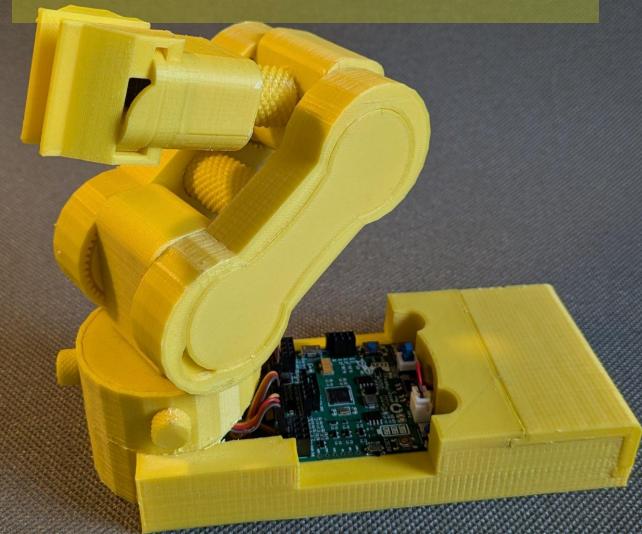
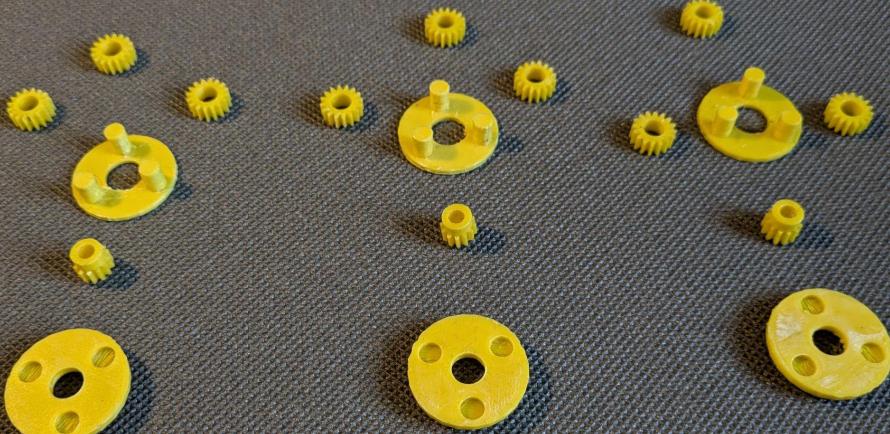


PEDRO

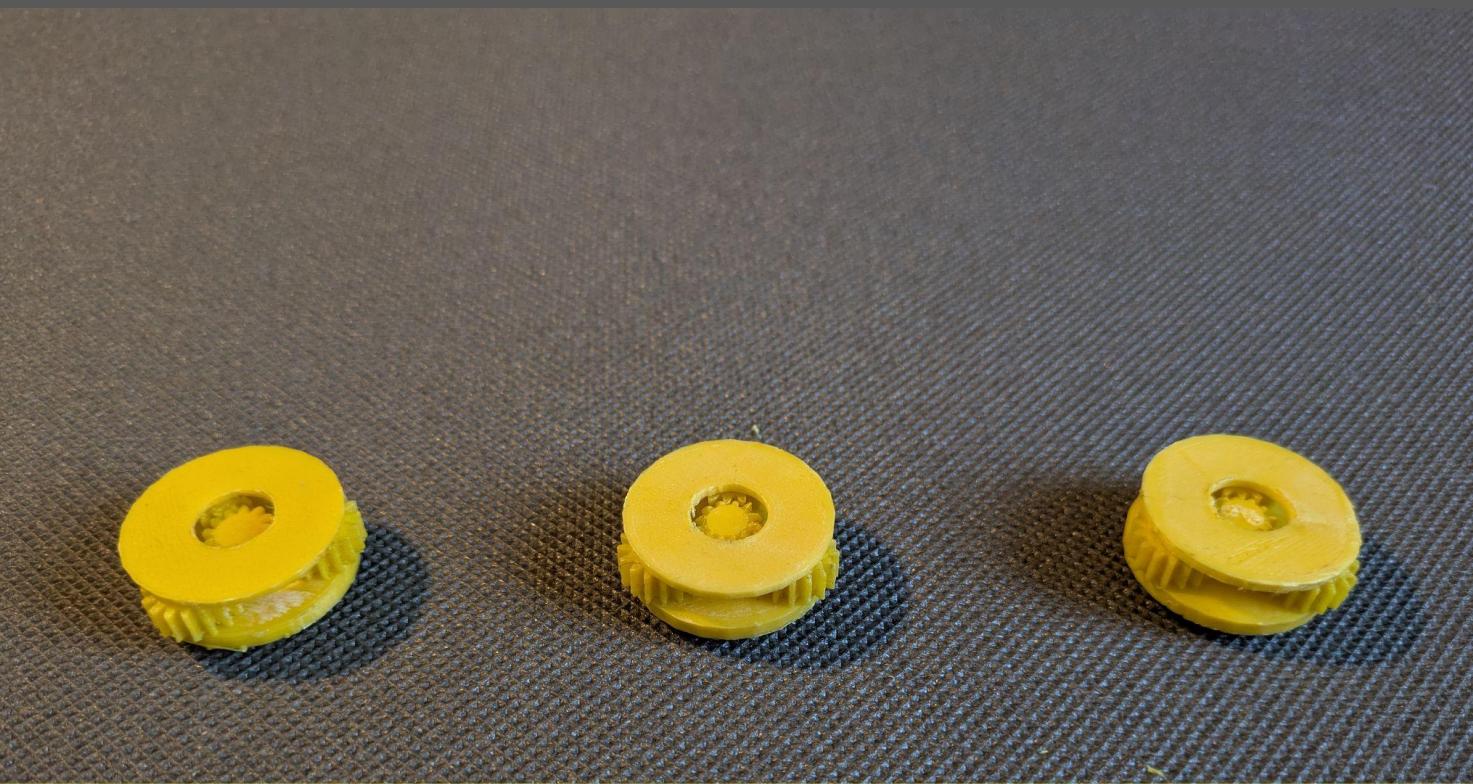
HOW TO ASSEMBLY



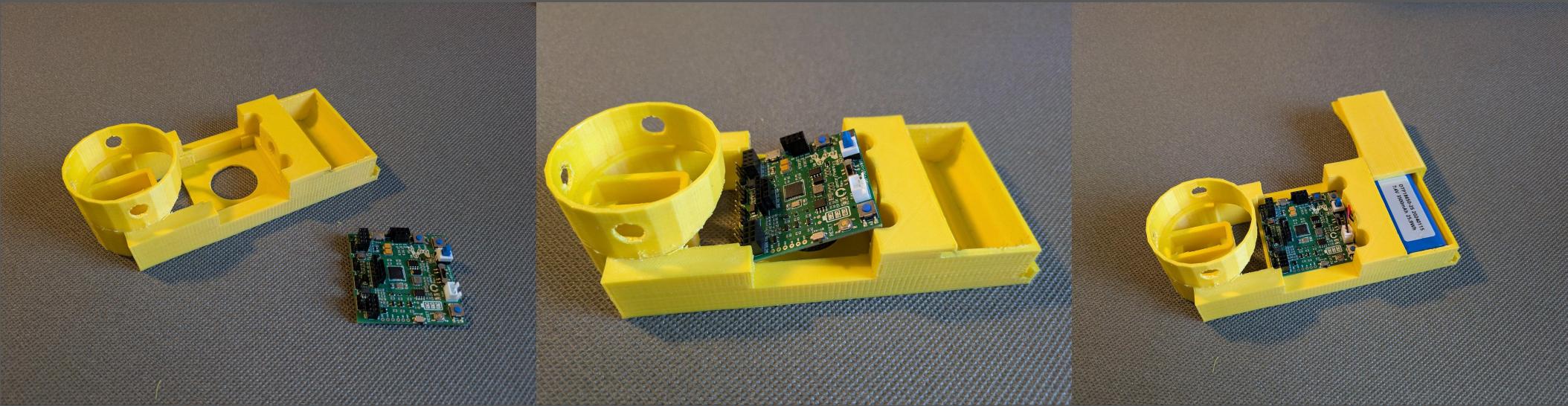
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STEP 1: Assembling the Planetary Gear Systems
Assemble the three side gears and the central gear to complete the planetary gear system.

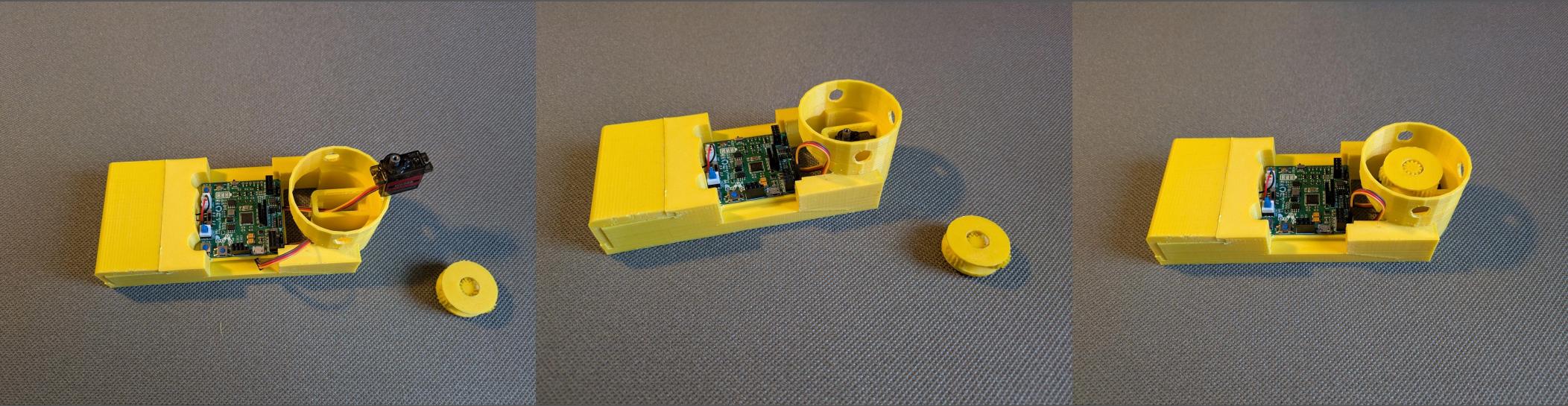


TIP: For smoother rotation of the gears, apply some grease or lubricant to ensure better movement.



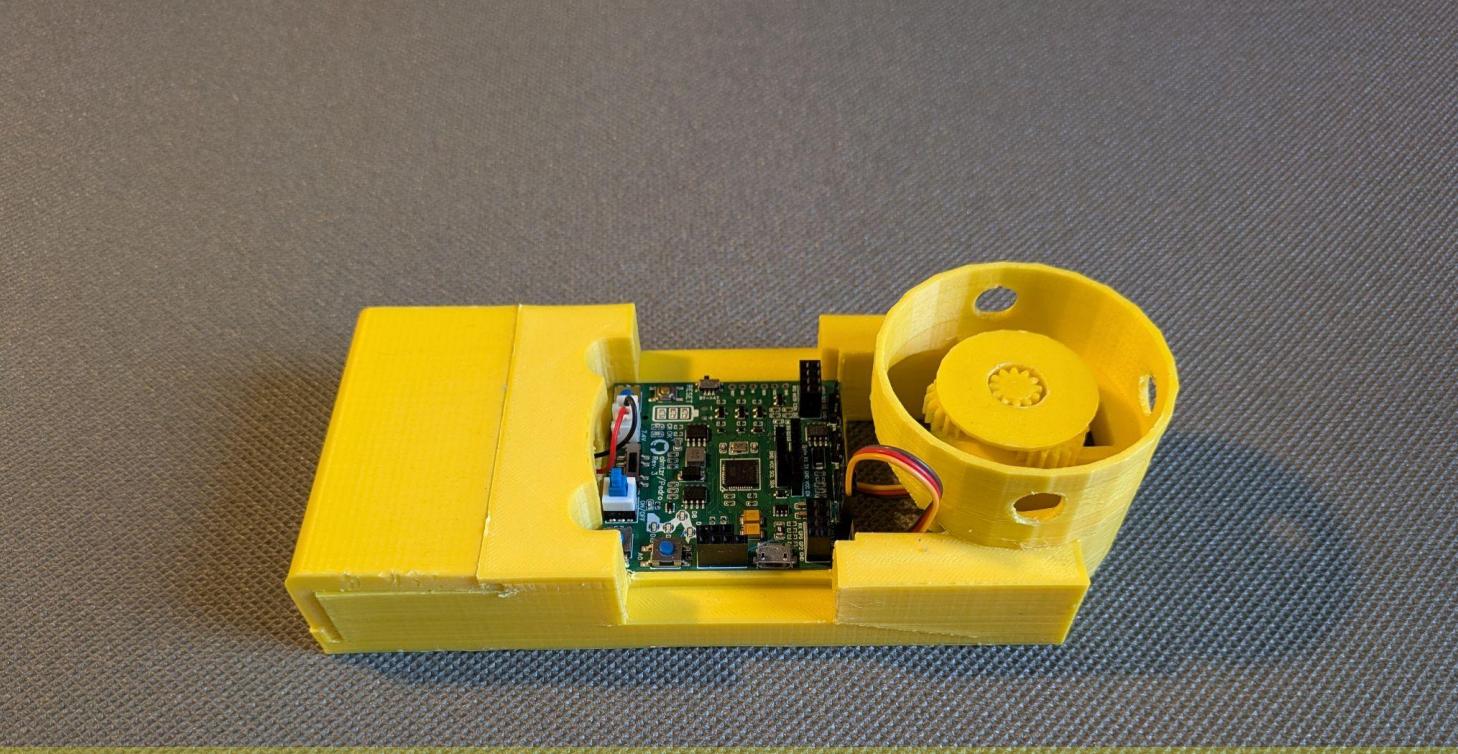
STEP 2: Placing the Board and Battery

Place the board in position as shown, and attach the battery. Connect the battery cable to the board and secure the battery compartment.

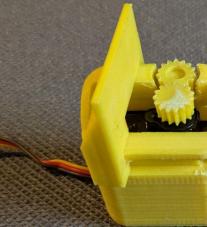


STEP 3: Servo Motor and Planetary Gear System

Mount the servo motor onto the base and connect it to pin D5 on the board. Then, attach the planetary gear system to the servo motor as shown.

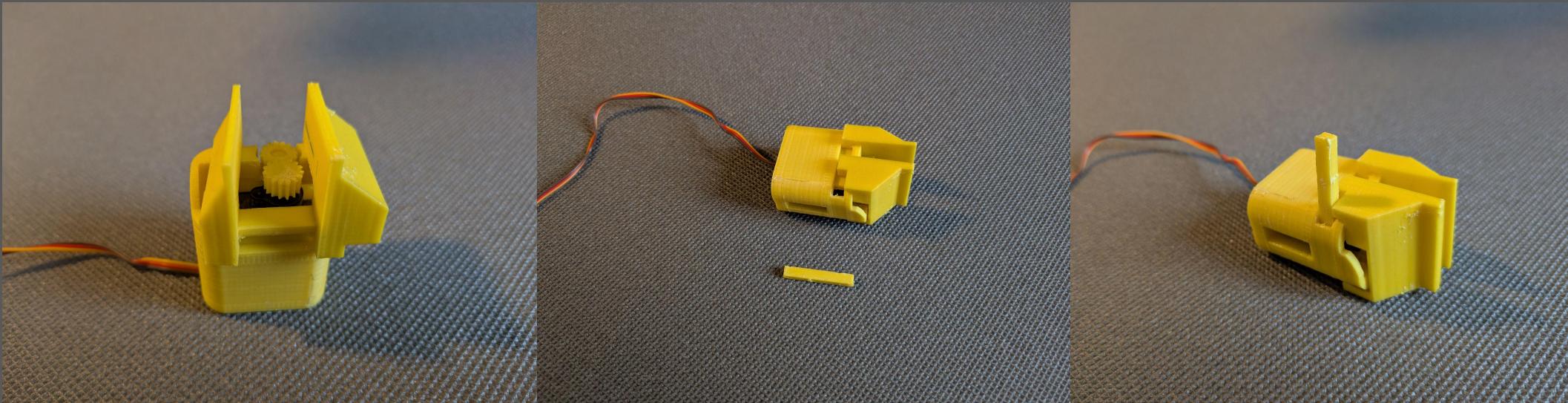


TIP: Power on the board. The LED on pin D13, corresponding to the D5 servo motor, should light up. Press A1 and A2 to test the rotation of the planetary gear system.



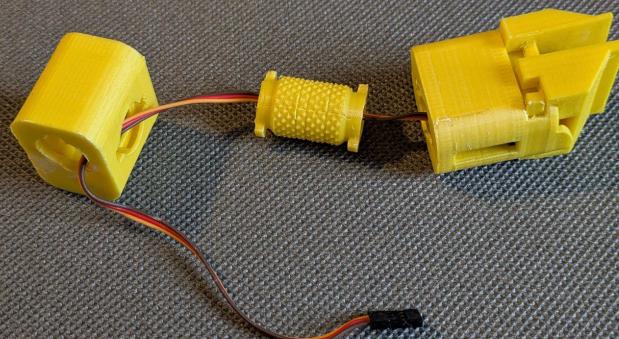
STEP 4: Assembling the Gripper

Place a servo motor into the gripper piece, then attach the fixed gripper part as shown. Next, install the two gripper gears as indicated.



STEP 5: Attaching the Movable Gripper

Place the movable gripper as shown and connect it to the gear system. Then, attach the gripper stopper in the indicated position.



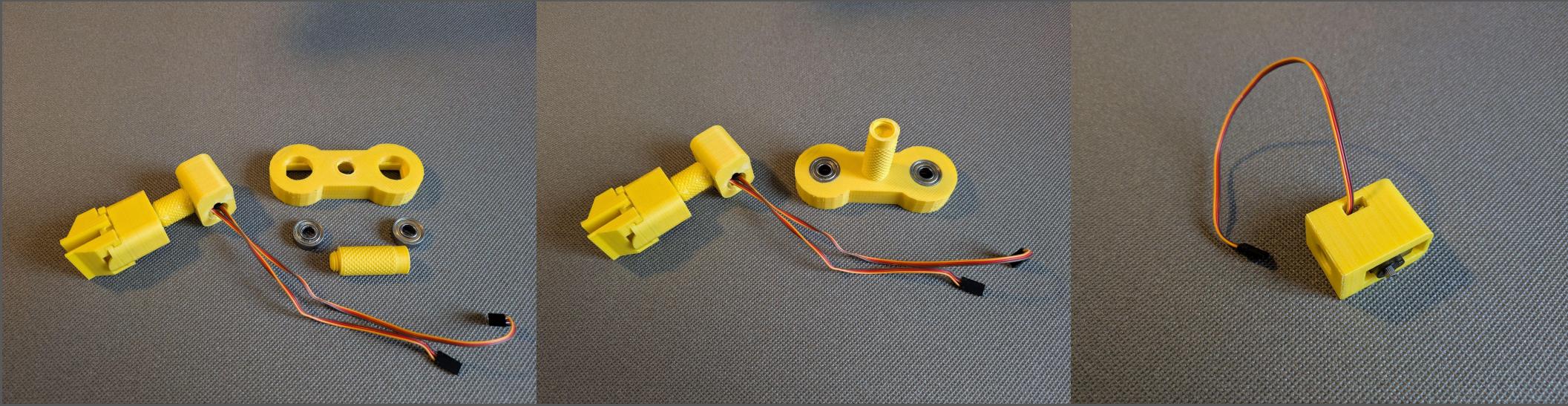
STEP 6: Assembling the Forearm
Connect the gripper to the elbow piece by
rotating it clockwise as shown.



STEP 7: Installing the Elbow Servo

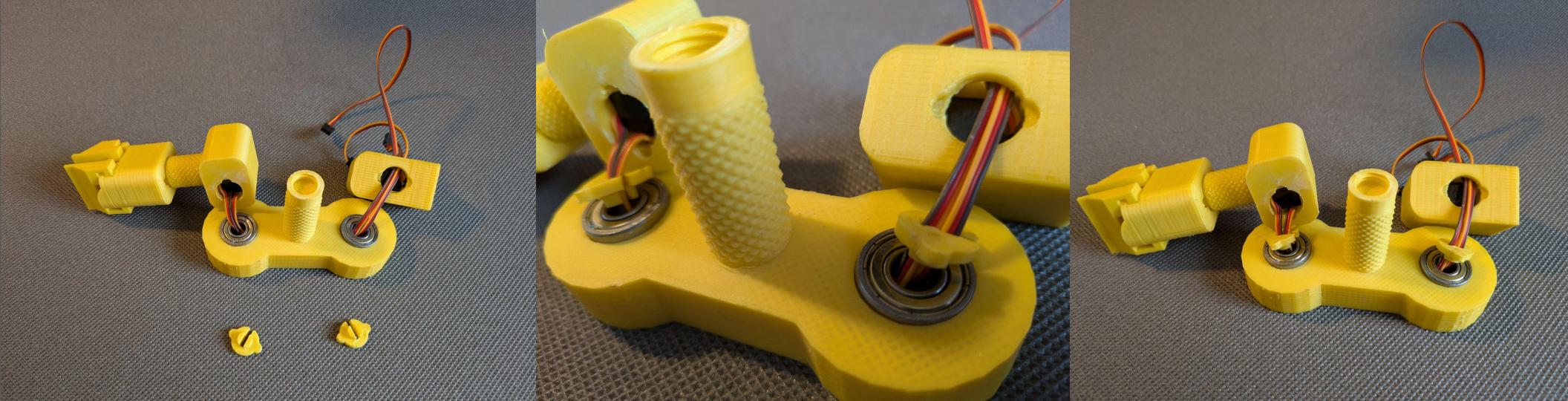
Insert the servo motor into the elbow piece as shown.

TIP: Connect the gripper servo to pin D10 on the board. Turn on the board and press button A0 until LED D7 is selected. Then, use buttons A1 and A2 to open and close the gripper.



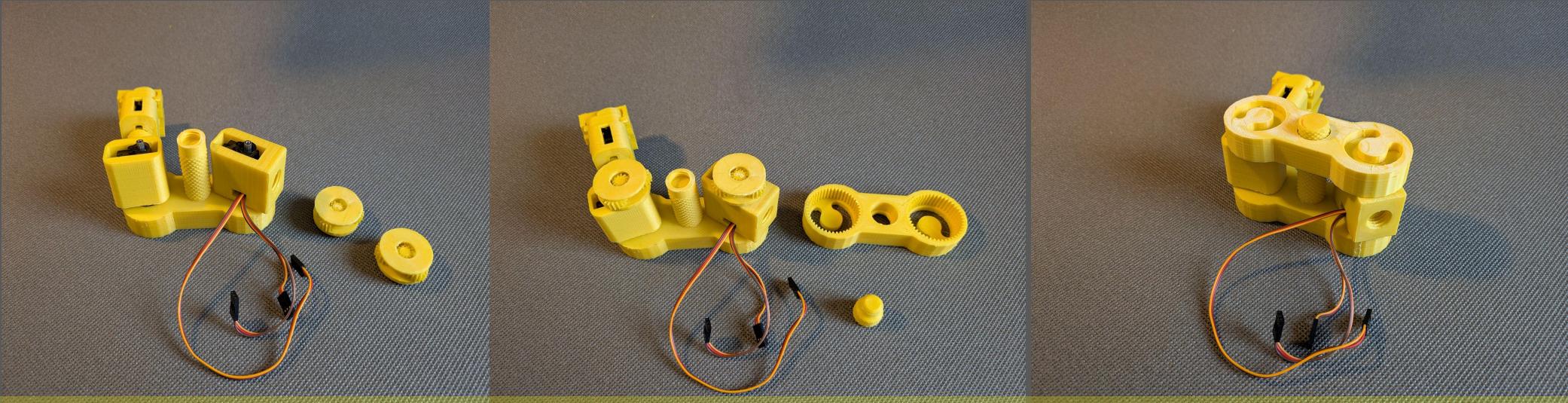
STEP 8: Assembling the Arm Part 1

Place the ball bearings as shown. Then, screw in the arm connector securely. Finally, insert the servo motor into the shoulder piece as indicated.



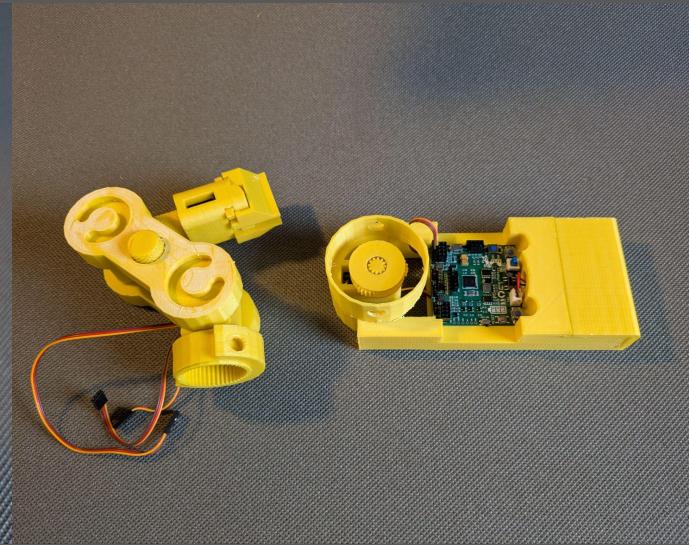
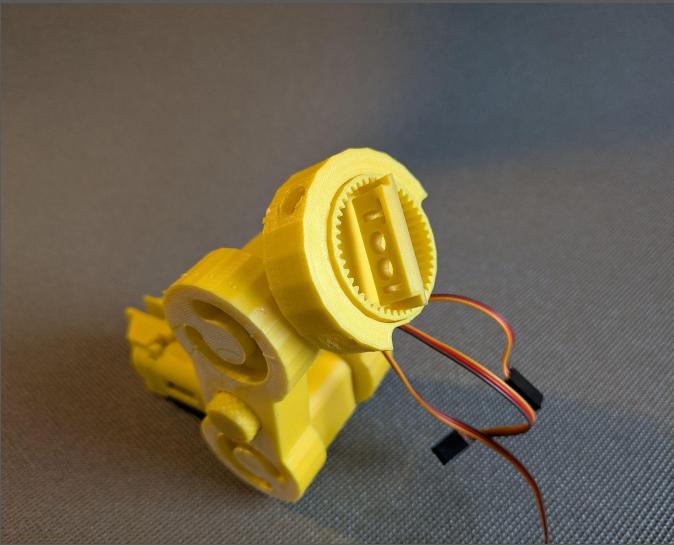
STEP 9: Assembling the Arm Part 2

Insert the two rotating arm pieces into the ball bearings as shown.



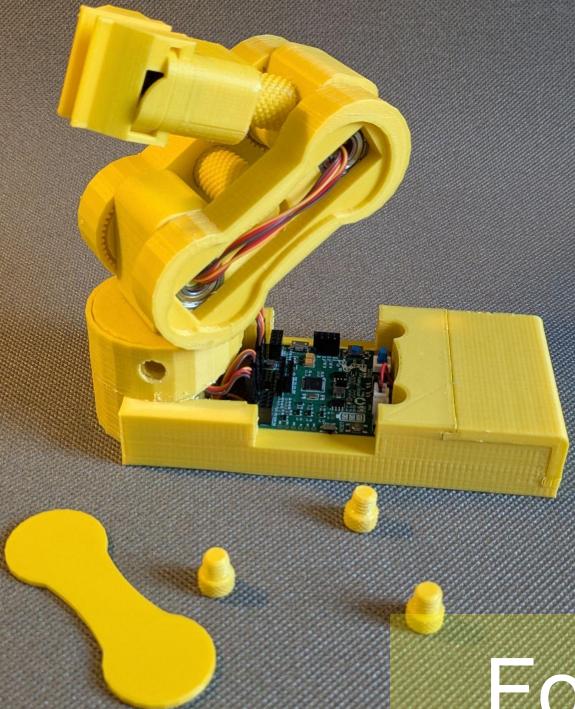
STEP 10: Planetary Gear Systems for the Shoulder and Elbow

Place the two planetary gear systems as shown. Connect the shoulder servo motor to pin D6 on the board, and the elbow servo motor to pin D9. Test the rotation of each planetary gear system by selecting the corresponding servo using button A0, and control the rotation in both directions using buttons A1 and A2.



STEP 11: Base Servo Gear

Screw the gear onto the base servo motor as shown. Use the tool piece to tighten it securely.



For more details visit
the Pedro Github page

