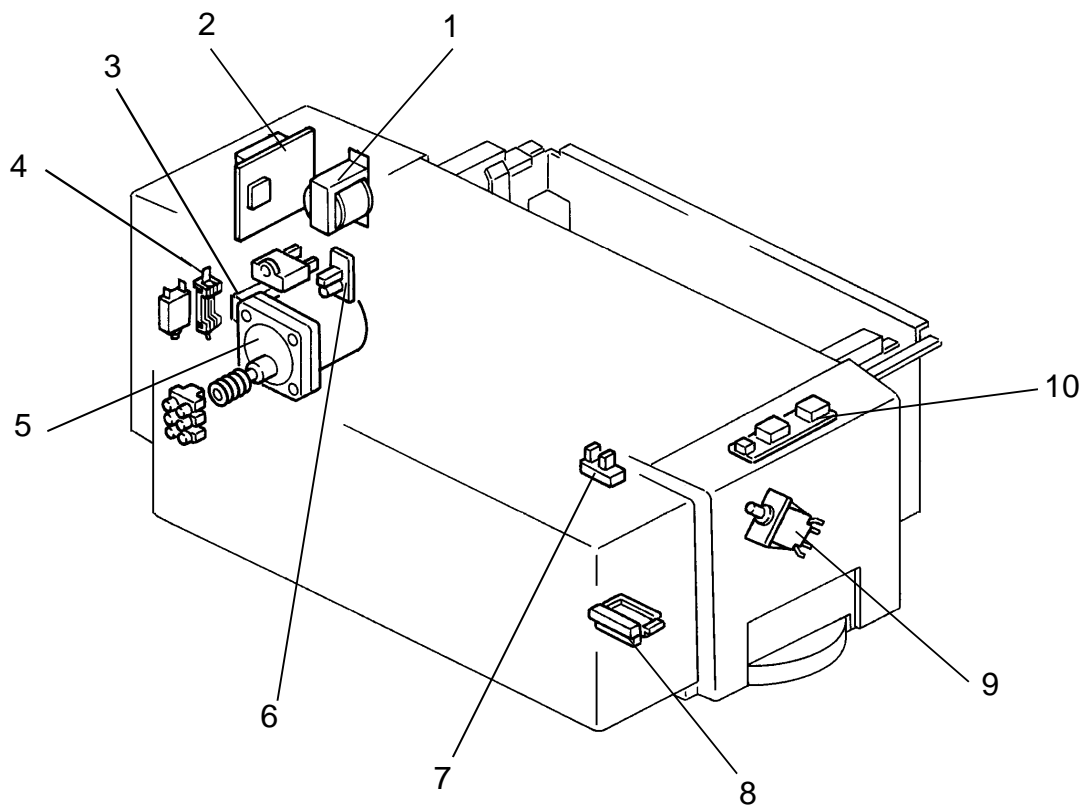
Copy Paper Size	B4 (lengthwise) A4 (lengthwise or sideways) B5 (lengthwise or sideways) 8 1/2" x 14" (lengthwise) 8 1/2" x 11" (lengthwise or sideways)
Copy Paper Weight:	52 g to 93 g (14 lb to 24 lb)
Tray capacity:	1,000 sheets (may vary slightly depending on paper weight)
Lift Time:	Maximum: 12 seconds (50 Hz) 10 seconds (60 Hz)
Power Source:	220 V/60 Hz 0.15 A 220 V/50 Hz 0.15 A 240 V/50 Hz 0.15 A 115 V/60 Hz 0.3 A 110 V/60 Hz 0.3 A
Power Consumption:	Maximum 30 W
Dimensions:(W x D x H)	385 mm x 545 mm x 220 mm (16.2" x 21.5" x 8.7")
Weight:	11.5 kg (25.3 lb)

2. MECHANICAL COMPONENT LAYOUT



- | | |
|-----------------|--------------|
| 1. Drive Wire | 4. Tray Wire |
| 2. Drive Gears | 5. Lift Rods |
| 3. Drive Pulley | |

3. ELECTRICAL COMPONENT LAYOUT



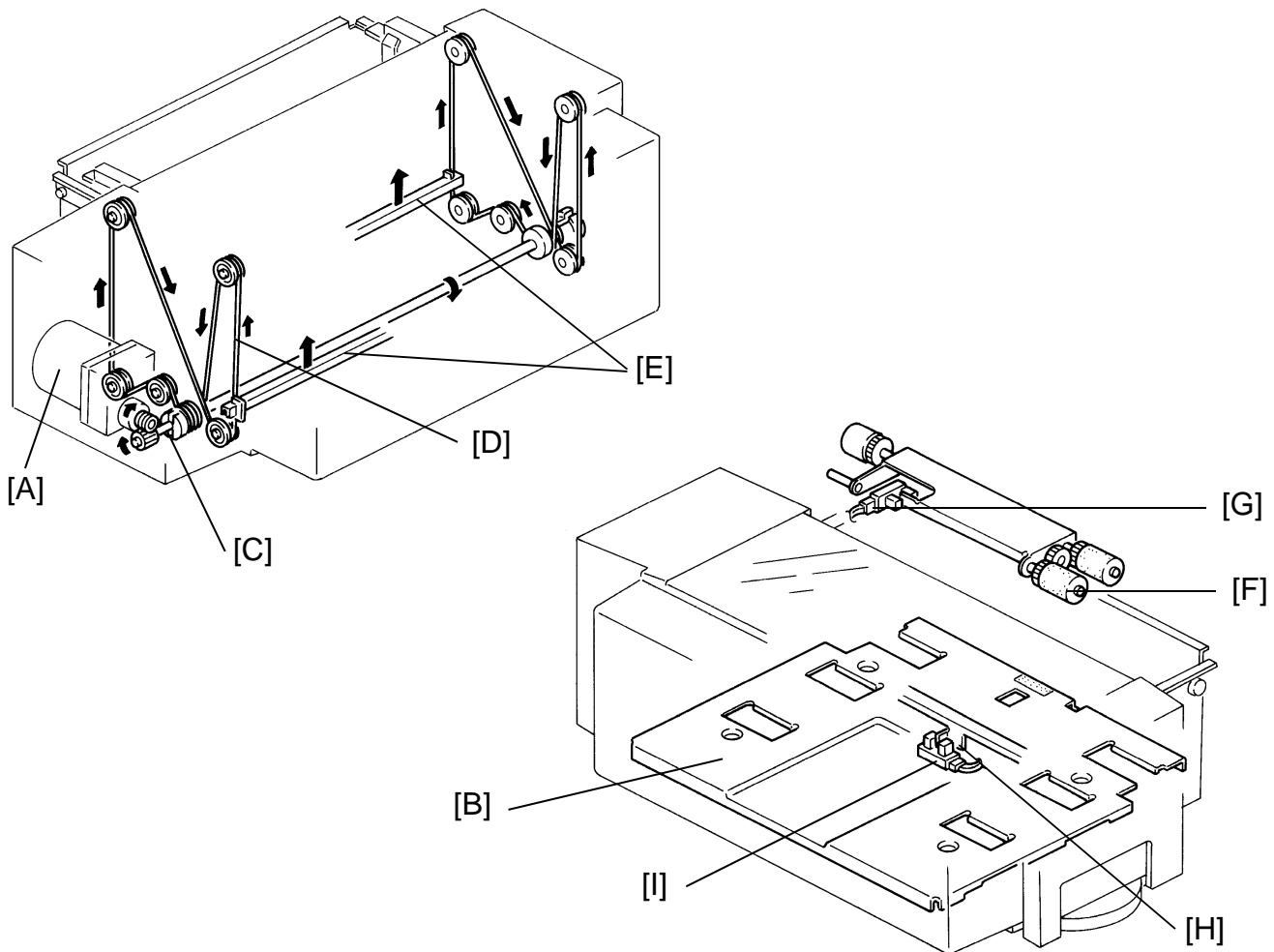
- | | |
|----------------------------------|---------------------------------|
| 1. LCT transformer (TR2) | 6. Surge Suppressor (SS1) |
| 2. LCT PCB (PCB7) | 7. Tray down sensor (S34) |
| 3. Noise Filter | 8. Paper size sensor (S35) |
| 4. Ac fuse (220 V) | 9. LCT safety switch (SW11) |
| 4. Circuit breaker (115 V) (NF2) | 10. LCT operation panel (PCB12) |
| 5. LCT Motor (M15) | |

4. ELECTRICAL COMPONENT DESCRIPTIONS

Index No.	Name	Function	Symbol	P to P Location
Motor				
5	LCT Motor	Lifts and lowers the LCT bottom plate to bring paper to feed position and allow loading of paper.	M15	A-10
Switches				
9	LCT safety Switch	Disables LCT motor when covers are open. Detects when covers are opened.	SW11	A-10
Sensors				
7	Tray Down Sensor	Detects when tray is completely down to stop tray motor.	S34	B-10
8	Paper Size Sensor	Determines what size paper is loaded into the LCT.	S35	B-7
Printed Circuit Boards				
2	LCT PCB	Controls LCT tray lift interfaces LCT with copier.	PCB7	A-7 to 10
10	LCT Operation Panel	Contains the Down SW, Down indicator, and Open Cover indicator for the LCT.		
Transformer				
1	LCT Transformer	Steps down wall voltage to 100 Vac for LCT.	TR2	A-11
Circuit Breaker				
4	LCT Circuit Breaker	Overload protection for LCT.	CB2	A-11
Noise Filter				
3	Noise Filter	Removes electrical noise From the AC input lines.	NF2	
6	Surge Suppressor	Removes surge current from the AC input lines.	SS1	

5. MECHANICAL OPERATION

5.1 DRIVE MECHANISM

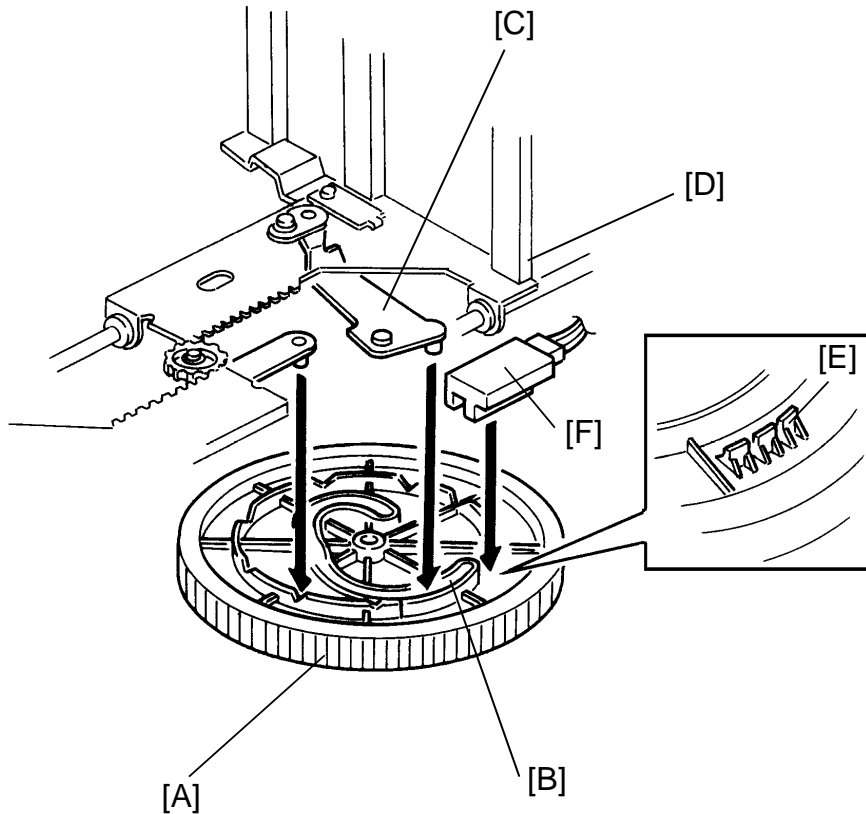


A reversible ac motor [A] drives the LCT's bottom plate [B] up and down.

The motor's drive is transmitted directly to the tray drive shaft [C] via a worm gear and worm wheel. The tray wires [D] have braces on them, these braces hold the ends of the two lift rods which support the tray bottom plate. When the wire drive pulley turns clockwise, the braces on the wires raise the lift rods [E] and the tray bottom plate. The bottom plate rises until the paper in the tray pushes up the pick-up roller [F], actuating the copier lift sensor [G].

The tray bottom plate lowers when the tray drive motor turns the wire drive pulley counterclockwise. It stops moving down when the actuator plate [H], on the left lift rod, actuates the tray down sensor [I].

5.2 PAPER SIZE DETECTION



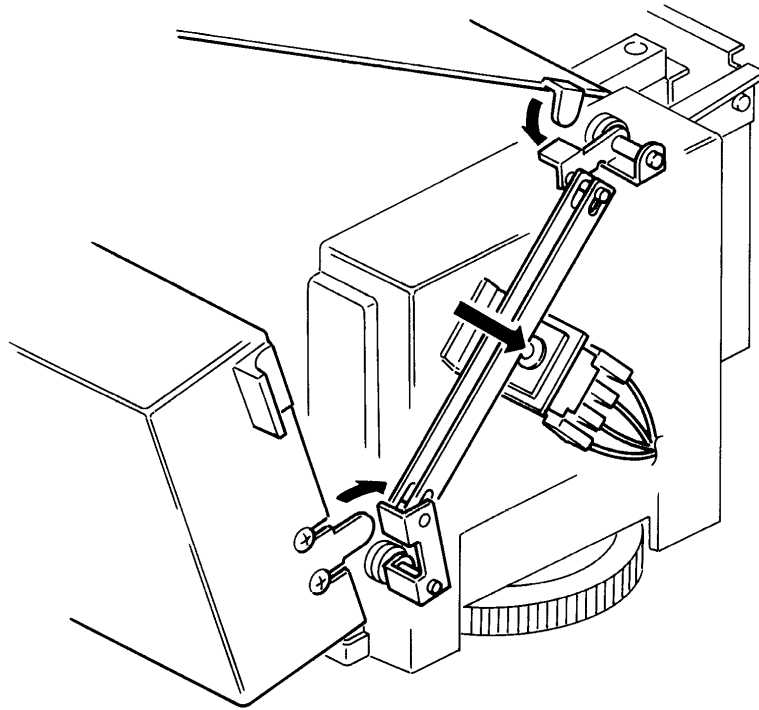
The paper size dial controls side post positioning and paper size detection.

When the paper size dial [A] is rotated, the cam groove [B] moves the size lever [C], which repositions the guide posts [D]. When the dial reaches a standard paper size, one of the actuator plates [E] enters the paper size sensor [F].

Paper Size Detection Table (LCT)

Paper Size	Sensor				
	1	2	3	4	5
B4	0	0	0	1	1
A4 Sideways	0	0	1	0	0
A4 Lengthwise	0	0	1	0	1
B5 Sideways	0	0	1	1	0
B5 Lengthwise	0	0	1	1	1
11" x 8 1/2"	1	0	0	0	1
8 1/2" x 11"	1	0	1	1	0
8 1/2" x 14"	1	0	1	0	0

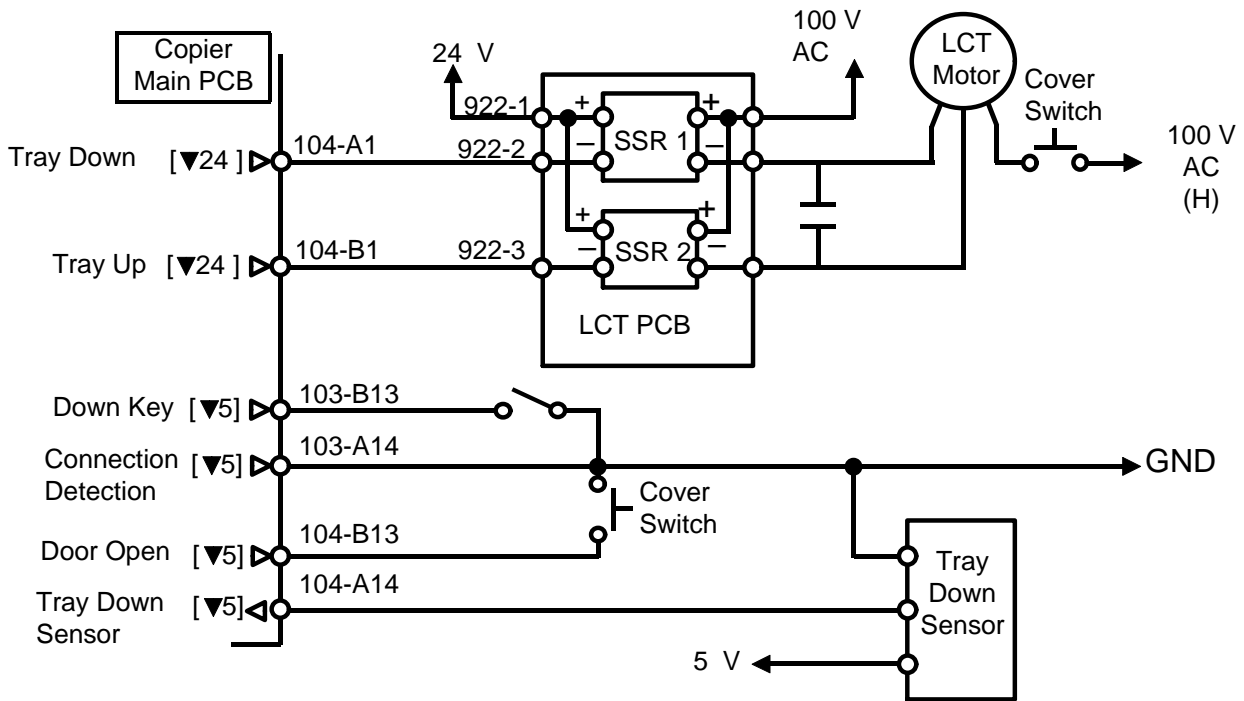
5.3 COVER SAFETY SWITCH



The cover safety switch monitors whether or not the top and side covers are closed. If either cover is open, the safety switch is de-actuated.

Pins on the top and bottom actuator levers hold the safety switch actuator. The top actuator lever is pushed down by the top cover, while the bottom actuator lever is pushed in by the side cover. Therefore, the safety switch actuates only when both the top and side covers are closed.

6. ELECTRICAL OPERATION



6.1 DOWN OPERATION

The bottom plate moves down only when the Down key is pressed or paper end occurs. When the Down key is pressed, the copier Main PCB sends a "Tray Down" signal to turn on SSR1 energizing the drive motor to move the tray down. The down sensor is actuated when the bottom plate is fully lowered, the copier main PCB then stops sending the "Tray Down" signal which causes the drive motor to turn off. The Cover safety switch prevents operation of the drive motor. When the cover is opened, the 100 volt ac line is cut. When the cover is closed again, the bottom plate moves up.

6.2 UP OPERATION

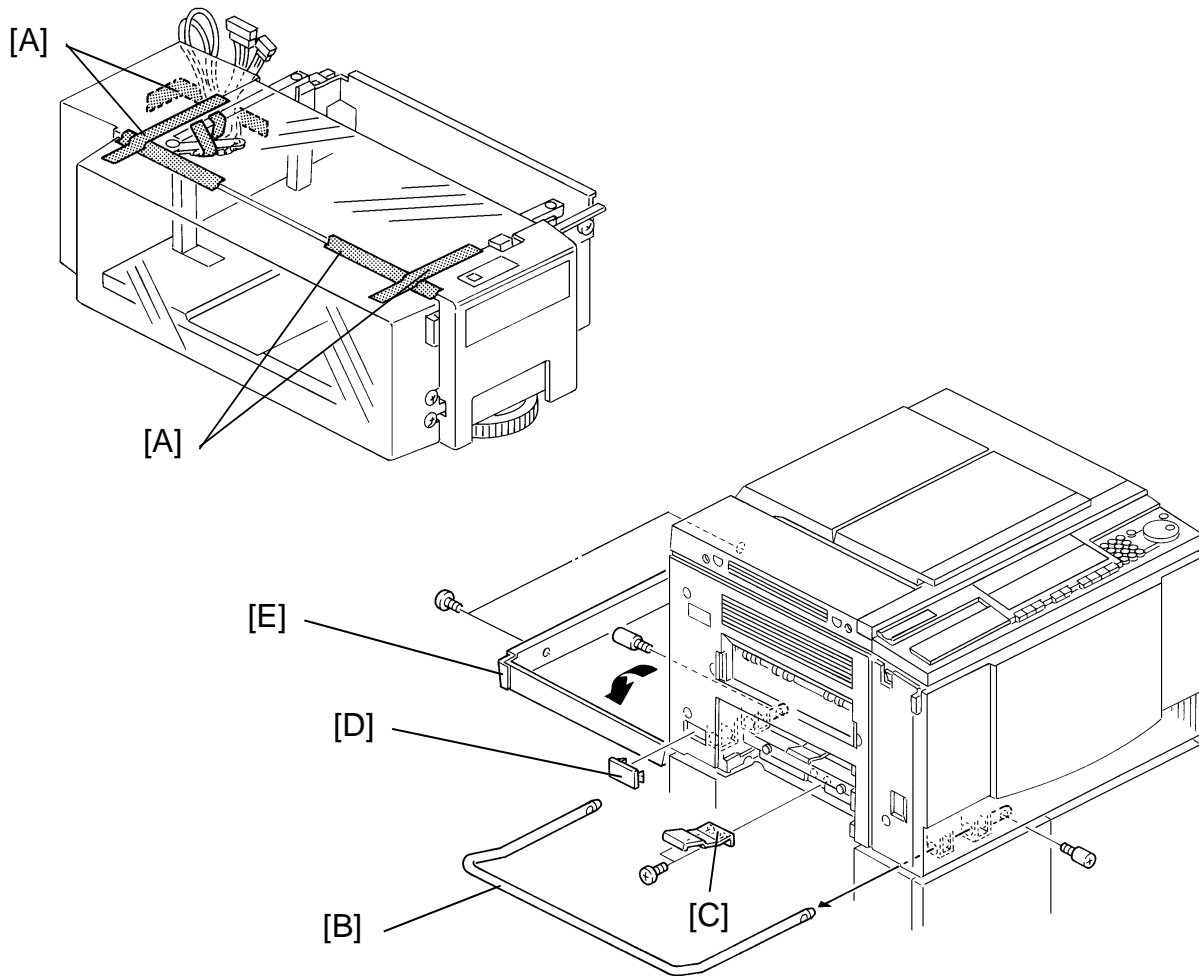
Opening and closing the upper or side LCT cover while the bottom plate is in the down position starts the up operation. When the cover is opened and closed, the copier Main PCB sends a "Tray Up" signal to turn on SSR2 energizing the drive motor to move the tray up. The drive motor stays on until the paper pushes up the pick-up roller, actuating the copier lift sensor. This causes the copier main PCB to stop sending the "Tray Up" signal which turns off drive motor. The cover safety switch prevents operation of the drive motor. When the cover is opened, the 100 volt ac line is cut. When the cover is closed again, the bottom plate moves up.

7. INSTALLATION PROCEDURE

ACCESSORY CHECK

Check the quantity and condition of the accessories in the box according to the following list:

1. Installation Procedure	1
2. New Equipment Condition Report	1
(17 and 27 machines)	
3. Intermediate Harness	1
4. Mounting Stud	2
5. Screw	1
6. Harness Clamp	2

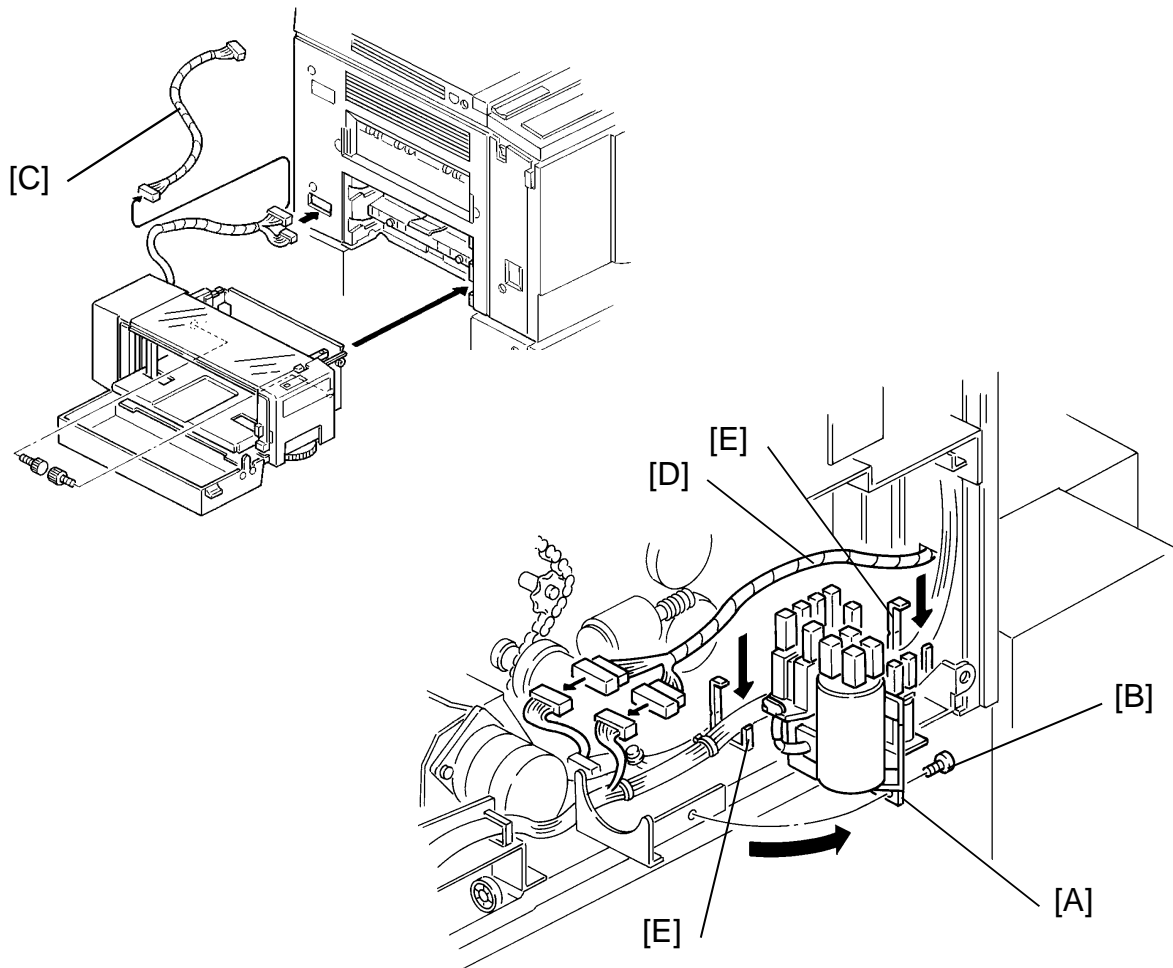


INSTALLATION PROCEDURE (on 2nd Paper Feed Station)

CAUTION: Make sure that the wall-outlet is near the LCT and easily accessible.

NOTE: When the 3rd paper feed unit is installed, install the LCT on the 3rd paper feed station.

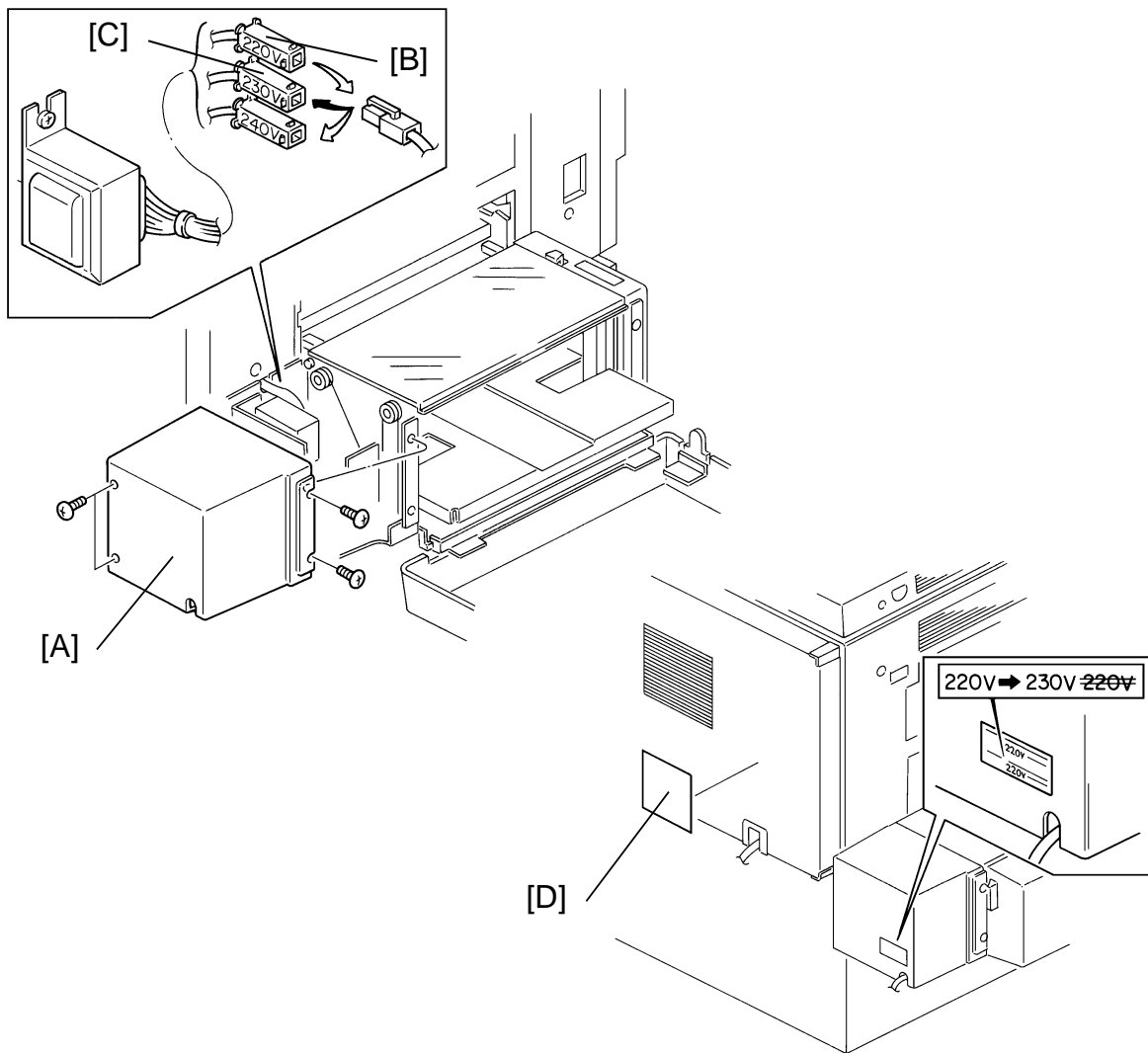
1. Turn off the main switch and unplug the copier.
2. Remove the strips of shipping tape [A].
3. Remove the copier left lift handle [B] (2 screws).
4. Remove the 2nd cassette arm [C] (2 screws) and the cap [D] of the left cover.
5. Open the rear cover [E] (2 screws).



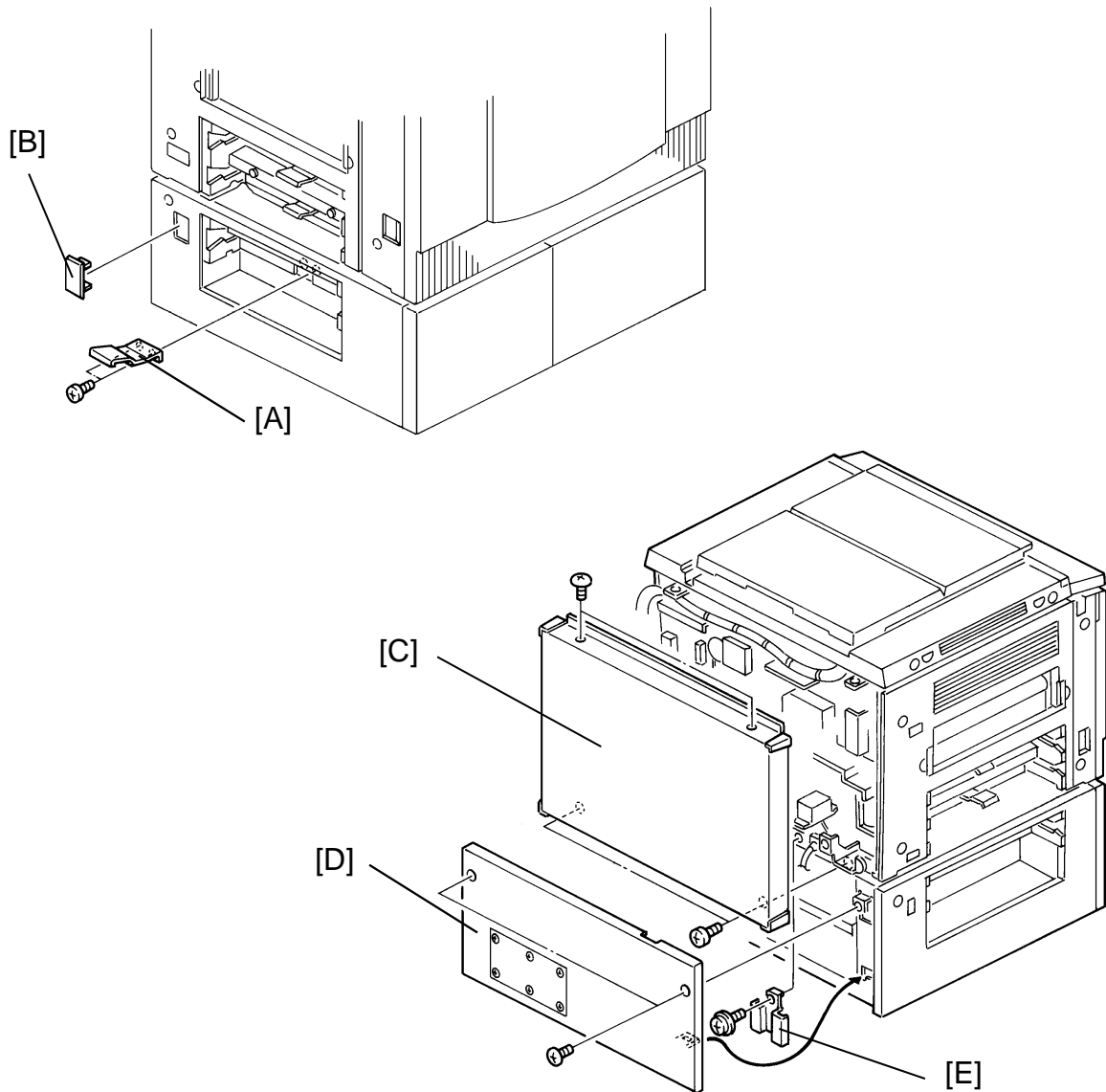
CAUTION: When closing the power supply section [A], use the (#9) grounding screw [B] for proper grounding.

6. Disconnect the 12P intermediate harness [C].
7. While passing the harness through the access hole, set the LCT to the 2nd paper feed station.
8. Fix the LCT using two mounting studs.
9. Open the power supply section (1 screw).
10. Connect the harness as follows:
 - 1) 12P black connector (LCT) - 12P black connector (copier)
 - 2) 8P black connector (LCT) - 8p black connector (copier)

NOTE: Set the harness [D] to harness clamp [E] so that it would not touch the drive section.
11. Close the power supply section and copier's rear cover.

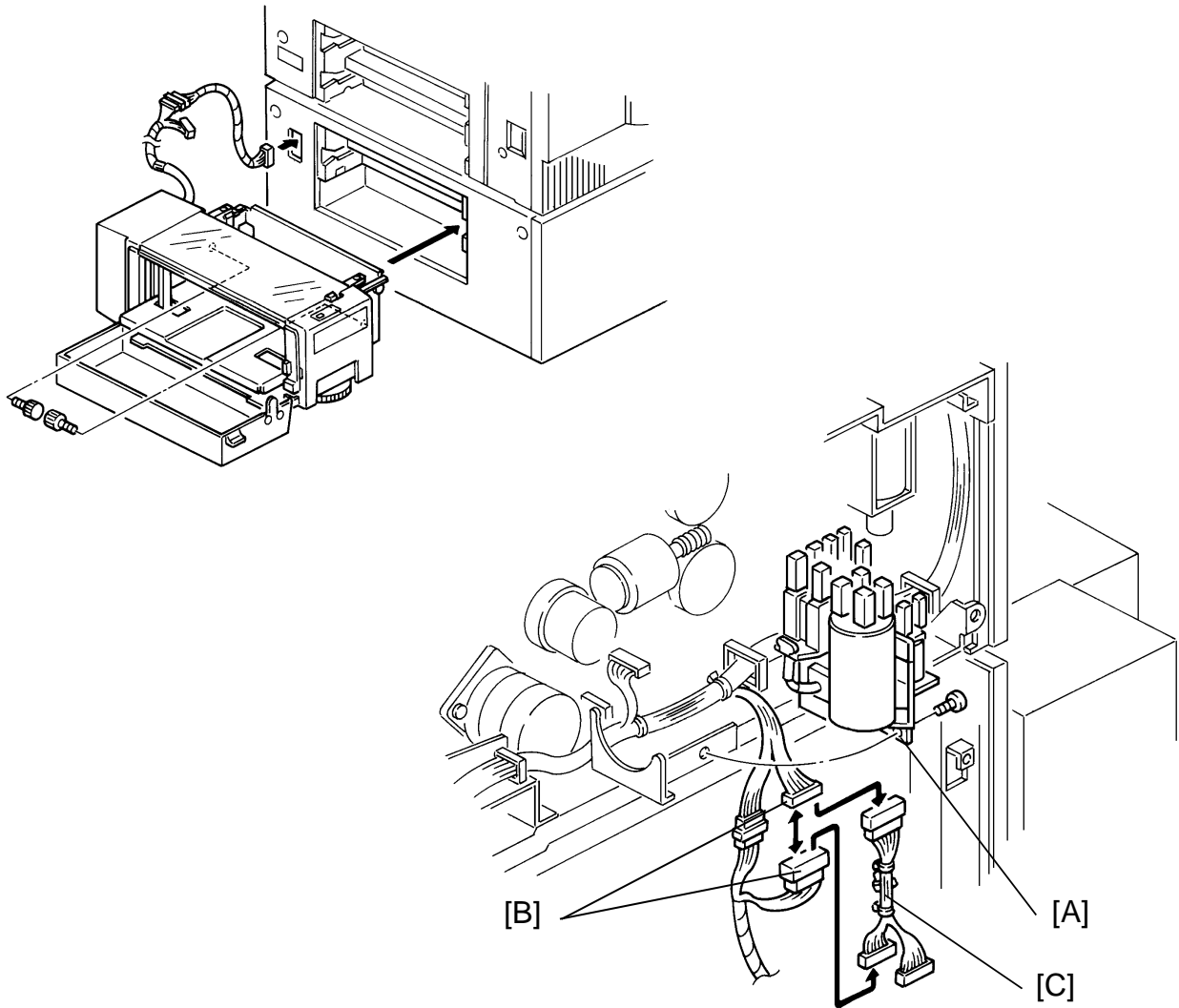


12. Perform the following if necessary:
 - 1) 220 to 230 (240) Volts conversion (European version only)
 1. Remove the rear cover [A] (4 screws).
 2. Disconnect the 220 Volt connector [B], and connect the 230 (240) Volt connector [C].
 3. Erase both "220 V" inscriptions written on the decal of the rear cover, and write "230 V (240 V)" on the decal as shown.
 - 2) Stick the accessory caution decal on the copier rear cover as shown. (U.S. version only)
13. Plug in the copier and LCT, and check the LCT operation.

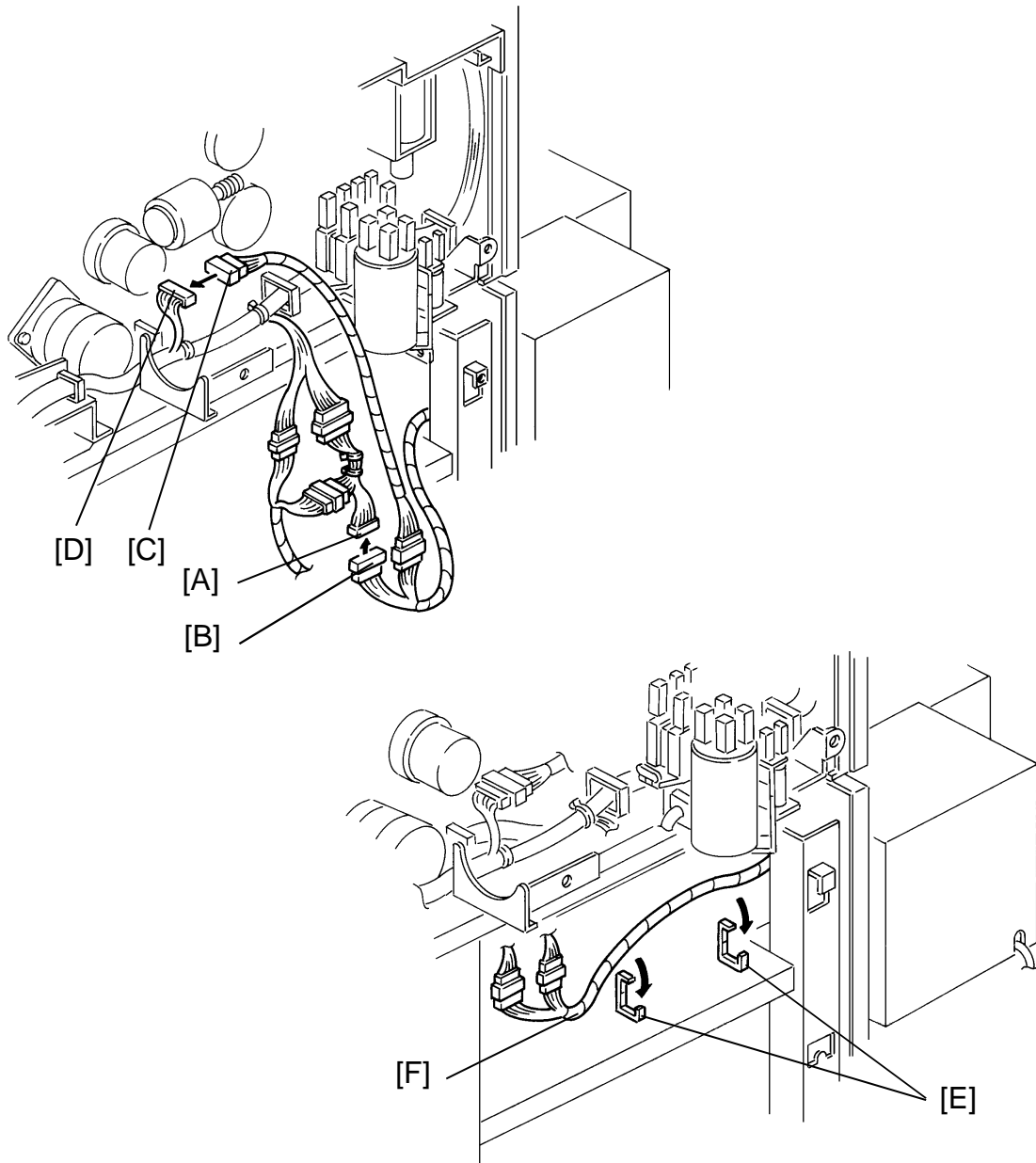


INSTALLATION PROCEDURE (on 3rd Paper Feed Station)

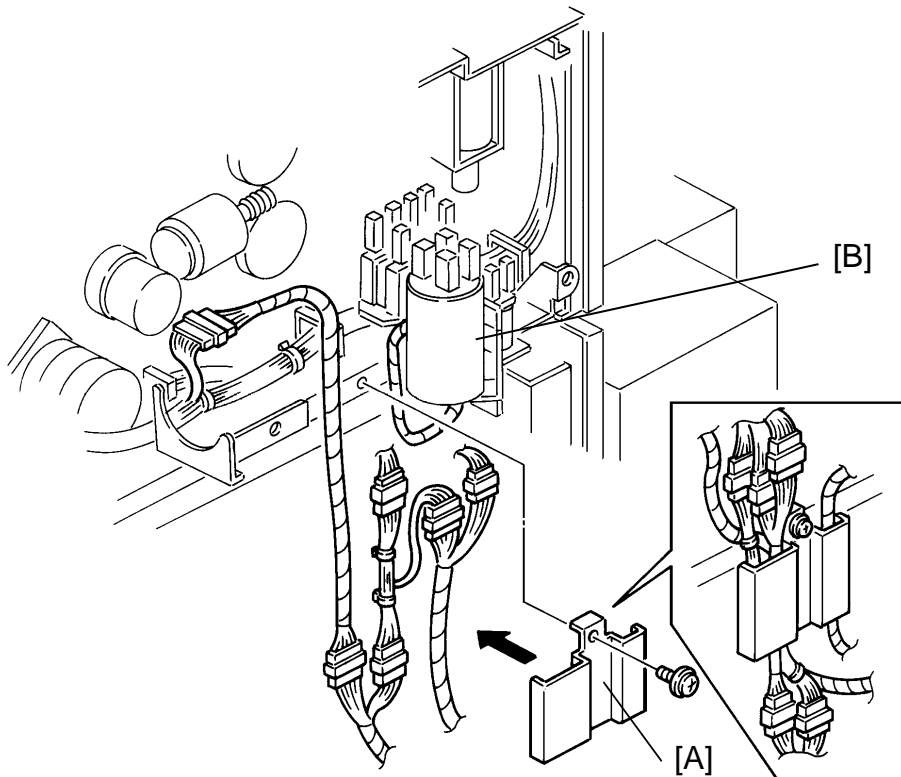
14. Perform steps 1 and 2.
15. Remove the 3rd cassette arm [A] (2 screws) and the cap [B] of the left cover.
16. Remove the copier rear cover [C] (4 screws).
17. Remove the rear cover [D] of the paper feed unit (2 screw).
18. Remove the harness bracket [E].



19. While passing the harness through the access hole, set the LCT to the 3rd paper feed station.
20. Fix the LCT using two mounting studs.
21. Open the power supply section [A] (1 screw).
22. Disconnect the 12P brown connector [B] of the 3rd paper feed unit, and connect the accessory harness [C] to the 12P brown connector, as shown.



23. Connect the 8P black connector [A] to the 8P black connector [B] of the LCT.
24. Connect the 12P black connector [C] of the LCT to the 12P black connector [D] of the copier, and set the two harness clamps [E].
25. Set the harness [F] to the harness clamp as shown so that it would not touch the drive section.

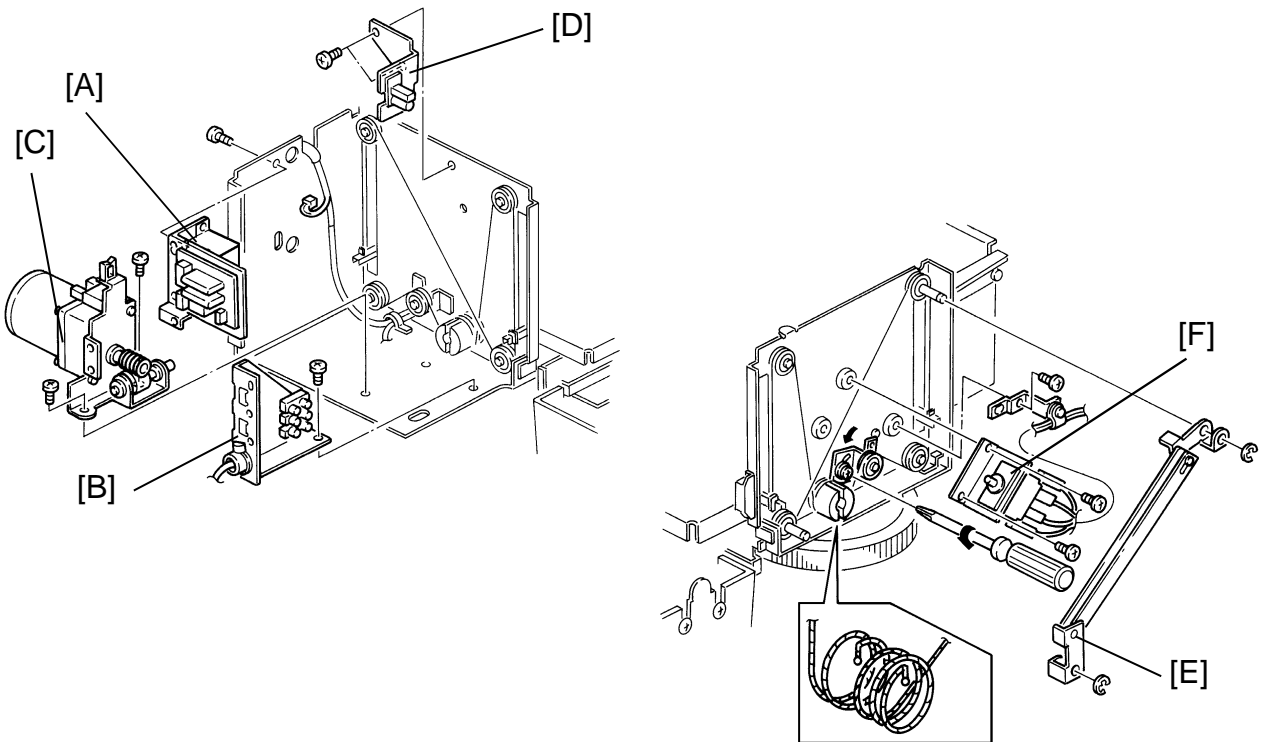


CAUTION: When closing the power supply section [B], use the (#21) grounding screw for proper grounding.

26. Install the harness bracket [A] (1 screw), as shown.
27. Close the power supply section and reinstall all the covers.
28. Plug in the copier and LCT, and check the LCT operation.
29. Perform step 12 and 13.

8. REPLACEMENT AND ADJUSTMENT

8.1 TRAY WIRE REPLACEMENT



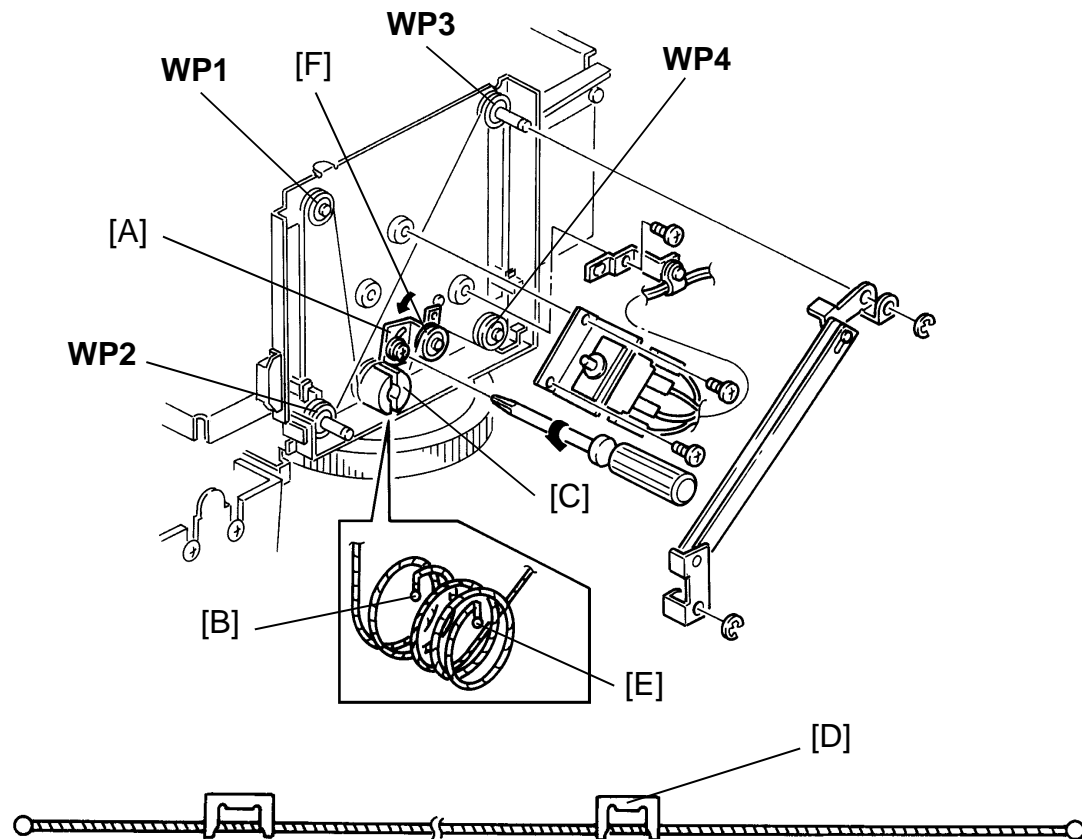
CAUTION: Unplug the tray power supply cord.

Rear wire

1. Remove LCT from the copier.
2. Remove the following parts:
 - a) Rear cover (4 screws)
 - b) Transformer assembly with LCT PCB [A] (1 screw, 6 connectors)
 - c) AC power terminal [B] (1 screw)
 - d) Drive motor assembly [C] (2 screws)
 - e) Surge suppresser assembly [D] (2 screws)

Front side

1. Remove the following parts:
 - a) Front cover (loosen 3 screws)
 - b) Safety switch actuator [E] (2 E-rings)
 - c) Safety switch assembly [F] (2 screws)

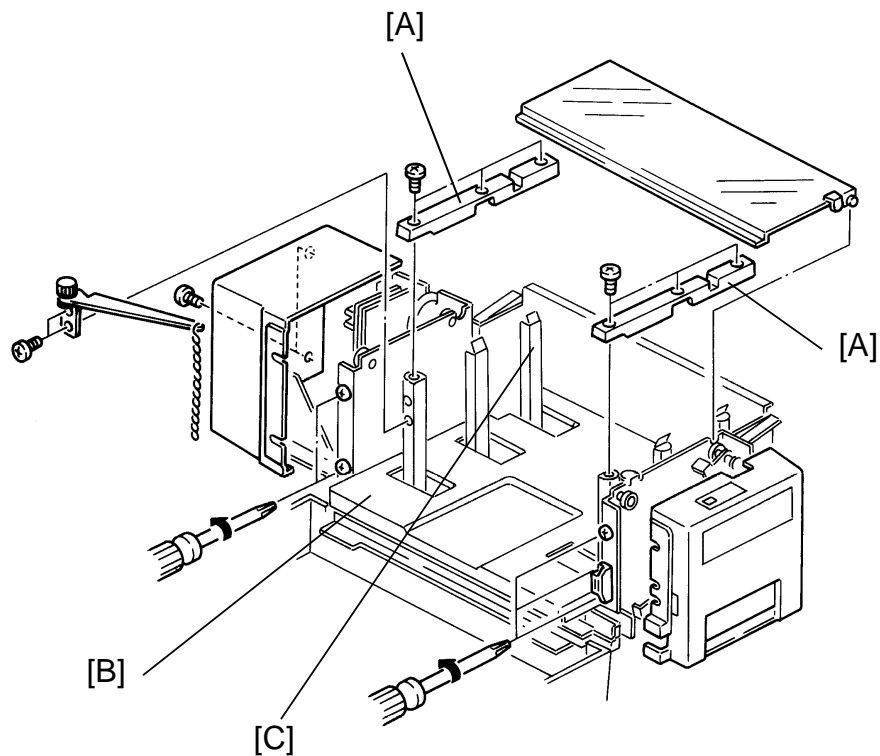


- Common Procedure for Front and Rear Wires -

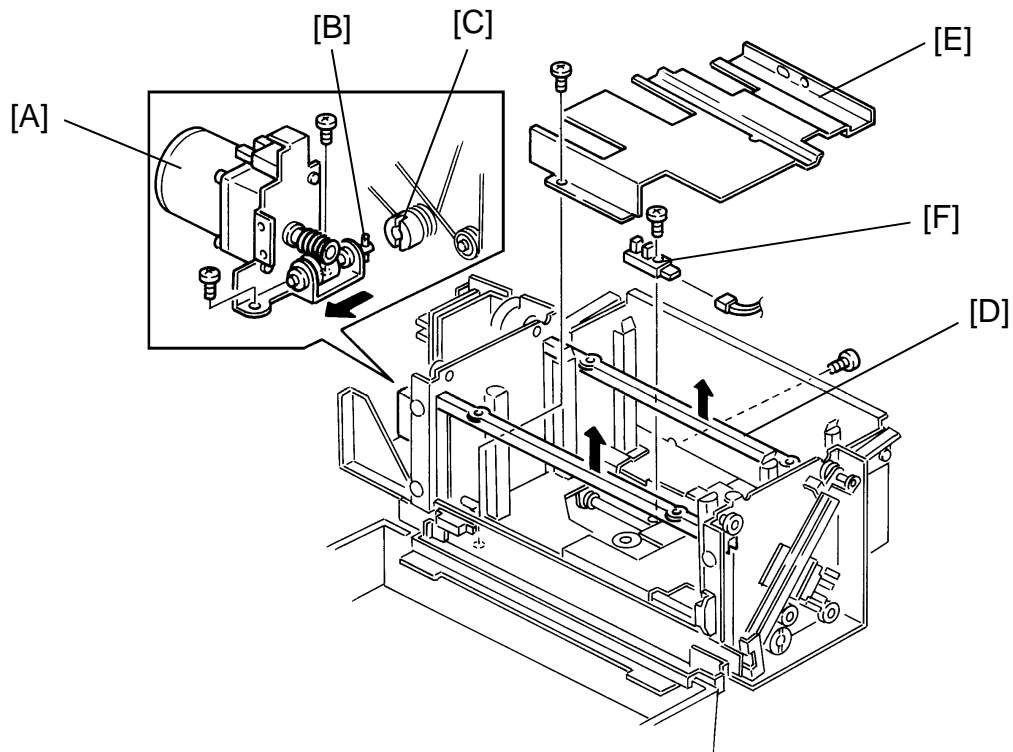
NOTE: The wrapping directions for the front and rear wires are opposite.

1. Loosen the wire tightener [A] (1 screw).
2. Insert the bead [B] (unmarked) into the rear slot of the drive pulley.
3. Loop the wire around the drive pulley [C], as shown (one and a half turns).
4. Run the wire over WP1, WP2, WP3, and WP4 in turn while also placing the lift rod's ends in the braces [D].
5. Insert the bead [E] (red) into the other slot of the drive pulley.
6. Loop the wire around the drive pulley, as shown (two and a half turns).
7. Hook the wire on the tightener pulley [F].
8. Move the rods up and down manually to ensure that the drive wire does not overlap on the pulley.
9. Tighten the wire using the tightener (1 screw).
10. Reassemble.

8.2 TRAY DOWN SENSOR REPLACEMENT

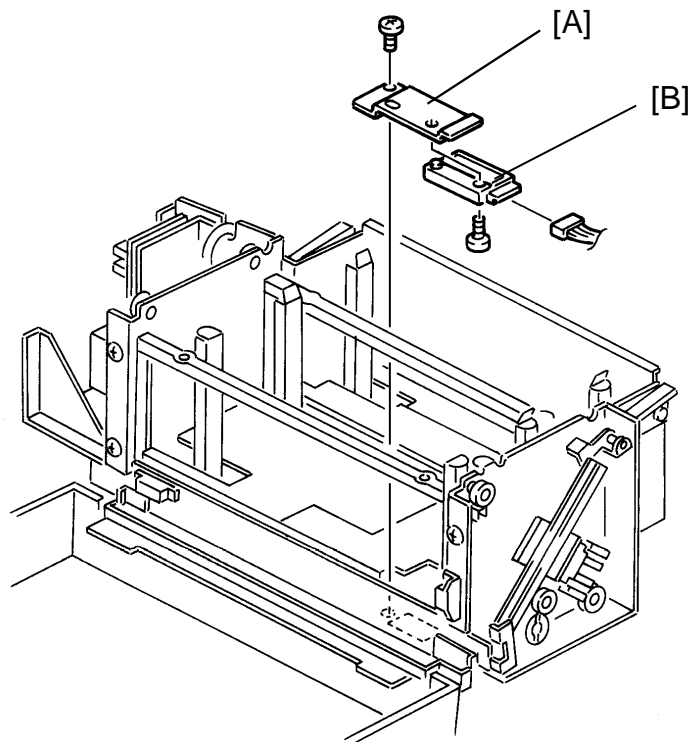


1. Open the side cover (1 screw).
2. Remove the top, front and rear covers (5 screws).
3. Remove the two post tops [A] (3 screws each).
4. Remove the tray bottom plate [B] (4 screws) taking care not to damage the 6 guide posts [C].



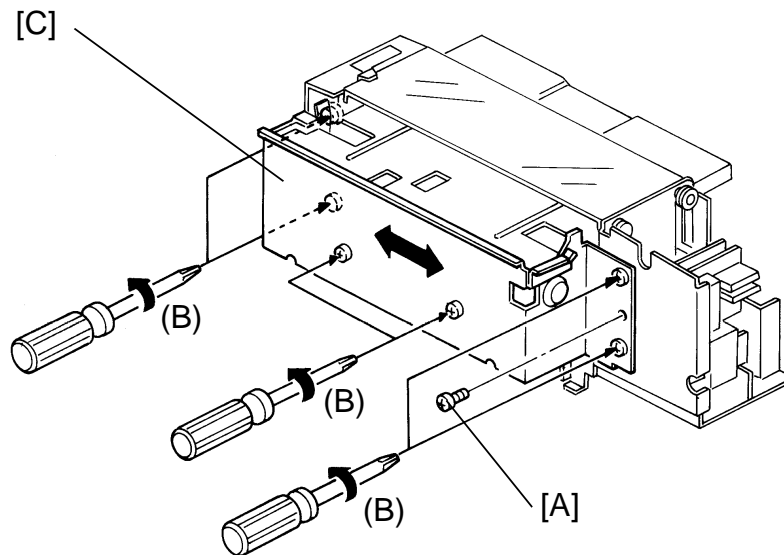
5. Move the tray drive motor assembly [A] (2 screws) to the rear to disengage the tray drive shaft [B] from the wire drive pulley [C].
6. Raise the lift rods [A].
7. Remove the front inner cover [E] (1 short and 1 long screw).
8. Replace the tray down sensor [F] (1 screw and connector).

8.3 PAPER SIZE SENSOR REPLACEMENT



1. Perform steps "1" to "7" of the Tray Down Sensor Replacement procedure.
2. Remove the paper size sensor bracket [A] (1 screw).
3. Replace the paper size sensor [B] (1 screw and 1 connector).

8.4 SIDE REGISTRATION ADJUSTMENT



After installing the large capacity tray, confirm the side registration of the large capacity tray. The side-to-side registration of A4 sideways (LT sideways) copies should be the same as that of the first cassette.

If the side registration is incorrect, adjust it as follows:

1. Remove LCT from the copier.
2. Remove the screw [A].
3. Loosen six screws [B].
4. Adjust the right frame [C] position according to the amount of the side registration gap to correct.
5. Tighten and install all screws.
6. Install LCT.
7. Confirm that the side registration is adjusted correctly.