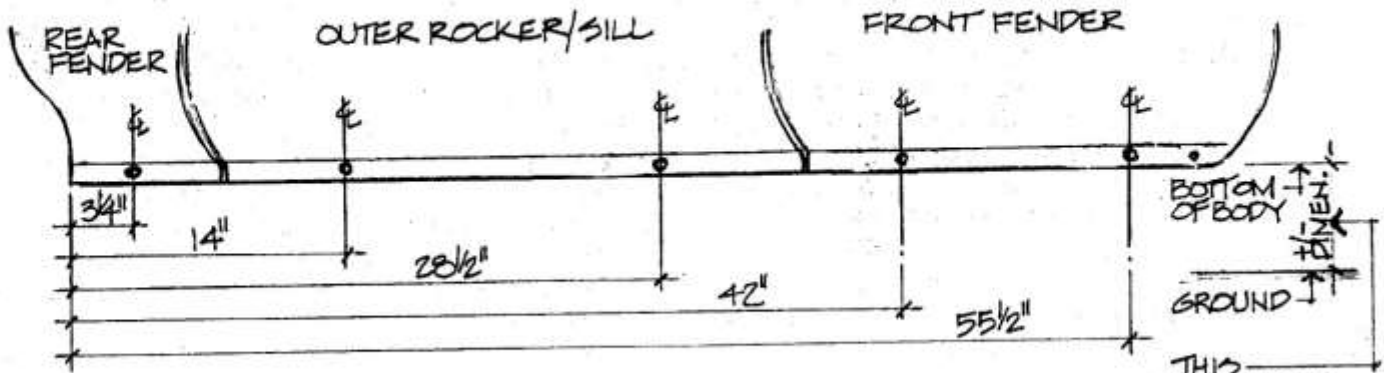
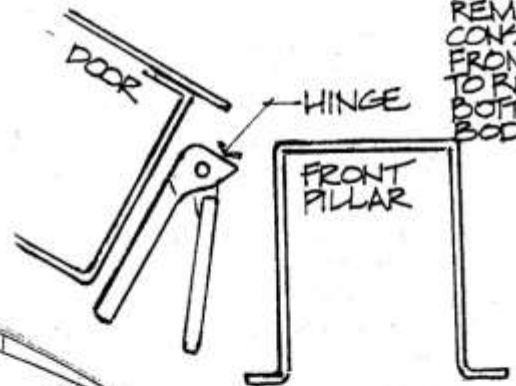


# BODY INFORMATION

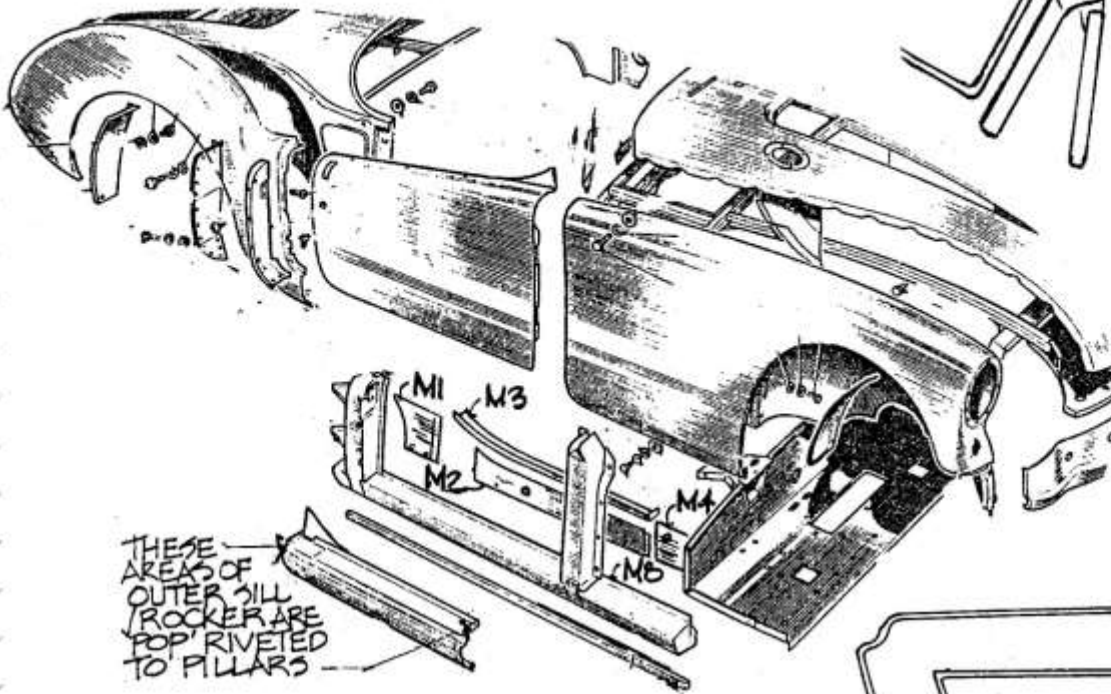


DRAWING SHOWS LOCATION OF HOLES FOR TRIM STRIP FASTENING. DRILL OR PUNCH FIVE 1/4" HOLES ON EACH SIDE OF BODY.

## TRIM STRIP



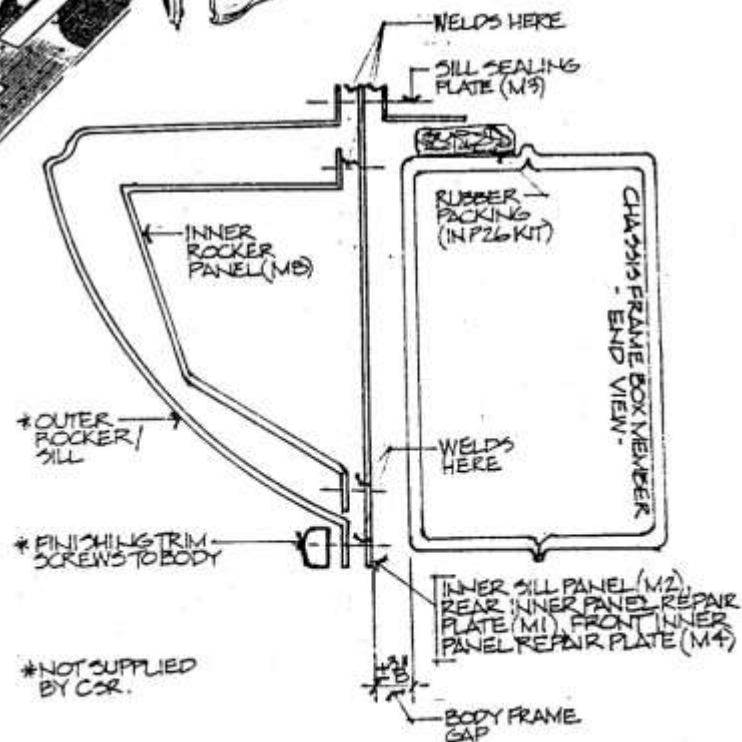
## DOOR HINGE



## EXPLODED VIEW - BODY PANELS

### GAUGE/THICKNESS OF METAL

- \* MOST BODY PANELS - 19 GAUGE / .040"
- \* MOST CHASSIS AREAS - 16 GAUGE / .059"



## SILL END VIEW

## CHASSIS FRAME AND BODY ASSEMBLING TIPS AND MISC. INFORMATION

The MGA body was assembled and painted away from the chassis... with the exception of the front wheel inner splash panels, all panels were installed on the main body before it was dropped on the chassis and tightened down. When we did complete restoration work we always painted the doors, bonnet, boot lid, hinges, splash plates, fenders/wings, bonnet/boot lid pulls, fascia panel and trim strips before bolting to body. We believe to some degree the same was done when the cars were manufactured... this process always resulted in a "cleaner" restoration as overspray on various brackets and hardware was virtually eliminated. Painting the body away from the frame also insured better coverage and no overspray on chassis, etc.

The majority of MGA bodies rust from the inside-out as opposed to the chassis which tends to rust from the outside-in. With the exception of very early cars all chassis frames were coated on the inside of the box chambers with a wax oil substance to prevent rust. We have worked with frames that are extremely rusty on the exterior or exposed surfaces but are clean and "shiny" on the inside. Also, moisture absorbing "bricks" were placed on the inside of the main box members-adjacent to the seats to control corrosion. Small holes located along the bottom of the main box members and other low points of the chassis structure act as condensation drains...these holes should be maintained as repair work and painting is completed. Although the bodies were designed to be painted on the inside of the sill/rocker boxes this and other rust preventative processes were never done. I have rarely found any evidence of even a primer coating on the inside of the inner sill panels. As you do your restoration we recommend you take the time to prime, paint and "wax" this area of the body. With the exception of the inner sill/rocker panel area of the body, the inside of the drive tunnel and the undersides of the boot floor, battery cover and radiator duct panel we have found applying an undercoating to be unnecessary. In most cases a tar type undercoating will act as more of a sound muffler than rust stopper.

### NOTES / TIPS

Always take precise measurements from specific points on the body before removing it from the chassis. For example measure distances between the front and rear tonneau ledges, front and rear pillars, etc.

Bodies are usually severely rusted in the sill area and will break in half when removed from the chassis. As long as the frame is straight it can be used as a fixture when putting the front and rear clips back in position. We always found it easier to repair the MGA body shell in two pieces then put them back on the chassis and install the inner sill panels. As long as you are aware of the fitting of the doors, fenders, outer rocker panels and their relation to each other you should be able to get every thing back together. It is also perfectly acceptable to repair the inner sills before the body is removed from the chassis. Once all of the inner sill panels are welded in position the body is extremely rigid and can be moved about without any additional reinforcement. This will allow for easy priming and painting away from the chassis.

PAINT & RUST STRIPPING - We recommend chemically stripping the body and sandblasting the chassis. It may be necessary to blast certain areas of the body after the chemical strip - beware of warping body skin, etc. Blasting misc. brackets, chassis components and hardware is recommended

## Chassis/Body Info. Cont.

although a mild chemical strip may be required to remove tar, etc. A "60" grit sand is ideal, however most professional blasters use a "90" grit as it is faster. A coarser grit will result in a rougher surface and you may have to "work" it a bit more before painting.

WELDING - The majority of welds on the MGA body were done with a spot welder. Other welding processes can be used as long as you remember excessive heat will result in warpage. Sometimes it is a good idea to temporarily hold panels together with "pop" rivets, clamps, screws, etc. until you are sure of fit.

FINISHING STRIP - The trim strips are held to the bottom of the sill area with a special screw that slides into the strip channel. There are five of these screws per strip - see diagram for positioning. The trim strip is painted the same color of the car and is designed to cover the washers and screw heads that attach the bottom of the fenders. The washer and screw head that hold the bottom of the front splash plate to the front fender are not covered by the strip.

HINGES - It is always a good idea to mark the hinges for the doors, bonnet and boot lid before removing them from the body...suttle changes in the hinges were made from time to time by the factory making it extremely difficult to retrofit hinges and doors from other cars, etc. Early cars featured right and left half hinges for the doors, later hinges could be used on both sides and some hinges feature minor bends. Shims can be used to help with the fit and were supplied on an "as-required" basis. If you are working with a car that has had the hinges removed you will no doubt be spending a great deal of time getting the doors, bonnet and boot lid to fit properly. Buying new hinges will not necessarily solve the problem. Getting the doors to fit properly is by far one of the hardest tasks and may take a great deal of patience. Always remember you are dealing with a car that is over thirty years old...a lot can happen to a body in that span of time - accidents, normal wear, sagging, etc.!!!! See drawing for basic fit of a typical door hinge.

OUTER SILL/ROCKER PANELS - CSR does not manufacture these. We have found the reproductions to be fairly good however you may have to do the following to get them to fit properly. The fit of the outer sill is directly related to the shape of the inner sill panel. (My part No. M2)... you may find it necessary to "open" or "close" the outer sill to match the lines of the M2...my M2 panels are exact - do not second guess them. THIS IS IMPORTANT.

FENDERS - Reproduction fenders are available but as of the time of this notation all reproductions are hand made and are not exacting. The original fenders were stamped from hard tools and dies as they were designed for a fairly fast assembly line type of fitting...although hammer persuasion techniques were not uncommon. We always recommend repairing an original fender before spending a great deal of money on reproductions that don't fit. Patch panels are available and for the most part they are good reproductions.

HARDWARE/FASTENERS - All washers and bolts used to hold the body panels together and position it to the chassis are made from steel and were originally plated in a plain zinc or cadmium finish. In some cases we have seen what appears to be factory paint on the bolt heads and



## Chassis/Body Info. Cont.

washers, however we believe that for the most part the finish of the hardware was left plated. Many of the body fittings and hardware are not easily replaceable. We recommend "cleaning" these pieces and having them replated. Most industrial platers charge a minimum fee for barrel plating based on batches up to 100 pounds. (Specify; plain/"silver" finish).

FITTING OF PART NOS. M1 & M4 REPAIR PANELS - These panels act as repair plates for the lower sections of the bodies where the bottom of the fenders bolt. They overlap the ends of the M2 Inner Sill Panel. They are designed to be trimmed, when necessary to meet your repair requirements. The top front "tip" of the M1 panel will require some trimming if the panel is used as is...trim it where it meets the top rear of the outer sill/rocker panel to match the radius. Cage nuts for fastening the bottom of the fenders are included with these panels.

DOOR SEAL - The "fur flex" door seal fits over the ledge created by the "lamination" of the inner sill panels...for example the three thicknesses of steel where the top of the outer sill/rocker, M2 inner sill and M3 sill sealing plate mate. It is important that the fitting of these three panels be as tight and "slag" free as possible. Also, the fit of the door seal relative to the closing of the door must be considered. Sometimes you have to "move"-bend away the seal ledge so that the "fur flex" is farther away from the door. You will not know how well your doors fit until the "fur flex" door seal and interior panels are installed.

FINAL FITTING - The body of the MGA is bolted to the chassis at 31 points. If you are dealing with a body that has broken in half because of inner sill rot and you are not sure if the relation of the front and rear clip is correct always remember that as long as the chassis is "straight" it can be used as a fixture. With all of the mounting bolts loose you will find there is virtually no play in the front clip but some play in the rear clip. This play will allow the movement you need to get the panels where you want them. Sometimes you will find it necessary to shim or jack up the rear clip at the rearmost mounting points as a temporary measure to get the door gap correct. Once the panels are welded in position the shims can be removed and the body will remain where it should even after tightening the mounting bolts. (There is some flexing at the back of the rear clip). The relation of the front hinge pillar and the rear striker pillar is important...In many cases you will find the front pillar to be in good shape and the rear pillar to be thoroughly rusted. Removing the pillars properly, involves drilling out all of the spot welds so unless the pillars are totally useless we do not recommend replacing them. Both the front and rear pillars are available separately and can be purchased through a number of sources. We believe the pillars now available through U.S. suppliers are actually produced in Britain and even with the cost of shipping it may be cost effective to buy them direct from the "old country".

Clarke Spares and Restorations has been producing the metal panels noted in the referenced diagram since 1977. We also manufacture a number of other body brackets, panels and fasteners you may need to restore your MGA body shell. Please see out MGA catalogue for further information.