ATTENTION INSTALLER:

This product must be installed by a qualified heating and air conditioning contractor. Failure to do so could result in serious injury from electrical shock. This product must be installed in compliance with all local, state and federal codes.

**WARNING**

1. ELECTRICAL SHOCK HAZARD. Can cause injury or death. Disconnect all electrical power supplies before servicing.
2. RISK OF PROPERTY DAMAGE, INJURY OR DEATH. Installation, adjustments, alterations, service and maintenance must be performed by your Lennox dealer.
3. RISK OF SCALDING. Water temperature over 125°F can cause severe burns and scalding instantly. Shut off the hot water supply before disconnecting or tapping into any hot water supply line.
4. RISK OF SHARP EDGES HAZARD. Equipment sharp edges can cause injuries. Avoid grasping equipment edges without protective gloves.

**CAUTION**

1. Water heating system can be damaged if water supply remains off.
2. After humidifier installation is completed, turn hot water supply back on.
3. Water heating system must be de-energized if the main water supply remains shut off.
4. Do not set humidity level above recommended or to recommended level if condensation exists on inside windows of any unheated space, as condensation damage may result. Excess humidity can cause moisture accumulation which can allow the possibility for mold growth in your home.
5. Do not install humidifier in locations where freezing temperatures may occur. The water line could freeze and crack causing water damage to the home.
6. Do not install humidifier or bypass connection on furnace cabinet.
7. Do not install humidifier or bypass connection on blanked off end of cooling coil where airflow will be restricted.
8. Do not connect the transformer to blower motor wiring. Premature component failure may result.
9. Do not install humidifier where water pressures exceed 125 psi, since humidifier damage may result. Follow codes in effect concerning pressure reduction.
10. Do not install humidifier on systems with greater than 0.4 in. wg pressure differential between supply and return plenums.

**SPECIFICATIONS**

- **HUMIDIFIER DIMENSIONS**
  - Width (including solenoid valve): 15 5/8”
  - Height (including drain spud): 13”
  - Depth: 10 1/4”

- **BYPASS DUCT OPENING**
  - 6” diameter

- **PLENUM OPENING**
  - 9 1/2”W x 9 1/2”H

- **WATER FEED RATE**
  - 3 gph

- **ELECTRICAL DATA**
  - 24 VAC-60 Hz, 0.5 AMP

**INSTALLATION OPTIONS**

The humidifier can be installed on either the supply or return plenum of a forced air handling system and is easily reversible for installation with right hand or left hand bypass duct connections. The humidifier dimensions and serviceability must be considered when selecting the best location for the humidifier. Here are 2 examples of many types of installations:

**MODEL HCWB3-12A & HCWB3-12AK**

**AUTOMATIC HUMIDIFIER CONTROL**

For detailed Automatic Humidifier Control installation and wiring instructions, see Publication No. 504,879M included with Control.

**NOTE**

- VERIFY THAT MODE SWITCH IS IN THE "BYPASS" POSITION.
- DO NOT WIRE TRANSFORMER USING FURNACE BLOWER CIRCUIT.

**Models HCWB3-12, HCWB3-12K, HCWB3-12A & HCWB3-12AK**

**MANUAL CONTROL**

For detailed Manual Humidifier Control installation and wiring instructions, see Publication No. 506407-01 included with Control.

**IMPORTANT**

- USE 120 VAC POWER SOURCE OTHER THAN FURNACE MOTOR CIRCUIT. HOWEVER, THE TRANSFORMER CAN BE POWERED OFF THE HOT 120 VAC LINE BEFORE IT ENTERS THE FURNACE.
- DO NOT WIRE TRANSFORMER INTO FURNACE BLOWER CIRCUIT.

**NOTE**

- CURRENT SENSING RELAY REQUIRED IF TRANSFORMER IS CONTINUOUSLY POWERED.
- CONNECT DRAIN LINE HERE

**WARNING**

Cover on humidifier must be securely in place when blower is operating. Gas fumes, which could contain carbon monoxide, can be drawn into living space resulting in personal injury or death.

**RECOMMENDED WIRING DIAGRAMS**

**TEMPLATE MUST BE LEVEL**

TRACE ALONG OUTER EDGE
**FURNISHED ITEMS**
- Built-in bypass damper
- 24 VAC Humidifier Control
- 24 VAC Transformer
- Saddle valve
- Humidifier Installation Template
- Humidifier Control manuals
- Mounting screws (sheet metal screws)
- Water supply line (1/4" copper)
- Drain line (1/2" I.D. hose)
- 18 gauge low voltage wire
- 6" bypass ductwork
- Current Sensing Relay (if required)
- Hose clamp

**ITEMS NOT FURNISHED**
- Drainline (1/2" I.D. hose)
- 24 VAC Transformer
- 6" bypass ductwork
- Water distribution tray (4)
- Feed tube (3)
- Valve (2)

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1. Remove front cover by pressing center tabs on top and bottom of the cover (1) and base (2). Pull feed tube (3) out of and water distribution tray (4). Tip the evaporative assembly forward and lift it out of the humidifier. (See Figure 1)

2. The humidifier comes assembled for left side discharge. If converting to right side discharge, the base can be rotated so round collar is facing to the right. Swap the location of the hole plug (10) and drain spud (9) if using a right side discharge. To remove the cap, push and twist from the side housing while lifting the cap up slightly on the outside. To remove the drain spud, twist and push from the outside of the base.

3. Using a level, position this template at least 3 inches above the furnace housing or cooling coil, if applicable, for clearance of the drain line. Trace around template edges. Remove the template and accurately cut the plenum opening 9 1/2" x 9 1/2", being careful to avoid injury from sharp edges.

4. Place the humidifier into the plenum opening, install six sheet metal mounting screws (not furnished) at the top and sides of the humidifier interior.

5. Install a 6" collar in a convenient location on the opposite plenum. Attach a 90° elbow and measure the length of 6" round duct required to make the connection. The design of the humidifier collar provides a solid connection with the bypass duct through the use of inside support ribs and pre-formed holes for sheet metal screws. Slip the duct inside the collar of the humidifier, up to the support ribs. Using the pre-formed holes at the top and bottom of the humidifier collar, secure the duct to the humidifier collar with two sheet metal mounting screws (not furnished). Support bypass ducts longer than 4 feet to prevent sagging. Seal duct seams and humidifier base with foil tape or mastic.

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6. Reinstall the evaporative assembly back into the base, with the bottom of the scale control insert (6) sitting firmly in the inside of the drain spud (9). Snap into place. If evaporative assembly does not snap into place, reverse the assembly. Push the feed tube back into the water distribution tray. (See Figure 2) Put the front cover back on. If the nameplate (11) is upside down, remove it and rotate the nameplate so it is right side up, and snap back into place. Turn damper handle (8) to the open position"WINTER" for the heating season, or closed position"SUMMER" for the cooling season.

7. Locate and install the Manual Humidifier Control by following the instructions shown in step 7A. For Automatic Humidifier Control installation instructions, see Publication No. 504.879M included with the Automatic Control. **DISCONNECT ELECTRICAL POWER TO FURNACE BEFORE PROCEEDING!**

8. The humidifier solenoid valve and Humidifier Control operate on 24 VAC. In order for the humidifier to turn on, the furnace blower must be operating and the Humidifier Control must be calling for humidity. See Humidifier Control manuals for Control wiring.

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9. Tap into a water supply line with the saddle valve furnished. See instructions on saddle valve package. The humidifier will function with cold, hot, softened or softened water.

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10. Connect tubing from the saddle valve to the inlet side of the solenoid valve using 1/2" O.D. copper tubing (not furnished). **DOUBLE WRENCH AS SHOWN IN FIGURE 3 TO PREVENT DAMAGE TO VALVE BRACKET AND ENSURE WATERTIGHT CONNECTION.**

11. Drain spud is designed to accept 1/2" I.D. plastic hose (not furnished). Run drain line from drain spud to floor drain or alternate drain location. **CAUTION: If hose clamp is used, do not over tighten, drain spud could crack. Be sure drain line has continuous slope. NOTE: Do not sweat or directly attach metal drain line to fitting. Do not use solvent type adhesive when connecting plastic drain line, since damage to fitting could result.

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**NOTE:**
- **BEFORE LEAVING THE JOB SITE, MAKE SURE:**
  1. Saddle valve is fully open.
  2. There are no plumbing leaks.
  3. Humidifier functions properly.
  4. Bypass damper is in proper position.

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**IMPORTANT!** Be sure owner’s manual containing instructions for operation and warranty information is given to owner in order to avoid unnecessary calls. Warranty is void unless humidifier is installed by qualified heating and air conditioning contractor due to possible misapplication of product.