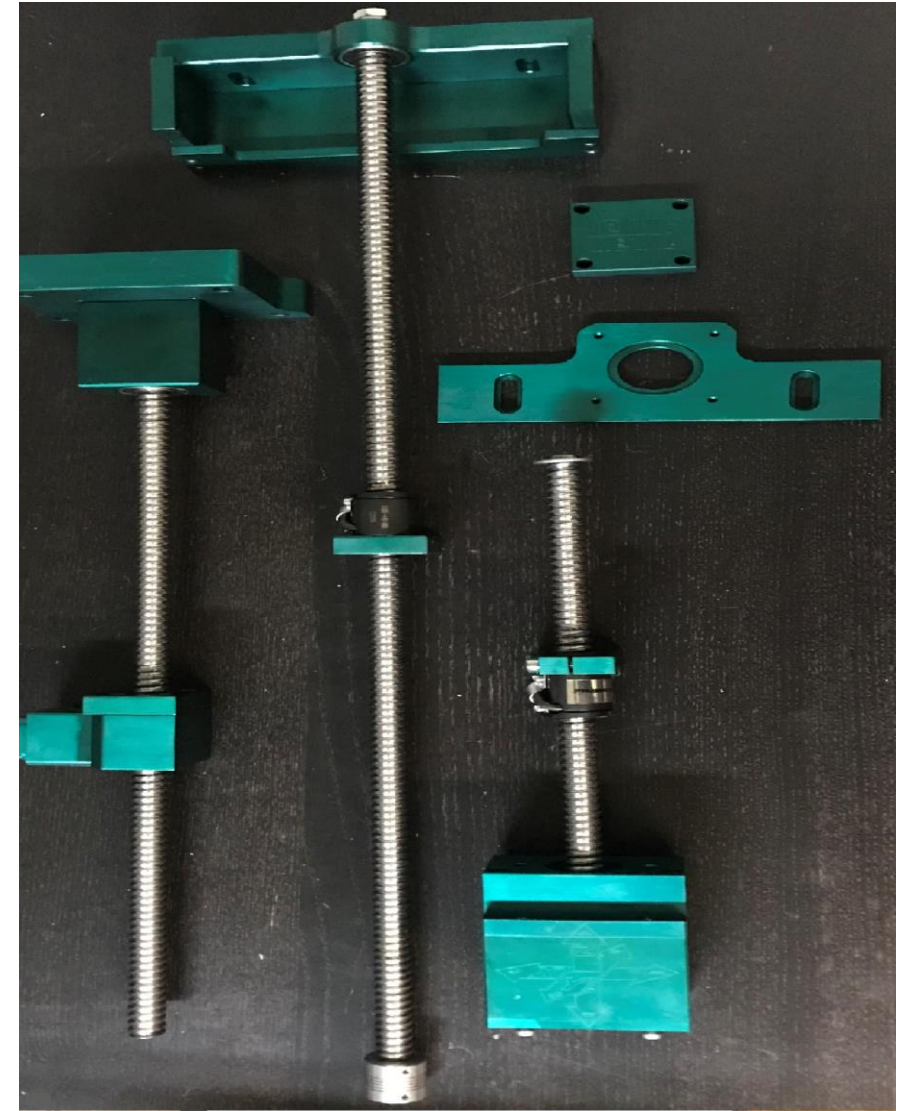
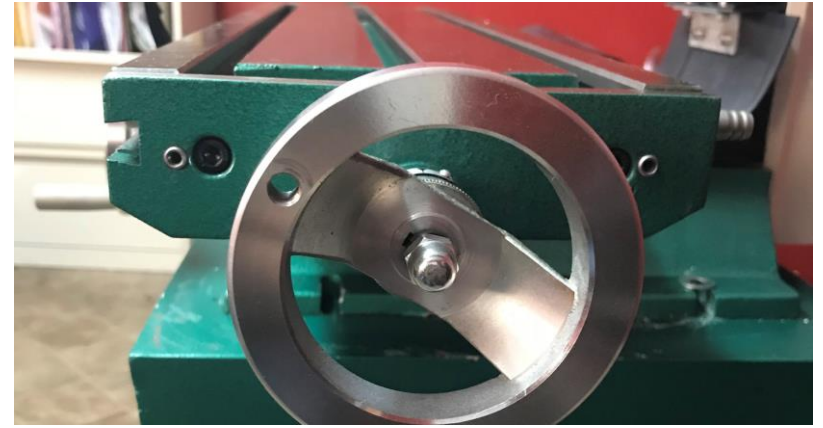


This kit comes with everything you see here. Plus 8 each: 5mm x 20mm stainless steel cap screws. 4 each: 4mm x 16mm stainless steel cap screws for Z motor. 4 each: 4mm x 12mm stainless steel cap screws for X motor. 2 each: 6mm x 75mm stainless steel cap screws for X extension and bearing block. 2 shim washers, just in case. 2 cardboard tubes for the ball nuts. These are added just in case you need to remove one of the ball nuts from the ball screw. Go Thomson Linear web site for video instructions on how to safely remove the ball nut from the ball screw.





Start by removing all of the handles



Remove the plates from both ends of the table



Remove the piece circled in red



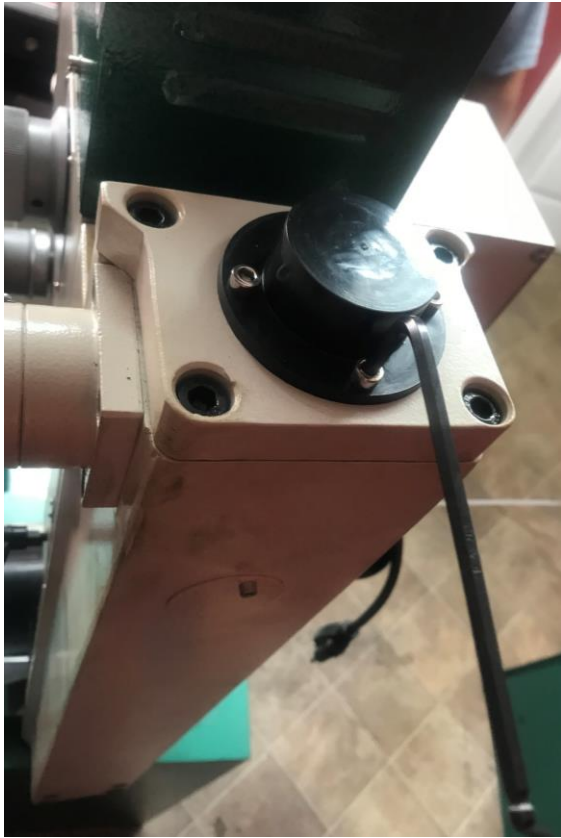
Now the table will slide off of the saddle

Loosen the two set screws and the lead screw nut will come off with the lead screw





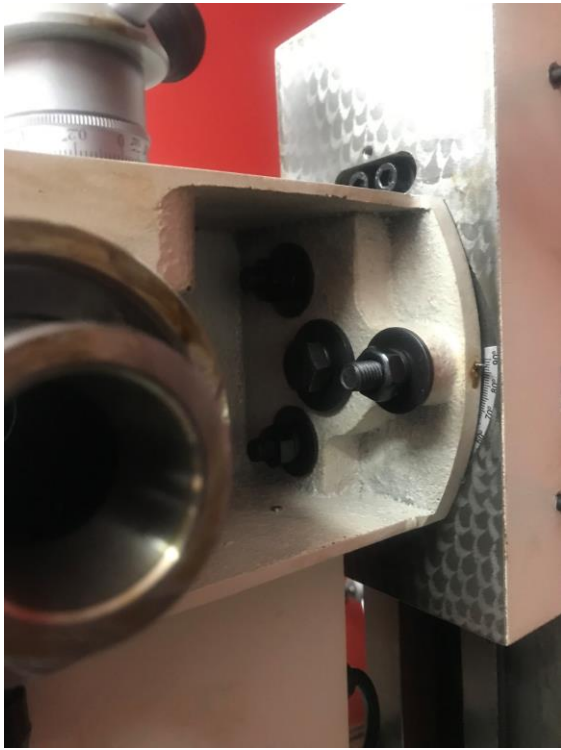
Move the head to the top of the column. Loosen the bolts for the head and rotate it 90 degrees. This will expose the bolts for the lead screw nut in Z. You can also just remove the head. It will make things easier, later



Take off everything on top of the column



Also remove everything from Z handle



Remove the bolts from behind the head. Screw the lead screw until the lead nut gets to the slot in the column. Take the block off as shown, then you can pull the lead screw out from the top



At this point you'll need to take the column off of the base. It's not a bad idea to remove the head first. It makes managing this easier

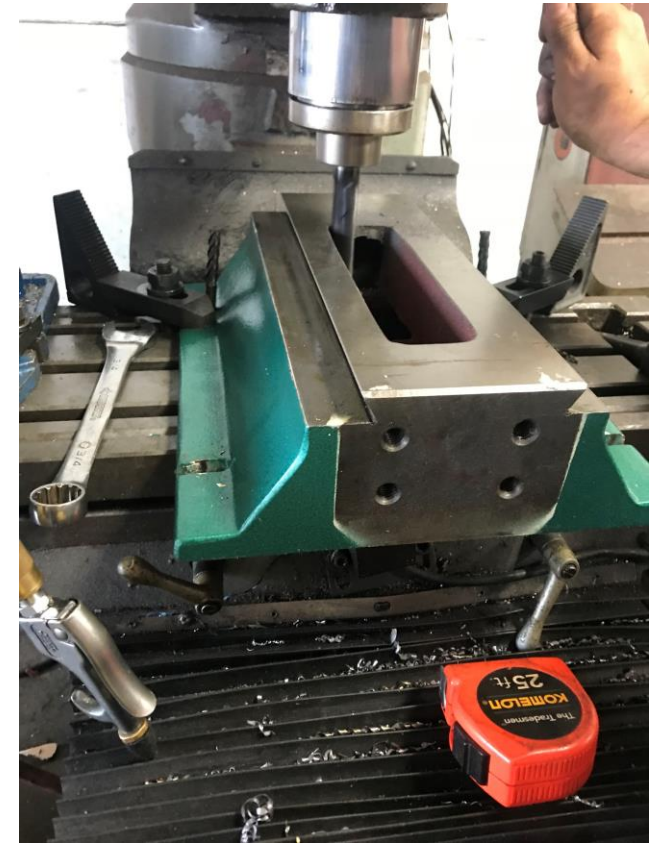




Unscrew the lead screw from the nut, and remove the nut, and lead screw



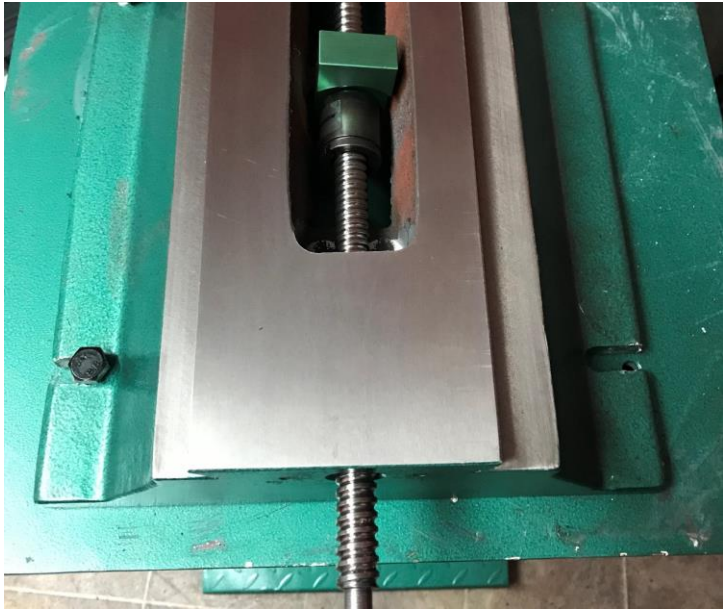
You will need to remove some material to get the new ball screw to go in the base



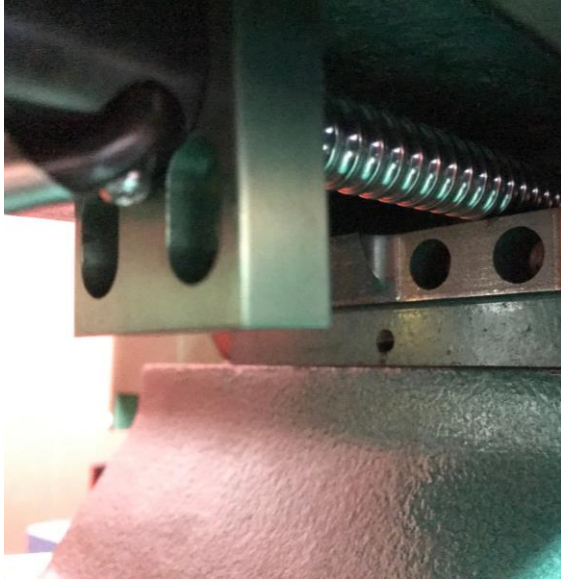
We used a manual mill to do this...because we have one. You may have to use a grinder. You'll be removing 1/4"-3/8"



The finish machining



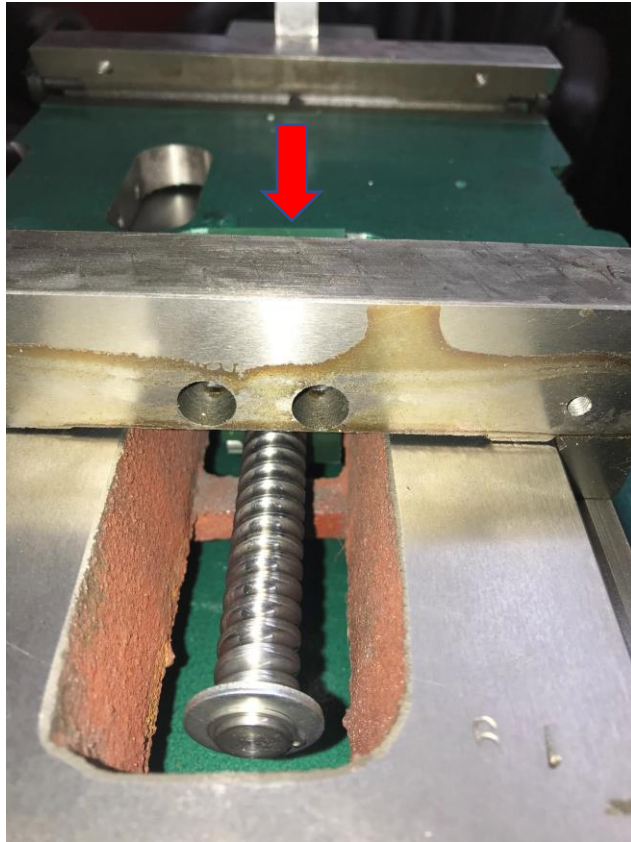
Now you can start the installation. You will need to remove the washer and snap ring.



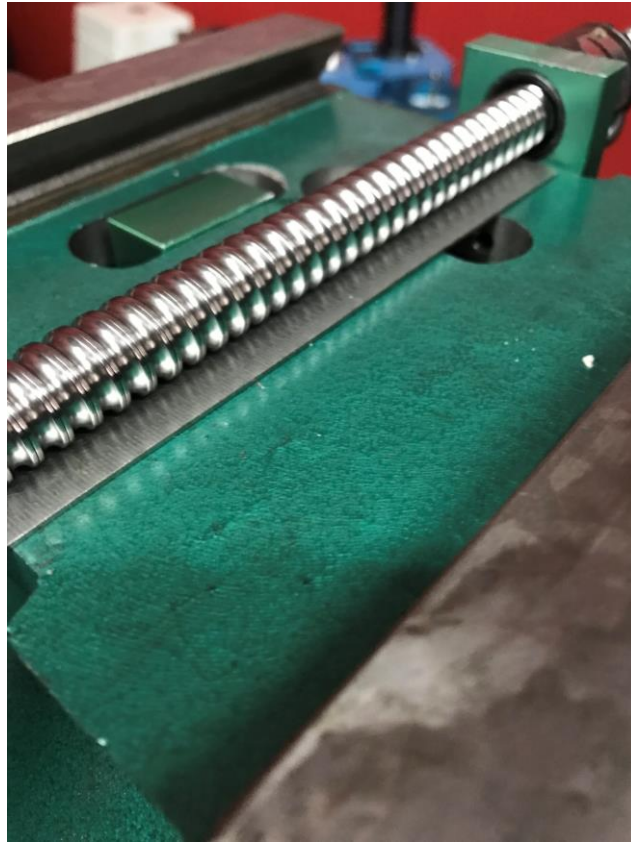
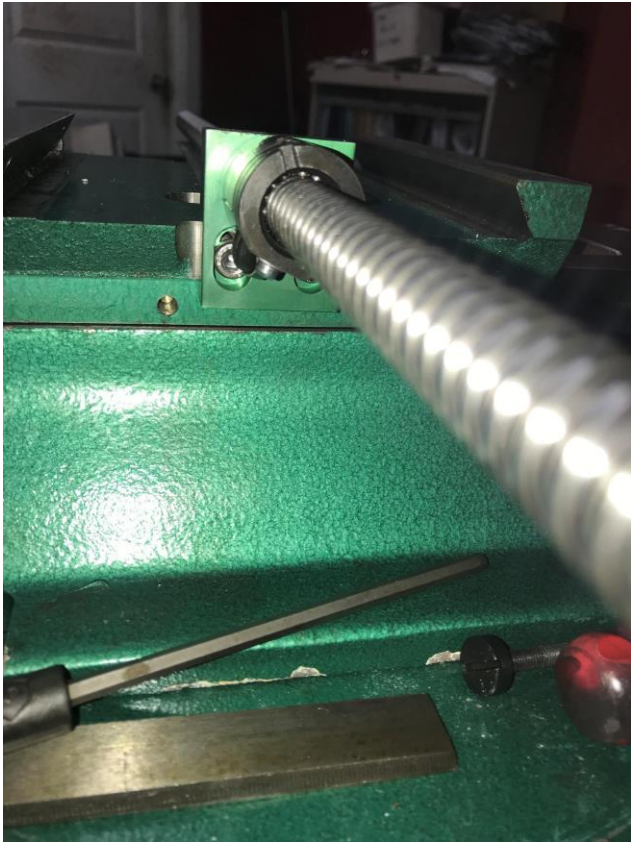
You also need to machine this area flat to mount the X ballnut block.
Grinding it would also work.



Remove the .25" plate from the Y assembly, and bolt the rest of the assembly to the base



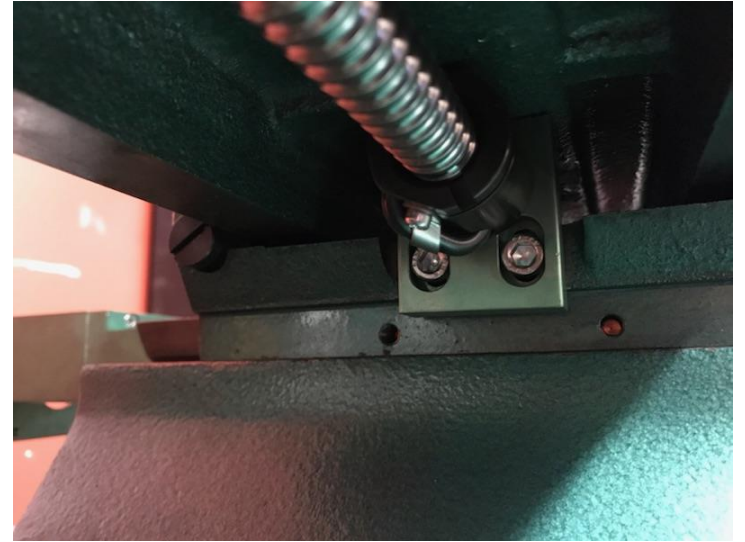
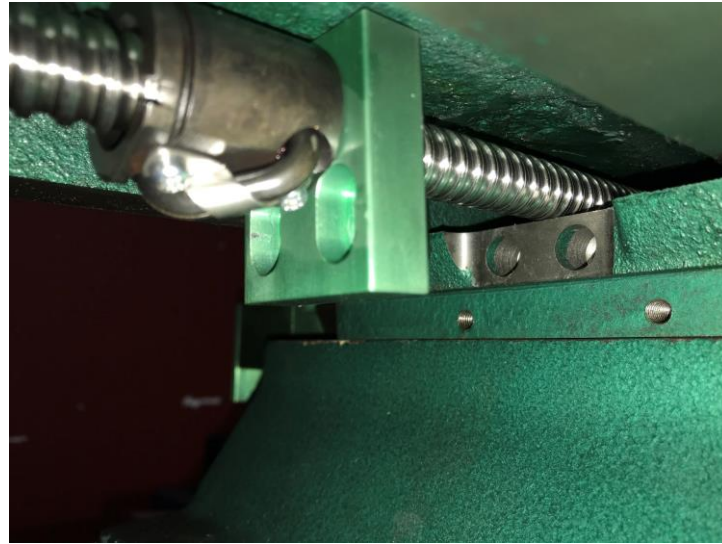
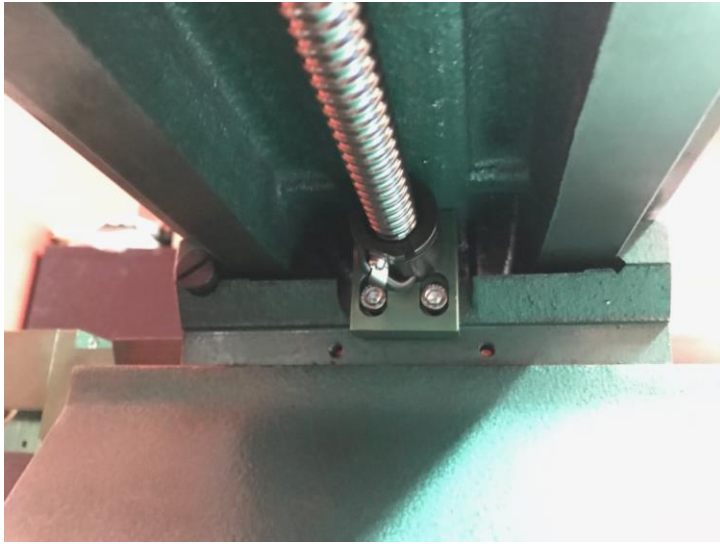
Tighten down the new ball nut block where the old one was



What we've done here is put a scale under the X ballscrew to use as a shim. The scale is about .05" thick to keep the ballscrew off of the saddle. If there are issues with it rubbing on the underneath side of the table, grind some relief under the ball screw so you can lower it down



Slide the table on and attach the motor mount on the left end, and the extension and bearing block on the right side. The extension is there so you won't lose any X travel.

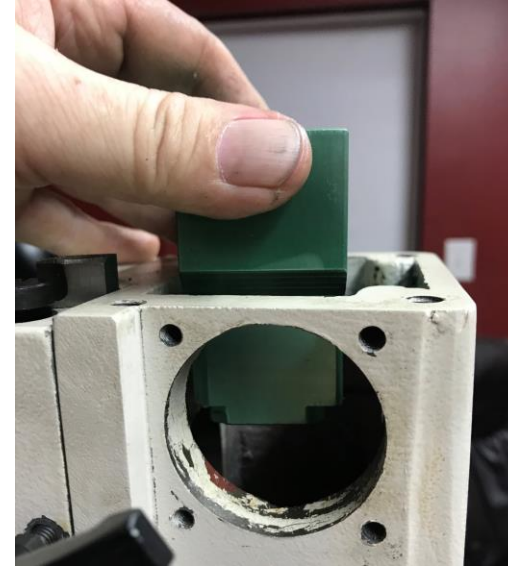


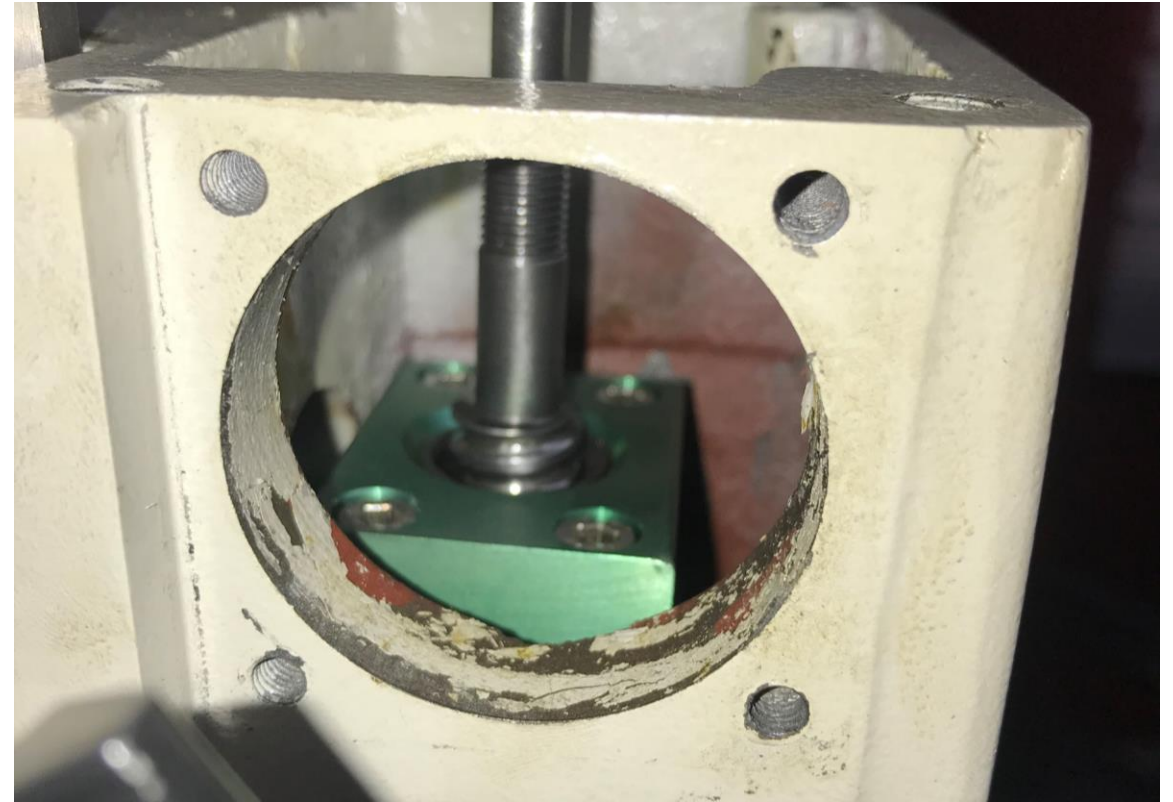
X ball screw and ball nut under the table



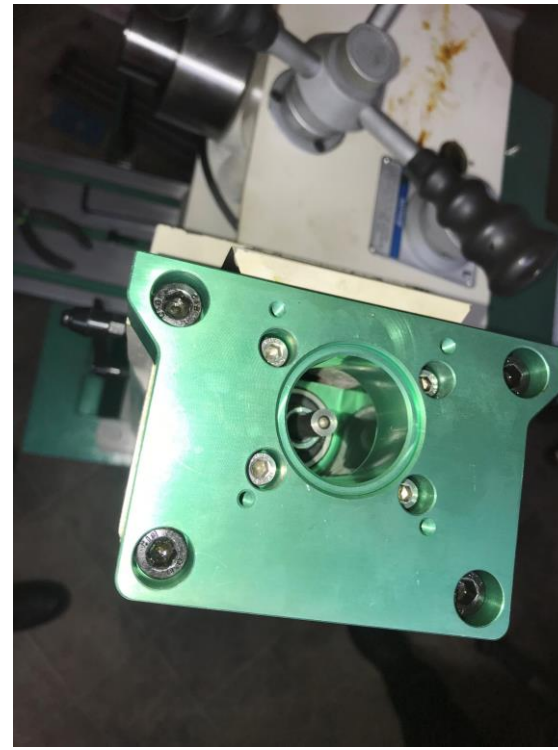
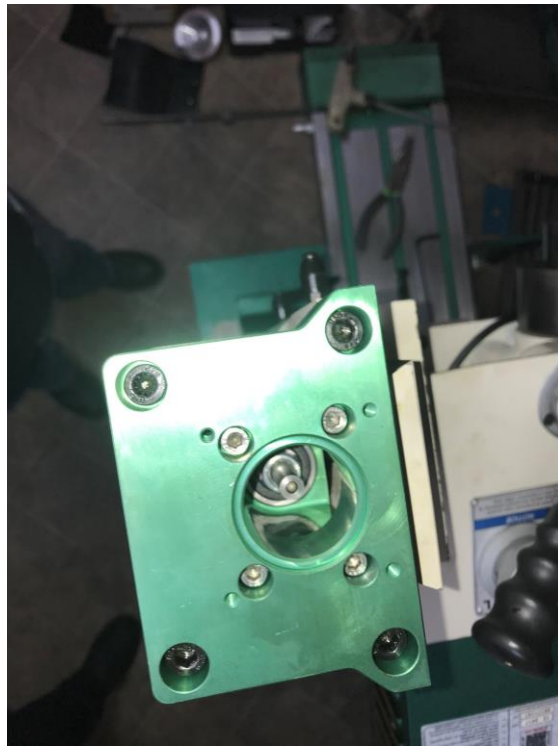
Put the column and the milling head back onto the base

- Drop the Z ball nut block down into the column as shown. When it gets to the through slot, you can tilt it to get it through the slot to align with the bolt holes





Drop the ball screw with the flange on it down through the ball nut block, and bolt the flange to the block.



Cap off the top. Now start tweaking everything in to run smoothly. We like to hook it up to a drill first, to get everything to start running back and forth smoothly. Then you can

hook up the motors and finish getting everything tweaked in.