



**ADH[®] NETCOM[™] AUTOMATIC AIR
DEHYDRATOR INLET SOLENOID MODULE
REPLACEMENT PROCEDURE**

**Replacement Kit Part Number 24096
Document Part Number 24108**

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 INLET SOLENOID MODULE REPLACEMENT PROCEDURE

This procedure addresses the removal and replacement of the Inlet Solenoid Module in an ADH NETCOM Automatic Air Dehydrator. The first section addresses the replacement of the Inlet Solenoid Module in the AC and DC models. The second section, starting on page 6, addresses the replacement of the Inlet Solenoid Module 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.

Item Number	Part Number	Item Quantity	Item Description
1	23270	1	Solenoid
2	24108	1	Instruction Manual (this document)

TOOLS REQUIRED

The following tools are needed to perform this procedure:

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

INLET SOLENOID MODULE REMOVAL AND REPLACEMENT

To replace the Inlet Solenoid Module (23270) in either an ADH NETCOM with AC power or an ADH NETCOM with Redundant DC power, perform the steps below. DC Refer to Figure 1. To replace the Inlet Solenoid Module (23270) in an ADH NETCOM AC NEMA, proceed to page 6.

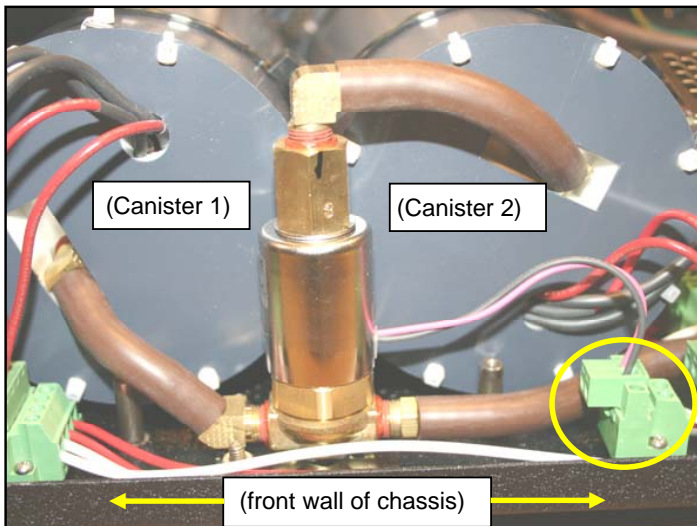


Figure 1. THE ADH NETCOM AUTOMATIC AIR DEHYDRATOR INLET SOLENOID MODULE AND POWER CONNECTOR.
(Front panel of chassis has been removed for greater clarity.)

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.

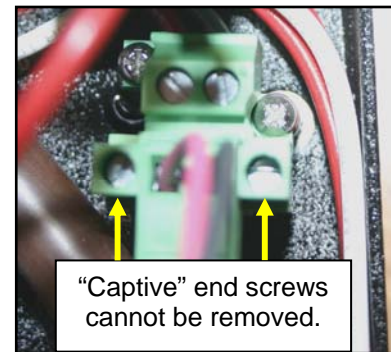


Figure 2. THE INLET SOLENOID MODULE POWER CONNECTOR.

4. Using a tubing wrench or vacuum tube pliers, grab hold of each of the three air hoses about 1 inch in from the end, then pull gently to disconnect the hoses from their fittings. Refer to Figure 3.
5. Using a 5/16" nut driver, loosen and remove the nuts and lock washers securing the existing inlet solenoid module mounting bracket to the chassis. Retain mounting hardware for re-use. With the mounting base and the three air hoses disconnected, remove the existing inlet solenoid module from the machine.

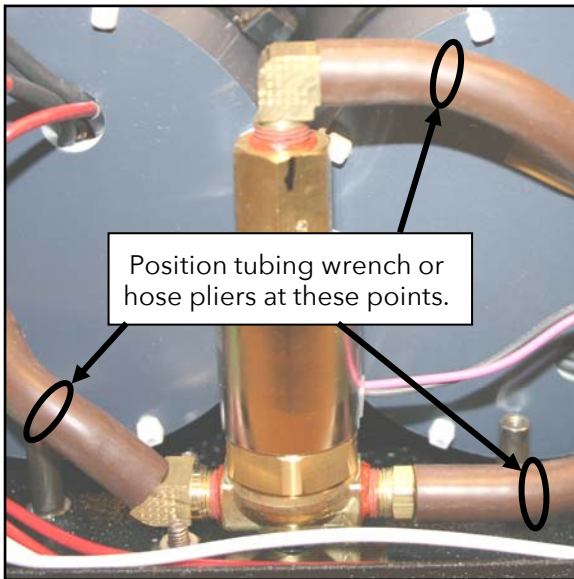


Figure 3. DISCONNECTING THE AIR HOSES.

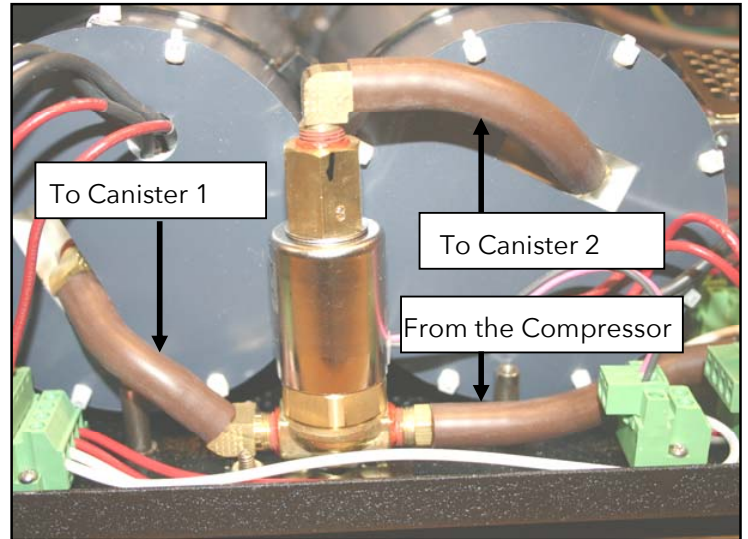


Figure 4. THE INLET SOLENOID MODULE AIR HOSE CONNECTIONS.

6. Install the new mounting bracket with the new inlet solenoid module over the Pem[®] studs from which the original module mounting bracket was removed. Secure the mounting bracket to the chassis using the two nuts and lock washers removed in step 5 and torque to 10 in/lb.
7. Reconnect the three air hoses to the corresponding fittings on the new module from which they were removed from the original module in step 4. Refer to Figure 4. The top hose runs to Canister 2. The lower left hose runs to Canister 1. The lower right hose runs from the compressor. Make sure each hose fits tightly onto the fitting.
8. Connect the green power connector from the new inlet solenoid module where the original power connector had been, then tighten the two captive end screws to secure it in place.
9. Reinstall the forward top panel using the hardware removed in step 2.
10. Restore machine power.

To replace the Inlet Solenoid Module (23270) 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.

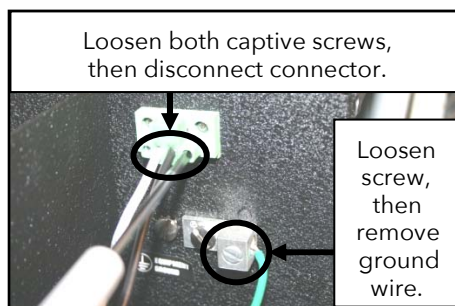
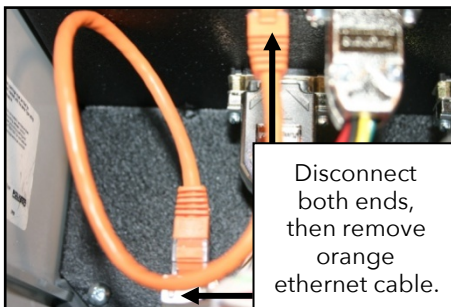


Figure 1. DISCONNECTING THE ETHERNET CABLE, THE POWER CABLE CONNECTOR, AND THE GROUND WIRE.

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.

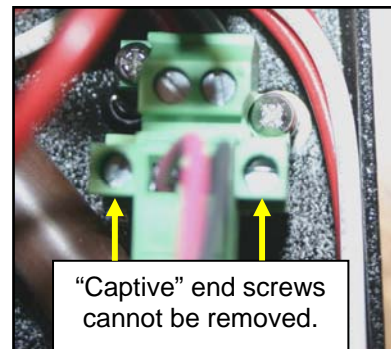


Figure 2. THE INLET SOLENOID MODULE POWER CONNECTOR.

6. Using a tubing wrench or vacuum tube pliers, grab hold of each of the three air hoses about 1 inch in from the end, then pull gently to disconnect the hoses from their fittings. Refer to Figure 3.
7. Using a 5/16" nut driver, loosen and remove the nuts and lock washers securing the existing inlet solenoid module mounting bracket to the chassis. Retain mounting hardware for re-use. With the mounting base and the three air hoses disconnected, remove the existing inlet solenoid module from the machine.

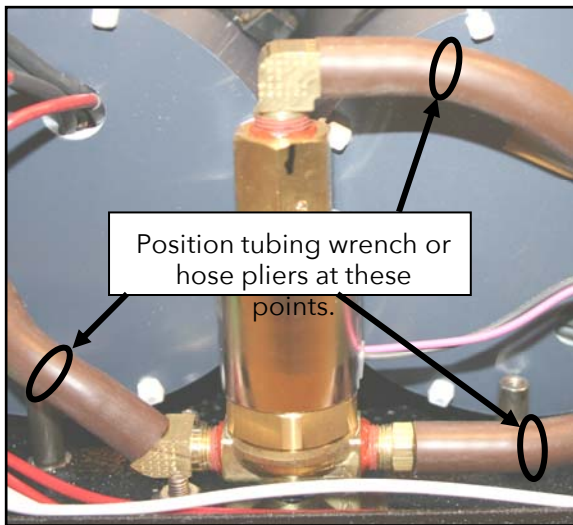


Figure 3. DISCONNECTING THE AIR HOSES.

8. Install the new mounting bracket with the new inlet solenoid module over the Pem[®] studs from which the original module mounting bracket was removed. Secure the mounting bracket to the chassis using the two nuts and lock washers removed in step 7 of this section and torque to 10 in/lb.
9. Reconnect the three air hoses to the corresponding fittings on the new module from which they were removed from the original module in step 6 of this section. Refer to Figure 4. The top hose runs to Canister 2. The lower left hose runs to Canister 1. The lower right hose runs from the compressor. Make sure each hose fits tightly onto the fitting.

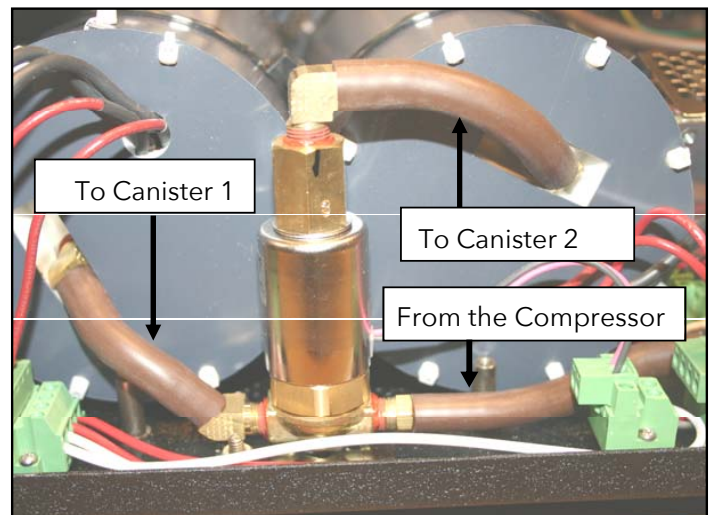


Figure 4. THE INLET SOLENOID MODULE AIR HOSE CONNECTIONS.

10. Connect the green power connector from the new inlet solenoid module where the original power connector had been, then tighten the two captive end screws to secure it in place.
11. 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.
12. 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.
13. 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.
14. 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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