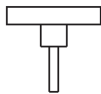




Chicago Stainless Equipment

Bi-Metal Thermometer Operating and Calibration Procedure

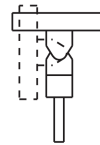
BACK
CONNECT



BOTTOM
CONNECT



ADJUSTABLE
ANGLE



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:

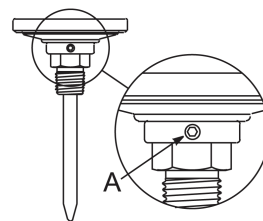
- Accuracy is $\pm 1\%$ full span per ASME B40.3 Grade A. Adjustment of the angle between case and stem may affect accuracy up to 0.5% of span (ASME B40.3).
- Over temperature limits - up to 250°F 100%; 250°F to 550°F, 50%; 550°F to 1000°F, continuous use up to 800°F, intermittent use over 800°F.
- For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

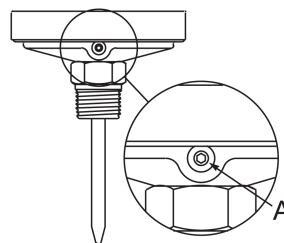
Figure A



- 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

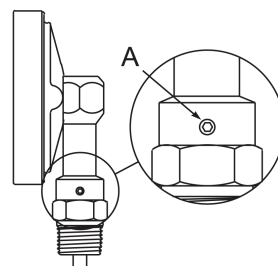
Figure B



- 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



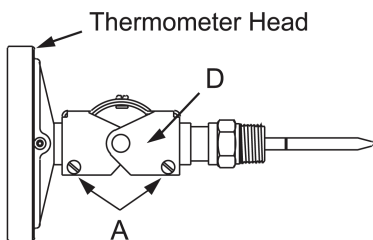
- 1) Using a 3/32" hex key, loosen 2 socket head screws (A) just above hex nut, 1/2 to 1 turn
- 2) Place wrench on hex connecting nut beneath head. Hold head and turn until pointer is at exact temperature
- 3) Tighten socket head screw
- 4) Remove hex key



INSTRUCTIONS FOR REPOSITIONING AND INSTALLING ADJUSTABLE ANGLE THERMOMETERS

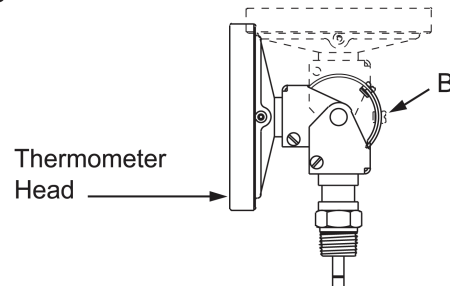
Thermometer head orientation can be adjusted by rotating the harness assembly up to 360°.

Figure 1



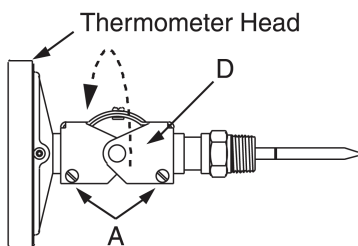
Thermometer head orientation can be adjusted **ONLY** when in the straight, back-connected position as shown in Figure 1. Loosen two screws (A) until harness (D) revolves freely.

Figure 3



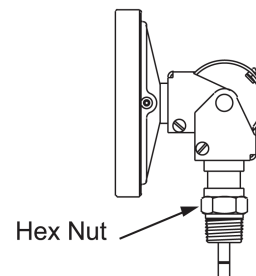
To tilt thermometer head up to 90° angle, loosen single screw (B) 1/2 turn **ONLY**. Tilt to desired angle and tighten screw (B) as shown in Figure 3.

Figure 2



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.

Figure 4



To install thermometer into threaded connection, always tighten with wrench on hex nut as shown in Figure 4.

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