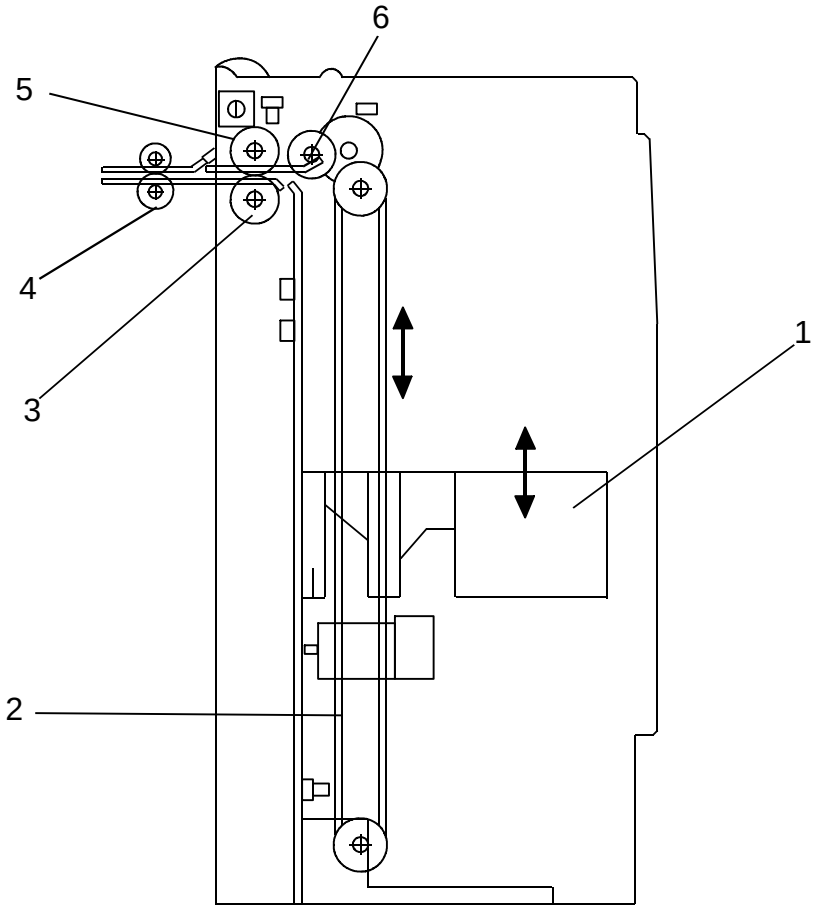
LARGE CAPACITY TRAY
(Machine Code: A380)

1. SPECIFICATIONS

Copy Paper Size:	A4 sideways B5 Sideways 8 1/2" x 11" sideways
Copy Paper Weight:	64 ~ 105g/m^2 16~24lb
Power Source:	DC24V, 5V (from the copier)
Power Consumption:	40W
Dimensions (W x D x H):	403 x 529 x 608mm (15.9" x 20.8" x 23.9")
Weight:	19.8kg (43.7lb)
Tray Capacity:	3,500 sheets (may vary slightly depending on paper weight)

2. MECHANICAL COMPONENT LAYOUT

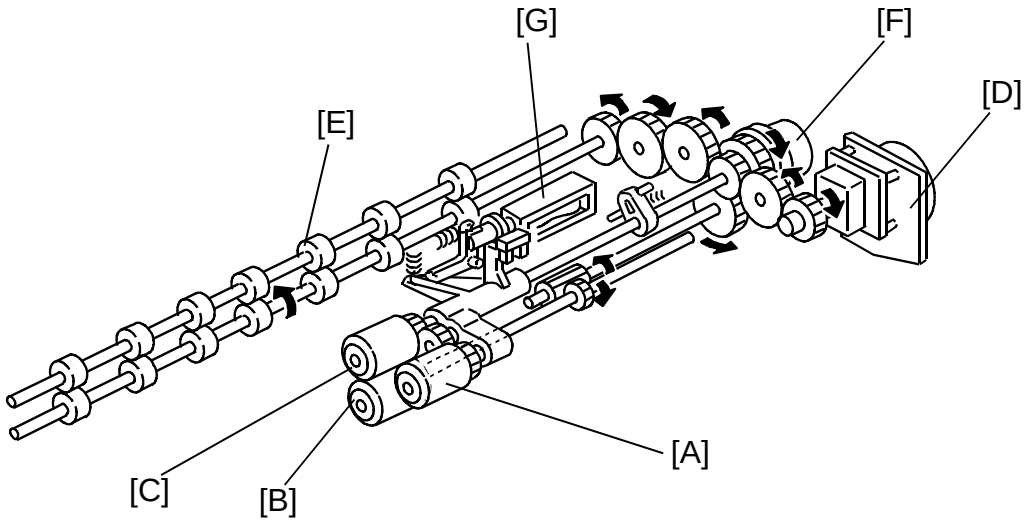


1. Bottom Plate
2. Tray Drive Belt
3. Separation Roller
4. Transport Rollers
5. Feed Roller
6. Pick-up Roller

3. ELECTRICAL COMPONENT DESCRIPTION

Symbol	Name	Function	Index No.
Sensors			
S1	Paper End	Informs the CPU that there is no paper on the LCT bottom plate.	2
S2	Paper Near End	Informs the CPU that about 60 sheets of paper remain on the LCT bottom plate.	3
S3	Paper Position	Detects the paper position.	4
S4	Tray Down	Informs the CPU that the LCT bottom plate is in the lowest position.	6
S5	Feed	Controls the paper feed clutch off-on timing and the pick-up solenoid off timing.	9
S6	Lift	Detects the correct paper feed height.	10
Switches			
SW1	Feed Unit Cover	Detects if the feed unit cover is open or not. **Note:** There are two sensors.	1
SW2	LCT Cover	Detects if the LCT cover is open or not. **Note:** There are three sensors.	7
SW3	Tray Down	Lowers the LCT bottom plate.	8
Motors			
M1	LCT	Lifts and lowers the LCT bottom plate to bring paper to the feed position and allow loading of the paper.	5
M2	Feed	Drives all feed and transport rollers.	13
Others			
SOL1	Pick-up	Controls the up-down movement of the pick-up roller.	11
MC1	Feed	Starts paper feed from the LCT.	12

4. MECHANICAL OPERATION



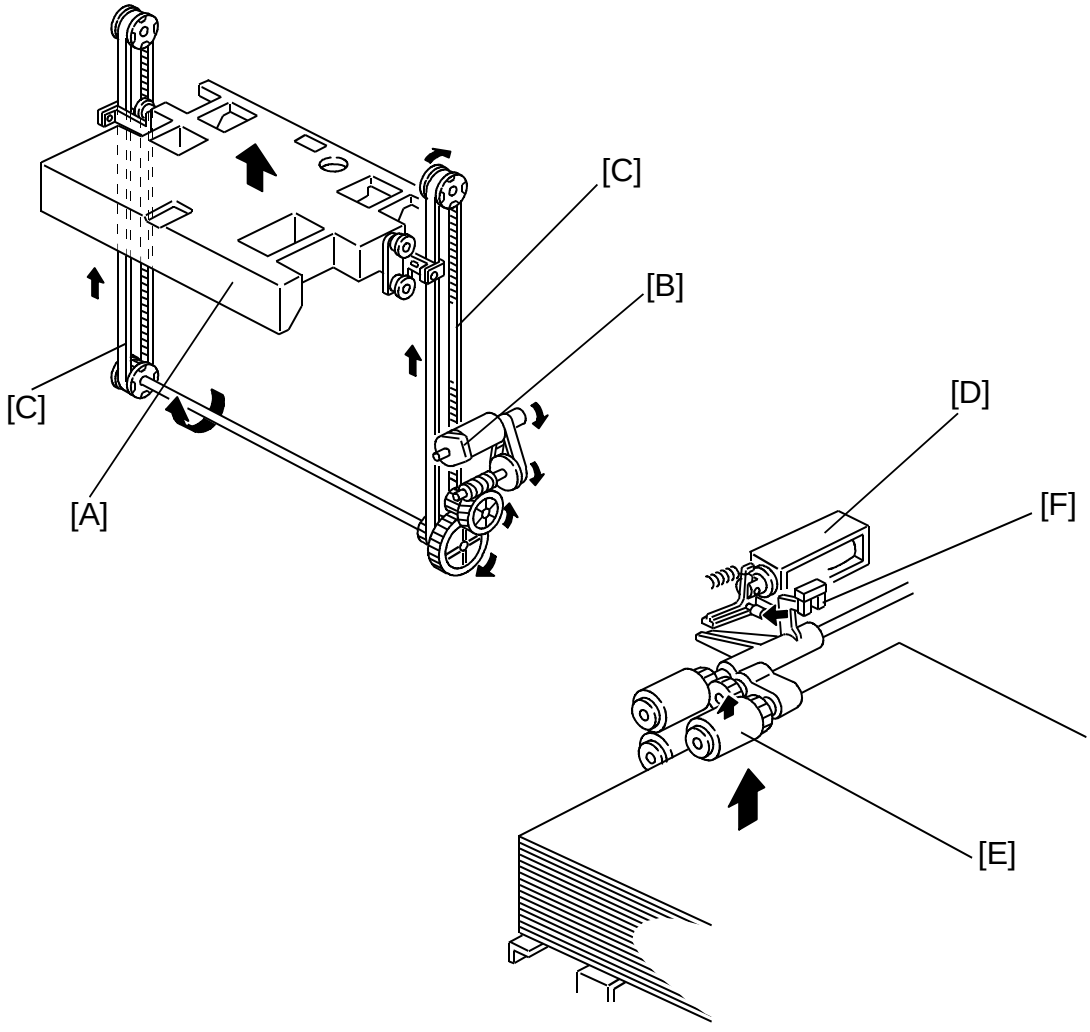
The LCT uses an FRR feed system which uses three rollers.
The pick-up [A], separation [B] and feed [C] rollers are common with those of the by-pass feed unit of the mainframe but different from those of the paper feed stations in the paper tray unit.

The LCT feed motor [D] drives the pick-up, separation, feed, and transport [E] rollers.

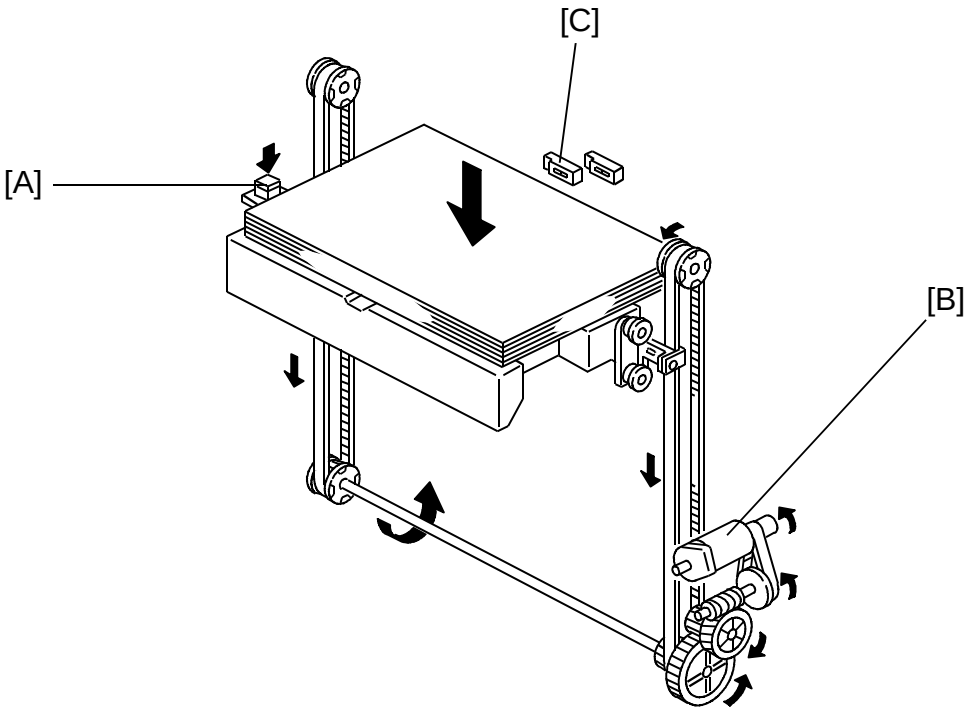
The pick-up and feed rollers rotate only when the LCT feed clutch [F] activates.

Paper feeding starts when the LCT pick up solenoid [G] activates.

5. PAPER LIFT MECHANISM



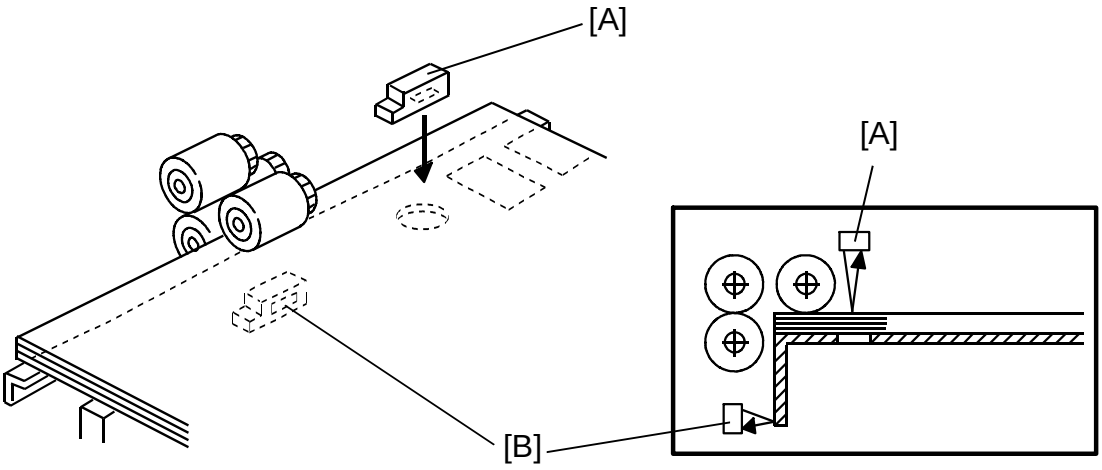
The bottom plate [A] of the LCT is raised and lowered by the LCT motor [B] and the drive belts [C]. When the main switch is on and the LCT cover is closed, the pick-up solenoid [D] activates and the LCT motor [B] rotates clockwise to raise the bottom plate until the top sheet pushes up the pick-up roller [E]. When the lift sensor [F] is de-actuated, the copier CPU de-activates the LCT motor [B] and the pick-up solenoid [D].



If the tray down switch [A] is pressed, or paper runs out, or a paper jam occurs in the LCT, the LCT motor [B] rotates counterclockwise to lower the bottom plate. However, it is not lowered all the way down at this time. When the paper position sensor [C] activates, the LCT motor stops once. At this point, the bottom plate (or the top sheet of paper) is positioned about 5cm below the top. This gives enough space for the customer to replenish about 500 sheets of paper.

If the tray down switch is then pressed again, the bottom plate moves down and stops once again when the top sheet of paper just passes the paper position sensor. In this way, the bottom plate is lowered 5cm at each press of the tray down switch. This allows the customer to replenish paper in convenient amounts and at the same position.

6. PAPER END DETECTION



The paper end sensor [A] detects paper on the bottom plate. If there is paper on the table, reflected light from the paper activates the paper end sensor. When the paper runs out, the paper end sensor de-activates and informs the copier CPU of the paper end condition.

The paper near end sensor [B] also detects the paper and the tray bottom plate. If there is enough paper on the table, reflected light from the paper activates the paper near end sensor.
If less than about 60 sheets of paper remain, the paper near end sensor de-activates because the black colored bottom plate does not reflect the light from the sensor LED.

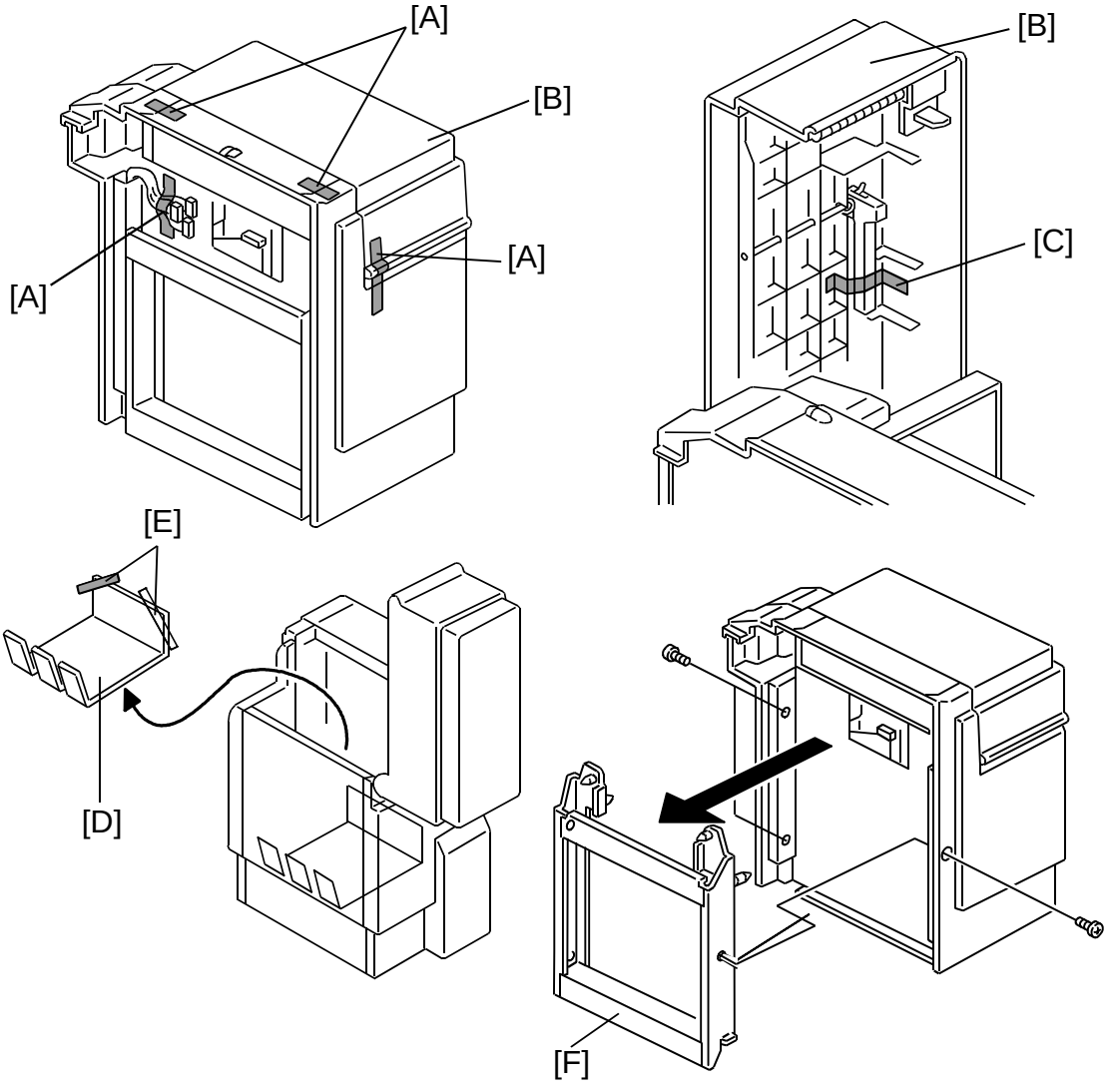
7. INSTALLATION PROCEDURE

7.1 ACCESSORY CHECK

Check the accessories in the box according to the following list:

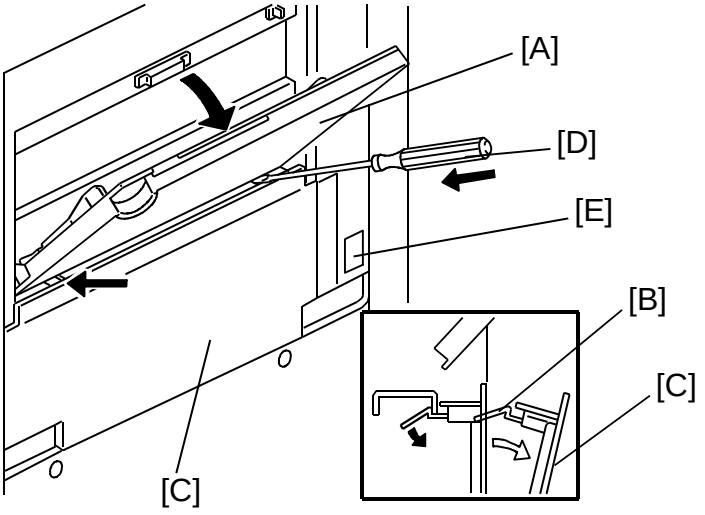
Description	Q'ty
1. Installation procedure	1
2. New Equipment Condition Report (for –17, –27 machines only)	1
3. LCT feed unit	1
4. Small cover - left cover	1
5. Philips pan head screw - M4 x 6	1
6. Philips pan head screw - M4 x 16	1
7. Tapping screw - M4 x 8	1
8. Envelope - NECR (for –17 machine only)	1

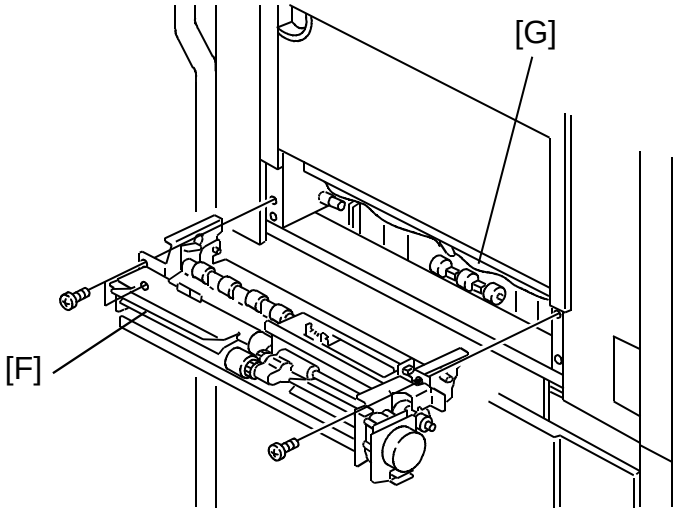
7.2 INSTALLATION PROCEDURE



CAUTION: Unplug the copier power cord before starting the following procedure.

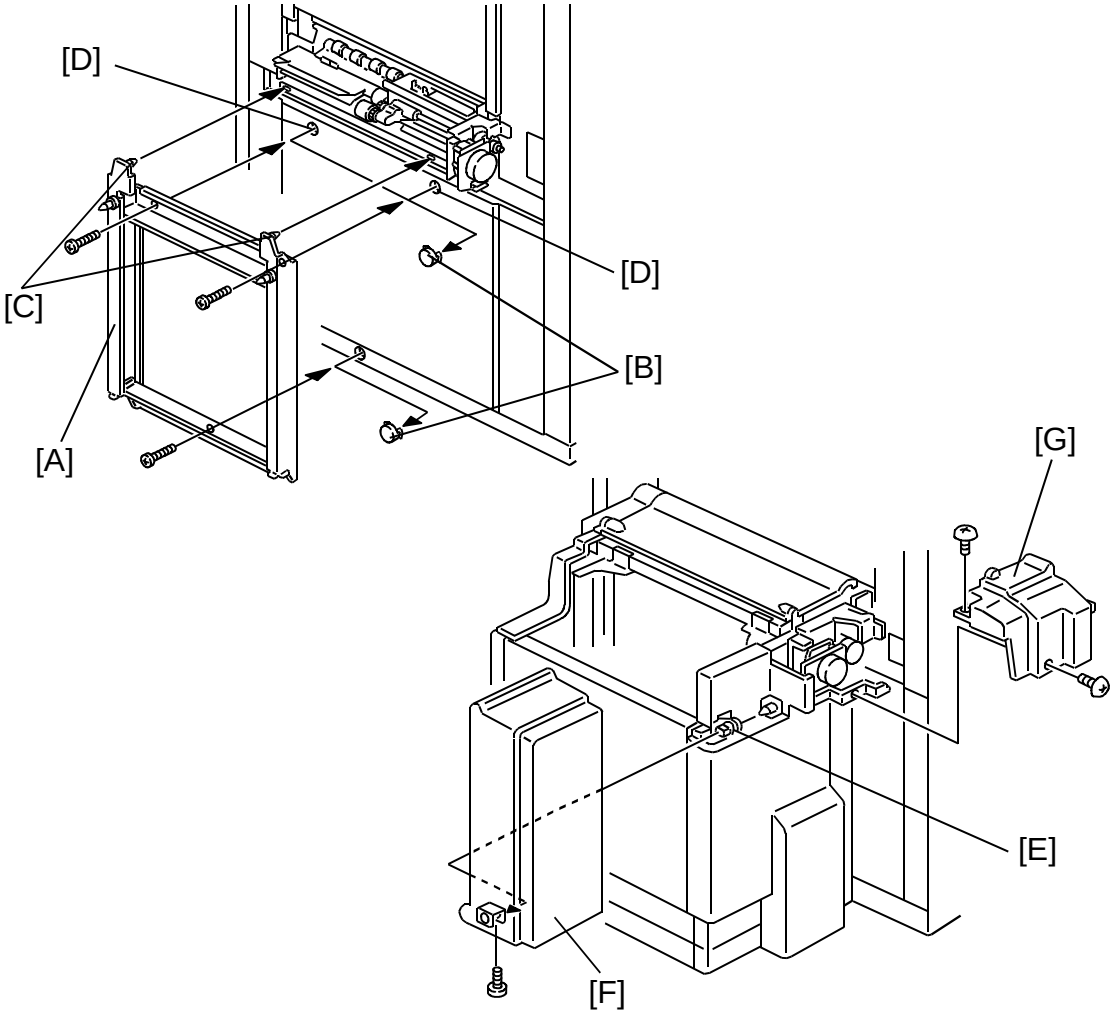
1. Remove the four strips of tape [A].
2. Open the LCT cover [B] and remove the tape [C] fixing the paper trailing edge stopper.
3. Remove the tray cushion [D] secured with two strips of tape [E].
4. Remove the LCT connector [F] (3 screws).





5. Open the by-pass table [A] approximately 45 degrees and push the stoppers [B] of the feed unit cover [C] by using a small flat head screw driver [D], then remove the feed unit cover.
6. Remove the harness cover [E].
7. Install the LCT feed unit [F] to the copier (3 screws - M 4 x 6).

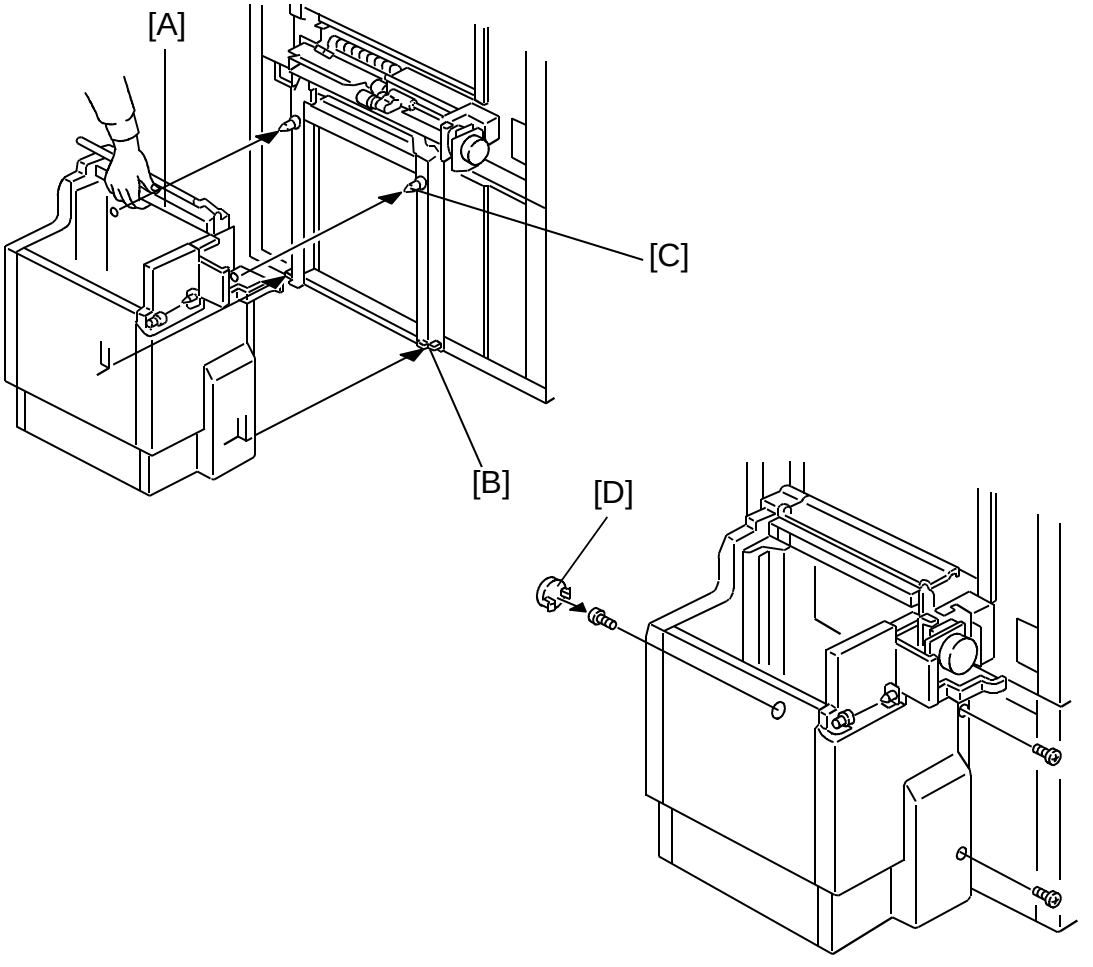
CAUTION: Do not pinch the harness [G] located below the by-pass table.



8. Install the LCT connector [A] to the copier.
   1) Remove the three caps [B].
   2) Set the two pins [C] of the LCT connector into the two holes [D] on the LCT feed unit.
   3) Install the LCT connector to the copier (3 screws - M4 x 16).

9. Remove the screw fixing the upper cover hinge [E] then slide and remove the LCT cover [F].

10. Remove the rear upper cover [G] (2 screws).



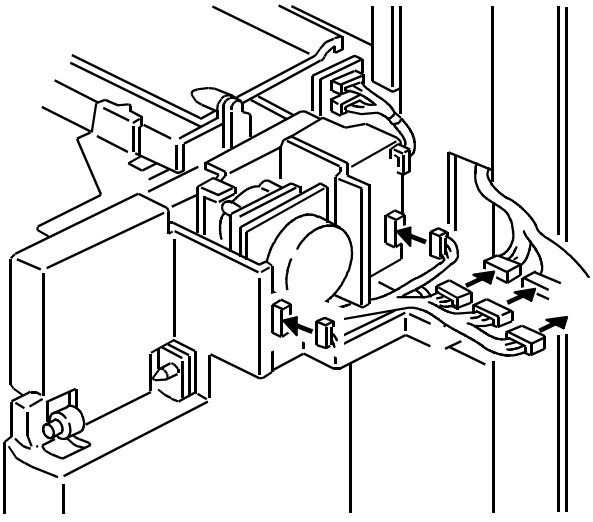
11. Hold the upper stay [A] of the LCT and place the LCT on the plates [B] of the LCT connector.

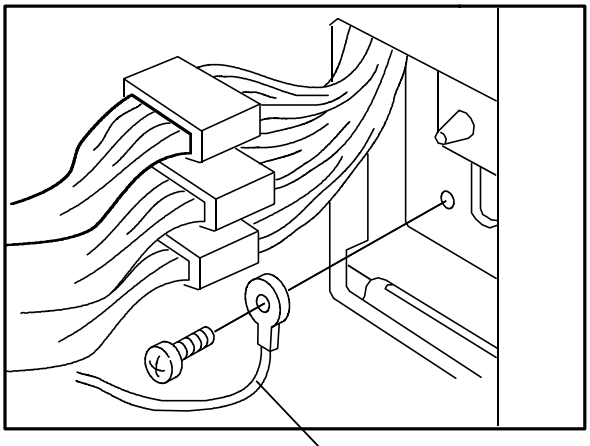
CAUTION: Properly place the LCT on the plate [B] of the LCT connector.

12. Insert the two pins [C] on the LCT connector into the two holes on the LCT.

13. Secure the LCT to the LCT connector (3 screws - M 4 x 8).

14. Set the cap [D] in the front screw access hole.



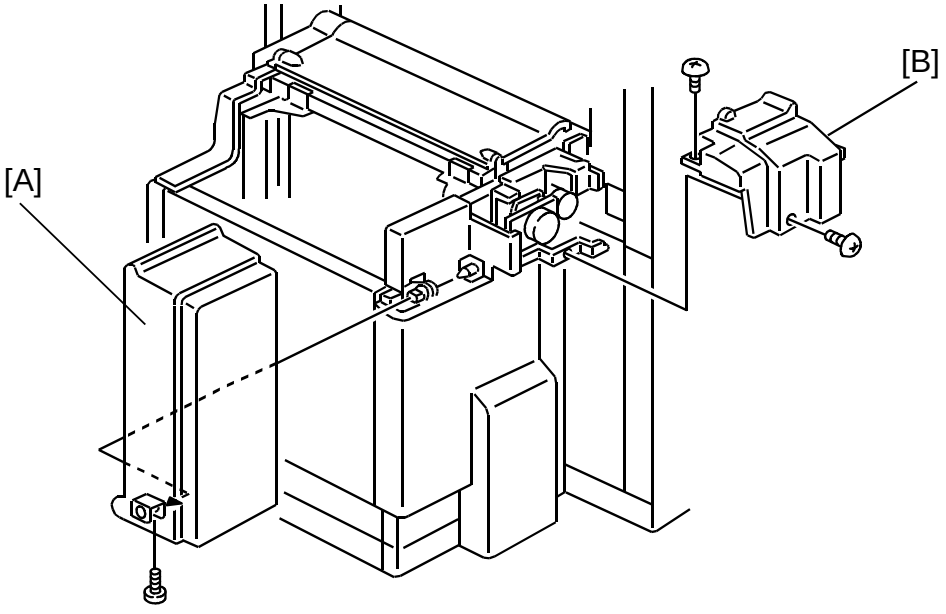


15. Connect the connectors.

1) Between the copier and the LCT (3 connectors).
- 13P white
- 13P red
- 16P white

2) Between the LCT and the LCT feed unit (2 connectors).
- 10P white
- 8P white

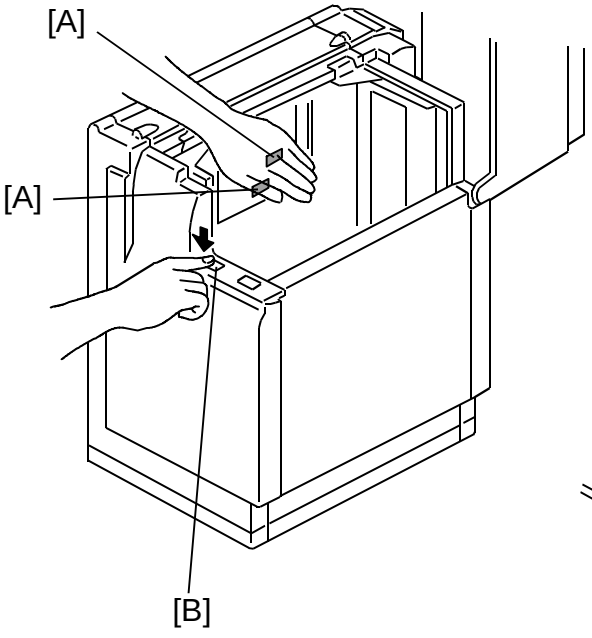
16. Secure the protective earth wire [A] on the copier.

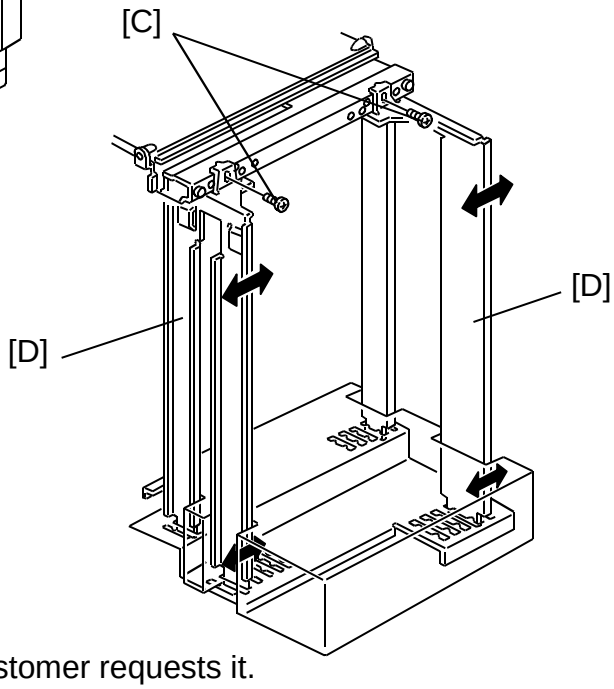


17. Install the rear upper cover [A] (2 screws).
18. Install the LCT cover [B] (1 screw).
19. Plug in the copier and check machine operation.

NOTE: The copier automatically recognizes that the LCT has been installed.

7.3 PAPER SIZE CHANGE

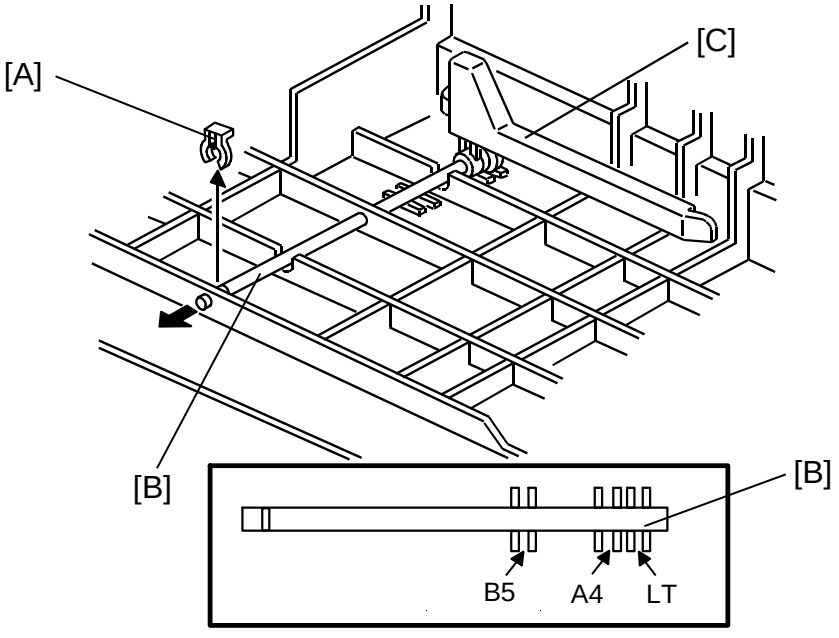




Change the paper size, if the customer requests it.

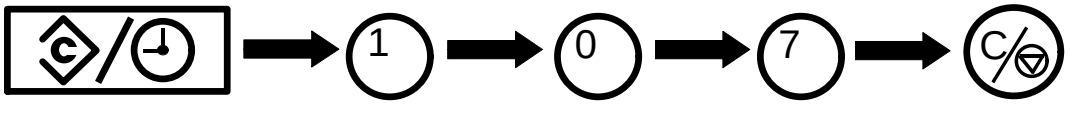
NOTE: A4/Letter sideways is the factory setting.

1. While covering two sensors [A] with your hand, press the tray down key [B] to lower the bottom tray.
2. Remove the screws [C] fixing the front and the rear side fences [D].
3. Tilt the side fences to the right (front view) and lift to remove.
4. Position the side fences according to the paper size.
5. Fix the side plates (1 screw each).

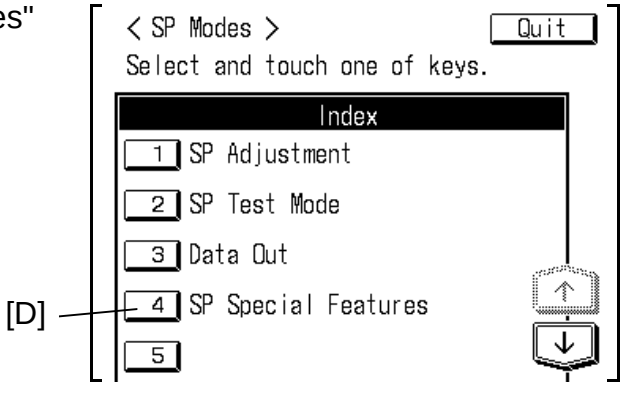


6. Remove the clip [A] and pull out the shaft [B]. Position the paper trailing edge stopper [C] according to the paper size.
7. Re-install the shaft [B] and the clip [A].
8. Enter SP mode as follows:

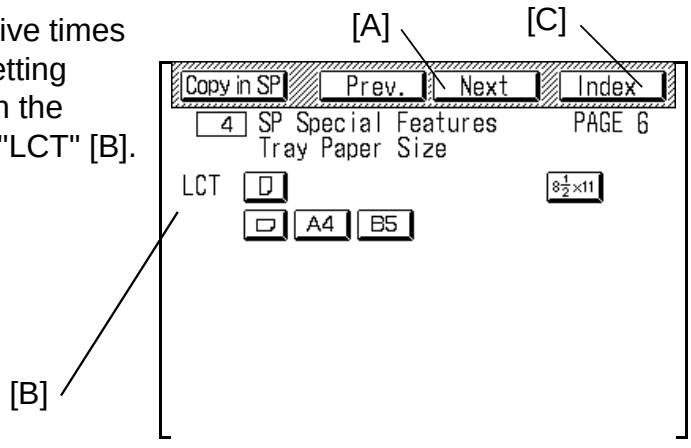
   1) Press the clear mode key.
   2) Enter "107".
   3) Touch the clear/stop key for more than 3 seconds.



9. Touch the "SP Special Features" key [D].

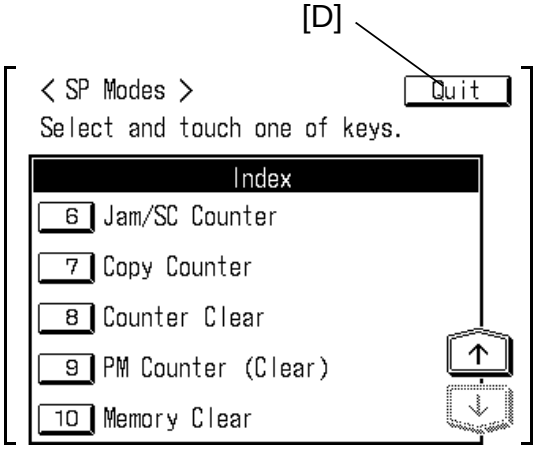


10. Touch the "Next" key [A] five times to select the paper size setting mode (page 6), then touch the appropriate paper size of "LCT" [B].



11. Touch the "Index" key [C].

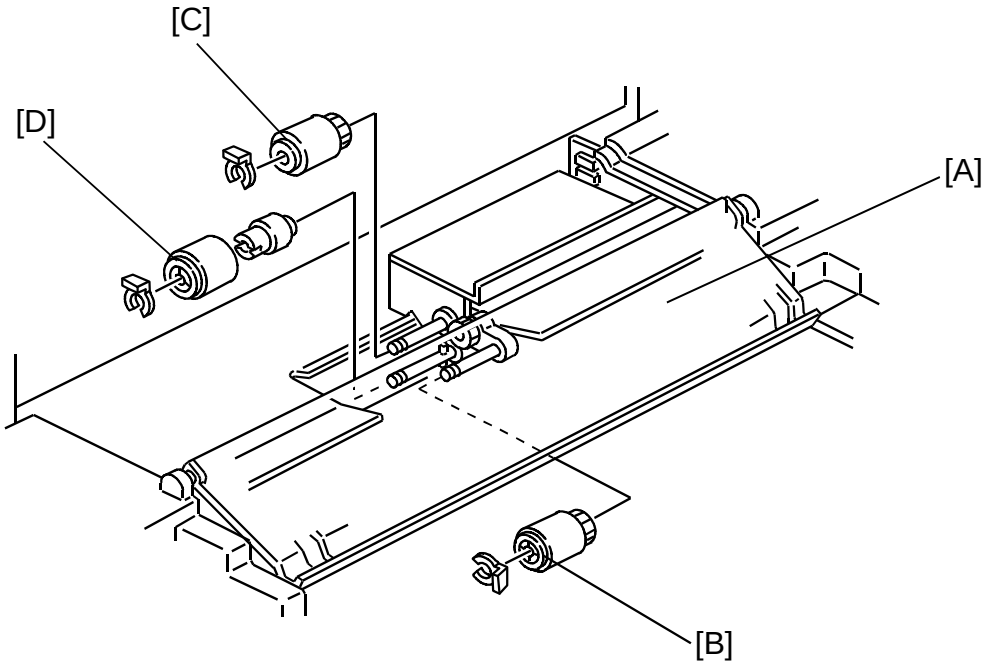
12. Touch the "Quit" key [D].



13. Check the copy quality and machine operation.

8. REPLACEMENTS AND ADJUSTMENTS

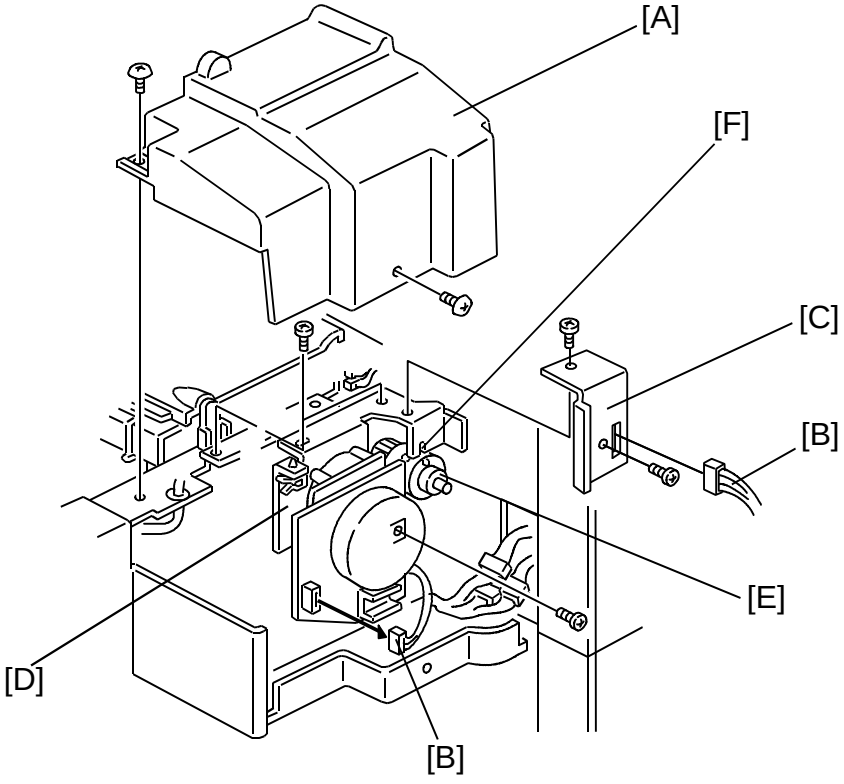
8.1 PAPER FEED ROLLERS REPLACEMENT



1. Open the top cover [A].
2. Remove the pick-up roller [B] (1 snap ring).
3. Remove the feed roller [C] (1 snap ring).
4. Remove the separation roller [D] (1 snap ring).

NOTE: Do not touch the surface of the rollers with oily hands.
The paper feed rollers used in the LCT are different from rollers used in the 1st ~ 3rd feed units in the paper tray unit.

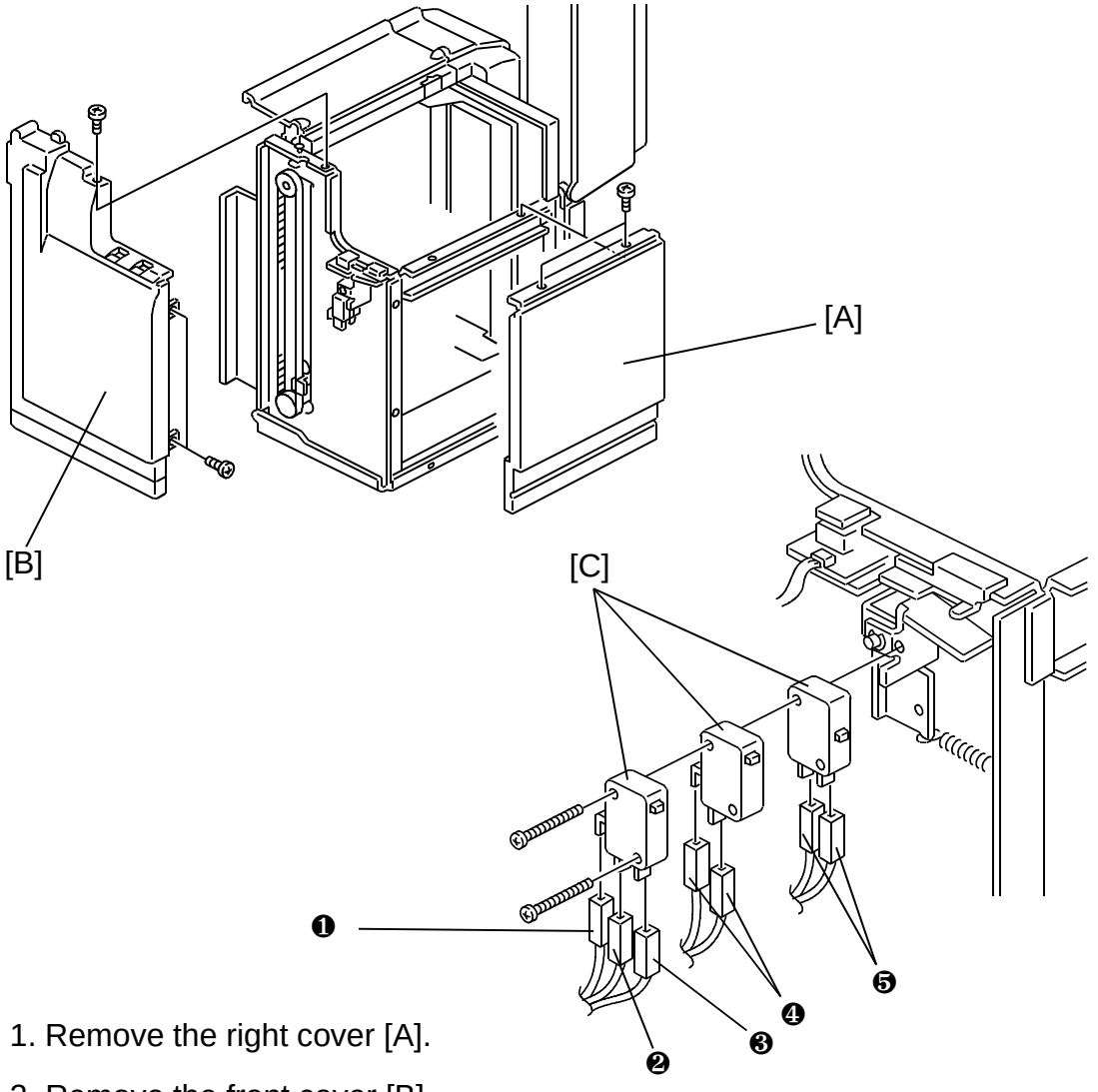
8.2 LCT FEED CLUTCH REMOVAL



1. Remove the rear upper cover [A] (2 screws).
2. Disconnect the two connectors [B].
3. Remove the harness bracket [C] (2 screws).
4. Remove the bracket [D] with the LCT feed motor (3 screws).
5. Replace the LCT feed clutch [E] (2 Allen screws).

NOTE: When installing the LCT feed clutch, set the stopper pin on the clutch in the cut-out [F] on the bracket.

8.3 UPPER COVER SWITCHES

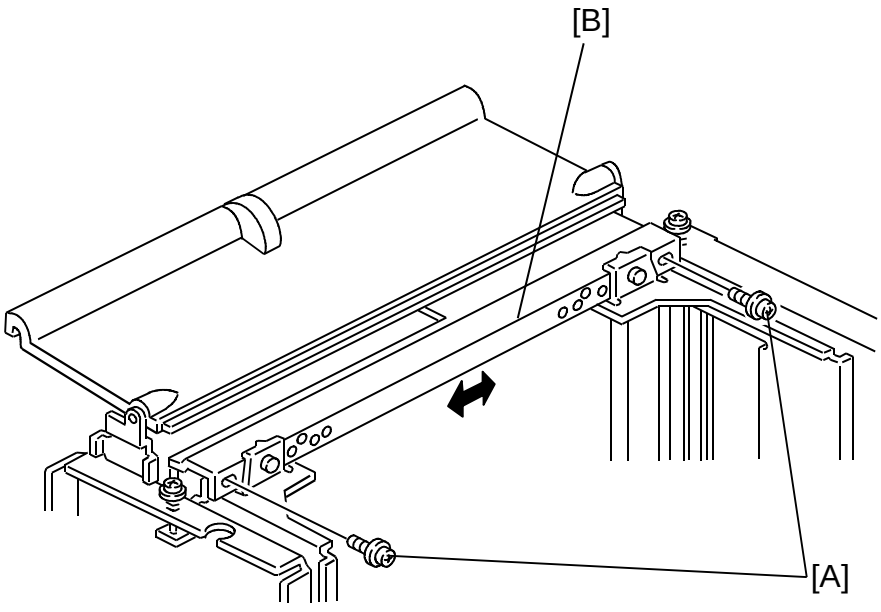


1. Remove the right cover [A].
2. Remove the front cover [B].
3. Remove the upper cover switches [C].

   NOTE: When installing the switches, set the connectors correctly.

   ❶ Yellow
   ❷ Blue
   ❸ Green
   ❹ Small white
   ❺ Large white

8.4 SIDE-TO-SIDE REGISTRATION ADJUSTMENT



- Rough Adjustment -

1. Loosen the two screws [A] fixing the stay [B].
2. Move the stay position to change the side-to-side paper position.

- Fine Adjustment -

1. Enter SP mode (refer to the service program access procedure) and access the side to side adjustment mode (1 SP Adjustment - PAGE 4).
2. Adjust side to side registration by changing the SP mode data.

   NOTE: Copies can be made in SP mode. Touch the "Copy in SP" key to select the paper feed station.

Adjustment standard: less than ±2 mm difference between the original and the copy.