

## TIP 85 — Follower rest modification to support odd-shaped stock/Russ Cupan

I had the need to face some 7/16" aluminum hex rod at a length that required the use of the follower rest (P/N 1090). The problem is that the shape of the rod doesn't allow for it to spin in the follower arms.

I came up with a plate that I mounted to the chuck side of the follower rest. The plate is 2" by 3" and 1/8" thick aluminum (See Figure 1). I used the follower rest clamped to the plate to transfer the mounting-hole locations.



Figure 1 — Shows 2" x 3" aluminum plate before mounting to the follower rest.

It is positioned so the bottom of the plate is flush with the relieved area on the bottom of the follower rest so it won't rub on the lathe bed ways (See Figure 2).

Once the plate was mounted to the follower rest, I installed it on the lathe. I put the drill I needed in the 3-jaw chuck and drilled the hole for the stock by moving the Z axis of the lathe. (See Figure 4 on the following page for a dimensional drawing and an alternate method of drilling the through-hole.)

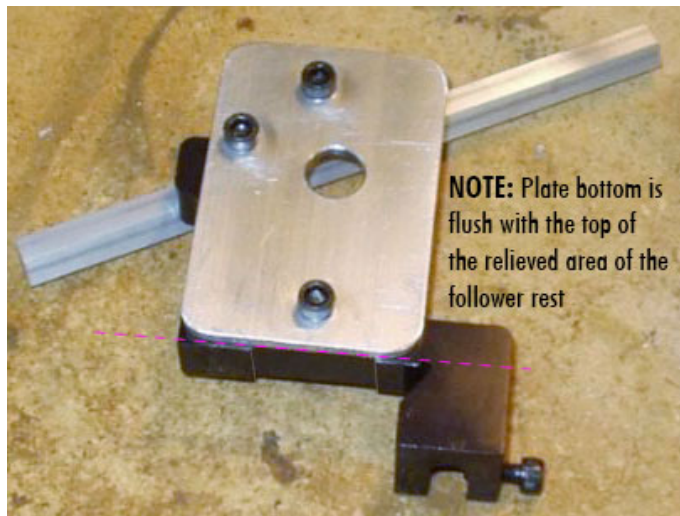


Figure 2 — The pink, dotted line shows the bottom of the plate flush with the top of the relieved area of the follower rest.

Once the hole for the stock was opened up to allow about .01" clearance, it was all set. I applied a drop of light machine oil to the stock where it passed through the plate and proceeded with the facing operation. There was some noise made when the stock spun, and I found a very small amount of marring on the points of the hex where it was located within the plate, but nothing that caused much concern (See Figure 3).

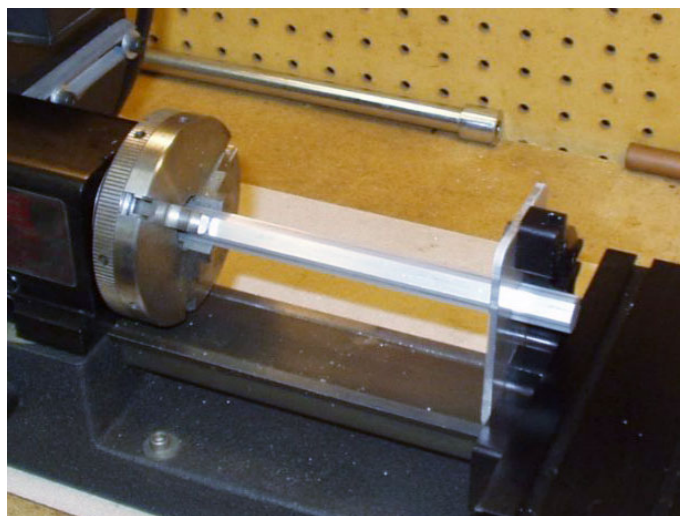


Figure 3 — Shows stock mounted in the chuck.

Continued on page 2

To find the exact center of the through hole, mount your plate to the front of the follower rest. Mount a chuck in your headstock and use a center drill to drill an under-size hole, marking the center location of

the through-hole. Then use a boring head to bore to the desired diameter to finish the through-hole.

Thank you,  
Russ Cupan

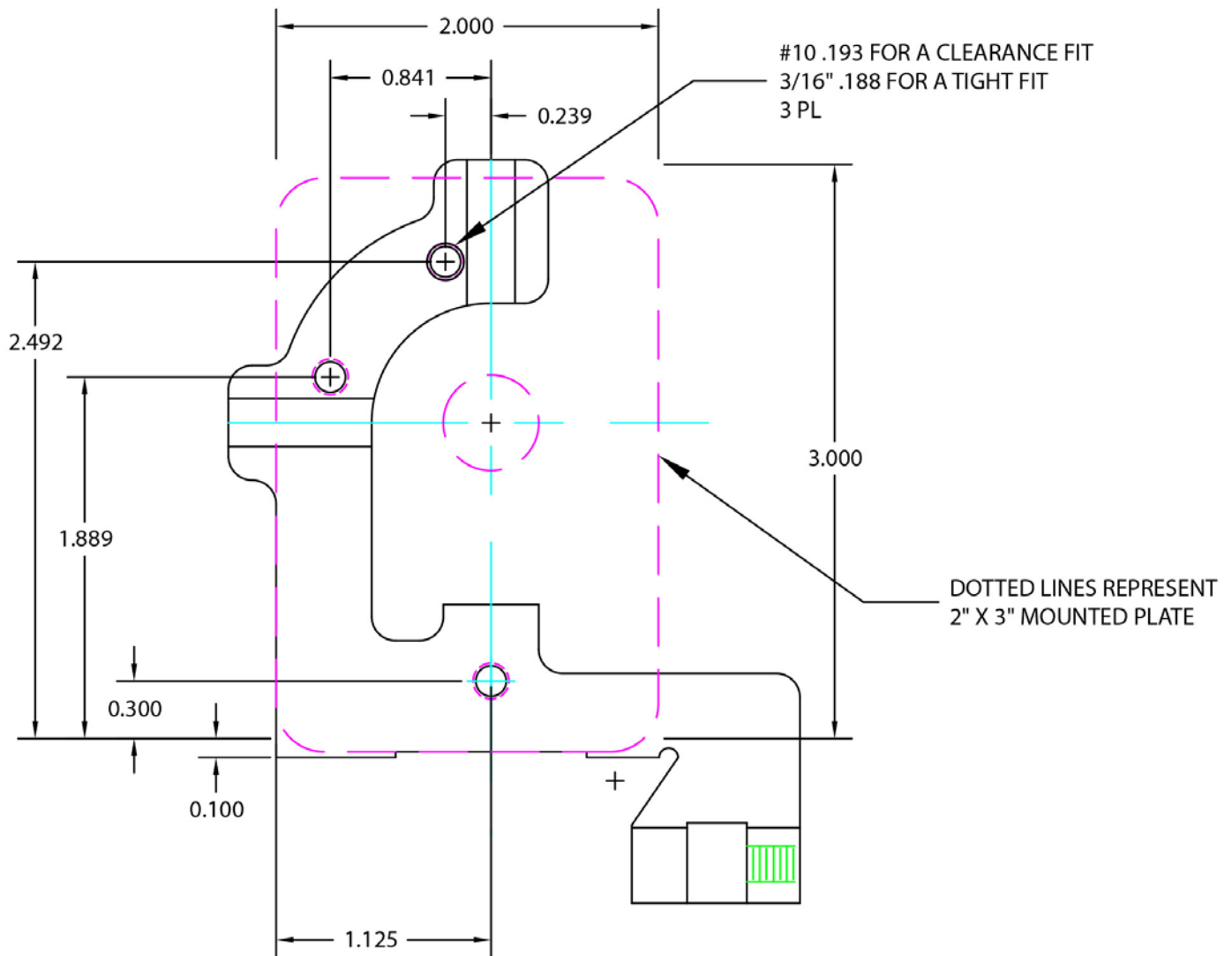


Figure 4 — The dimensional drawing shows the 2" x 3" plate (dotted pink line) mounted to the follower rest.