

INSTALLATION INSTRUCTIONS LEGACY II 2-IN-1 LED DRIVING LIGHT/ TURN SIGNAL & BRAKE LIGHT/TURN SIGNAL UPGRADES



Legacy 2 2in1 Install Instructions 5/30/19 v1.pdf

Installation is relatively straight forward although reasonable understanding of the auto electrical system on your bike is advisable. If at any stage of the installation you do not fully understand what is required please seek help from a qualified electrical engineer, your local dealer or contact Weiser support for assistance.

The specially designed LED Upgrade kit is designed specifically and only for BMW's not fitted with a CAN-bus electronics system and the kits supplied with this product is not suitable for fitting to any other BMW motorcycle with CAN-bus electronics.

BEFORE STARTING THE INSTALLATION

- Ensure you only handle the circuit boards by their edges. Do not touch or press down on any of the LEDs or the electronic components on the board as this can cause damage.
- Check you have all the parts as detailed and can identify each one. You will also need a few hand tools:
- A small Philips screwdriver to remove the turn signal lens retaining screw.
- Electrical wire cutters and strippers suitable for 20AWG wire. Some wires will require ends stripped before connecting.
- Spanner/screwdrivers/torx keys etc for removing access panels.
- Insulation tape.
- A multimeter is useful and can aid installs if wire colors and locations are not identified in advance.

INCLUDED IN YOUR KIT/S: WEISER FRONT DRIVE TURN KIT

- 2x Weiser "3-in-1" wires (purpose marked)
- 1x "3-in-1" drive wire long
- 5x cable ties
- 1x Posi-twist
- 1x Posi-tap

WEISER REAR BRAKE TURN KIT

- 2x "3-in-1" wires (purpose marked)
- 1x "3-in-1" wire short
- 5x cable ties
- 1x Posi-twist
- 1x Posi-tap

SECTION 1

FITTING THE 2-IN-1 DRIVING LIGHT/TURN SIGNALS

(If fitting the 2-in-1 brake lights go on to section 2)

Make sure the bikes ignition is off.

Take off the clear lens from the turn signal housing by removing the screw. Carefully remove the lens. Remove the bulb and reflector and unplug the two turn signal wires - earth (brown) and positive (blue) from the back of the reflector. At this stage you can check if the wattage of the bulb you are removing is 10W or 21W.



UPGRADING TO 21W

If your bike is fitted with 21W bulbs you will need to fit the resistor supplied to each PCB light unit. The resistor fits directly onto the terminals marked E & T on the non-LED side of the Weiser unit.



WEISER UNIT WITH RESISTOR FITTED

The existing BMW wires fit on to the two spade connections on the resistor. The brown wire fits to the E earth spade and the blue wire to the T turn spade.

Fit the Weiser 3-in-1 wire by feeding the plain end of the wire marked "3-in-1" into the hole through the turn signal into the stem where the existing turn signal wires run, leaving approximately 2 inches of wire with the female connector in the housing (similar length to the existing wires). This operation needs to be repeated on the housing on other side of the bike. Depending on your bike model the wires can then be run both together (advised) down one side of the bike. Feed the wire from the right or left to the other side taking care to ensure the wires do no foul any moving parts or are near to any parts that may be very hot when the bike is running.

The two wires, one from each turn signal housing, are then connected to the 3-in-1 drive wire by means of the blue Posi-twist connector supplied. Remove the cap of the Posi-twist and making sure there is enough exposed copper wire, twist the thee wire together and screw the cap back ensuring a good tight connection. (Do not insulate with tape until the circuit has been tested later).



POSI-TWIST CONNECTOR

The third wire from the 3-in-1 connector should run directly to a 12v supply that is on only when the ignition is on, we would suggest either connecting to the wire leading to the front parking light bulb or to the rear number plate / rear light bulb. Use a multimeter if necessary, to confirm which wire is 12v when the ignition is turned on. Use the grey and red Posi-tap connector supplied to connect the 3-in-1 wire to the 12v wire you have selected.



Back at the front of the bike you can now connect the two Weiser 2-in-1 LED driving light/turn signal circuit boards to the wires in the turn signal housing. To reduce the risk of static damaging the circuits, ensure you touch a metal earth point on your bike. Do this before handling the circuits as it will reduce any static that may have built up.

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Remove the circuit boards one at a time from their anti-static bags ensuring you only handle the units by their edges. Do not touch or press down on any of the LEDs or the electronic components on the board as this can cause damage.

Reconnect the existing ground and turn signal wires to the LED panel. Ground - Brown wire connects to E (earth). The turn power wire Blue connects to T and the new Weiser driving lights wire Black connects to B.

Make sure the connections push on tightly. Replace the turn signal lens taking care not to force the lens as this can break the plastic tab.



EXAMPLE OF REAR LIGHT CONNECTIONS

REPLACING THE LENS

SECTION 2 FITTING THE 2-IN-1 BRAKE LIGHT/TURN SIGNALS

Follow the instructions in section 1, steps 1-4.

The third wire from the 3-in-1 connector should run directly to a 12v supply that is on only when the brake light is on, we would suggest connecting to the wire leading to the to the rear brake light bulb. Use a multimeter if necessary to confirm which wire is 12v when the brake is operated.

Use the grey and red Posi-tap connector supplied to connect the 3-in-1 wire to the 12v wire you have selected. You may need to lower the panel under the rear of your bike to access the area underneath to feed these wires through and access the wire leading to the rear light.

Remove the circuit boards one at a time from their anti-static bags ensuring you only handle the units by their edges. As always, do not touch or press down on any of the LEDs or the electronic components on the board as this can cause damage.

Reconnect the existing ground and turn signal wires to the LED panel. Ground - Brown wire connects to E (earth). The turn power wire Blue connects to T and the new Weiser driving lights wire Black connects to B.

You are now ready to test the lights. Turn on the ignition and test all operations. It is advised to do this with the engine running though this is not essential.

The driving lights will come on with the ignition and stay on while the engine is running. Turn the left turn signal on and the driving light on the left will turn off and the amber turn signal will flash. Cancel the turn signal and the driving light will return. Repeat this operation to test the right side.

Make sure the connections are tight. Replace the turn signal lens, taking care not to force the lens as this can break the plastic tab.

13 Turn on the ignition and test all operations. It is advised to do this with the engine running though this is not essential.

The brake lights will NOT come on with the ignition but only when the brake levers are activated.

While holding the brake on, turn the left turn signal on and the brake light on. The left will turn off and the amber turn signal will come on. Cancel the turn signal and the brake light will return until the brake is released. Repeat this operation to test the right side.

Finally, before replacing any panels you have loosened or removed, take care to tidy your install by using the zip-ties and insulating tape where required.

TROUBLESHOOTING

- Feel free to contact us at +1 831.713.4365 or info@weisertechnik.com
- i. Firstly please check all your connections have power where necessary. You can do this with a multimeter if unsure.
- ii. Check you have identified the correct trigger wires in your bike's electronics harness if lights fail to illuminate.
- iii. Check the connections on the back of each circuit board have been wired correctly.
- iv. If a light works on one side and not another, swap the lights over to the other side to see if the problem follows or not. It could be a sign of a poor power connection to one side.

The wires and associated parts supplied with our kits are only intended for use with Weiser Technik's own products and is not necessarily compatible with any other manufacturer's components.

We warranty our lights for normal use and against manufacturing defect under our no quibble guarantee for up to four years. **Note:** it is not possible for us to warranty a claim for forward compatibility to motorcycle model years ahead of the year and bike model for which the product was originally sold. For example, moving a product from a 2016 model year bike to a 2019 model year could void warranty due to incompatibility issues.

