

Installation Manual

FM-094 FM-094-1 FM-094-2

Operation and Installation Instructions for FloodMaster Water Heater Leak Detection Alarm/Shutoff System – Model FM-094 Series

System Overview:

The FM-094 line of Feed Water (Water Heater) Leak Detection Alarm/Shutoff Systems is designed to sound an audible alarm and shut down the water feed line when the sensor puck comes in contact with conductive liquid (such as water). The unit requires an 110VAC wall outlet for power. In the event the alarm activates, locate the source of the leak, remove the sensor puck from the water and dry the metal contacts at the bottom of the sensor puck. Correct the problem causing



the leak and replace the sensor puck in the desired leak detection location once again as required. Press and release the red reset button on the alarm box to open the valve and begin the flow of water again. The green power ON/OFF indicator light on the alarm box will flash once to confirm the reset. All units provide an optional connection to a home security alarm system or control panel. Additional sensor pucks can be added to the system where a wider area of leak detection is required.

Installation Instructions:

- 1. Turn off the water supply to the hot water heater.
- 2. As appropriate, either solder (FM-094) or thread (FM-094-1; -2) the valve body into the feed water line after the manual shut-off valve, with arrow pointing towards the tank. For threaded installations, apply pipe sealant or Teflon® tape to the NPT threads and tighten. For solder installations, be careful not to get any flux or solder residue inside of the valve body.
- 3. Install valve stem assembly into valve body. Tighten with a box wrench. Do not over-tighten.
- 4. Install power head and hand-tighten knurled nut.
- 5. Open water supply valve and inspect for leaks.
- 6. Place sensor puck on the floor or in the pan near the pressure relief valve drain tube.
- 7. Secure excess sensor puck cable to the drain tube using the supplied tie wraps.
- 8. If the unit is used without a pan, it is recommended that a continuous bead of silicone be laid on the floor that encircles the hot water heater and sensor. This will help direct water flow towards sensor.
- 9. Plug the power cord into 110VAC wall outlet; the green power ON/OFF indicator light on the alarm box will turn on.
- 10. Function Test the system as follows:
 - a. Place sensor on a wet paper towel.
 - b. The alarm will sound and the valve will rotate (30 sec.) to the closed position.
 - c. Once the valve has completely closed, (30 sec.), open a hot water faucet and inspect for the absence of water flow. There should be no flow.
 - d. Remove the sensor puck from the paper towel, dry the contact points and place the sensor puck back in the desired leak detection location on the floor.
 - e. Press and release the red reset button on the alarm box. The green power ON/OFF indicator light will flash once to indicate the reset has occurred.
 - f. Open a hot water faucet and inspect for water flow.

Maintenance:

Exercise (press and release) the reset button on the alarm box annually to ensure correct operation and to maintain product warranty status.

Optional Feature and Connections:

Additional Sensor Pucks – For applications where a wider area of leak detection coverage is desired, additional sensor pucks can be added to the system. Wire additional sensor pucks to the terminal strip along the side of the alarm box, following the same wiring pattern of the original puck. Additional sensor pucks are sold separately; custom lengths are available.

Security Alarm Connection – Use for applications where connection to a home security system or control panel is desired. This dry contact relay signal can be wired per your application requirements as follows:

Red/White - Normally Closed Circuit Black/White - Normally Open Circuit



