SX3 Single Unit Lithium Battery Kit Installation Instructions

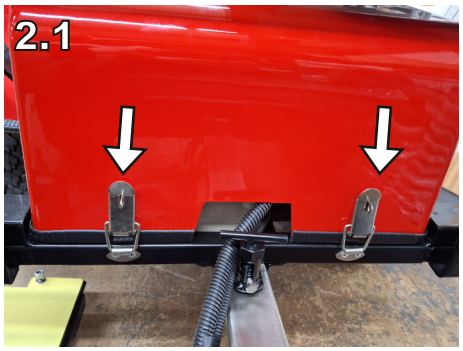
This guide offers instruction on how to install the single unit lithium battery and its hardware for the CRICKET SX5. Modification of the CRICKET's wiring and frame is required, and the customer assumes all responsibility for any damage incurred to their CRICKET during the installation process.

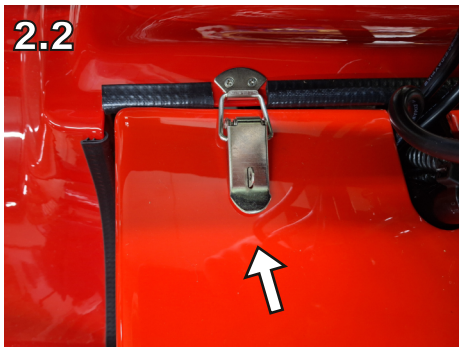
1. Underneath the CRICKET's main seat, undo the two bolts securing the charger tray (1.1) with a Phillips head screwdriver. Then, lift the charger tray up and out of the way by setting it on the motor controller tray (1.2).



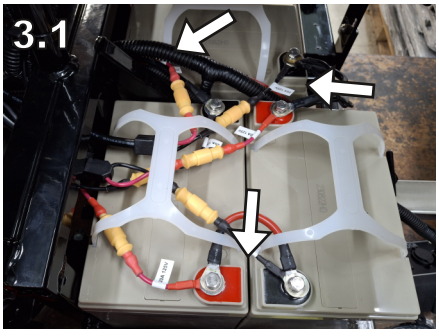


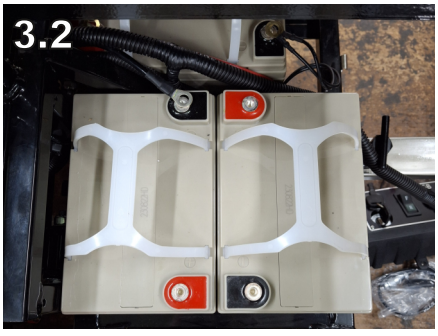
2. Unlatch the four latches securing the battery box cover, two in the front (2.1) and two in the back (2.2). With the cart fully extended and the floorplate out of the way, remove the battery box cover.

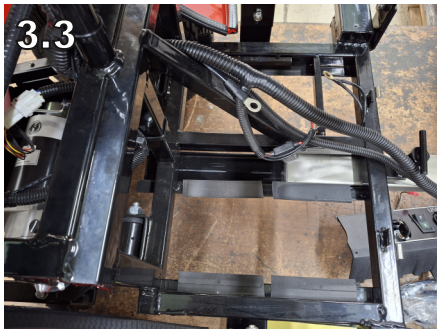




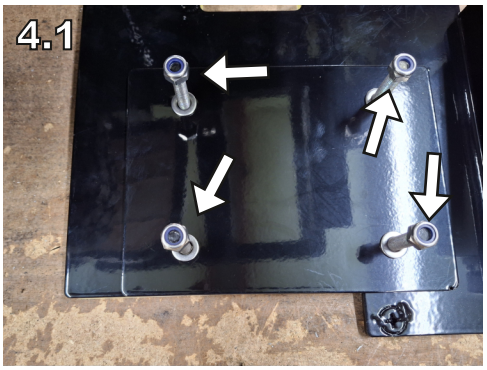
3. Using a 10mm socket or wrench, undo the now exposed battery terminal bolts (3.1). Remove all hardware/jumper wires/charger leads, as they will no longer be needed (3.2). Then, remove all present batteries (3.3). Be careful not to cross battery terminals when undoing the bolts.

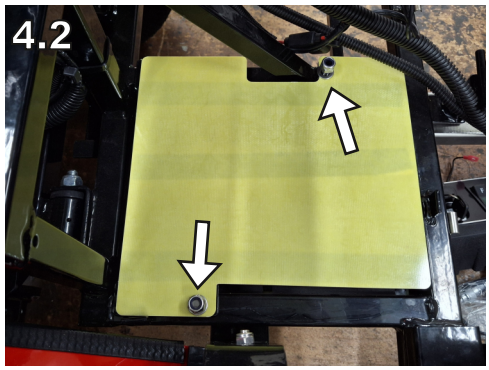






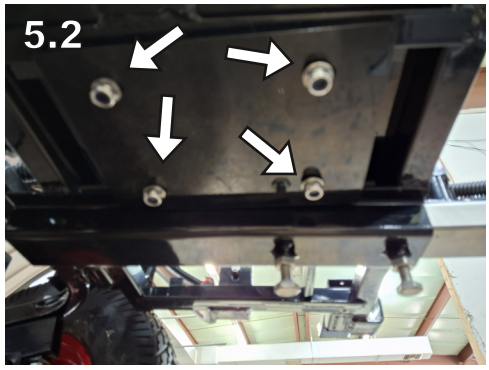
4. Take the black mounting plate, remove the locking nuts from the top and bottom and remove the lower part of the mounting plate (4.1). With the green side facing up and on the passenger side of the cart, align the cutout on the mounting plate in the battery compartment with the diagonal center support (4.2).



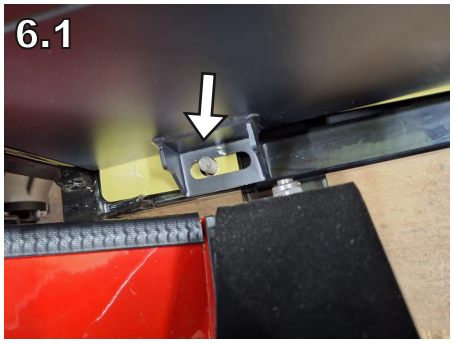


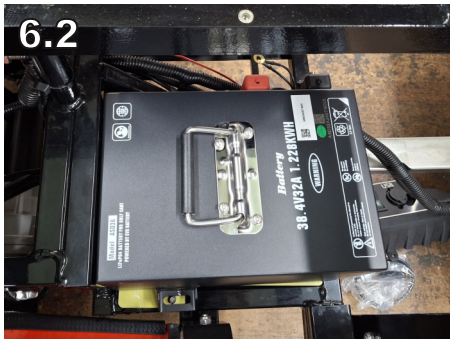
5. Slide the bottom mounting plate onto the four threaded posts pointing down through the bottom of the battery compartment (5.1) and secure it snugly with the washers and nylock nuts using a 13mm socket or wrench (5.2). Do not over tighten the nylock nuts.





6. Carefully place the lithium battery unit into place on the mounting plate (6.2). Secure it at both corners with the same washers and nylock nuts as before, and tighten them with a 13mm socket or wrench (6.1, 6.3).

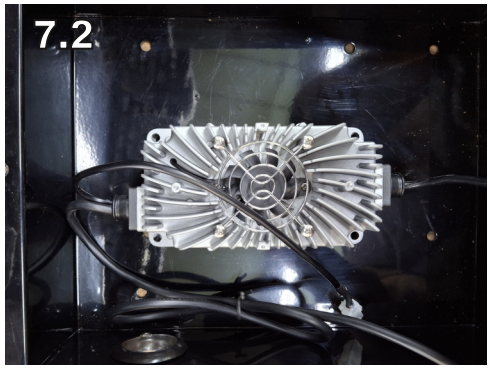




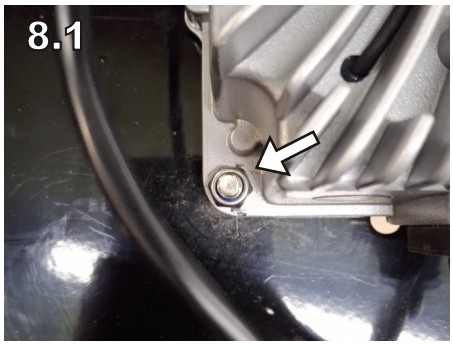


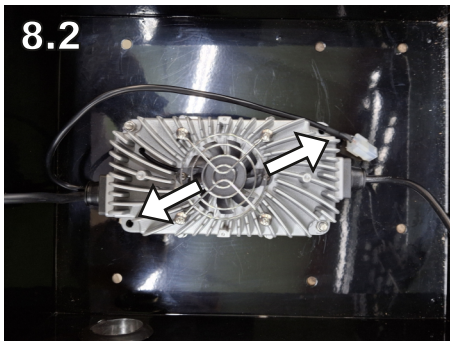
7. Next, remove RealPRO RS3 charger (or other charger if relevant) from the charger pan using a 10mm socket on top and a Philips head screwdriver on the bottom of the bolts (7.1). Remove the charger, and then line up the lithium charger with the holes in the charger pan (7.2). A new hole may need to be drilled.





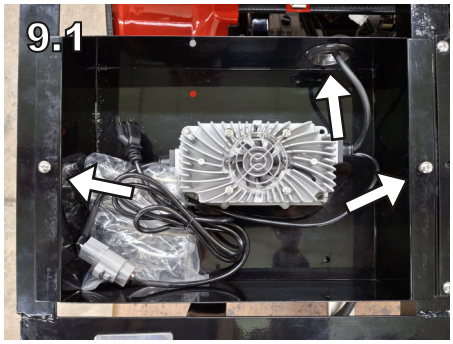
8. With the new lithium charger aligned with the holes, slide the provided bolts into place and secure them with a 10mm socket and a Philips head screwdriver (8.1, 8.2, and 8.3).

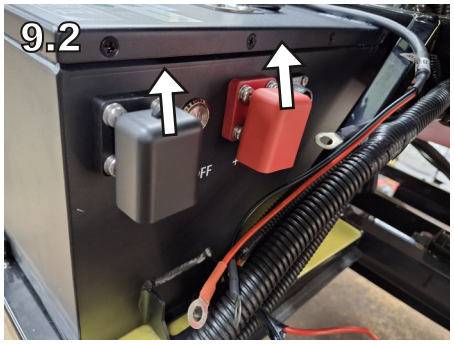






9. With the charger secure, return the charger pan to the CRICKET, replace and tighten the bolts to hold the pan in place, and feed the charger leads through the rear of the charger box (9.1). Prepare the Lithium battery unit for the next steps by sliding the lead covers off of the lithium unit terminals (9.2, 9.3).

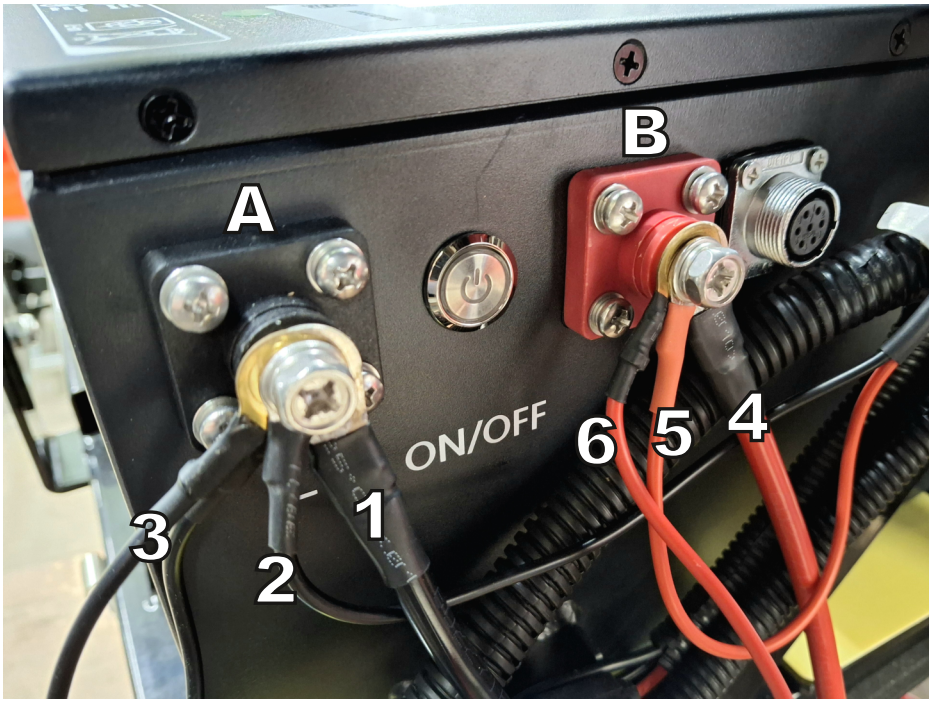


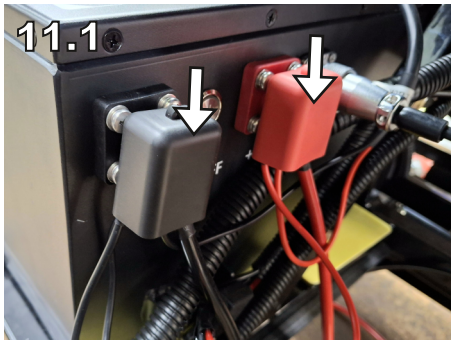






10. Undo the terminal bolts with either a Philips head screwdriver or a 10mm socket or wrench. Gather the thick black and red jumper wires (10.1), the charger leads, and the 5-amp fuse leads in preparation for securing the wires to each terminal. Each terminal will have wires attached as follows:
    A. Black Terminal: Attach the black jumper wire(1), the black charger lead(2) and the two black 5-amp fuse leads(3).
    B. Red Terminal: Attach the red jumper wire(4), the red charger lead(5), and the red 5-amp fuse lead(6).

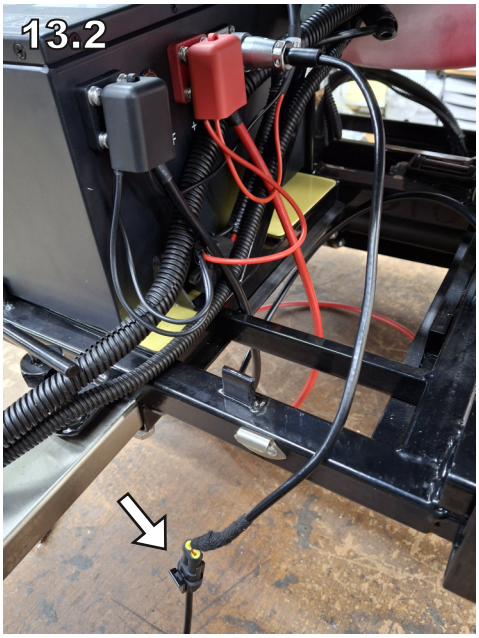






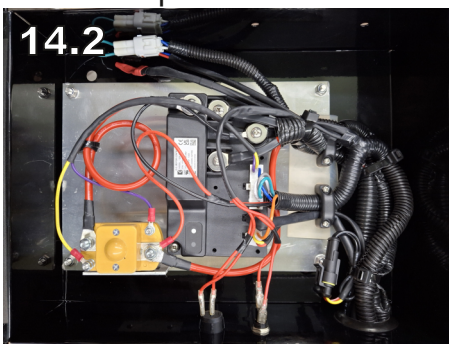
11. With the terminal bolts snugly tightened down on all respective leads and jumpers, replace the terminal covers (11.1).
12. Take the cable with the serial and two pin all-weather connectors (12.1) and secure it to the serial port on the lithium battery unit by inserting the connector and tightening the threaded collar down (11.1).
13. Attached the two pin all-weather jumper cable (13.1) to the female all-weather socket on the serial jumper (13.2).

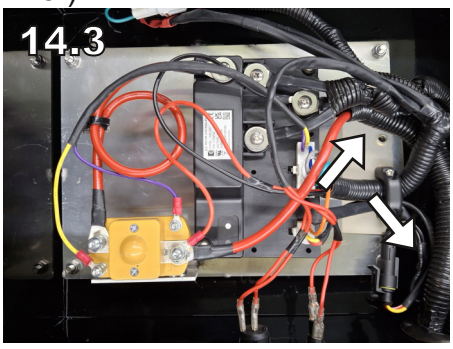




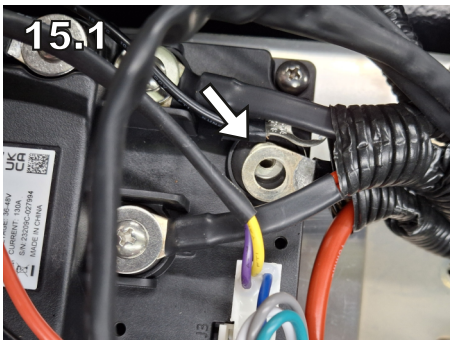
14. With the battery terminals complete, move on to the motor controller pan. Remove the four bolts holding on the lid and slide it out of the way (14.1, 14.2). Remove the zip ties on the wire bundles, being careful not to knick or damage the wires, and the wire loom bracket holding the battery and motor jumpers, which can be undone with a Philips head screwdriver (14.3.).

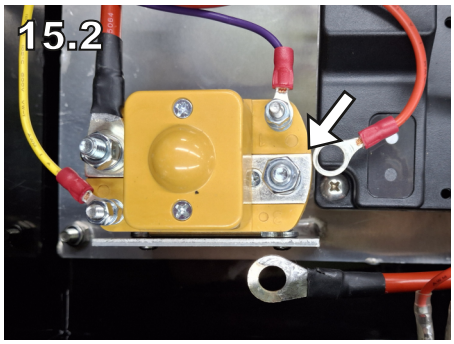




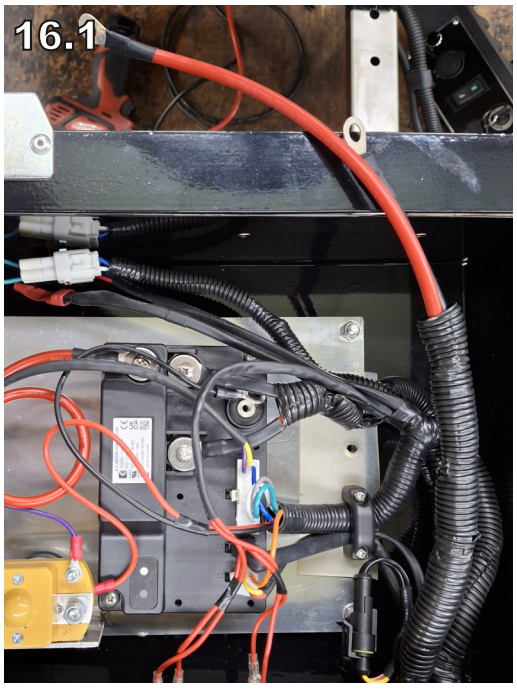


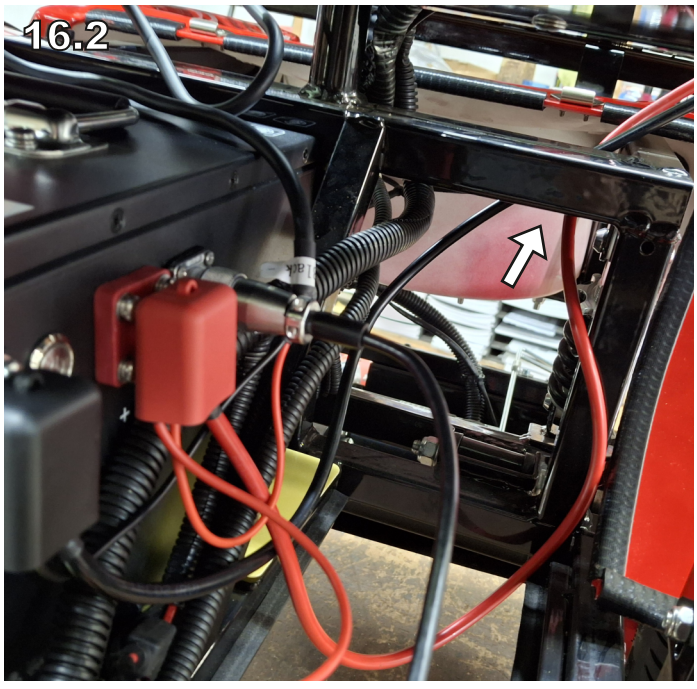
15. Remove the bolt holding the stock black jumper cable from the B-terminal on the controller using a Philips head screwdriver (15.1). Remove the nut holding the stock red jumper cable in place with a 10mm socket (15.2). With both jumpers loose, remove them from the CRICKET and the wire loom.



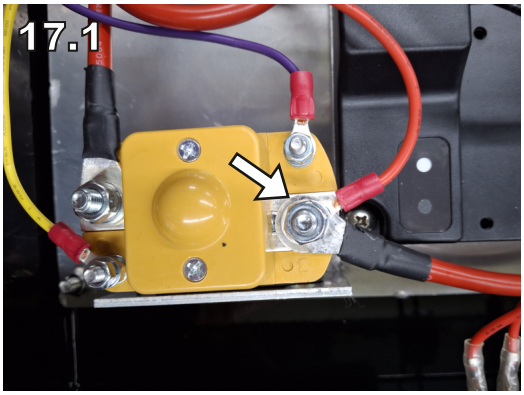


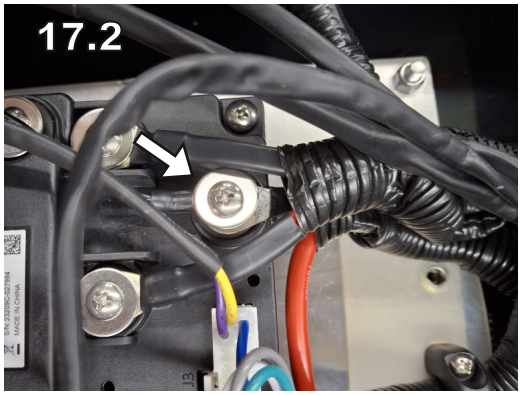
16. Feed the long black and red jumpers from the lithium battery unit behind the rear frame bar (16.2), through the wire loom, and into the motor controller box (16.1)





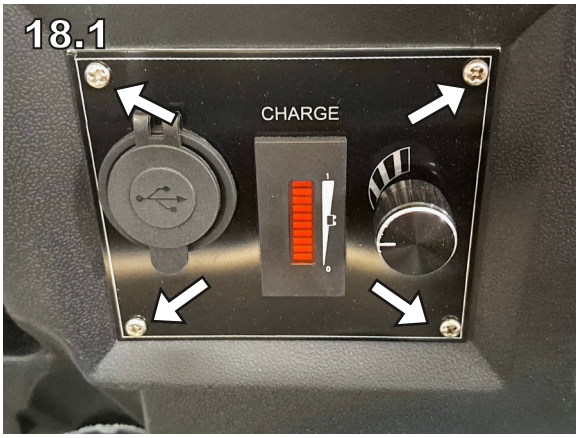
17. Take the long red jumper wire, and with the thin red wire that came o of the solenoid, secure both with the nut and washers using a 10mm socket or wrench (17.1). Then, take the long black jumper and with the thin black wire that initially came off of the B- terminal on the controller, secure both with the bolt and washer using a Philips head Screwdriver (17.2). Arrange the wires neatly, reattach the wire loom bracket, and re-zip tie the looms and wires where necessary to reduce the chance of damage to the wires (17.3).

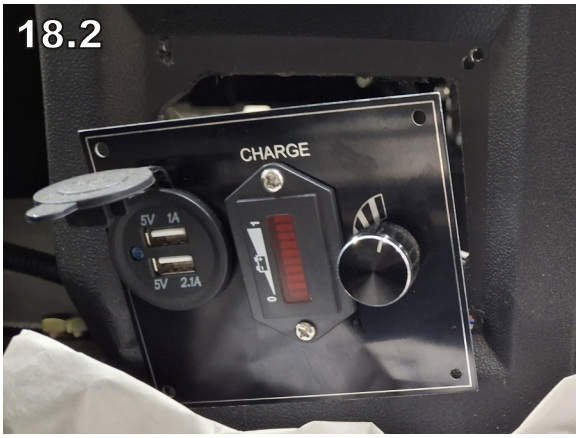




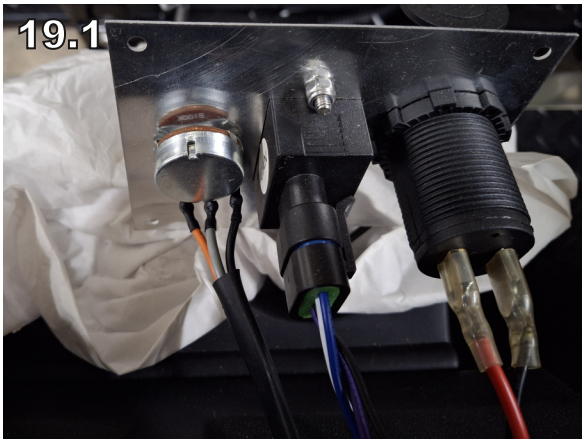


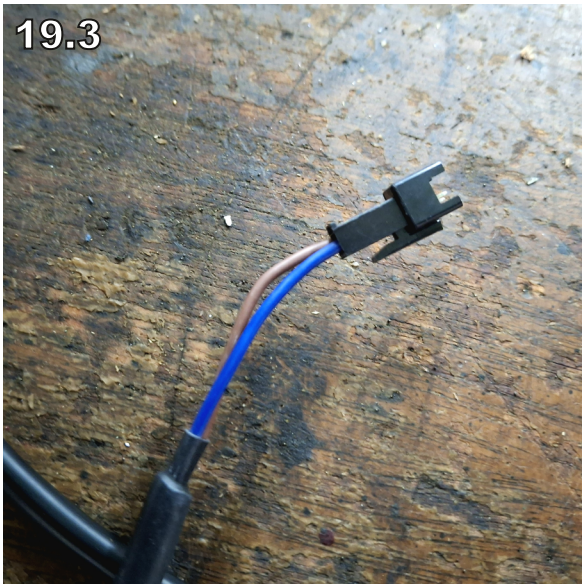
18. Next, move to the SX3 left dash control panel. It is held on with four Philips head bolts with nuts securing them (18.1). You can lift the front end, get some help, or remove the front shroud to access the nuts, then using a 9/32 socket or wrench, undo the bolts securing the left dash control panel. You can now take the panel loose (18.2).

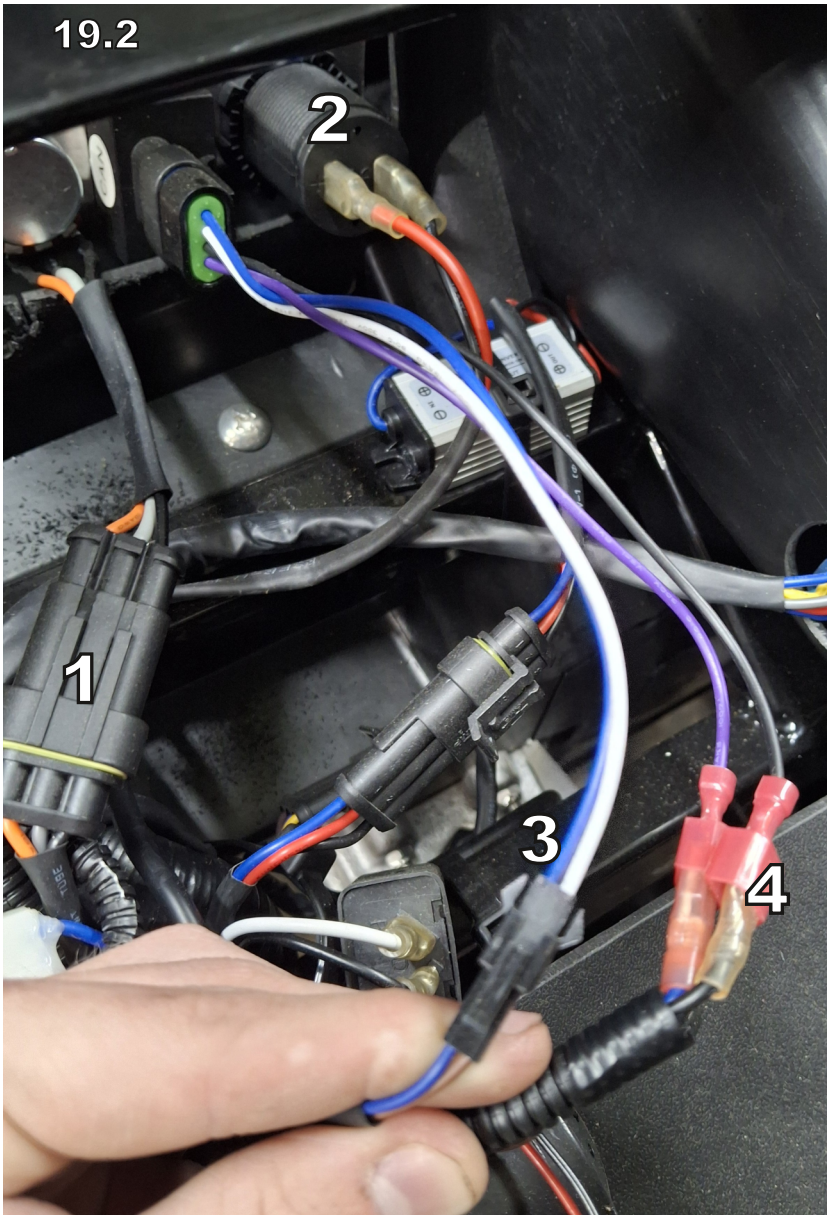




19. Disconnect the cables running to the USB charging port, the charge meter, and the rheostat speed adjuster. With the old dash control panel removed, install the new dash control panel (19.1) in accordance with the image below (19.2). The three-pin all-weather connector (1) with the orange, green, and black wires connects to the rheostat speed adjuster. The red spade connector from the USB charging port connects to the port's copper terminal, and the black spade connector to the port's silver terminal (2). Run the serial jumper cable (19.3) from steps 12. and 13 (3). to the front of the cart, avoiding pinch points, and connect it to the female connector with the blue and white wires coming from the new lithium charge meter. Lastly, connect the black spade connector to the black spade connection on the lithium charge meter, and connect the blue spade connector to the purple spade connection on the lithium charge meter (4). The red spade connector can be omitted, and we recommend using wire tape to keep it from making unnecessary contact.







20. Ensure all components are correctly attached to the dash panel and bolt it back into place.
21. The lithium conversion should be complete. Charge your lithium unit before use (shown charging with indicator light on most models in 21.1), and when you are ready to operate the cart, turn on the power button between the lithium battery unit terminals (21.2).



