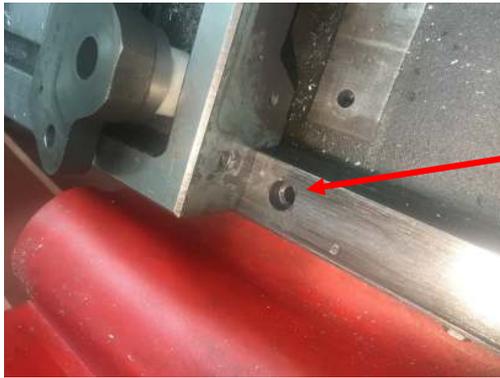


Improved Access to the Y Take Up Nut on a RF-30 Mill/Drill, Version 1.0

By R. G. Sparber

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If you want to access the Y take up nut, you must first remove the X leadscrew and slide the table far to the side. Then you can reach the mounting bolt. Over the last 7 months I have had to do this task dozens of times and it really got old².



By drilling one hole, I am able to access the Y take up nut without disturbing the X axis. This hole enables me to feed an allen wrench through the table and into the top of the Y axis take up nut's Socket Head Cap Screw.

When not needed, the hole should be plugged to prevent swarf from falling onto the X ways.

The hard part is bringing yourself to drill a hole right through the table. Goes against every fiber of responsible machining.

¹ You are free to distribute this article but not to change it.

² Precision alignment of the Y lead screw requires having access to this bolt. This will be the subject of an upcoming article.

To drill the hole, first remove the X axis bearings and leadscrew. Then slide the table out of the way. I chose to slide the table to the right. This uncovers the bolt hole.

Next set up to drill the hole through the table (yikes!). Loosen the head bolts and rotate the head towards the Y axis take up nut bolt hole. Move the apron and head until the center of rotation of the spindle is aligned with the center of the bolt. Then adjust the height of the head so that a ½ inch diameter drill can be mounted in the spindle when the table has been moved over the hole.

Lock the head. Note how far to feed in the drill such that the point just touches the bolt head. Then remove the bolt. Move the table over so the end of the table is even with the end of the ways. Lock the X and Y ways. Drill down to the previously defined depth.

Slide the table over so the hole is not blocked by the ways. Then mount the drill bit in a hand held drill and finish drilling through.

When you need to unbolt the Y take up nut, just unplug the hole and move the table to this same position. Drop the allen wrench into the hole and you are ready to go.

I welcome your comments and questions.

If you wish to be contacted each time I publish an article, email me with just "Article Alias" in the subject line.

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