

# LED Factory Style Light Kits Yamaha Drive 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 a 12V operation only. Operating this kit at a higher voltage will void any and all warranties. 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**

- Screwdriver (Phillips & Flat Head)
- Jig Saw or Rotary Tool
- Scissors
- Painter's Tape
- Sand Paper or a File
- Wire Cutters
- Allen Wrench (3mm)
- Ruler or Measuring Tape
- Center Punch or other Marking Device

#### **Before You Start**

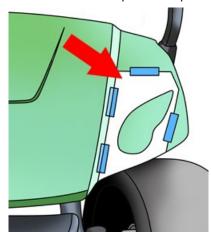
- 1. If the vehicle is ON, turn the key to the OFF position.
- 2. Place the TOW/RUN switch in the TOW position if equipped.
- 3. Remove the system's positive and negative connections from the battery or battery pack.
- Engage the parking brake (gas carts only).

# Headlight and Taillight Preparation LGT-307 LGT-307 LGT-307L LGT-307/L

- 1. Cut out the headlight template following the guidelines.
- 2. Starting with the driver side, place the template on the front cowl aligning it with the cowl mold line and the bottom edge of the cowl. Secure with painter's tape.
- 3. Trace the inside contour of the template using a marking device.

**NOTE**: If the cowl is painted, to prevent the paint from chipping, tape over the drawn line and redraw over the tape using the template.

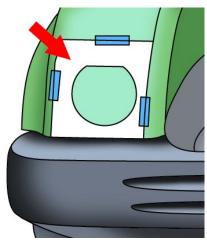
- 4. Using a jig saw or rotary tool, cut out the INSIDE of the marked area. Test fit the headlight and make any adjustments before removing the tape. Remove the tape and sand any rough edges.
- 5. Flip the template over and repeat Steps 2-4 for the passenger side.



- 6. Cut out the taillight template following the guidelines.
- 7. Starting with the driver side, place the template on the rear body. Use the guidelines on the template for correct placement. Secure with painter's tape.
- 8. Trace the inside contour of the template using a marking device.

**NOTE**: If the body is painted, to prevent the paint from chipping, tape over the drawn line and redraw over the tape using the template.

- Using a jig saw or rotary tool, cut out the INSIDE of the marked area. Test fit the taillight and make any adjustments before removing the tape. Remove the tape and sand any rough edges.
- 10. Flip the template over and repeat Steps 7-9 for the passenger side.



### Wiring Harness Overview +12V Dimmer +12V Dimmer (Deluxe Only) (Deluxe Only) 12V +12V -12V +12V Aux. Turn Signal To Driver Side To Passenger Side Aux. Turn Signal Head/Marker Light Head/Marker Light (Deluxe Only) (Deluxe Only) -12V +12V 12V Outlet To Horn (Deluxe Only) (Deluxe Only) Push-Pull Switch Turn Signal +12V To Positive (Deluxe Only) (Basic Only) -12V To Ground +12V Dimmer (Basic Only) (Deluxe Only) +12V To Positive (Deluxe Only) -12V To Ground **Brake Switch** (Deluxe Only) (Deluxe Only) Aux. Brake & Rear Marker Lights To Passenger Side To Driver Side (Deluxe Only) Brake Light **Brake Light** \*Basic Harness has Basic Harness has LGT-393 Basic Harness **Red Connector Red Connector** (wire color may vary) LGT-693 Deluxe Harness

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#### **Wire Harness Installation**





LGT-393 Basic Harness

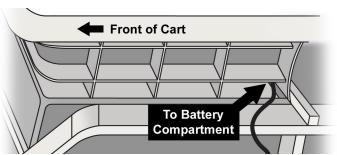
LGT-693 Deluxe Harness

**NOTE**: Raising the front of the cart and securing it on jack stands may make this installation easier. Make sure to engage the parking brake & chock the rear wheels.

- 1. 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 fuse holders from each other (deluxe only).



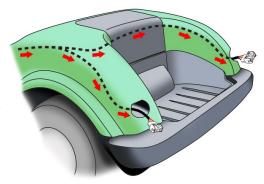
 From underneath the driver side of the cart, gently run the rear portion of the harness (taillight & battery connections) through the opening in the battery compartment.



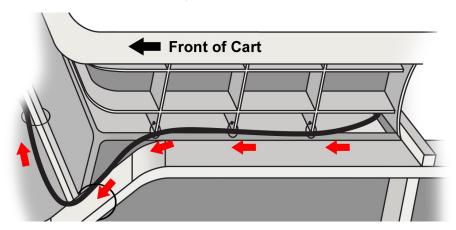
- Make sure the battery connection leads are able to reach the battery pack. Set the leads to the side and away from the terminals. They will be connected after completing the installation of the harness, lights and/or accessories.
- Feed the rear portion of the harness through the cart so the taillight connections reach the holes in the rear body.

The shorter cable will rest on top of the driver side wheel well.

Route the longer cable behind the battery compartment & over the passenger side wheel well.



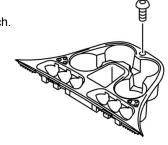
- 7. Make sure the taillight leads reach the holes in the body. Once the leads are in position, use cable ties to secure the harness in place and away from any moving parts or areas where it can be pinched. Holes can be drilled in the rear fenders if needed for wire ties.
- 8. Run the front portion of the harness on the driver side underbody towards the front of the cart as shown. Use wire ties to secure the harness in place. Holes can be drilled in the underbody's ribs for wire ties if needed.



- 9. If <u>not</u> installing the brake switch, secure the brake lead with rest of the harness (Deluxe Only).
- 10. Run the harness through the frame and behind the suspension.
  11. Run the headlight wires towards the holes cut out in the front cowl.
  12. Run the push-pull switch and the rest of the leads towards the cup holder area behind the dash.
  13. It not installing the horn, secure the horn lead with the rest of the harness (Deluxe Only).

14. Remove the cup holder insert by removing the button head socket cap screw with an Allen wrench.

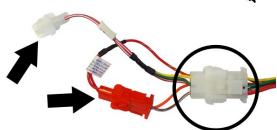
Gently pry upward until the insert is released.



15. Configure Jumper Harness (Deluxe Only):

If installing a turn signal, remove the jumper harness from the 9-pin connector and discard.

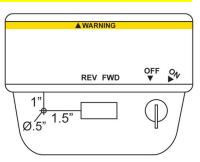
If installing brakes without a turn signal, switch the (2) male 2-pin connectors. Leave the jumper on the harness.



#### Push-Pull Switch Installation

NOTE: If installing the LGT-132A deluxe turn signal switch or the KEY-68 key switch, do NOT install the push-pull switch.

- 1. Mark the center of the mounting location for the push-pull switch below the cup holders. Follow the dimensions to the right as a guide.
- 2. Carefully drill a 1/2" hole for the switch. Do NOT drill into the cart's main harness. File any rough edges.



- 3. Remove the knob, retaining nuts and washer from the push-pull switch and insert the shaft of the switch into the 1/2" hole.
- Secure the switch using the retaining nuts and washer. Reattach knob. 4.





LGT-307 LGT-307L

**NOTE:** If installing other accessories, do so before installing the headlights.

- 1. Connect the driver side headlight to the driver side headlight lead.
- Insert the headlight into the mounting hole. Align and secure the headlight to the front cowl with the included screws.
- 3. Repeat Steps 1-2 for the passenger side headlight.
- 4. Secure any loose wires away from moving parts with wire ties.

#### **Taillights**

- 1. Connect the driver side taillight to the driver side taillight lead.
- Insert the taillight into the mounting hole. Align and secure the taillight to the rear body with the included screws.
- 3. Repeat Steps 1-2 for the passenger side taillight.

#### **Power Connections**

**NOTE:** Complete this section once all lights and optional accessories have been installed.

- 1. Verify the cart is in the TOW position 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. On a 48V system, select (1) 12V battery and connect the positive and negative wires of the harness to the positive and negative posts on the battery.
  - On a gas cart, connect the wires to the battery. Tighten the nuts but do not over tighten. Over tightening can destroy the battery posts. See figure on Page 12.

On a 48V system with 8V batteries, a voltage reducer is required to reduce the voltage to 12V.

**Note:** Light sparks can be normal when connecting the batteries, but a bright arching flash indicates there is a short in the system. The diagram to the right shows the batteries in a factory configuration.

- 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.

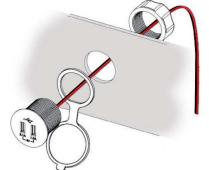
#### **Turn Signal LGT-132A**

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

- Mount the turn signal assembly in a convenient location on the steering column using the included collar and choose one of the included rubber inserts that best fits the diameter of the steering column.
- Run the turn signal wires down the steering column and into the cup holder area.

**NOTE:** If the relay is already installed on the turn signal, it may be helpful to remove the relay before routing the wires under the dash.

- Connect the 9-pin connector on the turn signal switch to the 9-pin connector on the harness.
- 4. Connect the included flasher relay to the turn signal switch wiring harness.
- Remove the push-pull switch at the 4-pin connector and replace it with the LGT-590 relay harness.



- 6. Secure the relays and any loose wires out of the way of the cup holders with cable ties.
- 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 & sand rough edges.

Snap the cover around the wires of the turn signal switch and the steering column.

#### **Horn Kit**

- Connect the spade connectors on the horn harness to the back of the horn, You can connect the leads to either terminal.
- Mount the horn under the front end of the vehicle in a location that does not interfere with the steering or front tires using the Included hardware. This may require drilling a 1/4" hole in a safe location on the golf cart frame.
- Connect the triangular plug on the horn harness to the triangular plug on the deluxe harness.

#### 12 Volt Receptacle and Dual USB Outlet

- 1. Find a convenient location to mount the outlet.
- 2. Mark the center of the mounting location with a marking device.

#### 12 Volt Outlet

- 1. Using a 1" hole saw, drill a hole at the marked location.
- Insert the 12V receptacle into the hole and mount it with the Included Hardware to the cup holder.
- 3. Connect the 12V positive lead to the inside/center terminal of the 12V outlet and the 12V negative lead to the outside terminal.

#### **Dual USB Outlet**

- 1. Using a 1-1/2" hole saw (maximum size), drill a hole at the marked location.
- Insert the dual USB outlet and wires through the protective cap into the cup holder. Secure it with the threaded retaining ring.
- The red and black wires will connect to the connections used for the 12V outlet. If needed, cut the wires to the desired length.