

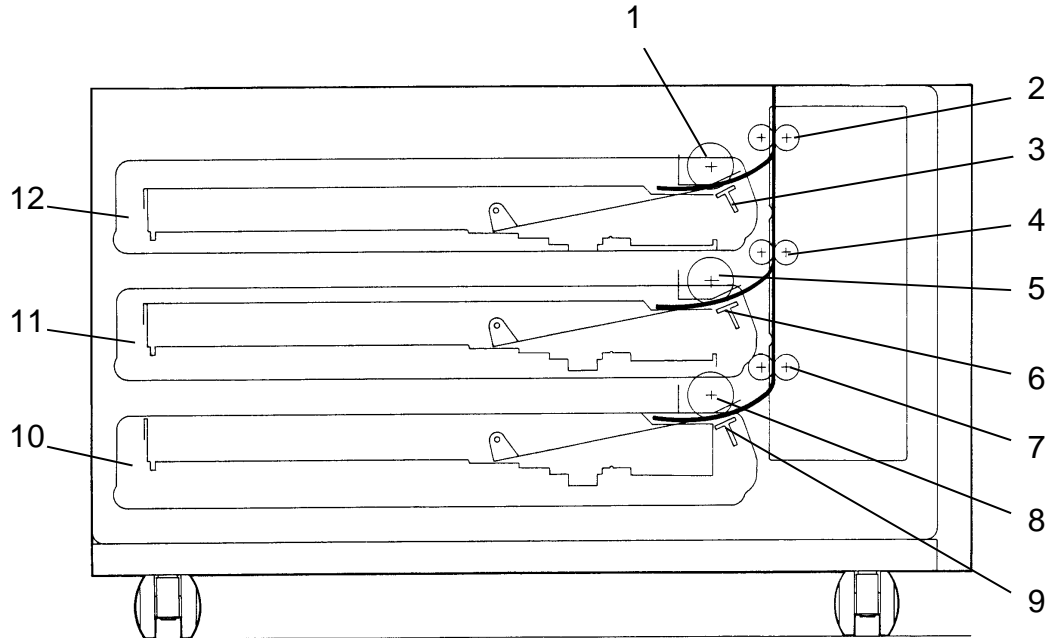
PAPER TRAY UNIT
(Machine Code: A325/A326)

1. SPECIFICATION

Configuration:	1 tray type table or 3 tray type table
Copy Paper Size:	Maximum A3/11"X17" Minimum B5/8 1/2"X11"
Copy Paper Weight:	52 - 128g/m ² , 14 - 34lb.
Copy Paper Capacity:	Approximately 250 sheets
Paper Feeding Speed:	[Main frame: A069/A073/A074 copier] 33 copies/minute (A4/8 1/2"X11" sideways) 19 copies/minute (A3) 18 copies/minute (11"X17")
Power source:	Dc 24V, 5V from the main frame
Drive Source:	Driven by the main frame through gear engagements
Power Consumption:	Maximum 20W Average 15W
Dimensions:	680mm/26.8"(width) X 430mm/16.9"(depth) X 600mm/23.6"(height)
Weight:	Less than 38kg/83.8lb. (1 tray type) Less than 45kg/99.2lb. (3 tray type)

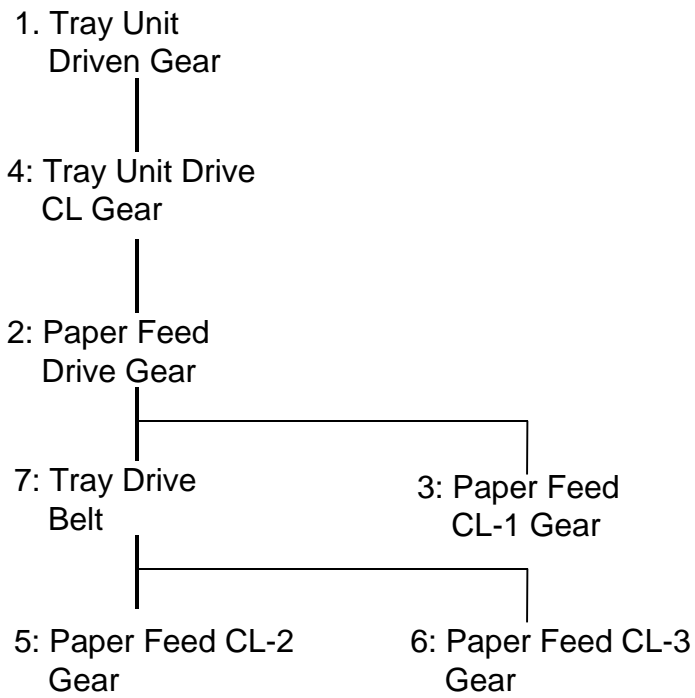
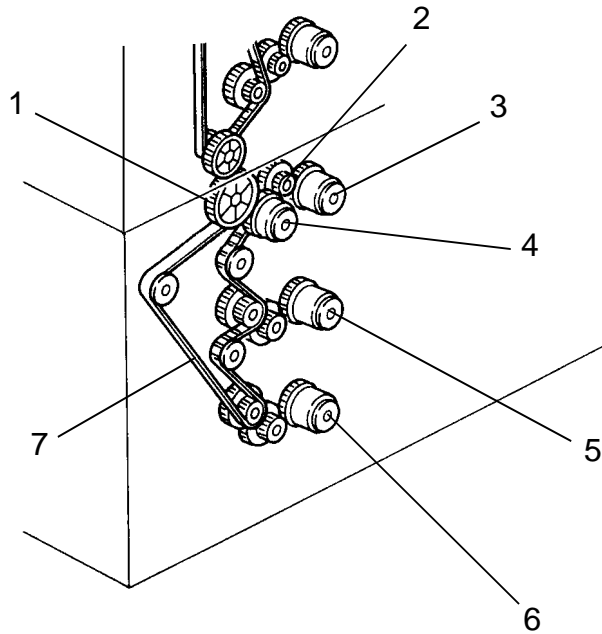
2. COMPONENT LAYOUT

2.1 MECHANICAL COMPONENT LAYOUT



- | | |
|-------------------------------------|-------------------------------------|
| 1. Paper Feed Roller (Paper Tray 1) | 7. Tray Relay Rollers -3 |
| 2. Tray Relay Rollers -1 | 8. Paper Feed Roller (Paper Tray 3) |
| 3. Friction Pad (Paper Tray 1) | 9. Friction Pad (Paper Tray 3) |
| 4. Tray Relay Rollers -2 | 10. Paper Tray -3 |
| 5. Paper Feed Roller (Paper Tray 2) | 11. Paper Tray -2 |
| 6. Friction Pad (Paper Tray 2) | 12. Paper Tray -1 |

2.2 DRIVE LAYOUT



Paper Tray
Unit

2.3 ELECTRICAL COMPONENT DESCRIPTION

Refer to the electrical component layout on the reverse side of the Point to Point (water proof paper) for symbols and index numbers.

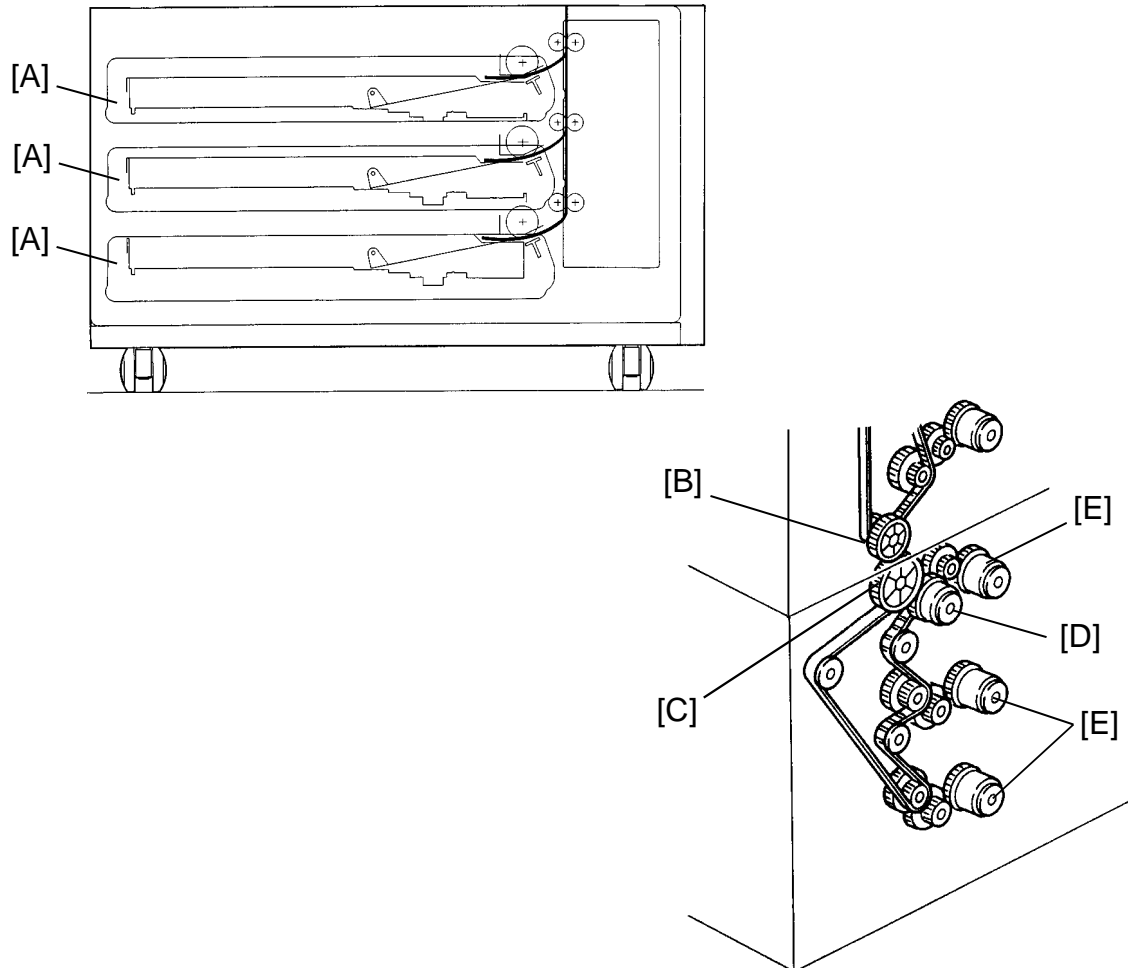
Symbol	Name	Function	Index No.
Motors			
M1	Tray lift - 1	Raises the bottom plate in paper tray - 1.	8
M2	Tray lift - 2	Raises the bottom plate in paper tray - 2.	30
M3	Tray lift - 3	Raises the bottom plate in paper tray - 3.	28
Circuit board			
PCB1	Tray control	Controls the paper tray functions according to the signal from the copier main board.	17
Switches			
SW1	Tray 1 : Paper size - 1	Determines what size paper is in the paper tray - 1.	1
SW2	Tray 1 : Paper size - 2	Determines what size paper is in the paper tray - 1.	3
SW3	Tray 1 : Paper size - 3	Determines what size paper is in the paper tray - 1.	6
SW4	Tray 1 : Paper size - 4	Determines what size paper is in the paper tray - 1.	9
SW5	Tray 2 : Paper size - 1	Determines what size paper is in the paper tray - 2.	38
SW6	Tray 2 : Paper size - 2	Determines what size paper is in the paper tray - 2.	4
SW7	Tray 2 : Paper size - 3	Determines what size paper is in the paper tray - 2.	7
SW8	Tray 2 : Paper size - 4	Determines what size paper is in the paper tray - 2.	11
SW9	Tray 3 : Paper size - 1	Determines what size paper is in the paper tray - 3.	2

Symbol	Name	Function	Index No.
SW10	Tray 3 : Paper size - 2	Determines what size paper is in paper tray - 3.	5
SW11	Tray 3 : Paper size - 3	Determines what size paper is in paper tray - 3.	31
SW12	Tray 3 : Paper size - 4	Determines what size paper is in paper tray - 3.	27
SW13	Tray unit door – 1	Detects if the tray unit door is open or not.	32
SW14	Tray unit door – 2	Cuts the dc 24 V line for the tray unit drive clutch when the tray unit door is open.	34
Magnetic clutches			
MC1	Paper feed - 1	Starts paper feed from paper tray 1.	14
MC2	Paper feed - 2	Starts paper feed from paper tray 2.	16
MC3	Paper feed - 3	Starts paper feed from paper tray 3.	18
MC4	Tray unit drive	Drives the rollers in the paper tray.	13
Solenoids			
SOL1	Tray lock - 1	Locks paper tray 1 in the paper tray unit.	40
SOL2	Tray lock - 2	Locks paper tray 2 in the paper tray unit.	39
SOL3	Tray lock - 3	Locks paper tray 3 in the paper tray unit.	37
Sensors			
S1	Tray set - 1	Detects if paper tray 1 is set or not.	15
S2	Tray set - 2	Detects if paper tray 2 is set or not.	21
S3	Tray set - 3	Detects if paper tray 3 is set or not.	22
S4	Tray upper limit - 1	Detects the upper position of the paper stack in paper tray 1 to stop tray lift motor 1.	10
S5	Tray upper limit - 2	Detects the upper position of paper stack in the paper tray 2 to stop tray lift motor 2.	29


 A black rectangular label with the text "Paper Tray Unit" written vertically in white.

Symbol	Name	Function	Index No.
S6	Tray upper limit - 3	Detects the upper position of the paper stack in paper tray 3 to stop tray lift motor 3.	26
S7	Paper end - 1	Informs the copier CPU when paper tray 1 runs out of paper.	12
S8	Paper end - 2	Informs the copier CPU when paper tray 2 runs out of paper.	19
S9	Paper end - 3	Informs the copier CPU when paper tray 3 runs out of paper.	20
S10	Tray relay - 1	Detects the lead edge of paper from paper tray 1 to determine the stop timing of paper feed clutch 1 and detects misfeeds.	25
S11	Tray relay - 2	Detects the lead edge of paper from paper tray 2 to determine the stop timing of paper feed clutch 2 and detects misfeeds.	24
S12	Tray relay - 3	Detects the lead edge of paper from the paper tray 3 to determine the stop timing of paper feed clutch 1 and detects misfeeds.	23
Heaters			
H1	Tray - 1 (option)	Turns on when the main switch is off to keep paper dry in paper tray 1.	36
H2	Tray - 2 (option)	Turns on when the main switch is off to keep paper dry in paper tray 2.	35
H3	Tray - 3 (option)	Turns on when the main switch is off to keep paper dry in paper tray 3.	33

3. OVERVIEW



There are two types of paper tray unit: one tray and three tray types. Each paper tray [A] is a drawer type and their function and mechanism are exactly the same as those of the main frame.

All the electrical components of the paper tray are controlled by the copier main control board through the tray control board.

All the tray rollers are driven by the main frame via the tray unit drive and driven gears [B,C]. When the tray unit drive clutch [D] is energized, the drive is transmitted to the paper tray unit and the relay rollers start rotating. When the paper feed clutch [E] for the selected paper tray is energized, paper is fed from the paper tray to the main frame through the relay rollers.

Paper Tray
Unit

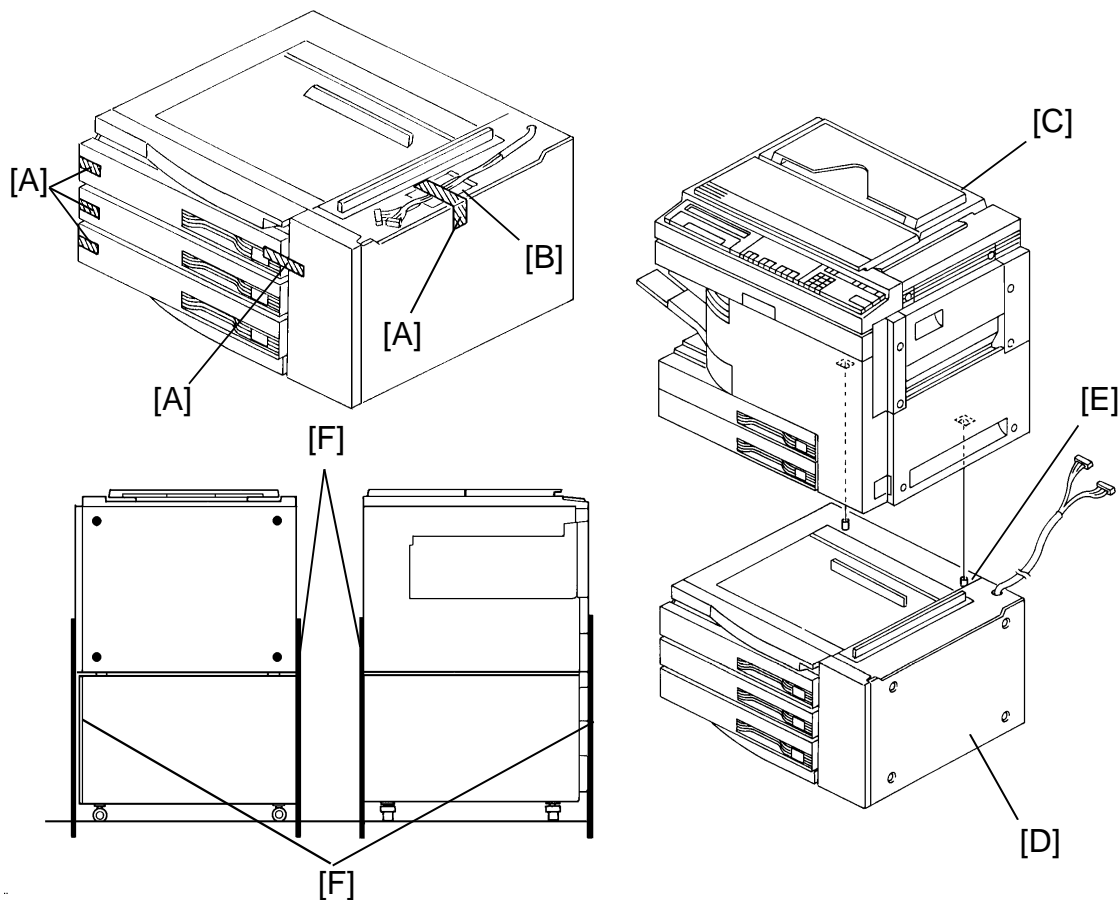
4. INSTALLATION

4.1 ACCESSORY CHECK

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

1. Harness Bracket	1
2. Harness Clamp	1
3. Philips Pan Head Screw –M4 x 8	2
4. Screw –M4 x 8.....	2
5. Shoulder Screw –M3	1
6. Shoulder Screw –M4	1
7. Rubber Ring	1
8. Tray Decals	1
9. New Equipment Condition Report (–17, –27 machines only)	1
10. Envelope for N.E.C.R. (–17 machine only)	1
11. Installation Procedure	1

4.2 INSTALLATION PROCEDURE



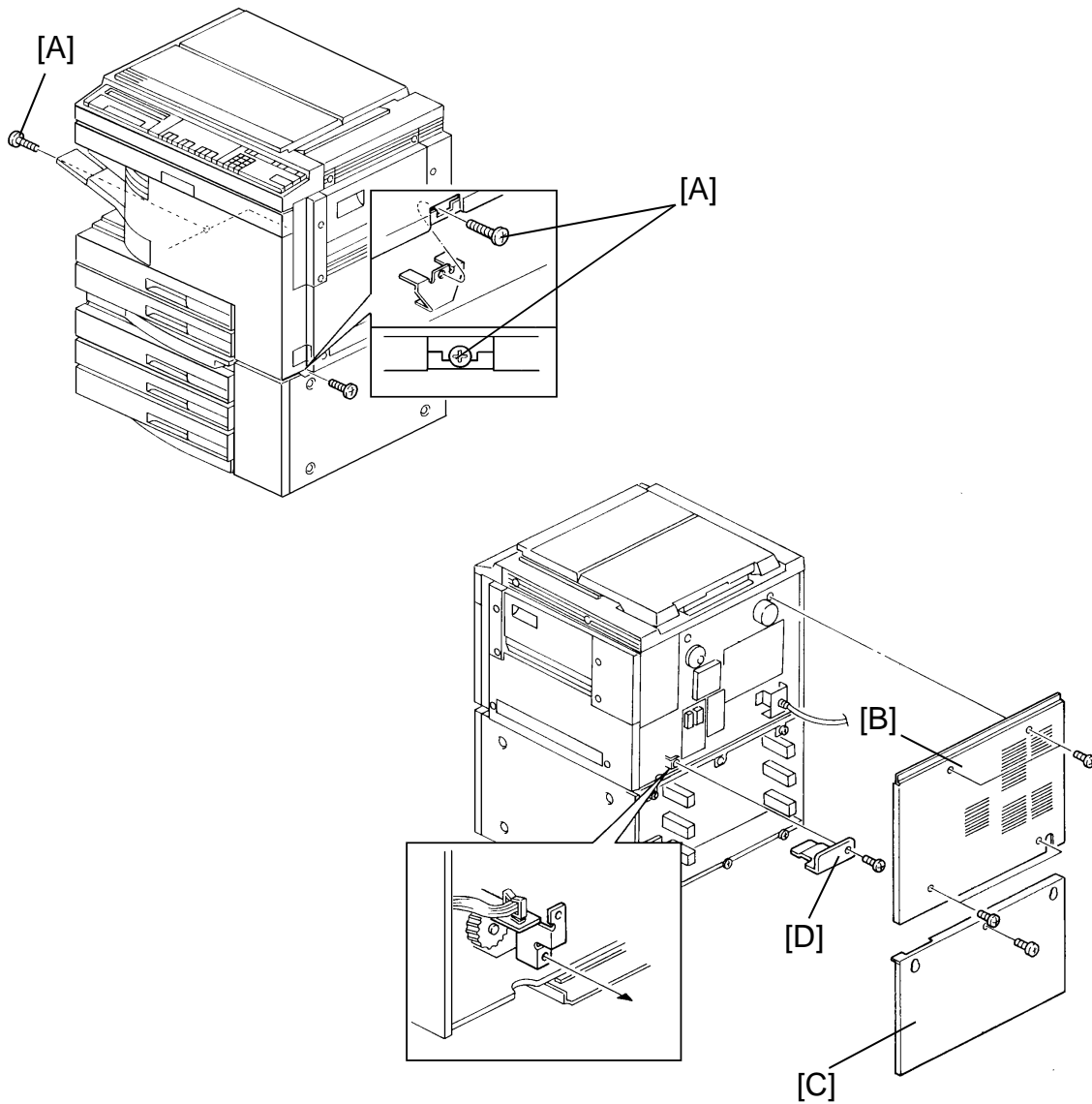
CAUTION: Unplug the copier power cord before starting the following procedure.

NOTE: Keep the shipping retainers after installing the machine. They will be reused if in the future the machine is transported to another location.

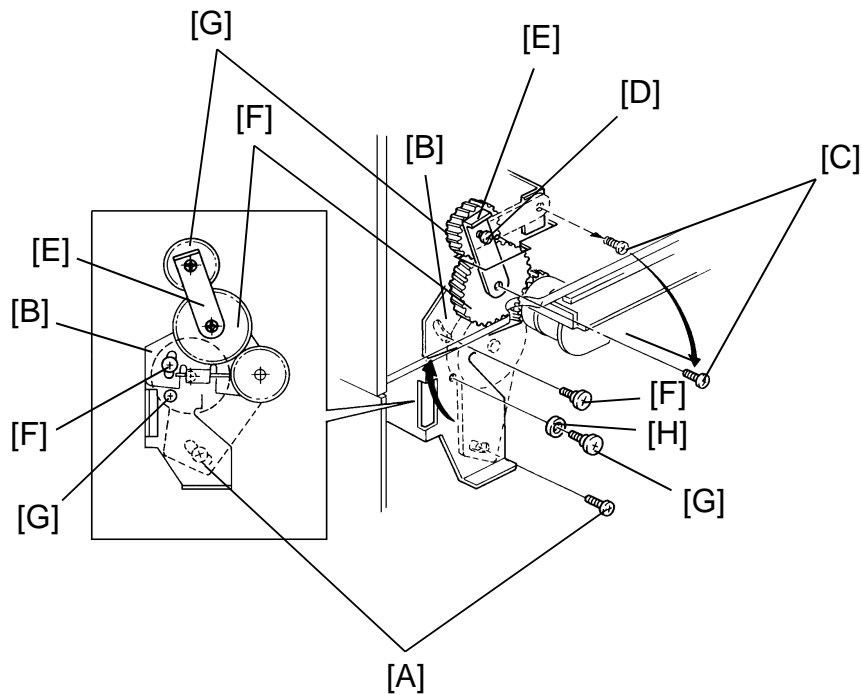
Proper reinstallation of the shipping retainers is required in order to avoid any transport damage.

1. Remove the strips of tape [A]. (3 tray type: 4 strips, 1 tray type: 2 strips).
2. Remove the accessory bag [B] (1 tape).
3. Pull out the paper tray and remove a strip of tape and the foam block. Do this for all the paper trays.
4. Set the copier [C] onto the paper tray unit [D]. Align the 2 pins [E] of the paper tray unit with the holes in the base plate of the copier. At this time each side of the copier and paper tray unit will align with one another [F].

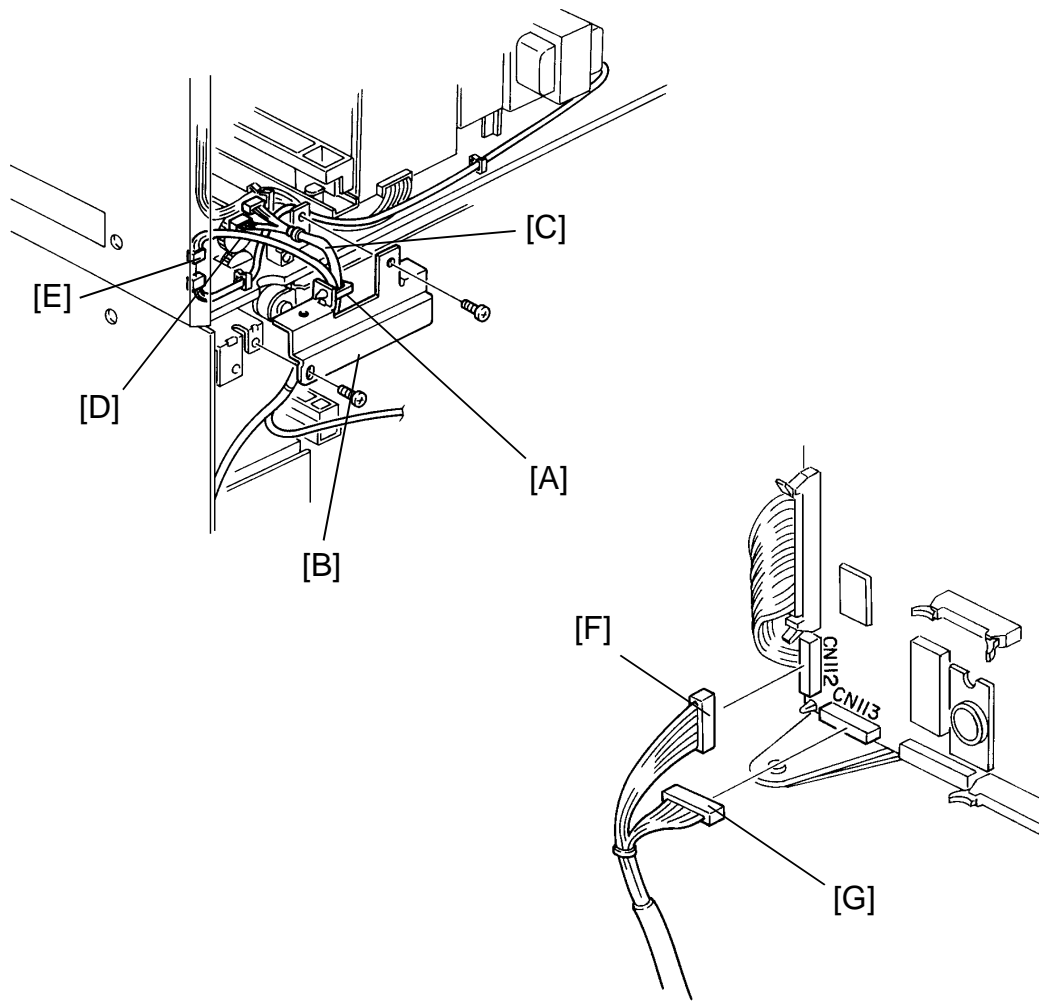
Paper Tray
Unit



5. Fix the copier on the paper tray unit with 2 screws [A].
6. Remove the copier rear cover [B] (Remove 2 screws and loosen 2 screws) and paper tray unit rear cover [C] (remove 1 screw and loosen 2 screws).
7. Remove the shield plate [D] (1 screw) from the copier harness bracket.



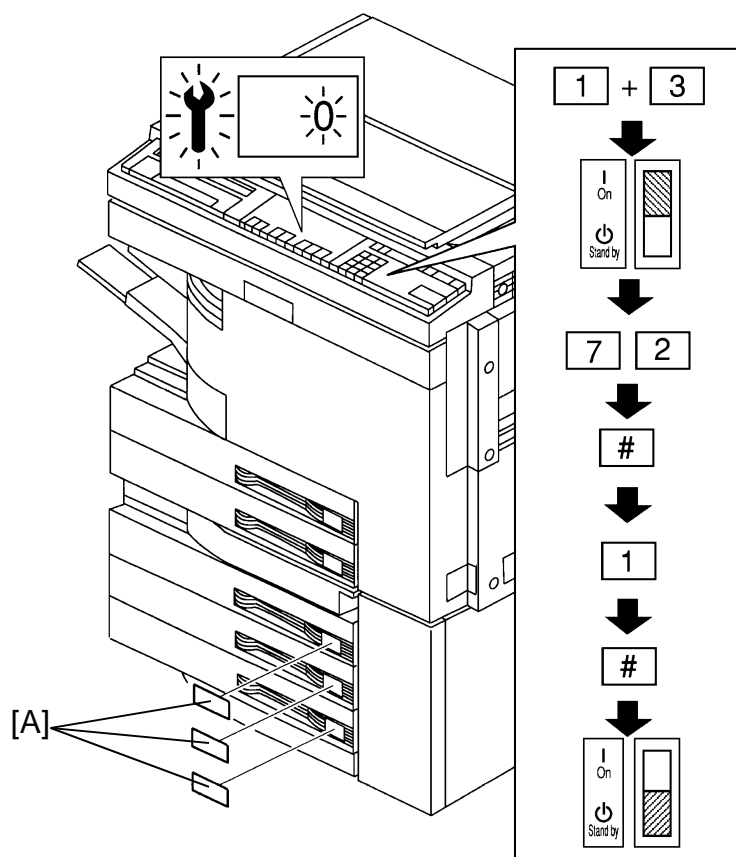
8. Remove the screw [A] for the connecting gear bracket [B].
9. Remove one screw [C] and loosen another screw [D] to let the gear fixing bracket [E] rotate down.
10. Engage the paper tray driven gear [F] with the paper tray drive gear [G] by raising the connecting gear bracket.
11. Secure the gear fixing bracket with the screws [C] and [D] on the shafts of the paper tray drive gear and the paper tray driven gear.
12. Fix the connecting gear bracket (1 shoulder screw –M3 [F] and 1 shoulder screw –M4 [G] with rubber ring [H]).



13. Set the wire saddle [A] on the harness bracket [B] and position the paper tray harness [C] and the tray heater harness [D] in the wire saddle.
14. Install the harness bracket [B] as shown (2 screws).

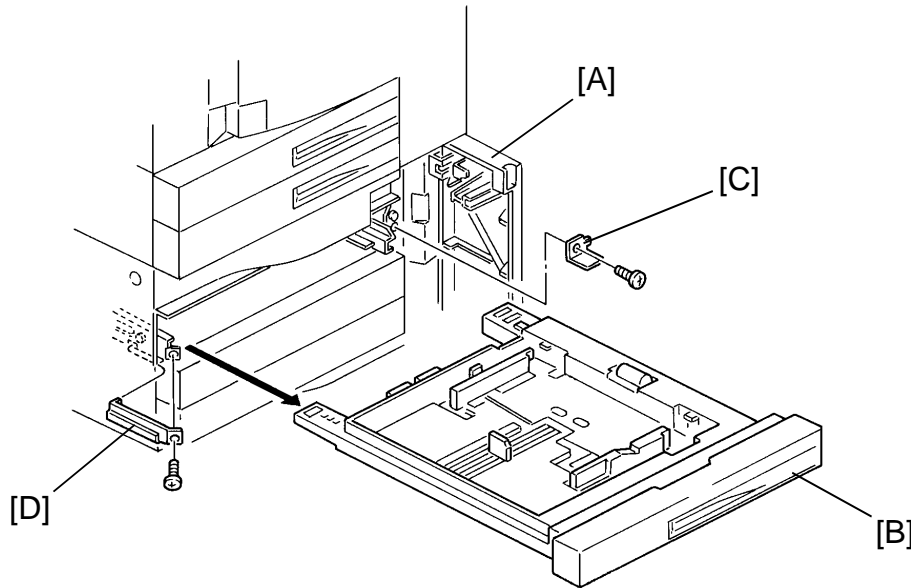
NOTE: Make sure that the screws are firmly secured so that the protective earth between the copier and the paper tray unit is maintained.
15. Couple the connector [E] of the tray heater harness with the copier and couple the connectors of the paper tray harness with the following connectors of the copier main control board:

11p connector [F]	CN112
8p connector [G]	CN113
16. Follow the copier installation procedure.



17. Reinstall all the covers.
18. While pressing both "1" and "3" on the operation panel number keys, turn on the main switch in order to access the SP mode.
NOTE: Release the number keys after confirming that the call service indicator and the copy counter number "0" are blinking.
19. Enter "72" using the number keys and then press the enter key.
20. Enter "1" using the number keys and then press the enter key.
21. Turn off the main switch.
22. Stick the tray decals [A] on the appropriate paper trays.
23. Turn on the main switch and check the machine operation and copy quality.

TRAY HEATER INSTALLATION (OPTION)



NOTE: The optional tray heaters keep copy paper dry. In humid environments, copy paper may crease as it comes out of the fusing unit. The heaters are available as service parts.

Required parts:

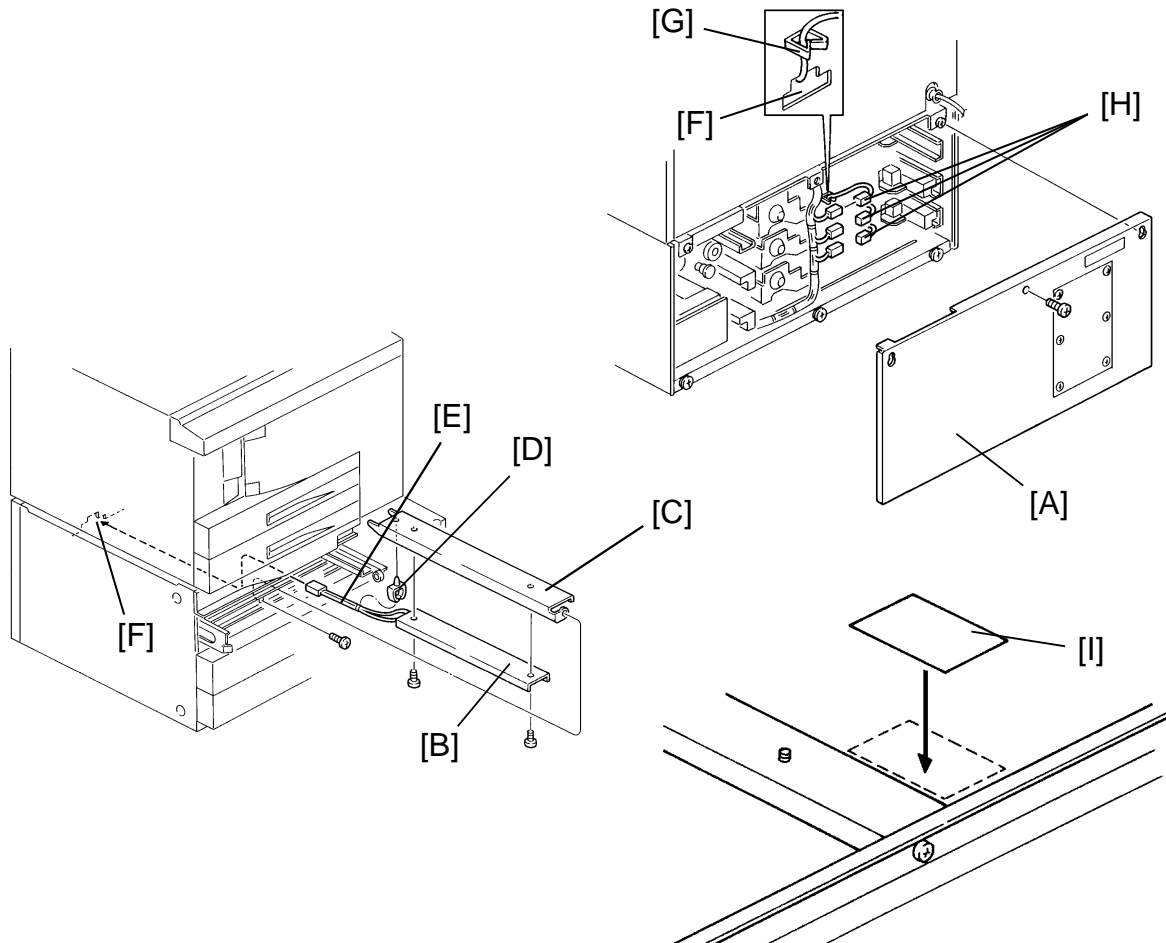
Part Number	Description	3-Tray Type	1-Tray Type
A0699500	Tray Heater Kit -115V	3 sets	1 set
A0699501	Tray Heater Kit -230V	3 sets	1 set

The contents of the kits are as follows:

Tray heater	1 piece
Tray heater bracket	1 piece
Wire saddle	1 piece
Philips pan head screw	3 pieces
Decal: High Temp.	1 piece

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

1. Open the paper tray front door [A].
2. Pull out the paper tray [B] and remove the tray stopper brackets [C], [D] on both sides as shown (1 screw each) and then remove the paper tray from the paper tray unit (3 paper trays for 3 tray type).



3. Remove the paper tray unit rear cover [A] (remove 1 screw and loosen 2 screws).

NOTE: Repeat steps 4 to 6 three times for the 3-tray type.

4. Fix the tray heater [B] on the tray heater bracket [C] (2 screws), and set the wire saddle [D] and the heater harness [E] on the bracket as shown.
5. Pass the heater harness through the heater access hole [F] and the wire saddle [G] and install the tray heater assembly as shown (1 screw at the front).
6. Connect the heater connector [H] with the paper tray unit as shown (2P red).
7. Stick the warning: High temp. decal [I] on the plate, to the right of the tray heater bracket as shown.
8. Reassemble the paper tray unit.
9. Tell the customer that the copier main switch should be turned off and the power cord should not be unplugged at night. Otherwise, the tray heaters will not function.

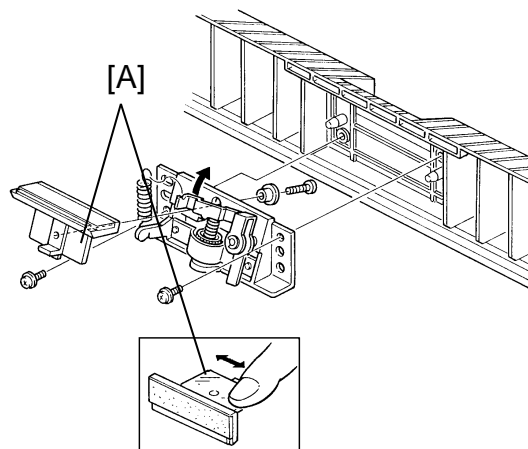
5. SERVICE TABLE

5.1 SERVICE REMARKS

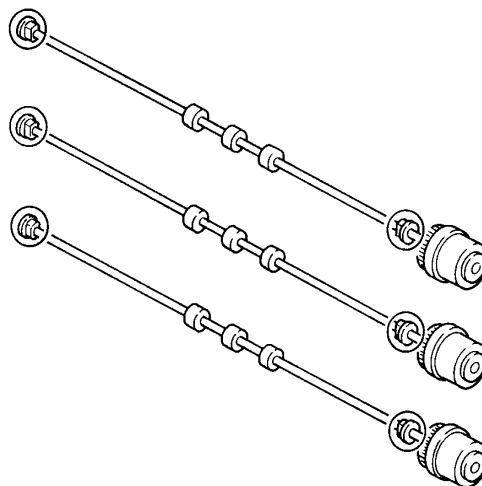
1. Do not touch the pick-up, feed, separation rollers and the friction pads with oily bare hands.
2. The side fences and the rear fence of the paper trays should be positioned correctly to align with the actual paper size. Otherwise, paper misfeeds may occur.
3. The friction pad should be replaced together with the friction pad holder and pad entrance seal as an assembly.
4. The friction pad assembly and the paper feed roller should be replaced as a set to maintain paper feed ability. (A worn out feed roller will provide incorrect friction pad pressure.)
5. The friction pad holder mounting bracket must be reinstalled on the original paper tray. Because the friction pad pressure is adjusted for each paper feed station independently at the factory.
6. The paper tray with the friction pad mechanism must be reinstalled at the original paper feeding station.
7. The friction pad pressure should not be adjusted in the field.

5.2 PM TABLE

PAPER TRAY UNIT (A325/A326)					
	EM	80K	160K	240K	NOTE
Paper Feed Roller	C	R	R	R	Water, Replace with friction pad ass'y as a set.
Friction Pad Ass'y	C	R/L	R/L	R/L	Water/Albania 2 grease Refer to NOTE 1
Paper Tray Bottom Plate Pad		R	R	R	Water
Drive Belt		I	I	I	Replace if necessary
Bushings			L		Spindle oil Refer to NOTE 2



NOTE 1: Friction Pad Assembly
 Replace the friction pad assembly [A] every 80k. Then, lubricate the pad holder with ALBAMIA 2 grease as shown.

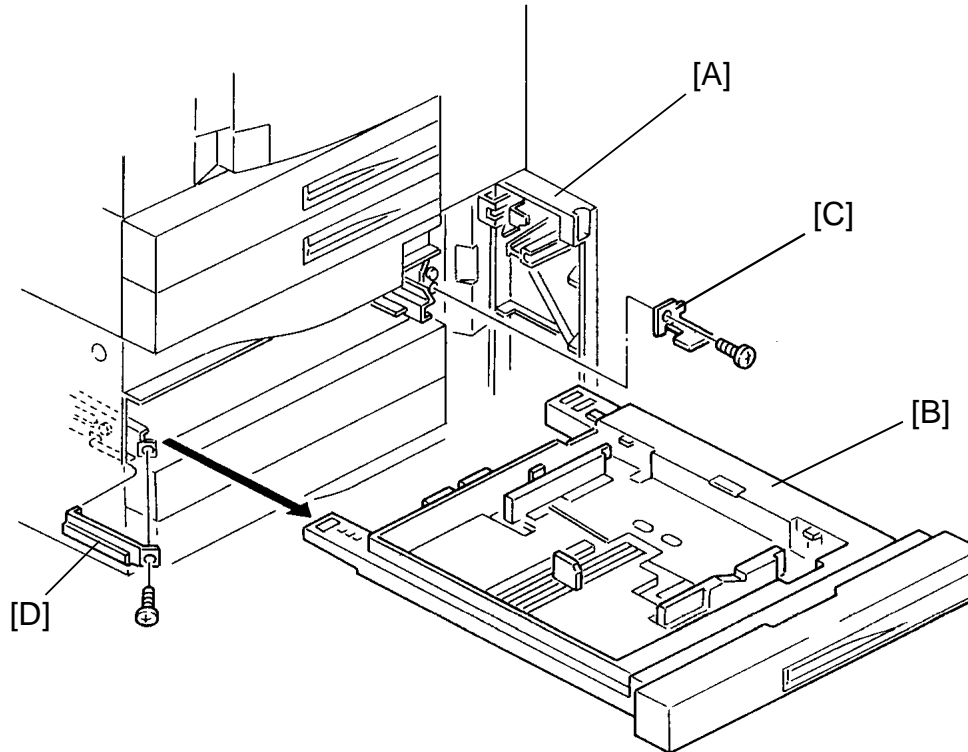


NOTE 2: Relay Rollers and Tray Paper Feed

Paper Tray Unit

6. REPLACEMENT AND ADJUSTMENT

6.1 PAPER TRAY REMOVAL



1. Open the paper tray unit door [A].
2. Pull out the paper tray [B] and remove the tray stopper brackets [C, D] on both sides as shown (1 screw each) and then remove the paper tray from the paper tray unit.

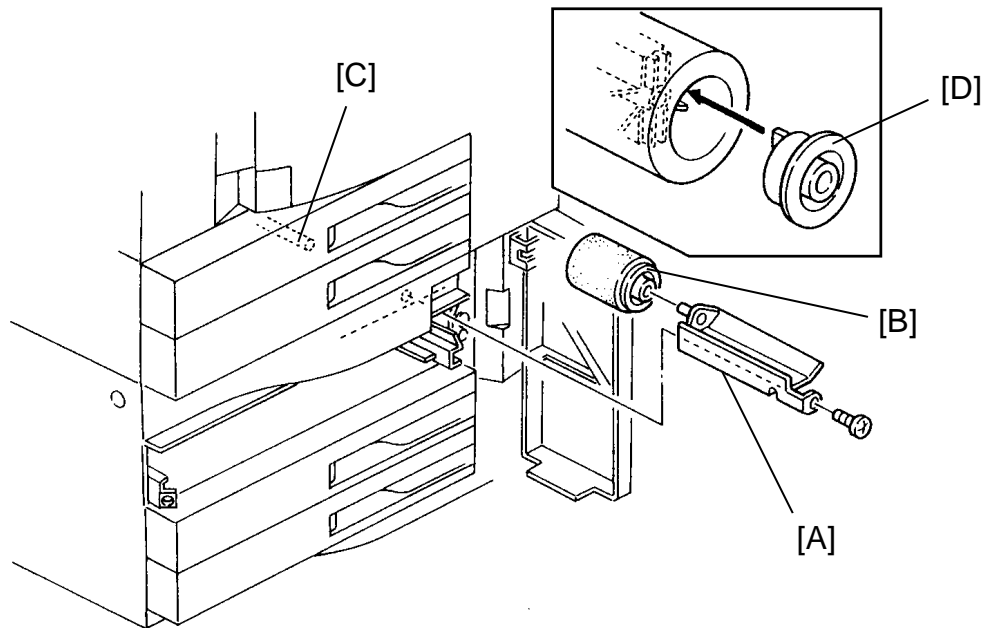
NOTE: When removing several paper trays at a time, make sure that the paper tray is returned to the original feeding station. To identify the original feeding station, each paper tray has its own decal on the right side.

C: Paper Tray Unit - Tray 1
D: Paper Tray Unit - Tray 2
E: Paper Tray Unit - Tray 3

6.2 PAPER FEED ROLLER REPLACEMENT

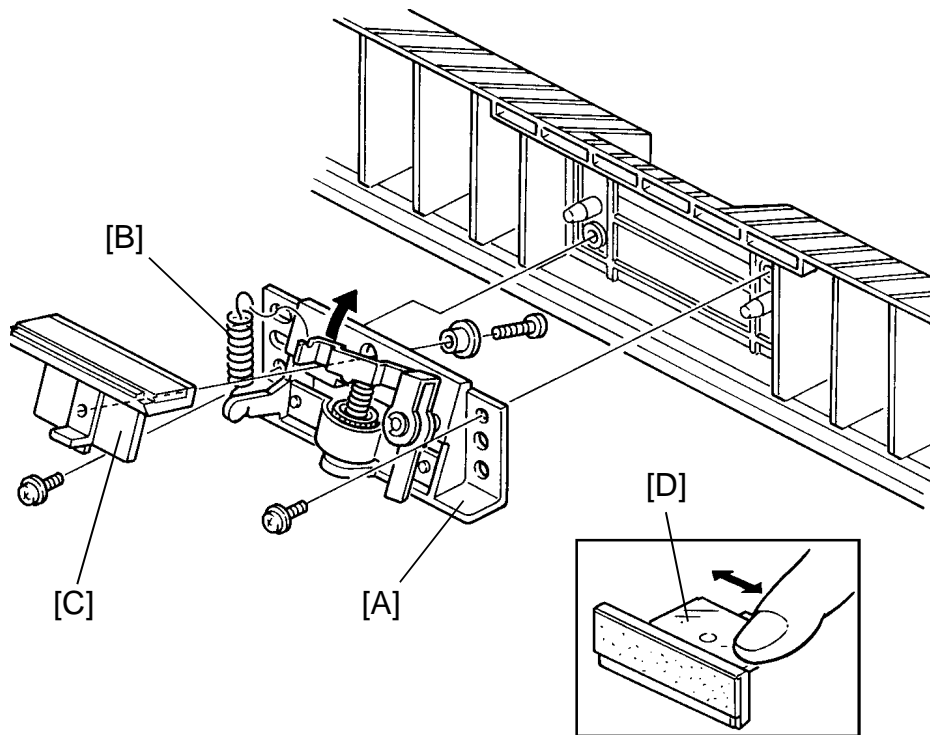
NOTE: Replace the paper feed roller and the friction pad assembly as a set to maintain paper feeding ability.

(1) Feed Roller Replacement



1. Remove the paper tray (see Paper Tray Removal).
2. Remove the feed roller guide [A] (1 screw).
3. Remove the feed roller assembly [B] from the shaft [C].
4. Replace the feed roller hub [D] from the old to the new feed roller.

- NOTE:** When replacing the feed roller hub, make sure that the projections of the hub engage with the grooves of the feed roller.
5. Reassemble the copier.

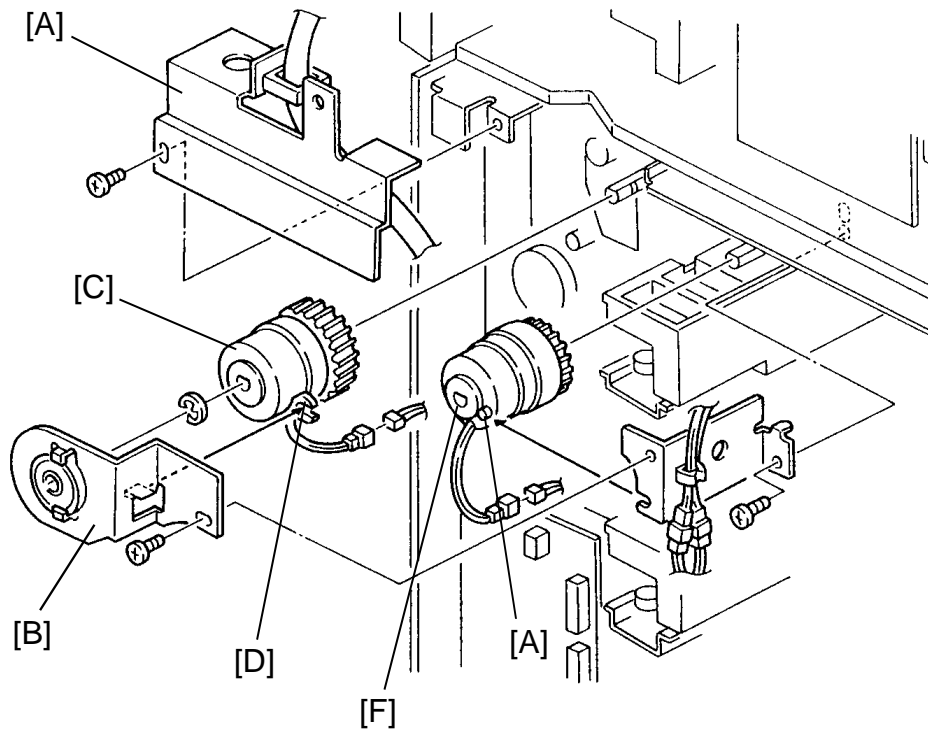
(2) Friction Pad Replacement


1. Pull out the paper tray.
2. Remove the friction pad holder mounting bracket [A] from the paper tray (2 screws with washer).
3. Unhook the spring [B] from the pressure release lever.
4. Remove the friction pad assembly [C] from the mounting bracket (1 screw and 1 swivel bushing).
5. Lubricate the sliding surface [D] of the new friction pad assembly slightly with the grease "Albania 2".
6. Install the new friction pad assembly on the mounting bracket and reassemble the paper tray.

NOTE: If the friction pad assembly is replaced for several paper trays at a time, make sure that the friction pad holder mounting bracket is placed back to the original paper tray.

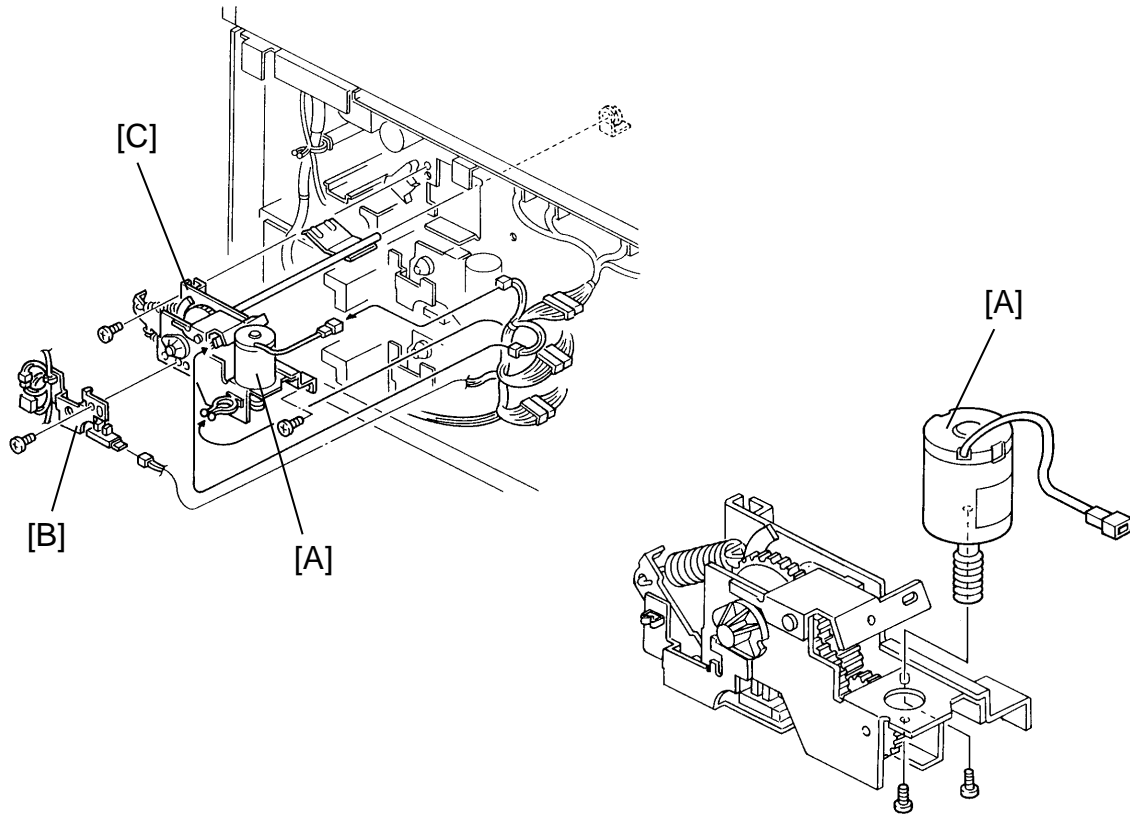
To identify the original position, the mounting bracket and the paper tray have the identical decals such as "C", "D", "E".

6.3 TRAY UNIT DRIVE AND PAPER FEED CLUTCH REPLACEMENT



1. Remove the copier and tray unit rear covers. 
2. Remove the harness bracket [A] (2 screws).
NOTE: When reinstalling the bracket, make sure that the screws are firmly secured so that the protective earth between the copier and the paper tray unit is maintained.
3. Remove the bearing holder bracket [B] (1 screw).
4. Remove the tray unit drive clutch [C] (1 E-ring and 1 connector).
NOTE: When reinstalling the clutch, make sure that the clutch stopper groove [D] engages with the stopper.
5. Remove the stopper bracket [E] (1 screw).
6. Remove the paper feed clutch [F] (1 connector and 1 wire saddle).
NOTE: When reinstalling the clutch, make sure that the clutch stopper pin [G] engages with the groove of the stopper bracket.

6.4 TRAY LIFT MOTOR REPLACEMENT



1. Remove the tray rear cover (remove 1 screw and loosen 2 screws).

= 1 tray type =

2. Remove the tray lift motor [A] (2 screws and 1 connector).

= 3 tray type =

3. Remove the paper tray from the paper tray unit (see paper tray removal).

4. Remove the tray set sensor bracket [B] (1 screw and 1 connector).

5. Pull out the paper lift motor assembly [C] from the paper tray unit (2 screws, 2 connectors, and 1 wire clamp).

6. Remove the tray lift motor [A] (2 screws).

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