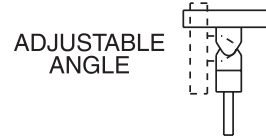
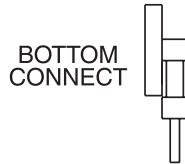




**BIMETAL INDUSTRIAL THERMOMETERS**  
 Operating and Calibrating Instructions



**CALIBRATING INSTRUCTIONS:**

- A master thermometer with a high degree of accuracy should be used for calibrating.
- Place thermometer to be calibrated alongside a master thermometer. Immerse both thermometers into an agitated liquid for at least 3 minutes. Compare temperatures. **IMPORTANT--**For accurate reading thermometer must be immersed PAST GROOVE on lower portion of stem. Master thermometer should also be immersed to same depth.

**NOTE:** "Recal" models can be calibrated by using the external reset feature as shown in Figures A, B, and C below.

**GENERAL INFORMATION:**

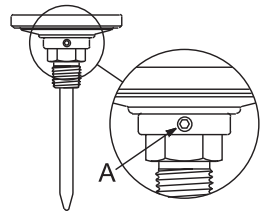
- Accuracy is  $\pm 1\%$  full span per ASME B40.3 Grade A. Adjustment of the angle between case and stem may affect accuracy up to 0.5% of span (ASME B40.3).
- Over temperature limits - up to 250°F 100%; 250°F to 550°F, 50%; 550°F to 1000°F, continuous use up to 800°F, intermittent use over 800°F.
- For accurate reading thermometer must be immersed PAST GROOVE on lower portion of stem.

**CAUTION:**

- Any severe shock to the thermometer dropping, bending of the stem or head, etc., can possibly impair its accuracy.
- When installing thermometer into threaded connection, always tighten with wrench on hex nut. **NEVER** use the head of the thermometer for tightening--**SEVERE DAMAGE** to thermometer will result.

**CALIBRATING 2" BACK CONNECTED MODEL**

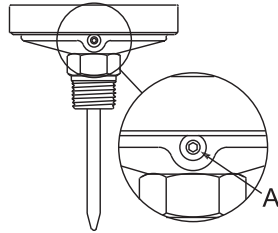
Figure A



- 1) Using a 5/64" hex key, loosen socket head screw (A) just above hex nut, 1/2 to 1 turn
- 2) Place wrench on hex connecting nut beneath head. Hold head and turn until pointer is at exact temperature
- 3) Tighten socket head screw
- 4) Remove hex key

**CALIBRATING 3, 4, AND 5" BACK CONNECTED AND ADJUSTABLE ANGLE MODELS**

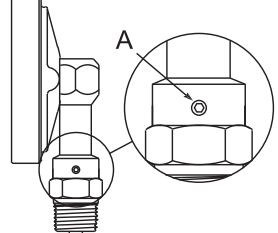
Figure B



- 1) Using a 1/16" hex key, insert into RESET opening (A) and turn until pointer is at exact temperature
- 2) Remove hex key

**CALIBRATING 3, 4, AND 5" BOTTOM CONNECTED MODELS**

Figure C



- 1) Using a 3/32" hex key, loosen 2 socket head screws (A) just above hex nut, 1/2 to 1 turn
- 2) Place wrench on hex connecting nut beneath head. Hold head and turn until pointer is at exact temperature
- 3) Tighten socket head screw
- 4) Remove hex key

**Tel-Tru Manufacturing Company**

408 St. Paul Street, Rochester, New York 14605 USA

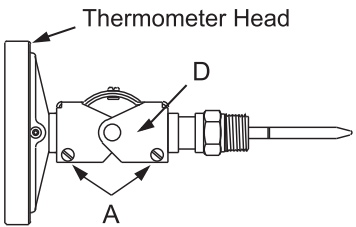
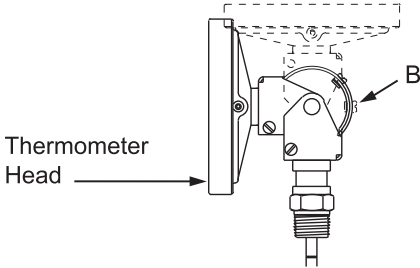
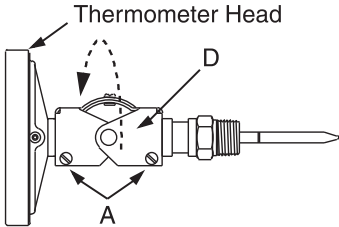
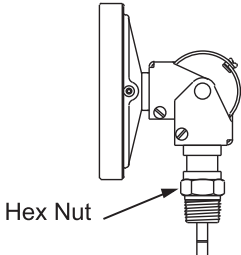
Phone: 585.232.1440 • 800.232.5335 • Fax: 585.232.3857 • E-mail: info@teltru.com • Web: www.teltru.com



**BIMETAL INDUSTRIAL THERMOMETERS**  
 Operating and Calibrating Instructions

**INSTRUCTIONS FOR REPOSITIONING AND INSTALLING ADJUSTABLE ANGLE THERMOMETERS**

Thermometer head orientation can be adjusted by rotating the harness assembly up to 360°.

<p><b>Figure 1</b></p>  <p>Thermometer head orientation can be adjusted <b>ONLY</b> when in the straight, back-connected position as shown in Figure 1. Loosen two screws (A) until harness (D) revolves freely.</p>	<p><b>Figure 3</b></p>  <p>To tilt thermometer head up to 90° angle, loosen single screw (B) 1/2 turn <b>ONLY</b>. Tilt to desired angle and tighten screw (B) as shown in Figure 3.</p>
<p><b>Figure 2</b></p>  <p>Hold thermometer head and harness (D), rotate harness to desired position as shown in Figure 2. Tighten two screws (A) until harness (D) is secure.</p>	<p><b>Figure 4</b></p>  <p>To install thermometer into threaded connection, always tighten with wrench on hex nut as shown in Figure 4.</p>

**CAUTION:** NEVER use head of thermometer or adjustment harness as a handle for tightening. SEVERE DAMAGE to thermometer will result.