

Battery Pack Errata

A MechE's Perspective

ME 498 | Spring 2021

Last Revision: 5/18/2020

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The Packs:

My name is Jack Mueller. I've worked on the packs since 2019. I helped create these bad boys with Tim LaGreca, he graduated in 2020 and had to abandon them when COVID hit. I was the only MechE for Battery Packs in Fall 2020 and Spring 2021.

I was team lead for Chassis last year, and I had other obligations, we didn't achieve all that we set out to do this year. We were not allowed into the labs Fall 2020, and I didn't have enough time to deliver more than the prototype that is in the lab now.

Here's the state of the Mechanical Prototype (Mechanical meaning it has no PCBs, no electrical oversight, only the bare minimum components needed to discharge safely at full power.

1. One black, flexible copper cable must still be made to connect to the far right BusBar
2. All electrical connections must be polished
3. Then conductive paste must be applied
4. Then nuts and screws must be properly torqued down

Unfortunately, that short list is what I had left to accomplish for a fully mechanical prototype.

You will most likely have issues with Inventor not opening up the battery pack assembly correctly. No worries, I'll try and get it sorted with you.

You're gonna be super confused for the first two weeks. That's perfectly fine. Shoot me an email at jmuellerj16@gmail.com or john.mueller@spts.com