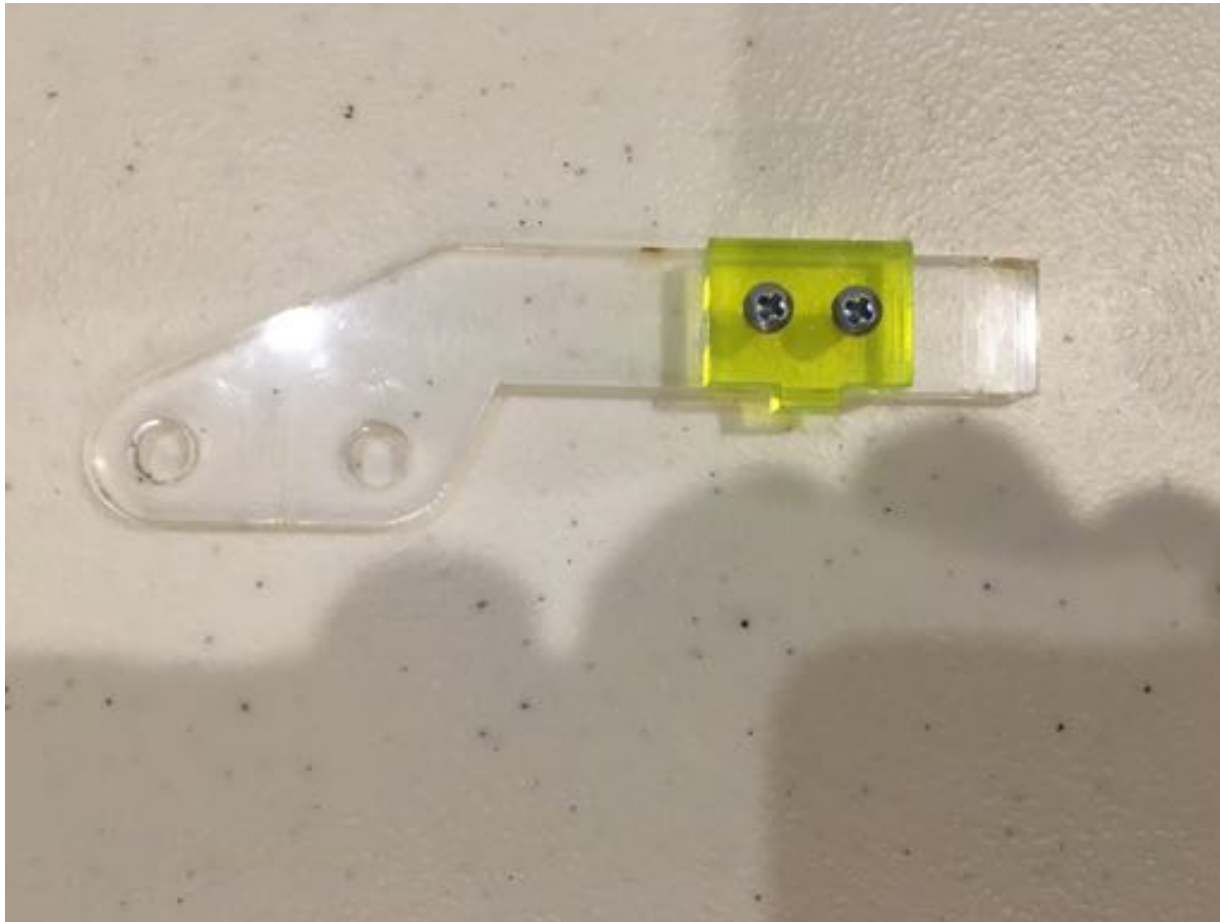


mimicArm
build instructions
Version 1.1

Dec. 2017 version

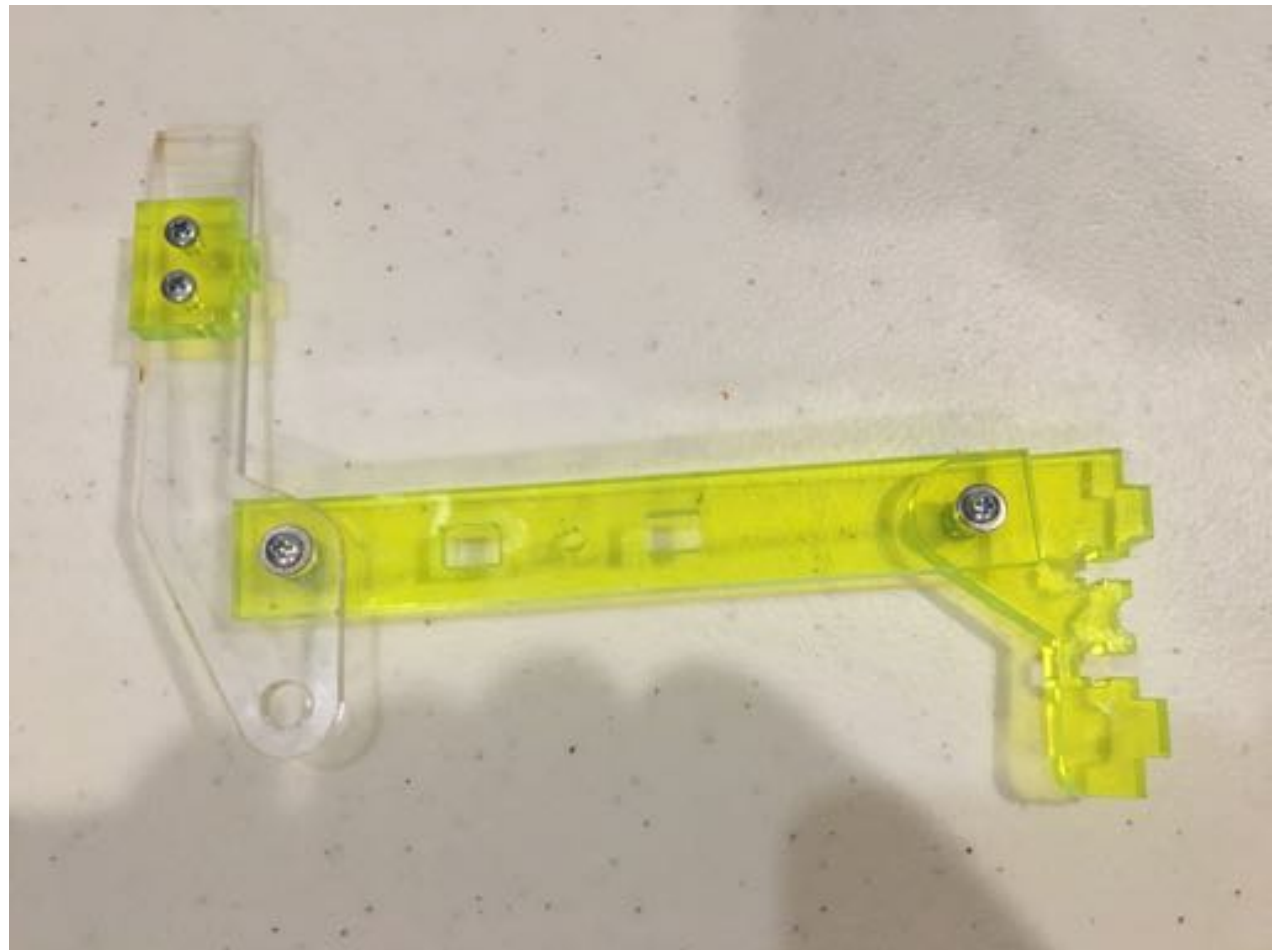
1. Arm Upper Right

- 2x bag A



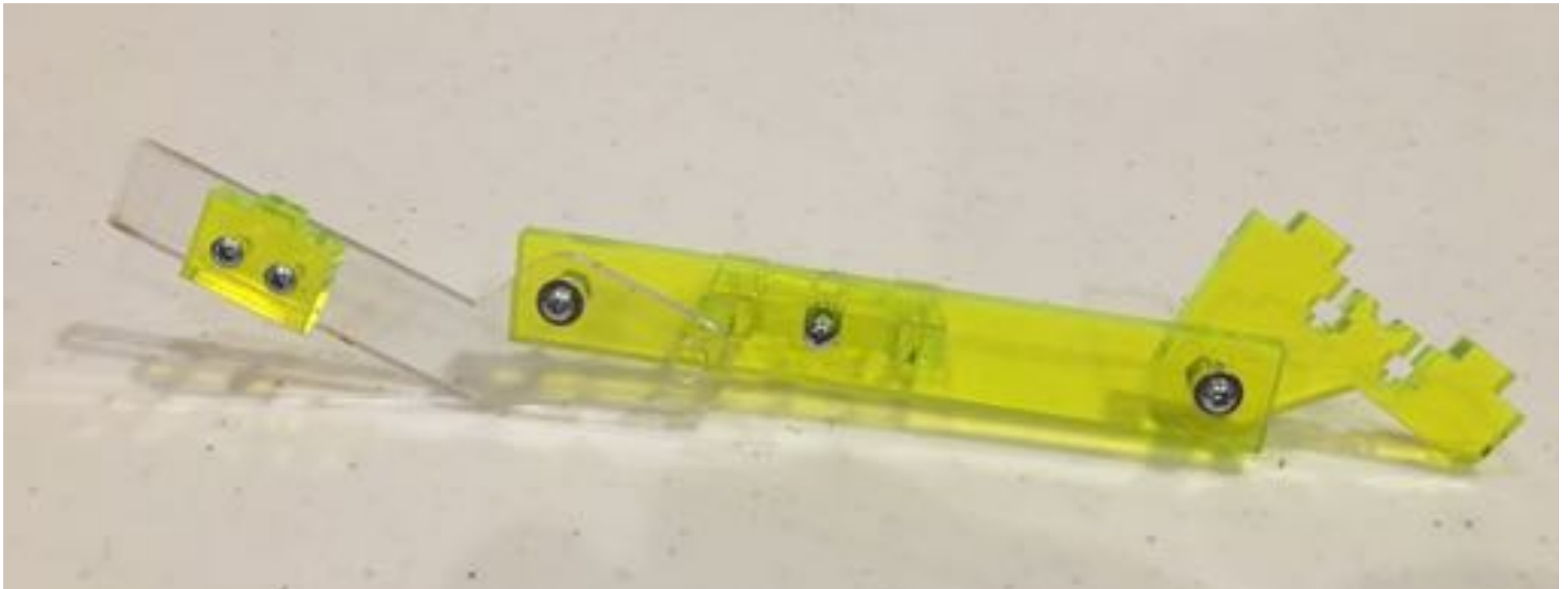
2. Right Arm Side

- 2x bag D
- 2x bag G
- 2x bag H
- 2x bag I



3. Arm Spacer

- 1x bag C screw
- 1x bag I nut



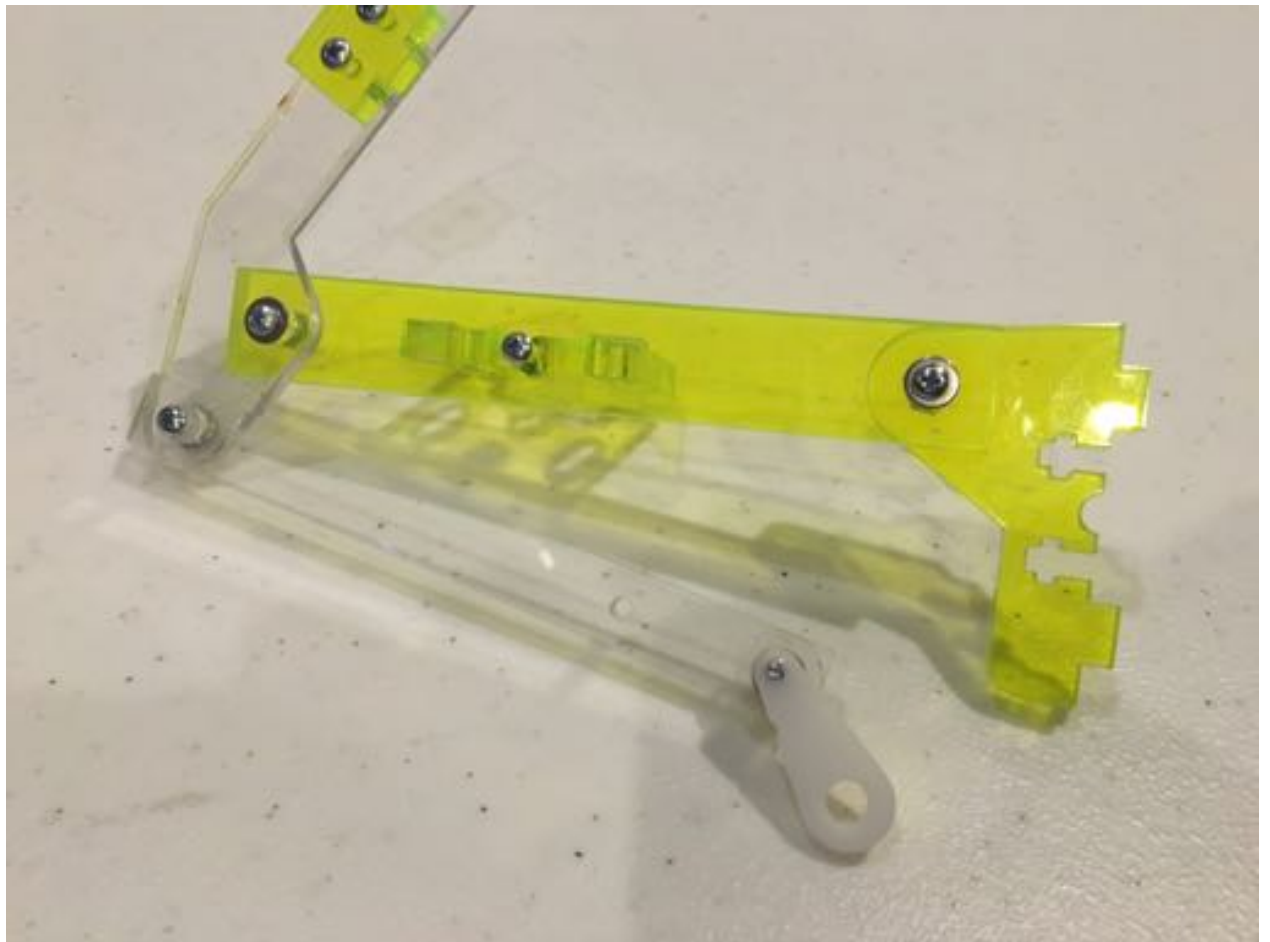
4. Ch 3 Control Arm

- 1x bag B
- 1x bag G
- 1x bag H
- 1x bag I



5. Ch 3 Control Arm

- 1x bag D
- 1x bag G
- 1x bag H
- Mount as shown. Arm should be on outside of upper arm.



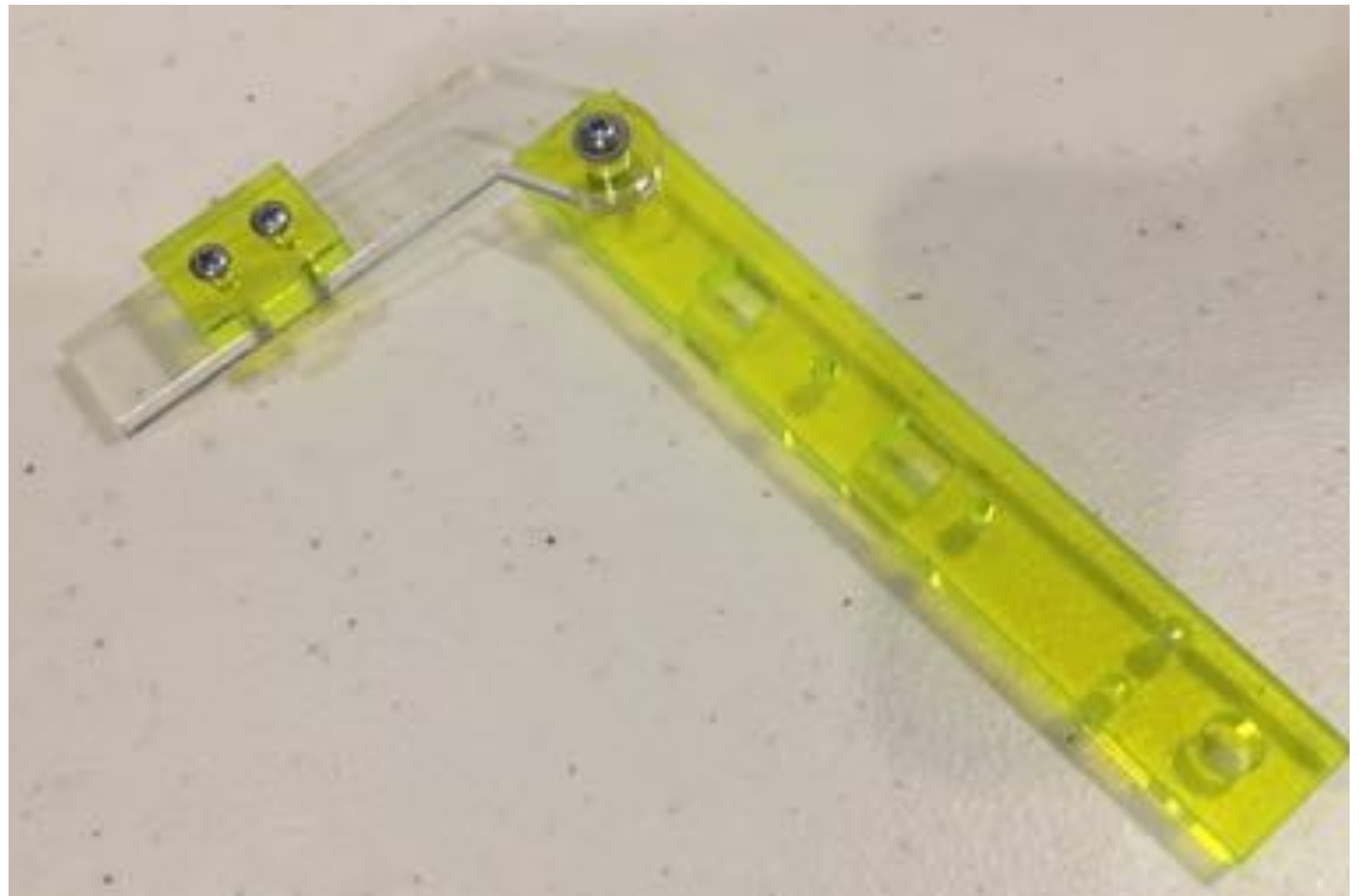
6. Arm left upper

- 2x bag A screw



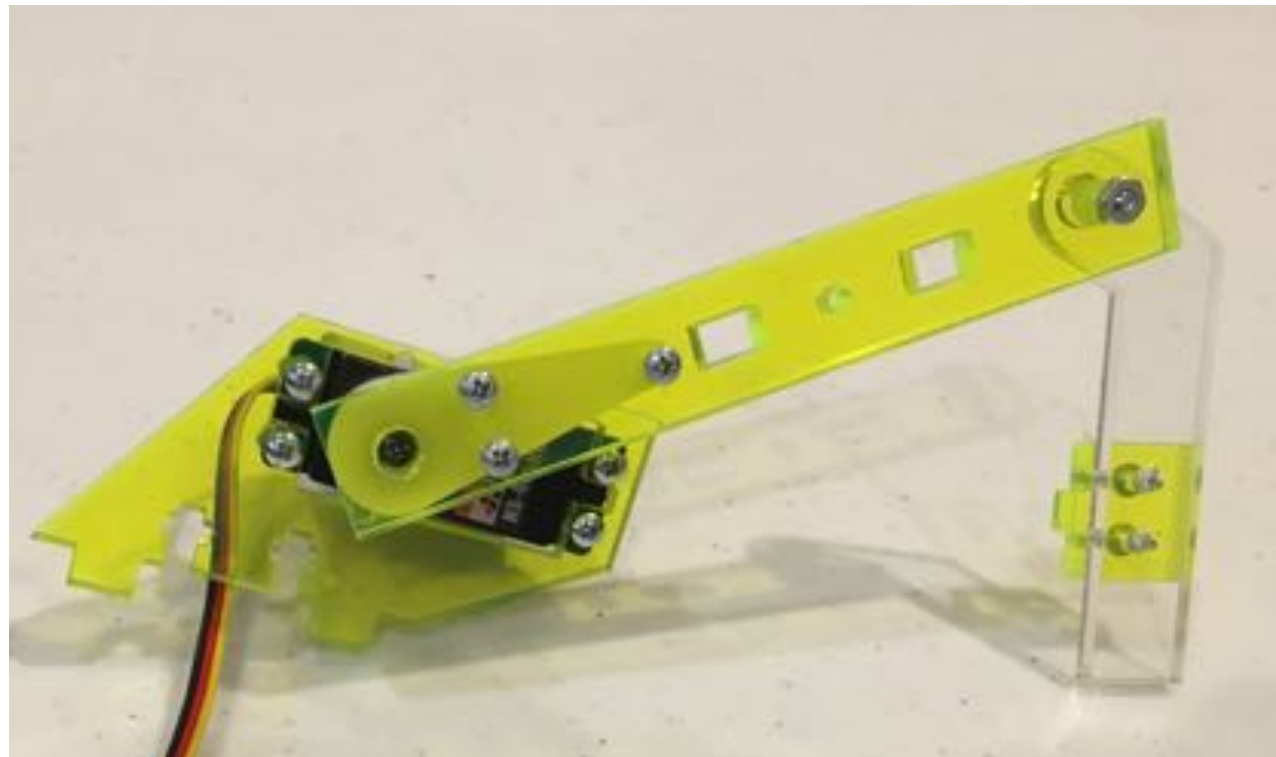
7. Arm left side

- 1x bag D
- 1x bag G
- 1x bag H
- 1x bag I



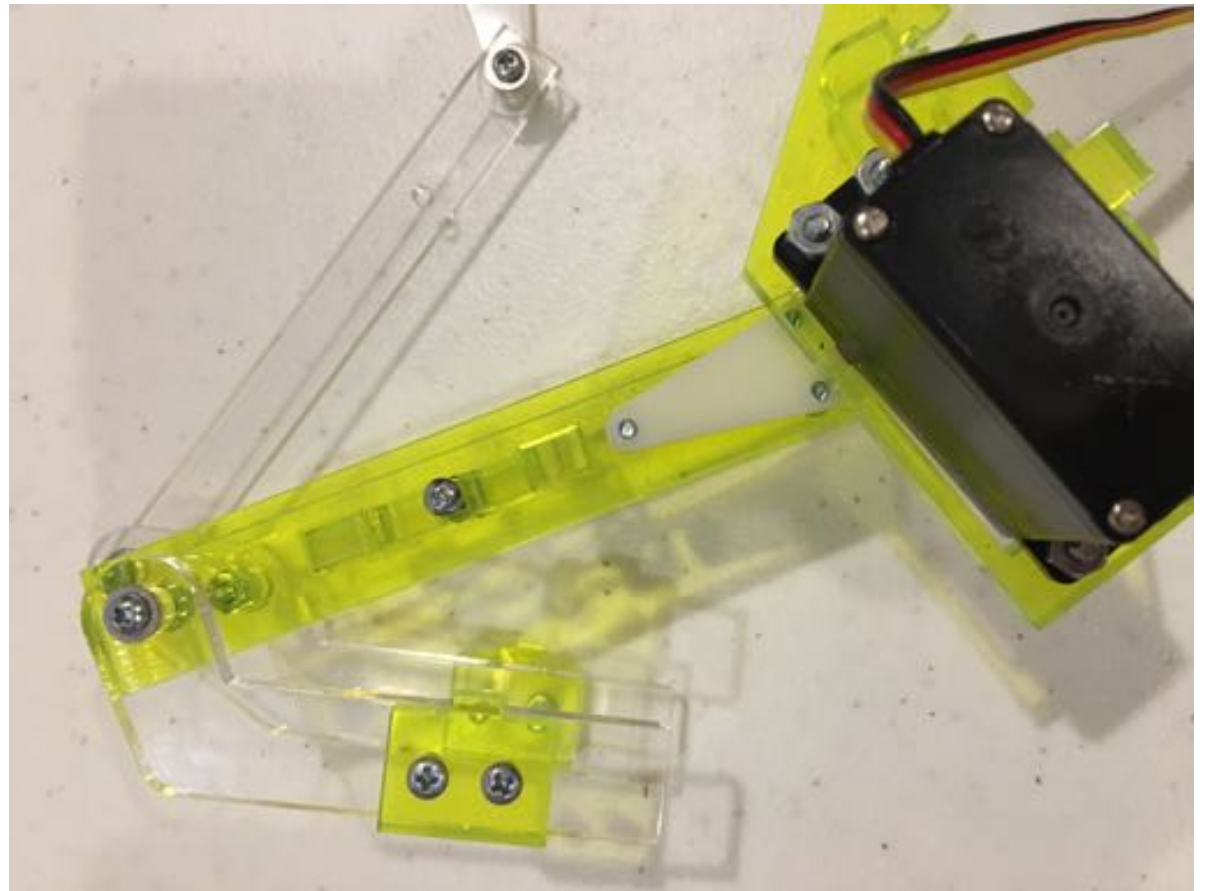
8. Ch 2 Servo

- 3x bag B
- 4x bag C
- 4x bag I
- Install servo arm on arm half
 - Use screw included with servo
 - Turn servo full clockwise – this position is arm parallel to servo
- Install arm half on servo using washer and servo screw



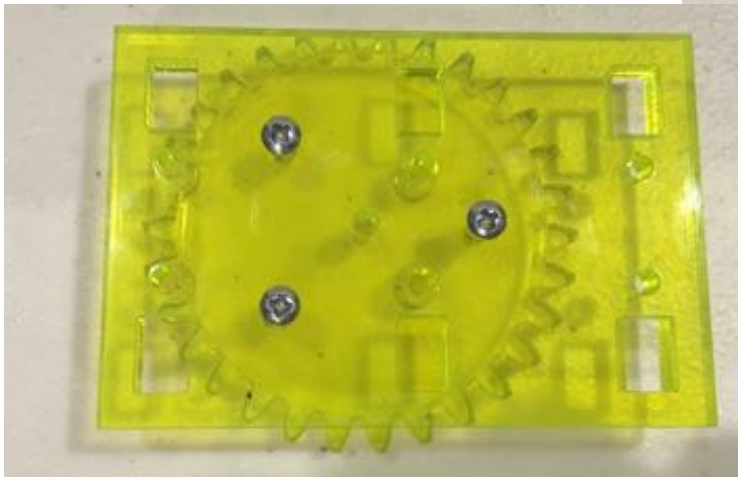
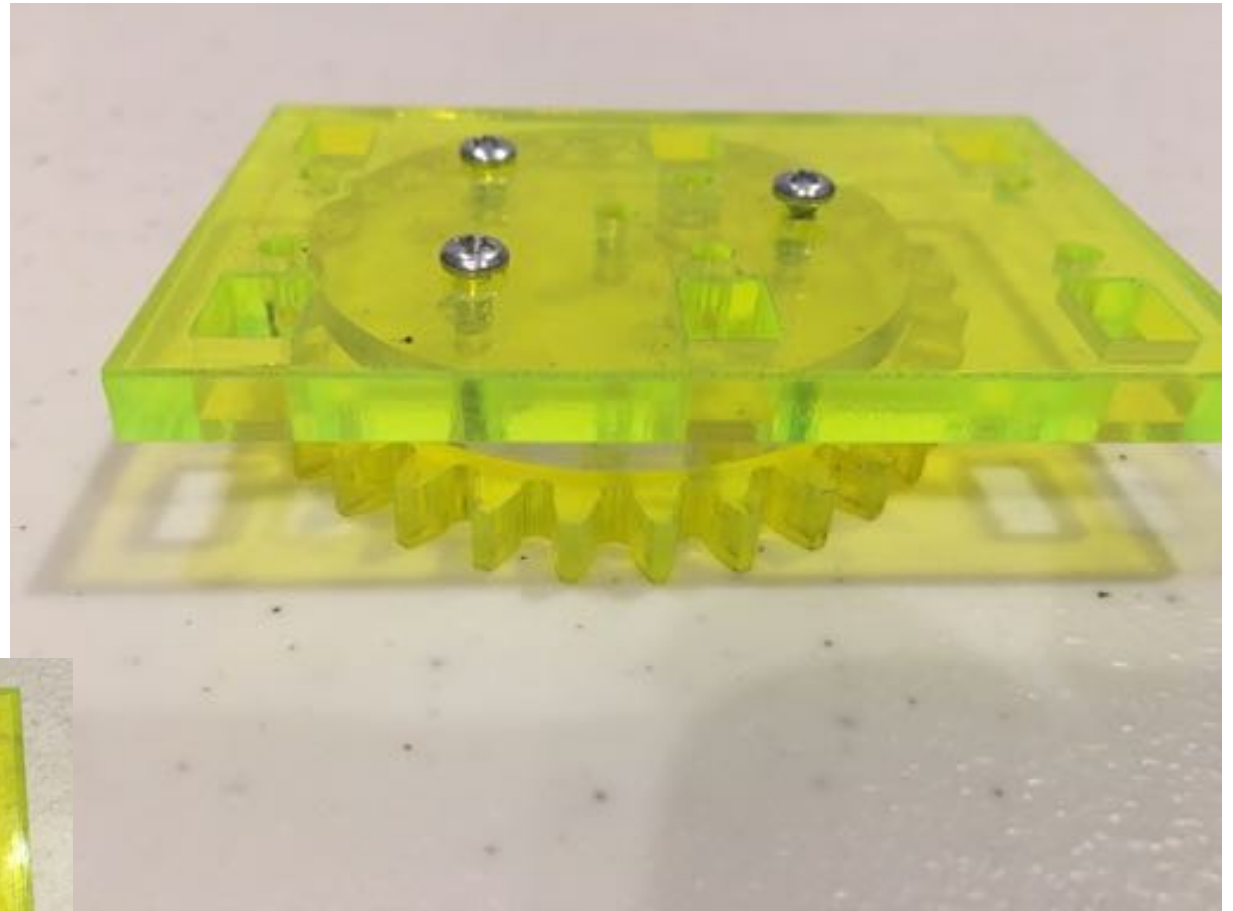
9. Join Arm Parts

- 1x bag C screw
- 1x bag I nut
- CAUTION:: Using longer screws will cause center brace to break



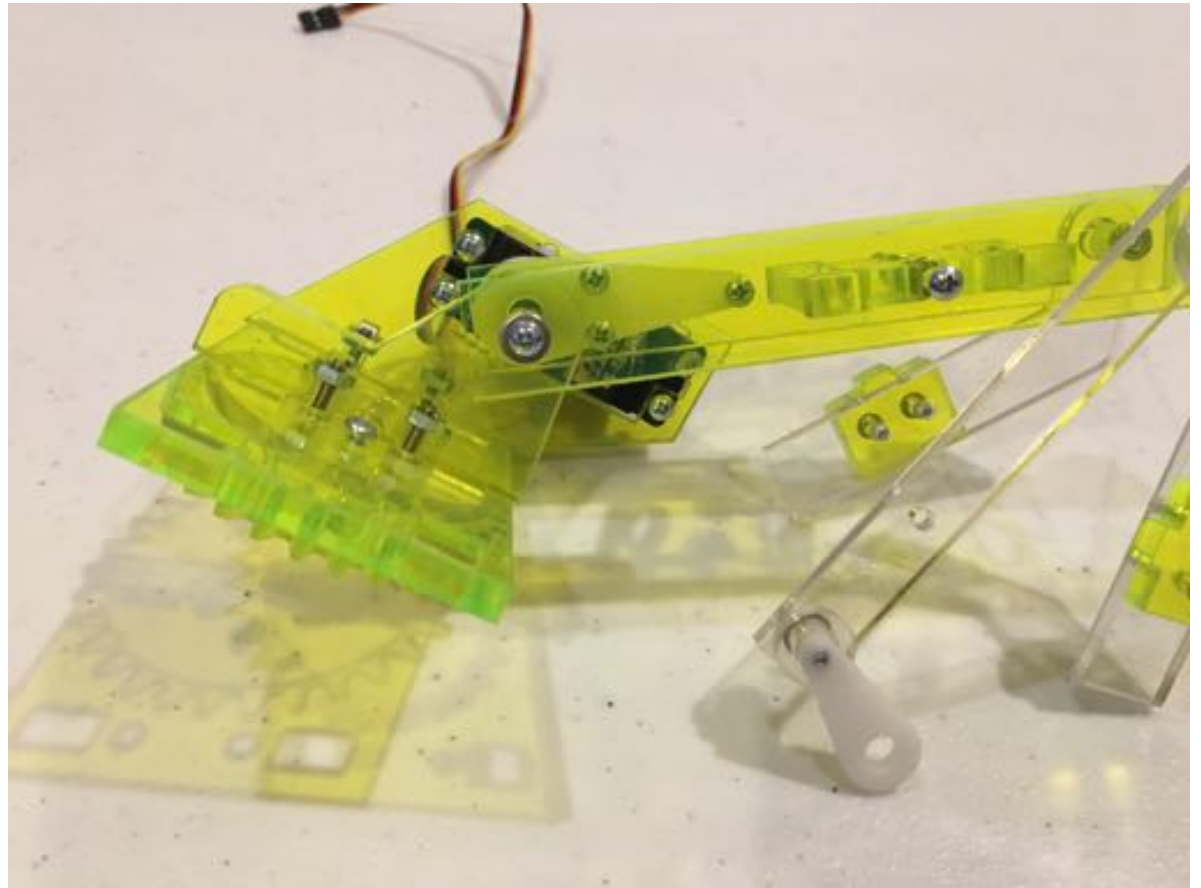
10. Arm Rotator Plate

- 3x bag B screw



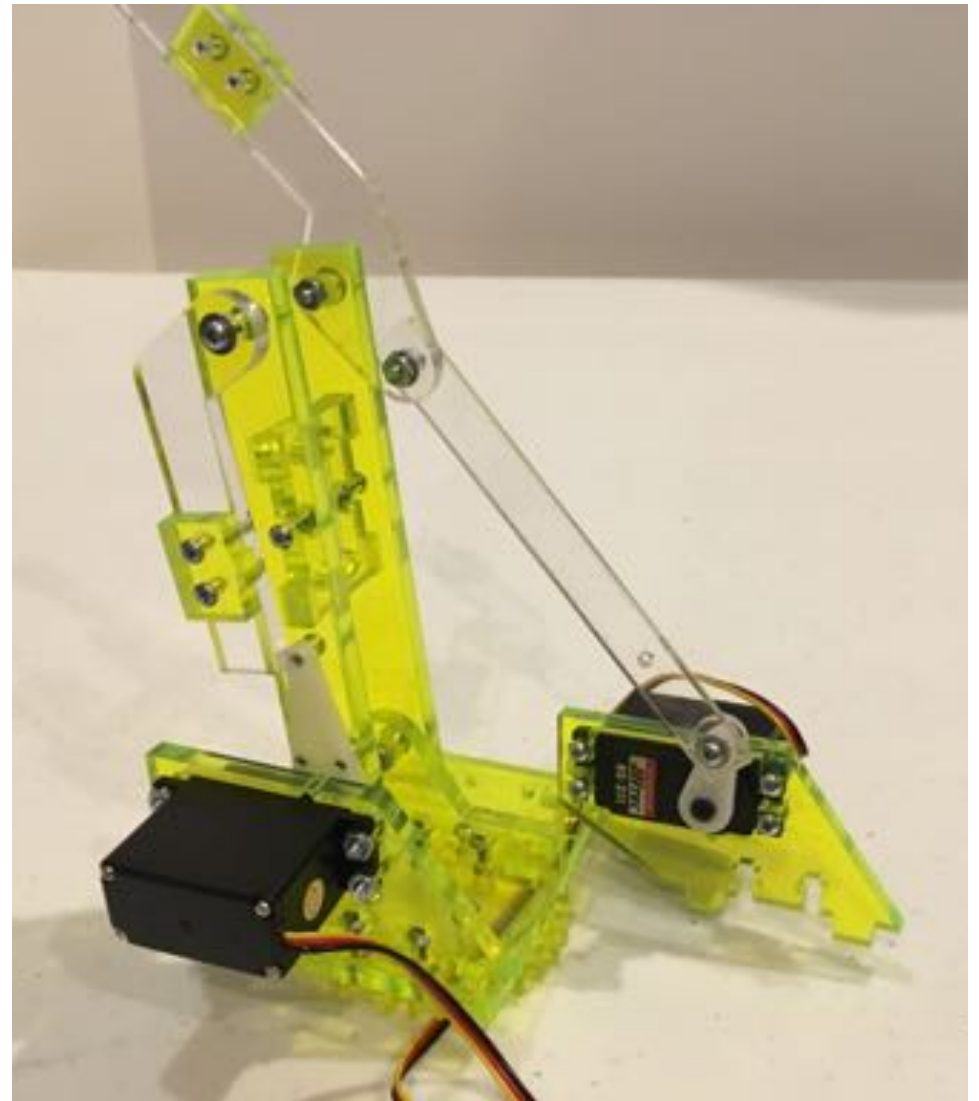
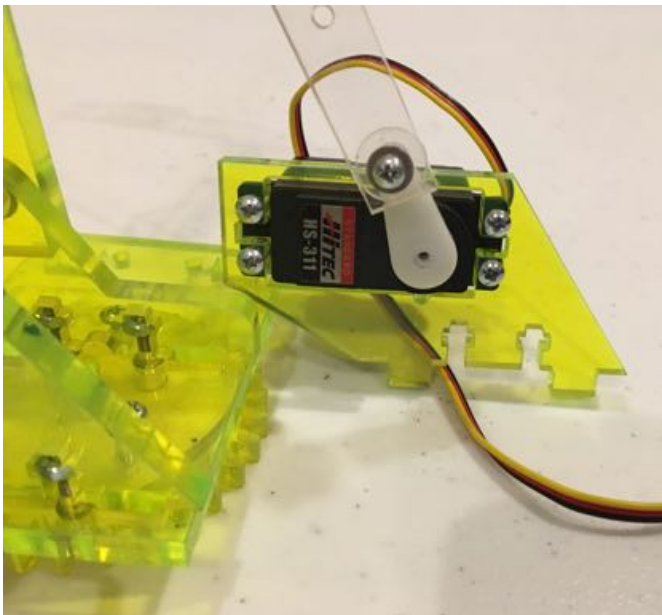
11. Arm to plate

- 4x bag C screw
- 4x bag I nut
- Mount as shown. Center mount hole should be between the mounts



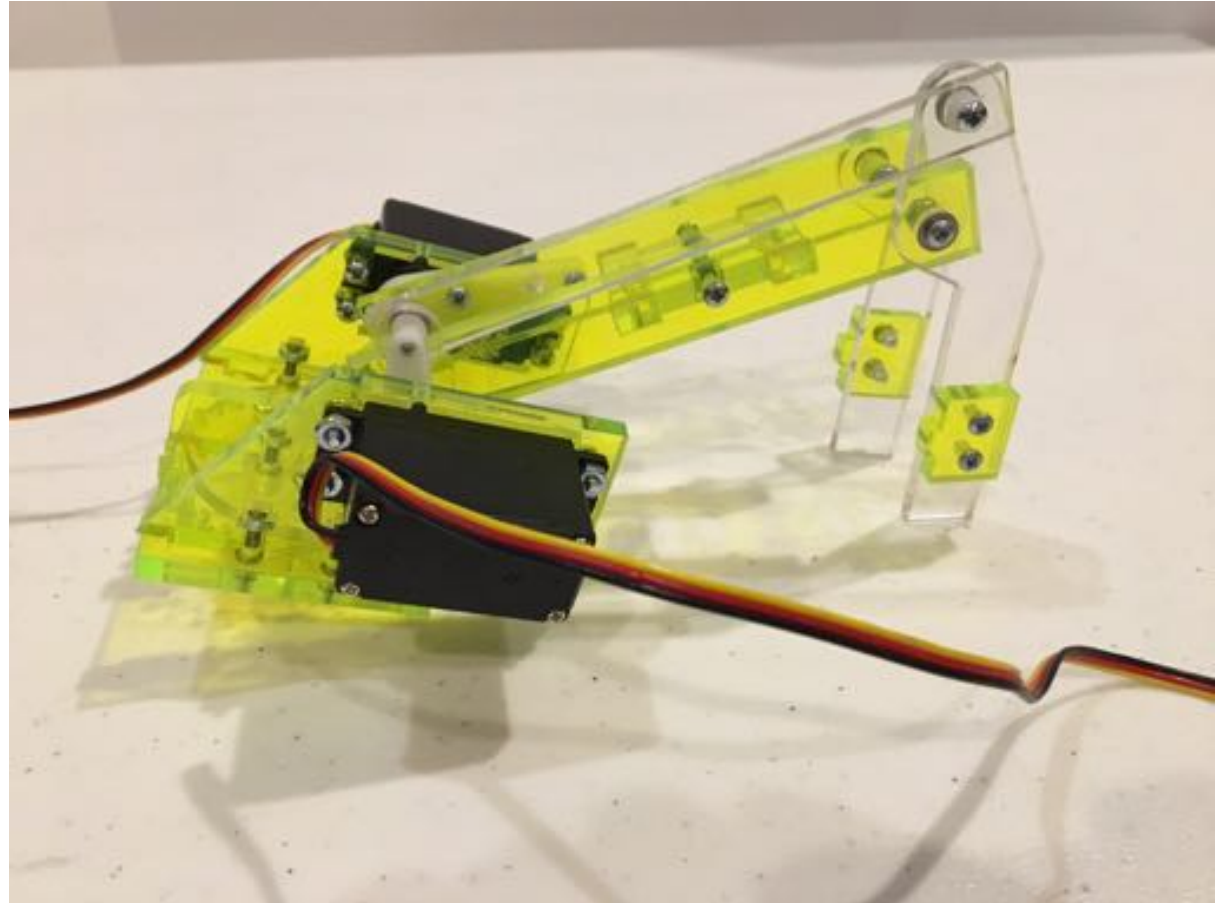
12. Servo 2 arm to servo

- 1x Bag H Washer
- Install arm on servo using the spacer, washer and clear plastic spacer
- Rotate servo full clockwise. This is the full down position



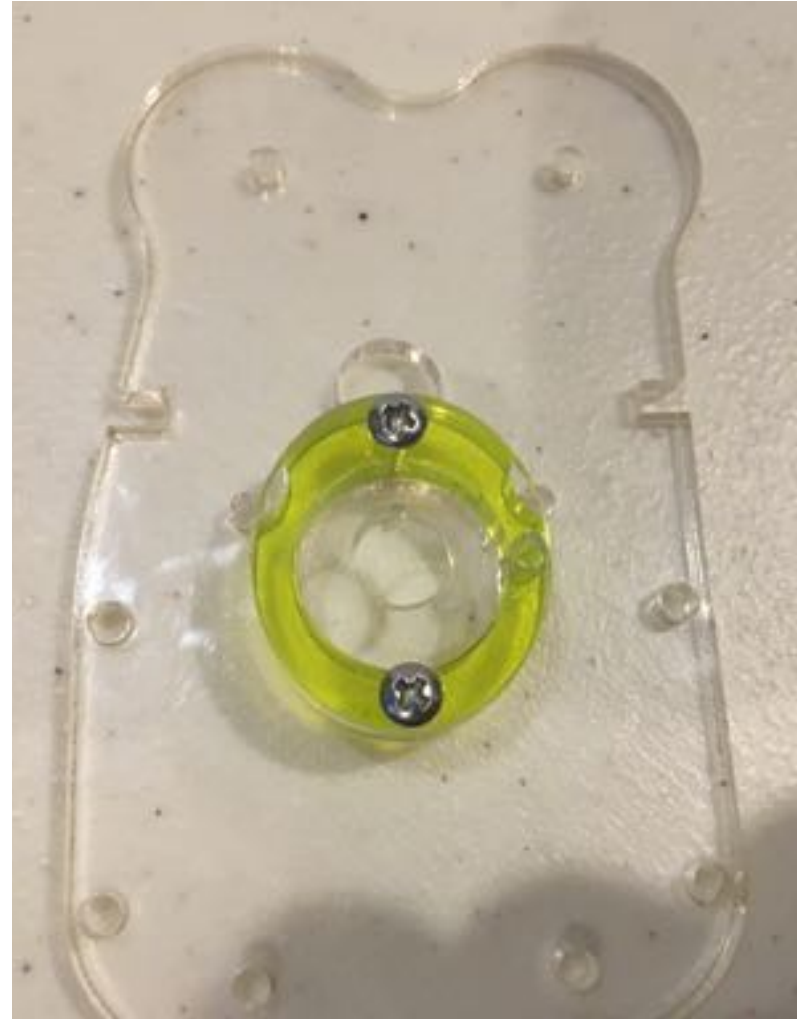
13. Servo 2 to base

- 2x bag C screw
- 2x bag I nuts



14. Pot holder to gripper

- 2x bag B screws
- Install colored and clear potentiometer mounts. Orient locator hole as shown



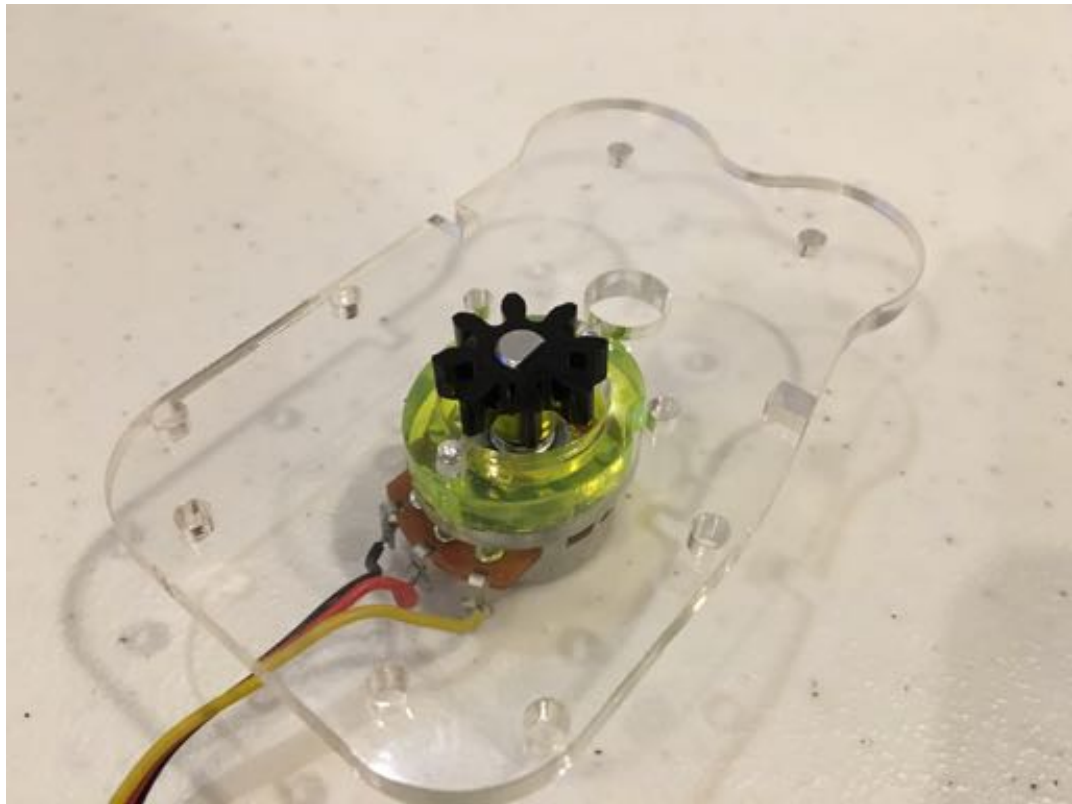
15. Pot to gripper

- Install pot on gripper part
- Orient with the flat to the right when oriented as shown



16. Pot Gear

- Use colored d-shaft spacer and d-shaft gear on potentiometer
- If a white gear is included add a clear spacer under gear

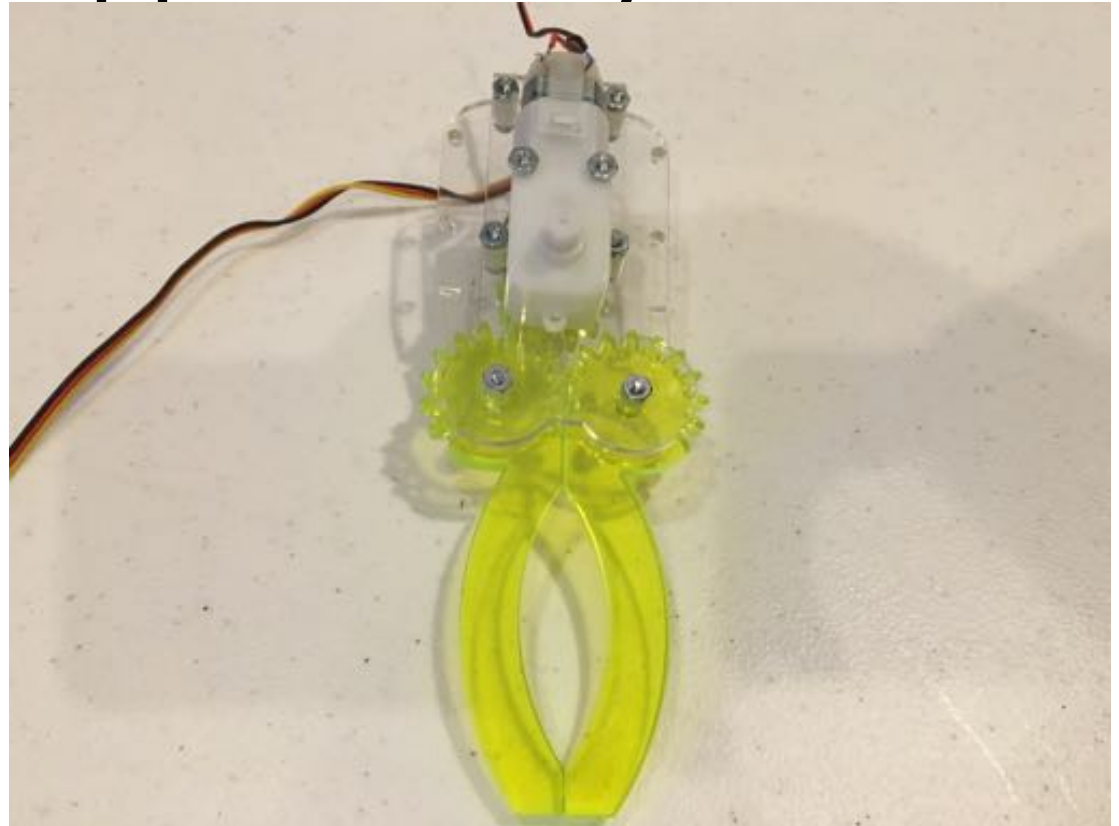


17. Gripper assy

- 2x bag E screw
- 2x bag F screw
- 2x bag G spacer
- 4x bag I nut
- Be sure the hinge holes line up

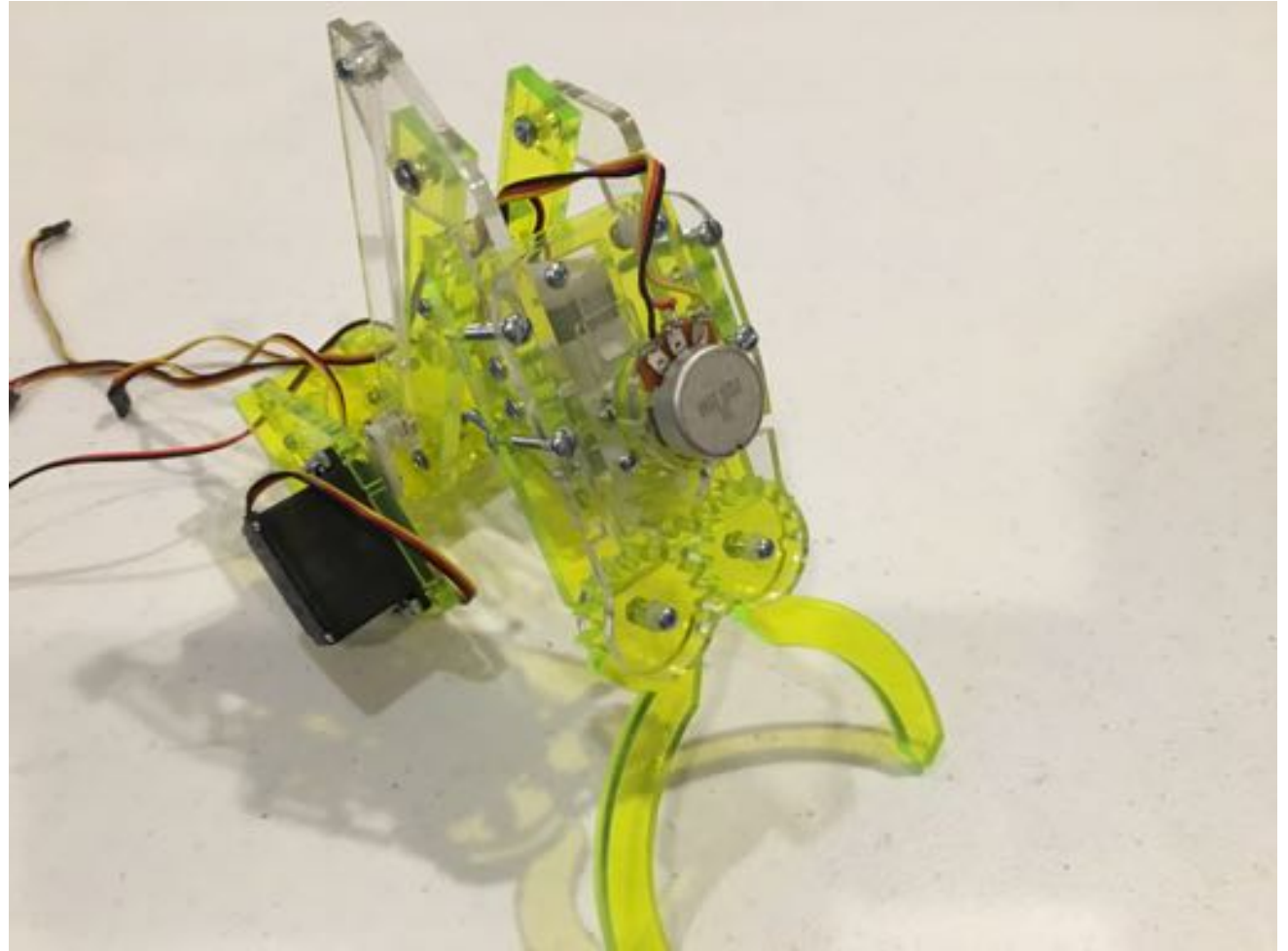
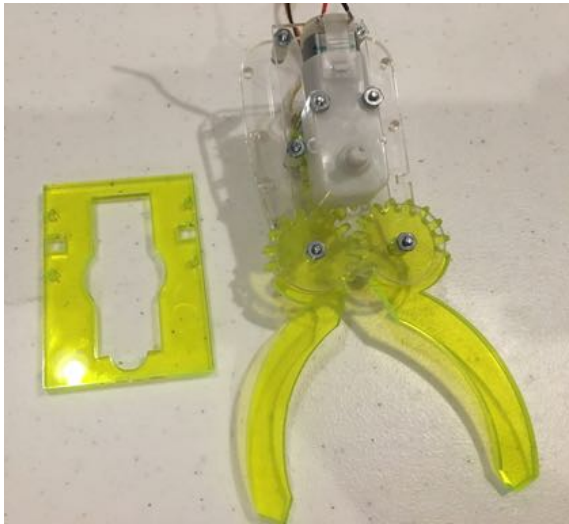


18. Gripper to assy



- 2x bag E screw
- 2x bag I nut
- 4x thin delrin
 - (top and bottom of grippers)
- 2x bag G spacer
- Place plastic washer on top and bottom of grippers. Using plastic spacers install grippers in closed position

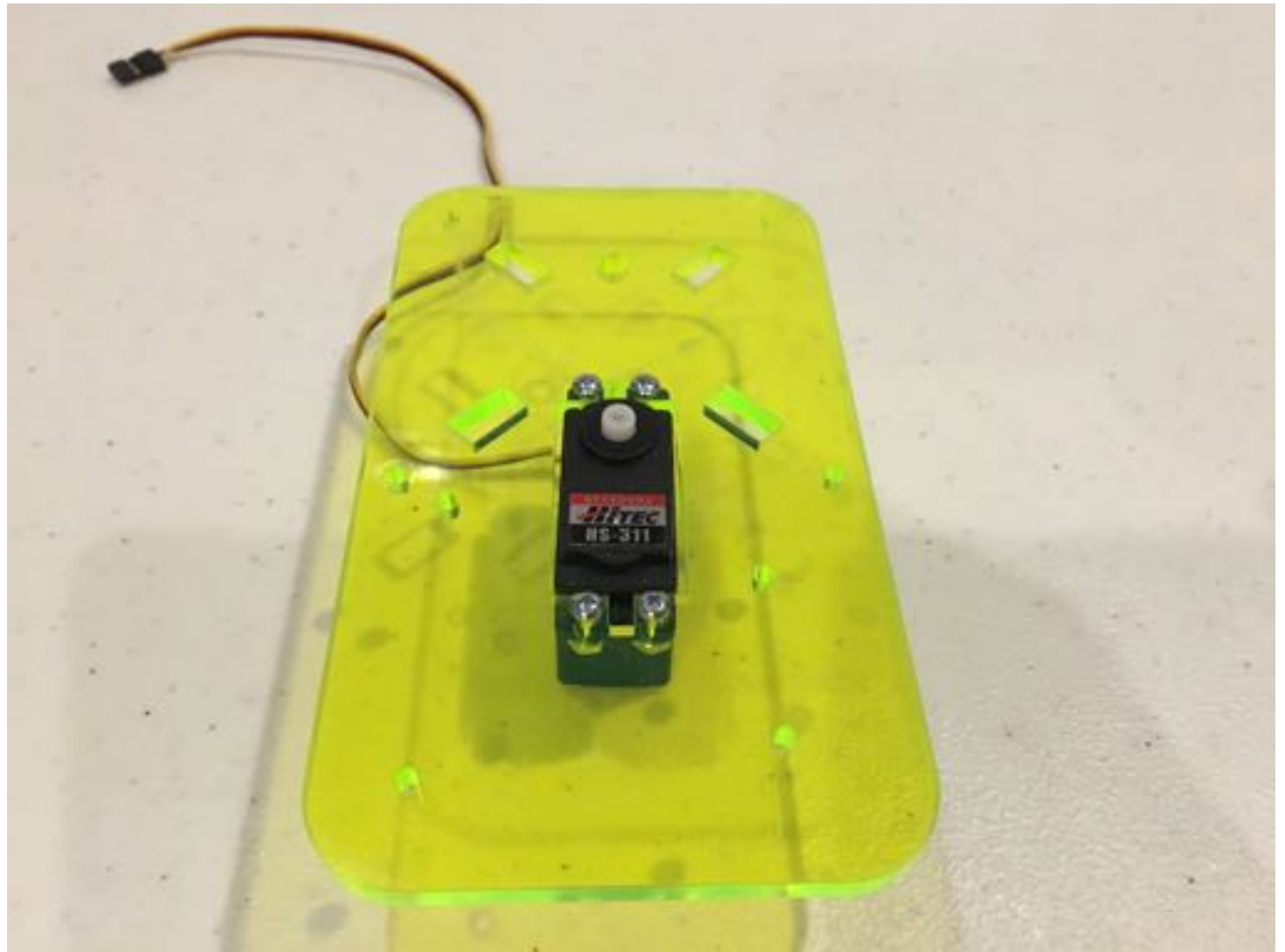
19. Gripper to arm



- 4x large screw (#6)
- 4x wingnut
- Using the square plastic piece install gripper to arm

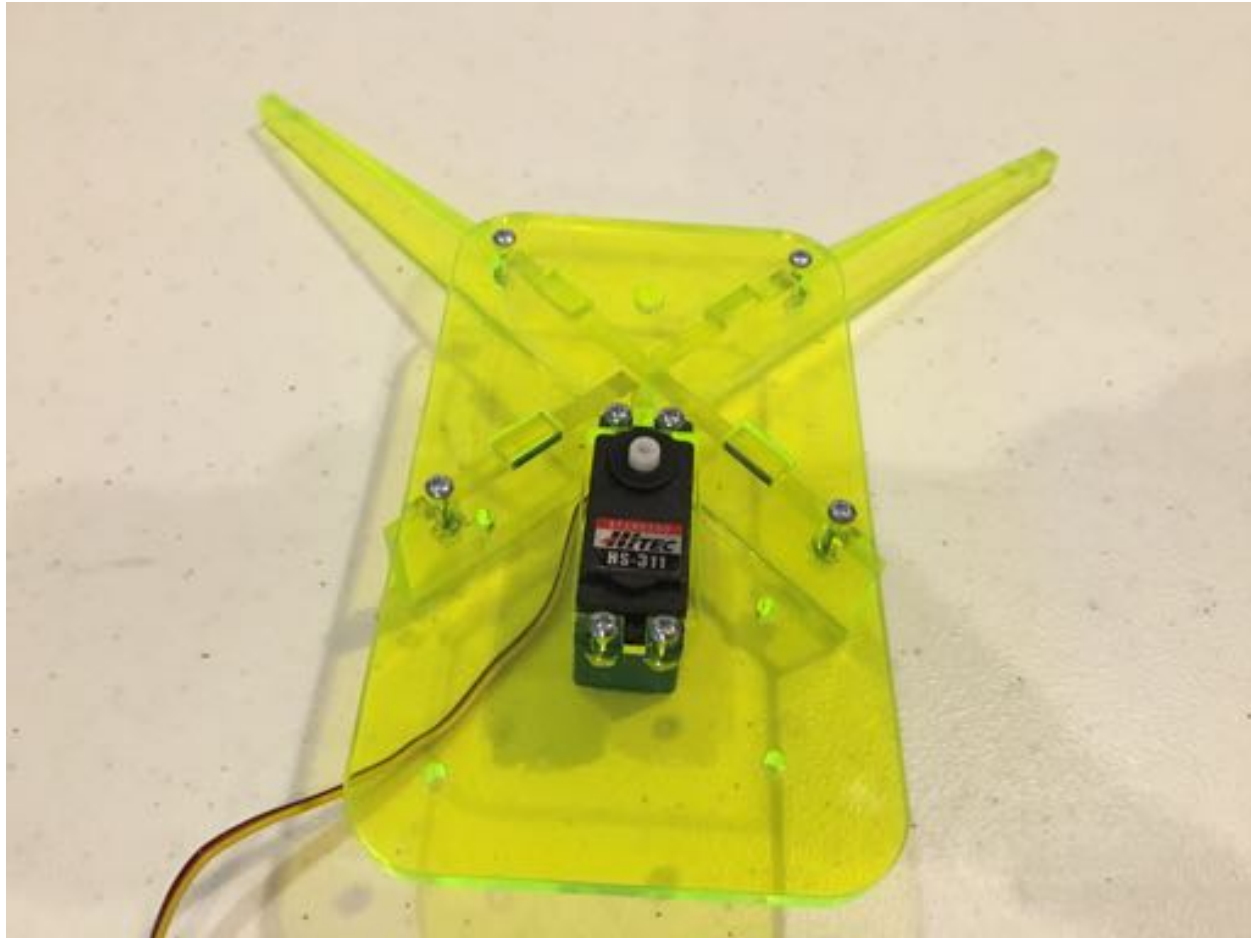
20. Servo to base

- 4x bag C screw
- 4x bag I nut



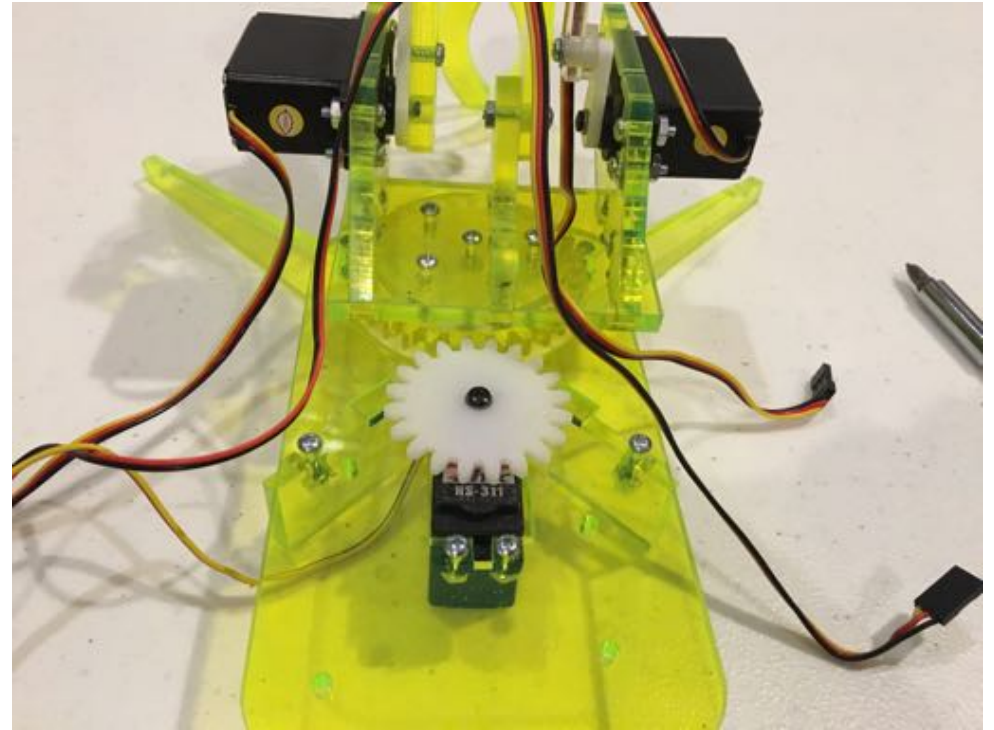
21. Legs to base

- 4x bag D screw
- 4x bag I nut



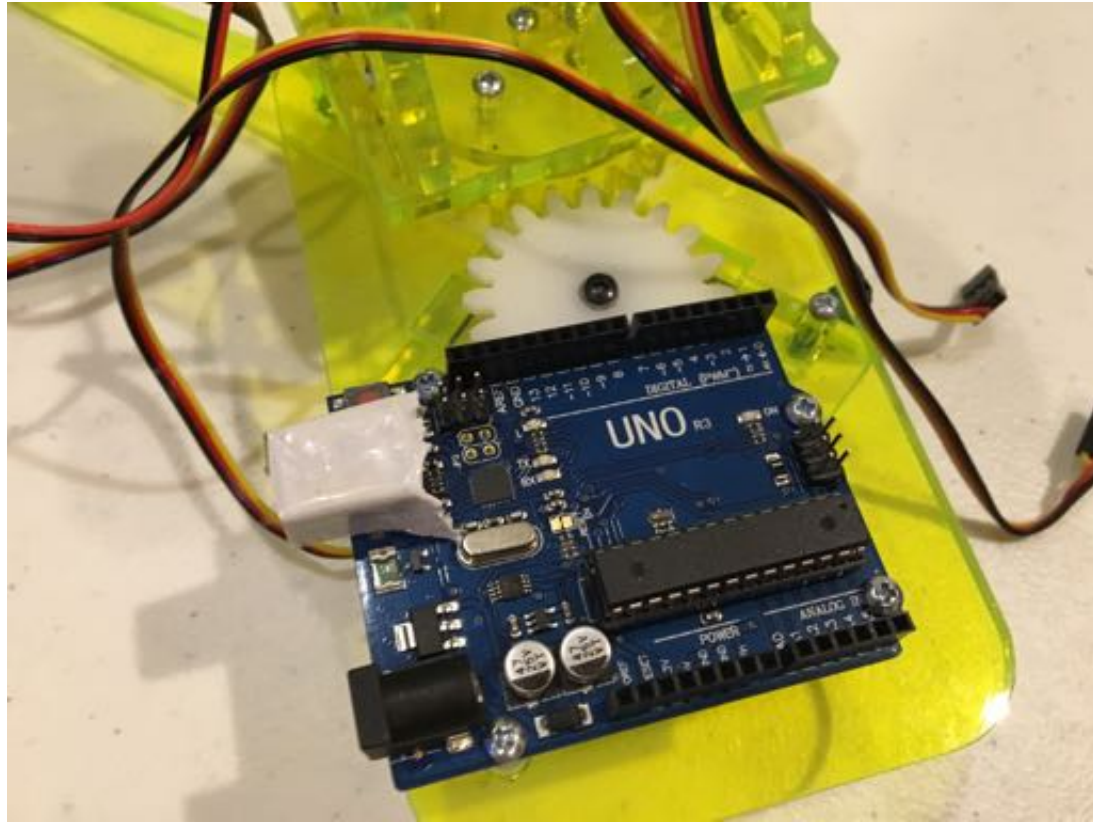
22. Arm to base

- 1x bag F screw
- 2x bag H washer
- 1x bag I nut
- 1x Large plastic washer
 - (install under large gear)
- 1x bag G spacer
- 1x small plastic washer
- Place large plastic washer under arm. Install arm on base using long screw and spacer. Use metal washer and nut to attach
- Center servo. Place small plastic washer under gear, install gear using metal washer and servo screw



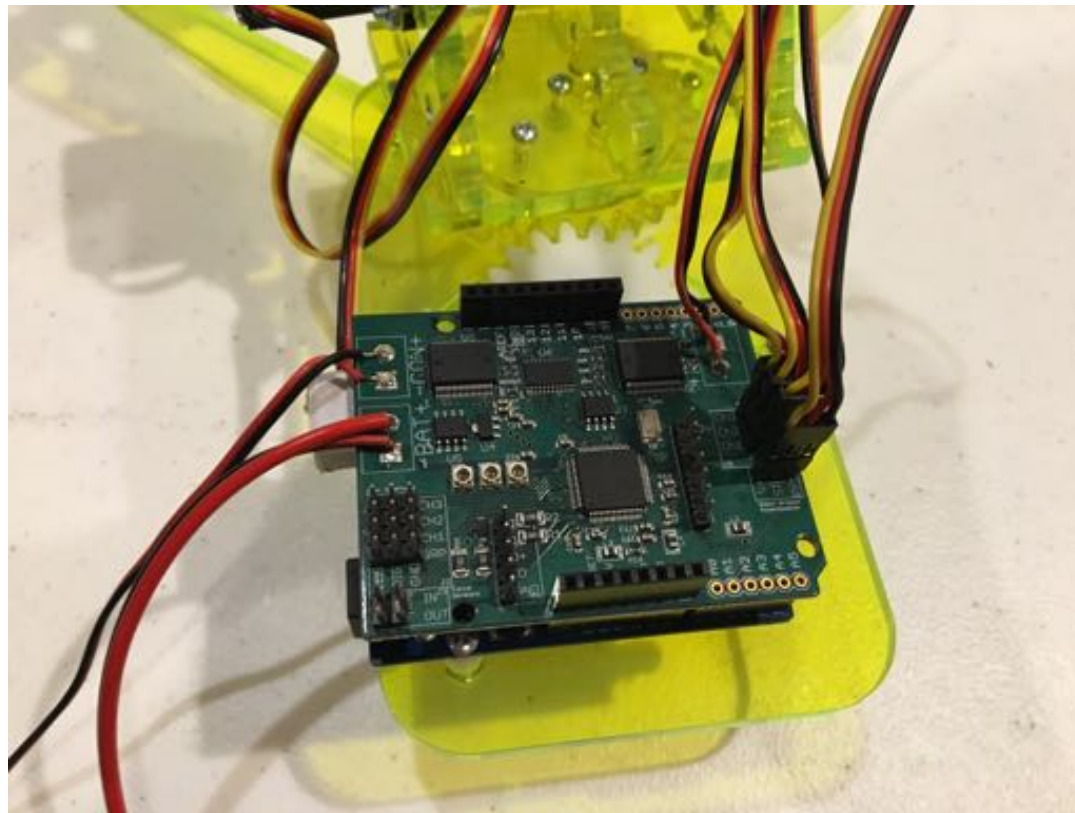
23. Attach Arduino or Controller

- 4x bag F screw
- 4x bag I nut
- 4x bag G spacer



24. Wire Robot

- Attach motor wires and gripper potentiometer wires
- Attach servo channel 1 (rotating base) channel 2 (left side of arm) and channel 3 (right side of arm). Black wire to GND and yellow wire to SIG



25. Wire Controller

- Attach motor wires and gripper potentiometer wires
- Attach channel 1 (rotating base) channel 2 (left side of arm) and channel 3 (right side of arm). Black wire to V- and yellow wire to V+
- Attach force sensors (IN is closing gripper)
- Use zip ties to tidy up

