## Installation Instructions & Mounting Template

COMPLETELY READ: SAFETY INSTRUCTIONS, PRE-INSTALLATION SET UP AND CHECKOUT PROCEDURE FOR **BYPASS HUMIDIFIER AND INSTALLATION/TEMPLATE INSTRUCTIONS** 

# **BYPASS HUMIDIFIER MODEL \*HUMD200A**

### (MANUAL HUMIDIFIER CONTROL INCLUDED)

\*May Be "A" or "T"

The humidifier can be installed on either the supply or return plenum of a forced air system.

Easy reversible installation right hand or left hand.

The unit is 13-1/4" x 12-3/4" x 9-1/4". The dimensions and serviceability must be considered when selecting the best location to install the unit. If the furnace has central cooling, the humidifier bypass damper must be closed during the cooling season.

### / WARNING

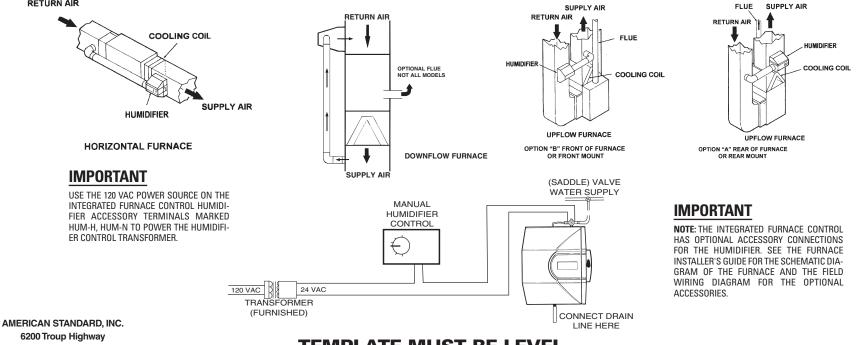
- Disconnect electrical power to the furnace before starting installation. Failure to do so could result in serious injury from electrical shock. 1.
- 2. Sharp edges may cause serious injury from cuts. Use care when making plenum openings and handling ductwork.
- 3. Hot water temperatures in excess of 1250F may cause serious injury from burns. Make sure water supply is shut off before connecting the water supply.
- 4. This product must be installed by a qualified heating and air conditioning dealer. Failure to do so, could result in serious injury from electrical shock.
- 5. This product must be installed in compliance with all local, state and federal codes.

### **∧** CAUTION

- 1. Do not install humidifier in attic or crawl areas.
- 2. Do not install humidifier where freezing temperatures could occur.
- 3. Do not install humidifier on the supply plenum where static pressure exceeds 0.20 WC.
- Do not install humidifier where water pressure exceeds 125 psi, since damage to the unit may result. Follow codes in effect concerning pressure reduction 4.
- 5. Do not install humidifier or bypass connection to the furnace cabinet.
- 6. Do not install humidifier or bypass connection on a plenum face where the blanked off ends of the cooling coil restrict air movement through the humidifier.
- 7. Do not set humidifier control higher than recommended. Condensation damage may result.
- 8. Do not set humidifier control up to recommended levels if there is condensation on the inside windows of any unheated living space. Condensation damage may result.

RETURN AIR

#### NOTE: TWO (2) #8 X 3/4" PLATED HEX HEAD SMS SCREWS (NOT FURNISHED) ARE REQUIRED FOR INSTALLATION.



6200 Troup Highway Tyler, TX 75711-9010

### **TEMPLATE MUST BE LEVEL**

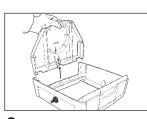
**— TOP —** 

### READ COMPLETE SAFETY INSTRUCTIONS AND INSTALLATION TEMPLATE BEFORE STARTING **TEMPLATE MUST BE LEVEL**

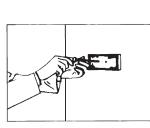


Place unit on flat surface and pull front cover off. Lift humidifier pad assembly out at the top.

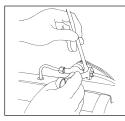
6 Reinstall the humidifier pad and scale control insert by fitting the drain tube into the round receptacle at the bottom of the unit. Push the assembly in at the top against the beveled tabs. Replace the front cover. If the decorative nameplate is upside down, apply light pressure, slide it out at the slot, and turn the nameplate right side up and snap it back into place.



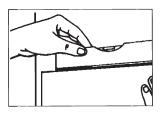
**2** The bypass humidifier ships in the right hand discharge position and may be converted to left hand discharge, if required. To make the conversion simply remove the right and left screws from the interior side walls and exchange the end and duct panels. Reassemble with the screws.



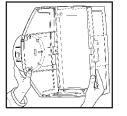
7 Locate and install the humidifier control by following the instructions shown in step #7A. DISCONNECT ELECTRICAL POWER TO FURNACE BEFORE PROCEEDING TO STEP #7A.



**10** Connect tubing from the saddle valve to the inlet side of the solenoid valve using 1/4" O.D. copper tubing (not furnished). **DOUBLE WRENCH** TO PREVENT LEAKING!



3 Use this template to mark the humidifier opening to be cut in plenum. Draw a level line at least three inches above the top of the indoor coil/furnace cabinet for clearance of the drain line. Prior to cutting the mounting hole in the plenum consider whether the selected mounting location will interfere with installation of the furnace flue pipe. Also, consider selecting a mounting location that provides space above the humidifier for solenoid valve, strainer and orifice maintenance. Remove the template and accurately cut the plenum opening accordingly, being careful to avoid injury from sharp edges.



4 Place the humidifier into the plenum opening so that the locking tabs on the bottom are closed down onto the lower sheet metal edge. While holding the humidifier in place, install two screws at the top of the humidifier interior.



5 Install a 6" collar in a convenient location on the opposite plenum. Slip on a 90° elbow and measure the length of a 6" round duct required to make the connection. The 6" duct will fit into the round collar on the side of the humidifier. Assemble components with sheet metal screws (field supplied). Support bypass ducts in excess of 4' to prevent sagging.



The enclosed manual humidifier control is designed for low voltage service to control humidification equipment. An increase in relative humidity expands the nylon ribbon which opens the control switch to stop operation of the humidifier. A decrease in relative humidity reverses the process and closes the control switch.

#### LOCATION

- 1. Locate on inside wall of living area approximately 5' above floor, or in the furnace return air plenum or duct. A manual humidifier adapter plate is required for return air plenum installation (BAYPLTO1AMHCOA).
- 2. Do not locate control in the direct path of furnace discharge air or drafts from open doors and windows.
- 3. Do not install where operation might be affected by lamps, sunlight, fireplace registers, radiators, concealed air ducts and pipes, or room occupants.
- 4. The basic rules for location of thermostats also apply to manual humidifier controls.

11 Connect and secure 1/2" I.D.

plastic hose (not furnished) from unit

to floor drain, wet sanitary trap or con-

densate drain. Be sure drain hose has

continuous slope downward. NOTE:

Do not sweat or directly attach

metal drain line to fitting. Do not

use solvent type adhesive when

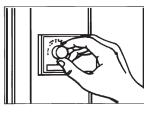
connecting plastic drain hose,

since damage to fitting could

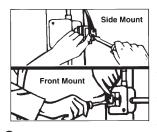
result.

#### GENERAL INSTRUCTIONS

- 1. DO NOT ATTEMPT TO REPAIR OR RECALIBRATE CONTROL. Controls requiring service should be returned to your distributor.
- 2. The humidifier control and solenoid valve must be installed using 24 volts from the transformer secondary.
- 3. Make sure no bare wires are exposed or insulation damaged. Insulation on wire should extend to head of binding screws.
- 4. Make sure all splices are mechanically and electrically secure.
- 5. To remove dirt or other foreign matter from nylon ribbon and control interior, dust lightly with a fine, soft brush.



**12** Open saddle valve and turn on furnace. Turn up manual humidifier control to operate unit. Allow unit to run until water is observed coming out of drain line. Check to see if unit is water tight and all electrical components function properly. Reset manual humidifier control to recommended level



8 Connect the transformer 120 VAC primary wires to the Integrated Furnace Control Accessory Terminals. The terminals are marked HUM-H. HUM-N, where available. The HUM terminals will provide 120VAC to the transformer whenever there is a call for heat. The transformer is designed to be mounted on a junction box. See furnace Installer's Guide for wiring recommendations. NOTE: For gas furnaces without humidifier accessory terminals providing 120VAC use the Current Sensing Relay (BAYR-LY10ASENSA).

### IMPORTANT

Dealer: Be sure to give the Use and Care Manual included with the humidifier to the homeowner. Explain the Use and Care Manual contents including operating instructions, **RECOMMENDED MAIN-**TENANCE, and warranty information.

NOTE: The saddle valve is designed to be fully opened or closed. Do not use it to regulate water flow.

Tap into the top or side (not bot-

tom) of the water supply line with the

saddle valve (furnished). The humidifi-

er will function with cold, hot, softened

or unsoftened potable water. The use

of service hot water (140° F MAX) and

constant blower operation will provide

maximum evaporative capacities.