MARUNI XYA5-2 Linear Actuator Block Replacement





Tools Needed

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



Document Information

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Product: https://barlowfabrication.com/products/xya5-2

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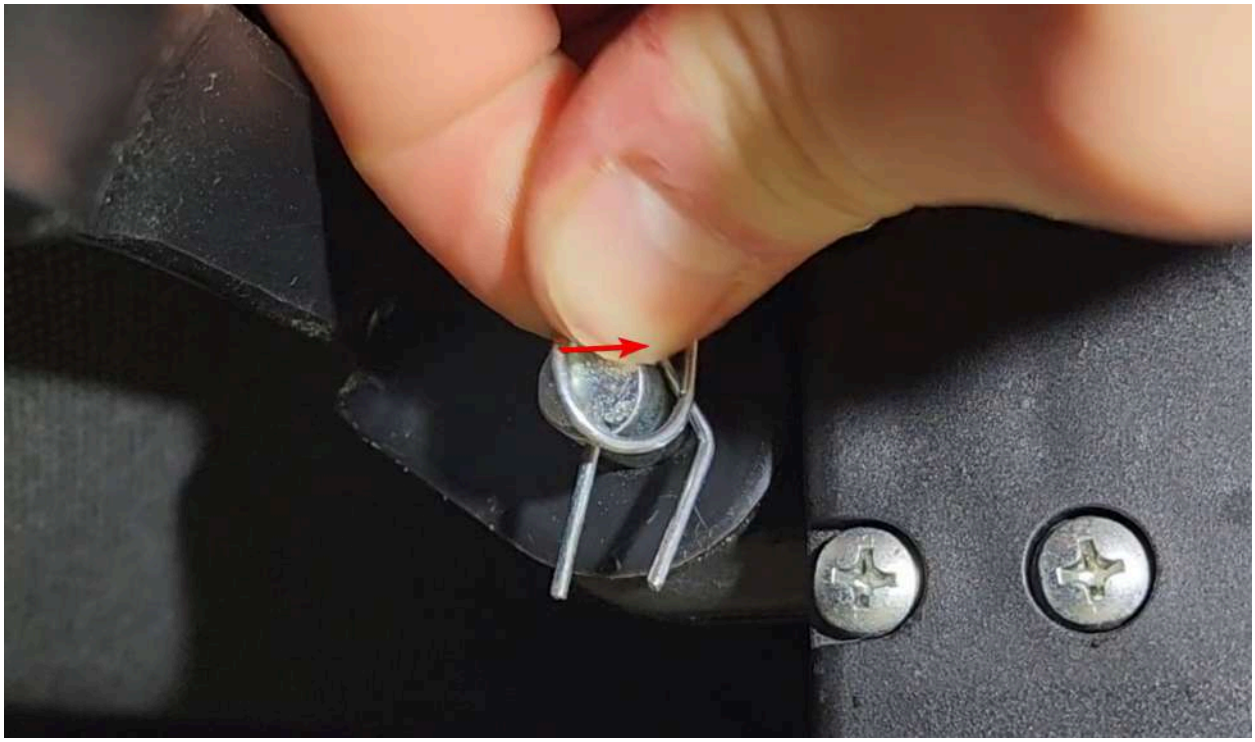
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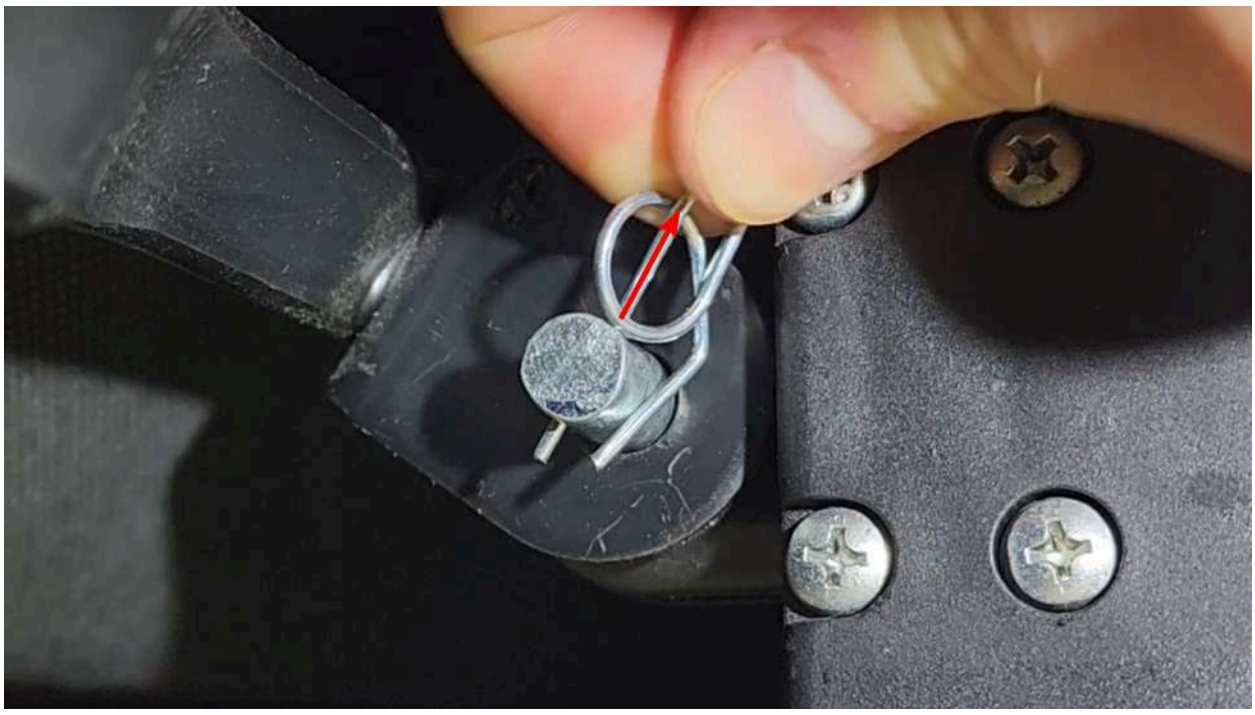
Removing the Assembly

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.



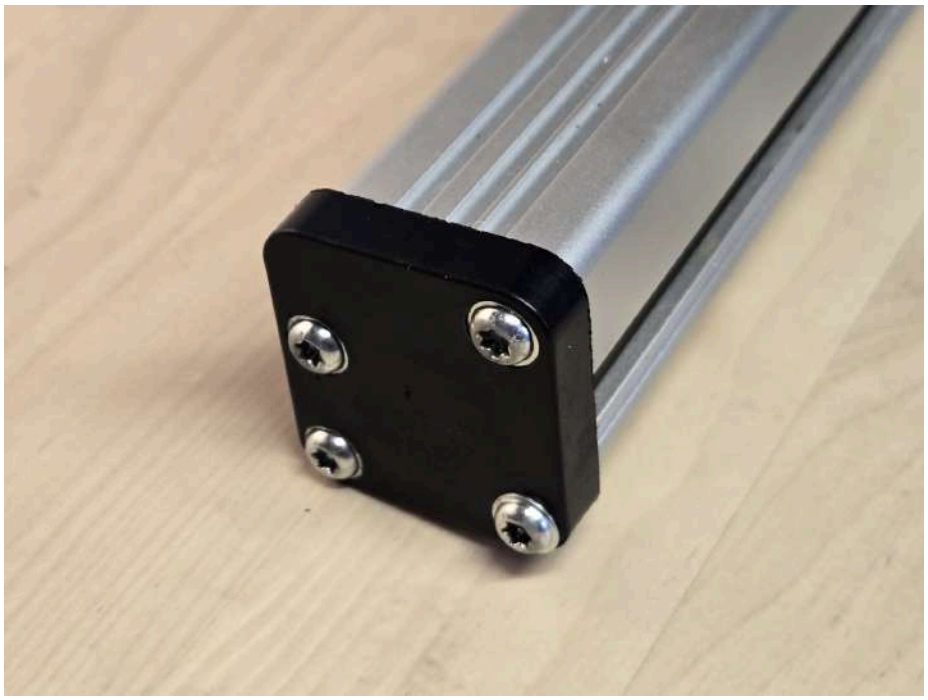




4. Pull the retaining ring pin out of the chair.
5. Assuming the block is broken, the front one will not be attached to the motor assembly. The same steps apply to remove the retaining pin and main pin.
6. Remove assembly from the chair.

Removing the Old Broken Block

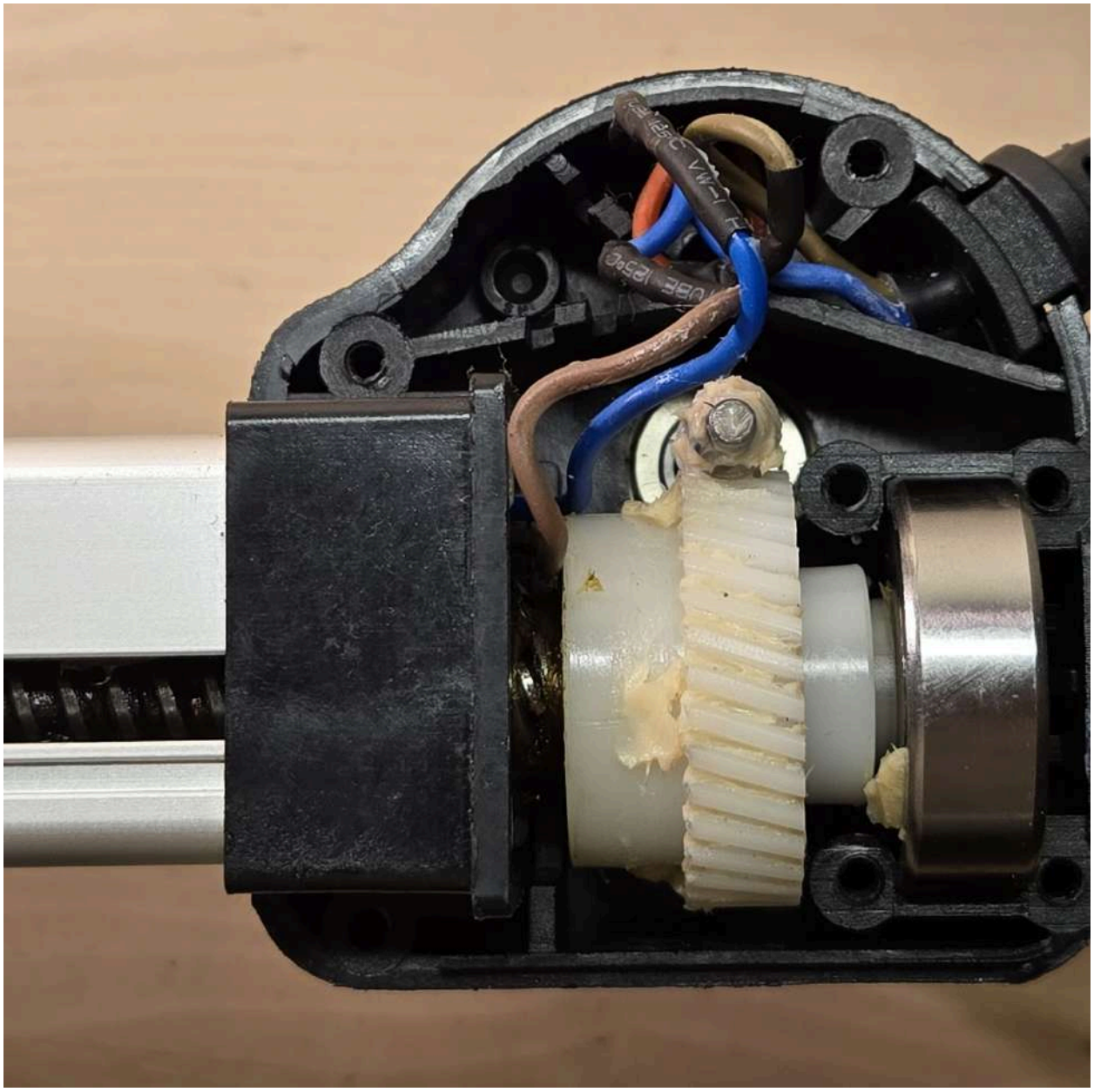
1. Remove the 4 small screws from the cap on the end of the assembly.



2. Remove 7 screws. These screws are quite long, I would recommend a cordless drill if it is available.

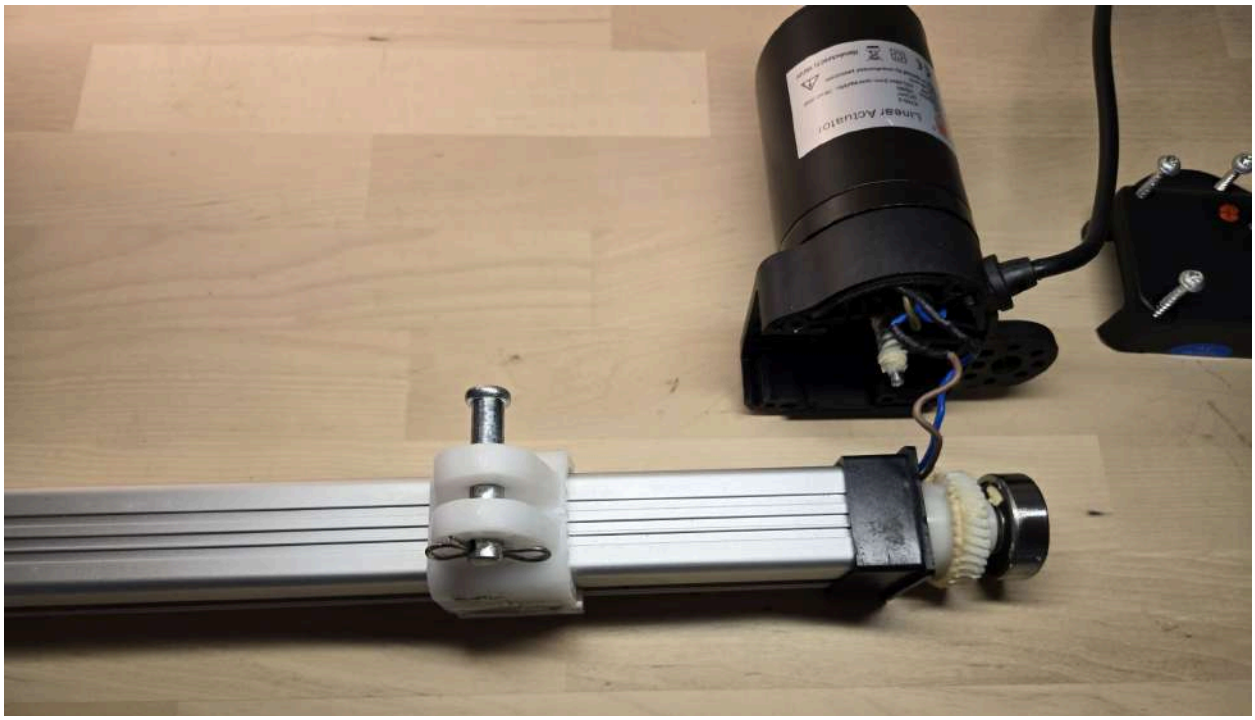


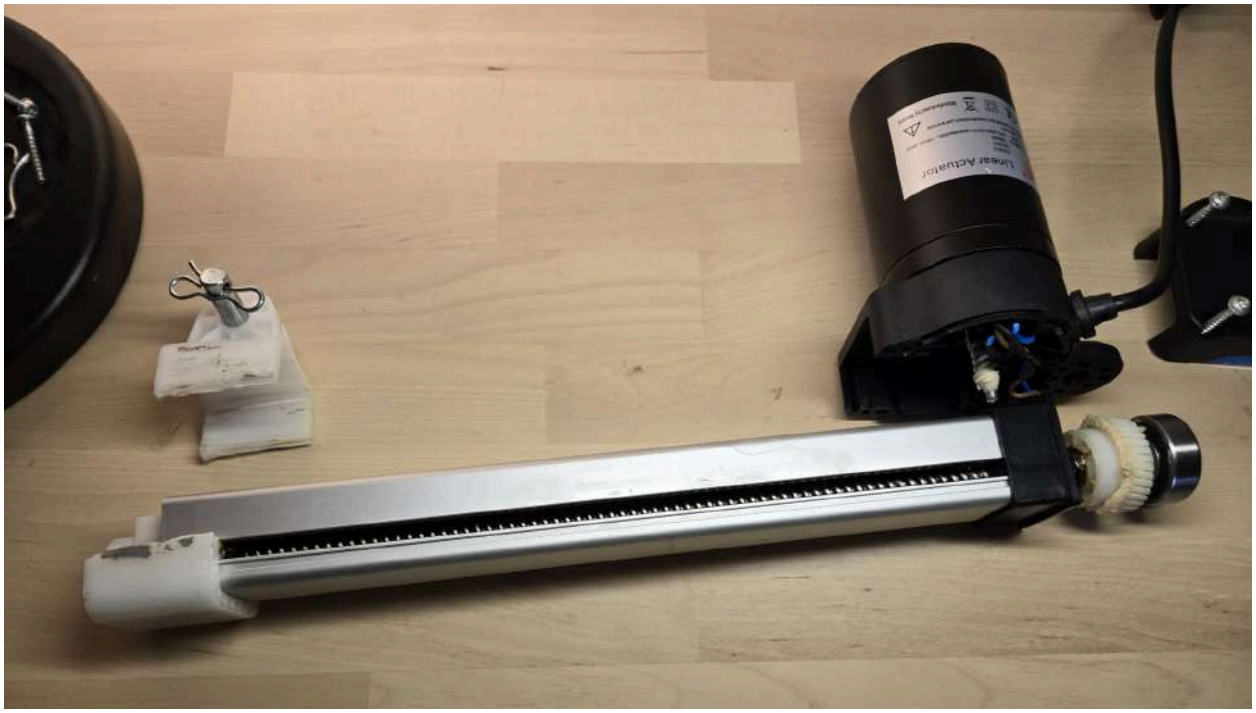
3. Remove gearbox cover. There are no clips holding it in place, only the fasteners that were just removed. Here is what that looks like:



4. <u>Make sure the orientation of the aluminum rail remains in the same orientation throughout.</u> It may be worthwhile to mark it with a marker or tape to not lose the orientation.

5. Rotate the plastic gear off of the worm gear. <u>The wires do not need to be disconnected.</u> Pulling the bottom of the plastic gear will rotate it off of the worm gear.





6. Twist the plastic gear counter-clockwise (the bearing pictured above is the top for reference) and either 2 things will happen
    a. The broken plastic block will slide to the end of the aluminum rail and you can take it off.

b. The lead screw comes out and the plastic block doesn't move. If this happens keep going in the same direction, then push the lead screw down back into the aluminum rail. This will push the plastic block off the end. Repeat as many times as necessary to remove the block.

7. (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.
8. Place the new block on the aluminum rail, with the "MOTOR SIDE" text facing the motor.



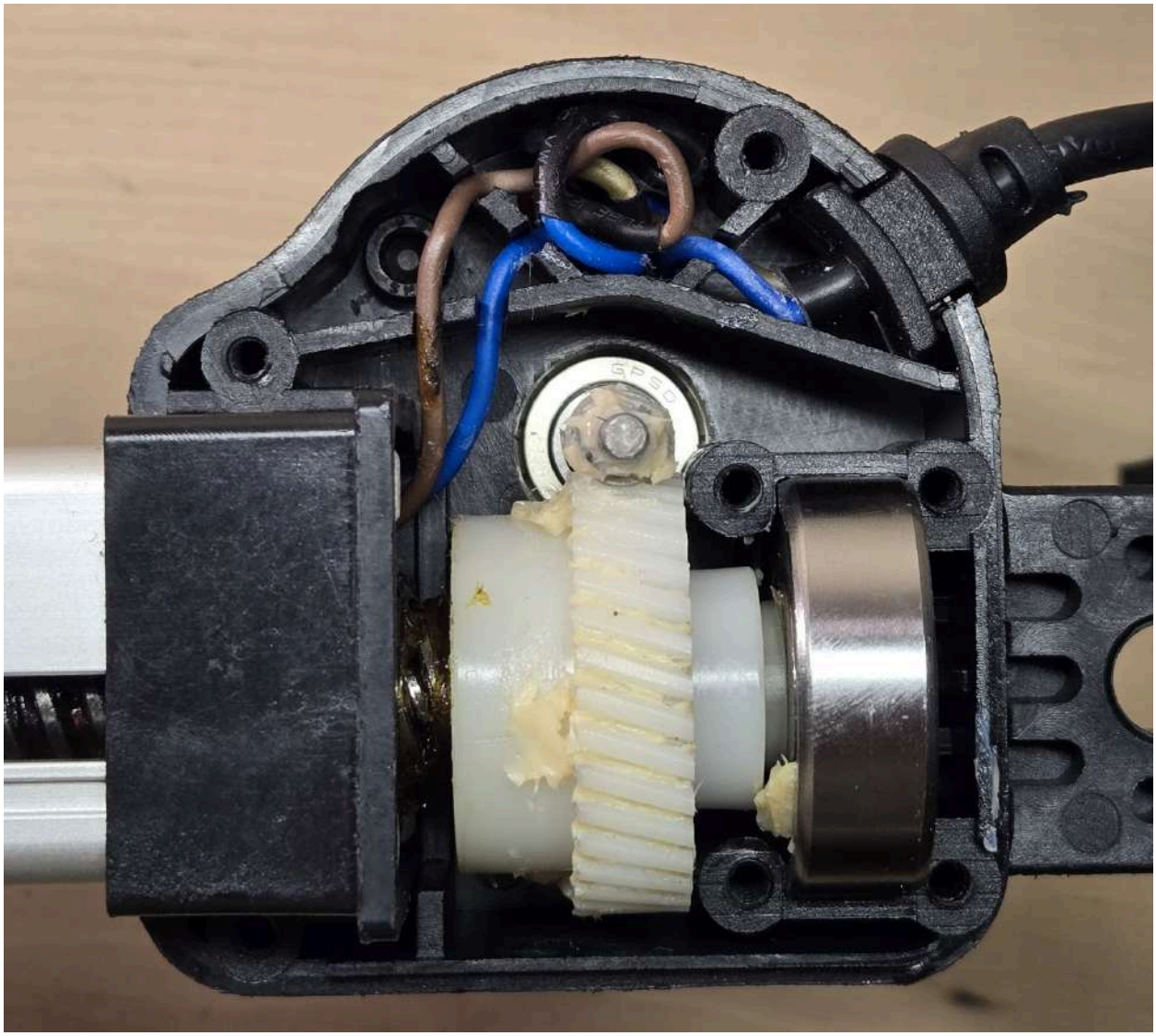
9. Slide the block down the aluminum rail, until it hits the lead screw.
10. Turn the lead screw with the plastic gear clockwise so it goes into the block.
    a. Turning the lead screw this direction will force the plastic gear into the aluminum rail screws pictured in the photo above. To more easily screw on the block, pull the lead screw out a little to avoid this.


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11. Ensure the block is fully on the aluminum rail. It will need to be past the limit switch that stops the motor from spinning the block off the end of the rail.



12. 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.
13. The spacing should look like this:

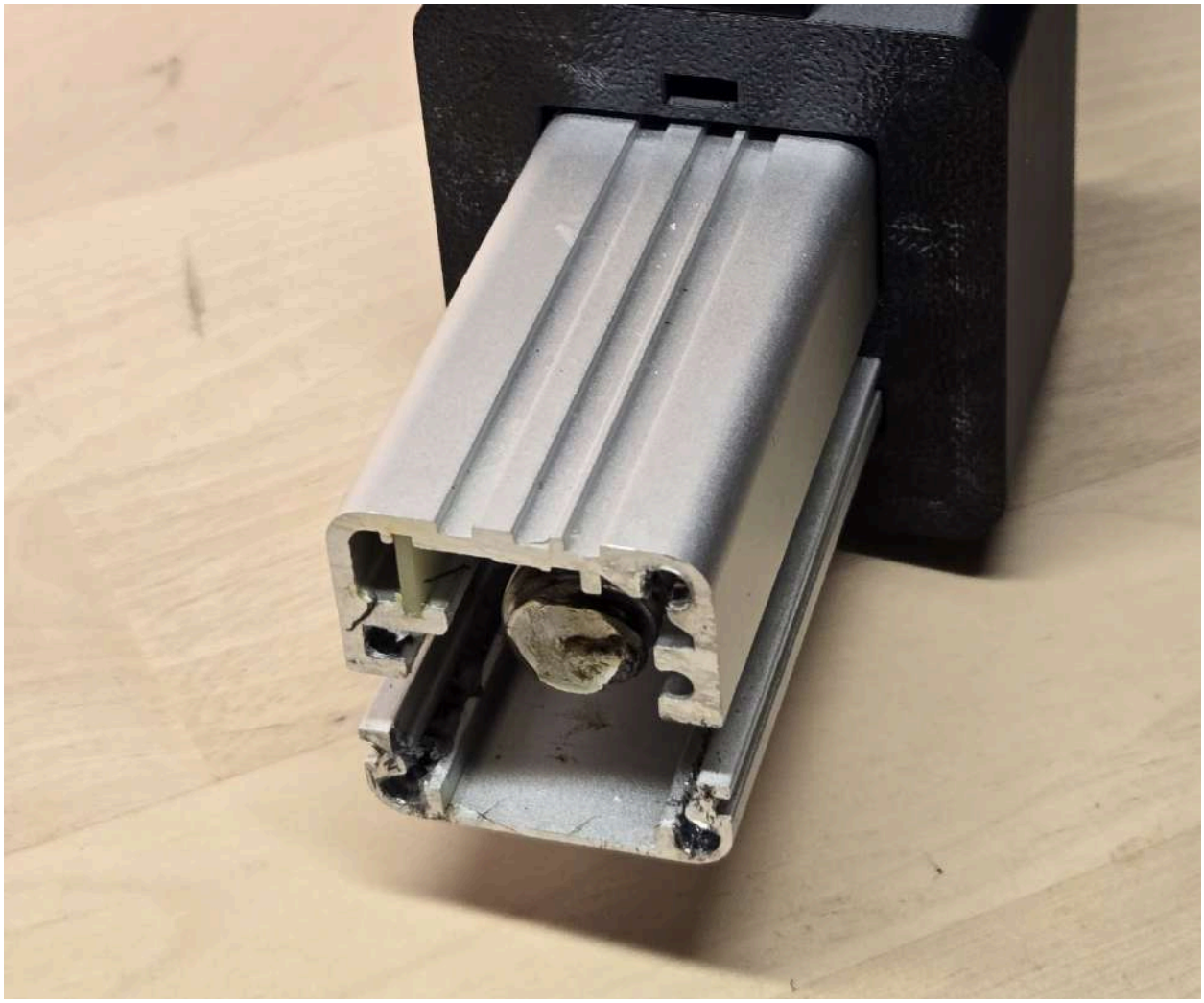


14. Get the wiring to fit back into the empty space made for it, and ensure the cable strain relief is lined up with the housing case.
15. Do not pinch any of the cables in the gearbox housing. Doing this can potentially damage the wires.

16. Place the housing cover back on and tighten all of the fasteners again. (Reverse of step 2)



17. Reattach the cap at the end of the aluminum rail.





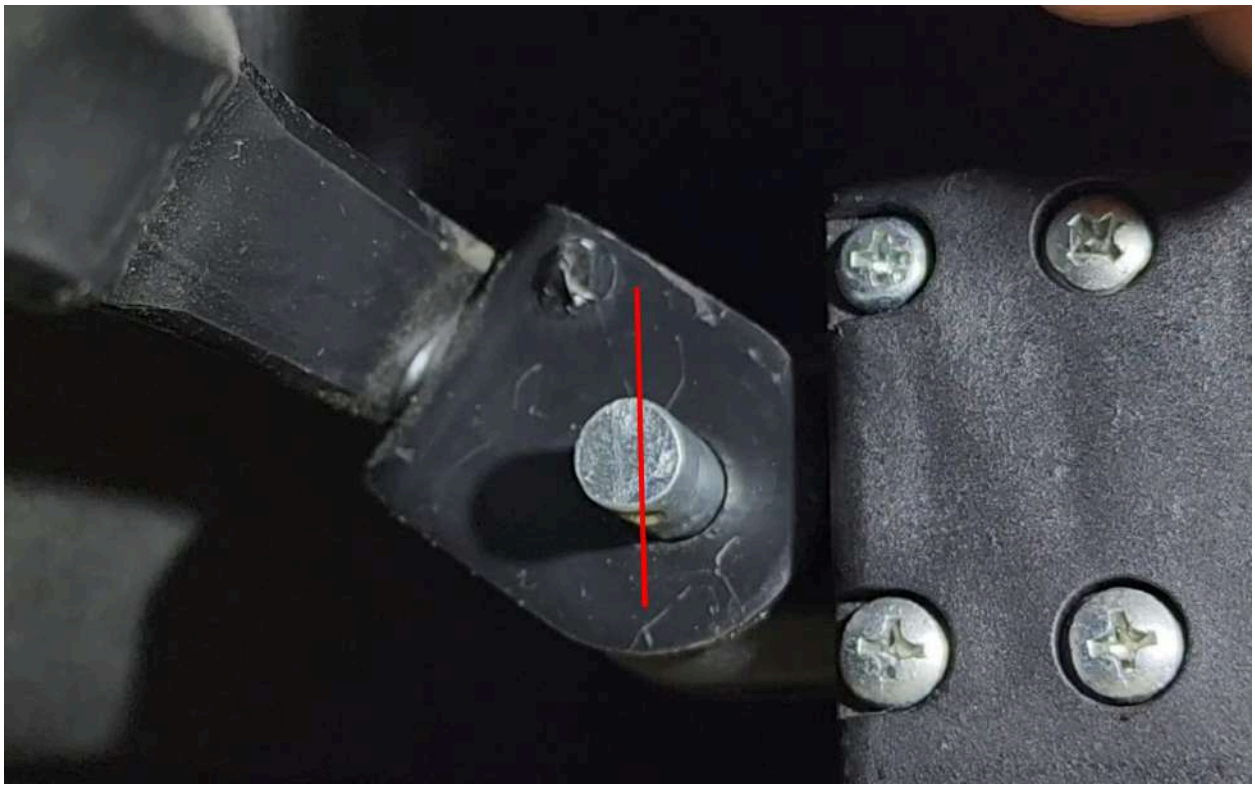
Reinstallation of the Motor Assembly

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.

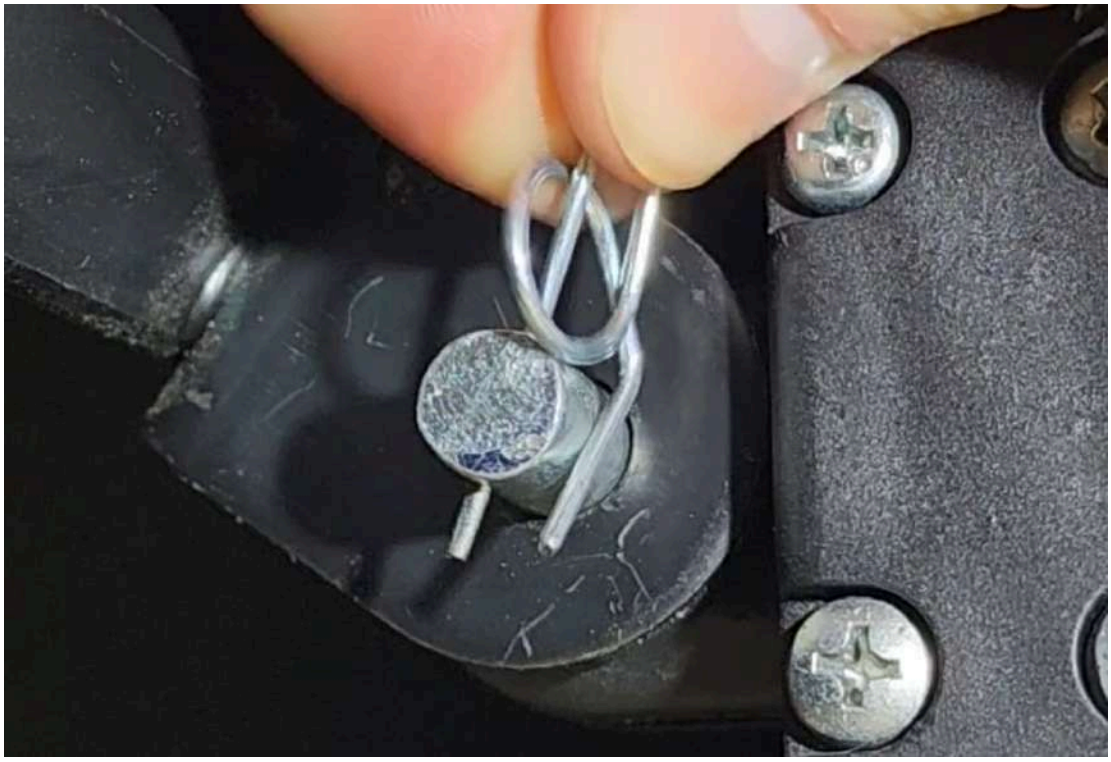
1. Before attaching either of the pins, the couch should still be unplugged from the wall.
2. Plug the two couch cables back into the motor.
3. Start with the rear pin, where the motor is. I found that resting the pin in the hole very shallowly helped with getting it through the two plates and assembly.



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



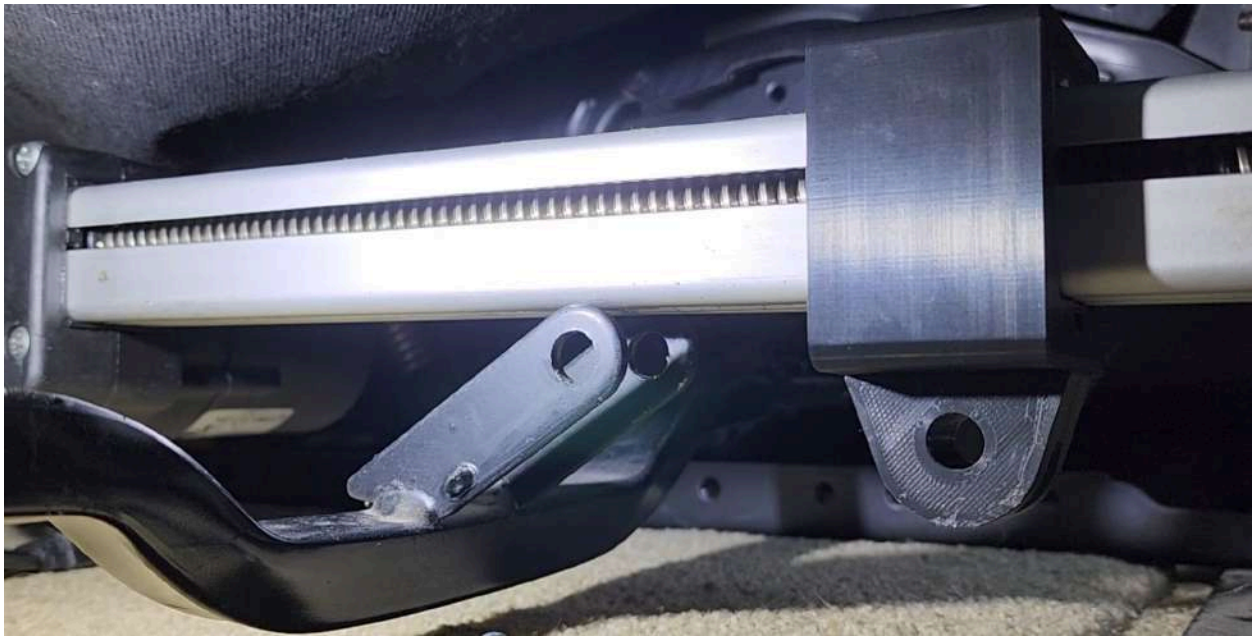
5. Push the retaining ring pin in, flat side through the hole.



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.



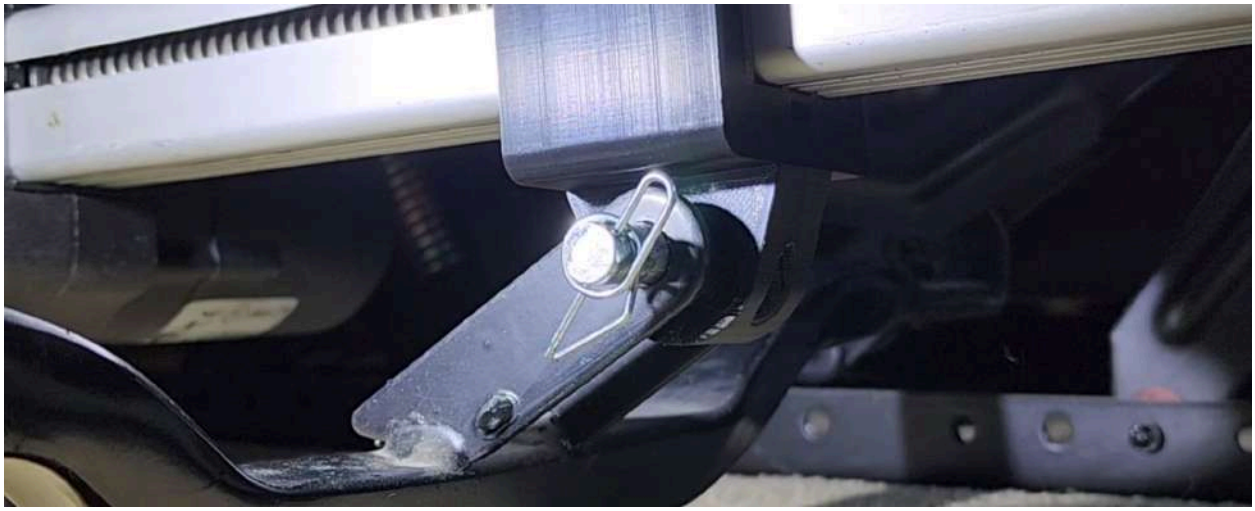
7. Plug the couch into the wall.
    a. Due to the moving position of the recliner (assuming you are laying under it), the block will not line up with the couch recliner holes at all.
    b. Use the recliner buttons to move the block to the correct position for inserting the main pin.







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.