RHOX
Rugged parts for your ride.

LGT-413L

Club Car Tempo
LED Light Kit
Installation Instructions

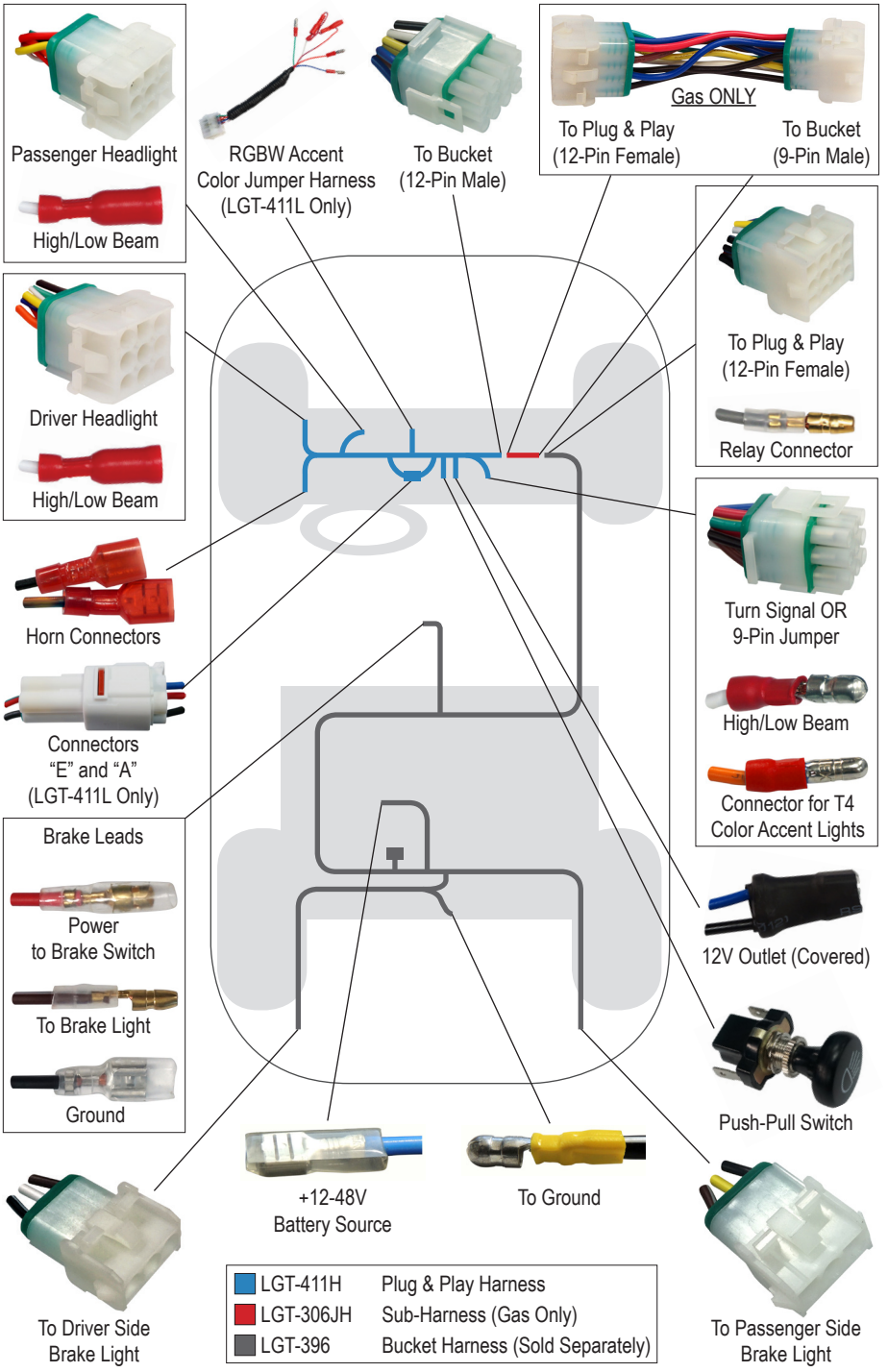
Caution: Please read through the instructions carefully. Before starting this project, remove the system's positive and negative connections from the battery or battery pack. This kit is designed for 12-48V operation only. Operating this kit at a higher voltage will void any and all warranties. Add-on 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.).

Table of Contents

Tools Needed for Installation

- Screwdriver (Phillips & Flat Head)
- Sockets & Open Ended Wrenches (10mm, 1/2”, 13mm)
- Drill, Drill Bits & Hole Saws (3/16”, 7/16”, 1”, 1-1/8”, 1-1/2”, 2”)
- Torx Bits (T-15, T-25, T-30, T-40)
- Center Punch
- Wire Cutters
- Fish Tape / Wire Snake
- Measuring Tape
- Hammer
- Rivet Gun
- Jig Saw or Rotary Tool, Utility Knife
- Sandpaper or File
- Marking Device
- Painter’s Tape

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

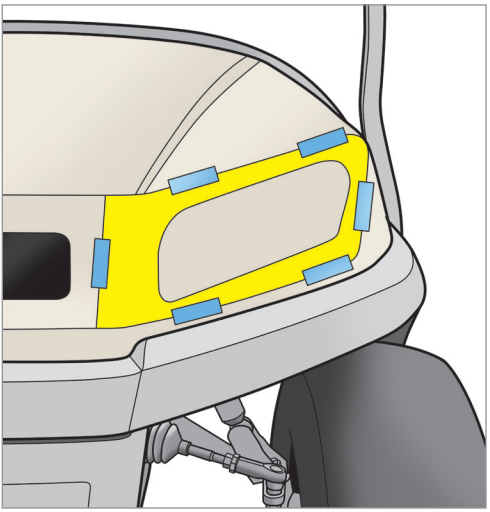
1. Cut out the headlight template following the guidelines.

2. Place the template on the driver side front cowl and align it with the cowl mold lines. Secure with painter's tape.

3. Trace the inside contour of the template using a marking device.

   NOTE: To prevent chipped paint on a painted cowl, tape over the drawn line and redraw over the tape using the template.

4. Using a jig saw or rotary tool, cut out the INSIDE of the marked area. Test fit the headlight and make any adjustments before removing the tape. Once the light fits, remove the tape and sand any rough edges.

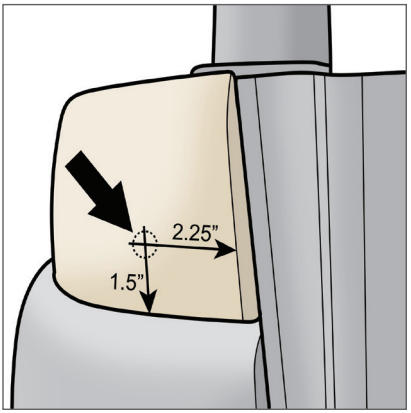


5. Flip the template over and repeat Steps 2-4 for the passenger side.

Taillight Preparation

1. On the driver side rear body, measure 2-1/4" from the vertical body line and 1-1/2" from the under body. Mark the location with a center punch. Drill a 1-1/2" hole at the marked location. File any rough edges.

2. Repeat Step 1 for the passenger side taillight opening.



3. Gas Carts or Carts with Bucket Harness: Reach inside of the rear body and pull the taillight connectors through the holes.

   Electric Carts 2008.5+: Continue to “Wire Harness Installation” below.

Wire Harness Installation

LGT-306JH
(Gas Only)

LGT-396

LGT-411H

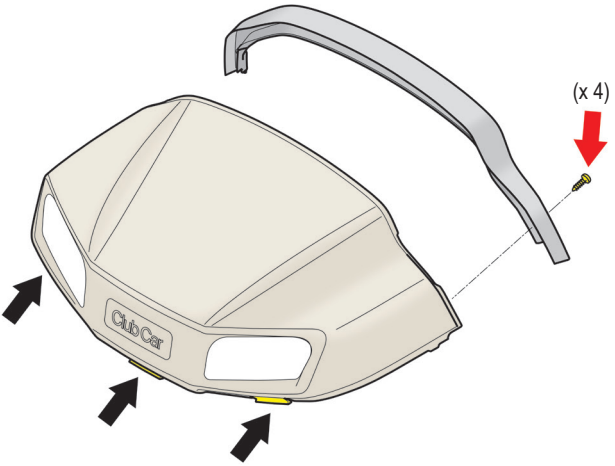
VOLT-0011
(Optional)

VOLT-2003 / 5
(Optional)

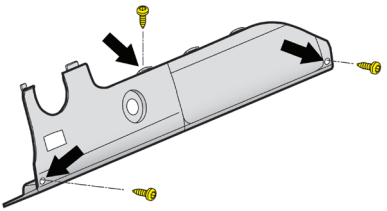
All Carts

1. Remove the trim around the dash / front cowl.

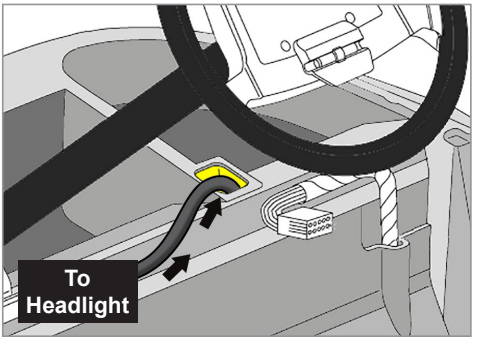
2. Remove the front cowl by pushing the tabs towards the inside of the cart and lifting the cowl upward and off the cart.



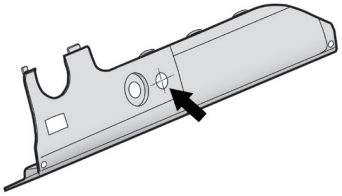
3. Remove the dash panel by removing the (3) Torx bolts. Retain hardware.



4. Route the headlight connector on the plug & play harness (LGT-411H) through the access hole in the passenger side dash to the front of the cart.



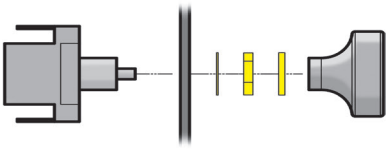
5. If powering the lights with a push-pull switch, locate the indentation to the right of the key switch on the dash panel and drill a 7/16” hole. File any rough edges.



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

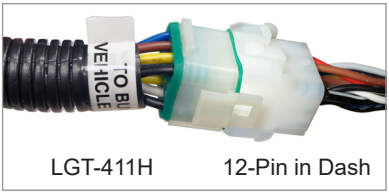
6. Remove the knob, retaining nuts and lock washer from the push-pull switch and insert the shaft of the switch into the newly drilled hole.

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



Electric Carts with OEM Bucket Harness Previously Installed

1. Locate the factory 12-pin male connector behind the dash and connect it to the 12-pin connector on the LGT-411H harness.



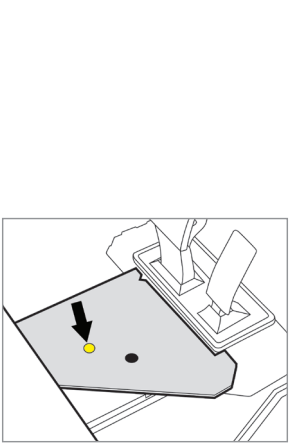
LGT-411H 12-Pin in Dash

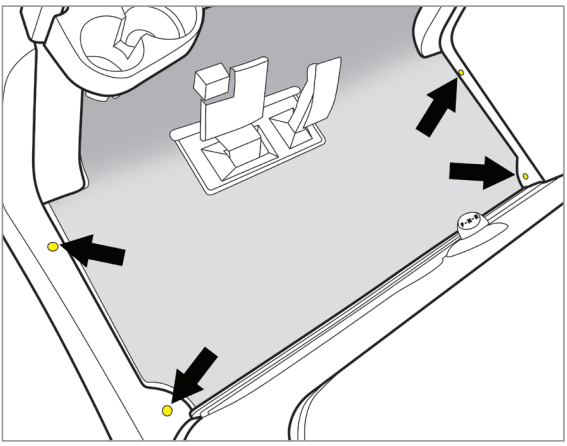
Electric Carts without OEM Bucket Harness (LGT-396 Sold Separately)

1. Remove the front seat bottom.

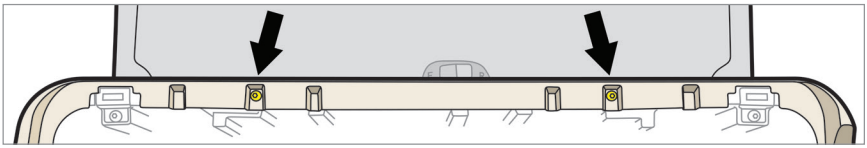
2. Remove the floor mat. Retain hardware.

3. Remove the rivet on the pedal group access panel and remove the panel. Retain hardware.

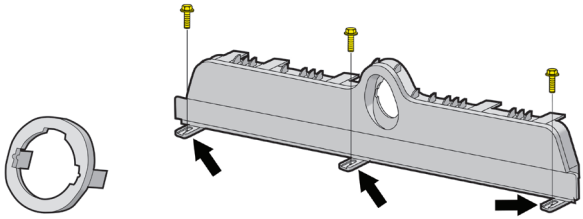




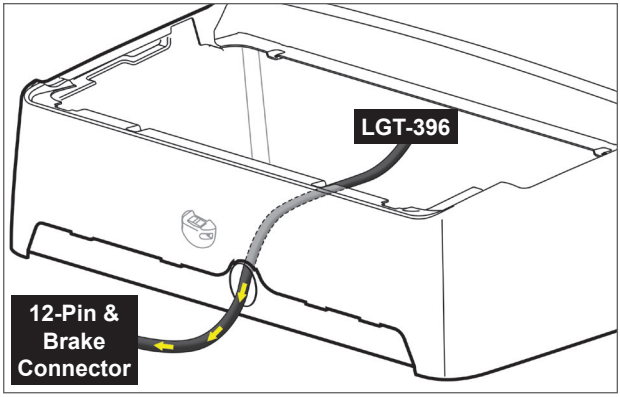
4. Remove and retain the (2) front body screws.



5. Remove the charging receptacle cover with a screwdriver. Remove the kick plate using caution not to break the tabs. Retain cover and kick plate.

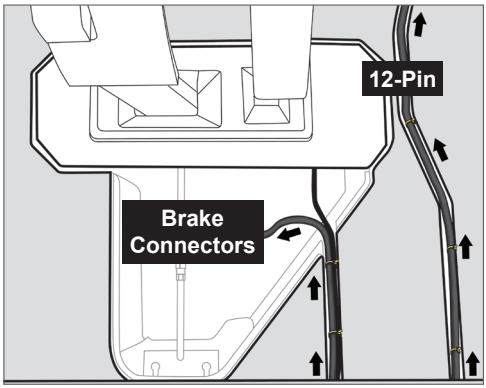


6. Route the 12-pin connector and brake light connectors on the LGT-396 bucket harness into the battery compartment and through the hole where the main harness runs to the front of the cart (below the F/R switch).

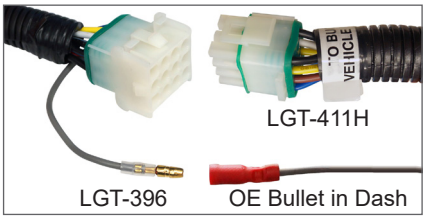


7. Feed the brake switch leads through the center floor channel into the pedal group compartment. Use cable ties to secure the LGT-396 to the OE harness.

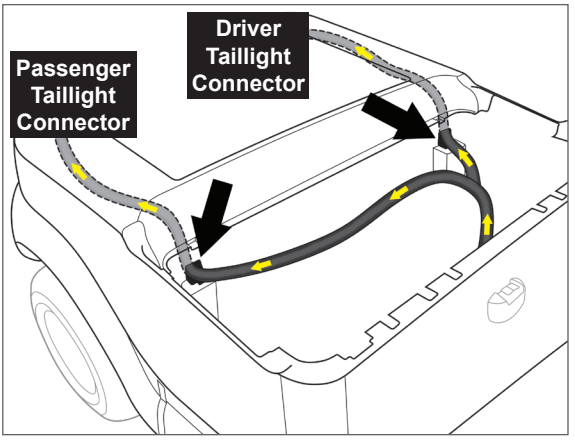
8. Route the 12-pin connector along the floor channel with the main harness and up under the dash. Secure with cable ties.



9. Behind the dash panel, connect the male bullet connector on the LGT-396 to the red female bullet connector on the OE harness. Connect the 12-pin connector on the LGT-396 to the 12-pin connector on the plug and play harness.



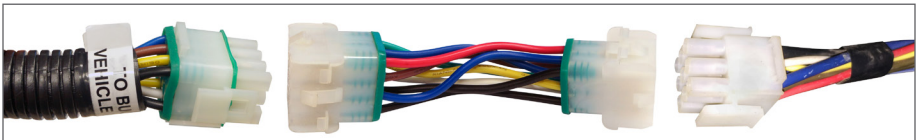
10. In the rear of the cart, use a wire snake or fish tape to route the taillight leads through the holes in the upper corners of the battery compartment to the holes drilled for the taillights.



Gas Carts

1. Locate the 9-pin connector behind the dash and connect it to the 9-pin connector on the LGT-306JH jumper harness.

2. Connect the 12-pin connector on the LGT-306JH to the 12-pin connector on the plug & play harness (LGT-411H).

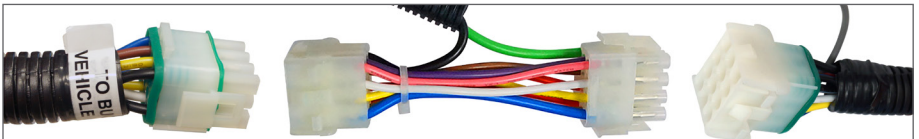


LGT-411H | LGT-306JH | 9-Pin in Dash

Voltage Reducers

NOTE: 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 is required if installing add-on accessories to a voltage greater than 12V DC. Reducers sold separately.

1. Connect the 12-pin to 12-pin connector from the voltage reducer between the plug & play harness (LGT-411H) and either the LGT-396 bucket harness or the 12-pin connector on the OE harness behind the dash.



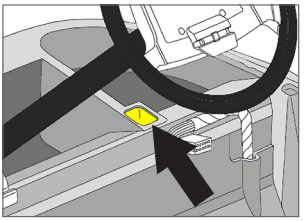
LGT-411H | Voltage Reducer Harness | LGT-396 or 12-Pin in Dash

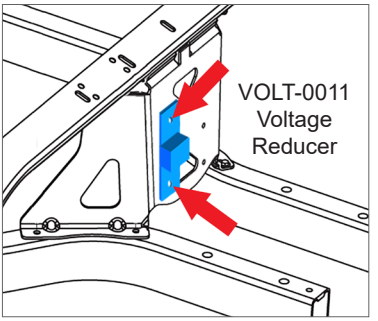
2. Route the rest of the voltage reducer's harness through the access hole in the passenger side dash to the front chassis of the cart.

3. Mount the reducer to the center dash support using the included hardware. A RHOX VOLT-0011 voltage reducer is shown below. VOLT-2003 and VOLT-2005 reducers mount in the same location.

4. Connect the voltage reducer harness to the voltage reducer.

5. Secure loose wires with cable ties.





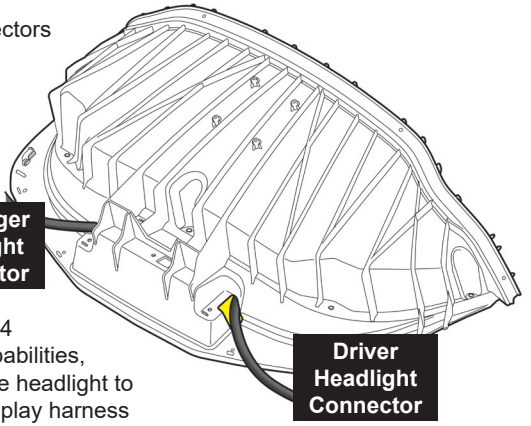
Headlight Installation

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

1. Run the headlight connectors on the LGT-411H harness from the dash area through the under-body and out of the holes in the under-body.

2. Connect the 9-pin headlight connectors on the LGT-411H harness to the matching connectors on the headlights.

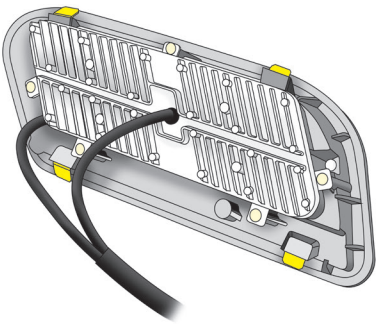
HIGH / LOW BEAM NOTE: High / low beams can be controlled by the T3 or T4 turn signal switches OR the LGT-169 high / low beam switch. If installing a T3 or T4 turn signal with high low beam capabilities, connect the bullet connector on the headlight to the bullet connector on the plug & play harness to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



3. Reinstall the front cowl and dash trim.

4. Insert the headlights from outside of the front cowl. The tension clips (yellow) will remain behind the cowl, keeping the light in place.

5. Reinstall the dash panel using the Original Hardware.



Taillight Installation

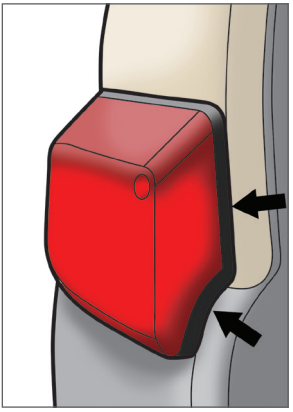
1. Connect the taillights to the wire harness leads that were pulled through the holes in the rear body.

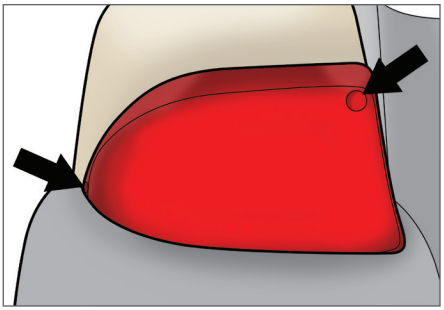
2. Test fit each taillight. They should rest on the underbody and align with the edge of the bagwell.

   NOTE: Do not expose the double sided tape until the lights are functioning and have been test fitted.

3. Clean the mounting surface with rubbing alcohol. If the taillights fit properly, remove the paper on the double sided tape and mount the taillights on the rear body.

4. Use the Included Screws to further secure the taillights.





Power Connections

NOTE: Complete this section once all lights and optional accessories have been installed. The following diagram shows the batteries in factory configurations. Each configuration may vary. 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.

48V Electric Carts with 8V Batteries

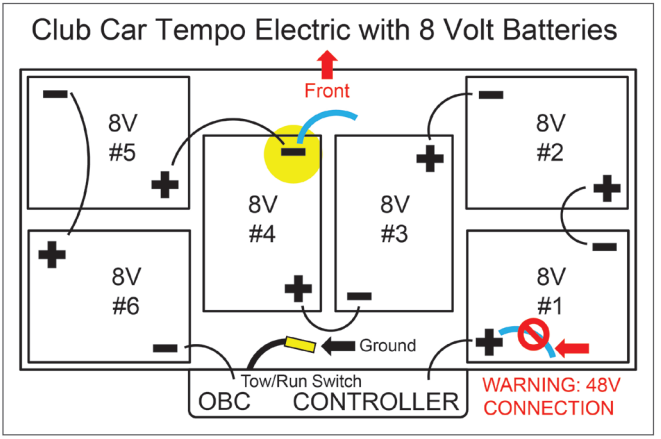
For 12V Installation: For 12V output, this battery configuration requires the installation of a voltage reducer (i.e. VOLT-0011) to reduce the voltage from 16V to 12V or from 48V to 12V. This is the safest option if installing optional accessories.

For 48V Installation: Installer must use extreme caution when connecting accessories to DC voltage. Improperly installing accessories to DC voltage of 12-48 Volts may lead to serious injury. We highly recommend professional installation for any accessory operating at a DC voltage greater than 12 Volts. This option is not recommended if installing optional accessories.

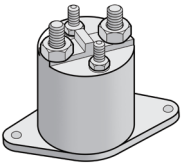
1. Connect the blue positive lead on the LGT-396 to the desired positive connection. If the factory cables have been replaced, connect the lead with a ring terminal.

2. Connect the black ground lead on the LGT-396 to the ground wire behind battery #4. The ground will be a 12 ga. black wire with a yellow connector.

3. Secure any loose wires with cable ties.



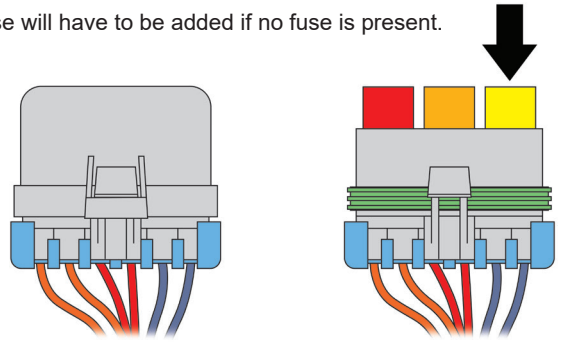
Gas Carts



1. Locate the fuse holder near the solenoid. The solenoid is shown to the right.

2. Remove the cover and verify there is at least a 10 amp fuse in the “lights” position.

3. A 10 amp fuse will have to be added if no fuse is present.



Turn Signal Assemblies


LGT-107A

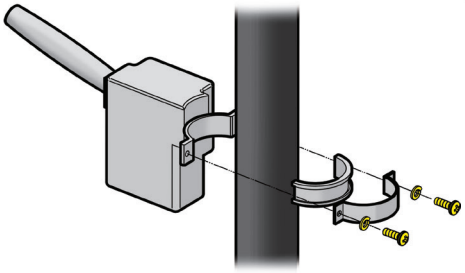

LGT-T2

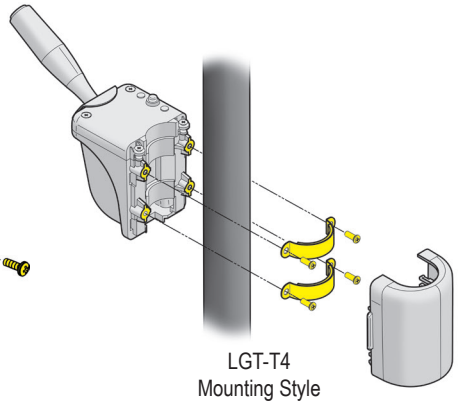

LGT-T3


LGT-T4

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

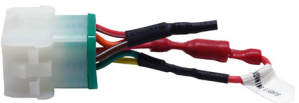
1. Mount the turn signal assembly in a convenient location on the steering column using the included hardware.


LGT-T2 / T3
Mounting Style


LGT-T4
Mounting Style

2. Carefully route the turn signal harness down the left side of the steering column and behind the dash.

3. Remove the jumper harness from the 9-pin turn signal connector.



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 (LGT-411H) to enable the low beam function.

   Turn Signal Activated Accent Lights (T4 only): Connect the female bullet connector labeled “Connect for Accent Light Control” on the T4 turn signal to the corresponding connector on the plug & play harness (LGT-411H). Disconnect connectors “E” and “A” on the plug & play harness. The first position on the T4 turn signal will activate accent lights only.

5. Connect the flasher relay to the turn signal harness (T3).

6. 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).

7. 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.

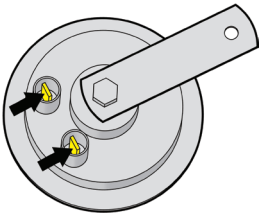
8. Snap the cover around the turn signal wires and the steering column. Secure any loose wires behind the dash.

Horns


ACC-0004 (12V Horn)

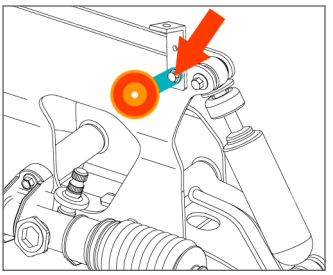

ACC-0005 (Optional 48V Horn)

1. Connect the (2) spade connectors on the light bar wire harness to the back of the horn on either terminal.



2. Mount the horn to the chassis using the bolt next to the driver side upper shock mount. The horn should face away from the cart and its passengers.

3. Secure any loose wires out of the way of moving parts with cable ties.



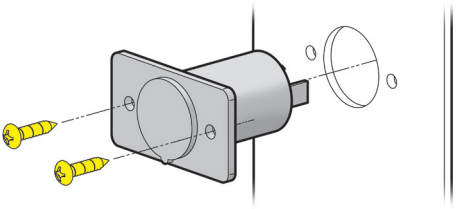
12 Volt Receptacle and Dual USB Outlets

ACC-0058

ACC-0097

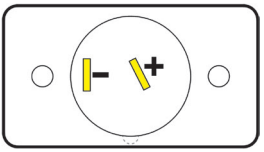
CAUTION: 12V Outlets are designed for 12V operation ONLY. Operating at a voltage higher than 12V will damage accessories plugged into the outlet.

1. Find a convenient location on the dash o receptacle and/or USB outlet.
2. Mark the center of the mounting location



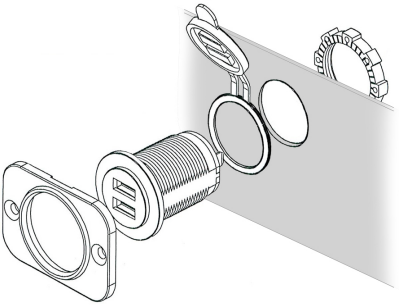
ACC-0058 12 Volt Outlet

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.



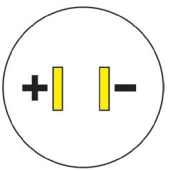
ACC-0097 Dual USB Outlet

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-B9

All Brake Switches

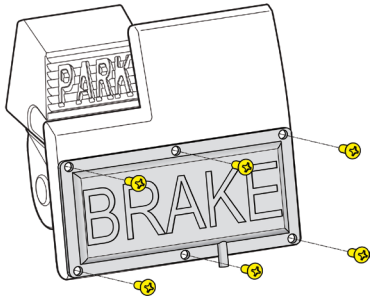
1. Verify cart is in TOW position (if equipped), key is OFF and wheel is chocked.

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

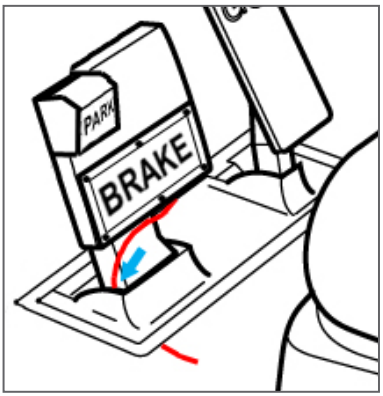
1. Lock the brake pedal and center the brake pad on the lower portion of the brake pedal assembly.

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.

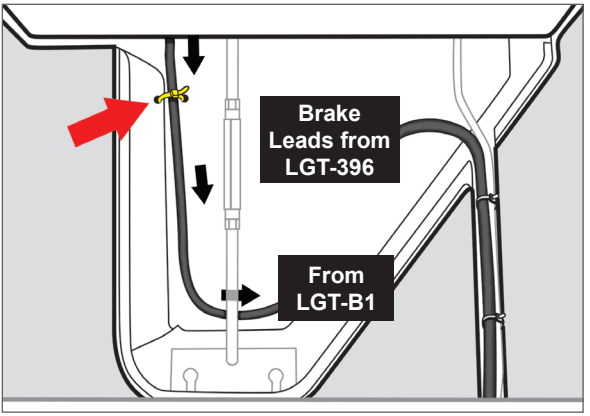


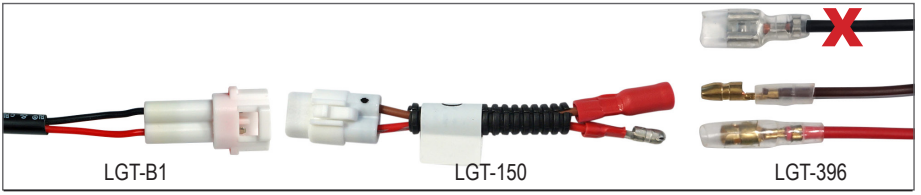
4. Drill (2) small holes in the pedal compartment close to the driver side (red arrow). Secure the LGT-138 wire out of the way with a cable tie.

5. Connect the brake pad lead to the LGT-150 sub-harness. Connect the LGT-150 to the brake leads from the bucket harness (LGT-396 or OE harness). Use cable ties to secure loose wires away from any moving parts.

NOTE: Black ground wire is not used with the LGT-B1. The ground wire is only used with a time delay.

6. Reinstall pedal group access panel, floor mat, lower body trim and receptacle cover using the Original Hardware.

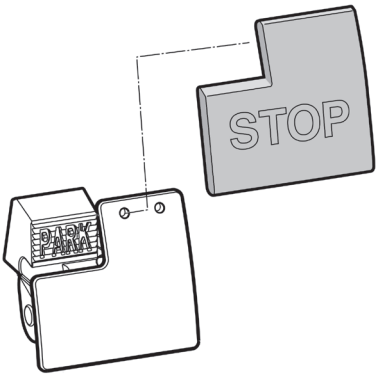




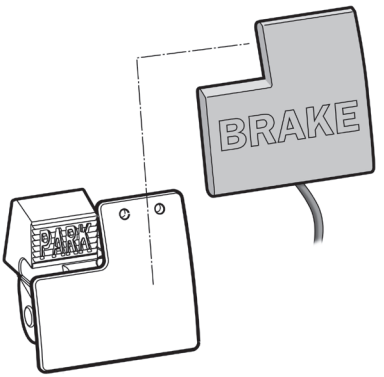
LGT-B9 Brake Pad Light Switch, OE Fit

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

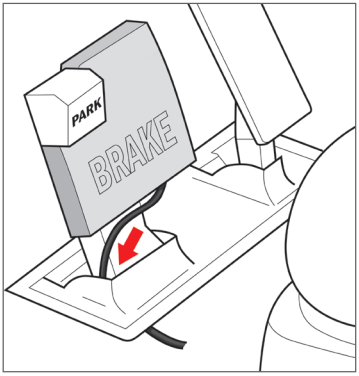
   NOTE: If saving the OE brake pad for future use, use caution not to tear the rubber alignment pins.



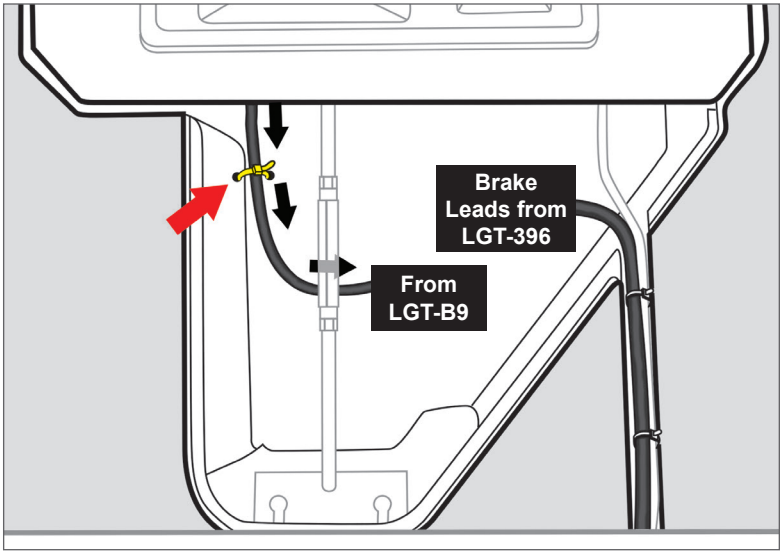
2. Reinstall the new brake pad by fitting it over the plate where the OE brake pad was removed.



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

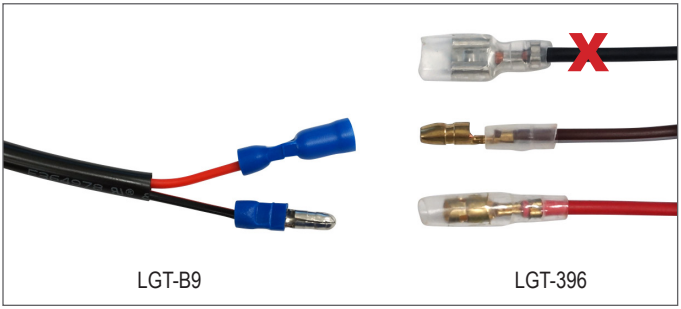


4. Drill (2) small holes in the pedal compartment close to the driver side (red arrow). Secure the LGT-B9 wire out of the way with a cable tie.



5. Connect the brake pad to the brake leads from the bucket harness (LGT-396 or OE harness). Use cable ties to secure loose wires away from any moving parts.

NOTE: Black ground wire is not used with the LGT-B9. The ground wire is only used with a time delay.



6. Reinstall pedal group access panel, floor mat, lower body trim and receptacle cover using the Original Hardware.

Your Tempo 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

NOTES

RUGGED STARTS HERE