

# WINDSCREEN AND REAR WINDOW REPLACEMENT

## CONSUL 375, ZEPHYR, ZODIAC (1956 ONWARDS)

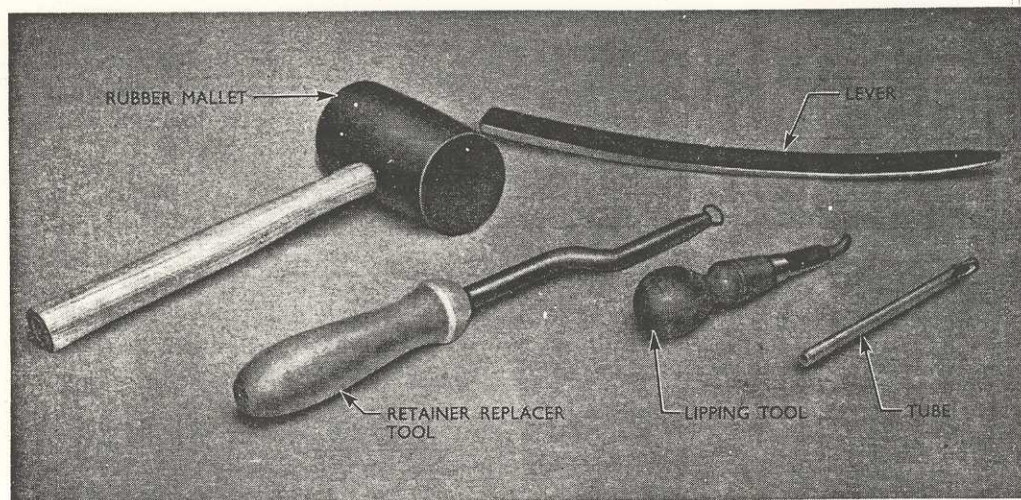


Fig. 1  
Suitable Tools

In order that satisfactory sealing against water ingress is obtained, it is essential that a correct fitting procedure is followed when installing a windscreen or rear window glass.

Before commencing to remove or refit a windscreen glass ascertain the type of glass being dealt with. Two types are used, toughened and laminated and a close examination of the glass will reveal a distinguishing mark including the words "Toughened" or "Laminated", or "T" or "L", placed centrally in the windscreen approximately 1 in. above the lower chrome moulding. To assist in correct fitting, a number of suitable tools are illustrated in Fig. 1. However, the use of the rubber mallet and lever as described in the following instructions is restricted entirely to the fitting of **toughened** glass. It is essential that laminated glass be treated with extreme care and should not be subjected to sudden shock or distortion.

In addition to the tools shown, it will be necessary to provide a suitable lubricant to help enter the rubber weatherstrip within the body aperture. Glycerine is the most suitable form of lubricant but if it is not available, soft tallow, or soapy water can be

used. These are not as effective as glycerine but it is important that whatever the lubricant employed, it should not have an adverse effect on the weatherstrip, or the sealer which is to be applied.

If the glass is being replaced because of accident damage, ensure that the aperture is dimensionally correct and that the aperture flange is free from buckles or protrusions. Carefully clean any shattered glass from the weatherstrip groove and scrape off any hardened sealer adhering to the weatherstrip or body aperture flange. It is most important that solvents such as petrol or white spirit are not used on the weatherstrip for cleaning purposes, since they can cause deterioration.

### Weatherstrip Identification

When renewing a windscreen or rear window weatherstrip on vehicles produced 1956-1959, care must be taken to select the correct type. Two types are available, one to suit the standard Consul with narrow chrome mouldings, and one suitable for De Luxe Consul, Zephyr and Zodiac with wider chrome mouldings. These weatherstrips can be recognised by comparing the

grooves which receive the chrome. In addition to the visible variation in width, the weatherstrip suitable for De Luxe Consul, Zephyr and Zodiac carries moulding ribs in the groove, whilst the standard Consul is plain in this location (see Fig. 2). If a standard Consul weatherstrip is inadvertently fitted to a De Luxe Consul, Zephyr or Zodiac, it will be found possible to fit glass and weatherstrip to the aperture, but it will be found impossible to fit the chrome mouldings.

Exact fitting procedures for windscreens and rear windows are given below and the suggested sequence of operations should be closely followed.

### WINDSCREEN (1956-1959)

The assembly consists of a windscreen glass, a weatherstrip, a rubber locking strip, two chrome mouldings and two moulding cover clips.

#### To remove

1. Cover the cowl and bonnet top with a suitable soft cloth to prevent accidental damage to paintwork.
2. Remove the wiper arms and blades. Where a wiper arm incorporating a cross-headed screw in the spindle boss is fitted, first slacken the screw, tap it once gently (to free the wedge action) and then withdraw the arm.
3. From inside the car unscrew the cross-head screws securing the upper and lower garnish mouldings both top corner mouldings, both lower corner mouldings and both screen pillar mouldings. Remove two cross-head screws and detach the rear view mirror.
4. From inside the car remove the rubber locking strip.

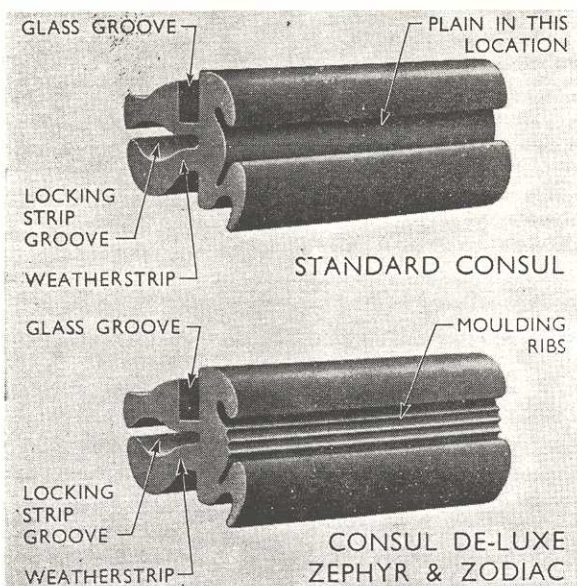


Fig. 2

#### Weatherstrip Identification

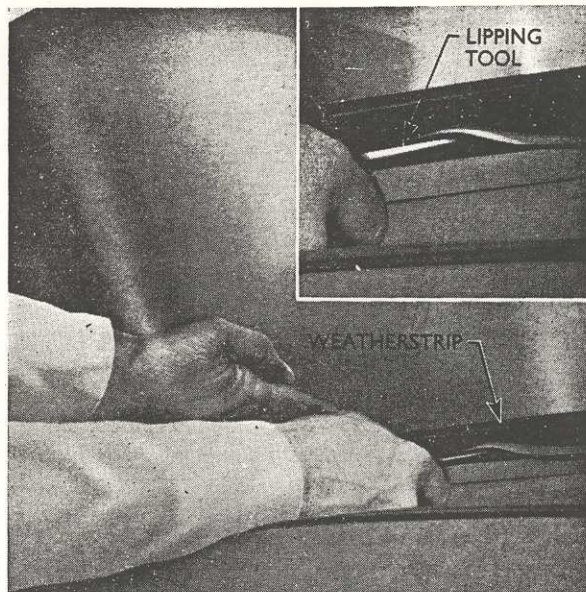


Fig. 3

#### Lipping Tool in Use

5. By applying pressure from within the car, push out the glass together with the weatherstrip and chrome mouldings.
6. Carefully detach the chrome mouldings from the weatherstrip to avoid distorting them and remove the weatherstrip from the glass.

#### To replace

1. Ensure that the aperture flange is clean and free from buckles or protrusions.
2. Fit the weatherstrip to the glass, if necessary, securing it to the glass with short lengths of masking tape lapped over the rubber and stuck to both sides of the glass (see Fig. 6).
3. Soak a rag in glycerine, squeezing out the excess, and thoroughly rub the weatherstrip with it, ensuring that the various grooves are adequately treated.
4. Apply a bead of suitable sealer to the rubber to body section of the weatherstrip.
5. Offer the glass and fitted weatherstrip to the body aperture by lowering the glass onto the bottom body aperture flange. Remove any masking tape used to secure the weatherstrip in position one piece at a time immediately before each section of the appropriate groove in the weatherstrip is positioned over the body aperture flange (see Fig. 6).
6. Allow the glass and weatherstrip to rest against the body aperture and then by means of a suitable lipping tool (a medium-sized screwdriver with all sharp edges removed (see Fig. 3), lift the inner lip of the weatherstrip over the body flange working from inside the car, taking care not to damage the weatherstrip and at the same time applying a light pressure to the glass from the outside.

7. After ensuring that the lower edge and sides of the weatherstrip are correctly in position, from outside tap the top edge of the glass into position with carefully directed blows from a rubber mallet or palm of the hand, at the same time lipping the top edge of the weatherstrip over the body flange.

(If the windscreen glass is laminated, do not use a rubber mallet, only the palm of the hand. See introduction to this Bulletin.)

8. Using a sealer gun fitted with a  $\frac{1}{8}$  in. (3.2 mm.) diameter swan neck nozzle, apply suitable semi-liquid sealer between the weatherstrip and glass on the outside of the car.

9. Lubricate the groove in the weatherstrip and fit the chrome finish mouldings, starting at the sides and working inwards. It will be found more satisfactory to insert the outside edge of each moulding under the weatherstrip lip, and then using the lipping tool, ease the inside lip of the weatherstrip over the moulding at the same time pressing it back into position. It may be found that the mouldings will overlap at the joints, in which case the weatherstrip should be seated in the corners of the body aperture using a hide or soft wood drift (suitably shaped to engage the weatherstrip), and mallet.

10. Lubricate the weatherstrip locking rubber and thread it halfway through the retainer replacer tool. From inside the car, insert this in the weatherstrip centrally above the windscreen (see Fig. 10).

11. Working around the weatherstrip, fit the locking strip taking great care not to stretch it. If a new locking strip is being fitted, when completely inserted trim off the excess. However, if the original locking strip is being replaced do not trim off any

excess but endeavour to fit the complete length into the weatherstrip. Failure to do this can lead to a bad water leak since under road vibration the locking strip will be found to "creep" and if it has been trimmed short a gap will develop at the joint locations.

12. Refit the moulding joints, all garnish moulding and inside corner mouldings, the rear view mirror and wiper arms and blades.

13. Remove any traces of the sealer and glycerine which may be apparent on the body.

### WINDSCREEN (1959 onwards)

The assembly consists of a windscreen glass, a weatherstrip, two transverse chrome mouldings and two vertical mouldings.

#### To remove

1. Cover the cowl and bonnet top with a suitable soft cloth to prevent accidental damage to the paintwork.

2. Remove the wiper arms and blades. Where a wiper arm incorporating a cross-headed screw in the spindle boss is fitted, to remove the arm, slacken the screw, tap it once gently (to free the wedge action) and then withdraw the arm.

3. From inside the car, unscrew the cross-head screws securing upper and lower garnish mouldings, windscreen pillar mouldings, lower corner mouldings, and top corner mouldings. Remove two cross-headed screws and detach the rear view mirror.

4. Drill out, using a  $\frac{1}{8}$  in. diameter drill, the four hollow rivets fixing each side chrome moulding to the door pillar and slide the vertical mouldings off the transverse mouldings.

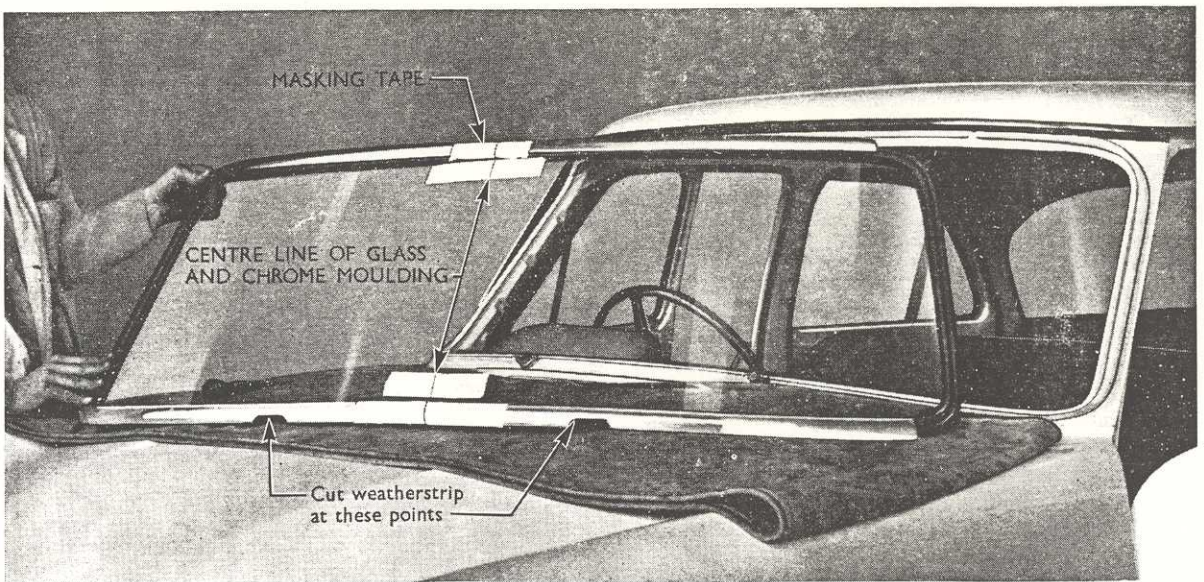


Fig. 4

Centre Line of Glass and Chrome Mouldings to Coincide

5. Applying pressure to the top of the windscreen from within the car, ease out the glass, together with the transverse mouldings and the weatherstrip.
6. Detach the transverse chrome mouldings and weatherstrip from the glass.

### To replace

1. Ensure that the aperture flanges are clean and free from buckles or protrusions.
2. Stick two pieces of white tape to the top and bottom mid-positions of the windscreen, and mark on the tape the centre of the windscreen glass (see Fig. 4).
3. Stick a piece of white tape in the mid-position of both the transverse chrome mouldings and accurately mark on the tapes the centre positions.
4. Fit the weatherstrip to the glass, lubricate the appropriate weatherstrip groove and press the transverse chrome mouldings into the weatherstrip so that the centre marks of chrome strips and windscreen coincide (see Fig. 4).
5. Apply a semi-liquid sealer to the rubber to body section of the weatherstrip.
6. Fit a length of cord in the weatherstrip to body groove so that the cord ends emerge at the bottom centre, allowing a cross-over of approximately 6 in. A short length of tube (as shown in Fig. 1) with about  $\frac{1}{4}$  in. (6 mm.) diameter bore will assist in fitting the cord.
7. Cut out the portions of the weatherstrip exposed by the cut-outs on the lower transverse moulding which accommodate the windscreen wiper motor spindles and washer jets.

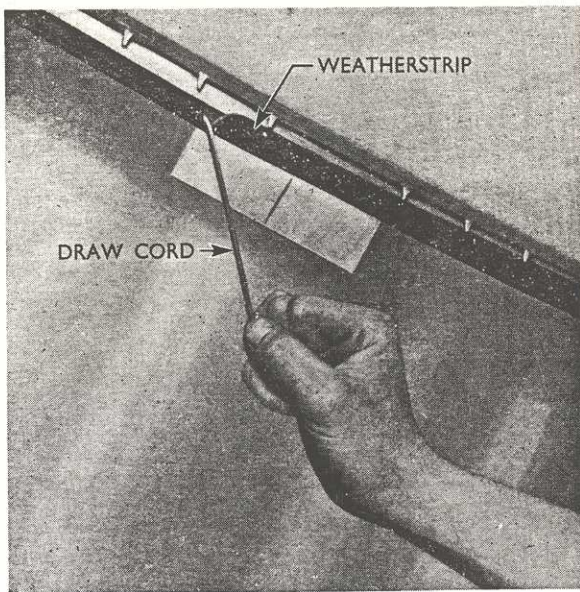


Fig. 5

**Pull Drawcord Towards the Centre of the Windscreen**



Fig. 6

**Masking Tape kept in position until the Weatherstrip is positioned correctly**

8. Using a sealer gun fitted with a  $\frac{1}{8}$  in. (3.2 mm.) diameter swan neck nozzle, apply suitable semi-liquid sealer between the weatherstrip and glass on the outside of the car.
9. Fit the assembly to the body in the following manner :  
 Locate the assembly centrally in the windscreen aperture, using the wiper motor spindles as a guide. Ensure that the cord ends are inside the body. Push the assembly up until the groove in the weatherstrip engages the top transverse lip of the body aperture, then push the windscreen firmly in at the bottom.

From inside the car pull out the cord, pulling always towards the centre of the glass. Upon reaching the top centre of the windscreen, start pulling out the other end of the cord, repeating the operation (see Fig. 5). As the cord is withdrawn, apply pressure to the outside of the windscreen in the immediate area of the cord to ease the windscreen into position. It may be necessary to work the rubber moulding either side of the windscreen glass in order to obtain an even seating for the windscreen and weatherstrip.

10. Fit the windscreen weatherstrip side inserts where initially fitted to the moulding groove, running the length of the windscreen pillars.
11. Apply a semi-liquid sealer to the rubber to body section and rubber to glass groove, adjacent to the windscreen pillars.
12. Fit the windscreen pillar chrome mouldings, lining up the four rivet holes in each moulding with

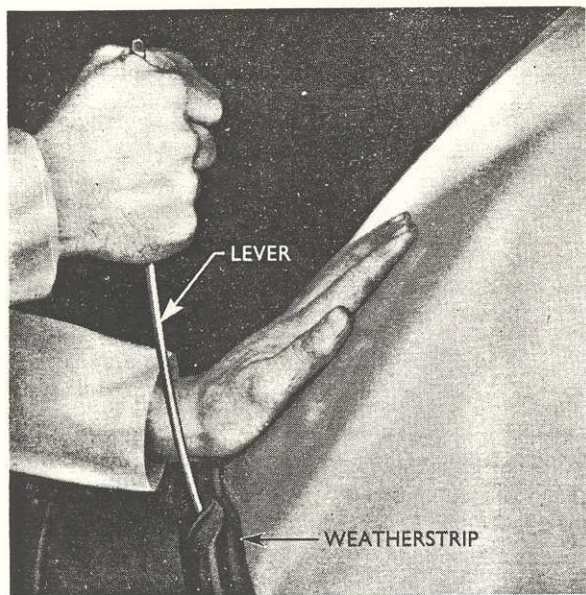


Fig. 7  
Use of the Lever

the windscreen body pillar holes and secure this moulding with hollow type rivets.

*NOTE* : Should it be necessary to renew either or both transverse chrome mouldings, the windscreen glass must be removed first.

13. From inside the car, refit the garnish mouldings and corner mouldings. Refit the rear view mirror.

14. Clean surplus sealer from rubber and glass immediately. Refit the windscreen wiper arms and blades.

### REAR WINDOW (1956-1959)

The assembly consists of a rear window glass, a weatherstrip, a rubber locking strip, six chrome mouldings and two moulding clips. Vehicles produced 1957-1959 also incorporate a polished metal ornament fitted between the rear door window and rear window.

#### To remove

1. Cover the luggage compartment lid and rear mudguards with a suitable soft cloth to prevent accidental damage to the paint.

2. From inside the car remove the rubber locking strip.

3. By applying pressure from the inside push out the glass together with the weatherstrip and chrome mouldings.

4. Carefully detach the chrome mouldings to avoid distorting them, and remove the weatherstrip from the glass.

#### To replace

1. Ensure that the aperture flanges are clean and free from buckles or protrusions.

2. Fit the weatherstrip to the glass, if necessary securing it to the glass with short lengths of masking tape lapped over the rubber and stuck to both sides of the glass (see Fig. 6).

*NOTE* : As stated for windscreen fitting, two types of weatherstrip are available and care must be taken to select the correct one (see page 1).

3. Soak a rag in glycerine, squeezing out the excess, and thoroughly rub the weatherstrip with it, ensuring that the various grooves are adequately treated.

4. Apply a bead of suitable sealer to the rubber to body section of the weatherstrip.

5. Offer the glass and fitted weatherstrip to the body aperture and engage the appropriate weatherstrip lip over the top aperture flange.

6. Allow the assembly to rest in the aperture and then apply a light pressure from the outside and at the same time by using the lipping tool, lift the appropriate lip of the weatherstrip from the inside until the weatherstrip has begun to enter the aperture all round (see Fig. 6).

7. Stand away from the body and make sure that the assembly is being offered centrally.

8. By using a rubber mallet, or the palm of the hand, seat the assembly completely into the aperture paying particular attention to both ends.

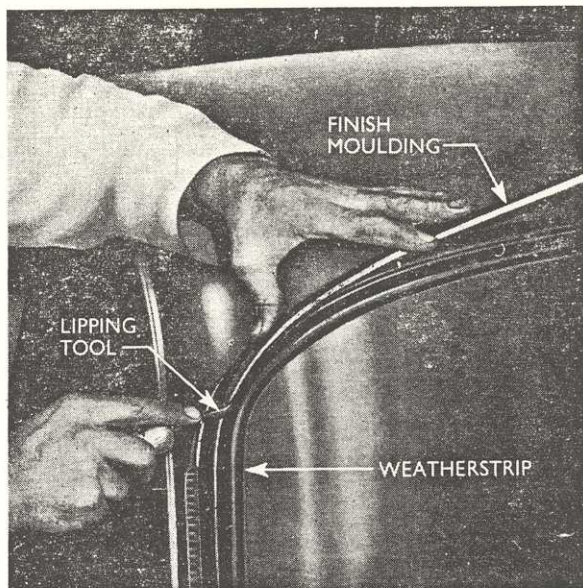


Fig. 8  
Fitting Chrome Mouldings

9. If difficulty is experienced in entering the assembly fully into the aperture, this can be overcome by using a thin flat lever (see Fig. 7). Insert the lever between the weatherstrip and over the bottom aperture flange and by carefully levering upwards and forwards, the assembly will move into the desired position.

10. Using a sealer gun fitted with a  $\frac{1}{8}$  in. (3.2 mm.) diameter swan neck nozzle, apply suitable semi-liquid sealer between the weatherstrip and glass on the outside of the car.

11. Lubricate the weatherstrip groove and commence fitting the chrome mouldings. It will be found more satisfactory to insert the outside edge of each moulding under the weatherstrip and then using the lipping tool ease the inside lip of the weatherstrip over the moulding at the same time pressing it back into position (see Fig. 8).

12. Care must be taken when fitting the small bottom corner mouldings (Part Nos. 206E-7342416/7-A) as they can be fitted in the wrong locations. A close examination of these parts will show that one end of the moulding has rounded corners (see Fig. 9) and the rounded end must be fitted uppermost. Failure to observe this will give a badly fitted moulding at this point.

13. Complete the fitting of the exterior chrome mouldings.

14. Lubricate the weatherstrip locking rubber and thread it half-way through the retainer replacer and from inside the car insert this in the weatherstrip centrally above the rear window (see Fig. 10).

15. Working around the weathersrip, fit the locking strip taking great care not to stretch it. If a new

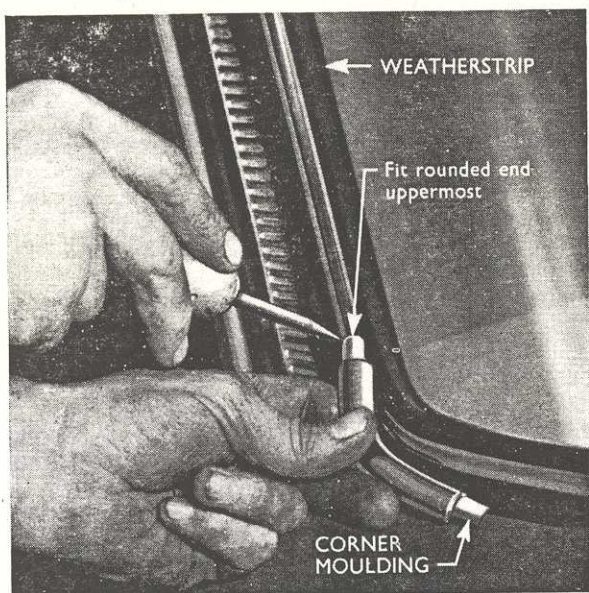


Fig. 9  
Fitting Corner Moulding

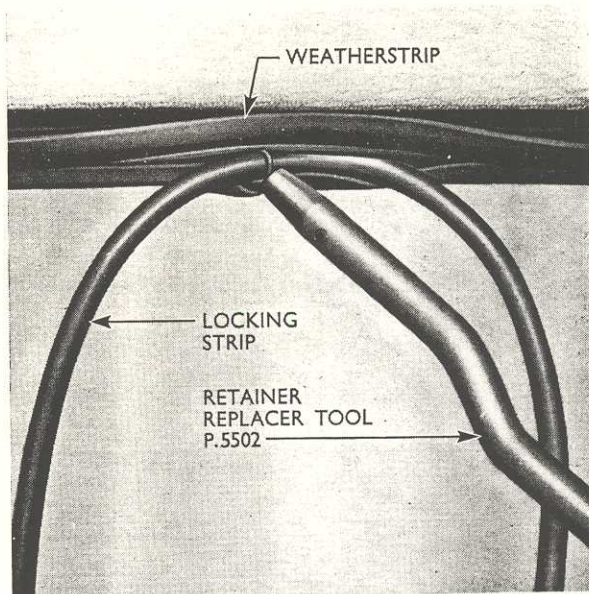


Fig. 10  
Fitting Retainer Strip

locking strip is being fitted, when completely inserted trim off the excess, however, if the original locking strip is being replaced, do not trim off any excess but fit the complete length into the weatherstrip. Failure to do this can lead to a bad water leak since under road vibrations the locking strip will be found to "creep" and if it has been trimmed short a gap can develop at the joint location.

16. Remove any traces of sealer and glycerine which may be apparent on the body.

#### REAR WINDOW (1959 onwards)

The assembly consists of a window glass, a weatherstrip, a rubber locking strip, two transverse and two vertical chrome mouldings.

#### To remove

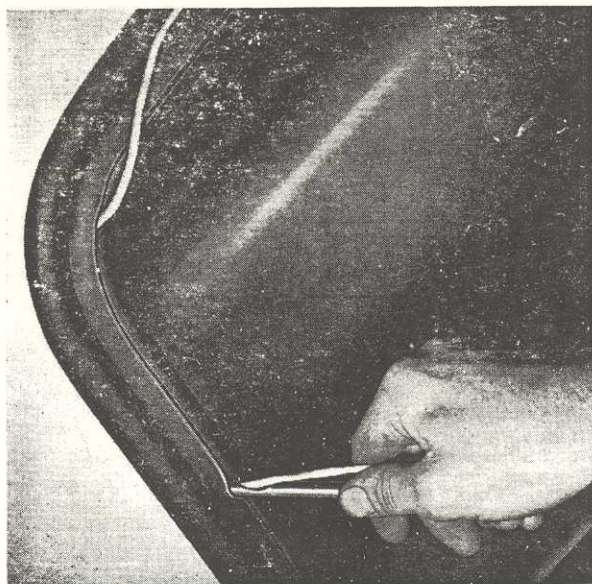
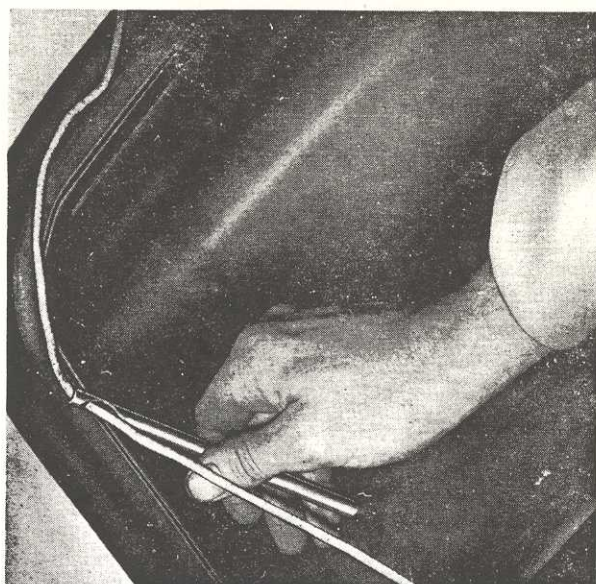
1. From within the car remove the rubber locking strip.
2. Carefully prise the emblem buttons from both vertical chrome mouldings and drill out the hollow rivets, using a  $\frac{1}{8}$  in. diameter drill.
3. Remove the two cross-headed self-tapping screws retaining each vertical chrome moulding and slide them from the upper and lower transverse chrome mouldings.
4. From within the car, apply pressure to the glass and ease the window at the top, together with the weatherstrip, away from the body.
5. Remove the rear window and detach the weatherstrip from the glass, together with the transverse chrome mouldings.

**To replace**

1. Ensure that the aperture flange is clean and free from buckles or protrusions.
2. Fit the weatherstrip to the glass, if necessary securing it to the glass with short lengths of masking tape lapped over the rubber and stuck to both sides of the glass (see Fig. 6).
3. Soak a rag in glycerine, squeezing out the excess, and thoroughly rub the weatherstrip with it, ensuring that the various grooves are adequately treated.
4. Apply a suitable sealer to the rubber to body section of the weatherstrip.
5. Offer the glass and fitted weatherstrip to the body aperture and engage the appropriate weatherstrip lip over the top aperture flange.
6. Allow the assembly to rest in the aperture and then apply a light pressure from the outside and at the same time by using the lipping tool lift the appropriate lip of the weatherstrip from inside the car until the weatherstrip has begun to enter the aperture all round (see Fig. 6).
7. Stand away from the body and make sure the assembly is being offered centrally.
8. By use of the rubber mallet or the palms of the hands seat the assembly completely into the aperture, paying particular attention to the two ends.
9. If difficulty is experienced in entering the assembly fully into the aperture, this can be overcome by using a thin flat lever (see Fig. 7). Insert the

lever between the weatherstrip and over the aperture flange at the bottom and by carefully levering upwards and forwards the assembly will move into the desired position.

10. Using a sealer gun fitted with a  $\frac{1}{8}$  in. (3.2 mm.) diameter swan neck nozzle, apply a suitable semi-liquid sealer between the weatherstrip and glass on the outside of the car.
11. Lubricate the weatherstrip locking rubber and thread it half-way through the retainer replacer tool and insert this in the weatherstrip centrally above the rear window (see Fig. 10).
12. Working around the weatherstrip, fit the locking strip, taking great care not to stretch it. If a new locking strip is being fitted, when completely inserted trim off any excess. However, if the original locking strip is being replaced do not trim off any excess but endeavour to fit the complete length into the weatherstrip. Failure to do this can lead to a bad water leak since under road vibrations the locking strip may be found to "creep" and if it has been trimmed short a gap may develop at the joint location.
13. Using a short length of tube with about  $\frac{1}{4}$  in. (6 mm.) diameter bore, insert a length of cord into the top weatherstrip groove which is to accept the top transverse moulding (see Figs. 11 and 11a).
14. Place the vertical chrome strip on one side of the body to coincide with the holes already drilled and from this obtain a position to allow approximately  $\frac{1}{2}$  in. overlap of the transverse moulding into the vertical moulding (see Fig. 12).



Figs. 11 and 11a

**Inserting Drawcord into Weatherstrip**

15. Place the transverse moulding in position along the weatherstrip, then pull the draw cord upwards and at right angles to the moulding to enter the lip on the back face of the moulding into the weatherstrip groove. At the same time press hard on the moulding to secure the lip into the weatherstrip (see Fig. 13).

16. Secure the two vertical chrome mouldings into position on the car body by fixing each with two cross head screws, one hollow type rivet, and the badge securing clip.



Fig. 12

### Locating Top Transverse Chrome Moulding

17. Using the length of tube previously described, fit a length of cord in the weatherstrip groove which accepts the lower transverse moulding. Fit these lower transverse mouldings approximately  $\frac{1}{2}$  in. inside the vertical mouldings, then pull the drawcord downwards and at right angles to the weatherstrip (see Fig. 14), at the same time pressing hard on the transverse moulding, to secure the lip on the chrome moulding into the weatherstrip.

**NOTE :** On current production vehicles the lower transverse moulding is fitted in two sections and is joined in the middle by a cover clip.

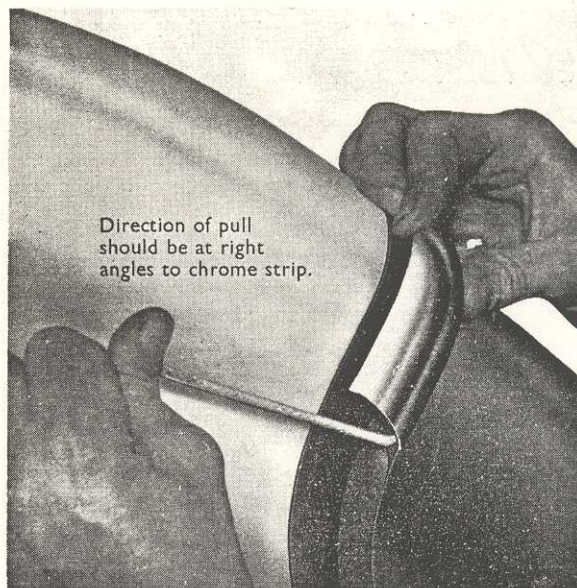


Fig. 13

### Fitting Top Transverse Chrome Moulding to Weatherstrip

18. Remove any traces of sealer and glycerine which may be apparent on the body, and refit the two badges.

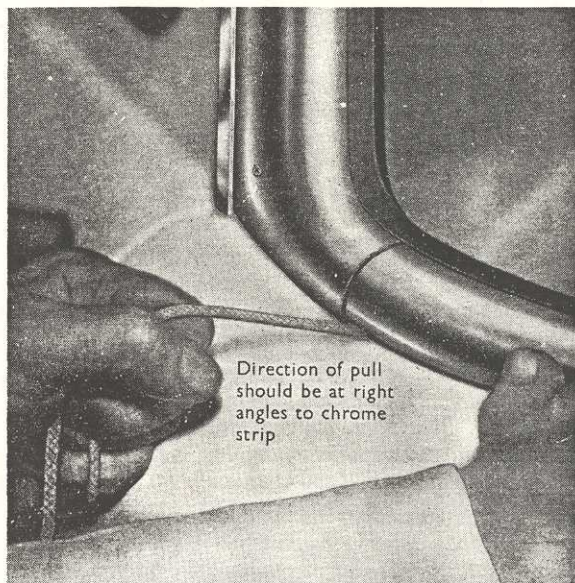


Fig. 14

### Fitting Lower Transverse Chrome Moulding to Weatherstrip