NEIL JEPSEN’S BARREL VICE & ACTION SPANNER

The vice collets and spanner.

The vice is made from two pieces of 1.75 x 1.75” steel bar 6.5” long. (Larger would be better) The hole was bored in my lathe in the 4 jaw, and is 2” in diameter. When I bored the hole, I put a 3/16” spacer between the steel bars first, so that the hole is slightly oval, and would tighten down well on the collets. The spanner on the right is for tightening the vice nuts.

The collets (left) are made from 2” mild steel rod. Whenever I encounter a new rifle, I make a new collet, which only takes 20 minutes or so. A collection of the common ones soon arises.

The bolts are ¾ high tensile UNF bolts, 6” long. They must be kept well greased. Spanner is hole made, and I use a 6 foot length of 2” water pipe as a spanner extension to get a real tight grip on the barrel. I DO swing on it too. If I’m worried about marking the barrel, I put a copper shim between the barrel and the collets, but if the collets are clean and really tight, and don’t slip, then the rarely mark the barrel.
The action spanner is made from two pieces of 1.5 “ x 1.5” mild steel bar, 5” long. The bottom jaw turned round for different shaped actions. I also have a custom made spanner that slips over a mauser and fits the recoil lug.

The spanner bolts are ½” high tensile, 5” long. The action spanner doesn’t need to be all that tight, but it’s important not to twist light actions with magazine cutouts, so I try to always grip as far forward as possible, over the thread and recoil lug. Copper or brass shims to prevent marking are used. With a mauser for instance, the Vee fits over the round part of the action (with a copper shim), and the flat goes against the recoil lug. Again, to remove a “tight” barrel, the 6foot length of pipe comes into use.