

South Dakota School of Mines & Technology

Zero Emissions Snowmobile

#E27



For the researchers:

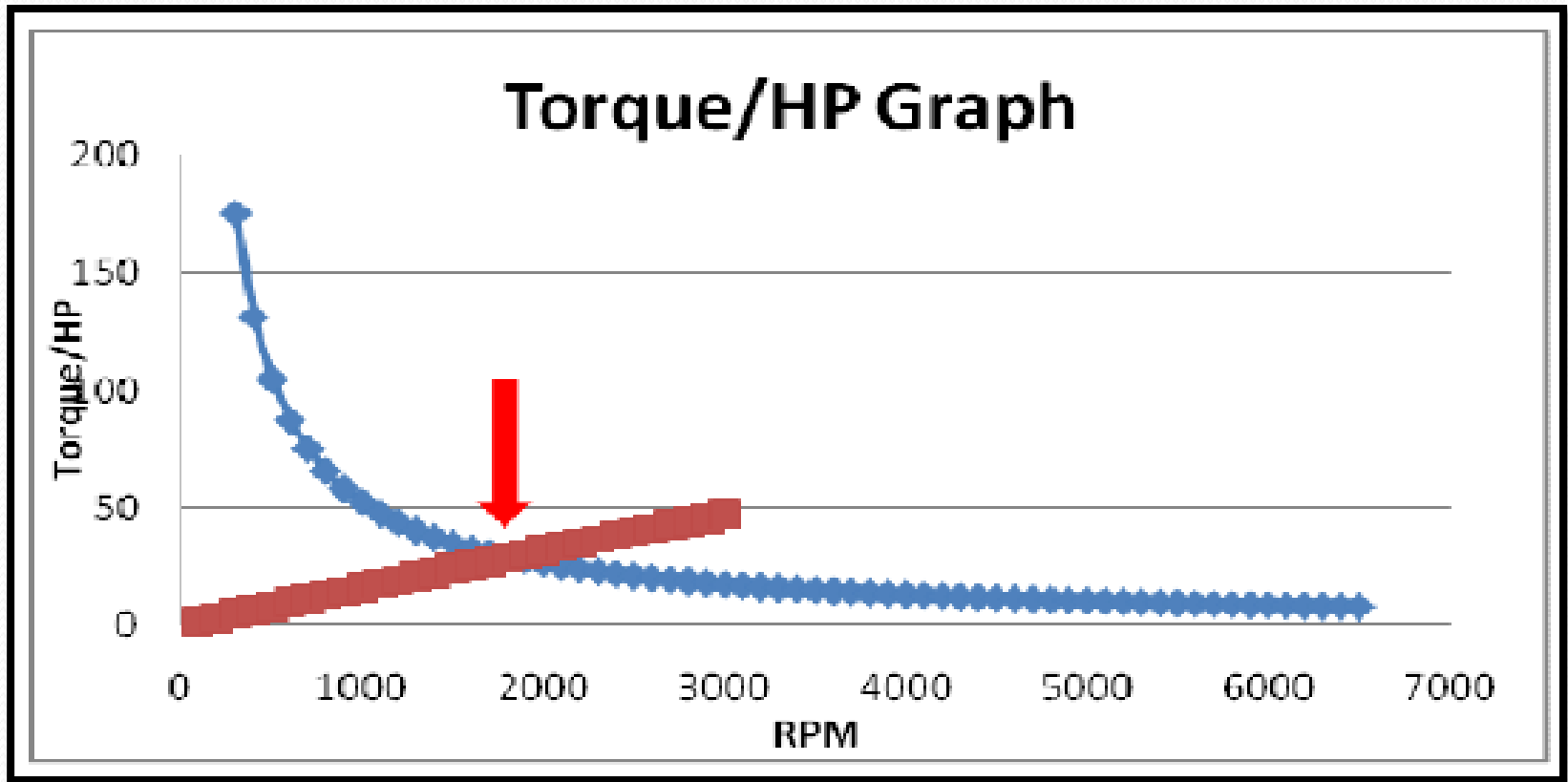


Features

- Pulling capability of more than 800lbf.
- Feels like a stock snowmobile.
- Range of up to 20 miles.
 - 8 kW-h
 - Efficient 3-Phase AC Motor, EM-CVT.



Features



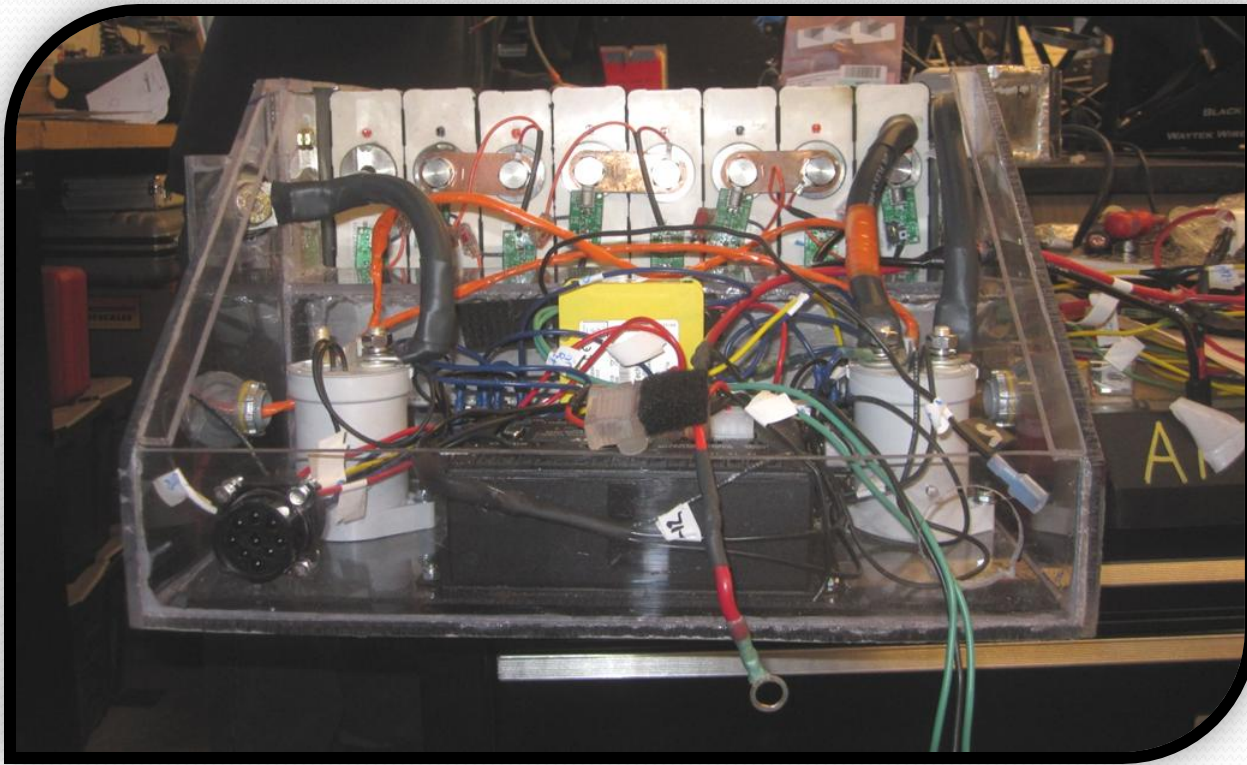
Features

- Safety Features
 - 1200 Lumen headlight has S.O.S. and Strobe features
 - Fuses protect all systems in the event of an electrical failure.
 - Tether, Kill Switch, Ground Fault, and loss of low voltage will turn off the snowmobile.

Environmental Impact

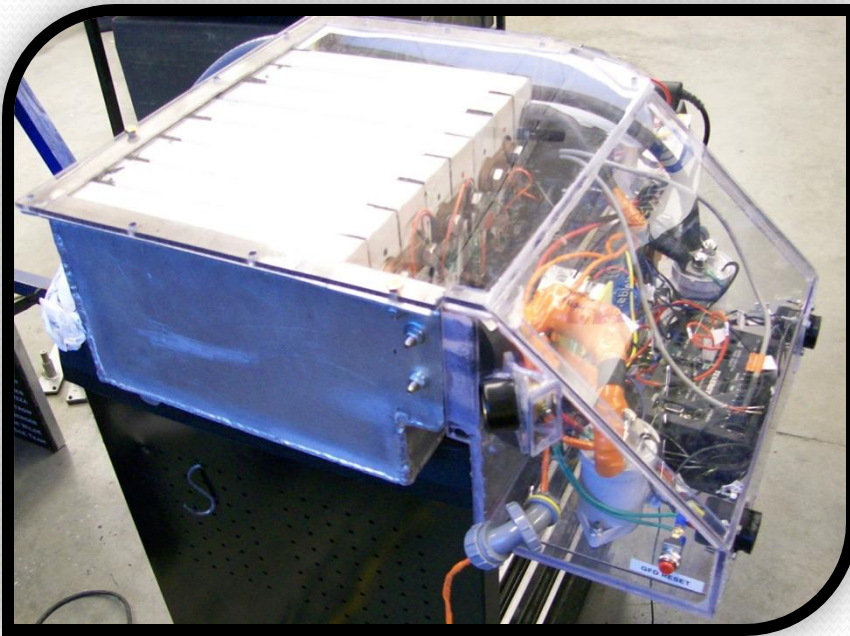
- All electric snowmobile means no pollutants.
 - LiFe-Po₄ batteries have a long life-cycles and are more stable than other battery types.
- Reused parts
- Few additional parts

What about the mechanics?

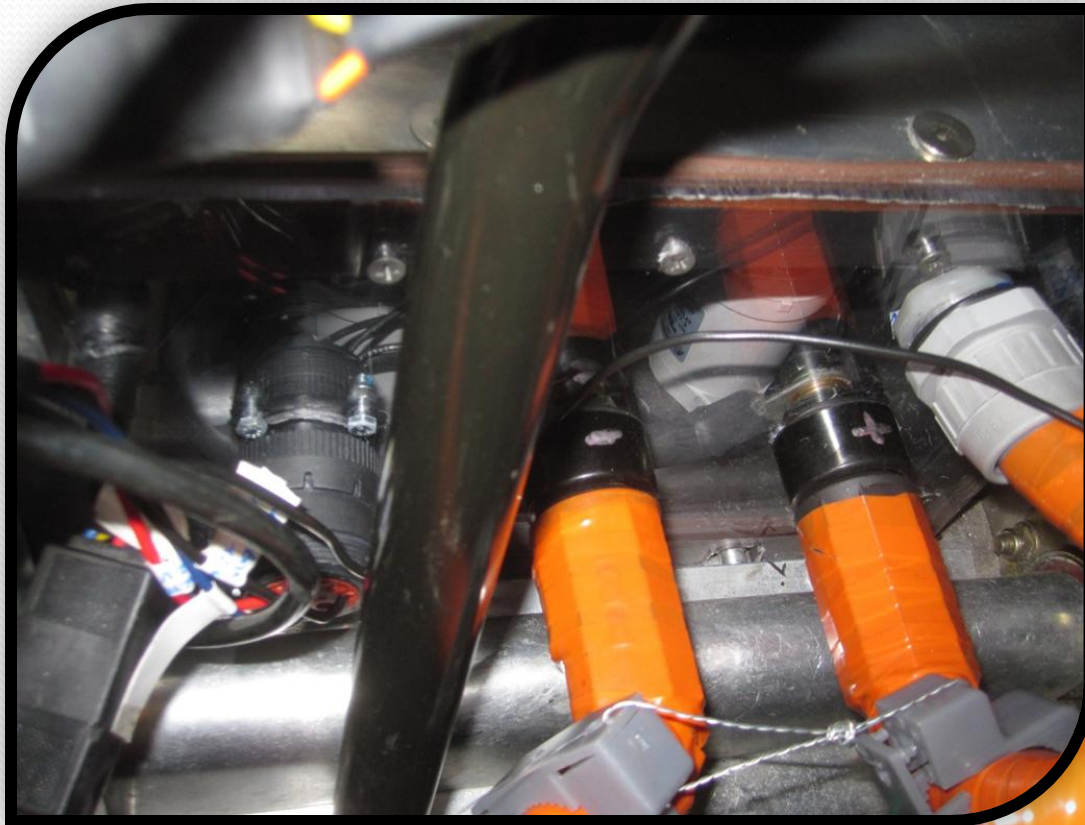


Serviceability

- Two battery packs
 - Easy to lift and remove
 - Connections and BMS system are easy to see

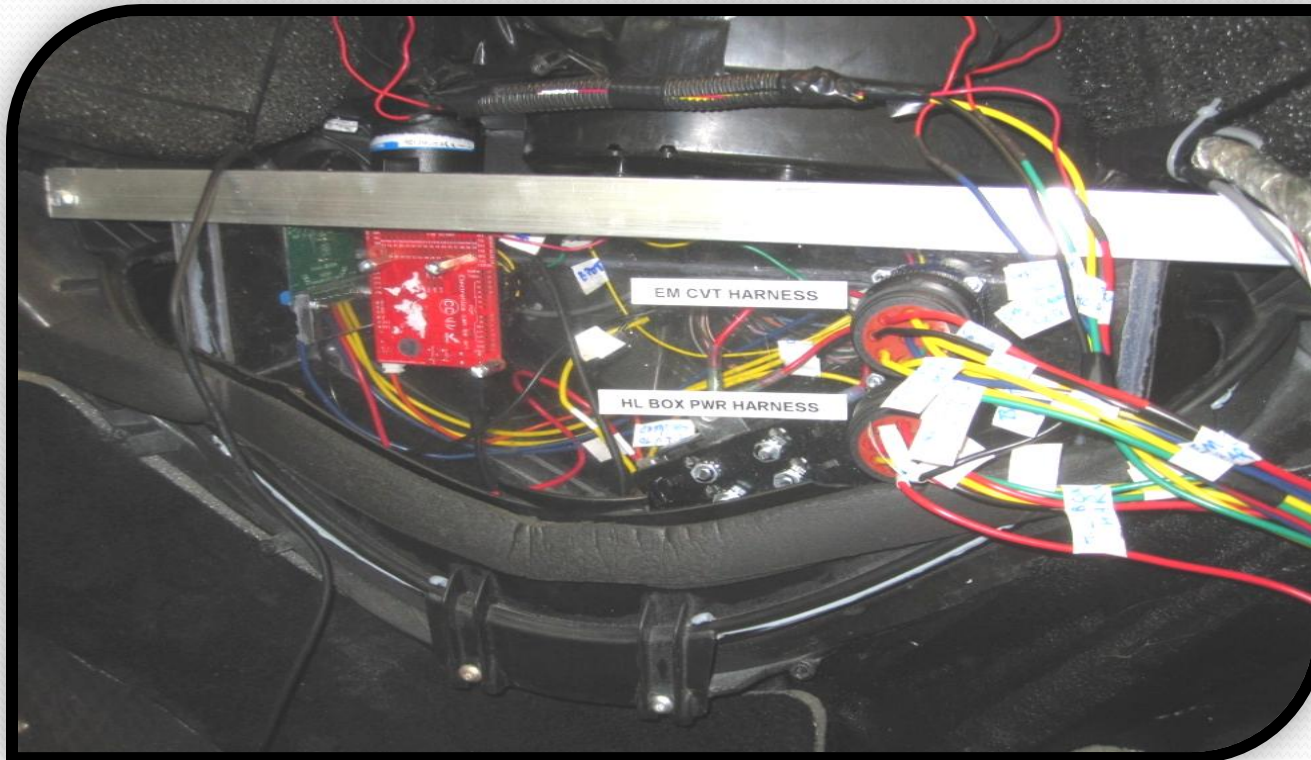


Serviceability

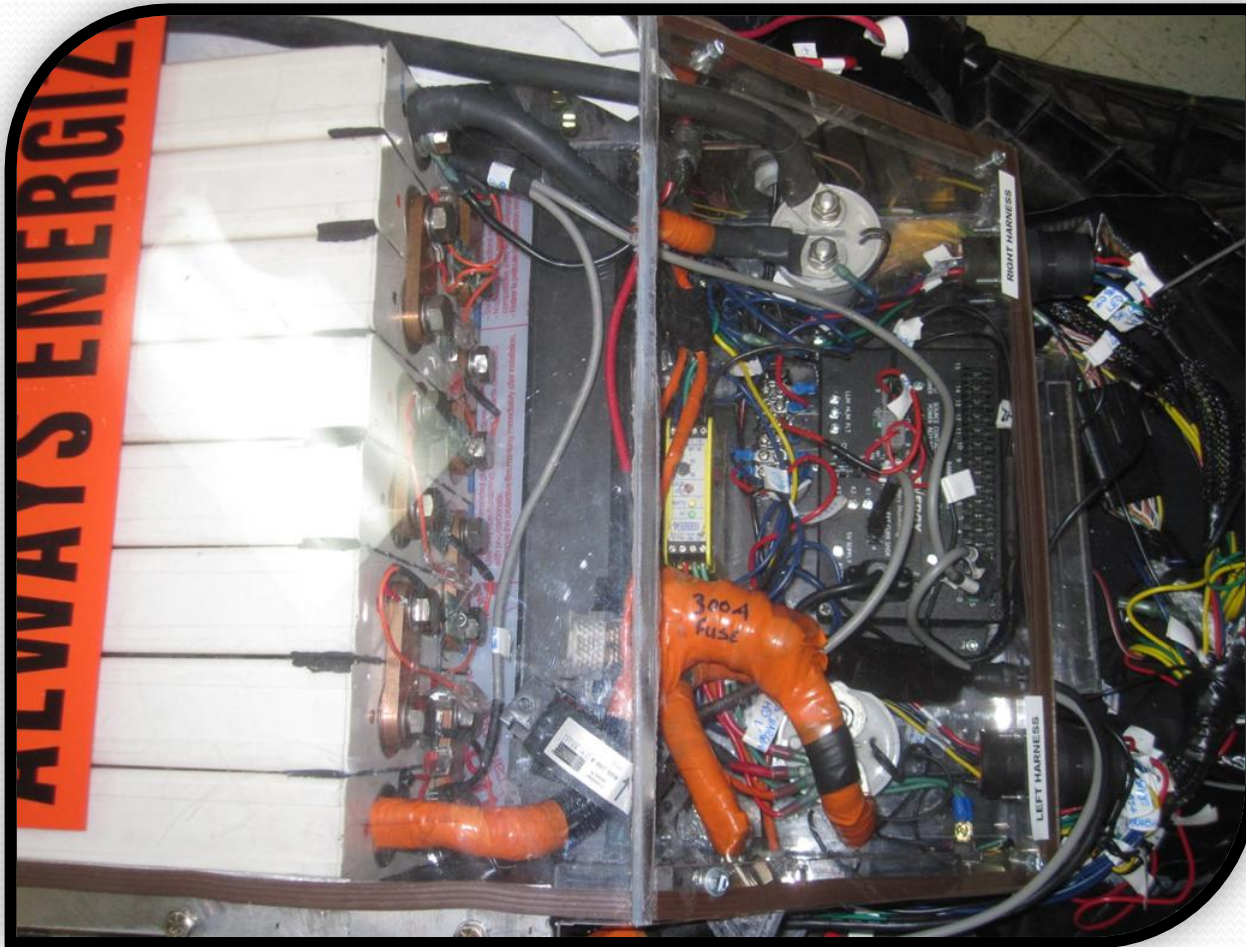


Serviceability

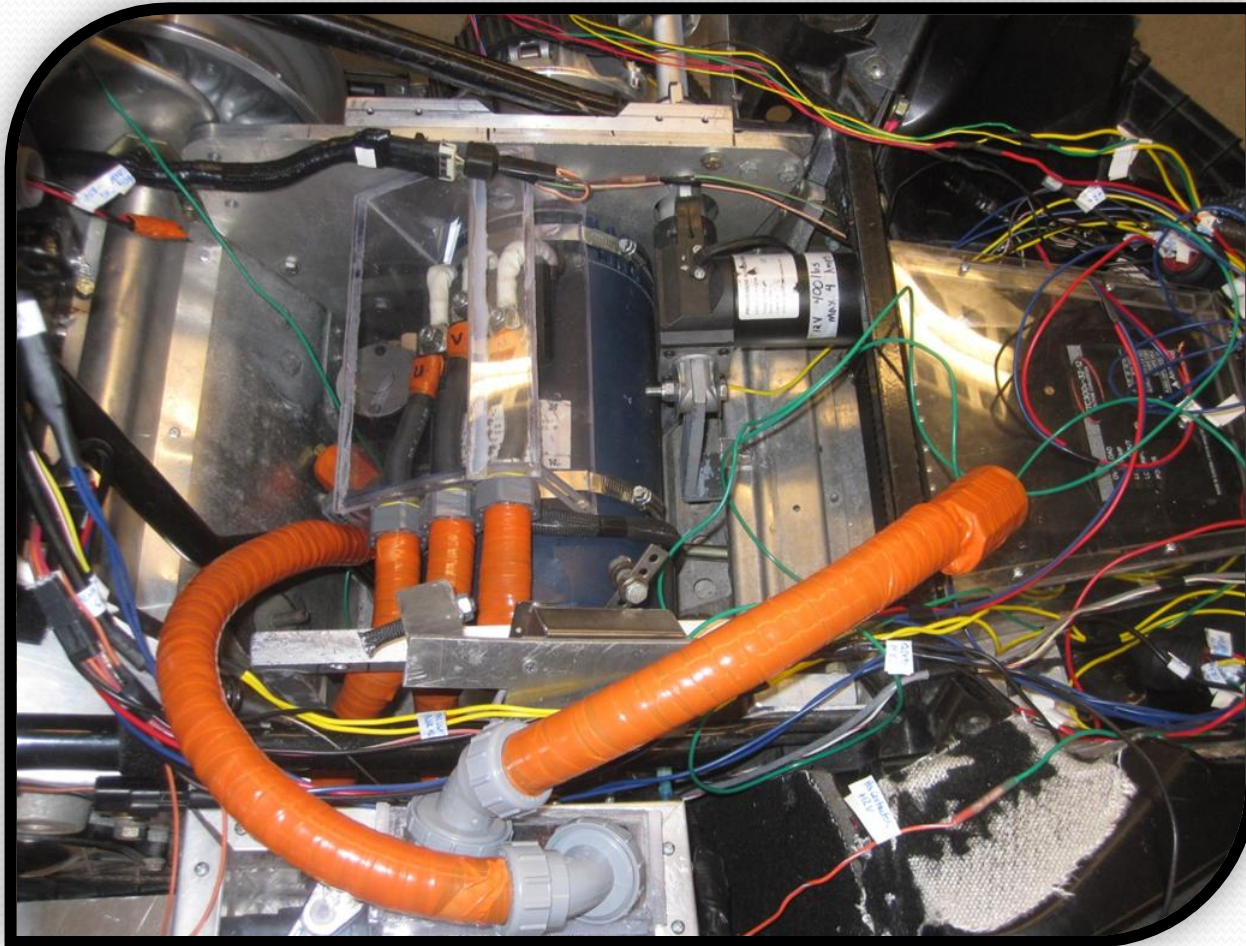
- Wiring
 - Clear wiring schematic
 - Labeled and color coded



Serviceability



Serviceability



Questions?

