

M3096G/H

**IMAGE SCANNER
OPERATOR'S GUIDE**

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CHAPTER 1 GENERAL

This manual is the operator's guide for the M3096G and M3096H image scanners. The M3096G and M3096H image scanner optically read image information on a document and inputs the information into the host computer.

The image scanner consists of the image reading mechanism, document feed mechanism, microprocessor control circuit, operator panel and power supply unit.

The M3096H can scan sheets of paper up to A3 and double letter size. The M3096G can also scan sheets of paper up to A3 and double letter size. In addition, the M3096G has an automatic document feed function.

Please read this guide carefully before attempting to operate the scanner.

The features of this image scanner are:

- **A document as large as double letter size can be read.**
- **High speed reading (less than 8 seconds for double letter size document)**
- **High resolution reading (400 dpi)**
- **Compact desktop size**
- **Automatic document feeder (ADF) (M3096G only)**

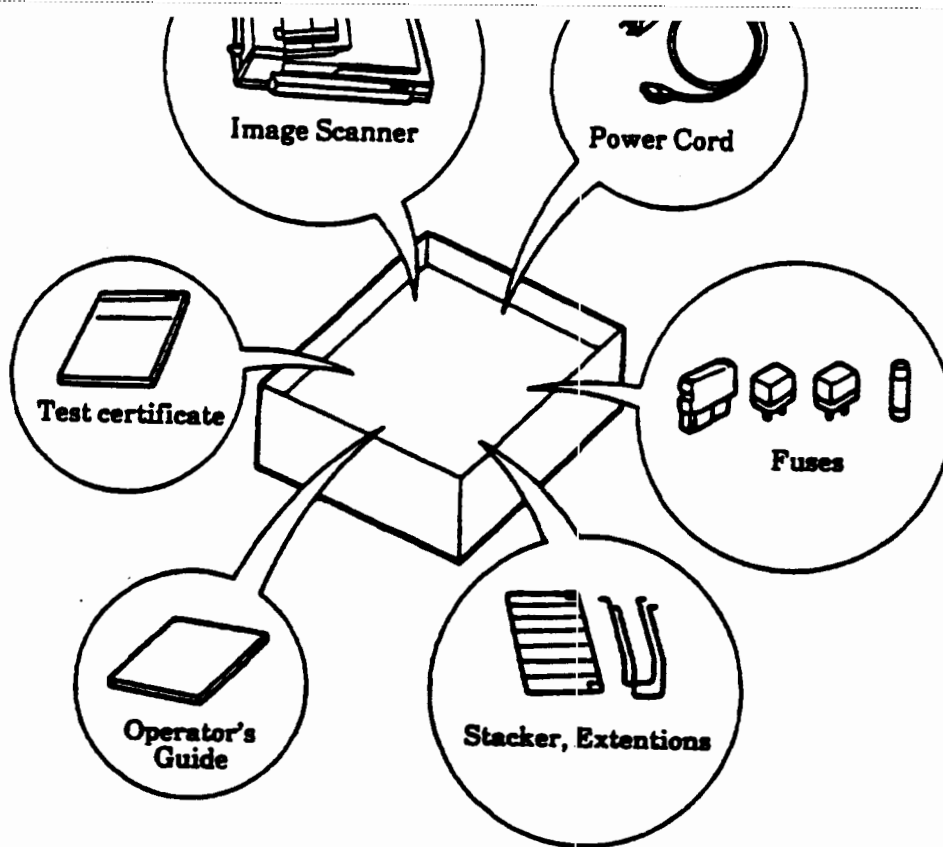
CHAPTER 2 CONFIGURATION

- | | |
|------------|----------------------------------|
| 2.1 | Unpacking Scanner |
| 2.2 | Scanner Parts |
| 2.3 | Indication Panel Function |

After removing the image scanner from the box, check to see if all of the parts are there. This section contains a listing of the parts supplied, and explains what they are used for.

2.1 Unpacking Scanner

Handle the parts with care. Refer to the figure below to determine what parts are supplied with the unit. If a part is missing, contact your local dealer. The image scanner in the figure below is the M3096G model.



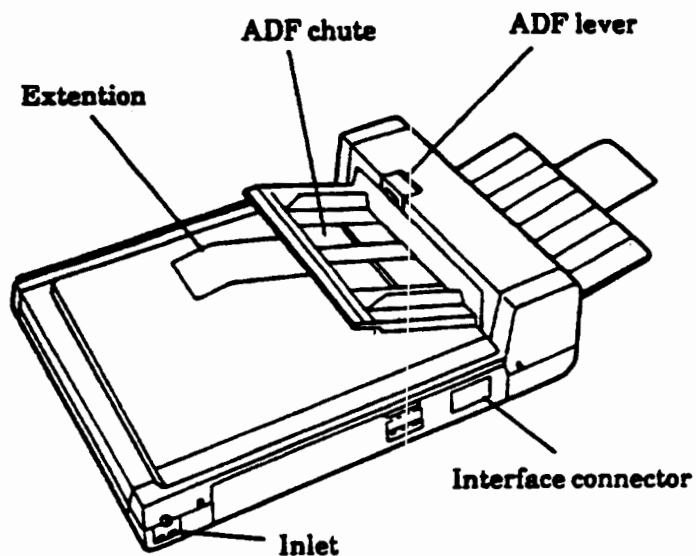
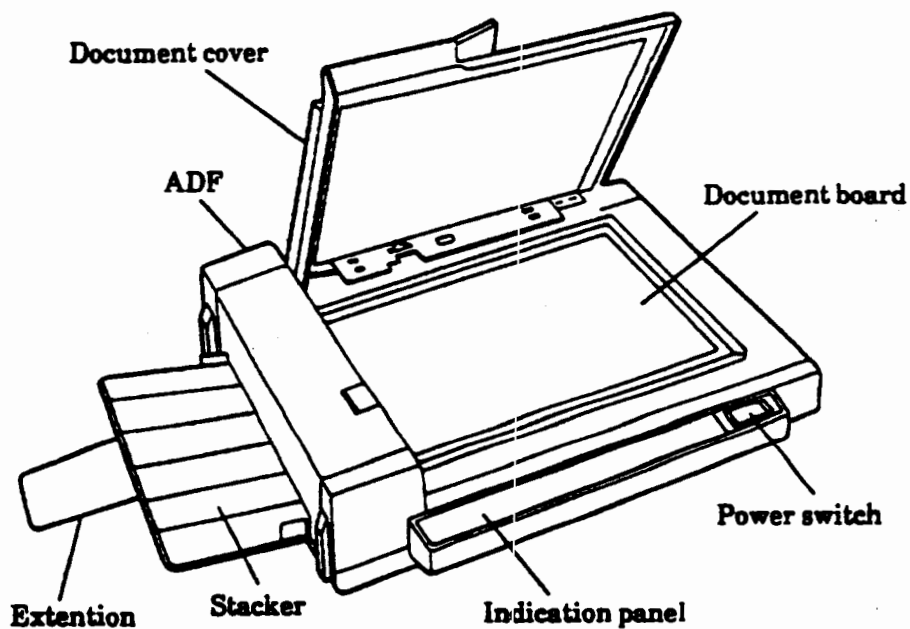
Fuses should be replaced by service man.

2.2 Scanner Parts

This section Lists the parts for each model and explains what they are use for.

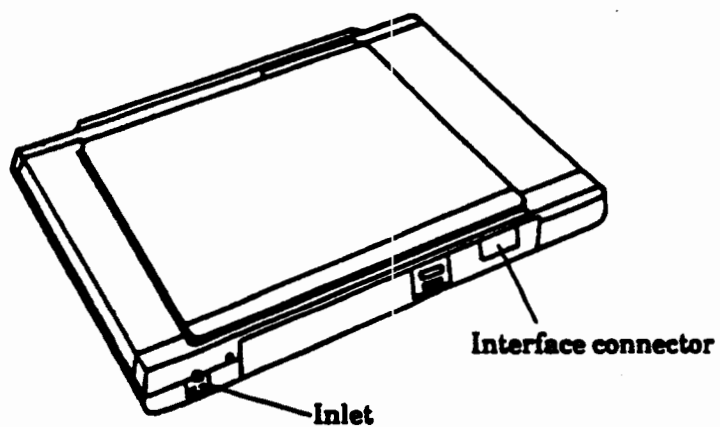
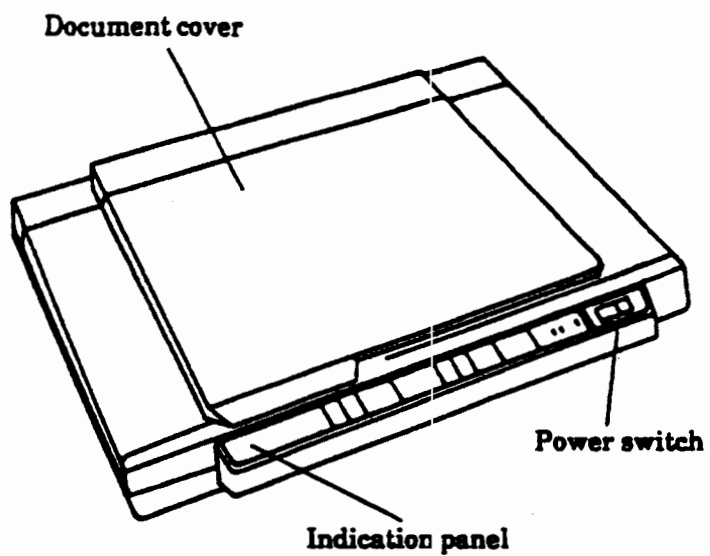
2.2.1 Parts location of M3096G model

The M3096G model can scan double letter or A.3 size documents. This model also has an automatic document feeder (ADF).



2.2.2 Parts location of M3096H model

The M3096H can scan double letter or A3 size documents.



2.2.3 Describing parts

(1) Document cover

Holds the document in place.

(2) Document board

The document is placed face down on this bed.

(3) Automatic document feeder (ADF)

Automatically feeds pages of a document into the scanner.

(4) Stacker

Documents are output here.

(5) Extension

Prevents documents from hanging off the paper.

(6) Power switch

Turns the power on and off.

(7) Operator panel

The status of the image scanner is displayed on this panel. The next section explains the function of this panel in detail.

(8) ADF chute

Place documents here for the ADF.

(9) ADF lever

Used to open and close the automatic document feeder mechanism in order to remove jammed documents.

(10) Inlet

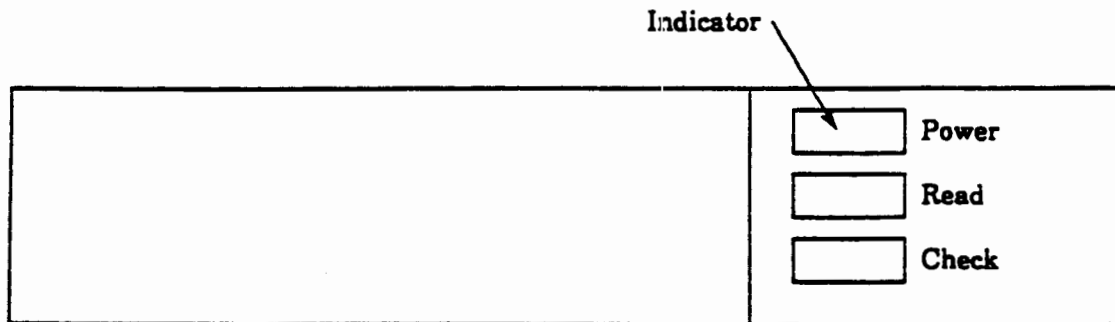
The power supply cable is inserted here to connect the scanner to a suitable power outlet.

(11) **Interface connector**

The interface cable is inserted here to connect the scanner to the host computer.

2.3 Indication Panel Function

The Indication panel has indicators which provide status information.



Indication panel for the scanner

Indicator names and functions

Indicator name	Lamp color	Function
Power lamp	Amber	This lamp is lit while the power is on. It flickers while the unit is warming up.
Read lamp	Green	This indicator lights up when the document is scanned.
Check lamp	red	This indicator lights up when error occurs. It flickers when a jam occurs in the auto feed mode. When jammed paper is removed, this indicator is turned off.

CHAPTER 3 SCANNER SETUP AND CONNECTION

- | | |
|------------|------------------------------|
| 3.1 | Precautions |
| 3.2 | Removing Metal Clamps |
| 3.3 | Removing Screw |
| 3.4 | Connecting Scanner |
| 3.5 | Mounting Stacker |

The image scanner is connected to the host computer. Listed below are precautions to be observed when setting up the image scanner.

3.1 Precautions

See the Appendix, "Scanner specifications for environmental conditions and installation".

Place the scanner away from any noise sources or strong magnetic fields.

Do not use the scanner close to an air conditioner, a copy machine, or a TV set; it may not operate correctly.

Avoid areas where the unit is subject to humidity or dust. These conditions may shorten the expected unit life or cause errors during operation. Also, avoid spilling coffee or tea on the unit.

Do not place the image scanner near a heater or in direct sunlight; otherwise, the expected unit life will be shortened and errors may occur during operation.

Avoid areas where shocks or vibrations may occur, or the unit may not operate correctly.

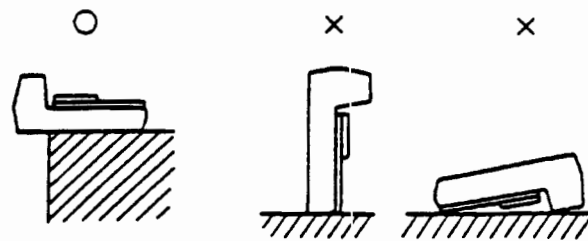
Avoid static electricity.

If the image scanner comes into contact with static electricity, it will not operate correctly. Place the unit on a floor or desk made of a material that does not generate static electricity.

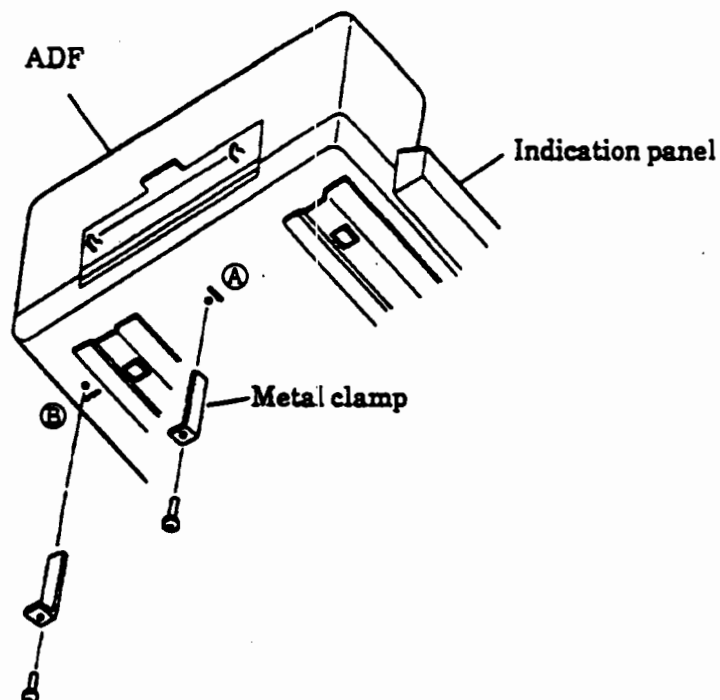
3.2 Removing Metal Clamp

Metal clamps are used to hold the unit in place during transportation. Remove the metal clamps as follows:

- ① Place the image scanner on a desk so that the left side, i.e. the automatic document feeder, protrudes from the edge of the desk. Do not place the unit upside-down or stand it on end.



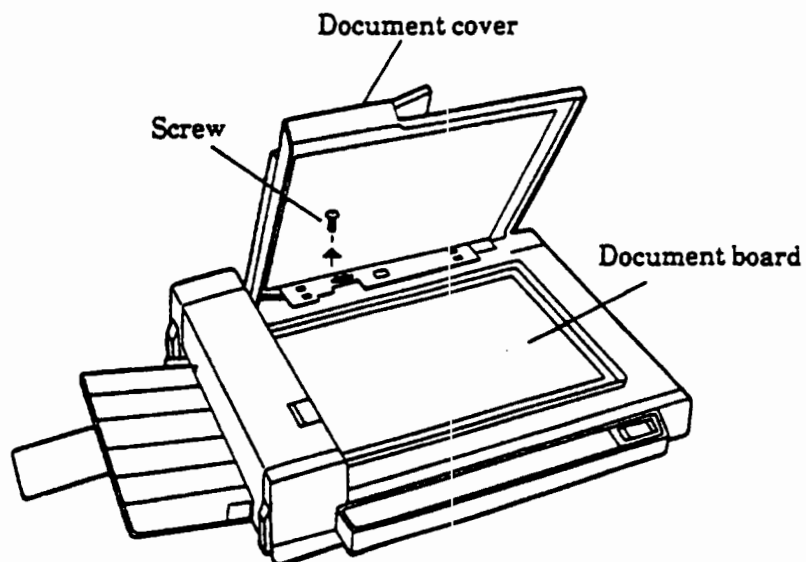
- ② Remove the metal clamp on the rear panel from ① and mount it in ②.



3.3 Removing Screw

Remove the screw from the document cover.

- ① Open the document cover and remove the screw.

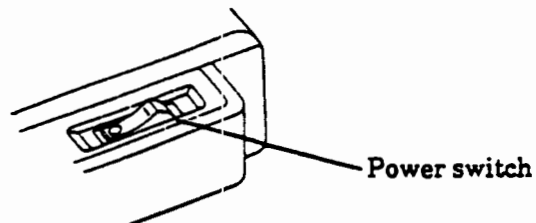


3.4 Connecting Scanner

Connect the image scanner as follows:

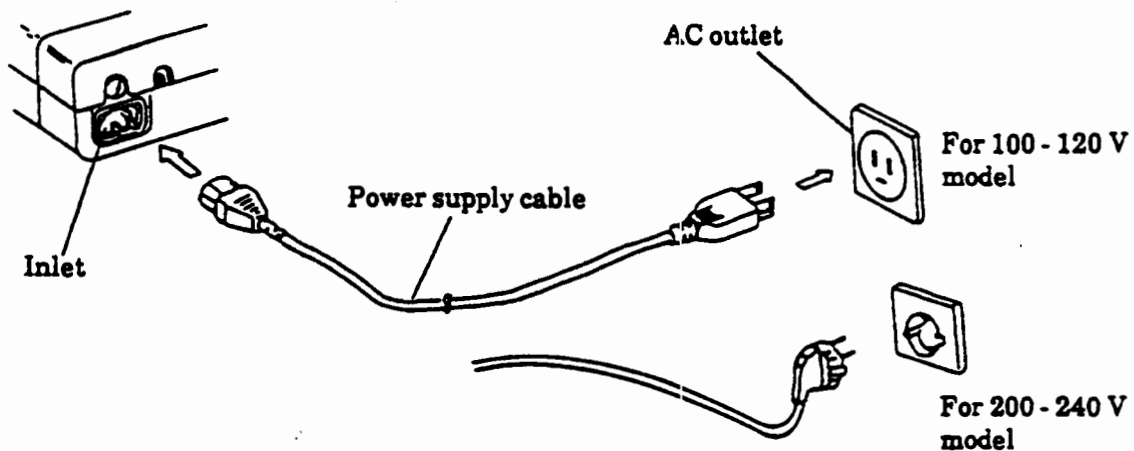
- ① Set the power supply switch to off.

Press the side of the switch marked \bigcirc to turn off the power.



- ② Connect the power supply cable

Connect one end of the power supply cable to the AC line receptacle and the other end to the power outlet.



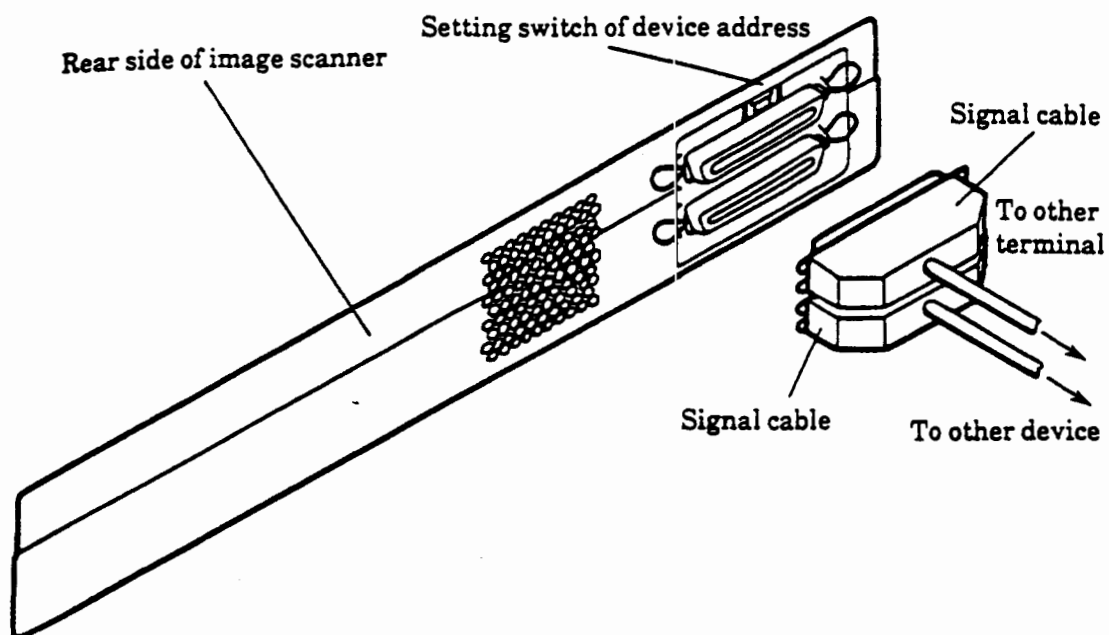
- ③ Connect the interface cable

Connect the interface cable to the interface connector and use the hooks hold it in place.

Connect the other end to the host device.

④ Set the device address

Use the address switches to set the device address.



Setting the device address

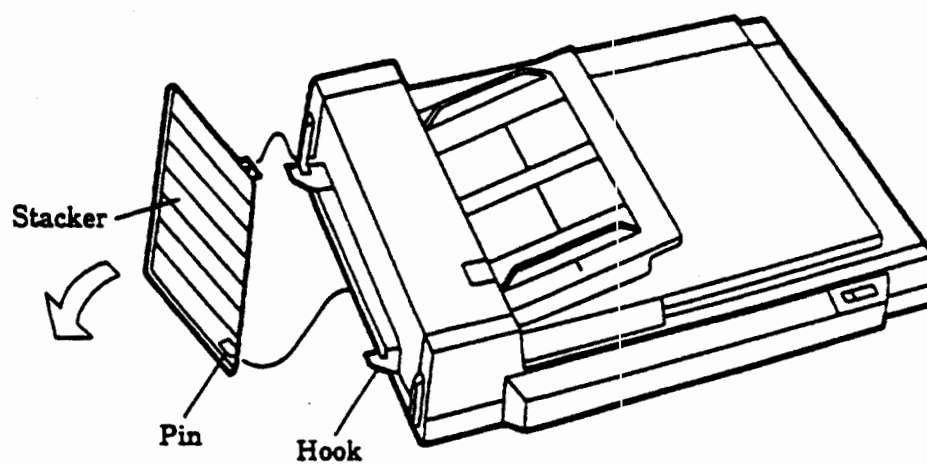
Address Number	Content
1 ~ 7	Available
8, 9	No Operation

- When the scanner is terminated device, the termination connector must be connected on one side of the connectors.

3.5 Mounting Stacker

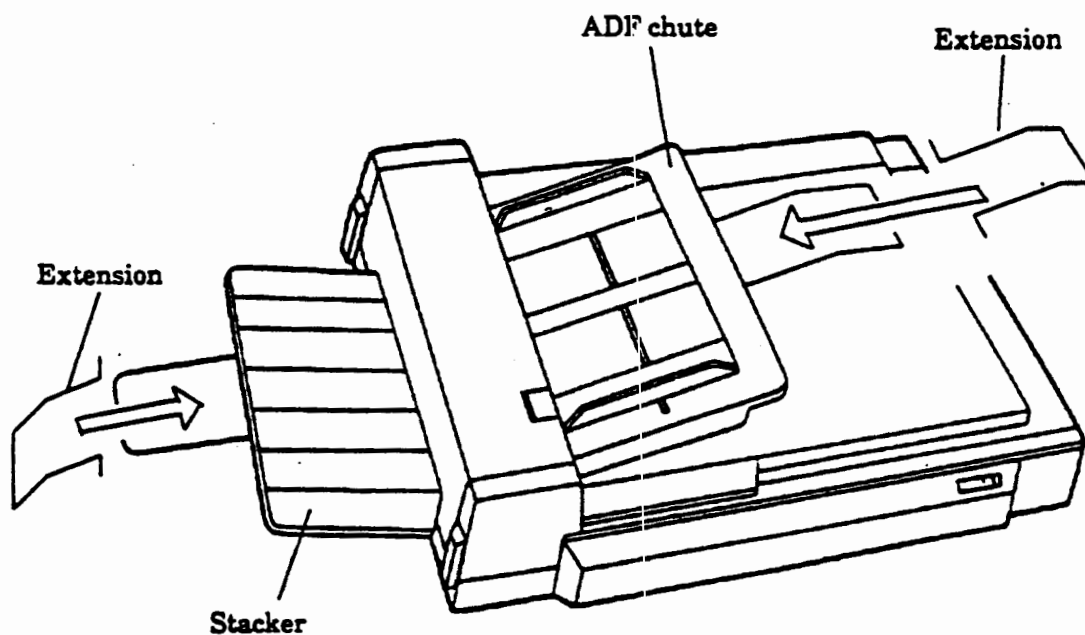
For the M3096G, mount the stacker and extensions as follows:

- ① Mount the stacker.



- ② Mount the extensions.

Mount the extensions on the stacker and the ADF chute.



CHAPTER 4 SCANNER OPERATION

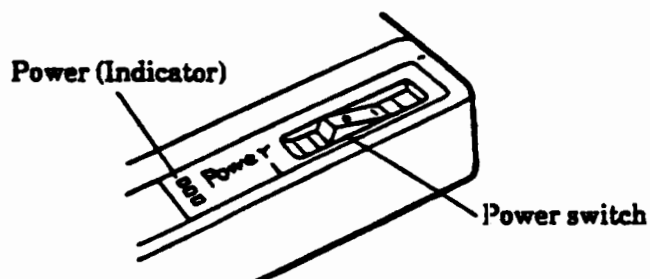
- | | |
|-----|-----------------------------|
| 4.1 | Turning on Power |
| 4.2 | Document Manual Set |
| 4.3 | Scanning Documents with ADF |

Documents are scanned manually by placing one sheet at a time on the document board, or they are scanned automatically using the automatic document feeder.

This chapter explains how to turn on the power supply, and how to scan documents using the ADF or the manual method.

4.1 Turning on Power

Press the side of the power supply switch marked " | ". The "Power" indicator will flicker and the unit will begin warming up. When the "Power" indicator lights up, the machine is ready to scan documents.



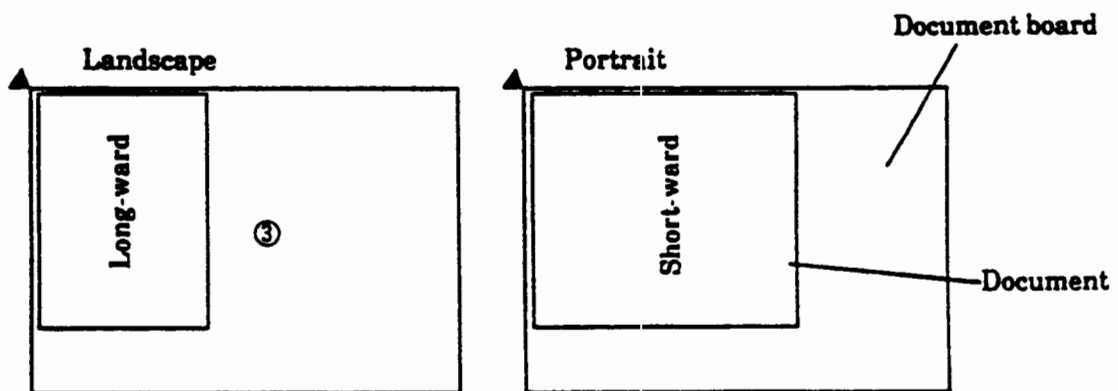
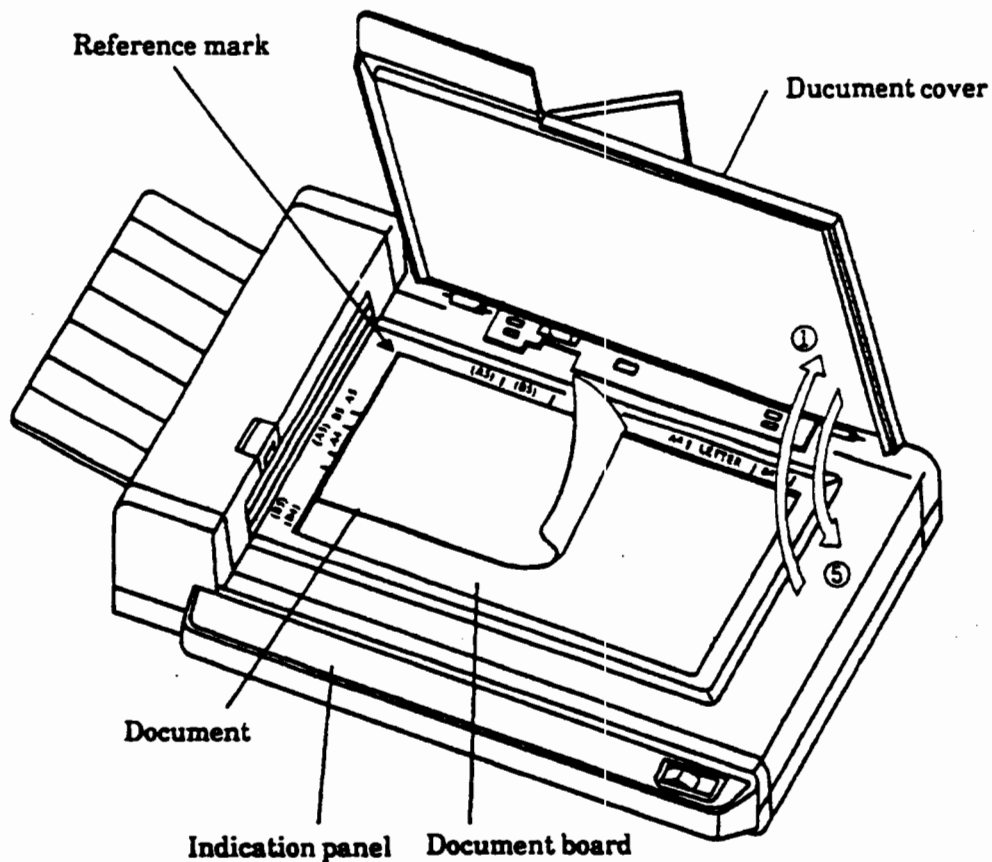
To turn off the power, press the side of the power supply switch marked "○".

4.2 Document Manual Set

This section explains how to scan documents that are set manually.

4.2.1 Scanning document smaller than document board

If the document to be scanned is smaller than the document board, follow the operating procedures below.



- ① Open the document cover.
- ② Place the sheet face down on the document board. Smooth out any wrinkles or folds.
- ③ To produce a landscape image, place the long side of the paper on the left side of the document board (e.g., where the ADF is). To produce a portrait image, place the short side of the sheet on the left side of the document board.
- ④ Make sure that the top left hand corner of the document is placed next to the reference mark.

The document must not be slanted, or it won't be scanned properly.

- ⑤ Slowly close the document cover.

If the document cover is closed too quickly, the document may move, and it won't be scanned properly.

- ⑥ Begin scanning.

Do not press or open the document cover while the document is being scanned.

- ⑦ When scanning has completed, open the document cover and take out the document.

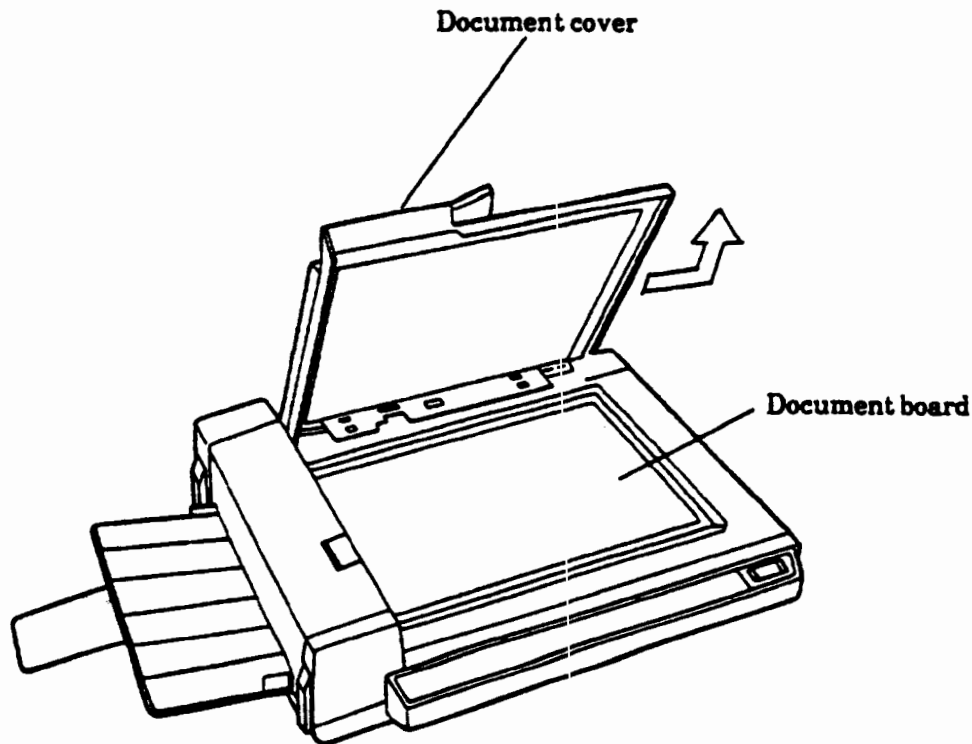
4.2.2 Scanning thick document

When a thick document such as a book is being scanned, observe the following guidelines:

- ① Leave the document cover open.
- ② Make sure that the paper is flat against the glass.
- ③ Do not move the document while it is being scanned.

4.2.3 Scanning document larger than document board

Use the following procedure to scan oversized documents.



- ① Unhinge and remove the document cover.
- ② Place the document face down on the document board.
- ③ Carefully place the document cover (as is, unhinged) over the document.
- ④ Scan the document.
- ⑤ When scanning is completed, remove the document and return the document over to its the original position, with the hinge in place.

Note:

Do not remove the document cover for other than scanning oversized documents.

4.3 Scanning Documents with ADF (only for M3096G model)

This section describes how to scan documents with ADF. If this procedure is not followed, an error may occur.

① **Inspect the document carefully.**

Look for:

- ◇ **Paper clips staples, etc.: These items must be removed.**
- ◇ **Wet ink**
- ◇ **Pages of varying sizes: These will cause alignment problems.**
- ◇ **Unusual paper sizes and thickness: These documents may become misaligned when scanned with ADF.**
 - **Paper that must not be scratched**
 - **Paper that is larger than A3 or double letter size**
 - **Very thin paper**
 - **Very thick paper**
 - **A mixture of thick and thin papers**
 - **Torn pages**
 - **Wrinkled, curled, and folded pages**
 - **Tracing paper**
 - **Coated paper**
 - **Carbon copies or pressure sensitive paper**
 - **Cloth or metal sheets, transparencies, or photographic paper**
 - **Envelopes**
 - **Sealed envelopes**

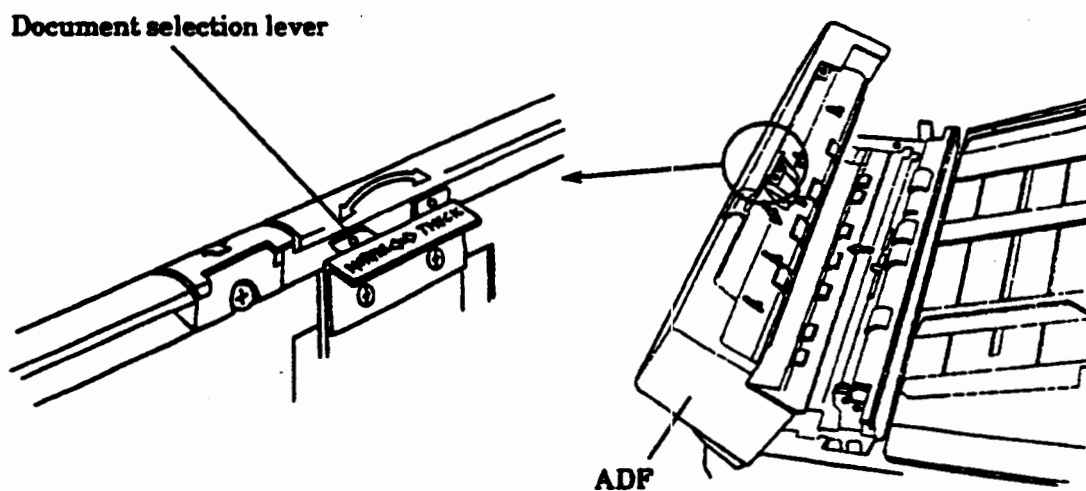
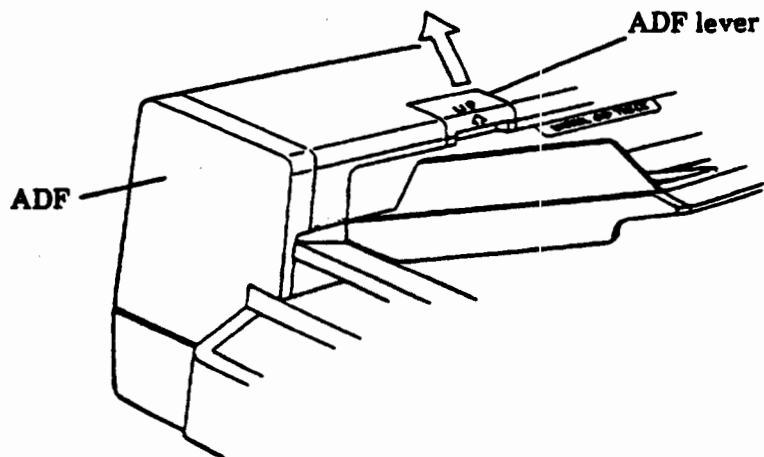
② Set the document selection lever.

Set the document selection lever as follows:

- ◇ Open the ADF by lifting the ADF lever.
- ◇ Use the tip of a ball-point pen to move the document selection lever.

For a regular size document: Set the lever to the normal position.
For a thick document: Set the lever to the thick position.

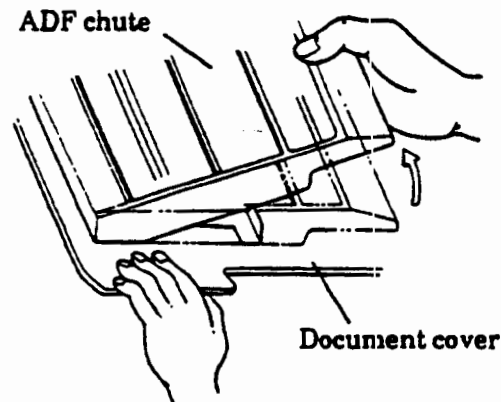
- ◇ Return the ADF to the original position by lifting the ADF lever.



③ Set the ADF chute.

Lift up the ADF chute as follows:

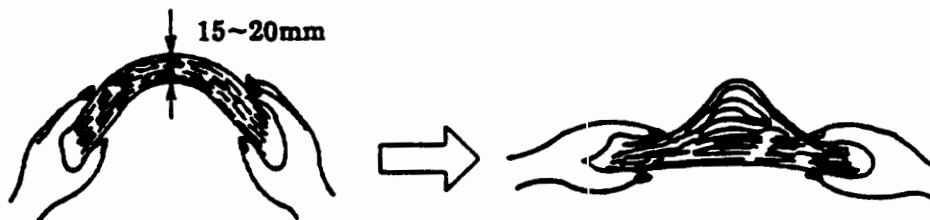
- ◇ Use one hand to hold the document cover in place, and the other to position the ADF chute. Lift up on the sheet feeder until you hear a clicking sound.



④ Loosen the documents

Loosen a bundle of documents as follows:

- ◇ Remove a 15 to 20 mm thick section of the document and place it face down. Using both hands bend the documents in the middle.
- ◇ Straiten out the documents, but don't allow the ends to meet. The papers should form a small hill in the middle.
- ◇ Repeat this procedure two or three times.
- ◇ Turn the documents 90 degrees and repeat the whole procedure.



⑤ Place the document in the chute.

Decide the amount of paper to be placed in the chute according to page size.

A4 or letter size documents: 4 mm or less
Documents larger than A4 size: 2 mm or less

⑥ Making the ends of the documents slanted

Make the ends of the documents slant as follows:

- ◇ Arrange the documents with the scanning surface down, and place the documents so that the reference side is on the left (see Figure A). For landscape images, make the long side the reference side. For portrait images, make the short side the reference side.



Figure A

- ◇ Use both hands to pick up the documents.
- ◇ Bend the documents keeping a firm grip with the left hand (see Figure B). The grip of the right hand should not be as firm.

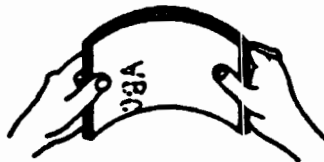


Figure B

- ◇ Return the bent documents to the original position. This time keep a firm grip with the right hand (see Figure C). Loosen the grip of the left hand.

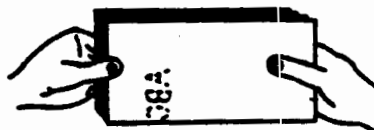


Figure C

- ◇ Repeat the steps shown in Figures B and C until the documents are slanted by 20 degrees at both ends (see Figure D).

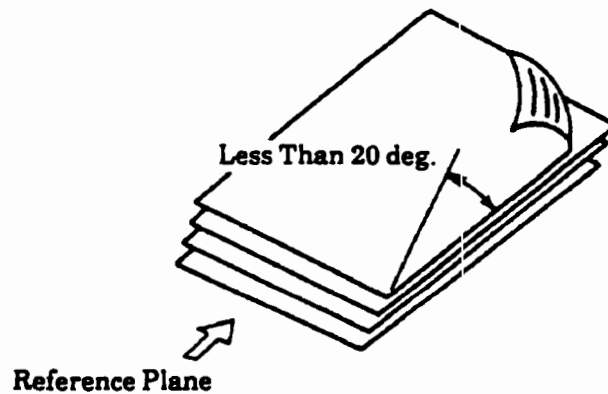


Figure D

- ⑦ Open the left and right guides on the ADF chute slightly wider than the width of the document (about 5 mm).
- ⑧ Gently place the documents on chute with face-down.
- ⑨ Move the left and right guides on the ADF chute until they touch the document slightly. If there is a space between the documents and the guide, misalignment may occur when the documents are fed through.
- ⑩ Insert the document until it lightly touches the inner wall of the ADF. Note that more than one page may be fed through at a time if the document is inserted too far. Check whether the edges of pages are bent.
- ⑪ Start scanning the document. If the wrong document size is selected or placement of the document is incorrect (i.e., portrait or landscape mode) entire sections of the document may not be scanned.
- ⑫ After scanning has completed, remove the documents from the stacker.

CHAPTER 5 MAINTENANCE

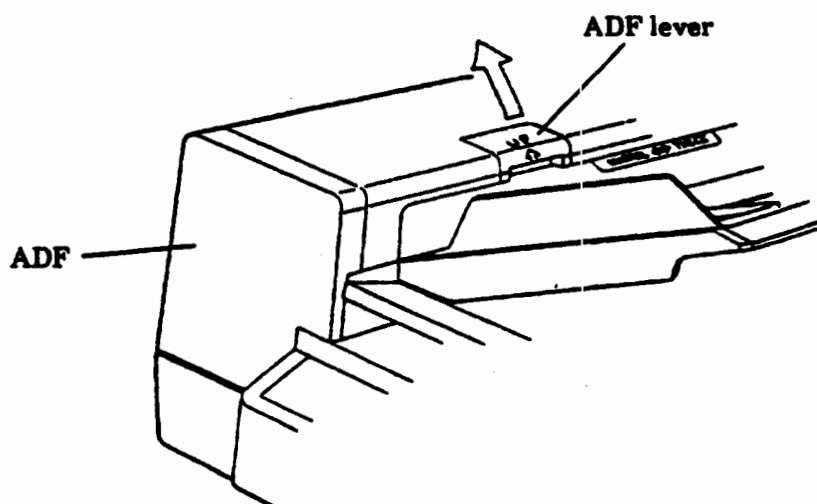
- | | |
|-----|---------------------|
| 5.1 | Clearing Paper Jam |
| 5.2 | Daily Maintenance |
| 5.3 | Cleaning Procedures |

This chapter explains how to clear a paper jam, and provides daily maintenance, and cleaning procedures.

5.1 Clearing Paper Jam

If a paper jam occurs in the ADF, extract the jammed paper as follows:

- ① Remove the papers in the ADF chute.
- ② Open the ADF by the ADF lever.
- ③ Remove the jammed paper.
- ④ Return the ADF to the original position by the ADF lever.



5.2 Daily Maintenance

To extend the life of the image scanner, daily maintenance is essential.

- ◇ One to three minutes is required for the image scanner to warm up. During this time, the "Power" indicator will flicker.
- ◇ Do not open the document cover and look directly at the fluorescent lamp during scanning.
- ◇ If the document cover, the document board, or ADF is stained, follow the procedure outlined in "Cleaning Procedures".

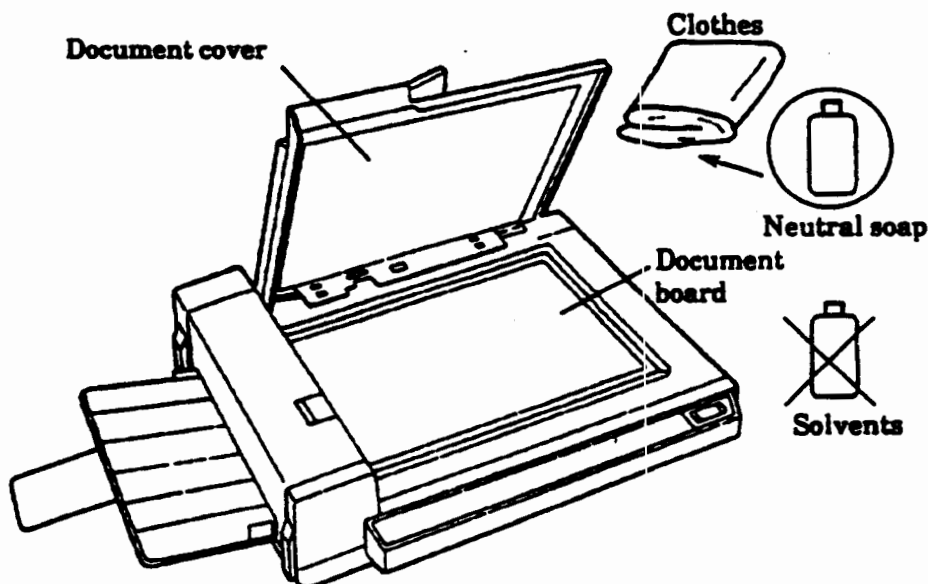
5.3 Cleaning Procedures

This section describes how to clean the image scanner.

5.3.1 Cleaning document cover and document board

Use a dry cloth, or a wet cloth with a small amount of neutral soap on it to clean the document cover and the document board. Do not use an organic solvent such as paint thinner. Do not allow any water to get on surrounding areas.

If a dry cloth is used to briskly rub the surface of the white sheet, the white board will become charged with static electricity, and dust will adhere to it. If dust adheres to the white sheet, wet a cloth with antistatic fluid or with methanol containing an anti-static fluid and wipe the white board.



5.3.2 Cleaning ADF

- ① Open the ADF by lifting the ADF lever.
- ② Use a dry piece of cloth or a piece of cloth dipped in isopropyl alcohol to clean the following parts:

Pad: Wipe the pad from the top to the bottom, as indicated with an arrow marked 1 in the figure below. Be careful not to catch the cloth on the pick spring.

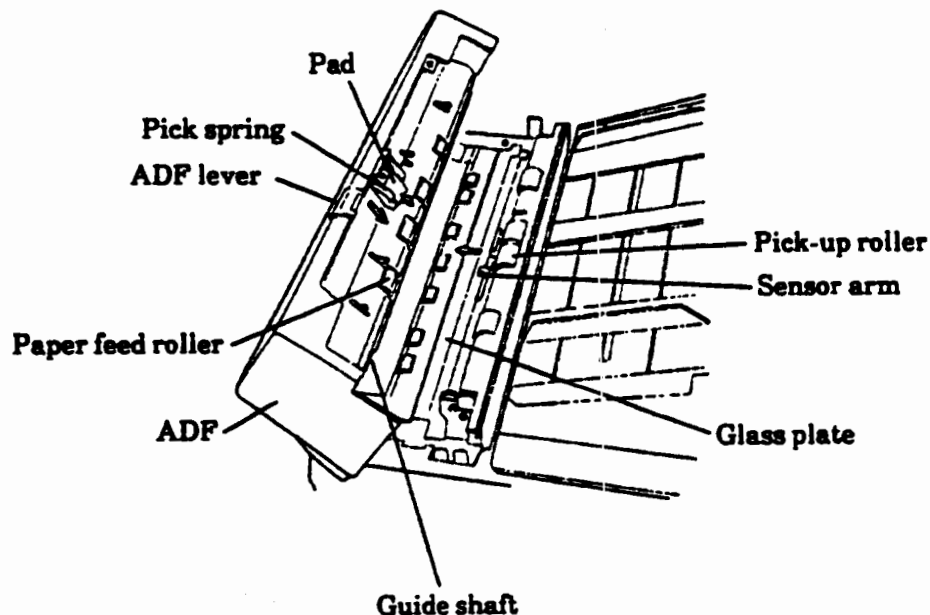
Glass plate: Wipe the glass plate from right to left, as indicated with an arrow marked 2 in the figure below. Be careful not to catch the cloth on the sensor arm.

Pick-up roller: Clean the pick-up roller gently so as not to damage the surface.

Paper feed roller: Clean the paper feed rollers gently so as not to damage the surface.

**Guide shaft
(white hexagon shaft):** Clean the guide shaft gently so that it is not damaged.

- ③ Close the ADF by lifting up the ADF lever.



CHAPTER 6 GENERAL TROUBLESHOOTING

If an error occurs, check the items listed in the following table.

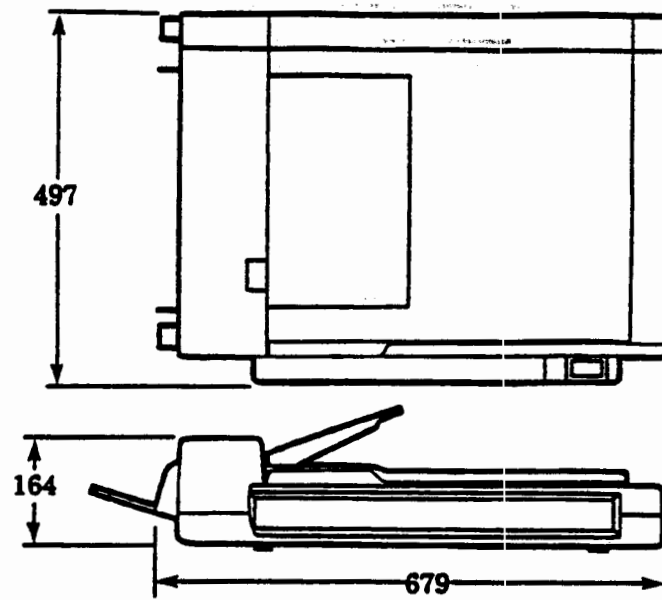
Error condition	Probable cause	Solution
The power does not come on.	The scanner has not been turned on yet.	Press the side of the power supply switch marked " ".
	The power supply cable has not been connected.	Connect the power supply cable.
The image scanner does not scan a document.	The address switch has not been set correctly.	Set the address switch correctly.
	The interface cable has not been connected or isn't connected correctly.	Connect the interface cable. If this scanner is terminated device, connect the "termination connector".
Characters, drawings, and photographs scanned are not correct.	The document board, chute, or the inside of the ADF may be stained.	Refer to "Cleaning Procedures" for a description of how to clean this part.
An image is shifted or disfigured.	The document was moved while it was being scanned.	Close the document cover so that the document does not move.
	The page was not flat against the document board.	Press the page flat against the document board, then scan the document.
The "Check" indicator is on.	The metal clamp has not been removed.	Remove the metal clamps following the instructions in "Remove Metal Clamps".
	—	Turn the power off, then turn it back on and run the image scanner. If the "Check" indicator comes on again, contact your local dealer.

APPENDIX SCANNER SPECIFICATIONS

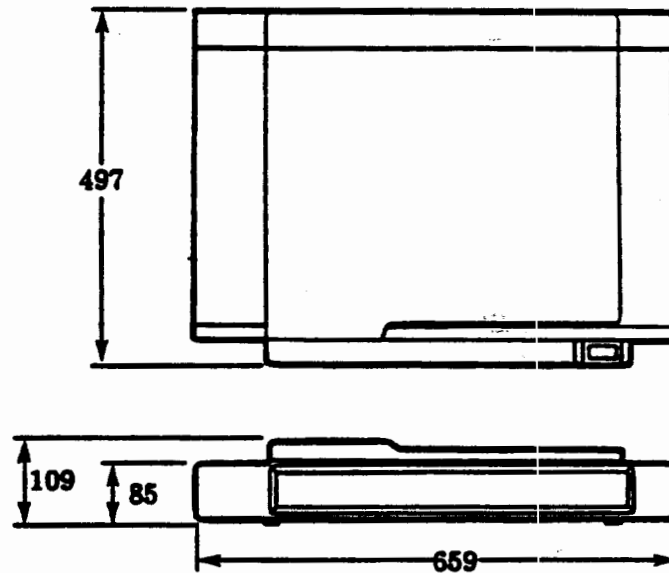
The following table lists the image scanner specifications for the M3096G and M3096H models.

Item		Specification			
Dimensions (*1)		Width	Depth	Height	
		M3096G	679 mm (26.7 in)	479 mm (19.6 in)	164 mm (6.5 in)
		M3096H	659 mm (25.9 in)	497 mm (19.6 in)	109 mm (4.3 in)
Weight	M3096H <i>G</i>	27 kg (59.6 lb)			
	M3096H	22 kg (48.6 lb)			
Input power supply	Voltage	100 - 120 VAC (For North America) 200 - 240 VAC (For Europe)			
	Number of phases	Single phase			
	Frequency	50/60 Hz			
Power consumption		2.2 A (For North America)			
		1.5 A (For Europe)			
Temperature and humidity tolerance		Operating	Nonoperating		
		Temperature	-20 to 60°C		
		Humidity	8 to 95%		

*1 Dimensions (unit: mm)



M3096G



M3096H