MENU READER

(Machine Code: A952)

1. SPECIFICATIONS

- Item -	- Specification -
Job Sheet	
 Material: Size: Weight: Markers: 	Paper 2.6" x 5.9" (67 mm x 150 mm) 22 lbs to 43 lbs (83 g to 161 g) Black pencil, HB or higher (HB, B, 2B, etc.) Marker (Black) Ball-point pen (Black)
Job Sheet Feed Method:	Fed in and out automatically
Reading Time:	Approximately 2.5 seconds
Reading Time: Power Source:	Approximately 2.5 seconds +24 volts and +5 volts (from copier)
0	

2. OVERALL MACHINE CONTROL



The menu reader is controlled by the copier.

3. DATA FORMAT

 $Menu \; Reader \rightarrow Copier$

ir					1			
b7	b6	b5	b4	b3	b2	b1	b0	DATA CONTENTS
BCD				0	0	0	0	Copy Quantity x 1
BCD			0	0	0	1	Copy Quantity x 10	
BCD			0	0	1	0	Copy Quantity x 100	
Size 4	Size 3	Size 2	Size 1	0	0	1	1	Paper Size
Enlarge 3	Enlarge 2	Enlarge 1	100%	0	1	0	0	Reproduction Ratio-1
Reduce 4	Reduce 3	Reduce 2	Reduce 1	0	1	0	1	Reproduction Ratio-2
0	2:1	2:2	1:2	0	1	1	0	Duplex
0	0	Stack	Sort	0	1	1	1	Sorter
0	0	0	Staple	1	0	0	0	Staple
0	0	0	Reserve-1	1	0	0	1	Reserve-1
0	Reserve 2-2	Reserve 2-2	Reserve 2-1	1	0	1	0	Reserve-2
0	0	0	Reserve-3	1	0	1	1	Reserve-3
0	0	0	Reserve-4	1	1	0	0	Reserve-4
				1	1	0	1	
				1	1	1	0	
				1	1	1	1	Control Data

$Copier \rightarrow Menu \; Reader$

b7	b6	b5	b4	b3	b2	b1	b0	DATA CONTENTS
				0	0	0	0	Insert Sheet OK/NG
				0	0	0	1	
	•							
				1	1	1	0	
1	1	1	1	1	1	1	1	Send OK

The contents of the reserve bytes are different in each market.

4. BASIC OPERATION

4.1 JOB SHEET READING



When a job sheet is inserted, the sheet detection sensor [A] detects the leading edge of the job sheet. The job sheet is then fed in by the upper and lower transport rollers [B, C].



The mark detection sensor [A] detects the reference line [D] and reads the job sheet. The mark detection sensor is composed of 4 photosensors. The sensor on the right [B] detects the reference line and reference marks [E], and the other sensors [C] read the job sheet data.

The menu reader CPU monitors signals from the mark detection sensor and measures the time between each reference mark. There are 25 reference marks along the sheet edge. After the 25th reference mark is read, the job sheet is fed out by the upper and lower transport rollers [F, G].

The operation panel status changes after the job sheet is read, and the job sheet information is sent to the copier CPU.

Menu Reader

4.2 MENU READER INDICATOR LIGHTS

	Red Light	Green	Meaning
1	OFF	ON	A job sheet can be inserted.
2	ON	OFF	A job sheet is being read or the copier Start key stays red.
3	Blinks	OFF	A job sheet read error has occurred; the menu reader stops reading. Check the job sheet to make sure it is marked correctly and insert it again. Note: The red light blinks for 6 seconds; then, it stays on.
4	OFF	Blinks	A conversion error has occurred; insert the job sheet again. Note: The green light blinks for 6 seconds; then, it stays on.
5	Blinks	Blinks	The RAM contents have been changed or the menu reader has failed to read the ROM contents. Note: Turn the main switch off and on.

4.3 PROCESSING ERRORS

Reference Line

If the reference line does not reach the mark detection sensor within 2.6 seconds after the job sheet is fed in, the job sheet is fed out. (Feeding out takes 1.6 seconds.) The red light blinks for 6 seconds; then, the job sheet can be reinserted.

Reference Mark

If the mark detection sensor detects the reference line and then fails to detect a reference mark within 0.2 seconds, or if it fails to detect a reference mark within 0.1 seconds, the job sheet is fed out and the red light blinks for 6 seconds; then, the job sheet can be reinserted.

NOTE: Occasionally, the job sheet feeds out to the rear side of the menu reader after a failure to detect the reference mark number.

Marking

When two or more selections are made for the same item, the menu reader cannot process the job sheet and the red light blinks (indicating an error).

NOTE: 1. When an item is not marked on the job sheet, the menu reader automatically reads as follows:

Item	Indicator
Copy Quantity	1
Reproduction Ratio	100%

2. The job sheet may jam inside the menu reader if it is smaller than the specified size.

CAUTION: Sensors were set at the factory and cannot be adjusted in the field.

5. INSTALLATION PROCEDURE (FT8780/8880)



CAUTION: Before installing the Menu Reader, make sure that the copier is unplugged.

- 1. Remove the left upper cover [A] (2 screws), left top cover [B] (7 screws), left rear cover [C] (2 screws), and right rear cover [D] (2 screws).
- 2. Peel the backing off the strips of double-sided adhesive tape [E] and stick the menu reader on the DF [F] as shown.



- 3. Run the menu reader harness [A] through the bracket hole [B].
- 4. 220/230/240 V versions only Install the ferrite core [C] on the menu reader harness as shown.
- Canadian market machines only To comply with C.S.A. standards, connect the sub harness [D] for C.S.A. (P/N: A9529506) to the 10p connector of the menu reader harness.
- 6. Connect the 10p connector of the menu reader harness to CN110 of the main control board and secure the grounding wire [E] with a M4 x 6 screw.
 - **NOTE:** Do not use the screw longer than 6 mm for securing the grounding wire, otherwise the screw contacts the development unit.
- 7. Clamp the menu reader harness (1 clamp [F] and 1 screw).
- 8. Reinstall the left top cover. (Pass the menu reader harness through the cutout [G] of the left top cover.)
 - **NOTE:** Do not use the screw longer than 6 mm for 4 screws [H], other wise the screw contacts the first scanner.



- 9. Wrap the grounding wire [A] twice around the coil [B] and secure the wire to the bracket (1 screw).
- 10. Reinstall all the covers.
- 11. Plug in the copier and turn on the main switch.
- 12. Check the operation of the menu reader.

INSTALLATION PROCEDURE (FT5233 series)





CAUTION: Before installing the menu reader, make sure that the copier is unplugged.

- 1. Peel the backing off the strips of double-sided adhesive tape [A] and stick the menu reader on the ARDF [B] or platen cover [C] as shown.
- 2. Remove the copier rear cover [D] (remove 2 screws and loosen 2 screws).
- 3. Remove the cover plate [E] from the top cover using cutting pliers.



- 4. Swing out the main control board assembly (1 screw).
- 5. Run the menu reader harness [A] through the bracket hole [B], then set the cord stopper [C] on the bracket with pliers.
- 6. Wrap the grounding wire [D] twice around the coil [E] and secure the wire to the bracket.



- 7. Reinstall the main control board assembly.
- 8. Install the 2 locking supports [A] on the copier main board bracket [B] and install the interface board (A344) [C] on to the CN114 of the main board as shown.
- 9. Connect the menu reader harness [D] on to the CN702 (10P green) of the interface board and secure the grounding wire [E].
- 10. Install the ferrite core [F] on the menu reader harness as shown.
- 11. Fold the harness as shown (three-fold) and secure the tie wrap [G].
- 12. Reassemble all the covers.
- 13. Plug in the copier and turn on the main switch.
- 14. Check the operation of the menu reader.

INSTALLATION PROCEDURE (FT6750)



Warning: Before installing the menu reader, make sure that the copier is unplugged.

1. Peel the backing off the strips of double-sided adhesive tape [A] and stick the menu reader on the ARDF [B], RDH [C], or platen cover [D] as shown.



- 2. Turn off the main switch of the copier, and remove the rear cover and the cover plate [A] (1 screw). Then pass the harness [B] through the hole [C].
- 3. Plug in the connector [D] and secure the grounding wire [E] (1 grounding screw) as shown.



- 4. Remove the shield plate [A] (1 screw). Then, install the cord stopper [B] on the harness and use a pair of plyers to secure the stopper to the cover plate. Reinstall the cover plate (1 screw).
- 5. Wrap the grounding wire [C] twice around the coil [D] and secure the wire to the cover plate [E] or the screw [F] on the left side (rear view) of the RDH.
- 6. Check the operation of the menu reader.
- 7. Fill out the New Equipment Condition Report.
- 8. Reassemble.

INSTALLATION PROCEDURE (FT5540/5550/5570)



- 1. Peel the backing of the strips of double-sided adhesive tape [A] and stick the menu ready on the ARDF [B], RDH [C], or platen cover [D] as shown.
- 2. Turn off the main switch of the copier, and remove the rear cover (4 screws) and the cover plate [E] (1 screw).
- 3. Pass the harness [F] through the hole [G]. Then, plug in the connector [H] and secure the grounding wire [I] (1 grounding screw) as shown.
- 4. Pull the harness tight so that there is no slack between the menu reader [J] and the hole [K]. Then, place the extra portion [L] of the harness neatly inside the copier.



- 5. Remove the shield plate [A] (1 screw). Then, install the cord stopper [B] on the harness and use a pair of plyers to secure the stopper to the cover plate. Reinstall the cover plate (1 screw).
- 6. Wrap the grounding wire [C] twice around the coil [D] and secure the wire to the cover plate

[E] or the screw [F] on the left side (rear view) of the RDH.

Installation Procedure (FT7770/7870)



- 1. Turn off the main switch of the copier, and remove the lower left cover [A] (2 screws). Then, connect the 10P free connector [B] to CN217 on the main PCB, and reinstall the lower left cover.
- 2. Remove the lower rear cover (2 screws) and the cover plate [C] (2 screws). Remove the cord stopper [D] from the cover plate.
- 3. As shown in the figure, install the cord stopper on the harness leading from the menu reader and secure the stopper [E] on the cover plate with pliers.



- Reinstall the cover plate. Connect the 10P free connectors [A], and secure the grounding wire [B] (1 ground screw) as shown in the figure. Then reinstall the lower rear cover.
- 5. Peel the backing off each strip of double-sided adhesive tape [C] and stick the menu reader on the DF.
- 6. Secure the grounding wire [D] (1 ground screw) as shown in the figure.
- 7. Check the menu reader operation.

6. REPLACEMENT AND ADJUSTMENT

6.1 LOWER TRANSPORT ROLLER UNIT REPLACEMENT



- 1. Turn off the main switch.
- 2. Remove the menu reader from the copier (3 strips of velcro tape).
- 3. Remove the upper cover [A] (4 screws) and the reader unit [B] (2 screws, 10P connector).



- 4. Remove the control board [A] (4 screws, 2P connector) and the base plate [B] (2 screws, 4 lock tabs).
- 5. Replace the lower transport roller [C] (3 E-rings, 2 bushes, 1 gear).
- 6. Reassemble.











