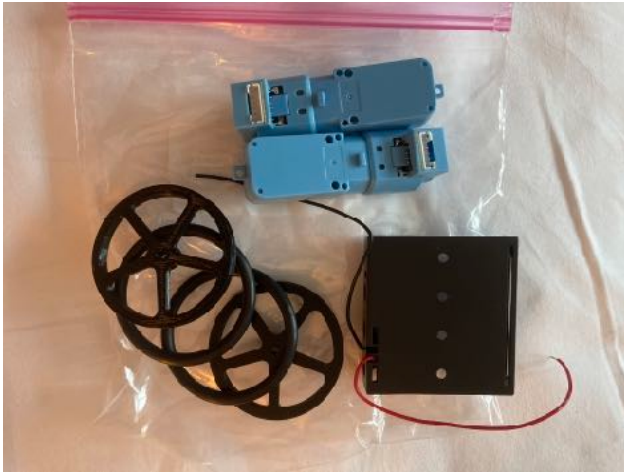


Identifying the parts



Motors, wheels, and battery holder



Robot body



Chassis kit with connectors

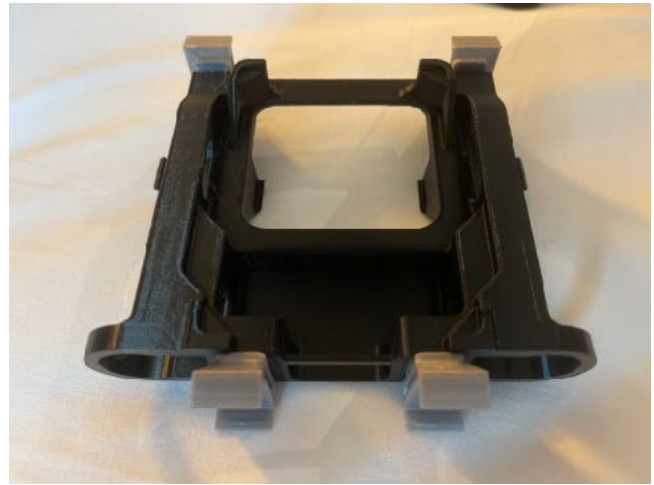
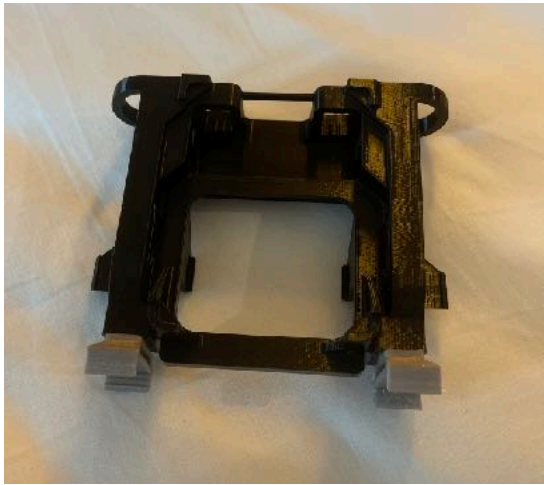


Sensor cables, servo, servo mount, and sensors



Robot body, circuit board, USB cable, battery holder, wheels, motor cables, and motors

Insert clips into robot body

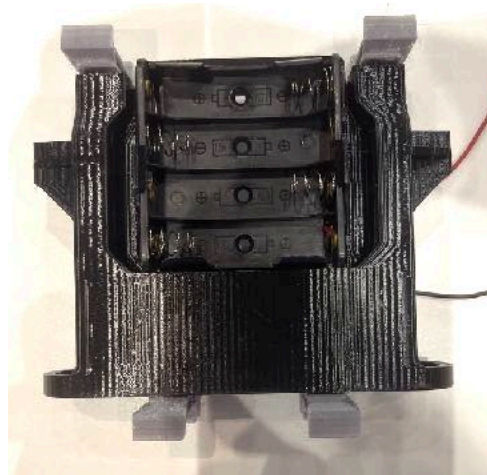
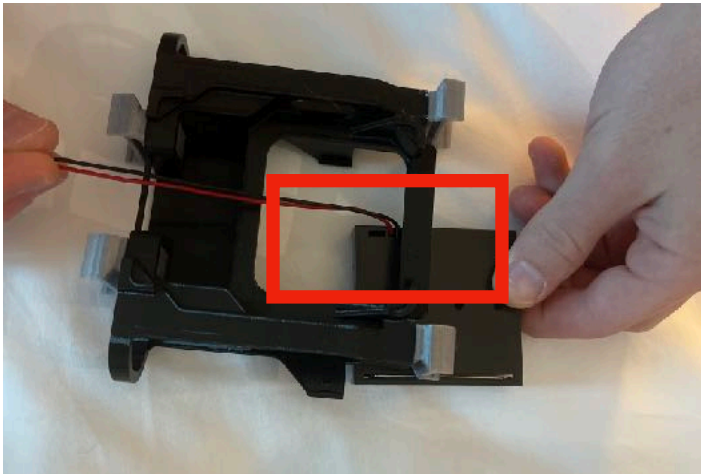


Clips are inserted in both sides of body

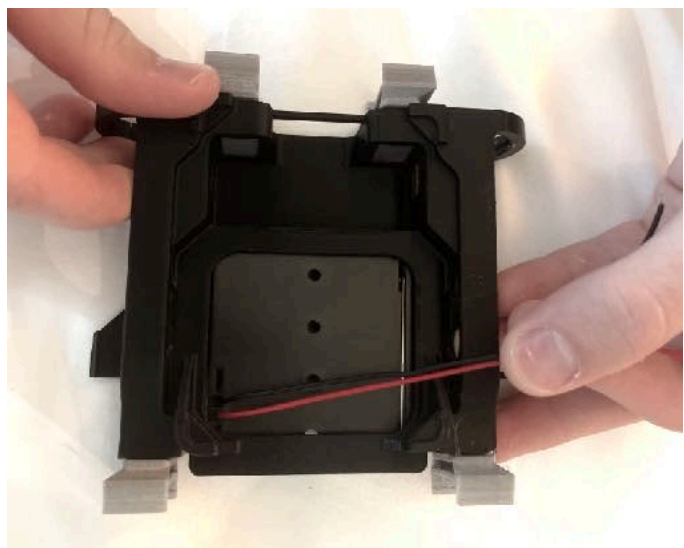
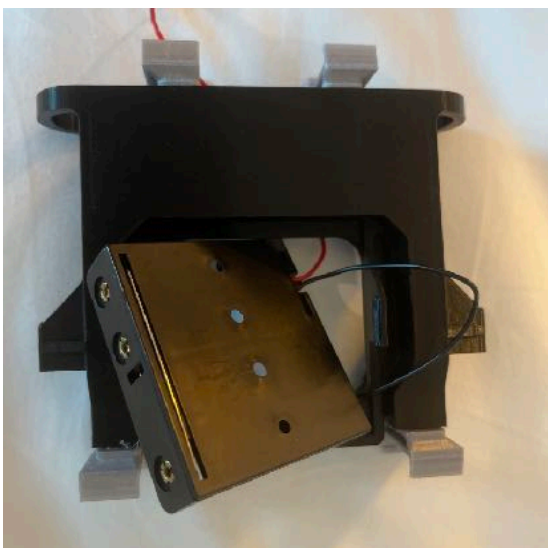


Head-on view of clips in robot body

Install battery holder in robot body

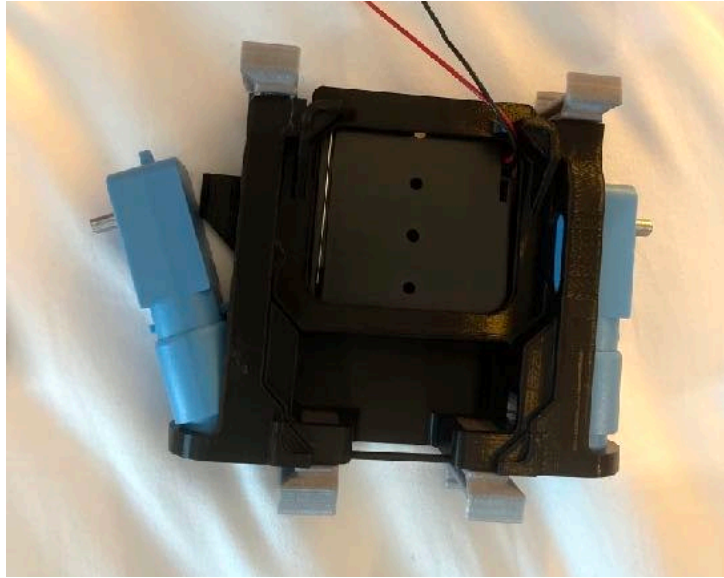


Wires go through opening in body

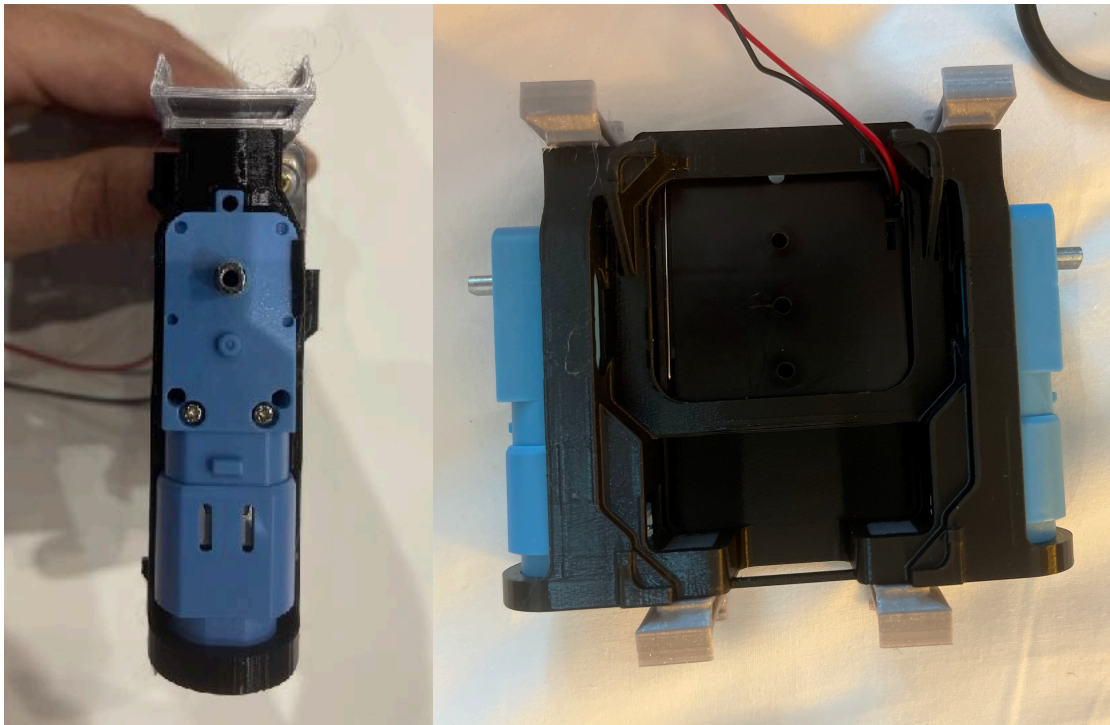


Install battery holder into body

Install motors into robot body



Push motor in end-first

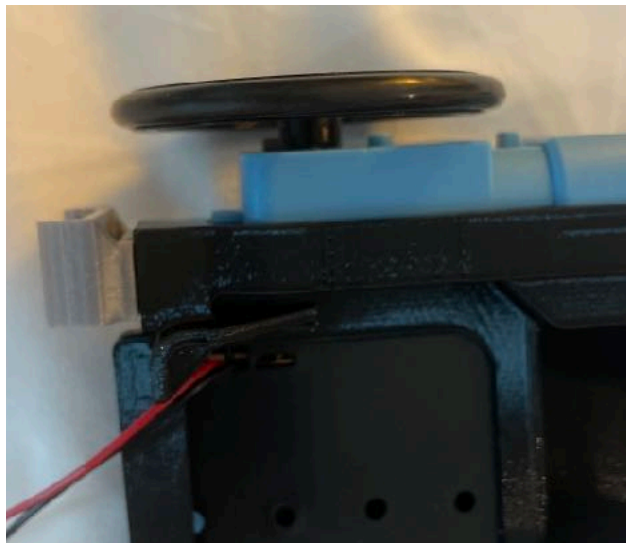


Motors correctly installed

Installing wheels

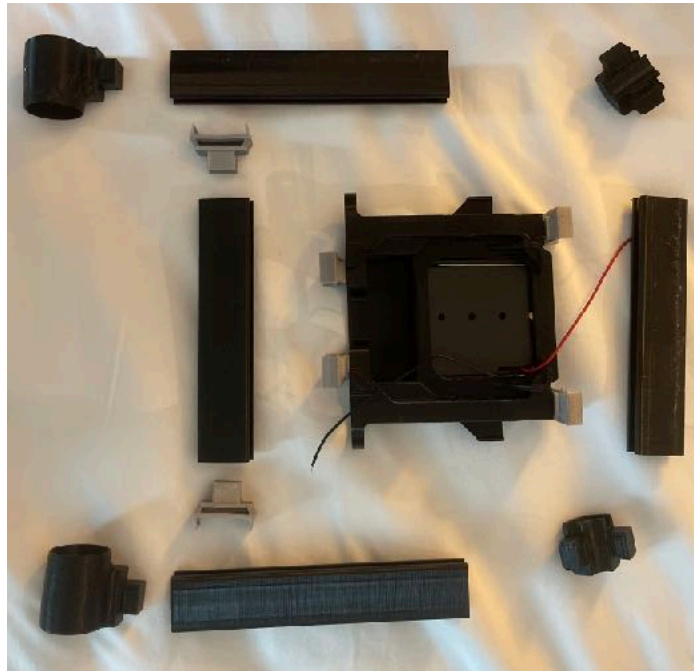


Install wheel tires onto wheels by pressing them on

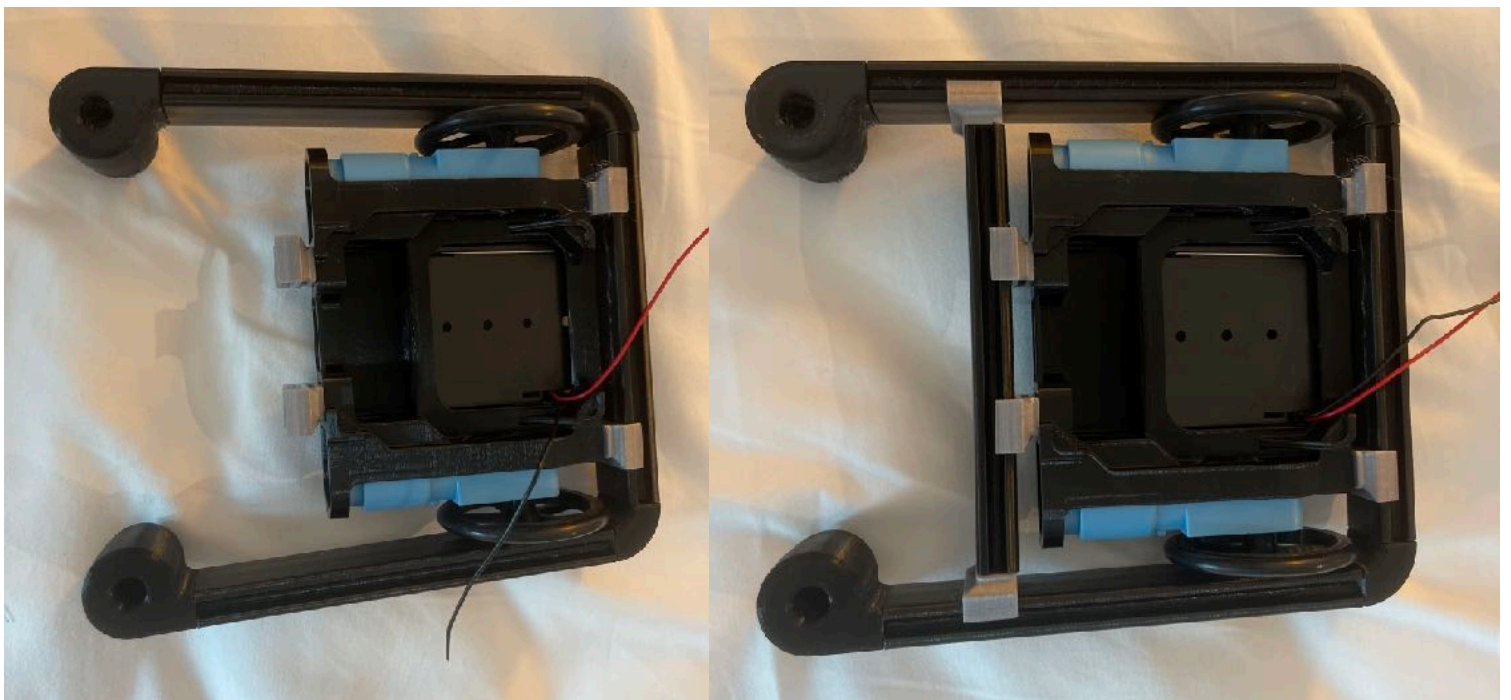


Install wheels onto motors. Be sure they are fully seated

Building the chassis

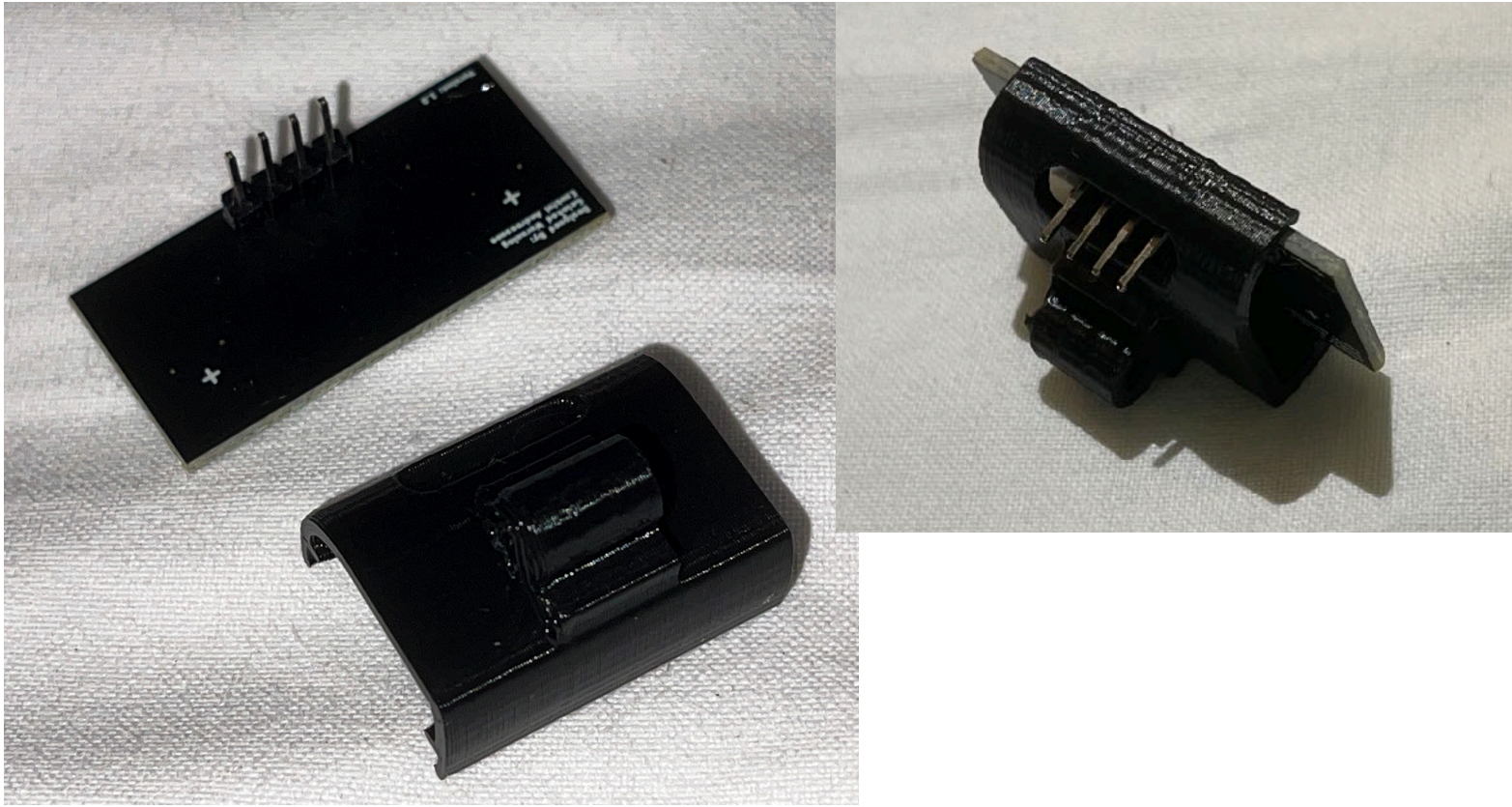


Lay out parts for the chassis

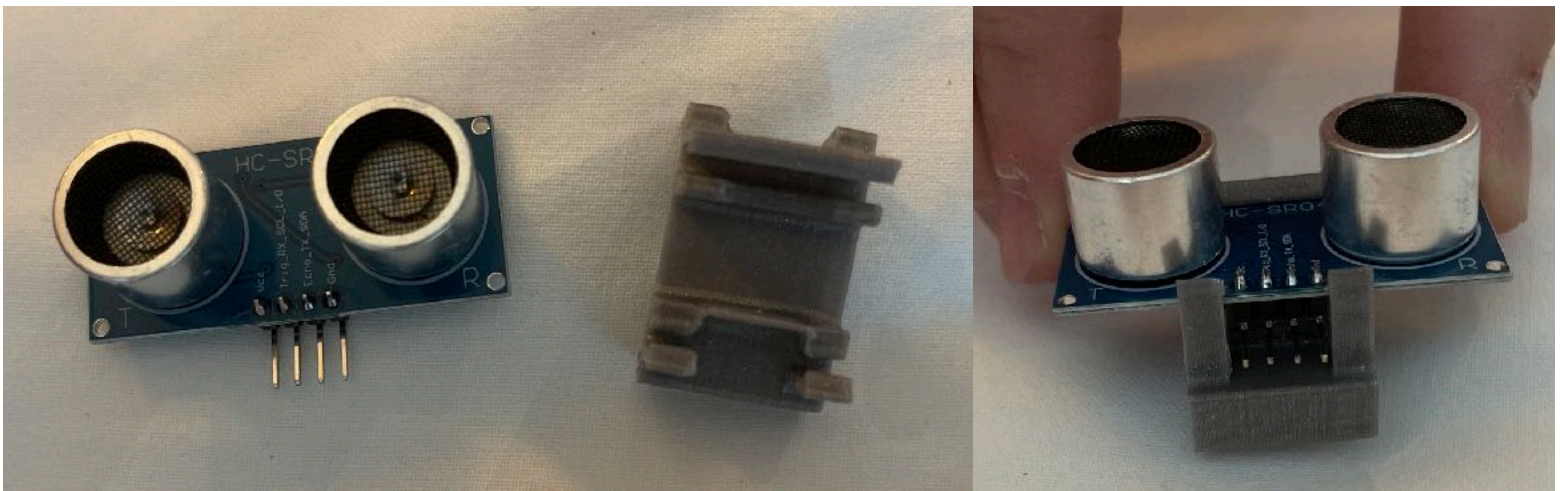


Connect the corner brackets and front casters

Sensors

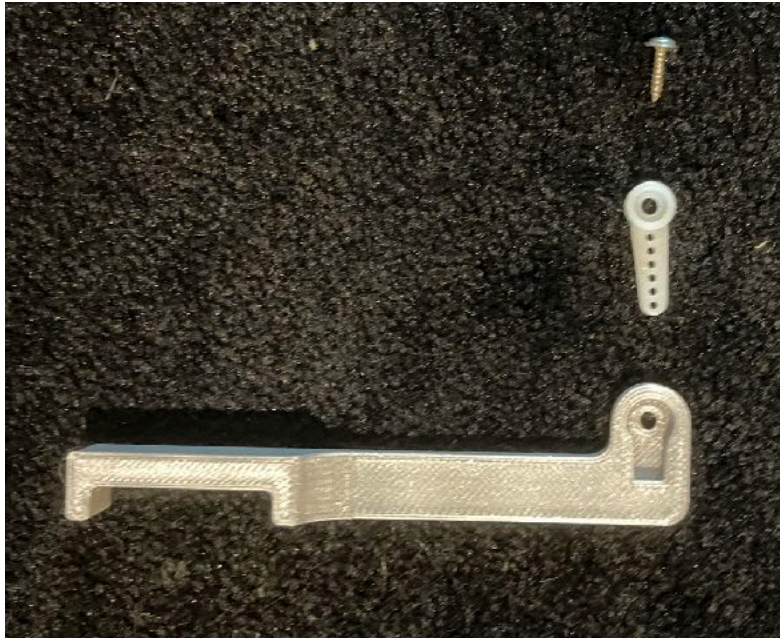


Place there reflectance sensor into the mounting bracket



Place there ultrasonic sensor into the mounting bracket

Servo Arm

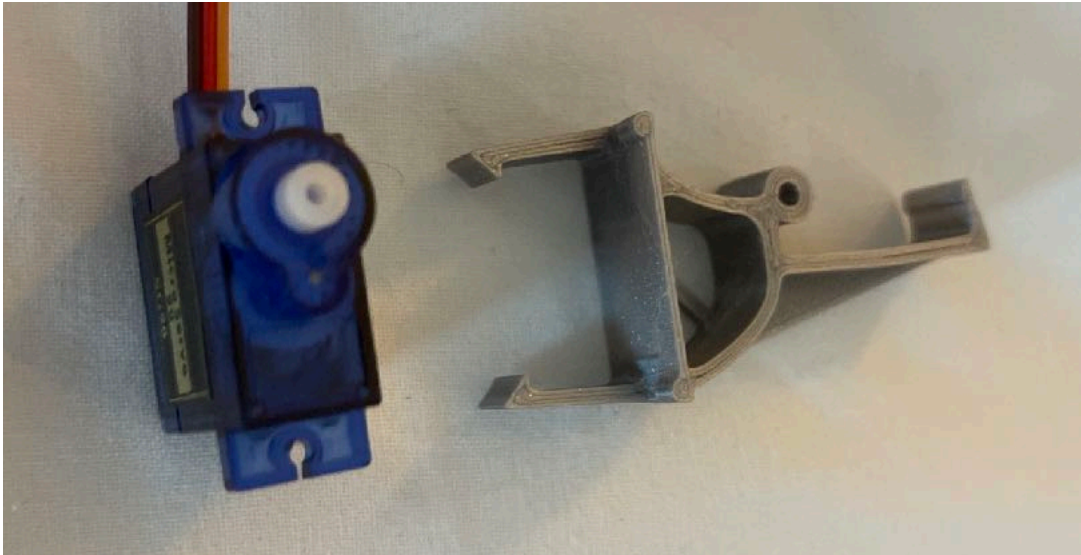


Place servo horn in the slot of the arm



Insert at an angle and push

Servo

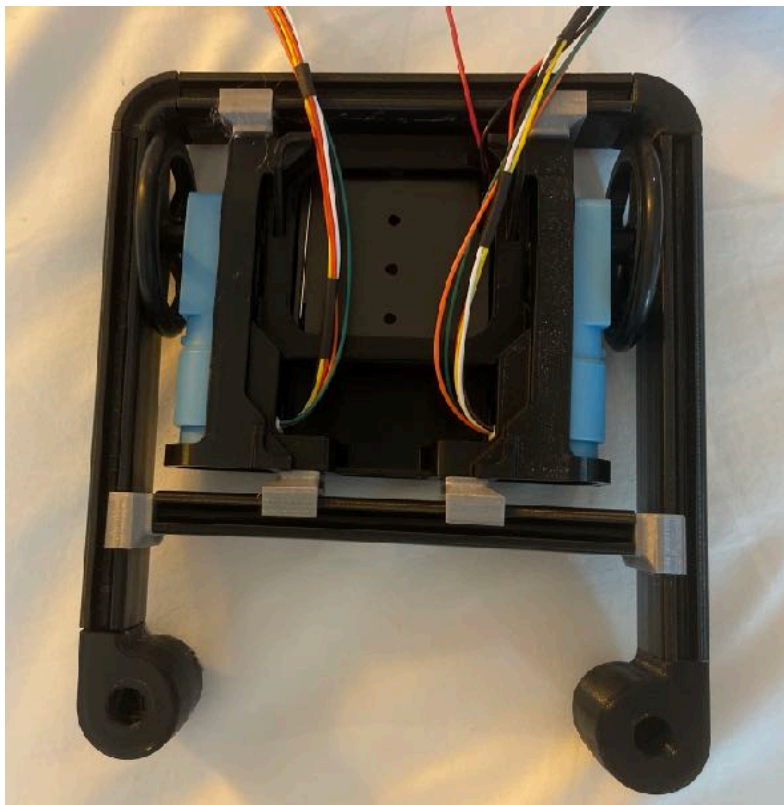


Place the servo into the mounting bracket as shown

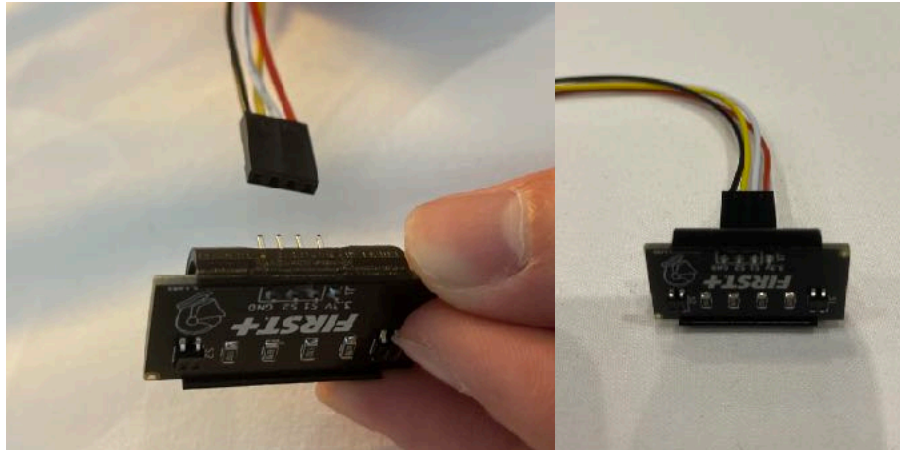
Motor Wiring



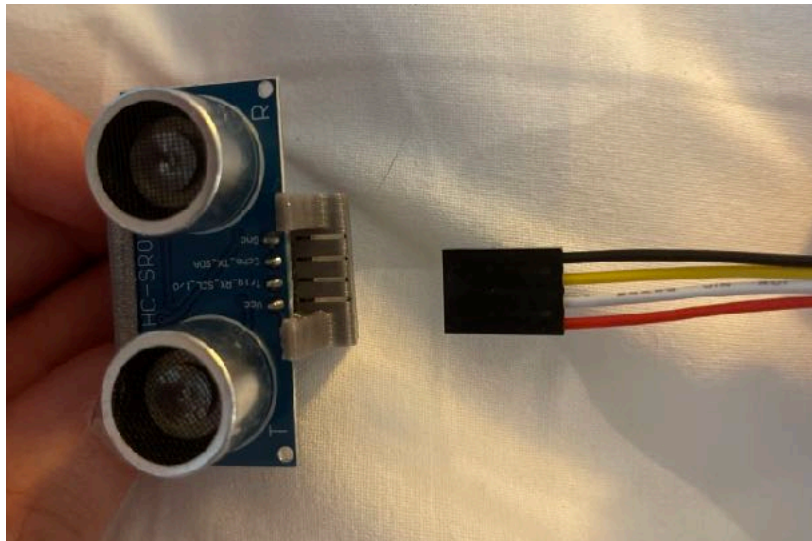
Insert the motor wires as shown



Sensor Wiring

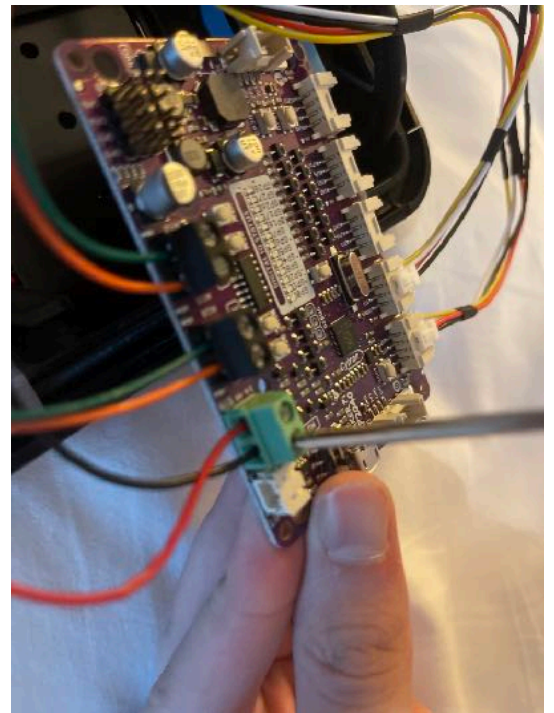
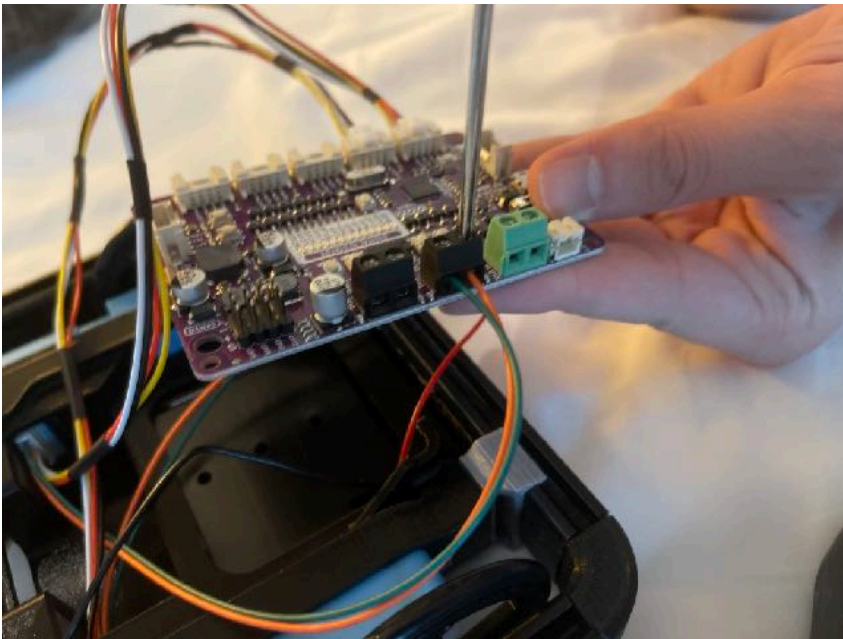
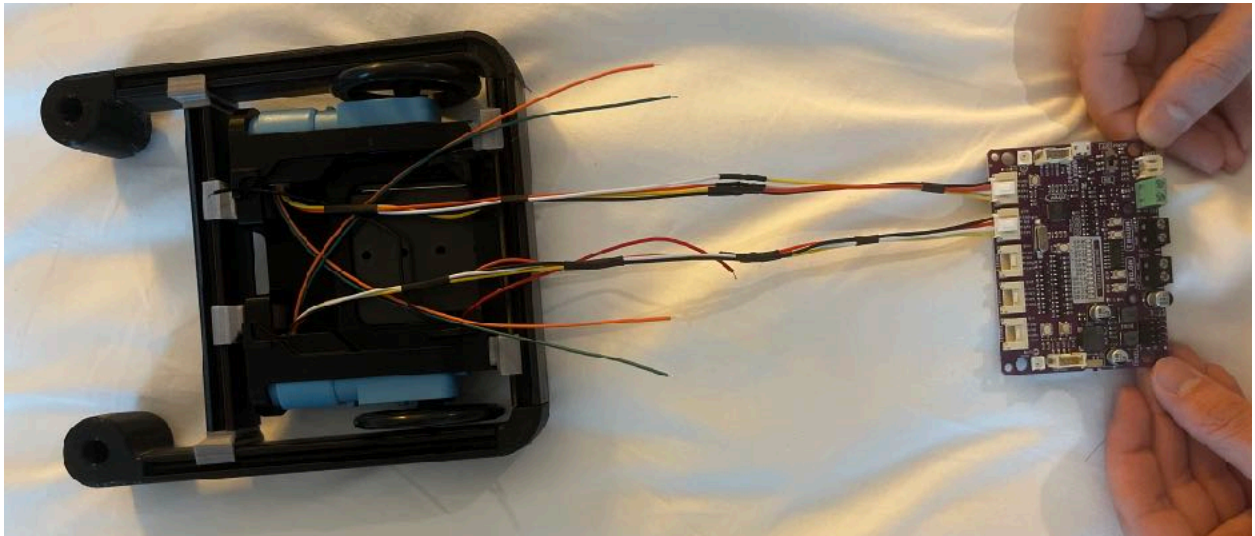


Connect the reflectance sensor, ensuring the the black wire is connected to GND



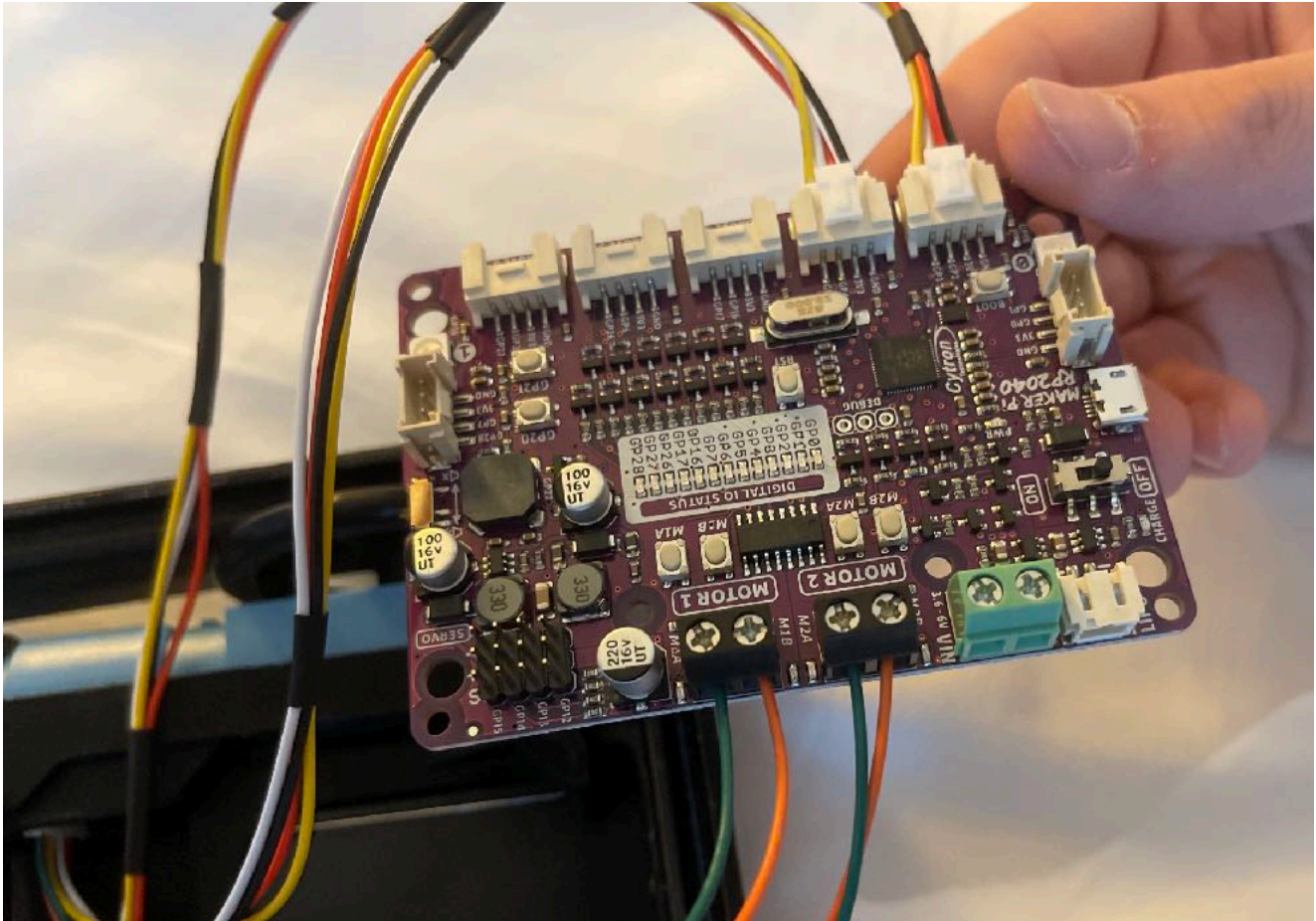
Connect the ultrasonic sensor, ensuring the the black wire is connected to GND

Connecting to the Board



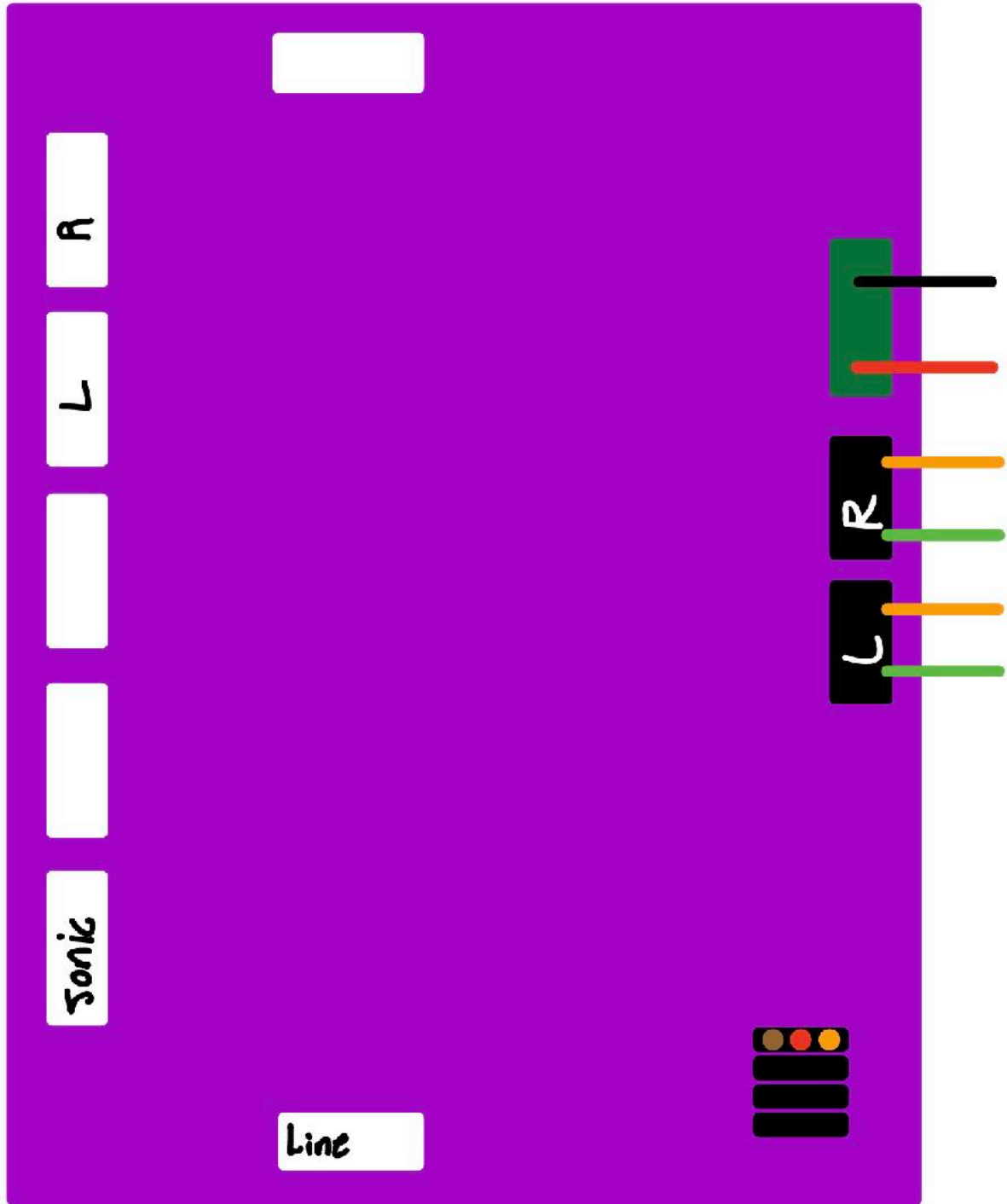
Connect the wires as shown

Connecting to the Board p.2

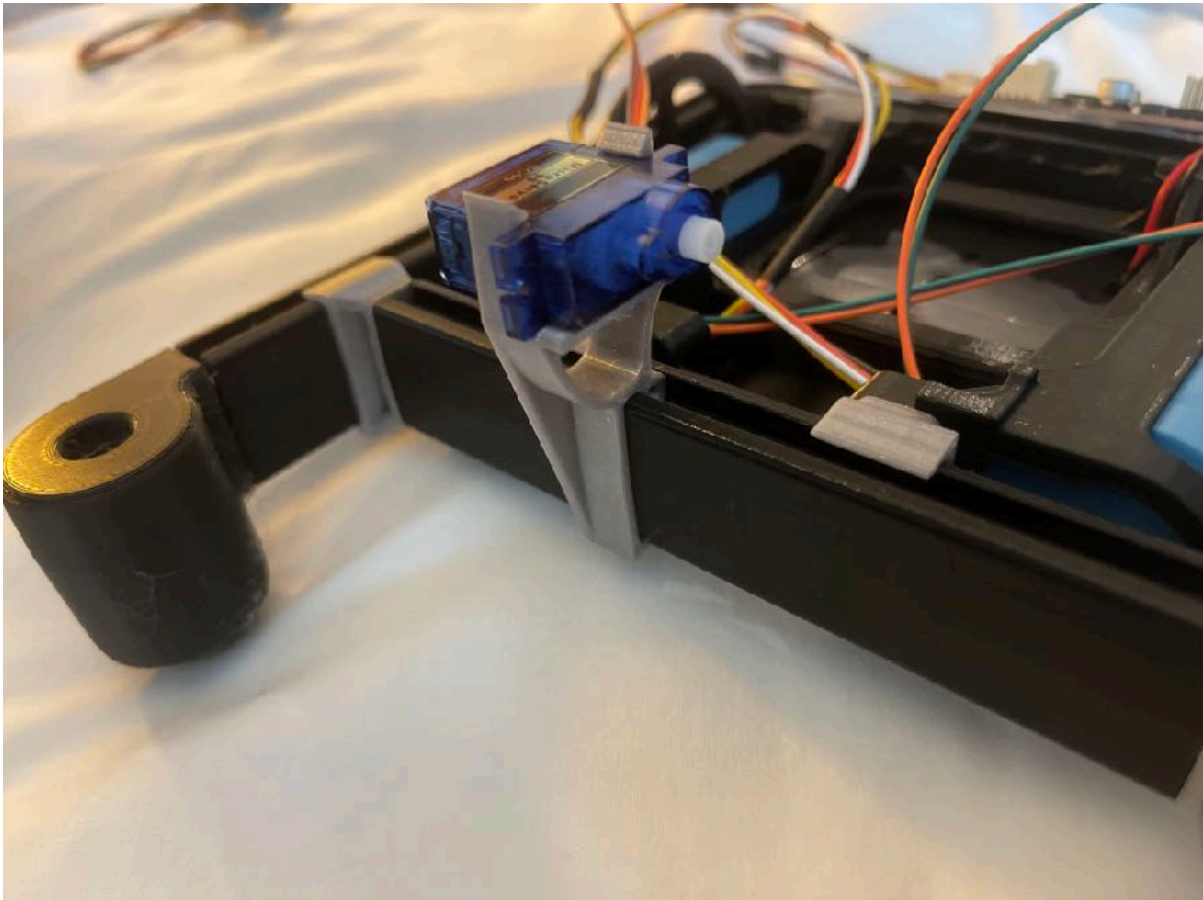


Connect the wires as shown

Wiring Diagram

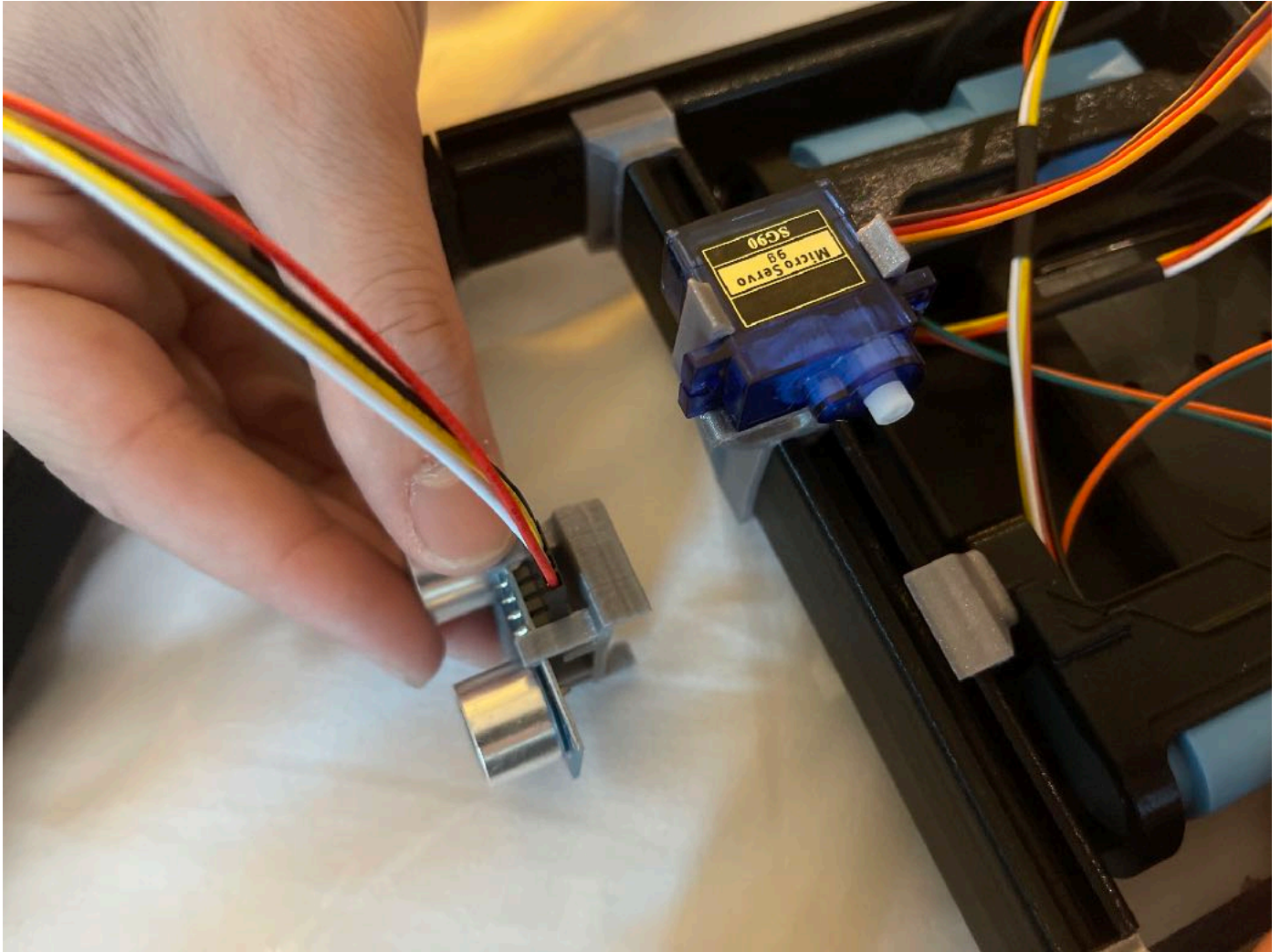


Placing the Servo



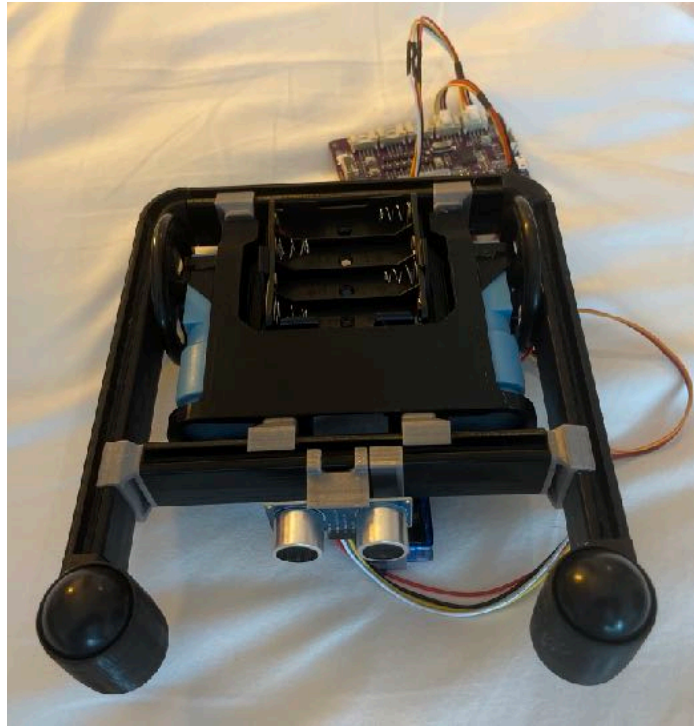
Place the servo mount on the front of the robot

Placing the Ultrasonic Sensor

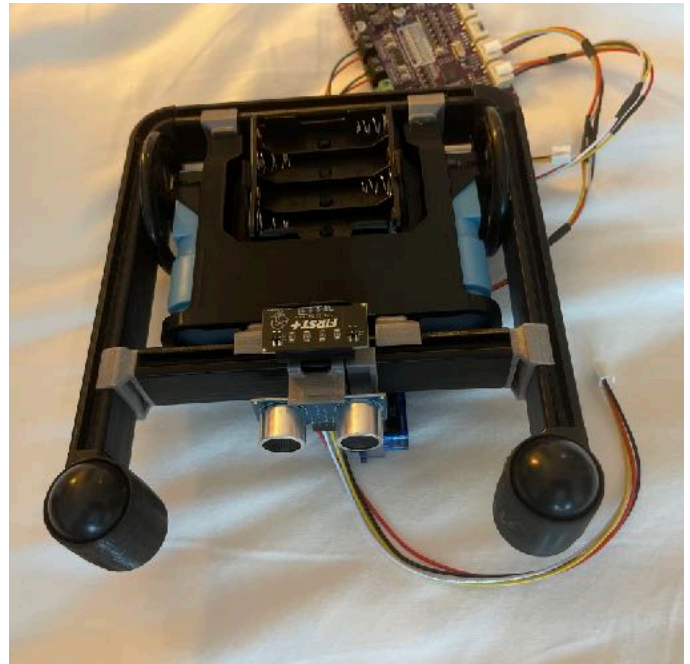
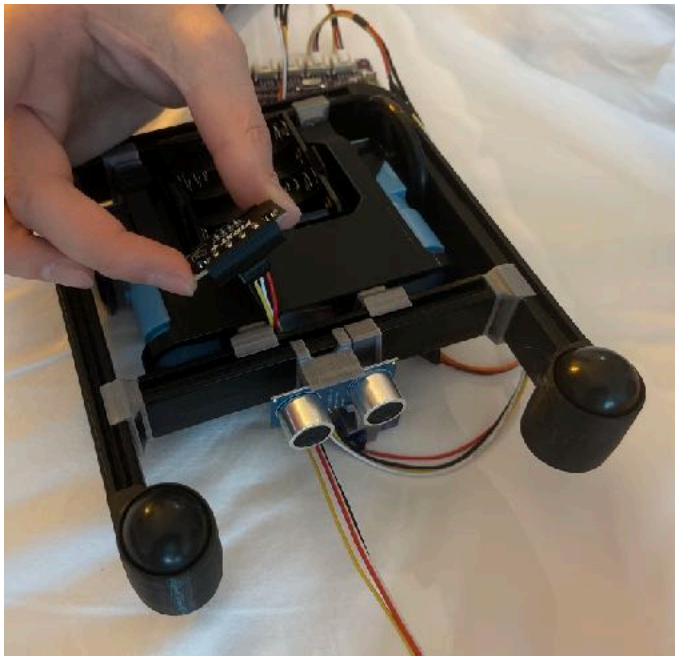


Clip the ultrasonic sensor to the front of the robot

Placing the Reflectance Sensor

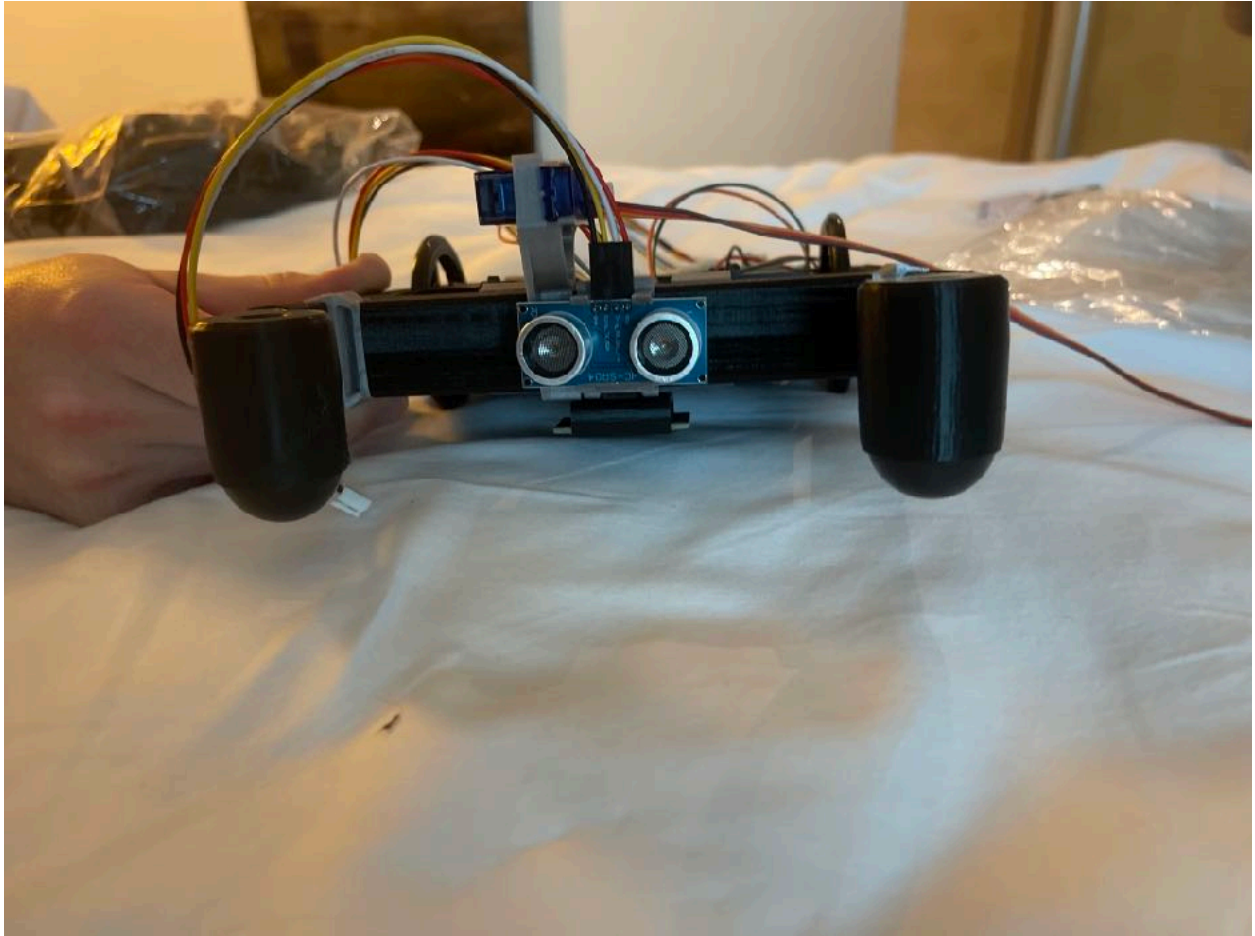


Flip over the robot



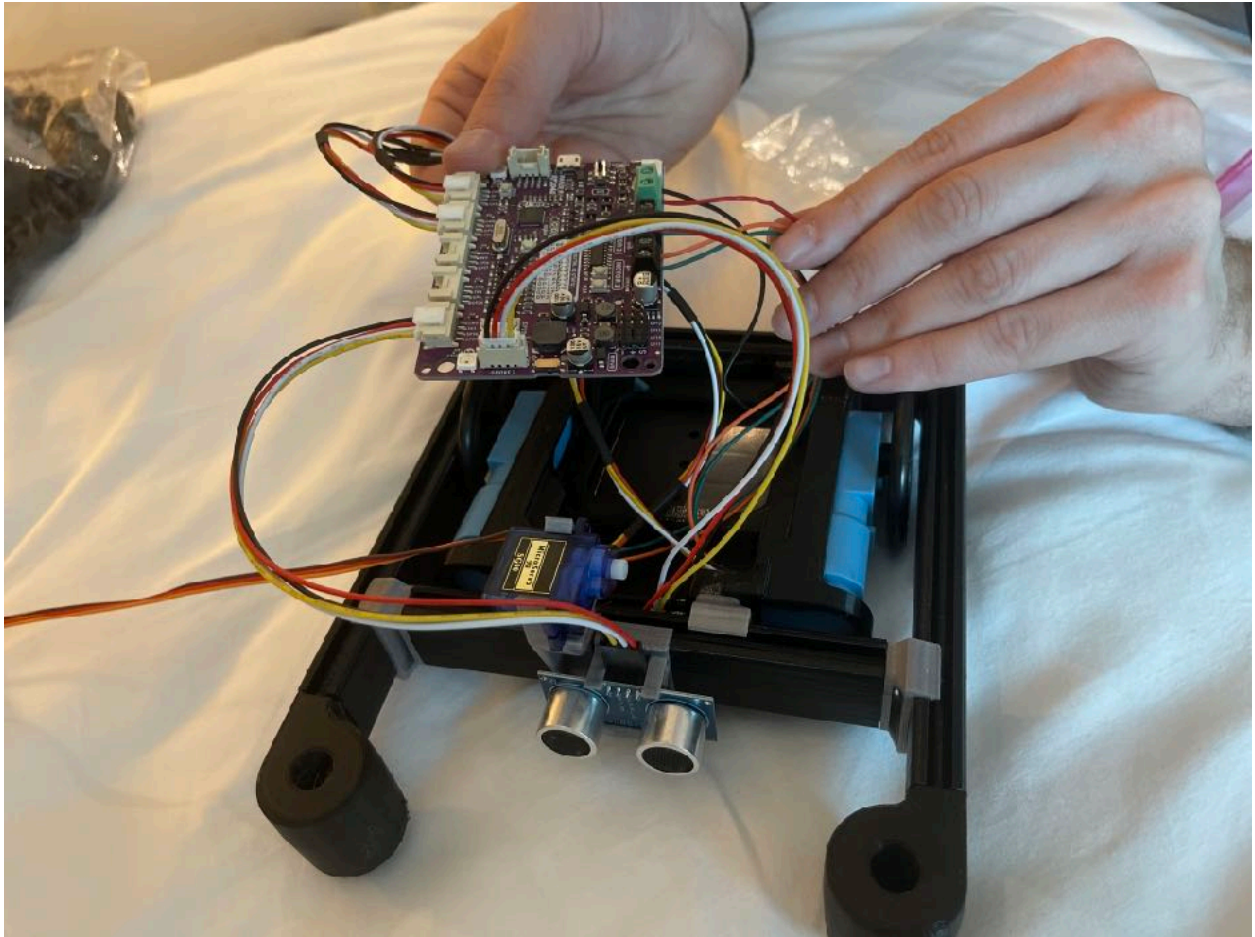
Place the reflectance sensor in the open space made by the other sensor clips. With the wires of the line follower facing towards the back of the robot.

Sensor Final Placement



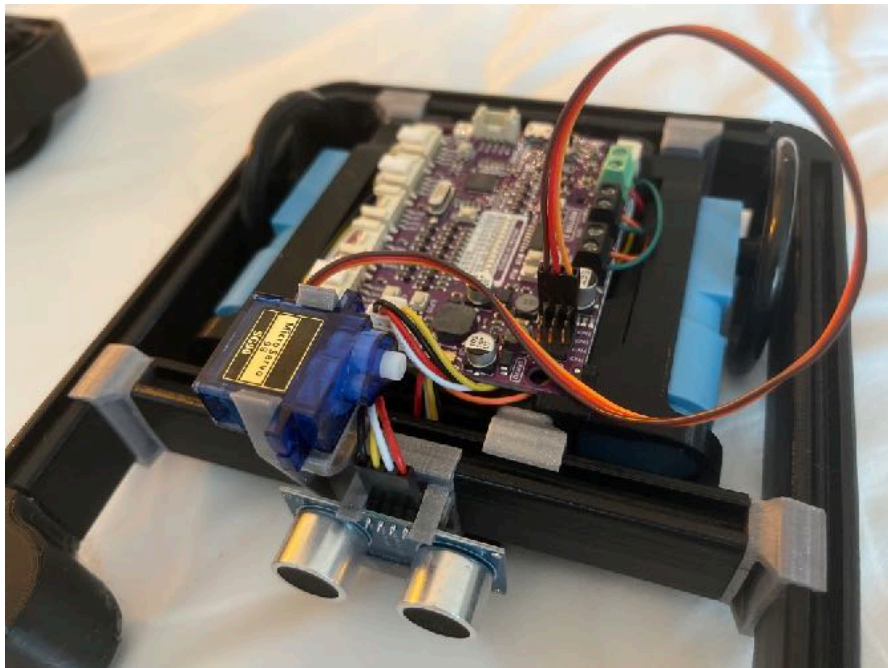
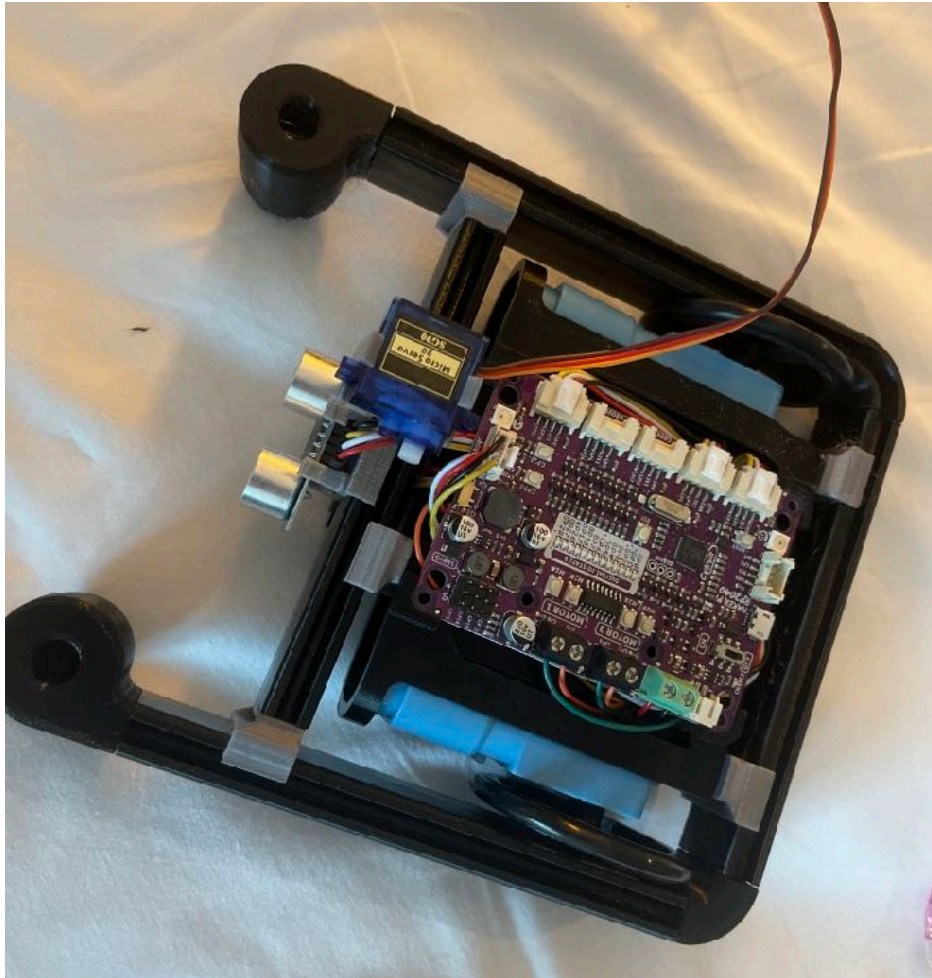
See above for recommended final sensor placement

Placing the Board



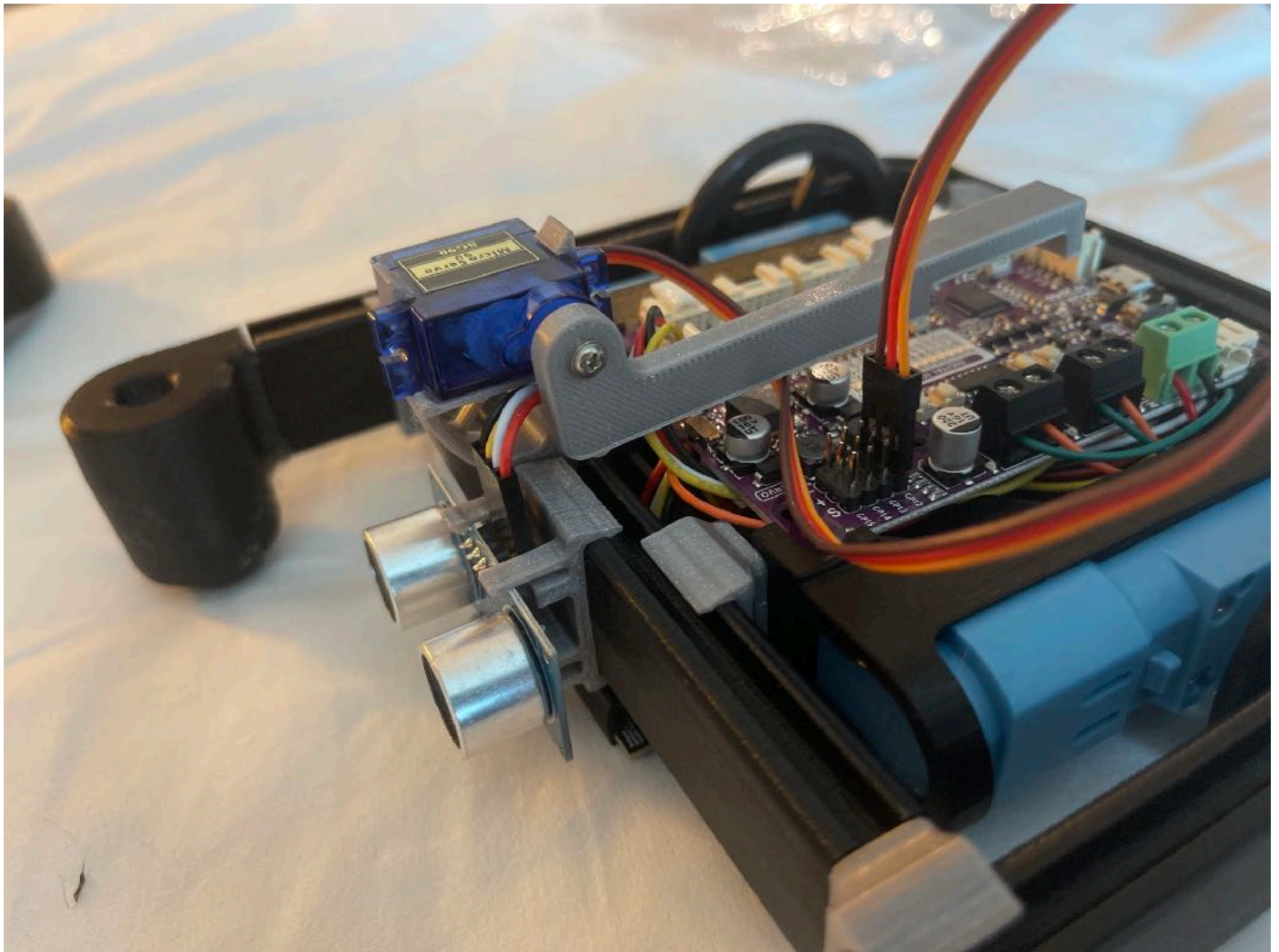
Take all the cables and place them under the board, squeezing cables as needed.

Placing the Board p.2



Seat the cables underneath the board, and push down on corners

Placing the Servo Arm



Place the servo arm on the servo head, using the provided mounting screw

