



# Installation Manual

Universal Kit

**Darla LED Light Kit**

*Dimmable*

*Patent Pending*



## About the Lights

### Darla Clearwater Lights



**Three CREE XML2 LEDs (ea)**

**Fully Dimmable**

**2,400 Lumens (ea)**

**Optic: Driving Beam**

**High Beam + Horn Features**

**Power: 24W/2A (ea)**

**Size: 2.2" Dia.**

**Weight: 7 ounces (ea)**

Don't be fooled by the small package, Darlas pack a punch and are our most versatile light. Darlas are designed for maximum conspicuity, making you more visible to other drivers and illuminating your path at night. Over a hundred mounting options available! Our Driving Beam projects 75% of the light down the road in a 15 degree beam and 25% in a 45 degree beam.

***See And Be Seen***

***Ride Strong***

***Clearwater Lights***

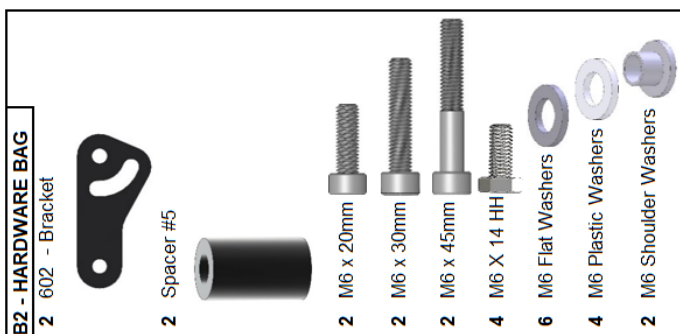
*Clearwater lights include a simple and high quality means of connecting to the motorcycle's electrical system. "Posi" devices made by Posi-Products are used to securely and safely make electrical connections on the bike. You can view instructions on the proper installation of the Posi-Products on the manuals page of our website or on Posi-Product's web site at <http://www.posi-lock.com>. They simply screw together and mate the wires.*



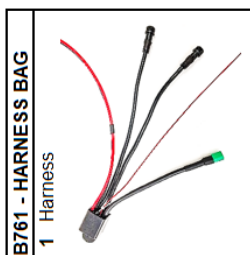
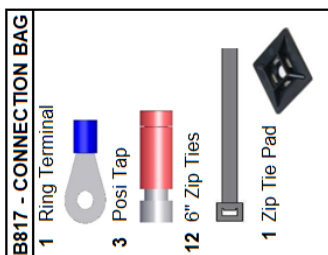
# Parts List and Bike Preparation

*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 ensure 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.



Last Updated: 1/20/21



## D-2 Universal

2 Light Assembly



### B709 - POT HARDWARE BAG

1 Pot Assembly



The parts above reflect a "standard" kit. If you have received a kit specialized for one bike, the parts may vary.

# Parts List and Bike Preparation

## D-25 - Crash Bar Clamp 25mm, BLACK

2 Light Assembly



**B817 - CONNECTION BAG**

1 Ring Terminal



3 Posi Tap



12 6" Zip Ties



1 Zip Tie Pad



**B761 - HARNESS BAG**



2 2' Darla Extension



**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



**B150 HARDWARE BAG**

2 D CB Bracket



4 M6 x 14 BHCS Bolt



2 M10 x 16 BHCS Bolts



4 M6 Flat Washers



2 M10 Lock Washer



HARDWARE IS ALL BLACK

**B25 - HARDWARE BAG**

2 Crash Bar Clamp - 25mm



4 M5x15 (Pre-installed)



The parts above reflect a "standard" kit. If you have received a kit specialized for one bike, the parts may vary.

# Mounting The Lights

## Fender Mount Overview: *(detailed diagrams on next page)*

- Pre-assemble the lights, mounting bracket, shoulder washers *(if needed)* and spacers with new bolts. Add 1 or 2 plastic washers to shoulder washer to make up difference in thickness of front fender if needed. Make sure to assemble one side at a time.
- Gently screw all bolts in hand tight. Inspect the bolt length and spacer alignment before tightening the bolts. Keep the pictures below as a reference.
- The mounting bracket can be mounted facing down *(shown)* or up to give the desired adjustability range.

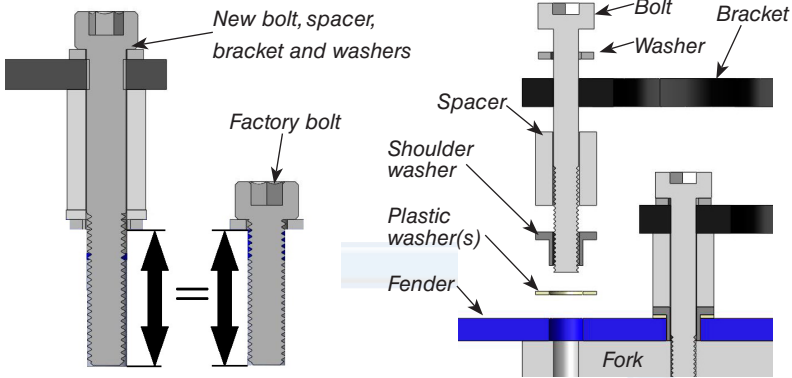
### D2 Universal Fender Kit



# Mounting The Lights

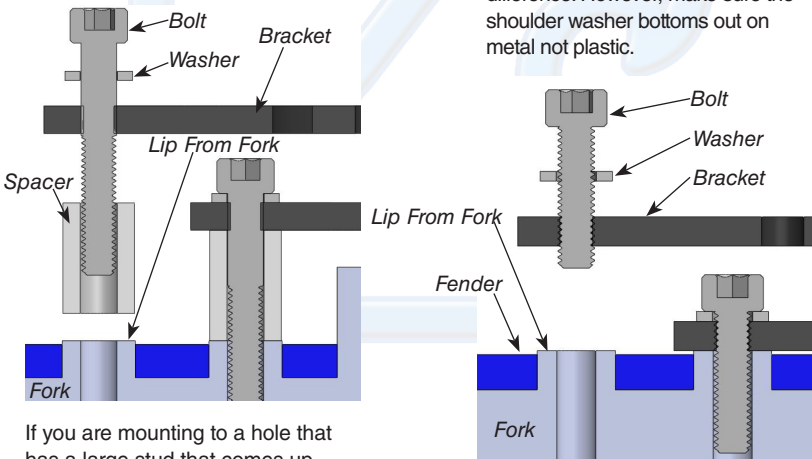
## Mounting Guidelines:

The Darla Universal Kit includes enough hardware to fit many bikes. Follow these guidelines for determining which hardware to use with your bike.



First, make sure the bolts, spacers, bracket, and washers you select have the same thread length as the factory's fender bolt.

Use a shoulder washer when mounting directly to the fender so the pressure from tightening the bolt doesn't crack the fender. If the shoulder washer is too long, use plastic washers to make up the difference. However, make sure the shoulder washer bottoms out on metal not plastic.



If you are mounting to a hole that has a large stud that comes up through the fender or is separate from the fender, and need to clear a step or other obstacle, add a spacer to the bracket as shown above.

If you are mounting to a hole that has a large stud that comes up through the fender (such as the *Yamaha FJR*) or is separate from the fender, flush mount the bracket as shown above.

# Mounting The Lights

## Mounting Lights (Crash Bar Mount):

- Find suitable location for mounting lights on crash bar or engine guard. We have a variety of crash bar clamp sizes.
- Mount bracket with clamps and attach light to bracket.
- Double check alignment before tightening bolts.
- There are many possible mounting angles with this bracket. Be sure that the location does not interfere with normal operation of the bike.
- Do not mount in a location that will expose the lights or wiring to high temperatures, such as within a couple inches of the exhaust manifold or cylinder head.

### D25 Crash Bar Kit



## Single Channel Harness Wiring Diagram



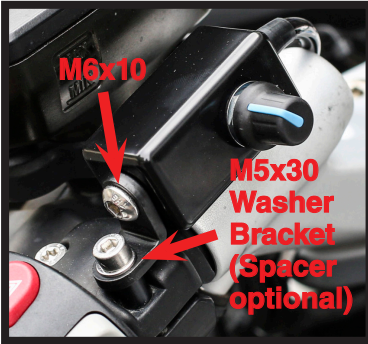
# Mounting The Volume Control Knob

There are three ways the volume control knob can be mounted:

## Mounting Dimmer #1:

(M5x30mm Screw Mount)

- Mount the volume control knob to handlebar by using supplied bracket, spacer and bolt.
- Try to route wires from lights and volume control knob along pre-existing wires. Make connections in a waterproof area.



## Mounting Dimmer #2: (Fairing Mount)

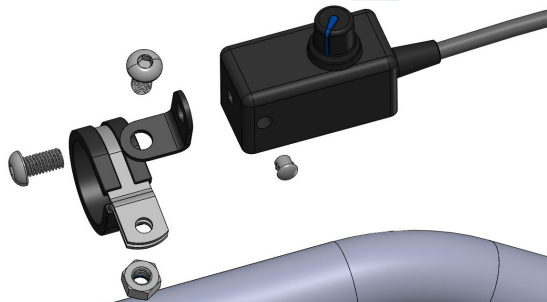
- Mount the volume control knob in fairing by drilling a 5/16" hole and mount with included nut.
- Check for minimum 2" clearance behind panel to allow for circuit board and wires.
- Double check fitment of parts before drilling your panel. Measure twice, drill once.
- Tighten 10mm nut and install rubber knob over volume control knob with press fit.



## Mounting Dimmer #3:

(Handle Bar Clamp)

- Mount the volume control knob to handlebar by using supplied bracket, bolt and clamp.



- **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.

# Mounting the Harness + Wiring

## Mounting the Harness:

- The harness should be mounted in a secure location close to the front of the bike. Use the provided zip tie pad, zip ties or a fastener of your choice to mount the harness. Choose a location away from direct heat and out of the way of pinch points and steering/suspension assemblies.
- Route the THICK RED/BLACK power wires toward the battery.
- Be sure to route all wires so that they cannot become tangled or caught in either a suspension or steering part. Use the provided zip ties to secure them in place. Again, check the movement of steering and suspension before riding.
- It may be helpful to follow the existing factory wire routing.

## Wiring + Connections:

- Before connecting any wires to your bike, first disconnect the negative terminal from the battery, then the positive.
- Please use the Wiring Diagram provided on Page 7 as a reference.
- **Dimmer:** Connect the dimmer to the harness (GREEN connectors). If the wires are too short, the GREEN extension cable may be required.
- **Switched Hot Wire:** The THIN RED wire from the harness needs to be connected to a 12V switched hot source on the bike using one of the Posi-Taps. This will allow the Clearwater Lights to turn on/off with the key or when the bike starts. The lights are NOT powered from this trigger wire. The Clearwater Lights are powered directly from the battery.
- **High Beam Feature:** Use one of the provided Posi-Taps to connect one of the THIN WHITE wires from the harness to the high beam headlight hot lead (+) on the bike. This feature sends a signal to the harness to turn the Clearwater Lights to 100% when the high beam is illuminated.
- **Horn Feature:** Use one of the provided Posi-Taps to connect one of the THIN WHITE wires from the harness to the horn hot lead (+) on the bike. This feature sends a signal to the harness to turn the Clearwater Lights to 100% when the horn is pressed.
- *Note: If you have an H4 headlight bulb or a ground switched horn, you may need a diode pack or isolation relay respectively, otherwise the lights will not function as intended.*
- **Power Wires:** Connect the fuse/fuse-holder to the red wire from the wiring harness to the positive terminal of the battery, then black wire from the harness to the negative terminal of the battery.
- **Light Wires:** Connect the lights to the harness. Light extension wires may be required depending upon the distance of the lights to the harness.
- Again, make sure all wires are neatly routed away from direct heat, steering/suspension components. Use zip ties to secure wires in place.

**TEST:** With the bike running, the lights should be dimmable via Clearwater Lights Dimmer. Test the high beam and horn features (if enabled) and the lights should go to 100%. If all checks, congratulations, you are finished!

## Alignment & Tips

### How to Align 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.

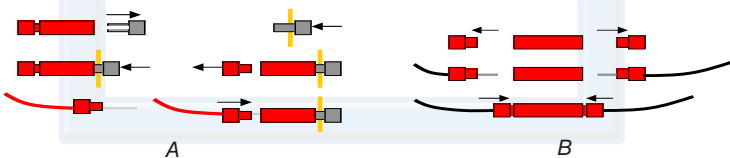
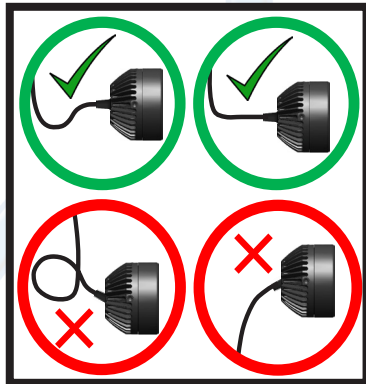
The goal is to adjust the lights so that the light is level with the ground.

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.



### Do Not Kink The Grommet

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



#### Posi-Tap (A):

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 (B):

1. Remove both ends from the Posi-lock.
2. Strip wire 1/2" and insert into bottom portion of the Posi-lock.
3. Hand tighten the Posi-lock onto bottom portion with wire, repeat for other side.

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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