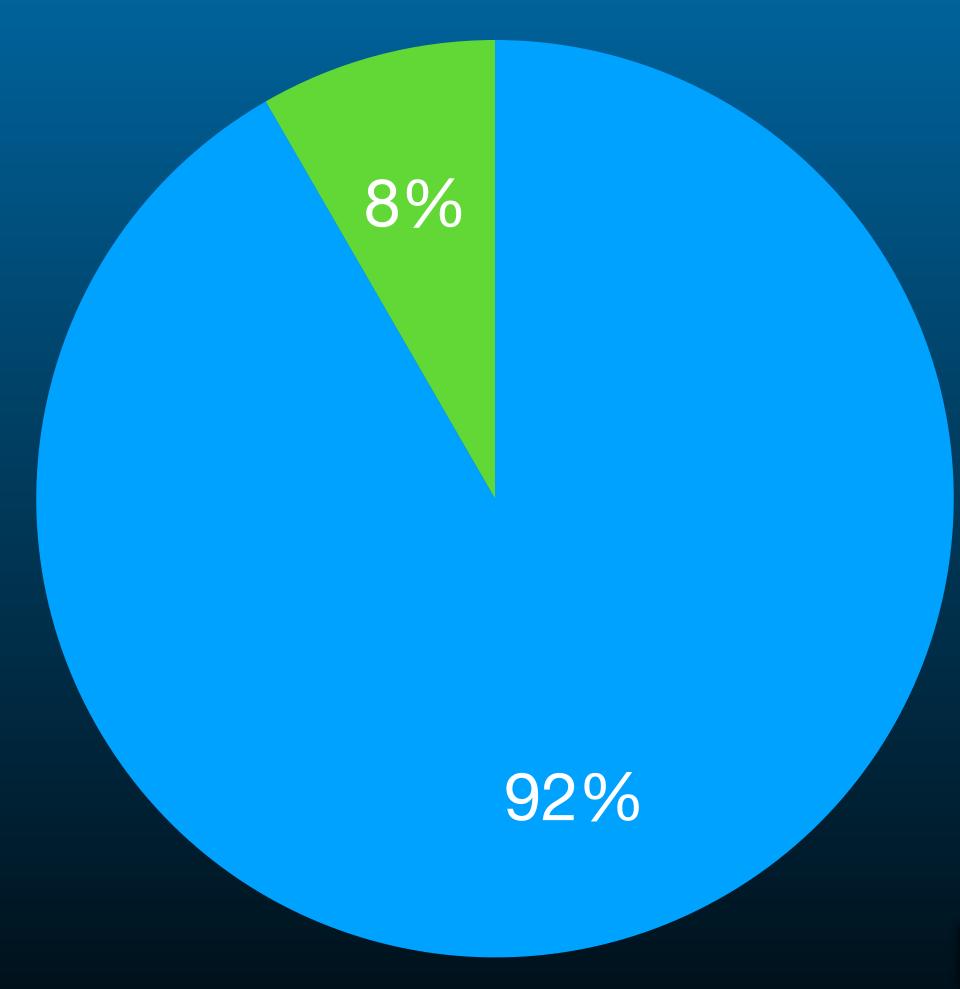
Power your Home from your Car

300MPG.org

Ben Nelson - June 24, 2023



Automotive Use



Driven: 2 Hrs

Parked: 22 Hrs





Analytics

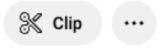
Edit video

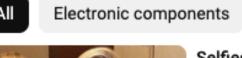














Selfies With Background

Hurricane Maria - Puerto Rico, 2017



How to Get Power Out from Car?

- •USB 5V, 1 or 2A
- •Cigarette Lighter Plug 12V, 10-20A
- Built-In Inverter (Maverick, etc.)
- •12V Starter Battery 12V, High Current
- EV Charging Port? (J1772)
- DC Fast Charge Port

DC Fast Charge Connections





CHAdeMO CCS

CHAdeMO Inverter



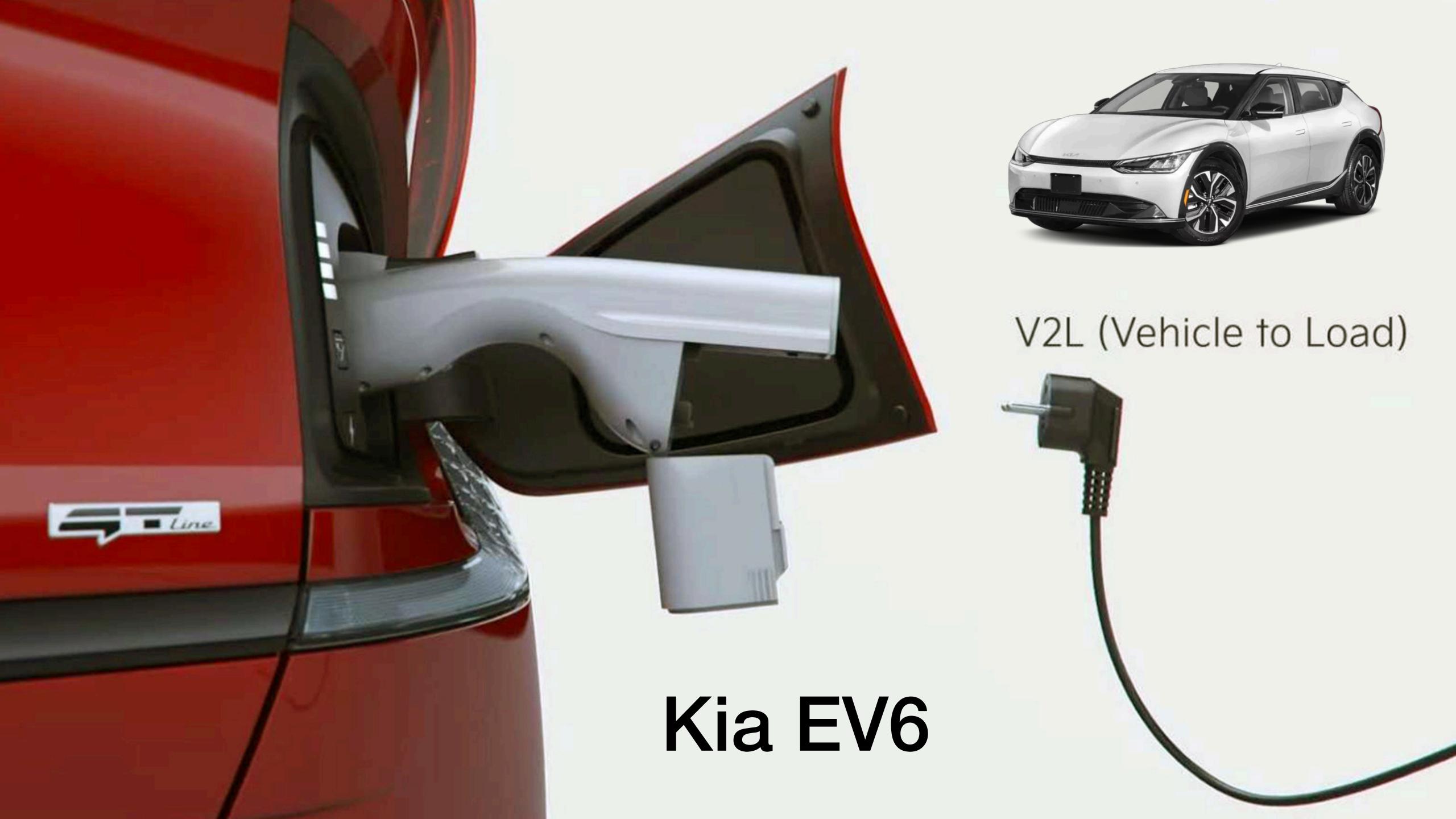


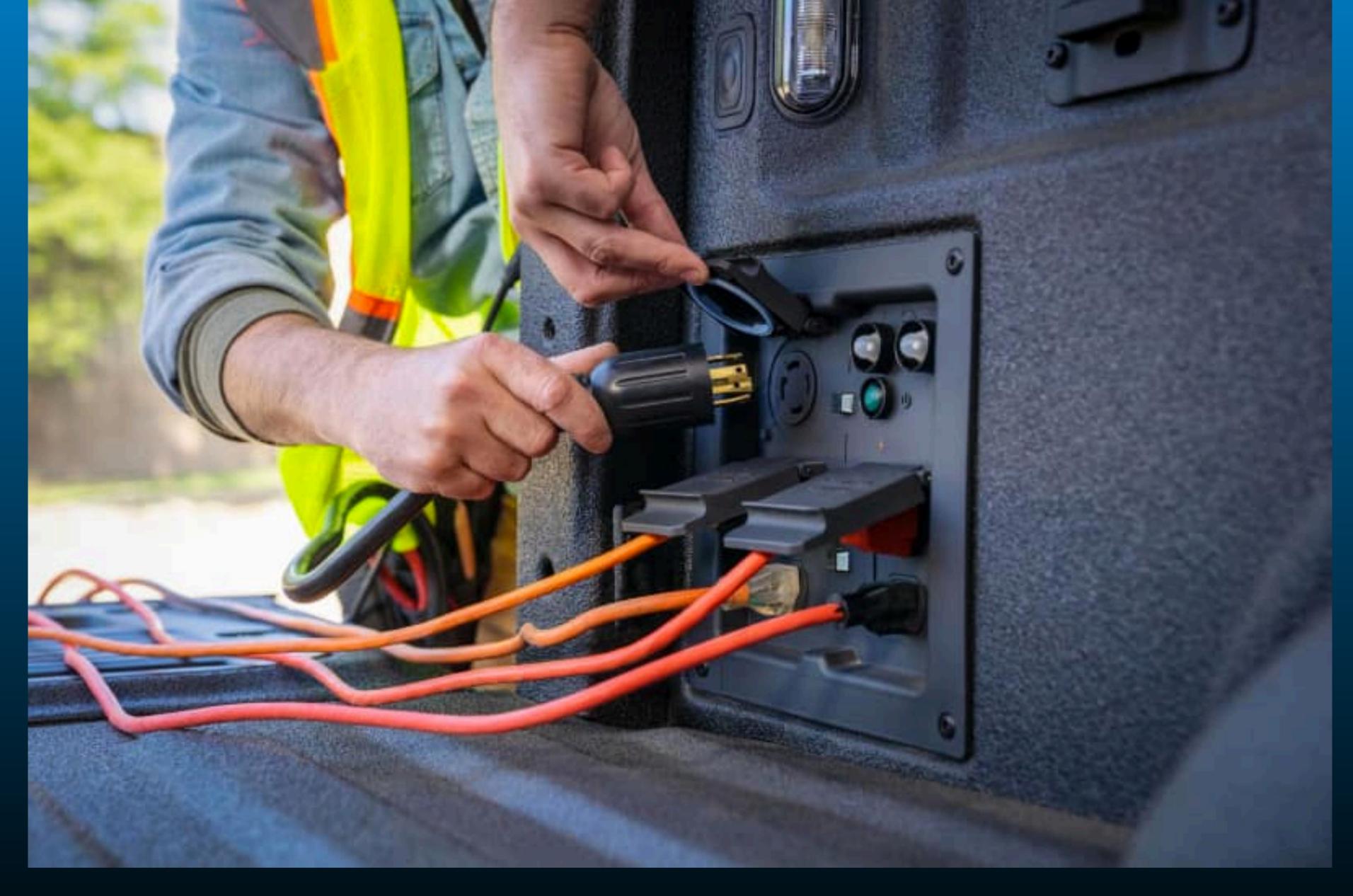


Practical V2X Right Now

- •12V Power Inverter
- •Built-In V2L (Kia EV6, Rivian)
- Whole Power Home Backup (Ford Lightning)



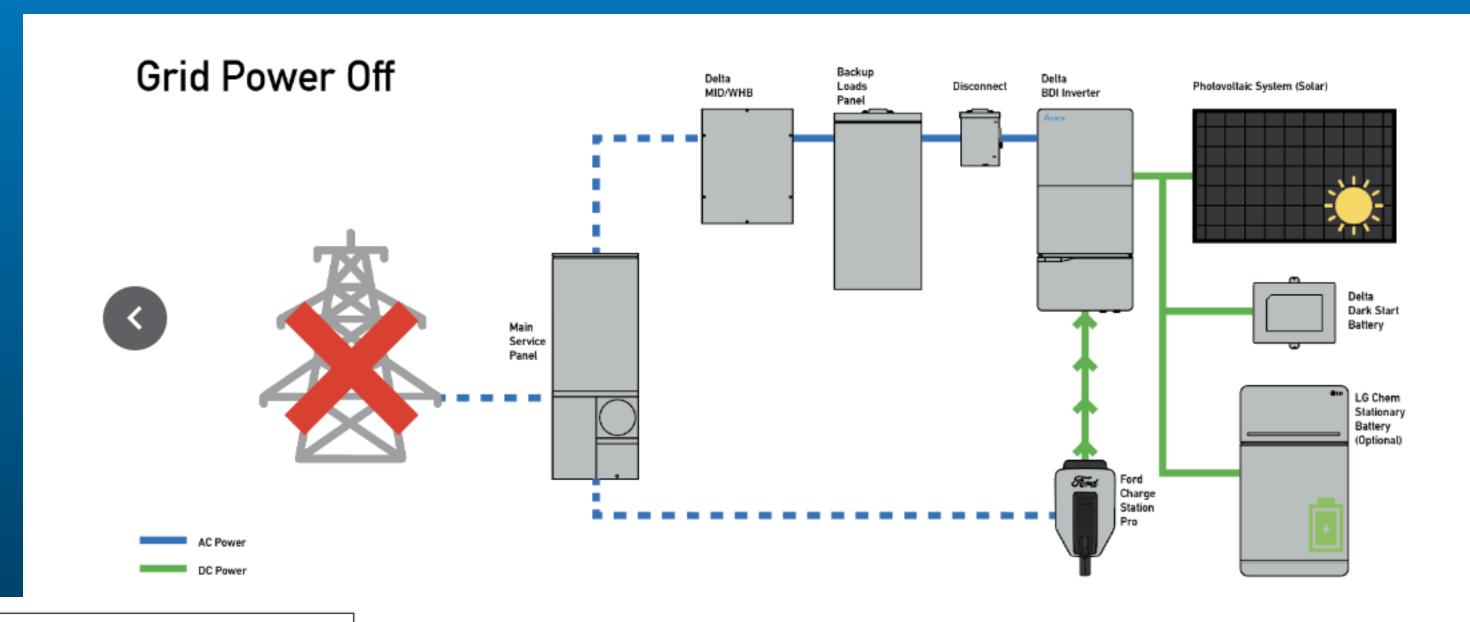




Ford F150 Hybrid - 240V/30A



Ford F150 Lightning



Document Number:

INS-SOP-0226-01

Revision: 1

< (1) > :

Ford Home Integration **System** Installation and Wiring

Field Operations Standard Operating Procedure

sunrun

SUPERSEDES PREVIOUS:

- Delta BDI Inverter Installation INS-SOP-0166
- Delta WHB INS-SOP-0167
- Delta Accessory Battery Pack INS-SOP-0169



Copies of this SOP including PDFs and paper copies are uncontrolled and may be out of date.

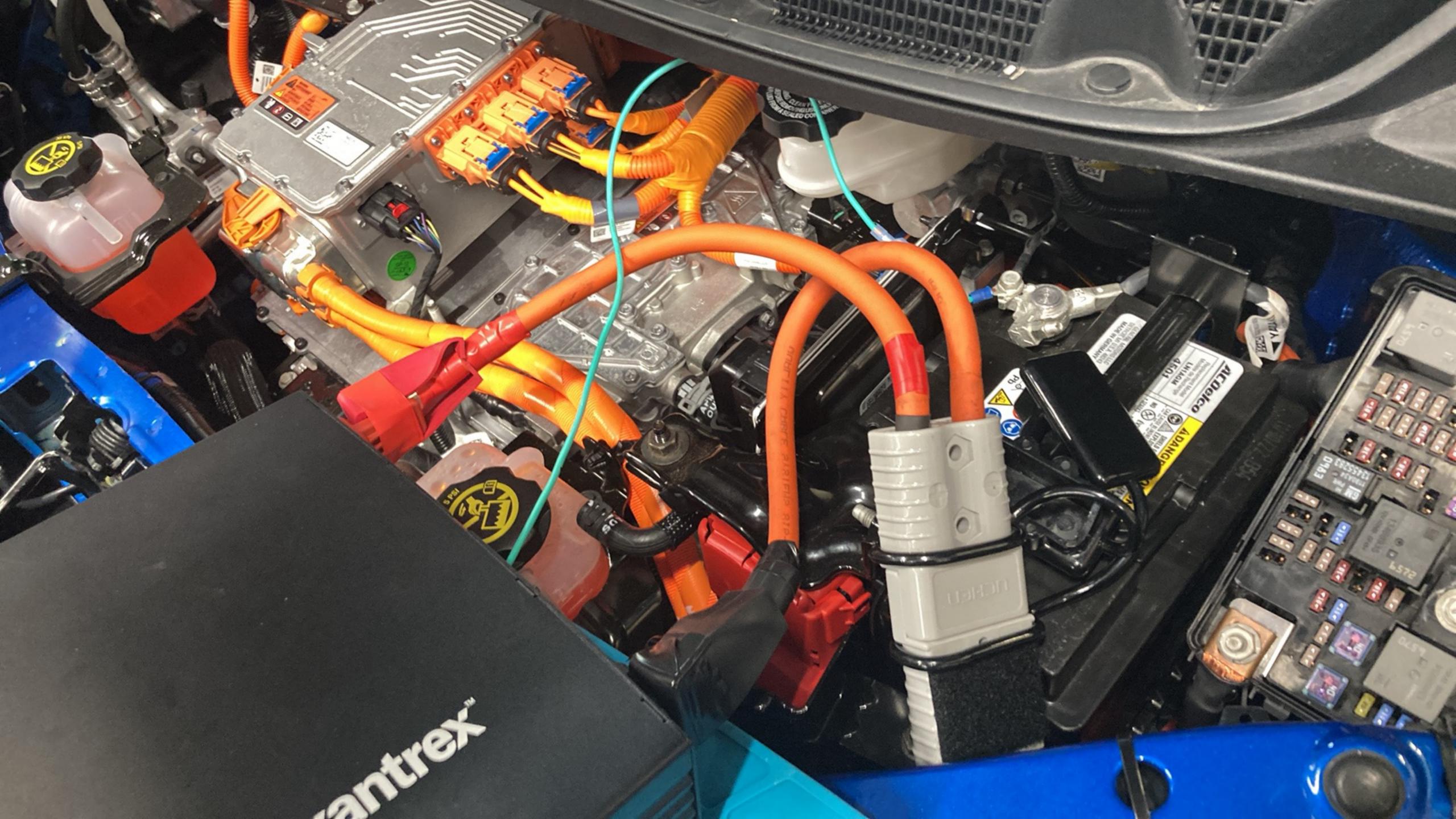
Ford F150 Lightning Whole Home Power Backup

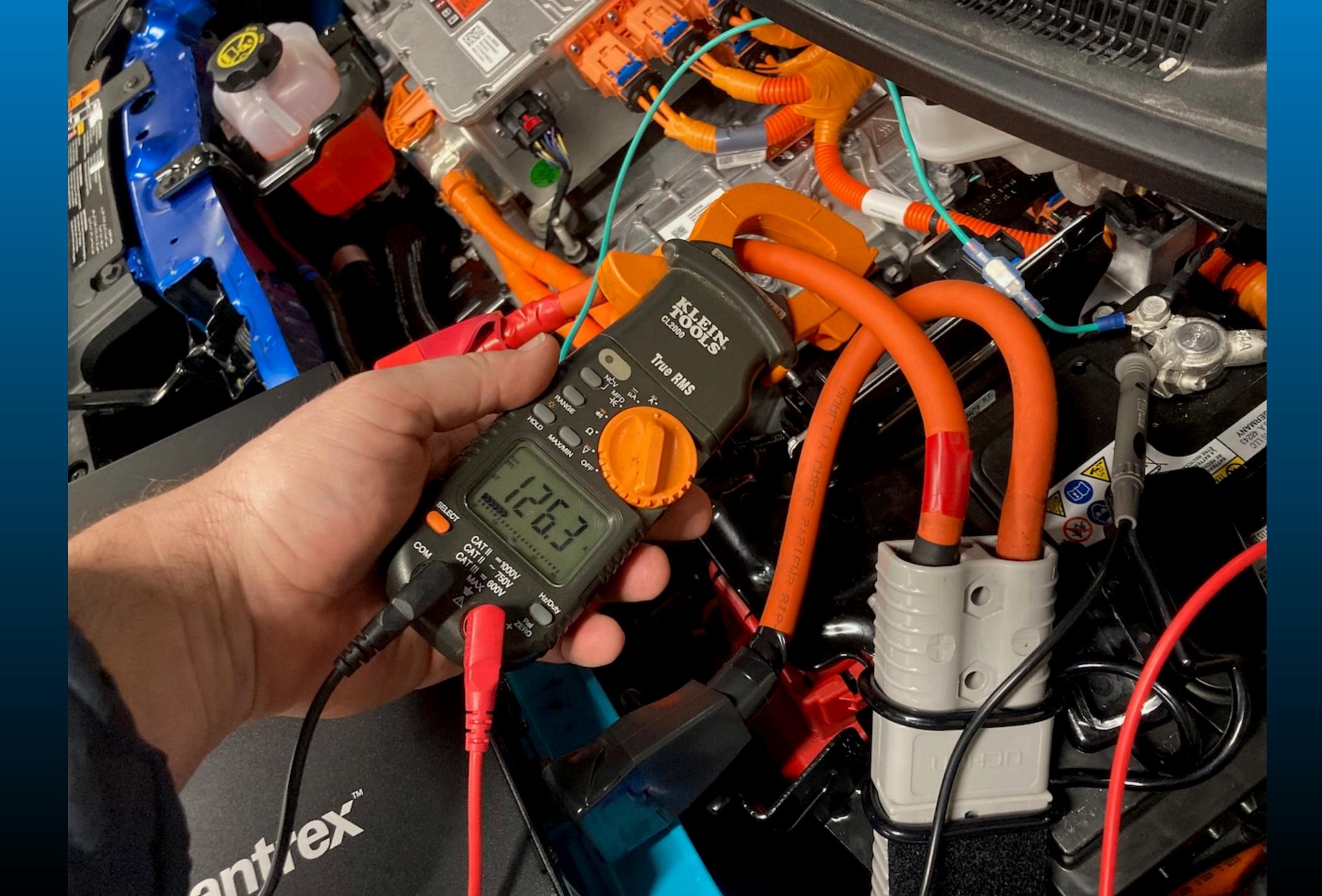
DIY Inverter Hook-up

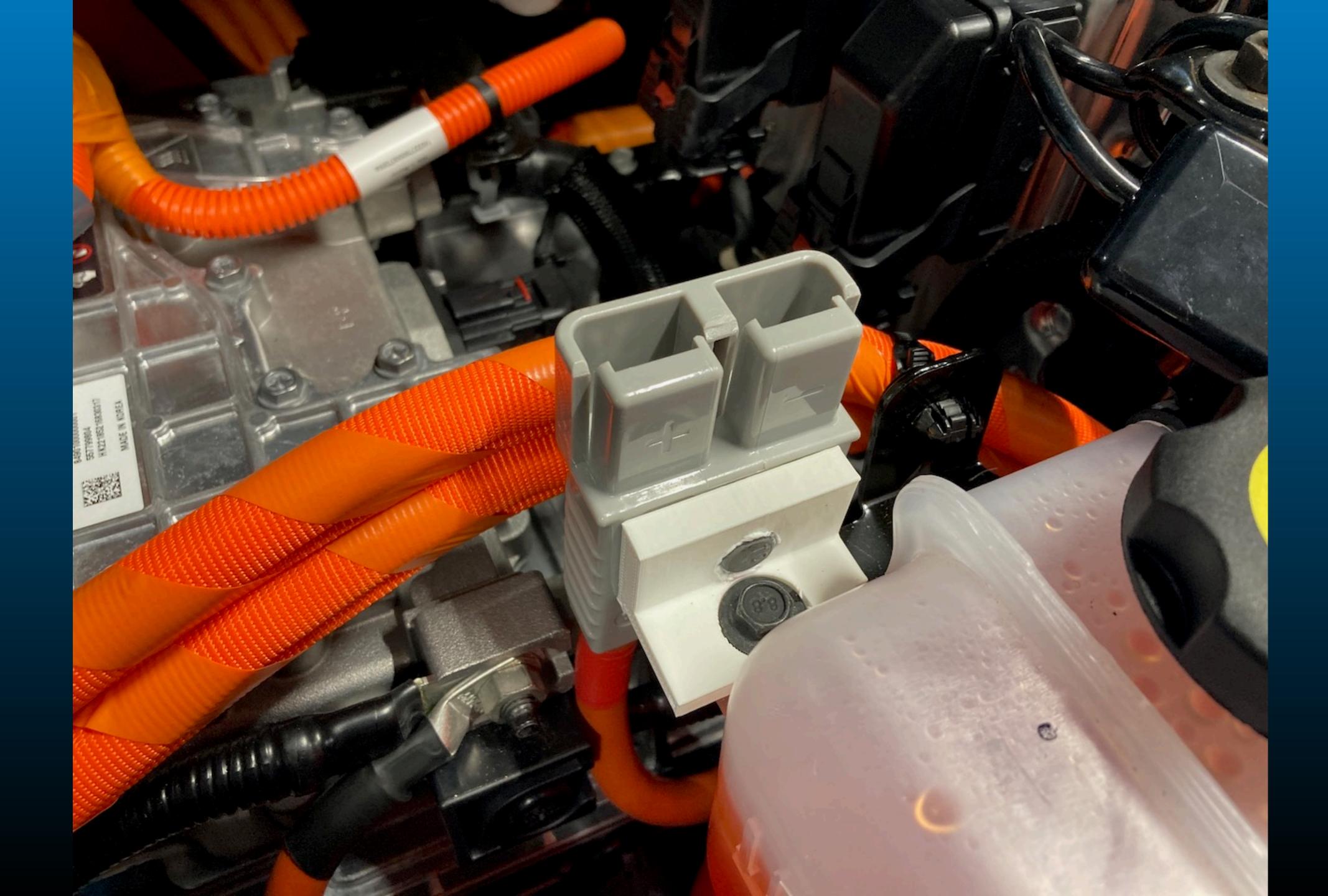
- DC/DC Converter Power (130A)
- •Inverter Power (1,000 2,000W)
- Cables vs Current
- Fusing/CB
- Connection/Quick Disconnect



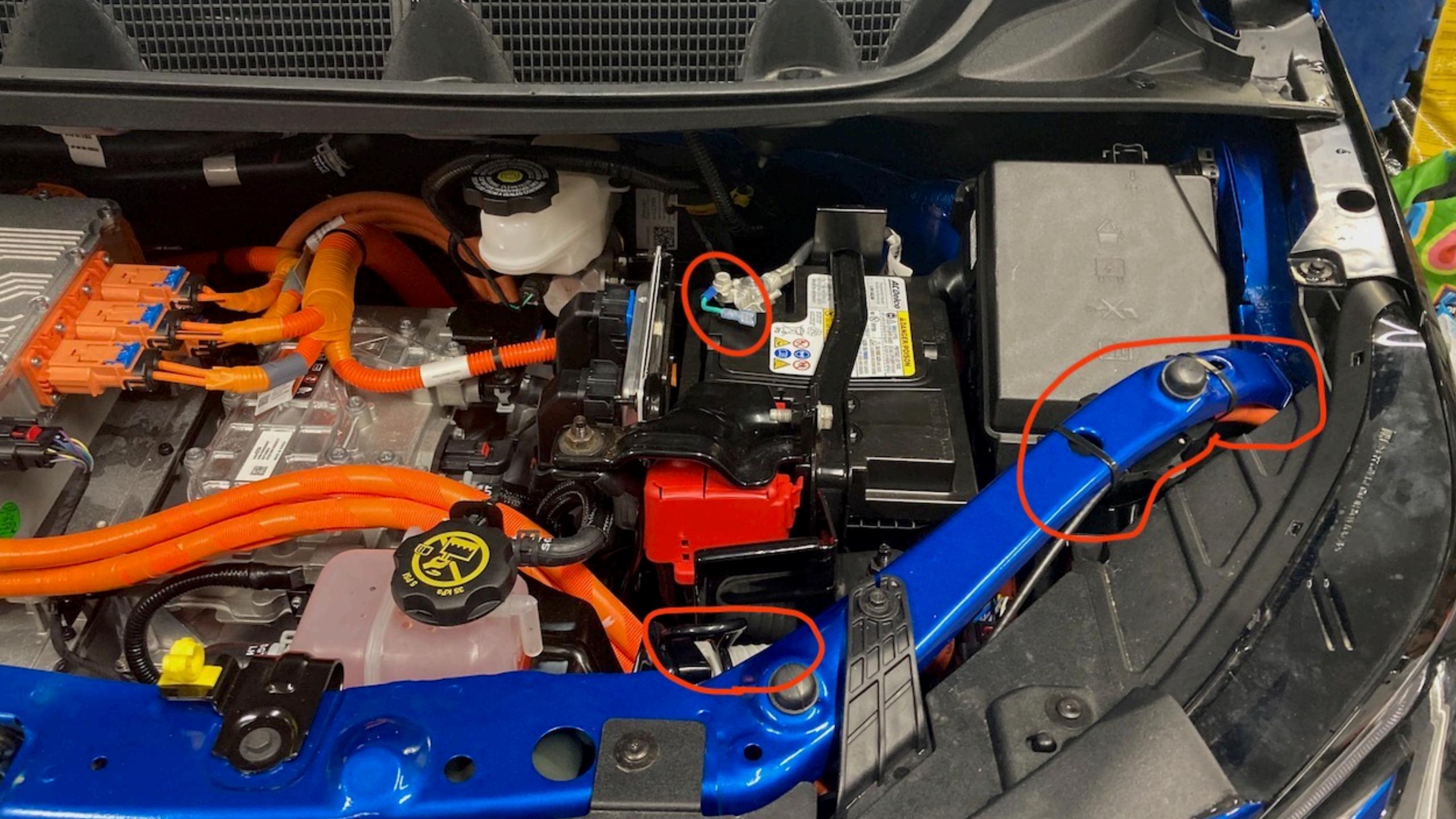
















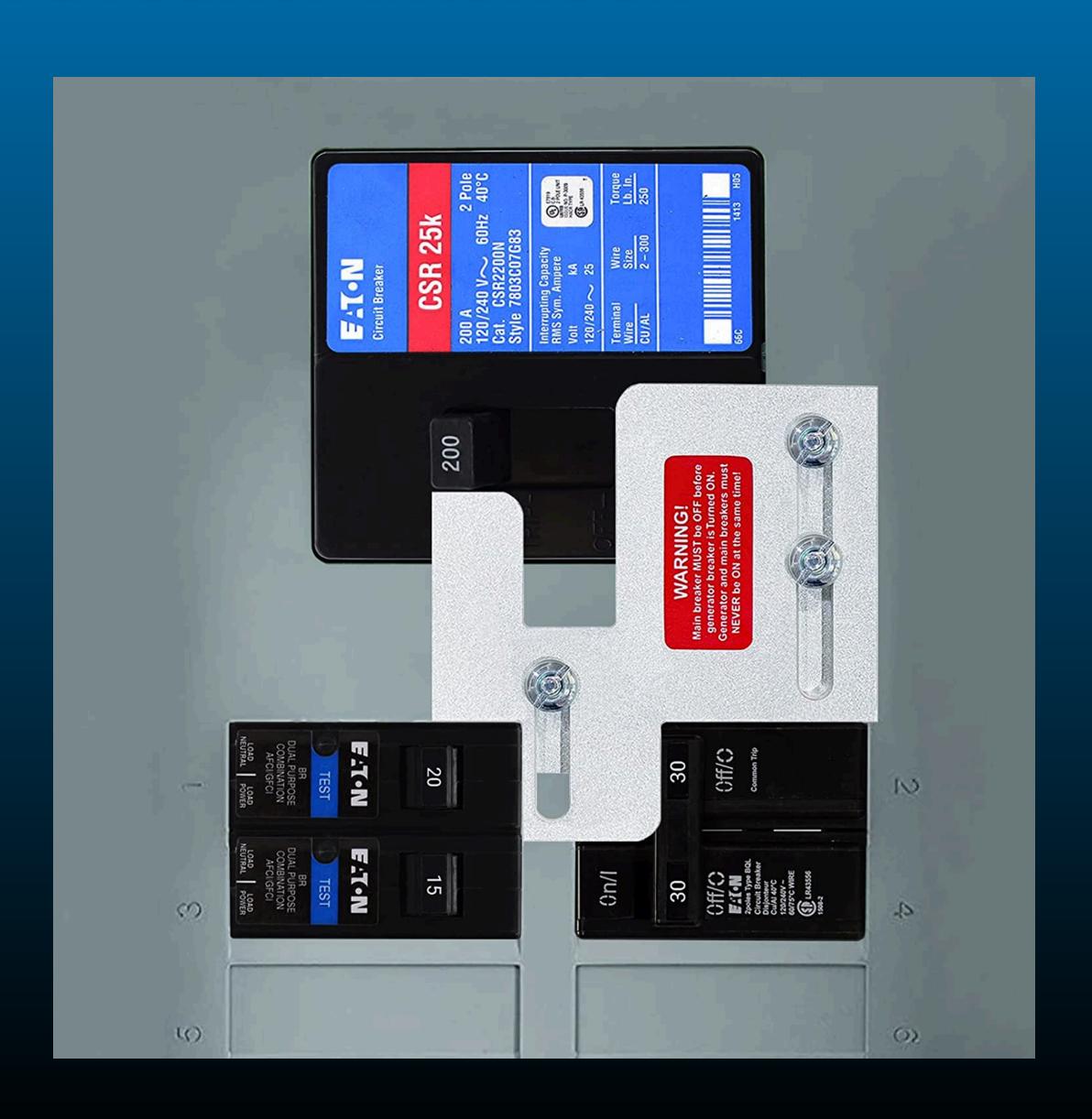
Connecting to your Home

Furnace Connection



Generator Input & Breaker Interlock





Manual Transfer Switch







Questions?

300MPG.org Ben Nelson