

# The Total A/C Condensate Drain Clog Solution

# Plexaire

Introducing Intelligent Condensate Management (ICM) • The Drain Monitoring & Clearing Solution That's Second To None

## INSTALLATION MANUAL **HydroClear™ 2000** Indoor unit



*US Patent #847603  
3 patents pending*

Important Safety & Installation instructions. PLEASE READ CAREFULLY. Improper installation can affect performance, cause damage and void warranty.

**Due to the complexity of this system Plexaire recommends that the HC-2000 be installed by a licensed HVAC technician.**

Thank you for purchasing this Plexaire product. The HC-2000 is an advanced Automated Condensate Drain Cleaner that has gone through extensive testing and refinement.

**⚠ WARNING! ⚠**

**FOR INDOOR USE ONLY! Do not install the HC-2000 where it will be exposed to outdoor elements.**

**Note:** *In applications where multiple air handlers share a common drain, an HC-2000 unit must be installed on each air handler drain pipe.*

## **Before you begin**

**Check with, federal, state and local laws for compliance with electrical, plumbing, building codes, etc.**

**Note:** *HC-2000 will not function properly if the condensate drain system is damaged, missing, improperly installed or poorly maintained and must be addressed prior to installation.*

### **Specifications**

**Pipe Inlet Diameter:** 3/4" SCH40

**Pipe Outlet Diameter:** 3/4" SCH40

**Max Pressure:** 60 PSI

**Timer:** Internal, non adjustable, 1-day 1-event

**Power Supply:** Output 12VDC 1.67A  
Input 100-240VAC - 0.55A - 50/60Hz

### **What is in the box.**

- 1 - Plexaire HC-2000
- 2 - Installation / Owner's manual
- 3 - Tee, plug, clear pipe, conical filter
- 4 - Warranty - last pages of this manual
- 5 - Power supply

**In the event that any of the parts are missing please contact Plexaire directly at (toll free) 855-975-3924**

For additional installation assistance please visit [www.plexaire.com](http://www.plexaire.com)

1. **Recommend** that coil and drain pan be cleaned prior to installation of HC-2000.
2. **Recommend** that downstream piping be cleaned using vacuum cleaner prior to installation of HC-2000. This will allow water flow testing to be performed after installation.
3. Use caution to avoid damage to air handler components and wiring.

## SECTION 1:

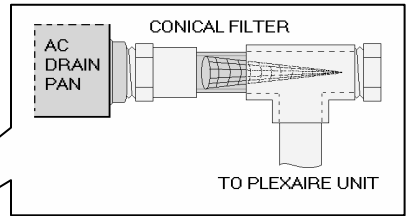
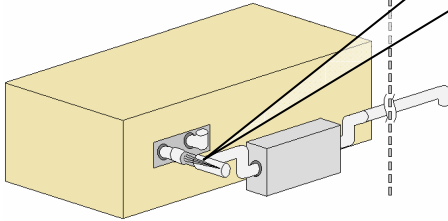
⚠ **TURN OFF POWER** ⚠

## SECTION 2:

## INSTALL FILTER ASSEMBLY

### INSTALL CONICAL FILTER ASSEMBLY

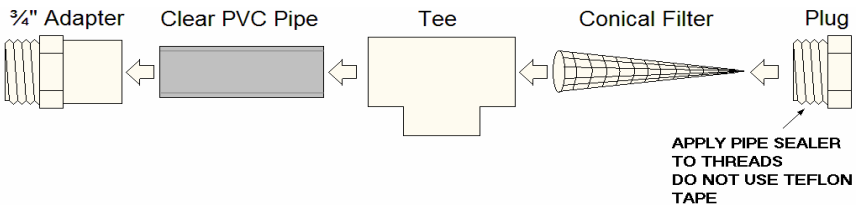
**Note:** A proper down pitch should be maintained throughout the PVC drain pipe system. Most codes recommend a minimum slope in direction of discharge. Check local codes.



### CONICAL FILTER ASSEMBLY DRAWING

Below is a drawing of the installation at the drain pan outlet. It includes: clear pipe, conical strainer, tee, and plug at drain connection, regardless of configuration. The tee must be positioned with the "bull" horizontal to minimize amount of debris that would be allowed to go downstream when strainer is removed for cleaning/service.

Plexaire recommends that the conical strainer be removed and cleaned as part of your service call every six months to assure maximum drainage flow and reduce risk of blockage.

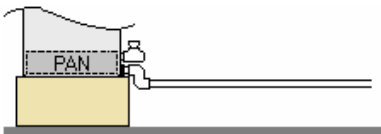


## SECTION 3:

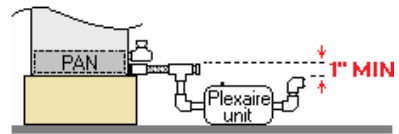
## INSTALL IN A TRAP CONFIGURATION

**1) INSTALL HC-2000 as close to drain pan as possible. ENSURE HC-2000 IS INSTALLED IN A TRAP CONFIGURATION.**

Condensate drain piping prior to HC-2000 installation:



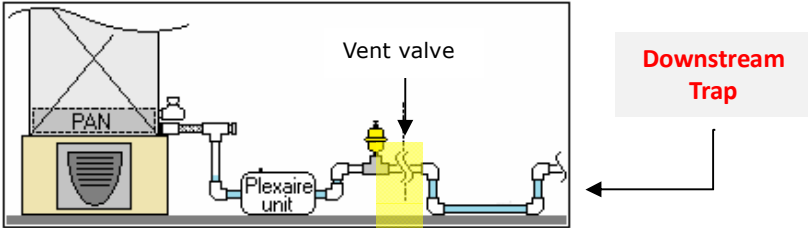
Condensate drain piping after HC-2000 installation:



2. **ATTACH** unit to mounting surface with four screws. Unit can be mounted on the wall or floor (see below).

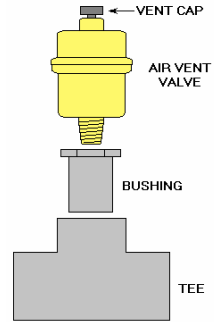
#### SECTION 4: INSTALL VENT VALVE (OPTIONAL)

1) If there is or there might be a downstream trap include a **venting valve on the downstream side of the Plexaire Unit and the highest point.**



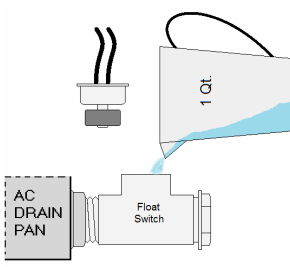
#### 2) TO INSTALL THE VENTING VALVE

- To install optional venting valve, install tee in piping immediately after the trap in which the Plexaire unit is installed, with bull opening of the tee pointing upward.
- Cement PVC bushing into the bull opening to accept venting valve thread size.
- Install and hand-tighten venting valve, using thread sealer to prevent leaks.
- Critical: venting valve must be installed vertically, vent cap opened two turns counterclockwise from seated position.



#### SECTION 5: WATER DRAIN TEST

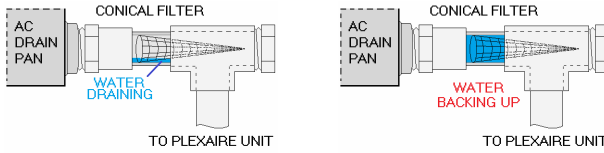
If an access port is available perform a water drain test.



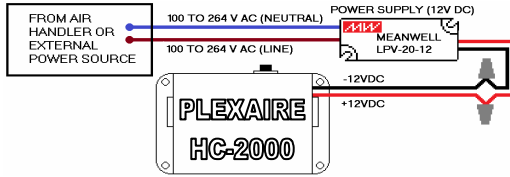
- Test to see if water drains properly by pouring 2 quarts of water through the float switch housing or drain pan access port.

**Note:** If access port or float switch is not available run AC and observe water level.

- 2) Check the water level through the clear PVC filter assembly. If the water backs up, check for traps, blockages or install vent valve (see section 4)



## SECTION 5: ELECTRICAL WIRING



1. Four wire connections are required for HC-2000.
  - a) Connect **blue wire** from power supply to 100-240VAC neutral source.
  - b) Connect **brown wire** from power supply to 100-240VAC hot source.
  - c) Connect **black wire** from power supply to **black** wire labeled on HC-2000.
  - d) Connect **Red wire** from power supply to **red** wire on HC-2000.

## SECTION 6: TEST

1. **Turn on power** to air handler
2. Verify critical drain piping requirements are met:
  - a. No open "vents".
  - b. All pipe and fittings are properly cemented.
  - c. Any caps on access ports or "vents" are either cemented in place or converted to threaded type and tightly in place.

### VERIFY PUMP OPERATES WHEN BUTTON IS PRESSED.

- After initial power up wait ten seconds.
- Push button
- Pump should run for 1 minute and shut off.

Do not assume proper drainage unless water flow test is performed successfully. For installations where condensate is discharged outside, visually verify that water flows out of the end of the drain pipe. Check to assure no leaks. If water does not drain freely, see **Section 8** for troubleshooting.

## SECTION 7: PRODUCT REGISTRATION

Complete product registration on-line at [www.Plexaire.com](http://www.Plexaire.com)

On our website you will also find additional installation help, troubleshooting, product updates and important safety information.

**IMPORTANT SAFETY WARNING:** *Before removing the HC-2000, make sure that the power to the air handler is switched off, and condensate after the HC-2000 is relieved of any residual pressure. To relieve residual pressure, drill a 1/16" hole in the PVC pipe after the HC-2000. Use a towel and a bucket to catch any leaking water. Replace the bored hole section with a new section of pipe.*

**1. Pump won't start when button is manually pushed.**

- Main circuit breaker turned off or tripped.
- Power supply not properly wired or connected to HC-2000.

**2. Water does not drain out - no blockage**

- The condensate drain system is damaged or improperly installed and must be addressed.
- Conical filter clogged, see **Section 2**.
- Check for second trap, see **Section 4**.
- Vent valve (Optional);
  - cap not loosened
  - not plumb
  - defective

## **MAINTENANCE AND SERVICE**

Plexaire recommends that the HC-2000 unit be manually operated every time the HVAC air filter is changed or serviced, not to exceed 6 months. (This is accomplished by depressing the push button on the side of the HC-2000).

Plexaire recommends that the following procedures be performed every six months:

### **Clean the conical filter**

1. Turn **OFF** power to furnace/air handler.
2. Wait at least 5 minutes for the condensate to drain through.
3. Place a small container under the plug.
4. Loosen the plug and let the water drain out.
5. Pull the filter out using needle nose pliers.
6. Clean filter, being careful so as not to damage or deform the screen.
7. When reassembling, insert large diameter first, using care not to bend filter wires.
8. Apply thread sealer to plug threads.
9. Reassemble and tighten plug 1/4 max turn past finger tight.
10. Check for leaks.
11. Turn **ON** power to furnace/air handler.

*If you suspect the HC-2000 to be defective please contact your installer or distributor.*

**Please save these instructions for future reference.**

# PLEXAIRE LIMITED WARRANTY AND DISCLAIMER

## LIMITED WARRANTY

PLEXAIRE, LLC ("PLEXAIRE") warrants to the original retail consumer (the "Original Consumer") that has purchased the Intelligent Condensate Management (HC-2000) system (the "Product") for use in a commercial or residential building that the Product will be free from material defects in material and workmanship for a period of one (1) year from the date of purchase by the Original Consumer (the "Warranty Period"). Completion of the product registration process on line will allow you receive product updates HC-2000. For defects reported during the Warranty Period, the exclusive remedy of the Original Consumer, and the sole liability of PLEXAIRE, shall be, at Plexaire's option, to provide replacement parts or replacement of the defective Product. Replacement parts and products will, at Plexaire's option, be either new or serviceably used, comparable in function and performance to the original part or product and warranted for the remainder of the original Warranty Period.

## WARRANTY LIMITATIONS AND EXCLUSIONS

1. THE FOREGOING LIMITED WARRANTY IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES NOT EXPRESSLY SET FORTH HEREIN, WHETHER EXPRESS OR IMPLIED BY OPERATION OF LAW OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

2. PLEXAIRE'S LIABILITY UNDER ANY WARRANTY IS EXPRESSLY LIMITED TO REPLACEMENT OF THE PRODUCT (IN THE FORM AND UNDER THE TERMS ORIGINALLY SHIPPED) OR PARTS OF THE PRODUCT AND IS LIMITED TO THE WARRANTY PERIOD. THE COSTS OF TRANSPORTING REPLACEMENT PRODUCT OR PARTS IS THE RESPONSIBILITY OF THE ORIGINAL CONSUMER, NOT OF PLEXAIRE. PLEXAIRE SHALL NOT BE LIABLE, REGARDLESS OF WHICH FORM OF ACTION IS INITIATED, WHETHER BY AGREEMENT, IN CONTRACT, TORT, UNDER STRICT PRODUCT LIABILITY LAWS OR OTHERWISE, FOR ANY INCIDENTAL, CONSEQUENTIAL, OR SPECIAL LOSSES, DAMAGES OR EXPENSES OF ANY KIND, INCLUDING, WITHOUT LIMITATION, ANY SUCH LOSSES, DAMAGES, OR EXPENSES ARISING DIRECTLY OR INDIRECTLY FROM THE SALE, HANDLING, OR USE OF THE PRODUCT OR FROM ANY OTHER CAUSE RELATING THERETO, OR FROM PERSONAL INJURY OR LOSS OF PROFIT. THIS EXEMPTION APPLIES EVEN IF PLEXAIRE WAS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES AND/OR IF THE DAMAGES WERE FORESEEABLE. IN NO EVENT SHALL PLEXAIRE BE LIABLE FOR AN AMOUNT IN EXCESS OF \$1,000.

3. Some states do not allow exclusions or limitations on the duration of implied warranties or conditions, and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This Limited Warranty gives you specific legal rights, and you may also have other legal rights which vary from state to state.

4. This Limited Warranty is made to the Original Consumer and does not extend to any other person or entity and is not assignable except to a person or entity (an "Assignee") that purchases the Product, as installed, from the Original Consumer. If so assigned, this Limited Warranty will apply to the Assignee as if the Assignee were an "Original Purchaser".

5. THIS LIMITED WARRANTY IS VOID UNDER THE FOLLOWING CONDITIONS:

(a) The Product is misused, subjected to careless handling, or operated under conditions outside of or contrary to PLEXAIRE's recommendations for safe and effective use.

(b) The Product has not been installed, operated, or maintained in accordance with approved procedures defined in the Product Manual, or the Product is uninstalled and reinstalled.

(c) The Product is disassembled, altered, or repaired by anyone other than a licensed and bonded HVAC technician.

(d) The Product is subject to improper storage or accident.

(e) The Original Consumer (or, if applicable, the Assignee) fails to register purchase of the Product through PLEXAIRE's website within 90 days of purchase of the Product by such Original Consumer (and, if applicable, by the Assignee).

(f) The Original Consumer (or, if applicable, the Assignee) does not include proof of purchase of the Product by the Original Consumer (and, if applicable, the Assignee) with a warranty claim.

6. THIS LIMITED WARRANTY DOES NOT COVER normal wear and tear, cosmetic damage that does not affect functionality, and Products where the PLEXAIRE serial number is missing, altered, or defaced.

## **GOVERNING LAW; JURISDICTION**

This Limited Warranty is governed by and construed under the laws of the State of New Jersey without giving effect to any conflict of laws principles that may provide the application of the law of another state or other jurisdiction. You agree to submit to the personal jurisdiction of the state courts located within the State of New Jersey and the federal courts in the District of New Jersey for the purpose of litigating all such claims or disputes, which courts shall have exclusive jurisdiction of such claims or disputes.

## **PRODUCT REPLACEMENT AND REPLACEMENT PARTS PROCEDURES**

If you are the Original Consumer or Assignee and you believe your Product is defective and is covered by this Limited Warranty, please contact the installer of your Product.

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**PATENT PENDING**