BODY OFF!!

Well as promised here is my article for the mag. It is how to take off and replace the body with chassis SINGLE-HANDEDLY.

Basically, I wanted to rebuild this car in my own garage, with all the comforts of home; light, heater AND coffee percolator all installed and carpet on the floor during the long cold winter months.

As this project was trying to mate a Mantula Spyder body with a V6 3.0 litre coupe chassis (for the first time!) I knew that there would be some problems, so had to devise a way that I could remove and replace the body fairly easily by myself (and when you are 69 years of age it has to be "easily").

Luckily I had some commercial straps (the kind you see in B&Q) but these were quickly discarded as too cumbersome and did not easily work with a one hand operation. As I am a keen windsurfer, I then thought of the straps which hold the boards onto roofs of cars and found these to be light, strong and, what is more important, self locking and can be released with one hand too.

Next of course was to work out a way to fix the straps to the roof and to the body. Just wrapping them around a piece of 2" x 4" wood doesn't work as the straps would not slide, so I made rope (well terylene or similar properties) loops which did!. This enabled the strap to slide more easily when being adjusted.

I procured two sets of additional axle stands from boot fairs for "coppers" (and sold them later on eBay for an exorbitant profit). However, these were not nearly high enough and luckily (again) I had some spare bricks in my garden with which I made plinths. These were both high and sturdy enough for the purpose. Pieces of 2" x 4" wood were used for the supports. The body is not very heavy in itself but cumbersome AND FRAGILE at the rear end if it is a Spyder body).

It has to be remembered that placing the stands is a little critical as you need to be able to wheel the rolling chassis in underneath and also that there is sufficient room to be able to manoeuvre the body into the footwells. This means rolling it slightly forward when removing body and backwards when fitting.

No straps were used at the front of the body as this becomes light enough to raise with one hand (at times I had to weigh it down with a battery!) So try to get your rear straps correctly placed.

The raising of the chassis is easy at the start, (you need to raise each side in turn a little at a time) but, it does become harder as it reaches higher and this sometimes needs a shoulder under the wheel arch to give it that little extra oomph!

One thing to remember is that once off the chassis - especially with a Spyder body - that the boot area needs to be supported or you'll end up with a two-piece body!

Dennis Butcher

Ed: Dennis is happy to answer individual questions if you need further clarification. I must admit to not having heard of anyone tackling something like this before. All credit to you Dennis for the thought and ingenuity you put into the task. Photos of the various stages are shown on the next few pages.

Figure 1 - Brick plinths and axle stands with the body resting on same

Figure 2 - Showing where the front support has to be. Because of the overhang of the boot it does mean that the pivotal point is not much forward of where the straps go thro' the body so the footwells may have to be weighted down.

Figure 3 - Showing the strap connections (thro' hole where seatbelt/hood connection goes.

Figure 4 - Shows the rope loop underneath; the 2''x4'' goes whole width of car.

Figure 5

Figure 6 - (& Figure5) Shows the strap layout. (The straps hanging perpendicular are the loose ends.) It is important to get the top fixings at least 1 metre apart, as when lowering the body you release the rear one first, which has the effect of moving the body FORWARD and so down into the footwells. On taking the body OFF, it is of course the reverse. The rope was affixed to the roof joist simply by drilling a hole through it!!

Figure 7 - This is the height that the rear end has to be raised in order to get the front end into the chassis footwell. This is a standard height garage, as can be seen by the clearance (few mm.) from the garage door.

Figure 8 - Sliding body in. Pieces of ply are to assist. It is easy enough to raise the front without straps and manoeuvre into place. This has to be done slowly as you have to release the straps at the same time as moving the front. But, with long straps and self locking this is not a problem. If you compare with a previous photo you get an idea of distance body has to be slid backwards (forwards).