

3S Trailer Suspension

Meeting # 5

Start Date & Time: Tuesday, 6/23/2020, 12:00pm

Members Present: Caitlin, Robert, Kirk left @ 12:45pm, Anson Joined @ 12:55pm

End Time: 1:50 pm

Last Meeting:

- Had our meeting with our client
- 3 different weight suspension systems – attachable to preexisting trailer
- Production ready drawings
- 2000lb – small scale prototype
- Stick with the single axle trailer
- Our trailer can be made to be independent and dependent suspension – with the removal of a pin
- There is a 50/50 deflection in the spring and the wheel
- For other details of size of bolts/springs see last meeting
- Don't alter the design – just alter the new springs/bearings/tires
- Could we make the lever out of 1 piece of material?
- Pin on just one side?
- Aesthetic is not a concern
- Just do all the drawings and calculations with just the spring
- Wouldn't mind using a bolt kit?

Today's Objectives:

- Work on Requirement documents
- Pull up models to make sense of them
- Get excel sheet – Start making sense of new capacities
- Find a time to go out and look at the trailer

Notes:

- Worked on our Product Requirements Document
- July 6th?? - go see trailer - Monday
- In New Hampshire you need brakes on your trailer above 3000lbs
- Design for brakes?
- Electric trailer brake assembly online?

- 3500lbs 160\$
- Questions to ask Swenson
 - Do you want us to worry about a max speed limit and how we go about testing it?
 - Do you want us to go off Idaho laws or on a nationwide law? In all 50 states
 - In New Hampshire we need brakes on trailer if its above rated 3000lbs?
 - In Idaho if your trailer physically weighs more than 1500lbs you need brakes on the trailer

For Next Time:

- Scale for prototype?
- Order parts
- Start Calculations
- Email Swenson

Comments/Concerns/Reflections from Today:

- One member left early for work – They let us know beforehand

Next Meeting Time & Date: **Thursday, 6/25/2020 12:00pm**