



**clearwater**  
**LIGHTS™**



## Installation Manual

BMW F650GS

Darla LED Light Kit

Dimmable

*Patent Pending*



Made in USA

# Parts List

*Please be sure to read our instructions thoroughly before attempting installation.*

Check parts list supplied with your kit to be sure all parts are handy.

First, park the motorcycle on hard pavement or concrete to insure the bike will be stable during the installation. If you can mount the bike on a stand with tie-down straps, this will help secure the motorcycle.

Follow the manufacturers guidelines for disconnecting the battery. This is important to prevent damage to the electrical system.

## Fender Mount (2008-2012)

2 Light Assembly



### B709 - POT HARDWARE BAG

1 Pot Assembly



1 M5 x 0.8 x 30mm

1 M6 X 10 BH

1 M5 Flat Washer

1 #7 Spacer (3/16 X 5/16")

1 L-Bracket

1 Plastic Plug

### B817 - CONNECTION BAG

1 Ring Terminal



3 Posi Tap



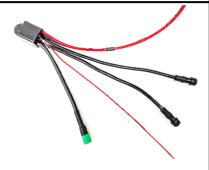
12 6" Zip Ties



1 Zip Tie Pad



### B761 - HARNESS BAG



2 2' Darla Extension



### B4 - HARDWARE BAG

2 Triangle Brackets - 640



4 M6 X 1.0 X 35



4 M6 X 14 HH



8 M6 Flat Washers



Last Updated: 1/21/21

# Parts List

*Please be sure to read our instructions thoroughly before attempting installation.*

## Fender Mount for 'Single/Dakar - Sertao Fender'

2 Light Assembly



### B709 - POT HARDWARE BAG

1 Pot Assembly



1 M6 x 35 SH

1 M6 X 10 BH

1 M6 Flat Washer

1 #20 Spacer

1 L-Bracket

1 Plastic Plug

### B817 - CONNECTION BAG

1 Ring Terminal



3 Posi Tap



12 6" Zip Ties



1 Zip Tie Pad



### B761 - HARNESS BAG



2 2' Darla Extension



Last Updated: 1/22/21

### B39 HARDWARE BAG

1 638L - F700GS Fork Bracket



1 638R - F700GS Fork Bracket



2 Spacer #11 (8mmID, 5/8" OD, .5" Long)



2 Spacer #12 (8mmID, 5/8" OD, 1 1/4" Long)



4 M6 x 14 HHCS Bolt



4 M6 Flat Washers



4 M8 Washers



3 M8 x 1.25 x 60 SHCS



1 M8 x 1.25 x 80 SHCS



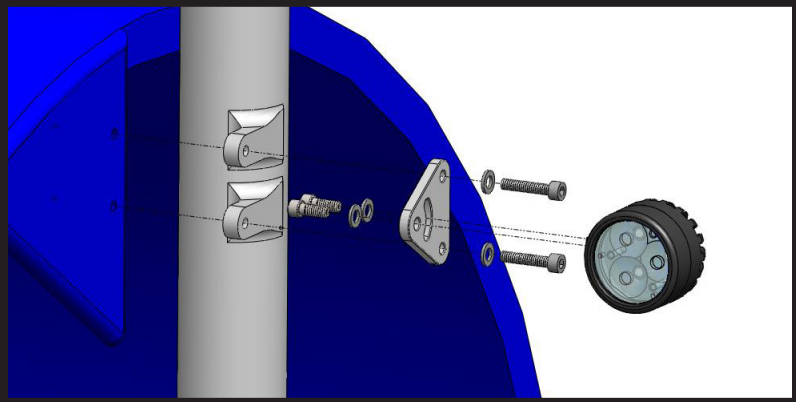
# Mounting The Lights

## Fender Mount (2008-2012):

One side at a time, remove both fender bolts. Be sure to keep fender from hanging in a position that will cause it to be damaged. Use a wire tie or piece of wire to hold the fender up until you are ready to install the new bolts.

Assemble the lights and mounting bracket with new bolts as shown below.

Gently screw all bolts in hand tight. Inspect the bolt length before tightening the bolts.



# Mounting The Lights

## Fender Mount for 'Single/Dakar - Sertao Fender'

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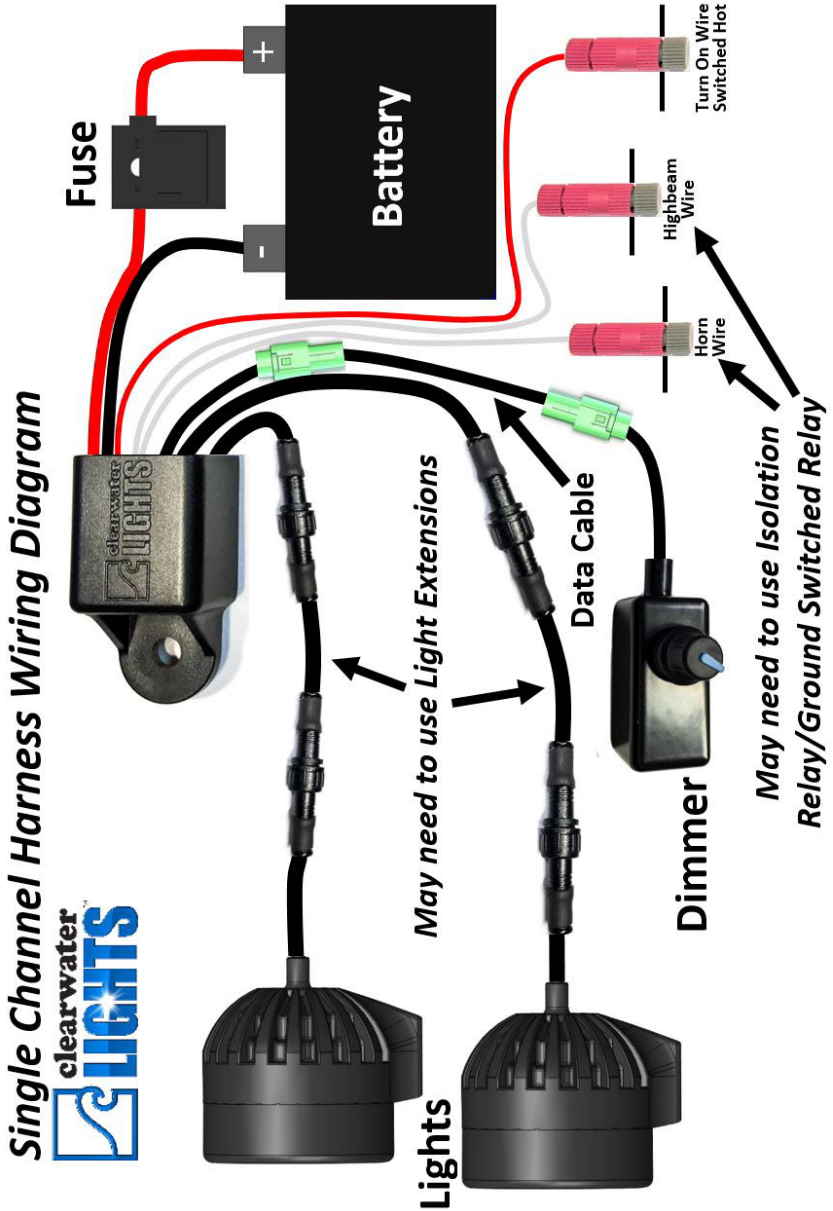
Assemble the lights and mounting bracket with new bolts as shown below.

Gently screw all bolts in hand tight. Inspect the bolt length before tightening the bolts.



# Wiring Diagram

Before starting on the electrical installation, review the wiring diagram below and make sure you are familiar with how the Clearwater Lights are installed electrically.

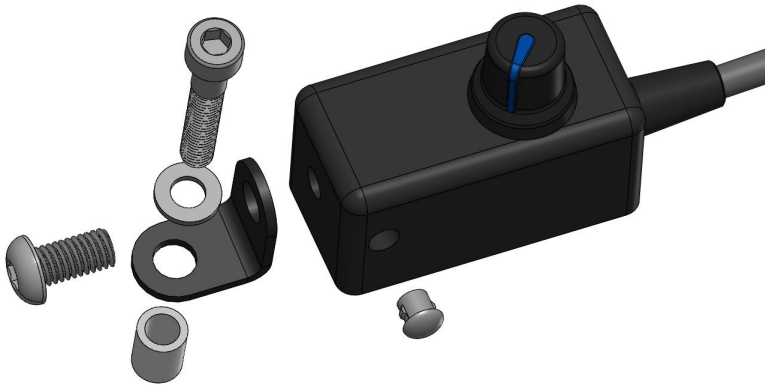


## Mounting The Dimmer

Be sure to route wires so that they cannot become tangled or caught in either a suspension part or steering part. Check movement of both steering and suspension before riding the bike.

Mount the dimmer to the handlebar using the provided pot hardware. Follow the photos below for mounting details.

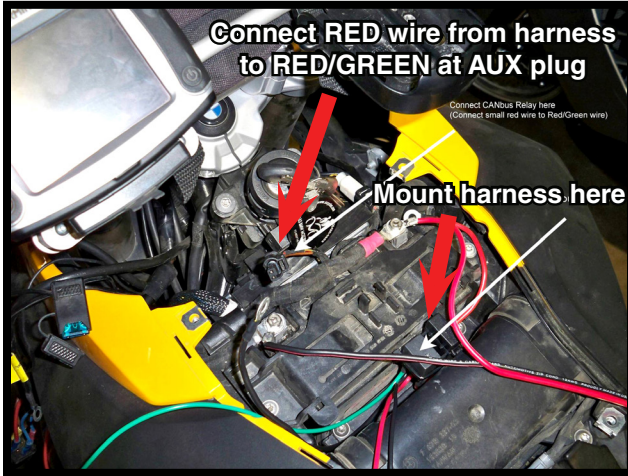
Route the dimmer wire along factory wires to the harness mounting location (behind the headlight assembly). Use zip ties to secure in place.



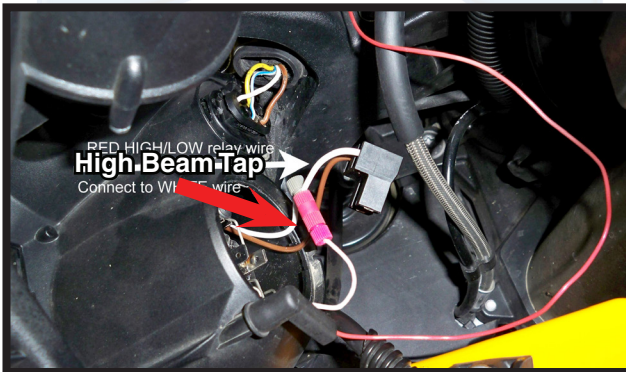
# Harness Installation

Using included zip ties, mount the harness toward the front of the bike, under the gas tank cover. Reference photo below for mounting location. Make sure all wires are routed clear of pinch points and direct heat.

Switch Hot Wire: Use a Posi-Tap to tap the RED wire from the harness to the RED/GREEN wire of the AUX plug next to the key assembly (under the tank cover). This will tell the Clearwater Lights to turn on/off with the bike's ignition.



Horn Feature: Locate the high beam wire on the bike. Posi-Tap the WHITE wire from the harness to the WHITE wire of the high beam circuit wire. This will make the Clearwater Lights go to 100% when the high beam is on.



The dimmer plugs into the harness (green connector).

Route the power wires from the harness to the battery. Ensure the RED power wire has the fuse connected to it, in line to the positive terminal of the battery.

Connect the RED power wire first, then the BLACK power wire.

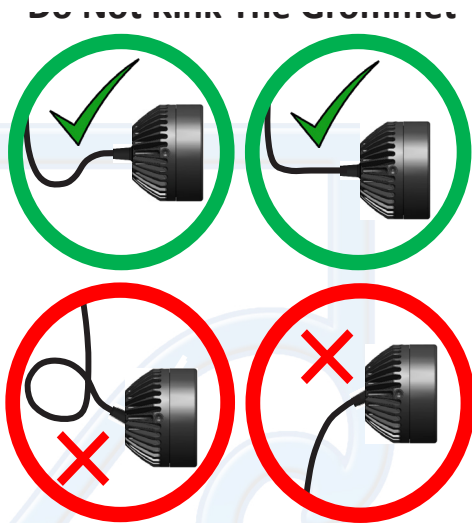


# Finishing Installation

Test your lights. The bike needs to be on, engine running for our system to work properly. Ensure the lights dim when in low beam, and go to 100% when the high beam or horn are pressed.

## Do Not Kink The Grommet

To maintain the integrity of the water sealling grommet, do not kink, deform or put pressure on the grommet when dressing the wires during install of Clearwater Lights.



## Aligning the Lights:

Ask an assistant to help you with this procedure. Make sure the bike is on level ground and have an assistant sit on the bike. Press a level against the face of the light, and adjust its angle.

The goal is to adjust the lights so that the light is level with the ground.

Passengers and luggage may alter the alignment of the light, so further adjustments may be needed. You may find that a slight downward angle (5 degrees) is helpful.



# Notes



# Notes



Thank you for purchasing your **Clearwater Lights**. We hope this product will help make you a safer rider. Please feel free to send us comments or suggestions at any time. We learn from you. Visit our website for more exciting products to help you see better at night.

Ride safe!

Sincerely,

*Glenn and the team at Clearwater.*



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