I. FEATURES

1. Front-loading.

- The copier is designed to accept cassettes from the front for ease of use (two cassettes holding 250 sheets each).
- The copier is given two cassette holders, thereby eliminating the need for cassette replacement in making copies of different sizes.
- The copier's multifeeder allows feeding multiple postcards.

2. Full line of automatic features

- The copier has an auto paper selection mechanism as standard, which selects paper of the correct size in response to placement of a document.
- With the auto reproduction ratio selection mechanism, the copier calculates the correct reproduction ratio according to the specified copy size.
- The AE (auto exposure) mechanism ensures crisp reproduction of newspapers and blue-print documents.
- The copier's auto-start feature lets you press the COPY START key during the wait period so that the copier will start making copies as soon as it becomes ready.

3. HQ jumping toner.

- The copier uses Canon's own HQ (high quality) jumping toner for reproduction of clear characters and photos.
- The toner is a single-component type, which provides stable images.
- In addition, a 30mm-dia. high sensitivity OPC drum is used to enable enhanced image reproduction and a compact copier design.

4. Man-machine interface.

- As many as 20 copies (A4, landscape) may be made per minute.
- The zoom mechanism allows reduction down to 50% and enlargement up to 200% of the original image.
- The page separation mode serves to speed up copying bound documents.
- The copier accepts documents as small as a postcard or as large as A3.
- With the CT Unit (option), the copies may be in red, green, blue, or brown.

5. A variety of options to choose from for full automation.

The copier communicates with its options at a higher speed than ever, resulting in more output per given time*.

* With options, up to 20 copies/min; 1:1 (A4, landscape).

- ADF-A1 for automatic document feed.
- Sorter-A1 for automatic sorting and grouping (20 bins).
- MS-A1 for automatic sorting and grouping (10 bins).
- Control Card V (configured as built-in) for copy volume control (up to 200 groups).
- Stapler Sorter-B2/D1 for stapling copies sorted in its ten bins.

II. SPECIFICATIONS

A. Type

Body	Desk top
Copyboard	Fixed
Light source	Halogen lamp (330 W)
Lens	Zoom lens
Photosensitive medium	OPC

B. Construction

Copying		Indirect static photocopying
Charging		Corona
Exposure		Slit (moving light source)
Copy density adjustment		Automatic (AE) or Manual
Development		Dry (toner projection)
Pick-up	Automatic	2 cassettes
	Manual	Multifeed (about 50 sheets of 80g/m^2)
Transfer		Corona
Separation		Curvature and Static eliminator
Cleaning		Blade
Fixing		Heat roller (950 W)

C. Performance

Document type		Sheet, Book, 3-D object (2 kg)
Document size (max.)		A3 (297x420 mm)
Reproduction ratio		See Table 1-1; 50% to 200%, zoom.
Wait time		90 sec or less (20°C)
First copy		8 sec or less
Continuous copying		1 to 99 copies
Copy size		A3 (297 x 431.8 mm) max. Postcard (100 x 148 mm) min.
Copy paper	Cassette	Plain paper (64 to 80 g/m²), Tracing paper*, Colored paper*
	Multi feed tray	Plain paper (64 to 128 g/m²), Tracing paper* Colored paper*, OHP film*, Postcard, Label*
	Tow-sided Overlay copy	Plain paper (64 to 128 g/m²), Colored paper*, Postcard
Cassette		Claws, Front loading: 27 mm deep (about 250 sheets of 80 g/m²)
Copy tray		99 sheets (80 g/m²)
Non-image width		2.0 ±1.5 mm (leading edge), 2.5 ±1.5 mm (left/right)
Auto clear mechanism		Provided. (2 min, standard)
Auto shut-off mechanism		Provided. (2 hours, standard; may be disabled)
Auto start		Provided.
Option		Sorter-A1, MS-A1, Paper Deck Pedestal-J1, Control Card V, CT Unit, Stapler Sorter-D1, Stapler Sorter-B2

* Of a type recommended by Canon.

D. Others

Operating environment	Temperature	7.5°C to 32.5°C	
	Humidity	5% to 85%	
	Atmospheric pressure	0.6 to 1 atm.	
Power Source		Serial No.	
	220V/50 Hz	UAF xxxxx	
	240V/50 Hz	QAF xxxxx	
Power consumption	Maximum	1.5 kW	
	During copying	0.840 kWH (reference only)	
	At standby	0.158 kWH (reference only)	
Noise	During copying	50 dB or less	(Sound power level as prescribed by ISO)
	At standby	40 dB or less	
Ozone (average over 8 hrs.)		0.05 ppm or less (UL standards)	
Dimensions	Width	697 mm	
	Depth	617 mm	
	Height	541 mm	
Weight		62.5 kg (approx.)	
Consumables	Copy paper	Keep wrapped to protect against humidity.	
	Toner	Avoid direct sun, and keep under 40°C, 85%.	
	CT Unit	Keep in box or pedestal; avoid direct sun, and keep it under 30°C, 85%	

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Reproduction mode		Paper size	Cassette	Copies/min
DIRECT		A3 (297x420mm)	A3	11
		A4 (210x297mm)	A4	20
		A4R (297x210mm)	A4R	15
		B4 (257x365mm)	(B4)	12
		B5 (182x257mm)	(B5)	21
		A5R (210x149mm)	A5R	20
REDUCE	I	50%		
	II	A3 → A4R	A4R	13
ENLARGE	I	A4R → A3	A3	11
	II	200%		

Table 1-1

Specifications are subject to change without notice.

III. NAMES OF PARTS

A. External View
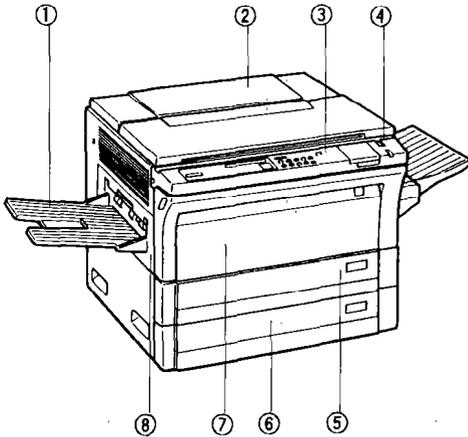
① Copy tray
② Copyboard cover
③ Control panel
④ Power switch
⑤ Upper cassette
⑥ Lower cassette
⑦ Front door
⑧ Delivery cover

Figure 1-1
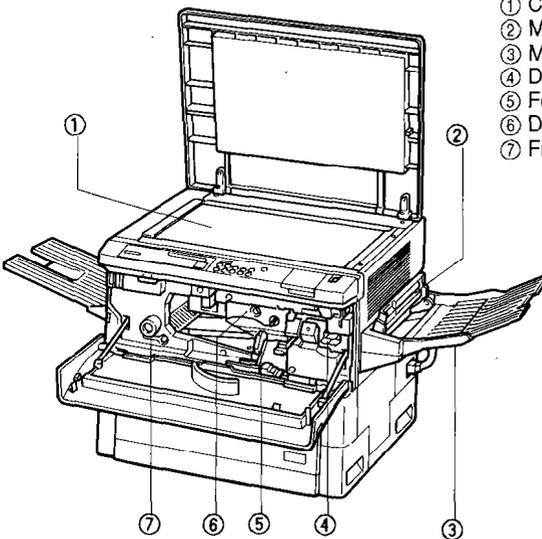
① Copyboard glass
② Multifeeder cover
③ Multifeeder tray
④ Developing assembly release lever
⑤ Feeder assembly release lever
⑥ Drum unit
⑦ Fixing assembly knob

Figure 1-2

B. Cross-Sectional View
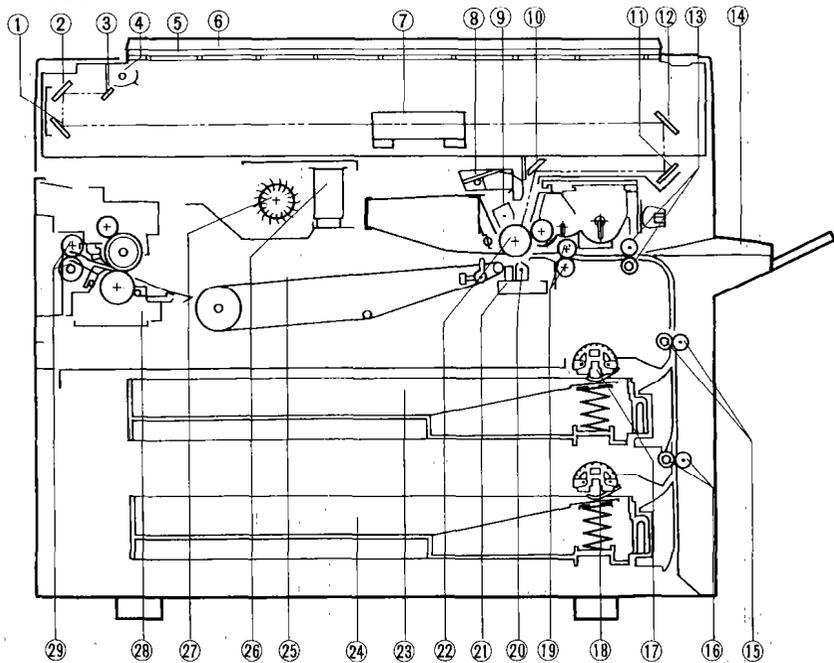
Figure 1-3

①	No. 3 mirror	⑪	No. 5 mirror	㉑	Static eliminator
②	No. 2 mirror	⑫	No. 4 mirror	㉒	Photosensitive drum
③	No. 1 mirror	⑬	Registration roller	㉓	Cassette 1
④	Scanning lamp	⑭	Multifeeder tray	㉔	Cassette 2
⑤	Copyboard glass	⑮	Vertical feed roller 1	㉕	Feeder unit
⑥	Copyboard cover	⑯	Vertical feed roller 2	㉖	Ozone filter
⑦	Lens	⑰	Cassette 1 pick-up roller	㉗	Exhaust fan
⑧	Pre-exposure lamp	⑱	Cassette 2 pick-up roller	㉘	Fixing unit
⑨	Primary corona unit	⑲	Feeder roller	㉙	Delivery roller
⑩	No. 6 mirror	⑳	Transfer corona unit		

IV. OPERATION

A. Control Panel

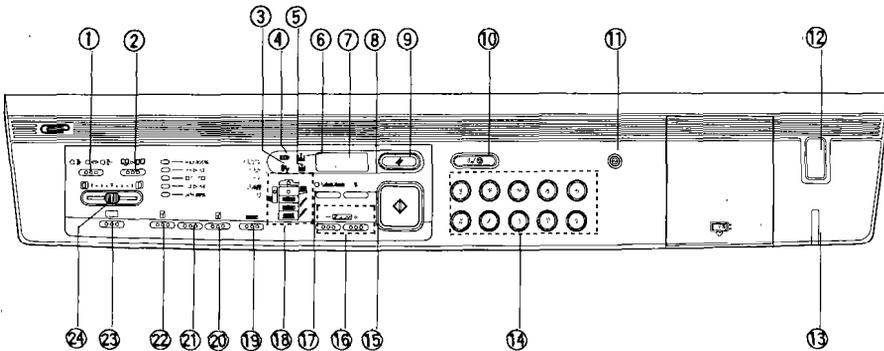**Figure 1-4**

① SORT/GROUP/STAPLE SORT key
Press it to select the sort, group, staple sort or non-sort mode. The indicator remains unlit when the non-sort mode is selected.
→ sorting
→ grouping
→ staple sorting

② PAGE OPERATION key
Press it to select the page separation mode.

③ JAM indicator

④ CONTROL CARD indicator

⑤ ADD PAPER indicator

⑥ ADD TONER indicator

⑦ COPY COUNT/RATIO indicator
It indicates the reproduction ratio when the % key is pressed.

⑧ COPY START key
• glows orange when the copier is not ready for copying.
• glows green when the copier is ready for copying.

⑨ RESET key
Press it to reset the copier to its default settings.
Default Settings
• copy count 1
• DIRECT
• AE (may be turned OFF using 'C15' of service mode)

⑩ CLEAR/STOP key

⑪ STANDBY key

⑫ POWER switch

⑬ POWER indicator
The indicator remains ON while the power is on.

⑭ Numeric keypad

⑮ % key
Press it to check the reproduction ratio on the copy count indicator.
The display changes to the copy count 2 sec after the key is released.

⑯ ZOOM key
Press it to select a desired reproduction ratio between 50% and 200% in 1% increments.

⑰ AUTO RATIO key
Press it to select or deselect the auto reproduction ratio mode.
The key is effective when the ADF is attached.

⑱ PAPER SELECT/JAM indicator
A LED goes ON to indicate the location of the paper or flashes to indicate the location of the jam, if any.

⑲ PAPER SELECT key
Press it to select automatic paper selection (may be turned OFF using 'C07' of service mode) or cassette or multifeeder as the source of paper.

⑳ ENLARGE key

㉑ DIRECT key

㉒ REDUCE key

㉓ AE (automatic exposure; density adjustment) key

㉔ COPY DENSITY lever

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B. Basic Copying Operation

1) Set the power switch to ON.
    a) If the temperature of the fixing roller is too low for copying, the indicator of the COPY START key will blink green.
    b) When the temperature of the fixing roller becomes high enough for copying, the indicator will glow green.
    c) The normal waiting time at room temperature (20°C) is about 90 seconds.
2) Raise the copyboard cover, place an original on the copyboard with the side to be copied facing down, and align it with the size index.
3) To adjust the copy density manually, the AE key indicator should be OFF; press the key once if it is ON. Set the COPY DENSITY lever to suit the original.
4) Check the size of paper in the cassette.
    a) If the cassette does not have the desired size of paper, remove it and install a cassette with the desired size.
5) Set the required number of copies (1 to 99) using the NUMERIC keypad and confirm that the correct number appears on the COPY COUNT/RATIO indicator.
    a) If an error was made in inputting the number of copies, press the CLEAR/STOP key and reset the number of copies.
6) Press the COPY START key.
    a) To stop a continuous copying operation, press the CLEAR/STOP key or RESET key. The copier will complete the copy in progress, then stop.
    The COPY COUNT/RATIO indicator will display the initial copy quantity.
    b) It is possible to switch from automatic exposure control to manual density adjustment at any time from the start of copying to the completion of the final copy. However, it is not possible to switch from manual density adjustment to automatic.

Example:
If the copy is too dark or too faint using AE, cancel AE and vary the copy density with the COPY DENSITY lever.
    c) If the ADD PAPER indicator goes ON during copying, the copier will stop. Refill the cassette and press the COPY START key. The remaining number of copies will be made automatically.
    d) If the copier has an ADF, place a document (original) on the document tray. The document will be fed automatically and copying will start.
    e) If no other operation is performed, the copier will return to the standard mode approximately 2 min after it completes a copy or after the last key operation.
    f) The copier shuts itself off automatically 2 hours after power-on (auto shut-off function; may be turned off using 'C08' of service mode).

C. Pick-Up from Multifeeder

1) Set documents on the copyboard.
2) Press the PAPER SELECT key to select the multifeeder.
3) Open the multifeeder tray.
4) Open the multifeeder cover.
5) Set the slide guide to the size of the copy paper.
6) Set copy paper.
    • As may as 50 sheets (80 g/m²) may be set.
7) Close the multifeeder cover.
8) Set the desired reproduction ratio using the DIRECT, REDUCE, ENLARGE, or ZOOM key.
9) Cancel the AE mode, and set the COPY DENSITY lever if manual adjustment of the density is desired.
10) Enter the number of copies using the numeric keypad.
11) Press the COPY START key.

D. Two-Sided Copying

Copy one side of a 2-sided original. Turnover the original so that the same edge faces the front. Turnover the copy in the same way (from edge facing the front) and feed it into the copier.

a) Use dry, uncurled paper.
b) Use paper in the weight range 60 to 128 g/m².
c) When making two-sided copies, only one image can be made on each side of the copy paper.
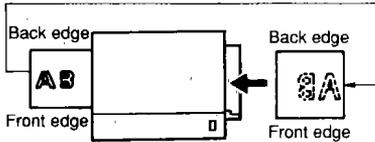d) Both overlay and two-sided copies cannot be made on the same sheet of copy paper.

Figure 1-5

E. Overlay Copy Operation

By changing the developing assembly, a 2-color copy can be made on the same side of the copy paper.

a) Use paper in the range of 64 to 128 g/m².
b) When making an overlay copy, a maximum of two images can be made on one side of the copy paper.
c) Overlay and two-sided copies cannot be made on the same sheet of copy paper.

F. Auto Start

The auto start mechanism may be made use of while the copier is in the wait mode (COPY START key blinking green); i.e., after it is switched ON or after the standby mode is canceled.

Set a document while the copier is in the wait mode, and select the copy modes; then, press the COPY START key.

The COPY START key changes from blinking green to orange to indicate that the auto start mechanism has been activated.

The copier starts making copies as soon as it enters the standby mode using the selected copy modes.

The auto start mechanism may be canceled by pressing the CLEAR/STOP or RESET key.

G. Auto Shut-off

If the copier is not used for two hours, the power will turn OFF automatically. (The Standby key will flash orange.)

To turn the power back ON, press the Standby key.

H. Replacing the CT Unit

1) Open the front door.
2) Swing the developing assembly release lever counterclockwise.
3) Pull the developing assembly forward.
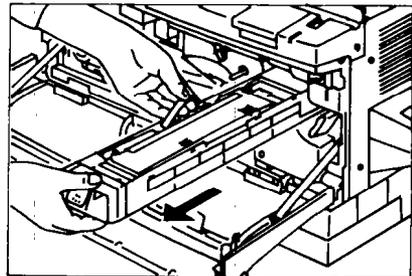4) Grasp the handle of the developing assembly, and raise it carefully.

Figure 1-6

5) Place the CT carefully on the developing assembly guide rails and push it in the copier.
6) Shift the developing assembly release lever clockwise until it is horizontal.
7) Close the front door.

Note:
i. Do not tilt or handle the developing assembly or the CT unit roughly.
ii. Do not place the developing assembly or the CT unit on the floor. Be sure to place them in their storage box or on the pedestal of the copier.

V. WARNING INDICATOR AND REQUIRED ACTION

A. Jam Indicator ⸱⸱ᐯ

If an area of this indicator flashes while copying is taking place, it is likely that the paper has jammed at the position represented by the part that is flashing. Check and take action as follows.
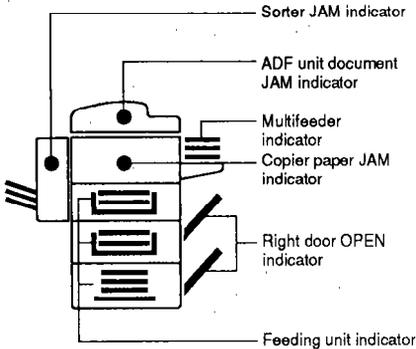

Figure 1-7

When clearing a paper jam which has occurred in an option unit (sorter or ADF), refer to the SERVICE MANUAL for the option unit.
• Multifeeder indicator
• ADF unit document JAM indicator
• Copier paper JAM indicator
• Right door OPEN indicator
• Feeding unit indicator
• Sorter JAM indicator

If paper jams inside the copier, check the paper pick-up area, separation feeder area, fixing/copy delivery area, and cartridge area; and remove all jammed paper.
1) Open the front door.
2) Remove the copies from the copy tray.
3) Operate the release and open the copy delivery assembly.
4) Check if there is copy paper jammed in the fixing assembly. If there is paper jam in it, turn the knob of the fixing rollers counterclockwise to remove the jammed paper.
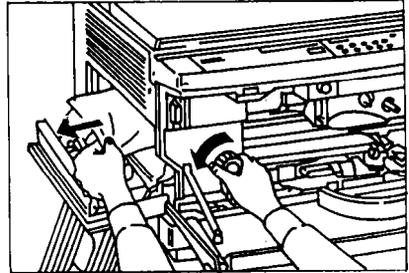

Figure 1-8

5) Close the copy delivery assembly.
6) Check if there is paper jammed in the separation/feeder area. If there is, swing the feeder release lever counterclockwise to open the feeder, then remove the jammed paper. Be careful not to tear the paper.

Note:
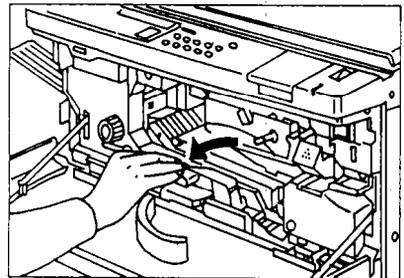When removing jammed paper from the separation area, be very careful not to touch the photosensitive drum.

Figure 1-9

7) Open the multifeeder cover, and remove the paper from the multifeeder tray.

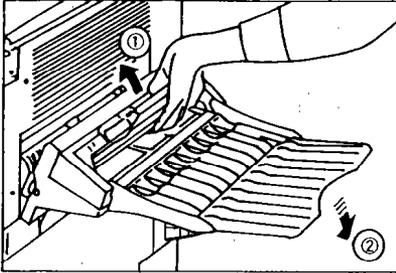8) Hold the grip found at the bottom of the multifeeder cover, and open the right door; then, remove the jam.

Figure 1-10
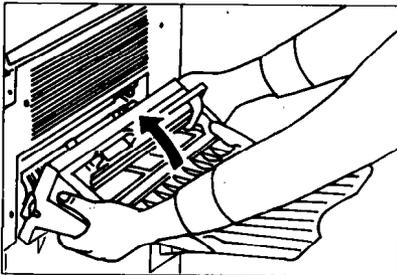
9) Close the right door.

Figure 1-11

10) Close the front door.

B. Add Paper Indicator ⬚

1. Cassette

The indicator goes ON when no cassette is found in the cassette holder or no paper is found inside the cassette.

1) Push the center of the cassette.
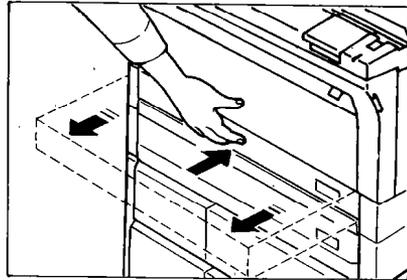 - The cassette springs out automatically.

Figure 1-12

2) Set copy paper inside the cassette.
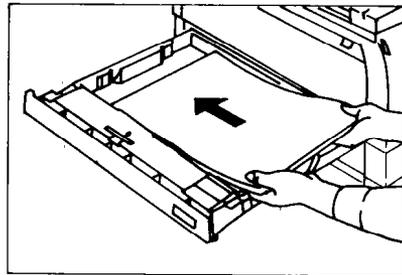 - As many as 250 sheets of copy paper (80 g/m²) may be set.

Figure 1-13

3) Hold the center of the cassette, and slide it into the cassette holder until it stops.

2. Multifeeder

The indicator goes ON when the paper on the multifeeder tray is not positioned correctly or the multifeeder cover is left open.

  - As many as 50 sheets of copy paper (80 /g/m²) may be set on the multifeeder tray.

C. Add Toner Indicator ⣧

This indicator flashes when the amount of toner in the black developing assembly has become low.

1. Black developing assembly
1) Open the front door.
2) Turn the developing assembly release lever counterclockwise.
3) Pull the developing assembly forward as far as possible.
4) Open the top cover of the developing assembly.
5) Shake the toner cartridge back and forth about 10 times.
6) Place the toner cartridge on the developing assembly.
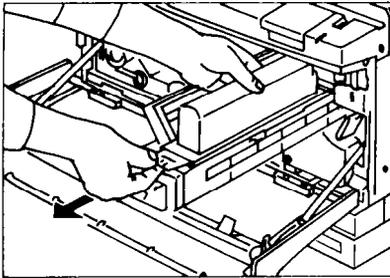7) While holding the toner cartridge in place, remove the seal slowly to allow the toner to flow out.

Figure 1-14

8) Tap the top of the toner cartridge to remove any toner remaining in the cartridge.
9) Carefully remove the toner cartridge.
10) Close the top cover of the developing assembly.
11) Put the developing assembly back into the copier.
12) Swing the developing assembly release lever clockwise.
13) Close the front door.

2. CT Unit (color developing unit)
If copy images become faint, the color toner has probably run out. In this case, replace the CT Unit. The copy image can sometimes be temporarily restored by agitating the CT Unit in its storage box.

Note:
The CT unit is a disposable type. When the color toner has been used up, toner is not added to the CT Unit; rather, the entire unit is replaced.

D. Control Card Indicator 🔢

The control card indicator operates on a copier with a control card unit. It flashes in the following cases:
a) When there is no control card in the control card unit.
b) When there is a control card in the control card unit but the indication on the control card unit is 'P' or 'EE'.

VI. DAILY INSPECTION TO BE PERFORMED BY THE CUSTOMER

Carefully instruct the customer to be sure to clean the following parts of the copier once a week.

1. **Primary Corona Assembly**
   Slide in and out the wire cleaner to clean the corona wires.

2. **Copyboard Glass**
   Clean the copyboard glass with a moist cloth, then wipe it dry.

3. **Copyboard Cover**
   Clean the copyboard cover with a mild detergent solution, then wipe it dry.

4. **Transfer Corona Assembly**
   Remove the transfer corona assembly from the copier, then slide the knob (wire cleaner) at the bottom of the transfer corona assembly back and forth to clean the corona wires.
   Further, clean the static eliminator using the cleaning brush (accessory).