Faking A Trapezoidal Left Hand 16 X 2 Nut, Version 1.0

By R. G. Sparber

Protected by Creative Commons.¹

Ed, a good friend of mine had need of a lock nut to thread onto a shaft. How could I say no? Then I got the shaft! After much head scratching and web searching, I figured out it had to be a left handed trapezoidal metric thread with a 2 mm pitch. Looking further, the best fit was 16 mm.

Ed had tried to solve the problem. He located a left handed SAE nut that threaded on part way and jammed.

I originally planned to turn a new nut and tap it. But a TR 16X2 LH is not that common and certainly not low cost. More head scratching.

Two millimeters equals approximately 0.0787 inches. If I had an SAE thread with this pitch it would be 12.7 TPI. I took out my thread gage and sure enough, 13 TPI fit well enough for 3 threads of the shaft but by 7 it was way off. Why not remove half of the threads in the nut and see how it fits?



I put the nut in my lathe and bored in to half the thickness of the nut.



The nut spun on the shaft just fine! Ed is happy. I am happy.

Rick Sparber <u>Rgsparber.ha@gmail.com</u> Rick.Sparber.org

¹ This work is licensed under the Creative Commons Attribution 4.0 International License. To view a copy of this license, visit http://creativecommons.org/licenses/by/4.0/ or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA.