

UNITARY PRODUCTS GROUP

5005 YORK DRIVE
NORMAN, OK 73069

HUMIDIFIER MODEL S1-HU12MB INSTRUCTIONAL TEMPLATE

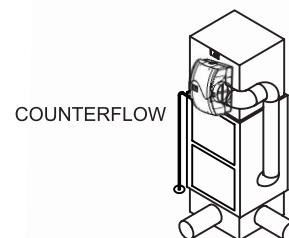
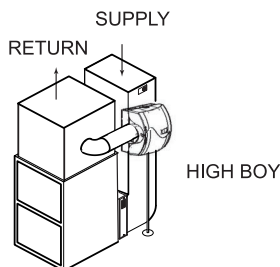
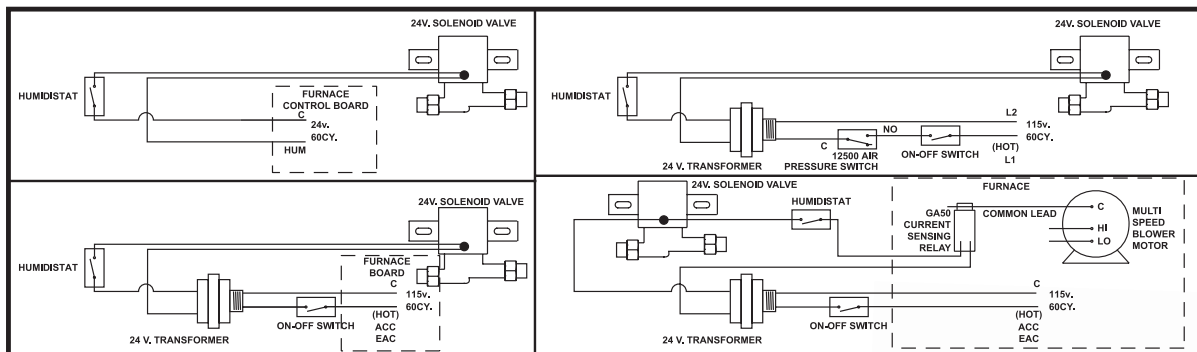
The Unitary model S1-HU12MB may be installed on either the supply or return plenum of a forced air handling system. The S1-HU12MB is reversible for installation with bypass duct connections on the right or left side of the cabinet. The outer dimensions of the cabinet are 13 1/2" wide, 15" high X 9 1/2" deep. Select a location for the humidifier that allows for service.

INSTRUCTIONAL TEMPLATE

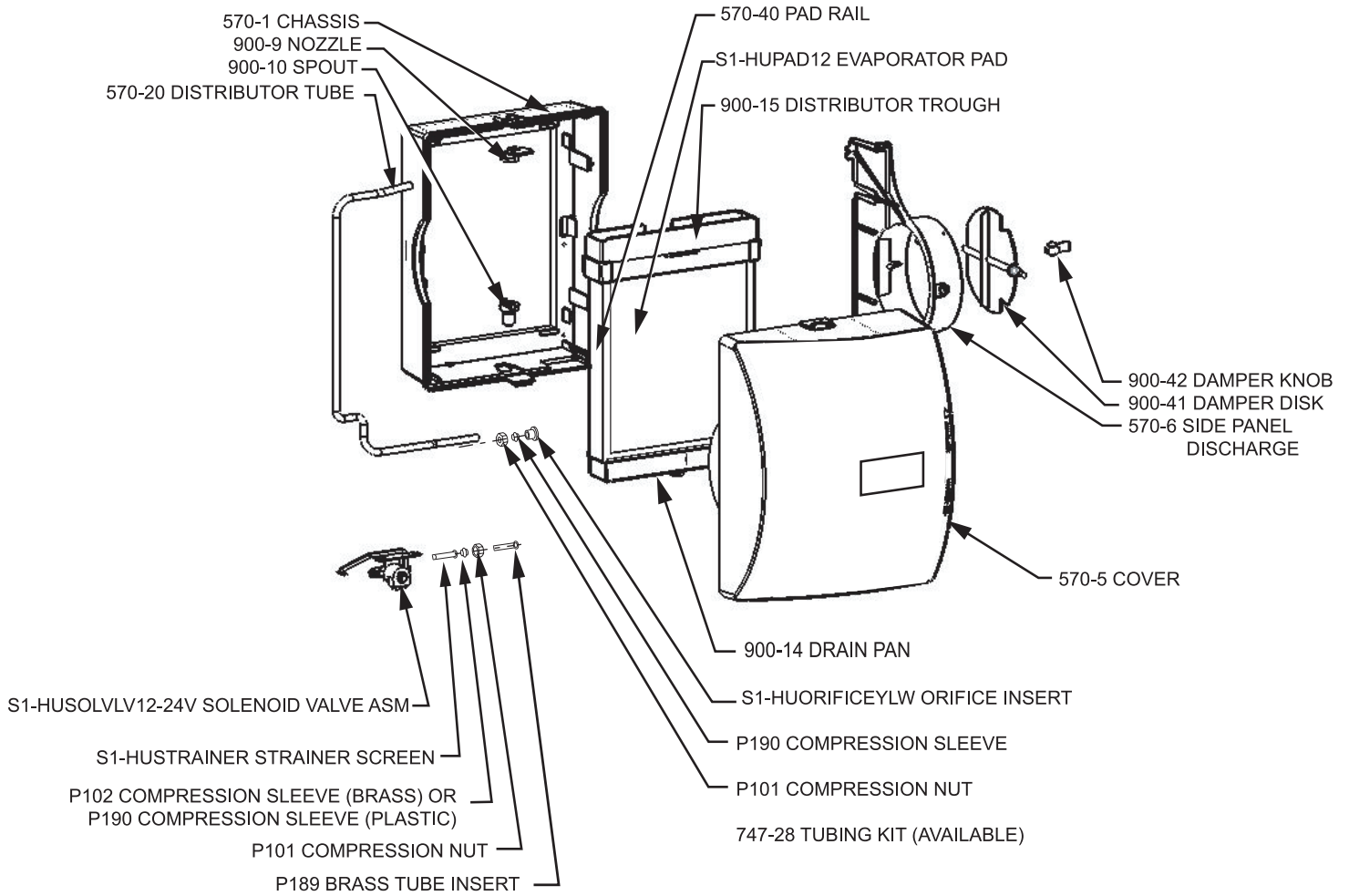
WARNING The installer should be an experienced service technician. Disconnect electrical power before beginning installation. Do not install where temperatures fall below 32° F, where plenum temperatures exceed 200° F, where water pressure exceeds 100 psi, or where static pressure exceeds 3" water column. This product must be installed in compliance with all local, state and federal codes. Reduce humidity setting if condensation occurs. Read complete instructions before beginning installation.

ADDITIONAL MATERIALS THAT MAY BE NECESSARY:

1. 1/4" diameter plastic supply tubing or 1/4" copper supply tubing for hot water applications
2. Current sensing relay (Unitary model S1-HURELAY24V suggested)
3. #8 mounting screws.
4. 6" round bypass duct.
5. Low voltage wiring.



PARTS LIST FOR HUMIDIFIER



PLACE
STAMP
HERE

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LIMITED WARRANTY

This humidifier, if properly registered by the return of the warranty registration card to the manufacturer, is warranted to the consumer against defects in materials and workmanship for a period of five years from the date of installation. Evaporator pads, water strainers or metering orifices are not covered by this limited warranty or any other warranties. Any other defective parts will be repaired without charge except for removal, reinstallation and transportation costs. To obtain repair service under this limited warranty, the consumer must send the defective part or the complete humidifier to the manufacturer.

THERE ARE NO EXPRESS WARRANTIES COVERING THIS HUMIDIFIER OTHER THAN AS SET FORTH ABOVE, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED. THE MANUFACTURER ASSUMES NO LIABILITY IN CONNECTION WITH THE INSTALLATION OR USE OF THIS PRODUCT, EXCEPT AS STATED IN THIS LIMITED WARRANTY. THE MANUFACTURER WILL IN NO EVENT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow either limitations on implied warranties, or exclusions from incidental or consequential damages, so the above exclusion and limitation may not apply to you.

Any questions pertaining to this limited warranty should be addressed to the manufacturer. (U.S.A.: The manufacturer has elected not to make available the informal dispute settlement mechanism which is specified in the Magnuson-Moss Warranty Act.)

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CARE AND MAINTENANCE

Your humidifier is engineered to give helpful and trouble-free humidification. For maximum efficiency the following cleaning procedures should be carried out at the end of each heating season:

1. Turn off water supply and electrical power to humidifier.
2. Remove cover, water distributor tube, distributor trough, evaporator pad and drain pan. Clean excessive mineral deposits from the distributor trough, drain pan, pad rails, and humidifier cabinet. A solution of 1/2 vinegar & 1/2 water will help loosen mineral deposits. Inspect drain hose, clean or replace as necessary.
3. If the evaporator pad has excessive mineral deposits, replace with a new "S1-HUPAD12" evaporator pad. Install trough and drain pan. Replace cover.
4. In heavy mineral areas or if the solenoid valve fails to function disconnect the 1/4" water supply line from the solenoid valve. Carefully pull the strainer screen (P.N. S1-HUSTRAINER) from the valve body (P.N. 900-6). Clean the mineral deposits from all parts. If the orifice is clogged, it may be opened by inserting a small pin. Reinsert the filter into the orifice fitting and screw the brass strainer body into the solenoid valve.
5. Reconnect the 1/4" water line to the solenoid valve if necessary. Turn on the water supply and check all points for leakage. The operation of the unit may be checked by starting the furnace. The humidifier operates only when the furnace blower is running or the burner circuit is energized. The humidifier is now ready for operation.
6. During the summer, turn off water supply and electrical power to humidifier. Close air damper.

AT OUTSIDE TEMPERATURE		RECOMMENDED SETTING
-20°F	-29°C	15%
-10°F	-23°C	20%
0°F	-18°C	25%
+10°F	-29°C	30%
+20°F	-7°C	35%
+30°F	-1°C	40%

WARRANTY REGISTRATION

MODEL S1-HU12MB

OWNER'S NAME: _____

STREET ADDRESS: _____

CITY: _____ STATE: _____ POSTAL CODE: _____

DEALER'S NAME: _____

STREET ADDRESS: _____

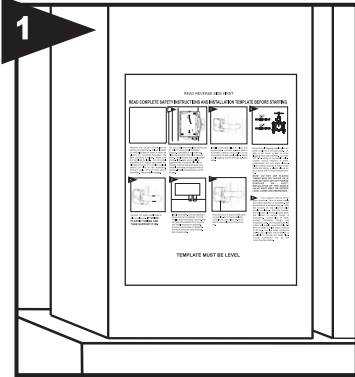
CITY: _____ STATE: _____ POSTAL CODE: _____

DATE OF INSTALLATION: _____ SERIAL NUMBER: _____

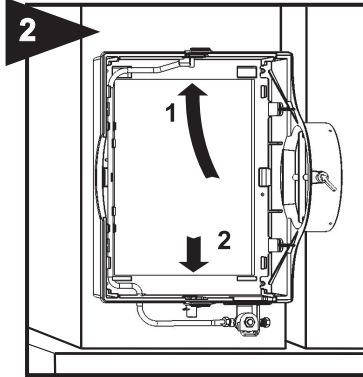
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READ REVERSE SIDE FIRST

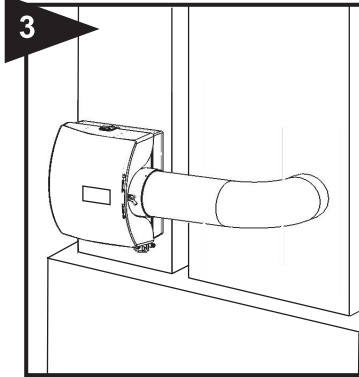
READ COMPLETE SAFETY INSTRUCTIONS AND INSTALLATION TEMPLATE BEFORE STARTING



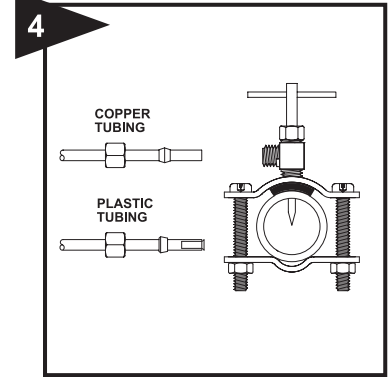
Remove this section of template by tearing at perforation. Select location on vertical surface of warm or return air plenum for mounting humidifier and tape mounting template. Make sure the template is level. Do not install humidifier or 6" bypass pipe where the blanked off ends of a cooling coil will restrict air flow to the humidifier. Scribe 6" circle 10" to 15" from side of humidifier. Trace template edges.



Cut 8.75" wide by 9.5" high hole from template tracing and 6" dia. hole for duct, install humidifier chassis. Humidifier is self retaining. Slide top side first, then slide chassis down. Level chassis and install center screws. If by-pass pipe installs to opposite side of chassis, flex clip on chassis, remove side discharge, and reinstall discharge to opposite side of chassis. Install remaining four corner screws.

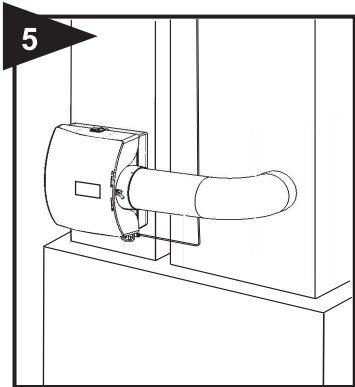


Install connecting collar, 6" elbow and bypass pipe. Connect by-pass pipe to humidifier cabinet using holes at top and bottom of side panel collar. Pierce 2 self tapping screws through by-pass pipe.

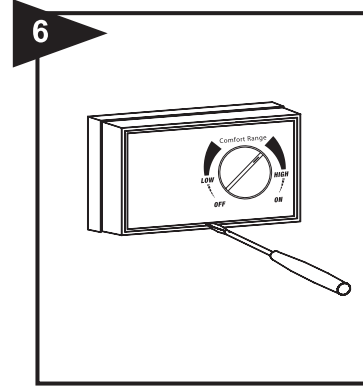


Mount the self tapping saddle valve on either a cold or a hot water pipe. A side or top mount is best to avoid clogging from pipe sediment. Connect 1/4" O.D. tubing to the saddle valve. Copper tubing requires a brass compression nut and brass sleeve. Plastic tubing requires a brass insert inside the tubing, a plastic sleeve on the outside with a brass compression nut.

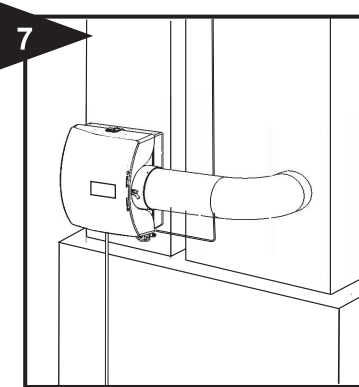
NOTE: DO NOT USE PLASTIC TUBING WITH HOT WATER OR IN CONTACT WITH ANY HOT PLENUM SURFACE OR DUCT. INSTALLATION OF THIS SADDLE VALVE MUST MEET OR EXCEED LOCAL CODES AND ORDINANCES.



Connect 1/4" water supply tube to inlet of solenoid. **DO NOT USE PLASTIC TUBING IN CONTACT WITH ANY HOT PLENUM SURFACE OR DUCT. IF USING PLASTIC TUBING, USE TUBE SUPPORT P189 AND PLASTIC COMPRESSION SLEEVE P190.**



Install humidistat on return air ductwork or on wall. Use template and refer to instructions included with humidistat.



Connect drain hose to 1/2" spout on humidifier cabinet using hose clamp. Run 1/2" hose to suitable drain such as floor drain, sewer or laundry sink. Be sure hose has continuous slope and is not kinked at any point.

8 Turn damper knob to winter (open) position. Turn on water supply and check operation of humidifier. Set humidistat to a demand setting. With the furnace off, the solenoid valve should be closed. Start the furnace, the solenoid valve should open when the blower or burner circuit is energized. Check flow of water through distributor trough and evaporator pad. The standard S1-HUORIFICEYLW orifice will supply approximately 3.5 GPH of water at a line water pressure of 60 psi. For low water pressures (20-40 psi) a larger orifice S1-HUORIFICEBLU is available to provide the same flow. Leave humidistat set at the recommended setting.

TEMPLATE MUST BE LEVEL