

Sample specifications for SW-2

Humidifiers shall be of the high speed centrifugal atomizing type. Construction shall be of heavy gauge copper, brass and non-ferrous alloy. Heavy duty shaded pole motor with overload protection shall drive the centrifugal disc and pump assembly to draw water up from the seamless copper reservoir, against breaker combs, producing a finely atomized mist. Rotating parts shall be electronically balanced to eliminate vibration. An automatic float valve shall maintain water level in the reservoir.

Vapor output of the humidifier shall be constant while in operation and shall not depend on the temperature of the air or water.

Humidifier(s) shall be Model SW-2 as manufactured by Humidity Source, LLC. Must be UL listed for US and Canada.



Support bracket optional

SPECIFICATIONS

CAPACITY

Moisture Output – 2 lb./hr.

WEIGHT

Net: 10 lb.

Shipping: 11 lb.

Operating: 15 lb.

WATER CONNECTIONS & PRESSURES

Supply: 1/8" Male Pipe Thread

Overflow: 1/4" Female Pipe Thread

Operating Pressure Range: 10-150 psig

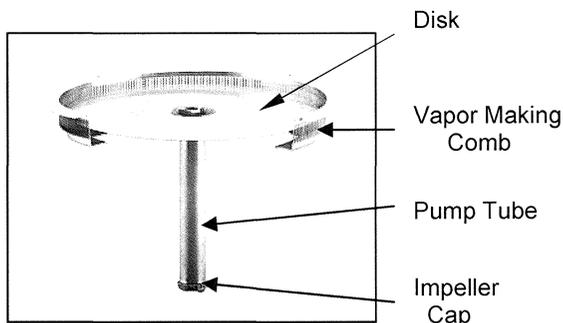
Electric Motor

50 Watts

115 volts, single phase, 60 Hz.

CARTON SIZE

15 1/2" X 12 1/4" X 15 1/4"

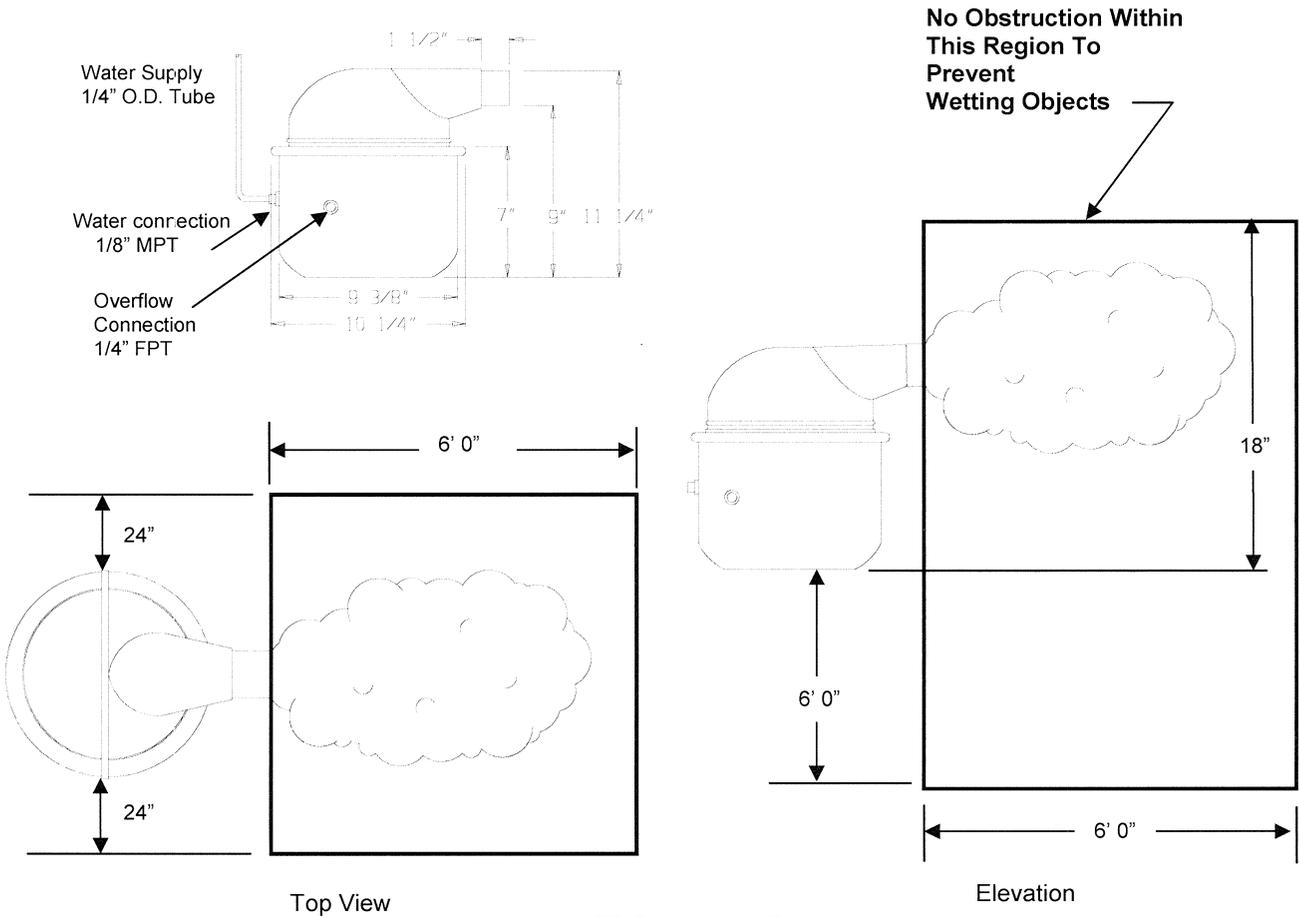


CENTRIFUGAL ATOMIZER

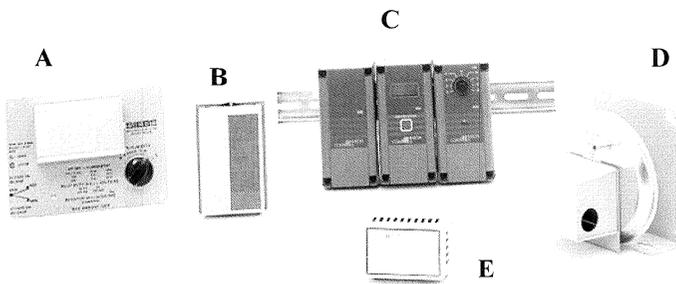
Heart of the unit

The heart of Humidity Source humidifier units is the patented masterfully engineered Centrifugal Atomizer. Water is drawn by centrifugal force up through the rotating impeller cap and pump tube, then spun across the disk rotating at 3250 RPM striking the Vapor-Maker Comb creating an extremely fine vapor. An integral fan under the rotating disk blows the vapor out of the unit resulting in a fine atomized vapor that is quickly absorbed into the air.

HUMIDITY SOURCE ATOMIZING humidifiers produce moisture that will quickly be absorbed in the air. However, it is very important that the humidifier be installed so that there is no chance of the moisture striking **any object** before it has been absorbed by the air. If any solid is hit with air containing suspended or unabsorbed moisture, condensation and dripping will result. It is therefore most important that all directions and minimum dimensions be strictly adhered to.



NOTE: Drawings Not To Scale



ACCESSORIES

- A. Duct mounted, high limit humidistat. Model No. HC-201
- B. Wall mounted humidistat. Model No. P825.
- C. Johnston Controls electronic humidistat. Model No. W351 and remote sensor (E)
- D. Air duct pressure switch. Model No. PC-301

MODEL SW-2

Your humidifier has been designed and engineered to give, with proper care, many years of trouble free service. Therefore, if this unit ceases to operate properly, we suggest you contact your local dealer. If we, at Humidity Source, can be of any assistance to you, please feel free to write, call or e-mail.

IMPORTANT

This space type humidifier is designed so that it may be shelf mounted. The shelf should be at least 18" (45.7cm) below the ceiling and 6 feet (1.8m) above floor. The directional vapor dome should be positioned to diffuse moisture without striking any obstructions closer than six feet and maintain 24" minimum between each side of the humidifier and any wall or obstruction.

PROCEDURE

Run a water supply line using 1/4" o.d. copper or plastic tubing or 1/8" pipe. Keep the line to the rear of the unit to avoid creating an obstruction.

Flush water feed lines before making final connection to avoid having cutting oil, pipe scale, or chips which may clog the float valve.

Turn on water valve and adjust water level to 1/2" below the overflow connection by adjusting the thumb screw as shown in Figure 1.

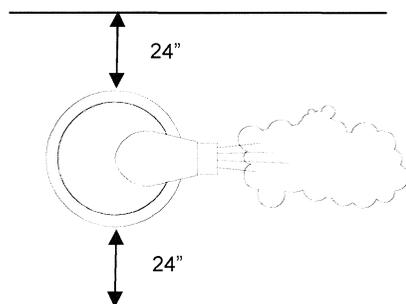
Adjustment is easily made using the adjusting thumb screw for higher or lower water level as illustrated.

SERVICE & REPAIR

Should this humidifier need service or repair some time in the future, return only atomizing unit direct to the factory.

CARE OF THE MACHINE

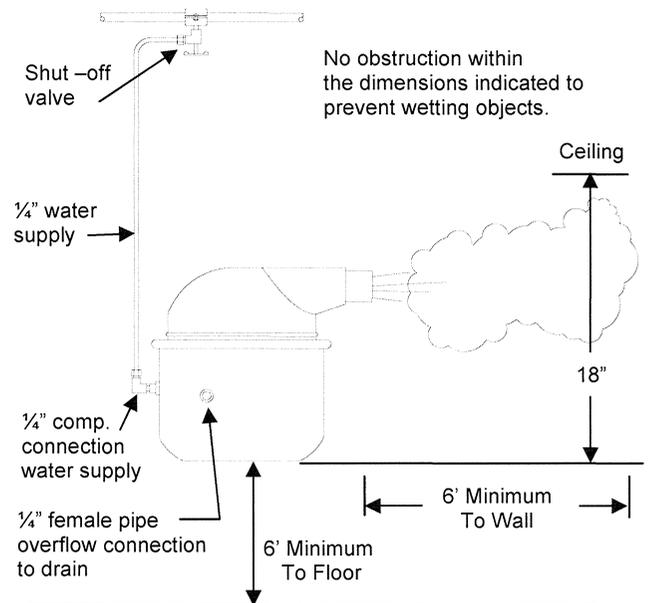
Due to air washing while the humidifier is in operation, a deposit of dirt and dust may settle in the bottom of the water reservoir and screen, and it is recommended that both be cleaned regularly.



IN ROOM MOUNTED HUMIDIFIER

Periodically the atomizing unit should be taken from the reservoir and given a careful visual check. The pump tube should be spun by hand to make sure that it is free to revolve without binding. See maintenance instructions.

Typical Installation



WIRING

The atomizer motor draws .67 Amps at 115 Volts A.C. single phase and 60 Hz service. Provide standard electric receptacle to receive electric cord from humidifier. Have the hot leg of service to this receptacle wired in series with the humidistat terminals and use a standard disconnect switch if required. See wiring diagram.

This humidifier may be run continuously or operated by means of a humidistat.

Our standard human hair element humidistat model P-825 is correct for most applications maintaining up to 60% RH.

For humidors and other high humidity applications, or for more precise control, use the electronic humidistat model W351A. This model also has an optional digital display module to indicate the set point and the actual R.H. in the room.

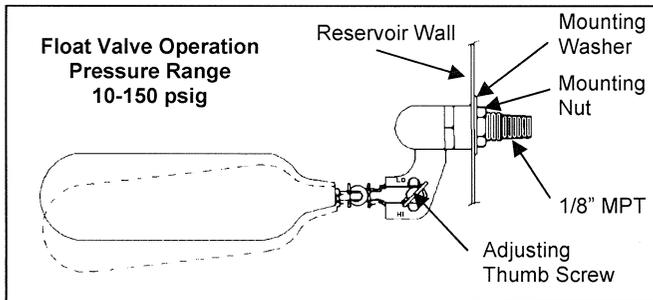


Figure 1

OPERATION

Positive capacity atomizing humidifiers produce a mist that will quickly evaporate into the air if there is no impingement of water particles against barrier surfaces before the water is completely absorbed. Strict attention to minimum clearance dimensions must be adhered to in order to avoid condensation.

MAINTENANCE

Unplug electric cord & remove dome. Carefully lift atomizing unit out of reservoir (Figure 2). Hold atomizing unit firmly and remove the perforated screen (2-A) by turning it slightly to the left until the four lugs are in line with the slots. To remove the impeller cap (2-B), hold a flat file or the back of a table knife flat against the side of the tube and gently tap the cap which is held in place by a pressed fit. After the cap has been removed, the inside of the tube is visible and it is simple matter to clean it with a piece of cloth on the end of a screwdriver or a small round brush.

There are three ports through which water makes its way from the pump tube to the top of the rotating disc (2-C). These ports should be cleaned out with the aid of a wire. See drawing on this page.

Replace the impeller cap by tapping it evenly back into place, using plastic handle on screwdriver.

Remove water from reservoir & rinse. Fill reservoir with white vinegar or other mild acid solution. Replace dome & atomizer on reservoir & block outlet of dome with plastic wrap & a rubber band. Run atomizer for ½ hour or until minerals are completely dissolved. If necessary, rinse with diluted chlorine bleach solution. Rinse with clean water and return to service. For hard water problems, see "demineralized water" below.

Inspect float valve assemble periodically, & replace when necessary, or every few years. Should this humidifier need service or repair some time in the future, return only atomizing unit direct to the factory.

DEMINERALIZED WATER

If your local water supply has a high mineral content, (call water company & ask for "total dissolved solids" or T.D.S.) This mineral will create tiny particles of airborne "white dust" when the mist evaporates in the air. To eliminate this dust, use an ion exchange or a reverse osmosis demineralizer. See Humidity Source data sheets for Reverse Osmosis demineralizing filters.

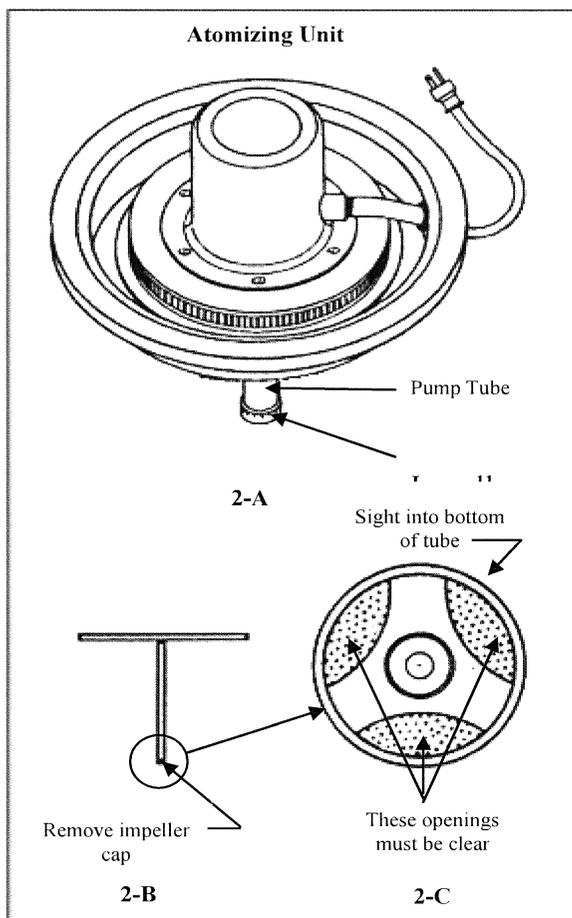
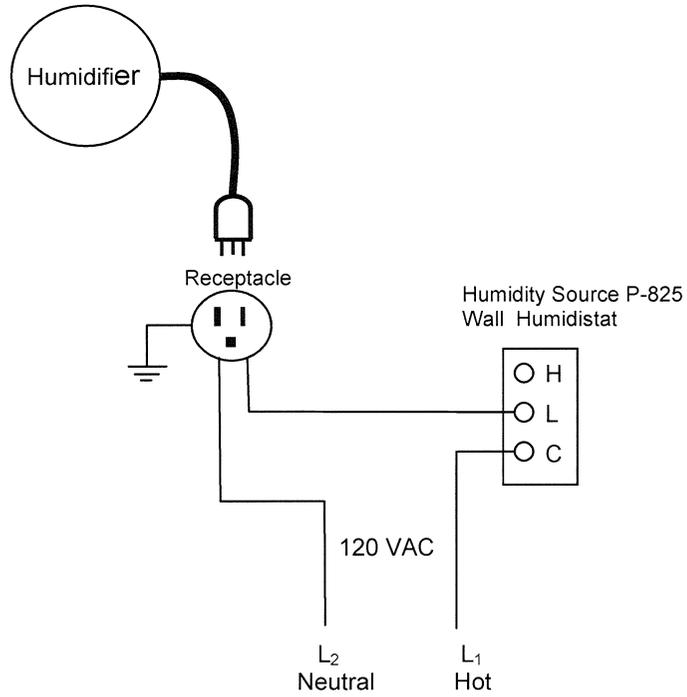
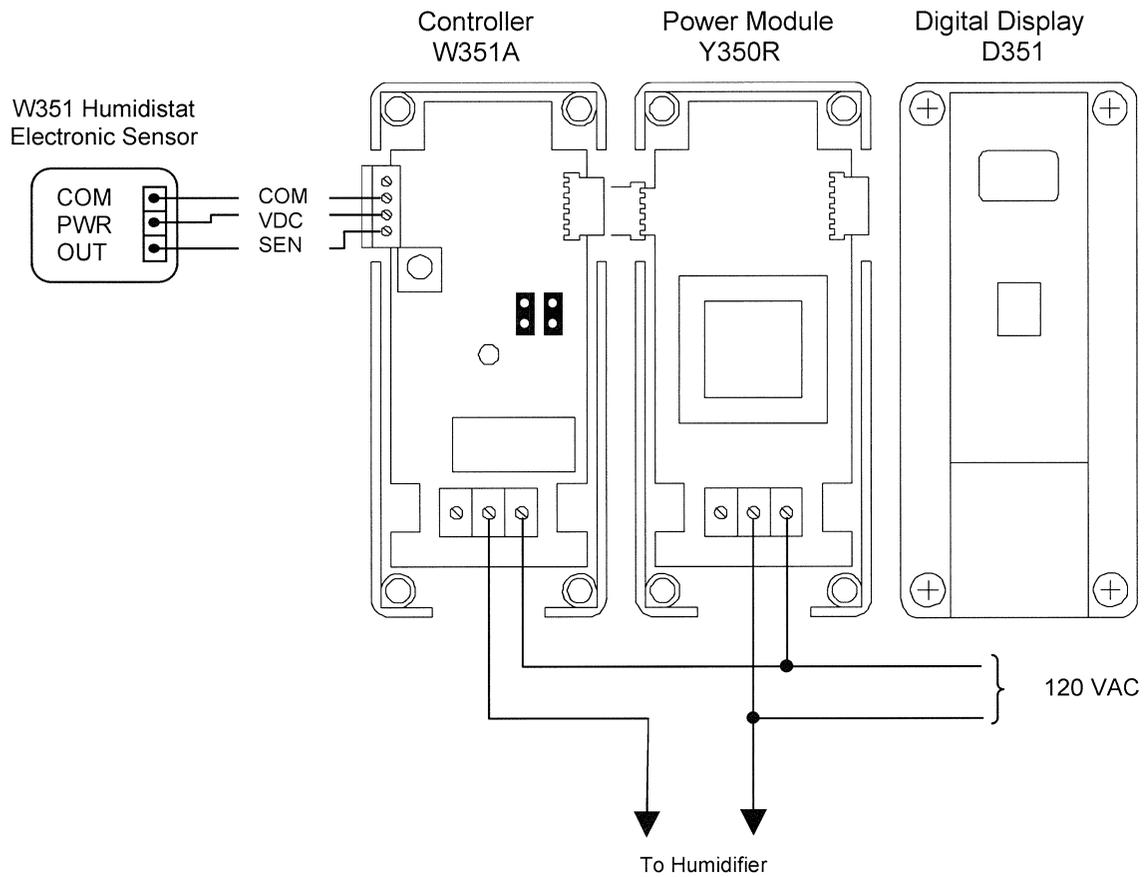


FIGURE 2

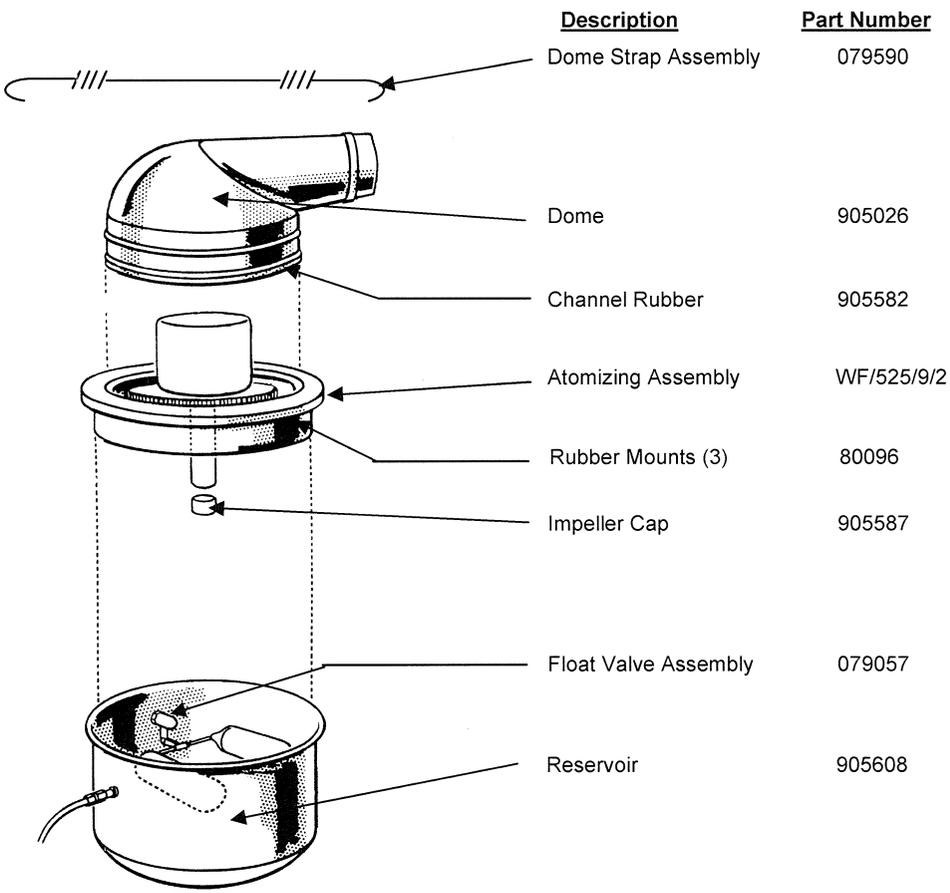
Wiring Diagram If Using P-825 Humidistat Installation



W351A Wiring Diagram If Using W351 On/Off Controller

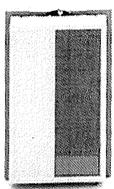


MODEL SW-2 REPLACEMENT PARTS



Humidifier Accessories

P-825 Humidistat
Human Hair Element



Standard

W351 Humidistat
Electronic Sensor



For high humidity
And/or close
tolerances

Humidity Source Reverse Osmosis water
Treatment systems. Sizes range from industrial
capacities down to individual room units.

