

Doors and Windows

Removing and Installing Doors

9 80

Removal

1. Remove sheet metal covering the hinges.
2. Remove cotter keys from hinge pins.
3. Drive the upper hinge pin down with a hammer and drift.

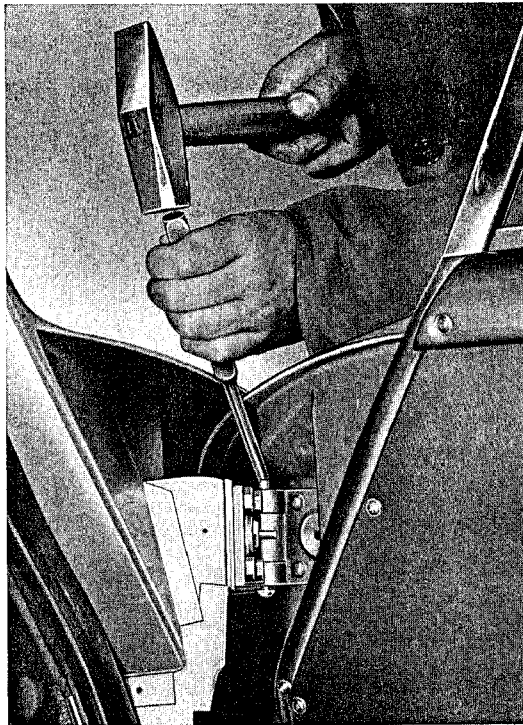


Fig. 30

To extract the hinge pin a piece of flat iron with an 8.5 mm dia. hole cut open with a hack saw can be used to advantage. While extracting the hinge pins, an assistant should hold the door.

4. Remove the rubber cap from the panel below the lower hinge and drive the lower hinge pin out from below using a hammer and drift.
5. Remove the door.

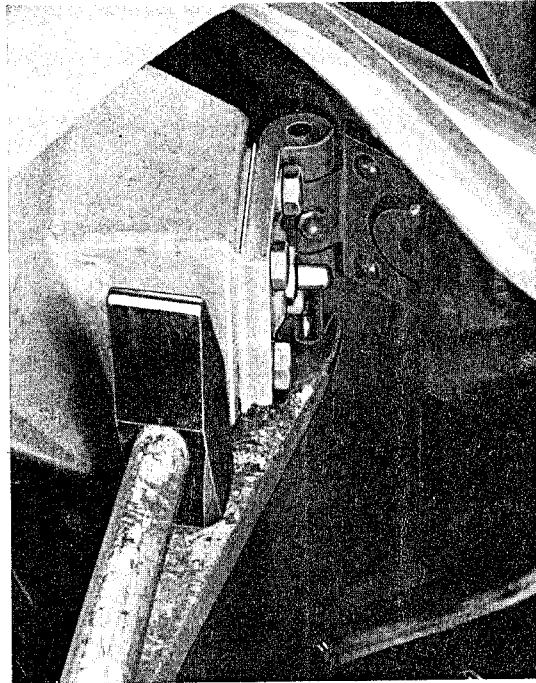


Fig. 31

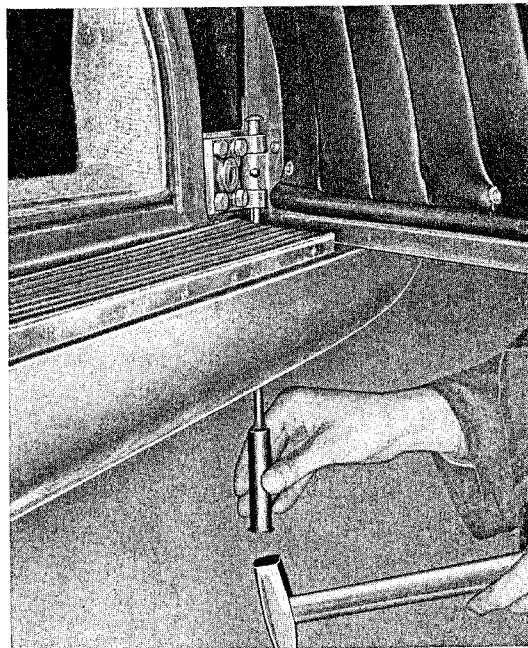


Fig. 32

Weather Strip

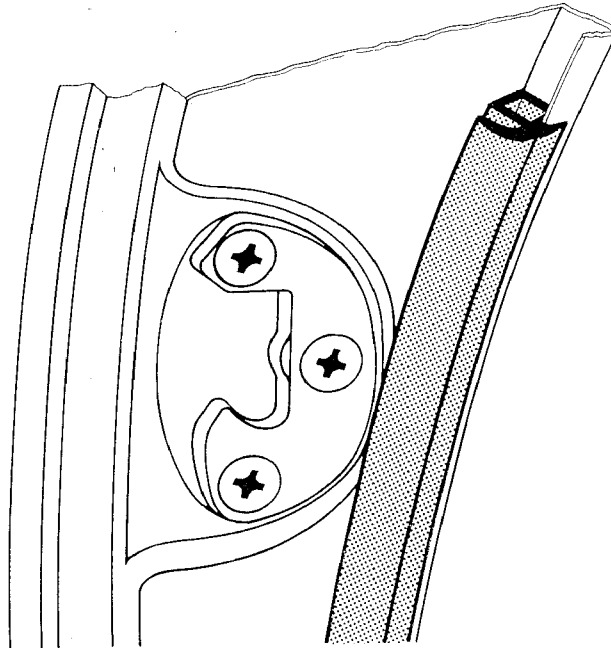


Fig. 33

Installation

The installation is accomplished in the reverse order of removal observing the following points:

1. Inspect weather stripping and install new weather strip where necessary.
2. After installing the door, check whether the door fits flush with the body on all sides. The adjustment can be made by removing or installing shims at the door hinges. Remove the four cap screws shown in Fig. 34 and adjust as required.
3. Test the weather strip around the doors by inserting a piece of paper and closing the door. If the paper can be pulled out easily, it is necessary to install sponge rubber stripping under the weather strip to obtain the required contact.
4. Grease the hinges cleaning nipples before connecting the grease gun.
5. Check the door lock to see if the door closes sufficiently and is properly closed. The lock plate can be moved vertically and horizontally by loosening the three phillips screws.

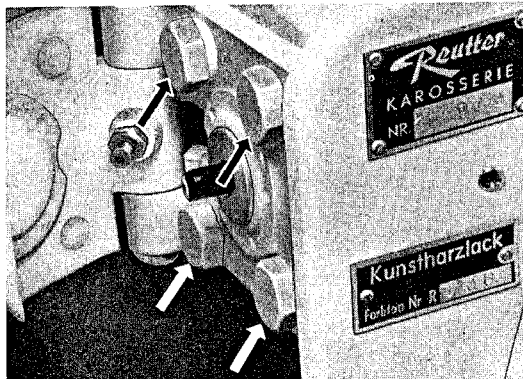


Fig. 34

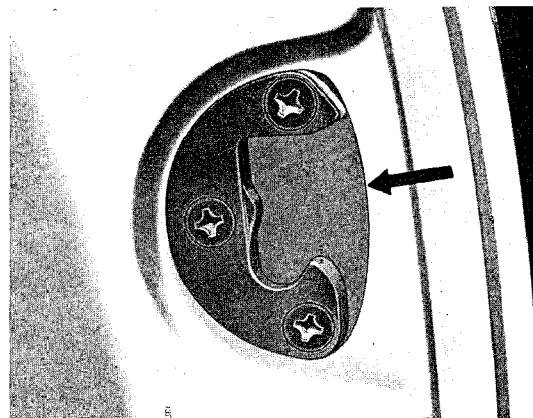


Fig. 35

Note

- a. The rubber parts and weather strips may cause squeaking noises where they contact metal parts. This can be corrected by dusting the parts in question with tire talcum powder.
- b. If a door rattles while closed, the position of the door with respect to the body should be checked. If the door is not flush with the body, the lock plate must be moved inward. The enlarged holes in the body may be widened if necessary.

It is, however, important, that the holes are covered in the installed position so that water and dirt cannot enter into the car from the car underside.

- c. The three screws of the lock plate thread into a common plate inside the door post.

Removing and Installing Door Panels

10 B0

Removal

1. Remove door handle and window crank. The retaining pins are removed by pushing back the handle boss and pressing the pins out with a punch.
2. Remove the top moulding by removing two philips screws.
3. Remove the screws from the door panel observing the screw inside the glove compartment. The "D" handle must not be removed since it is part of the panel. Remove the panel.

Installation

The installation is accomplished in the reverse order of removal observing the following points:

1. Check the rubber strips and replace where necessary before installing the door panel.
2. Do not forget to install the springs for the window and door handles before installing the door panel.
3. Check for loose objects (tools) lying inside the door which may rattle after assembly.

Removing and Installing Door Window

Coupe

Removal

1. Roll down window.
2. Remove door panel (10 B0).
3. Remove sponge rubber pad from window crank shaft.
4. Disconnect window rails from the bottom of the door frame.

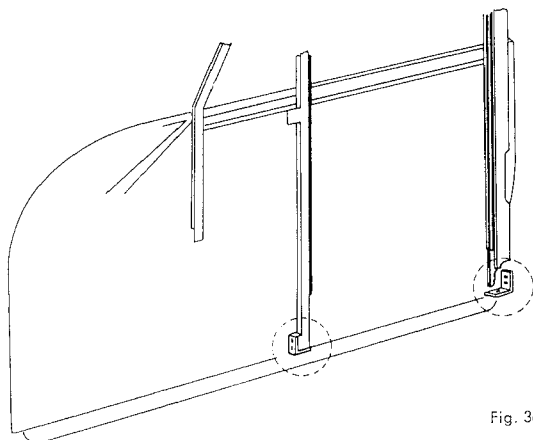


Fig. 36

5. Bend open the window elevating track at the arrow Fig. 37, and spread the window rails so that the window can be brought out of the frame toward the inside.

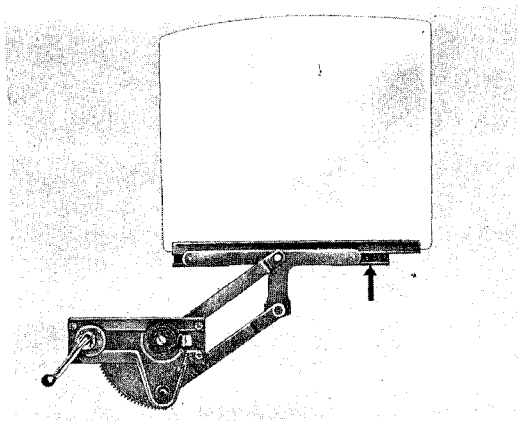


Fig. 37

6. Lift the window so that the forward roller leaves the end of the elevating track and tilt the assembly forward lifting it from the door edgewise.
7. Remove the screws which hold the elevating mechanism and remove the assembly.

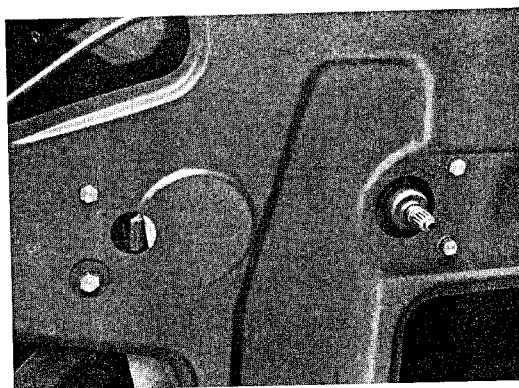


Fig. 38

8. Remove the window frame rails only if necessary.

Installation

The installation is accomplished in the reverse order of removal observing the following points:

1. Install the elevating mechanism loosely at first.
2. Install the window standing it on edge and lowering it into the door channel so that the elevating track engages the rollers of the elevating mechanism. Bend track back into shape.
3. Fasten window rails to the bottom of the door frame.
4. Adjust the window rails so that the window is secured but free to move. Adjust the level position of the window by adjusting the position of the elevating mechanism (thin arrow Fig. 39).

5. Tighten the mounting screws of the elevating mechanism.

6. The bottom of the window travel is regulated by a stop on the window carrier (large arrow Fig. 39).

7. Grease moving joints of the elevating mechanism.

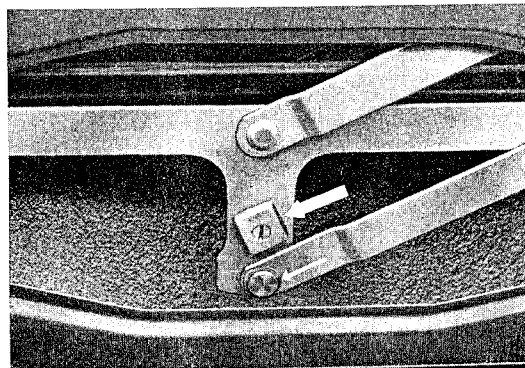


Fig. 39

Cabriolet-Hardtop

Removal

1. Roll down window.
2. Remove door panel (10 BO).
3. Remove sponge rubber pads from the mounting screws.
4. Remove felt moulding at the upper edge of the window channel.
5. Disconnect window rails from the bottom of the door frame.

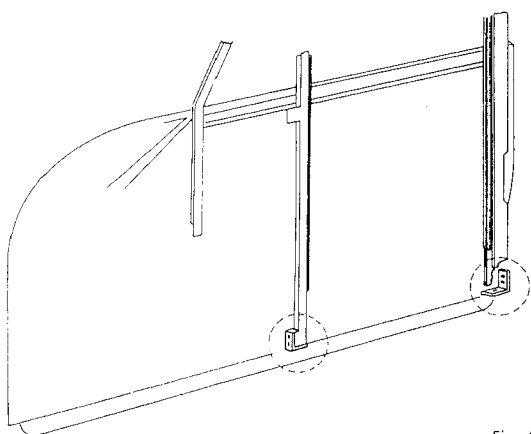


Fig. 40

6. Remove the nut (14 mm) from the inside of the elevating arm pin (on the other end of the pin shown by the arrow Fig. 41).

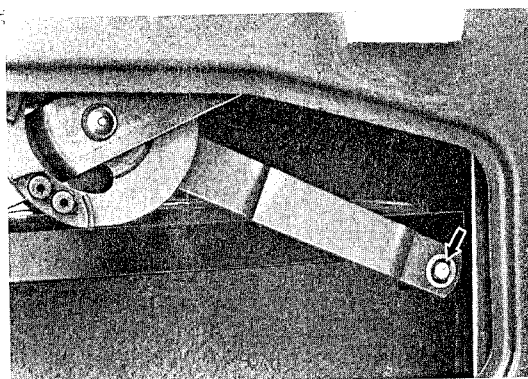


Fig. 41

7. Roll the other elevating arm out of the track, move the window out of the frame and lift it out tilting it up edgewise.
8. Remove screws holding the elevating mechanism and remove the entire assembly.

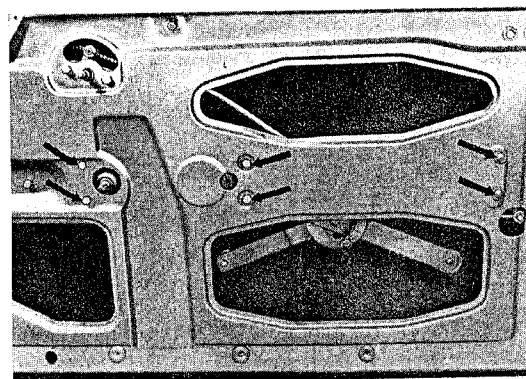


Fig. 42

9. Remove the window rails only if necessary.

Installation

The installation is accomplished in the reverse order of removal observing the following points:

1. Install the elevating mechanism loosely at first.
2. Install the window edgewise so that the elevating roller is engaged and the window fits into the rails.
3. Fasten the window rails to the bottom of the door frame.
4. Install the nut on the back of the elevating arm pin (Fig. 41) and raise the window fully to determine whether the window is parallel to the frame. Adjust the mounting screws of the elevating assembly.
5. Tighten the mounting screws of the elevating assembly.
6. Install felt moulding at the upper edge of the window slot.
7. The fully raised windshield should extend a slight amount higher than the top of the wind wing rim (approx. 1 mm, $\frac{1}{32}$ in.).
8. The end stops for the windshield travel are adjustable for downward and upward travel in Fig. 43 and Fig. 44 respectively.

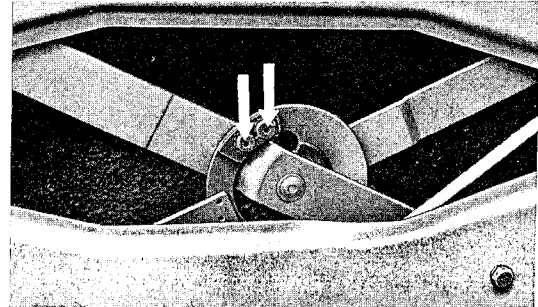


Fig. 43

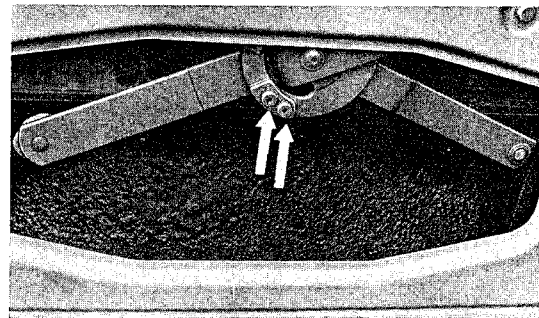


Fig. 44

Roadster

Removal

1. Roll down window.
2. Remove door panel (10 BO).
3. Remove felt moulding from the top edge of the window slot.
4. Remove the nut on the end of the elevating arm.

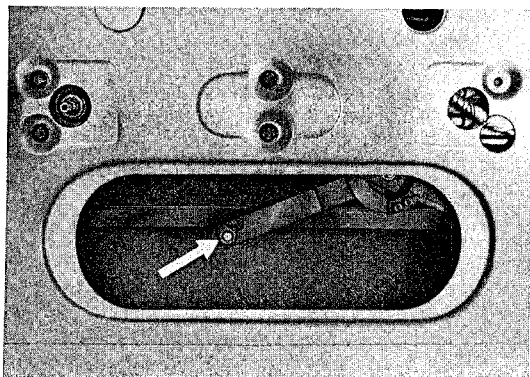


Fig. 45

5. Remove the screws which hold the elevating mechanism.

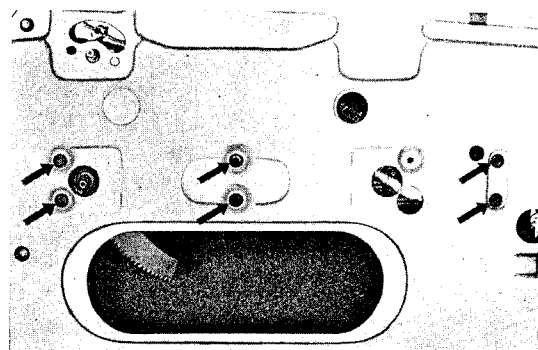


Fig. 46

6. Move the elevating arm roller from the window track and raise the window by lifting it out edgewise.
7. Remove the complete elevating assembly.

Installation

The installation is accomplished in the reverse order of removal observing the following points:

1. Roll down the elevating mechanism as flat as possible so that it will fit through the opening in the door.

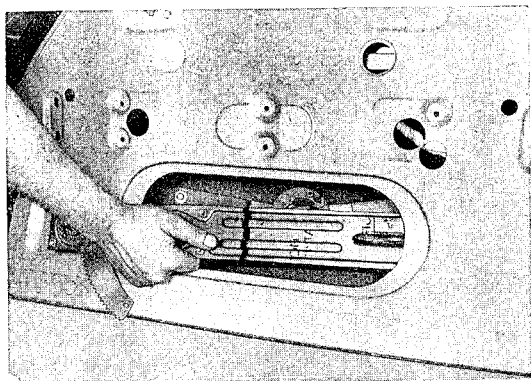


Fig. 47

2. Loosely fasten the elevating mechanism to the door so that it can be adjusted to fit the window.

3. Disconnect the window rails from the bottom of the door frame so that the window may be adjusted to fit the elevating mechanism and install the window.

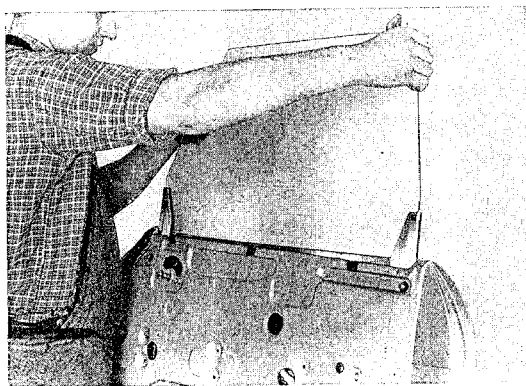


Fig. 48

4. Engage the rollers of the elevating arm in the elevating track of the window. Tighten the elevating mechanism mounts when the correct position is obtained.

5. Fasten the window rails to the bottom of the door frame.

6. Roll up the window and check whether it is parallel to the windshield post and roof. If not, adjust by re-locating the elevating mechanism.

7. The window must be tilted inward so that it seals against the roof and windshield post when the door is closed. The slope can be adjusted by moving the window rails.

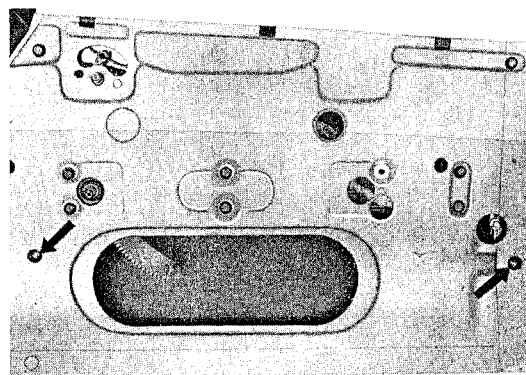


Fig. 49

8. The travel of the window can be adjusted by two limiting stops on the elevating mechanism (see item 8 page R 18).

9. Grease all moving joints of the elevating mechanism.

4. Using a 10 mm socket, remove two cap screws from front edge of window frame.

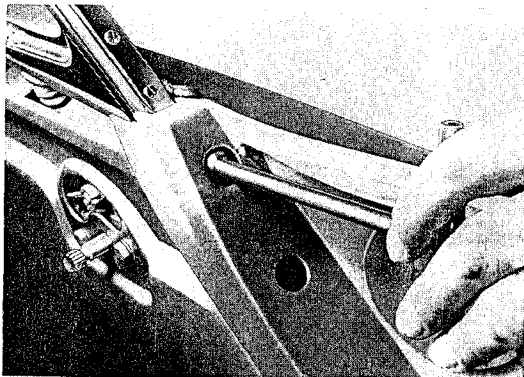


Fig. 53

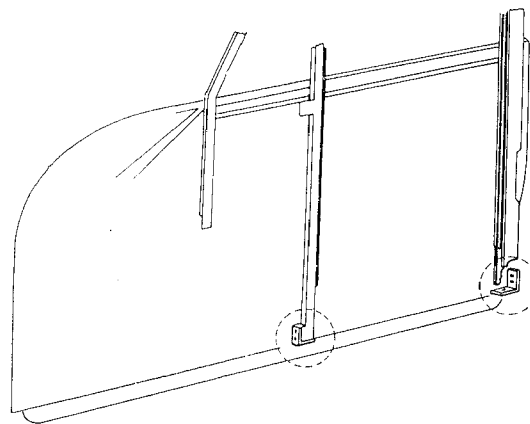


Fig. 55

7. Remove window frame and rails from the door.

5. Remove two cap screws from the inside of the door indicated by arrows in Fig. 54.

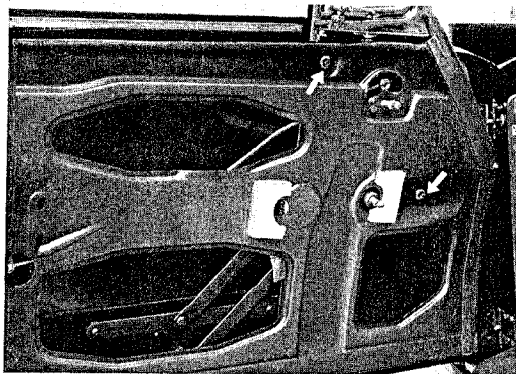


Fig. 54

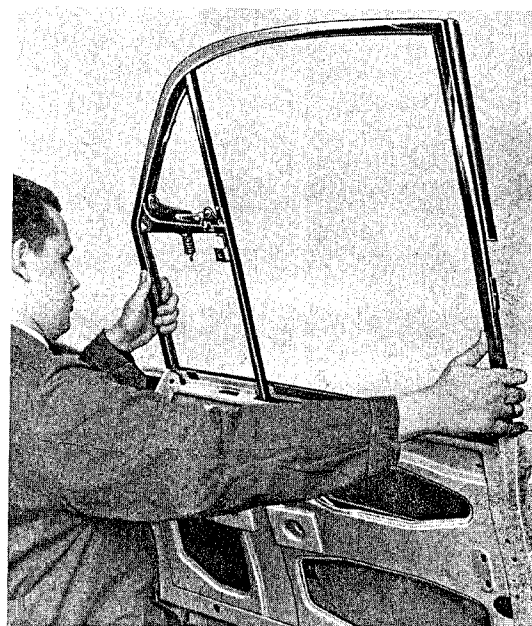


Fig. 56

Installation

6. Remove the screws from the window rail in the bottom of the door frame if they have not already been disconnected.

The installation is accomplished in the reverse order of removal observing the condition of the weather strip and felt linings in the window rails replacing where necessary.

Cabriolet-Hardtop

Removal

1. Remove door panel (10 BO).
2. Remove window (11 BO).
3. Remove the mounting screws from the vent window frame and window rail as shown in Fig. 57.



Fig. 57

4. Remove the vent window, frame, and window rail.

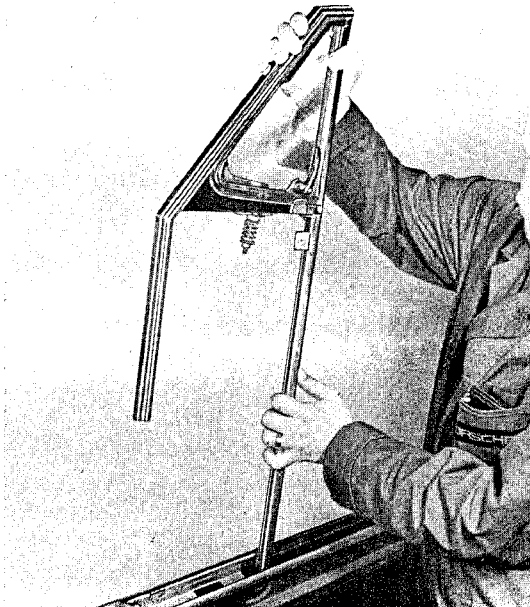


Fig. 58

5. Remove the two screws from the rear window rail.

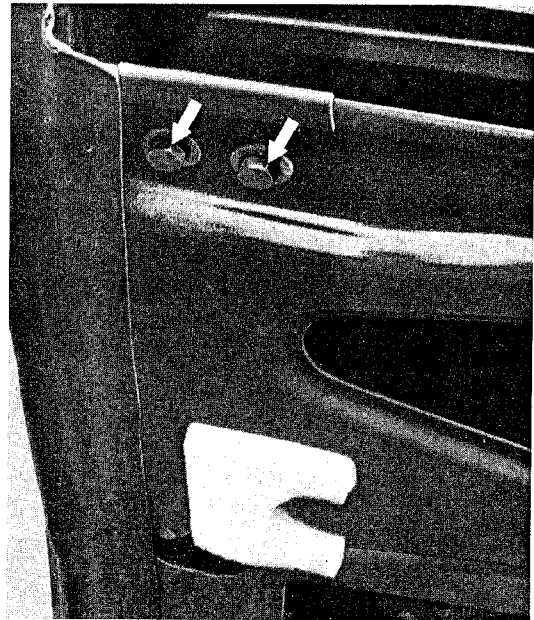


Fig. 59

6. Remove screws from lower end of the window rail.
7. Remove the window rail.

Installation

The installation is accomplished in the reverse order of removal observing the condition of the weather strip and felt linings in the window rails replacing where necessary.

Roadster

Removal

1. Remove door panel (10 BO).
2. Remove window (11 BO).
3. Remove the window rail screws as shown in Fig. 60.
4. Remove window rail.

The installation is accomplished in the reverse order of removal observing the condition of the weather strip and felt lining of the window rails replacing where necessary.

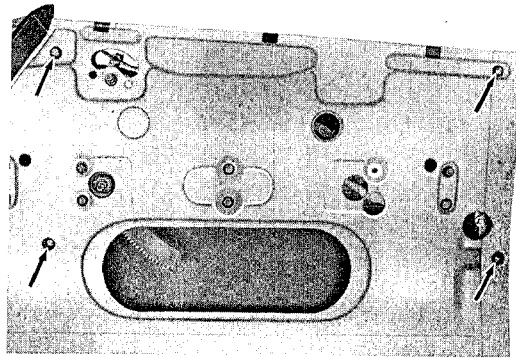


Fig. 60

Function of the Door Lock

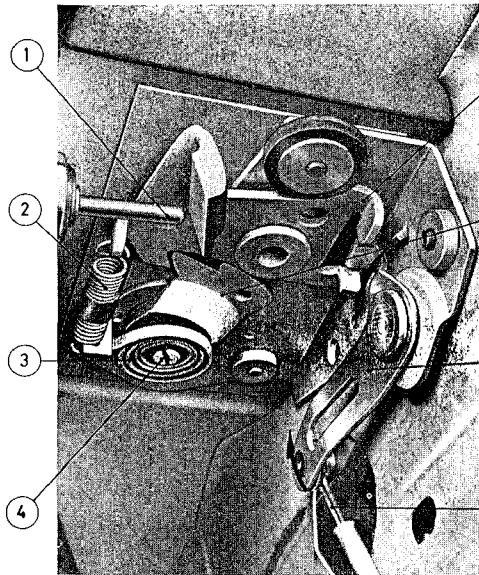


Fig. 61

Door closed. The arrows indicate the position in which the door is locked from the inside.

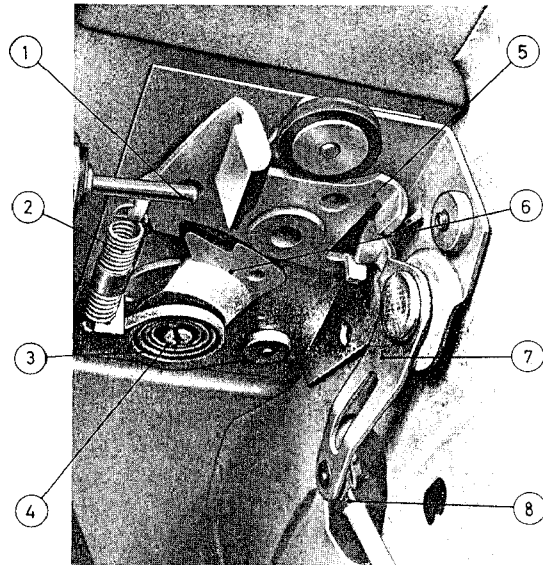


Fig. 62

Door being opened from the inside.

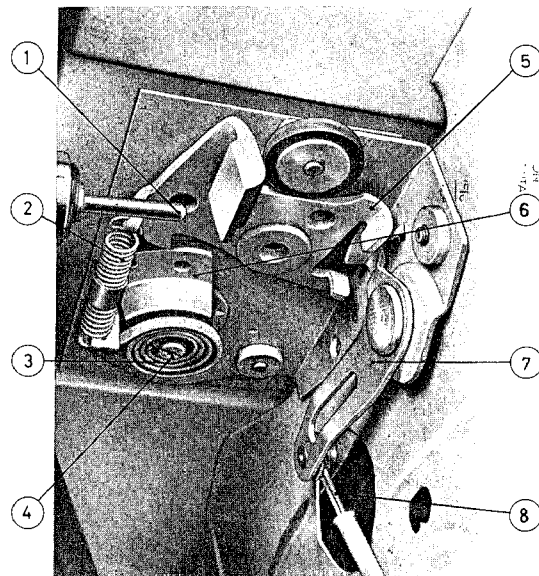


Fig. 63

Door latch released (door open).

- ① Push button plunger
- ② Catch return spring
- ③ Spiral spring of the latch
- ④ Spiral spring mount
- ⑤ Catch
- ⑥ Latch
- ⑦ Catch release and lock
- ⑧ Catch release cable

Removing and Installing Door Lock

14 80

Removal

1. Remove door panel (10 BO).
2. Remove window (11 BO).
3. Remove window frame. Only the one window rail on the Roadster (13 BO).
4. Remove set screw from door lever and pull out release cable.
5. Remove door lever mounting screws and remove lever assembly.

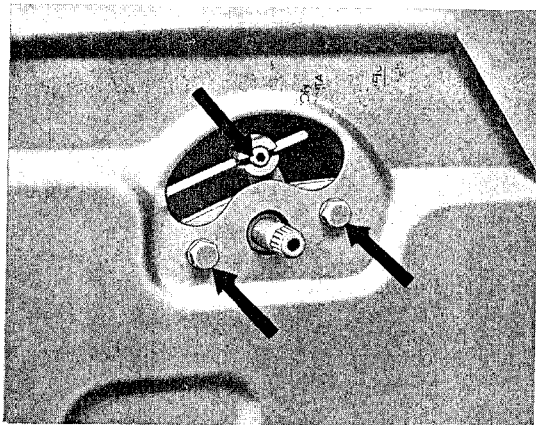


Fig. 64

6. Remove the four mounting screws from the door lock.

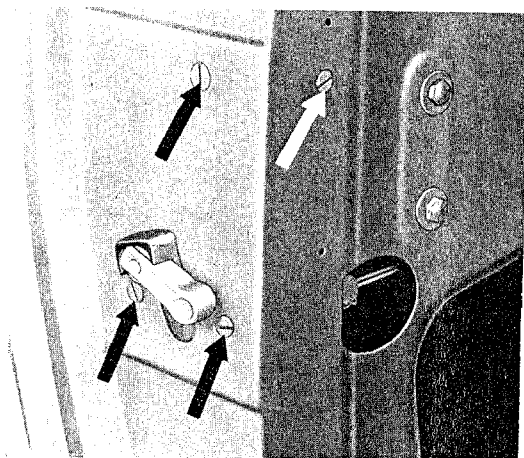


Fig. 65

7. Remove the door lock from the door.

Installation

The installation is accomplished in the reverse order of removal observing the following points:

1. Inspect the lock for worn parts and weak springs replacing parts as necessary.
2. Clean all parts and grease the moving parts.
3. Adjust the door striker so that the door surface fits flush with the car body.

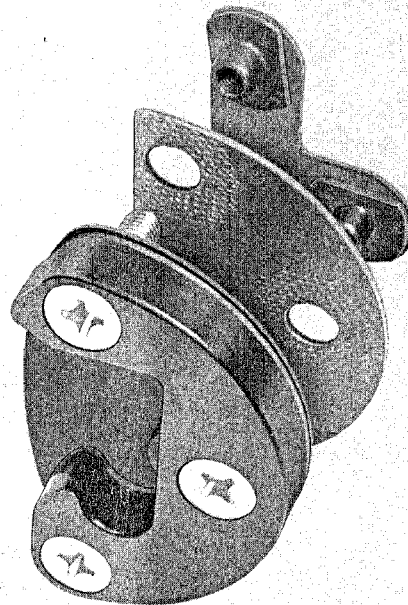


Fig. 66

Coupe, Cabriolet-Hardtop**Removal**

1. Remove windshield wiper arms.
2. Using a sharp knife or linoleum knife, cut rubber around entire window being careful to cut close to but not touching the aluminum trim. Remove cut rubber and slide trim strip connections to one side.

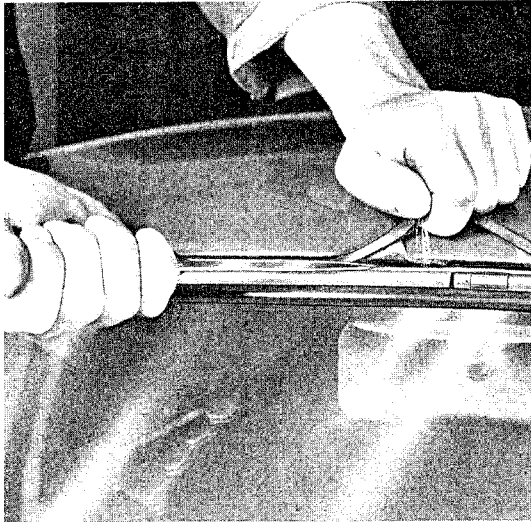


Fig. 67

3. Insert a putty knife or screw driver completely under trim strip and draw evenly around the window. Remove trim strip.

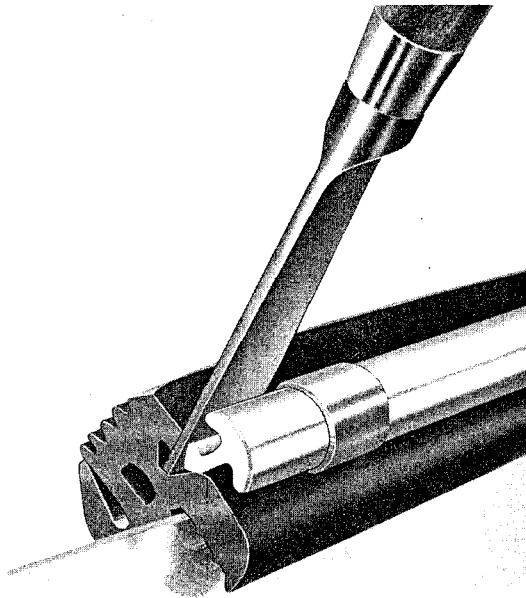


Fig. 68

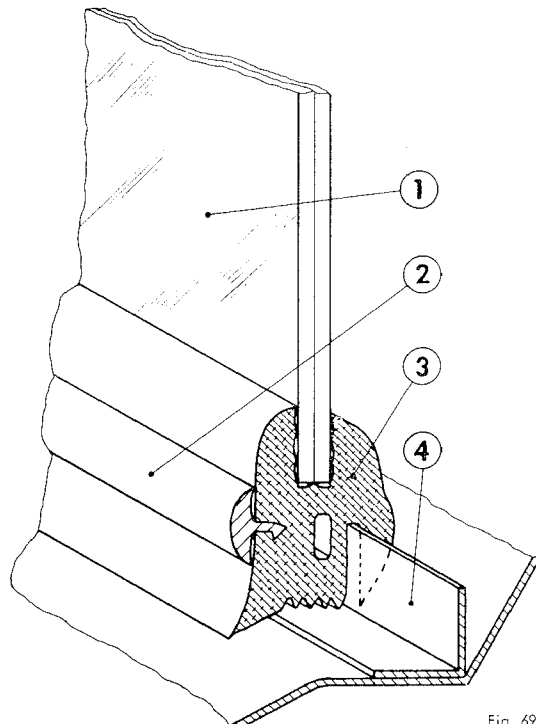


Fig. 69

- ① Windshield
- ② Trim strip
- ③ Rubber strip
- ④ Body section

4. Loosen rubber around glass with a putty knife, then cut parallel to the surface of the glass through the weather strip being careful not to chip or scratch the edge of the glass.

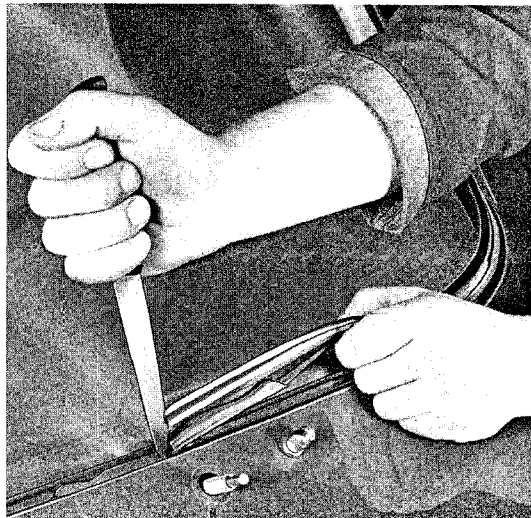


Fig. 70

- Using the palm of the hand, gently strike the upper part of the windshield from the inside and remove the windshield.

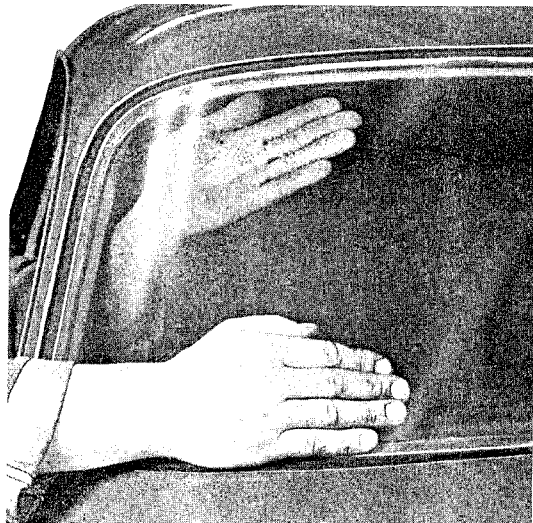


Fig. 71

- Clean the recess for the windshield weather strip of rubber and rubber cement.

Note

If the entire car is to be spray painted, the windshield should be left in after performing step 3 removal. The windshield can easily be removed and cleaned after spraying.

Installation

- Clean windshield and inspect defroster vents for obstructions.
- Place new rubber strip on clean windshield so that the connected seam is exactly in the bottom center of the windshield.
- Using rubber lubricant or soapy water, moisten the slot for the aluminum trim and press trim strip in place. Slide center connectors in place.
- Insert a thick cord into the bottom of the slot (item 4 in Fig. 69) so that the cord overlaps at the top.

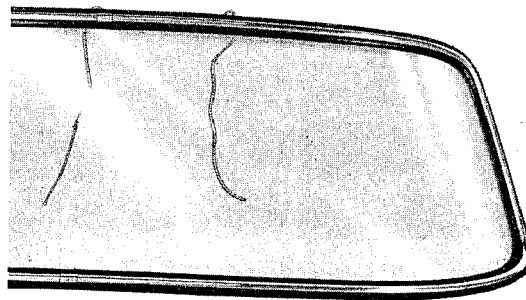


Fig. 72

- Set complete windshield with rubber strip and trim into the windshield frame engaging the lower edge first. Press windshield into the frame as far as possible and pull out the cord parallel to the glass.

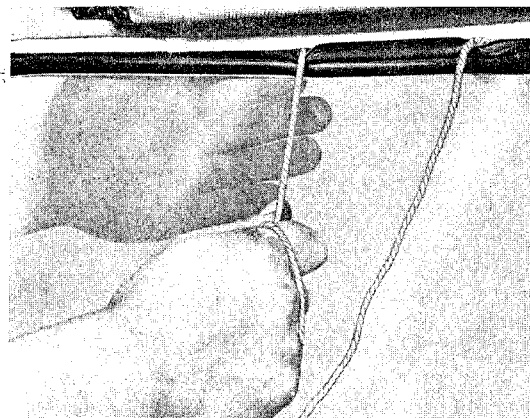


Fig. 73

- Using a wooden block and hammer, seat the windshield firmly in place.

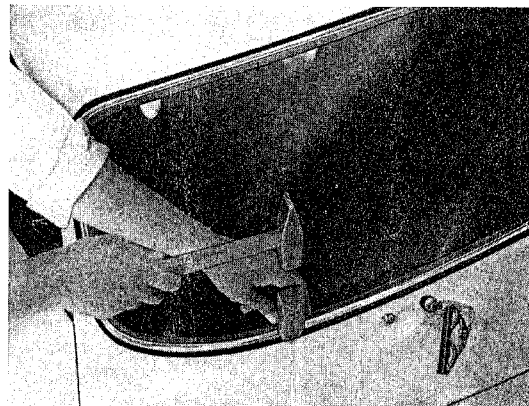


Fig. 74

7. Apply special rubber cement between the rubber strip and body, using a putty knife to pry up the edge of the strip. The same procedure is used to apply rubber cement between the outside of the windshield and the rubber strip.

Note

This step is essential to insure a waterproof seal between the windshield and body.

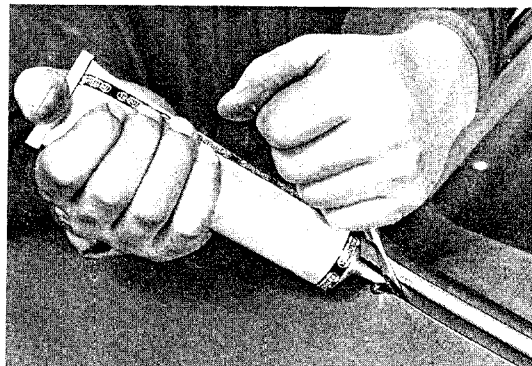


Fig. 75

Roadster

Removal

1. Lower convertible top.
2. Remove wiper arms.
3. Remove windshield holding clamps from wiper shafts by removing the nut and rubber pad.
4. Remove trim strip lifting upward and out.
5. Remove windshield frame tensioner by removing the two screws at the top and releasing the tension from beneath the instrument panel.

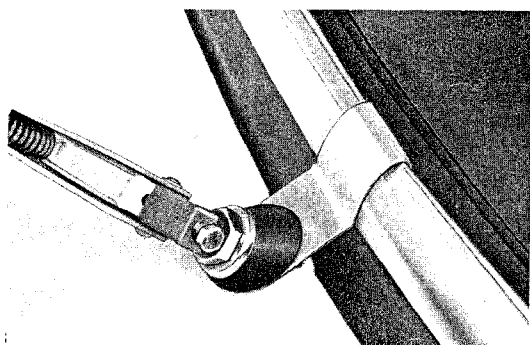


Fig. 76

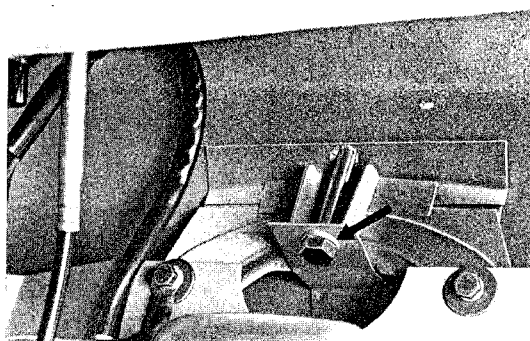


Fig. 77

6. Remove the two allen head screws located at the extreme left and right lower edges of the instrument panel. These screws thread directly into the windshield posts.

7. Lift out windshield with frame.

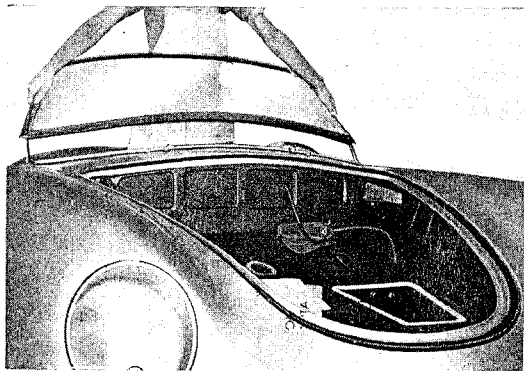


Fig. 78

8. Remove lower rubber strip.
9. Remove windshield from frame.

- a. Slot for glass.

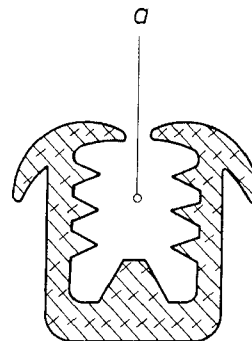


Fig. 79

3. Install windshield in frame and secure with two cords.

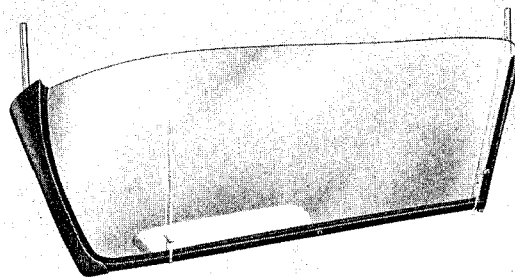


Fig. 80

4. Seal rubber with special rubber cement around edges.

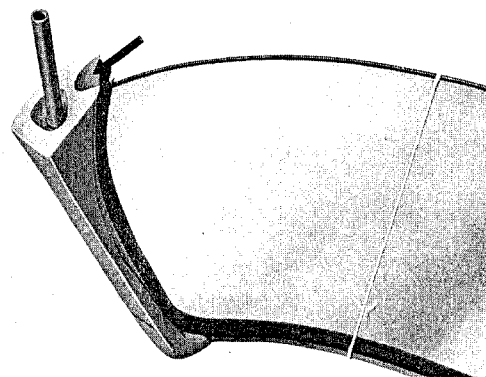


Fig. 81

Installation

1. In the case of a new windshield, compare the shape of the glass and the frame. If there are differences, the glass must be reworked to match the frame.

2. Fit rubber strip to the windshield.

5. Install lower rubber strip.

Bottom rubber strip

- a. Windshield slot
- b. Trim strip slot
- c. Slot for body sections

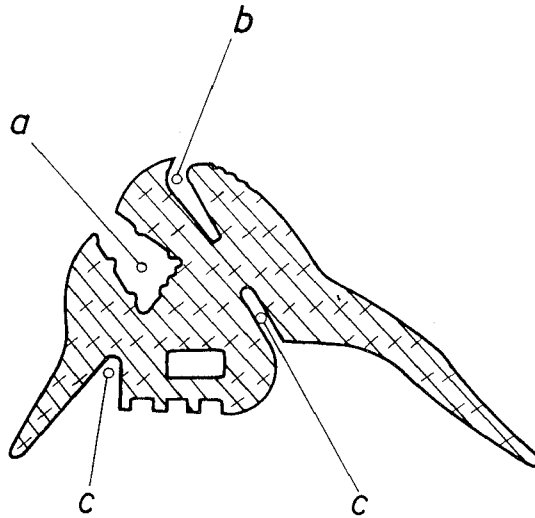


Fig. 82

- 6. Install windshield complete with frame.

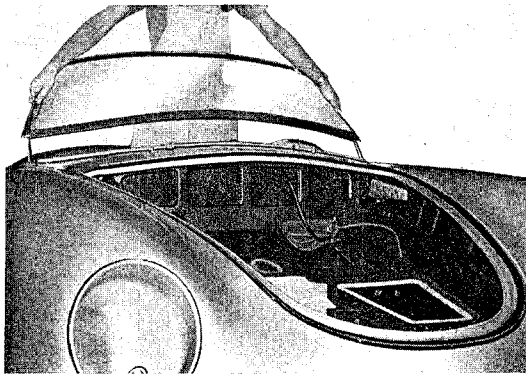


Fig. 83

- 7. Install and tighten allen screws for windshield posts.
- 8. Check the angle of the windshield post with respect to the door window and the top as shown in Fig. 84. The correct space is approx. 15 cm ($\frac{5}{8}$ in.) which can be adjusted by placing shims under the windshield post as required.

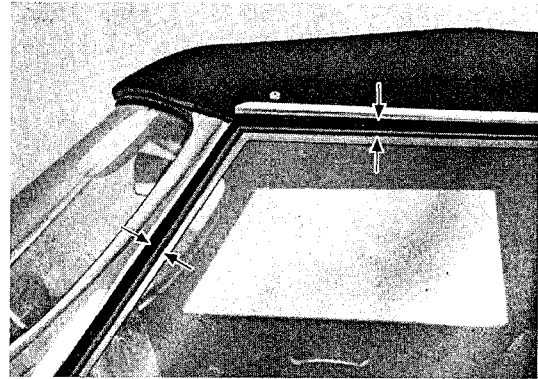


Fig. 84

- 9. Install tension rod in center of windshield.

- 10. By raising the forward edge of the lower rubber strip, check whether the body section is properly engaged.

- 11. Press down rubber strip so that the body section seats fully.

- 12. Place a cord in the slot ("b" Fig. 82) and insert trim strip. Pull out cord downward and press trim strip in place.

- 13. Install windshield holding clamps on wiper shafts.

- 14. Install wiper arms.

- 15. Test the windshield with water. Where leaks are found, dry with compressed air and seal with special rubber cement.

- 16. Clean windshield with alcohol.

Removing and Installing Rear Window

16 B0

The removal and installations is accomplished in a manner similar to that of the windshield.

Removing and Installing Side Windows

17 B0

Removal

1. Open the window and remove the three screws which hold the window linkage.

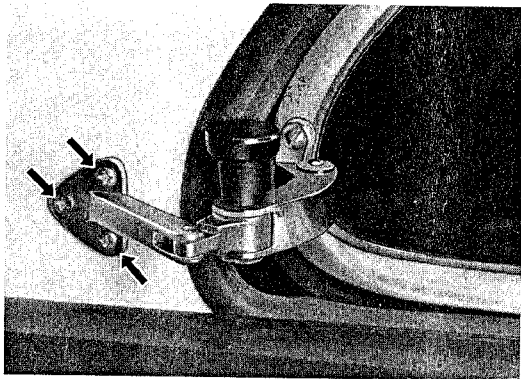


Fig. 85

2. Remove two screws from each hinge and remove the window.

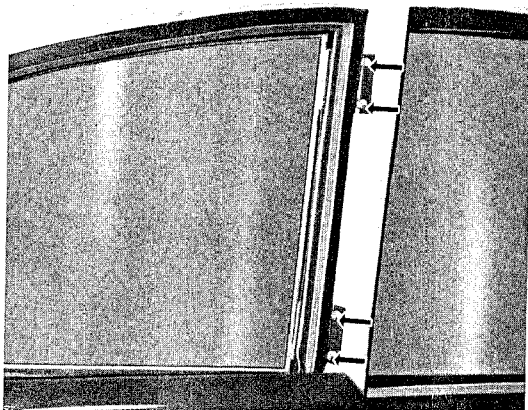


Fig. 86

3. If necessary, remove the screws from the hinges and remove the hinges.

Disassembling

1. Pull weather strip from the outer edge of the window frame.
2. Remove end piece from the frame as in Fig. 87.
3. Remove the straight section of the window frame and remove the pane from the frame.
4. Remove the rubber strip from the frame.

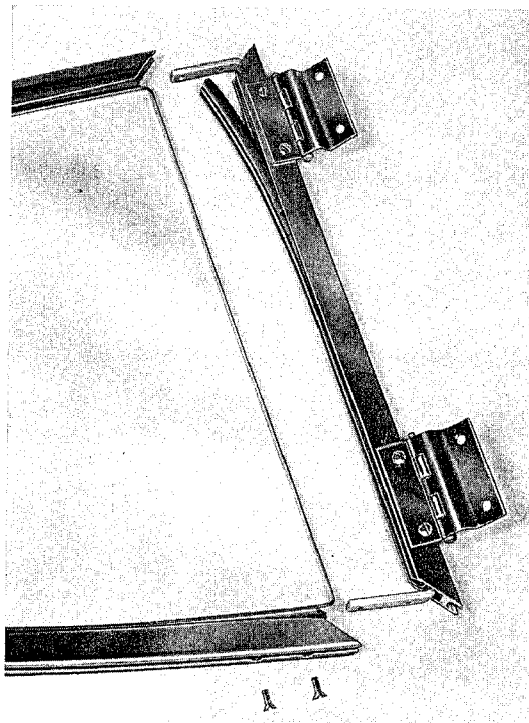


Fig. 87

Assembly and Installation

The assembly and installation are accomplished in the reverse order of disassembly and removal respectively, observing the following points:

1. Inspect all rubber gaskets and weather strips replacing them where necessary.
2. Check seating of the rubber parts and that the window opens and closes properly.
3. Dust rubber parts with talcum powder.