

EXPANDER BOARD 8800 M/BD ASSEMBLY

There are up to four edge connectors to be mounted on each 8800 M/BD expander board. These connectors are all to be mounted in the same manner.

Observe that the edge connectors each have a double row of pins; one side is numbered 1 through 50 and the other side is lettered A through AF. These markings are indicated on both the top and the bottom of the connectors.

Observe that the expander board has a foil pattern only on one side. The connectors will be mounted on the blank side of the board.

(✓) Orient the expander board in front of you with the foil pattern on the bottom. The board designation markings (MITS 8800 M/BD, etc.) should be underneath, in the right corner towards you. Looking at the blank side of the board, this will place pin 1 on the left and pin 50 on the right.

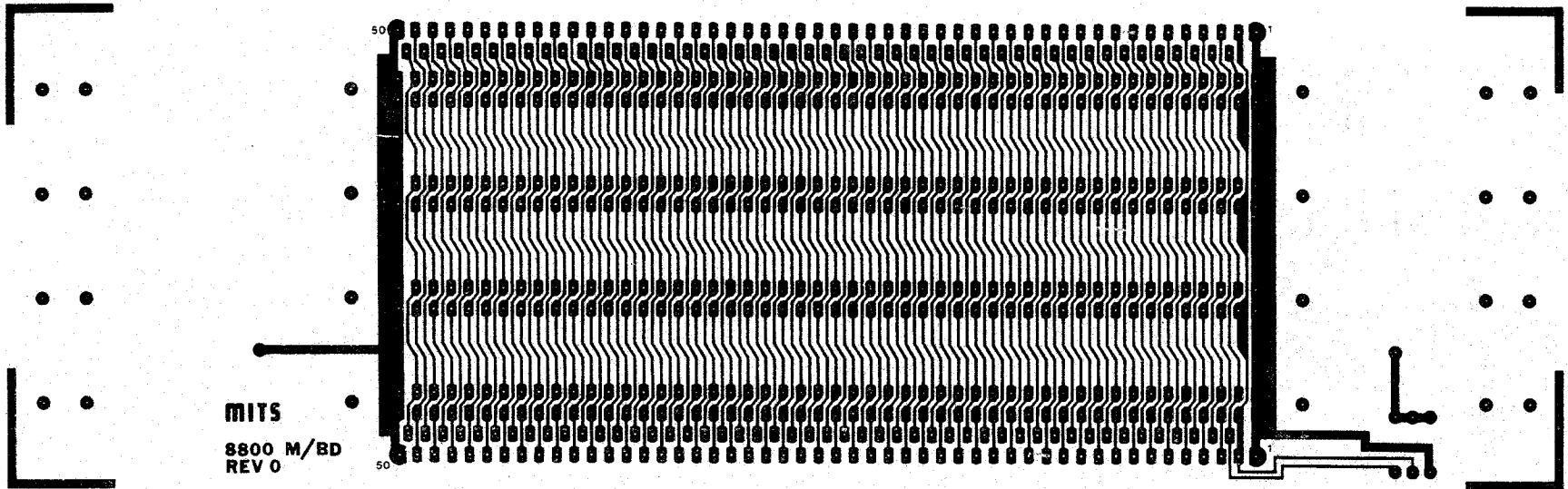
(✓) Orient one of the edge connectors so that the numbered pins are towards you and the lettered pins towards the back, with the pins themselves pointing downward. This should place pins 1 and 50 with the same orientation as the 1 and 50 on the bottom (foil side) of the board.

(✓) The edge of the board towards you has four rows of holes close together. The first two rows are staggered from each other and will be used later for wiring. The second two rows are in line and match the pins on the connector. Insert the connector into the 2nd two rows of holes keeping the same orientation as above. It may be necessary to use the tip of a scribe or a screwdriver to help guide the pins into the holes.

(✓) Be sure that the connector is tight against the board and that all 100 pins are in their holes; then turn the board over and solder the pins to the foil pattern. Be careful not to leave any solder bridges between the pins or the lands.

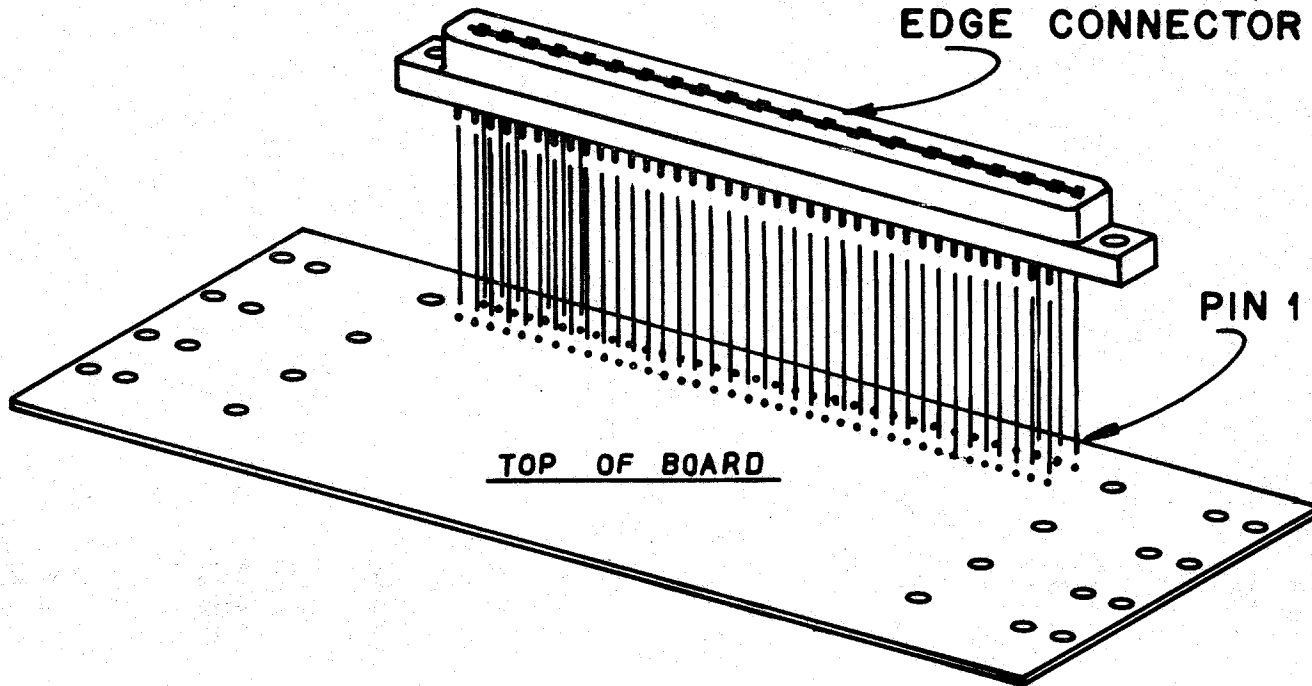
(✓) Mount all of the edge connectors to the expander board in the same manner.

BOTTOM OF BOARD



MITS
8800 M/RD
REV 0

EDGE CONNECTOR



TOP OF BOARD

BOARD INSTALLATION

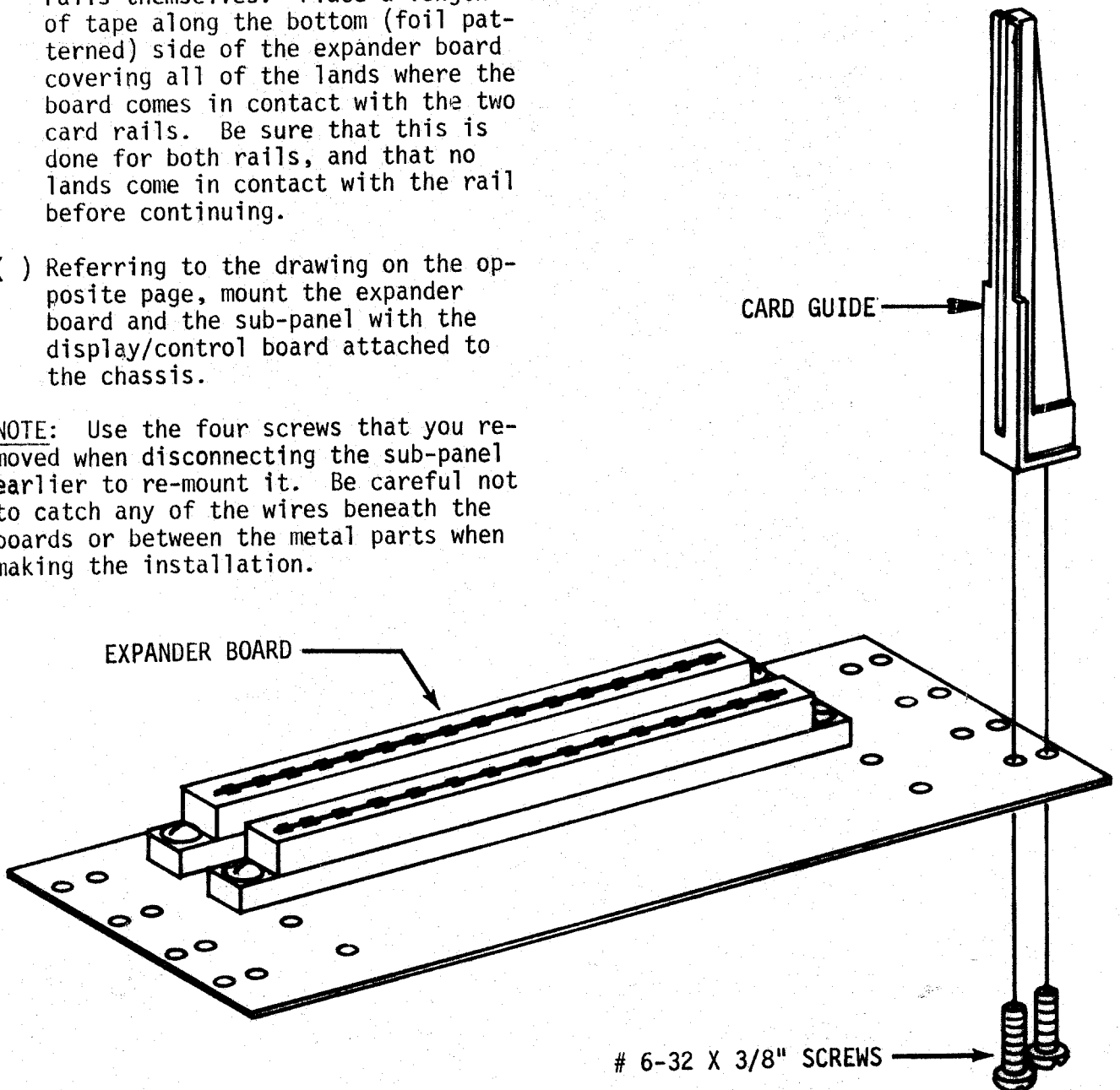
The expander board and the display/control board can now be mounted onto the chassis.

- () Before mounting the expander board, refer to the drawing on the opposite page and set the board in place on the card rails. Observe where the board comes in contact with the rails themselves. Place a length of tape along the bottom (foil patterned) side of the expander board covering all of the lands where the board comes in contact with the two card rails. Be sure that this is done for both rails, and that no lands come in contact with the rail before continuing.

- () Referring to the drawing on the opposite page, mount the expander board and the sub-panel with the display/control board attached to the chassis.

NOTE: Use the four screws that you removed when disconnecting the sub-panel earlier to re-mount it. Be careful not to catch any of the wires beneath the boards or between the metal parts when making the installation.

- () Install card guides into the pairs of holes along the outside edges of the expander board as shown below. Install them in the holes corresponding to each of the edge connectors you have previously installed.



SEE
NOTE
PG 11

EXPANDER BOARD WIRING

SEE COMPUTER NOTES
PG. 19

Place the expander board in front of you with the same orientation as at the beginning of the previous step. Observe the two staggered rows of holes towards the front edge of the board. These holes correspond with the pins on the connector. The row of holes closest to the edge of the board corresponds to pins 1 through 50 consecutively from left to right. The second row corresponds to pins 52 through 99 consecutively from left to right. (52 = B, 99 = AE) (see drawing and bus chart)

NOTE: Pins 51 and 100 are electrically common with pins 1 and 50 and thus are not used for wiring the bus.

- (✓) Orient the Display/Control Board in front of you with the sub-panel and switches facing down and the row of wire connections along the longer edge of the board towards you.
- () Orient the expander board so that it is approximately 4 inches away from the back edge of the Display/Control Board. It should be setting so that the two rows of holes described above are to the right and the shorter edge of the board towards you. (see drawing)
- (✓) Referring to the drawing, remove the nut and lockwasher from the front right corner of the Display/Control Board. Place all of the wires, except "GND", "(+8V)B", and "AC SW", through the cable clamp and remount the clamp to the corner with the same nut and lockwasher.*

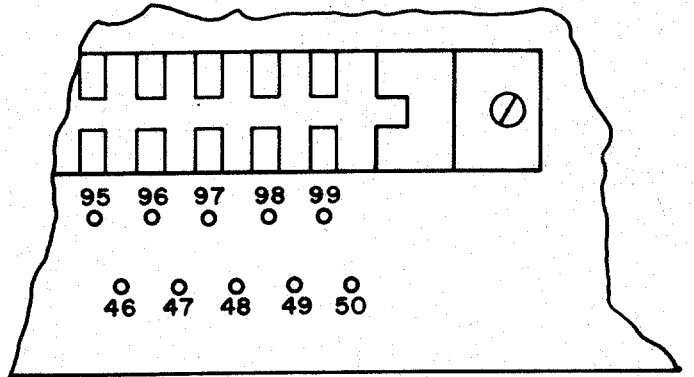
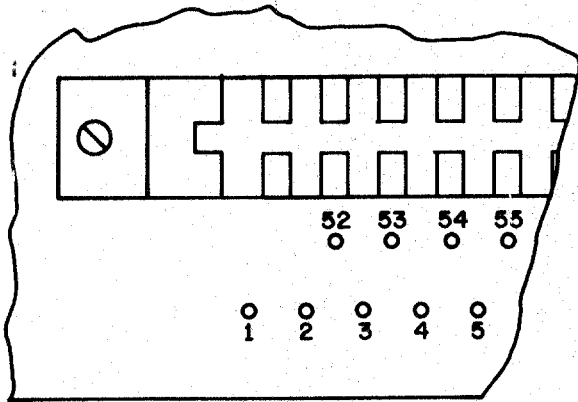
SEE
NOTE
PERTAINING
TO CABLE
CLAMPS
PG II

- () Connect the wires from the Display/Control Board labeled with numbers to the expander board according to the following procedure.
- () One at a time, take one of the wires and stretch it out to the hole on the expander board corresponding to the same number as the label on the wire.
- () Cut the wire 1/2 inch longer than the length necessary to reach its hole; then strip 3/8 inch of insulation from the cut end. Tin the exposed portion of the wire by applying a thin coat of solder.
- () Insert the end of the wire into its hole from the blank side of the board, being careful not to push any of the insulated portion of the wire into the hole.
- () Turn the board over and solder the wire to the foil pattern on the bottom side. Clip off any excess lead length.
- () Follow this same procedure for each of the wires.

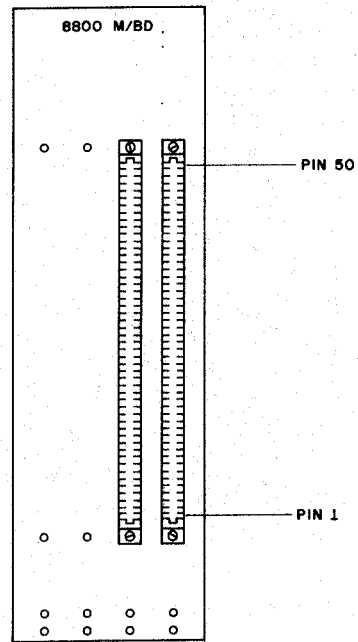
MAKE SURE THAT THE NUMBER ON THE WIRE LABEL CORRESPONDS WITH THE NUMBER OF THE HOLE ON THE EXPANDER BOARD AS YOU CONNECT EACH ONE.

- () In the same manner as the connections above, connect the free end of the 4 24-inch wires with terminal lugs attached to holes number 1, 2, 50 and 52.

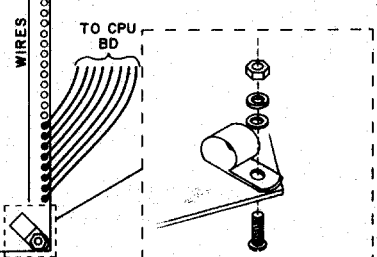
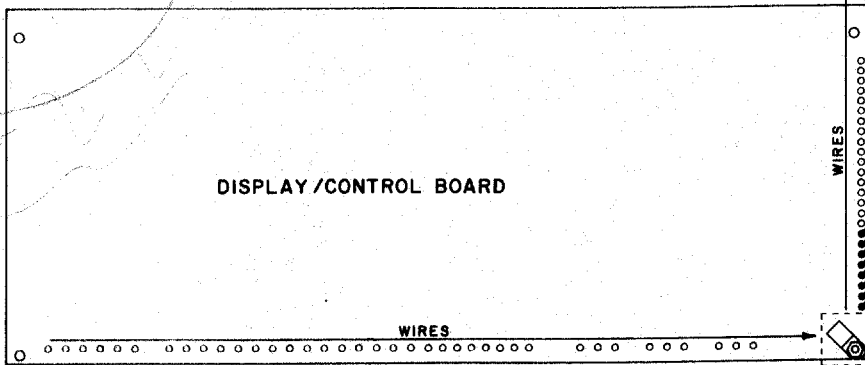
- ()*In the same manner, install cable clamps on the two screws on the left side of the board and route the other four wires through these.



8800 M/BD
EXPANDER
BOARD
WIRING



SEE
NOTE PG II



BOARD INSTALLATION

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