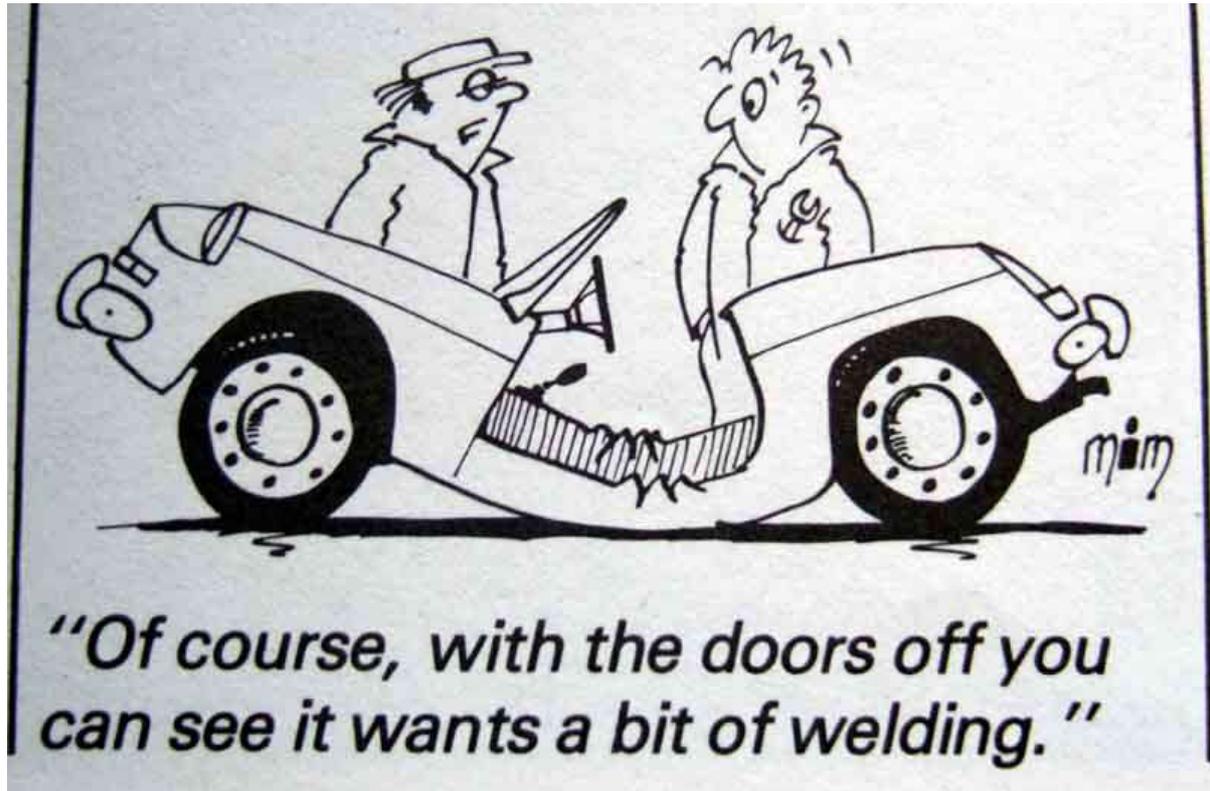


How Strong is my Body?

The effects of severe sill corrosion ... You may laugh but one roadster I looked at did have the bottom of the doors rubbing on the tops of the sills. Cartoon from Lyndsay Porter's ['Guide to Purchase and DIY Restoration of the MGB'](#), republished as ['The MGB Restoration Manual'](#), both by Haynes:



From [MGBs Made in Australia](#):

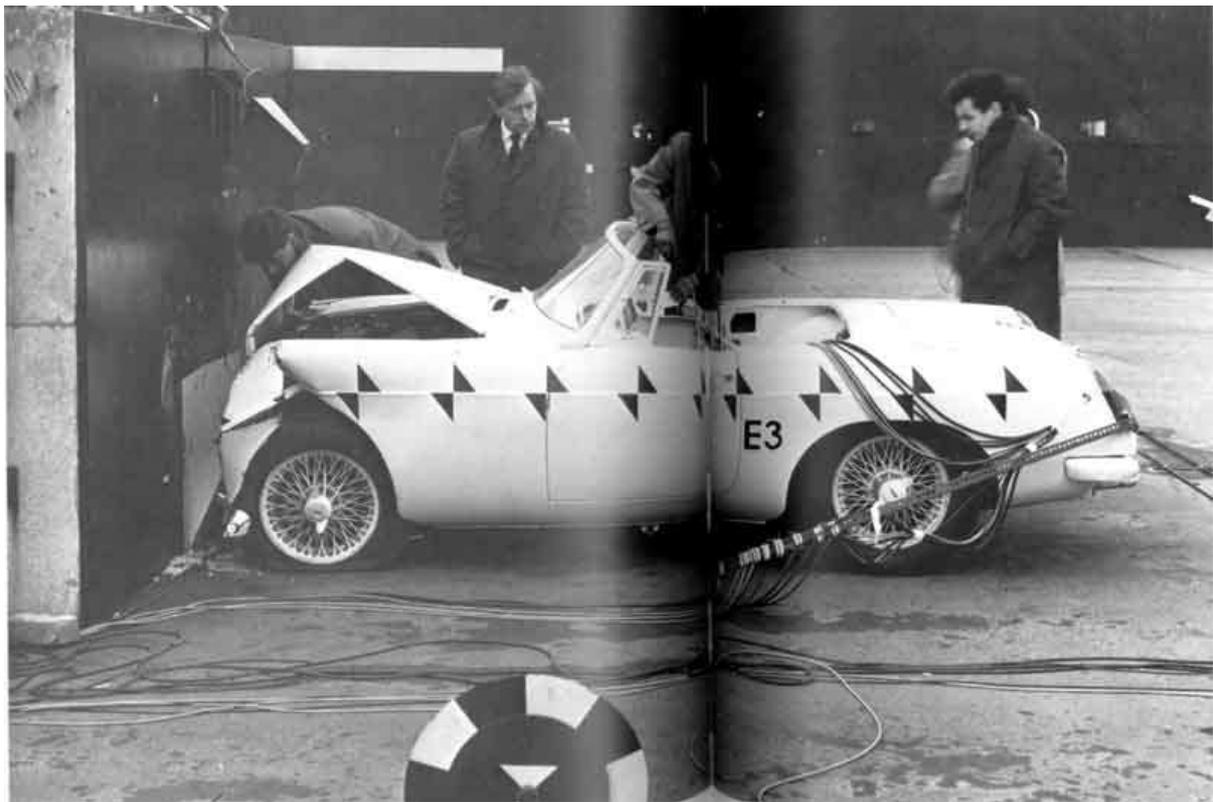
"FYI the damage from the tree was a dented/cracked aluminium bonnet (thrown away not worth to repair), dented L&R front 1/4 panels (I've panel beaten and repaired), a torn and bent soft top roof (thrown away), broken off side mirror 1/4 glass bracket.

"The bonnet cracked where it hit the engine filler cap (the bolt that comes out the top of it). The cap survived with no damage, engine still ran fine.

"Tuff little bugger!"



30mph full-frontal impact into a concrete block at Abingdon in 1967. Apart from the crumpled bonnet there doesn't seem to be any external damage aft of the wheel arch. Image from 'MG by McComb' published by Osprey/Motorbooks:



And another of a GT at the same speed taken in the 1970s, with much the same result. Image from 'MG - The Untold Story' by David Knowles, published by Windrow & Greene. (Just noticed this has V8 wheels!)



About as severe an impact as you could get, and the worst combination - car and large truck:



Spot the motor-cycle ...



... now do you see it? The motor-cycle was travelling at about 85mph and the VW driver was talking on a cell phone when she pulled out from a side street, apparently not seeing the motorcycle, the rider didn't stand a chance. The car had two passengers and the bike rider was found INSIDE the car with them. The Volkswagen actually flipped over from the force of impact and landed 20 feet from where the collision took place.

All three involved (two in the car and the bike rider) were killed instantly:



Aerial in Front Wing

General view showing the location of the panel behind the front wheel. This is the right-hand side, where it seems common to mount the aerial on right-hand drive cars at least i.e. the drivers side, possibly to be clear of pedestrians when parked on the correct side of the road. Normally it is recommended that the aerial be mounted on the opposite side to the ignition system to be as far away from interference as possible. However Clausager shows both right- and left-hand drive cars with some having it on the driver side and some on the passengers in both cases, so no consistency there.



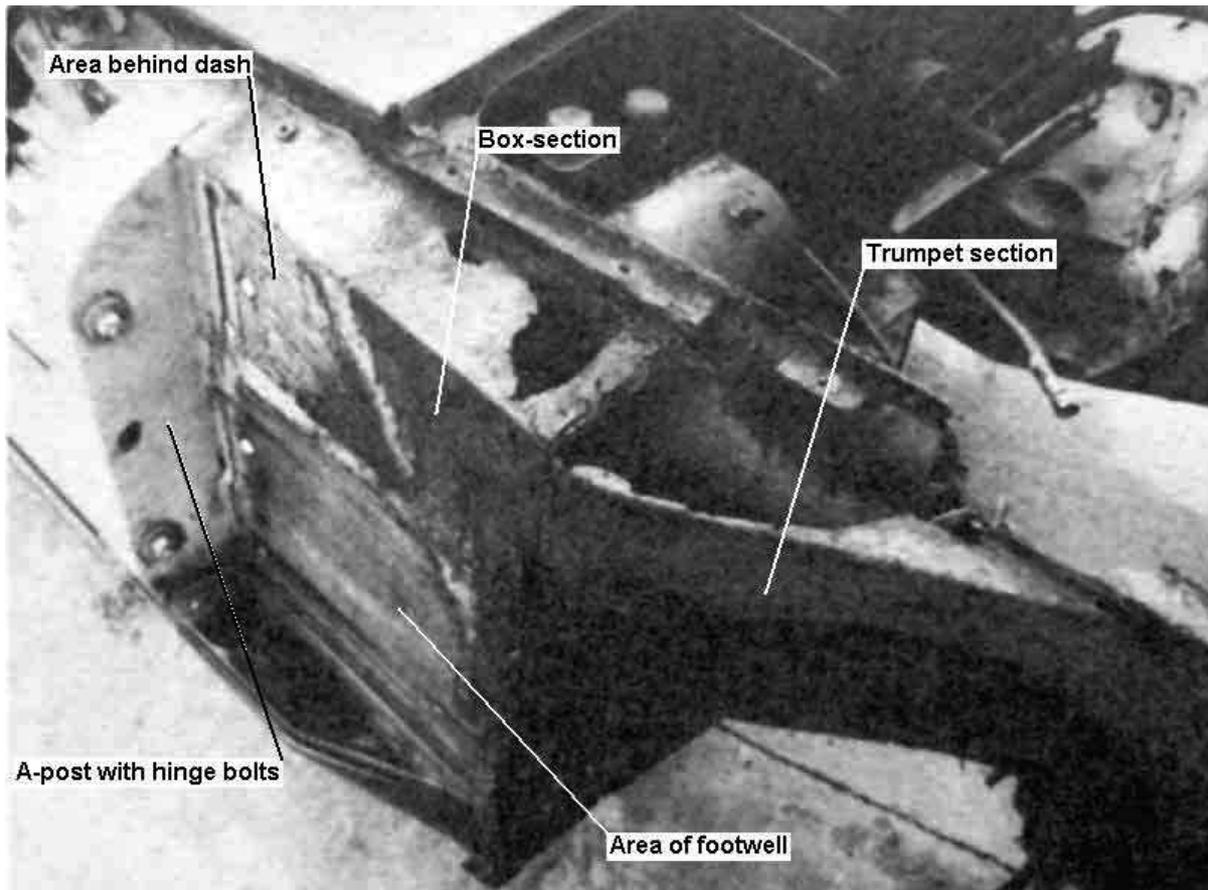
The top of the main splash panel with three bolts, with the smaller panel and seal just visible above the box-section at the top right.



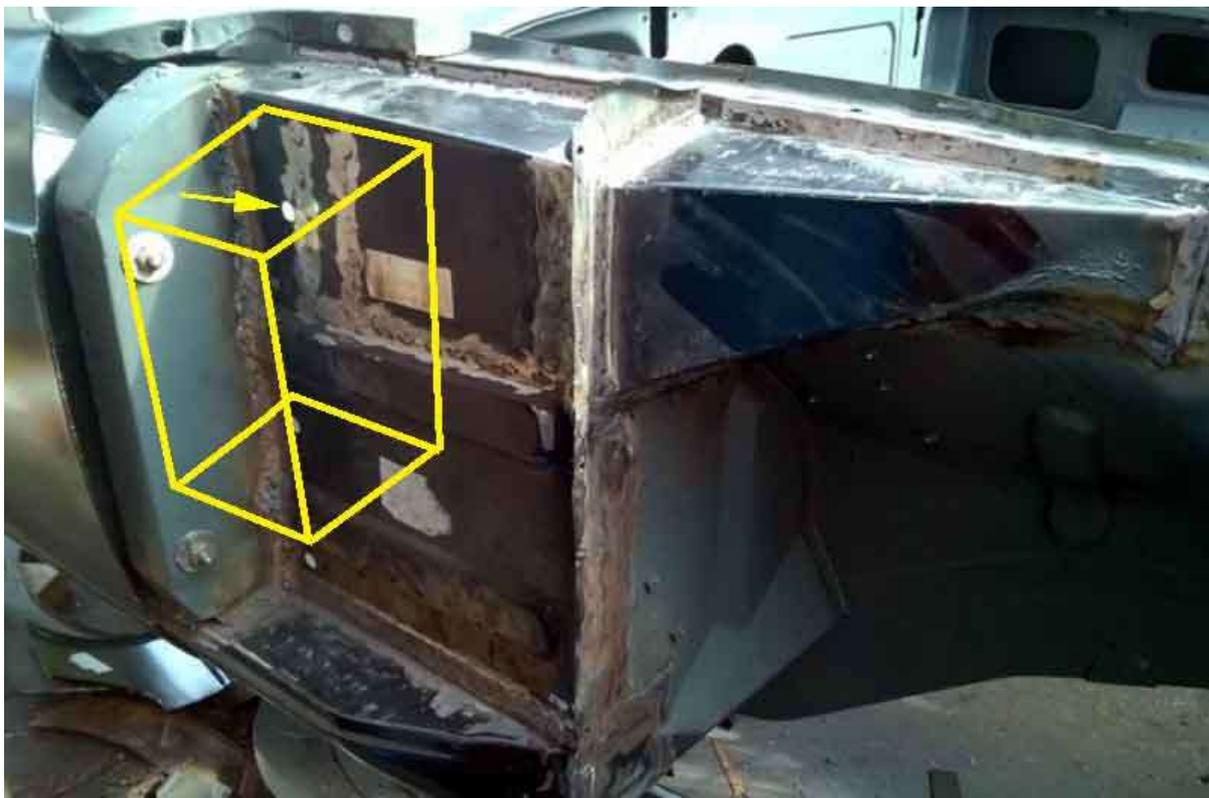
The bottom of the main splash panel with three bolts visible, the 4th bolt is out of sight where the very bottom of the panel turns under the sill.



Showing the box and 'trumpet' section and how they relate to other parts of the structure. This picture starkly shows the rot that can develop, in this case on a roadster. The top of the trumpet section (in front of the splash-panel) is the most prone as there is a flat 'shelf' that is a great receptacle for water, mud and salt thrown up from the wheels. The top of the box section is protected by the splash-panel, but can still rot as shown here. *Lyndsay Porter's 'Guide to Purchase and Restoration of the MGB'*.



Any retracting aerial, either manual or motorised, needs to be positioned somewhere inside the yellow box, in this case a GT. The arrow indicates the hole for the aerial cable, the four other holes in a vertical line close to the A pillar are for wing bolts. [KGC Engineering](#)



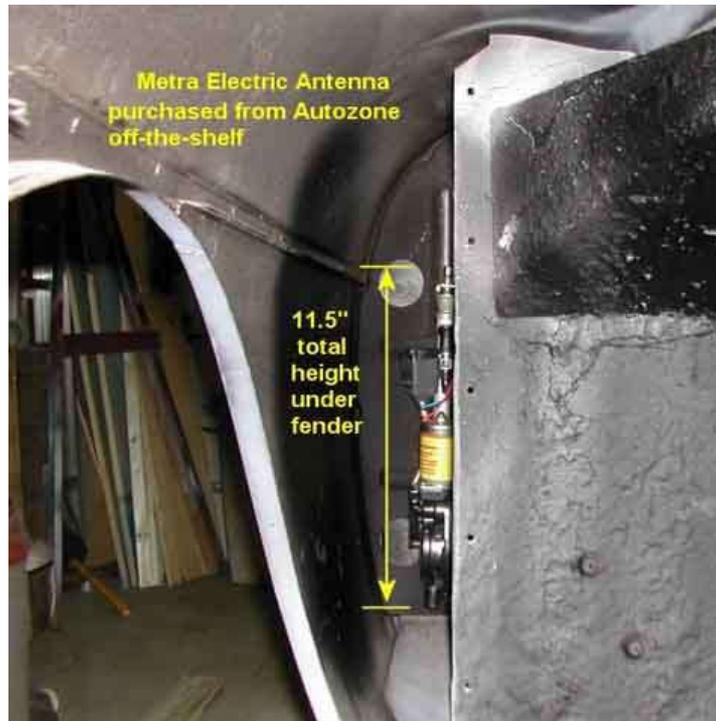
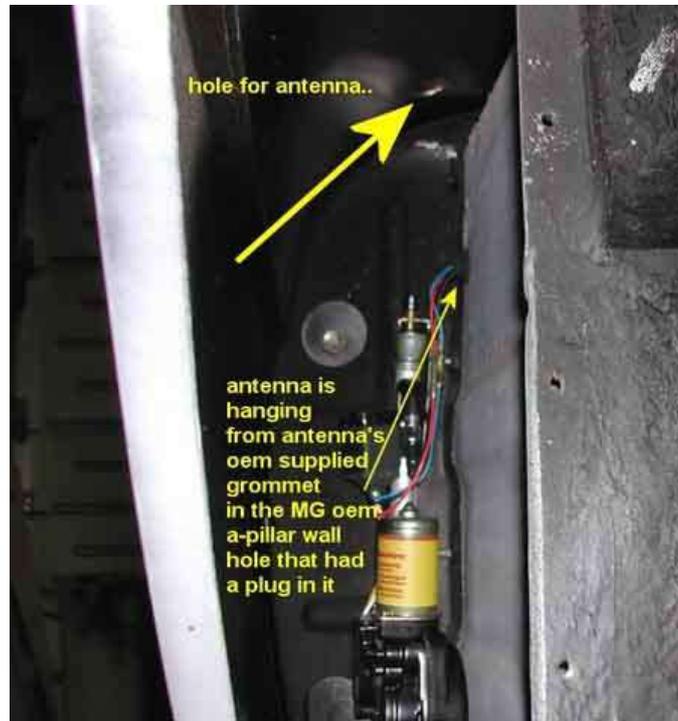
A general view of the position of a motorised aerial on my V8.



As long as you keep within about 4.25" of the outer vertical face of the wing you should be able to clear the box-section. The fore-and-aft position is much less critical, but you must be far enough forward to clear the A-post. You will also need a hole to pass the cable through to the cabin. My car came with the aerial so I don't know exactly where one had to be drilled or not or exactly where it is, but both the Porter photos seem to show a hole just forward of the A-post, and Paul Tegler (see below) also found a factory hole, ready grommited.



Paul Tegler's motorised aerial in the process of being installed. In these photos the aerial is significantly below its final position, and shows just how much room there is to work with. The first photo also shows the 'shelf' which forms the top of the box section adjacent to the inner wing. If you drill the hole any further in towards the engine compartment than Paul has you run the risk of being above this shelf, and so having to drill through the top of the box section as well, and the bottom of the box section will severely limit how deep your aerial can be.



Arm-rest Cubby & Centre Console

[Centre Console](#)

All models got an extended centre console with arm-rest and cubby under for the 1972 model year. This is my 75 V8:



Showing typical sideways play of the lid before fastening ...



... which can easily break the peg on the lid in its original orientation:



Peg removed from mounting plate ...



... turned round through 90 degrees and refitted:



Showing the clip after turning round through 90 degrees, and the curious recess and marks looking like blocked-up fixing holes (75 V8). Both peg and socket are slightly rectangular so some filing of the holes is needed:



If the underside of your lid looks like this, the socket is being pulled out of the base! Lever it off carefully using one screwdriver each side to avoid breaking the peg:



In which case you can fabricate a mounting plate like this to hold the socket more securely, which will drop neatly into the recess, as on my 73 roadster:



Centre Console: Original circular blank on the left, missing on the right:



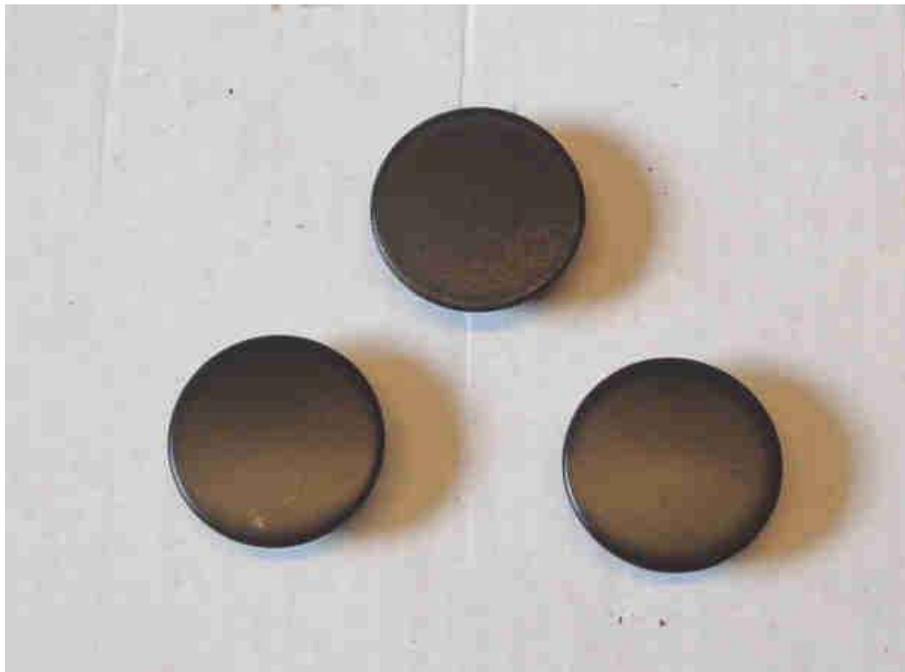
Original flat blank at the top, ACH9373 as received at the bottom, slightly domed:



Four 'legs' on each of the new ones bent out very slightly to grip the sides of the hole:



A splash of satin black:



One original and one new fitted, doming showing up as well as a difference in shade:



So both new ones fitted - but may still repaint them matt:



Chrome Bumper Over-riders

The all-chrome (this is a rear with provision for the number-plate light) have a welded bracket with nut inside for a standard bolt that comes through from the other side of the mounting iron: ([Moss Europe](#))



An original rubber-faced rear with long bolt under the facing strip:



Some suppliers have new rubber-faced with the long bolt already fitted: ([Sussex Classic Car](#))



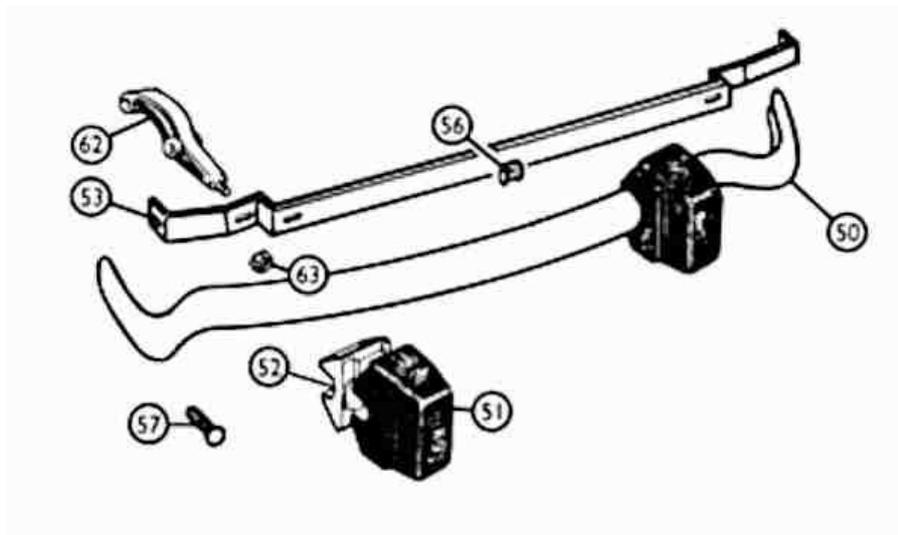
Long bolt BHH877B for the above type: ([Sussex Classic Car](#))



Some sell a kit of parts including the long bolt and facing strip, washers and nut; some needing this long bolt but without it; and some suppliers have the rubber-faced with the earlier welded bracket that takes a shorter standard bolt:



North American 1974 ['Sabrina'](#) rubber overrides to pass impact tests had a completely different 'spring' and mounting arrangement. The rubber over-rider with supporting structure (51, 52) bolts to the spring (53) immediately inboard of the mounting point for the spring to the bumper iron (62). 56 is a central distance piece between the spring and the bumper, there are other distance pieces for the over-riders and bumper ends not shown: ([Moss.com](#))



The bumper with three holes across the back instead of four (plus two in the ends as with all chrome rear bumpers). The over-riders bolt through the outer holes to the spring, and there is a single chrome-headed bolt in the middle (with support bracket 56 in the above drawing) bolting the bumper to the spring. Oddly this is from an [Australian site](#) but there is no indication (I can find) that these bumpers were used there:



Clausager says that they were moved across to give more clearance to the fuel filler cap, but that doesn't really hold water (I didn't fit the Sabrina style to my roadster of course, it just so happened that the best picture I found of the back was of a car of the same colour):

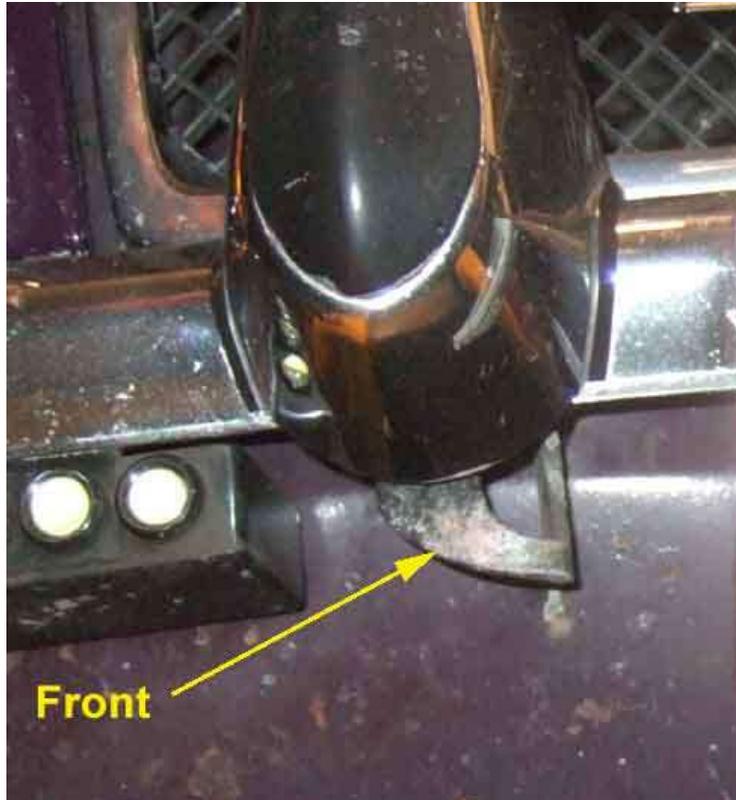


They **do** have more clearance, but that is because they are lower, they overlap in the vertical plane almost the same amount by the filler. It's my contention that the move puts the two mounting points on the spring - one for the over-rider and the other for the bumper iron - side-by-side instead of several inches away which will better cope with the impact test. The fact the spring was thicker as well tends to support that.

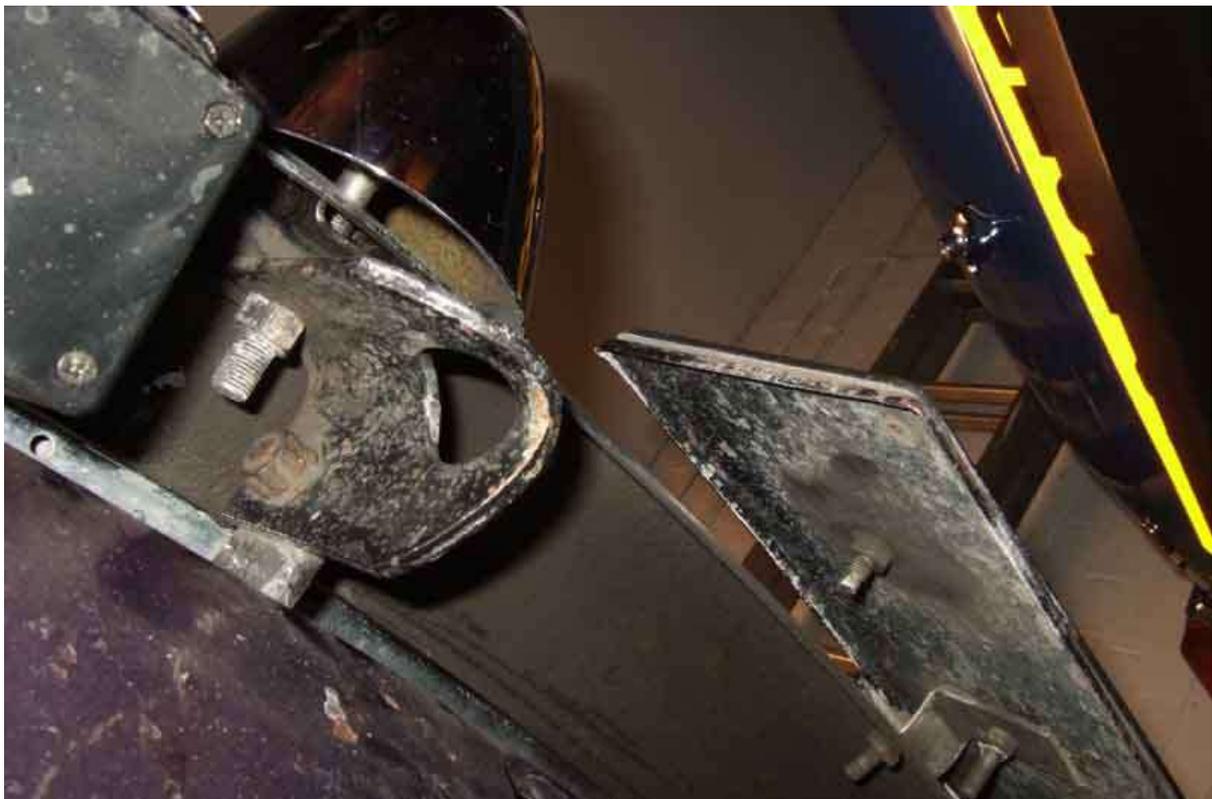
Lashing Brackets

Clausager says 'lashing brackets' were added to the front bumper on export MGBs at chassis number 107703 in November 66, and at the same time the towing eye (fitted from car 368 in July 62) was deleted from the front crossmember.

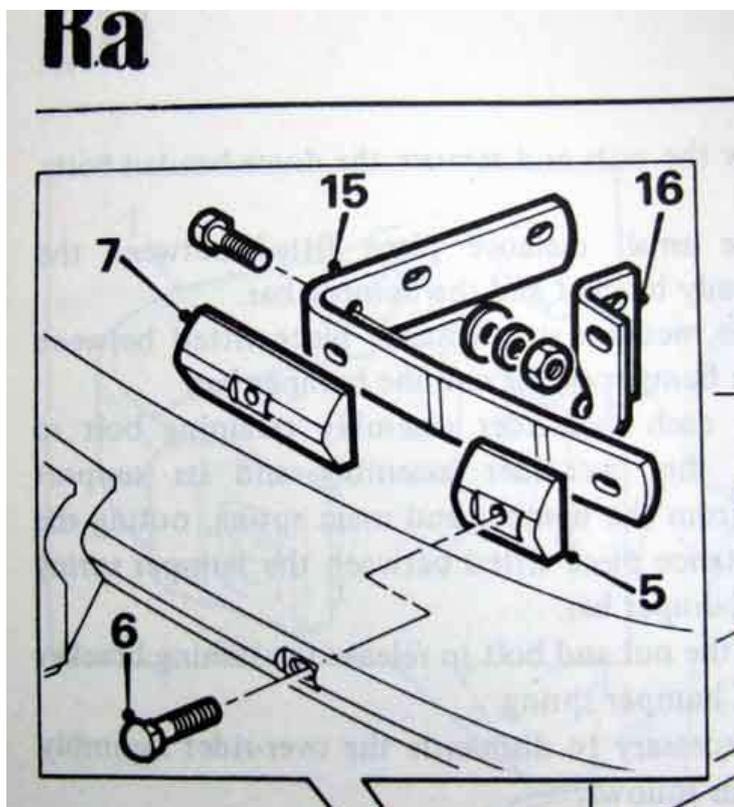
Despite the statement about 'export cars' Bee came to me with them fitted and they seem very common on home-market cars:



Attached using the overrider bolt and another at right-angles through the bumper spring:



The only 'official' reference I have found to these brackets anywhere is in the Workshop Manual page for the 'Sabrina' overriders used on 1974-model CB cars for North America, item 16:



MGCs had a different arrangement of a flat plate that extended through the valance to the front bolt that mounted the spring to the chassis rail, as well as the one straight through the spring as above. The hole for the chain or strap points across the car, as opposed to half-and-half as for the MGB. Various suppliers show this but only a couple give the part number as AHC40, described as a 'towing eye' which is not unreasonable. This type can be seen on early MGBs without front overrides - although in theory the later type could be attached using the chrome bumper bolts - front overrides only becoming standard in August 66. Series production of the MGC didn't start until December 67, so maybe MGBs had the flat type originally, changing to the curved at some point - presumably prior to the 1973 model year at least. Clausager writes that in June 1969 "Front towing eyes (plural) discontinued, replaced by lashing brackets", at MGC car number 8333. Was this when the MGB changed as well? Seems odd the two would be different. Clausager lists no other changes for the remainder of CB production: (*Motaclan/Leacy*)



Clausager says that lashing brackets were added to the rear of export cars at chassis number 107465 in November 66. Perhaps unsurprisingly Bee doesn't have them - although she does have the front ones, maybe they were used when being transported to dealers. These next two pictures of the brackets were posted on the MG Enthusiasts forum. Some apparently flat: (*Dave O'Neil*)



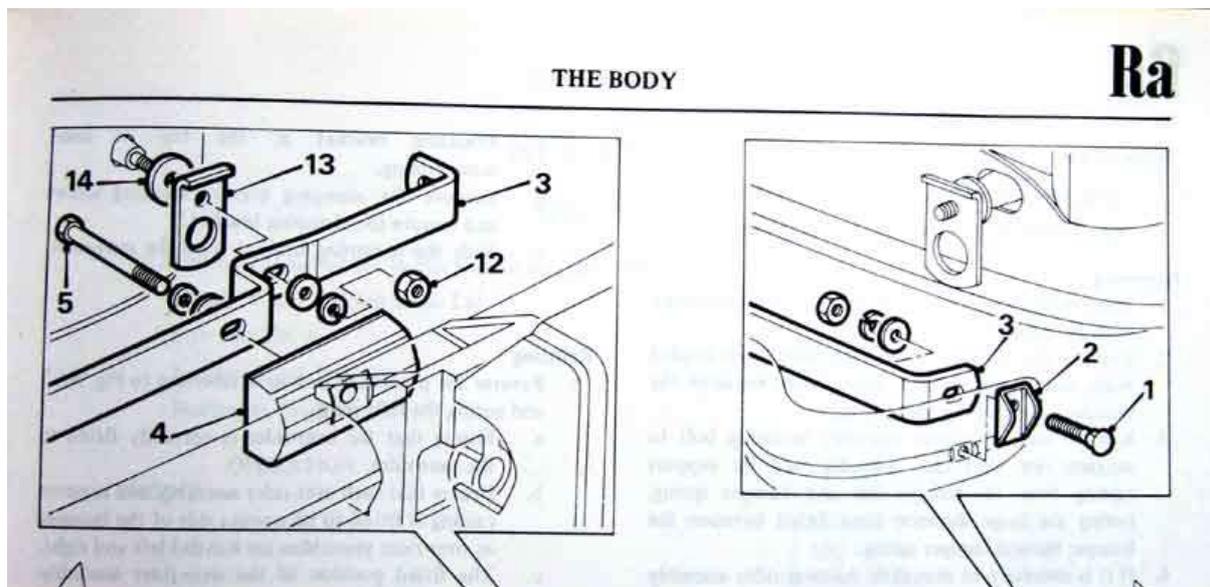
And others curved: (*William Revit*)



Shown quite well in this picture, which also shows the North American half-bumpers for 1970: ([Historic Motor Sports](#))

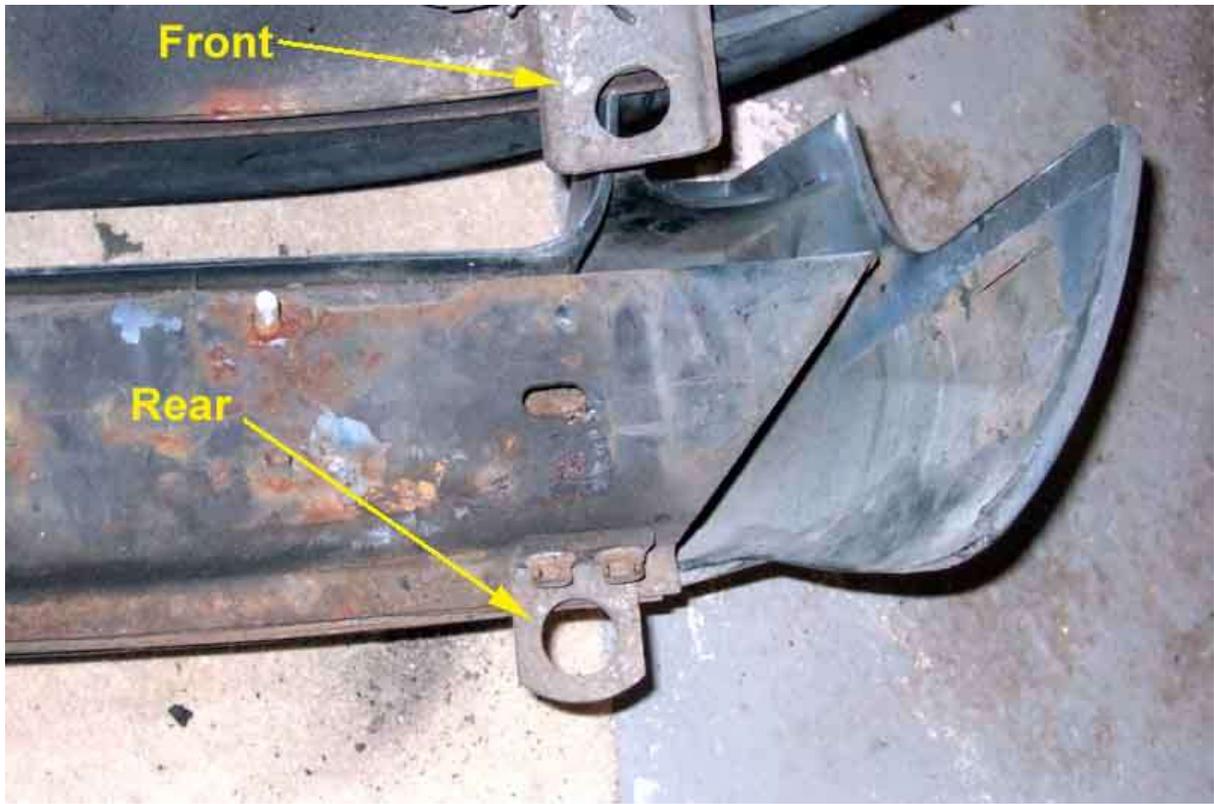


There has been debate about just how they were fitted i.e. whether they went on the chassis rail bracket before or after the bumper spring, with the tab resting on top of the spring. This again from the Workshop Manual on 'Sabrina' overrides shows flat ones fitted to the chassis brackets before the bumper springs:



However the curved ones are such that it must have been after, with the tab resting on the back of the spring the lower part pointing backwards, and in any case if they went on first it would space the bumper back on cars with them compared to cars without. Also if they were intended to be fitted and removed for shipping it would be much easier to remove just the nut and washer to get the lashing eye off, than have to remove the whole bumper. As to why they were curved, the flat ones are visible in photos of the rear of the car, maybe the curve was just enough to tuck them up out of sight unless you squatted down. Renders them unsuitable as a towing eye though, which the flat ones might be able to do.

Rubber bumper: Vee has them both front and rear, attached direct to the bumper armatures as you can see, although again they aren't shown in the Parts Catalogue or the main suppliers websites:



Rubber Bumper Mounting

Front bumper, two studs (FHS2614 with plain and spring washers and nuts) each side with slotted spacer plates (as required):

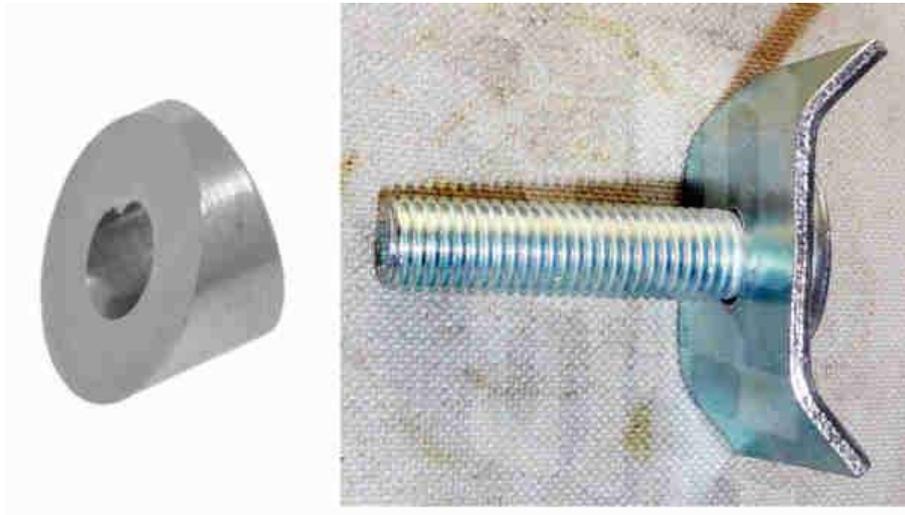


Mounting points through reinforcing plates on the rear valance - two studs as above each side and the upper one in the middle. The upper ones go through into the boot space and the others below the floor:



An odd (in both senses of the word) hole one side above the cut-out for the exhaust which seems correct for original panels, some replacement panels have a matching hole on the other side. One each side is needed on CB cars with the number-plate lights in the over-riders and in the ends of the quarter bumpers for North America in 1970. Non-North American models from Jan 1974 had them mounted on the bumper itself, close together below the number-plate, so these were possibly daisy-chained with only one cable going through the rear panel instead of two, but the Parts catalogue doesn't bear that out. RB always had them on the number-plate backing plate on the rear panel wired separately. That one hole could be a hang-over from the end of CB production, but bumper mounting and hence that part of the panel was completely different so that doesn't make sense.

Side mount spacer BHH1576 and bracket BHH1575: ([Moss Europe](#))



Fitted, these do not need to be removed from the panel to remove the bumper, it simply slides off:



Slot in rear bumper that engages with the above bracket:



Mk1 or Mk2?

Mk1 tunnel with a pronounced hump on top of the tunnel in a large removable panel round the gear lever: ([MGBs Made in Australia](#))



Non-OD on the left with the lever at the front of the oval rim ring, OD on the right with the lever at the rear of the trim ring: ([Clausager](#))



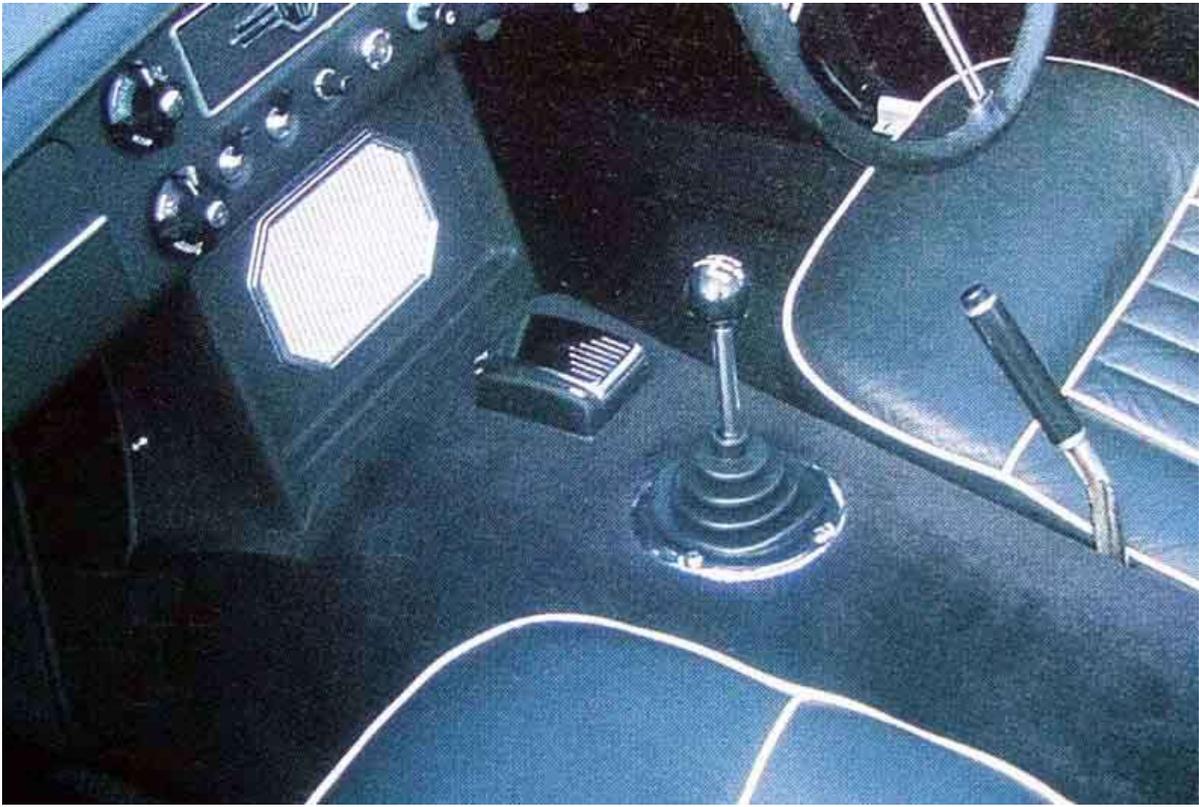
Mk2 tunnel is wider with a flat top, with the lever in the same position on both OD and non-OD. There is a small removable panel HZA1431 screwed to the tunnel:



Removed - suppliers show gasket AHC188 under it and I did find that on a 78 sitting on the metal tunnel but both Bee and Vee have thick insulation there which makes the gasket pointless:



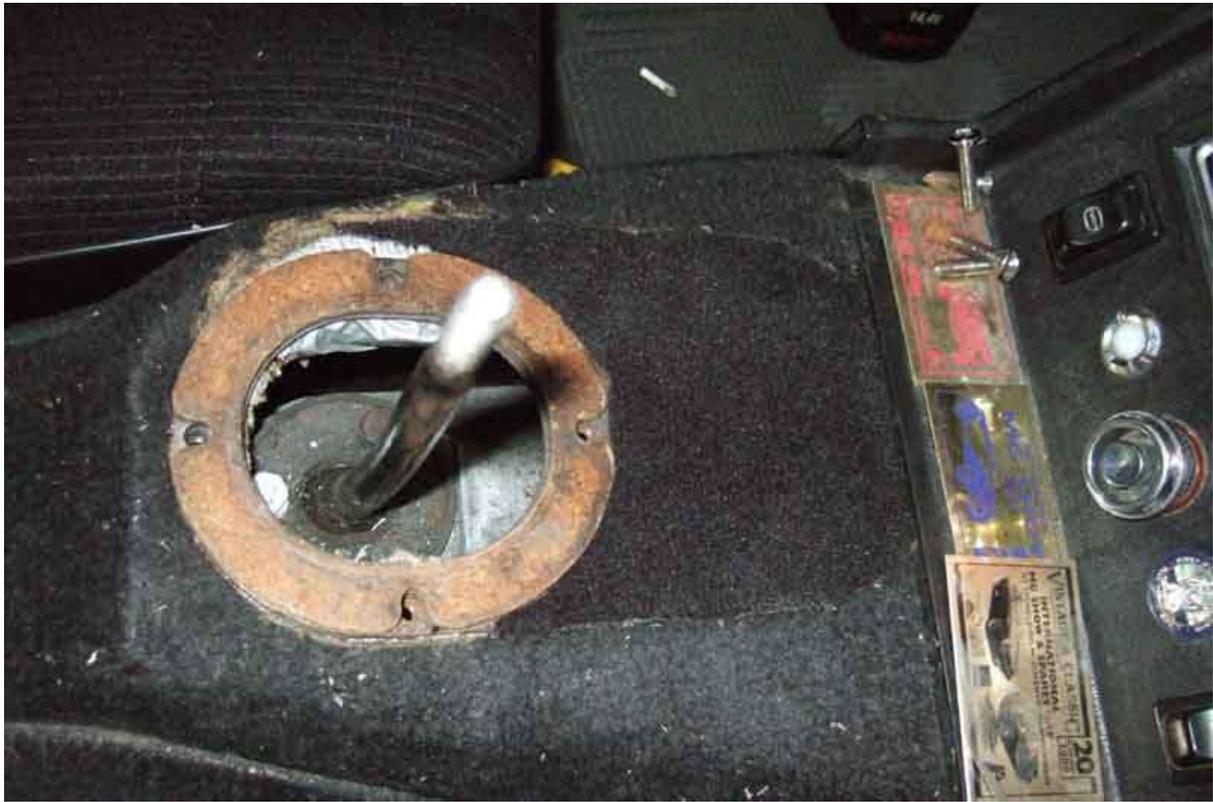
Early Mk2 lever in the same position for both OD and Non-OD: (*Clausager*)



Mk2 with the 72 and later centre console. What the rubber bit at the top of the gaiter is I have no idea, it came with the car - possibly hiding a bit of rattyness at the top of the gaiter, but like steering wheel and the gear knob it seems churlish to replace that part of the car's 'character':



With the 72 and centre centre arm-rest the tunnel carpet can be cut to allow removal of the small access panel without pulling the carpet back, saving a section of carpet to drop back on top for noise insulation:



A 4-synch gearbox can be installed in a Mk1 car but the large removable panel on top of the tunnel needs a section inserted to move the hole back for the 4-synch gear lever, as indicated by the arrows:



Carpet/Mats

['Starter Cover' Mat](#) [Rear Cockpit](#) [Boot/Hatch](#)

'Starter Cover' Mat: Or RHD clutch foot-rest cover. In the right-hand footwell, a moulded rubber mat covering the tunnel bulge for the starter motor. AHH6443 for Mk1, AHC98 for Mk2: ([Moss Europe](#)).



I'm pretty sure Bee didn't have one when she came to me, so I made one out of an offcut of thin carpet I'd used in a couple of other places (left), which has stood up very well to 32 years of use. Vee had one but quite ratty and hanging loose, I glued it down at one point but it's beyond repair now, so goes on my list of parts for the next order:



At least it was, until I thought "Why not?", pulled the old rubber mat off and used it to create a card template, then trial-fitted that cutting slots and darts as needed, then used that to cut a piece out of the left-overs from Vee's [load-space cover](#) and glued it in:



Rear Cockpit: Separate chassis rail carpets fabricated and glued in as the arch carpets were not long enough to go over them. They were also flat and the only way I could get them to fit anything like reasonably was to [cut a couple of darts](#) in the sides. Note the darts have to be cut out, and not folded over as in thin material.



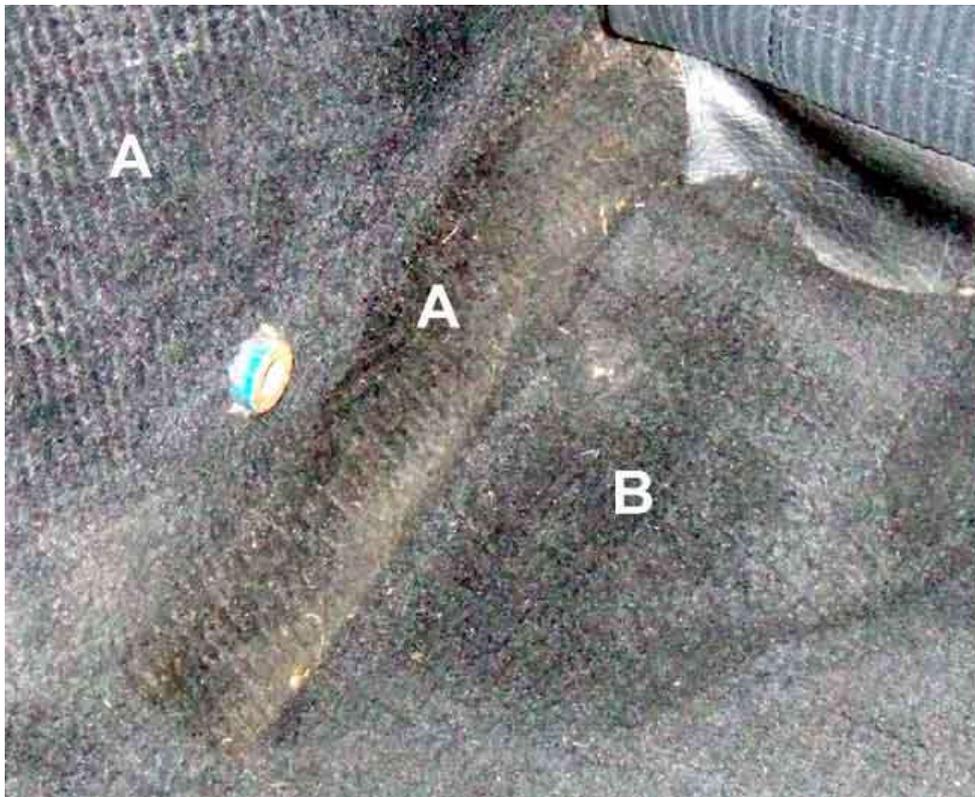
Darts not ideal:



The V8 arch carpets, which I'm pretty certain are original, are not only moulded but the sides are long enough to go over the chassis rails and under the battery cover carpet. In fact the battery carpet press studs are riveted to the floor through the edge of the arch carpets.



'A' is arch carpet and 'B' is battery cover carpet.



A GT section posted by 'R & M Hare' on the MGOC forum in October 2021, these appear to cover the arch in the cabin and in the load space, the slot being for the bracket that the rear seat back latches go behind. Will they cover the chassis rails as on Vee?



He/She/They was/were asking where the bits upper left went, I wondered if they were for the boot floor extensions as below, and/or for the inside of the upper half of the wing. I suggested fitting it over the arch and bracket, and see where those pieces wanted to lie! No response.

Boot/Hatch: Bee and Vee have separate sections aft of the arch for the side extensions of the boot/load space floor. Left-hand piece, the larger section lies on the flat floor, the tapered section up past the rear light unit covering the wiring:



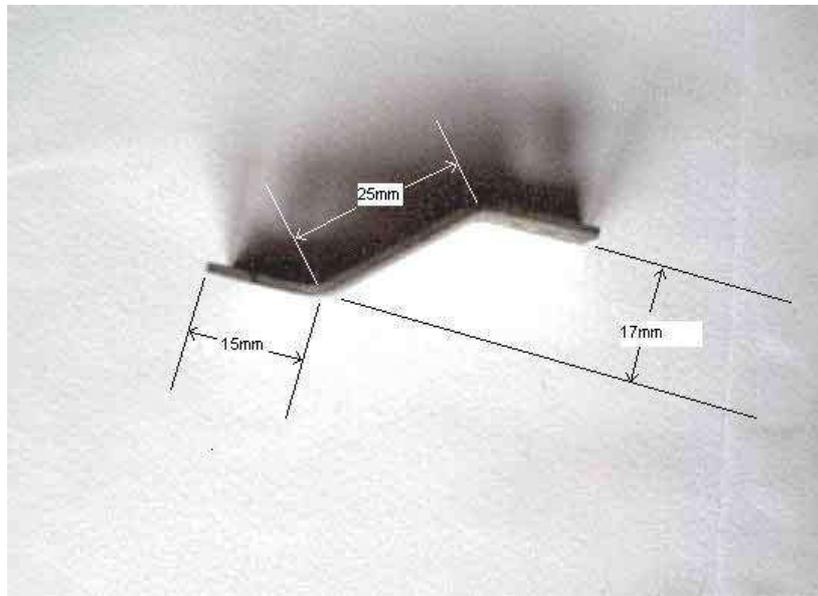
Plastic push-in fastener, serrated, not threaded:



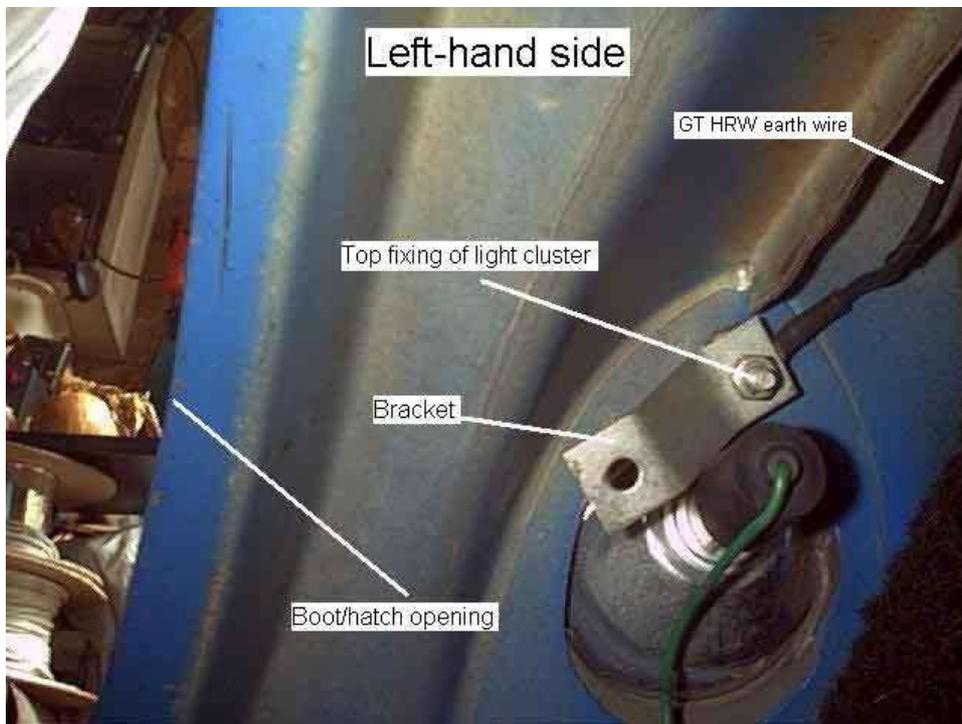
Bracket attaches to the top light-unit bolt and the plastic fastener pushes in to it ...



... with dimensions



Bracket attached and ready for carpet and fastener



Main Wiring Harness

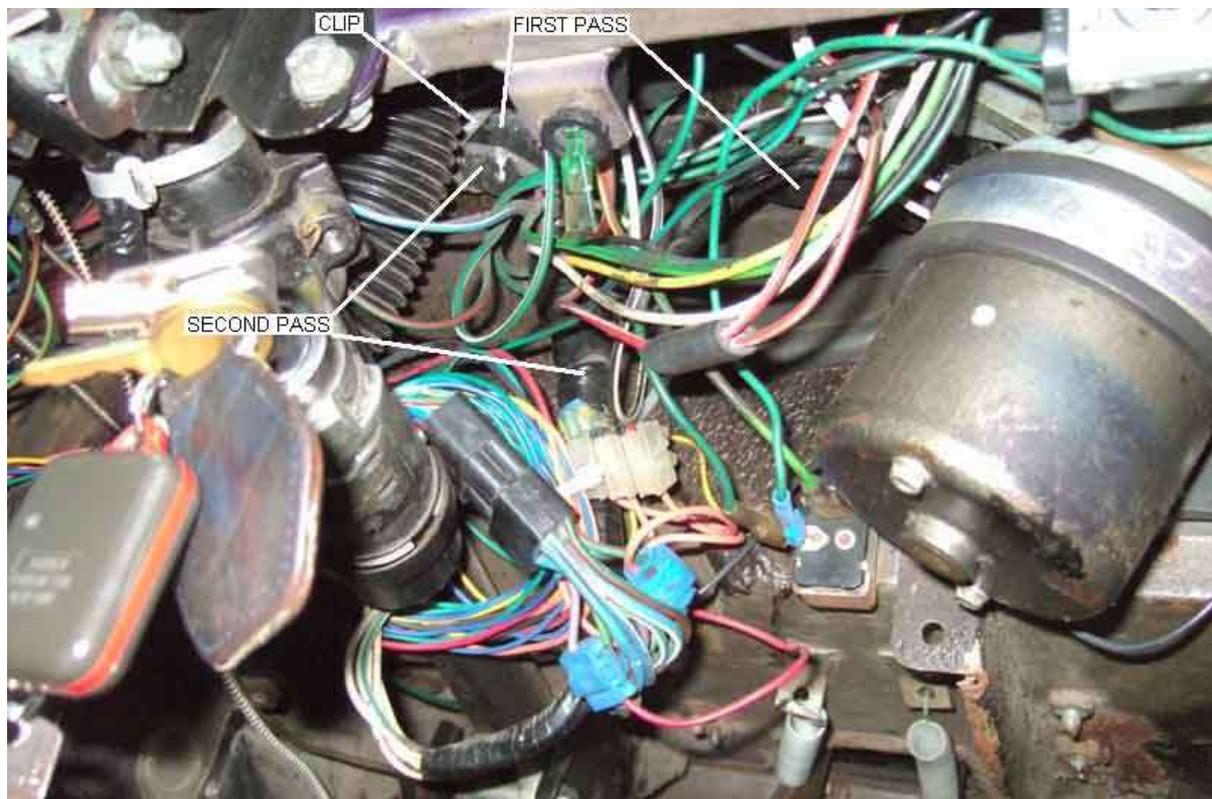
[Main, rear and gearbox harness interconnections](#)

Showing the main harness coming across the firewall behind the wiper motor, before looping back down and through a clip mounted below the motor for RHD. Basically the same harness was used for LHD but going across the firewall to the other side: (Richard Coombs)

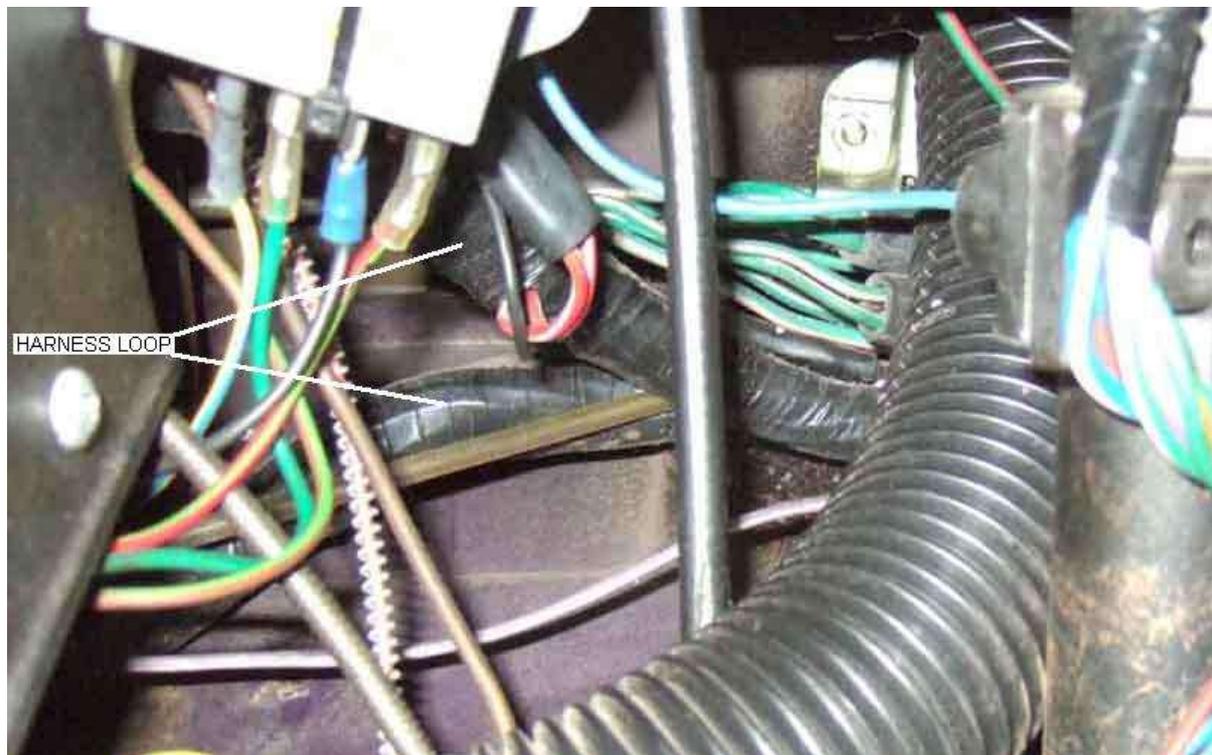


Note that the wiper rack goes through the wheelboxes under the spindles, not above.

However mine seems to pass through the clip twice - once on its way towards the left, then again after it is looped round and comes back to the right:



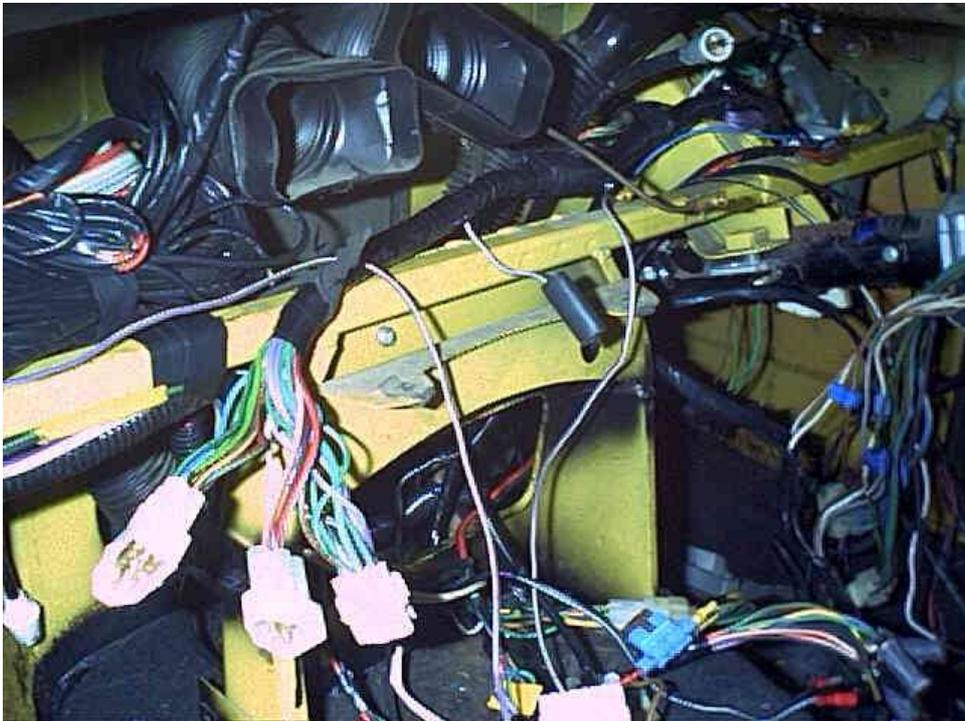
Whilst I had the dash off when I repainted the car I'm pretty sure I didn't disturb the routing of the main harness:



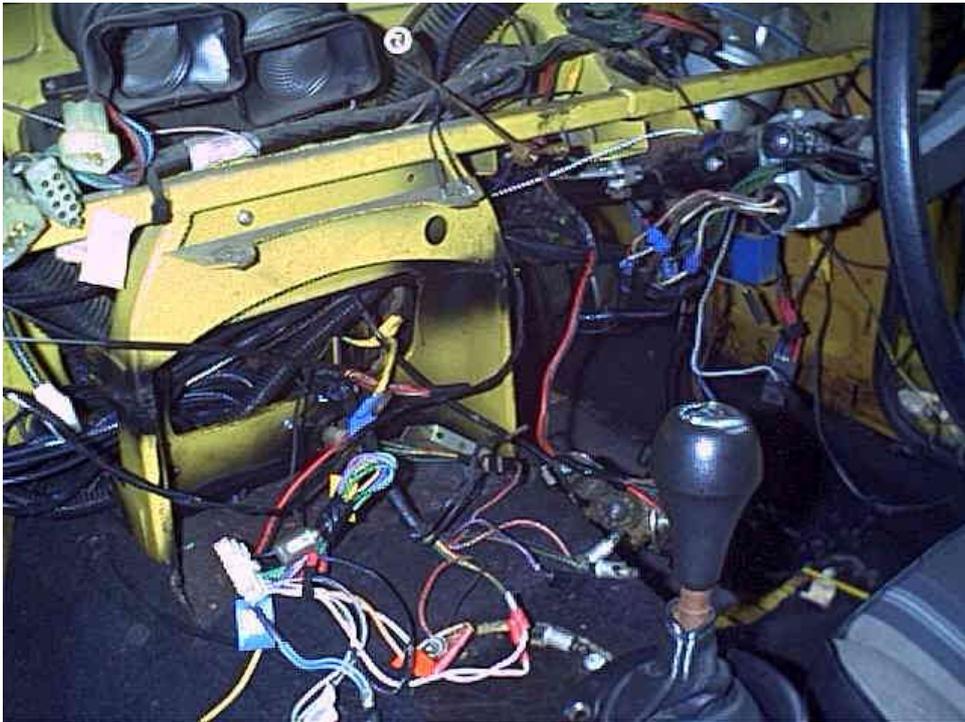
There is just too much additional wiring behind the dash of the V8 to get anything remotely useful, this 1980 I rewired is a bit clearer with the dash out, and by this time RHD and LHD were so different they had unique harnesses so no loop with the RHD. The connectors for the column controls are by the wiper motor, and the main harness goes across over the steering column bracket not through the hole:



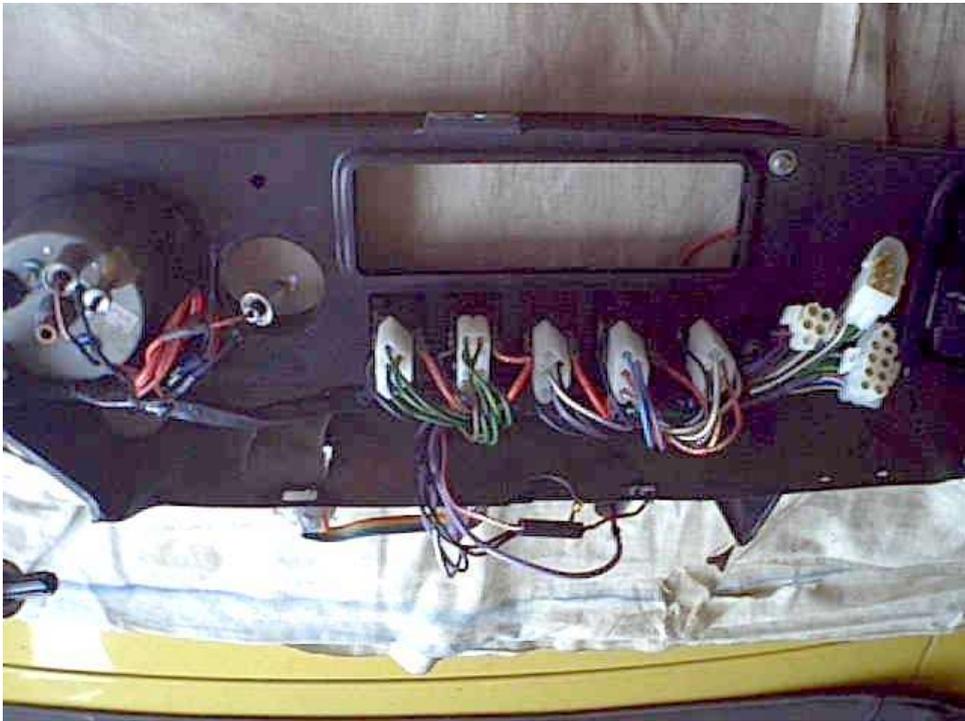
Ending just past the centre console with the dash sub-harness connectors. The loose door switch wires run along the square-section bracing bar to a 4-way bullet connector, they are not part of the harness:



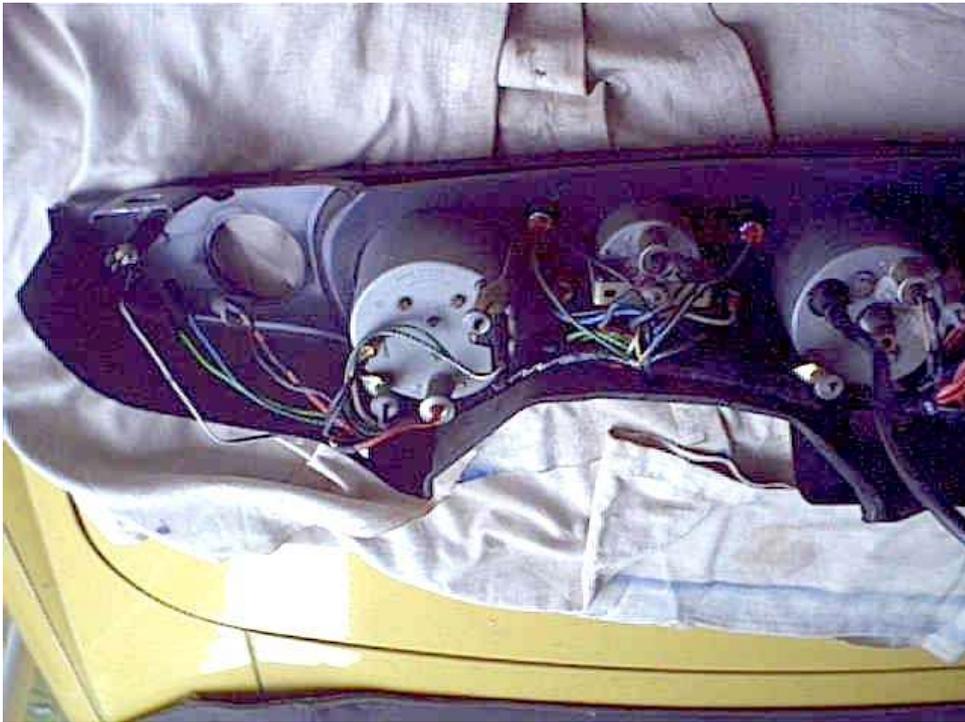
A spur comes down off the main harness behind the console for the console controls:



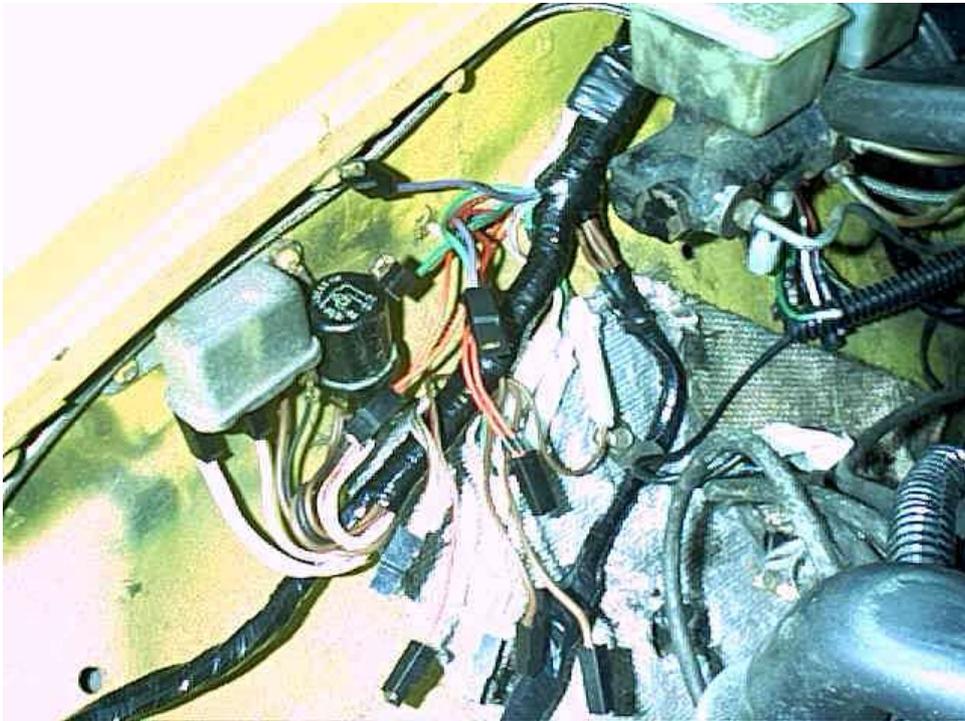
Dashboard sub-harness to the switches:



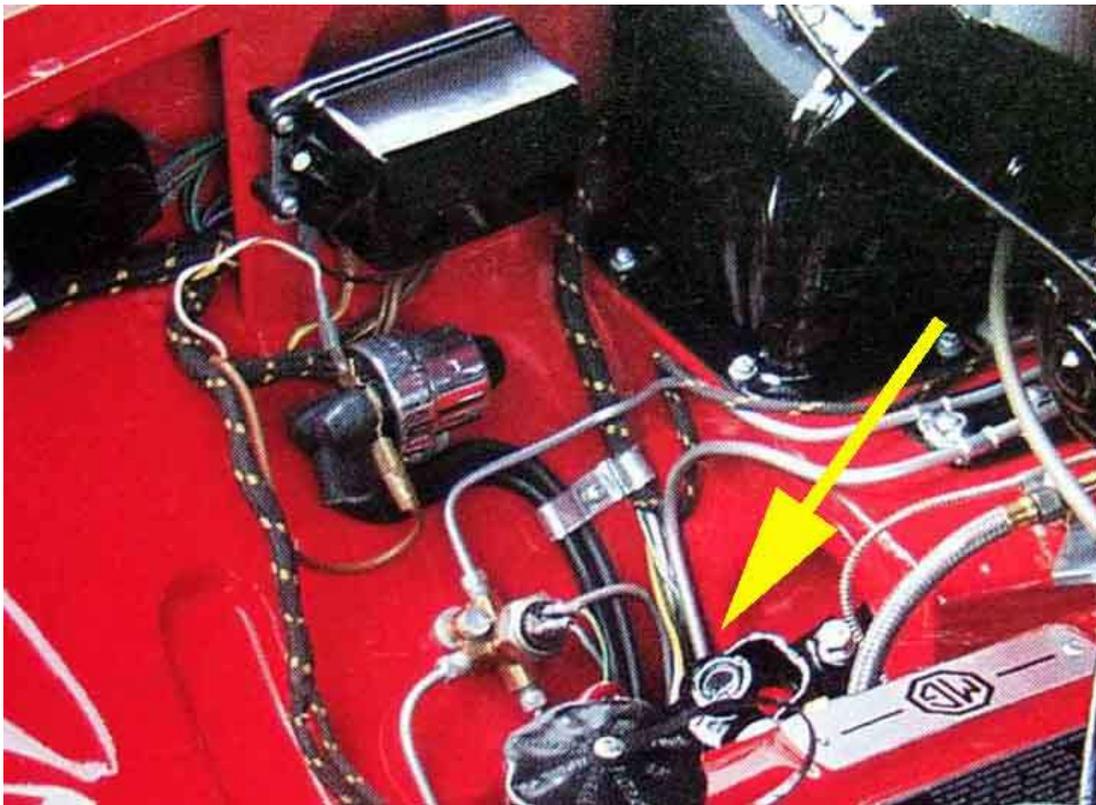
And to the instruments:



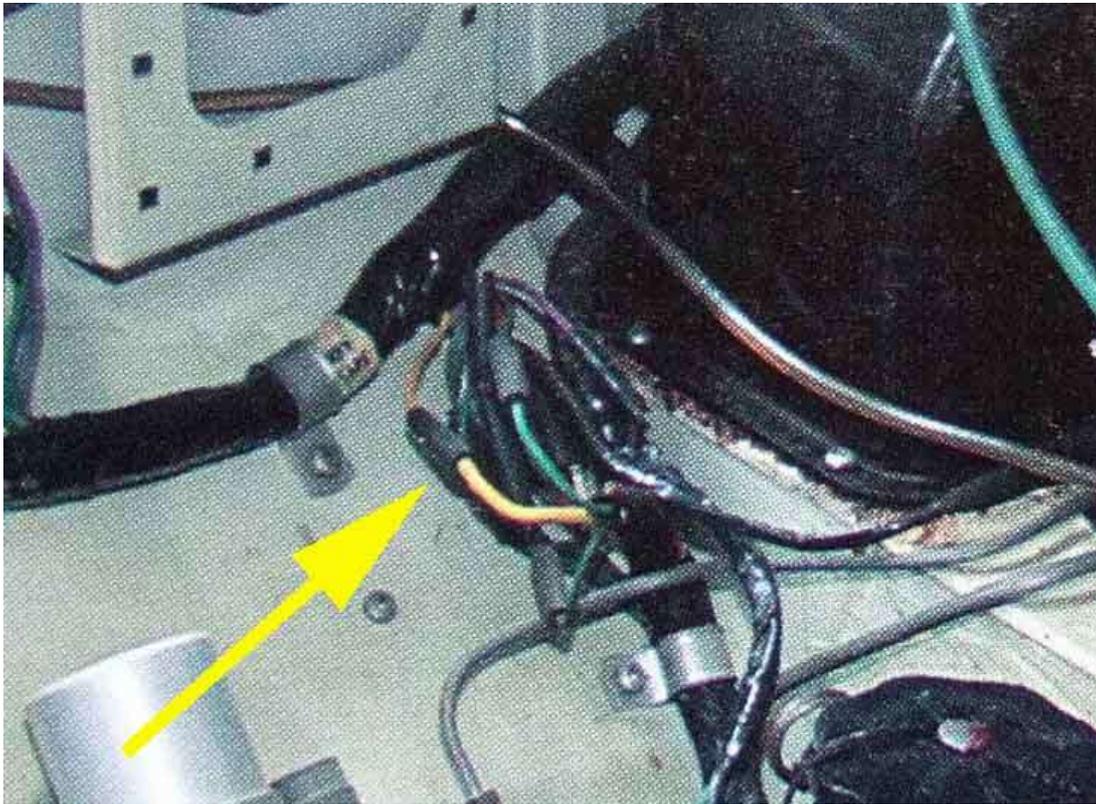
Engine compartment, relays in-situ, fusebox goes between them and the brake master:



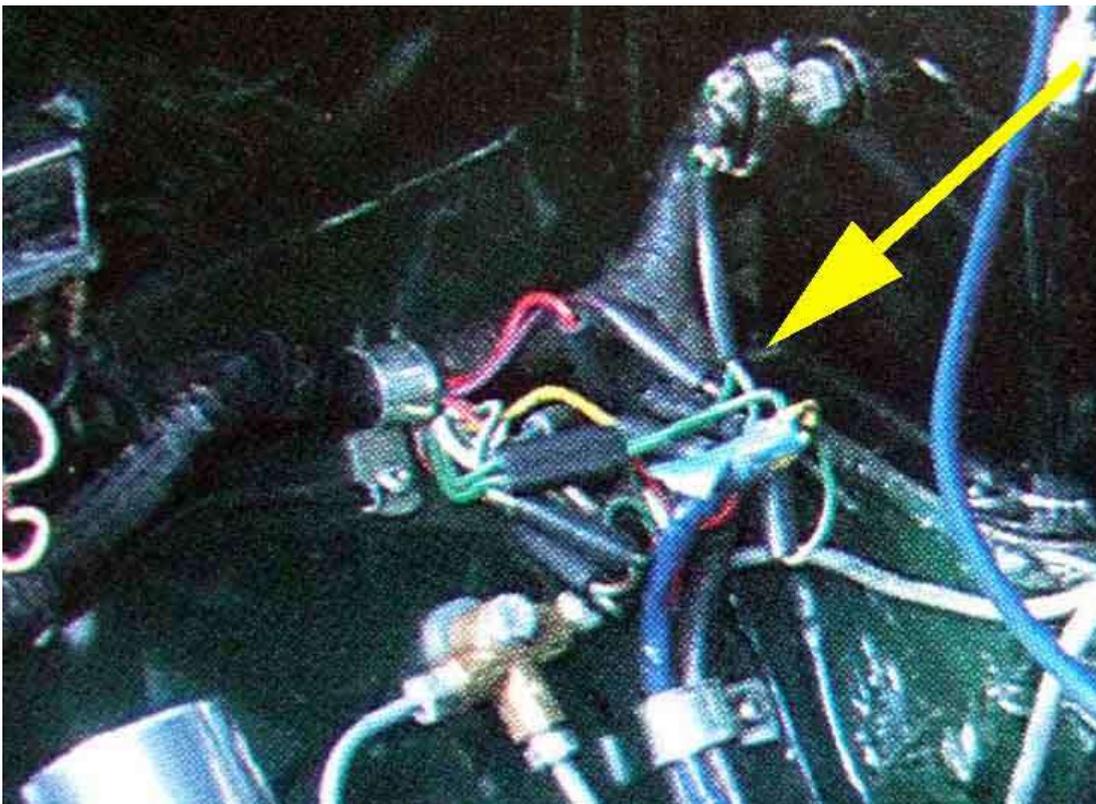
Main, rear and gearbox harness interconnection: In these images from Clausager this 1965 looks like it has a long tail on the main harness with connections close to the steering column UJ:



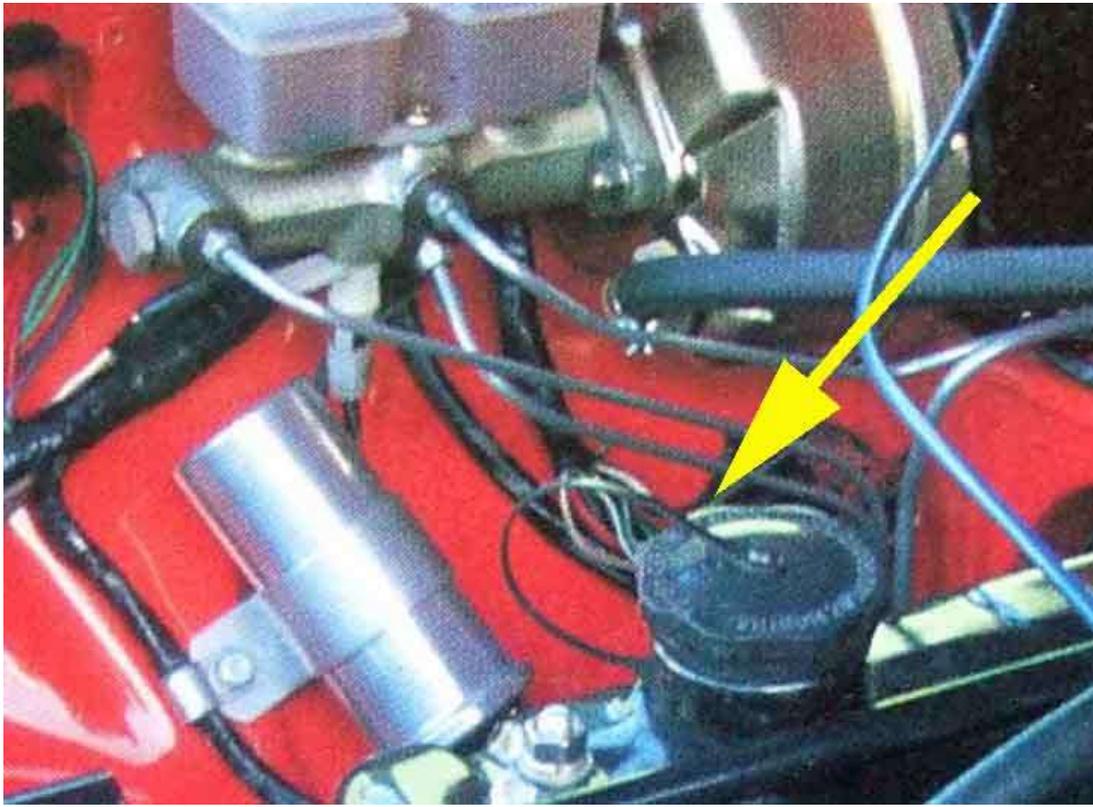
But in this 1969 the connections are only just below the main harness:



Where they stayed through 1973 and this 1975:



Until for 1977 with the longer brake master and servo assembly again there is a long tail with connections close to the steering column UJ:



The V8 also had them my the main harness:



Cable and Pipe - or 'Services' - Routing

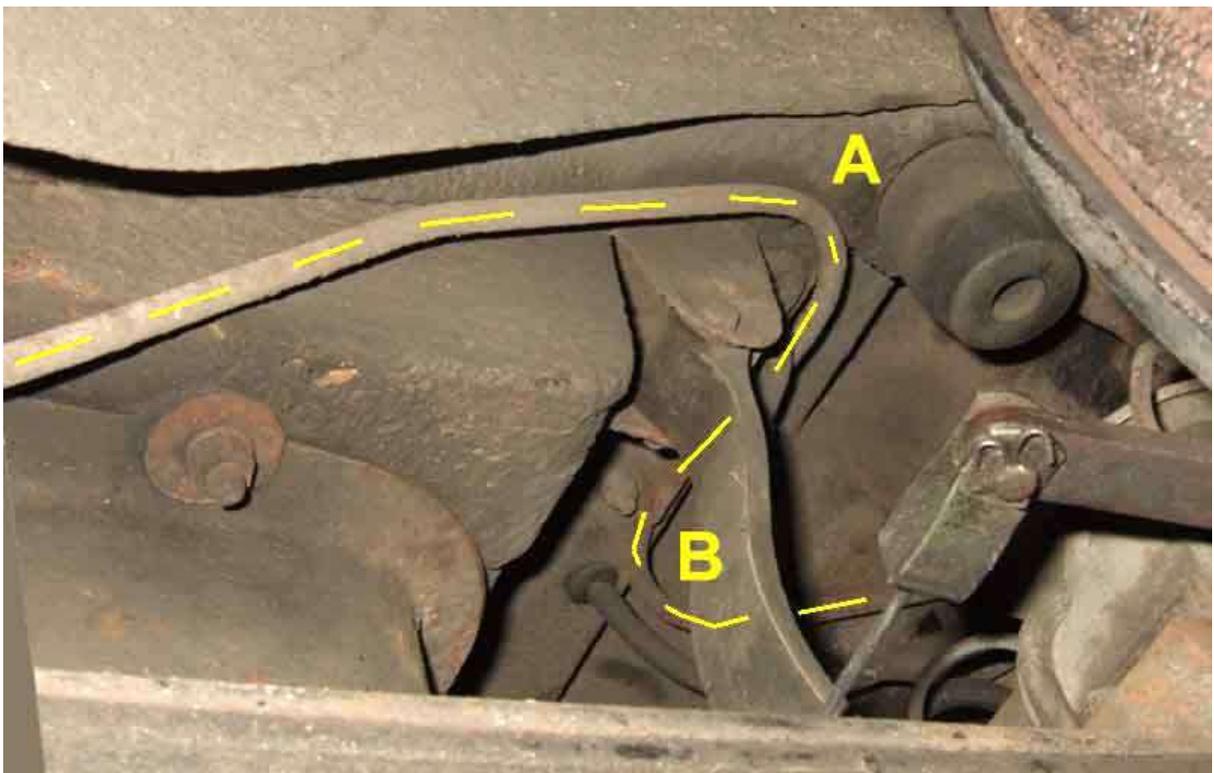
Bulkhead holes and grommets

Tank to Pump Pipe - CB and [RB](#), [pump to carbs](#), and [body harness](#), and [boot/loadspace](#):

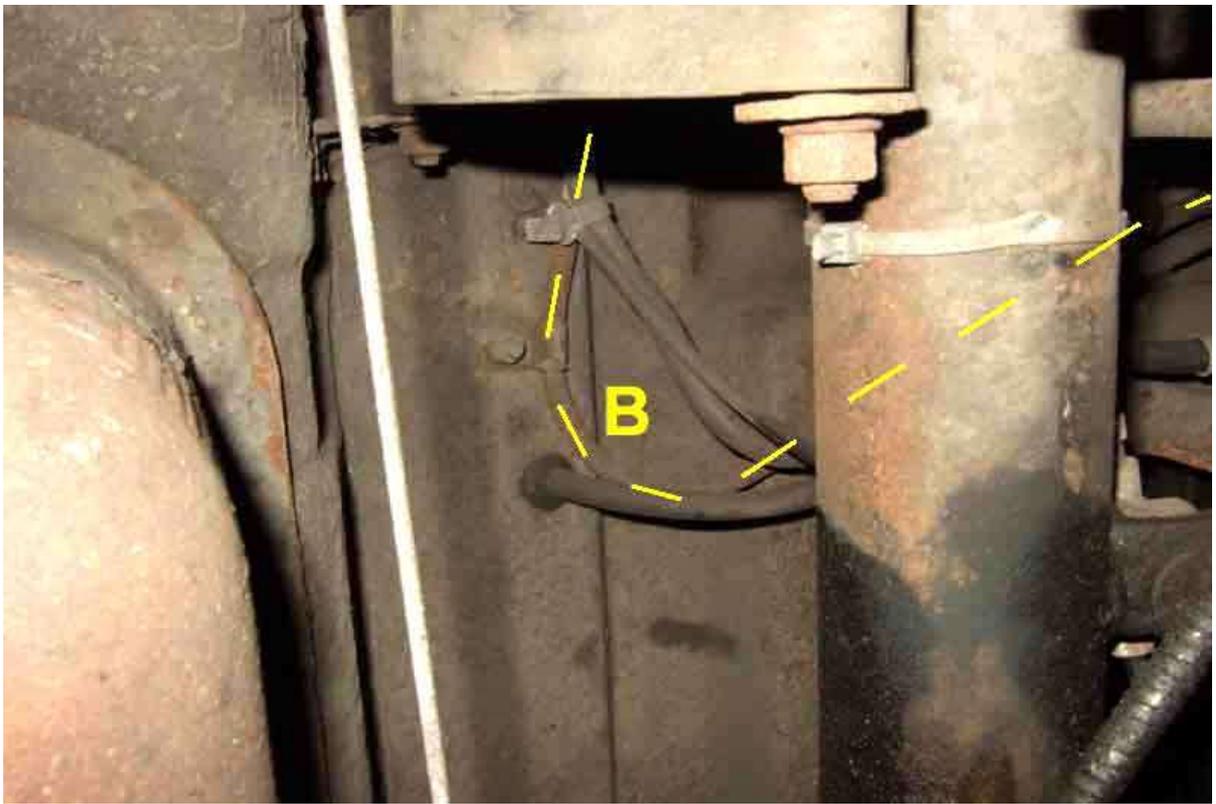
CB: Alongside the tank, round the axle strap towards the middle of the car:



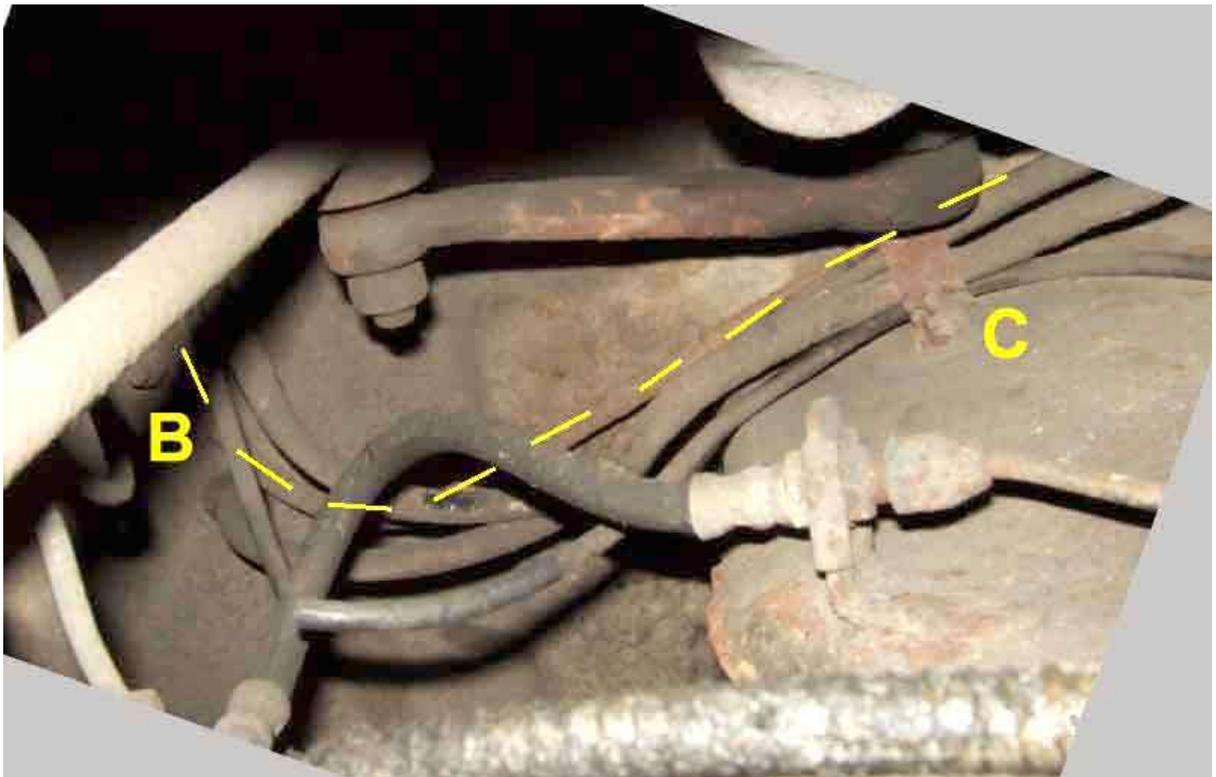
Then turns over the axle:

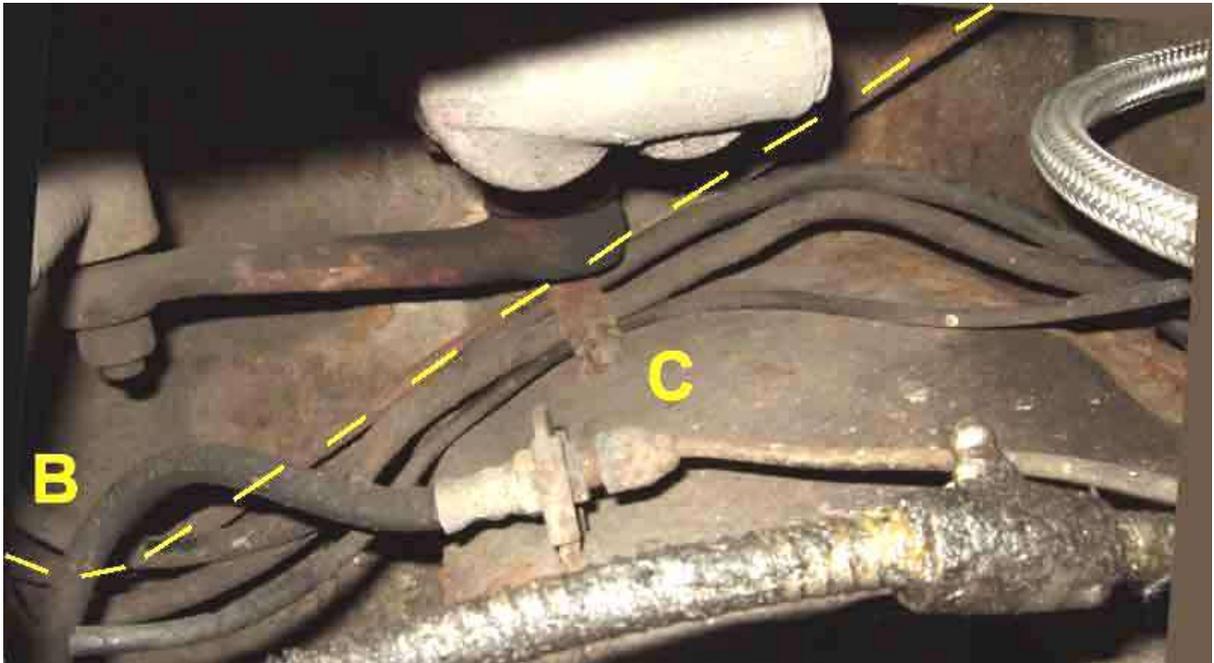


Picking up the harness and a pump breather tubes:



Alongside the battery box:

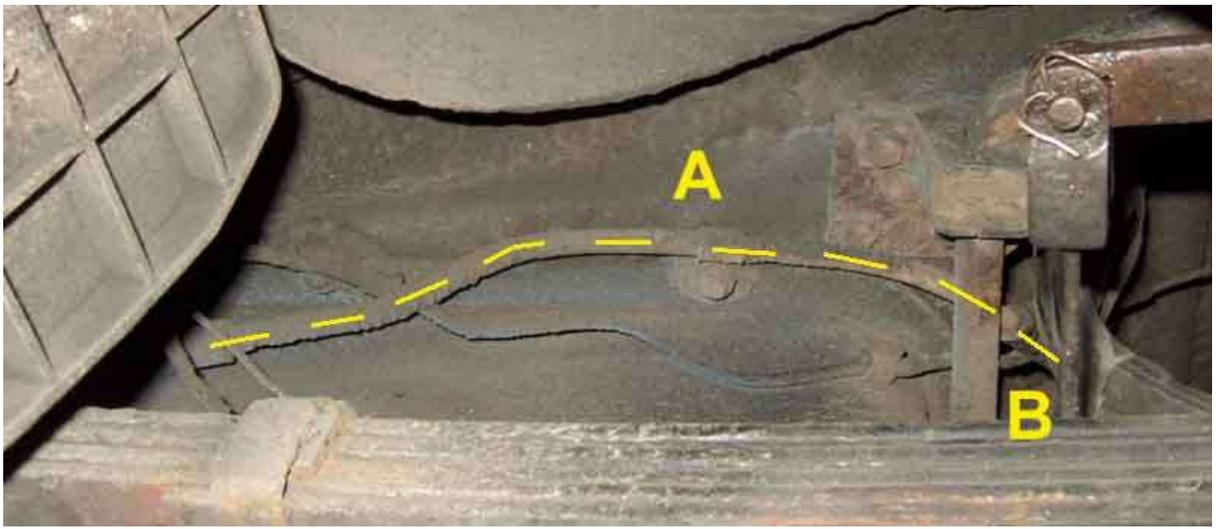




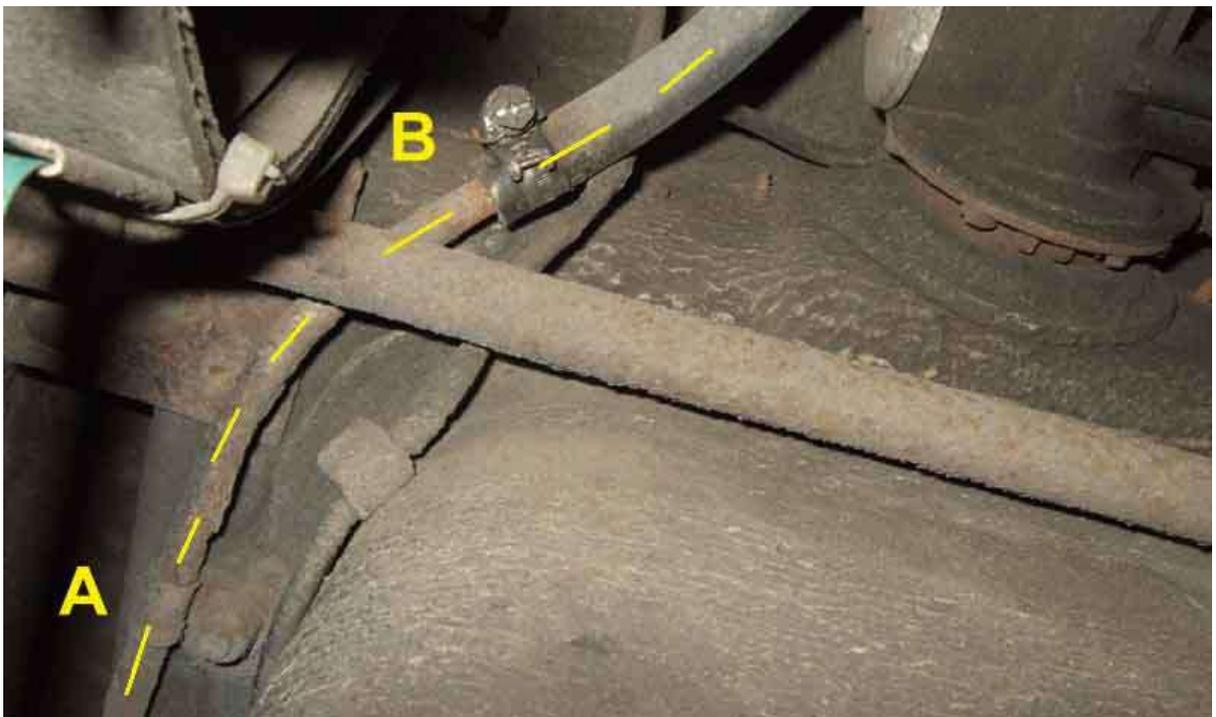
To the pump (note braided hose replaced with plain):



RB is much simpler



Going back to a hose



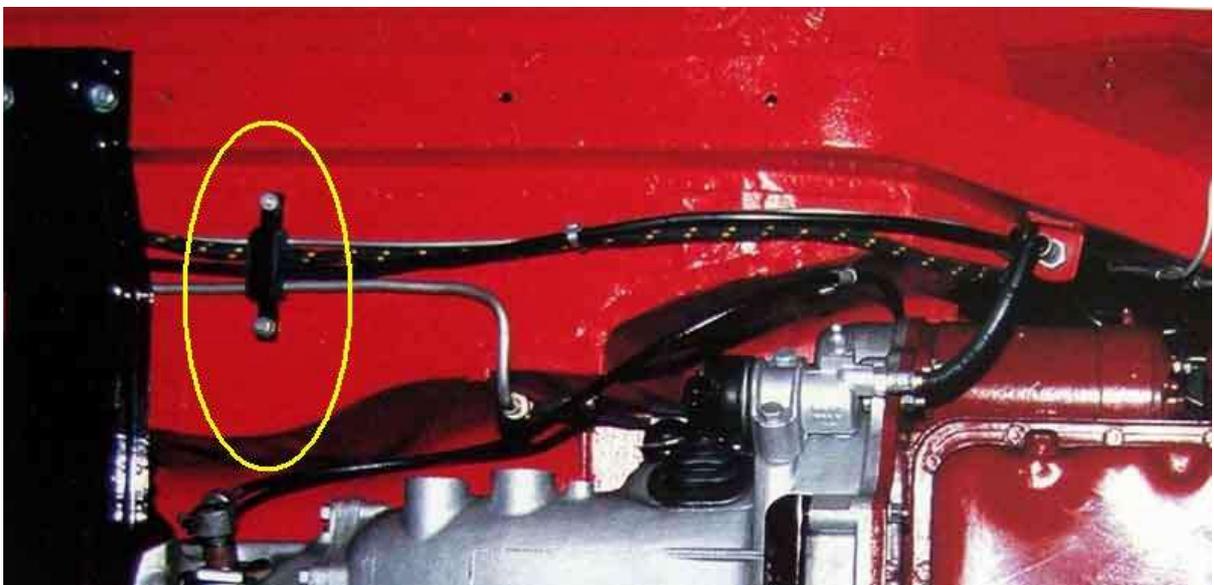
To the pump:



Pump to carbs - the rear two small and larger comb:



The small comb in front of the gearbox crossmember on Mk1 cars ...



... and on Mk2 cars with the wider tunnel. The end of the strap fits through a slot in a tab welded to the side of the tunnel. This also shows how the rear harness is routed alongside the other three with P-clips instead of going through the same small combs, this one and the next one back being riveted to the side of the chassis rail:



The rear harness now passes through two grommets in the fixed crossmember instead of a channel and comb with the other services:



And through P-clips attached to the outboard comb retainer in the other two positions aft of the fixed cross-member:

**Boot/loadspace:**[Earthing points](#)

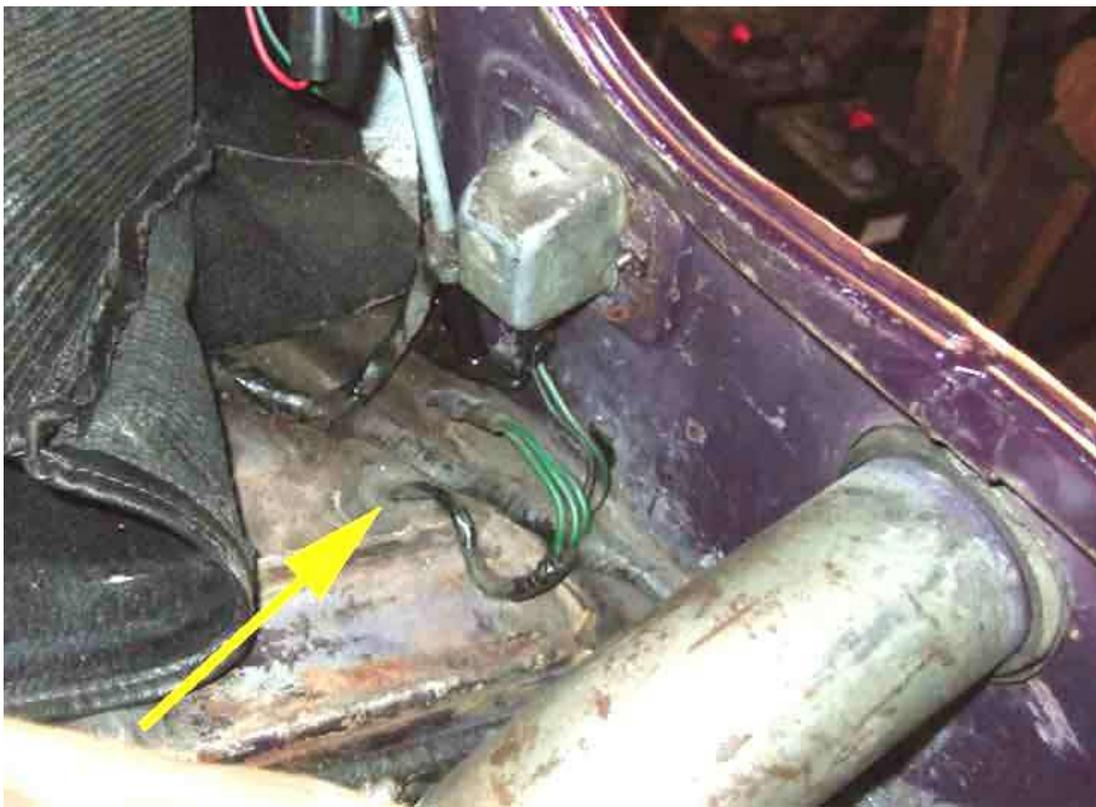
On roadsters the harness enters the boot on the 'shelf' and goes up the rear bulkhead (two spot-welded tabs with plastic sleeves) and over the arch (two more tabs), then along the join between the outer wing and the boot side floor to under the off-side light cluster (one P-clip on the lower inboard stud). Then along the join between the rear panel and the boot floor (two more tabs) to the near-side light (and another P-clip on the lower inboard stud: *(MGste)*)



On GTs the harness travels back along the floor (clipped), to the offside light cluster, then as for the roadster: *(Clausager)*



On CB cars the tail to the fuel tank sender stays in the harness until the back of the boot floor, then goes out through a hole by the off-side light cluster:



Under the bumper iron and chassis rail:



And forwards to sender, clipped to the edge of the tank:



RB cars still have the hole at the back of the boot but with a plastic plug:



But the tail leaves the rear harness under the floor near the fuel pump and travels back to the sender (yellow arrows). However that's only the gauge wire, the earth wire (green arrow) is separate. The Leyland schematics show the earth wire going back to a number-plate bolt on both CB and RB, but this one (1975) is screwed to the underside of the floor nearby. 77 and later cars did not have an earth wire for the sender, were all RB the same but when the factory found only one wire to put on a sender with two spades they added one i.e. a factory bodge? Or do all RB senders rely on the mechanical fixings to pick up an earth like the 77 and later cars do, but it went bad, and a PO boded a local earth?



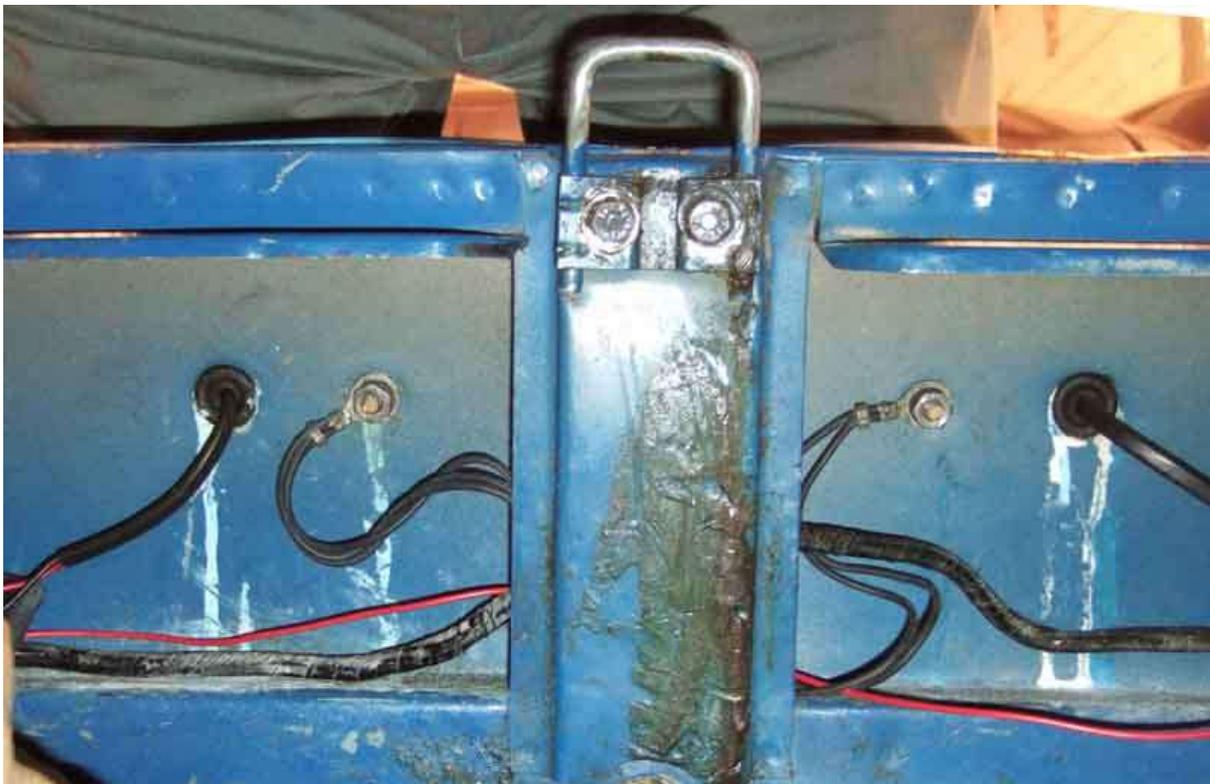
The 1976 (4-cylinder) of a pal in America - the same single wire coming from the harness but with the earth spade on the sender unused, which means mine is probably a PO bodge, maybe from a replacement tank having been treated 'too well':
(Bill Etter)

**Earthing points:**

73 roadster, four earth wires - two reversing lights, fuel gauge sender and pump. Two more have been added for the number-plate lights as they did not pick up an earth from their physical mountings after everything had been painted:

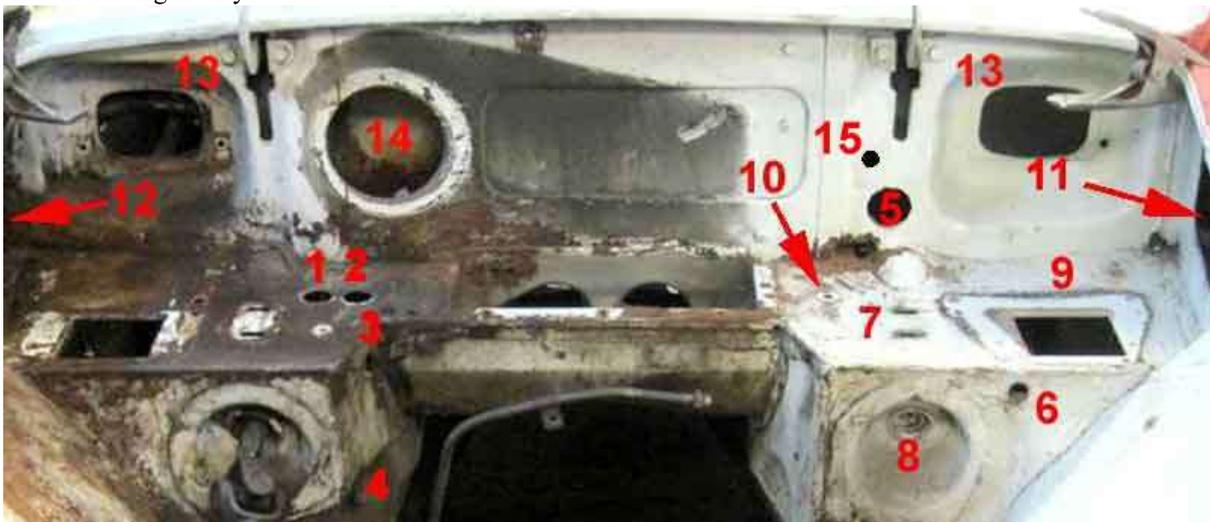


75 V8, five earth wires at two points - two reversing lights, two number-plate lights and the pump. Although a sixth is shown for the fuel tank sender on both CB and pre-77 RB diagrams it does not exist here, and there is a [local earth provided near the sender](#):



Bulkhead holes and grommets:

Quite a few in the engine bay:



1, 2 and 3 are for the temperature gauge capillary (where used), 4-cylinder heater valve cable or V8 choke cable with grommets RFR503, and 4-cylinder oil pressure gauge pipe with grommet AAA643 (was ACH805). I'm not aware of a definitive statement of what goes where, there are several arrangements pictured in Clausager. The oil gauge grommet is an odd pointed one, and I have one like that in the side hole on my roadster, with two flat ones in the shelf. One picture does show the oil gauge pipe coming from the side hole with a tortuous path up, back and round to attach to the hose connector, even though there is a logical path up one of the shelf holes and straight into the connector, which another picture does show. The heater valve cable almost certainly does use one of the shelf holes, and the temp gauge capillary could use the other one of those or the side hole. There are pictures showing the temp gauge capillary coming through 1 with a support clip under the oil hose connector and the heater cable coming up 2, which does leave the oil gauge pipe in 3. Temp gauge capillaries should normally be supplied with a grommet already fitted, or you have to cut one through from the edge and slide it on.

4 is the speedo cable (ACB8474, was RFR405) on all RHD, and earlier LHD, although I have a picture of an LHD with the cable entering at 3, and seen one of the cable entering at 4 only to come out at 3 and go across to 15.

5 is for the screen washer tubing, the choke cable on 'top-down' HIF carbs, and V8 heater cable. Not grommets originally as it is in a double-skin section of the bulkhead, and there is the large open hole for the bonnet hinge immediately above it. Grommets for anything passing through this hole need to be on the cabin side in the footwell for sealing purposes, probably RFN303. However if they rattle about in this hole then a grommet will prevent that.

6 is for the CB choke cable - both HS and early bottom-up HIFs - and needs a grommet as this section is single-skin, RFN303.

7 is two small elongated grommets (AHH6478) to block up the holes for the LHD steering column bolts on RHD cars, on the other side in LHD cars.

Similarly 8 is the plastic blanking plug for the LHD steering column on RHD cars ...

... and 9 is the blanking plate and gasket for the LHD pedal box on RHD cars.

10 is a small plastic plug on RHD cars, grommeted for the accelerator cable on LHD.

11 is the bonnet release cable in the cavity, but secured in the panel with a nut so no grommet is used.

12 is the main wiring harness which should have its own grommet already fitted. The link below lists this as 3H1547, but my two grommets have a much smaller sleeved hole which is a snug fit to the harness, and a flat membrane between that and the grooved section that fits in the body aperture. The V8 oil pressure capillary also goes through here using its own grommeted hole above the harness grommet. In theory it could go across the engine compartment to the holes on the shelf and down one of those, the length would be the same, but there are only two holes there already occupied by the temp gauge capillary and the choke cable, the V8 does not have the third hole on the side.

13 are the large bulkhead grommets behind the master cylinders (14B630, both sides).

14 is the heater inlet seal 17H3714 which is attached to the heater casing.

15 is the speedo cable entry point for later LHD cars, possibly May 72 on.

Also on the heater itself are matrix port seals 7H1993, and strip seals AHH6290 between the heater casing and the bulkhead shelf, not forgetting the dread rubber block BHH389 between the heater and the bulkhead.

The following pages contain information on the plugs and grommets used on the MGB:

[Brown & Gammons](#)

[Moss Europe](#)

[Rimmers](#)

[MGOC](#)

Edge-clip info supplied by MGSte (*Images from Brown & Gammons*):



BHA4473



17H9603



BMK385

BHA4473 secures the harness to the edge of the bonnet slam panel.

17H9603 (3/16) secures the brake pipes.

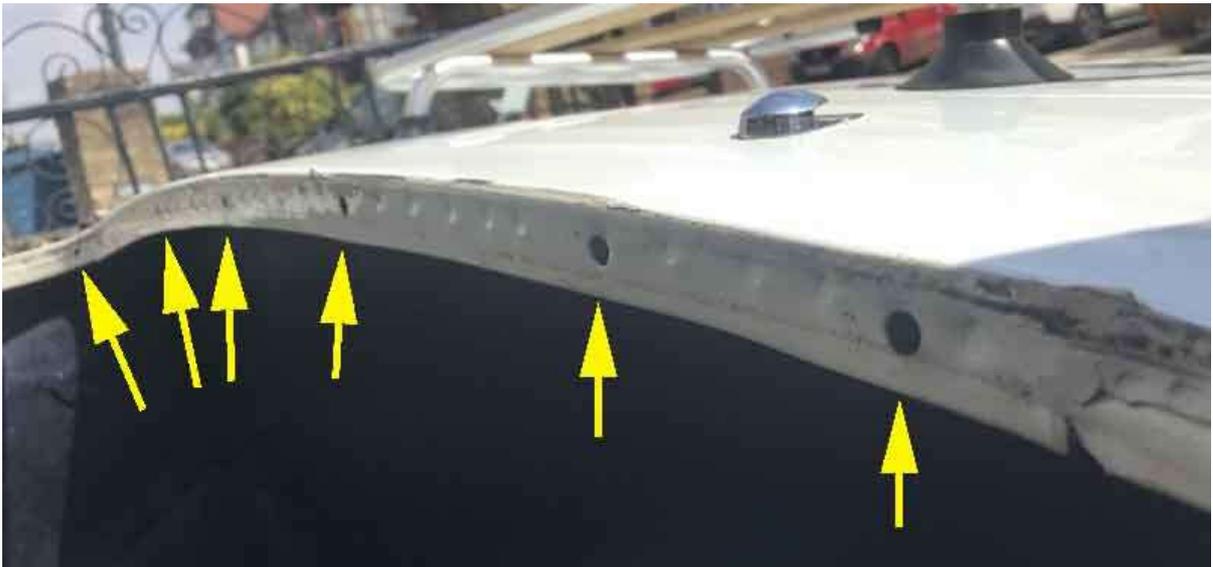
BMK385 (1/4) secures the fuel pipe.

Cockpit Rail

The pegs indicate the location of the studs as an aid to removal - one in the centre and four radiating out from there, accessed below and behind the cockpit rail from inside the cockpit. Should be a 2BA nut, spring and plain washer on each stud. Maybe a screw through an end-plate in the cockpit rail moulding, behind the tab on top of the trim panel aft of the door, needing removal of the hood frame and/or tonneau socket and trim panel.



With the rail off the holes are obvious, one on the far corner, one more to the left out of picture, and two to the right out of picture. (*Dave Farrar*)



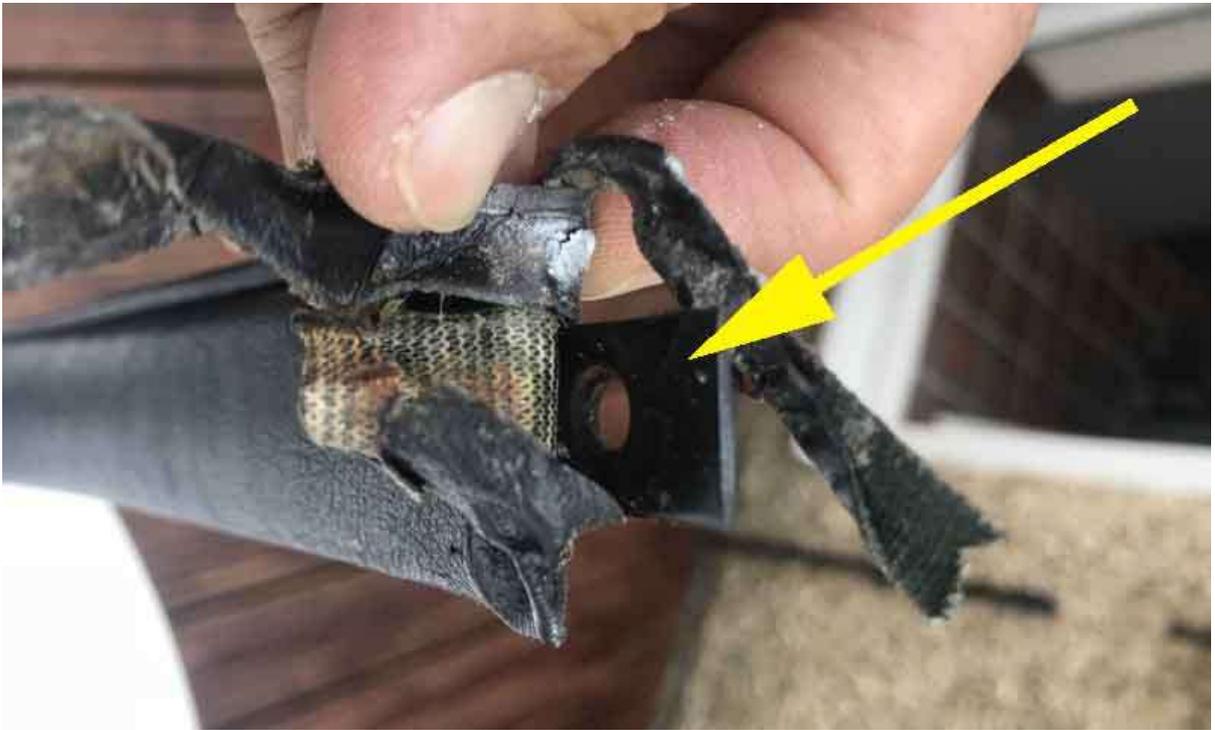
Studs prior to fitting, with convenient cut-outs ... (*Dave Farrar*)



... and fitted. *(Dave Farrar)*



One of the end-plates (arrowed) ... *(Dave Farrar)*



... which goes behind the tab on the trim panel, and the tonneau socket (where fitted). There is a screw for the end-plate into the body, but it isn't really needed (and maybe not even the end-plates) as the hood frame and/or tonneau socket and trim panel holds everything in place.



Dashboard

Crash-Roll:

Eight holes across the dash-top flange for the crash-roll studs: (*Richard Mills*)



Mounting:

Dashboard brackets go over the studs first, then the plates are used to bolt them up to the underside of the dash-top. This from Brendan Hussey, glovebox side, green arrow is the bracket on the dashboard, which was the only way it fitted neatly:



These are mine done over 30 years ago i.e. the same as Brendan - instrument side:



Glovebox side:



After fitting both mine and Brendan's have a narrow gap between the top of the dashboard and the underside of the crash-roll - about 3mm or 1/8", running the full width. It's really only visible if your eye-line is below the level of the crash-roll. It's been convenient for mounting [switch illumination](#) on the V8 and [supplementary warning lights](#) on the roadster. V8 - quite possibly original with the same beading underneath as on top:



Roadster replaced in 1990, no beading underneath but there is on top (if you can't see it while driving ...):



Drinks Bottle Holder

The old, broken washer-bottle holder ...



... and the old bottle



Repaired holder and cut-down bottle



Painted frame ...



... and installed. A bit in the way of the handle for the fresh-air vent, but I have to say I never used it even before fitting this.



I did the same in Vee years ago, but the Navigator complained that on long trips in hot weather her water got a bit warm! Subsequently I noticed Vee has an additional trim-panel screw half-way up the edge by the door, so moved hers. Navigator declared herself satisfied so I subsequently moved Bee's as well.



Glovebox

[Lock problems](#)

Fittings: The five (OK one missing when I took this) screws that hold the lid to the dash panel. The central one screws into a welded nut so is easy, the other four have lock-washers and nuts on top that need a 2BA spanner. Remove the central one last/re-fit first to hold the lid while you are messing with the others. Check all come loose before fully removing any of them, you wouldn't want to get so far and be stymied by one or two rusted ones (mine weren't). 'A' is one (HZA545) of the two pieces that support the back of the fibre-board 'box' ('B'), the other (HZA543) goes up from the screw near the bottom of the image to the back of the box. Both NLA, but easy enough to fabricate:



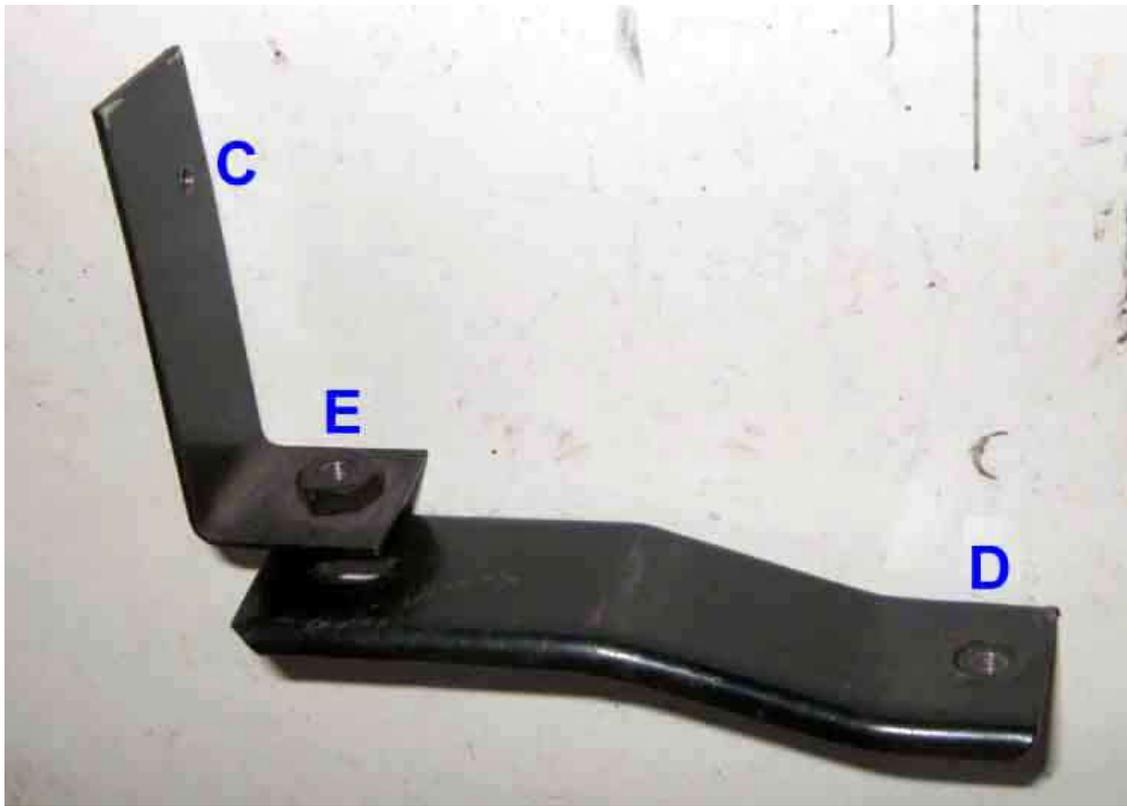
'C' is a sheet-metal screw and cup-washer go through the fibre-board 'box' into the rear (rear as in 'behind the glovebox') bracket:



'D' is where the lid hinge screw with lock-washer goes up through the dashboard flange into the welded nut of the lower bracket; 'E' is where a screw with lock-washer go up through the hole in the lower bracket, the hole in the bracket on the cross-brace, into the welded nut on the rear bracket:



'C' is the hole for the sheet-metal screw through the back of the glovebox; 'D' is the welded nut in the lower bracket for the lid hinge screw. This nut is underneath the bracket to act as a spacer for the downward-facing flanges on the bracket because the bracket goes on top of the dashboard flange; 'E' is where the screw goes through the lower bracket and the cross-brace bracket into the welded nut on the rear bracket:



As above:



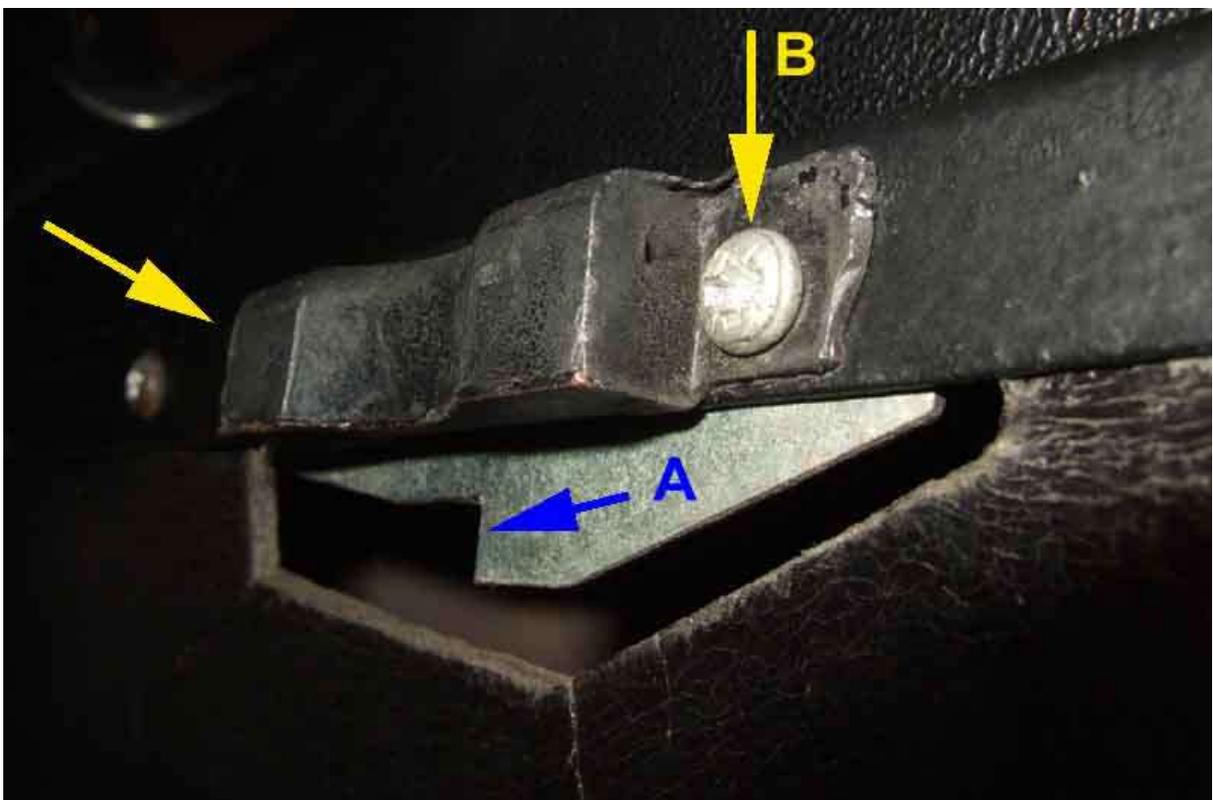
Lock problems:

With the five lid hinge screws out the lower edge of the lid will come forwards, I did wonder if it would do so far enough to get a 9/16" spanner up behind to undo the screw that holds the lock tongue onto the barrel, but mine wouldn't without forcing. Slide the lid to the left as far as you can, and lower the left-hand side, and the tongue should come free of the slot in the dash panel, so the lid can be lowered on the stay wire. The arrows show some of the screws that attach the fibre-board

'box' to the dash panel:



When refitting you may need to bias the lid to the left before fully tightening the screws, if it is too far to the right the tongue can't rotate clockwise far enough and the key may be difficult to remove and insert. But there isn't much scope for lateral movement, and although the original key worked OK a new one bought as a spare worked the lock OK with the lid open but it was a struggle to get the key out with it closed. This is because for some reason the striker plate 'A' has an edge that stops the lock tongue going past a certain point, even though the lock itself prevents it moving past a certain point anyway. I removed the rubber buffer and striker plate by undoing the two screws 'B' (the other one on the far side of the rubber buffer) and cut that stop edge back about 1/8" towards the point of the arrow, and now the key comes out easily:



Plan B would be to pick the lock, before resorting to destroying either the lock or the fibre-board box. Whilst door and boot/hatch locks have [five elements that much match between key and lock](#) Bee's glovebox only has three, you can see two of the three arrowed here. The nearest element is set low with the key out, the second one is the same height so hidden behind the first, but the third one is higher so visible behind the first two:



Note that the five element door key can be used with the three element glovebox lock!

Manufacturing tolerances in cheap locks are such that if you apply some 'unlocking' force to the barrel, then depress each tumbler in turn with a pick, one of the tumblers will almost certain move to the correct position and the barrel rotate a fraction, which keeps that tumbler in the correct position. By keeping up the tension and depressing each tumbler again, another should move to the correct position and the barrel move a little more, and so on. If you apply too much force to the barrel the tumblers probably won't move, and if you don't apply enough they will probably spring back to the locked position. When all the tumblers have been aligned the barrel should turn fully.

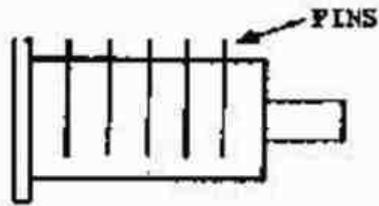
I got a long panel-pin as a pick, and a small screwdriver, and by poking the panel pin in to depress the tumblers while applying a turning force to the barrel with the screwdriver, the lock came open in a couple of minutes. I have to say this was with the lock removed and held lightly in a vice as I didn't want to booger the lock while the lid was closed! Like that the barrel moved very easily, but when I subsequently tried it in-situ it was more difficult as with the lock engaged the back of the striker is pressing against the tongue which is angling the barrel in the lock body slightly, the lid has to be pressed closed to free it up. I did manage to get one of the barrels in the right place on one occasion (if you release the barrel you will see it click back up), and another on another occasion, but couldn't get all three in the time I was prepared to give it. Nevertheless, if I had to do it in anger I would persevere, having been able to do it on the bench.

How the keys are coded to the locks FS locks as used on many cars have five 'wafers' in the barrel positioned by five peaks on the key passing through cut-outs in the wafers. As the key is inserted the wafers move up and down according to the height of the peak on the key and the position of the cut-out in the wafer. Only when the peaks and the cut-outs line up are the wafers flush with both sides of the barrel, and the barrel can turn, or be removed as here:

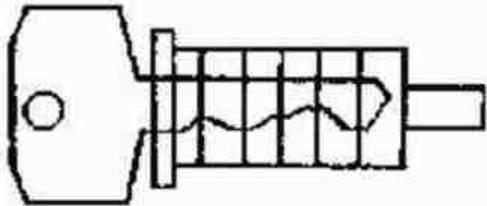


The cut-outs can be in one of three (or five?) positions in the wafer - high, medium and low so there are three possible peaks on each key. When there is a mis-match in the peak and the cut-out the wafer is moved out from the barrel either one side or the other to engage in a slot in the lock body, preventing the barrel from turning: (*'Sideways'*)

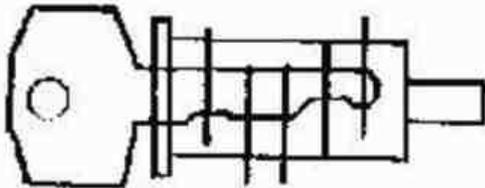
FIGURE 1



WITH NO KEY IN THE BARREL THE PINS ARE PRESSED OUT IN LOCKED POSITION BY SMALL SPRINGS.

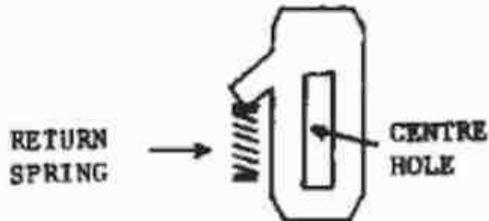


WITH THE CORRECT KEY INSERTED THE PINS ARE RETRACTED INTO THE BARREL ALLOWING IT TO TURN.



AN INCORRECT KEY WILL NOT RETRACT ALL THE PINS INTO THE BARREL AND ALLOW IT TO TURN.

FIGURE 5

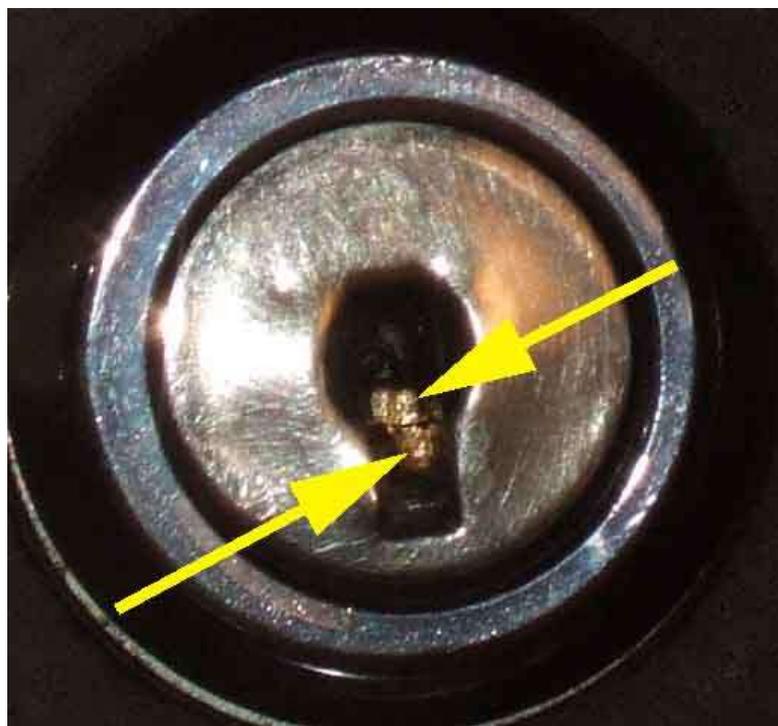


A TYPICAL PIN SHOWING THE CENTRE HOLE. THE HOLE POSITION MAY BE HIGHER OR LOWER IN THE PIN.

Showing three different peaks on the key and five wafers with cut-outs in one of three positions: (*Sideways*)



However going by an old lock of mine the peaks on the key interface with the bottoms of the holes not the top as implied above. The effect is the same though, on a new lock the holes would all be the same height and be in different positions in the wafers, so a high peak on the key would correspond to the hole being lower and hence a narrower gap to the bottom of the wafer:

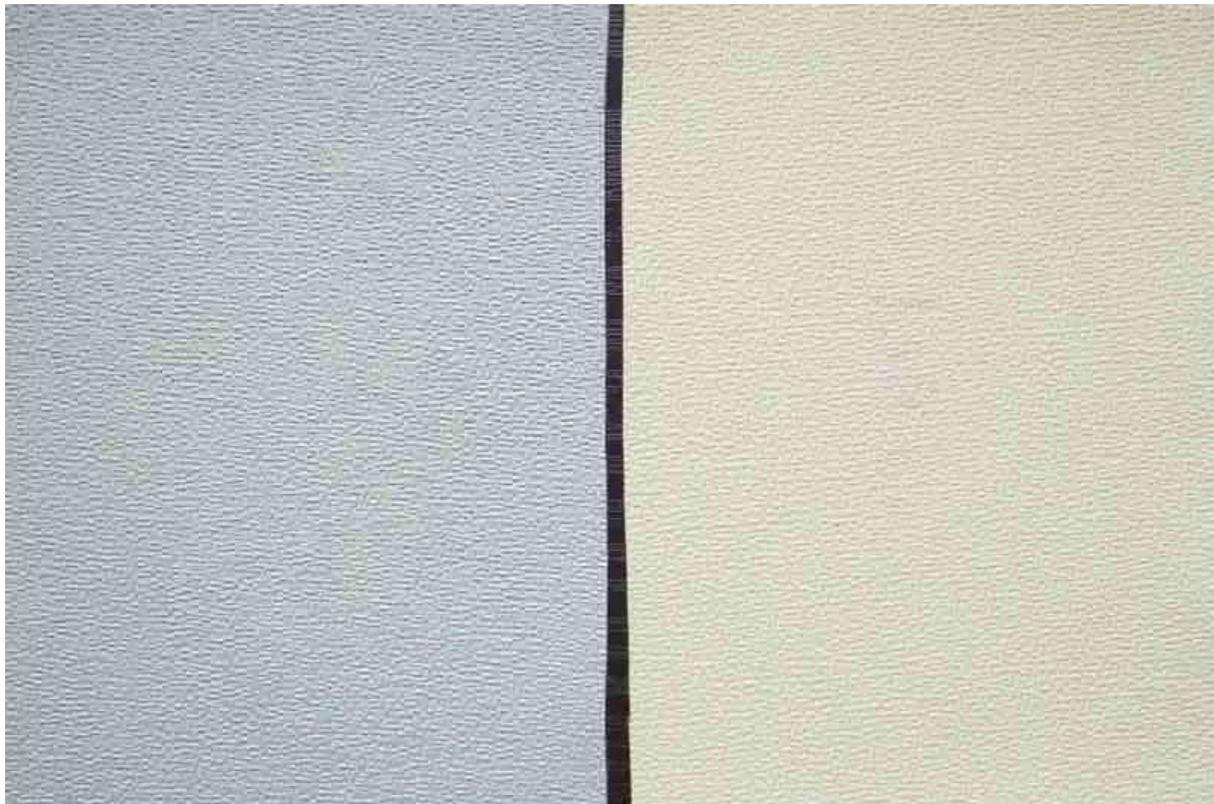


On this old lock the outer three wafers had jammed and the key had enlarged the holes so they weren't doing anything anyway, only the inner pair, and the inner-most one was only partially moving:





Samples, both pale, this is a pretty good match on my screen.



New liners laid over old, subtle differences in size and shape.



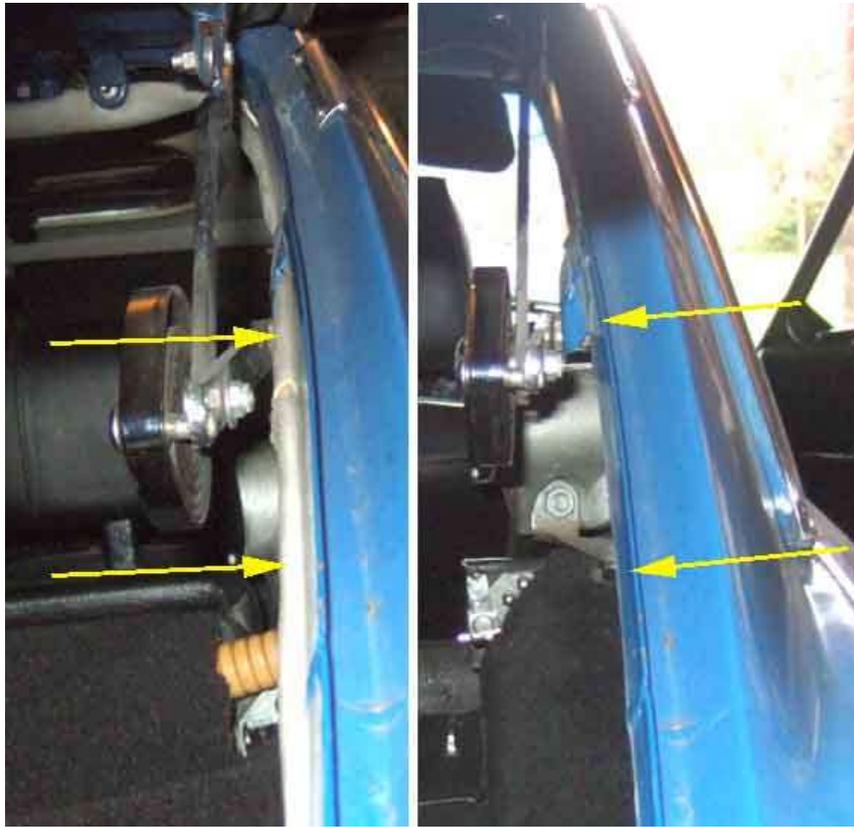
Old liner clips pointing all in the same direction. On the new liners they needed to be pointing in various directions, and the upper three were barely clipped onto the board in order to line up with the body panel holes.



Masking tape wrapped round the stay bracket to protect the new liner while it was repeatedly fitted and removed for fine tuning of the clips etc.



Old liner on the left showing it was well proud of the flange, and probably why it was being caught by the stay nuts. New liner on the right completely concealed by the opening (yes, it is installed!)



The finished result - a big improvement, and not showing-up the rest of the trim too badly.



Showing the (probably) PO trim-screw which pushes the C-post trim out of the way of the tail-gate strut. However the original purpose may just have been to hold the trim in place, given the fit at the top. Also showing the foam block that is pushed up behind the inner C-post panel, in that orientation, i.e. flat face aligned with the bottom of the panel - which takes quite a bit of pushing to get it in. (*Tom Brearley*)

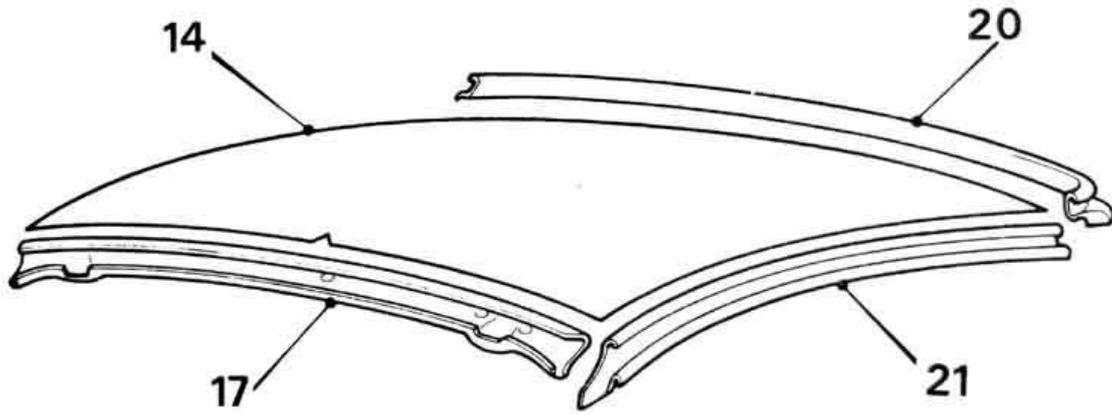




Often described as 'the biscuit', perhaps from its apparent tendency to 'crack' when manoeuvring it in and out of the shell, particularly with a large hole it in for the sunroof:



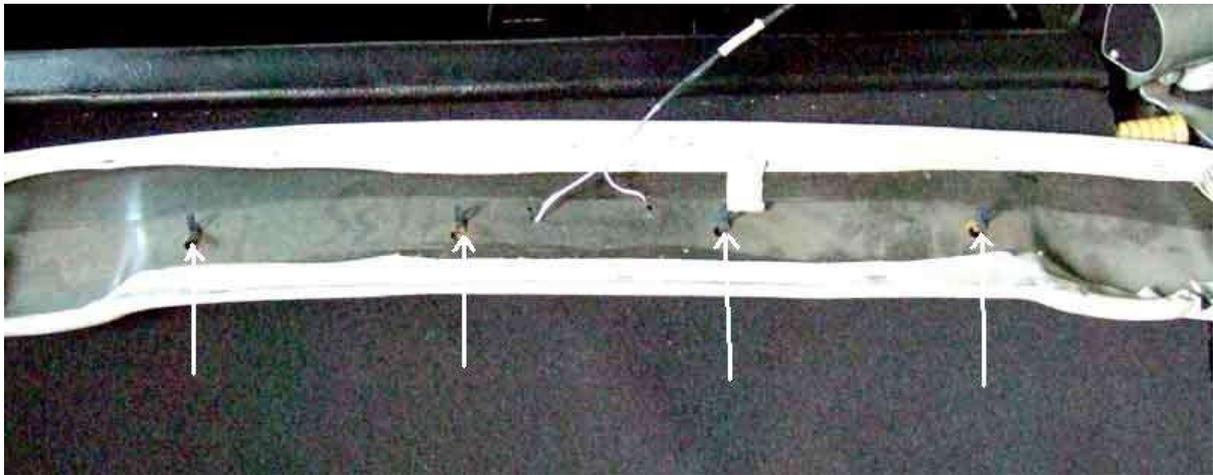
From the Leyland Parts Catalogue, 14 being the headlining proper, 20 being the front header, 17 the rear and 21 the two sides. This purports to show the front and sides as being similar in construction to the rear, but whilst Vee's rear is vinyl over moulded board, the front and sides are nothing more than vinyl glued to the cant rails in the body structure:



C-post trim vinyl over foam padding on hardboard with five clips (arrowed):



Rear header rail vinyl over moulded fibreglass with four clips (arrowed):



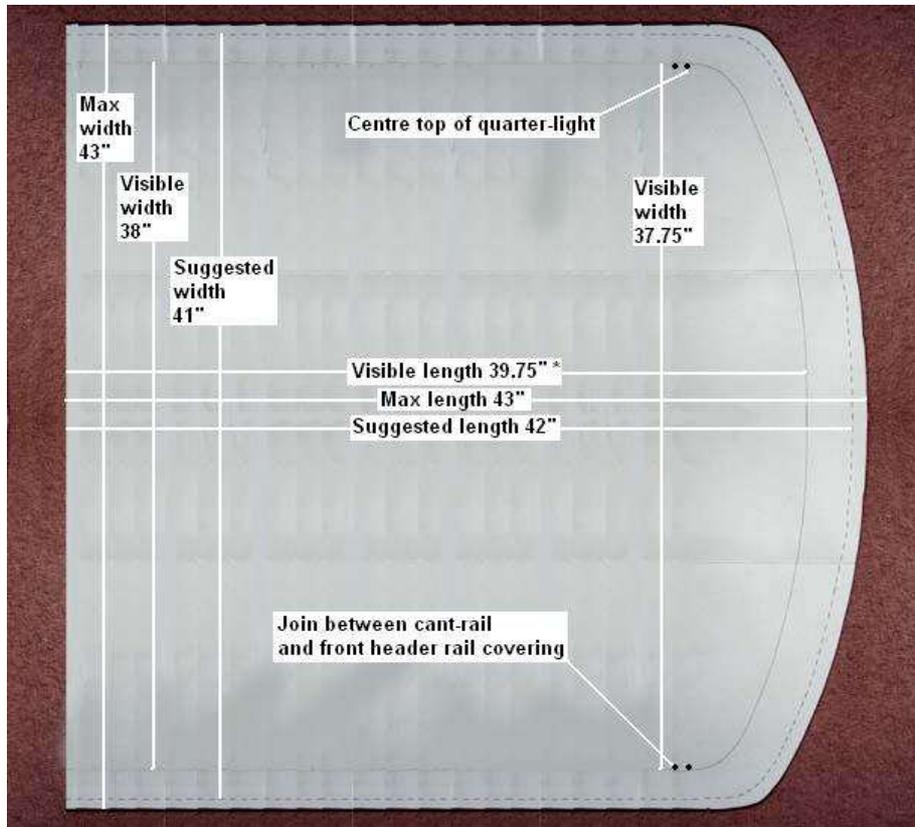
An unused hole at each end, which are adequately supported by the C-post trim pieces:



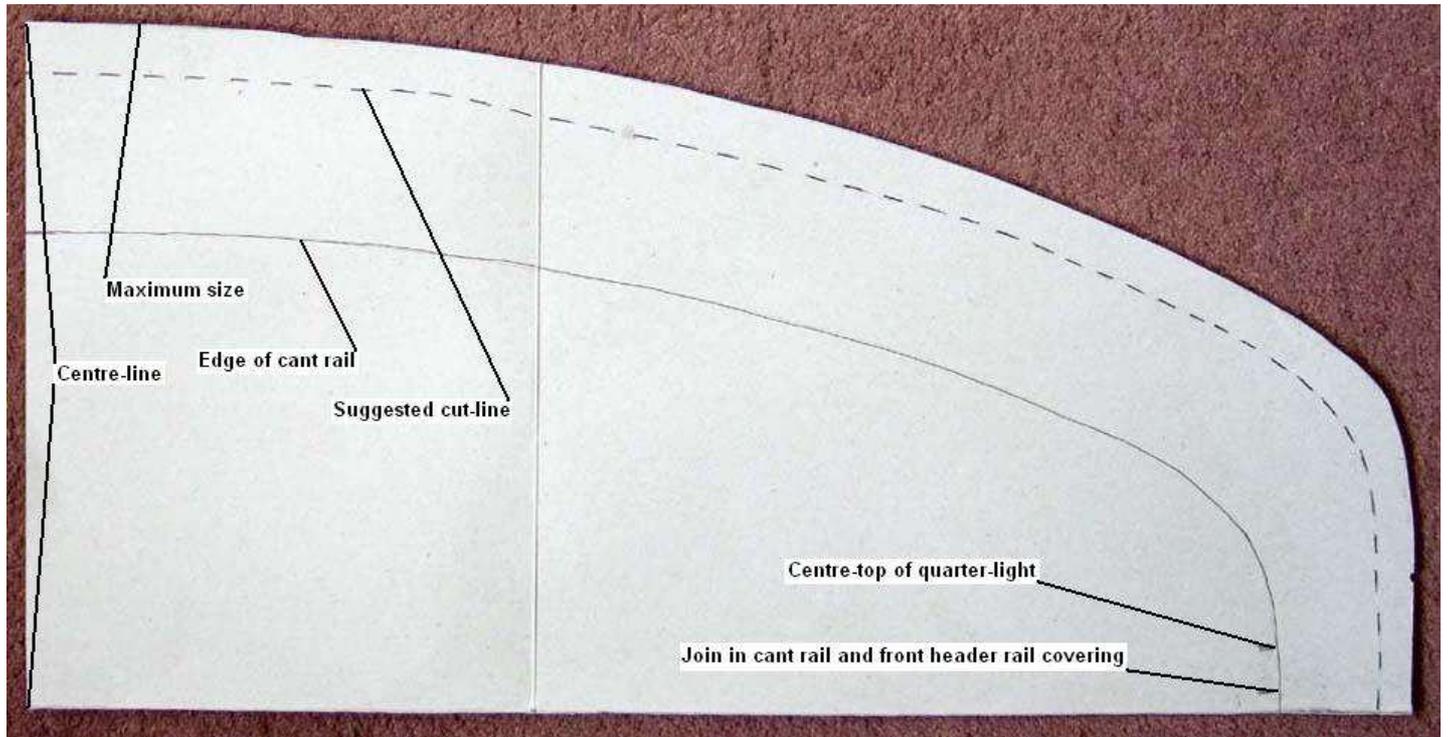
Detail of a rear corner, the side (and front) covers are just vinyl glued to the body structure:



Suggested dimensions for the main board (however early cars seem to have the material stuck to the roof panel). Note that 'visible length' is with the rear header panel removed i.e. to the rear edge of the board. The visible width over the B-posts is also 38", it only tapers in to 37.75" in the last few inches before the join in the cant rail and front header rail covering:



Detail of a front corner. You may be able to print this out and blow it up to use as a template, but it is easy enough to make one using a card 20.75" x 10", sliding it into the gap, drawing round, and trimming the corner bit by bit. Given the amount of overlap it isn't that critical:

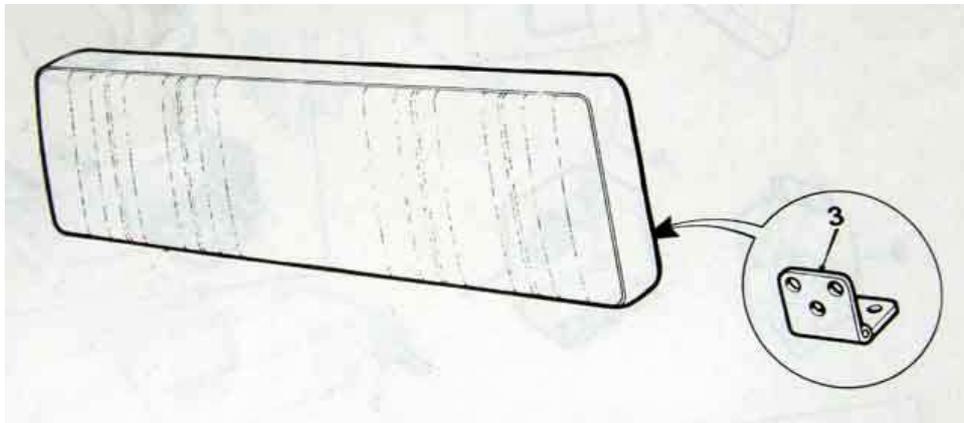


GT Load Space

The original two-part board with a square of black vinyl covering the hole for the wire-wheel clamp ... (*image from Clausager*)



... and the simple hinges used for both that and the seat back (*drawing from Leyland Parts Catalogue*)



From October 73 a one-piece board was used (with the same square of black vinyl covering the hole) ...



... with a more complex hinge that pivoted both the board and the seat-back. Press stud for carpet arrowed.



The seatback is processed wood with threaded inserts for the hinge screws.



The two end sections of the hinge (arrowed) attach both the board (raised) and the seat-back to the body.



A general view of the load-space board in the raised position, the V8 wheel is stored upside down which give useful additional storage space ...



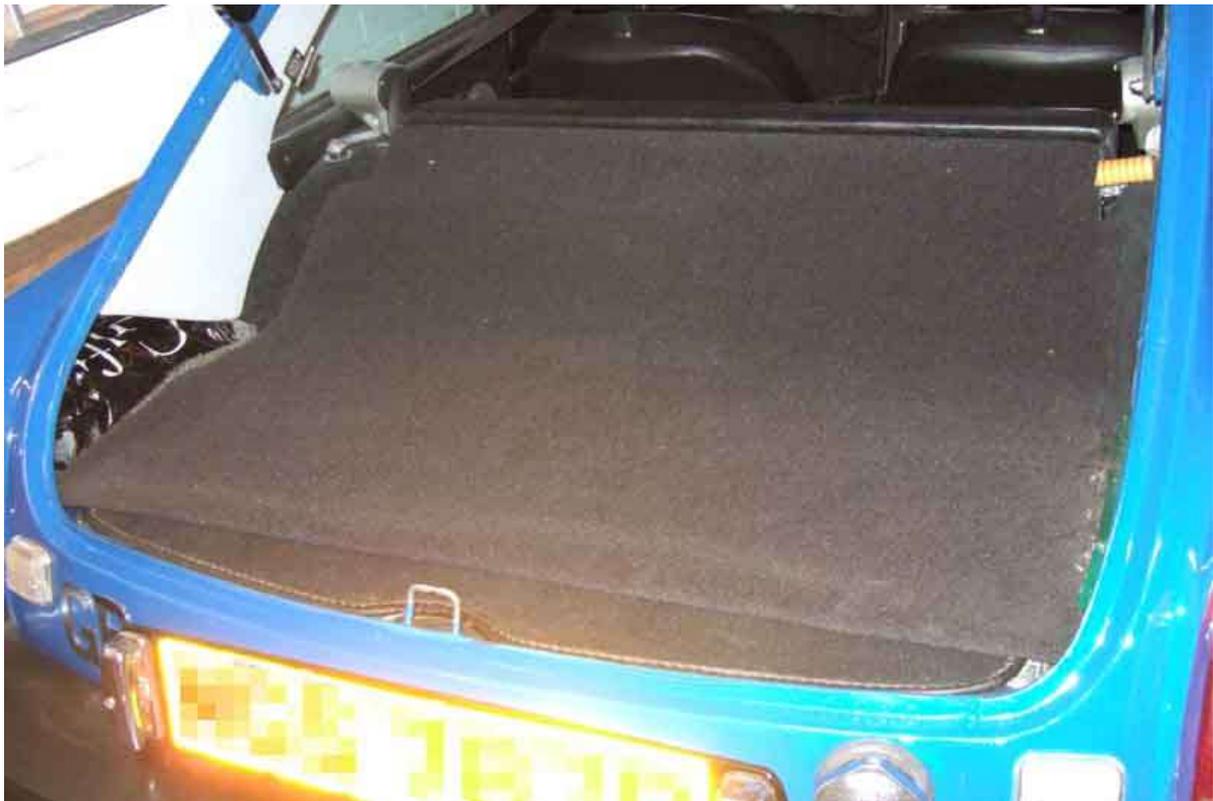
... and the very simple hook to hold the board up ...



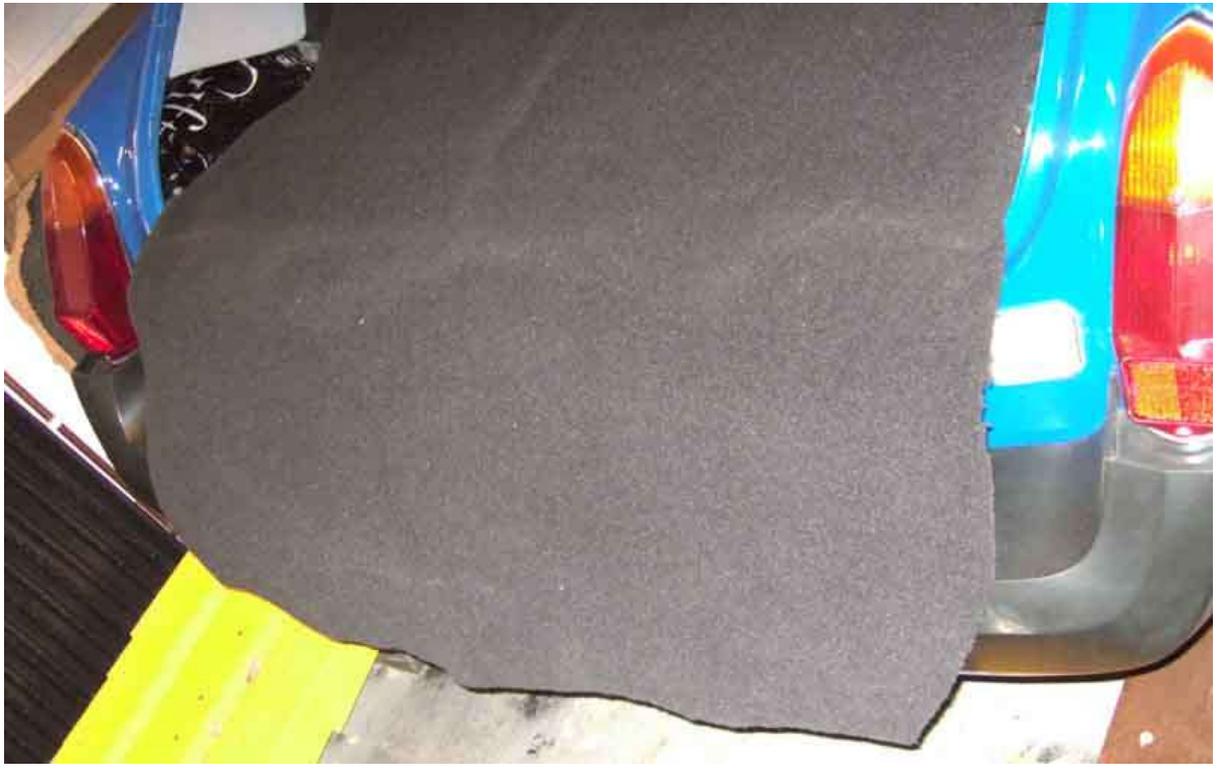
Uncovered 'luggage' (cover fitted but folded forwards over the rear seat back out of the way)



Covered and pretty-well invisible, especially with the hatch shut through tinted glass.



Cover made long enough for when the rear seat back is folded forwards for more luggage, tucked up underneath itself when not in use.



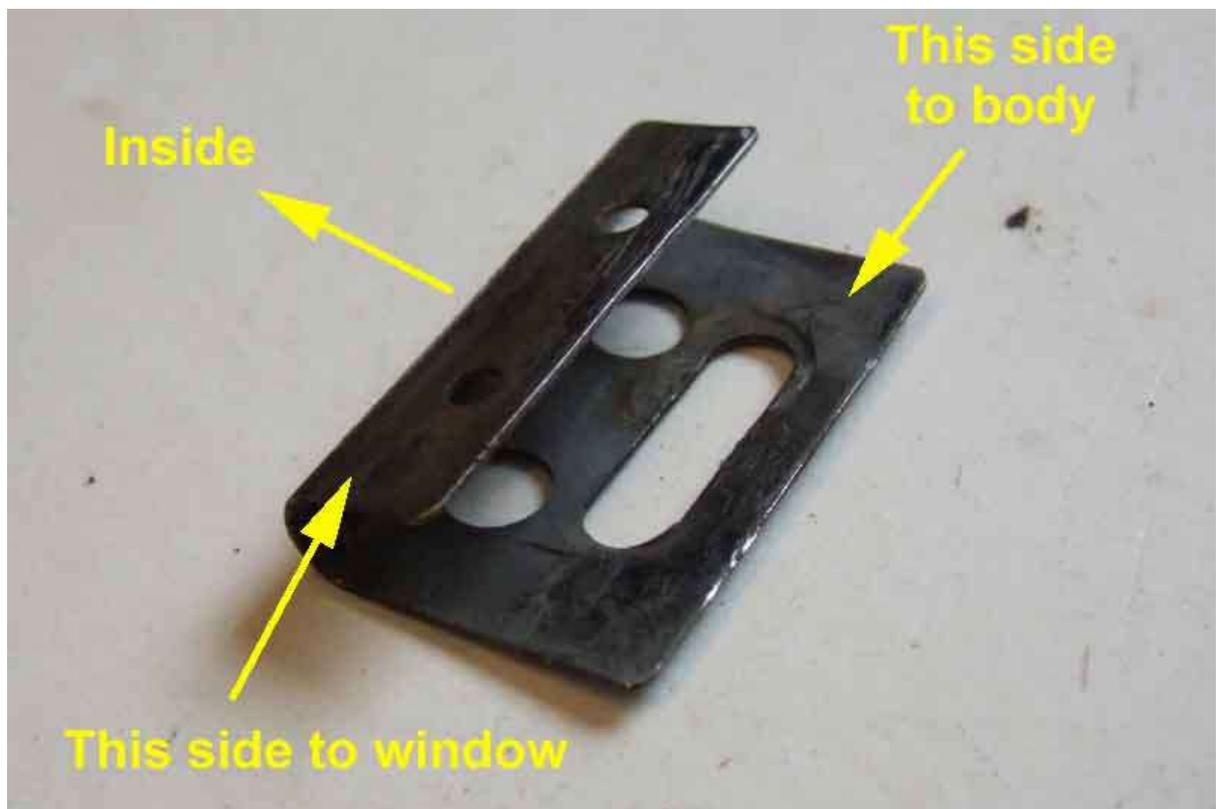
GT Rear Side Windows

B-post trim screws

Hinge screws



Detail of later hinge (detached from Vee's vent, see below)



Chrome frame with join in the rear lower corner:



Stainless frame with trim-piece at the corner ... (*Gary Roberts*)



... covering the gap ... (*Gary Roberts*)

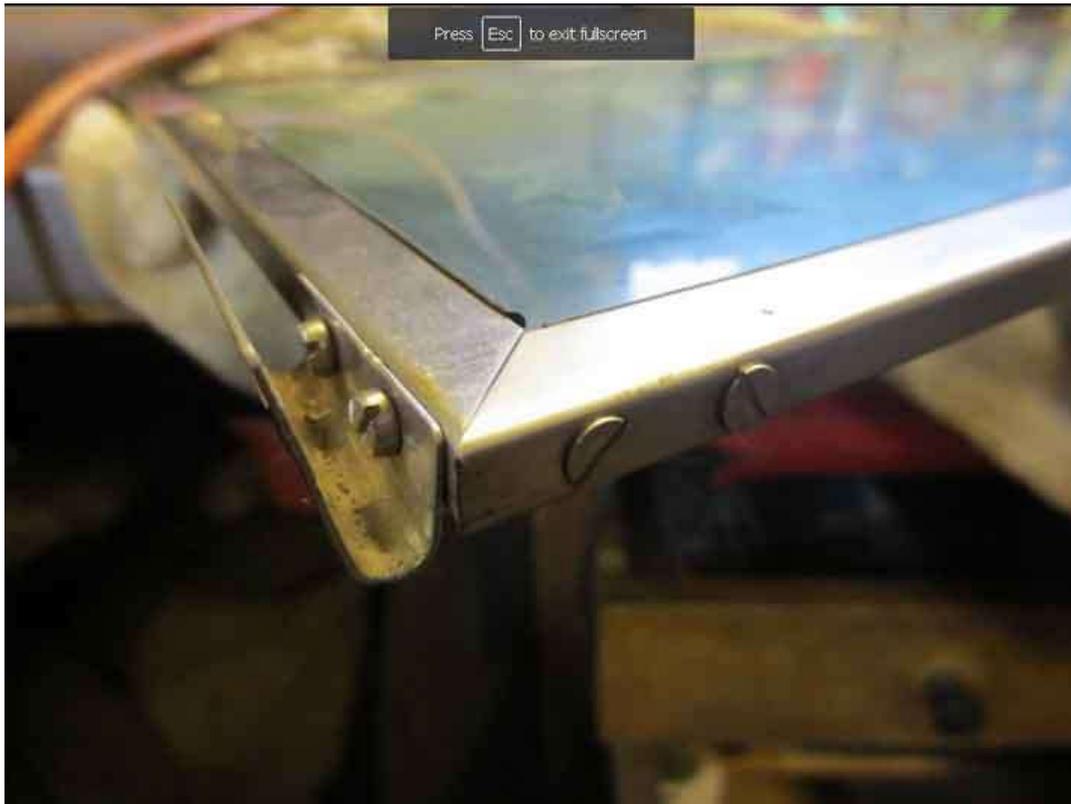


... that would otherwise be left to the body:



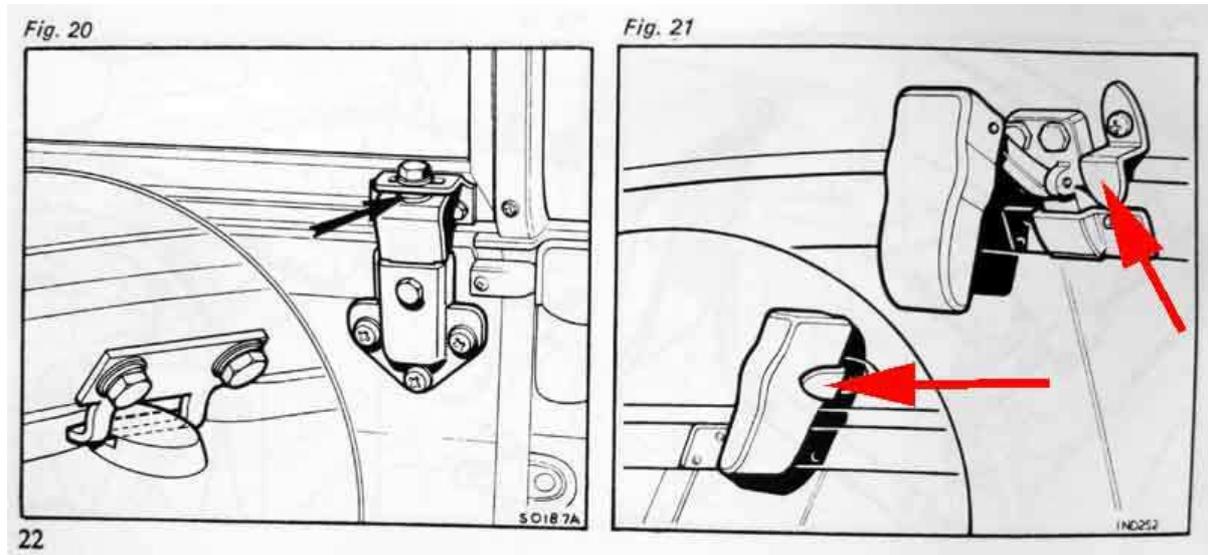
Details of the repair of the lower leading corner by Sven Hinrichsen from Germany. This was part of a major reconstruction of a GT including [conversion to electric drive](#), which is worth a read in its own right.





Hardtop Fixings

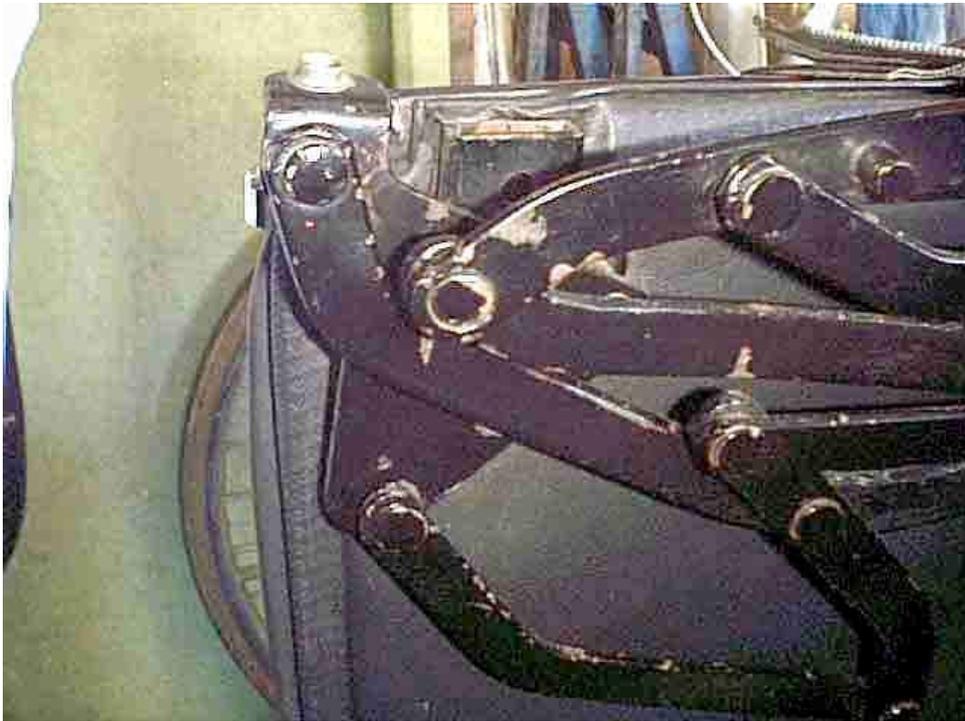
Detail of attachment points to body. Fig 21 shows what appears to be a 'safety catch' (arrowed) to prevent the main latch to the screen from coming open, although this isn't shown in the Parts Catalogue (image from Leyland Drivers Handbook):



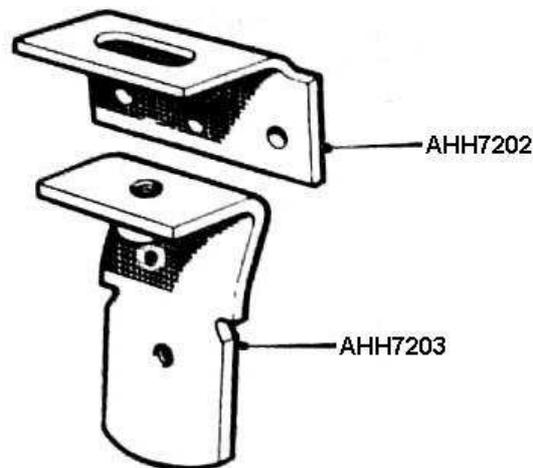
Front fastenings to top of screen frame. Exactly the same as for the soft-top header rail - originally AHH6262 for cars up to chassis number 38387, AHA7709 from then to the end of production for the UK, AHA8491 for North America: (Motaclan/Leacy)



The sides use the standard tonneau bar sockets AHH8391 screwed to the body, shown here mounted behind the hood frame as the sockets are also used for the tonneau or hood cover bars:



Bracket AHH7202 is screwed to or through the body of the hard top, with bracket locating AHH7203 between the bracket and the socket providing the adjustment between top and body, from a screw going through a slot in the bracket into a welded nut on top of the locator. Another screw goes through a hole in the tonneau socket into a threaded hole in the locator to resist pulling upward from air pressure or Bernoulli effect (drawings from Leyland Workshop Manual):



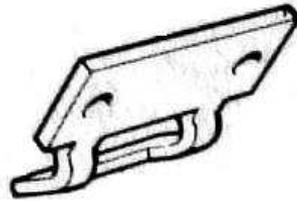
Side bracket locating detail: (Motaclan/Leacy)



Slots into tonneau/hardtop socket AHH8391, with the hole for a screw to go into the side bracket above:



At the rear bracket AHH7199 also screws through or to the hardtop body ... (drawing from Leyland Workshop Manual)

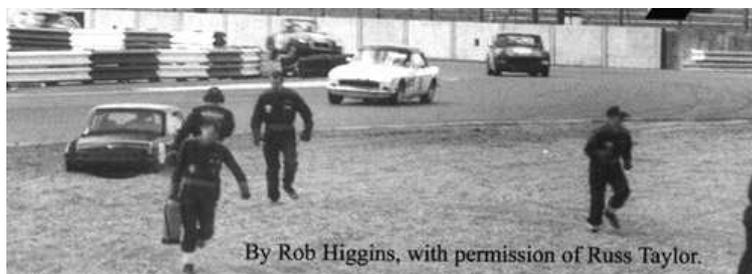


... its bar slotting under the same retaining plates 14B1730 screwed to the tonneau panel as used by the soft-top: ([Brown and Gammons](#))





A lesson in Safety



This article is a reminder of how the safety regulations for motor sport do matter, and are the difference between life and death under extreme circumstances. If you drive a car and don't check your equipment after reading this, you've missed the point.

The Incident

I have been medical officer and then Chief Medical Officer for the M.G. Car Club meeting at Silverstone for some years now, so when I heard the "chequered flag" over the radio from race control for the last race of the Sunday meeting, I sighed with relief and sent my son, James, away to sit in the car. I would be out soon, and it was a tight schedule to get to the NEC, Birmingham, for 7.30. It had been another long boring day, with minor injuries and headaches, that sort of thing. Indeed, in about 2000 race starts at Silverstone in M.G. Car Club meetings in the last 9 years, there had been no significant driver injury.

I was sorting out the paperwork in the medical centre a few seconds later when the scramble call arrived, and James saw me disappear without a word in a green flash. We stopped at Brooklands and got clearance to enter the circuit while cars were still at speed, and then radio silence was called from Race Control to clear the air for a serious incident - which makes Silverstone seriously spooky when you are used to listening to circuit radio, calls from marshals, cars being snatched and so on. Just a little hiss from the radio as the medical car leans around Luffield. We passed some cars on the grass but no injuries, and then on the exit of Woodcote, half way along the start grid, is the other medical car, the rescue unit and a cluster of people around a wreck.

The intensity of the moment as you arrive at such a scene is hard to describe. Especially if you are responsible. There is a heartsink and fear that there is something will happen over which you will have no control. I am always scared that someone will die and I can't help. A wheel is detached from the car, the tyre unmarked but the alloy bent right out of shape. There is hardly anyone in the grandstand. The driver's face is rather blue, his helmet half off and the anaesthetist, Emmett, is cradling his neck and airway. You notice irrelevant details, such as the shredding of the fibreglass front end or the car where it has been torn. The chest moves normally as the driver breathes and I can't feel any injury, so haemothorax is unlikely. I do not fancy putting in a chest drain on the trackside, however many times I've done it before in hospital. The abdomen is soft and there is no mass over the spleen. By now we have a pulse of 140 and oxygen saturation of 96%. Emmett is clearing some blood away from the mouth with suction, but the airway is safe. The pulse is still strong. We can relax a bit as there seems no desperate problem apart from the head and neck, so we can concentrate on getting him out of the car slowly and without risking any injury to his neck or back. As he cannot speak to us, we must treat as though there is a spinal injury.

We slow down and take it carefully, and the team is co-ordinated by myself and we pool all our skills, especially the paramedics who are experienced in extrication. There is a chance to look around more, but all I really see is the RAC steward with a notebook, writing down what we are doing. The deliberation at this stage appears painfully slow to outsiders. Why are they not doing it faster? But it is hard to get someone out of a car under these circumstances. Space is more cramped than you expect, overalls get snagged in the footwell, and so on. Pulling him out too fast would only cause injury. The paramedics are very experienced at extrication and work to position a backboard, and, of course, a neck brace is already on. The cutters snip off the steering column, and then the roll cage. Out he came, and I nipped back quickly to the medical centre by car as the other two doctors came in the ambulance. The nurses in the centre have cleared out anyone with cuts and bruises, and the bed in the resuscitation area was ready with chest drain kit, oxygen, cardiac monitoring and so on all to hand. I brief them on what to expect.

We decide not to move him off the ambulance trolley, as he will be going to hospital soon. He is starting to wake up, and is rather restless. It was good that he was partially awake and answering some questions, but when he started intermittently thrashing around from cerebral irritation it made us feel we had less control. We checked the pulse and oximetry a third time, and they were getting even better. Chest, abdomen, arm and leg examination confirm no serious injuries, so it is best to get him in the ambulance and off to Northampton General Hospital as soon as possible. I telephone the hospital, warning them what to expect. Then a telephone call to his wife and talk to his friends, sort out the paperwork and report to Race Control. Finally, my bemused son was still in the car! More telephone calls and a dash to the NEC just in time for my daughter's trip to All Saints. We just missed a rather poor backing band but were in time for the main act. By the way chaps, they may not look too bad, but they can't sing.

The video

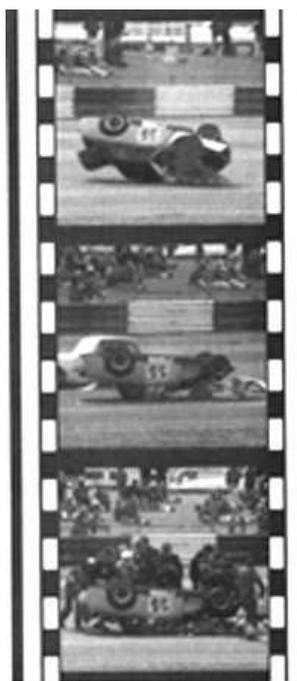
Before I left Silverstone, Race Control showed me the video of Russ's crash - by now I knew his name. He had been overtaking round the outside of another driver, both taking a fairly tight line because of a third car. There was contact and Russ went right over into the concrete wall, with no chance to slow down. He hit the concrete at just too acute an angle to bounce off along the track, so the car just crumpled a little and came back a couple of yards. The remarkable feature was the close up of the cockpit area. The car stopped so abruptly that the deceleration forces were clearly incredible. The harness stretched right out, so that his chest hit the steering wheel, and his head flew forwards but did not hit any fixed object. Debris missed him entirely, but anyone sitting on the left hand side of the car would have risked crush and penetrating injuries at chest, neck and head level. As I watched the impact over and again, the enormity of the forces experienced by Russ's body became more and more apparent.

Laws of physics

Russ is an example of the effects of pure deceleration forces that were marginally sublethal. I refer to my copy of "The Pathology of Violent Injury" here. The G forces (multiples of the force of gravity) experienced during this type of event are calculated by $G = 0.0039v^2/d$, where v is the speed in km/h and d is the distance over which the deceleration occurs, in metres. The MGB did not deform much during the abrupt hC deceleration - this saved his legs from external crush, but the lack of crumple increased the forces on Russ because the distance over which deceleration occurred was shorter. Let's say the speed was 120 km/h and the M.G. had 0.75 metre of crush as it stopped, both I think reasonable estimates (Russ estimated his speed rather faster, I think, at about 140 km/h, but we'll be more conservative here). Therefore the deceleration was just under 75G. This represents a potentially fatal injury - at much over 60G, either the heart ruptures or the aorta falls off the heart. Russ's feet were up against the footwell and decelerated at the same rate as the rest of the car, and indeed Russ has fractures of bones in one foot. Recall, the footwell was not deformed and there was no intrusion. It was purely the force of the weight of his foot against the footwell that caused the fractures. If Russ's body had decelerated at this rate, he would have died from multiple injuries. Why was he saved?

The harness, you remember, stretched out forwards so that his torso moved over some distance - perhaps a bit too far as the steering wheel was bent, but the deceleration was spread over almost another metre. This gets the deceleration down to below 40G, which is survivable for the human torso. Then his head - this flew forwards another half a metre, so that the G was force was down to under 20G. However, the stretch on the neck must have transiently been much greater than this, as the neck would offer little resistance to forward movement until it got right forward. If the terminal deceleration on the neck was about 25G, then the force on the neck was twenty five times the weight of the head plus the helmet. This injury, I think, made Russ unconscious. The top of his brain was squashed against the inside of his skull and his brain stem, lower down, was stretched. All this occurred momentarily before the whiplash. You can see why the brain gets scrambled, even if it swims around in a little pool of cerebrospinal fluid, cushioning impacts. It is likely that some of the nerve-to-nerve contacts (synapses) rupture or are disrupted during the impact, and the severity and extent of this disruption determine the extent of brain injury. The brain can look normal to the naked eye, but becomes unwired. Russ was unconscious for about 10 minutes, not so bad as some other well known drivers - Mika Hakkinen had a much worse brain injury in Australia in 1985, but, as with Russ, there seems to be no lasting cerebral injury.

The safety message



Russ's survival in this impact was down to perhaps the most mundane article of safety, which most of us take for granted. The safety harness is a brilliantly engineered piece of kit that converts a lethal injury into graded deceleration and survivable impact. So make sure your harness is not old and has not been stretched in an accident before - they don't stretch twice. Make sure your mounting points are secure - if Russ decelerated at 25G and it was probably greater, the shoulder mounts would have taken a force of over half a ton each. Indeed, examination of Russ's car apparently showed the metal around these mounts was deformed, but had not given way. Russ commented to me that in his MGA, the mounting points would probably have given way - so think about strengthening your harness mounting points, and spreading the load area. When you buy a helmet, get one that is strong and light - a heavy helmet can be bad news, so invest well. Make sure your seat is firmly attached to the floor - you don't want that on your back.

Lastly, if you have a six point harness, do arrange the crotch straps carefully when you strap yourself in. If your pelvis weighs 20kg and you decelerate at 25G, you've dropped half a ton in the area of your testicles, so your eyes might water.

Other accidents at Silverstone

Yes, this accident looked a little like that sustained by Michael Schumacher, and the rescue team followed exactly the same types of procedure (I was not at Silverstone for the Grand Prix). But the Ferrari hit the concrete at 100 km/h, apparently, and the deceleration was not enough to make Schumacher lose consciousness. Russ hit the wall harder, and was fortunate enough to have a car that, in this type of impact, looked just as strong. Amazing little cars, M.G.s, aren't they?

Thanks to the team The paramedic, rescue, marshalling nursing teams and everyone else involved at Silverstone were wonderful; their experience and training made the rescue effective, controlled and state of the art. Although I was Chief Medical Officer, I had to do virtually nothing, the entire team worked like clockwork and they must take the credit. I do not think they could have

been better, so if you are going to have a bump like Russ anywhere, Silverstone is the place Even better, drive safely and look after yourselves.



BRITISH MOTOR INDUSTRY HERITAGE TRUST

CERTIFIED COPY OF A FACTORY RECORD

BMIHT certifies that the details given below are a true copy of an entry in the original factory records for the vehicle with the chassis number quoted.

This Certificate does not constitute verification of the present condition of a specific vehicle. These are the details of the car as it left the assembly line. Cars were sometimes modified by the manufacturer after production and prior to shipment.

Certificate Number: **2012/26968**

1. Make & Model	MGB GT
2. Car/Chassis Number	G-HD5/321199-G
3. Engine Number	18V-582-F-H/17847
4. Body Number	Not Recorded
5. Specification	RHD, Home Market
6. Colour	Blaze
a) exterior	
b) trim	Navy
c) hood (top)	Not Applicable
7. Date of Build	16 - 18 May 1973
8. Date of Despatch	23 May 1973
9. Destination (Dealer)	Henlys Limited, Bristol
10. Other Numbers (where recorded)	Key numbers FS.888, 2722
11. Details of Factory Fitted Equipment	Rostyle wheels, Overdrive, Tinted windscreen, Servo assisted brakes, Inertia reel seatbelts, Head rests
12. Other Information	-
13. Issued to	Mr Andrew Fletcher
14. Date of Issue	19 September 2012
15. Signature of Archivist	



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This is as displayed by The British Motor Museum, so presumably a dummy! This style with the gold 'stamp' is required by the DVLA as dating evidence.

Body Numbers

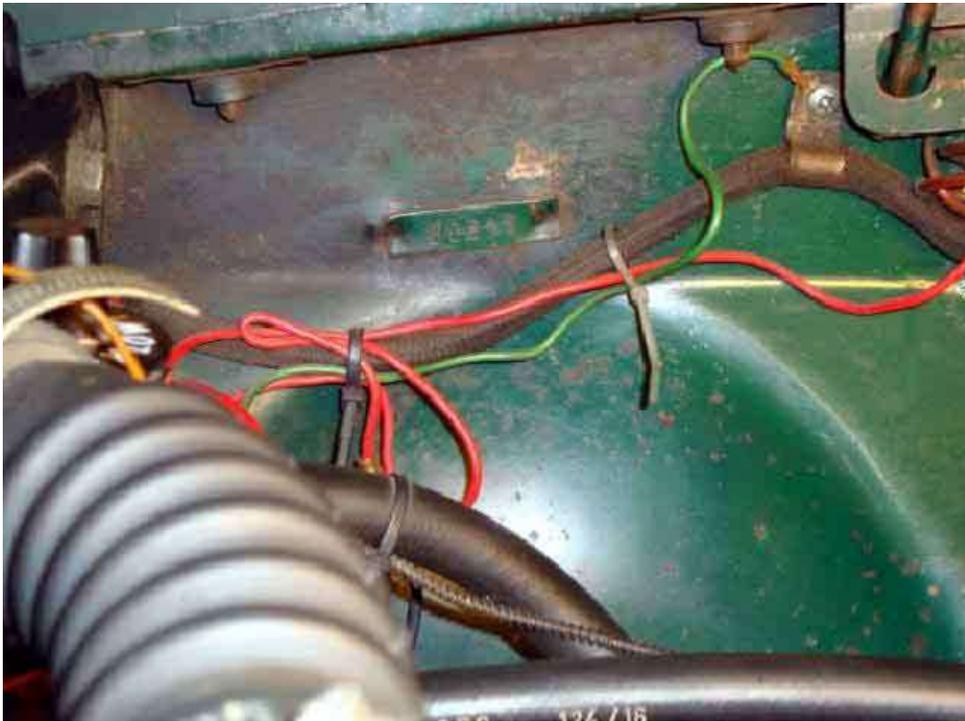
Feb 1963 - unprefix number by the dynamo (Tore)



1963 - MGB number by the carbs (Ste Brown)



May 1965 - unprefix number by the dynamo ...



... and prefixed by the carbs (George Wilder)



About October 1966 - unprefix number, very front edge of the inner wing on the dynamo side (Colin Parkinson) ...



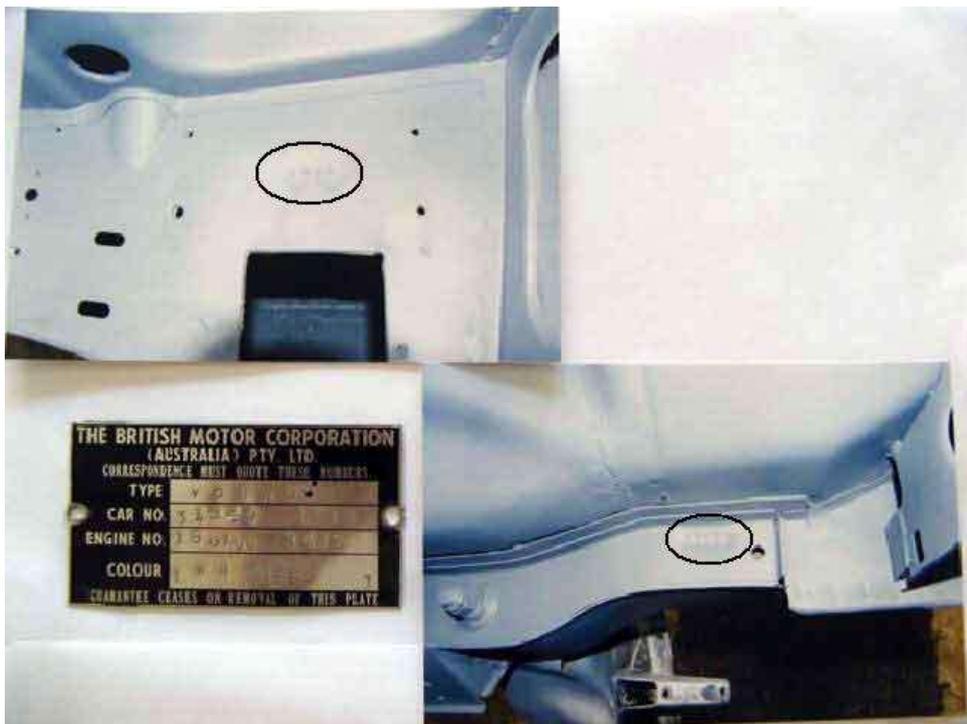
... and the MGB number, just in front of the radiator, carb side



March 1967 - unprefix number, very front edge of the inner wing on the dynamo side (Dave O'Neill)



Australian 1963 - top-left body number by the carb-side hole for the pedals, bottom-right chassis number at the very front of the chassis rail on the carb side (Ian Buckley).



Australian October 1968/July 1969 - body number beside the hole for the pedals on the carb side (Denis) ...



... and in front of the radiator alternator side



More info on [Australian CKD cars](#) here.

Chassis Number Plates

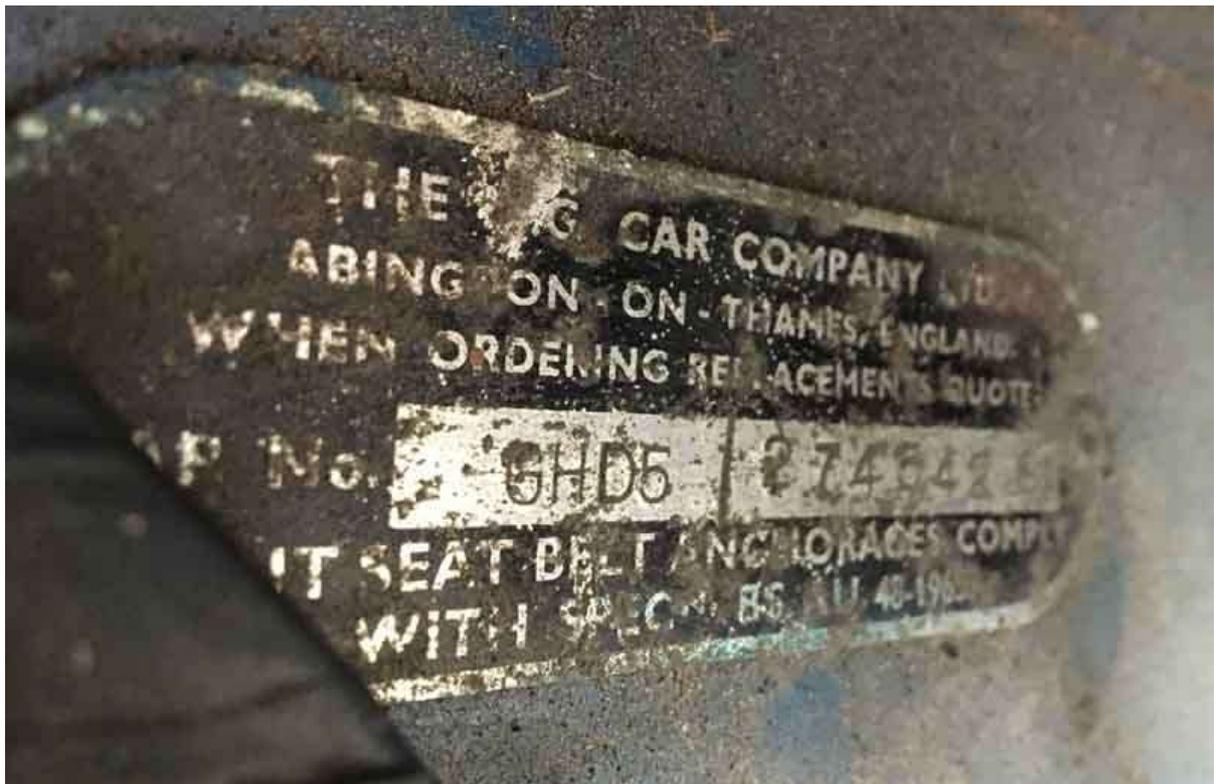
The original style, probably used until January 1967, front stamped and screwed:



The second style, said to be used from January 67 to autumn 72 on UK cars, the 1970 model year for North American. This appears to be reverse-stamped (see the partial digit of the sequential number on the right), on a 69 MGC. Also pop-riveted, whereas Clausager says this didn't start until 1970:



But this Feb 72-built roadster is still front stamped:



Clausager's third style, used from autumn 72 or January 1973 on UK cars until the final year, reverse stamped (this is a 74 V8).
Opinion is that reverse stamping came in with this plate ...



... however my September 72-built roadster has the old style plate, with the new style of stamping. These seem to be stamped in a jig as the characters are all correctly aligned and spaced:



The final plate used for one year, with the extended chassis number prefix and the paint and trim codes. This is clearly front-stamped:



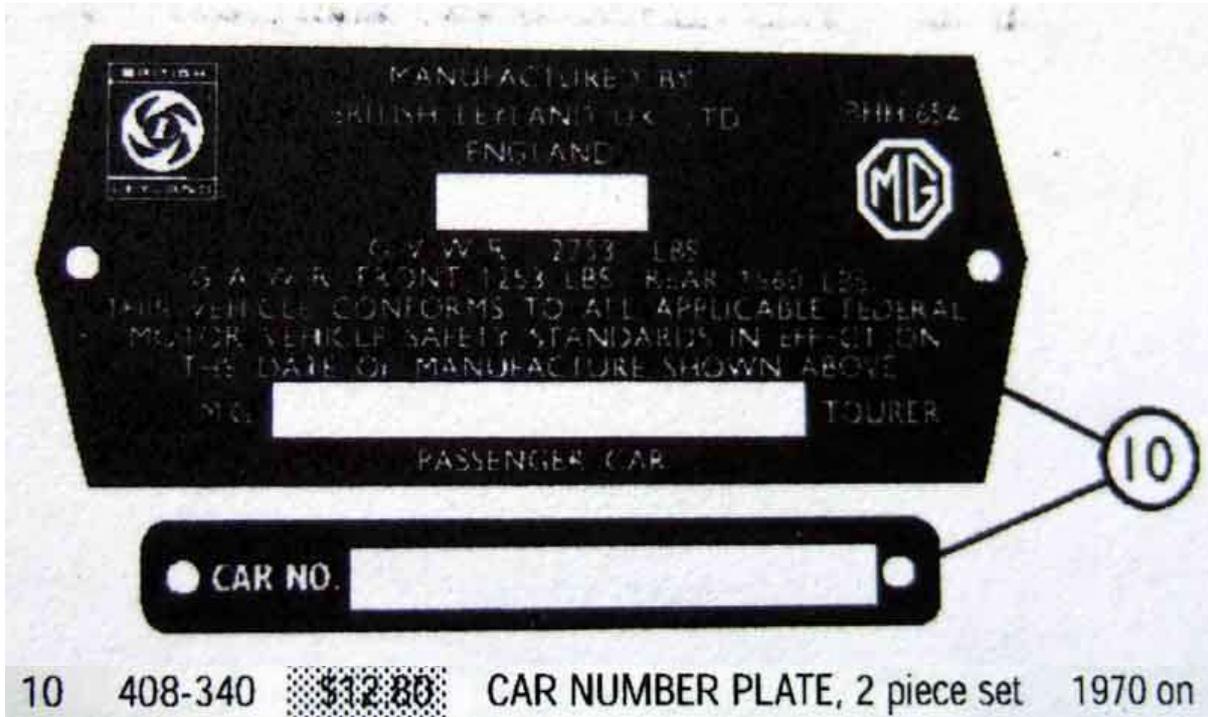
The North American additional strip-plate on the dash-top viewable through the screen from the outside, used from 1st January 1969:



The special North American plate used from September 1969:



The Moss catalogue North American plates, with the correct date ...



... and the UK plates with the incorrect date for the change from one to the other:



The 4-cylinder location, which doesn't seem to have changed until the final year when it moved to the bonnet lock panel on the same side ...



... and the V8 location:



Jacks

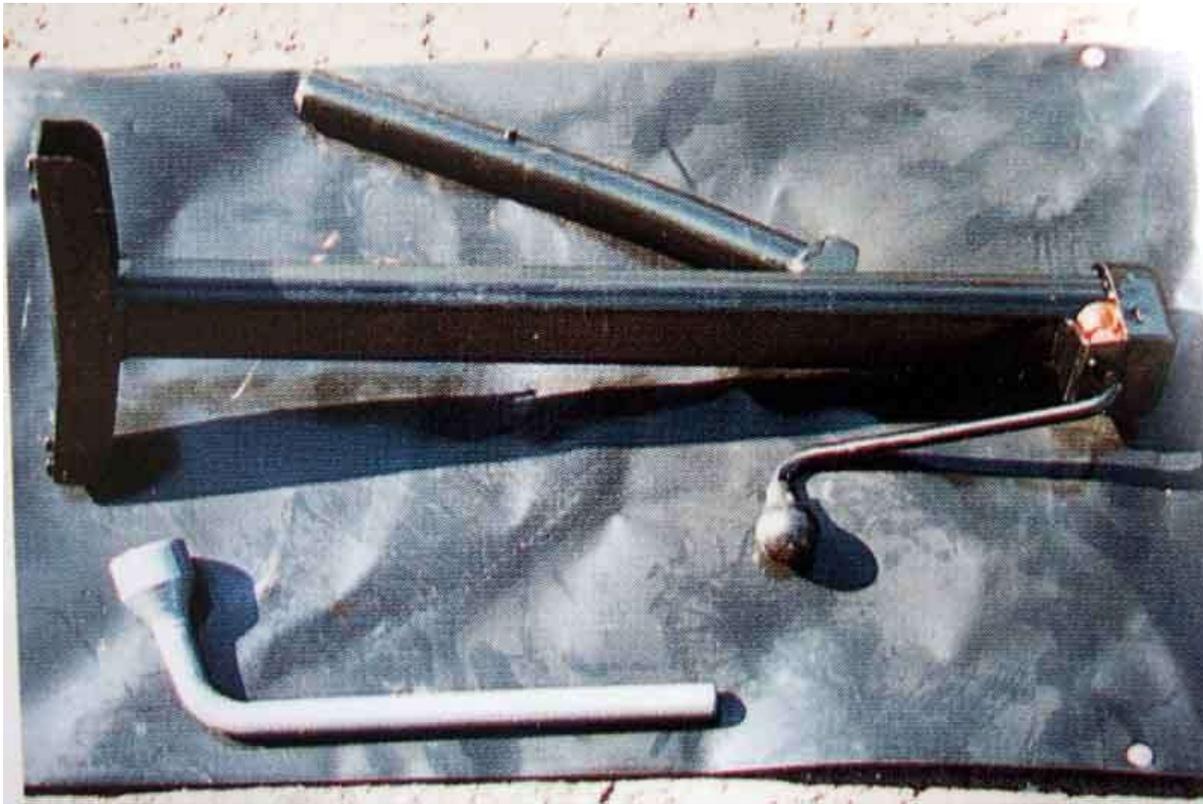
Clausager's original 'King Dick' jack - note the foot with the flat bottom and flat angled tops, and round-topped cover over the gears:



Clausager's replacement 'from the same maker' in May 73, note the foot is curved top and bottom, with an exposed gear:



Clausager's replacement 'from Metallifactory' in Feb 74, note the identical foot to the above, with flat-topped cover over the gear:



My blue and black jacks, almost identical i.e. curved feet and flat-topped cover over the gear, with the same profile of the main upright. Exceptions are the stop pin being on the side of the arm in my blue jack and underneath in my black, also the different shape of the bracket where the lifting arm connects to the screw, both arrowed. The main difference is in the lengths - the blue being 19" overall and the black 20.5", the blue lifting arm being 10" and the black 13":



Crank handle of a basic scissors jack extended by 15" using 'cut and shut' so I can use it from the ends of the car without having to crawl underneath.



Jacking Points and the Fixed Cross-member

Jacking-point HZA492:



Outrigger repair section MB31:



Half-repair section HZA464H:



Full cross-member HZA464:



All above images from [Moss Europe](#).

Unfortunately I have lost who sent me the following pictures.

Looking towards the prop-shaft, showing the 'lid' on the crossmember:



'A' is the cross-member and 'B' is the 'lid' that extends a short way under the flanges of the tunnel and the floor panels, the end of the overlap is circled:



Door Mirror Repair

Top: An old 'wedge' which despite being metal had one of the angled ends break away.

Middle: Plastic wedge which had completely broken up, albeit after very many years. Note the very shallow angled face compared to the top one.

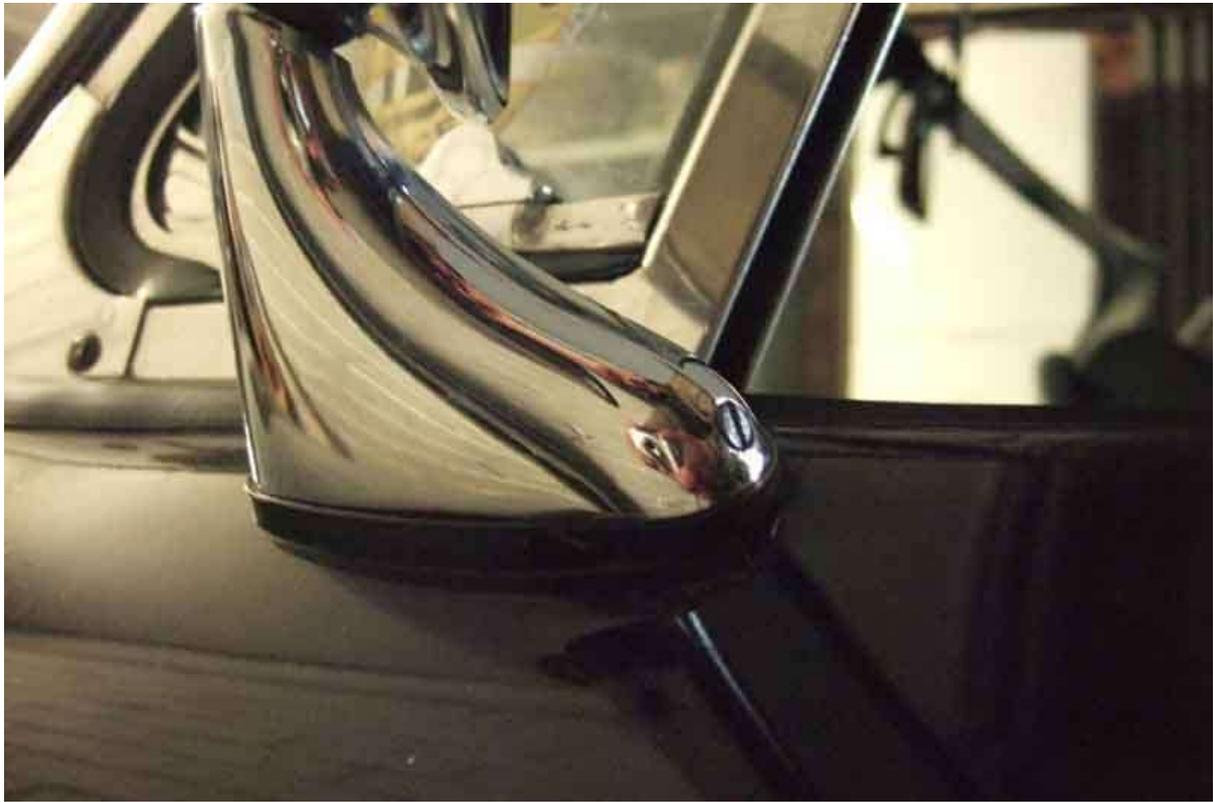
Bottom: Fabricated steel wedge which should last for ever.



Fitted to plinth and door.



Mirror fitted, wedge length set so grub-screw is just fully seated into mirror base, maybe another few thou to just recess it wouldn't have hurt.



The 'flat' plinth is very slightly thicker at the lower edge compared to the upper, as well as being curved to fit the door skin:



The roadster has the mirrors further forwards than they should be as I used them and a plate inside the door to strengthen the skin after a [Crack of Doom](#) repair. As a result they obstruct full opening of the vents, but then they are rarely needed in a roadster:



Also the passenger side is slightly obscured by the drop-glass channel, but it has never been an issue in use:

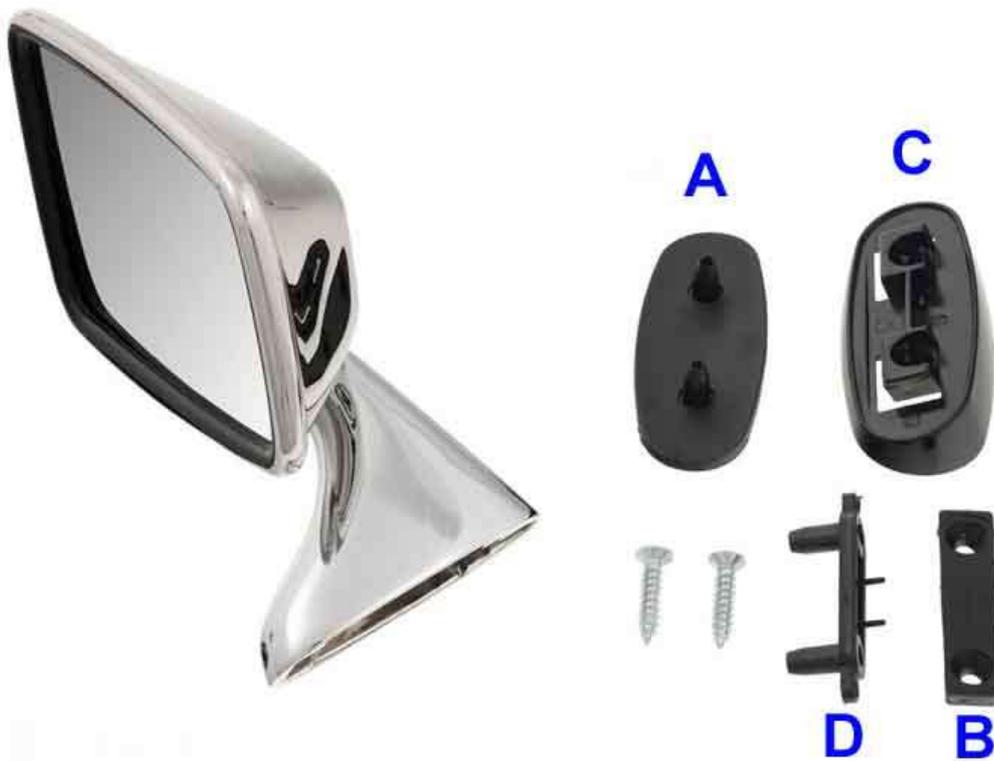


If I did it again - or if the doors are ever repainted - then I would consider moving them forwards enough to allow the vents to open, which should still give some strengthening against the Crack of Doom.

The V8 - which I assume is factory standard - is as here:



[Moss Europe](#) have several different types of mirror available but the ones like mine have different components. Mine just have the flat plinth 'A', the piece that the mirror stem clamps onto 'B' and the screws. 'C' is an angled plinth perhaps needed where the door skin doesn't have the angled mounting face that the MGB has, but how that is used with 'D' and 'B' I don't know. Maybe 'D' fits in the skin holes in place of 'A' with 'C' covering it, but how 'B' fits on top of that I don't know, and long screws would be needed to go through all three:



Seat Belts

[GT](#) [Tunnel point](#) [Sill point](#)

Roadster:

Very early twin 5/16" studs. Both need to be used with an adapter plate to have the same strength as the later 7/16" single points. *Image from [MG Enthusiasts BBS](#) posted by Roadwarrior*



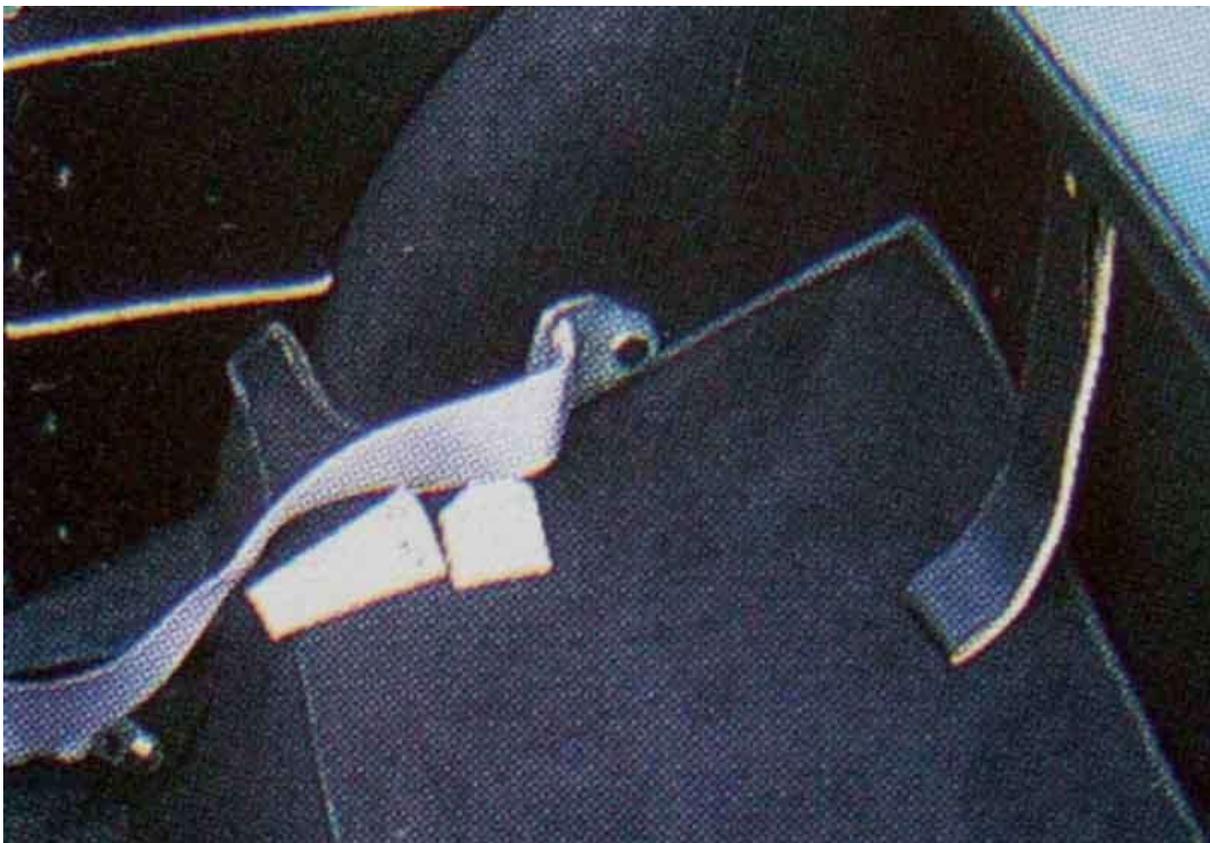
65 roadster. Mounts a bit further back than subsequent pictures, so possibly a dealer or owner addition (subsequently seen on a [72 roadster](#)). This would conform to owners of some early American cars saying theirs don't have these mounts, and theirs only came with lap belts, despite Clausager stating all MGBs always had mounting points, and that when dealer fitted to UK cars they were 3-point.



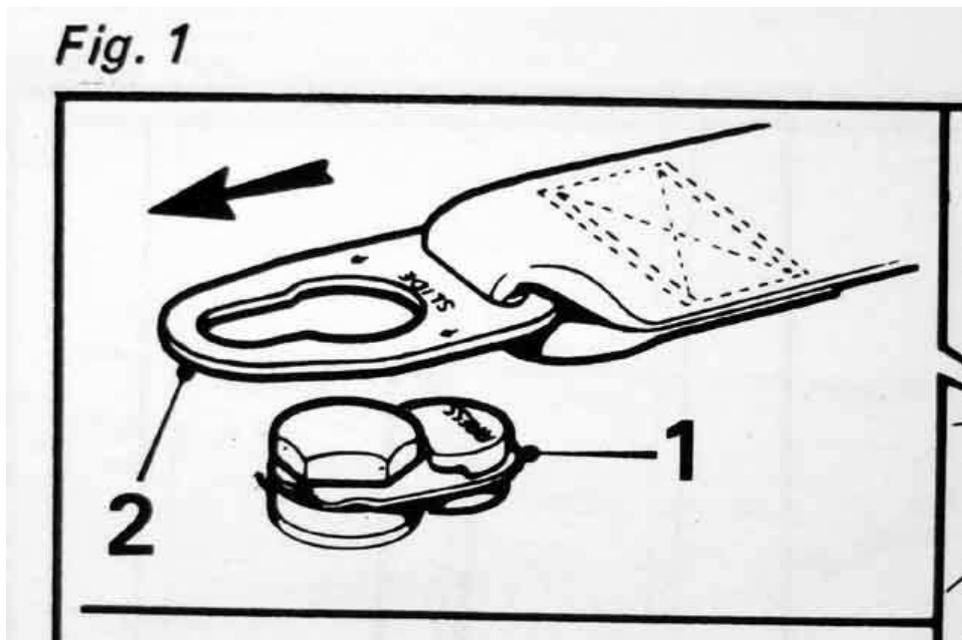
67 MGC.



68/69 roadster (Clausager).



Quick-release clip for the static belts when mounted to the tonneau panel on Mk2 to 71 roadsters for North America and from 71 to May 77 roadsters elsewhere. (*Leyland Drivers Handbook*)



Original fittings with a black plastic 'PRESS' insert.



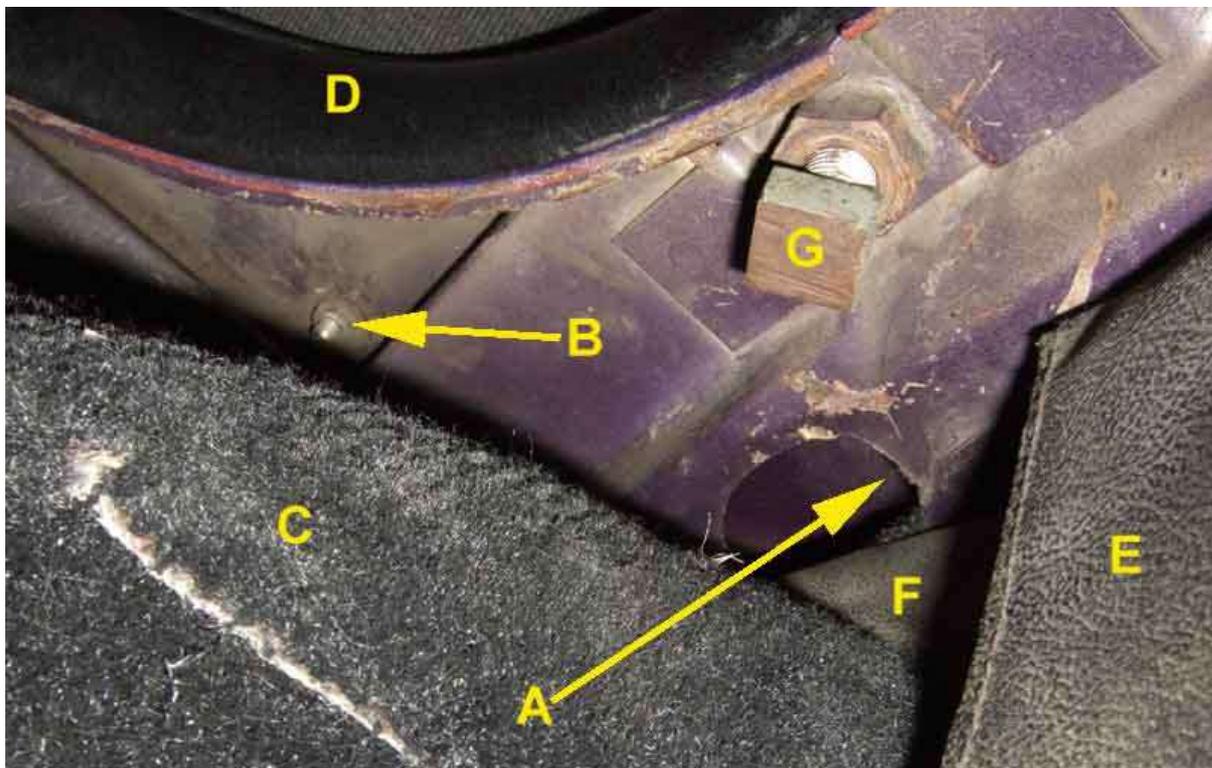
A neat replacement seen on the New Forest Run in 2007, and subsequently on the car owned by a pal of a pal ...



... probably from [SC Parts Group Ltd](#), not cheap at £32 **each**, apparently. Also available from Moss as part number [SBK1001K \(item 29\)](#) at £36 for a **pair** at the time of writing. The Moss drawings did appear to show the original design of button to press, but have been changed to show the same as the other supplier i.e. a metal push-button instead of the original plastic. The [MGOC also have them \(item 3\)](#), it looks like an original drawing, but you would have to check if it is the original plastic push-button or not.



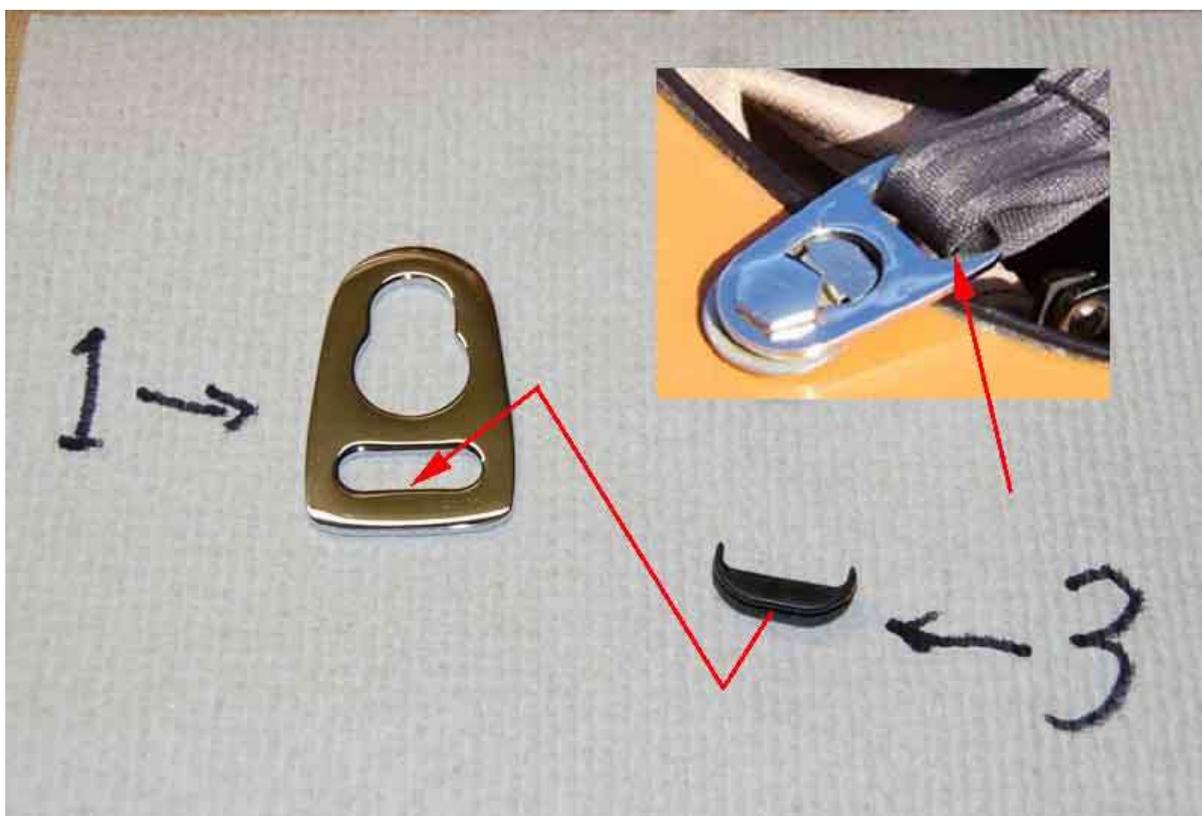
The bolts go into a welded nut under the rear deck - with bolt 'G' fitted here. That was to prevent water ingress until I discovered the plugs in the next image:



May 2018: If that wasn't enough, someone was asking about plastic slotted blanks that filled the holes in the tonneau cover when the quick-release system wasn't being used. I couldn't see why plugs of that type would be used in the cover, but it struck me that they may have been used to cover the holes in the tonneau panel itself. I had an idea I had one kicking around somewhere, in one of my many boxes of bits, that probably came off our Mini in the late 60s when my future father-in-law 'suggested' I fit seat belts ... And so it proved to be. A bit more research came up with these [RFN207 'grommets'](#), which some suppliers do show as a conventional grommet instead of this plug, others show then as [24K6821 blanking plug](#).



May 2015: And if **that** wasn't enough Jack Wheeler in America has discovered that there is a plastic insert - item 3 here - between the webbing and the chrome tongue, presumably to protect the webbing from fraying on the edges of the slot in the tongue. He is missing one and keen to replace it. Were these on all static shoulder belts? Or only on these 'quick-release' type? And if not on all statics, why not? One would think that the stresses on all belts would be the same, especially given that this type of belt is only unclipped by exception, and probably clipped back straight away.



A check of several static belts revealed no insert on the shoulder fitting, so I was beginning to think it was manufacturer-specific. And as I can't see why it would only be needed in that position I checked my inertia belts and on what I strongly suspect are the original Kangol Reflex belts in the V8 I find these inserts on the sill fitting, and Jack used that information to find the required insert.



Bee's after-market inertia reels mounted in the post December 71 (North America) and September 76-on (other markets) position - on the arch right at the back and just above the chassis rail. The hole for these has to be drilled as there was no boss on the roadster wheel arch while the tonneau quick-release fastening was provided. Fitted in this position ...



... they don't prevent the hood from folding fully into the space behind the seats, as some have complained.



A Pal's 72 roadster, albeit nearer the early static position rather than the later inertia position. Bolt head inside the cabin is neater, but nut and threads inside the cabin will keep them free from corrosion!



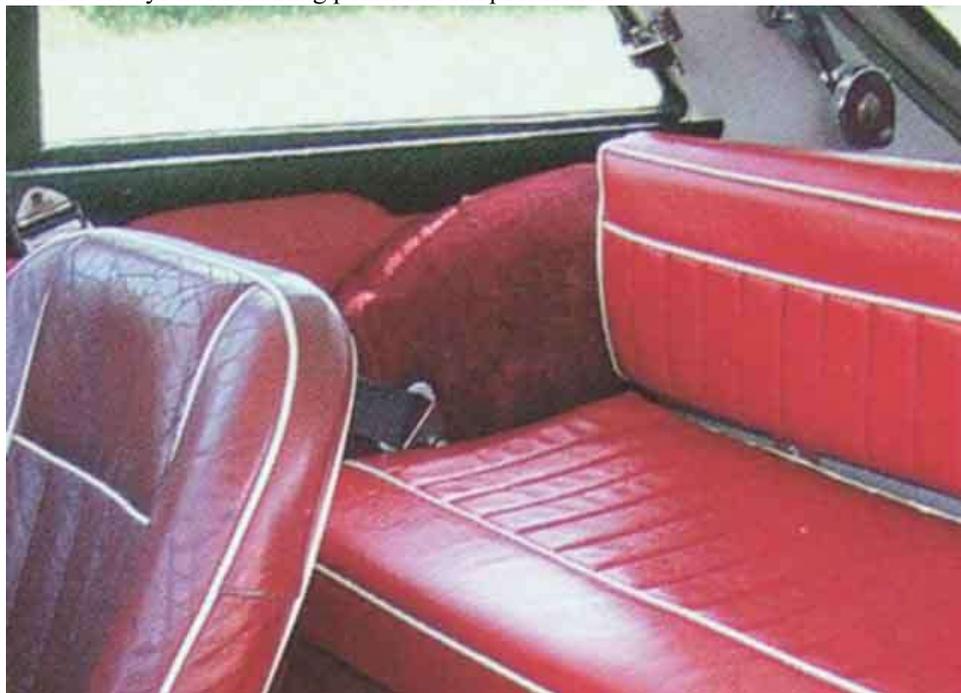
Both the above use the [MGOC fitting kit \(item 2\)](#), which includes the factory right-angle bracket BMH9512/3. [Securon 514/30 belts](#) can be mounted at virtually any orientation as they have adjuster knobs to ensure the mechanism works correctly. This means they can be mounted directly to the inner arch, but the belt then exits the reel vertically, which is less than ideal for its relative position to the seat and compromises retraction. Complicated still further by the presence of a commercial windstop, and a home-brew 'clip' to bring the buckle closer to hand when getting in the car and fastening the belts. (*Michael Beswick*)



GT Belts:

Mk1 GT from 1965, using the roadster arch boss for static belts (*Clausager*). Incidentally this also shows the buckle hooked onto the waist rail. Was this originally provided, and then deleted? *Clausager* indicates they were only fitted to late model

GTs. Or is it a PO addition? When the roadster mounting point moved from the arch to the tonneau panel the arch point was deleted, but this didn't happen to the GT, and at some point Mk1s gained a mounting point on top of the arch as well. Clausager says the MGB had mounting points from the beginning, and the GT is classed as a 4-seater (yes I know), so the implication is that the GT always had mounting points in both positions ...



... but another image of the same car doesn't appear to show the upper mounts.



This late Mk1 built in February 1967 does have the upper arch mounting points. Car-from-UK.com



72 GT with inertia reels, can't see the static boss, but could be hidden by the seat cushion (*Clausager*)



73 GT (*Clausager*) and 75 V8 with inertia reels on top of the arches as well as the lower bosses.





75 V8 brackets and reels (Kangol Reflex), note they are handed to allow the right-hand reel to clear the window but the belt exit at the correct angle.



Vee's first replacement belt ...



... and the second - without the cover over the reel. Checking Bee's they don't have covers either.



The later reels are noticeably smaller, neater and less obtrusive than the originals.

**Tunnel point:**

Early tunnel boss just an inch or so forward of the heel board ... (*Roger Parker*)



... later about 5 inches forward. The change seems to have been made for the 1970 model year going by examples. A longer tunnel stalk is available from some sources for earlier cars.



Originally the tunnel strap was floppy and needed two hands to fasten. A one-handed version for UK statics was introduced which consists of a stiff plastic sleeve over the floppy belt, which Vee has for her inertia belts, also over the bottom part of the sill section. Current replacements uses a stiff cable as for inertia belts.



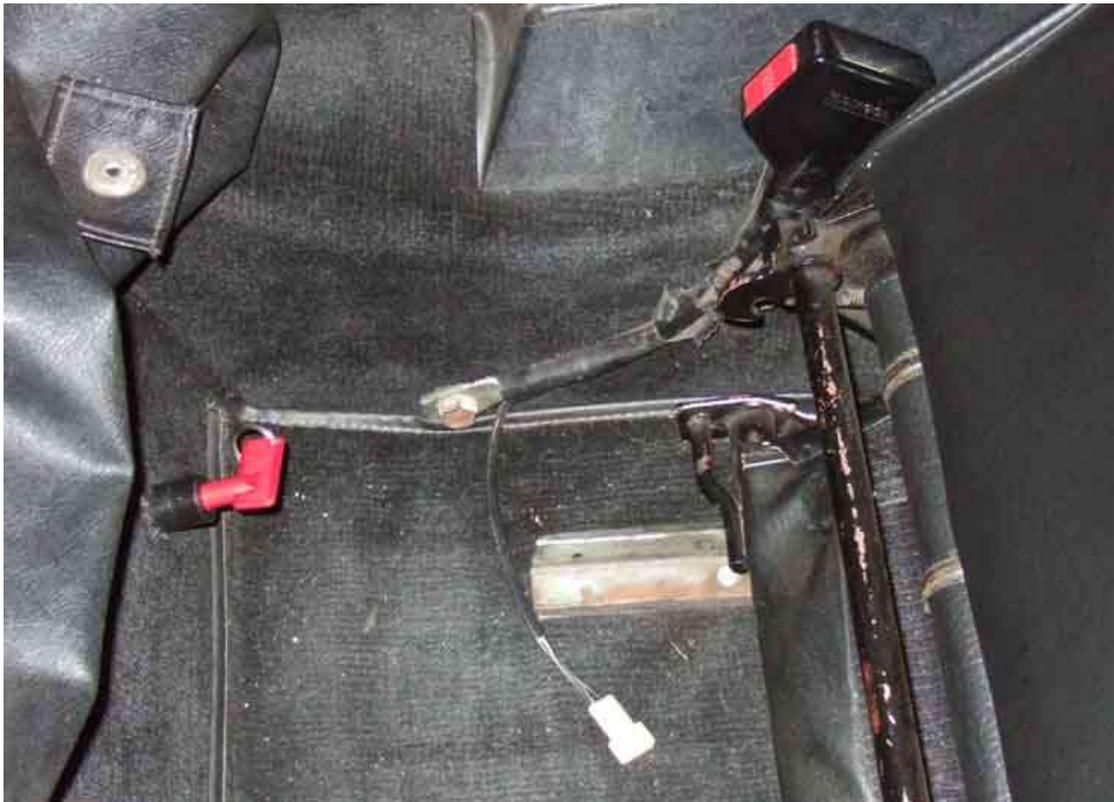
Original tunnel part from Vee. The plastic covering should go over the lower end of the buckle to support it for easy one-handed fastening, but over the years it has broken away meaning the buckle flops about and has been getting more difficult to fasten with one hand.



This is what it should look like.



Bee's retro-fitted late model (they have seat-belt warning wires) stalks - plastic-covered stiff cable which means they can be oriented to suit then to all intents and purposes stay there. Vee's replacements are the same minus the wires.



Sill points:

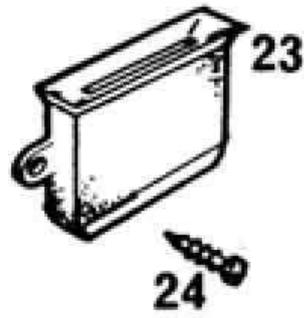
The sill mount on my 75 V8. Tricky to measure if trying to find the hole after fitting carpets given all the curves, angles and welded panels in that corner. About 1 1/4" up from the floor pan. Measuring straight back from the head of the bolt until it touches the heel-board is about 2 1/4", however using the seat rear mounting bolt as a datum it's 6 1/8". Interestingly there is a moulded circle in the rubber mat that you could be forgiven for thinking marked the position!



See also this sans carpets and mats from John Pinna.



'Seatbelt parking cover instead of parking buckle' (Clausager) BHH938 used from Feb 72 to Jan 77. I don't know about a cover, it looks more like a socket the tongue would drop into, but I could imagine inertia belts pulling it out if not worn when under way. *May 2020*: Just come across a [source of these](#), however they are 3D printed and have a rough textured finish, also expensive at \$30 albeit including worldwide shipping. Positioned as shown that far down and back I can't see them being that convenient to use, unlike the hook (below) that replaced it: *Image from [Moss Europe](#) item 23.*



Seat-belt hook BHA5236, replaces the above (shown on a GT) in Feb 77 with Kangol belts.



Mud-flaps

Fitted ...



... but a bit clunky as delivered sticking out past the wing as on the left, so I trim about 1cm off the curved edge which brings the top corner inside the wing (right).



No metal insert so the screw tightens down until the head bottoms on the clamp, cutting into the rubber and limiting the clamping force onto the wing flange (top clamp). A thick washer with a small hole spreads the force over a larger area, creating more clamping pressure (lower clamp).



Number Plates

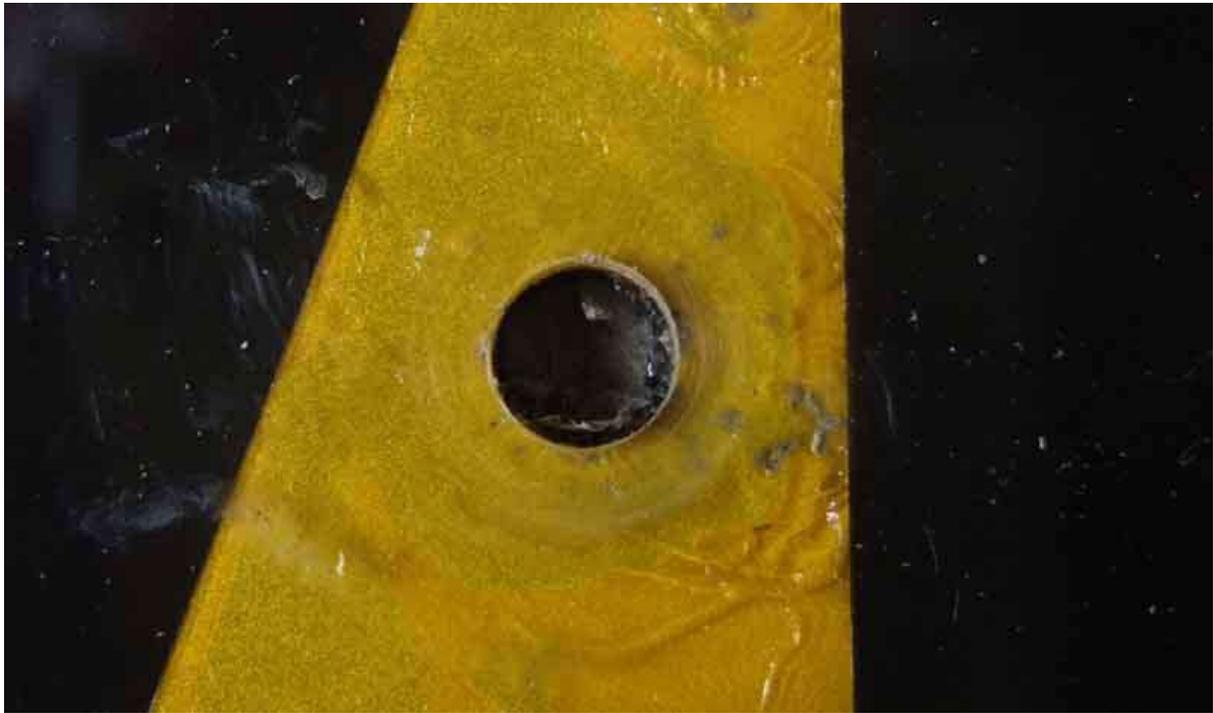
Vee's old rear plate, backing film buckled and delaminated:



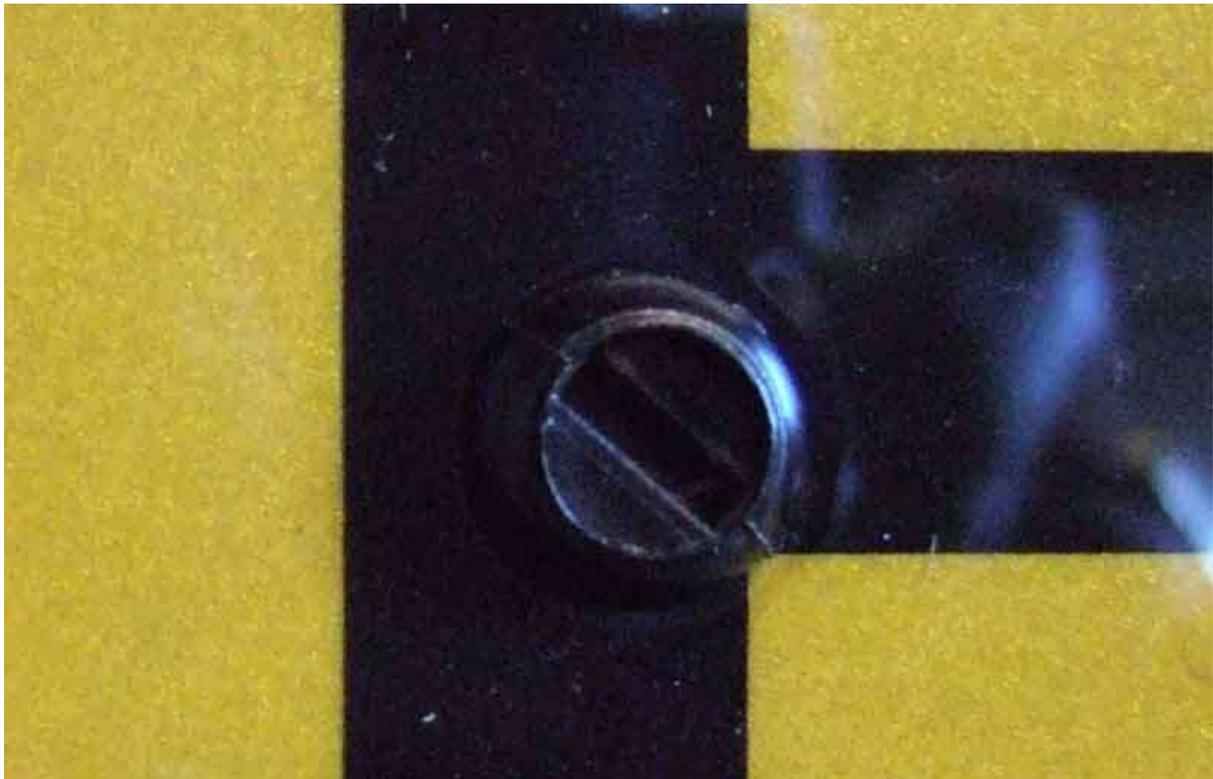
Dirt gets in, sticks to the adhesive (although not as bad yet as on the plate this replaced), and eventually partly obscures the number:



Position of one of the fixing holes on the old plate, deliberately chosen to be between characters:

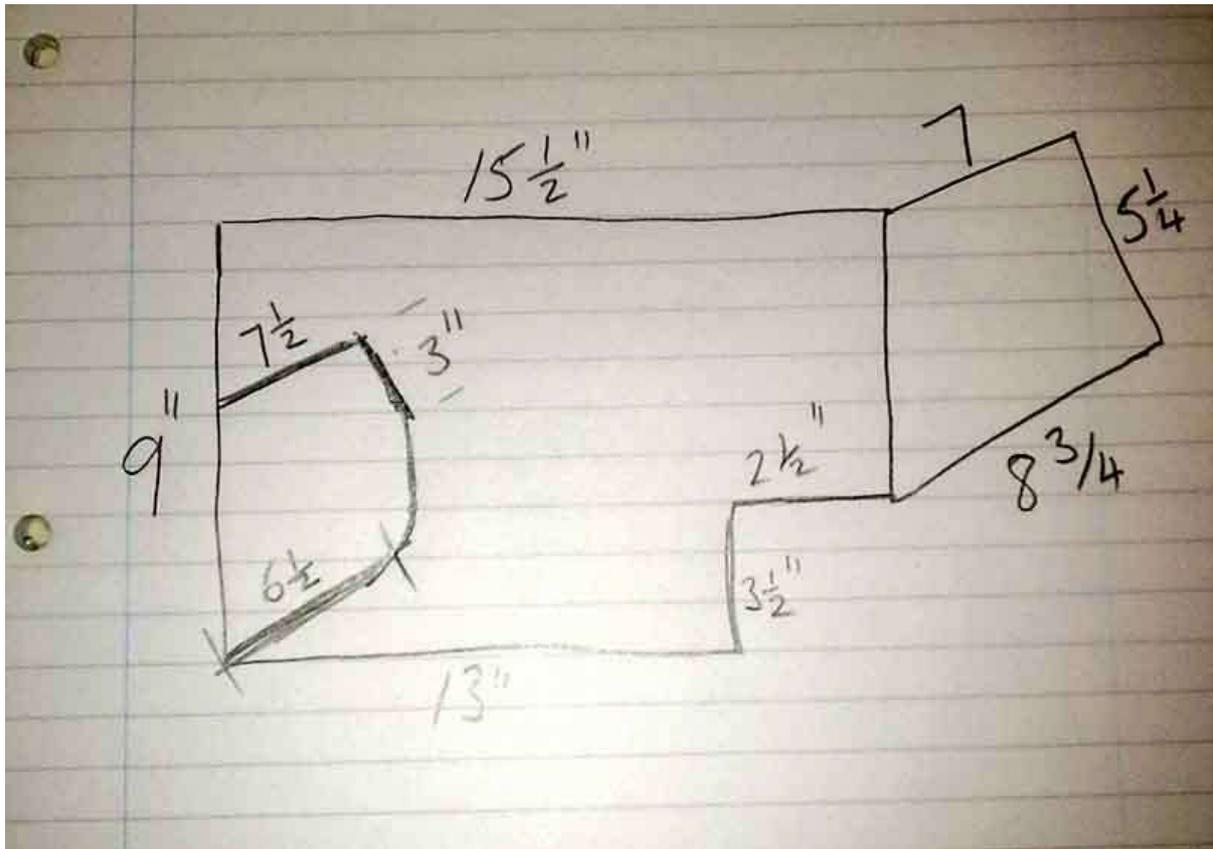


Same hole positions on the new plate with different character positioning, thankfully both fixings just inside character boundaries. Of course I reused the fixings, just painted them satin-black:



Passenger Foot Brace (aka Numpty Board)

Michael's sketch with dimensions for his board, used as a starting point.



Trial pieces in hardboard, originally used for a board then modified for the bar, sill side on the left, tunnel side on the right.



3/16" aluminium offcuts, with the wood plugs to go inside the tube.



General view, the side at the top goes against the tunnel.



Right side against the tunnel, angled in at the front.



Installed, just snugged down where it takes up a natural position along the carpet edges.



Wing Quarter-panels and Sills

Front left-hand section, showing heavy corrosion adjacent to the sill, but plenty of Waxoyl and no corrosion above and to the front of it



The adjacent sill section, fortunately in very good condition



The repair panels are considerably bigger than the amount I have cut off the old panel, only cut out the minimum to get to sound metal. The higher you go, the more work you will have to do to make the join invisible.

Wing fittings: In the above picture you can just about make out three spire clips along the bottom edge of the sill, for the wing lower-edge screws. Wing fitting kits are very variable in what they contain, some only conventional nuts, washers and bolts. There are three elongated washers AFH2546 for the lower edge of the wing as shown here, although there is an opinion that these should be between the wing and the sill for drainage and ventilation: (*John Keene*)



There should be two larger elongated washers AFH2627 for the upper rear wing bolts as shown here:



And this clamp plate AHH8094 (GT only) where the wing attaches to the A-post:



Both the above from mgb-gt.co.uk

Decals

Images from Motaclan/Leacy except where stated.



Roadster hood header rail



Speedo - could be black, red or green. However on my 73 and 75 the knob points downwards behind the dash so 'clockwise' is a matter of interpretation, and doesn't need to be pushed, just turned. It seems that some North American (at least) types do have to be pushed up then turned to have the desired effect. It seems that their late-model speedos (79-80?) had a push-button reset on the face.



Air filter cans up to 1969



Air filter cans 1970 to 1976



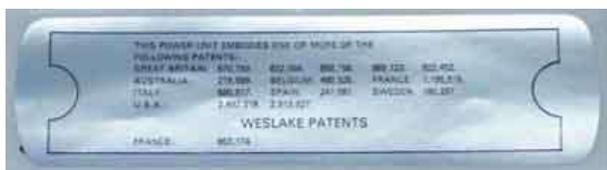
Air filter cans 1977-on ([Miniphernalia](#))



Heater case, facing forwards, between ports



Heater motor, top



Rocker cover - carb side, black screen-printed plate to 65, sticker as here 66 to 72



Rocker cover - plug side, plate up to 66, sticker 67 to 72 ([Moss Europe](#))



Rocker cover - 18V engines to 1979



Container for replaceable oil filter element



Round washer bottle



SU fuel pump



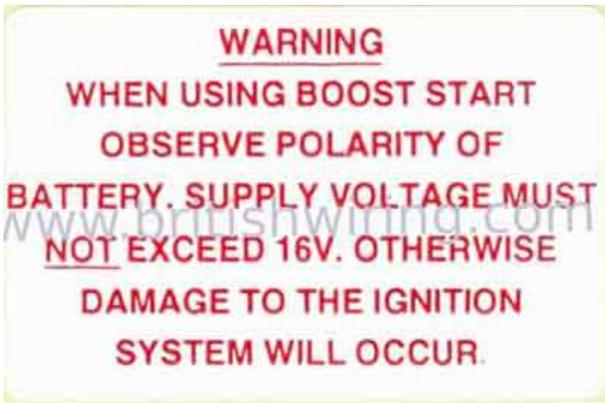
Bonnet slam-panel, Mk2 on chrome bumper?



1970 on chrome bumper?



Rubber bumper replacing the previous two?



Clausager shows this label on the battery cover of a 1980 roadster. Apparently a UK car, I could expect it on a North American model with factory electronic ignition, less so an RHD model with points. ([British Wiring](#))



V8 radiator

November 2023: Four examples of EU conformity stickers used from when the UK joined the EU in 1973: ([V8 Register](#)).



Not exhaustive, found as a result of a query on the MGOC forum from someone who had one showing a part number of BHH2008 and a different set of code numbers and was asking what it meant. Not listed in the Parts Catalogue, and only paper so most were 'lost' years ago.

There are very many more for North American spec, mainly concerned with their emissions and car ID requirements.

Tonneau Cover

Both press-stud and outer lift-the-dot post: *(68 MGC, Clausager)*



North American padded dash, centre post - by the right-hand bolt, right-hand press-stud: *(71, Clausager)*



77-on (plastic dash) LHD as above: *(77, Clausager)*



Centre post out by the left-hand bolt, right-hand post over the fuel gauge: (64, *Clausager*)



Centre post closer to the centre bar, right-hand post over the overdrive switch (68, *Clausager*). Also note how the centre post seems to have moved towards the front of the car on this 68 - about mid-way between the beading on the crash rail and the bracket - compared to the 64 above - which seems noticeably closer to the beading:



I had to swing the centre stud out to the left on my 73 before either the 'original' or the replacement tonneau covers would fit it:



Also it seems to have moved back to be 1.25" from the beading again. It has been said that from 1974 or so it was 2" closer to the bracket compared the 64, which would put it about an inch from the bracket:



My 73 with the right-hand post over the overdrive switch ...



... and the centre post past the left-hand bolt, original cover with the zip dead in-line with the centre bar:



Replacement cover, zip only very slightly to the left of the centre bar:



Replacement cover showing the original press-stud, and the added tab with the lift-the-dot socket:



Cover with short zip, two heel board fastenings each side, and what looks like one dart. Press stud just aft of the hood tongue socket, with what looks like a second press-stud inboard of that, alongside the zip. Plus a further press-stud inboard of the first post, by the dart: (*Clausager*)



No zip, two heel-board fastenings each side, one dart, and the hole for the quick-release seat belt fastener. Press stud just aft of the hood tongue socket, plus another inboard of the first post by the dart: (71, Clausager)



My original cover, short zip (over the hood tongue socket), two darts. One press-stud just aft of the hood tongue socket. This originally had two heel-board fasteners each side, but I removed one each side for the front of the replacement cover:



My replacement cover, long zip (just in front of the first post), no darts, just a short cut-out. One press-stud just aft of the hood tongue socket. One heel-board fastening each side:



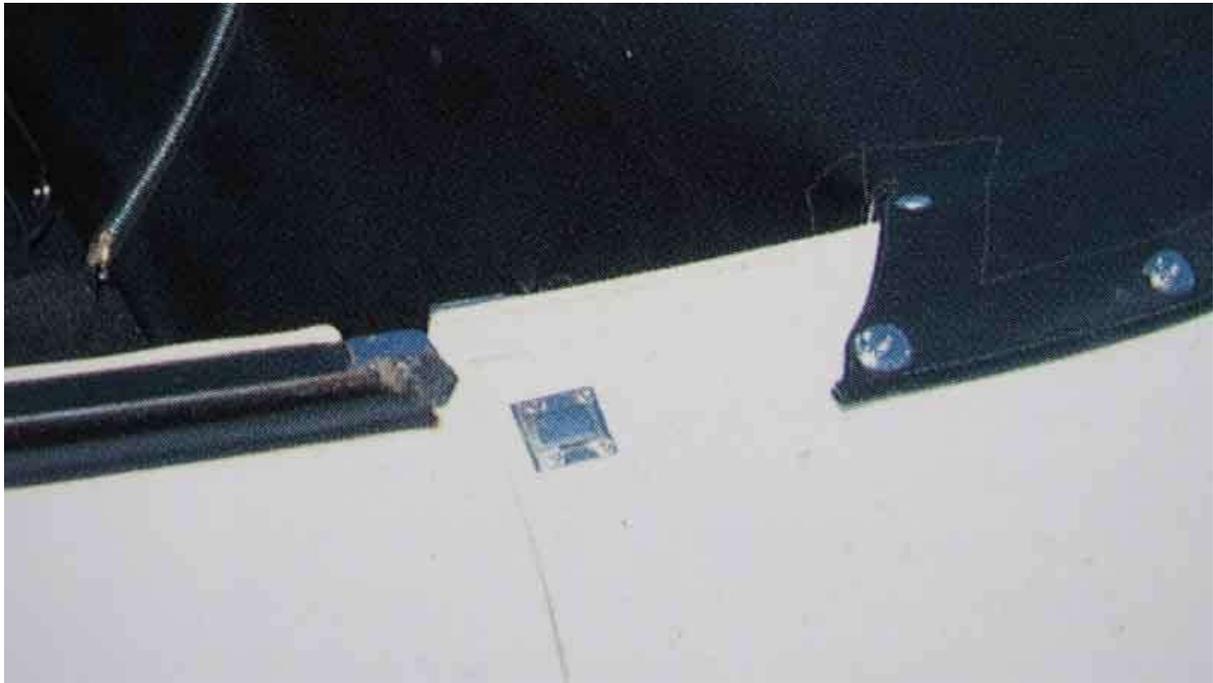
I added a tab to the replacement cover to prevent the zip chafing the raised seam at the top of the wing:



Lift-the-dot post behind the hood tongue socket: (64, Clausager)



Nothing behind the hood tongue socket: (69, Clausager)



Press-stud behind the hood tongue socket, as on my 73: (71, Clausager)



None of Clausagers images show the hood tongue socket being used for the full-length tonneau, but he and various others show it is used for the hood cover, such as : [SC Parts Group Ltd](http://www.scparts.co.uk/):



And [Prestige Trim](#):



Heel-board lift-the-dot post spacing:



My tonneau covers and photos of others I have seen have two short bars stitched into pockets to engage with the 'tear-drops', although Steve Brookes indicates that his mohair from MGOc has a long bar which goes into a slot, and he was concerned about the ends scratching the paint, but then discovered two slots where they can just about be fitted into. The full-length bar in my cheapo vinyl hood has [little vinyl boots on the ends](#) even though those ends are concealed within the main slot, just in case the bar should move to one side, but it would have to be several inches:



Tonneau sticks and bag:



As recommended in the drivers handbook for use with a hood cover ...



... gives a very neat finish:



The tonneau bars slot into socket AHH8391:



The sockets can be installed with either of the folding frames:



Cockpit cover without tonneau sticks, the middle of the zip is the lowest point (indicated by the ball) so rain drips through:



But with the sticks in the alternative position in front of the seats ...



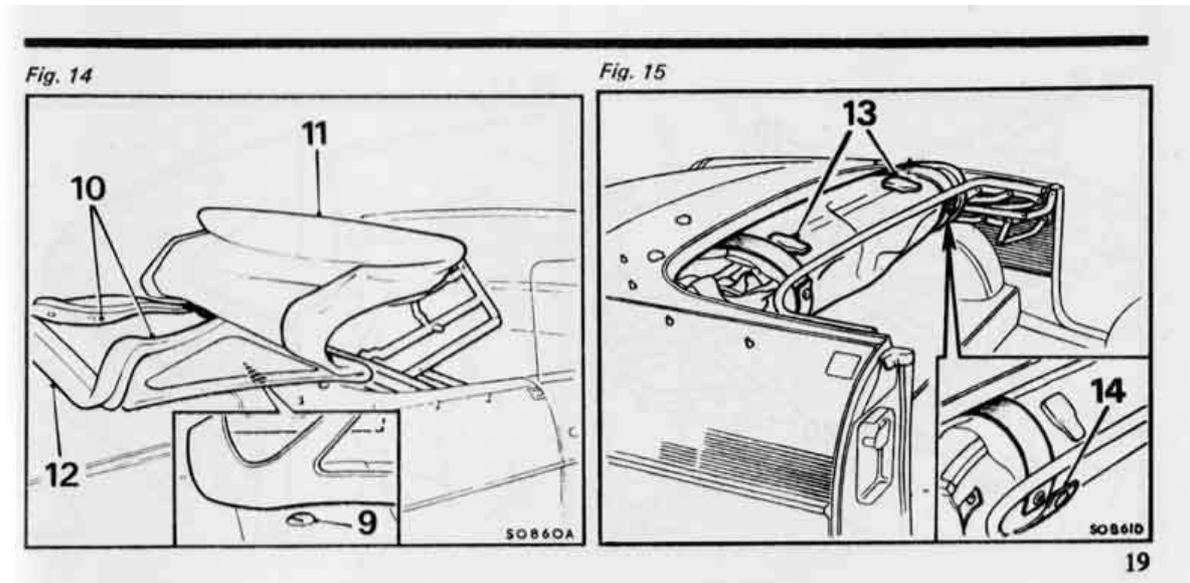
... the zip is raised and rain will either run off at the sides (taut cover) or at worst pool in an impervious part on a slacker cover (as indicated by the ball) and can be swept off:



Hood/Top Folding

Front bow fouls the body

This is one of the illustrations from the Driver's Handbook:



But I don't like draping the material over the rear panel and boot so came up with a modification to the process to avoid that.

Fold the rear section forwards over the top:



Tuck in the quarter-lights (you can see one of the cords that pulls the rear bar into the correct position when the hood is erected):



Lower it into the tonneau space, holding up the rear edge to lift the rear bar and stop it jamming on the wheel arches:



Lay the rear part over the rest of the assembly (closing the catches first). The folds should all be in the material not the windows, and the strips between the rear window and quarter-lights should be lying over the header rail clips:



Hood straps in use, although I never bother. With the inertia reels in the lower rear corner as they are, and the belt exiting horizontally, leaving the hood hanging has never impeded belt extension or retraction, and the tonneau cover used as a hood cover hides it all anyway:



Hanging down in the corner between the back panel and the arch:



Attachments:



The folded hood drops down almost completely into the space behind the seats (this space is the 'tonneau', not the cover that goes over it, that is the 'tonneau cover'). Originally it stuck up much higher than this and I couldn't fasten the full-length tonneau cover over it. I took the hood frame off and placed it on the floor and lowered it, and I could see how one strut each side was jamming. By bending those struts a bit more it suddenly collapsed all the way. Unfortunately I can't remember which strut it was!



Now the tonneau cover fits over the hood neatly and clips to the heel-board snaps. However the downside is that I can't now throw the hood back and leave its snaps fastened all the way round in preparation for a quick ... erection, so to speak:



Sticking up: *(This and the next three pictures from Martin White)*



Although the rear bar rests on the rear arches the remainder of the frame cannot sink right down:



The strut that needs to be adjusted:



The result:



65 with the later Michelotti frame down all the way, as well as still being fastened to the rear panel. It has the rear window zipped out though, so maybe that makes a difference:



With inertia reels fitted in this position ...



... the hood drops down, and it is the frame resting on the arches (see witness mark on the arch carpet above) that stops it going any further, not the inertia reels. I never use the straps to fasten the hood into a bundle, just let it all hang down, but it doesn't affect retraction of the belts:



Front bow fouls the body:

The most convenient position for the front bow is to point down and slightly back at the same angle as the middle bow ...



... then when folded it points straight forwards and tucks inside the cockpit rail:



If it is pointing too far backwards ...



... it will be pointing straight down when the hood is folded and foul the body:



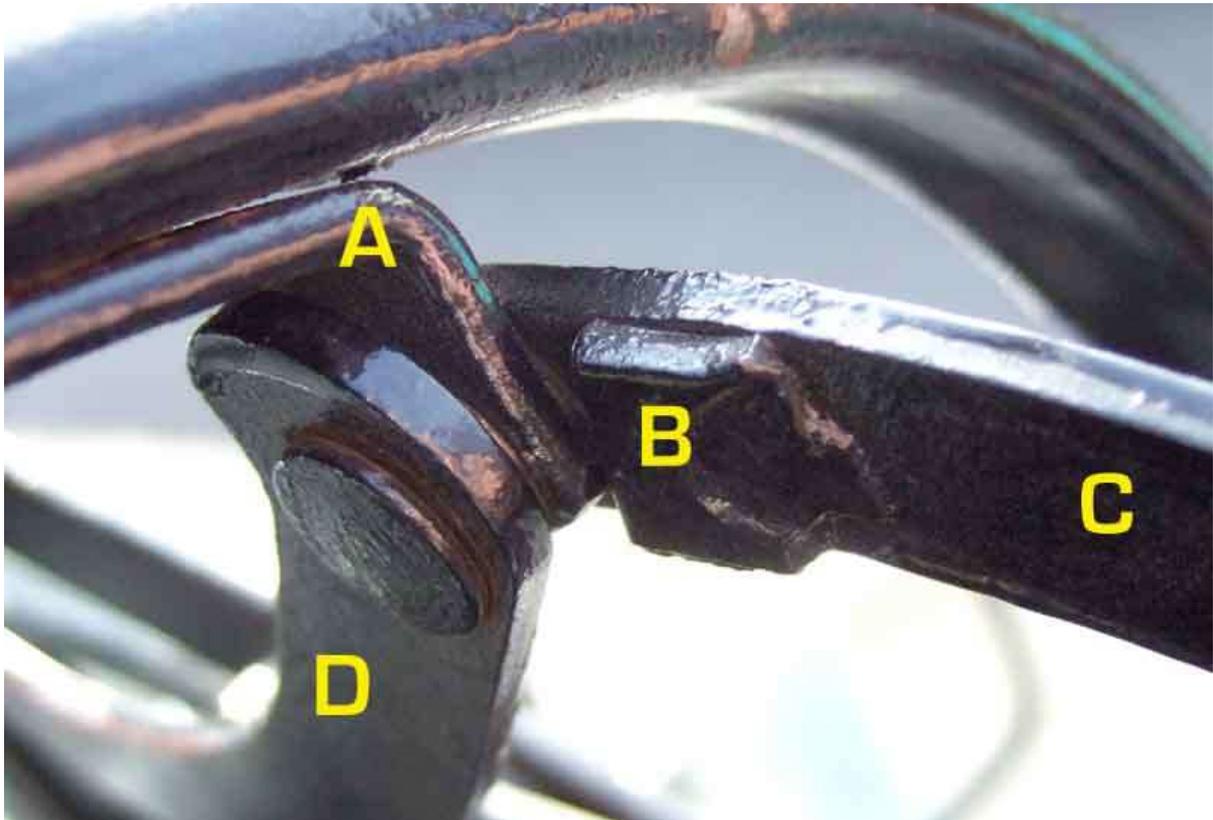
If it is pointing straight down when erected ...



... then when folded it won't foul the body but will be pointing up upwards, which is less convenient:



The front bow support 'A' looks like it should more-or-less butt up against block 'B' giving just a small amount of movement of the bow. 'C' is the short rear strut and 'D' the longer front strut. If the side of A should butt right up against the edge of the block then that would put the bow ends pointing straight down as in the two previous pictures:



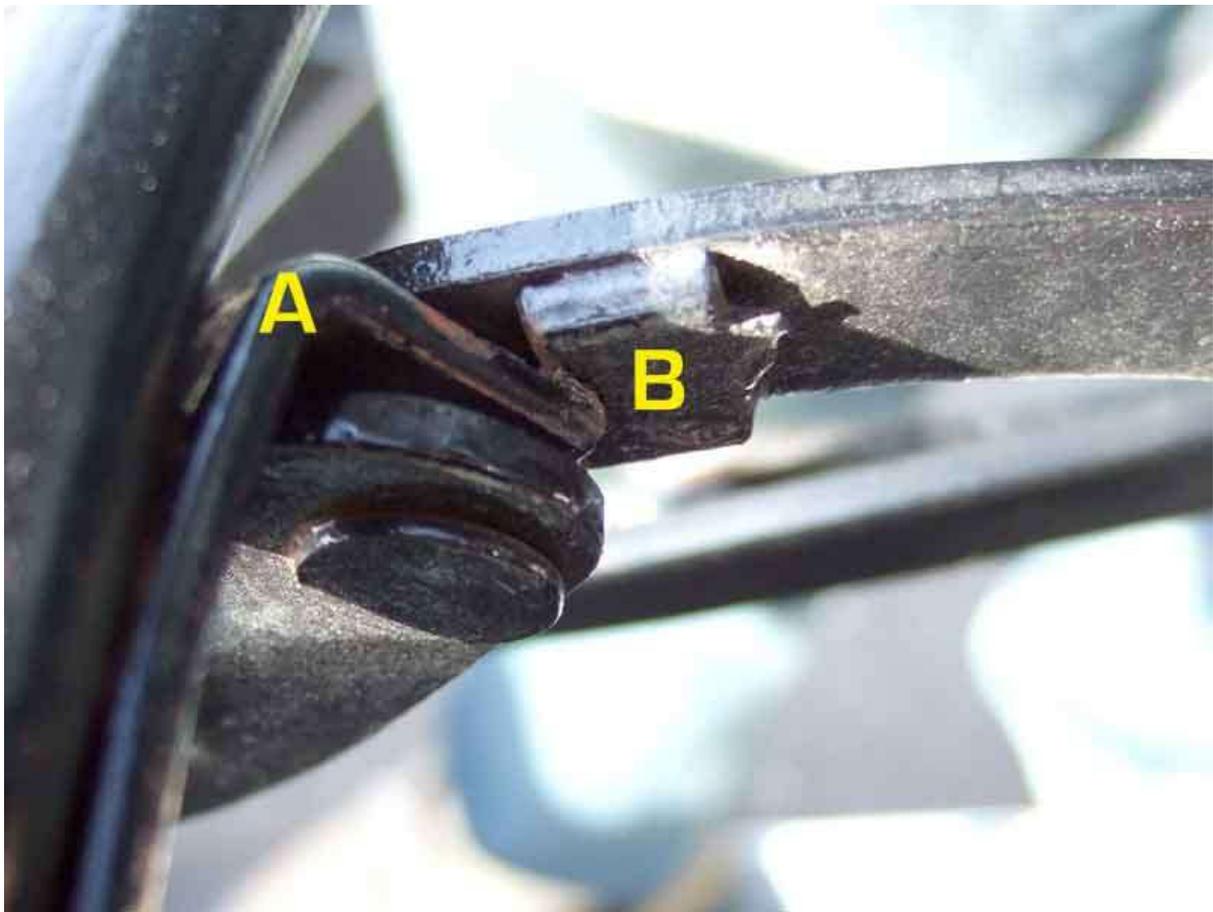
But given the gap between the bow and the block ...



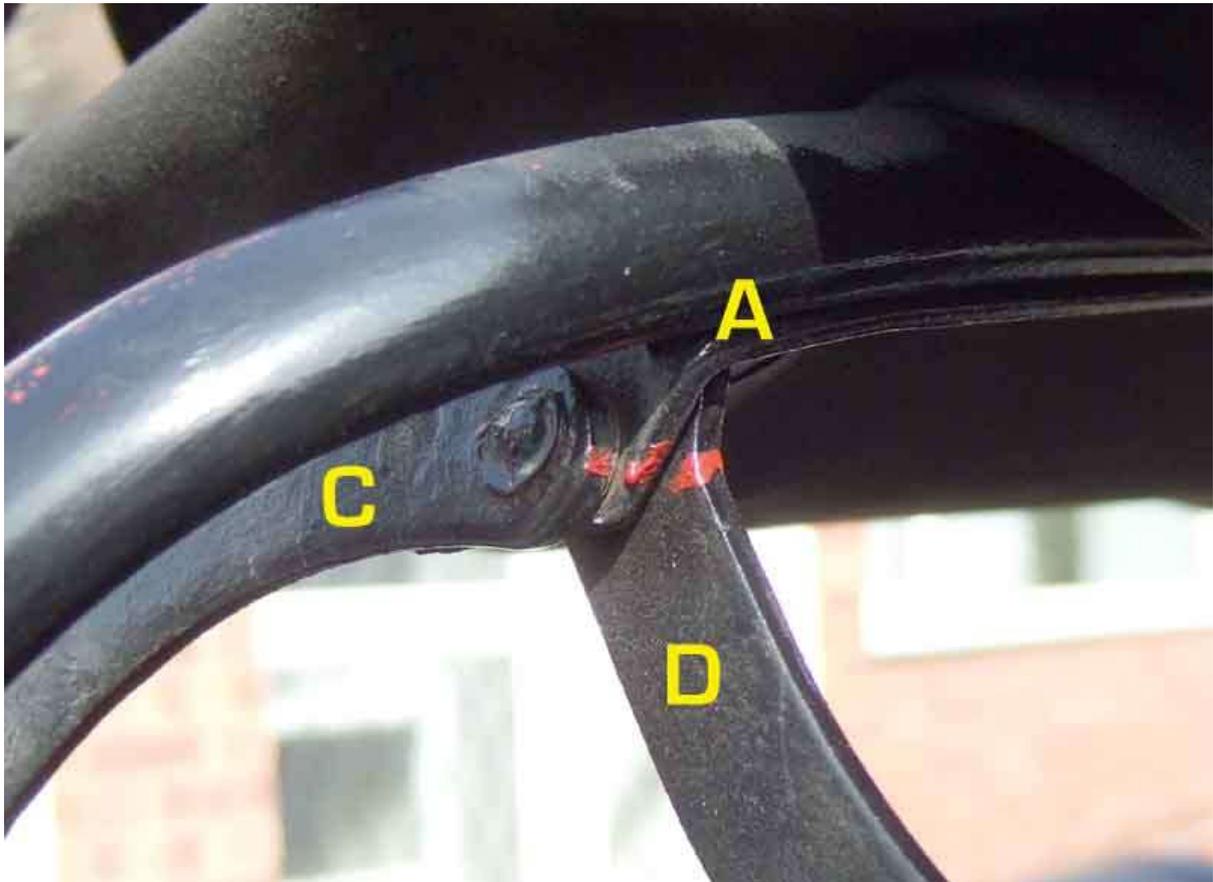
... and wear in the pivots giving a less-than-ideal angle ...



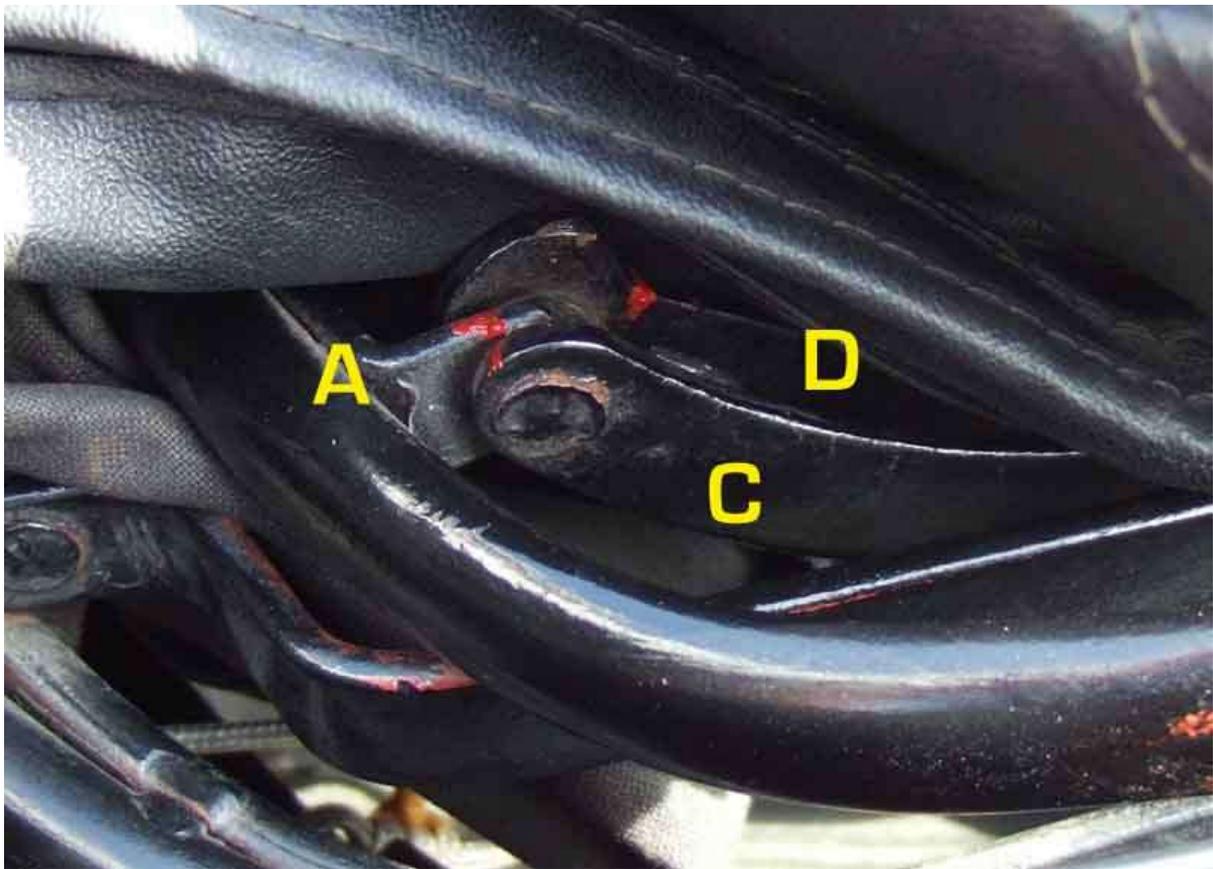
... the bow bracket can ride up over the block which allows the bow to tilt forwards when the frame is raised, which is when the ends of the bow foul the body when the frame is lowered:



With the frame raised a line of paint marks on the three elements ...



... shows that the bow support 'A' remains aligned to the rear strut 'C', so could conceivably be welded to it:



I root around in my box of scrap metal and offcuts, and find an old Mini rear brake handbrake lever dating back 45 years - some of which has already been used for something else - and find it is the ideal thickness and width, so cut two pieces off ...



... which (having just been placed here) should nicely fill the gap between the two struts better than the existing block. Judging by the effort needed to hacksaw through it's harder than basic mild-steel, probably because it needs to be able to force the shoes on tight without excessive wear in the pivot or where it engages with the shoe:



Old block ground off:



New block welded in place, prior to painting:



Hood/Top Fit

Drop-glass fully raised (as indicated by the safety markings), top edge just under the hood gutter, and the flap inside laying flat against the glass.



Hood Fittings

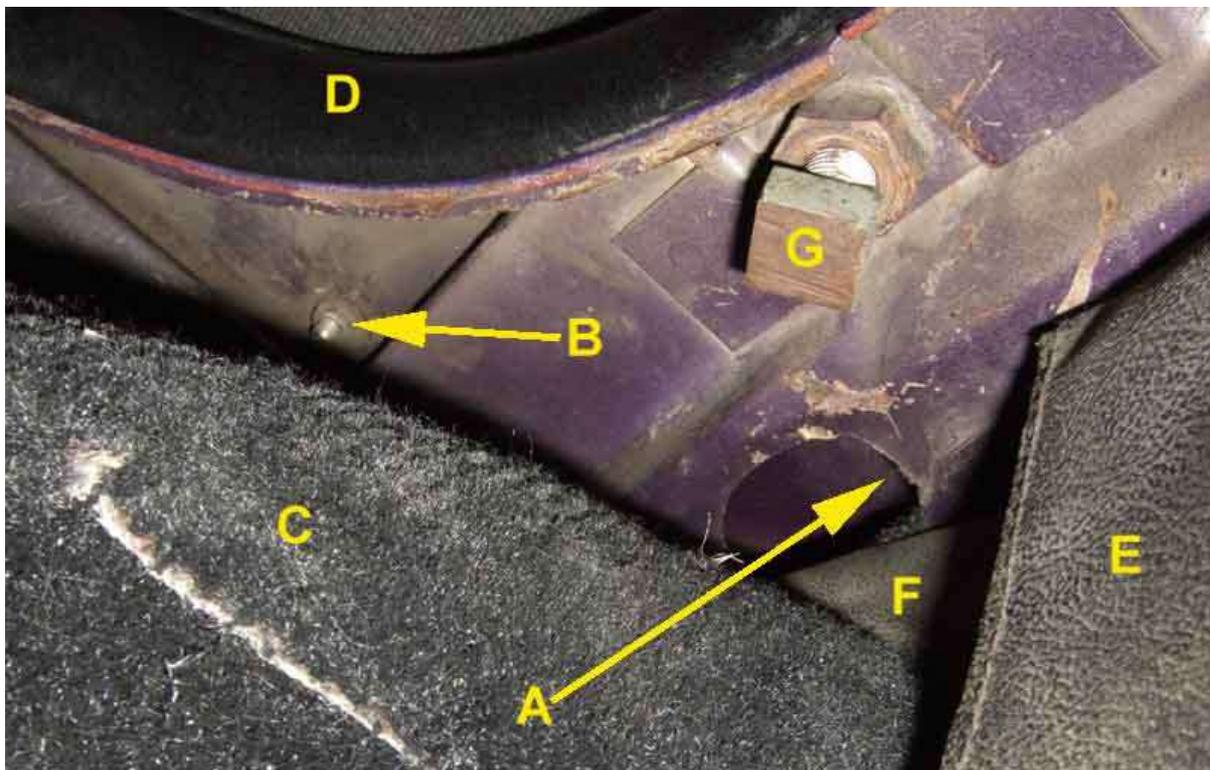
Relative dimensions of the pegs, press-stud, and hook plate. However Kelvin Dodd of Moss America has written to say: "In reality, the rear snaps moved around quite a lot when the V8/rubber bumper shell was built. I've done some research on this and have found that the stud location on the cars up to 1974.5 is pretty standard. From then on the snaps vary even from side to side. To allow the later tops to fit these later cars accurately the snaps and even the cut of the top from some manufacturers is slightly different.":



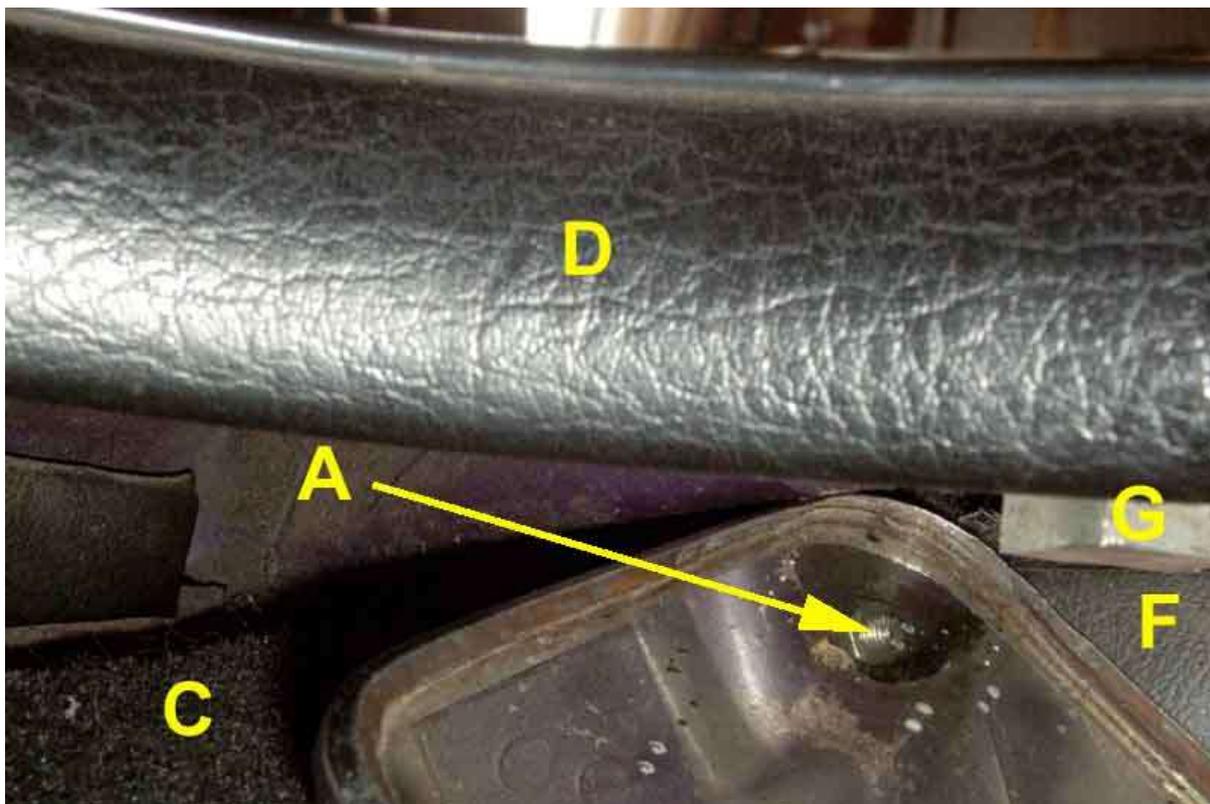
The positioning of the press-stud is dependant on what tonneau or hood cover you are using. I've had two full tonneau covers and both fitted my stud in this position, but I have seen others with a smaller spacing i.e. a bigger gap to the front socket:



The pegs are secured with washers and nuts that are a fiddle to get to, this picture is of the off-side. The rear one (A) is accessed through the arrowed hole which is awkward enough, but also to one side which is why you can only feel it and can't see it without a mirror. The next one moving forwards (B) is easier to access, and the other two further forward still are accessed by removing the trim panel aft of the doors. 'C' is the carpeted wheel arch, 'D' the cockpit rail, 'E' the straps that go round the folded hood, and 'F' the rear bulkhead trim panel. 'G' is a gash bolt I have screwed up from below to block off the hole that was used for the static belt quick-release fitting, to prevent water running down:



Seen with a mirror, 'A' etc. are the same components as in the picture above:



An 8mm or 5/16" socket is a snug fit on the nuts, or a 2BA spanner. However whilst I can get my miniature 1/4" drive ratchet and socket on 'B' above there isn't enough room for 'A'. Initially I used a 6mm Allen key which can be wiggled into the 1/4" square drive of the socket, and that will just fit on that nut. Subsequently I expanded on this idea to use [square bar in a 1/4" drive socket](#) for the heater valve nuts, and that bar can be used with the 5/16" socket as well. Also note that you don't really need to turn the nut, just hold it in position, while you carefully screw the peg down into it. Stuff the socket so the washer and nut sit just below the top otherwise the stud won't pick them up. Do that before putting the stud in the hole which will allow you to align them with the hole as well as give you more space. Use a soft washer of some kind between stud and body to protect the paint, I used offcuts of vinyl used to recover the cockpit rail or dash:



The two 'teardrops' for the rear of the hood and tonneau cover are accessed from the boot, via a hole near the lid hinge:



Rear retaining bar - curved as well as chamfers on one side of each end:



A shade under 35.5" long, little vinyl boots glued on the ends in case the bar should move sideways far enough to come out of one of the slots:



Fitted and slot arrowed:



With the hood fastened and the drop-glass raised pull each flap or tab into position for neatest fit including the internal flaps laying against the glass. Then use a bradawl to punch through material over the males attached to the hood frame, and at the top of the screen frame. You may need to position both B-post ones at the same time before punching holes. Despite the inwards bow of the vertical internal flap here nothing comes through even in the heaviest rain, whereas on the passenger side it does even in light rain and I've used a length of clothes-hanger wire inside a channel to press it against the glass:



The front tabs seemed flimsy, I had some vinyl left over from something else when I re-trimmed the car and sewed a square over each and onto the main material at each corner to make a much stronger flap:



This top came to me with the car 33 years ago although it was nearly new at that time. It's as good as ever, although apart from planned runs where it is wet and MOTs, and in the garage when we are away for a while doing other things, it's never up of

course!

Hood Frames

Early packaway, showing no connections between the frame and the header rail: (*Clausager*)

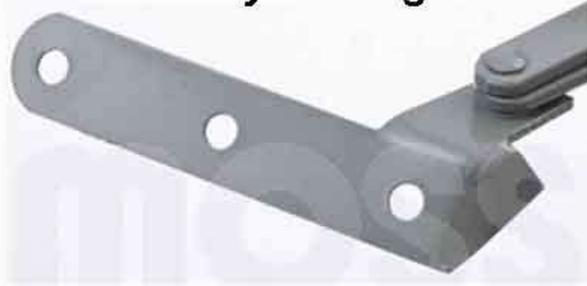


Early 'scissor' folding, showing the header rail attached to the frame: (*Clausager*)



Early and later folding frame brackets for the header rail. Different header rails (BHH496 and AHH6347 respectively) are listed in the Leyland Parts Catalogue, but parts suppliers are only showing the earlier part number implying the two are ostensibly the same: (*Moss*)

Early folding



Later folding



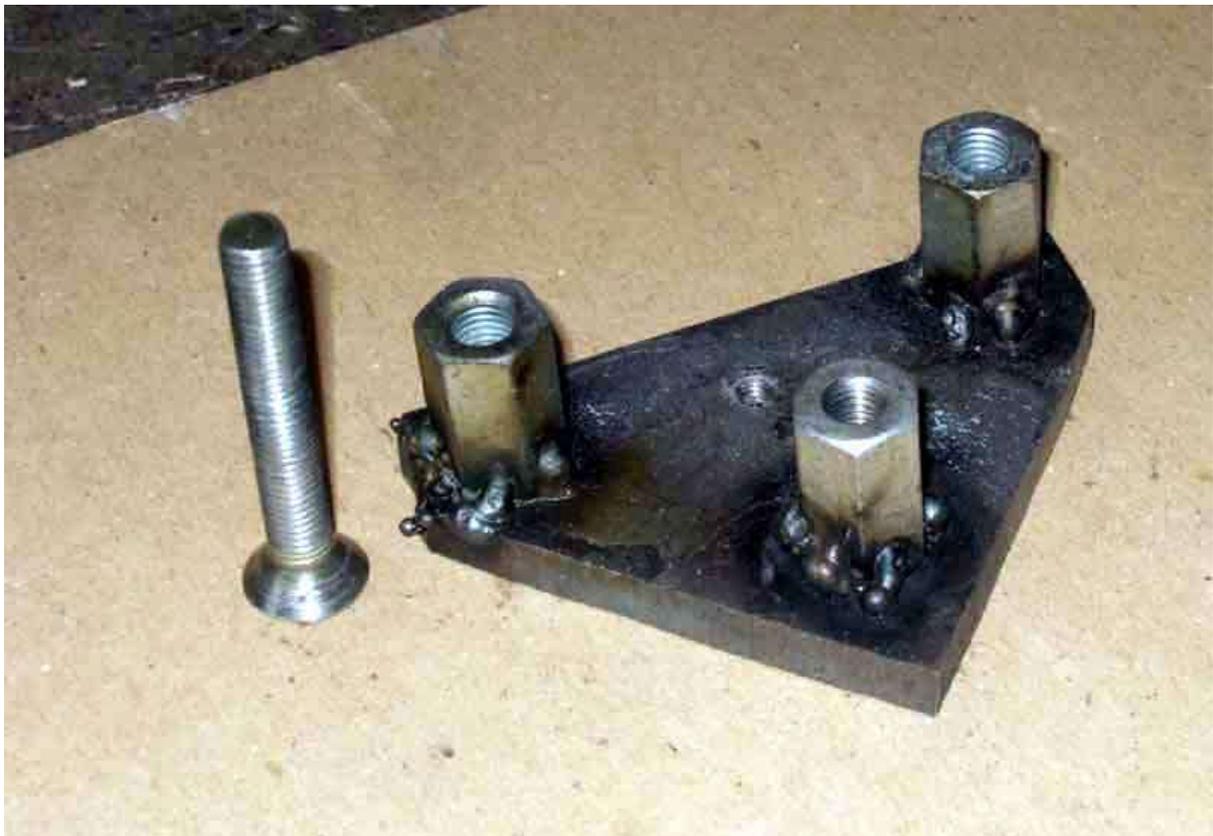
(Moss UK)

Hood Frame Mounts

Welded nuts had ripped free from the panel leaving the hood frame flopping about all over the place as it was raised and lowered.



Deep quarter-light nuts welded to a thick base. Standard fixing screw shows that even with the stand-offs that are part of the hood frame, and tonneau bar socket when fitted, shows that all the threads of the screws will be engaged with the nuts.



Nuts pressed into slightly undersized holes drilled in the plate prior to welding. Counter-sunk fixing hole drilled and tapped for a screw to hold them in position while attaching the hood frame to the body.



[Moss US have produced a similar thing](#) albeit with much less substantial nuts, and a larger pan-head screw instead of the countersunk I used, for which a hole has to be cut in the trim panel. Not listed on the appropriate Moss Europe 'Hood Frame & Tonneau Cover Fittings' page, but can be found by searching for the Moss US part number [472-328](#).



Removing a Rubber Bumper Radiator Grille



First remove the two large screws from the bottom brackets and the three small screws going through the slam-panel to the plastic sockets in the top brackets, then slide the whole grille forwards, keeping it vertical, just enough for the top brackets to clear the front edge of the slam-panel.



Next tilt the grille by pushing its bottom edge back as far as it will go, this should allow you to tilt it even more by bringing the top edge further forward to clear the end of the wing drain channels and the very front edge of the wings themselves.



Now you should be able to lift the whole grille up, keeping it square and tilted, with the outer edges of the grill passing through the small gap between the back of the bumper and the front face of the wing. If your gap between bumper and wing is too small to allow this, slacken the nuts securing the bumper to the chassis legs which should allow it to angle forwards increasing the gap.



This image shows the vertical edges of the grille and the reinforcing bar for the upper part of the rubber bumper. This bar sits in a channel across the top edge of the bumper, then bends back for a short distance and then downwards. There should be about 1" clearance between the edges of the grille and these bars i.e. they should not interfere with removal at all.

Seat-belt Inertia Mechanisms

There are two types of locking process - one that responds to sudden changes of speed and direction i.e. inertia or at severe angles from the horizontal, and another that responds to 'snatch' i.e. if the belt is suddenly yanked out of the reel. Vee's originals only had the inertia function i.e. didn't respond to snatch, but Bee's (retro-fitted) and the ZS respond to snatch as well as inertia. The snatch function can be checked with the car stationary, but the inertia function can only be tested under harsh braking or by tilting the car significantly.

Vee's original mechanism is very similar to these pictures from Justin Mercier on the TR6-pack forum. Remove one of the screws and slacken the cover, then by swivelling the cover round you can expose the spring to be able to re-tension or de-tension it, without it sproinging all over the place. Nevertheless eye protection should be worn, just in case, as it can be pretty violent and has near-razor sharp corners.



The reel has many turns of a 'clock' spring which is tightened as the belt is withdrawn, and retracts the belt when unfastened. When Vee's first replacement belt arrived above initially I had great difficulty when checking it to get the belt to come out at all. Eventually I realised that even though I was holding it at the correct orientation the little bit of movement while hand-held was enough to cause it to lock. It was only when pressing it down onto a flat surface to keep it still that I could get it to reel out consistently.

But by that time I'd decided to investigate. Two covers on the sides secured with cross-head screws, one of the covers was embossed 'DO NOT REMOVE', but when did that stop me? Undid the screws, carefully lifted the cover a bit ... and SPROING!!! ... out spills a 'clock' spring. That's all there is that side so it didn't need removing anyway, and I pondered how to put it back. If it does sproing out care is needed to untangle it without buckling it.



Looking at the spring, it started spiralling out from what had obviously been the tightly wound middle for about a quarter of its length, then it turned back on itself to spiral in the other direction for the remainder of the length to the outside! Eh? The spindle has a slot for the inner end of the spring, and when I was able to pull the belt out that spindle was turning in a clockwise direction, so that obviously has to tighten the spring and so determines which way round the spring fits at that end. Looking at the other end of the spring there is a cut-out on one edge about 1/2" from the end, and was a corresponding projection in the slot in the cover, so again the spring can only fit that way round. However slotting that end into the cover and curling the spring into the cover, I realised that would put the inner end the wrong way round in the spindle, i.e. pulling out the belt would try and unwind the spring, not wind it up! It's not helped by the outer end being held in the cover and the inner end on the spindle, and trying to look at both halves at the same time and work out the 'logic'. At the same time I came to the conclusion that the bulk of the spring was curved the 'wrong' way when it was out of the cover. But even then, it meant that the outer end instead of following the curve of the bulk of the spring, must fit in the slot in the cover, then turn back on itself, as well as being wound into the cover against its natural curve, as that was the only way that the inner end would be the correct way round for the spindle. The spring has a natural reverse curl like this as it is a way of increasing the tension once fitted, a clever bit of lateral thinking. Fortunately the spring was well-behaved and could be fed back into the cover quite easily, and stayed there once complete.



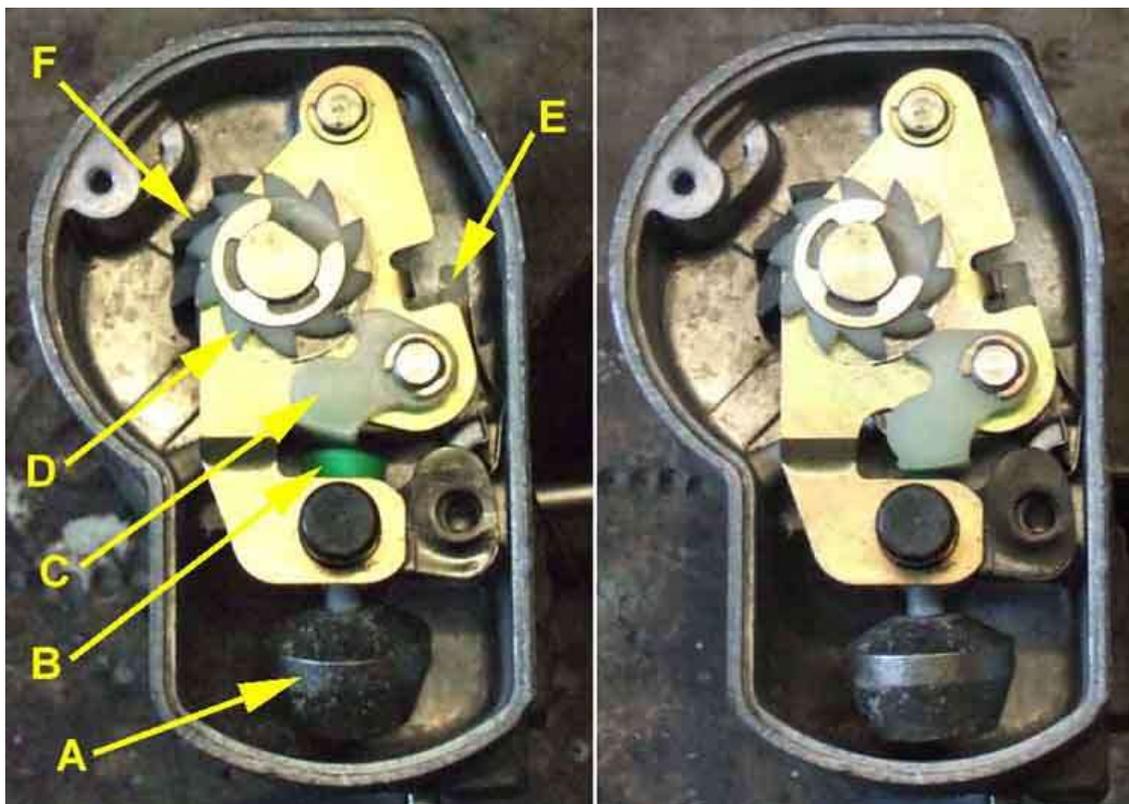
Note that with both this earlier grey-bodied reel and the later black-bodied, as it is withdrawn the belt rotates the spindle clockwise to tighten the spring. If it needs retensioning there are two possible ways, and that is either to turn the inner end of the spring clockwise relative to the spindle to add tension, or to rotate the outer end of the spring anti-clockwise relative to the body. On the face of it this should be easier on the grey-bodied reel as both inner and outer ends are retained by the body when the cover is removed, whereas on the black-bodied type the inner is in the spindle in the body, and the outer is retained in the cover.

However with the grey-bodied it does mean that one either has to grasp the inner end of the spring, remove it from the spindle slot, and rotate it clockwise relative to the spring, or remove the outer end from its slot and rotate it anti-clockwise, neither of which sound particularly easy. Theoretically one could pull the belt out a certain amount, detach the spring from the spindle and hold it there, then rotate the spindle anti-clockwise to reel the belt in, then refit the spring, but that sounds even less easy. With the black-bodied by careful lifting of the unscrewed cover the minimum amount, it can be rotated anti-clockwise relatively easily to add tension.

That done I wound the belt all the way back in manually, and refitted the cover with the inner end of the spring in the spindle slot. By this time I had discovered the cover had a section over the end of the spindle that could be removed to help refit and remove the inner end of the spring to the slot in the spindle. I then pulled the belt all the way out, and released it, but of course it only retracted about a quarter of the way even being 'helped'. So removed the cover again this time careful to pull the inner end out of the spindle slot so it didn't sproing out again, and manually wound the belt the rest of the way back in counting turns of the spindle, and got to ten full turns. So the spring needs to be pre-tensioned by something approaching that amount, to retract in use. It doesn't need to retract all the way under its own efforts as there is still a couple of feet of belt from the reel to my belt-guide, and from there to the sill, in normal 'use' when not fastened. I refitted the cover, then very carefully lifted it up as little as possible leaving the inner end engaged ion the spindle slot while I turned it anti-clockwise (the spindle turns clockwise when the belt is pulled out remember) through a series of half-turns to pre-tension it. After five full turns I refitted the cover and tried it, but even helping it retract there was still a couple of feet or so that wouldn't go in. So unscrewed the cover again, carefully turned it another full turn. Better, but still some left, and another full turn plus me helping it got all the belt in, I reckon that will do.

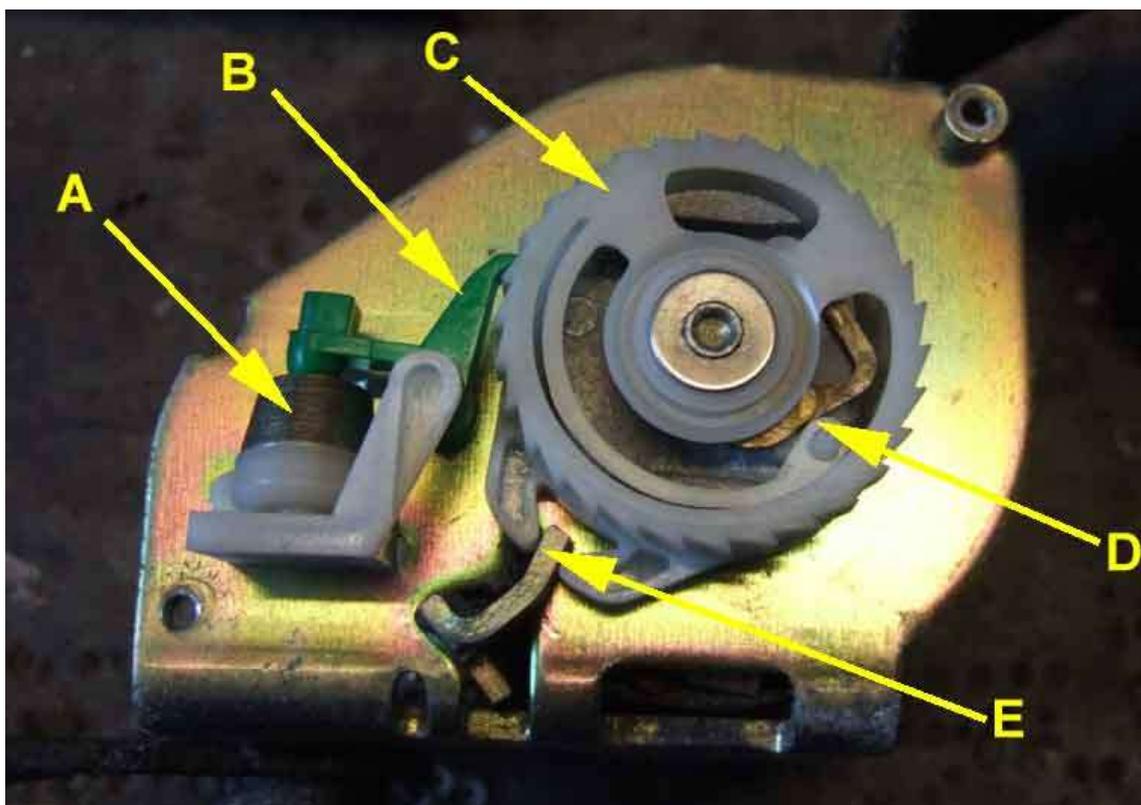
Justin Mercer describes pulling a pin out from the other side, which is what locks the belt to the spindle, and at that point one could turn the spindle independently of the belt to add tension, however it needs complete dismantling of the locking mechanism to do that. With the later black-bodied it's just a case of turning the cover relative to the body, which keeps both ends of the spring firmly in place. On the other hand his mechanism was more straightforward than mine in that if dismantling is required, conventional circlips are used. This enables removal of the webbing from the reel, and is something I pondered doing to both old and new belts to enable me to change the tongues over. But my new one has one of those 'single-use' Spire clips which I was reluctant to break, lose or damage, hence decided to use the new belt complete.

On the other side is the locking mechanism, a much safer area to investigate. Basically a pendulum hangs vertically and is free to swing in any direction. As it does so it pushes a latch into engagement with a toothed wheel that initiates the locking action. On the later reels there is also a friction mechanism that performs the same function if the belt reel spins at more than a certain speed i.e. if the belt is yanked. Vee's original belts - a single-action locking mechanism: On the left in the locked position, A is the pendulum that responds so sudden changes in speed, direction or car orientation; B is pushed up as the pendulum moves from the vertical; C is the initial locking lever; D is the toothed wheel that pulls C into the fully-engaged position, lifting E which is the main locking latch, into engagement with the main locking wheel F, to lock the belt. On the right unlocked - B is retracted, C is clear of D, and E is clear of F to allow the belt to be withdrawn. Circlips allow the mechanism to be completely dismantled and reassembled.

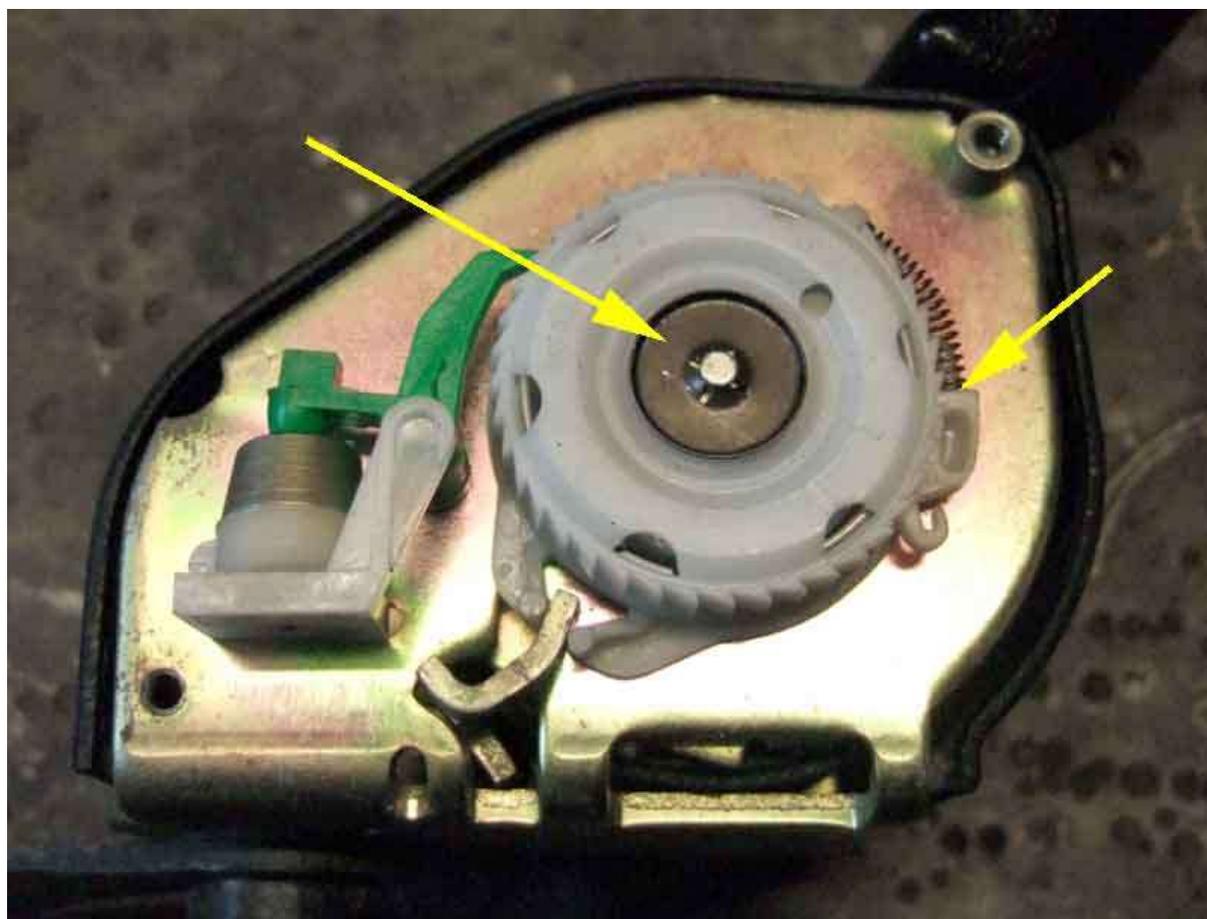


Later belts with a dual-action mechanism: A is the pendulum that responds so sudden changes in speed, direction or car orientation; B is the wedge lifted by the pendulum to lock the wheel C; D is the friction mechanism that responds to the belt being

yanked out of the reel which also locks C; With C locked any attempt to withdraw the belt moves the main latch E in the direction of the arrow to engage with teeth on both sides of the reel (not shown) to lock the belt. This has a washer trapped under a peened-over shaft to retain the inertia mechanism, which make dismantling inadvisable if you want to reuse the belt.



Other versions of the externally identical reel have a spire-clip (A) securing the inertia mechanism, and a different way of triggering the locking action if the belt is yanked out (B). Despite being a spire-clip it's probably inadvisable to attempt removal of this as well in case it does not retain the parts as securely as previously.



Showing how the Securon adjustable reels have a large additional 'lump' on one end, which means the right-hand reel can't be positioned correctly on the GT arch without a second bracket at right-angles to the first, as on the right. If ever the belt is used in

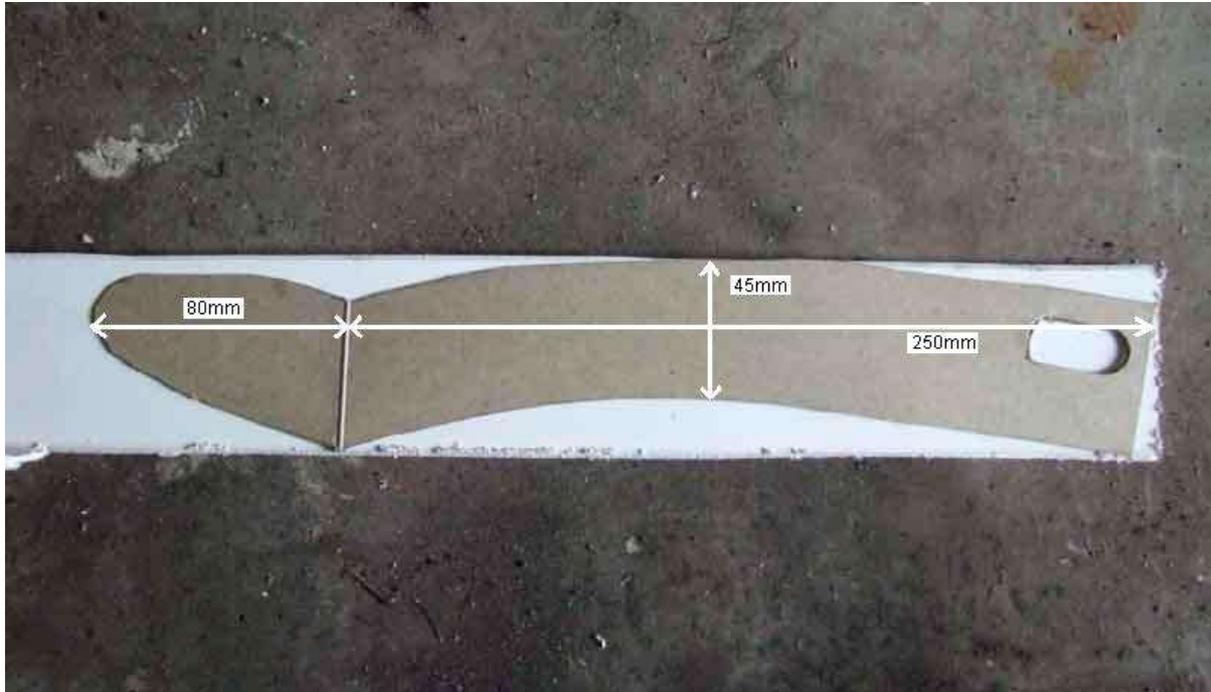
'anger' the locked reel will almost certainly be pulled forwards a certain amount, allowing the occupant the travel further forwards than otherwise than otherwise would be the case. Absolutely pointless buying this adjustable belt, and Securon don't seem to do a non-adjustable reel where the belts exits forwards as is required for the GT arch-top mounting position, or the roadster, unless they are mounted so the belt exist vertically and has to twist through 90 degrees between reel and shoulder.



Non-adjustable belts are available from some sources, but many come with a floppy tunnel belt which would be a pain for single-handed fastening. The [MGO C M061](#) (available singly) come with the stiff stalk (not shown, but they have confirmed it) and fitting kits for roadster and GT are available. [Watford Classics](#) shows a kit (pair with brackets) for the GT, and [Chase MG](#) one for the roadster (pair with brackets, albeit with red belts), both with stiff stalks.

Seat Belt Guide

Suggested template, dimensions not critical. Simply bend the curved end back one way for one side, and the other way for the other. The tube hole is offset to the rear as the width of the strip is limited by what I can get out the 60mm width of UPVC square downpipe, but still keeping the clip towards the front of the seat-back.



Attached to the bottom of the headrest if it pulls right out (which the driver's does).



If it doesn't (like the passenger side) cut a small slot in the end so it can be pushed onto the tube, and you should still be able to reach the screw with the headrest pulled up.



Quite a neat installation, especially the later black version



Some time later something very similar appears in MGOC Accessories, for £27 ... now I wonder where they got the idea from ... and subsequently there are several reports of them breaking. There has also been [an eBay pair](#) made from sheet metal with a rubber grommet the head restraint stalk goes through, also expensive at £28.50. Currently unavailable, and I was concerned that with inertia reels at least [the rough edge shown in one of the pictures](#) would fray the belt with the continual to-ing and fro-ing.

November 2017: With Vee's new seat covers, she needs them as well.



Subsequently modified as with Vee's inertia reels much higher compared to Bee's - being on top of the rear arch instead of down by the chassis rail, the belt was lifting out of the guide in normal use. The first modification flattened the folded-over part fully down, but that was inhibiting belt retraction so I spaced it back to give a parallel gap. That put the tip under the head restraint which made it awkward to get the belt in and out to tip the seat forwards, so I cut the tip back a bit as well. But they were still coming out while being worn, and the driver's side broke because the sliding clip under the tongue was too high so the tongue was pulling the guide back when released. So I took the opportunity when making a replacement to make them higher with the protruding part nearly vertical. Early indications are that is successful, so I reshaped the Navigator's side as well:



GT Rear Seat Belts

Suitable lap-belt such as the [Securon 210C](#) (other sources are available ...)



Central mountings behind the rear seat, under the spare wheel cover.



Slot in the rear edge of the spare wheel cover



Boss on the wheel arch beside the seat



Seat belt end on the bolt first, then the wavy washer, then the stepped spacer. The two previous components fit over the narrower part of the spacer. Bolts seem to be 7/16" UNF/20. They should be short enough to clamp the spacer tight to the body, while still engaging as many threads as possible i.e. if they have to be shortened don't cut them too short.



Quick and neat installation. Using the original boss for the buckle half the belt would have to be adjusted to put the buckle beside the opposite hip of the passenger, otherwise it will be across their abdomen which is incorrect.



Safety First: the SSV/SRV cars



Following Ralph Nader's 1965 report "Unsafe At Any Speed", which highlighted the poor handling and/or crash-resistance of numerous cars sold in the US, the race was on by the car manufacturers to prove that they took the safety issue seriously, despite the old automotive adage that "safety doesn't sell".

Like all other companies wishing to maintain a presence in the US market, BLMC had already been forced to react to the pending Federal Motor Vehicle Safety Standards legislation (introduced in January 1968 almost as a direct result of Nader's report) by developing revised versions of the Austin 1300 and MGB with enhanced safety features.

However, by the early 1970s, the company had embarked on a programme to explore the future of car safety technology, leading to the development of the Safety Systems Vehicle (SSV1) in 1972. Two years later, in collaboration with the Transport and Road Research Laboratory, a further five prototypes were developed under the Safety Research Vehicle (SRV) project.

SSV1



The SSV1 was prepared by the development team at Abingdon in 1972, to demonstrate that even small cars were capable of being modified for optimum safety. This MGB GT-based car featured a wealth of innovative features, including airbags (which worked in combination with passive seat-belts), anti-lock brakes, self-levelling suspension, impact-absorbing side-panels, and a rather curious roof-mounted rearview mirror which afforded the driver a 120-degree field of vision.

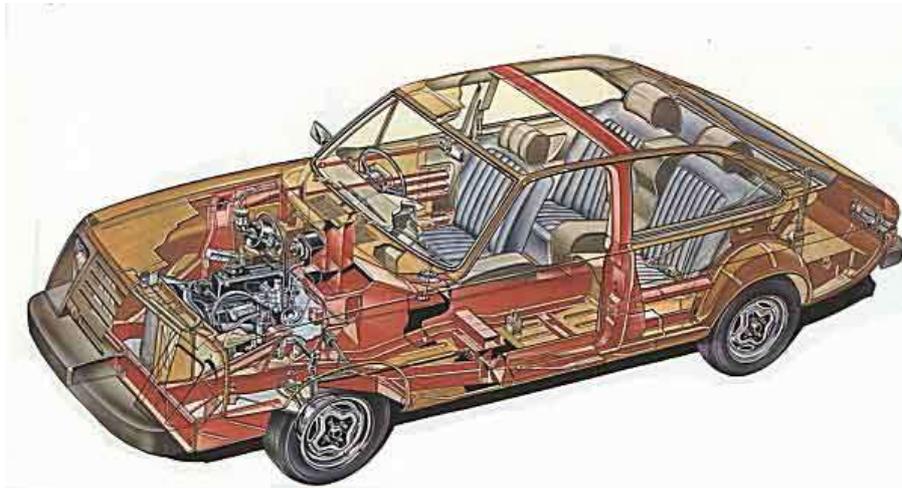
Mounting the thick rubber bumpers low down brought two advantages: firstly, if the car ran into the side of another, the point of impact would more likely be in the sill area rather than the more vulnerable doors; and were the car to hit a pedestrian, the low point of impact would tend to result in the unfortunate soul being lifted onto the bonnet rather than thrown forward into the car's path. Pedestrian safety was to become a persistent feature of Leyland's future safety prototypes.



The car was also equipped with a novel system designed to prevent tired, inebriated or otherwise incapacitated drivers from taking the wheel. Do you remember the electronic game called Simon, where players had to replicate a sequence of coloured lights by pressing buttons in the correct order? Well, that was precisely what the SSV1 driver would have to do in order to start the car. Get the (randomly generated) sequence wrong three times in a row, and he would have to wait an hour before being allowed to try again. While designed primarily as a safety device, this feature also doubled as a pretty effective immobiliser.

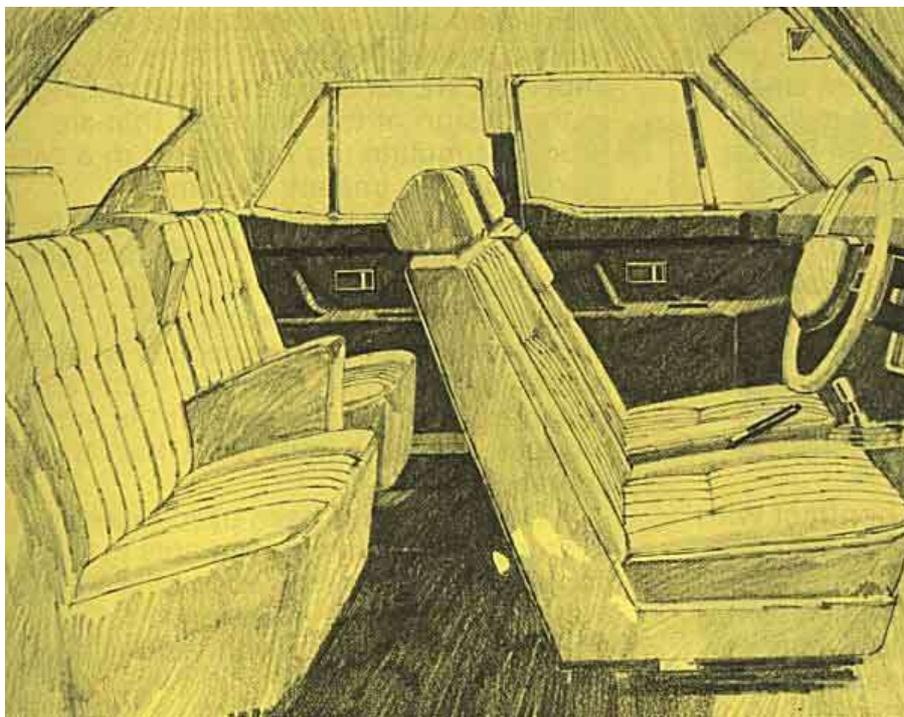
The car was presented at the third conference of the America's National Highway and Traffic Safety Administration (NHTSA) in Washington DC in 1972, but none of its innovations were ever to see the light of day on any production MG to leave the Abingdon works.

SRV1



The first of the five SRV prototypes prepared in 1974 was based on the 2-door Marina. External alterations included a deformable front-end and impact-absorbing bumpers, while the interior featured front and rear head restraints and a padded barrier built into the centre of the rear seat, presumably designed to prevent its occupants knocking each other out in the event of an accident. This car was also referred to as the "ESV Marina Phase 1", ESV standing for "Experimental Safety Vehicle".

SRV2

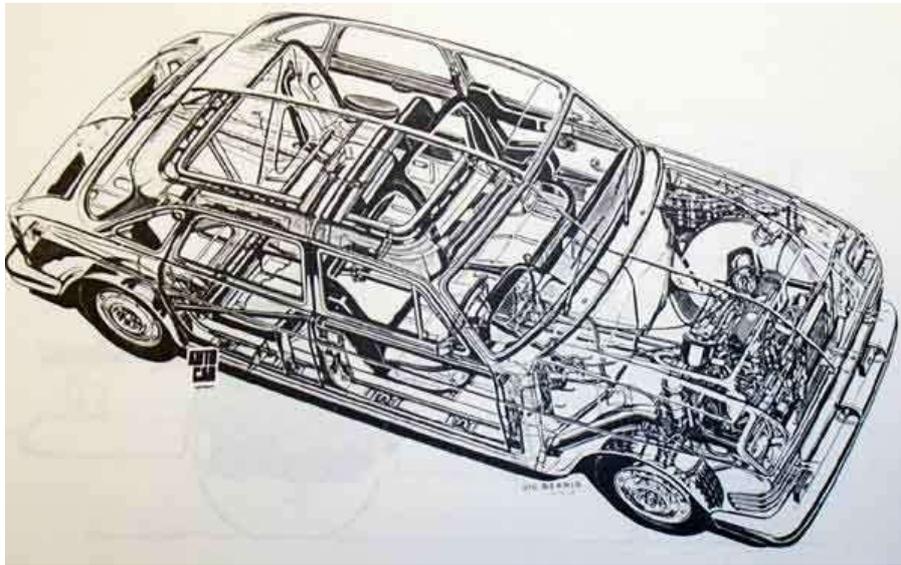


The Marina-based SRV2 featured many innovative ideas with the emphasis on minimizing the consequences of frontal impacts. It was claimed that the car was capable of safely absorbing the energy of an impact at speeds up to 40mph, while its low nose featuring retractable headlamps was designed to minimise the injuries incurred by pedestrians.

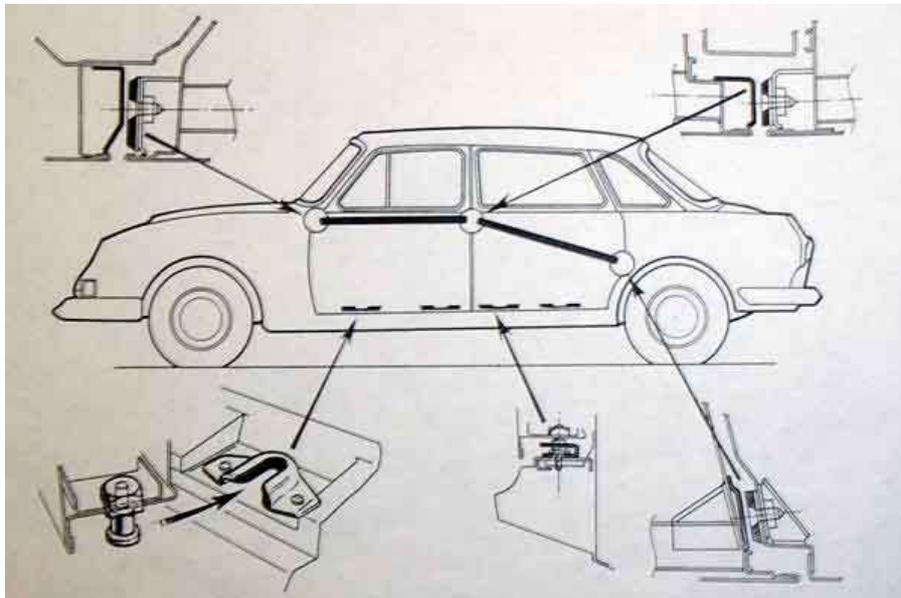
The company was also keen to point out that the lessons learnt with this car were benefiting the design of its production cars, in particular the Princess, and looking at the carefully staged photograph below, one has to accept that the similarities in frontal profile are undeniable. Of course, by 1974, the shape of the Princess had long been signed-off, so a cynic would conclude that the SRV2's front had in fact been deliberately styled in order to mimic the new car's outline.



SRV3



The third SRV prototype was based on the ADO17 "Landcrab", and like the other cars in the series, it featured heavily-modified frontal styling. However, the main innovation on SRV3 related to research into side impact resistance, and to this end, it featured "dove-tail" catches along the door-bottoms to prevent intrusion into the passenger compartment, and anti-collapse struts and "proximity pads" to reinforce the location of the doors within their apertures.

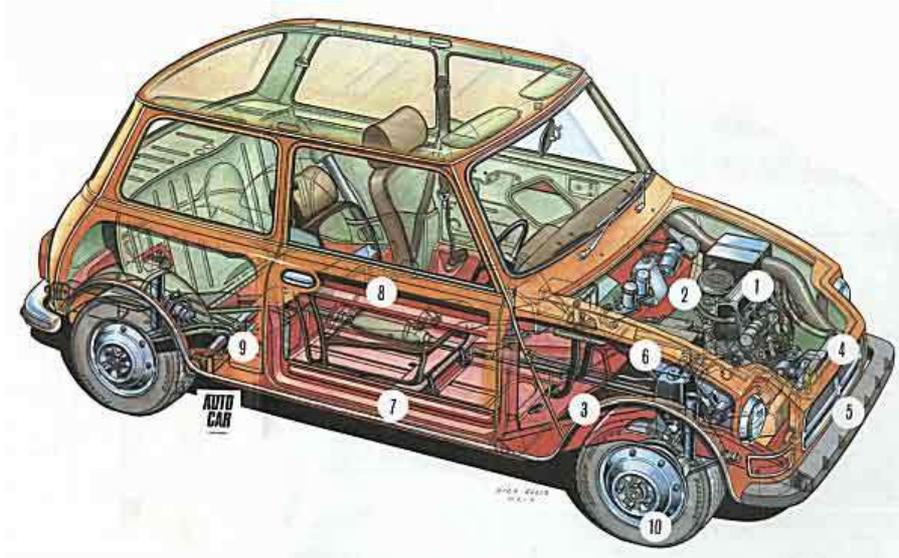


SRV4



SRV4 was based on the Mini Clubman, but featured an extended wheelbase to afford a greater frontal crumple zone. Again, the front of the car was also designed to be pedestrian-friendly, being both softer and smoother than that of the standard car, while other refinements included larger-diameter wheels with run-flat Denovo tyres,

strengthened door sills and recessed door handles. The safety of the car's occupants was catered for with copious padding.



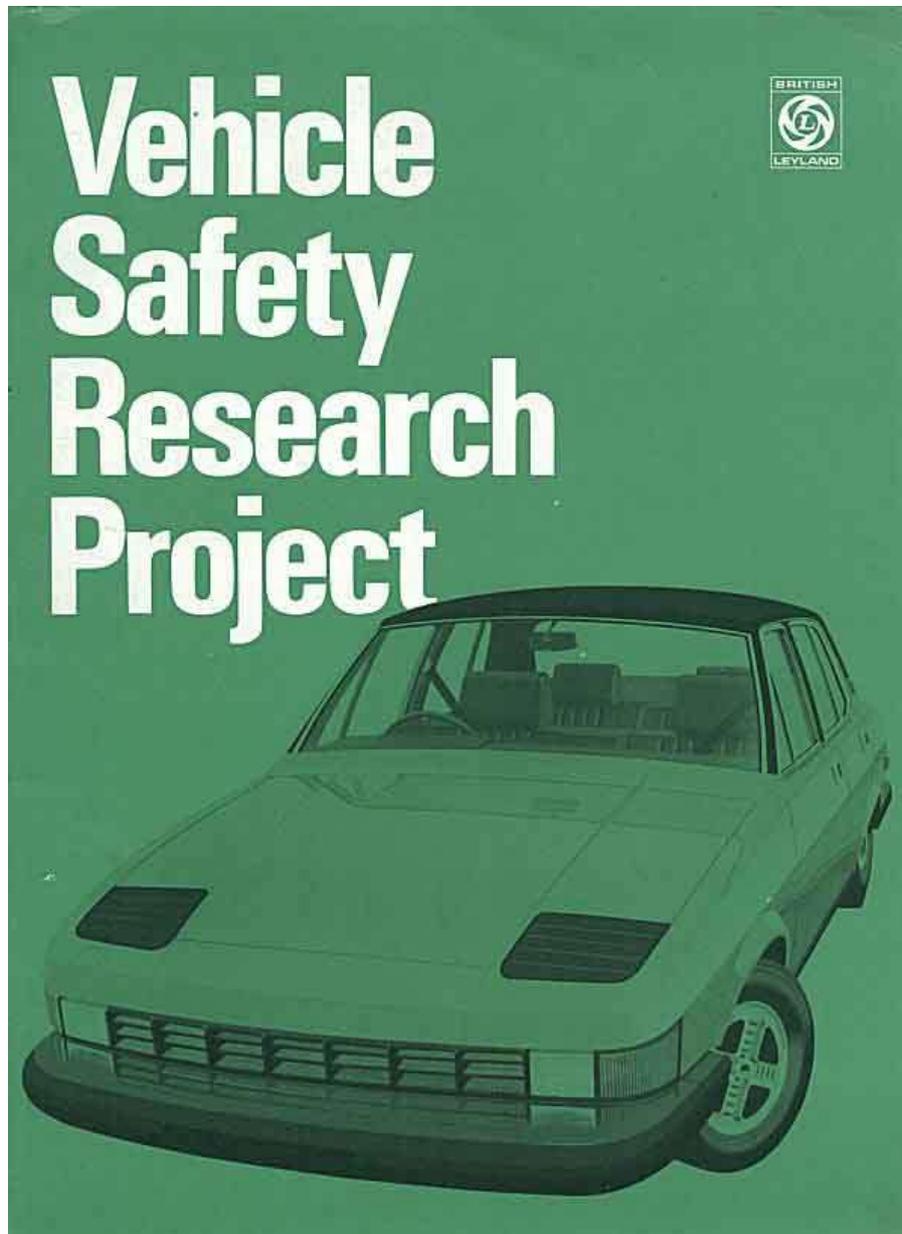
SRV5



The final SRV car was based on the Austin/Morris 1300, perhaps an odd choice in view of how close the car was to the end of its production run at the time. It was, nevertheless, the most adventurous of the SRV prototypes, featuring a spring-loaded (and rather thinly-padded) pedestrian-catching cage which was activated in the event of an impact. Thus, it would be raised from its dormant position atop the front bumper in order to prevent the accident victim from sliding down into the path of the car's wheels. Well, that was the theory, anyway. This unique feature is amply demonstrated in the above photograph, which also shows the car's steeply drooping nose to good effect.



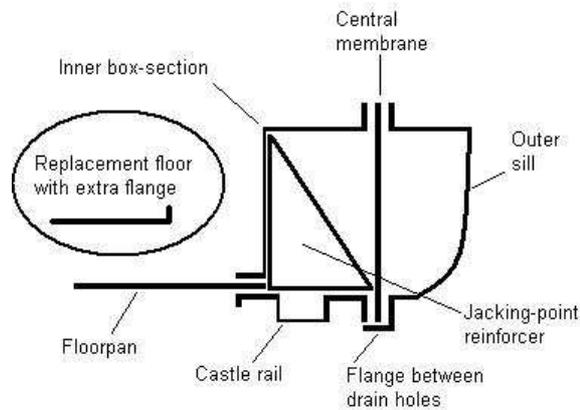
Here the car can be seen awaiting restoration at the premises of ADO16-specialists, RPM Workshops in Chesterfield. (Picture kindly supplied by Michael Turner)



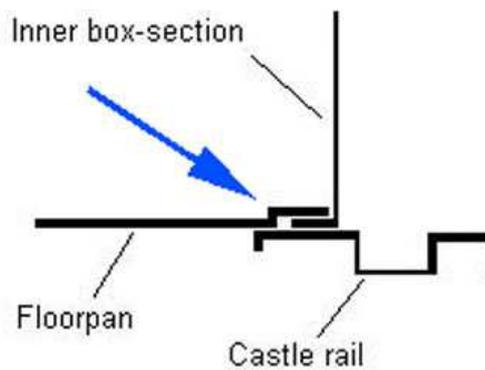
This page was contributed by Declan Berridge

Sill Construction and Drainage

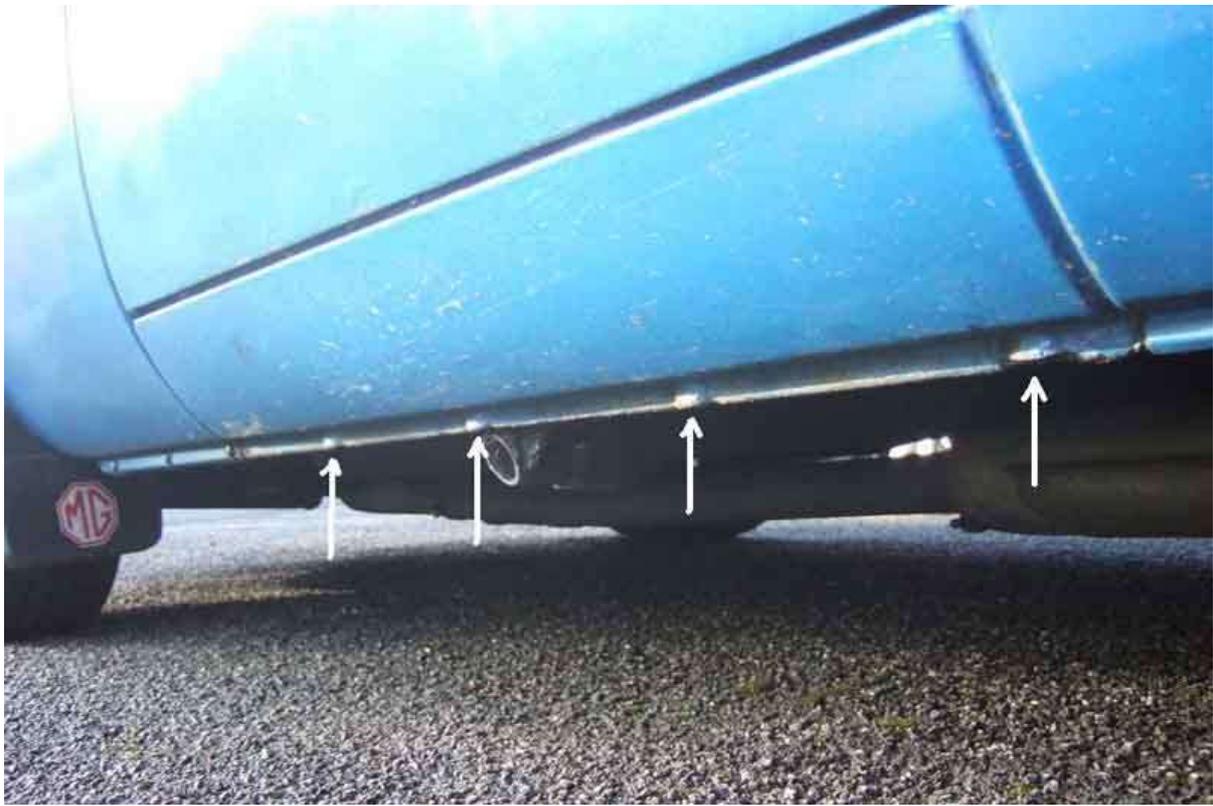
Cross-section of sill construction. Inset is a typical replacement floor panel with a vertical flange on the outer edge to deal with any rot at the bottom of the inner box section. (Note: The inner edge has a similar flange to cope with any rot to the lower edge of the tunnel.)



That is how I found mine when I did a part floor replacement i.e. the floor pan was sandwiched between the inner box-section and the castle-rail. However others have said the floor sits on top of the inner box-section flange, with a joggle in the edge of the floor pan to close up to the face of the castle-rail, which projects beyond the inner box-section flange as shown below. Mine is possibly a function of how various parts had been replaced in the past.



The four drain holes to the outer sill cavity.



Nearest the camera are arrowed two of the holes in the front half of the castle section to drain the inner cavity. Three of the outer sill drain holes are arrowed furthest from the camera.



Three outer sill drain holes arrowed at the left, and on the right one of the drain holes in the rear half of the castle section.



A question was asked about fitting the sill end-plates at the rear. This still (@ 8:24) from [this YouTube](#) shows one being offered-up on the right-hand side. Once you have which piece goes which side (!) it's self-explanatory, the recess faces outwards as that allows the flanges to be 'adjusted' to fit the adjacent panels.



Radio installation

Installed ...



... removed (the surround is cut from an old Metro blanking plate to cover up a mass of holes a PO had drilled around the edge of the opening):



And the modified blanking plate ...



... installed:



CD player with cassette adapter:



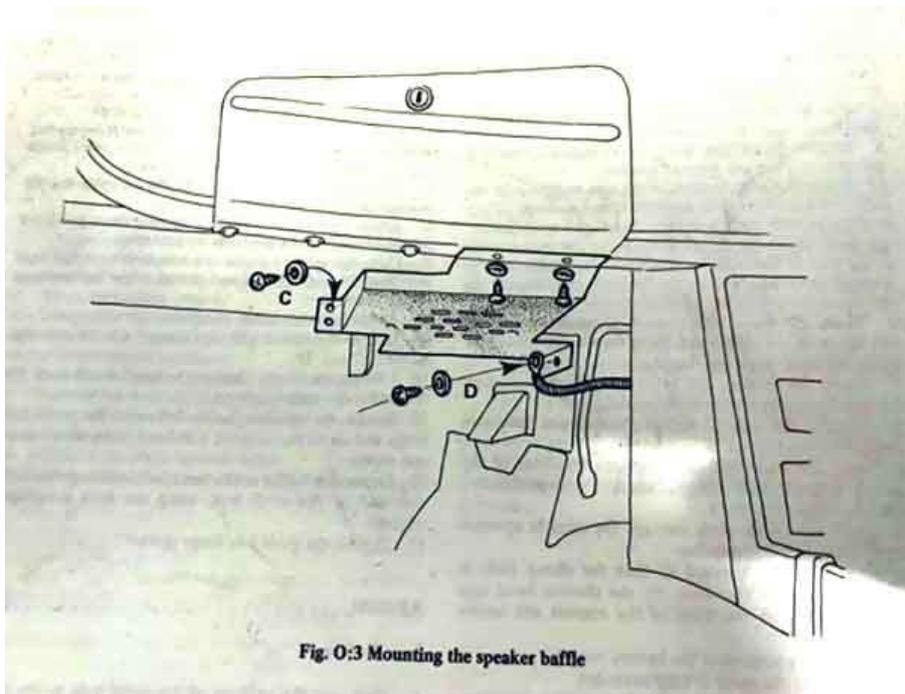
MP3 'jukebox':



Factory mono speaker baffle:



Maybe some artistic licence in this drawing as it doesn't seem to match up with the above picture. Appears to use two of the five glovebox lid screws as mounting points:



Different mounting points to the above drawing in this installed picture from Mark Denny:



This in a pal's 77/78 (no wiring to the doors): (*Geoff Turner*)



Looks like it uses the one(s) for the LHD steering column:



'Dual voice-coil speaker' (Google it), ideal for stereo output using a single speaker, particularly in the early centre console. There are many types, this is just one example: ([Classic Car Stereo](#))



77-on (America) and 78/79 (UK) factory speakers: (*Mark Denny*)



Shrouded to protect the cone and voice-coil from water getting past the drop-glass seals:



Shroud removed:



The shroud:

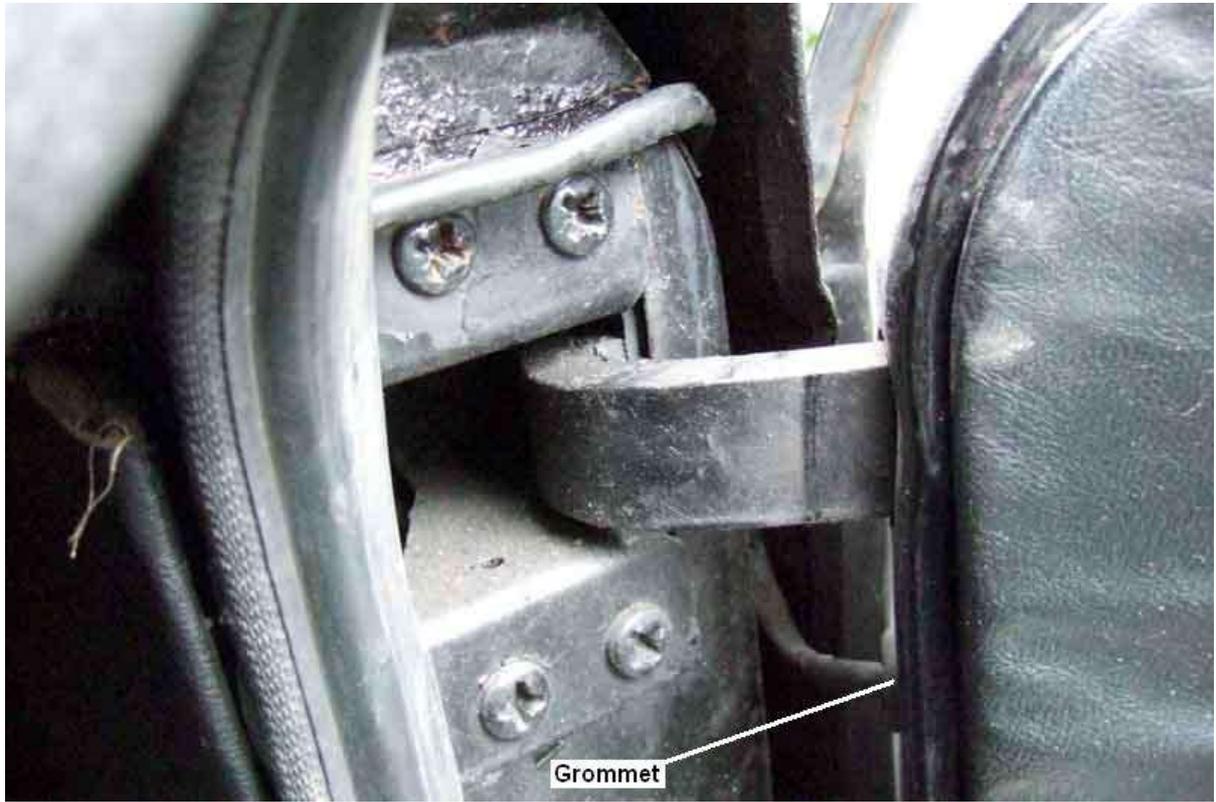




Factory cable routing, showing the grommet in the panel between door space and cabin ...



... and in the end of the door casing. I've used similar routing for the central locking in my 75 V8. This had the holes in the door casing already, with a sealing grommet, but I fed the cable through the hinge as I didn't want to drill a visible hole, not knowing this routing at the time:



THE NEVER ENDING SAGA OF THE BL---Y B

by Herb Adler 5243 3409

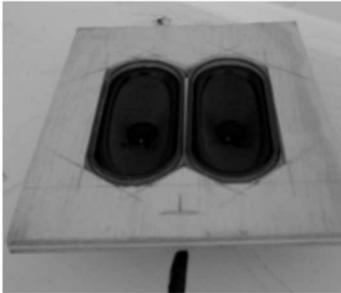
INTERLUDE

Fitting of a radio and accessories.

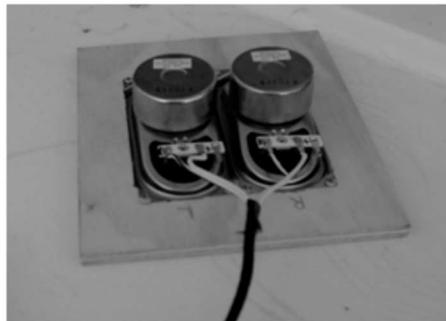
I had been thinking of this for some time, having a fairly modern 4 channel radio / CD player lying around. The problem I foresaw was where to fit two to four speakers. I would be happy to just use two, but it still left the problem of where to fit them. I was considering two speakers behind the seats and setting the radio to only use the front speakers, but it didn't sit well with me. Then I thought of a defunct TV I had that had 2 small oval speakers. Maybe I could fit them to the existing speaker surround.

Out with the speakers and start to play with them and the speaker surround out of the car. Yes, it was feasible. Now I needed to make a speaker baffle to mount the speakers, as they had a funny mounting arrangement where the corners are bent back to allow screwing to a plastic pillar so the front was level with the front of the TV case.

Using a piece of 9mm plywood I cut out the appropriate shape and screwed the speakers to it.

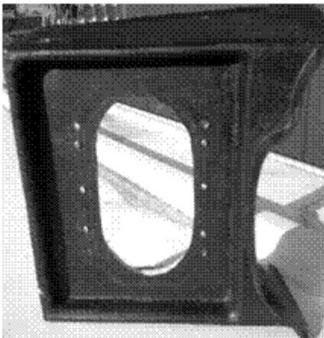


Mounted speakers from front, showing cutouts



Rear view of mounted speakers

Now, how to mount the speakers to the surround? The escutcheon screws had been cut short, so I couldn't use them. I had to find a way that didn't involve screw heads being visible from the front. What I did was to remove the escutcheon, drill several holes in the surround, which would be covered by the escutcheon and make a second baffle which had clearance holes for the escutcheon screws and attach this second baffle to the surround with self tappers with very small heads. After fitting this second baffle I refitted the escutcheon and grill, then screwed the first baffle to this baffle.



Screws in the space under the escutcheon



Rear view of fitted speakers

Now that the speakers were sorted out it was time to consider the fitting of the radio and aerial.

First the aerial. This posed somewhat of a problem since the doors weren't aligned well with the body and I needed to correct this before fitting the self extending / lowering aerial, as I might need to access the door hinge bolts for adjustment reasons, and these would be inaccessible once the aerial was fitted. For this reason I kept putting the aerial fitment off, and I wasn't going to the trouble of fitting the radio before the aerial was fitted, in case things just wouldn't work.

Off with the front wheel and find that there was a hole for an aerial that had been bogged up. Remove the bog and fit the aerial with a bit of fiddling. Drill a hole for the wires to go from under the mudguard into the engine bay and utilise an existing hole into the cockpit.

Now for the radio itself. First remove the blanking panel, from the dash. This has a chrome surround around it which I wanted to use to neatly cover the gap between the radio and the dash itself. Using the good old favourite, Tarzan's Grip, I glued this to the radio. To secure the radio I made a bracket out of 25mm aluminium angle and screwed it to the firewall using the screws that hold one of the hinges of the heater control flap. An L shaped bracket was screwed to the back of the radio and with lots of contorting

and removing both the radio and the aluminium bracket I managed to mark and drill holes so that a screw through the two brackets would fasten the radio to the firewall.



This picture shows the brackets under the dash.

Connect all the wires and try. Works perfectly, up when the ignition is turned on, down when it is turned off, depending of course on whether the radio was turned on.



This picture shows the final installation, rather good, I thought.

GT Sunroof

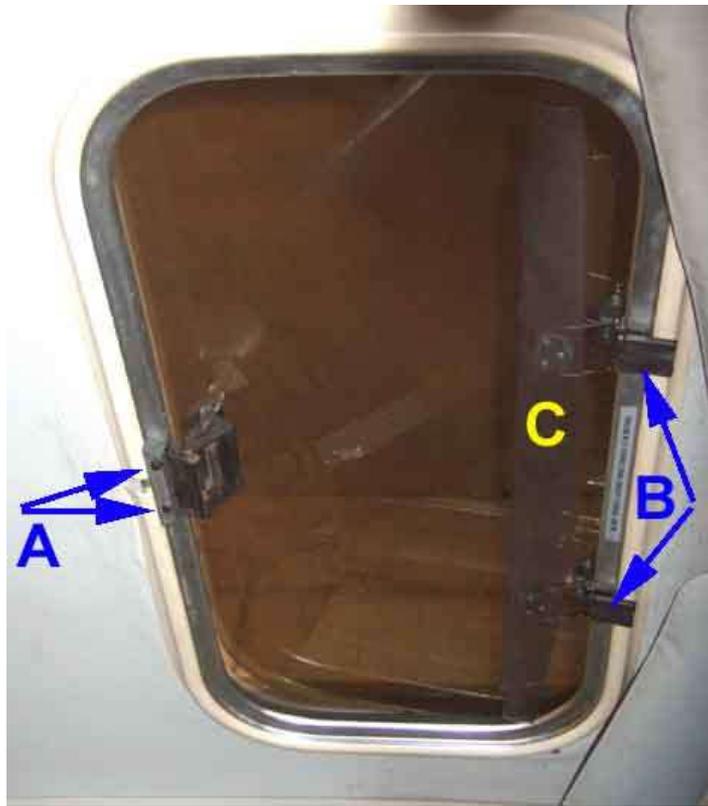
The Navigator would never countenance a full-length Webasto, she is concerned enough with someone slashing the roadster hood. I've had tilt and remove in the past, had one fitted to a previous car and really liked how much lighter and airier the interior is. Vee came to us with this:



Tilted:



From the inside - 'A' is the two push-buttons that release the main handle from the frame to enable removal, and 'B' are the two over-centre catches that retain the front. 'C' is the wind deflector that eliminates 'boom' at speed:



Removed - which can be done in seconds from the driving seat:





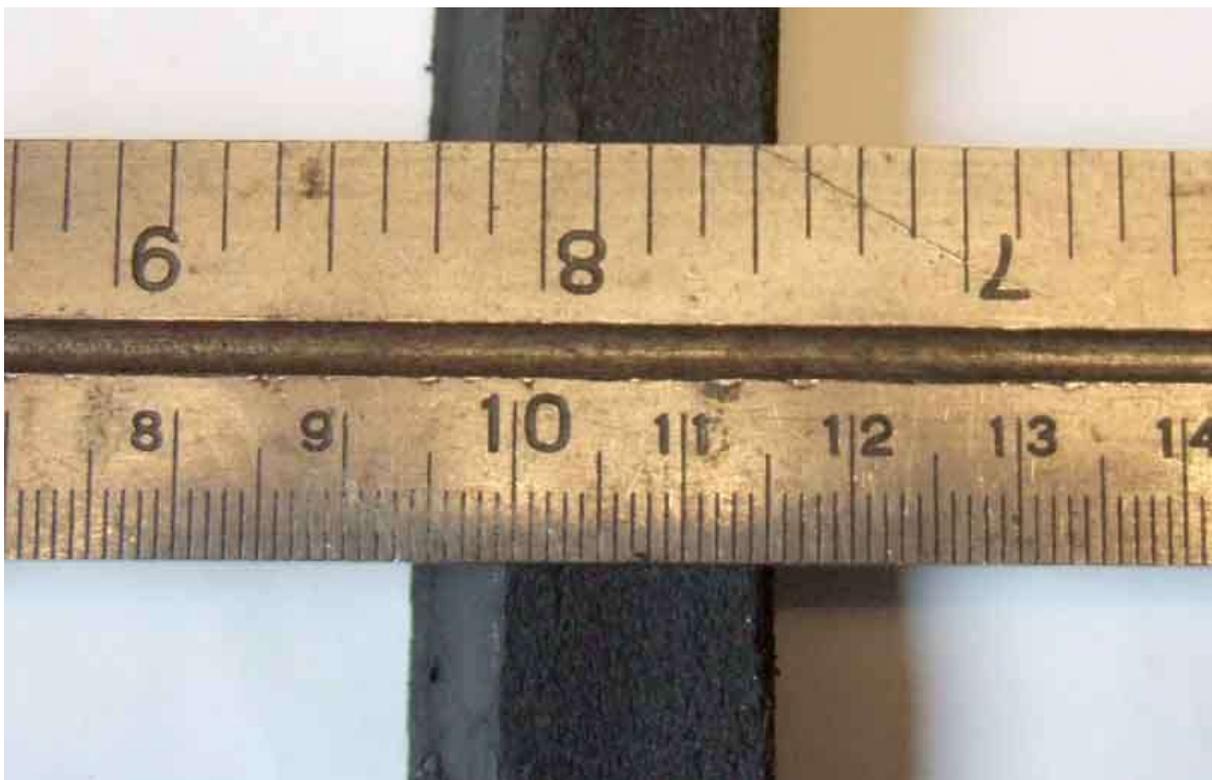
Frame removed prior to paint back in 2016:



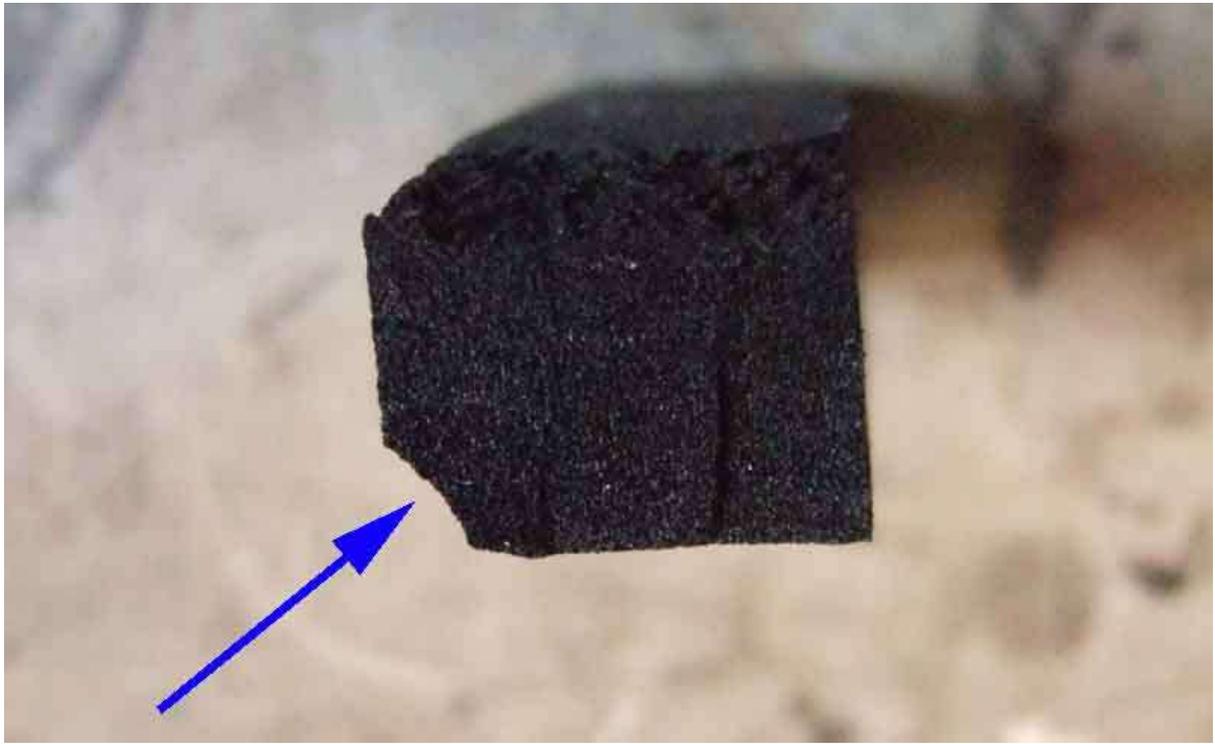
The top of the original seal, with a very thin section flattened now but which almost certainly stuck up originally:



The original seal is narrower at the bottom than the top, tapered on the outer edge, as is the channel in the frame. About 16mm wide at the bottom, 22mm at the top:



The new seal, slightly narrower overall at 20mm nominal (about 19mm measured), I've cut away one corner so it lies flat in the bottom of the tapered channel:



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