Design Review 2 Meche Stuff

Battery Segment Assembly

- New battery segment assembly
- Very crowded on top with circuitry
- English Number 6 screws for circuit boards
- SMD
- Look into conduit tubing - teflon tubing for GLV/TSV wire isolation
- Copper braided wire or cable instead of bars
- Ring terminals for bar to cable connections
- Poos find more user friendly steel that can be accessed from the outside

Side Plate Assembly

- Poss make steel and paint

Back Plate Assembly

- CANBUS and safety loop connectors go to board

Bottom Enclosure Assembly

- Make the bottom
- If we do enclosure in this way, make sure it will pass the 40, 20g test
- Underestimating weight, size, and difficulty to support enclosure
- GLV from AIRs go thru vert walls from TSV section to GLV section
- Make holes a little bigger than wires and put some grommet to protect wires

Segment Mount Assembly

- Thinking of squeezing and holding as two different functions. One part cant do both
- One a fixed side and one squeezing side or both squeezing sides when applying compression on battery cells
- Make bars cables where possible especially between segment and airs
- Clearance between segment mounting and frame/enclosure plates allow for that segment mounting to shift by that much clearance in the event of an accident
- Make the front side of the segment mounting integrated within the front of the frame
- Make ‘shoe box lid’ part to cover both segments
- OtherUL listed insulative material (thermoset) is: capton, teflon, epoxy
- MAKE SURE EVERYTHING MADE OUT OF GAROLITE IS 10 MM EXCEPT THE SEGMENT SEPARATION WHICH CAN BE 3 MM

Enclosure Assembly

- Steel not aluminum plates? Aluminum is fine

Frame Assembly

- Insert to catch to the nuts
- Threaded holes instead of nuts
- Issue is nuts falling into the inside enclosure

Other

- Need to start getting metrics for 40g/20g test
- GET ALL OLD PARTS FROM 2018 OUT OF ASSEMBLY
- Start drawing parts

- Face bottom of bars, use 1 slot for 2 terminal bolts, press fit spacer