Section A
Body

PAINT CODES-U.S.

Colors (73-74)	Paint Code	VW Part Number
Blizzard White	90H	LKLO90H00
Sunshine Yellow	11E	LKLO11E00
Pumpkin Orange	30F	LKLO30F00
(1974 Only)		
Avocado Green	60F	LKLO60F00
(Acapulco Only)		
Cream White	90H	LKLO90H00
Delft Blue	55Z	LKLO55Z00
Misc Colors, All Years		
(For interior trim, seat frames, brake handle etc.)		
Gray/Black	LD43	LKLD4300
(Wheel Color, 1973 and Later)		
Alum. Gray	L97U	Unknown

Description of body

The four-door open body is bolted to the flat frame. The deep side members stiffen the body against distortion as well as provide good fording properties.

The center pillars act as lock pillars for the front doors and as hinge pillars for the rear doors.

The all-welded body consists of the front and rear ends, the side panels with side members and the cross member for the rear seats.

The front luggage and engine compartments have hinged hoods. Air is drawn into the engine compartment through slots in the rear side panels.

Sheet metal thicknesses

Front and side outer panels	0.88 mm (0.035 in.)
Rear outer panels	1.00 mm (0.039 in.)
Fenders	0.88 mm (0.035 in.)
Doors and hoods	0.88 mm (0.035 in.)
Interior panels	0.75 to 1.00 mm (0.029—0.039 in.)

Painting

The Type 1 / Model 181 has three coats of paint, including the electrophoretic prime coat. These coats are as follows:

1. Electrophoretic primer
2. Filler
3. Top coat

The **electrophoretic primer** (and the initial zinc phosphate coating) is applied by a dipping process. This gives protection against corrosion to all parts of the body including those hidden areas and hollow parts which cannot be reached by spraying.

The **filler coat** is the intermediate stage between the primer and the top coat. It covers up slight scratches and sanding marks in the primer coat.

The **top coat** is applied to protect the undercoats against external mechanical and corrosive influences. The main features of a good top coat lie in its color fastness, gloss retention and covering power.

All spare parts such as complete bodies, fenders, doors, hoods and other body parts are covered with a coat of primer applied by the dipping method.

This high quality primer gives the necessary protection against corrosion while the parts are in transit and being stored. It also provides an excellent base for the coats of paint to be applied later.

Undercoat

A layer of vinyl (PVC) undercoating is applied in the factory. This tough flexible coating protects the underside of the fenders and all parts exposed to the road, from stone damage, corrosion and leakage. The floor panels are sprayed with a wax-based undercoat.

Bumpers

The one-piece bumpers with welded support plates are bolted to the front reinforcement panel and to the bumper brackets. They are also bolted to the fenders with brackets.

Fenders

The fenders are bolted to the side panels.

The beading between the side panel and fender is designed so that it can be fitted **after** the fender has been installed. The clearance required for the beading is given by the bent-up metal tabs on the spacer clips.

Hoods

The luggage compartment hood is attached to the body with external hinges.

The hood lock is operated by a pull loop on the passenger side. The hood lock also has a retaining hook to prevent it from opening accidentally.

The hood is held in the open position by a support which is mounted on the wheel housing and engages in the hood inner panel.

The engine compartment lid is mounted on two external hinges and held open by a support.

Doors

The 717 mm (28.2 in.) wide doors are made up of inner and outer panels which are welded all around the outer edge. Rear view mirrors are fitted on the lockable front doors.

The door opening angles are limited to 75° by check straps.

The doors are opened from outside by a trigger fitted in the outer handle and from inside by a handle on the lock.

The doors can be locked by lifting the inside handle.

The doors are hinged on the front side panel and on the center pillar and can be taken off the hinges completely when desired.

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Windows

The windshield is set at an angle of 27° and is 1300 mm (51.1 in.) wide and 370 mm (14.5 in.) high.

At the bottom the windshield is fitted to hinges mounted on the cowl panel and can be folded forward.

The doors are fitted with detachable windows of transparent vinyl (PVC).

The rear window is also made of vinyl (PVC) which is sewn into the top material. The window is 1045 mm (41.1 in.) wide and 450 mm (17.7 in.) high.

Front seats

The adjustable individual seats have hinged backrests and are mounted on inclined runners which give a fore and aft range of movement of 140 mm (5.5 in.) and a height adjustment of 18 mm (0.7 in.).

The backrests can be adjusted to four different angles.

The front seats and backrests are covered with leatherette.

Rear seats

The seat cushion is made up of plastic foam padding with a fiber underlay and flat spring base.

The flat springs are hooked into the transverse seat support and the floor plates.

The two hinged backrests are padded with plastic foam and can be folded forward after releasing the catches.

The seat cushion and backrests are also covered with leatherette.

Heating

The heater works independently of the engine and supplies warm air through defroster vents on the upper edge of the instrument panel and through footwell outlets.

Interior trim

The edges of the instrument panel are covered with padded strips and all projecting metal flanges are trimmed with protective strips.

The floor is covered with perforated rubber matting.

Top

The top consists of a tubular framework with a weatherproof vinyl (PVC) cover.

The tubular framework is secured at the rear with webbing straps and gives the roof its shape.

Lateral stability is given by the side linkage.

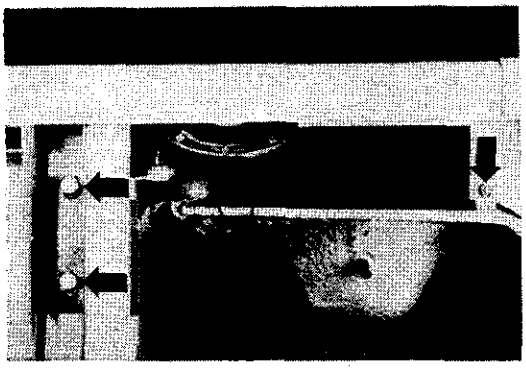
The front bow is located on the windshield frame by two centering pins and secured with two fasteners.

When top is folded back, the tubes lie one above the other and the top cover is folded above the tubes and secured with straps.

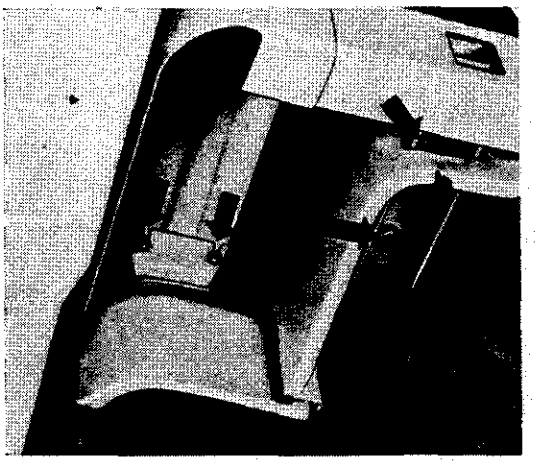
The pivot points of the linkage are covered with vinyl (PVC) caps.

The bumper brackets are mounted by two bolts to the reinforcement under the spare wheel well or to the rear side members.

The bumpers are also attached to small angle brackets on the fenders.



Front bumper



Rear bumper

Removing

Before removing the front bumper, disconnect the wires from the horn.

Loosen the bolts in the fender brackets and take out the bolts under the spare wheel well or in the rear side members.

Installing

1 - Install in the reverse order.

2 - Make sure that the gap between bumper and fender is uniform.

3 - Do not forget the washers.

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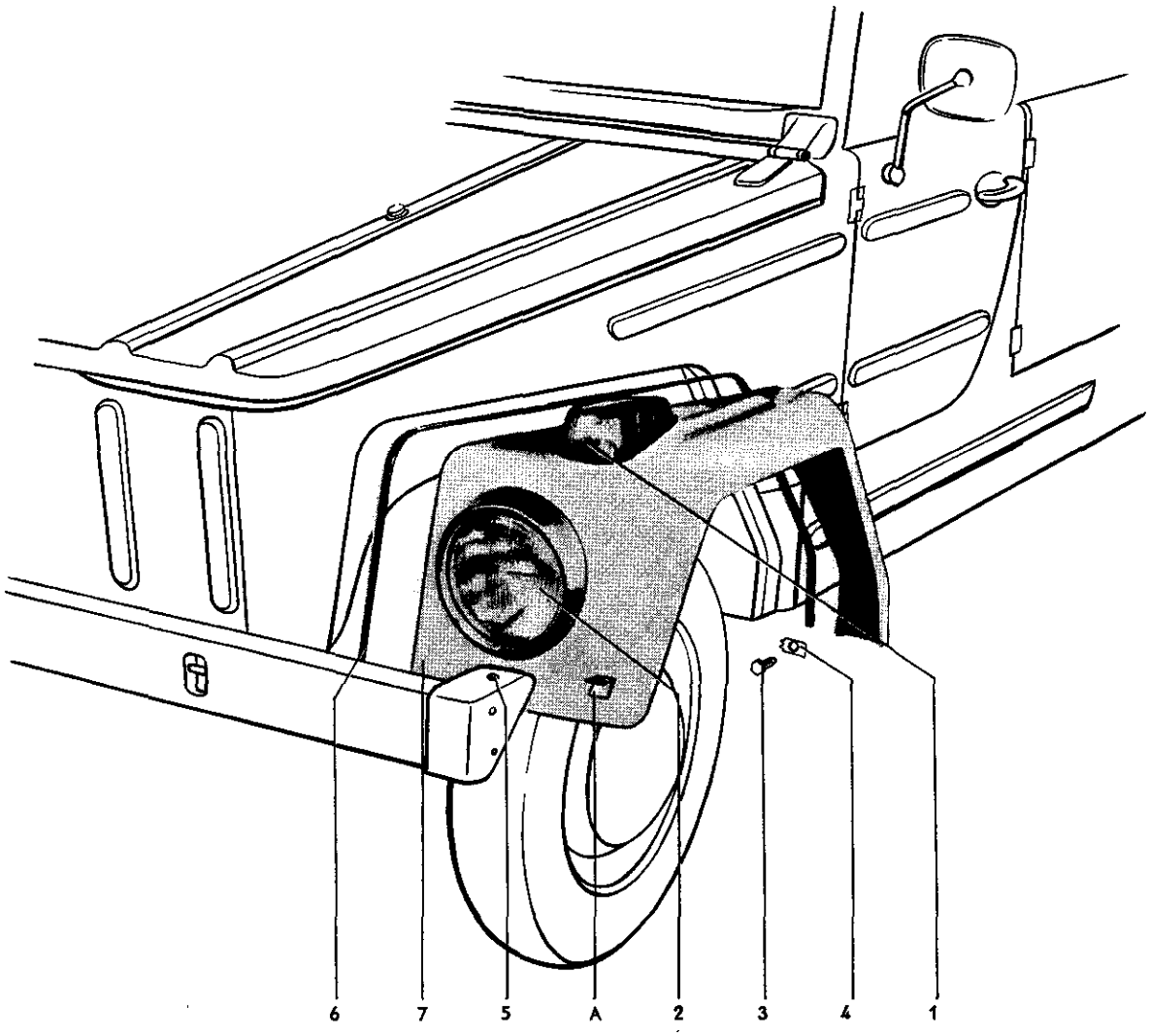

No.	Description	Qty.	Note when removing	Note when installing	Special instructions see
1	Turn signal	1	pull wire out of headlamp housing		E 8.2/1
2	Headlight	1	pull wire out of headlamp housing		E 8.2/1
3	Bolt	8		replace it necessary	
4	Spacer clip	8		replace if necessary	
5	Carriage bolt	1			A 2.3/1
6	Beading with clips	1		check, replace if necessary. Drive in with wooden or plastic block	
7	Fender	1			
A	Angle bracket	1			

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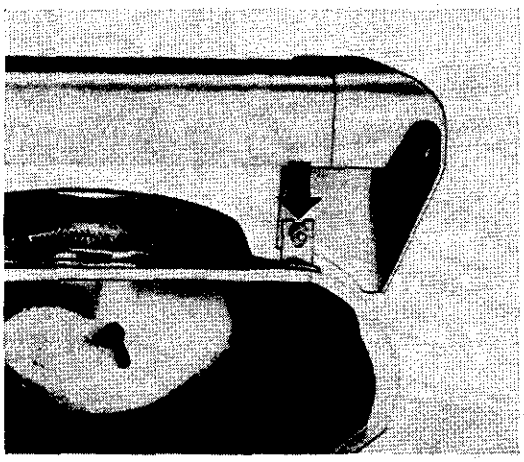
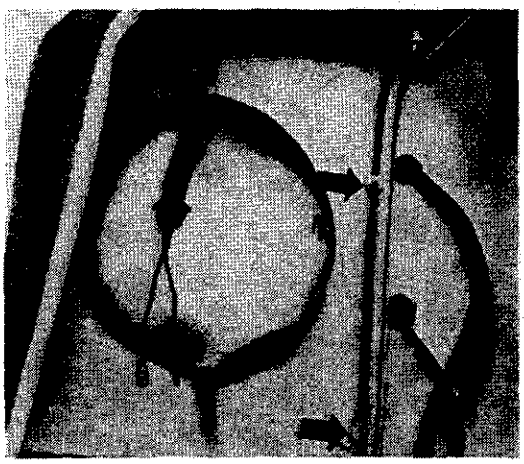


Removing

1 - Remove bolt on angle bracket.

2 - Part the vinyl (PVC)-undercoating material between fender and wheel housing with a sharp knife.



3 - Remove eight bolts under fender.

a - Three bolts at the front (arrows).

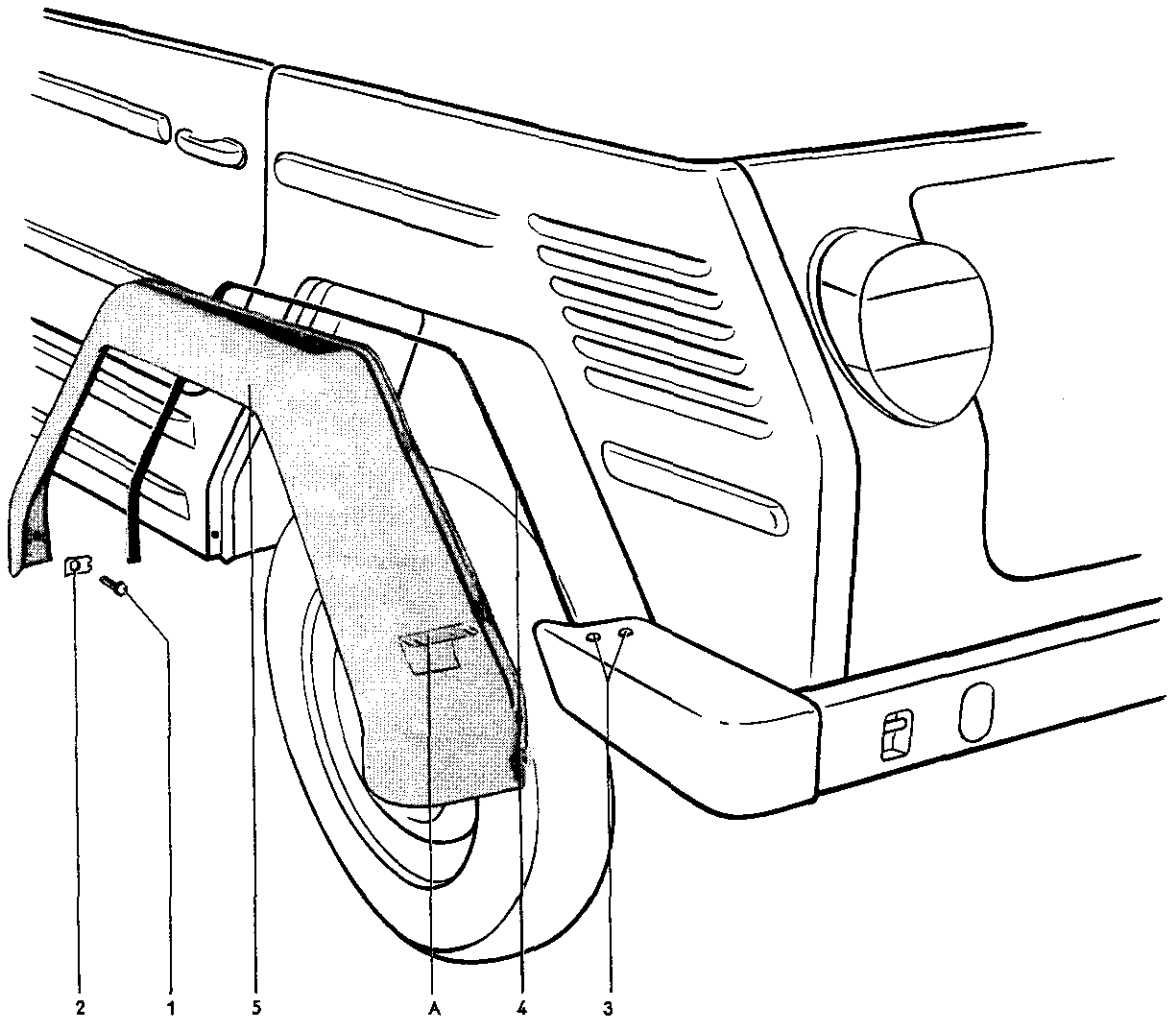
b - Five at the rear (arrows).

4 - Pull rear part of fender outwards and free angle bracket from bumper at front.

Installing

1 - Install beading with wood or plastic block so that it fits properly.

2 - Repair the damaged vinyl (PVC)-undercoating material around the bolts with underbody sealer.



No.	Description	Qty.	Note when removing	Note when installing	Special instructions see
1	Bolt	8		replace if necessary	
2	Spacer clip	8		replace if necessary	
3	Carriage bolt	2			
4	Beading with clips	1		check, replace if necessary. Drive in with wooden or plastic block	
5	Fender	1			
A	Angle bracket	1			

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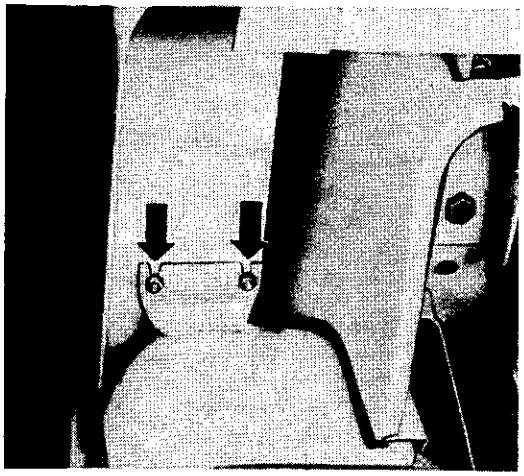
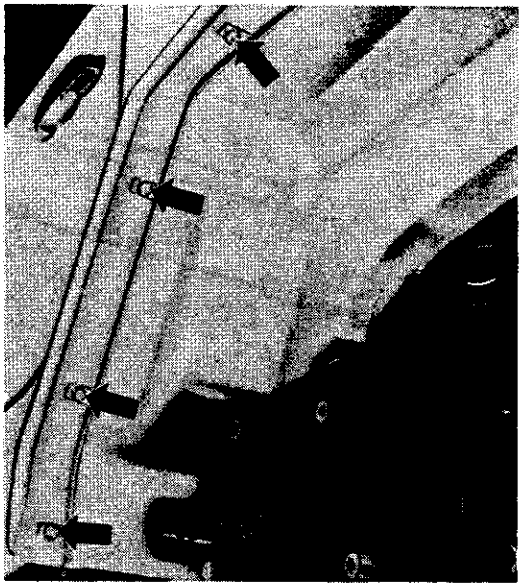


Removing

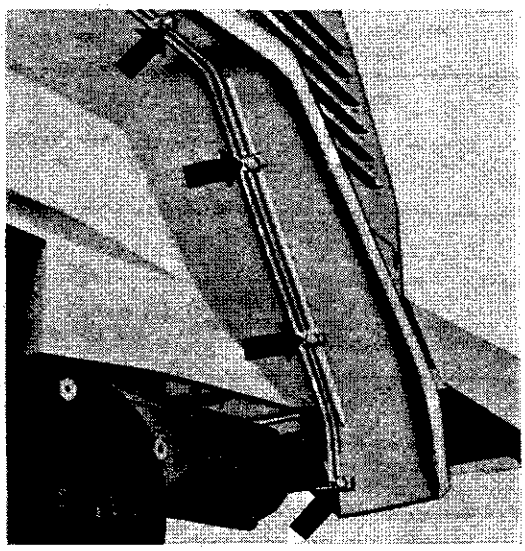
1 - Remove bolts on angle bracket.

2 - Part the vinyl (PVC)-undercoating material between fender and side panel with a sharp knife.



3 - Remove eight bolts under fender.

a - Four bolts at front (arrows).



b - Four bolts at rear (arrows).

4 - Pull front part of fender outward and free angle bracket from bumper at rear.

Installing

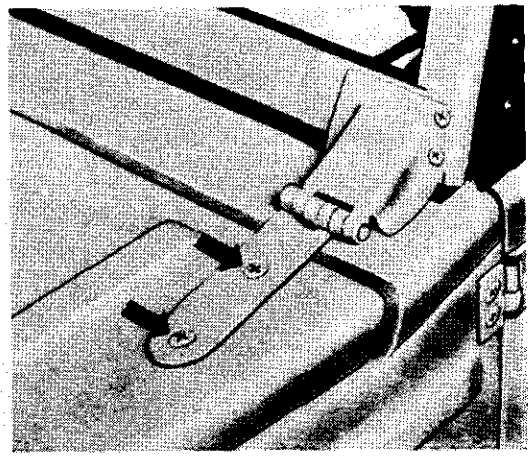
1 - Install beading with wood or plastic block so that it fits properly.

2 - Repair the damaged vinyl (PVC)-undercoating material around the bolts with underbody sealer.

Removing

1 - In order to prevent damage to the paint work when removing and installing the front hood this work should be carried out by two mechanics.

2 - Remove the two Phillips screws holding the hinges on each side and take hood off.



Installing

Before installing the hood, check the condition of the seal. Replace seal if necessary.

1 - Check Phillips screws and replace if necessary. Lift hinges up and attach hood to each hinge with two screws.

2 - Open and close hood a few times to check operation of lock. If necessary, adjust position of lock upper part in the elongated holes and depth of engagement of lock pin after loosening lock nut.

3 - Then check the tightness of the Phillips screws in the hinges.

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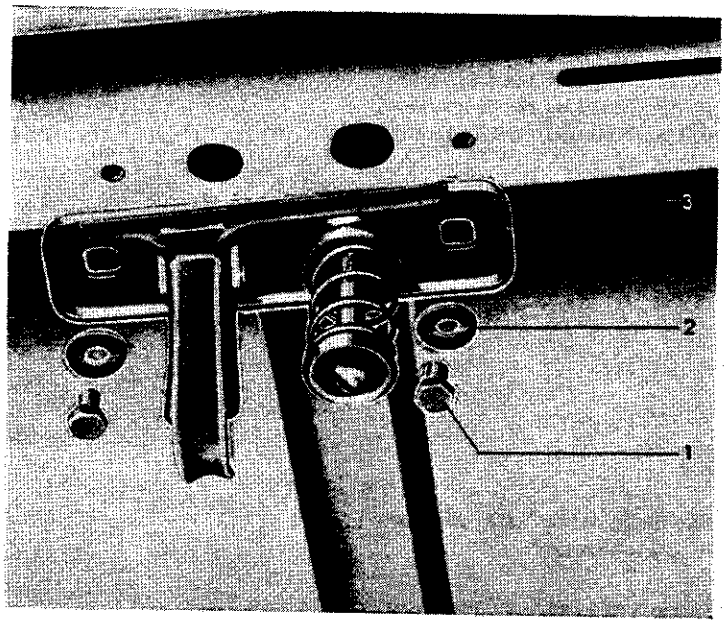
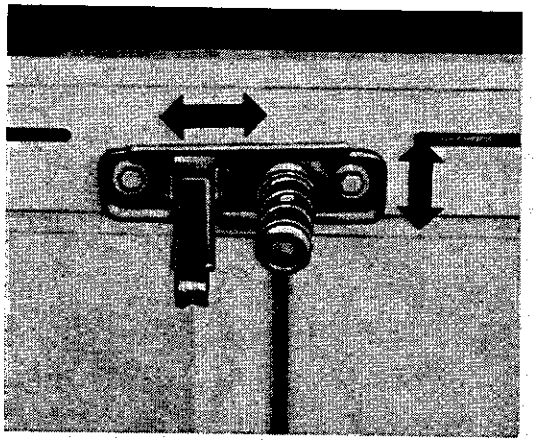


No.	Description	Qty.	Note when removing	Note when installing	Special instructions see
1	Bolt	2			
2	Washer	2			
3	Lock upper part	1		adjust	



Installing and adjusting

1 - Check lock upper part, replace if necessary or lubricate with "Door and lock lubricant G 4".

2 - Open and close hood several times to check location of upper part and length of pin.

Note

The lock upper part is fitted with an adjustable pin and a safety catch which engages a hole in the lower part of lock when hood is closed.

3 - If necessary, adjust position of lock upper part by moving it in the square holes (arrows) and alter length of pin after loosening the lock nut.

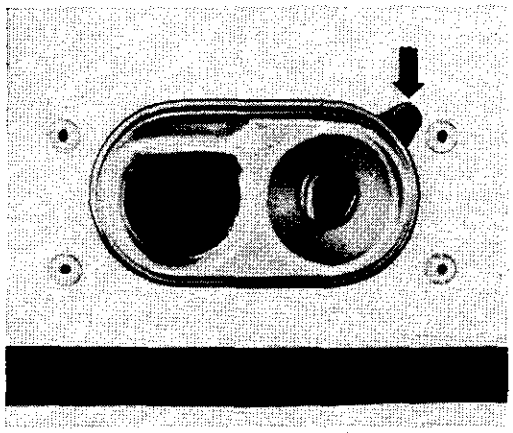
Removing

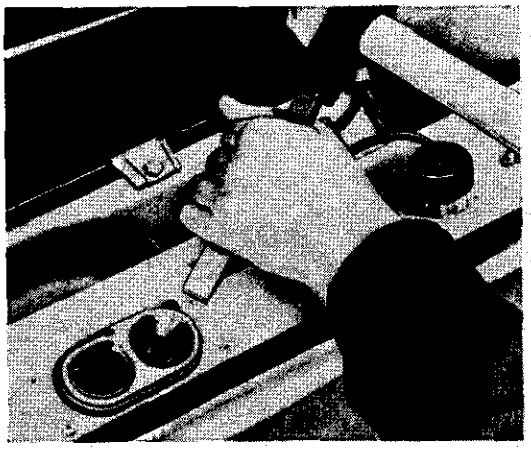
The lock lower part is attached to the lock carrier plate with hollow rivets.

1 - Loosen the Bowden cable clamping screw in the lock plate. An access hole is provided in the lock and lock carrier plate for this purpose (arrow).

2 - Cut the four rivets off with a flat chisel.

3 - Take lock lower part off.

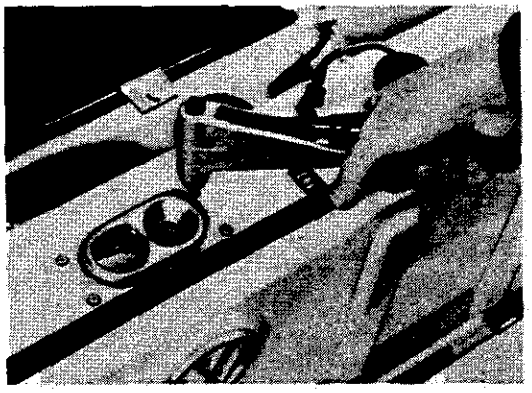




Installing

Check lower part, replace if necessary or grease with "Door and lock lubricant G 4".

When installing a new Bowden cable, grease it lightly before inserting it into the guide tube to prevent rust.



1 - Push cable through the guide in the lower part of lock and attach it to the lock plate temporarily with the clamping screw.

2 - Install lock with rivets or screws.

Note:

Use 4.8 mm diameter hollow rivets or M 5 bolts with washers and nuts.

3 - Loosen Bowden cable clamping screw, pull cable out and tighten screw again. Then bend the end of the cable over behind the clamp.

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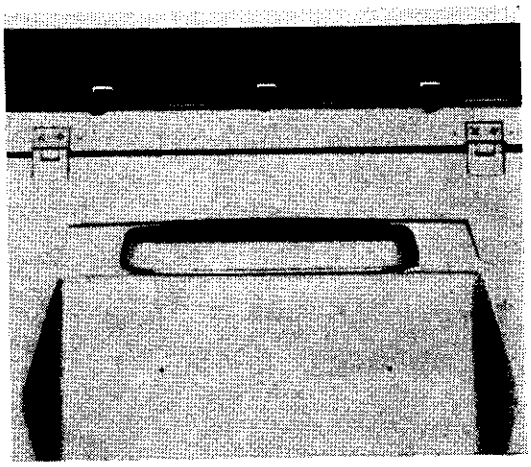
Removing

1 - The hinge screws are removed with the hood closed. If the same hood is being installed again, mark the position of the hinges on the body with a pencil.

2 - Pull wire off license plate light.

3 - Remove two screws from each hinge, open the hood lock and take hood off.

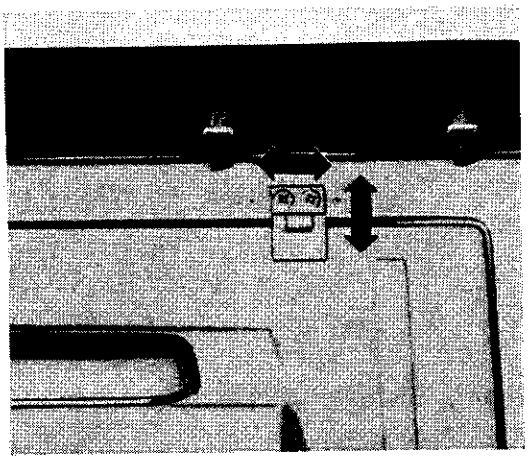


Installing

Before installing hood, check condition of seal. If necessary, glue a new seal on.

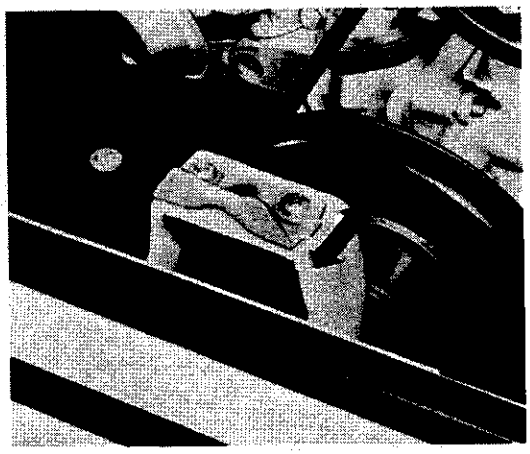
If the same hood is fitted again, align it according to the pencil marks and tighten the screws.

1 - Attach hinges loosely and move hood so that the gap is uniform all around and the hood seals properly. Then tighten screws fully.



2 - Open and close the hood several times to check the position of the lock. If necessary adjust the position of the striker plate by moving it in the elongated holes (arrow).

3 - Connect wire for license plate light.



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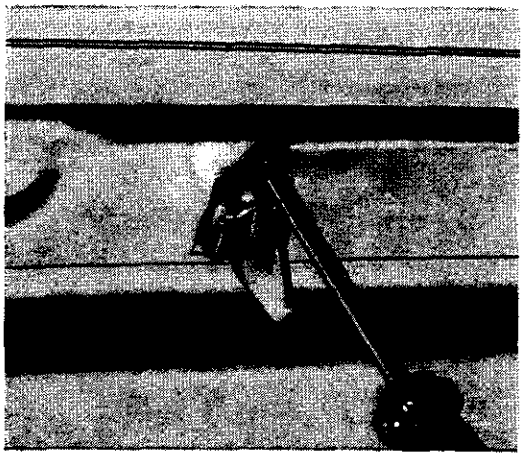


Removing

1 - Open the hood and remove one Phillips screw on the inside of the hood.

2 - Pull lock out.

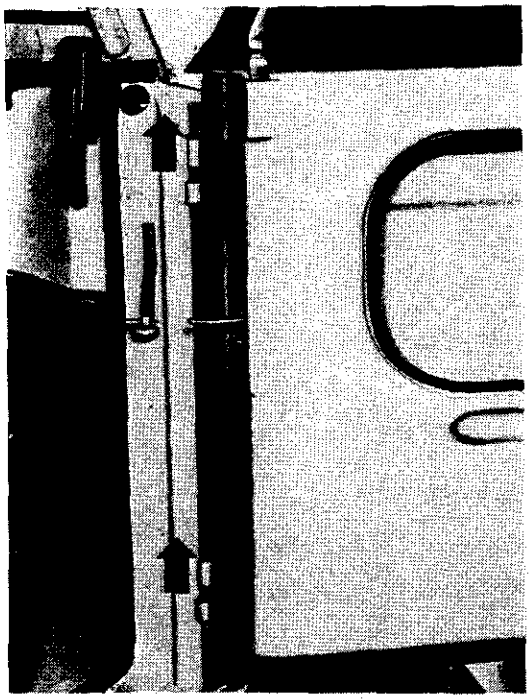
Installing

1 - Check lock and gasket and replace if necessary. Lubricate the moving parts of the lock.

2 - Insert lock into hood.

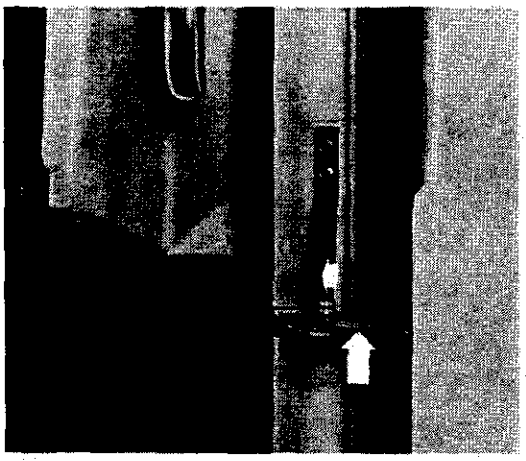
3 - Insert and tighten Phillips screw.

The front and rear doors and hinges are basically the same. These doors are designed so that they can be taken off quickly without tools. All that is necessary is to press in the leaf spring so that the check strap can be taken off the retaining pin. The door is then swung open about 120° and lifted off its hinges. The door is installed in the same way.



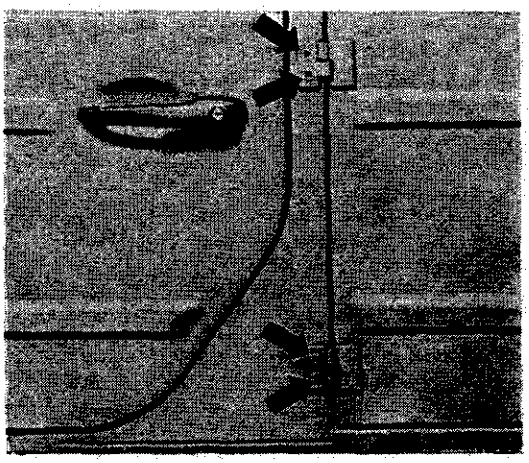
Removing

1 - Press the leaf spring (arrow) in and take check strap off retaining pin.



2 - If the same door is to be installed again, mark the position of the hinges with a pencil.

3 - Remove four Phillips screws and take door off. If the screws are rusted and tight they should be sprayed with a rust solvent and then loosened with an impact screwdriver.



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Installing

1 - Check door weatherstrip and renew if necessary. Glue new weatherstrip on with D 21 adhesive.

2 - If the same door is installed it need only be aligned with the marks made. It is then not necessary to fit the door in the opening.

3 - If a new door is being installed, proceed as follows:

Install door and position it in the body opening so that it contacts the weatherstrip evenly all around and the door can be opened and closed without jamming. When doing this the striker plate should be removed. The door hinges are bolted to movable tapped plates which are located inside the body pillars. This makes it possible to move the door about until it is properly aligned. If the door cannot be aligned with the body outer panels despite this it may be necessary to press the hinges inward or insert packing pieces to move the hinges outward.

4 - Install striker plate again and adjust it so that the top edge of door is in line with the body panels. Make sure that the door is not too far in or out.
Detailed instructions are given in the section "Adjusting striker plate".

5 - Oil hinges.

Lubricating hinges

Remove the small plug (A) and fill the chamber in the hinge with SAE 30 oil.

Oil which drips on to the paint should be wiped off immediately because the additives in the oil can cause discoloration if left on the paint.

Adjusting

Warning

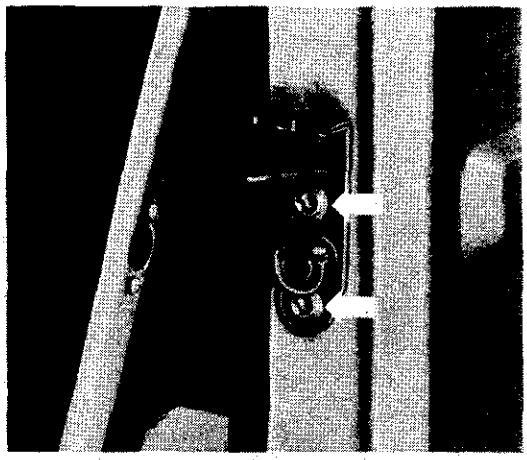
When adjusting the striker plates, the vehicle must not be on a hoist.

To prevent the lock latch moving back and forth due to vibration when the vehicle is driven the striker plate is fitted with a spring-loaded bonded rubber wedge. This wedge is not adjustable.

In isolated cases it may be found that door rattling cannot be entirely eliminated by adjusting the striker plate. In such cases it is necessary to replace the striker plate.

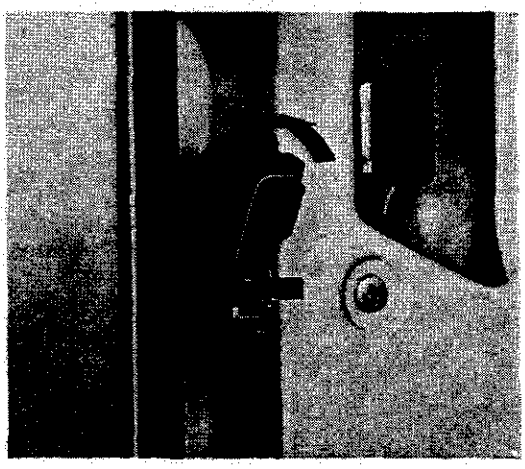
1 - To check if the latch is making good contact with the wedge on the striker plate, proceed as follows:

a - Remove striker plate — two bolts (arrows).

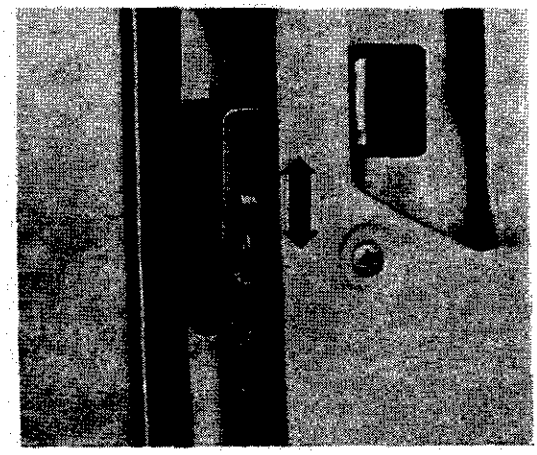


b - Insert striker plate into latch at bottom first, then press latch down fully into locked position.

c - Then swing striker plate upward.



d - If play is felt when moving striker plate up and down in this position, the wedge must be replaced.



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2 - After removing the striker plate, check position of door in door opening as follows:

a - tightness of screws of the hinges.

b - alignment of door with front and rear panels and the center pillar.

c - uniformity of gap between door and door opening.

3 - If these points are not in order, the following operations must be carried out.
Loosen hinges and move door to front, rear, up or down. Then tighten Phillips screws again.

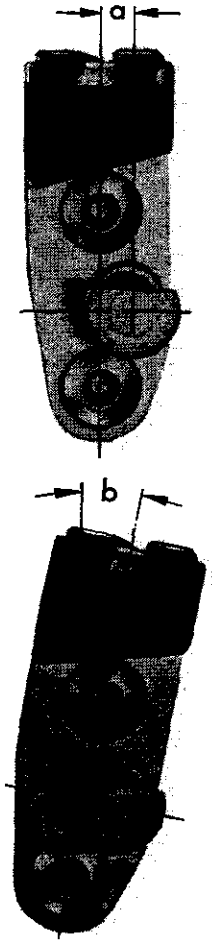
4 - **The door adjustment is correct when:**

a - the door is in line with the front or rear panel and the center pillar.

b - the gap between door and door opening is uniform all around.

c - no play can be felt between lock and striker plate when forcing door in and out with handle.

d - the door can be opened from inside and outside without excessive effort.



5 - **The striker plate position can be corrected as follows:**

a - If the door is difficult to close, the trigger will be hard to operate. This is caused by the striker plate being inclined inward too far.

Remedy
Correct striker plate as shown at "a".

b - If the door springs back to the secondary latching position when slammed instead of closing properly, the striker plate is inclined outwards too far at the top. The door can be opened easily with the trigger.

Remedy
Move striker plate as shown at "b".

c - If the striker plate has been set too high, the door will be difficult to open with the trigger. When it is opened the door will drop slightly instead of remaining parallel to the door opening.

Remedy
Move striker plate down.

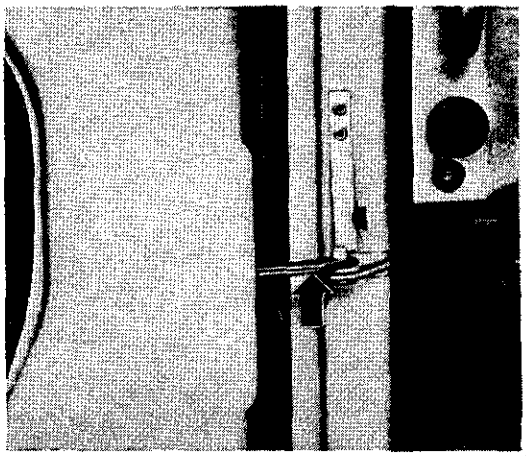
d - If the striker plate has been set too low, the door will spring out of the closed position when slammed shut and merely engage in the secondary latching position.

Remedy
Move striker plate up.

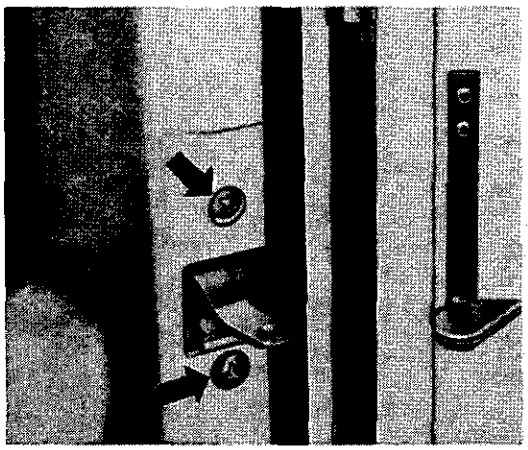
The check strap consists of a rod with a rubber buffer and a supporting bracket. In the door reinforcement there is a welded-on stop plate which the buffer contacts when the door is opened. On the body, the check strap fits over a small pin on a bracket and is secured with a leaf spring.

Removing

1 - Press the leaf spring in and take strap off the pin.



2 - Remove two Phillips screws (arrows) in door end face and take check strap out inward.



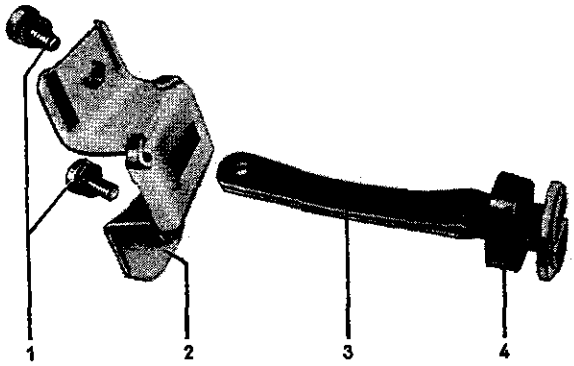
Installing

1 - Screws and spring washers
2 - Bracket
3 - Strap
4 - Buffer

1 - Check the strap and buffer and replace if necessary.

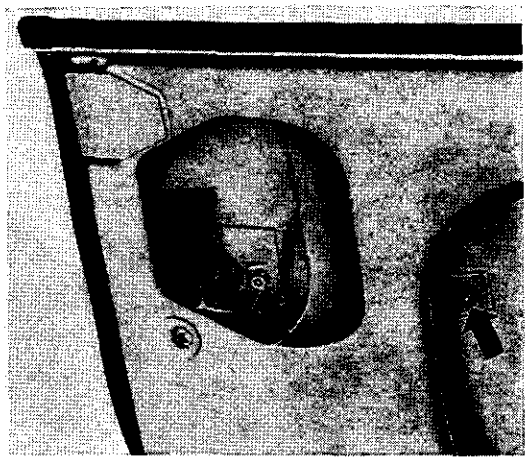
2 - Insert the check strap into the door so that the curved side is inward.

3 - Hook strap on to the retaining pin.



Removing

Remove two socket head screws (arrows) with an Allen wrench.



Installing

1 - Check gaskets and replace if necessary.

2 - Place handle in door.

3 - Insert screws loosely first, check position of gaskets and then tighten screws.

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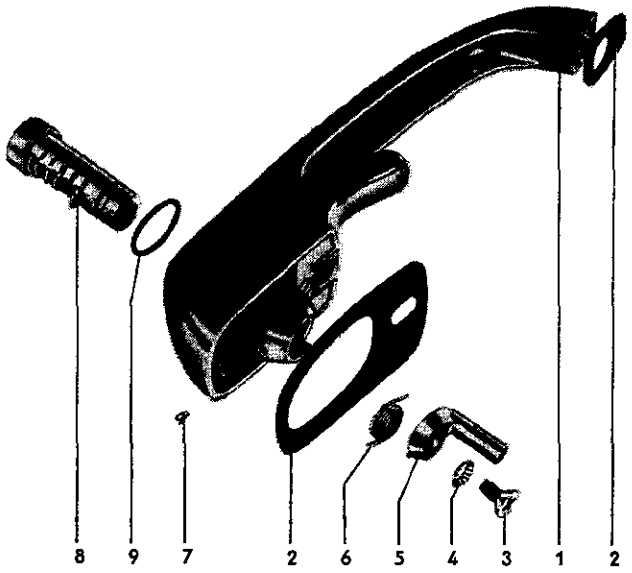
The lock cylinder is fitted in the door handle. To remove the lock cylinder the door handle must be taken off.



No.	Description	Qty.	Note when removing	Note when installing	Special instructions see
1	Door handle	1			
2	Gasket	2			
3	Phillips screw	1		check, replace if necessary	
4	Lock washer	1		check, replace if necessary	
5	Operating pin	1			
6	Spring	1			
7	Setscrew	1			
8	Lock cylinder	1		lubricate with "Door and lock lubricant G 4"	
9	O-ring	1			

Removing

1 - Remove screw and lock washer and take operating pin off lock cylinder.

2 - Take spring off cylinder.

3 - Turn the small setscrew in handle out until the lock cylinder can be pressed out.

Installing

1 - Place key in lock cylinder, fit O-ring and push cylinder into door handle.

2 - Insert setscrew to secure lock cylinder.

3 - Install spring on lock cylinder. The ends of the spring must be under tension against a lug on the handle.

4 - Fit operating pin on square end of lock cylinder and secure with screw and lock washer.

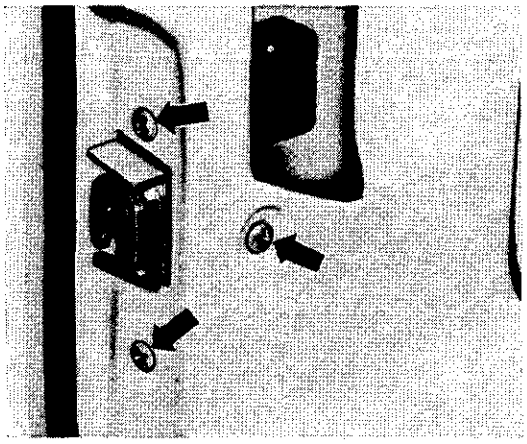
5 - Install handle on door complete with gaskets.

To remove the lock, the door handle must be taken off first.

Removing

1 - Move locking handle to vertical position and remove three Phillips screws.

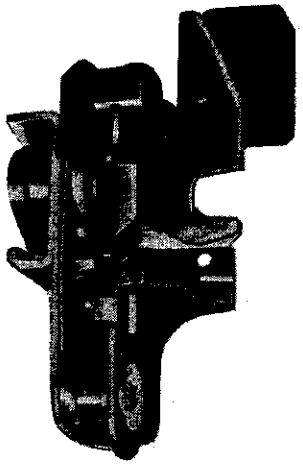
2 - Take lock out downward.



Installing

1 - Check lock for wear and replace if necessary. Lubricate all moving parts with "G 4" lubricant.

2 - Install lock with latch vertical, install door handle and check operation of all parts.



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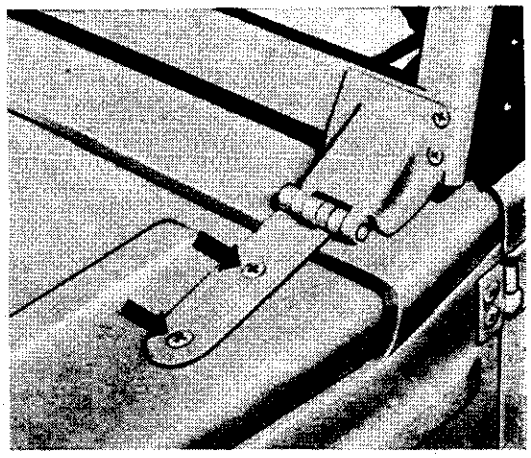
Removing

1 - If a new windshield is to be installed, remove the windshield wiper, sun vizors, interior mirror, etc.

2 - Remove screws attaching hinge to front hood.

Note

Mark position of hinge with a pencil first.

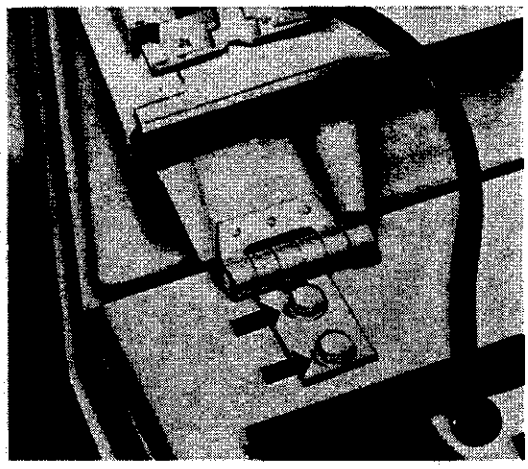


3 - Fold windshield down and remove screws attaching hinge to cowl panel.

Note

Mark position of hinge with a pencil first.

4 - Lift windshield off carefully (two mechanics if possible).



Installing

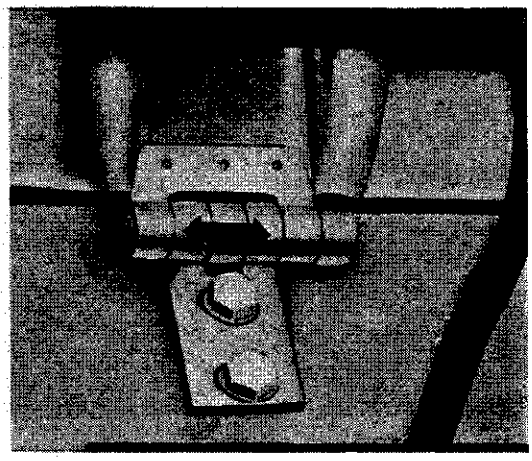
1 - Install windshield on cowl panel and attach hinge to front hood.

2 - Align hinge with the marks made and tighten screws.

3 - Install windshield wiper, sun vizor, interior mirror, etc. on windshield.

4 - Check location of windshield with top and doors closed. If necessary move hinges in elongated holes.

5 - Check location of front hood.



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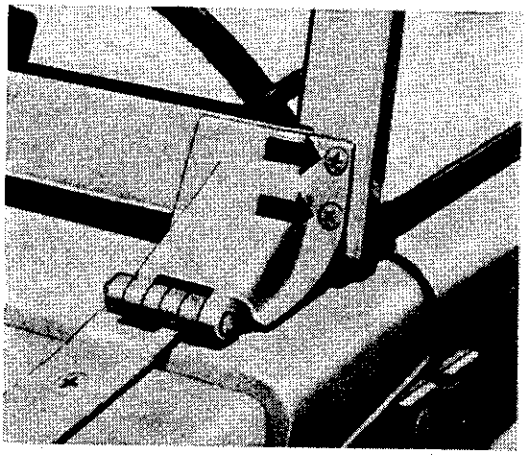
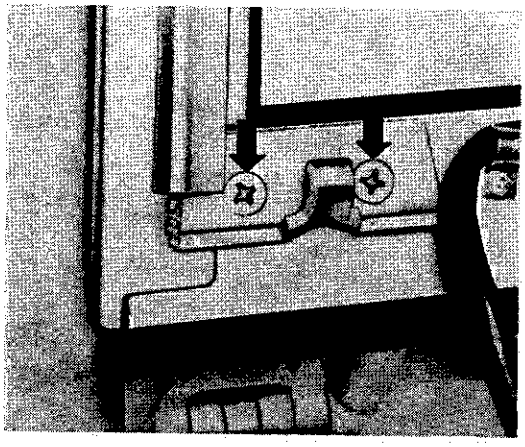
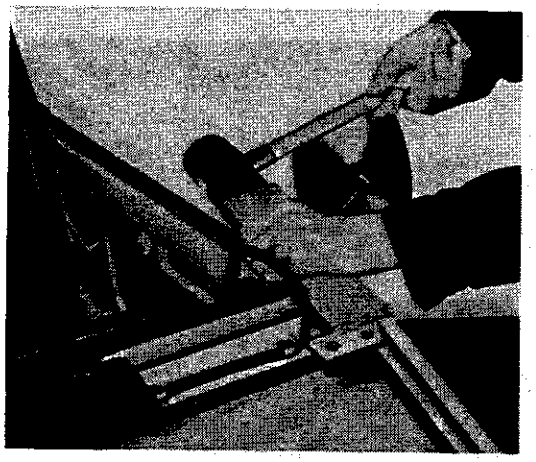


Removing

1 - Remove two Phillips screws on each side of windshield.



2 - Fold windshield down and remove two Phillips screws on each side.

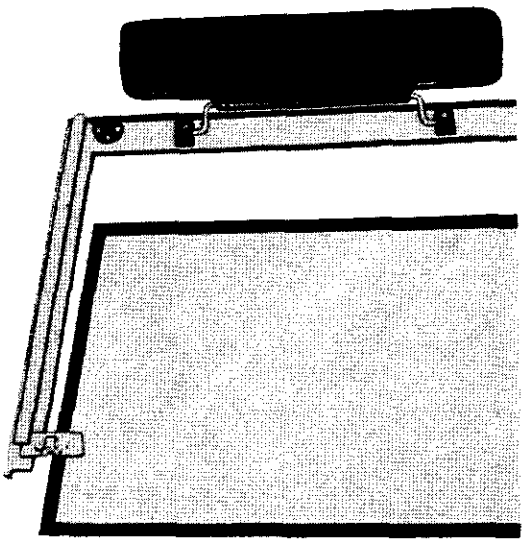


3 - Knock upper part of windshield frame off carefully with a rubber hammer and a block of wood.

Note

This operation should be performed by two mechanics. The front hood should be covered to prevent damage.

4 - Pull glass out of frame complete with rubber seal.



Installing

Note

When installing the glass, ensure that the makers and VW signs are at the upper left corner.

1 - Check seal and replace if necessary.

Coat the seal with talcum powder or glycerine to make it easier to install.

2 - Push glass and seal into frame upper part.

3 - Place upper part of frame in lower part and insert screws.

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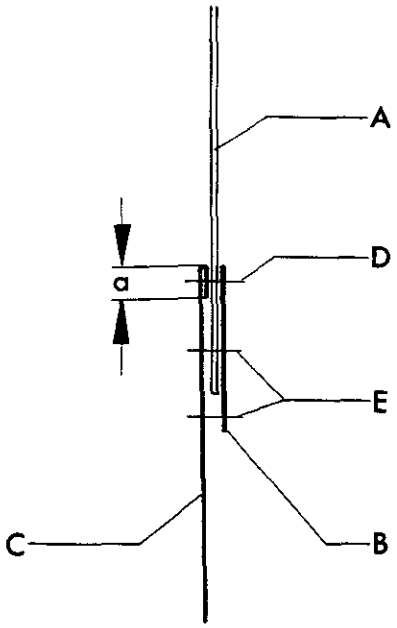


A - Rear window
B - Surround
C - Top material
D - Stitched seam
E - High-frequency welding

a = 8 mm ($^5/_{16}$ in.)

Repair instructions

1 - Take top cover off vehicle (see A 13.3/1).

2 - Cut the stitches of the seam around the window with a sharp knife. Take care not to cut the top material when doing this. Then pull the stitches out.

3 - Part the high-frequency welding between top material and rear window surround carefully with a plastic wedge and take out remaining pieces of Polyglas.

4 - Coat area where window makes contact with acetone adhesive and let it dry.

5 - Fold edge of window opening in about 8 mm ($^5/_{16}$ in.) all around.

6 - Insert window, position it and secure the folded edge with pins.

7 - Sew rear window and surround to the top with nylon thread.

8 - Seal the stitched seam in the surround.

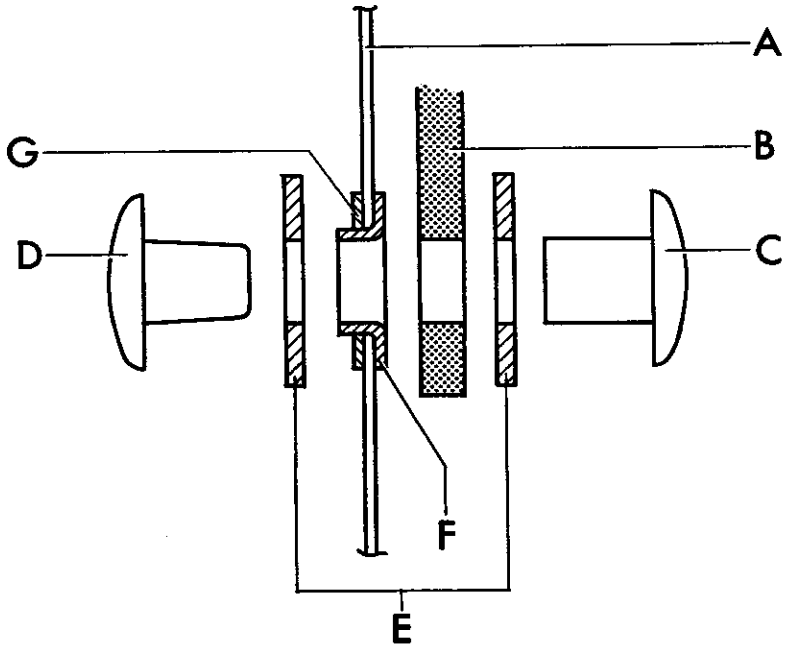
9 - Install top on vehicle.

Repair instructions

The parts for the front detachable windows are available under the following part numbers.

181 837 821 Fastener, upper for left window and lower for right window (see Parts List for colors).
181 837 822 Fastener, lower for left window and upper for right window (see Parts List for colors).
181 837 825 Rivet with window and eyelet.

Where damaged windows can be repaired, use these parts.



A - Vinyl (PVC) window
B - Fastener
C - Rivet, outer part
D - Rivet, inner part
E - Washer
F - Eyelet
G - Washer

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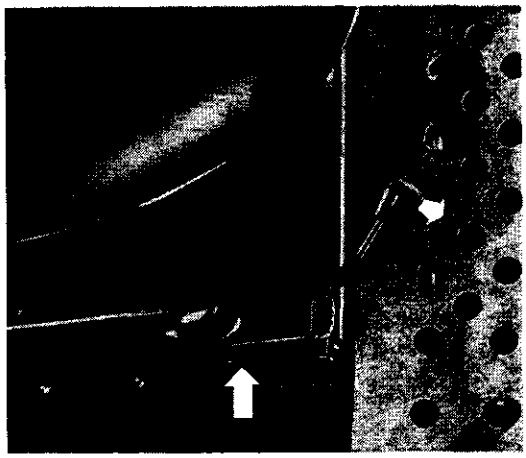
Removing and installing front seat

Lift seat retaining lever and push seat forward until the spring on the left side of the seat frame can be unhooked. Then release leaf spring (arrow) and push seat forward off the runners.



Note

When interchanging the front seats, remove the adjusting knobs and change them over to the other side. The adjusting knob with the lever must be on the outside.

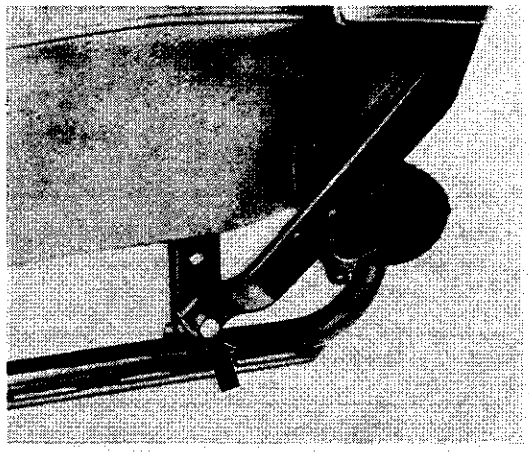
Before installing the seats, clean the runners, remove any burrs on runners and lightly grease them again.

Removing and installing front seat backrest

Removing

1 - Remove cap nut on each side.

2 - Pull the seat frame off the studs and take backrest off.



Installing

1 - Press frame ends apart and install them on the studs.

2 - Attach nuts and tighten them.

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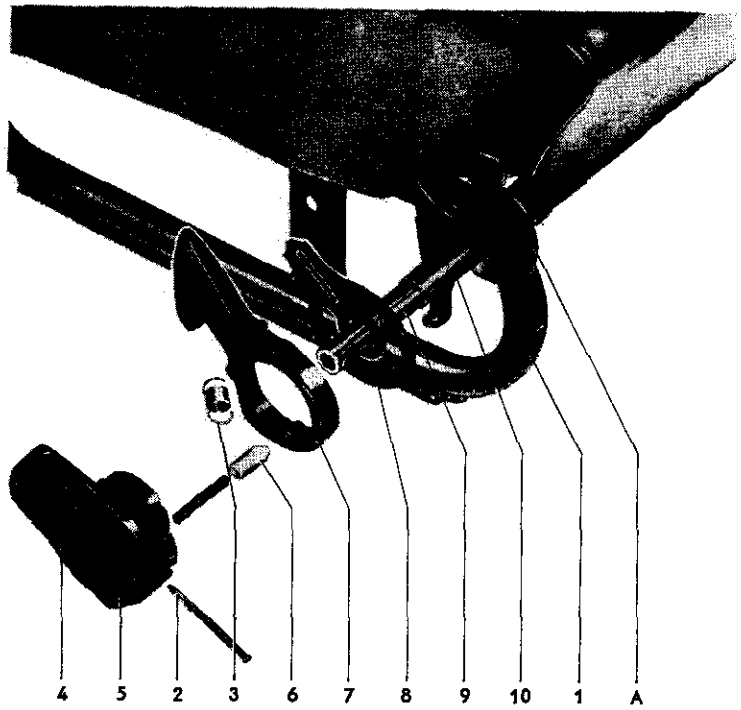


No.	Description	Qty.	Note when removing	Note when installing	Special instructions see
1	Seat frame	1			
2	Threaded nail	2			
3	Spring for lock	2		check tension, replace spring if necessary	
4	Adjusting knob, outer, with lever (inner, without lever)*)	1 (1)			
5	Spring for pin	2		check tension, replace spring if necessary	
6	Pin	2		check, replace if necessary	
7	Backrest lock hook outer (Backrest lock hook inner)*)	1 (1)			
8	Hook operating plate	2		grease	
9	Connecting tube for adjusters	1		grease	
10	Connecting tube for locking hooks	1		grease	
A	Stop washer for pin	2			

*) Parts shown in brackets are different.

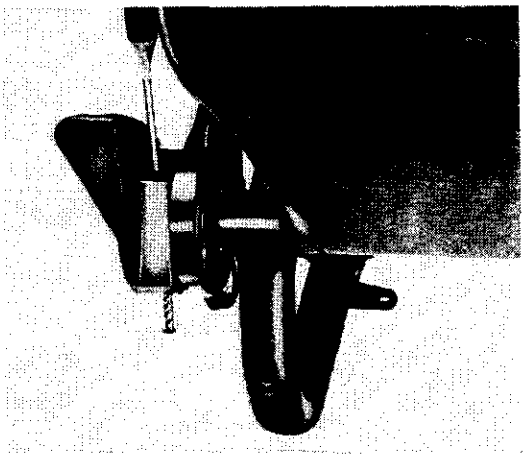
Removing

1 - Knock the threaded nail out of the outer adjuster with a punch and take adjuster off connecting tube.

2 - Pull tube out complete with adjuster on opposite side.

3 - Take hook operating plates off connecting tube.

4 - Pull locking hook connecting tube out.



Installing

Before installing, lightly coat all moving parts with universal grease.

1 - Insert locking hook connecting tube into seat frame tube.

2 - Place operating plates on the connecting tube correctly aligned.

3 - Insert adjuster connecting tube into operating plate connecting tube complete with adjuster and locking hook for one side.

Caution

Make sure that the lug on the hook engages the operating plate. Do not forget the pin and spring.

4 - Install hook and adjuster on the other end of tube. Make sure that the lug on the hook engages the operating plate.

5 - Align second adjuster with first and secure it to the connecting tube with the threaded nail.

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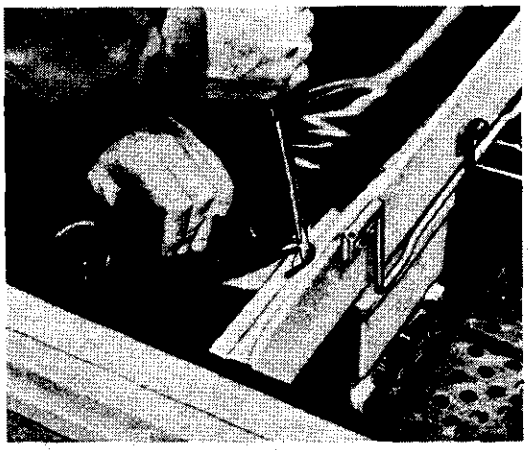
Removing and installing rear seat

Removing

Unhook the springs (in the cushion) from the retaining tabs on both sides.



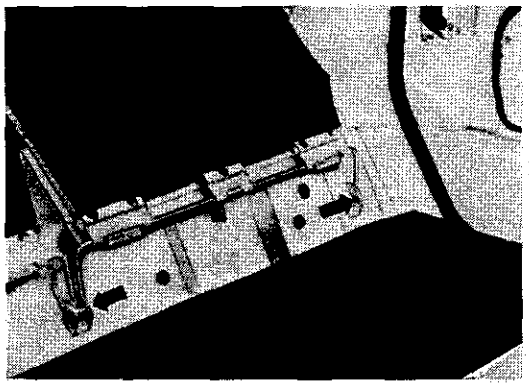
Installing

When installing the seat, hook springs at rear first and then at the front.

Removing and installing rear seat backrest

Removing

Remove screws and washers from backrest brackets.



Installing

1 - Check the brackets and oil lightly.

2 - Secure with the screws.

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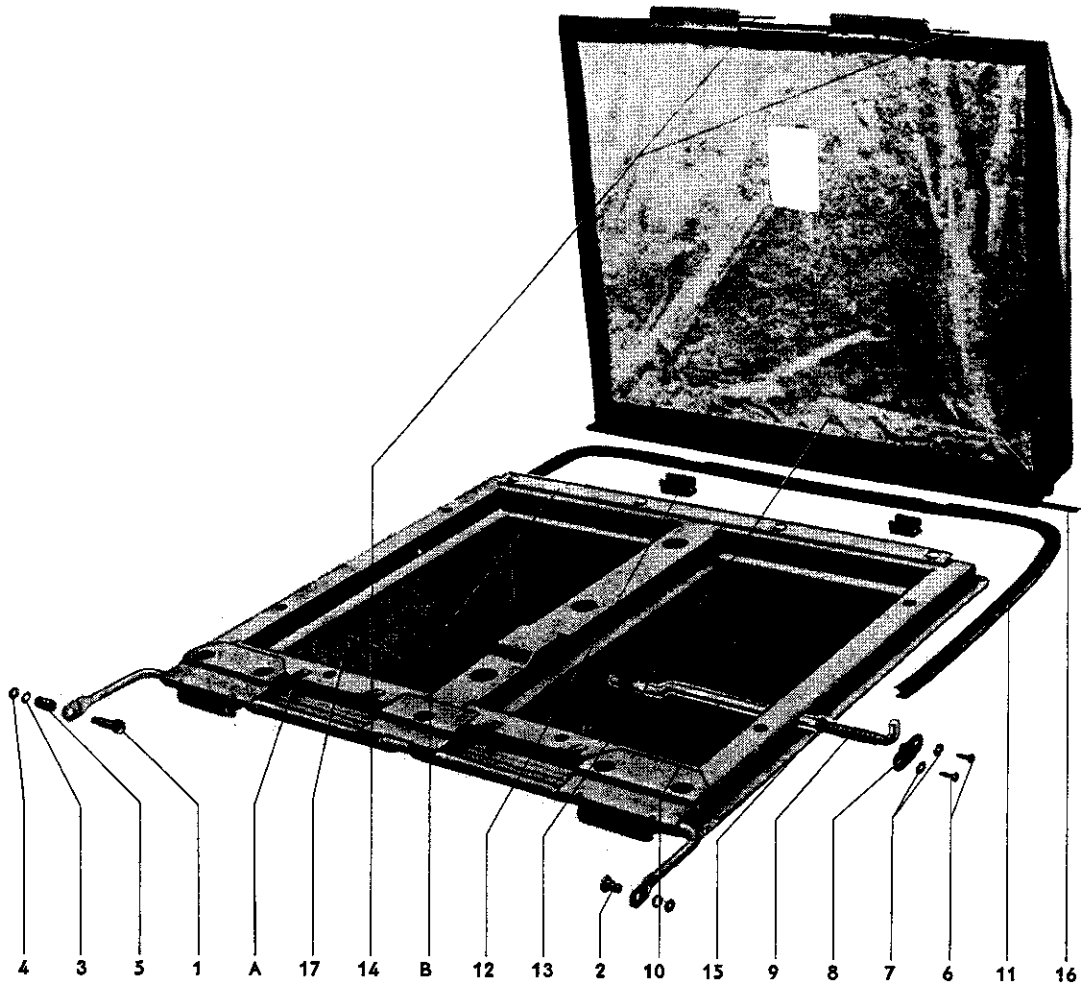


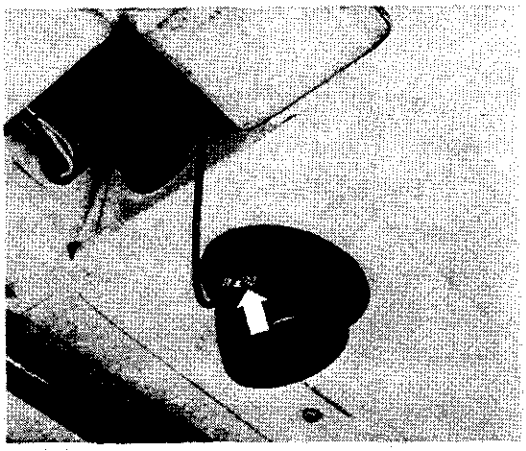
No.	Description	Qty.	Note when disassembling	Note when assembling	Special instructions see
1	Threaded pin	1		check, replace if necessary	
2	Threaded pin	1		check, replace if necessary	
3	Washer	2		check, replace if necessary	
4	Nut	2		check, replace if necessary	
5	Bushing	1			
6	Phillips screw	2		check, replace if necessary	
7	Washer	2		check, replace if necessary	
8	Plate	1			
9	Spring	1		check, replace if necessary	
10	Locking bar	1			
11	Protective strip	1			
12	Rubber for clip	2		check, replace if necessary	
13	Backrest padding	1			
14	Retaining rod	2			
15	Washer	1		check, replace if necessary	
16	Cardboard strip	1		check, replace if necessary	
17	Rear panel	1			
A	Clip	4	bend up	bend down	
B	Retaining strip	1	bend up	press together	

Removing

1 - Remove Phillips screw.
(Retaining nut falls off.)

2 - Remove footwell outlet.

3 - Detach Bowden cable on heater flap.



Installing

1 - Install outlet.

2 - Adjust regulating lever.

3 - Close heater flaps. Pull regulating lever to "closed" position also, and tighten Phillips screw of Bowden cable clamp.

4 - Check operation of outlet.

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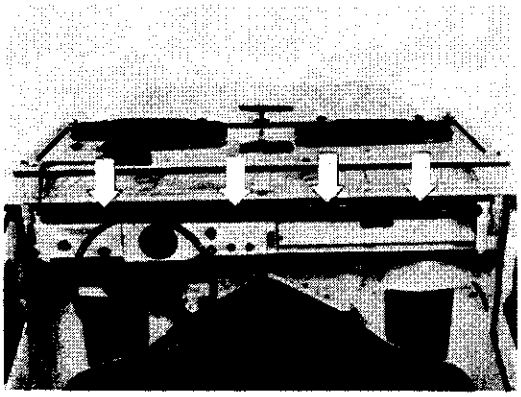

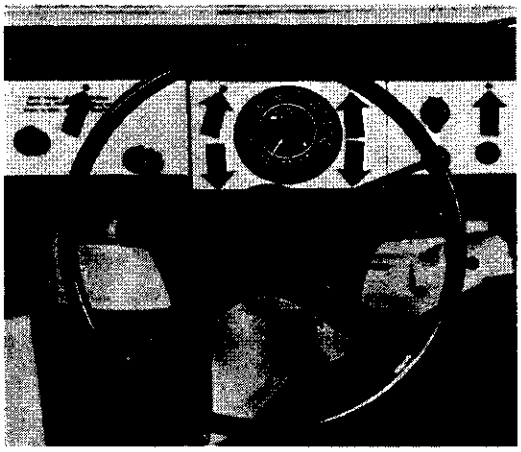

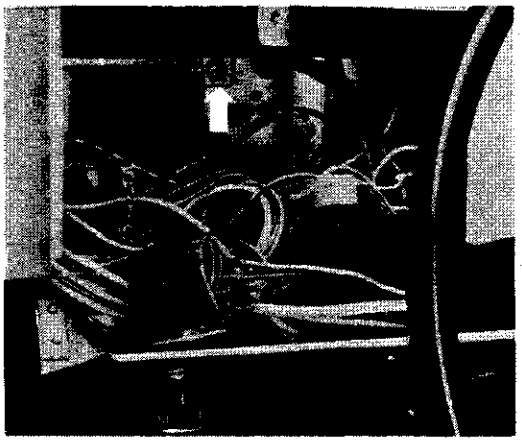

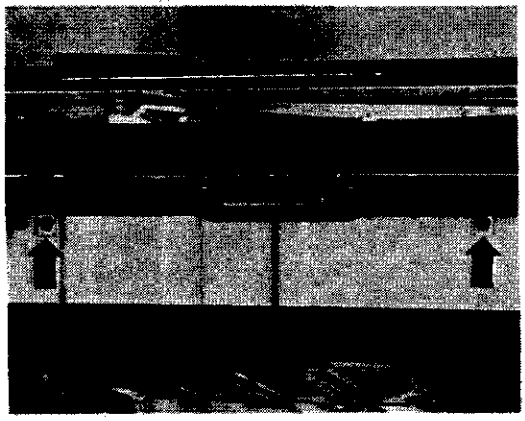

Removing

1 - Fold windshield forward.

2 - Remove four Phillips screws (arrows) from the upper edge of the instrument panel.

Caution

Before performing further work on the instrument panel and particularly on the electrical components, disconnect the battery ground strap.

3 - Remove screws in instrument panel cluster (arrows).

4 - Disconnect speedometer cable and remove steering column tube bolts under the luggage pan.

5 - Parts of the electrical system which prevent access to the left defroster vent should be disconnected or removed.

6 - Remove three Phillips screws in the retaining bracket.

a - One screw (arrow) behind the left cluster.

b - Two screws (arrows) in glove compartment.

7 - Pull heating air elbow off the heater connecting pipe and the left defroster vent.

8 - Pull right defroster vent off the left vent and take it out through the parcel shelf.

9 - Take left vent out to the left carefully while pressing the steering wheel down slightly.

Installing

1 - Install left defroster vent in the instrument panel.

2 - Slide right vent on the left vent.

3 - Install the four Phillips screws at the upper edge of the instrument panel.

4 - Install the Phillips screws with washers in the retaining bracket.

Note

When tightening the screws make sure that the openings of the defroster vents are lined up with the slots in the instrument panel.

5 - Install electrical components and connect speedometer cable.

6 - Install instrument panel clusters.

7 - Connect battery ground strap and check operation of electrical system.

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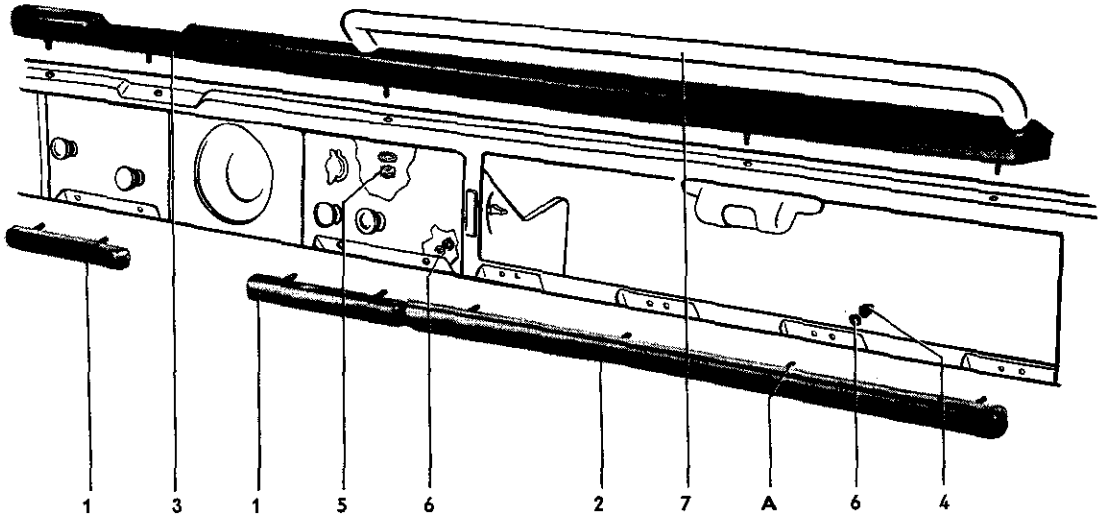

No.	Description	Qty.	Note when removing	Note when installing	Special instructions see
1	Pad	2			
2	Pad	1			
3	Pad	1			
4	Cap nut	4			
5	Nut	9			
6	Washer	13			
7	Grab handle	1			
A	Studs	13		recut threads if necessary	

Removing

1 - Fold windshield forward.

2 - Remove screws holding instrument panel clusters and swing down.

3 - Remove nuts from pad studs.
(Do not remove nuts of grab handle.)

Installing

1 - Check studs in pads.

2 - Install pads. Make sure that they are parallel to each other.
(Do not forget the washers.)

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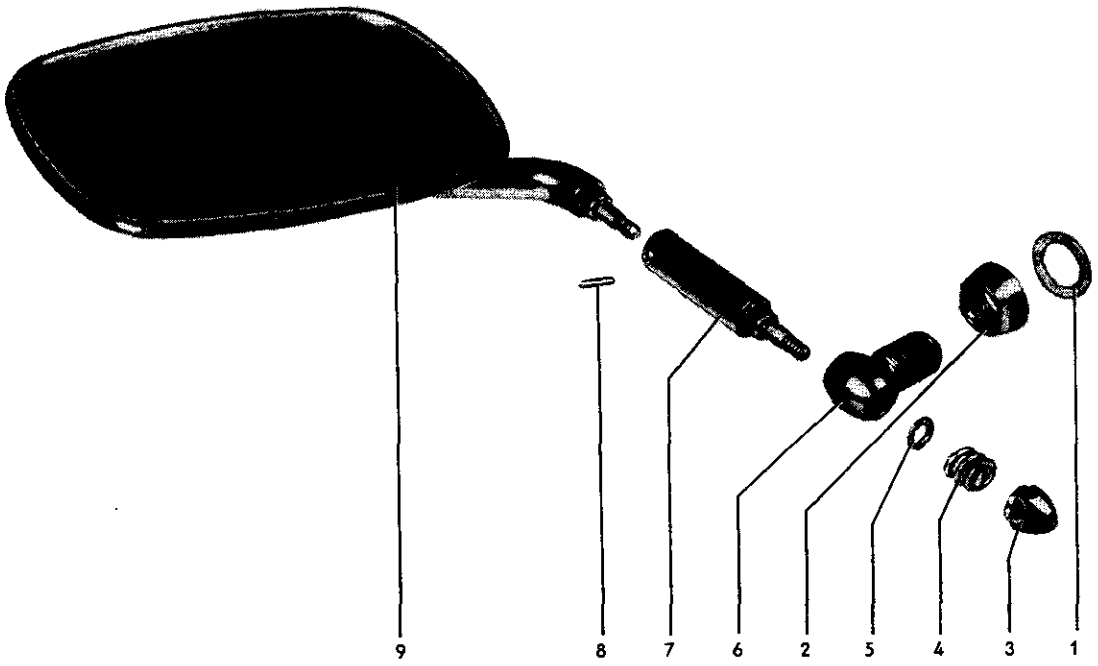


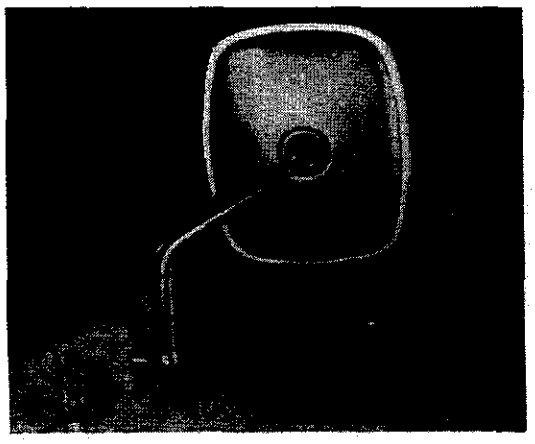
No.	Description	Qty.	Note when removing	Note when installing	Special instructions see
1	Plastic ring	1		check, replace if necessary	
2	Union nut	1			
3	Cap nut	1			
4	Spring	1		clean, grease lightly	
5	Special washer	1			
6	Mirror socket	1		clean, grease taper and thread lightly	
7	Adaptor	1		clean, grease taper lightly	
8	Pin	1			
9	Mirror	1		clean taper and thread, grease lightly	

To remove the mirror, screw the mirror socket out of the door panel.

Before installing mirror, check that the two joints move freely.

Note

Do not forget the plastic ring when installing the mirror.



Description of top

The top frame is made up of two lateral frames joined together with two transverse bows. The complete frame is attached to the rear side panels at the main hinges.

The top cover is made of durable, weather resistant vinyl (PVC) material.

At the front the cover is attached to the header with hollow rivets and at the rear it is secured by eyelets in the cover which fit over loops on the body and are held by small straps sewn to the top cover.

When down, the top can be taken off the body quickly after detaching the cover at the rear and pushing out the pins in the main hinges.

When open, the top cover should always be secured with the two end covers supplied with the vehicles. This will prevent the cover from tearing due to flapping when the vehicle is moving and stop friction marks which spoil the appearance of the cover.

Care of the top cover

The special vinyl (PVC) top cover does not require any particular care. It is however important to clean the top promptly and regularly.

After driving for a long time on dusty roads, the top should be wiped clean before being lowered otherwise the sharp dust particles will damage the surface of the vinyl (PVC) material and cause friction marks.

Lubricate the hinges if necessary.

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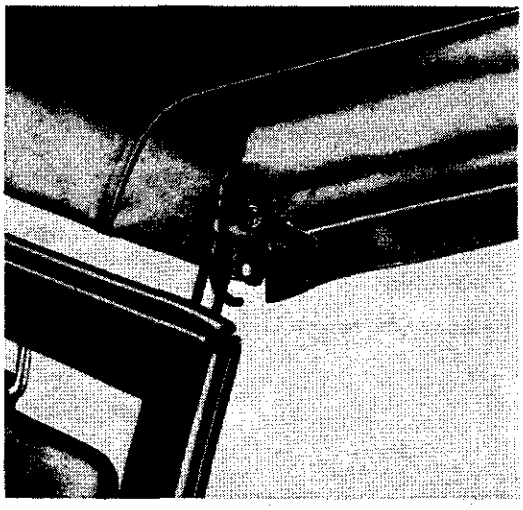
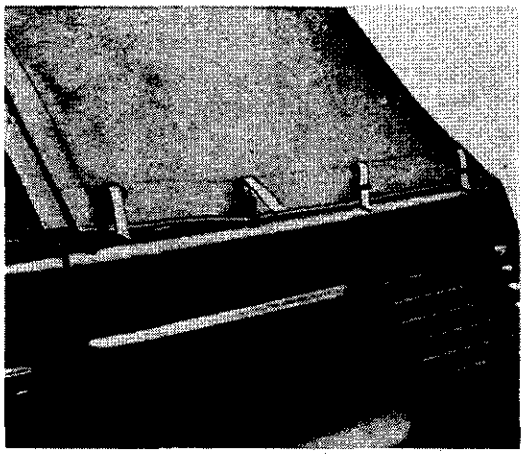


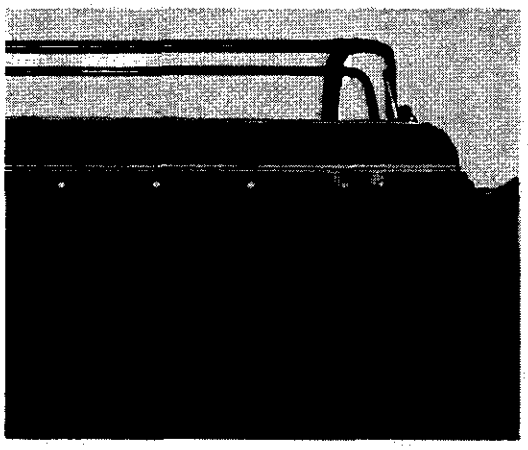
Removing

1 - Remove two chrome plated Phillips screws at the sides of the header.



2 - Detach top cover at the rear by pulling out the straps.

3 - Pull top cover forward over the frame.



4 - Grind off the rivet heads in the header.

5 - Take off top cover complete with inner plate.

6 - Take outer plate off the header with the remaining parts of the rivets.

Installing

Before installing the top cover, it is advisable to check the condition of the connecting straps. If they are damaged they should be replaced.

At the same time the paint on the frame should be examined, particularly on the header. The frame should be touched up with synthetic resin paint. The joints of the frame should be oiled lightly with SAE 30 oil after cleaning off all dirt and dust.

1 - Attach top cover at the rear, pull it forward firmly and secure it temporarily with clamps.

2 - Rivet the top cover to the header together with the inner and outer plates using a few hollow rivets.

Note

Use hollow rivet N 13 528 4 (head) and N 13 506 4 (rivet).

3 - Close the top and check that the top cover is uniformly tensioned and free of creases.

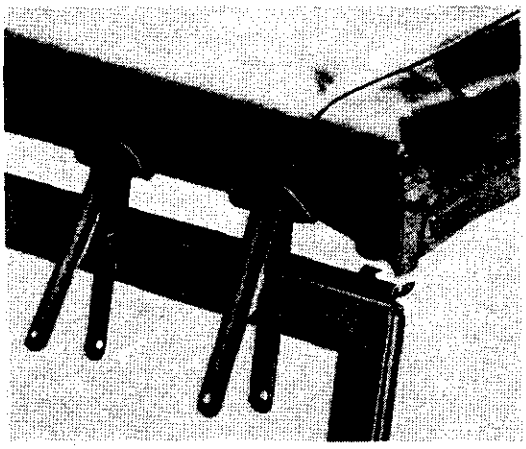
If necessary the location of top cover on the header must be rectified.

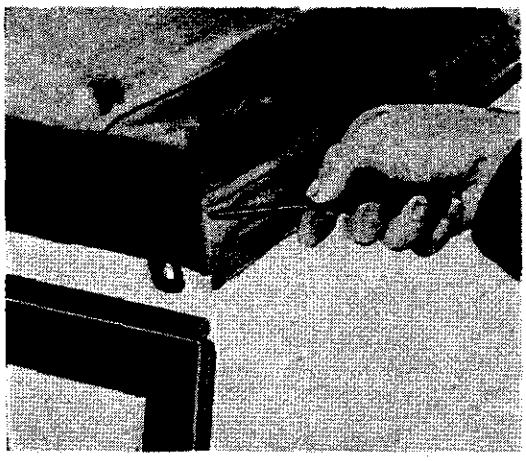
4 - Insert remainder of rivets securing top to header. Cut surplus material off.

Caution

Do not cut into the parts of the top cover which can be seen from outside. The cover cannot be glued together and would have to be discarded.

5 - Make holes in the side of the top cover at the header as shown and install two chrome-plated screws.





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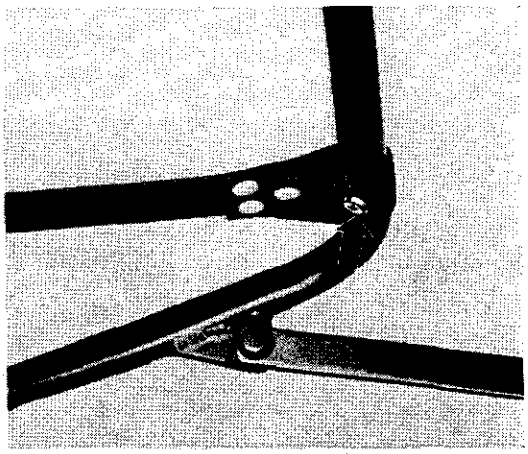
The connecting straps are made of cotton reinforced with hemp thread. Straps of synthetic materials can be used as replacements.

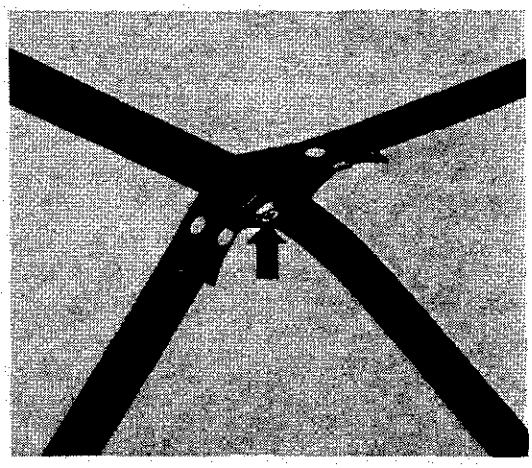
Removing

The straps are detached at the following points by cutting them or by removing Phillips screws:

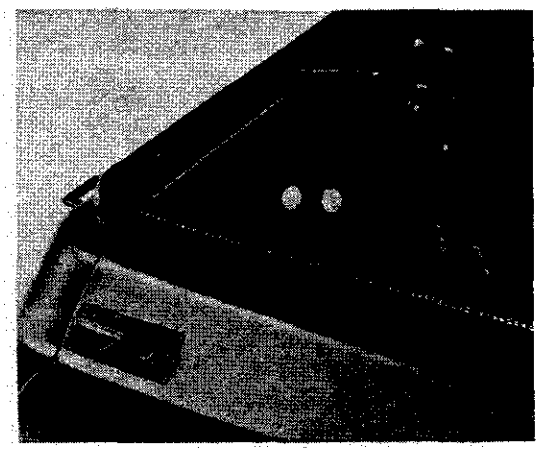
a - remove the Phillips screw (arrow) on each side of the front bow and cut the strap.



b - remove screw (arrow) on each side of the rear bow and cut the strap.



c - cut the straps at the rear of body on each side.



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Installing

Cut the straps and securing strips to size:

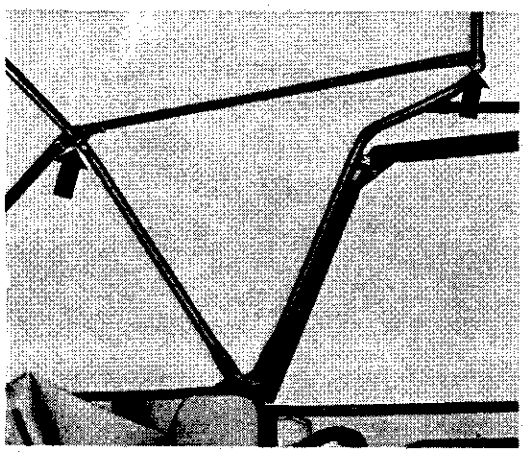
Thickness of material	3 mm	(1/8 in.)
Width of material	35 mm	(1 3/8 in.)
Length of strap	1520 mm	(59 27/32 in.)
Length of securing strips	110 mm	(4 11/32 in.)

If synthetic material is used, the cut ends should be singed to prevent the material from fraying.

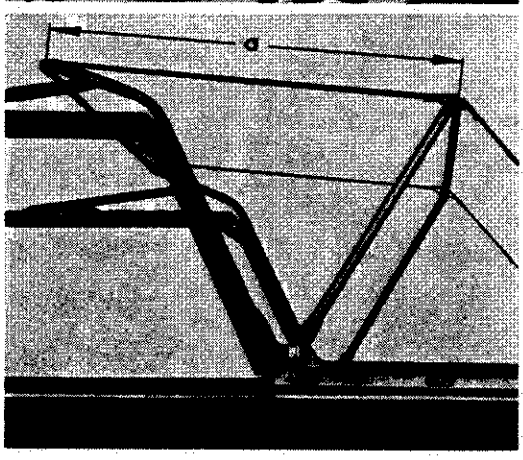
Cotton should be lightly coated with plastic adhesive.

Caution

The connecting straps and securing strips can only be installed properly with the roof closed.

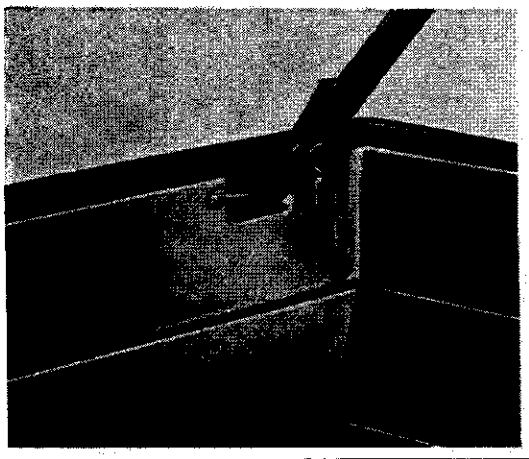


1 - Secure straps on front bow with two rivets — N 13 520 4 (head), N 13 510 4 (rivet) and a Phillips screw each (arrows).



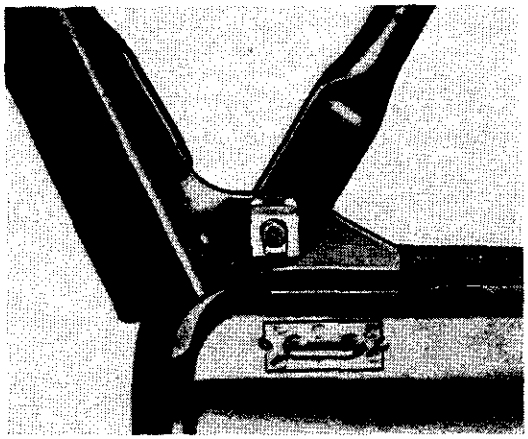
2 - Set the rear bow to the dimension given and secure the strap by riveting the short strip on with four rivets and inserting the Phillips screw.

Dimension a = 695 mm (27 3/8 in.)



3 - Pull strap tightly to the rear and attach it to the loop on the rear panel with two rivets.

The top frame is attached to the body by means of two brackets and the connecting straps.



Removing

1 - Detach top cover from body at rear.

2 - Remove the rivets securing the connecting straps to the body at the rear.

3 - Remove the clips from the pins in the brackets.

4 - Lift top frame off complete.

Installing

1 - Install frame on the pins and secure it with the clips.

2 - Rivet the connecting straps.

3 - Lubricate the frame pivots with SAE 30 oil as required after removing all dust and dirt.

Body dimensions

General instructions:

The specified basic dimensions shown on the following pages for repairing bodies sections, were obtained in a series of measurements made with a caliper gauge.

The general tolerance is ± 2 mm (1/16 in.).

Dimensional checks in the workshop can be carried out with other appropriate measuring instruments.

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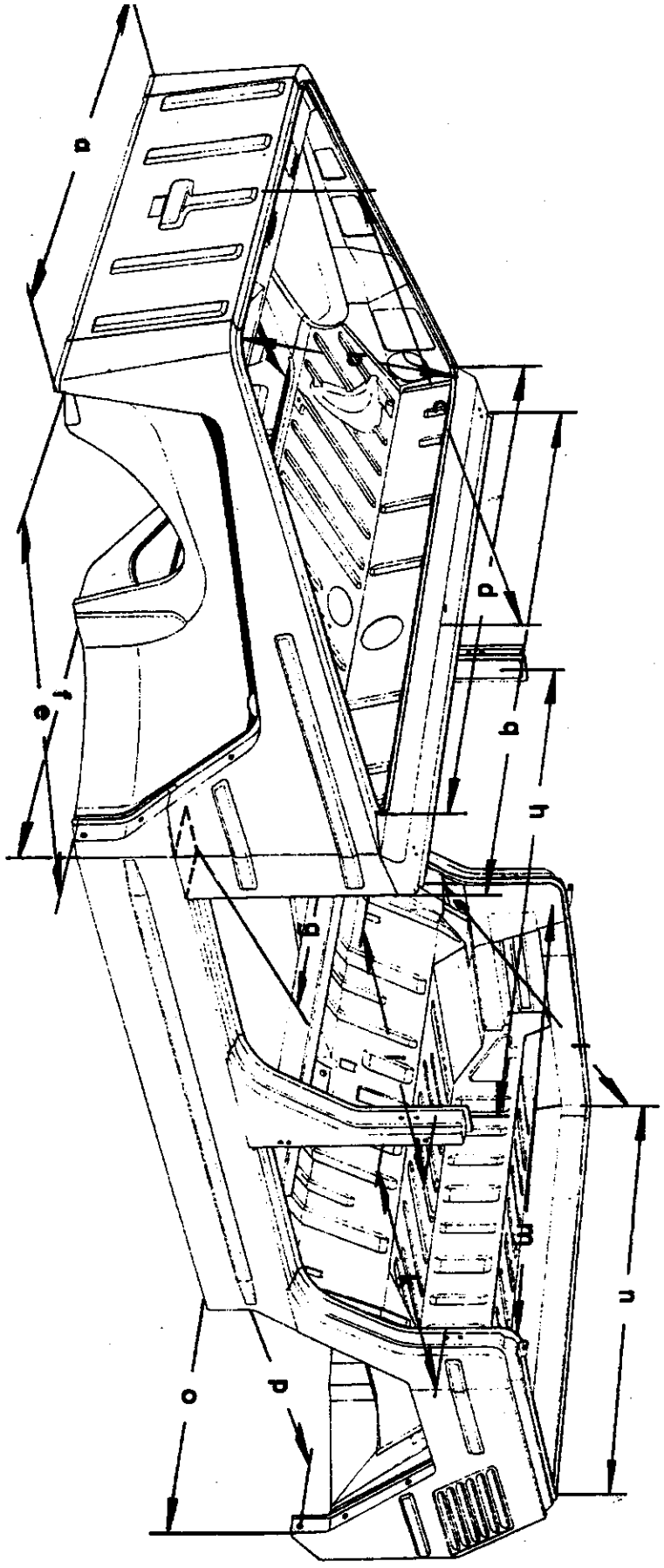
A18.5 Basic Dimensions Type 1, Model 181



Front end

	Dimension	mm (in.)	Remarks	Fig.
a	Between side panels	969 (38⁵/₃₂)	Measured in front of the fender mounting	1
b	Luggage compartment opening, between centers of flange radii	1479 (58¹/₄)	Diagonally	2
c	Between bent edge of cowl to upper edge of front apron	1103 (43³/₈)	Measured direct	3
d	Between the intersecting edges spot welded flange/cowl panel support	1371 (54)	Wide luggage compartment opening	4
e	Between the two lower securing points of the front fender	954 (37⁵/₈)		5
f	Between the side panels	1495 (59)	Measured at the profile bend	6
g	Between the hinge pillars	1349 (53¹/₈)		7

Interior

	Dimension	mm (in.)	Remarks	Fig.
h	Between center pillars	1368 (53²⁷/₃₂)	Measured between inside surfaces	8
i	Between hinge pillar and center pillar	727 (28⁵/₈)	Measured at the outer edge of the flange	9
k	Between the center pillar and rear side panel	727 (28⁵/₈)	Measured at the outer edge of the flange	10
l	Between instrument panel/hinge pillar joint and the corner of the rear shelf	2564 (100³¹/₃₂)	Measured diagonally. Measuring point: Corner 10 mm (³/₈ in.) above the flange	11/12

Rear end

	Dimension	mm (in.)	Remarks	Fig.
m	Between front of rear side panels	1365 (53³/₄)	Between inner surfaces	13
n	Between rear of rear side panels	1248 (49¹/₈)	At spot weldet flanges where radii end	14
o	Between rear of rear side panels	1302 (51¹/₄)	At the lower edge of the side panels — fender mounting point	15
p	Between the lower securing points	981 (38⁵/₈)		16
q	External distance between side panels at end of cowl panel	1495 (59)	Horizontally	17

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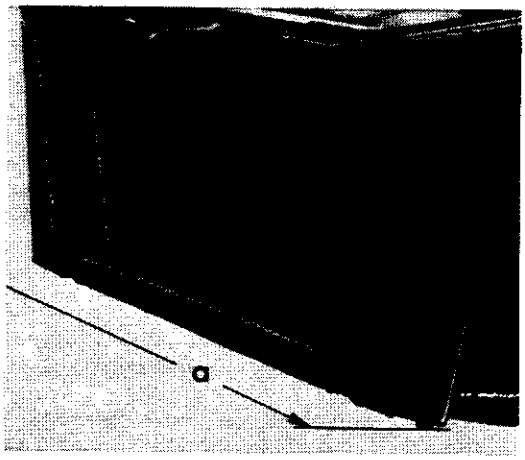

Fig. 1

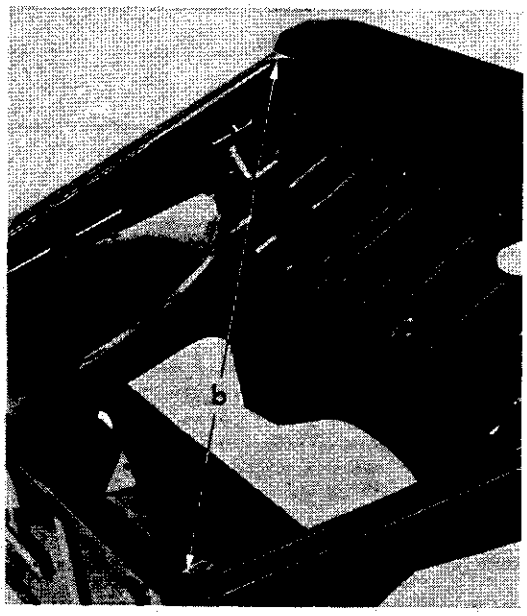

Fig. 2

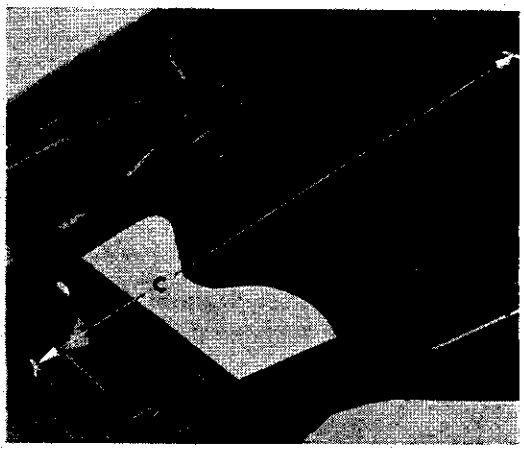

Fig. 3

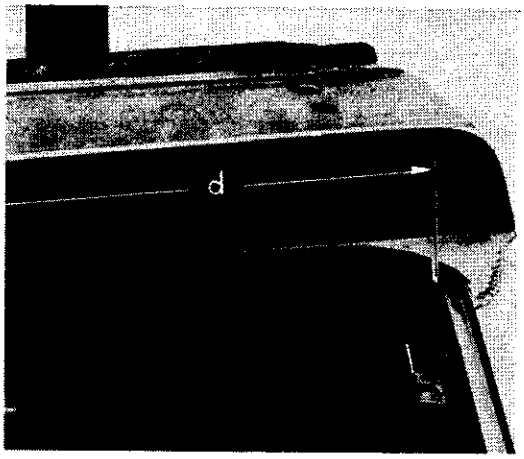

Fig. 4

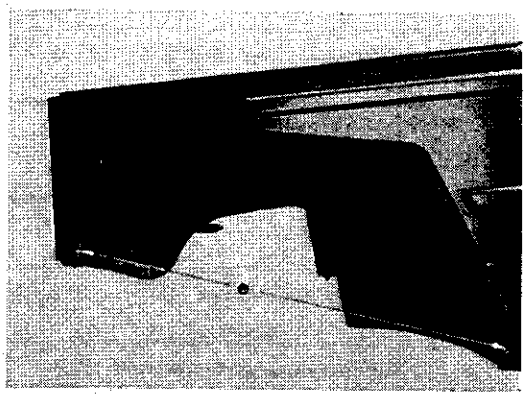

Fig. 5

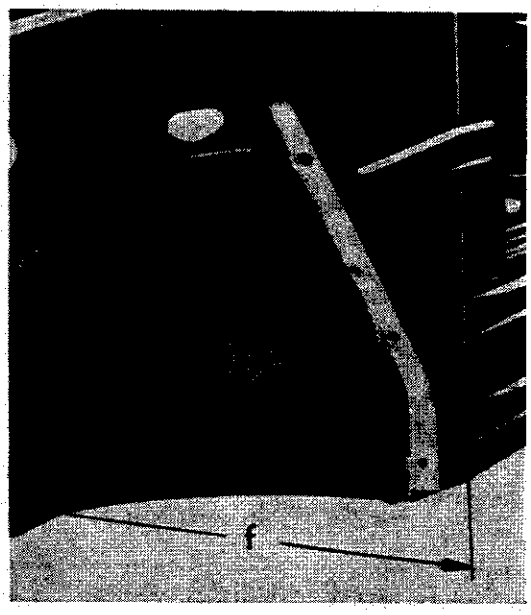

Fig. 6

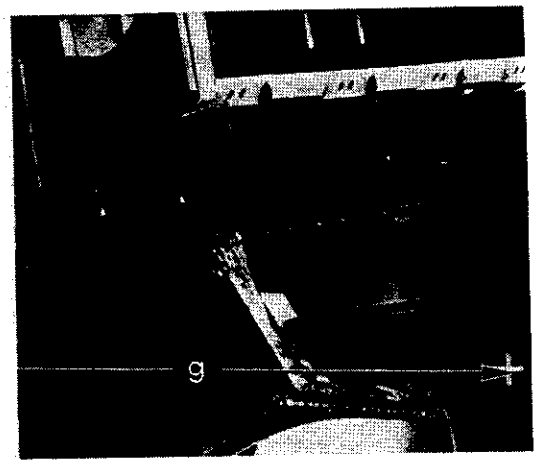

Fig. 7

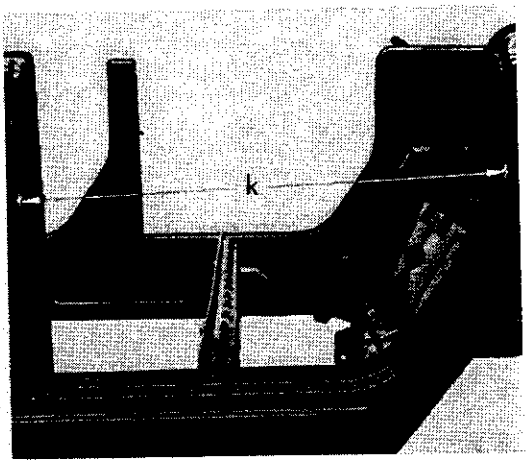

Fig. 10

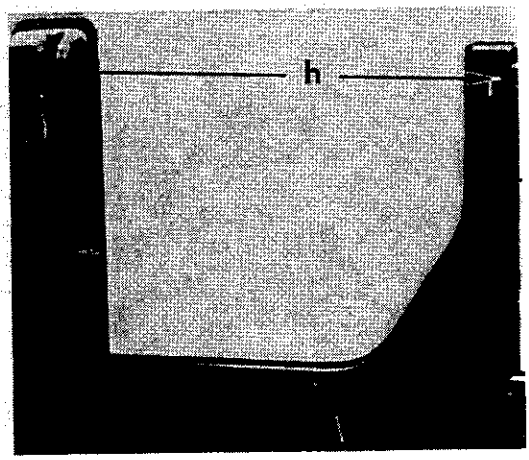

Fig. 8

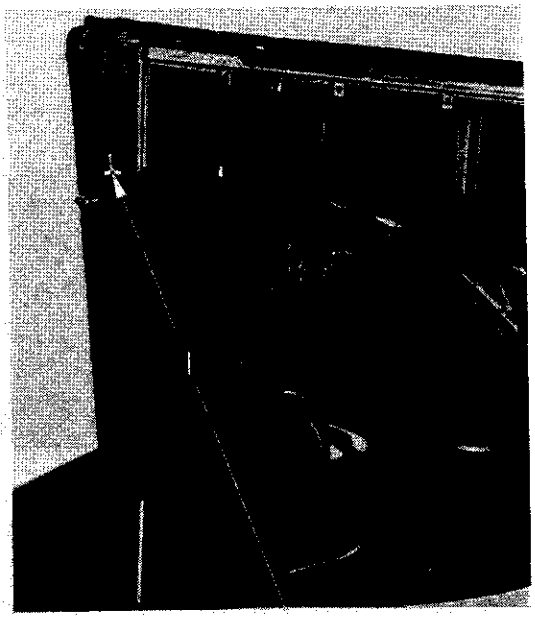

Fig. 11

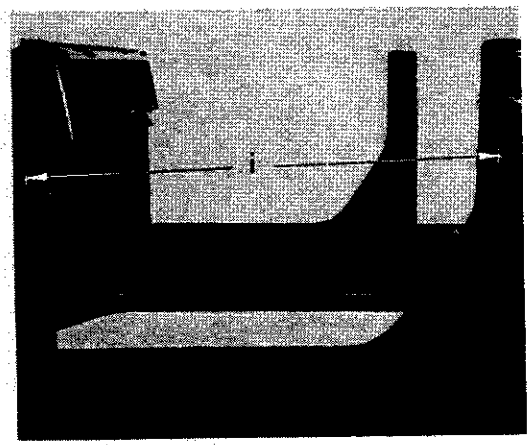

Fig. 9

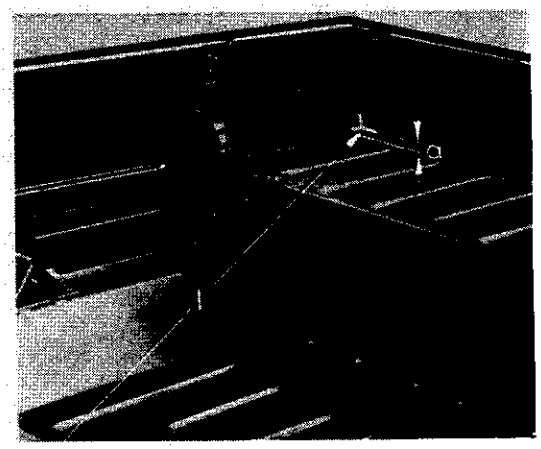

Fig. 12

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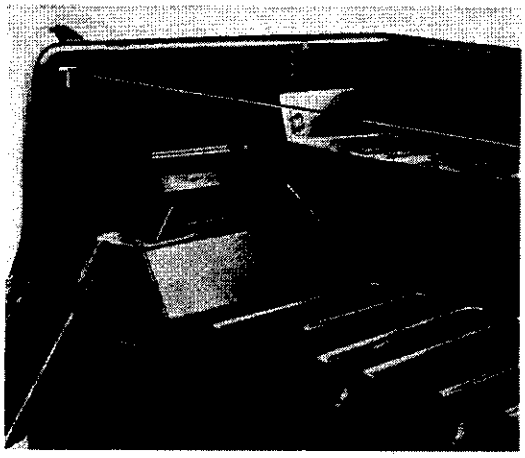


Fig. 13

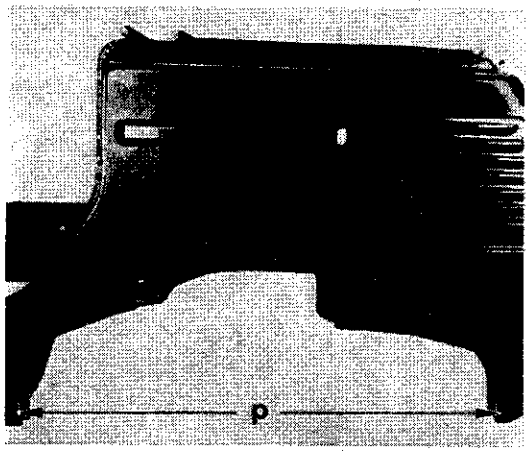


Fig. 16

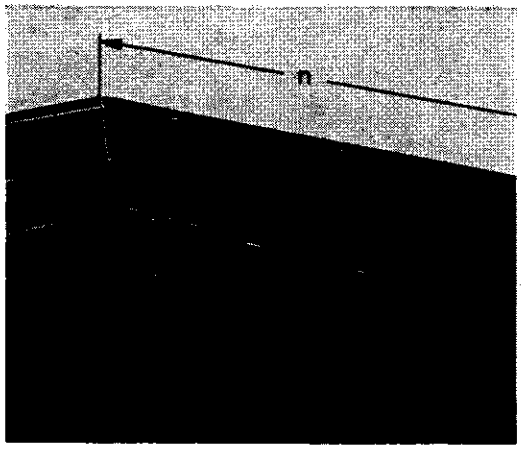


Fig. 14

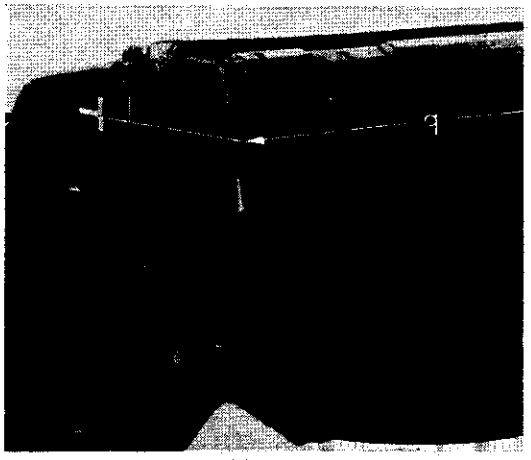


Fig. 17

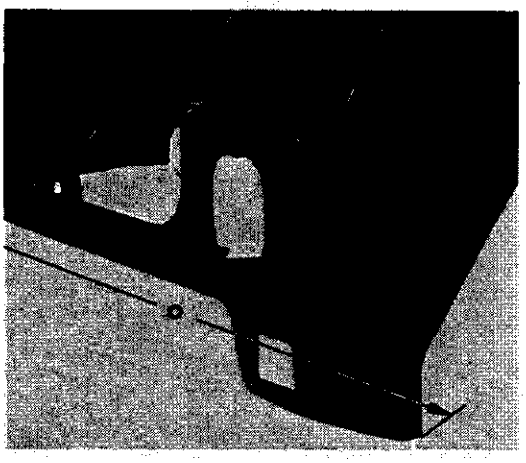


Fig. 15

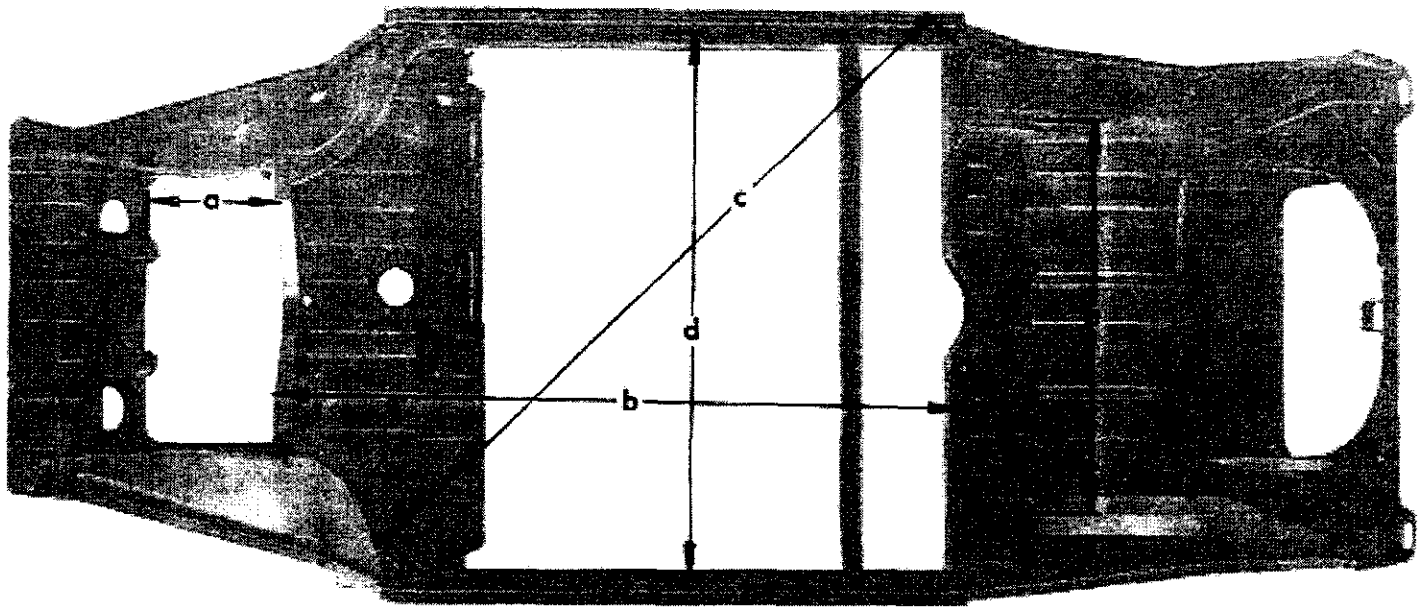
Dimensions of body / frame mounting points

General instructions:

The specified basic dimensions shown for repairing body sections were obtained in a series of measurements made with a caliper gauge.

The general tolerance is ± 2 mm ($^{5}/_{16}$ in.).

Dimensional checks in the workshop can be carried out with other appropriate measuring instruments.



	Dimension	mm (in.)	Remarks
a	Between front axle support and cross panel	350 ($13^{25}/_{32}$)	Measured at inner edge of hole
b	Between cross panel to lower part of luggage compartment floor	1765 ($65^{1}/_{2}$)	Measured from/to outside edge of flange
c	Between mounting points for the floor section to the side members	1908 ($75^{1}/_{16}$)	Diagonally measured between centers of captive nuts
d	Between mounting points for the floor section to the side members	1365 ($53^{3}/_{4}$)	Measured between centers of captive nuts
e	Between the mounting points of the cross tube	1019 ($40^{1}/_{16}$)	Measured between centers of captive nuts

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