

**clearwater**  
**LIGHTS™**



## Installation Manual

BMW R1200GSW - R1200GSAW

R1250GSW & R1250GSAW

**Krista/Erica/Sevina LED Light Kit**

Dimmable

*Patent Pending*



# Parts List and Bike Preparation

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

- Check the 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.

## K-E-S-52: Fog Light Replacement w/WonderWheel

2 Krista/Erica/Sevina Lights



B300

2 Mod Bracket



B102 - HARDWARE BAG

2 610c - GSA Bracket



2 M10 x 16 BH



2 M10 washers



2 M10 Nylock Nut



4 M8 x 16 BH



4 M8 Washer



2 M6 x 35 SH



4 M6 Washer



2 M6 Star Washer



2 M6 Nylock Nut



Last updated: 8/19/20

B713 - CAN3 BAG

1 5' Long Data Cable



1 CAN-Opener



B724 - KES CANopener HARNESS BAG  
KES CAN Harness



B805 - KES CONNECTION BAG

2 12" Zip Ties



12 6" Zip Ties



1 Ring Terminal



1 Zip Tie Pad



## K-E-S-51: 25mm-1" Crash Bar Mount w/WonderWheel

2 Krista/Erica/Sevina Lights



B300

2 Mod Bracket



B151 - HARDWARE BAG

2 621 KES CB Bracket



2 M10 x 16 HH



2 M10 x 20 BH



4 M10 Lock Washers



4 M8 x 16 BH



4 M8 Washer



B713 - CAN3 BAG

1 5' Long Data Cable



1 CAN-Opener



B724 - KES CANopener HARNESS BAG  
KES CAN Harness



B805 - KES CONNECTION BAG

2 12" Zip Ties



12 6" Zip Ties



1 Ring Terminal



1 Zip Tie Pad



B25 - HARDWARE BAG

2 625 - Crash Bar Clamp - 25mm



4 M5x15 (Pre-installed)



Last updated: 8/3/18

# Parts List and Bike Preparation

## K-E-S-156: GSAW w/WonderWheel Light Bar

2 Krista/Erica/Sevina Lights



B300

2 Mod Bracket



B156 - HARDWARE BAG

2 M10 x 25 HH



4 M8 x 16 BH



4 M6 x 18 SH



2 M10 Washers



4 M8 Washers



6 M6 Washers



2 M10 Nylock



2 M6 Nylock



2 Hex Nut Insert



2 Long Stand-Offs



1 Lightbar



B713 - CAN3 BAG

1 5' Long Data Cable



1 CAN-Opener



B724 - KES CANopener HARNESS BAG

KES CAN Harness



B805 - KES CONNECTION BAG

2 12" Zip Ties



12 6" Zip Ties



1 Ring Terminal



1 Zip Tie Pad



Last updated: 1/31/20

# Summary of Installation

## Summary of Installation

1. Mount the lights and brackets.
2. Remove the side panel.
3. Remove fuse from Clearwater Lights wiring harness
4. Mount the wiring harness to a secure location toward the front of the bike.
5. Connect the CANopener to Tire Pressure Monitor (*TPM*) under the passenger seat in the back of the bike.
6. Connect the lights and CANopener to their corresponding plugs on the wiring harness.
7. Secure wires, making sure they won't get caught in the suspension or steering column.
8. Attach power lines to battery and replace the fuse.

## Important Notes:

- The engine needs to be running for the lights to work.
- CANbus controller fuse 7.5 AMP (*located under seat*)

## Abbreviations:

**TSC** = Turn Signal Cancel

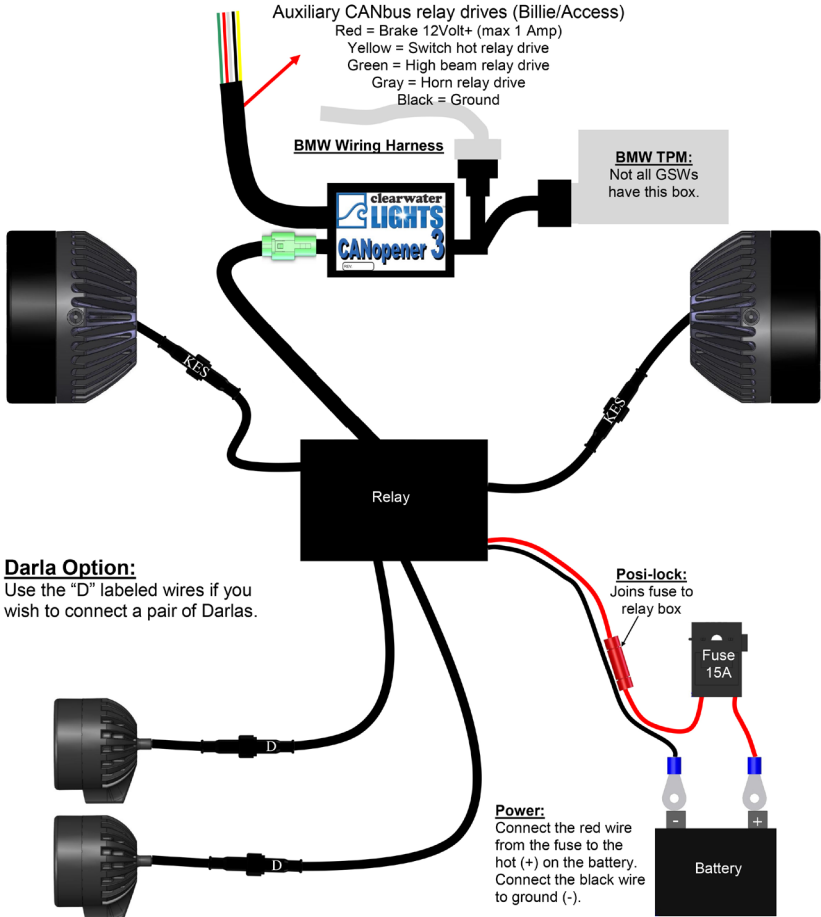
**WW** = WonderWheel (*BMW multifunction controller*)

**TPM** = Tire Pressure Monitor

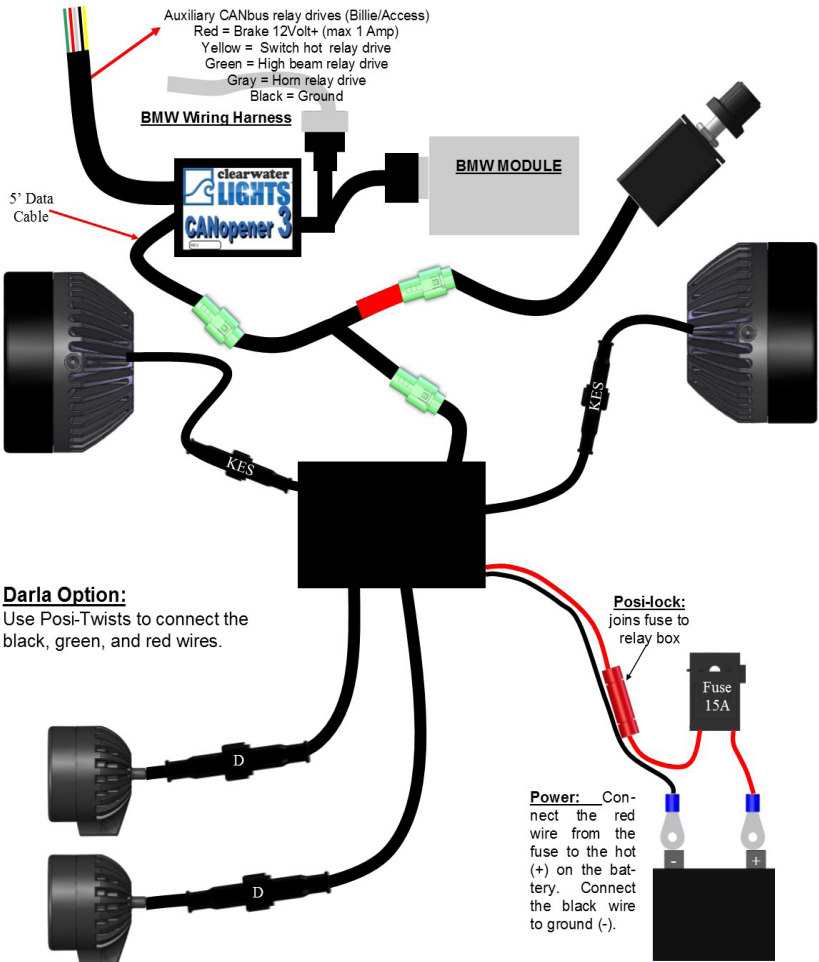
**FTP** = Flash To Pass

**OBL** = Optional Brake Light

## Wiring Diagram for Krista/ Erica/ Sevina

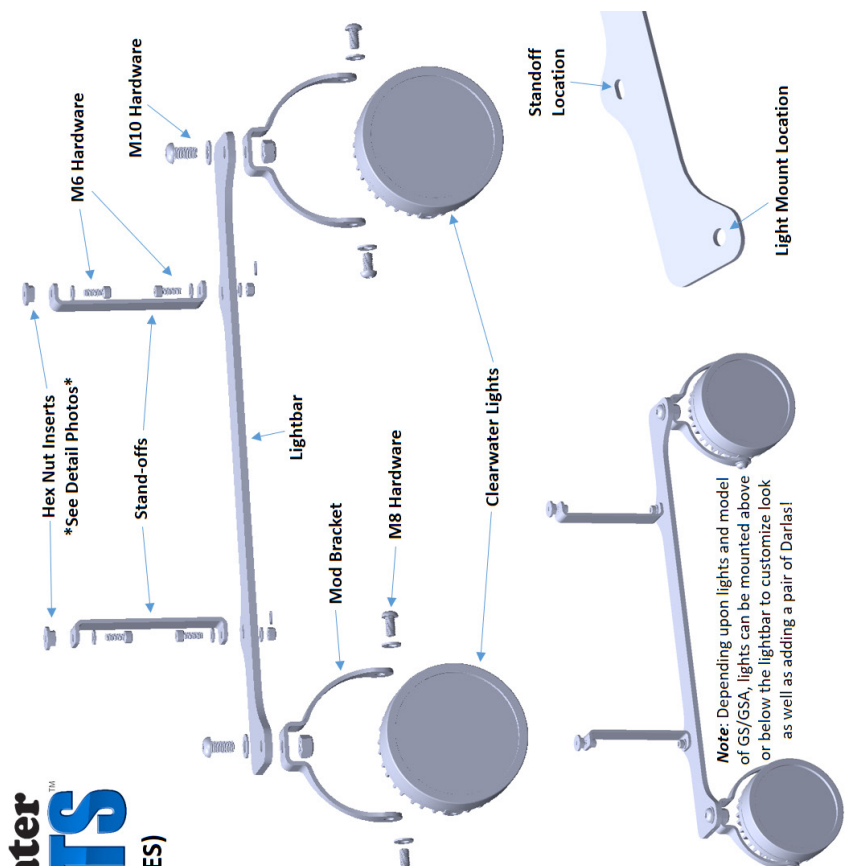


# Wiring Diagram Without Wonder Wheel



# Step 1: Mounting the Lights

If you have purchased the 156 Lightbar kit, this page is dedicated to the mechanical installation of that kit. Please follow the exploded diagram below for proper installation of the Clearwater Lightslightbar.



**Note:** Depending upon lights and model of GS/GSA, lights can be mounted above or below the lightbar to customize look as well as adding a pair of Darts!



# Step 1: Mounting the Lights

## Krista-Erica-Sevina Technical:

The Krista, Erica, and Sevina are very bright LED lights that use digital drivers to produce very efficient light from High Power LEDs. By using a proprietary digital volume control, we can dim the lights via the factory WonderWheel (WW) controller. This sends a digital signal to our microprocessor that changes the pulses of electricity to the LEDs, turning them on and off at a rate of 250 times per second.

As we increase the time that the lights are off vs. on, the human eye perceives this as dimming. Increased efficiency occurs with the dimming as well. Krista, Erica, and Sevina can be used in a low beam mode and a high beam mode. The factory handlebar high beam switch is used to select the two different modes.

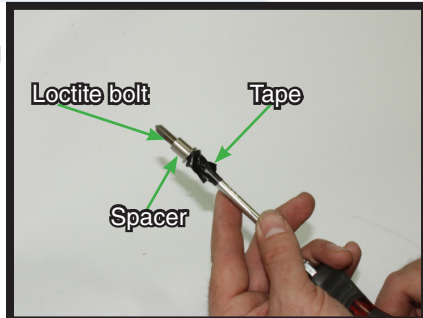
### Mounting the Lights: (Light Bar)

To install the light bar, the black plastic hex nut included with the kit will be mounted in the hexagonal recess near the headlight.



#### **\*\*PRO TIP\*\***

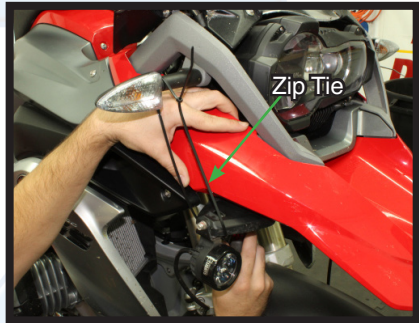
The bolt with blue loctite on it included with the kit is used to attach the light bracket to the bike. To make installation of this bolt easier, tape it to a 25 torx wrench with the included spacer.





## Step 1: Mounting the Lights

When screwing in the torx bolt to the hexagonal plastic nut, it helps to have the light bar zip tied to the bike.



- Mount the bracket assembly to the BMW GS light bar using the provided M10 x 16 bolts, and M10 washers.

**(Note: light bar is sold separately.)**

After the light bar is bolted on you can easily mount the bracket assembly.

- Mount your Krista/Erica/Sevina lights in the U-shape bracket using the provided M8 x 16 bolts and M8 washers.
- Route wires from lights to the harness and zip tie into place, making sure to leave enough wire at the light for a drip loop.
- When routing the wires, make sure they will not interfere with the steering or suspension.



## Step 1: Mounting The Lights

### Mounting the Lights: *(Crash Bar Bracket)*

- Our crash bar mount comes with an optional L-bracket to be used at your discretion.
- The L-bracket can be used to give you more clearance in locations that may have body panel interference.
- Decide where you want to mount your new Clearwater lights on your bikes crash bar.
- Mount the crash bar bracket to your crash bar, position as needed for your application.
- If you are using the provided L-bracket, you will position the crash bar clamp so that the light mount will be parallel to the ground.
- Mount the Mod bracket to the crash bar bracket using the included M10 x 16 hex head bolt.
- Route wires behind lights and up under the bikes beak, making sure to leave enough wire at the light for a drip loop.
- Using the provided zip ties, secure wiring, taking care not to route them in a way that will interfere with the steering or suspension.



BMW 1200GSW Crash Bar Mount  
without L-bracket



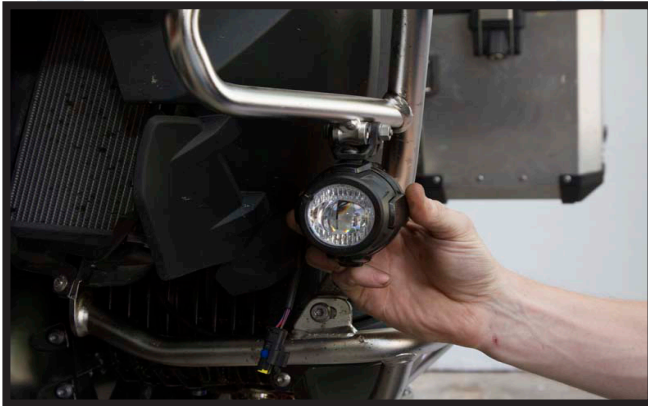
BMW 1200GSW Crash Bar Mount  
with L-bracket

**Shown on Touratech upper crash bars**

# Step 1: Mounting The Lights

## Mounting the Lights: *(Fog Light replacement)*

- Remove the fog light from the bike.
- Tuck the factory wire away, do not remove the factory wiring harness.
- Mount the adapter bracket to the U-shape bracket using the provided M10 x 16 button head bolts, M10 washers and M10 nylock nuts.
- Mount the bracket assembly to the BMW fog light location using the provided M6 x 35 bolts, M6 washers and M6 nylock nuts.
- Mount your Krista/Erica/Sevina lights in the U-shape bracket using the provided M8 x 16 bolts and M8 washers.
- When routing the wires, make sure they will not interfere with the steering or suspension.



## Step 1: Mounting The Lights



Using a small flat head screw driver press in here and gently bend toward the light body to release the catch, pull plug out with your other hand.



Pictures above show how to take off the fog light outside of the bike for installation purpose only. Do not remove the factory fog light wiring harness, doing so may cause a CANbus computer fault.

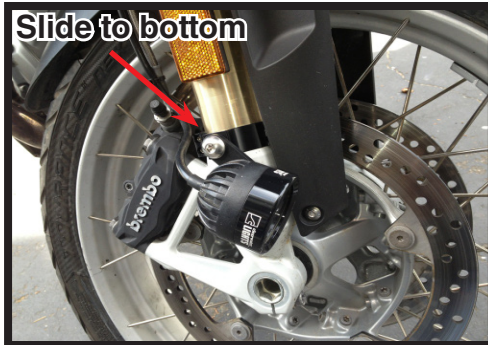
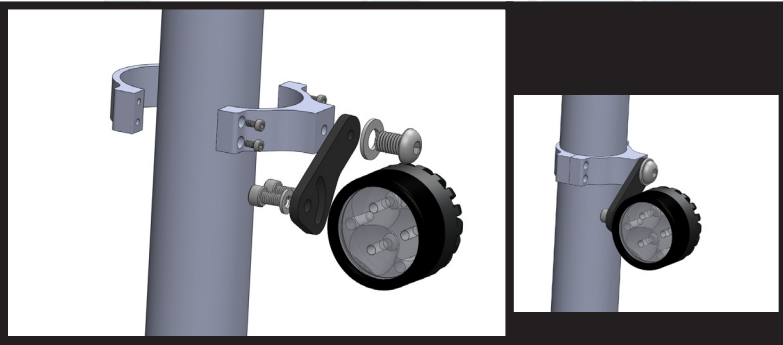
# Step 1: Mounting The Darla Lights (Option)

## Fork Mount Overview:

- Your R1200GSW has reflectors on the fork tubes that interfere with mounting your Glenda/Darla/Sevina lights. You will have to remove the reflectors. The best way is by using “DENTAL FLOSS”

Slide the floss back and forth to peel the foam tape behind the reflector. Then clean any residue left by them and continue with the installation. Once your lights have been installed, use the provided double-sided tape to reattach the reflectors just above the Clearwater brackets.

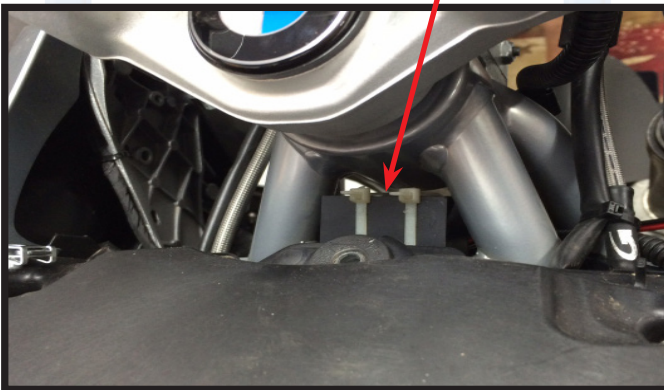
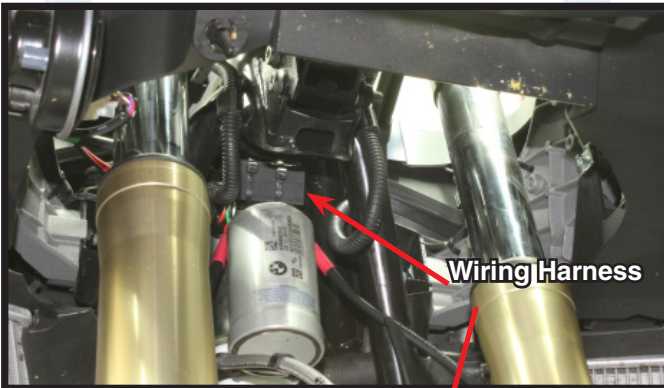
- Attach front and rear halves of clamp to the bottom of the machined fork tube using the supplied M3 x 10mm bolts as shown in the exploded view below.
- Attach the universal bracket to the Darla Light using two M6 x 14 bolts and two M6 flat washers.
- Attach the universal bracket to the clamp with one M10 x 20 bolt and one M10 flat washer.
- Route wires from lights up brake lines, making sure to leave a drip loop. Run wires to right hand side of the bike, leave loose behind fairing.
- Connect the wires from the Darla lights to the harness wires on the wiring harness labeled “D.” Refer to the wiring diagram.



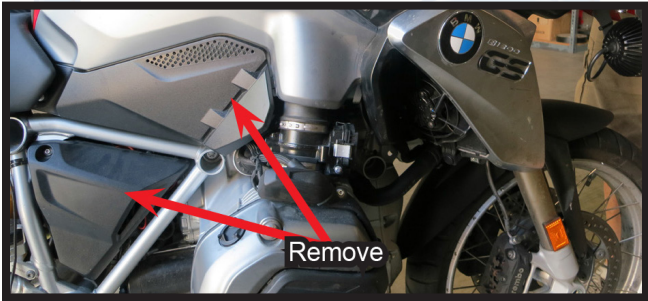
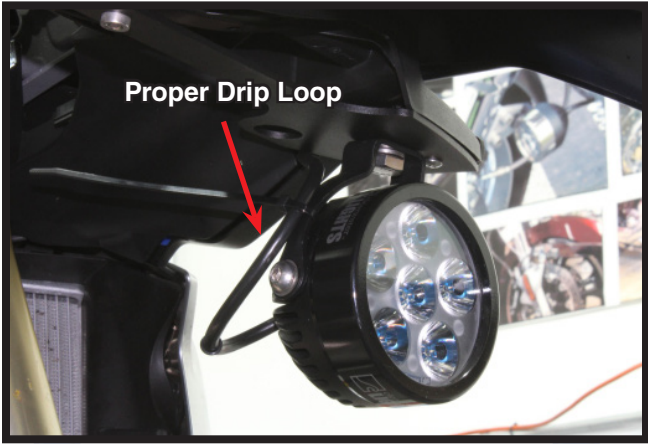
## Step 2: Wiring

### Mounting The Wiring Harness Relay & Wiring Routing:

- Mount the wiring harness relay in the center of the motorcycle behind the fork and upper fairing using provided zip ties. Check movement of both steering and suspension before riding the bike.
- Plug lights into wiring harness and secure wires with the provided zip ties. Be sure to leave a good bit of slack in the wire.
- Remove the rider and passenger seat from bike and set aside.
- Remove the side panel (2 screws) and battery cover (1 screw) from the right side of the bike.



## Step 2: Wiring

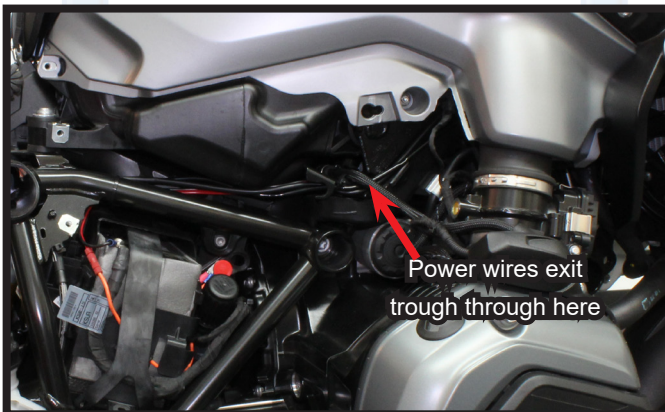
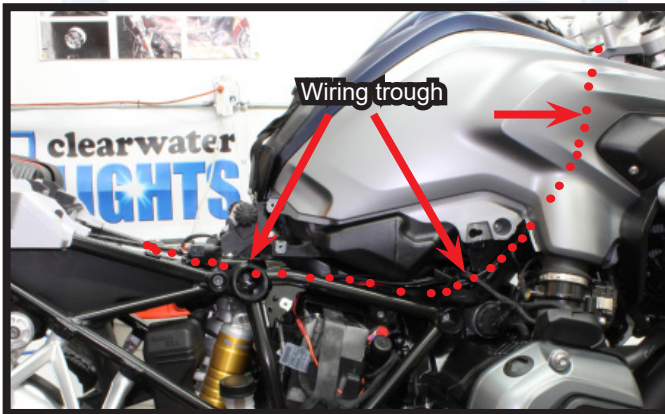


## Step 2: Wiring

### Wire Routing: R1200GSW

- Locate the factory wire loom trough on the right hand side of the bike, you will be routing wires through here. See images below for reference.
- Run the RED and BLACK power wires and the data cable from the front to the back of the bike through wiring trough. The RED and BLACK wire will exit the trough above the battery area and run down to the battery. See images below.
- The Data cable will continue to the section under the passenger seat.
- The BLACK power wire with the ring terminal goes to the negative ( - ) side of the battery. The RED power wire with the in-line fuse holder goes to the positive ( + ) terminal port, located in front of the battery.

**Note:** Remove the fuse while wiring the lights to prevent any accidental shorts.

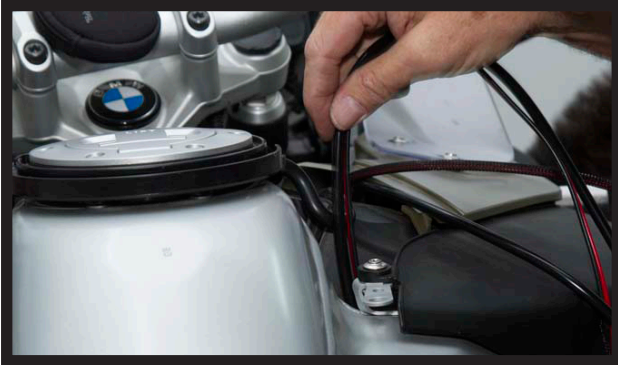




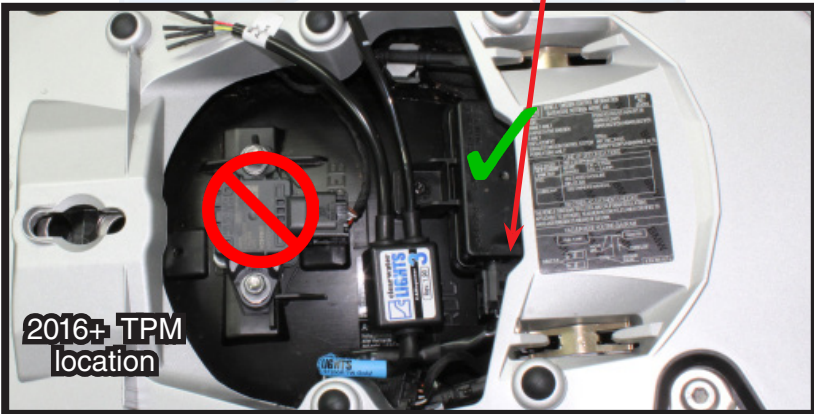
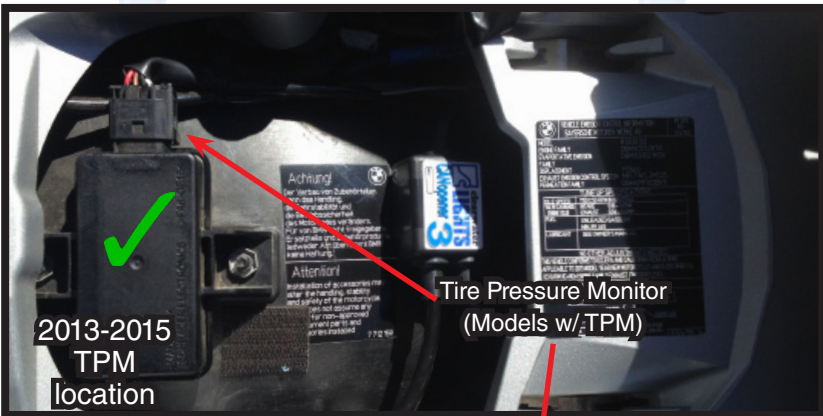
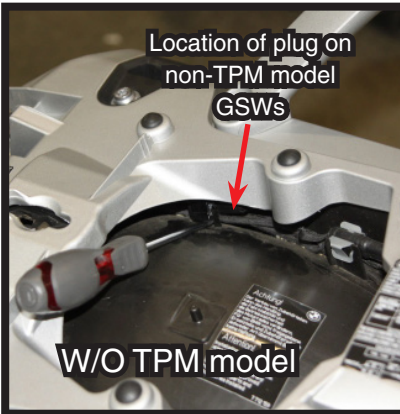
## Step 2: Wiring

### Wire Routing: R1200GSAW

- Run the RED and BLACK power wires and the data cable under the tank from the front to the back of the bike. Removal of the tank is not required nor recommended. Use a pull tool for routing wires. The RED and BLACK wire will exit the trough above the battery area and run down to the battery.



## Step 2: Wiring



- Secure the CANopener to the plastic inner fender with provided Velcro strip. Be sure to clean any dirt or dust from area with alcohol before affixing the CANopener.

## Helpful Hints

### 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:

As Erica, Krista, and Sevina are designed as auxiliary lights, adjustment is up to the user depending on his or her needs. 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. Using a level, align the lights to be perpendicular to the ground. Another method would be to position a large square on the floor and slide it up to the light. The goal is to adjust the lights



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 at most**) is helpful. Often times it is helpful to angle the right side light toward the right side of the road. This helps with identifying road terrain and potential critters.

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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