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General

The body is all-steel construction.

All pillars and frame members are of thin wall sheet metal and have been deep-drawn for maximum strength, and also to enable all control cables, linkages, heater lines and cables to be accommodated in the spaces so formed.

The outer skin extending from the windshield pillar to the tail end is welded to the floor group, the wheel arches and pillars to form a rigid integral construction unit.

The aerodynamic contours of the body offer very low wind resistance.

Doors

The doors are fixed to the front pillars of the body by means of internally fitted hinges. They are opened from outside by means of a pushbutton located in the door handle which can be locked with the ignition key.

From inside the doors can be locked by pushbuttons. Opening of the doors from inside is effected by pushing a button on the front of the armrest.

Opening of the doors is limited by a strap which at the same time holds the door in the open position. It has been made possible by means of adjustable hinges and striker plates for the exterior contours of the door to be lined up exactly with the adjacent body contours.

Windows

The curved door window glass, vent windows and hinged rear side windows are of single-layer safety glass. The door windows can be raised and lowered by means of crank gear. Integral metal frames with fitted velvet sections ensure silent window operation.

The opening of the vent and rear side windows can be set according to the degree of ventilation desired. The catches can only be opened and closed from the car interior.

For reasons of safety high-grade laminated safety glass has been used for the windshield. It locates in a flexible rubber molding surround which compensates for slight variations between the shape of the windshield and the windshield opening.

The rear window glass (the remaining glass) is of single-layer safety glass. Fitment and location as for the windshield glass.

Front fenders

The front fenders are bolted on. The filler neck for the fuel tank is located in the left-hand front fender.

Bumpers

The bumpers fitted front and rear are detachable. They are cellulosed in the same color as the car and have trim strips with rubber or plastic inserts.

The bumper overrides are chromium plated.

Lids

The front and rear lids have internally fitted hinges. The lid catches can only be opened from the car interior by means of cable pulls. If the cable shears the catch opens automatically. For safety reasons however the front lid can only be opened after an additionally fitted safety catch has been disengaged by hand.

Built-in pneumatic springs retain the open lids in any desired position.

Under the front lid is located the trunk compartment with the toolkit, the spare wheel, the battery and the fusebox.

The rear lid covers the engine compartment and carries the air intake grille for the engine.

Seats

Both front seats are mounted on slide rails and are adjustable backward and forward. The seat backs can be set in stages by means of the reclining seat mechanism for any position down to horizontal.

The seat back of the front passenger seat has an additional catch and can only be folded forward when this catch has been disengaged.

Trunk compartment

Luggage space is provided by the front compartment under the front lid. The spare wheel, the toolkit, the battery and the fusebox are also located here.

Additional luggage space can be made in the back of the driving compartment if the seat backs of the occasional seats are folded forward.

Interior fittings

Padded leather cloth in various colors and patterns has been used for the upholstery of the instrument board paneling, the door panels, the rear side panels and the rear paneling. The leather cloth used for the roof lining is perforated.

The side panels in the front foot compartment, the tunnel, the side members and the occasional seat recess in the rear acting as a cross member, together with the trunk compartment are carpeted. The floor is covered with rubber mats or carpets according to vehicle type.

For sound proofing and insulation all hollow components are sprayed or painted with rust inhibitor before welding.

All surfaces which are not cellulosed in the body color, in particular the floor group with the wheel arch panels and the interior compartment are sprayed with an efficient anti-drum compound which at the same time provides rust protection.

For further sound proofing the interior compartment together with the front and rear compartments are covered on special instructions with bitumen board, bitumen felt, jute felt and cork felt mats.

For heating purposes the hot air from the engine fan is blown through heater ducts into the car interior, to the windshield and on the coupé also onto the windshield glass. The hot air volume can be controlled by means of a hand lever on the tunnel and by slides on the side members in the front foot compartment.

For fresh air ventilation air intake slots have been provided in the windshield pillar in front of the windshield glass. An air scoop conducts away any water and passes the fresh air through a louver into the car interior onto the center of the windshield.

A proportion of the fresh air is diverted by the air scoop through connecting hoses and passed through the side heater louvers onto the windshield glass. The fresh air flow can be regulated by means of a lever on the instrument panel.

By switching on the heater the incoming fresh air can be mixed with hot air.

DOORS

Special tools:

P 290 Extractor for door hinge pins

(Made up tools)

P 1000 Door flange gauge

P 1001 Door gap gauge

P 1003 Hinge adjusting plate

Note!

It is recommended that repair of accident damage should start with the fitting of the doors.

REMOVING AND STRIPPING DAMAGED DOOR

1 B0

1. Unscrew trim strip and button on door catch.
2. Remove cover from window crank, screw bolt out of crank and remove crank with bezel.
3. Unscrew armrest covering. Disengage door interior catch. Undo 3 bolts on the bottom of the armrest and remove armrest.
4. Unscrew door panel, pull off door panel with clips and remove.
5. Remove window glass well cover strip.
6. Undo door strap.

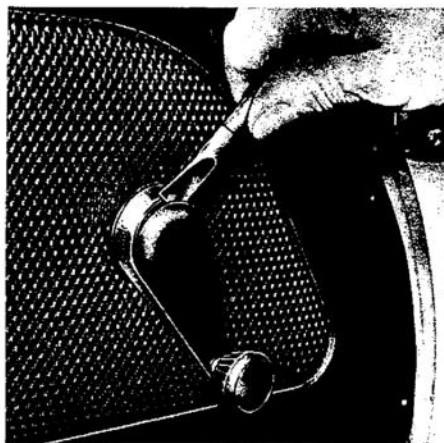


Fig. 1

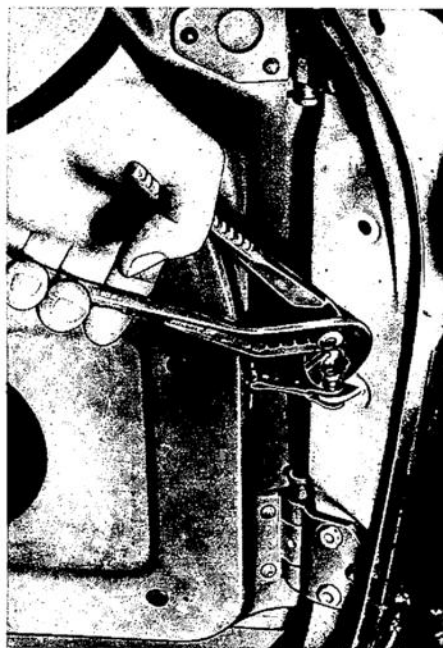


Fig. 2

7. Release door window frame and extract.



Fig. 3

8. Disengage door window glass and remove.

9. Remove crank gear.

10. Unscrew door exterior handle.



Fig. 4

11. Remove door lock with remote control.

12. Remove hinge pin with special tool P 290 and remove doors.

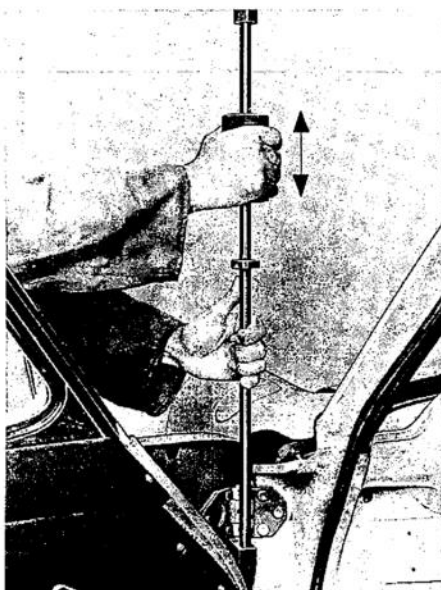


Fig. 5

1. Screw door shell onto hinge pillar. At first only screw up loosely one of each of the three screws per hinge. Final adjustment will be carried out lining up with the front fender.
2. Adjust door height and door gap. The exterior contour of the door must line up perfectly with the treadplate, the front fender and the rear fender.
The door can be moved outwards on the hinge side with the aid of special tool P 1003.

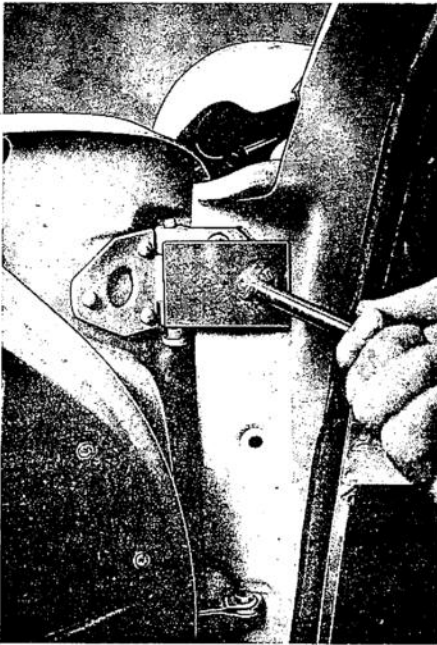


Fig. 6

Adjustment inwards should be carried out by tapping the hinge portion on the inside of the door with the door removed. On the door catch side adjustment is carried out by means of the striker plate.

Here it should be checked whether an additional packing piece is necessary for the striker plate. The door gap should be 3 - 4 mm (0.12-0.16") at the bottom, the front and the rear. At the top the front door gap should be a maximum of 4 mm (0.16") from the windshield pillar.

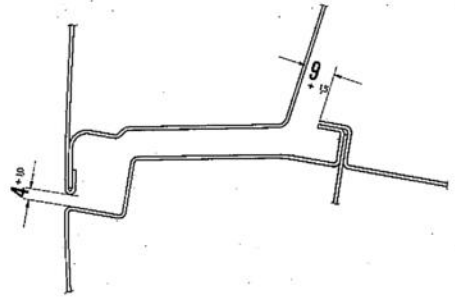


Fig. 7

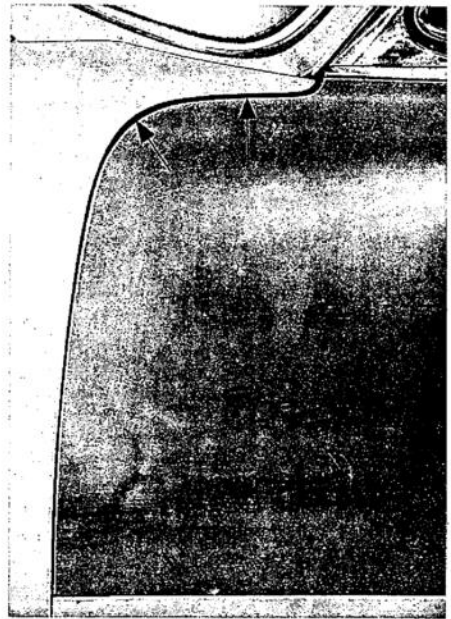


Fig. 8

Adjustment of the door gaps in a forward direction can be effected by tapping the hinge eye with a suitable piece of hardwood.



Fig. 9



Fig. 10

The opposite effect is achieved by using packing piece no. 901, 531, 945, 20. At the same time it should be ensured that the recommended distance from door to hinge and lock pillars as well as to tread plate is maintained.

Alignment of both hinge axes should be checked with a straight edge.

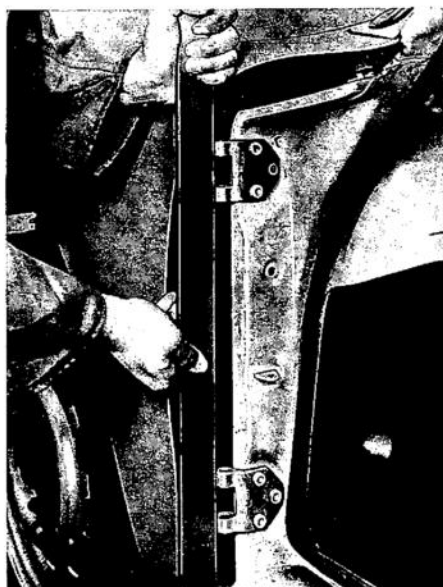


Fig. 11

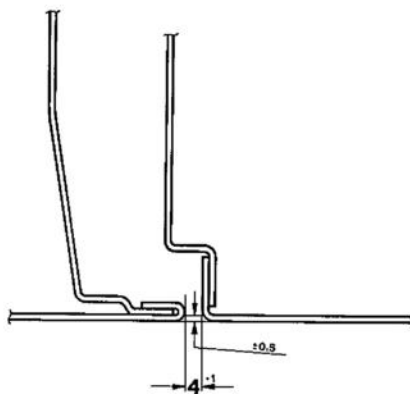


Fig. 12

3. When fitting the door lock it should be noted that there are various designs of lock. If an old-type lock is locked with the pushbutton on the inside of the door and at the same time the lock cylinder on the exterior door handle is pressed then the lock mechanism can jam. We recommend therefore that the new model lock should be fitted.

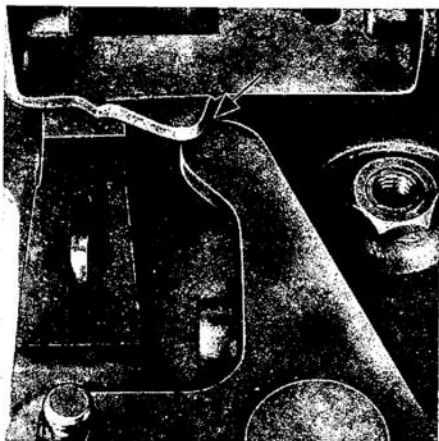


Fig. 13

- b. It should be ensured that the longer pressure pin part no. 901, 531, 919, 20 (left) 901, 531, 920, 20 (right) does not touch the lock pressure plate when disengaged. If this is not done there is the risk that as a result of heavy vibrations on bad roads the catch can disengage and the door spring open.

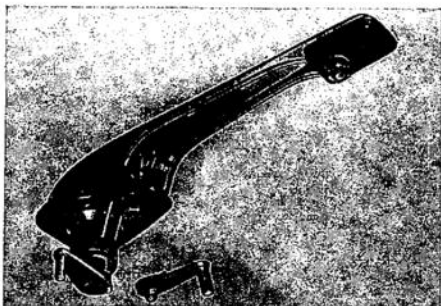


Fig. 15

Here the following should be noted:

- a. On the new lock the pressure plate which is operated by the exterior door pushbutton is located on a continuous spindle. The pressure plate has a more pronounced angle and increases the distance from the pressure pin of the door exterior handle. For this reason it is necessary to change the operating peg with the longer pressure pin.

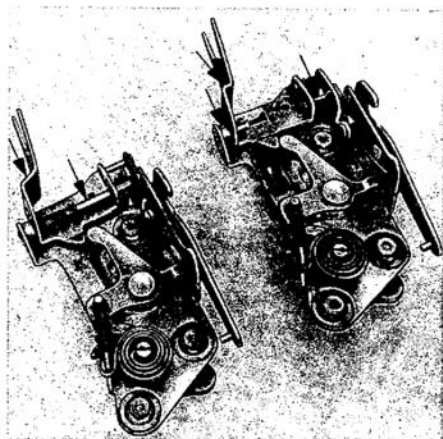


Fig. 14

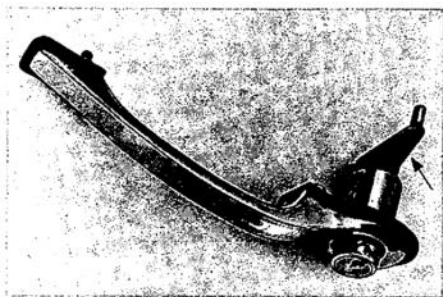


Fig. 16

- c. As a further safeguard against the door springing open the shape of the lock peg on the door lock and simultaneously the shape of the striker plate have been altered so that the lock peg is additionally supported in the striker plate. The hole for the lock peg should be enlarged to approx. 33 mm (1.3").

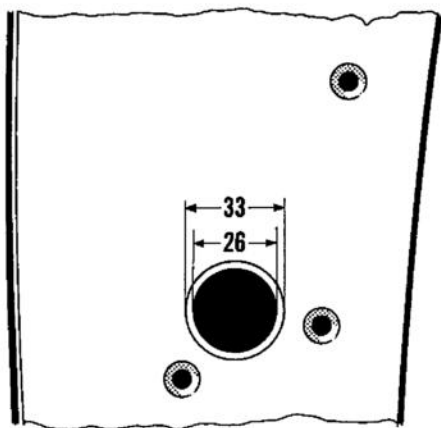


Fig. 17

- d. A new type striker plate must always be fitted with a new type lock. Outer edge vertical - if necessary enlarge operating holes in lock pillar.

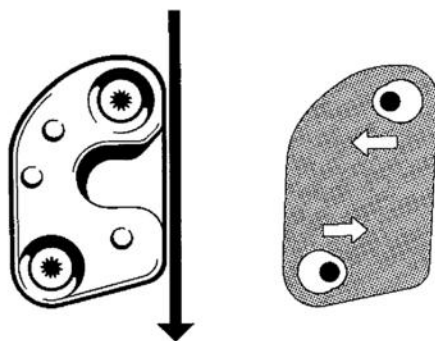


Fig. 18



Fig. 19



Fig. 20

Various lock positions

Doors closed - engaging the lock
Exterior door pushbutton - operation
Lock in normal position

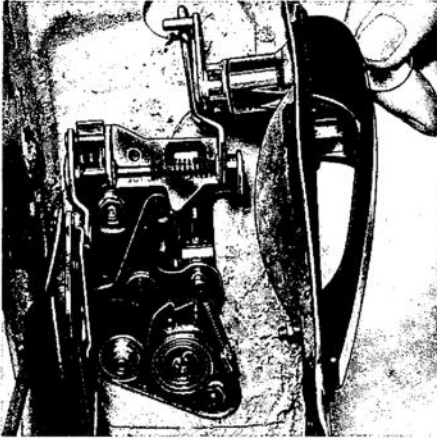


Fig. 21

Opening lock - operation

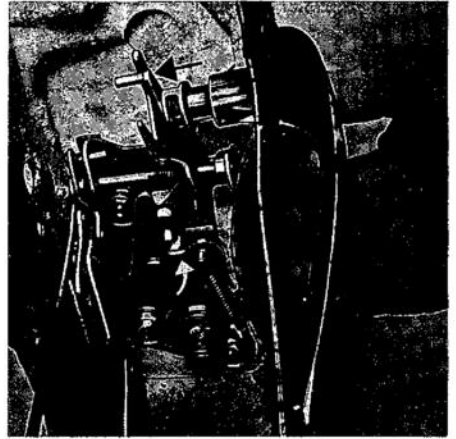


Fig. 23

Doors closed - disengaging lock
Exterior door pushbutton - operation

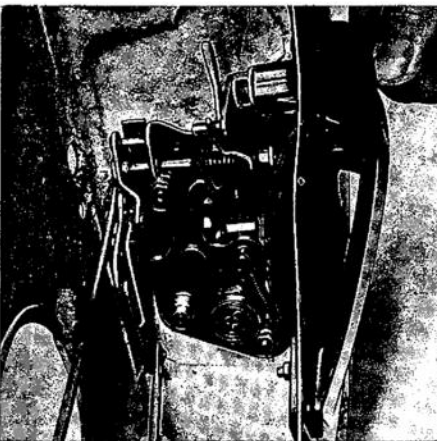


Fig. 22

Lock open - normal position

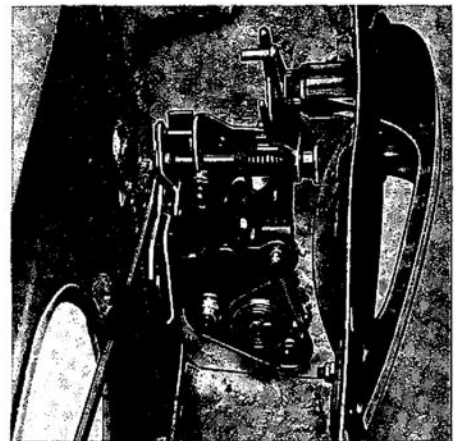


Fig. 24

e. Old type: the two doors can only be locked from inside in the closed position.

New type: if the right-hand door is locked when getting out it will remain locked after closing and can only be opened from outside if it is unlocked from outside with the door key or from inside by means of the pushbutton. This lock operation applies to vehicles with left-hand drive and will be the reverse with right-hand drive vehicles.

f. Secure remote control for interior door pushbutton and catch to lock before fitting lock.

4. As regards the door weather strip the necessary contact pressure on the molding strip will be achieved if the clearance from the top edge of the sealing flange to the inside of the door is 9 mm (0,35").



Fig. 25

Check sealing flange with gauge P 1000 and if necessary align flange. On the first vehicles of the 911 type a tubular rubber molding was used for door sealing.

In addition as a temporary measure a foam rubber molding of larger section was fitted. For both sections a gap of 12 mm (0,47") from top edge of sealing flange to inside of door was necessary.

When changing these door seals to the new design the gap should be reduced from 12 mm (0,47") to 9 mm (0,35").

It is recommended when adjusting the door shell that the door window frame should be fitted temporarily so that the distance from the top edge of the sealing flange to the door window frame can also be adjusted to 9 mm (0,35"). Here it should be noted that this clearance should be reduced from 9 mm (0,35") to 6 or 7 mm (0,23 or 0,27") for a length of approx. 300 mm (11,8") in the region between the screen pillar and the roof, to ensure that higher contact pressure is obtained at this point and the window will not flutter at high speed.

At the same time it should be ensured that the recommended clearance between window frame and screen pillar and roof frame to lock pillar are observed.



Fig. 26

Note

5. The door shell has not been welded at the points indicated in the illustration. It is thus possible to twist the door when fitting. When the door fits these points must be welded. In addition a cover plate must be cut to size for the door window frame and then welded on the top edge of the door front and rear and solder filled to give a clean finish.

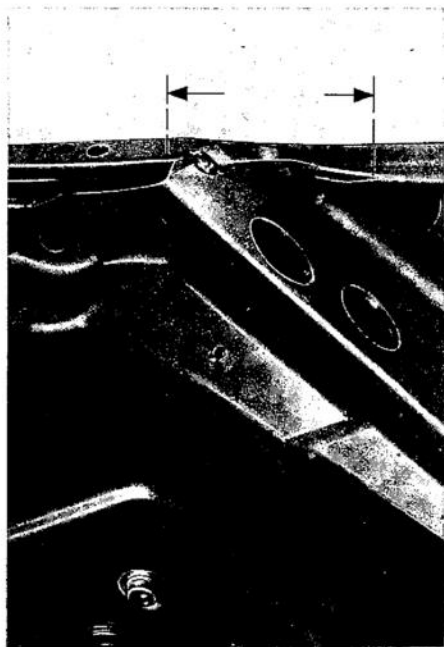


Fig. 27

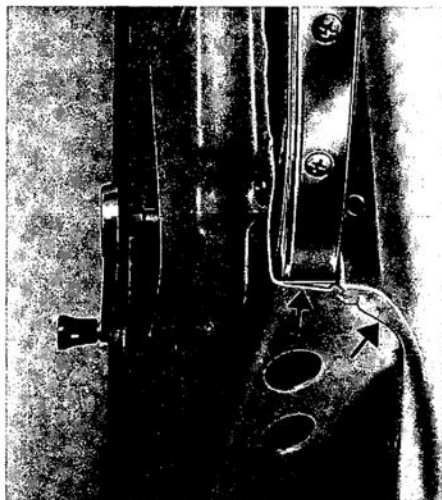


Fig. 28



Fig. 29

1. Fit door check strap.
2. Fit door lock with remote control and catch.
3. Insert crank gear and screw up loosely with 4 socket head screws. Don't forget washers and spring washer!

Note!

There are three different crank gears:



Fig. 30

- a. Type with metal rollers and short fixing plate.
- b. Type with plastic slide and short fixing plate.
- c. Type with plastic slide and long fixing plate.

For repairs we recommend that only crank gears of the new types "b" or "c" should be fitted with the appropriate raiser bar, because type "a" is prone to rattling.

4. Fit window glass.
Set crank gear to half-way position and push door window glass with raiser bar fixed in position backwards onto the slide pieces of the crank gear from the front.

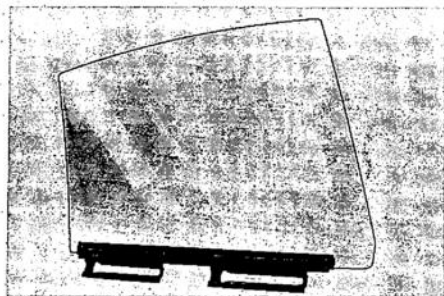


Fig. 31

5. To fit the door window frame crank the door window glass to half-way position and push the window frame into the door from above. The glass will slide in the velvet/rubber molding of the window frame. Adjust window frame and screw in position in the sequence shown in Fig. 32.

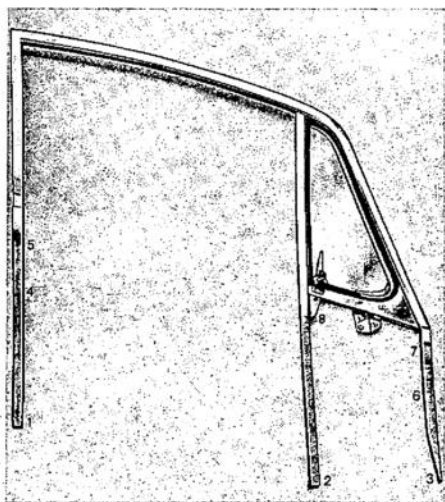


Fig. 32

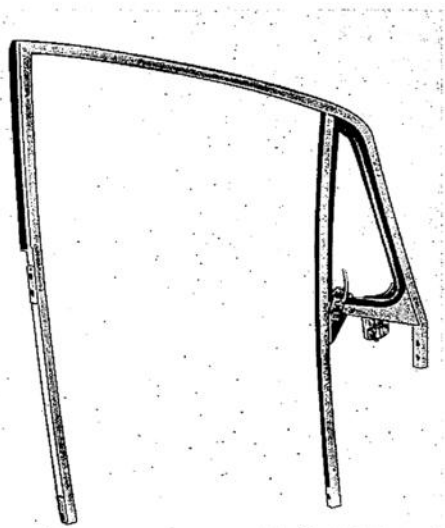


Fig. 33

Ensure that the fixing screws are not too long and therefore press on the window guide molding.

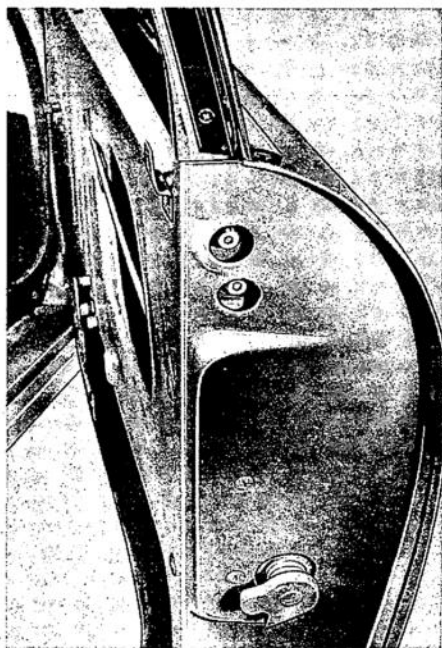


Fig. 34

6. Crank door glass up and adjust. Tighten fixing bolts of crank gear.

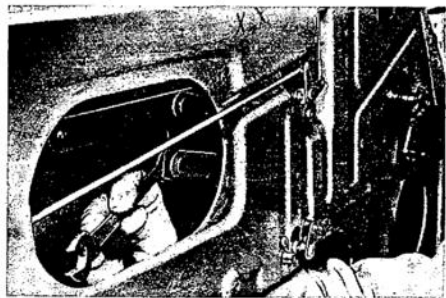


Fig. 35

7. Fit exterior door handle.
8. Secure window well bar together with packing and clips (push in rubber molding first).
9. Grease door lock and crank gear and check.
10. Glue in stop pad on crank gear.

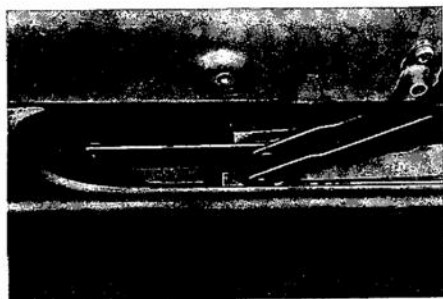


Fig. 36

11. For crank gear type "a" only.
To avoid rattling between raiser bar and crank gear a foam rubber strip of dimensions 50x50x8 mm (1,10 x 1,10 x 0,31") should be glued onto the raiser bar.
12. Stick felt packing pieces 6 mm (0,23") thick onto the door interior plate under the remote control rods.
13. Fit door weather strip.
Terokal No. 2444 is recommended as adhesive for this purpose. The door seal should be checked with a strip of paper wedged between the inside edge of the door and the weather strip. If the strip of paper can be pulled out quite easily the contact pressure is insufficient and the weather strip should be packed out from underneath at the place concerned with thin strips of foam rubber.
This test must be carried out right round the door including the window frame. If necessary check that the window frame is secure in the door.
14. All fitting holes in the door inner plate should be sealed over with leather cloth or plastic sheet to ensure water tightness.
15. Fix door panel on door frame with clips (push in rubber grommets beforehand).
16. Additional securing of door panels with screws. With old design ensure that the door pockets are secured against tearing at both ends with a screw.
17. Fitting the armrests:
 - a. Place armrest vertically and secure at the back with cylindrical head screw.

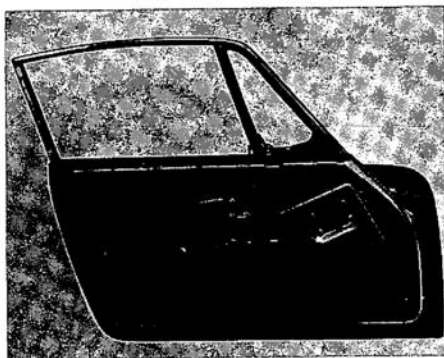


Fig. 37



Fig. 38

- b. Pivot armrest forwards into horizontal position and secure with two further cylindrical head bolts.
- c. Secure handle with two screws below trim strip.
(No handle on driver's side.)
- d. Insert pushbutton for lock remote control backwards into the armrest and push on the nipple.
The button must move freely; if this is not the case bend control rod.
- e. Secure cover cap on bottom of armrest with two bolts.
- f. With new design door pocket swing upwards and secure at sides with two screws.

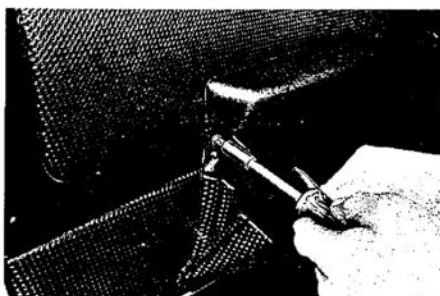


Fig. 39

- 18. Secure trim strip onto which velvet strip has already been fixed on door frame.
At the rear with snap nut and self-tapping screw
at the front with self-tapping screw only.
- 19. Screw on knob for door catch.

- 20. Fit window crank with bezel.
With the window closed the window crank should point diagonally downwards parallel to the window frame.
- 21. All holes in window frame should be sealed with rubber plugs.
- 22. Check door for proper location.
Make final adjustment to striker plate in relation to door lock and position of lock peg.

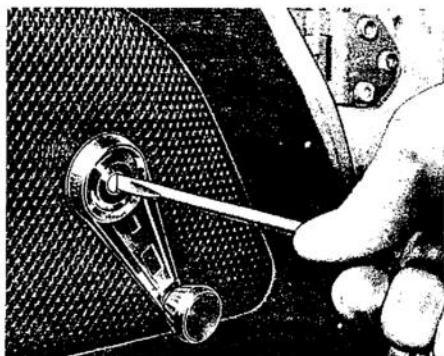


Fig. 40



Fig. 41

Removing

1. Unscrew trim strip and pushbutton.
2. Remove window crank and disengage door panel at the front until access can be gained to the hole for the vent window fixing.
3. Slacken vent window friction catch through opening in door interior plate.



Fig. 42

4. Extract sealing strip frame by top pivot.
5. Unscrew top pivot by inserting 7 mm (0.27") open ended spanner into well of window frame.
6. Extract vent window upwards if necessary further loosening friction catch. With the frames of the initial design there are spacing washers on the peg. Care should be taken that these do not drop into the door frame when removing.

Reinstalling

1. If necessary renew sealing strip frame on vent window.
2. Insert peg of vent window through sealing strip frame into the vent window friction catch, tighten the latter slightly.
3. Fit top pivot and secure in well of window frame with washer. Tighten spring of vent window friction catch as required.

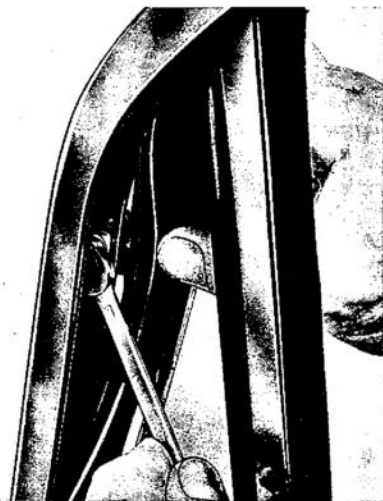


Fig. 43

4. Push sealing strip frame carefully into window frame checking that it seals properly all round.
5. Seal over fitting hole. Secure door panel with window crank, fit trim strip and pushbutton.

Removing

1. Fold wiper arms forward.

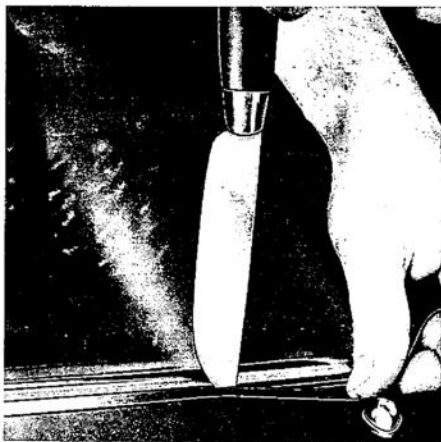


Fig. 44

2. Cut through the rubber seal along the outside edge of the bezel with a knife working along the windshield cutout.

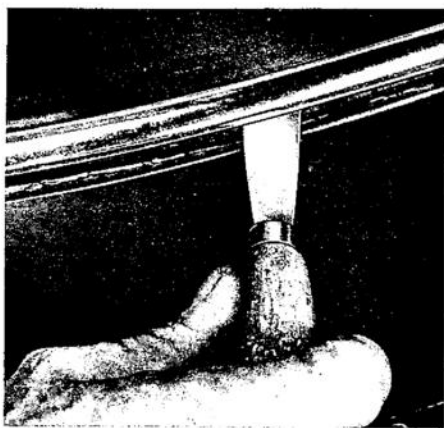


Fig. 45

3. Extract bezel from the rubber with a suitable scraper blade. Cut through the rubber parallel to the windshield, so that the windshield glass can be extracted forwards and the remainder of the rubber seal can be pulled out.



Fig. 46

Reinstalling

1. Thoroughly remove all remnants from windshield recess.
2. Fit check template and check for proper seating, if necessary rectify.

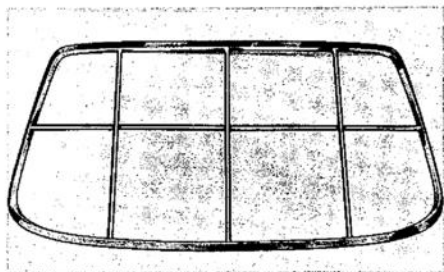


Fig. 47

Note!

3. Only a new rubber molding should be fitted to the windshield.
4. Smear bezel groove with wet soap to facilitate installation.
5. Insert bezel starting at bottom center. There should be approx. 1 cm (0.39") clearance top and bottom between the two halves.



Fig. 48

6. Place windshield glass on outside and draw a piece of string into the rubber molding starting at the top so that the string overlaps about 30 cm (11.8") in the top molding.

7. To make it more slippery smear with glycerine the lip of the rubber molding which is pulled inwards over the upright rim.
8. Insert windshield glass at the bottom so that the distance from the frame is uniform.
9. Slowly pull out the string parallel to the windshield tapping the windshield from outside with the palm of the hand. Ensure that the lip of the rubber molding slides over the vertical rim properly. In so doing pull in both sides in turn down to the bottom outside corner to avoid excessive stress and shifting of the windshield.



Fig. 49

10. Tap round windshield once again. Push slide pieces over both bezels until central.

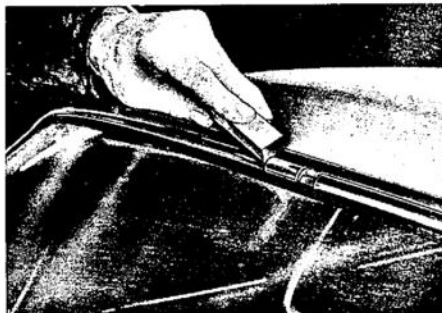


Fig. 50

11. Line up bezel with scraper blade or a piece of wood and a light hammer so that the distance from the windshield cutout is uniform all round.

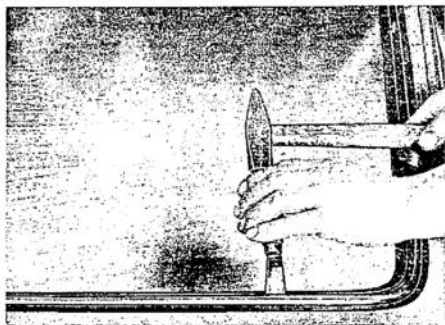


Fig. 51

12. Lift the rubber moulding first of all away from the metal and then away from the glass with a scraper blade and seal with special cement.

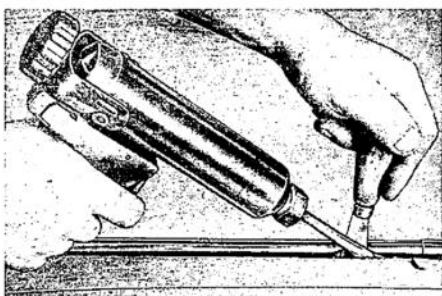


Fig. 52

13. Remove excess sealing compound with benzine.

14. Clean windshield and check for leaks.

REMOVING AND REINSTALLING REAR WINDOW

6 B0

Removal and reinstalling of the rear window is carried out in exactly the same way as with the windshield.



Fig. 53



Fig. 54

Removing

1. Unscrew bolts on lock pillar.
2. Remove self-tapping screws of window catch from roof frame.
3. Push vent window forwards and outwards with the palm of the hand.
4. Unscrew chrome trim strip either from above (self-tapping screws) or under the fender (self-tapping nuts).

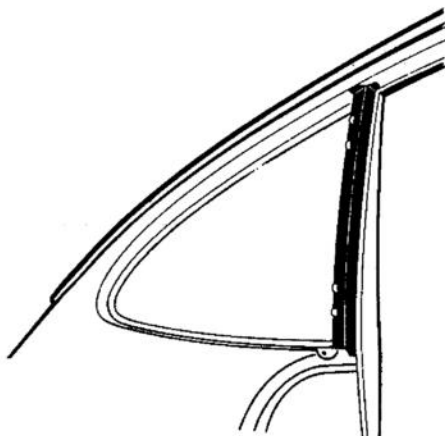


Fig. 56

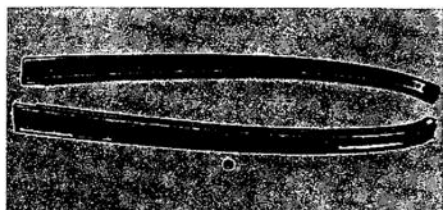


Fig. 55

Reinstalling

1. Cut rubber strips to size as shown in sketch and attach with adhesive. Fit sealing strips to rim of lock pillar and roof frame.
2. Place underlay of Terostat strip under chrome trim strip and fit.
3. Insert rear vent window, pushing the perforated metal tabs on the vent window in behind the retaining lips in the lock pillar.
4. Screw up vent window at the front taking care to ensure equal distance between roof and fender.
5. Fix window catch to roof frame. The rubber seal in the chrome bezel must form a satisfactory fit and seal all round.



Fig. 57

Removing

1. Remove folding top.
2. Unscrew trunk clips and rear paneling.



Fig. 58

3. Remove left- and right-hand rear compartment trim strips.
4. Unscrew rear panel top section.
5. Remove interior lights, disconnect cable.
6. Undo safety bar inside covering and remove to the rear.



Fig. 59

7. Undo front seal frame along safety bar.
8. Remove self-tapping screws on chrome cover plate.
9. Unscrew chrome cover plate underneath fender and remove. Pull off rear seal.
10. With heated rear window disconnect cables in engine compartment and remove glass.

Installing

1. Fit check template, rectify window cutout where necessary.

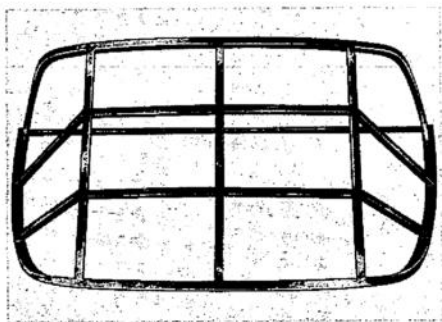


Fig. 60

2. Pull new rubber sealing strip onto glass and push in chrome bezel.
3. Check heater wires for function.
4. Pull two cords into rubber sealing strip.
5. Place glass in position and center exactly. Pull out front cord on both sides approx. 20 cm (7.9") then pull bottom cord out completely, pressing on glass with palm of hand and pulling out cord along safety bar.



Fig. 61



Fig. 62

6. Pull sealing lips over rim at the corners.
7. Fully seal glass and clean.

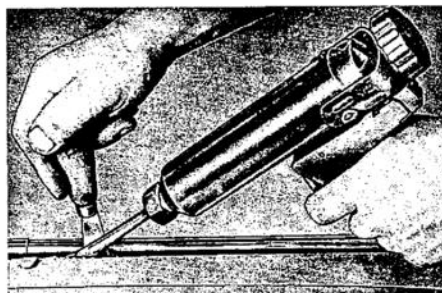


Fig. 63

8. Connect electrically.
9. Place chrome cover plate in position and screw up.
10. Cement sealing strips at front and rear of chrome cover plate.
11. Fit inside covering on safety bar, insert interior lights.
12. Insert rear panel top section, rear compartment trim strips and rear paneling.
13. Reinstall folding top and check for leaks.

Removing

1. Unscrew trim strips.



Fig. 64

2. Unscrew rear paneling and trunk clips. Use a small screwdriver or one with a flexible shaft for undoing the screws.



Fig. 65

3. Detach interior lights unscrew safety bar inside covering and remove to the rear.



Fig. 66

4. Undo securing screw with eccentric washer on tension arm so that the zippers can be fully opened.



Fig. 67

5. Unscrew the screws from the three eye bolts at the rear of the rear end bar, also the left- and right-hand fixing bolts for rear end bar and clamping bracket.

6. Detach top rear section. For this purpose push clamp bracket down and then pull first the top and then the bottom out from the roof bar.



Fig. 68

7. Unscrew lock sleeves of top catches from clamp bracket and screw the three eye bolts out of the rear end bar.



Fig. 69

8. Pull the left- and right-hand halves of the rear end bar as well as the clamp bracket out of the top rear section.



Fig. 70

9. Remove damaged zipper from top rear section.

Installation

1. Stitch the new zipper part no. 901.565.615.40 with a sewing machine onto the curved inside with large open stitches.

2. Cement zipper in position. For this purpose gather the threads on the insides of the curves and snip the outside accordingly so that the zipper locates snugly and no folds occur on the rear window.

3. Push in halves of rear end bar, ensuring that they are inserted on the correct sides, push in clamp bracket and secure the two lock sleeves.

4. Place top rear section in position with zipper open, loosely screw clamp bracket and rear end bar onto bottom of safety bar with spacer bush, washer and spring washer.

5. Smear sealing strip on safety bar and top of top cover with glycerine. Then tap in clamp bracket with padded wood.

6. Adjust and secure eye bolts on rear end bar so that the rear end bar seats evenly all round. Tighten bolts on left- and right-hand sides of safety bar.
7. Close top catches and install securing bolts with eccentric washer of tension arm.
8. Check zipper and close.
9. Install rear paneling, inside covering with lights and trim strips.

10. Clean top rear section.

Note: If the rear window has become clouded it should be cleaned with a good cellulose polish such as Herco 66 Kristall polish.
If the rear window is shattered the whole top rear section, part number 901, 565, 085, 40 must be renewed.

Special tools:

P 1001 Gauge for door and lid gap
(own manufacture)

Removal

1. Remove fender bolt along wheel arch, door sealing plate and windshield pillar.
2. Remove headlamps, grille and light box.

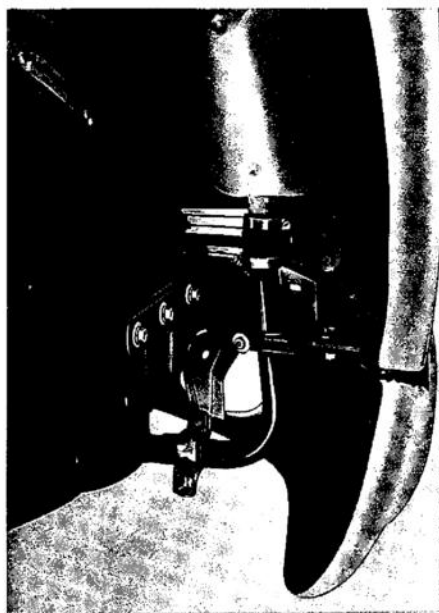


Fig. 71

3. Remove grommet and tube for cable harness, withdraw cable harness, undo bolt on bumper.
4. Remove fender.
5. Additionally on left-hand fender disconnect and remove cable to filler cap.
6. Heat dowel pins on wheel arch and knock out.



Fig. 72

Fitting

1. Fit filler cap on left-hand fender.
2. Insert spring nuts in fender.
3. Offer up fender and screw up lightly. The beading along the top edge of the fender will only be installed during final fitting. For this reason the gap between the upper edge and the doors will at first be 1 mm (0.04") greater.
4. Line up fender connecting plate so that the door gap is 4 mm (0.16"). At the same time adjust alignment to door. If necessary elongate bolt holes.

5. The distance from the wheel arch to the top edge of the fender is 17 mm (0.67"). The wheel arch panel should be aligned so that the gap between fender and lid is 3 mm (0.12").

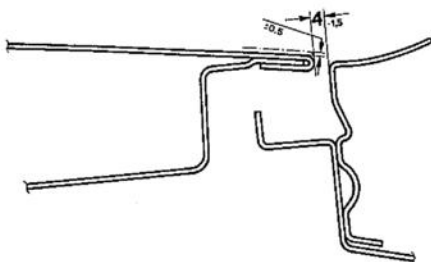


Fig. 73

6. Tighten fender bolts.

Fixing

1. When the fender has been fitted two 5 mm (0.19") diameter pilot holes should be drilled through wheel arch panel and fender and secured with steel rivets which should be hard-soldered with the head on the wheel arch panel.



Fig. 74

2. Fit bumper bar.
3. On older vehicles the grille was fixed in position by means of 4 screws; in this case small metal corners must be welded on the corresponding corners on the light box.

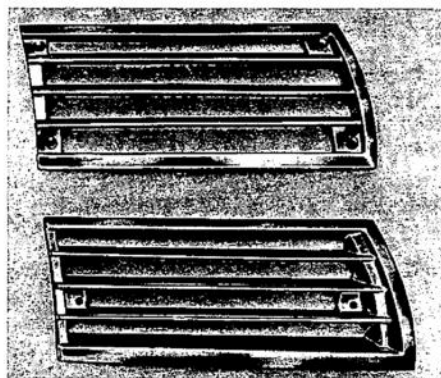


Fig. 75

4. Unbolt fender and cellulose.

Installation

1. Before final installation with the left-hand fender insert tube for filler cap cable. Pack wheel arch panel and fender joint plate with Terostat strip.
2. Place packing under bolts and tighten in the sequence shown in the illustration.
3. Fit electric cables, pull cables through. Fit headlamp and light box.
4. Cement sealing rubber for front lid in position.

Detaching

1. Jack up vehicle.
2. Undo screw connection with fenders.

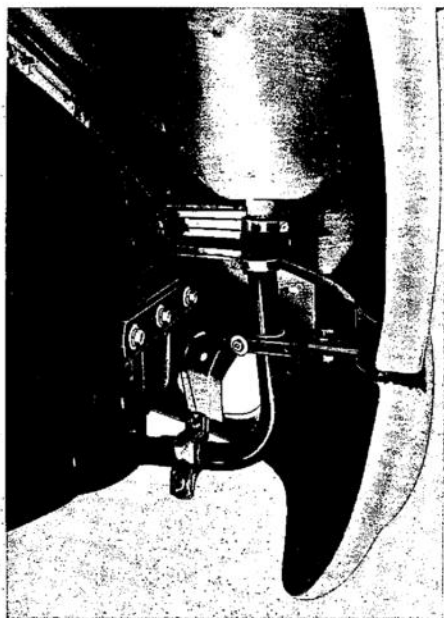


Fig. 76

3. Unbolt spring bracket on wheel arch. If necessary disconnect cables on foglamps and driving lights.
4. Remove bumper forwards and strip if required.

Fitting

1. Secure sealing strip of front bumper on cross panel, cement projections onto fender bottom edges, check for seal with wheel cutout. When fitting push bumpers against the sealing strip.

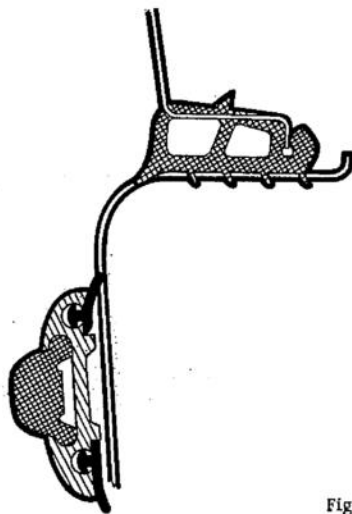


Fig. 77

Installing

1. Install trim strip and bumper overrides. On the 6-cylinder models secure bumper reinforcements with Epoxy resin. Place rubber packing pieces at both ends of reinforcements. Install spring bracket, and adjust so that the bumper lines up exactly with the fenders and does not project on either side.

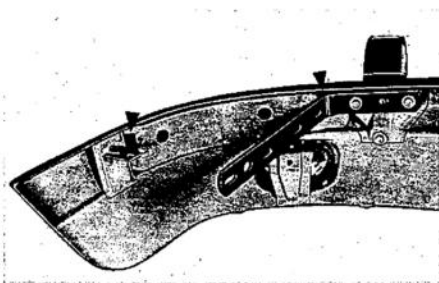


Fig. 78

2. Install fog lamps or cover. Screw up complete bumper onto bumper bracket and with fender support.

Detaching

1. Remove plastic plugs from bumper overrides and undo bolts. Remove overrides.

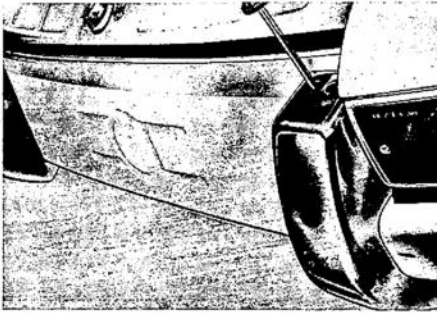


Fig. 79

2. Undo quarter bumper bolts at wing bracket and side member as well as on center section, detach quarter bumpers.

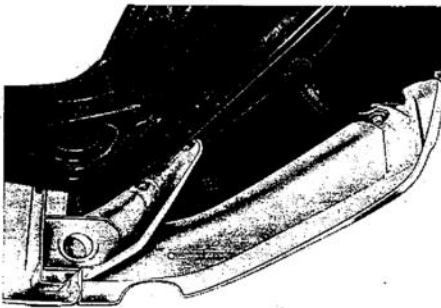


Fig. 80

3. Remove trim strips and sealing strips.

Fitting

1. Bolt on quarter bumpers so that they line up with the wheel cutout of the fender and the light box. It should be ensured that the bumpers are parallel with the fender bottom edge. If necessary re-align bumper bracket.

2. Push in bumper center section. Here the center section should not wedge at the sides, nor should there be more than 5 mm (0.20") clearance between it and the quarter sections.
3. Remove sections and cellulose.

Installing

1. Install trim strips and aprons on quarter sections.
2. Cement sealing strips on fender bottom edge and center section. Pull sealing strips into center section.
3. Install quarter sections, ensuring that the sealing strip makes contact at all points. Push center section onto bracket and bolt to the quarter sections at the bottom ends. Fit a spacer on either side.

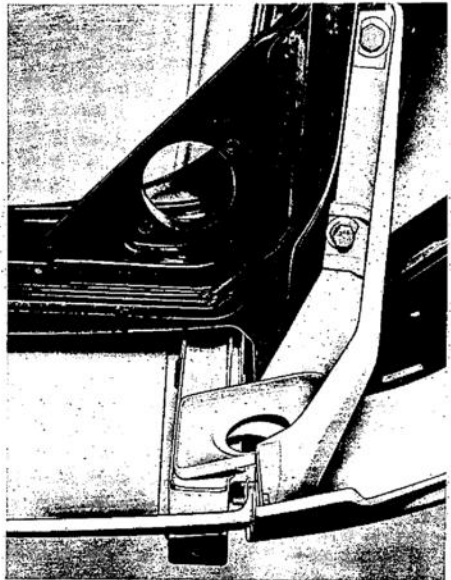


Fig. 81

4. Fit overrides on inner edge with packing piece and bolt tight. Fit plastic plugs in top screw holes. Trim off any projecting sealing strips and packing pieces.

Removal

1. Open lid.
2. Unplug contact on trunk compartment light.
3. Undo the two M 8 hexagon bolts on each of the hinges, Remove lid.
4. If necessary renew hinges or pneumatic springs (note difference between pneumatic spring for front and rear lid!).
When fitting the plunger of the pneumatic spring should be fixed on the trunk compartment floor.

Fitting

1. Place lid on hinge and secure loosely with bolts.

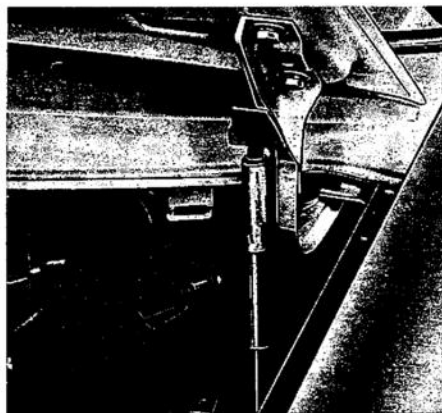


Fig. 82

2. Adjust rear lid gap to 4 - 5 mm (0.16-0.20").
Regulating height, Lowering lid: By tapping on the contact face of the hinge on the lid frame.
Setting lid higher: A suitable piece of wood is wedged between the gutter and the lid frame and the lid pushed to accordingly.

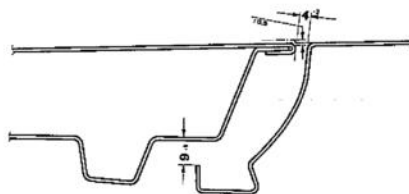


Fig. 83

3. Fit top and bottom lock sections. The lock pin must locate at right angles and in the center of the catch for the lock to close properly. The height can be altered by turning the lock pin.
Tension the spring of the lid lock with the cable. If the cable shears the catch opens automatically.

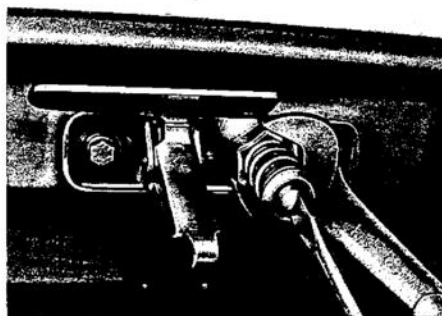


Fig. 84

4. Adjust gap from fender as per sketch.

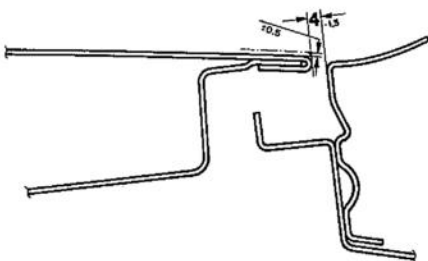


Fig. 85

5. Set the lid to the same height as the fender joint edge. In the front section of the lid frame there is a screw hole on either side for adjustable rubber pads which support the lid at the sides.



Fig. 86

6. Set top edge of wheel arch panel to 9 mm (0.35") clearance from lid bottom edge to ensure the necessary contact pressure for the sealing strip.
7. It should be ensured that the front edge of the lid lines up with the two grilles and lies parallel to the bumper.
8. Before removing the lid a pilot hole should be drilled through hinge and lid frame. Unbolt lid for cellulosing.

Installation

1. Cement rubber sealing strips in position.
2. Secure lid at hinges in accordance with pilot hole. If the height setting of the lid has to be adjusted a washer should be placed under the rear bolt between hinge and lid frame to raise the lid.
Lowering: place washer under front bolt.

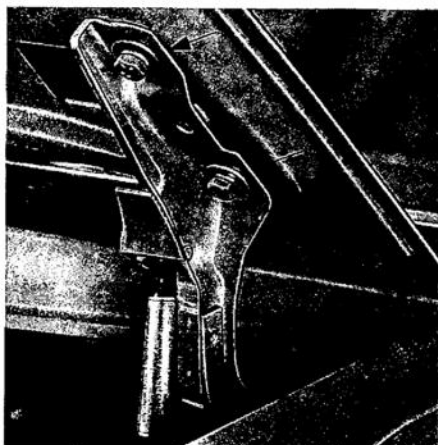


Fig. 87

3. Install trunk compartment light and secure cable. Secure badge with underlay by means of Mecano-Speed nuts.
4. Check lid lock and carry out final adjustment.

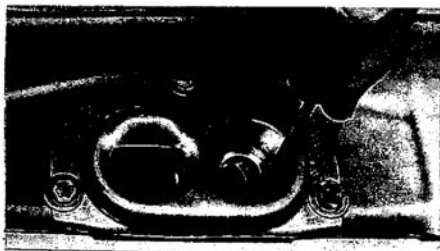


Fig. 88

Removal

1. Open lid.
2. Unscrew number plate lights. Pull cable out of lid frame.
3. Undo air intake grille.
4. Undo bolts on lid hinge and remove lid.
5. If necessary change hinges and pneumatic spring. (Note difference between pneumatic spring for front and rear lids!)

Fitting

1. Bolt on cover.
2. Set top lid gap to 4 - 5 mm (0.16-0.20"). Adjust height with washers.

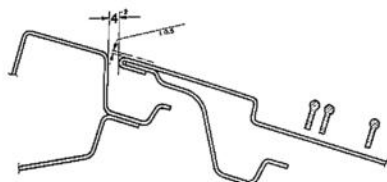


Fig. 89

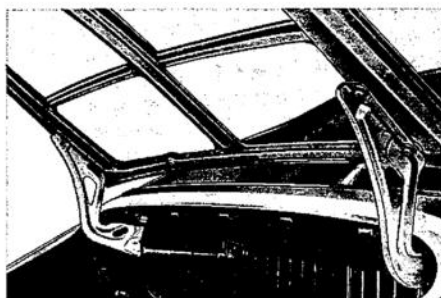


Fig. 90

3. Install and adjust lock. Tension spring with cable.

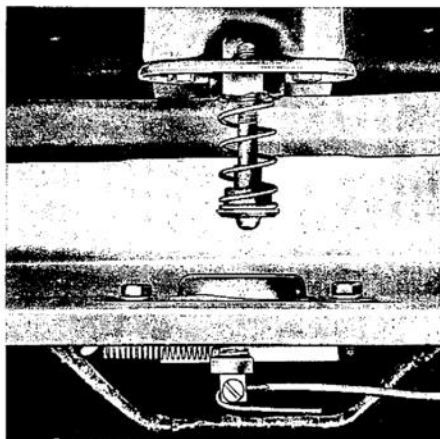


Fig. 91

4. Align gaps to the fenders according to sketch. The lid bottom edge must line up with the fender edges, rectify if necessary. Adjust height by rotating lock pin.

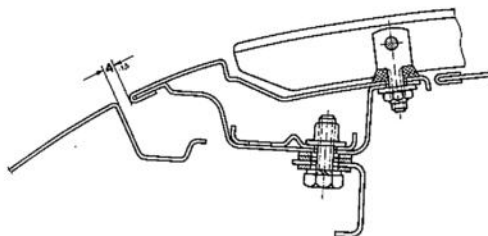
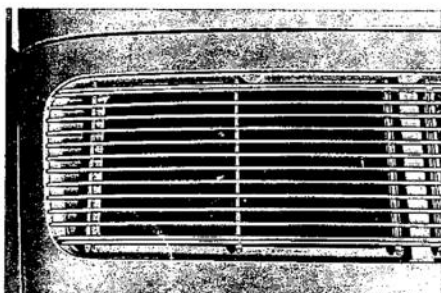


Fig. 92

5. Screw in adjustable rubber pads. Drill pilot holes and unbolt lid for cellulosing.

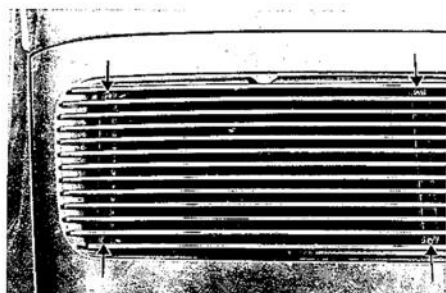
Installation

1. Install lid in accordance with pilot hole.
2. Pull in cable and install number plate lights.
3. Install air intake grilles with underlays. Affix Porsche insignia and type insignia with Mecano-speed nuts.
4. Check lid and make final adjustment to lock.



old model

Fig. 93



new model

Fig. 94

General

The electrically operated sliding roof is operated from a switch on the instrument panel.

The drive motor is connected to the gear by a short flexible shaft and fitted in the rear roof section. These components together with the tubular girder are accessible through a zipper in the roof lining.

The slip coupling fitted protects the drive from damage. At the same time injuries caused through jamming are also prevented.

In the event of failure of the electric drive the sliding roof can be operated by means of an emergency hand crank.

15 B0

REMOVING AND REINSTALLING SLIDING ROOF

Removal

1. Open the sliding roof approx. 10 cm (3.9").
2. Undo clips on front edge of top of sliding roof.
7. Remove both screws on the rear guides and detach cover reinforcements.
8. Lift sliding roof and remove forwards.



Fig. 95

3. Push sliding roof top fully back.
4. Close sliding roof.
5. Remove left-hand and right-hand front guides by undoing the two screws.
6. Lift off spring catch of rear guide and turn sideways.

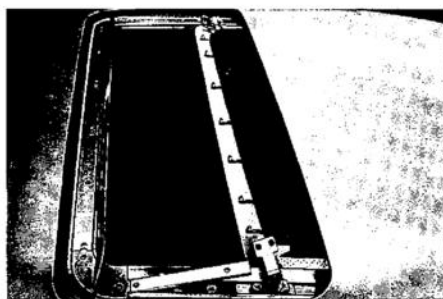


Fig. 96

9. Remove one of the left-hand or right-hand guide tails forwards; for this purpose the spacer should be unscrewed first.
10. Remove top frame.

Installing

1. Cement velvet strips at front of roof cutout and at sides as far as under the rear curvature.
2. Cement velvet strips on sliding roof cover including the radius. Cement on the rear sealing rubber with the lip against the velvet strip.
Note!
When the sliding roof is closed there should be no gap or difference in height between the two velvet strips.

3. Introduce guide rails into the pegs and tube ends at the rear of the sliding roof base. This locates the guide rails at the rear.

4. Introduce rear guides with operating cable in front into the raised rails and grease lightly. Before fitment the operating cable and drive pinion should be checked for wear and renewed if necessary, to ensure positive operation it is advisable to renew both guides with operating cable.

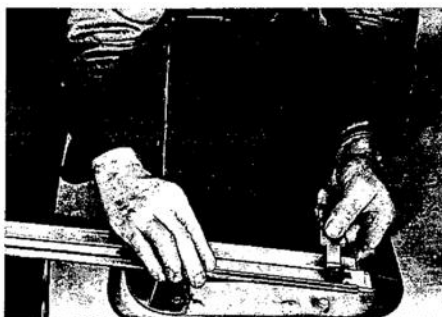


Fig. 97

5. Assemble cable covers and wind deflector.
6. Introduce top frame into guide rails, push to the rear to its farthest extent and secure the guide rails with the spacers.
7. Insert sliding roof cover and secure the guides at the front so that the cover has no more than 1 mm (0.04") side play.
Do not forget to fit safety plates!

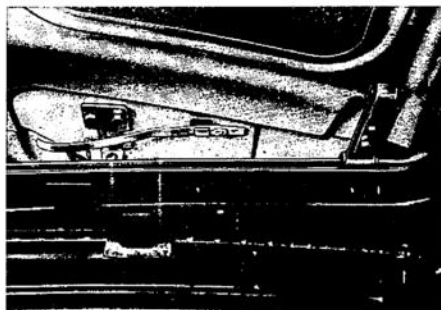


Fig. 98

8. Adjust guides at the rear so that the reinforcements can be pushed in and with the guides bolted on the cover. Swivel leaf springs under the guide pins.

9. Adjusting height of sliding roof.

- a. Slacken front guides, turn knurled nuts, by this means the sliding roof can be adjusted for height.
- b. If the front guides are turned round further height adjustment can be made. Lateral adjustment is effected by moving the front guides.
- c. Rear height adjustment is carried out by means of the adjusting screws of the rear guides.

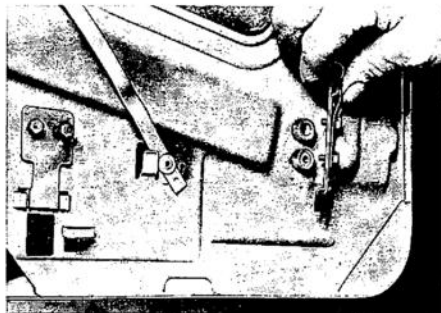


Fig. 99

10. Bolt on gear. Check sliding roof for free running and parallel location.
11. Pull forward top frame and push the hollow clips into the cover frame.
12. It should be ensured that the top lining is not loosened at the roof frame by the movement of the sliding roof. If necessary remove the sliding roof cover. Carefully cement the top lining in position. Cement over a strip about 70 mm (2.75") wide to prevent any further loosening of the lining. Pull plate downwards until the cover does not rub during motion.
13. The friction action of the coupling can be increased by the addition of coupling washers under the gear bolt. However, the slip coupling action must come into operation when overloaded (end positions), as otherwise the electric motor would burn out.
14. Fix plastic cap on gear.
15. Clean water passage with compressed air or flexible steel cable, e. g. old operating cable.

Manual operation

If the electric drive fails the sliding roof can be operated by means of the emergency manual crank. The manual crank is fitted as follows:

1. Open zipper.
Detach plastic cap on gear and remove screw with the screwdriver end of the manual lever. Remove the spacing washers fitted. Ensure that these are not lost.
2. Screw the manual crank into the gear by means of the knurled nut. The teeth on the crank must locate in the groove in the gear, then tighten knurled nut. The sliding roof can now be operated by the crank.

Sources of failure: motor defective - battery too low - fuse burnt out - bad cable contacts.

Sliding roof lid lifts up on one side only

1. The lifting piece (angle metal tab on cover fitted with plastic wedge) is not engaging on the ramp.
Remedy: align lifting pieces so that they engage fully on the cap shaped ramps.
2. Back of guides, operating cable or drive pinion damage.
Remedy: renew damaged parts.
3. Locating piece set too high or too low.
Remedy: alteration of height by means of adjusting screw of rear guide.

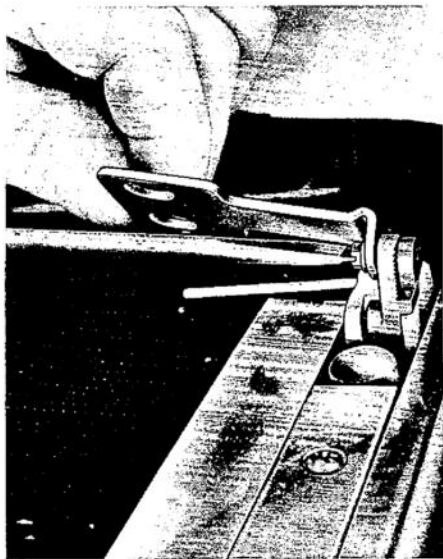


Fig. 100

4. Wind deflector flaps.
Remedy: the guide plates should be indented on the top edge with a screwdriver close to the retaining lugs, which will eliminate the play between the two faces.

Removal

1. Open zipper and after removal of the two fixing bolts let gear hang loose.



Fig. 101

2. Unscrew the spacer of the second guide rail and pull guide rail out forwards.
3. Pull out cables and check condition. If damaged wherever possible renew both cables to ensure positive sliding roof operation.

Installation

1. Grease the cables and push into the tubular supports until the threaded plate is in the rear part of the sliding roof opening.
2. Push the guide rails into the cables and push to the rear until the end of the tube and the plastic pin in the rear part of the top frame slide completely into the rail section and thus secure the guide rail at the rear.
3. Secure one guide rail with the spacer.

4. Before securing the second rail insert top frame and push to the rear.



Fig. 102

5. Adjust cables with fixing plate on both sides evenly to about 5 cm (1.96") before the end of the rear roof cutout.
6. Insert gear and secure.
7. Insert sliding roof and bolt cables in position with reinforcements. Engage spring catch.
8. Secure front guides.
9. Fully close sliding roof and adjust for height and uniform gap. If necessary undo gear to obtain parallel location of sliding roof. Then re-secure gear.
10. Alteration of height at front by means of knurled nuts, at the rear by adjusting the locating piece bolt.
11. Ensure even gap at sides by moving guides.
12. Open sliding roof approximately 10 cm (3.93") to the rear and pull top frame forward, push clips into sliding roof.
13. Check sliding roof for ease of operation.
14. Close zipper and clean any dirt off top lining.

Removal

1. Open zipper.
2. Disconnect electric cable.
3. Undo gear.
4. Unbolt motor with fixing bracket from roof frame.
5. Unscrew fixing bracket from motor and renew motor with flexible shaft and gear.

Installation

Installation should be effected in the reverse order, check sliding roof for function, close zipper.

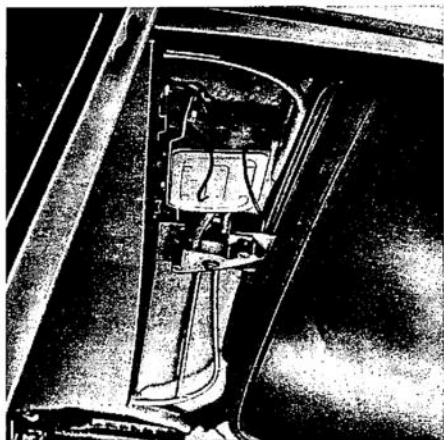


Fig. 103

1. Remove and reinstall top frame as described under sliding roof cover.
2. Remove damaged lining from top frame. Remove remains of old adhesive.
3. Cement Moltoprene strips to the underside of the front and rear top frame cross piece.
4. The top frame lining should, if it is of unperforated leathercloth be joined to the center cross piece with a retaining strip by the seam in the center. Perforated leathercloth should be backed with a plastic sheet and sewn to the retaining strip to make dustproof.
5. Place top frame on the ready-sewn lining so that the seam of the lining locates on the front side of the center cross piece. Cement retaining strips on both sides of the center section. Cement plastic sheet around the underside of the frame. Stretch the lining evenly and cement carefully on the top side. Cut out the corners to avoid overlap, so that the top frame runs satisfactorily in the guides.

General

The whole of the underside of the vehicle including front, engine and rear compartment with door interiors plus the underside of the front lid are sprayed with sound-proofing material which also has an insulating effect. The rear compartment, the back panel and the side panels together with the engine compartment and the inside of the roof are additionally covered either with bitumen paper, bitumen felt, Moltoprene, felt or cork matting.

The noise level is reduced still further by means of cemented in carpets which according to vehicle type are of bouclé, velour, or perlon.

The floor is covered either with rubber mats or the appropriate carpets.

The side and rear panel trim and door paneling is covered with padded leathercloth.

The roof lining is of perforated leathercloth and is located in the roof frame on four stays (Coupe) and cemented along its outer edge.

The instrument panel is edged at the bottom with a padded cover strip (knee strip) which is fixed to the instrument panel by means of four screws. The top covering of the instrument panel is single piece up to the 1968 model and two piece as from the 1968 model.

The screen plates for the heater jets are fitted on the top section of the instrument panel with securing clips.

The instrument panel on types 912 and 911 T is paneled with aluminum plate, whereas the other models have padded leathercloth covers, which were in wood on previous vehicles.

Heating and ventilation is conducted via three jets to the windshield, by two slides on the side members into the foot compartment and to the rear window glass. Available as special option is an additional heater unit with blower which is fitted as standard on the 911 S type.

The rear vision mirror can be dipped and is fixed so that it springs out of its frame on impact.

The sun visors are padded and there is a make up mirror on the passenger side. The glovebox has a locking magnetic catch. The interior lights are in the side roof members in the Coupe whereas with the Targa type the interior lights are located on the interior cover of the safety bar.

Removal

1. Disengage catch by lifting lever.

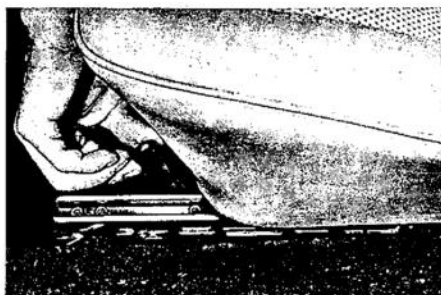


Fig. 104

2. Push seat forward until the seat rails slide on the guide rails.
3. Lift out seat.
4. The outer seat rail bracket can be adjusted by slackening the screw fixings. By this means it is possible to cure both stiffness and rattling of the seat in the guides.

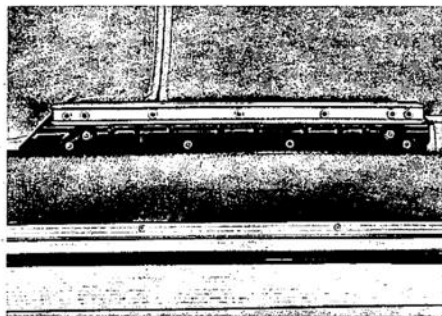


Fig. 105

Installation

1. Before installation of the seat the guide rails should be greased. When placing in position it should be ensured that the seat cover is not damaged by the guide rails.

2. Push seat to the rear and engage catch lever in required position.

The rubber underlay on the seat frame should be renewed if badly worn. This will prevent rattling of the seats.

The front seats can be raised by about 20 mm (0.79") by fitment of raised seat rail brackets on the outside and seat rail packing piece in the center.

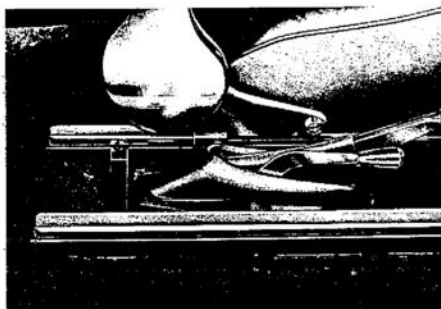


Fig. 106

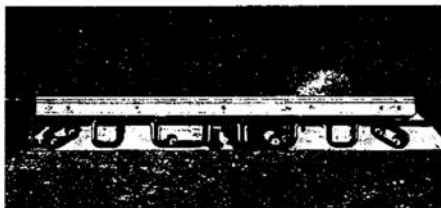


Fig. 107

Removal

1. Remove seat.
2. Unscrew defective half of bracket first at backrest and then at seat frame.

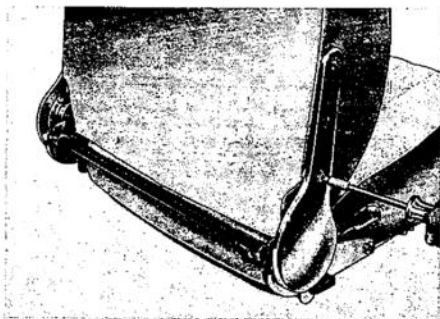


Fig. 108

3. Push bracket half out of square on seat frame. Pull the bracket out of the connecting tube between the brackets and if necessary renew.

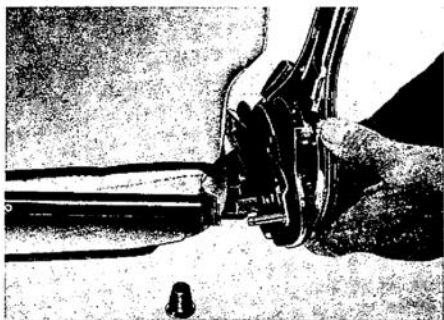


Fig. 109

Installation

1. Push bracket half on to the connecting tube.
2. Secure bracket on seat frame with plain and toothed washer.
3. Position the arm for securing the backrest parallel with the second bracket half, then bolt up to the backrest.
4. Check the reclining seat bracket for proper function.
5. Check the backrest locking catch and if necessary renew rubber underlays on seat frame.
6. Install seat and check the operation of the reclining seat bracket with the seat occupied.

Up to model 1968 the bracket for the headrest is fitted on the rear of the backrest.

1. The brackets with knurled screws should be fixed with two each chromium plated self-tapping screws approx. 30 mm (1.18") below the seat lining seam and approx. 135 mm (5.31") from the outside edge of the backrest. Fixing plates should be fitted in this position through the lining of the backrest and on these are fitted the brackets corresponding with the headrest guides.



Fig. 110

2. As from model 1968 the headrests are of a modified design whereby their supports are pushed through corresponding holes in the backrest and adjusted to the required height, a ratchet retaining the headrest in position.

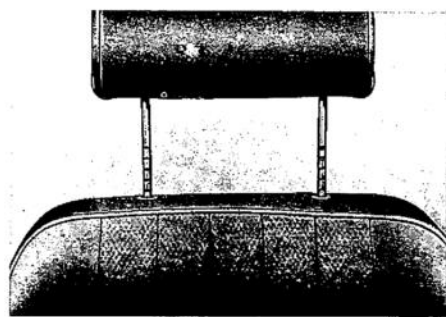


Fig. 111

The backrests are swivel mounted by means of an external bracket and are located on the inside by means of a dowel pin above the transmission tunnel.

The rear paneling of the occasional seat backrest is fixed to the luggage compartment floor by two self-tapping screws so that when the backrest is folded forward this covering (carpeting) lies flat without wrinkling.

The occasional seat backrest can be detached when these screws are removed.

Installing should be carried out in reverse order to removal of the seat back.

The occasional seat squabs are only cemented in position.



Fig. 112

Removal

1. Remove windshield and rear window glass.
2. Undo catches on the rear vent windows.
3. Remove trim strips and rear panel covering.

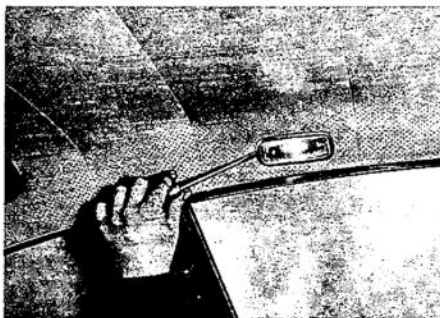


Fig. 113

4. Remove sun visors and interior mirror together with interior lights and clothes hooks.
5. Where necessary remove door sealing rubber.
6. Remove damaged head lining all round if necessary cutting out and disengaging stays. Where necessary remove pillar paneling.

4. Fix paper strips at the rear of the roof lining on the trunk compartment floor with self-tapping screws.

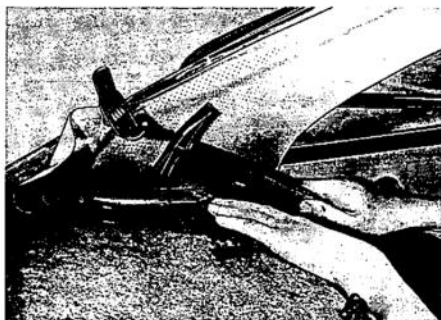


Fig. 114

5. Stretch the lining forwards pulling onto the windshield pillars. Then stretch the lining sideways, evenly on either side, cut to the correct size and cement. When doing this ensure that the lining is cemented around the metal edges and is additionally secured with clips around the windshield, back and side windows. Where pillar paneling has been removed re-cement in position.
6. Cement in door sealing rubber. Fix sun visors, interior mirror and interior lights. Reinstall windshield and back window glasses, refit trim strips and rear paneling.

Installation

1. Cut loops for fixing wires in the new roof lining after marking on both sides, approx. 13 cm (5.11").
2. Push transverse stays into the loops and put rubber caps on the wire ends. Check used rubber caps for damage (bracket creaking noises). Cement sound-proofing paper to roof interior, if necessary re-cementing any loose sections.

The carpets are supplied ready cut to size. According to vehicle type they consist of Perlon, Bouclé or velour in various colors. The floor covering varies according to type consisting of either rubber mats or carpets in various colors and qualities. The carpets should be cemented in in the following order,

1. Tunnel carpet rear.
2. Carpet for seat moulding center (for occasional seats).
3. Carpet for left- and right-hand side paneling (pocket section).

The pocket should be secured at the front with an upholstery nail.

4. Left- and right-hand side member carpet. When fitting the heater slide use self-tapping screw 4, 2 x 23 mm at the front and 4, 2 x 19 mm at the rear.
5. Carpet for heel board.
6. Carpet for rear seat moulding.
7. Cement in occasional seat squab.
8. Screw in transmission tunnel cover.
9. The left- and right-hand side paneling should be pushed to the rear and the side paneling secured under the cover on the wheel arch with a self-tapping screw.

The cover should be cemented at the door cutout around the metal moulding for the door seal. The front floor covering is fixed top front by means of eyelets. The trunk compartment is carpeted, the side sections are cemented in. The trunk compartment mat is attached by eyelets under the windshield frame center section.

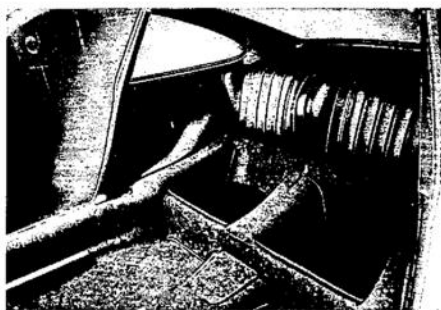


Fig. 115

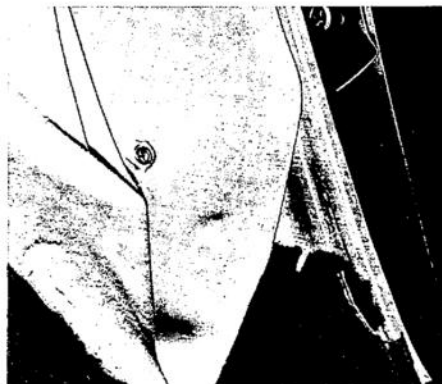


Fig. 116