



clearwater
LIGHTS™



Installation Manual

BMW R1200RT

Krista/Erica/Sevina LED Light Kit

Dimmable

Patent Pending



Made in USA

Bike Preparation

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

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.

Krista/Erica/Sevina Technical:

- Krista, Erica, and Sevina are very bright LED auxiliary lights. Do not use these with oncoming traffic unless the dimmer is turned down all the way. Be certain to use the lights in a manner that does not blind oncoming traffic.
- Krista, Erica, and Sevina LED lights use digital drivers to produce very efficient light. By using a proprietary digital volume control, we can “dim” the lights via a remote mount volume control. This rotary knob sends a digital signal to our microprocessor that changes the pulses of electricity to the LED’s. 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.
- Krista, Erica, and Sevina can also 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. Krista, Erica, and Sevina are easy to install and have many, many uses. Krista is also serving overseas as an emergency operating room light on a remote island hospital.

Please take the time to review the included instructions. Installation of these 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!

Parts 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 5 – R1200RT Mirror Mount

2 Kristal/Erica/Sevina Lights



2 Mod Bracket



B721 - KES UNIVERSAL HARNESS BAG | KES Wiring Harness

B709 - KES POT BAG:

1 Pot Assembly



1 M6 x 10 BH



1 M5 x 35 SH



1 L Bracket



1 M5 Flat Washer



1 Spacer #7



1 Plastic Plug



B821 - KES CONNECTION BAG

3 Posi Tap



12 6" Zip Ties



1 Ring Terminal



2 Female Spade



1 Switch



B105 - HARDWARE BAG

1 648 - R1200RT Mirror Mount



1 648 - R1200RT Mirror Mount



2 M10 x 16 BH



2 M10 washers



2 M10 Nylock Nut



4 M8 x 16 BH



4 M8 Washer



4 M5 x 25 BH



2 M5 x 14 BH



2 M5 Flat Washer



2 M5 Nylock Nut



4 Neoprene Washer



4 M5 Well nut



1 Spade Drill Bit



Bike Dissassembly

Removing the Mirrors:

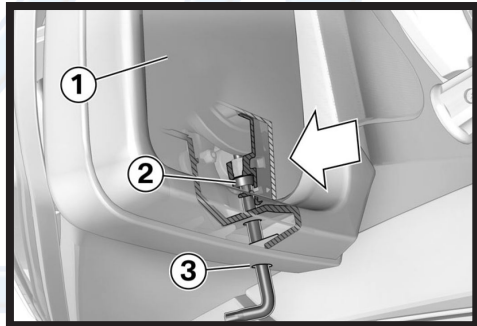
- To mount the brackets you must first remove the mirrors. To remove the mirrors on bikes made before 2011, stand facing mirrors, grab with both hands, and pull toward back of RT. Mirrors will release.



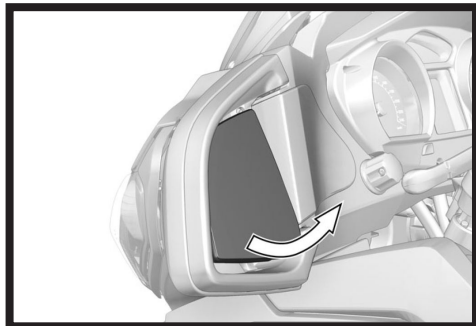
Mirror Removal for 2011+ Bikes: *(Pre 2011 just pull off)*

- To complete the wiring for the lights, the mirrors must be removed. On 2011 and newer bikes, there is a special way to get them off. Follow the instructions below:

- Position mirror (1) fully down.
- Slacken screw (2) through bore (3) in underside of housing.

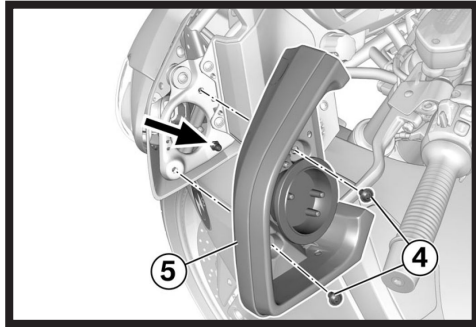


- Push the bottom edge of the mirror forward and up to remove.

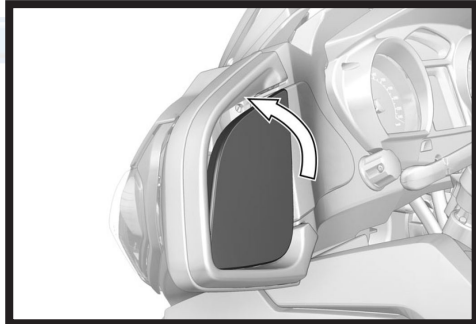


Bike Dissassembly

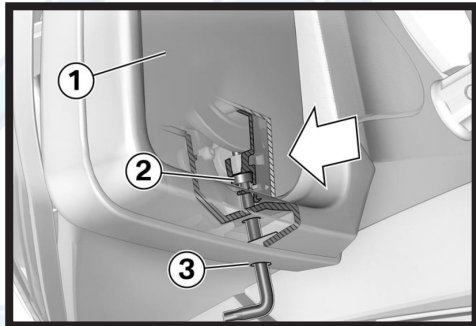
- Remove screws (4).
- Remove housing (5) from the projection (arrow).
- To re-install insert screws and tighten.



- Hold the mirror in position at the bottom and push the top edge into place.
- Mirror is firmly seated on carrier.



- Position mirror (1) fully down.
- Tighten screw (2) through bore (3) in underside of housing.



Bike Dissassembly

Removing Body Panels:

- 1 Torx near speaker (A), 1 Torx at knee position (B), 2 Torx inside front wheel cowl (C)



A



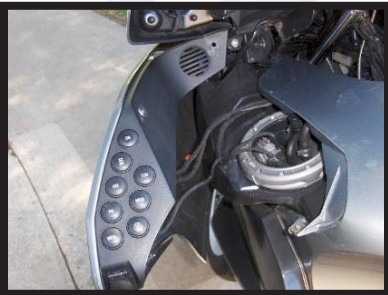
B



C



D



E



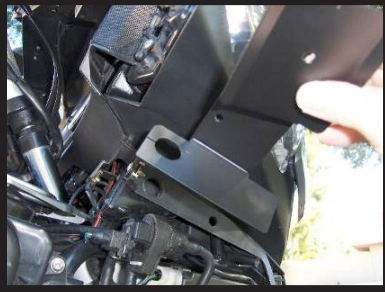
F

- After screws are removed from both left and right side body panels as pictures show, with fingers lift out the speaker cover while rotating panel to the left. When you reach the position in picture (D), push panel forward to release front of panel from its placement inside the front wheel cowl. At this point the panel is free. If you have the BMW radio kit you will have wiring that will be attached to left panel. Right Panel is removed in same fashion and will not have any wiring attached.

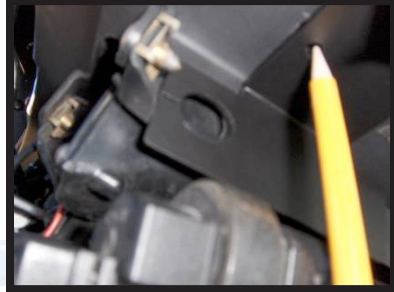
Mounting Lights

Mounting Brackets:

- **See A-B:** Place mirror mount fitting tight to left corner. Oval opening will fit over oval in black plastic. With pencil trace circle of 2 screw holes.



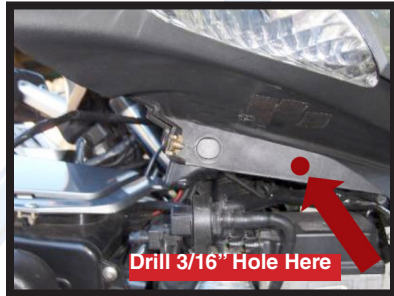
A



B



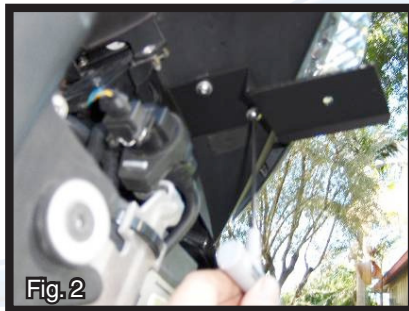
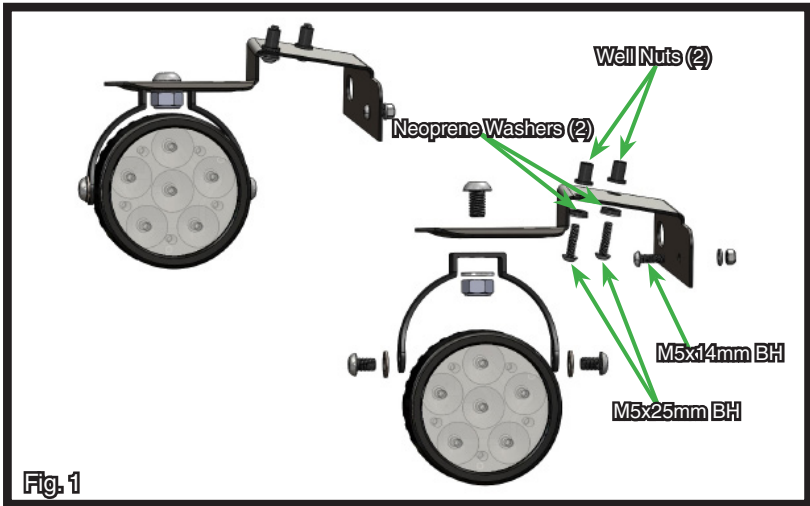
C



D

See Above C-D: Center Spade bit with the pencil scribed hole locations. Spin drill at medium speed to open a 7/16" hole. In step D note the location of the red circle and drill a 3/16" hole here, be careful not to go too deep inside drilled opening. Try to pass through and withdraw quickly.

Mounting Lights



Assemble the bracket with components as seen above in (Fig.1). The well nut will be finger tightened to the M5x25mm BH bolt on the bracket before the assembly is affixed to the bike. Bring the bracket assembly to the bike and push the well nuts through the vertically drilled 3/16" holes. Tighten the M5x25mm bolts (Fig 2). Use the M5x14mm bolt, washer and nut to secure the bracket to the horizontally drilled 3/16" hole.

Wiring

Wire Routing:

- Keep the side panels off until wiring is completed.
- 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.
- It is sometimes helpful to follow existing wire routing.

Electrical:

- Run the red and black power wires directly to the battery. The fuse will protect the system in the event of a short.
- Locate the power relay box in a safe location. Secure with a zip tie. It is a good idea to face the relay box with the wires coming out the bottom. This helps keep everything dry.
- Route the two black connectors for the lights to a convenient location where they will not interfere with steering or any other moving parts.
- Install the switch in a convenient location. Refer to the sticker on the switch for proper placement.
- Switch - Crimp spade lugs to red, yellow and black wires from relay box. Attach to corresponding tabs on switch. (See wiring diagram pg. 12)
- Using Posi-tap, attach red (turn on wire) to a low beam or switched accessory hot wire. See wiring diagram for your motorcycle on pg. 12.
- Install connectors as shown in the wiring diagram on page 12.
- Note: extra crimp on connectors provided in connection kit for if you would like to shorten the wires.

Horn Feature:

- Locate the Horn's hot (+) lead. This will make your lights flash to full when you sound your horn. Use a Posi-tap to connect one of the white wires from the relay box to this wire. It does not matter which white wire you use, both trigger the same way. If you do not want to use this feature, simply tuck the white wire away in a neat fashion.
- See addendum for ground switching bikes.

High Beam Feature:

- If you are going to install the high beam feature (and we hope you do) be sure to follow these instructions.
- Locate the high beam headlight wire. This will be on only when the high beam is illuminated. This will trigger the volume control knob to control the brightness of the lights. Connect the white wire from the volume control knob to this high beam circuit wire. See diagram for details.

Wiring

Wiring Procedure:

Locate the Headlight wiring harness under the dash, right side, this is where you will be tapping in for high beam trigger and switched power. Depress tab on top of connector and pull straight back to disconnect.

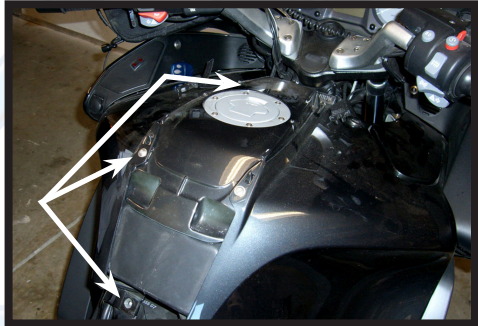


Body Panel Removal:

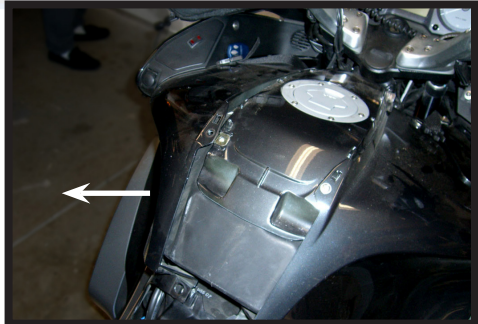
Start by removing the passenger and driver seat. Then remove the tank bag holder. (4 Screws, 2 at the bottom by the seat and 2 in the front by the handlebars).



Remove three screws on the left hand side panel and unhook the panel from the center plastic by carefully lifting up on the side panel. The lower tab needs to be lifted at the bottom screw.



It should resemble the image to the right.



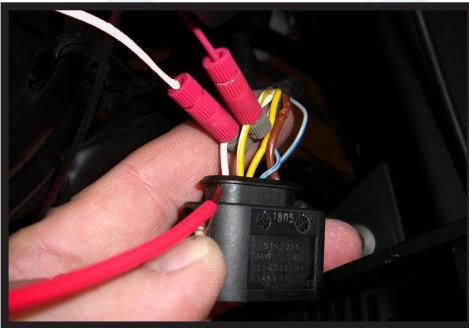
Wiring



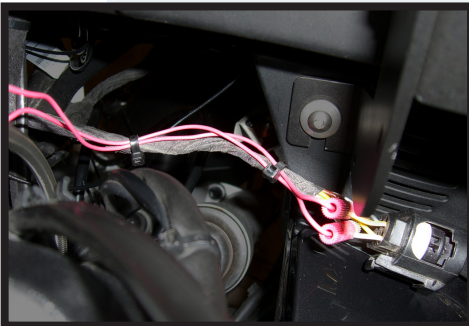
Feed the power wire from the harness in the space between the side panel and the tank. Image below shows the cable exiting the front of the side panel by the handlebars.



This shows the cable harness exiting the bottom of the side panel by the battery.



Install the supplied Posi-Taps on to the yellow with white stripe wire (low beam) and will be used for switched power trigger for the harness relay.



The white wire on the connector is the high beam trigger for the Hi/Lo feature if used. Tie wrap the new wires to the existing headlight harness as shown.

Mounting the Volume Control Knob & Switch

Mounting the Volume Control Knob & Switch: (Fairing Mount)

We recommend that you mount the volume control knob using the L bracket to the clutch lever assembly. See photo below for location.



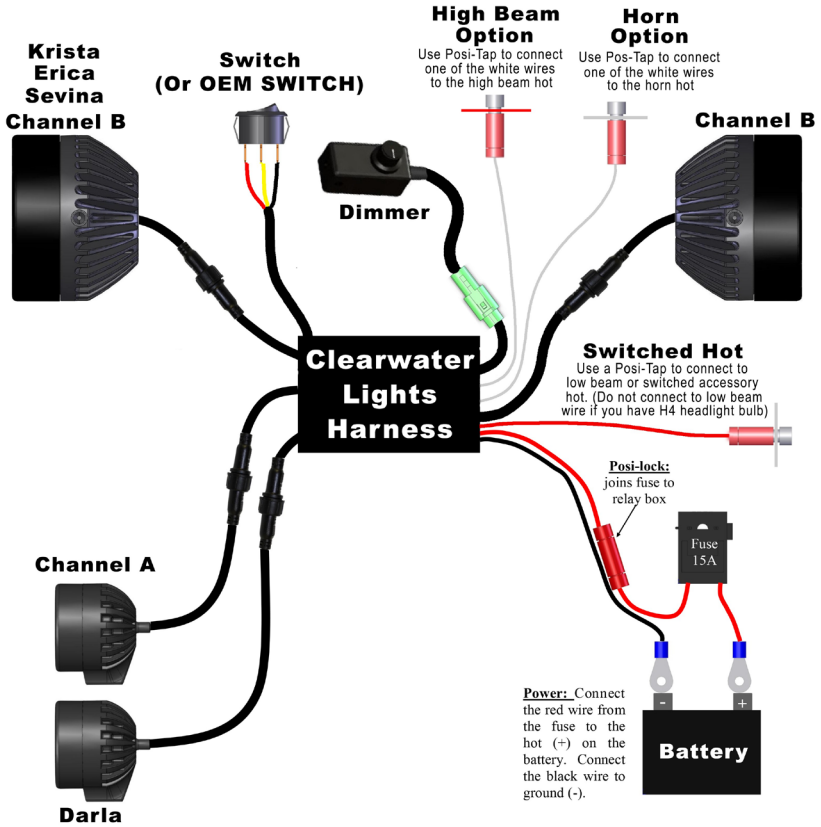
We recommend mounting the switch on a flat surface such as the removable cover on the left side panel. To mount the switch, mark and drill a 1/2" hole. Attach the wires to the switch and tighten in place with plastic nut.



- **Hint for High Vibration installations:** *To keep the Volume Control Knob from rotating itself under high vibration, put a dab of silicone adhesive under the knob and let it dry. Then push the rubber knob back on. The friction of the glue under the knob will keep it in place.*

Wiring Diagram

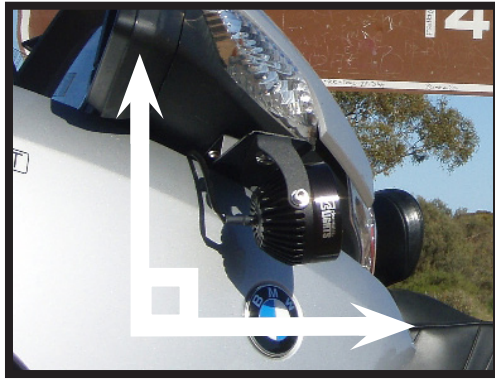
Wiring Harness for Krista, Erica and Sevina



Alignment + Tips

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. With a right angle board or object, position the board on the floor and slide it up to the light. 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.



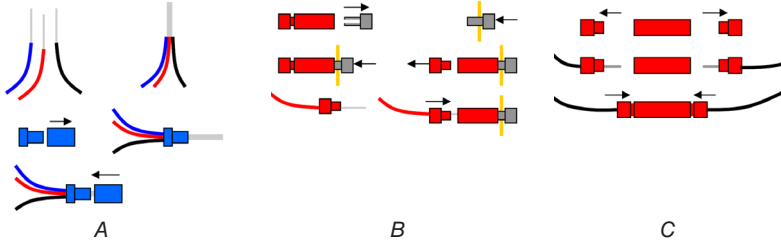
Do Not Kink The Grommet

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.



Notes: Posi-Products Instructions

Posi-Products Installation Instructions:



Posi-Twist (A):

1. Strip all wires to be inserted 3/4"
2. Twist all wires together.
3. Completely unscrew the top from the Posi Twist.
4. Feed the twisted wires through the bottom portion of the Posi-Twist.
5. While ensuring the wires do not slip out of the bottom of the Posi-Twist, attach the top and tighten.

Posi-Tap (B):

1. Unscrew the cap of the Posi-Tap (gray or large end).
2. Slide the wire you wish to tap into through the slot in the cap.
3. Re-attach the body of the Posi-Tap and tighten.
4. Attach the other wire to the bottom using the same method as a Posi-Twist.

Posi-Lock (C):

Attach the wires to the screw in connectors using the same method as Posi-Twists.

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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