

8.4.20 Capacitor Replacement

Replacement Part Number 180-1502-20

Included in Kit:	Tools Required:
Capacitor (15 micro farad	Phillips screwdriver
- 400 volts	(medium w/long shaft)
	Needle-nose pliers (insulated)

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.)
- Capacitor



Figure 8-63 Location of the Capacitor

Step 1 Removing the Capacitor

a. Using insulated needle-nose pliers, carefully remove the female connectors on the capacitor wires from the two capacitor terminals.

NOTE: The capacitor wires are interchangeable.

b. After the capacitor is discharged, lift the capacitor up and out of the molded base.

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Capacitor



Capacitor Replacement (Continued)

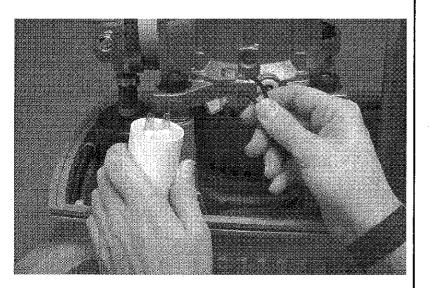


Figure 8-64 Removing the Capacitor

- Step 2 Installing the Capacitor
 - a. Slide the capacitor into position between the foam insulation and the compressor assembly standoff.
 - b. Connect the capacitor wires to the terminals on the capacitor.
 - c. Make sure the capacitor terminals are parallel to the rear wall in the base cabinet as shown in Figure 8-63.

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8.4.21 Pressure Relief Valve Replacement

Replacement Part Number 365-0600-10

Pressure relief valve (medium 9/16" box deep we
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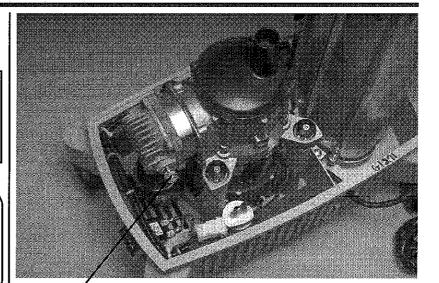
NOTE: If it has been determined that the pressure relief valve must be replaced, the unit should be operated for a minimum of ten minutes to insure that the compressor head is warm. This will soften the sealant used on the threads of the pressure relief valve and assist in its removal.

Procedure

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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.)
- Pressure relief valve



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Pressure Relief Figure 8-65 Valve Location of the Pressure Relief Valve

- Step 1 Removing the Pressure Relief Valve
 - a. Run the unit for a minimum of ten minutes to insure that the compressor head is warm.
 - b. Using a 9/16" box end wrench or deep well socket, turn the pressure relief valve counter-clockwise to remove it from the compressor head.

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Pressure Relief Valve Replacement (Continued)

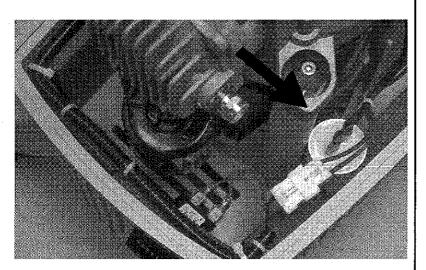


Figure 8-66 Removing the Pressure Relief Valve

Step 2 Installing the Pressure Relief Valve

- a. Apply an appropriate sealer to the threads of the pressure relief valve.
- b. Using a 9/16" box end wrench or deep well socket, install the pressure relief valve into the compressor head. Do not over tighten the pressure relief valve.

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8.4.22 Compressor Assembly Replacement

Replacement Part Number H611 - 120 Volt H612 - 230 Volt

Optional RP Kit for This Procedure

Compressor Mount Replacement Part Number H616

Included in Kit: Compressor assembly One-eared clamp	Tools Required: Phillips screwdriver (medium w/ long shaft) Crimping clamp tool or diagonals 1/8" hex key wrench or
	socket

Included in the Optional Kit: Compressor bumper (×4) Spring, helical (×4) 10-24 hex shoulder screw (×4)

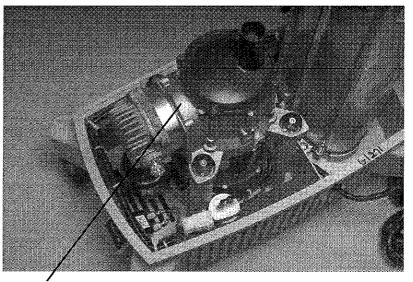
Procedure

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.)

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- Compressor cover / perforated canopy (See Section 8.4.18 for more detailed instructions.)
- Compressor assembly
- Compressor mounts



Compressor Assembly

Figure 8-67 Location of the Compressor Assembly

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Compressor Assembly Replacement (Continued)

WARNING: Insure that the unit is disconnected from the AC power source before beginning this procedure.

- Step 1 Removing the Compressor Assembly
 - a. Disconnect the compressor assembly harness from the main power cabinet wiring harness by depressing the locking tabs and separating the connectors.
 - b. Disconnect the wires from the capacitor terminals.

NOTE: The wires connected to the capacitor are interchangeable.

c. Using a crimping clamp tool or diagonals, cut the one-eared clamp securing the pressure tubing to the outlet port of the compressor assembly. Remove the pressure tubing from the compressor assembly outlet port.

One-eared Clamp ~

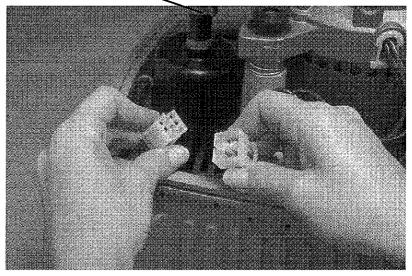


Figure 8-68 Disconnecting the Compressor Assembly Wiring Harness and Location of the One-eared Clamp

d. Using a 1/8" hex key wrench or socket, remove the four shoulder screws and rubber bumpers securing the compressor assembly to the standoffs.

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Compressor Assembly Replacement (Continued)

Shoulder Screws & Rubber Bumpers

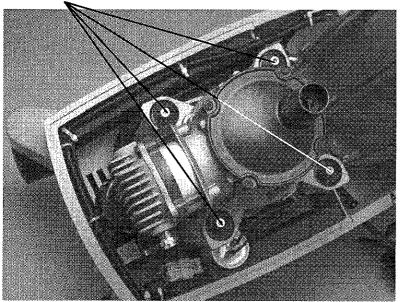


Figure 8-69 Location of the Shoulder Screws and Rubber Bumpers

e. Lift the compressor assembly up from the standoffs and helical springs.

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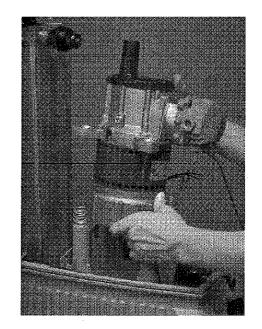


Figure 8-70 Removing the Compressor Assembly

f. If the optional compressor mount kit is being used, remove the four helical springs from the compressor assembly standoffs.

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Compressor Assembly Replacement (Continued)

Step 2 Installing the Compressor Assembly

- a. If the optional compressor mount kit is being used, install the new helical springs on the top of each compressor assembly standoff.
- b. Align the compressor / motor assembly with the standoffs and helical springs. Set the compressor assembly in place.
- c. If the optional compressor mount kit is being used, install the new rubber bumpers on each shoulder screw provided. If the optional compressor mount kit is not being used, insure that the rubber bumpers are properly seated on the original shoulder screws.
- d. Using a 1/8" hex key wrench or socket, install and tighten the four shoulder screws and rubber bumpers that secure the compressor assembly to the standoffs.
- e. Slide the supplied one-eared clamp onto the pressure tubing. Align the tubing with the compressor assembly outlet port. Slide the tubing onto the ports.
- f. Slide the one-eared clamp into position on the pressure tubing. Using a crimping clamp tool or diagonals, firmly "pinch" the one-eared clamp to secure the pressure tubing.

g. Confirm that the in-line muffler is not touching the side wall of the base cabinet or main power wiring harness.

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- h. Install the capacitor wire connectors onto the terminals of the capacitor.
- i. Align the female connector on the compressor assembly wiring harness with the connector on the main power wiring harness. Press the connectors together until completely seated and locked together.

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8.4.23 In-line Muffler Replacement

Replacement Part Number H622

Included in Kit: In-line muffler Pressure hose (3/8" × 1 3/4") One-eared clamp (×3) Tools Required: Phillips screwdriver (medium w/ long shaft) Crimping clamp tool or diagonals

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.)
- In-line muffler

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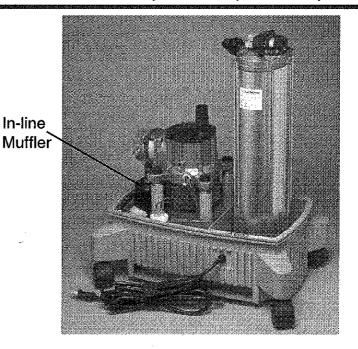


Figure 8-71 Location of the In-line Muffler

Step 1 Removing the In-line Muffler

a.

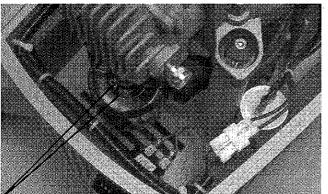
Using a crimping clamp tool or diagonals, cut the two one-eared clamps between the compressor head and in-line muffler.

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In-line Muffler Replacement (Continued)



One-eared Clamps

> Figure 8-72 Location of the One-eared Clamps

- b. Straighten the pressure hose to gain access to the bottom on the in-line muffler. Cut the one-eared clamp then remove the pressure hose.
- c. Remove the in-line muffler.
- Step 2 Installing the In-line Muffler
 - a. Slide a new one-eared clamp onto the existing 12" pressure hose. Attach the pressure hose to the bottom in-line muffler.

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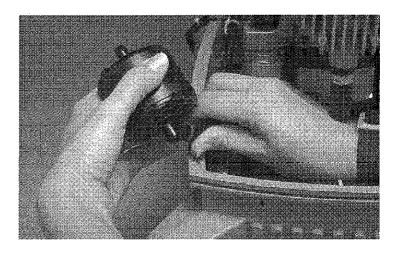


Figure 8-73 Correct Orientation of the In-line Muffler

- b. Using a crimping tool or diagonals, firmly "pinch" the one-eared clamp to securely fasten the pressure tubing to the outlet port of the in-line muffler.
- c. Attach the 13/4" pressure hose to the inlet port of the in-line muffler. Slide a new one-eared clamp onto the supplied 2" pressure tubing.
- d. Using a crimping tool or diagonals, firmly "pinch" the one-eared clamp to securely fasten the pressure tubing to the inlet port of the in-line muffler.

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In-line Muffler Replacement (Continued)

- e. Slide a one-eared clamp over the 1 3/4" pressure hose.
- f. Align then seat the short pressure tubing on the compressor assembly's outlet port.
- g. Using a crimping tool or diagonals, firmly "pinch" the one-eared clamp to secure the connections at the compressor assembly

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8.4.24 Hour Meter Replacement

Replacement Part Number 199-0600-60

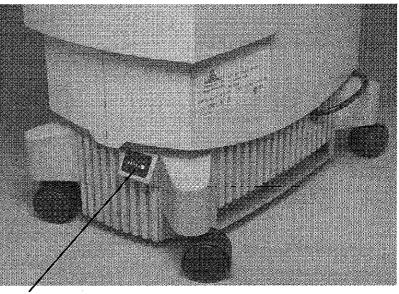
Included in Kit:	Tools Required:
Hour meter	Phillips screwdriver
Locking frame	(medium w/ long shaft)
	Needle-nose pliers

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.)
- Hour meter

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Hour Meter Figure 8-74 Location of the Hour Meter

Step 1 Removing the Hour Meter

a. Using your fingers or needle-nose pliers, remove the wires from the terminals on the back of the hour meter.

NOTE: The hour meter wires are interchangeable.

b. Spread the tabs on the locking frame out from the hour meter.

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Hour Meter Replacement (Continued)

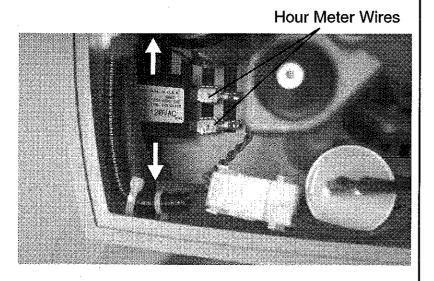


Figure 8-75 Removing the Hour Meter Wires and Releasing the Locking Tabs

c. While holding the tabs spread away from the hour meter, push it through the openings in the base cabinet.

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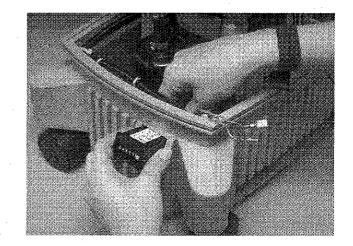


Figure 8-76 Removing the Hour Meter

Step 2 Installing the Hour Meter

- a. Align then insert the hour meter into its receptacle in the base cabinet.
- b. While holding the hour meter in place, install the locking frame over the hour meter from this inside of the base cabinet. Press it onto the hour meter until it "snaps" in place.
- c. Install the hour meter wires on the terminals on the back of the hour meter.

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8.4.25 Valve / Solenoid Replacement

Replacement Part Number H625

Included in Kit:	Tools Required:	
Air valve / solenoid assembly	Phillips screwdriver	
6-32 × screw (× 5)	(medium w/long shaft)	
#6 flat washer (× 5)	7/64" hex key wrench or	
· · ·	socket	
	Torque wrench (inlbs.)	

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.)
- Valve / solenoid assembly

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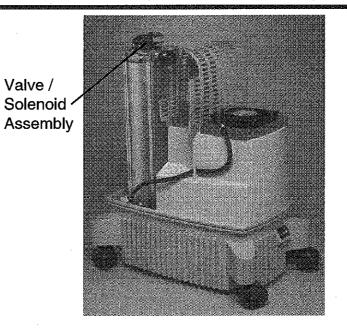


Figure 8-77 Location of the Valve / Solenoid Assembly

Step 1 Removing the Valve / Solenoid Assembly

- a. Remove the two wire connectors from the valve / solenoid assembly.
- b. Using a 7/64" hex key wrench or socket, remove the five screws and flat washers securing the valve / solenoid to the top of the sieve canister assembly.

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8-86 Chapter 8: Repair & Replacement a. Align the valve / solenoid assembly with the holes in the top of the sieve canister assembly. Figure 8-79 Removing the Valve / Solenoid Assembly Installing the Valve / Solenoid Assembly Millennium Oxygen Concentrator System Service Manual Step 2 c. Lift the valve / solenoid assembly up and away from Figure 8-78 Location of the Screws Securing the Valve / Solenoid Assembly 6 Screws Valve / Solenoid Replacement (Continued) the sieve canister assembly. 1002403

Valve / Solenoid Replacement (Continued)

- b. Using the five screws and flat washers provided, secure the valve / solenoid assembly to the sieve canister assembly. The screws should be torqued sufficiently in order to prevent leaks, but care should be taken not to crush the shoulder of the valve.
- c. Reconnect the two wire connectors to the valve / solenoid assembly.
- d. Connect the unit to a power source and turn on the unit. Apply snoop leak detector to the area where the valve / solenoid assembly mounts to the sieve canister assembly and check for leaks.

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8.4.26 Pressure Regulator Replacement

Replacement Part Number 365-0001-00

Included in Kit: Pressure regulator	Tools & Supplies Required: Phillips screwdriver (medium w/ long shaft) Channel locks (medium) Hog ring or slip joint pliers (medium) Teflon® thread tape	
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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.)
- Pressure regulator

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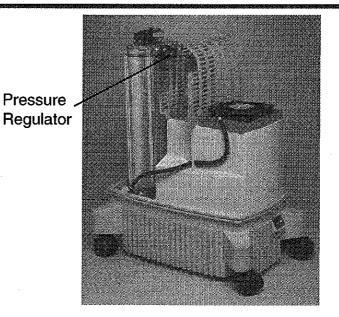


Figure 8-80 Location of the Pressure Regulator

Step 1 Removing the Pressure Regulator

- a. Remove the pressure tubing from the outlet port on the pressure regulator.
- b. Note the orientation of the pressure regulator outlet port. The new pressure regulator must be installed with the outlet port in the same position.
- c. Using a pair of channel locks, remove the pressure regulator from the sieve canister assembly.

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