SPECIFICATIONS

Paper Transport System: Rubber Rollers

Copy Paper Weight: 52 to 93 g/m, 14 to 25 lb

Paper Size: Maximum -- A3, 11" x 17"

Minimum -- A5, 5.5" x 8.5"

Power Requirement: 115 V, 60 Hz, 2 A 220 V, 50 Hz, 1 A

240 V, 50 Hz, 1 A

Maximum Power Consumption: 220 watts

Dimensions (W x D x H): 580 x 635 x 705 mm

22.8" x 25.0" x 27.8"

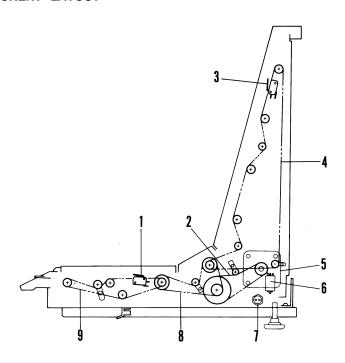
Weight: Approximately 37 kg, 81.7 lb

Minimum System Space Rear -- 400 mm, 15.7" Requirements: Front -- 1,000 mm, 39.4"

Left side -- 300 mm, 11.8" Right side -- 300 mm, 11.8"

Manual Feed: From first sorter only

COMPONENT LAYOUT



- 1. First Cover Safety Switch
- Motor Belt
- 3. Second Cover Safety Switch 8.
- 4. Vertical Drive Belt
- 5. Drive Motor

- Power Relay
- 7. Fuse

6.

- Turn Section Belt
- Horizontal Drive Belt

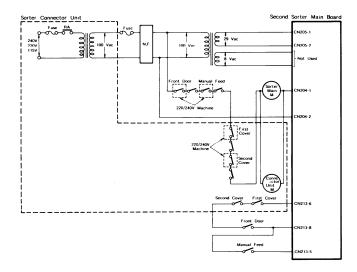
MECHANICAL OPERATION

Copy paper exits from the copier and enters the first sorter. If the first sorter is full, the paper exits through the 20th bin position and enters the sorter connector unit, which transports the copy to the second sorter.

The motor of the sorter connector unit (SCU) turns on when the timing sensor of the first sorter detects the first copy which is to be sorted or stacked after the copy exits.

ELECTRICAL OPERATION

1. Circuit



AC power (100 volts) passes through the sorter connector unit to the second sorter. The ac power circuit is protected by a 3 ampere fuse and a power relay.

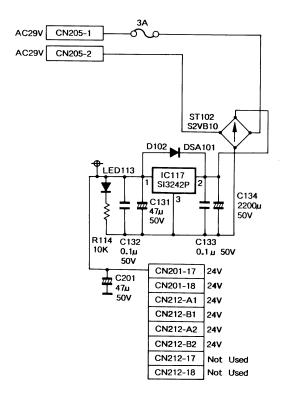
When the main switch of the copier is on, the first sorter provides +24 volts to the sorter connector unit and second sorter. This energizes the power relays of the sorter connector unit and second sorter, closing the ac power circuit

The motors of the sorter connector unit and the second sorter are in a parallel circuit. This circuit is directly opened by the front door safety switch (second sorter), manual feed safety switch (second sorter), first cover safety switch (connector unit), and second cover safety switch (connector unit). If any of these switches opens when the second sorter is in use (more than 19 bins used), this Close Door indicator of the copier turns on and the Start Key turns red,

2. Main Board

The second sorter main board differs from the main board of the first sorter in several ways. The most obvious is that the second sorter does not have a programmable 10 port (IC113 on the first sorter board). The programmable 10 port of the first sorter manages both sorters. Also, the second sorter board has only one one-to-eight data selector (LS515), and the second sorter does not have a +5 volt power circuit. All other components are basically the same as the main board of the first sorter.

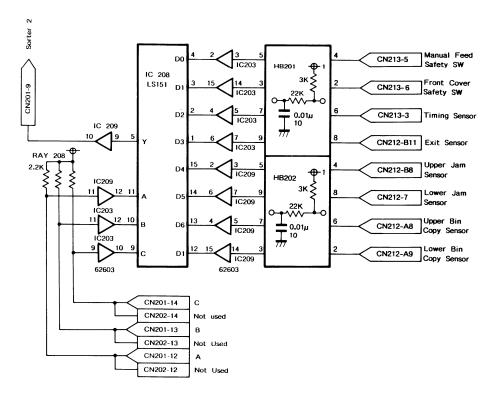
3. DC Power Supply



The transformer supplies 29 volts ac and 8 volts ac to the second sorter main board. The +8 volt input is not used. The circuit shown above converts the 29 volt ac input to +24 volts. When +24 volts is supplied, LED 113 lights.

The +5 volt power for the second sorter comes from the first sorter (CN201-19 and CN201-20).

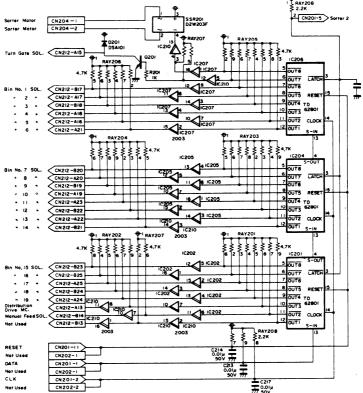
4. Sensor Input Circuit



The sensor input circuit is basically the same as that of the first sorter. However, it needs only one LS151 CHIP (IC208) because the second sorter does not use a manual feed sensor. The +5 volt power for this circuit comes from the first sorter.

Input from the sensors and switches go through noise filters (HB201 and HB202) to eliminate false indications. The output of the noise filters is then buffered and input as data to a one-of-eight data selector. Timing signals (3-bit data) coming from the first sorter select which data bit is output from the one-of-eight data selector. This output is buffered and sent to the first sorter.

5. Bin Drive Circuit



The sorter uses a series of 3 shift registers to turn on all clutches and solenoids and the motor. The operation is similar to the erase lamp unit of the copier.

Initially, all three shift registers are reset (CN201-11, CN202-11). The clock (CN201-2, CN202-2) then shifts the serial data (CN201-1, CN202-1) through the shift registers. It takes 14 clock pulses to input all the data into the registers.

When the latch signal is applied the shift registers output the data that was serially input into them. The parallel output from the shift registers is then buffered by drivers. The drivers turn the individual components on or off.

The manual feed solenoid of the second sorter, though present, is never actuated.

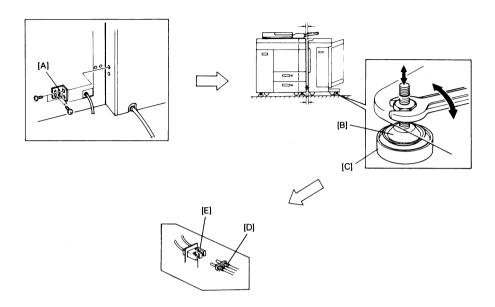
INSTALLATION

1. Accessory Check

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

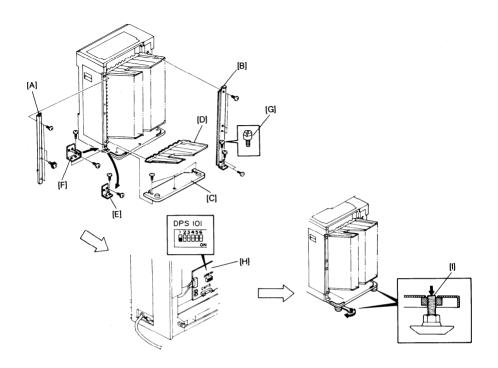
DESCRIPTION		Q'ty
1)	Left Side Sorter Shield	1
2)	Front Side Sorter Shield	1
3)	Rear Fixing Bracket	1
4)	Front Fixing Bracket	1
5)	Screw M4 x 8mm	2
6)	Foot Shoe	2
7)	Docking Pin	1
8)	Second Sorter Main PCB	1
9)	Screw With Star Washer M4 x 8mm	1
10)	Motor Harness	1
11)	Ground Wire	1
12)	Caution Decal	2
13)	1st Sorter Misfeed Decal	1
14)	2nd Sorter Misfeed Decal	1
15)	Multiple Language Decal (220/240V)	1

1. Installation Procedure

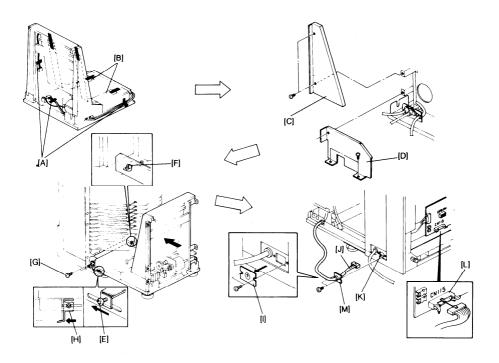


Caution: Turn off the copier main switch

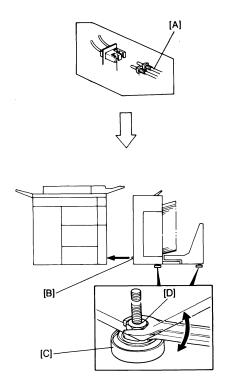
- First Sorter Preparation -
 - 1. Remove the fixing bracket [A] (4 screws).
 - 2. Screw up the leveling feet [B], and remove the foot shoes [C].
 - 3. Open the copier top unit, and secure the copier and the first sorter, being careful not to damage the fiber optics cable [D]. Remove the fiber optics cable from the copier [E].



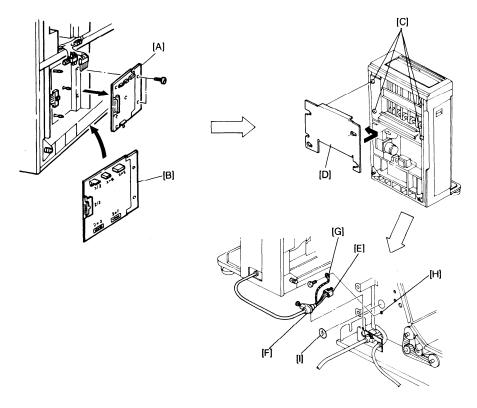
- Remove the bin number bracket [A] (2 screws, 2 ground screws), the distribution unit support bracket [B] (7 screws), and the base plate cover, [C] (3 screws).
- 5. Replace the locking bracket [F] with the front fixing bracket [F] (4 screws). (Do not clamp the ground wire with the front fixing bracket.)
- 6. Reinstall the bin number bracket and the distribution unit support bracket. Use the docking pin [G] to fix the support bracket instead of the front side screw.
- 7. Turn on DIP SW101-1 on the first sorter main PCB [H].
- 8. Screw down the leveling feet so that the heads [I] are flush with the base plate. (This makes it easier to dock the sorter connector unit with the first sorter.)



- Sorter Connector Unit Preparation -
 - 1. Remove all the external strips of [A] and the two polystyrene covers [B].
 - 2. Remove the upper [C] and lower [D] rear covers (5 screws).
- Docking (Sorter connector unit & First sorter) -
 - Loosen the screw [E] securing the locking bracket then, dock the sorter connector unit with the first sorter (2 screws). Make sure that the docking pin [F] is seated firmly in the notch on the sorter connector unit. (Do not bend the upper guide plate.) Secure the two screws [G].
 - 2. Tighten the screws while pressing the locking bracket [H] to the left.
 - 3. Remove the cover plate [I] (2 screws) from the first sorter.
 - 4. Pass the interface harness [J] from the sorter connector unit through the opening [K], and couple it to CN115 (20P) [L] on the first sorter main PCB. Then, install the harness bracket [M] (2 screws.)

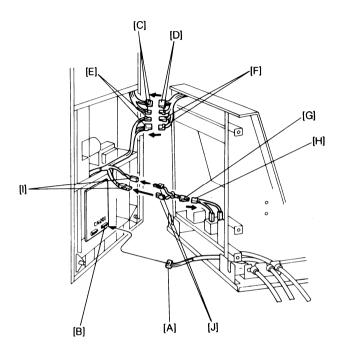


- Docking (First Sorter & Copier) -
 - 1. Connect the fiber optics cables [A] to the copier. (The cable with the brown making should be installed on the rear terminal.)
 - Dock the first sorter with the copier. Make sure that the docking pin
 [B] is seated firmly in the notch on the copier.
 - 3. Install the leveling shoes [C] under the first sorter and the sorter connector unit. Then, level the first sorter and the sorter connector unit by securing the feet [D] up or down. Install the fixing bracket between the copier and the first sorter (2 screws).

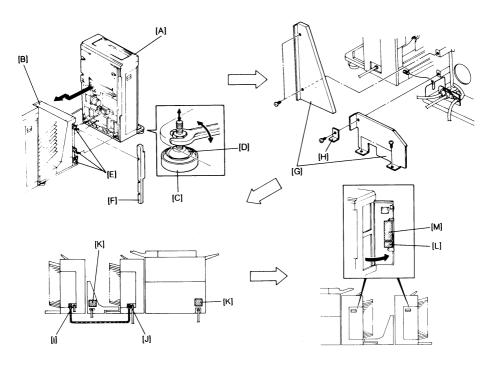


- Second Sorter Preparation -

- 1. Unpack the sorter, install all the bins according to the installation procedure contained in the sorter carton.
- 2. Replace the sorter main PCB [A] with the second sorter main PCB. [B] (4 connectors, 2 screws, 3 PCB mounting studs).
- 3. Loosen the four screws [C], then, install the left side sorter shield [D].
- 4. Connect the second sorter power supply cord [E] to the connector from the sorter connector unit transformer, and fix the cord stopper [F] with the cord bracket. Secure the ground wire [G] to the sorter connector unit rear plate [H], stick the ground decal [I] beside it.



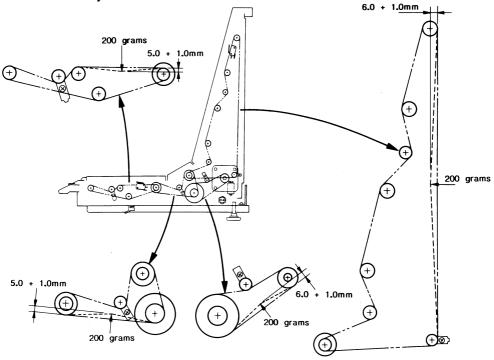
- Connect the sorter connector unit interface harness [A] with CN201 (20P) on the second sorter main PCB [B].
- 6. Uncouple the second sorter 8P connectors (Green) [C], and connect them with the sorter connector unit 8P connectors (Green) [D].
- 7. Uncouple the second sorter 2P connectors (White) [E], and connect them with the sorter connector unit 2P connectors (White)[F].
- 8. Connect the long end of the motor harness [G] to the connector on the sorter connector unit [H].
- 9. Uncouple the second sorter drive motor 2P connectors (White) [I], and connect them with the short end of the motor harness connectors [J].



- Docking (Second sorter and Sorter connector unit) -
 - Dock the second sorter [A] with the sorter connector unit [B] (2 docking pins).
 - 2. Place the foot shoes [C] under the second sorter leveling feet [D], and screw down the feet to level the second sorter.
 - 3. Loosen the three screws [E] and install the front side sorter shield [F].
 - 4. Reinstall the upper and lower rear covers [G].
 - 5. Install the rear fixing bracket [H] (1 screw) while pushing it down.
 - 6. Connect the one the ground wire ends to the second sorter power supply bracket [I] and the other end to that of the first sorter [J].
 - 7. Stick the caution decals [K] beside the sorter connector unit and copier power supply brackets.
 - 8. Stick the first and second sorter misfeed decals [L] under the lowest decals [M] inside the front doors.

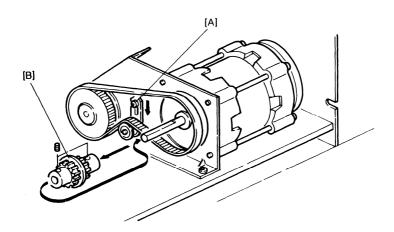
REPLACEMENT AND ADJUSTMENT

1. Tension Adjustment



- Horizontal Drive Belt Tension Standard: 5.0 ±1.0 mm deflection at 200g pressure Adjust with tightener [A].
- Turn Section Belt Tension Standard: 5.0 ±1.0 mm deflection at 200g pressure Adjust with tightener [B].
- Motor Belt Tension Standard: 6.0 ±1.0 mm deflection at 200g pressure Adjust with tightener [C].
- Vertical Drive Belt Tension Standard: 6.0 ±1.0 mm deflection at 200g pressure Adjust with tightener [D].

2. 50Hz/60Hz Modification (Sorter Connector Unit)



- 1. Loosen the belt tension bracket screw [A].
- 2. Loosen the two Allen screws and remove the main motor pulley [B].
- 3. Reverse the main motor pulley and install it so that it is flush with the end of the main motor shaft.
- 4. Adjust the main motor drive belt tension. There should be $6.0 \pm 1.0 \text{ mm}$ deflection of the belt when 200 grams pressure is applied.