



clearwater LIGHTS™



Installation Manual

BMW K1600GT with CANopener

Krista/Erica/Sevina LED Light Kit

Dimmable

Patent Pending



Made in USA

Overview of Installation

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

Please take the time to review the included instructions. Installation of your new Clearwater Lights is straightforward, but be sure to follow some of the suggestions to keep the installation safe and reliable. If you have any questions or comments please feel free to contact us.

Thank you!



Krista/Erica/Sevina Technical:

- The Krista, Erica, and Sevina lights are very bright LED auxiliary lights. The wide circular pattern is great for motorcycle riding in mountain roads, and off road applications. The beam pattern keeps light on the road and in the tree canopy on twisty turns. As the bike leans, light is still focused on the road. Because the lights are so bright, it is advisable to dimm them down when faced with oncoming traffic.
- The rotary knob sends a digital signal to our microprocessor that changes the pulses of electricity to the LEDs. As we increase the time that the lights are “off” the human eye perceives this as dimming. We switch our lights on and off at a rate of 250 times per second, every second. Increased efficiency occurs with the dimming as well.

Part List

- Check Parts list below with your kit to be sure all parts are handy. If something is missing please call us at (916) 852-7029.

E-K 98 – BMW K1600 GT/GTL/B (2010+)

2 Krista/Erica/Savina Lights



B300
2 Mod Bracket



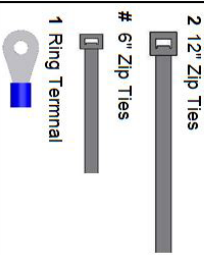
B714 - CAN3 BAG
1 5' Long Data Cable



B724 - KES CANopener HARNESS BAG
KES CAN Harness



B805 - KES CONNECTION BAG



6" Zip Ties



1 Ring Terminal



B198 - HARDWARE BAG

1 1092-4-1-1 KES K1600 (2018+) Bracket



2 M10 x 20 BH



4 M8 x 16 BH



4 M6 x 20 SH



1 1092-4-2-2 KES K1600 (2018+) Bracket



8 M6 x 16 BH



1 Antenna Spacer



1 1092-4-3-1 KES Intermediate Bracket



2 M10 Lock Washers



4 M8 Washers



1 1092-4-4-2 KES Intermediate Bracket



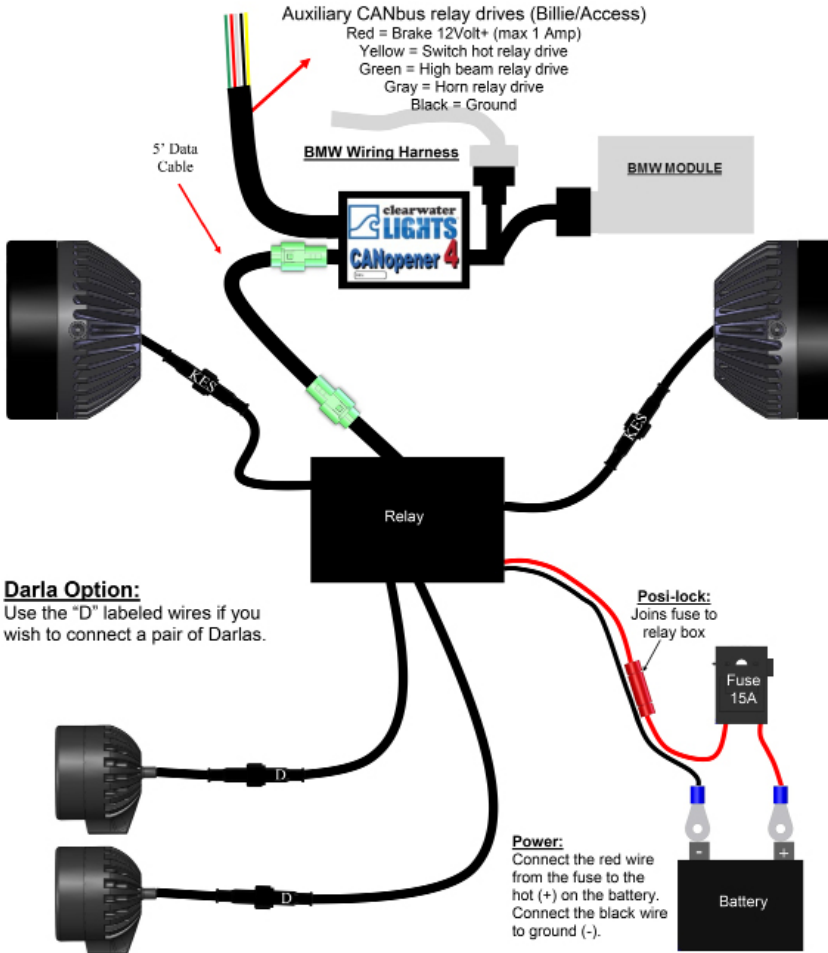
4 M6 Washers



Last updated: 7/2/20

Wiring Diagram

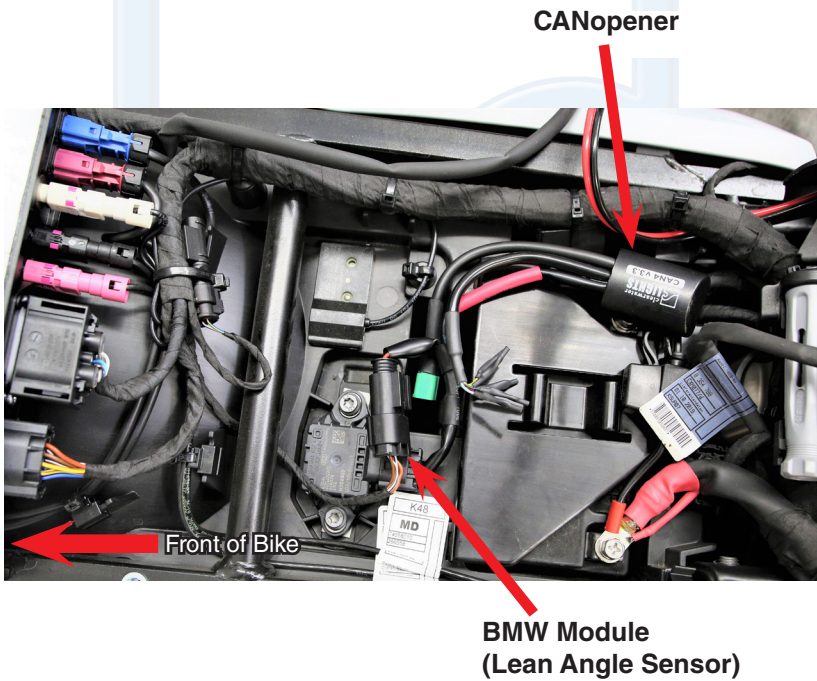
Wiring Diagram for Krista/ Erica/ Sevina



Mounting the CANopener

Mounting the CANopener

- Remove the seat from the bike and set aside.
- Locate the module under the seat, unplug the wiring harness from it and plug your Clearwater CANopener in it's place. Then plug the wiring harness into the CANopener.
- Secure the CANopener to the plastic inner fender with provided Velcro strip. Be sure to clean any dirt or dust from area before affixing the CANopener.
- **DO NOT** mount the CANopener on top of or touching the module.



Bike Preparation:

Summary of Installation:

Part 1: Disassembly

- Raise Windshield
- Remove Seats
- Remove Winglets
- Remove Speaker Covers
- Remove Speakers
- Remove Left Gas tank Cover (Left)
- Remove Mirrors

Part 2: Mounting the Lights

- Reinstall antenna on right side
- Attach bracket
- Reattach Mirror

Part 3: Wiring

- Route wires through bike
- Make attachments

Bike Preparation:

- 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.

Disassembly

(1) Windshield:

Before removing fairings, turn key to on position. Press button circled in the image to the right and raise windshield and GPS. Turn the bike off.



(2) Seats:

To remove the seats you will need to either pop the seat off with the key. Or if your bike has a two piece seat then you may need to undo two bolts under the first seat to get access to the second.



(3a) Winglet (2018+):

On 2018+ models, the winglet below the mirror, circled in the figure to the right, will have to be removed.



(3b) Winglet (2018+):

Loosen the bolt behind the winglet, but do not remove it



Disassembly

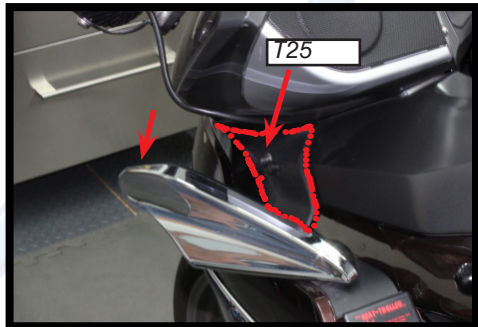
(3c) Winglet (2018+):

Carefully pull winglet in the direction shown. Remove winglets on both sides of bike.



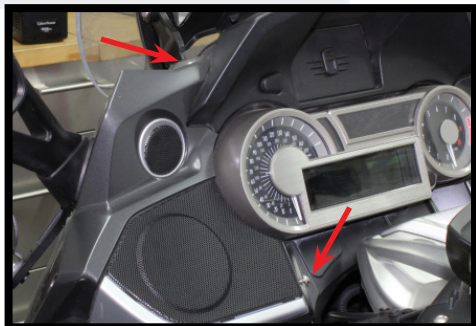
(4) Outer Side Fairing:

Move aside plastic shroud cover, exposing first fairing bolt. Remove this bolt and subsequent bolts with T25 wrench. Remove Side Fairing covering outlined in picture.



(5) Speaker Covers:

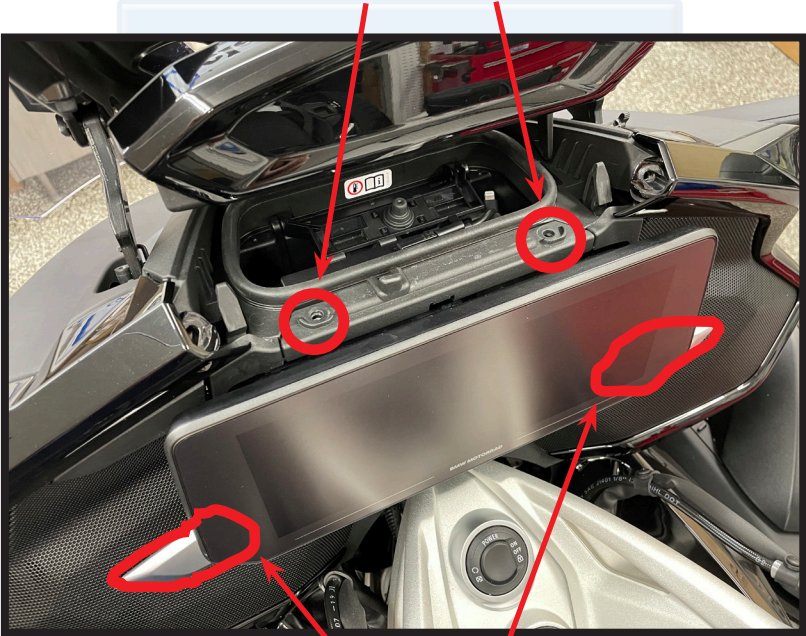
Remove the (2) bolts shown in the image, and pull out speaker covers. Remove covers on the left and right side of the bike.



2022+ Model Addendum

2022+ Model Addendum:

Installation on 2022 and newer models is slightly complicated by the addition of the new TFT display. Simply open the top glove compartment, unscrew the two screws that hold the TFT display and carefully disconnect

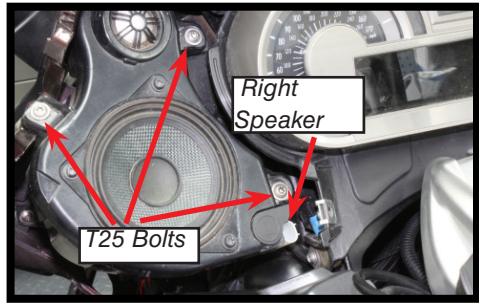


Once the TFT is removed, this will expose the silver speaker caps which cover screws that hold the speaker grills on. Remove the screws. The speaker grills then are removeable via friction pins and can be pulled off.

Disassembly

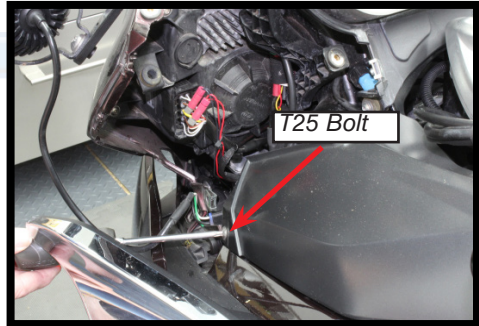
(6) Speakers:

After pulling off speaker covers, remove (3) bolts holding down speaker. Disconnect speaker plug. Repeat this process for both sides.



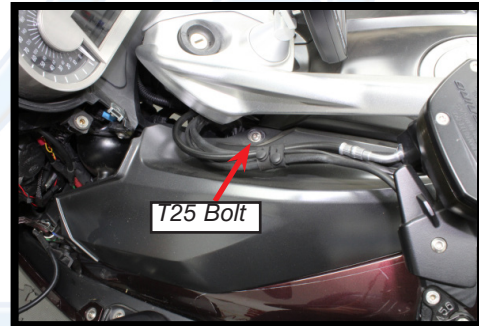
(7a) Outer Tank Cover:

Once the speakers are removed, the outer cover on the left side of the bike must be removed. Start by removing the bolt shown.



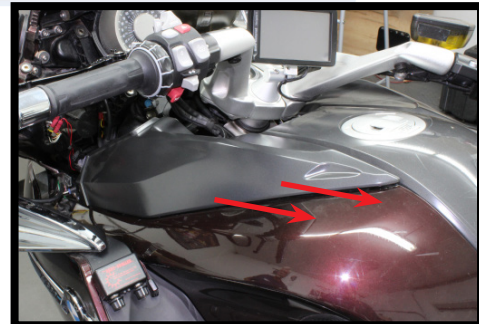
(7b) Outer Tank Cover:

Remove top bolt shown in the figure to the right.



(7c) Outer Tank Covers:

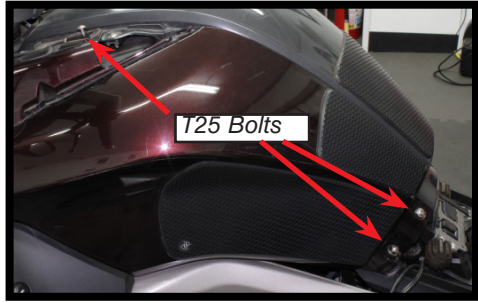
Remove outer tank cover by carefully pulling it backwards in the direction shown.



Disassembly

(7d) Tank Covers (2010-2017):

The left tank cover only needs to be removed on 2010-2017 models. The next (4) steps can be skipped on 2018+ models. Remove 3 bolts holding down gas tank cover.



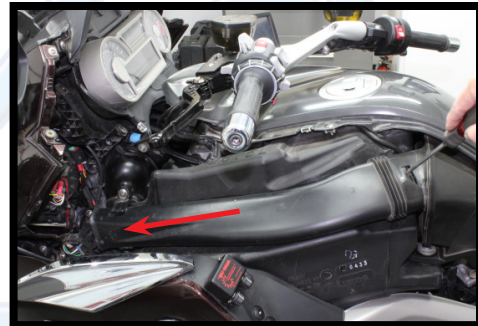
(7e) Tank Covers (2010-2017):

Remove gas tank cover by carefully pulling it in the direction shown.



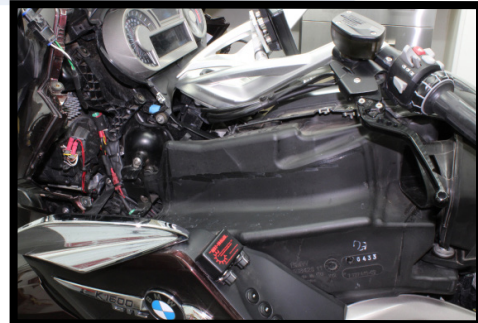
(8a) Air Inlet Tube (2010-2017):

With the gas tank cover removed, the intake tube can be removed by pressing down on the release button and pulling the tube in the direction shown.



(8b) Air Inlet Tube (2010-2017):

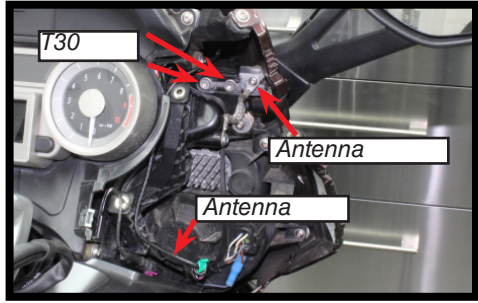
With coverings removed, light harness wires can be routed through the left side of the bike.



Disassembly

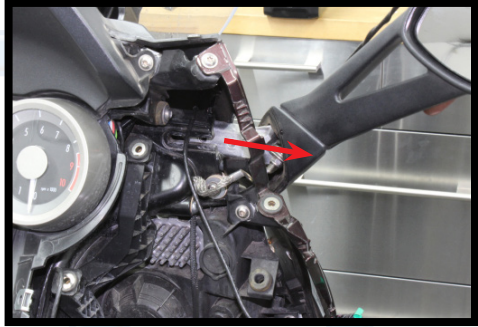
(9a) Mirrors:

Mirrors must be removed on both sides of bike. The left side mirror is held down by two bolts, while the right side mirror (on some models) has an additional antenna plug and ground wire that must be disconnected.



(9b) Mirrors:

With bolts removed, the mirror can be pulled away from the bike.



(9c) Mirrors:

For the right side mirror, the antenna cable must be disconnected from the mirror body.



Mounting The Lights

Helpful Hints:

1. Be patient.
2. Take your time.
3. An assistant will be helpful (*you will find yourself looking for a third hand*).
4. Lay a towel down to protect your body panels from scratches.
5. Remove mirror and install light bracket to one side at a time so one mirror is always attached for reference.

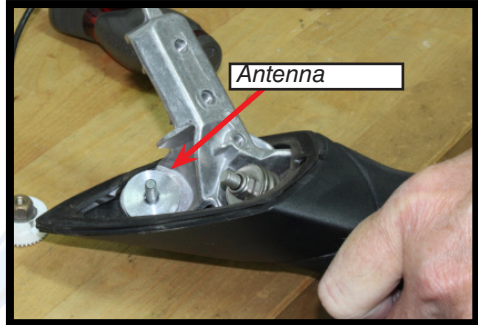
IMPORTANT NOTE

The antenna side mirror will be more difficult to install than the non-antenna side. Take your time, and all will be fine. Though the fit is tight, the bracket assembly definitely will fit. Not all models have the antenna.

Installing Light Bracket:

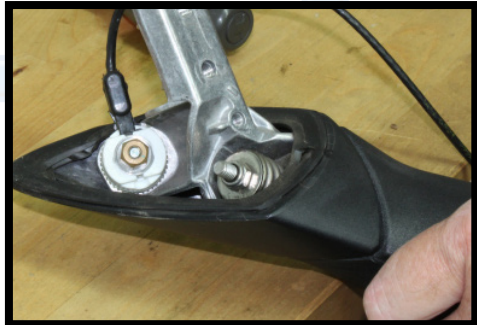
(1a) Antenna Cable:

Before reattaching antenna wire to right side mirror, the included spacer must be inserted. The bracket assembly will not fit without this spacer.



(1b) Antenna Cable:

Reattach antenna cable at the position shown.



Mounting The Lights

Mirror Mount Assembly:

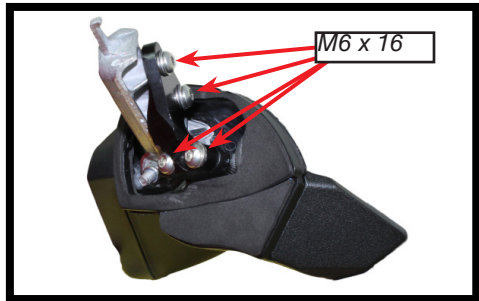


Note:

Before installing the light brackets to the mirrors, carefully look over the above assembly diagram. The above diagram shows the right side. With exception to the antenna ground wire and plug, both the right and left mirror brackets will be attached the same way.

(2a) Light Bracket (Left):

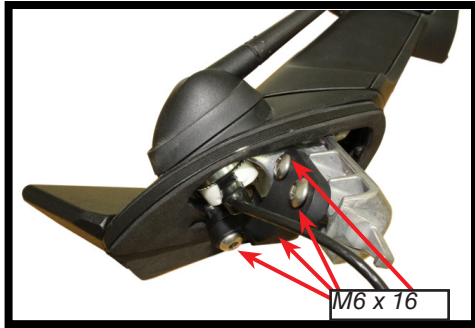
The left side mirror is attached to the light bracket and intermediate bracket as seen in the figure to the right. The pieces are connected together by (4) M6x16 BH



Mounting The Lights

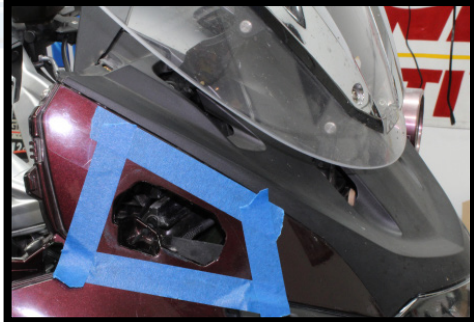
(2b) Light Bracket (Right):

Connect the right side mirror to the mirror bracket, and intermediate bracket. Be mindful of the antenna wire positioning.



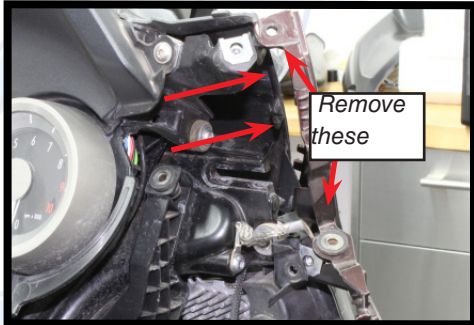
(3) Fairing Protection:

Before installing mirror back on to bike, lay some masking tape down on the fairing as shown to prevent any scratching of the panel.



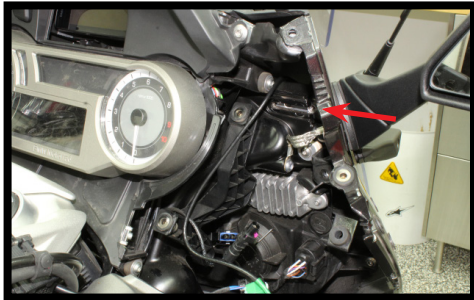
(4) Loosen Fairing:

To make installation of the mirror with bracket easier, remove the two bolts shown, and pull fairing outward. Doing this will allow more room for the mirror assembly.



(5a) Reattaching Mirror:

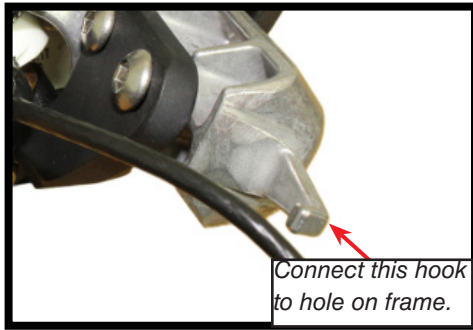
While the fairing is loose, carefully insert the mirror assembly back into its slot, making sure everything is properly lined up. It is helpful to rotate the mirror assembly 90 degrees



Mounting The Lights

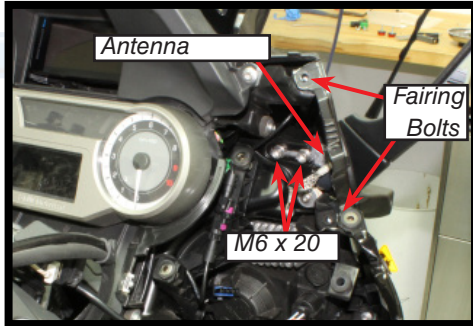
(5b) Reattaching Mirror:

Make sure the hook shown in the figure to the right connects to the appropriate hole on the bike frame.



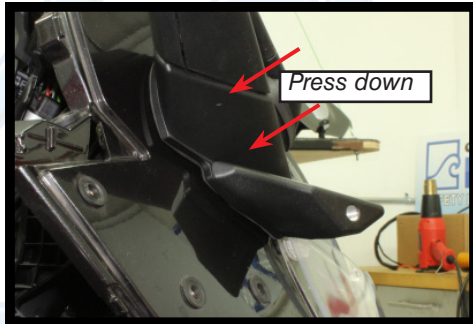
(5c) Reattaching Mirror:

Loosely attach (2) M6x20 mounting bolts with washers to connect mirror assembly to frame of bike. Attach antenna ground bolt for right side. Remove masking tape on fairing.



(5d) Reattaching Mirror:

Before tightening down mirror bolts, press down firmly on mirror assembly. Mirror bracket must sit flush with fairing and mirror arm.



(5e) Reattaching Mirror:

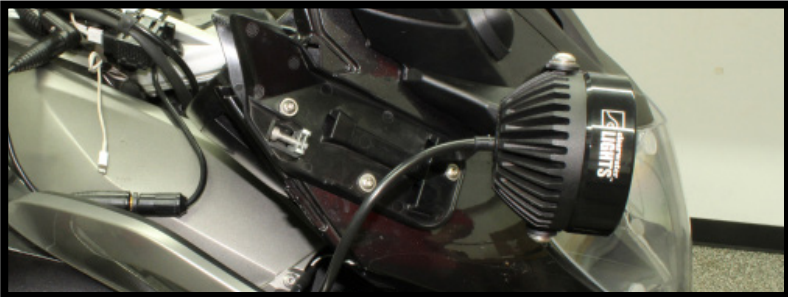
Reattach antenna plug for the right side. Tuck antenna wire into its original location, and zip tie it down. Make sure not to pinch cable between mirror mount and frame.



Mounting The Lights

Mounting the Lights:

After you have the under mirror brackets securely in place you can mount the lights.

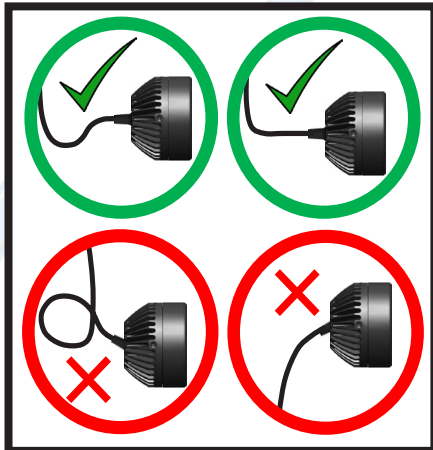


Be sure to leave a little excess wiring loose so that you can add a drip loop to the lights to avoid potential water leakage.

Almost done!

Do Not Kink The Grommet

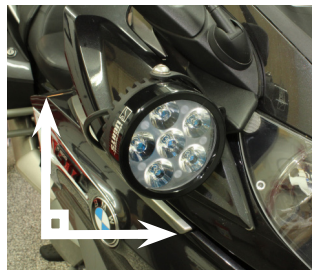
To maintain the integrity of the water sealling grommet, do not kink, deform or put pressure on the grommet when dressing the wires during install of Clearwater Lights.



Aligning the Lights:

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 your assistant sit on the bike. Using a level, make sure the face of the light is perpendicular to the ground.

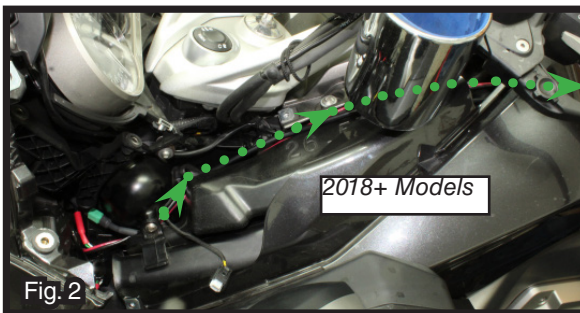
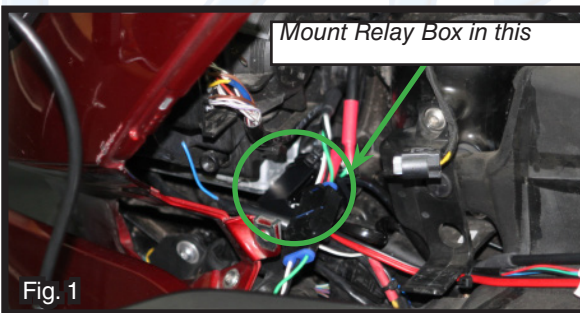
Passengers and luggage may alter the alignment of the light so further adjustments may be needed. Often times it is helpful to angle the right side light toward the right side of the road. This helps with identifying road



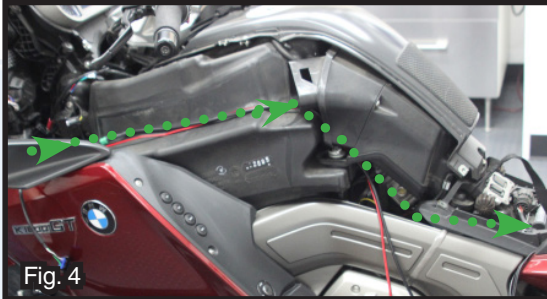
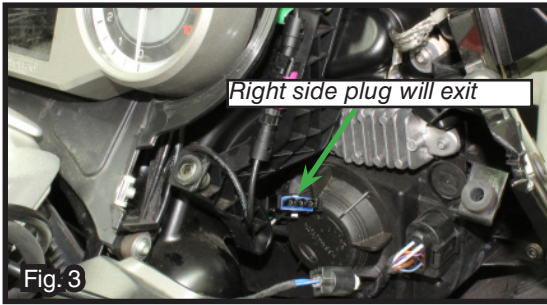
Wiring

- 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.
- Locate the relay box in a safe location. The spot shown in Fig. 1 is a great location. Secure with a zip tie.
- Route the two cables connected to the lights with 3-prong connectors in a convenient location where they will not interfere with steering or any other moving parts. The right side plug will have to route underneath the center instrument panel and come out through the location seen in (Fig. 3).
- Run the RED and BLACK power wire, and Data Cable along the air intake back to the battery. Follow the green arrow path shown in (Fig. 4) for 2010-2017 models.
- For 2018+ models, run the RED and BLACK power wires, and data cable along the top of the air inlet tube back to the battery (Fig. 2). It may be helpful to remove a few gas tank cover bolts.
- The BLACK power wire with the ring terminal goes to the negative (-) side of the battery. The RED power wire with the inline fuse holder goes to the positive (+) side of the battery.

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



Wiring



Reinstall bike components in the opposite order that they were removed. The cables running to the lights will route through the outer cover to the outside of the bike as seen below in Fig. 5 and Fig. 6.



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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