

# Recoverable microdrive assembly instructions.

Design name: rat 1/2" v18

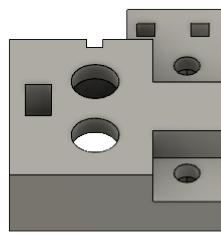
Travel distance: 5.8 mm

Shell base: 3.2 x 7.5 mm (WxL)

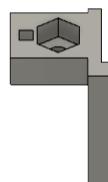
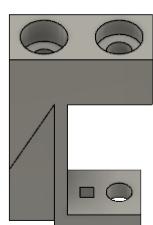
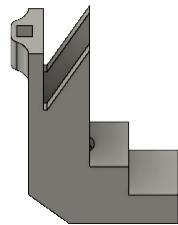
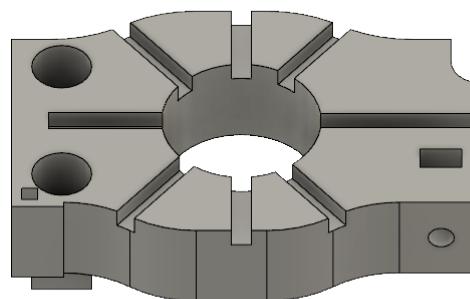
More information is available at:

- <https://github.com/YoonGroupUMich/Microdrive>
- or contact me (Misi Voroslakos) directly at voroslakos@gmail.com

Drive holder



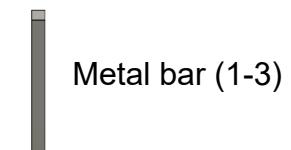
Stereotax attachment



Shell

Drive

Arm



Metal bar (1-3)



00-90 nut (7x)

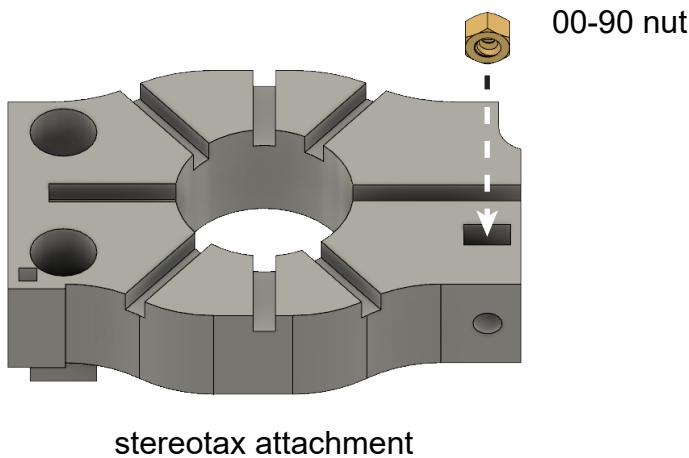


00-90 screw (2x)  
flat head

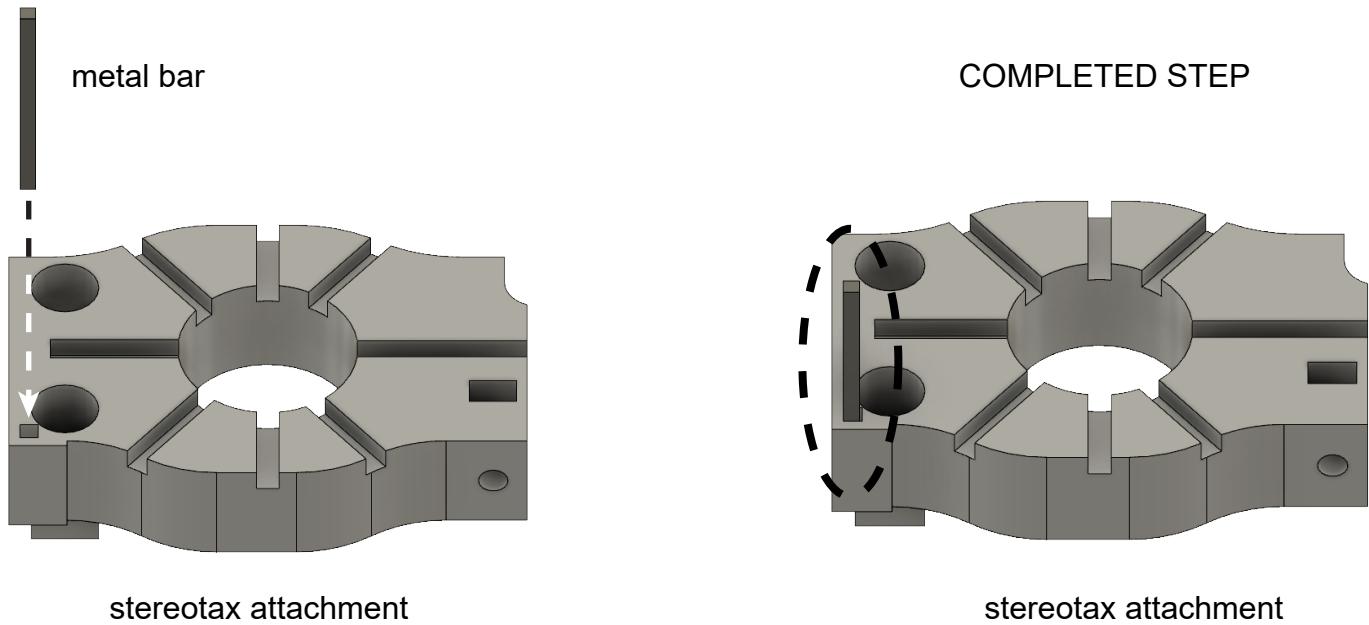


00-90 screw (4x)  
torx head (T2)

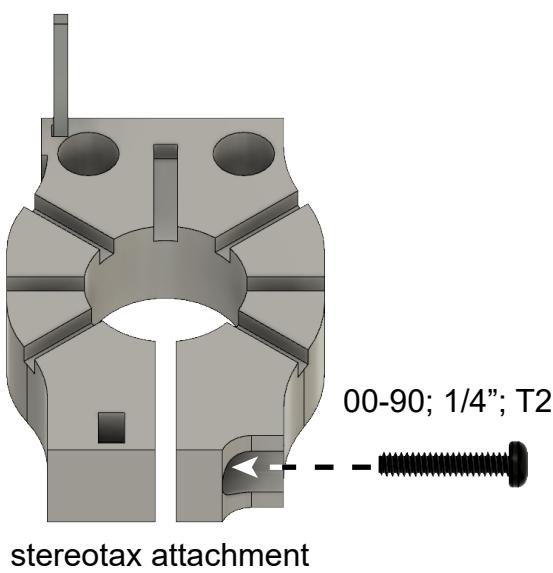
**1. Insert 00-90 nut into stereotax attachment.**



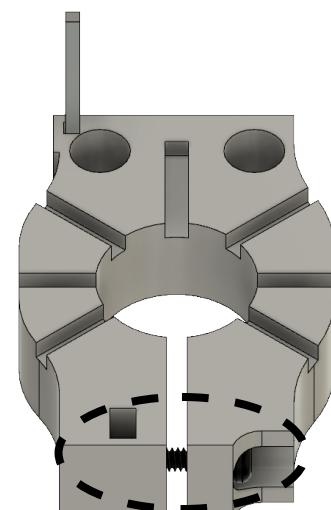
**2. Insert metal bar into stereotax attachment.**



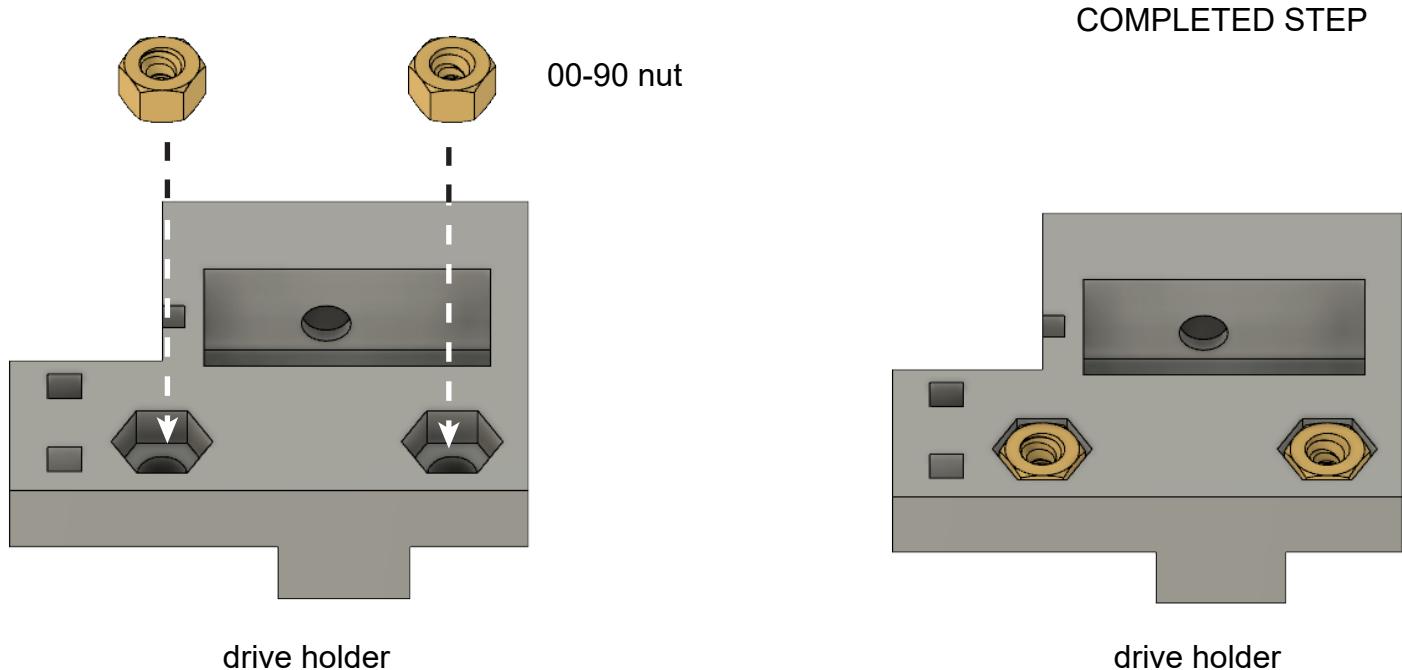
**3. Insert 00-90 1/4" T2-screw.**



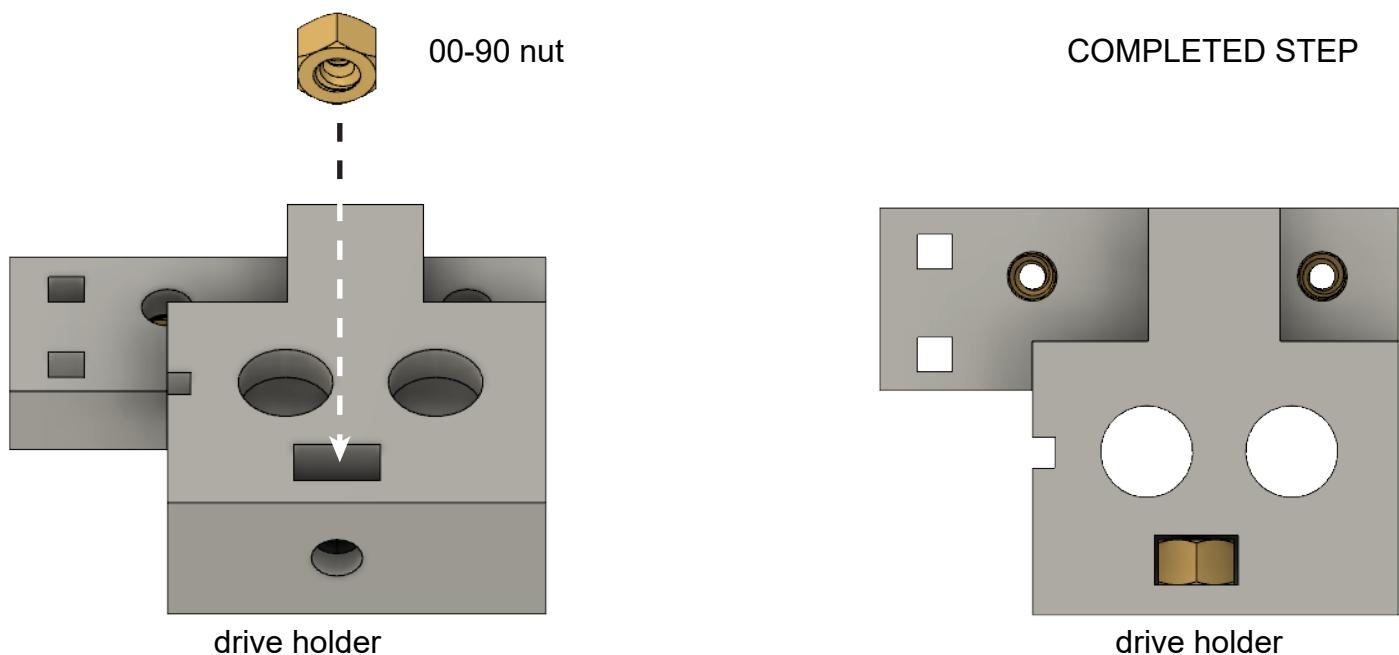
COMPLETED STEP



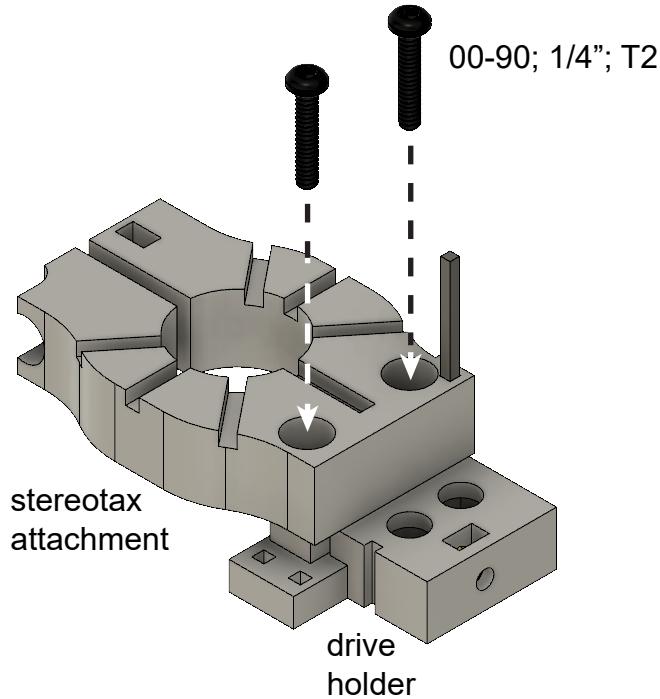
**1. Insert 00-90 nuts into bottom of drive holder.**



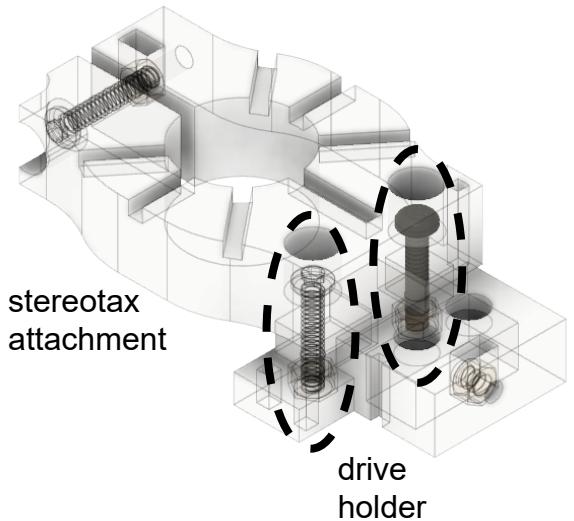
**2. Insert 00-90 nut into top of drive holder.**



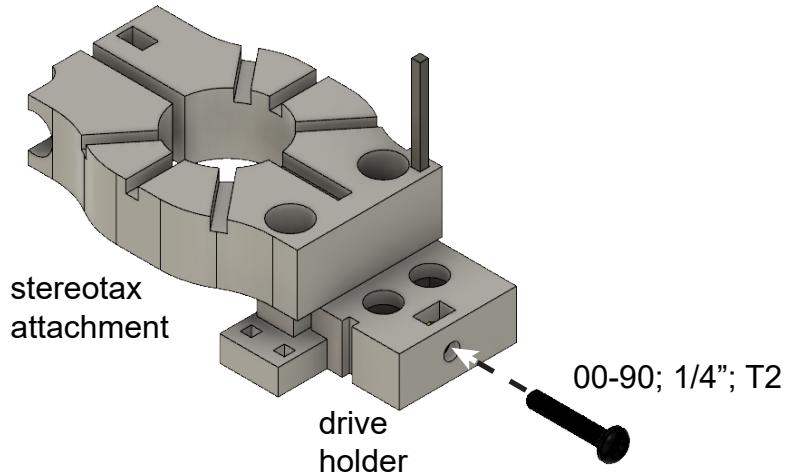
## 1. Insert 00-90 1/4" T2-screws.



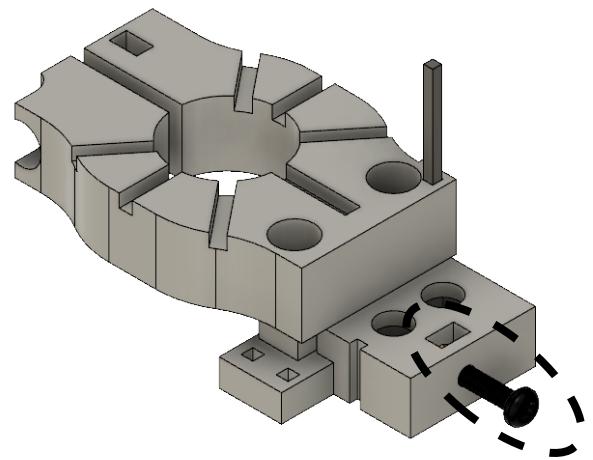
COMPLETED STEP



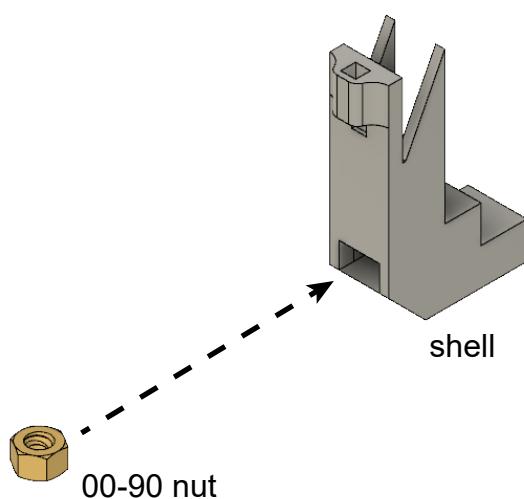
## 2. Insert 00-90 1/4" T2-screws.



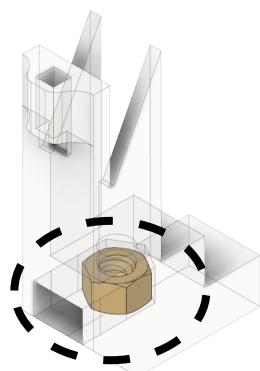
COMPLETED STEP



**1. Insert 00-90 nut into shell.**

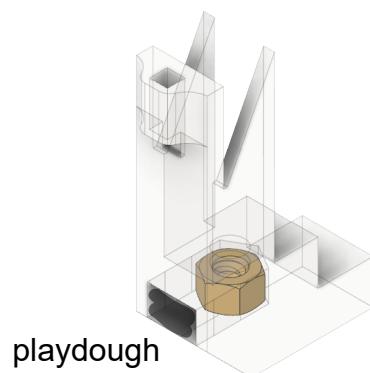


COMPLETED STEP



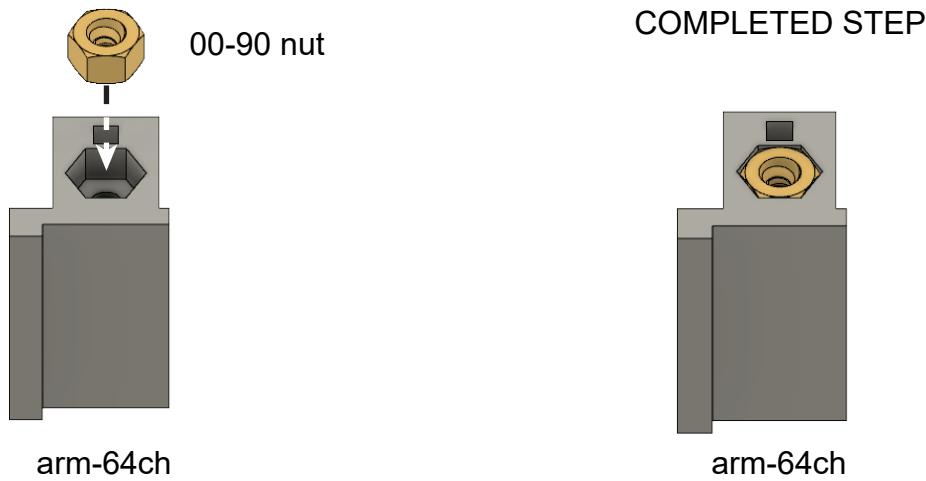
**2. Seal the hole with playdough.**

It will prevent cement flowing into the hole/nut during surgery.

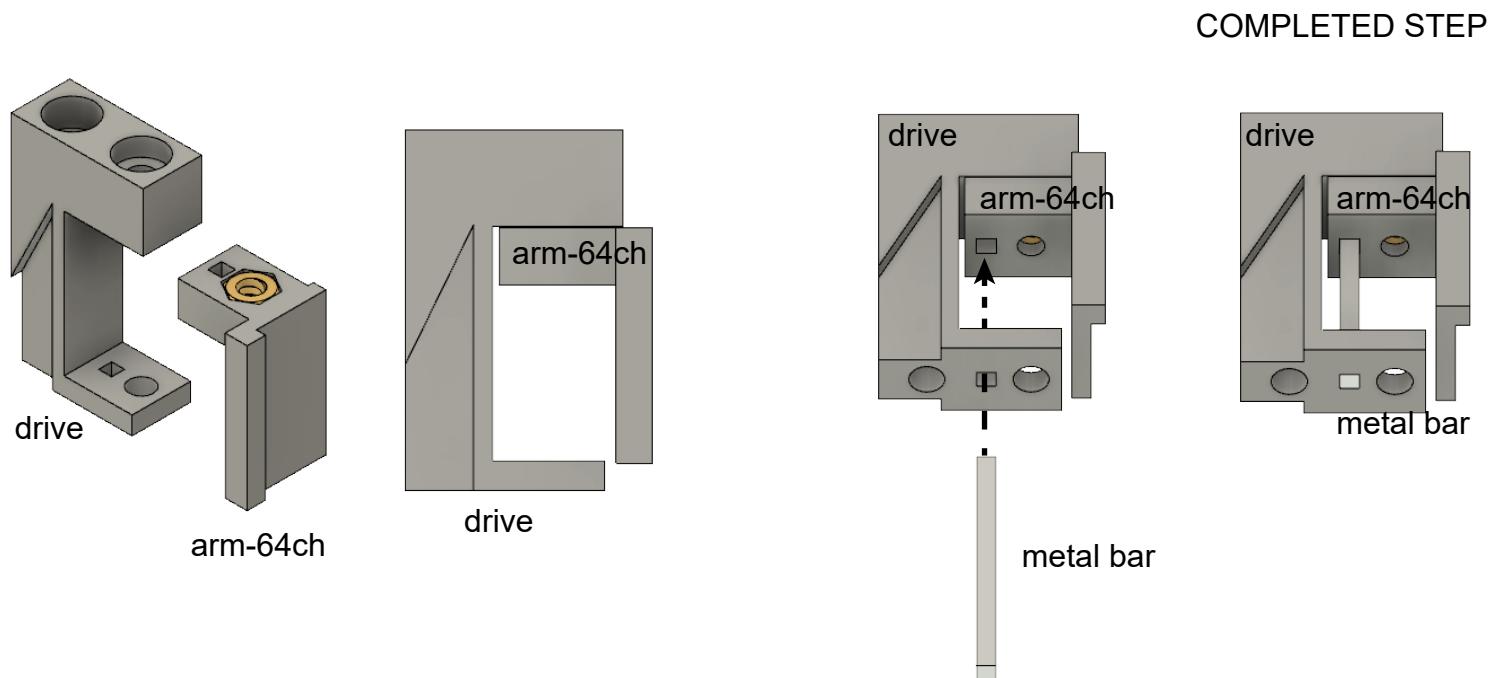


**3. Cover the playdough with cement.**

### 1. Insert 00-90 nut into arm.

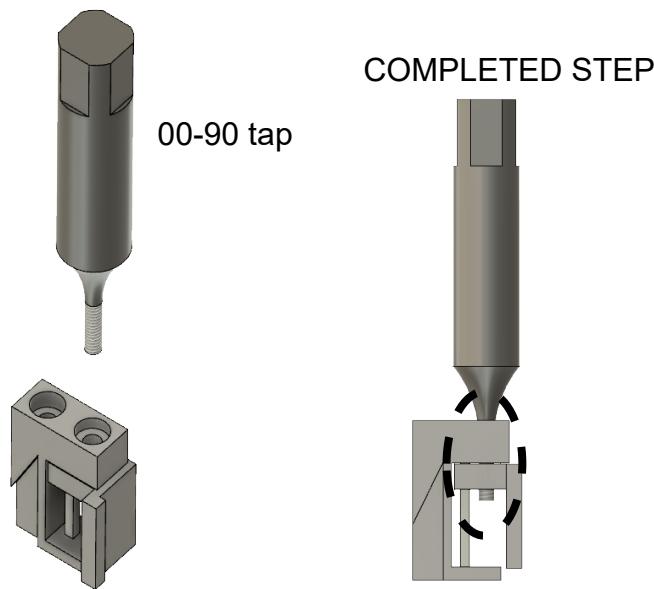


### 2. Align arm and drive and insert/glue metal bar.

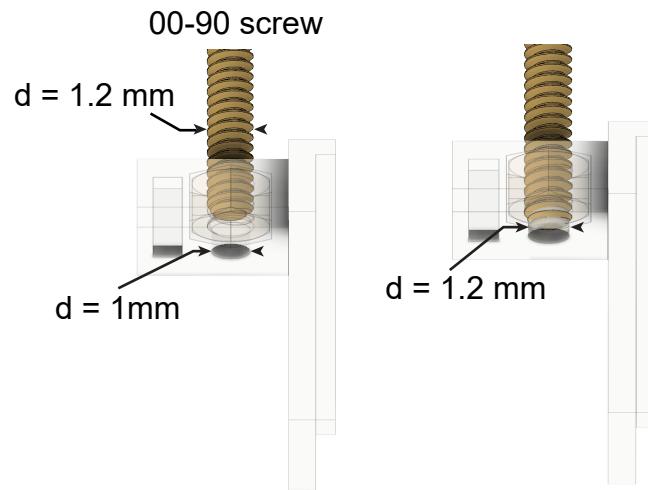


### 3. Cut 00-90 thread into plastic (arm) through the nut.

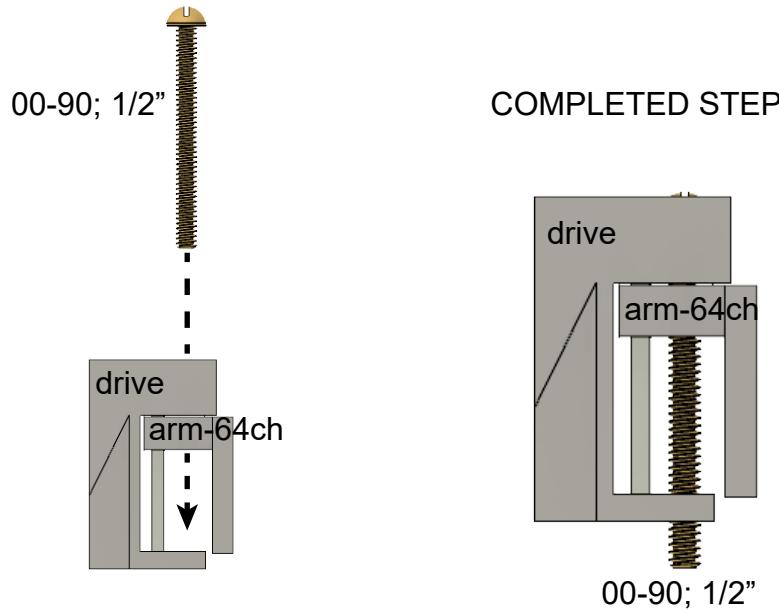
Option-1 (preferred)



Option-2

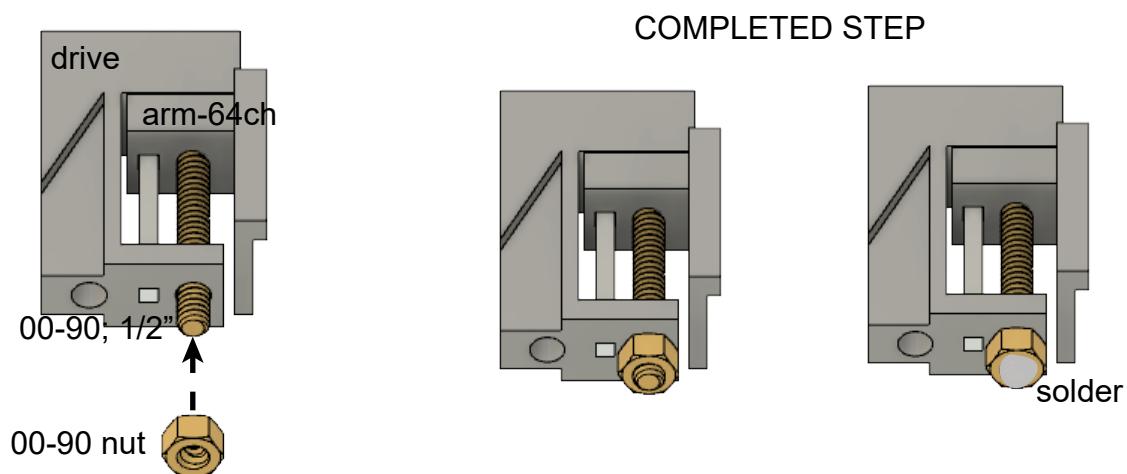


**4. Insert 00-90; 1/2" screw into arm nut.**

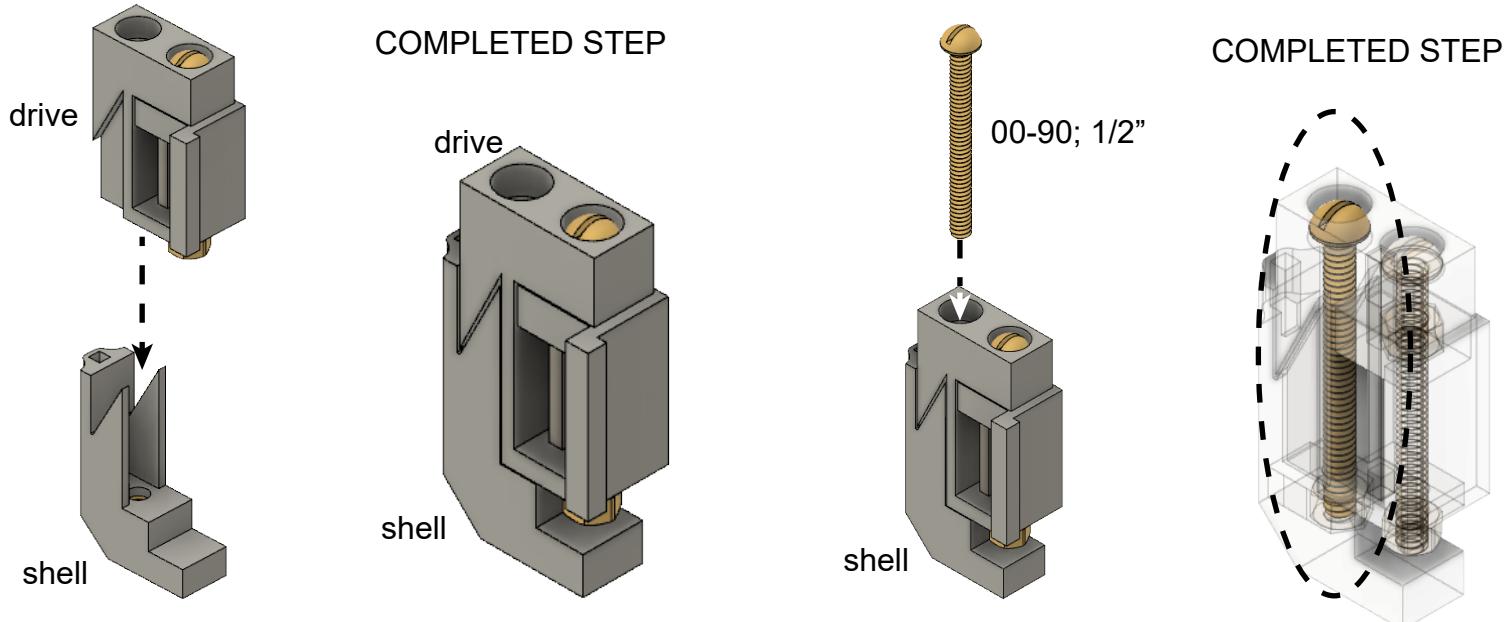


**5. Solder 00-90 nut to 00-90 screw.**

Tighten nut completely then release a quarter/half turn. Apply a drop of flux then solder nut to screw.



## 1. Insert drive into shell then insert 00-90; 1/2" screw into shell.



## 2. Push drive into drive holder then lock it in with side screw.

Be aware that you are pushing metal against plastic (if it is too tight, you can break the drive!!!).

