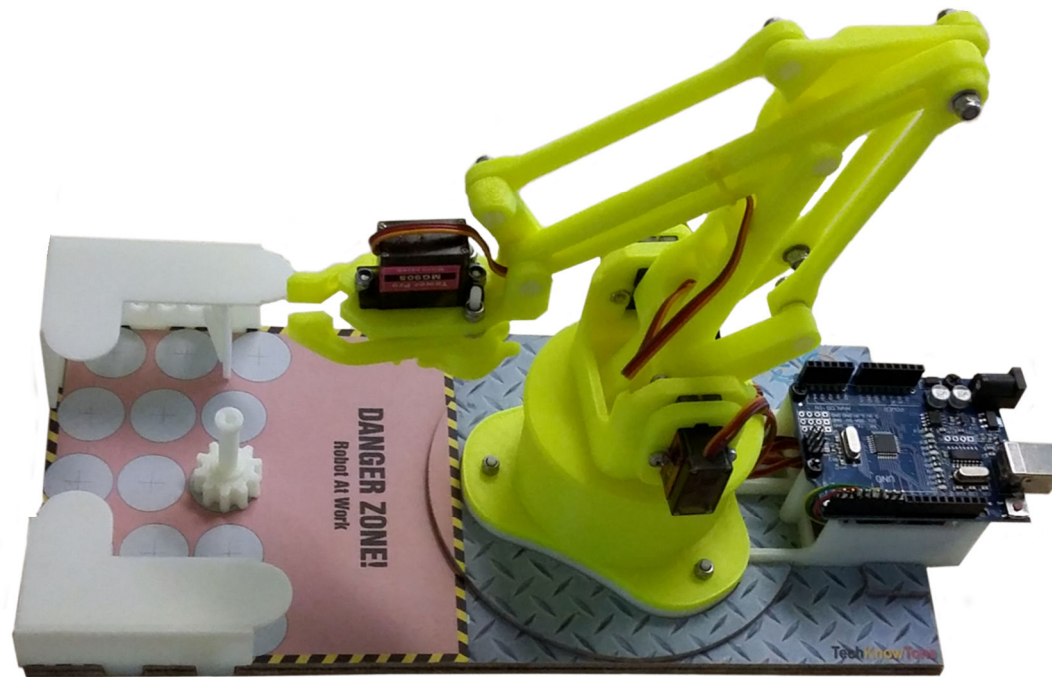


# Reach Robot

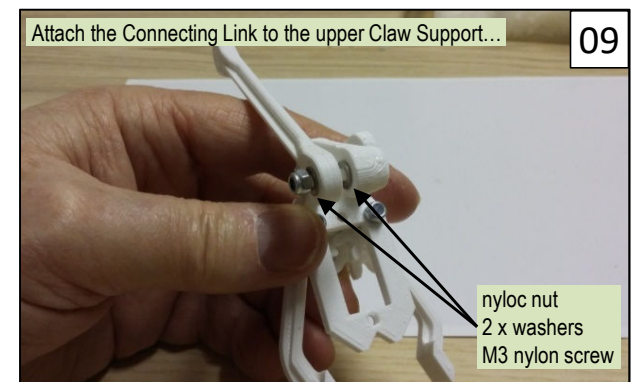
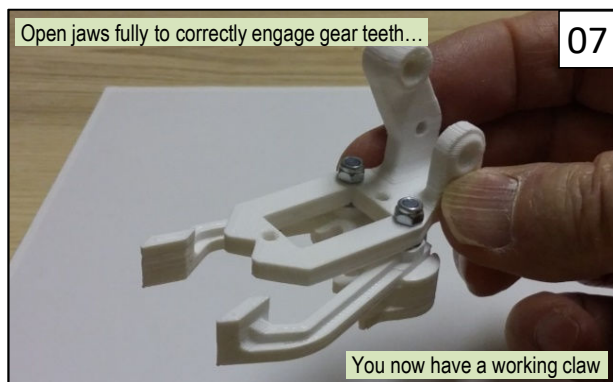
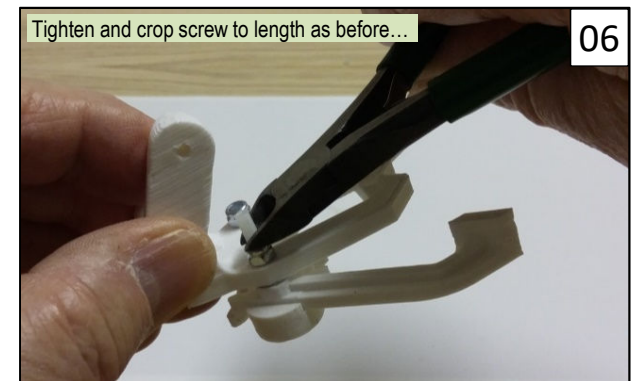
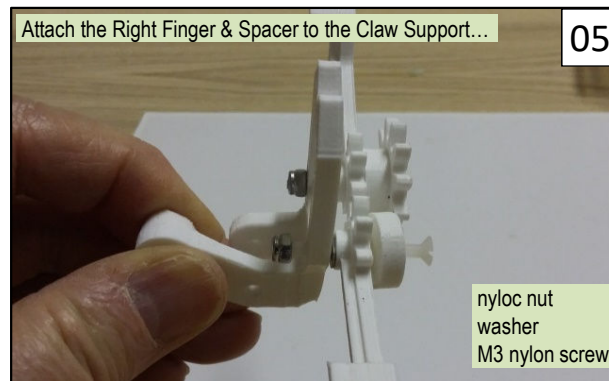
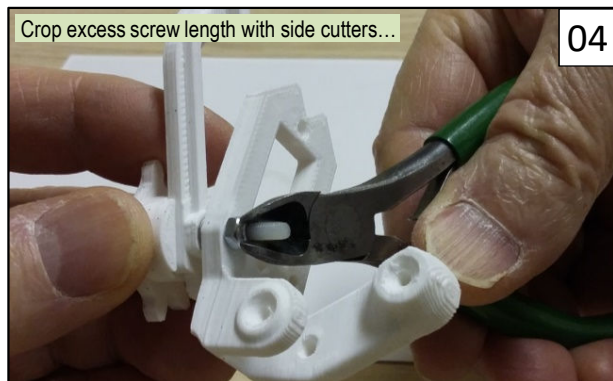
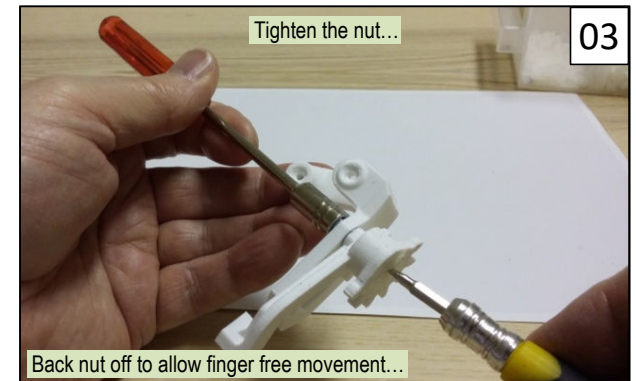
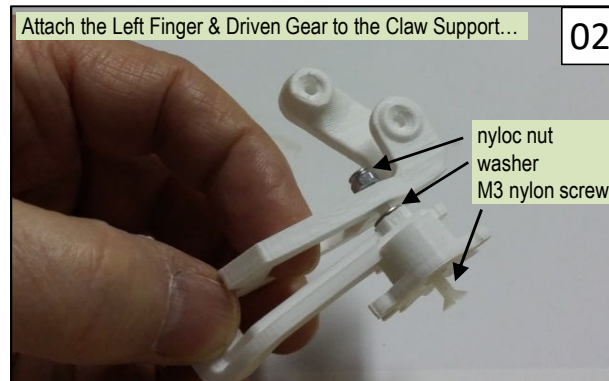
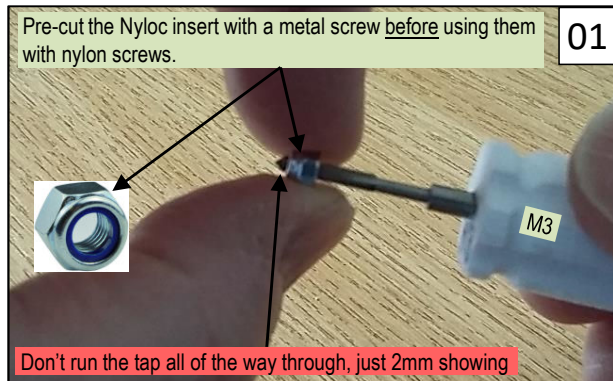
## Printed Parts Assembly

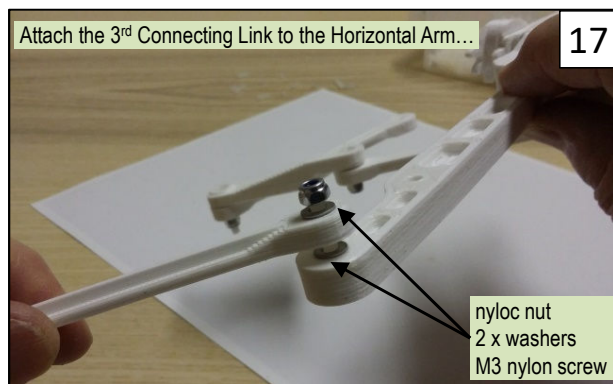
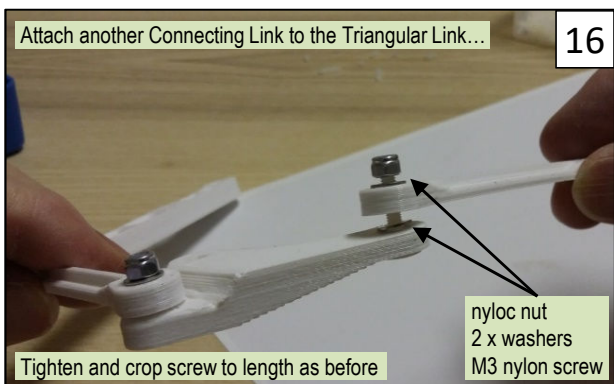
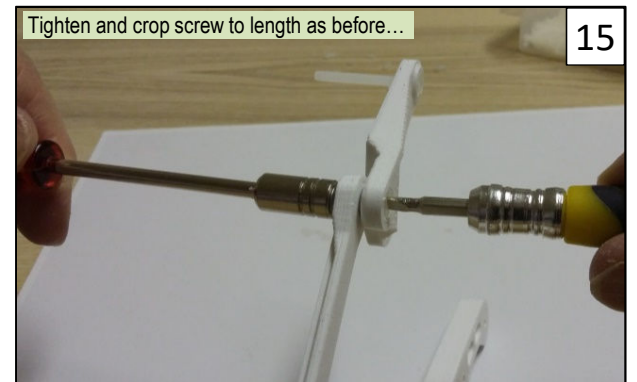
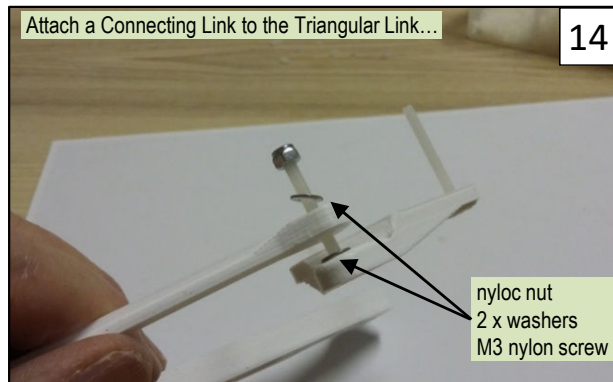
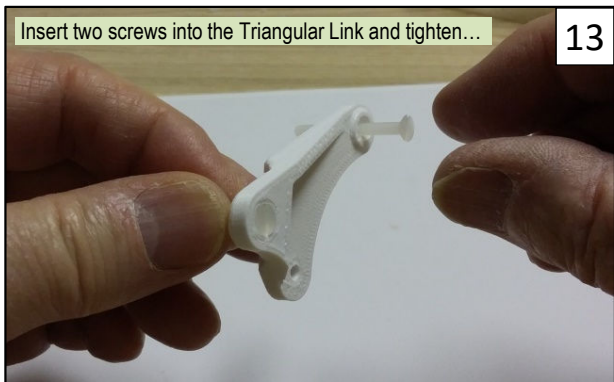
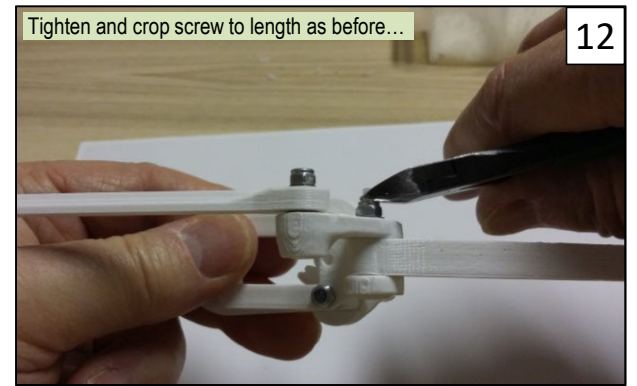
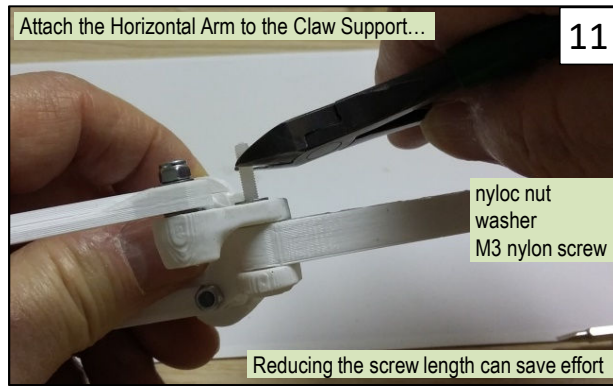
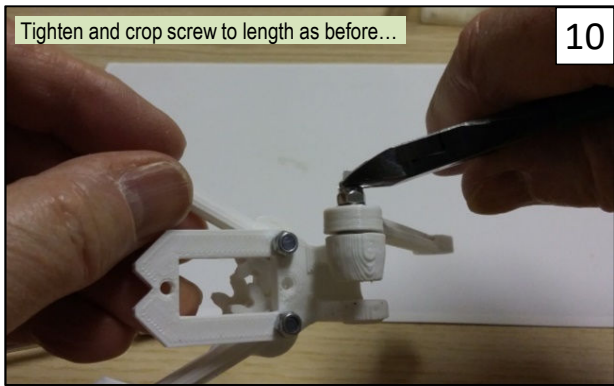


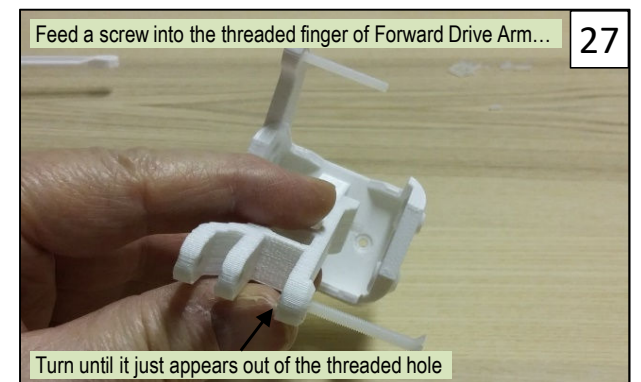
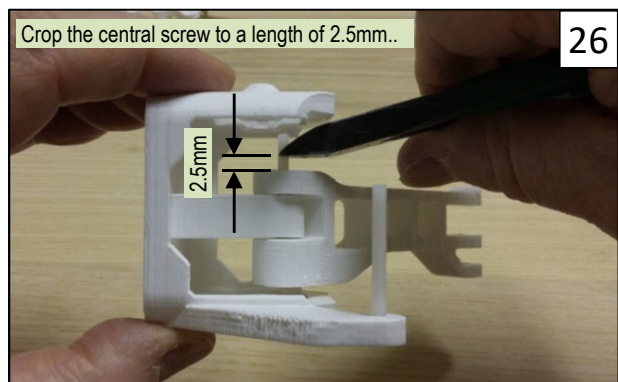
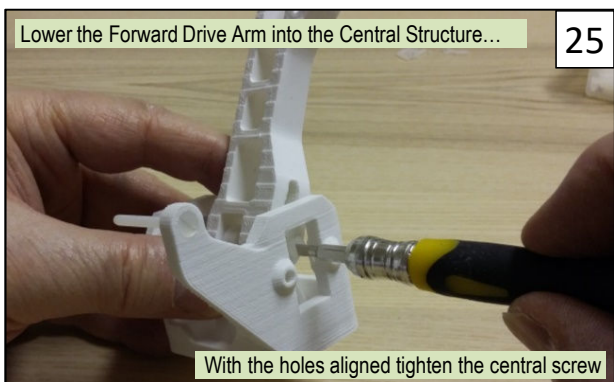
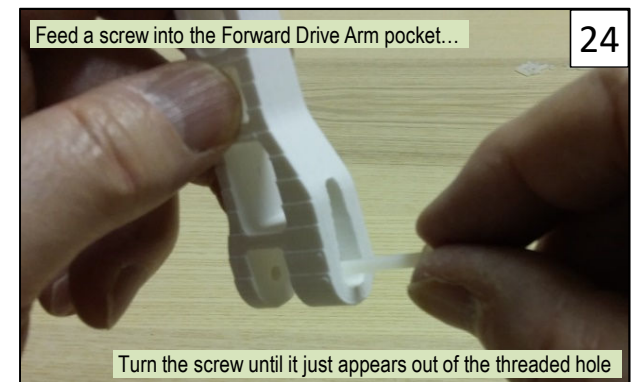
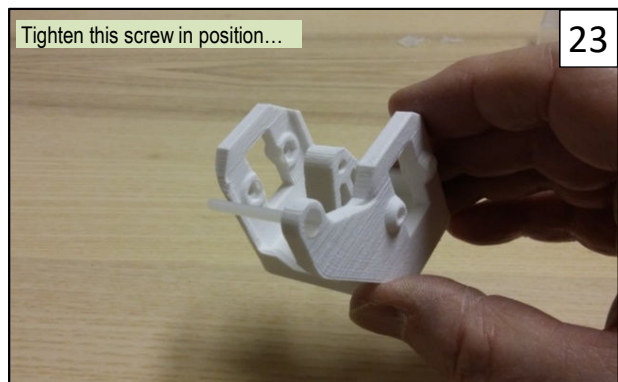
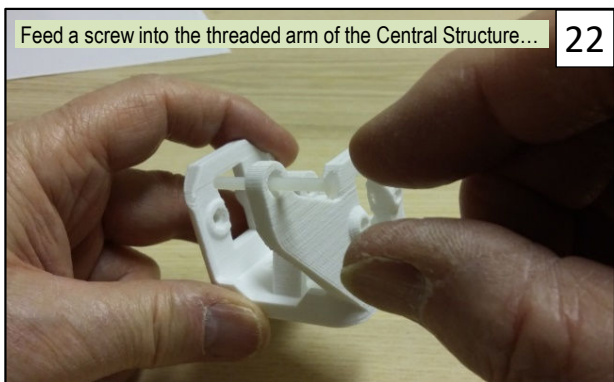
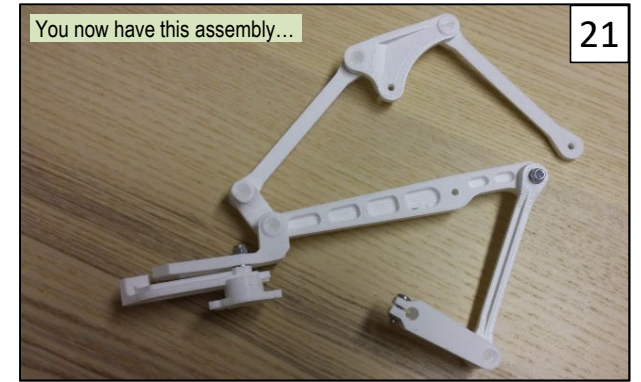
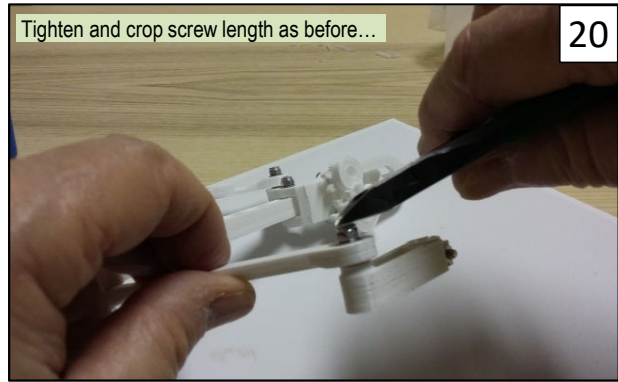
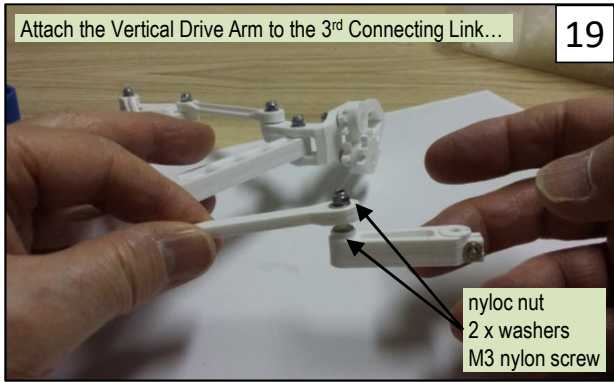
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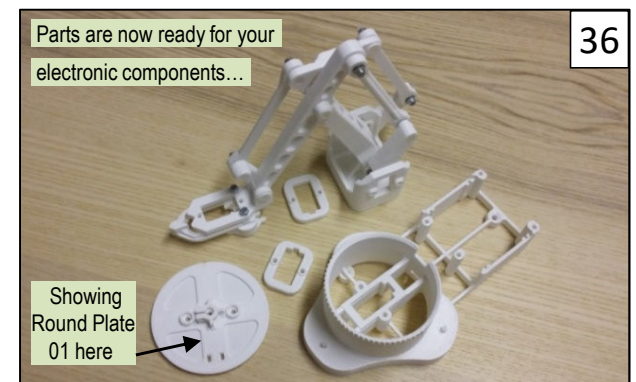
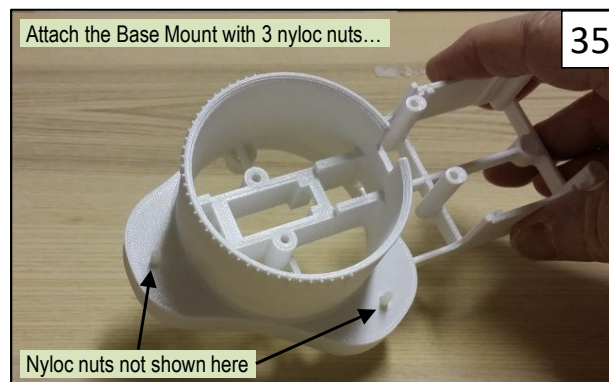
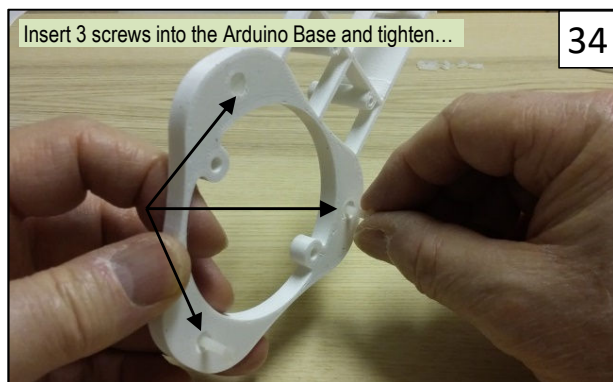
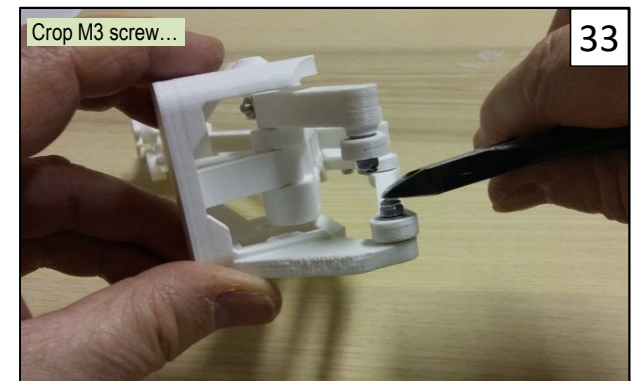
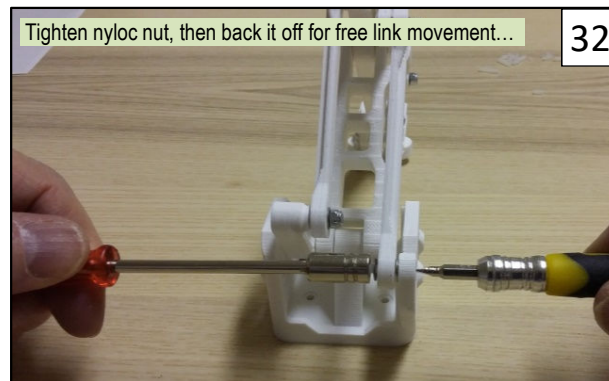
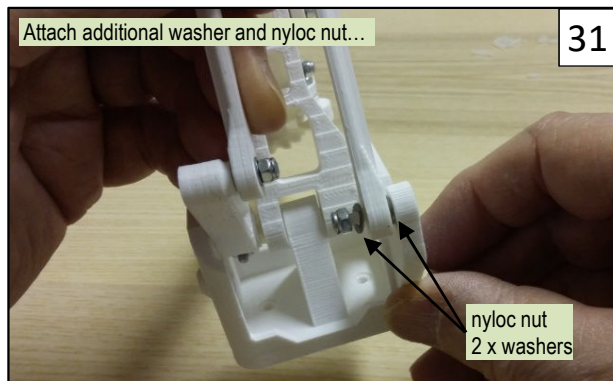
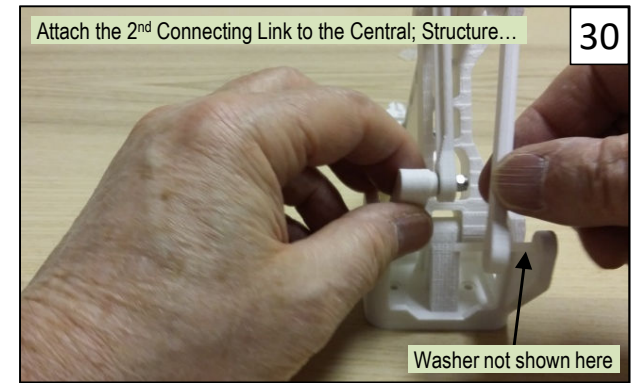
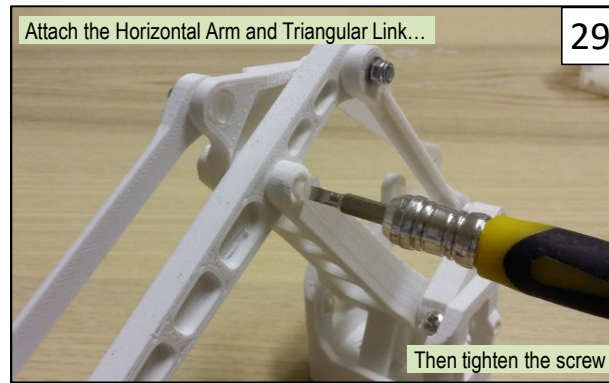
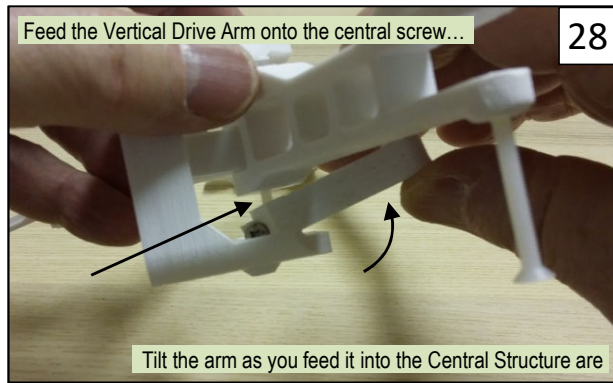
M3 Box Spanner  
Screwdriver – Flat blade  
Screwdriver – Cross blade  
Side cutters









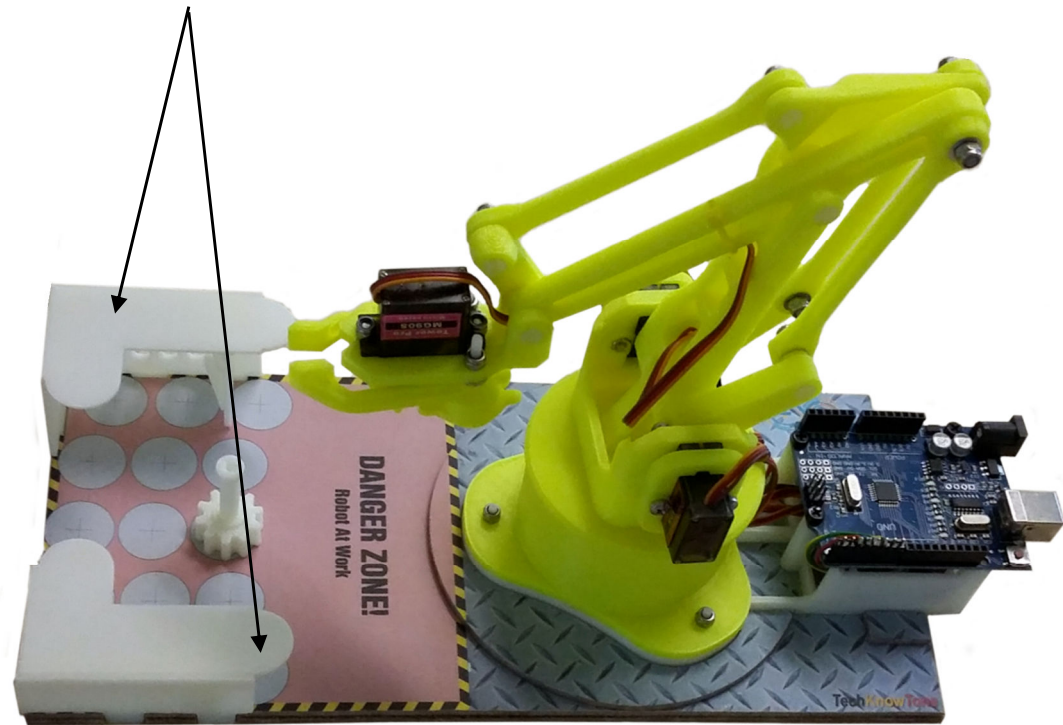


# Reach Robot

## Welding Corner Parts



Temperature controlled soldering iron

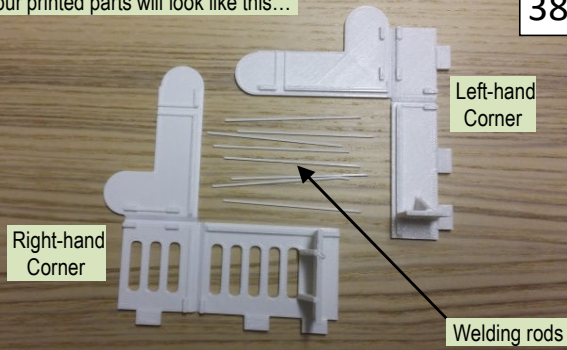


**WARNING** – use a temperature controlled iron  
Do **NOT** exceed a temperature of 320 °C...



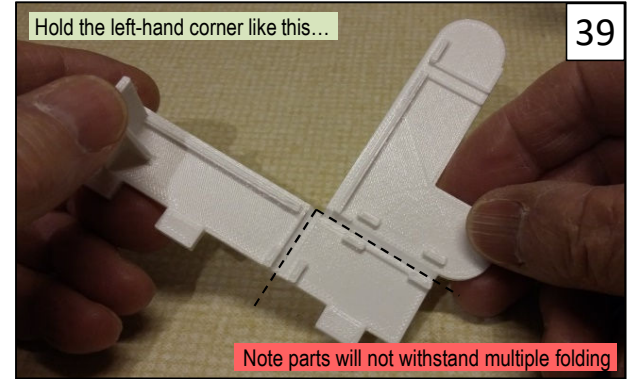
37

Your printed parts will look like this...



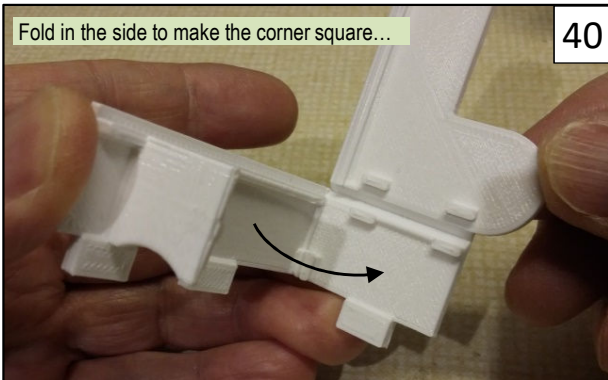
38

Hold the left-hand corner like this...



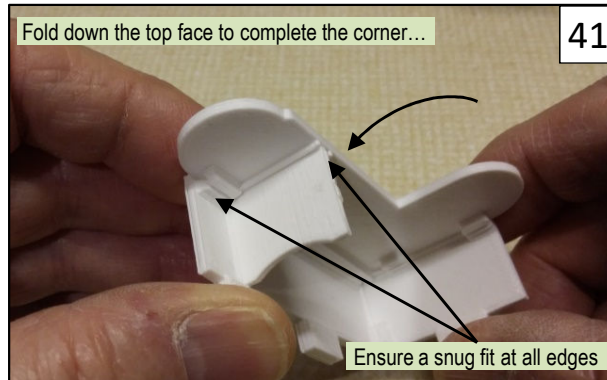
39

Fold in the side to make the corner square...



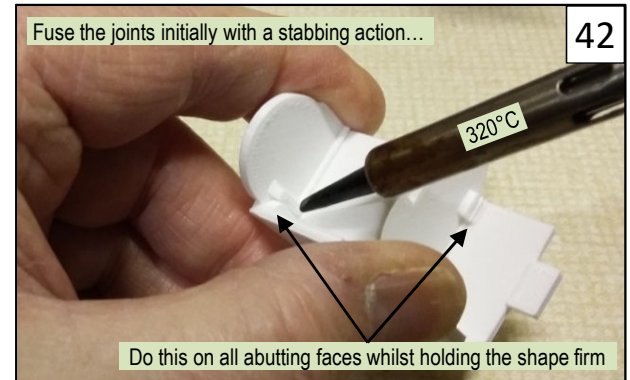
40

Fold down the top face to complete the corner...



41

Fuse the joints initially with a stabbing action...



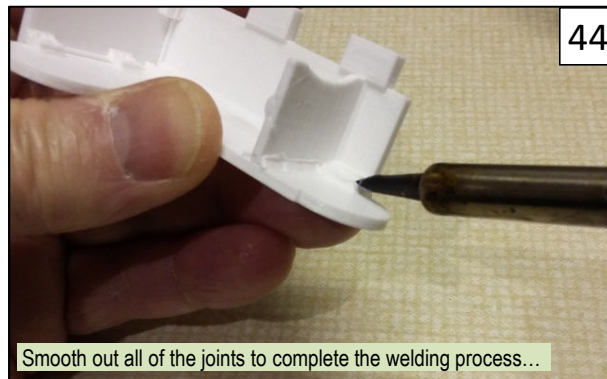
42

With the sides are tacked together, smooth out the joints...



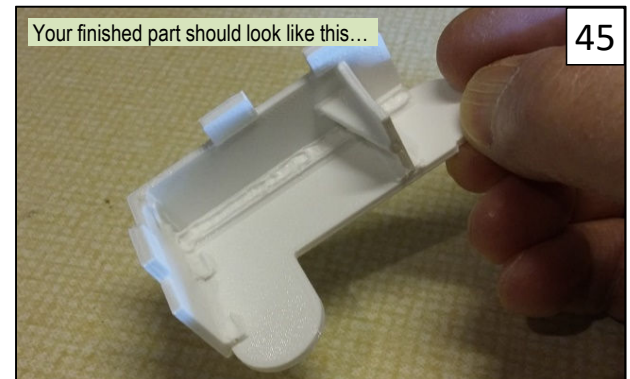
43

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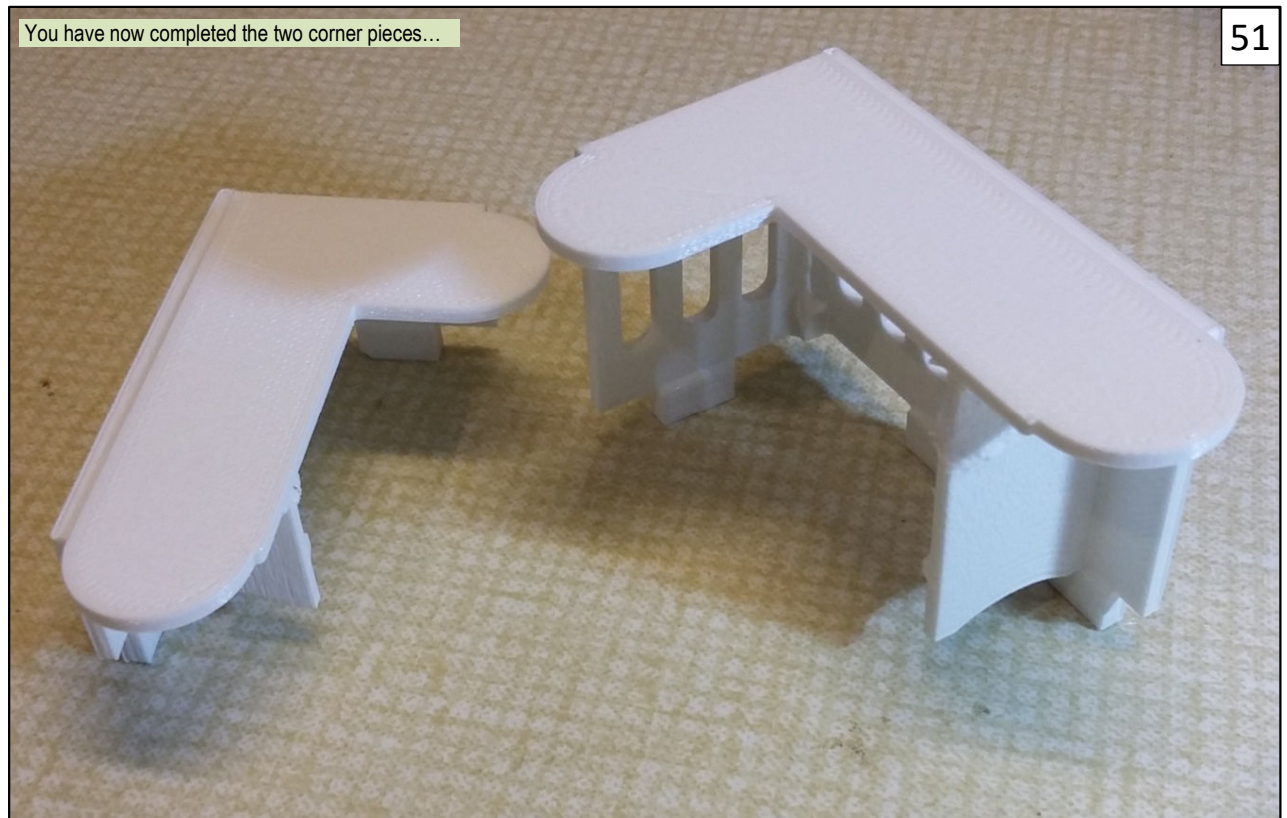
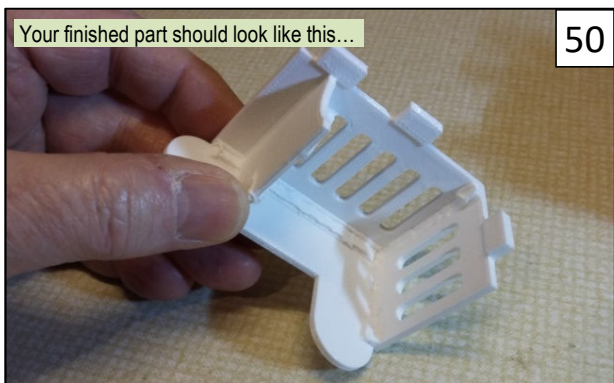
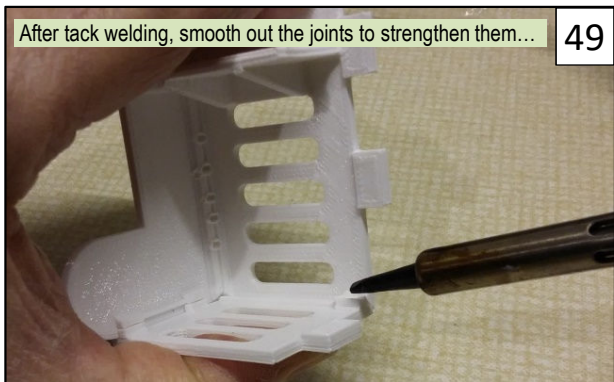
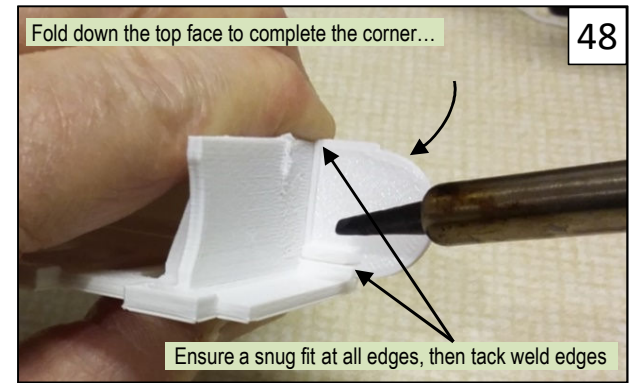
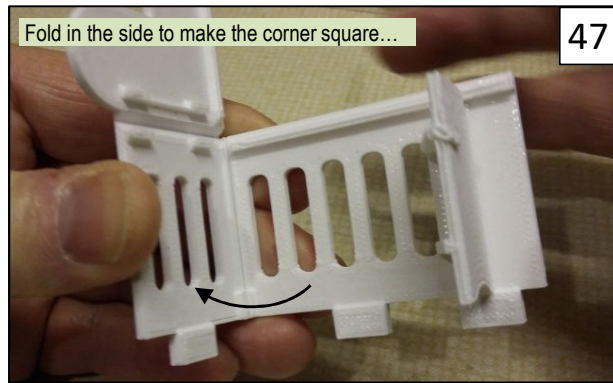
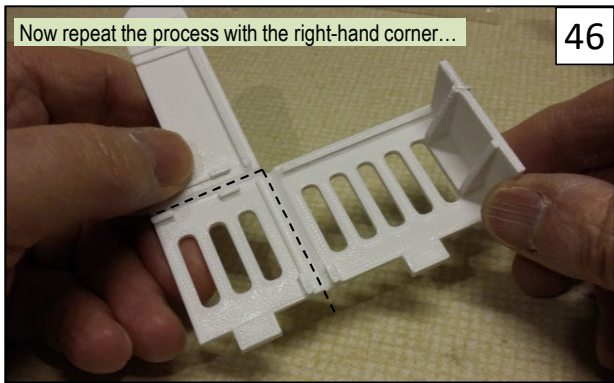


44

Your finished part should look like this...

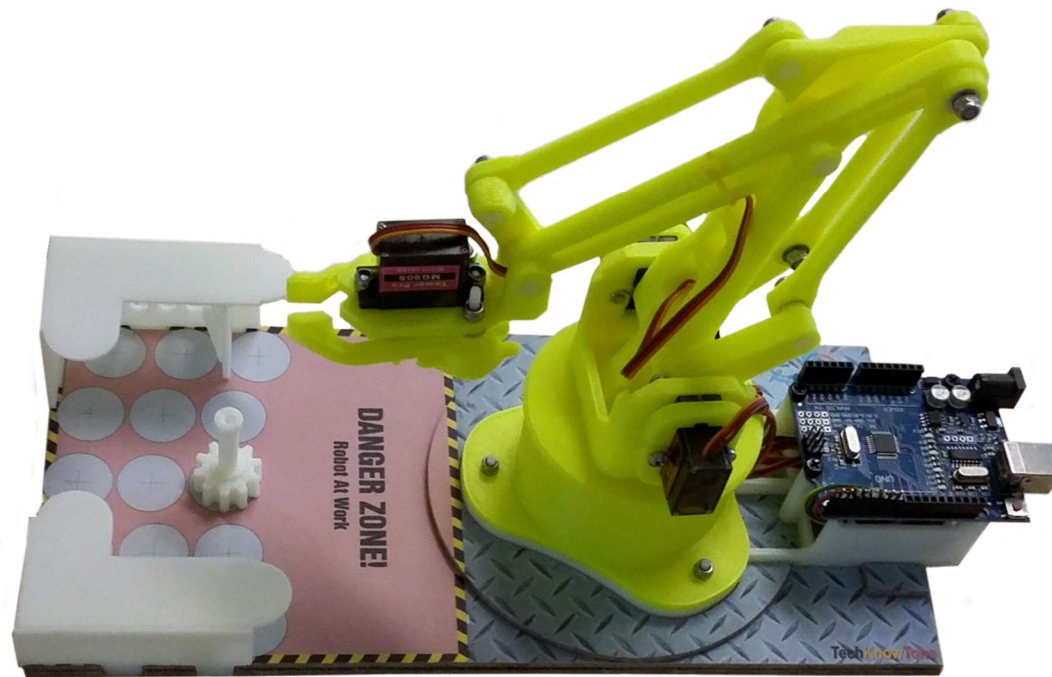


45



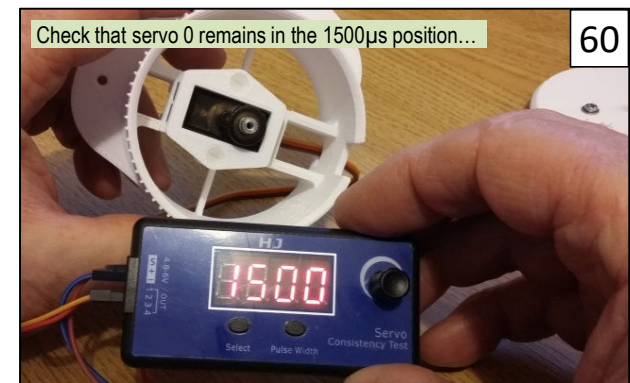
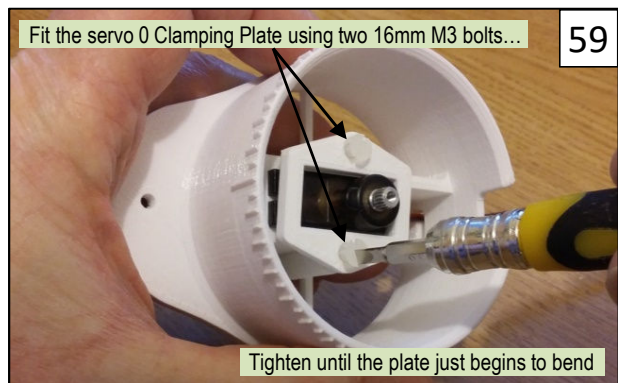
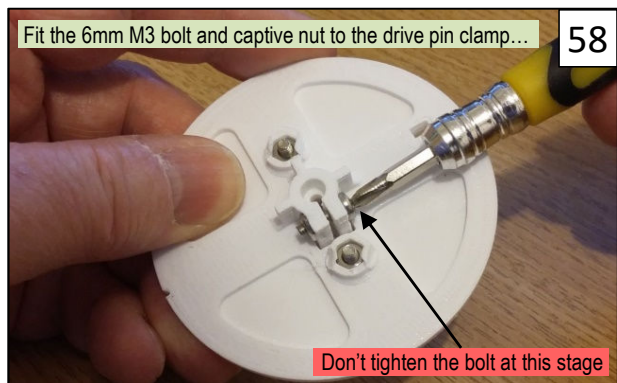
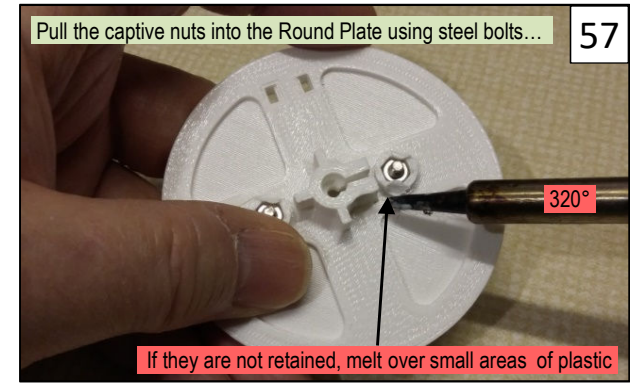
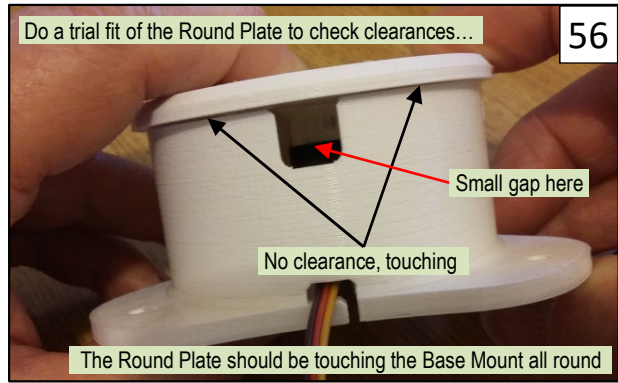
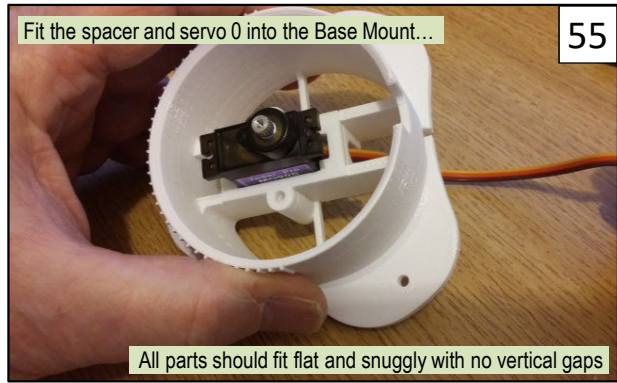
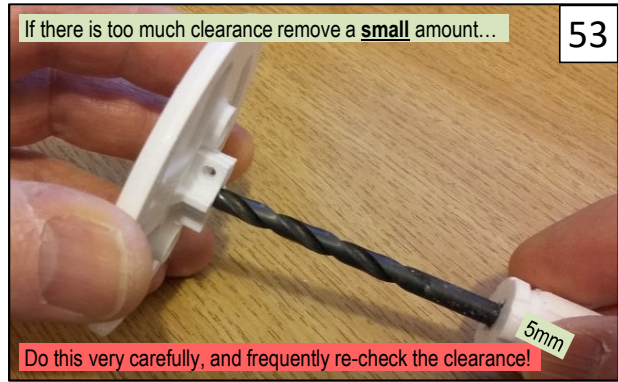
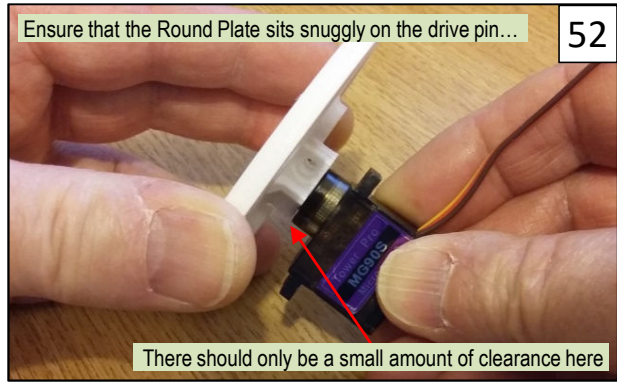
# Reach Robot

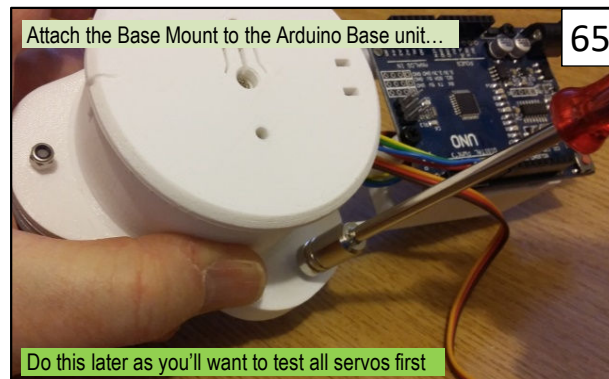
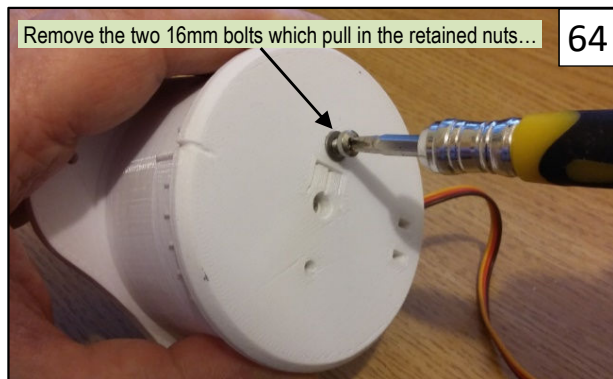
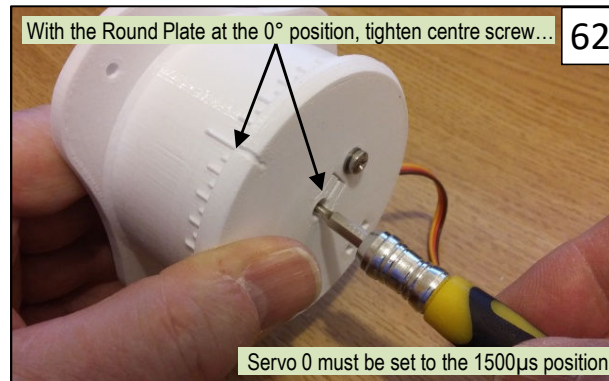
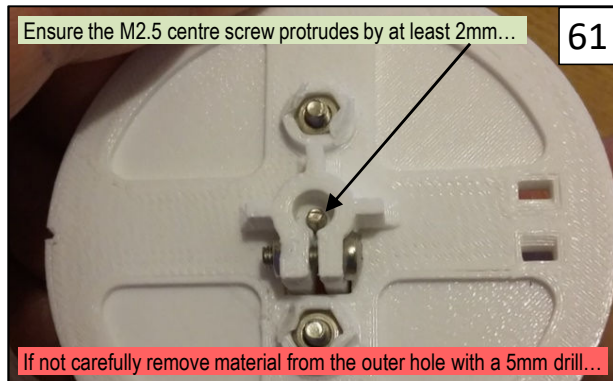
## Attaching Servos



# Round Plate 01.stl Assembly Method

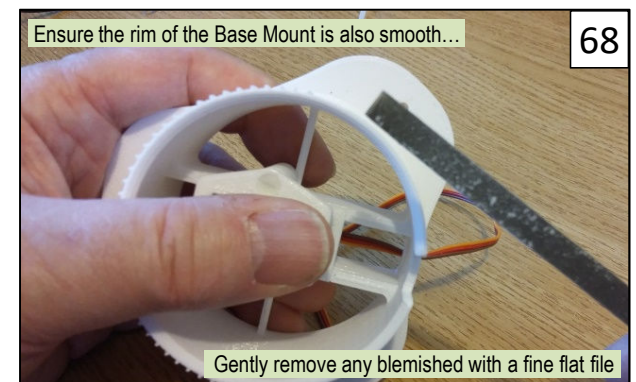
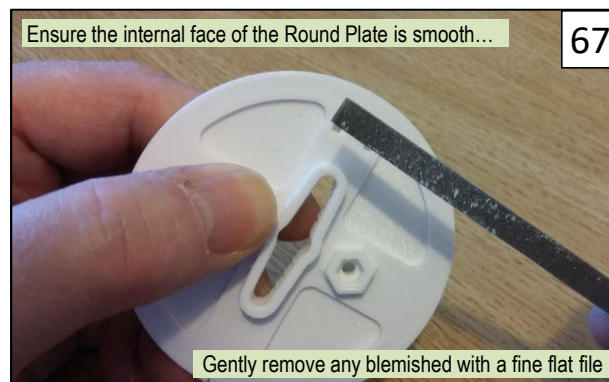
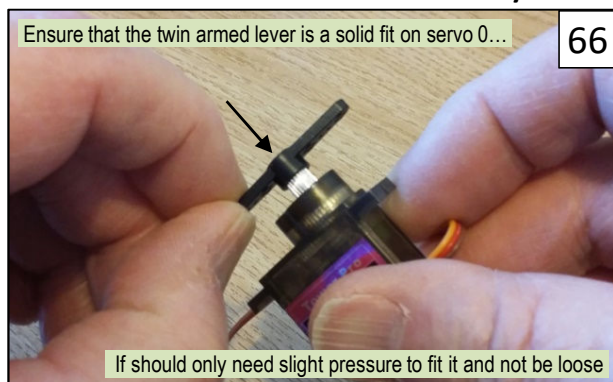
For Round Plate 02.stl go to the next page

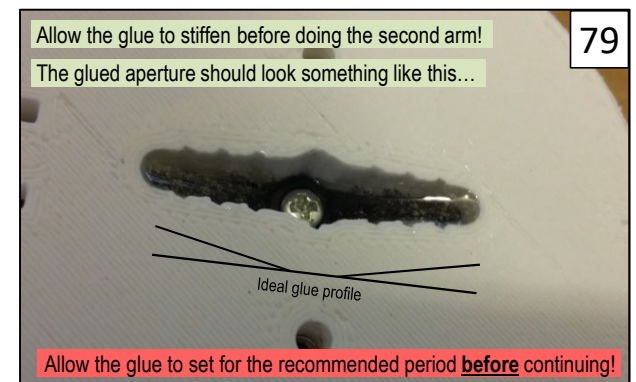
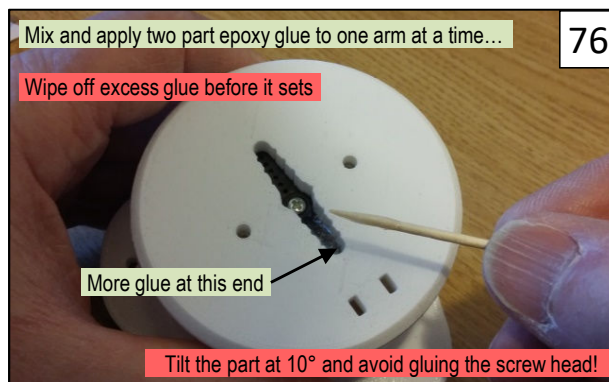
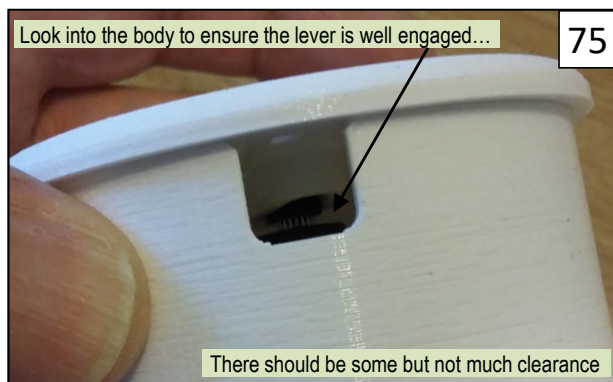
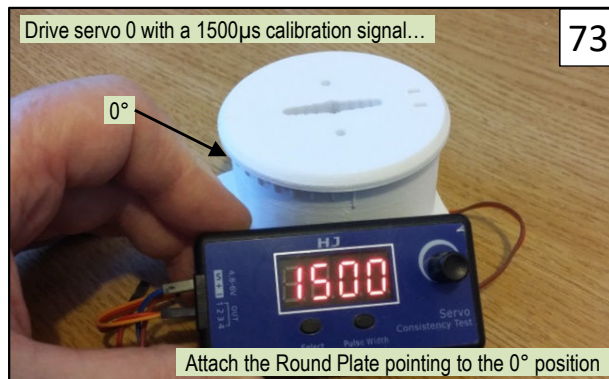
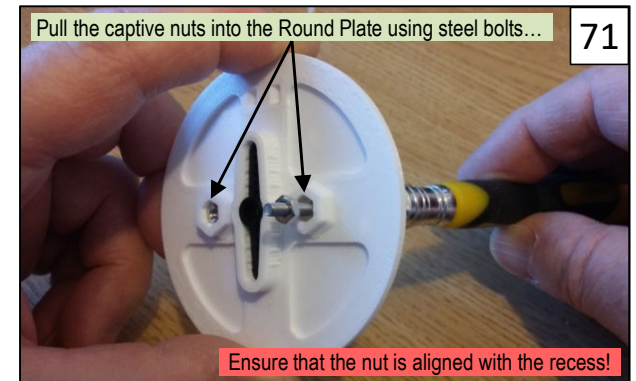
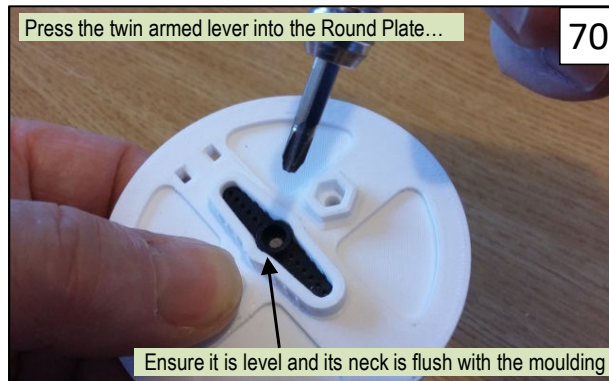
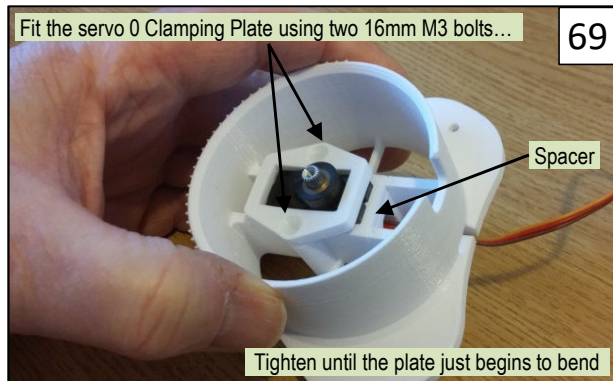


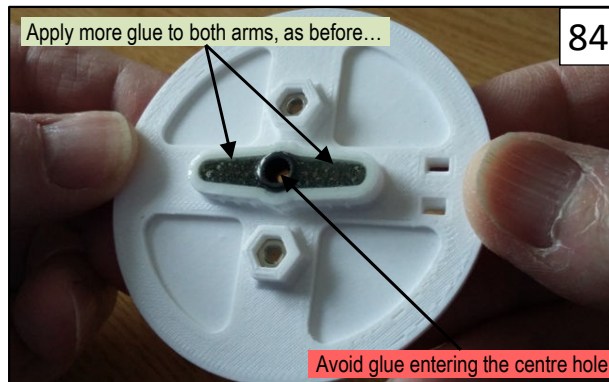
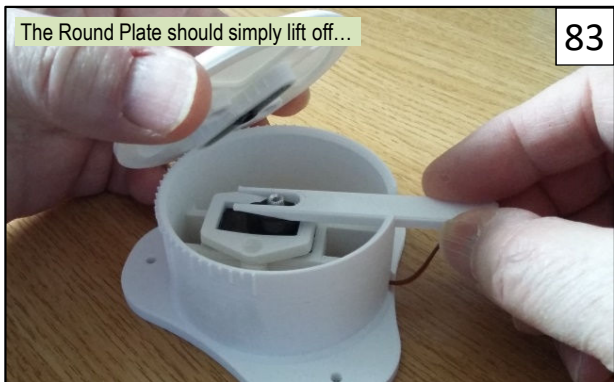
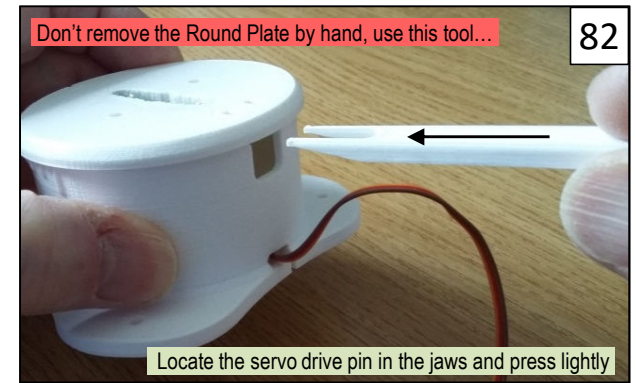
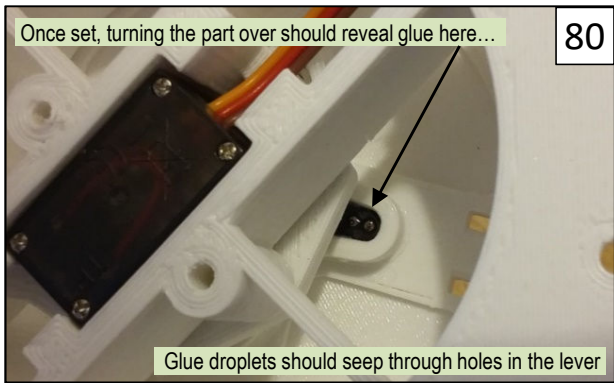


As this plate design proved to be ineffective with low quality servos, which produce high levels of vibration, Round Plate 02.stl was designed as an alternative solution. Both models and methods are included.

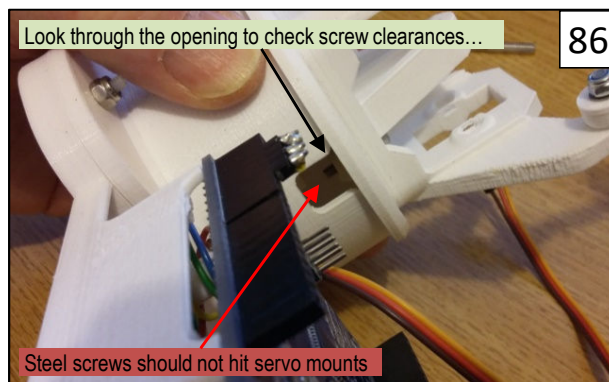
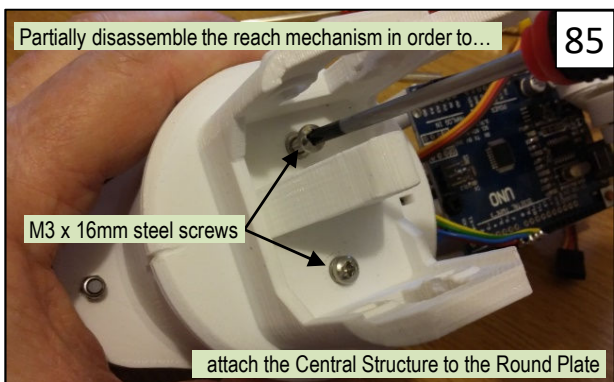
## Round Plate 02.stl Assembly Method

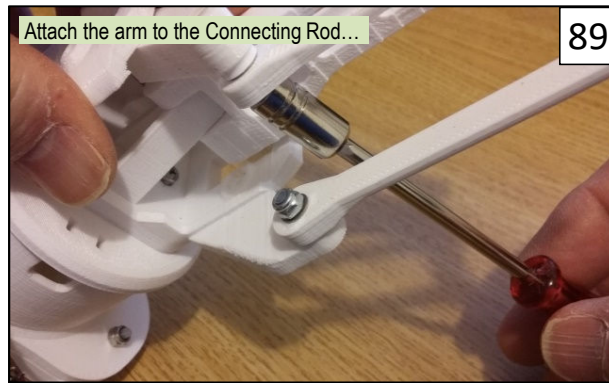
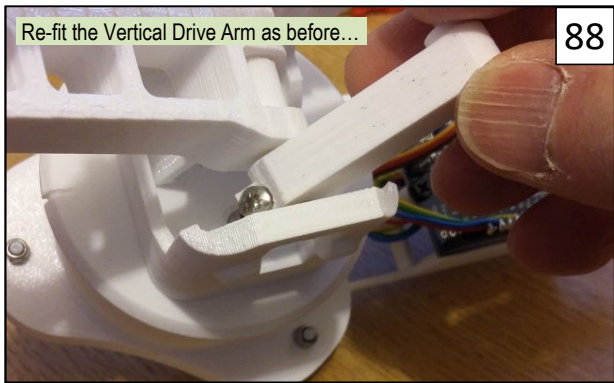




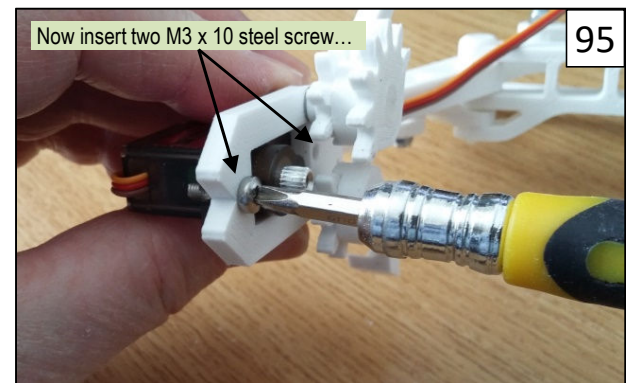
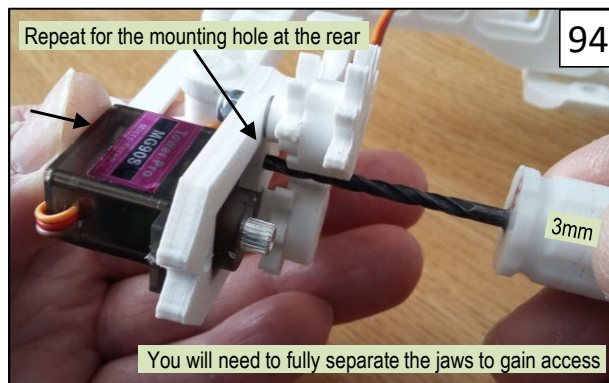
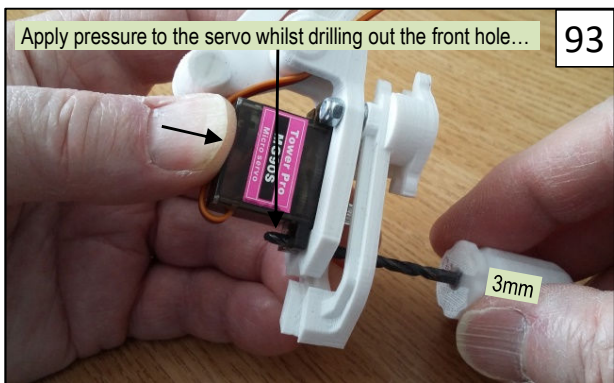


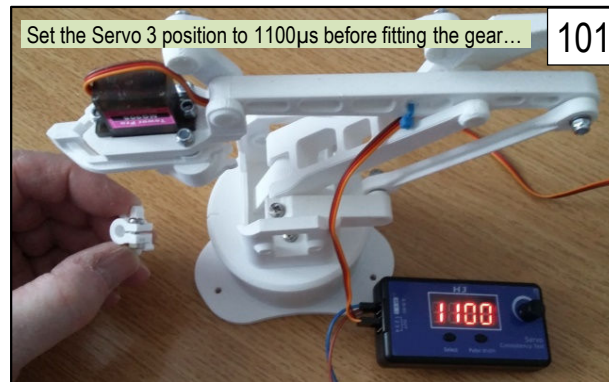
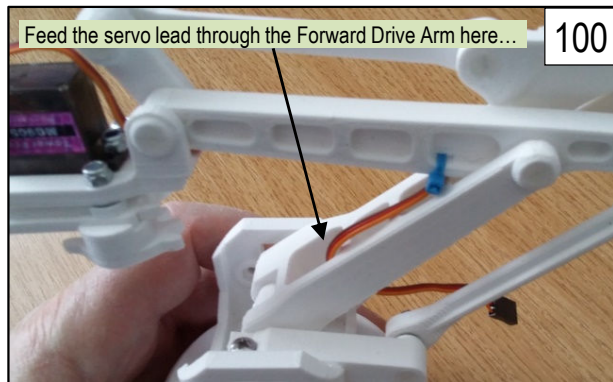
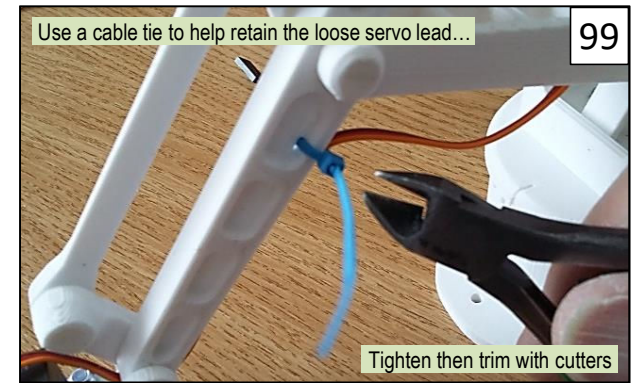
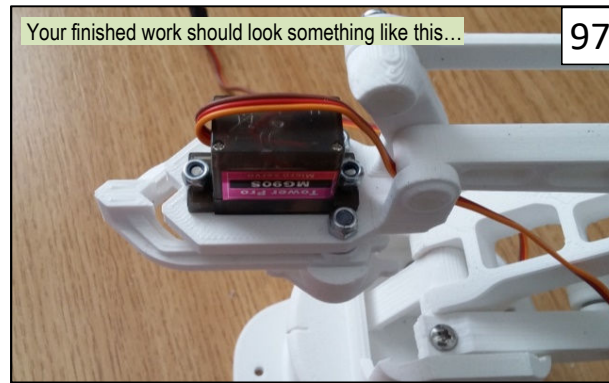
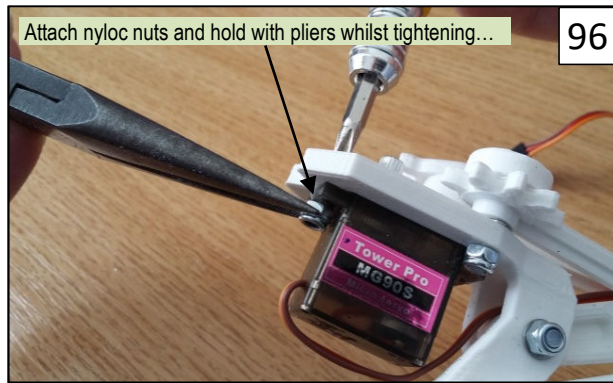
The remaining assembly process continues from here.





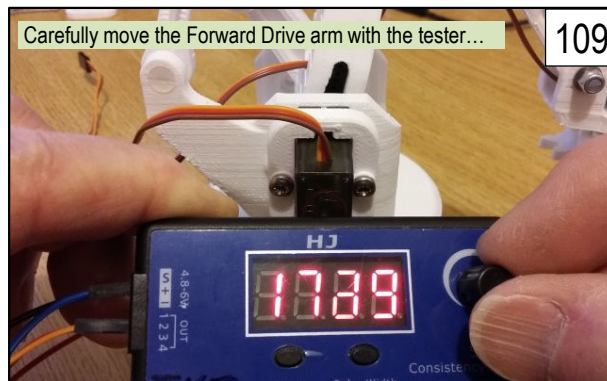
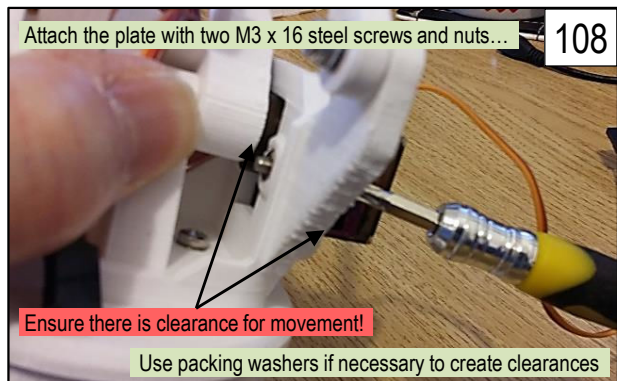
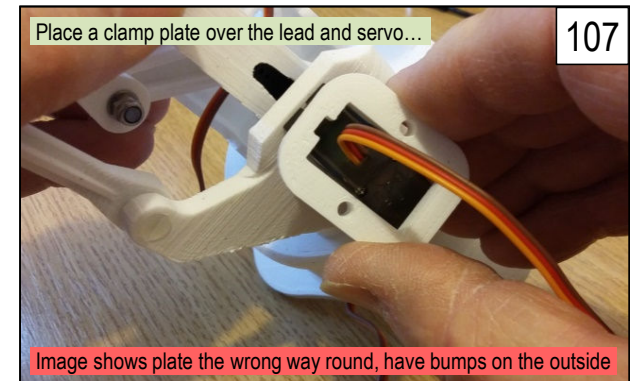
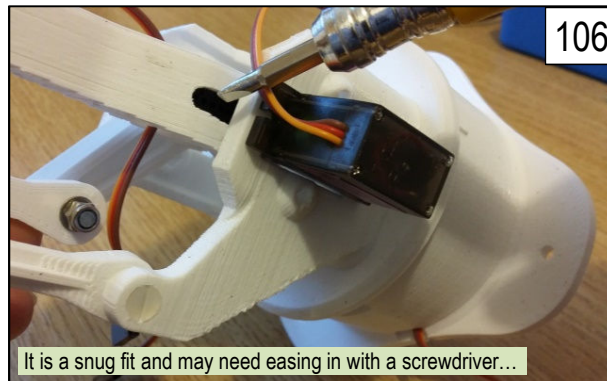
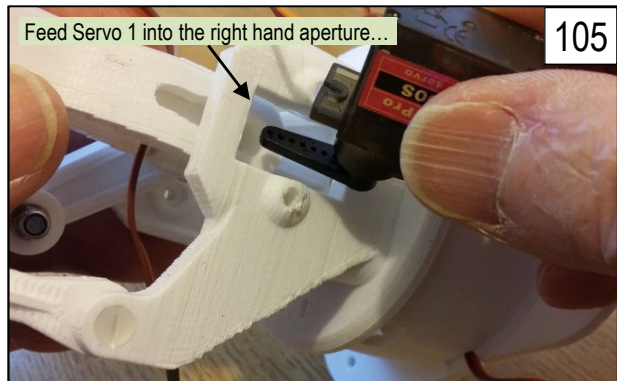
We will now fit the Claw Support, Servo 3.





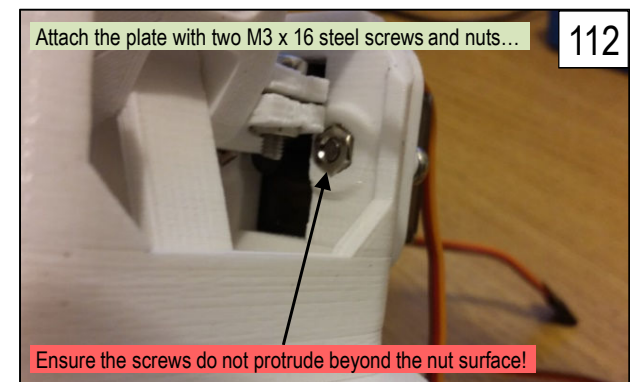
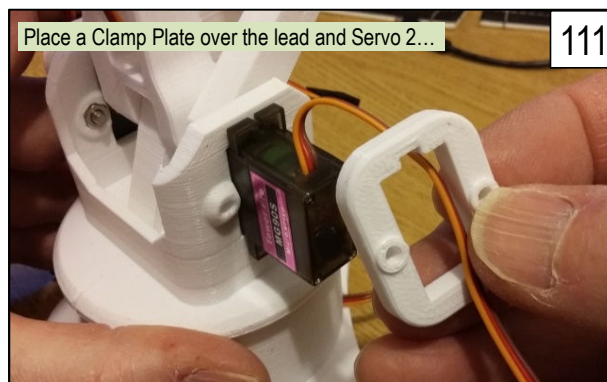
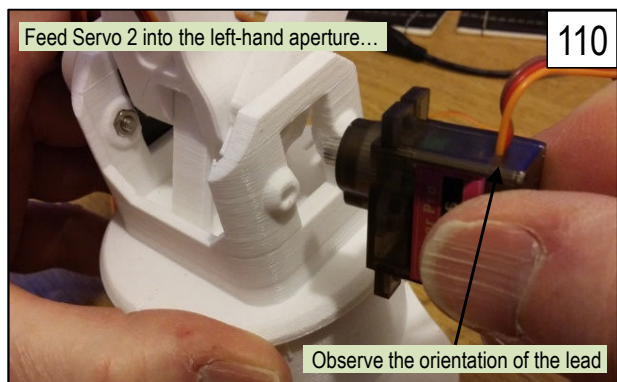
We will now fit the Forward Drive Arm, Servo 1.

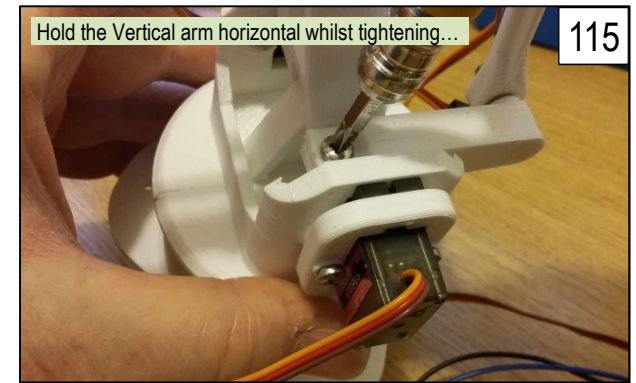
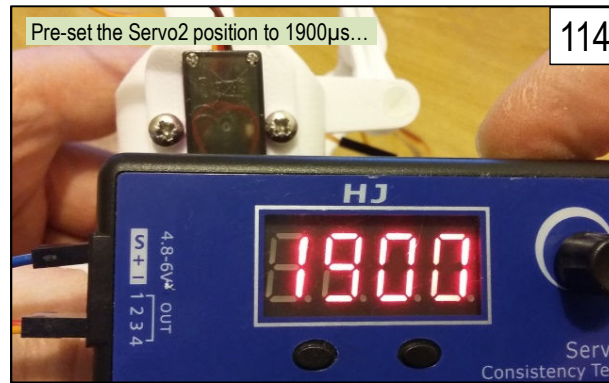
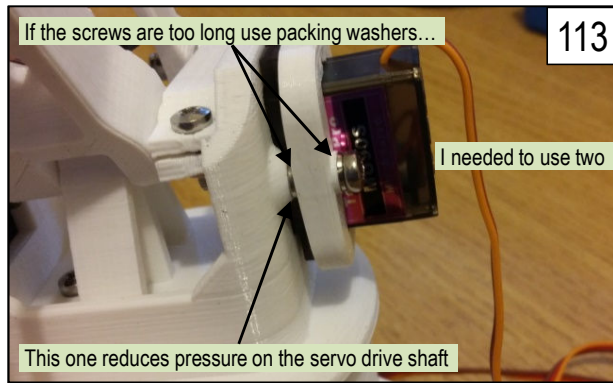




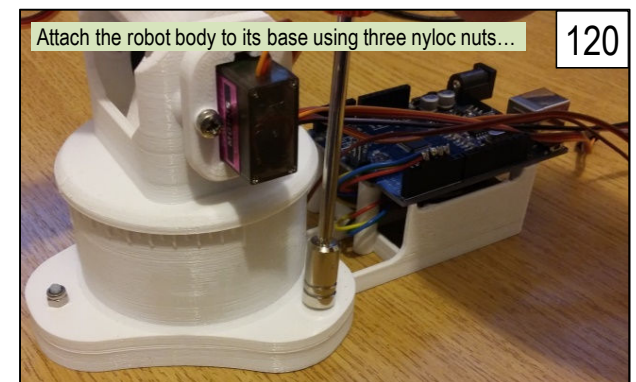
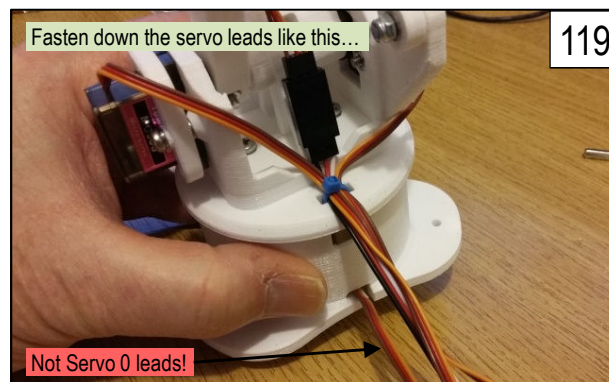
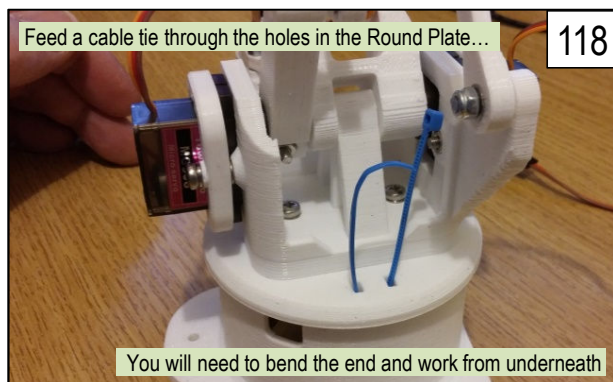
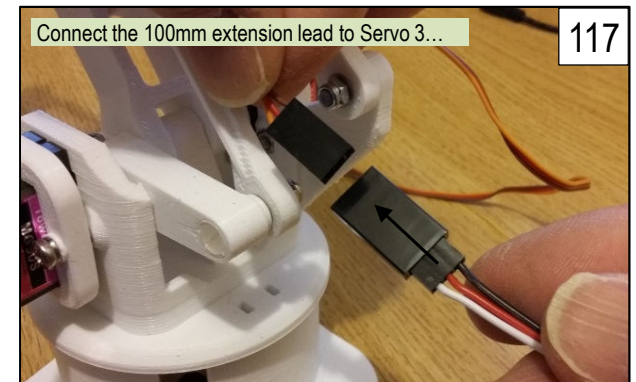
We will now fit the Vertical Drive Arm, Servo 2.

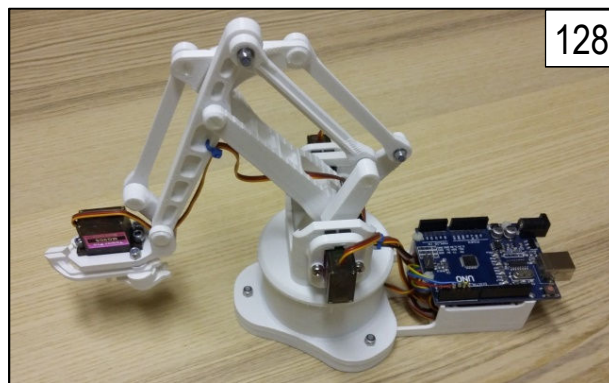
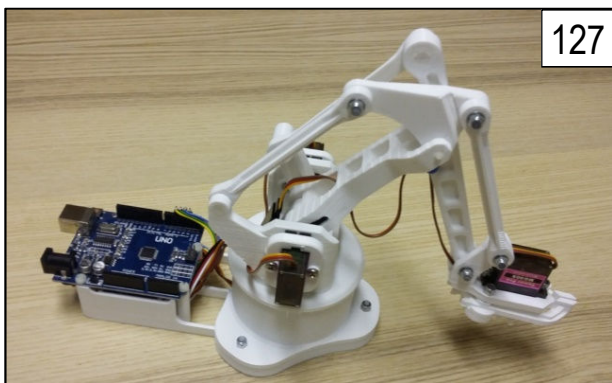
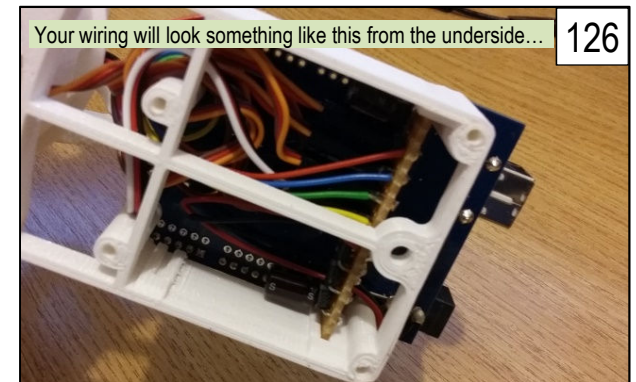
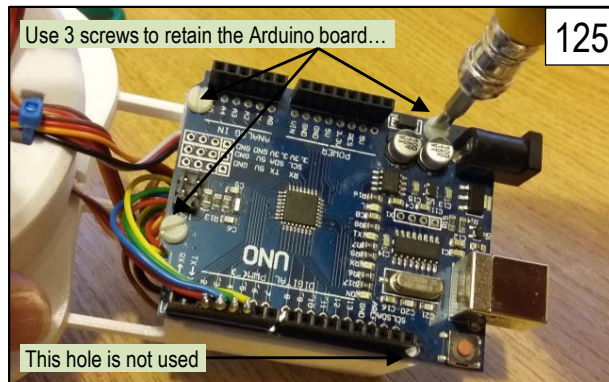
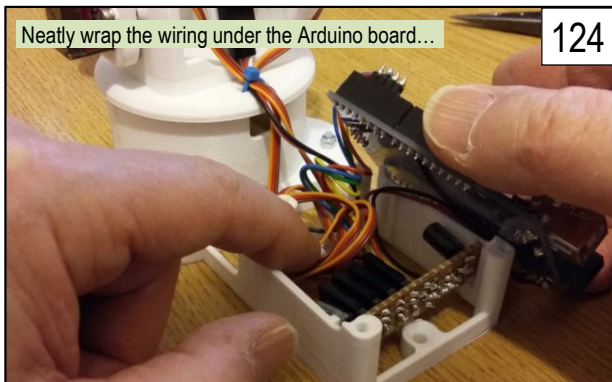
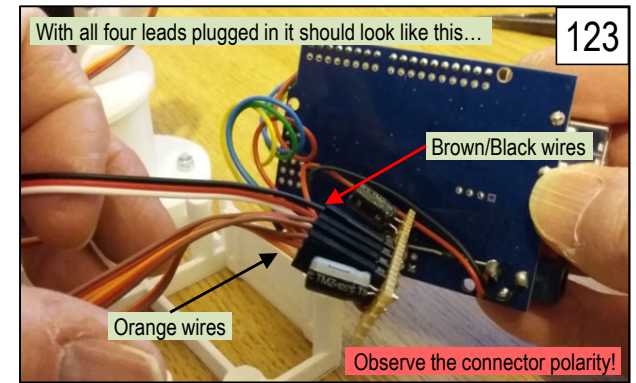
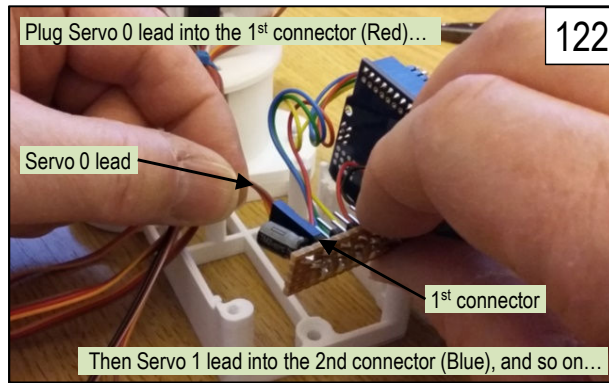
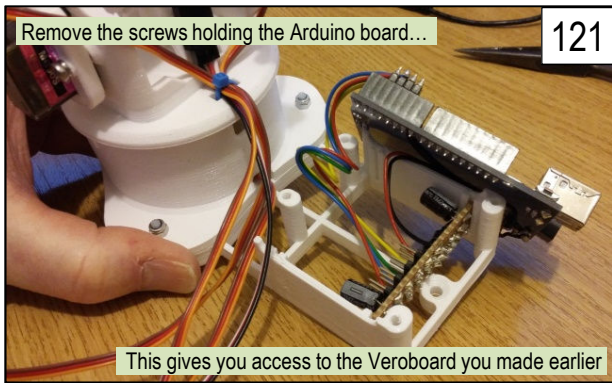
If you elect to use the glued servo lever mounting method with Vertical Drive Arm 02.stl you will need to attach this arm before mounting the servo. See separate calibration instructions.





Now for the final connections to the Arduino Veroboard.





You are now ready to calibration your robot using Arduino code. Well done!