



## OPERATING INSTRUCTIONS FOR CLIP-ON BAND TENSION METER

### ***MODEL BTM-SERIES***

**ALL METERS ARE SHIPPED CALIBRATED AND READY FOR USE.**

Arrests are provided at 1-1/2 revolutions to avoid overstraining.

To change calibration for materials of different thickness or stiffness, use the following **CALIBRATION PROCEDURE:**

Suspend a length of your new calibration material from overhead. Hang a weight one half of your instrument's full range on this material. Adjust the BTM so that the suspended weight value is indicated on the instrument dial.

First, hold the BTM tension meter so that the dial indicates 0 in the attitude that the instrument will be used/tested in. Loosen bezel lock-screw. Turn dial/bezel to zero setting. Retighten lock-screw.



Engage the instrument onto the tensioned material. Slide the instrument up and down on the material, being sure to hold the handle completely down. The pointer should straddle the suspended weight value on the dial. For example, if a 100 lb weight is suspended on your material the instrument should indicate 100. If it is not on 100, note the setting. Remove the meter from the material. If the reading is less than 100, the calibrating ramp will have to be rotated a slight amount in the counterclockwise direction. If more than 100, rotate in the clockwise direction.

To rotate calibrating ramp, slightly loosen the 6-32 clamping screw on top of the indicator sensing block. (The indicator sensing block is between the back plate and the indicator

clamp.) Note how much the pointer moves as you rotate the calibrating ramp. It should move slightly -- about 5 lb at a time. Retighten clamping screw.

Reset dial/bezel to zero setting. If necessary, readjust as outlined above.

To reposition the pointer after calibrating ramp is reset, rotate the dial/bezel to top center of the indicator. Then loosen the four 8-32 cap screws fastening the indicator plate. Move plate and indicator until pointer straddles 0 / Maximum reading on the dial.

Retighten all four cap screws. Recheck readings.

### **ACCURACY CHECK ONLY:**

Check at 1/4, 1/2, 3/4, and 100% of your meter range. If adjustments are necessary, either following the above calibration instructions or return the instrument to Tensitron, Inc. for service and repair.

### **TO COMPENSATE FOR VERTICAL OR HORIZONTAL POSITION:**

Hold instrument in position to be used. Loosen bezel lock-screw. Turn dial to zero setting. Retighten lock-screw. **AVOID PUTTING THUMB ON THE INDICATOR SENSING BLOCK.**

### **CARE AND MAINTENANCE:**

Do not apply pressure to indicator sensing block. Keep clean and free of dust.

If handle becomes stiff, apply a slight drop of oil or grease on point of contact.

### **DO NOT OIL DIAL INDICATOR OR ROLLER BEARINGS.**

#### **If service is required, return to:**

Tensitron, Inc.  
733 South Bowen Street  
Longmont, CO 80501

Tel: (303) 702-1980  
Fax: (303) 702-1982  
E-Mail: [repairs@tensitron.com](mailto:repairs@tensitron.com)