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Installation Instructions

XR650L Lithium-Ion Battery Box



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2. Tools Required

- Phillips Head Screw Driver
- Flat Blade Screw Driver
- Ratchet with 8mm, 10mm, 12mm, 13mm Sockets
- 12mm or 13mm Wrench
- Metric Allen Wrench Set
- Loctite 242 (Recommended)

3. Assembly Procedure

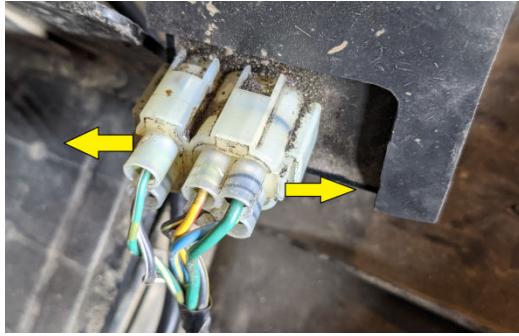
These instructions will step you through the process of removing your OEM battery box and associated components, along with the installation of your Spectrum Moto battery box.

1. Remove OEM Battery Box and Components

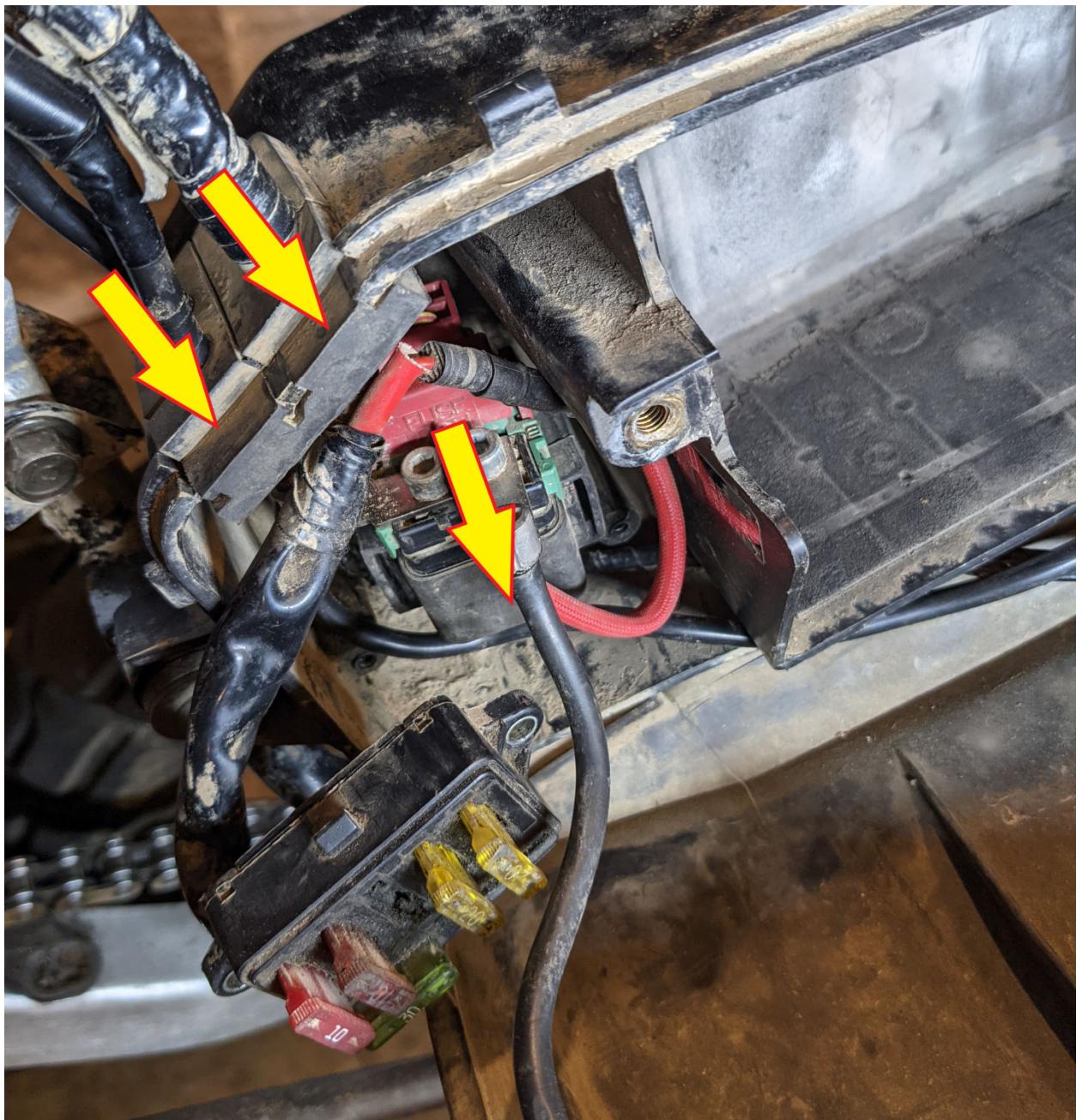
- 1) Remove side panel, flip down rubber battery box cover, and remove battery restraint, and fuse panel.
- 2) Disconnect the battery terminals, and remove the battery



- 3) Pull out the ignition, and disconnect the connections by pulling out slightly on the retaining tabs as shown. The connections should then easily separate.



- 4) Pull out your starter relay by sliding it straight outward (wiggle left and right as you pull). Simultaneously, pull the wire grommet boot out of the battery box. Spraying some WD-40 or equivalent lubricant on the boot guides, and plastic battery box relay retainer blades will greatly assist in removal.



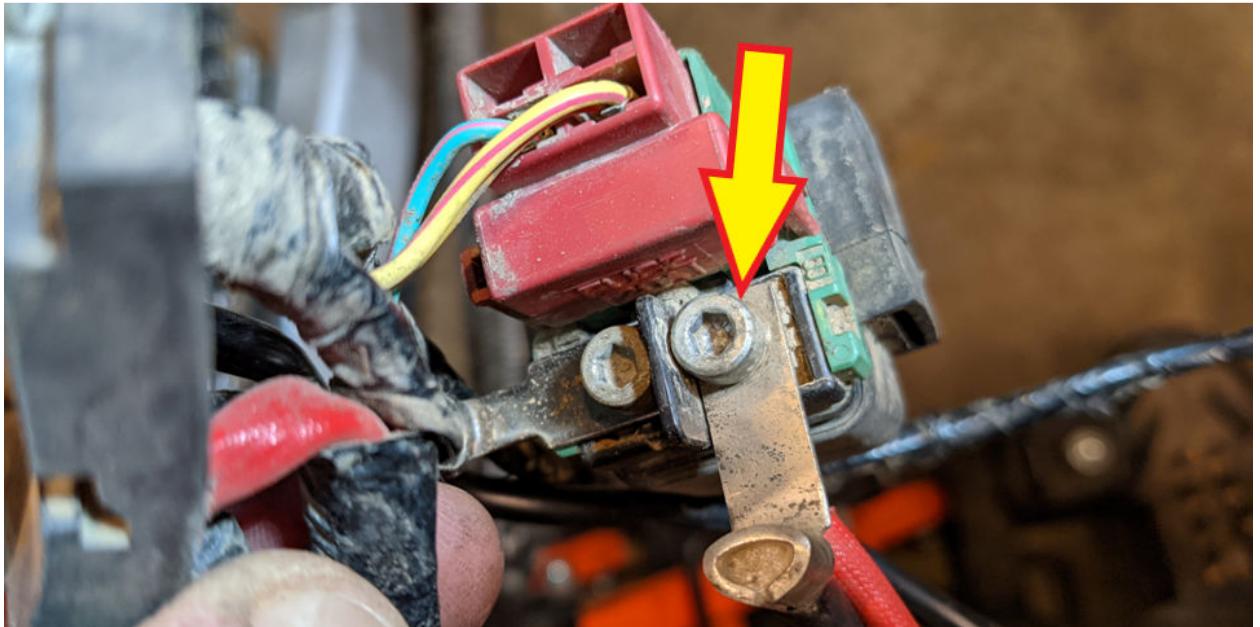
- 5) With all components removed from the battery box, proceed with removing the three bolts that hold the plastic battery box into the steel frame.



- 6) Remove the two bolts that hold the battery box frame in place.



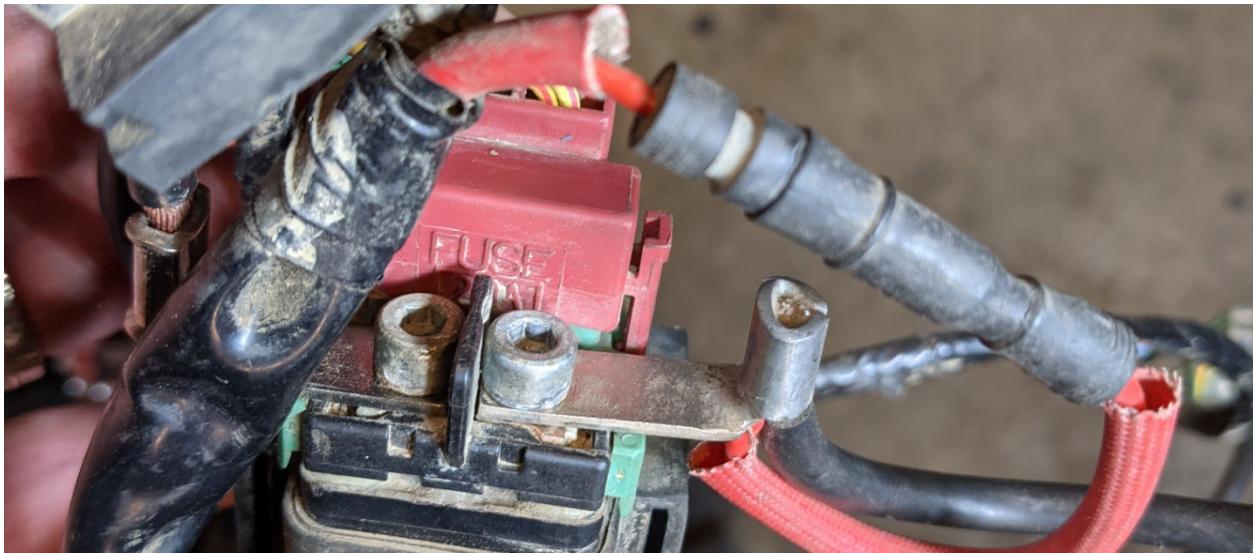
- 7) Remove the positive terminal from the starter relay. It will be re-installed 90° relative to its current position. In order to do this, a small amount of material from the end of the terminal must be filed off. Remove .03in (<1mm) from the end of the terminal as shown.



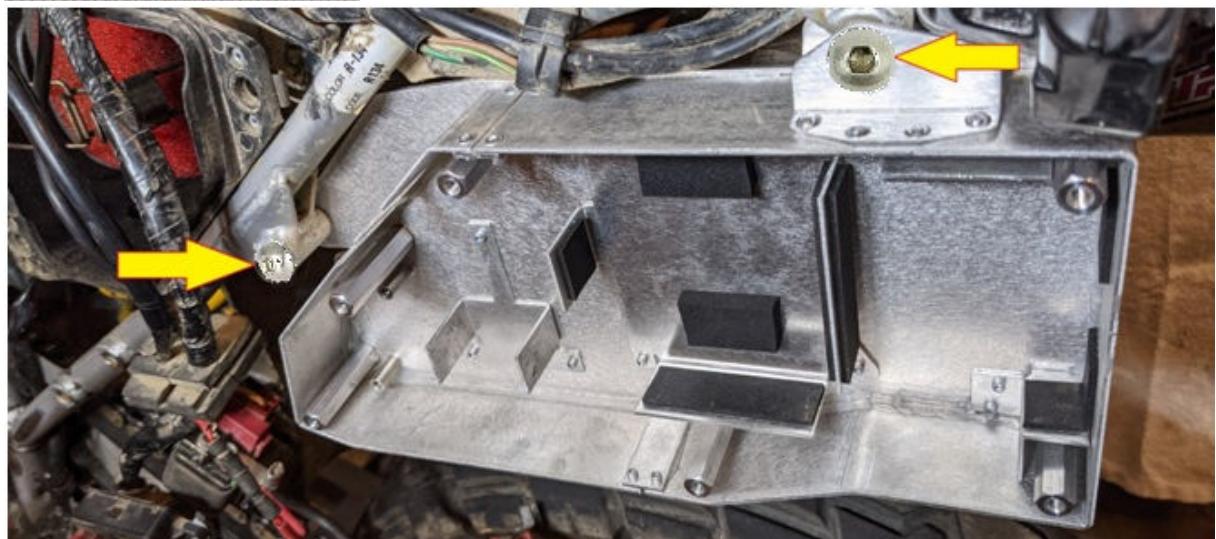
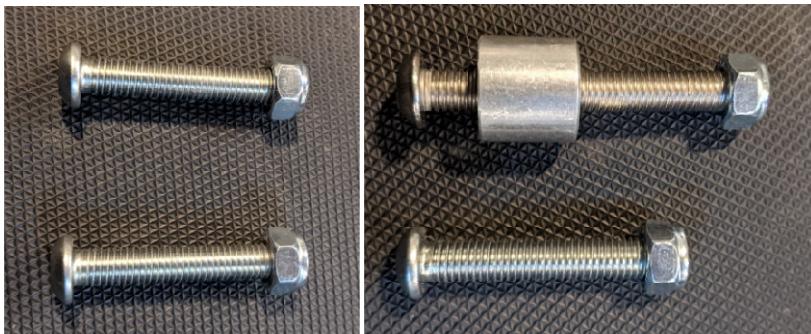
This is what the terminal looks like once enough material has been removed to install screw:



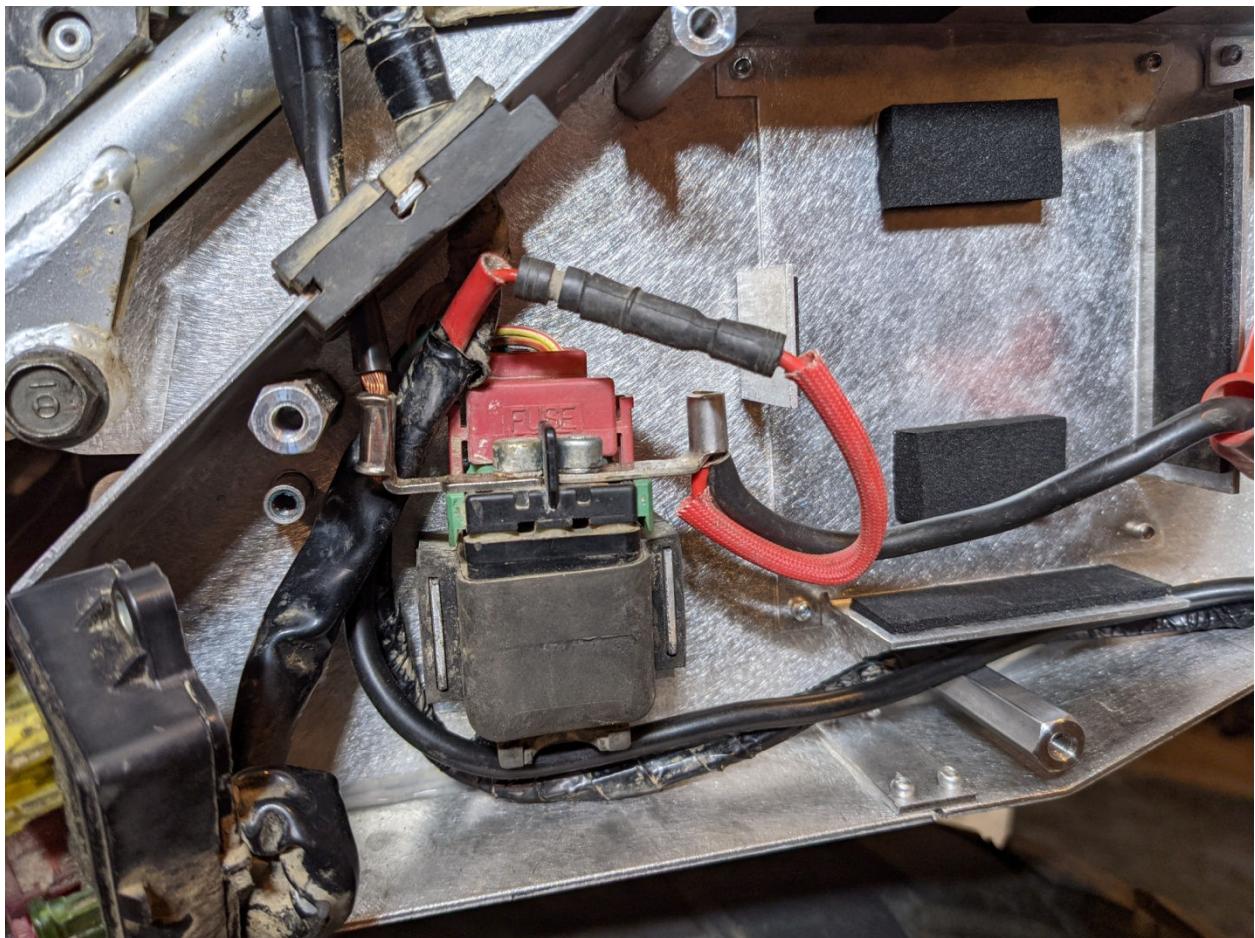
Reinstall to be parallel with terminal on the opposite side:



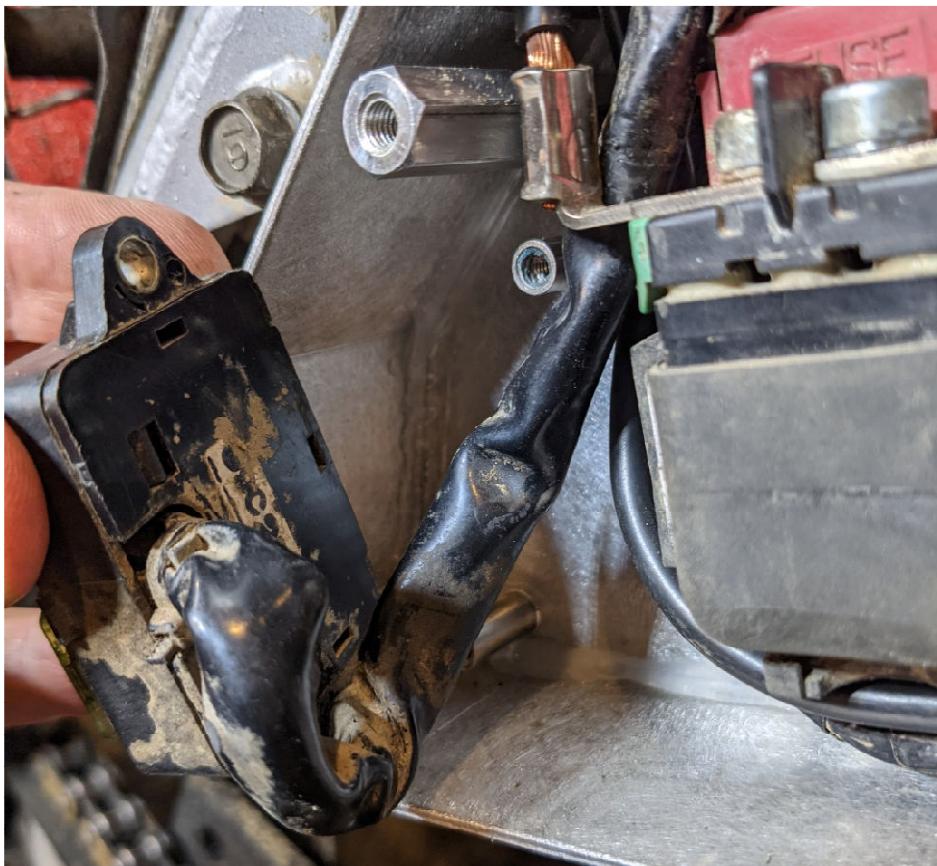
- 8) Using the M8 X 45mmL button head bolts along with the hex nuts that were supplied, you can install the new aluminum battery box as shown. Nuts are installed in the rear (they are 13mm drive size). Do not fully tighten either bolt down until both bolts are partially installed to ensure proper positional and angular alignment. If you have purchased the box compatible with a 150mm tire, you will have one shorter bolt and one longer bolt with a spacer. The longer bolt and spacer go on the rear, with the spacer on the outside of the frame.



- 9) You can begin to install the cable grommet and starter solenoid, but first please note. **Cable routing is critical** for proper fit of all components in the new aluminum battery box. Start by routing the negative battery cable and the ignition module cable behind the left side of the starter solenoid. Also, the fuse panel cable must be routed behind the left side solenoid terminal as shown.



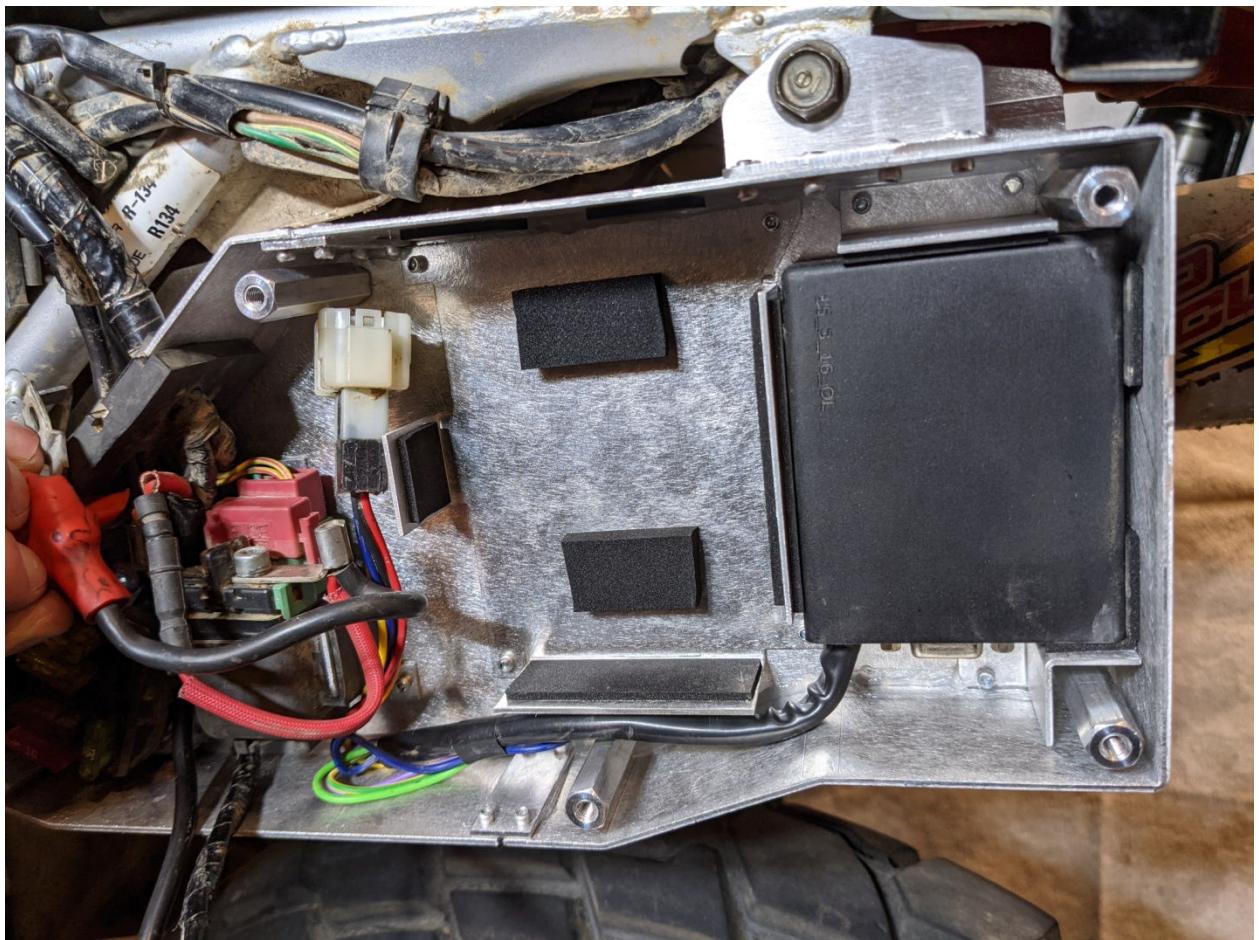
10) Tightly coil the fuse panel cable behind itself as shown.

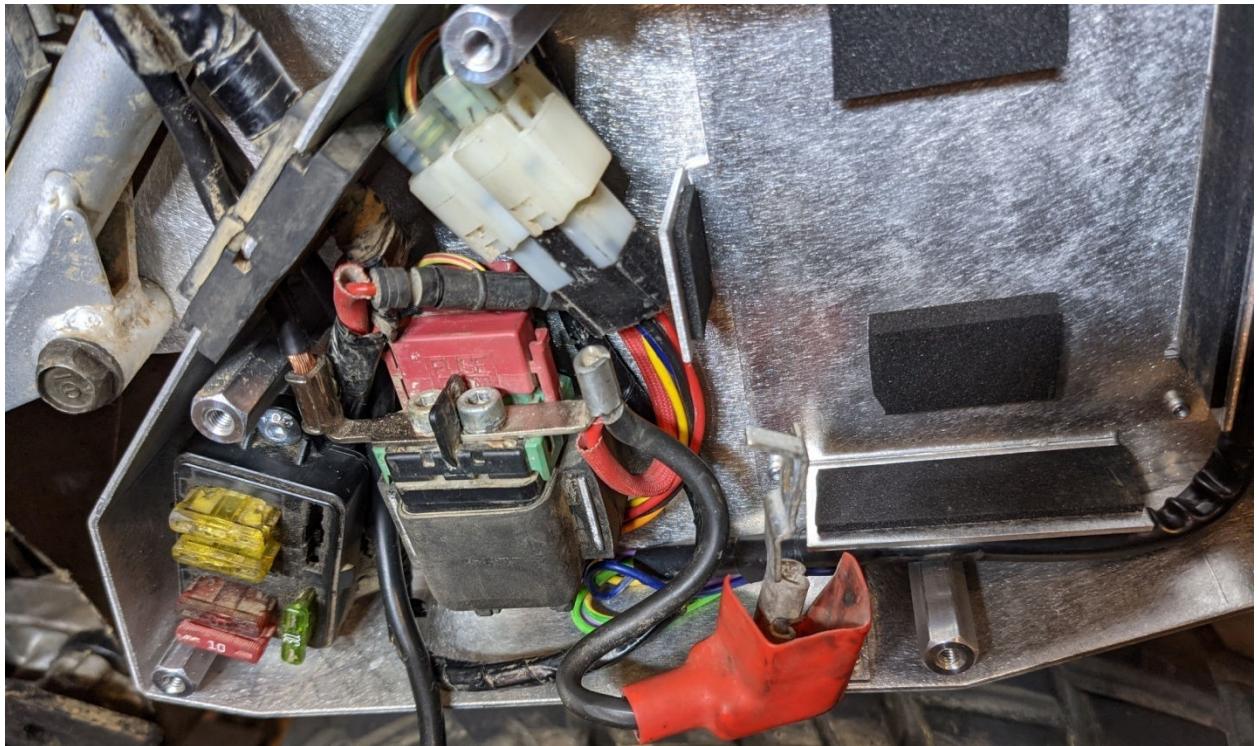


11) Install the fuse panel as shown with the supplied button head screws. Be certain no wires are being pinched during final tightening. Applying Loctite #242 or equivalent is recommended here.

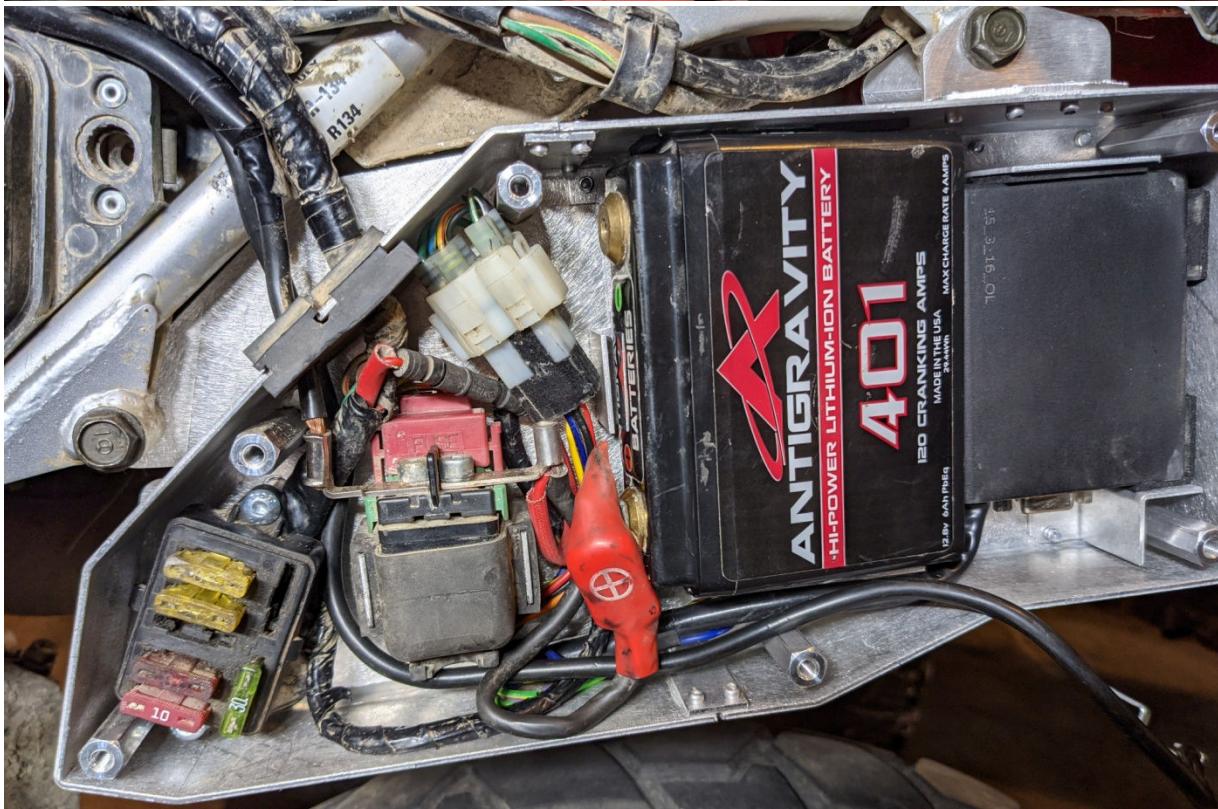
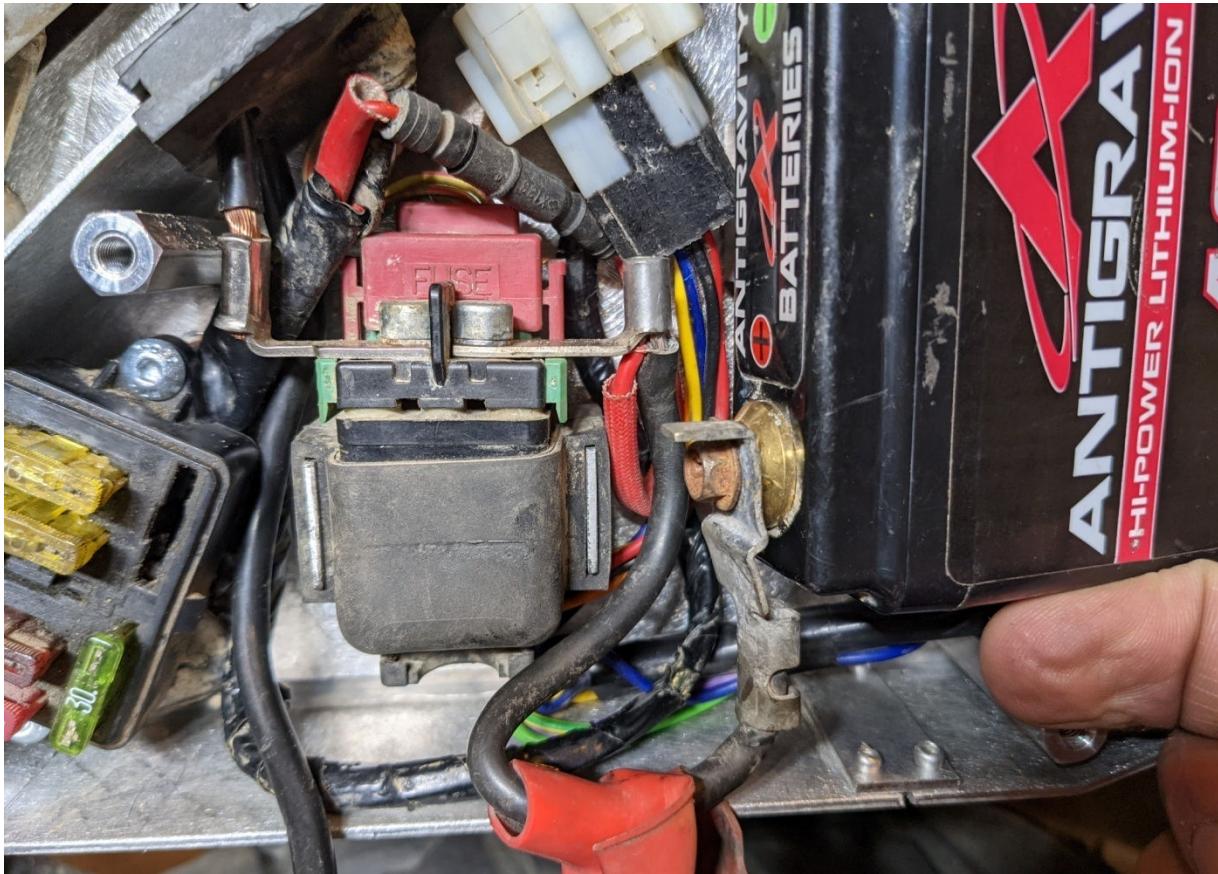


12) Install the Ignitech ignition module, and route cables as shown.





- 13) Pre-install the positive battery terminal onto the Anti-Gravity 4 Cell battery, and bend/orient cable as shown. It is recommended that the small tab on the terminal be cut off to ensure boot fits more snug. When cable terminal is in vertical position, tighten terminal screw.



- 14) Finalize the battery installation by routing and securing the negative battery terminal as shown. Having cable route horizontal across the battery is critical to ensure foam retainer pad on the battery box cover clears the cable properly and rests only against the battery body.



- 15) Install the battery box cover using six of the supplied button head screws. Using Loctite #242 or equivalent is recommended for these screws. Assembly is now complete.

