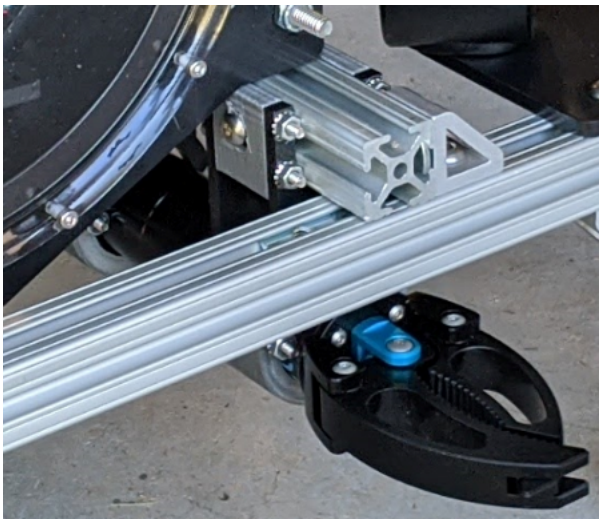
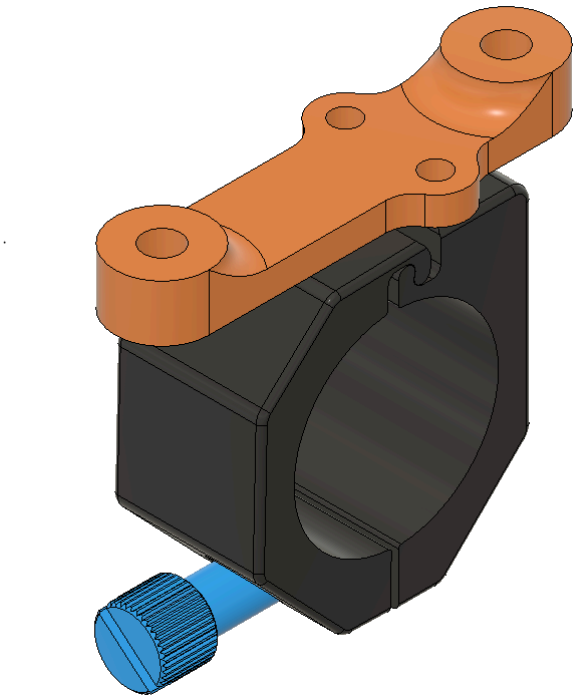
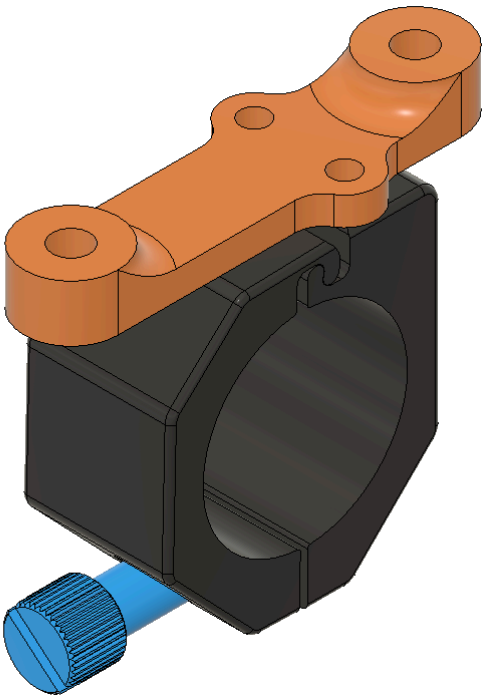
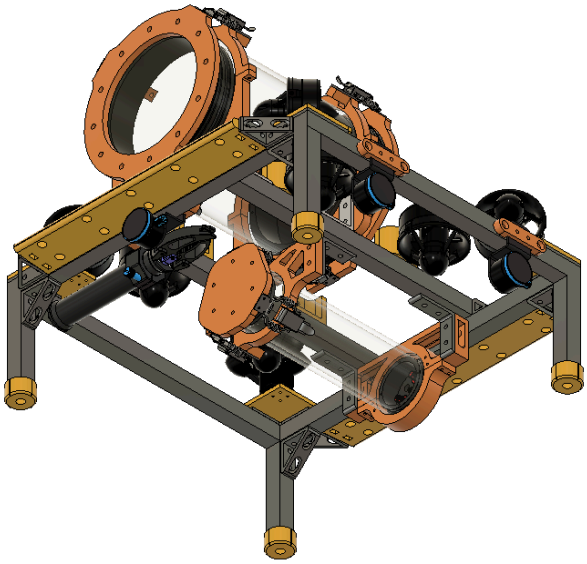
Gripper Holder Evolution

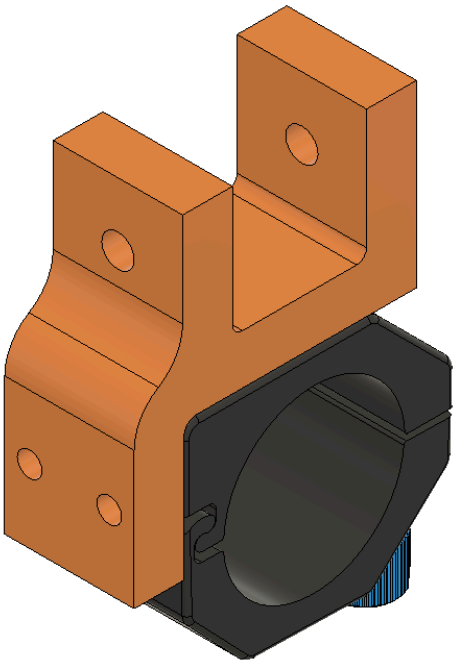
Lessons learned	
	One thing about the final iteration of this design was that the 3d printed pieces (additively manufactured) did not have enough tolerance. This meant that the piece was difficult to mount and even more difficult to work with. In the future, we would add more tolerance to 3d printed parts. Pictured left is the gripper mount attached onto the 80/20 lengthwise structural bar. We can see the post processing required to fit the component onto the part. The hole was distorted into an oval to allow for the part even to fit over the bar.
	Keep it simple. To the left we attempted to adapt the newton subsea gripper mount to the 80/20 extrusion. However this would compromise the strength of the adapter as it consisted of both injection molded components (the stock gripper clamp) and weaker PLA printed plastic.

Claw holders	

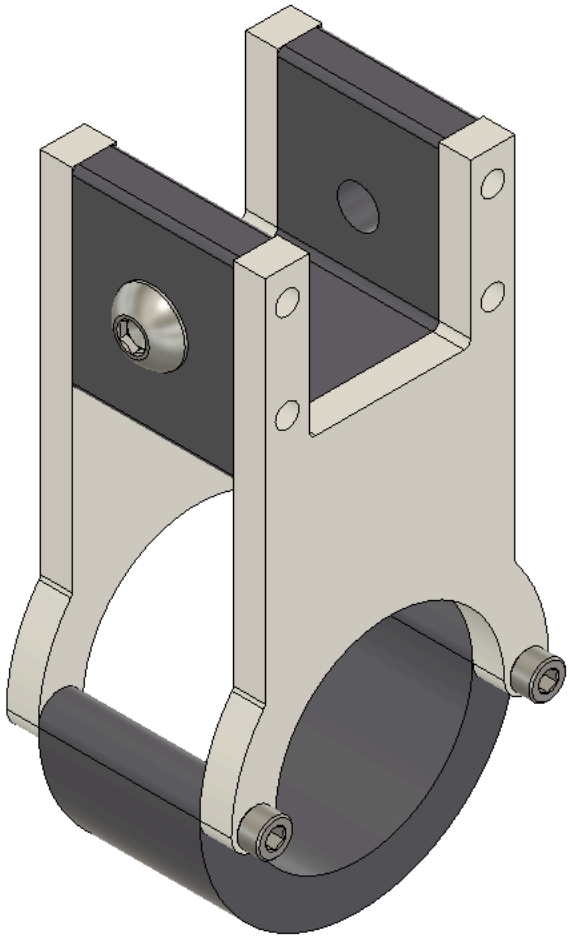


Initially tried a hybrid between the mounts. Here we have the stock newton subsea gripper from blue robotics. This adapter allowed the gripper to be mounted perpendicular to the lengthwise mounting bars.





This adapter allows the claw to be mounted parallel to the sub.This allows for the gripper to be mounted lengthwise on the robot.

	Moved to a combination of 3d printed and delrin cut parts for the holder. The gripper is mounted parallel to the lengthwise bars to manipulate objects right in front of the sub.