

**READ COMPLETE SAFETY INSTRUCTIONS AND INSTALLATION TEMPLATE BEFORE STARTING**

**Attention Installer: WARNING** 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.

# Aprilaire® AUTOMATIC HUMIDIFIER MODEL 400

The Model 400 Aprilaire 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 pipe connections. Read complete instructions before mounting the humidifier. The unit is 15" x 14<sup>3</sup>/<sub>8</sub>" x 10". The dimensions and serviceability must be considered when selecting the best location for the unit.

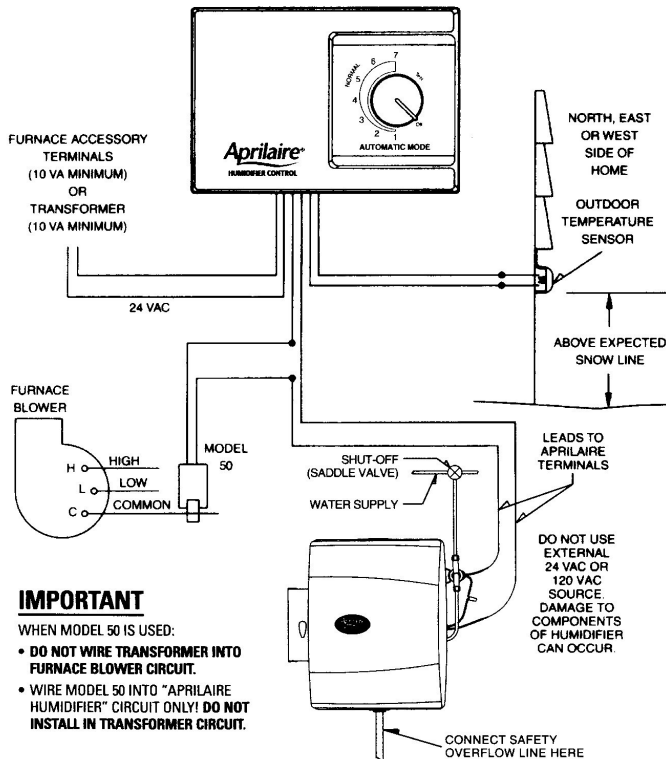
**WARNING**

1. Disconnect electrical power to the furnace before starting installation. Failure to do so could result in serious injury from electrical shock.
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 125°F. may cause serious injury from burns. Make sure water supply is shut off before connecting the water supply.
4. Do not set humidity higher than recommended. Condensation damage may result.
5. Do not connect the transformer of the Model 400 to multi-speed furnace blower motors or blower motors other than 120 VAC. Premature component failure may result. Use Research Products Corporation Model 50 Current Sensing Relay.
6. Do not set humidity up to recommended levels if there is condensation on the inside windows of any unheated living space. Condensation damage may result.

**CAUTION**

1. Do not install unit where freezing temperatures could occur.
2. Do not install unit or bypass connection on the furnace jacket.
3. Do not install unit or bypass connection on a plenum face where the blanked off ends of the cooling coil restrict air movement through the humidifier.
7. When installing Humidifier Control on downflow furnace, ensure blower continues to run after a heat call is satisfied to eliminate high temperatures from damaging the Humidifier Control.
8. Do not install humidifier where water pressure exceeds 125 psi, since damage to the unit may result. Follow codes in effect concerning pressure reduction.

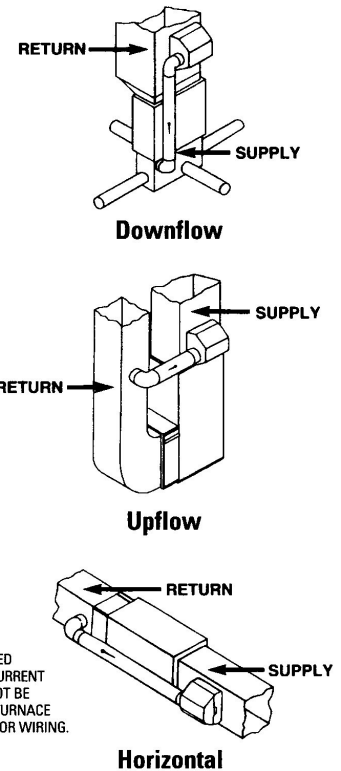
**NOTE:** SIX (6) #8 X 3/4" PLATED HEX HEAD SMS SCREWS (NOT FURNISHED) ARE REQUIRED FOR INSTALLATION.



**IMPORTANT**  
WHEN MODEL 50 IS USED:  
• DO NOT WIRE TRANSFORMER INTO FURNACE BLOWER CIRCUIT.  
• WIRE MODEL 50 INTO "APRILAIRE HUMIDIFIER" CIRCUIT ONLY! DO NOT INSTALL IN TRANSFORMER CIRCUIT.

DO NOT USE EXTERNAL 24 VAC OR 120 VAC SOURCE. DAMAGE TO COMPONENTS OF HUMIDIFIER CAN OCCUR.

**NOTE**  
FOR INSTALLATION IN MANUAL MODE, REPLACE OUTDOOR TEMPERATURE SENSOR WITH PLASTIC RESISTOR CASE AND ATTACH MANUAL FACE PLATE. SEE FORM #DP10005402 FOR COMPLETE WIRING INSTRUCTIONS, INCLUDED WITH EACH HUMIDIFIER.



**NOTE**  
SOME FURNACES ARE EQUIPPED WITH ACCESSORY TERMINALS THAT CAN BE USED FOR THE HUMIDISTAT. THE RP MODEL 50 CURRENT SENSING RELAY (NOT FURNISHED) MAY NOT BE NECESSARY IN THIS CASE. CONSULT THE FURNACE MANUFACTURER'S RECOMMENDATIONS FOR WIRING.

