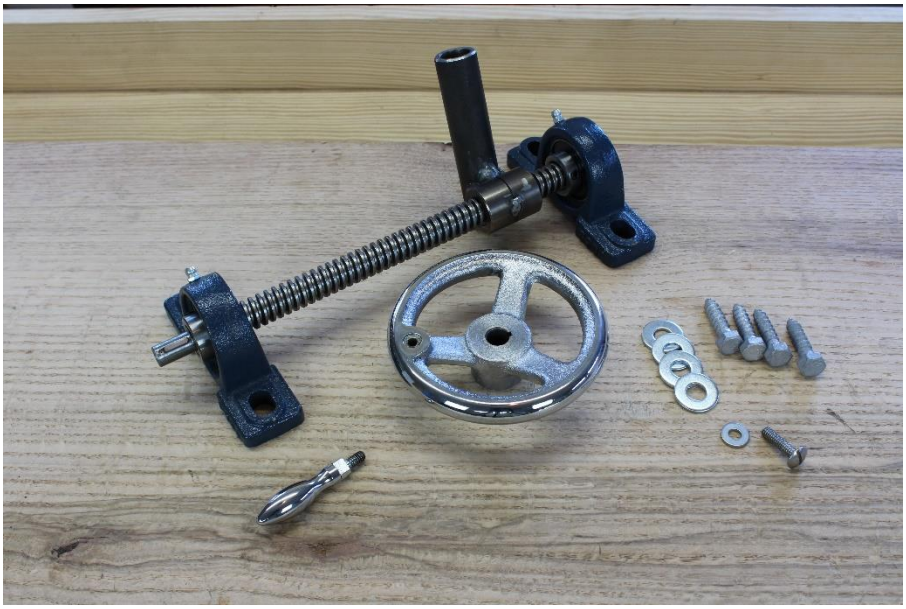
Moravian Tail Vise

Installation Instructions

Thank you for purchasing the Moravian tail vise! These vises can be mounted on most any workbench with a top thickness from 1 ½" to 6". You will also need a minimum bench overhang of 12" in length.

Assemble the vise.

1- After unboxing check to make sure all the hardware is there. You should have (4) 3/8 lag bolts, (4) 3/8 flat washers, (1) ¼" machine screw and washer, (1) hand wheel, (1) revolving handle, and (1) vise screw and bearing assembly. The washers and machine screw will be mounted to the end of the drive screw for shipping.

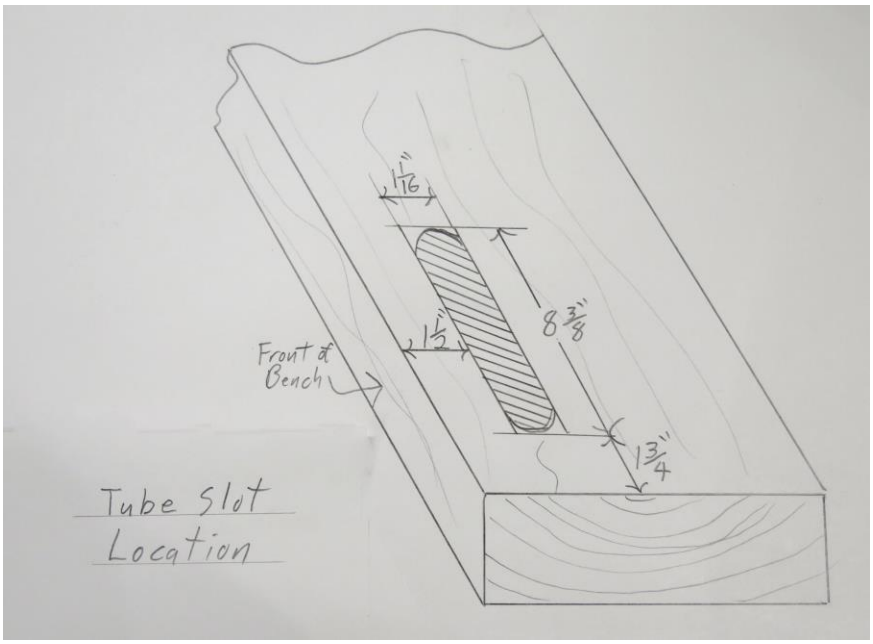


2- Assemble the revolving handle to the hand wheel by screwing it in the threaded hole in the perimeter of the hand wheel and tightening with an 8mm or 5/16 wrench.

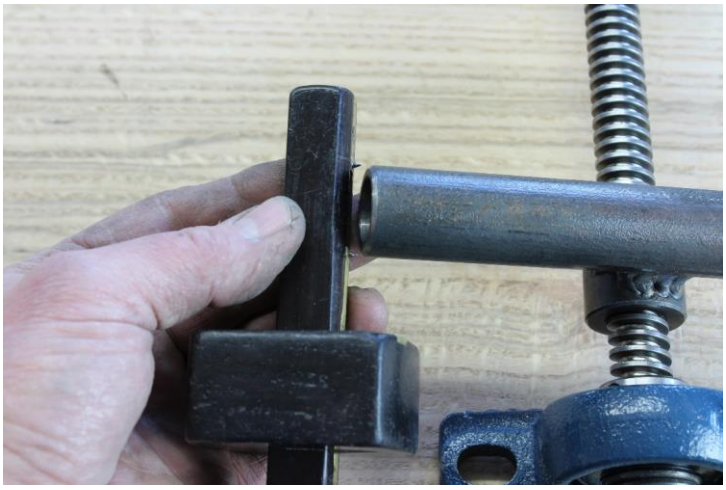
3- Mount the hand wheel to the vise screw being sure to align the key slot to the keyed shaft of the vise screw.

4- Install the machine screw and ¼”washer to the secure the hand wheel to the screw shaft.
5- The bearing housing are aligned when the vise is assembled. They could get knocked out of alignment in shipping, if so, use a small hammer to tap the bearing housing back in to aliment with the drive screw. Tap only the blue painted housing and not the bearing itself!

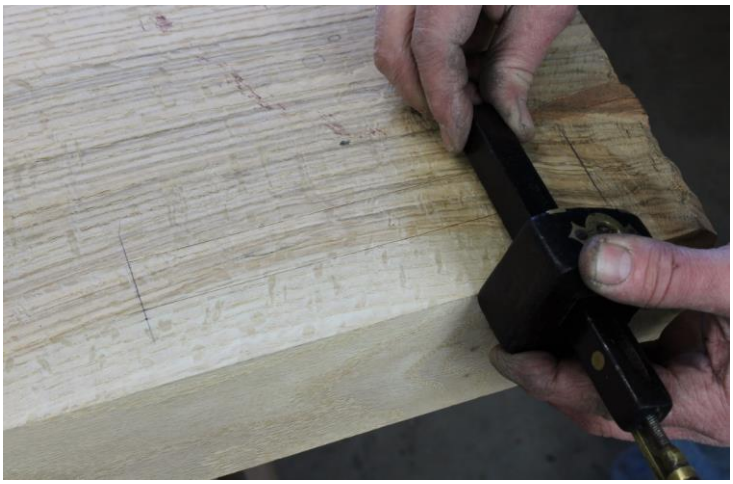
Mounting the vise to the bench.



1- Start by squaring a line 1 ¾” from the end of the bench, measure from this line 8 3/8” and square a second line across. This will be the length of the tube slot.



2- Set a double tooth mortise gauge to the width of the dog tube (about 1 1/16”).
3- Set the gauge fence to 1 ½” from the inside tooth of the mortise gauge.
4- Gauge between the two pencil marks.

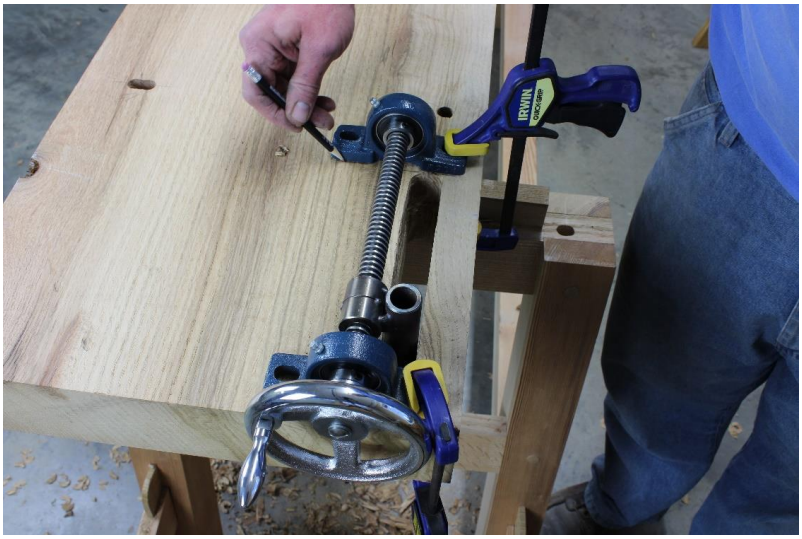


5- Flip the bench top over and repeat the same layout on the underside.
6- From the top of the bench; center a 1” auger and bore all the way thru the bench top at either end of the slot layout. Don’t worry if the auger exits a bit outside the layout on the underside. For the remainder of the waste use a slightly smaller 7/8” auger being careful to stay inside the layout on the topside.
7- Use a chisel to carefully chop and pare to the gauge marks on the topside of the bench. Use the dog tube to check you work, you want a close fit from the surface of the bench to about ½” down into the top. From there down flare out and make the bottom wider than the dog tube. As rasp or coarse file works well for fine tuning the fit. From the

bottom side chop out a bit outside the gauge marks to provide plenty of clearance for the tube.

Bearing Recesses

1-With the benchtop upside down drop the vise mechanism in the slot with the dog tube run back the bearing closest to the hand wheel and the tube against the end of the slot. Clamp the bearing to the bench. Rotate the hand wheel until the dog tube is at the other end of the slot and clamp that bearing. Now operate the vise moving the bearings side to side until it operates smoothly with no binding.



2- Trace around the bearing feet with a pencil.

3- Because tops are varying thicknesses the depth of the bearing recesses are different with each application. To determine this measurement for your bench top, before

unclamping the vise measure from the top side of the bench to the top of the dog tube. Subtract 1/8” from your measurement and that is how deep you need to recess the bearings in the underside of the top. This will place the top of the dog tube 1/8” below the surface of the bench.

4-Cut the bearing recesses slightly longer and wider than the tracings to allow for bearing adjustment if needed. The waste can be bored and chopped away or a router

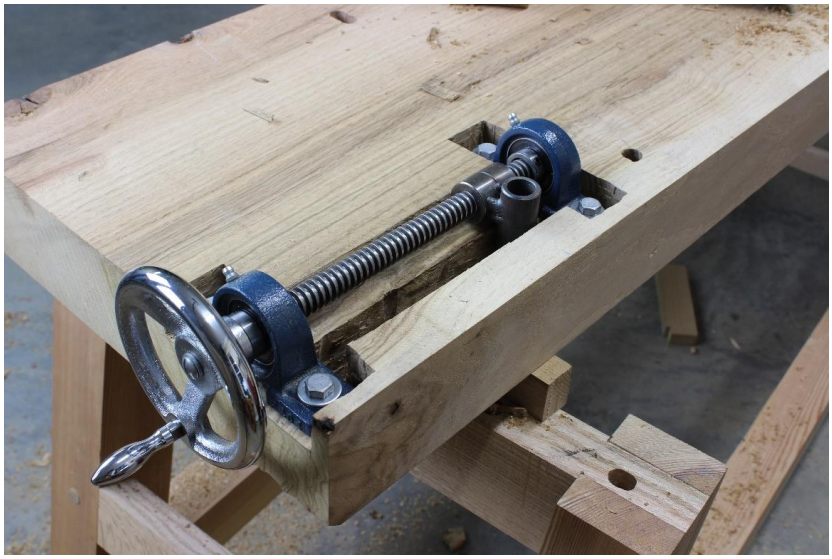
with a straight bit works well.

5-After the bearing slots are cut you can drop the vise assembly in and see than it will not seat all the way. You will need to chop away some material from the inside edge of the tube slot so the nut that drives the dog tube will clear.

Finishing Up

1- Place the vise assembly in the slot and trace the bolt locations to the benchtop with a pencil. Bore ¼" pilot holes for the lag bolts.
2- Install the four lag bolts and washers with a 9/16 socket and ratchet.
3- Operate the vise and check for binding. The bearings can be adjusted side to side if need be.

4- Apply oil or a light grease to the vise drive screw. You're done!



The dog holes are bored in line with the center of the dog slot of the vise.