



# **ALLTRAX**

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Installation guide for XCT controllers  
on 2008-2014 Club Car Precedent  
models.

# Kit Contents

X2



Nylon Washer 375

X2



Nylon Washer 125

X4



Flat Washer

X4



Nylon Nut  $\frac{1}{4}$  x 20

X2



Bolt  $\frac{1}{4}$  x 20 x 2"

X2



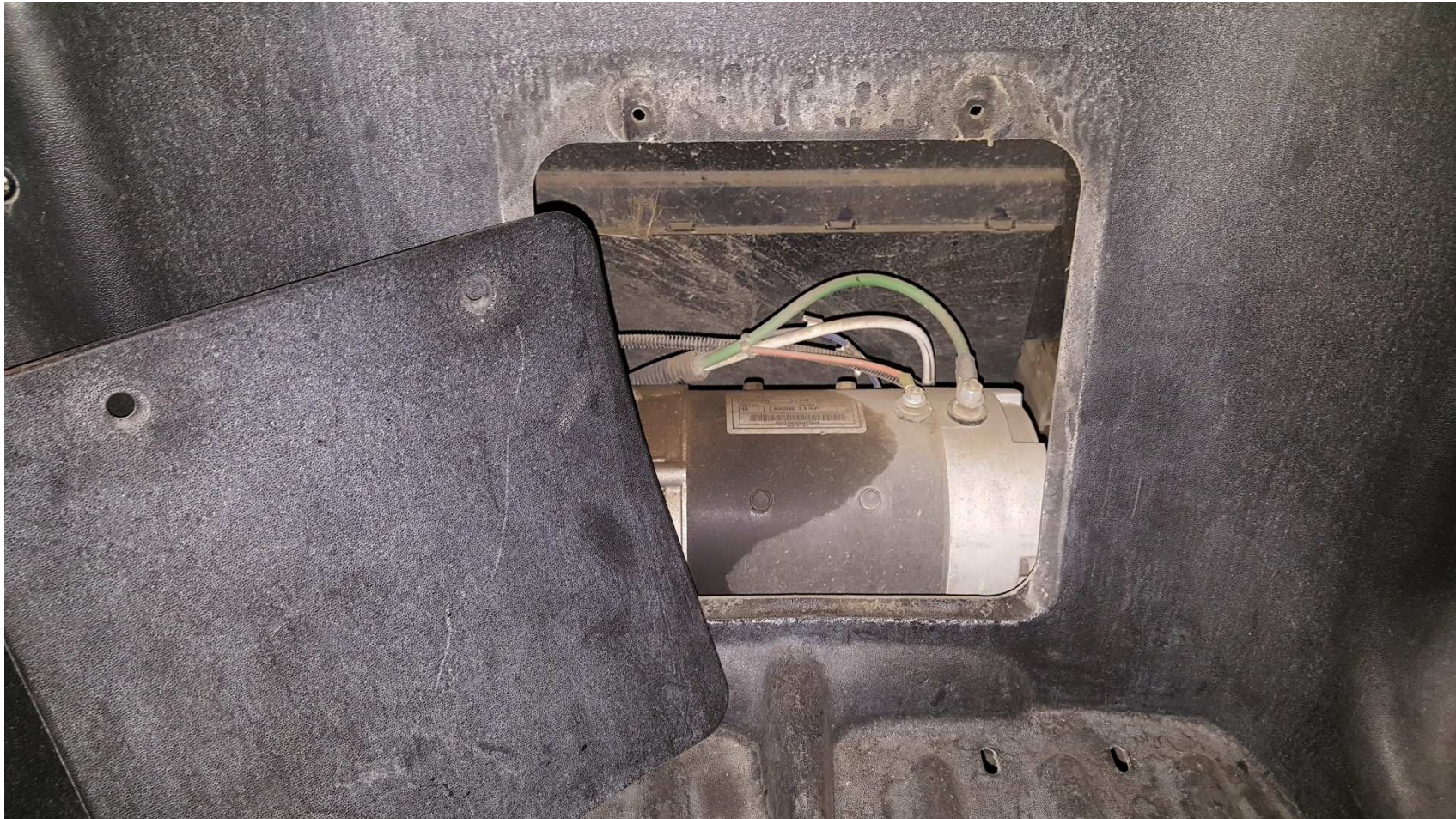
Bolt  $\frac{1}{4}$  x 20 x 1.75"

## **WARNING:**

***This installation should be done by a certified golf cart technician or someone trained in the craft.***

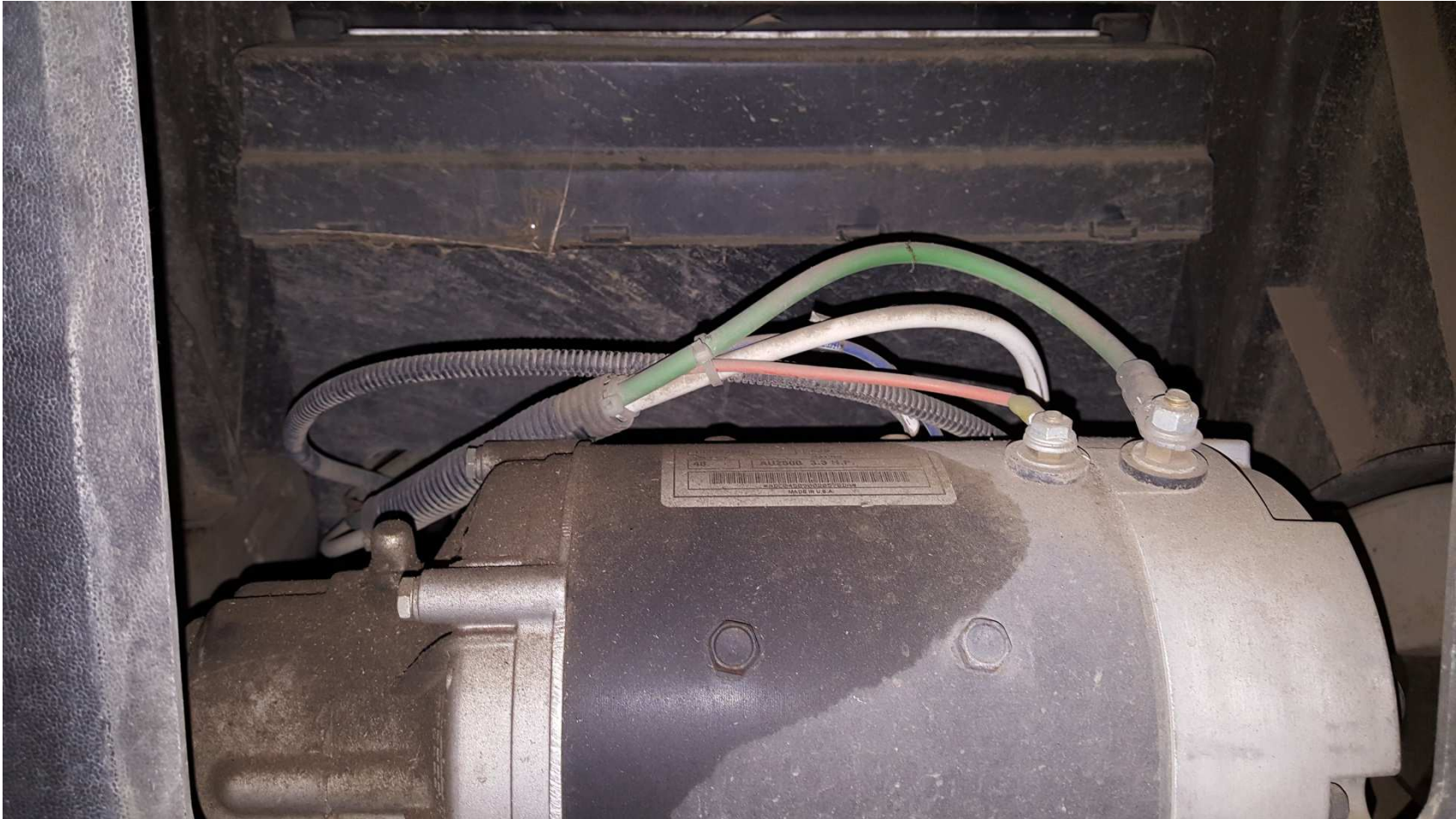


Step 1: Remove the motor access plastic cover to access the motor and controller compartment.

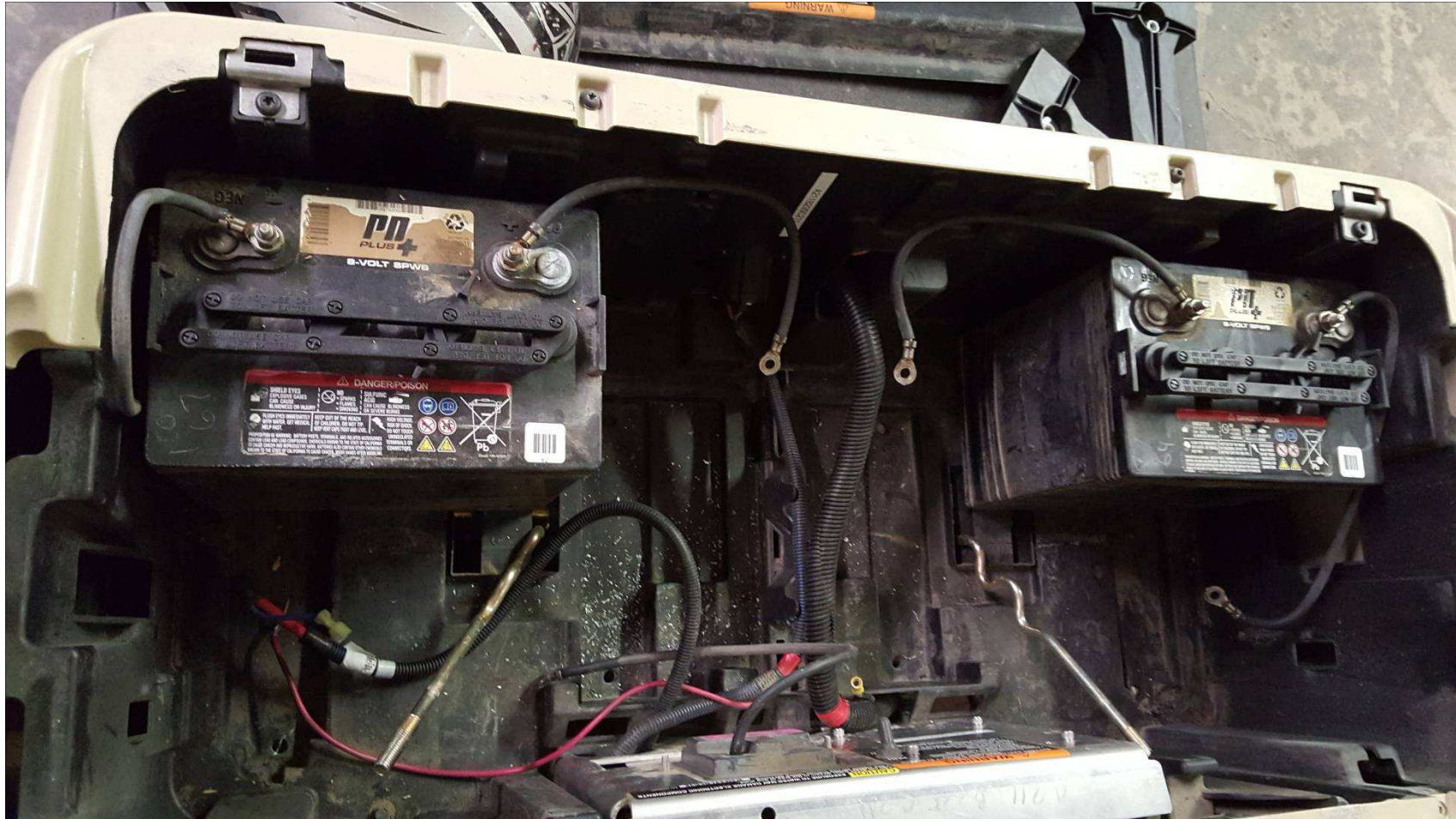




Step 2: Remove the plastic cover that goes over the stock controller. Remove the wires that go to the motor. Also unplug the speed sensor.



Step 3: Set the TOW/RUN to TOW. Then remove 4 batteries leaving the 2 shown in the picture.

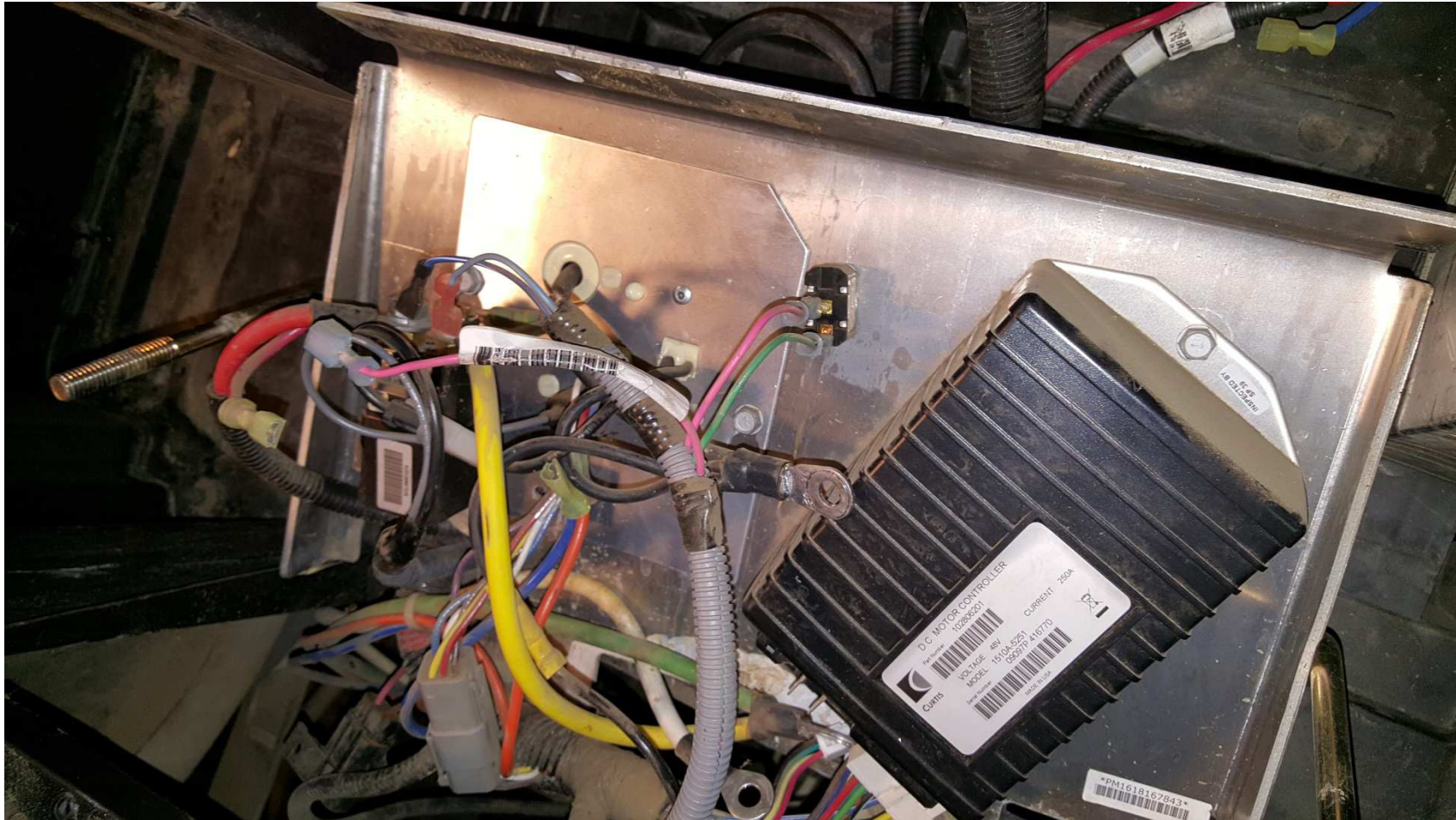




Step 4: Remove the star screw holding the mounting plate in place.

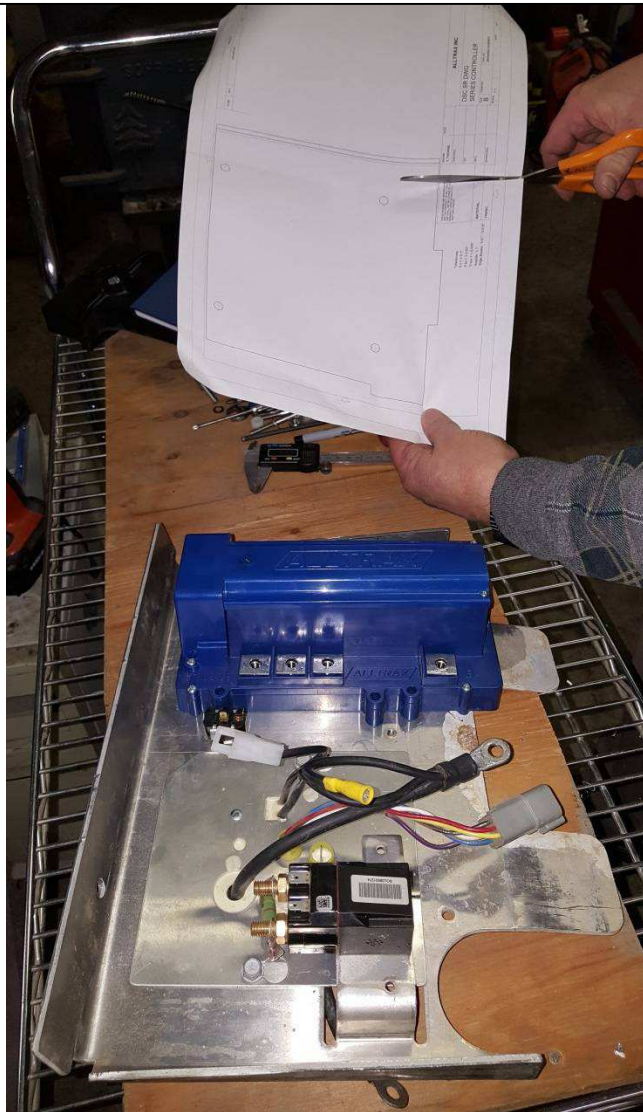


Step 5: Pull the mounting plate up and forward and remove all the cables from the controller, OBC and contactor and tow/run switch. Pull The mounting plate out of the cart.



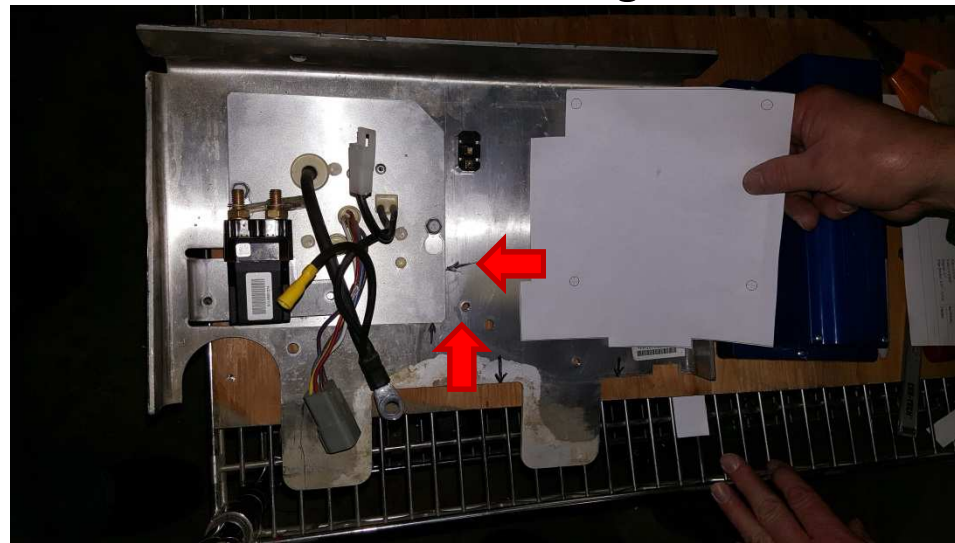


Step 6: Remove the stock controller from the mounting plate and cut out the template for the XCT controller.

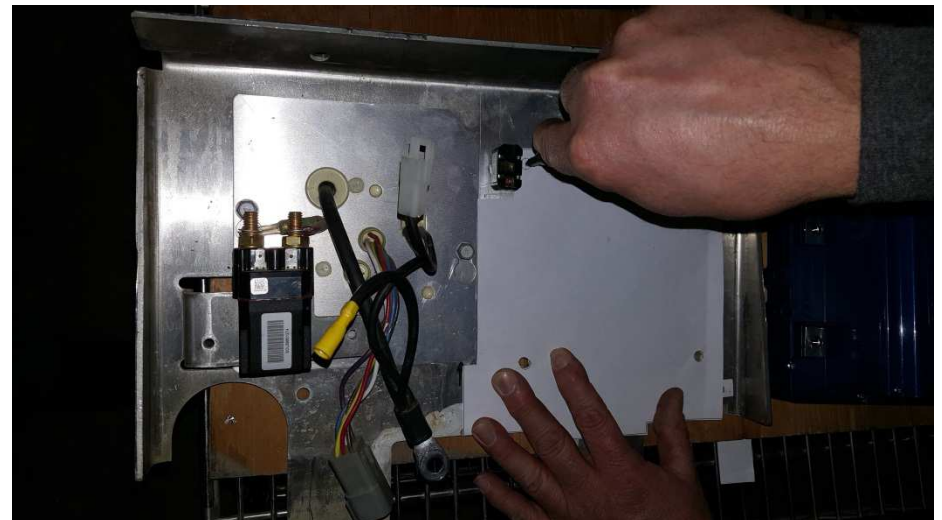




Step 7: Line up the drill-template so that the left edge – and – bottom Notch in the paper template aligns with the edge of the OBC as shown in the picture. Its best to tape this down so it doesn't move when center punching the hole markings.



Step 8: Use a punch tool to mark the 4 holes Through the template onto the adapter plate.

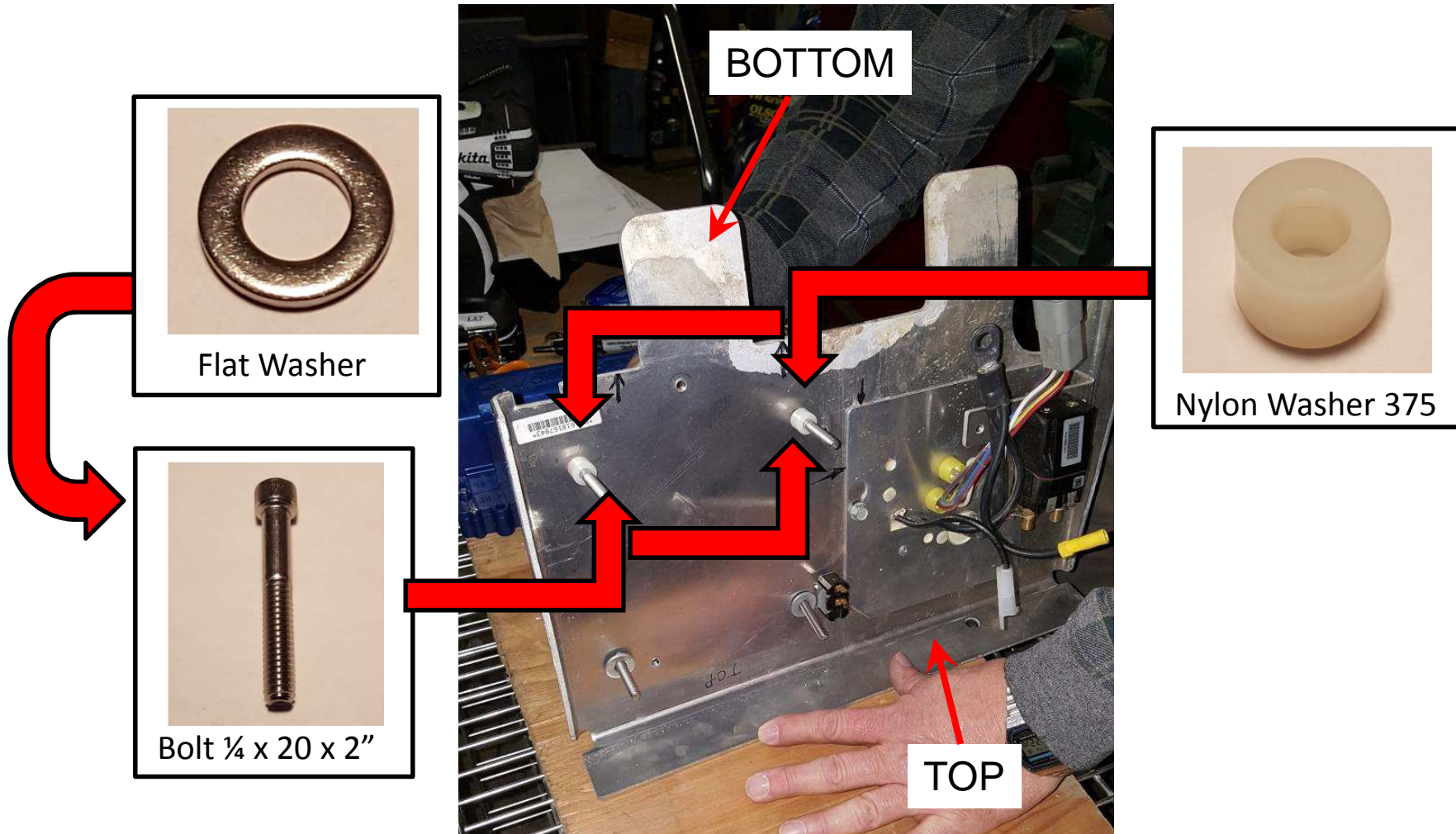




Step 9: Drill the marked holes using a ¼" (6mm) drill bit.



Step 11: Put TWO flat washers on TWO  $\frac{1}{4}$  x 20 x 2" bolts then push the bolts through the bottom 2 holes as shown. Then put the 2 Nylon Washer 375 on the bolts. The THICKER 0.375" nylon washers space the controller OUT.





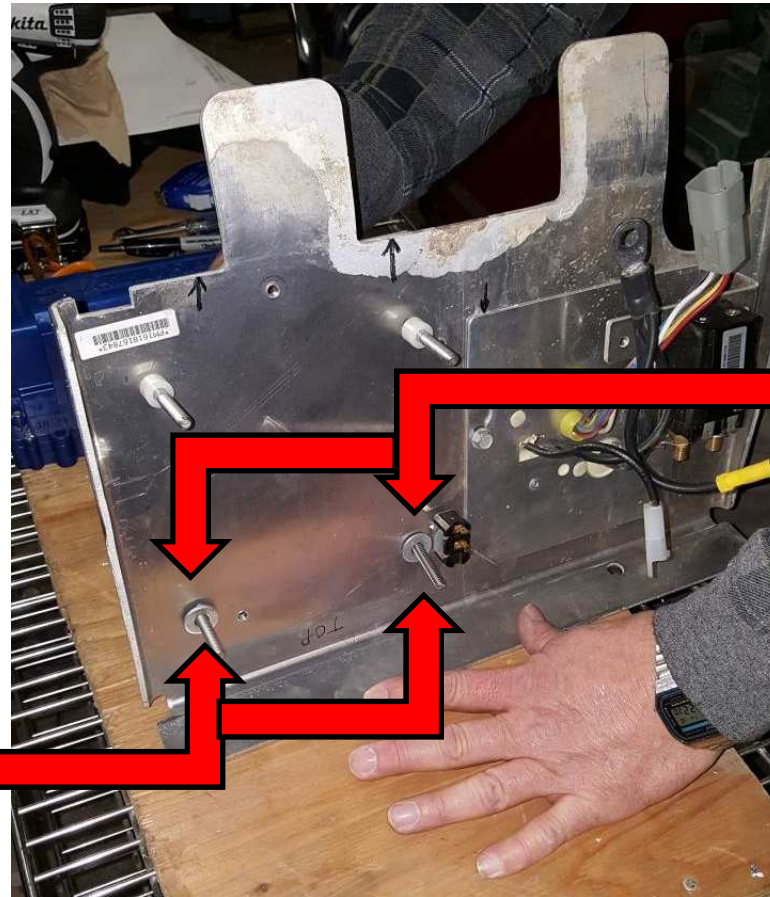
Step 12: Put TWO of the Flat washer's on the TWO  $\frac{1}{4}$  x 20 x 1.75" bolt's. Then push the bolts through the 2 top holes of the mounting plate as shown. Then put the 2 THIN Nylon Washer 125 on the bolts. THICK 375 washers on bottom and THIN 125 washers on top causes the controller to sit ANGLED pushed out away at the bottom to clear the battery tray lip.



Flat Washer

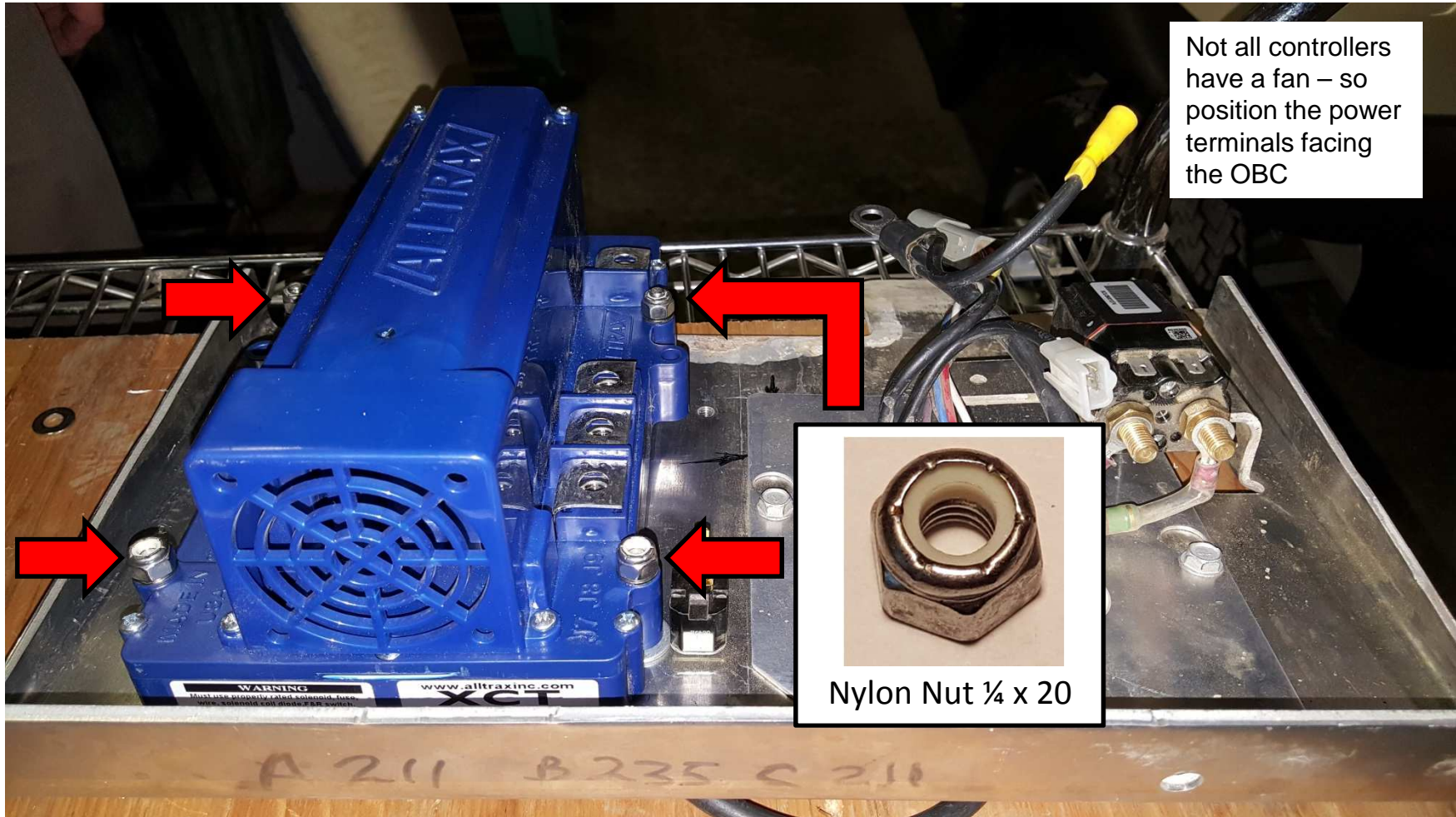


Bolt  $\frac{1}{4}$  x 20 x 1.75"



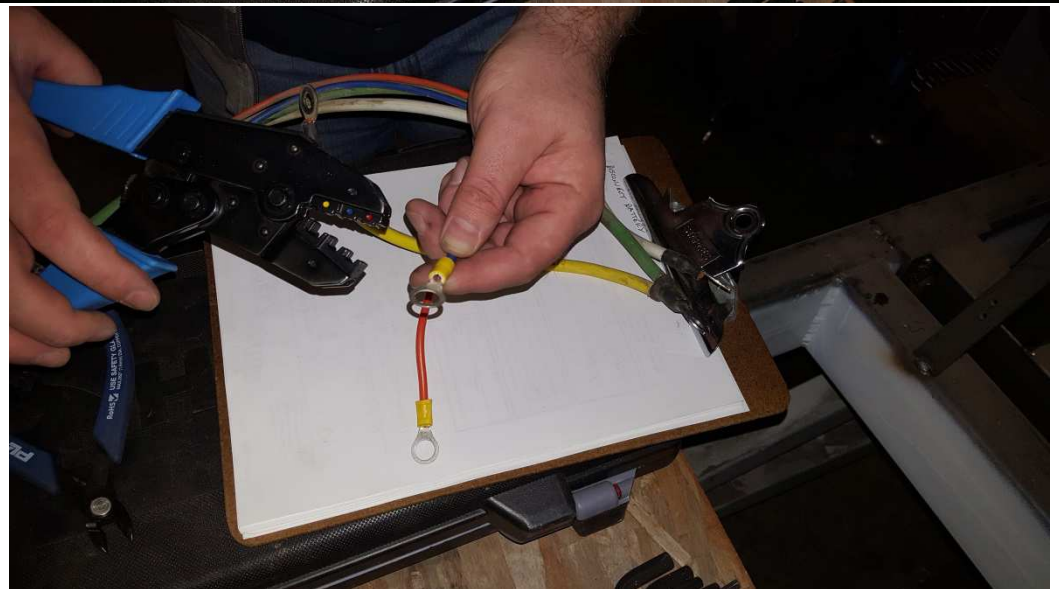
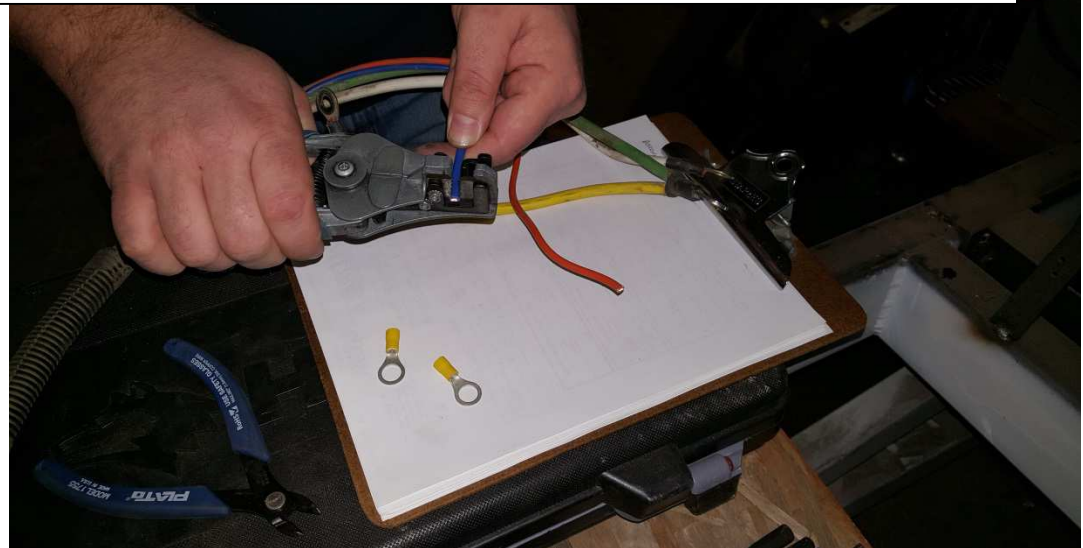
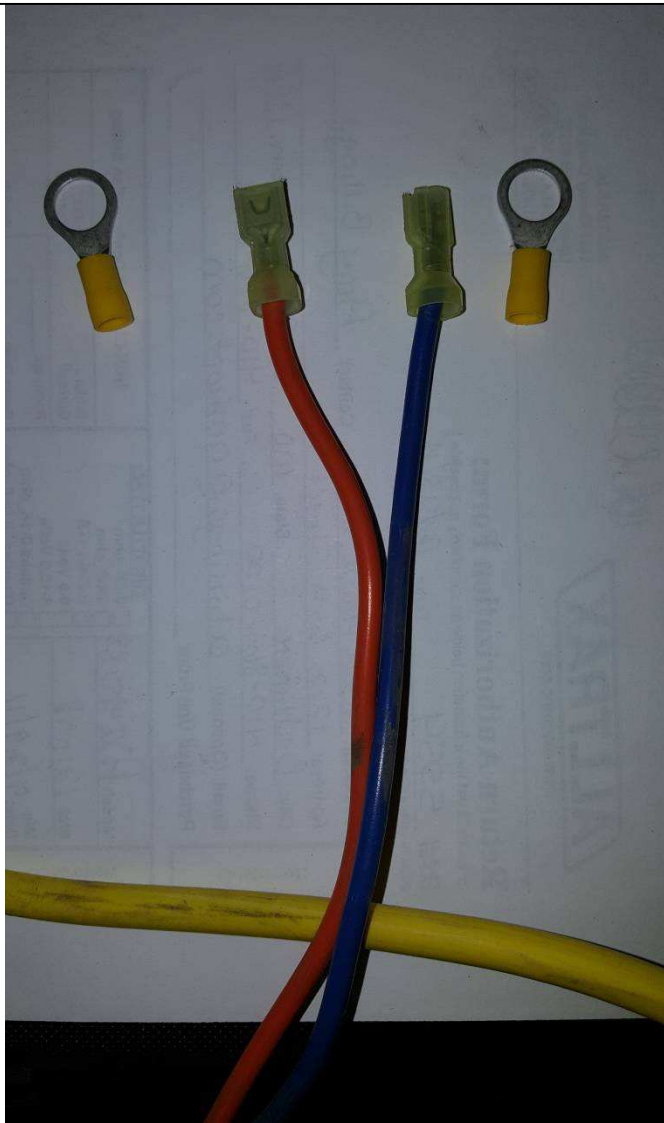
Nylon Washer 125

Step 13: Put the controller FAN END UP – Power terminals towards OBC and slide onto the 4-bolts. Install 4x SMALL diameter washers on the bolts. Install the 4x Nyloc nuts and tighten. DO NOT OVER TIGHTEN!





Step 14: Attach the supplied 5/16" Yellow ring terminals to the 10AWG blue and orange FIELD wires that go to the motor's F1 and F2 terminals.



Step 15: Cut the yellow wire attached to the green motor wire and tape the GREEN WIRE END as shown.

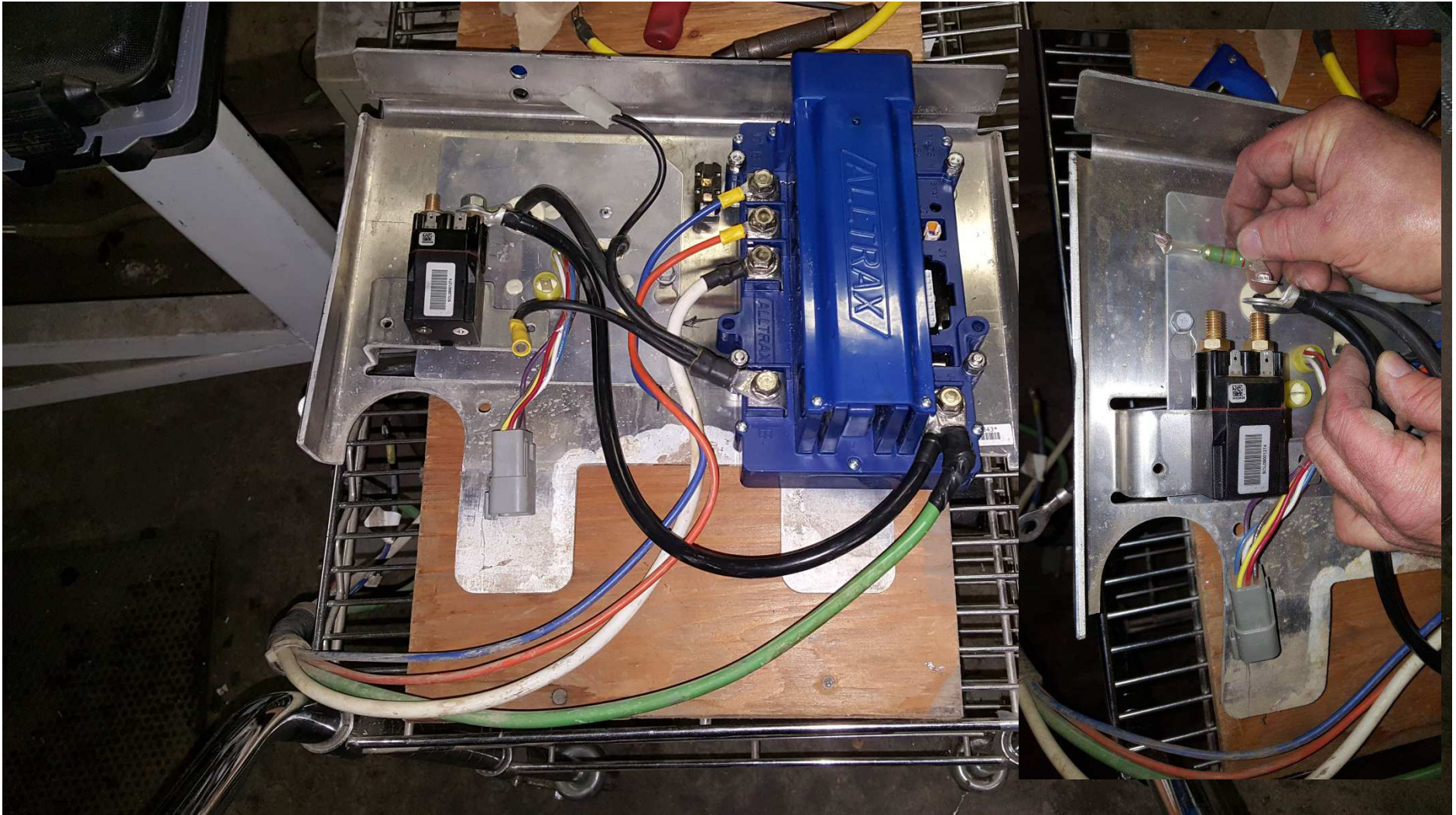


**Warning!**  
If using a 500 amp model controller you must upgrade the stock 6AWG cables to high current 4-2 AWG cables throughout the cart. The F1 and F2 wire's remain at the stock 10AWG.



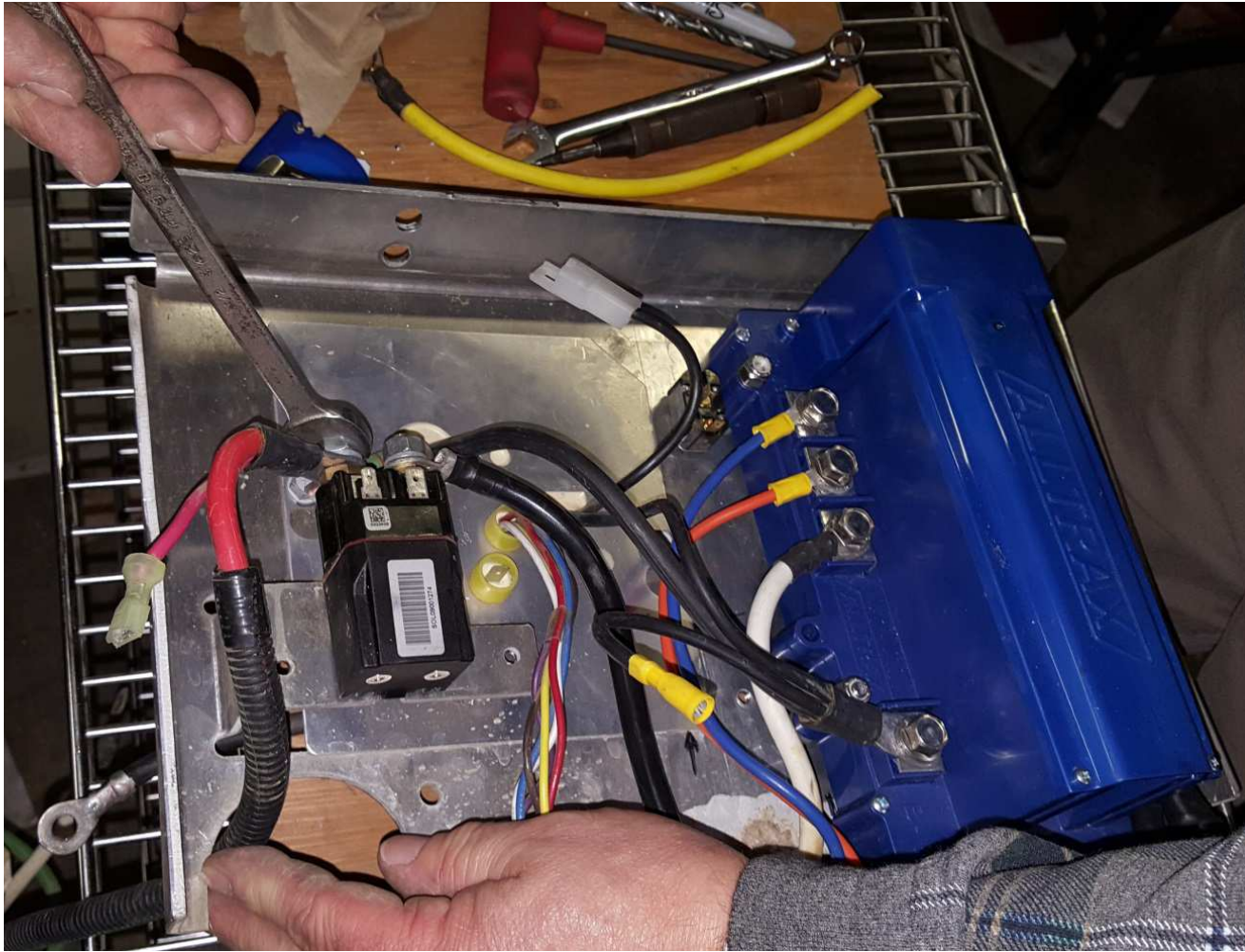


Step 16: Connect BOTH the GREEN wire from the motor and the supplied 4 gauge JUMPER wire and attach them to the B+ terminal of the controller. Attach the other end of the supplied JUMPER 4 gauge wire to the solenoid (with resistor) as shown. Attach the Blue FIELD wire to J7. Orange FIELD wire to J8. White M- wire to J9.



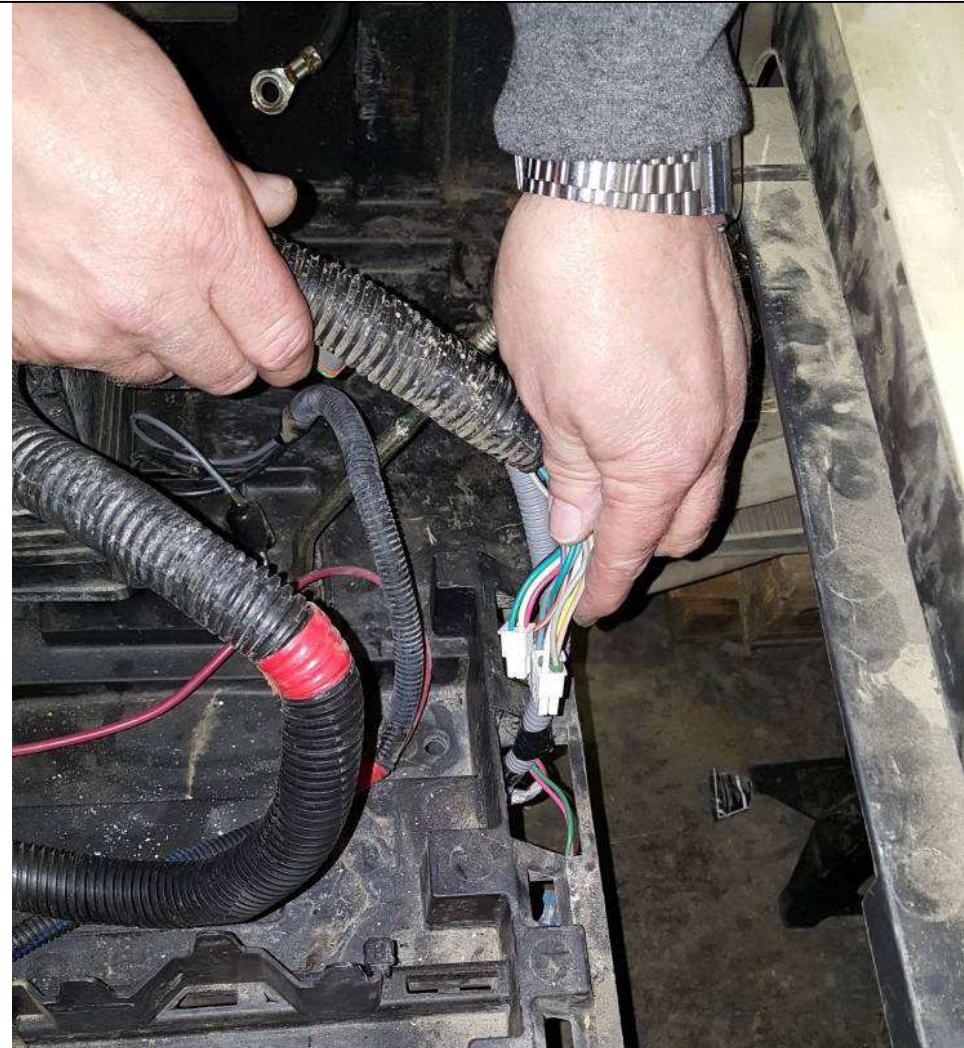


Step 17: Attach the Positive battery wire to the contactor/solenoid and route through adapter plate cutout as shown.



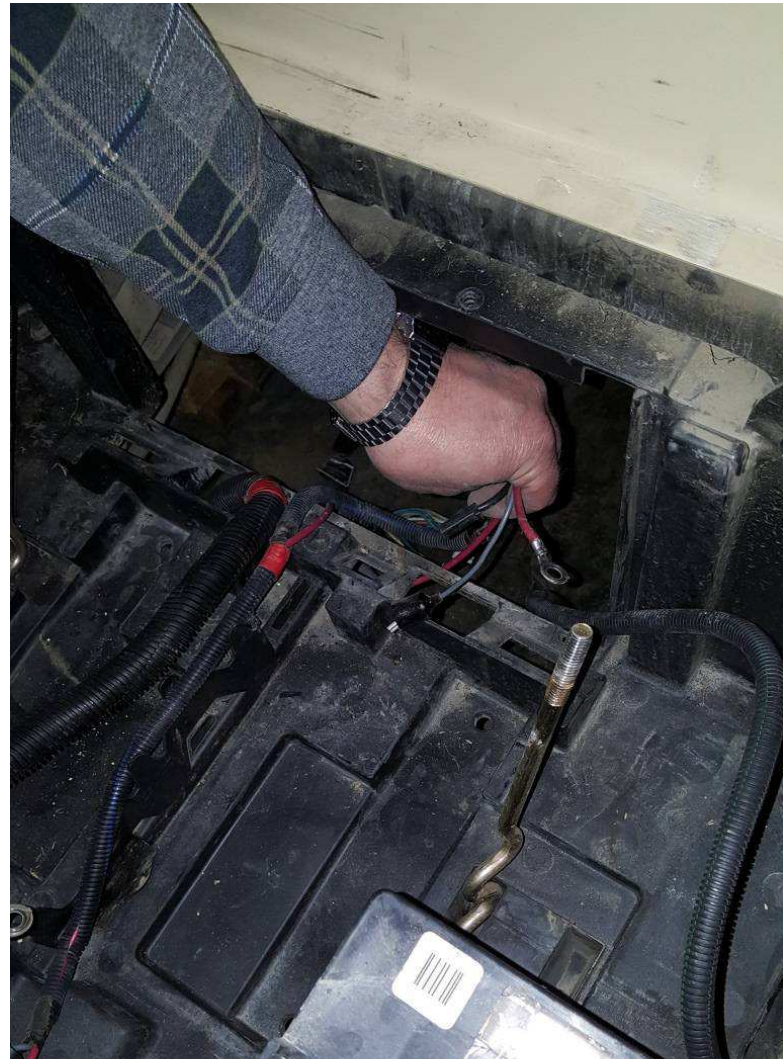
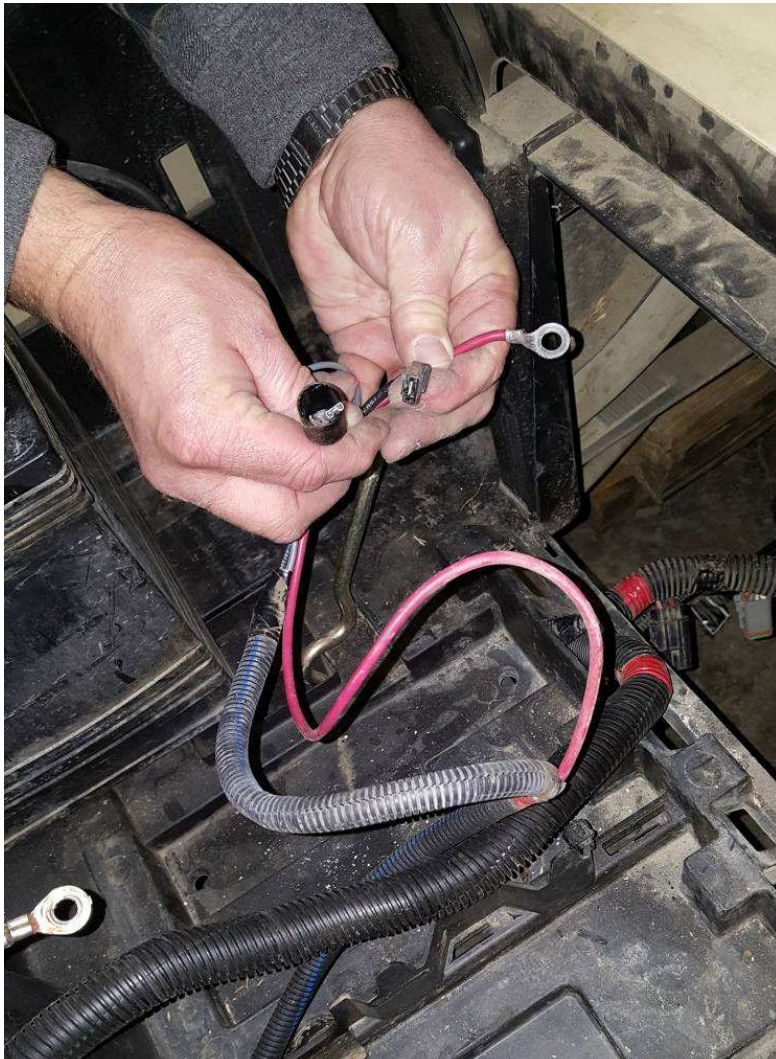


Step 18: Route the wire harness containing the 16 pin connector, 4 pin connector and OBC connector through the bottom hole in the plastic battery tray as shown.





Step 19: Route the wire harness that contains the OBC, Tow/Run and charge port wire across the battery tray as shown.





Step 20: Slide the adapter plate back into it's original position. The bottom lip of the plastic battery tray will fit between the controller and adapter plate as shown.

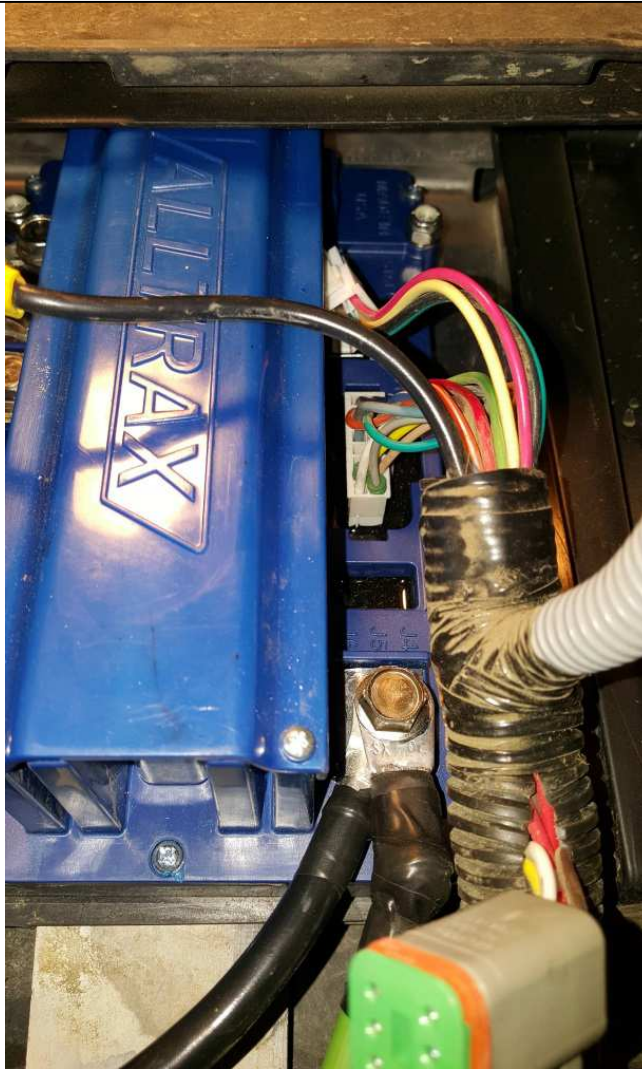


Step 21: Mark and drill a new hole as shown for the star screw to allow clearance for the plastic cover to go back over the controller.  
(About ½ to ¾" inward) Use eye protection when using power tools.





Step 22: Connect the 16 pin wire harness to the controller. The 4 pin plug is for the stock controller only and not used for the XCT.



Step 23: Reconnect the OBC wire's, solenoid wire's and tow/run switch wire's.



Blue/White and blue wire to contactor coil terminals.

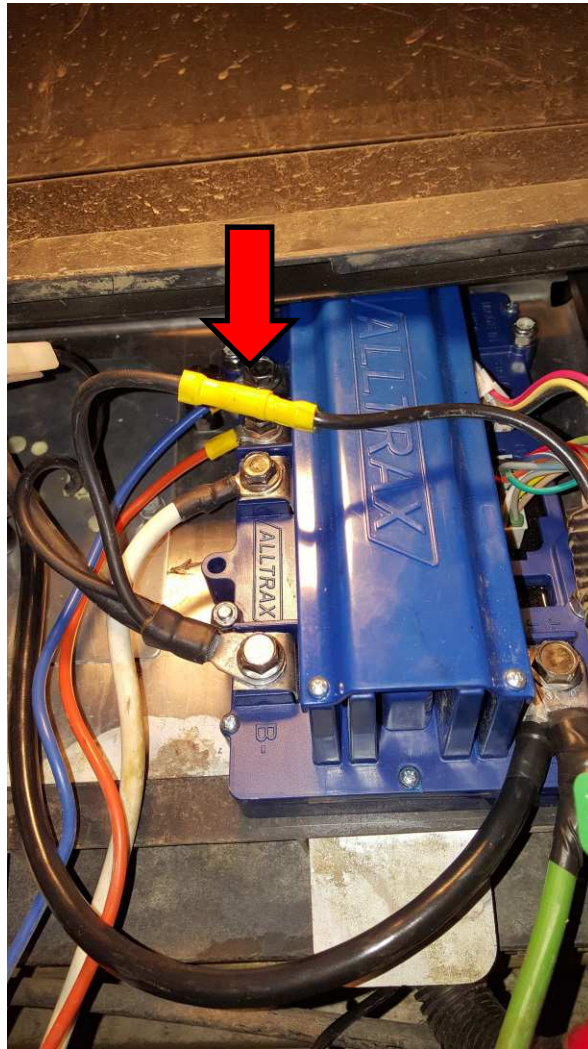
Red and Green wires to tow/run switch

Contactor wire to harness

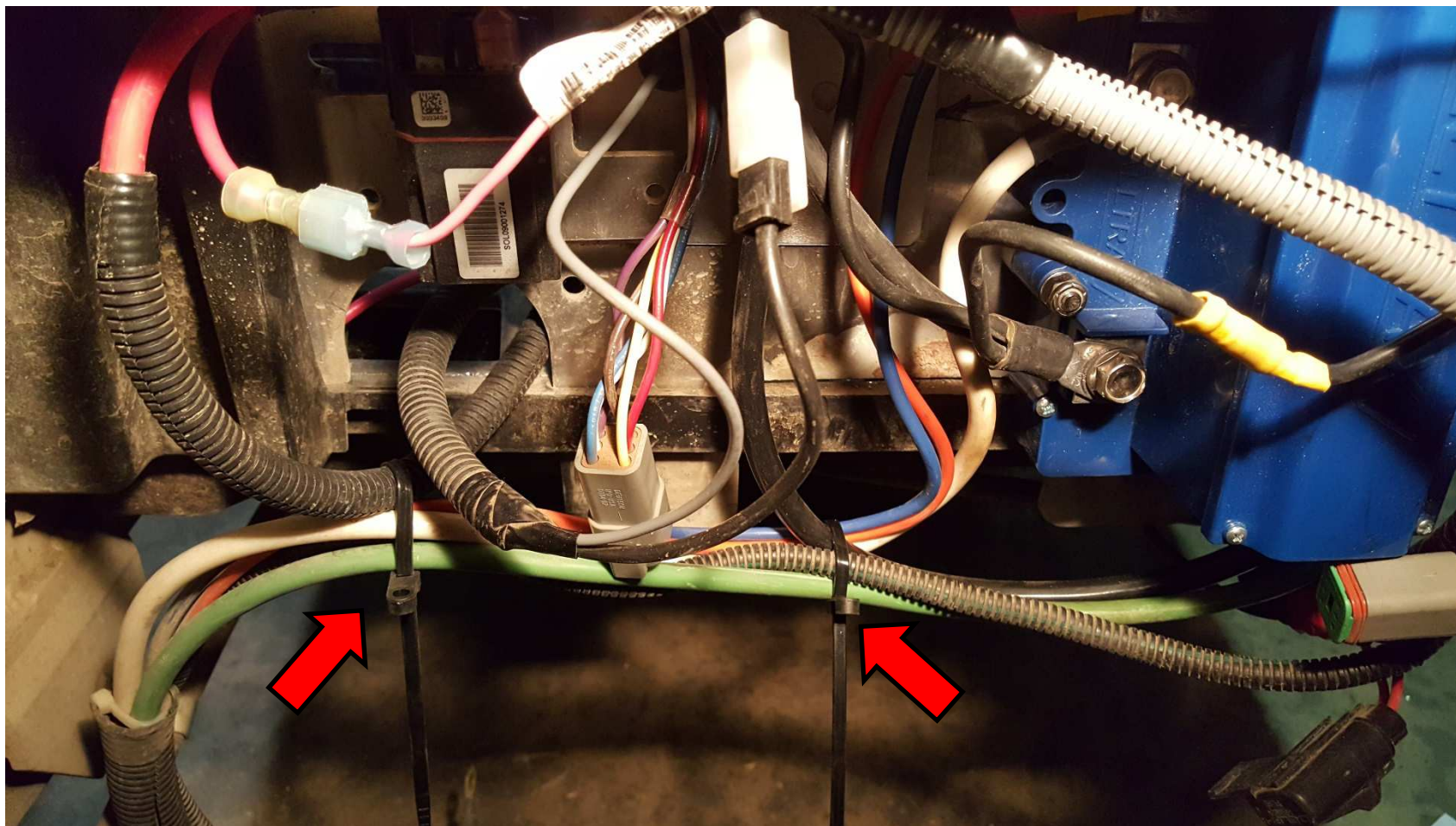




Step 24: Reconnect the black wire's yellow "quick barrel connect" from the harness to the black B- wire as shown.

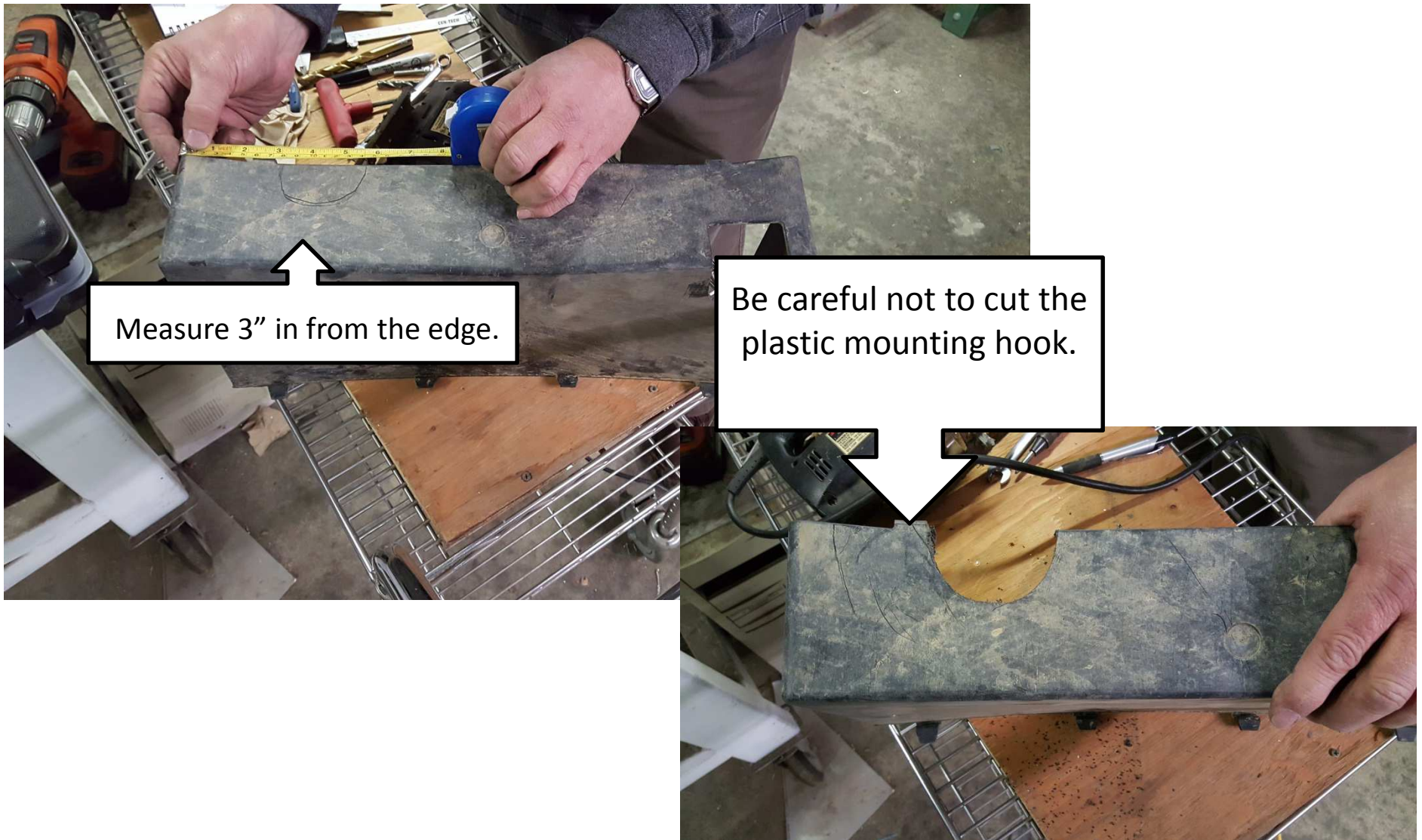


Step 25: Zip tie the motor and speed sensor wires as shown.

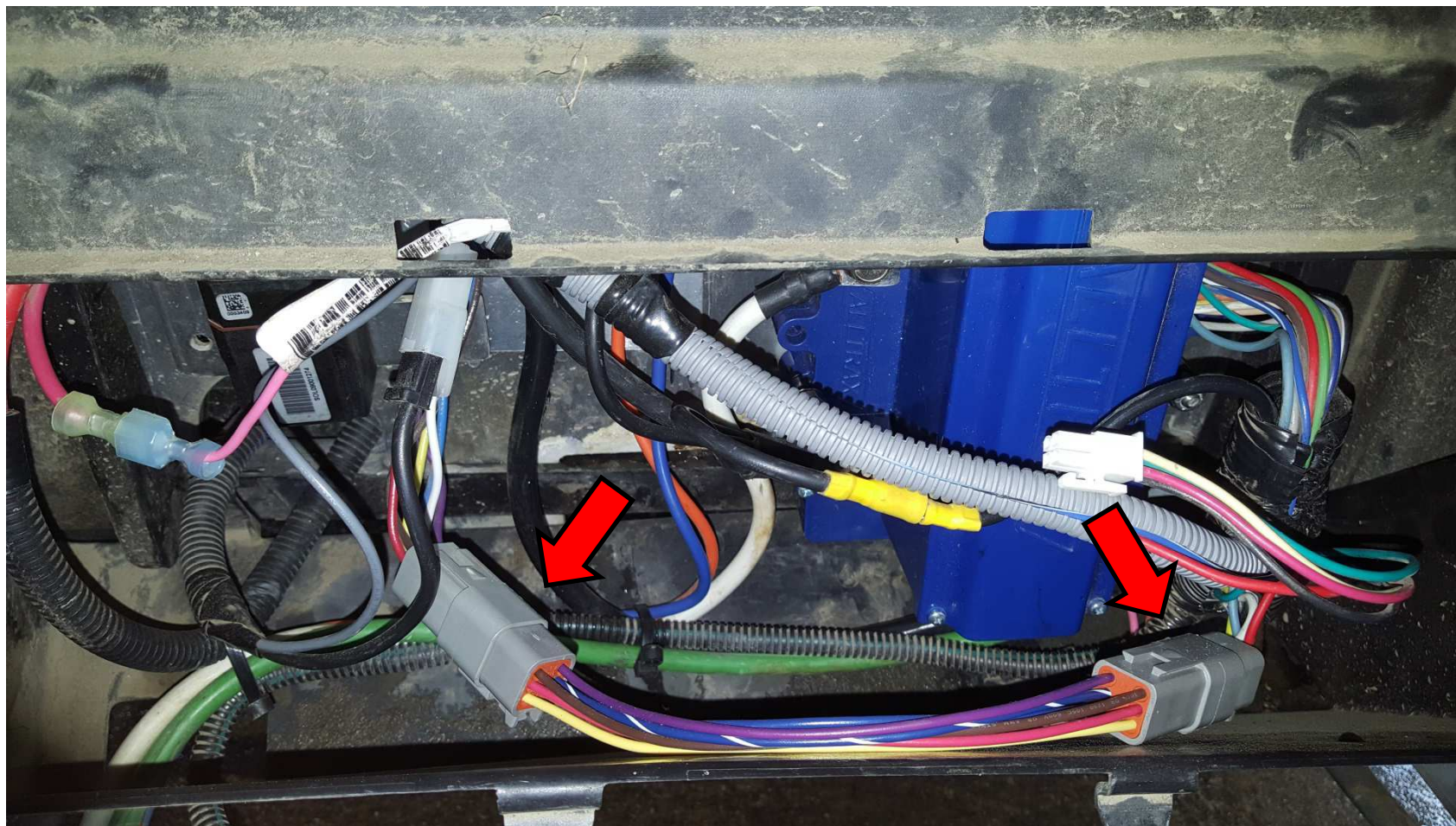




Step 26: The plastic cover must be notched as show in order for the new wire location to pass through it. A fine blade jig saw works best. Use eye protection when using power tools.



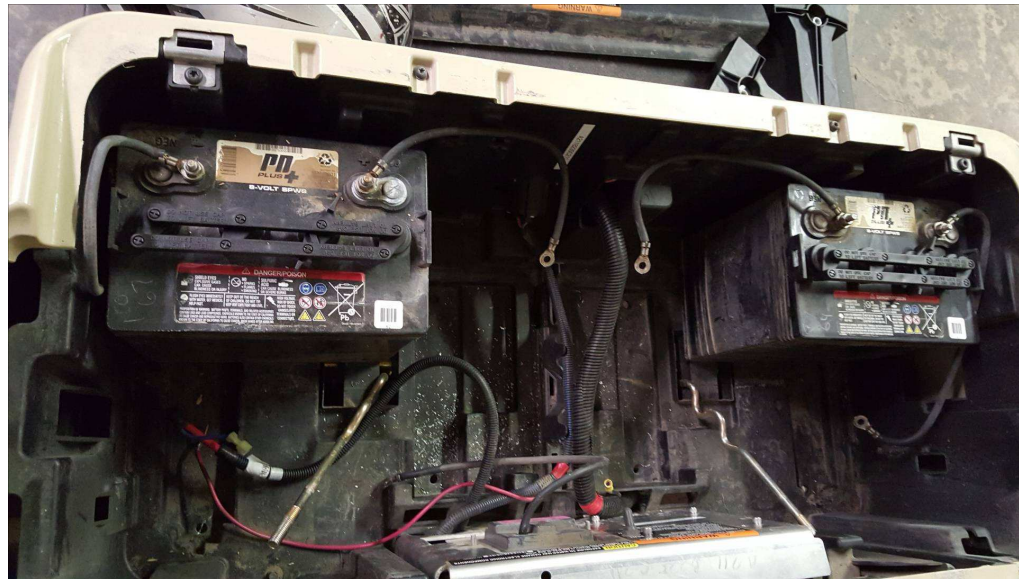
Step 27: Attach the supplied OBC Jumper and put the plastic cover back on.





Step 28: Re-install the 4 batteries observing polarity.

Set the TOW/RUN to RUN. Using a JACK under the cart, test Forward / Reverse direction switch. Turn key-switch to ON and slightly push the pedal. If the direction is “backwards”, turn off KEY switch and reverse the F1 and F2 wires on the motor to set proper direction.



If you have any questions, please feel free to contact Alltrax world class technical support department for assistance. If the controller flashes errors, check the wiring and connections first. Then use a laptop and the Alltrax Toolkit which can diagnose 90% of issues very quickly. The other 10% may require a call to Alltrax support USA-541-476-3565