

DIAL TEST INDICATOR CALIBRATION PROCEDURES # 6

ENVIRONMENT:

The inspection, calibration environment must be relatively dust free. Clean the surrounding inspection area with Citri-clean.

A. INSPECTION

1. Visual Inspection
 - a. Inspect the crystal for readability, nicks and general appearance.
 - b. Inspect the Bezel for cracks.
 - c. Inspect the Spindle for straightness.
 - d. Inspect the Spindle Point for wear, chips and indentations.
2. Inspect the function of the test indicator.
 - a. Rotate the Bezel – inspect for smoothness of movement and sloppiness.
 - b. Move the Spindle Point through the instruments full range – inspect for smoothness of movement, sticking and the jumping of the needle.

B. CALIBRATION

1. Clean the Granite Surface Plate with a clean, damp, lint free cloth.
2. Use an alcohol based cleaner for removing the storing oil from the Ring Gauge and Precision Feeler Gauges.
3. Mount the Test Indicator on the Surface Plate so the Spindle is at a 15 – 30 degree angle from the horizontal plane of the Setting Ring.
4. Set the dial on the Test Indicator so the zero is pointing straight up or vertical.
5. Adjust the height of the instrument so the needle is also at zero or vertical.
6. Due to the individual range characteristics of each Test Indicator the thickness of Feeler Gauges will vary for each instrument. In order to record an accurate finding a minimum of four tests must be performed.
7. Insert the .005" Feeler Gauge between the surface of the Setting Ring and pointer. The reading on the dial should be .005". Record the finding on the Inspection Report.
8. Repeat step #7 with the .010", .015", and .020" Feeler Gauges. Record findings on the Inspection Report.
9. Apply storing oil to the Feeler Gauges and Setting Ring and return to the toolbox.

Periodically clean the point and inspection tools when calibrating. If at anytime standards are not being met, check the set up of the instrument and cleanliness of the tools.