OPI Board Replacement (Continued)

NOTE: The pressure tubing from the flow meter is connected to the top fitting on the oxygen sensor. The pressure tubing connected to the pressure regulator on the sieve canister assembly is connected to the bottom fitting on the oxygen sensor.

c. Using a Phillips screwdriver, remove the four screws securing the OPI board to the front cabinet assembly.

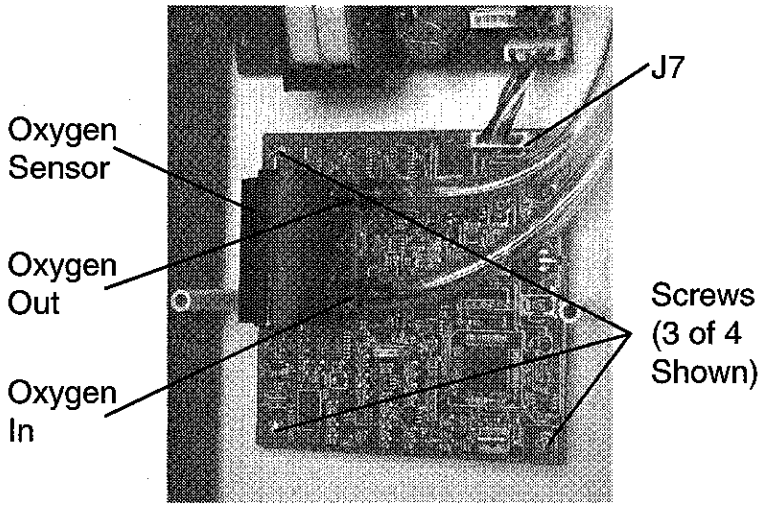

Figure 8-41
Connections and Mounting Screw Locations on the OPI Board

d. While holding the wiring harness out of the way, remove the OPI board from the front cabinet assembly.

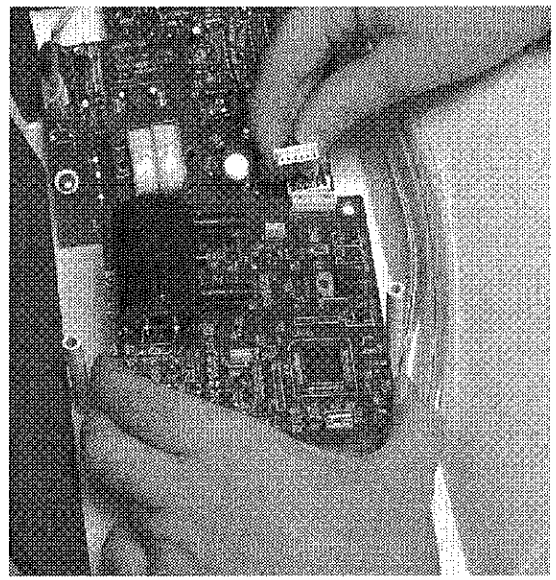

Figure 8-42
Removing the OPI Board

Step 2 Installing OPI Board

a. Align the holes in the OPI with the standoffs on the front cabinet assembly.

OPI Board Replacement (Continued)

b. Insert then tighten the four screws provided to secure the OPI board to the front cabinet assembly.

c. While holding the oxygen sensor, install the pressure tubing on the oxygen sensor by carefully pushing the tubing onto the oxygen sensor fittings.

d. Align the connector on the OPI wiring harness with the J7 receptacle on the OPI board. Carefully press the connector onto the receptacle until completely seated.

Step 3 Verify that there Are No O_2 Leaks

a. Set flow meter to 0 lpm.

b. Ensure the "no flow" alert activates.

c. The alert should activate. If not, check for leaks at newly installed OPI board.

8.4.13 Power Switch Wiring Harness Replacement

Replacement Part Number 610-00615-00

Optional RP Kit for This Procedure

Cable Tie - Screw Down H641

Included in Kit:	Tools Required:
Power switch wiring harness Convoluted tubing (with crimped ends)	Phillips screwdriver (medium w/ long shaft) Diagonals (wire cutters)

Included in the Optional Kit:
Cable tie - screw down (×10)

Procedure

Removed / Installed During Process:

- Rear cabinet (See Section 8.4.4 for more detailed instructions.)
- Front cabinet assembly (separated from unit) (See Section 8.4.5 for more detailed instructions.)
- Power switch wiring harness

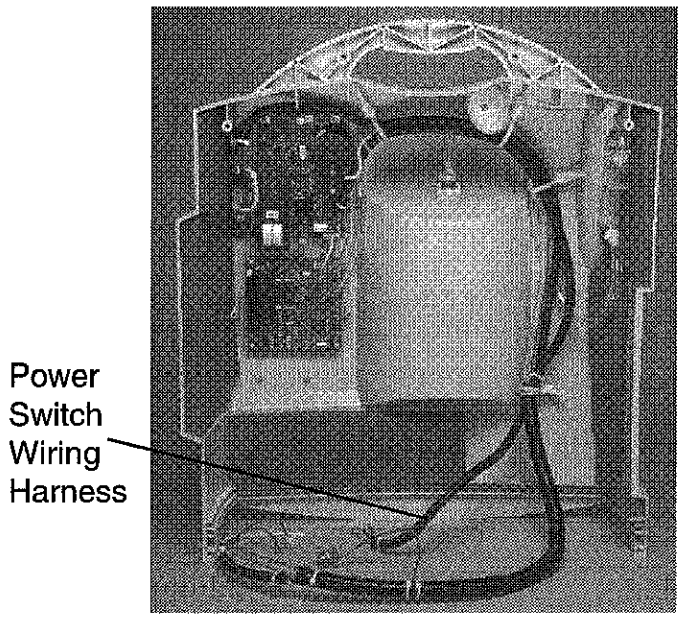

Figure 8-43
Location of the Power Switch Wiring Harness

Step 1 Removing the Power Switch Wiring Harness

a. Disconnect the male connector on the power switch wiring harness from this female connector on the main power wiring harness.

Power Switch Wiring Harness Replacement (Continued)

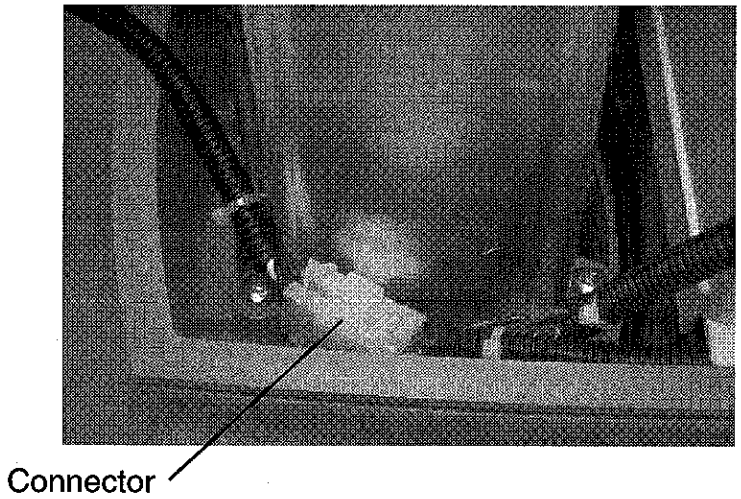

Figure 8-44
Location of the Power Switch Wiring Harness to Main Power Wiring Harness Connector

b. Remove the female connector from the (J2) location on the power control board (PCB).

c. Looking at the back of the power switch from inside the front cabinet assembly, note the position and colors of the wires connected to the terminals on the power switch.

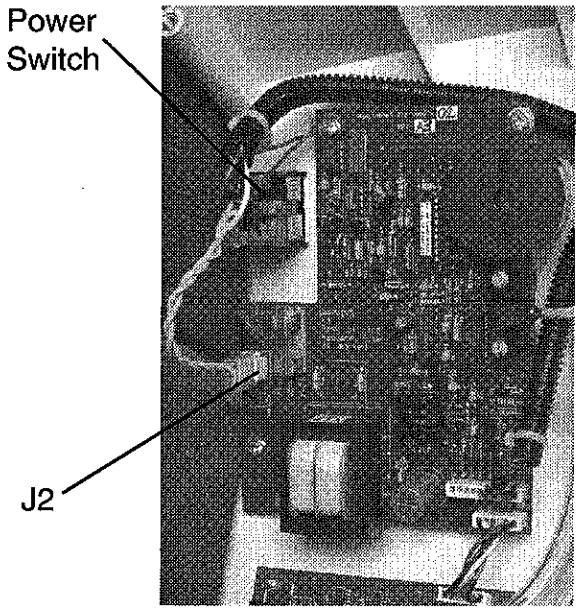

Figure 8-45
PCB (J2) and Power Switch Location

CAUTION: Except for the two red wires that are interchangeable, the wires must be connected to the power switch as shown. Failure to do so will result in damage to the unit.

Power Switch Wiring Harness Replacement (Continued)

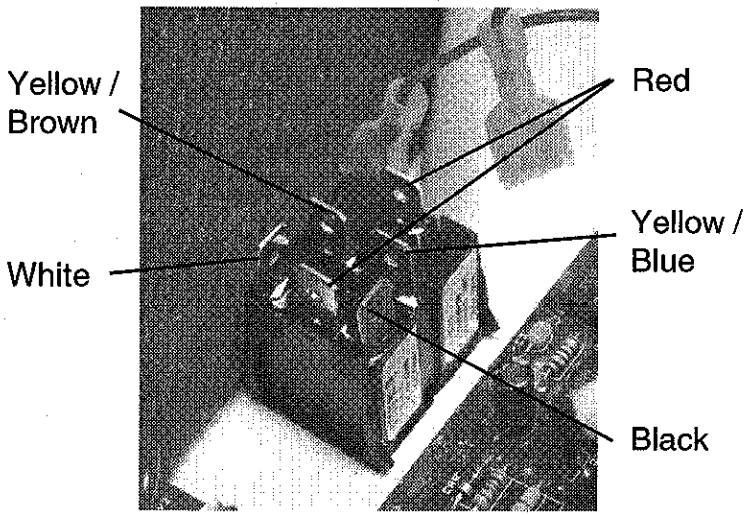

Figure 8-46
Correct Connection of the Wires to the Power Switch

d. Using needle nose pliers, remove the connectors from the power switch terminals.

NOTE: The two red wires from the O_2 / solenoid / battery wiring harness do not have to be disconnected from the power switch.

e. Remove the screws that secure the screw down cable ties to the front cabinet.

f. Either feed the power switch wiring harness through the screw down cable ties or, if new screw down cable ties are available, cut the cable ties and remove the power switch wiring harness.

Step 2 Installing the Power Switch Wiring Harness

a. Either feed the power switch wiring harness through the original screw down cable ties or, if new screw down cable ties are available, loosely install four cable ties grouping the power switch wiring harness; the O_2 / solenoid / battery wiring harness, and the clear and yellow pressure tubing together.

b. Install the connectors onto the proper terminals of the power switch. Insure that they are installed in their original position (see Figure 8-33).

c. Install the female connector onto the (J2) location on the power control board (PCB).

d. Position the screw down cable ties at their mounting posts then secure each using the original screws. Tighten the screw down cable ties.

e. Connect the male connector on the power switch wiring harness from this female connector on the main power wiring harness.

8.4.14 O_2 / Solenoid / Battery Wiring Harness Replacement

Replacement Part Number 610-00600-00 - without OPI

610-00610-00 - with OPI

Optional RP Kit for This Procedure

Cable Tie - Screw Down H641

Included in Kit:	Tools Required:
O_2 / solenoid / battery wiring harness Convoluted tubing (w/ crimped ends)	Phillips screwdriver (medium w/ long shaft) Diagonals (wire cutters)

Included in the Optional Kit:
Cable tie - screw down (×10)

Procedure

Removed / Installed During Process:

- Rear cabinet (See Section 8.4.4 for more detailed instructions.)
- Front cabinet assembly (separated from unit) (See Section 8.4.5 for more detailed instructions.)
- O_2 / solenoid / battery wiring harness

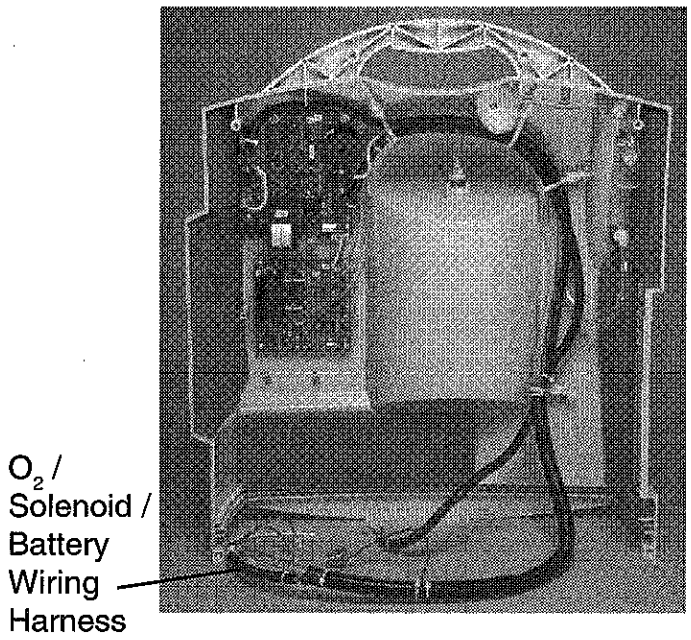

Figure 8-47
Location of the O_2 / Solenoid / Battery Wiring Harness

Step 1 *Removing the O_2 / Solenoid / Battery Wiring Harness*

a. Remove the battery connector from the battery.

b. Remove the two connectors from the valve / solenoid assembly.

O_2 / Solenoid / Battery Wiring Harness Replacement (Continued)

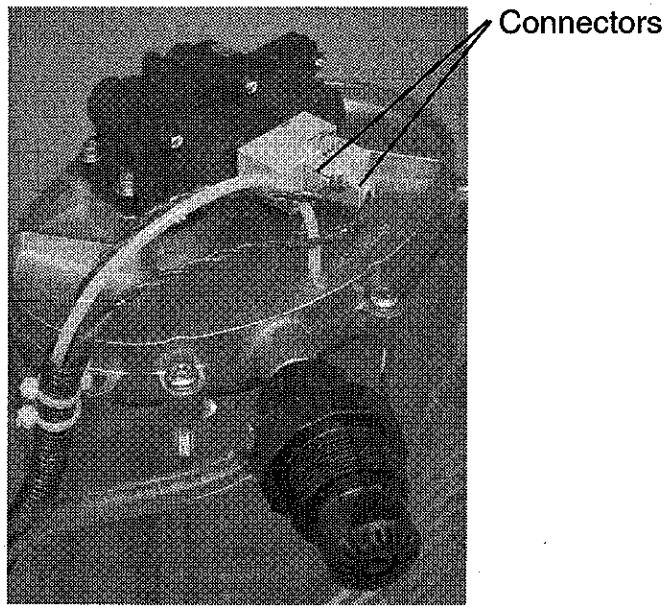

Figure 8-48
Valve / Solenoid Connections

c. Remove the two red wires connected to the power switch.

NOTE: The two red wires are interchangeable.

d. Remove the O_2 / solenoid / battery wiring harness connector from the (J1) location on the oxygen percentage indicator (OPI) board.

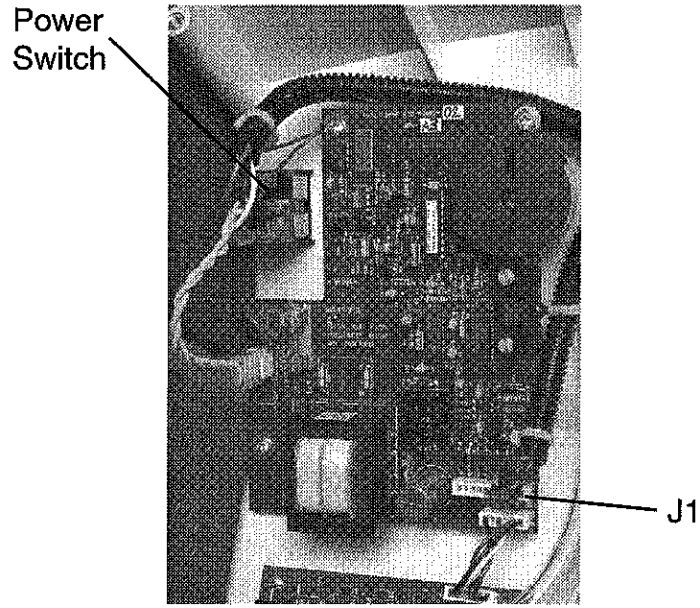

Figure 8-49
Power Switch and (J1) Location

e. Remove the screws that secure the screw down cable ties to the front cabinet.

f. Either feed the O_2 / solenoid / battery wiring harness through the screw down cable ties or, if new screw down cable ties are available, cut the cable ties and remove the O_2 / solenoid / battery wiring harness.

O_2 / Solenoid / Battery Wiring Harness Replacement (Continued)

g. Note the location at which the battery wires exit the large convoluted tubing. Cut the cable ties and remove the O_2 / solenoid / battery wiring harness from the convoluted tubing.

Step 2 Installing the O_2 / Solenoid / Battery Wiring Harness

a. Install the O_2 / solenoid / battery wiring harness into the large convoluted tubing. Insure that the battery wires exit the large convoluted tubing at their original location. Secure the convoluted tubing with four cable ties.

b. Either feed the O_2 / solenoid / battery wiring harness through the original screw down cable ties or, if new screw down cable ties are available, loosely install four cable ties grouping the O_2 / solenoid / battery wiring harness, power switch wiring harness, and the clear and yellow pressure tubing together.

c. Install the O_2 / solenoid / battery wiring harness connector onto the (J1) location on the oxygen percentage indicator (OPI) board.

d. Install the two red wires from the O_2 / solenoid / battery wiring harness to the power switch.

e. Position the screw down cable ties at their mounting posts then secure each using the original screws. Tighten the screw down cable ties.

f. Install the two connectors from the O_2 / solenoid / battery wiring harness on the valve / solenoid assembly.

g. Install the battery connector on the battery.

8.4.15 Front Cabinet Replacement

Replacement Part Number H634

Included in Kit:	Tools Required:
Front cabinet (w/ foam insulation)	Phillips screwdriver (medium w/ long shaft)
Control Overlay (Model #600)	Phillips screwdriver (small)
Control Overlay (Model #605)	Flat-blade screwdriver (small)
Cable tie (screw down ×5)	Hog ring or slip-joint pliers (medium)
6-19 × .31" low torque screw (×5)	Needle-nose pliers
	7/8" open-end wrench
	11/16" wrench

Procedure

Removed / Installed During Process:

- Rear cabinet (See Section 8.4.4 for more detailed instructions.)
- Front cabinet assembly (separated from unit) (See Section 8.4.5 for more detailed instructions.)
- Flow meter (See Section 8.4.6 for more detailed instructions.)
- DISS outlet fitting (See Section 8.4.7 for more detailed instructions.)
- Power switch harness (Partial - from front cabinet assembly only) (See Section 8.4.13 for more detailed instructions.)
- O_2 / solenoid / battery wiring harness (Partial - from front cabinet assembly only) (See Section 8.4.14 for more detailed instructions.)
- Power switch (See Section 8.4.8 for more detailed instructions.)
- Oxygen percentage indicator (OPI) wiring harness (See Section 8.4.11 for more detailed instructions.)
- Power control board (PCB) (See Section 8.4.10 for more detailed instructions.)
- OPI board (Model #605 only) (See Section 8.4.12 for more detailed instructions.)
- Front cabinet

Front Cabinet Replacement (Continued)

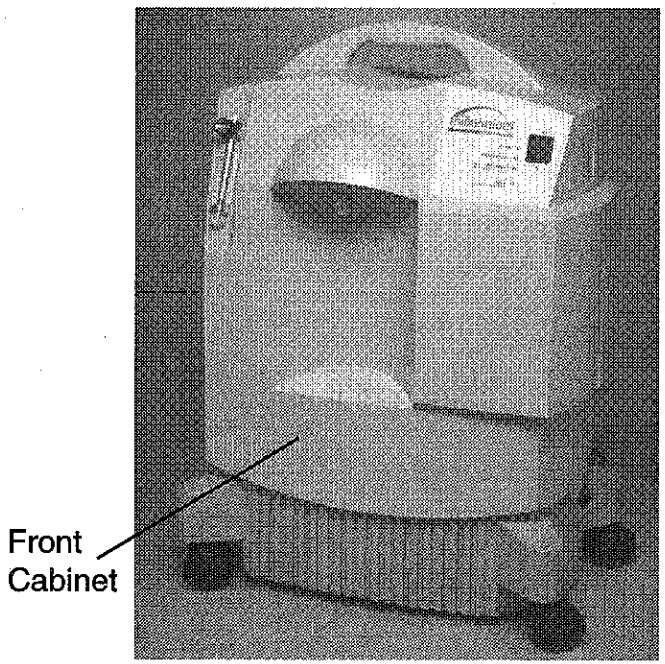

Figure 8-50
Location of the Front Cabinet

Step 1 Removing the Front Cabinet

a. Following the order listed under Procedure earlier in this section, carefully remove all components mounted to the front cabinet.

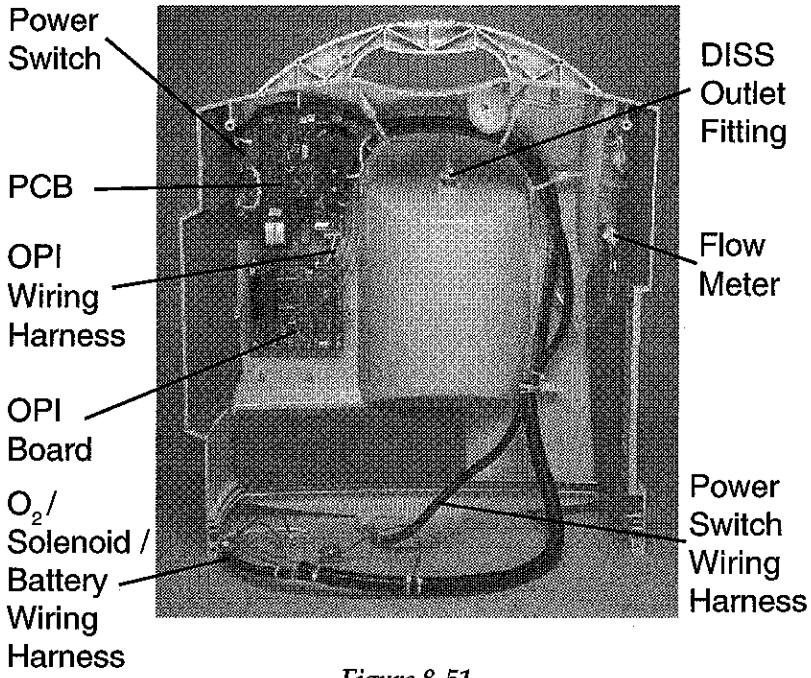

Figure 8-51
Components to be Removed from the Front Cabinet

Step 2 Installing the Front Cabinet

a. Remove the protective backing from the appropriate control overlay supplied with the RP kit. Carefully align then apply the control overlay to the front cabinet.

Front Cabinet Replacement (Continued)

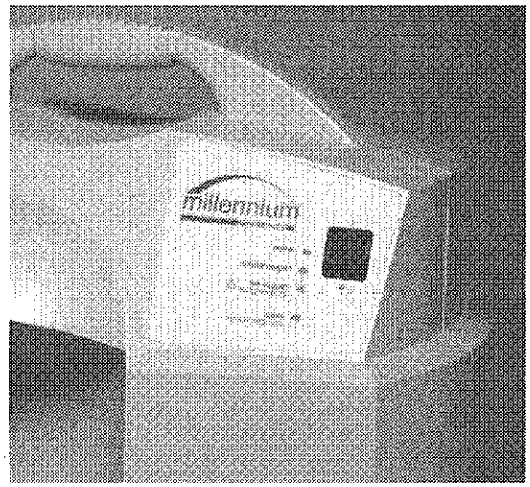

Figure 8-52
Correct Alignment of the Control Overlay

b. Position the front cabinet face down on a protected work surface that will not damage the front cabinet.

c. Reversing the order listed under Procedure earlier in this section, carefully install all components mounted to the front cabinet.

8.4.16 Cooling Fan Replacement

Replacement Part Number 360-9100-15

Included in Kit:	Tools Required:
Cooling fan	Phillips screwdriver (medium w/ long shaft) Phillips screwdriver (small w/ thin shaft)

Procedure

Removed / Installed During Process:

- Rear cabinet (See Section 8.4.4 for more detailed instructions.)
- Front cabinet assembly (separated from unit) (See Section 8.4.5 for more detailed instructions.)
- Cooling fan

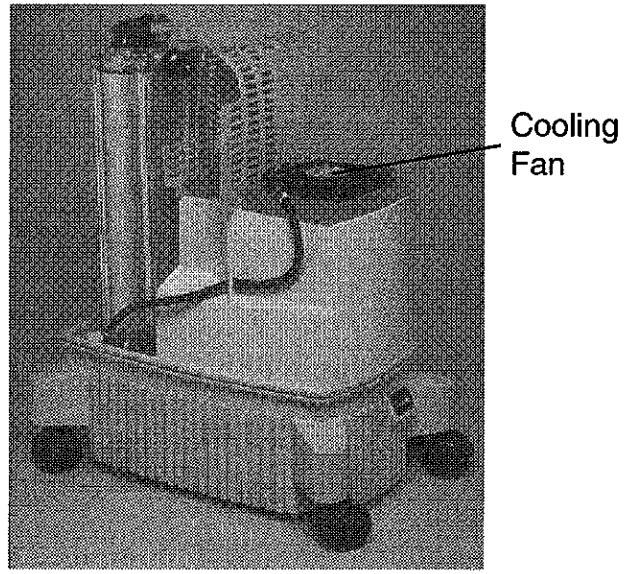

Figure 8-53
Location of the Cooling Fan

Step 1 Removing the Cooling Fan

a. Remove the two wires from the terminals located on the side of the cooling fan.

NOTE: The two wires are interchangeable.

b. Using a small, thin shaft Phillips screwdriver, remove the four screws securing the cooling fan to the compressor cover.

Cooling Fan Replacement (Continued)

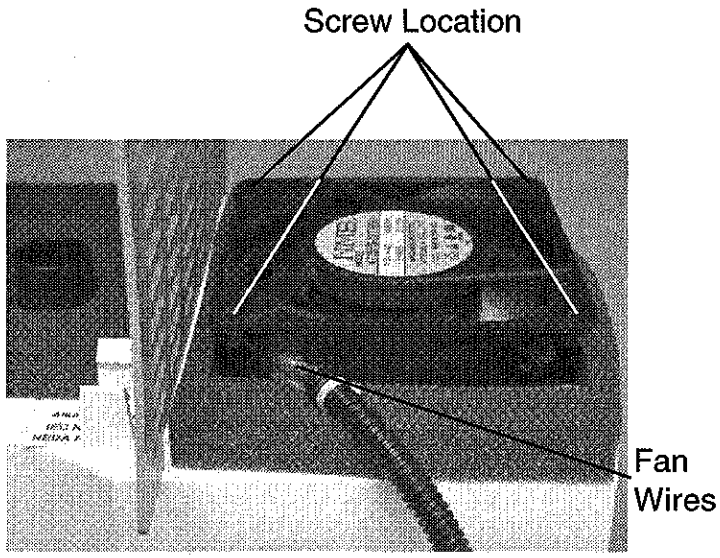

Figure 8-54
Location of the Cooling Fan Wires and Mounting Screws

c. While holding the compressor cover in place, lift the fan up and away from the compressor cover.

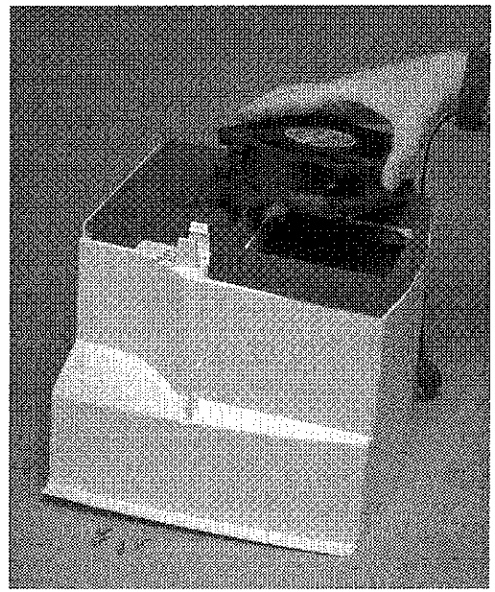

Figure 8-55
Removing the Fan from the Compressor Cover Housing

Step 2 Installing the Cooling Fan

a. Align the cooling fan with the holes in the compressor cover.

NOTE: The fan must be installed so the terminals are oriented towards the front and center of the unit.

Cooling Fan Replacement (Continued)

b. Insert then tighten the four screws to secure the fan to the compressor cover.

c. Connect the fan wires to the terminals on the side of the cooling fan.

NOTE: Insure that the convoluted tubing covering the fan wires is still properly seated in the wire holder built into the front of the compressor cover.

8.4.17 Perforated Canopy Replacement

Replacement Part Number 260-0671-00

Included in Kit:	Tools Required:
Perforated canopy	Phillips screwdriver (medium w/ long shaft)

Procedure

Removed / Installed During Process:

- Rear cabinet (See Section 8.4.4 for more detailed instructions.)
- Front cabinet assembly (separated from unit) (See Section 8.4.5 for more detailed instructions.)
- Perforated canopy

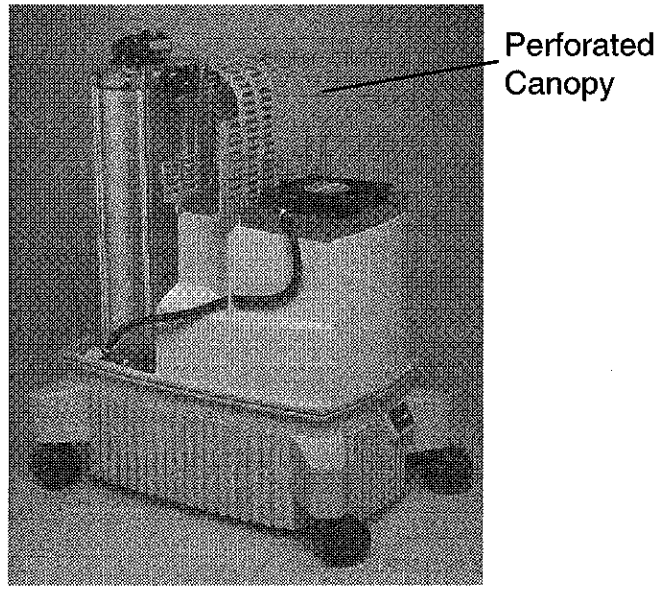

Figure 8-56
Location of the Perforated Canopy

Step 1 Removing the Perforated Canopy

a. Remove the 9-volt alarm battery from its holder.

b. Press inward on the bottom of each side of the perforated canopy until the locating posts are clear of the holes in the compressor cover.

Perforated Canopy Replacement (Continued)

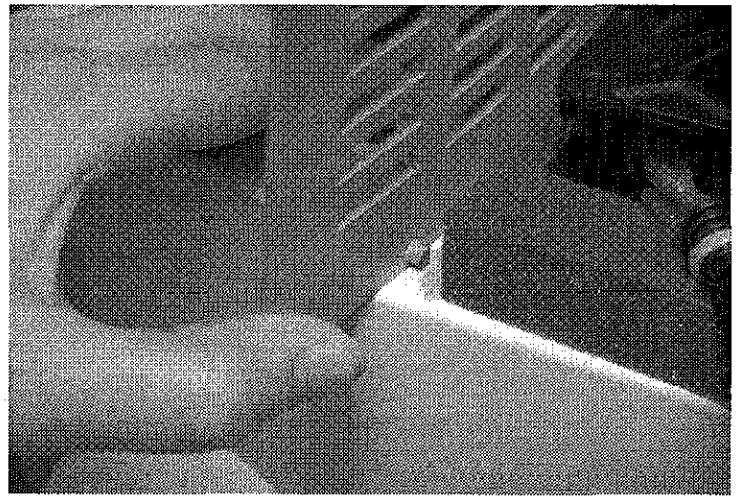

Figure 8-57
Releasing the Perforated Filter Canopy from the Compressor Cover

c. Lift the perforated canopy up and away from the compressor cover.

Step 2 Installing the Perforated Canopy

a. While exerting slight inwards pressure on the sides of the perforated canopy, align the locating posts with the holes in the compressor cover.

b. Release the pressure, then insure that the locating posts have locked in place in the compressor cover.

c. Install the 9-volt battery in its holder.

8.4.18 Compressor Cover / Perforated Canopy Replacement

Replacement Part Number H637

Included in Kit:	Tools Required:
Compressor cover (w/ foam insulation)	Phillips screwdriver (medium w/ long shaft)
Perforated canopy	Phillips screwdriver (small w/ thin shaft)
Label - battery	
Label - caution	

Procedure

Removed / Installed During Process:

- Rear cabinet (See Section 8.4.4 for more detailed instructions.)
- Front cabinet assembly (separated from unit) (See Section 8.4.5 for more detailed instructions.)
- Perforated canopy (See Section 8.4.17 for more detailed instructions.)
- Inlet filter (See Section 6.3.2 for more detailed instructions.)
- Air inlet filter (See Section 6.3.2 for more detailed instructions.)
- Cooling fan (See Section 8.4.16 for more detailed instructions.)
- Compressor cover / perforated canopy

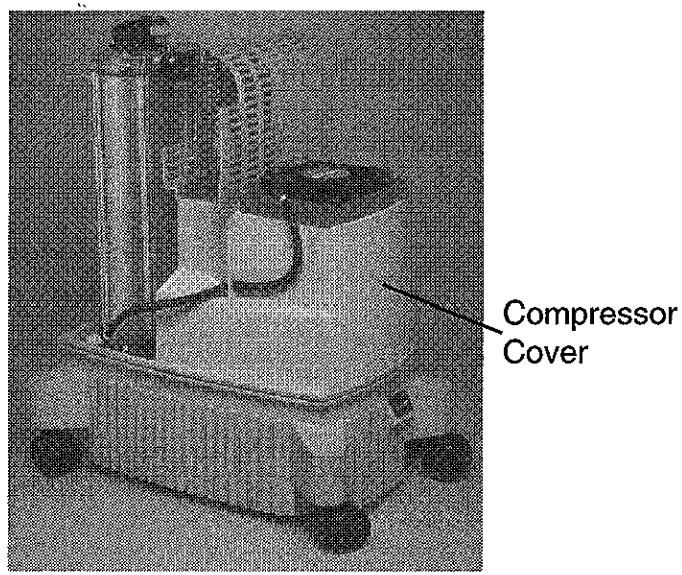

Figure 8-58
Location of the Compressor Cover

Step 1 Removing the Compressor Cover

a. Remove convoluted tubing containing the fan wires from the wire holder built into the front of the compressor cover.

b. Remove 9-volt battery

Compressor Cover Replacement (Continued)

c. Lift the compressor cover housing straight up then away from the base cabinet.

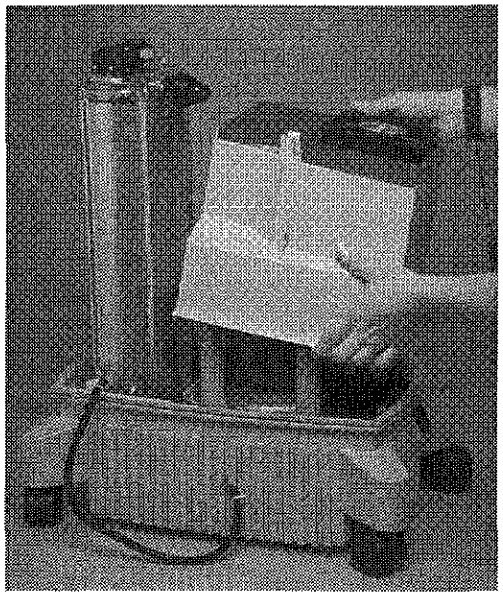

Figure 8-59
Removing the Compressor Cover

Step 2 Installing the Compressor Cover

a. Position the compressor cover so the built-in wire holder is facing the front of the unit.

b. Align the round hole in the top of the compressor cover housing with the inlet port of the compressor assembly.

c. Set the compressor cover into place on the base cabinet. Insure that the bottom of the compressor cover housing is correctly seated on the base cabinet.

d. Insert the convoluted tubing containing the fan wires into the built-in wire holder on the front of the compressor cover.

8.4.19 Main Power Wiring Harness Replacement

Replacement Part Number 610-00625-00

Included in Kit:	Tools Required:
Main power wiring harness	Phillips screwdriver (medium w/ long shaft)
Convoluted tubing (with crimped ends)	Amp terminal retractor tool
Cable ties	Diagonals (wire cutters)

Procedure

Removed / Installed During Process:

- Rear cabinet (See Section 8.4.4 for more detailed instructions.)
- Front cabinet assembly (separated from unit) (See Section 8.4.5 for more detailed instructions.)
- Compressor cover / perforated canopy (See Section 8.4.18 for more detailed instructions.)
- Main power wiring harness

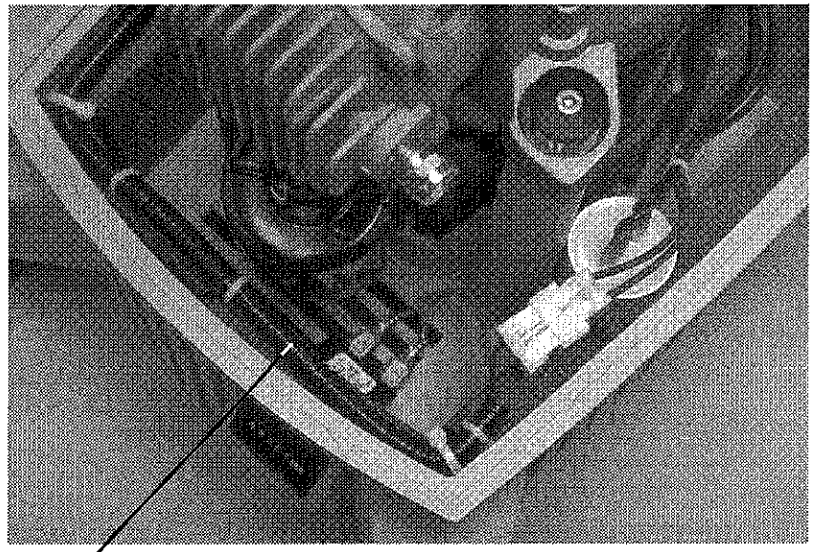

Figure 8-60
Location of the Main Power Wiring Harness

WARNING: Make sure AC power is disconnected.

Step 1 Removing the Main Power Wiring Harness

a. Disconnect the female connector on the main power wiring harness from the male connector on the power switch wiring harness.

Main Power Wiring Harness Replacement (Continued)

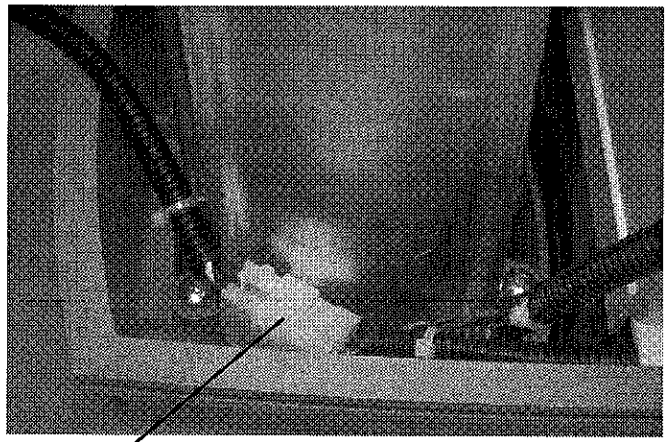

Figure 8-61
Location of the Main Power Wiring Harness to Power Switch Wiring Harness Connector

b. Note the position of the power cord wires in the main power harness female connector. Using an amp terminal retractor, remove the power cord wires from the connector.

c. Note the routing of the main power wiring harness and the location of the cable ties securing the harness to the base cabinet. Cut the cable ties.

d. Remove the two connectors from the hour meter.

NOTE: The wires connected to the hour meter are interchangeable.

e. Disconnect the female connector of the main power wiring harness from the male connector on the compressor wires.

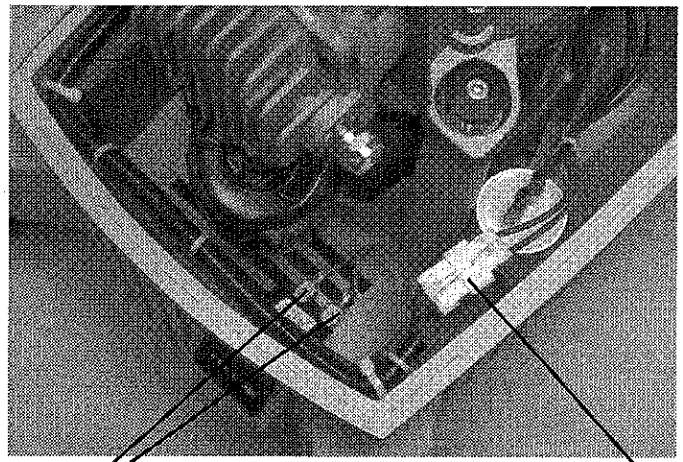

Figure 8-62
Location of the Hour Meter and Compressor Wire Connectors

Main Power Wiring Harness Replacement (Continued)

Step 2 Installing the Main Power Wiring Harness

a. Install the female connector of the main power wiring harness onto the male connector on the compressor wires.

b. Install the two hour meter wires onto the hour meter.

c. Route the main power wiring harness along the inside of the base cabinet. Secure the main power wiring harness to the base cabinet using three cable ties.

d. Install the power cord wire connectors in their original position in the main power harness female connector.

e. Install the female connector on the main power wiring harness onto the male connector on the power switch wiring harness.