

# **Y AXIS TORRINGTON UPGRADE FOR EARLY SHOPTASK 17-20 XM AND XMTC**

Early model Shoptasks had no thrust bearing in the Y axis bracket, therefore it was difficult to adjust the handle for free turning without having backlash in the lead screw. It is a fairly simple task to add Torrington bearings to the bracket to allow tightening of the handle against the bearing so that there is no backlash in the screw, yet the handle turns freely.

You will need 2 12MM X 26 MM X 4 MM needle thrust bearings ( Torrington) When ordering the bearings pay attention to the bearing thickness, as different manufacturers may vary. The 4 MM dimension is the thickness, and is the dimension for the depth of your relief in the bracket.

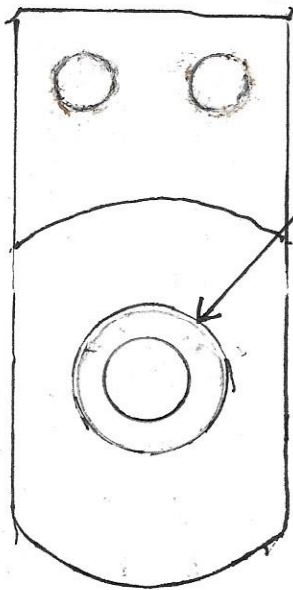
You will need to remove the bracket from the machine and either mill or turn a relief on each side for the bearing. On the rear side of the bearing you can make the relief depth the same as the bearing thickness. On the front side where the handle mounts, make the relief slightly less than the bearing thickness- about 0.010" so that the bearing race will be slightly proud of the surface. This will allow the handle to tighten up against the bearing without rubbing against the bracket.

There are 2 ways to do the modification-

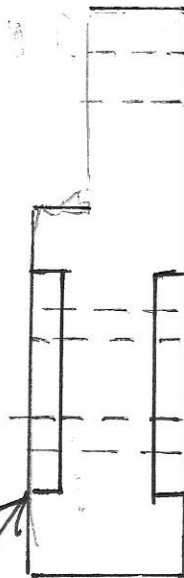
1. Use an end mill or counterbore of 26 MM diameter or more to bore the relief with your mill. The outer diameter is not critical, as the lead screw and bearing are located by the 12 MM inner diameter of the bronze bushing, you could use any tool that is slightly larger than 26 MM.

2. Chuck the bracket in a 4 jaw chuck and turn the relief on the lathe.

Obviously, you will need to use another lathe for this work since your Y axis will be non functional with the bracket removed.



BRONZE BUSHING  
20 X 12



MACHINE RELIEF  
12 X 26 X 4

MACHINE RELIEF  
12 X 26 X - 4