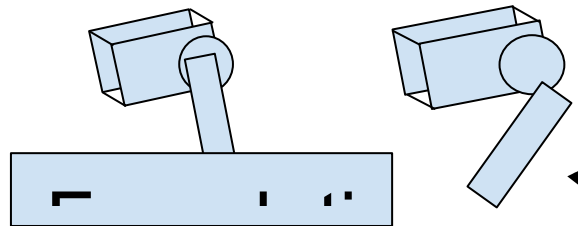


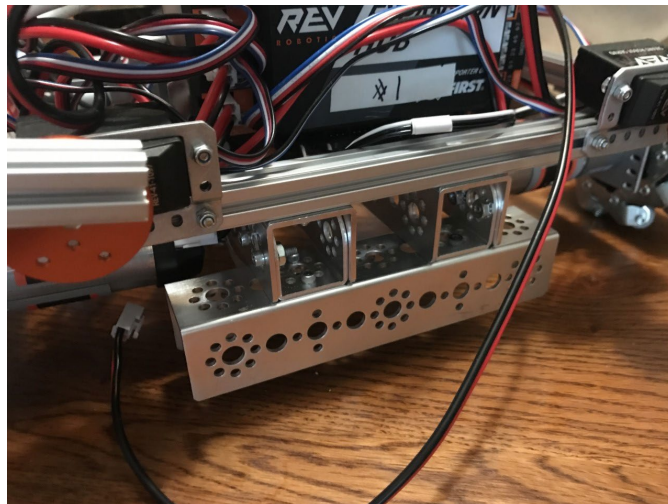
Foundation Bumper

During the endgame, we planned on putting the capstone on the stone stack, dragging the foundation, and parking in the building zone. We found that doing all of these tasks took too much time. While reviewing our route, we realized that the majority of the time was wasted on the robot driving around to grab and pull the foundation. We decided to try and see if it was possible to push the foundation instead.

We attempted to do this with our robot as it was. We were concerned that if we used the foundation grabber to push it, there would be too much weight on the servo hub and that it would break.



Then, we attempted to push from the front with the lift pressing against the foundation. What we found was that the robot would consistently drive over onto the foundation instead of pushing it. In order to fix this, we decided to add a bar to the back of the robot.



We then decided to test the bumper on the foundation. Using the bracket, we were able to push the foundation containing a whopping 36 stones. This showed that we were more than able to push the foundation during the endgame and not have to drive around the foundation in order to pull it.