



**TEL-TRU®**  
**MANUFACTURING CO.**

*World-Class Instruments*

Thermometers • Pressure Gauges • Transmitters • Accessories

## **INSTRUCTIONS FOR THE INSTALLATION AND USE OF GAS ACTUATED THERMOMETERS**

### **INSTALLATION OF THERMOMETER:**

Mount the case of the thermometer at a location where it can be read conveniently. The maximum case temperature should not exceed 160°F (70°C). Do not expose line to extreme temperatures, such as alongside steam pipes, ovens or other heated surfaces.

The minimum line radius is 1 inch. Place it so that it will be protected from damage. Should the line be too long, coil the surplus neatly at a convenient point but **DO NOT CUT IT.**

Do not cut or take apart thermometer system (Bourdon spring, line, and bulb) for any reason.

**INSTALLATION OF BULB IN THERMOWELL:** *(Note: Requires well with 3/8" bore; adapters are available to permit installation in larger bore wells.)*

1. Install well.
2. Assemble union connection to bulb, finger tighten.
3. Apply heat-conducting medium to bulb of thermometer (50/50 mix of glycerin and graphite, or Vaseline.)
4. Insert bulb into well and hold against bottom of well.
5. Assemble union connection to well.
6. Tighten jam nut to union to lock bulb in position, normal tightening is  $\frac{3}{4}$  to 1 from finger tight.
7. Where service temperatures exceed 350°F (177°C) the heat-conducting medium may smoke when first subjected to a high temperature. This is caused when the vehicle in the heat conducting medium vaporizes and leaves dry solids behind. This should not be cause for alarm. The dry solids will act equally well as a heat conducting medium for temperatures up to 1200°F (650°C).

### **TESTING:**

Every TEL-TRU thermometer is carefully calibrated at the factory and under normal operating conditions it will remain accurate. If it is necessary to test the thermometer the following procedure should be used: Immerse the entire sensitive part of the bulb side by side with a test thermometer of known accuracy in a liquid bath that is being stirred vigorously and in which the temperature is maintained constant for several minutes before readings are taken.

Never attempt to test thermometers in air. Air is a poor conductor of heat and there is always the danger of cold currents influencing the thermometer reading.

### **TO CHANGE THE INDICATED TEMPERATURE READING:**

1. Remove the window.
2. Hold the hub of the pointer stationary. Use a slotted screwdriver.
3. Hold pointer in other hand between thumb and forefinger so that torque can be applied to move pointer.
4. Establish reference temperature and rotate pointer required amount for most accurate reading.
5. Replace the window.

### **Tel-Tru Manufacturing Company**

408 Saint Paul Street, Rochester, New York 14605 • PO Box 30144, Rochester, New York 14603-3144  
Phone: 585.232.1440 • 800.232.5335 • Fax: 585.232.3857 • Email: [info@teltru.com](mailto:info@teltru.com) • Web: [www.teltru.com](http://www.teltru.com)