Weiser Ultrabrights 2-in-1 LED Driving Light/Turn Signal upgrades For Weiser P/N's EXT-DTC-BM01 & LG1-DTC-BM01



INSTALLATION INSTRUCTIONS

Installation is quite straight forward but does require the installer to have a good understanding of the Auto electric systems on their bike. If at any stage of the installation you do not fully understand what is required then seek the assistance of a qualified auto electrician or your local bike shop.

The model and year of your bike will determine the type of installation most suited to your model of bike. The latest bikes that use the canbus wiring system normally need to have the driving lights and brake lights installed using a relay so that the canbus system does not flag any faults, were as many of the earlier bikes can be installed without the relay.

Please note the photos in these instructions are for reference only and the turn signal housing shape will vary dependent on the Upgrade model you have bought.

Before starting the installation.

Check that you have all the parts as detailed on the contents list and can identify each one. You will also need a few hand tools. A small Philips screwdriver to remove the indicator lens retaining screw.

Electrical wire cutters and strippers suitable for 20AWG wire. Spanner / Screwdriver to remove the battery terminals.

Insulation tape.

Installation using a relay

The first task is to decide on the location of the relay and the in-line fuse. When installing the Weiser Driving lights, a good location is the area close to the battery and makes for a neater installation. You will need space to for the relay and fuse holder

1 Open the turn signal housing by removing the single screw, remove the bulb and reflector assembly as shown and unplug the two wires.



2 The bulb holder assembly that was removed incorporated a locking key that prevented the Turn signal housing from separating from its stem, within the installation kit is a new locking key (item 11) which should be inserted as shown in the photograph, (the locking key that best fits your flasher unit is included in the fitting kit). Ensure the key is pushed fully home so that the lens will fit back in position correctly.



3 Feed the plain end of the wire (item 1) marked "Weiser - 3 in 1"into the hole where the two existing turn signal wires run; leaving approximately 2 inches of wire in the housing. (About the same length as the existing wires). Locate the wire that you have inserted on the inside of the indicator stem.



4 Repeat operations 1 through to 3 on the other turn signal housing.

5 As both driving lights need to operate at the same time take the wire from the right turn signal and feed it across the bike to the left turn signal take care to ensure that the wire does not foul any moving parts or is near to any item that may be hot when the bike is running. Use cable ties (item 10 to secure the wire neatly in place. The two wires now at the left turn signal will need to join to the wire (item 4) in stage 6.

6 Using (item 4) wire marked "relay 87" – "3 in 1"connect the wire onto the relay terminal 87 – see Circuit diagram below for pin numbers of the relay. Locate the relay in the position you have allocated. Rout the wire from this location to meet the two wires you have installed at stage 5. When routing wires on the bike it is always best to follow the rout of existing wiring avoid any items that will get hot when the bike is running or any moving parts, secure the wire in place using the cable ties (item 10). The 3 wires need to be joined together to do this use a



Posi Twist connector (item 7). Instructions on using a Posi Twist are given at the end of this document.

7 Disconnect the wires that are connected to – **Ve of the battery** position them so that they cannot accidently re connect as you perform the next stage. Using (item4) The inline fuse holder, connect the <u>ring terminal end</u> marked "Battery +" to the



Battery + Ve terminal Take care not to let any part of the tool you are using touch the bike earth. - **DO NOT FIT THE FUSE AT THIS STAGE.** The connector on the other end of the cable should be fitted to terminal 30 on the relay.

8 Using item 5 the wire marked "Bike Earth one end and Relay 85 the other" connect the Relay 85 end to the relay terminal 85 see wiring diagram to confirm relay terminal numbers. The ring connector on the other end of the wire to either a convenient earthing point on the bike or to the – Ve terminal on the battery. The Existing wires to the **-Ve of the battery** can now also be reconnected.

9 Using the wire (item6) marked "Relay 86" on one end connect to the relay terminal 86. The plain end of the wire needs to be connected to a +12v supply that is only live when the ignition is turned on to its first position. On some bikes, this could be an accessory socket - check that is does switch off when the key is turned to off. On most bikes, the most convenient place to take this signal is from the front parking light. To do this rout the wire from the relay to the parking light.



Routing the cable with existing cables on the bike keeping it away from any parts that may get hot when the bike is running and any moving parts. On the rear of the parking light bulb holder identify which of the wires that feed the parking light is +12v when the ignition is turned to the first position (The parking light should be illuminated). The connection to this wire is made a Posi Tap connector (item 8) Details of how to use the Posi Tap connector is given at the end of this document.

10 Using the Wiring diagram and the instructions above check that all of the wires have been correctly installed. If possible get the wiring checked with a second person.

11 To reduce the risk of static damaging the Weiser Driving Lights ensure that you touch a metallic earth point on your bike, do this immediately before the next stage as it will reduce any static that may have built up.

12 Remove the Weiser Turn signal unit from its packing ensuring that you only handle the unit by its edges – do not touch or press down on any of the LEDs or the electronic components on the board as this will cause damage to the unit. Connect the Brown wire to the Terminal "T", the Blue wire to the Terminal "E" and the new "Weiser" wire you installed to the Terminal "+". Re fit the board into its housing – again taking care not to touch any of LEDs or electronic components and re fit the lens. Take care not to over tighten the screw.

13 Insert the 5 amp fuse into the fuse holder and fit the cover.

14 Turn the ignition key to the first position so that the parking light is on, your Weiser driving lights should also be on.

15 Start the bike the Weiser driving light should remain on, set the turn indicator to the left and then the right as you do this the Weiser driving light should go out on the side you are indicating and the Indicator should flash. Finally check that with hazard lights on both Weiser driving lights turn off.

Fitting PosiTwist connectors

The blue Posi Twist connector has two halves, Strip the insulation back $\frac{1}{2}$ inch on each wire and insert them through the hole in the male section then screw the cap back on.



Fitting Posi Tap connectors

The Posi-Taps have two ends that unscrew. The grey end has a slot to slide over the wire you are connecting to. The red end has a hole to push the wire you are adding through. The center portion has two ends. One has a point for piercing the insulation of the wire you are tapping into. The other has the point blunted which connects to the wire you are adding. With the grey end slid over the source wire, thread on the center pointed end until it is snug. Pus h the stripped wire you are adding through the red end of the Posi-Tap and thread it onto the blunt end.



Weiser driving Lights EXT-DTC-BM01 LG1-DTC-BM01

Installation Kit Contents List

1. 2 off wires marked "Weiser" one end and "3 in 1" the other end. These wires will join together using item 7 and item 3 to provide the power to your Weiser driving lights.

2. 1 off Relay. The relay takes power direct from the battery and switches it to your Weiser driving lights to ensure the canbus will not flag any faults.

3. 1 off wire marked "Relay 87 one end and "3 in 1" the other. This wire will take 12v from the relay to join with item 1 to provide the power to your Weiser Driving Lights.

4. 1 off wire with fuse holder marked "relay 30" one end and "Battery + Ve" the other. This is providing the +12v to the relay so that it can be switched to your driving lights when the ignition is on.

5. 1 off wire marked "Bike Earth one end and "Relay85" the other. This wire provides the – Ve to the relay.

6. 1 off wire marked "Relay 86" on one end and is unmarked the other. This wire needs to connect the relay to a switched +12v supply that is only on when the ignition is on. If available the bike parking light is easy location to connect too using the Posi Tap item 8 provided.

7. 1 x Posi twist connector see separate instructions on how to use this item.

8. 1 x Posi Tap connector see separate instructions on how to use this item.

9. 1 x 5-amp fuse – do not fit any other value fuse.

10. 5 x Tie wraps – use these to secure the wires you are installing to the bike as required.

11. 2 x Locking Keys for securing the turn signal housing .. (not an essential requirement).