

3S Trailer Suspension

Meeting # 1

Start Date & Time: Wednesday, 6/17/2020, 12:00pm

Members Present: Robert, Anson, Kirk, Caitlin

End Time: 1:15pm

Last Meeting:

- N/A

Today's Objectives:

- Introduce ourselves to our teammates
- Decide on a team name
- Talk/ask questions to our instructors and mentors
- Work on Team Contract

Notes:

- Max gave his intro
 - Ask him if we need anything made in the shop
 - 3D print, etc.
- Swenson
 - Air suspension to spring suspension?
 - Shocks and springs for different weight classes
 - Weld on version for a pre-existing trailer
 - Take It to the next level!
 - Drawings for people that could build this on a new trailer
 - How can we optimize this and streamline this for production while maintaining the general requirements?
 - How can we scale up the design to handle more capacity?
 - As weight goes up, we will need Bigger Plates and bolts, bigger axle, ect.
 - How much do we need to increase diameters?
 - We need to Select the spring for the correct reaction that we want - How do we do that?
 - Big picture - actively shopping around for a manufacturer
- How can we organize ourselves?
 - Team leader- Caitlin - helps with all aspects of projects

- Solid works - Kirk/rob
- Calculations/sizing - Kirk/rob/Anson/Caitlin
- One fabricating -
- One testing on prototype - Anson
- Things we need to consider:
 - Moving previous Solid works into our group folder
 - Pick bearings for different weight loads and what do we need for our small prototype
 - Load and lifetime of bearings?
 - Can we build a small house on it?
 - Plasma cutter for functional little model
 - Restraints for little bearings - sizing to models - BBs?
 - All trailers are all different in width and length
 - Have a max/min width and length so that it is mounted on certain trailers
 - Plan for 4ftX8ft trailer
 - Fabricate small scale model - 1X2ft - hold in hands - JUST 1 Small model
 - We want an Axle that pivots - spring that does its function - wheels/tires from something

For Next Time:

- Fill out our own parts of the Team Contract
- Start thinking about planning our budget
- Start Creating a Schedule
- Make a template for group meetings
 - What we went over last time
 - Agenda of meeting
 - Action items
 - Tasks and who is going them
 - What we want to do next

Comments/Concerns/Reflections from Today:

- N/A

Next Meeting Time & Date: **Thursday, 6/17/2020 @ 12:00pm**