

# NECK WALL THICKNESS GAUGE INSTRUCTIONS

## SETUP:

1. Unscrew the ball knob, and remove the bullet spindle, retaining the bullet spindle spring and bullet spindle collar for installation of Neck Wall Thickness Gauge (fig. 1).
2. Select the correct caliber pilot from the chart inside and insert into the new neck sort spindle and tighten the hex head set screw using the included allen wrench (fig 1). An under-cut will be visible behind the pilot next to the neck sort spindle face (fig. 2).
3. Using the existing bullet spindle spring and collar, insert the neck sort spindle into the frame and thread on the ball knob (fig. 1).
4. Remove the .001 inch dial indicator, and replace with the new .0005 inch dial indicator (fig. 1).
5. Position the indicator cradle (fig. 1) so the end of the dial indicator spindle is touching the straight section of the pilot, but does not contact the neck sort spindle (fig. 2). Back the nylon-tipped bullet straightening screw out several turns away from the pilot, as this screw will not be used with the Neck Wall Thickness Gauge (fig. 1). Slide the dial indicator's O-ring holds to the body of the indicator to hold the indicator spindle in this position. **NOTE:** If the O-ring holds are not set then the spindle will be in the way when inserting/removing cases (fig. 3).
6. Loosen the case head spindle lock. Place cartridge case head (for best results, cases should be sized or neck sized and de-burred) in the case head spindle (fig. 1) and slide the spindle forward, guiding the case mouth onto the pilot past the undercut in the pilot but not touching the neck sort spindle face (fig. 4). Tighten the case head spindle lock (fig. 1). **NOTE:** If the case mouth touches the neck sort spindle face your reading may be inaccurate. The under-cut on the pilot is to eliminate the possibility of an inside neck

burr altering your indicator reading (fig 4).

7. The Neck Wall Thickness Gauge is now set and ready for operation. Cases can be inserted and removed by pulling the ball knob away from the tool until the pilot slides out of the case neck and then subsequently guiding the next case onto the pilot while releasing the ball knob.

## OPERATION:

Place a cartridge case in the tool and rotate the case only; the neck sort spindle **MUST** remain stationary to achieve accurate measurements. This is easily achieved by keeping the set screw that secures the pilot visible on the top of the spindle (fig. 4). Holding the head of the case tight against the case head spindle, rotate the case until the dial reads at its lowest position. Set the dial indicator to zero by loosening the dial indicator face lock and rotating the face (fig. 3), or by loosening the dial indicator lock screw and adjusting the indicator in or out (fig. 1). Once the dial is set to zero, the maximum reading as the cartridge case is rotated will be the runout of the case neck.

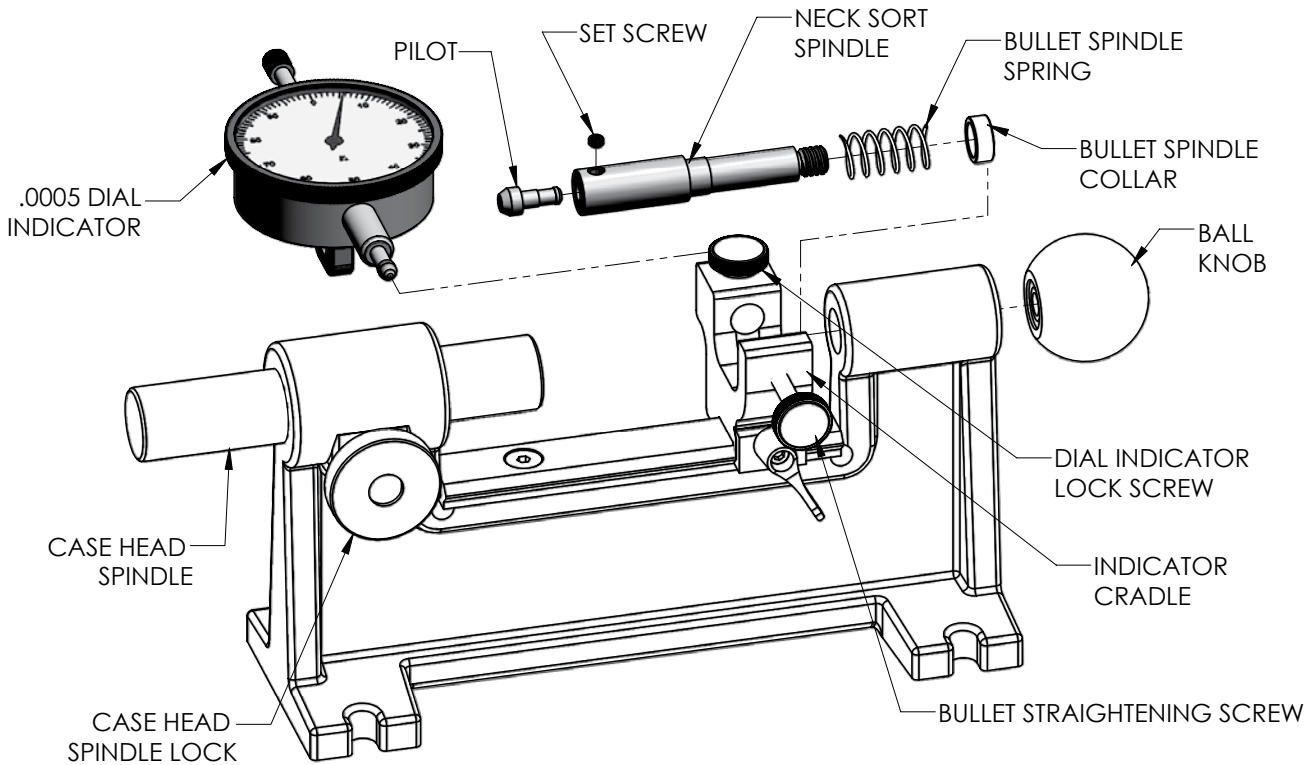
**NOTE:** If the neck sort spindle rotates with the cartridge case, hold the ball knob to prevent this; the neck sort spindle **MUST** remain stationary to achieve accurate measurements.

To measure neck wall thickness, set the tool up as outlined in Setup steps 1 through 7. Do not add a cartridge case. With the dial indicator spindle resting on the pilot, set the dial indicator to zero. Now when a case neck is measured, the indicated number will be the thickness of the neck wall itself. **NOTE:** Be sure to keep the set screw on the alignment spindle in the same position throughout the entire process to ensure accurate measurements.

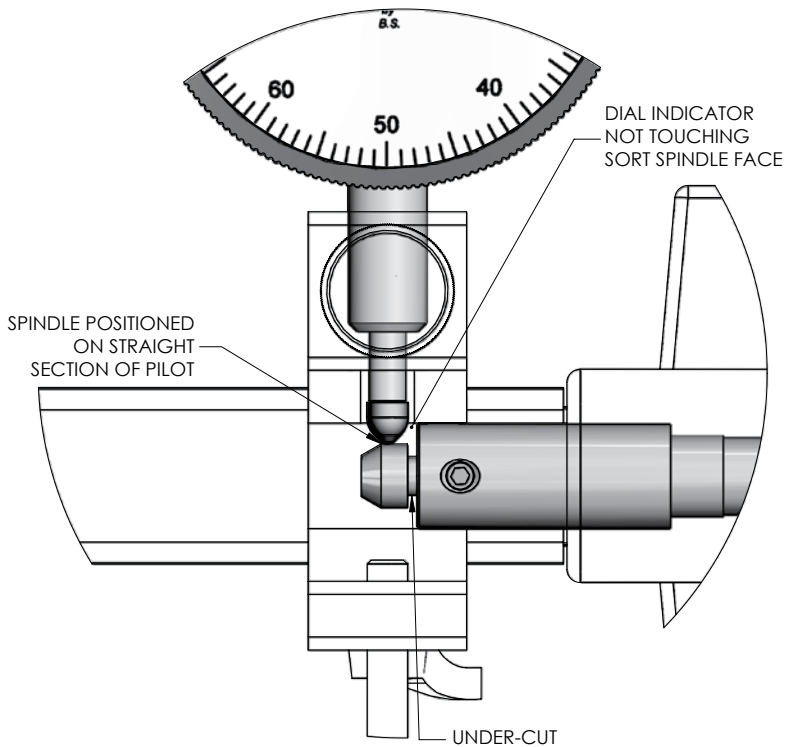
<b>Pilot No.</b>	<b>Cal. / Bullet Dia.</b>	<b>Item No.</b>
1	22 / .224	390943
3	6mm / .243	390945
4	25 / .257	390946
5	6.5mm / .264	390947
6	270 / .277	390948
7	7mm / .284	390949
9	30 / .308	390951
13	33 / .338	390955
15	35 / .358	390957
19	45 / .452	390961

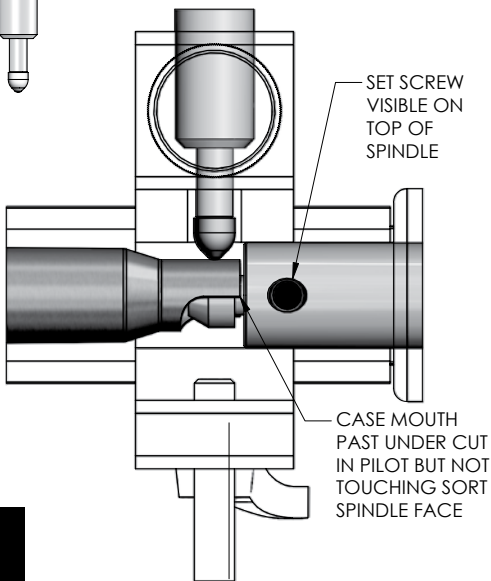
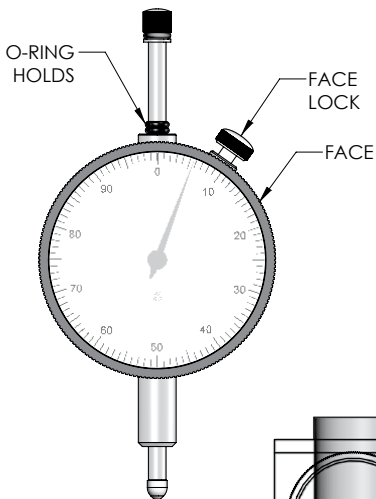
\*\*\*The Neck Wall Thickness Gauge is only designed to measure run-out and/or neck thickness. It does not have the ability to correct neck thickness variation. The Hornady Neck Turning Tool (#041222), sold separately, will allow neck thickness correction once identified.\*\*\*

**FIG. 1**



**FIG. 2**



**FIG. 3****FIG. 4**