



Modification to avoid a failed MGB bonnet catch

Ralph Coulson describes an interesting modification he has fitted to his V8 Roadster conversion (Flame Red 4398).

Sometime ago, I was motivated by the many comments regarding unexplained failure of the bonnet release mechanism and safety catch assembly. The thought of the bonnet providing my wife and I with bespoke 'tin hats' did not appeal.

First I investigated cause and effect of the bonnet release mechanism failure. After a thorough examination of the associated parts, I realised there were several factors, which when linked together, would give rise to a bonnet flying open:

- Worn shoulder on Lock Pin.
- Worn Catch Plate.
- Weak Catch Plate Return Spring.
- Seized Safety Catch Pivot.
- Seized or sticky Release Cable.
- Over painting of the moving parts.
- Accumulation of road dirt and grit, exacerbated by over lubrication without cleaning.
- Poor adjustment.

One other, less obvious factor, is flexing of the body shell. More likely with a roadster but an 'event' that could lead to instant personal injury.

Therefore, before embarking on modification, it makes sense to take a very close look at the existing bonnet release and safety catch mechanism, paying particular attention to freedom of action,

cleanliness, lubrication, excessive wear on the lock pin and catch plate and a sticky release cable. If all components are correctly fitted, adjusted and in good condition, a failure is very unlikely.

However, a further consideration which could affect our cars; most now over 35 years old; is the aforementioned body flex, leading to unintentional release of the bonnet. Just imagine hitting one of our plentiful 'pot-holes' at 70 mph! Having previously owned a 40 year old MGB Roadster with a body shell, albeit in very good condition, best described as 'a little flexible', I decided to reduce my chances of the bonnet flying open by fitting a second safety catch.

The photographs show the modification 'carried over' to my V8 Roadster Conversion, even though the Heritage body shell is noticeably stiffer. A Safety Catch and Ring Bracket are listed in the Moss catalogue and can be purchased for less than £30:00, plus a new release cable is only a further £8:95.

Installation is simple, requiring a rectangular aperture in the slam panel 'mirroring' the existing, then fitting the components using the original as a guide. Care must be taken when deciding the position of the new aperture, clearance must be allowed below for the safety catch. In my case the right hand cooling fan motor bracket dictated I position the aperture 8.5" to the right of the bonnet catch, centre line to centre line.

To secure the Ring Bracket to the slam panel, I fabricated a simple plate to fit

under the slam panel as this also has the advantage of spreading the load. The Safety Catch is secured using self-tapping screws backed up by a tack weld.

The advantages of this modification are:

- Auto engagement when closing the bonnet.
- Raising the bonnet is simple. Just use both hands, tip the safety catches and 'up she comes'.
- In the event of involuntary release, the bonnet remains close and parallel to the slam panel thus avoiding side loading the original safety catch.
- Double the strength of a single safety catch.
- Subtle and unobtrusive.

Disadvantage:

- Loss of originality. For me, a small price to pay for peace of mind.

Needless to say, I haven't tested this modification but believe two safety catches have got to be better than one.

Footnote:

Before using No 10 self tapping screws to fit the safety catch to the bonnet of my previous MGB, I established a single self tapping screw, in steel, would support a 400lb load, without failure. The addition of a 'tack' weld was insurance.

Following a constructive comment from Barrie Jones to use a 5mm Rivnut in place of the self tapper, I viewed the Bollhoff website, manufacturers of the Rivnut, (Rivnuts come in many forms). Bollhoff confidently state their Rivnut will out perform the screw fastener during a fatigue and axial pull test. It is, therefore, a better/stronger option to use Rivnuts. If an owner has doubts about the reliability of their bonnet release/safety catch assembly, or wishes to have a second safety catch fitted and are within striking distance of Dorset. Mike Rolls of Mike Rolls Services 4 MGs (01258 820337) is very knowledgeable and will be able to help.

