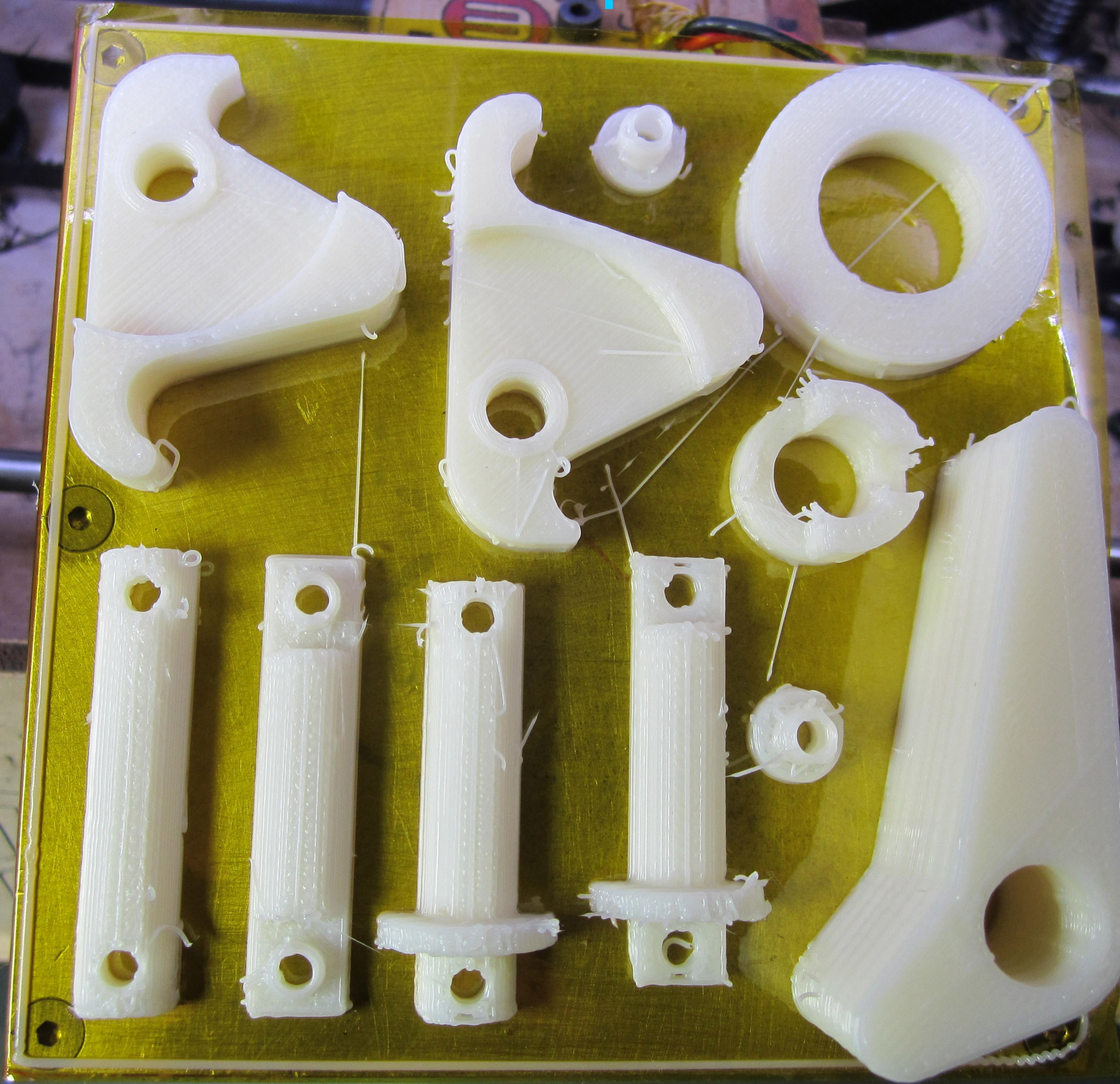
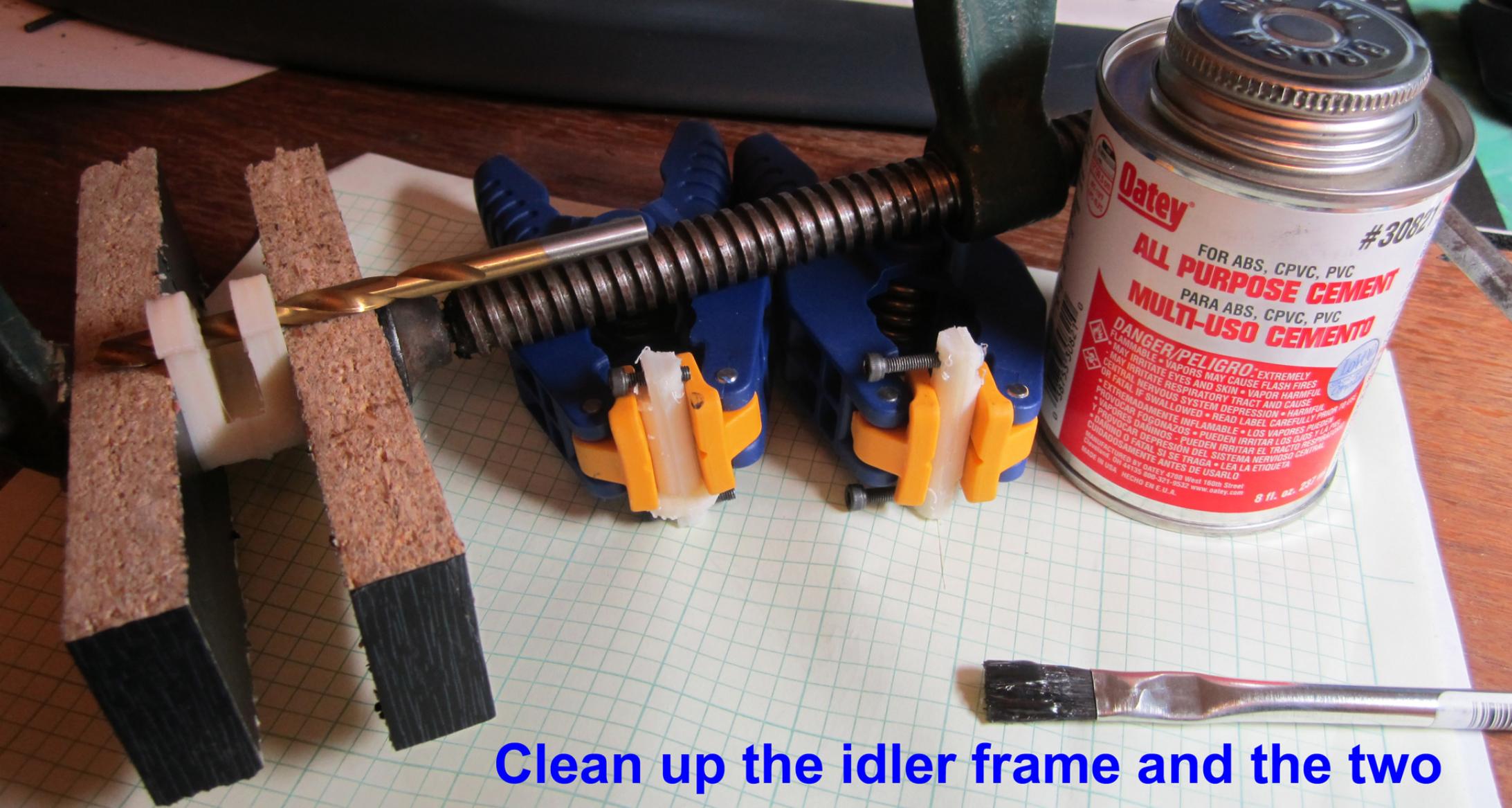


Build front and back at the same time

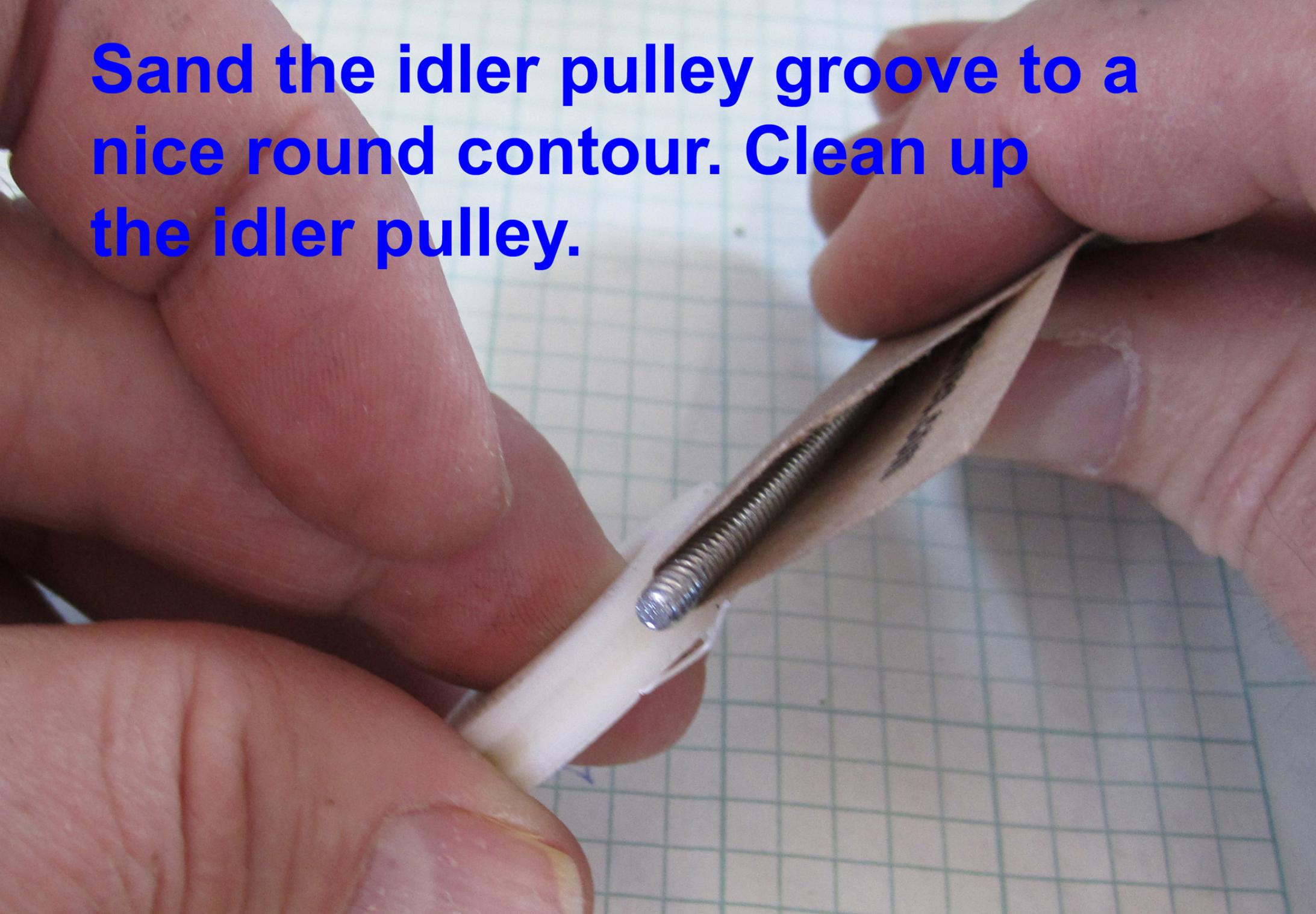
Build all the other parts at one time





Clean up the idler frame and the two axels. Glue, align and clamp. The glue is from the plumbing section.

Sand the idler pulley groove to a nice round contour. Clean up the idler pulley.



Paint a thin coat of “hot” (thin) superglue around the rim of the idler pulley. This will fill any voids and assure the fibers are bonded well.



Let it cure, sand it, and re coat. Then a final clean-up with fine sand paper.

**Press the small bearing into the idler pulley.
This is the bearing that was on the end of
the DC motor on the MK4.**

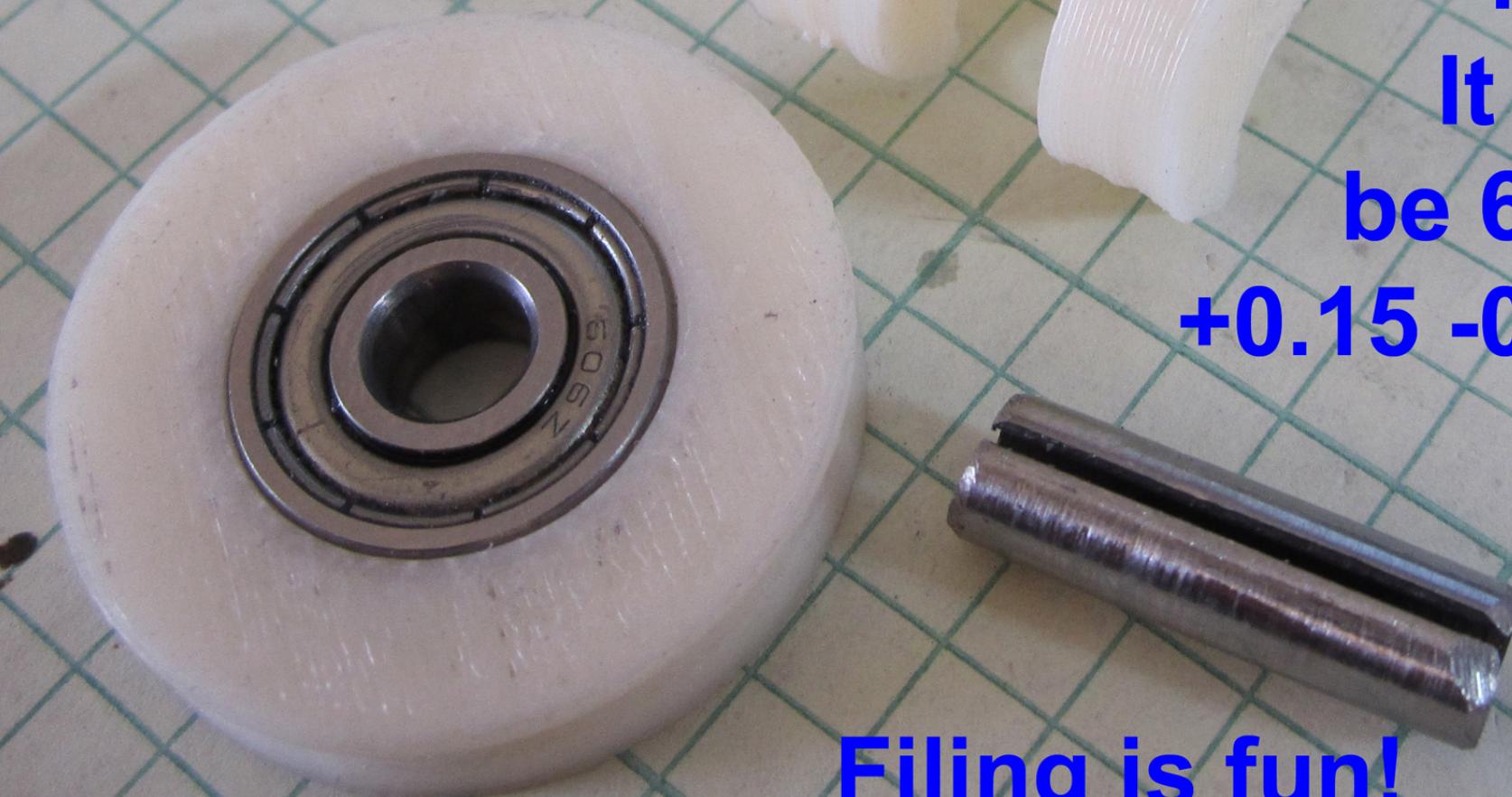


**Prepare the parts
for the idler
assembly.**

**You will need to
manually create
a 6mm roll pin
from a 1/4"**

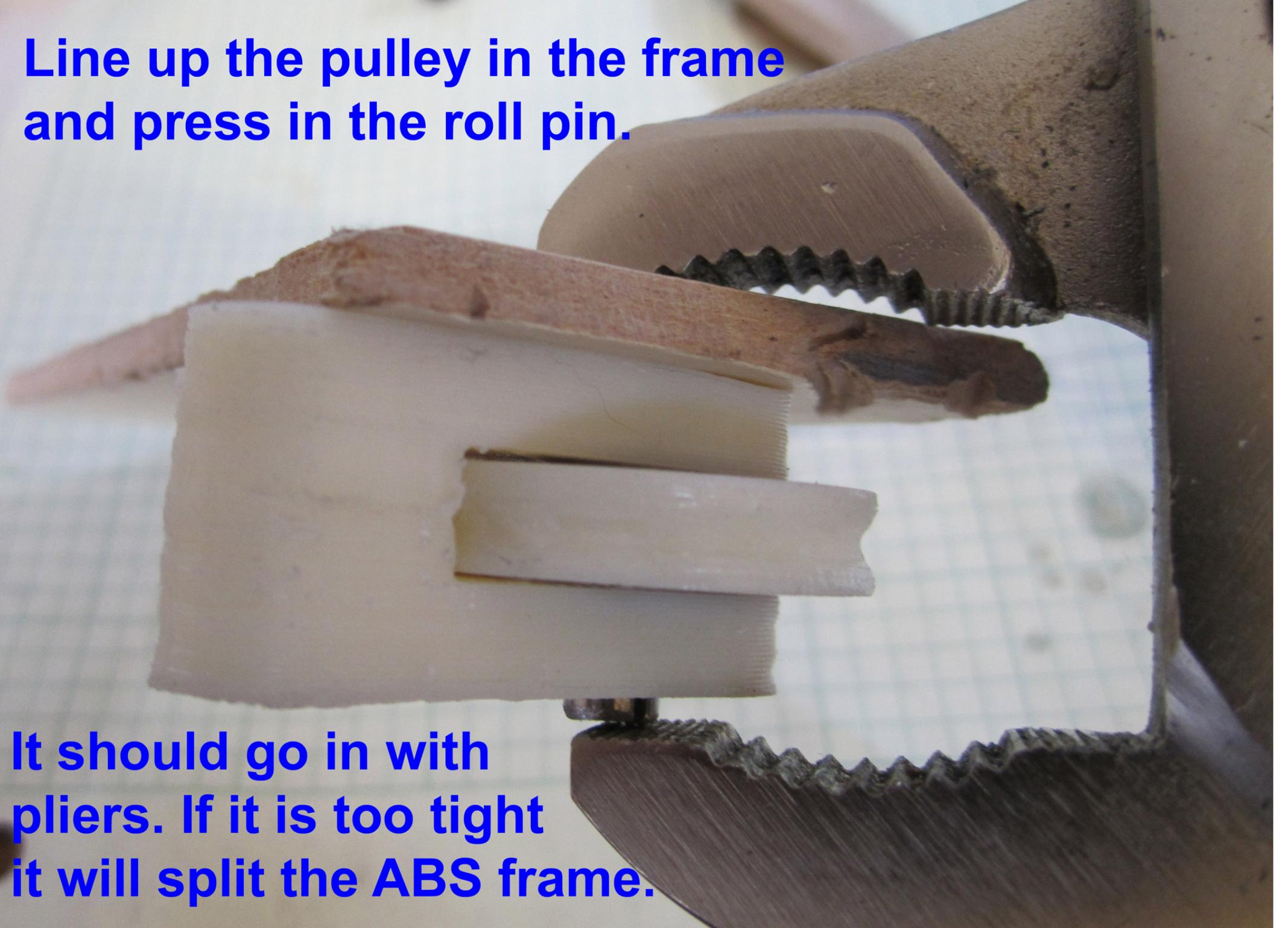
**or 6mm
roll pin.**

**It should
be 6.00mm
 $+0.15 -0.00$ OD**



Filing is fun!

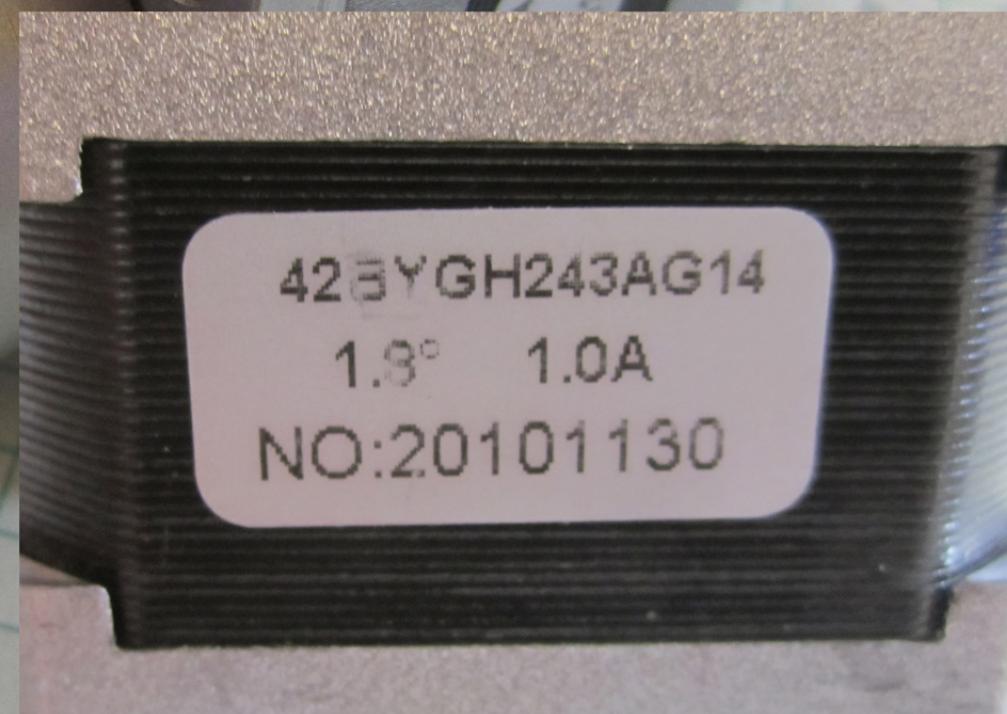
**Line up the pulley in the frame
and press in the roll pin.**



**It should go in with
pliers. If it is too tight
it will split the ABS frame.**

**Get this motor from the good
folks at MakerGear.com.**

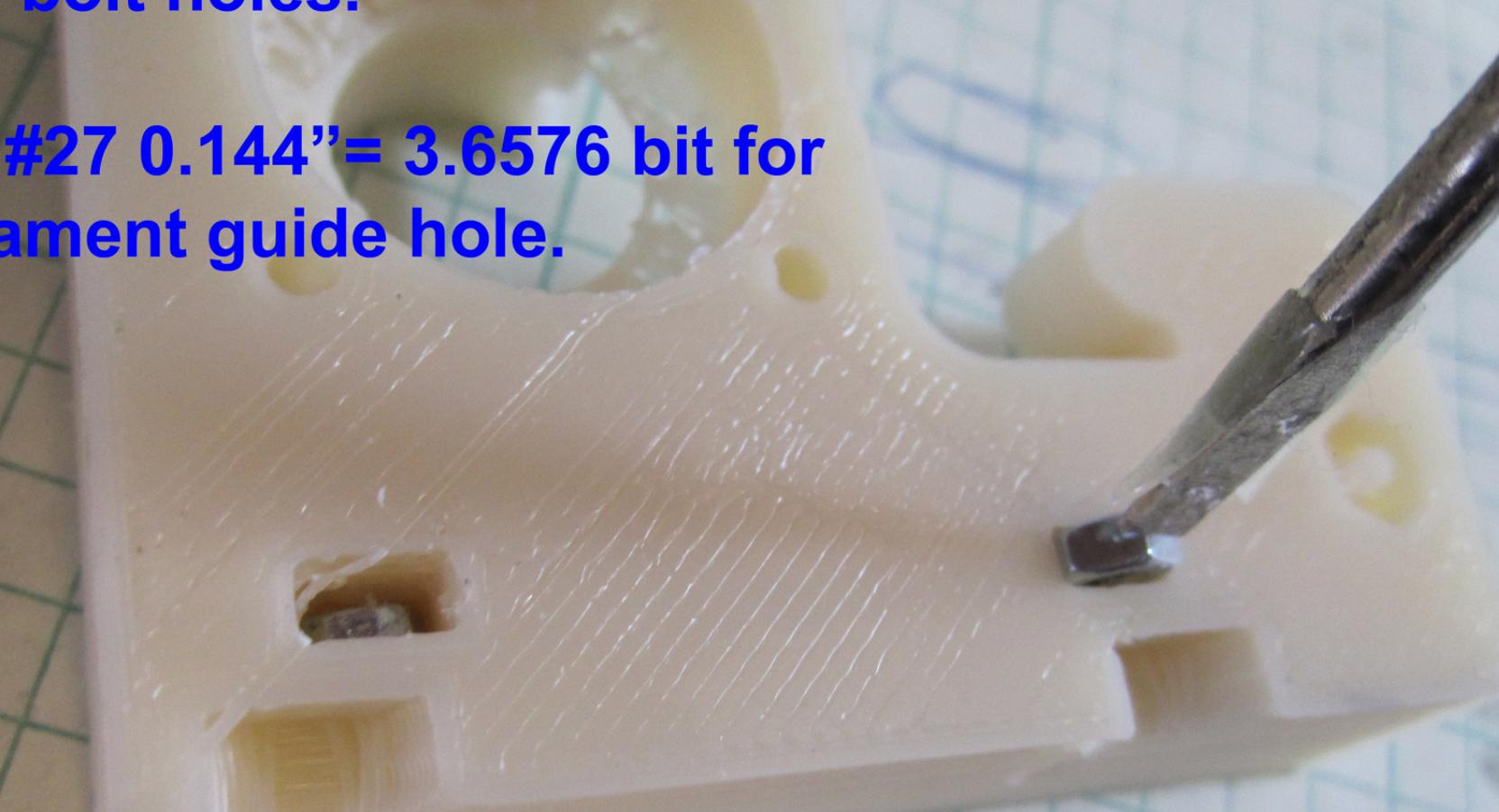
**Get a MK5
drive
pulley,
drill**



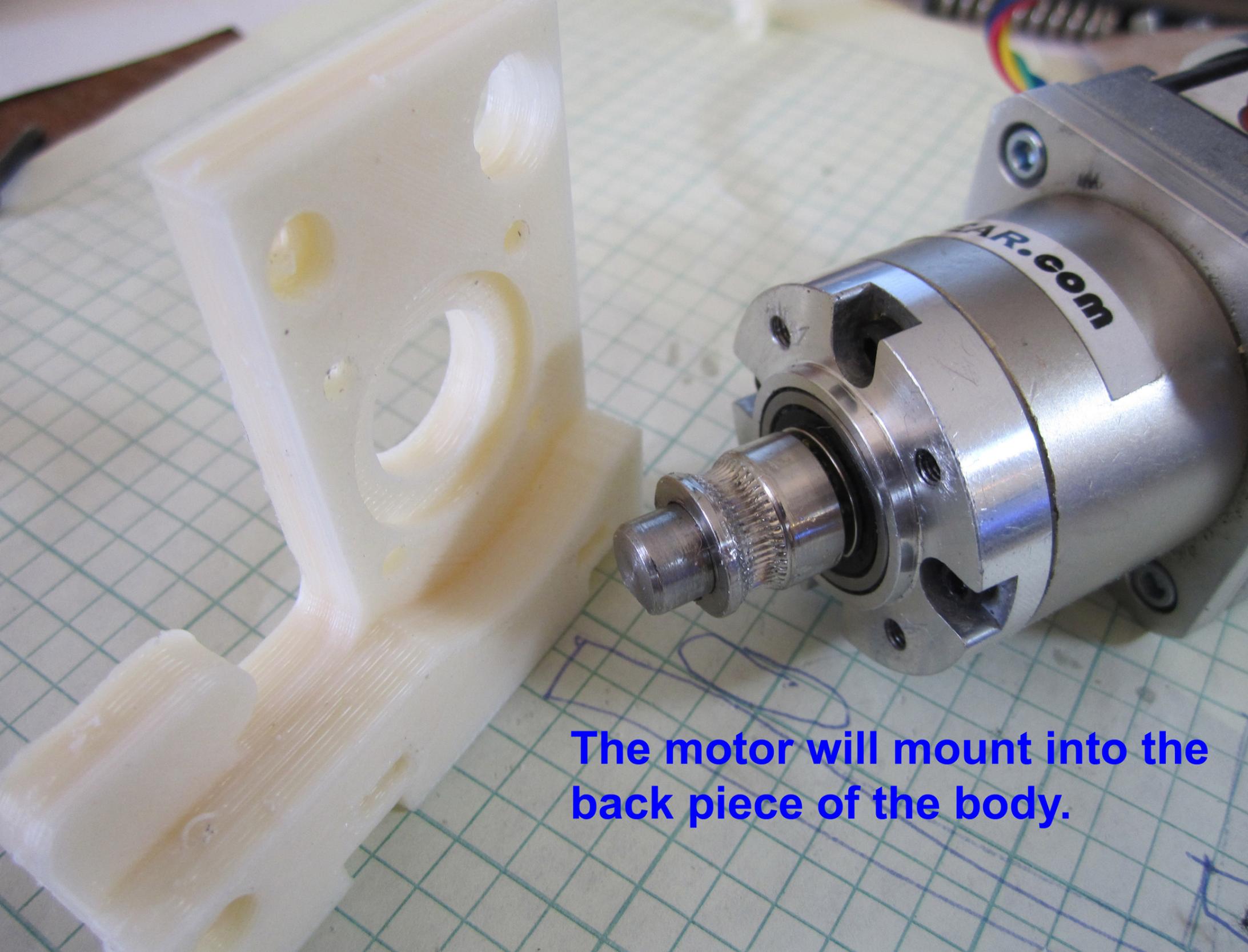
**it out with a “O” size drill
(0.3160” / 8.0264 mm). It is
stainless, do not go fast and gall
your bit. Use a lathe to make sure it is centered.**

Run a 3mm bit (#31 0.120" = 3.048mm) through all the bolt holes.

Use a #27 0.144"= 3.6576 bit for the filament guide hole.



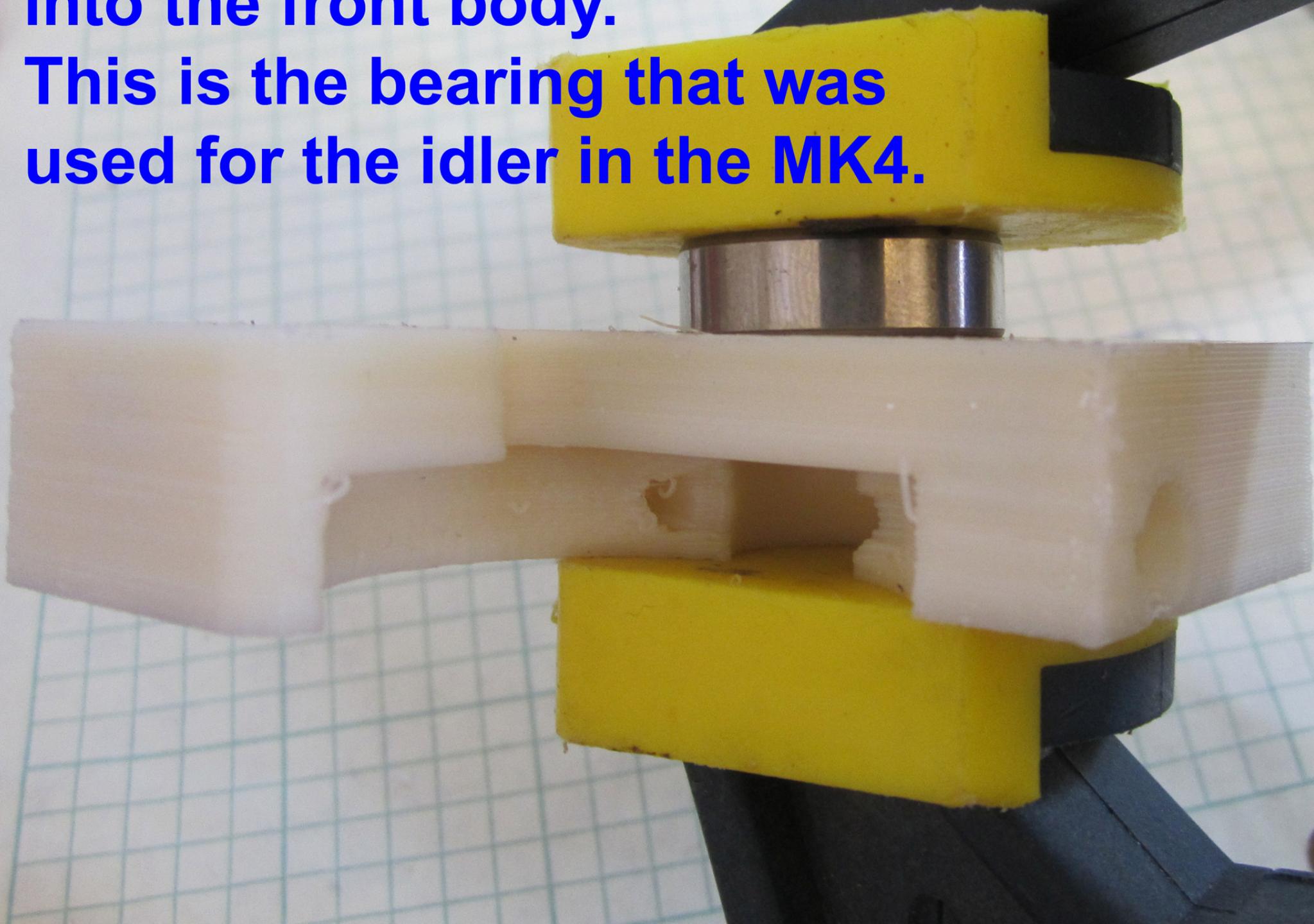
Press M3 nuts into the slots of the front and back body pieces (4 places). Assure they line up with the holes from the bottom.

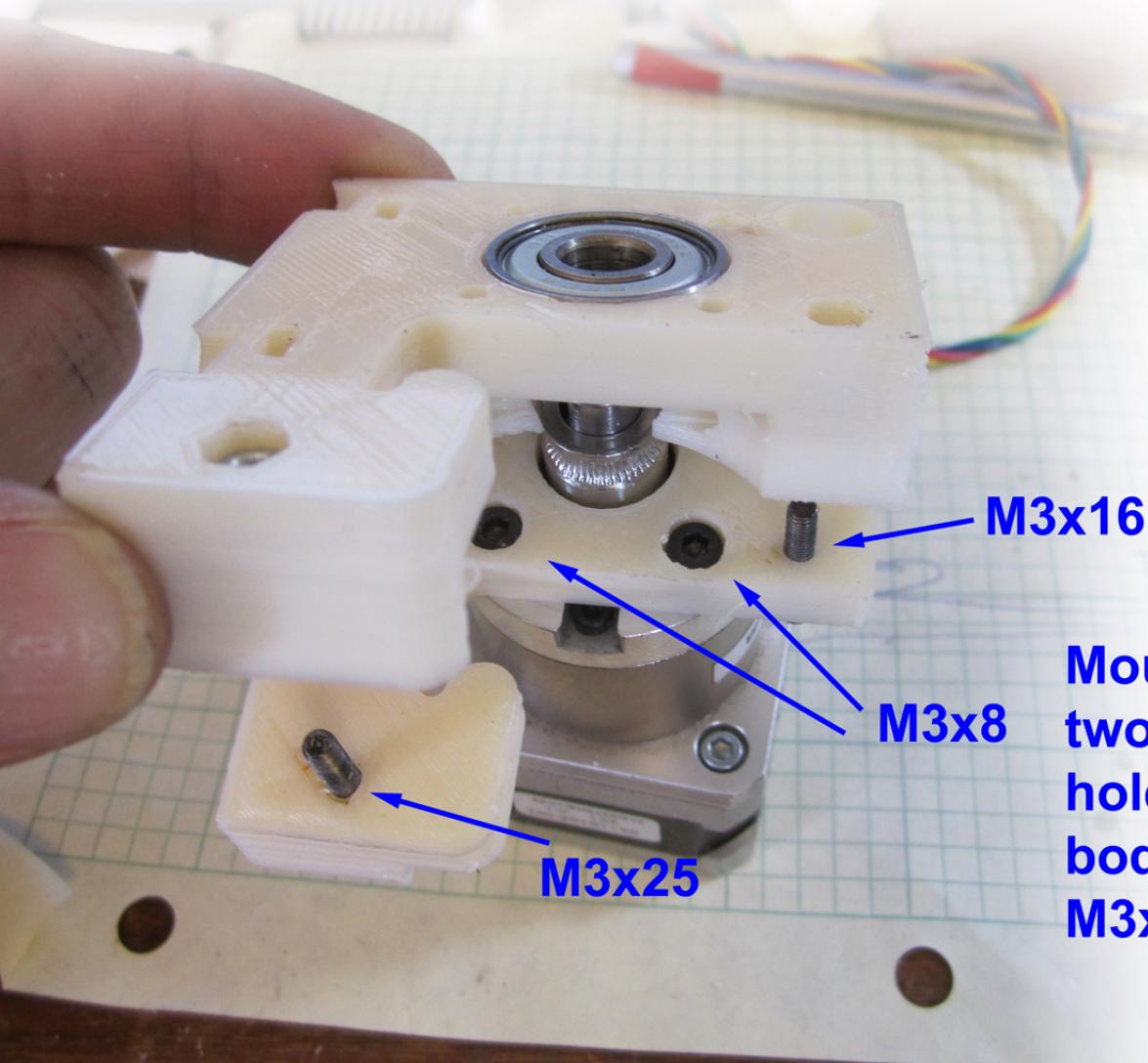


The motor will mount into the
back piece of the body.

**Press the large bearing
into the front body.**

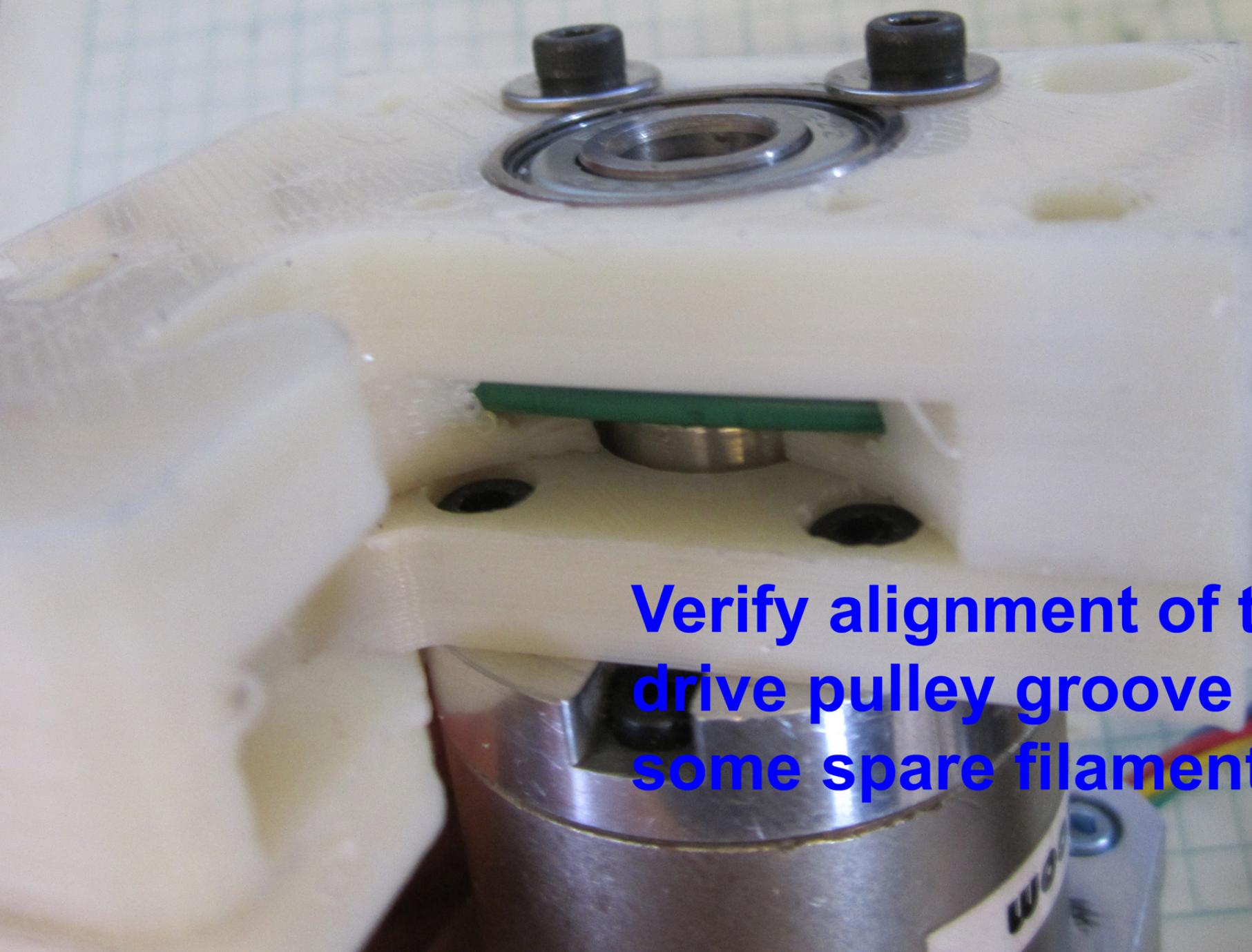
**This is the bearing that was
used for the idler in the MK4.**





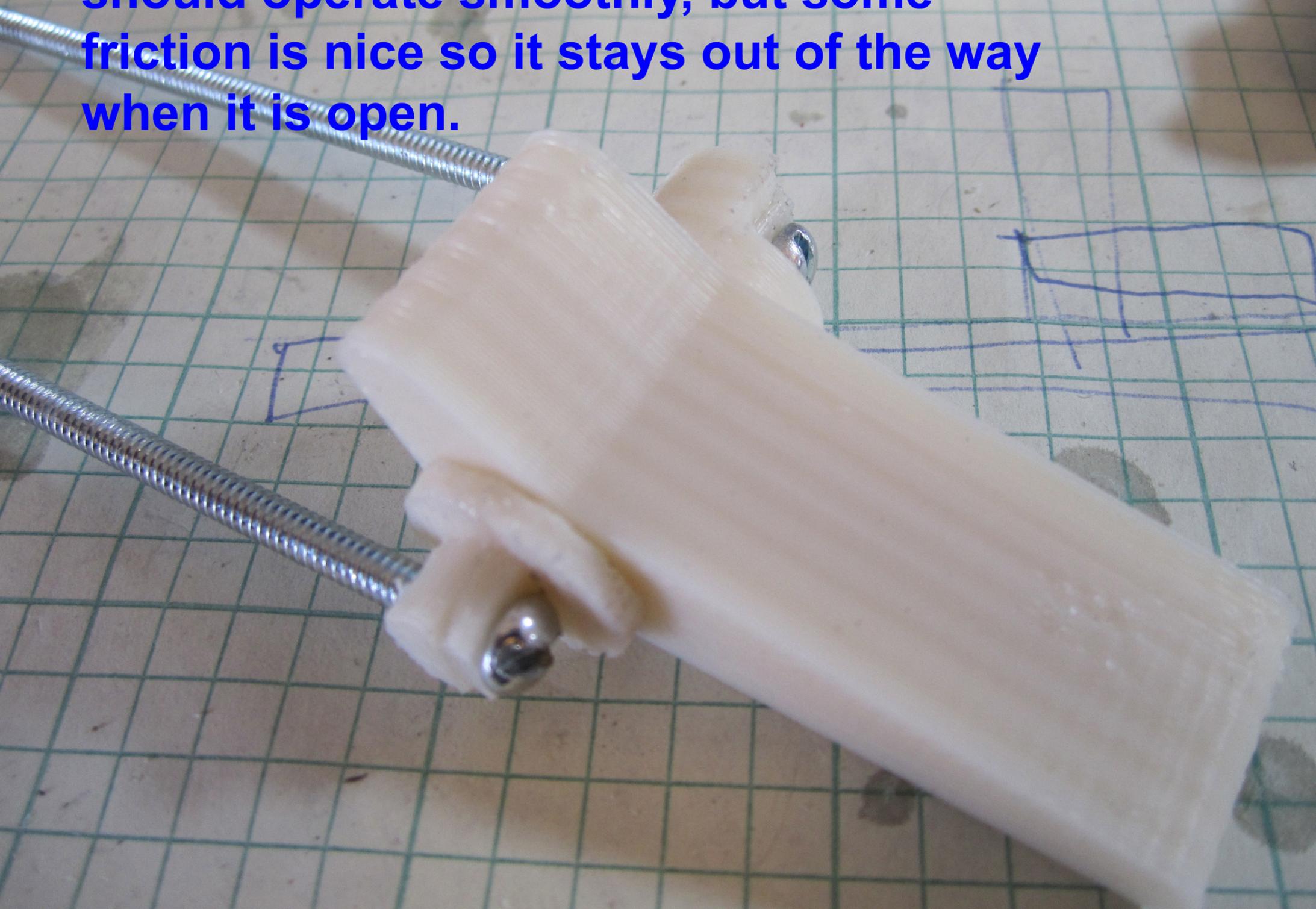
Mount the body back to the motor using two M3x8. Press two M3 nuts into the hex holes in the front body. Assemble the front body to the backbody+motor, secure with M3x16 and M3x25.

Use two M3x25 screws with washers to complete the assembly. The washers serve to hold in the motor shaft support bearing.

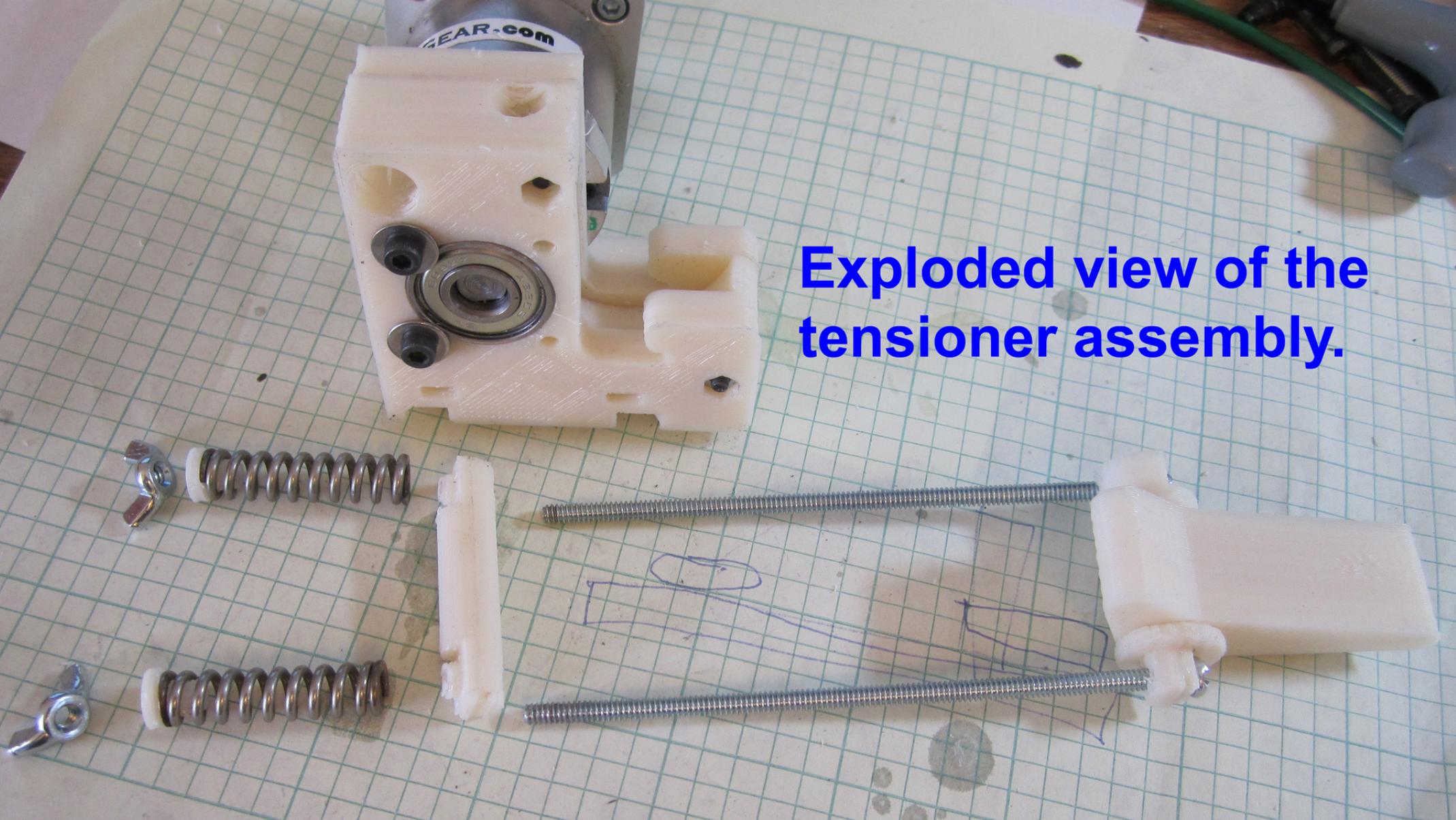


Verify alignment of the drive pulley groove and some spare filament.

Assemble the 6-32x4 bolts, the over-center lever, the axel and keeper. It should operate smoothly, but some friction is nice so it stays out of the way when it is open.

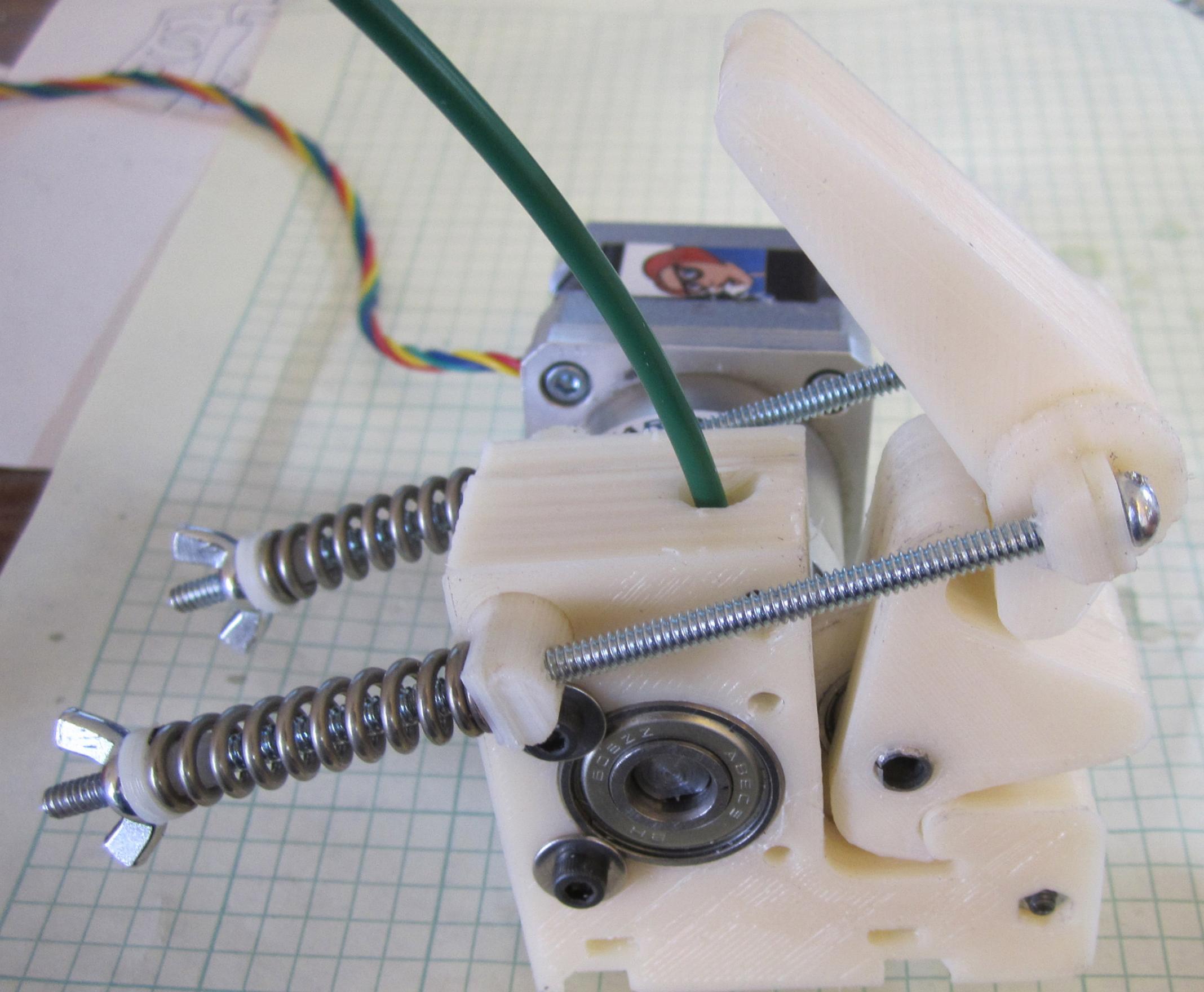


**Exploded view of the
tensioner assembly.**



And it goes . . .





... a little like ...

CLICK!

... THIS !

Bolt it up to the MK5 Bridge using the original bolts.

