## POTENTIAL ISSUES WHEN FITTING LUCAS LED HEADLIGHT BULBS

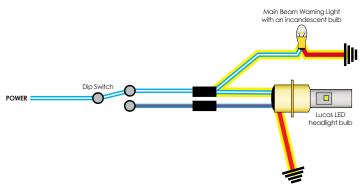
## POOR HANDLEBAR SWITCH CONNECTIONS POOR GROUNDING OR CORRODED EARTH CONNECTIONS

Motorcycles equipped with headlight warning lights may experience the LED only running on high beam or flashing when switched with the dip switch.

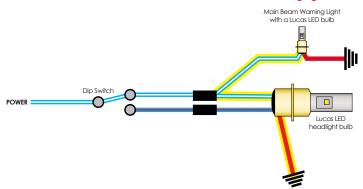
The problem is the incandescent warning light bulb allows a constant contact to earth via the bulb filament and the current flow selects the easy path to earth via the warning light and not via the LED headlight bulb.

The most effective solution is to install a Lucas LED warning light bulb. Diodes and 'Light Emitting Diodes' work in a manner that is best described as a one-way valve for electrical flow. The illustration below explains how fitting a Lucas LED warning light bulb will stop the power-flow taking the easy route to earth.

## Power Flow With An Incandescent Bulb Fitted To The Main Beam Warning Light



## Power Flow With A Lucas LED Bulb Fitted To The Main Beam Warning Light



We have bench tested Lucas LED headlight bulbs using one of our positive ground Lucas LED warning light bulbs and the LED headlight bulb functions correctly. Dip beam lights one side of the LED and main beam illuminates both sides including the LED main beam warning light.

It is essential on motorcycles fitted with a high beam warning light to replace the incandescent bulb with a Lucas LED replacement. Another solution is to remove the incandescent bulb and just leave the warning light connections in place. This is not an issue on most pre 1968 motorcycles as no warning light is used.

The Lucas LED headlight bulb contains an IC chip which allows both positive and negative ground fitment and a supply voltage of 6-24v. Light intensity increases with higher input voltage.

Poor earth continuity due to vibration or corroded connections can cause the internal circuit contained in the bulb to switch input voltage, which will appear to mimic the bulb switching from dip to main due to changing resistance of the earth path.



**Authentic Classic Range**