

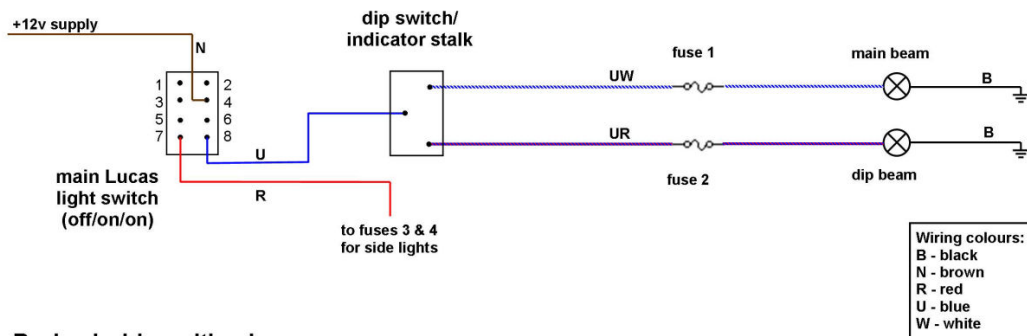
# Headlamp Wiring

©CJH 2009 (www.ngkitcar.co.uk)

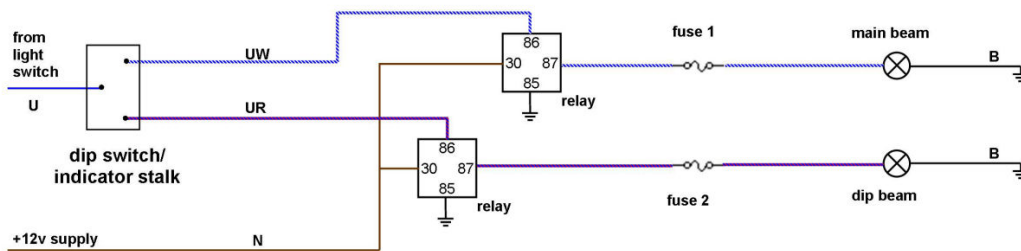
## Electrical connections

The standard wiring for the headlamps is as shown in the diagram below. A 12v supply from the main fuse connects to the main light switch, which has two "on" positions for side lights and headlamps. The blue headlamp wire takes the current to the dipswitch section of the indicator switch and this in turn connects to either the blue/red wire (for dip beam) or blue/white (for main beam). These are connected to the headlamp units via the fuse box where each circuit is protected by a separate fuse. It can be seen that the whole working current for both headlamps (about 10 amps on main beam) and the side/tail lights (about another 3 amps) passes through the main light switch.

### Normal wiring for headlamps



### Revised wiring with relays



## Fitting Relays

The two new relays can be fitted behind the dash beside the other relays. Each of the two circuits (main & dip) is treated exactly the same. The wire from the dip switch is interrupted just before the fuse box and re-routed to relay terminal 86. Terminal 85 is then connected to earth completing the low current section of the circuit.

For the high current section a 12v supply is connected to relay terminal 30. Terminal 87 is then connected to the fuse box where the original wire from the dip switch went.

The principle is that the light switch & dip switch now only supply current to the relay (a very small current indeed, about 30mA) and the main current only passes through the actual relay and the original fuse to the lamps.

This modification should, therefore, vastly reduce the likelihood of switch failure.