STANDARD TRIUMPH

BODY

TRIUMPH 2000

SERVICE TRAINING NOTES

A Member of the Leyland Motor Corporation

TO BE USED WITH FILMSTRIP

No. 4216

INTRODUCTION

This booklet and its accompanying filmstrip shows the main features of the Triumph 2000 Body.

There are three main sections :

Part 1. Hanging doors and assembling door fittings.

Part 2. Roof lining and fitting windows.

Part 3 Fitting and Adjustments.

a. Seats. b. Bonnet.

c. Boot lid. d. Bumpers.

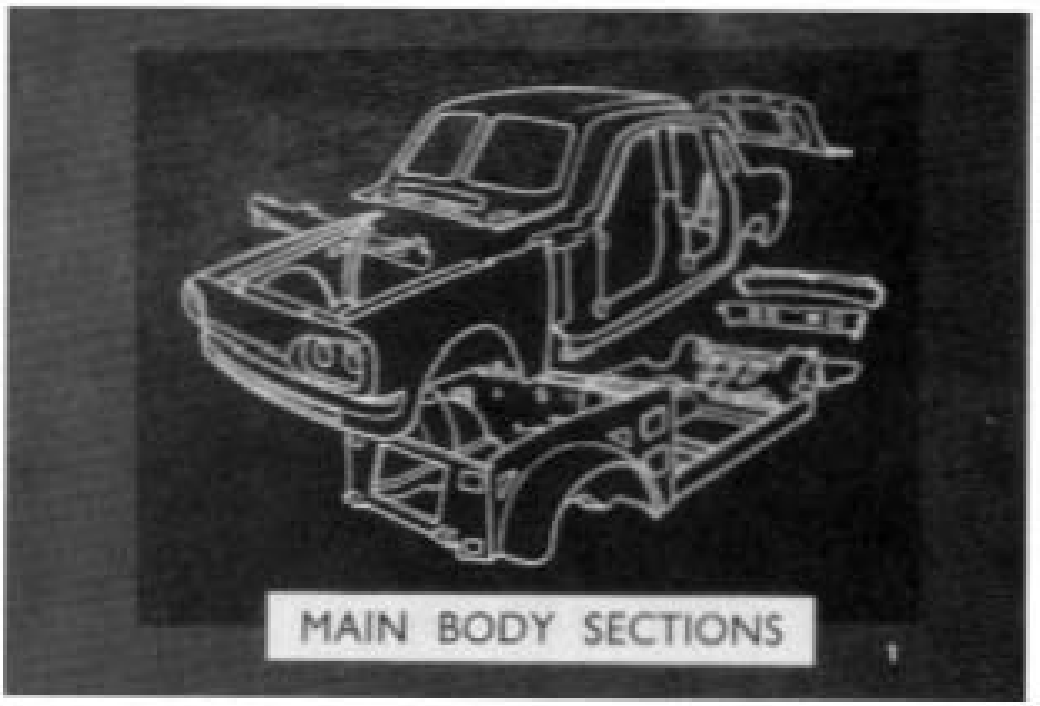
e. Wing Mirror and Aerial.

f. Paint and Trim Coding.

It is intended that the filmstrip should form the backbone of a lecture. The subject matter can be elaborated or abbreviated to suit the standard of audiences.

The booklet by itself provides a handy pocket manual for ready reference.

FRAME No. 1.



The Triumph 2000 body is a mono-construction type with all the outside panels including front wings, headlamp panel surrounds and grille assembly mounted to the body sub-frame.

The roof assembly consists of a single section incorporating the front screen aperture.

Continued

The bonnet and boot lid are hinged to the body. Each consists of :-

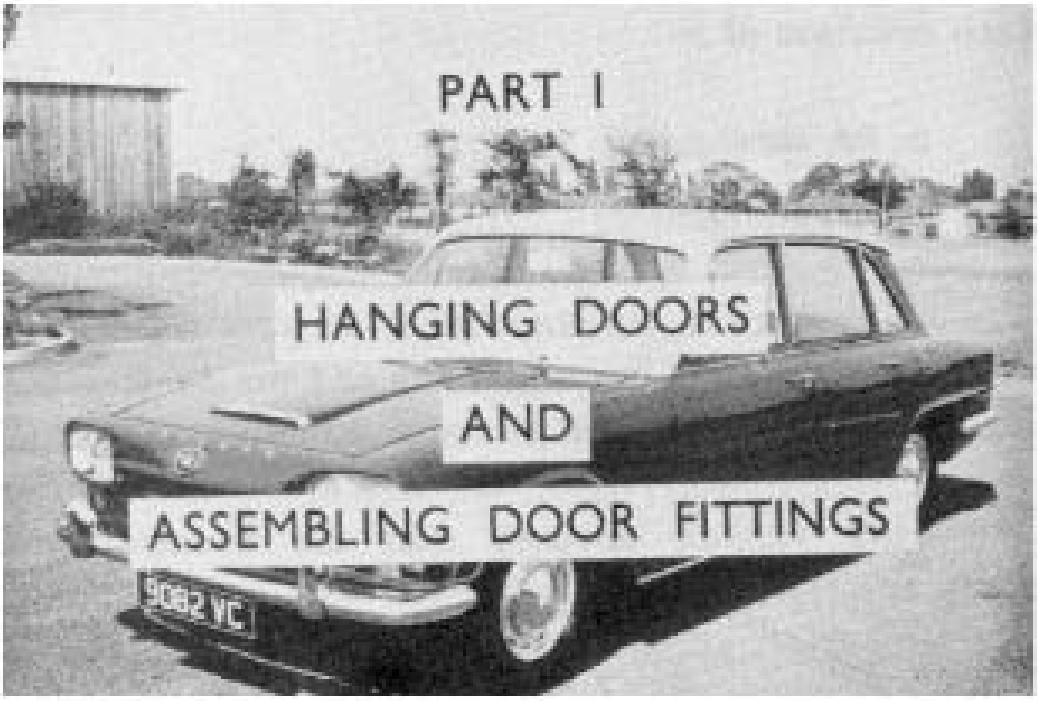
a. An outer panel.

b. A sub-frame.

In each case the outer panel is spot welded along the outside edges of the sub-frame and the centre section fixed by means of a metal to metal adhesive.

This method ensures that the assemblies are strong and rigid.

FRAME No. 2.

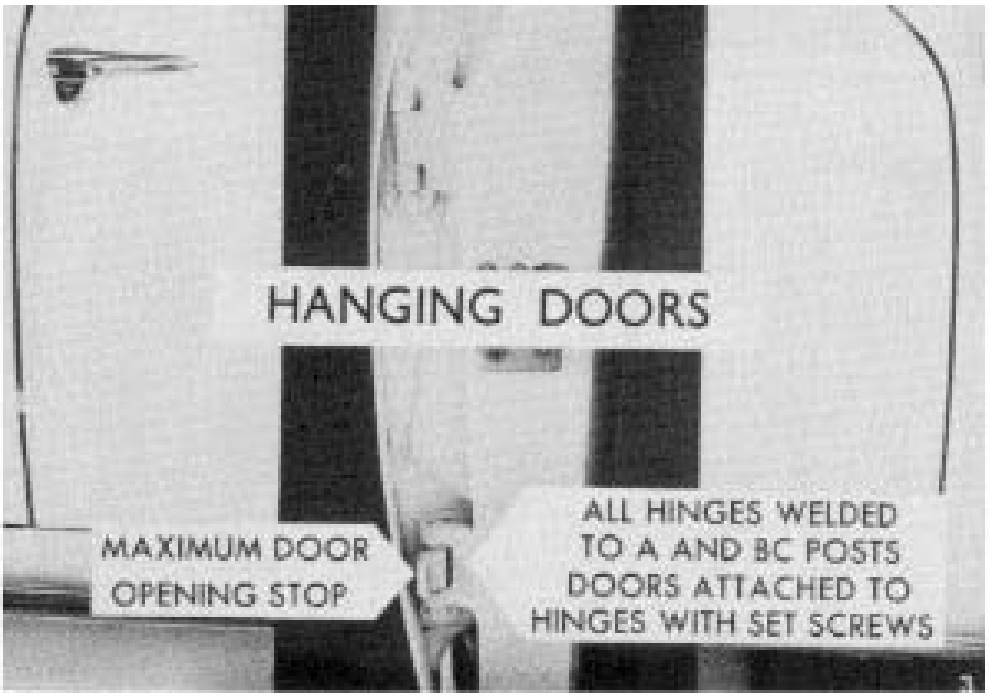


PART I.

Hanging Doors

and

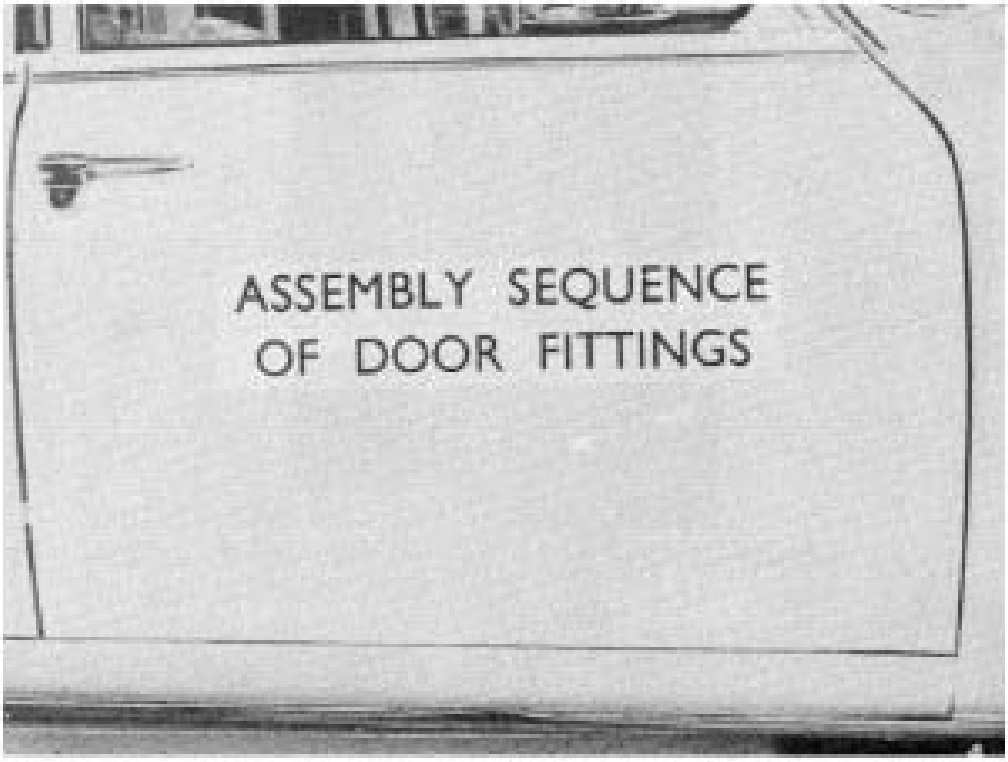
Assembling door fittings



The Front and Rear Door Hinges are welded in a pre-set position to the A and BC posts respectively.

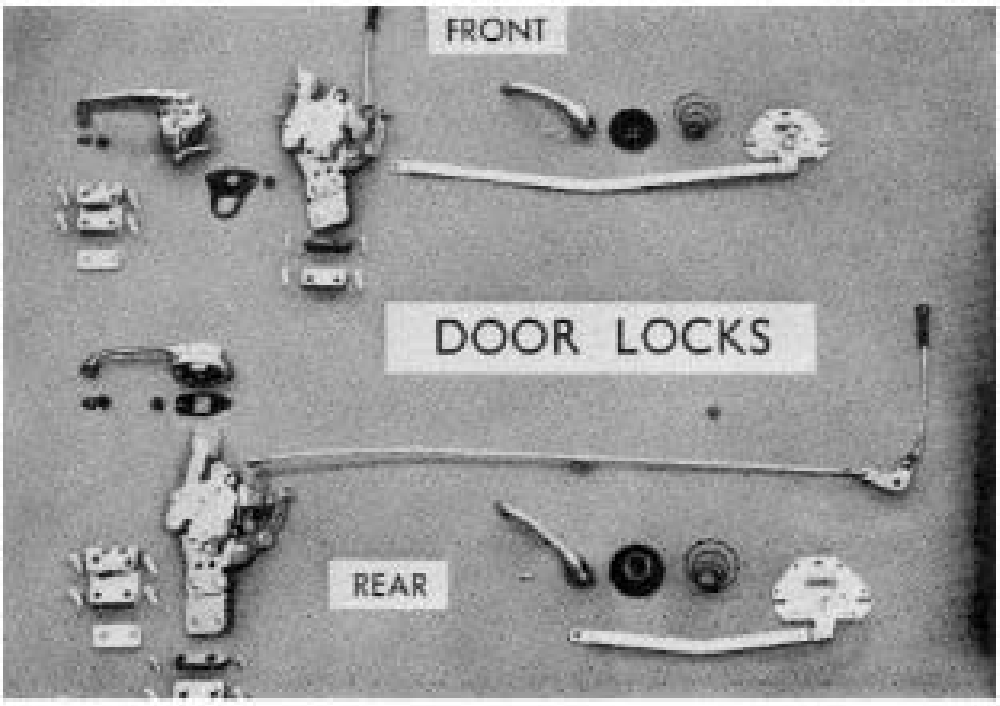
The hanging of the doors to the Body is a simple and straightforward procedure. There is all round adjustment as the fixing bolts screw into a tapped plate held in a cage in the door frame.

FRAME No. 4



It is advisable when assembling the locks and window winding mechanisms to keep to the sequence explained in the next 30 frames.

FRAME No. 5



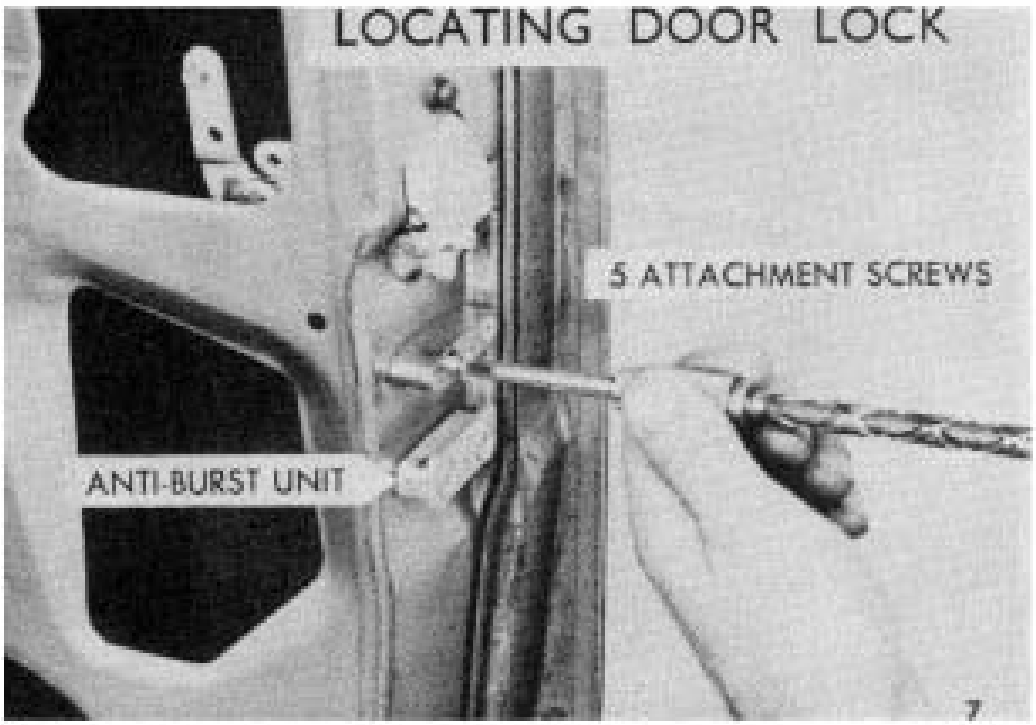
This frame shows front and rear door locks including remote control assembly, interior and exterior handles, striker plates and anti-burst device.

Note : The locks are not interchangeable.

FRAME No. 6

This frame shows the door lock being inserted via the large cut out at the bottom of the door.

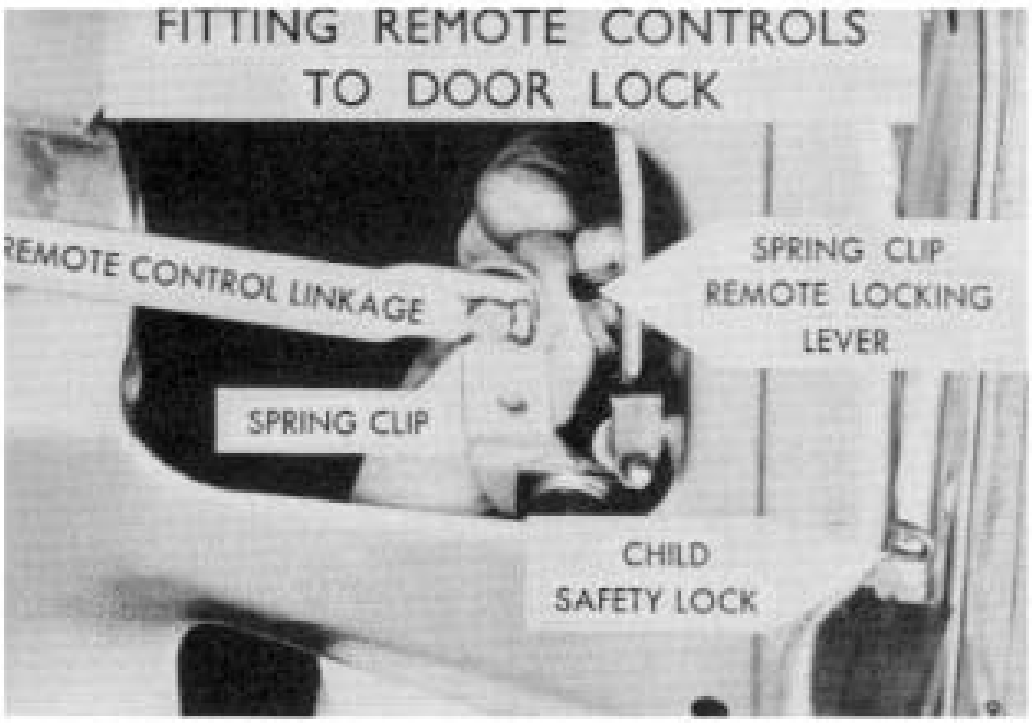
The same procedure applies to the rear doors.



When the lock has been located into the correct position it is attached with one screw at the top complete with shakeproof and flat washers. At the bottom with four bolts which also hold the anti-burst unit and dovetail plate.

FRAME No. 8

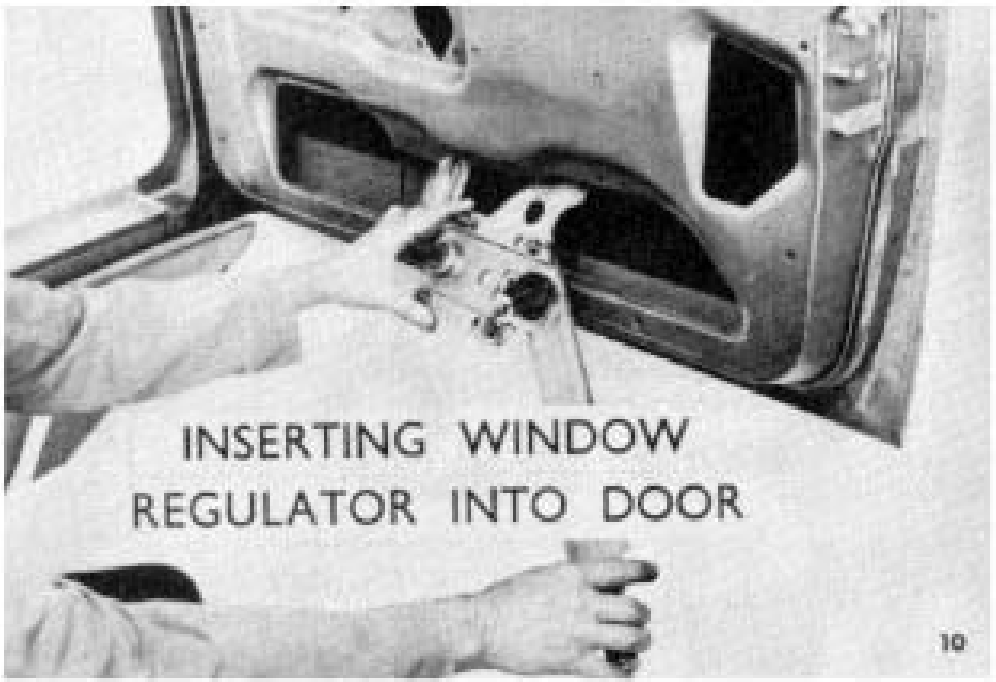
The remote control is attached to the door panel with three set screws, shakeproof and flat washers.



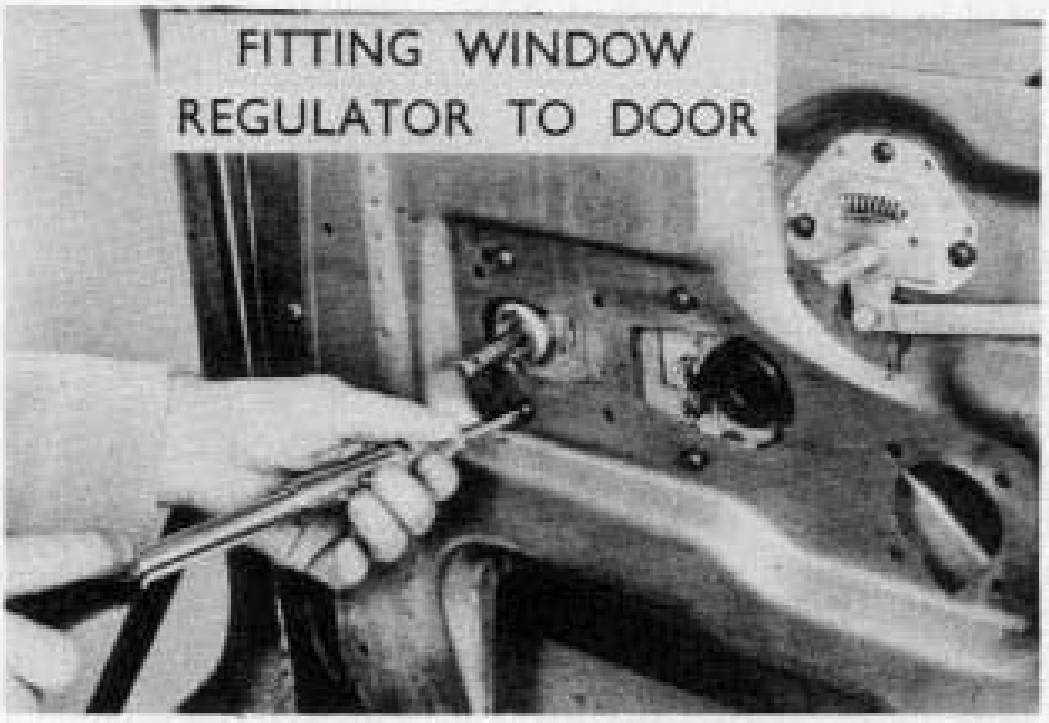
Before fixing the remote control it is necessary to place in position on the lock the anti-rattle wavy washer. The remote control linkage can then be secured in position with the spring clip. The fixing of the interior locking linkage is by means of the special spring clip as shown in the picture.

Note: The lock includes a childrens' safety device. To put this into operation raise the lever before closing the door. This will disengage the interior remote handle making it impossible to open the door from inside.

FRAME No. 10



The window regulator is inserted through the large aperture of the door.



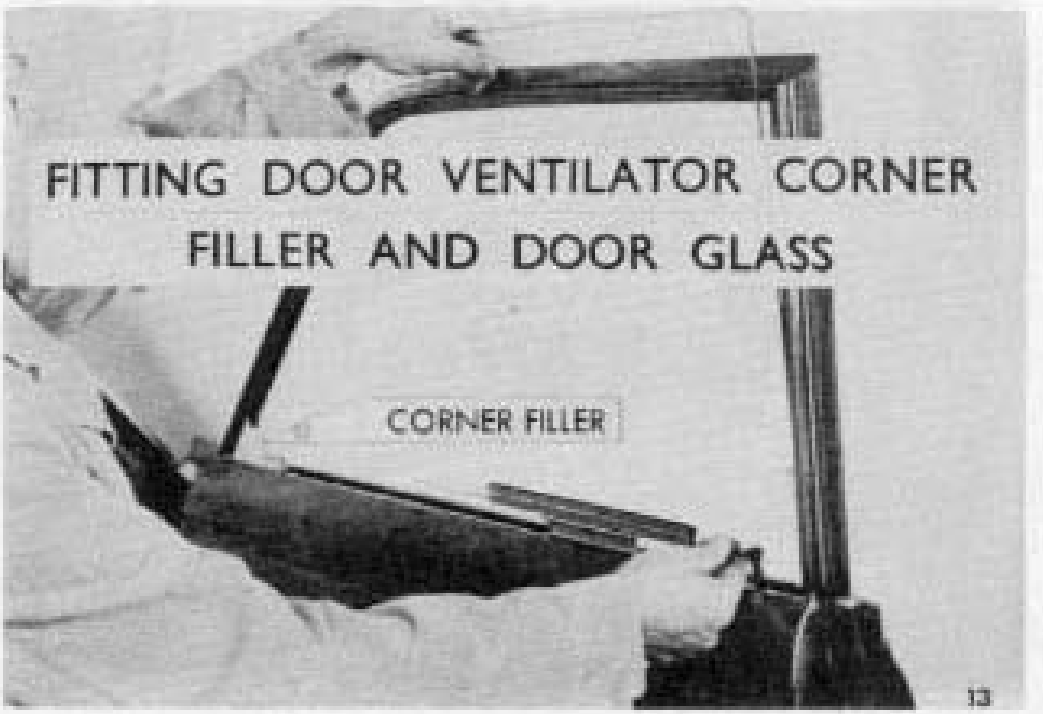
Fit the window regulator into its correct position and secure with four set screws, shakeproof and flat washers.

At this stage leave the regulator arm in the fully downward position.

FRAME No. 12

The silent run rubber channel is pressed into position as shown. Care must be taken to ensure that it is not pressed below the metal outside face of the glass channel otherwise rattles will develop owing to the glass fouling the metal frame.

FRAME No. 13.



The door ventilator corner filler is a push fit into its location. Before fitting apply sealing compound to prevent water leakage into door.

The door glass complete with the channel assembly is then placed into the door.

FRAME No. 14.

This frame shows the regulator being guided into the glass channel assembly.

Note : The outer panel of the door has been removed for instructional purposes.

FRAME No. 15.

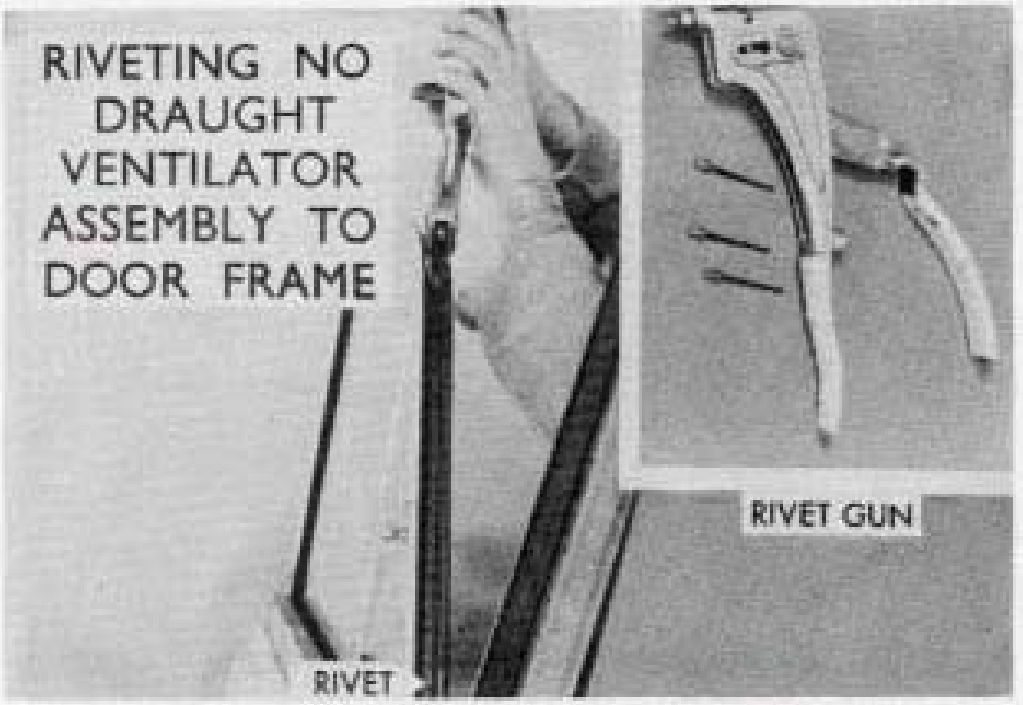
The assembly is lowered into the window aperture, at the same time the front corner is guided into the window frame with the lower channel positioned over the edge of the door glass.

The whole assembly is then able to be moved forward to its correct location.

It is then secured at the bottom with a set screw with shakeproof and flat washers.

For top fixing see next frame.

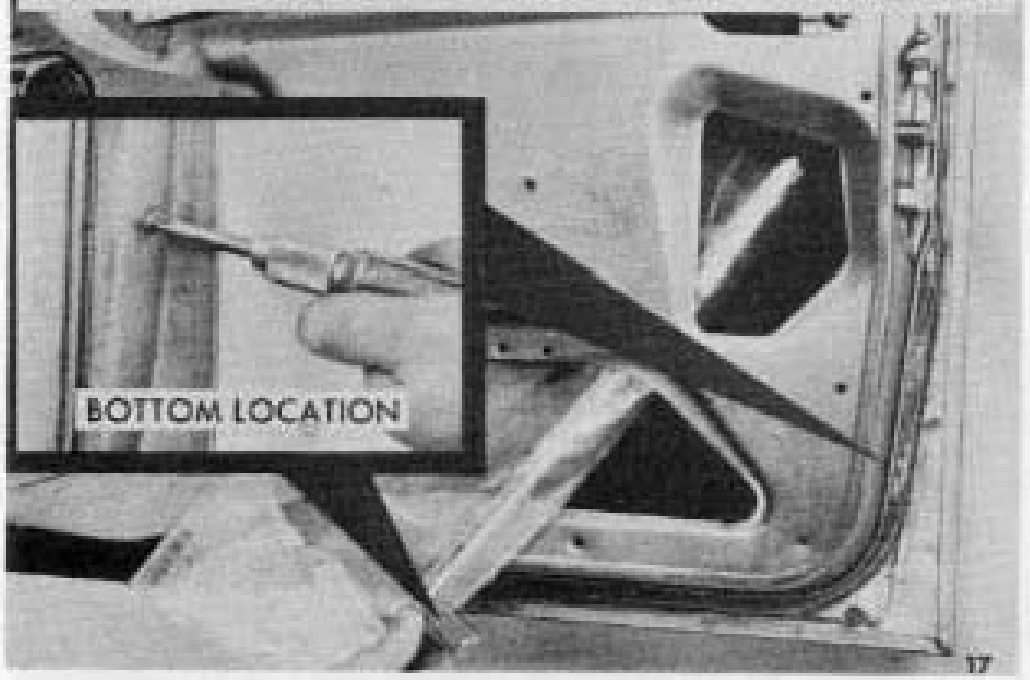
FRAME No. 16



The top of the frame is held in position with two pop rivets.

Using the two holes as guides drill with a $\frac{1}{8}$" dia. drill (3.2 mm).

FITTING SHORT GLASS RUN CHANNEL



Having completed the assembly of the no draught ventilator frame, wind up the door glass to assist in fitting the short glass run channel.

NEXT :-

1. Wrap a plastic shield round the channel.
2. Push channel assembly into position.
3. Locate to the fixed channel at the top.
4. Attach bottom of channel to door with a set screw from the outside of the door frame as shown in the insert.

FRAME No. 18

The method of fitting the exterior weather strip is as follows :-

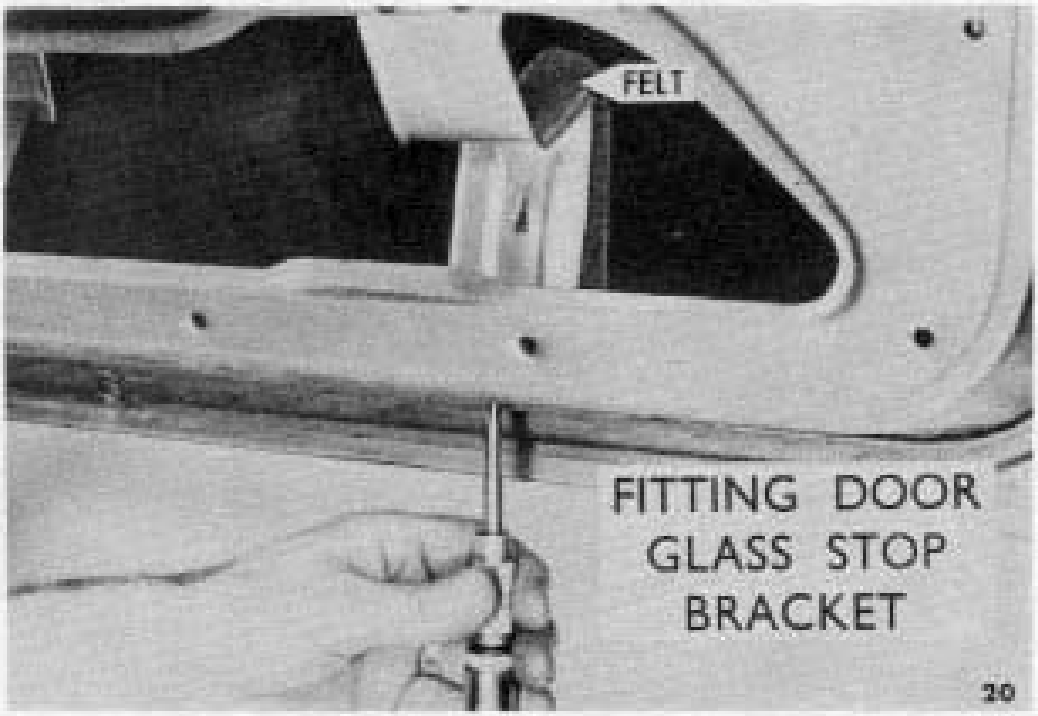
1. Wind down the door glass.
2. Fit four clips evenly spaced along the weather strip.
3. Lower the clips and strip into the door glass aperture.
4. With the special tool as shown in the insert pull the clips firmly onto the top flange of the door.

FRAME No. 19.

The method of fitting the interior weather strip is as follows :-

1. Attach four clips evenly along the strip for the front doors, and five clips for the rear doors.
2. Lower the clips and strip into the door glass aperture suspended at one end on the special tool shown in insert and at the other end by a piece of string.
3. Pull the strip and clips upwards to the flange of the door.

FRAME No. 20

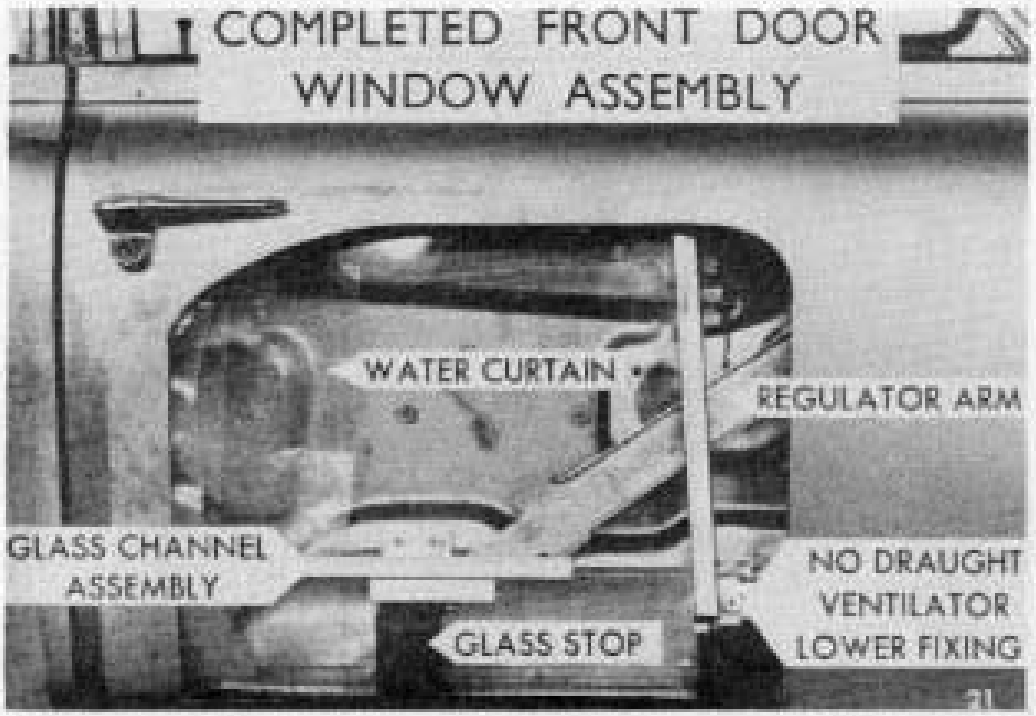


Having fitted the weatherstrips wind up the door glass so that the door glass stop bracket can be fitted.

The door glass stop is held in position by three set screws with shakeproof and flat washers.

The third screw is seen being fitted on the underside of the door.

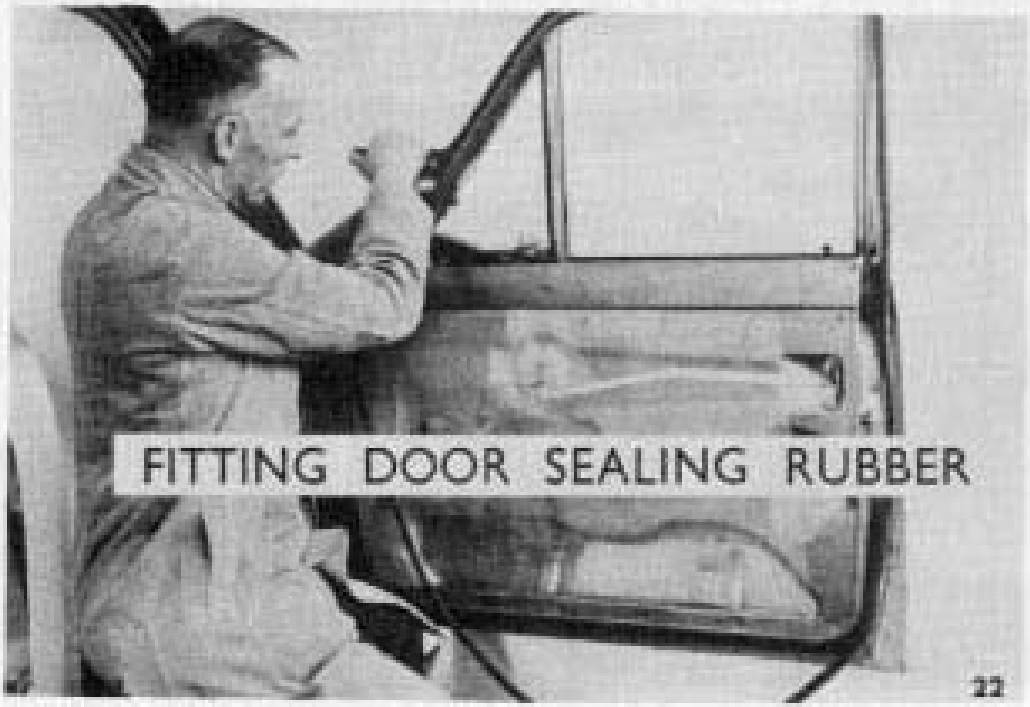
FRAME No. 21.



This frame shows the door assembly viewed from the outside.

Note the water curtains, glass stop and lower fixing of the no draught ventilator frame.

FRAME No. 22



The method of fitting is as follows :-

1. Lubricate the rubber with a solution of soapy water.
2. Press the rubber seal into the channel surrounding the door with the aid of a piece of tapered wood.

NOTE : The position of the water curtain to door lock and to the door panel. The lower portion of the curtain is placed into the large aperture at the bottom of the door.

FRAME No. 23

FITTING DOOR TRIM AND HANDLES

The method of fitting the door trim is as follows :-

1. Make sure all clips are properly in position and aligned to door holes.
2. Press the lower clips into their holes.

Continued

3. Position a conical shaped coil spring on window regulator spindle and door lock spindle with the large diameter end towards the trim.

4. Continue pressing the trim panel clips into the holes working up either side of the door and finally along the top.

The procedure for fitting the handles is as follows :-

1. Place an escutcheon over each spindle.

2. Place the handles onto the spindles making sure they are positioned correctly.

   NOTE : The window regulator handle should be positioned with the window fully closed.

3. Fit retaining pins into handles.

4. Press handle and escutcheon against spring pressure until retaining pin passes into hole in spindle.

5. Release pressure on escutcheon which covers retaining pin and prevents it falling out of position.

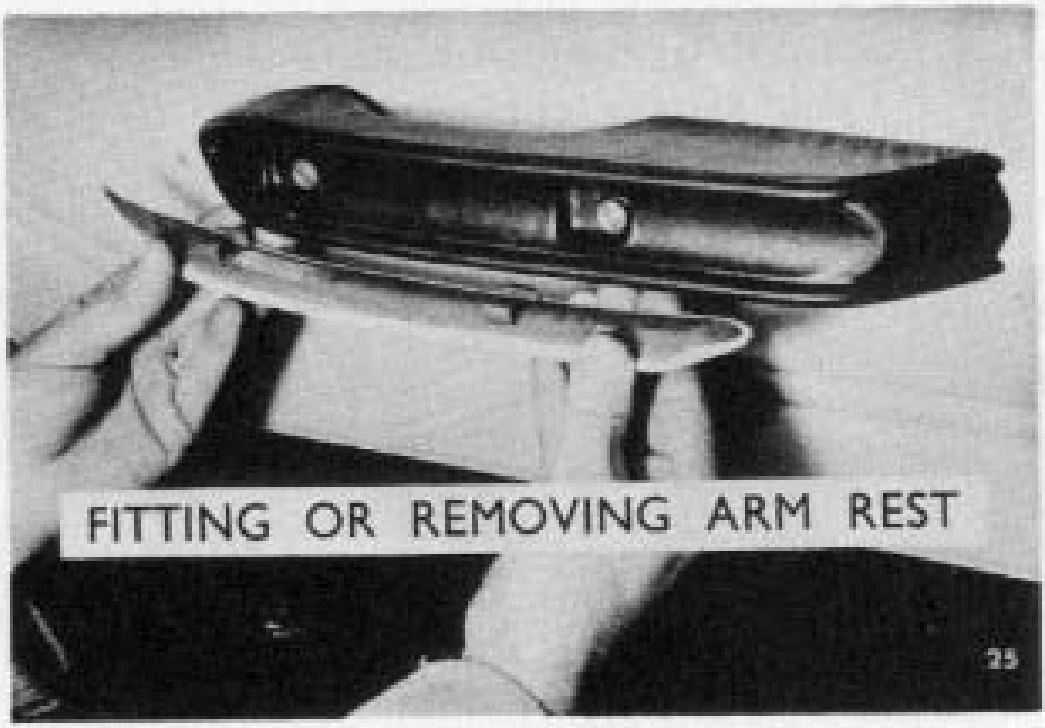
FRAME No. 24.

For servicing the locks and regulator mechanism it is necessary to remove the handles and trim panel etc.

Shown in this frame is a quick method of removing the retaining pin, by pressing the fork end between handle and escutcheon the retaining pin is exposed and the centre prong is able to push the retaining pin out.

An example of the tool is shown in the insert.

FRAME No. 25



The armrest is secured to the door by two special bolts with flat washers and locking washers.

The bolts have a groove around the head for the finisher to clip into.

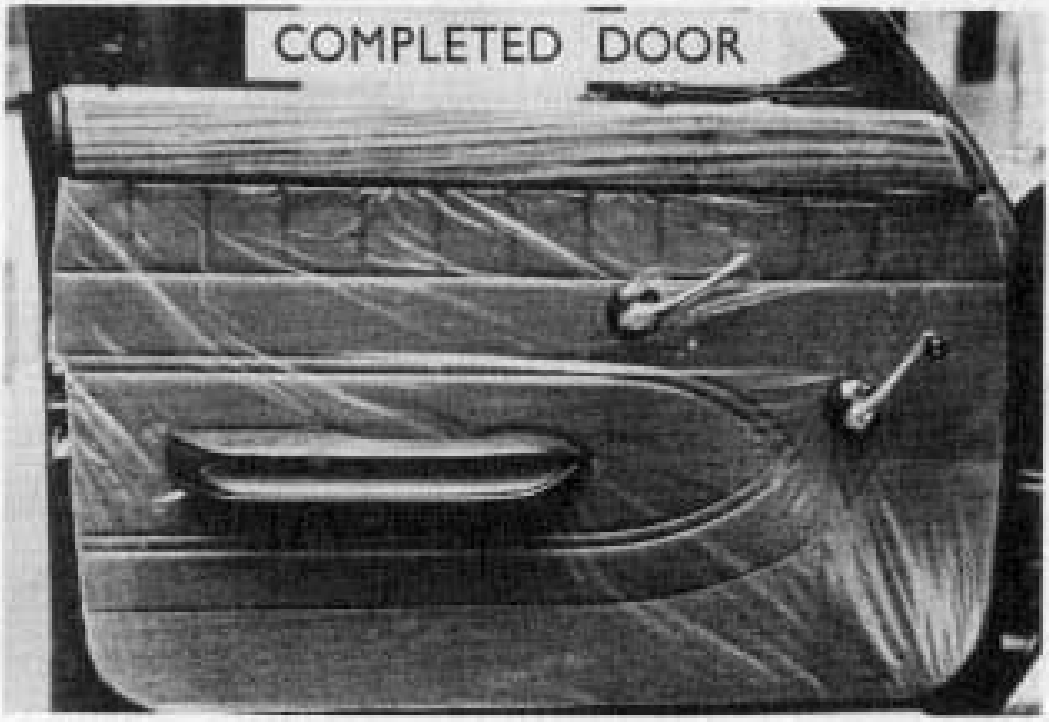
The method of fitting is as follows :-

1. Fit bolts and washers to the armrest and screw assembly to door panel.

2. Slide finisher clips into bolt grooves.

NOTE : If bolts are too deep in armrest or stand out too far to allow finisher to position properly, adjust bolt position by adding or subtracting flat washers.

FRAME No. 26

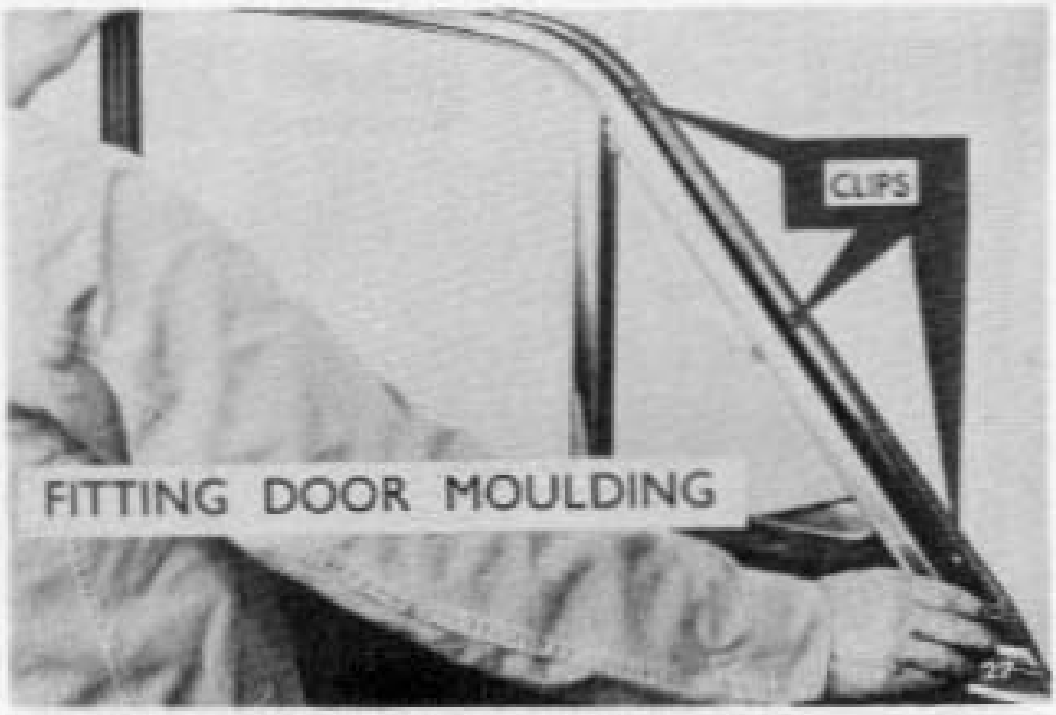


This frame shows a completed door with the trim and all fittings in position.

NOTE : The position of the door handle and the window winding regulator handle when the window is fully closed.

THE POLYTHENE TRIM COVER SHOWN IS PURELY PROTECTION TO A NEW CAR.

FRAME No. 27

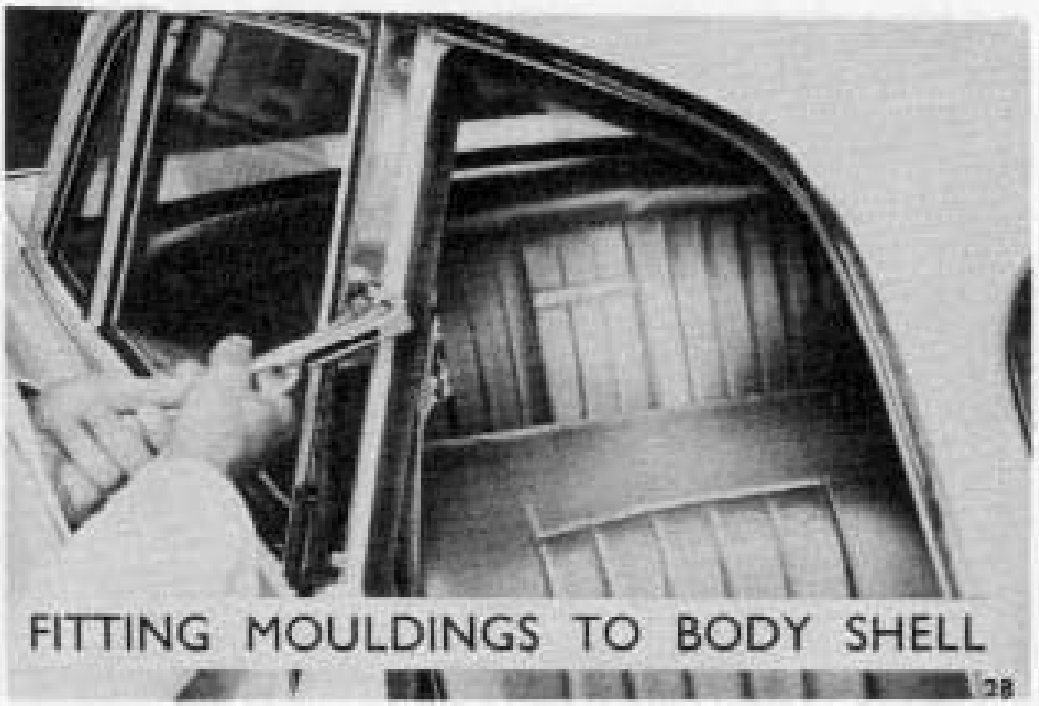


Body mouldings to the Doors and sills are fixed by pressing on to special clips attached to the body by pop rivets.

This frame shows the moulding being fitted to the front door.

Note : The clips already riveted in position.

FRAME No. 28



This shows the moulding being fitted to the BC post with pop rivets.

The moulded finisher along the water channel is pressed into position.

The remaining mouldings such as trunk lid, tail lamp surround etc. are retained in position by clips which are pressed onto the various flanges.

FRAME No. 29

The build up of the rear doors is similar to that for the front door.

The following frames deal only with the main differences.

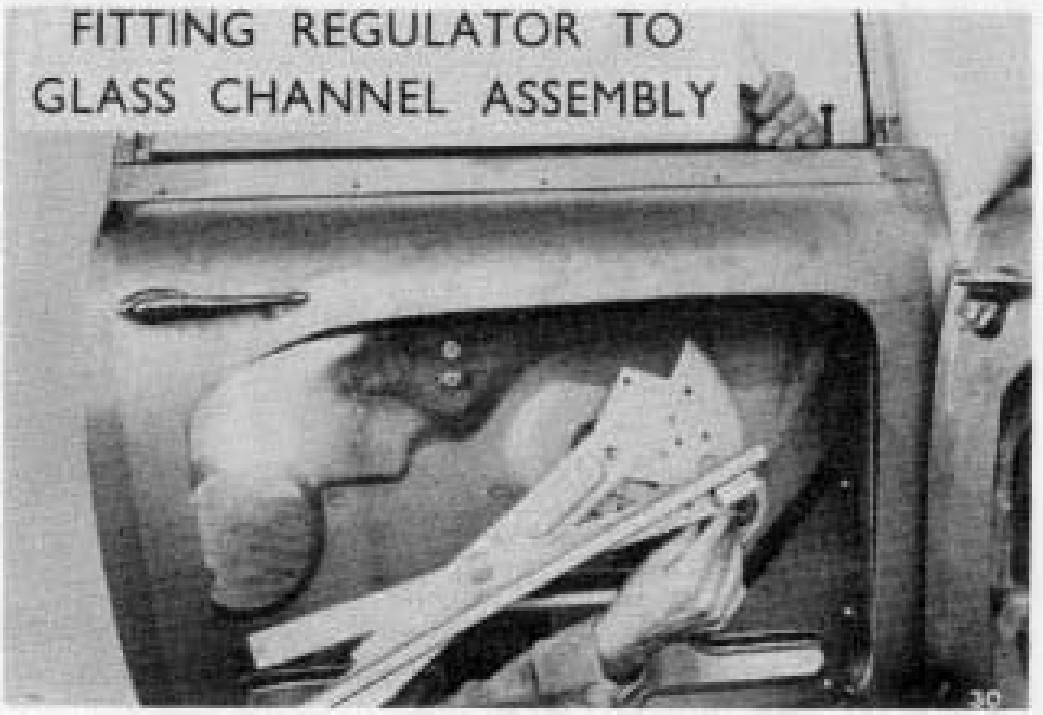
This frame shows the lowering of the glass through the door aperture.

Note the following details :-

a. The Interior and Exterior weather strips have been fitted.

b. The angle at which the door glass is being lowered.

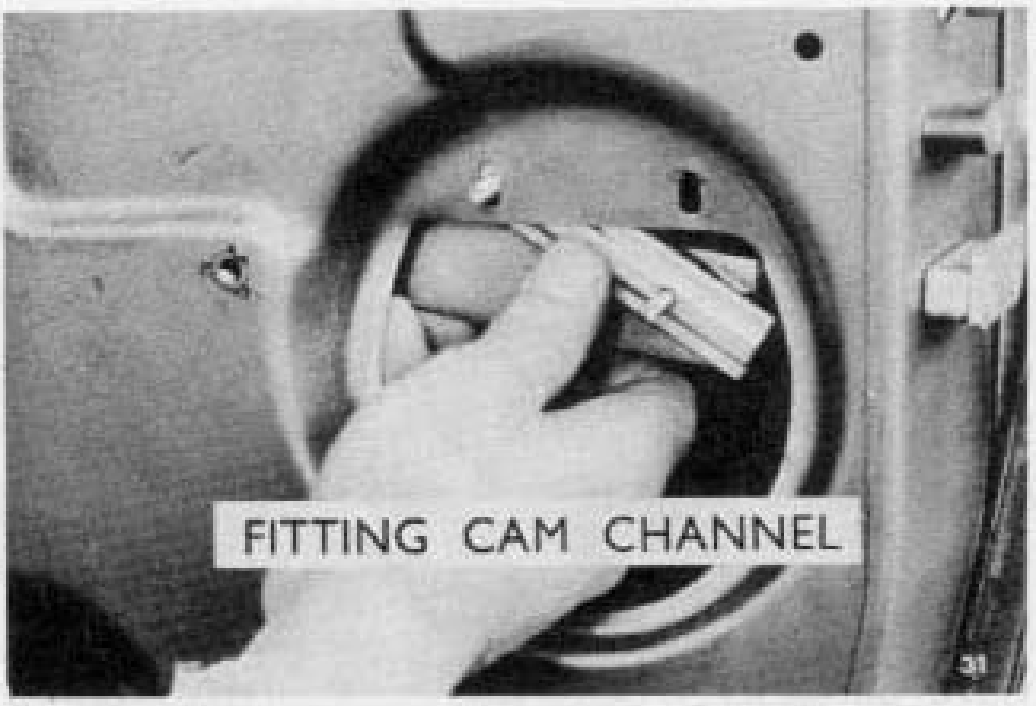
FRAME No. 30



This frame shows the location of the regulator arms into their respective channels on the glass assembly.

It is important to have the glass at the angle shown as it simplifies the operation of fitting.

FRAME No. 31

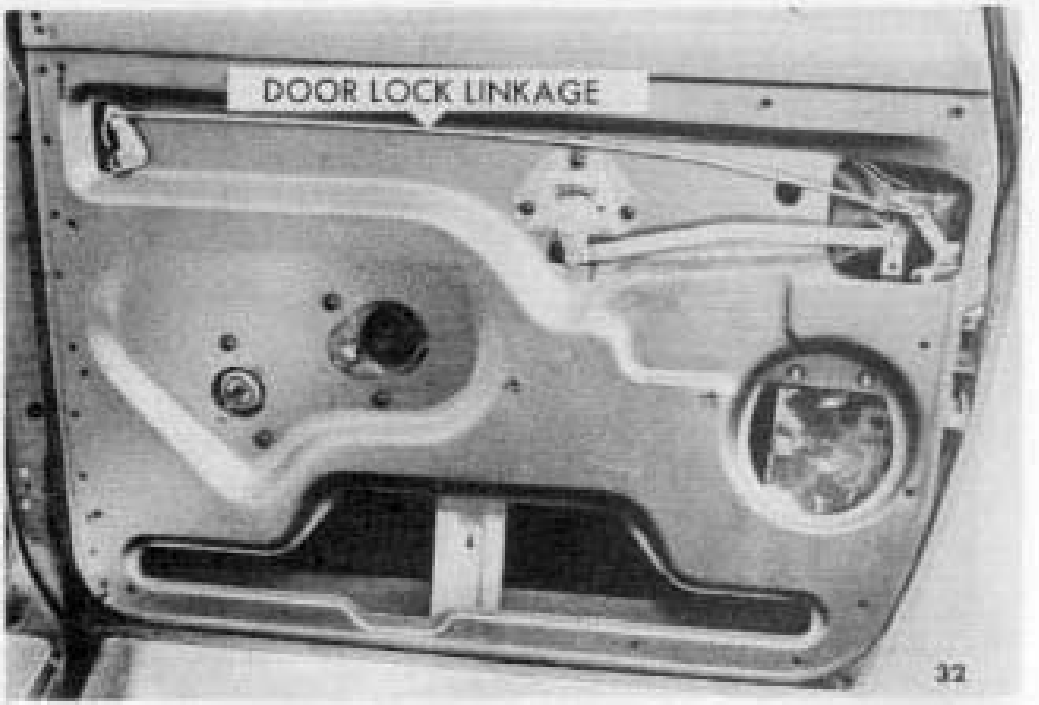


Having completed the previous operation then fit the cam channel assembly. This slides onto the regulator cam and the two fixing studs locate through the slotted holes in the door panel as shown.

It is held in position with nyloc nuts and plain washers.

NOTE :- Use care when tightening.

FRAME No. 32



This frame shows all the assemblies in position. The short glass run channel and glass stop are fitted as for the front door.

Note the positioning of the locking linkage and support clip.

FRAME No. 33

This frame shows the plastic weather shields in position before fitting interior trim and handles etc., as described in Frame No. 22.

FRAME No. 34

An exterior view of completed rear door through cut away panel.

Note : The glass stop and window regulator cam channel.

FRAME No. 35.

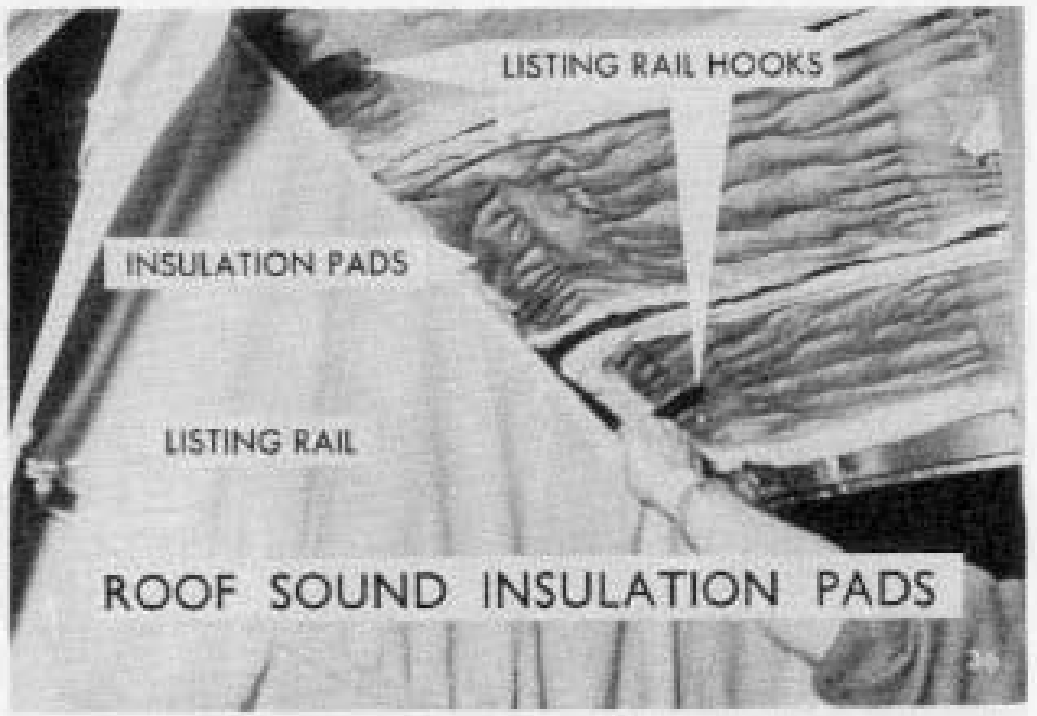
PART 2

Fitting Roof Lining

and

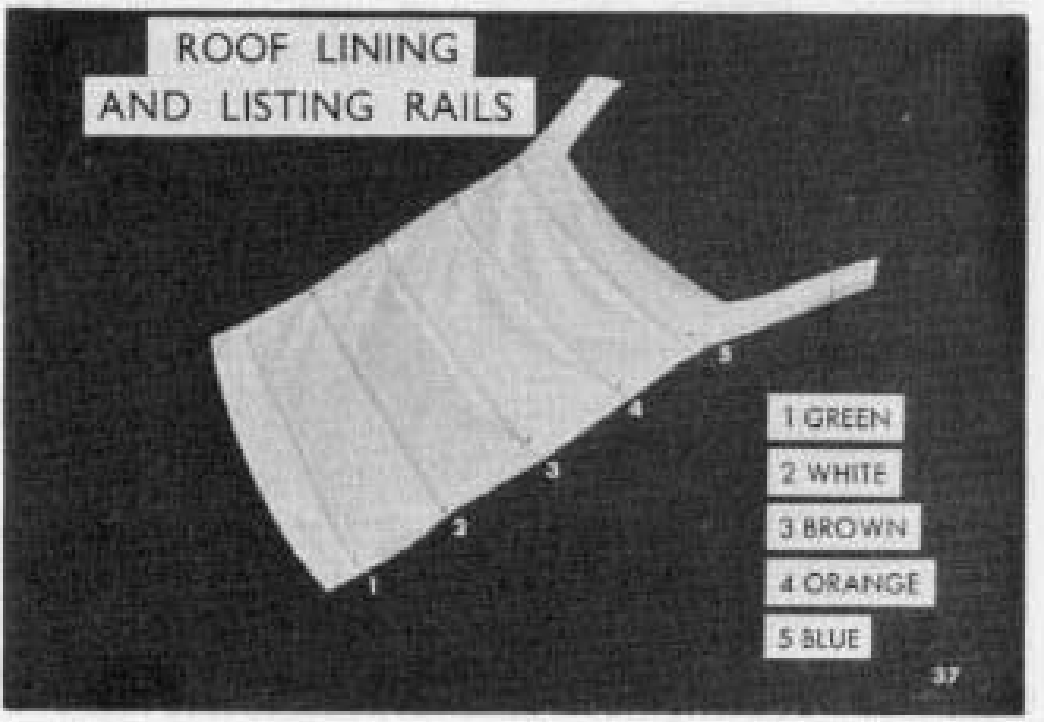
Windows

FRAME No. 36



This frame shows the Insulation Pads fitted to the roof. There are three separate sections and they are held to the roof panel first by using a suitable adhesive. (Dunlop Universal S.758) also by the listing rails of the roof lining which follow afterwards.

FRAME No. 37



Lay the lining face down on a suitable table and spread an adhesive approximately 2" wide around the edge.

The listing rails are secured to the lining in loops at varying intervals.

As each listing rail has a different form, each rail is painted with an identifying colour.

Starting from the front the colour code is as follows :-

1. Green
2. White
3. Brown
4. Orange
5. Blue

This frame shows the lining with listing rails in position ready for fixing to the roof.

FRAME No. 38.

The procedure is as follows :-

1. Brush an adhesive along all outside flanges of the roof, backlight and screen apertures.
2. Locate the listing rails into their respective brackets on the roof commencing at the front.
   (No. 1 rail (Green) is anchored into the two flat metal hooks at the front).
3. Moving to the rear of the roof lightly pull the lining over the backlight flange and press into position.
4. Repeat this operation at the sides and front brushing out creases as they occur.
5. Trim off surplus material.

FRAME No. 39

This frame shows the roof lining finished and ready for the fitting of internal trimmings.

FRAME No. 40

1. When fitting the screen care must be taken to avoid damage by scratching etc.
   The screen glass of the Triumph 2000 is Zone toughened either R.H. or L.H.
   To distinguish one from the other looking from the front at the bottom centre the operator will see the words ZONED TOUGHENED and a small arrow pointing either to the left or right.

Continued

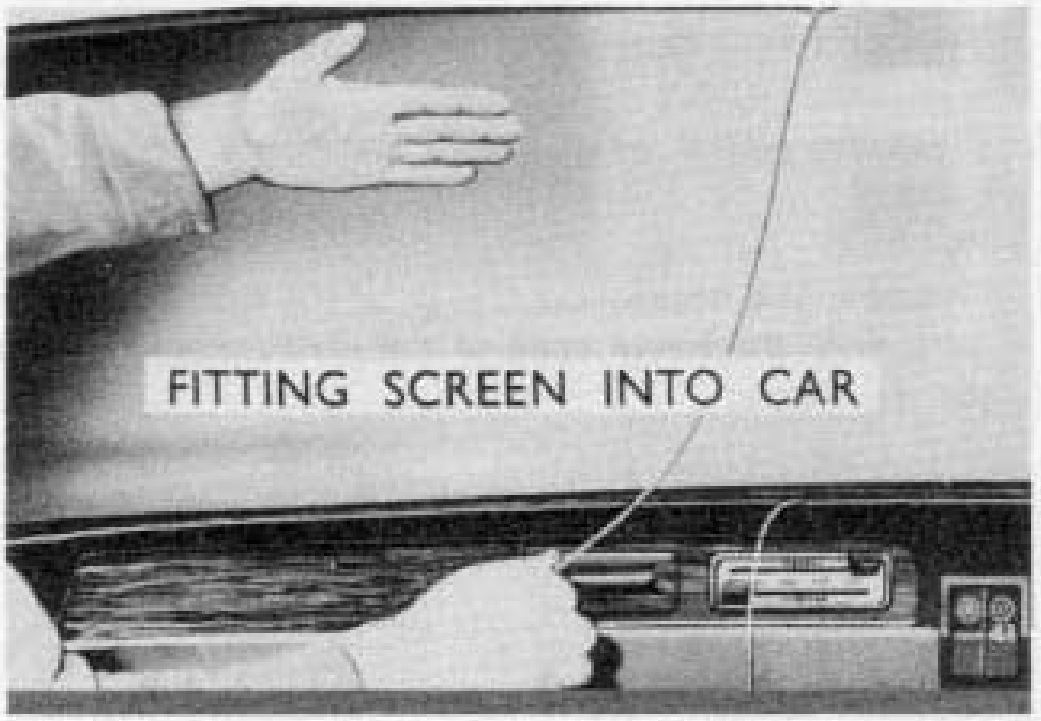
Make certain the correct glass is used.

2. Place the rubber weatherstrip around the edge of the glass.

3. Thread a cord around the flange of the rubber weatherstrip with the loose ends of the cord crossed over at the top centre.

The screen is now ready for fitting into the car.

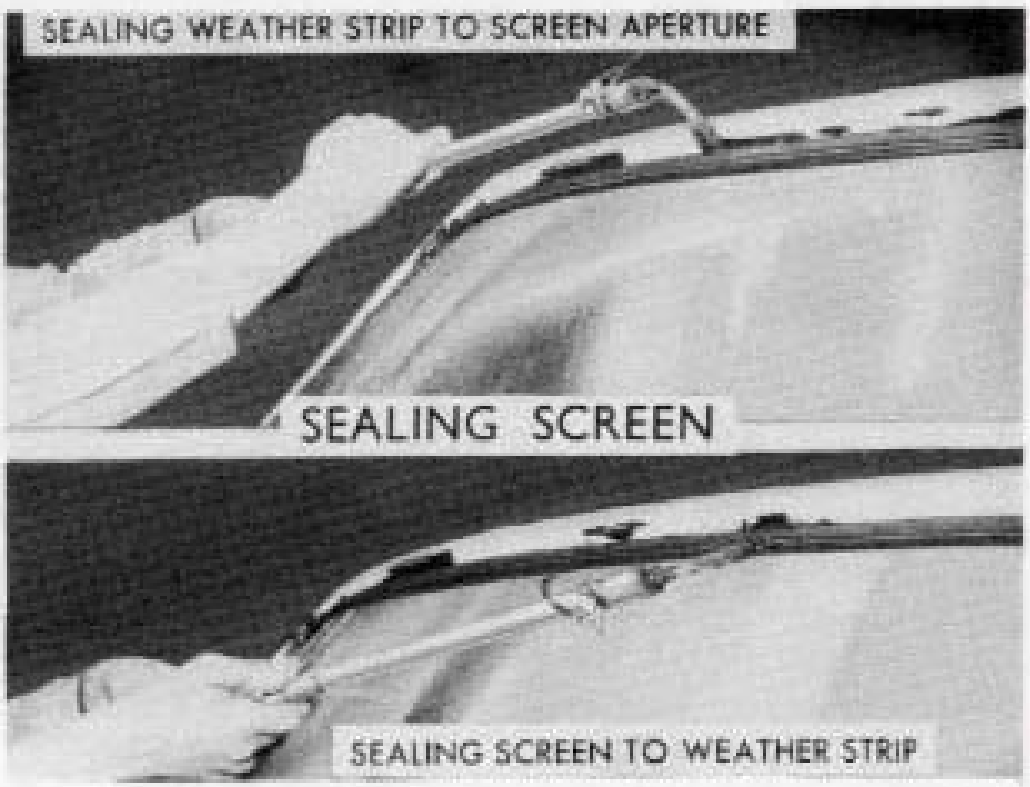
FRAME No. 41



Place the screen into position on the car making sure that it lies centrally in the aperture.

Using an assistant to press the glass inwards, the operator pulls the cord from inside drawing the rubber flange over the lip of the frame surround as shown.

FRAME No. 42



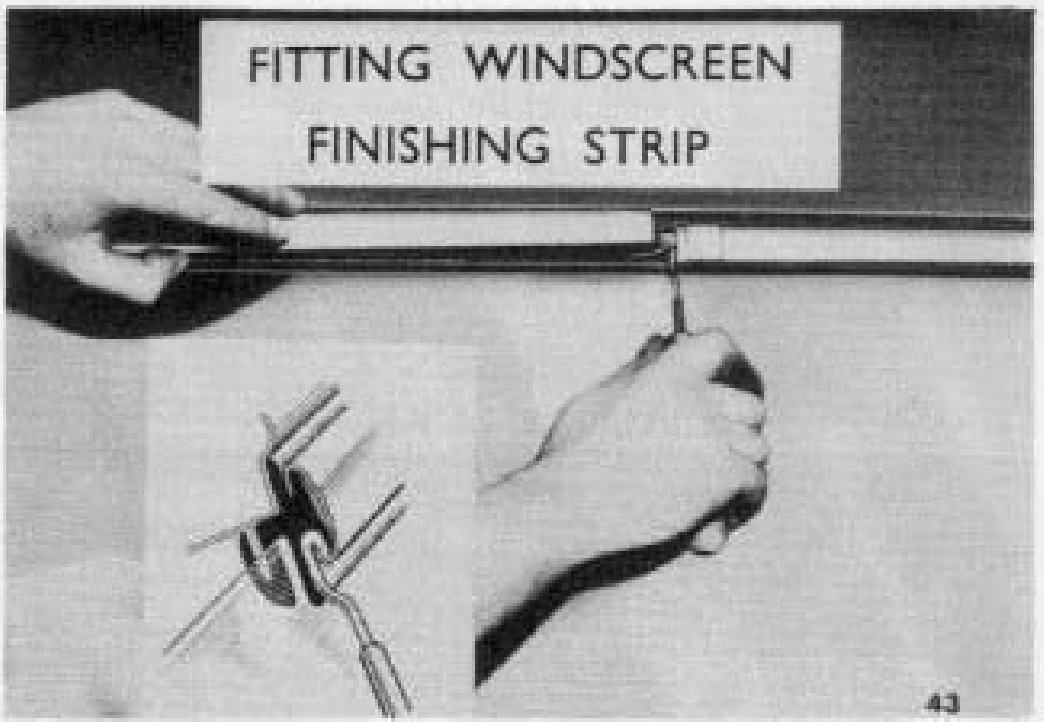
Having fitted the screen it is important to prevent water seeping in around the rubber weatherstrip.

The top picture shows the sealing solution being forced in between the weather strip and metal edge of screen aperture.

The bottom picture shows the sealing solution being forced in between weather strip and screen.

Note :- Surplus sealing solution should be wiped clean as soon as possible while it is easy to remove.

FRAME No. 43.

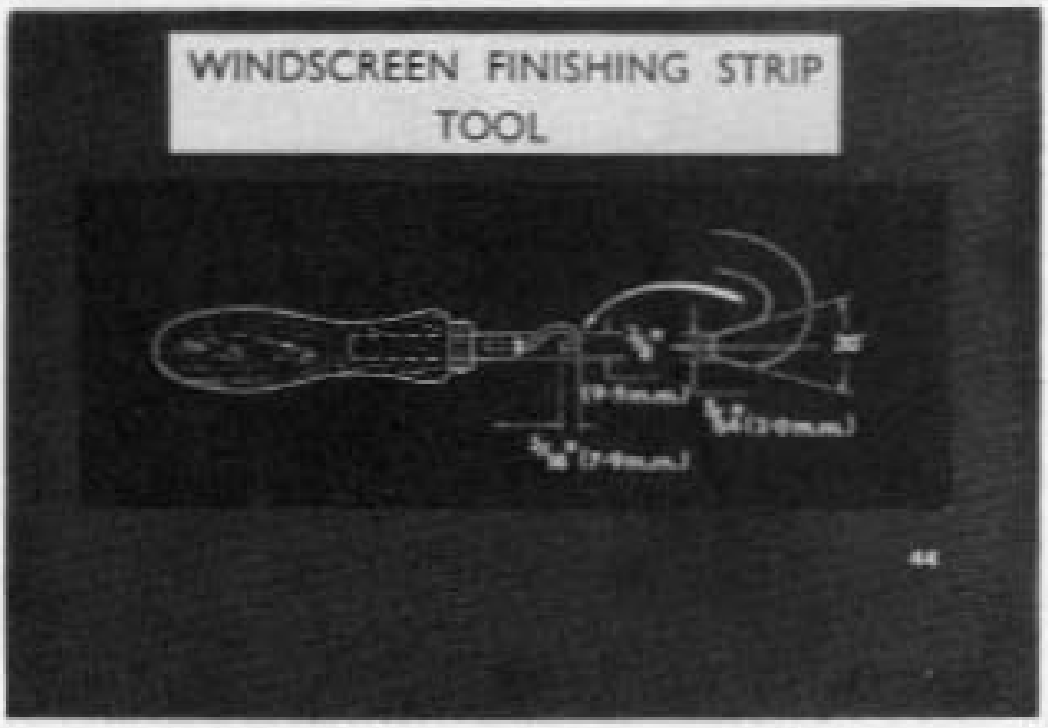


To fit the screen moulding a special tool is necessary.

The instructions for making this tool are given in frame No. 44.

Using a soapy solution or rubber grease smear the rubber and offer the moulding into position. Hook the tool as shown in the picture and slide it along which will lift the rubber to engage in the mouldi ng. When finished place over the joints of the moulding at the top and bottom centre the two special plates which press easily into position.

FRAME No. 44



The windscreen finishing strip tool as seen in use in the last frame can be made of $^{3}/_{16}$" (5.0mm) mild steel rod.

The easiest way, is to fabricate the parts.

1. Obtain a file handle.
2. Make a hook paying particular attention to the tip dimensions.
3. Braze the hook into a metal stock
4. Fit the stock into the handle and secure with a rivet.

FRAME No. 45.

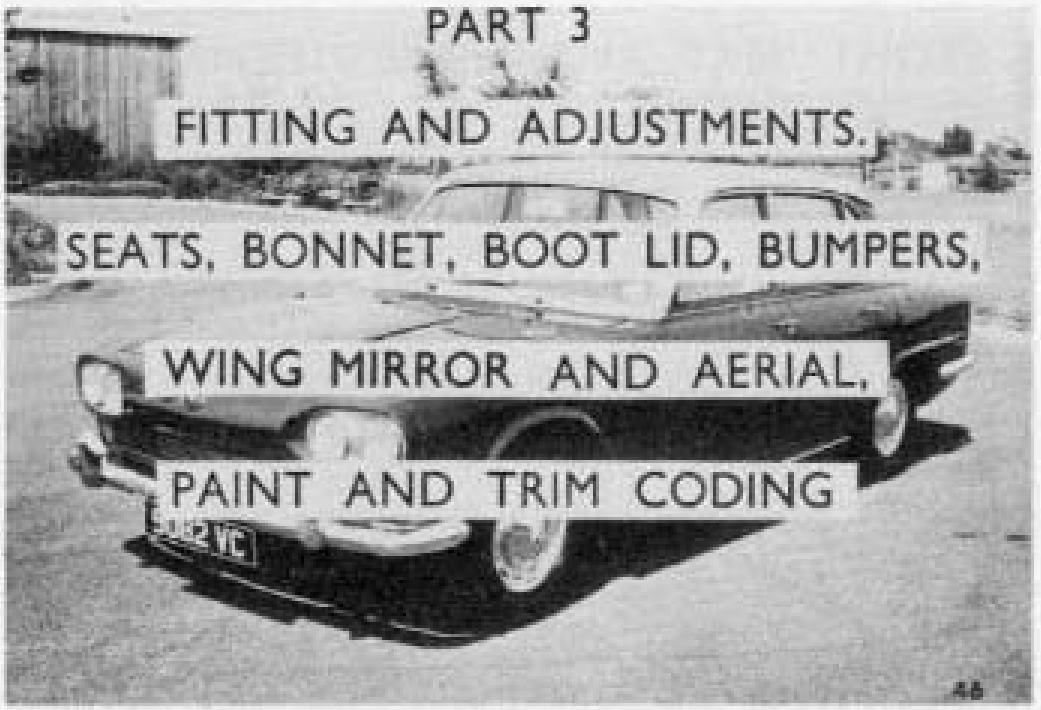
The assembly sequence is as follows :-

1. Fit the weatherstrip rubber backing with sealing compound round the glass.
2. Position glass and rubber backing into window frame with sealing compound between frame and rubber.
3. Fit interior mouldings and walnut capping loosely into position.
4. When satisfied that all mouldings are fitting correctly tighten all screws up evenly.

FITTING BACK LIGHT

The method for fitting the back light is the same as for the front screen, see Frames 40, 41 and 42.

FRAME No. 46.

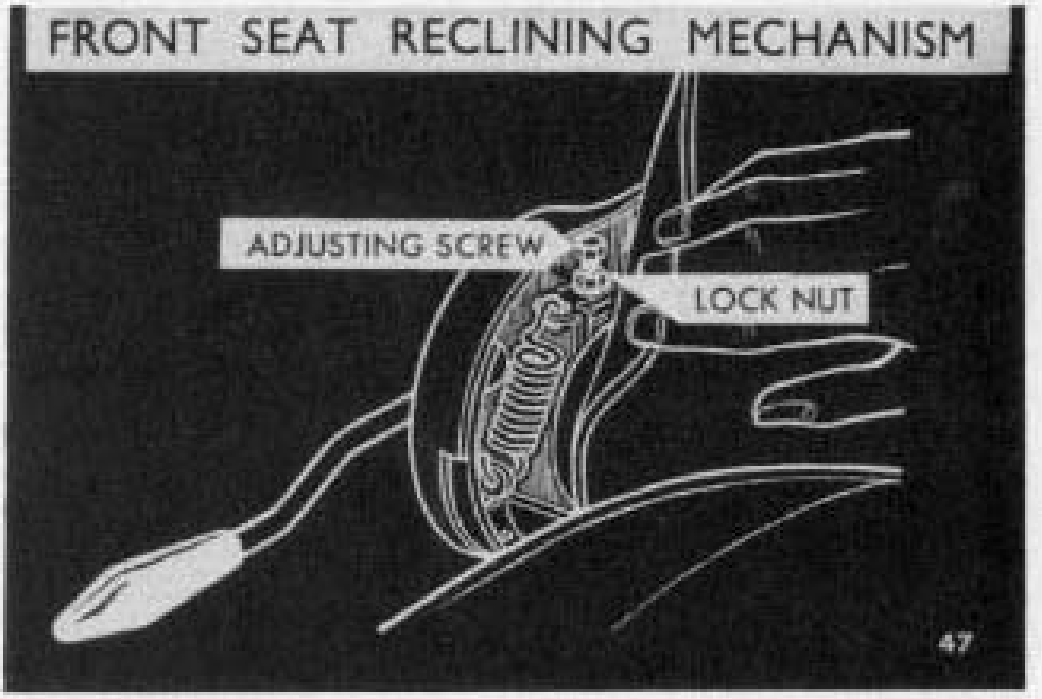


PART 3

Fitting and Adjustments

a. Seats
b. Bonnet
c. Boot Lid
d. Bumpers
e. Wing Mirror and Aerial.
f. Paint and Trim Coding.

FRAME No. 47.



The adjustment of the front seat reclining mechanism is by a lock nut and adjusting screw at either side of the seat.

To adjust the seat, the only tool required is a 2 BA spanner.

Continued

The procedure is as follows :-

1. Turn the adjusting screw in as far as possible without forcing and check that the lever returns to its correct position after each turn of the screw.

2. If lever does not return to the normal position slacken adjusting screw back until lever returns correctly and tighten locking nut.

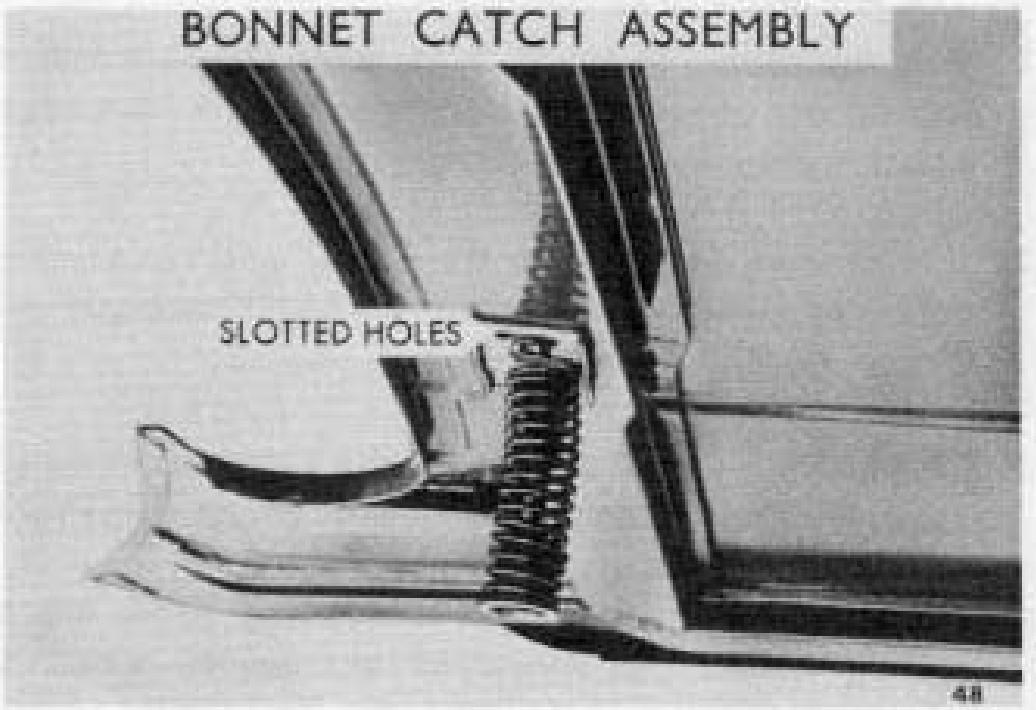
3. Check both sides of seat and make sure that whatever position the squab is in there is no movement.

4. When reclining the squab make sure there are no grating noises. To overcome any noises turn both adjusting screws back until the noise ceases and tighten up lock nuts.

NOTE : As from October 1964 a new front seat frame was introduced with re-designed reclining mechanism which does not require any mechanical adjustments. The only part of the mechanism visible is the operating lever.

FRAME No. 48

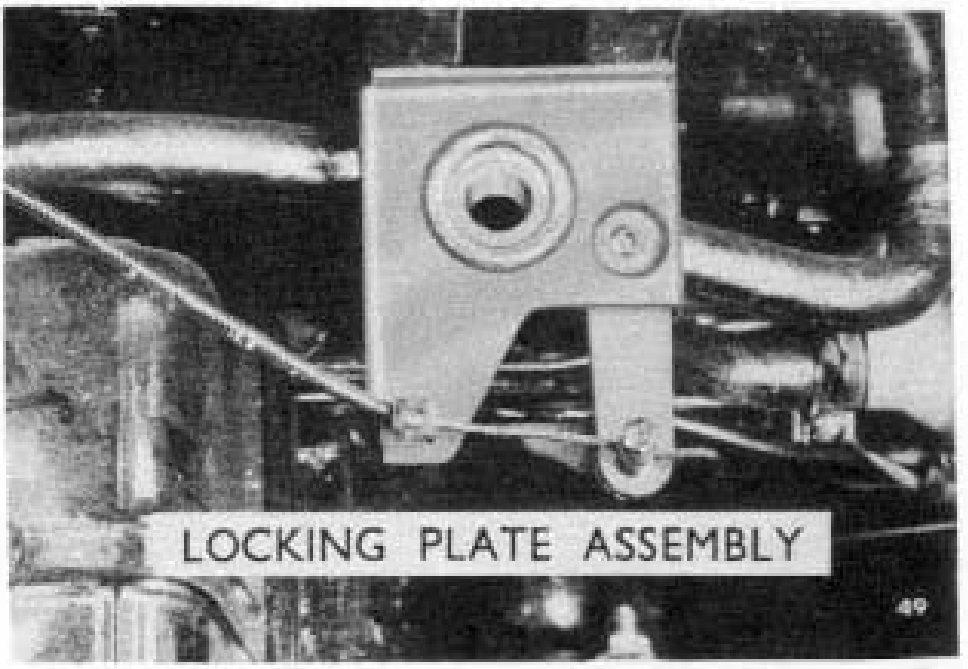
BONNET CATCH ASSEMBLY



The spring loaded bonnet catch assembly is secured to the bonnet by two set-screws, flat washers and locking washers.

Alignment of the bonnet catch to the locking plate is by slotted holes on the bonnet catch locating bracket.

FRAME No. 49

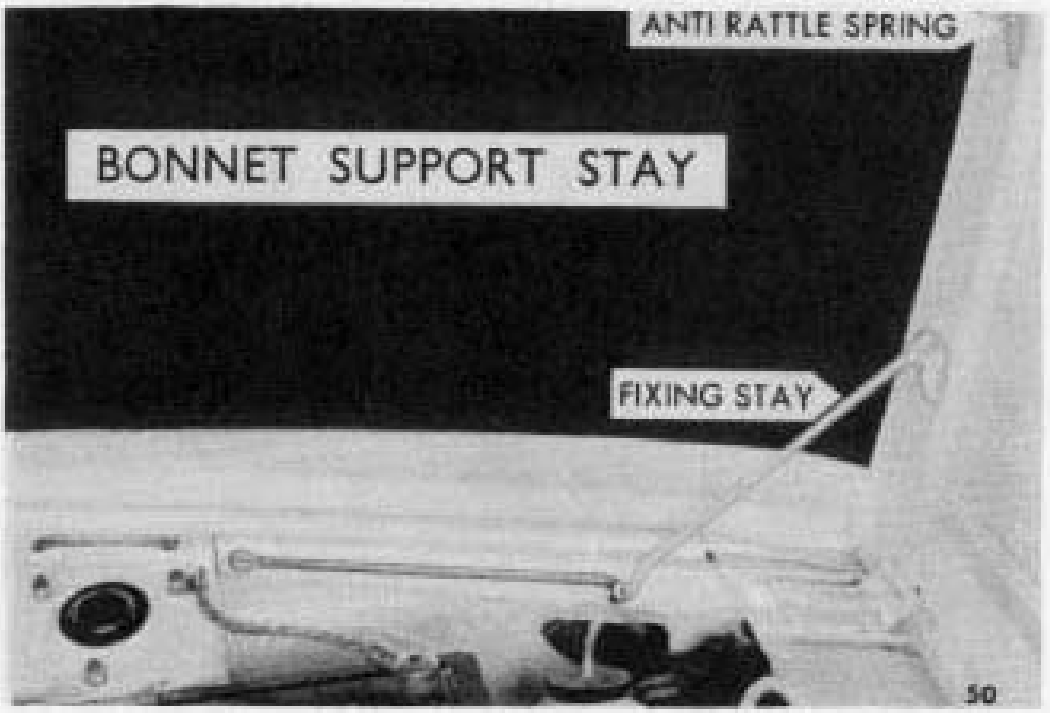


The locking plate is secured to the bulkhead by four set screws, flat washers and locking washers.

The method of adjusting the bonnet catch to the locking plate is as follows :-

1. Slacken bonnet catch assembly.
2. Screw pin striker in or out until bonnet is held securely in the closed position.
3. Tighten and secure bonnet catch assembly.
4. Check again action of bonnet closing and if necessary adjust striker pin.

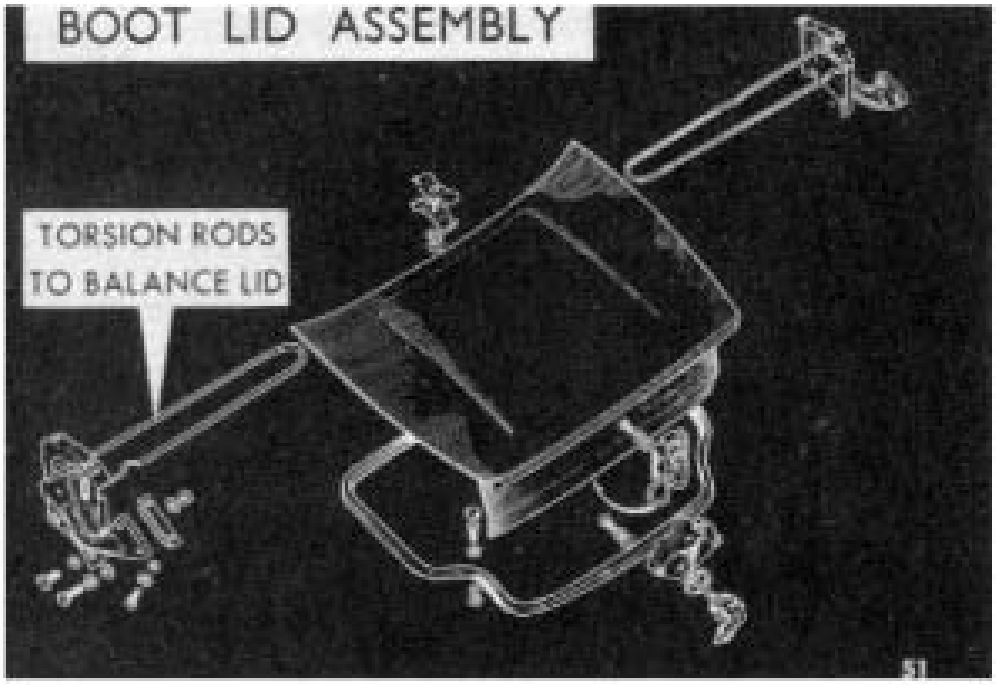
FRAME No. 50.



The bonnet support stay is secured to the bonnet by a clevis fork, retaining pin and split pin. The other end slides in a channel.

When removing the bonnet stay take precautions to support the bonnet before removing clevis pin.

FRAME No. 51.

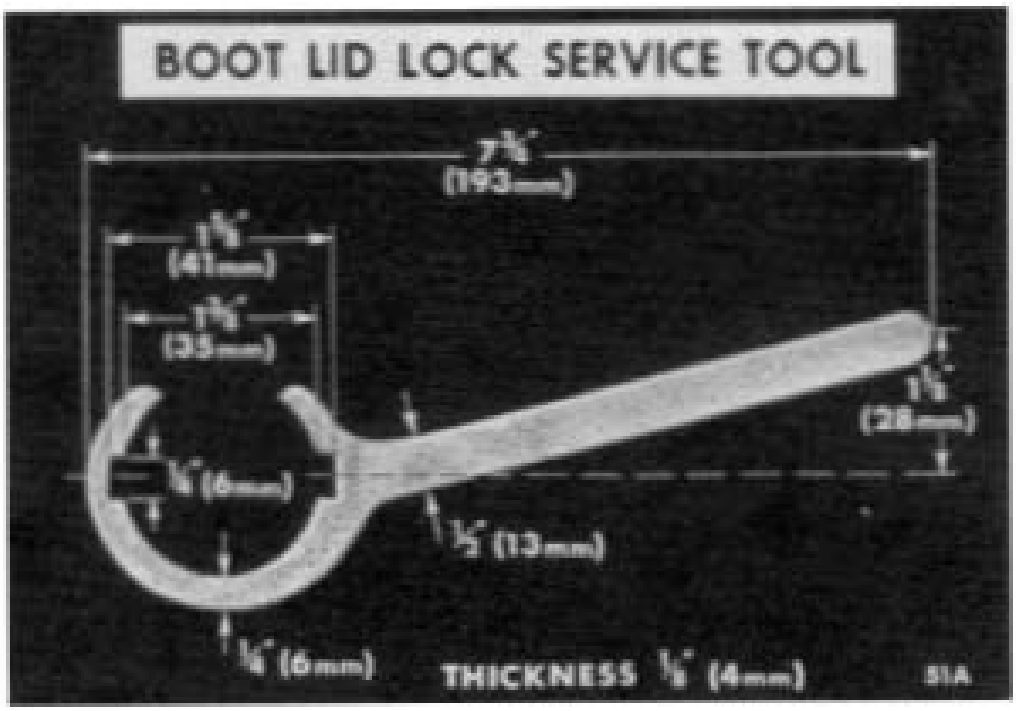


When fitting or removing the assembly it is necessary to adopt the following sequence :-

1. Remove the Rear seat squab
   Rear shelf trim pads
   Spare wheel
   Fuel tank trim
2. Disconnect boot lid bracket from hinge assembly and remove boot lid.
3. Remove torsion rod clamp.
4. Remove each torsion bar hinge assembly which is held in position by four nuts, bolts and washers.

The boot lid catch assembly has an adjustable striker bar which is secured by two setscrews, plain washers and locking washers.

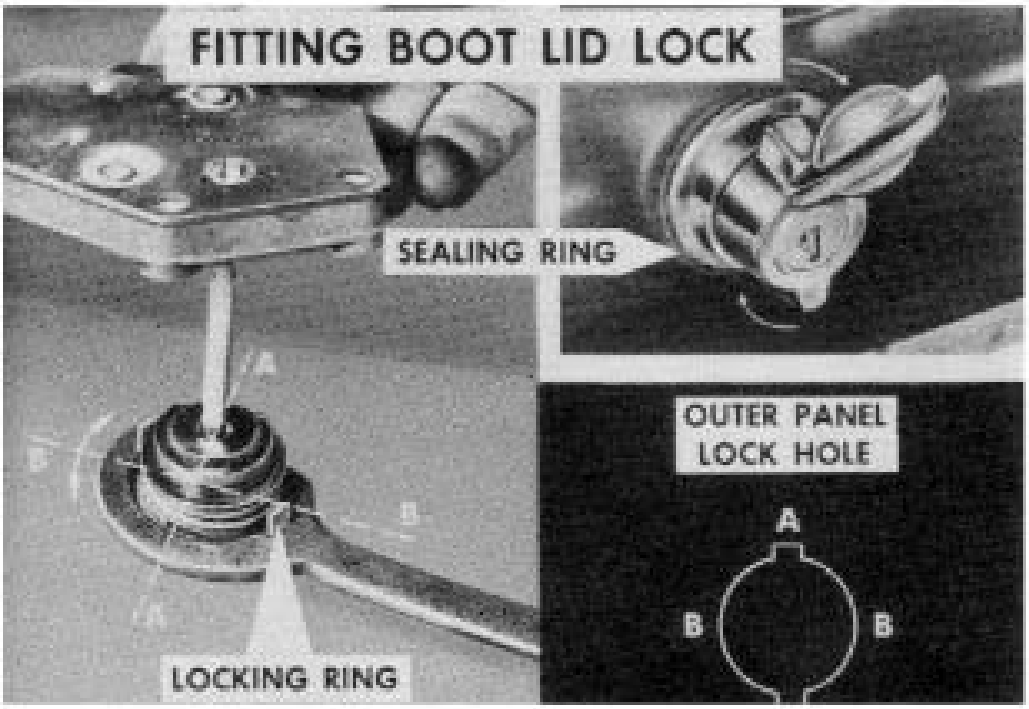
FRAME No. 51A



As the boot lid lock is concealed within the double skin of the body shell it is very difficult to fit or remove the lock with conventional tools.

The tool shown has been produced and the dimensions suggested will assist a mechanic in making one from any suitable steel plate approximately $\frac{1}{8}$" (4 mm) thick.

FRAME 51B



As it is impossible to see behind the double skin of the rear boot panel this arrangement has been set up to shown the assembly and the use of the tool which has been shown in the previous frame.

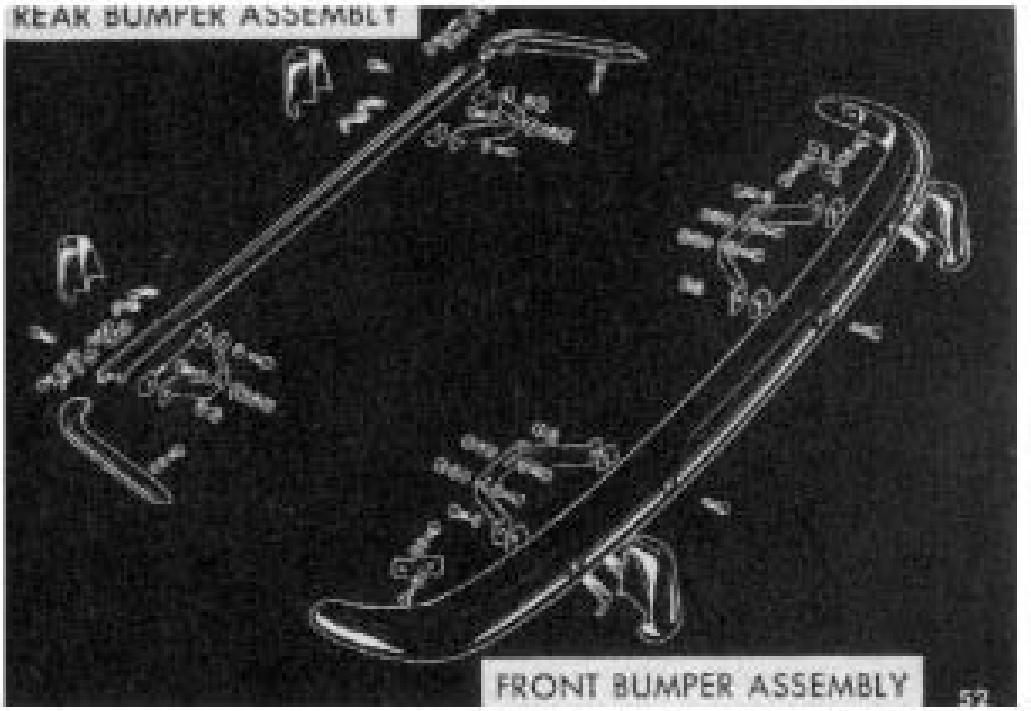
To fit the lock the procedure is as follows :-

1. Smear the rubber ring thoroughly with sealastic and place in position on the lock.

2. Insert the lock with locking ring lugs at position AA through the panel aperture shown in the lower insert.

3. Fit the special spanner in position as shown onto the locking ring and turn 90° so that the locking ring lugs are at position BB.

FRAME No. 52.



Front Bumper Assembly consists of bumper, two overriders and four mounting brackets.

The method of fitting is as follows :-

1. Fit the four brackets and overriders with mouldings securely to the bumper.

Continued

2. Offer up the assembly to the front wings tightening up the four setscrews of the two centre brackets finger tight.

3. Centralise assembly and tighten securely the two end brackets then tighten the four centre bracket bolts.

Rear Bumper Assembly consists of centre and two side bumper bars with overriders and two brackets.

The method of fitting should be carried out in the same way as for the front bumper assembly.

NOTE : The spare wheel and quarter trim panels have to be removed.

FRAME No. 53

The Triumph 2000 wing structure is stiffened with fillets, consequently it is wise to keep to the following dimensions :-

Wing Mirrors. 14.5" x 4.25" (369 mm. x 107 mm.)

Radio Aerial. 13.6" x 2.4" (346 mm. x 62 mm.)

The diameter of the hole being drilled should be kept as close to the diameter of the article being fitted.

Continued

Fitting Wing mirrors and aerials.

Measure the dimensions given and mark the position on a piece of adhesive tape, then select an appropriate drill and forming cutter to make the hole.

To fit the wing mirror remove the headlamp to enable the hand to tighten the nuts and washers.

To fit the aerial, type Radiomobile AW.90/60 is recommended as the nut for tightening is on top of the wing.

FRAME No. 54

PAINT AND TRIM CODING

This code of colours and shades is evolved to assist the ordering of paints and trim from Spares Division.

From the introduction of the Triumph 2000 in October 1963 a paint and trim code is recorded on the commission number plate.

This system will be introduced for all models in the future.

Continued

The nine basic colours are as follows :-

Black 1.	Yellow 4.	Purple 7.
Red 2.	Green 5.	Grey 8.
Brown 3.	Blue 6.	White 9.

The prefix number to the basic colour number represents the shade.

The colour and shade range is as follows :-

Basic Colour	1st Shade	2nd Shade	3rd Shade	4th Shade
Black	11			
Red	12-Matador	22-Cherry	32-Signal	42-Burgundy
Brown	13			
Yellow	14-Jonquil			
Green	15-Cactus	25-Conifer	35-Olive	
Blue	16-Midnight	26-Wedgwood	36-Dark Blue	46-Royal Blue
Purple	17			
Grey	18-Gunmetal	26-Dark Grey		
White	19			

Dual paint colours will be shown as two codes divided by a stroke.

Example : 35/15 Olive Green and Cactus Green, with Olive green as predominating colour.
Vehicles delivered in primer the colour code number is prefixed by "P" i.e. Grey primer P.8.

The commission number plate has two additional spaces. The lower left is for paint code and the lower right for trim code.

1st example : Commission No. MB300
Paint 19/11 Trim 12.

Continued

19/11 represents white/black and 12 represents matador red.

2nd example : Commission No. MB. 102
Paint 26. Trim 16

26 represents Wedgwood Blue and 16 represents Midnight Blue.

ACRYLIC PAINT

When repairing car bodies which are painted in Acrylic it is absolutely important that **all** re-spraying and even small touching up repairs are carried out with not only Acrylic paint but the same make of Acrylic paint as used on production.

To assist the body repairer Acrylic paint details are found on the commission number plate.

After the normal commission number a suffix letter "A" is stamped and to indicate the paint supplier two code letters are stamped in front of the colour code number.

Manufacturer's code letters :-

AV Goodlass Wall Valspar AB Bergers

AI I.C.I. AG General Industrial Paints

AP Pinchin Johnson

Example - Commission No. MB 23008A

Manufacturer & Paint AV.25 Trim 12

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