



# LGT-414L

## E-Z-Go RXV 16+

### LED Light Bar Kit

### Installation Instructions



**Caution:** Please read through the instructions carefully. Before starting this project, remove the system's positive and negative connections from the battery or battery pack. This kit is designed for 12-48V operation only. Operating this kit at a higher voltage will void any and all warranties. Add-on accessories for this light kit may not be rated for any voltage over 12V DC and can be damaged if installed at a higher voltage. Look behind each drill location **BEFORE YOU DRILL**. Installer is responsible for damage (i.e. drilling into a wiring harness, battery, fuel tank etc.).

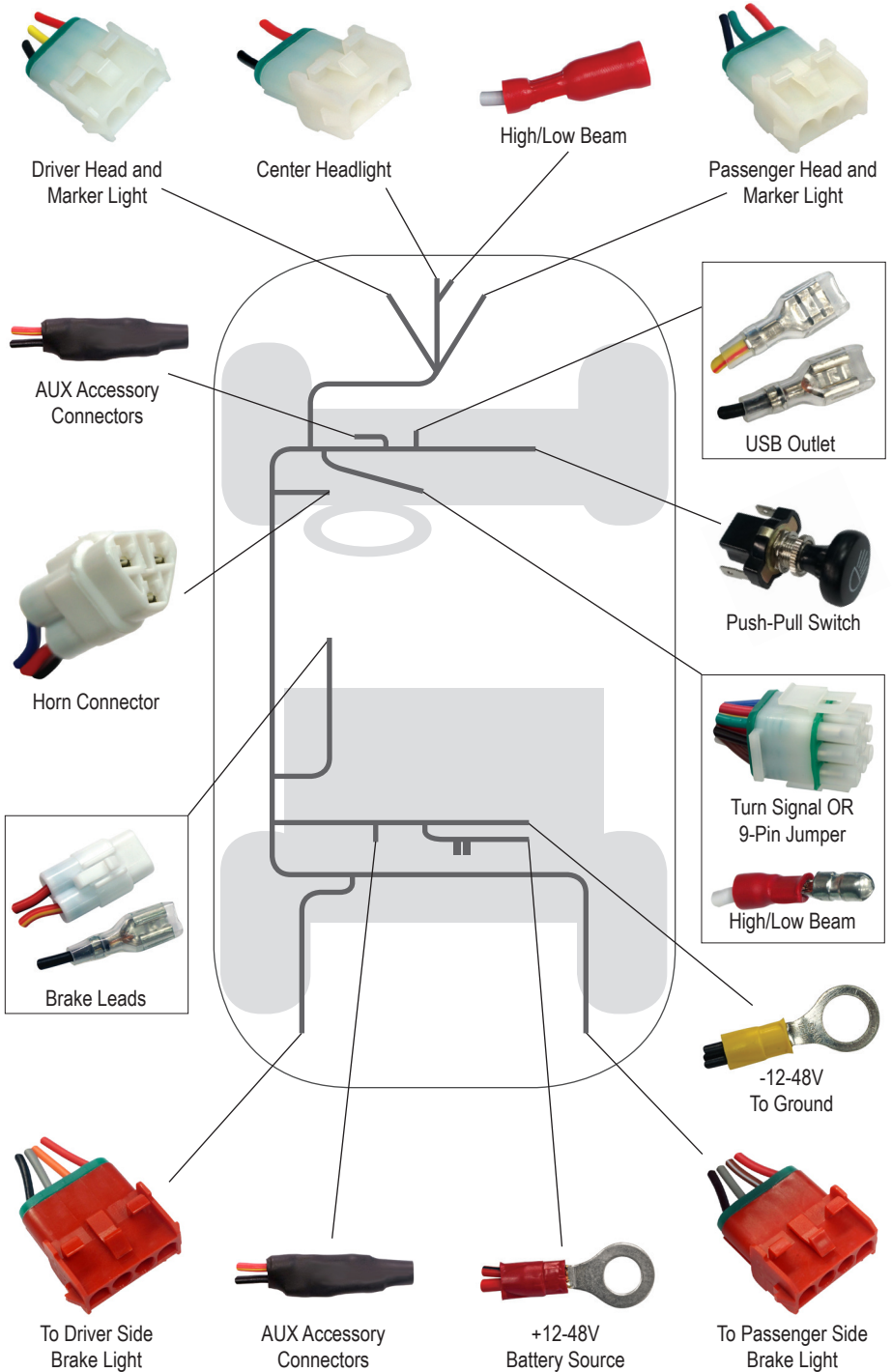
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## Tools Needed for Installation

- Center Punch
- Drill, Drill Bits & Hole Saws (3/16", 1/4", 7/16", 1", 1-1/8")
- Hammer
- Hex Bit (6mm)
- Jig Saw or Rotary Tool, Utility Knife
- Marking Device
- Measuring Tape
- Painter's Tape
- Rivet Gun
- Sandpaper or File
- Scissors
- Screwdriver (Phillips)
- Sockets & Open Ended Wrenches (10mm, 7/16", 1/2", 15mm)
- Torx Bits (T-30, T-45)
- Wire Cutters
- Voltage Meter

# Wire Harness Overview



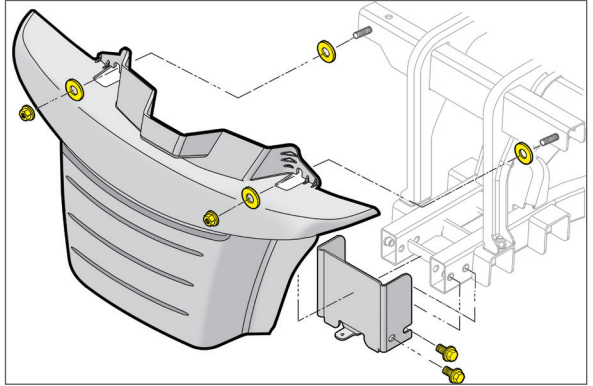
## Before You Start

1. Turn Key OFF.
2. Place Tow/Run Switch in Tow if equipped.
3. Remove the system's positive and negative connections from the battery/battery pack.
4. Engage the parking brake.

## Headlight & Taillight Preparation

### Headlight Preparation

1. Remove the front bumper and bumper bracket. Discard bumper and bracket. Retain hardware.

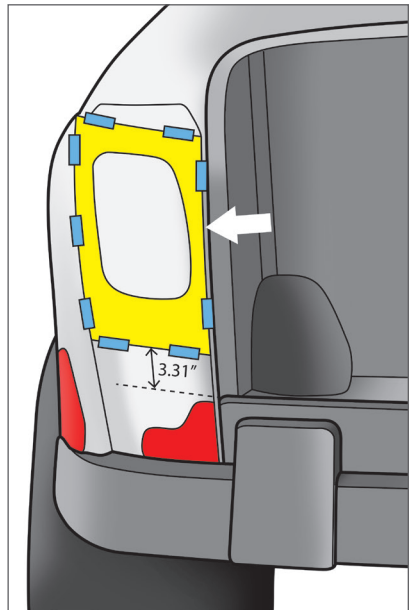


### Taillight Preparation

1. Cut out the included taillight template following the guidelines.
2. Use painter's tape to tape the template to the driver side rear body of the cart. Align the template with the body lines and edge of bagwell as indicated on the template.
3. Use a marking device to trace the inside contour of the template onto the body.

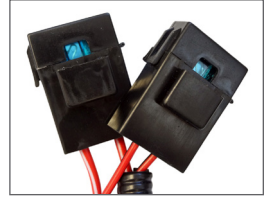
NOTE: To prevent the paint from chipping, lay painter's tape down first and trace over the tape.

4. Use a jigsaw or rotary tool to cut out the **INSIDE** of the marked area. Test fit the taillight. If needed, make any modifications and retest. Once it is fitted properly, remove the tape and sand any rough edges.
5. Flip the template over and complete Steps 2-4 for the passenger taillight.

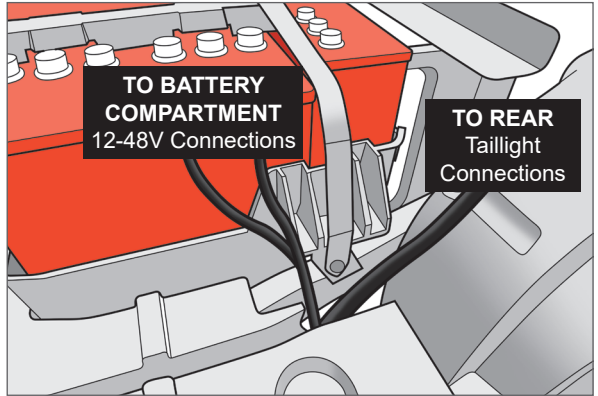


## Wire Harness Installation

1. Completely remove the front seat bottom assembly.
2. Lay the harness parallel to the driver side of the cart to help with orientation of the harness before installation.
3. Disconnect the fuse holders from each other.

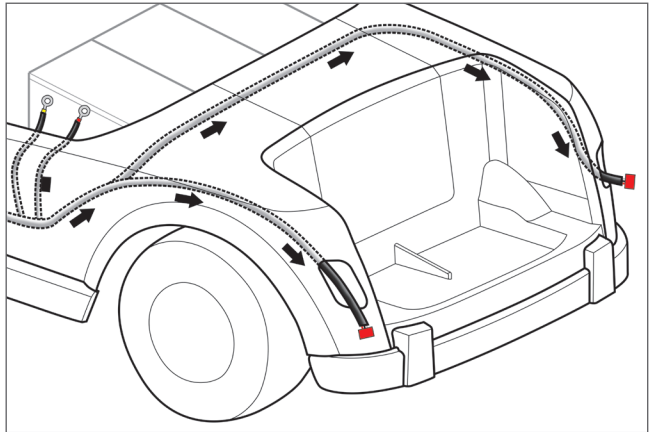


4. From underneath the driver side of the cart, gently run the rear portion of the harness (taillight & battery connections) through the opening in the side of the battery compartment.



5. Set the battery leads to the side. They will be connected after installation of the harness and lights.

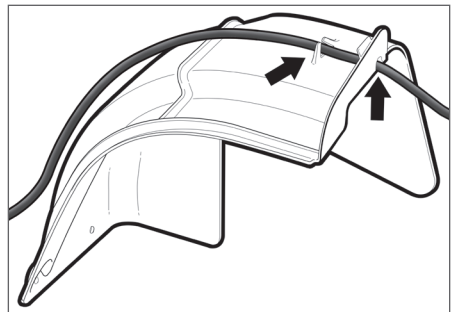
6. Feed the rear portion of the harness through the cart so the taillight connections reach the holes in the rear body. The shorter cable will rest on top of the driver side fender. Route the longer cable behind the battery compartment and over the passenger side rear fender.



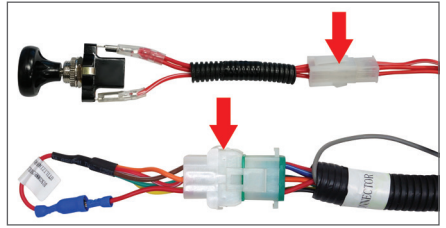
7. Make sure the taillight leads reach the holes in the body.

Once the leads are in position, lock them into place on top of the fender with the wire keepers and route them through the notch.

Fasten the lead at the taillight to the frame with cable ties.

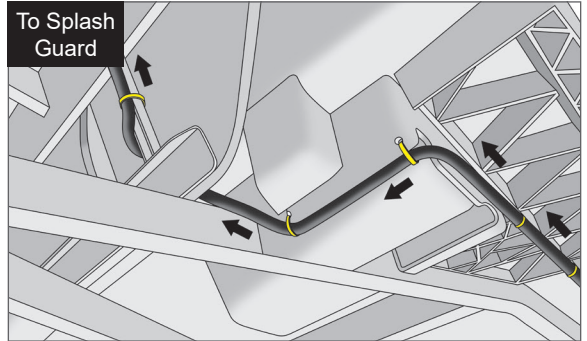


8. Secure the passenger taillight cable to the rail of the frame with cable ties using the pre-drilled holes in the frame. The harness should run below or behind the cross frame so it is not pinched by the seat or body.
9. Disconnect the push-pull switch at the 4-pin connector and the jumper from the 9-pin connector.



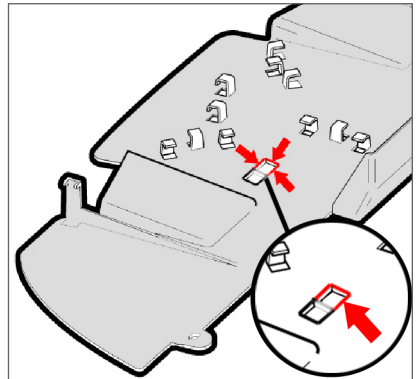
10. Starting with the 9-pin connector, route the entire front portion of the harness through the cart, towards the dash compartment.

Loosely secure the middle portion of the harness to the underbody of the cart with cable ties. 1/4" holes can be drilled in the plastic underbody as needed for cable ties.



**NOTE:** If you are NOT installing a brake switch, secure the brake switch lead to the underbody with the rest of the harness.

11. Locate the rectangular hole in the bottom of the splash guard. Use a utility knife to enlarge the hole enough to fit the harness.



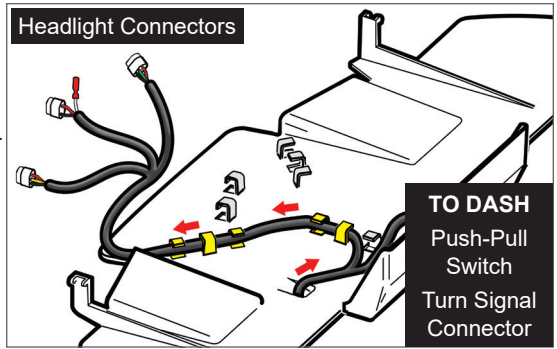
12. To access the upper portion of the splash guard, remove the cup holder by removing the (3) pal nuts underneath the cup holder. Retain cup holder and hardware.

**NOTE:** Do not reinstall the cup holders until all optional accessories have been installed.



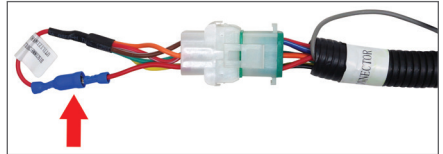
13. Keeping the harness on the inside of the steering column, gently route the harness through the hole in the splash guard, one connector at a time.

14. Run the lead with the headlight connectors through the clips on the driver side of the splash guard. Make sure the headlight connectors reach the area behind the front bumper.



15. If not installing a turn signal, reconnect the 9-pin jumper that was removed in Step 9.

If installing a brake switch without a turn signal switch, disconnect the bullet connector on the 9-pin jumper.



16. Tighten any cable ties left loose in this section.

### **Push-Pull Switch Installation**

**NOTE:** Do NOT install the push-pull switch if installing a LGT-132A (T3) or LGT-180 (T4) turn signal kit.

1. Remove the (4) Torx screws that hold in the front dash.

**NOTE:** The same Torx screws hold on the front cowl. Use caution not to damage the cowl.

2. Reconnect the push-pull switch to the 4-pin connector (Page 6, Step 9).

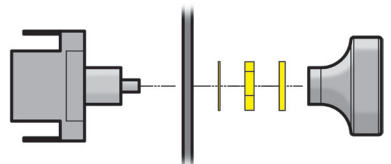
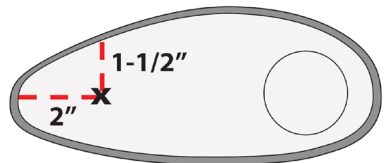
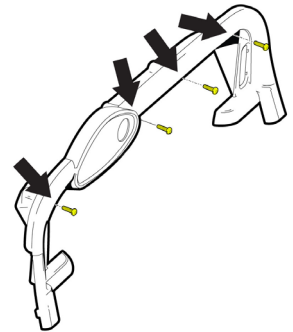
3. Measure 2" from the left side of the dash and 1-1/2" down from the top of the dash. Use a marking device to mark the drill location.

4. Drill a 7/16" hole at the marked location. File rough edges.

5. Remove knob, retaining nuts and lock washer from the push-pull switch and insert the shaft of the switch into the newly drilled hole.

6. Secure using the lock washer and retaining nuts. Reattach the knob.

7. Reinstall the front dash using the Original Hardware.

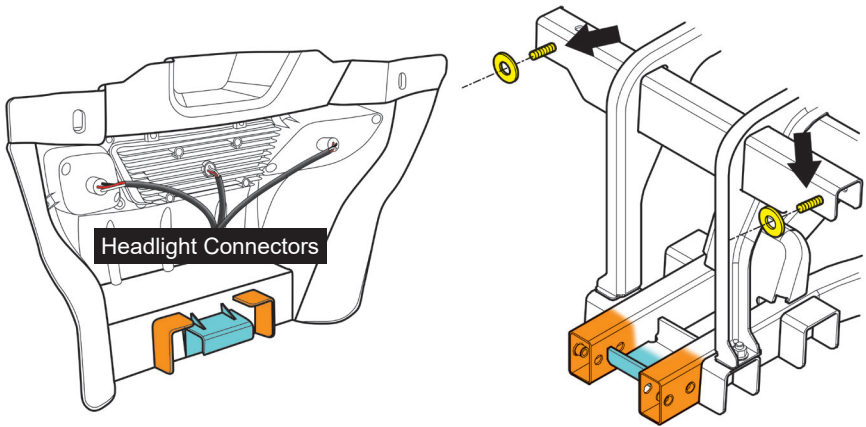


## Headlight Installation

**NOTE:** Install other accessories before installing the headlight bumper, if applicable.

1. Connect the 3-pin connectors on the light bar bumper to the matching connectors on the harness.

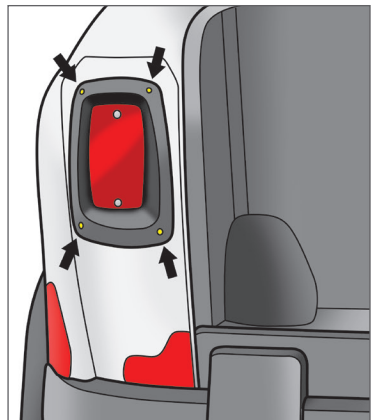
**HIGH / LOW BEAM NOTE:** High / low beams can be controlled by the T3 or T4 turn signal switches OR the LGT-169 high / low beam switch. If installing a T3 or T4 turn signal with high low beam capabilities, connect the bullet connector on the headlight to the bullet connector on the plug & play harness to enable the low beam option.



2. Install the light bar bumper starting at the bottom. It will fit over the frame rails (orange) and lock into the chassis (blue). Slightly push up the cowl and the splash guard as the light bar bumper is placed into position.
3. Install the light bar bumper using the Original Bumper Hardware. Keep the original hardware in place between the bumper and the shock.

## Taillight Installation

1. Connect the taillights to the taillight leads on the main harness.
2. Insert the taillight assemblies into the holes cut out earlier. Once in place, secure with the (8) Included Screws.
3. Secure the taillight wires to the frame with cable ties so they are safely out of the way of the tires.





## Power Connections

**NOTE:** Complete this section once all lights and optional accessories have been installed. Test all batteries with a voltage meter prior to installation to determine the output voltage.

**CAUTION:** This light kit is designed to operate at a DC voltage range of 12-48V. Please be advised that add-on accessories for this light kit may not be rated for any voltage over 12V DC and can be damaged if installed at a higher voltage. A voltage reducer must be used with 12V add-on accessories to avoid damage.

1. Verify the cart is in the TOW position (if equipped) and the key is OFF.
2. Verify any exposed wires and the push-pull switch are not touching the frame or any metal parts on the cart.
3. Connect the positive and negative battery connections from the light kit's harness to the appropriate batteries. Tighten the nuts but do not over tighten. Over tightening can destroy the battery posts.

Gas Carts: Connect the wires to a 12V battery.

48V Electric Carts with 8V Batteries for 12V Output: A voltage reducer is required to reduce the voltage to 12V. This is the safest option if installing optional accessories.

48V Electric Carts with 12V Batteries for 12V Output: Connect the light kit to (1) 12V battery OR connect the light kit to a voltage reducer to reduce the voltage to 12V. This is the safest option if installing optional accessories.

48V Electric Carts with 8V Batteries for 48V Output: This option is not recommended if installing optional accessories.

48V Electric Carts with 12V Batteries for 48V Output: This option is not recommended if installing optional accessories.

**NOTE:** Light sparks can be normal when connecting batteries, but a bright arching flash indicates there is a short in the system. Always test the batteries with a voltage meter as each configuration may vary.

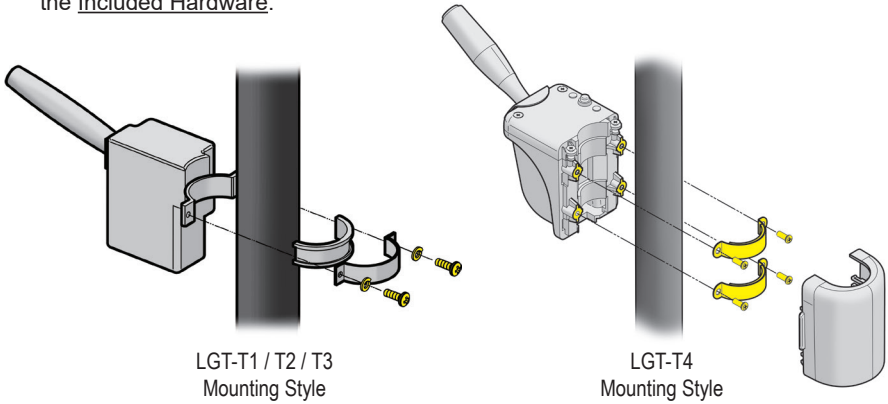
4. Put the cart in the RUN position and turn the key ON.
5. Turn the lights ON and test the lights and accessories to make sure they function properly.
6. Secure any loose wires with cable ties.

## Turn Signal Assemblies



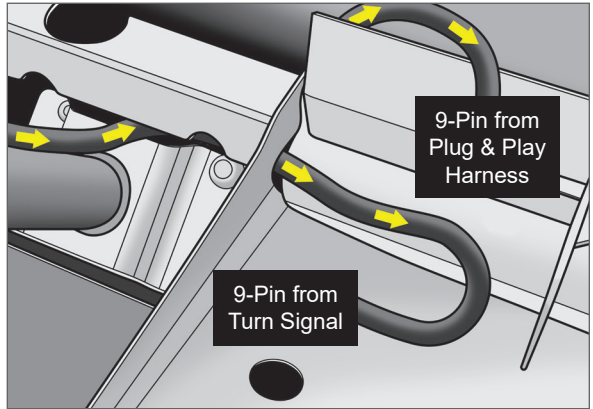
**NOTE:** If installing a steering column cover, do so before installing the turn signal.

1. Mount the turn signal assembly in a convenient location on the steering column using the Included Hardware.

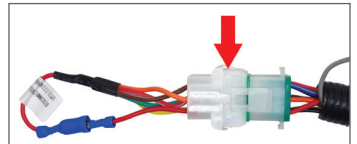


2. With the cup holders removed, carefully route the turn signal harness down the left side of the steering column, under the dash and into the cup holder area.

**NOTE:** If the control box or the relay is installed on the turn signal, remove it before routing the wires through the dash.



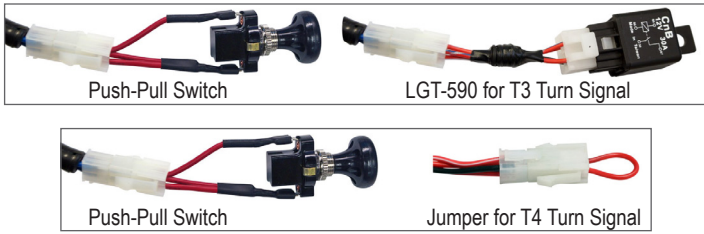
3. Remove the jumper harness from the 9-pin connector on the plug & play harness.
4. All Turn Signals: Connect the 9-pin connector on the turn signal to the 9-pin on the plug & play harness.



High/ Low Beam Function (T3 and T4 only): Connect the bullet connector on the turn signal harness labeled "dimmer" to the corresponding bullet connector on the plug & play harness to enable the low beam function.

5. Connect the flasher relay to the turn signal harness (T3). Reconnect any control boxes or relays removed in Step 2.

- If installing the LGT-T3 or T4 turn signals, remove the push-pull switch from the 4-pin connector on the plug & play harness and replace it with the LGT-590 relay (T3) or the jumper harness (T4).



- Measure from the bottom of the turn signal to the dash. Using a utility knife, saw or tin snips, cut the LGT-107A (universal turn signal switch wire cover) to the measured length and sand rough edges.

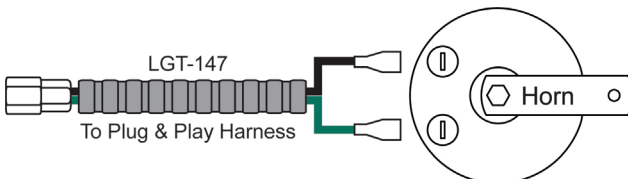
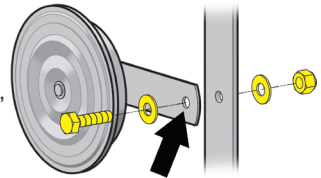


- Snap the cover around the turn signal wires and the steering column. Secure any loose wires behind the dash.



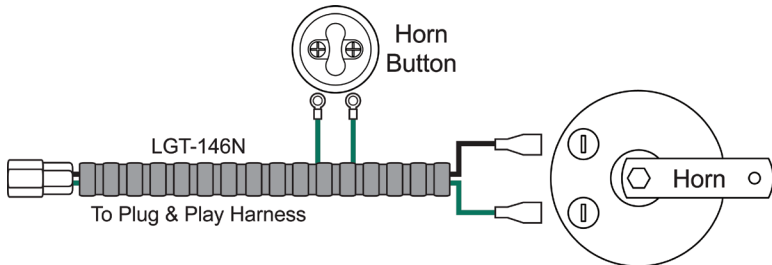
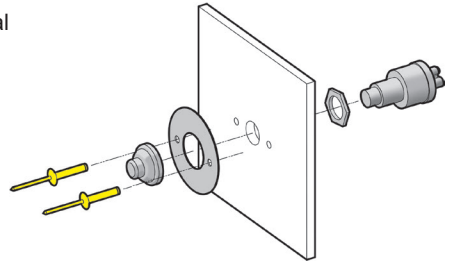
**Horn Only (For use with LGT-T2, LGT-T3 and LGT-T4 Turn Signals)**

- Connect the spade connectors on the horn harness to the back of the horn on either terminal as shown below.
- Mount the horn under the driver side front end of the vehicle in a location free of moving parts using the Included Hardware. Use a pre-drilled hole or drill a 1/4" hole in a safe location on the golf cart frame. The horn should face away from the cart and its passengers.
- Connect the triangular plug on the horn harness (LGT-147) to the triangular plug on the plug and play harness. Secure any loose wires with cable ties.



## Horn w/ Horn Button (For use alone or with LGT-T1 Turn Signal)

1. Mount the horn as shown on Page 11, Step 2.
2. Use the pre-drilled hole for the horn button in the floor or the cart (located under the mat) or find a convenient location on the floor to mount the horn button. This area should be free and clear of obstacles and wiring harnesses. Drill a 5/8" hole through the floor at the location. Cut away the floor mat over the hole.
3. Insert the horn button in the hole from the underside of the cart. Place the horn decal over the horn button. Screw the rubber button cover onto the horn button. Do not tighten.
4. Align the decal so it is straight. Mark the (2) hole locations for the decal onto the floor mat. Remove the horn button, cover and decal. Drill the (2) marked hole locations with a 7/32" bit.
5. Install the horn button and decal as shown using the Included Rivets.
6. Connect the (2) ring terminals on the horn harness to the back of the horn button and connect the (2) spade terminals to the horn. You can connect the leads to either terminal.
7. Connect the triangular plug on the horn harness to the triangular plug on the plug and play harness. Secure any loose wire with cable ties.



## 12 Volt Receptacle and Dual USB Outlets



ACC-0058



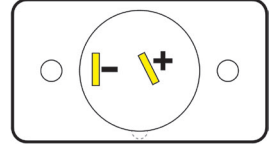
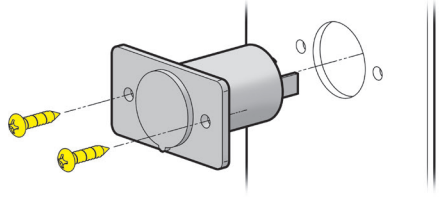
ACC-0097

**CAUTION:** 12V Outlets are designed for 12V operation ONLY. Operating at a voltage higher than 12V will damage accessories plugged into the outlet.

1. Find a convenient location on the dash or center compartment to mount the 12V receptacle and/or USB outlet.
2. Mark the center of the mounting location with a marking device.

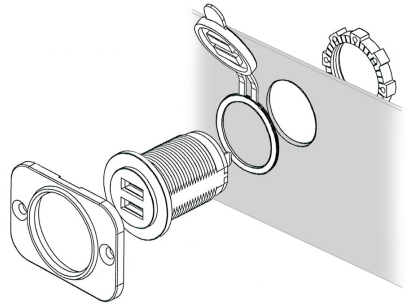
## **ACC-0058 12 Volt Outlet**

1. Drill a 1" hole at the marked location.
2. Insert the 12V receptacle into the hole and mount it with the Included Hardware.
3. Connect the +/- 12V outlet leads on the light kit harness to the +/- 12V terminals on the back of the ACC-0058.

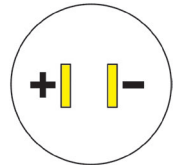


## **ACC-0097 Dual USB Outlet**

1. Drill a 1-1/8" hole (maximum size) at the marked location.
2. Insert the outlet through the protective cap and into the mounting area. Secure it with the retaining nut. Mount the flat panel cover over the outlet (not required) using the Included Screws.
3. Connect the +/- 12V outlet leads on the light kit harness to the +/- 12V terminals on the back of the ACC-0097.



NOTE: A fuse holder (ACC-0019) and 15A fuse (ACC-0021) are recommended if direct connecting the USB ports to a 12V battery or voltage reducer.



## **Brake Light Switches**



LGT-B1



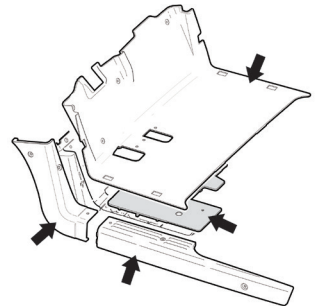
LGT-B7



LGT-B11

## **All Brake Switches**

1. Verify cart is in TOW position (if equipped), key is OFF and wheel is chocked.
2. Remove the side and upper rocker panels, floor mat and pedal group access cover.



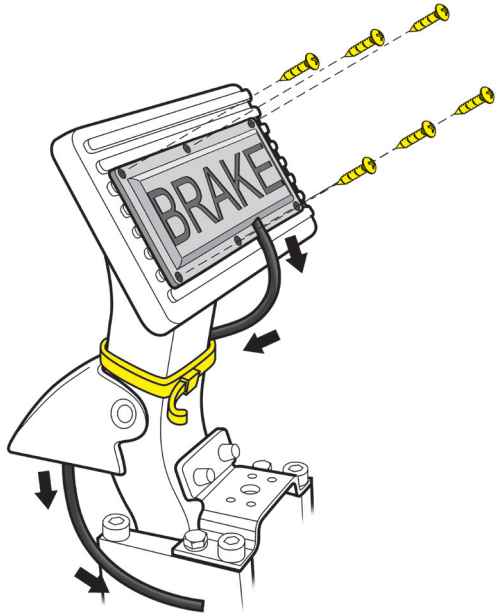
## **LGT-B1 (LGT-138) Brake Pad Light Switch, Universal Fit**

1. Center the brake pad on the lower portion of the brake pedal assembly and align the holes with the ridges in the pedal.

2. If mounting the switch using the Included Screws, fasten the pad directly to the pedal.

If mounting the switch using the Included Rivets, mark the hole locations and drill (6) 3/16" holes through the pedal. Mount the pad with the rivets.

3. With the brake pedal in PARK, run the wire from the pad down the left side of the pedal and into the pedal compartment. Keep the wire close to the driver side so it does not get pinched.



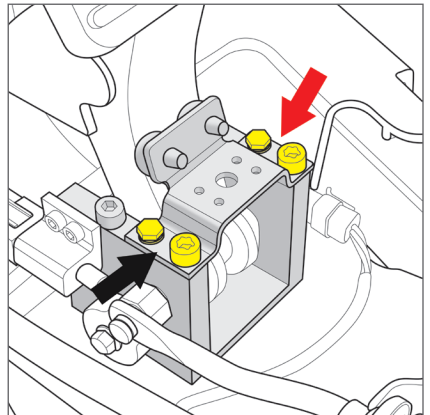
4. Connect the brake pad lead to the plug and play harness. Use cable ties to secure loose wires away from any moving parts or pinch points.

**NOTE:** Black ground wire is not used with this option.

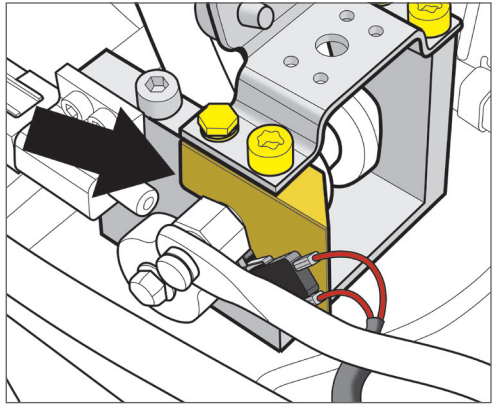
5. Reinstall brake access panel, floor mat, side and upper rocker panels with Original Hardware.

## **LGT-B7 (LGT-161) Brake Light Switch (Electric Carts Only)**

1. Loosen the (2) bolts on the passenger side stop bracket (red arrow).
2. Completely remove the (2) bolts on the driver side of the stop bracket (black arrow). Push the brake pedal slightly to remove any pressure.



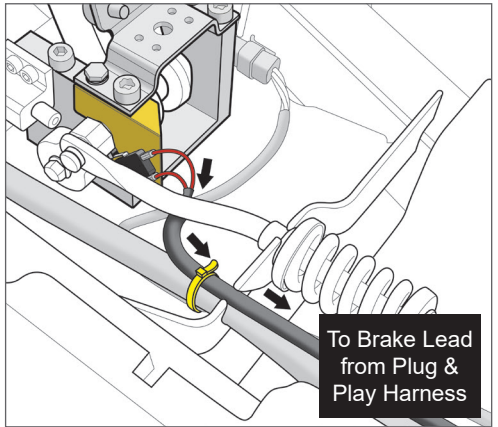
- Slide the LGT-161 brake switch bracket under the original stop bracket on the driver side. The wires should face the rear. Align the slots with the holes in the brake assembly. Reinstall using the Original Hardware. Do not tighten.



- Release the brake. It should stop at the stop bar. Slowly press the brake until the micro-switch clicks. There should be a small amount of travel before it clicks and activates the brake.

- Make any adjustments in the brake switch position and tighten all hardware.

- Route the wire under the brake cable & follow the gray wire from the sensor. Place it into the notch in the pedal box under existing wire.



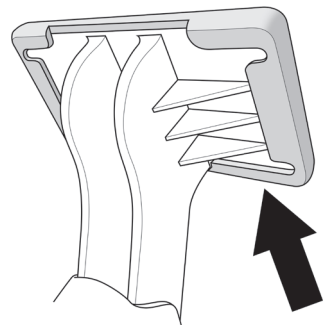
- Connect the brake pad lead to the plug and play harness. Use cable ties to secure loose wires away from any moving parts or pinch points.

**NOTE:** Black ground wire is not used with this option.

- Using cable ties, secure the brake leads and ground to the existing group of wires. Also secure the brake switch wire to the gray sensor wire. Make sure all wires are out of the way of moving parts.
- Reinstall brake access panel, floor mat, side and upper rocker panels with Original Hardware.

### **LGT-B11 Brake Pad Light Switch, OE Fit**

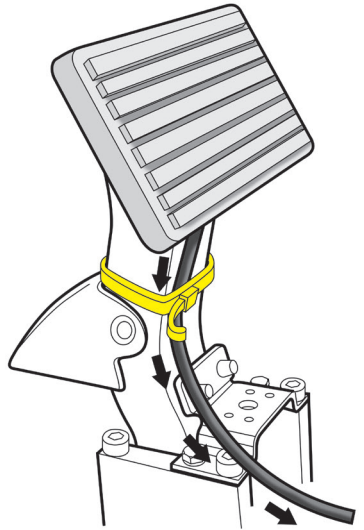
- Remove the OE brake pad by gently pulling it away from the pedal.



2. Reinstall the new brake pad by fitting it over the plate where the OE brake pad was removed.
3. With the brake pedal in PARK, run the wire from the pad down the pedal and into the pedal compartment. Keep the wire away from any moving parts or pinch points so it does not get damaged.
4. Connect the brake pad lead to the plug and play harness. Use cable ties to secure loose wires away from any moving parts or pinch points.

**NOTE:** Black ground wire is not used with this option.

5. Reinstall brake access panel, floor mat, side and upper rocker panels with Original Hardware.



**RUGGED  
STARTS  
HERE**

Your RXV Light Kit is now complete.  
Please enjoy safely!

Scan QR code or use the link below to view the installation video.  
<https://vimeo.com/user39935056>

