

# DAIMLER 2½ V8 SALOON – FITTING ALTERNATIVE DOOR SEAL

## Disclaimer

1. This instruction covers the fitting of an alternative, non-OEM, door seal to the Daimler V8 Saloon. It is provided for advice only and comes with no guarantee that it will provide a perfect seal, although it has provided a good seal on the example car, solving the problem of wind noise and water ingress experienced with the (inexpertly fitted) bulging, original style seals. Of course, it does not look standard, being far slimmer than the factory seal,

## Overview

2. The seal used is a generic 'double bubble' hollow sponge rubber section. The actual one used in the example was obtained from COH Baines, ident number SRS141, which was supplied as a continuous length and comes with a self-adhesive backing. See Fig 1. Others that are of similar dimensions may well do the job equally well – you pays your money and takes your choice....

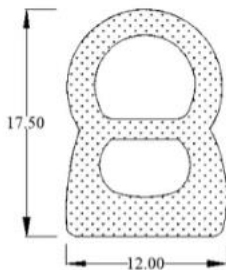


Fig 1 - SRS141 section (dims in mm)

## Materials and Tools

3. A length of seal (approximately 18m), a very sharp knife, superglue, masking tape, flexible measuring tape/non-stretch cord (eg Para Cord or similar), lightweight string, cleaning cloth/rag, a short wooden lath (approx. 8 inch x ¾ inch x 1/8 inch), suitable solvent/cleaning fluid that will not damage paintwork. As an alternative to a sharp knife, you may find a pair of mitre shears useful.



Fig 2 – Example of typical mitre shears

## Stage 1 – Preparation

4. The first step is to pull the old seal away from the door aperture and then remove all traces of the old glue from the bodywork. It is up to you how you do this, but one method is to wrap multiple thicknesses of a rag around the end of a narrow piece of wood, soak it in a solvent and rub the glue until it loosens from the seal channel. Note:

- a. Specialist contact adhesive removal solvents are available but they can also remove paintwork, so be careful; brake disc cleaning fluid is less aggressive, but will work eventually.

- b. It is essential to remove all traces of the old seal and the adhesive used to secure it; if any trace remains, it could both prevent the new seal adhering and/or cause the new seal to sit unevenly.
- c. Some parts of the seal channel (eg the lower section of the A-Post channel) are particularly difficult to access, but still need to be thoroughly cleaned of adhesive.
- d. In the case of the example car, it took 2-3 hours to clean each door frame. Don't stop until all the old glue has been removed!

**Approach to fitting the new seal – general technique**

5. This job is best done on a warm, dry day to ensure that the surfaces to which the seal will be stuck are dry. There are undoubtedly multiple ways the task of attaching the new seal to the door aperture could be approached. The following technique is the one used on the example car. As with all such projects, measure twice (at least) and cut once. Measurement can be made using a flexible tape measure, a length of (non-stretch) cord or using a free end of the seal itself.

**Stage 2 – Front Doors**

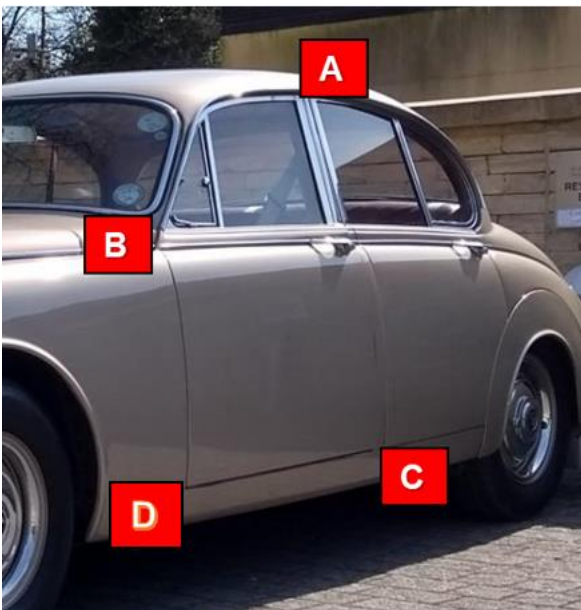


Fig 3 – Points at which the front door seal is joined.

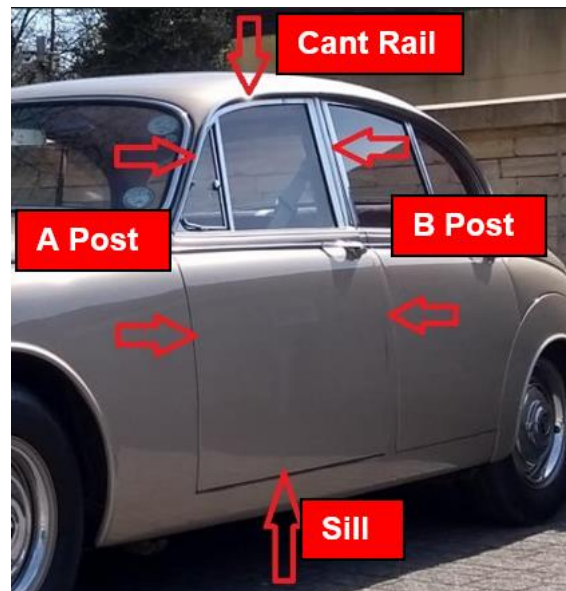


Fig 4 – Terms used for parts of front door aperture.

- 6. Measure from Point A to Point B and Point A to Point C.
- 7. Cut 2 sections of seal an inch or 2 longer than the lengths measured above. The aim of cutting slightly longer is to ensure that the lengths are never too short; if you are particularly confident of your measuring, you can reduce the extra allowance.
- 8. Using a very sharp blade (or mitre shears), carefully cut **one** end of each of the lengths of seal at 45° in preparation to form a mitred 90° corner. Join the mitred corners with super glue to form the corner that will sit inside the upper rear corner of the front door aperture at Point A. Allow the glue to reach full strength in accordance with the manufacturer's instructions. If you find any minor gaps in the join you can use a quality flexible black sealant to plug them.



*Fig 5 – The first 2 lengths of seal mitred and joined at 90° with super glue.*

9. Without removing the self-adhesive backing yet, position the seal (with mitred corner at Point A) in place and hold it there temporarily using multiple strips of masking tape. Once you are sure that it is correctly seated, lift the mired join away from the body at Point A and peel back a few inches of backing from both lengths, working away from the join. Stick the first few inches of the vertical and horizontal lengths of seal in place, working

from Point A downwards and forwards. Don't cut the backing strip away as it will be useful to have a free end of the strip to peel away during the next stage.

10. Once the corner of the seal is securely stuck in place, slowly remove the backing from the vertical seal working downwards, carefully stick the seal in place until approximately 5 inches above Point C. When sticking the seal down, do not stretch it, just press it firmly in place.



11. With the majority of the B Post seal in place, carefully mark on the seal (using a fine point indelible marker (red ink makes a legible mark) where you will need to cut it to form the mitre at Point C. The reason for leaving 5 inches not stuck down at the foot of the B Post is to allow you to lift the free end clear of the body to be able to make the mitred cut against a piece of wood if using a knife.

*Fig 6 – the seal once in place at Point A (note that it is reflected in the chrome B Post finisher; there aren't 2 seals!).*

12. Moving back to Point A, start peeling away the backing strip of the seal which runs along the cant rail and carefully stick the seal down as you work forward and then down towards Point B. Stop removing the backing strip when about halfway down the upper section of the A Post and, in a similar manner to that in Bullet 11, mark the free end of the seal where it will need to be cut and joined at Point B.

13. The join at Point B requires you to cut another mitre. Again, not sticking the whole length down to the A Post will let you lift it away from the car and cut it against a block of wood.

14. Now measure the length of seal required for the lower half of the A Post from Point B to Point D. Using a piece of cord is a simple way to do this or you could feed a length of seal down into the gap from above. As with the other lengths, cut the next length of seal an inch or so longer than measured and mitre the upper end ready to join with the cant rail/upper A Post seal.

15. Form the mitre required at Point B with super glue. Again, this is more easily achieved with the cant rail/upper A Post seal only half stuck in place as it provides far better access to make the join holding the pieces away from the car rather than with the seal sections sat in the channel. Once the glued join in the seal at Point B is set securely, peel back a very short length of the backing strip at the top of the lower A Post seal and securely tie a foot long piece of thin cord to it. The reason for this is that access to the lower A Post seal channel is very limited, so the aim is to feed the seal down from the top such that it hangs in place, then peel off the remaining backing strip on the cant rail/A Post seal, pressing the seal firmly in place as you work down to Point B.



16. Once the cant rail/A Post seal is stuck down at Point B, very carefully pull the thin cord slowly to peel the backing strip away from Point B down *towards* (but not right down to) Point D whilst pressing the seal in place. As before, stopping a few inches before reaching Point D will make cutting the mitre at Point D easier.



Fig 7 – The join at Point B

17. With the free end of the lower A Post seal hanging down past Point D, mark the point where you will need to cut it to form the next mitre. Bear in mind that cutting the mitre too high or too low would result in the sill seal not sitting straight in its channel and potentially bulging out of the door gap. You may find it useful to cut a length of seal several inches longer than the sill and mitre the forward end. You can then position this length in the sill seal location (holding it in place with masking tape if that helps) and line the forward end up with the free end of the lower A Post seal to gauge where to cut the mitre at Point D. Measure and

cut carefully! Don't join the seals at Point D yet.

18. The seal along the sill sits over the folded-over edge of the sill tread plate. The tread plate is secured in place by screws which are hidden by the seal. As the seal used in this method is relatively thin compared to the standard seal, simply sticking it over the screw heads would cause it to bulge out visibly at the point it passes over every screw head. To minimize/avoid this, there are 2 steps which you can take. One route is to unscrew the sill mounting screws and file the heads down to the point where they have been flattened noticeably but the slot is still just sufficiently deep to enable them to be turned with a screwdriver. The alternative is to remove the tread plate, slightly countersink the screw holes and find suitable self-tapping screws with shallow countersunk heads. Assess which provides you with the lowest profile and will thus result in the best appearance once the sill seal is stuck down.



19. Once you have cut the mitre at Point D, glue the forward end of the sill seal section to the lower end of the A Post section. As before, as the lower end of the A Post seal has not been stuck down yet, it should provide more room to manoeuvre to make a clean, accurate join with the ends held away from the car.



20. Now peel the remaining length of backing strip away from the lower end of the A Post seal and the first few inches of the sill seal and press them into place.

21. With the forward end of the sill seal securely in place, lay the rest of the seal in place and assess where to cut the rear end of the sill seal and the lower end of the B Post seal to make the join at Point C. Again, making this join with the

Fig 9 – the join at Point D before the lower A Post seal is stuck down.

seals cut too long or too short would result in the seal not lying straight and/or bulging out. When you are sure that the free ends have been cut to the correct length, glue them to form the joint at Point C at the bottom of the C Post then peel the backing strips away to secure the final joint in place.



Fig 11 – The final join at Point C



Fig 10 – The join at Point D.



Fig 13 – The door closed on the new seal.



Fig 12 - The A Post seal with the door closed.

22. If you have measured all the lengths correctly and formed all the joints accurately you should now have a working front door seal. You can check the seal by trapping a piece of paper in the seal by shutting the door and seeing if the paper can be pulled free. If the seal does not trap the paper sufficiently, you can make 2 adjustments. The first is to move the door striker plate inboard to make the door close more tightly to the door aperture. The second involves more effort but can be used to bring the chromed window surround in towards the upper half of the seal slightly. It involves removing the door card to gain access and unscrewing the lower mounting legs of the window frame and adding additional spacers to pivot the window frame inboard. The workshop manual provides more detail about the components involved and how to access them.



Fig 14 – One of the window frame lower mounting bolts and the factory spacer.

### Stage 3 – Rear Doors



23. The procedure for the rear door seals is very similar to that for the front doors, so there is no need to go into the same level of detail in these instructions. However, the key points to note are set out below.



Fig 15 – Points at which the front door seal is joined.

24. The joins are made at Points E, F, G, H and I. As with the front doors, start with the 90° join, in this case at Point E.

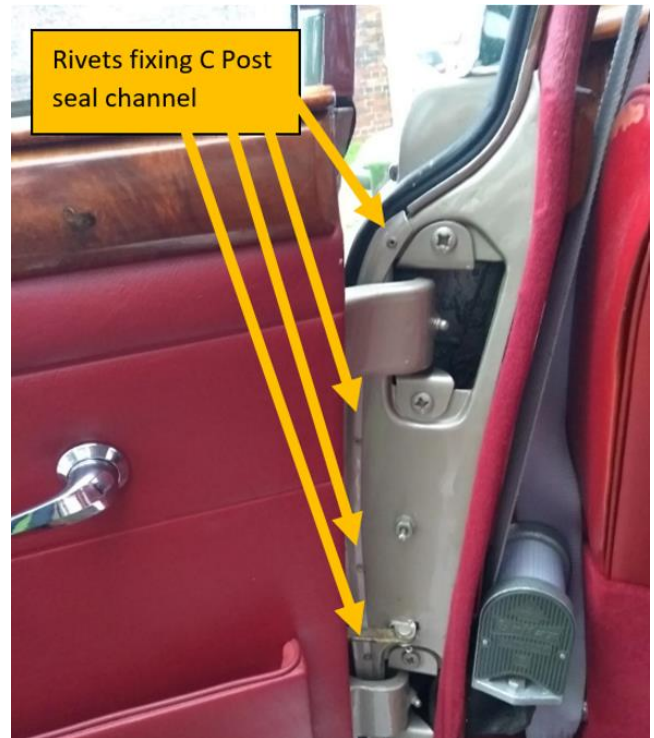


Fig 16 – C Post seal channel.

25. The seal channel on the C Post is very difficult to access. To ensure the best access for both cleaning the old adhesive and fitting the new seal, drill out the pop rivets which secure the seal channel and re-fit it with new rivets once you have finished. As the rivet heads are painted in body colour, if you wish to achieve an invisible finish you will need to paint the installed rivet heads with primer and body colour.



Figs 17 & 18 – Detail of the D Post joins.

**Final point to note.**

26. As you will have noted from the images, the alternative seal sits within the seal channel, leaving the edges of the channel exposed. Consequently, you will need to be sure that you can live with this.