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. Proper humidification and humidity control also requires that the home be constructed in accordance with local codes and good building practices.

MODEL 700 SERIES HUMIDIFIER

WARNING

1. ELECTRICAL SHOCK HAZARD. Disconnect electrical power to the furnace before starting installation. Failure to do so could result in serious injury from electrical shock.
2. SHARP EDGES HAZARD. Sharp edges may cause serious injury from cuts. Use care when making plenum openings and handling ductwork.
3. RISK OF SCALDING. Water temperature over 125°F can cause severe burns and scald instantly. Shut off the hot water supply before disconnecting or tapping into any hot water supply line.

CAUTION

1. Do not install humidifier where freezing temperatures could occur. The water line could freeze and crack causing water damage to the home.
2. Do not install humidifier on the furnace jacket.
3. Do not install humidifier on a plenum face where the blanked off ends of the cooling coil will restrict air movement through the humidifier.
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 the home.
5. Do not connect the Model 700 or 700M power cord 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. When installing Humidifier Control on a downflow furnace, ensure blower continues to run after a heat call is satisfied to eliminate high temperatures from damaging the Control.
7. Do not install humidifier where water pressure exceeds 125 psi, since damage to the humidifier may result. Follow codes in effect concerning pressure reduction.
8. Do not install humidifier on the supply plenum where static pressure exceeds 0.4 in. wg.

SPECIFICATIONS

HUMIDIFIER DIMENSIONS
- Width 15¾”
- Height (including solenoid valve and drain spud) 18”
- Depth 10¼”

PLENUM OPENING
- 14¼”W x 14½”H

WATER FEED RATE
- 6 gph

ELECTRICAL DATA
- 120 VAC-60 Hz, 0.8 AMP

RECOMMENDED WIRING DIAGRAMS

Model 700
DIGITAL HUMIDIFIER CONTROL

Model 700M
MANUAL CONTROL

NOTE:
- Models 700 and 700M are not suitable for installation on ducts with horizontal airflow. Performance will be reduced.
- When installing the Aprilaire humidifier with the Aprilaire Digital Humidifier Control or on a heat pump system, use hot water. The heated water supplements the reduced supply air temperature as added heat for evaporation.

INSTALLATION OPTIONS

Typical Installation

Alternate Installation

Orientation of Aprilaire Model 700 and 700M to Cooling Coils

RESEARCH PRODUCTS CORPORATION • P.O. BOX 1467 • MADISON, WI 53701-1467 • CALL 800/334-6011 • FAX 608/257-4257
1. Detach the cover assembly by lifting the latch at the bottom. Remove the Water Panel® evaporator assembly by grasping at top and tipping out. See Figure 1.

2. Position template on supply plenum. Make sure template is level. Allow clearance for drain line and for servicing. See “Installation Options” on opposite side for position relative to cooling coil.

3. Position base (2) in duct opening top-first so hooks engage sheet metal at top. See Figure 2. Insert bottom of base and slide down to engage hooks at bottom.

4. Rotate swing locks to secure base to duct. See Figure 3. Fasten base to duct using 4 sheet metal screws in holes provided.

5. Insert Water Panel Evaporator assembly into base. Make sure bottom of scale control insert (5) is over drain opening. Snap top of evaporator assembly into base.

6. Control installation and wiring. **Disconnect electrical power to furnace before wiring control.** In order for humidifier to operate, furnace must be on and RH must be below set-point of control. Wiring diagrams illustrate recommended method of detecting furnace operation.

7. Humidifier will function with cold, hot, softened or softened water. Hot water (140°F max) is strongly recommended to provide maximum evaporative capacity. Saddle valve provided may be used to tap into water supply. See installation instructions on saddle valve package. Saddle valve is designed to be fully opened or closed. Do not use to regulate flow.

8. Run 1/4” copper tubing from saddle valve to solenoid valve. **DOUBLE-WRENCH TO PREVENT LEAKING.** See Figure 4.

9. **INSTALL DRAIN IN ACCORDANCE WITH LOCAL CODES.** Run 1/2” I.D. hose from drain spud to floor drain. Make sure drain has constant downward slope and is not kinked. Do not overtighten hose clamp onto drain spud. Do not use solvent adhesive on drain spud.

10. Check humidifier operation. Open saddle valve and turn control to highest setting. Turn on furnace. Allow humidifier to run until water flows from drain. Make sure all electrical connections are secure and all plumbing connections are watertight. Set control to proper setting.

**NOTE: BEFORE LEAVING THE JOB SITE, MAKE SURE:**
1. Saddle valve is fully open.
2. All plumbing connections are watertight.
3. Humidifier functions properly.

**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.