

Northern Arizona University
Society of Automotive Engineering
2017-2018 Baja Team

Meeting Date: November 27, 2017

Start Time: 7:40 AM

Members Not Present:

Jordan Sudin

Frame

Update: Not going to use the aluminum seat
The part where you sit needs to be somewhat horizontal
Looking at 10 ply for the seat
5 ply for the seat covers

Future Tasks: Finish up the frame

Questions: N/A

Front Suspension

Update: semi- We are gona go with no parallel A-arms
Camber change through the roll is minimal
Change in bump is small
We are going with Front steer
Steering box prototype second piece has been machined
ADS not getting back
Front end tires going with 23 inch tires with 10 inch rims

Future Tasks: Start throwing lotus designs into Solidworks

Questions: Get shock parameters to the rear end lead

Rear Suspension

Update: Done with how we want the design to look
Machined aluminum lower
Aluminum knuckle and spindel
23 inch tire size and 10.5 inch rims
Trying to shoot for as much tire impact as possible
For better travel
3 in hopefully
Through gage recommended values we are looking at about 38 mph with
23in tires
Two sets of aluminum and an extra steel set

Future Tasks: Just finish the geometry
Trying to do FEA
There is a way to link Solidworks and Ansys together

Questions: N/A

Drivetrain

Update: CVT came in
Back shifter is on back order
Bought the axels
Almost done with second iteration of the gear box
Complete with roller paper bearings
Retaining rings
Actual shafts
The face width of the gear is 1.5
Casing is ¼ inch
Be on drop box soon
Chromoly
With the CVT there is no splines it is however keyed

Future Tasks: Finishing the second iteration
Putting it into Ansys
Finish drive train and mounting
Finish gear box design cover

Questions: Have a frame mock up?
How long is the engine?
Thought about CVT housing air cooled?

Team Business

