

This information sheet identifies Halogen bulbs for Lucas spot lamps with BPF P36s and BPF P36d bulb holders and shows how to make an adaptor plate to fit high powered H3 bulbs where a suitable conversion bulb is not available.

Parts Concerned: -

- GLB323:- Spot lamp bulb known by Lucas as LLB323 fits lamps with BPF P36s holders 12V 48W
- LLB326:- This spot lamp bulb fits lamps with BPF P36d holders 12V 38W
- GLB185:- fits lamps with BPF P36s holders 12V 48W SLR576 type
- GLB185-1:- Halogen version of GLB185
- RTR8470:- PIAA Halogen H3 Bulb
- RTR8263:- Lucas 7" spot lamps



Figure 2: Original Bulb GLB323



Figure 1: Halogen conversion Bulb GLB185-1

Background: -

Lucas Spot lamps were designed so long ago that most bulb suppliers would not even know what a BPF P36s bulb holder is. Obviously if you want to see where you are going, don't bother reading this and go to our website www.revingtontr.com and search PIAA and buy some decent lamps. However there are instances where the period look of the old style Lucas lamps is important to retain. Such is the case with my TR4 works Rally car so I made a couple of adaptor plates shown here. I now have PIAA H3 HE-271 55w (equivalent light output 85w) platinum white bulbs (part number RTR8470) fitted with excellent results.



Figure 3: Standard or Halogen conversion bulb installed

The Adaptor plate: -



Figure 5: GLB323 on the left, Adaptor plate on the right

To achieve this I made a couple of simple adaptor plates from 2mm thick galvanised steel (see Figures 4 and 5). The H3 bulb is held in place with a couple of self-tapping screws (Figure 6). The completed job, held in place with its spring clip, can be seen in Figure 7.



Figure 4: Adaptor plate in the BPF holder



Figure 7: H3 bulb RTR8470 fitted to plate

Electrical connection: -

Most lamps have a black lead off the clip which goes to the chassis of the car (negative usually). In the back of the shell of the lamp is a connector that makes contact with the centre pin of the bulb when the lamp is assembled (figure 3). This is energised by a positive lead terminating at the contact in a round connector. I made a simple converter lead with a round connector one end and a female Lucar connector the other end. A female/female connector was used to connect the live feed to the adaptor lead and the bulb male Lucar pushed into the other end



Figure 6: Assembly fitted into the holder retained by its clip

of the adaptor lead. As a small amount of the bulbs male connector is unshrouded I used a 100mm long piece of PVC sleeving to cover this connection, held in place by two Ty Wraps.

Exceptions: -

There is also a type of lamp that uses a bulb that has two cut outs in the bulb flange (BPF P36d) which uses a large black plastic bulb retainer with two electrical connections, engaging the lamp holder with a ¼ turn bayonet type fitting. This type of spot lamp does not use the body of the bulb as an electrical connection and cannot easily be used to incorporate an H3 bulb unless modified to accept the clip retainer shown in Figures 3 & 7.

To modify Lucas spot lamps of this type it is only necessary to drill two holes 4-5mm diameter through the first part of the shell (It is double skinned) to allow the clip to sit in. See Figure 8. You will of course need to source a clip too.

Benefits of the new H3 Bulbs: -

Apart from making the lamps useful in modern traffic by using high output modern bulbs, a long term supply of replacement bulbs is a significant advantage. The RTR8470 bulbs I am using have a rating of 55W but give a light output equivalent to an 85W bulb. We stock a range of H3 PIAA bulbs to suit all needs.

I have not dimensioned the plate described here as there is no need, it has to fit the holder and have a gap in it to allow the H3 bulb to be fitted. We do not offer the plate for sale however, if there is sufficient demand we can have a batch made. Drop us an email if you are interested.

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Figure 8: Holes to allow clip to be used