

# RELIANCE™

## Part # 25-148-CC

### Club Car Li Battery Kit

(fits Club Car Precedent, Tempo, and Onward  
2008+ with 8V Batteries)



**SCAN CODE TO WATCH  
INSTALLATION VIDEO**



## WARNING

This battery is intended only for use in golf carts. Use for other applications may void battery warranty.  
Only use provided battery charger.

When state of charge reaches zero, stop driving immediately and charge the battery as soon as possible.

Battery may shut down immediately due to faults including but not limited to:  
under-voltage, over-current, short circuit across the terminals and over- or under-temperature.



High voltage. Risk of shock - do not touch uninsulated terminals or connectors. Always ensure battery is powered off before servicing vehicle



Do not expose battery to temperatures higher than 140°F (60°C).  
Do not store or operate at temperatures below -4°F (-20°C).



Never allow metallic or otherwise conductive objects to short across the battery terminals.



Do not attempt to disassemble, modify, or service battery internals. Improper reassembly can result in fire or electrical shock. Disassembling battery will void all remaining warranty.



Keep open flames and sparks away from battery. Do not smoke near battery.



Keep out of reach of children. Never allow children to operate battery or vehicle.

## DANGER - RISK OF ELECTRIC SHOCK

- Always disconnect the charger handle from the vehicle and unplug the AC power before servicing the vehicle. By only turning off the charger, there is still risk of electric shock.
- Never touch the uninsulated portion of the AC or DC connectors or uninsulated battery terminals
- Ensure all electrical connectors are in good working condition. Use of damaged, cracked, or corroded connectors can result in electric shock and/or overheating.
- Do not attempt to disassemble, modify, or service charger. Contact technical support if the charge is not working properly. Attempting to disassemble the charger will void all remaining warranty.
- Always connect to a properly grounded, 3-wire outlet. Never modify the AC cord. If needed have a proper 3-wire outlet installed by a qualified electrician.
- Extension cords are not recommended. However, if an extension cord is needed, it must be a 3-wire, grounded cord of at least 14AWG and no more than 25ft long. Improper extension cords may result in electrical shock or fire.

- To reduce risk of accidents and injury or death -

### Be Prepared

- Wear seatbelt, motorcycle helmet, eye protection, and protective gear.
- Keep your body completely inside the vehicle at all times. Keep both hands on the steering wheel. Be sure passenger is seated, belted, and holding onto the handholds.

### Be Qualified and Responsible

- This vehicle is intended for use only by an operator 16 years or older with a valid motor vehicle license.
- Passenger and driver must be able to place both feet flat on the floorboard while seated upright with their backs against the seat backs.



### Avoid Rollovers and Crushing Injuries

- Use care when turning:
    - Turning the steering wheel too far or too fast can result in a rollover or loss of control.
    - Slow down before entering a turn.
    - When making tight turns from a stop, or at slow speeds, avoid sudden or hard acceleration.
    - Avoid sideways sliding, skidding, or fishtailing, and never do donuts.
  - Drive straight up and down inclines, not across them, if crossing a hill is unavoidable, drive slowly and turn downhill immediately if you feel the vehicle may tip.
- Abrupt maneuvers or aggressive driving have caused roll-overs - even on flat, open areas.**

**MUST BE  
16 or Older**



## ITEMS INCLUDED

### 07-012 Lithium Charger Kit

- Lithium Charger
- Charge Receptacle
- AC Power Cord
- Charger Mounting Bracket
- Charger Mounting Hardware Kit

### 25-129 Club Car Lithium Mounting Kit

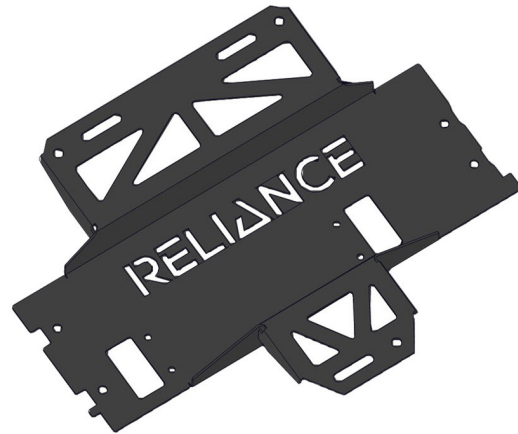
- Club Car Mounting Bracket
- Charge Port Adapter Plate
- Club Car Mounting Hardware Kit

### 25-125 Reliance Lithium Battery Kit

- 48V - 105Ah Lithium Battery
- Low Voltage Buzzer with Harness
- Lithium Dash Harness with Power Switch and SOC Meter
- Battery Retaining Brackets
- Retaining J-bolts with Hardware

## TOOLS NEEDED

- 9/16" Insulated Wrench
- 8mm Wrench
- 10mm Wrench
- 1/2" Wrench
- 10mm Socket
- 13mm Socket
- T15 Torx
- T30 Torx
- T40 Torx
- 1/4" Drill Bit
- 3/8" Drill Bit
- 7/8" Drill Bit
- Adjustable Wrench
- Flat Screwdriver
- #2 Phillips Screwdriver
- Permanent Marker
- Rotary Cutter
- Ratchet
- Drill





## STEP 1



9/16 Insulated Wrench

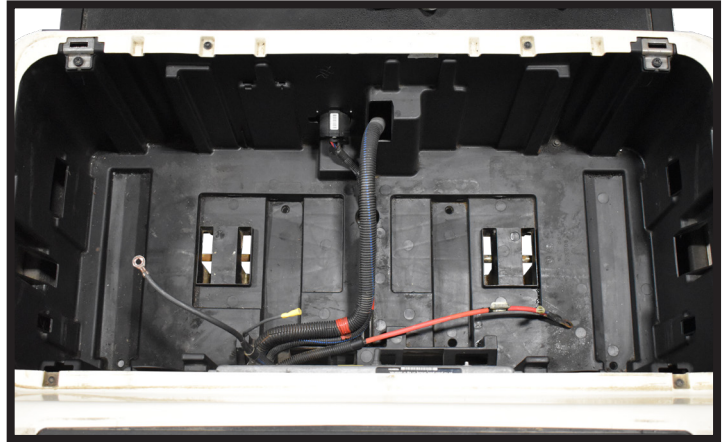
Set the parking brake and turn the key switch to the "OFF" position.

Remove the front seat bottom. Switch the car into "TOW"

Disconnect the battery cables.

Remove the battery hold downs and the batteries.

Clean out any debris from the empty battery tray as needed.



## STEP 2



T40 Torx

Remove the rear cover to access the wiring from the charge port.



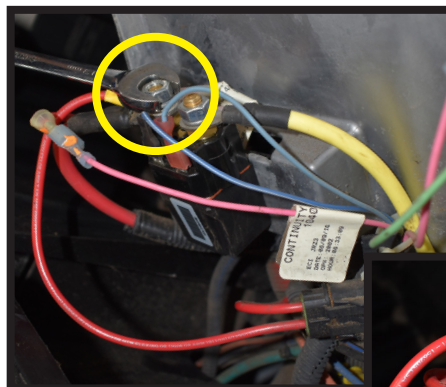
## STEP 3



13 mm Wrench

Behind the panel, locate the solenoid. Remove the red wire from the solenoid which has the fuse holder connected to it.

Retighten the nut to secure the remaining wires back to the post of the solenoid.



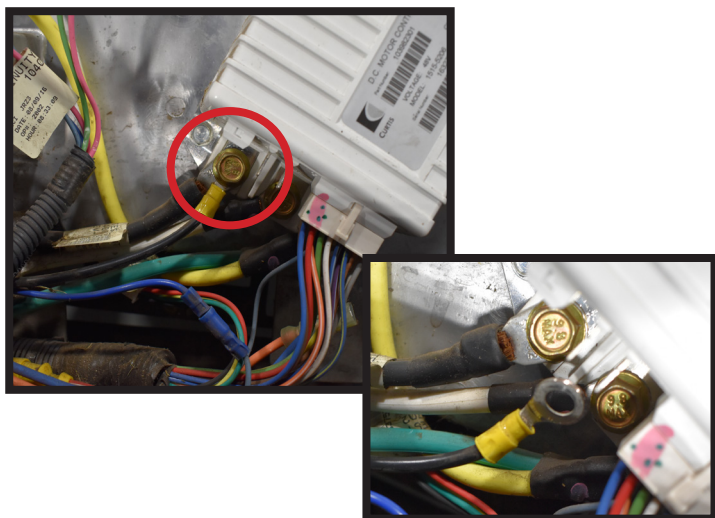
## STEP 4



1/2" Wrench

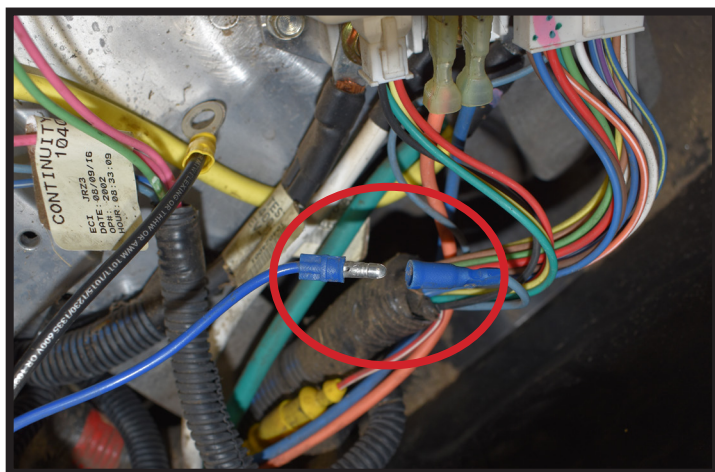
Locate and remove the ground wire of the charge port that is connected to the motor controller.

Retighten the bolt to secure the remaining wires back to the terminal of the controller.



## STEP 5

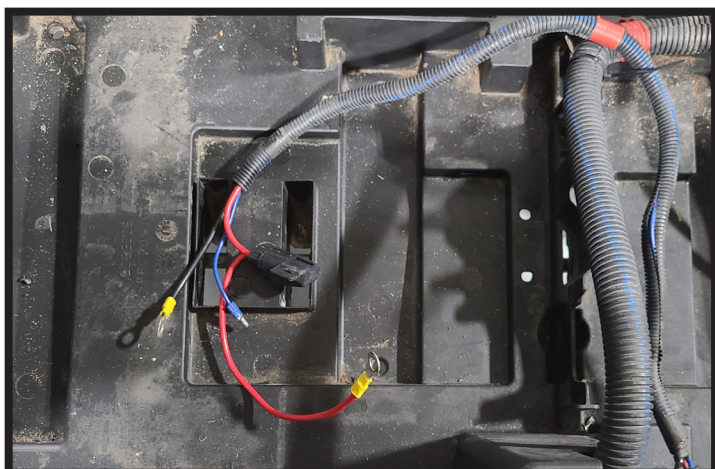
Locate and disconnect the blue bullet style connector as shown. This blue wire is also part of the charge port wire harness.



## STEP 6

Pull the charge port wire harness back through the rear access panel until the three wires are free and in the battery tray.

Resecure the rear access panel in place with the hardware previously removed in Step 2.





## STEP 7



Flat Screwdriver

Using the indentions on the inside of the trim ring in front of the charge port, gently pry off the trim ring free from the vehicle with a flat screw driver.



## STEP 8



T40 Torx

Remove the floormat to access the three (3) screws that hold the lower kick panel to the floor.



## STEP 9



T30 Torx

Remove the top two (2) screws that hold down the front of the body.

This will allow you to lift up slightly on the rear body and gently pry the bottom of the lower kick panel out and away from the body to gain access to the charge port retaining screws.



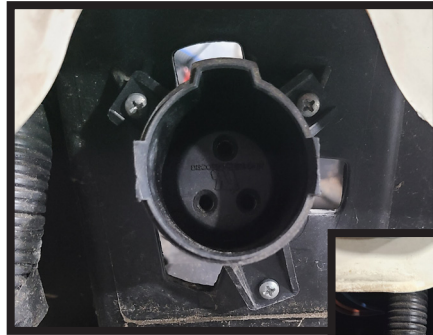
## STEP 10



#2 Phillips

Remove the three (3) phillips head screws that hold the charge port.

Pull the charge port and its wiring harness free from the vehicle.



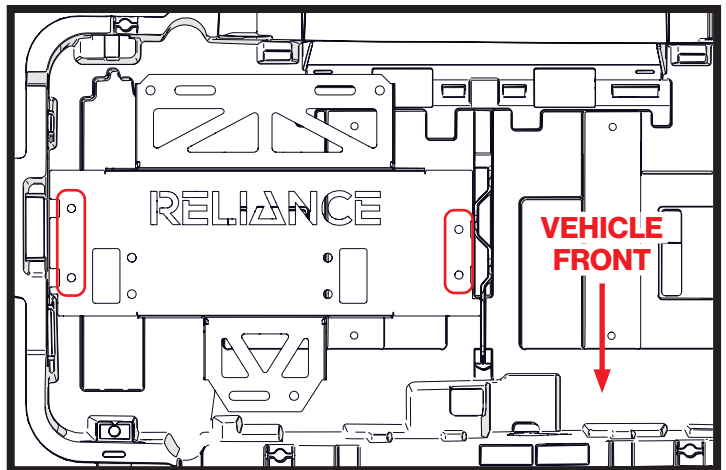
## STEP 11



Marker  
3/8" Drill Bit

Set the lithium battery bracket into the vehicle's battery tray on the passengers side as shown. The RELIANCE logo should be read from the front of the vehicle.

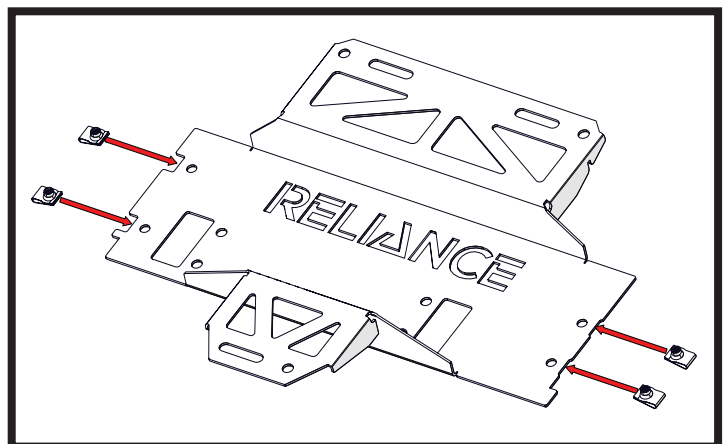
Use the bracket as a template to mark and drill the four outer most holes of the bracket onto the battery tray and all the way through to the under side of the vehicle.



## STEP 12

Assemble the threaded clips onto the lithium battery bracket as shown.

The threaded side of the clip will be on the top.

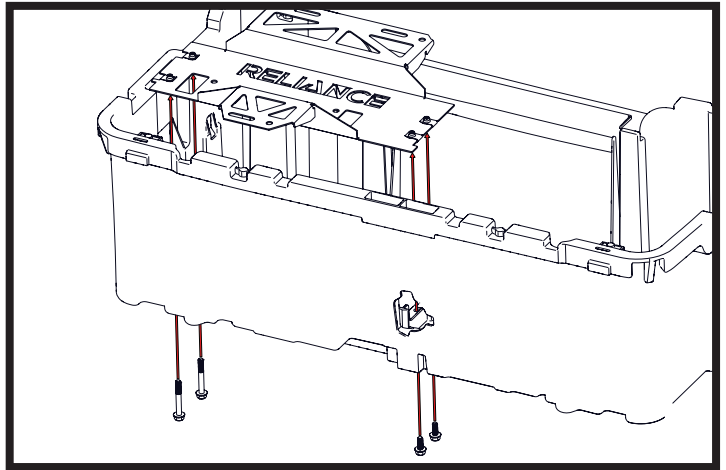


## STEP 13



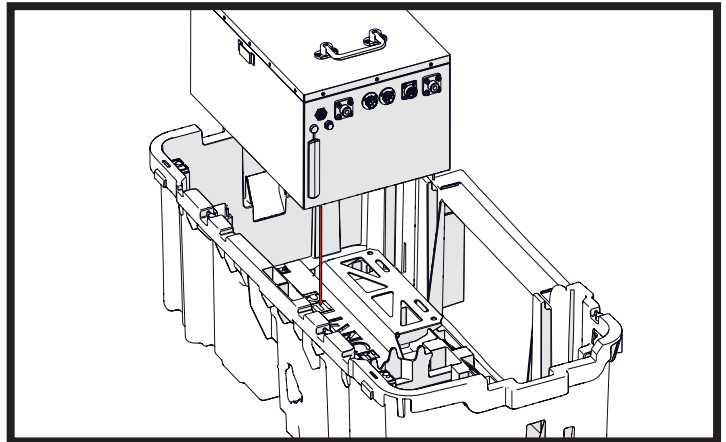
10mm Socket

Set the bracket back in place, over the drilled holes. Secure it to the vehicle by installing the hardware from below the vehicle and up into the threaded clips on the bracket. The passenger's side holes require two (2) M8x60mm hex flange bolts. The driver's side holes require two (2) M8x20mm hex flange bolts.



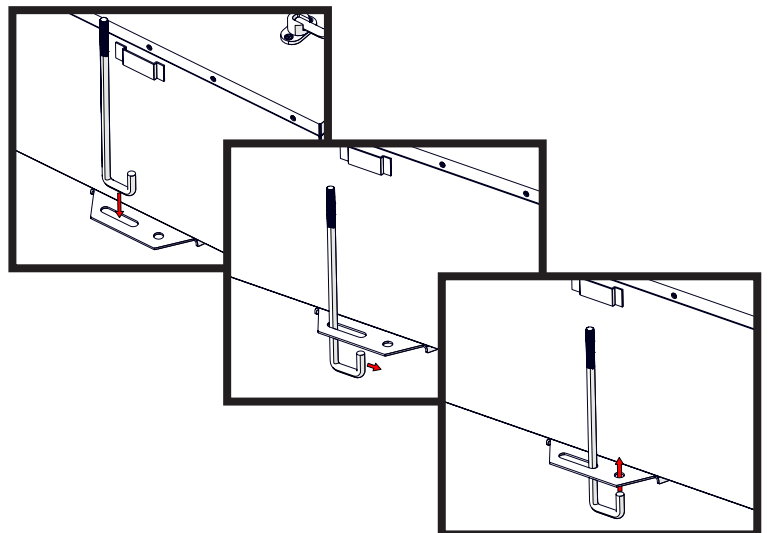
## STEP 14

With the bracket in place, set the battery on top of the bracket, with the electrical connections facing the driver's side of the vehicle.



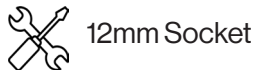
## STEP 15

Install a J-hook into the base bracket as shown.





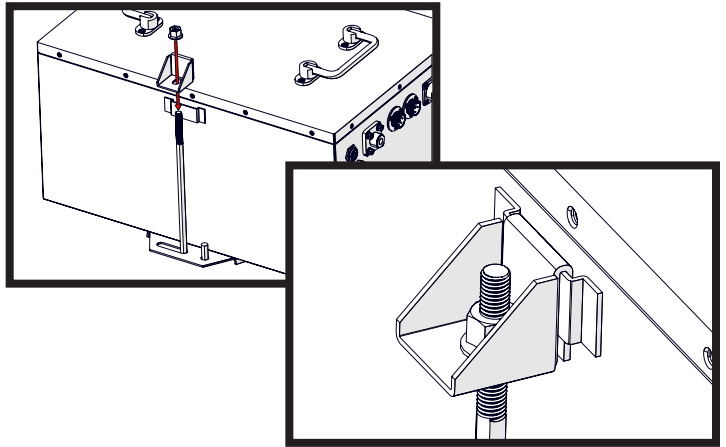
## STEP 16



Holding the J-hook in place, install the retaining bracket and M8 Nylock nut onto the J-hook.

When complete, the retaining bracket will be hooked over the corresponding slot on the battery case as shown.

Repeat for all three retaining points, one on the front and two on the rear.



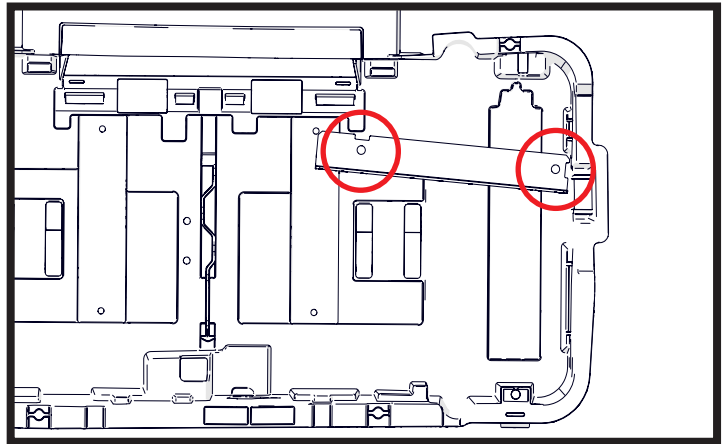
## STEP 17



Place the charger bracket in the driver's side of battery tray. The right side will up against the side of the battery tray and up against the rib to the rear. With the right side positioned, the left side will rotate rearward until it is against the back of the battery tray as shown. The bracket will be touching the sides of the battery tray in the two highlighted areas.

In the shown orientation, the mounting bolts will avoid support ribs of the battery tray below.

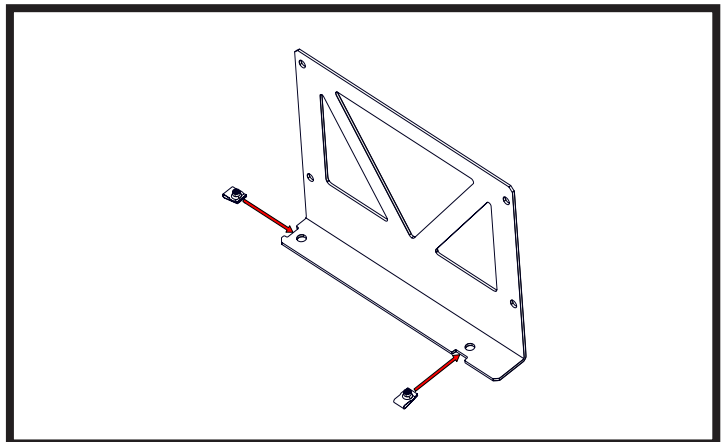
Use the bracket as a template to mark and drill the two (2) 3/8" mounting holes into the bottom of battery tray and through to the underside of the vehicle.




## STEP 18

Install two (2) M8 threaded clips to the charger mounting bracket as shown.

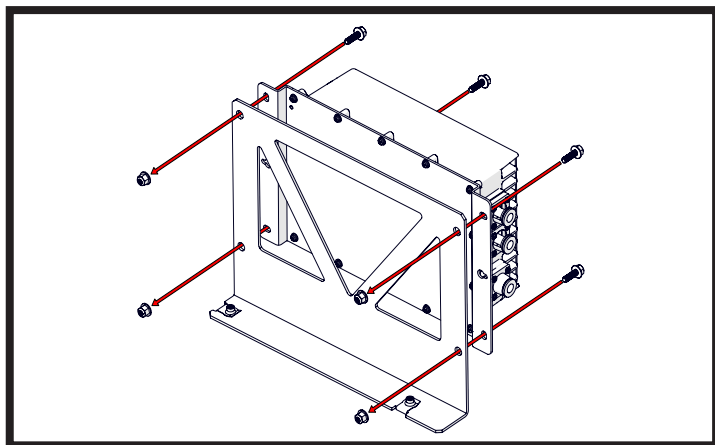
The threaded portion of the clip will be on top.




## STEP 19

 10mm Socket  
10mm Wrench

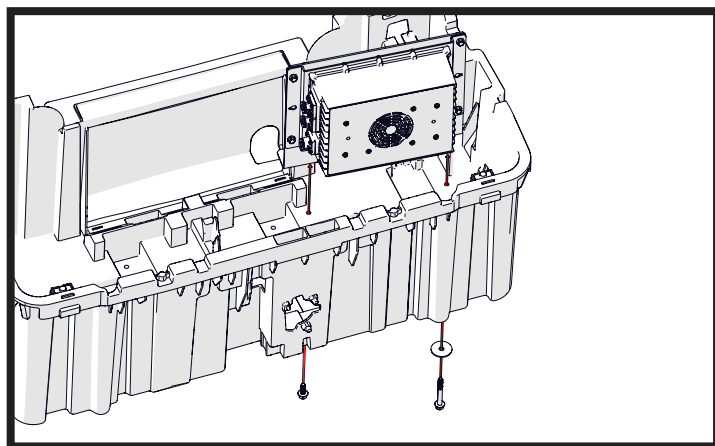
Install the charger to the bracket using four (4) M6x20mm hex flange bolts and four (4) M6 nylock nuts.



## STEP 20

 10mm Socket  
13mm Socket

Install the charger to the vehicle using one (1) M8x20mm hex flange bolt for the passenger's side mounting point and one (1) M8x60 hex flange bolt and M8 fender washer for the driver's side mounting location.



## STEP 21

Insert the plug end of the dash harness from the outside in to the access hole in the battery tray.




## STEP 22

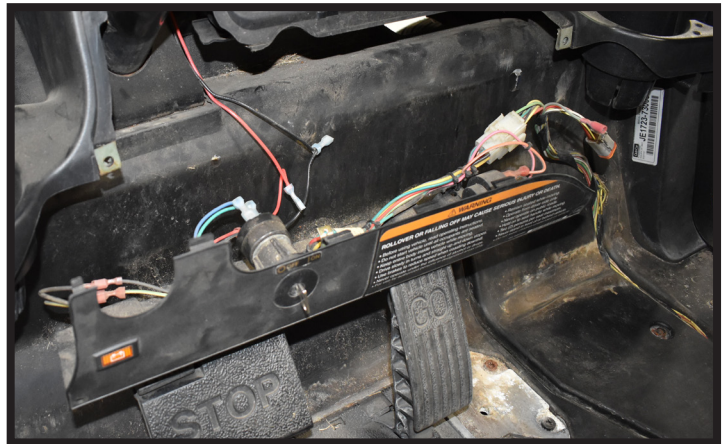
The dash wire harness will run under the lower kick panel to the harness channel in the passenger's side of the floor board, then up to the back of the instrument panel.



## STEP 23

 T15 Torx  
T30 Torx

Remove the two (2) screws on the front and one (1) screw in the top which hold the instrument panel onto the dash. Pull the instrument panel away from the dash to access the back of it.



## STEP 24

 7/8" Drill Bit

Locate an appropriate spot to install the battery power switch (recommend location shown). Ensure there is enough rear clearance for the power button behind the selected location.

Drill a 7/8" hole into the instrument panel for the power button.





## STEP 25



1" or Adjustable Wrench

Install the battery power switch into this hole by inserting the switch body into the hole and secure it from the back with the nut, sandwiching the instrument panel.

Ensure the power switch is right side up and straight before tightening the nut.



## STEP 26



Marker  
Ruler

Locate an appropriate spot to install the state of charge meter. Be sure there is enough room behind the selected location for the switch and harness.

Mark out a rectangle that measures 22mm x 46mm (0.87" x 1.81"). The rectangle can be oriented horizontally, as shown, or vertically if space allows.

NOTE: If replacing a previous charge meter, the existing hole may need to be trimmed to fit the new lithium charge meter



## STEP 27



Rotary Cutter  
Razor Blade

Use a rotary cutting tool or razor blade to carefully cut out the hole for the state of charge meter.

The meter can then be pressed into the hole from the front. It will click into place once fully inserted.



## STEP 28

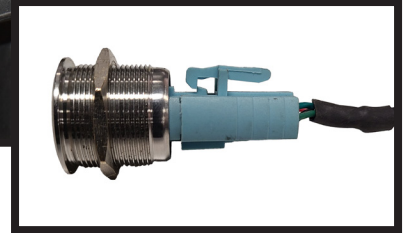


T15 Torx  
T30 Torx

Plug the dash harness into both the power switch and the state of charge meter.

Ensure the clip on the harness engages with the tab on the back of the power button as shown.

Re-install the instrument panel onto the dash using the three (3) screws previously removed in Step 23.



## STEP 29

Place the dash harness into the floor board recess as shown. Pull all slack in the harness back and into the battery tray.

Secure in place with tape if needed.



## STEP 30



#2 Phillips  
8mm Wrench

Install Lithium Charge Port through the adapter plate and secure using four (4) flat head screws, lock washers, and acorn nuts. The nuts will be on the front side as shown and the screw heads should be flush with the back of the adapter plate.




## STEP 31

 Marker  
1/4" Drill Bit

Set the charge port in place and use the adapter plate as a template to mark and drill the three 1/4" mount holes into the lower kick panel which was removed in Step 9.




## STEP 32

 #2 Phillips  
8mm Wrench

Install the adapter plate to the lower kick panel using three(3) button head screws, lock washers, nuts, and six (6) flat washers as shown.



## STEP 33

 T30 Torx  
T40 Torx

Replace the lower kick panel back onto the rear body and secure it to the floor board with the three (3) screws removed in Step 9.

Ensure the rear body is properly in place on top of the lower kick panel and reinstall the two (2) screws from Step 9 into the top of the rear body.

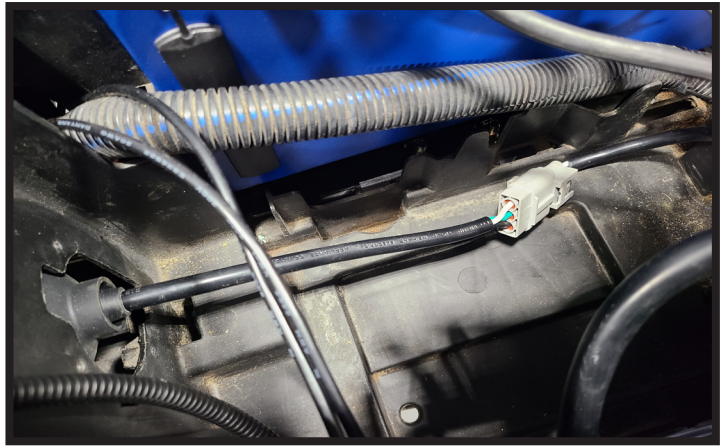
Reinstall the floormat using the hardware previously removed.





## STEP 34

Plug the lithium charge port into the corresponding plug from the on board charger.



## STEP 35

Plug the cord from the charger into the outlet labeled "CHARGE" on the battery case.



## STEP 36

Plug the dash harness into the outlet labeled "KEY/CAN" on the battery case.



## STEP 37

Plug the Low Battery Buzzer harness into the outlet labeled "BUZZER GAUGE" on the battery case.



## STEP 38

Locate a suitable panel on which to place the buzzer. Clean the area with rubbing alcohol, remove the adhesive backing, and press the buzzer in place.



## STEP 39



13mm Insulated Wrench

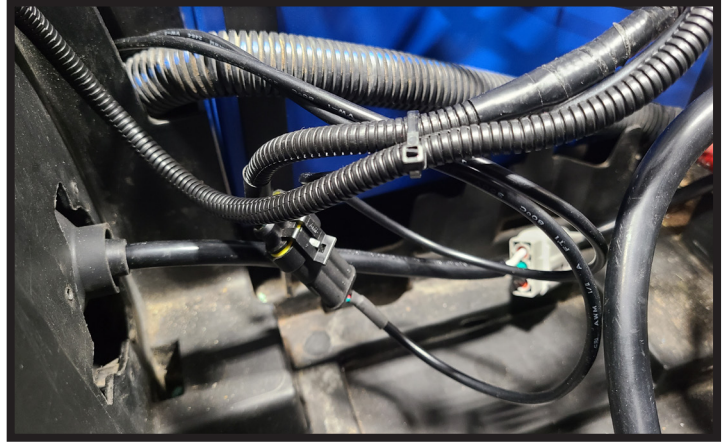
Locate the ground cable which was removed from the main negative terminal of the original battery pack. Install this cable to the black (-) terminal on the battery case.

Locate the positive cable which was removed from the main positive terminal of the original battery pack. Install this cable to the red (+) terminal on the battery case.



## STEP 40

Coil any excess harness or cable together and secure with a zip tie inside the battery tray.



## STEP 41

Switch vehicle back to RUN mode.



**INSTALLATION COMPLETE**



<b>WARRANTY PARTS</b>		
<b>QTY</b>	<b>PN</b>	<b>DESCRIPTION</b>
1	25-129	Club Car Lithium Battery Mounting Kit w/ Charge Port Adapter Hardware
1	07-012	Reliance Lithium Charger w/ Charge Port and AC Cord
1	25-147	Reliance Lithium Charger Mounting Bracket w/ Hardware
1	25-125	Reliance Lithium Battery Li48-105
3	25-137	Lithium Battery Retaining Bracket
3	25-138	Lithium Battery Retention J-Hook
1	25-133-1	Lithium Battery Low Voltage Buzzer
1	25-144	Reliance Lithium Switch/SOC Harness Assembly
1	25-133-2	Reliance Switch/SOC Harness
1	25-133-4	Reliance Lithium Power Switch
1	25-133-5	Reliance Lithium Charge Meter

<b>CHARGE PORT HARDWARE</b>	
<b>QTY</b>	<b>HARDWARE</b>
4	M5-0.8x12mm Countersunk Screw
3	M5-0.8x15mm Buttonhead Screw
6	M5 Flat Washer
7	M5 Lock Washer
4	M5-0.8 Acorn Nut
3	M5-0.8 Hex Nut

<b>CHARGER MOUNTING HARDWARE</b>	
<b>QTY</b>	<b>HARDWARE</b>
2	M8-1.25x20mm Hex Flange Bolt
2	M8-1.25 Clip Nut
4	M6-1.0x20 Hex Flange Bolt
4	M6-1.0 Nylock Nut
4	M6 Flat Washer

<b>BATTERY RETENTION HARDWARE</b>	
<b>QTY</b>	<b>HARDWARE</b>
3	M8-1.25 Flange Nut

<b>BATTERY BRACKET HARDWARE</b>	
<b>QTY</b>	<b>HARDWARE</b>
2	M8-1.25x60mm Hex Flange Bolt
2	M8-1.25x20mm Hex Flange Bolt
4	M8-1.25 Clip Nut

