

RBE 522: Continuum Robotics Lab Robot Assembly Guide

Parts:

3x Dynamixel XL330-M288-T

1x OpenRB-150

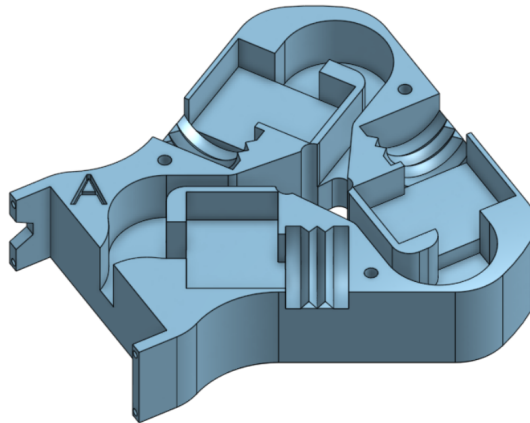
1m Braided Fishing Line, cut into **3** equal parts

9x M3 Threaded Inserts

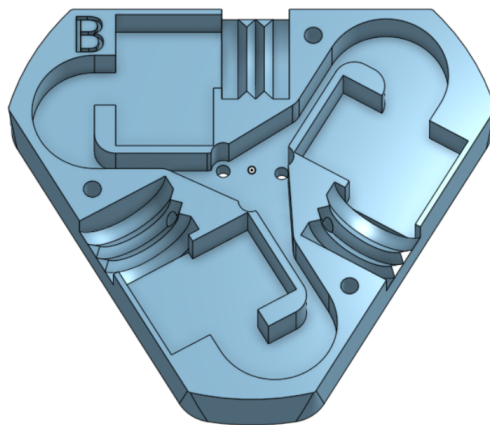
9x M3 Bolts

Print each of the following parts:

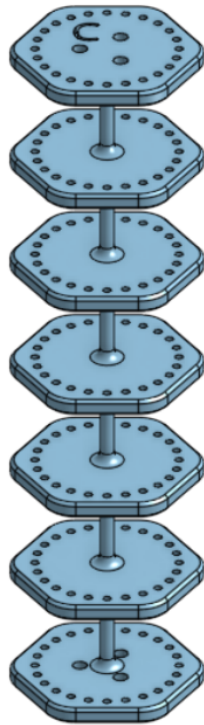
1x Part A:



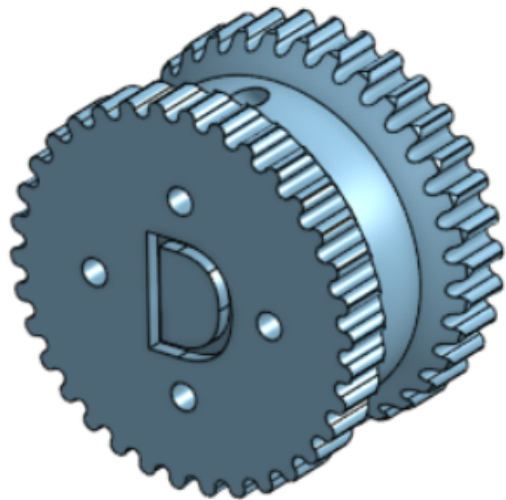
1x Part B:



1x Part C:



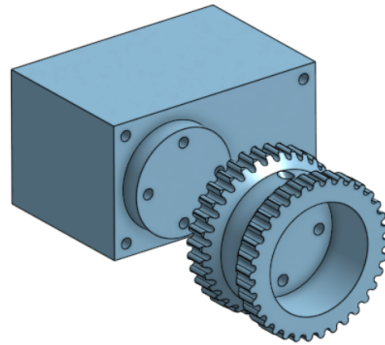
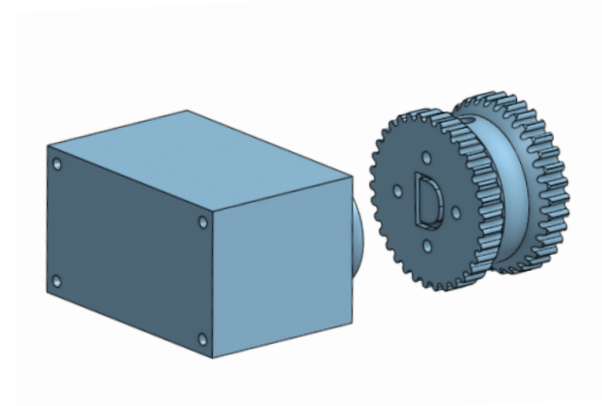
3x Part D:



Step 0:

Using a soldering iron, heat up each of the threaded inserts and insert them into each of the holes marked with a pentagon (6x on)

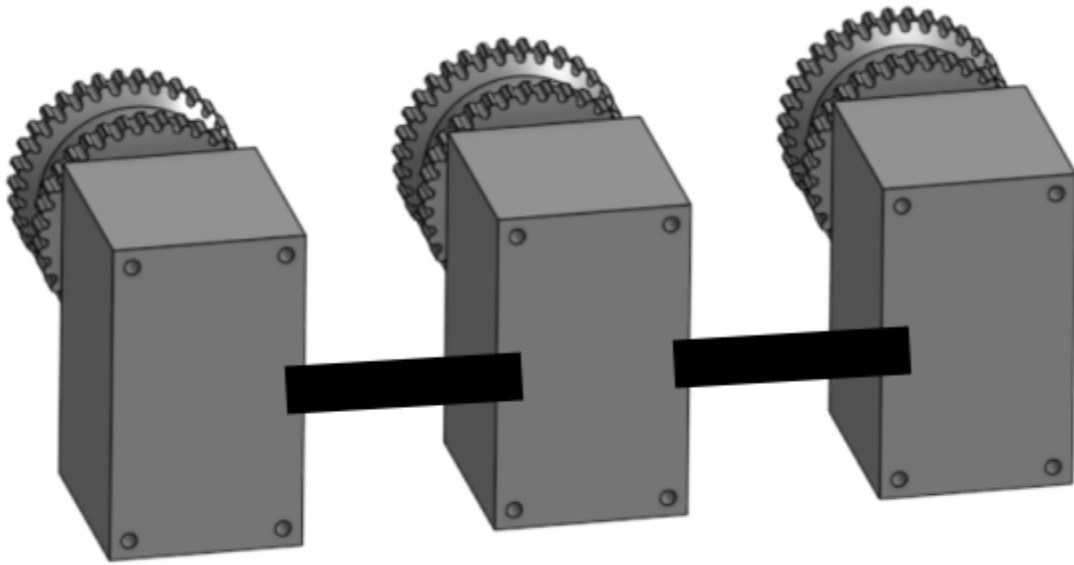
Step 1:



Attach one **Part D** to the mounting horn of each Dynamixel motor with the D facing the motor, with one of the provided bolts in each of the holes.

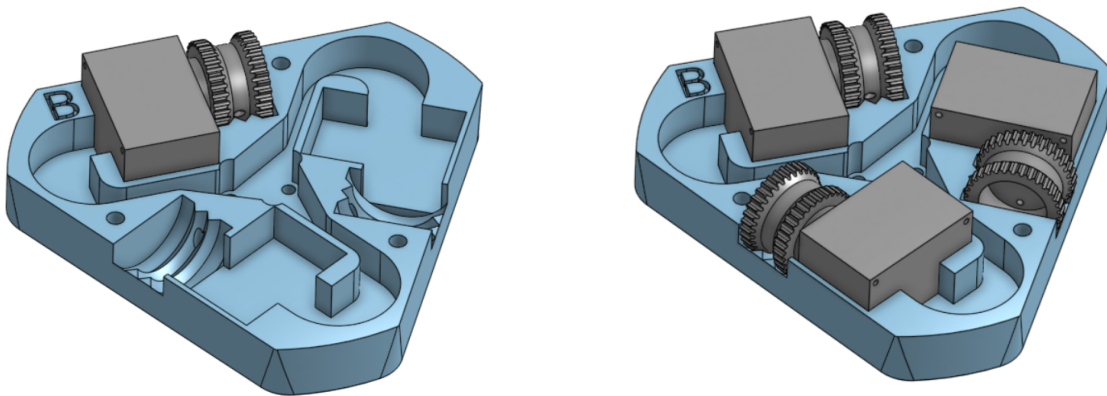
Leave one of the bolts loose enough to have space between the face of the spool and the head of the bolt

Step 2:



Connect the three Dynamixels in series with the provided wires

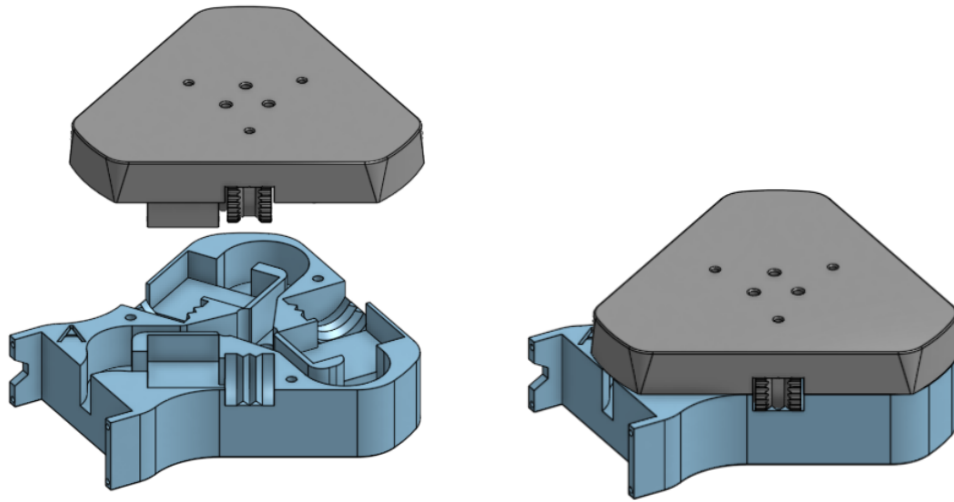
Step 3:



Place each of the motors into one of the spaces in **Part B** (this should be a friction fit)

Step 4:

Step 5:



Place the **Part B** assembly into **Part A**, with the Dynamixel that is connected to both of the others in the farthest position from the “A”

Notes:

The manual for the OpenRB-150 can be found on the ROBOTIS website:
<https://www.robotis.us/openrb-150/>