V8NOTE459

Solving a malfunction with the indicators on an MGBGTV8

Geoff Hall posted a query on the V8 Bulletin Board seeking help solving a fault with the indicators on his MGBGTV8 saying “for some time now, and I mean years, I have been having problems with the direction indicator on my V8. Switch them on the light come on and stays on -sometimes after a while they flash - very slowly. I have read all the notes I could find on the issue and over recent months have changed relays more than once, switches and all the bullet connectors I could find in the circuit which made no difference whatsoever. I then read an article - I think it was from someone who had a Triumph Spitfire who had the same problem and had gone down the same route. He eventually changed all the indicator bulbs even though they appeared to be working and that solved the problem. I did the same thing at a cost of £4 and hey presto problem solved. It’s easy when you know how - why is a different matter for me!”

Bob Owen, an experienced electronics engineer, provided an explanation saying “the old Lucas electromechanical flasher units are operated by heat bending a bi-metallic strip (like a thermostat) and opening the contact to the lamps. So the lamps come on as soon as the stalk is operated and then the current is cut when the bi-metallic strip has bent far enough to open the contacts. The lack of current causes the heating effect to stop and the contact to be re-made after a short cooling interval. With the correct load and a correctly working flasher unit the flash rate is within the legal requirement and, what is more, fulfils the requirement that a lamp fault is indicated to the driver by a change in flash rate or failure to flash.

As bulbs age the filament gradually evaporates away, some parts slightly more than others. The thinner parts get hotter than the thicker parts and eventually a runaway situation develops which results in that thin part of the filament becoming so fragile that it ruptures and the bulb fails. However, before this the resistance of the bulb has increased and its consequent load current has decreased. If both bulbs in the flasher load are high resistance due to age, the flasher will fail to heat up enough to turn off - in effect giving a "bulb fail" indication, albeit a bit premature. So changing "perfectly good" bulbs will effect a cure.”