

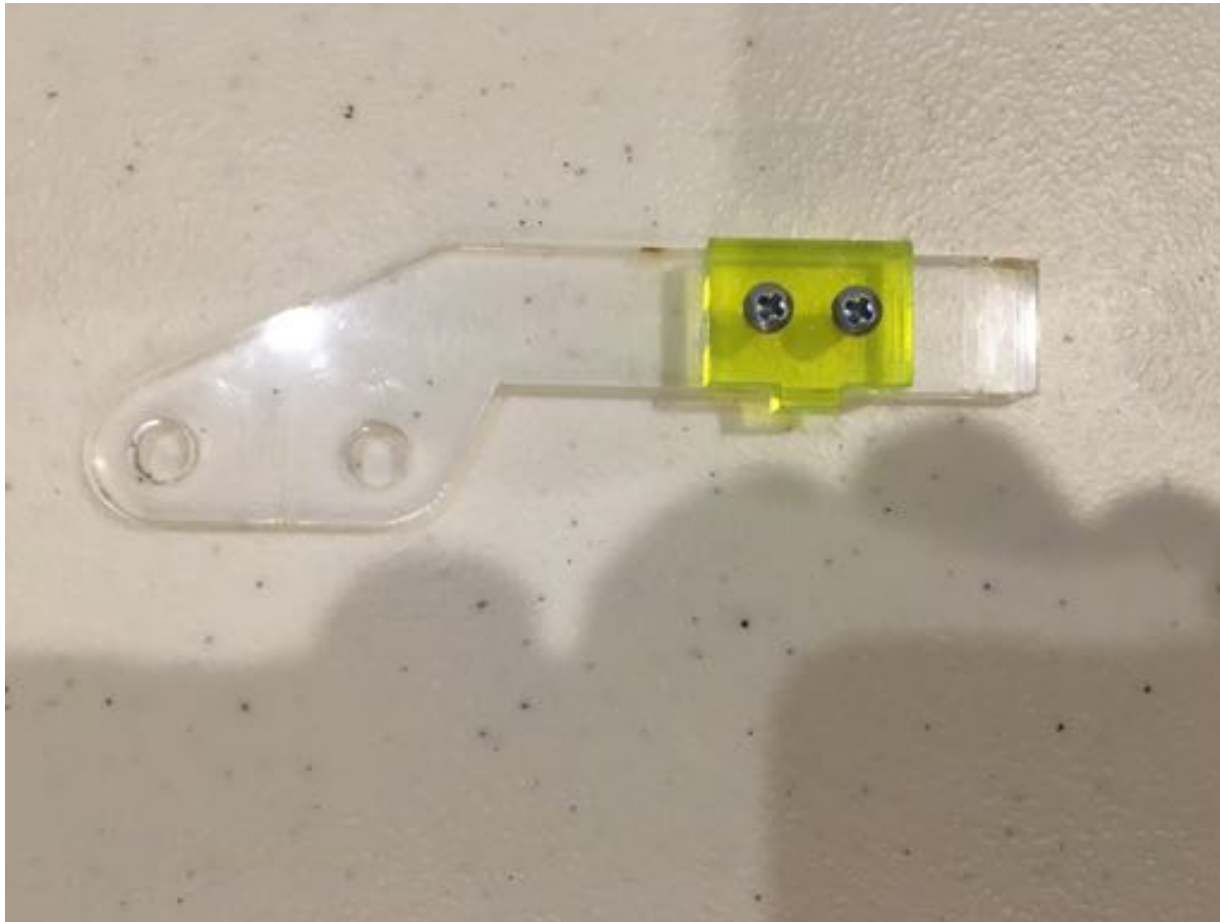
mimicArm

build instructions

Dec. 2017 version

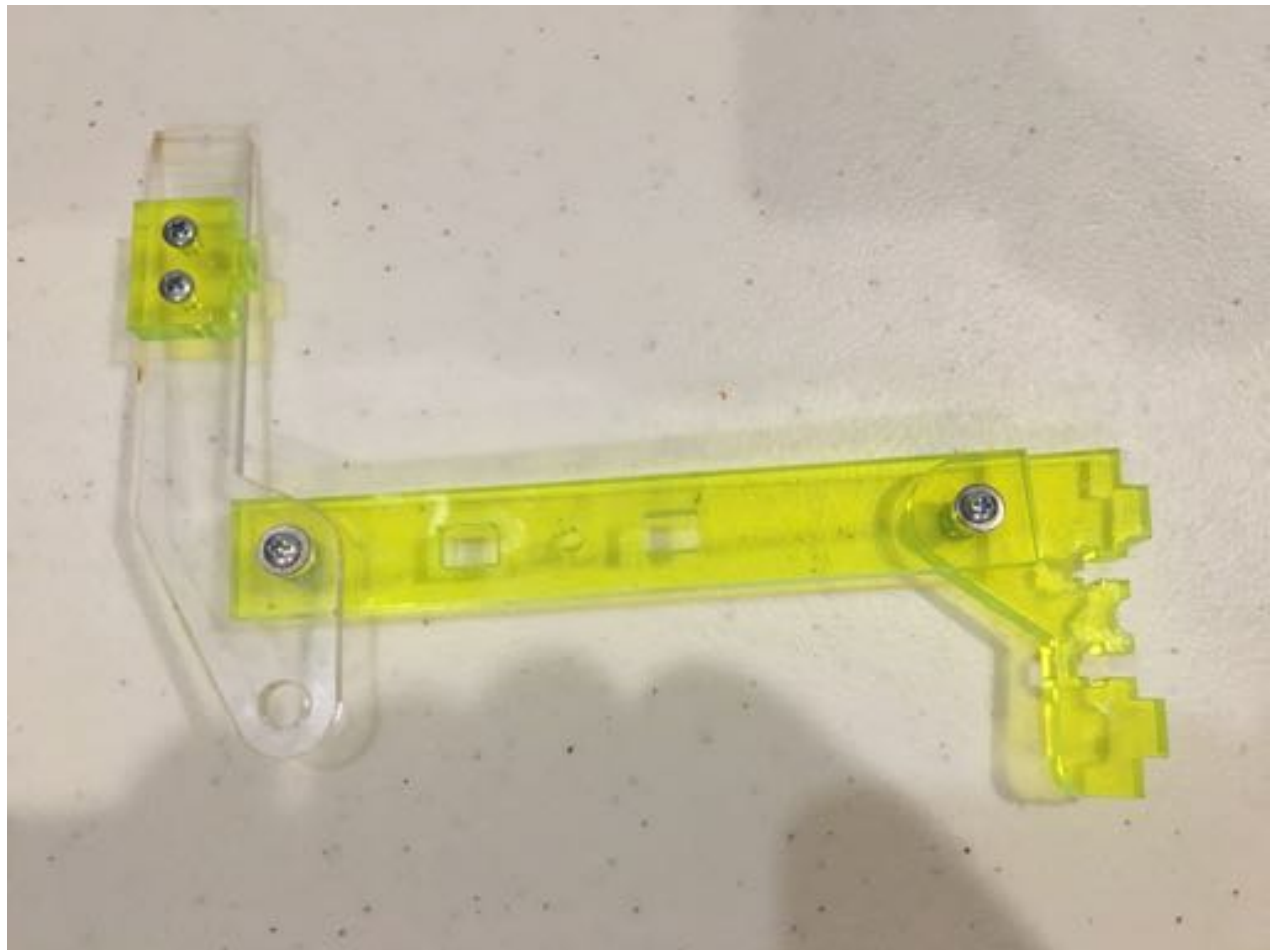
1. Arm Upper Right

- 2x bag 1



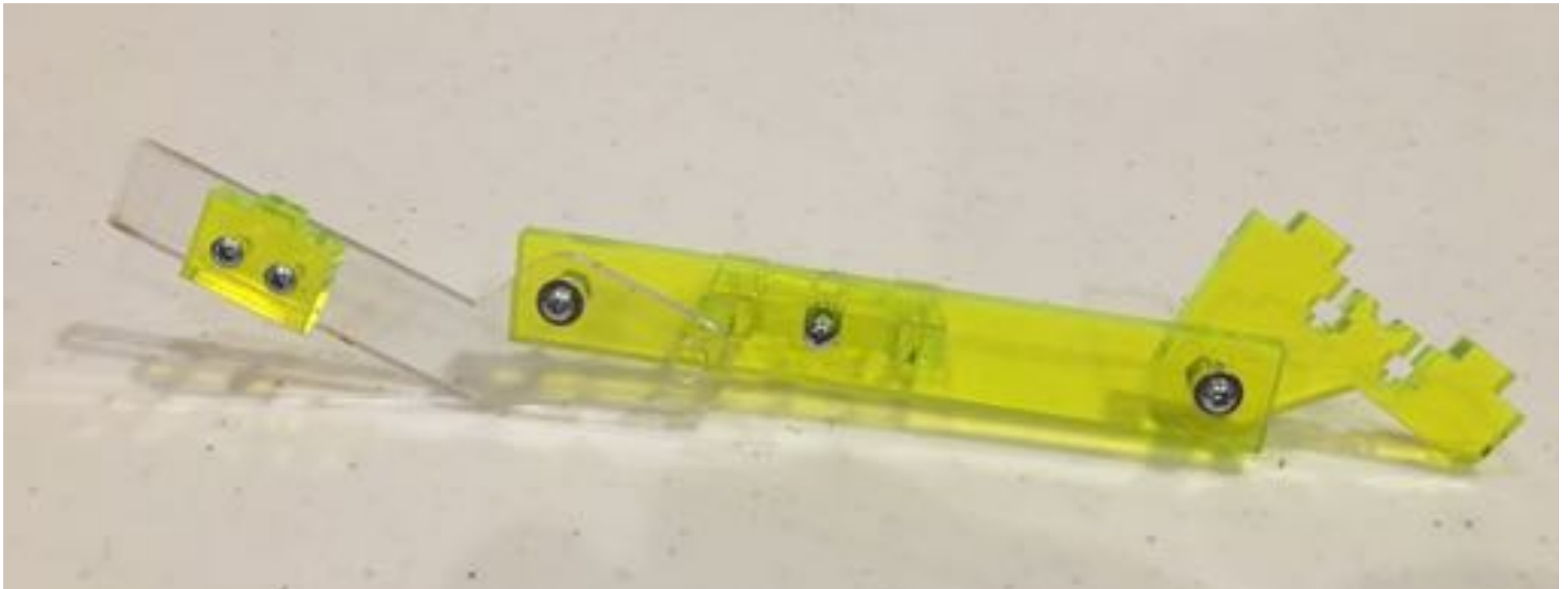
2. Right Arm Side

- 2x bag 4 screw
- 2x bag 10 nut
- 2x bag 9 spacer
- 2x bag 12 washer



3. Arm Spacer

- 1x bag 2 screw
- 1x bag 10 nut



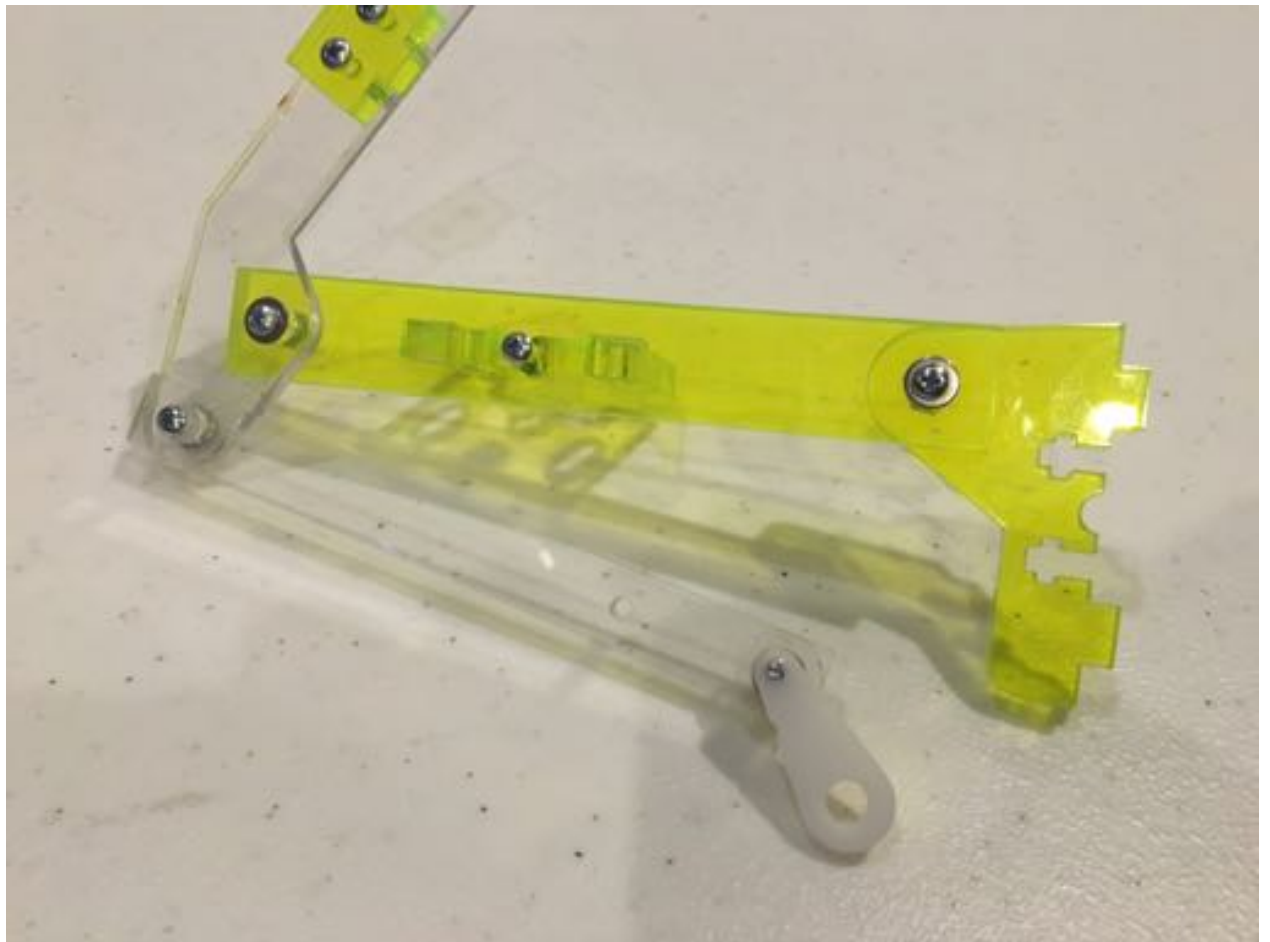
4. Ch 3 Control Arm

- 1x bag 13 screw
- 1x bag 12 washer
- 1x bag 9 spacer



5. Ch 3 Control Arm

- 1x bag 2 screw
- 1x bag 9 spacer
- 1x bag 12 washer
- Mount as shown. Arm should be on outside of upper arm.



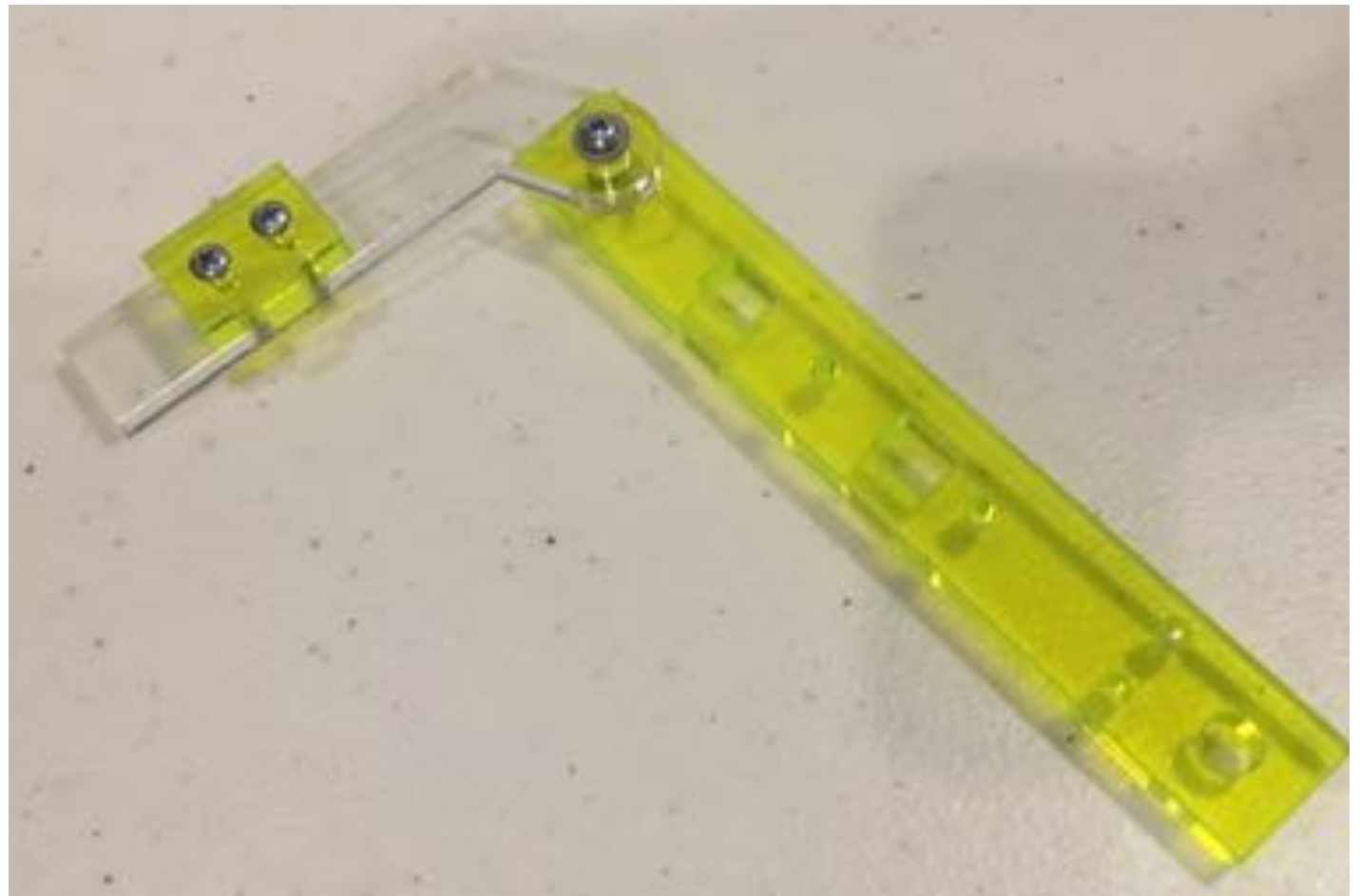
6. Arm left upper

- 2x bag 1 screw



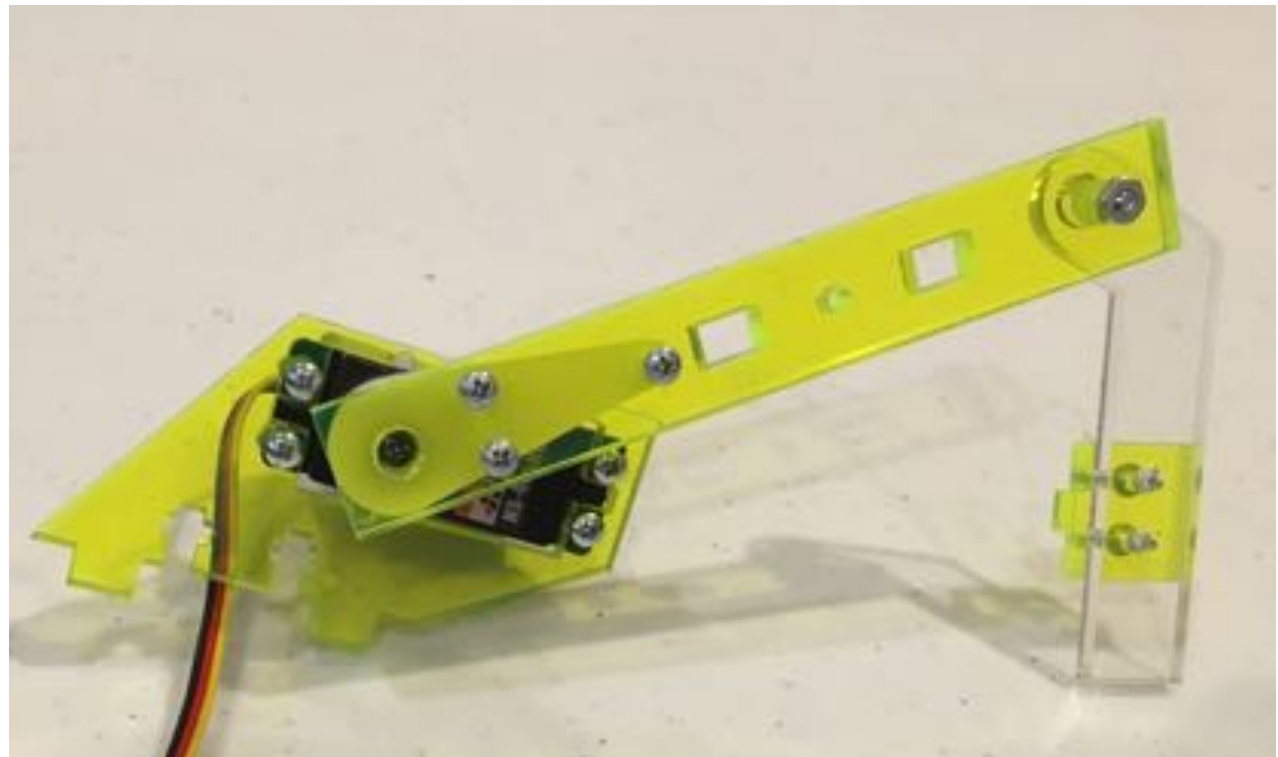
7. Arm left side

- 1x bag 5 screw
- 1x bag 10 nut
- 1x bag 12 washer



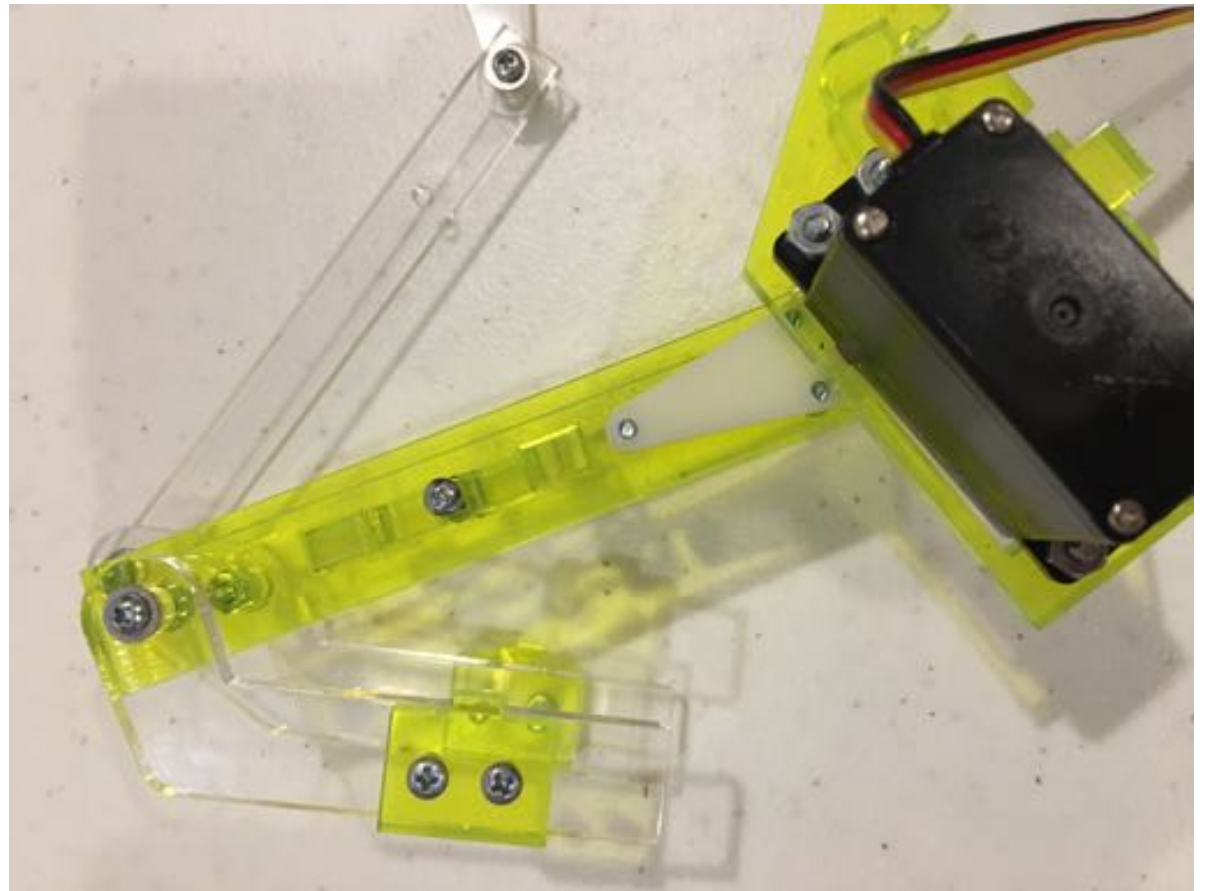
8. Ch 2 Servo

- 4x bag 2 screws
- 4x bag 10 nuts
- 3x bag 1 screws
- 1x bag 14 washer
- Install servo arm on arm half
- Install arm half on servo using washer and servo screw



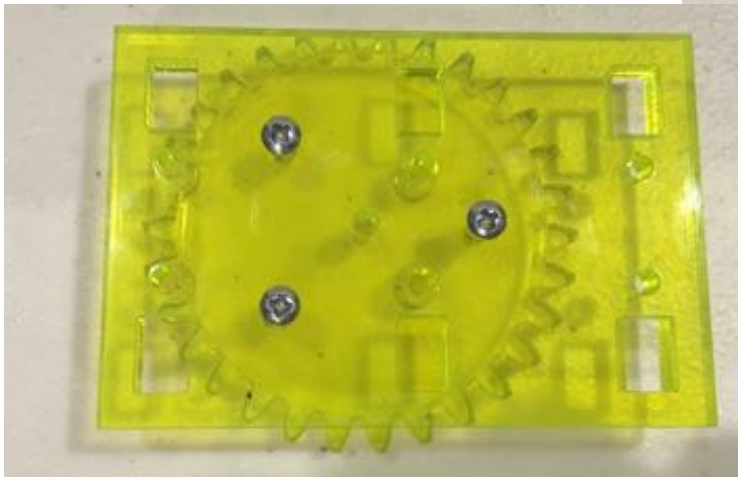
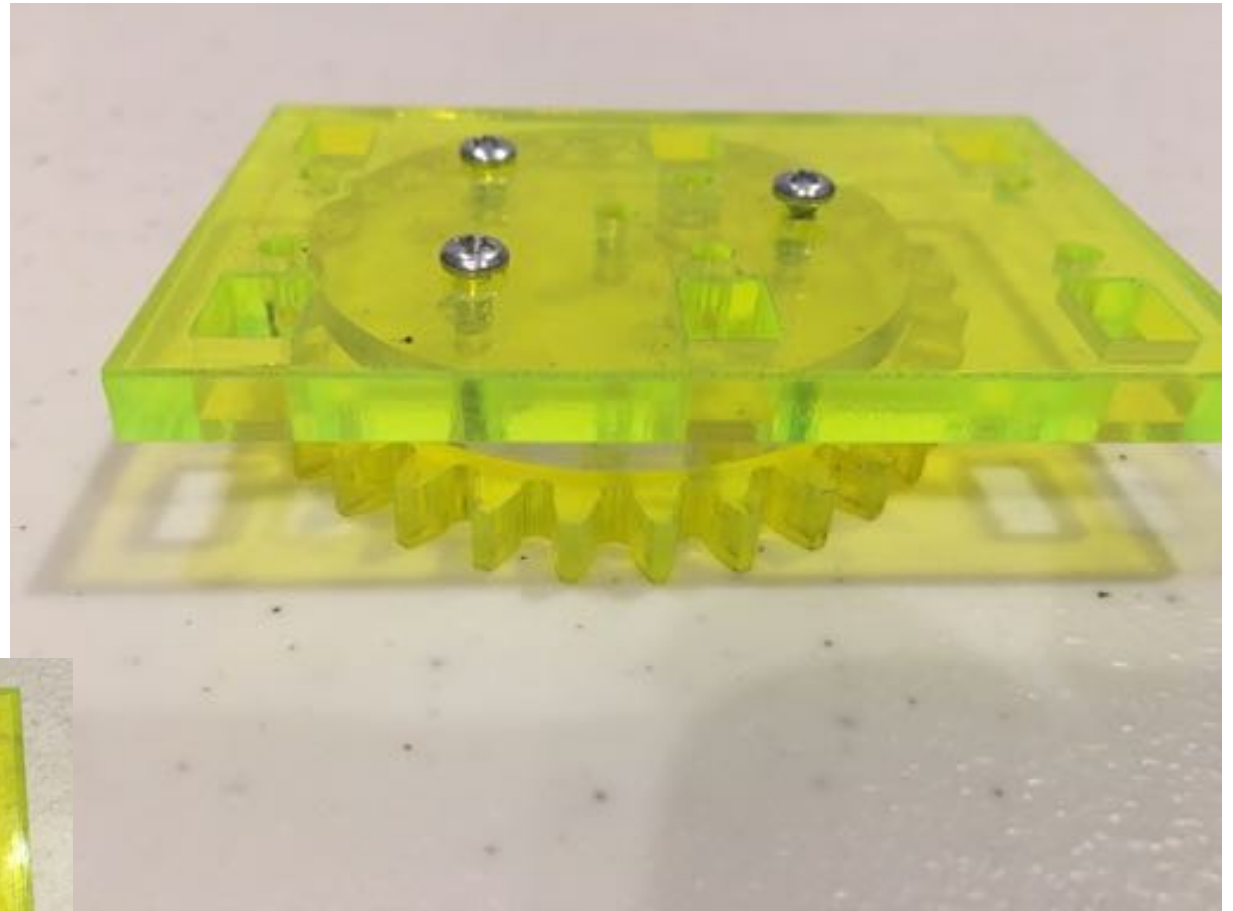
9. Join Arm Parts

- 1x bag 2 screw
- 1x bag 10 nut
- CAUTION:: Using longer screws will cause center brace to break



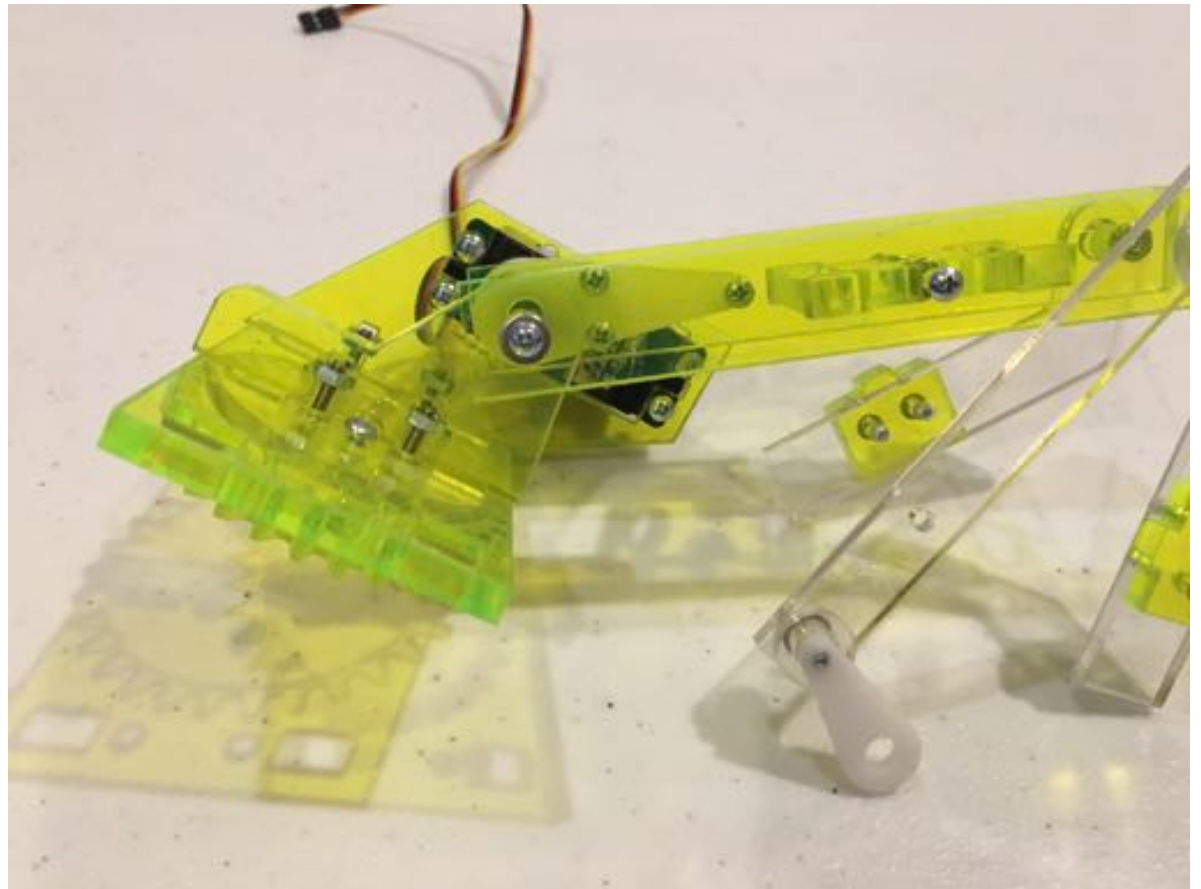
10. Arm Rotator Plate

- 3x bag 13 screw



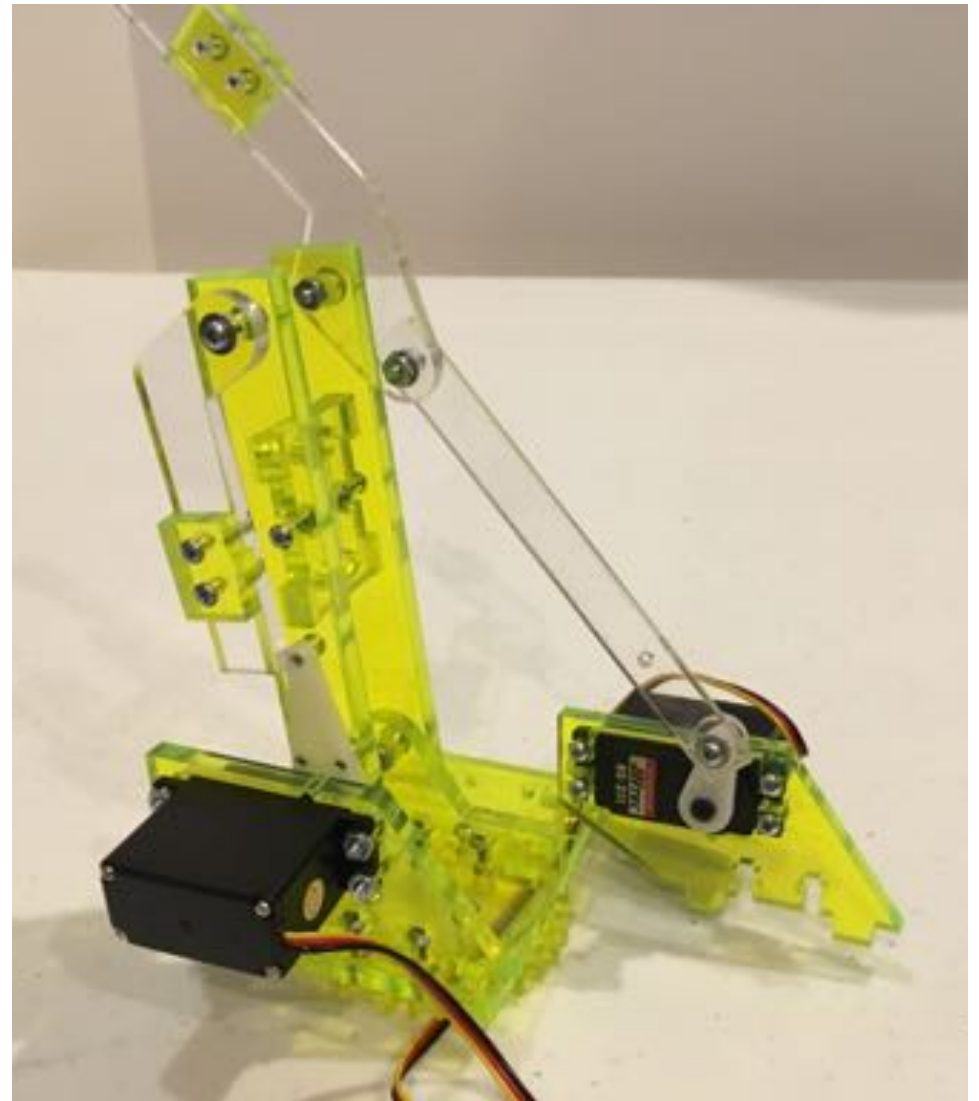
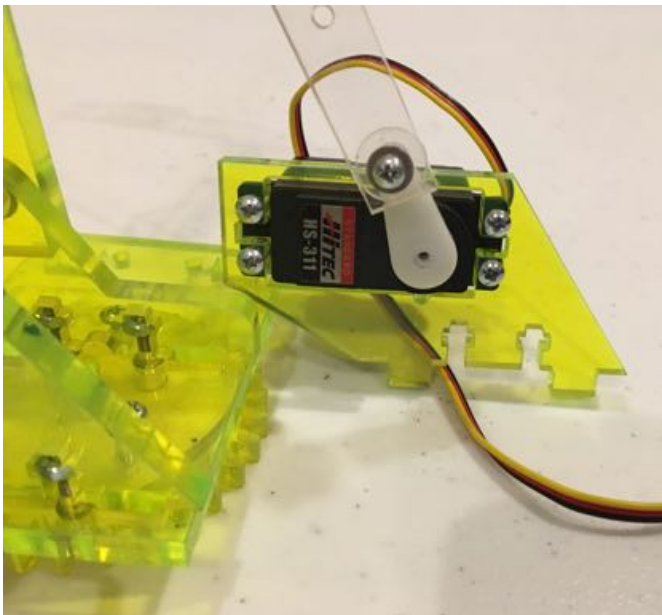
11. Arm to plate

- 4x bag 3 screw
- 4x bag 10 nut
- Mount as shown. Center mount hole should be between the mounts



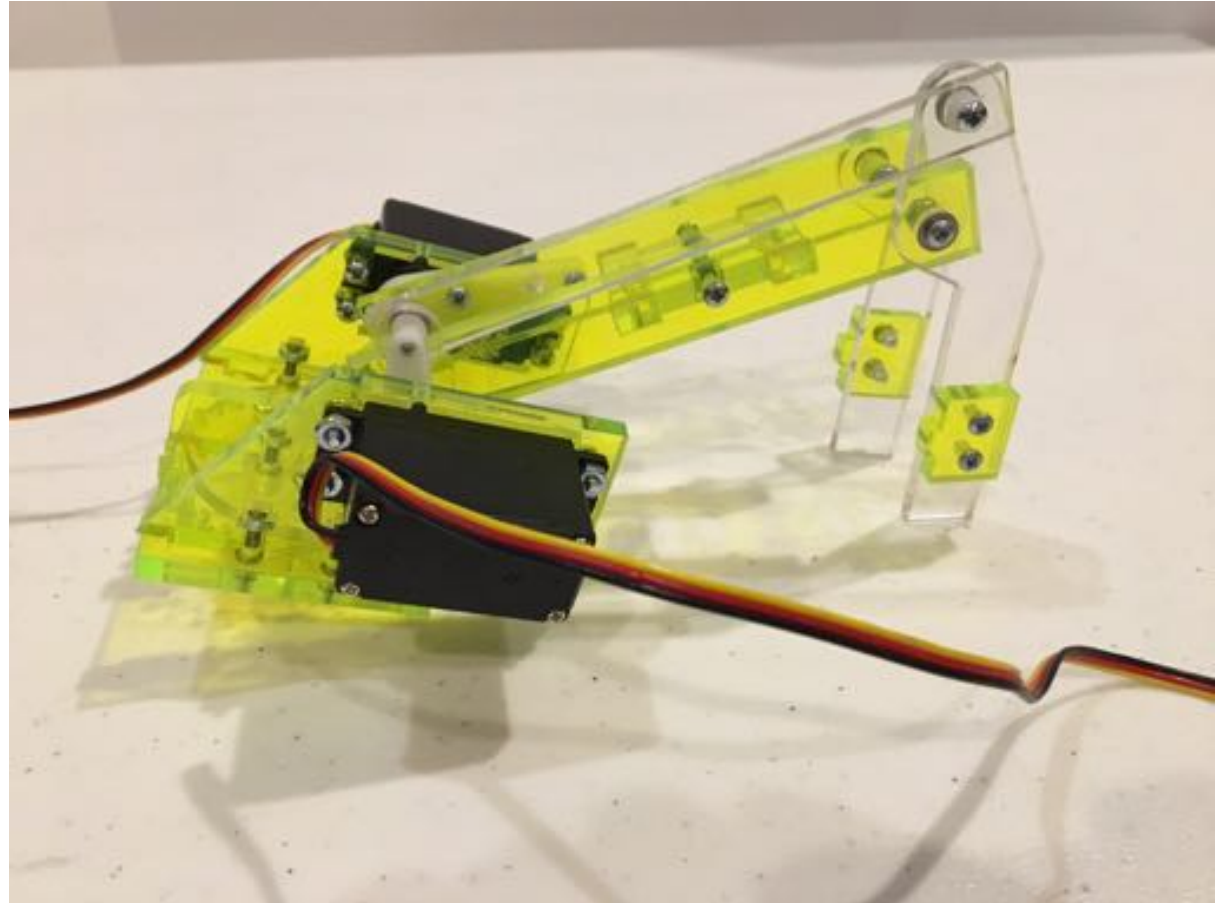
12. Servo 2 arm to servo

- 1x Bag 14 Washer
- Install arm on servo using the spacer, washer and clear plastic spacer
- Lower picture represents the upper servo stop position



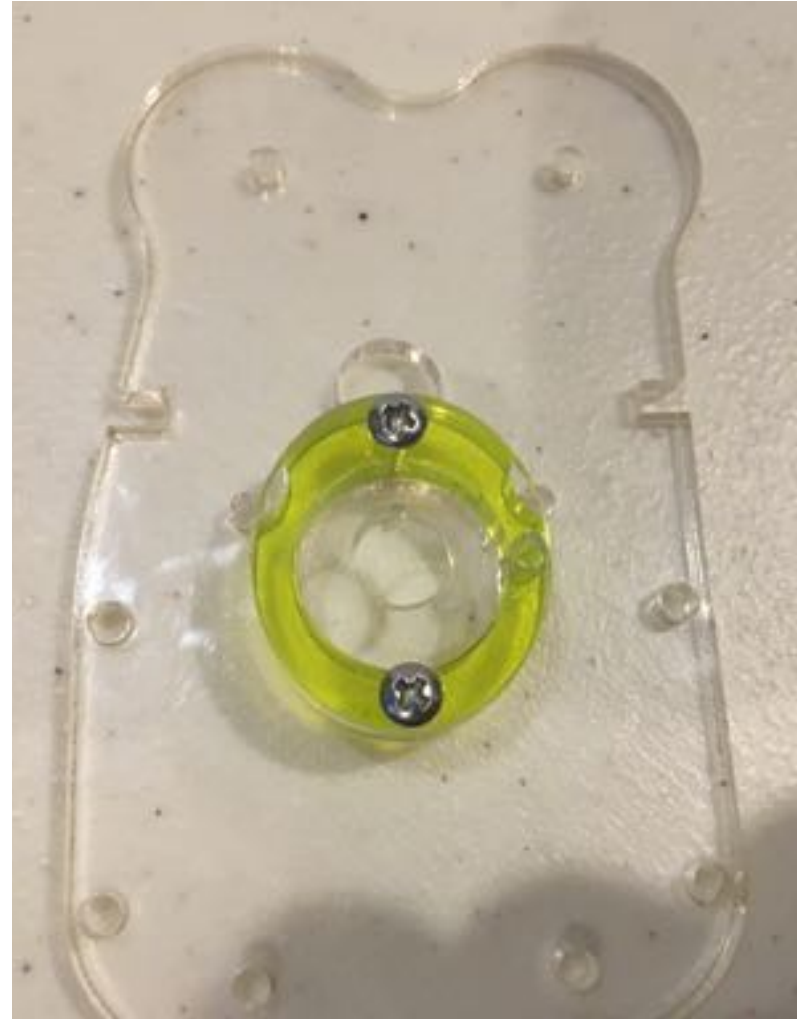
13. Servo 2 to base

- 2x bag 3 screw
- 2x bag 10 nuts



14. Pot holder to gripper

- 2x bag 13 screws
- Install colored and clear potentiometer mounts. Orient locator hole as shown



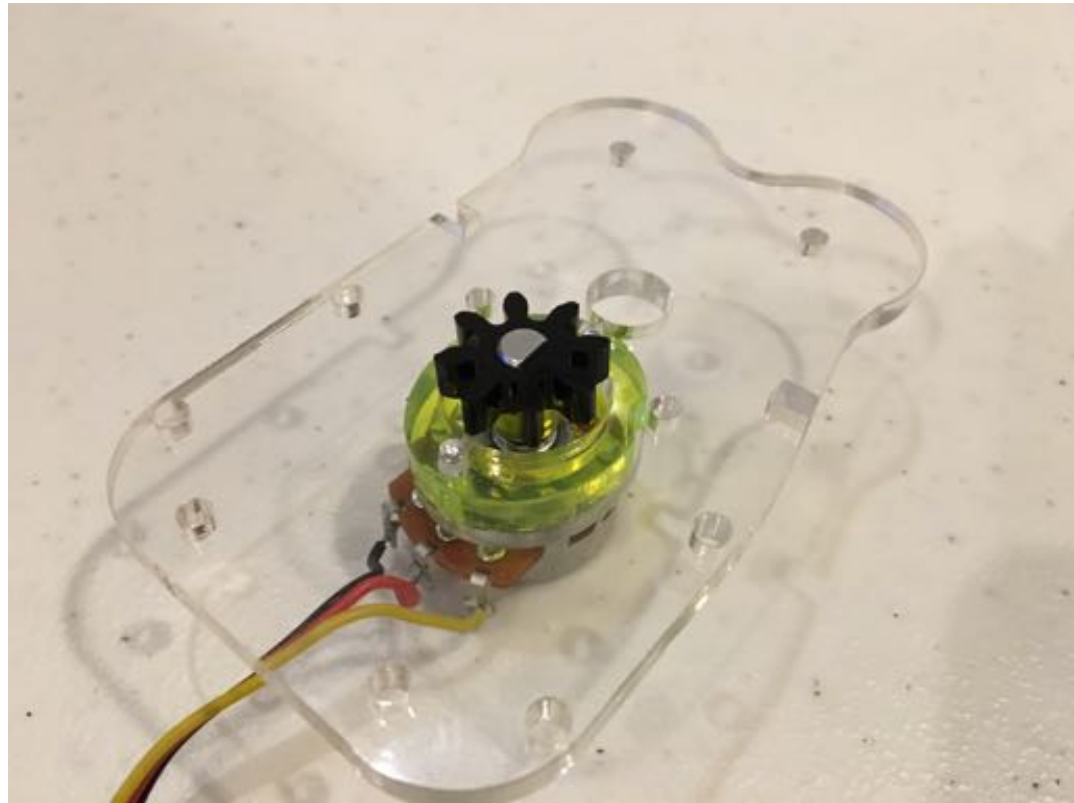
15. Pot to gripper

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



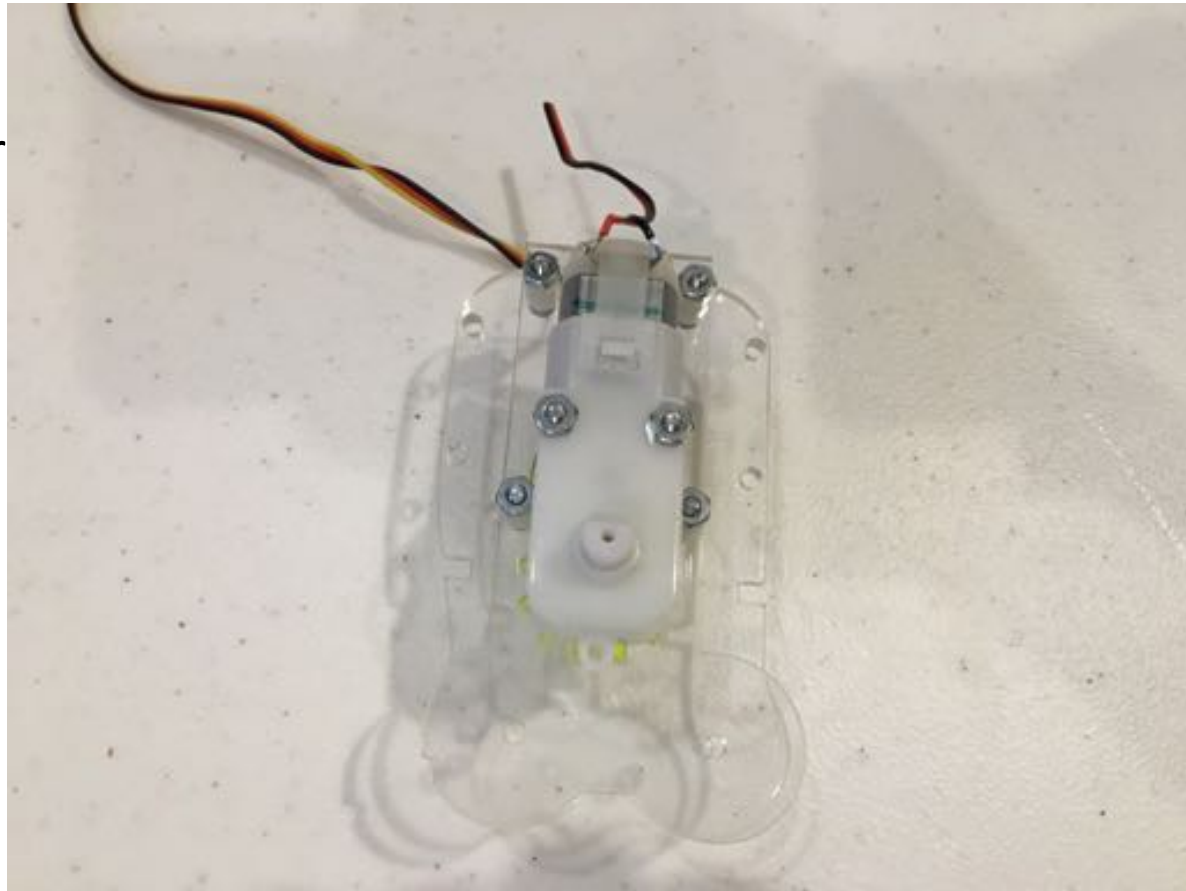
16. Pot Gear

- Use colored d-shaft spacer and d-shaft gear on potentiometer

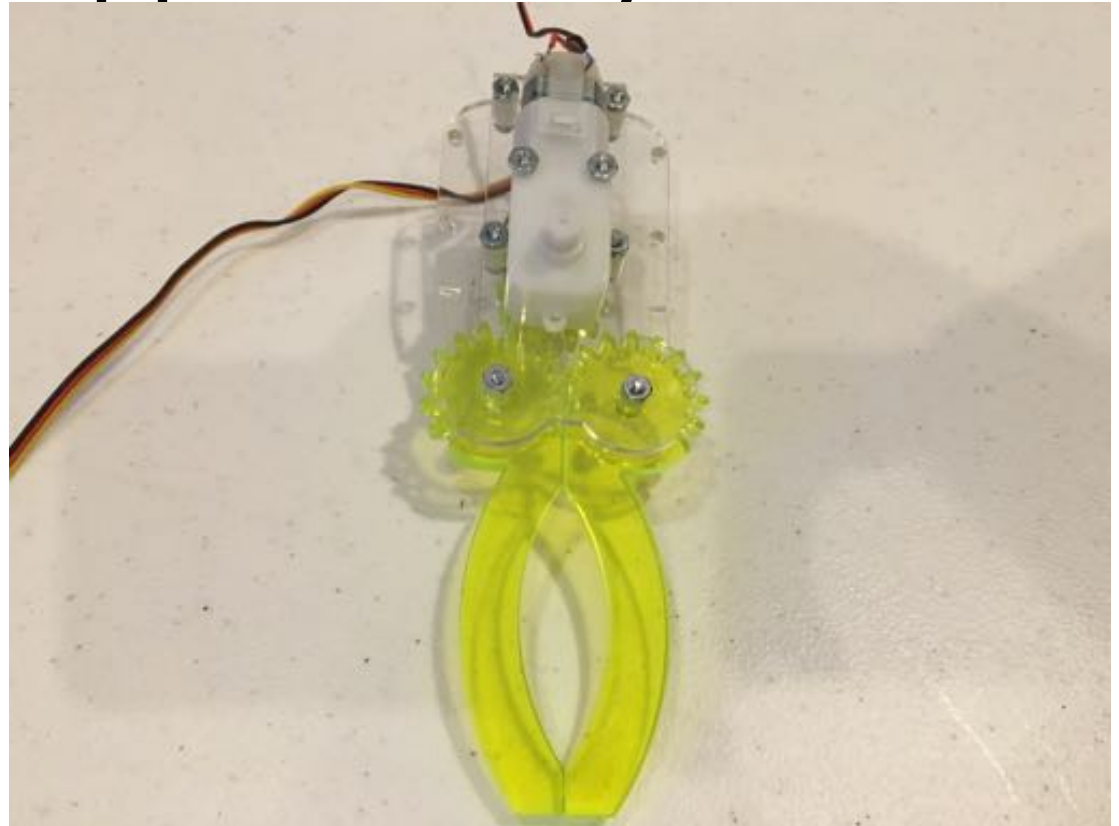


17. Gripper assy

- 4x bag 5 screw
- 4x bag 10 nut
- 4x bag 9 spacer

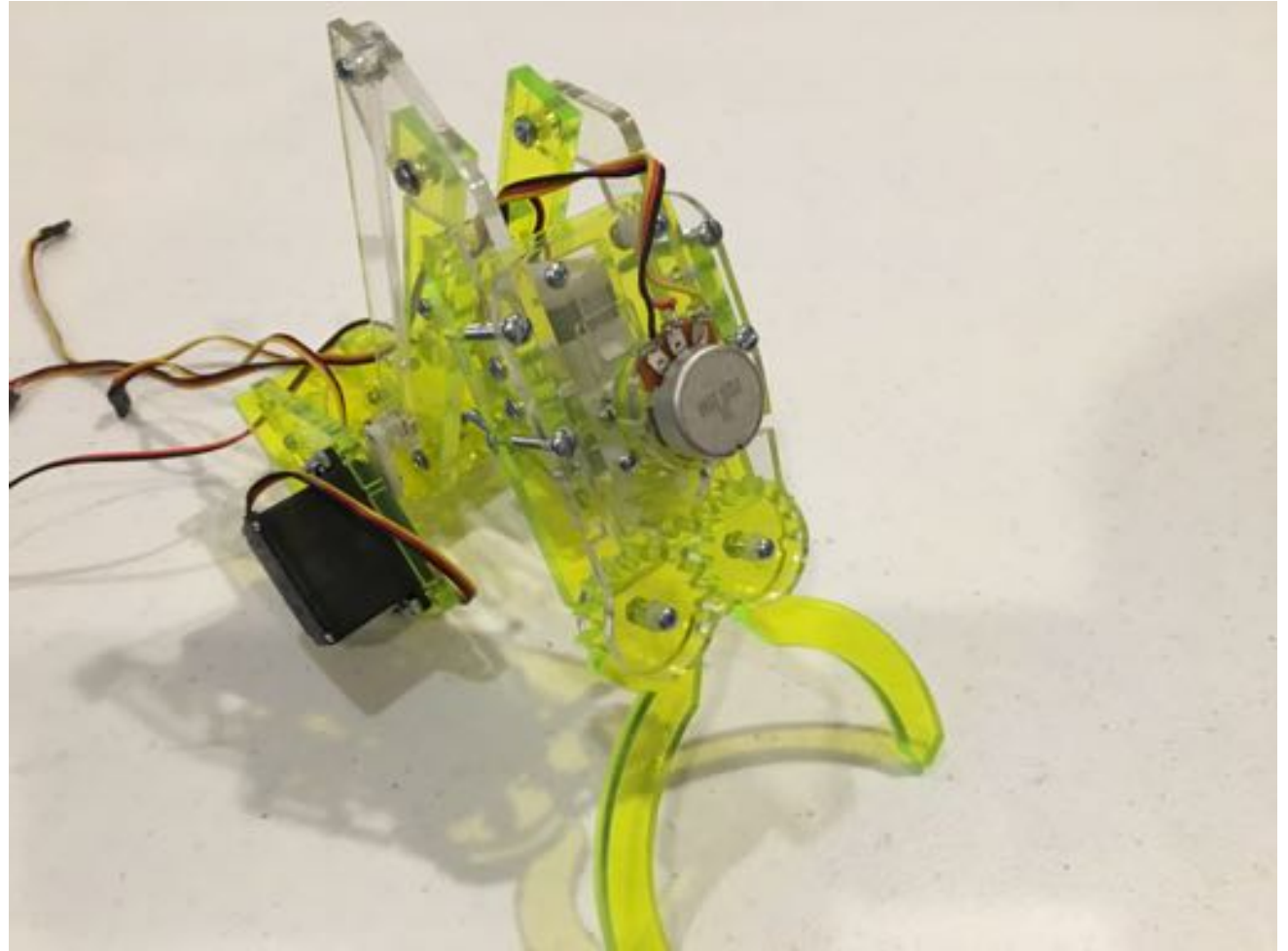
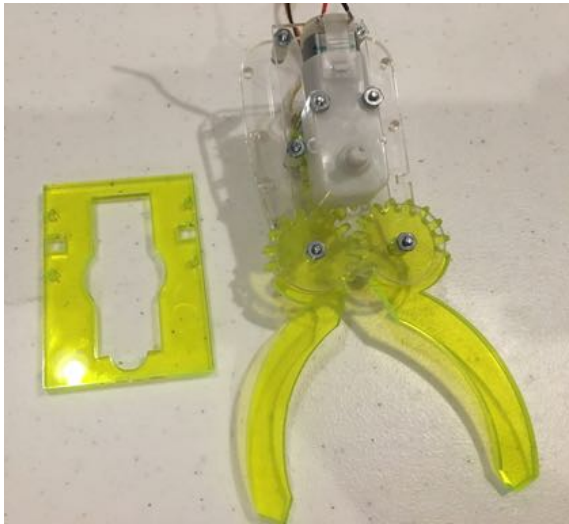


18. Gripper to assy



- 2x bag 5 screw
- 2x bag 10 nut
- 4x thin delrin
- 2x bag 9 spacer
- Place plastic washer on top and bottom of grippers. Using plastic spacers install grippers in closed position

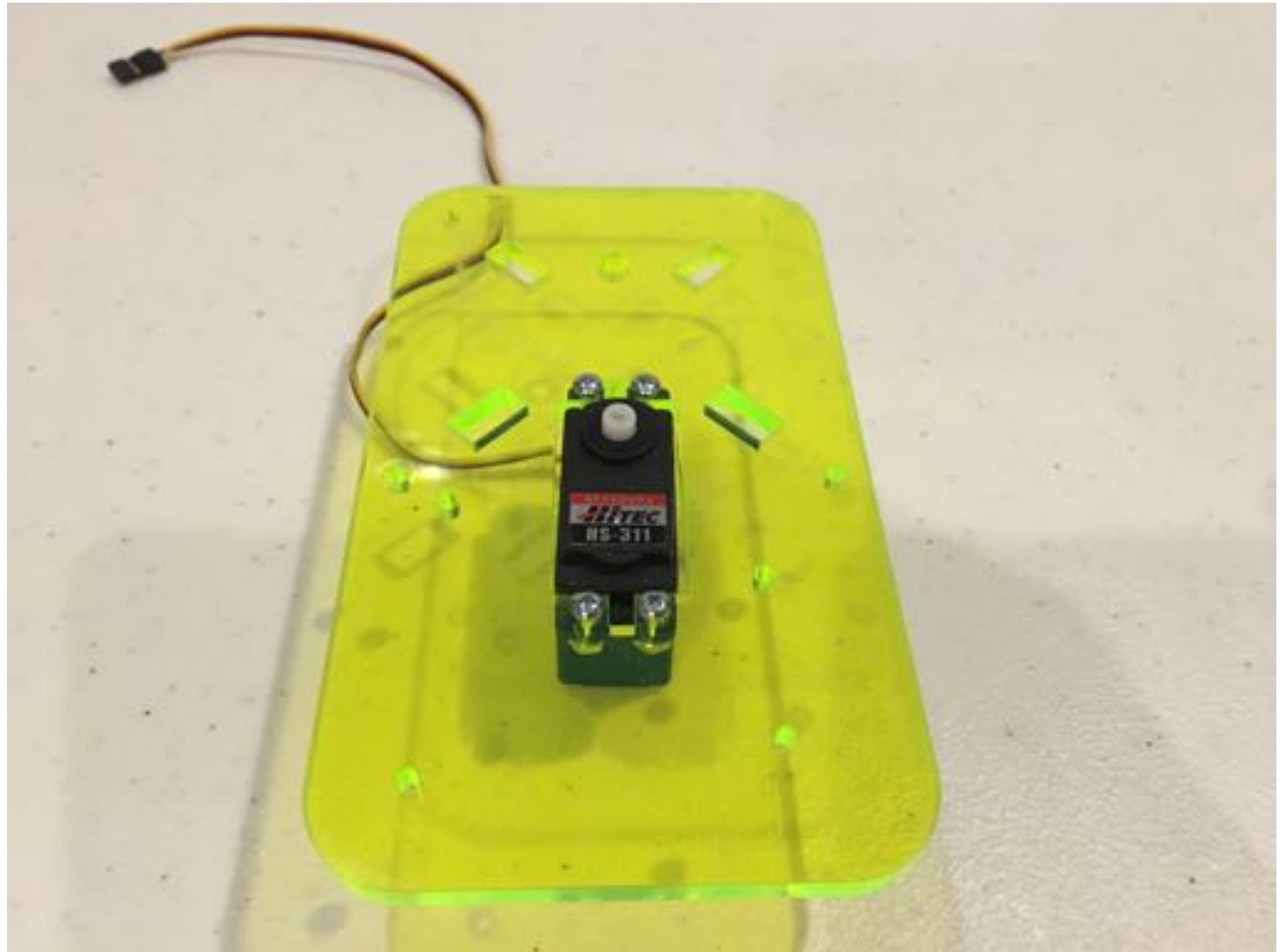
19. Gripper to arm



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

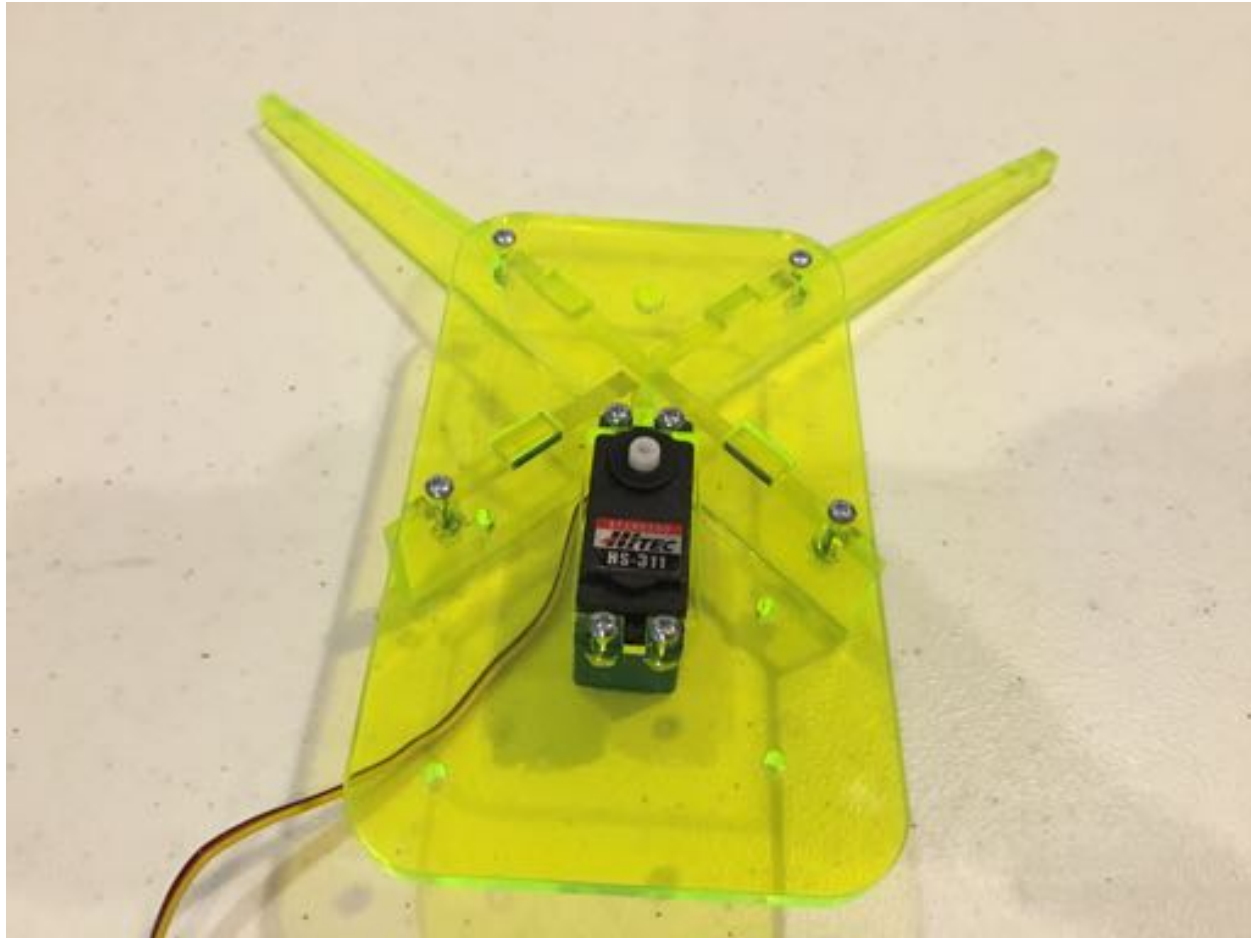
20. Servo to base

- 4x bag 2 screw
- 4x bag 10 nut



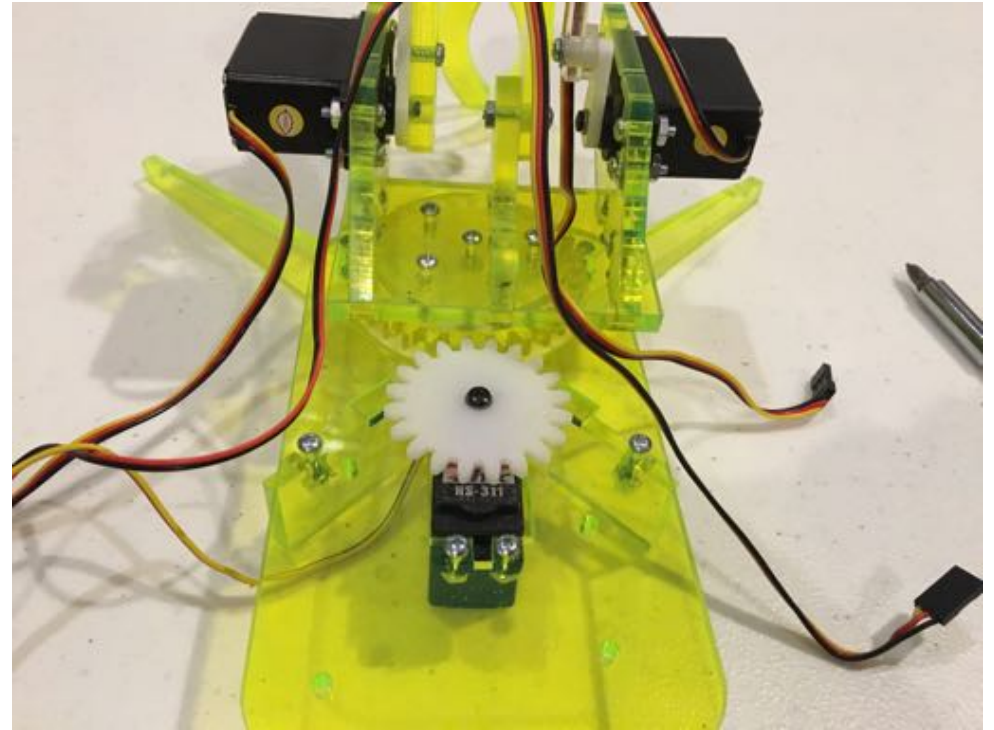
21. Legs to base

- 4x bag 4 screw
- 4x bag 10 nut



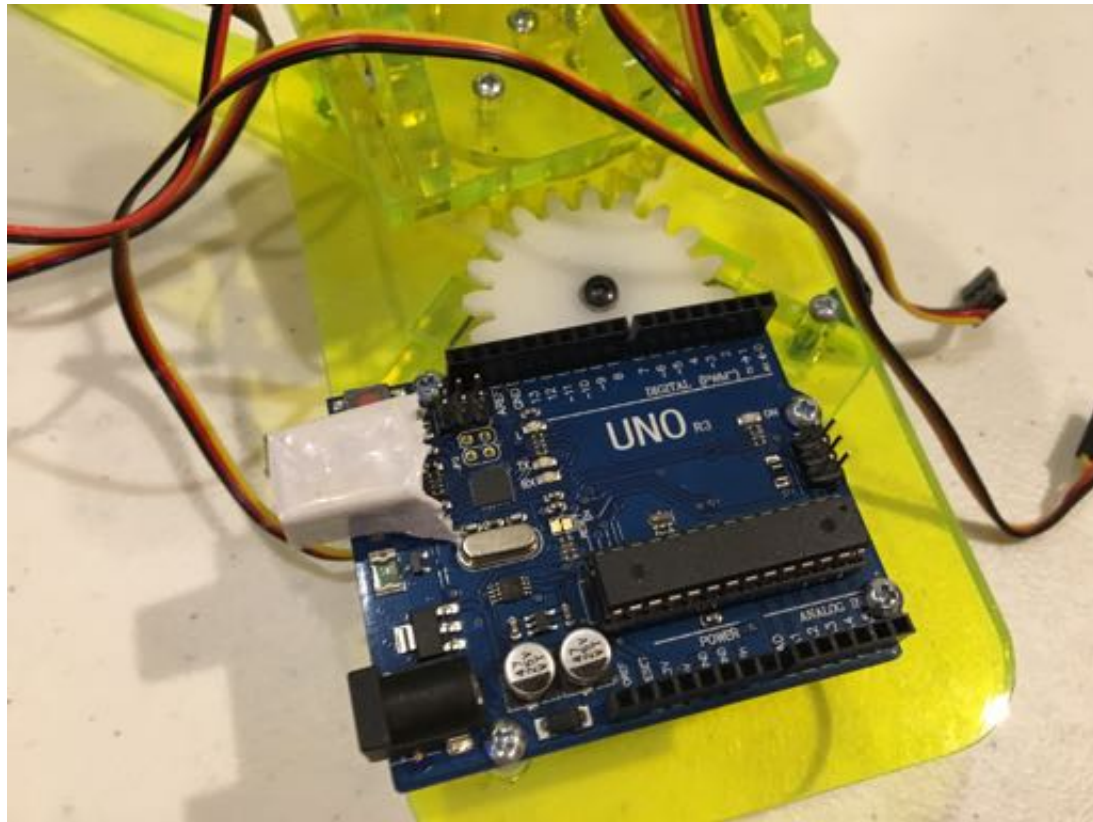
22. Arm to base

- 1x bag 6 screw
- 2x bag 12 washer
- 1x bag 10 nut
- 1x Large plastic washer
- 1x bag 9 spacer
- 1x bag 14 washer
- 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



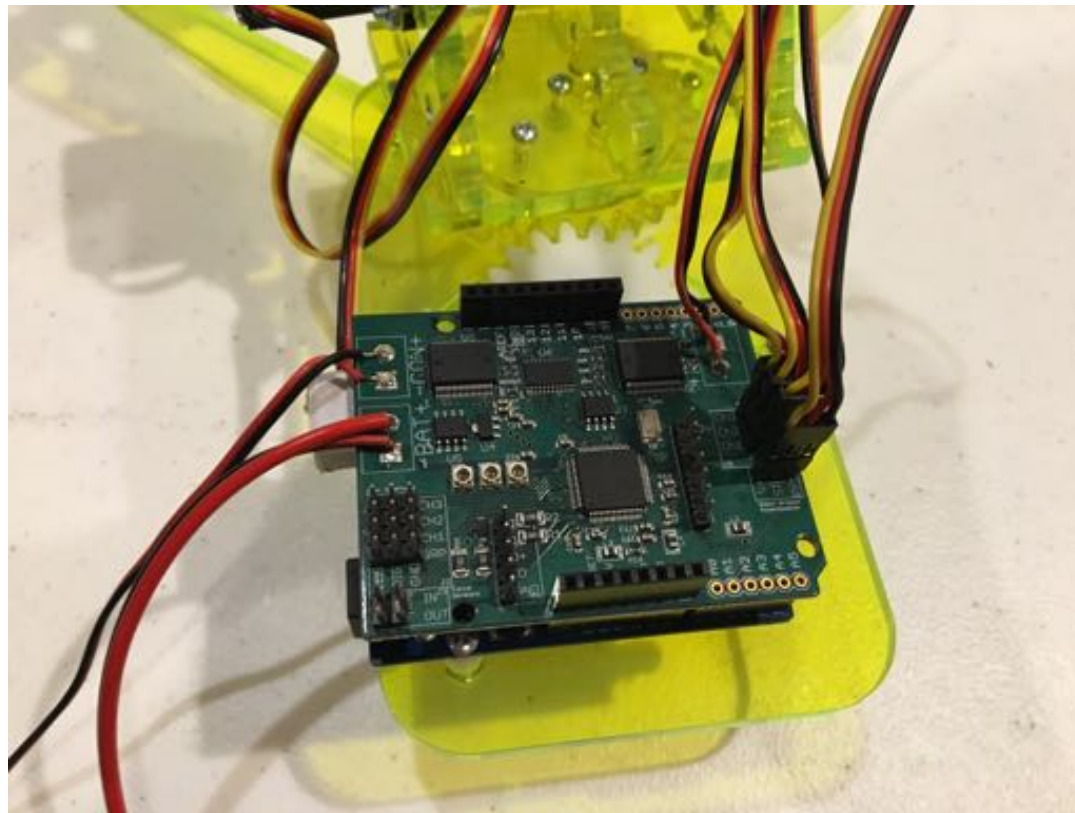
23. Attach Arduino or Controller

- 4x bag 5 screw
- 4x bag 10 nut
- 4x bag 9 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)

