



The majority of these tips have appeared in club newsletters over the years. Please note that you use them at your own risk as neither the Bristol Austin 7 Club nor the authors can be responsible for the results of trying to follow the instructions given.

### Spare wheel, mounting modification, for Chummy - Ian Moorcraft

A problem often encountered on a Chummy is flexing of the rear body panel where it meets the spare wheel carrier, this in time leads to 'star' cracking of the aluminium rear panel necessitating a new aluminium patch to be welded into the body.

If you have ever pulled on the spare wheel when manoeuvring your car in the garage you will have been aware just how much movement occurs at the edge of the wheel, and also the flexing of the body panel.

When restoring an original car or repairing an older restoration this area will most certainly need attention, as usually the flanges on the rear end of the tunnel will all be cracked off, along with distortion and cracking of the rear of the body itself. The state of the roads we now have is a contributing factor.

When restoring my Chummy in the early 70s, the rear of the body was in a terrible state, bashed in and star cracked in at least six places. Luckily the spare wheel mounting itself was almost perfect, only one stud was pulled out, easily fixed by welding in a patch and new stud.

I decided to make an unobtrusive mod as the need to cut out and weld in a new patch of metal would in itself make the body even weaker around the area than it was originally, the welding process softening the surrounding aluminium around the weld.

If your car is showing signs of distress in the area it may be worth considering my mod, as it is easy and quite cheap to do.

The original construction has a 18 gauge steel plate that is riveted to the flanges on the end of the tunnel under the back seat, this plate rises above the tunnel

and is covered by the rear body panel, the spare wheel mounting bolts or rivets connect through the body and pick up around the edge of this steel plate. The problem is that the plate is standing up too high above the tunnel and is too thin to give any support to the top of the wheel mounting and vibration eventually stresses the body panel and tunnel flanges. The spare wheel and tyre is a considerable weight hanging out over the rear of the body with very little support.

Picture 1 is a view looking towards the rear of the car and shows the new bracket, this is fabricated from  $\frac{1}{4}$ " mild steel plate being angled to fit very neatly against the original 18 gauge steel plate connected to the end of the tunnel and a tight fit on each of the tunnel sides. It is bolted with two  $\frac{1}{4}$ " steel bolts on each side. Picture 2 shows the bolt heads inside the car. Picture 3 shows a general view of the mod that most would not be aware anything had been done.



Picture 1



Picture 2



Picture 3

The next part to make is a disc cut from  $\frac{1}{4}$ " thick aluminium plate, cut it to fit inside the spare wheel mounting with about  $\frac{1}{8}$ " clearance around the inside edge. This plate is fitted on the outside rear panel of the car in a position such that the spare wheel carrier can be fitted over it in its original position.



Picture 4

Now looking again at picture 1 there are three  $\frac{1}{4}$ " hexagon bolts, these are bolting the aluminium plate tightly against the outside back panel. Moving on to picture 4 you can see the original 18 gauge plate bolted to the tunnel flanges. Then two more  $\frac{1}{4}$ " hexagon bolts with wing washers are drilled out through the body and aluminium plate. You now have five bolts and all the stress on the top

of the original light steel plate are now transferred to the aluminium disc then down to the steel bracket inside the tunnel. You can just see the edges of the new aluminium patch welded into the rear of my Chummy that hasn't moved for 40 years. I made a complete new floor pan for the original body that's why the tunnel flanges are good, even if now looking a little tatty !

All that remains to do is to bolt or rivet the spare wheel carrier into place over top of the thick aluminium plate and covering it from view. Picture 4 shows the top five 3/16" bolts and picture 1 shows the bottom three 3/16" bolts fixing the carrier to the new assembly.

One thing worth doing is to drill a 1/8" hole in the bottom edge of the carrier to drain any water that could collect inside.

You can pull on your spare wheel as much as you like as this mod is absolutely 'solid' give mine a try when you next see my car.

This mod will suit an AD Chummy from 26/29, not sure if earlier or later cars have the same construction or the same body problems.

I used to tie deck chairs, cool box, push chair and any other paraphernalia needed for the day to the spare wheel without a problem, but would be a bit worried about doing that on a standard car. I even made a towing frame that fixed to the spare wheel to bring home a sheet of half-inch ply for my garage extension !