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X180-STC Segment External Thread Gage

Set-up and Usage procedure:

1. Place the appropriate size segments on the gage frame with the writing facing outward on both segments and install the axis pin screws to hold the segments on the frame. Do NOT tighten the tightly on the segments. Tighten the screws close to the segment’s surface, but allow the segments to still rotate.

2. Loosen the set screw that locks the stop screw on the side of the frame into place so the stop screw can be toward and away from the lower thread segments.

3. Adjust the stop screw until the segments appear to be aligned with one another and tighten the axis screw on the lower segment to keep it in a stationary position. (Once the stop screw is properly set for one set of segments it will probably not need adjusting for other segments.)
4. Depress the upper arm lever to raise the upper segment. Tighten the axis screw in the upper segment and then back off just enough so the segments can move freely.

5. Insert the GO plug between the segments and rotate the set plug clockwise slightly to assure the plug is completely seated in the segments.

6. Pre-set the indicator to the GO set plug size. Make sure that when the lever is pressed downward the value on the indicator increases. If the value decreases press the “ZERO” button on the indicator, then press the “+/−” button once. Press the “Pre-set” button again.
7. Press the lever downward. Remove the GO set plug and insert the NOGO set plug between the segments. Rotate the set plug slightly to assure it is seated completely between the segments and observe the indicator reading.

If the segments are in proper position and the upper segment is still free to rotate the reading on the indicator should be within +/- .0003 of the value of the NOGO set plug.

If the indicator value is not within that range then the stop screw position should be adjusted until the value is equal to the desired value. Put the GO set plug back in. Press “pre-set” and then measure the NOGO set plug again.

When the GO set plug and NOGO set plug provide the values on the set plug handle within +/- .0003” the gage is measuring accurately.