



Door mirror instability

Peter Spurrs found the two door mirror fixings on his MGBGTV8 were unstable. Here is how he resolved the problem.

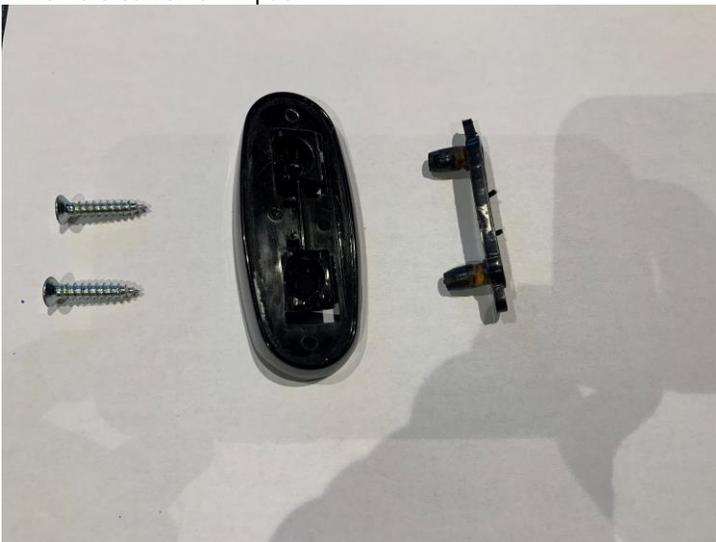
Thanks

Whilst undertaking the project, I corresponded with other V8BB members under the topic Door Mirror Mount. Thanks to everyone who contributed.

The Problem

The Factory method of fixing the mirrors to the door was a quick and easy solution for the production line, but did not give a stable mounting.

Firstly, on the production line, the two plugs on the plastic base plate were fitted into the two holes in the door. Next, the mounting plate was held in place with two self-tapping screws. Finally, a single screw held the mirror in place on the mounting plate. The single screw is on the rear facing side of the mirror to allow the mirror to break off on impact.



There are two weaknesses

1. The fixing for the mirror relies on a wedge fit at the front and a pointed grub screw at the rear. The screw penetrates the plastic mount to hold the mirror in place. In practice, the way the parts

fit together, the screw does not bite into the middle of the plastic, but the top. The screw then tends to work its way over the top of the plate and becomes loose. The more the grub screw is turned to tighten the mirror, the more the deformation of the plastic and the looser the mirror. Net result – an unstable mirror.



2. Secondly, the fixing to the door skin is not solid, relying on self-tapping screws in a plastic mount.

The Solution

The logical order is to make the mirror to mounting plate connection more robust, then to improve the mounting plate to door connection. To make the mount more robust, I glued in place a small aluminium plate to the plastic screw contact face.



I then filed the base of the mirror to lower the point at which the grub screw contacts the plate. Sufficient material was removed to ensure the point on the grub screw contacted the middle of the aluminium plate and did not ride over the top.

Securing the door mount.

The first job is to remove the door card to gain access to the inside of the door,

1. Remove the four screws holding the door capping and lift off the capping.

2. Remove the two screws on the door pull.
3. Remove the single screw on the window winder.



4. The door lock surround is in two pieces which can be pushed apart. The upper surround needs to be fed carefully over the trim strip to avoid damage.
5. With all of the components taken off, the door card can be removed. It is held in place with a number of plastic push-on clips. In my case, finger pressure around the edge of the door was adequate. It may be necessary to use a lever of some sort. Whatever it is, some padding may be needed to prevent damage to the door paint.
6. The final layer is a plastic sheet used to form a waterproof barrier between the door card and the door inner. It is glued in place. Careful removal will allow it to be reused.
7. Repair any damage and corrosion. In my case, the rust around the mounting holes needed to be addressed.



Once I had access to the inside of the door, I cut down the plugs on the base plate leaving enough plastic to hold the plate in the door and protect the metalwork.



I then fitted the base plate into the two holes and placed the mounting plate over it. Two 25mm M5 countersunk machine screws were then threaded through the mounting plate to hold the parts in place. Fitting the plastic and spring washers and nuts onto the machine screws was technically simple but physically difficult. Without removing the window, the only access to the machine screw is

through the door and upwards. The length of my arms meant that all I could use was my finger-tips. It is also worth noting that some of the edges are sharp – long sleeves are advised.

As the screw points downwards through the door, the washers tended to fall off and into the bottom of the door where retrieval can be difficult. A dab of light grease held the washers in place whilst I threaded the nut. Once threaded and spun on, it was relatively simple to hold the nut with an 8mm spanner whilst the screw was tightened.



Whilst I had access, I took the opportunity to grease the window winding mechanism. It looked as if it hadn't been touched since 1973. To copy the phrase from workshop manuals, replacement of the door card is the reverse of removal.

Result

Two stable and useable door mirrors.



Footnote – Peter adds the items in the photo above are the debris he found when he was working in the nearside door. Clearly the assembly line worker was having a clumsy day!