



# ADH NETCOM AUTOMATIC AIR DEHYDRATOR HUMIDITY SENSOR ASSEMBLY REPLACEMENT PROCEDURE

Replacement Kit Part Number 24092  
Document Part Number 24104



## 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.



## 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.



## 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 HUMIDITY SENSOR ASSEMBLY REPLACEMENT PROCEDURE

This procedure addresses the removal and replacement of the Humidity Sensor Assembly in either an ADH NETCOM Automatic Air Dehydrator with AC power or with Redundant DC power. 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.

QTY.	PART NO.	DESCRIPTION
1	23368	Humidity Sensor Assembly
1	24104	Instruction Manual (this document)

## TOOLS REQUIRED

The following tools are needed to perform this procedure:

- Small flat blade screwdriver
- Tubing wrench or vacuum tube pliers
- Diagonal Cutters

## NOTE :

On AC units, it might be useful to move the power filter module and switch assembly out of the way for better access to the humidity sensor during this procedure. Refer to Figure 1a. To do so, from the inside of the machine, after first noting their placement, carefully disconnect the three electrical leads from the filter module. Do not separate the leads from the spade lugs. Then, from the back of the machine, unscrew the two screws securing the power filter module to the machine chassis then gently push the power filter module toward the back of the dehydrator. It is not necessary to fully remove the power filter module.

## HUMIDITY SENSOR ASSEMBLY REMOVAL AND REPLACEMENT

To replace the Humidity Sensor Assembly (23368) in either an ADH NETCOM Automatic Air Dehydrator with AC power or an ADH NETCOM with Redundant DC power, perform the steps below. Refer to Figure 1a or 1b, respectively, for AC and DC unit illustrations.

1. Shut off AC unit power by placing the power switch in the OFF (O) position. Unplug the power cord. Shut off DC unit power by shutting off the external power supply. If possible, move the unit to a work table.
2. Remove both top machine panels for easier access to the humidity sensor assembly. Retain mounting hardware.
3. Using a tubing wrench or vacuum tubing pliers, carefully disconnect from the "Y" hose assembly the length of hose running between the "Y" assembly and the evaporator tray. Refer back to Figure 1a for AC units and Figure 1b for DC units.
4. Using a tubing wrench or vacuum tubing pliers, carefully remove the two air hoses connected to the existing humidity sensor. Refer to Figure 2.

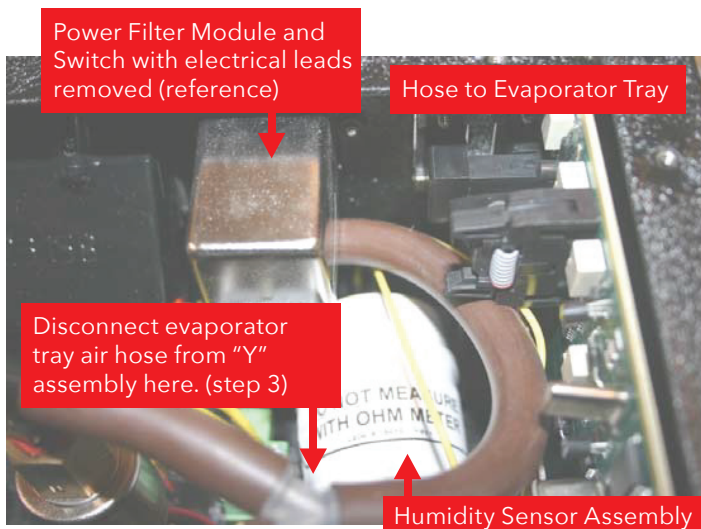


Figure 1a. THE ADH NETCOM AUTOMATIC AIR DEHYDRATOR HUMIDITY SENSOR ASSEMBLY IN AN AC UNIT.

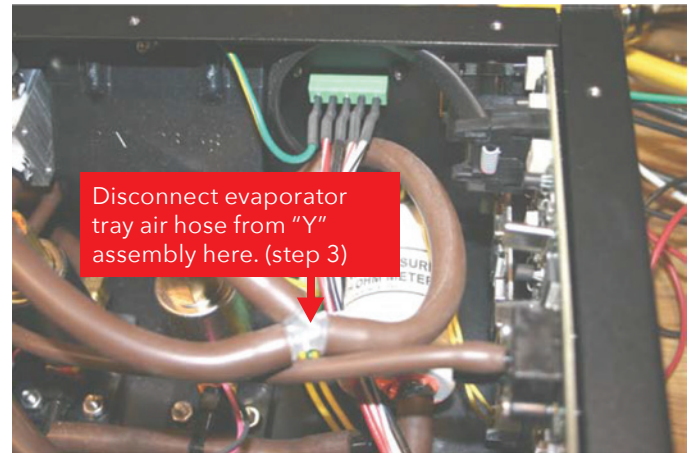


Figure 1b. THE ADH NETCOM AUTOMATIC AIR DEHYDRATOR HUMIDITY SENSOR ASSEMBLY IN A DC UNIT.

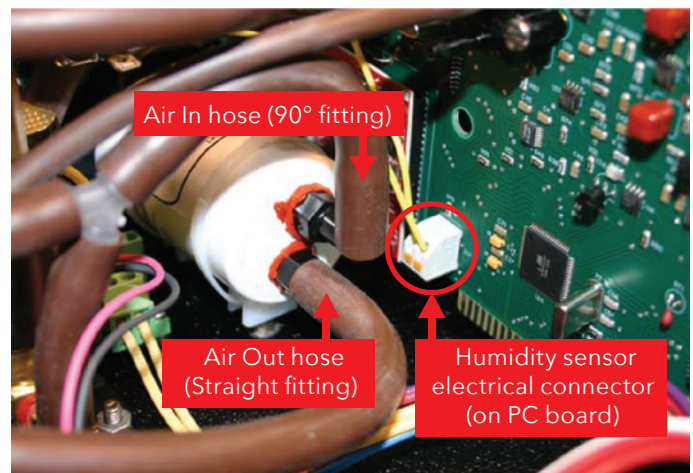


Figure 2. THE TWO HUMIDITY SENSOR AIR HOSES.  
(some components removed for greater clarity)

5. Using the diagonal cutters, cut the two tie wraps securing the humidity sensor assembly to its tie wrap mounts then move the sensor out of the way to gain access to the electrical connector.
6. Using a small tool, press in on either orange release tab on the humidity sensor electrical connector on the PC board then carefully remove the lead from that terminal. Repeat for the other lead. Once both air hoses and both electrical leads have been disconnected and the two tie wraps cut, remove the existing humidity sensor from the dehydrator.

7. Before putting the new humidity sensor on the tie wrap mounts, connect the two leads from the new humidity sensor. Reversing the process in step 6, push in on either orange release tab then insert either humidity sensor lead into that terminal. It does not matter which lead goes to which terminal. Release the tab to secure the lead. Repeat this process for the other lead. Tug gently on each lead to make sure it is firmly connected.
8. Place the new humidity sensor onto the two tie wrap mounts from which the original assembly was removed. Before securing the new humidity sensor in place, rotate the sensor on the two mounts so that the two air hoses reach their respective 90° and straight fittings. The longer hose is the Air Out hose and connects to the lower or straight fitting.  
  
The shorter hose is the Air In hose and connects to the upper or 90° fitting. There is no right or wrong angle for the humidity sensor itself in terms of function. All that matters here is that both air hoses reach and connect securely to the two sensor fittings.
9. Once the angle of the humidity sensor is determined based on the position of the fittings to the hoses, secure the new humidity sensor in place by feeding the two tie wraps from the kit through the slot in each mount, knurled side up, wrap the tie wraps together, then cut off the excess from each tie wrap.
10. Reconnect the "Y" section of the tubing assembly which runs to the evaporator tray and which was disconnected in step 3.
11. As described in the Note on page 3, if any components were moved or removed for better access to the humidity sensor, replace them in their original location and position at this time. Restore all connections. When connecting the three electrical leads to the power filter module on AC units, make sure to connect them to the same terminals from which they were removed.
12. Reinstall the top panels using the hardware removed in Step 2.
13. Restore machine power.

## CONTACTING CUSTOMER SERVICE

For technical help, questions or comments concerning this product or any ETI product contact Customer Service 8:00 a.m. - 5:00 p.m. Eastern Time.

**Email:** [info@networketi.com](mailto:info@networketi.com)

**Web:** [networketi.com](http://networketi.com)

**Mail:** ETI  
1850 North Sheridan Street  
South Bend, IN 46628

## LIMITED WARRANTY

ETI's two year limited warranty covering defects in workmanship and materials applies. Contact Customer Service for complete warranty information.

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