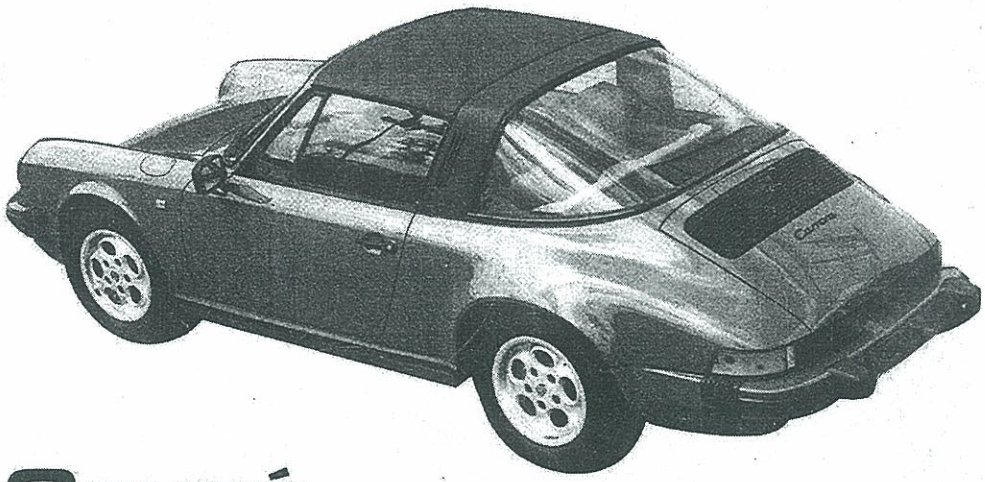
SERVICE

Sealing of 911



Coupé

Targa

Cabriolet

INFORMATION

TECHNIK

Printed in Germany

WKD 493 821

Table of contents

Continuously changing loads on the automobile while driving may result in the mounting position of the doors, lids, collapsible top and Cabriolet top changing.

If such changes are not repaired professionally and in time, squeaks, rattles and wind noises plus drafts and the penetration of water may result.

Regulating and sealing work in practice are frequently one and the same and can be performed only by careful professional attention.

All rubber parts exposed to the weather need care. As a result of folding, special care must be applied at the folding parts and the Targa roof and Cabriolet top.

Test steps:

1.) Are seals damaged or are larger deformations evident?

2.) Are the seals tightly in the fold, bonded at transition points and are they fitted properly?

3.) Has the collapsible top been set properly?
Do the collapsible top locks have sufficient tension?

4.) Do the door frames and door panels have sufficient pretensioning and good contact to the seals?

5.) Are all movable and sliding parts greased, are the sealing foils in the doors carefully bonded and are the gutters unobstructed?

Glue in door seals Coupé and Targa:

Preparation

a.) Remove damaged seals
b.) If required, refinish fold to fit
c.) Remove residual glue with appropriate solvent, e.g. cleaning gasoline
d.) Align door window frame and tighten, make sure space to door fold is correct
e.) Check alignment of doors in the area of front and rear fenders
f.) Retighten door lock screws
g.) At the transition points interior door panel to door window frame, attach markings for the sealing transitions on the front wall and roof column

Note:

Prime new door seal and fold with thinned adhesive.

Bonding:

Coat new door seal with adhesive section by section and bond from the direction of the markings, slightly tensioning seal. Seal lip must be flush with course of the roof, roof column, front wall and door window frame.

Check contact pressure of door and window frame to seal with a paper strip, doing so should make the clamped paper strip tear. Readjust locking wedge if need be (lightly grease lock pin and locking wedge).

Note:

The door should be kept shut for a few hours to give the adhesive a chance to dry and harden and to prevent the seal from twisting.

Door seal for type 911 Coupé and Turbo

Up to and including model 77, seals were lip profiles.

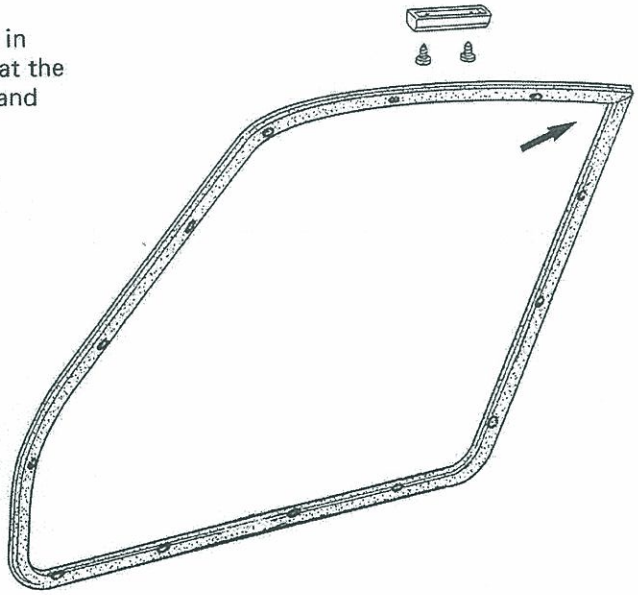
ET no. 911.531.095.00 left

ET no. 911.531.096.00 right

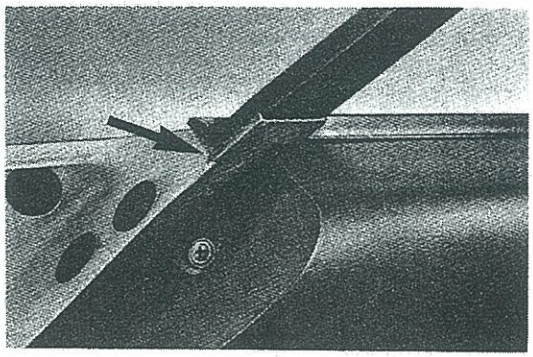
This seal was replaced as of model change '78 by a hollow profile (closed seal) identical on the left and on the right.

ET no. 911.531.095.01 series as of '78

Start bonding this seal at the B column in the upper corner (arrow). Make sure that the vent holes in the rubber remain visible and point to the inside.



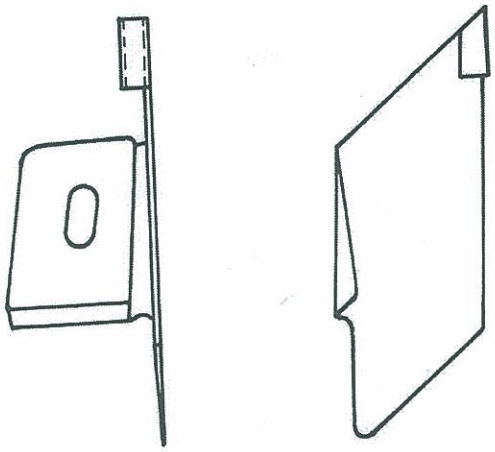
At the transition point interior door panel to door window frame, step bridges will be attached.
To avoid wind noise, put an elastic filler underneath after fitting. The step bridges are bonded using gutter strip cement.
The front transition piece in addition will be attached with a body-bound rivet.



Transition piece front

ET no. 911.531.711.01 left

ET no. 911.531.712.01 right



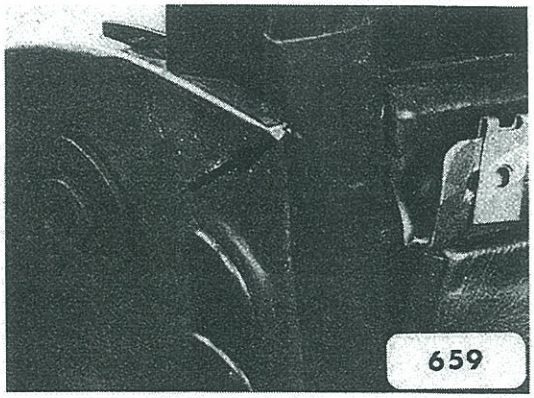
One body-bound rivet for mounting of the front transition piece

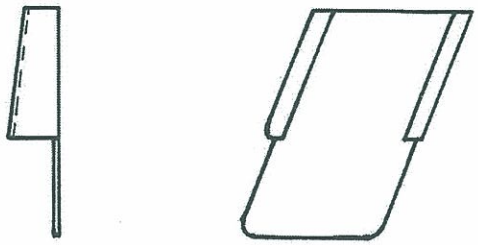
ET no. 999.591.429.40

Transition piece rear

ET no. 911.531.713.01 left

ET no. 911.531.714.01 right



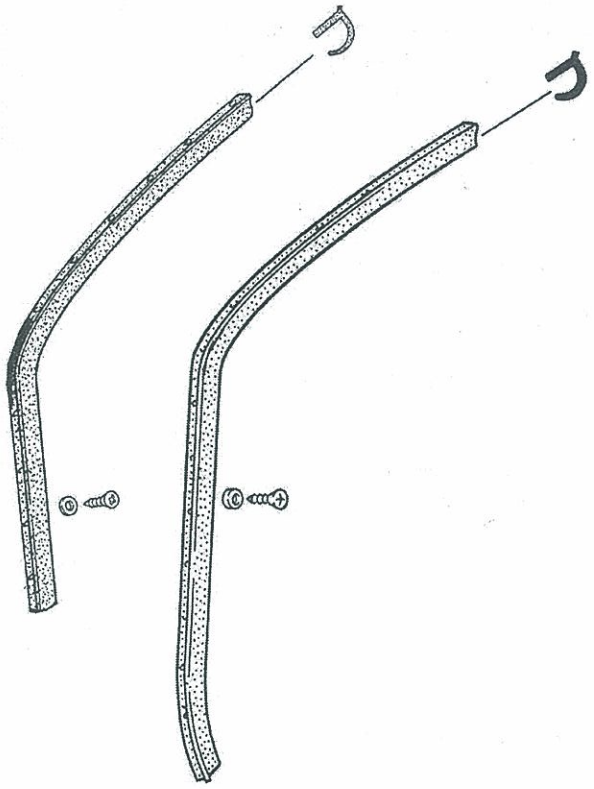


For the 911 Turbo as of model 76 and as of model '77 for all 6 cylinder vehicles, an additional insulation strip is attached to the A column.

Insulation strip up to model '85

ET no. 911.542.403.01 left

ET no. 911.542.404.01 right



Insulation strip as of model '86

This seal is longer and has different holes.

ET no. 911.799.542.01 left

ET no. 911.799.542.20 right

15 screws each

ET no. 900.145.081.00

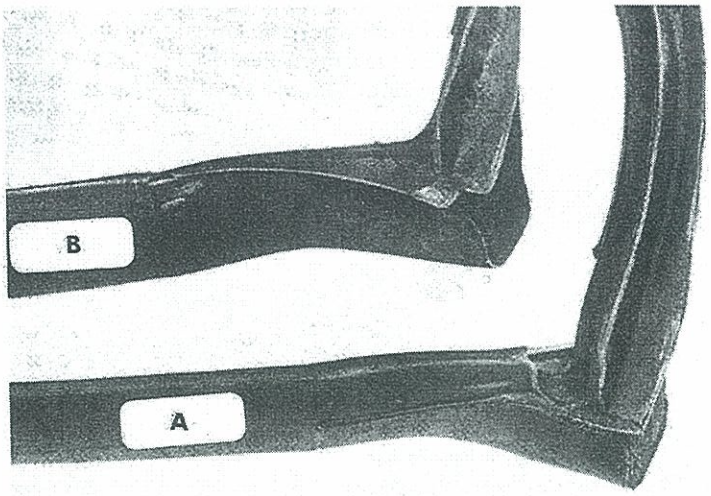
15 hollow disks

ET no. 999.591.009.12

Front wall seal ET no. 911.565.090.47 (replaces .45)

Seal A with index 45 above the door window frame is fitted with a molded gutter.

The new front wall seal B with index 47 at this point was fitted with a continuous lip.



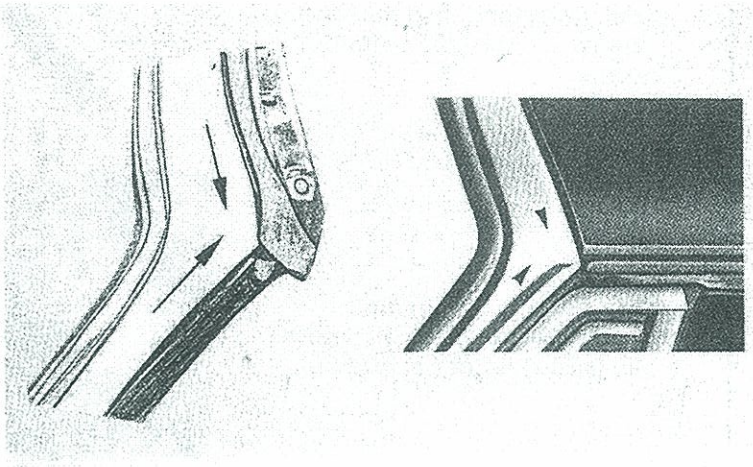
736

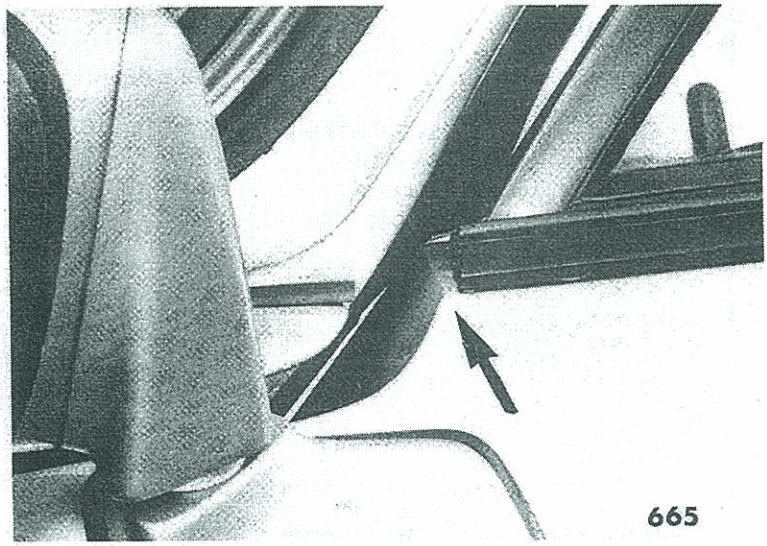
Bonding:

To start, prime only one corner using adhesive and place the seal into the fold. For an accurate positioning of the seal, close the door so that the door frame retains the rubber in the correct position.

Following this, bond the other corner and then the central section.

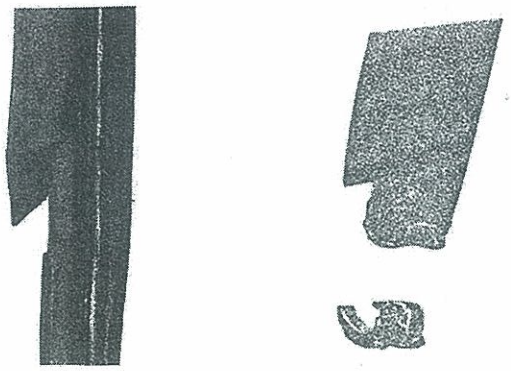
The seal may now be bonded to the A column. In this context, the rubber molded part must be exactly flush with the upper edge of the door.





665

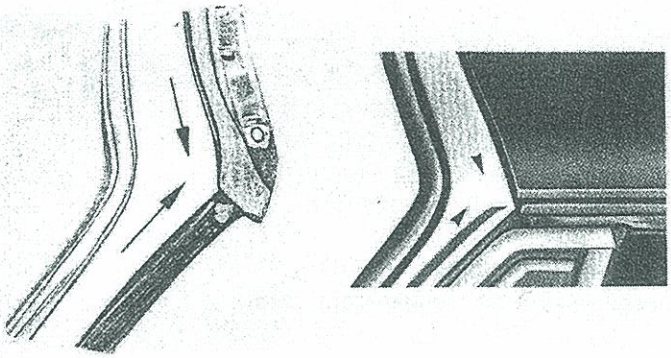
Note: If the seal with Index 45 is replaced by Index 47, both door seals must be replaced at the same time. See transition for door seal old to new.



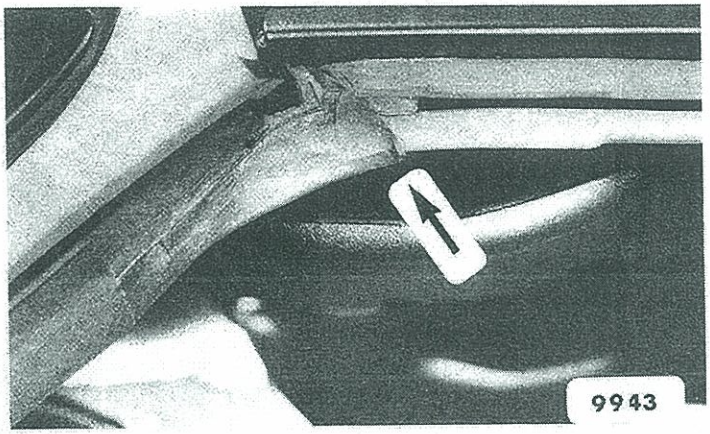
Glueing in:

To start, prime only one corner with adhesive.
For an accurate positioning of the seal, close the door, put on collapsible top and, for the Cabriolet, close the top.

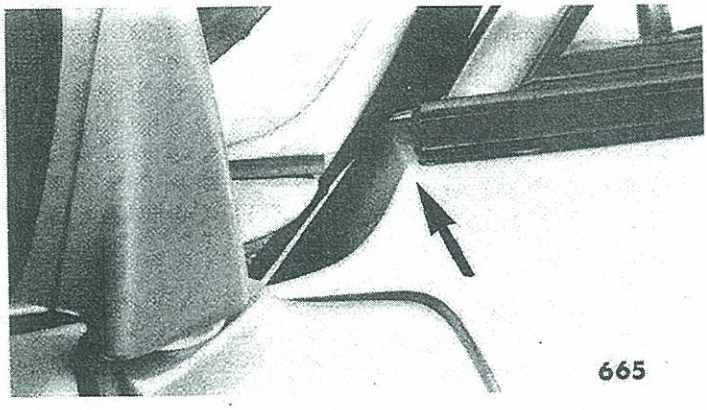
Following this, bond the other corner and then the central part.



Make sure at the point of transition that the small rubber lip (arrow) is not clamped in.



The seal on the A columns may now be bonded. The rubber molded part must be exactly flush with the upper edge of the door.



Front wall seal ET no. 911.565.090.46 as of model '86

This seal is no longer fitted with a molded section at the transition point to the door.
The transition door/door frame is formed by a transition piece.

Transition piece front left

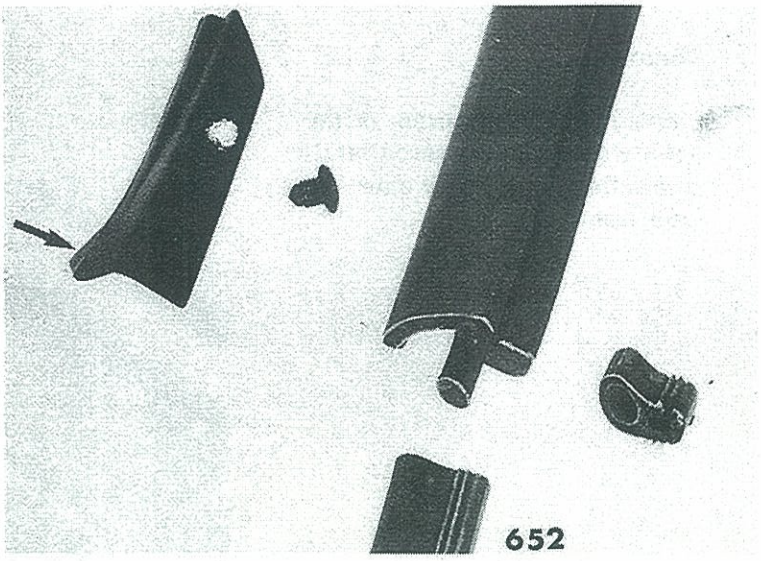
ET no. 911.531.711.40

Transition piece front right

ET no. 911.531.712.40

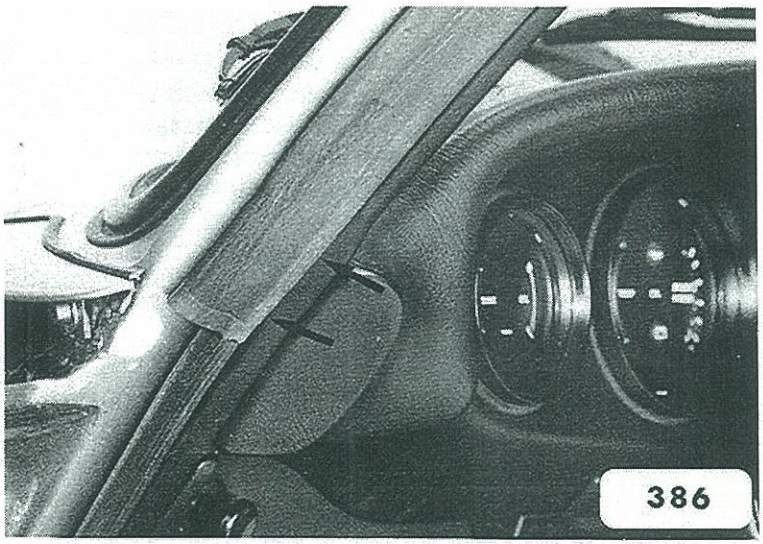
One retention pin each

ET no. 911.799.531.75



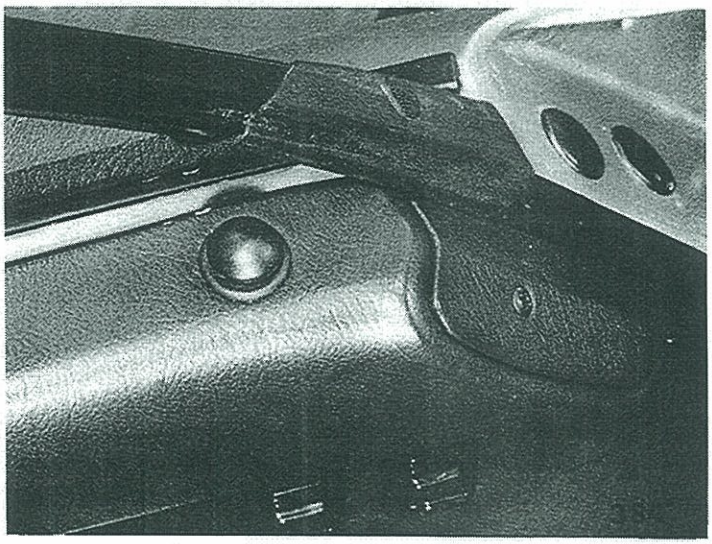
The transition piece had only been bonded initially. It was then attached with an additional sheet metal screw.

ET no. 900.145.081.00
dia. 2.5 mm



In the meantime, this additional screw was cancelled again. It was replaced by a retention pin, dia. 7.2 mm.

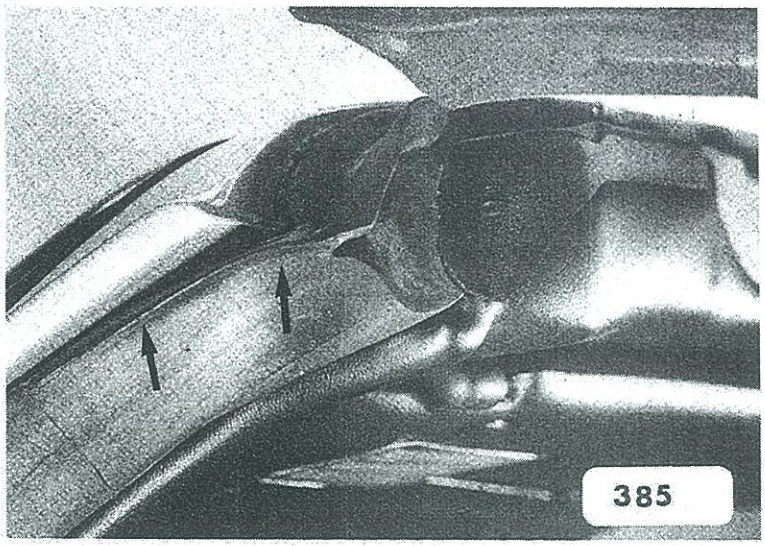
The transition piece must be fitted, lined and attached individually for each vehicle.



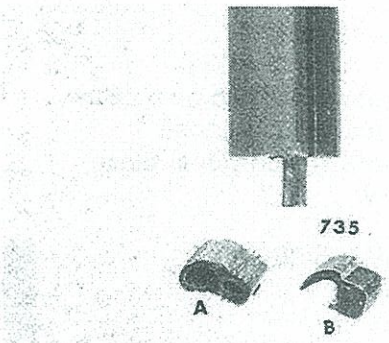
Front wall seal ET no. 911.565.090.46 as of model '86

Bonding:

Start bonding at a corner of the front wall and make sure that the additional lip perfectly covers the door frame.



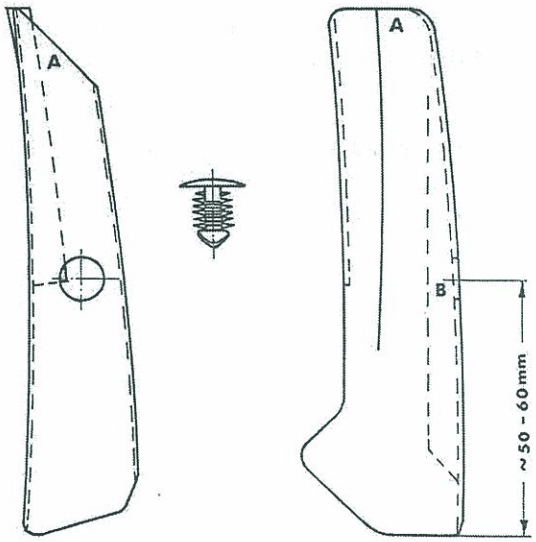
Note: This seal can be retrofitted on Targa and Cabriolet vehicles. The transition to the door seal, regardless if it is a lip or hollow profile, has no significance.



Fit transition piece:

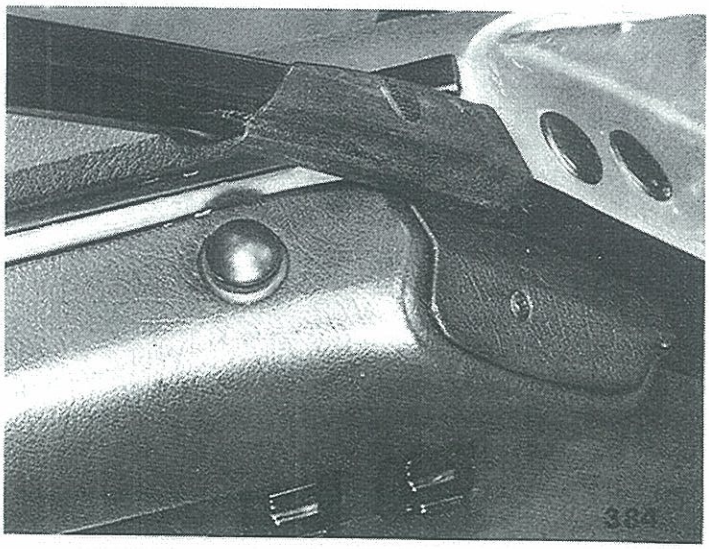
The proper fitting and attaching of the transition piece is decisive for proper functioning.

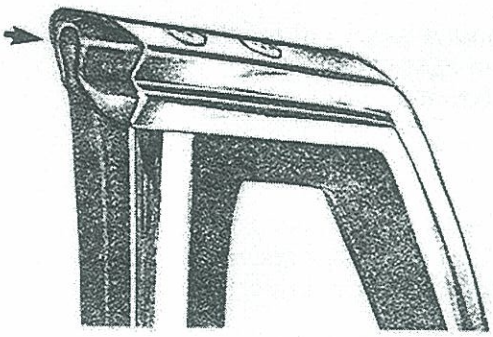
Grind the inside of the transition piece in the A area to obtain a smooth transition. Drill a hole, diameter 7.2 mm in area B off center.
The head of the retention pin should be flush with the outside edge and should not protrude. To this end, place transition piece to door, transfer bore to door frame, center and drill, dia. 6.5 mm.

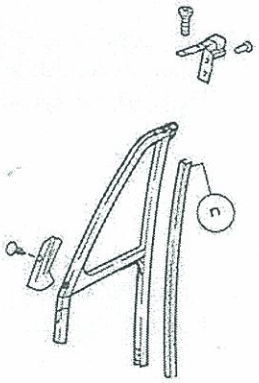


Mount transition piece:

Completely fill transition section or hollow space with elastic filler, press on transition piece, remove it again and check filling of hollow space for complete filling. Following this, bond transition piece with gutter strip cement and carefully knock in retention pin to stop (Caution: risk of fracture).





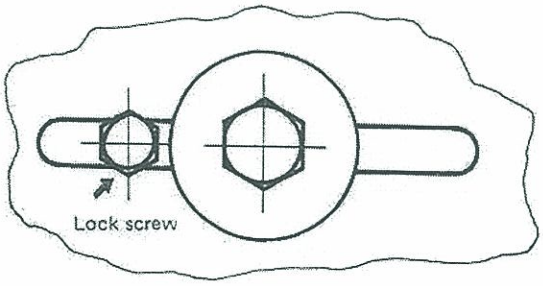


Frame connection piece:

ET no. 911.542.065.41 left

ET no. 911.542.066.41 right

This part is bevelled at the transition to the door glass (see arrow) to improve sealing in this area.



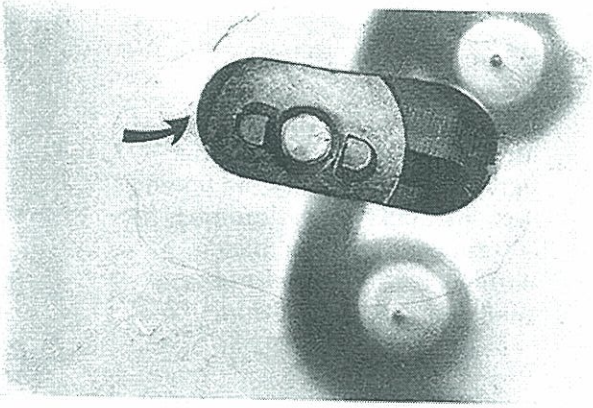
The door glass must be adjusted in height so that the glass is flush with the door frame. To prevent this setting from changing, an additional lock screw may be mounted at the window glass mechanism.

Hexagon screw M 6 x 6

ET no. 900.075.007.02

Hexagon nut M 6

ET no. 900.910.012.02



Roll bar insulation

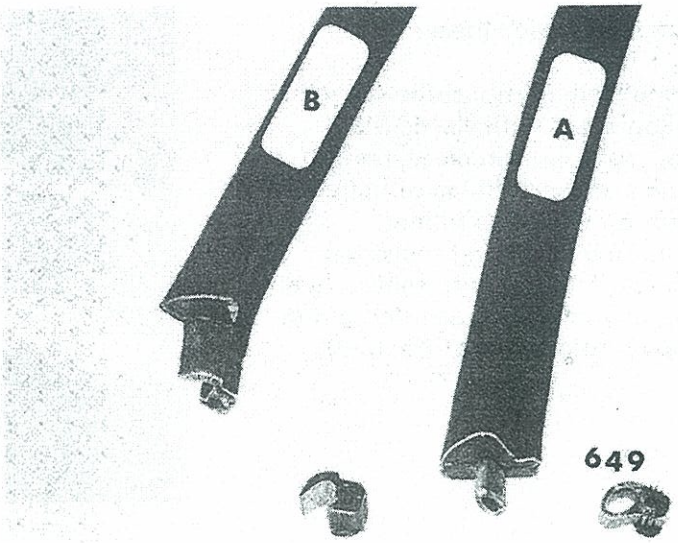
ET no. 911.565.091.45 (B)

ET no. 911.565.091.46 (A)

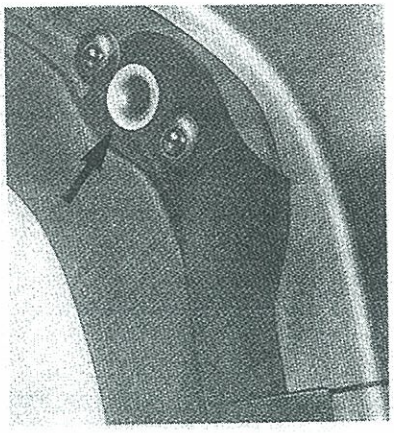
B = Transition to door seal with lip profile

A = Transition to door seal with hose profile

This seal is bonded together to a strip of various molded sections.



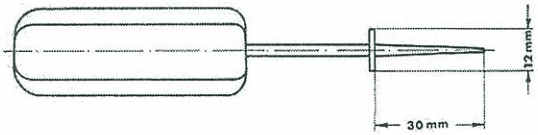
The rubber at the contact surface of the door glass is coated with an elastic fiber material to make the glass slide better going up or down.



Bonding:

The seal is pressed over an elastic support when bonding (arrow) and immediately bonded. Then bond the other side of the elastic support and the central strip.

Bonding around the elastic supports is enhanced by additionally attached plastic nails which are pressed in with a prepared tool (see page 23).



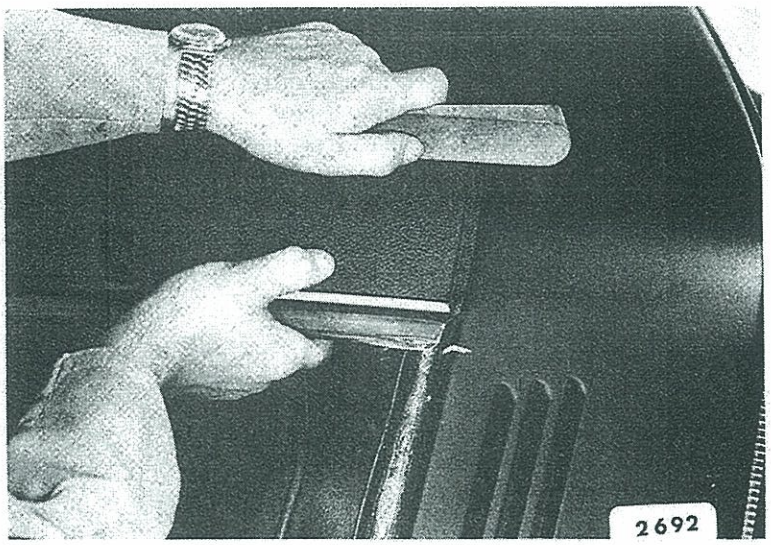
4 ea. plastic pins

ET no. 999.591.520.40

Cap

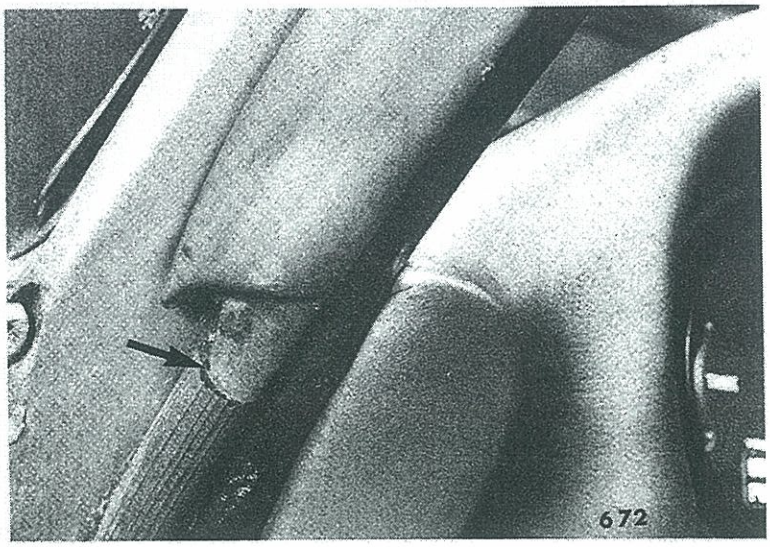
ET no. 999.591.384.40

Now fit the collapsible top and lock the locks. Following this, bond the seal laterally, in which case the upper transition must be accurate and the seal must terminate with the door glass guide rail (see pages 8 and 11).



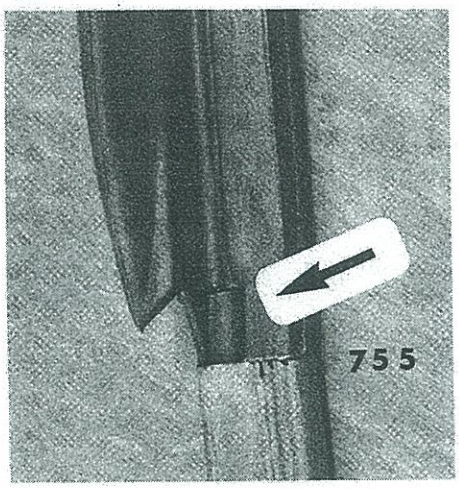
Door seal Cabriolet

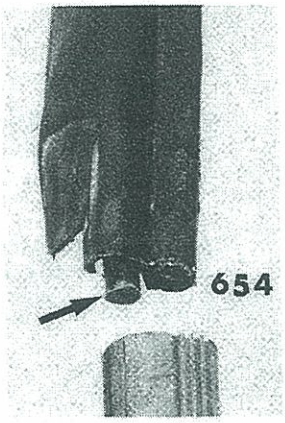
ET no. 911. 531.293.60



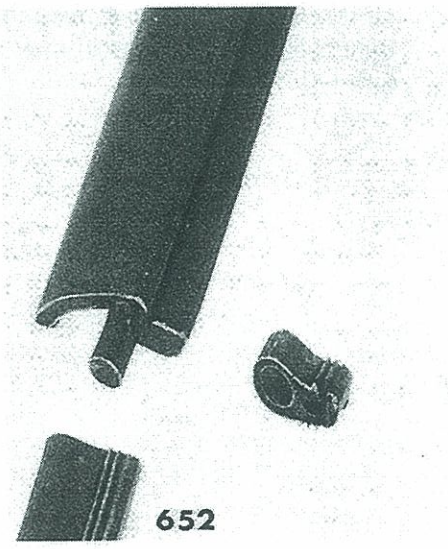
Transition to front wall seal ET no. 911.565.090.45 and 47 may be determined by yourself when doing the bonding and should be implemented on the basis of photographs.

A round rubber profile, diameter 8 mm (running meter merchandise), length approx. 15 mm must be glued in at the transition point. This improves sealing properties at the hose and lip profile.



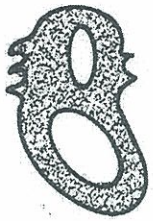


Transition to front wall seal ET no. 911.565.090.46 is provided and need only be bonded.



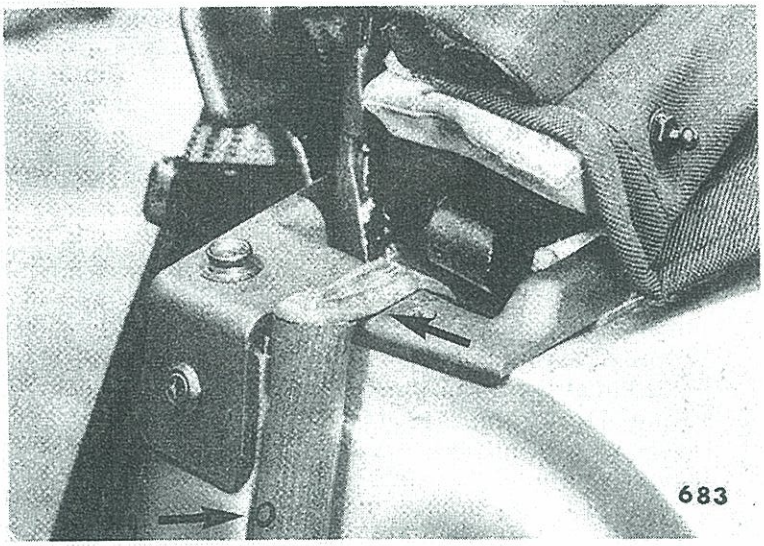
Door seal ET no. 911.531.293.60 as of model '83

A hollow profile of a given length.
Left/right identical.



Bonding

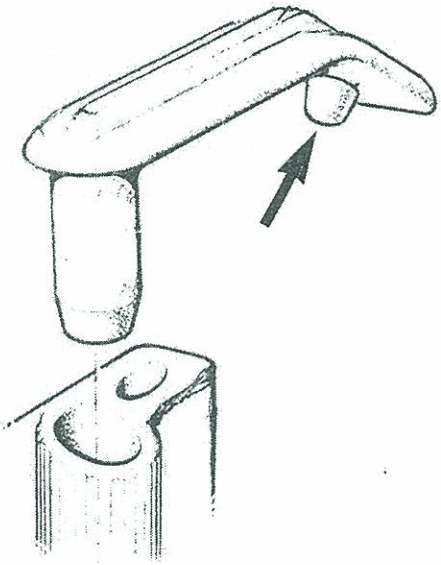
Make sure that the vent holes in the rubber point to the inside when bonding.



A mushroom-type cover is bonded to the B column to terminate the sealing.

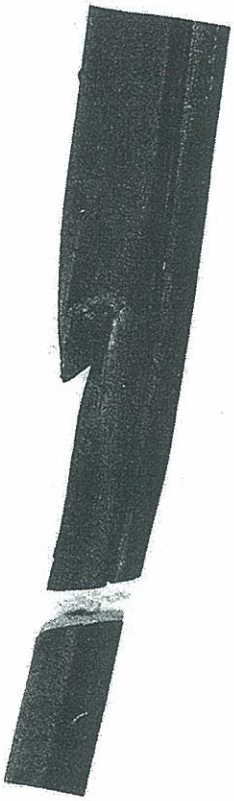
Mushroom-type cover
ET no. 911.799.531.34
left/right identical

On vehicles where the hole for the mushroom-type cover is missing, the rubber pin (see arrow) may simply be cut off.



Door seal Targa ET no. 911.531.093.45

Door seal model 82 to 85 has a lip profile and is identical for the left and right side.

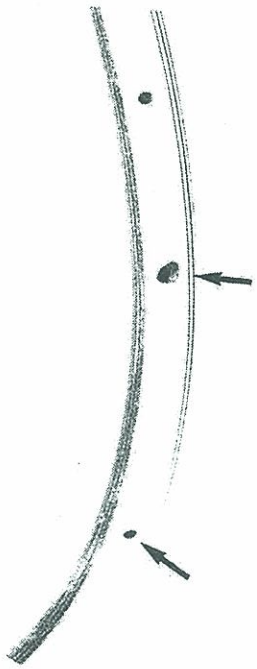


This seal was also incorporated in 200 Cabriolets. It is slightly longer so that the transition to the front wall seal 911.565.090.47 must be determined by yourself when bonding.
When cutting the transition piece, provide a bevel on both seals.

Door seal ET no. 911.531.093.46 left
Door seal ET no. 911.531.094.46 right

as of model '86
Targa and Cabriolet

The cross section of the door seal is a hollow profile with an additional, larger water drain hole. This water drain hole should be outside below at the B column when bonding.

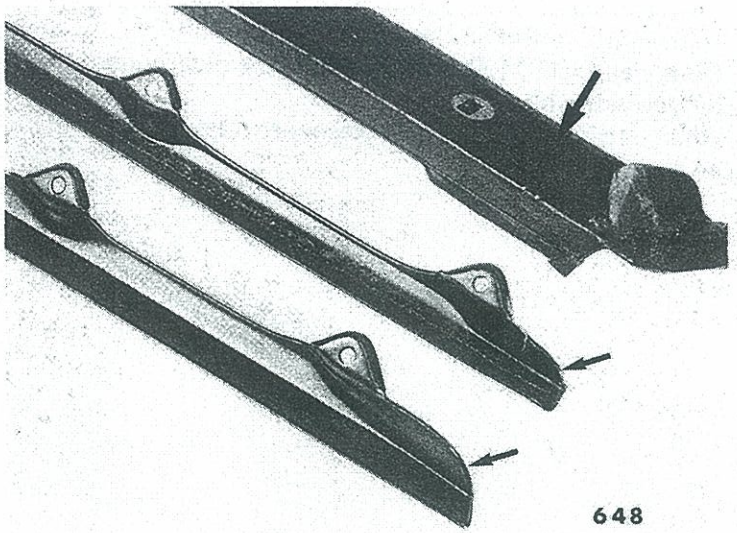


Note: The left seal may also be glued in on the right. In this case, the additional larger water drain hole is outside below at the A column. In future, a second larger water drain hole will be attached so that the door seal is identical left and right.

Roof frame seal lateral ET no. 911.565.259.40 left

ET no. 911.565.260.40 right

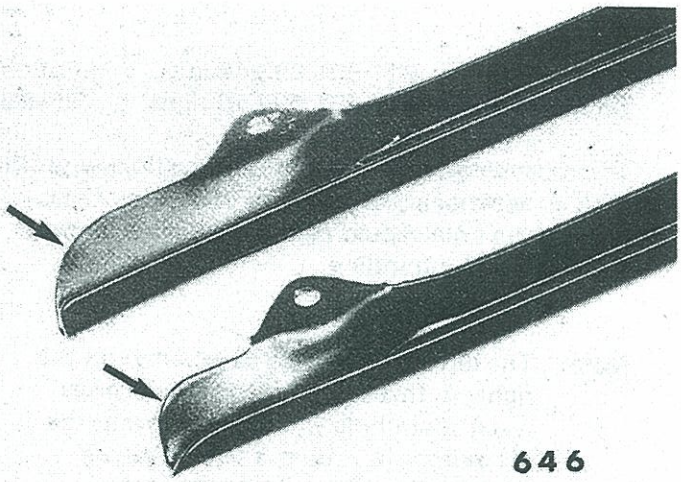
A molded seal is screwed to the roof frame with its steel sheet insert. The end pieces are glued to the roof. The elongated holes at the attachment positions allow an adjustment and centering of the door glass. On the rear, a fiber material is bonded for more recent parts, this improves sealing properties to the roof.



648

On the gutter strips, the ends were rounded more pronouncedly and the corners were reduced.

This produced a larger space to the roll bar and on the front wall.



646

Gutter new ET no. 901.565.303.45 left

ET no. 901.565.304.45 right

Roof frame seal lateral

ET no. 911.561.205.00
left up to and including
model '85

ET no. 911.561.206.00
right up to and including
model '85

The roof frame seal is a molded section with a steel sheet insert screwed to the roof frame. The front end piece is bonded to the roof.

B column seal up to and including model '85

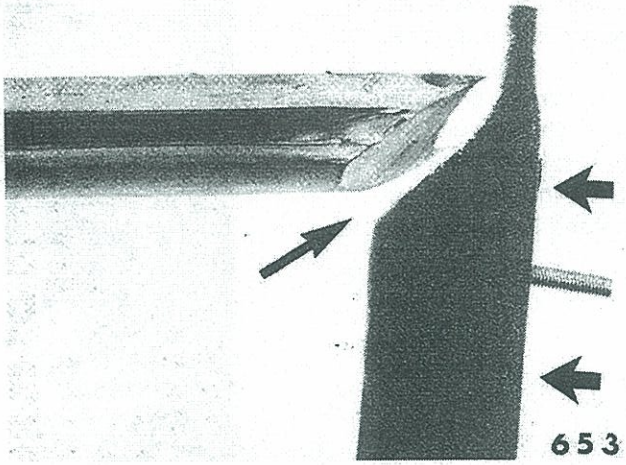
ET no. 911.561.221.01 left

ET no. 911.561.222.01 right

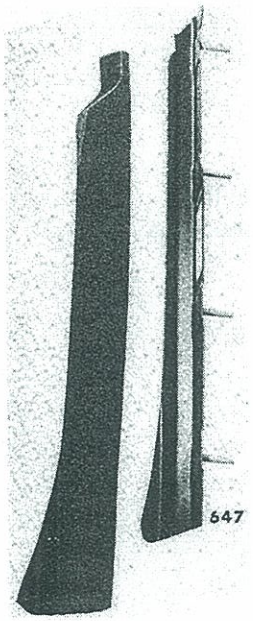
Attachment rail up to and including model '85

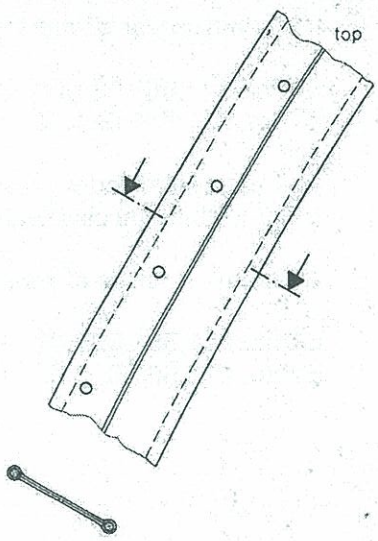
ET no. 911.561.025.00 left

ET no. 911.561.026.00 right



When fitting the seal, make sure it agrees with the lateral seal (arrow). The seal is then bonded into the attachment rail. Bond the weatherstrip at the screw side (arrows) and provide an additional sealing strip on the frame of the top.





Note:

Weatherstrip for attachment rail required **only up to and including model '85.**

ET no. 911.561.913.00 left

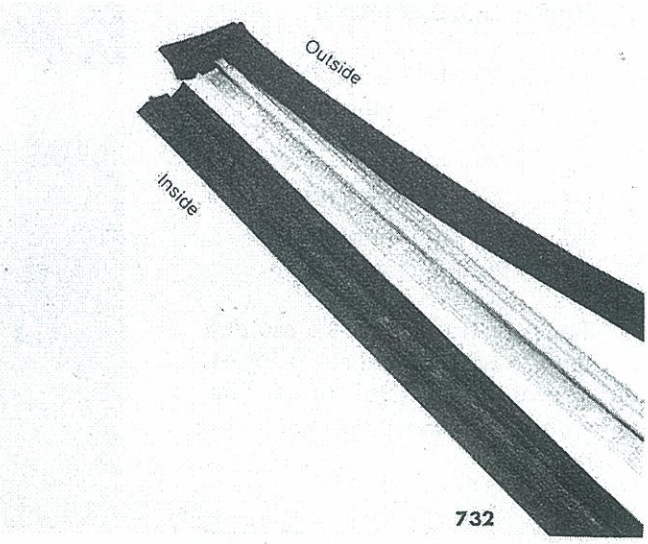
ET no. 911.561.914.00 right

Roof frame seal lateral as of model '86

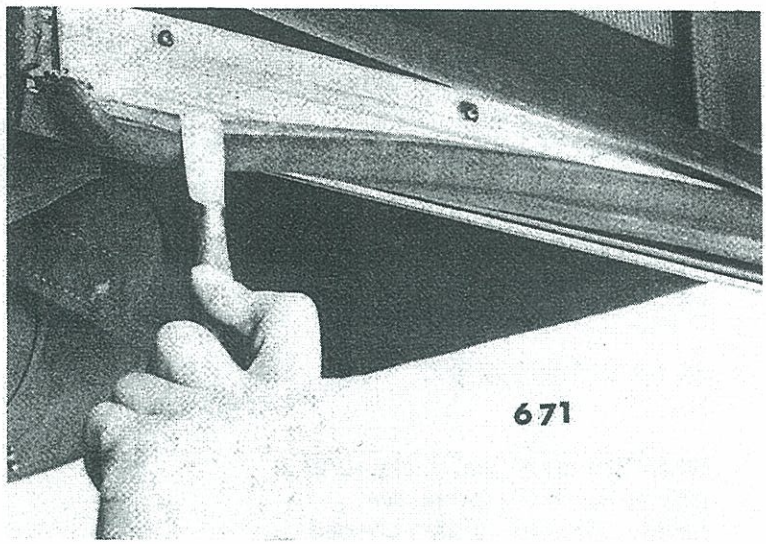
Outside
ET no. 911.561.189.65 left
ET no. 911.561.190.65 right

Inside
ET no. 911.561.187.00 left
ET no. 911.561.188.00 right

Retainer strip as of model '86
ET no. 911.561.793.00 left
ET no. 911.561.794.00 right



The outside and inside seal is retained by the retainer strip. If the fitting of the seal must be changed relative to the door glass, the retainer strip must be reattached accordingly. Drill the bore holes again if need be.



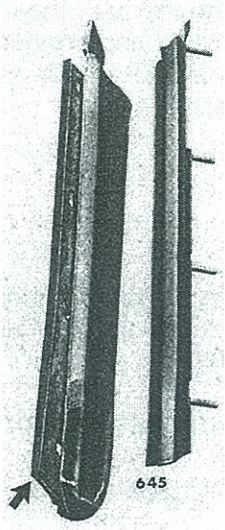
B column seal as of model '86

ET no. 911.561.681.00 left
ET no. 911.561.682.00 right

This seal was fitted with an additional lip (arrow), this cancels the double weatherstrip.

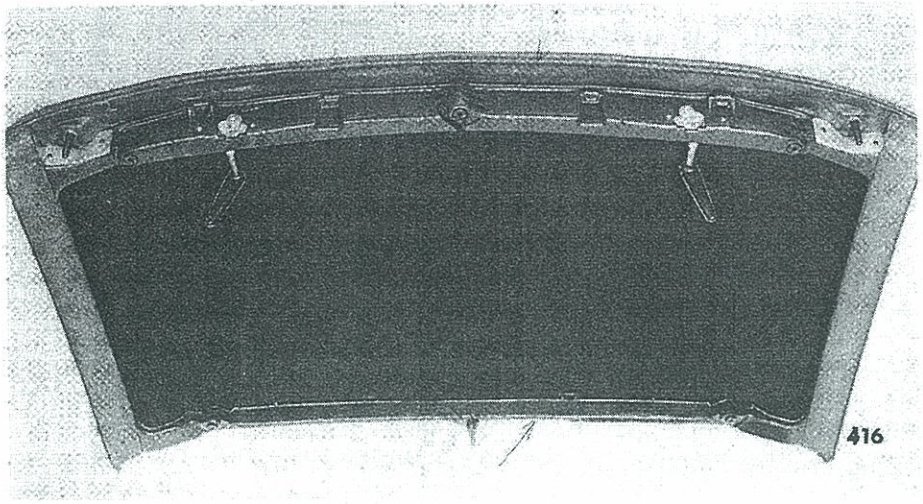
Attachment rail as of model '86

ET no. 911.561.025.02 left
ET no. 911.561.012.02 right

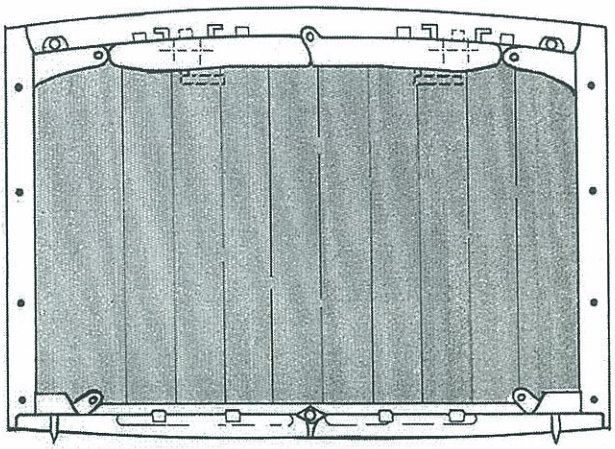


Collapsible roof complete up to model '85 ET no. 911.565.002.40

Collapsible roof complete as of model '86 ET no. 911.565.002.46



The introduction of the electrical top activation changed the locks for the tops for the 911 Cabriolet and Targa and the complete insulation kits.
Refitting or replacement of parts is not feasible. A clear differentiation must therefore be made between, **up to and including model '85 and as of model '86.**



Note:

For follow-up work on the Targa roof, use a soft cushion to prevent damages to the outer cover or to the reinforcement ribs.

The collapsible cover is identical for both versions.
ET no. 901.565.035.41

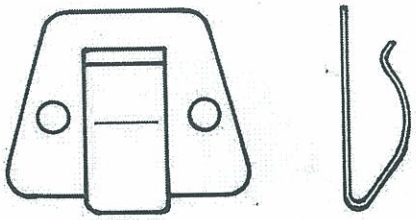
As of model '87, the manual Targa roof and the lock for the Cabriolet was rotated by 90° so that the handles point down when the locks are locked. This is to induce the driver to remove the handles while driving.

Adjustment and refinishing options.

1. Clean all hinges and pins, then treat with antiseize agents.

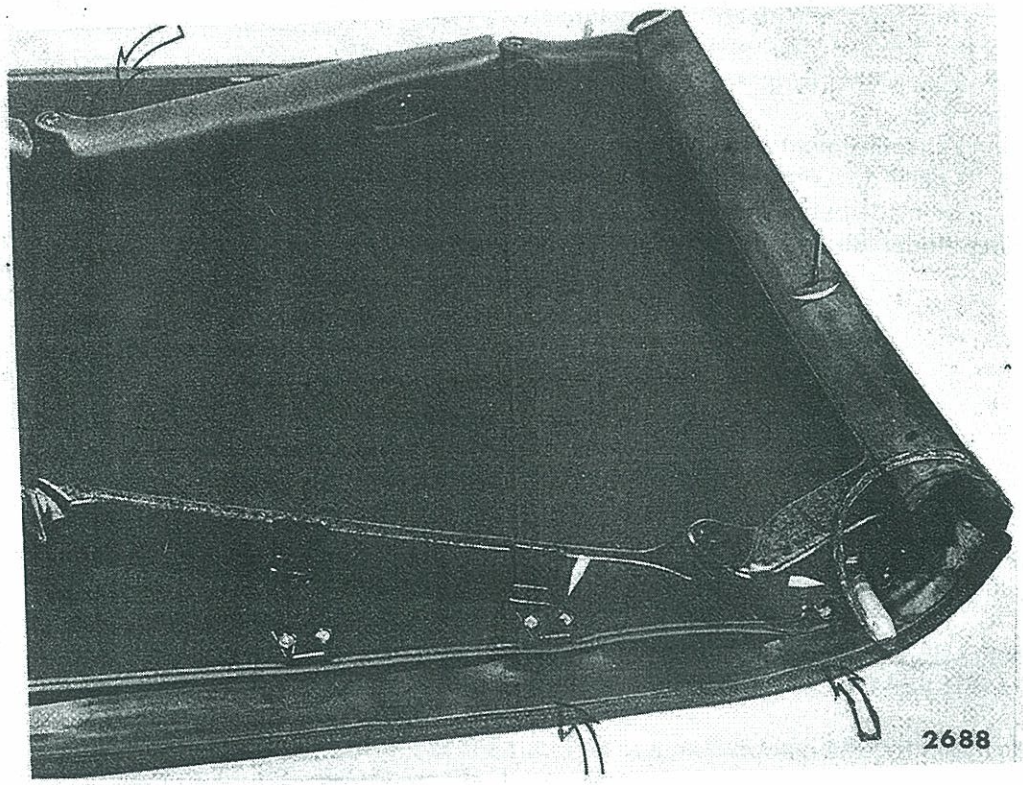
2. Realign all bars holding the swivel arms until they are devoid of any play, then tighten them again.

Note: In order to better retain the rear swivel arms, screw in retaining clamps at the 4 rear bars. This reduces rattling noises.



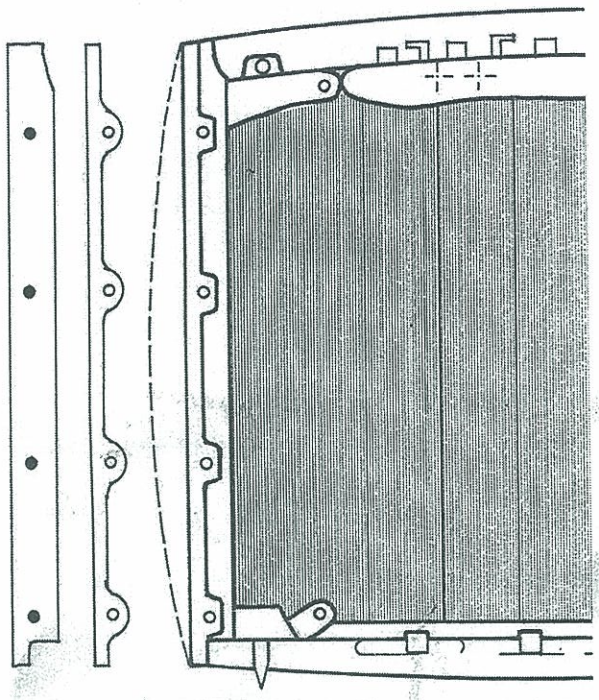
4 ea. retaining clamps ET no. 911.565.263.00

In order to visually improve the transition from the roof to the vehicle, older Targa roofs may require the front and rear edge (arrow) to be refinished. To this end, place the roof onto a soft cushion, lift the roof on the opposite side by approx. 400 mm and align the edge from the inside using a rubber hammer, keeping an eye on the contour of the roof.



Adjustment and refinishing options for the complaint fold formations or roof bulges:

4. The outside cover may be retensioned on both sides for approx. 15 mm. In almost all cases, a unilateral retensioning suffices to prevent fold formation and to reduce rattling noises. To this end, dismantle lateral seal and gutter strip, undo cover. Tension the outside cover in the center approx. 15 mm running to the outside and rebond. Mount gutter and seal.



Note: When retensioning and rebonding, the roof must be off any tension. The corners need not be released.

Adjustment and refinishing work in case of wind noise:

If the Targa roof produces wind noises, an additional seal is available to seal the front wall.

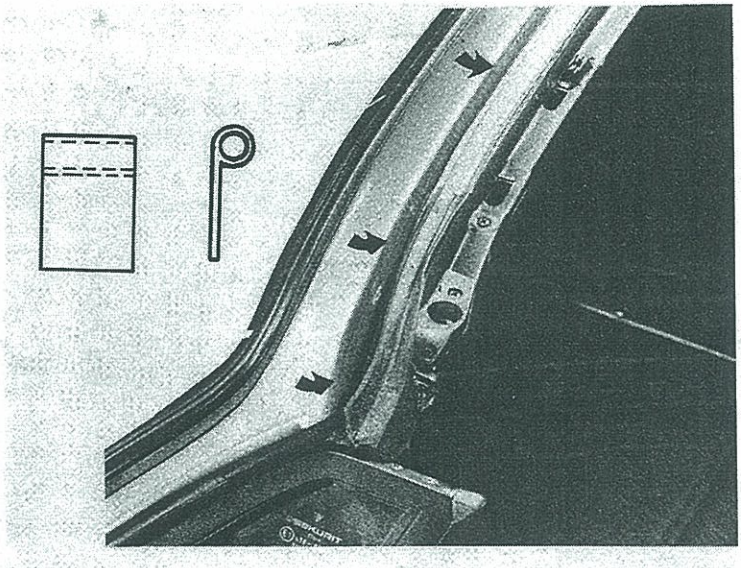
ET no. 911.799.565.25

Attaching this seal:

a. Remove Targa roof.

b. Undo front wall seal in upper range only.

c. Bond additional seal 5 mm below upper edge wind course, then rebond front wall seal.



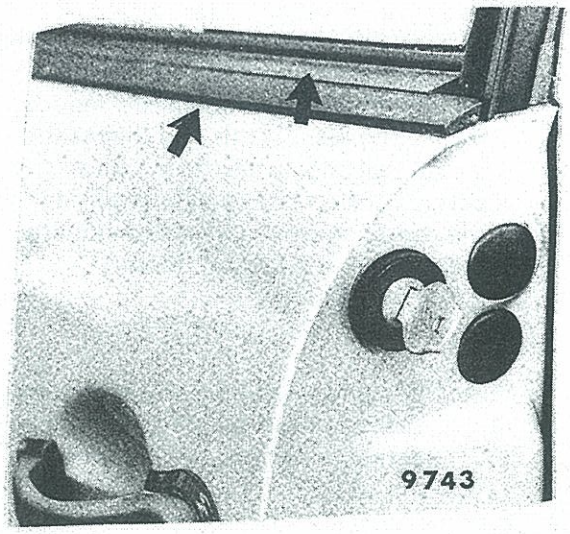
A door well cover strip (arrow), closed by rubber on its face, will be used in the current model '87.

Coupé ET no. 911.531.041.30
70 K black, left

ET no. 911.531.042.30
70 K black, right

Targa ET no. 911.531.041.50
70 K black, left

ET no. 911.531.042.50
70 K black, right



Cabriolet with canvas

(M 70) ET no. 911.531.041.60 70 K black, left

ET no. 911.531.042.60 70 K black, right

Weatherstrip for gap between triangular window and door well outside.

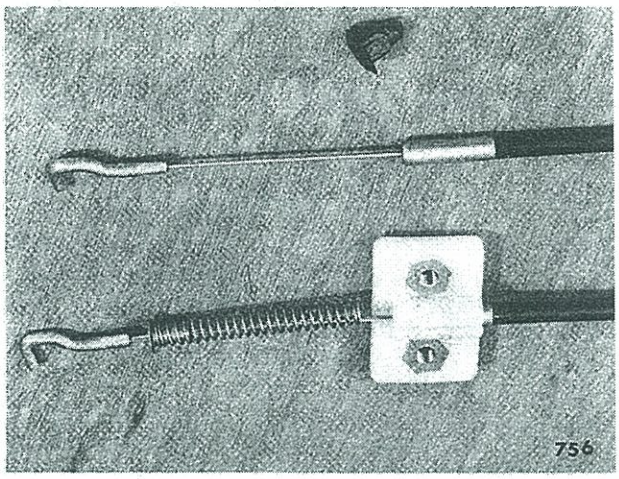
Coupé ET no. 911.531.297.00 01 L black, left/right, length 53 mm

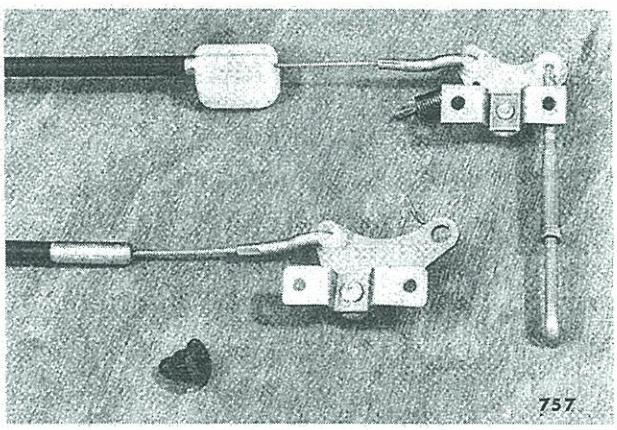
Targa ET no. 911.531.297.40 01 L black, left/right, length 245 mm

The parts listed may be retrofitted.

Inside activation difficult to operate:

Note: In case of complaints – inside activation difficult to operate, proceed as per conversion instructions (Quality Info dated 18 Apr 86, 6 cyl. Group 5).





Remedy for rattling noises (Cabriolet)

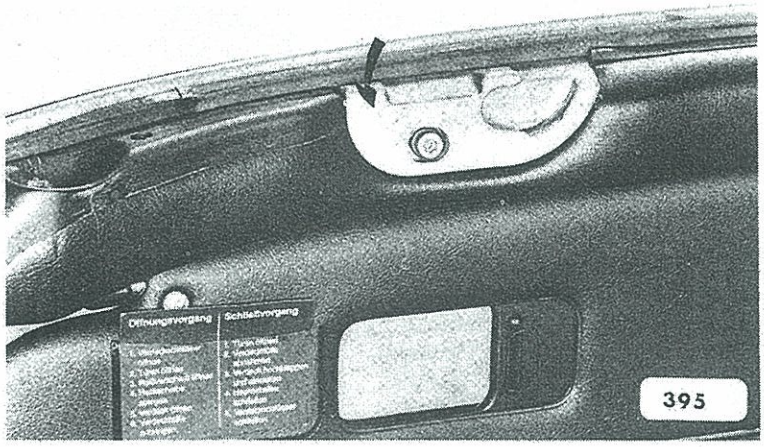
Possible cause:

Roof frame impacts on sliding block guide.

Sliding-block guide for electrical top ET no. 911.561.739.03 left
ET no. 911.561.740.03 right

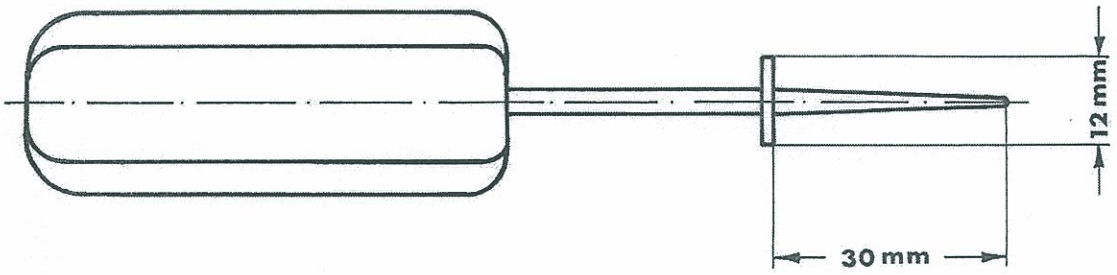
Center adjustment of convertible top of Targa roof relative to the front wall and attach. In individual cases, roof frame lining in this area may have to be folded back.

An improved sliding-block guide is now incorporated under the identical parts no.



Self-built tool

Weld a washer diameter 12 mm to an awl or a screw driver as shown by the diagram.



The plastic pin ET no. 999.591.520.40
can be mounted more easily using this tool.

Adhesives:

Terocal 2444 to bond seals.

Manufacturer: Teroson-Werke GmbH
6900 Heidelberg 1
Postfach 1720
Tel (0 62 21) 70 40, Telex 461 42 80

Dekalin to attach cover materials on sheet metal or plastics.

Manufacturer: Deutsche Klebstoffwerke GmbH
Rödiger & Sohn
6450 Hanau/Main
Tel. (0 61 81) 8 10 05, Telex 418 48 48

J.S. Sekundenkleber, JS. 12 or J.S. 04E
for butt bonding seals (intersecting points)

Manufacturer: Loctite Deutschland GmbH
Postfach 810 580
Arabellastr. 5
8000 München 81
Tel. (089) 92 68-0, Telex 523 266

Planex 60 % N and K rubber adhesive
(to bond fibers to fibers)

Manufacturer: Erwin Epple
Am Mühlkanal 10
7000 Stuttgart-Berg
Tel. (07 11) 2 62 27 03

To remove adhesive residue, the following agents are appropriate:

- Cleaning gasoline
- Ethyl alcohol (diluted with water)
- Adhesive dilution
- Nitro dilution

Note: All these agents may not be used on lining materials and interior furnishings.

Dr. Ing. h. c. F. Porsche
Aktiengesellschaft

Postfach 400640
7000 Stuttgart 40

Bereich Kundendienst
Abt. Kundendienst Technik
Redaktion Kundendienst Schule (NO)

Satz + Druck: Schnelldruck-Dienst Günter Dussling GmbH, 7140 Ludwigsburg