Journal 6

1/16/18

Team/Group Members Involved:

- Whole Class
- Mark
- Wes
- Sohum
- Austin

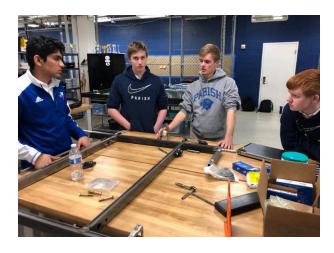
What I Did:

- Recapped where each team was in there progress
- Looked at welded base frame
- Discovered problem with bearings
- Discovered possible problem with mounting axles

What I Learned(Implications Of Work):

Today we began class by reviewing where each group was in terms of progress. We also discussed how we could get better grades on our journals. After that we split up into our groups and began to work. Over the weekend, while I was out of town, other members of the chassis team welded the basic frame together. After pulling them out, we noticed that the bearings appear to be possibly damaged since for some reason they are at an angle. We discussed possible ways to fix this such as putting it in a clamp to press it together. Another issues is that installation might be difficult. Since we put on the pieces to mount the steering on it might be difficult to put the axle on and the bearings. We think that we have found a solution though.





1/17/18

Team/Group Members Involved:

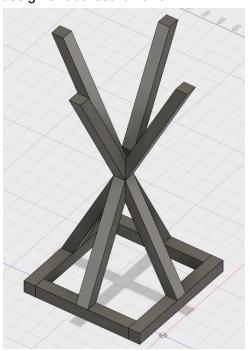
None

What I Did:

• Worked on CAD for welding project

What I Learned(Implications Of Work):

Today I mostly just worked on my welding project in CAD. Since I was having trouble getting the correct measurements for several of the legs of my stool, I had to ask Mr. Cribbs for help. He was able to give me a trick to help me get measurements more easily and accurately. After this I was able to quickly get the main part of the stool out of the way, making it so that I only have to design a foot rest for it now.



1/18/19

<u>Team/Group Members Involved:</u>

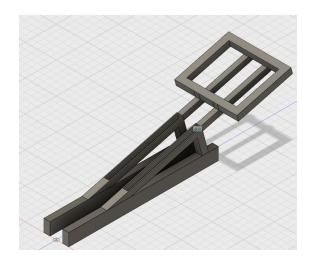
- Austin
- Mark
- Wes

What I Did:

- Looked at Austin's possible seat mount design in CAD
- Worked with Austin to come up with a more efficient and stronger seat mount design
- Researched possible necessary materials to make seat mount modifications

What I Learned(Implications Of Work):

Today in class me and Austin mostly worked on how we would modify the seats on the 2017 rover to make it more efficient. He showed me a design that he had be working on in CAD but we ended up coming to the conclusion that it would be more effective if we only modified the mounting bracket. The changes we are making would allow the seat to be more adjustable, while at the same time being stronger than they were before. Instead of making the mount out of mostly aluminum, we will most likely use steel since it is stronger and more durable and we can weld it to the frame. To get adjustability we will weld a steel channel lock to the frame with holes for screws in the side. The seat will be mounted on a solid piece of aluminum that also had holes for screws. The piece of aluminum will be able to slide up and down the channel lock, letting us move the seat forwards or backwards. The only thing that we are currently having trouble finding is a steel channel lock of the right dimensions.



1/19/19

Team/Group Members Involved:

None

What I Did:

- Worked on journal 6
- Worked on welding project

What I Learned(Implications Of Work):

Today I worked on getting ahead on my journal 6 so that I won't have to worry about it later. I also worked on my CAD design for my welding project. And for the top design that will be etched in wood for the seat.

40	Cut Frame Pieces	01/03/18	01/11/18	Frame Team	9d	In progress
41	Assemble and Weld Frame	01/09/18	01/18/18	Frame Team	10d	In progress
42	Prepare turning down measurements	01/13/18	01/18/18	Sohum Kulkarni	6d	In progress
43	Prepare waterjet cutting drawings	01/16/18	01/19/18	Sohum Kulkarni	4d	To Do
44	Attach Drivetrain Components to Frame	01/12/18	01/26/18	Sohum Kulkarni, Ma	15d	To Do

Frame				
Steel	Rectangular tube 2x1x.083	A500/A513	Metal Supermarl	180
Steel	Square Tube 1x1x.083	A500/A513	Metal Supermarl	240
Aluminum	Flat Bar 1x6	6061T6	Metal Supermarl	8
Keyed Rotary St 1045 Carbon Steel, 3/4 diameter, 48" Long		1045	McMaster-Carr	1
Keyed Rotary	St 1045 Carbon Steel, 5/8 Diameter, 24" long	1045	McMaster-Carr	1