# RELIANCE

### Part # 25-148-RXV6 E-Z-GO RXV Li Battery Ki

(fits E-Z-GO RXV with SIX 8V Batteries)



# WARNING

This battery is inteded 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 terminasl 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 techincal support is 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 rollovers - even on flat, open-areas.





### **ITEMS INCLUDED**

07-012 Lithium Charger Kit

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

25-128 RXV 4x12 Lithium Mounting Kit

- RXV 4x12 Mounting Brackets
- Charge Port Adapter Plate
- RXV 4x12 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
- Mounting Clips
- Mounting J-bolts with Hardware

### **TOOLS NEEDED**

- 10mm Wrench
- 1/2" Wrench
- 10mm Socket
- 13mm Socket
- T30 Torx
- T40 Torx
- 3/8" Drill Bit
- 7/8" Drill Bit

- Adjustable Wrench
- Flat Screwdriver
- Phillips Screwdriver
- Permenant Marker
- Rotary Cutter
- Ratchet
- Drill





STEP1 3/16" Insulated Wrench

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 any debris from the battery compartment.





STEP 2 T40 Torx 15mm Socket

Remove the 4 bolts holding the factory battery tray to the vehicle.

Retain the bolts to secure the lithium battery tray later.





Lift the front of factory battery tray up and remove the tray from the vehicle.







Assemble the side mounting brackets to the lithium battery tray as shown using four (4) M8 carriage bolts and M8 lock nuts.







Install the assembled lithium battery tray into the stock mounting locations.

Be sure not to kink or crush and wiring harnesses or cables.

Secure with the mounting bolts removed in Step 2.





Remove the screws mounting the charge port to the kick panel and remove the charge port from the vehicle.





Using the charge port adapter plate as a template, line up the two top and the bottom left holes with the existing mounting holes on the body.

Mark and drill a new bottom right mounting hole with a 3/8" drill bit.

The mounting clip for the bottom right hole will need to be reloacted to the new mounting hole





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.





Install the charge port adapter plate to the vehicle using the stock screws removed in Step 2.





Remove the rocker panels and roll the floor mat back to access the harness channel in the floor board.

The single plug end of the dash harness will go under the rear body and into the battery comparntment.

The dash harness will go under the harness cover in the floorboard and up through the access hole under the cup holder.







Remove two (2) nuts from the bottom of the cup holders.

Pull up and out on the top of the cup holders to free it from the instrument panel.

Unplug any USB or other electrical accessories installed into the cup holder.

Retain the cup holder and hardware.





Remove and retain the four (4) screws holding the upper dash panel to the front cowl and pull the dash rearward to gain access to the back of the dash panel.

The dash does not need to be fully removed from the vehicle.







Locate an appropriate position for the lithium power button on the cup holder or the dash. Be sure there is enough room behind the selected location for the switch and harness.

Drill a 7/8" hole in the selected location.





Install the power button into the hole. Be sure the button is straight before fully tightening the retaining nut on the back of the panel.







Locate an appropriate position for the lithium charge meter on the cup holder or the dash. Be sure there is enough room behind the selected location for the switch and harness.

Mark a rectangle in the selected locatioin that measures 22mm x 46mm (0.86" x 1.81"). The rectangle can be oriented horizontally or vertically as space allows.







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.







Route the wiring through the access hole behind the dash and down to the area behind the cup holder.





Plug the dash harness into the back of the power buton.

NOTE: The clip on the harness plug should engage with the small tab on the side of the button as shown.



### STEP 19

Plug the charge meter into the dash harness as shown.

Organize the harnesses behind the cup holder. Then reassemble cup holder and dash panels to the vehicle using the hardware retained in Steps 11 and 12.





Set the lithium battery into the battery tray.

The electrical connections must face the passenger's side of the vehicle.





Install a J-hook into the base bracket as shown. Be sure that the J-hook mounting hole is below the corresponding retaining bracket on the battery case.





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 the remaining two retaining points.





Find a suitable location for the charger mounting bracket on the drivers's side of the battery tray. Ensure there is enough room to easily access the plugs and cables on the end of the charger.

Using the bracket as a template, mark and drill the mounting holes into the battery tray using a 3/8" drill bit.





Install two (2) threaded clips to the base of the mounting tray. The threaded portion of the clips will be on the top.





Install the charger to its mounting bracket using four (4) M6x20mm bolts and M6 nuts.





Set the charger mounting bracket back in place and secure to the battery tray using two (2) M8x20mm bolts from the bottom.





Plug the charge port cord into the appropriate plug coming from the onboard charger.





If desired, find a suitable panel in which to mount the charge status indicator.

Use a 7/8" drill bit to drill a hole for the charge indicator.

Feed the indicator through the hole and secure to the panel using the included plastic washer and nut.





Plug the charge indictaor into the white plug from the charger.

Plug the charger interlock cable from the vehicle harness into the plug coming from the charger.





Plug the new charge port cable to the plug coming from the charger.

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





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





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





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.





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.





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





Switch the vehicle back to RUN mode.



# **INSTALLATION COMPLETE**

WARRANTY PARTS				
QTY	PN	DESCRIPTION		
1	25-128	RXV 6X8V 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		

CHARGE PORT HARDWARE			
QTY	HARDWARE		
4	M5-0.8x12mm Countersunk Screw		
4	M5-0.8x15mm Buttonhead Screw		
8	M5 Flat Washer		
8	M5 Lock Washer		
4	M5-0.8 Acorn Nut		
4	M5-0.8 Hex Nut		

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

CHARGER MOUNTING HARDWARE			
QTY	HARDWARE		
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		

BATTERY BRACKET HARDWARE		
QTY	HARDWARE	
4	M8-1.25x20mm Carriage Bolt	
4	M8-1.25 Nylock Nut	

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