



product page

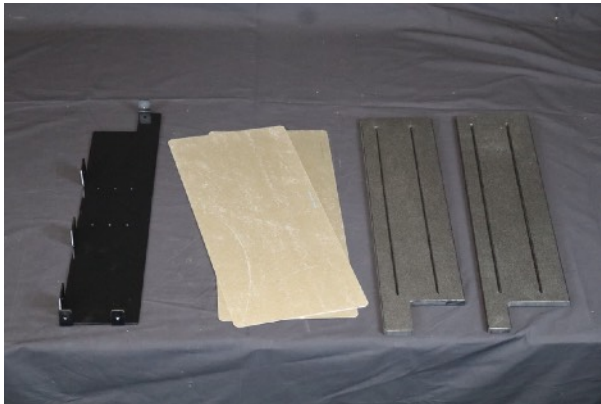
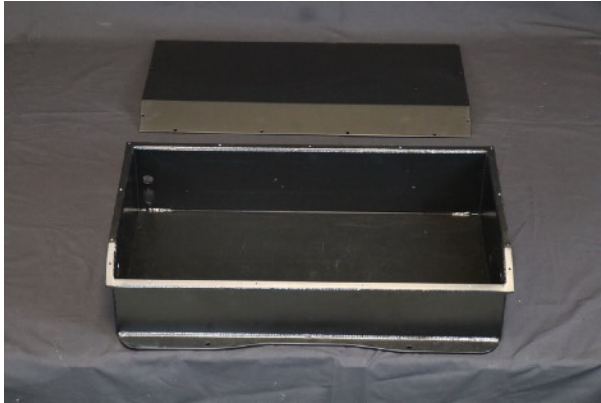


Installation Guide

Beetle front battery box



Thank you for purchasing the EV West beetle box enclosure! We appreciate your trust in our products and are excited to be part of your electric conversion journey. Attached, you'll find the installation instructions for assembling your beetle battery box. These instructions will help guide you through the process, ensuring a smooth and efficient installation. If you have any questions or concerns, please feel free to email us at support@evwest.com or call us at **888-591-5830**.

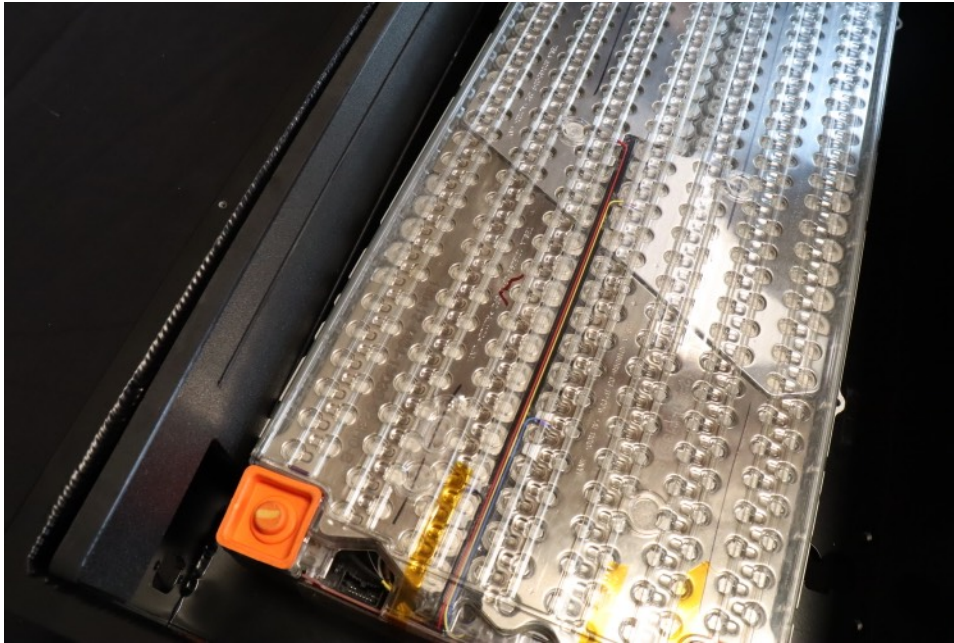


Collect parts needed

- Battery Modules (2)
- Box and lid
- ABS spacers
- Amphenol connector
- 90 degree battery collector adaptors
- BMS module
- BMS harness
- MX150 connector and pins
- USB port (optional depending on BMS system)
- Fuse holder
- Fuse
- 2/0 cable
- 2/0 cable eyelets
- Heat shrink
- Hardware for mounting components
- Anti corrosion compound



Insert rear ABS spacer



Install first battery module



Install first battery module



Install second battery module



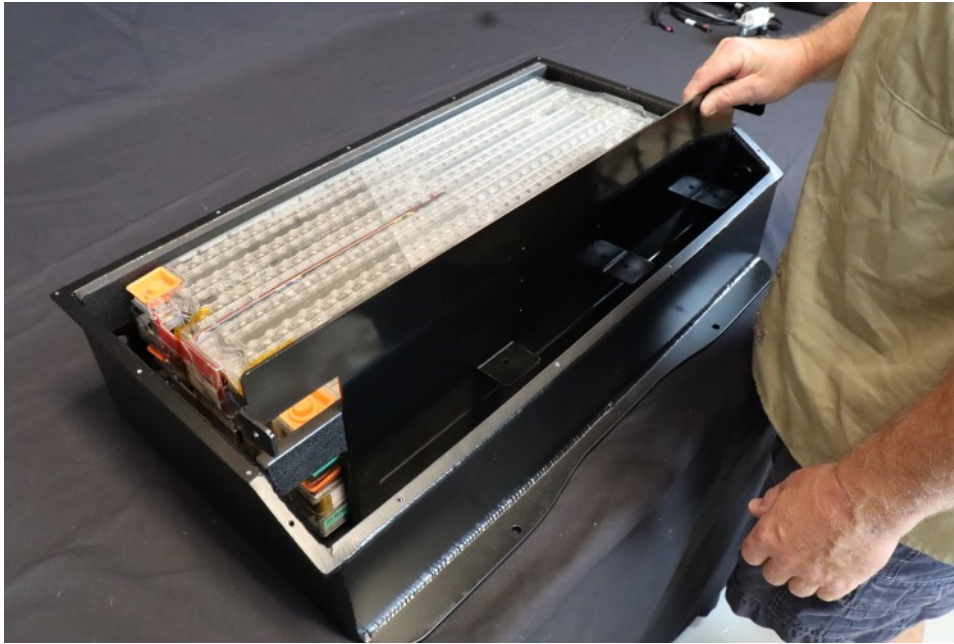
Install second battery module



Install front ABS spacer



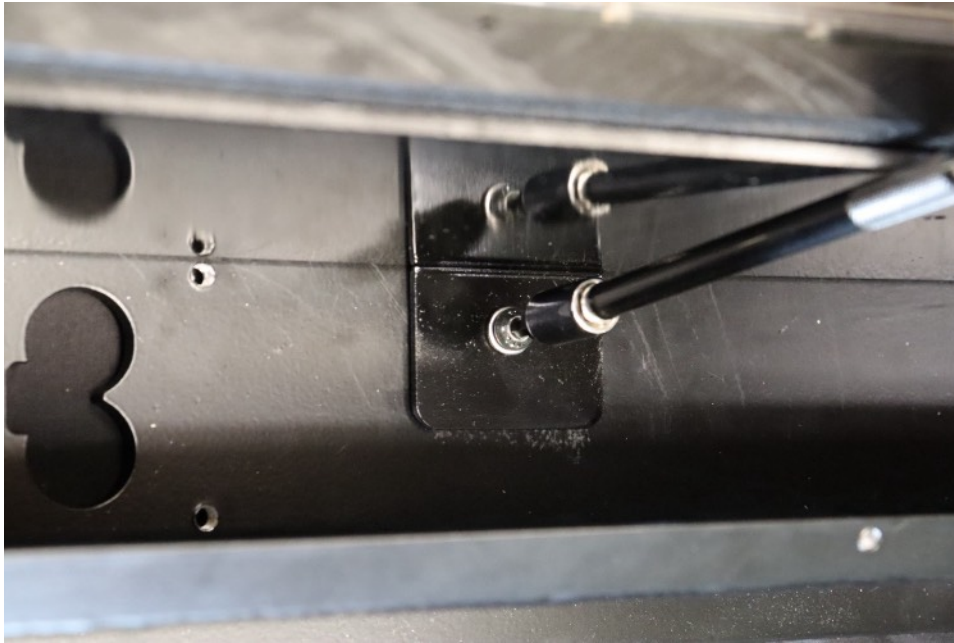
Install front ABS spacer



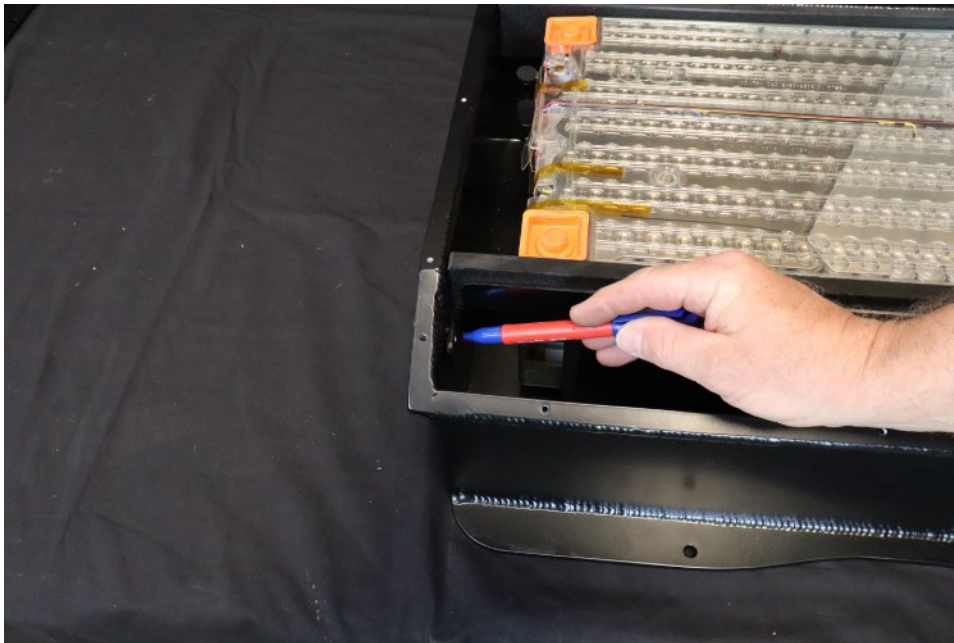
Install BMS mount



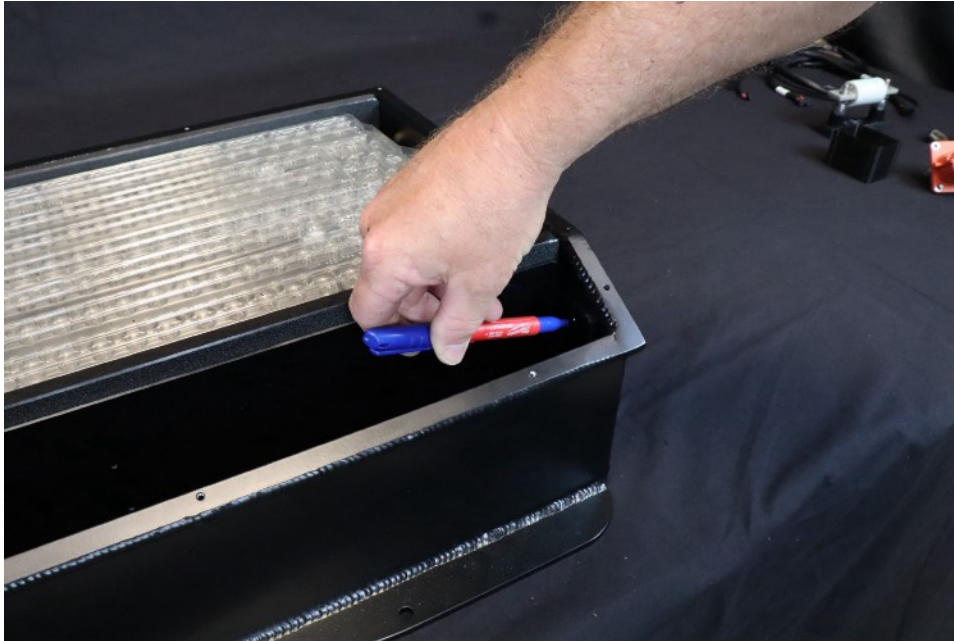
Install BMS mount



Fasten BMS mount to bottom of box.



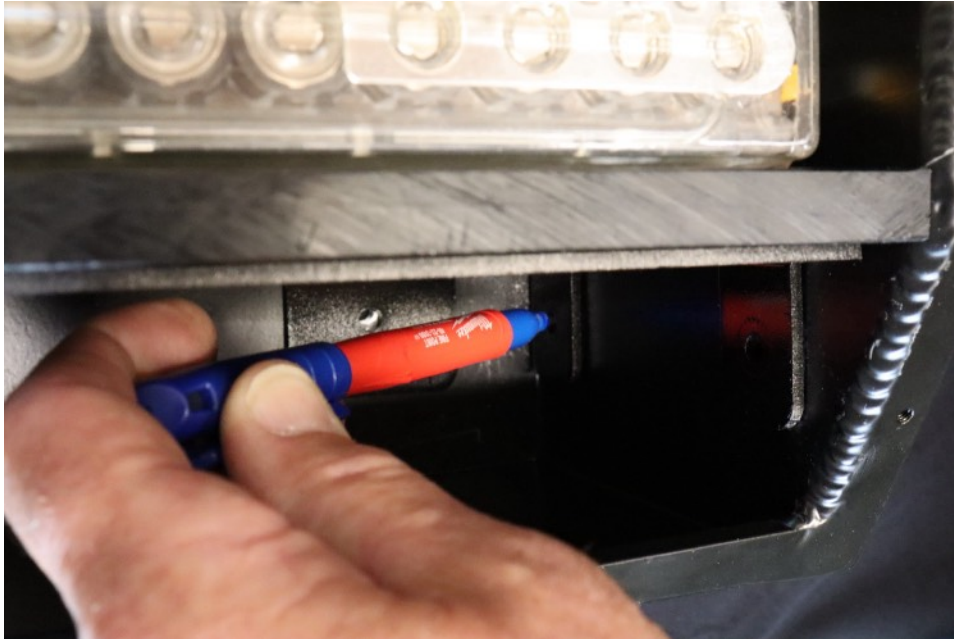
Mark and drill holes for bolts on side of box



Mark and drill holes for bolts on side of box



Mark and drill holes for bolts on side of box



Mark and drill holes for bolts on side of box



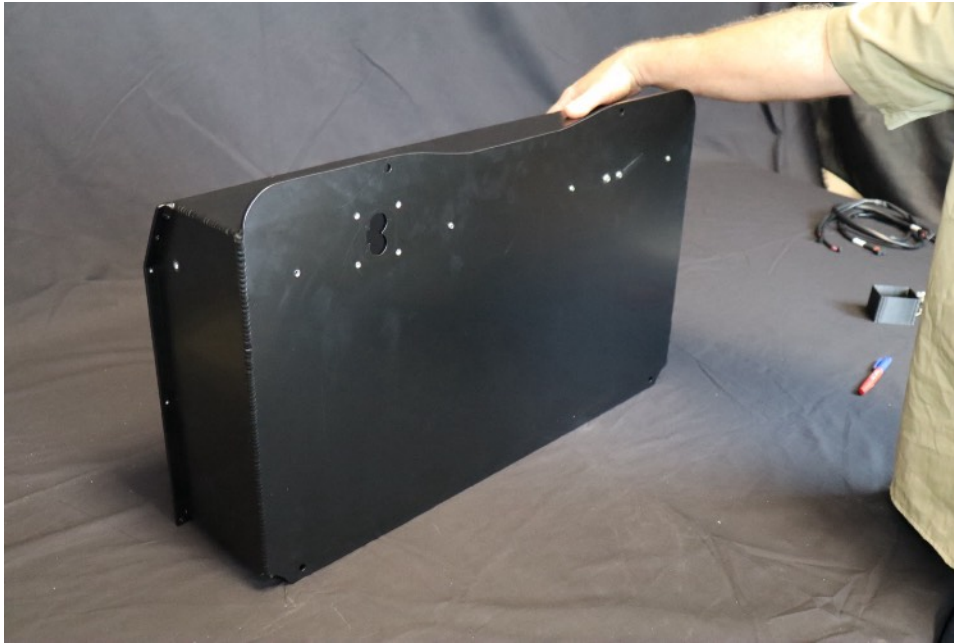
Mark and drill fuse holder mount holes. Leave clearance between fuse holder and BMS mount for fuse body



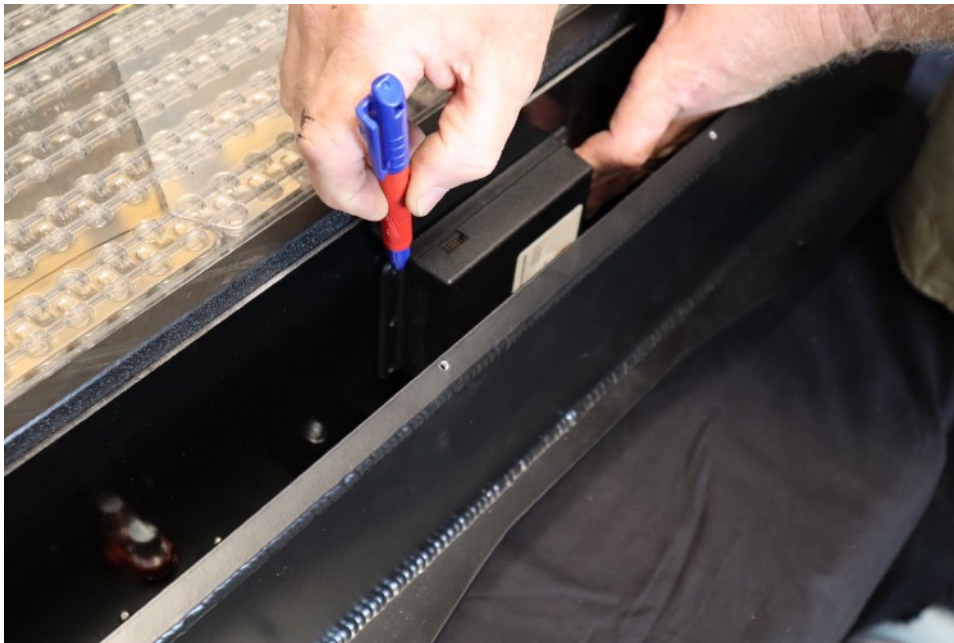
Mark and drill fuse holder mount holes. Leave clearance between fuse holder and BMS mount for fuse body



Install fuse holder



Check that fasteners protrude minimally through bottom of box (less than 1/8 inch)



Mark BMS module mounting location



Mark BMS module mounting location

Remove BMS mount, front ABS spacer, battery modules and rear ABS spacer (Disassemble Box)



Drill holes



Mount BMS module



Mount BMS module



Mount BMS module



Mount BMS module



Flush hardware with rear of BMS mount or clearance front ABS spacer for hardware.



Install Amphenol connector in cutout on box.



Install Amphenol connector in cutout on box. Document poles of Amphenol connector.



Support box off work surface to prevent damage to Amphenol connector.



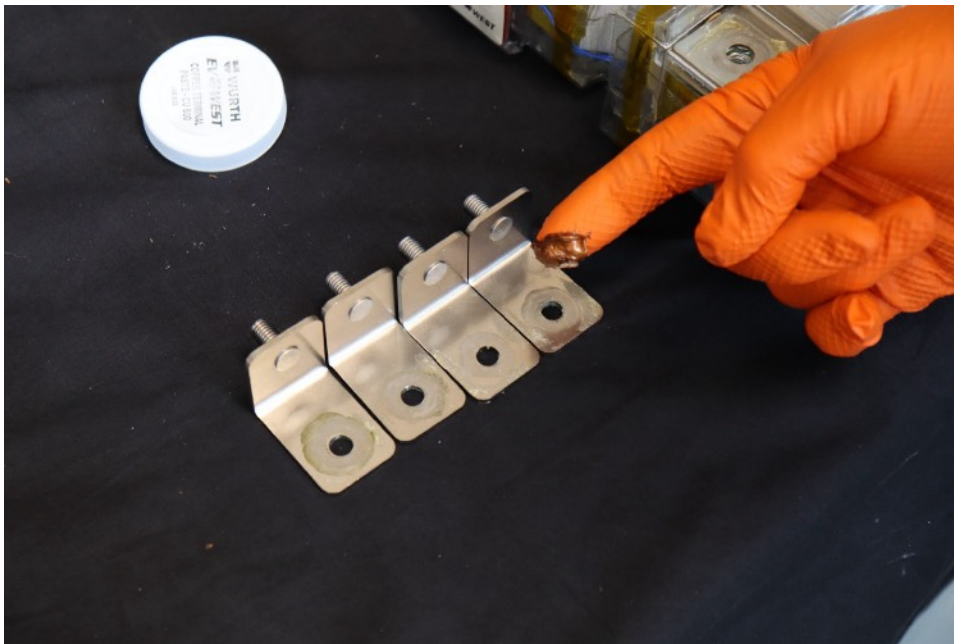
Support box off work surface to prevent damage to Amphenol connector.



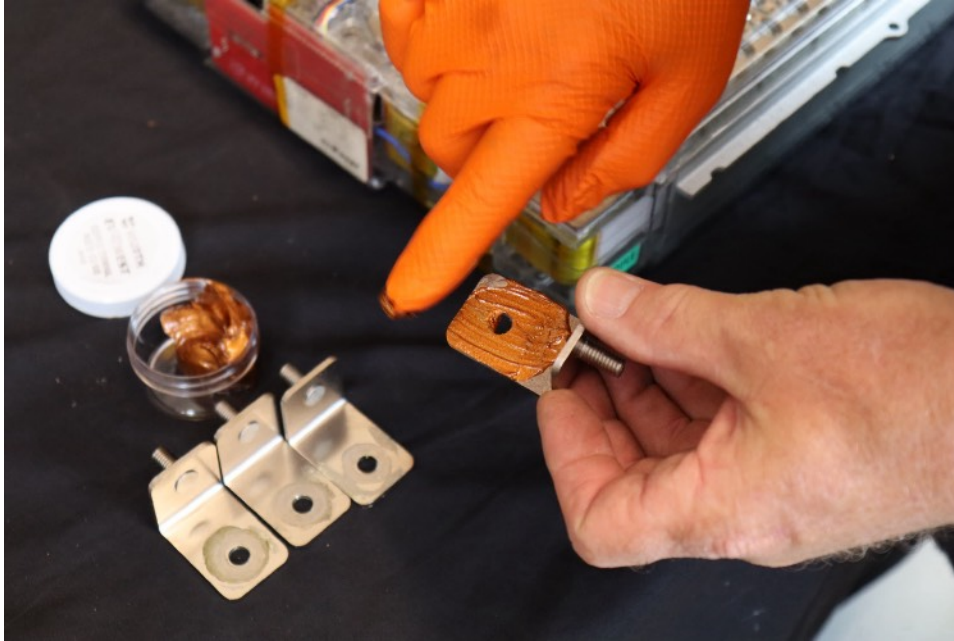
Connect positive and negative cables to Amphenol studs



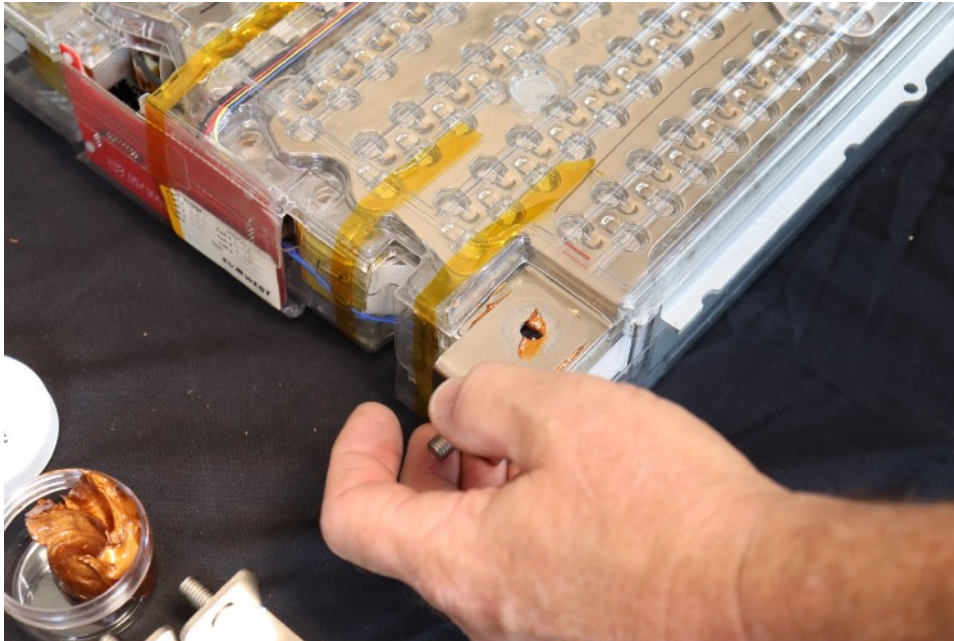
Connect positive and negative cables to Amphenol studs.



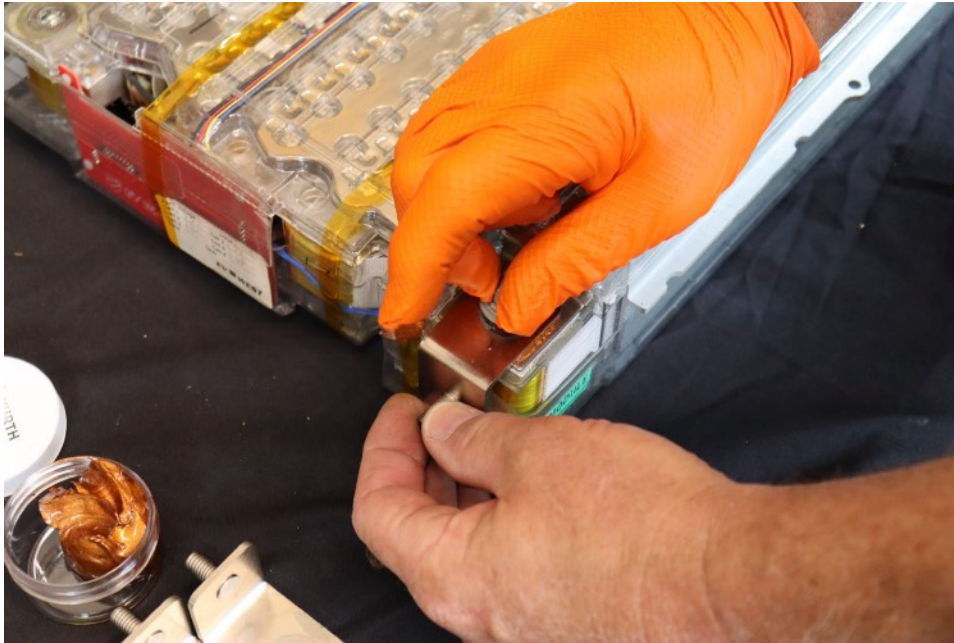
Apply anti corrosion compound.



Apply anti corrosion compound.



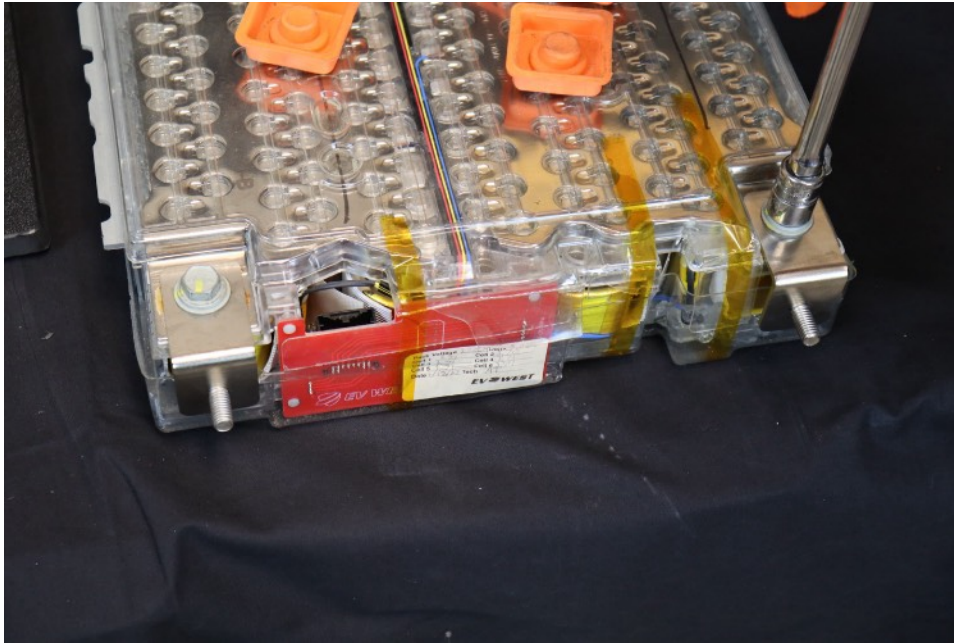
Attach 90 degree adaptor to battery collector.



Attach 90 degree adaptor to battery collector.



Torque to 10 Newtons.



Repeat the process the remaining battery collectors.



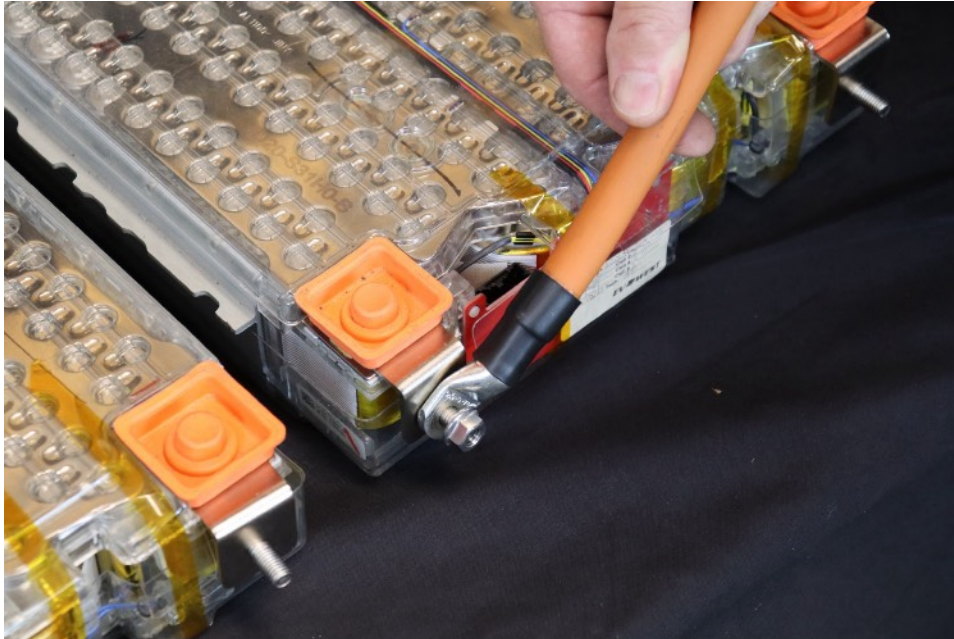
Cover terminals with orange safety caps.



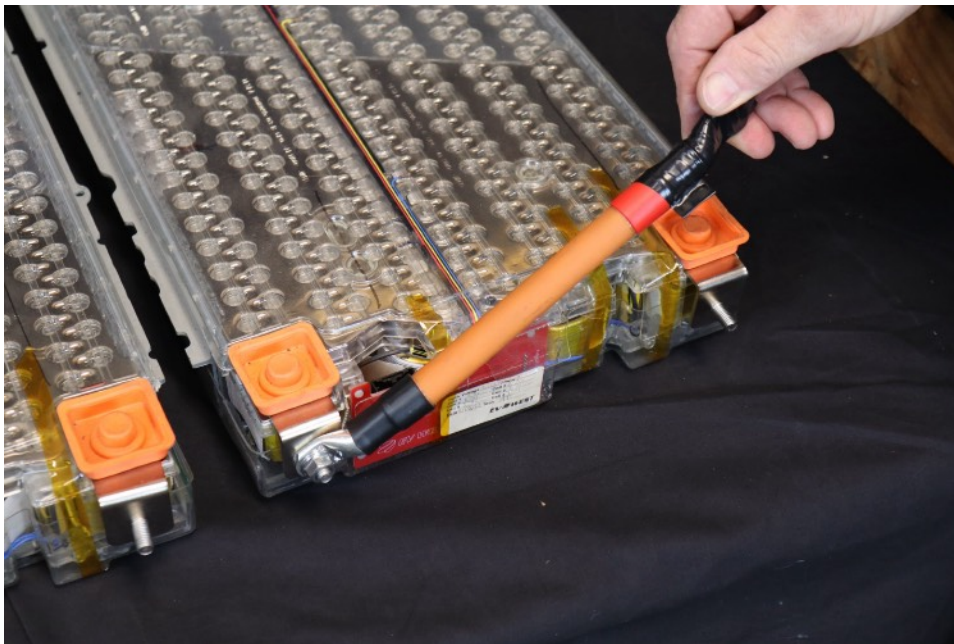
Insulate battery interconnect cable positive end with tape to prevent shorting battery.



Insulate battery interconnect cable positive end with tape to prevent shorting battery.



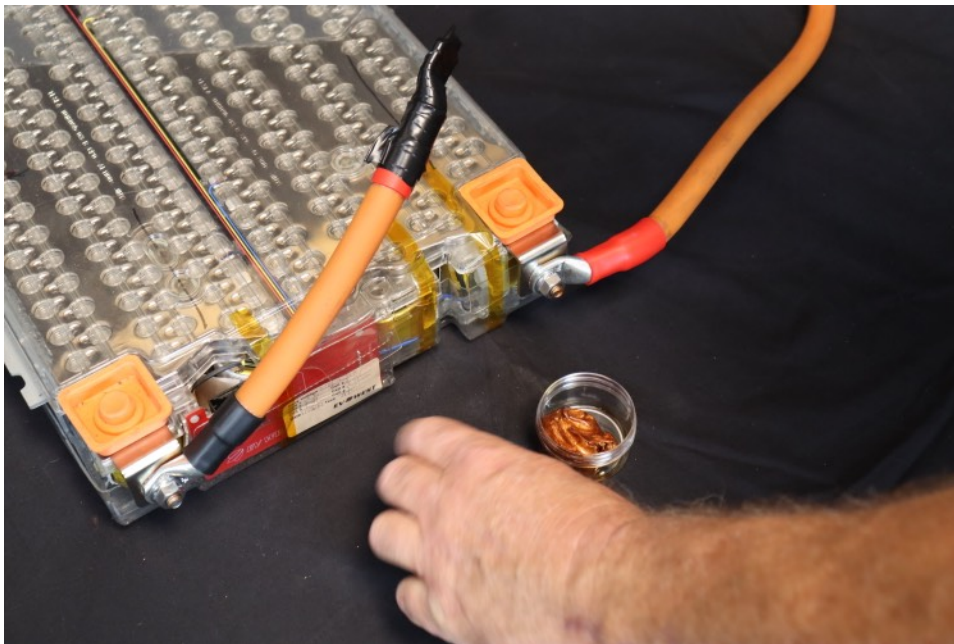
Connect battery interconnect cable to negative adapter.



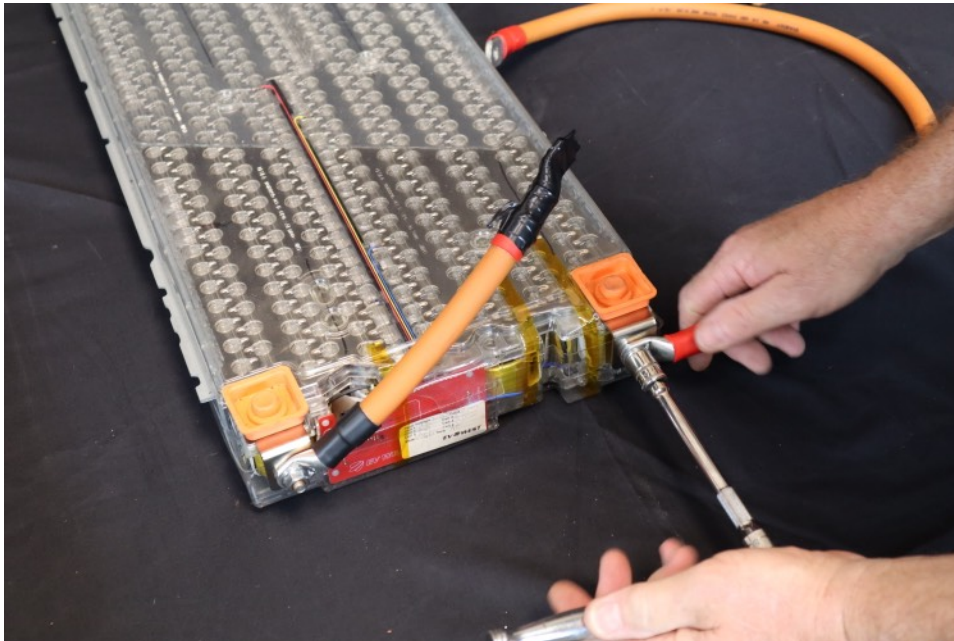
Connect battery interconnect cable to negative adapter.



Attach battery positive to fuseholder cable to positive adaptor (Apply anti corrosion compound)



Attach battery positive to fuseholder cable to positive adaptor.



Attach battery positive to fuseholder cable to positive adaptor (Torque to 10 Newtons)



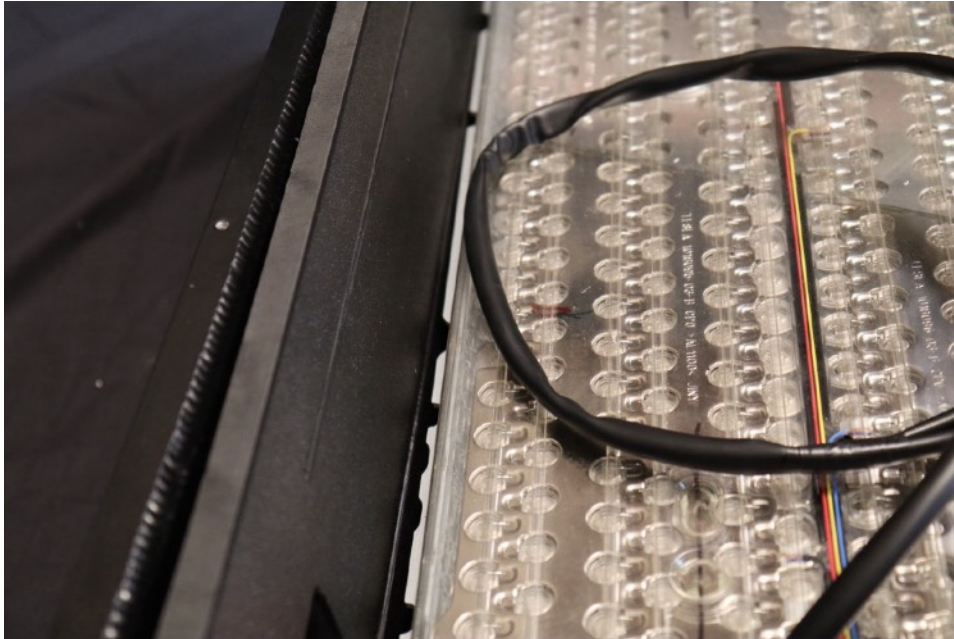
Insulate battery positive to fuseholder cable positive end with tape to prevent shorting battery



Plug in BMS harness one and BMS harness two their respective EV West BMS boards.



Reinstall rear ABS spacer



Install lower battery



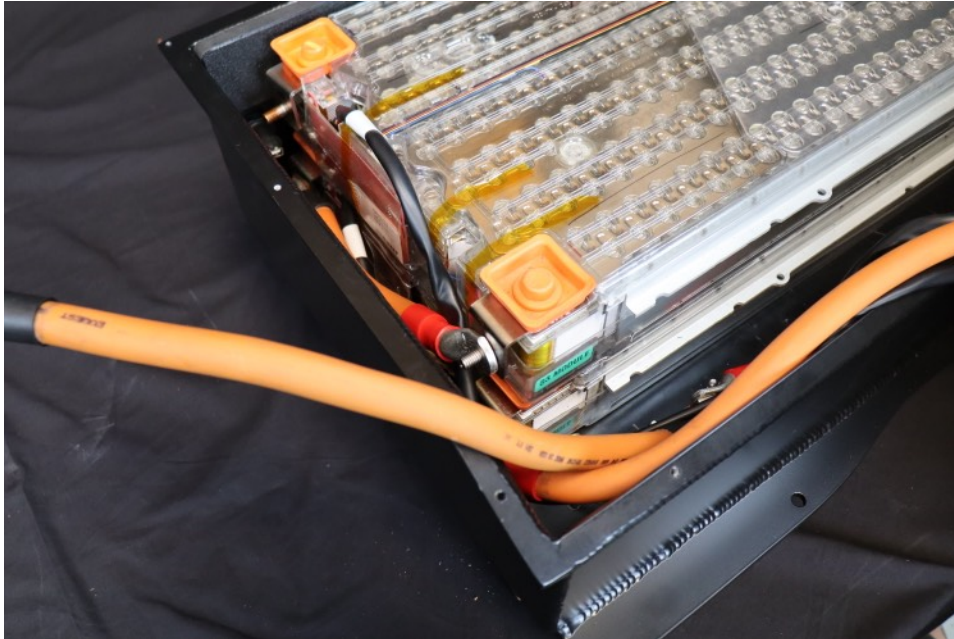
Install lower battery



Insert mica sheet on top of lower battery



Install upper battery



Connect inter connect cable. Apply anti corrosion compound.



Connect inter connect cable. Torque to 10 Newtons.

BE CAREFUL! most positive and most negative now have potential full pack voltage!



Connect negative cable from Amphenol connector to upper battery negative post. Apply anti corrosion compound. Torque to 10 Newtons.



Plug EV West harness into BMS

Lower battery to LTC B. Connect thermistor harness to corresponding LTC port
Upper battery to LTC A. Connect thermistor harness to corresponding LTC port

Connect IMO and IPO wires to appropriate BMS ports



Install front ABS spacer.



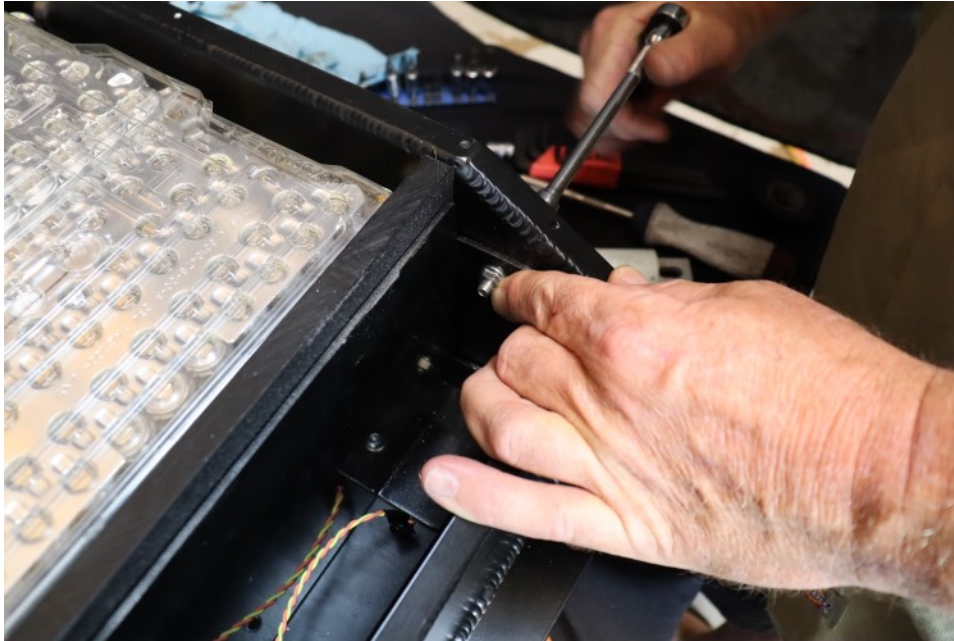
Install front ABS spacer.



Install BMS mount.



Install BMS mount. Install lower bolts and side bolts.



Install BMS mount. Install lower bolts and side bolts.



Install fuse holder.



Install fuse Attach battery positive cable to drivers side post. Apply anti corrosion compound. Attach Amphenol positive cable to passenger post. Apply anti corrosion compound.

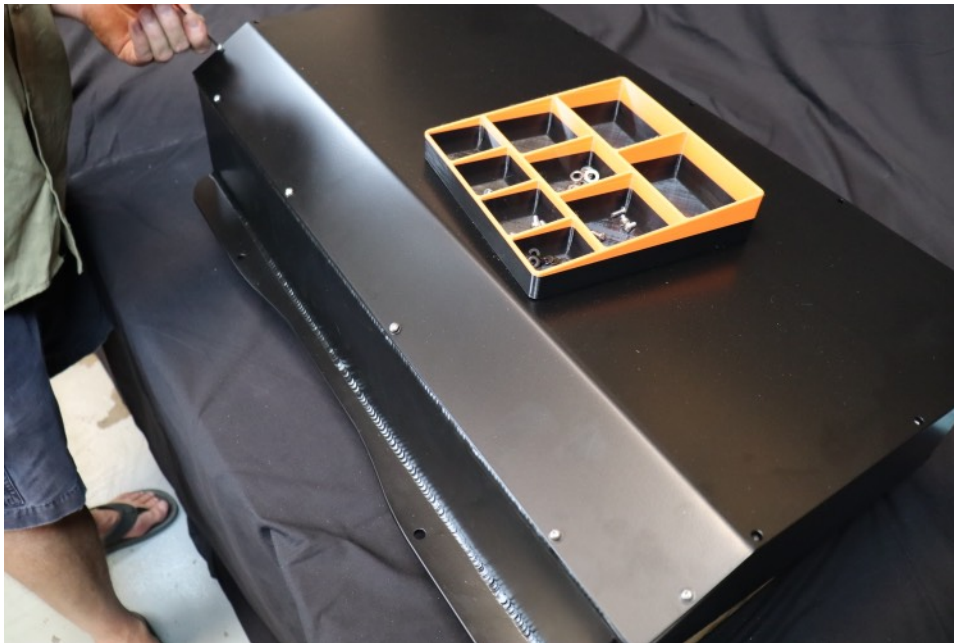
Test BMS. Verify both LTCs. Verify cell count. Verify cell voltage. Verify Thermistors.



Apply RTV sealant to lip of box



Install lid



Install lid



Install lid



Install lid



Congratulations! You have just completed the assembly of your front beetle battery box—great work! This is an important conversion, and we're thrilled to be part of your build. Now, let's get started on the rear battery box assembly!

If you have any questions or concerns as you move forward with your project, please don't hesitate to email us at support@evwest.com or call us at **888-591-5830**. We're here to help make your conversion a success from start to finish.