

SMD HALO TROUBLESHOOTING

FAQ: WHAT IS THIS METAL BOX ON MY LED INPUT WIRES AND WHAT DOES IT DO?

This is the LED driver and it is there for the following reasons

- Increased Reliability- By conditioning the power going into the LEDs this prevents degradation which can shorten the overall lifespan of the product.
- Wider Input Voltage- SMD rings were designed to strictly work on a specific DC input. Voltage spikes could cause damage to the LEDs or failure. The driver can operate on a very wide voltage range.
- Ease of Installation- With the resistors no longer on the back of the circuit board there is more surface area contact between the PCB and the headlight mounting surface.
- Brighter Light- by moving the heat of the resistors off the PCB we are able to increase the number of LEDs on the circuit board without thermal issues. This means a brighter and more even light.
- Easy to Replace- Although uncommon, if there is ever a case where a LED driver needs to be replaced you can easily unplug it from the ring and replace without having to open the headlight.

IN THE EVENT A YOU ARE EXPERIENCING ISSUES (HALO / LED DRIVER)

Here are some points to check to ensure the halo/driver was installed properly:

- Never extend or shorten the wires between the halo and LED driver
- Check wiring from power source to driver – then from driver to halo for any bare or pinched wires which would result in a short
- Make sure the solder contacts at the halo are not touching directly to chrome housings (These are dipped in a tin material and in most cases are conductive)
- Halo LED driver connectors (White plugs) must be free from moisture especially in trucks and vehicles that see off-road use (This can be done with heat-shrink and/or dielectric grease)
- When de-pinning the white halo connector for install, ensure you are re-pinning the connector correctly (Red to Red – Black to Black – See fig A.)
- Ensure upon install, to avoid twisting or pulling wires in any way that will cause the silicone wire coating to expose bare wires at the PCB solder contacts (See fig B and fig C.)
- Do not allow epoxy or glue to touch contacts (Current will always choose the path of least resistance. Any bridge between positive and negative will re-direct current away from the halo)

Fig A

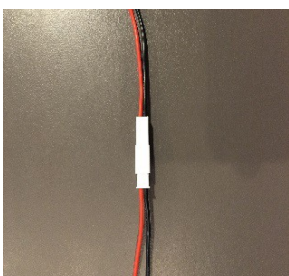


Fig B



Fig C

