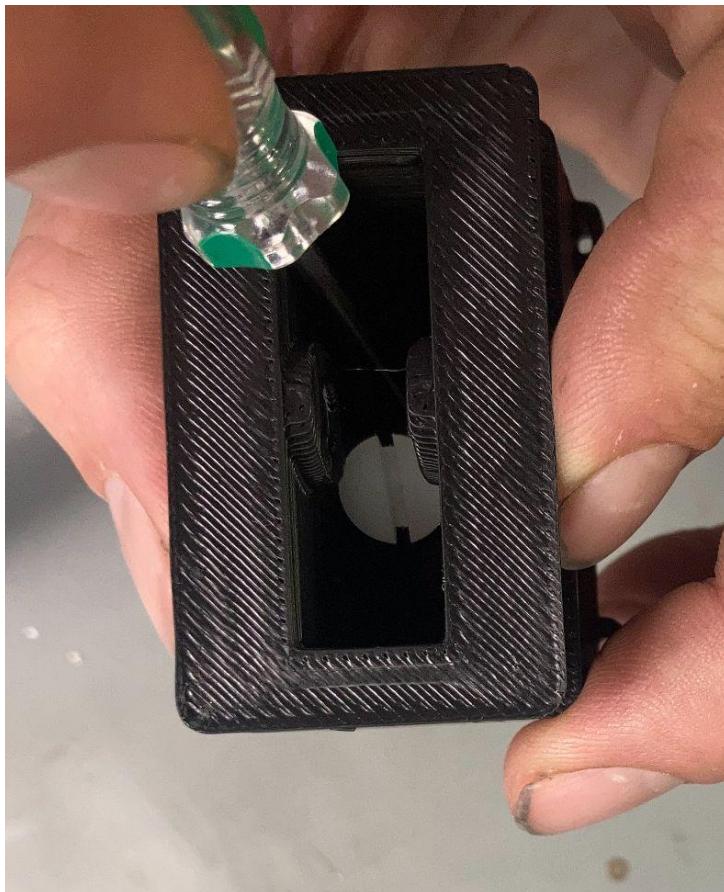


1

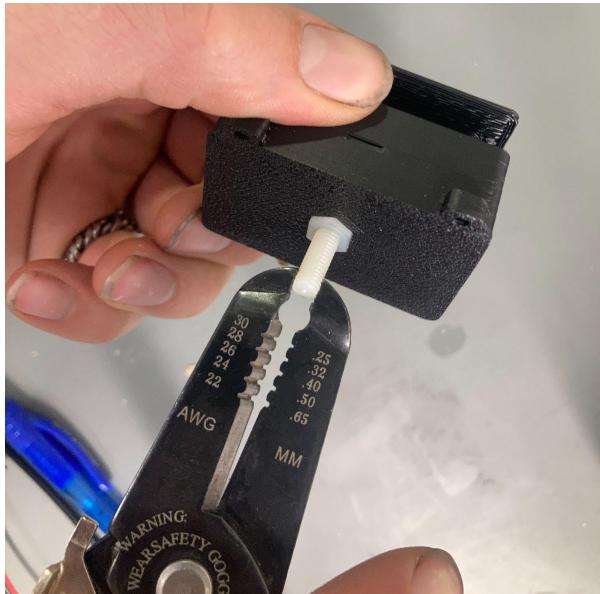
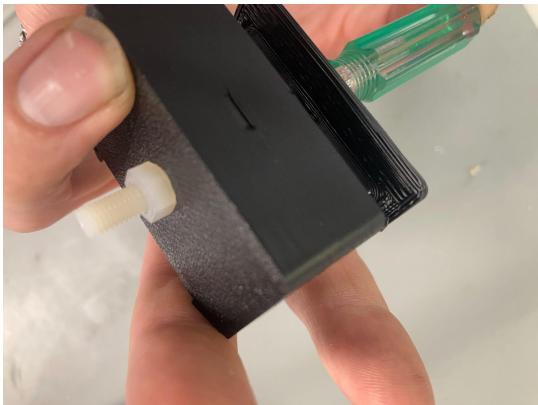
add M5 screw in the back of dynamo housing

- Use flathead screwdriver to get the screw through the hole



Add m5 nut to back and screw in

- when done screwing in, use wire stripper / pliers to really tighten the screw down on the nut



- add M5 adaptor to the bearing (sometimes you need to hit it with a hammer to get it in)
- add magnet ring around bearing



add magnets!

4

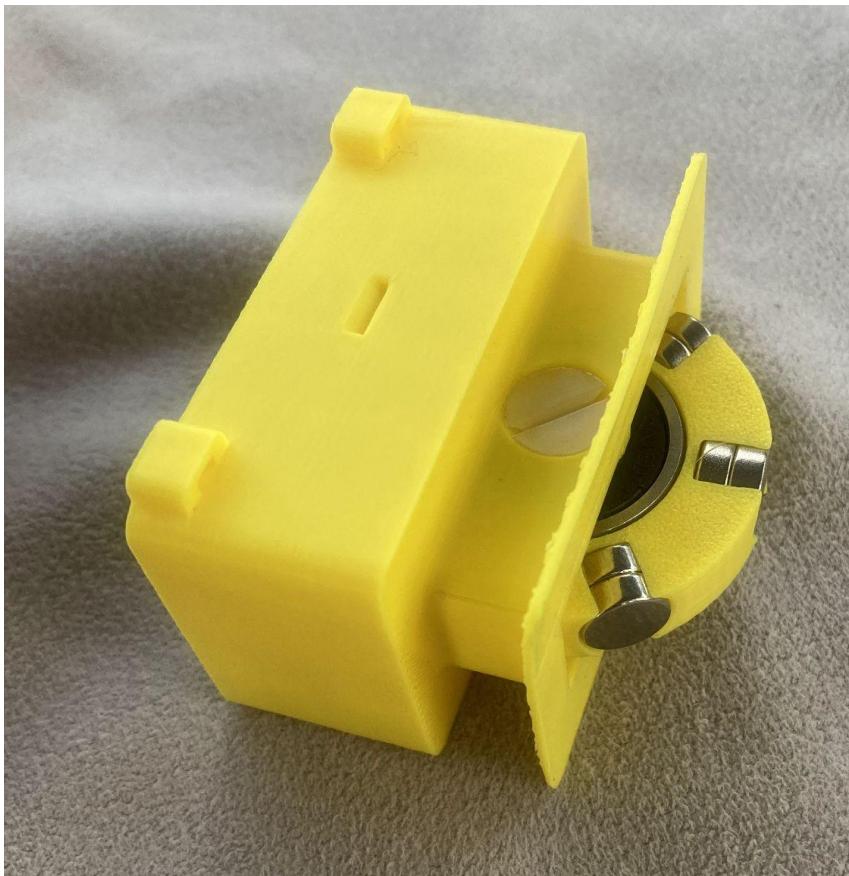
- two stacked magnets per slot
- make sure adjacent ones are opposite polarity!

(they need to push away from each other.

test magnets you are about to place by trying to stick them to the magnets next to them. if they stick, flip them!)

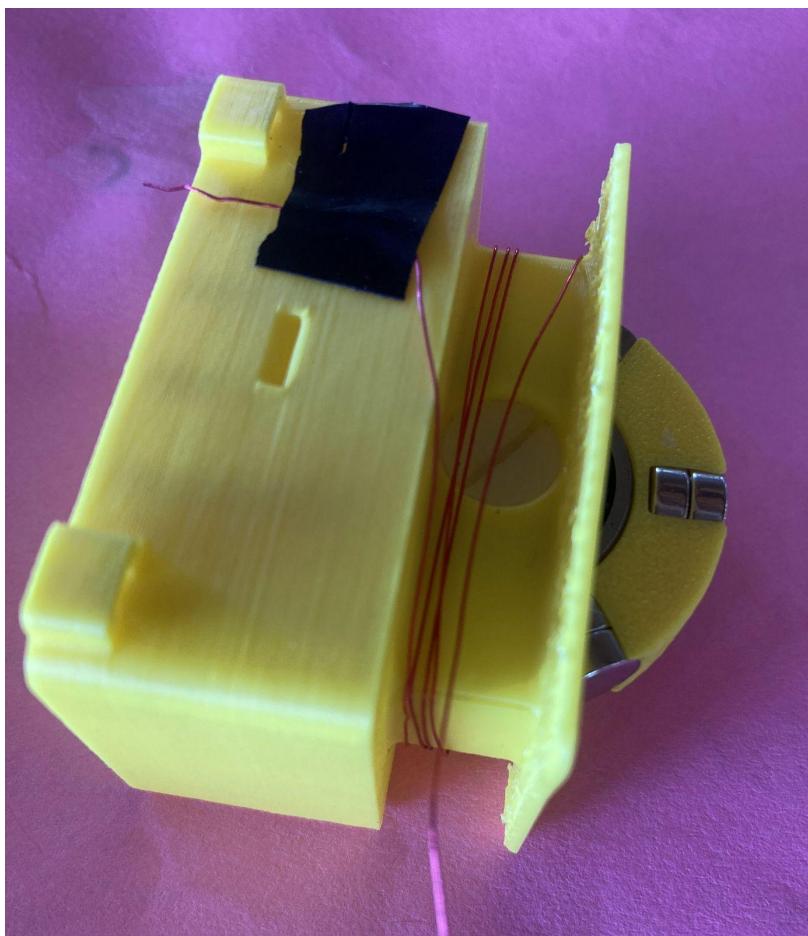


- **stick bearing assembly into Dynamo Housing**
 - **add screw through assembly**
- **add nut on back side (nut should fit in hexagonal hole)**
 - **Tighten!**



prepare winding

- cut small piece of electrical tape
- tape one side of enameled wire to dynamo housing
- do a couple windings by hand, keep them tight!

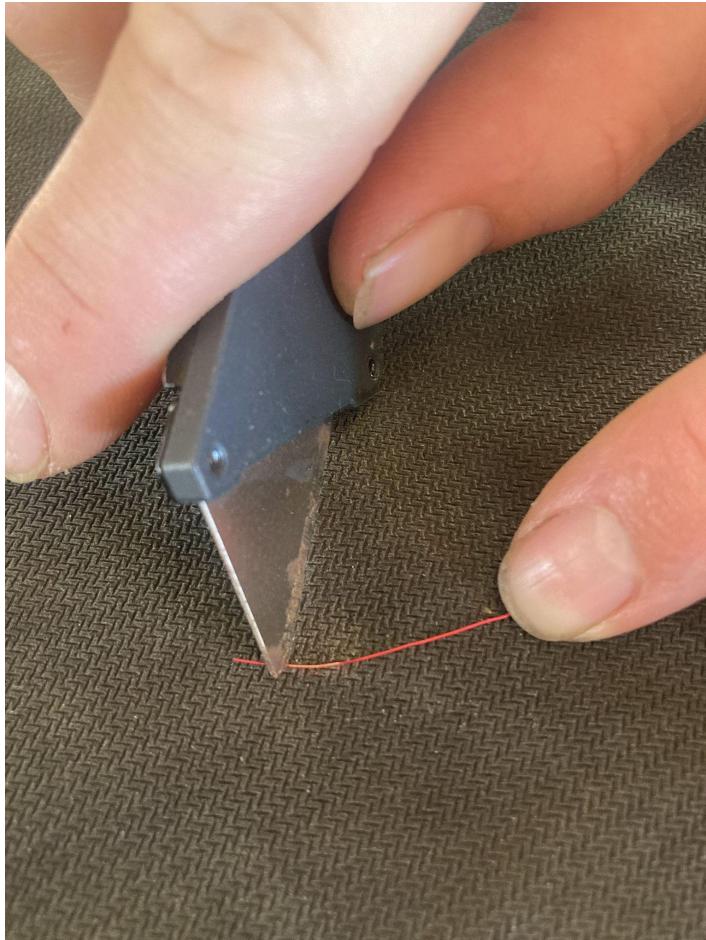


winding!

- put that screw poking out of the back of the dynamo into the drill chuck
 - someone holds drill
- other person holds spool and helps guide it in
 - start slow!
- having the spool be far away from the drill can help



- when done unwinding the entire spool, tape the other ⁸ wire to dynamo to temporarily secure
- scrape enamel off with knife or sandpaper



solder JST connector to the enamel wire

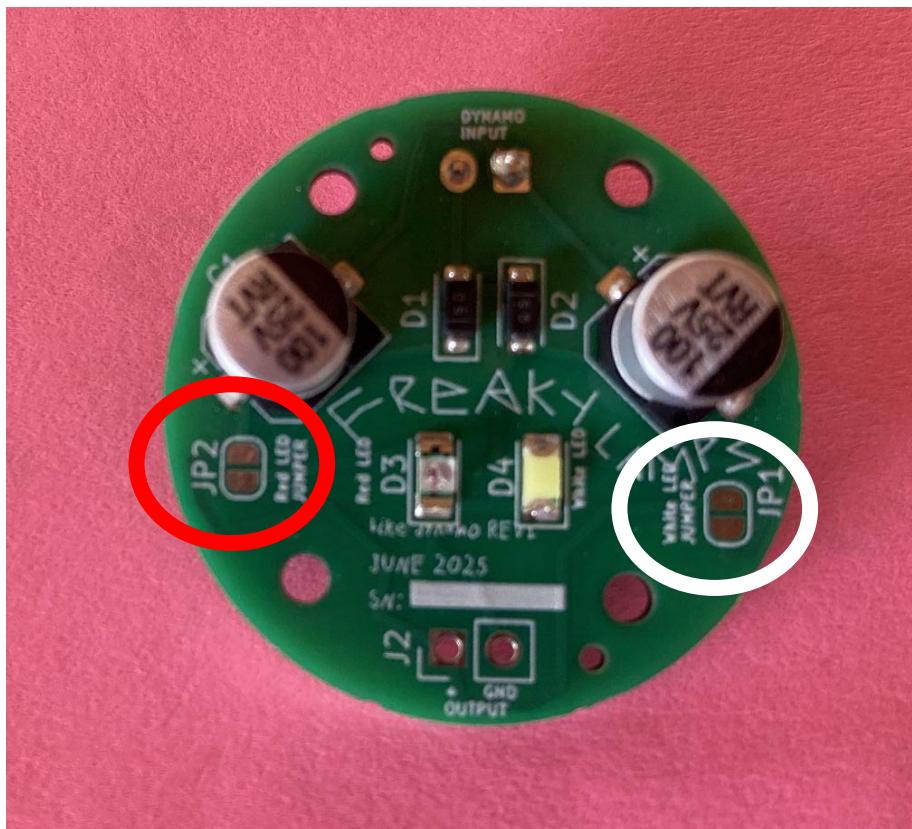
- make sure to use shrink
wrap!

- secure with zip ties

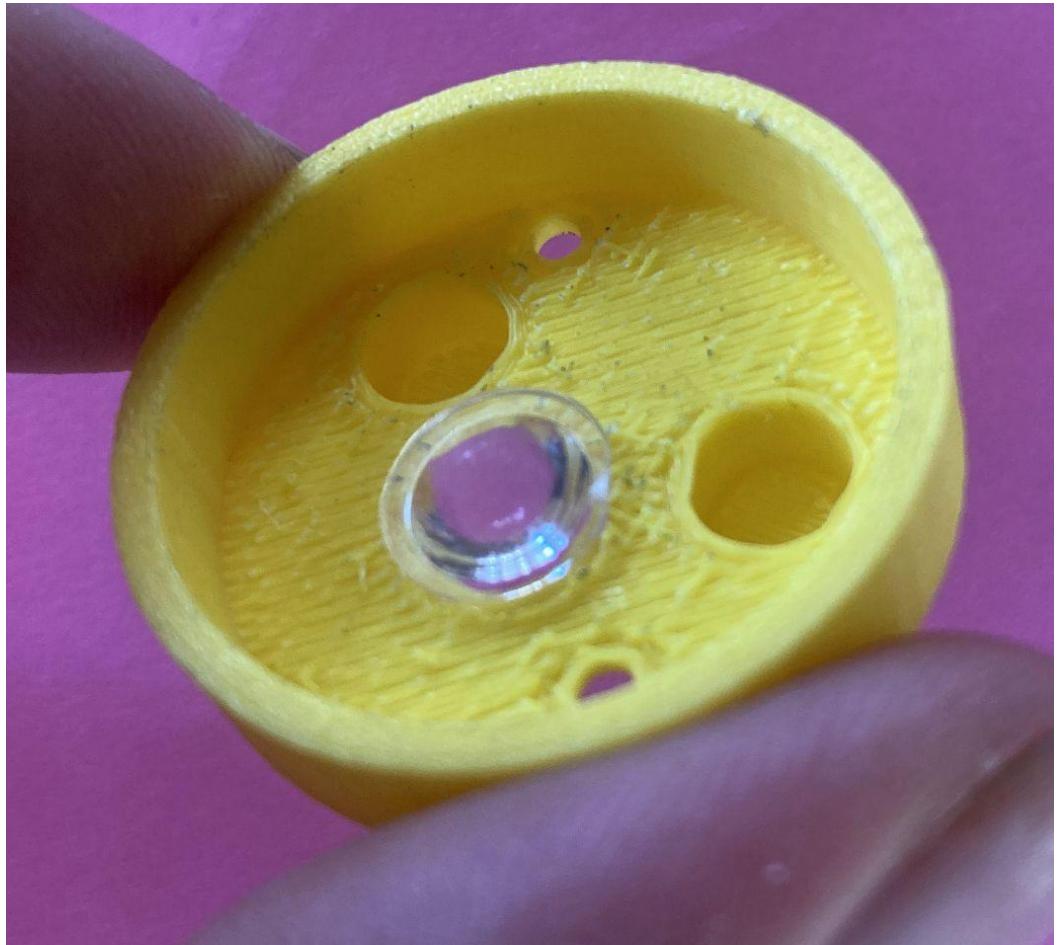


**do you want the bike
light to be red or white?**

- solder blob the
corresponding jumper**

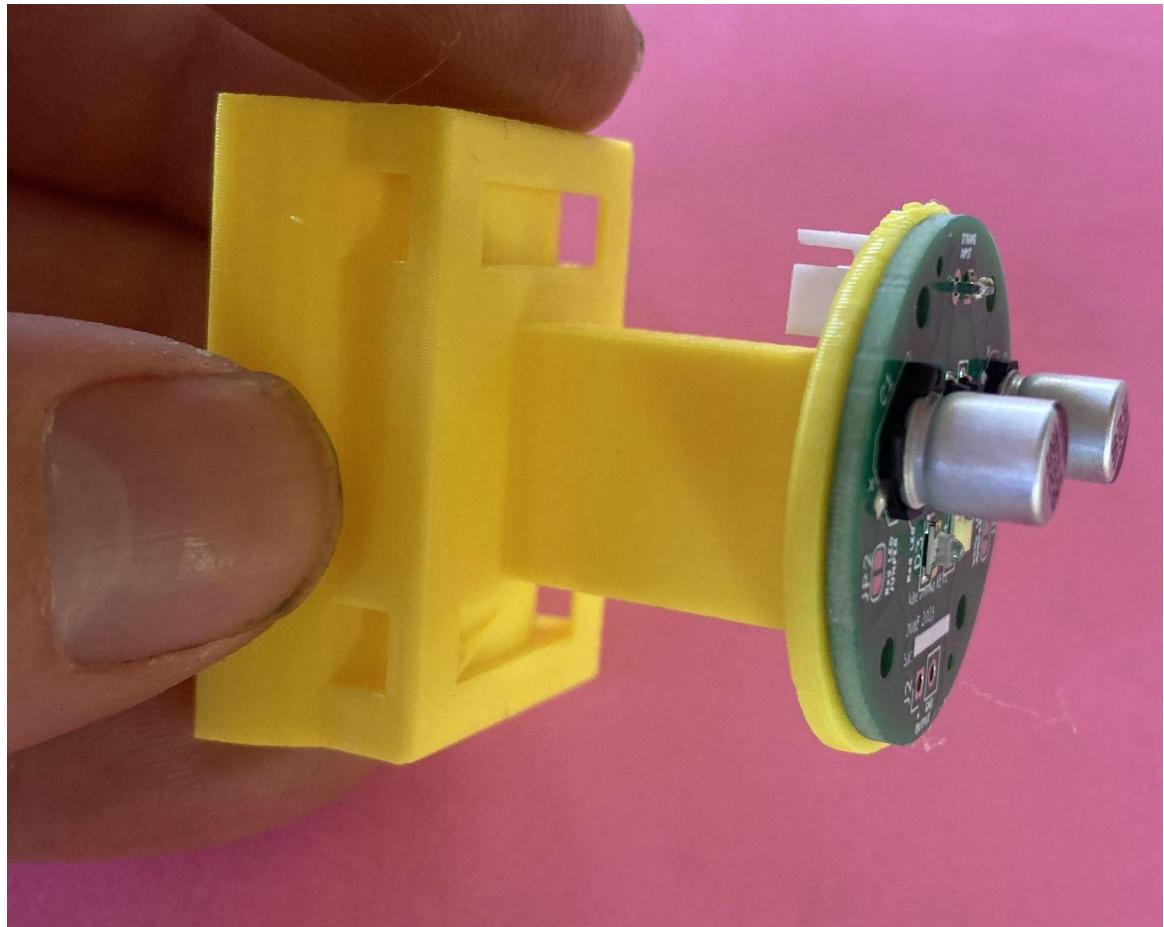


LIGHT TIME!
put lens on the PCB
cover with a lil
super glue



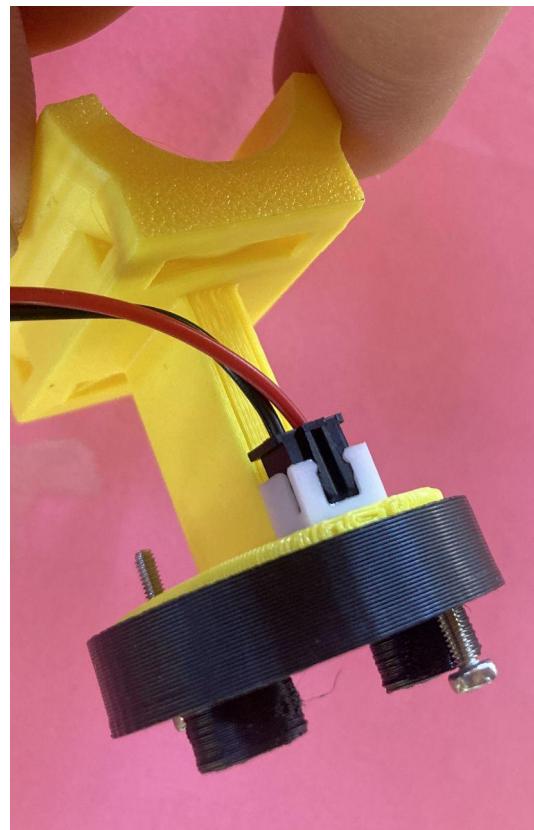
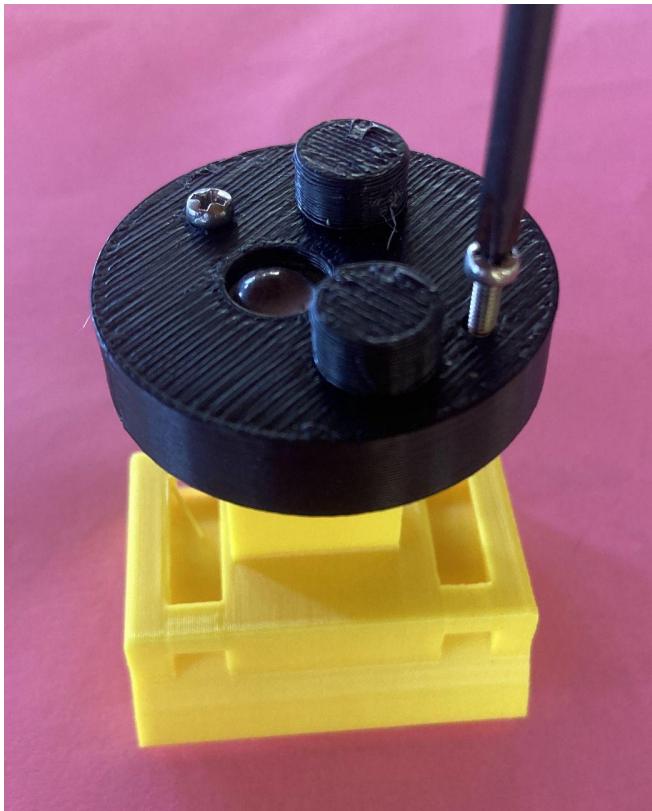
put PCB on the bike mount

12

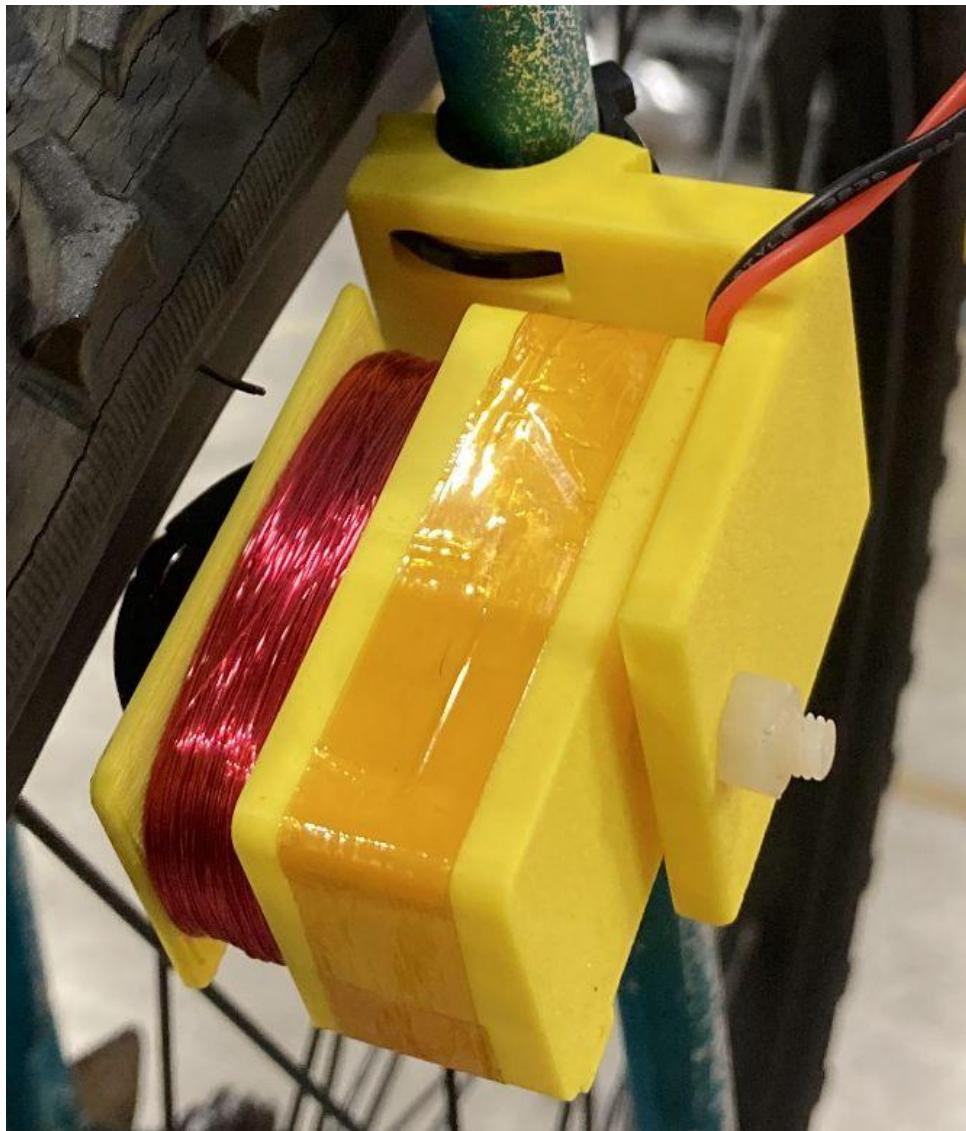


add cover over pcb

- **secure with QTY 2 - M2 screws**
- **add JST extension cable to light and to dynamo! TEST and see the light!**



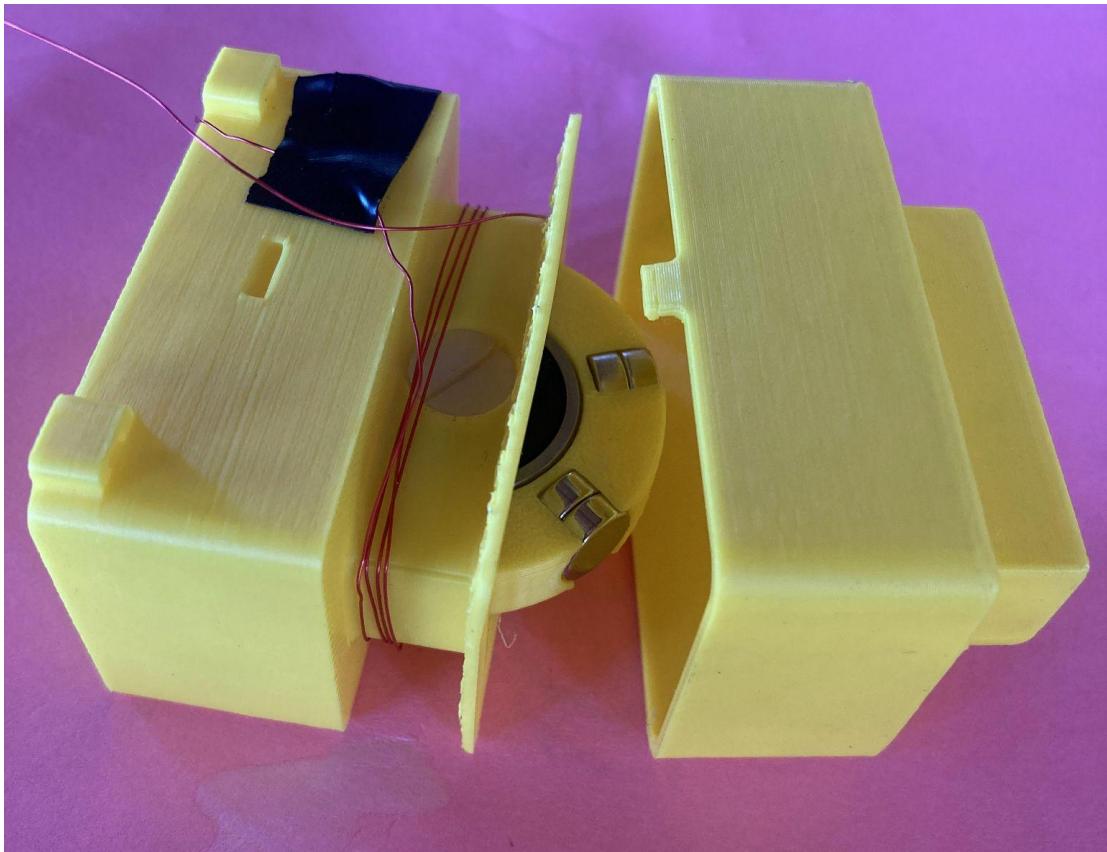
attach Dynamo to bike mount with m5 nut



- 15
- mount dynamo to bike with zip ties!
(add an old inner tube or piece of rubber down on the rod first so it doesn't slide around)
 - get it as close to the aluminum rim as you can, but dont touch it!
 - Mount bike light to bike! (also add inner tube/rubber on rod)



once you know its
working, add the
protective cover
over the dynamo ¹⁶



contactless bicycle dynamo workshop!

17

Make a bicycle light without a battery!

