

Installation Instructions and Mounting Template



Model HUM-SFTBP Whole-House Humidifier High-Capacity Flow-Thru with Side Entry

USE THIS INSTRUCTION SHEET AS A TEMPLATE. SEE REVERSE SIDE. Width of cutout (9") is equal to the width of this sheet. Length of cutout (10") is equal to the length of this sheet from top to perforation.



WARNING: This product must be installed by a qualified heating and air conditioning contractor. Failure to comply could result in serious injury from electrical shock, or damage to humidifier or heating appliance, or void all warranties.

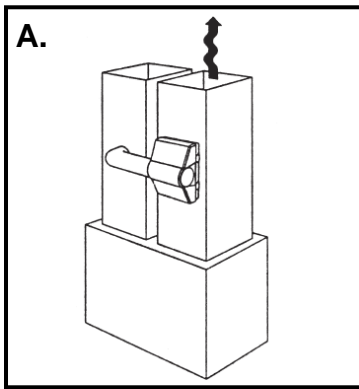
ADDITIONAL WARNINGS:

1. **Disconnect electrical power** to the furnace before starting installation to avoid serious injury or electrocution.
2. **Use care when cutting plenum openings and handling ductwork.** Sharp edges may cause serious injury.
3. **Do not cut or drill any air conditioning or electrical accessories** during humidifier installation. (See Mounting Diagram C, below.) Electrocution is possible if you come in contact with a live electrical wire. Blindness can occur if refrigerant contacts your eyes.

CAUTIONS:

1. Do not install the unit where freezing temperatures could occur, or where temperatures could exceed 180°F.
2. Do not install the unit on a furnace jacket.

3. Do not install the unit on a plenum face where the blanked-off ends of the cooling coil restrict air movement through the humidifier.
4. Do not set humidity higher than recommended. Condensation damage may result.
5. 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.
6. Do not install the unit on any plenum where static pressure exceeds 0.4" W.C.
7. Do not install the unit where water pressure exceeds 125 psi. Leakage may result. Follow relevant codes regarding pressure reduction.
8. Be sure that the installation, wiring and plumbing on the humidifier comply with local codes, ordinances and regulations.

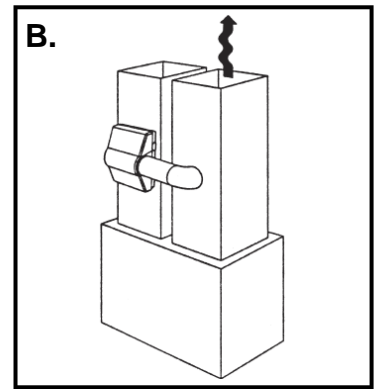


Mounting Options

A. Mount the humidifier to the warm air plenum. Connect the unit to the cold air return using 6" round duct.

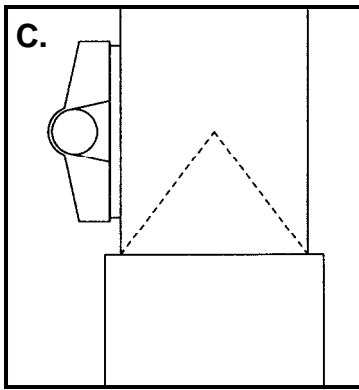
OR

B. Mount the humidifier to the cold air return. Connect the unit to the warm air return using 6" round duct.



▼▼▼ Detach Mounting Template Here ▼▼▼

(See Side 2)



C. HUM-SFTBP Flow-Thru Humidifier should be installed as shown in relation to the AC cooling coils.

Explanation of A/B Options

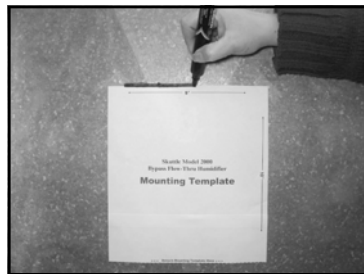
Mounting the humidifier on the warm air supply or the cold air return plenum does not alter humidifier performance. In either location, air will flow from the warm air to the cold air side, due to the positive and negative pressures of the heating system.

Humidity produced by a bypass flow-thru humidifier is dispersed as a pure vapor (i.e., gas), not as a liquid. The moisture will remain in the air, even when reheated. The humidity can only be depleted by escaping to the outside, or by condensing on a cold surface. Because all surfaces in the furnace/humidifier system are warm, condensation is unlikely.

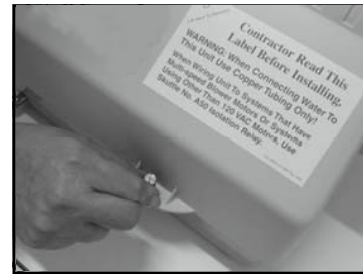
Step-by-Step Installation Instructions



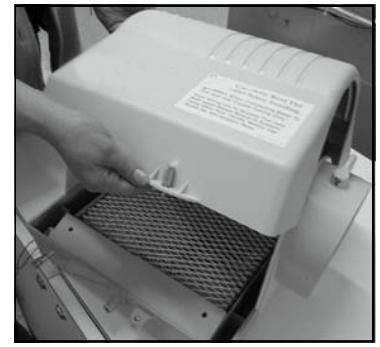
1. Locate the duct-cutting template at the top of the reverse side of this sheet. Detach the template from these instructions at the perforation. Tape the template lengthwise onto the furnace plenum, making sure it is level.



2. Trace around the template. (Cutout size is 9" wide by 10" long.) Remove the template. Accurately cut the plenum opening.



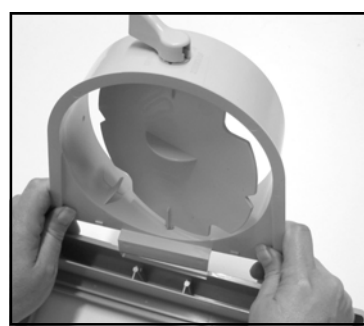
3. Disengage the humidifier cover from the mounting frame by rotating the thumb screw at the bottom.



4. Tilt and lift the cover off the frame.



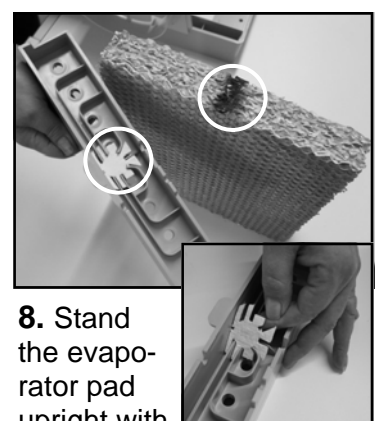
5. Pull out the drip tray and evaporator pad assembly by grasping the top lip and tipping out.



6. To convert the humidifier from right- to left-side discharge, apply pressure to the inside of the side panel using both hands. Lift. Exchange the two side pieces. Reinstall using moderate pressure.



7. Place the mounting frame into the plenum opening so that the frame hooks over the bottom of the opening. Screw the frame to the plenum.



8. Stand the evaporator pad upright with the black index mark on top. Make sure the wick is seated securely in the drip tray.



9. Place the drip tray on top of the pad. Reinstall the evaporator pad and drip tray.

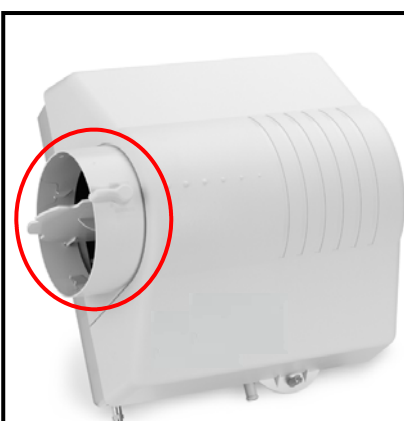


10. Reattach the cover assembly by hooking it at the top of the mounting frame, then securing it with the thumb screw at the bottom.



11. Install the 6" starting collar on the opposite plenum. Slip on a 90° elbow and measure the length of 6" round duct required to make the connection. Screw the 6" duct to the discharge collar.

See Template and Additional Instructions on Back ►►



Winter (open)



Summer (closed)

Summer Shutoff Damper

The **Summer Shutoff Damper** is designed to reduce the bypass of air through the humidifier during the summer months, allowing the air conditioner to run more efficiently and economically. The homeowner merely needs to turn the knob on the bypass collar to "summer" or "winter", depending on the season.

Other than restricting air flow during cooling, or limiting humidifier efficiency in winter, no harm is done if the homeowner fails to open or close the damper at the appropriate times.

← 9" →

10"

Model HUM-SFTBP Bypass Flow-Thru Humidifier Mounting Template

Template Must Be Level

▼▼▼ Detach Mounting Template Here ▼▼▼

Installation Instructions (continued)

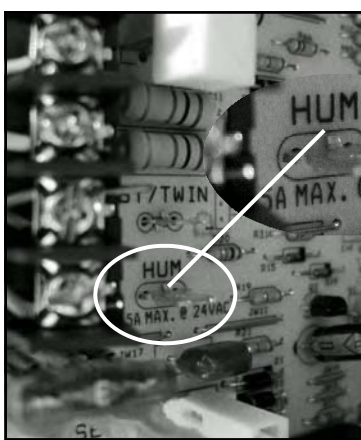
12. Shut off the furnace power. If the furnace is relatively new, check to see if there is an electronic control board with humidifier control terminals (sometimes marked HUM). You may also consult the furnace installation manual or wiring diagram. **If humidifier terminals are present, proceed to No. 12A.**

If humidifier terminals are not present, answer the following questions:

- Is the blower motor powered with a supply greater than 120 volts? **OR**
- Does the blower motor change speed during the heating mode? **OR**
- Does the blower motor change speed when the thermostat's system fan switch is activated during the heating mode? **OR**
- Does the blower motor change speed when the air conditioning is activated?

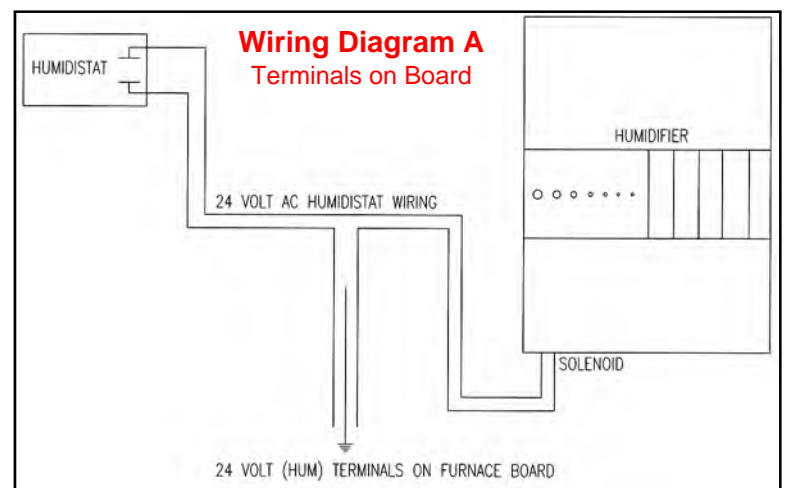
If the answer to any of the above questions is YES, skip to No. 12B.

If the answer to all of the above questions is NO, skip to No. 12C.

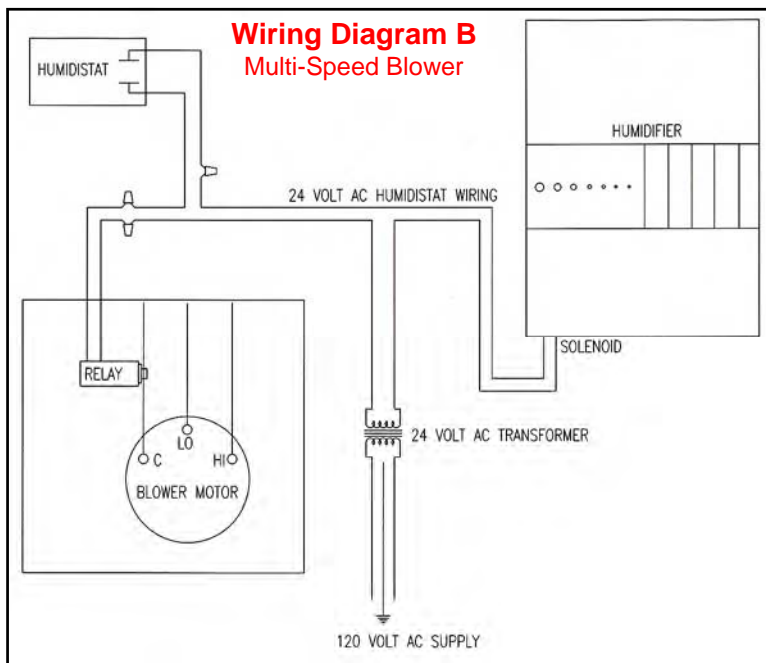


12A. Using a meter, check the terminals for power output during the heating cycle when the blower is running. Determine the output voltage. Some circuit boards have printed indicators. Most are 24 volt AC and only require connecting the humidifier solenoid and the humidistat. **(See Wiring Diagram A, right.)** → → →

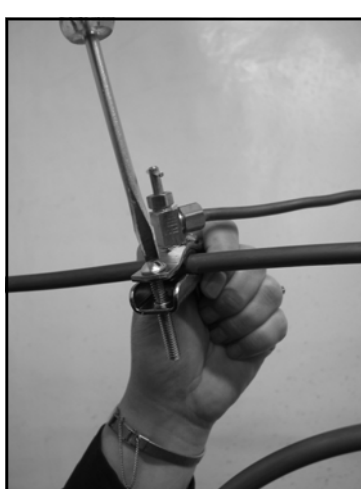
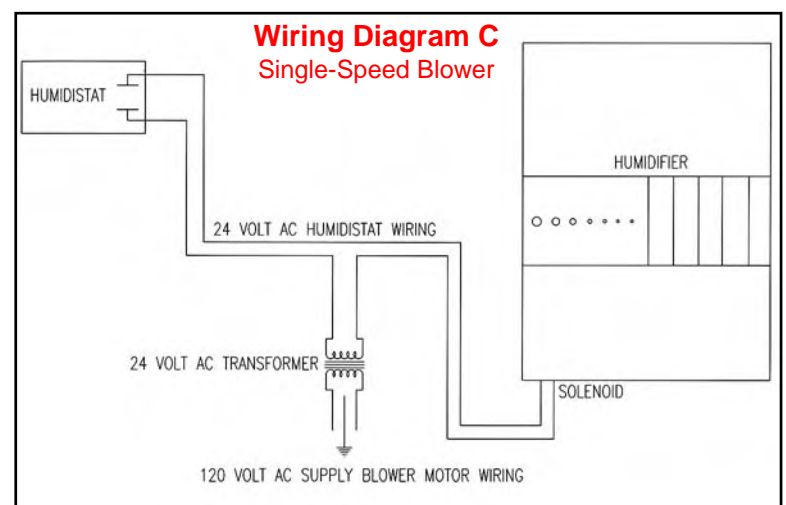
If, in rare cases, the furnace terminals are 120 volt, connect the transformer to the terminals and wire as shown in Diagram C.



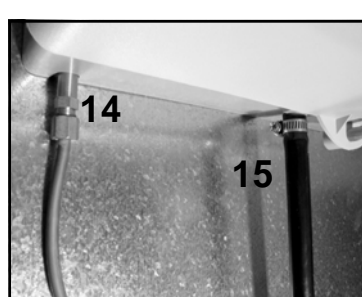
12B. For multi-speed blowers or systems not using 120 VAC, use an **HUM-A50 Electronic Relay** or other method of coordinating humidifier operation with the system air mover. The source of power for the humidifier transformer should not be the blower motor wiring, but an independent source. This is to prevent transformer failure, either from feedback from the blower motor during air conditioning, or from voltage greater than the 120 volts required for the transformer. **(See Wiring Diagram B, left.)** ← ← ←



12C. If you have determined that the system blower motor is a 120 volt, single-speed motor, and that it does not change speed during the cooling mode, wire the transformer into the blower motor wiring. This will coordinate the humidifier and system operations. **(See Diagram C, right.)** → → →



13. Tap into the water supply line using the saddle valve provided. Follow the directions on the saddle valve bag.



14. Connect **copper tubing** from the saddle valve to the solenoid valve. **(Do not use plastic tubing.)** Check for leaks.

The saddle valve must be fully opened or closed. Do not use the valve to regulate water flow.

15. Attach a 1/2" I.D. vinyl hose and clamp to carry the flushing water from the unit to the drain. Be sure the drain hose has a constant pitch to the floor drain. **To avoid damage to the drain fitting, do not use solvent type adhesives when connecting the plastic hose to the humidifier.**



16. Test operation. Check for water leaks. Be sure the humidistat is operating properly.