



**ADH<sup>®</sup> NETCOM<sup>™</sup> AC NEMA AUTOMATIC AIR  
DEHYDRATOR POWER FILTER MODULE  
REPLACEMENT PROCEDURE**

**Replacement Kit Part Number 24087  
Document Part Number 24100**

## 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 AC NEMA POWER FILTER MODULE REPLACEMENT PROCEDURE

This procedure addresses the removal and replacement of the Power Filter Module in an ADH NETCOM AC NEMA Automatic Air Dehydrator. 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:

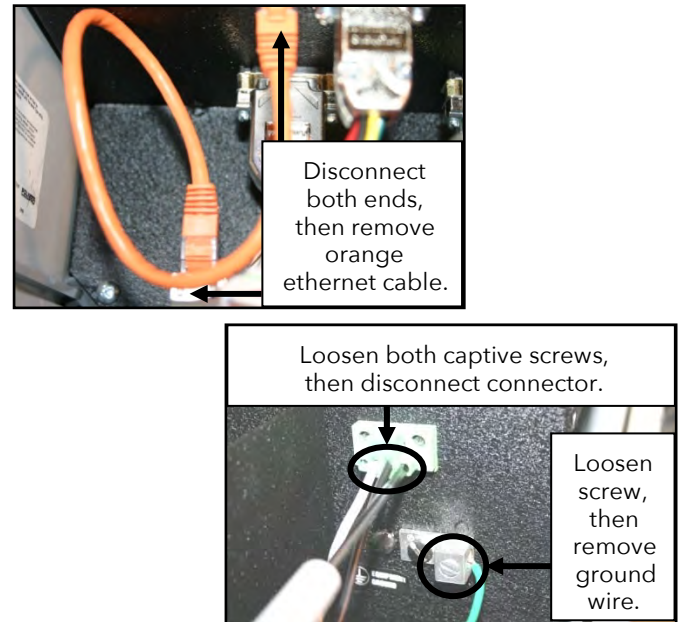
- Small flat blade screwdriver
- Nut driver
- Tubing wrench or vacuum tube pliers
- 11/32" open end wrench
- Philips screwdriver
- Needle nose pliers
- Long screwdriver

Item Number	Part Number	Item Quantity	Item Description
1	23563	1	Power Filter Module
2	24100	1	Instruction Manual (this document)

## POWER FILTER MODULE REMOVAL AND REPLACEMENT

To replace the Power Filter Module (23563) in an ADH NETCOM AC NEMA Automatic Air Dehydrator, perform the steps below.

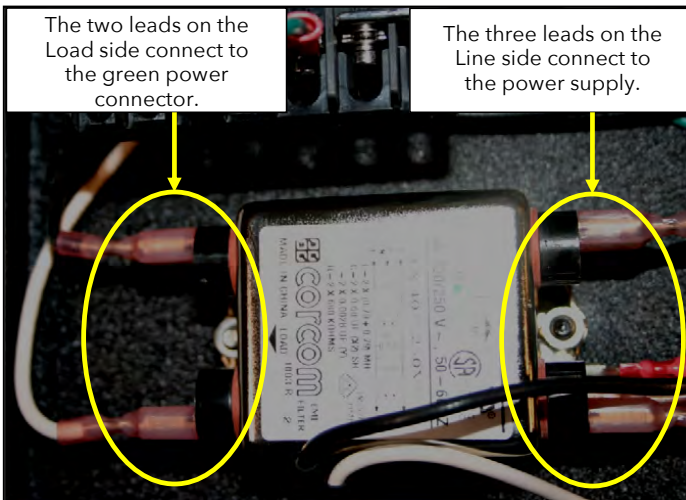
1. Shut off machine power by unplugging the unit.
2. Open the two front door latches, loosen the two captive screws in the corners of the housing opposite the hinges, then open the NEMA box. Place an object underneath the door once open to help support it during this procedure.
3. Remove the orange Ethernet 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. Note how the five electrical leads are connected to the existing Power Filter Module, then use a needle nose pliers to carefully disconnect the leads from the module. The two leads on the Load side connect to the green power connector. The three leads on the Line side connect to the power supply. Of the two connector leads, the black lead is the line and the white lead is neutral. Of the three output leads, the black lead is the line, the white lead is neutral, and the green/yellow lead is ground. All of these leads will connect to the new module the same way.



**Figure 2. THE POWER FILTER MODULE.**

6. Using the nut driver, remove and retain the nuts and lock washers securing the existing module to the chassis. Once all five electrical leads have been disconnected and the mounting hardware has been removed, remove the existing Power Filter Module from the unit.
7. Position the new Power Filter Module over the Pem® studs on which the original module was installed. Using the nuts and lock washers retained in step 6, install the new Power Filter Module and torque to 10 in/lb.

8. Connect the electrical leads in the corresponding locations on the new Power Filter Module from which they were removed on the old module. Refer to the following tables. Make sure all leads are secure.

Load Side Connections	
Black	Line
White	Ne

Line Side Connections	
Black	Line
White	Ne
Green/Yellow	

12. Reinstall the front cover removed in step 4. 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 ground wire retaining screw. Reconnect the green power connector by holding it in place then tightening the two captive screws removed in step 3. Reconnect both ends of the orange ethernet cable removed in step 3. It does not matter which end of the ethernet cable goes into which receptacle.

14. With the ground wire, power connector and Ethernet cable reconnected, close the lid of the NEMA enclosure and secure the two latches opposite the hinges. Secure the lid in place by reinstalling the two 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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