

M3093E

**Image Scanner
Operator's Guide**

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CHAPTER 1 GENERAL

The M3093E Image Scanner reads 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.

The features of this device are:

- A document as large as A4 size can be read.
- High-speed reading (less than 3.5 seconds for a A4-size document with 400 dpi)
- High-resolution reading (400 dpi)
- Compact desktop size
- Automatic document feeder (ADF)

CHAPTER 2 INSTALLATION

2.1	Precautions of Installation
2.2	Unpackaging
2.3	Checking Received Products
2.4	Shipping Retainer Removal
2.5	Parts Names
2.6	Cable Connection
2.7	Repackaging

This chapter explains the unpackaging procedure, installation procedure and confirmation of operation.

2.1 Precautions of Installation

Pay attention to following matter before unpackaging and installation.

- Do not install in a place where vibration may occur.
- Keep the scanner out of the sun. Do not install near a heat source.
- To ensure proper air circulation, do not place material around scanner.
- Do not install in a humid or dusty place.
- Do not use the wall socket with connecting devices which may make noise, for example motor.
- Use the suitable AC power source.

2.2 Unpackaging

Perform unpackaging according to following procedure.

- ① Remove two joints.
- ② Pull up the carton to remove.
- ③ Remove the upper retainers.
- ④ Take out the accessories and test certificate.
- ⑤ Take out the scanner.
- ⑥ Take out the scanner from vinyl bag and remove the protection tape.
- ⑦ Check the accessories by referring to Figure 2.2 and Table 2.1

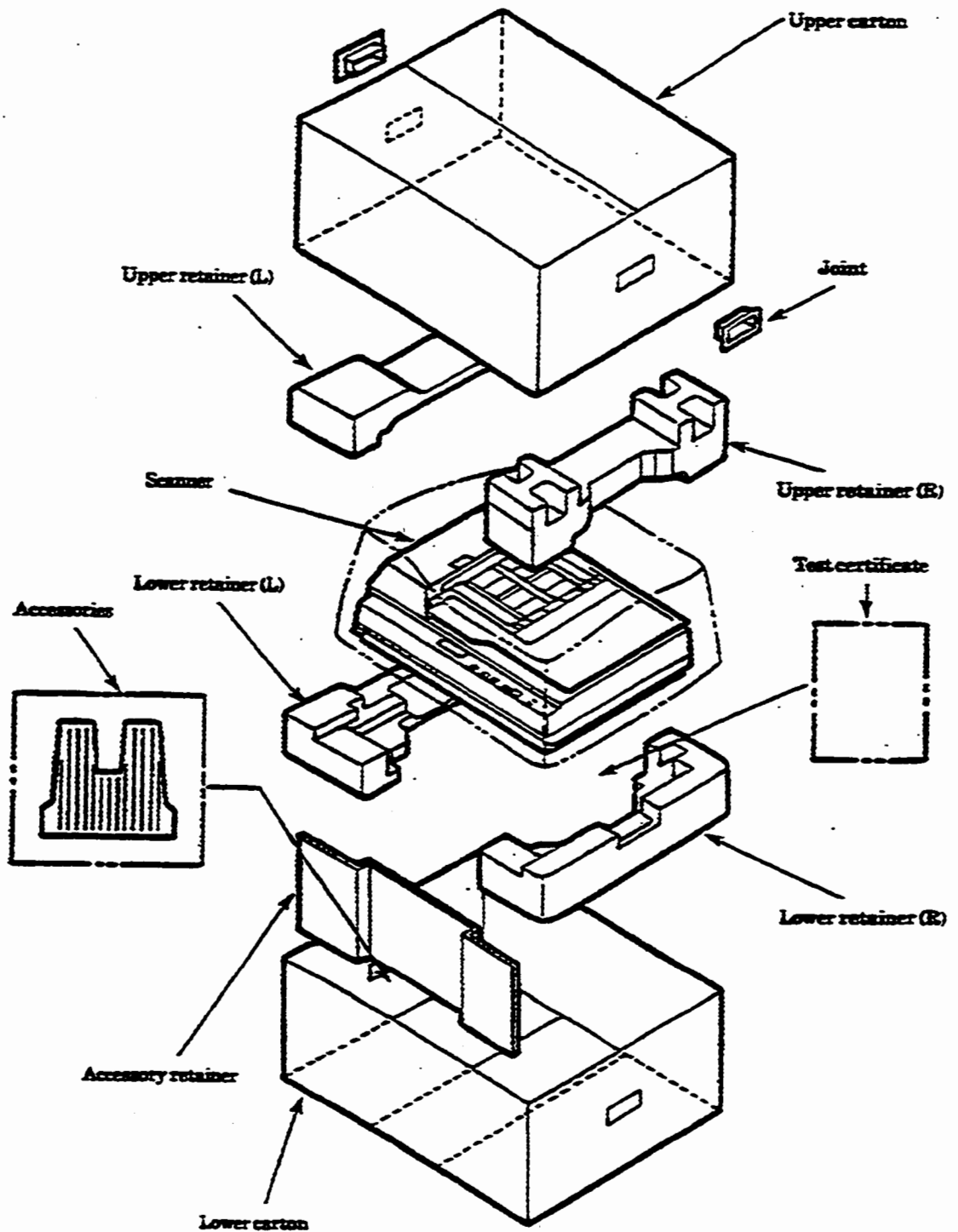


Figure 2.1 Unpackaging

2.3 Checking Received Products

Check that the following items have been received.

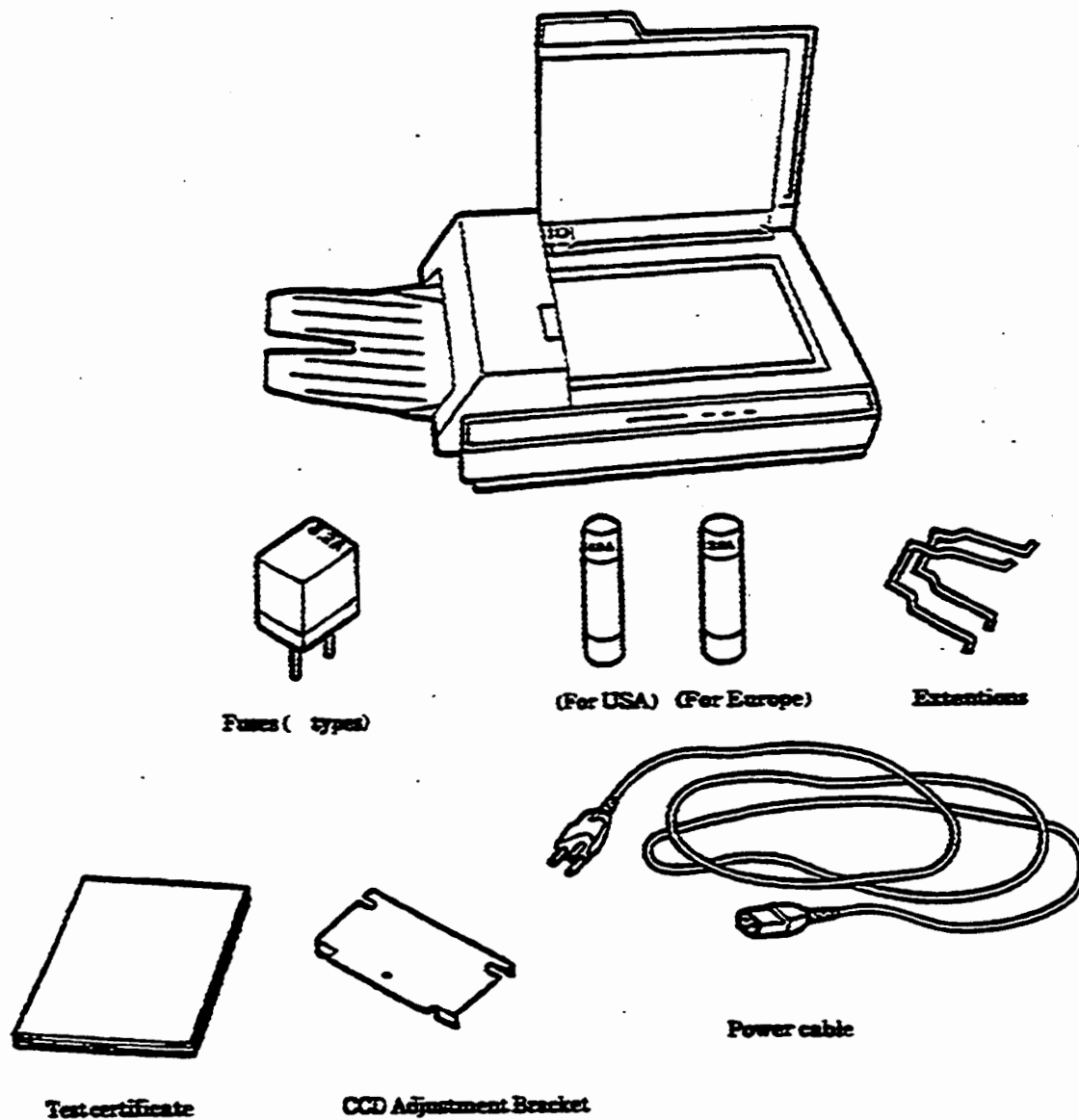


Figure 2.2 Received products

Table 2.1 Check list

No.	name	Quantity	Remarks
1	Power cable	1	
2-1	Fuses	2	3.2A 4.0A (For USA)
2-2	Fuses	2	3.2A 2.0A (For Europe)
3	Stacker	1	
4	CCD Adjustment Bracket	1	
5	Extensions	2	

2.4 Shipping Retainer Removal

① Remove the document cover

Open the document cover approximate 45° and pull it as shown in Figure 2.3.

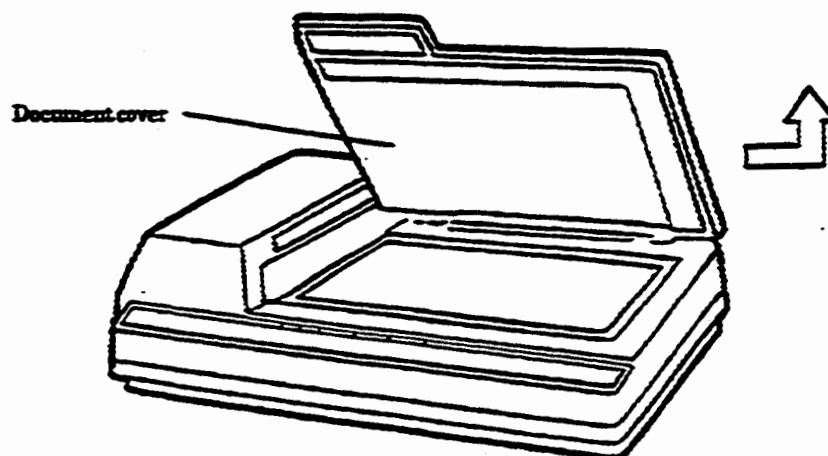


Figure 2.3 Document cover removal

- ② Pull up the lamp cover.

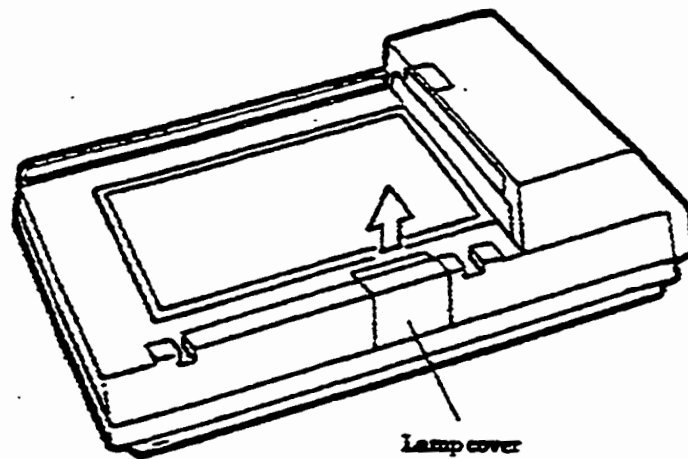


Figure 2.4 Lamp cover removal

- ③ Pull out the shipping retainer.

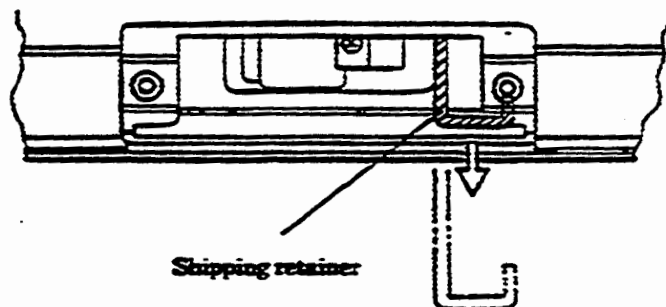


Figure 2.5 Shipping retainer removal

- ④ Put in the lamp cover.
- ⑤ Put on the document cover.

2.5 Parts Names

Figure 2.6 describes parts names.

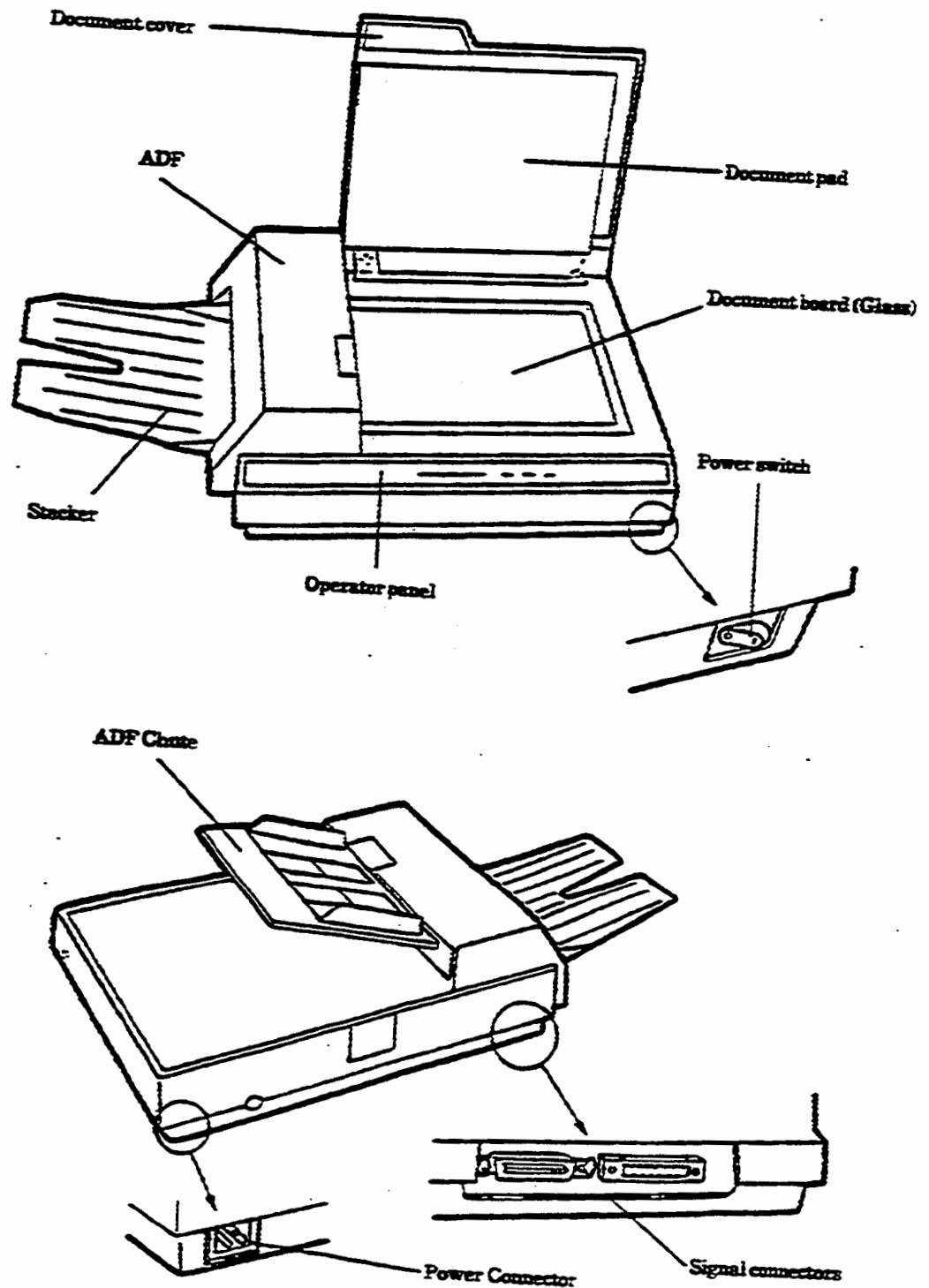


Figure 2.6 M3093E parts names

2.6 Cable Connection

Connect the signal cable and power cable as follows.

- ① Confirm that the power switches of the image scanner and host computer have been set to OFF.
- ② Connect the image scanner to the host computer with signal cables V and R.

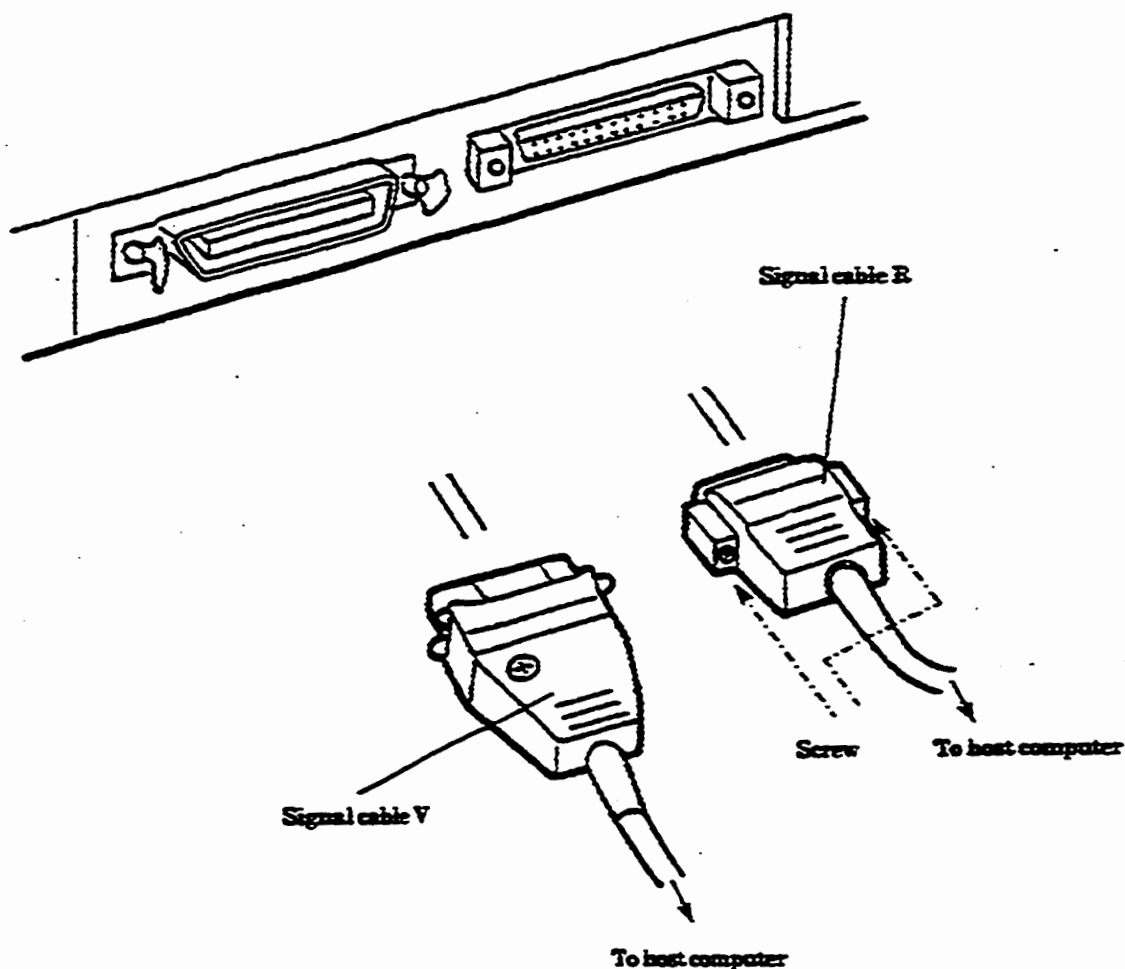


Figure 2.7 Signal cable connection

Insert the two cables as shown in Figure 3.3. Fasten the two catches to signal cable V and fix signal cable R with the screws.

The other end of each cable should be attached to the host computer in the same way.

- ③ Insert the power cable into its connector on the rear of the image scanner.

Also insert the power cable into a power outlet (with FG).

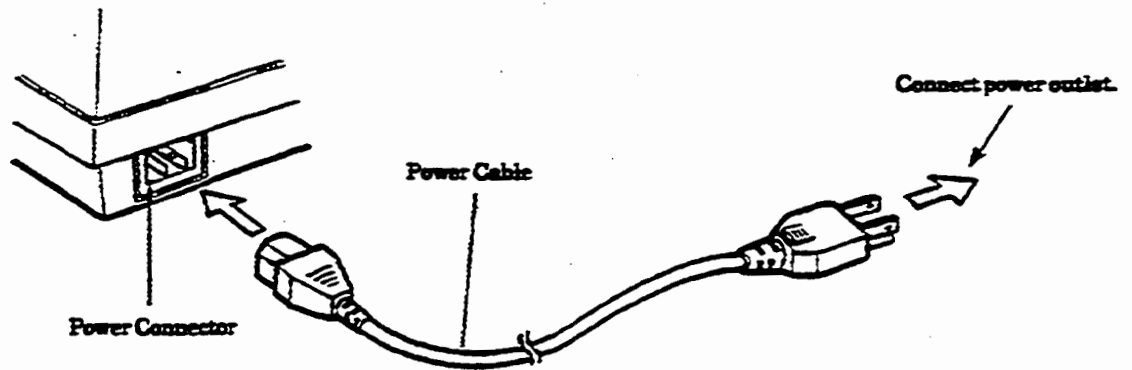


Figure 2.8 Power cable connection

2.7 Repackaging

When the scanner is moved for long distance, repackaging should be done with following method.

- ① Turn on the power with pressing 'Select' and 'Mode' switches.
- ② The carrier will go to the center of flat-bed.
- ③ Turn off the power when the LCD panel indicates 'Power Off'.
- ④ Remove the document cover and the lamp cover.
- ⑤ Disconnect the power cable.
- ⑥ Insert the carrier fixing pin to the hole of the carrier (see Figure 2.9).
- ⑦ Put the lamp cover and the document cover.
- ⑧ Push down the chute and remove the stacker and extensions.
- ⑨ Set poly-urethane foam on the upper cover and close the document cover (see Figure 2.10).
- ⑩ Tight the covers with adhesive tape (see Figure 2.10).
- ⑪ Put the scanner into the vinyl bag.
- ⑫ Put the scanner into the lower carton.
- ⑬ Put the accessories into the lower carton.
- ⑭ Put the upper retainers on the scanner, and close the box with upper carton.
- ⑮ Put the joints to the box.

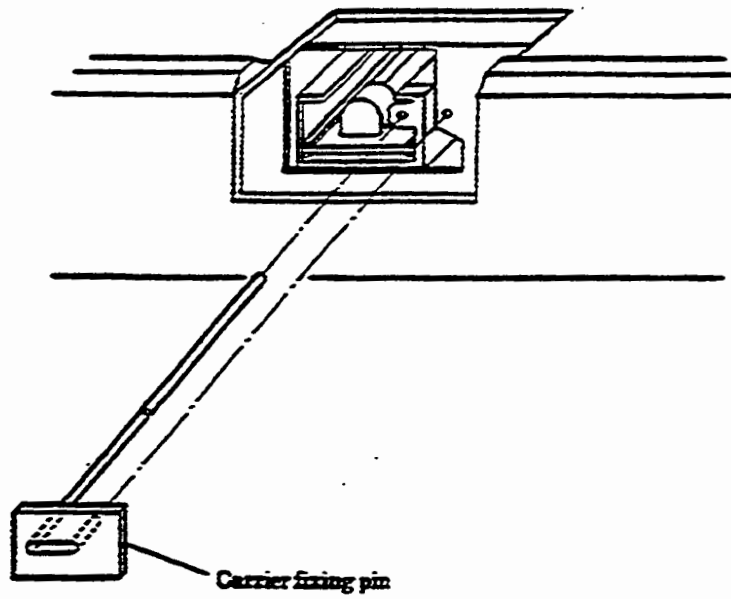


Figure 2.9 Carrier fixing pin installation

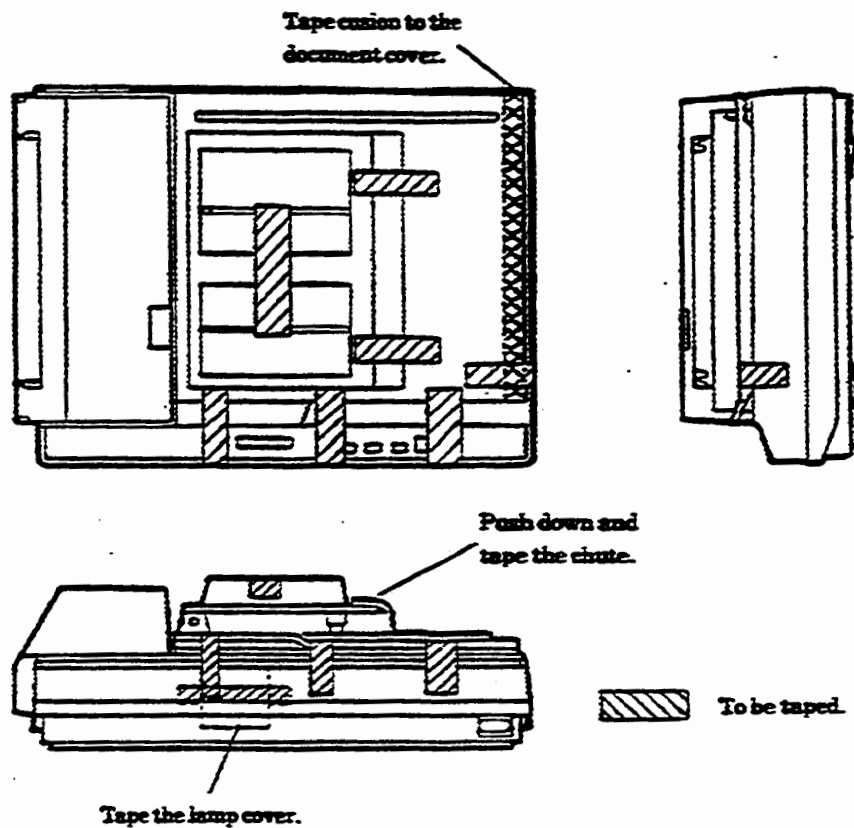


Figure 2.10 Repackaging (1)

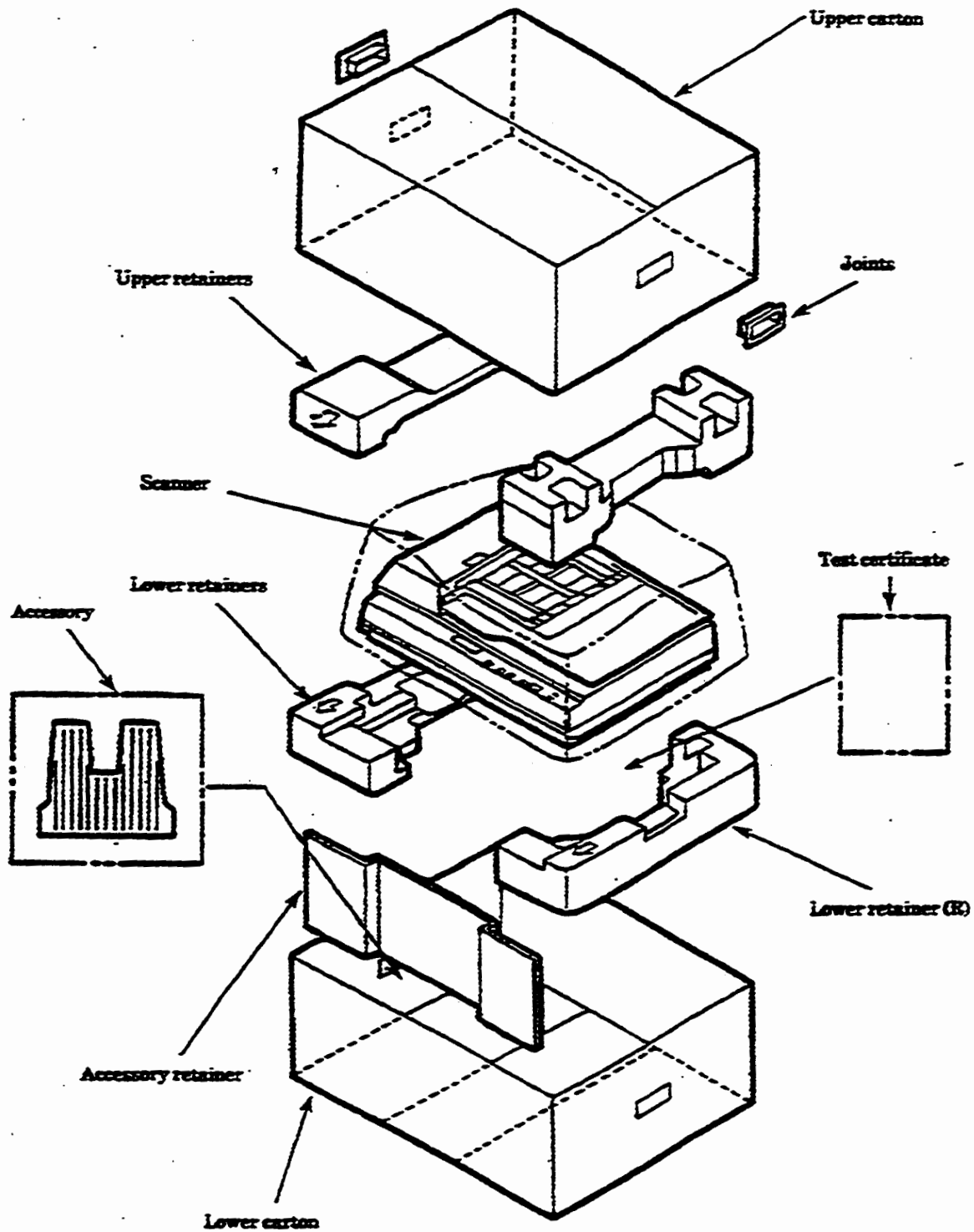


Figure 2.11 Repackaging (2)

CHAPTER 3 PRECAUTIONS

- ① Use dry cloth or neutral cleanser to remove dirt from the cover, glass, document cover, and document holding pad. Do not use organic solvents such as thinner.
- ② Do not look directly at the light source during reading. Keep the document cover in place.
- ③ If the document is moved during reading, the image quality will be poor and the read data is not guaranteed.
- ④ Position the document on the glass surface.
- ⑤ Warming up time is necessary after power-up. During warm up, the Size, Density, Resolution, and Line lamps blink and reading cannot be done. The warming up time depends on the ambient temperature. It is approximately 3 minutes at 5°C and 30 seconds at 25°C.

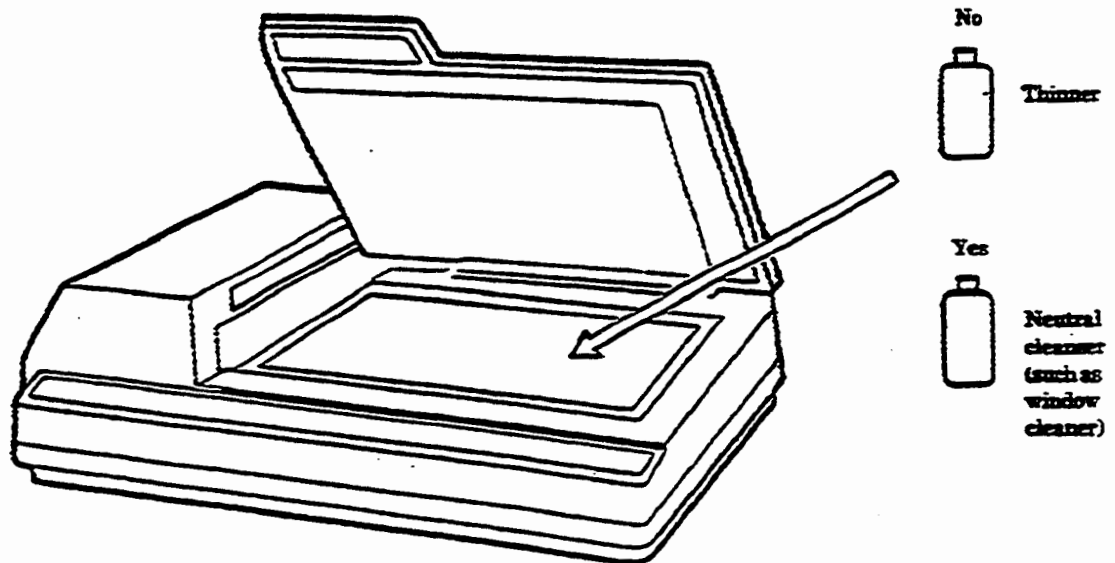


Figure 3.1 Cleaning the document board glass

CHAPTER 4 OPERATION

- | | |
|-----|-------------------------------------------|
| 4.1 | Power ON/OFF |
| 4.2 | Appearance and Function of Operator Panel |
| 4.3 | ADF Paper Chute Setting |
| 4.4 | Document Setting Method |
| 4.5 | Paper Jam Alarm Recovery |

4.1 Power ON/OFF

The power switch is on the front of the image scanner. (See Figure 4.1.)

By pushing the side of the switch marked "I" power is applied, and the power lamp on the operator panel is lit. By pushing the side of the switch marked "O", power is disconnected and the power lamp on the operator panel goes out. (In Figure 4.1, power is applied.)

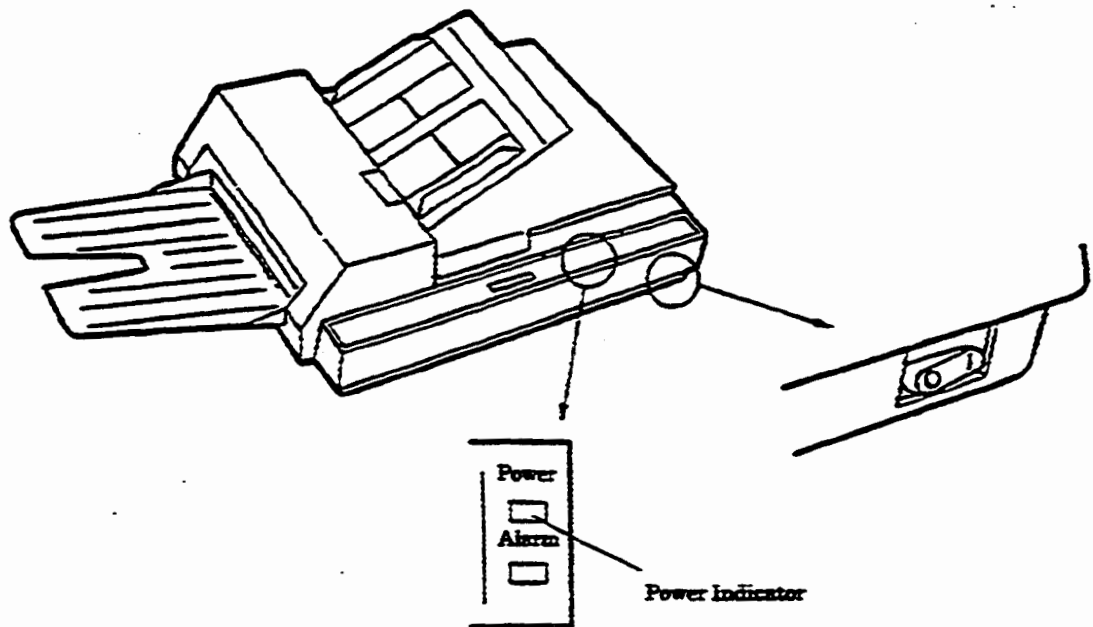


Figure 4.1 Power switch and indicator

4.2 Appearance and Function of Operator Panel

Figure 4.2 shows the operator panel.

4.2.1 Switch operation

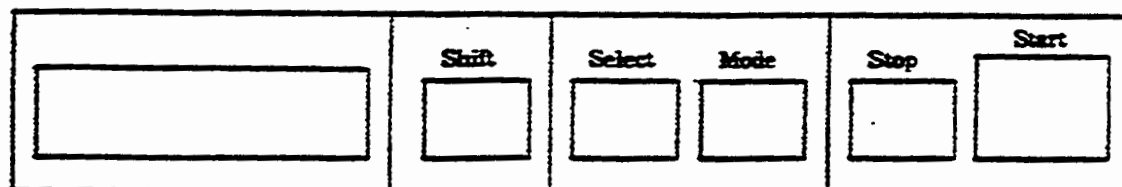
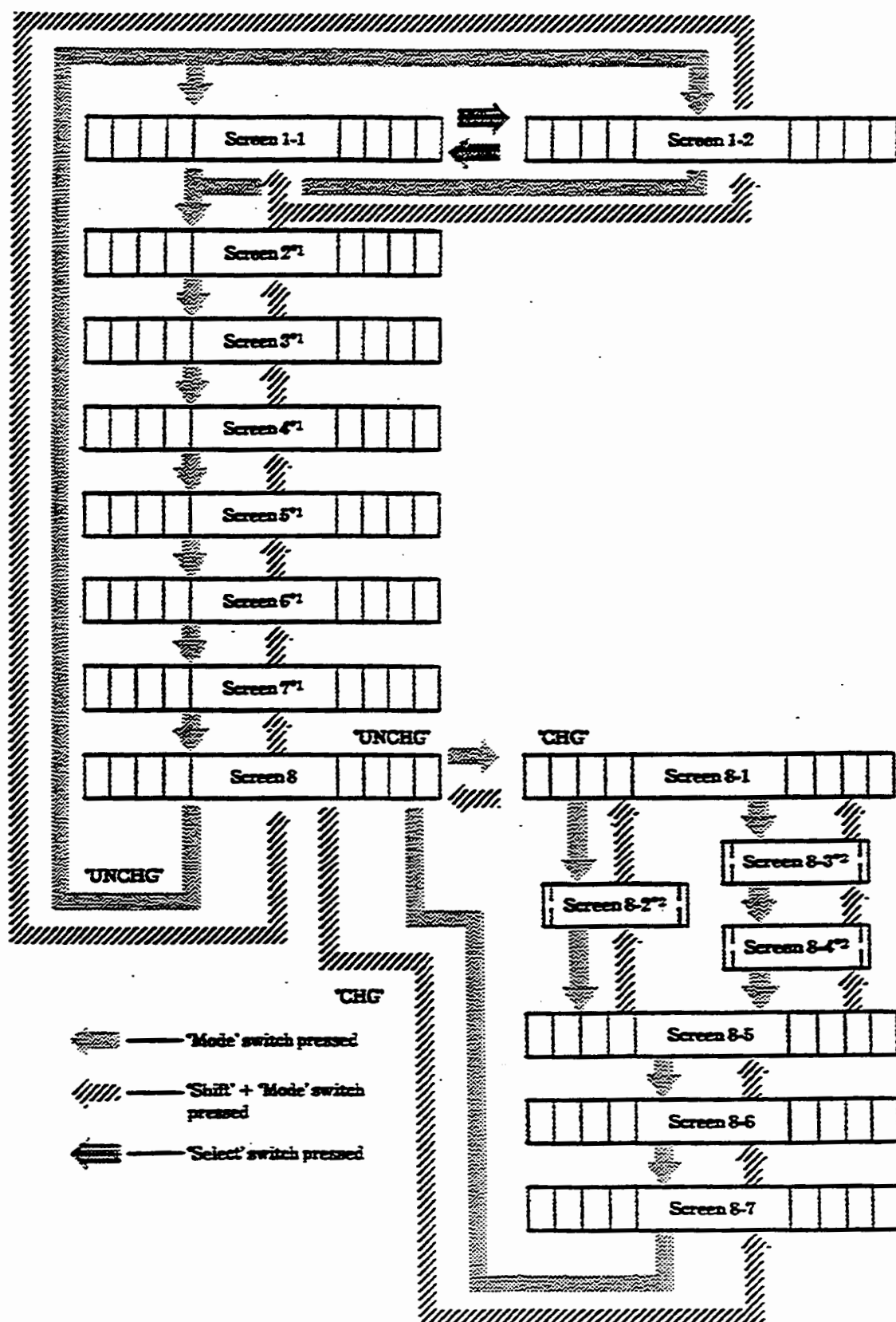


Figure 4.2 Operator panel

1. **Start switch**
 - Scanning starts under the manual mode when Ready is displayed.
2. **Stop switch**
 - Interrupts scanning.
 - Displays Ready screen (Screen 1.1 or 1.2) when scanning mode is specified.
3. **Mode switch**
 - Updates the scanning mode specification screen.
4. **Select switch**
 - Updates the scanning mode specification.
5. **Shift switch**
 - Changes the zoom factor.
6. **Shift and Stop switches**
 - Resets the scanning mode to the default values.
7. **Shift and Mode switches**
 - Changes from the scanning mode specification screen to the preceding screen.
8. **Shift and Select switches**
 - Changes from the scanning mode specification to the preceding specification.

4.2.2 Flow-chart of operator panel

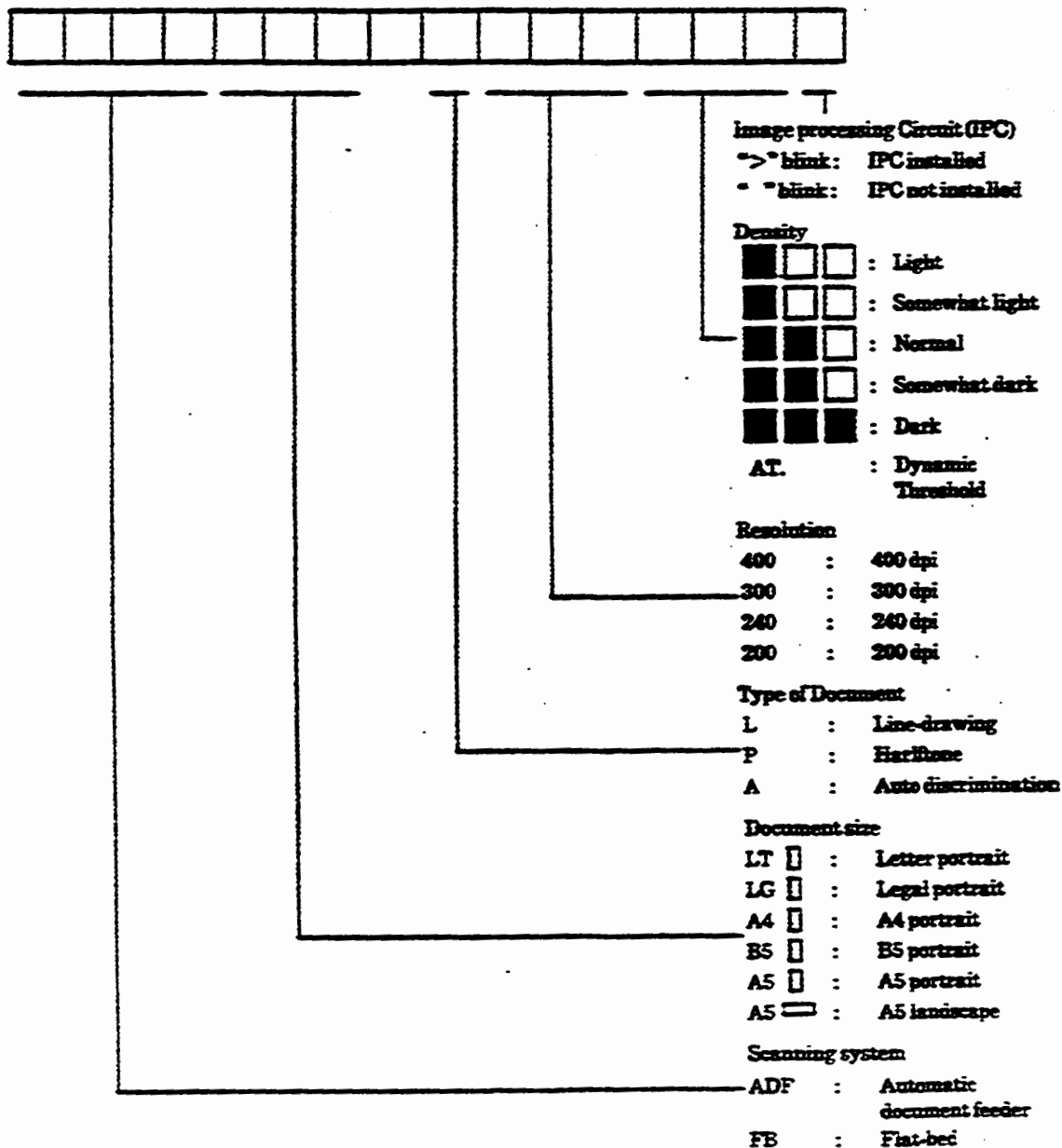


Note:

- *1 When scanning mode specification from operator panel is invalid by the host command, the screens 2 to 7 aren't displayed. The Screen 1-1 or 1-2 will be displayed on the equipment without image processing PCA, and the screen 8 will be displayed on the equipment with image processing PCA.
- *2 When Vertical/Horizontal zooming is specified by command, the screen 8-3 is indicated after 8-1. If it is not specified, the screen 8-2 is indicated.

4.2.3 Details of indication and operation of the panel

(a) Screen 1.1 (The ready 1 screen)



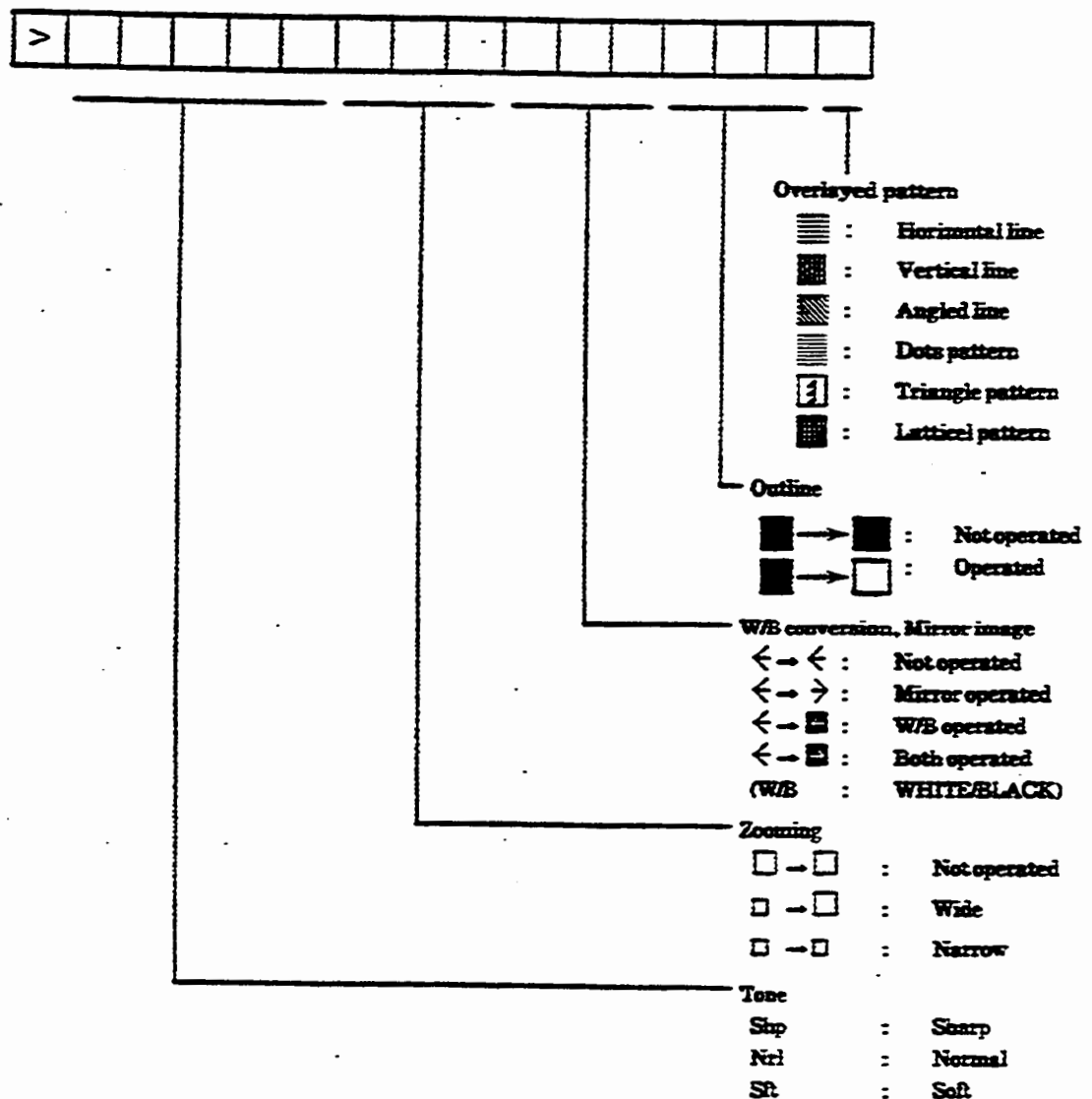
This screen is displayed in the scanning mode and shows the current scanning mode specification.

This display indicates, from the left, scanning system, document size, type of document, resolution, density, and image processing status. The details are given above. If there are no image processing options, the Image processing in indication will not be displayed.

Pressing the Mode switch in this status changes the screen to the read mode specification change screen.

When image processing is specified, press the select switch to change the display to screen 1.2 (The ready 2 screen).

(b) Screen 1.2 (The ready 2 screen)



When image processing is specified, press the Select switch in the Ready 1 screen to activate this screen. The display indicates, from the left, Tone, Zooming, W-B-conversion/Mirror, Outline, nad overlay statuses.

Press the Select switch to display the Ready 1 screen.

Press the Mode switch to display the specification change screen.

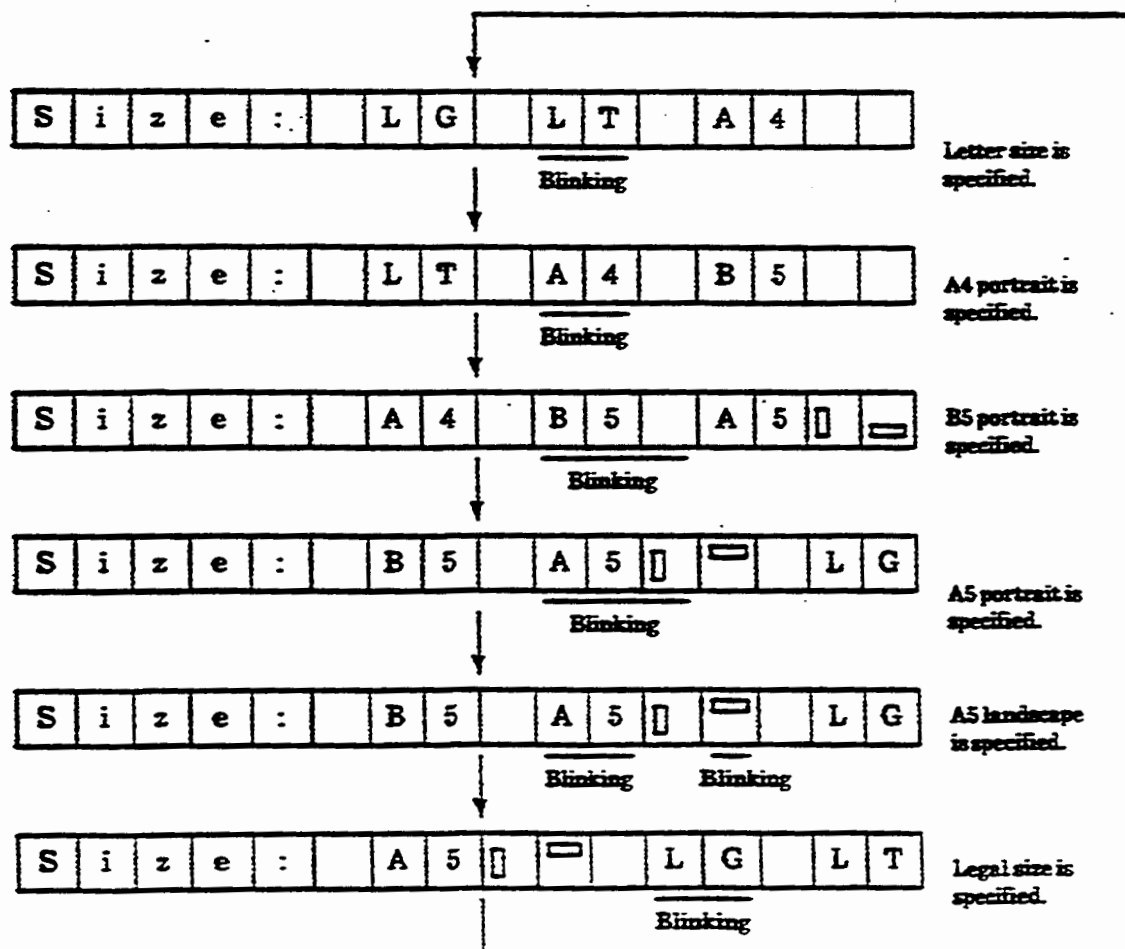
(c) Screen 2 (Scanning system specification)

R	e	a	d	:	F	B		A	D	F					
---	---	---	---	---	---	---	--	---	---	---	--	--	--	--	--

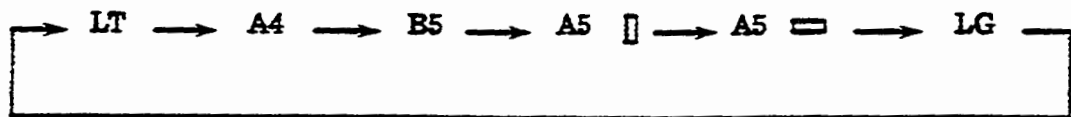
Press the Select switch at the scanning system specification screen to change between FB and ADF. Blinking mode is specified. The default setting is FB.

Press mode switch to choose the desired scanning system and go on to next screen.

(d) Screen 3 (Document size specification)



Pressing the Select switch at the size specification screen changes cyclically.



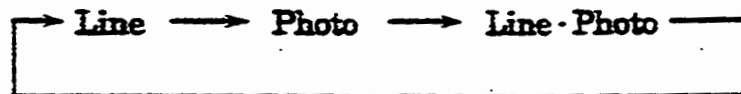
The default setting is A4.

Press the Mode switch to choose the desired document size and go on to the next screen.

(e) Screen 4 (Type of document specification)

D	o	c	.	:	L	I	N	E	.	P	h	o	t	o	
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	--

Pressing the Select switch at the type of document specification screen changes cyclically.



The default setting is Line - Photo. When the image processing circuit is not installed, the default setting is Line, and Line - Photo can not be selected. Press the mode switch to choose the desired type and go on next screen.

(f) Screen 5 (White level follower specification)

				A	E				:		O	N		
											O	F	F	

This screen specifies if white level follower active. The white level follower calibrates the white level to background color level. The default setting is ON.

(g) Screen 6 (Density specification)

D e n . : ☐ ☐ ☐ ☐ ☐ . A u t o

Press the Select switch at the density specification screen to cyclically changes.



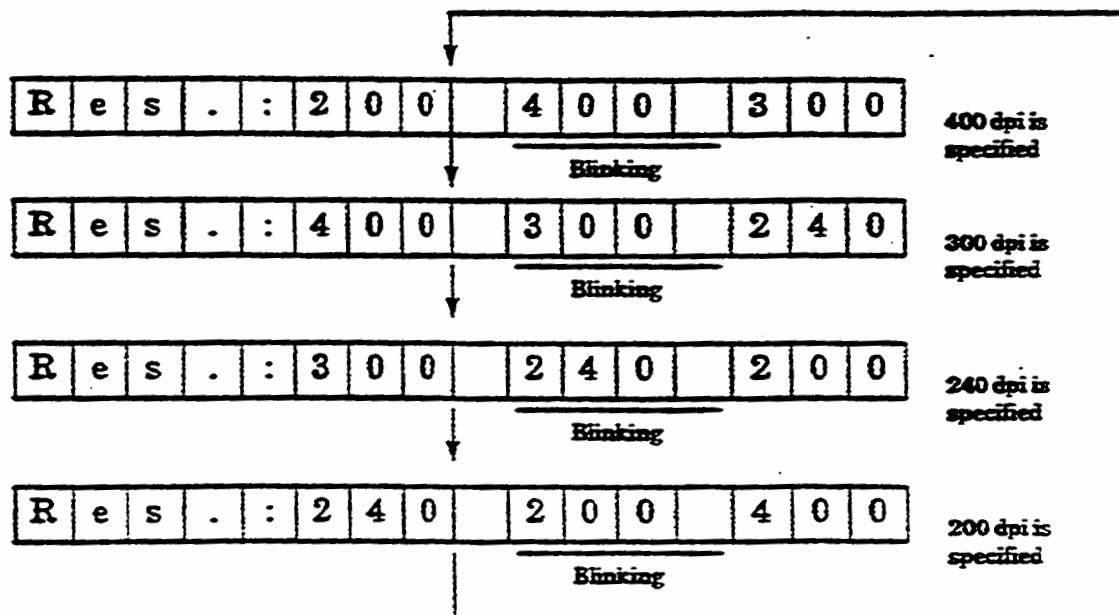
The default setting is '■ ■ ■ ■ □'.

The meaning of the character is shown below.

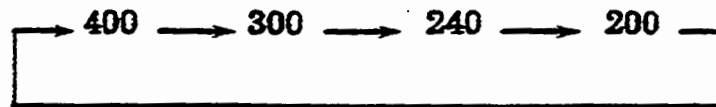
■ □ □ □ □ : Light	■ ■ ■ ■ □ : Somewhat dark
■ ■ □ □ □ : Somewhat Light	■ ■ ■ ■ ■ : Dark
■ ■ ■ □ □ : Normal	Auto : Dynamic threshold

Press mode switch to choose the desired density and go on next screen.

(h) Screen 7 (Resolution specification)



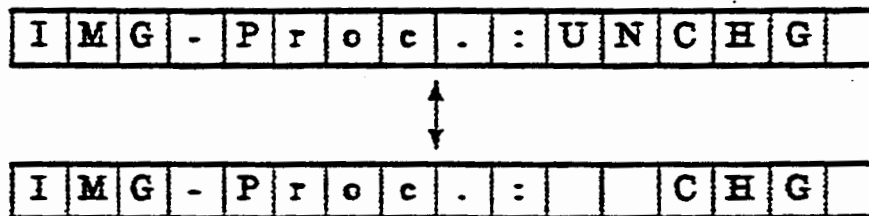
Press the Select switch at the resolution specification screen to cyclically changes. Blinking resolution is selected.



The default setting is '400'.

Press the Mode switch to choose the desired document size and go on to the next screen.

(i) Screen 8 (Image processing mode specification)

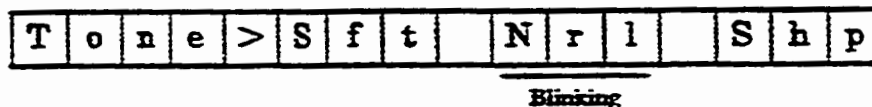


Press the Select switch at the image processing mode specification screen to alternately select UNCHG and CHG. Press the mode switch at CHG to display the image processing screens. Press the Mode switch with UNCHG selected to go on to next screen.

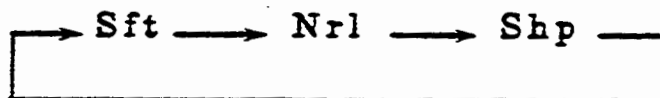
Note:

- 1) When there are no image processing circuit, no screens are displayed after this.
- 2) Only 1 mode among 'Tone', 'Outline', 'Overlay' can be changed from default. If these modes are changed from operator panel, only last set mode will be valid.

Screen 8-1 Tone (Image emphasis) specification



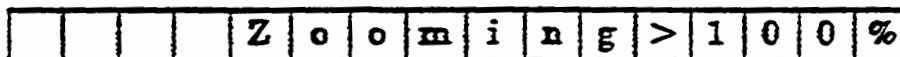
Press Select switch at the tone mode change screen to cyclically select.
Brinking character is selected.



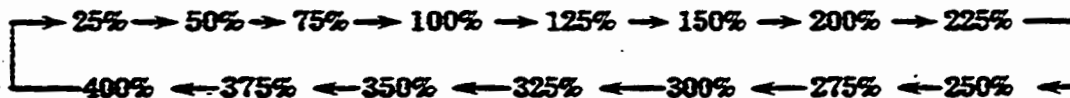
The default setting is 'Nrl'.

Press the Mode switch to choose the desired tone and go on to the next screen.

Screen 8-2 Zoom (Same zooming rate for both direction)



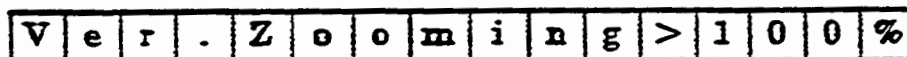
Press Shift and Start switch at the Zooming rate change screen to cyclically select.
The step is as shown.



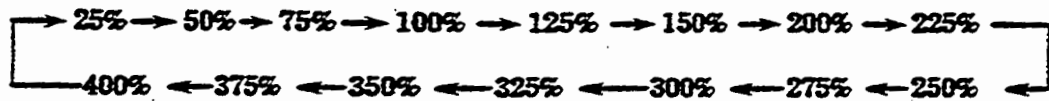
The default setting is '100%'. The zooming rate can be incremented in 1% steps using the Select switch. To decrement the value in 1% steps, press the Shift and Select switches at the same time.

Press the Mode switch to choose the currently displayed zooming factor and go on to next screen.

Screen 8-3 Zoom (Zooming rate for sub scanning direction)



Press Shift and Start switch at the Zooming rate change screen to cyclically select. The step is as shown.



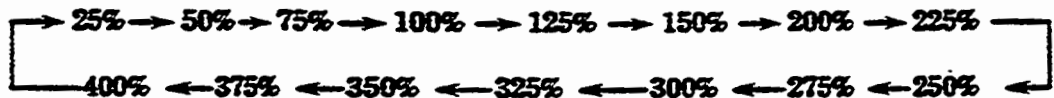
The default setting is '100%'. The zooming rate can be incremented in 1% steps using the Select switch. To decrement the value in 1% steps, press the Shift and Select switches at the same time.

Press the Mode switch to choose the currently displayed zooming factor and go on to next screen.

Screen 8-4 Zoom (Zooming rate for main scanning direction)

H	o	r	.	Z	o	o	m	i	n	g	>	1	0	0	%
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Press Shift and Start switch at the Zooming rate change screen to cyclically select. The step is as shown.

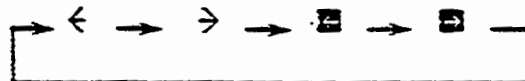


The default setting is '100%'. The zooming rate can be incremented in 1% steps using the Select switch. To decrement the value in 1% steps, press the Shift and Select switches at the same time. Press the Mode switch to choose the currently displayed zooming factor and go on to next screen.

Screen 8-5 Reverse(White/Black conversion) Mirror operation

R	V	S	>	<	-	<		>		■		■			
---	---	---	---	---	---	---	--	---	--	---	--	---	--	--	--

Press the Select switch at the reverse/mirror specification screen to cyclically select.



The brinking character is the selected mode.

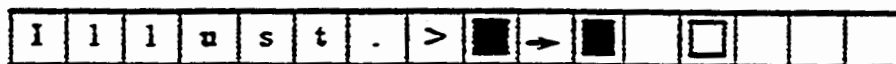
The default value is (No operation).

Press the Mode switch to choose the desired setting and go on to next screen.

The meaning of the characters indicated in the screen is shown below.

- < No operation
- > Mirror operation
- Reverse operation
- Mirror and reverse operation

Screen 8-6 Outline specification



Press the Select switch at the outline specification screen to alternately select, ■ and □. The brinking character is selected mode.

The default setting is ■.

Press the Mode switch to choose the desired specification and go on to the next screen.

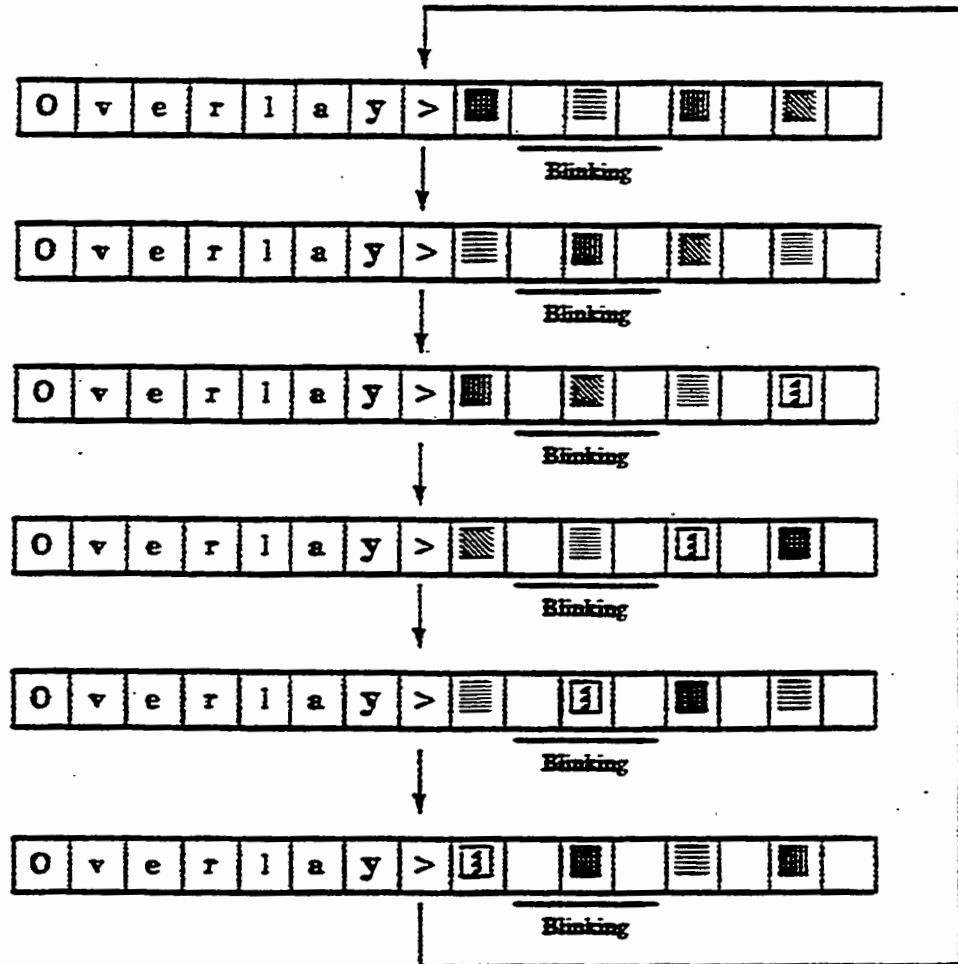
The meaning of the character indicated in the screen is shown below.

■ : No operation

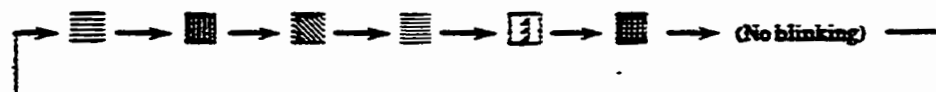
□ : Outline

Screen 8-7 Overlay specification

Overlays the pattern on the scanned data and make the overlaid black data to white data.



Press the Select switch at the overlay specification screen to cyclically select. The default mode is no operation (no blinking).



Press the Mode switch to choose the desired overlay pattern and go on to next screen.

Messages

1. Immediately after power-on

W	a	r	m	i	n	g		u	p		N	o	w	!	!
---	---	---	---	---	---	---	--	---	---	--	---	---	---	---	---

2. Ready for operation (Start switch pressed in manual mode)

					R	e	a	d	y						
--	--	--	--	--	---	---	---	---	---	--	--	--	--	--	--

3. Reading in progress

		N	o	w		R	e	a	d	i	n	g	!		
--	--	---	---	---	--	---	---	---	---	---	---	---	---	--	--

4. No paper in ADF Chute

		P	a	p	e	r		E	m	p	t	y			
--	--	---	---	---	---	---	--	---	---	---	---	---	--	--	--

5. Paper jam in ADF

			P	a	p	e	r		J	a	m				
--	--	--	---	---	---	---	---	--	---	---	---	--	--	--	--

6. ADF Cover open

	A	D	F	-	C	o	v	e	r		O	p	e	n	
--	---	---	---	---	---	---	---	---	---	--	---	---	---	---	--

7. Equipment Error

E	q	u	i	p	m	e	n	t		A	l	a	r	m	
---	---	---	---	---	---	---	---	---	--	---	---	---	---	---	--

Press the Select switch to display the error message.

- 7-1 Control system error (EEPROM or RAM error)

	C	o	n	t	r	o	l		A	l	a	r	m		
--	---	---	---	---	---	---	---	--	---	---	---	---	---	--	--

- 7-2 Driver system error (The carrier does not return to the home position.)

M	e	c	h	a	n	i	c	a	l		A	l	a	r	m
---	---	---	---	---	---	---	---	---	---	--	---	---	---	---	---

- 7-3 Option error (Lamp error check)

	O	p	t	i	c	a	l		A	l	a	r	m		
--	---	---	---	---	---	---	---	--	---	---	---	---	---	--	--

7-4 Lamp heater error (Lamp temperature doesn't rise at power-on.)

		H	e	a	t	e	r		A	l	a	r	m		
--	--	---	---	---	---	---	---	--	---	---	---	---	---	--	--

7-5 Carrier motor fuse brown.

	F	B	-	m	o	t	o	r		A	l	a	r	m	
--	---	---	---	---	---	---	---	---	--	---	---	---	---	---	--

7-6 ADF motor fuse brown.

A	D	F	-	m	o	t	o	r		A	l	a	r	m	
---	---	---	---	---	---	---	---	---	--	---	---	---	---	---	--

7-7 Lamp driver fuse brown.

	L	a	m	p	f	u	s	e		A	l	a	r	m	
--	---	---	---	---	---	---	---	---	--	---	---	---	---	---	--

7-8 Lamp heater fuse brown.

H	e	a	t	e	r	f	u	s	e		A	l	a	r	m
---	---	---	---	---	---	---	---	---	---	--	---	---	---	---	---

4.3 ADF Paper Chute Setting

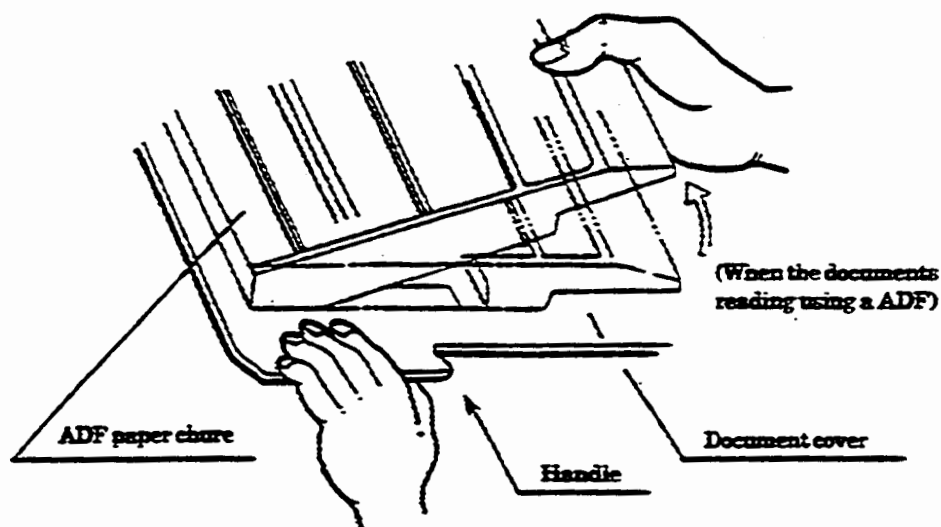


Figure 4.3 ADF paper chute setting

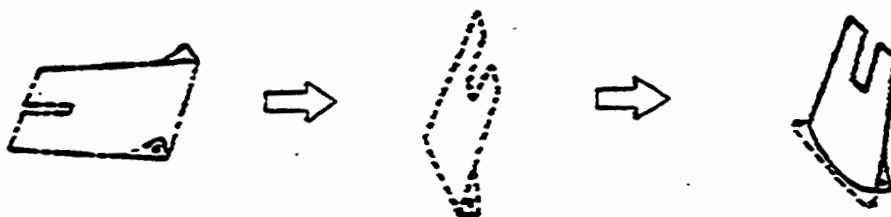
4.3.1 ADF paper chute setting

When the documents will be read using ADF, set the ADF paper chute as follows.

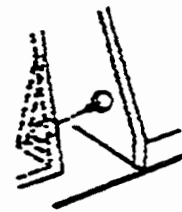
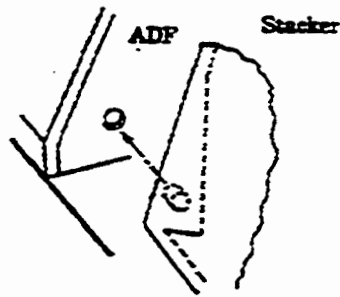
- ① Hold the handle of document cover with one hand, and grip the edge of ADF paper chute with another hand.
- ② Raise up the ADF paper chute till hear the click sound.
- ③ When down the ADF paper chute, push it down to the document cover.

4.3.2 Output stacker installation

- ① Lift the stacker and slightly bend it from its base.

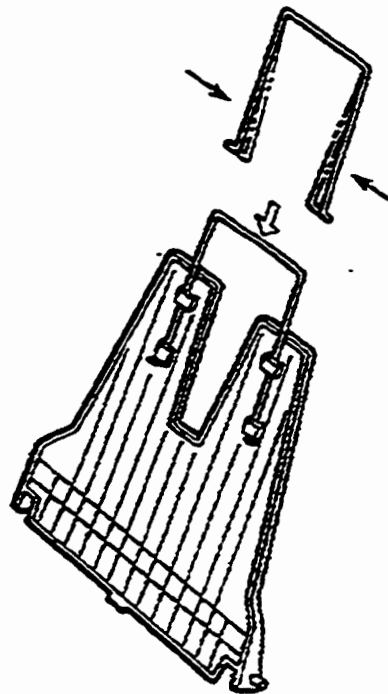
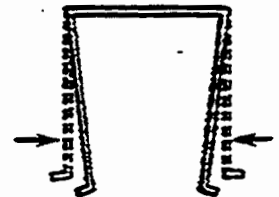


- ② Insert the pins of the stacker in the side holes.



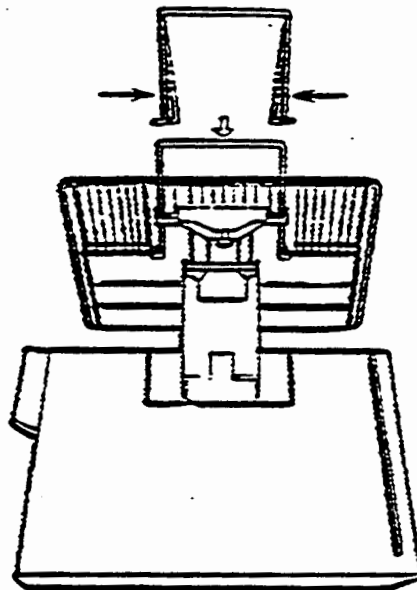
4.3.3 Output extensions installation

- ① Lift the stacker.
- ② Grasp both sides of the extension and press the side edges inside as follows.
- ③ Insert the extension in the slots on the base of the stacker as follows.
- ④ Release the extension and lower the stacker.



4.3.4 Input extensions installation

- (1) Bend the extension slightly the same way as 4.3.3, and insert it in to the slots on the back of ADF paper chute.
- (2) Release the sides and pull the extension out until the edges are stopped by slots.



4.4 Document Setting Method

4.4.1 Flat-bed

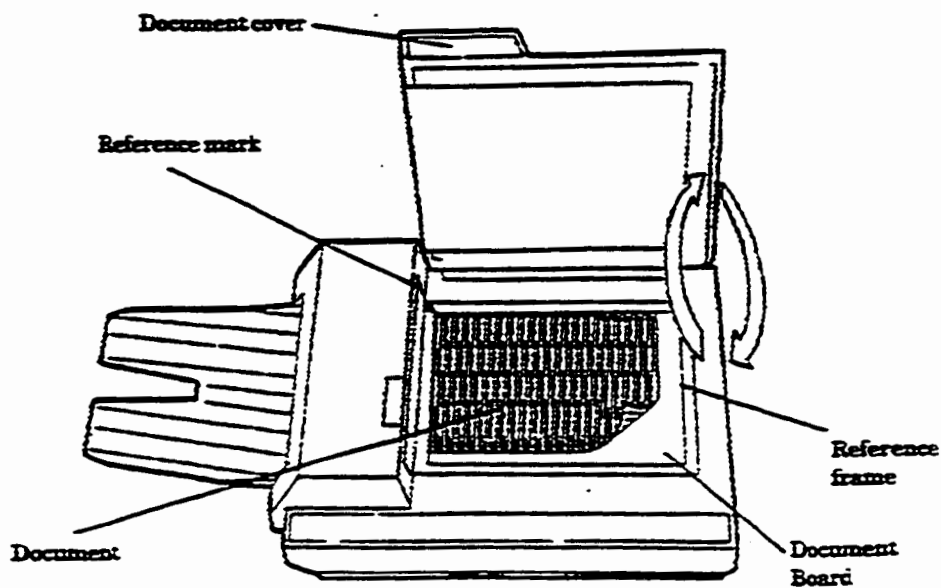


Figure 4.4 Document setting on flat-bed

- (1) When the document size is A4 or smaller

If the document is to be read on the flat-bed, follow the steps below.

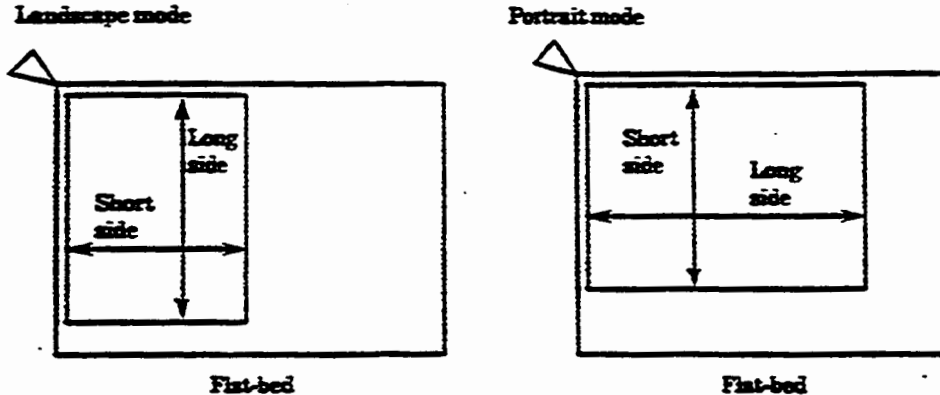
- ① Open the document cover.
- ② Put the document face down on the document board with the upper end to the left. Straighten any curls or folds on the document.
- ③ Position the left side and upper end of the document in line with the reference frame so that the upper-left corner of the document coincides with the reference mark (triangle mark) at the upper-left of the reference frame.
- ④ Close the document cover slowly.

Caution

- * If the document cover is closed too quickly, the document may be moved.
- * During reading, do not press or open the document cover.

- ⑤ Select the reading mode from the control panel and start scanning. If portrait/landscape is selected according to the document size or form, reading time can be reduced.

The relationship between the document form and reading mode is as follows:



- ⑥ After reading ends, open the document cover and take out the document.

- (2) When the document is a thick book

- ① Open the document cover and place it on the glass surface.
- ② If the document is thick, do not close the document cover.

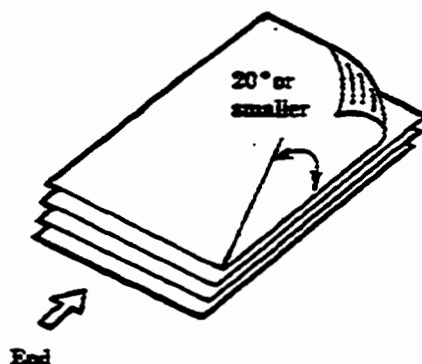
The part of the document which is in contact with the glass will be read correctly, but any part which is not in contact with the glass may be distorted or unclear, so care must be taken.

- (3) When the document size is larger than A4.
- ① Remove the document cover.
 - ② Lay the document on the surface of the glass.
 - ③ Place the document cover on the document with the document pad facing down.
 - ④ After reading, assemble the document cover.

4.4.2 Automatic document feeding

When the document is read in the automatic document feed mode, follow the steps below. If these steps are not closely followed, a feed error may occur.

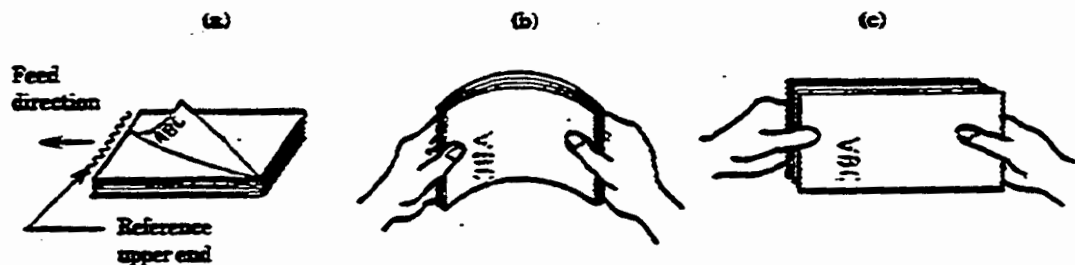
- ① Place the document upside down.
- ② Arrange the document as shown below. (See the next page.)



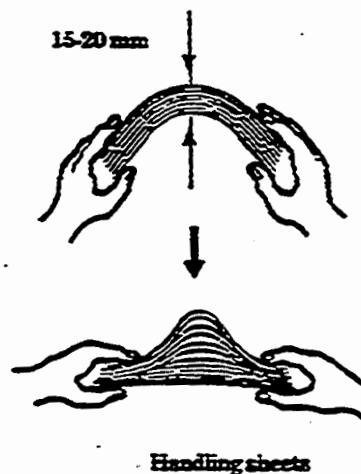
- ③ Open the right and left guides of the ADF paper chute, and set them approximately 5 mm wider than the document width.
- ④ Position the document face down and put the ends of the lower 2 or 3 sheets into the auto feeder hole.
- ⑤ Line up the guides with the document sides. (Skewing may occur if there is a gap between the guides and document.)
- ⑥ Slide the pages down until they hit the far end of the auto feeder hole.
- ⑦ Position the remaining document sheets on the paper chute.
- ⑧ Insert these sheets until they hit the far end of the auto feeder hole.

Fanning the document sheets

1. Place the document face down on a flat surface, with its upper end to the left. (a)
2. Lift the sheets (maximum 4 mm for A4 or smaller, maximum 2 mm for larger than A4) with both hands.
3. Hold the sheets tightly with your left hand and bend the sheets as shown in (b).
4. Grip tightly with your right hand, loosen the grip of your left hand, and straighten the sheets as shown in (c).
5. Repeat operations 3 and 4 as often as necessary.



Handling sheets



Take a 2 to 4 mm thickness of sheets. Lightly hold both ends with both hands. Bend the sheets as shown. Hold the sheets tightly with both hands then straighten the sheets. The sheets swell and air is introduced between them. Repeat this operation two or three times. Turn the sheets through 90° and repeat the entire operation.

Sheet suitability

A4 or letter size or smaller. Maximum thickness approximately 4 mm

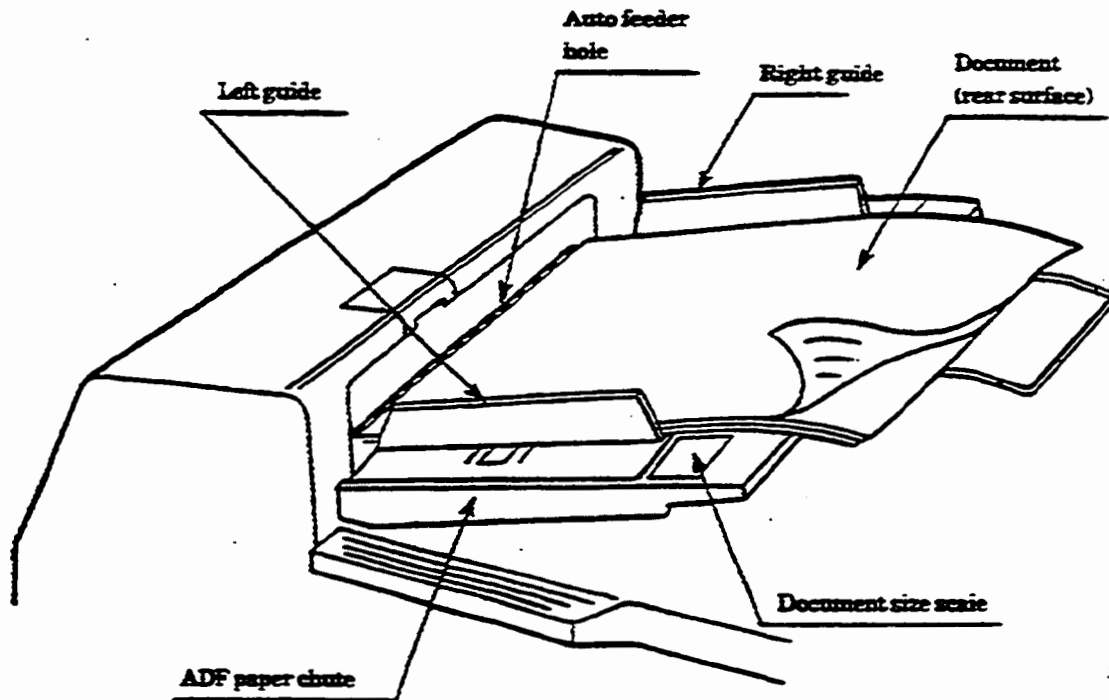
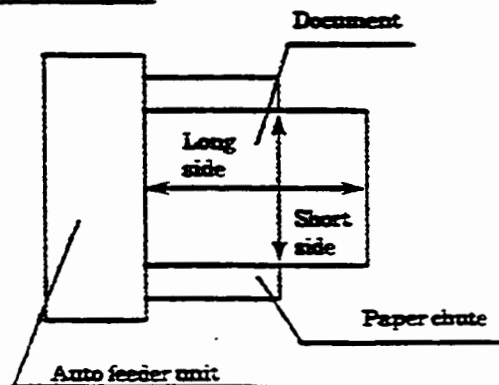


Figure 4.5 Loading the document

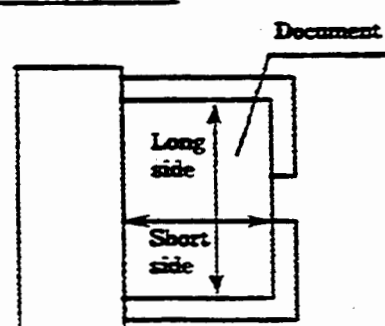
- ③ Select the reading mode from the control panel and start reading. If selection of the document size or format (portrait/landscape) is wrong, reading of the entire document may fail, so care must be taken.

The relationship between the document format and reading mode is as shown below.

Portrait mode



Landscape mode



- ④ After reading is completed, remove the document from the stacker.

Attention items :

- (1) Remove clips and staples from the document.
- (2) Dry any wet ink.
- (3) Line up the document (to avoid skewing).
- (4) Use the flat bed for the following types of document.
 - (a) Wrinkled, curled or folded documents
 - (b) Transparent documents
 - (c) Documents treated with a glossy coating
 - (d) Damaged documents
 - (e) Very thin documents
 - (f) Very thick documents
 - (g) Documents smaller than A5 size
 - (h) Carbon paper or thermal paper
 - (i) Cloth, metal sheets, OHP sheets, photographs
 - (j) Envelopes or pasted document
 - (k) Documents of uneven thickness

4.5 Paper Jam Alarm Recovery

When paper jam occurs, remove jammed paper with following procedure.

- (1) Take out the document on the paper chute.
- (2) Open ADF unit with holding the metal part inside of the ADF cover lettered 'UP'.
- (3) Remove jammed paper.
- (4) Close ADF unit.
- (5) Press 'Stop' switch.

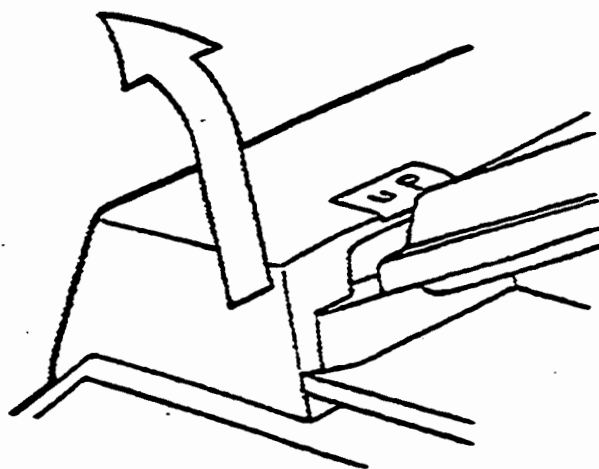


Figure 4.6 Jammed paper removal

CHAPTER 5 REPLACEMENT

5.1 Lamp Unit Replacement

5.2 Pad Assembly Replacement

5.1 Lamp Unit Replacement

When the LCD on operator panel indicates 'Optical Alarm', the lamp unit must be replaced with following procedure.

- (1) Turn off the power.
- (2) Power on with pressing 'Mode' switch and 'Select' switch.
- (3) After the carrier moves to the center of Flat-bed, turn off the power. (LCD indicates 'Power-off!!')
- (4) Remove the document cover and lamp cover.
- (5) Pull out the lamp unit. (Meshed parts in Figure 5.1)

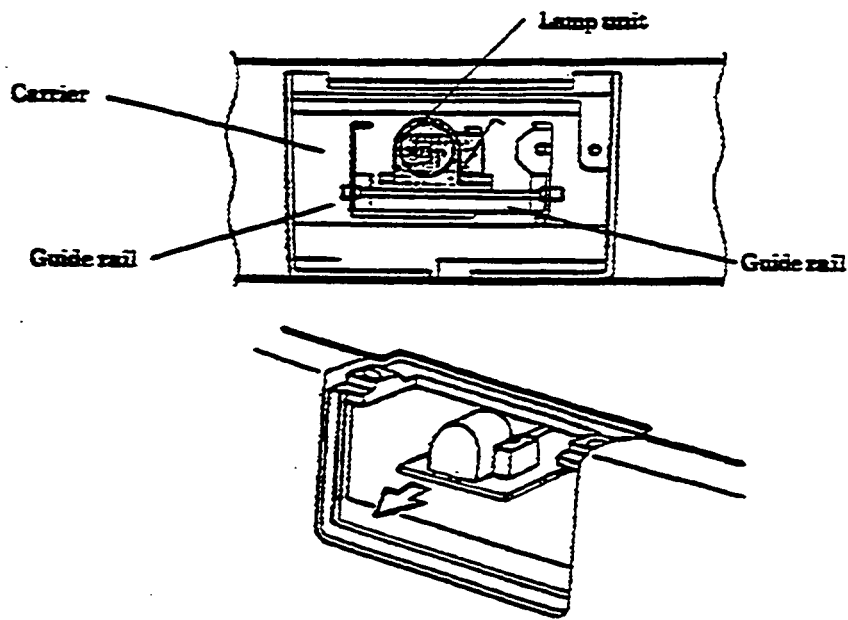


Figure 5.1 Lamp unit removal

(6) Insert the lamp unit along the guide rails.

When insert, pay attention not to touch plated area of the unit.

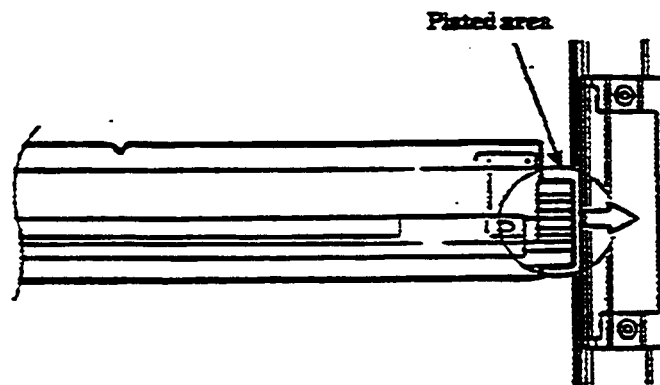


Figure 5.2 Replacement of lamp unit

(7) Mount the lamp cover and the document cover.

5.2 Pad Assembly Replacement

Pad assembly should be replaced when following errors often occur.

- Multiple sheets feed error
- Large skew

- ① Open the ADF unit.
- ② Hold both ends of the pad retainer to remove the pad assembly.

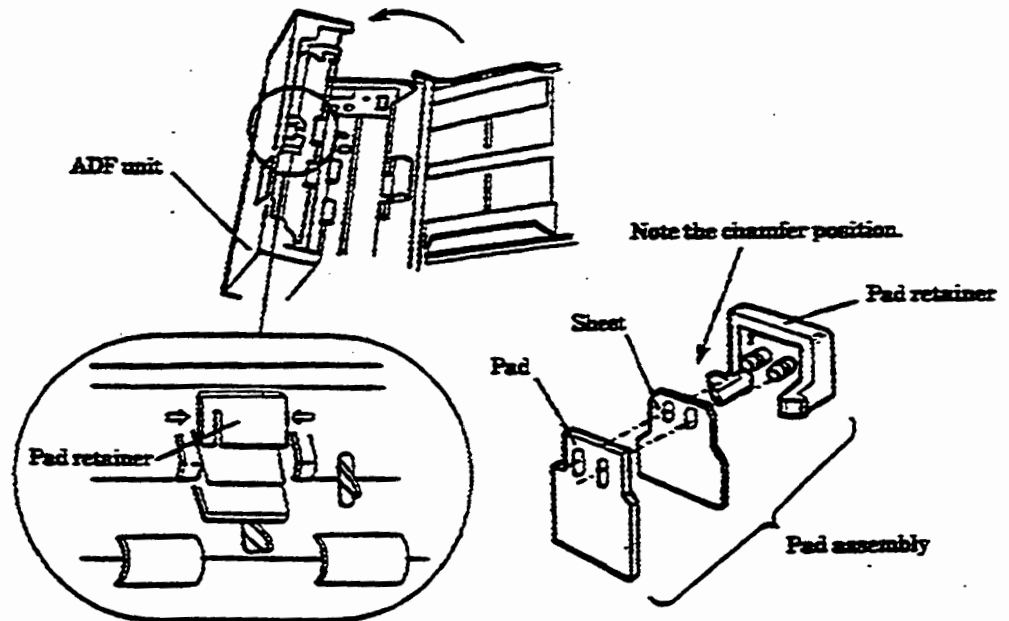


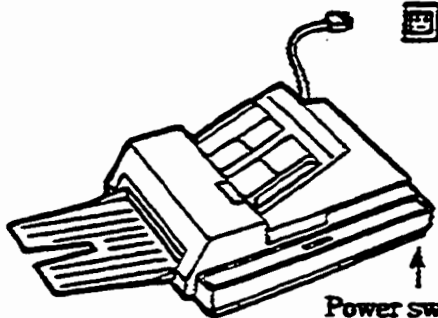
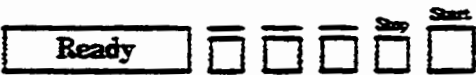
Figure 5.3 Pad assembly removal

Notes:

1. Do not bent or break the sheet when installing the pad assembly.
2. Note the chamfer position of the sheet when installing the pad assembly.

CHAPTER 6 TROUBLESHOOTING

If a problem occurs, check the following.

Case	Possible reason	Check
No power	The power plug is not connected. The power switch has not been set to "I".	
Reading cannot be started	Manual mode is selected. (LCD indicates 'Ready'.)	Press 'Start' switch 
Pictures and photographs cannot be read	Density setting error. Not in halftone mode. Image processing setting error. Dirt on glass surface.	<ul style="list-style-type: none"> • Select suitable mode. • Clean the glass. (Use dry cloth or neutral cleanser. Do not use organic solvents such as thinner.)
Characters or lines are not read well.	Density setting error. Halftone is set. Dirt on glass surface.	<ul style="list-style-type: none"> • Select suitable mode. • Clean the glass. (Use dry cloth or neutral cleanser. Do not use organic solvents such as thinner.)
Unclear image Distorted image	Document moved during reading. Document not in contact with glass surface.	<ul style="list-style-type: none"> • During reading, close the cover and do not move the document. • Adjust the document so that it is in close contact with the glass.
The Alarm lamp	Device failure.	<ul style="list-style-type: none"> • Check the details of error. When 'optical alarm', replace the lamp unit. For other, please call your dealer or service agent. • Check the shipping retainer is removed.

CHAPTER 7 CLEANING

7.1 Cleaning Document Cover and Document Board Glass

7.2 Cleaning the ADF Section

7.1 Cleaning Document Cover and Document Board Glass

Use the dry cloth or neutral cleanser to remove dirt from the cover, glass, document cover, and document holding pad. Do not use organic solvents such as thinner.

7.2 Cleaning the ADF Section

When the following conditions often occurs when using the ADF, clean the ADF according to the cleaning procedure.

- Documents is not fed smoothly.
- Several documents is fed in a same time.
- Reading result is not so good.

① Open the ADF section.

② Use the dry cloth or isopropyl alcohol to softly remove dirt and dust as follows.

- Pad: Cleaning direction is upper to lower.
 Be careful not to hooking the pick spring when cleaning.
- Glass: Cleaning direction is right to left.
 Be careful not to hooking the sensor arm when cleaning.
- Pick roller }
● Feed roller } Clean softly to avoid roller damage
● Exiting roller }
- Guide plate (White colored metal plate):
 Cleaning direction right to left.
 Be careful not to pull the sensor arm when cleaning

③ Close the ADF section.

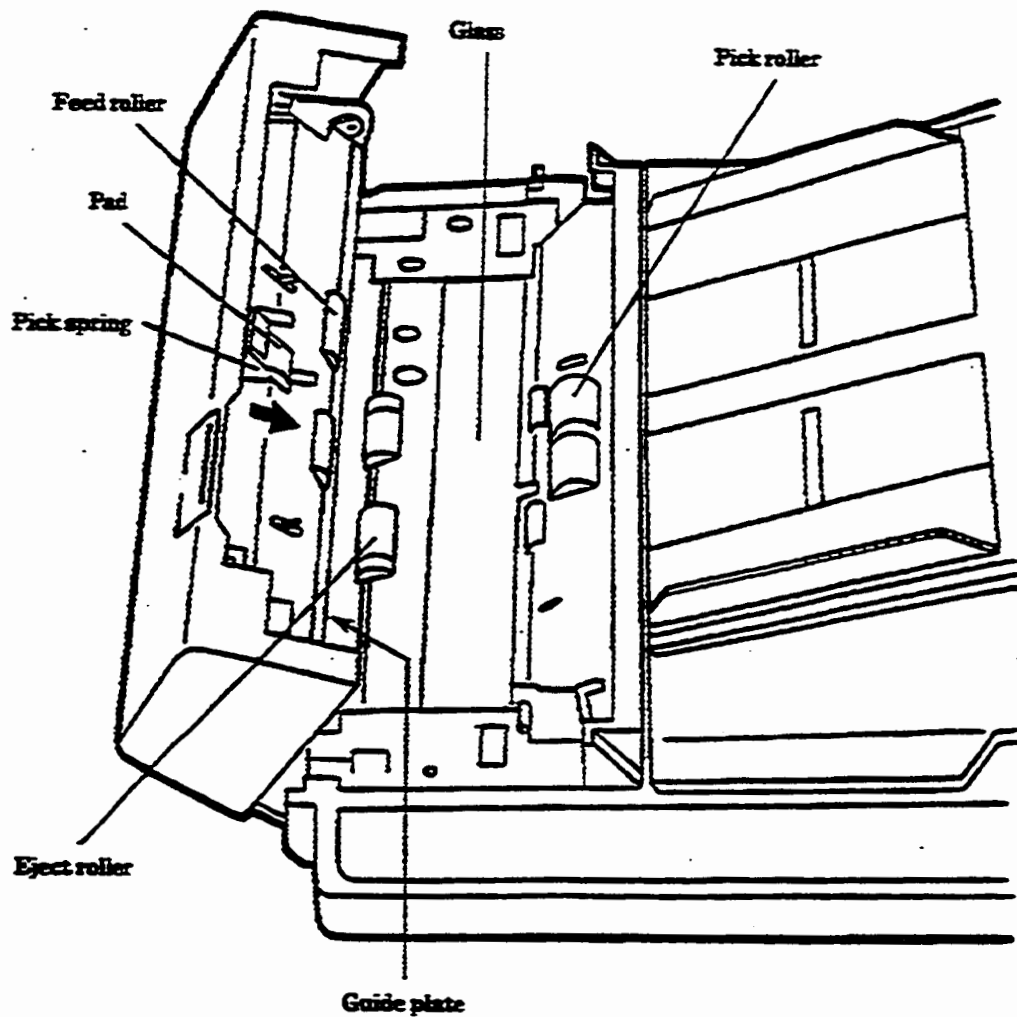


Figure 7.1 Cleaning the ADF section