### **INSTALLATION INSTRUCTIONS**

# for the *Programmable*Humidifier Automatic Flushing Timer

#### SAVE THESE INSTRUCTIONS

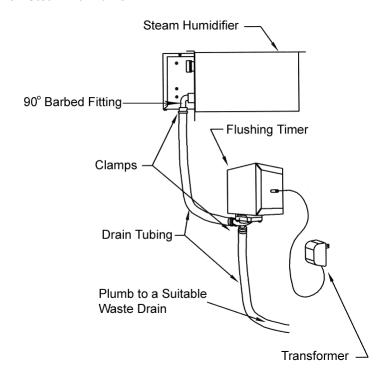
The Humidifier Automatic Flushing Timer automatically flushes accumulated mineral deposits from all central-system steam- and reservoir-type humidifiers. This enables homeowners to enjoy the benefits of healthful humidified air without the hassles of frequent maintenance due to mineral buildup.

The flushing timer is set at the factory to flush the humidifier every two hours for a duration of 10 seconds, using only about 1.5 gallons of water per day. (See "Reprogramming Instructions", lower right, for alternate settings.) This flushing reduces or eliminates servicing during the humidification season, depending on the mineral content of the water.

### To Install the Flushing Timer on Steam Humidifiers:

**CAUTION:** All plumbing and electrical connections must comply with local codes and ordinances.

<u>FIGURE 1</u>: Installation of the Programmable Flushing Timer on Steam Humidifier



- 1. If the humidifier has been pre-installed and needs servicing, refer to the humidifier operating manual for instructions.
- 2. For a new or pre-installed humidifier, select a suitable mounting location for the flushing timer within 3 feet (0.91 meters) of the humidifier, and within 10 feet (3.05 meters) of a properly fused electrical outlet.
- Locate a suitable waste drain for disposal of flushed water.

**CAUTION:** Drain tubing must not kink or come in contact with sharp edges or hot surfaces. Tubing must run in a continual downhill slope to allow proper drainage and to prevent overflow.

- 4a. If this flushing timer was purchased as an accessory to install on a steam humidifier... remove the drain valve from the humidifier and install the 90° barbed fitting (provided), as shown in Figure 1 above.
- 4b. If this flushing timer was purchased with the steam humidifier as a complete assembly... the 90° barbed fitting already should be installed on the humidifier in the proper location. (See Figure 1 above.)
- 5. Screw the unit to the mounting surface selected in Step #2.
- 6. Cut a piece of drain tubing to reach from the humidifier fitting to the fitting on the side of the flushing timer.

**CAUTION:** Drain tubing must not kink or come in contact with sharp edges or hot surfaces. (Caution applies to #7, as well.)

7. Cut a second piece of tubing to reach from the bottom fitting on the flushing timer to the drain. (See Step #3.)

- 8. Connect tubing with clamps or fittings suitable for your installation.
- 9. Refer to the humidifier operating manual to return the humidifier to its normal operating mode and adjust the water level.
- 10. Plug the flushing timer into the designated outlet. (See Step #2.)
- 11. Check all fittings for leaks. Tighten as necessary.
- 12. Test the flushing timer for proper operation.
  - A. Press and release the MANUAL button.
  - B. Wait 10 to 30 seconds\* until the flushing noise stops, indicating that the flushing cycle is complete.

\*The number of seconds will vary depending on how the unit is programmed. (See "Reprogramming Instructions" below.)

**NOTE:** To drain the humidifier for cleaning or service, refer to maintenance instructions in the humidifier owner's manual, then follow procedures in Step 12 above.

#### REPROGRAMMING INSTRUCTIONS

As previously stated, the flushing timer is set at the factory to flush the humidifier every two hours for a duration of 10 seconds, using approximately 1.5 gallons of water per day. Although the two-hour intervals between flushes may not be altered, the duration may be lengthened to either 20 or 30 seconds per flush.

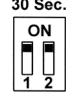
### To Reprogram the Flushing Duration, Follow these Steps:

- 1. Unplug the flushing timer from the electrical outlet.
- 2. Take off the back cover plate by removing the three screws closest to the mounting flanges.
- Inside, on the circuit board, locate the red switch block with contains two switches, numbered 1 and 2.

NOTE: The switches are pre-set in the 10-second mode, with the #1 switch in the ON position and the #2 switch in the OFF position, as shown at right. (Both switches in the ON position will also produce a 10-second flush.)

20 Sec.

- 4. To reprogram the flushing timer to 20second flushes every two hours, move the #1 switch to the OFF position and the #2 switch to the ON position, as shown at left. In this mode, the automatic flushing timer will use approximately 3 gallons of water per day.
- 5. To reprogram the flushing timer to 30second flushes every two hours, move both switches to the OFF position, as shown at right. In this mode, the automatic flushing timer will use approximately 4.5 gallons of water per day.



10 Sec.

ON

- 6. Reposition the back cover plate on the flushing timer and secure it with the three screws.
- 7. Plug the flushing timer back into the wall outlet. Make sure it is functioning properly with the humidifier. (See Step #12 above.)

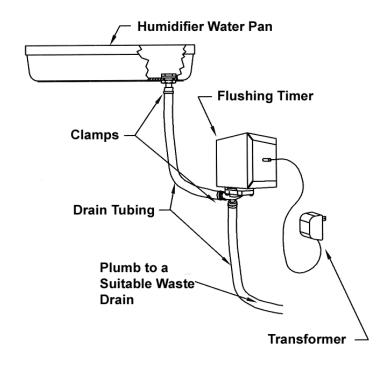
**NOTE:** Lengthening the flushing duration will help keep the humidifier cleaner. However, it may also cause undesirable drain noise.

See back for Flushing Timer Installation on Reservoir Humidifiers

### To Install the Flushing Timer on MOST Reservoir Humidifiers:

**CAUTION:** All plumbing and electrical connections must comply with local codes and ordinances.

<u>FIGURE 2</u>: Installation of the Programmable Flushing Timer on a Reservoir, Plenum-Mount Humidifier



- 1. If the humidifier has been pre-installed and needs servicing, refer to the humidifier operating manual for instructions.
- 2. For a new or pre-installed humidifier, select a suitable mounting location for the flushing timer within 3 feet (0.91 meters) of the humidifier, and within 10 feet (3.05 meters) of a properly fused electrical outlet.
- 3. Locate a suitable waste drain for disposal of flushed water.

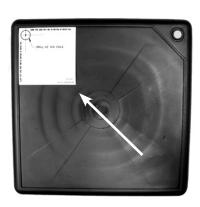
**CAUTION:** Drain tubing must not kink or come in contact with sharp edges or hot surfaces. Tubing must run in a continual downhill slope to allow proper drainage and to prevent overflow.

Attach the flushing timer drilling template to an appropriate corner of the water pan (see Figures 3 and 4 below). Drill a 1/2 in. (1.27 cm) diameter hole, as indicated on the template.

### FIGURE 3: Right-hand Installation

For units with the water valve entering the right-hand side of the humidifier cabinet, attach the flushing timer template on the right-hand side of the water pan's drain fitting, as shown.



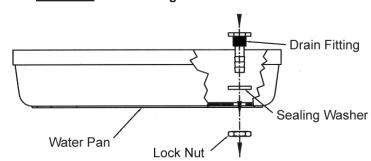


#### FIGURE 4: Left-hand Installation

For units with the water valve entering the left-hand side of the humidifier cabinet, attach the flushing timer template on the left-hand side of the water pan's drain fitting, as shown.

5. Attach drain fittings as shown in **Figure 5** below.

#### FIGURE 5: Drain Fittings Attachment



- 6. Screw the unit to the mounting surface selected in Step #2.
- 7. Cut a piece of drain tubing to reach from the humidifier fitting to the fitting on the side of the flushing timer.

<u>CAUTION</u>: Drain tubing must not kink or come in contact with sharp edges or hot surfaces. (Caution applies to #8, as well.)

- 8. Cut a second piece of tubing to reach from the bottom fitting on the flushing timer to the drain. (See Step #3.)
- 9. Connect tubing with clamps or fittings suitable for your installation.
- 10. Refer to the humidifier operating manual to return the humidifier to its normal operating mode and adjust the water level.
- 11. Plug the flushing timer into the designated outlet (see Step #2).
- 12. Check all fittings for leaks. Tighten as necessary.
- 13. Test the flushing timer for proper operation.
  - A. Press and release the MANUAL button.
  - B. Wait 10 to 30 seconds\* until the flushing noise stops, indicating that the flushing cycle is complete.

\*The number of seconds will vary depending on how the unit is programmed. (See "Reprogramming Instructions" on front.)

**NOTE:** To drain the humidifier for cleaning or service, refer to the maintenance instructions in the humidifier owner's manual, then follow procedures in Step 13 above.

## **IMPORTANT:** Some reservoir models require additional fittings. THESE MUST BE BRASS OR STAINLESS STEEL.

1. Follow the previous instructions for reservoir humidifiers, except, rather than using a drilling template, you will need to determine an appropriate location for the 1/2 in. (1.27 cm) diameter hole to be drilled into the humidifier water pan, based on the design of the humidifier.

**CAUTION:** The drill hole must not interfere with moving parts or operation of the humidifier.

2. If necessary, use a 1 in. (2.54 cm) diameter hole saw to create an exit hole for the water pan drain fitting in the humidifier cabinet.