## **Stag Interior Lighting**

The wiring arrangement for the interior lights on a Stag has led to considerable confusion and many problems over the years, not helped by the fact that Triumph never produced an official wiring diagram for later cars.

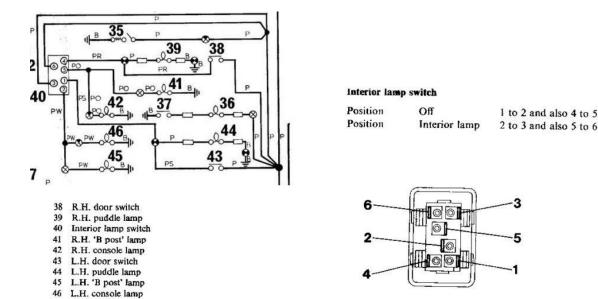
It is widely known that Mk 1 cars had interior lights on each B post, whereas Mk2 cars had just one lamp in the centre of the T bar, but with two bulbs inside. What is not so well known is that there are, at least, two types of wiring that differ radically. I am not convinced that the earlier type of wiring is only applicable to Mk 1s so I refer to 'early' and 'late' types.

The wiring on the interior light switch, on both types, is by individual wires, rather than a block connector (as for the electric window switches) and if they become muddled up then all sorts of odd lighting permutations can occur!

There are two ways to tell easily if you have the earlier or later wiring arrangement: 1) The early version has twin contacts on the door switches – the later cars have just one. 2) On the back of the interior light switch, the early system had two purple wires at the front whereas the later ones had two black wires connected together.

The following is the situation as I understand it, but I would not claim to be infallible and if anybody knows differently, I would be more than happy to amend what I have written. The information comes from the official ROM and from the technical pages of the SOC site.

**EARLY TYPE** – applicable to Mk 1 cars with lamps on both B posts and early Mk 2 cars with lamp in the T Bar (with twin terminal door switches).



From this you can see that the feed comes from the collective point to the bottom right of the diagram via purple wires to the door switches (38 & 43).

When the door is open these switches are closed and the feed then goes via purple/slate or purple/red wires to the puddle lamps (39 & 44) and to the interior light switch (terminals number 1 & 4)

From the info in the top right, above, you can see that, when the interior light switch is off those terminals (1 & 4) are connected to terminals 2 and 5. This then provides feed to the B post (41 & 45) and the console lamps (42 & 46)

When the interior light switch is turned on the separate feed, on terminals 3 & 6 of the interior light switch, is connected to terminals 2 & 5 which in turn feeds the B post and console lamps, but not the puddle lamps.

**LATE TYPE** – applicable to Mk 2 cars with lamps in the centre of the T bar (with single terminal door switches).

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## **ACTUAL LAYOUT**

## **SCHEMATIC LAYOUT**

NB This diagram comes from the technical reprints of the SOC and although this goes a long way to de-mystify the later system, it contains one significant mistake (certainly compared to all the late cars I have examined).

The error is that it shows a purple feed wire going to both interior lamp bulbs (Note that the T bar roof light actually houses two bulbs). Although a purple feed would have been technically correct, Triumph appear to have taken the unusual, even bizarre, step of using a single BLACK wire to feed both bulbs (either for the cable going up the B post and/or the cable in the T Bar). (Bizarre because Black is almost universally used exclusively for earths)

Anyway, coming up the right-hand B post is a loom containing this feed wire that is connected to one end of both bulbs. Purple/white & purple/orange wires come from the other end of the bulbs and go down the right hand B post in the same loom that the black feed came up and are connected to terminals 3 & 4 on the back of the interior light switch.

As can be seen from the diagram on the left above, terminals 1 & 2 of the interior light switch are connected together and fed by one black wire which is (correctly) an earth.

Also from the diagram, you can see that purple wires take a feed to both of the footwell lamp bulbs. The other end of these bulbs is connected to the purple/white & purple/orange wires and then to those same terminals 3 & 4 on the back of the interior light switch.

If the interior light switch is turned ON, it simply connects terminals 1 & 2 to terminals 3 & 4. This makes terminals 3 & 4 earths and completes the circuit and illuminates all four bulbs. (On a properly operating system, the puddle lamps do NOT illuminate when the interior light switch is operated)

When the interior light switch is OFF, terminal 3 is connected to terminal 7 and terminal 4 is connected to terminal 8. As terminal 7 and/or 8 are earthed as the respective door is opened, this makes terminals 3 and/or 4 earth, allowing the circuit to be completed to ALL bulbs on the respective side of the car.

Next, we'll look at what happens when the interior light switch is OFF and a door is opened. You can see from the diagram that when a door is opened, it both earths the door (puddle) lamps – which have their own separate purple feeds – and it also earths terminals 7 & 8.

From there it depends if the switch is activated or not. If it's on, then that 12v goes to those two black wires you've seen on the switch and then to earth so both roof bulbs illuminate. If it's turned off then it goes through the switch and out to the respective door switch which, when open, completes the circuit to earth – illuminating just one roof light bulb per side. The principle for the footwell and puddle lights is similar.

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