Somersets and seat belts

Ron Dawes tells how he fitted seat belts to his Somerset.

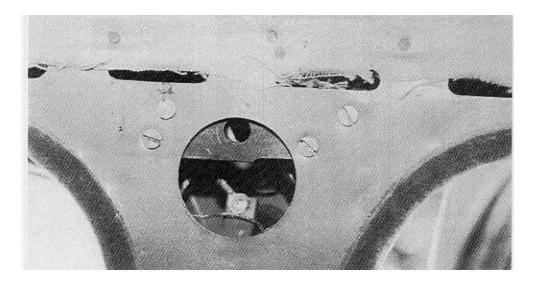
Before describing the method used to fit seat belts to my Somerset, it should be made clear that I am not an automotive engineer and cannot therefore say that structurally it is correct, but I feel knowing how our cars are built there should be no problems.

So what do we need to start? There are a couple of avenues to explore. Firstly lap or inertia. I chose inertia. Here I was lucky as son Ray already had a spare pair.

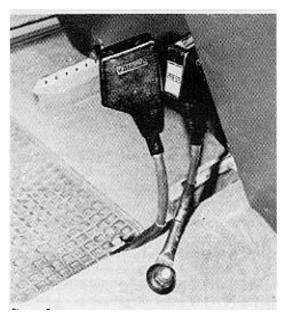
Fixings: if plan well ahead and are prepared to scramble over a few cars at your local breakers, you require the following – stalks from a Mini (or any other car if the length is right), six seat belt brackets from Allegros, a couple of pieces of 18g sheet (more on that later), a selection of large fixing bolts and a dozen or so $\frac{34}{7}$ x $\frac{3}{16}$ csk screws or similar.

I only managed to get 4 Allegro brackets, so the other 2 were made from 1" x 3/16" flat iron that, as always in DIY articles, I happened to have in my scrap box.

These need to be approximately 4 1/8" for the top one and 5" for the lower. Much longer and you wont get them through the apertures in the post. The strips need a clearance hole and a 10mm nut welded / brazed on the back. If you haven't access to welding equipment then start you search for Allegros early.



Picture 1 (above) shows clearly how the top bracket is fixed. The trim needs to be drilled for the fixing bolts and this needs to be accurate. This is achieved by putting the bolt into the hole and then painting a small circle on the bolt head. The trim is then held in place and just flicked onto the bolt head. This gives you the precise position marked on the back of the trim. Repeat this for the lower fixings. Take great care over this, otherwise the trim will not line up. Incidentally, if your seats can be easily removed then do so and the whole job becomes a lot easier.



The lower fixings are fitted in the same manner as the top. The stalks are fitted to the tunnel, picture 2, and this where the 18g sheet is needed. Cut two pieces each about 3" by 2" (drilled first to take the bolt) and bend to match the tunnel curve. A couple of oversize washers can also be used to spread the load.

Before you put the trim back, don't forget that you have made a lot of swarf that has dropped into the sills. My little cleaner wouldn't reach down there, so I used a small magnet in one of those flexible claw retrievers.

If you are not happy with the method I've used for the top fixings, another method is as follows, bu courtesy of friend and fellow Club member, John Edwards. Drill a 10mm hole through the top of the trafficator fixing, then fix with a long bolt, spacer and nut.



Picture 3 shows the completed job.

Finally, if you think that installing seat belts might loose you point, just think which is best - a winner's plaque at a rally or a loser's plaque on the wall of the crematorium! So get to work and make your Somerset a safer car.

(In the light of the complex range of laws which exist to protect consumers, it is necessary to point out that publication of Ron's article does not mean that his method of fixing seat belts has the endorsement of the Club. It is up to individual members to judge for themselves the loads and stresses which can be put on their cars structure and to check for themselves the strength and efficiency of any new or used components they may fit to their cars. This disclaimer is not intended to detract from Ron's advice, but is simply a reminder that in making any modifications to an old car, those who make the modifications are in the end responsible for their own actions. Ed)

(Republished from an article by Ron Dawes in County Counsel 110, December 1993 / January 1994 edition {the bimonthly magazine of the Austin Counties Car Club} Prepared by Ray Dawes)