

## INSTALLATION

### When Installing This Product...

1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
2. Check the ratings given in the instructions and on the product to make sure the product is suitable for your application.
3. Installer must be a trained, experienced service technician.
4. After installation is complete, check out product operation as provided in these instructions.

## ⚠ WARNING

### Electrical Shock Hazard.

**Can cause serious injury, death or equipment damage.**

Disconnect power supply before installation to prevent electrical shock or equipment damage.

NOTE: These devices can be installed in any position. Proper location, sizing and threaded boiler tapping are required.

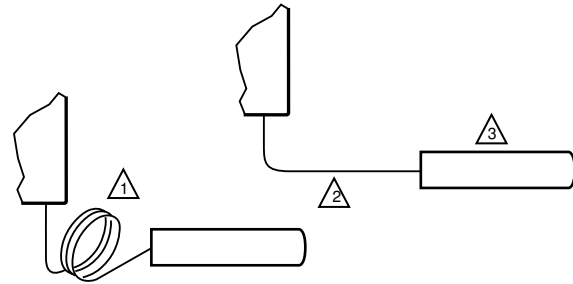
1. Maximum pressure rating for these models is 200 psi (1380 kPa)
2. Maximum permissible ambient temperature as sensing bulb is 265°F (130°C); at switches, 150°F (66°C).
3. The L6081C is without enclosure or well assembly.

## Mounting

Follow instructions provided by system manufacturer, if available. Otherwise, proceed as follows:

1. Drain the boiler if the system is filled with water.
2. Place the front of the controller down on a horizontal surface and gently raise the sensing bulb until it is at a right angle with the back of the case and centered with the large hole in the case. This requires bending the capillary tube, but be sure to make no sharp bends and no bends near the bulb.

NOTE: Some models have an adjustable tubing length to 3 in. (76 mm). In these models, extra tubing inside the case can be pulled out, if needed. See Fig. 3.



⚠ **CAUTION:**  
EXCESSIVE HANDLING OR SHARP BENDS  
CAN DAMAGE THE CAPILLARY.

1. SENSING ELEMENT IS FACTORY FORMED FOR 1.5 IN. INSULATION WELL ASSEMBLIES.
2. FOR 3 IN. INSULATION WELL ASSEMBLIES, PULL OUT SUFFICIENT CAPILLARY TO ASSURE THAT THE CAPSULE BOTTOMS IN THE WELL.
3. STRAIGHTEN CAPILLARY SUFFICIENTLY SO IT DOES NOT INTERFERE WITH INSERTION OF THE CAPSULE INTO THE WELL. M8882

**Fig. 3. Adjusting the capillary length.**

3. Adjust the position of the bulb so that the bulb projects 4-7/8 in. (124 mm) from the back of the case for immersion well designed for 1-1/2 in. (38 mm) insulation; or 6-3/8 in. (162 mm), if designed for 3 in. (76 mm) insulation. If this requires bending the tube inside the case, insert the end of your index finger through the hole and carefully mold the tube into the correct shape as you gently pull (or push) the bulb to the correct position. The bulb must project the right distance so that after the case is installed, the spring force of the capillary tube holds the bulb against the inner end of the well for good thermal contact. The tube must be straight for at least 3/8 in. (10 mm) inside the case so the end of the well spud does not strike the coiled tube and pull the bulb away from contact with the inner end of the well.
4. Remove the plug from a properly located boiler tapping.
5. Apply pipe dope sparingly to the threads of the well, then screw the well tightly into the boiler tapping.
6. Fill the system with water, then carefully examine around the threads for leakage. Tighten the well if necessary to stop any leakage.
7. Loosen the wallclamp screw three or four turns., move the screw in and out and not how it moves the well clamp. See Fig. 4. Loosen the screw enough so that when the screw is pushed inward, the T-shaped clamp guide is at the far end of the slot in the case.
8. Mount the case on the well spud in any position that facilitates wiring. With the case in final position, carefully insert the sensing bulb into the well until the case slips over the end of the well spud and fits squarely against the shoulder of the spud.

NOTE: Open the clamp to receive the spud by pushing in the well clamp screw.

9. While holding the case in the correct position, firmly tighten the well clamp screw.