



Julian Parker provides a most useful 16 minute presentation on replacement headlamps. [Video](#)

### Replacement headlamps for the original sealed beams

Peter Spurrs sought fellow members' views and advice on replacement headlamps for his original MGBGT V8 sealed beams in a V8BB posting. An early workshop note (V8NOTE324) contributed in 2005 by Steve Taylor, who runs the auto electrical supplier SVC at Tamworth in the West Midlands, provided a useful note on upgrading sealed beam units so more modern lighting standards can be achieved. The comments at that time from members pointed to the Cibie replacement units as the preferred option. Here we have an update.

**Peter Spurrs** enquiry was "my headlights are still sealed beam units and, given the history of the car, are probably the ones fitted at the Factory in December 1973. I'm considering upgrading them to as near a modern standard as possible. V8NOTE324 and V8NOTE348 give some valuable insight, but are coming up 15 years old. Does anyone have any thoughts on what is currently available?"



Replacement H4 Halogen headlamp unit with 2-adjuster back shell

**Victor Smith** responded "the main step is to find a good set of 7" reflector units that can take Halogen bulbs. Some kits come with flat lenses but probably like me you will want to have domed lenses similar to the original sealed beam units. There is a very good 16 minute [video](#) on sealed beam replacement headlamp units from Holden Vintage & Classic. Julian Parker of Holdens provides a good guide to the various types of headlamps fitted to older cars and demonstrates how to replace an original sealed beam light unit using the available replacements - a budget unit or the good quality Wipac, Cibie or Lucas units. They take a 60/55W standard Halogen bulb or you can use Xenon 60/55W bulbs which produce 90% more light". Fitting HID "burners" (bulbs) as an upgrade in a standard headlamp unit is both illegal and an MOT fail.

**Chris Bound**, who is working on a V8 Conversion using a very good MGBGT, added "a useful upgrade while you are working on replacing the headlights would be to add a relay (or pair or relays) into the circuits. In standard form, the feed to the lights goes via the main light switch and the headlight dip switch, both of which can sap the power reaching the lights themselves. It's a simple modification to insert relay(s) into the circuits so that you get full power directly from the battery. There are even handy kits available which contain everything you need to do the job.

If you are comfortable working on auto-electrics, it's not hard to make up your own relay circuits. However, whatever your skills, I think it is probably easiest to buy a complete kit, with all the wires and terminals made up ready to fit. One of the best I have seen is available from [Moss Europe](#) at £39.00. I intend to fit the Moss kit to my car in the near future. They also sell a selection of H4 headlamp bulbs and you can choose whether you want the authentic Lucas domed lens look (with or without pilot lamps) or the flatter lenses fitted to later cars. I suspect that you won't want pilot lights on your 1973 car so these [Wipac items](#) might suit you well. I not certain but I think you may also need the [wiring harness](#) that comes with the correct plug. As an alternative, another supplier does a full Lucas conversion kit (part number is M190) which includes the headlamp bowl, trim and harness for £54.95".

**Mike Howlett** added "definitely fit relays, not only because you minimise the voltage drop but because it preserves your original switches. Clicking on your headlamps puts a 10amp load across the puny brass contacts in the main switch and the dip switch.



The 2-adjuster backshell. [See replacement headlamp unit details.](#)

Some sparking must occur and eventually the contacts will fail - they are 50 years old after all. Using relays means the switches only have to pass a milliamp load, and the relay handles the big load. Relays are cheap and easily replaced, unlike your switches. **Chris Hunt Cooke** agreed with the advice to operate the headlamps through a relay system, to reduce the current passing through the light switch and dip switch, both to reduce the voltage drop and to preserve those switches.

**Mike Howlett** added "as for the choice of brand of replacement headlamp, I originally bought a pair of **Wipac Quadoptic units** and was disappointed in the scatter of the beam. Then after only about 18 months, the reflectors were rusting so I stumped up extra cash for **Cibie Valeo units** and have found they are terrific. The beam control is excellent and even with standard H4 Halogen bulbs they give better light than my modern VW car. After over ten years use they still show no sign of deterioration".

**Peter Spurrs** agreed the Holden video is good, showing that the job is straightforward. He also agreed on going for both a good quality replacement headlamp unit and the dome lens shape. The Cibie replacement headlamp with the side light fitment is part number **082439**.

#### Bulb upgrade considerations

With regard to bulbs for the replacement headlamp units Peter Spurrs mentioned the Government website with its guidance on "[Aftermarket HID Headlamps](#)" published in May 2010 which says "in the Department for Transport's view it is not legal to sell or use after-market HID lighting kits for converting conventional Halogen headlamps to HID Xenon, but if you want to convert your vehicle to Xenon HID you must purchase completely new Xenon HID headlamps. The reason for this is that the existing lens and reflector are designed around a Halogen filament bulb, working to very precise tolerances. If a HID "burner" (bulb) is placed in the replacement headlamp unit designed for Halogen bulbs, the beam pattern will not be correct, there will be glare in some places and not enough light in other places within the beam pattern". The website's advice is clear: "it is not permitted to convert an existing Halogen headlamp unit for use with HID bulbs. The entire headlamp unit must be replaced with one designed and approved for use with HID bulbs".

The H4 Halogen bulb has twin filaments – one for the the main beam and an offset filament for the dipped beam. The bulbs have an indent on the locating ring so the bulb can only be fitted in the correct position to ensure the correct lighting. They are massively more powerful than the original sealed beam units. The standard Halogen bulbs are 60/55W. An alternative is a 60/55W Xenon filled bulb which uses the same current but produces 90% more light for the same power. When installing Halogen bulbs take care to avoid touching the glass of the bulb. If a replacement headlamp unit has a separate provision for a side light then a 5W BA9 single contact bulb will be needed. When the wiring connector is plugged in, a large rubber bung is pressed on covering the terminals at the back of the reflector to provide protection at the back of the light unit.

There is concern over replacement LED bulbs for headlights because the LED bulb has multiple light sources so is difficult to focus in a replacement H4 Halogen headlamp reflector with consequential concerns over dazzle for oncoming vehicles.

**Chris Hunt Cooke** highlights the complexity with current vehicle lighting regulations in the UK by noting that "it is correct to say that LED bulbs are technically illegal as the minimum wattage requirements for a headlamp is 30 watts, which an LED bulb would not consume, but this does not apply to new cars which have type approval as a unit and so do not have to conform to those lighting

regulations. It is better to stick with Halogen bulbs for your replacement headlamp units and if the standard bulbs are not bright enough, then fit the high performance ones which are now available and promise up to 150% greater brightness".

**Peter Spurrs** found a [test review](#) by Auto Express online which rated the **Osram Night Breaker Plus** bulb its top choice (5 stars & 100% score) saying "it's the beam that secures its win here. It was noticeably bright with a wide hot spot and a sharp cut-off. A clear victory in the absence of arch-rival Philips".



For those who prefer to avoid buying via Amazon then their fourth choice **Halfords H4 472 bulb** was rated 4 stars & 92% but it seems the price was a factor in the ranking. Their review said Halfords' "regular 'buy one get one free' winter offer on bulbs wasn't active as we put together this test, so this pair look very expensive when compared to rivals. Halfords' [H4 472](#) Alite-branded bulbs



actually delivered a better result than our recommended bulbs by a small margin, but that price dropped Halfords off the podium. However, they are still worth considering thanks to the light tunnel performance, which delivered a **win in the maximum brightness test** and a 148 FOM rating".

If you have trouble finding replacement headlamp units, [Holden](#) have a large range, as do [Demon Tweaks](#).