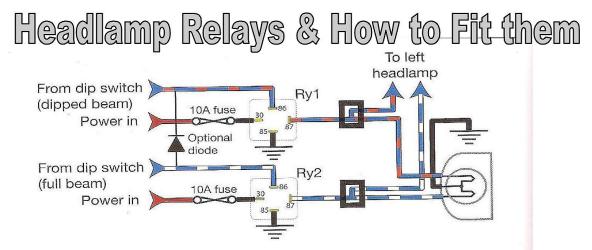
#### Taken from TVMGOC newsletter August 2014



The current consumed by your MG headlamps makes them one of the highest consumption loads next to the cooling fan (*if elec fan fitted*) in your MG, and vulnerable to high voltage drop that can cause very significant reduction in brightness. To minimize the voltage loss, almost every modern car uses relays to switch the headlamps and avoid the need to route their full current through the lighting switches.

All MGs can benefit from adding headlamp relays. This mod is especially recommended when halogen headlamps are fitted. Halogen lamps are supply at 60/55W power rating, as against the original lamp rating of 50/40W. The current drawn from two halogen headlamps is up by about 20% and the heat in the switch by about 44%, so to get brighter headlamps just add relays to your MG lighting circuit.

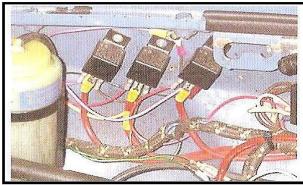
## How to Install Headlamp relays The modifications to the standard MG circuit are as this:-

- 1. A new power feed must be provided for the power-in line to both relays. The best way is to take from where the brown wires are connected to the starter solenoid because it both provides a very good low loss supply and has a minimal effect on any other system. I would always recommended that you individually fuse the power feeds at 10amps, the power line will be live all the time. The best wire to do this job is (205mm<sup>2</sup>) 14AWG or larger.
- 2. Both the blue/red dip beam and blue/white full beam wires must be cut at a convenient position where it is intended to install relays Ry1 and Ry2. The best position on a MG B is close to the bonnet stay fixing and above the wiring harness from which you will find the blue/white and blue/red wires.

In order to be able to pull through sufficient length of wire that can be cut, terminated and connected to the relays, it just may be more convenient to install them a bit closer to the front of the car where a taped harness can be more easily unwrapped and more free length of wire is available.

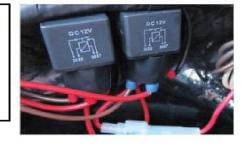
In operation, the dip switch, which is supplied from the lighting switch, provides power to the relay coils via terminal 86, the earth return being terminal 85. Once energized, the relays switch power to either the full or dip beam headlamp filaments by taking power in to terminal 30 and switching it to terminal 87. again, these two connections can be reversed if convenient.

That is the job finished and your MG lights are now working through relays, it is a lot safer.



You can get the relays from MGOC Spares and other

**MG Spares stockists** 



# <u>This is from MGOC</u>

### Headlamp Relay Kit M104D

Boost Brightness - Eliminate Flicker - Extend Lamp Life.

Our exclusive fused kit is suitable for negative or positive earth vehicles and comes supplied with; a pair of pre-wired relays, fixings and instructions for a simple and discreet installation. Modification to your existing loom isn't necessary, with all connections being made with plug and spade connectors.

## Price: £17.95 Including VAT at 20%