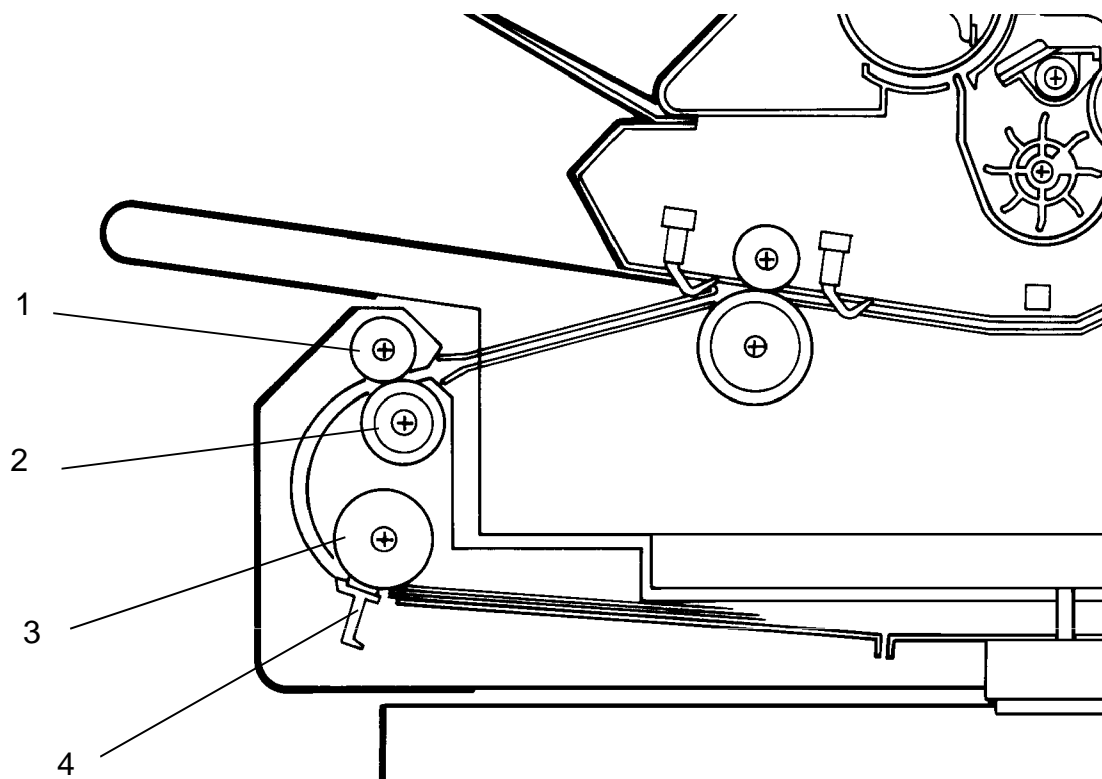


1. SPECIFICATIONS

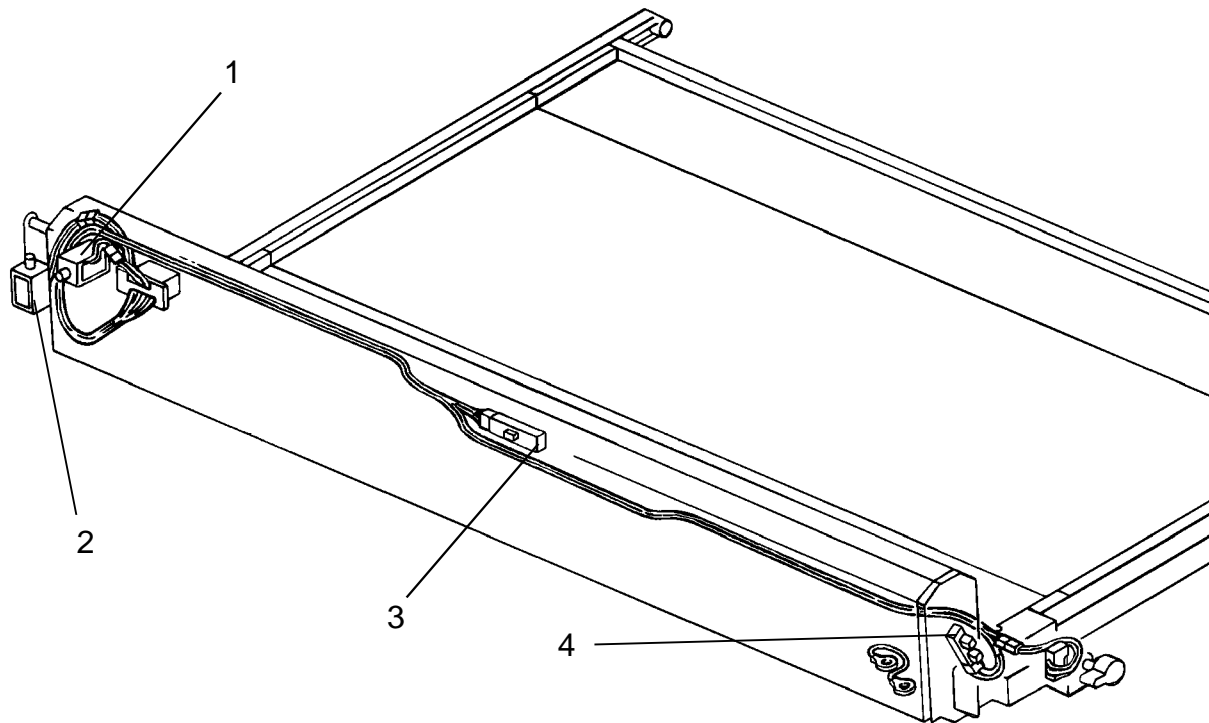
- | | |
|-------------------------------|--|
| 1. Copy Paper Size: | Maximum: A1, D sideways
Minimum: A4, A (8 1/2 x 11 in) lengthwise |
| 2. Tray Capacity: | 100 sheets (Bond Paper) |
| 3. Power Source: | + 24 volts and + 5 volts from the copier |
| 4. Dimensions
(H x W x D): | 144 x 1,180 x 772 mm
5.7 x 46.5 x 30.4 in |
| 5. Weight: | 25 kg, 55 lb |

1.1 MECHANICAL COMPONENT LAYOUT



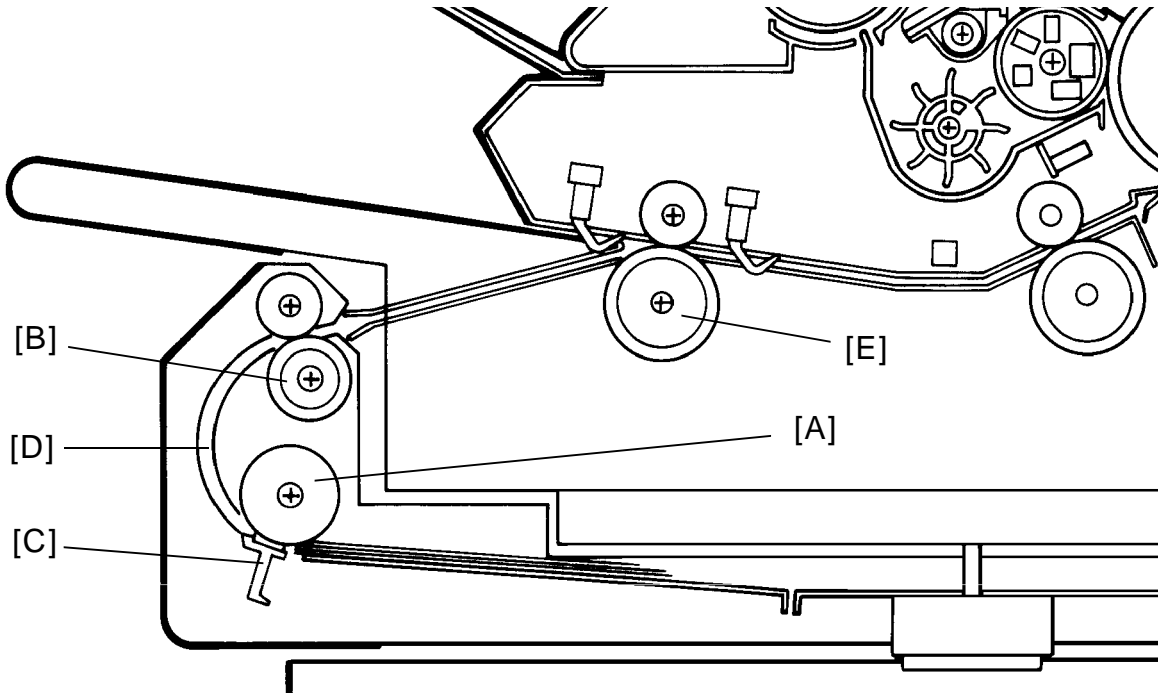
- 1. Upper Relay Roller
- 2. Lower Relay Roller
- 3. Paper Feed Roller
- 4. Friction Pad

1.2 ELECTRICAL COMPONENT LAYOUT/DESCRIPTIONS



SYMBOL	NAME	FUNCTION	LOCATION
Solenoids			
SOL10	Auto Feeder Solenoid 1	Turns the paper feed roller of the auto sheet feeder.	1
SOL11	Auto Feeder Solenoid 2	Turns the relay rollers of the auto sheet feeder.	2
Sensors and Detectors			
S18	Auto Sheet Feeder Sensor	Detects misfeeds in the auto sheet feeder.	3
S19	Paper End Detector	Detects when the auto sheet feeder runs out of paper.	4

2. BASIC OPERATION



Auto Feeder operation begins when an original is inserted into the original entrance. At this time, the paper feed roller [A] and the relay rollers [B] start turning. The paper feed roller feeds the top sheet of paper past the friction pad [C] to the turn guides [D]. The relay rollers then feed the paper to the manual feed rollers [E]. From that point onwards paper feed continues in the same way as manual feed.

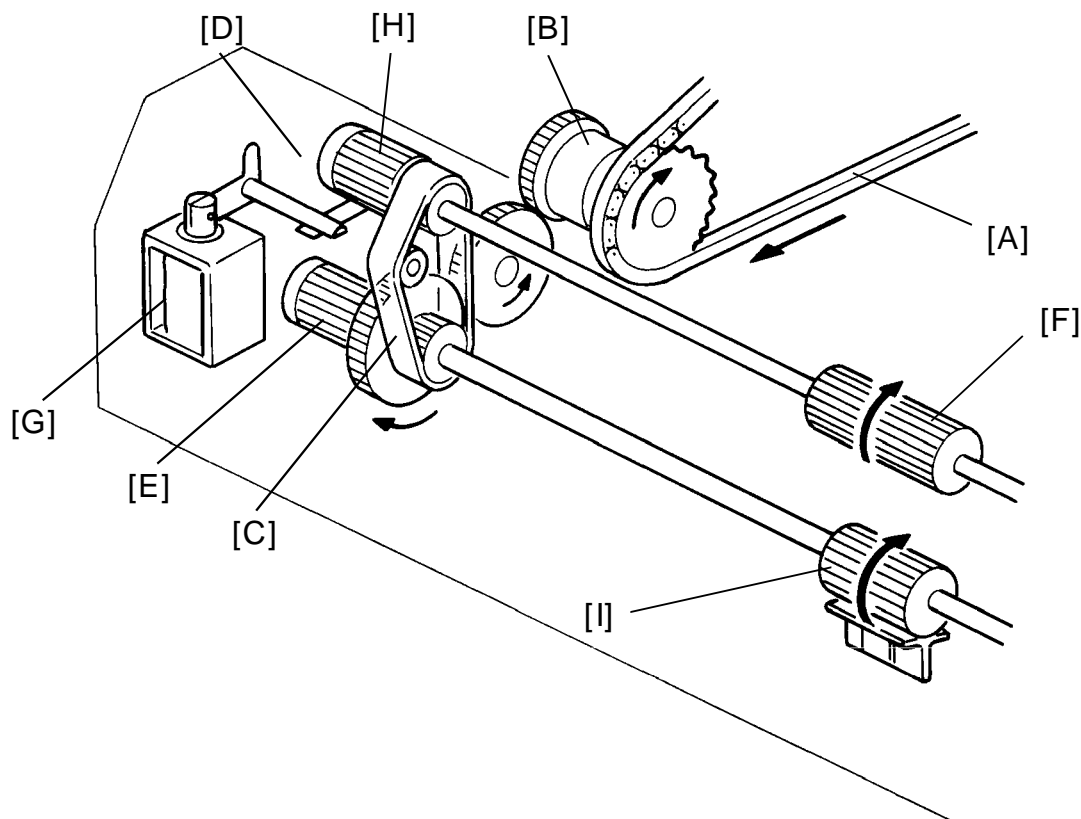
This model uses the friction pad method for paper feeding. The pressure of the friction pad must be more stronger for translucent paper than for bond paper.

The friction lever can be used to change the pressure of the friction pad. There are three settings.

<u>Position</u>	<u>Pressure</u>	<u>Kind of Paper</u>
1	standard	Bond Paper
2	stronger	Translucent Paper (A3, A4)
3	strongest	Translucent Paper (A1, A2)

NOTE: When position 3 is selected, the copy paper feeding speed becomes slower and paper/original registration will not function properly. To correct for this, the CPU delays original feed, and as a result, the copying speed becomes half (1/2) of standard speed.

2.1 DRIVE MECHANISM



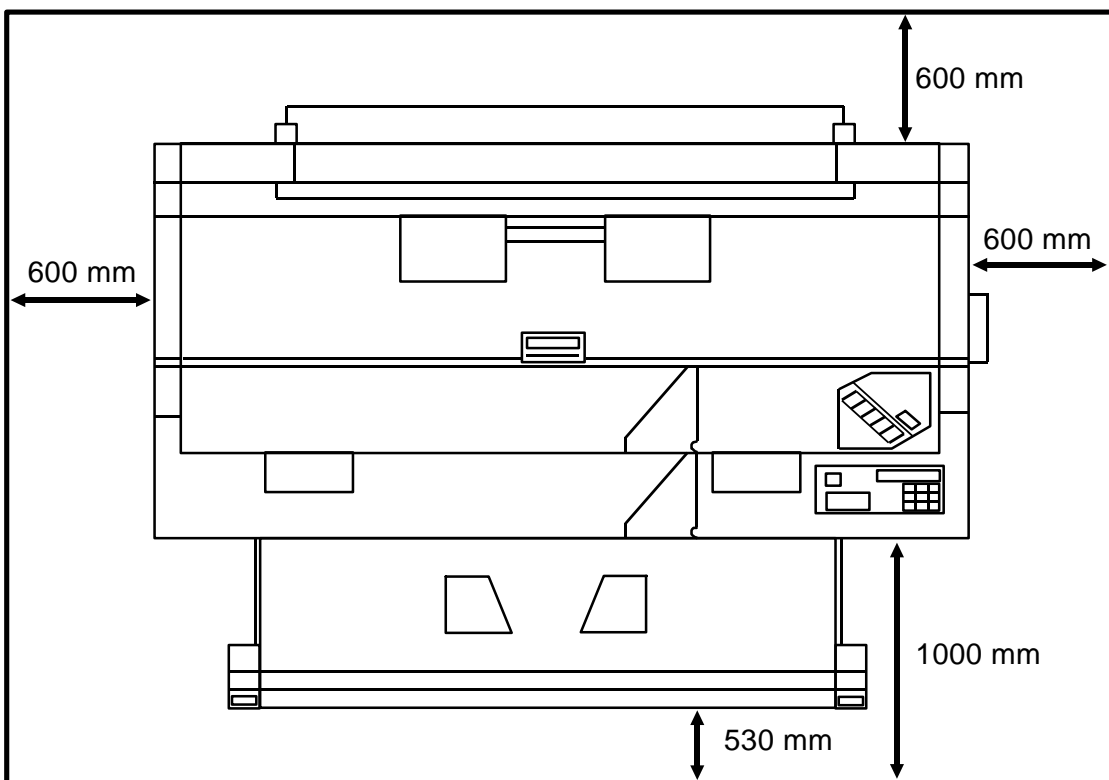
Constant drive is provided from the main motor via the paper feed drive chain [A], to the drive sprocket [B], through some gears, and to the feed drive belt [C].

Engaging and disengaging auto feeder solenoid 1 [D] allows the spring clutch [E] to turn, thus driving the relay roller [F]. Engaging and disengaging auto feeder solenoid 2 [G] allows the spring clutch [H] to turn, thus driving the paper feed roller [I].

3. ENVIRONMENT

1. Temperature Range: 10°C to 30°C (50°F to 86°F)
2. Humidity range: 15% to 90% RH
3. Ambient Illumination: Less than 1,500 Lux (do not exposure to direct sunlight).
4. Ventilation: Room air should turn over at least 3 times/hour.
5. Ambient Dust: Less than 0.15 mg/m³ (4 x 10⁻³ oz/yd³)
6. Room Size: More than 10 m³ (13.4 yd³)
7. If the installation place is air-conditioned or heated, place the machine as follows:
 - a) Where it will not be subjected to sudden temperature changes from low to high, or vice versa.
 - b) Where it will not be directly exposed to cool air from an air conditioner in the summer.
 - c) Where it will be directly exposed to reflected heat from a space heater in the winter.
8. Avoid placing the machine in an area filled with corrosive gases.
9. Avoid any area higher than 2,000 m (6,500 ft) above sea level.
10. Place the machine on a strong and level base.
11. Avoid any area where the machine may be subjected to frequent strong vibration.

3.1 MINIMUM SPACE REQUIREMENTS



1. Front: 530 mm
2. Back: 600 mm
3. Right: 600 mm
4. Left: 600 mm

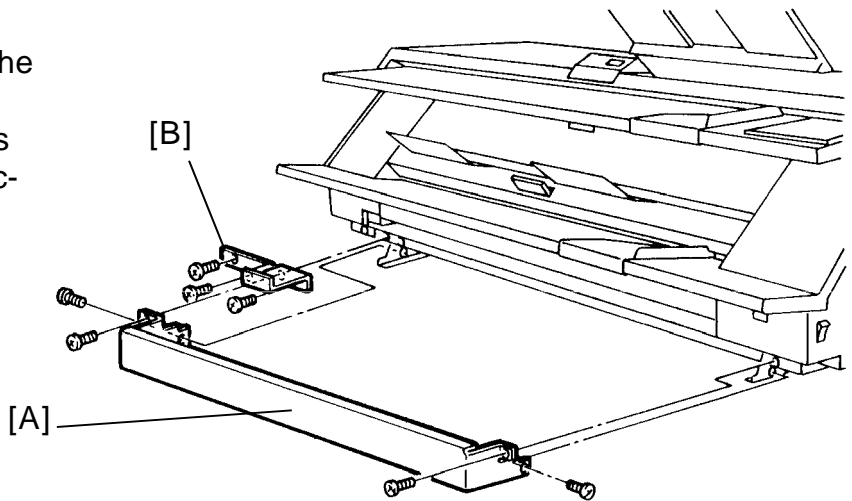
4. ACCESSORY CHECK

Check the accessories and their quantities according to the following list:

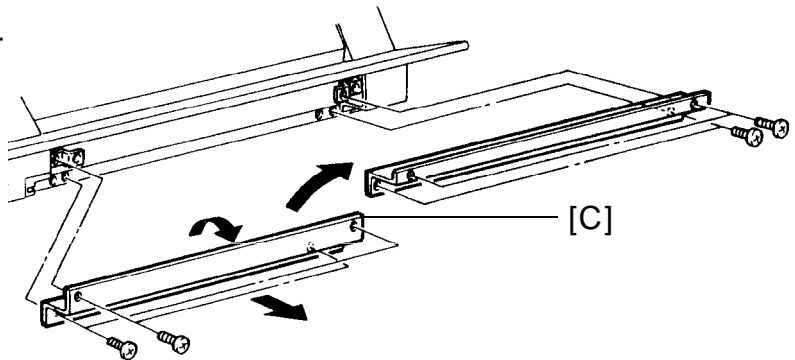
- 1. Right Feeder Stopper 1 pc
- 2. Left Feeder Stopper..... 1 pc
- 3. Ground Wire 1 pc
- 4. Ground Wire Cover 2 pcs
- 5. Right Rear Feeder Cover 1 pc
- 6. Left Rear Feeder Cover 1 pc
- 7. Right Feeder Lock Bracket..... 1 pc
- 8. Left Feeder Lock Bracket 1 pc
- 9. Safety Switch with Bracket 1 pc
- 10. Connector Socket with Bracket 1 pc
- 11. Shoulder Screw 1 pc
- 12. Pan Head Screw..... 15 pcs
- 13. Right Harness Holder Bracket..... 1 pc
- 14. Left Harness Holder Bracket 1 pc
- 15. Toothed Washer..... 2 pcs
- 16. Caution Decal..... 1 pc

5. INSTALLATION PROCEDURE

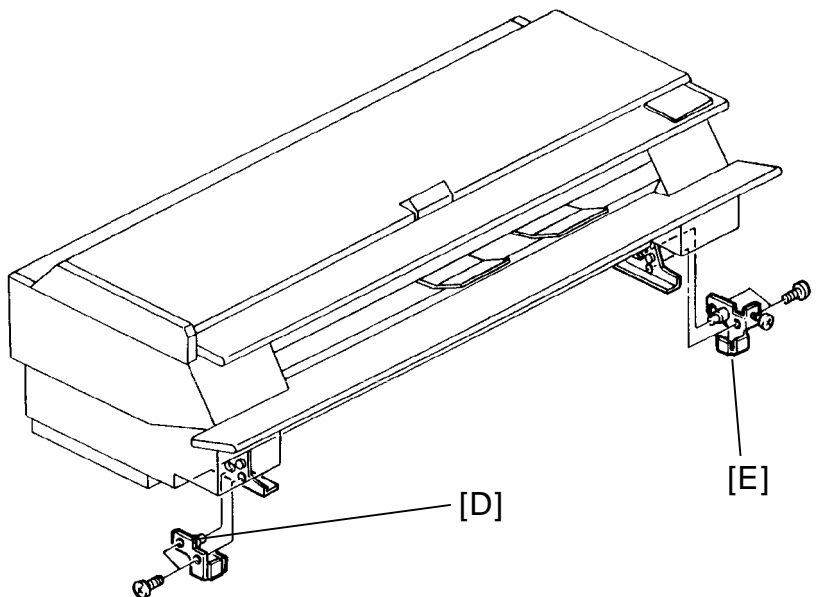
1. Remove the lower front cover [A] and the gear cover [B] from the copier. (4 screws and 3 screws respectively)



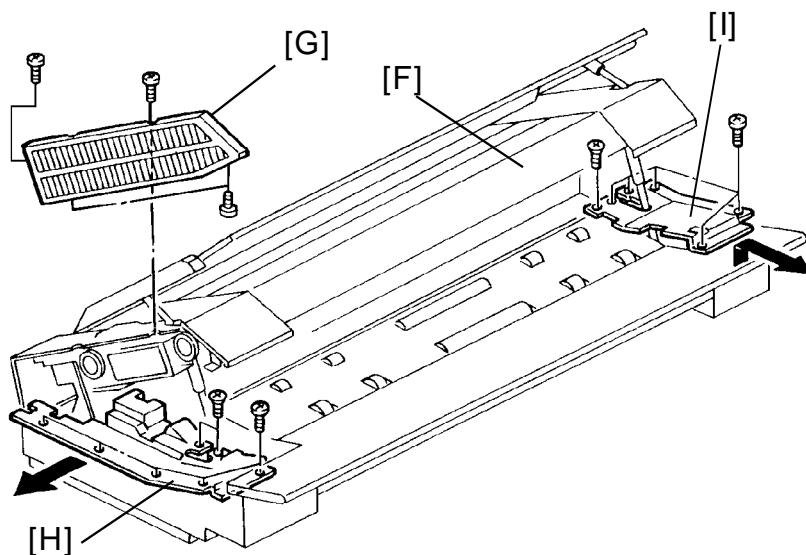
2. Remove the front lower plate [C] on the copier (2 screws). Turn the plate 180 degrees and then install it in the same place again.



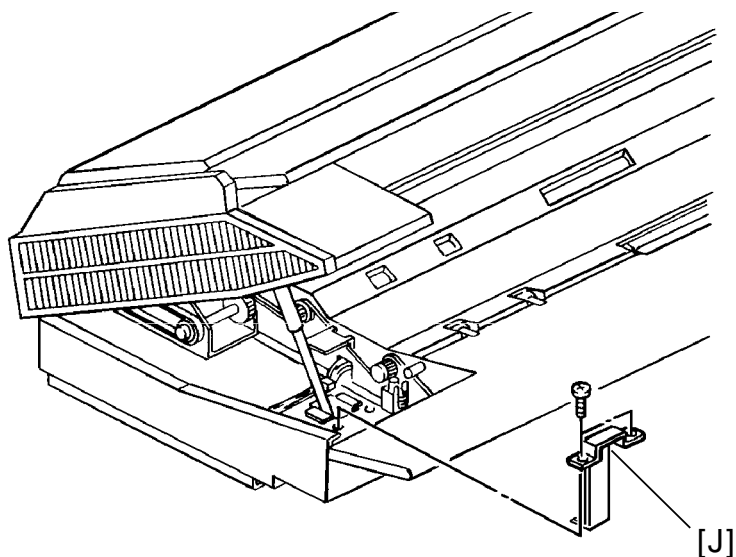
3. Install the left and right feeder lock brackets [D, E] on the front rail of the copier. (2 screws each)



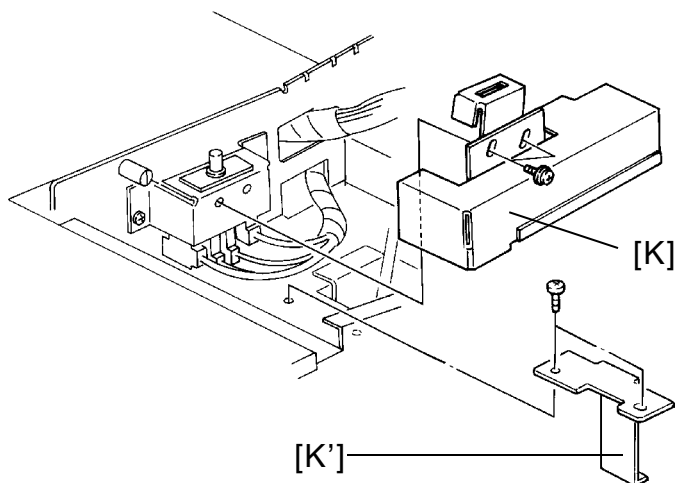
4. Open the upper unit [F] of the copier and remove the left middle cover [G] (4 screws), the left inner cover [H] (7 screws), and the right inner cover [I] (6 screws).



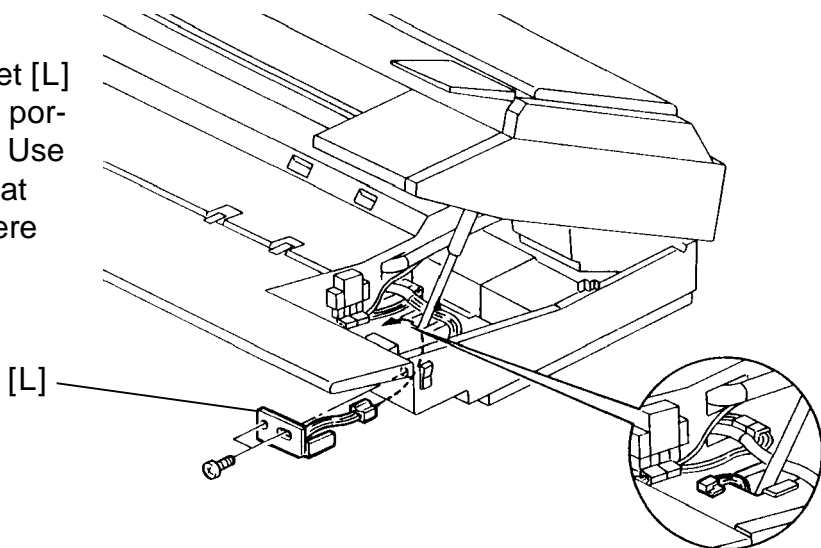
5. Remove the left harness holder bracket [J]. (2 screws)



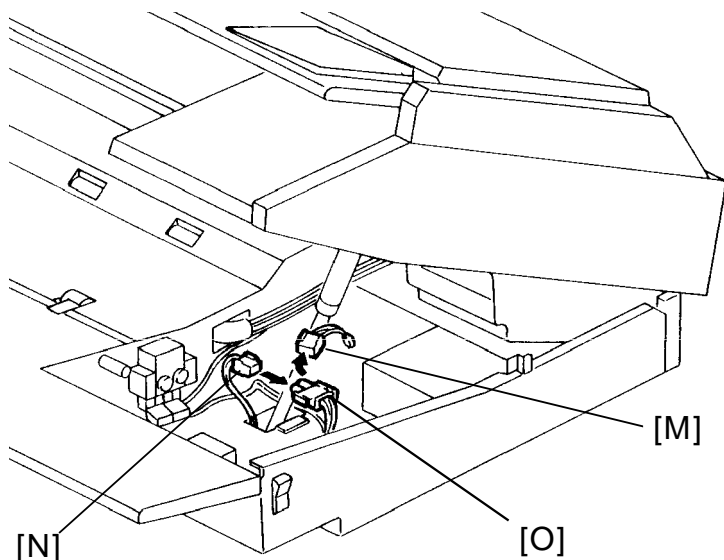
6. Remove the safety cover [K] and the right holder bracket [K']. (2 screws each)



7. Install the safety switch with bracket [L] on the right lower portion of the copier. Use the two screws that were mounted there previously.

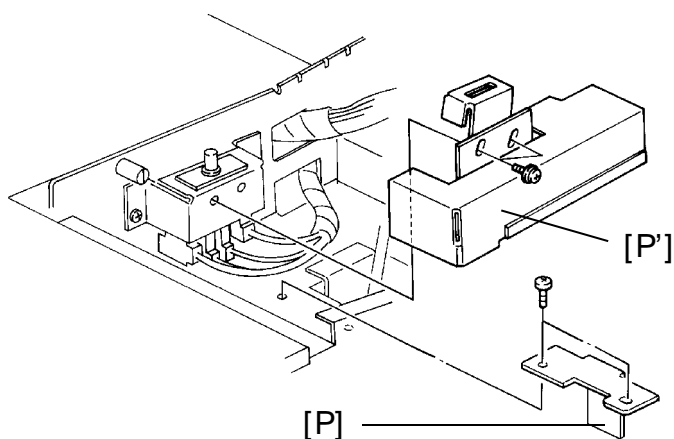


8. Disconnect the jumper connector [M] and connect the safety switch connector [N] with the copier connector [O].

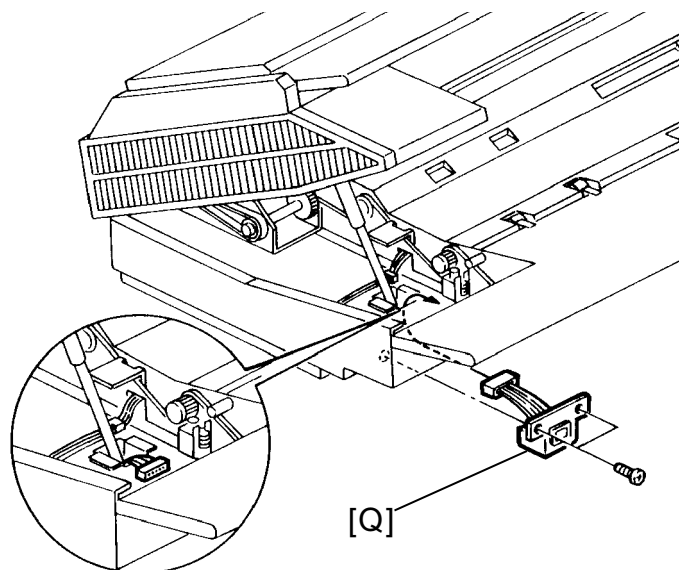


9. Install the right harness holder bracket [P] and the safety switch cover [P']. (2 screws each)

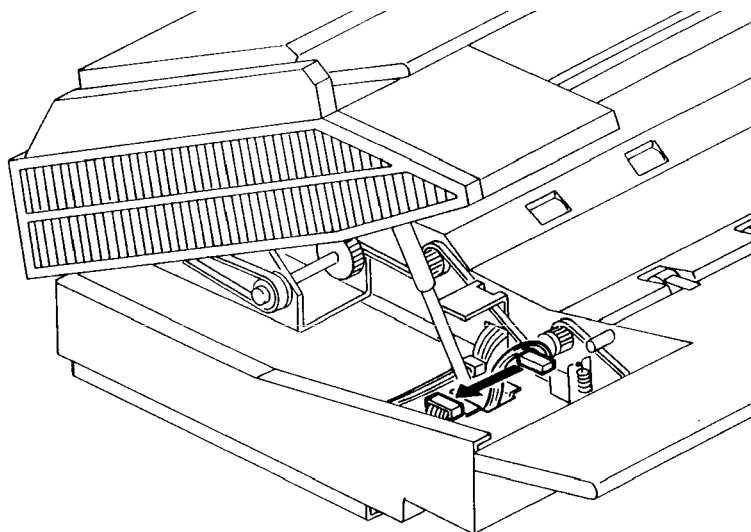
10. Reinstall the right inner cover. (6 screws)



11. Install the connector socket with bracket [Q] on the lower left of the copier.

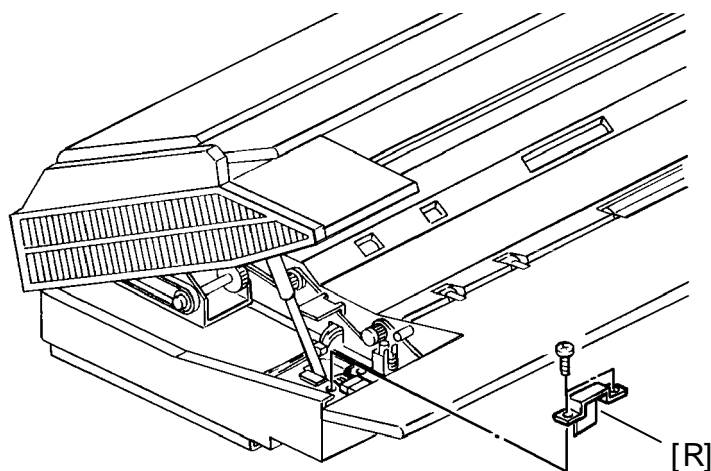


12. Join the connector from the bracket with the one from the copier.



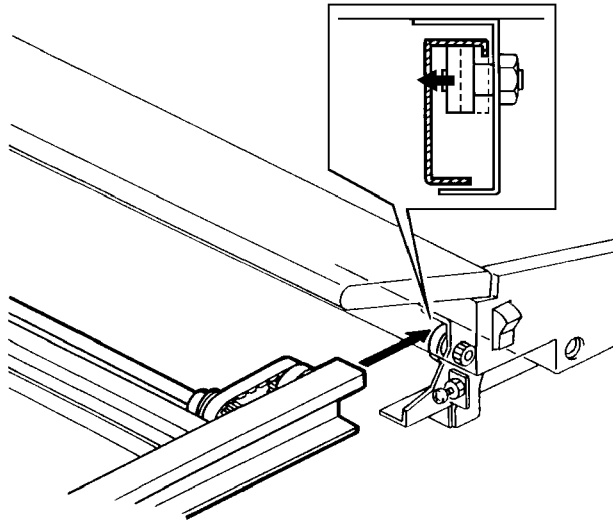
13. Install the left harness holder bracket [R]. (2 screws)

14. Install the left inner cover. (6 screws)

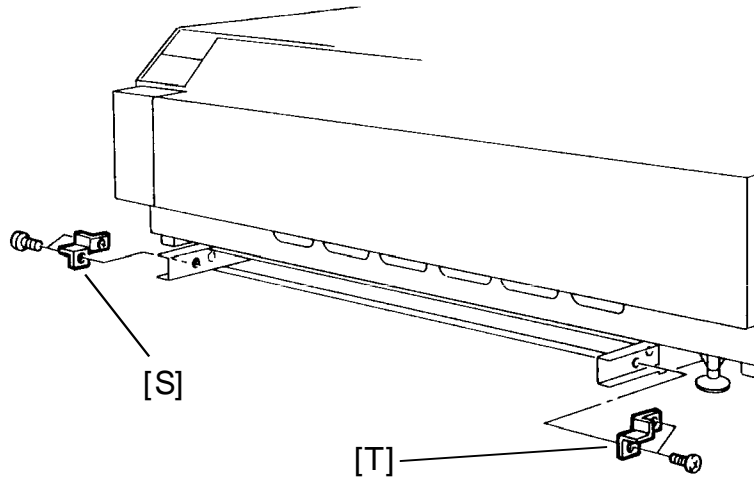


15. Move the two ball bearings of the left and right lock brackets toward the inside.

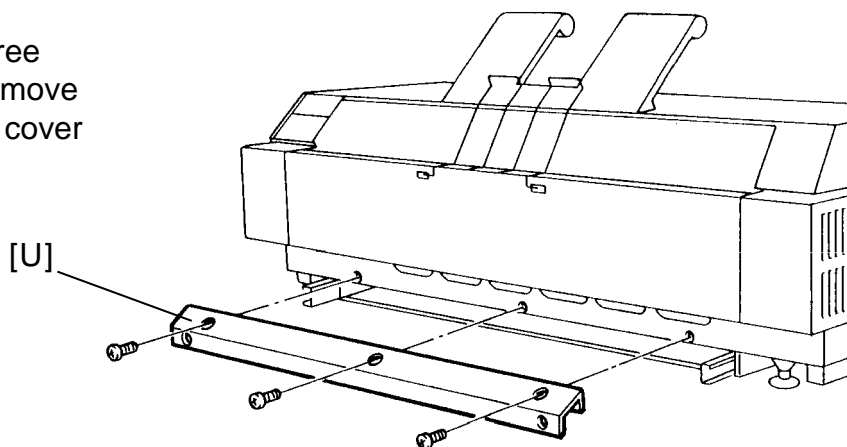
16. Slide the auto sheet feeder unit into the copier.



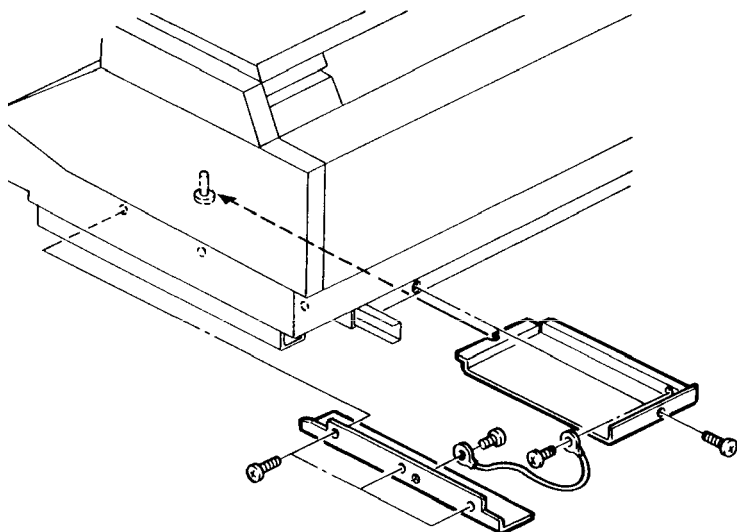
17. Install the left and right feeder stoppers [S,T]. (2 screws each)



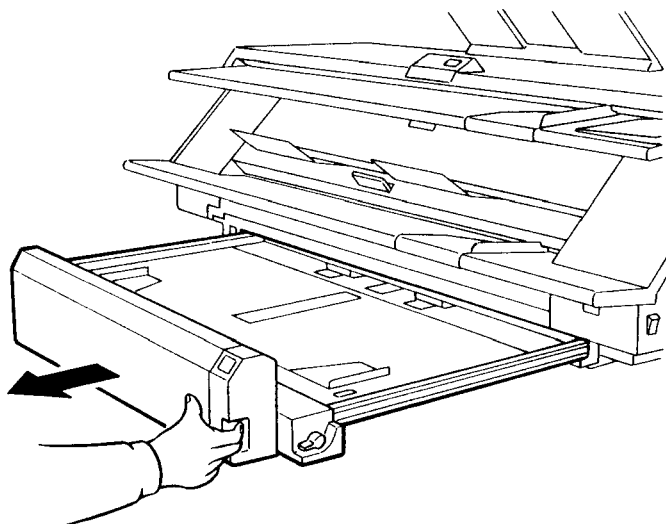
18. Loosen the three screws and remove the rear lower cover [U].



19. Install the ground wire covers with the ground wire as shown in the figure.

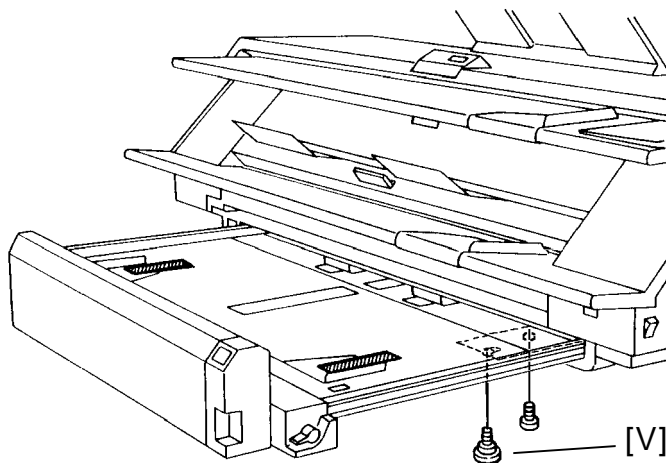


20. Pull out the auto sheet feeder unit until it stops. Then remove all strips of shipping tape from the unit.

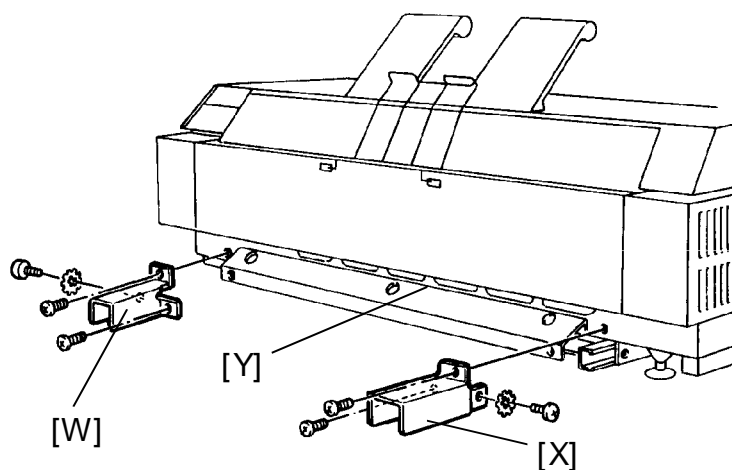


21. Fix the ground wire cover using the shoulder screw [V] and a pan head screw.

22. Close the sheet feeder completely and fix the screws of the connector bracket.

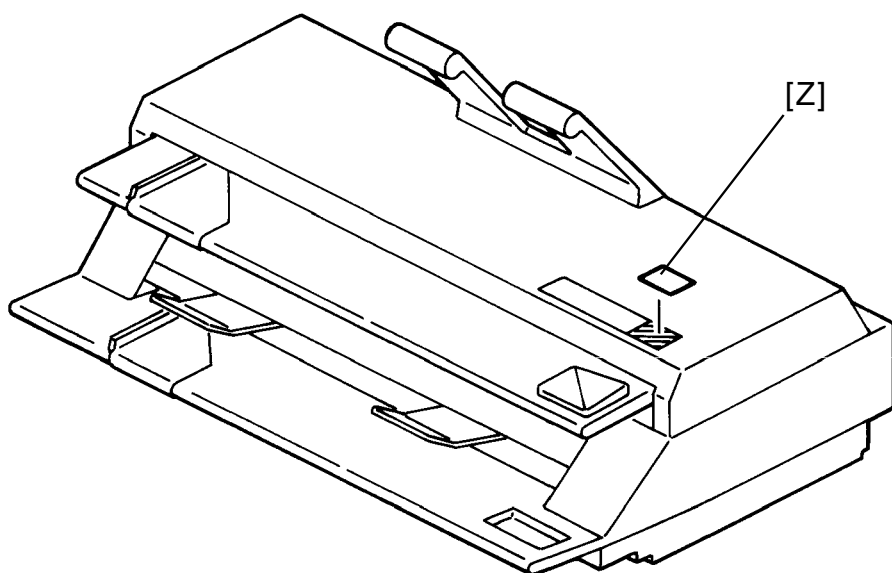


23. Install the left and right rear feeder covers [W, X] with toothed washers. (Remove two screws each from the right and left sides of the copier for installation of the rear feeder covers.)



24. Install the rear lower cover [Y].

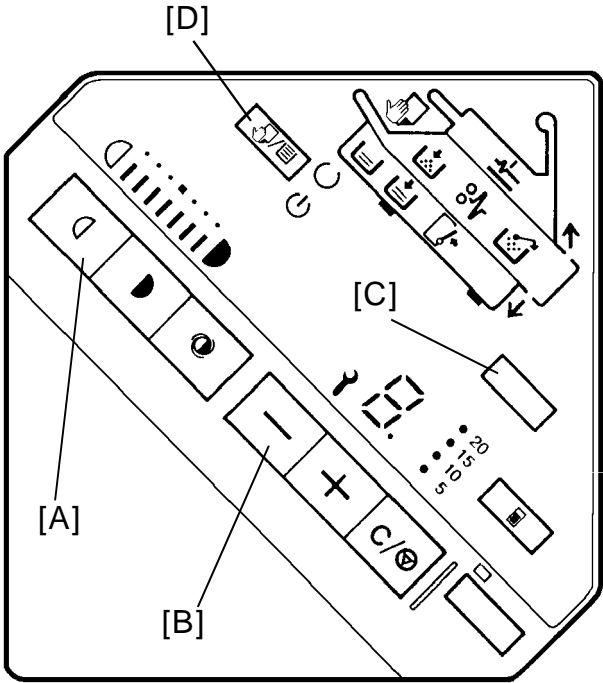
25. Stick the caution decal [Z] on the top cover of the copier.



6. CHANGING THE OPERATION PROGRAM

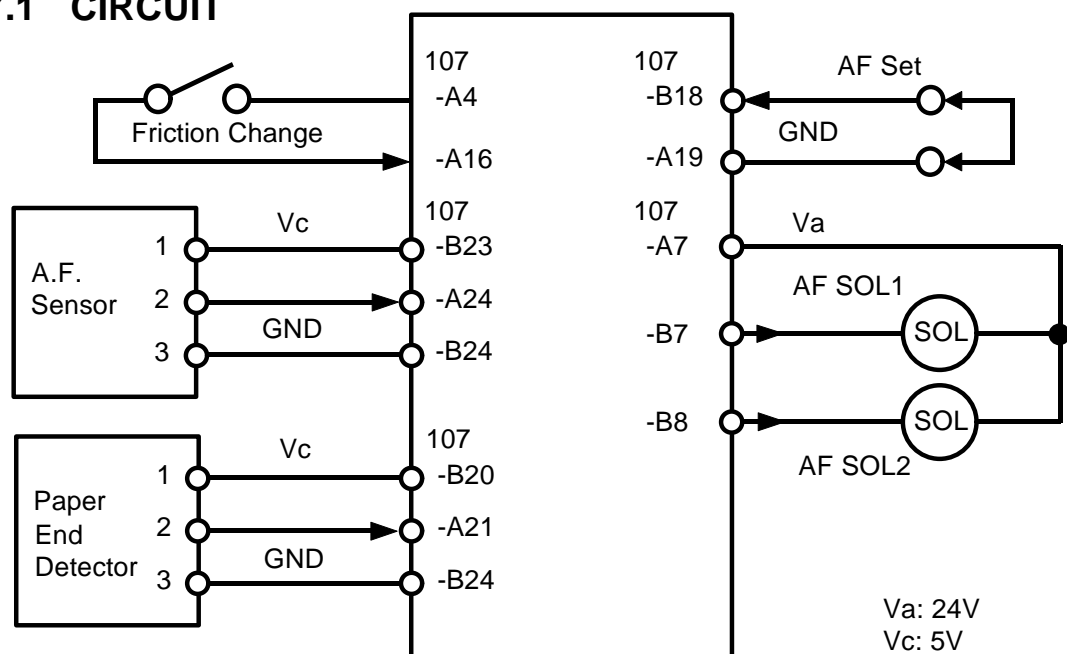
After installation, do the following to change the operation program so that the sheet feeder can be used.

1. Remove the right middle cover of the copier. (loosen 4 screws)
2. Turn on DIP101-8.
3. Plug in the power cord and turn on the main switch.
4. Press the Lighter key [A] 12 times.
5. Press the Minus key [B] once.
6. Press the Copy Exit Way key [C] once.
7. Turn off DIP101-8.
8. Confirm that the indicator switches between manual feed and auto feed when the Select Paper key [D] is pressed.

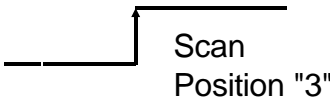
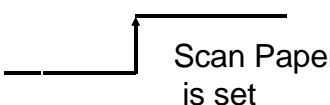
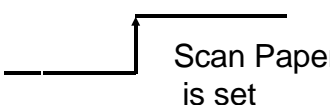
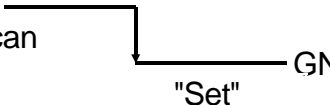
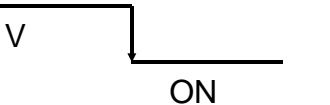
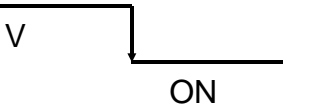


7. ELECTRICAL CIRCUIT

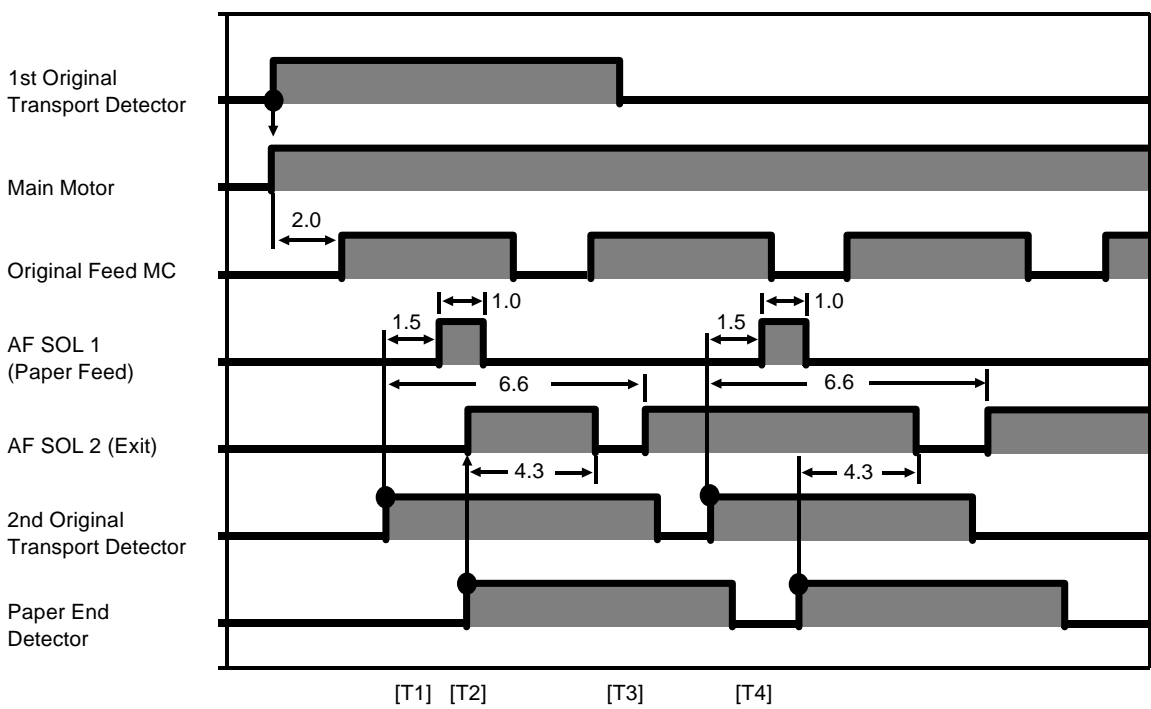
7.1 CIRCUIT



7.2 SIGNAL LEVEL

Signal	I/O	CN No.	Signal Level
Friction Charge Switch	I	107-A16	GND 
AF Sensor (Exit Sensor)	I	107-A24	GND 
Paper End Detector	I	107-A21	GND 
AF Set Detector	I	107-B18	Scan 
AF SOL 1 (Paper Feed)	O	107-B7	24 V 
AF SOL 2 (Exit)	O	107-B8	ON 

8. TIMING CHART



- [T1]: The main motor starts to turn when the original activates the 1st Original Transport Detector. Two seconds later the Original Feed Magnetic Clutch turns on. The Auto Sheet Feeder starts feeding a sheet of paper (AF Solenoid 1 ON) 1.5 seconds after the 2nd Original Transport Detector is activated by the original.
- [T2]: AF Solenoid 2 (Exit) turns on and the exit roller starts to turn when the sheet of paper turns on the Paper End Detector.
- [T3]: The AF Solenoid 2 turns off after 4.3 seconds. The AF Solenoid 2 turns on again 6.6 seconds after the 2nd Original Transport Detector turns on, and the sheet of paper starts to feed again.
- [T4]: In multiple copy runs, 2nd sheet of paper starts feeding (AF solenoid 1 ON) 1.5 seconds after the 2nd Original Transport Detector is turned on by the leading edge of the 2nd original.