

## A2 INTERCONNECT

### Removal

1. Remove all modules from the mainframe.
2. Remove the rear cover. Refer to the Rear Cover Replacement Procedure.
3. Remove the bottom cover. Refer to the Bottom Cover Replacement Procedure.
4. Remove the three large screws (1) on the interconnect cover. See figure 5-4.
5. Remove the 11 screws (2) on the interconnect cover.
6. Remove the interconnect cover (3), being careful with the RFI gasket (4). The RFI gasket may be reused if NOT damaged.

#### NOTE

**Do not remove the support bracket screws at the bottom left of the interconnect board assembly. These screws secure the support bracket for the board assembly connector. The connector may be damaged if the screws are removed.**

7. Remove the A2 Interconnect Board Assembly (5).

### Replacement

8. Replace the A2 Interconnect Board Assembly (5). See figure 5-4.
9. Replace the interconnect cover (3), then the RFI gasket (4).

#### CAUTION

**Do not torque the small screws (2) on the A2 Interconnect Board Assembly to more than 3 in/lbs.**

10. Replace the 11 screws (2) on the interconnect cover and tighten.
11. Replace the three large screws (1) on the interconnect cover.
12. Replace the rear cover. Refer to the Rear Cover Replacement Procedure.

- W3 B1 Fan (3)
- W4 B2 Fan (4)

9. Replace the bottom cover. Refer to the Bottom Cover Replacement Procedure.

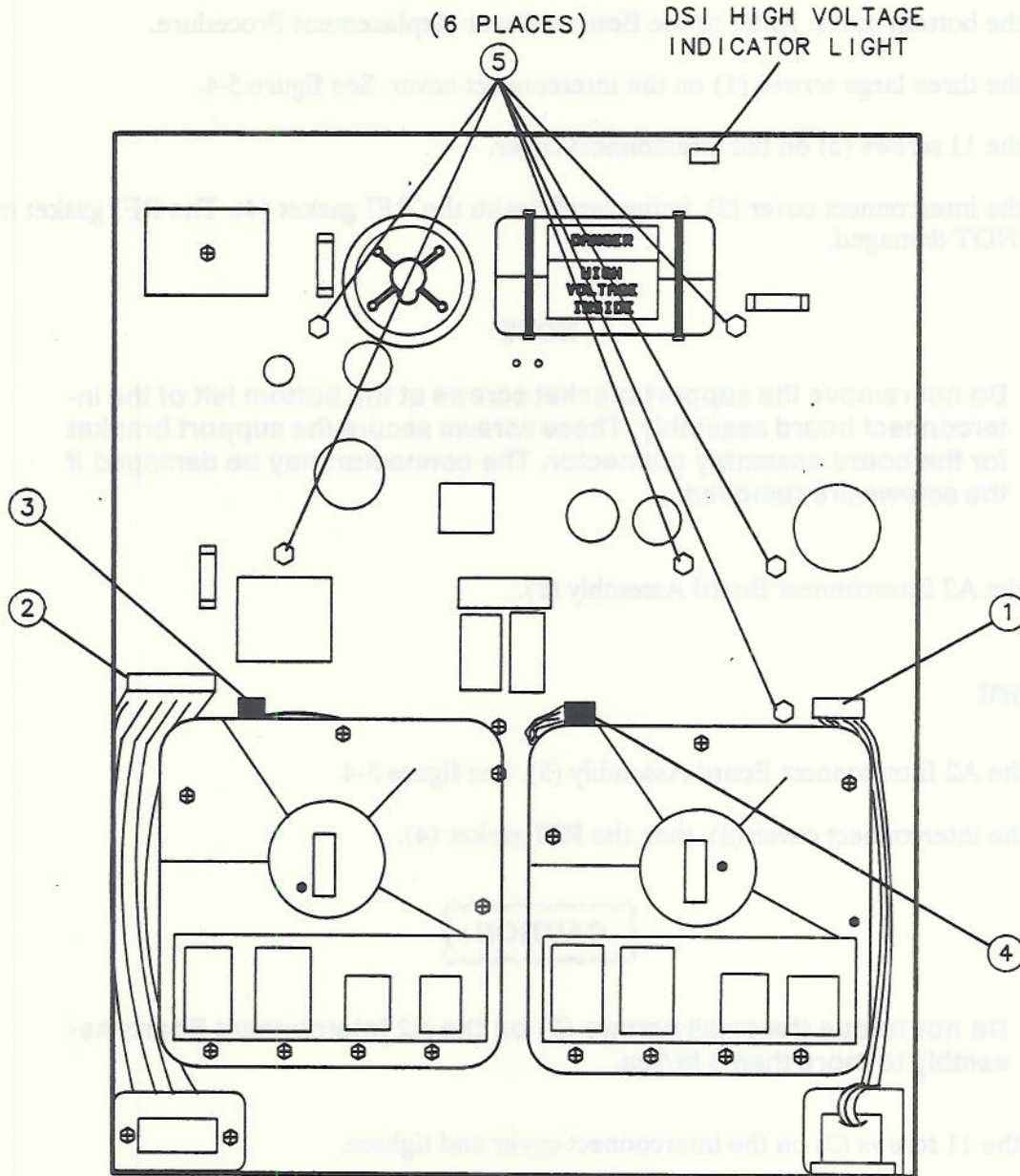


Figure 5-3. A1 Power Supply Replacement

## A1 POWER SUPPLY

### WARNING

The Mainframe A1 Power Supply Board Assembly has **LETHAL VOLTAGES**, with **LETHAL CURRENTS**, in all areas. Use extreme care when servicing the power supply board assembly. **DANGEROUS VOLTAGES** exist on this board assembly for at least three minutes after the power is turned OFF. Service personnel **MUST** use a  $> 1\text{ M}\Omega$  resistor-isolated ground or heel strap while handling the A1 Power Supply board.

Observe A1DS1, the High Voltage indicator light. DS1 indicates that the primary filter capacitors are still charged to more than 80V. Wait one minute or more for the capacitors to discharge fully after DS1 has turned OFF.

### Removal

1. Remove the bottom cover. Refer to the Bottom Cover Replacement Procedure.
2. Disconnect the following cables from the A1 Power Supply Board Assembly. See figure 5-3.
  - W1 line input (1)
  - W2 power supply output (2)
  - W3 B1 Fan (3)
  - W4 B2 Fan (4)
3. Remove the six stand-offs (5) used to attach the power supply to the bottom cover.
4. Lift the A1 Power Supply Board Assembly from the bottom cover.

### Replacement

5. Verify that the spiral gasket is properly seated in its bottom cover channel.
6. Place the A1 Power Supply Board Assembly on the bottom cover.
7. Replace the six stand-offs (5) used to attach the power supply to the bottom cover. See figure 5-3.
8. Connect the following cables on the A1 Power Supply Board Assembly.
  - W1 line input (1)
  - W2 power supply output (2)

- 11. Replace all four bottom feet (1).
- 12. Set the line switch to the OFF position.
- 13. Replace the line power cord.

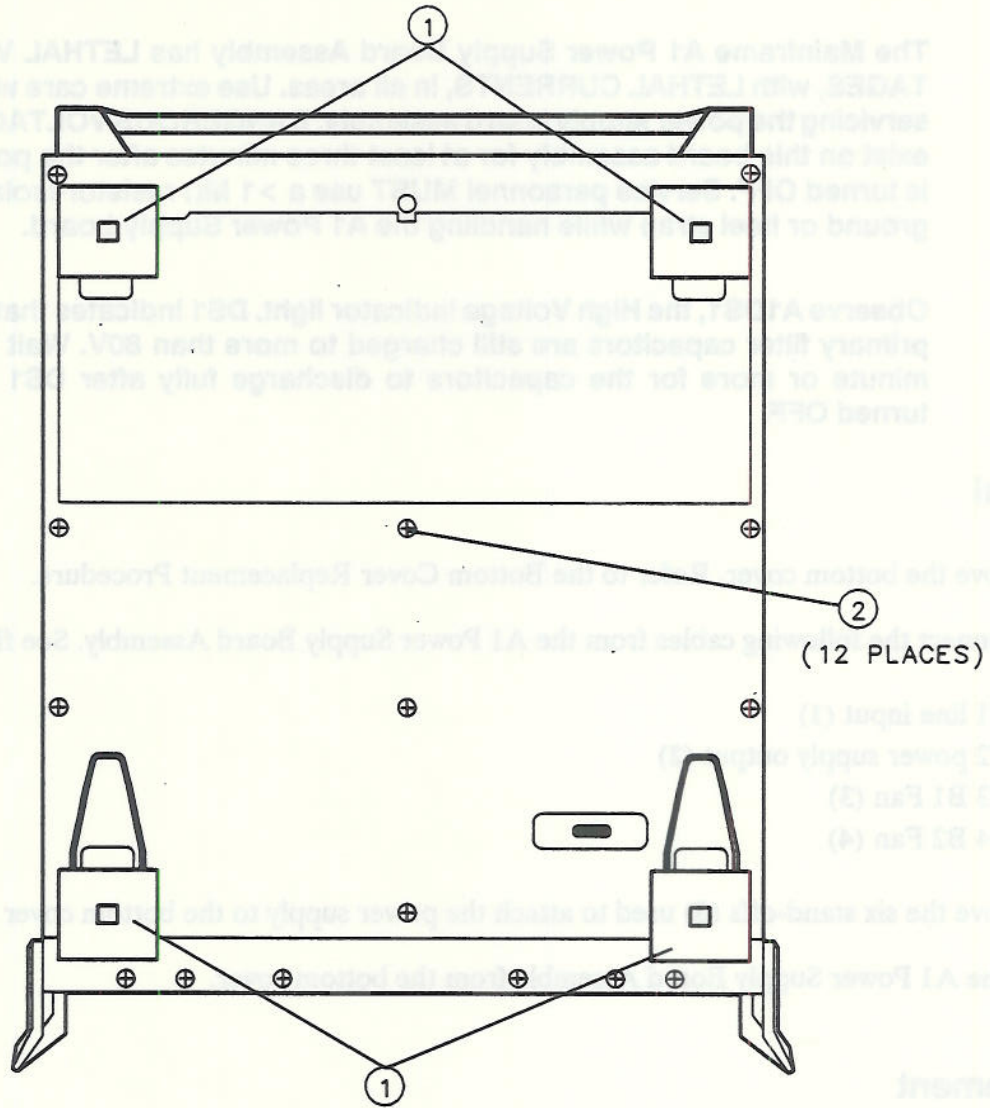


Figure 5-2. Bottom Cover Replacement

## BOTTOM COVER

### Removal

#### WARNING

The Mainframe A1 Power Supply Board Assembly has **LETHAL VOLTAGES**, with **LETHAL CURRENTS**, in all areas. Use extreme care when servicing the power supply board assembly. **DANGEROUS VOLTAGES** exist on this board assembly for at least three minutes after the power is turned OFF. Service personnel **MUST** use a  $> 1\text{ M}\Omega$  resistor-isolated wrist or heel strap while handling the A1 Power Supply board.

#### CAUTION

The power supply board assembly and the fans attached to the bottom cover have a combined weight of approximately 6.8 Kg (15 Lbs).

### Removal

1. Disconnect the line power cord.
2. Disconnect any module rear-panel cables. Remove all modules from the mainframe.
3. Set the line switch to the ON position. To avoid damage, the line switch must remain in the ON position during removal or replacement of any board assembly.
4. Turn the mainframe over so the bottom faces up.
5. Remove all four bottom feet (1). See figure 5-2.
6. Remove the 12 bottom-cover screws (2).
7. Remove the bottom cover with the attached power supply board assembly.

### Replacement

8. Verify that the line switch actuator is in the ON position.
9. Replace the bottom cover with the attached power supply board assembly.
10. Replace the 12 bottom-cover screws (2). See figure 5-2.

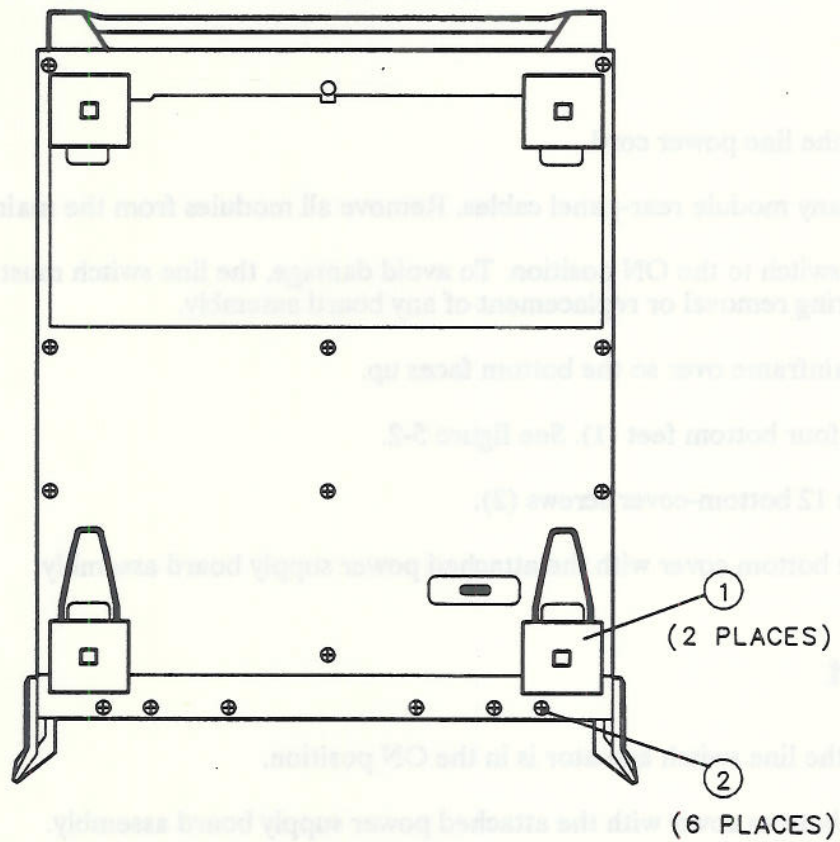
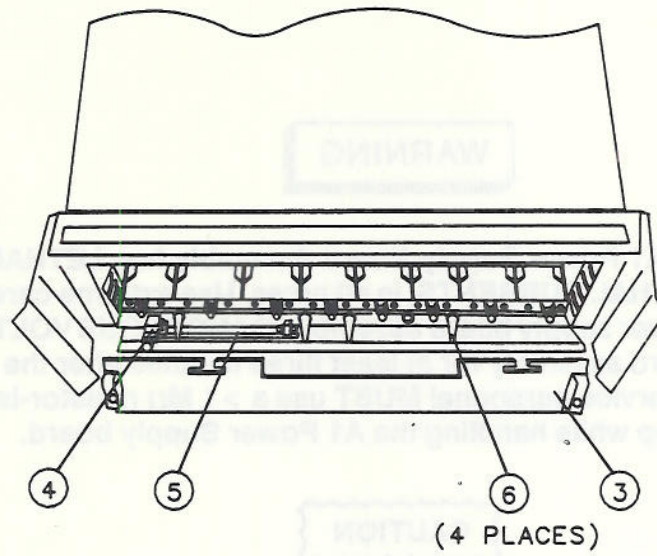


Figure 5-1. Front Panel/Main—Line Switch Actuator Replacement.

## FRONT PANEL/MAIN LINE SWITCH ACTUATOR

### Removal

1. Set the line switch to the OFF position.
2. Disconnect the line power cord.
3. Disconnect any module rear-panel cables. Remove all modules from the mainframe.
4. Turn the mainframe over so the bottom faces up.
5. Remove the two front feet (1). See figure 5-1.
6. Remove the six front-panel screws (2).
7. Remove the front panel (3) and main-line switch (4).

### Replacement

8. Replace the main line switch (4), door lock shaft (5), and light pipes (6) (if necessary). The fourth light pipe hole from the left (line switch side) is empty. See figure 5-1.
9. Replace the front panel (3), taking care that the door lock shaft (5) and light pipes (6) are aligned properly.
10. Replace the six front-panel screws (2).
11. Replace the two front feet (1).

The pin connector contacts of PC board assemblies may be cleaned by using a lint-free cloth with a solution of 80% electronics-grade isopropyl alcohol and 20% *de-ionized* water. Perform this procedure at a static-free work station.

Refer to Chapter 1, "General Information", for more detailed information on ESD.