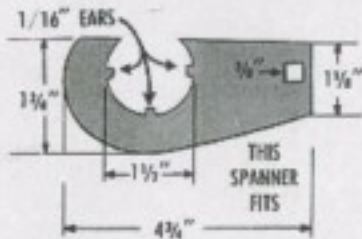
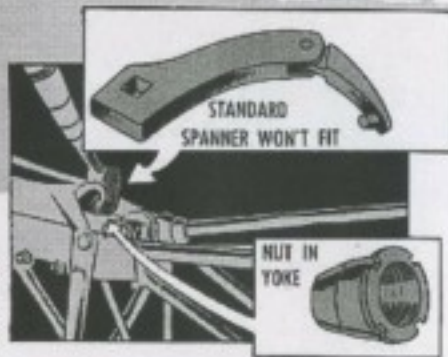
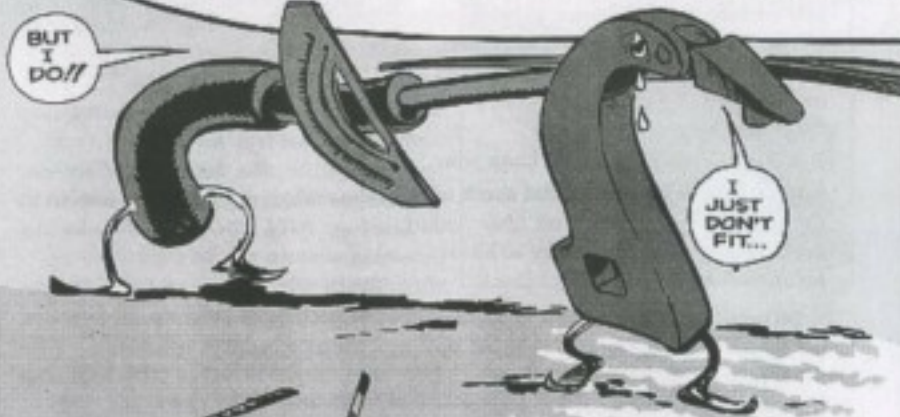


NUT A PRO



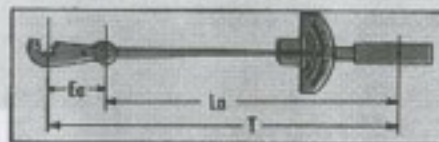
Dear Editor,

The intermediate inspection in the Sioux (OH-13) TM 55-1520-204-20 (6 Feb 62) calls for checking the 450-500 in-lb torque on the tail-rotor-drive-shaft lock-nuts, P/N 47-644-035-1, in area 3.9.

We can make the check using a standard spanner wrench on all the nuts except the one nestled in the yoke assembly. There just wasn't enough room for the spanner.

So . . . we made our own spanner wrench from 1/4-in flat cold rolled stock, using one of the nuts as a template.

BLEM?



Now, checking the recessed nut is a breeze. All we do is slip the spanner on the torque wrench, engage the nut, and take the reading.

OF COURSE, THE READING ON THE WRENCH HANDLE IS CHANGED, WITH THE SPANNER ATTACHED, SO WE USE THIS SIMPLE FORMULA TO FIGURE IT.

TORQUE READING NEEDED

$$S = \frac{T \times L_a}{L_a + E_a}$$

MEASURES 15 INCHES

EFFECTIVE LENGTH OF SPANNER . . . 4 INCHES

TORQUE APPLIED AT END OF SPANNER . . . MINIMUM 450 INCH-POUNDS

LENGTH OF TORQUE WRENCH

$$S_a, S = \frac{T \times L_a}{L_a + E_a}$$

$$S = \frac{450 \times 15}{15 + 4}$$

$$S = \frac{6750}{19}$$

$$S = 355 \text{ inch-pounds}$$



Ground Crew
4th Avn. Co.
Fort Lewis, Washington

(Ed Note—Good going. Seems like some other Sioux outfits have made up similar spanners so they can make the torque check.)