



**ADH[®] NETCOM[™] AUTOMATIC AIR DEHYDRATOR
COMPRESSOR ASSEMBLY
REPLACEMENT PROCEDURE**

**Replacement Kit Part Number 24085
Document Part Number 24098**

SAFETY INFORMATION AND WARNINGS

Abnormal Odor or Smoke



In the event of smoke or a burning or abnormal odor, immediately interrupt power to the ADH NETCOM with the POWER switch at the rear of the unit, unplug the unit, or turn off the circuit breaker controlling the outlet. Note that only the AC model of the ADH NETCOM has an ON / OFF switch.

Lethal Voltages Present



Lethal voltages are present inside the ADH NETCOM. Service should be performed by qualified personnel only. There are no user serviceable components inside the chassis.

Pneumatics



Each of the air pumps inside the ADH NETCOM automatic air dehydrator is capable of generating as much as 24 psig (1,655mbar). Other attached dry air sources may be capable of generating even higher pressures. Proper safety practice requires treating all pneumatic components with care. Always vent the system to atmospheric pressure before servicing pneumatic components.

Rack Mounting



Before and after rack mounting the ADH NETCOM, ensure that the rack is stable. Mounting of the ADH NETCOM into a rack should be such that a hazardous condition is not created due to uneven mechanical loading. Verify that adequate air flow and power source capacity is available to the unit. Ensure that the ADH NETCOM maximum operating temperature of 130°F (55°C) will not be compromised by other components in the rack. Ensure reliable earthing of the ADH NETCOM.

ADH NETCOM COMPRESSOR ASSEMBLY REPLACEMENT PROCEDURE

This procedure addresses the removal and replacement of the Compressor Assembly in an ADH NETCOM Automatic Air Dehydrator. The first section addresses the replacement of the Compressor Assembly in the AC and DC models. The second section, starting on page 6, addresses the replacement of the Compressor Assembly in the ADH NETCOM AC NEMA configuration. It is recommended to read the entire procedure prior to beginning work.

INVENTORY LIST

Identify the following items in this kit prior to beginning work.

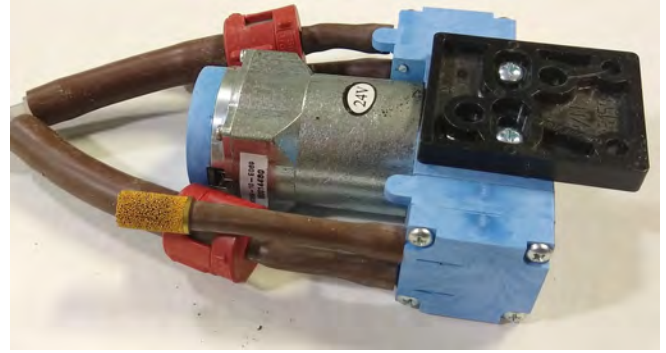
TOOLS REQUIRED

The following tools are needed to perform this procedure:

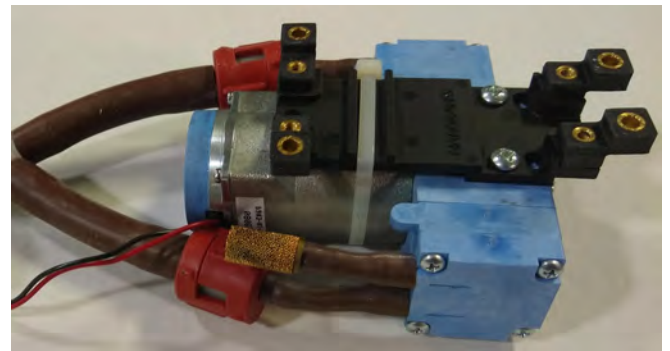
- 5/16" Nut driver
- Phillips screwdriver
- Tie wrap cutting scissors
- Small flat blade screwdriver
- Tubing wrench or vacuum tube pliers

NOTE:

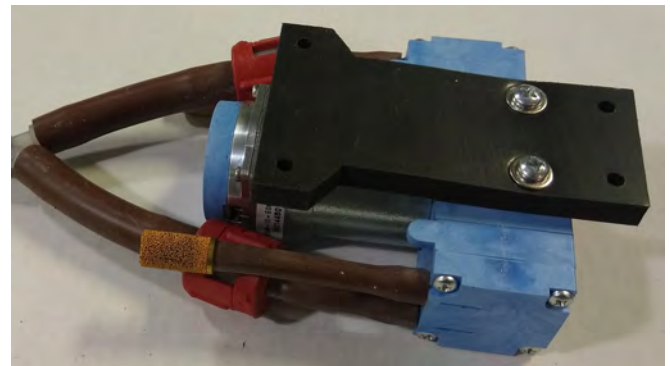
The this kit will have a solid rubber mount attached to the compressor which replaces the EZ mount bracket. It is recommended that the wire tie remain loose until after the mount is installed in the unit to allow easier installation.



Original 2 Hole Mount



4 Hole EZ Mount



Solid Rubber 4 Hole Mount, replaces EZ Mount Bracket

Item Number	Part Number	Item Quantity	Item Description
1	23216	1	Compressor Module
2	23159	1	Mounting Plate
3	24098	1	Instruction Manual (this document)
4	12200	2	Flat washers

COMPRESSOR ASSEMBLY REMOVAL AND REPLACEMENT

To replace the compressor (23216) in either an ADH NETCOM with AC power or an ADH NETCOM with Redundant DC power, perform the steps below. Refer to Figure 1. To replace the compressor (23216) in an ADH NETCOM AC NEMA, proceed to page 6.

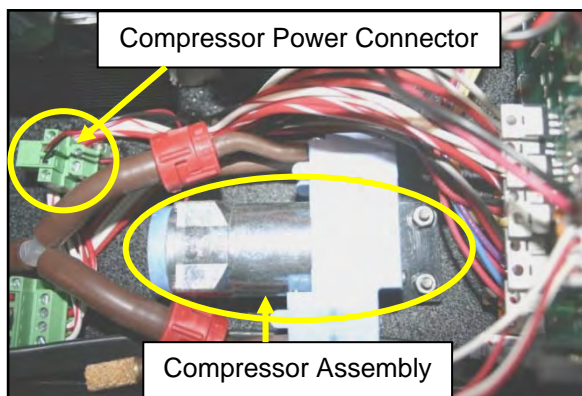


Figure 1. THE ADH NETCOM AUTOMATIC AIR DEHYDRATOR COMPRESSOR ASSEMBLY.

1. Shut off machine power by placing power switch in the OFF (O) position. With the power switch in the off position, unplug the power cord. If possible, move the dehydrator to a work table.
2. Remove the front top machine panel. Retain the mounting hardware.
3. Loosen the captive screw at each end of the green power connector. Refer to Figure 2. As captive screws, they cannot be removed. Once the end screws have been loosened, disconnect the green power connector.



Figure 2. THE POWER CONNECTOR END SCREWS.

4. Using a 5/16" nut driver, loosen and remove the nuts and lock washers securing the existing compressor mounting bracket to the chassis. Retain the mounting hardware for re-use.
5. Using a tubing wrench or vacuum tube pliers, hold the air hose about an inch in from the end of the hose (in front of canister 2), then pull gently to disconnect the air hose from the fitting. Refer to Figure 3. With both the mounting base and the air hose disconnected, remove the existing compressor from the machine.

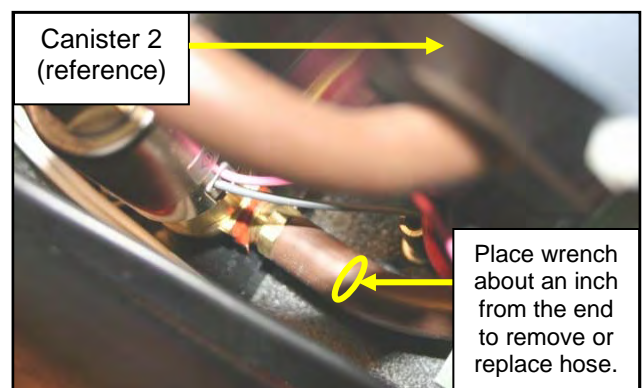


Figure 3. DISCONNECTING THE AIR HOSE.

6. The mounting hole “footprint” of the replacement compressor assembly mounting bracket most likely does not match the mounting hole footprint of the original bracket. Either way, the original mounting bracket hole configuration must be re-used when installing the new compressor. On units using the 2-hole mounting bracket (23159), that original mounting bracket (or the replacement provided in the kit) must be used again. In this case, cut the tie wrap securing the new compressor to its mounting bracket, remove the two screws securing the existing compressor to its mounting bracket, then attach the new compressor to the original mounting bracket using the two screws and the slotted mounting holes used on the original mounting bracket.
7. Connect the air hose to the same compressor fitting from which the original hose was removed in step 5.
8. With the new compressor installed on the mounting bracket with the matching mounting hole footprint, install the mounting bracket with the new compressor onto the Pem® studs from which the original compressor mounting bracket was removed. Secure the mounting bracket using the nuts and lock washers removed in step 4. If using the original 2-hole mounting bracket, torque the two nuts to 10 in/lb. If using the mounting bracket that came with the new compressor, torque the four nuts to 4 in/lb.
9. Connect the new compressor green power connector to the same place from which the original compressor power connector was removed in step 3, then tighten the two end screws to secure it in place.
10. Reinstall the forward top panel using the hardware removed in step 2.
11. Restore machine power.

To replace the compressor (23216) in an ADH NETCOM AC NEMA, perform the steps below.

1. Shut off machine power by unplugging the unit.
2. Open the two front door latches, loosen the two captive screws in the corners of the housing opposite the hinges, then open the NEMA box. Place an object underneath the door once open to help support it during this procedure.
3. Remove the orange Ethernet cable on the left by disconnecting both ends, then removing it. Set aside for re-use. Remove the power cable connector on the right by loosening the captive screw on each end of the green connector, then unplugging the connector. Disconnect the ground wire by loosening the ground wire retaining screw, then carefully removing the ground wire. Refer to Figure 1.

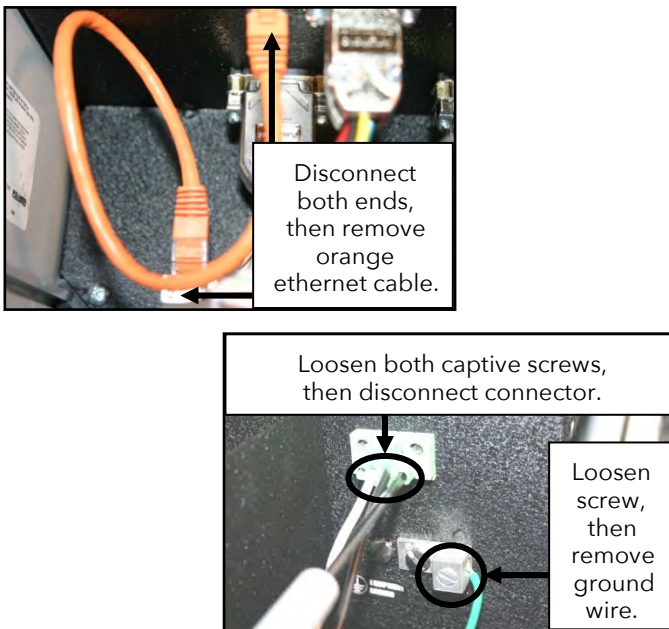


Figure 1. DISCONNECTING THE ETHERNET CABLE, THE POWER CABLE CONNECTOR, AND THE GROUND WIRE.

4. Remove and retain the four mounting screws from the four corners of the protective front cover, then slowly lift the front cover, carefully flip it over, then set it down, upside down, to rest on the inside of the enclosure door. Be careful as there are still many wires connected between the enclosure and the front cover and there isn't a lot of slack. Note that the two upper front cover mounting screws are located in plain sight in the top corners of the front cover, while the two lower front cover corner mounting screws are located down in the front "well" of the unit. Use a long-handled screwdriver to remove them.
5. Loosen the captive screw at each end of the green power connector. Refer to Figure 2. As captive screws, they cannot be removed. Once the end screws have been loosened, disconnect the green power connector.



Figure 2. THE POWER CONNECTOR END SCREWS.

6. Using a 5/16" nut driver, loosen and remove the nuts and lock washers securing the existing compressor mounting bracket to the chassis. Retain the mounting hardware for re-use.
7. Using a tubing wrench or vacuum tube pliers, hold the air hose about an inch in from the end of the hose (in front of canister 2) then pull gently to disconnect the hose from the fitting. Refer to Figure 3. With the mounting base and the air hose disconnected, remove the existing compressor from the machine.

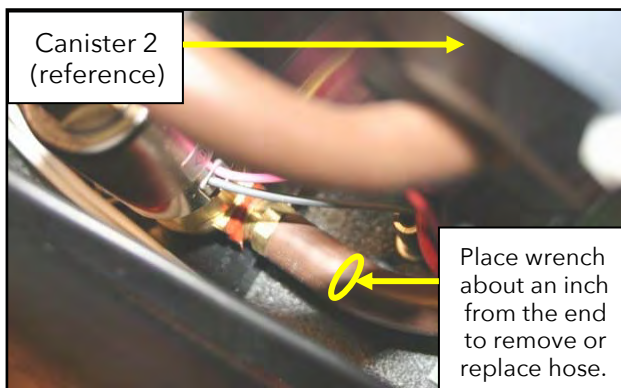


Figure 3. DISCONNECTING THE AIR HOSE.

8.
 1. The mounting hole "footprint" of the replacement compressor assembly mounting bracket most likely does not match the mounting hole footprint of the original bracket. Either way, the original mounting bracket hole configuration must be re-used when installing the new compressor. On units using the 2-hole mounting bracket, that original mounting bracket must be used again. In this case, cut the tie wrap securing the new compressor to its mounting bracket, remove the two screws securing the existing compressor to its mounting bracket, then attach the new compressor to the original mounting bracket using

the two screws and the slotted mounting holes used on the original mounting bracket.

9. Reconnect the air hose which was removed in step 7 of this section to the compressor fitting.
10. With the new compressor installed on the mounting bracket with the matching mounting hole footprint, install the mounting bracket with the new compressor where the original assembly had been. Secure the compressor mounting bracket using the nuts and lock washers removed in step 6 of this section. If using the original 2-hole mounting bracket, torque the two nuts to 10 in/lb. If using the mounting bracket that came with the new compressor, torque the four nuts to 4 in/lb.
11. Connect the new compressor green power connector to the same place from which the original compressor power connector was removed in step 5 of this section, then tighten the two end screws to secure it in place.
12. Reinstall the front cover removed in step 4 of this section. If it was placed upside down on the lid of the unit during this procedure, carefully turn the cover back over and work it back into position, past the wires and other components in the enclosure. Reinstall the four corner screws securing the front cover to the chassis.
13. Reconnect the ground wire by inserting it behind the retaining screw from which it was removed, then tighten the retaining screw. Reconnect the green power connector by holding it in place then tightening the two captive screws removed in step 3 of this section. Reconnect both ends of the orange ethernet cable removed in step 3 of this section. It does not matter which end of the ethernet cable goes into which receptacle.

14. With the ground wire, power connector and ethernet cable connected, close the NEMA enclosure and secure the two latches. Secure the lid in place by reinstalling the captive screws in the two outer corners of the lid.
15. Restore machine power by plugging the unit back in.

QUESTIONS AND COMMENTS

For technical help, questions, or comments concerning this or any ETI, Inc., product, contact the Customer Service Department between 8:00 a.m. and 5:00 p.m. EST.

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