



Atlanta Wire

1117 Battle Creek Rd., Jonesboro, GA 30236-2497
(404) 471-0660

JOHNSON TENSOMETER

OPERATION AND MAINTENANCE INSTRUCTIONS

The Johnson High Precision Tensometer accurately reports direct fabric tension in pounds per lineal inch (pli). It should not be used on press felts.

Field Use:

It is recommended that the instrument be exposed to the machine area ambient temperature before it is used. The Tensometer is normally used on the return run between two non-driven rolls, as far away from the edge of the fabric as possible. It should be held firmly against the fabric, applying a vertical pressure sufficient to assure the full contact of the Tensometer base with the fabric. The dial needle will move rapidly up to a point and then slowly as the pressure increases. The first steady pressure recorded is the proper reading. Press the "lock button" located on the back of the instrument to hold the needle in position.

NEEDLE "ZERO" SETTING

Verify if the indicator needle is at zero, reset if necessary and check readings with calibration bar (see sketch). The needle can be reset at zero by adjusting the numerical face of the indicator. It is important to retighten the knurled ring after adjustment to keep out moisture.

The Tensometer should be held vertically avoiding any contact with the cantilever during the setting. If the instrument is to be used in another position than vertical, it should be held in that position for proper setting.

CALIBRATION

Each instrument is calibrated and the specific value is marked on the calibration bar supplied with the instrument. After the needle has been set at zero, place the Tensometer on the bar in such a way that the cantilever rests with its entire width into the recess of the bar (see sketch). Finger pressure on the handle should give the desired reading. Ensure that the surface is clean and there is no debris or high spots on the instrument base. If the calibration reading cannot be attained within ± 1 pli, the instrument should be checked to see that no pulp has lodged between the dial gauge tip and the skid. If this does not correct the problem, the instrument should be returned for recalibration.



JWI Group

Atlanta Wire

Johnson Tensometer

Page 2

INDICATOR NEEDLE STICKING OR FROZEN

When the indicator needle in the dial gauge appears to stick at some position or will not move when pressure is applied to the cantilever, this is usually due to seizing of the central stem of the dial gauge in the split collar region of the handle. This problem will necessitate repair of the dial gauge. Sometimes, however, if the knurled rings of the dial are too tight, the needle could be jammed against the outer face. To check that this is not the reason for sticking, simply loosen the knurled rings and activate the cantilever by hand.

Seizure of the central stem can be avoided if care is taken not to jolt the body of the dial gauge when setting the instrument down or using it on a machine.

STORAGE

The Tensometer should be cleaned after use and kept in its case for maximum protection against possible damage.

