

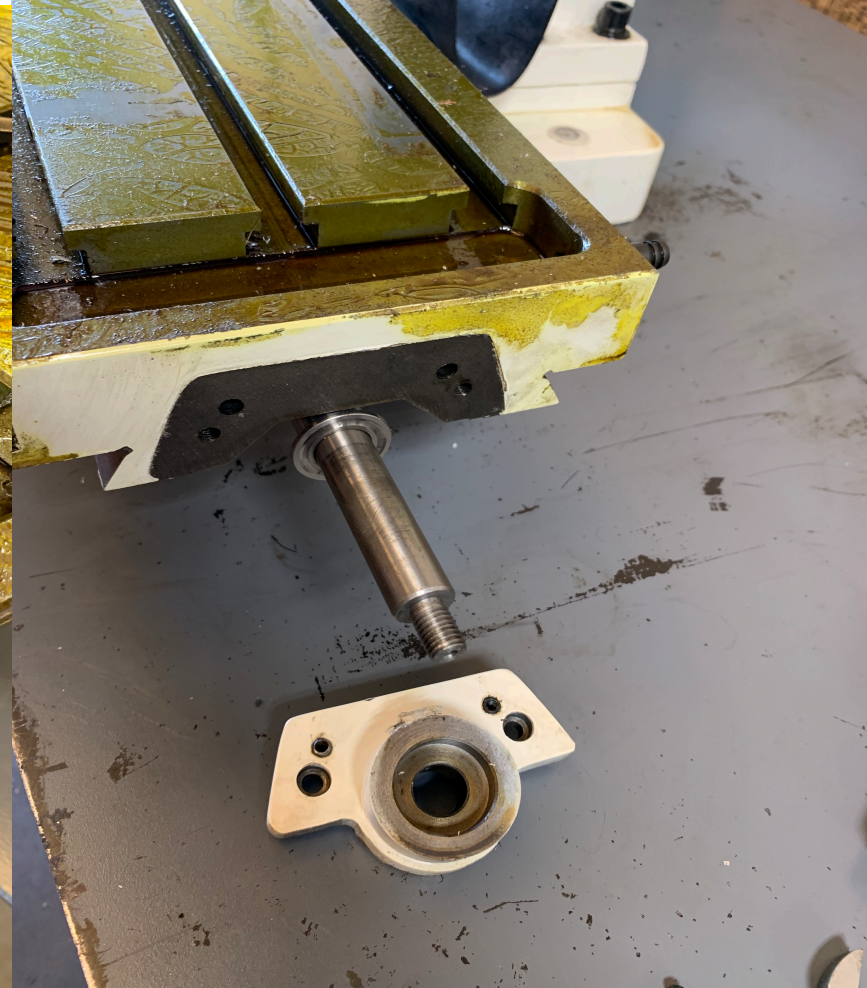
The machine just out of the crate. Still has the sticky coating for protecting the table



Start with removing the handles. Make sure and take the key out as well.



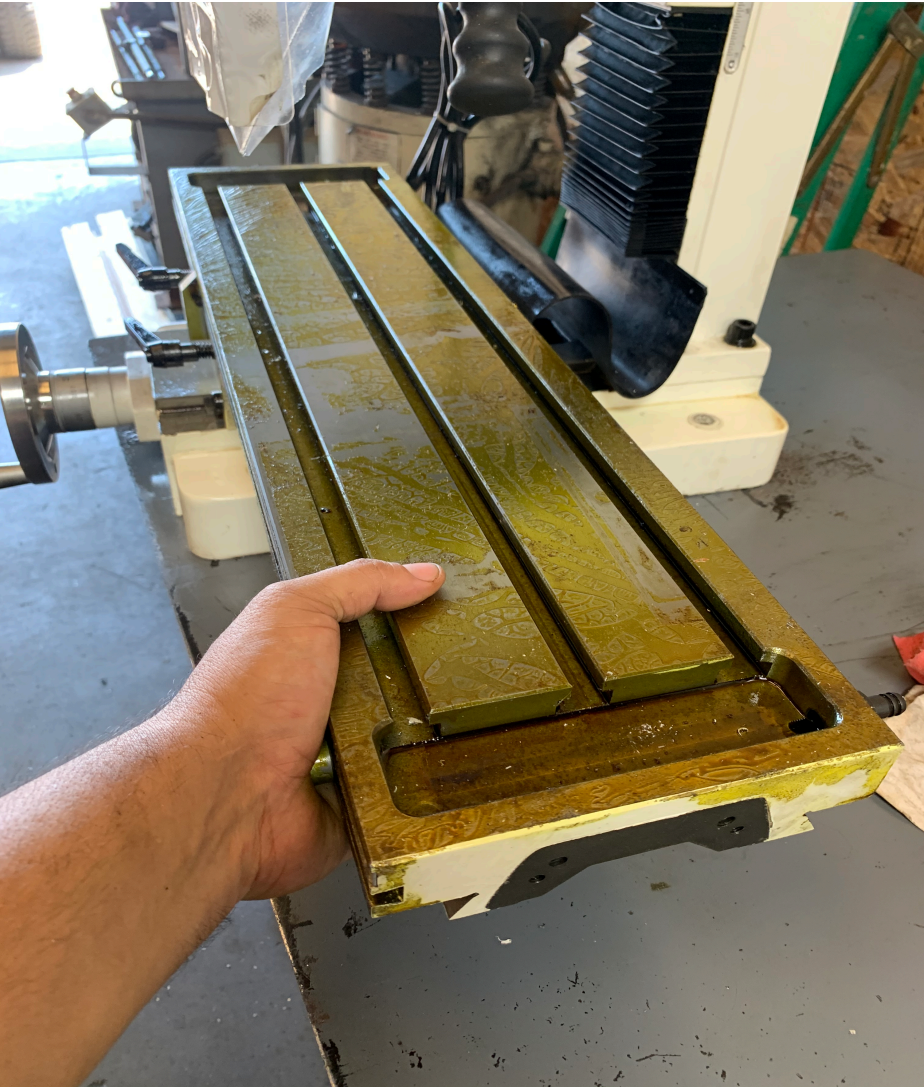
Remove the end plate. Two cap screws. It also has two pins. You may need to tap it a bit with a hammer to get the pins to come out. Remove everything from the other end of the table as well.



Remove the screw as shown. It holds the gib in place.
Also remove the table stops.



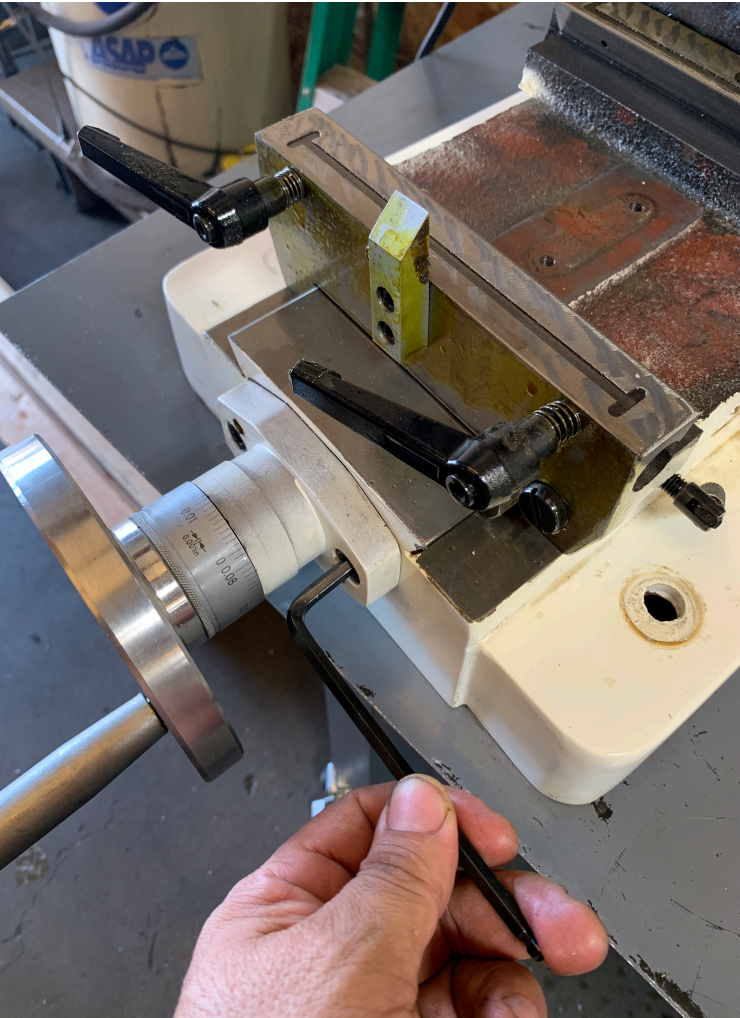
Now you can just grab the table and slide it off the saddle. It should come off pretty easy as long as you keep the table straight.



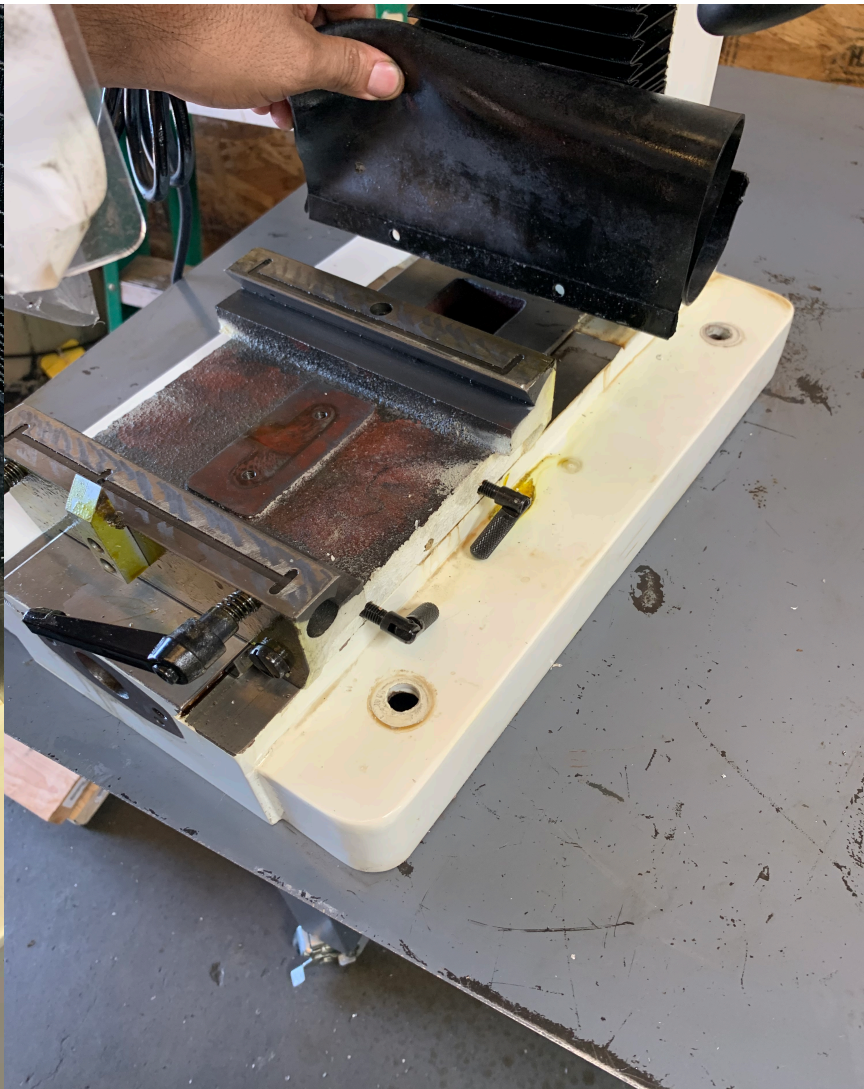
Remove the two cap screws on the lead nut and you can remove the nut and screw.



Moving to Y. Remove the two cap screws behind the hand wheel Also remove the two cap screws for the way cover. Crank the handle and unscrew it from the lead nut



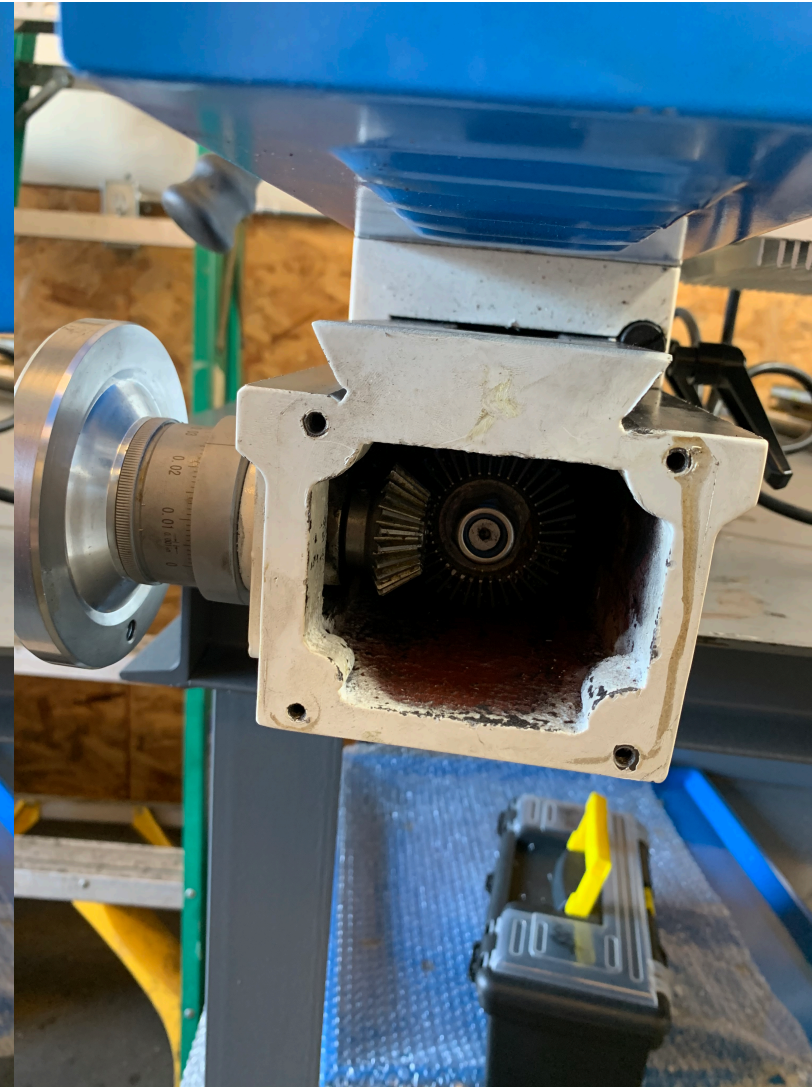
Remove the cap screw in the slideway. That will remove the Y lead nut. Then remove the screw for the gib.



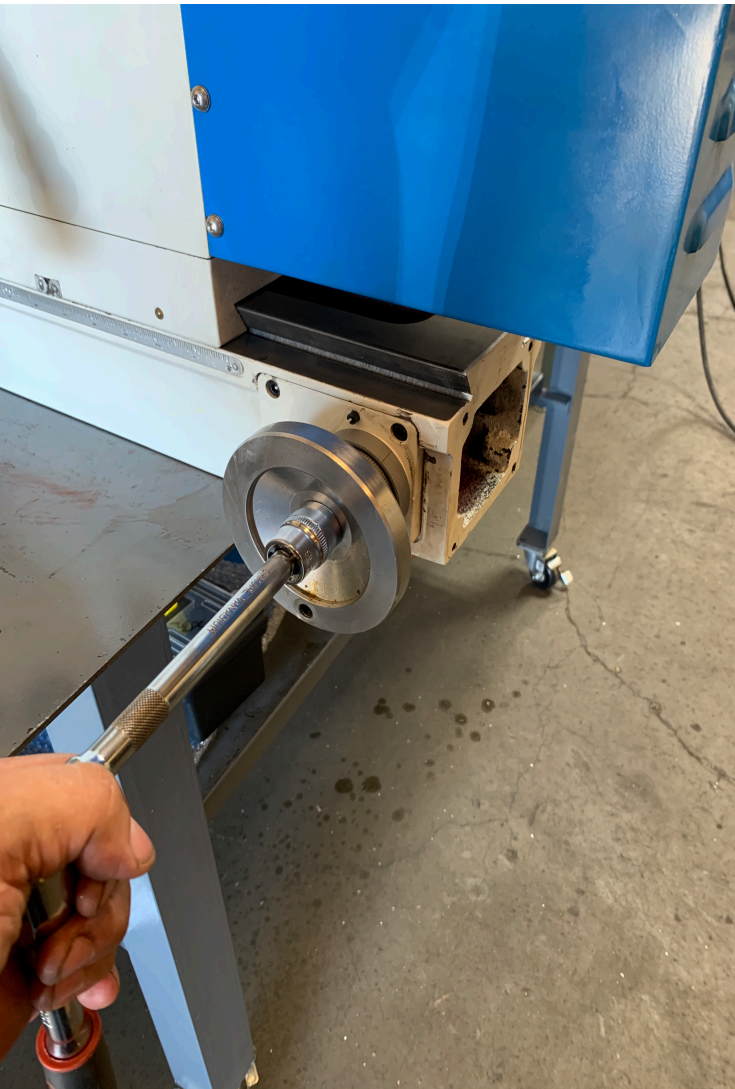
Now you can slide the saddle off.



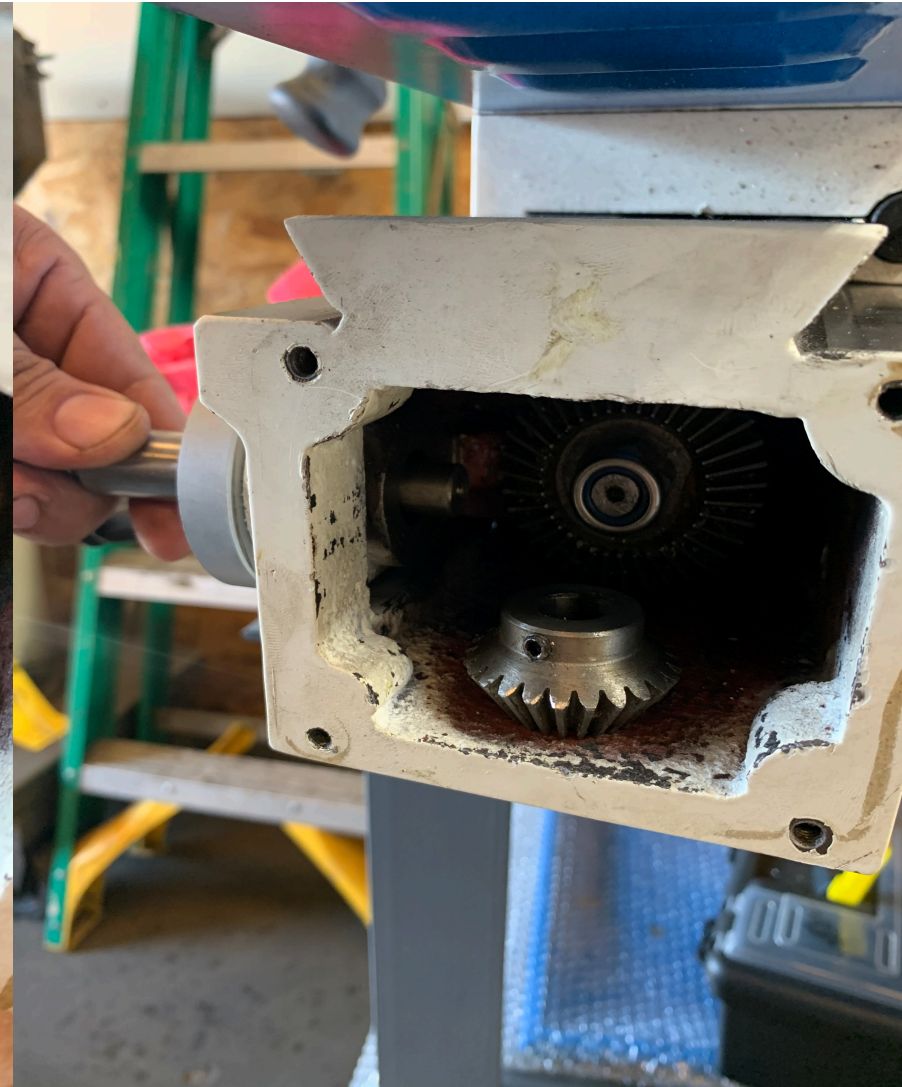
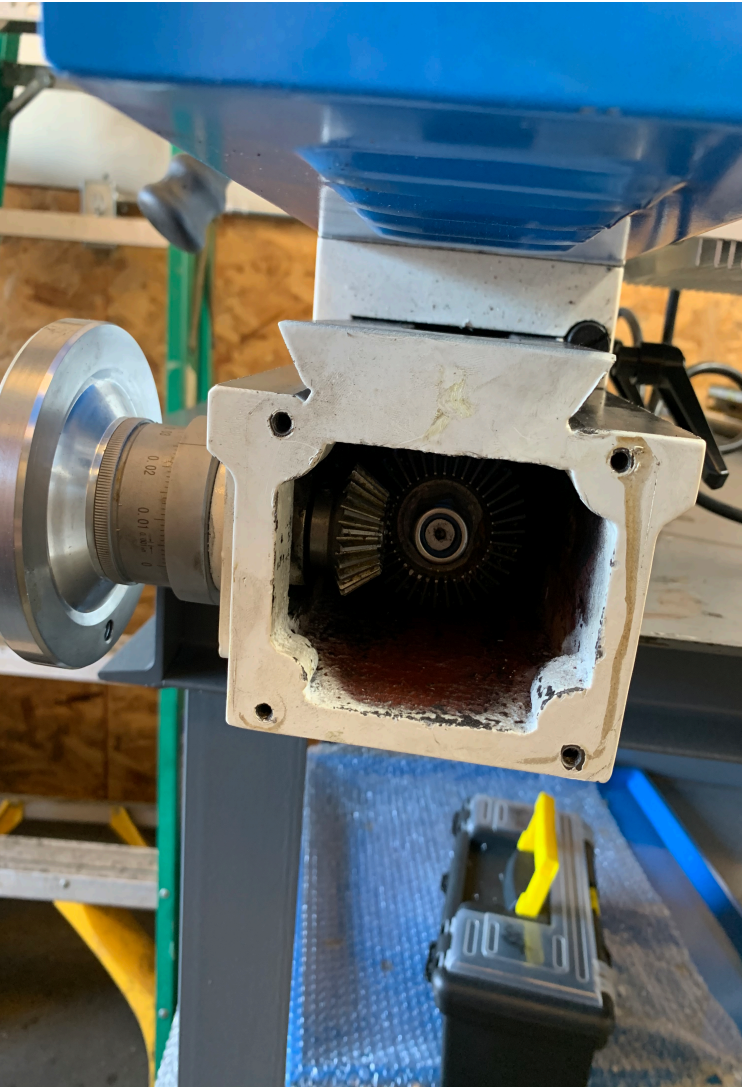
We found the best way to handle Z is to lay the machine back onto the column. Then remove the cover plate.



Remove the handle, then the backing plate.

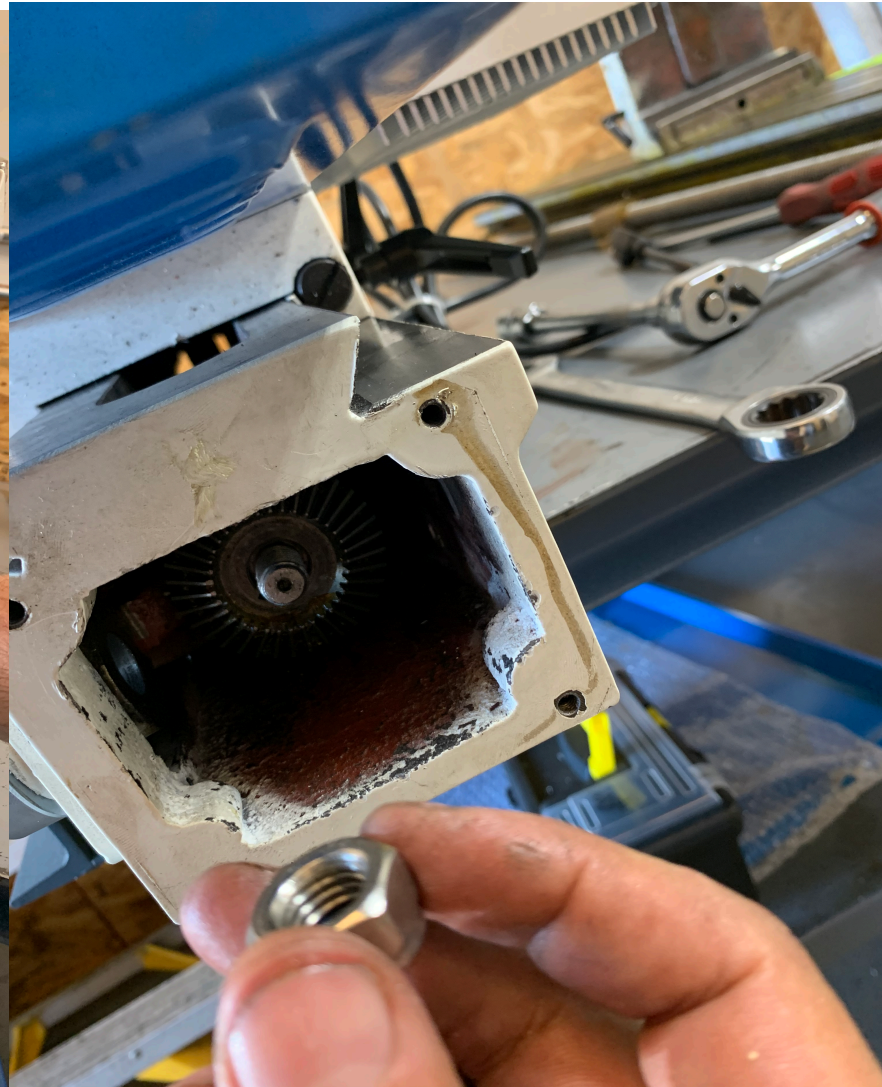
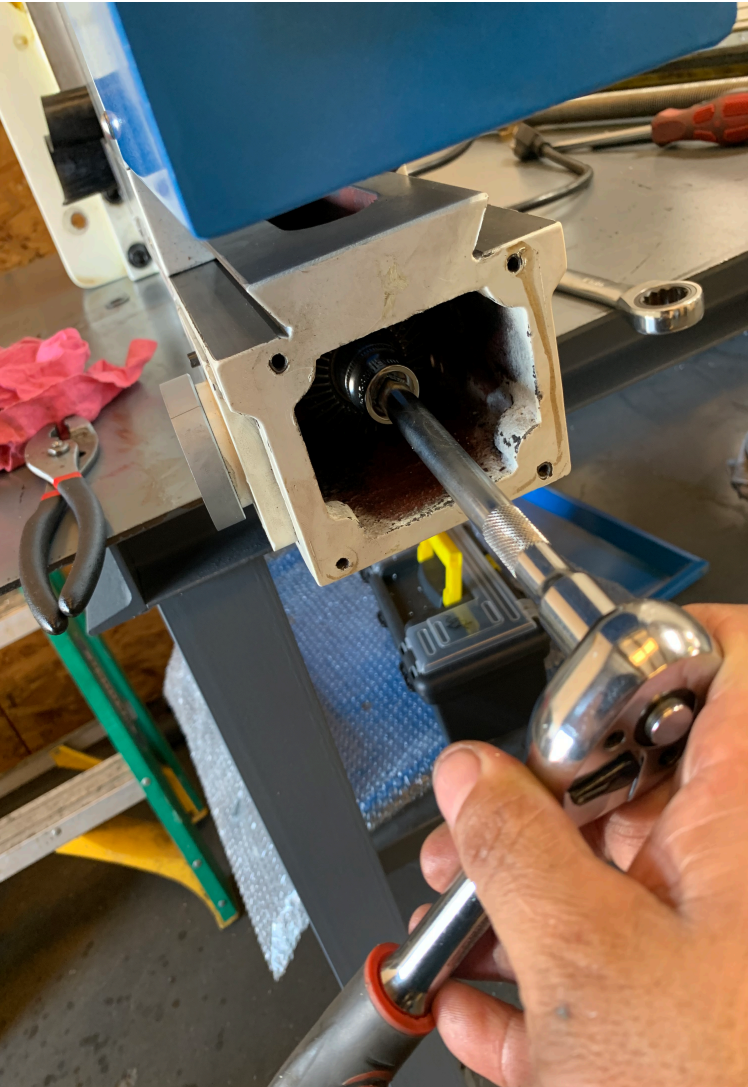


There are two gears that need to be removed. Remove the set screw from the first one. You can then pull out the backing plate and push it off the shaft.



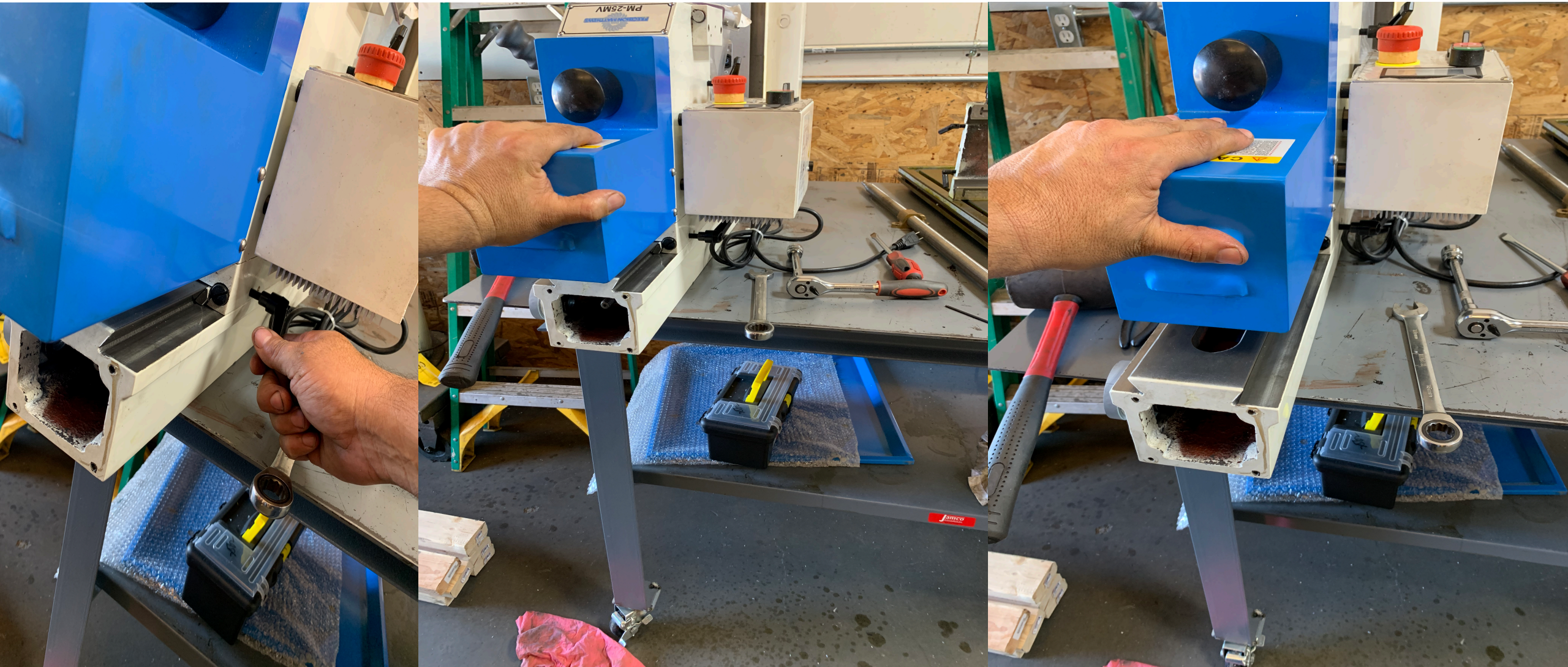


Remove the lock nut for the other gear.
Tighten down the head as a precaution.





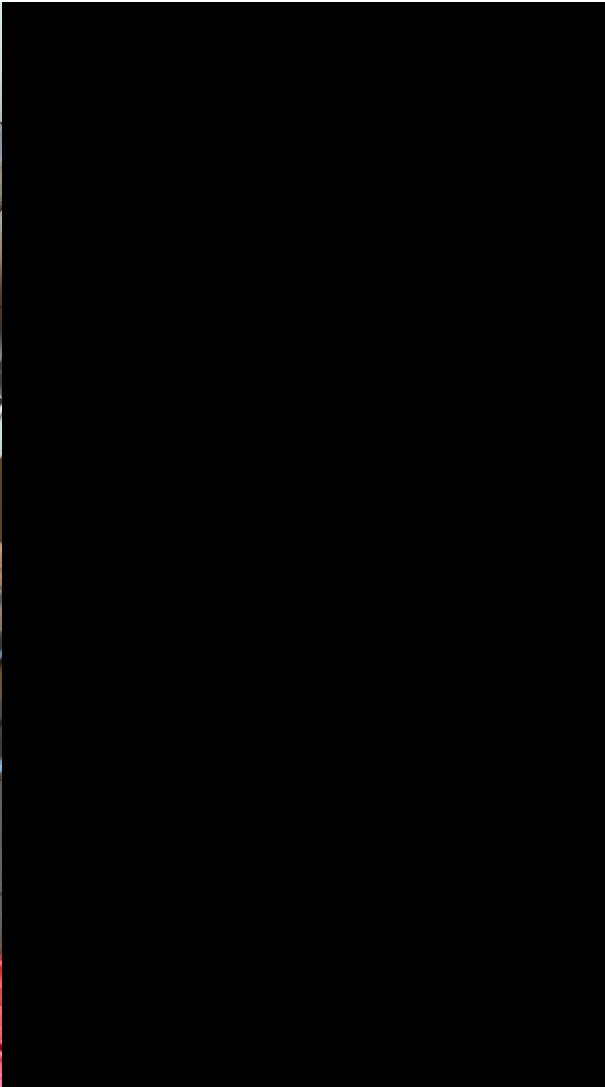
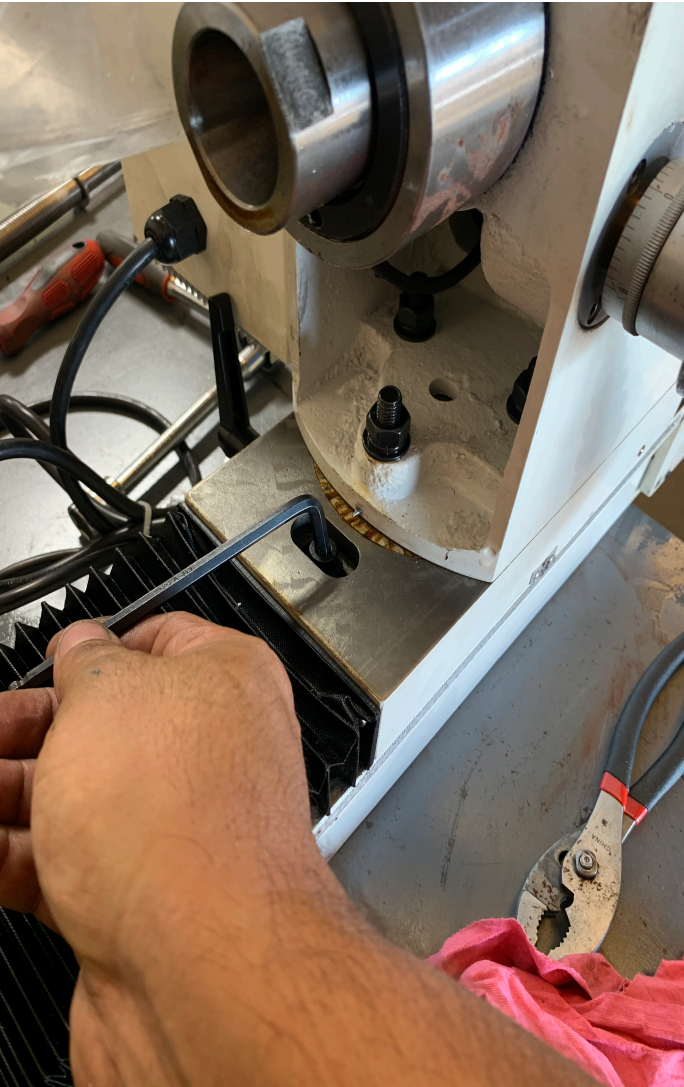
Loosen the head and push it down so the lead screw is out of the way.

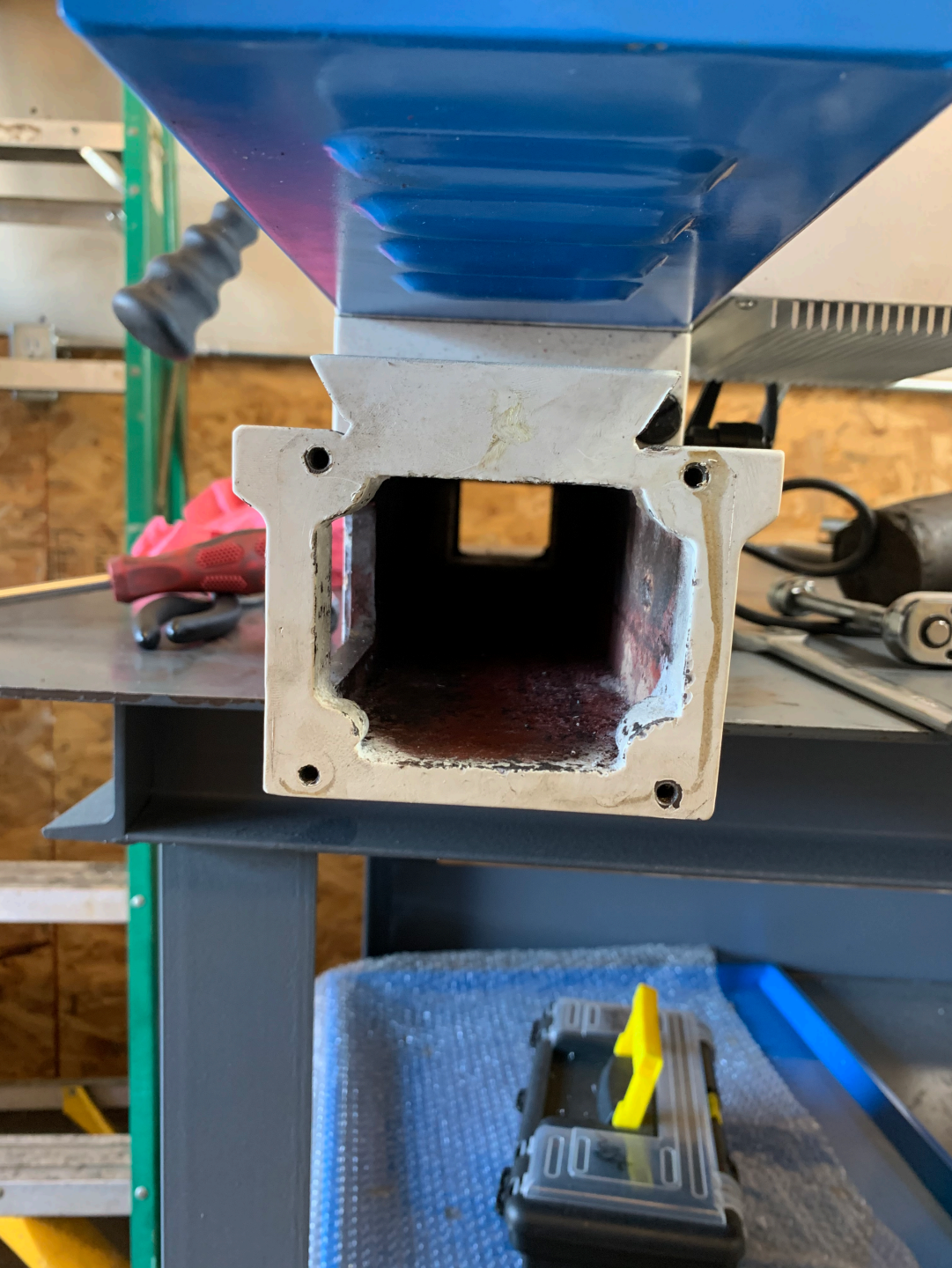


Now you can remove this plate



Remove the screw under the head. It unbolts the Z lead nut. Then it comes out the top.





These instructions will explain how everything goes together.

What we can't show with pictures is how to get everything aligned so it does not bind.

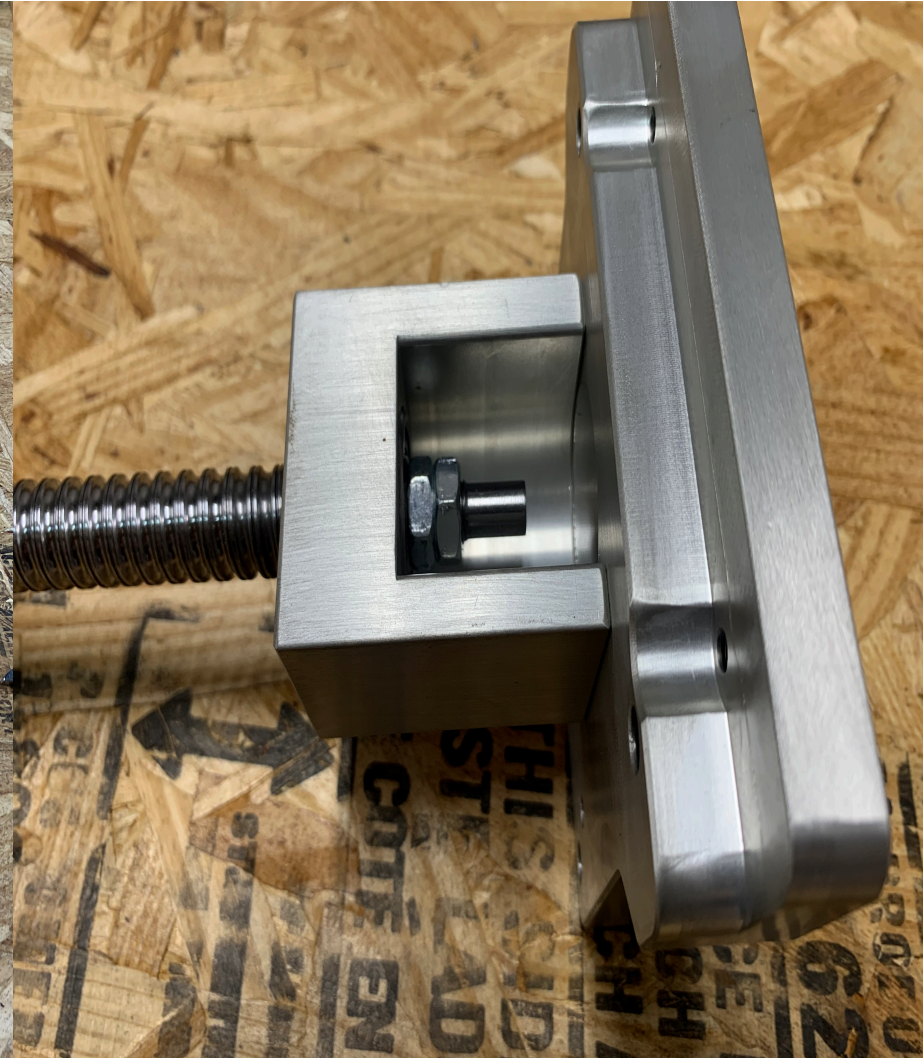
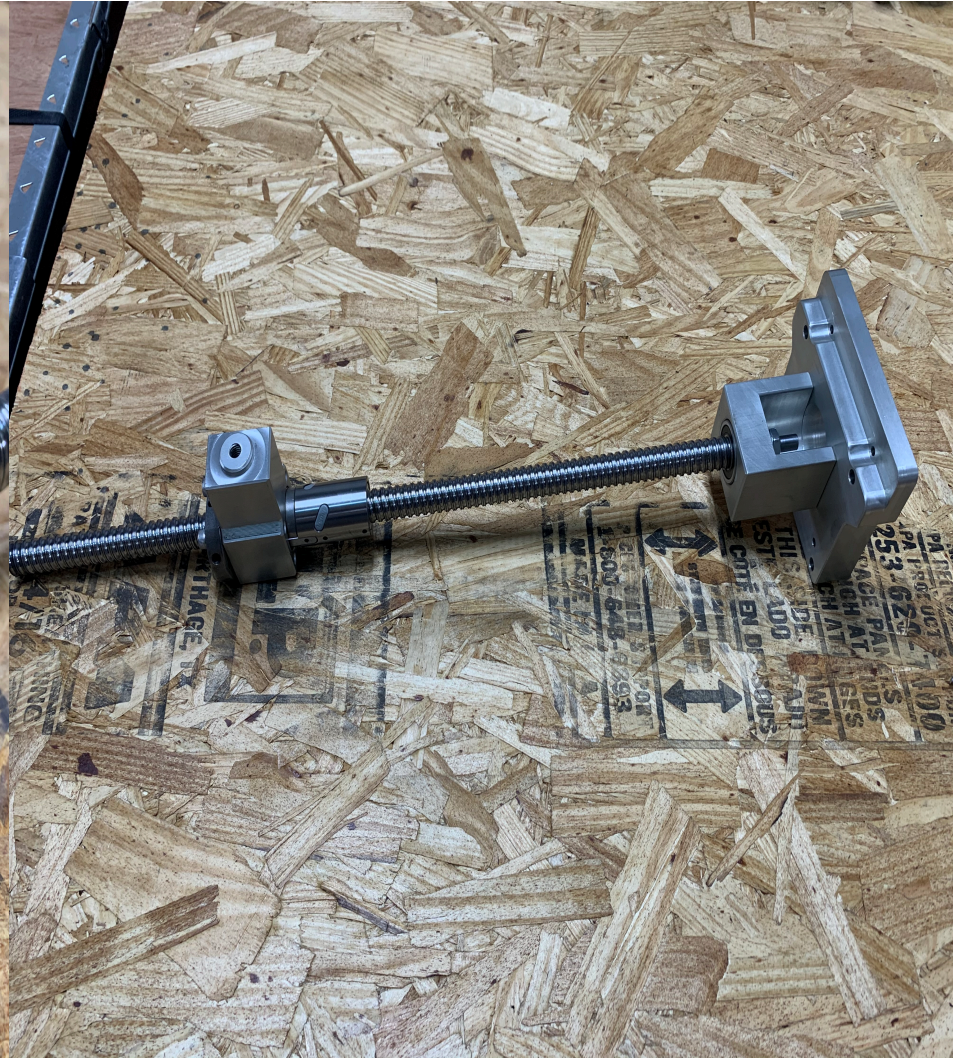
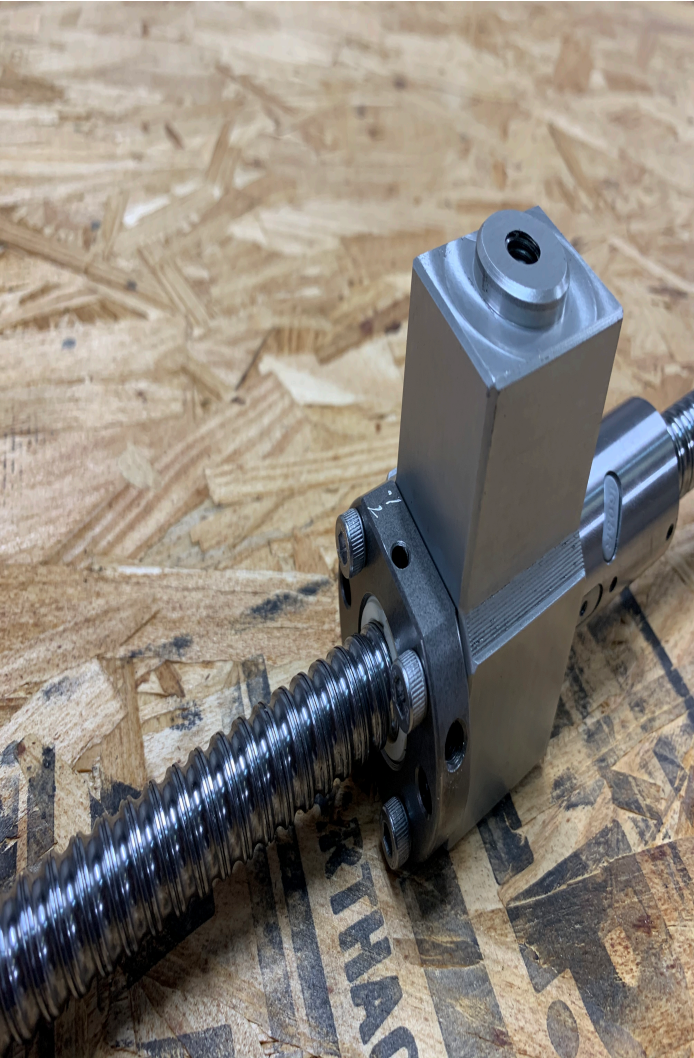
We slot the mounts for adjustments that need to be made to keep everything sliding back and forth smoothly.

This is a process. It takes time. Do not rush through this part of the process.

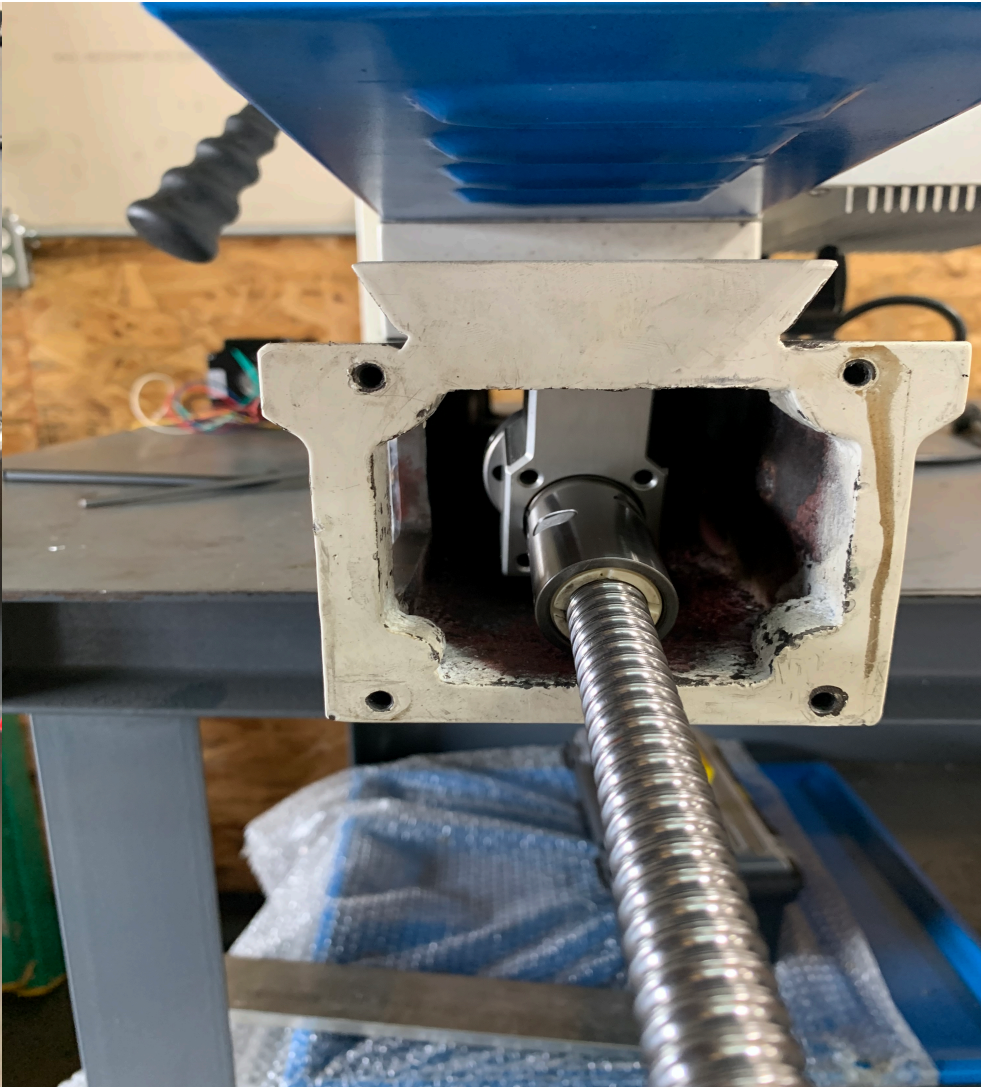
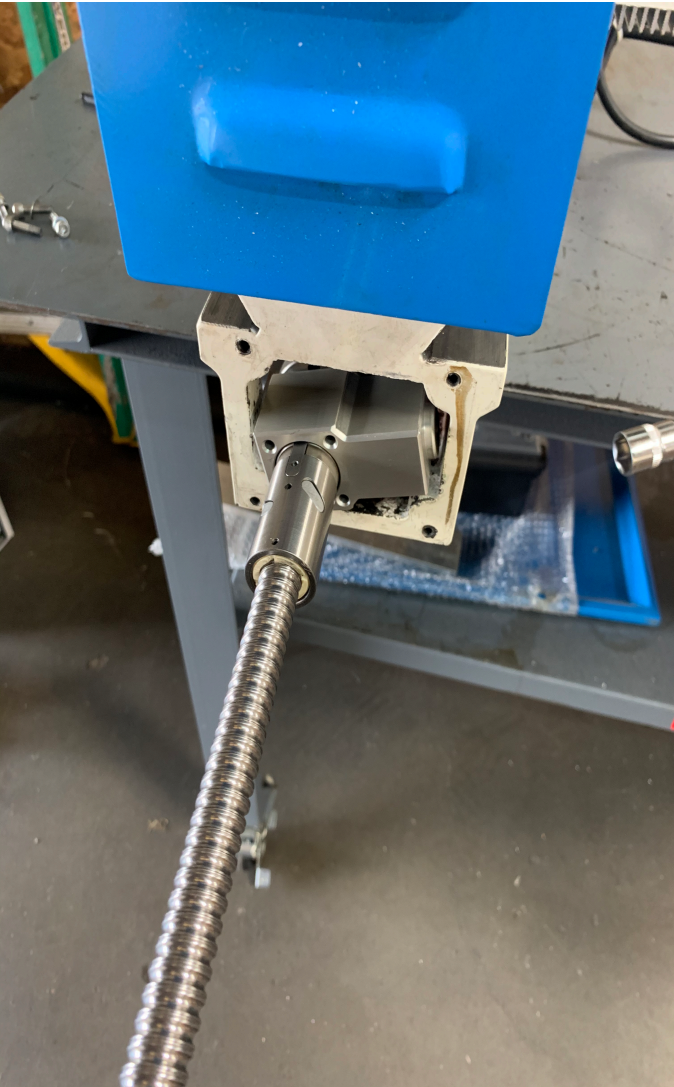
It is even possible you will need some shims.

And lastly, be sure to tram the head. Because it will move at angles it needs to be dialed in with a dial indicator to make sure it is running true.

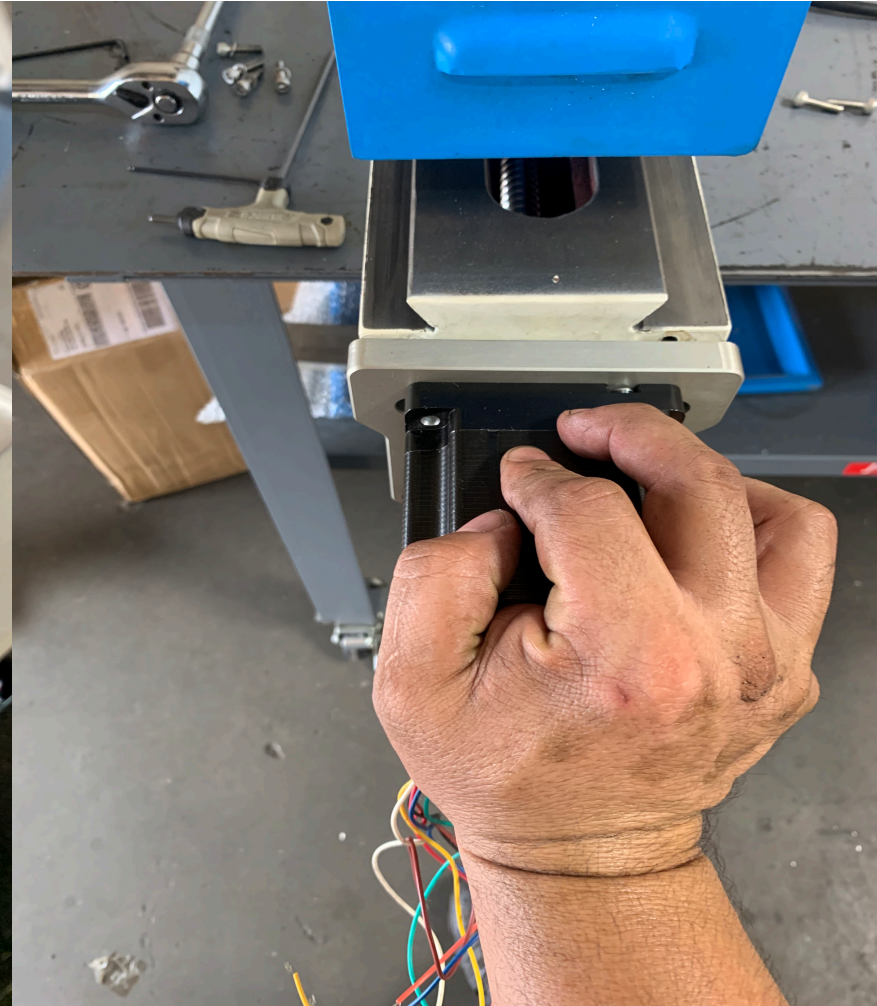
Now that everything is apart, put it back together in reverse. Start with Z



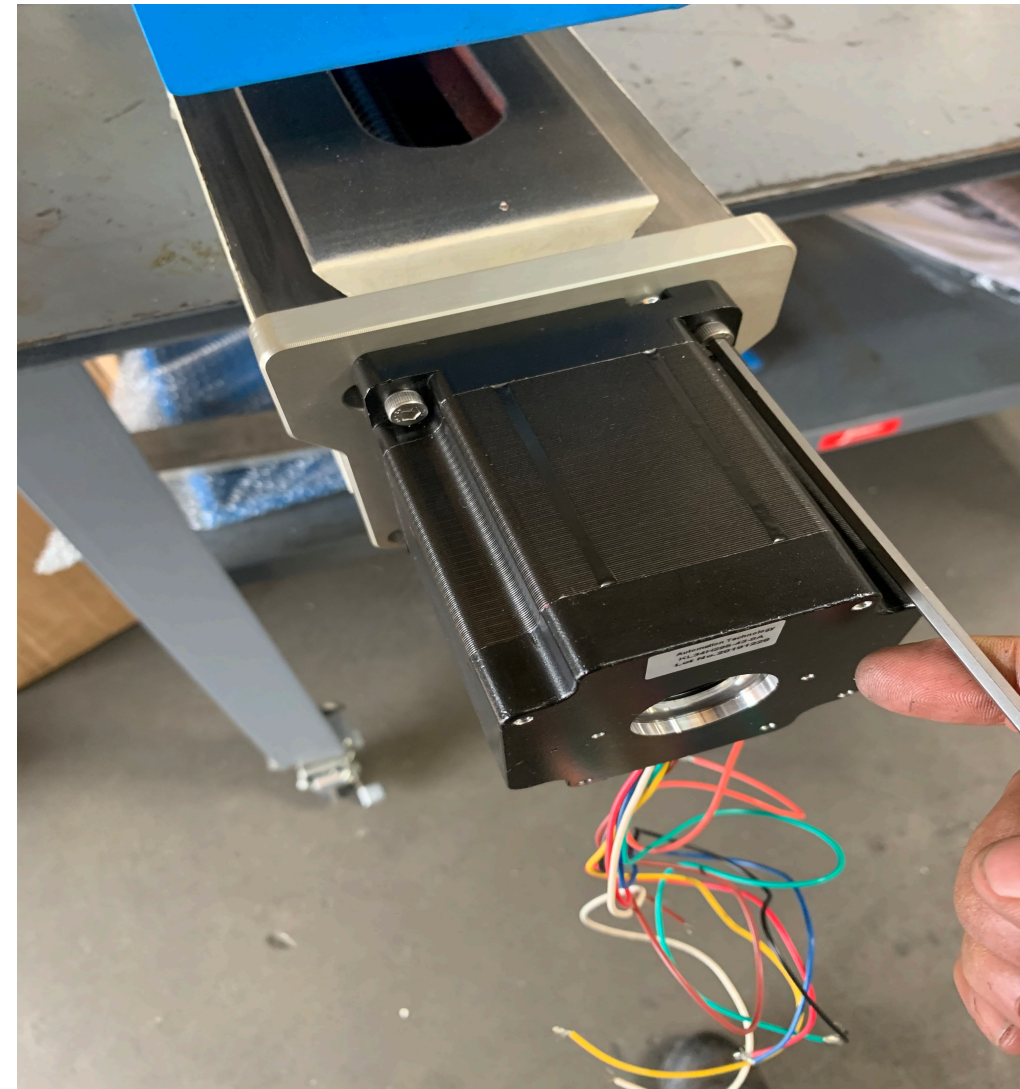
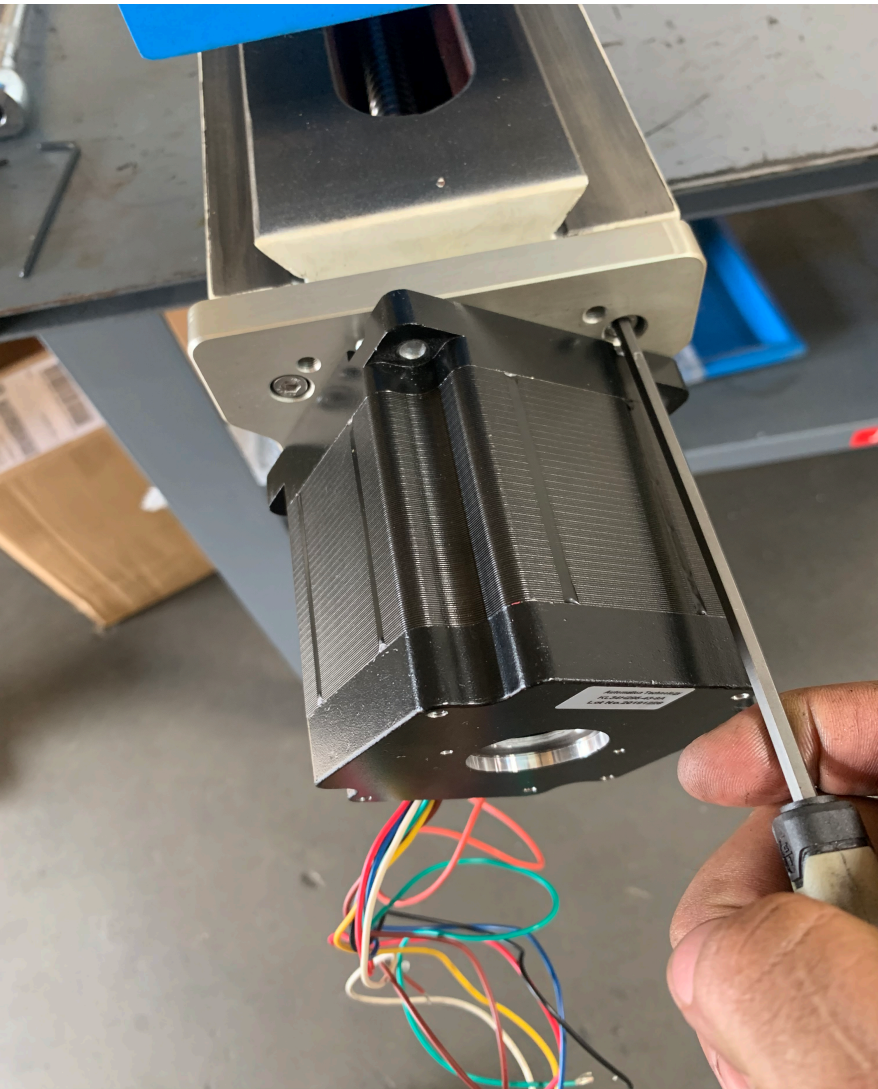
Make sure the cap screws are tight and slide the Z assembly into the column



You will need to set the plate and install the motor at the same time. It is easiest to put the coupling on the motor first, then the whole thing slides onto the end of the ball screw.



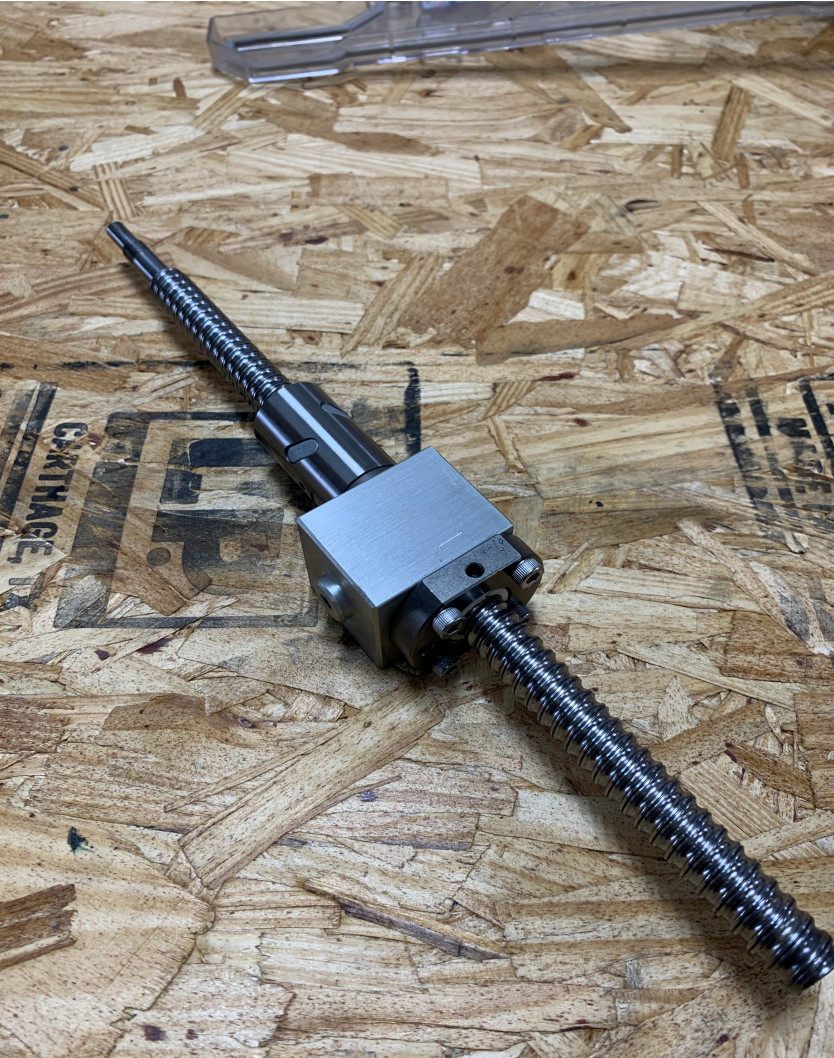
Now bolt down the motor mount and the motor



Now you can bolt the ball nut block to the head.
The head slides up and down pretty easily with the
machine laying down



With the machine still laying down you want to put the Y ball nut and ball screw in place



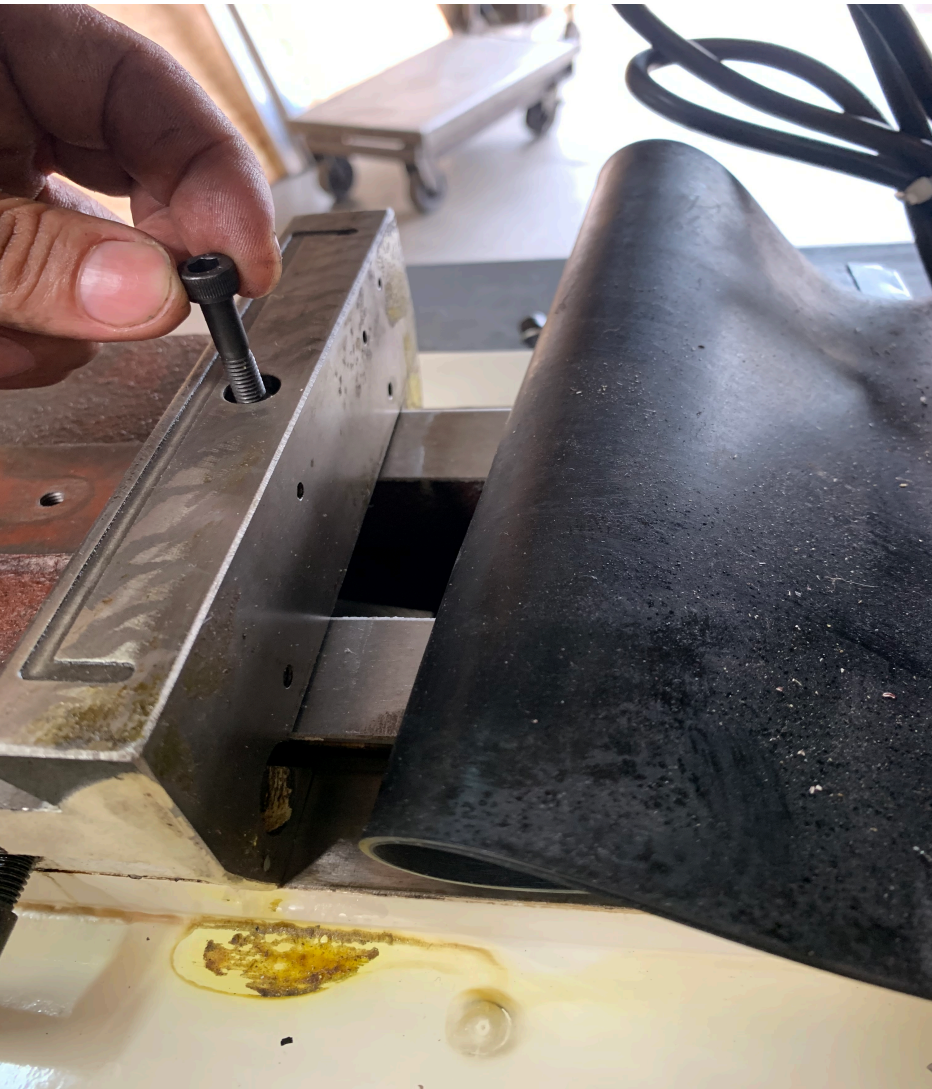
Drop the Y motor mount onto the shaft with the bearings installed and tighten down the jam nuts



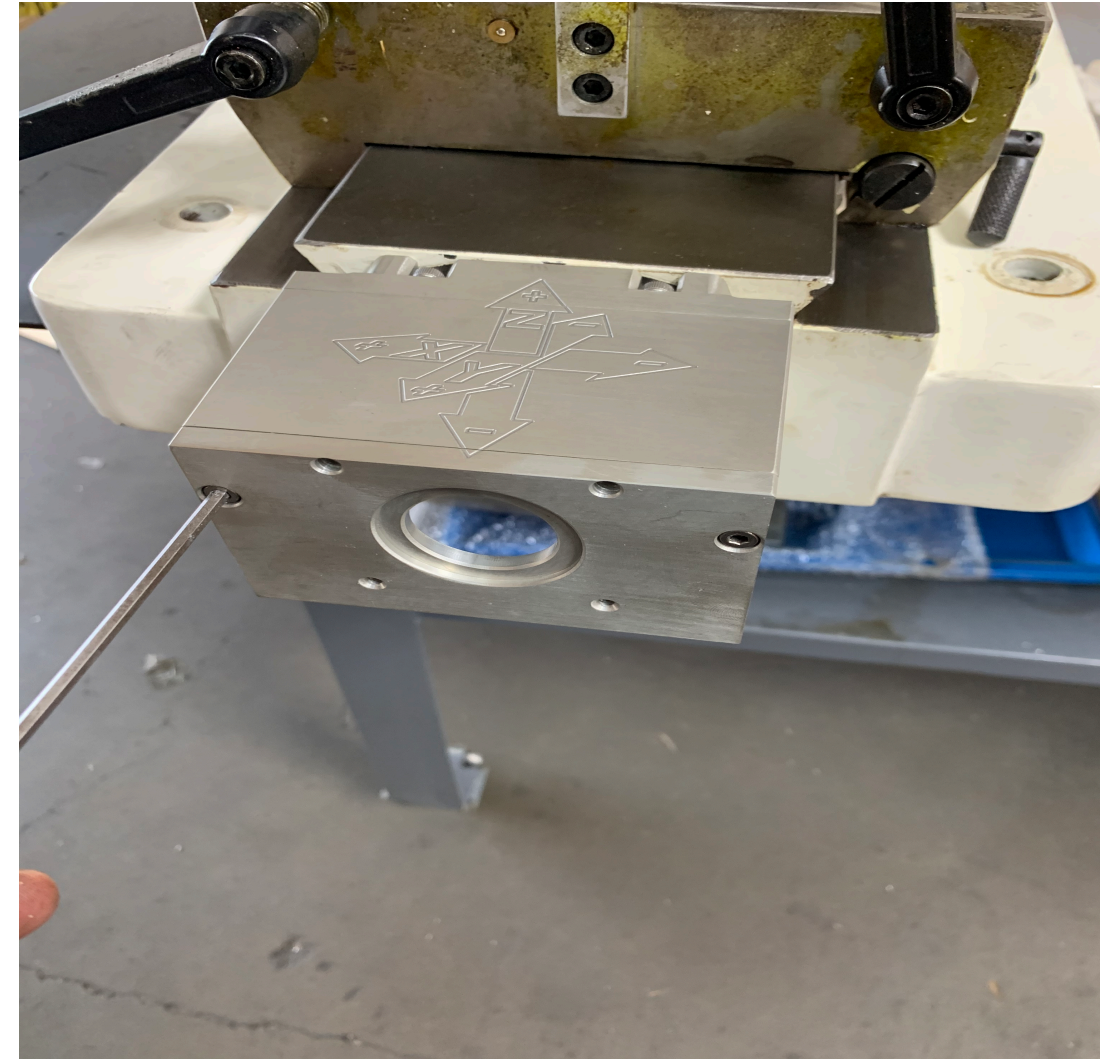
Set the machine back upright and slide the saddle back on. Be sure to slide the gib back in as well and put the retaining screw back in



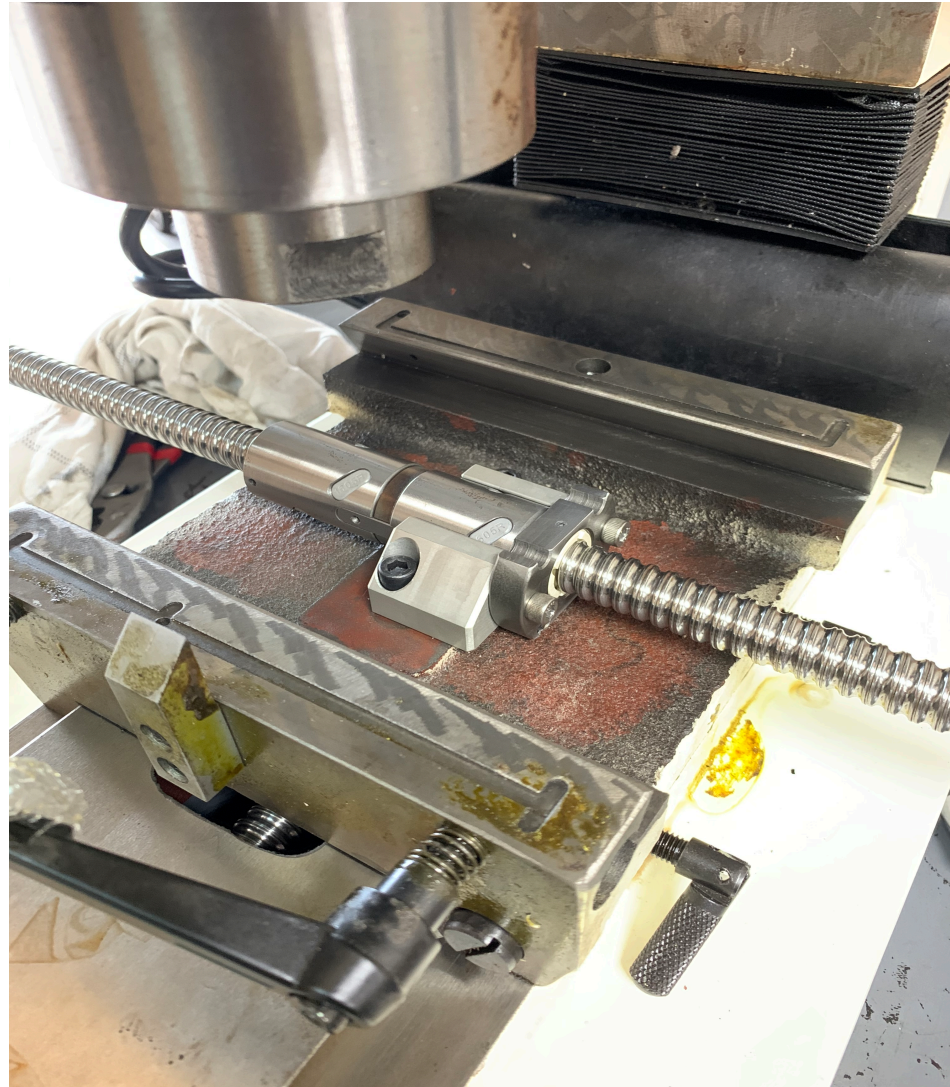
Move the ball nut in place to align with the cap screw, and bolt it down



Bolt the motor mount to the base of the machine and put the motor mount plate on



Bolt down the X ball nut block to the existing tapped holes.



Slide the table back on along with the gib, and put the retention screw back in



Bolt on the bearing plate and tighten down the jam nuts. Bolt on the motor mount



Last but not least. Put the bad ass Heavy Metal plate on to cover the hole in the column

