

# Limoss 451615 MD142-30-L1-150 Linear Actuator Replacement Instruction



## Tools Needed

- Torx T20 screwdriver
- Cordless drill with Torx T20 bit (optional but recommended)
- Silicone grease (optional but recommended)



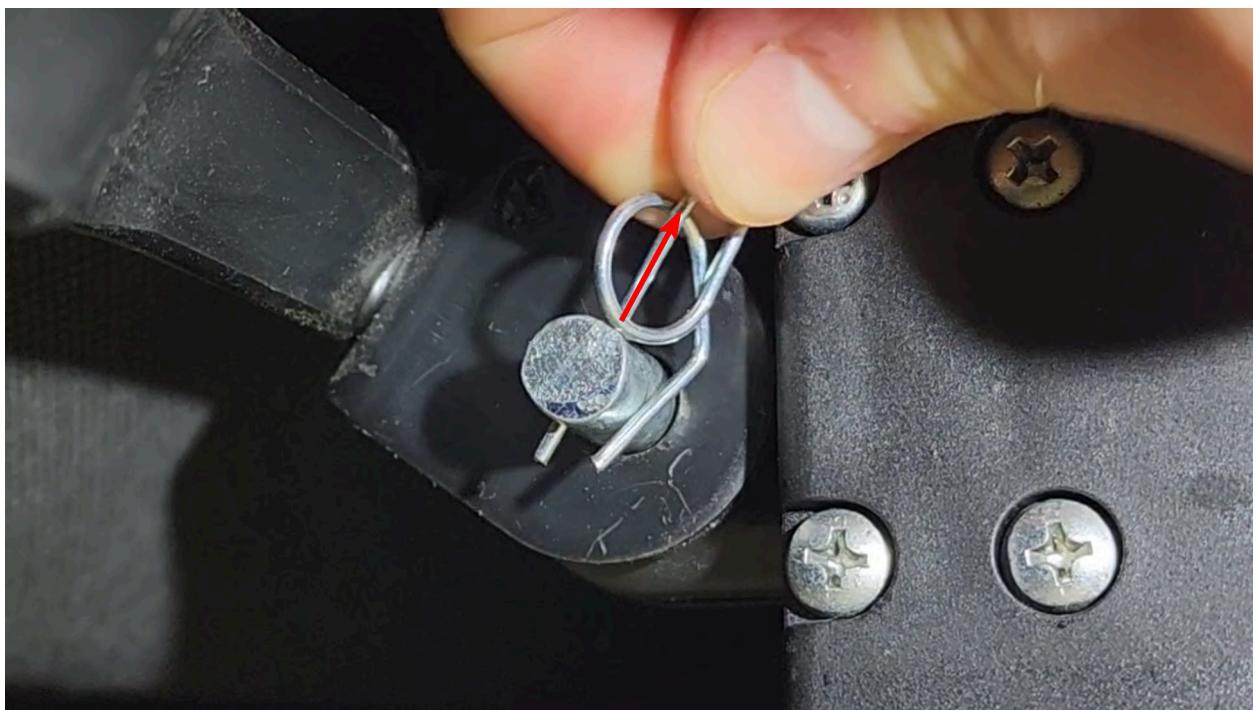
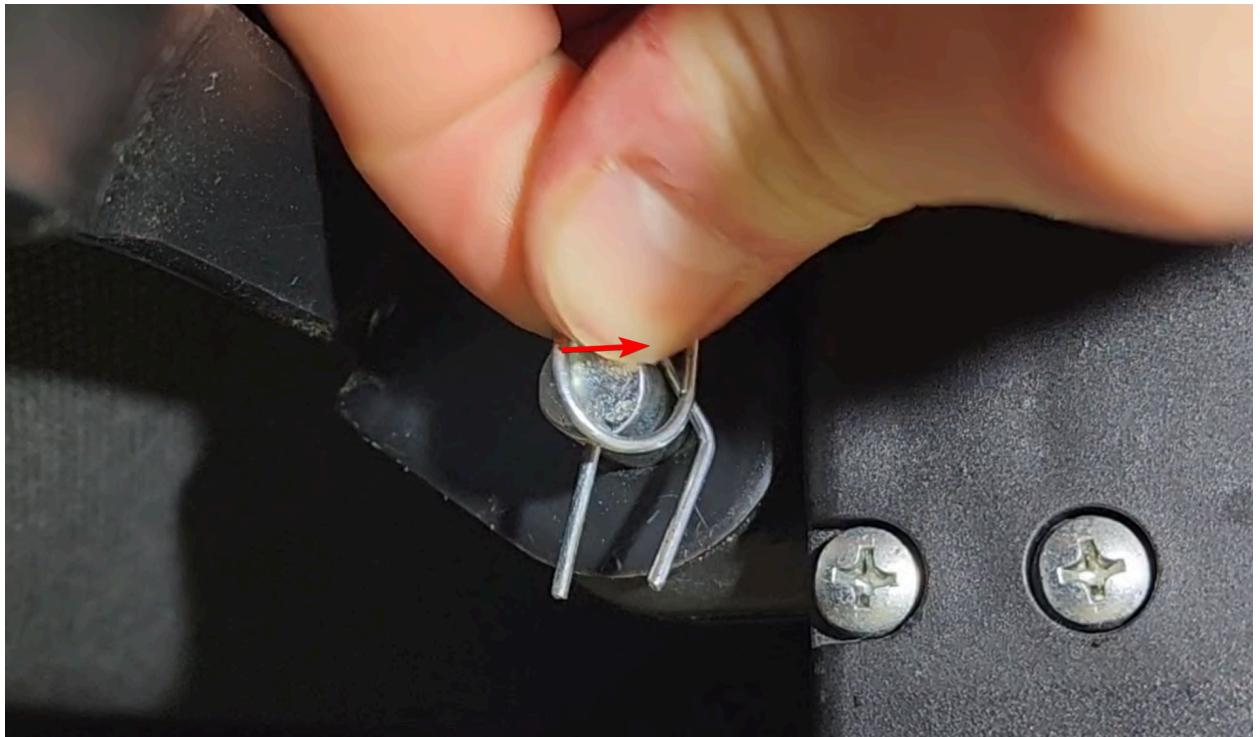
## Removing the Assembly

*The models pictured in the removal and reinstallation are not exactly the same as the instructions for replacing the block above. The installation for the entire assembly should be in the opposite order of how you safely removed it from the couch before. This is a general guide that should apply to all recliners.*

1. Before removing anything, make sure to press the button to move the recliner to the reclined position. Regardless of the chair not operating, this will help to remove the block later. Unplug the couch from the wall after this.
2. Ensure the 2 power cables are unplugged from the motor. There are small clips that hinge onto them to prevent them from coming loose. Undo the clips and unplug the two cables.
3. Undo the ring pin that is holding the main pin in place. This is best done by rotating it like this to slide the ring off the top of the main pin. Some couches may not have a cotter pin,

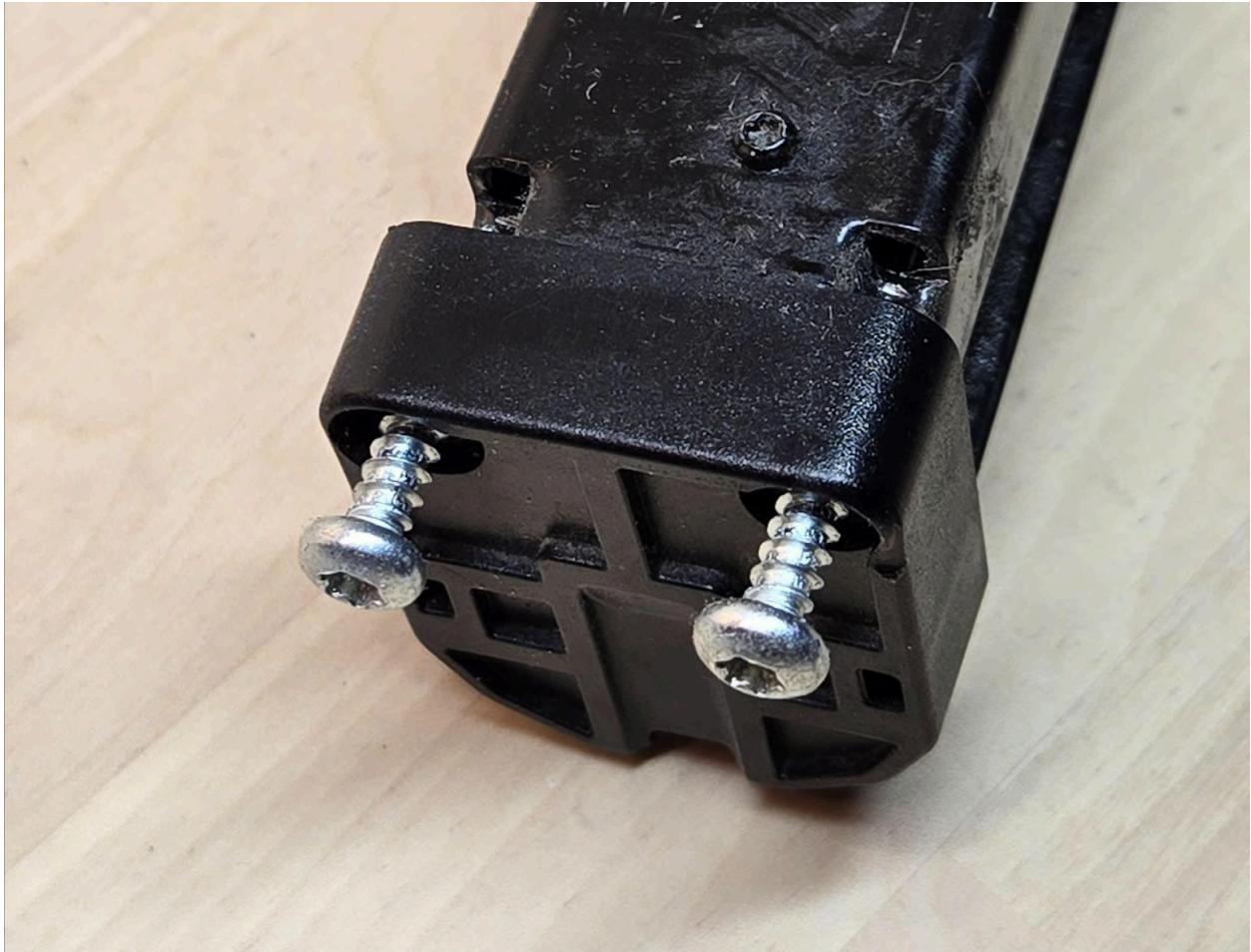
so use your judgement to remove this main pin that holds the actuator in place.





4. Pull the retaining ring pin out of the chair.
5. Assuming the block is broken, the front one will not be attached to the motor assembly.  
The same steps apply to remove the retaining pin and main pin.
6. Remove assembly from the chair.

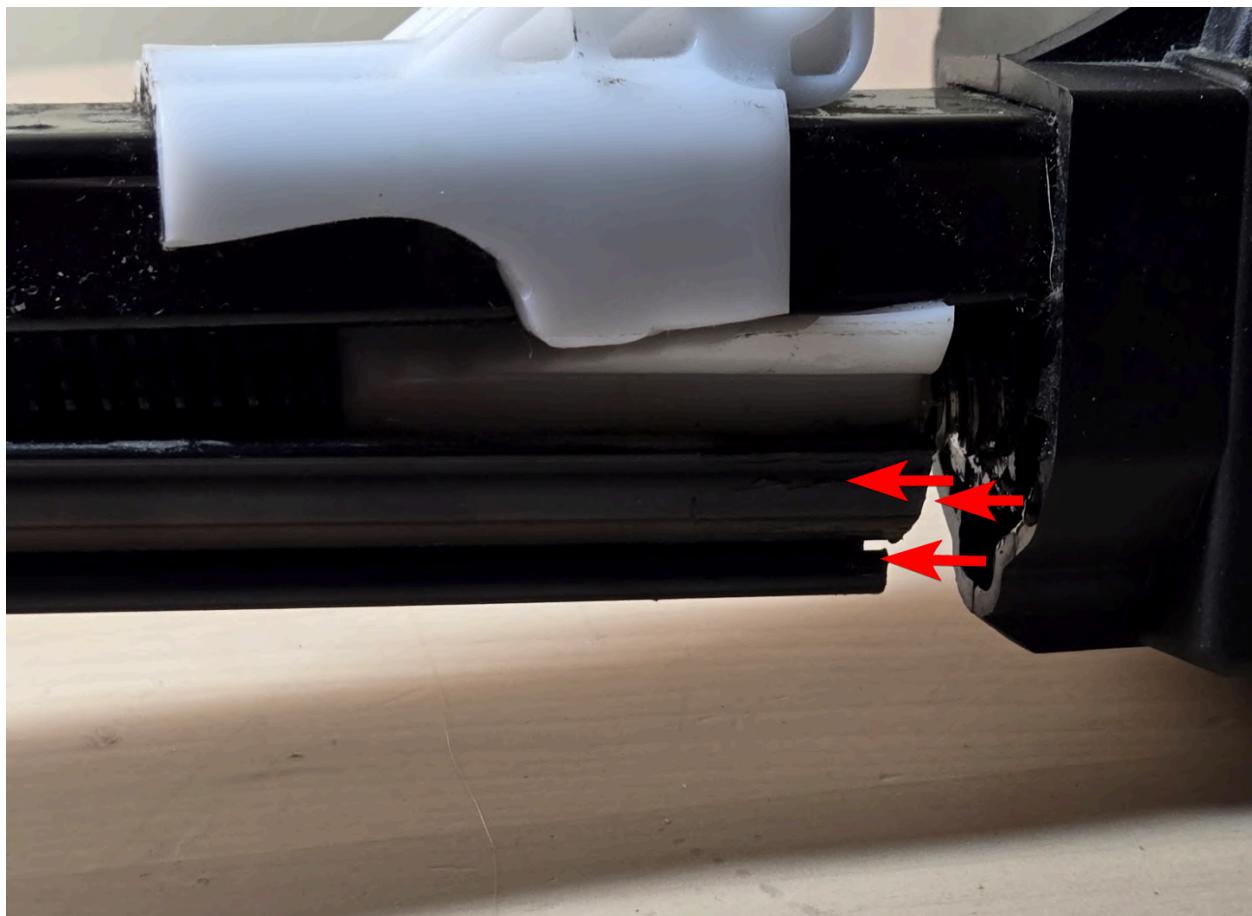
## Removing the Old Broken Block



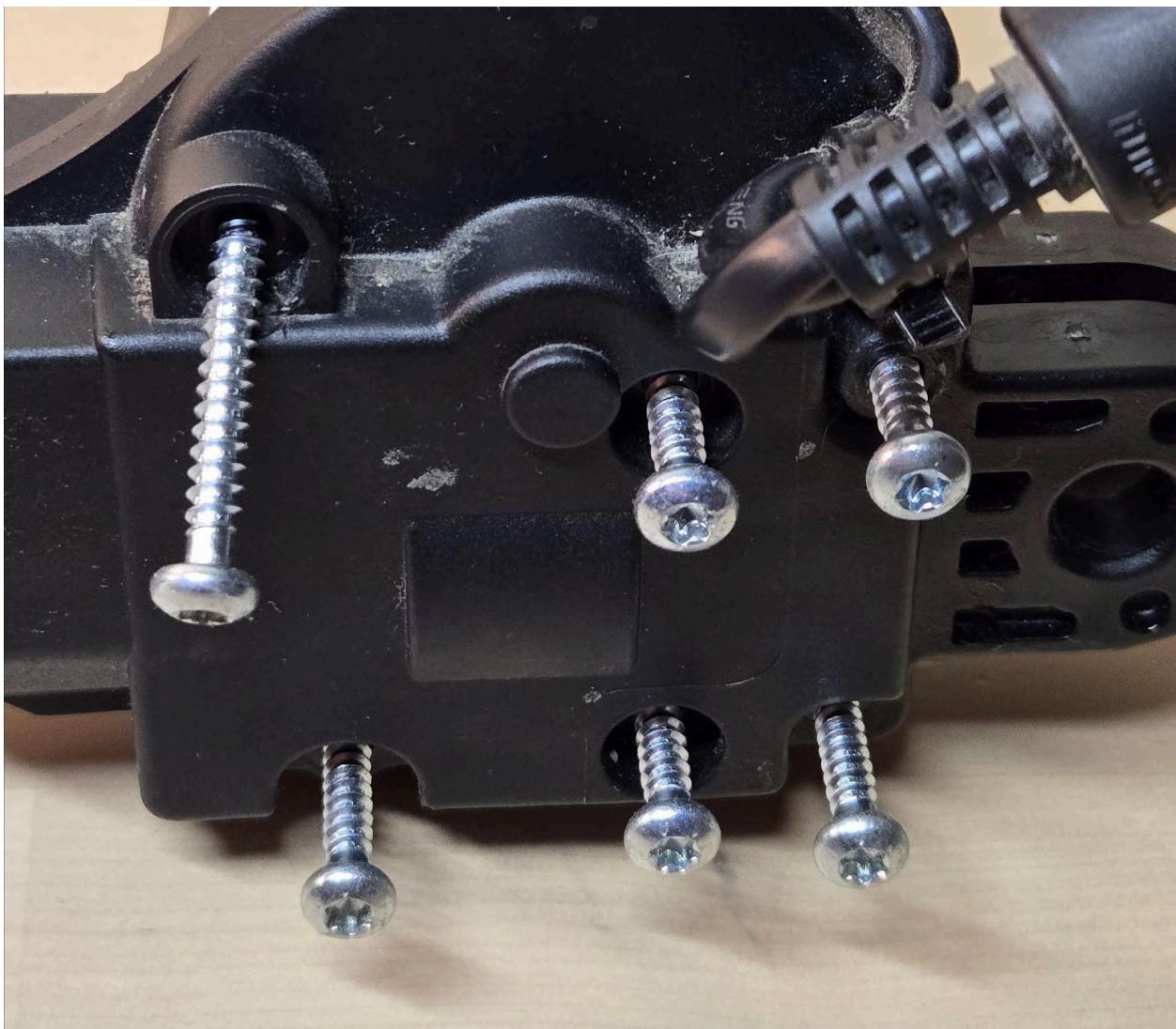
7. Remove the 2 small screws from the cap on the end of the assembly.



8. Slide the bottom plastic protective sleeve off after removing the end cap that was just unscrewed.



9. Remove 6 screws. These screws are quite long, I would recommend a cordless drill if it is available.



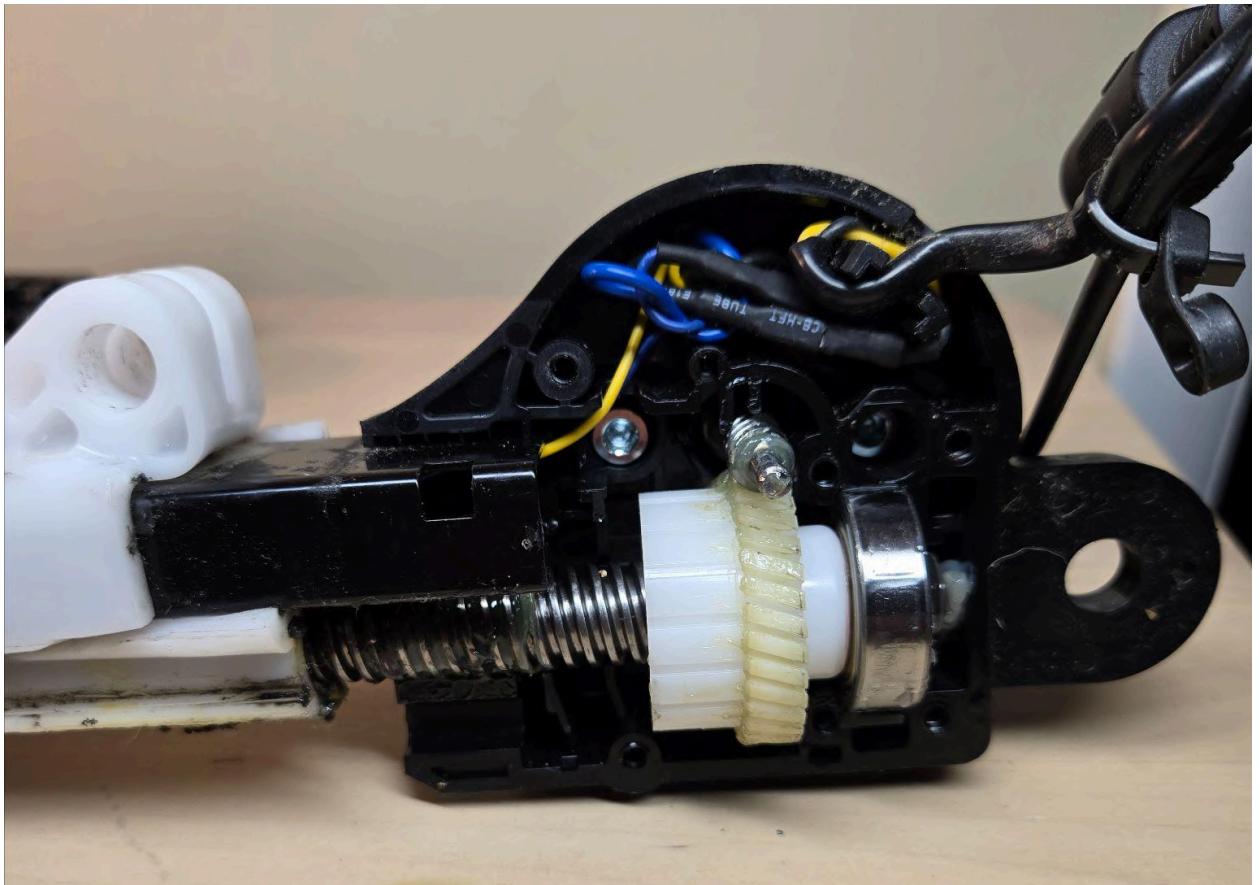
10. Move the wire and wire strain relief out of the way to remove the cover



11. Remove gearbox cover. There are some clips holding it in place. Prying carefully with a screwdriver should separate the cover from the motor assembly, as pictured below:

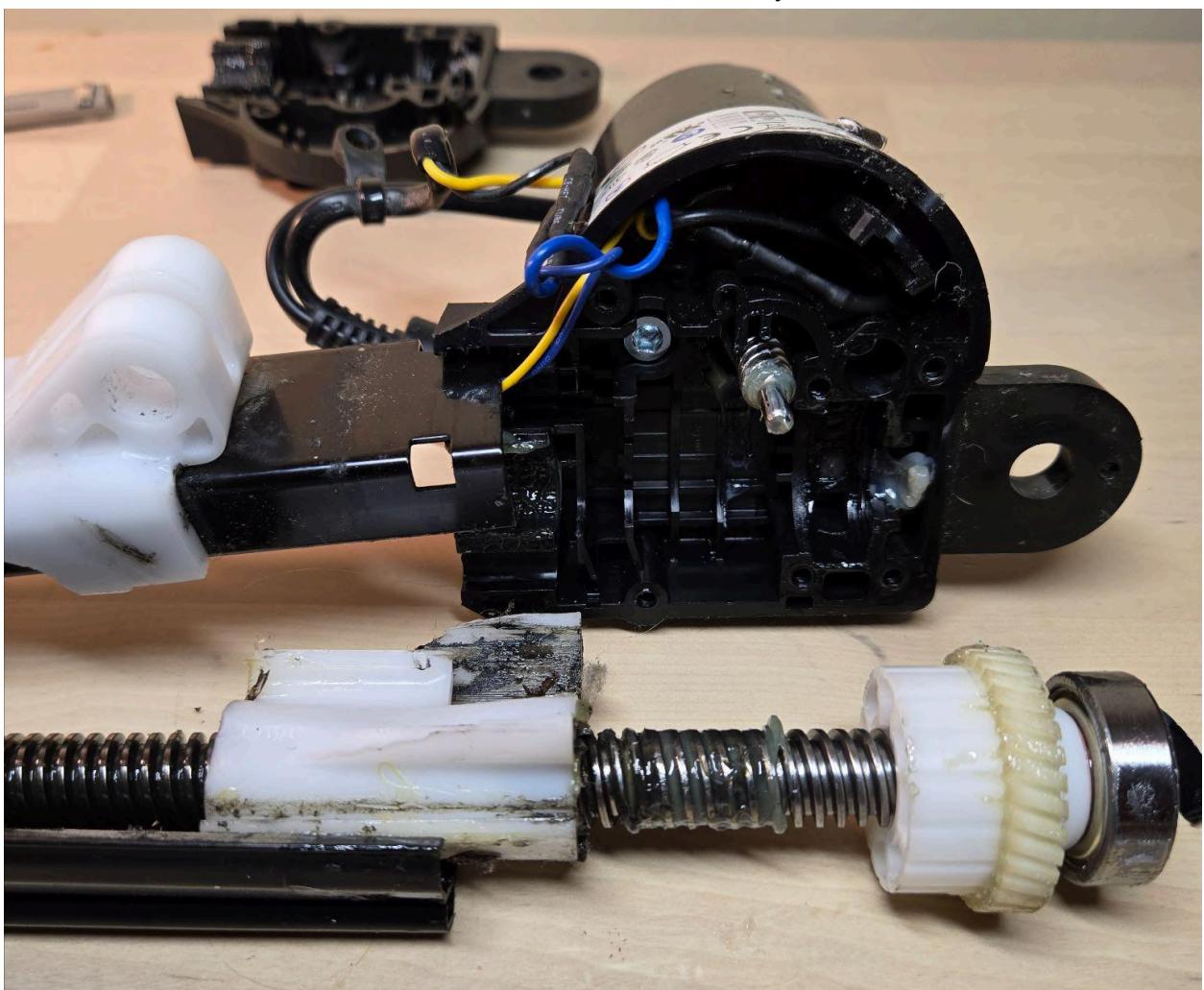


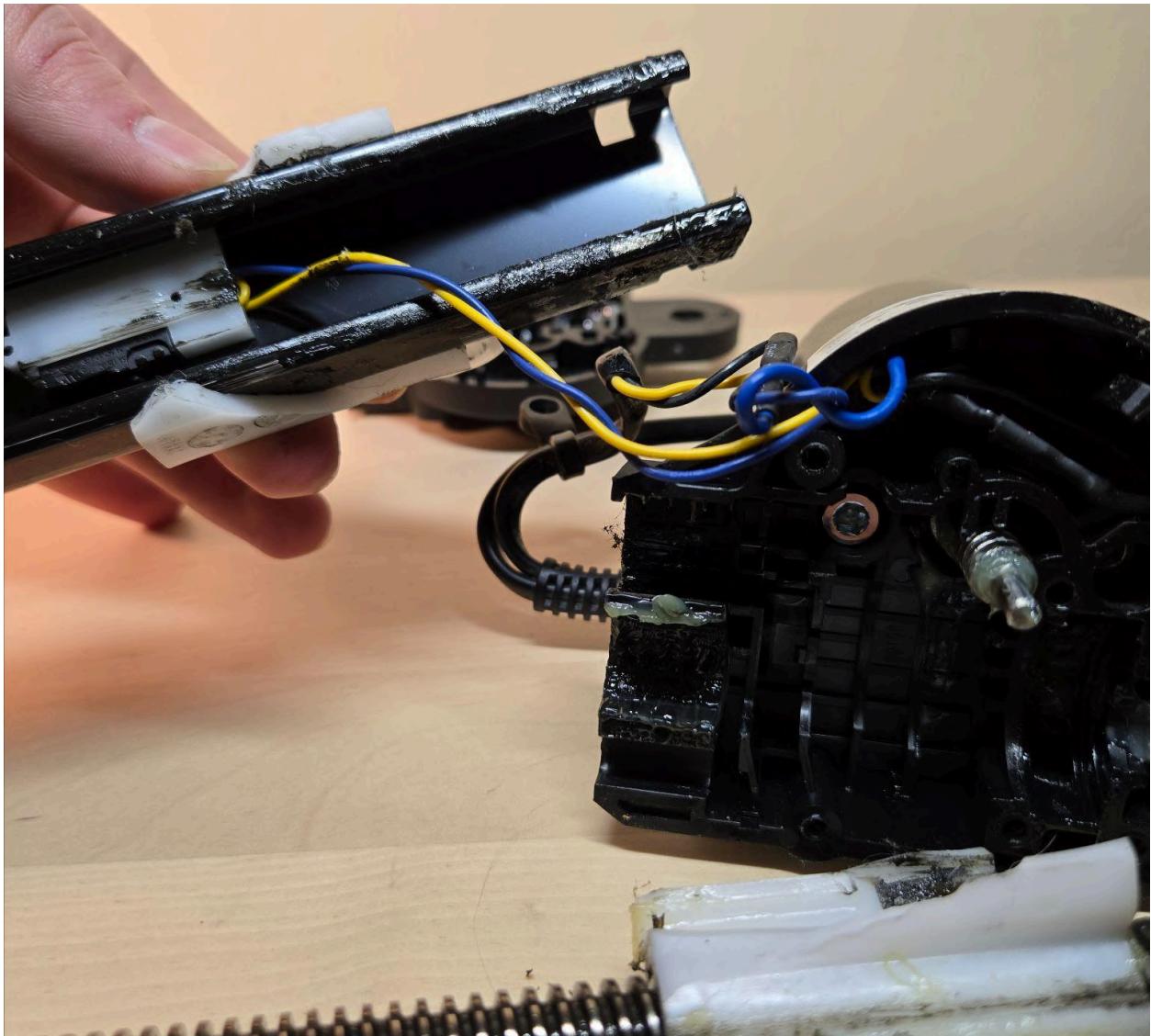
12. Here it is with the cover removed.



13. The next step is where things fall apart a bit if the block is broken- the takeaway is that the broken block needs to be removed, and this is done without unplugging the wiring.

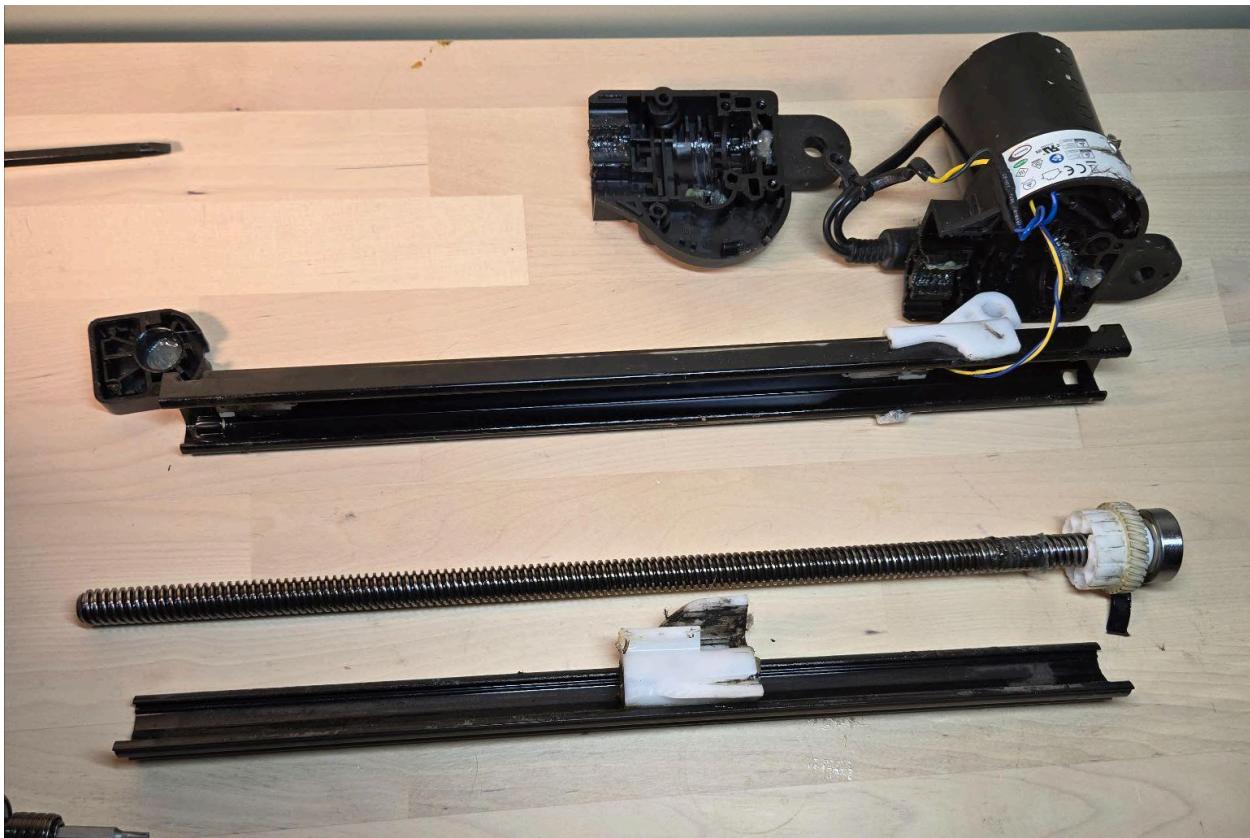
14. Remove the lead screw and metal rail from the motor assembly.





15. Slide the remaining broken block off of the other end of the rail to ensure the wires are not damaged (if there is any block left)

16. Rotate the plastic gear off of the worm gear. The wires do not need to be disconnected.  
Pulling the bottom of the plastic gear will rotate it off of the worm gear.



17. Twist the plastic gear counter-clockwise until the plastic block comes off the end of the lead screw  
18. (Optional) At this time if you have some grease, you can apply it to the threads on the block so they will be spread around by the lead screw.

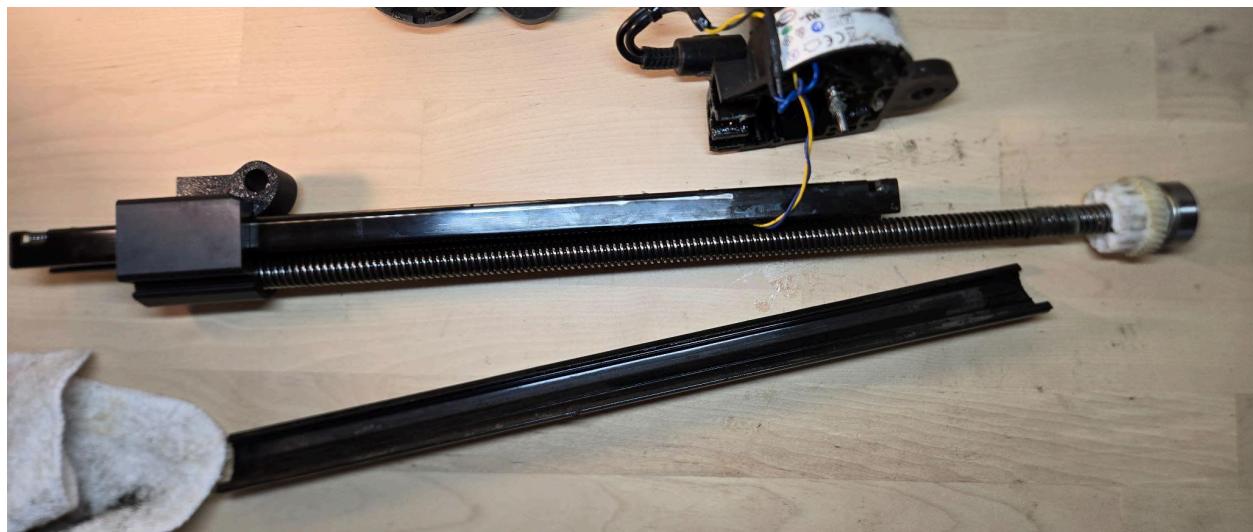
19. Position the new block to slide it onto the non-wire end of the metal rail. Ensure that the pin is facing towards where the motor goes. Slide it onto the rail, just past the electronic limit switch.

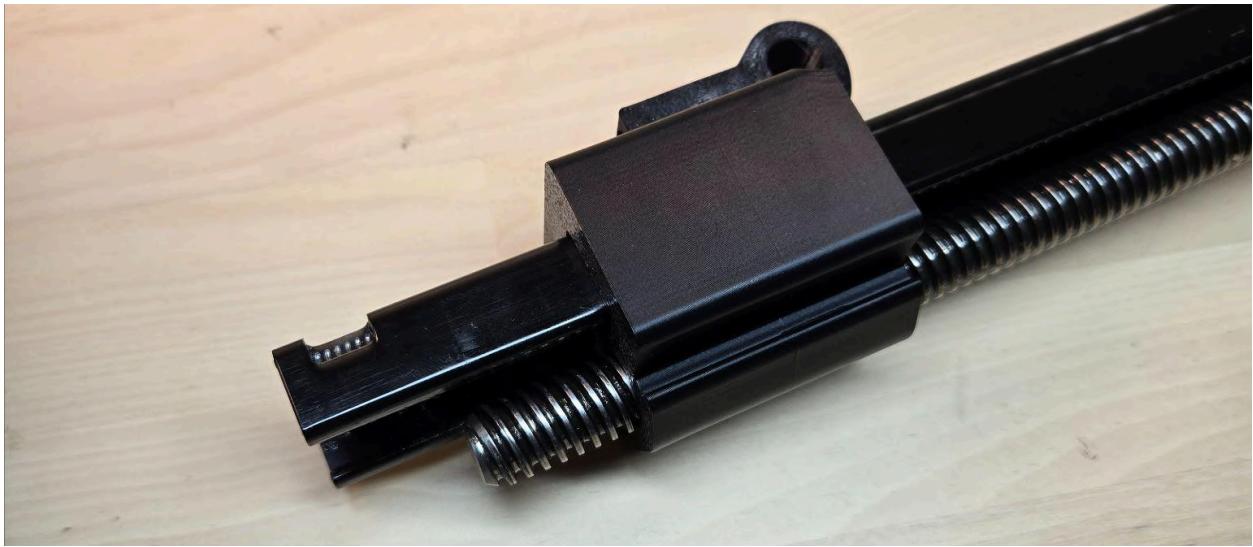


**Block must  
be past this  
switch**

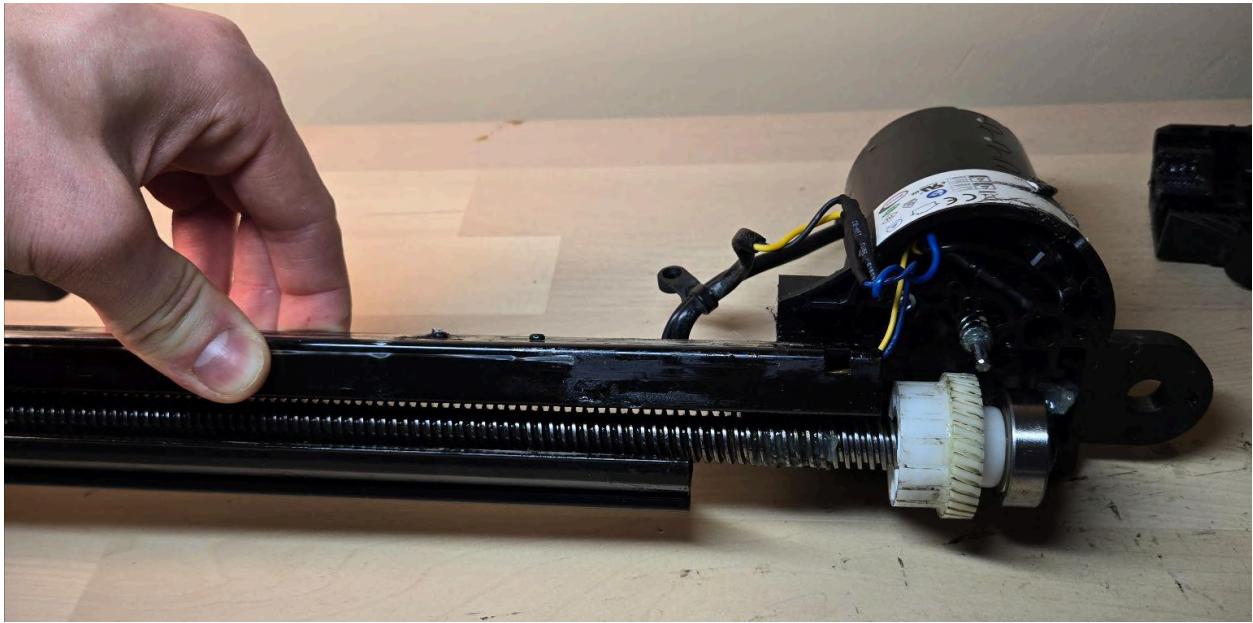


20. With the rail on its side now, align the lead screw and begin spinning it into the block



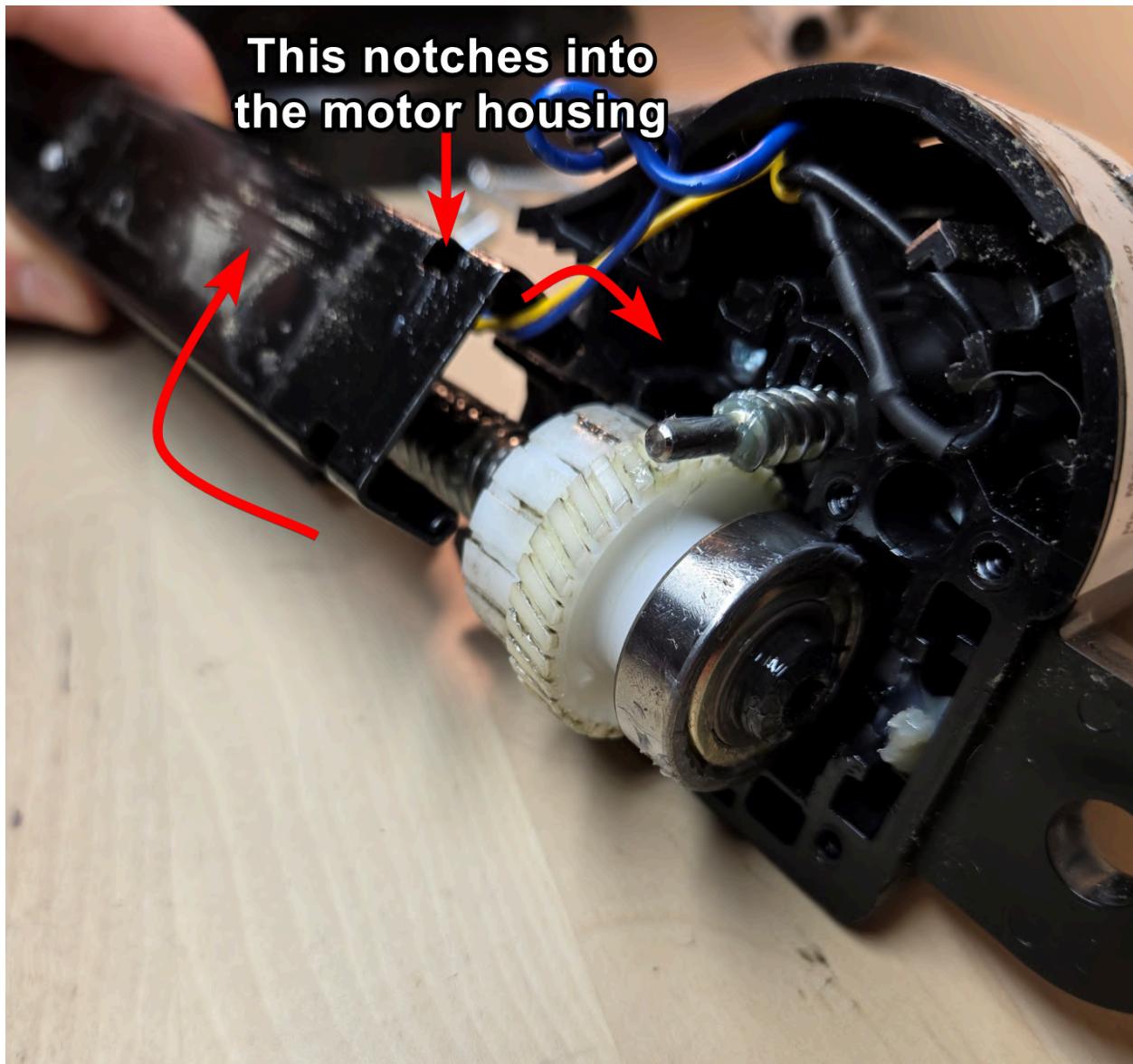


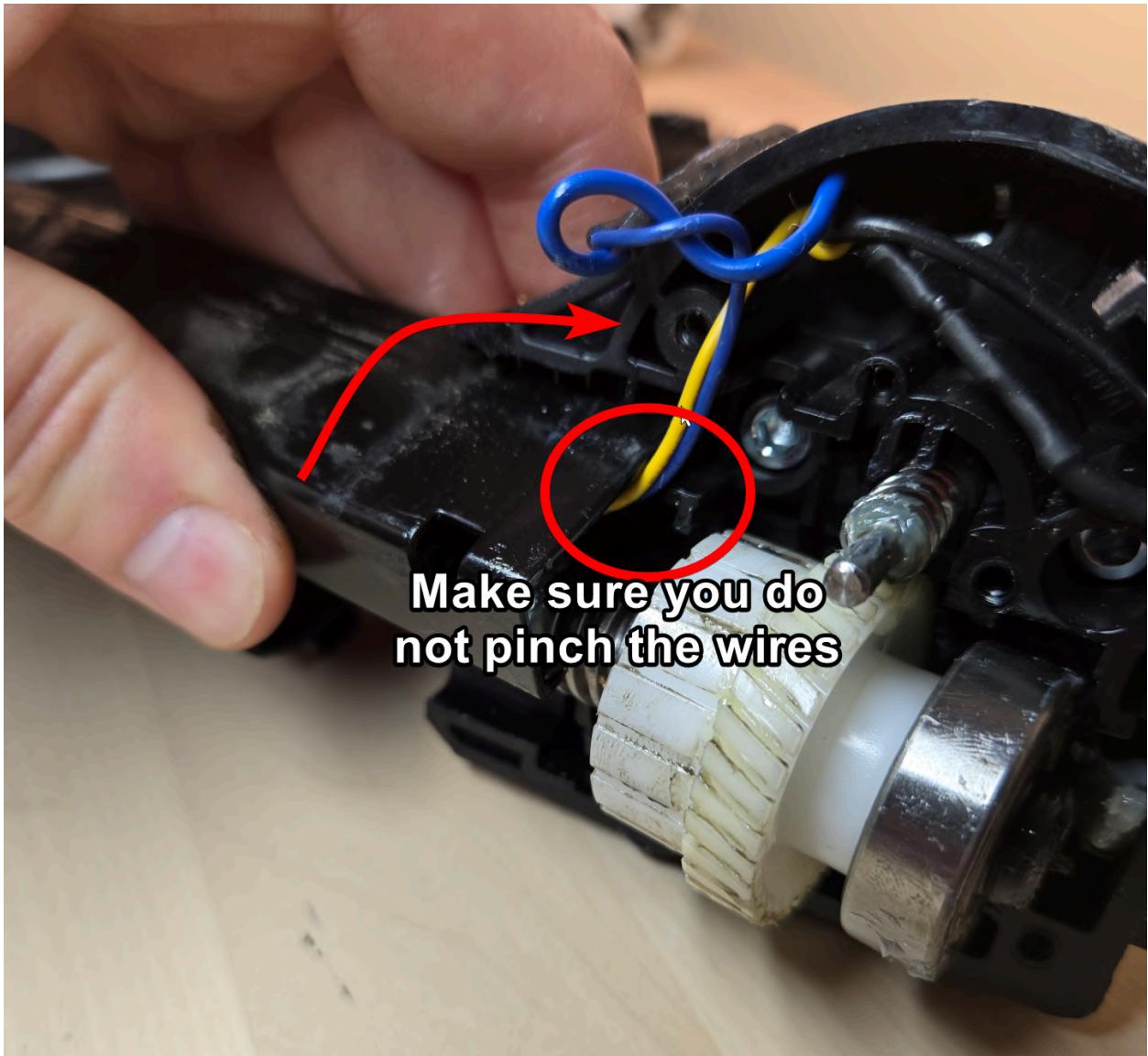
21. Spin the lead screw until the plastic gear is roughly at the end of the metal rail. Try and match this picture if you can.

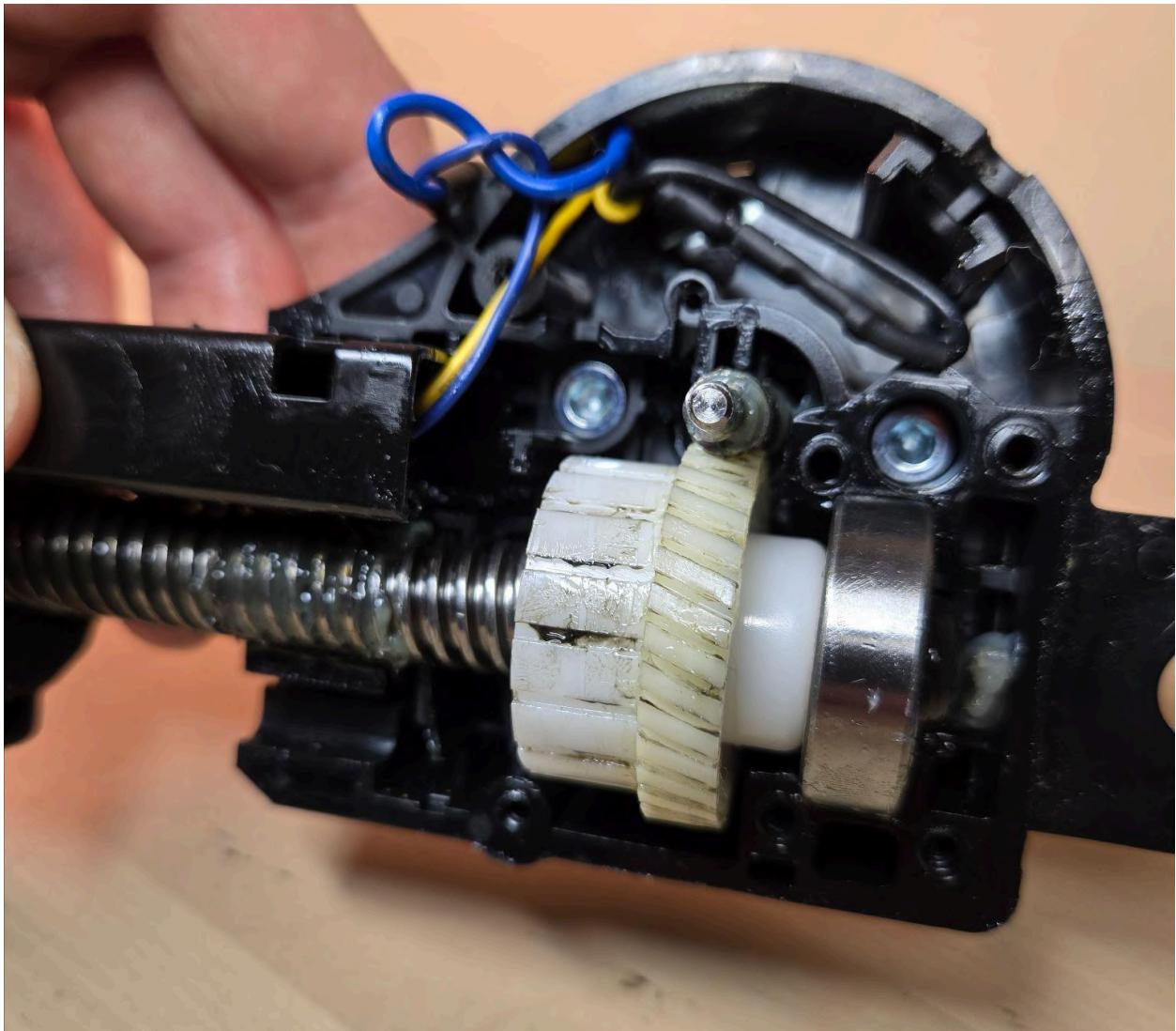


22. Press the plastic gear, bearing, and rail back in the motor housing. This part can be finicky due to the rotation of the gear causing the lead screw to shorten in length.

23. The rail needs to rotate into position, where there is a small hole on the top corner of the rail that will fit into place. Follow these pictures for a better description. This is the hardest part of the installation.

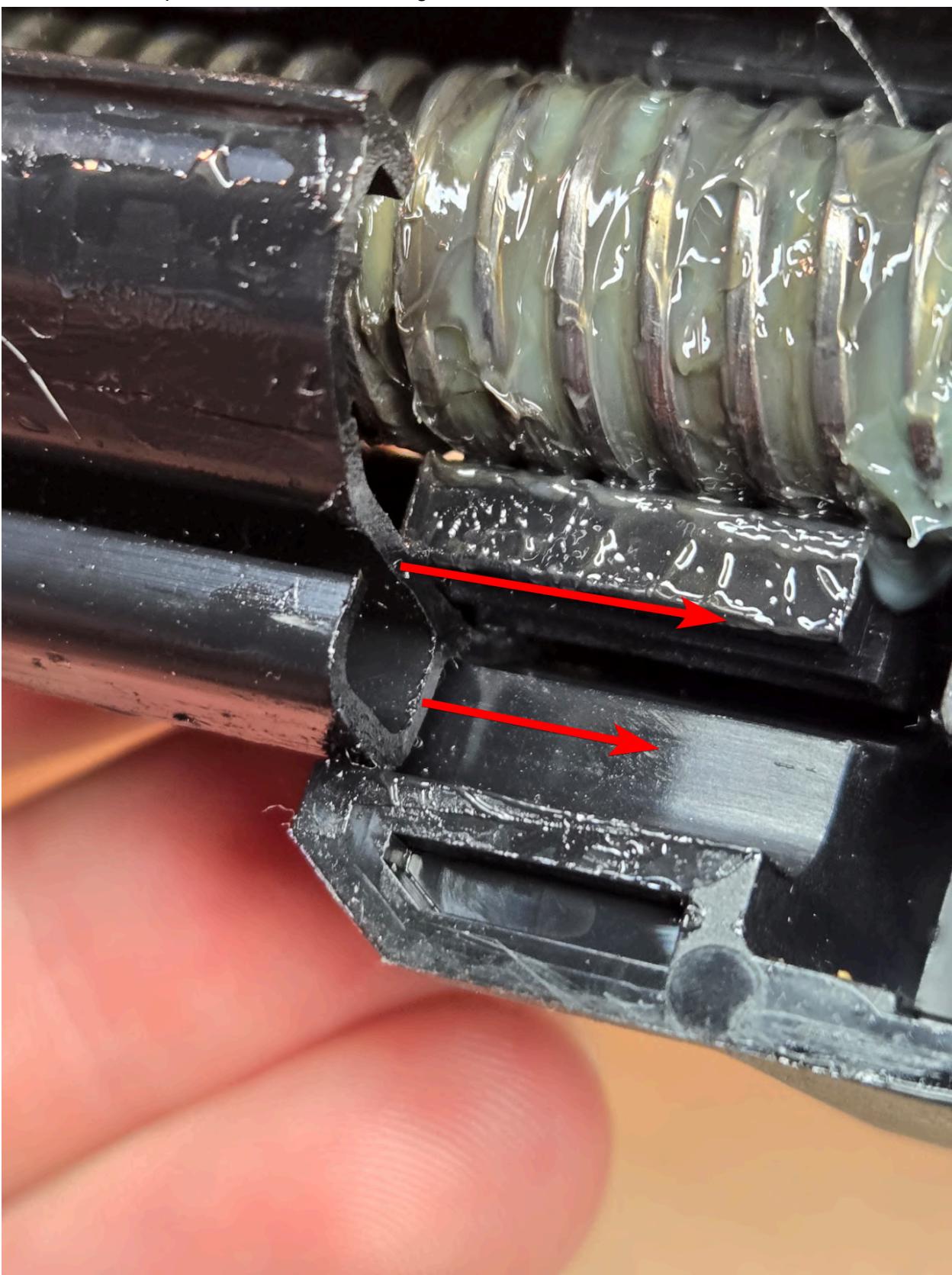




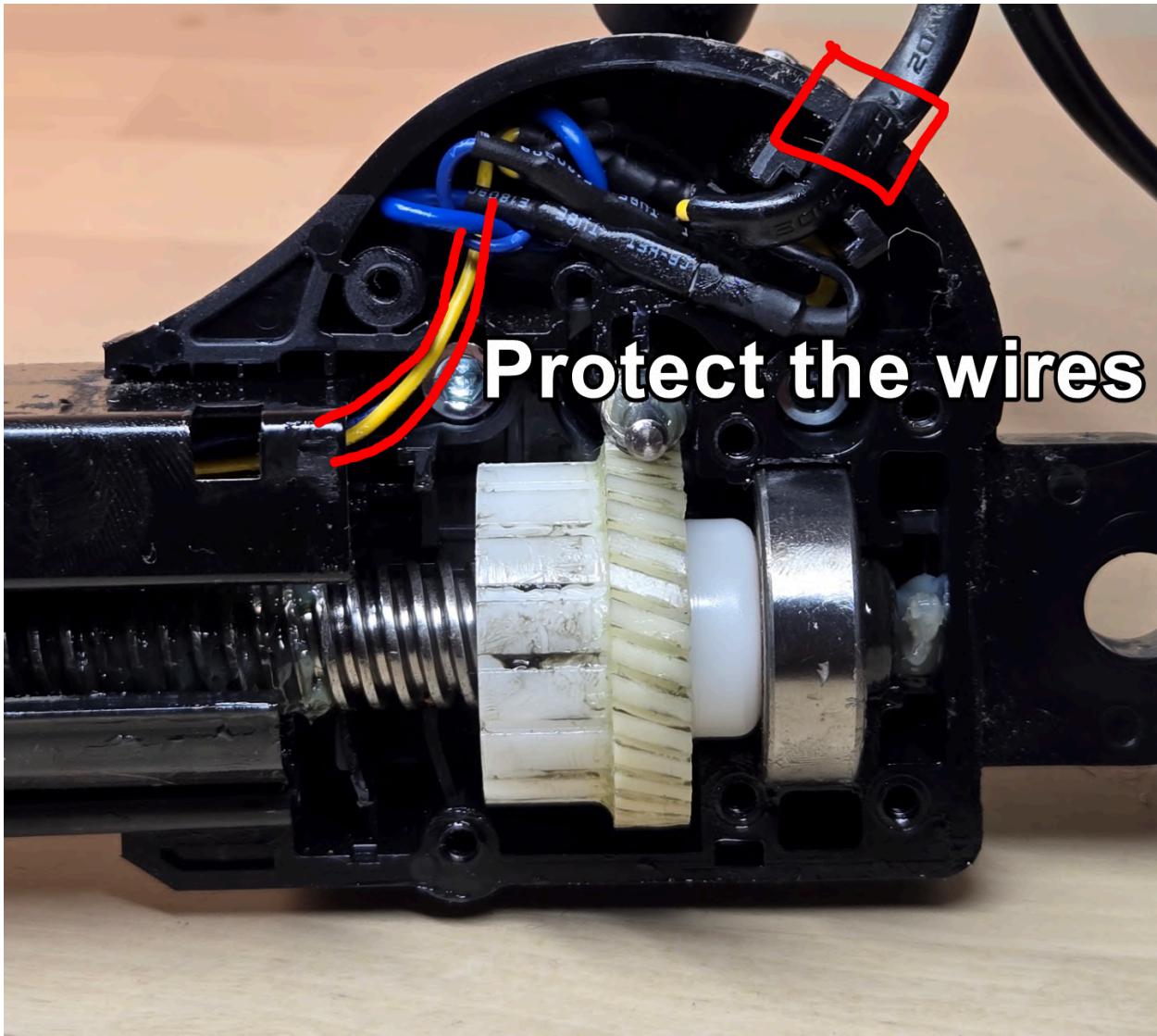


The above photo is the rail and lead screw in its final position.

24. Slide the plastic rail into the housing, below the lead screw

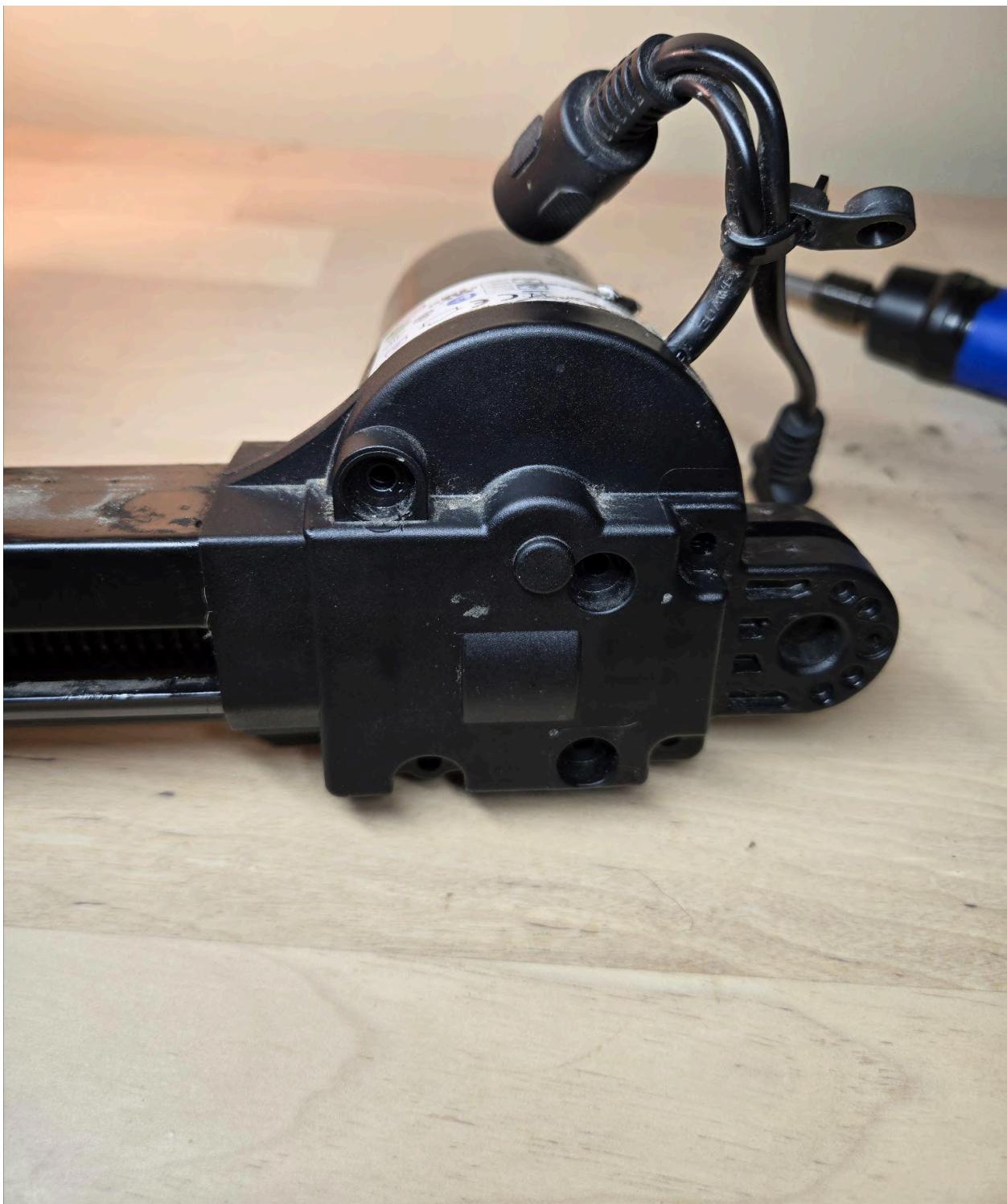


25. Get the wiring to fit back into the empty space made for it, and ensure the cable strain relief is lined up with the housing case.

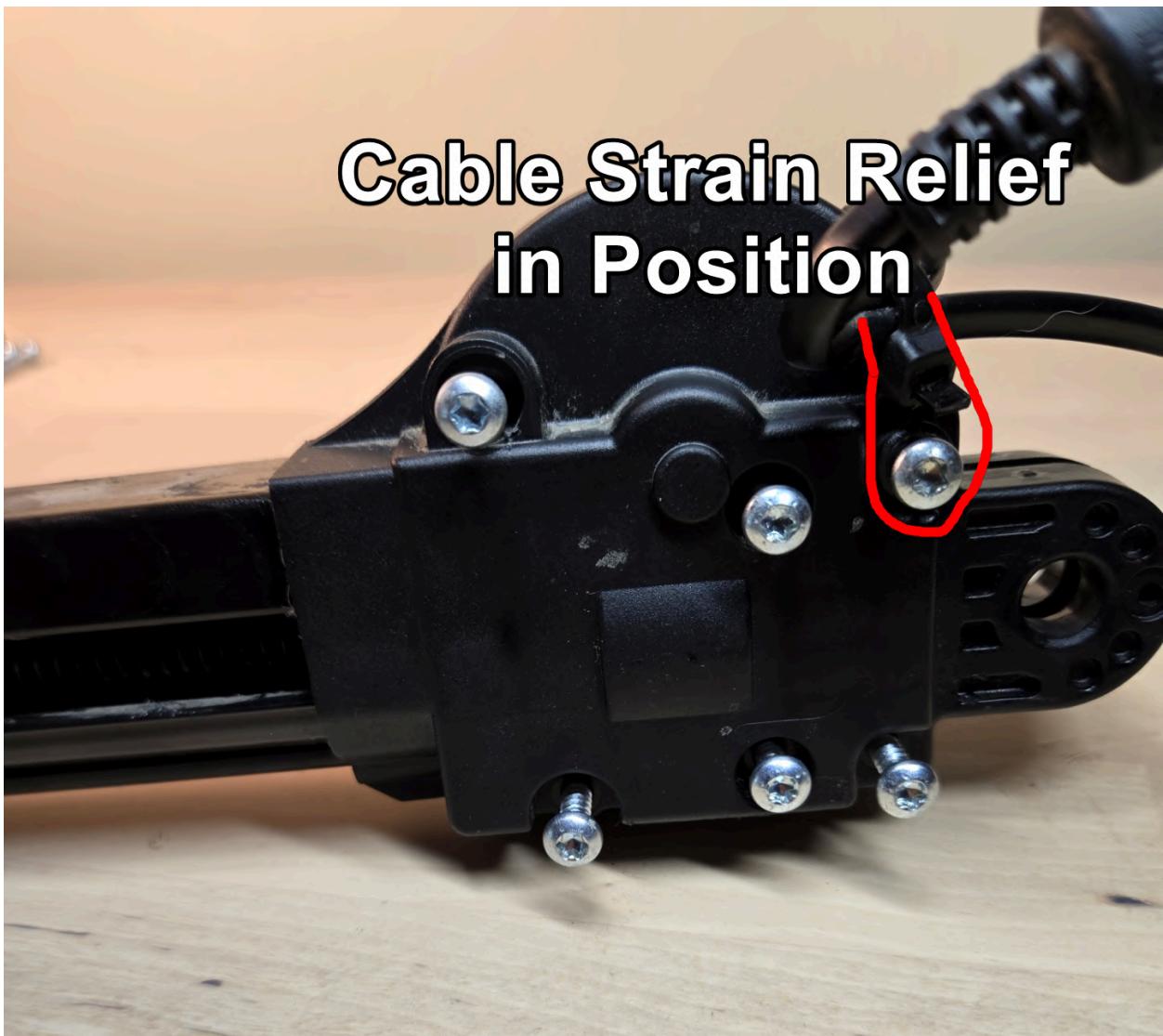


26. Do not pinch any of the cables in the gearbox housing. Doing this can potentially damage the wires. Also ensure the wire strain relief for the power cable is connected properly to the casing, pictured above.

27. Push the motor housing cap back onto the motor housing, and it should snap back into place.



28. Place the cable securing clip under the associated screw (right next to it) and tighten all of the screws back down



29. Reattach the cap at the end of the rails.





30. That's it! Your new block is installed, and the motor assembly is ready to be plugged back into the couch.



## Reinstallation of the Motor Assembly

*As stated in the removal, the models pictured in the reinstallation are not exactly the same as the instructions for replacing the block above. The reinstallation for the entire assembly should be generally in the opposite order of how you safely removed it from the couch before. This is a general guide that should apply to all recliners.*

1. Before attaching either of the pins, the couch should still be unplugged from the wall.
2. Plug the two couch cables back into the motor.

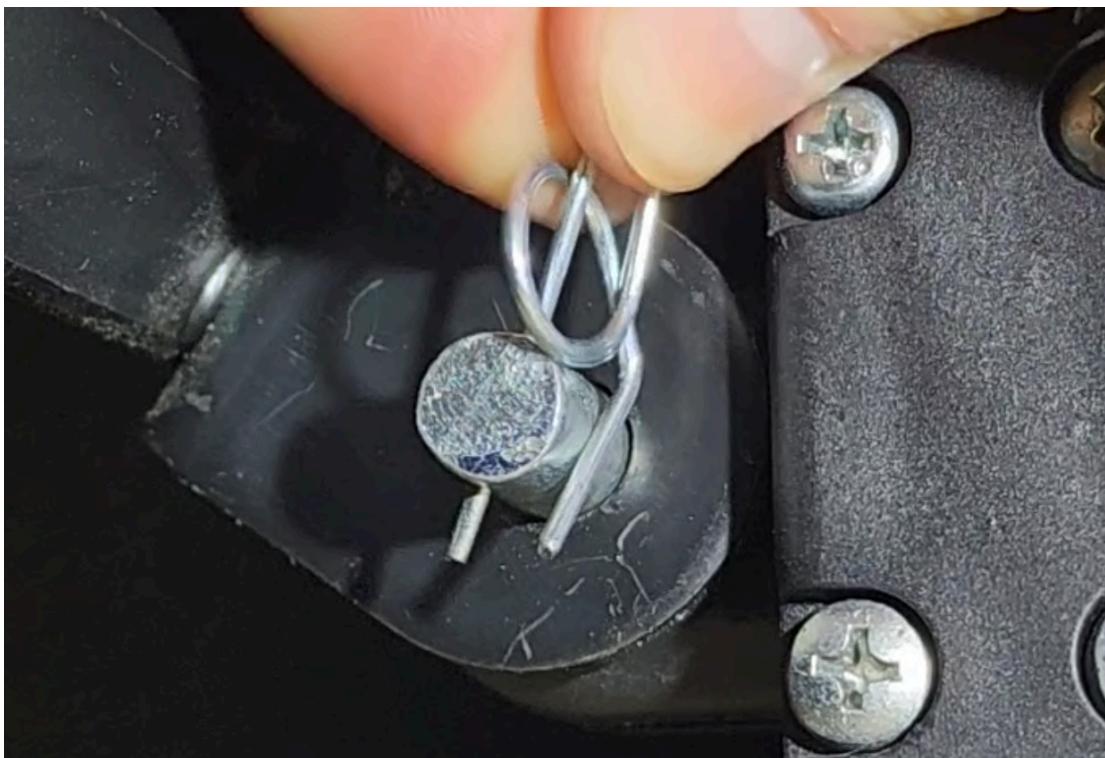
3. Start with the rear pin, where the motor is. I found that resting the pin in the hole very shallowly helped with getting it through the two plates and assembly.



4. Make sure the hole in the main pin is roughly up/down so that the retaining ring pin can be pushed in easily.



5. Push the retaining ring pin in, flat side through the hole.



6. Twist the retaining ring pin so that the ring snaps into the locked position on the main pin. It should look like this when complete.



7. Plug the couch into the wall.
  - a. Due to the moving position of the recliner (assuming you are laying under it), the block will not line up with the couch recliner holes at all.
  - b. Use the recliner buttons to move the block to the correct position for inserting the main pin.



8. Repeat the same insertion steps as the back main pin.



9. Retract the recliner to the seated position to ensure the motor will stop at both ends.

10. Repair is complete! Sit back and relax, now that you can kick your feet up.