Installing the Spindle Bearing Grease Cup on an RF-30 Mill/Drill, Version 1.0

By R. G. Sparber

Protected by Creative Commons.¹



What a perfect storm. The spindle-bearing grease cup screws in upside-down and has fine threads on its perimeter. It is also greasy, making it hard to hold and turn.

After a few frustrating minutes of cross-threading, I decided there had to be a better way. I needed to set the face of the cup perpendicular to the spindle plus at a height that would let me engage the threads.

Well, I do have extremely fine control of the Z axis of the mill, plus the table is perpendicular to the spindle. That's a start.

R. G. Sparber August 1, 2022 Page 1 of 3

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.



After the usual false starts, I selected a short length of aluminum thick-walled tubing. It cleared the spindle while supporting the cup.

I placed the tubing on a 4 x 4 because it was about the right height.

I now had the cup perpendicular to the spindle.



Then I slowly fed the Z axis down until the cup was inside the end of the spindle. The trick was to get the threads close enough that I only had to turn the cup to engage the threads.

I hit it right on the second try.

Once engaged, I raised the quill and spun the cup home.

I welcome your comments and questions.

If you want me to contact you each time I publish an article, email me with "Subscribe" in the subject line. In the body of the email, please tell me if you are interested in metalworking, software plus electronics, kayaking, and/or the Lectric XP eBike so I can put you on the right distribution list.

If you are on a list and have had enough, email me "Unsubscribe" in the subject line. No hard feelings.

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