

Technical Manual

911 Carrera (996)

Technical Information

Repair

Contents:

Group 6

Body equipment, exterior

Supplement Overview

| Supplement | Edition | Topic | Article number |
|------------|---------|--|----------------|
| | 05/1997 | Basic edition | WKD483721 |
| 2 | 08/1997 | General supplement | WKD483721.02 |
| 4 | 09/1997 | General supplement | WKD483721.04 |
| 5 | 12/1997 | Safety regulations for airbag vehicles | WKD483721.05 |
| 6 | 11/1997 | General supplement | WKD483721.06 |
| 7 | 02/1998 | Cabriolet scope | WKD483721.07 |
| 8 | 03/1998 | General supplement | WKD483721.08 |
| 9 | 05/1998 | Folder separation 5/6 | WKD483721.09 |
| 11 | 05/1998 | General supplement | WKD483721.11 |
| 13 | 06/1998 | General supplement | WKD483721.13 |
| 17 | 10/1998 | General supplement | WKD483721.17 |
| 21 | 01/1999 | General supplement | WKD483721.21 |
| 22 | 02/1999 | Folder separation 6/7 | WKD483721.22 |
| 23 | 02/1999 | General supplement | WKD483721.23 |
| 25 | 03/1999 | GT3 scope | WKD483721.25 |
| 28 | 05/1999 | General supplement | WKD483721.28 |
| 29 | 06/1999 | GT3 Roll-over bar modifications | WKD483721.29 |
| 31 | 07/1999 | General supplement | WKD483721.31 |
| 33 | 08/1999 | Modifications Cabriolet (convertible-top covering) | WKD483721.33 |
| 34 | 10/1999 | General supplement | WKD483721.34 |
| 37 | 12/1999 | Note on closing the convertible-top flexible rear window | WKD483721.37 |
| 38 | 12/1999 | Removing and installing the side airbag units | WKD483721.38 |
| 40 | 07/2000 | Replacing folder 6 | WKD483721.40 |
| 41 | 07/2000 | General supplement | WKD483721.41 |
| 42 | 08/2000 | General supplement and changes in model year 2001 | WKD483721.42 |

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6 Foreword

Foreword

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Foreword

This manual contains Technical Information as well as instructions on repairs for Porsche vehicles. It is intended for the sole use of workshops belonging to Porsche AG.

The descriptions form the basis for professional and correct maintenance and repair work. The content of the work procedures described is based on the level of training of a fitter who has completed vocational training and has a sound knowledge of the product. This level of knowledge is necessary in order to carry out the work described.

Warning notes

The warning notes and safety instructions are classified by the respective signalling word (Danger, Warning, Caution) beside the warning symbol.



Danger!

Warns against death or very serious injury which will certainly occur if the instructions are not observed.



Warning!

Warns against death or very serious injury which may occur if the instructions are not observed.



Caution!

Warns against minor injury or damage to property if the instructions are not observed.

To prevent injury and restricted operating and traffic safety of the vehicle, or damage to the vehicle as the result of incorrect work, read these instructions carefully and observe them without fail.

It is not possible for Porsche AG to give a detailed evaluation of all danger situations for the persons carrying out the work. It is therefore imperative that all persons carrying out repair and maintenance work on Porsche vehicles use their specialist knowledge to ensure that their own safety is not at risk and the procedure chosen will not have any negative effects on the vehicle - especially with regard to safety.

It is therefore expressly specified that all work involved in the work procedures described should be carried out only in accordance with the valid guidelines and regulations of the local authorities responsible with respect to health and accident prevention and environmen-

tal protection, and in compliance with the legal requirements of individual countries.

Notes

Notes contain advisory information related to the work procedure which makes the fitter's work easier. The following pictogram indicates this information:



Note!

Contains advisory information which makes the work procedure easier.

Due to the continuous development and improvement of our vehicles, there may be discrepancies between the actual technical status of the vehicles and the work descriptions. Any existing deviations are corrected by means of supplements, and the scope of the descriptions is extended with supplements.

Porsche AG retains the right to implement changes at any time and without prior notice.

Use

The workshop documentation for the "911 Carrera (996)" model has the designation "911 Carrera (996) Technical Manual" and contains Technical Information as well as instructions on Repairs.

The integration of the technical information published in the "911 Carrera (996)" Technical Manual with the instructions on repairs provides the user with a complex reference work that combines into one book associated or cross-referenced material of relevance to workshops and originating from various information media.

The "911 Carrera (996)" Technical Manual consists of 15 folders, subdivided into the following Groups.

- ◆ 0 Entire vehicle - General
- ◆ 0 Diagnosis, part 1 (up to Repair Group 45)
- ◆ 0 Diagnosis, part 2 (as of Repair Group 69)
- ◆ 1 Engine, part 1 (up to Repair Group 13)
- ◆ 1 Engine, part 2 (as of Repair Group 15)
- ◆ 2 Fuel, exhaust, engine electronics
- ◆ 3 Transmission, manual transmission
- ◆ 3 Transmission, automatic transmission
- ◆ 4 Running gear
- ◆ 5 Body
- ◆ 6 Body equipment, exterior
- ◆ 7 Body equipment, interior
- ◆ 8 / 9 Air conditioning / Electrics
- ◆ 9 Circuit diagrams, part 1 (up to and including '99 model)
- ◆ 9 Circuit diagrams, part 2 (as of and including '00 model)

The two folders with Group 0 are to be regarded as one folder; i.e. file the "Technical Information" notices only in the folder "Group 0 Diagnosis, part 1" **-up to Repair Group 45-**.

The second folder Group 0 Diagnosis, part 2 **-as of Repair Group 69-** includes the further Repair Groups belonging to Group 0.

The two folders with Group 1 are to be regarded as one folder; i.e. file the "Technical Information" only in front of the repair descriptions in the folder Group 1 – Engine, part 1 **-up to Repair Group 13-**.

The second folder Group 1 Engine, part 2 **-as of Repair Group 15-** includes the further Repair Groups belonging to Group 1.

The two folders with Group 9 are to be regarded as one folder; i.e. file the "Technical Information" notices only in the folder Group 9 Circuit diagrams, part 1 **-up to '99 model-**.

The second folder Group 9 Circuit diagrams, part 2 **-as of '00 model-** includes the further Repair Groups belonging to Group 9.

The "911 Carrera (1996)" Technical Manual has the same structure in each folder, with the following breakdown for all Groups:

Title page: "911 Carrera (1996)" Technical Manual

- ♦ Foreword

Title page: "Technical information"

- ♦ Table of contents, Technical Information
- ♦ Technical Information

Title page: "Repair"

- ♦ Overview of repair groups
- ♦ Table of contents, repair
- ♦ General / technical data
- ♦ Description of repairs

As can be seen from the breakdown, the published Technical Information is in the front part of each folder – numbered according to the Groups. The Table of Contents assigned to each Group will be periodically updated.

Following the Technical Information, separated by a title page, the instructions on repairs – assigned according to the Groups or broken down into Repair Groups – are included in the folders.

The instructions on repairs will be extended and updated by means of supplements.



Note!

Sheets that already exist in the "911 Carrera (1996)" Technical Manual and are updated or revised and thereby exchanged by a supplement are designated in the footer with the supplement number corresponding to the current version: e.g. "Printed in Germany - 2,- 2000"



Note!

Due to a system modification in the Technical Literature production, the following procedures have changed in model year 2000:

- 1 - The previous record sheet in the folder "O-General" and the supplement contents sheet -red sheet- have been omitted. A supplement overview now appears separately in each folder. The new supplement contents sheet can be destroyed after the supplement is filed in the folder.



Note!

The supplement overview sheet is replaced with the relevant supplement in the corresponding folder and must no longer be maintained by hand.

- 2 - The page numbering in the new and the replaced chapters are no longer continuous. Each new chapter is now given an additional chapter number followed by the page number e.g.-2 Page 11 ⇒ Rep. Gr. 0; General.
- 3 - The old page numbering still applies to existing chapters and those that are not replaced.

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6 Body equipment

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6 Colour range for 1998 models**Exterior paintwork solid:**

| Designation | Code |
|---------------|------|
| Snow white | 3AT |
| Snow white | 3AU* |
| Black | 747 |
| Black | 741* |
| Guards red | 80K |
| Guards red | 84A* |
| Pastel yellow | 12L |
| Pastel yellow | 12M* |

Exterior paintwork metallic / pearl:

| Designation | Code |
|------------------------------|------|
| Arctic silver metallic | 92T |
| Arctic silver metallic | 92U* |
| Zenith blue metallic | 3AW |
| Zenith blue metallic | 3AX* |
| Black pearl | 746 |
| Black pearl | 744* |
| Ocean blue metallic | 3AY |
| Ocean blue metallic | 3AZ* |
| Arena red pearl | 84R |
| Arena red pearl | 84S* |
| Dragonfly turquoise metallic | 25H |
| Dragonfly turquoise metallic | 25K* |
| Paladio metallic | 554 |
| Paladio metallic | 555* |
| Vesuvio metallic | 40W |
| Vesuvio metallic | 40X* |

= Water-based paints

6 Colour range for 1999 models**Exterior paintwork solid:**

| Designation | Code |
|---------------|------|
| Glacier white | 3AT |
| Glacier white | 3AU* |
| Black | 747 |
| Black | 741* |
| Guards red | 80K |
| Guards red | 84A* |
| Pastel yellow | 12L |
| Pastel yellow | 12M* |
| Speed yellow | 12G |
| Speed yellow | 12H* |
| Dark blue | 374 |
| Dark blue | 3C7* |

Exterior paintwork metallic / pearl:

| Designation | Code |
|--------------------------|------|
| Arctic silver metallic | 92T |
| Arctic silver metallic | 92U* |
| Zenith blue metallic | 3AW |
| Zenith blue metallic | 3AX* |
| Black pearl | 746 |
| Black pearl | 744* |
| Ocean blue metallic | 3AY |
| Ocean blue metallic | 3AZ* |
| Arena red pearl | 84R |
| Arena red pearl | 84S* |
| Ocean jade metallic | 25H |
| Ocean jade metallic | 25K* |
| Iris blue metallic | 39N |
| Iris blue metallic | 39V* |
| Wimbledon green metallic | 23I |
| Wimbledon green metallic | 2B6* |
| Pine-green metallic | 22E |
| Pine-green metallic | 2B4* |
| Violet metallic | 39G |
| Violet metallic | 3AE* |

= Water-based paints

Exterior paintwork metallic / pearl:

| Designation | Code |
|------------------------|-------|
| Cobalt blue metallic | 37U |
| Cobalt blue metallic | 3C8* |
| Polar silver metallic | 92E |
| Polar silver metallic | 92M* |
| Slate metallic | 22D |
| Slate metallic | 23F* |
| Midnight blue metallic | 37W |
| Midnight blue metallic | 39CF* |
| Vesuvio metallic | 40W |
| Vesuvio metallic | 40X* |
| Paladio metallic | 554 |
| Paladio metallic | 555* |

6 Colour range for 2000 models**Exterior paintwork solid:**

| Designation | Code | Designation | Code |
|----------------|------|-----------------------|------|
| Biarritz white | 9A3 | Black metallic | 744* |
| Biarritz white | 9A2* | Ocean blue metallic | 3AY |
| Black | 747 | Ocean blue metallic | 3AZ* |
| Black | 741* | Arena red metallic | 84R |
| Guards red | 80K | Arena red metallic | 84S* |
| Guards red | 84A* | Jungle green metallic | 2A2 |
| Speed yellow | 12G | Jungle green metallic | 2A1* |
| Speed yellow | 12H* | Vesuvio metallic | 40W |

Vesuvio metallic 40X*

Paladio metallic 554

Paladio metallic 555*

Exterior paintwork metallic / pearl:

| | | | |
|------------------------|------|-----------------------------|------|
| Arctic silver metallic | 92T | Orange-red metallic | 1A9 |
| Arctic silver metallic | 92U* | Orange-red metallic | 1A8* |
| Zenith blue metallic | 3AW | Violet ChromaFlair metallic | 3C4 |
| Zenith blue metallic | 3AX* | Violet ChromaFlair metallic | 3C5* |
| Black metallic | 746 | | |

= Water-based paints

Colour range for 2001 models

Exterior paintwork solid

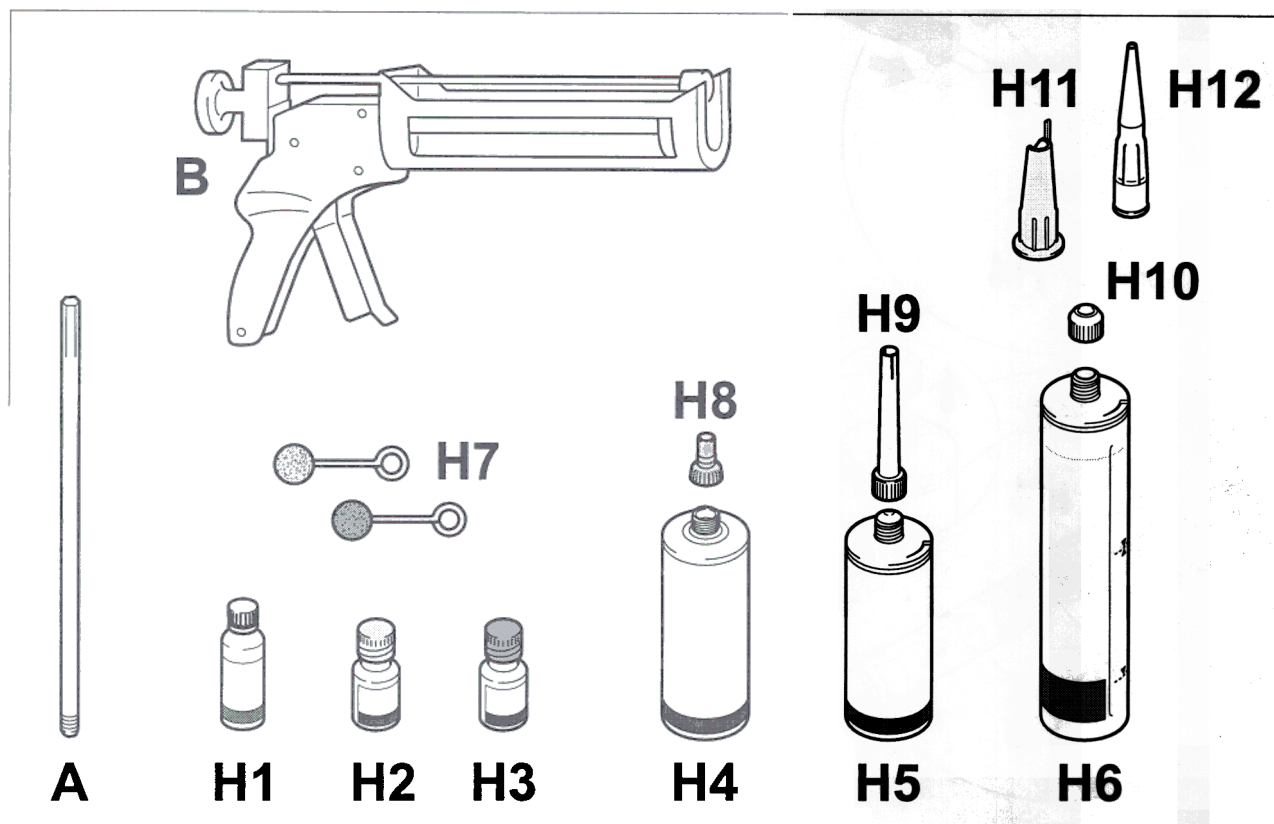
| Designation | Colour code (conventional) | Colour code (water-based paints) |
|----------------|-------------------------------|-------------------------------------|
| Biarritz white | 9A3 | 9A2 |
| Black | 747 | 741 |
| Guards red | 80K | 84A |
| Speed yellow | 12G | 12H |

Exterior paintwork metallic / pearl

| Designation | Colour code (conventional) | Colour code (water-based paints) |
|---------------------------|-------------------------------|-------------------------------------|
| Arctic silver metallic | 92T | 92U |
| Lapis blue metallic | 3A9 | 3A8 |
| Black metallic | 746 | 744 |
| Orient red metallic | 8A4 | 8A3 |
| Meridian metallic | 6A7 | 6A6 |
| Rainforest green metallic | 2A2 | 2A1 |
| Zanzibar red metallic | 1A9 | 1A8 |
| Seal grey metallic | 6B5 | 6B4 |

Processing of Porsche 2-component window bonding agents

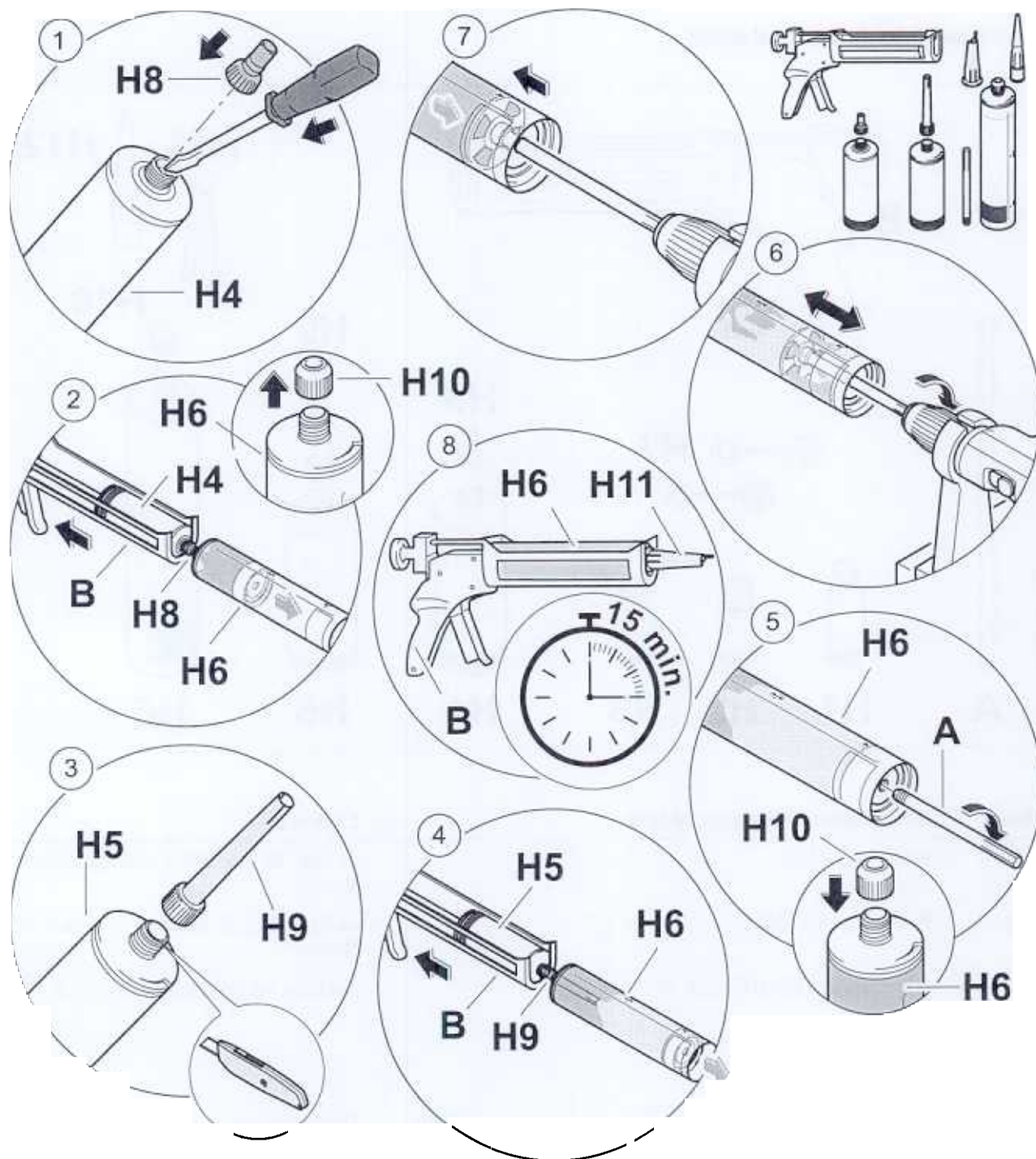
Overview of tools and materials



| Item | Designation of the special tool | Explanation |
|------|---------------------------------|---|
| -A- | Mixing rod 9528 | ⇒ Rep. Gr. 2.2; Workshop Equipment Manual |
| -B- | Bonding gun 9586 | ⇒ Rep. Gr. 2.2; Workshop Equipment Manual |
| -H- | Adhesive set 000.043.204.34 | Contains set components H1-H12 |

| Item | Designation | Item | Designation |
|------|------------------------|------|-------------|
| | Cleaning solution | I7- | |
| | Primer | I8- | |
| | Activator | I9- | |
| | Cartridge, component A | I10- | |
| | Cartridge, component B | I11- | |
| | Mixing cartridge | I12- | |

Mixing procedure



**Caution!**

- ♦ **Observe the safety instructions of the individual adhesive set components.**

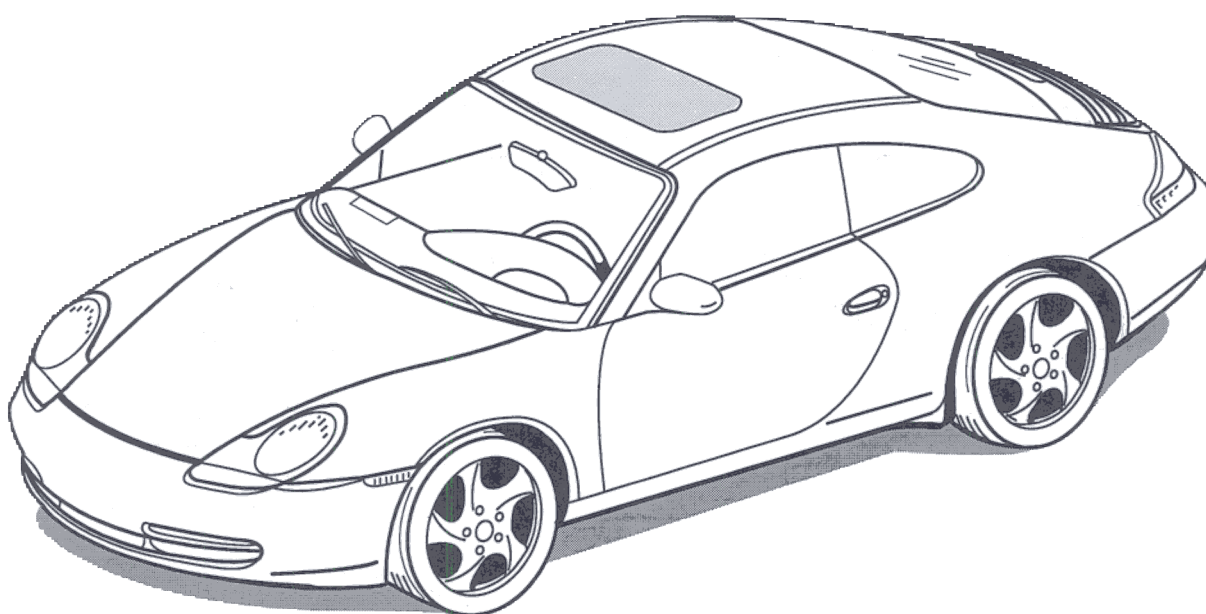
**Note!**

In addition to this manual, observe the relevant job descriptions for installing car windows (Group 64) in the Technical Manual!

| No. | Procedure | Instructions |
|-----|---|---|
| 1 | Preparing cartridge component A -H4- | Clamp an adjustable electric power drill in a conventional horizontal clamp. Pre-set a speed of 900 - 1,200 rpm. Pierce the membrane in the nozzle connection of component A (aluminium cartridge) -H4- with a screwdriver and extend the opening. Remove the flanged cover from the end of the cartridge. Screw the short filler nozzle (blue) -H8- on to the nozzle connection of component A. |
| 2 | Transferring contents of component A | Unscrew the screw cap -H10- on the empty mixing cartridge -H6- , insert the prepared cartridge (component A) -H4- in to the bonding gun -B- and insert the filler nozzle -H8- as far as possible into the mixing cartridge -H6- . Press component A fully into the mixing cartridge. After transferring the contents, pull the filler nozzle of the cartridge (component A) -H8- out of the mixing cartridge. |
| 3 | Preparing cartridge component B -H5- | Cut off the point of the nozzle connection of component B (plastic cartridge) -H5- with a knife. Screw the injection nozzle (yellow) -H9- on to the nozzle connection of component B. |
| 4 | Transferring contents of component B | Insert the prepared cartridge (component B) -H5- in to the bonding gun -B- and insert the injector nozzle -H9- as far as possible into the mixing cartridge -H6- . Press component B fully into the mixing cartridge. After transferring the contents, pull the injector nozzle of the cartridge (component B) -H9- out of the mixing cartridge. |
| 5 | Screwing mixing rod -A- into place | Close the mixing cartridge -H6- with a screw cap -H10- and screw the mixing rod -A- by hand into the mixer of the mixing cartridge. |
| 6 | Mixing component A and component B | Clamp the mixing rod in the prepared power drill. Switch the power drill on and allow it to turn at a speed of 900 - 1,200 rpm. During operation, move the mixing cartridge axially from one end stop to the other 25 times -arrows- . Note: perform the stroke movements rapidly. The cartridge piston is secured at the rear and can not fall out during the mixing procedure. |

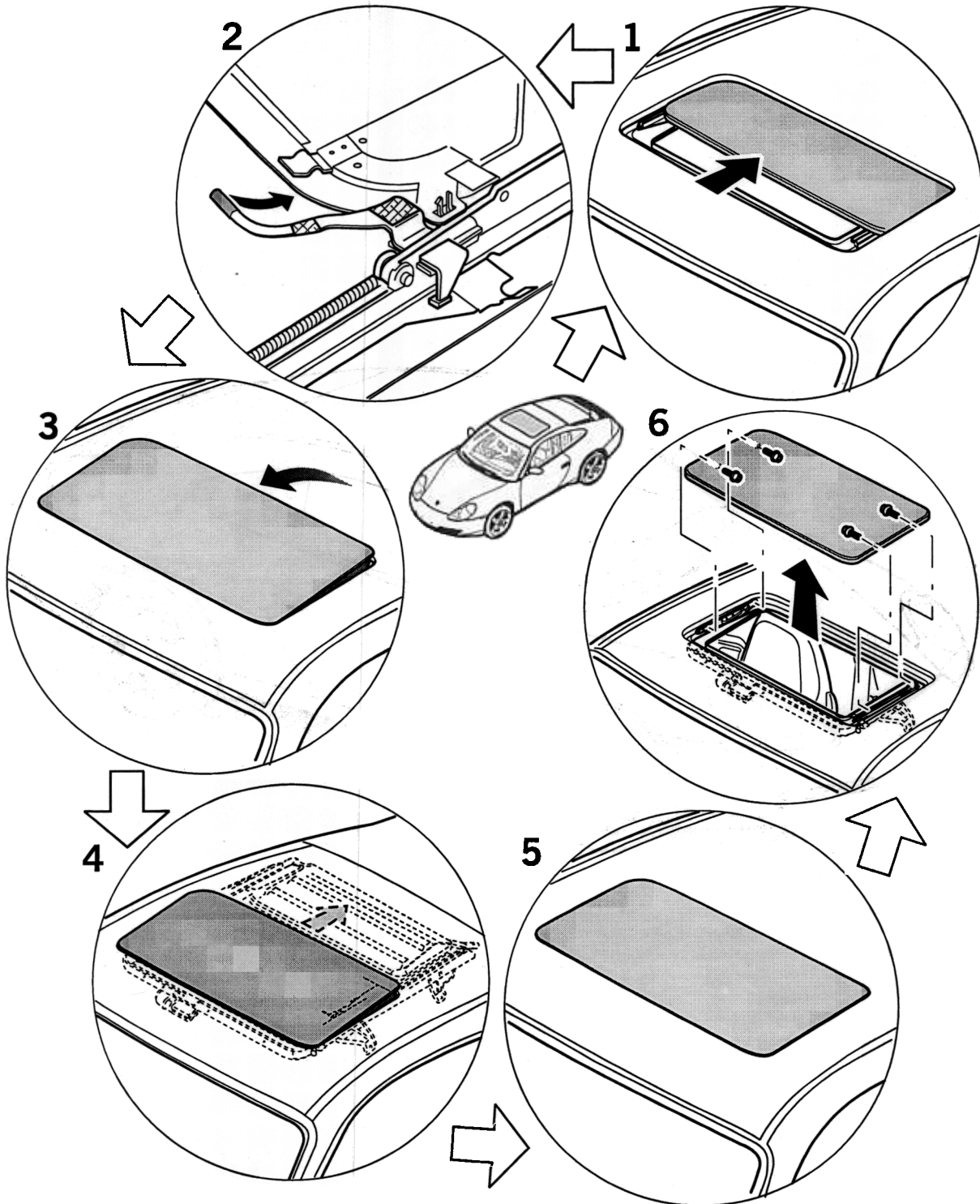
| No. | Procedure | Instructions |
|-----|--|---|
| | Concluding the mixing procedure and engaging the mixer in the piston | To conclude the mixing procedure, pull the mixer during its last stroke so strongly towards the rear against the piston that a rattling noise becomes audible. Then switch off the power drill and unscrew the mixing rod from the mixer; the mixer then engages in the piston. |
| 8 | Inserting the mixing cartridge in the bonding gun and affixing the car window within -15 min- | Unscrew the screw cap on the mixing cartridge and screw on the processing nozzle (grey) -H11- . Insert the mixing cartridge -H6- in the bonding gun -B- . Note: the bonding material has an open time of -15 min- , which means that the bonding material must be applied and the car window must be assembled within this period of time. |

60 40 19 Removing and installing sliding roof panel



68_97

Removing sliding roof panel



133_98

Removing sliding roof panel

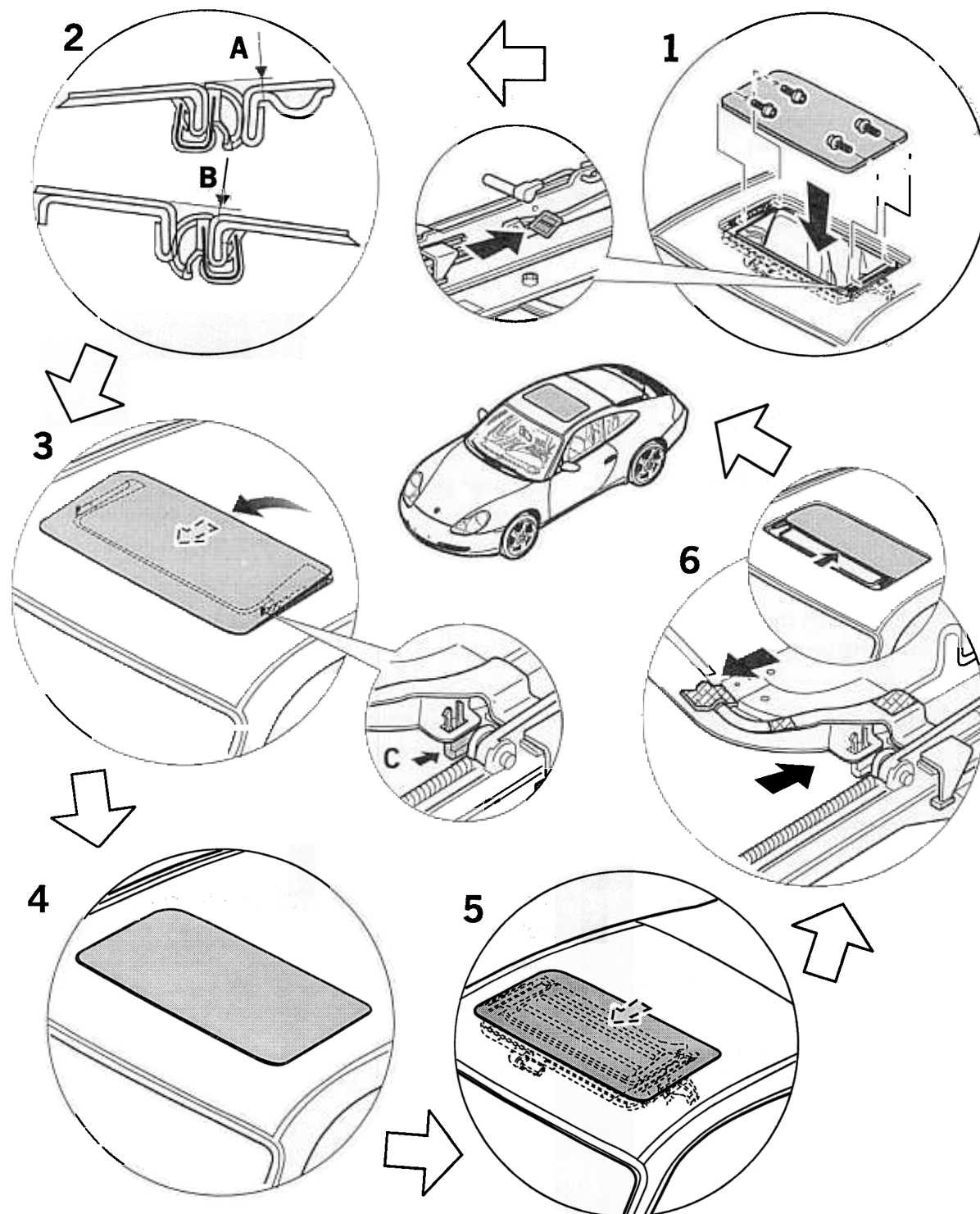
**Warning:**

Damage to rear water drainage channel or to the sliding roof mechanism when the sliding roof panel is removed and when moving the trim of the sliding/tilting roof (Item 4)

- > The sliding roof frame must not be moved to the "Open" position when the sliding roof panel has been removed. The trim of the sliding/tilting roof (Item 4) must be shifted without the use of force.

| No. | Procedure | Instructions |
|-----|---|--|
| 1 | Open sliding roof panel | Open the sliding roof panel approx. 80 mm. |
| 2 | Unclip sliding/tilting roof trim | Disengage (press) trim of sliding/tilting roof out of the left and right-hand front catches towards the rear and out of the drivers, and push back by approx. 30 mm. |
| 3 | Move sliding roof panel to tilting position | Close the sliding roof panel and move to tilting position |
| 4 | Sliding/tilting roof trim | Push trim of sliding/tilting roof back evenly on the left and right as far as it will go. |
| 5 | Close sliding roof panel | Move the sliding roof panel to zero position (closed) |
| 6 | Remove sliding roof panel | Unscrew fastening screws T25 M5 x 8 from the sliding roof panel and remove the panel from the sliding roof frame. |

Installing sliding roof panel



402_98

Installing sliding roof panel

Note: Install sliding roof panel in the sliding roof frame in zero position.

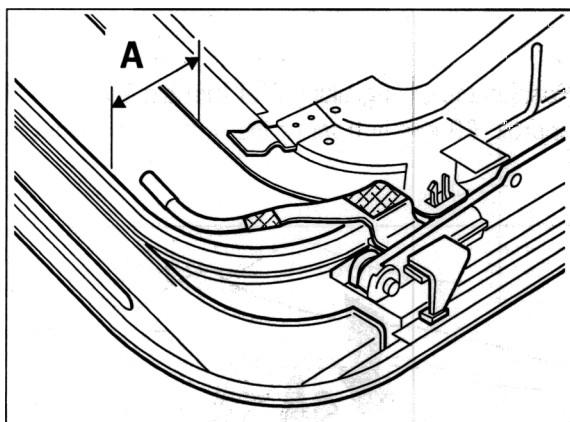
| No. | Procedure | Instructions |
|-----|---|---|
| 1 | Insert sliding roof panel | Push gate (inset) back on the left and right. Insert the sliding roof panel in the sliding roof frame and screw in fastening screws T25 M5 x 8 slightly. |
| 2 | Adjust sliding roof panel | Adjust the sliding roof panel in line with the roof contour: lower at the front Dimension A , 0 to -1,0 mm, raise at the rear, Dimension B , by 0 to +1 mm. Tighten fastening screws T25 M5 x 8. Tightening torque 6 Nm (4.4 ftlb.) |
| 3 | Move sliding roof panel to tilting position, check inner panels | Move sliding roof panel to tilting position. Carefully pull trim of the sliding/tilting roof forwards evenly on the left and right until it is approx. 40 mm in front of the roof edge cut-out. Check whether the left and right-hand inner side panels in Fig. C have engaged. If inner panels are damaged or have become detached from the groove of the sliding roof frame, take off the trim of the sliding/tilting roof with the sliding roof panel removed and replace the inner panels if necessary. See: Additional instructions for fitting the inner panels |
| 4 | Close sliding roof panel | Move the sliding roof panel to zero position (closed). |
| 5 | Engage sliding/tilting roof trim | Push sliding/tilting roof trim forward as far as the roof edge cut-out. While doing so, take care not to push trim of sliding/tilting roof upwards. This could detach or damage the inner panels. |

| No. | Procedure | Instructions |
|-----|-------------------------|--|
| 6 | Open sliding roof panel | Open sliding roof panel approx. 80 mm. Pull trim of sliding/tilting roof forward until the left and right-hand drivers engage. Close sliding roof panel. |
| | Function test: | <p>The trim of the sliding/tilting roof lies against the rear of the sliding roof panel in tilting position. Close sliding roof panel. The trim of the sliding/tilting roof must lie against the clamping frame of the roof lining on the front, right and left with a slight degree of pre-tension. The trim of the sliding/tilting roof must not lie against the rear cross bar of the roof lining. A gap of approx. 0.5 mm (cheque card thickness) must be left.</p> <p>Do not leave a gap from the rear cross member and the roof lining in vehicles with a fully coated (flocked) clamping frame.</p> |

Additional instructions for fitting the inner panels

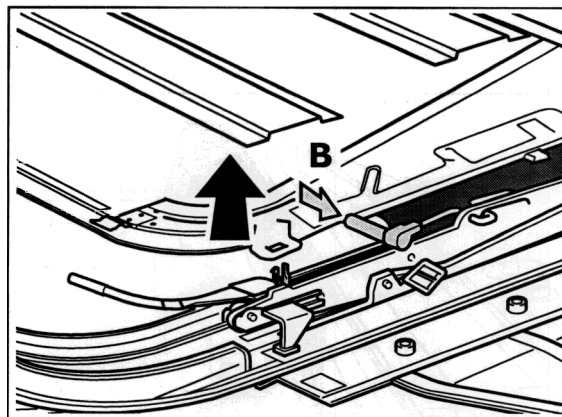
When the inner panels are being removed or replaced, the sliding roof panel and sliding/tilting roof trim should be removed and the gate of the roof frame should be extended (tilting position).

Removing inner panels



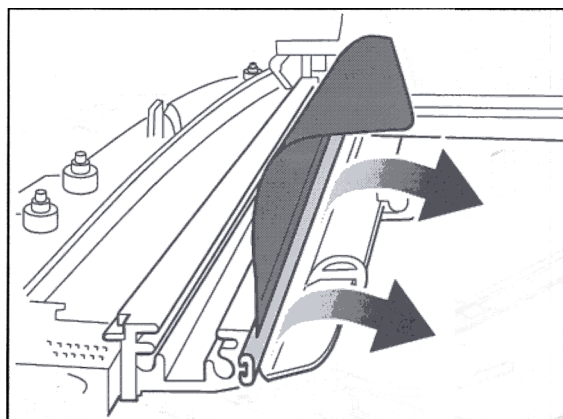
394_98

Position the sliding/tilting roof trim dimension A approx. 80 mm in front of the roof edge cut-out.



395_98

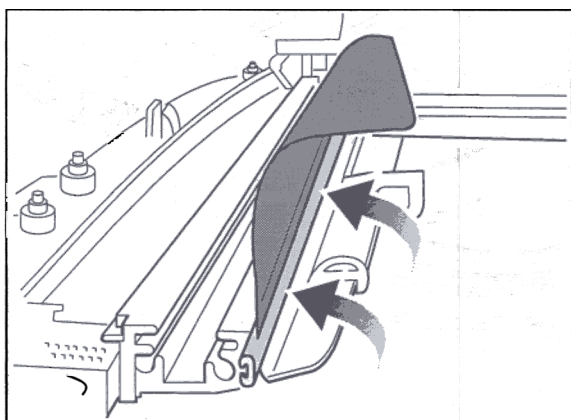
Disengage left and right inner side panels. Pull out the connector springs **B** on the gate and pull the sliding/tilting roof trim upwards.



396_98

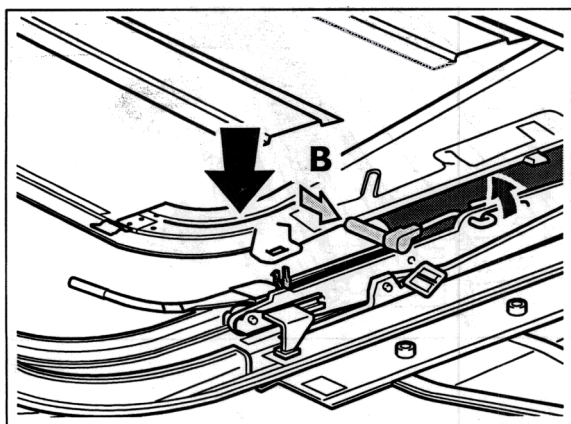
Push the sides of the inner panels out of the sliding roof frame inwards (centre of the vehicle).

Installing inner panels



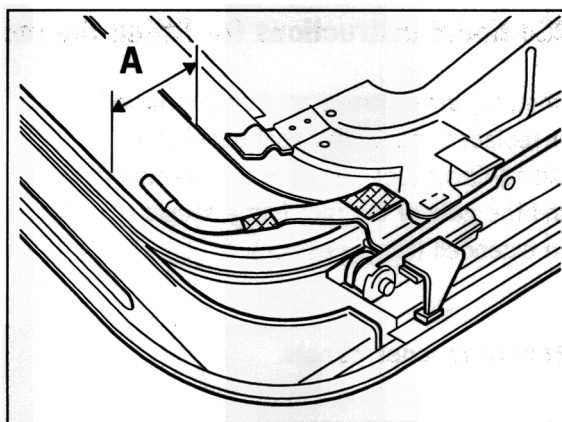
397_98

Press the sides of the inner panel into the sliding roof frame. Move to check function.



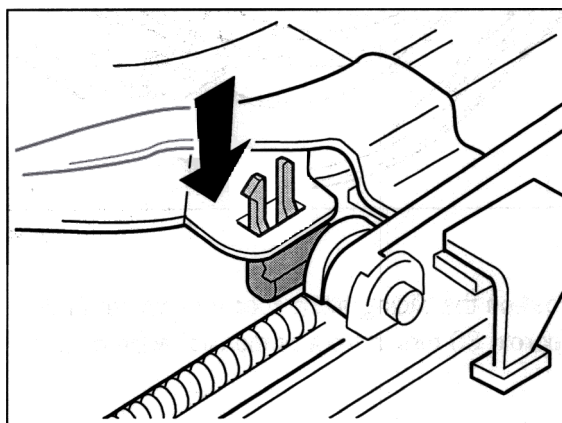
398_98

Pull out the connector springs **B** on the gate and push in sliding/tilting roof trim. Push inner panels under the sheetmetal panel of the sliding/tilting roof trim.



399_98

Position the sliding/tilting roof trim dimension **A** approx. 80 mm in front of the roof edge cut-out.



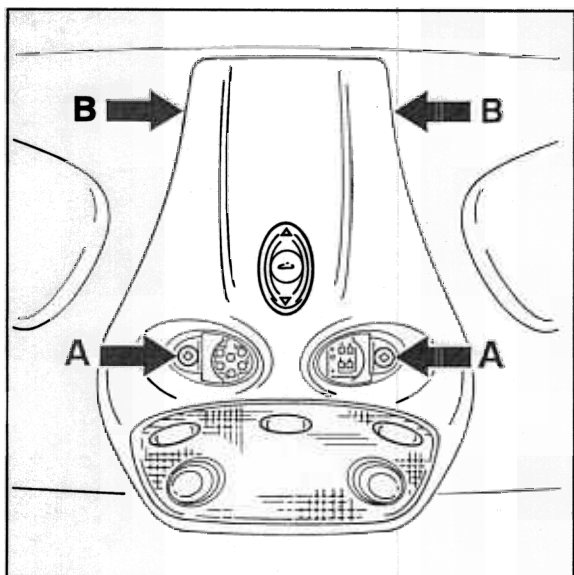
400_98

Engage the left and right-hand inner side panels in the sliding/tilting roof trim. Repeat the procedure for installing the sliding roof panel.

60 14 19 Removing and installing lifting/sliding roof drive

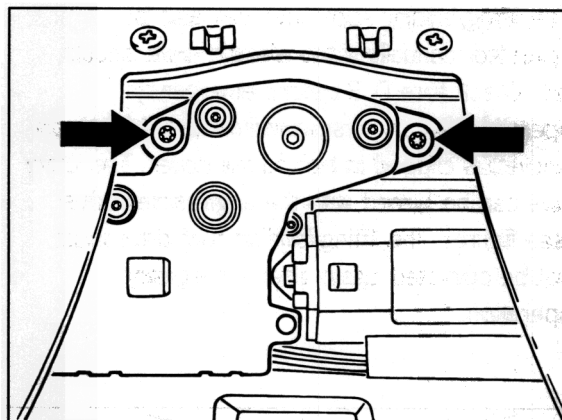
Removal

1. Using a small screwdriver, carefully unclip both cover lenses at the openings provided. Undo fastening screws M5 with a crosshead screwdriver (arrow A).



176_97

2. Unclip cover at the rear left and right (arrow B), push forward towards the windshield and remove.
3. Unscrew both fastening screws (Torx T25) and take lifting/sliding roof drive down and off the teeth.



434_97

4. Push lifting/sliding roof drive in the roof member trim to the side and take out to the bottom. Disconnect the electrical plug connection.

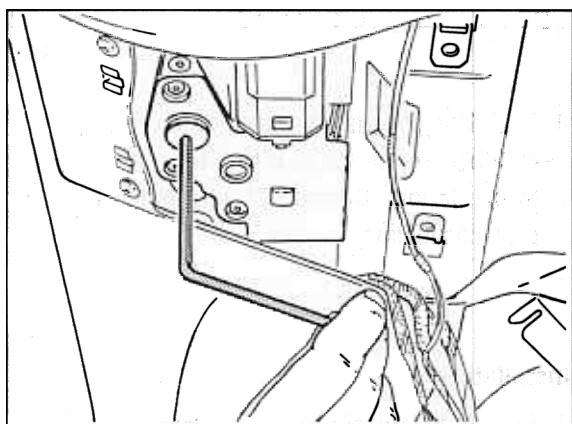
Installation

1. Engage electrical plug connection and carefully lay the wire (do not pinch).
2. Replace fastening screws (micro-encapsulated). Tightening torque of the M5 x 25 fastening screws = 6 Nm (4.5 ftlb.)
3. Do not press on or touch the transmission/reception diodes with your fingers.
4. The cover lenses must not be soiled or smudged with grease.

Emergency operation mechanism

Note

The lifting/sliding roof drive can also be operated manually if the electric drive should fail. Check fuse D 3 before emergency operation. An angle screwdriver (a/f 4 hexagon socket) is clipped in behind the cover. The drive axle can be turned with the angle screwdriver (see figure). The lifting/sliding roof drive must not be operated again after emergency operation.



436_97

60 14 15 Re-teaching the lifting/sliding roof drive**Note**

It is necessary to re-teach the lifting/sliding roof in the event of emergency operation or replacement of parts on the lifting/sliding roof (seals, sliding-roof drive) or if the entire system is replaced.

The data of limit positions and characteristics are stored and are retained even if the battery is disconnected.

Teaching

1. With the ignition switched on, press the "lift" button and move the lifting/sliding roof drive to the "raised" limit position.
2. Press "lift" button again and keep depressed. After around 10 seconds, a complete cycle takes place from the "raised" limit position to the positions "lower – open – close".
3. Teaching of the characteristics has been completed after this process.

Note

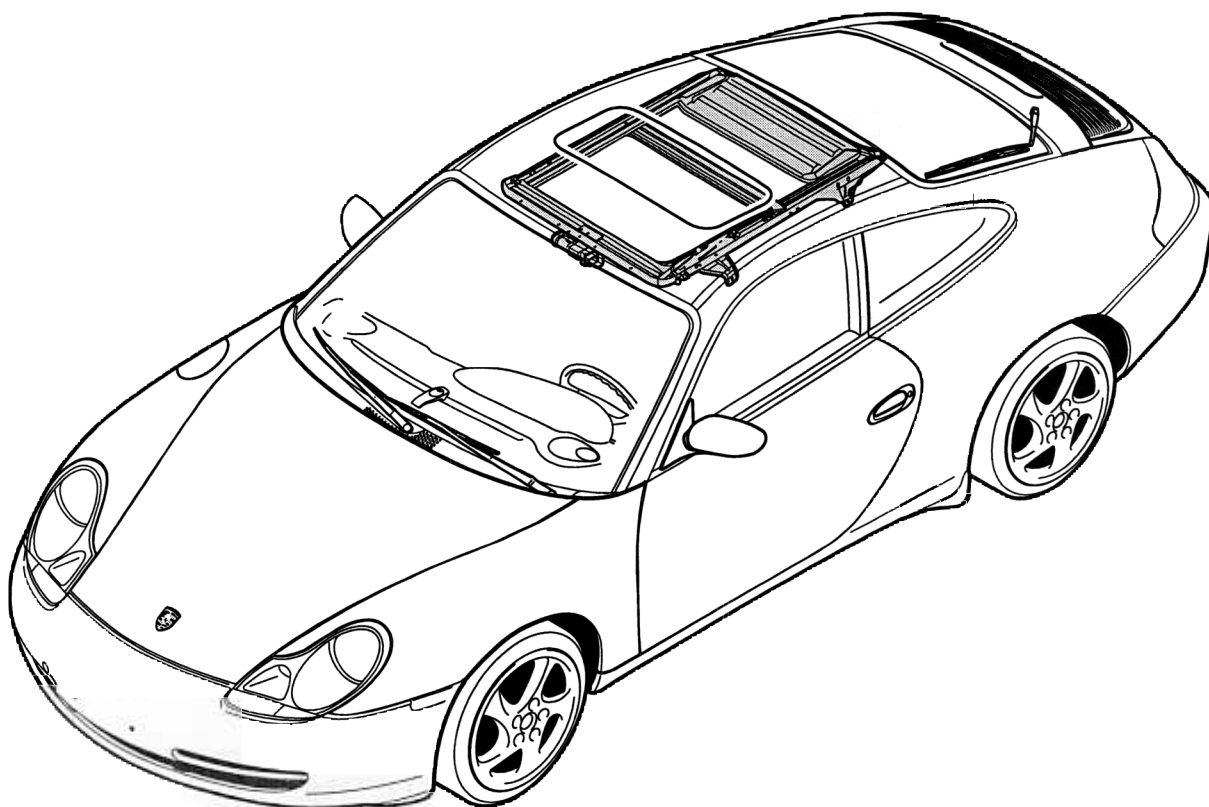
The "raise" button must not be released during the entire process. In the event of a restart, the lifting/sliding roof must always be moved to the raised limit position first.

4. If the lifting/sliding roof drive should move back in Item 1, then the closing force limitation function has responded (lifting/sliding force drive was taught). The "open" button must be re-taught in this case.

Teaching

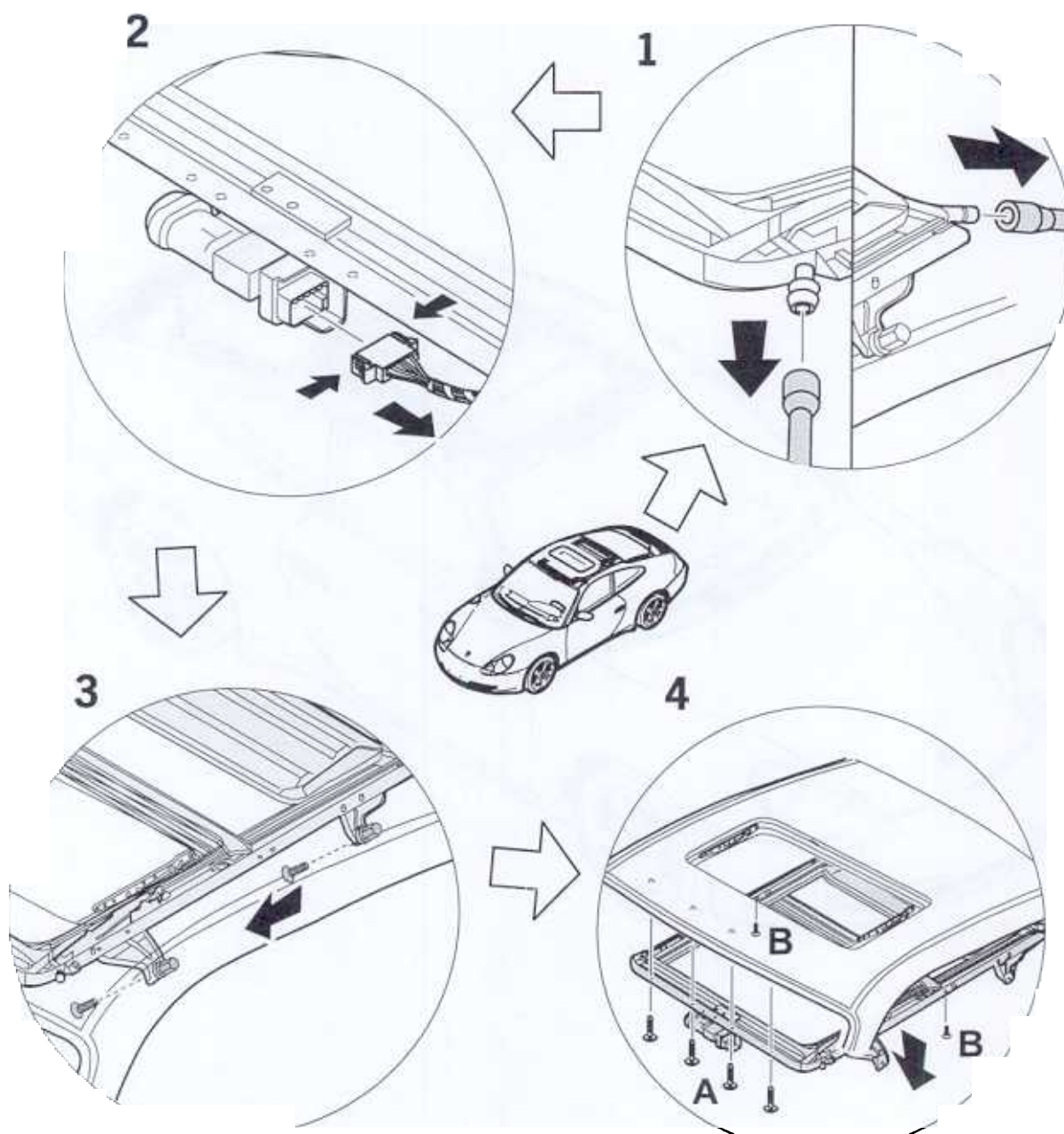
1. Press the "open" button until the sliding roof stops. Then release the button. Press **again** until the lifting/sliding roof drive stops again. Then release the button.
2. Press "open" button again and keep depressed. The entire process takes place after approx. 10 seconds: "close - lift - lower - open - close".

60 28 19 Removing and installing frame for sliding roof



60280001


Removing frame for sliding roof



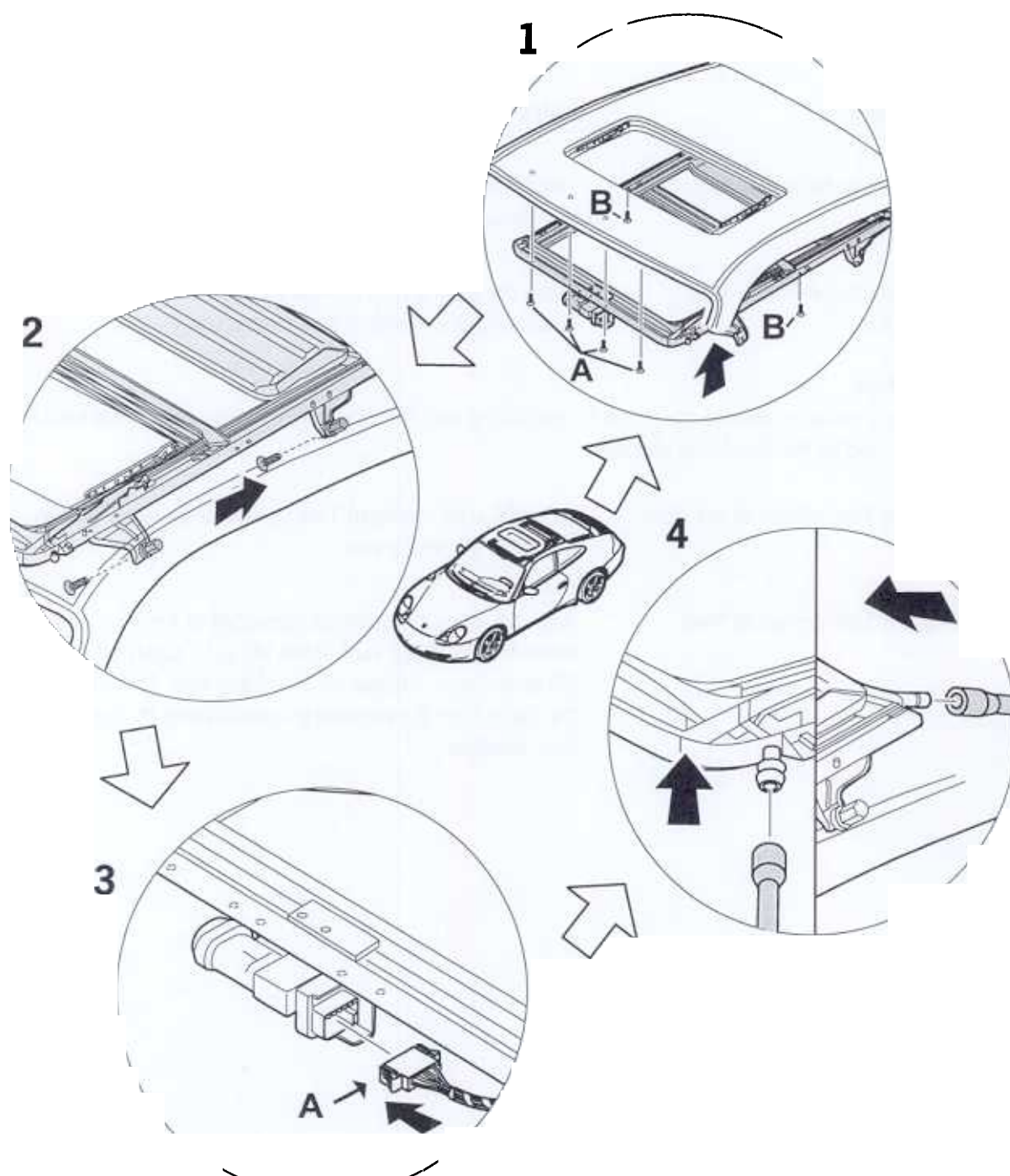
60280003

Removing frame for sliding roof

The roof lining (Serv. No. 70 84) must be removed before removal of the frame for the sliding roof.

| No. | Procedure | Instructions |
|--|--|---|
| 1 | Pulling off water drain hoses | Disconnect water drain hoses at the front and rear from the connection points of the frame for the sliding roof. |
| 2 | Disconnecting electrical plug connection | Press the locking tabs (arrow A) on both sides. Disconnect the electrical plug connection. |
| <div> Note: > In order to remove the frame for the sliding roof from the vehicle, move both seats back and tilt the backrests slightly.</div> | | |
| 3 | Undoing Torx screws at the sides | Undo M6 x 16 oval-head Torx screws at the sides of the frame for the sliding roof. |
| 4 | Undoing Torx screws at front | Undo the M6 x 25 oval-head screw (A) at the front of the frame for the sliding roof or the M6 x 16 oval-head screw (B) at the side of frame for the sliding roof. Then remove the frame from the passenger compartment through the door aperture. |

Installing frame for sliding roof

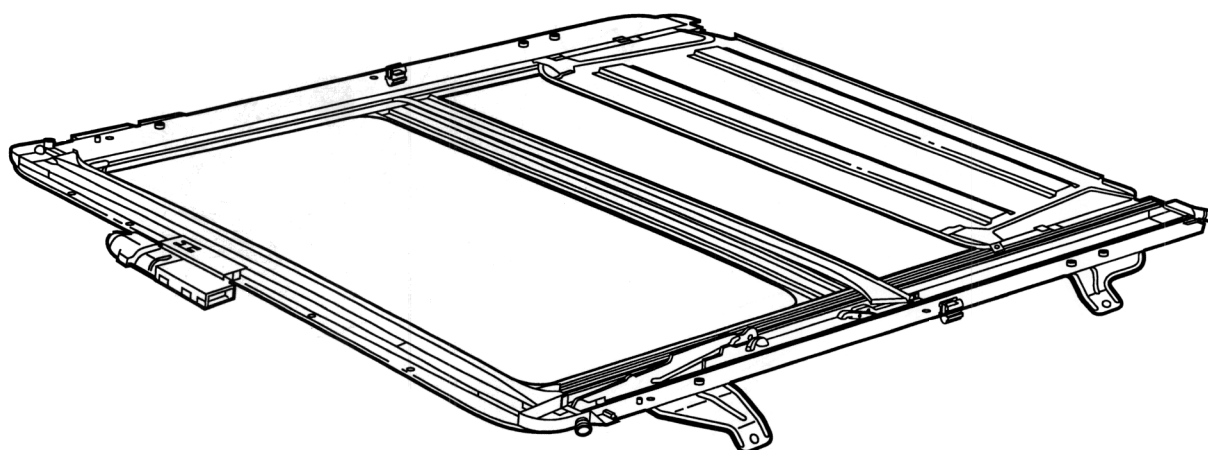


60280002

Installing frame for sliding roof

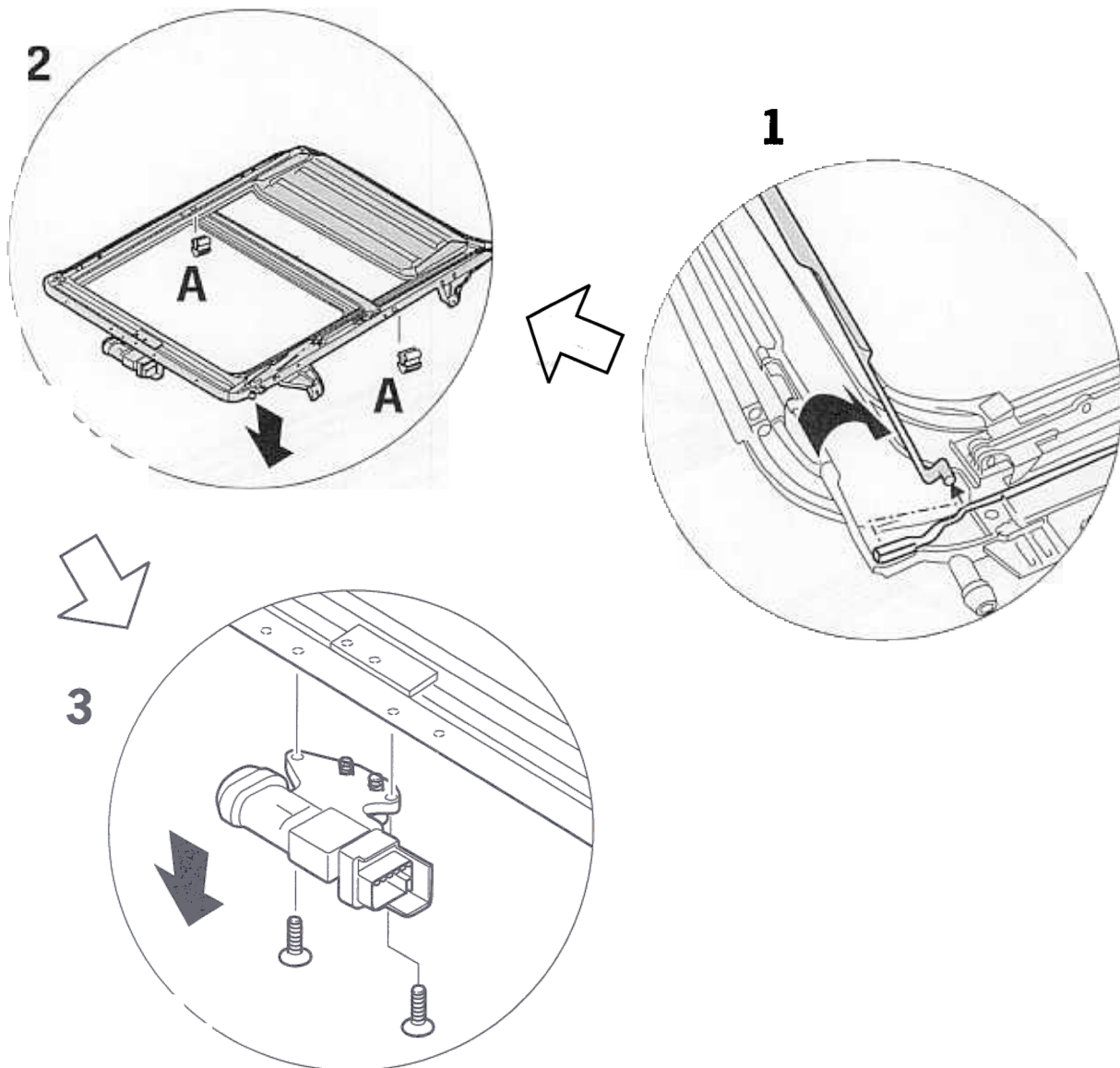
| No. | Procedure | Instructions |
|-----|---------------------------------------|--|
| 1 | Fitting frame for sliding roof | Insert the frame for the sliding roof through the door aperture into the passenger compartment and position it at the screw-mounting points at the front and sides of the roof. Fasten the roof frame at the sides with M6 x 16 oval-head screws (B) and at the front with M6 x 25 oval-head screws (A) . Tightening torque 7.5 Nm (5.5 ftlb.) |
| 2 | Fitting Torx screws at front | Tighten the M6 x 25 oval-head screw at the front of the frame for the sliding roof. Tightening torque 7.5 Nm (5.5 ftlb.) |
| 3 | Connecting electrical plug connection | Plug in the electrical plug connection. The locking tabs (arrow A) must engage on both sides when the connection is made. |
| 4 | Attaching water drain hoses | Attach water drain hoses at the front and rear from the connection points of the frame for the sliding roof. |

60 28 37 Disassembling and assembling frame for sliding roof



60280005

Disassembling frame for sliding roof



60280007

Disassembling frame for sliding roof**Note:**

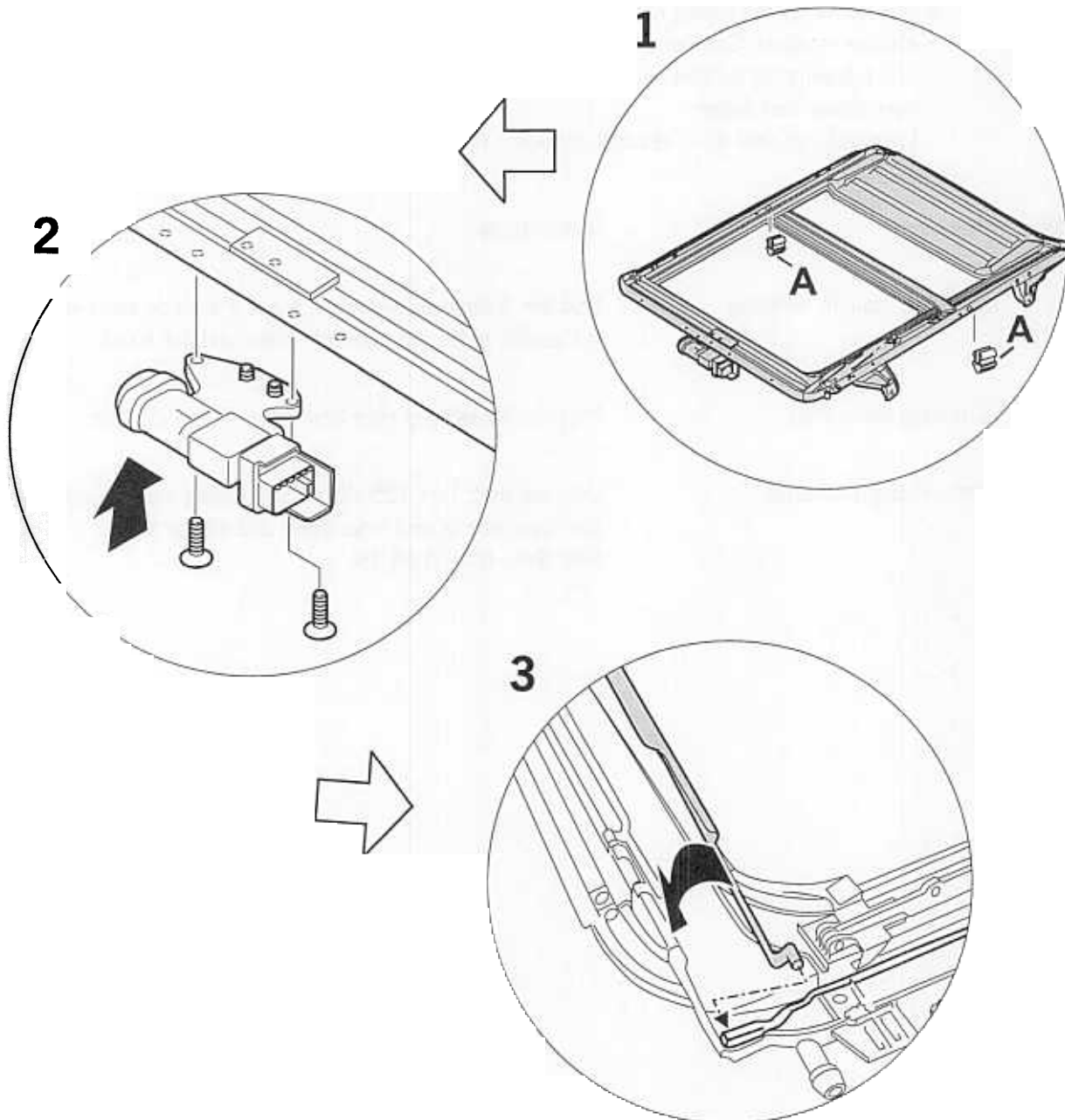
> The frame for the sliding roof must be removed before the frame for the sliding roof lid can be replaced. See Serv. No. 60 14 19

The following parts must be removed from the old sliding roof frame and installed on the new sliding roof frame:

Lifting/sliding roof drive, draught deflector, frame clips

| No. | Procedure | Instructions |
|-----|----------------------------|---|
| 1 | Removing draught deflector | Fold the draught deflector up, press it inwards and out of the guides at the left and right sides and pull it out. |
| 2 | Removing frame clips | Press in the left and right tabs of the frame clip (A) . |
| 3 | Lifting/sliding roof drive | Unscrew both Torx T25 M5 x 25 fastening screws and pull the lifting/sliding roof drive down and off the teeth. See: Serv. No. 60 14 19 |

Assembling frame for sliding roof



60280006

Assembling frame for sliding roof

| No. | Procedure | Instructions |
|-----|------------------------------------|---|
| | Fitting frame clips | Press the frame clips (A) in until the left and right tabs engage. |
| 2 | Fitting lifting/sliding roof drive | Position lifting/sliding roof drive into the teeth of the frame. Screw in and tighten the T25 M5 x 25 Torx screws. Tightening torque: 6 Nm (4.5 ftlb) See: Serv. No. 60 14 (19/15) Removing, installing and re-teaching lifting/sliding roof. |
| 3 | Fitting draught deflector | Press the draught deflector in on the left and right and insert it into the guides at the sides. Fold up the draught deflector. |

Removing and installing convertible top

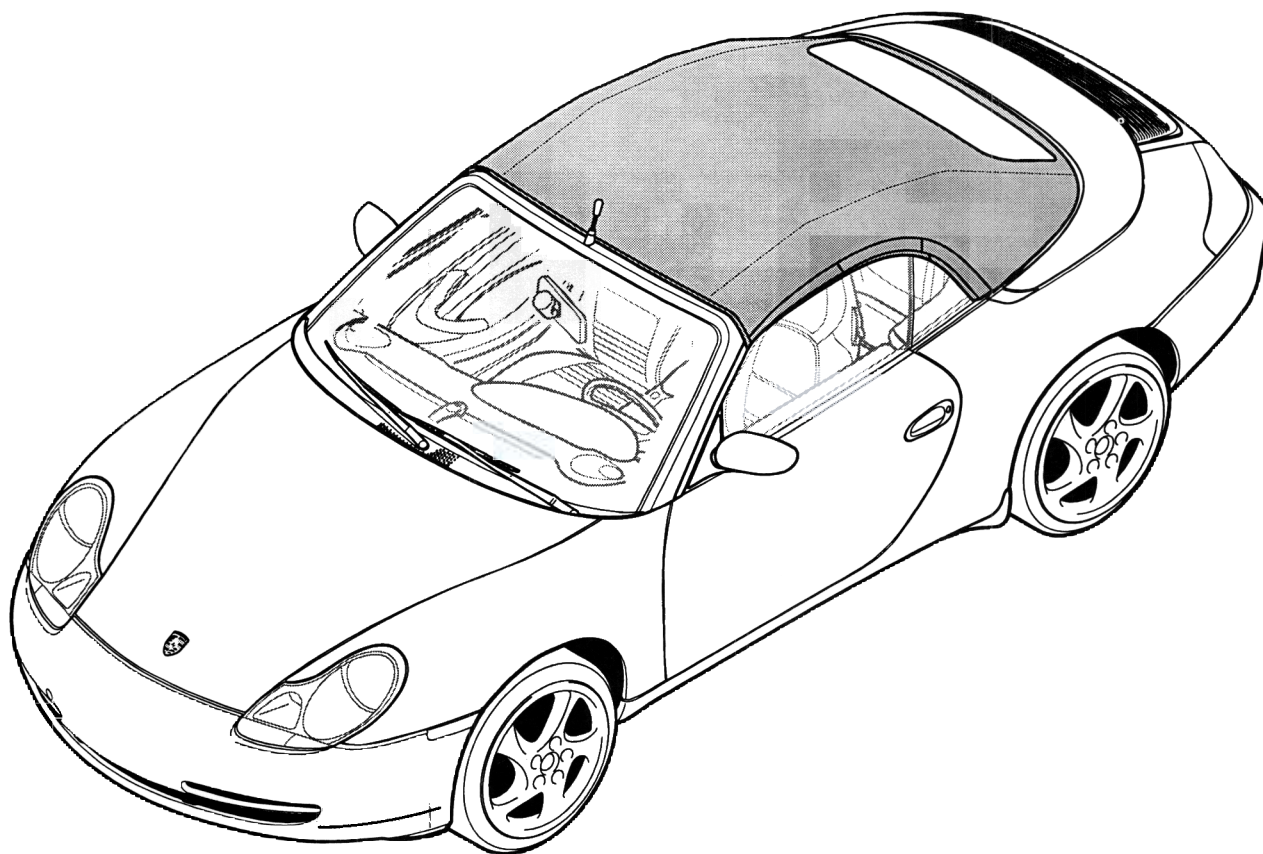
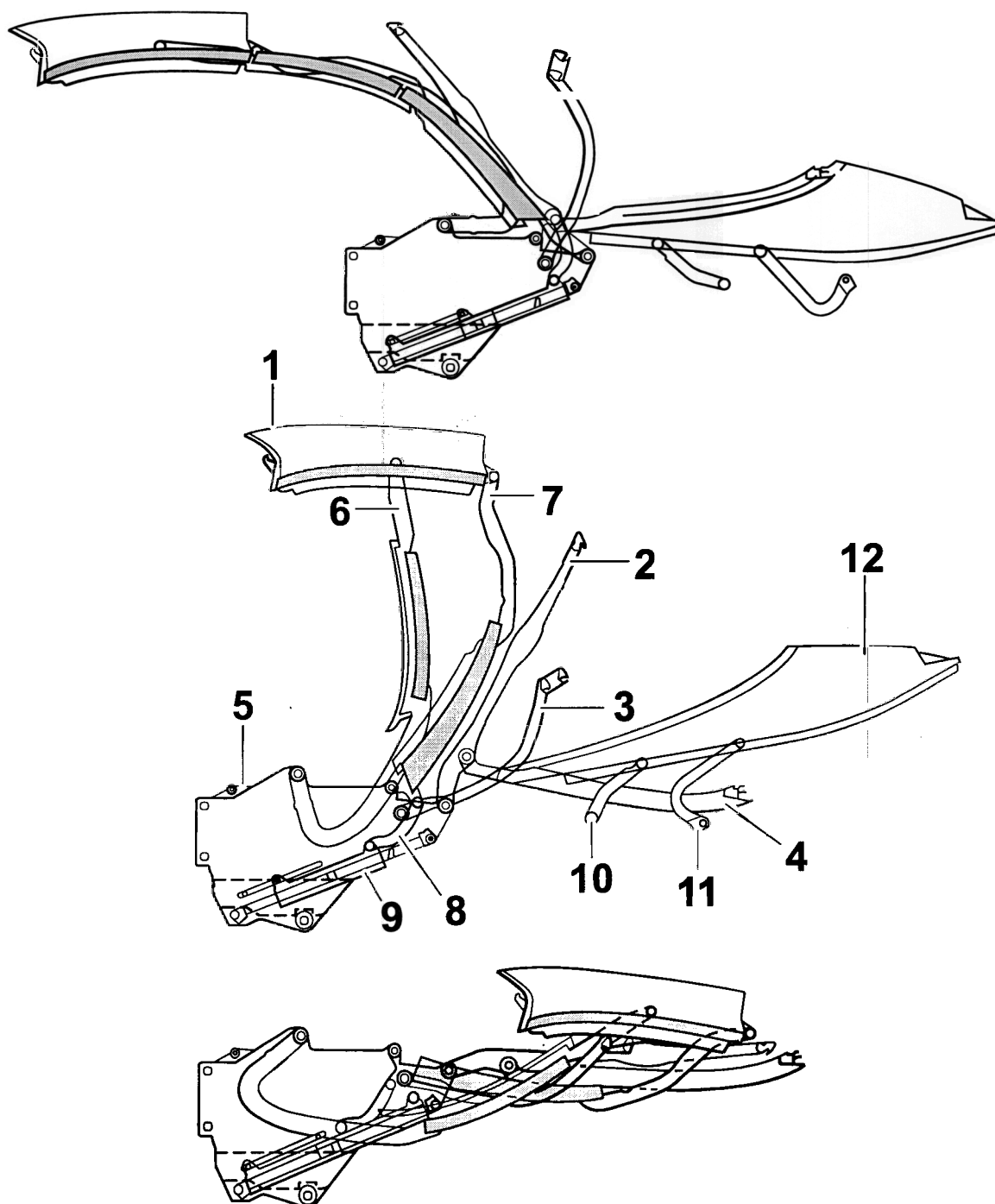
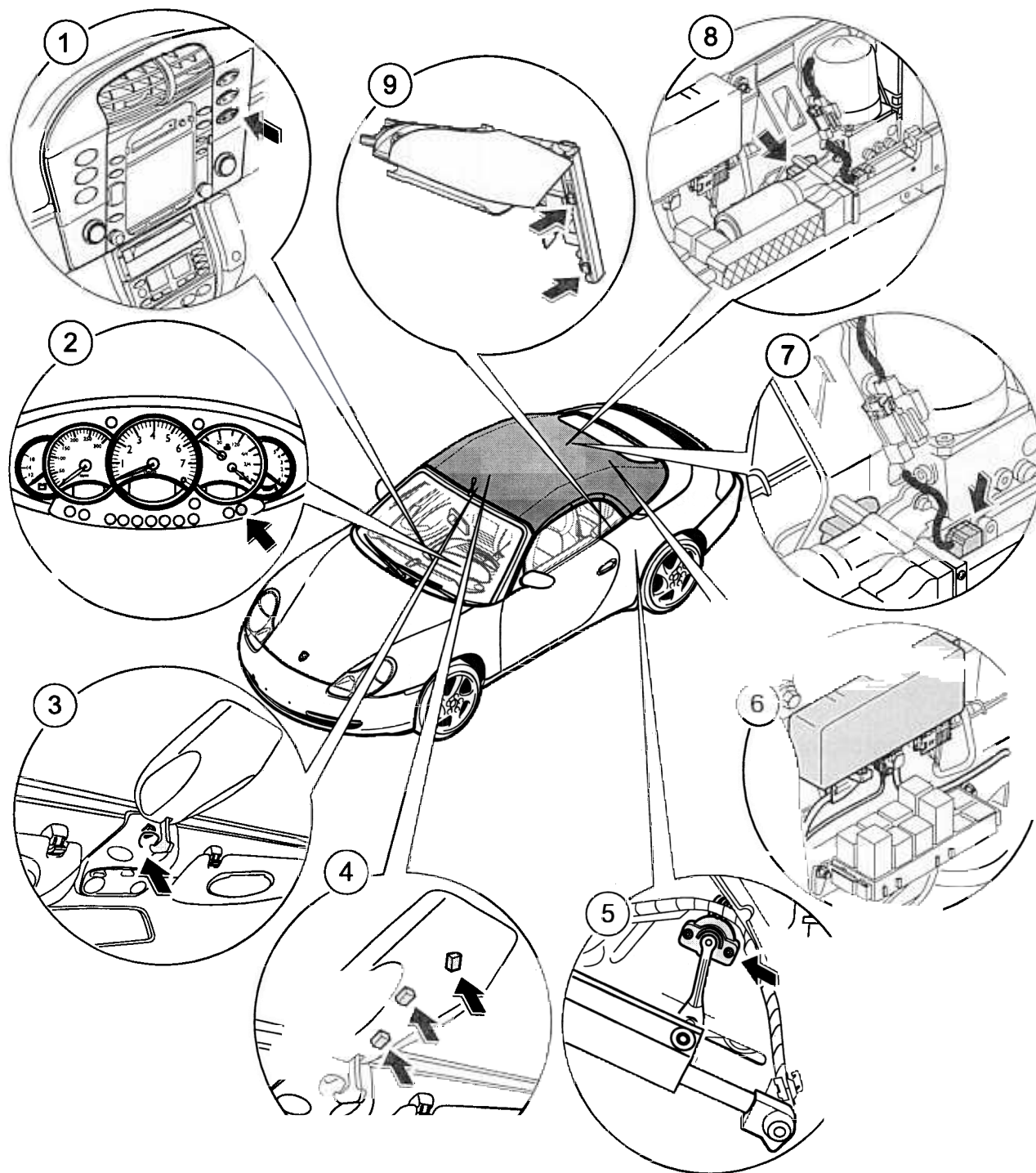


Diagram of convertible top



- 1 - Roof frame 1**
- 2 - Main bow**
- 3 - Corner bow**
- 4 - Tension bow**
- 5 - Convertible-top support**
- 6 - Roof frame 2**
- 7 - Roof frame 3**
- 8 - Drive lever**
- 9 - Hydraulic cylinder (drive)**
- 10 - Front hinge lever**
- 11 - Rear hinge lever**
- 12 - Convertible-top compartment lid**

Overview of convertible-top components

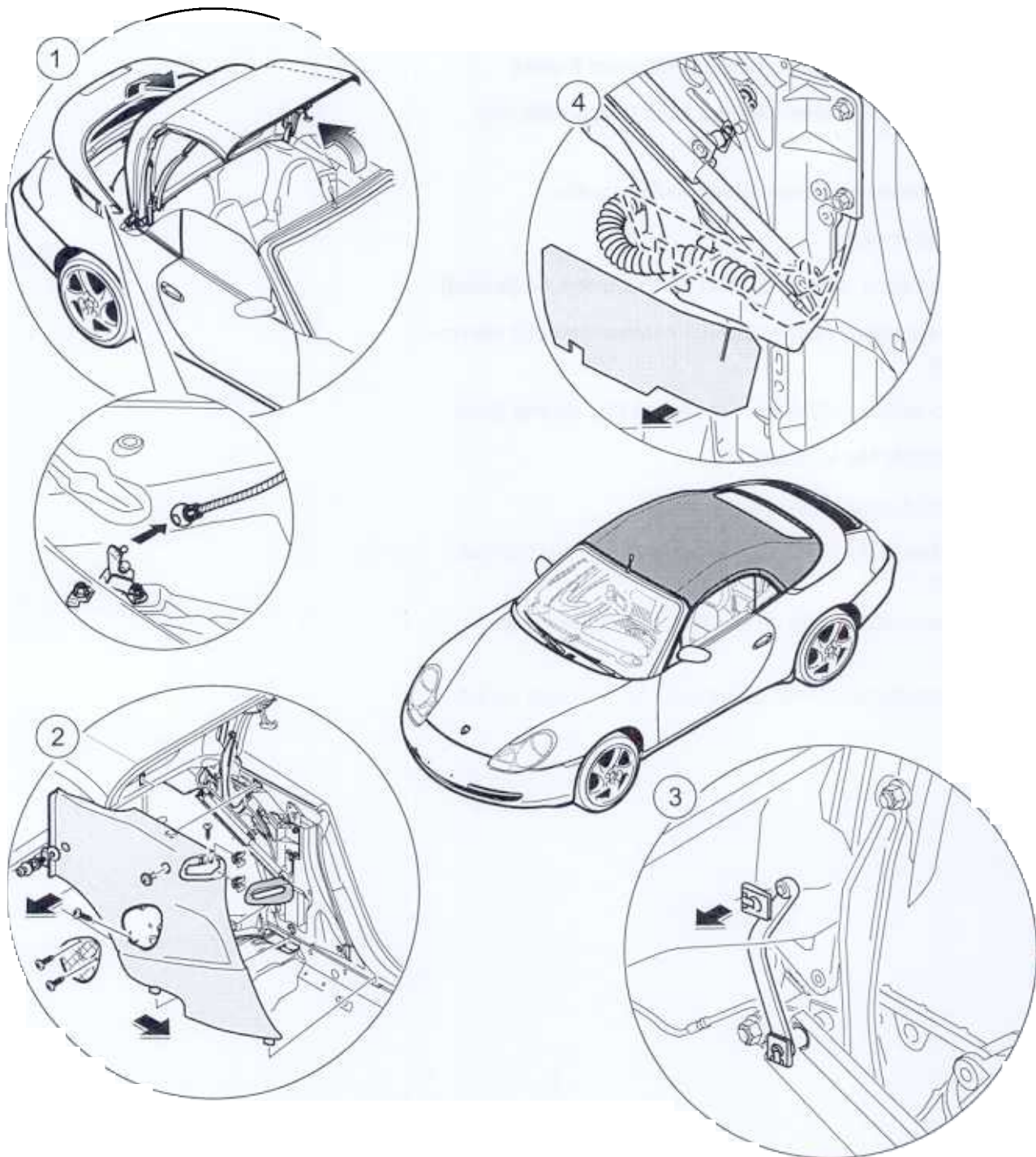


- 1 - Rocker switch
- 2 - Warning light
- 3 - Micro-switch, latching hook (windscreen frame)
- 4 - Micro-switch, convertible-top latch (convertible-top side)
- 5 - Potentiometer, convertible-top interrogation
- 6 - Control module
- 7 - Micro-switch, convertible-top compartment lid (locked)
- 8 - Potentiometer, convertible-top compartment lid interrogation
- 9 - Micro-switch, left/right rear section flap up and down

The convertible top is actuated if:

- Terminal 15 is connected via ignition.
The parking brake input is connected to ground (parking brake engaged).
- No speedometer signals greater than 5 km/h (3 mph) are present.
- Engine compartment lid is closed (input not at ground potential).

Removing convertible top

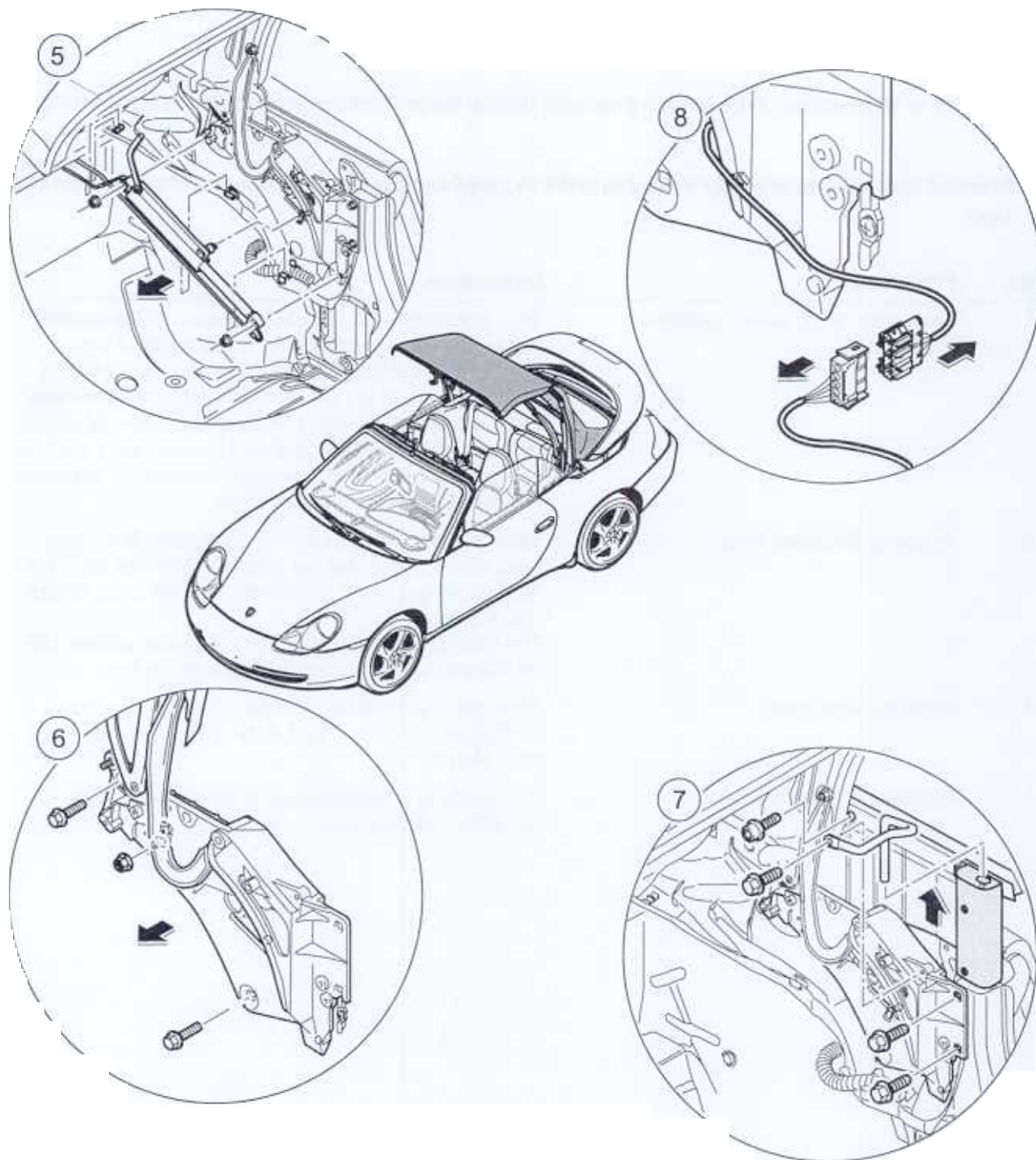


**Caution!**

Damage to or destruction of the tension bow seal. During the procedure convertible top in service position

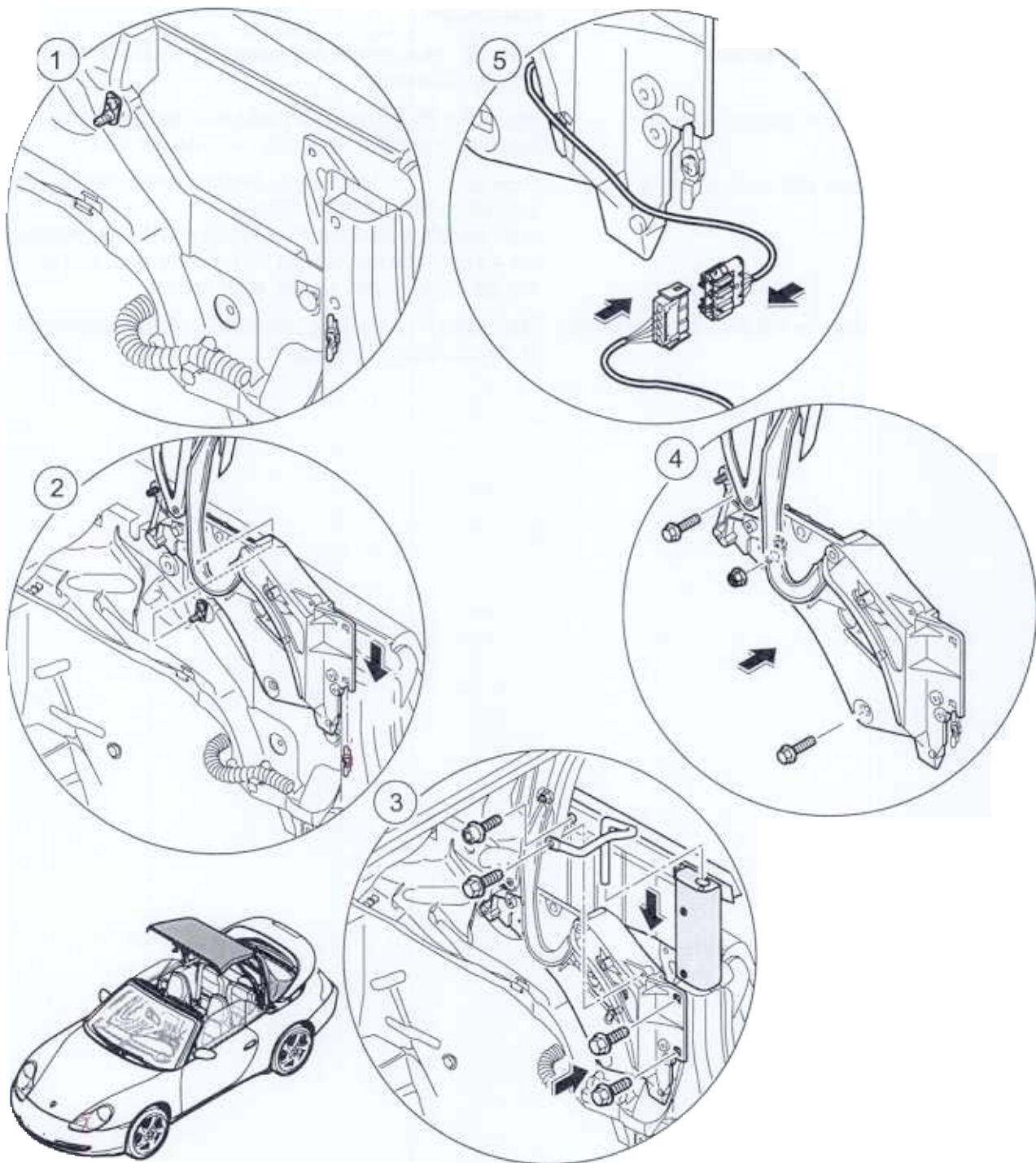
- **Proceed according to procedure No. 1 in order to avoid damage to or destruction of the tension bow seal!**

| No. | Procedure | Instructions |
|-----|-------------------------------------|---|
| | Convertible top in service position | Move convertible top rearward by means of the electric motor until the convertible-top compartment lid has reached the rear limit position. Move convertible top forward by means of the electric motor until the convertible-top compartment lid moves forward. Then interrupt closing operation. Disengage left and right tension cables and fold up the tension bow. The convertible top must no longer be electrically operated in this position. |
| 2 | Removing side-panel lining | Remove seat cushions and belt cover; undo B 4.2 oval-head screw. Loosen holding pegs with Allen key St6. Undo the Torx screws of the loudspeaker and the cross-recess screw beneath it. Press out the windstop collar using a plastic spatula. Lift up side-panel lining and remove towards the front. |
| 3 | Detaching drive lever | Press out upper retaining clip SBL10 of the drive lever. ⇒ Removal tool; Rep. Gr. 2.4, Nr. 131; Workshop Equipment Manual |
| 4 | Removing spray protection | Pull the spray protection upwards out of the chamber in the water collection tray. |

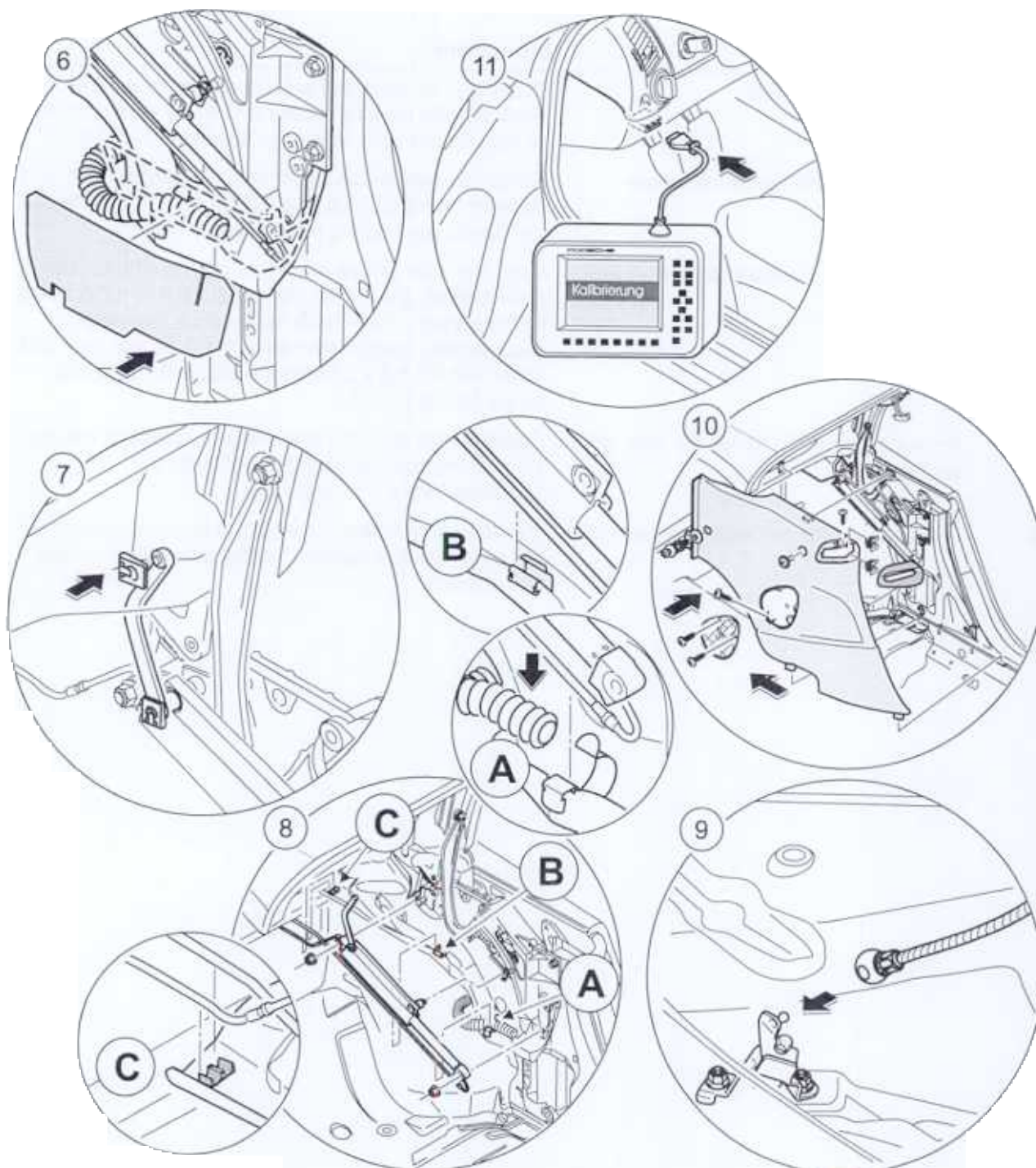


| No. | Procedure | Instructions |
|-----|--|--|
| | Removing hydraulic cylinder | Undo M8 hexagon nuts and remove the hydraulic cylinder with the drive lever. |
| 6 | Detaching convertible-top support | Undo M8 x 35 hexagon-head bolts from the convertible-top support. Undo M8 nut from the assembly aid at rear. |
| 7 | Removing rear side window inner seal | Undo and remove M8 hexagon nut from the convertible-top support and the deflection fitting. Undo rear M6 x 20 hexagon-head bolt from the convertible-top support, and pull the rear side window inner seal up and out together with the belt guide section. |
| 8 | Disconnecting the electrical plug connection | Disconnect electrical plug connection of the potentiometer at the convertible-top support. |

Installing convertible top



| No. | Procedure | Instructions |
|-----|--|---|
| | Checking assembly aids | Ensure that the assembly aids are seated firmly. The assembly aids must be recalibrated if they were removed. ⇒ Rep. Gr. 610115; Adjusting Cabriolet convertible top. |
| 2 | Placing convertible top on the vehicle | Position convertible-top supports in the assembly aids, and place the convertible-top pegs of roof frame 1 into the convertible-top peg housing in the cowl-panel frame. |
| 3 | Fitting rear side window inner seal | Insert rear side window inner seal together with the belt guide section, and tighten M6 hexagon nut on the convertible-top support. Push the deflection lever into the belt guide section, position the belt on the deflection lever and fasten with the M8 x 20 hexagon-head bolt. Tightening torque 50 Nm (37 ftlb.). |
| 4 | Screwing convertible top on the inner side section | Fasten the left and right convertible-top supports with the M8 x 35 hexagon-head bolts and M8 nut. Tightening torque 23 Nm (17 ftlb.). |
| 5 | Disconnecting the electrical plug connection | Join the electrical plug connection of the potentiometer for the convertible-top support and the convertible-top latch micro switch. |



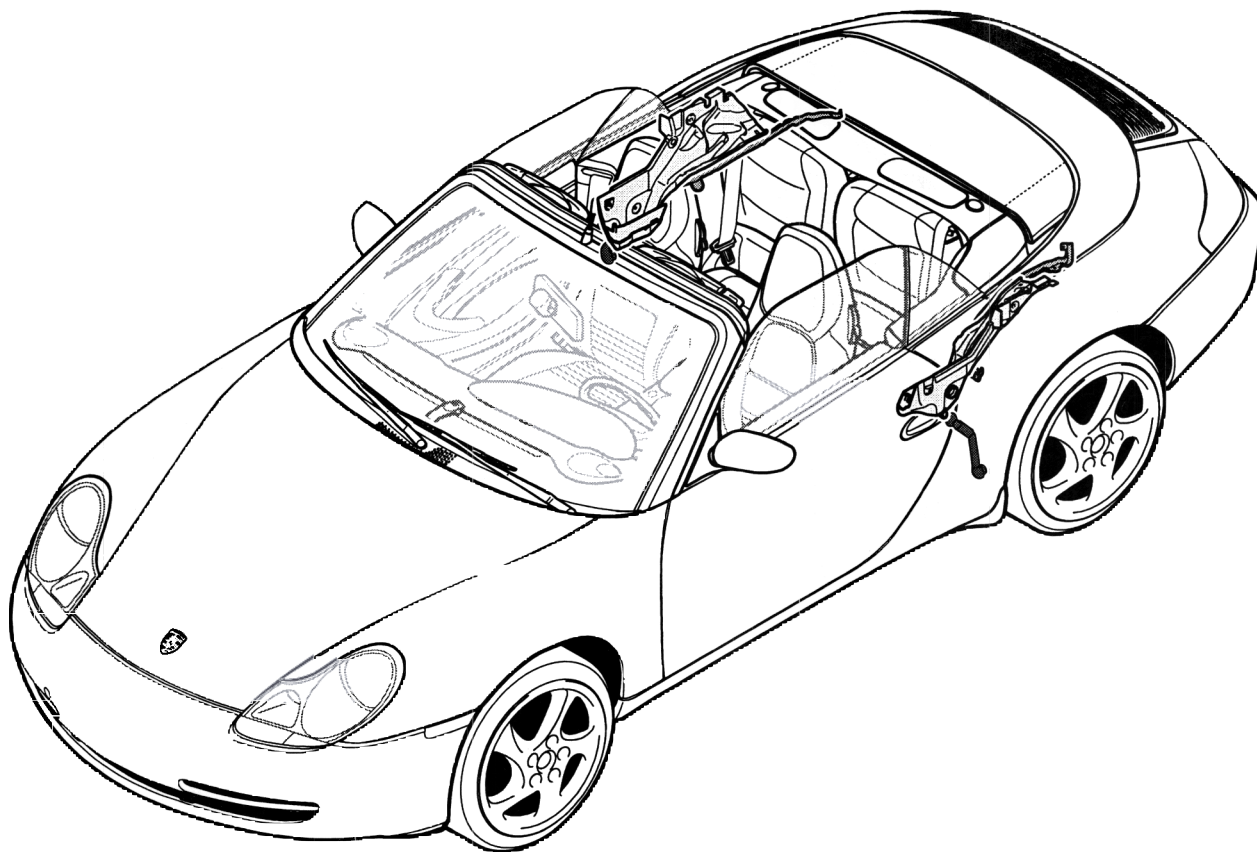
**Caution!**

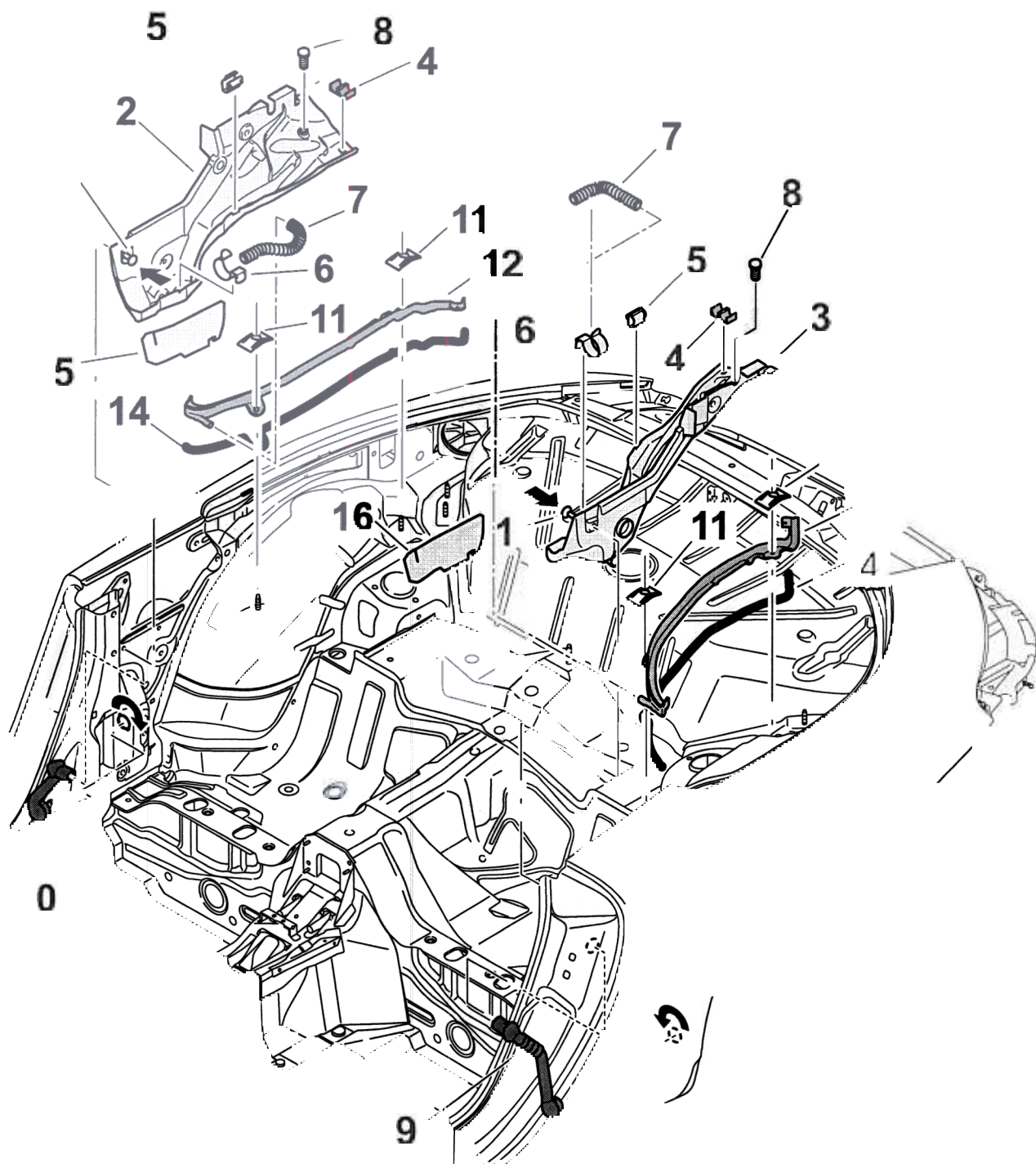
Damage to hydraulic system if hydraulic lines are trapped or crushed during installation

- Pay special attention when routing the hydraulic lines in the clips.

| No. | Procedure | Instructions |
|-----|------------------------------------|---|
| | Installing hydraulic cylinder | Position hydraulic cylinder with the drive levers on the convertible-top support, and insert potentiometer fork in the pin of the hydraulic housing (on the left side only). |
| 7 | Laying lines to hydraulic cylinder | Lay hydraulic line -Figure A- in the clips underneath the water drain hose. Press hydraulic lines into the clips in -Figure B- and -Figure C- . Tighten M8 hexagon nuts. Tightening torque 17 ± 2 Nm (12.5 ± 1.5 ftlb.). Secure drive lever with the retaining clip SBL 10. ⇒ Removal tool; Rep. Gr. 2.4, Nr. 131; Workshop Equipment Manual |
| 8 | Installing spray protection | Insert the spray protection in the chamber in the water collection tray. |
| 9 | Engaging tension cables | Fold down tension bow and press ball socket of the left and right tension cables into the ball head of the adjusting element. |
| 10 | Installing side-panel lining | Insert side-panel lining into the guide rail at rear, position on the belt guide section at front, and fasten with the B 4.2 oval-head screws. Insert collar for the windstop until it engages. Tighten holding pegs with Allen key St6. Position cross-recess screw on the sheetmetal bracket in the cut-out for the loudspeaker, and tighten. Plug in electrical plug connection of loudspeakers. Position loudspeakers and secure with the Torx screws. |
| 11 | Convertible top calibration | Connect the Porsche System Tester 2 to the diagnostic socket. Switch on the ignition. Select menu item "Convertible top", and select menu item "Calibrate" in the command line which then appears. Start the calibration with the -F7 key- . Calibration can be started irrespective of whether the convertible top is open or closed. The latching hook in roof frame 1 does not close during calibration. |

Removing and installing water collection tray



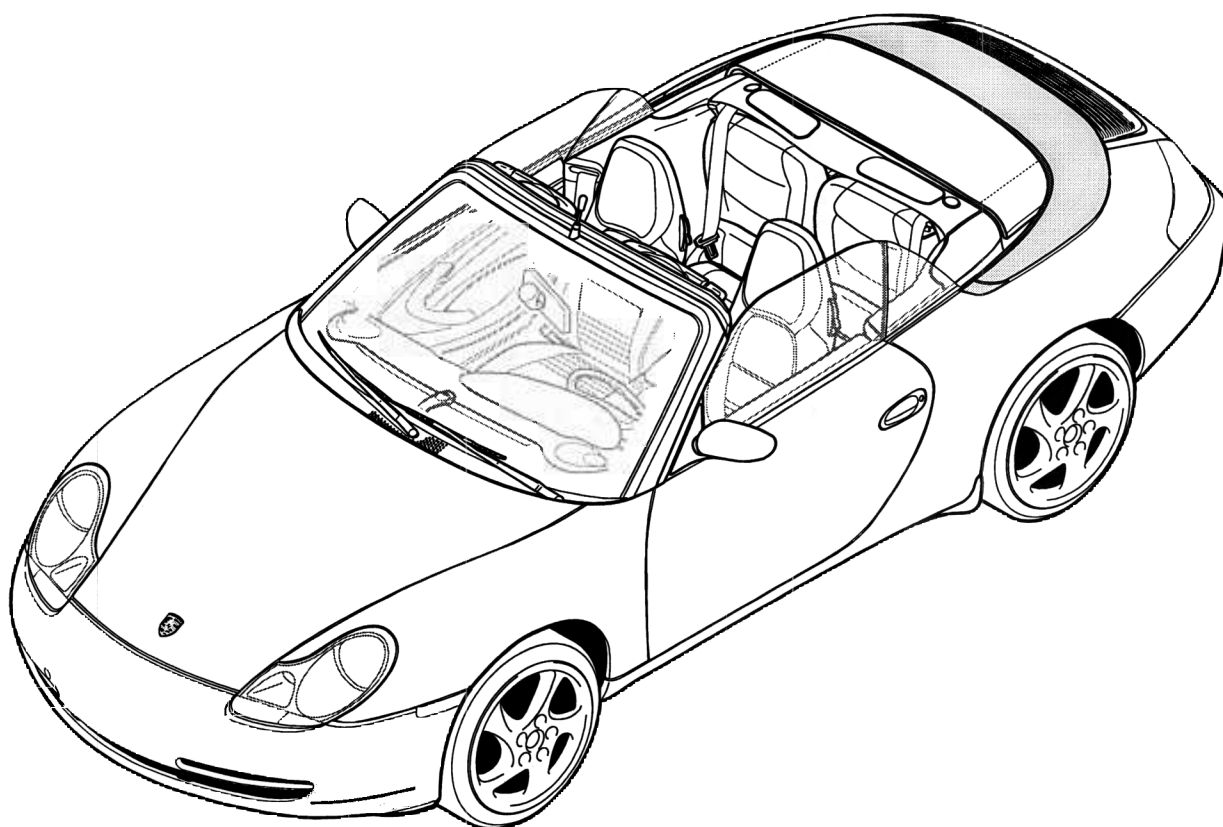


The convertible top must be removed before removal of the water collection tray! ⇒ Rep. Gr. 610119; Removing and installing convertible top

| No. | Designation | Qty. | Removal | Note: |
|-----|--|------|---|--|
| | | | | Installation |
| | Clip | | | |
| | Water collection tray, right | | | |
| | Water collection tray, left | | | |
| | Double clip for hydraulic hose Ø6.9 | | Pull off. | Push on. |
| 5 | Clip for hydraulic hose | 2 | Pull off. | Push on. |
| 6 | Combination clip for water hose and hydraulic hose | 2 | Pull off. | Push on. |
| 7 | Water hose 13.5 x 2 x 200 | 2 | Pull out of combination clip -6- and out of water channel -12, 13- . | Push onto the water channel -12, 13- and press into the combination clip -6- . |
| 8 | Adjusting piece | 2 | Unscrew. | Screw in; adjusting range approx. 30 mm. Adjust height at the adjusting piece so that the convertible-top compartment lid can still close freely. ⇒ Rep. Gr. 610115; Adjusting convertible top |
| 9 | Water drain tube, left | 1 | Unplug from the water collection tray -2- , turn it inward and remove from the body. | Insert horizontally into the body and pull it upwards. |
| 10 | Water drain tube, right | 1 | Unplug from the water collection tray -2- , turn it inward and remove from the body. | Insert horizontally into the body and pull it upwards. |
| 11 | Clip | 4 | Press out. | Replace. |
| 12 | Water channel, right | 1 | Cut out with a knife. | Apply body sealant -14- approx. 10 mm on the inner wheel housing; spread emerging body sealant using a brush. Press on water channel -12- and secure with clips -11- . |
| 13 | Water channel, left | 1 | Cut out with a knife. | Apply body sealant -14- approx. 10 mm on the inner wheel housing; spread emerging body sealant using a brush. Press on water channel -12- and secure with clips -11- . |

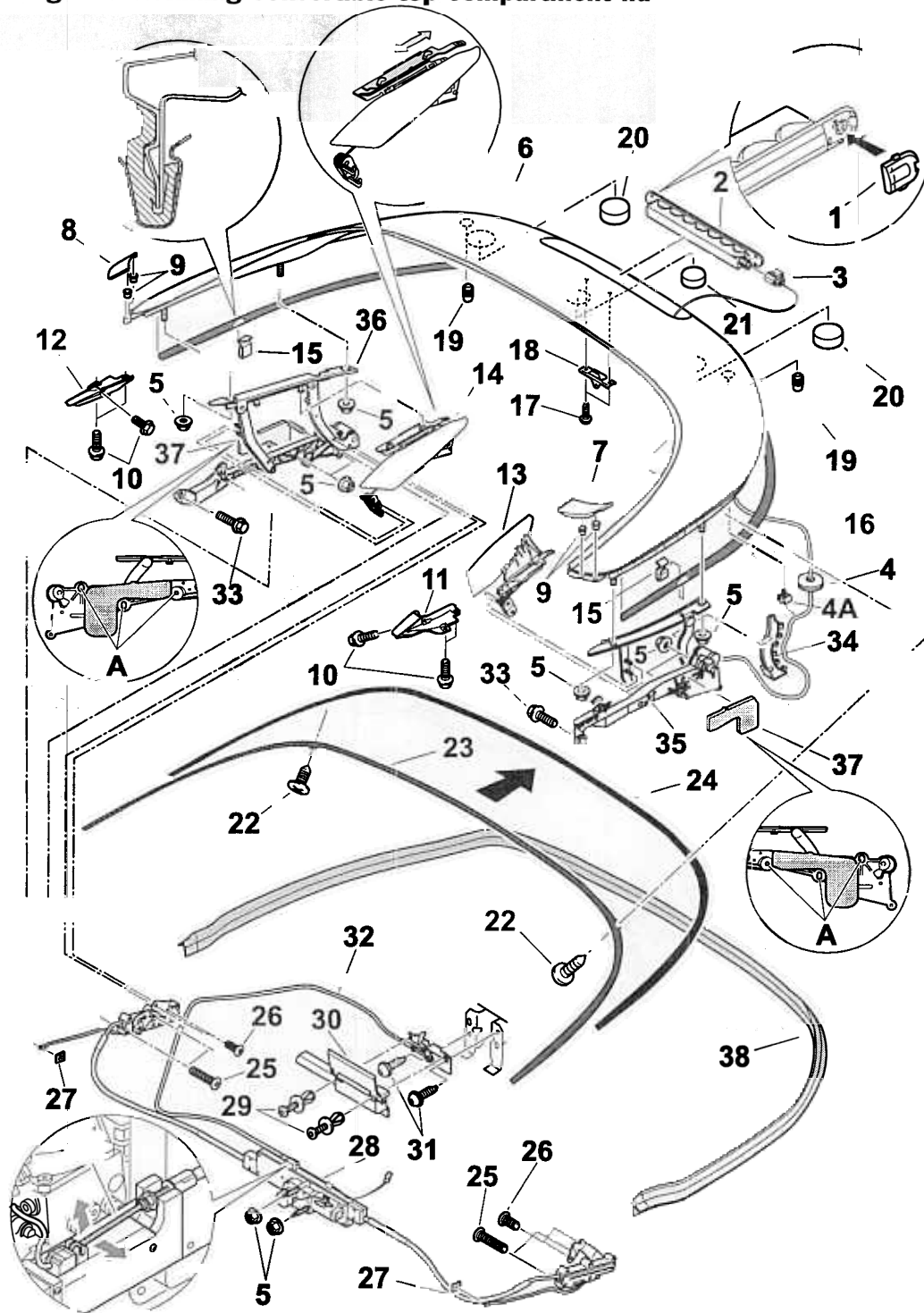
| No. | Designation | Qty. | Removal | Note: |
|-----|------------------|------|---|--|
| | | | | Installation |
| | Body sealant | | | See: -12, 13- |
| | Spray protection | | Unplug from the water collection tray -2, 3- . | Insert in the chamber in the water collection tray -2, 3- . |

61 90 19 Removing and installing convertible top compartment lid



693_97

Removing and installing convertible top compartment lid



61900001

Removing and installing convertible top compartment lid



Caution!

The tension bow seal can be damaged or destroyed; move the convertible top to service position during this work!

> Always observe the procedure "convertible top in service position" in order to avoid damage or destruction of the tension bow seal. See: Serv. No. 61 01 19

| No. | Designation | Qty. | Removal | Note: Installation |
|-----|---------------------------------|------|--|---|
| 1 | Cover | 1 | | |
| 2 | Additional brake light | 1 | Unclip right-hand cover (Item 1), turn the twist lock by 90° with a screwdriver and remove the additional brake light. | Position additional brake light in the convertible-top compartment (Item 5), turn twist lock by 90° and press the cover into the additional brake light |
| 3 | Electrical plug connection | 1 | Disconnect electrical plug connection | Connect electrical plug connection |
| 4 | Grommet | 1 | | |
| 4A | Clip | | | |
| 5 | Collar nut M6 | 6 | Undo | Tightening torque 9.7 Nm (7.0 ftlb.) |
| 6 | Convertible top compartment lid | 1 | Remove | Position convertible top compartment lid on the hinges and fasten with the M6 collar nuts (Item 5) |
| 7 | Cover | 1 | Pull off | Press in |
| 8 | Cover | 1 | Pull off | Press in |
| 9 | Grommet | 4 | | Inspect and replace if necessary |
| 10 | Hexagon-head bolt M6 x 12 | 8 | Undo | |

| No. | Designation | Qty. | Removal | Note: Installation |
|-----|---------------------------------|------|------------------------|--|
| 11 | Left bracket | 1 | | Position on the convertible top compartment (Item 6) and fasten with the M6 x 12 hexagon-head bolts (Item 10) |
| 12 | Right bracket | 1 | | Position on the convertible top compartment lid (Item 6) and fasten with the M6 x 12 hexagon-head bolts (Item 10) |
| 13 | Additional flap, left | 1 | See Serv. No. 61 91 19 | |
| 14 | Additional flap, right | 1 | See Serv. No. 61 91 19 | |
| 15 | Clip | 2 | Pull off | Push on |
| 16 | Edge guard | 1 | | |
| 17 | Torx screw | 2 | | |
| 18 | Upper part of lock | 1 | | |
| 19 | Rubber buffer | 2 | Unscrew | Screw in |
| 20 | Foam pad | 2 | Pull off | Replace; remove protective paper and bond onto the marked locations |
| 21 | Foam pad | 1 | Pull off | Replace; remove protective paper and bond onto the marked locations |
| 22 | Sheetmetal screw B 3.5 x 9.5 | 2 | | |
| 23 | Sealing strip | 1 | | Push seal (Item 24) with sealing strip (Item 22) onto the convertible top compartment, and fasten the convertible top with the B 3.5 x 9.5 sheetmetal screws (Item 16) |

| No. | Designation | Qty. | Removal | Note: Installation |
|-----|--------------------------------|------|--|--|
| 24 | Gasket | 1 | | Push on |
| 25 | Torx screw T30 M6 x 30 | 2 | | Tightening torque 9.7 Nm (7.0 ftlb.) |
| 26 | Torx screw T30 M6 x 12 | 2 | | Tightening torque 9.7 Nm (7.0 ftlb.) |
| 27 | Clip SLB 4 | 2 | Removal tool: refer to Workshop Equipment Manual, Chapter 2.4, No. 131. | |
| 28 | Drive | | Undo collar nut (Item 5) and Torx screws (Items 25 and 26), and remove the drive | Position drive in the centre of the frame and fasten with the collar nuts (Item 5). Position Torx screws on the mechanical drive on the right and left, and tighten the screws with a tightening torque of 9.7 Nm (7.0 ftlb.) |
| 29 | Expanding rivet | 2 | Unscrew threaded plug and remove | Press in and screw in threaded plug |
| 30 | Flap | | | |
| 31 | Torx screw T M6 x | 2 | | Position locking hook in the body and screw down |
| 32 | Locking hook with bowden cable | 1 | Loosen bowden cable at the hexagon nut and lift nipple out of the drive | Insert nipple in the drive (Item 28), and set threaded spindle free of play with the hexagon nut |
| 33 | Hexagon-head bolt | 2 | | |
| 34 | Fastening element | | | |

| No. | Designation | Qty. | Removal | Note: Installation |
|-----|-------------|------|--|---|
| 35 | Hinge left | 1 | Undo M8 hexagon-head bolts and detach the hinge from the body, taking care not to damage the seal. | Adjust to the rear left side section in accordance with lid contour. For this purpose, use a Ø 5 mm centring pin (shop-made tool) for centring the hinge. Insert the centring pin with the hinge in closed position. Fit the convertible top compartment lid (Item 6) and adjust the gap width. See: Serv. No. 5 Diagram of body gap dimensions Note: It may be necessary to reposition an operating pin when replacing the hinges and using old convertible top flaps See serv. No. 61 92 31 |
| 36 | Hinge right | 1 | See Item 35 | See Item 35 |
| 37 | Seal | 2 | Detach using a spatula; the seal must be replaced only if damaged or if a new hinge is used (Items 35 and 36). | Position and adhere on the hinge (Items 35, 36). Note: The seal must not be adhered over the support surfaces of the hinge (A) and body. Remove the backing film before installing the hinge. |
| 38 | Gasket | 1 | Pull off | Push onto the rim, rear side section on the vehicle |

61 28 55 Replacing convertible-top covering**Information:**

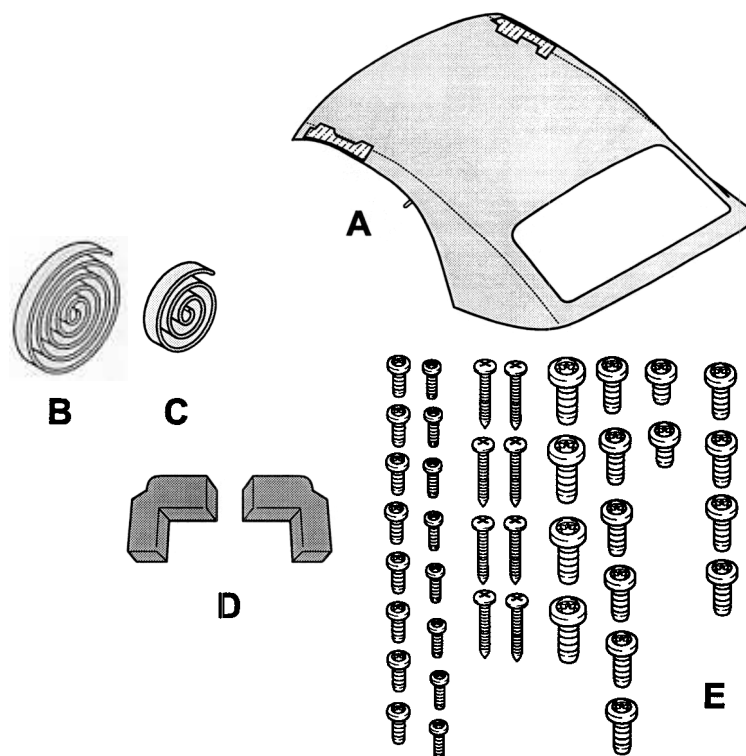
The following convertible-top covering spare parts are required for replacement of the convertible-top covering. The spare parts contained in the "convertible-top covering" scope of parts must always be replaced.

The convertible-top covering must be replaced at a room temperature of at least 15 degrees Celsius (59 Fahrenheit).

For the fitting procedure, the convertible top must be in service position. Move convertible top towards the rear by means of the electric motor until the convertible-top compartment lid has reached the rear limit position.

Move convertible top forward by means of the electric motor until the convertible-top compartment lid moves forward. Then interrupt closing operation. Disengage left and right tension cables and fold up the tension bow.

The convertible top must no longer be electrically operated in this position.

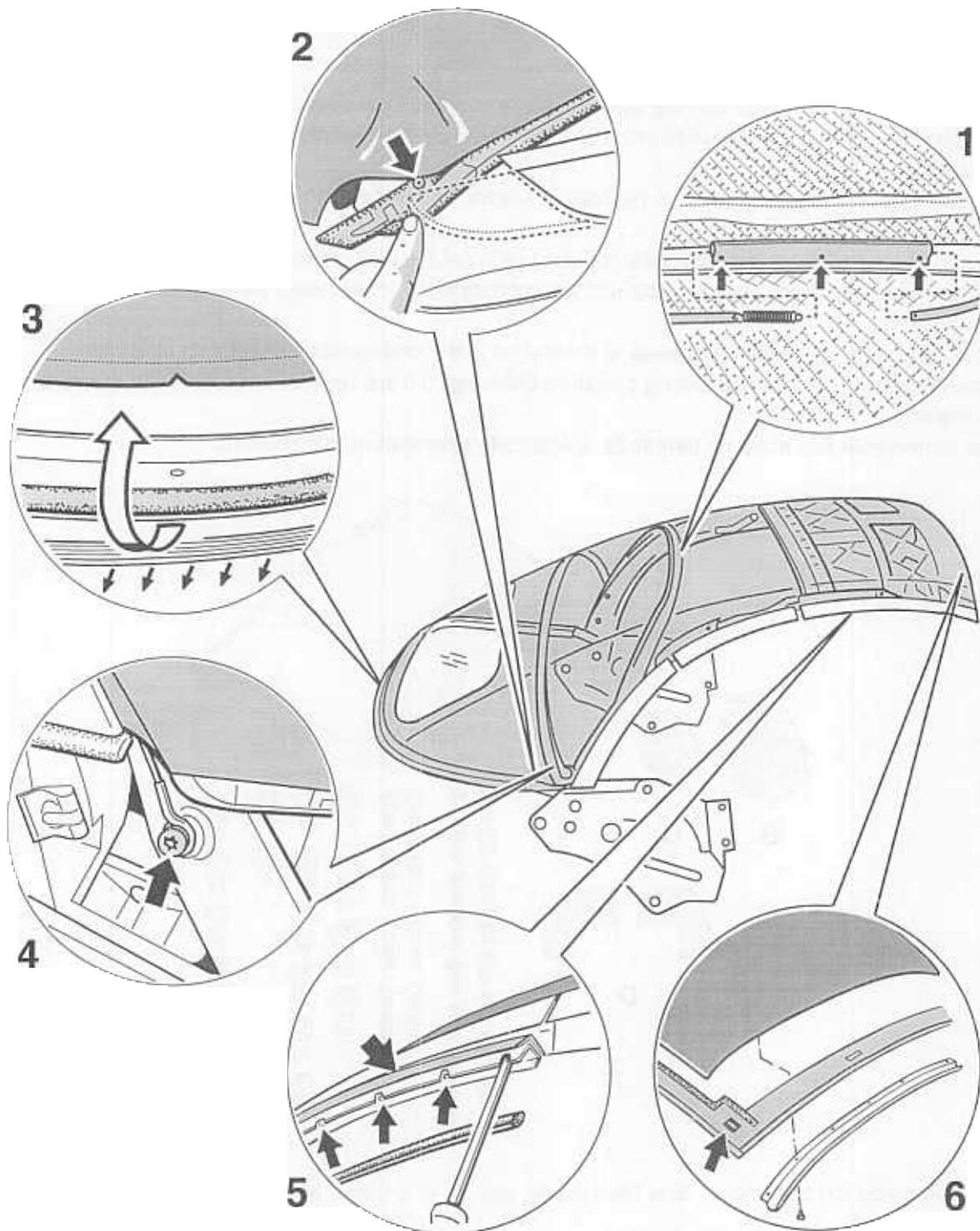


61280037

A = Convertible-top covering B = Tension bow seal C = Corner bow seal D = Filler piece

E = Bolt set for convertible-top latch, roof frame front and at the sides, fabric pocket on the main bow, tension cable, tension bow seal and main bow fastening strap

Removal overview of the convertible-top covering components



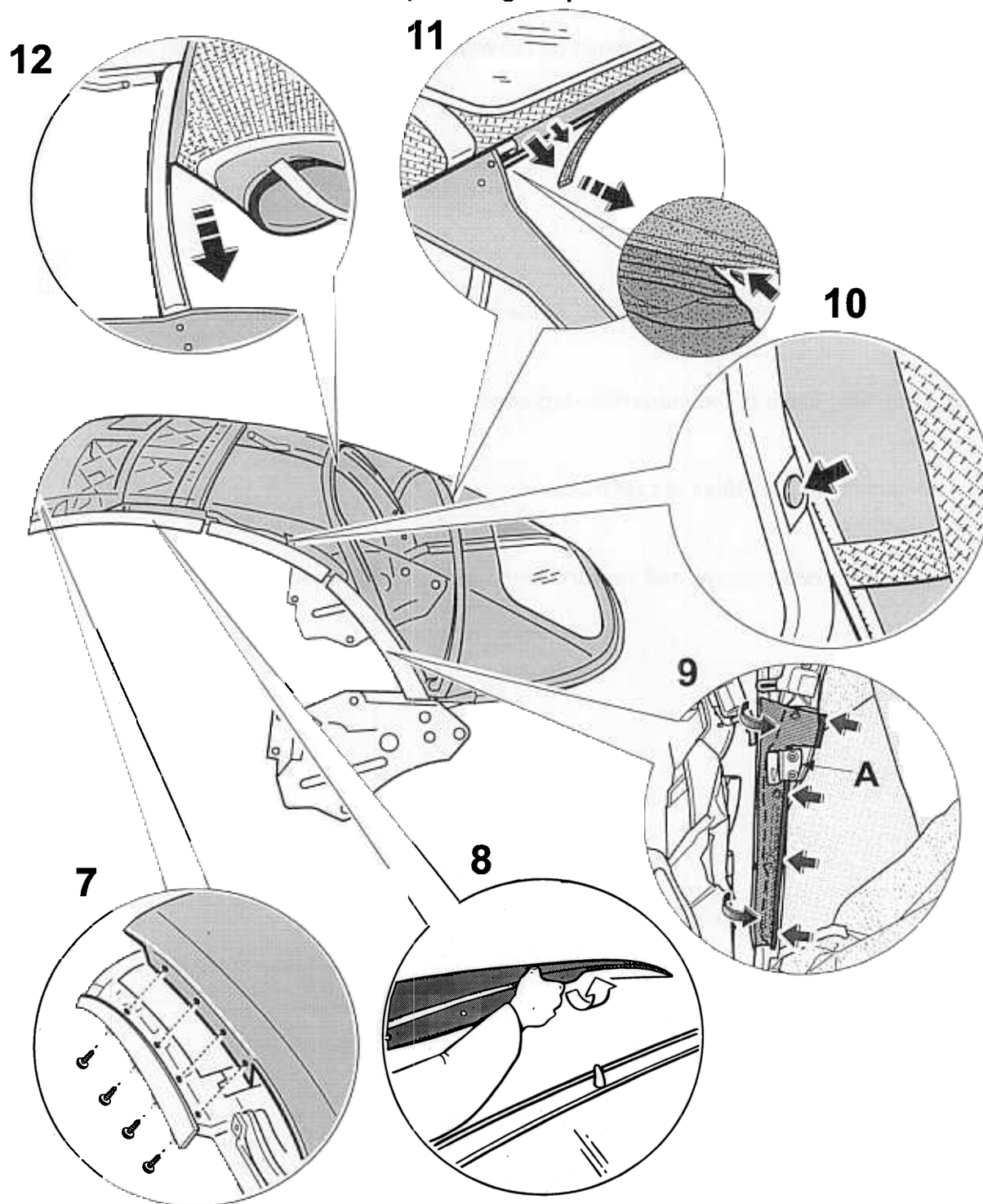
82_1_98

Removal overview of the convertible-top covering components

The headliner (Serv. No. 70 84 19) must be removed before removal of the convertible-top covering.

- 1 Detaching tension strap at the main bow**
- 2 Detaching tension bow seal**
- 3 Detaching convertible-top covering at the tension bow**
- 4 Detaching cable of the convertible-top covering**
- 5 Detaching seal at sides of roof frame**
- 6 Detaching retaining rail and convertible-top seal on roof frame 1**

Removal overview of the convertible-top covering components



61280012

Removal overview of the convertible-top covering components

- 7 Detaching convertible-top covering at front**
- 8 Detaching convertible-top covering at sides of roof frame 1**
- 9 Detaching fastening strap at the main bow**
- 10 Detaching holding strap of the convertible-top covering**
- 11 Detaching convertible-top covering at the corner bow**
- 12 Detaching convertible-top covering at the main bow**

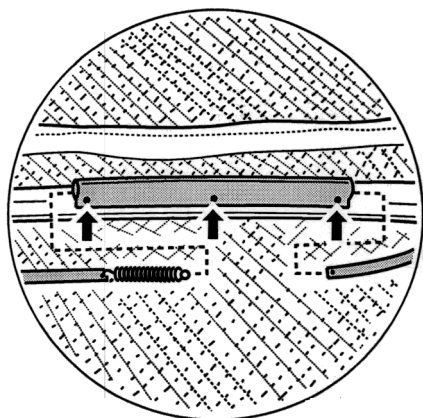
Removing convertible-top covering

The headliner (Serv. No. 70 84 19) must be removed before removal of the convertible-top covering.

No. Procedure

Instructions

1

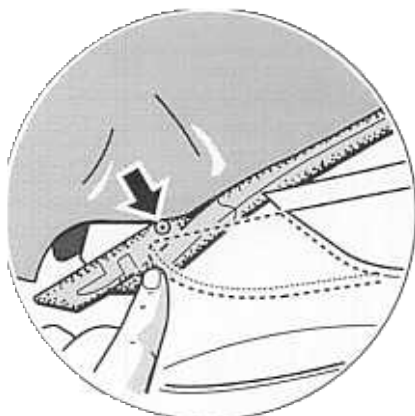


82_A_98

Detaching tension strap at the main bow.

Undo T10 x 8 Torx screws from the fabric pocket on the main bow, move the fabric pocket and disengage the tension spring from the tension strap.

2

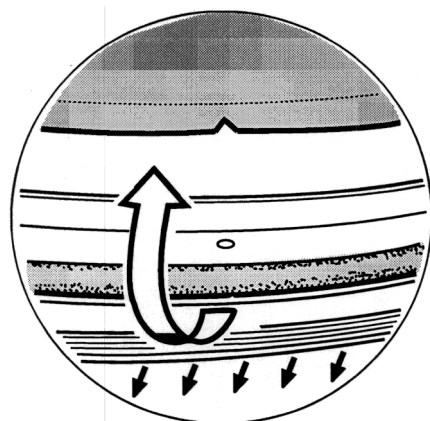


82_B_98

Detaching tension bow seal.

Undo T25 x 12 Torx screws on left and right sides from the tension bow seal, and pull out of the groove of the tension bow.

3



82_C_98

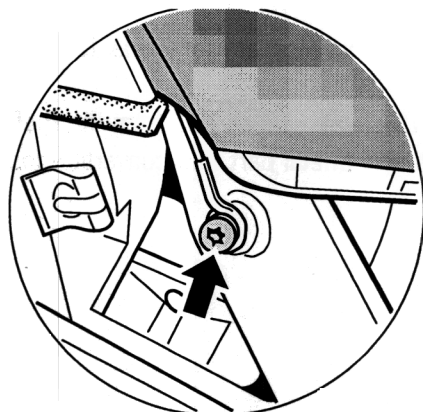
Detaching convertible-top covering at the tension bow.

Remove seal on the convertible-top covering from the centre groove of the tension bow. Disengage the convertible-top covering in downward direction.

No. Procedure

Instructions

4

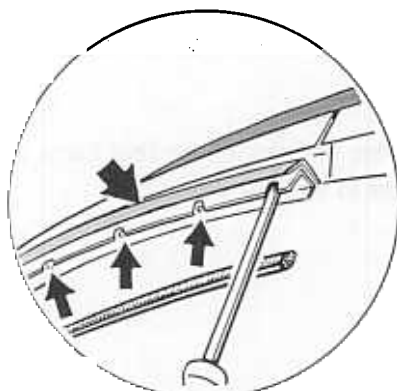


82_D_98

Detaching cable on the convertible-top covering.

Undo T25 x 12 Torx screw from the bottom on the main bow.

5

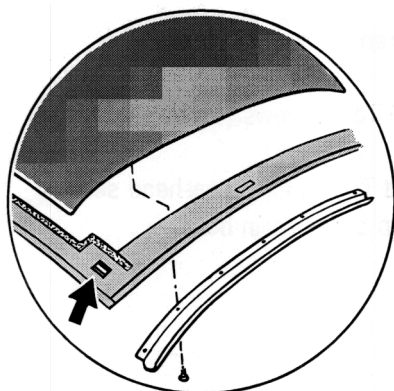


82_E_98

Detaching seal at sides of roof frame.

The seal on the roof frame consists of two parts. Pull the lower seal out of the profile of the retaining rail. On the upper seal with the retaining rail, unscrew the T15 x 9 Torx screws and remove the seal and the retaining rail from the roof frame.

6



82_F_98

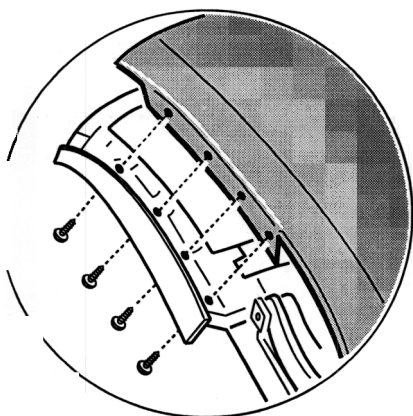
Detaching retaining rail and convertible-top seal on roof frame 1.

Unscrew the T25 x 8 Torx screws from the retaining rail and the T25 x 12 Torx screws from the convertible-top seal. Pull out the roof frame corners on the left and on the right to the front.

No. Procedure

Instructions

7

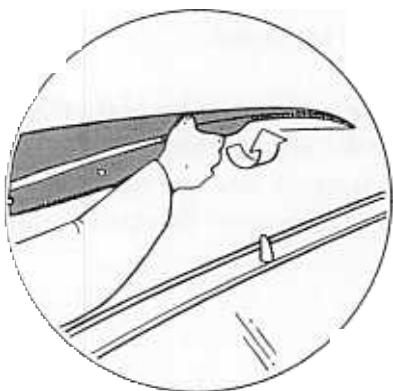


82_H_98

Detaching convertible-top covering at roof frame 1

Unscrew the B4.8 x 19 sheetmetal screws from the roof frame; lift the shaped sheetmetal part with convertible-top covering.

8

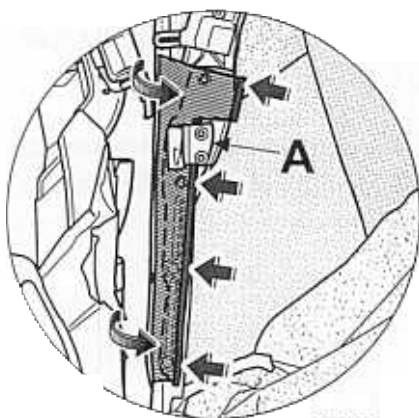


82_G_98

Detaching convertible-top covering at front on the roof frame.

Detach the convertible-top covering on the roof frame at the front and lay it down to the rear.

9



61280036

Detaching fastening strap at the main bow.

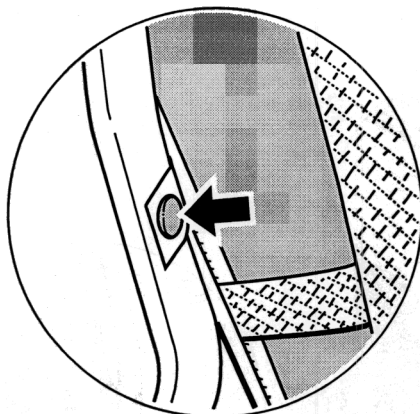
Undo the T25 M5 x 10 Torx screws (**arrow A**) mounted in the wedge.

Undo T25 M5 x 10 and T15 M3 x 8 oval-head screws from the fastening strap at the main bow.

No. Procedure

Instructions

10

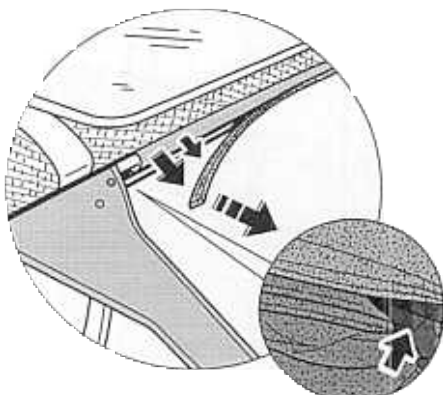


82_K_98

Detaching holding strap of the convertible-top covering.

Press out fastening clip from roof frame 3 on the inner right. On the left side, press the fastening clip of the wiring harness out of roof frame 3.

11

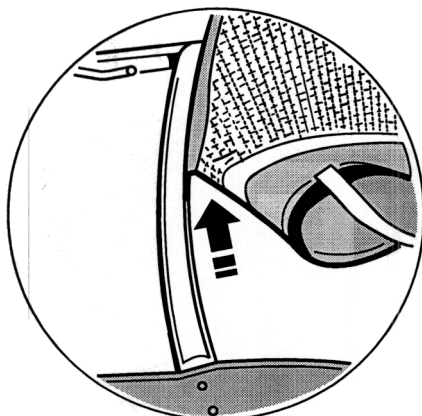


61280010

Detaching convertible-top covering at the corner bow.

Undo the tension hook cloth inside around the corner bow. Fold the convertible-top covering forwards to the roof frame. Pull seal out of the groove of the corner bow and disengage the covering strip of the convertible-top covering in downward direction.

12

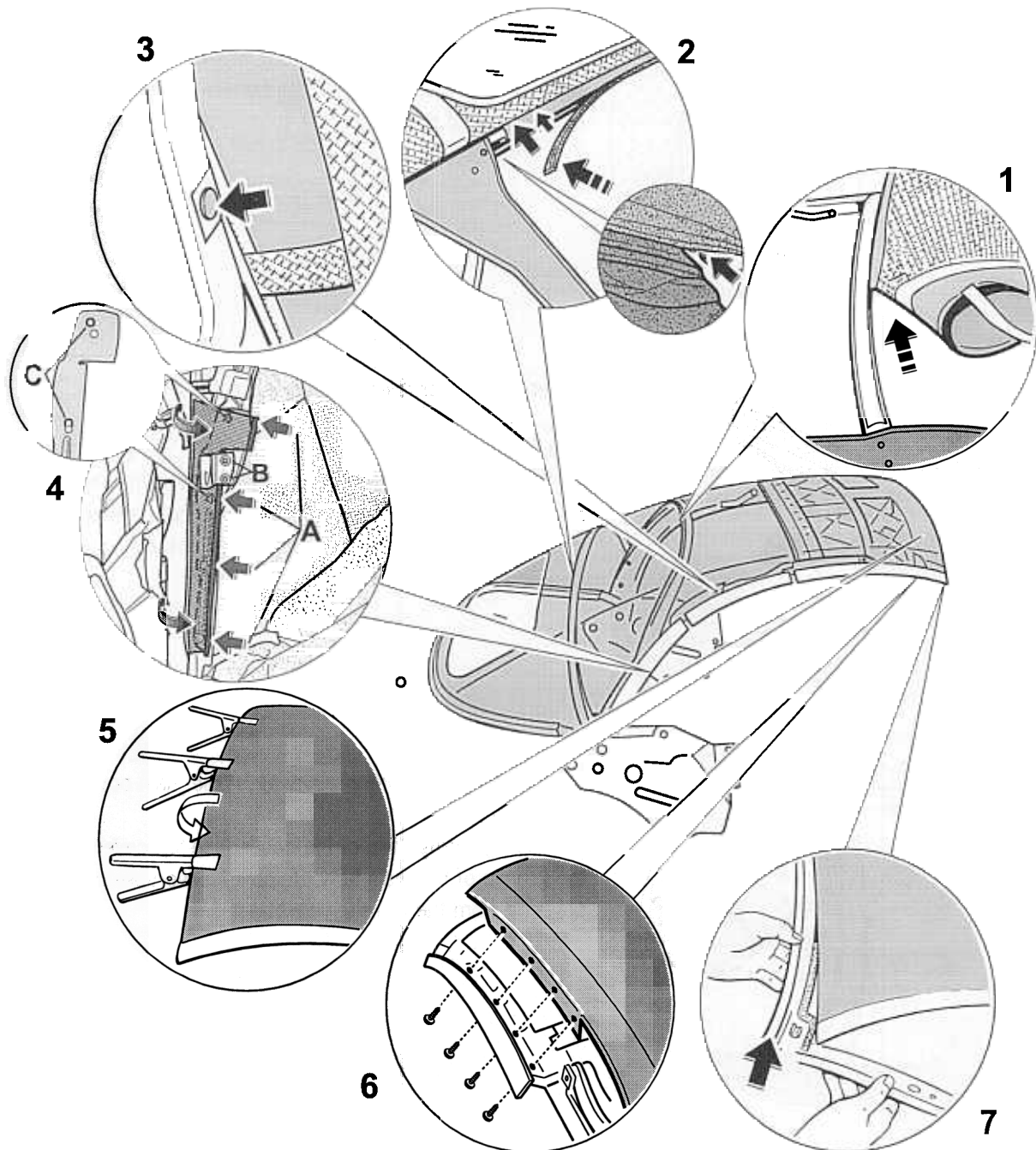


82_M_98

Detaching convertible-top covering at the main bow.

Pull the tightening strip of the convertible-top covering from the groove of the main bow. Remove convertible-top covering from the vehicle.

Installation overview of the convertible-top covering components

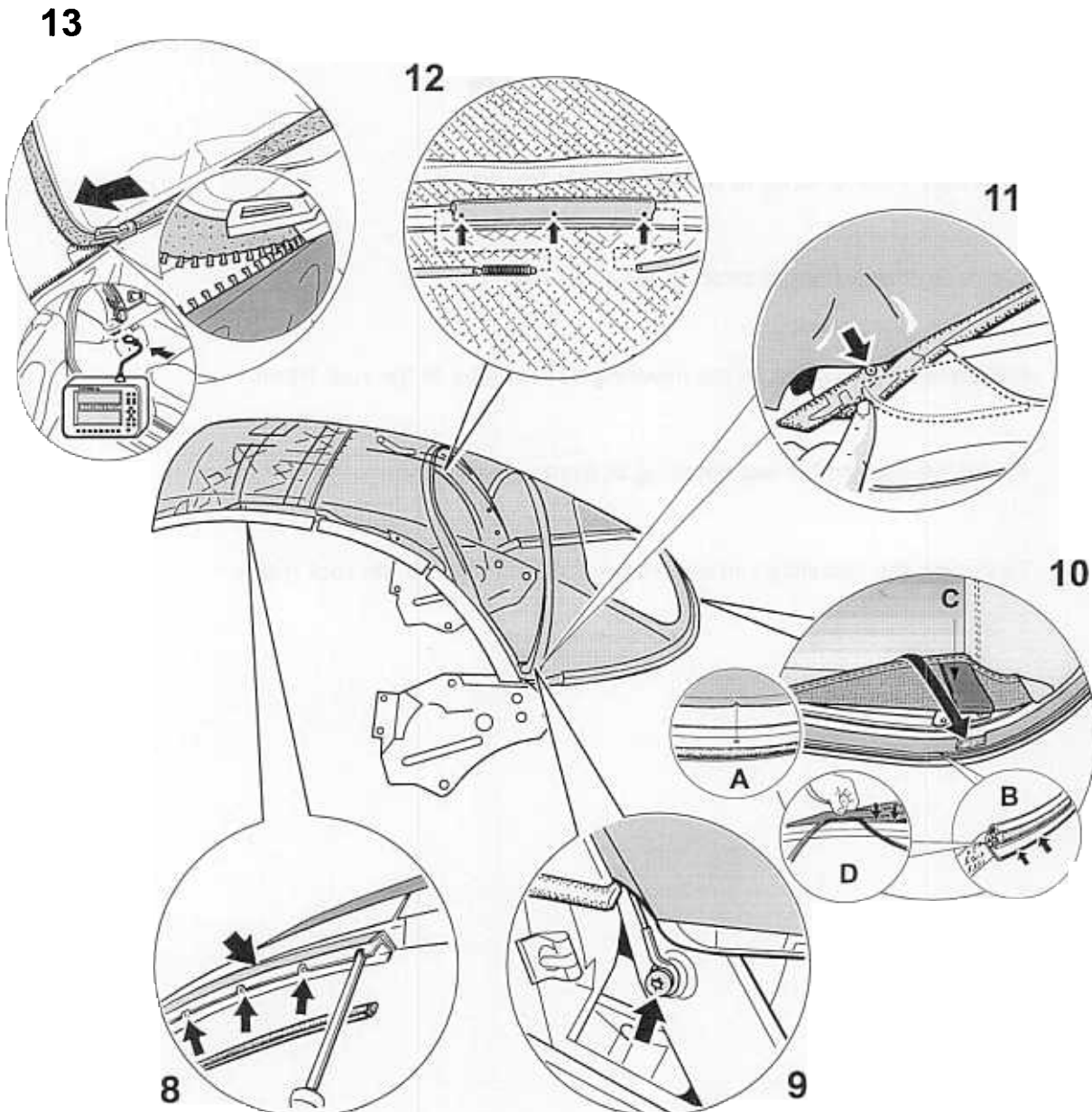


61280013

Installation overview of the convertible-top covering components

- 1 Fastening convertible-top covering at the main bow
- 2 Fitting convertible-top covering at the corner bow
- 3 Fastening holding strap of the convertible-top covering
- 4 Fastening the fastening strap at the main bow
- 5 Fastening the convertible-top covering at the sides of the roof frame
- 6 Fastening convertible-top covering at front
- 7 Fastening the retaining rail and convertible-top seal on the roof frame

Installation overview of the convertible-top covering components



61280015

Installation overview of the convertible-top covering components

- 8 Fastening seal at the sides of the roof frame**
- 9 Fastening cable of the convertible-top covering**
- 10 Fastening convertible-top covering on the tension bow**
- 11 Fitting tension bow seal**
- 12 Fastening tension strap at the main bow**
- 13 Inserting flexible rear window; observe safety note concerning the flexible rear window!
Calibrating the convertible top**

Installing the convertible-top covering

**Caution!**

Damage (tearing) to the zip fastener connection on the convertible-top covering!

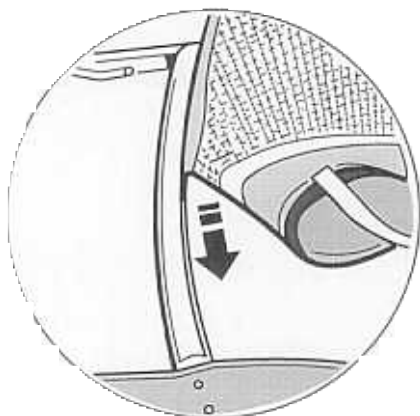
- > The adhesion (hot-melt process) between the rear window and the convertible-top covering must be implemented before the first closure or calibration of the convertible top.

**Information:**

All pins and screw joints on the convertible-top frame must be checked for tightness before the convertible-top covering is installed. If the convertible-top covering is very taut (with new convertible-top covering), close the convertible top and heat the convertible-top covering evenly using a heating lamp. Ensure that the convertible-top covering is not heated for longer than 1 hour. Maintain a safe distance from the heating lamp of approx. 50 cm, then leave the vehicle overnight with the convertible top closed.

No. Procedure**Instructions**

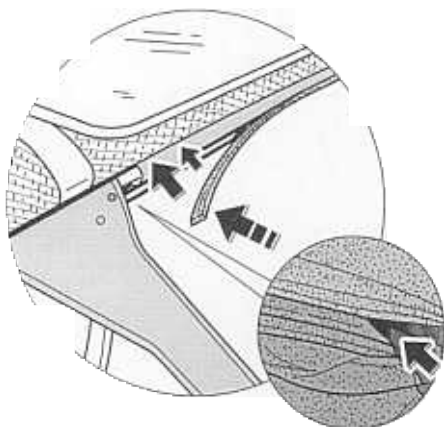
1



83_A_98

Fastening convertible-top covering at the main bow (convertible top unlocked).

Lay the convertible-top covering on the convertible-top frame, fit the front tightening strip in the groove of the main bow and centre.



61280011

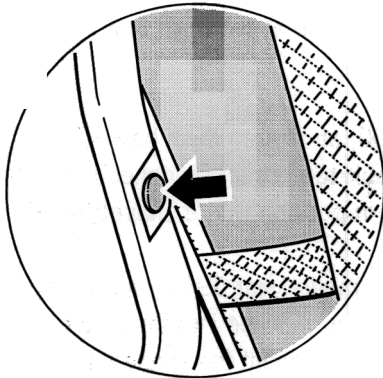
Fastening convertible-top covering at the corner bow (convertible top unlocked).

Press tightening strip centre (notch marking) into groove of the corner bow (centre of the corner bow is identified by a hole). The tightening strip is secured by tapping in the seal. Coat the tension hook cloth with adhesive and stick it inside around the corner bow.

No. Procedure

Instructions

3

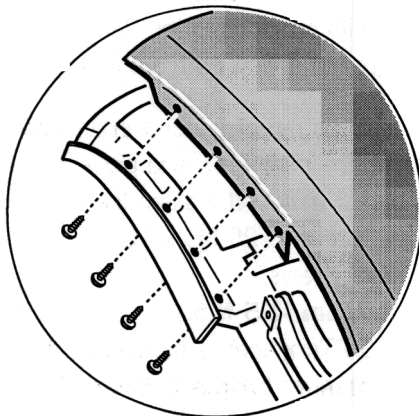


83_C_98

Fastening holding strap of the convertible-top covering.

Position holding strap at the right on convertible-top frame 3 on the inside and press in the clip. On the left side, the holding strap is fastened with the fastening clip of the wiring harness.

4

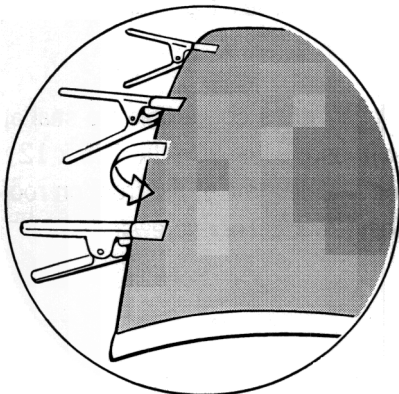


83_e_98

Fastening the convertible-top covering at the sides of the roof frame.

Lay the convertible-top covering to the front and guide the aluminium inset plate into the roof frame from above. Fasten the convertible-top covering with B4.8 x 19 sheetmetal screws, starting from the rear bottom side of the roof frame.

5



61280009

Fastening convertible-top covering at the front (convertible top unlocked).

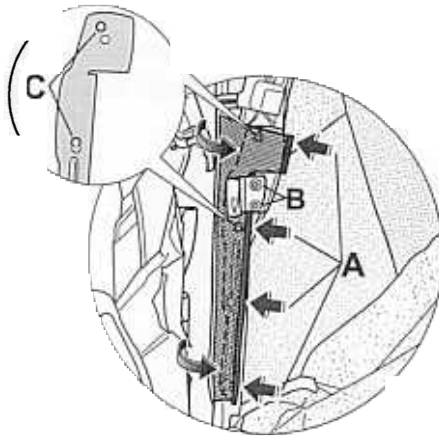
A cardboard strip and a self-adhesive strip are affixed at the front of the convertible-top covering. Pull the protective paper off the adhesive tape and fold the convertible-top material around the roof frame edge without wrinkles. The fold is initially held with fixing clips.

No. Procedure

Instructions

6

Fastening the fastening strap at the main bow



61280009



Information:

As of model year 2000, an altered main bow will be installed. The convertible-top covering connection on the main bow is screwed in position with a shaped sheetmetal part (**inset C**).

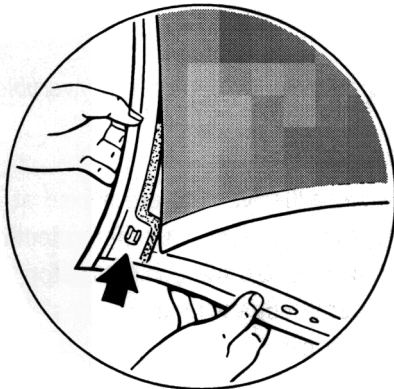
In vehicles built before model year 1999, the two upper bores (**arrow C**) must be re-drilled into the shaped sheetmetal part. To do so, mount the shaped sheetmetal part on to the main bow by the two lower screwed points. Mark the position of the new drill-holes through the upper holes in the main bow with a marking tool. Remove the shaped sheetmetal part and drill at both markings with a $\varnothing 6$ mm drill bit.

Turn the vertical fastening strap of the convertible-top covering inward around the main bow, and place it on the shaped sheetmetal part. (**arrow A**). Fasten the fastening strap to the main bow with the T25 M5 x 10 and T15 M3.5 x 8 oval-head screws.

Tightening torque 1.7 Nm (1.5 ftlb.)

Tighten the T25 M5 x 10 Torx screws mounted in the wedge (**arrow B**). **Tightening torque 2.8 Nm (2.0 ftlb.)**

7



83_G_98

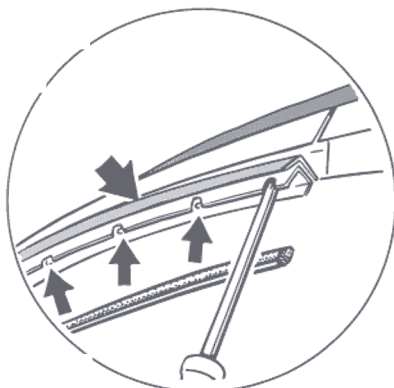
Fastening retaining rail and convertible-top seal on roof frame 1.

Remove the fixing clips, push in the convertible-top seal at the corners from the front, and fasten with the T25 x 12 Torx screws. Position the retaining rail at the front on roof frame 1, and fasten using T25 x 8 Torx screws.

No. Procedure

Instructions

8

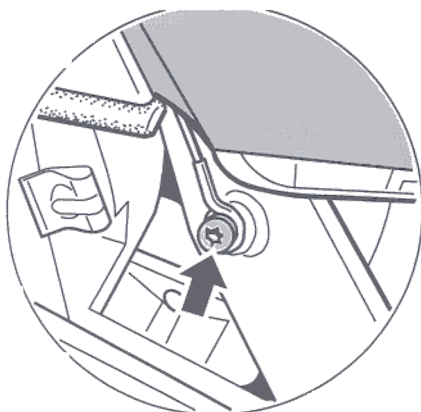


83_H_98

Fastening seal at the sides of the roof frame.

The seal on the roof frame at the sides consists of two parts. Screw the upper seal to the roof frame together with a retaining rail using the T15 x 9 Torx screws. Press the lower seal into the profile of the retaining rail.

9

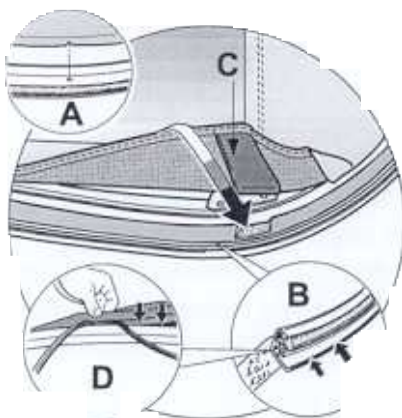


83_I_98

Fastening cable of the convertible-top covering.

Position the cable on the main bow, and fasten with the T25 x 12 Torx screw. Close and lock the convertible top.

10



61280014

Fastening convertible-top covering at the tension bow.

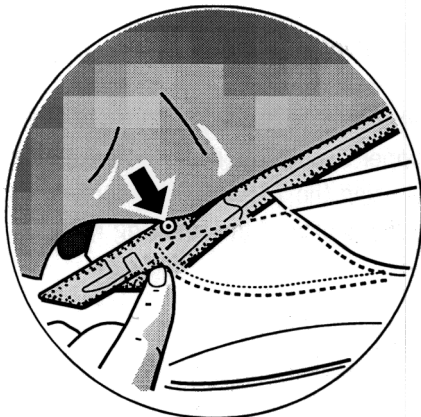
As from the running gear number 99 XS 65 5 883, cutouts have been integrated to the right and left of the additional seal. These cutouts can also be integrated retroactively into the additional seal by cutting out. Press tightening strip centre (notch marking) (**inset A**) into the lower groove of the tension bow (**inset B**) (centre of the tension bow is identified by a hole) (**inset A**).

The reference overlap seams of the convertible-top covering must be positioned and centred in the additional seal (**arrow C**) cutouts on the left and right. Secure the convertible-top covering by tapping in the seal (**inset D**).

No. Procedure

Instructions

11

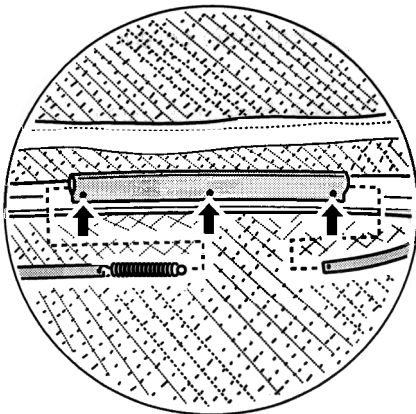


83_L_96

Fitting tension bow seal.

Press tension bow seal into the lower groove of the tension bow and fasten at both ends with the T25 x 12 Torx screws.

12

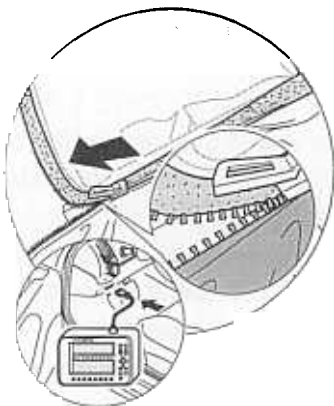


83_M_96

Fastening pull strap at the main bow.

Pull tension strap on left through the fabric pocket on the main bow, and engage both ends of the tension straps into the tension spring. Position fabric pocket on the main bow and fasten with the T10 x 8 Torx screws.

13



61280038

Inserting flexible rear window

See: Serv. No. 64 85 19 Installing flexible rear window of Cabriolet

Observe **safety note** concerning the flexible rear window!

Caution!

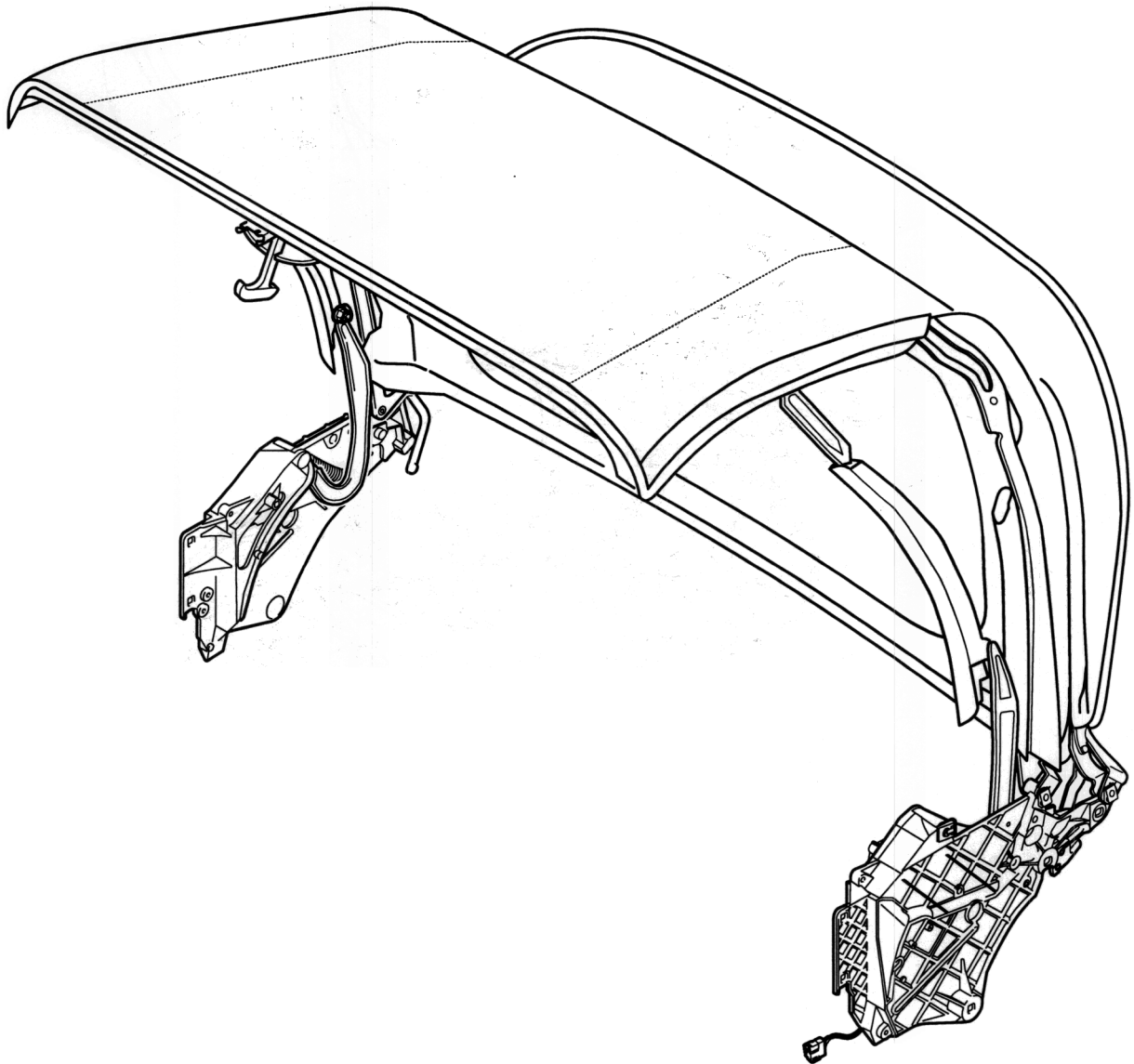
Damage (tearing) to the zip fastener connection on the convertible-top covering!

The adhesion (hot-melt process) between the rear window and the convertible-top covering must be implemented before the first closure or calibration of the convertible top.

Calibrating the convertible top

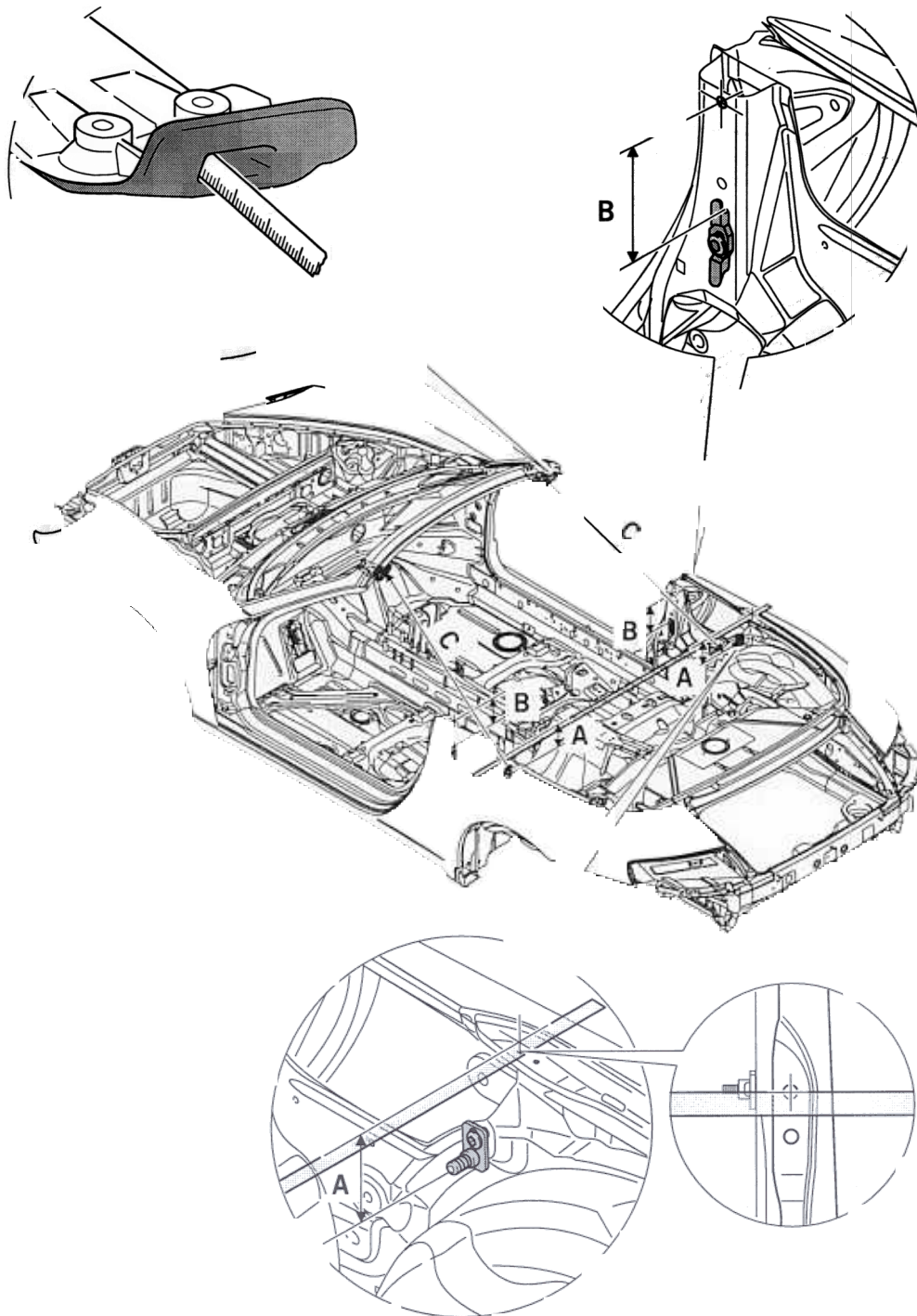
See: Serv. No. 61 01

61 01 15 Adjusting convertible top



92_98

Adjusting convertible top



Adjusting convertible top

The assembly aids must be recalibrated after removal or after an accident repair in the area of the side section on the inside.

The calibration of the assembly aids represents the basic position for convertible top installation.

The required tools include a tape measure and a rule or an aluminium section at least 1600 mm long, which is laid over the rear side sections, front centre, first Roof Transport System fastening hole.

Dimension **A = 135 mm** is measured from the rear side parts to the assembly aid, centre of peg on the rear side section on the inside.

Dimension **B = 118 mm** is measured from the upper fastening point, centre of hole for convertible-top support (rear side part on inside), to the assembly aid.

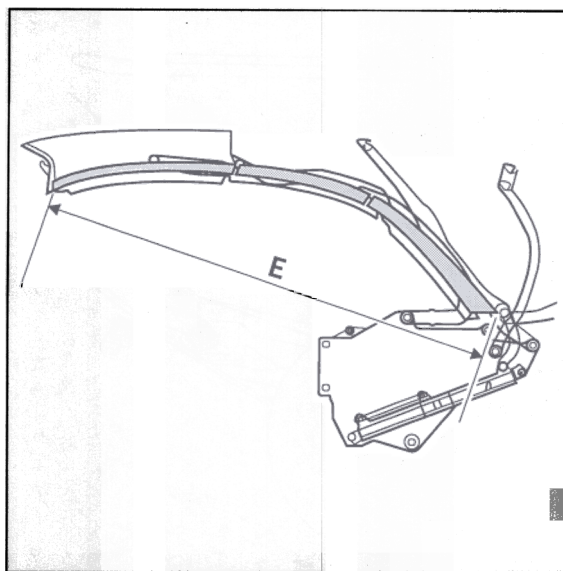
Dimension **C = 1064 mm** is measured from centre of assembly aid peg to lower edge of convertible-top peg housing on inside.

Adjusting convertible-top peg housing

In order to avoid rattling noises, each of the convertible-top peg housings on the left and right must be facing outwards in relation to the centring pins fitted on the convertible top or hardtop when tightening.

Note: The convertible top must be closed and the hardtop must be fitted to check the adjustment.

Check dimension on convertible top after calibration of the assembly aids

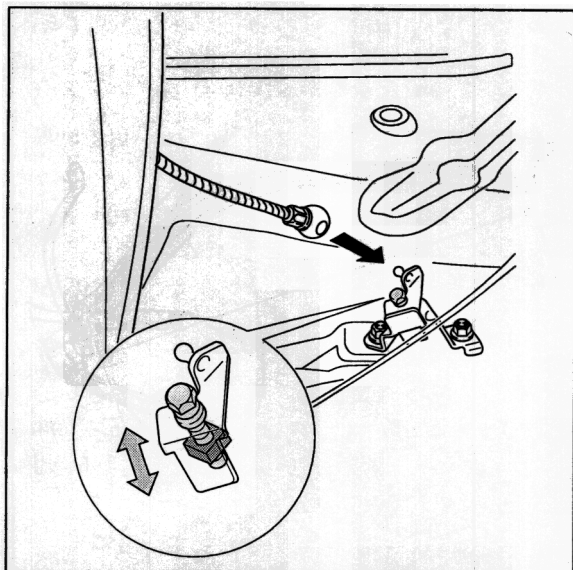


113_98

After calibration of the assembly aids and fitting of the convertible top with convertible top closed, the check dimension from the styling edge, roof frame 1, lower edge diagonal to styling edge, roof frame 3, upper edge, rear should be

E = 1024 +/- 2 mm.

Adjusting the tension cables on the adjusting piece



96_98

The tension put on the tensioning bow by the left and right tension cables braces the convertible-top covering and presses the tension bow seal against the convertible-top compartment lid. If the pressure of the tension bow seal is too great, the convertible-top compartment will project with respect to the lid and the side part.

Adjustment procedure: Raise the convertible-top compartment lid to upper position. Adjust tension of the tension bow at the hexagon-head bolt in the adjusting piece on the roll-over bar (**adjustment range approx. 15 mm**) according to the lid and side-part contours and the contact pressure on the convertible-top compartment lid.

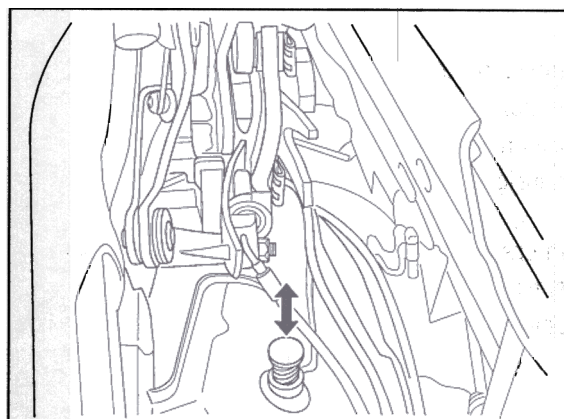
Checking the adjustment: Clamp a paper strip between the convertible-top compartment lid and tension bow seal; when the convertible top is closed, it should not be possible to pull out the sheet of paper.

Note

On vehicles that were operated for an extended period with the convertible top open or with a hardtop, the centring pins of the roof frame and the locking hook might not engage in the windscreen frame the first time the convertible top is closed. It is necessary to provide manual assistance at the handhold on the convertible-top latch.

The folded convertible-top covering must first stretch again.

Adjusting the convertible top resting position

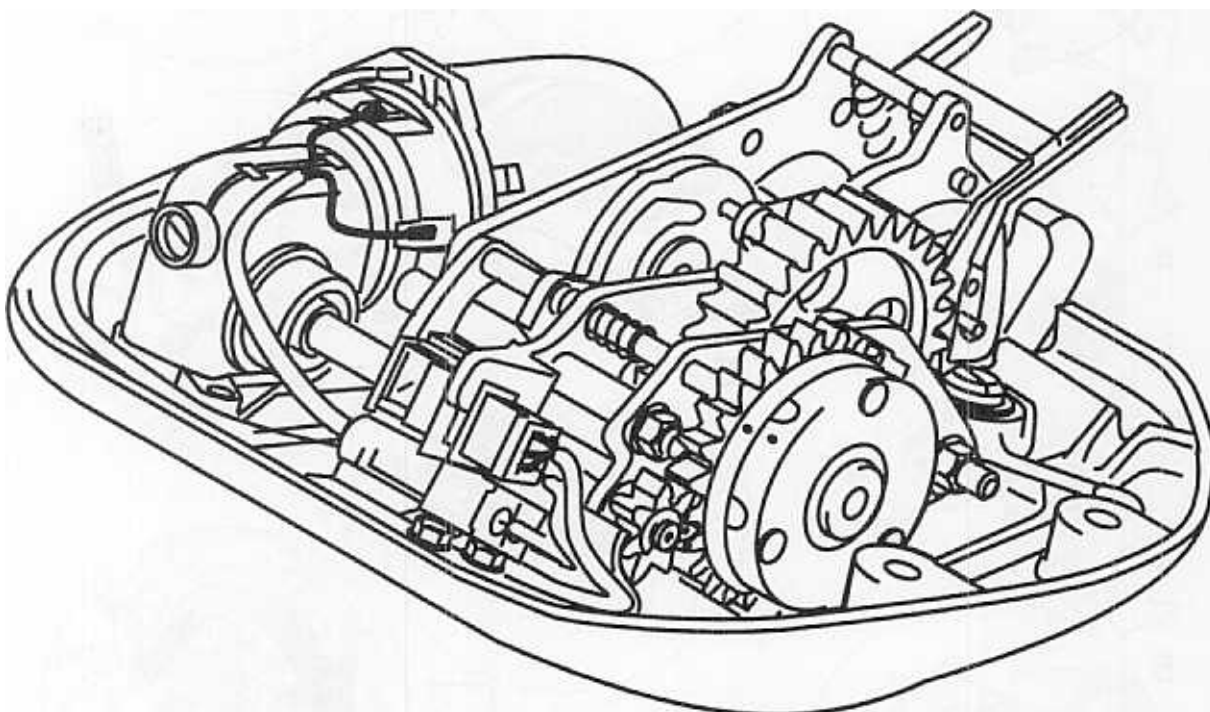


97_98

With the convertible top open, the corner bow rests on the adjusting piece in the water collection tray. The adjusting piece can be vertically adjusted by approx. 30 mm by screwing the adjusting piece in or out. A corner bow that is set too low can leave pressure marks in the plastic window.

Adjustment procedure: Adjust height at the adjusting piece so that the convertible-top compartment lid can still close freely.

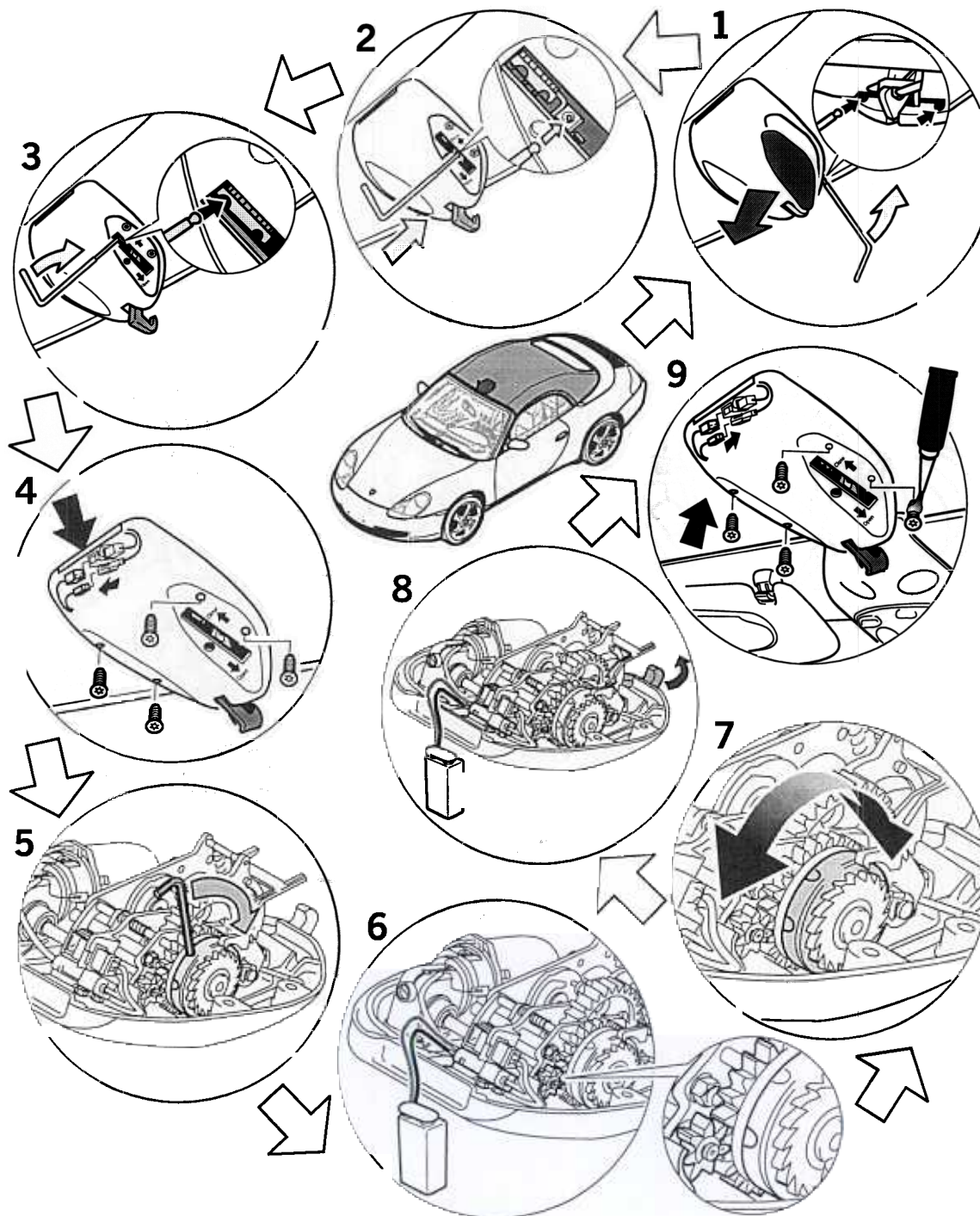
61 01 41 Convertible top repair after emergency operation



88_98

Repairing convertible top after emergency operation

Repairing convertible-top latch



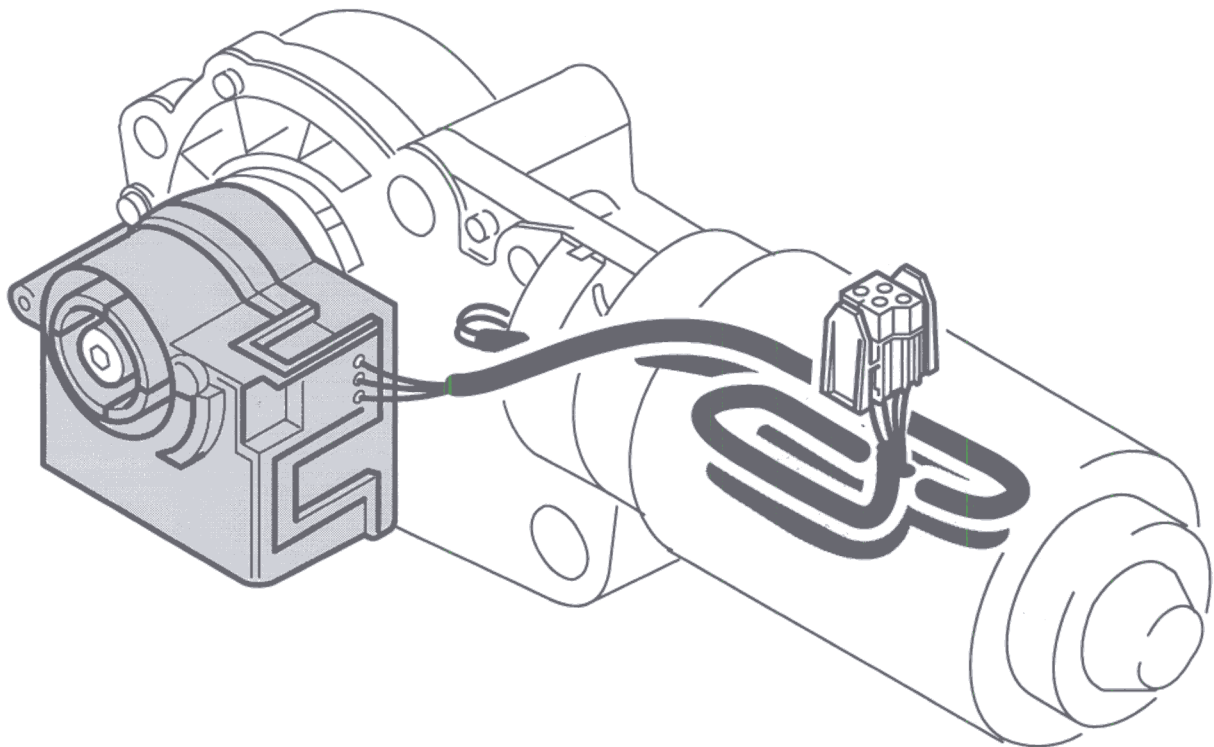
232_98

Repairing convertible top after emergency operation**Repairing convertible-top latch**

| No. | Procedure | Instructions |
|-----|--|--|
| 1 | Remove lid from convertible-top latch | Insert Allen key (tool kit) into the openings on the convertible-top latch front edge, and press the lid down and out. |
| 2 | Disengage lock | With the Allen key, press the pawl up until it engages. |
| 3 | Move locking hook to end position | Insert the Allen key in the recess between the gear wheel and driving plate and move forward in the direction of the arrow ("Open" – inscription on convertible-top latch) until the locking hook is in the extended end position (perceptible stop). |
| 4 | Detach convertible-top latch | Undo T30 x 16 Torx screws. Remove convertible-top latch and disconnect electrical plug connections. |
| 5 | Move locking hook to end position | Insert the Allen key in the recess between the gear wheel and driving plate and move in the direction of the arrow ("Close" – inscription on convertible-top latch) until the locking hook is in the retracted end position (perceptible stop). |
| 6 | Align gear wheel markings to one another | Leave Allen key inserted with the driving plate and gear wheel engaged. Supply power to the electric motor via the 2-pole plug using a separate power source, e.g. 9-volt block battery or power supply unit. Align gear wheel markings to one another using the electric motor. Single dot on small gear wheel must lie between the two dots on the large gear wheel. |

| No. | Procedure | Instructions |
|-----|-------------------------------|---|
| 7 | Engage driving plate | Remove Allen key, turn the driving plate manually and engage it in the hole segment of the gear wheel. |
| 8 | Extend locking hook | Using a separate power source, e.g. 9-volt block battery or power supply unit, supply power to the electric motor via the 2-pole plug until the locking hook is fully extended. |
| 9 | Install convertible-top latch | Join electrical plug connection, position convertible-top latch on roof frame 1, fasten with the T30 x 16 Torx screws and coat with high-strength screw locking compound . Tightening torque 7 Nm (5 ftlb.) Press lid into the convertible-top latch on the left and right. |

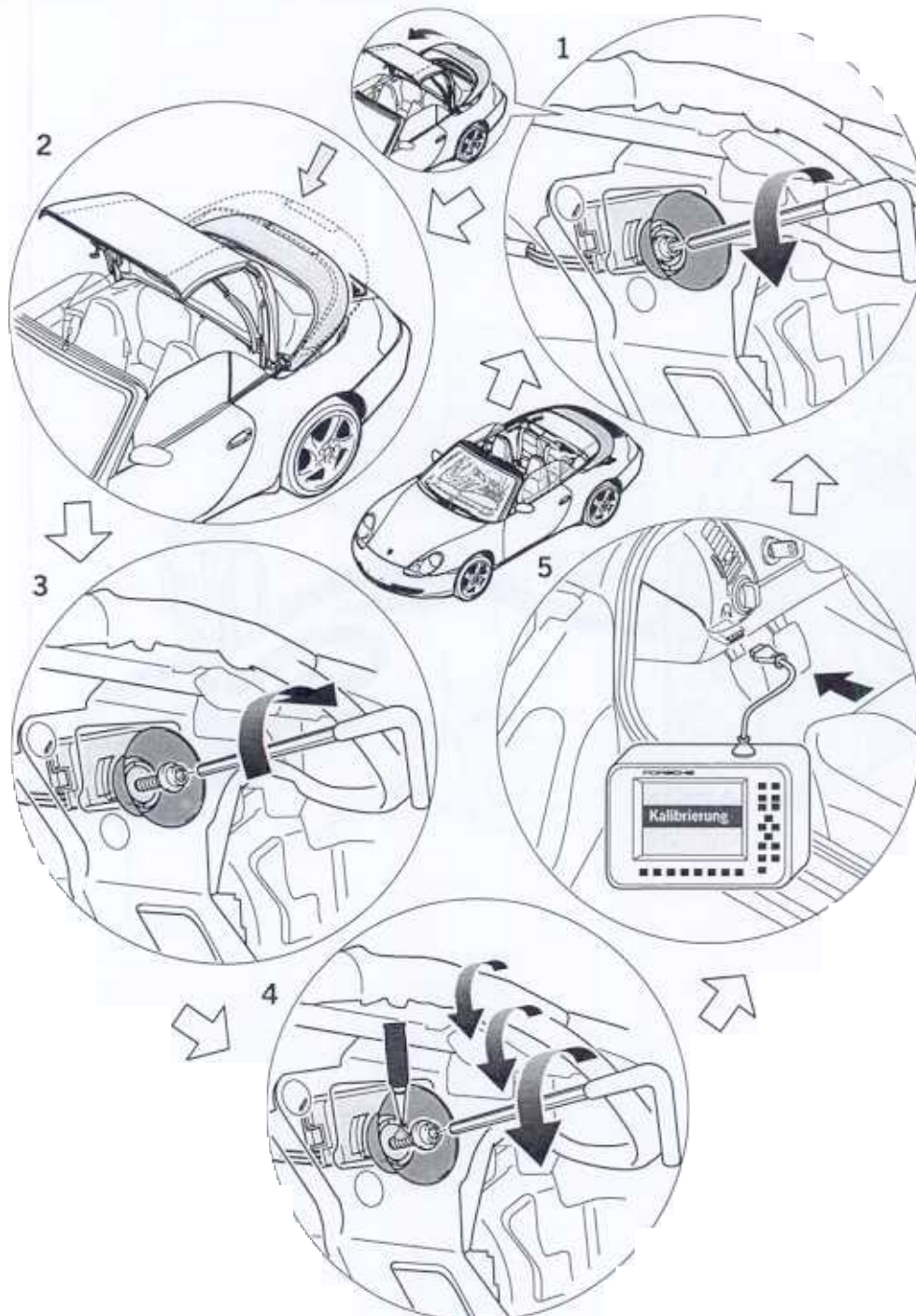
Convertible top repair after emergency operation



90_98

Convertible top repair after emergency operation

Repairing convertible-top compartment lid drive



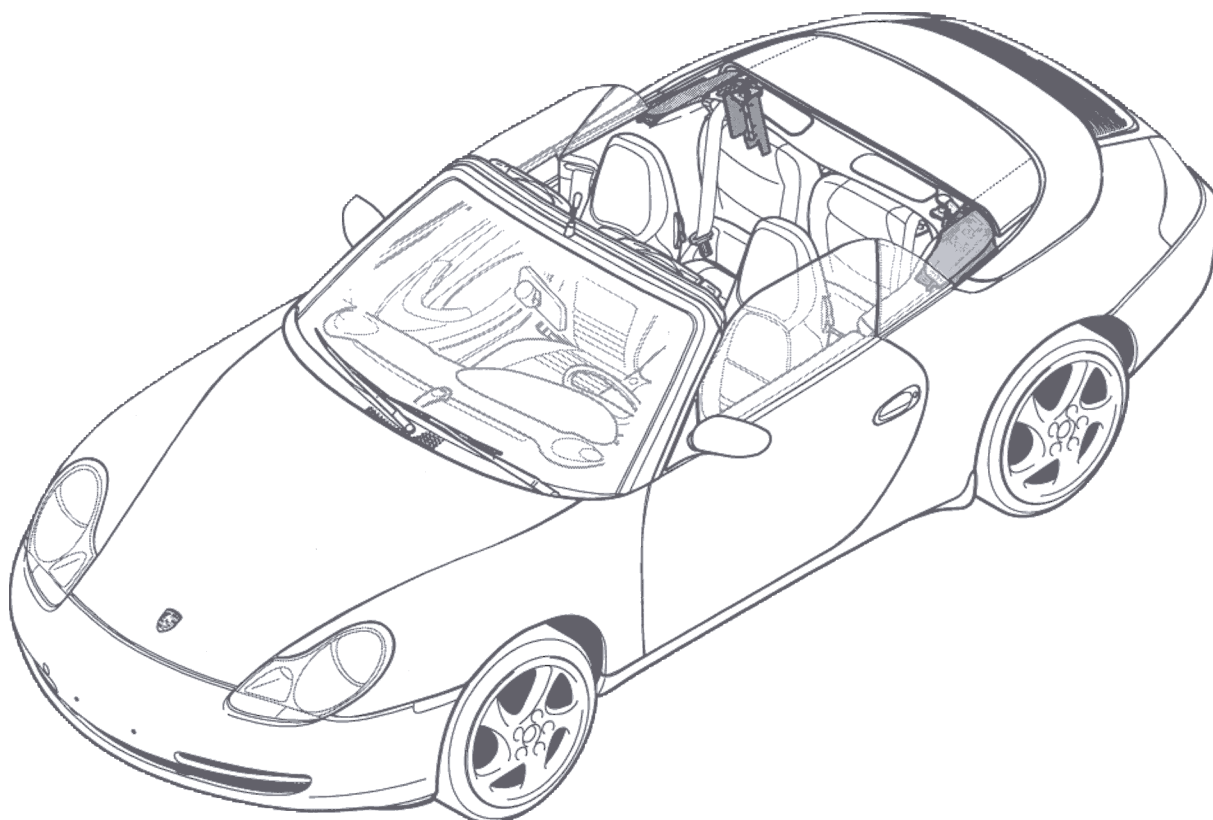
233_98

Convertible top repair after emergency operation

Repairing convertible-top compartment lid drive

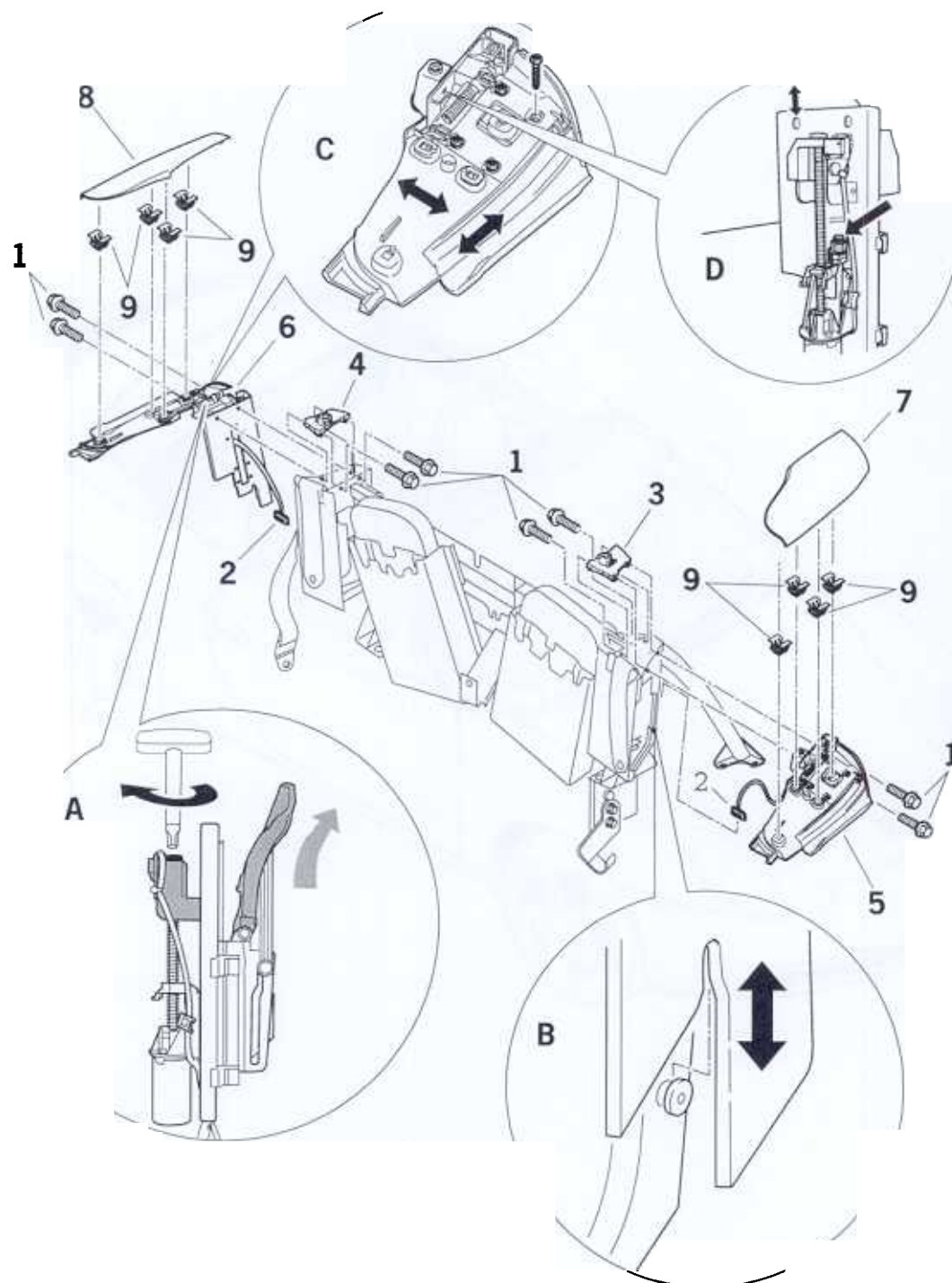
| No. | Procedure | Instructions |
|-----|---------------------------------------|---|
| 1 | Open convertible-top compartment lid | Insert Allen key (tool kit) into the drive axle and turn it counterclockwise until the convertible-top compartment lid is fully open (perceptible stop). |
| 2 | Close convertible-top compartment lid | Grasp convertible-top compartment lid above the brake light and push forward until it is closed. |
| 3 | Undo hexagon socket head bolt | Turn Allen key (tool kit) clockwise until the hexagon socket head bolt (left-hand thread) is unscrewed. |
| 4 | Bond in hexagon socket head bolt | Coat hexagon socket head bolt with medium-strength screw locking compound and screw it in by three turns (left-hand thread). |
| 5 | Convertible top calibration | <p>Connect the Porsche System Tester 2 to the diagnostic socket. Switch on ignition.</p> <p>Select menu item "Convertible top". Select menu item "Calibrate" in the command line which then appears. Start calibration with the F7 key.</p> <p>Calibration can be started irrespective of whether the convertible top is open or closed. The latching hook in roof frame 1 does not close during calibration.</p> |

61 42 19 Removing and installing rear side section flap



701_97

Removing and installing rear side section flap



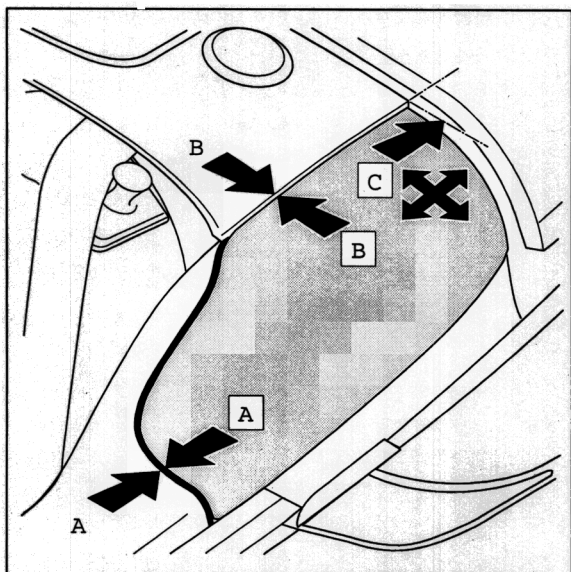
702_97

Removing and installing rear side section flap

| No. | Designation | Qty. | Removal | Note: |
|-----|---------------------------------|------|---|---|
| | | | | Installation |
| 1 | Hexagon-head bolt M6 x 20 | 8 | Undo | |
| 2 | Electrical plug connection | 2 | Disconnect electrical plug connection | Connect electrical plug connection |
| 3 | Hardtop mount bracket, left | 1 | | |
| 4 | Hardtop mount bracket, right | | | |
| 5 | Rear side section flap, left | 1 | At the flap, Figure A , insert the Allen key in the emergency operation mechanism and turn it counterclockwise (direction of arrow) until the lid of the flap starts to move horizontally | Move flap into the pin, Figure B , and adjust the height with respect to the roll-over protection system cover by means of the slots, Figure D . A basic setting was made on the height adjusting nut, Figure D , at the factory. This setting should not be changed. Fasten flap in the frame with the hardtop bracket (Item 3) and the hexagon- head bolts (Item 1), and connect the electrical plug connection |

| No. | Designation | Qty. | Removal | Note: |
|-----|------------------------------|------|--|---|
| | | | | Installation |
| 6 | Rear side section flap, left | 1 | At the flap, Figure A , insert the Allen key in the emergency operation mechanism and turn it counterclockwise (direction of arrow) until the lid of the flap starts to move horizontally | Move flap into the pin, Figure B , and adjust the height with respect to the roll-over protection system cover by means of the slots, Figure D . A basic setting was made on the height adjusting nut, Figure D , at the factory. This setting should not be changed. Fasten flap in the frame with the hardtop bracket (Item 4) and the hexagon-head bolts (Item 1), and connect the electrical plug connection |
| 7 | Cover, left | 1 | Insert a plastic spatula under the cover and press it out | Position it and press it into the clips |
| 8 | Cover, right | 1 | Insert a plastic spatula under the cover and press it out | Position it and press it into the clips |
| 9 | Clip | 8 | Press on | Inspect and replace if necessary |

Adjusting the gap dimensions of the rear side section trim



14_98

Adjusting gap dimensions

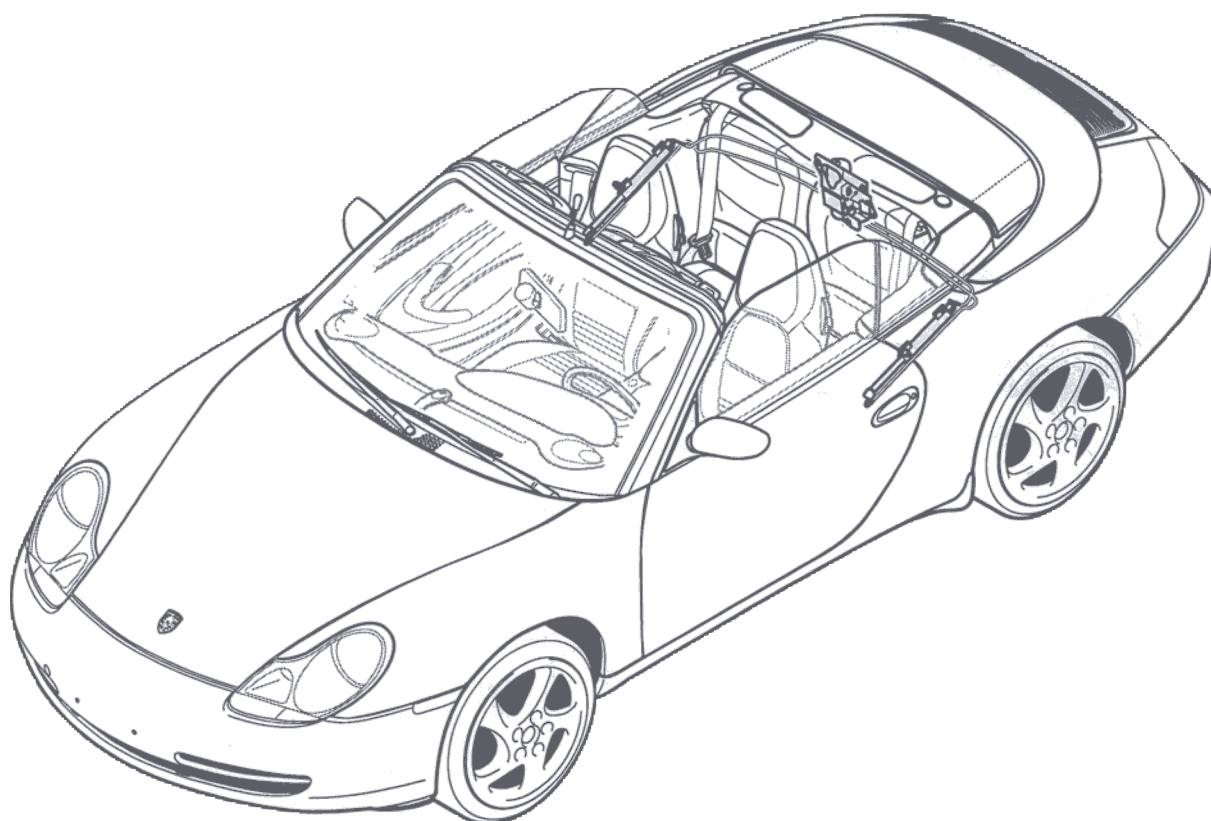
(Convertible top open and set down.) Insert a plastic spatula under the trim and press it out. The adjustment, **Figure C**, is made by means of the Torx screws in the flap.

Dimension A = 4.0 + 2.0 mm gap width between the rear side section trim and side section trim.

Dimension B = 3.0 + 2.0 mm gap width between the roll-over protection system cover and rear side section trim.

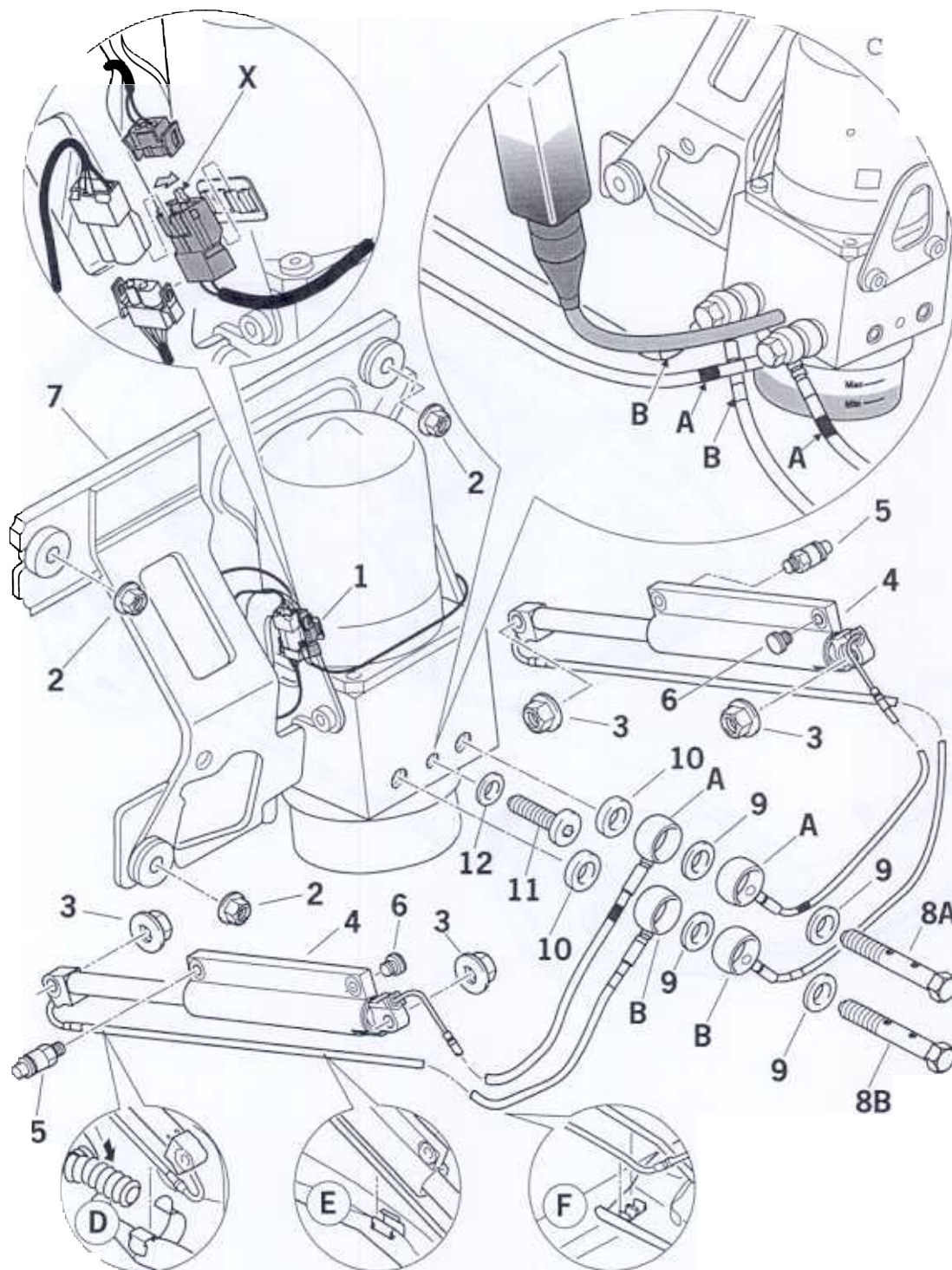
Dimension C = ± 1 mm offset between the roll-over protection system cover and rear side section trim.

61 86 19 Removing and installing hydraulic cylinders



93_98

Removing and installing hydraulic cylinders



94_98

Removing and installing hydraulic cylinders

| No. | Designation | Qty. | Removal | Note: Installation |
|-----|----------------------------|------|--|--|
| 1 | Electrical plug connection | 1 | Disconnect electrical plug connection (Fig. X), press locking tab and push out of the bracket | Push plug connection into the bracket until it engages, and connect electrical plug connection |
| 2 | Collar nut M6 | 3 | Undo | |
| 3 | Collar nut M8 | 4 | Undo | |

**"WARNING"**

Damage to hydraulic lines. Do not bend, trap or crush hydraulic lines during installation.

> Pay special attention when routing the hydraulic lines in the clips.

| | | | | |
|---|---|---|--|--|
| 4 | Hydraulic cylinder (left and right cylinders are identical parts) | 2 | Undo M8 hexagon nut and remove the hydraulic cylinder from the convertible-top support | Position hydraulic cylinder on the convertible-top support, and insert potentiometer fork in the pin of the hydraulic housing (on the left side only). Lay hydraulic line (Fig. D) in the clips underneath the water drain hose. Press hydraulic lines into the clips in (Fig. E) and (Fig. F). Tighten M8 hexagon nuts. Tightening torque 17 ± 2 Nm (12 ± 1.5 ftlb.) |
| 5 | Guide pin (left and right pins are identical parts) | | Remove from the hydraulic cylinders (Item 4) | Replace, micro-encapsulated. Screw guide pins into the outside of the hydraulic cylinder to be fitted on the right or left side Tightening torque 11 ± 1 Nm (8 ± 1 ftlb.) |

| No. | Designation | Qty. | Removal | Note: Installation |
|-----|---|------|---|--|
| 6 | Convertible-top pin (left and right pins are identical parts) | 2 | | Replace, microencapsulated. Tightening torque 12 ± 2 Nm (9 ± 1.5 ftlb.) |
| 7 | Bracket with hydraulic pump | 2 | Undo collar nuts (Item 2) and remove from roll-over bar frame | |
| 8A | Banjo bolt | 1 | Place a cloth underneath the banjo bolt and undo the banjo bolt | Fit the sealing rings (Item 8), hydraulic lines A with red ring and the sealing ring (Item 9) on the banjo bolt (Item 7A), and screw the banjo bolt into the right side of the hydraulic pump. Tightening torque: 12 + 2 Nm (9 + 1.5 ftlb.) |
| 8B | Banjo bolt | 1 | Place a cloth underneath the banjo bolt and undo the banjo bolt | Fit the sealing rings (Item 8), hydraulic lines B with blue ring and the sealing ring (Item 9) on the banjo bolt (Item 7B), and screw the banjo bolt into the left side of the hydraulic pump. Tightening torque: 12 + 2 Nm (9 + 1.5 ftlb.) |
| 9 | Sealing ring A8 x 12, 1 thick | 4 | | Replace |
| 10 | Sealing ring A8 x 12, 2 thick | 2 | | Replace |
| 11 | Plug G 1/8" | 1 | | Tightening torque 10 + 1 Nm (7.5 + 1 ftlb.) |
| 12 | Sealing ring A 10 x 14, 1 thick | 1 | | Replace |

General

The hydraulic system is sensitive to any penetration of dirt.
As soon as the system is opened by the plug, a cloth must be placed under the hydraulic lines to catch escaping hydraulic oil.

The hydraulic convertible top uses a closed hydraulic system. In general, the hydraulic system will need to be filled only if the hydraulic circuit was opened (after parts replacement).

Use only **Original Porsche hydraulic oil** when changing or topping up the hydraulic oil for the convertible top.

The system has a self-bleeding feature. Three to four operations will bleed the system.

After bleeding, check the oil level in the container on the hydraulic pump and top up if necessary.

Filling the hydraulic system

It is essential to lay a cloth underneath the hydraulic motor when filling. **Do not fill the system over the "Max" marking** (Fig. C).



Bleeding the hydraulic system

"WARNING"

Damage to the convertible-top frame if not running synchronously.

- > Bleed the hydraulic system only after the hydraulic cylinders have been removed from the convertible-top supports and drive levers on the left and right.

61 96 19 Removing and installing convertible-top control module**Removal**

Move the convertible top to service position before removing the control module.

1. Move convertible top rearward by means of the electric motor until the convertible-top compartment lid has reached the rear limit position.

Move convertible top forward by means of the electric motor until the convertible-top compartment lid moves forward.

Then interrupt closing operation.

2. Disengage left and right tension cables and fold up the tension bow.

The convertible top must no longer be electrically operated in this position.

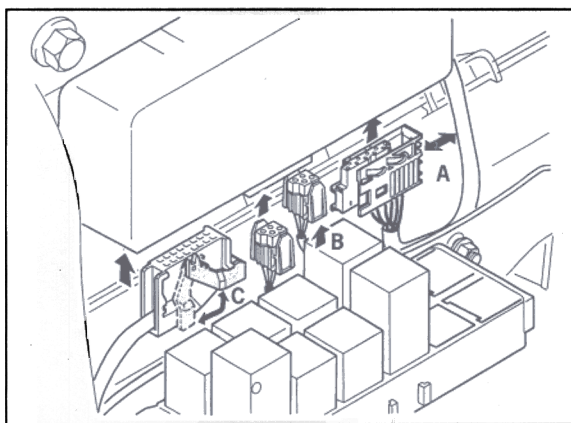
3. Bend cover over the control module rearward and unscrew the two cross-recess screws.

Removal

3. Remove control module, disengage the electrical plug housing (**arrow A**) to the right, and pull it down and off. Press plug connection (**arrow B**) together and pull it down and off. Disengage plug connection (**arrow C**) toward the upper right, and pull it down and off.

Installation

1. Join electrical plug connections (**arrow C**) and engage the locking lever downward. Join plug connection (**arrow B**). Join plug connection (**arrow A**), and press the plug housing to the left until it engages. Lay lines carefully (do not trap).
2. After installation of a new control module, the control module must be recalibrated with the Porsche System Tester 2.



118_98

Convertible top calibration

Note

The convertible top opens and closes automatically during convertible-top calibration with the Porsche System Tester 2. Calibration can be started irrespective of whether the convertible top is open or closed. The locking lever in roof frame 1 does not close during calibration. There must not be any objects in or on the convertible top to obstruct this.

Connect and switch on the Porsche System Tester 2.

Switch on ignition.

Select menu item "Convertible top". Select menu item "Calibrate" in the command line which then appears.

Start calibration with the F7 key.

61 70 19 Removing and installing convertible-top compartment lid drive**Removal**

Move the convertible top to service position prior to removal.

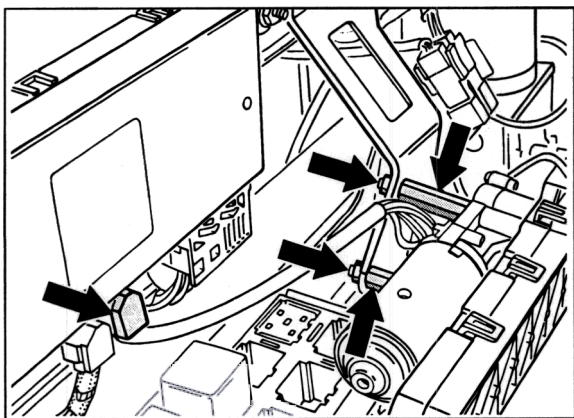
1. Move convertible top rearward by means of the electric motor until the convertible-top compartment lid has reached the rear end position.

Move convertible top forward by means of the electric motor until the convertible-top compartment lid moves forward. Then interrupt closing operation.

2. Disengage left and right tension cables and fold up the tension bow.

The convertible top must no longer be electrically operated in this position.

3. Remove the cover over the drive. Pull off the plastic funnel and undo the two M6 hexagon nuts. Disconnect the electrical plug connection of the control module.



201_98

4. Pull the motor backwards out of the bracket and loosen and remove the hexagon thread bolts.

5. Pull motor forwards out of the toothing.

Installation

1. Set the potentiometer to 6.2 k Ω before installing the motor.
2. Connect a commercially available digital multimeter to pin 3 (blue/yellow) and pin 5 (red/black).
3. Remove the potentiometer from the motor and turn on the toothing until it reaches a value of 6.2 k Ω .
4. Install potentiometer and motor.
Tightening torque for:
Hexagon thread bolts M5 6 Nm (4.5 ftlb.)
Hexagon nuts M6 10 Nm (7.5 ftlb.)
5. Once the motor has been installed, the potentiometer must be recalibrated with the Porsche System Tester 2.
6. The values between pot. 2, calibration value 1, and pot. 2, calibration value 4, are calculated in percent by the convertible-top control module.

Pot. 2, CTCL

- Pot. 2 calibration value 1

Tester display must be greater than > 1.0 volts

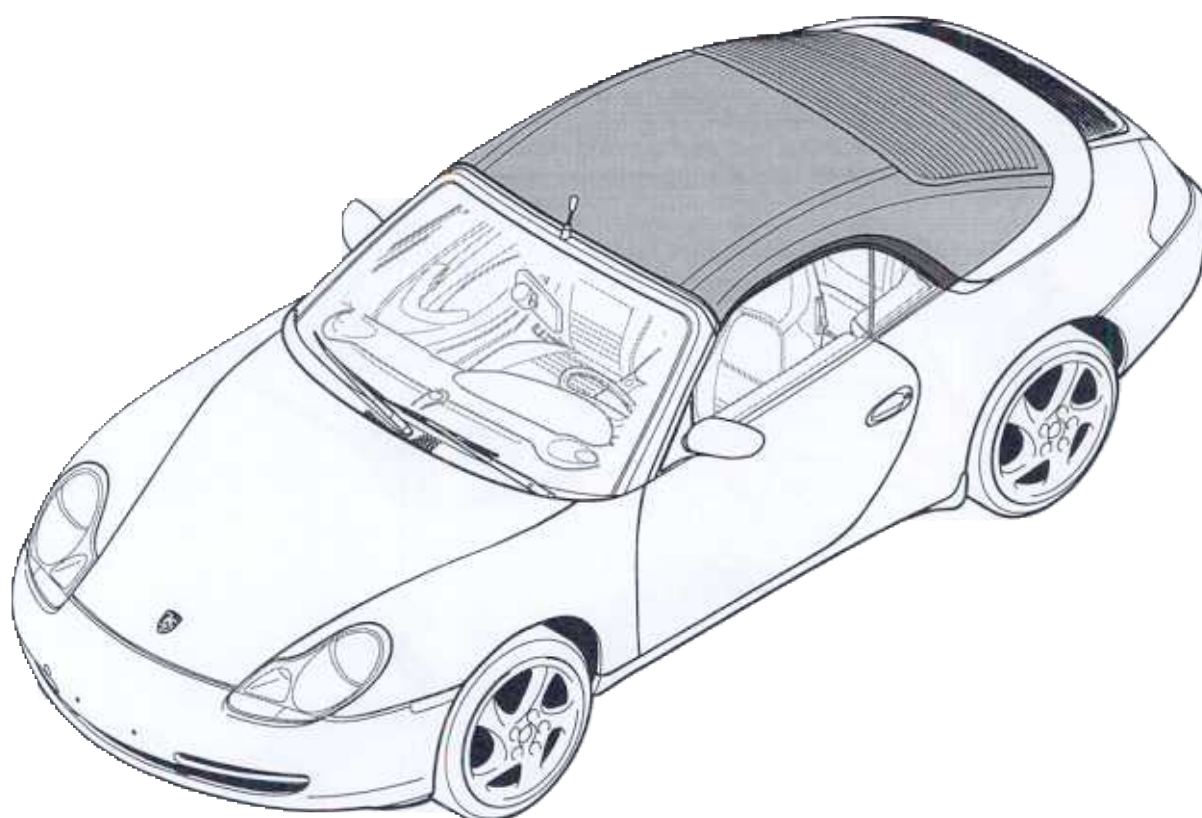
- Pot. 2 calibration value 2

- Pot. 2 calibration value 3

- Pot. 2 calibration value 4

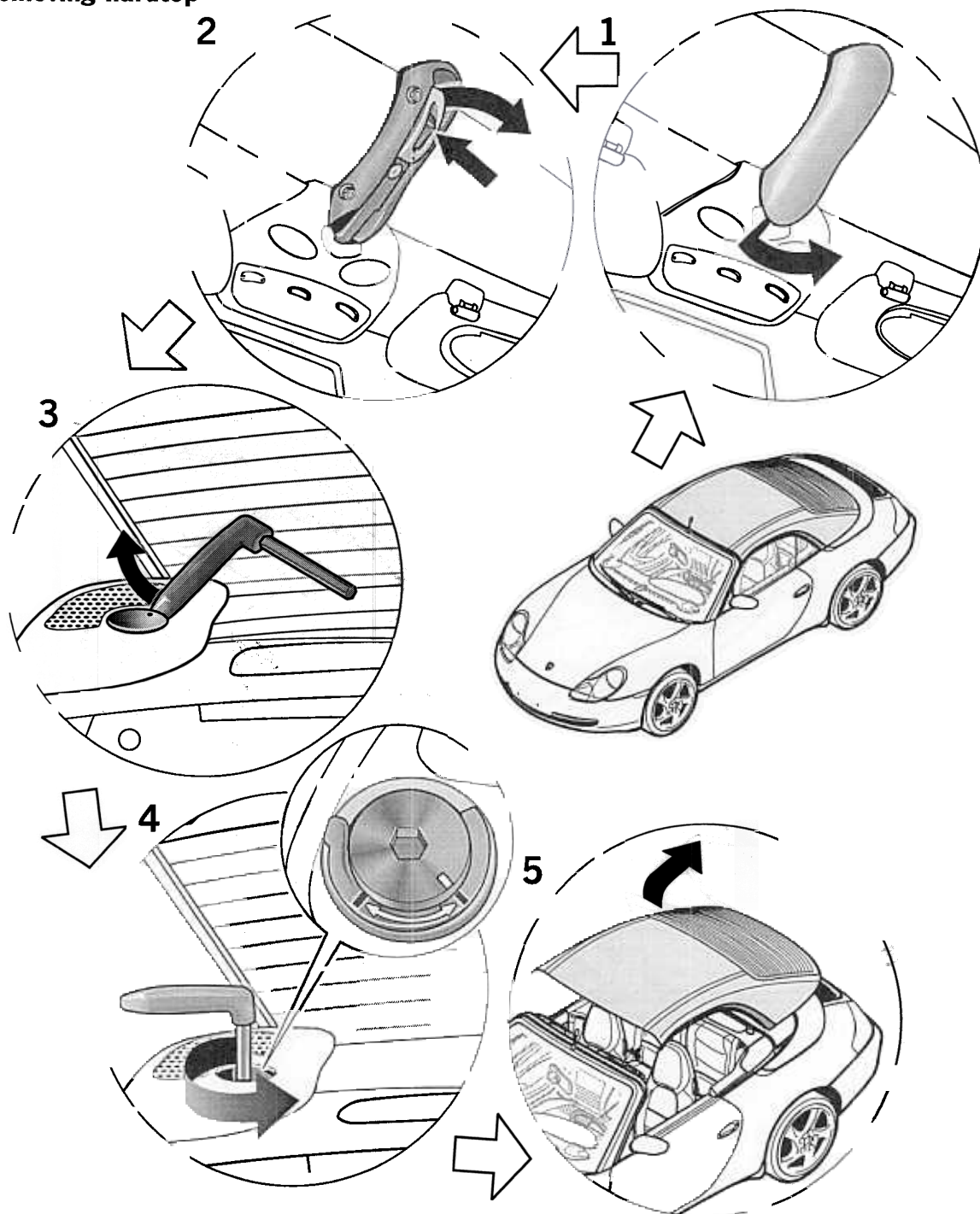
Tester display must be smaller than < 3.9 volts

61 02 19 Removing and installing hardtop




234_98

Removing hardtop

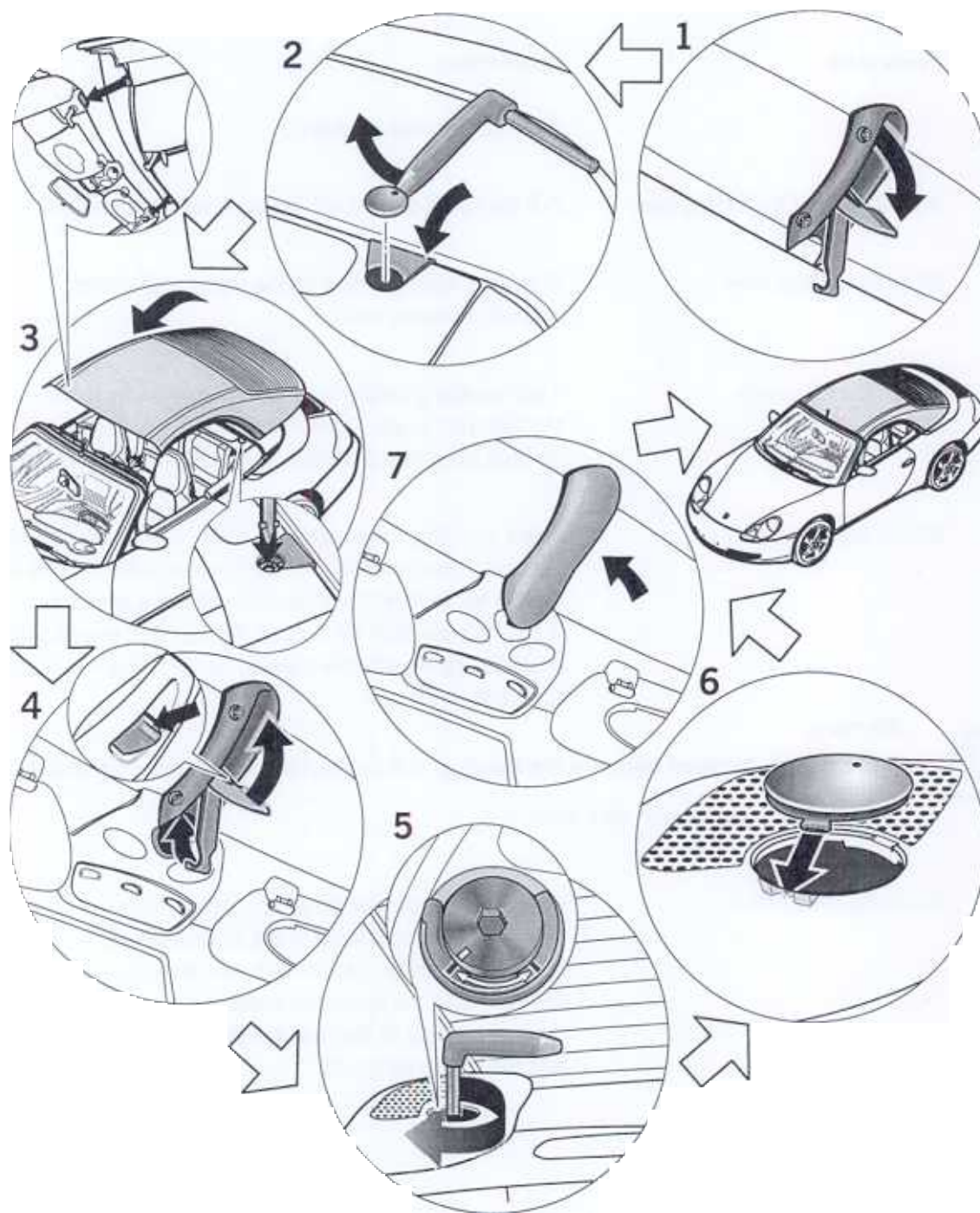


332_98

Removing hardtop


| No. | Procedure | Instructions |
|---|-------------------------------------|--|
| | | Open all four side windows. |
| 1 | Pull off cover of the locking lever | Pull the cover of the front locking lever down and off. |
| 2 | Open the locking lever | Press red locking button on the front locking lever and fully open the latch. |
| 3 | Lift off plastic covers | Take unlocking handle from the oddments tray between the two front seats. Carefully remove the plastic cover on both sides of the hardtop using the unlocking handle. |
| 4 | Unlock hardtop lock | Insert unlocking handle into one of the rear hardtop locking elements. Turn unlocking handle counterclockwise until it can be felt to meet the stop. The reference point (red; it can be seen from the outside through the rear window) must be aligned with the marking on the hexagon socket head bolt at the end. |
|  | | Warning: Hand can be trapped between the hardtop and convertible top compartment lid! > Evenly lift the hardtop at both sides. |
| | | |
| 5 | Removing the hardtop | Together with another person on the other side, evenly lift the hardtop out of the locking elements. Carefully lift the hardtop up and over the vehicle to the rear. Carefully take the protective cover out of the roll-over protection cover to the rear and press the plastic cover into the locking elements. |

Installing hardtop



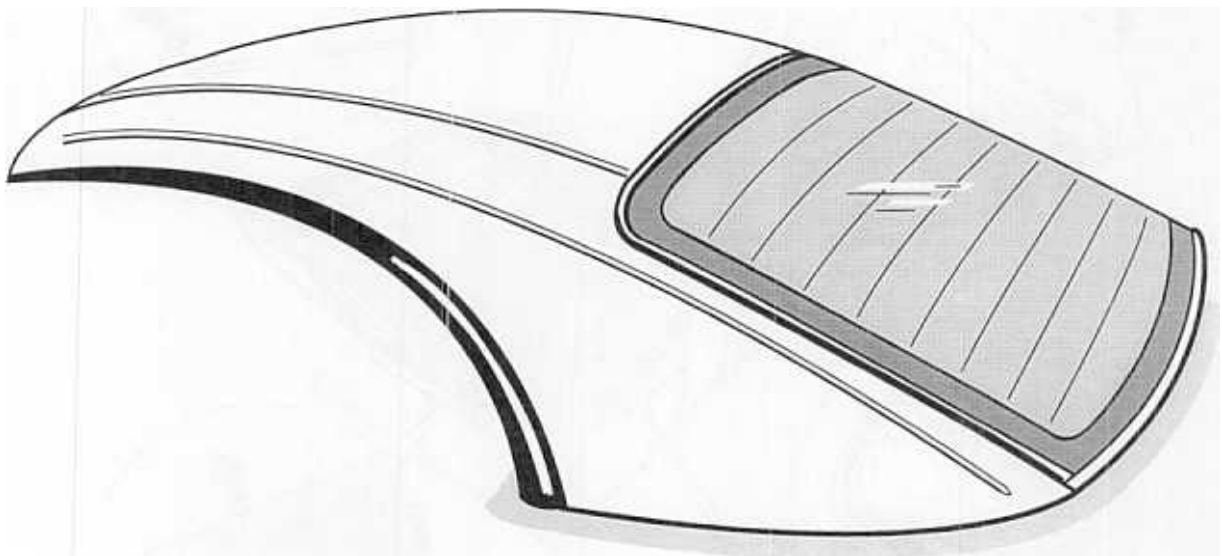
333_98

Installing hardtop

| No. | Procedure | Instructions |
|--|----------------------------------|---|
| | | Open all four side windows. |
| 1 | Open the locking lever | The locking lever must be completely opened. |
| 2 | Lift off plastic covers | Take unlocking handle from the oddments tray between the two front seats. Carefully remove the plastic cover on both sides of the hardtop using the unlocking handle. Carefully fit the protective cover into the roll-over protection cover from behind. |
| <div>Warning: The hardtop lining and windstop can be damaged! > Remove the windstop before fitting the hardtop.</div> | | |
| 3 | Putting on the hardtop | Carefully lift the hardtop over the vehicle from the rear and insert it first into the mounts of the windscreen frame at the front. Then carefully lower the hardtop into the locking elements at the rear. |
| 4 | Close locking lever at the front | Swivel locking lever of front lock to the rear. When doing so, the locking hook must engage in the windscreen frame. The white marking line on the red locking button must become visible when the hardtop is locked properly. |
| 5 | Closing latching lever at rear | Insert unlocking handle into one of the rear hardtop locking elements. Turn unlocking handle clockwise until it can be felt to meet the stop. The reference point (green; it can be seen from the outside through the rear window) must be aligned with the marking on the hexagon socket head bolt at the end. |

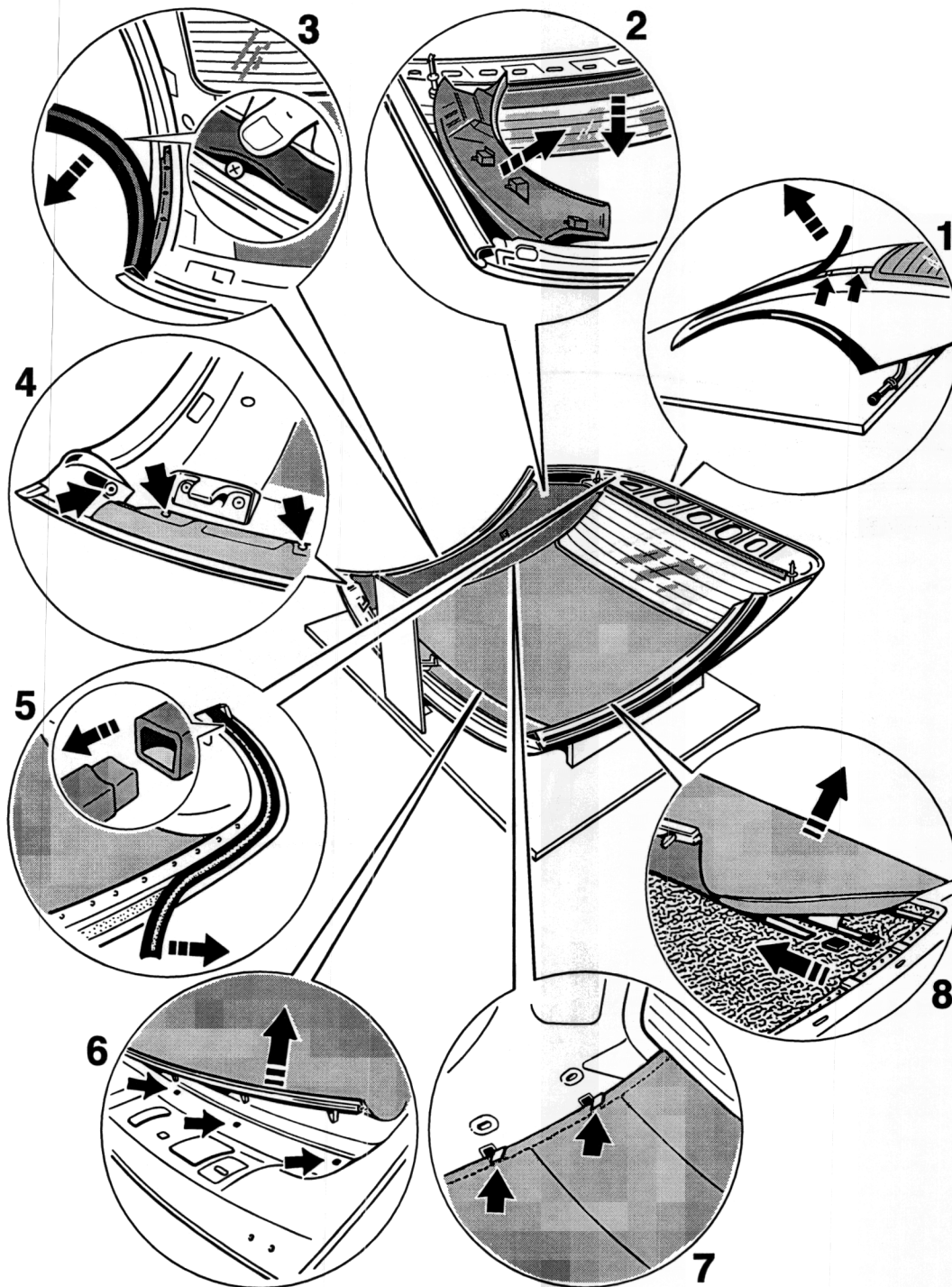
| No. | Procedure | Instructions |
|-----|---|---|
| 6 | Insert plastic covers | Press both plastic covers into the trim of the hardtop locking element. |
| 7 | Pushing on cover of the front locking lever | Push on cover of the front locking lever. |

61 02 37 Disassembling and assembling hardtop



286_98

Removal overview of the hardtop components

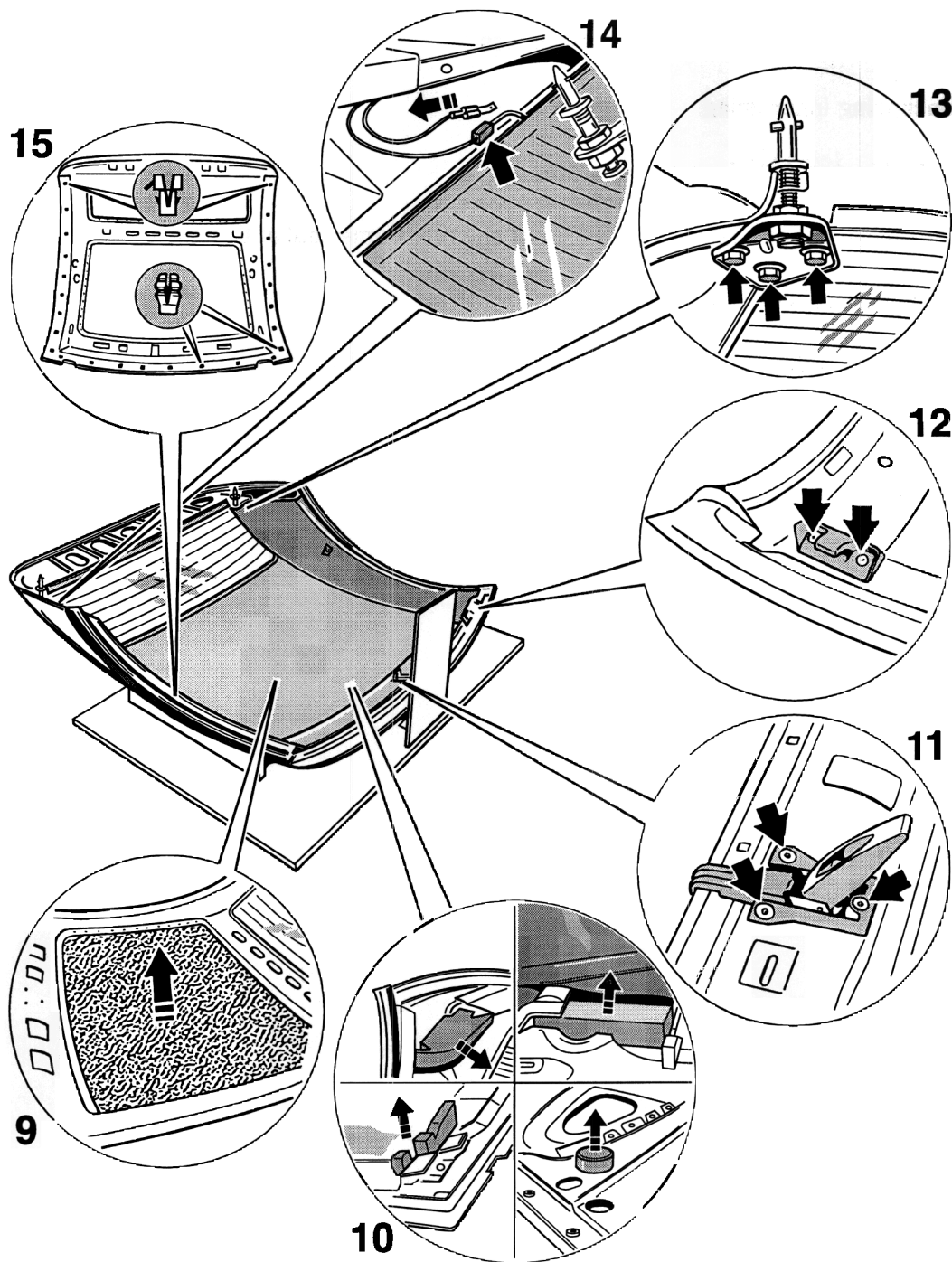


284_1_98

Removal overview of the hardtop components

- 1 Removing cover strips and roof strip clips**
- 2 Unclipping inner lining**
- 3 Detaching seal at sides of roof frame**
- 4 Detaching and disengaging retaining rail and roof frame seal at the corners**
- 5 Detaching rubber seal**
- 6 Detaching roof liner at front**
- 7 Detaching roof liner at sides**
- 8 Detaching roof liner at rear and transverse struts**

Removal overview of the hardtop components



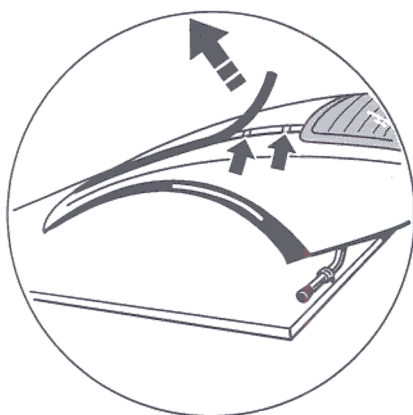
284_2_98

Removal overview of the hardtop components

- 9 Detaching insulation from the hardtop body**
- 10 Removing foam strips and foam pads**
- 11 Removing locking lever**
- 12 Removing centring peg**
- 13 Removing hardtop locking element**
- 14 Disconnecting wiring harness of the heated rear window**
- 15 Pressing expanding nuts out of the hardtop body**

Disassembling hardtop**No. Procedure****Instructions**

Place hardtop on the assembly fixture and lock with the latching levers and the locking lever at front.



284_A_98

Removing cover strips and roof strip clips

Lift cover strip at the left and right with a plastic spatula and pull off. The roof strip clips are destroyed when they are removed and must always be replaced.

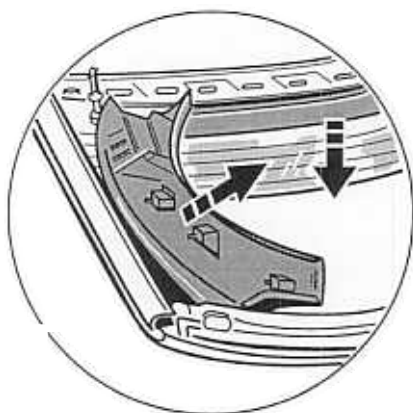
Removing rear window

See: Serv. No. 64 86 19

Turn hardtop

Place outer side of the hardtop on the assembly fixture.

2



284_B_98

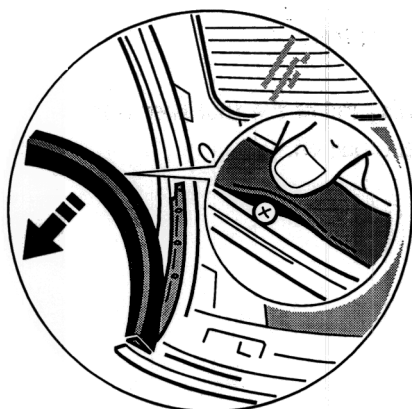
Unclipping inner linings

Unclip inner lining from hardtop body at the sides, front and rear.

No. Procedure

Instructions

3



284_C_98

Detaching seal at sides of roof frame

The seal on the roof frame consists of two parts. Pull the upper seal out of the profile of the retaining rail. Undo B 3.5 x 16 fastening screws from the retaining rail. Remove the seal below it together with the retaining rail from the roof frame.

4

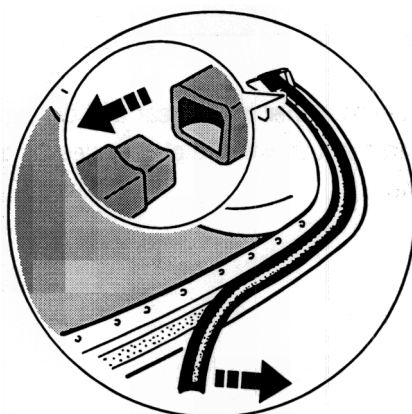


284_D_98

Detaching and disengaging retaining rail and roof frame seal

Undo the B 3.5 x 16 sheetmetal screws from the retaining rail, undo the M6 x 20 pan-head screw from the roof frame seal and disengage and remove the seal at the corners.

5



284_E_98

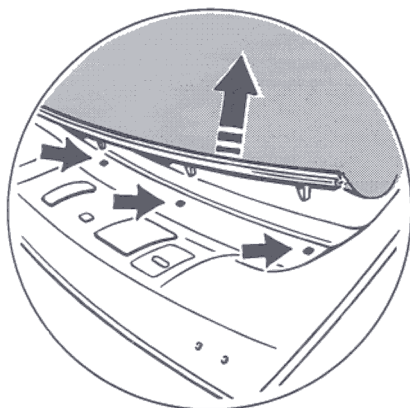
Detaching rubber seal

Pull off the all-round rubber seal at the rear and pull out of the roof frame seal at the ends.

No. Procedure

Instructions

6

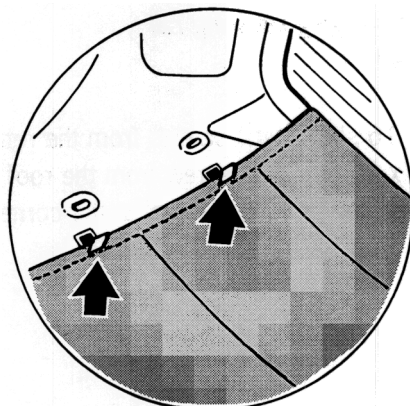


284_F_98

Detaching roof liner at front

Lift the front retaining rail of the roof liner with a plastic spatula and pull off.

7

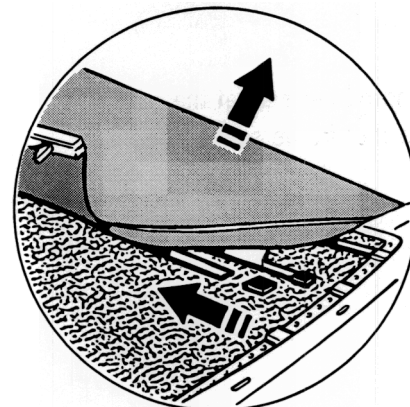


284_G_98

Detaching roof liner at sides

Lift the roof liner on the left and right sides with a plastic spatula and disengage from the sheetmetal clips.

8



284_H_98

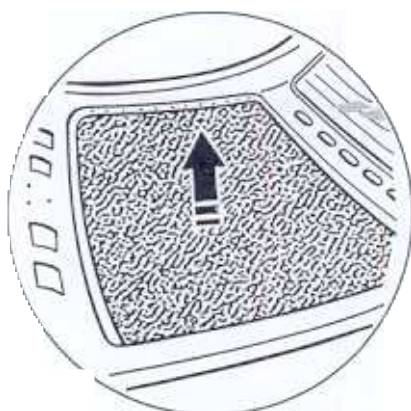
Detaching roof liner at rear and transverse struts

Pull plastic rail on the roof liner to the rear and disengage. Pull out the transverse struts with the plastic sleeves and remove the roof liner.

No. Procedure

Instructions

9

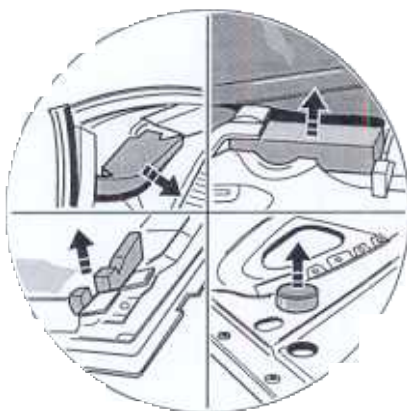


284_I_98

Detaching insulation from the hardtop body

Detach insulation of the hardtop body with a spatula.

10



284_K_98

Detaching foam strips

Carefully pull off foam strips on the B-pillar, rear of roof and at the centring pegs at front and the foam pads on the left and right.

11



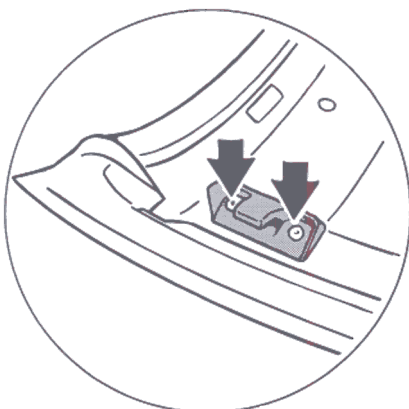
284_L_98

Removing locking lever

Remove the M6 x 20 countersunk screw from the locking lever and remove the lever.

No. Procedure**Instructions**

12

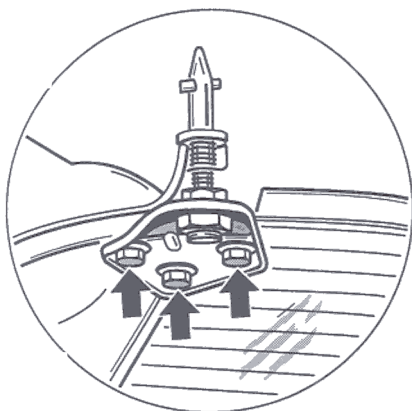


284_M_98

Removing centring peg

Remove the M6 x 20 pan-head screw from the centring peg and remove.

13



284_N_98

Removing hardtop locking element

Remove hexagon head bolts from the hardtop lock and remove.

14



284_O_98

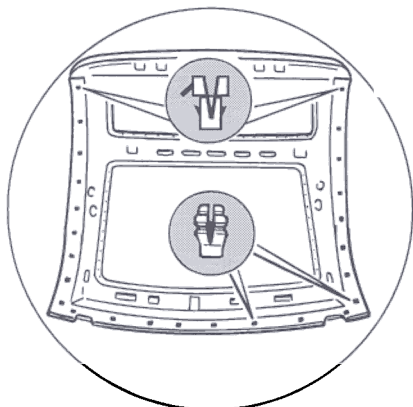
Disconnecting wiring harness of the heated rear window

Drill out the Ø 3.2 mm tubular rivet. Disconnect electrical plug connection, remove wiring harness with the hardtop locking element (Figure 13) from the hardtop body.

No. Procedure

Instructions

15

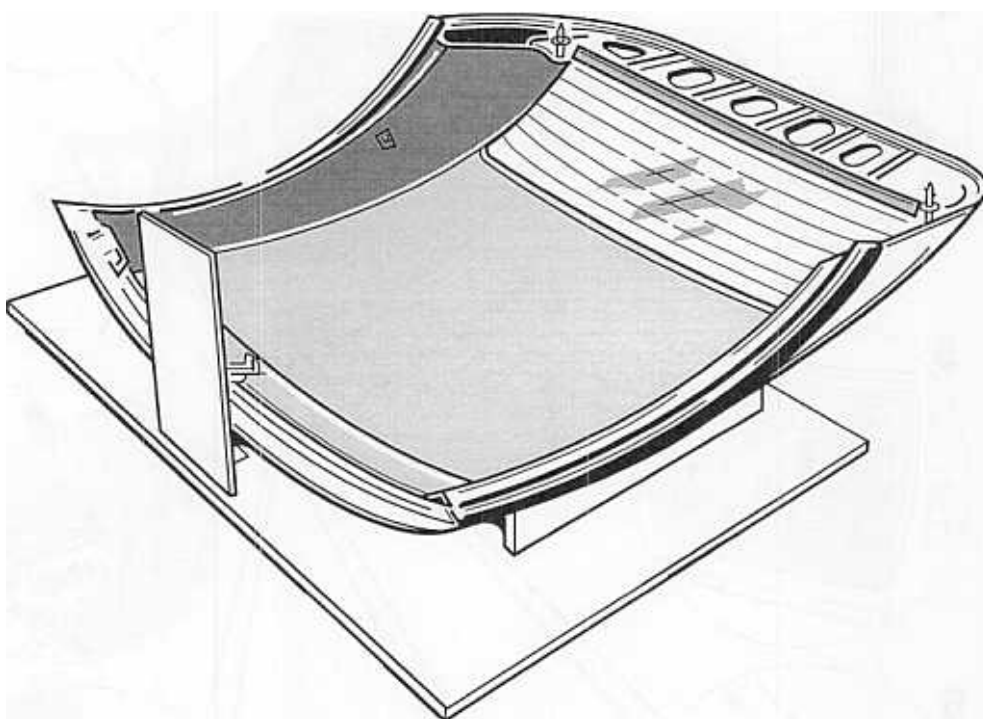


284_P_98

Pressing expanding nuts out of the hardtop body

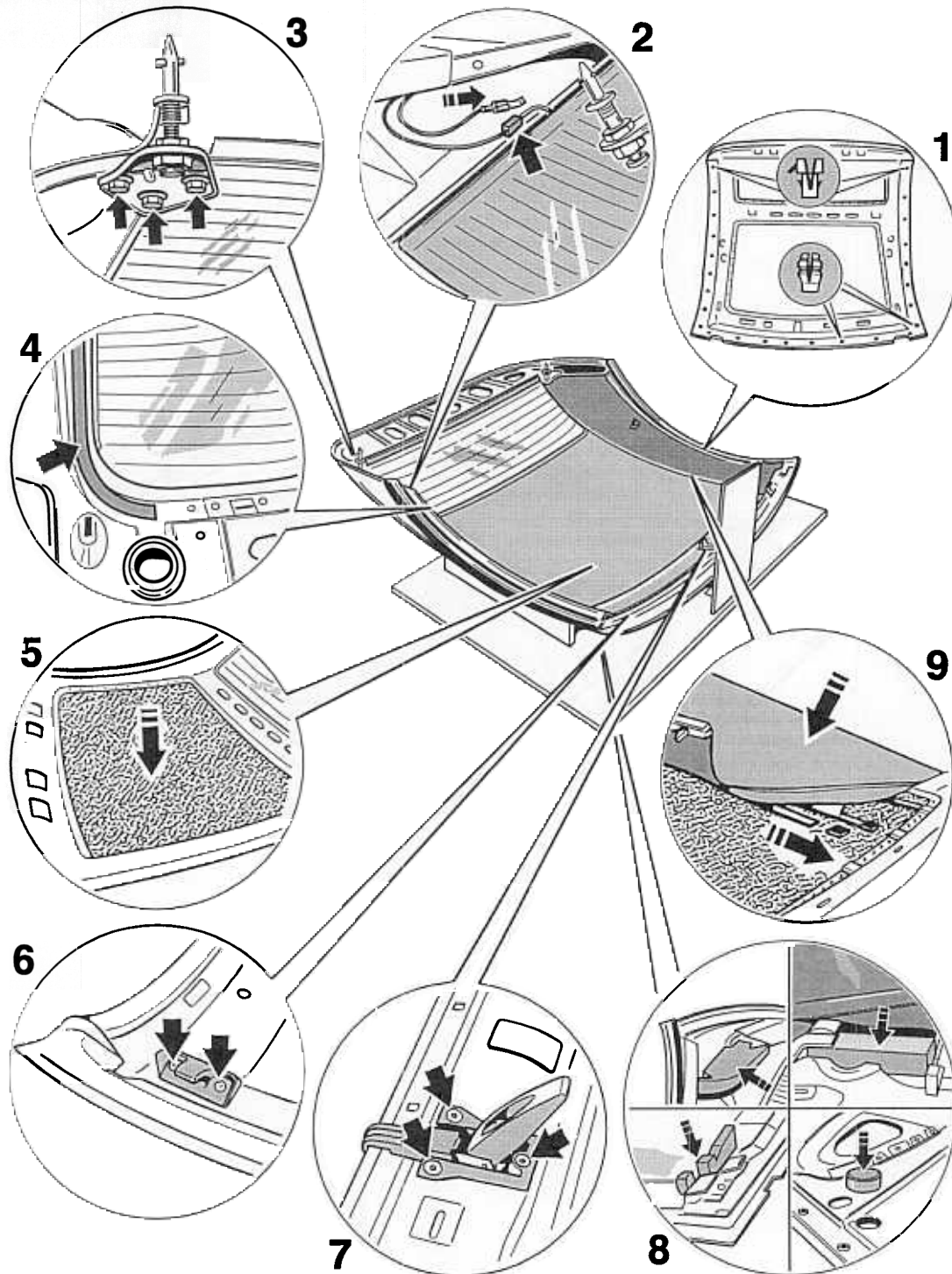
Press expanding out expanding nuts at the sides and front of the hardtop body.

Assembling hardtop



286_1_98

Installation overview of hardtop components

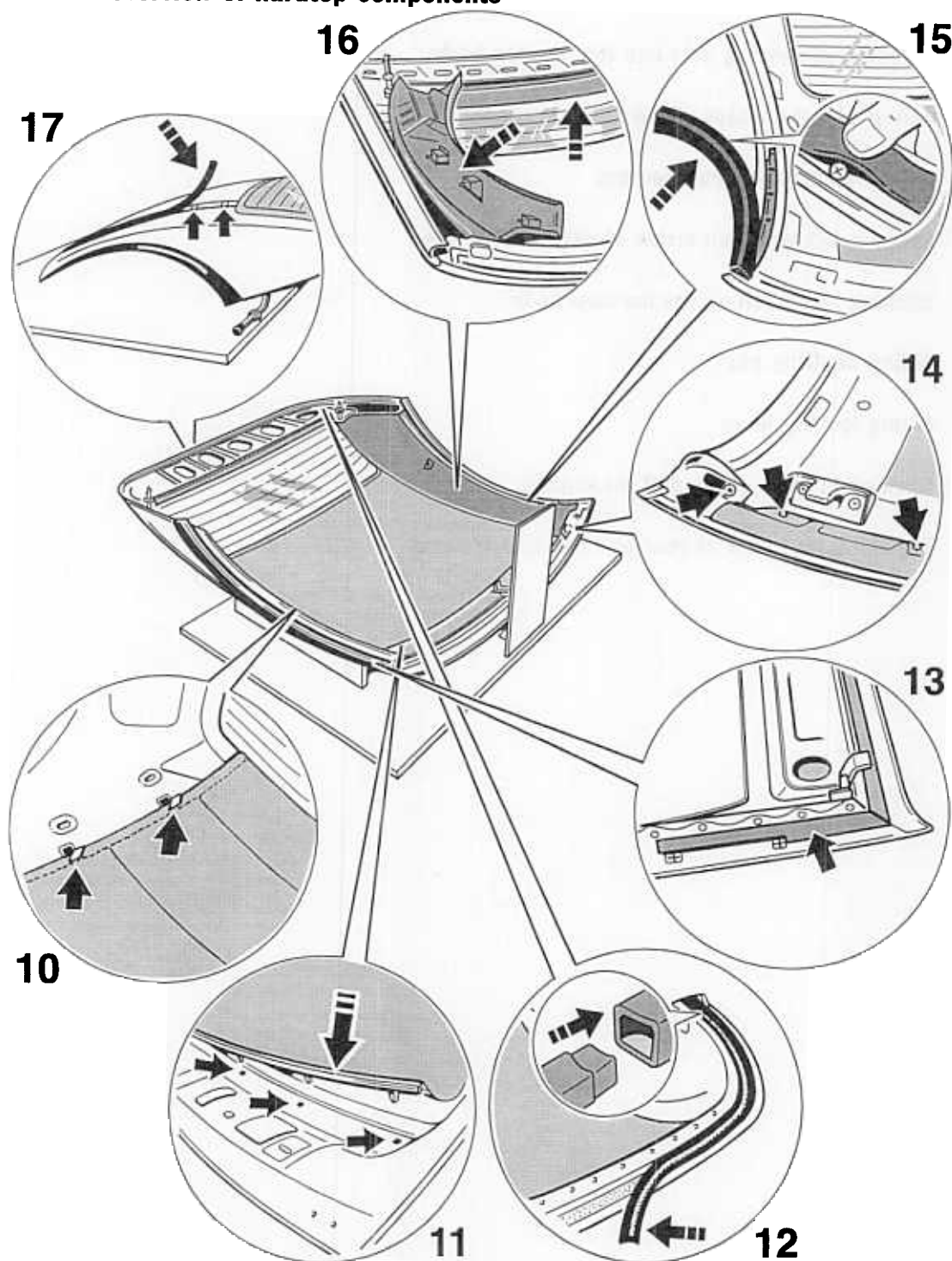


285_1_98

Installation overview of hardtop components

- 1 Pressing expanding nuts into the hardtop body**
- 2 Fitting wiring harness of the heated rear window**
- 3 Fitting hardtop locking element**
- 4 Sticking felt strips on inside of window aperture**
- 5 Sticking insulation on the hardtop body**
- 6 Fitting centring pin**
- 7 Fitting locking lever**
- 8 Sticking in foam strips and foam pads**
- 9 Engaging roof liner at rear and transverse struts**

Installation overview of hardtop components



285_2_98

Installation overview of hardtop components

- 10 Engaging roof liner at sides
- 11 Fitting roof liner at front
- 12 Fitting rubber seal
- 13 Adhering Nito tape on the front left and right of the hardtop body
- 14 Fitting retaining rail and roof frame seal at the corners
- 15 Fitting seal at sides of roof frame
- 16 Clipping in inner linings
- 17 Fitting cover strips and roof strip clips

Assembling hardtop

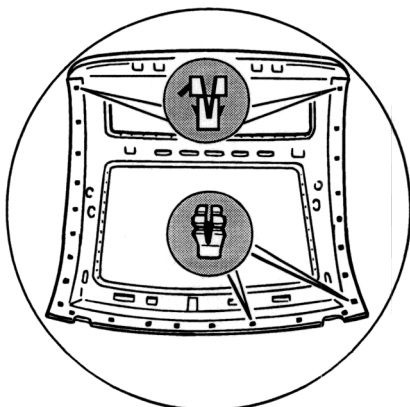
No. Procedure

Instructions

Set down hardtop

Set the hardtop down on the assembly fixture on the outer side of the roof.

1



285_A_98

Pressing expanding nuts into the hardtop body

Press expanding nuts into the hardtop body at the sides and front.

2



285_B_98

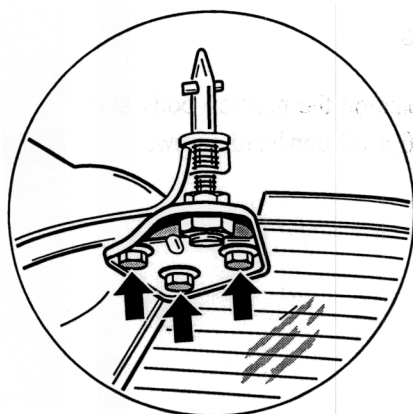
Fitting wiring harness of the heated rear window

Position wiring harness with the hardtop locking element, rivet the flat connector onto the hardtop body with a $\varnothing 3.2$ mm tubular rivet and connect the flat connector to the cable lug.

No. Procedure

Instructions

3

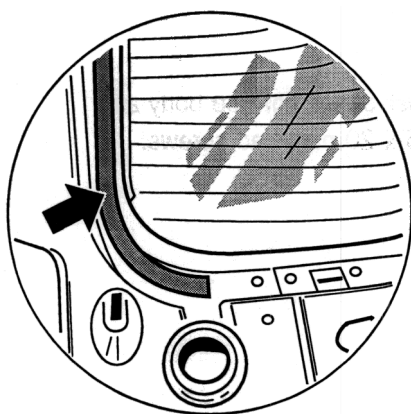


285_C_98

Fitting hardtop locking element

Screw M6 x 20 hexagon-head bolts into the hardtop locking element and tighten.

4

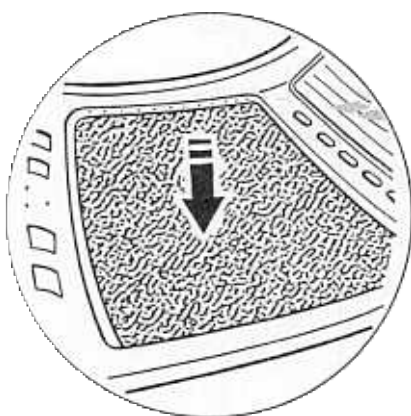


285_D_98

Sticking felt strips on inside of window aperture

Stick a felt strip approx. 2 cm wide on the rivet joints of the hardtop body along the window aperture.

5



285_E_98

Sticking insulation on the hardtop body

Position the self-adhesive insulation in the hardtop body and press firmly into place.

No. Procedure

Instructions

6



285_F_98

Fitting centring pegs

Position centring pins on the hardtop body and fasten with the M 6 x 20 pan-head screws.

7

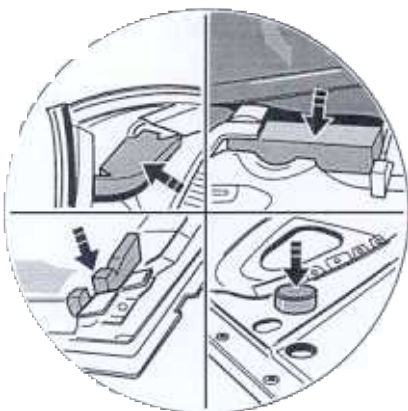


285_G_98

Fitting locking lever

Position locking lever on the hardtop body and fasten with the M 6 x 20 pan-head screws.

8



285_H_98

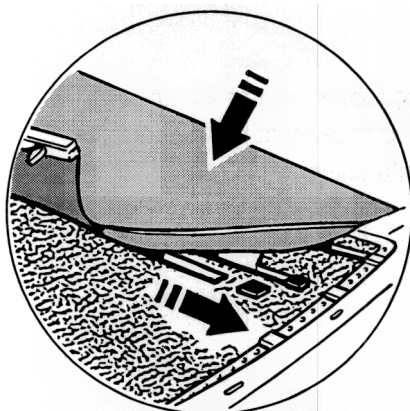
Sticking in foam strips and foam pads

Position the foam strips on the B-pillar, at the rear of the roof and at the centring pegs and the left and right foam pads and press firmly into place.

No. Procedure

Instructions

9

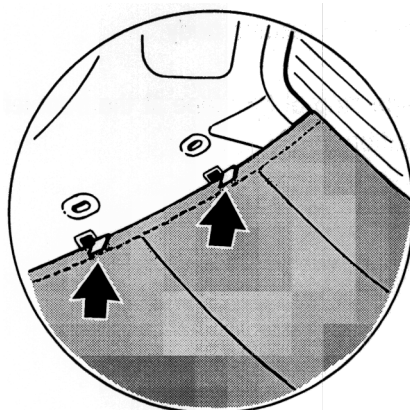


285_I_98

Engaging roof liner at rear and transverse struts

Insert the transverse struts with the plastic sleeves into the hardtop body, pull the plastic rail of the roof liner rearward and engage in the groove of the hardtop body.

10



285_K_98

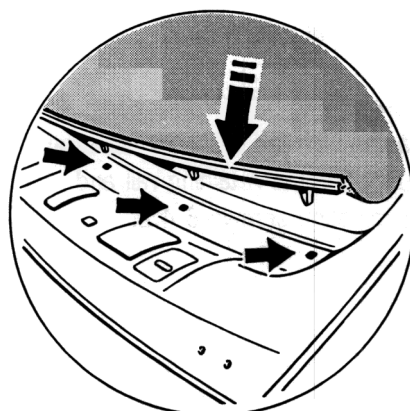
Engaging roof liner at sides

Engage roof liner in the sheetmetal clips at the left and right.

Note:

If the hardtop body is new, the sheetmetal clips on the left and right must be bent over to the outside using a plastic hammer.

11



285_L_98

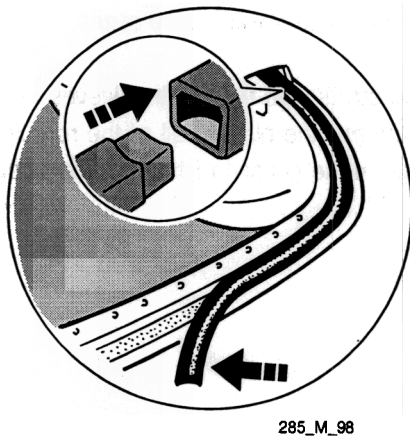
Fitting roof liner at front

Position the front retaining rail of the roof liner and clip into place.

No. Procedure

Instructions

12

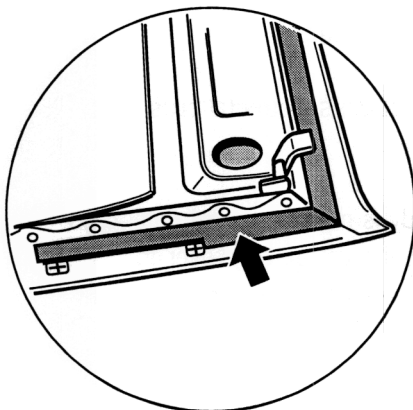


285_M_98

Fitting rubber seal

Insert self-adhesive rubber seal at the ends of the roof frame seal. Remove backing of the rubber seal and press firmly into place at the rear on all sides.

13

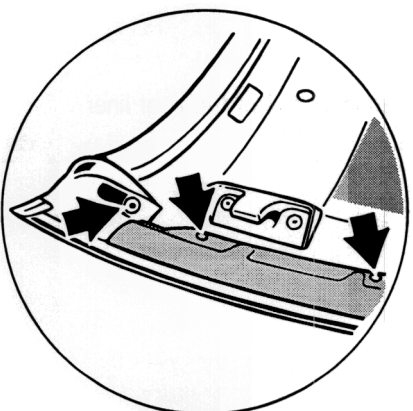


285_N_98

Adhering Nito tape on the hardtop body

Stick on a 2 cm wide strip of Nito tape at the front left and right of the hardtop body.

14



285_O_98

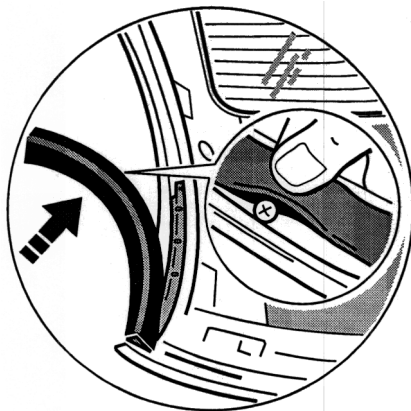
Fitting roof frame seal and retaining rail

Engage roof frame seal into the hardtop body at the corners and fasten with the M6 x 20 hexagon socket head bolt. Position the retaining rail and fasten with the combination screws B 4.2.

No. Procedure

Instructions

15

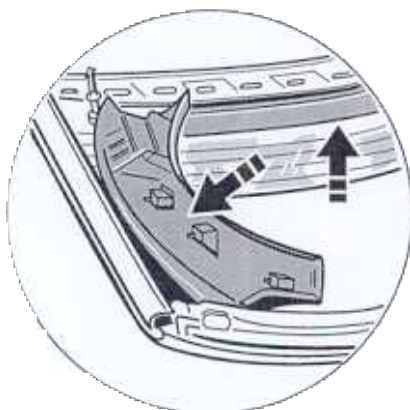


285_P_98

Fitting seal at side of roof frame seal

The seal at the side the roof frame consists of two parts. Position the lower seal with the retaining strip on the roof frame and fasten with the B 3.5 x 16 fastening screws. Press the upper seal into the profile of the retaining rail.

16

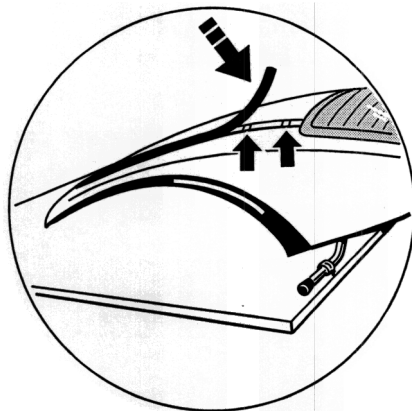


285_Q_98

Fitting inner linings

Clip inner lining into the hardtop body at the sides, front and rear.

17

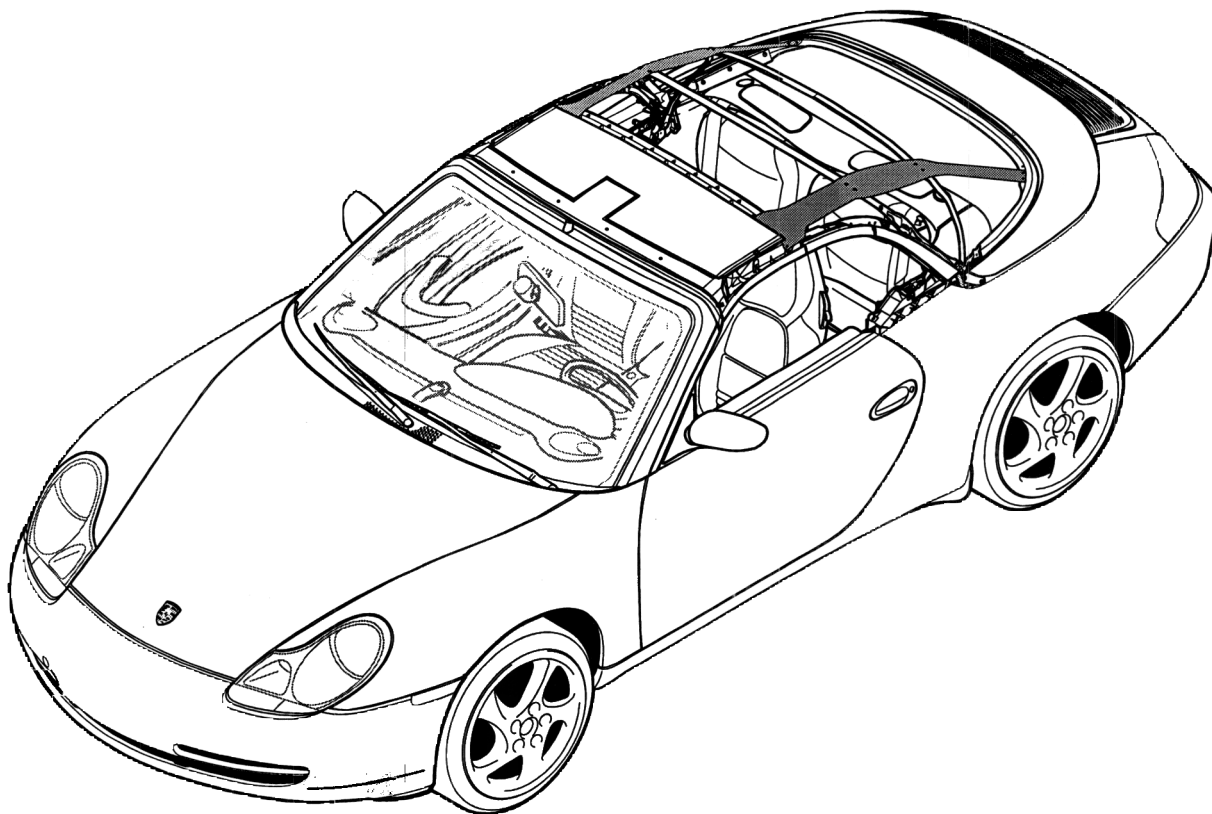


285_R_98

Clipping in roof strip clips and cover strips

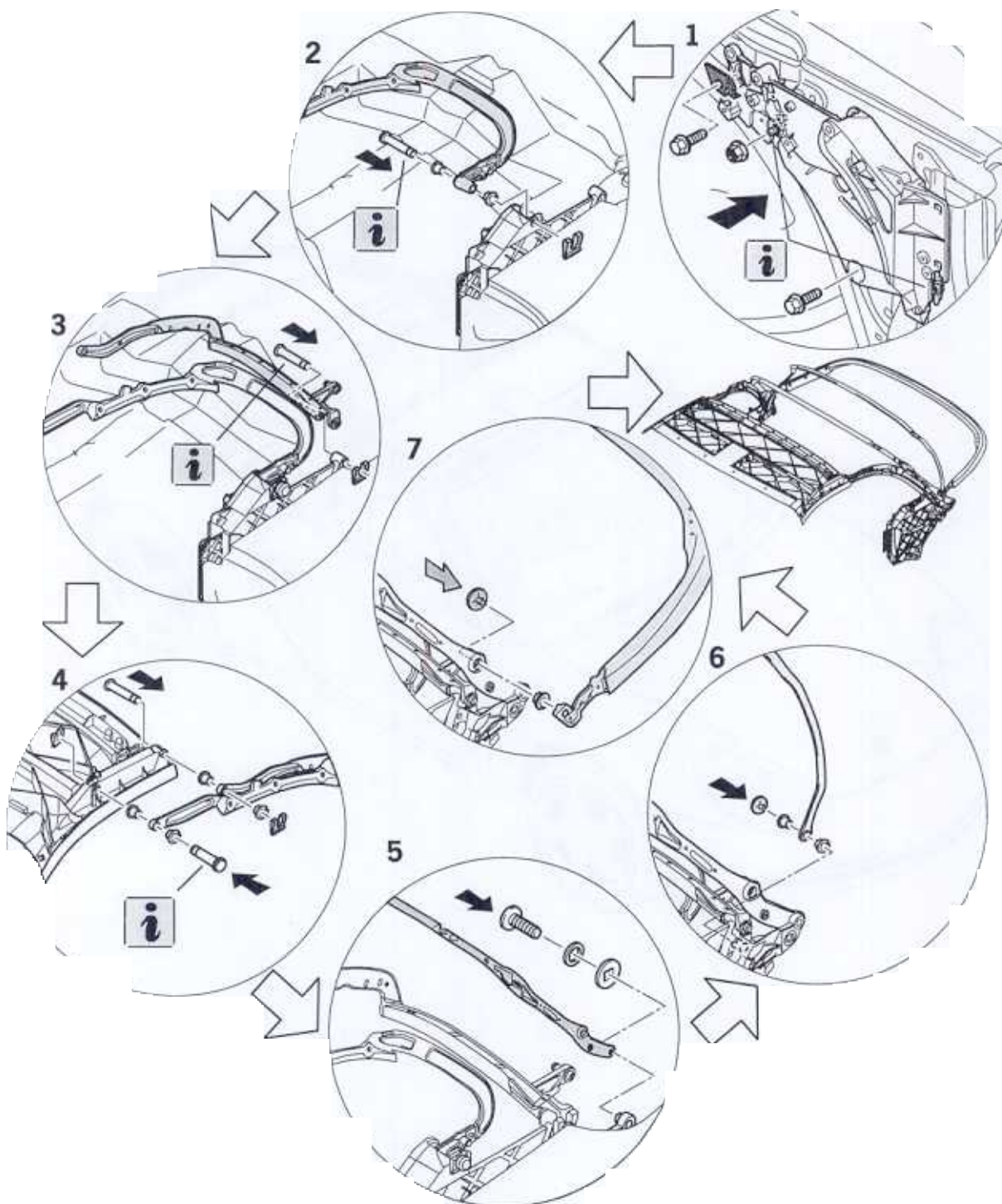
Fit the roof gap clips; fit cover strip seal on the cover strip. Position cover strip on the hardtop body and press into the roof strip clips.

61 30 55 Replacing convertible-top frame



299_98

Installation overview of the convertible top frame components

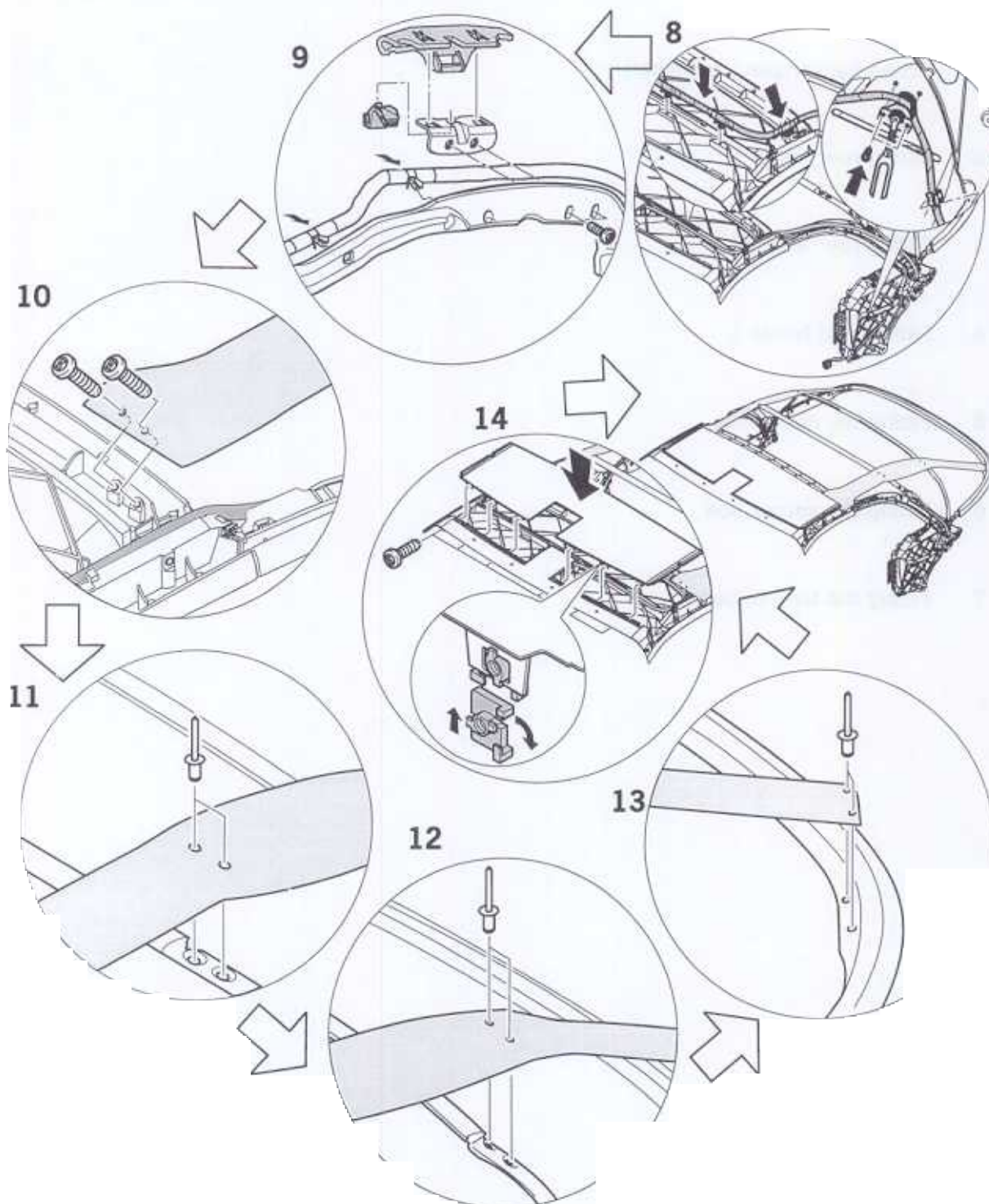


61300004

Installation overview of the convertible-top frame components

- 1 Fitting convertible top support
- 2 Fitting roof frame 2
- 3 Fitting roof frame 3
- 4 Fitting roof frame 1
- 5 Fitting the main bow
- 6 Fitting the corner bow
- 7 Fitting the tension bow

Installation overview of the convertible-top frame components

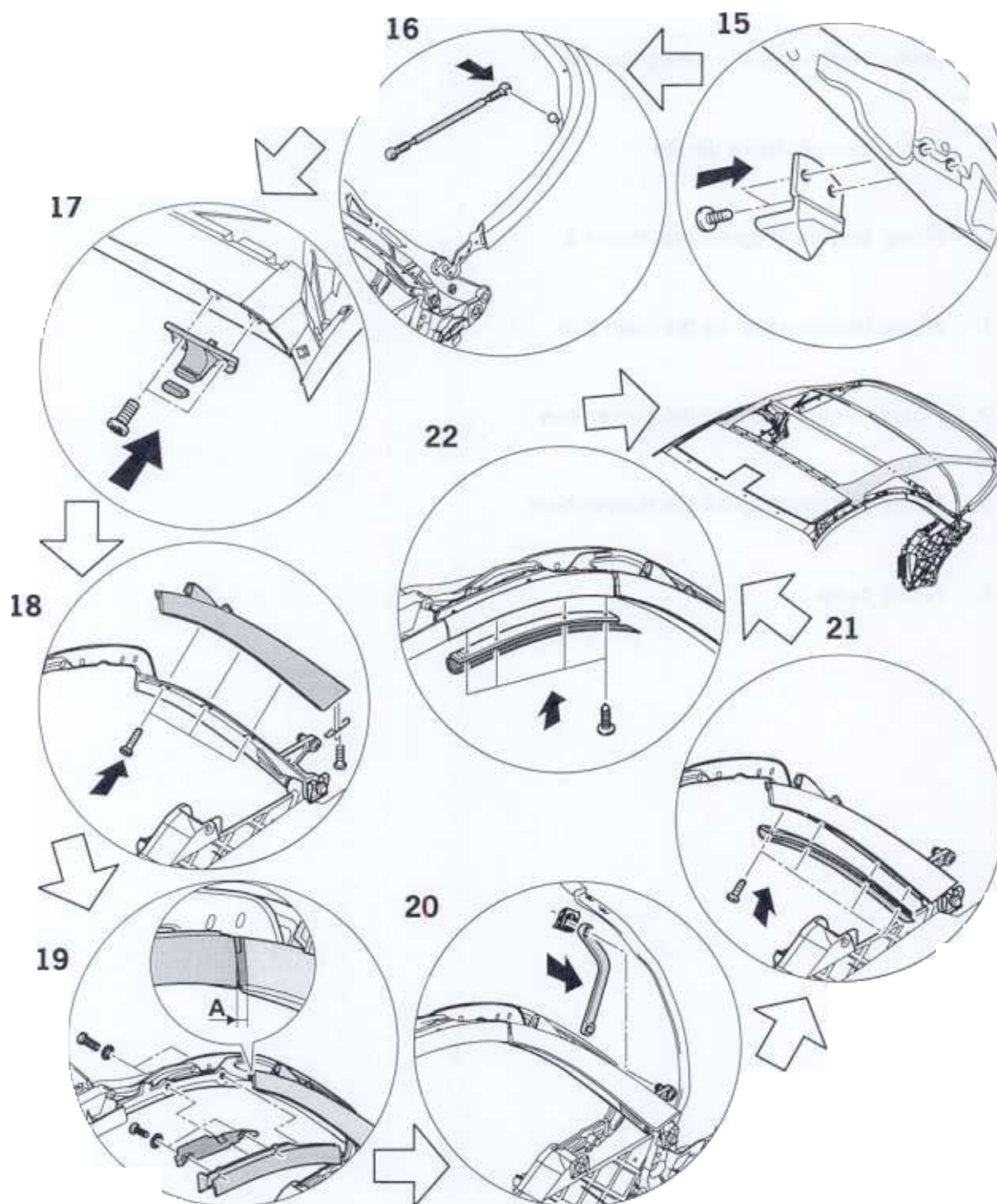


61300005

Installation overview of the convertible-top frame components

- 8 Fitting convertible top wiring harness
- 9 Fitting Y-angle fixing device
- 10 Fitting tension strap on roof frame 1
- 11 Fitting tension strap on the main bow
- 12 Fitting tension strap on the corner bow
- 13 Fitting tension strap on the tension bow
- 14 Fitting cover

Installation overview of the convertible-top frame components



300_3_98

Installation overview of the convertible-top frame components

- 15 Fitting wedge**
- 16 Fitting the tension cable**
- 17 Fitting centring pegs**
- 18 Fitting styling frame, roof frame 3**
- 19 Fitting fabric guide plate and styling frame, roof frame 2**
- 20 Fitting drive lever**
- 21 Fitting frame and seal, roof frame 3**
- 22 Fitting frame and seal, roof frame 2**

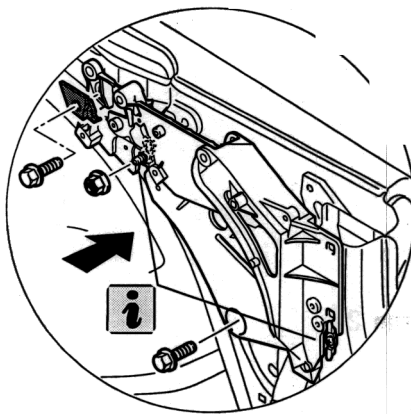
Replacing convertible-top frame

No. Procedure

Instructions

1

Fitting convertible-top supports.



300_A_98



Information:

Ensure that the assembly aids are seated firmly. The assembly aids must be recalibrated if they were removed. See: Serv. No. 61 01 15 – Adjusting convertible top.

Position convertible top supports in the assembly aids and fasten with the M8 x 40 hexagon-head bolts and M8 nuts.

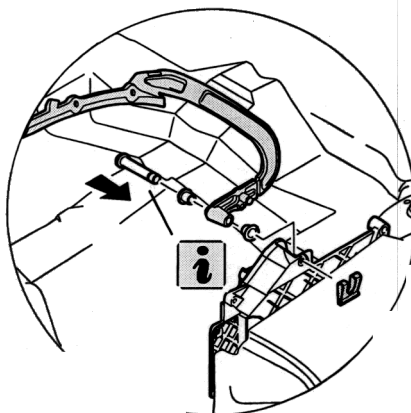
Tightening torque 23 Nm (17 ftlb.).

Insert rear side window inner seal together with the belt guide section, and tighten M6 hexagon nut on the convertible-top support. Push the deflection lever into the belt guide section, position the belt on the deflection lever and fasten with the M8 x 20 hexagon-head bolt.

Tightening torque 50 Nm (37 ftlb.). Refer to Service No. 61 01 19

2

Fitting roof frame 2.



61300007



Information:

Use assembly grease when fitting the pins

Press 10x12x15 bushing into the roof frame bore on the inside and outside.

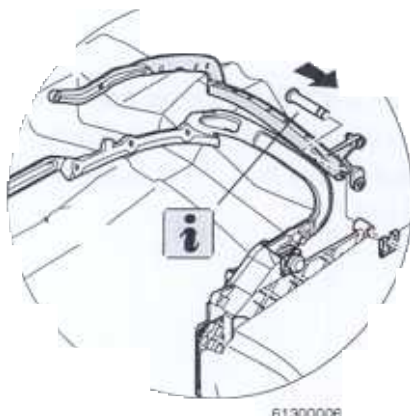
Position roof frame 2 on the convertible top support, connect with the 10D7x61.8 pin and secure with the retaining clip SLB 10.

Removal tool, refer to Workshop Equipment Manual, Chapter 2.4, No. 131.

No. Procedure

Instructions

3



Fitting roof frame 3.

Press 10x12x15 bushing into the roof frame bore on the inside and outside.

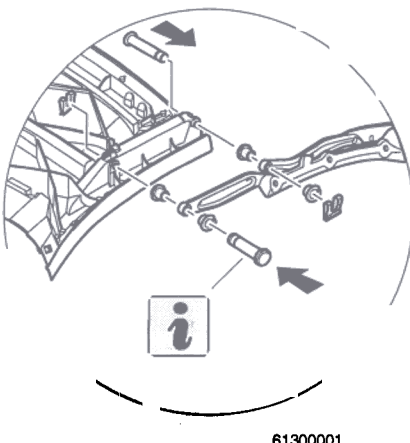
Position roof frame 3 on the convertible top support, connect with the 10D7x51.8 pin and secure with the retaining clip SLB 10.



Information:

Use assembly grease when fitting the pins

4



Fitting roof frame 1

Press 8x19x5.5 bushing in the bores of roof frame 2 or roof frame 3 on the inside or outside.

Position roof frame 2 and roof frame 3 on roof frame 1, connect with the 8D7x28.2 or 8D7x23.2 pin and secure with the retaining clip SLB 8.

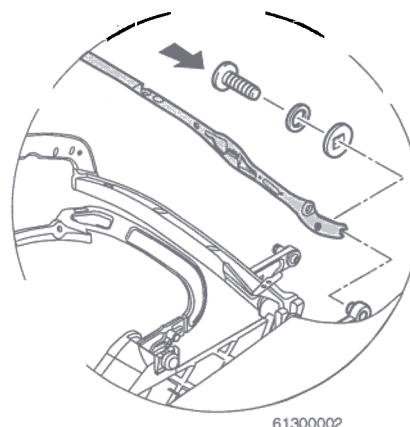
Removal tool, refer to Workshop Equipment Manual, Chapter 2.4, No. 131.



Information:

Use assembly grease when fitting the pins

5



Fitting the main bow.

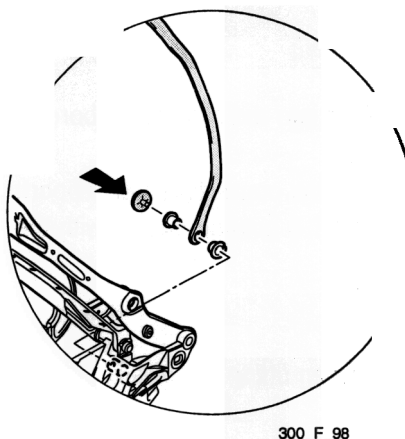
Position main bow and washer V9-100 on the convertible-top support and fasten with the 6.4 washer and M6.0 x 20 oval-head screw. Secure oval-head screw with Loctite 270

Tightening torque 9 Nm (6.5 ftlb.)

No. Procedure

Instructions

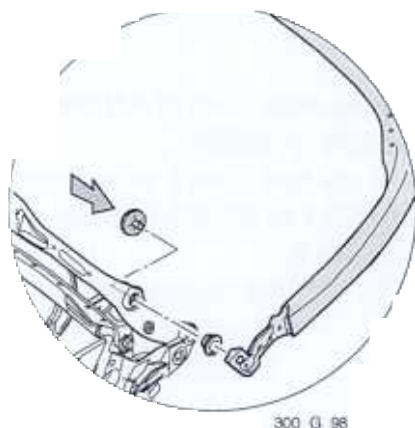
6



Fitting corner bow.

Press 10x12x15 bushing into the corner bow bore on the outside. Position corner bow on the convertible-top support and press in the anti-spread lock. Press in the retaining pin of the anti-spread lock.

7



Fitting the tension bow.

Press bushing into the main bow bore on the outside. Position tension bow on the main bow and press in the anti-spread lock. Press in the retaining pin of the anti-spread lock.

8



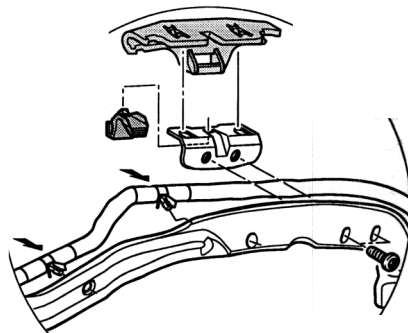
Fitting convertible top wiring harness.

Starting at roof frame 1, press the strip clips fastened on the wiring harness into the holes provided for this purpose in roof frame 1 "3 strip clips" and roof frame 3 "2 strip clips" or into the fastening clips on the convertible-top support. Position potentiometer and the wiring harness connection on the convertible top support and fasten with the T 20 Torx screws.

No. Procedure

Instructions

9



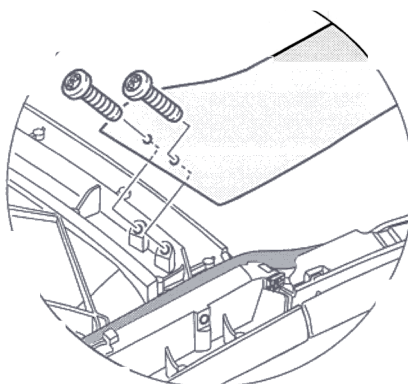
300_i_98

Fitting Y-angle fixing device.

Position wiring harness in Y-fixing device and fasten the Y-fixing device on roof frame 3 with the M5x10 cross-recess screws.

Tightening torque 2.8 Nm (2.0 ftlb.)

10

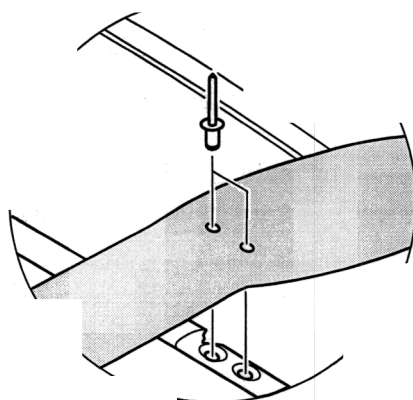


61300003

Fitting tension strap on roof frame

Position tension strap on roof frame 1 (using the holes provided) and fasten with the T30 5.0 x 12 Torx screws.

Tightening torque 5 Nm (3.5 ftlb.)



300_L_98

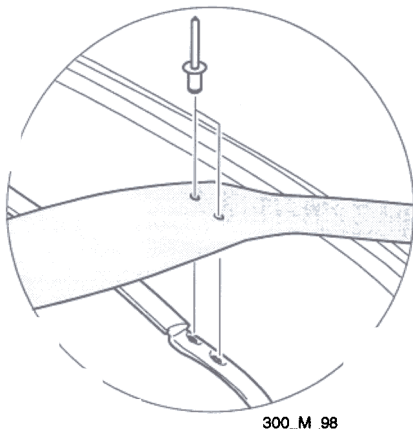
Fitting tension strap on the main bow.

Position tension strap on the main bow (using the holes provided) and fasten the tension strap on the main bow with the A4.8 x 9.2 pop rivets.

No. Procedure

Instructions

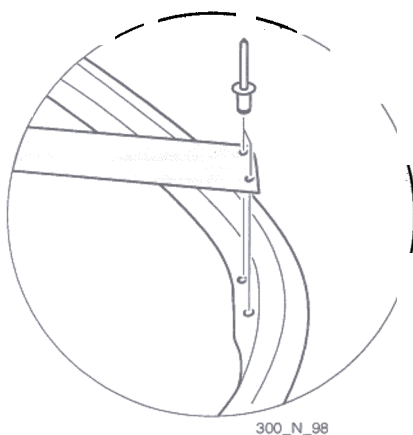
12



Fitting tension strap on the corner bow.

Position tension strap on the corner bow (using the holes provided) and fasten the tension strap on the corner bow with the A4.8 x 9.2 pop rivets.

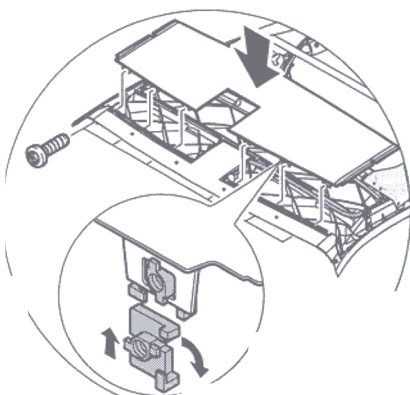
13



Fitting tension strap on tension bow.

Position tension strap on the tension bow (using the holes provided) and fasten the tension strap on the tension bow with the A4.8 x 9.2 pop rivets.

14

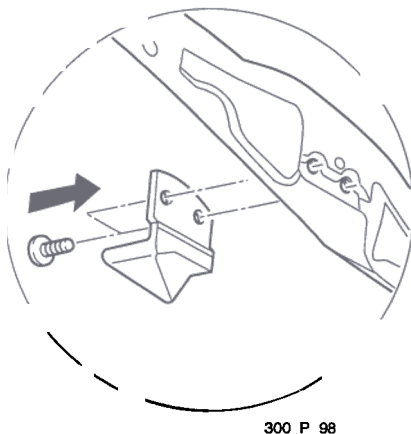


Fitting cover.

No. Procedure

Instructions

15

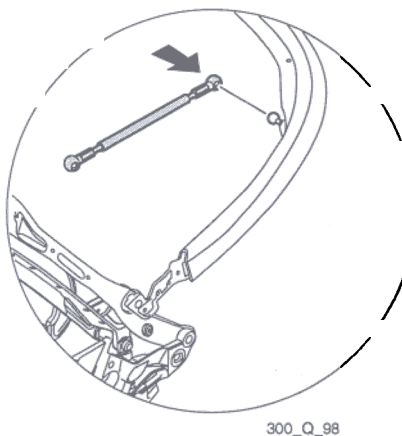


Fitting wedge.

Position wedge on the main bow and fasten with the M5 x 10 cross-recess screws.

Tightening torque 2.8 Nm (2.0 ftlb.)

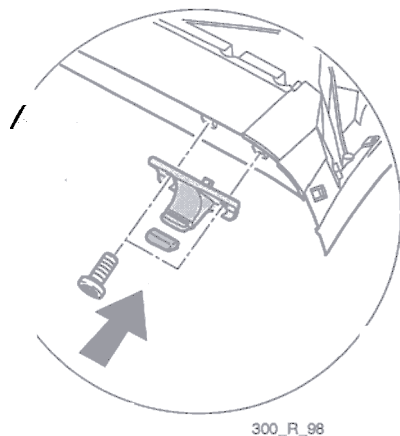
16



Fitting tension cable.

Press tension cable into the ball head of the tension bow.

17



Fitting centring pegs.

Position centring pegs on roof frame 1 and fasten with the T30 6.0 x 16 Torx screws

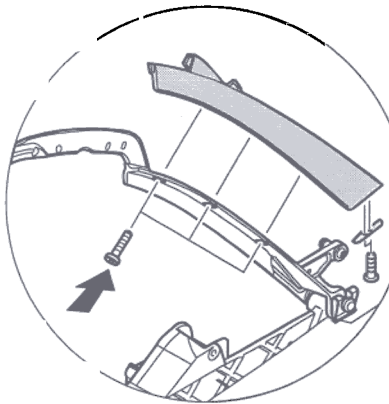
Tightening torque 7 Nm (5.0 ftlb.)

Stick the cover cap to the centring peg with *Loctite 454*.

No. Procedure

Instructions

18



300_S_98

Fitting styling frame, roof frame 3.

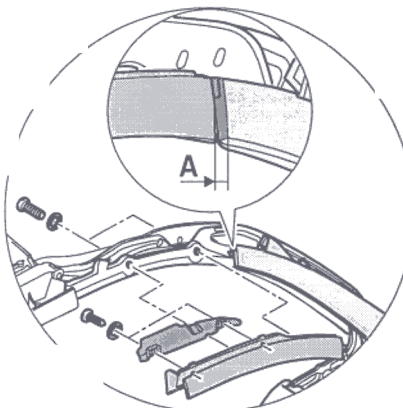
Fasten draught deflector on the front face of the styling frame using the T15 3.5 x 8 Torx screws.

Tightening torque 1.7 Nm (1.5 ftlb.)

Position styling frame on roof frame 3 and fasten with the T15 M3 5 x 8 Torx screw.

Tightening torque 1.7 Nm (1.5 ftlb.)

19



300_T_98

Fitting fabric guide plate and styling frame on roof frame 2.

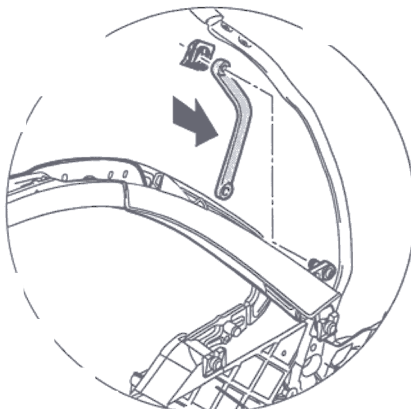
Fasten fabric guide plate on the styling frame with the T15 3.5 x 8 Torx screws.

Tightening torque 1.7 Nm (1.5 ftlb.)

Position styling frame on roof frame 2 and set the gap **A: 3.1 + 0.5 mm** between styling frame, roof frame 3 and styling frame, roof frame 2. Tighten Torx screw T30 M6 x 20.

Tightening torque 9 Nm (6.5 ftlb.)

20



300_U_98

Fitting drive lever.

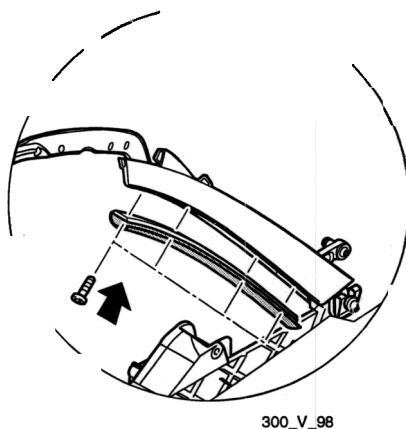
Position drive lever on the main bow and secure with the retaining clip SLB 10.

Removal tool: refer to Workshop Equipment Manual, Chapter 2.4, No. 131.

No. Procedure

Instructions

21

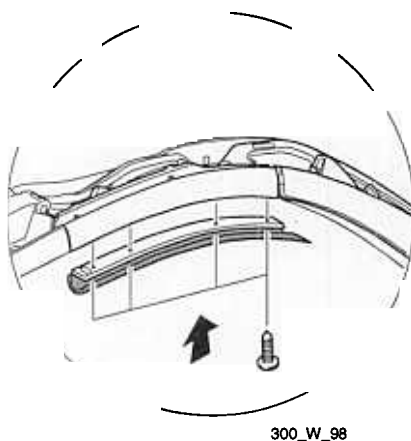


Fitting frame and seal, roof frame 3.

Position aluminium frame on roof frame 3 and fasten with the Torx screws T15 M3.5 x 8. Insert seal in the aluminium frame.

Tightening torque 1.7 Nm (1.5 ftlb.)

22



Fitting frame and seal, roof frame 2.

Position aluminium frame on roof frame 2 and fasten with the Torx screws T15 M3.5 x 8. Insert seal in the aluminium frame.

Tightening torque 1.7 Nm (1.5 ftlb.)

61 81 19 Removing and installing micro-switch for convertible-top compartment lid**Removal**

Move the convertible top to service position before removal.

1. Electrically actuate the convertible top rearward until the convertible-top compartment lid has reached the rear limit position. Electrically actuate the convertible top forward until the convertible-top compartment lid moves forward. Then interrupt closing operation.

2. Disengage left and right tension cables and fold up the tension bow.

The convertible top must no longer be electrically actuated in this position.

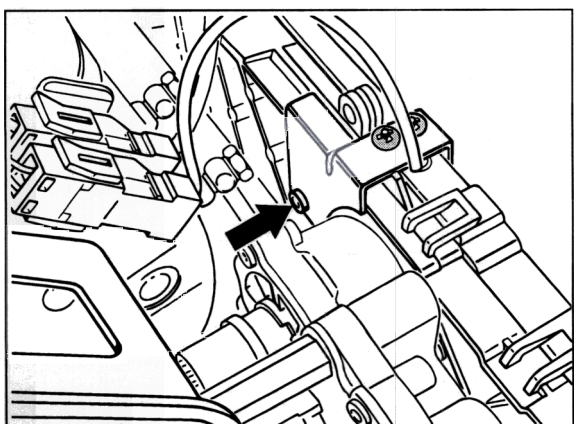
3. Remove cover over the drive. Disconnect the electrical plug connection. Press locking tab and push the plug connection down and out.

4. Undo fastening screw (Torx T20) and lift the retaining bracket with micro-switch up and out.

5. Remove both tab washers and take out the micro-switch.

Installation

1. Fasten micro-switch on the retaining bracket with tab washers and install.
2. Engage electrical plug connection and perform a function test.

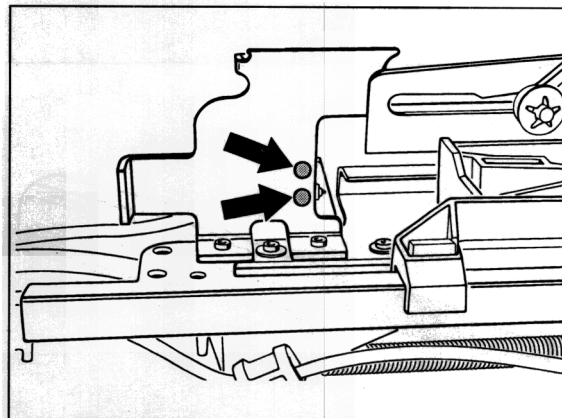


339_98

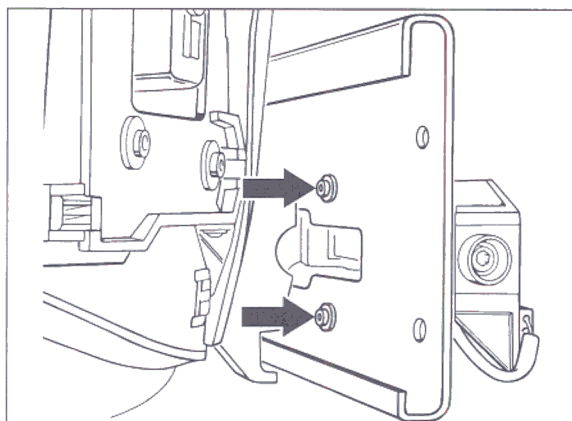
61 41 19 Removing and installing micro switch for rear side section flap**Removal****Note**

The upper and lower micro switches are replacement parts. If one micro switch is defective, both must be replaced. Removing and installing rear side section flap: Serv. No. 61 42 19.

1. Remove rear side section flap.
2. Remove upper micro switch. Turn threaded spindle until the fastening screws can be undone with an angle screwdriver (Torx T10).



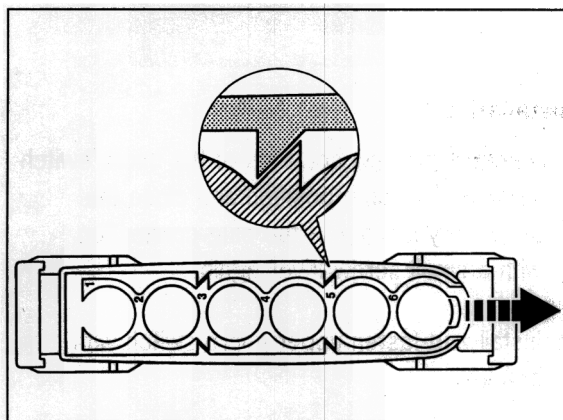
341_98



340_98

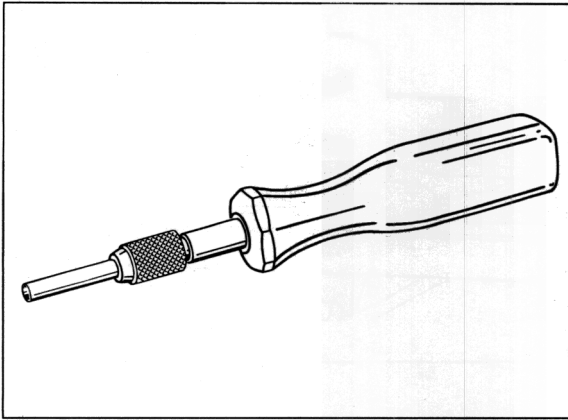
3. Remove lower micro switch.
4. Turn threaded spindle until the fastening points can be heated with a soldering iron.
5. Heat fastening points and remove the micro switch.

6. Unlock the secondary locking of the plug connection with a small screwdriver. Unlock both sides by inserting a small screwdriver and shift in the direction of the arrow. Figure shows secondary locking unlocked.



552_98

7. Unlocking tool to unlock the old contacts in the plug connection (see Workshop Equipment Manual, No. 155).



164_98

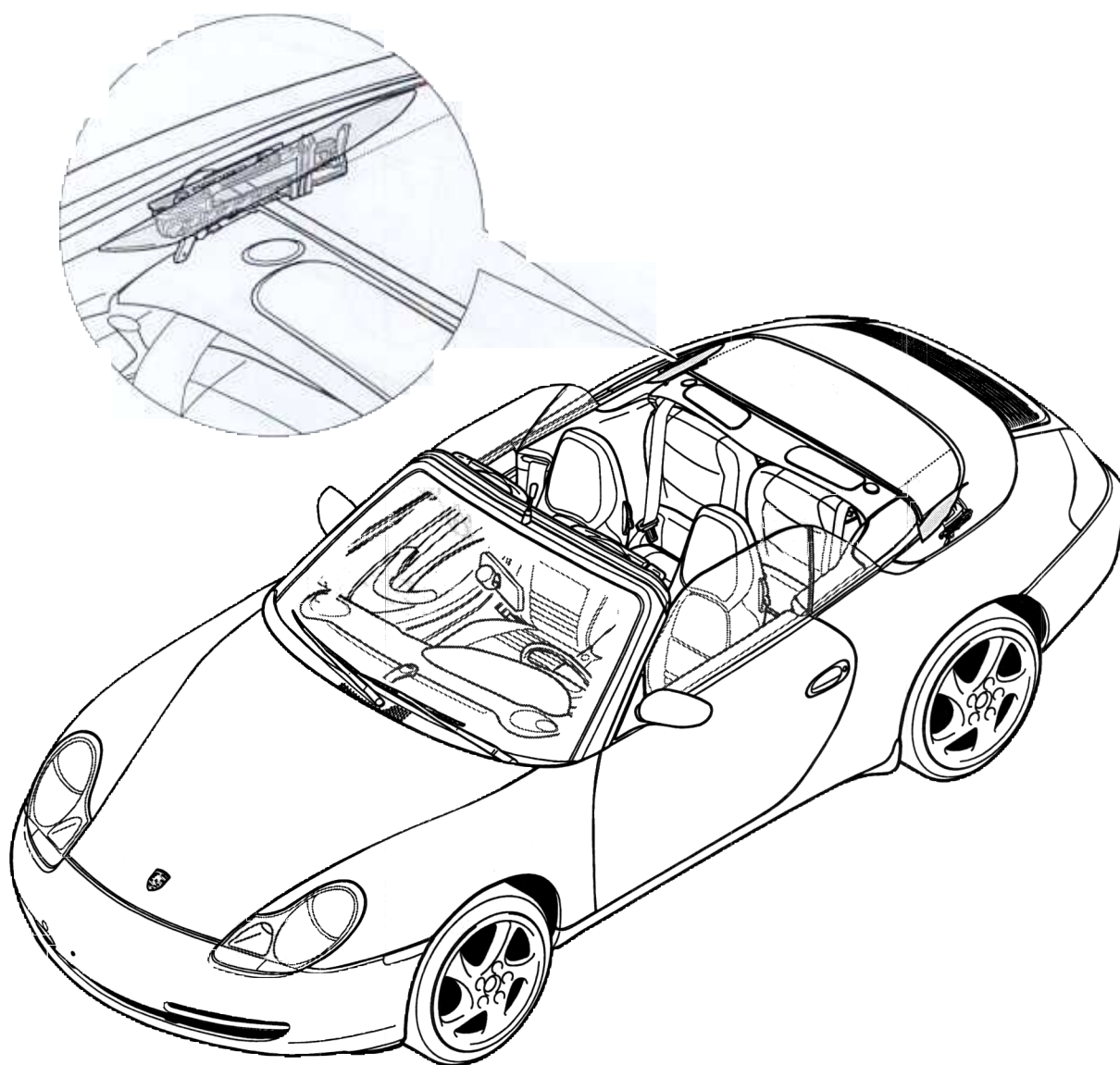
4. The micro switch must be seated firmly in the fastening points after the material cools.
5. Installation of the flaps is described from Page 61 - 53 to Page 61 - 57 in Serv. No. 61 42 19.

8. Unlock the old contacts of the micro-switch wires with the unlocking tool and remove.
grey in pin 3
blue in pin 4
black in pin 5

Installation

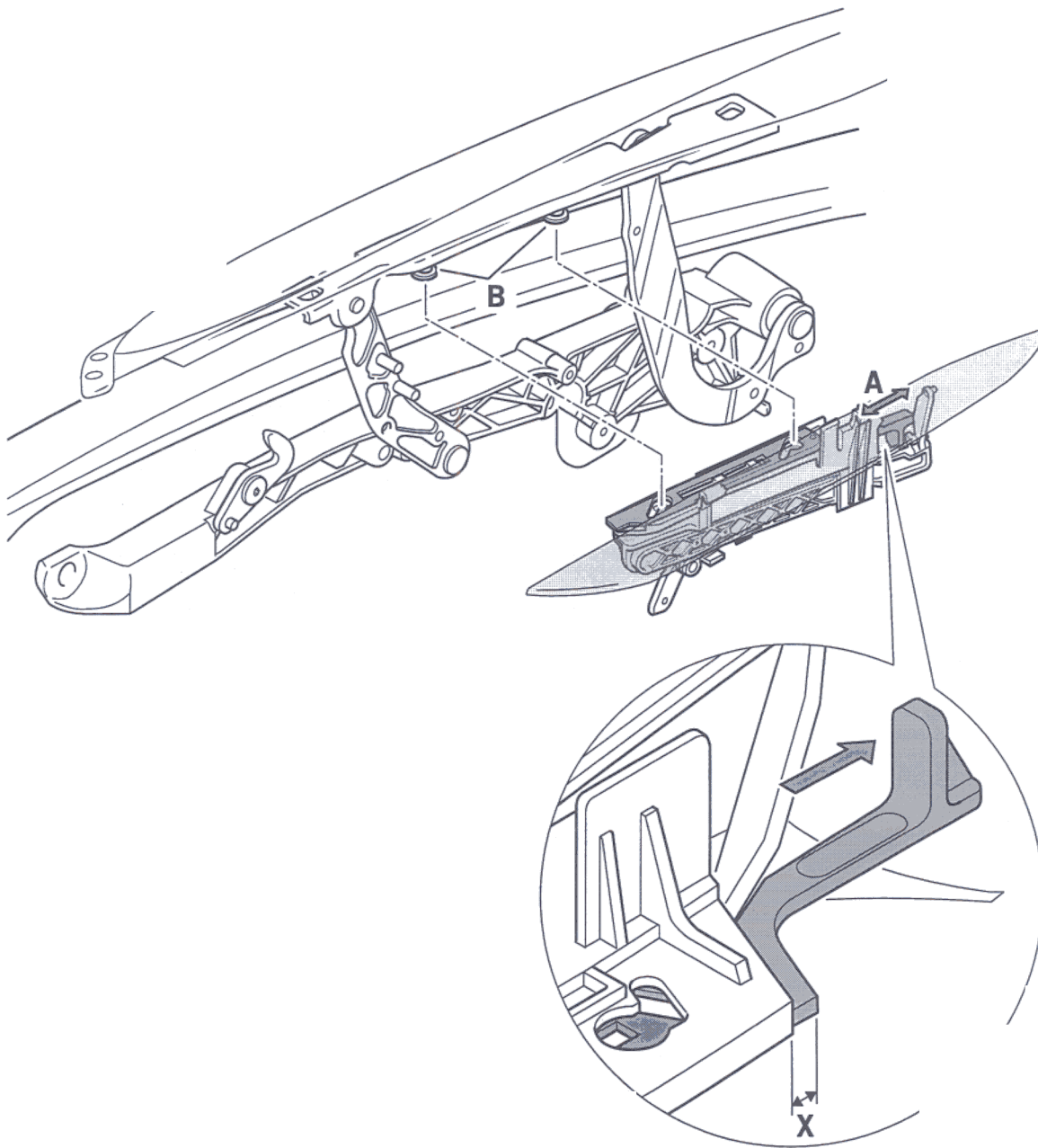
1. Reinstall the new contacts of the micro switch wires in the same position and close the secondary locking of the plug connection with a small screwdriver again.
2. Install and fasten upper micro switch with bracket.
3. Install lower micro switch and carefully heat the fastening points (plastic) with a soldering iron until the material starts to flow.

61 91 19 Removing and installing additional flap



376_98

removing installing additional flap



385_98

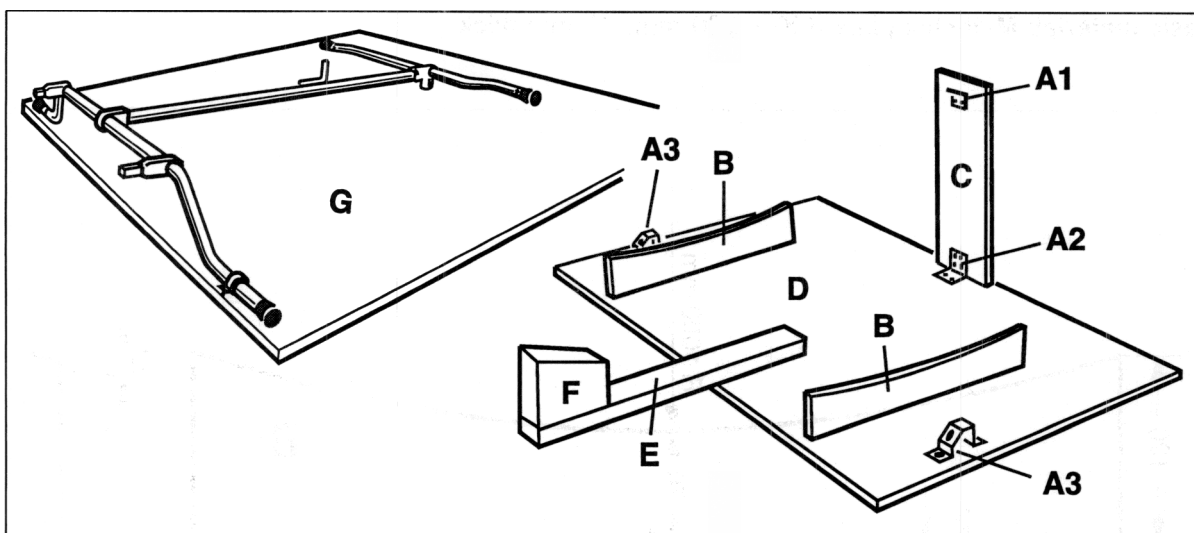
Removing additional flap

| No. | Procedure | Instructions |
|-----|---|---|
| | Convertible top in service position | See procedure: Serv. No. 61 01 19 |
| 1 | Unlock additional flap | Push locking lever A forward (direction of travel) Tool: Position $\frac{3}{8}$ " extension from the socket wrench set onto locking lever A and push forward. |
| 2 | Pull out additional flap from CTCL hinge | Pull additional flap backward and pull downwards out from hinge pins B of the CTCL. |

Installing additional flap

| No. | Procedure | Instructions |
|-----|---|---|
| 1 | Insert additional flap into CTCL hinge | Insert additional flap upward onto hinge pins B of the CTCL and pull forward. |
| 2 | Lock additional flap | Pull locking lever A backward (against direction of travel) to lock the additional flap. The additional flap is locked if locking lever A projects approx. 5 to 8 mm over the body of the additional flap in the area of dimension X . |

61 02 Assembly instructions for hardtop assembly fixture



370_98

The following materials and tools are required to construct the fixture for work in the inner area:

| No. | Designation | Qty. | Size/No. | Supplier |
|-----|-----------------|------|---|------------------------------------|
| A | Set of fittings | 1 | Special tool 9620 | Refer to Workshop Equipment Manual |
| B | Support cheek | 2 | Multiplex plate, 25 mm thick, 600 x 120 mm | Commercially available |
| C | Swivel arm | 1 | Multiplex plate, 25 mm thick, 550 x 200 mm | Commercially available |
| D | Base plate | 1 | Wood-core plywood, 19 mm thick, 1500 x 900 mm | Commercially available |
| E | Boom | 1 | Hardwood, 30 mm thick, 650 x 50 mm | Commercially available |
| F | Support | 1 | Hardwood, 50 mm thick, 90 x 140 x 190 mm | Commercially available |

The following fixture is required for assembly work the outer area:

| | | | |
|---|--|---|--|
| G | Wall support for 911 Carrera (996) | 1 | See Workshop Equipment Manual Page 3.5 - 71 |
|---|--|---|--|

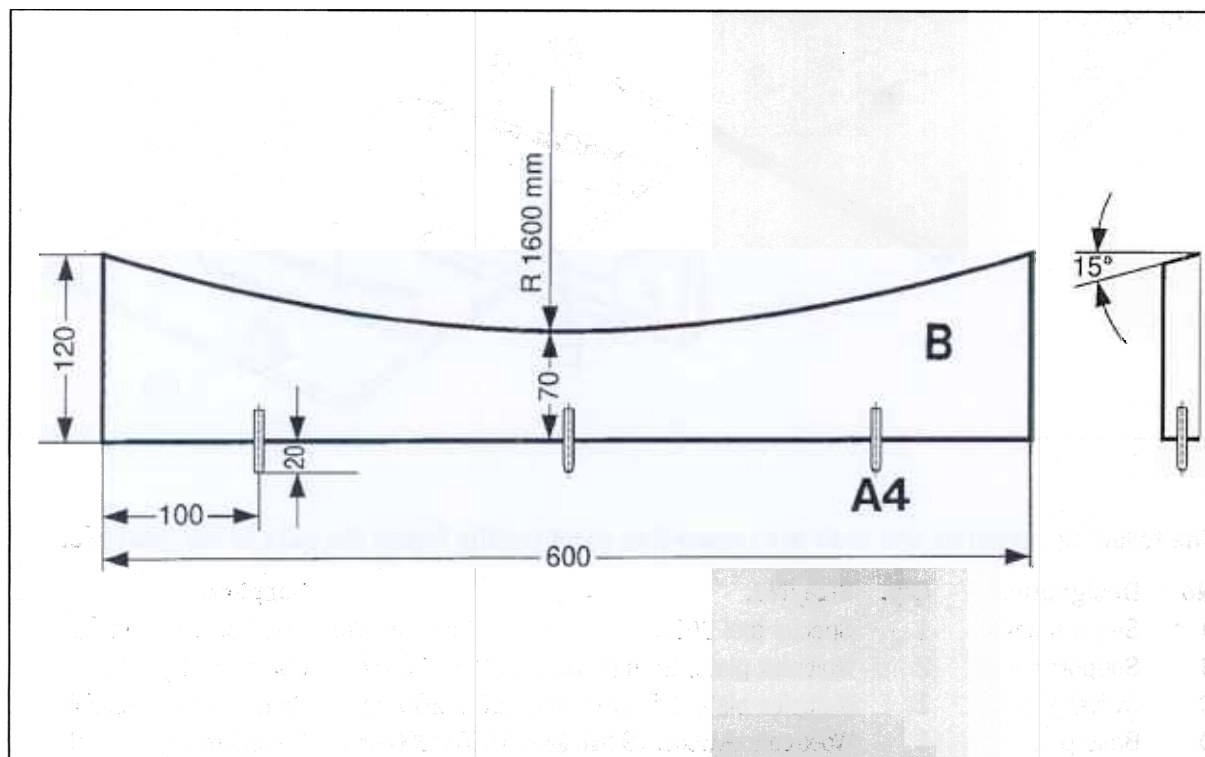
Tools: Drill, drill bit \varnothing 6 mm and drill bit \varnothing 3 mm, sabre saw, tape measure

Set of fittings includes:

| | |
|--------------------------------------|--|
| A1 = Bracket (1x) | A6 = 6 x 20 countersunk screw (2x) |
| A2 = Hinge (1x) | A7 = 6 x 20 hexagon head bolt with washer (4x) |
| A3 = Support (2x) | A8 = 6 x 60 countersunk screw (2x) |
| A4 = 6 M6 x 40 straight pin (6x) | A9 = 6 x 50 countersunk screw (3x) |
| A5 = 4.5 x 20 countersunk screw (8x) | |

Making support cheeks (B)

Basic material: Multiplex plate 600 x 120 mm, 25 mm thick



A4 = Straight pin 6 M6 x 40 / B = Support cheek

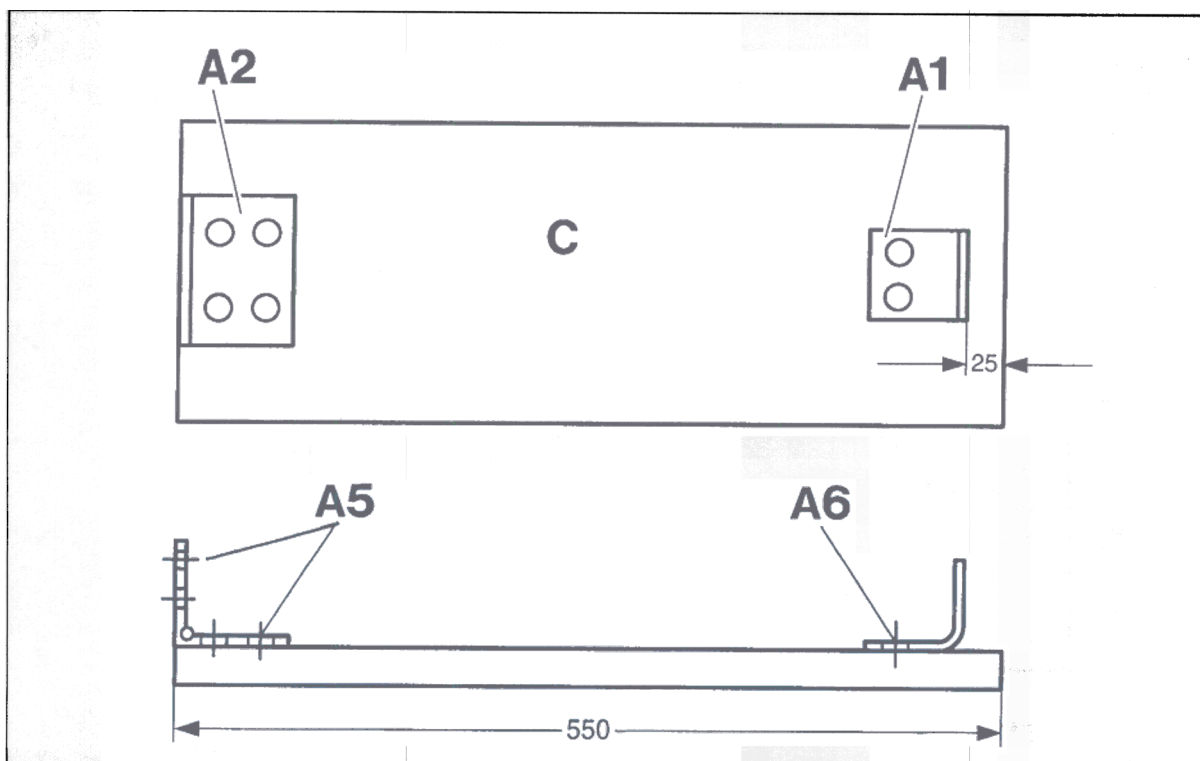
21_97

Procedure:

1. Transfer 160 mm radius to the multiplex plates.
2. Saw multiplex plates along the traced radius. The foot of the sabre saw must be tilted by 15° for this purpose.
3. Drill four \varnothing 6 mm holes in the support radii of each support cheek to provide clearance for the Tucker bolts on the hardtop body. Obtain the dimensions from the hardtop body.
4. Drill three \varnothing 6 mm holes, 20 mm deep, in the support cheeks (B) to accommodate the straight pins (A4) 6 M6 x 40 from the set of fittings (A). These straight pins will be used to fasten the support cheeks (B) to the base plate (B).

Making swivel arm (C)

Basic material: Multiplex plate 550 x 200 mm, 25 mm thick



A1 = Bracket

A2 = Hinge

A5 = 4.5 x 20 countersunk screw

A6 = 6 x 20 countersunk screw

C = Swivel arm

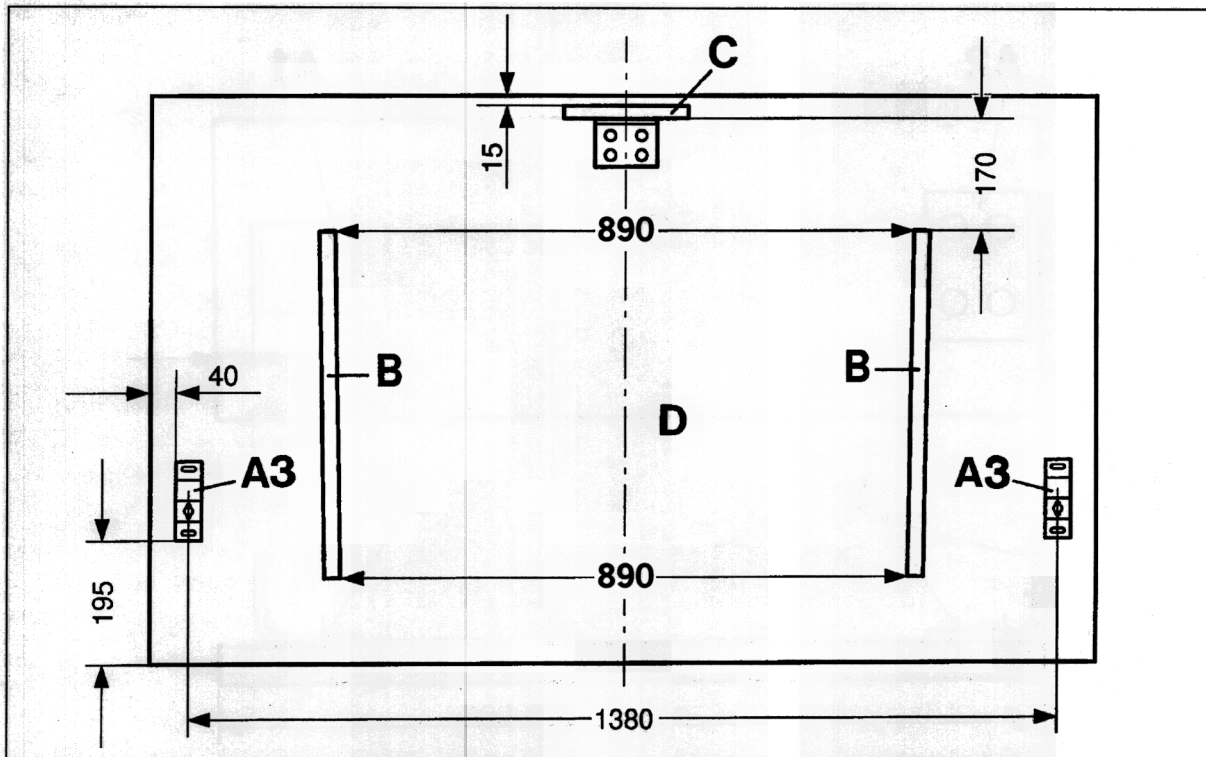
22_97

Procedure:

1. Fit bracket (A1) on swivel arm (C) with two 6 x 20 countersunk screws (A6) in accordance with the specified dimensions.
2. Fit hinge (A2) on swivel arm (C) with four 4.5 x 20 countersunk screws (A5) in accordance with the specified dimensions.

Fitting the swivel arm (C) and support cheeks (B) on the base plate (D)

Basic material: Wood-core plywood 1500 x 900 mm, 19 mm thick



A3 = Support
B = Support cheek
C = Swivel arm
D = Base plate

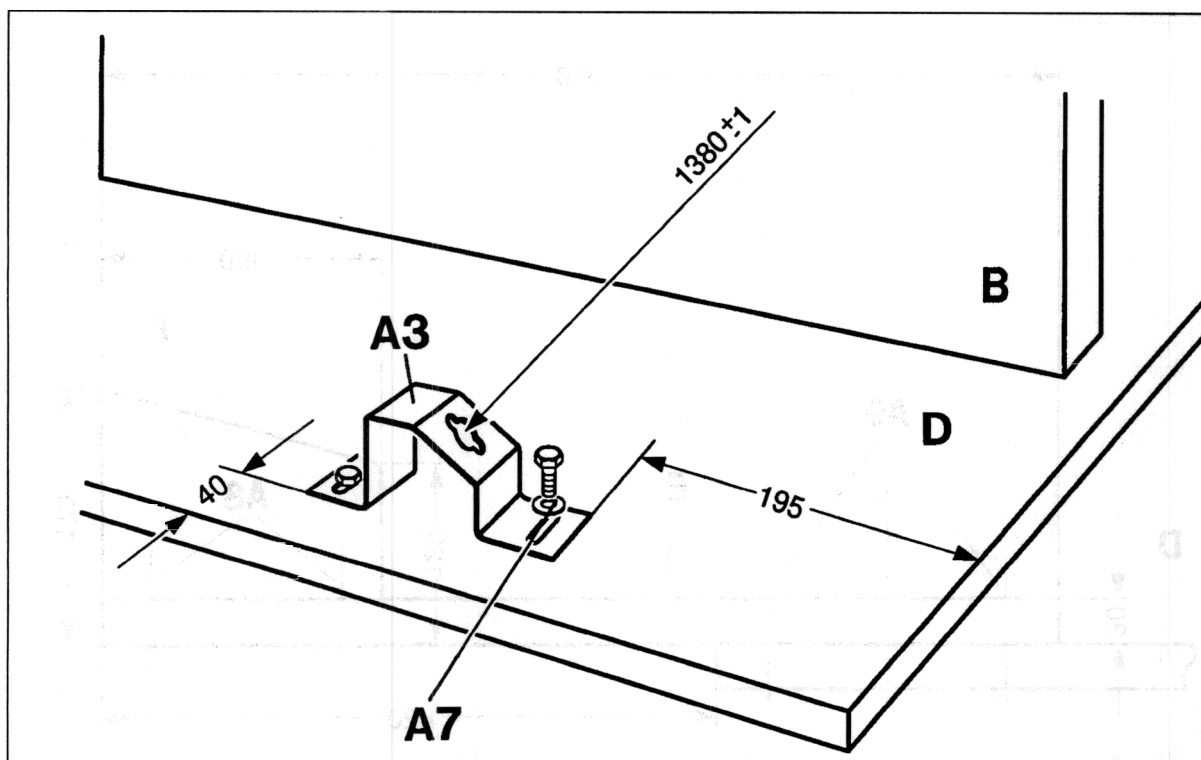
116_99

Procedure:

During assembly, all parts are positioned from the centre line!

1. Measure and mark centre of the base plate (D).
2. Fasten hinge (A2) of the completed swivel arm (C) on the base plate (D) with four 4.5 x 20 countersunk screws (A5) in accordance with the specified dimensions.
3. Transfer hole pattern of the support cheeks (B) onto the base plate (D) in accordance with the specified dimensions and drill holes using a $\varnothing 6$ mm drill bit.
4. Fit the support cheeks (B) on the base plate (D) by means of the pre-fitted straight pins (A4) 6 m6 x 40.

Fitting supports (A3) for the hardtop latching levers on the base plate



A3 = Support

A7 = Hexagon head bolt 6 x 20 with washer

B = Support cheek

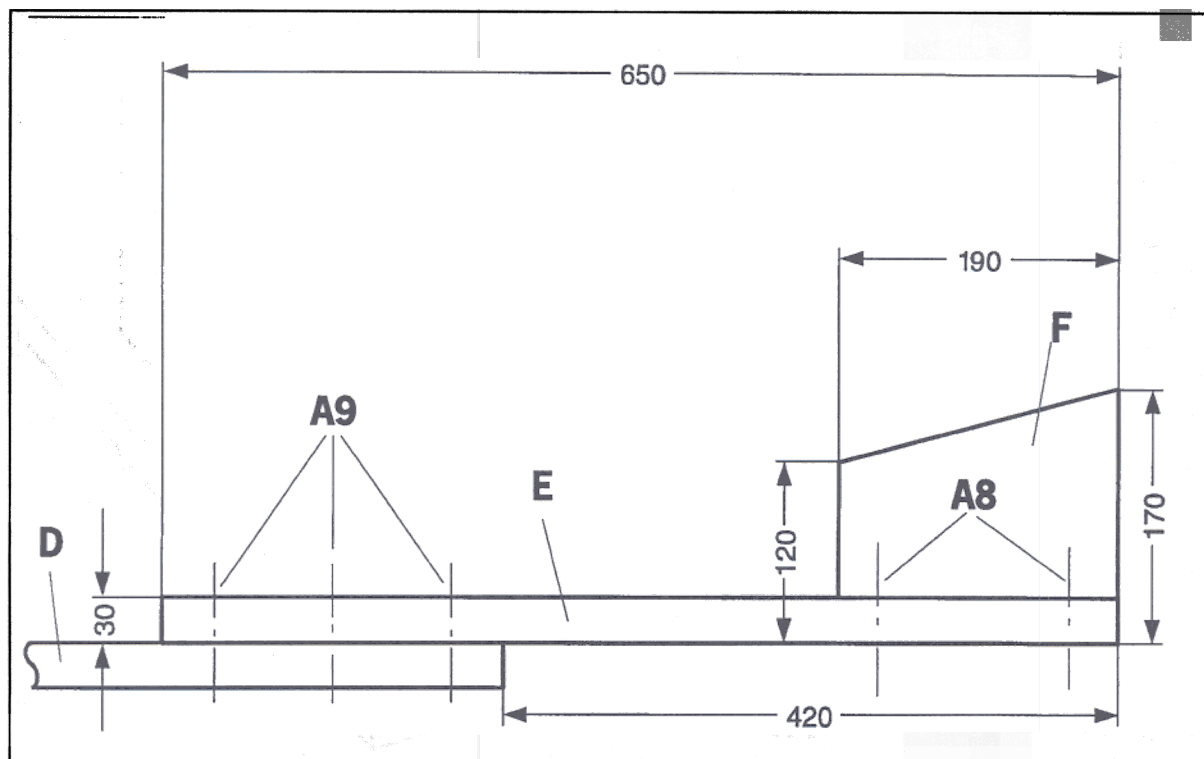
D = Base plate

24_97

Procedure:

1. Fit the supports (A3) on the base plate (D) with two 6 x 20 hexagon head bolts (A7) each in accordance with the specified dimensions.

Fitting the boom (E) and the support (F) on the base plate (D)



D = Base plate

E = Boom

F = Support

A8 = 6 x 60 countersunk screw (2x)

A9 = 6 x 50 countersunk screw (3x)

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Place boom in the centre!

1. Measure and mark centre of the base plate (D).
2. Fit boom (E) on the base plate (D) with the three countersunk screws (A9) in accordance with the specified dimensions.
3. Fit support (F) on the boom (E) with the two countersunk screws (A8) in accordance with the specified dimensions.

61 92 31 Converting hinge for convertible top compartment lid (cabriolet)

A technical modification on the hinge for the convertible top compartment lid was introduced in production in June 1998. This modification involves repositioning of the operating pin on the lever arm of the hinge for the convertible top compartment lid, and the additional flap now moves differently.

For the purpose of repair or replacement capability of the additional flap, it is necessary to reposition one of the operating pins on the hinge for the convertible top compartment lid in the case of vehicles with the old additional flap:

Up to Vehicle Identification Number

99 ZWS 64 08 13 RoW

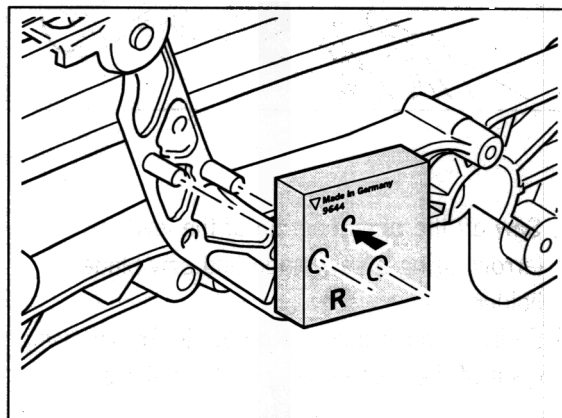
99 7XS 65 07 08 USA.

Use drilling template 9644 (special tool) to position the new operating pin. The drilling template can be used for the left and right sides.

Procedure:

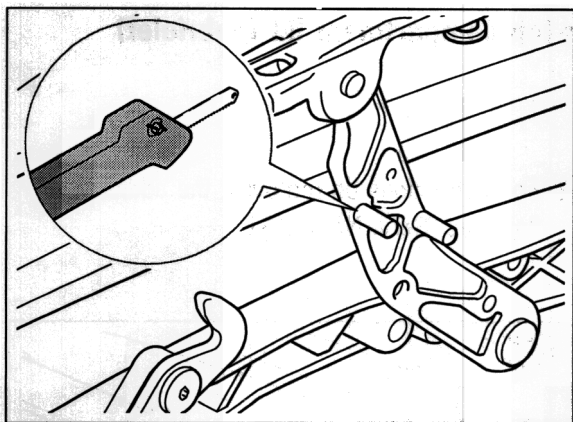
1. Convertible top service position, see: Serv. No. 61 01 19

2. For instructions on removing the additional flap, see: Serv. No. 61 91



493_98

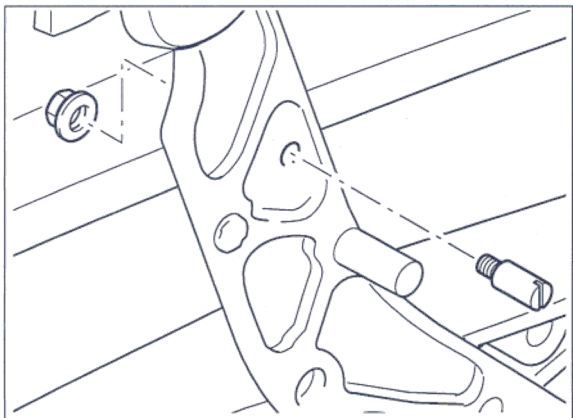
3. Place drilling template on the two operating pins. Make sure that the smaller bore of the drilling template faces up and the inscription (single letter) is allocated to the correct side. (**R** = right or **L** = left.) The template must be fitted with the appropriate letter on the inner side opposite the lever arm of the hinge. Drill a **Ø 4.0 mm** through-hole in the lever arm.



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4. Saw off the operating pin of the lever arm (arrow) using a saw blade and saw blade holder.

Fill in the paint damage on the lever arm using paint of the same colour as the vehicle.



495_98

5. Position new operating pin in the bore of the lever arm and fasten it with a self-locking M4 hexagon nut.

6. Fit new additional flap.

For instructions on installing the additional flap, see: Serv. No. 61 91

61 66 19 Removing and installing potentiometer for convertible-top interrogation**Removal**

Move the convertible top to service position prior to removal.

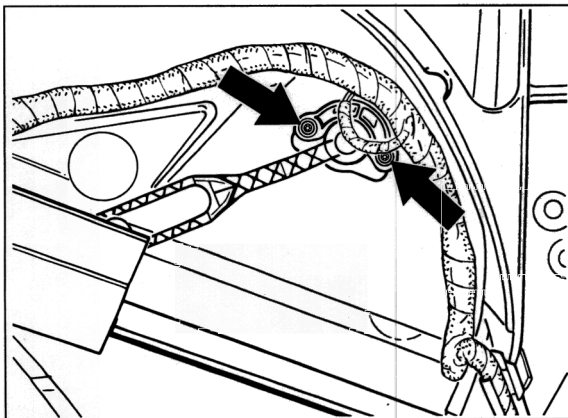
Move convertible top rearward by means of the electric motor until the convertible-top compartment lid has reached the rear end position. Move convertible top forward by means of the electric motor until the convertible-top compartment lid moves forward. Then interrupt closing operation.

2. Disengage left and right tension cables and fold up the tension bow.

The convertible top must no longer be electrically operated in this position.

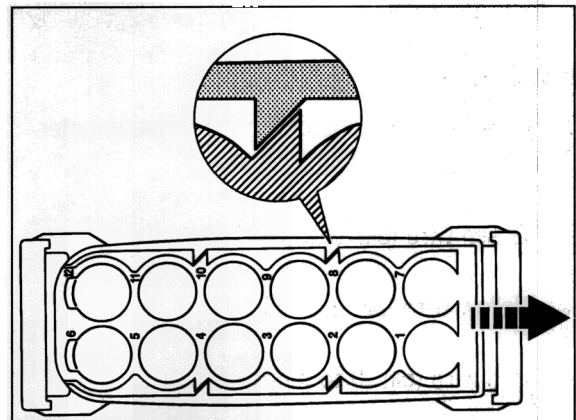
3. Remove rear left side-panel lining and remove hydraulic cylinder.
See procedure No. 2 to No. 4 on page 61 - 7 under Serv. No. 61 01 19.

4. Unscrew fastening screws (Torx T 20) and remove the potentiometer.



554_98

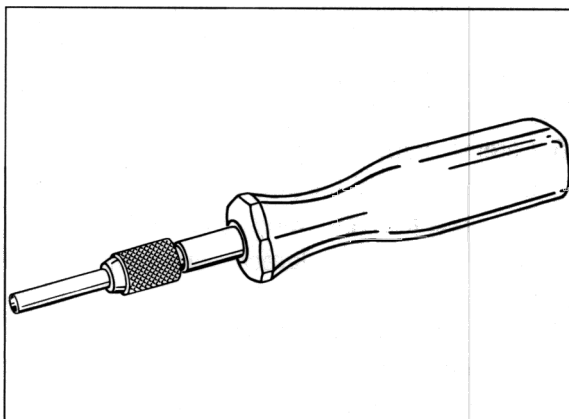
5. Unclip the potentiometer wires downwards and disconnect the electrical plug connection (disconnection point X 26).
6. Carefully remove insulating tape from the potentiometer to the plug connection without damaging any other wires. Expose the potentiometer wires (green, yellow and red).
7. Unlock the secondary locking of the plug connection with a small screwdriver. Unlock both sides by inserting a small screwdriver and shift in the direction of the arrow. Figure shows secondary locking unlocked.



553_98

8. Unlocking tool for unlocking the old contacts in the plug connection (see Workshop Equipment Manual No. 155)

3. Install hydraulic cylinder and rear left side-panel lining.
See procedure No. 6 to No. 8 on page 61 - 11 under Serv. No. 61 01 19.



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9. Unlock the old contacts with the unlocking tool, and remove.

Installation

1. Install the new contacts of the potentiometer in the same position as follows:

Green wire (pin 1) to pin 9

Yellow wire (pin 2) to pin 4

Red wire (pin 3) to pin 8

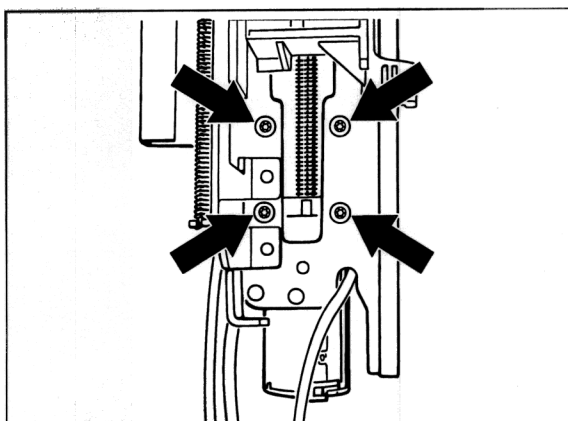
Close the secondary lock of the plug connection with a small screwdriver again.

2. Wind insulation tape around the wires and install potentiometer. Engage electrical plug connection.

61 40 19 Removing and installing motor for rear side section flap**Removal****Note**

Motor and electrical plug connection are one replacement part. If the motor is faulty, the wires of the micro switches must be removed. Removing and installing micro switch for rear side section flap, see Serv. No. 61 41 19. Removing and installing rear side section flap, see Serv. No. 61 42 19.

1. Remove rear side section flap.
2. Undo and remove motor with screwdriver (Torx T 10).



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Installation

1. Insert motor into the spindle guide with the spindle and fasten motor.
2. Install wires for micro switches into the plug connect and clip in wires.
3. Install rear side section flap and perform a function test.

3. Unclip wires for micro switches.
4. Pull motor with rear side section flap downwards and remove spindle from the spindle guide.
5. Remove wires for micro switches from the plug connection.

61 00 15 Calibrating convertible top

Calibration of the Cabriolet convertible top and the convertible top compartment lid is carried out with the Porsche System Tester 2 diagnosis. The respective potentiometer values (convertible top and convertible top compartment lid) are established during calibration. If the potentiometer values are plausible, the values are stored.

The calibration values can then be calculated as a percentage by the convertible top control module from the potentiometer values.

The following preconditions must be met in order to enable successful calibration.

1. The convertible-top latch must be repaired (after an emergency operation).
Refer to Serv. No. 61 01 41
2. The convertible-top compartment lid drive must be repaired (after an emergency operation).
Refer to Serv. No. 61 01 41
3. The valve screw of the hydraulic pump must be closed.
4. The parking brake must be engaged.
5. The engine compartment lid must be closed.
6. The potentiometer values of the convertible top and the convertible top compartment lid lie between the nominal values specified.
See Serv. No. 61 01
Diagnosis/troubleshooting convertible top (nominal values). Read out fault memory if necessary and proceed according to Serv. No. 61 00 Diagnosis/troubleshooting convertible top.
7. The upper microswitches of the left and right rear side section flap are actuated when the opened convertible top is set down.
See under Input signals in the Tester:
Bitmap position (left side flap up or right side flap up).
Read out fault memory if necessary and proceed according to Serv. No. 61 00 Diagnosis/troubleshooting convertible top.
8. The lower microswitches of the left and right rear side section flaps are actuated when the convertible top is closed. See under Input signals in the Tester: Bitmap position (left side flap down or right side flap down).
Read out fault memory if necessary and proceed according to Serv. No. 61 00 Diagnosis/troubleshooting convertible top.
9. The convertible top compartment lid microswitch must be unlocked when the convertible top compartment lid is open.
See under Input signals in the Tester: Bitmap position (convertible top compartment lid unlocked).
The microswitch must be locked when the convertible top compartment lid is closed.
See under Input signals in the Tester: Bitmap position (convertible top compartment lid locked).
Read out fault memory if necessary and proceed according to Serv. No. 61 00 Diagnosis/troubleshooting convertible top.

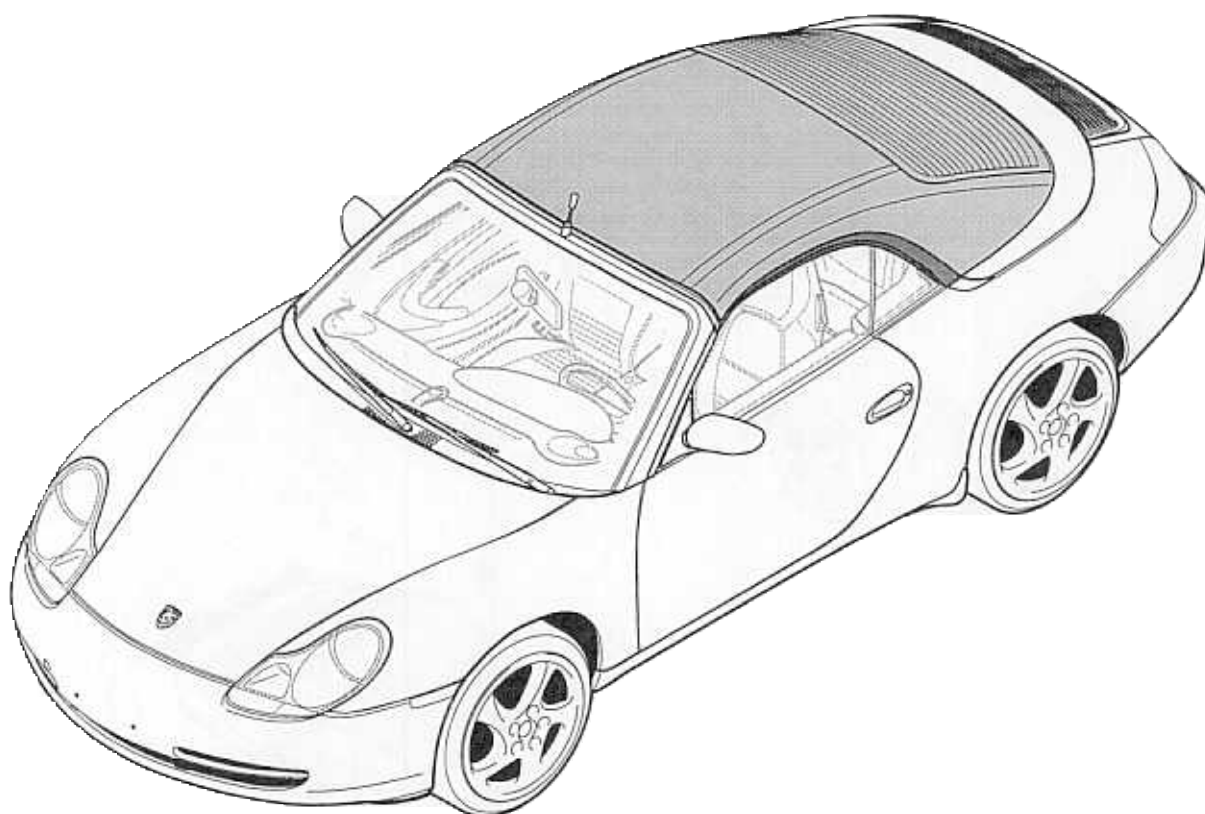
Note:

The actuation counter 2 is reset during calibration.

Calibration is not counted as actuation.

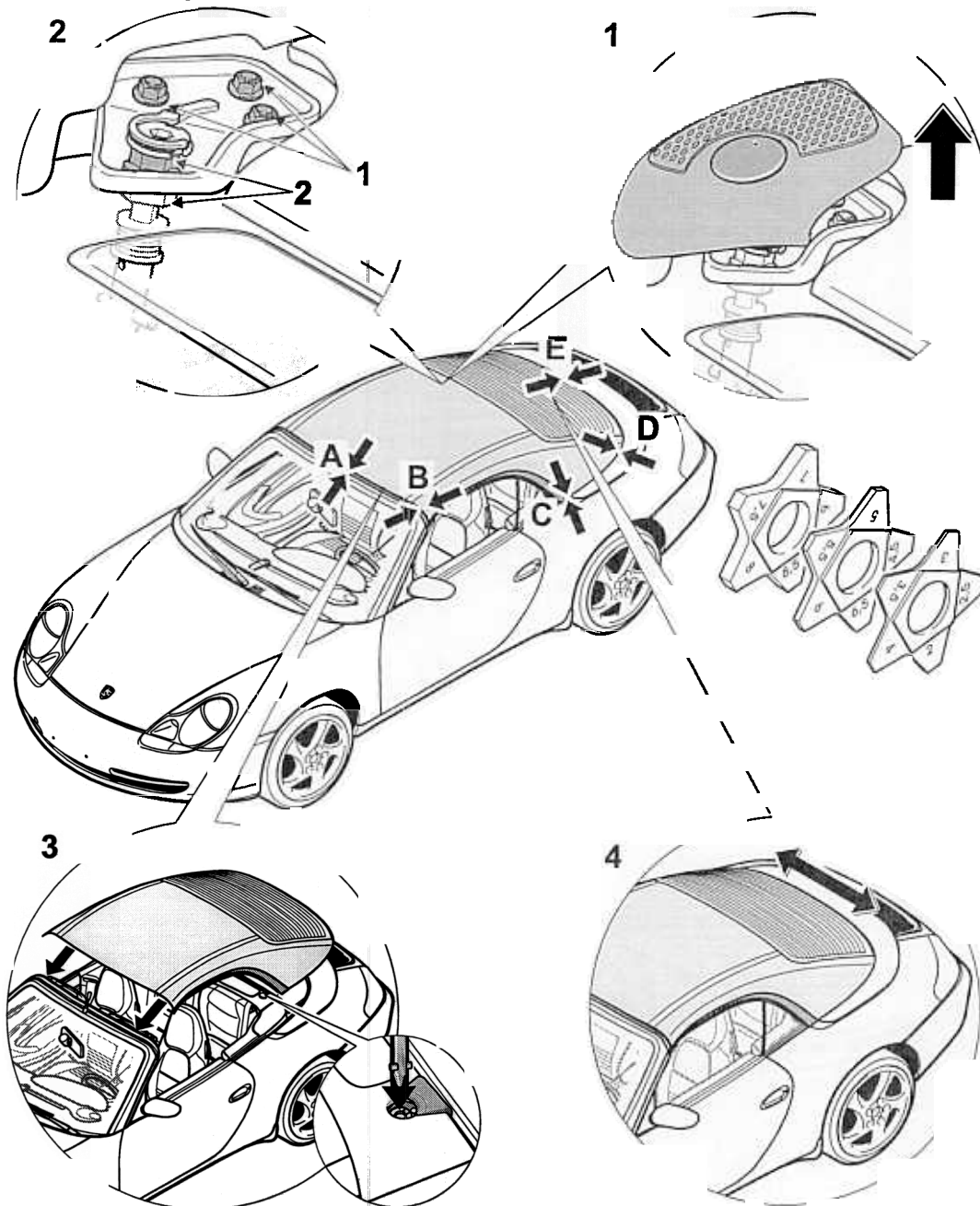
Calibration can be interrupted at any time with the Tester **F8** key.

61 02 15 Adjusting the hardtop



234_98

Adjusting the hardtop



61020001

$A = 5.5 \pm 1.0 \text{ mm}$

$C = 8 \pm 4.0 \text{ mm}$

$E = 6.5 \pm 3.5 \text{ mm}$

$B = 0 \pm 1.0 \text{ mm (offset)}$

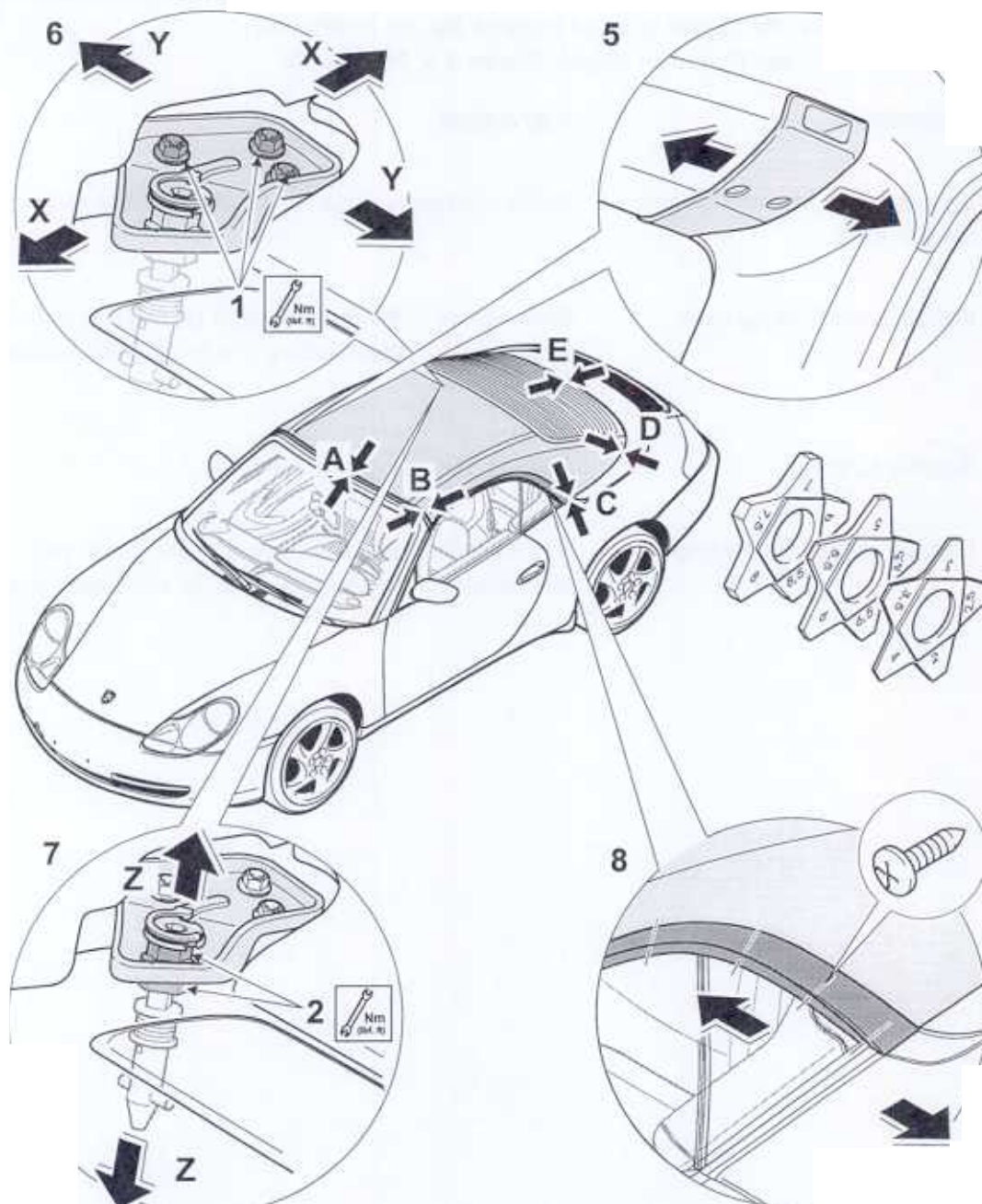
$D = 9 \pm 4.5 \text{ mm}$

Adjusting the hardtop

> Note: Use star gauges to adjust or check the gap dimensions,
see Workshop Equipment Manual, Chapter 2.4, No. 127 - 1

| No. | Procedure | Instructions |
|-----|--|---|
| 1 | Removing trim panels of the rear hardtop locks | Unclip trim panels upwards. Replace fastening clips. |
| 2 | Releasing rear hardtop locks | Undo screws of the fastening plate (1) and nuts of the locking pins (2). Move locking pins to assembly position (unlock). |
| | Installing hardtop | Refer to Serv. No. 61 02 19 |
| 4 | Laterally aligning the hardtop | By shifting the hardtop sideways at the rear locking elements, set a parallel gap "A" at the windscreen frame. |

Adjusting the hardtop



6102002

A = 5.5 ± 1.0 mm

C = 8 ± 4.0 mm

E = 6.5 ± 3.5 mm

B = 0 ± 1.0 mm (offset)

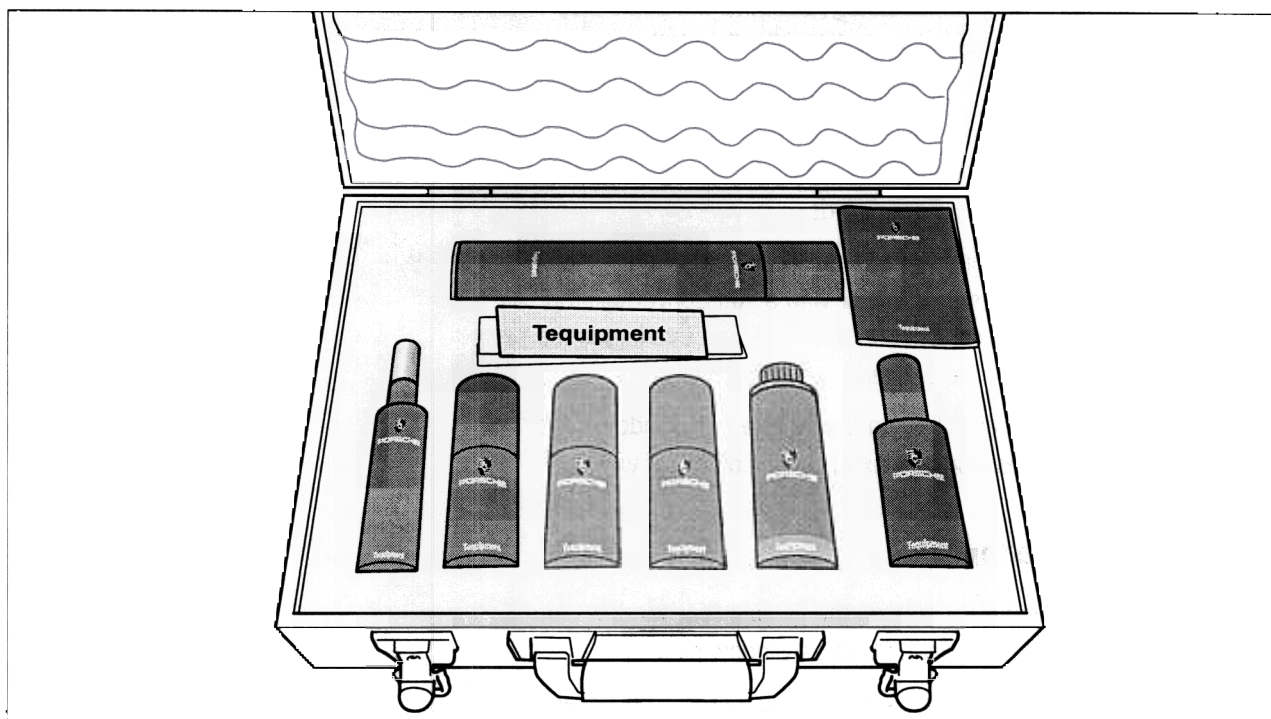
D = 9 ± 4.5 mm

Adjusting the hardtop

- | | | |
|---|---|--|
| 5 | Setting the lateral offset of the hardtop at the front | <p>The offset between the hardtop and the cowl panel at the front (dimension "B") can be corrected by adjusting the convertible top pin housing.</p> <p>Note: Change setting on the convertible top pin housing only after checking the adjusting dimensions with the convertible top closed. Also see Serv. No. 61 01 15 "Adjusting the convertible top"</p> |
| 6 | Tightening the fastening screws (1) of the rear hardtop locks. | Tighten screws to 10 Nm (7.5 ftlb.) . |
| 7 | Setting gap between hardtop and convertible top compartment lid | By turning the fastening screws (2), set gap "D" on both sides of the vehicle. Tighten fastening nuts (2) to 90 Nm (67 ftlb.) . |
| 8 | Closing all side windows | <p>Check for smooth operation and freedom from leaks; readjust the channel strips on the hardtop if necessary.</p> <p>Note: Readjust the side windows if necessary. Before adjustment, check position of the side windows in relation to the convertible top (see Service Nos. 64 75 19 and 57 51 37).</p> <p>It might be possible to avoid adjusting the side windows by varying the gap at the hardtop at the rear. If the windows are in contact with the hardtop at their end position, correct the gap at the hardtop at rear toward the max. value. If the side windows leak, correct the gap at the hardtop at rear toward the min. value.</p> |
| 9 | Removing trim panels of the rear hardtop locks | Clip in trim panels downwards. |

Care and cleaning of the convertible top

For the care and cleaning of the convertible top, use the Tequipment care case.



Warning!

The convertible top and the flexible rear window may be damaged or discoloured by improper care or handling.

- ♦ *Never remove snow and ice with sharp-edged objects.*
- ♦ *Never affix adhesive strips, stickers, etc. to the flexible rear window or cover it with plastic film.*

The service life and the appearance of the convertible top are largely dependent on proper care and operation.

The car should be parked in the shade whenever possible, as the fabric, rubber material and colour can be harmed by long exposure to sunlight.

Cleaning the convertible top

Do not wash the convertible top every time the car is washed. It is normally sufficient to wash or rinse the convertible top with clear water. Only in the case of heavy soiling, moisten the convertible top with luke-warm water and Porsche "Wash-Shampoo &" convertible-top cleaner and rub gently with a sponge or soft

brush. Then rinse off the convertible top with pure water until no traces of the Porsche "Wash-Shampoo &" convertible-top cleaner remain.

Remove bird droppings immediately, because the acids they contain will cause the rubber material to swell and will make the convertible top leak.

Only open the convertible top when it is completely dry, because otherwise damp stains and abrasions may occur which can not be removed afterwards.

In the case of light soiling/always before washing, brush the convertible top with a soft brush or with a stiff convertible-top covering (cut out of a replaced convertible-top covering) in the direction of the cut of the convertible-top material.

In order to prevent scratches on the flexible rear window, first remove all impurities from the exterior with plenty of water.

Care of convertible top

- Light scratches and dull areas on the flexible rear window can be removed with the Porsche Polyglas window cleaner.
- Do not apply Porsche Polyglas window cleaner to the convertible-top material.
- In the case of leaks in the convertible-top covering or seams or in the folded sections, use Porsche convertible-top care product.
- Do not bring Porsche convertible-top care product into contact with painted surfaces, glass or the flexible rear window; if there is contact, remove the product immediately.
- Do not remove stains on the convertible top and on the flexible rear window with petrol, stain remover, benzene, paint thinner or other solvents; they attack the rubber layer between the fabrics and diminish the water-tightness and the service life of the convertible top.
- Recommendation: treat the convertible top with Porsche convertible-top care product twice a year or before installing the hardtop (winter driving).

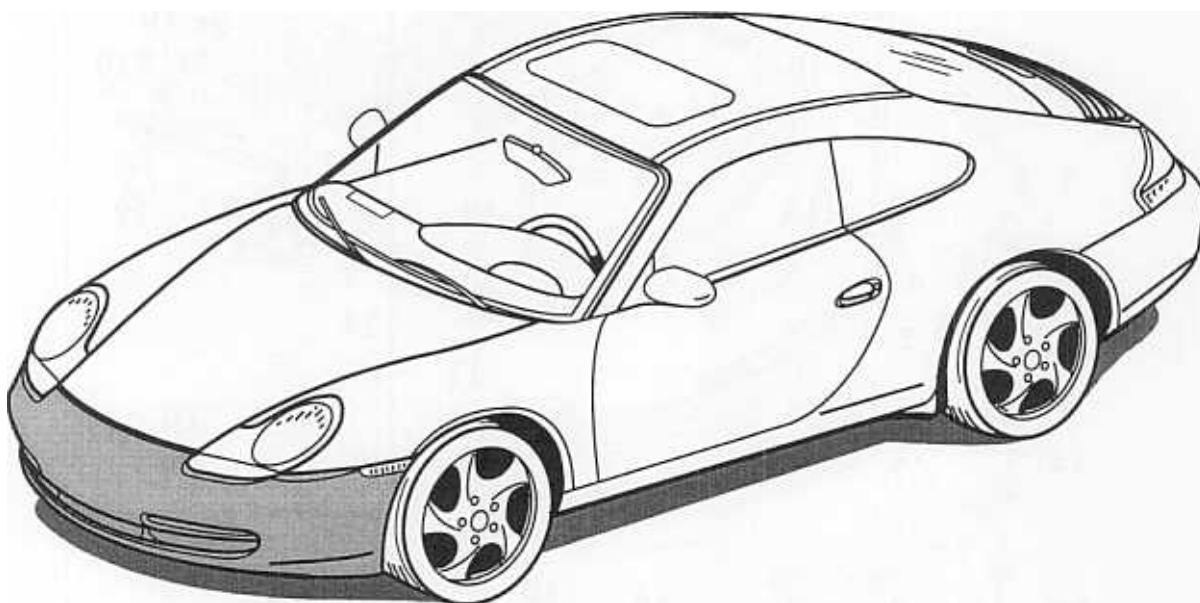
Care of convertible-top seals



Note!

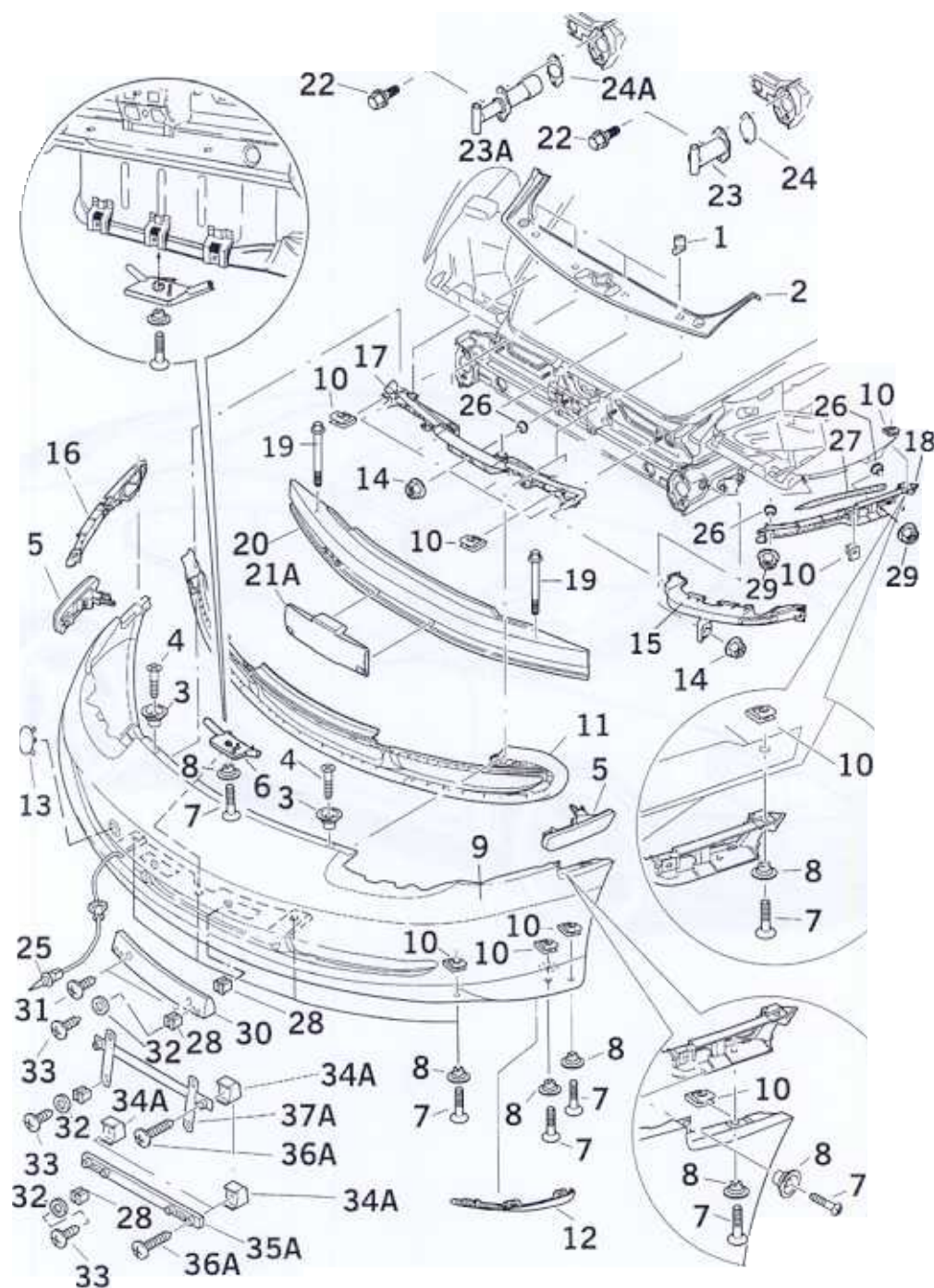
- ♦ *The convertible-top seals have an anti-friction coating or are flocked and do not require any special care.*
- ♦ *Never grease or lubricate or spray on seals that are flocked or have an anti-friction coating.*
 - Clean soiled seals with clear water.
 - It is only possible to rinse the convertible top or to use an automatic car wash after the flocked seals have dried.

63 15 19 Removing and installing front spoiler



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Removing and installing front spoiler



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Removing and installing front spoiler

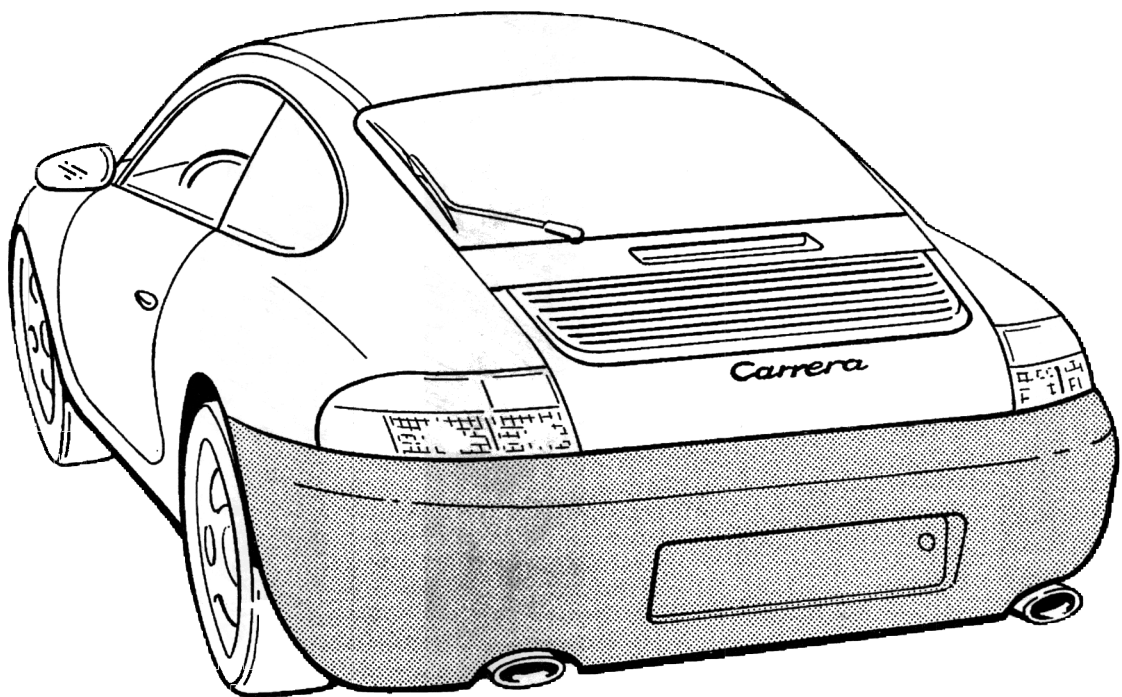
| No. | Designation | Qty. | Removal | Note: | Installation |
|---|---|------|--|-------|--|
| The wheel housing liners Service No. 50 56 must be partially detached at the front before the front spoiler can be removed. | | | | | |
| 1 | Hexagon cap nut | 4 | Turn and remove | | |
| 2 | Cover | 1 | | | Fix the cover and turn the hexagon cap nuts. |
| 3 | Spacer sleeve 5.2 x 14 | 2 | | | |
| 4 | Countersunk screw 4.8 x 19 | 2 | Undo from the front end | | Screw down in the centre of the retaining strip. |
| 5 | Direction indicator light | 1 | Press in spring clip at the side and pull out direction indicator light; disconnect electrical connection. | | Connect electrical plug connection, insert lugs and clip in the direction indicator light. |
| 6 | Ventilation holder (for the headlights) | 1 | | | Position front spoiler and ventilation holder on the body and fasten with the sheetmetal screw St 4.8 x 19 |
| 7 | Sheetmetal screw St 4.8 x 19 | 8 | | | |
| 8 | Spacer sleeve 5.2 x 14 | 4 | | | |
| 9 | Front spoiler | 1 | On the front spoiler, undo the sheetmetal screws St 4.8 x 19 (Items 7, 8) from the retaining strips on the left and right. Remove front end. | | Attach the front spoiler to the retaining strip and fasten it with the sheetmetal screw St 4.8 x 19 |
| 10 | Sheetmetal nut St 4.8 | 17 | | | Adjust the sheetmetal nut, centre hole |
| 11 | Grille frame | 1 | Unclip from the front end | | Clip into the front spoiler. |

| No. | Designation | Qty. | Removal | Note: | Installation |
|-----|-----------------------------------|------|---|-------|--|
| | | | | | |
| 12 | Panel | 1 | Cut off pegs on the inside. | | (Replace) Clip into the front spoiler. |
| 13 | Cap | | | | |
| 14 | Collar nut | 11 | | | |
| 15 | Support, left and right | 1 | Undo collar nut M6 (Item 14), and unclip support from retaining strip on the left and (right). | | Clip support into retaining strip on the left and (right) and tighten collar nut M6 (Item 14) on the side member. |
| 16 | Retaining strip, right | 1 | Undo the collar nut M6 (Item 29) and the sheet metal screw St 4.8 x 19 (Item 7) from the retaining strip. | | Fix retaining strip on the wing upward to the stop and fasten with the collar nut M6 (Item 29) and the sheetmetal screw St. 4.8 x 19 (Item 7). |
| 17 | Retaining strip, centre | 1 | Undo the collar nut M6 (Item 14) and remove the centre retaining strip | | Fix the centre retaining strip to the transverse lock panel and fasten with the collar nuts M6 (Item 14) |
| 18 | Retaining strip, left | 1 | Undo the collar nut M6 (Item 29) and the sheet metal screw St 4.8 x 19 (Item 7) from the retaining strip. | | Fix retaining strip on the wing upward to the stop and fasten with the collar nut M6 (Item 29) and the sheetmetal screw St. 4.8 x 19 (Item 7). |
| 19 | Hexagon-head bolt M12 x 1.5 x 100 | 2 | | | |

| No. | Designation | Qty. | Removal | Note: | Installation |
|-----|-----------------------------------|------|--|-------|---|
| | | | | | |
| 20 | Bumper mount | 1 | Undo hexagon-head bolt M12 x 1.5 x 100 (Item 19) from the bumper mount and remove. | | Attach the bumper mount to the impact pipes (Item 23) and fix it in position. Fasten it with the hexagon-head bolt M12 x 1.5 x 100 (Item 19). |
| 21A | USA version, foam part | 1 | Is destroyed during separation | | (Replace) and attach. |
| 22 | Combination screw M8 x 30 | 4 | | | Undo and remove impact pipe (Item 23). |
| 23 | Impact pipe | 2 | Undo combination screw M8 x 30 (Item 22) and remove impact pipe and seal. | | Fix the impact pipe to the body with the seal and fasten with the combination screw M8 x 30 (Item 22). |
| 23A | USA version, impact absorber | 2 | Undo combination screw M8 x 30 (Item 22) and remove impact absorber and seal. | | Fix the impact absorber to the body with the seal and fasten with the combination screw M8 x 30 (Item 22). |
| 24 | Seal, impact pipe | 2 | | | Inspect and replace if necessary. |
| 24A | USA version, impact absorber seal | 2 | | | Inspect and replace if necessary. |
| 25 | Temperature sensor | 1 | | | Plug in |
| 26 | Spacer sleeve 4.8 x 19 | 4 | | | |
| 27 | Adhesive film, left | 1 | | | Inspect and replace if necessary. |
| 28 | Expanding nut | 10 | Unclip | | Clip in |
| 29 | Collar nut M6 | 4 | | | |
| 30 | Holder | 1 | | | |
| 31 | Combination screw 4.2 x 16 | 2 | | | |

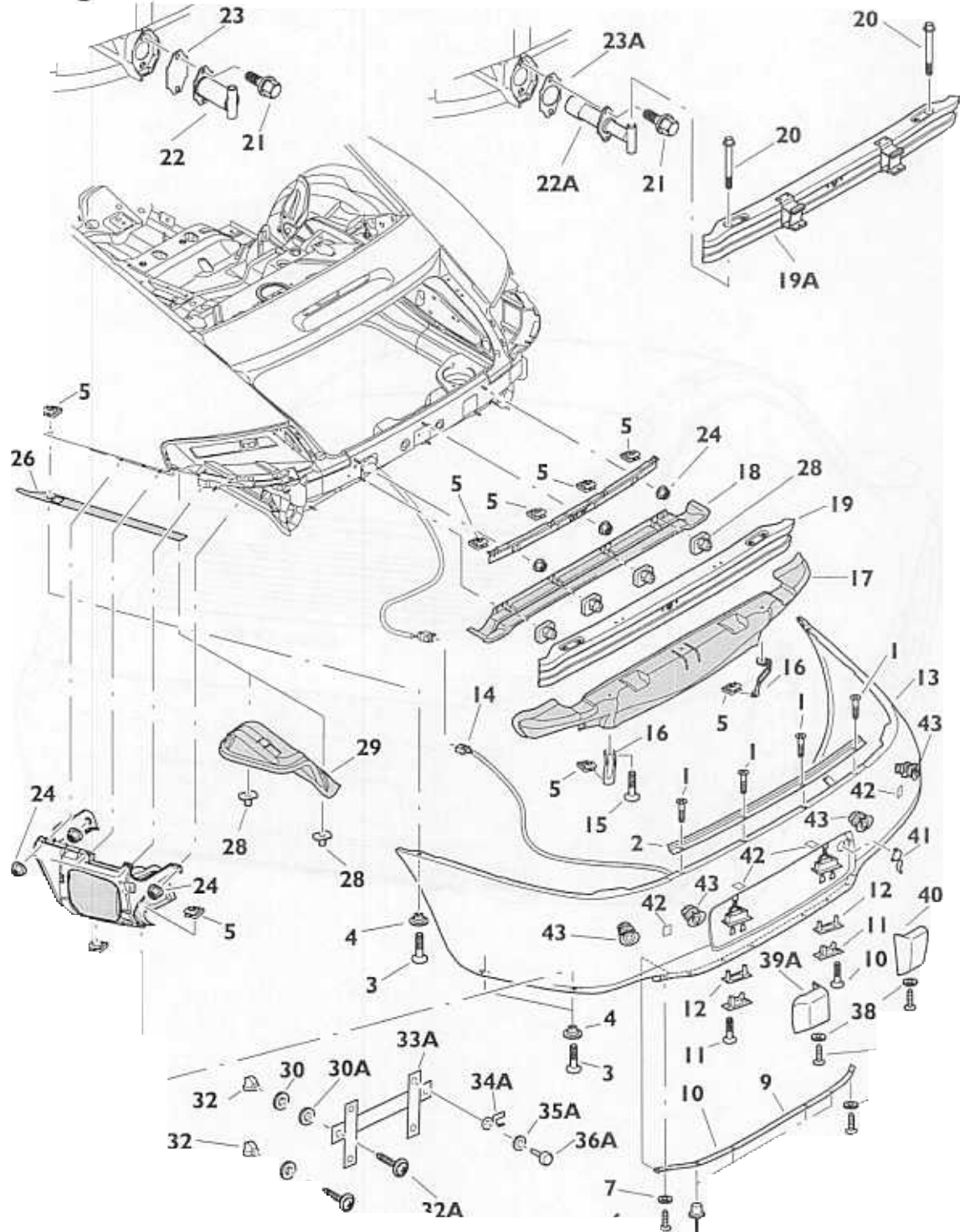
| No. | Designation | Qty. | Removal | Note: | |
|-----|---|------|---------|--------------|--|
| | | | | Installation | |
| 32 | Washer | 6 | | | |
| 33 | Sheetmetal screw 4.2 x 9.5 | 6 | | | |
| 34A | USA version, rubber holder | 2 | | | |
| 35A | USA version, holder | 1 | | | |
| 36A | USA version, sheetmetal screw B4.2 x 30 | 2 | | | |
| 37A | USA version, holder | 1 | | | |

63 55 19 Removing and installing rear spoiler



321_97

Removing and installing spoiler



Removing and installing rear spoiler**Caution!**

Damage will result if deformed heat shields are fitted

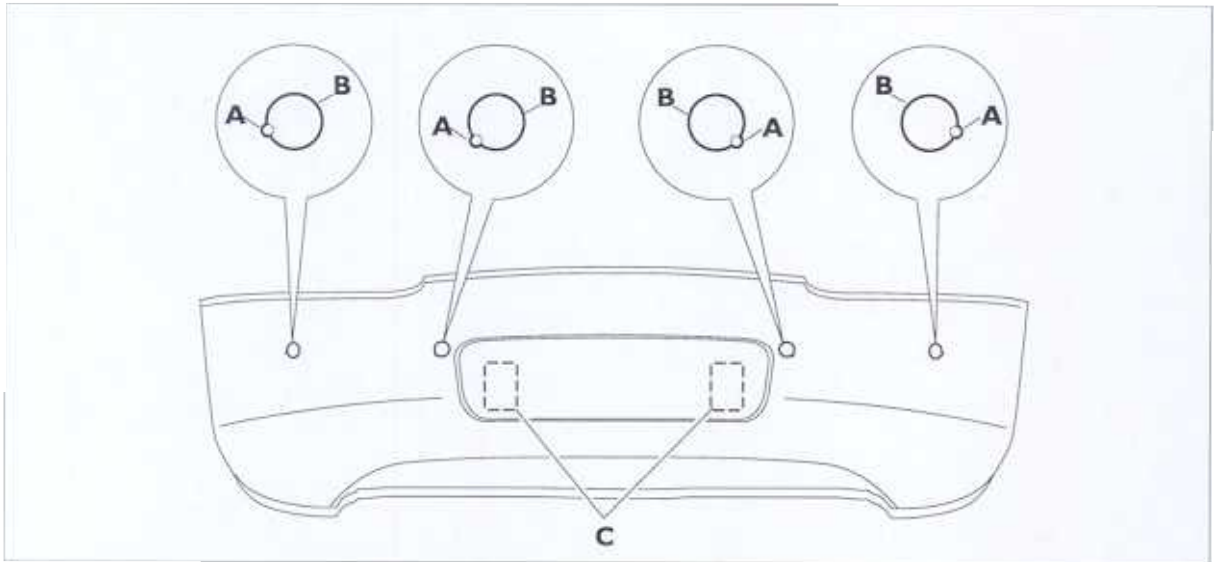
> Damaged or distorted heat shields must be straightened or replaced.

| No. | Designation | Qty. | Removal | Note: Installation |
|-----|------------------------------|------|---|---|
| 1 | Countersunk screw 4.8 x 15 | 4 | Undo and remove the cover moulding | Fix the cover moulding and tighten the countersunk screws |
| 2 | Cover moulding | 1 | | Fix cover moulding with rear end on the retaining strip (Item 25) and fasten with countersunk screw 4.8 x 15 (Item 1) |
| 3 | Oval-head screw 4.8 x 15 | 8 | Remove from rear spoiler | Fix sheetmetal nut (Item 5) with rear spoiler and tighten sheetmetal screw |
| 4 | Spacer sleeve 5.2 x 14 | 6 | | |
| 5 | Sheetmetal nut | 8 | | |
| 6 | Oval-head screw 4.8 x 15 | 2 | | |
| 7 | Washer | 2 | | |
| 8 | Pop rivet A3.2 x 7.9 | 4 | Drill open riveted connection of the strip (Item 9) to the rear spoiler (Item 13) with a Ø 3.2 mm drill bit | |
| 9 | Strip | 1 | Remove | Fix strip on rear end and rivet with pop rivet A3.2 x 7.9 |
| 10 | Sheetmetal screw St 4.2 x 16 | 4 | | |

| No. | Designation | Qty. | Removal | Note: Installation |
|-----|----------------------------|------|--|--|
| 11 | Number plate light | 2 | Pull down and off, and disconnect the electrical plug connection | Plug in the electrical plug connection, press in the number plate light and fasten with sheetmetal screws 4.8 x 15 |
| 12 | Base | 2 | Unclip. | Clip in. |
| 13 | Rear spoiler | 1 | Remove | Push on |
| 14 | Wiring harness | 1 | Disconnect electrical plug connection | Connect electrical plug connection |
| 15 | Combination screw M6 x 22 | | Remove combination screw from heat shield and bumper mount | |
| 16 | Rear support | 2 | Remove | Fix rear support and heat shield on bumper mount and tighten combination screw M6 x 22 |
| 17 | Heat shield, centre bottom | 1 | Straighten or replace the centre heat shield if the centre heat shield (bottom) is damaged or deformed. | |
| 18 | Heat shield, centre top | 1 | Straighten or replace the centre heat shield if the centre heat shield (top) is damaged or deformed. | |
| 19 | Bumper mount | 1 | Remove | Attach the bumper mount to the impact pipes (Item 22). Fasten with the hexagon-head bolt M12 x 1.5 x 100 |
| 19A | USA version, bumper mount | 1 | | |

| No. | Designation | Qty. | Removal | Note: Installation |
|-----|---|------|---|---|
| 20 | Hexagon-head bolt M12 x 15 x 100 | 2 | Undo hexagon-head bolt from bumper mount | |
| 21 | Combination screw M8 x 30 | 4 | | |
| 22 | Impact pipe | 2 | Remove the impact pipe and seal | Fix the impact pipe to the body with the seal and fasten with the combination screw M8 x 30 |
| 22A | USA version, impact absorber | 2 | | |
| 23 | Seal, impact pipe | 2 | | Inspect and replace if cracked |
| 23A | USA version, impact absorber seal | 2 | | Inspect and replace if cracked |
| 24 | Collar nut M6 | 12 | Undo collar nut | |
| 25 | Retaining strip | 1 | | |
| 26 | Adhesive film, left | 1 | | Inspect and replace if cracked |
| 27 | Retaining bracket with heat shield, left | 1 | Straighten or replace the left heat shield if it is damaged or deformed. | |
| 28 | Hexagon nut T5 | 12 | | |
| 29 | Heat shield, inner left | 1 | Straighten or replace the inner left heat shield if it is damaged or deformed. | |
| 30 | Combination screw 4.2 x 16 | 2 | | |
| 30A | USA version, rubber washer | 2 | | |

| No. | Designation | Qty. | Removal | Note: Installation |
|-----|---|------|---|---|
| 31 | Rubber washer | 2 | | |
| 32 | Expanding nut 4.22 | 2 | Press out | Inspect and replace if necessary |
| 32A | USA version, combination screw 4.2 x 22 | 2 | | |
| 33A | USA version, holder | | | |
| 34A | USA version, plug-in nut St. 4.2 | 2 | | Inspect and replace if necessary |
| 35A | USA version, washer | 2 | | |
| 36A | USA version, combination screw 4.2 x 16 | 2 | | |
| 37 | Hexagon socket head bolt M8 x 25 | 2 | Undo the combination screw and remove the impact horn | |
| 38 | Washer | 2 | | |
| 39A | USA version, left impact horn | 1 | Remove | Fix impact horn on the rear spoiler and fasten with the combination screw (Item 37) |
| 40A | USA version, right impact horn | 1 | Remove | Fix impact horn on the rear spoiler and fasten with the combination screw (Item 37) |
| 41 | Cap | 1 | | |
| 42 | Wiring harness holder | 4 | | Clean marked areas in the rear spoiler. Replace holder |
| 43 | ParkAssistent sensor | 4 | Refer to Serv. No. 91 75 19 | Refer to Serv. No. 91 75 19 |

Additional instructions for replacing the rear spoiler

361_99

Vehicles with ParkAssistent

Note: Additional holes must be drilled for the ParkAssistent sensors in the rear spoiler before this component is painted.

Drill holes in accordance with the markings inside the rear spoiler.

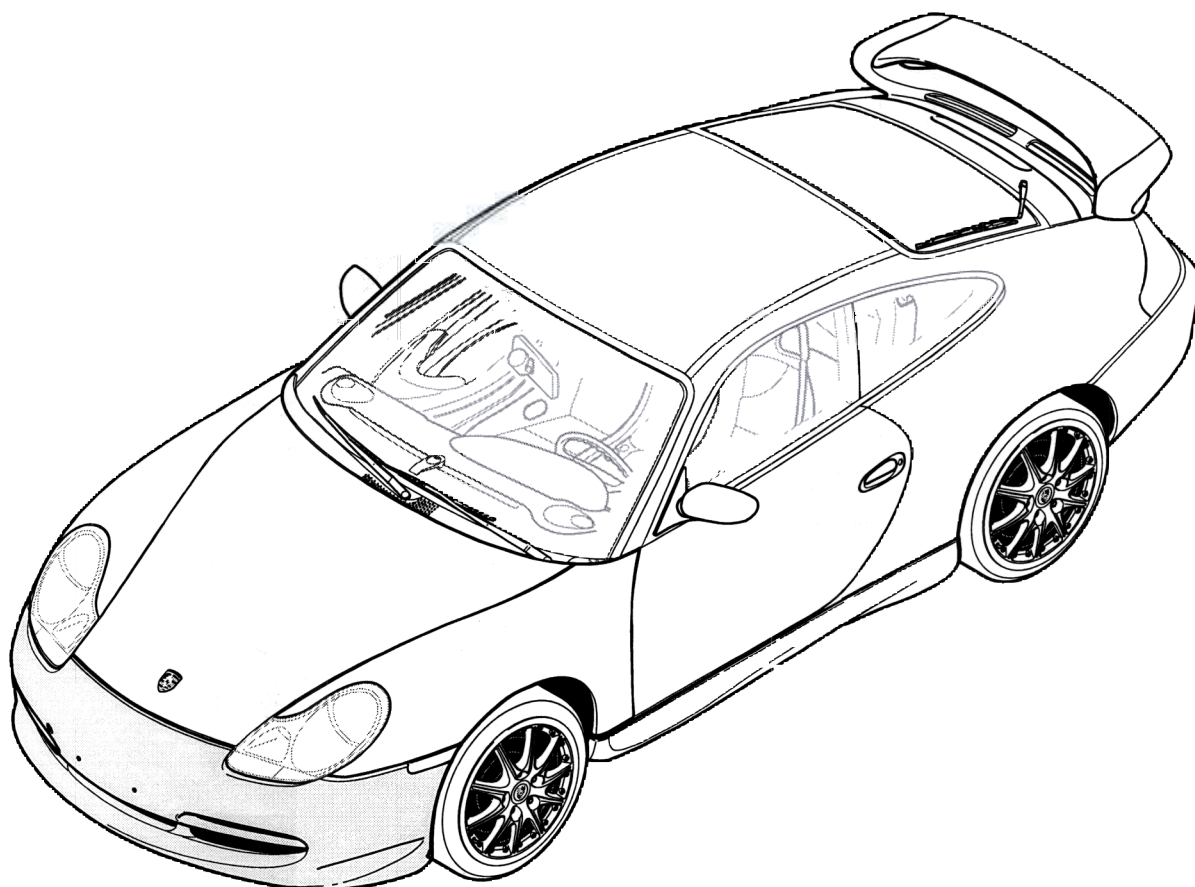
1. Drill holes "A" with \varnothing 6 mm.
2. Enlarge holes "B" to \varnothing 35 mm using a stepped drill or a centre bit.
3. Check holes by putting on a disc of the ParkAssistent sensor or by inserting the sensor.
4. Rework the holes if necessary.

USA model

Note: Additional cut-outs must be made for the impact horns in the rear spoiler before this component is painted.

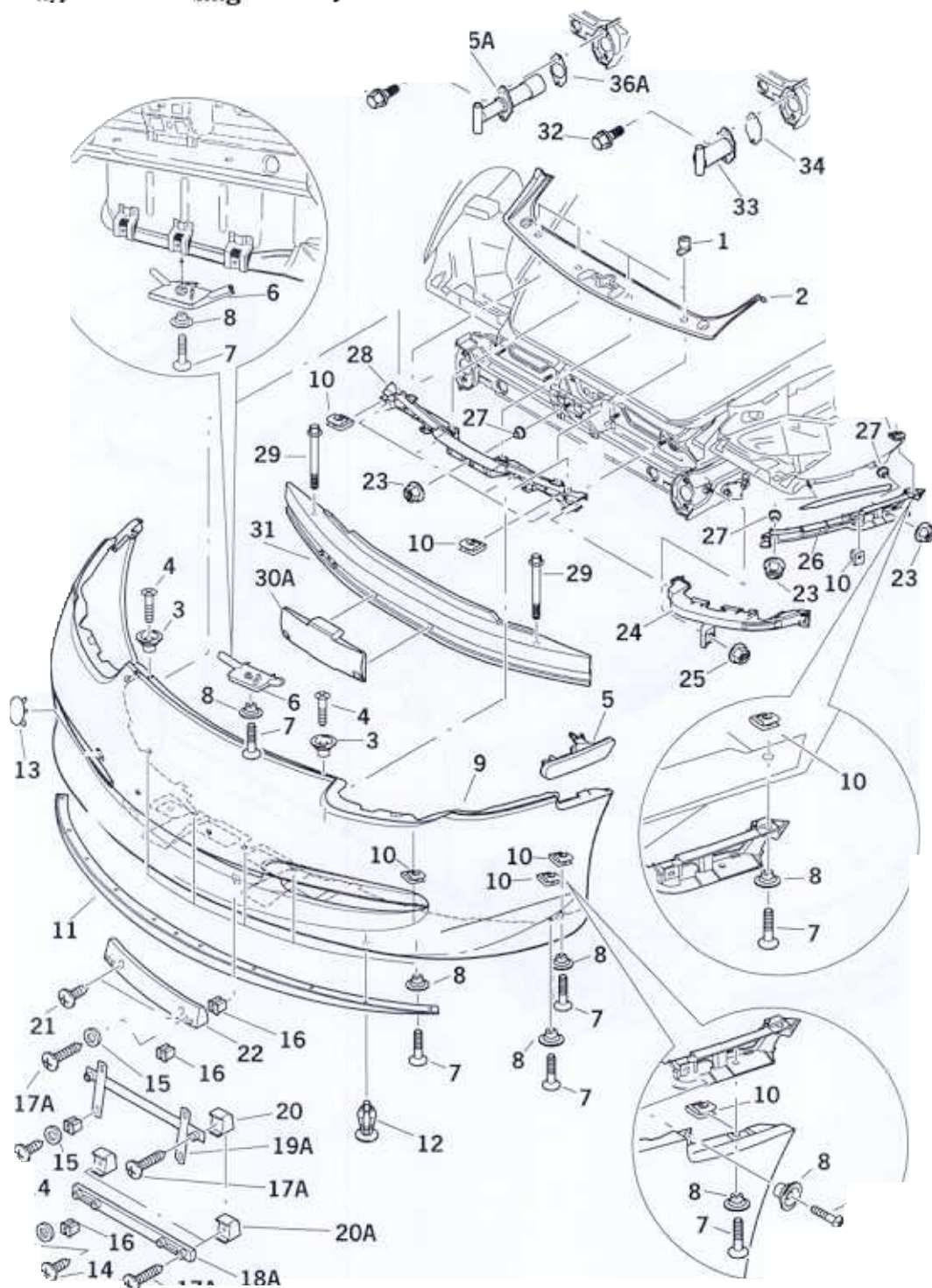
1. Saw out cut-outs "C" in accordance with the markings inside the rear spoiler.

63 15 19 Removing and installing front spoiler – GT3



41_99

Removing and installing front spoiler



Removing and installing front spoiler

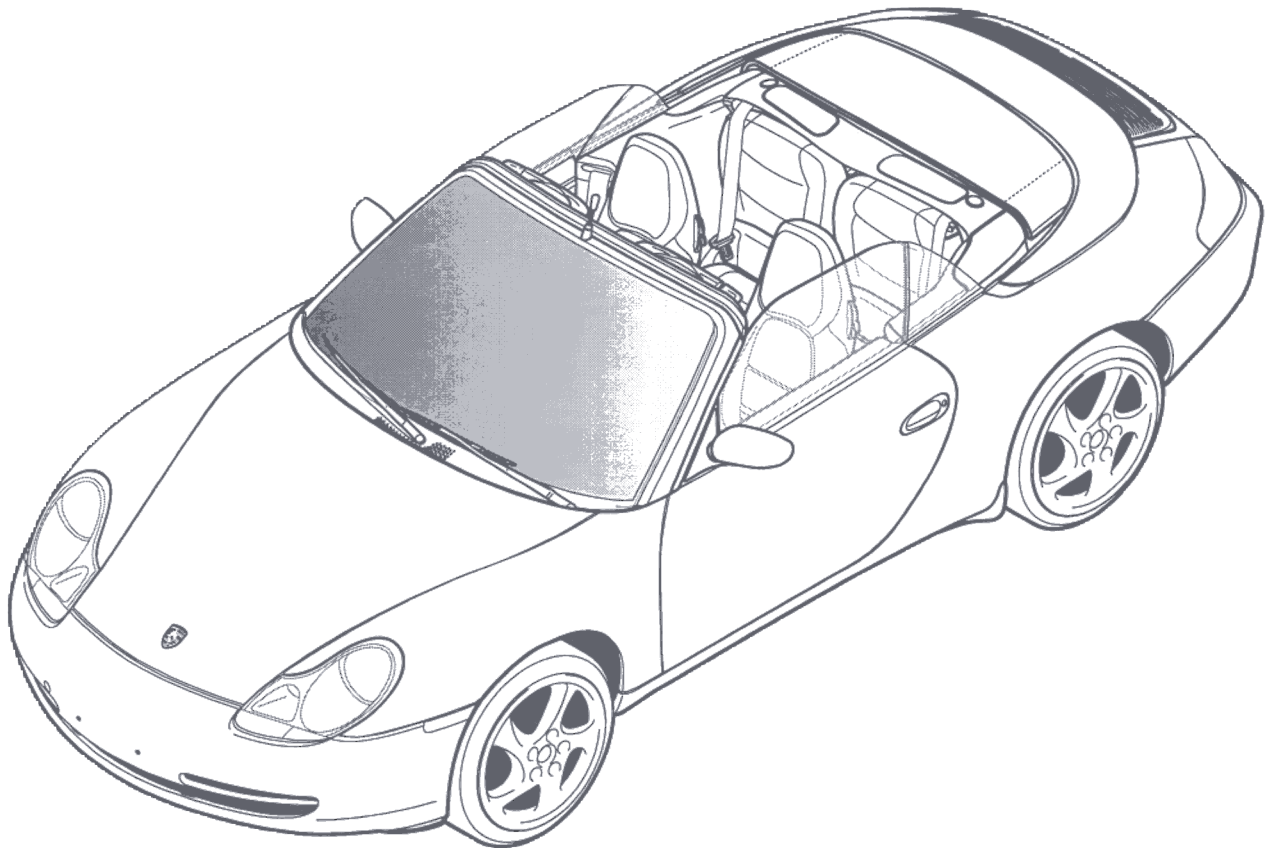
The wheel housing liners Serv. No. 50 56 must be partially detached at the front before the front spoiler can be removed.

| No. | Designation | Qty. | Removal | Note: Installation |
|-----|--|------|--|--|
| 1 | Hexagon cap nut | 4 | Turn and remove | |
| 2 | Cover | 1 | | Fix the cover and turn the hexagon cap nuts. |
| 3 | Spacer sleeve 5.2 x 14 | 2 | | |
| 4 | Countersunk screw 4.8 x 19 | 2 | Undo from the front end | Screw down in the centre of the retaining strip. |
| 5 | Direction indicator light | 1 | Press in spring clip at the side and pull out direction indicator light; disconnect electrical connection. | Connect electrical plug connection, insert lugs and clip in the direction indicator light. |
| 6 | Ventilation holder (for the headlights) | 1 | | Position front spoiler and ventilation holder on the body and fasten with the sheetmetal screw St 4.8 x 19 |
| 7 | Sheetmetal screw St 4.8 x 19 | 8 | | |
| 8 | Spacer sleeve 5.2 x 14 | 4 | | |
| 9 | Front spoiler | 1 | On the front spoiler, undo the sheetmetal screws St 4.8 x 19 (Items 7, 8) from the retaining strips on the left and right. Remove front end. | Attach the front spoiler to the retaining strip and fasten it with the sheetmetal screw St 4.8 x 19 |
| 10 | Sheetmetal nut St 4.8 | 17 | | Adjust the sheetmetal nut, centre hole |
| 11 | Front lip | 1 | Pull out the retaining pin of the body-bound rivet. | Position front lip on the front spoiler and affix with the body-bound rivets. Push in the retaining pins of the body-bound rivets. |

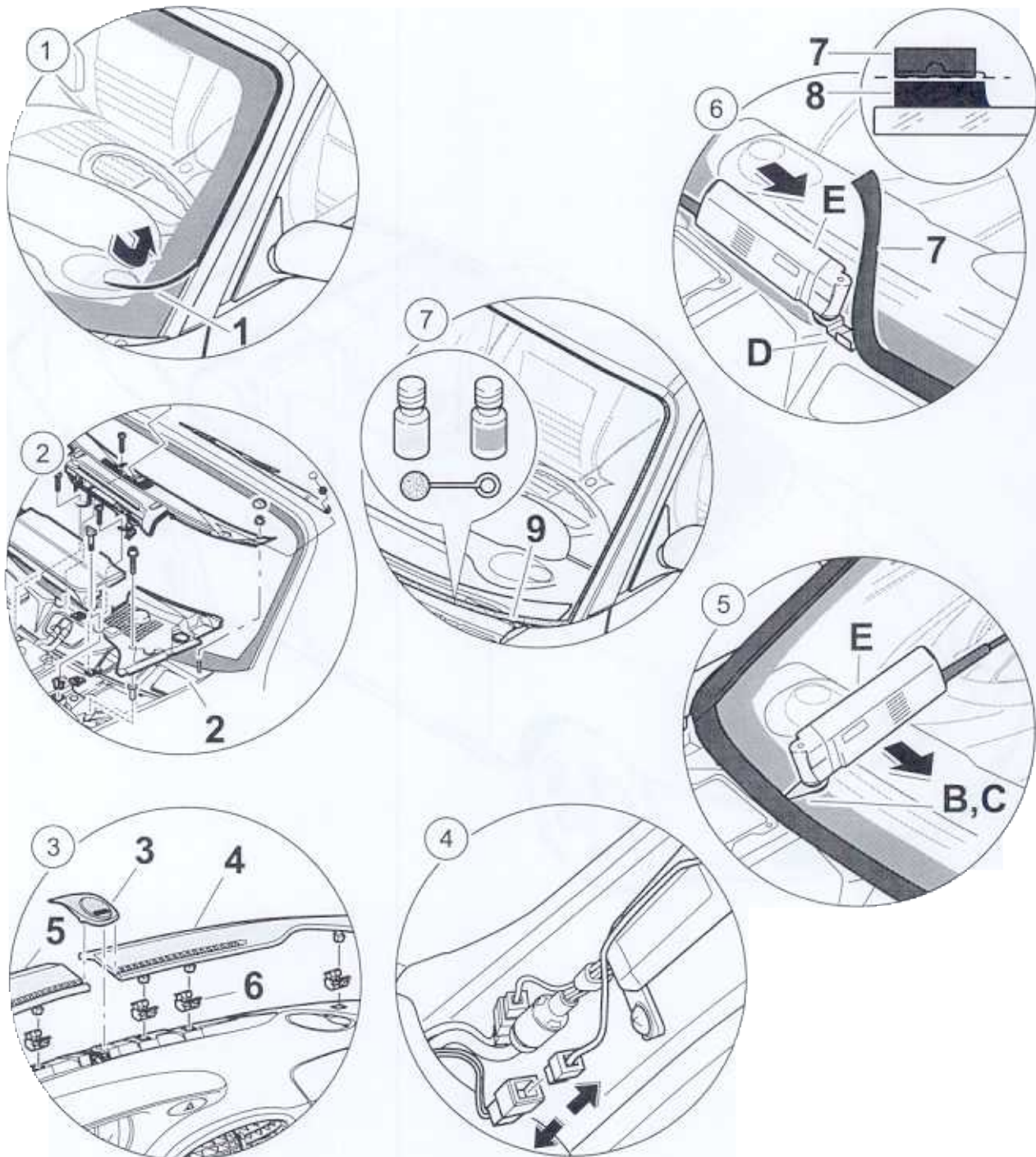
| No. | Designation | Qty. | Removal | Note: Installation |
|-----|---|------|--|--|
| 12 | Body-bound rivets | 11 | | See: Item 11 |
| 13 | Cap | 1 | | |
| 14 | Oval-head screw 4.2 x 9,5 | 6 | | |
| 15 | Washer | 6 | | |
| 16 | Expanding nut | 10 | Unclip | Clip in |
| 17A | USA version, sheetmetal screw B4.2 x 30 | 2 | | |
| 18A | USA version, holder | 1 | | |
| 19A | USA version, holder | | | |
| 20A | USA version, rubber holder | 4 | | |
| 21A | USA version, rubber holder | 2 | | |
| 22 | Holder | | | |
| 23 | Collar nut M6 | 8 | | |
| 24 | Support, left and right | 1 | Undo collar nut M6 (Item 25), and unclip support from retaining strip on the left and (right). | Clip support into retaining strip on the left and (right) and tighten collar nut M6 (Item 25) on the side member. |
| 25 | Collar nut M6 | 2 | | |
| 26 | Retaining strip, left | 1 | Undo the collar nut M6 (Item 23) and the sheetmetal screw St 4.8 x 19 (Item 7) from the retaining strip. | Fix retaining strip on the wing upward to the stop and fasten with the collar nut M6 (Item 23) and the sheetmetal screw St. 4.8 x 19 (Item 7). |
| 27 | Spacer sleeve 4.8 x 19 | 4 | | |

| No. | Designation | Qty. | Removal | Note: Installation |
|-----|--------------------------------------|------|--|---|
| 28 | Retaining strip, centre | 1 | Undo the collar nut M6 (Item 23) and remove the centre retaining strip. | Fix the centre retaining strip to the transverse lock panel and fasten with the collar nuts M6 (Item 23). |
| 29 | Hexagon-head bolt M12 x 1.5 x 100 | 2 | | |
| 30A | USA version, foam part | 1 | Is destroyed upon separation | (Replace) and attach. |
| 31 | Bumper mount | 1 | Undo hexagon-head bolt M12 x 1.5 x 100 (Item 29) from the bumper mount and remove. | Attach the bumper mount to the impact pipes and fix it in position. Fasten it with the hexagon-head bolt M12 x 1.5 x 100 (Item 29). |
| 32 | Combination screw M8 x 30 | 4 | | Undo and remove impact pipe. |
| 33 | Impact pipe | 2 | Undo combination screw M8 x 30 (Item 32) and remove impact pipe and seal. | Fix the impact pipe to the body with the seal and fasten with the combination screw M8 x 30 (Item 32). |
| 34 | Impact absorber seal | 2 | | Inspect and replace if necessary. |
| 35A | USA version, impact absorber | 2 | Undo combination screw M8 x 30 (Item 32) and remove impact absorber and seal. | Fix the impact absorber to the body with the seal and fasten with the combination screw M8 x 30 (Item 32). |
| 36A | USA version, impact absorber seal | 2 | | Inspect and replace if necessary. |

Removing and installing windscreen



Removing the windscreen



**Caution!**

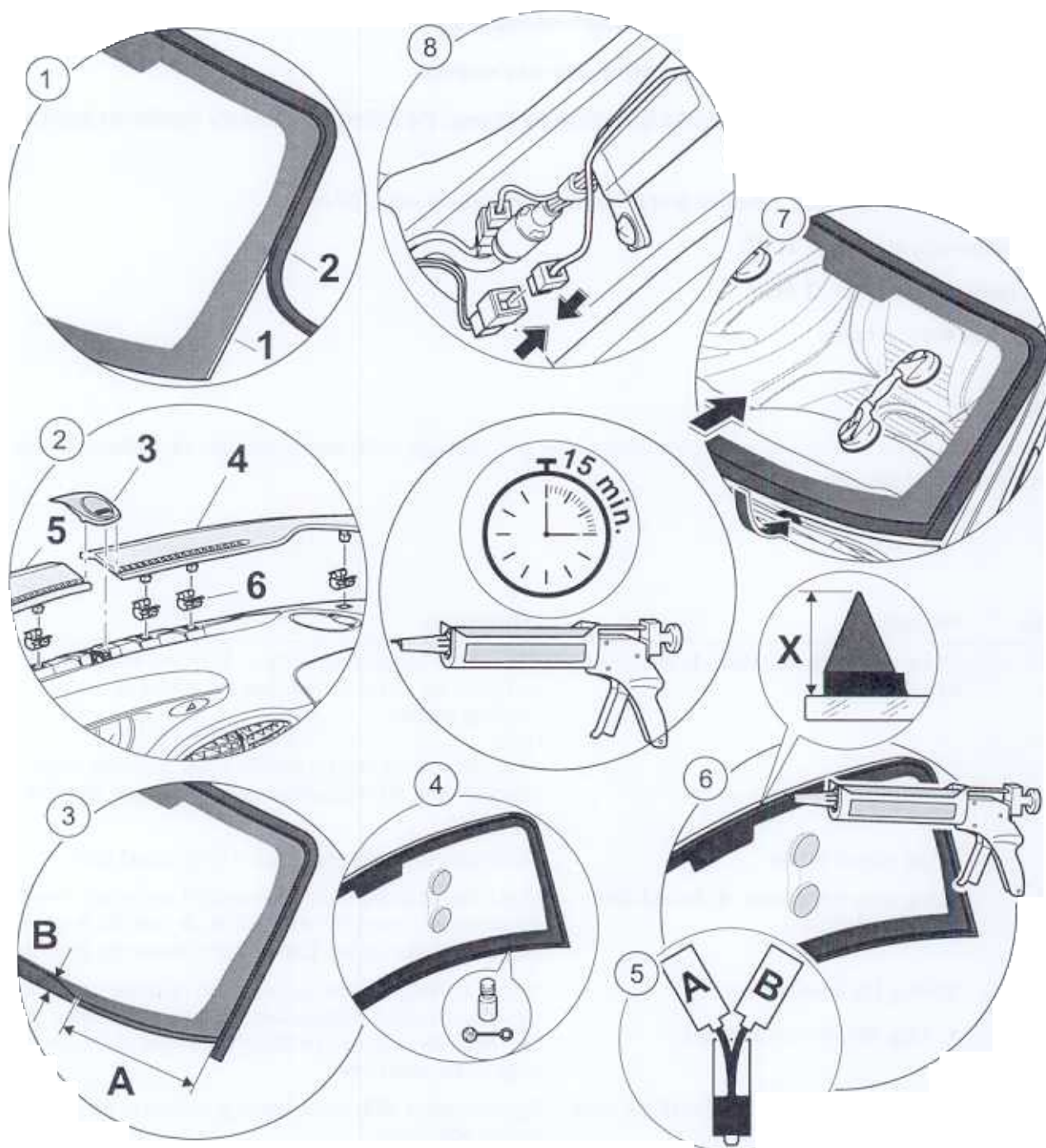
Danger of injury caused by loose glass splinters and sharp window edges.

During removal and installation, wear protective glasses and leather gloves.

| No. | Procedure | Instructions |
|-----|--|---|
| | | Wind down the door windows. Note: the door windows must not be closed until after the curing time has elapsed. |
| | Masking the wing corners | Mask the wing corners with adhesive tape in the area of the cowl panel in order to protect the paintwork. |
| | Pulling off cover trim -1- | Undo and remove the cover trim -1- . |
| 2 | Removing cowl panel cover -2- | ⇒ Rep. Gr. 702219; Removing and installing cowl panel cover |
| | Removing inner A-pillar trim | ⇒ Rep. Gr. 705719; Removing and installing trim of A, B and C-pillars |
| | Removing the interior rearview mirror | ⇒ Rep. Gr. 682719; Removing and installing interior rearview mirror |
| 3 | Removing defroster covers -4, 5- | Lift the alarm readiness light -3- and unclip it to the rear. Lift the defroster covers on the left and right -4, 5- and unclip them. Check fastening clips -6- , replace if necessary. |
| 4 | Disconnecting the windscreen antenna plug connection | |
| 5 | Cutting out the windscreen | Fit a U-type cutting knife to the cutter -E- . Set the vibration frequency controller to 5. Cut through the bond between the body and the windscreen at the top and sides. Fit a U-type cutting knife -B- to the cutter -E- . Cut through the bond between the body and the windscreen at the bottom. Remove the windscreen. Note: when cutting out the windscreen, ensure that the label with the vehicle identification number and the surrounding section is not damaged. |
| | Removing the windscreen | |
| | Pulling off surrounding section | Carefully detach the surrounding section from the windscreen. If the surrounding section is removed from the windscreen undamaged, it can be re-used. |

| No. | Procedure | Instructions |
|-----|--|---|
| | Removing adhesive from the body | <p>Remove adhesive residues -7- from the body with the cutter -E- and flashing knife -D-, ensuring that a residual covering of adhesive remains -8-.</p> <p>Note:</p> <p>the residual covering of adhesive acts as an adhesive foundation for new bonding material. Keep cut surfaces clean and free of grease and do not clean with cleaning solution.</p> |
| | Removing adhesive from the windscreen <ul style="list-style-type: none"> Only if the windscreen is re-installed | <p>Equip the cutter -E- with the flashing knife -D- and remove the adhesive remains on the pre-coated bonding section of the windscreen so that as much as possible of the bonding section of the pre-coating is preserved.</p> <p>Note:</p> <p>the bonding section of the pre-coating acts as an adhesive foundation for new bonding material. Keep cut surfaces clean and free of grease and do not clean with cleaning solution.</p> |
| 7 | Cleaning and priming paint damage or newly built-up paint areas in the window aperture of the body | <p>Clean new paint surfaces and damage to the roof paint in the non-visible area of the window aperture of the body with cleaning solution -H1- and touch up with primer -H2-.</p> <p>Note:</p> <p>observe the drying time of 10 minutes minimum after cleaning! No cleaning solution residues may remain on the body.</p> |

Fitting the windscreen



**Caution!**

The bonded joint does not have its final strength immediately.

The vehicle must not be used until the curing time has elapsed.

In order to ensure that the bonded joint is sufficiently strong, the following boundary conditions must be adhered to:

- *Time between applying adhesive and inserting windscreen: max. 10 min*
- *Temperature: at least 10 °C*
- *Fixing time: approx. 1 hour*
- *Curing time: 3 hours*

**Note!**

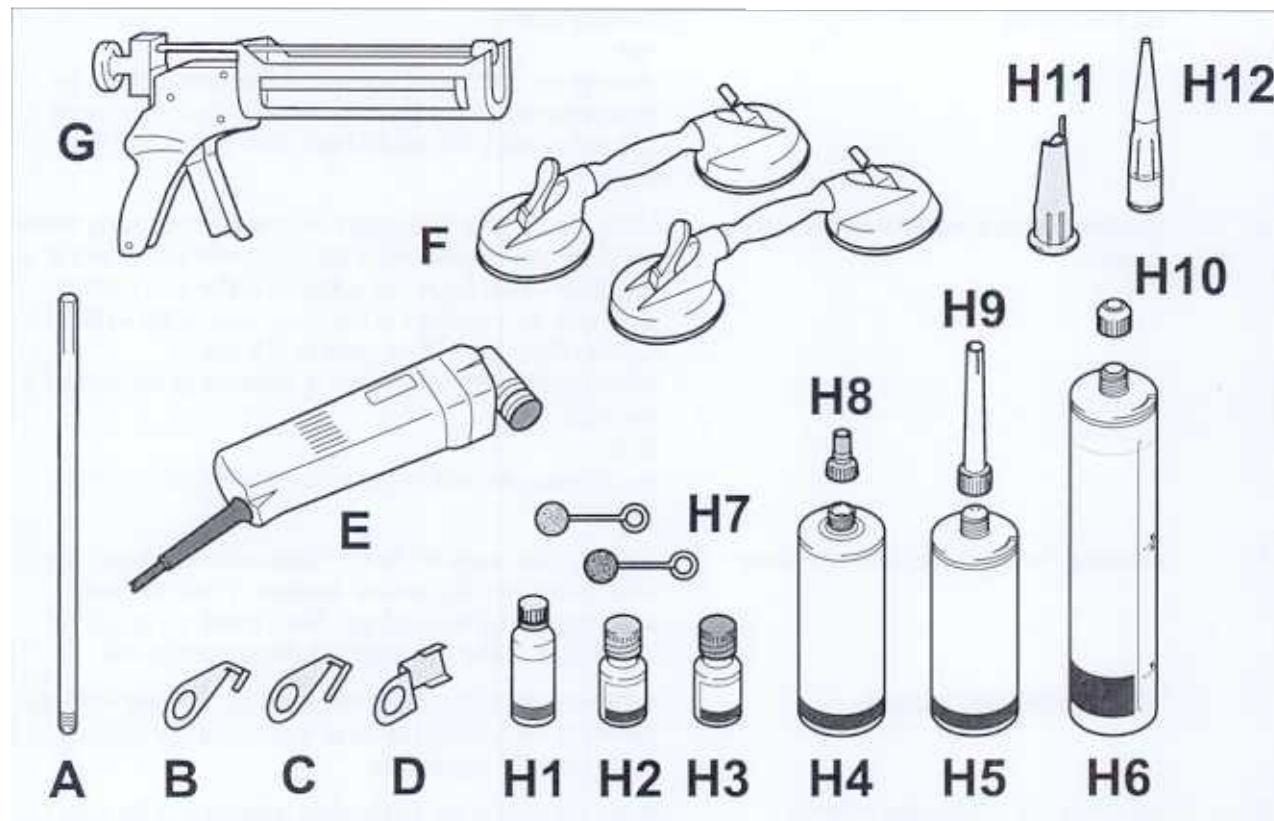
The removed windscreen can be reinstalled if there is no prior damage to the windscreen and the windscreen was removed without damage.

| No. | Procedure | Instructions |
|-----|--|--|
| | Fitting surrounding section -1- and cover trim -2- | Position the surrounding section -1- on the windscreen and press the cover trim -2- into the groove of the surrounding section. Note: if the surrounding section and the cover trim have been removed from the windscreen without damage, they can be re-used. |
| | Fitting spacer blocks | Clip in spacer blocks and press in body-bound rivets. |
| 2 | Fitting defroster covers -4, 5- and alarm readiness light -3- | Check the fastening clips -6- , replace if necessary. Insert the defroster covers left and right -4, 5- and clip in under the alarm readiness lug. Engage alarm readiness light -3- . |
| 3 | Marking the bonding area <ul style="list-style-type: none"> • Only with new windscreens | Before applying the adhesive material, mark the course of the adhesive bead in accordance with the dimensions -A- 160 mm, -B- = 30 mm on the left and right on the lower edge of the windscreen. |
| 4 | Activating the bonding section of the windscreen <ul style="list-style-type: none"> • Only with new windscreens | Apply activator -H3- to the bonding section of the pre-coated windscreen. Note: pre-coated windows must not be treated with cleaning solutions. Do not apply activator to painted surfaces. Allow a drying time of at least 10 minutes! |

| No. | Procedure | Instructions |
|-----|---|--|
| | Preparing 2-component bonding material for processing | ⇒ 6-7 "Processing of Porsche 2-component window bonding agents" Note: observe open time of 15 minutes! The open time is the time within which the bonding material must be applied and within which the windscreen must be put into the body. |
| 6 | Applying bonding material to the windscreen | Using the bonding gun, apply 2-component bonding material to the windscreen along the cover trim in the form of a triangular bead. Apply the adhesive material in accordance with the markings in the lower part of the windscreen. Dimension -X- = approx. 15 mm. When applying the adhesive, it is essential to ensure that it overlaps. Note: two persons are needed to insert and adjust the windscreen! |
| 7 | Inserting the windscreen into the body | Apply suction cups -F- to the windscreen and insert the windscreen into the window aperture. Press the windscreen up as far as it will go. When doing so, press the lower edge of the glass against the spacer blocks. |
| | Cleaning the fields of vision | Adhesive which has oozed out must be removed immediately and the affected fields of vision must be cleaned using cleaning agent -H1- . |
| 8 | Attaching the windscreen antenna | Insert the plug of the windscreen antenna into the antenna amplifier. |
| | Installing the A-pillar trim | ⇒ Rep. Gr. 705719; Removing and installing trim of A, B and C-pillars |
| | Installing cowl panel cover | ⇒ Rep. Gr. 702219; Removing and installing cowl panel cover |
| | Removing masking of wing corners | Pull adhesive tape off wing corners. |
| | Bonding on the interior rearview mirror | ⇒ Rep. Gr. 682713; Bonding on the interior rearview mirror |
| | • Only if the windscreen is replaced | |
| | Installing the interior rearview mirror | ⇒ Rep. Gr. 682719; Removing and installing interior rearview mirror Note: the interior rearview mirror may only be installed after a curing time of 3 hours! |
| | Closing the door window | |

Overview of tools and materials

The following tools and materials are required for removing and installing the windscreen with 2-component adhesive:

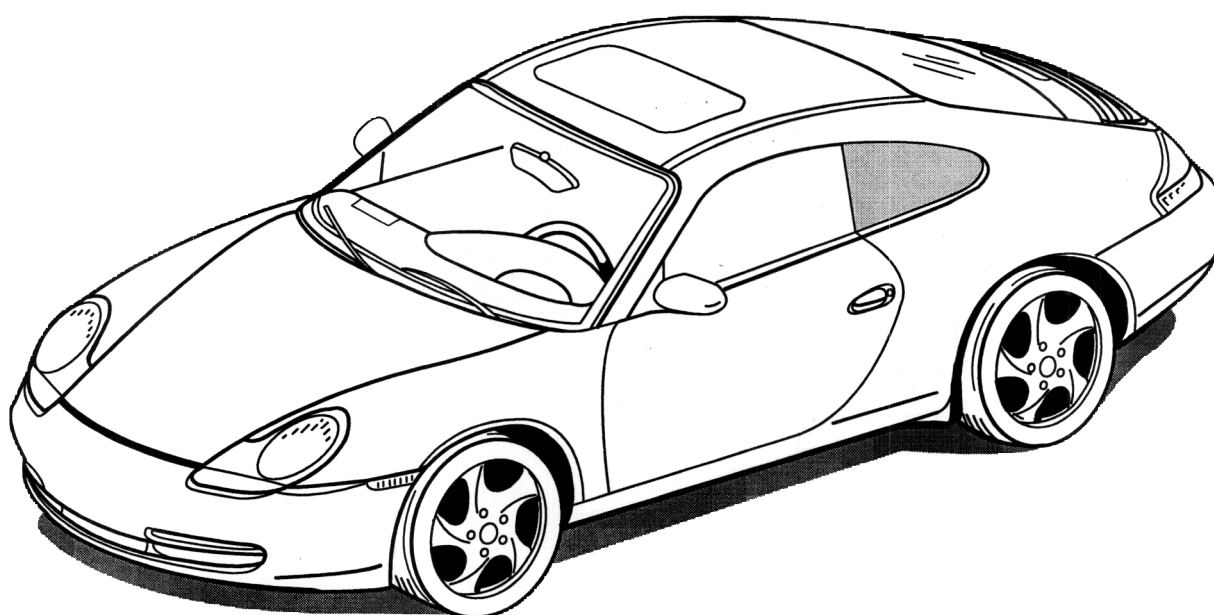


| Item | Designation of the special tool | Explanation |
|------|---------------------------------------|---|
| -A- | | ⇒ Rep. Gr. 2.2; Workshop Equipment Manual |
| -B- | Cutting knife, U-type 639.030.760.16 | |
| -C- | Cutting knife, U-type 639.031.540.10 | |
| -D- | Flashing knife, U-type 639.031.130.22 | |
| -E- | Cutter VAG 1561 | |
| -F- | Twin-cup suction lifter VAG 1344 | |
| -G- | Bonding gun 9586 | ⇒ Rep. Gr. 2.2; Workshop Equipment Manual |
| -H- | Adhesive set 000.043.203.42 | Contains set components H1-H12 |

| Item | Designation | Item | Designation |
|------|-------------------|------|-----------------|
| | Cleaning solution | -H7- | Swab |
| | Primer | -H8- | Filler nozzle |
| | Activator | -H9- | Injector nozzle |

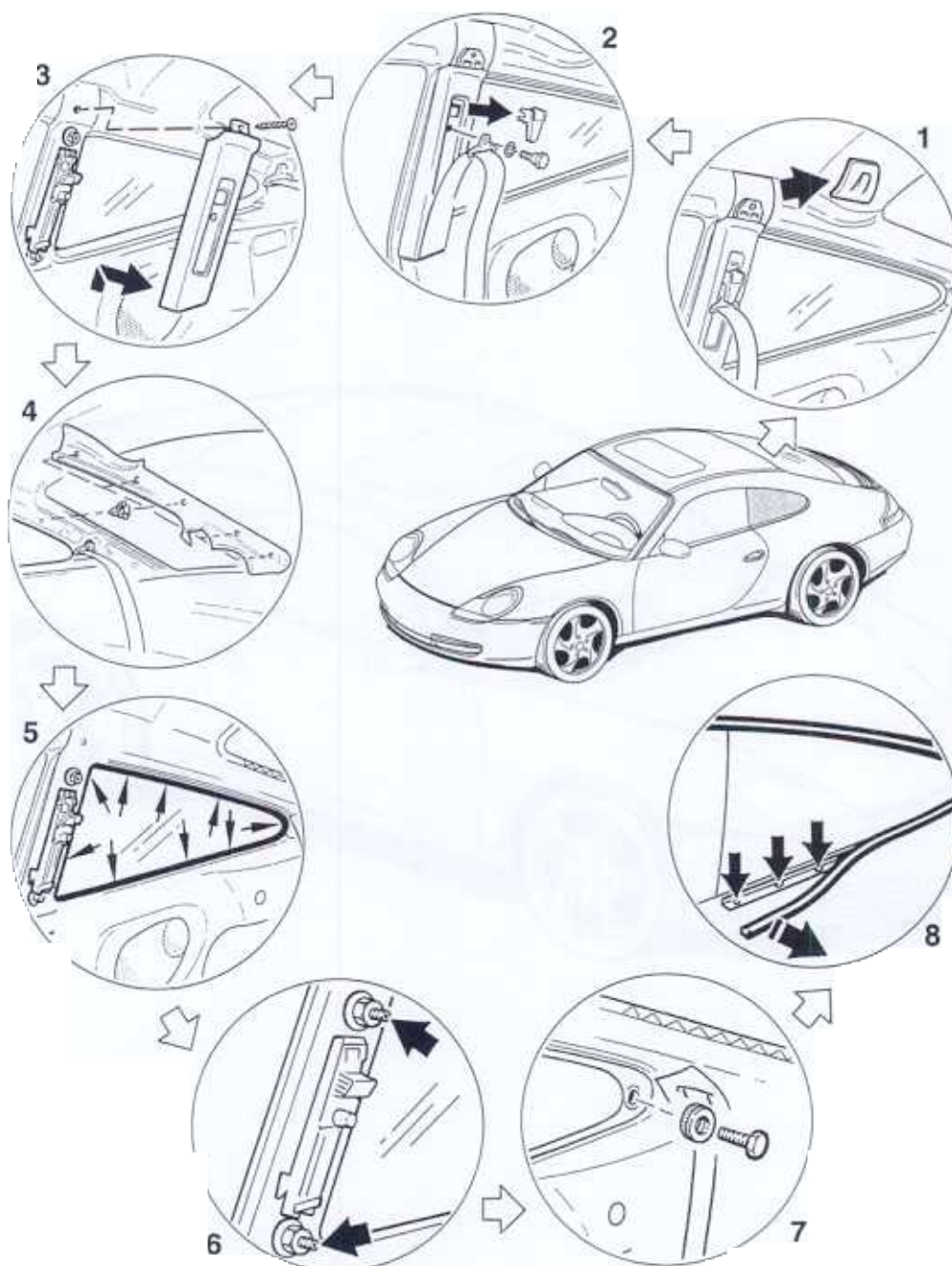
| Item | Designation | Item | Designation |
|------|------------------------|------|-------------|
| | Cartridge, component A | 10- | |
| -H5- | Cartridge, component B | 11- | |
| -H6- | Mixing cartridge | 12- | |

64 75 19 Removing and installing side window



324 - 97

Removing side window



352 - 97

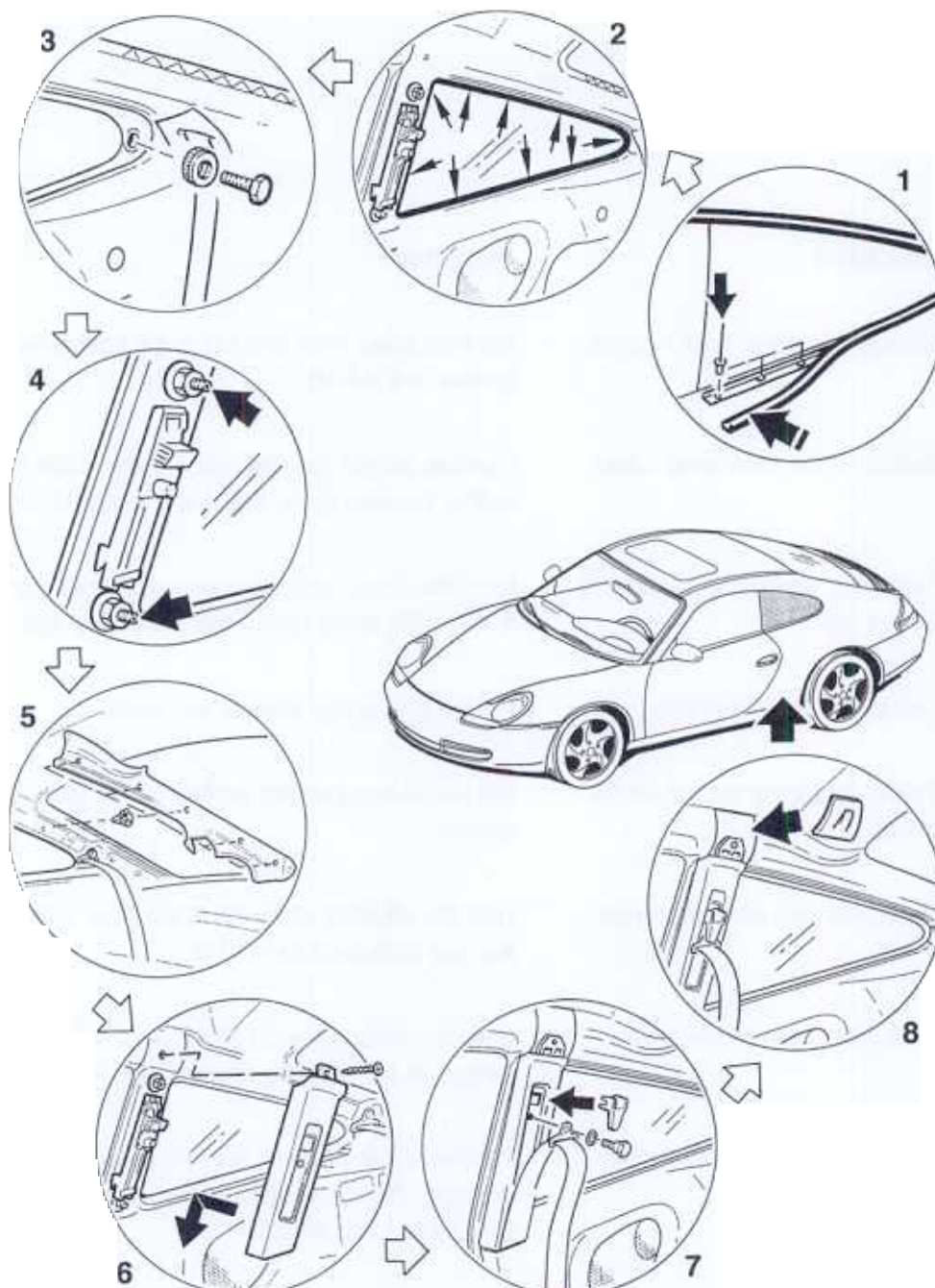
Removing side window**Note**

The removed side window can be reinstalled if

- there is no prior damage to the side window
- the side window was removed without damage.

| No. | Procedure | Instructions |
|-----|---|---|
| 1 | Unclipping clothes hook bracket | Lift the clothes hook bracket at the bottom with a plastic spatula and pull off. |
| 2 | Pulling off the sash guide cover. | Carefully pull off the sash guide cover. Undo hexagon-head bolt of the sash guide mount and B-post trim |
| 3 | Detaching sash guide mount and B-post trim. | Undo the cross-recess screw on the B-post trim B 4.2 x 25, unclip trim at top and pull up and out. |
| 4 | Unclipping the C-post trim. | Pull the C-post trim inwards and unclip. |
| 5 | Pulling off rubber section on the inside. | Pull the all-round rubber section off the seam of the side section. |
| 6 | Detaching side window at front. | Hold the adjusting elements at the front with the a/f 4 Allan key and undo the lock nut M8. |
| 7 | Detaching side window at rear. | Undo the hexagon-head bolt M6 x 12 from the side window at the rear and take the side window off. |
| 8 | Detaching rubber covering and aluminium section | Pull the rubber covering out of the aluminium section and drill open the hollow rivets in the aluminum section with a Ø 4.0 x 6.3 mm drill bit. |

Installing side window



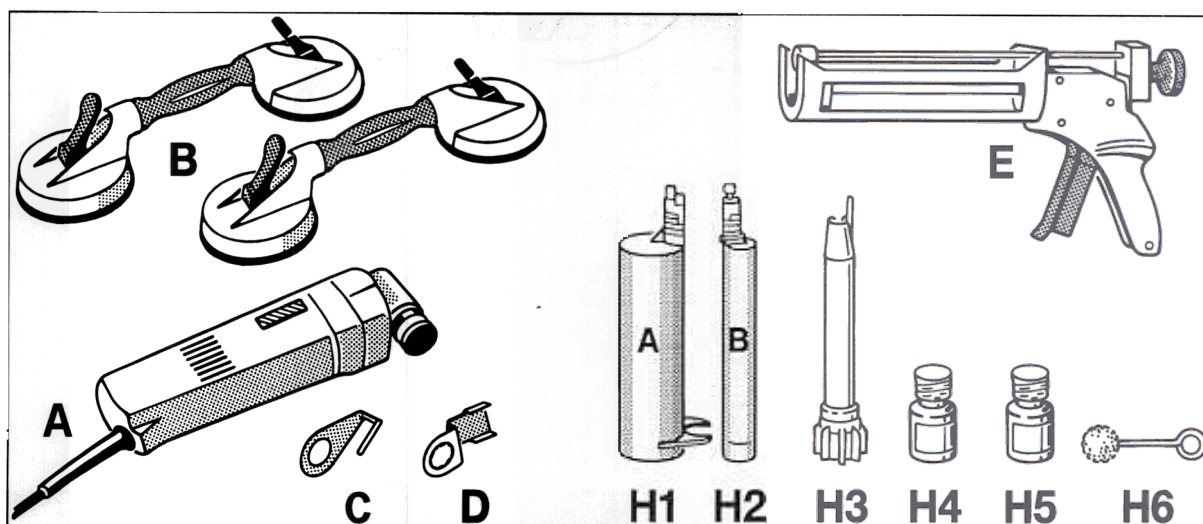
353 - 97

Installing side window

| No. | Procedure | Instructions |
|------------|--|--|
| 1 | Fitting aluminium section and rubber covering. | Rivet aluminium section to the side section with the tubular rivets Ø 4.0 x 6.3. Wet rubber covering with soapy water and insert in the aluminium section. |
| 2 | Fitting rubber section on inside. | Push the rubber section onto the seam of the side section all around. |
| 3 | Fitting side window. | Insert the side window, position it and fasten the side window at the rear with the hexagon-head bolt M6 x 12. |
| 4 | Adjusting side window at front. | Fit the lock nut M8. Use the a/f 4 Allan key to adjust the adjusting elements of the side window with respect to the door window contour. Tighten lock nut M8. |
| 5 | Clipping in C-post trim. | Position and clip in the C-post trim. |
| 6 | Fitting sash guide mount and B-post trim. | Insert the B-post trim at bottom, press in the two clips at the top and fasten with the B 4.2 x 25 cross-recess screw. |
| 7 | Fitting the sash guide cover. | Position the hexagon-head bolt of the sash guide mount and tighten. Tightening torque: 50 Nm (37 ftlb.) Fit the sash guide cover. |
| 8 | Fitting the clothes hook bracket. | Push on the clothes hook bracket. |

64 86 19 Removing and installing rear window

The following tools and materials are required for removal and installation of the rear window with two-component adhesive:



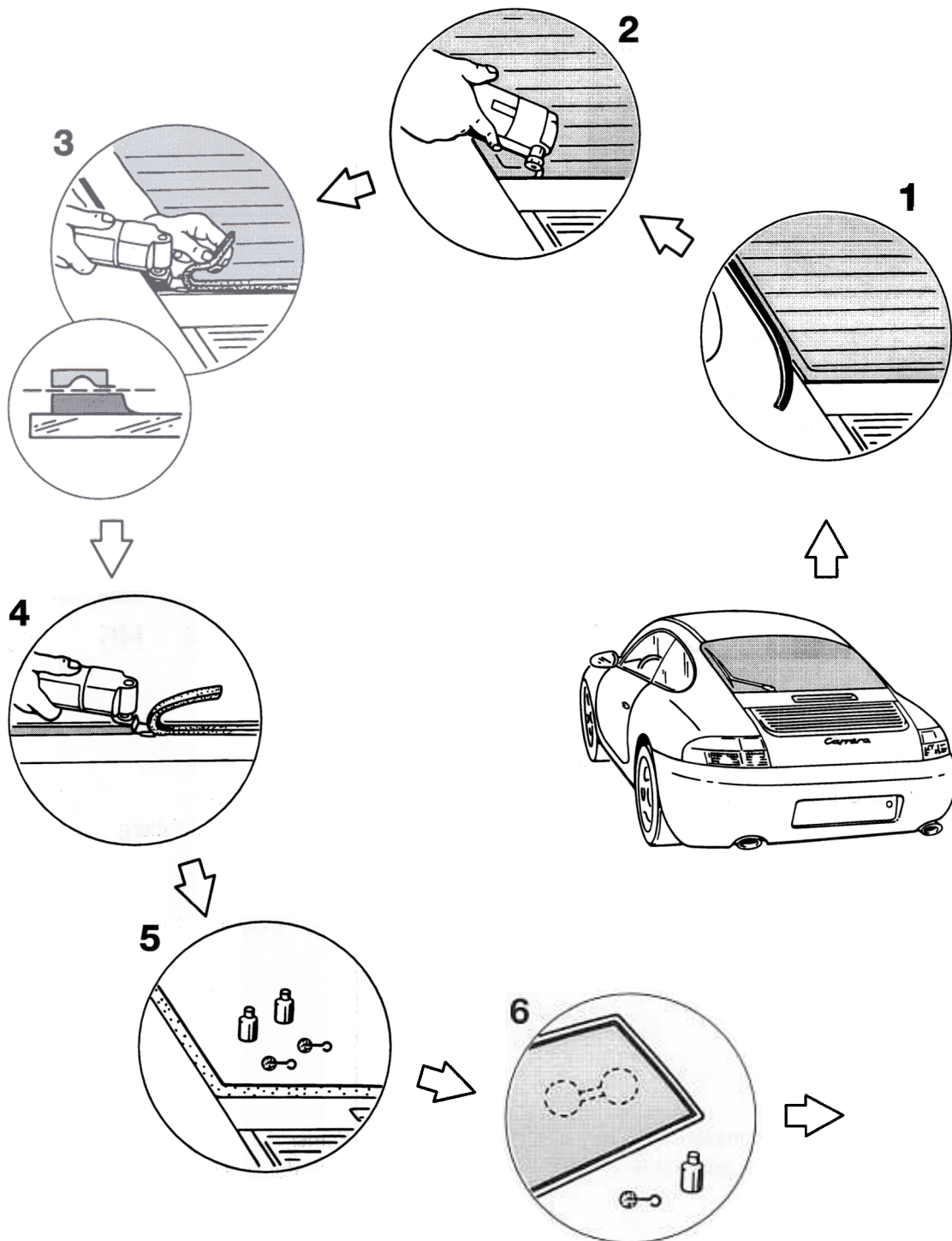
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| | | | |
|---|-------------------------|----------------|-------------------------|
| A | Cutter | VAG 1561 | Volkswagen AG |
| B | Twin-cup suction lifter | VAG 1344 | Postfach |
| | | | 38436 Wolfsburg |
| C | Cutting knife, U-type | 639.030.760.16 | C. & E. FEIN GmbH & Co. |
| D | Flashing knife | 639.031.130.22 | 70013 Stuttgart |
| E | Bonding gun 9586 | 000.721.958.60 | Porsche Parts Service |
| | Adhesive set | 000.043.203.42 | |

Adhesive set contents:

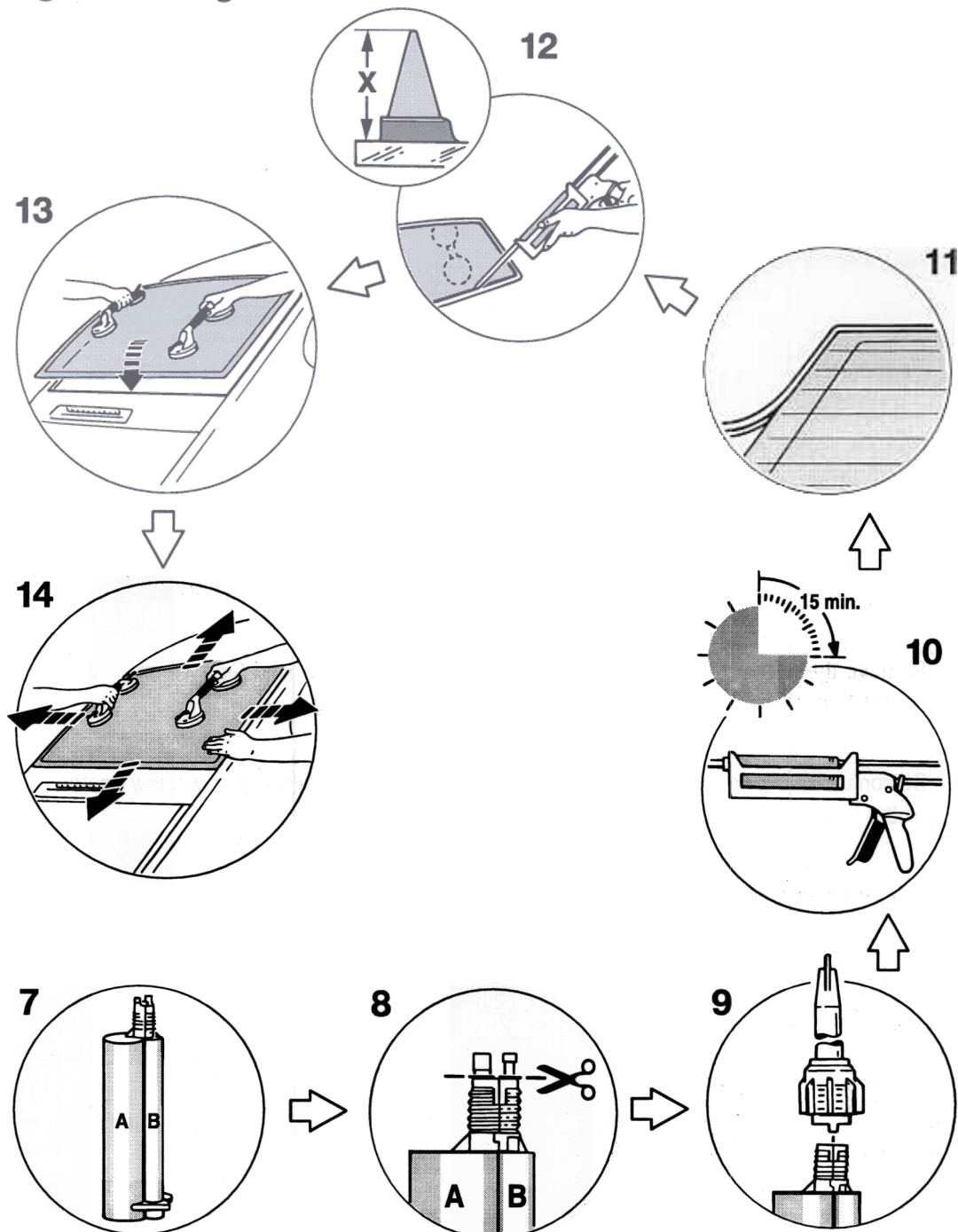
| | | | | | |
|----|---|------------------------|----|---|-----------------------------|
| H1 | = | Cartridge, component A | H4 | = | Primer |
| H2 | = | Cartridge, component B | H5 | = | Activator (solvent cleaner) |
| H3 | = | Mixing tube | H6 | = | Swab |

Removing and installing rear window



585_A_97

Removing and installing rear window



585_B_97

Removing rear window**Note:**

The removed window can be re-installed if

no prior damage can be seen on the rear window

the rear window was removed without being damaged.

| No. | Procedure | Instructions |
|-----|--|--|
| | Remove rear window wiper | Fold up the cap, unscrew the hexagon nut, lift and detach the spring washer and wiper arm. |
| | Open door windows | The door windows must not be closed until after the curing time has elapsed. |
| | Remove the left and right-hand C-post trim | Unclip the left and right-hand C-post trim and the rear wall lining. |
| | Disconnect the plug connection of the rear window heater | Unplug the connector of the rear window heater on the rear window. |
| | Pull off cover trim | Detach the cover trim from the surrounding section of the rear window and pull off. |



| No. | Procedure | Instructions |
|-----|--|---|
| 2 | Cut out rear window | <p>Fit a U-type cutting knife (C) to the cutter (A). Set the vibration frequency controller to 5. Cut through the bond between the body and the rear window at the top, bottom and sides. Take out the rear window.</p> <p>Note When cutting out the rear window, take care not to damage the surrounding section.</p> |
| | Pull off surrounding section | <p>Carefully detach the surrounding section from the rear window. If the surrounding section is removed from the rear window undamaged, it can be re-used.</p> |
| 3 | <p>Only if the rear window is re-installed Remove adhesive from the rear window</p> | <p>Fit the flashing knife (E) to the cutter (A) and use it to remove the adhesive residues from the precoated bonding section of the rear window only to such an extent that the bonding section of the precoating is preserved as completely as possible.</p> |
| 4 | Remove adhesive from the body | <p>Remove adhesive residues from the body with the cutter (A) and flashing knife (E), ensuring that a residual covering of adhesive remains.</p> |
| 5 | <p>Clean and prime the window aperture of the body</p> | <p>Clean the window aperture of the body with cleaning solution (H 5). Use primer (H 4) to prime damage to the top coat paint in the non-visible area of the window aperture.</p> <p>Note Allow a drying time of at least 10 minutes after cleaning! No cleaning solution residues may remain on the body.</p> |

Fit rear window

| No. | Procedure | Instructions |
|-----|---|--|
| 6 | Apply activator to the bonding section of the rear window | Apply activator (H 5) to the bonding section of the precoated rear window. Note Allow a drying time of at least 10 minutes! |
| 7 | Clip together cartridges of the components A and B | Clip the cartridge containing component B to the cartridge containing component A. |
| 8 | Open the assembled cartridge | Evenly cut off the seals of the assembled cartridge with a knife. |
| 9 | Secure the mixing tube | Push the mixing tube (H 3) into the groove provided for this purpose over the assembled cartridge and secure it with the union nut. |
| 10 | Insert the cartridge into the bonding gun | Insert the assembled cartridge, including mixing tube, into the bonding gun (F). Note Observe open time of 15 minutes! The open time is the time within which the adhesive must be applied and the rear window inserted in the body. |
| 11 | Fit surrounding section and cover trim | Place surrounding section on the rear window and press cover trim into groove of the surrounding section. Note If the surrounding section and cover trim were removed from the rear window undamaged, they can be re-used. |

| No. | Procedure | Instructions |
|-----|--------------------------------------|--|
| 12 | Apply adhesive to the rear window | <p>Using the bonding gun, apply 2-component adhesive along the cover trim of the rear window in the form of a triangular bead.</p> <p>Dimension "X" = approx. 15 mm</p> <p>When applying the adhesive, it is essential to ensure that it overlaps.</p> <p>Note</p> <p>Two persons are needed to insert and adjust the rear window.</p> |
| 13 | Insert the rear window into the body | Insert the rear window at the top of the window aperture and rest it in the aperture. |
| 14 | Fix the rear window | Align the rear window in the Z and X-directions. |
| | Clean the fields of vision | Adhesive which has oozed out must be removed immediately and the affected fields of vision must be cleaned using cleaning agent (H 5). |
| | Plug in the rear window heater | Plug in the rear window heater. |
| | Fit the interior | Fit the C-post trim and the rear wall lining. |

| No. | Procedure | Instructions |
|-----|-----------|--------------|
|-----|-----------|--------------|

Important

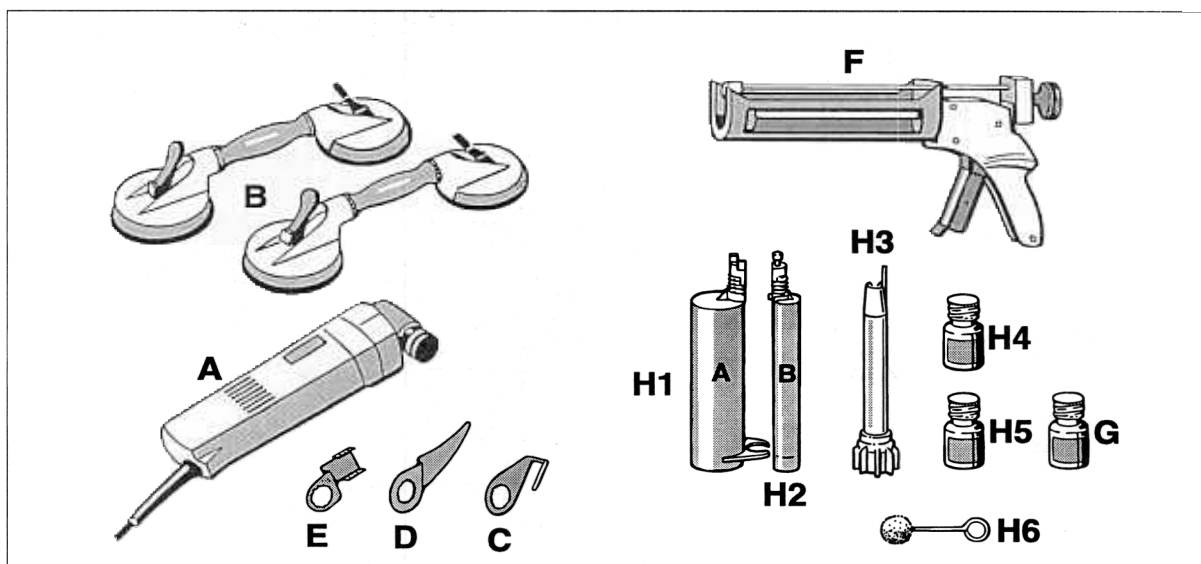
The bonded joint does not have its final strength immediately. In order to ensure that the bonded joint is sufficiently strong, the following boundary conditions must be adhered to:

| | |
|-------------|----------------|
| Curing time | 3 hours |
| Temperature | min. 10 °C |
| Fixing time | approx. 1 hour |

The vehicle must not be used until the curing time has elapsed.

64 86 19 Removing and installing rear window (hardtop)

The following tools and materials are required for removal and installation of the rear window on the hardtop with two-component adhesive:



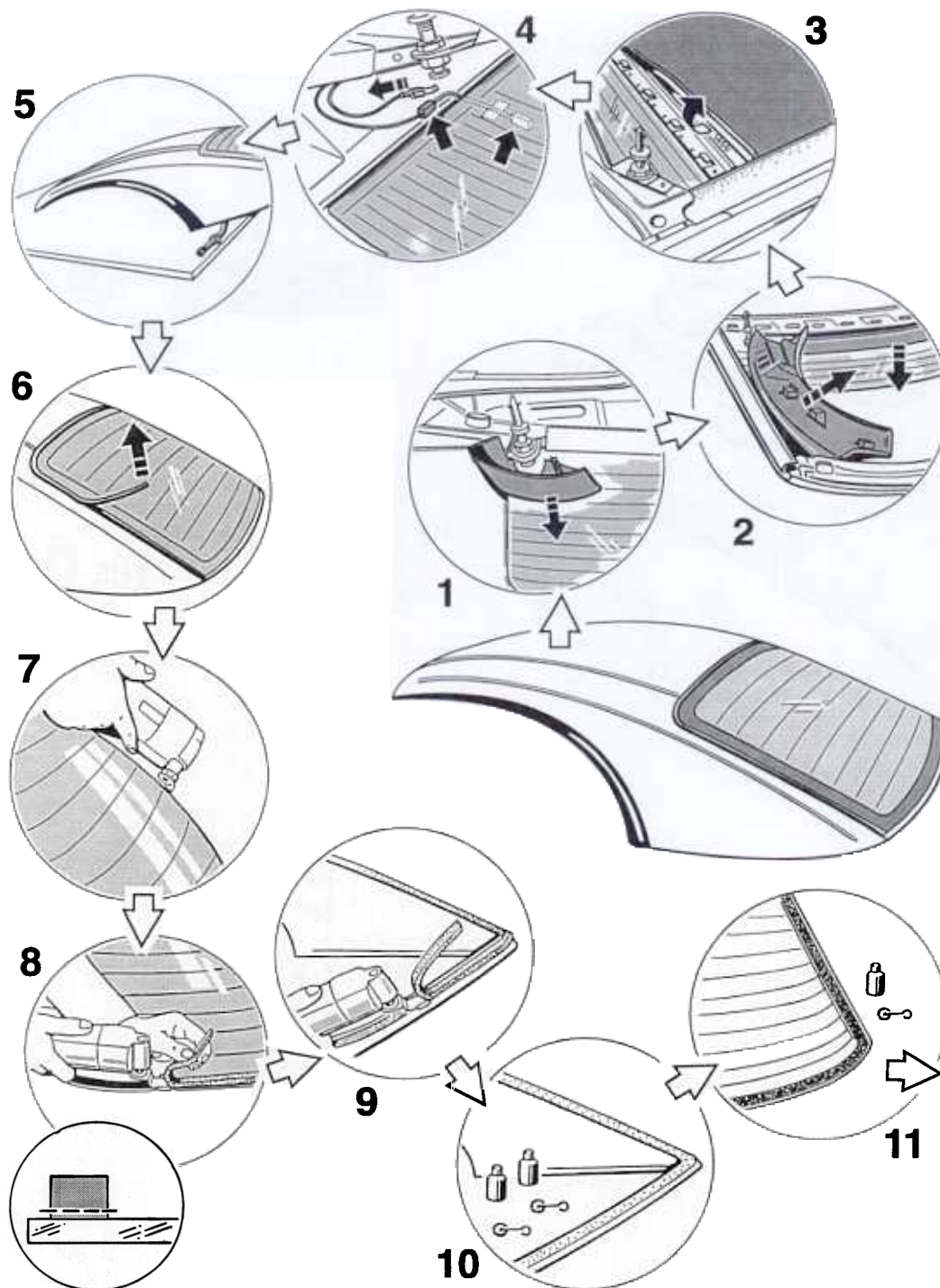
596_96

| | | | |
|---|-------------------------|----------------|-------------------------|
| A | Cutter | VAG 1561 | Volkswagen AG |
| B | Twin-cup suction lifter | VAG 1344 | Postfach |
| | | | 38436 Wolfsburg |
| C | U-type cutting knife | 639.030.790.12 | C. & E. Fein GmbH & Co. |
| D | Angled cutting knife | 639.030.720.17 | Postfach 10 14 44 |
| E | Flashing knife | 639.031.130.22 | 70013 Stuttgart |
| F | Bonding gun 9586 | 000.721.958.60 | Porsche Parts Service |
| H | Adhesive set | 000.043.203.42 | |
| G | Glass primer | 000.043.158.00 | |

Adhesive set contents:

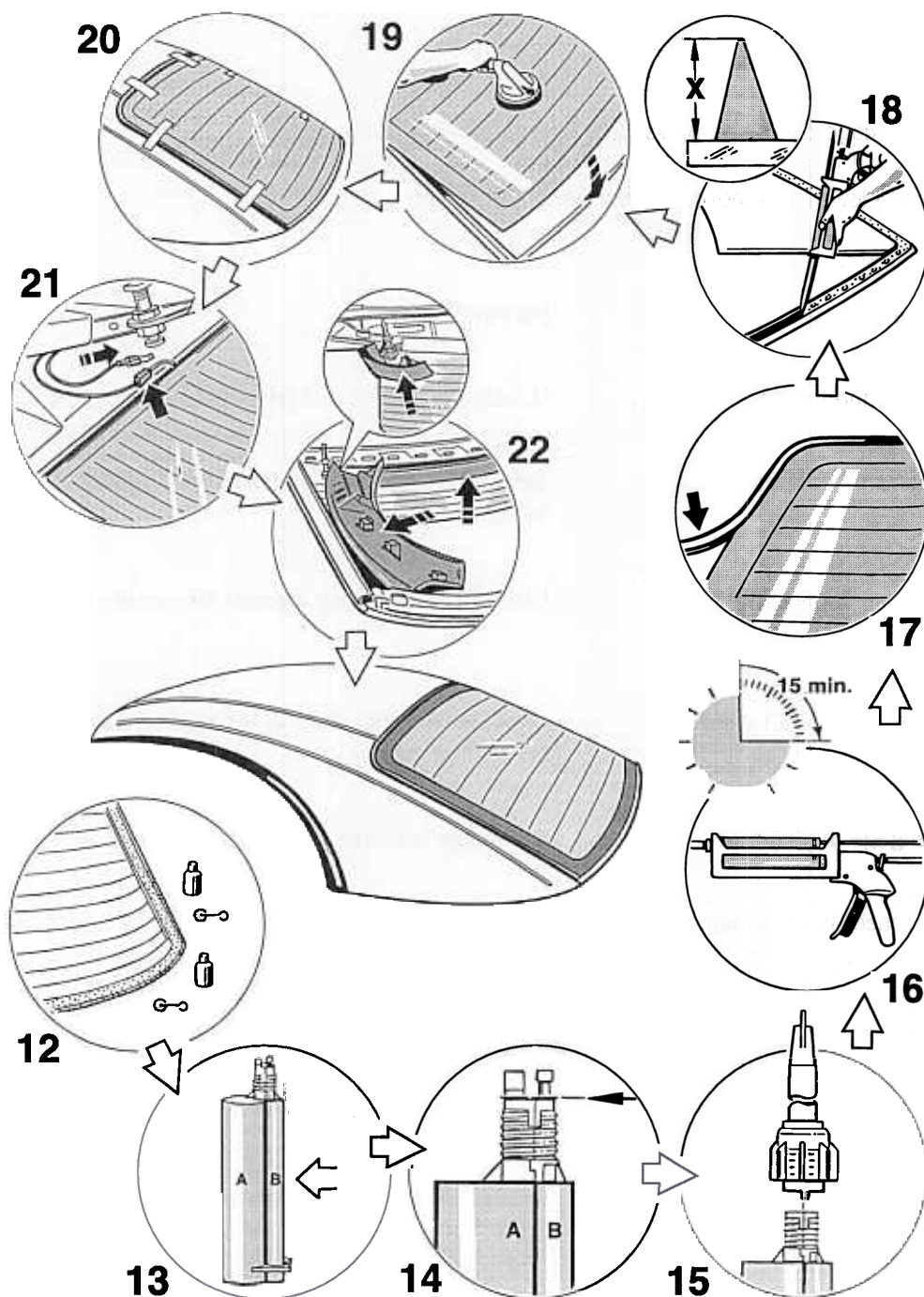
| | | | | | |
|----|---|------------------------|----|---|-----------------------------|
| H1 | = | Cartridge, component A | H4 | = | Primer |
| H2 | = | Cartridge, component B | H5 | = | Activator (solvent cleaner) |
| H3 | = | Mixing tube | H6 | = | Swab |

Removing and installing rear window



277_A_98

Removing and installing rear window



277_B_98

Removing rear window**Note**

The removed window can be re-installed if

no prior damage can be recognised on the rear window

the rear window was removed without being damaged.

| No. | Procedure | Instructions |
|-----|-------------------------------------|---|
| | Remove the hardtop | Unlock the hardtop and remove it from the vehicle. |
| | Set down the hardtop | Set the hardtop down on the assembly fixture on the outer side. |
| | Unclip hardtop locking element trim | Unclip hardtop locking element trim on the left and right. |
| 2 | Unclip interior trim parts | Unclip interior trim parts at the sides and rear of the hardtop body. |
| 3 | Disengage the headliner | Disengage headliner at the rear window to the rear. |
| 4 | Disconnect the rear-window heater | Disconnect the electrical plug connection on the left and right of the rear window heater. Affix wire to the rear window with adhesive tape. (The wire would otherwise be severed when the rear window is cut out). |
| 5 | Turn the hardtop | Place hardtop locking elements on the assembly fixture. |
| 6 | Pull off cover profile | Detach and pull off the cover profile. |

**Warning:**

The hardtop body parts are riveted together; the riveted joints will be destroyed if the rear window is cut out improperly!

> Take care to cut close to the rear window.

| No. | Procedure | Instructions |
|-----|---|--|
| 7 | Cut out the rear window | Equip cutter (A) with the U-type cutting knife (C). Set the oscillation-speed control to Stage 5. Cut through the adhesive joint between the body and the rear window at the top and sides. |
| 8 | Only if the rear window is re-installed: Remove adhesive on the rear window | Equip the cutter (A) with the flashing knife (E) and use it to remove the adhesive residues on the rear window. However, stop when a layer of approx 2 to 3 mm remains so that the screen-printed border is not destroyed. |
| 9 | Remove adhesive on the hardtop body | Use the cutter (A) and the flashing knife (E) to remove adhesive residues on the hardtop body, leaving a layer of adhesive all around. |

Note

Remove adhesive residues between the riveted joints as thoroughly as possible without damaging the riveted joints.

Paint damage in the window aperture must be repaired.

| No. | Procedure | Instructions |
|-----|---|--|
| 10 | Clean and prime the window aperture of the hardtop body | Clean window aperture of the hardtop body with cleaning solvent (H5). Prime repaired areas of the paintwork in the concealed part of the window aperture with primer (H4). Use the swabs (H6) intended for this purpose. |

Note

Always allow a drying time of at least 10 minutes after cleaning!
Cleaning solvent residues must not remain on the hardtop body.

Installing rear window

| | | |
|----|---|---|
| 11 | Only if the rear window is re-installed: Activate adhesive profile of the rear window | Apply activator (H5) to the adhesive profile of the rear window using the swab (H6). |
| 12 | Only when installing a new rear window: Clean and prime the screen print | Apply activator in the area of the screen print, let dry and prime the screen print of the rear window with glass primer (G). |

Note

Always allow a drying time of at least 10 minutes!

| | | |
|----|--|---|
| 13 | Clip together cartridges of the A and B components | Clip cartridge with component B to the cartridge with component A. |
| 14 | Open the completed cartridge | Evenly cut off the outlets of the completed cartridge with a knife. |

| No. | Procedure | Instructions |
|---|---|---|
| 15 | Attach the mixing tube | Slide the mixing tube (H3) into the groove over the completed cartridge and fasten with the union nut. |
| 16 | Insert the cartridge in the bonding gun | Insert the completed cartridge, including mixing tube, into the bonding gun (F). |
| Note | | |
| Observe open time of 15 minutes! | | |
| The open time is the time within which the adhesive must be applied and the rear window inserted in the hardtop body. | | |
| 17 | Fit the cover profile | Push the cover profile onto the rear window. |
| 18 | Apply adhesive on the hardtop body in the area of the window aperture | Use the bonding gun to apply a triangular bead of 2-component adhesive on the window aperture of the hardtop body along the riveted joint. Dimension "X" = approx. 12 mm Take care when applying the adhesive to ensure that the adhesive bead overlaps. |
| Note | | |
| Two persons are needed to install and adjust the rear window. | | |
| 19 | Insert the rear window in the body | Insert the rear window at the top of the window aperture and carefully lay it down. |
| 20 | Fix the rear window | Push the rear window all of the way up and press the lower window edge into place. Secure the rear window against sliding out of place with adhesive tape at the sides and top. |

| No. | Procedure | Instructions |
|-----|--------------------------------|--|
| | Clean the visible areas | Any emerging adhesive must be removed immediately, and the affected visible areas must be cleaned with the cleaning solution (H5). |
| 21 | Plug in the rear window heater | Plug in electrical plug connections on the left and right-hand sides of the rear window. |
| 22 | Fit the interior | Position and clip in the interior trim parts at the rear and sides and the hardtop locking element covers on the left and right. |

Important

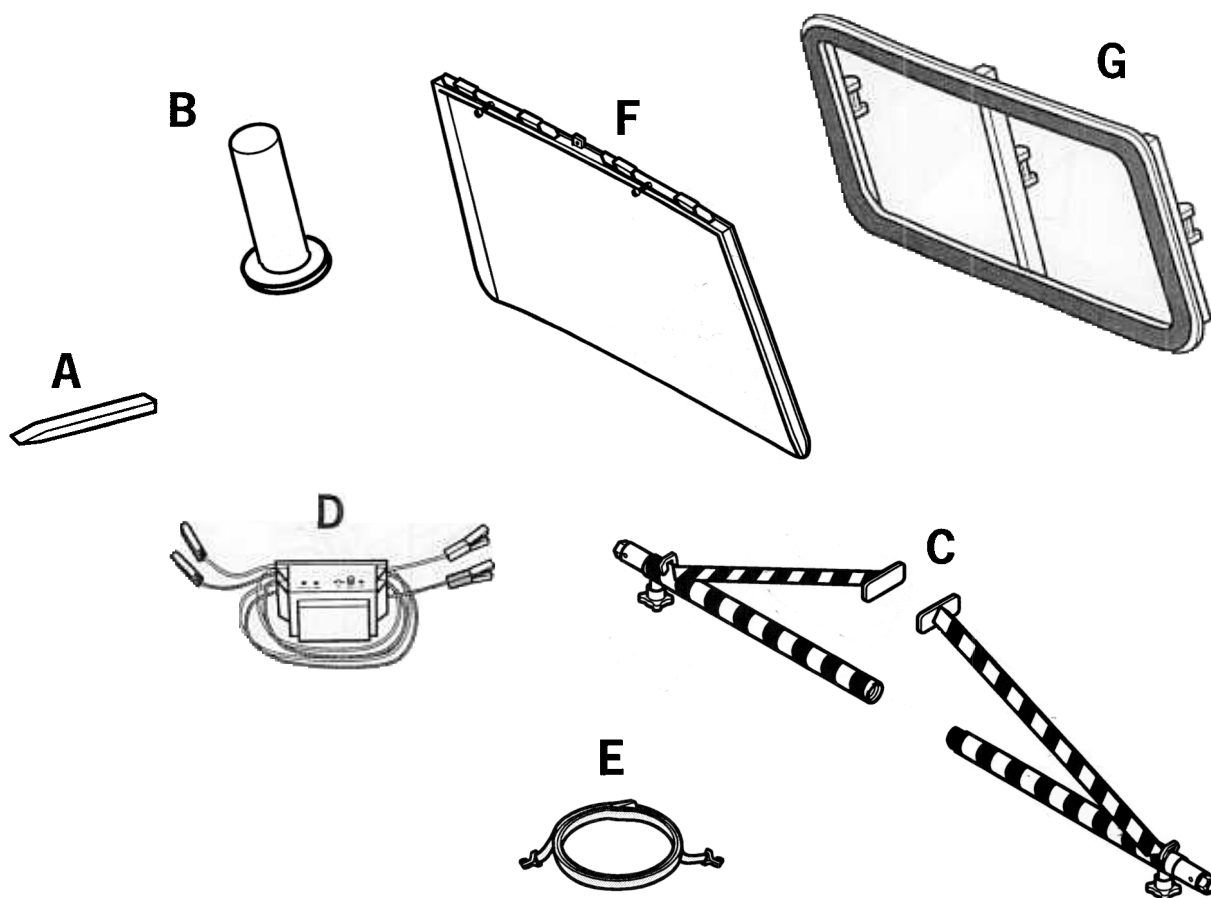
The adhesive joint does not attain its final strength immediately. The following conditions must be observed in order to ensure adequate strength of the glued joint:

| | |
|-------------|----------------|
| Curing time | 3 hours |
| Temperature | at least 10° C |
| Fixing time | approx. 1 hour |

The hardtop must not be used on the vehicle before the curing time has elapsed!

64 85 19 Removing and installing flexible rear window of Cabriolet

The following tools and materials are required for removal and installation of the flexible rear window of the Cabriolet:



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A = Spacer wedge

B = Tension bow support

C = Belt holder

D = Timer

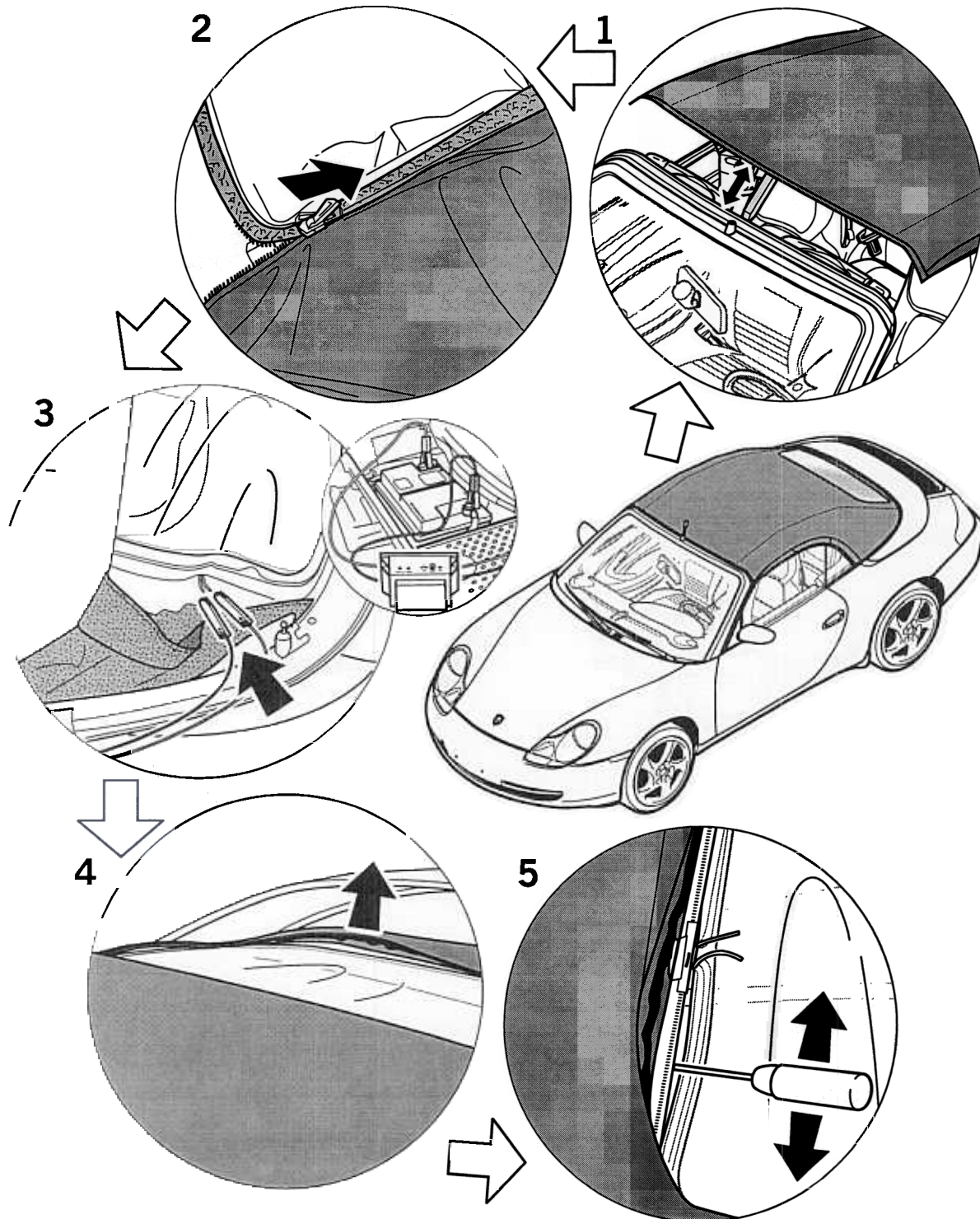
E = Belt strap

F = Inner plate

G = Pressure frame

Ordering address: refer to
Workshop Equipment Manual, Page: 3.6 – 11

Removing flexible rear window of Cabriolet



335_98

Removing flexible rear window of Cabriolet

**Warning:**

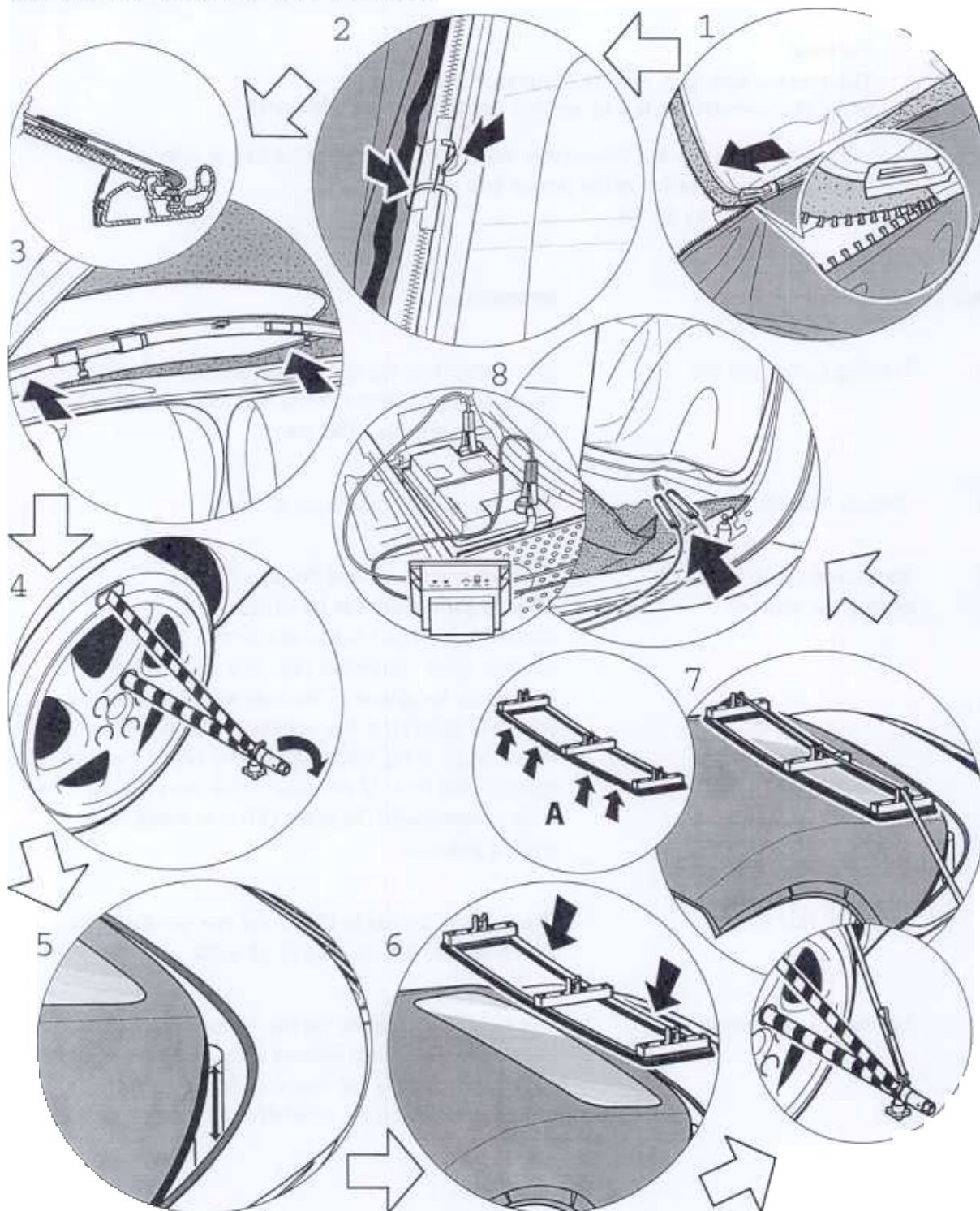
The tension bow seal can be damaged or destroyed;
move the convertible top to service position during this work!

> Important: Observe the "Convertible top service position" procedure in order to avoid
damage or destruction of the tension bow seal.

See: Serv. No. 61 01 19

| No. | Procedure | Instructions |
|-----|--|--|
| 1 | Relieving convertible top | Open convertible top and jam the spacer wedge between the windscreen frame and roof frame. Dimension approx. 300 mm |
| 2 | Opening headliner | Open the headliner zipper on all sides. |
| 3 | Connecting power cord and heating the adhesive | Bend out contact ends of the wire strands. Wire strands must not be crossed! Connect power cord to the wire strands as close as possible to the convertible top covering. The red LED will light up for approx. 5 seconds when the operating voltage is connected; this permits a polarity test. Press button of the switching clock to initiate the hot-melt process. The timer (2 minutes) set in the switching clock ends automatically. The green LED is lit during the welding process. |
| 4 | Detaching rear window | Use a plastic spatula to detach the rear window from the convertible top covering on all sides. |
| 5 | Removing rear window | Insert awl into zipper on the left, centre area, and undo the zipper on all sides. Remove raised adhesive residues from the convertible top covering. Adhesive residues that adhere uniformly on the convertible top can be left in place. |

Installing flexible rear window of Cabriolet



336_98

Installing flexible rear window of Cabriolet

**Caution!**

It is not permissible to close the convertible top with a rear window which is not glued in!

Damage (tearing) to the zip fastener connection on the convertible-top covering!

- > The adhesion (hot-melt process) between the rear window and the convertible-top covering must be implemented before closing the convertible top.

| No. | Procedure | Instructions |
|-----|----------------------------------|--|
| 1 | Inserting rear window | <p>Insert slider at the start of the rear window zip fastener. Position rear window in the convertible top covering aperture. Precisely align the ends of both zip fastener halves and insert the slider. Close the zip fastener up to the wire connections.</p> <p>If the zip fastener is offset by more than two teeth, this will produce high stress in the window radii and should be avoided.</p> |
| 2 | Pushing wire connections through | <p>Between the zip fastener and the convertible-top covering, push the two wire strands inward through the divided chambers of the Teflon insert.</p> <p>Do not cross the wire connections – danger of short circuit!</p> <p>Close the zip fastener completely and remove the slider.</p> |
| 3 | Fitting inner plate | <p>Insert the inner plate between the headliner and convertible-top covering onto the tension bow; while doing so, adjust centre of the rear window.</p> <p>Press inner plate against the convertible-top covering at top and pull forward against the corner bow. Push locking elements on left and right outward.</p> |

No. Procedure

Instructions

**Caution!**

Danger of impact with the belt strap holders fitted on wheel!

> Pay attention to the two projecting belt strap holders when working on the vehicle.

- | | | |
|---|--|--|
| 4 | Fitting belt strap holders on the wheel | Remove top wheel nut on the rim edge. Screw in push rod and tighten at the hexagon nut with the torque wrench. Tightening torque: 130 Nm (96 ftlb.) Push support bow onto the push rod and support it on the tyre sidewall. Tighten adjusting screw of the support. |
| 5 | Putting on pressure frame on the outside | Centre the pressure frame on the outside on the convertible top behind the rear window aperture. |
| 6 | Fitting support | Jam the support between the tension bow and the convertible-top rest. |

**Caution!**

Wire strand can crack and melt off and the rear window can be destroyed during heating!

> The pressure frame must be in contact on all sides.

- | | | |
|---|---|---|
| 7 | Fastening pressure frame on the outside | Engage the tension belt on the belt strap holder over the pressure frame by the wheel on the outside and tension. The pressure frame on the outside must evenly press the convertible-top covering against the rear window on all sides. The contact pressure can be checked on all sides with a – 0.5 mm feeler gauge. If the tension of the transverse struts (Figure A) of the pressure frame decreases, they can be re-bent in accordance with the shape. |
|---|---|---|

No. Procedure

Instructions

**Warning:****Danger of short circuit and burns at the convertible top!**

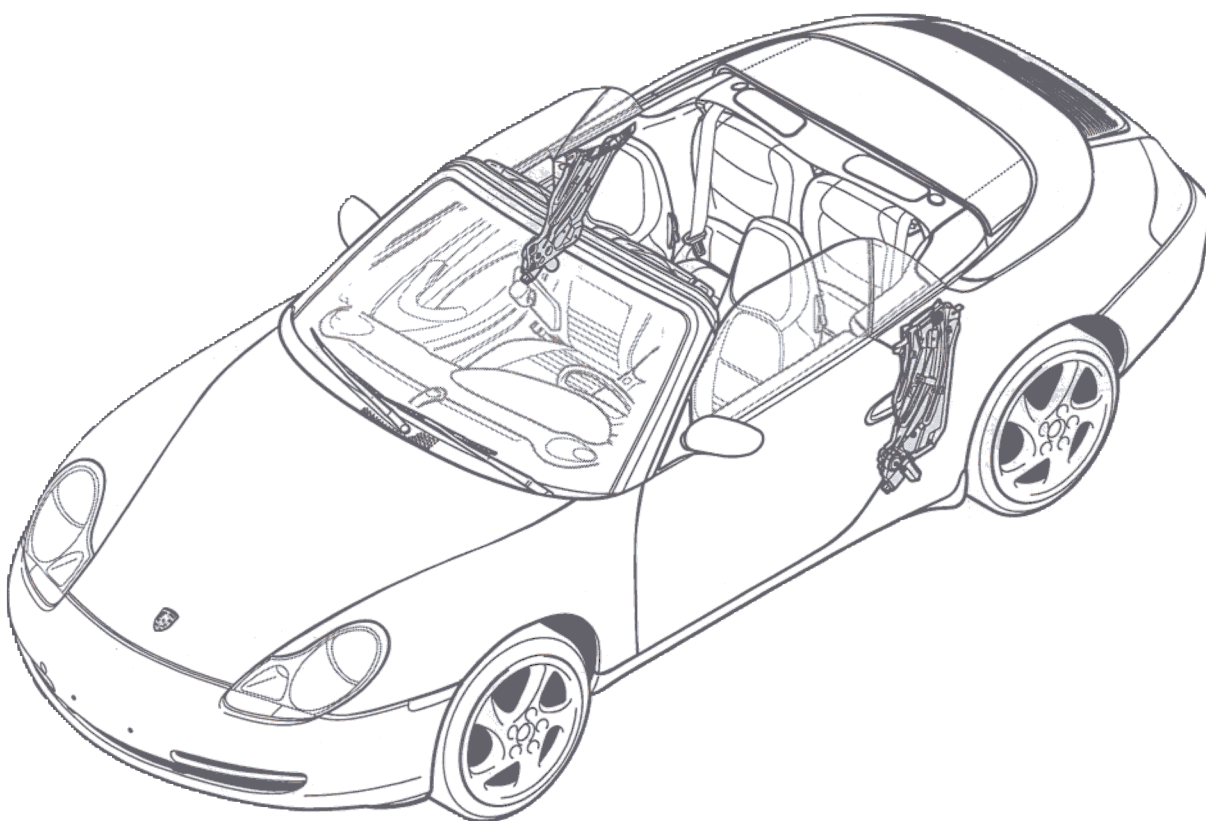
> Wire strands must not be crossed.

8 Connecting power cord

Connect power cord to the wire strands as close as possible to the convertible top covering. The red LED will light up for approx. 5 seconds when the operating voltage is connected; this permits a polarity test. Press button of the switching clock to initiate the hot-melt process. The timer **(2 minutes)** set in the switching clock ends automatically. The green LED is lit during the welding process. If smoke occurs, disconnect the power cord and check the contact pressure. Disconnect the power cords after the hot-melt process. Allow the bond to cool down for 20 minutes; the tools must remain on the convertible top during the cooling time. After the cooling time has elapsed, detach the belt strap and remove the tools. Check rear window bond for visibility and tightness; repeat steps No. 5 to No. 8 if necessary.

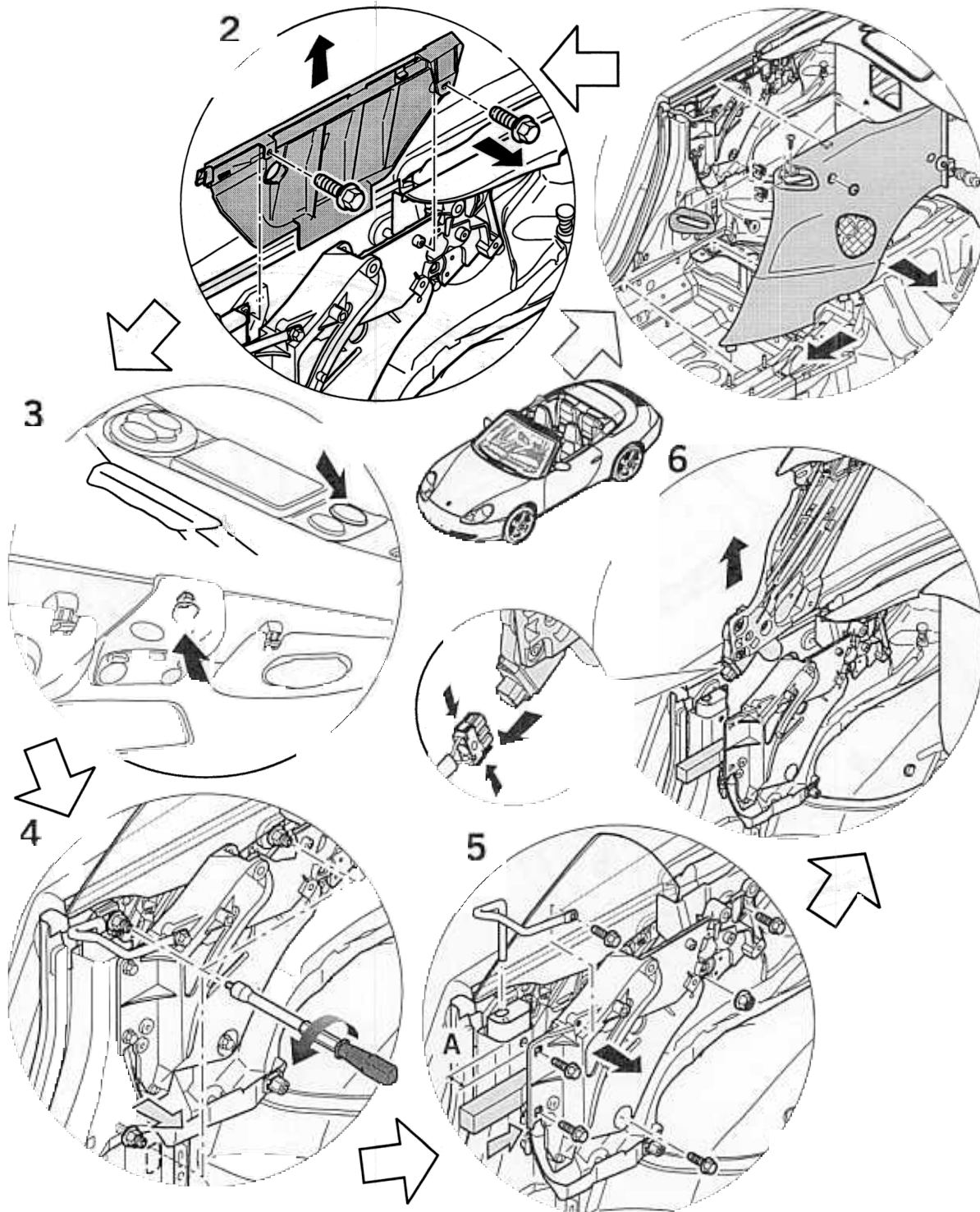
The belt strap tension must not be changed by entering or leaving the vehicle during the hot-melt process and the cooling time!

64 71 19 Removing and installing rear power windows (Cabriolet)




356_98

Removing power windows (Cabriolet)

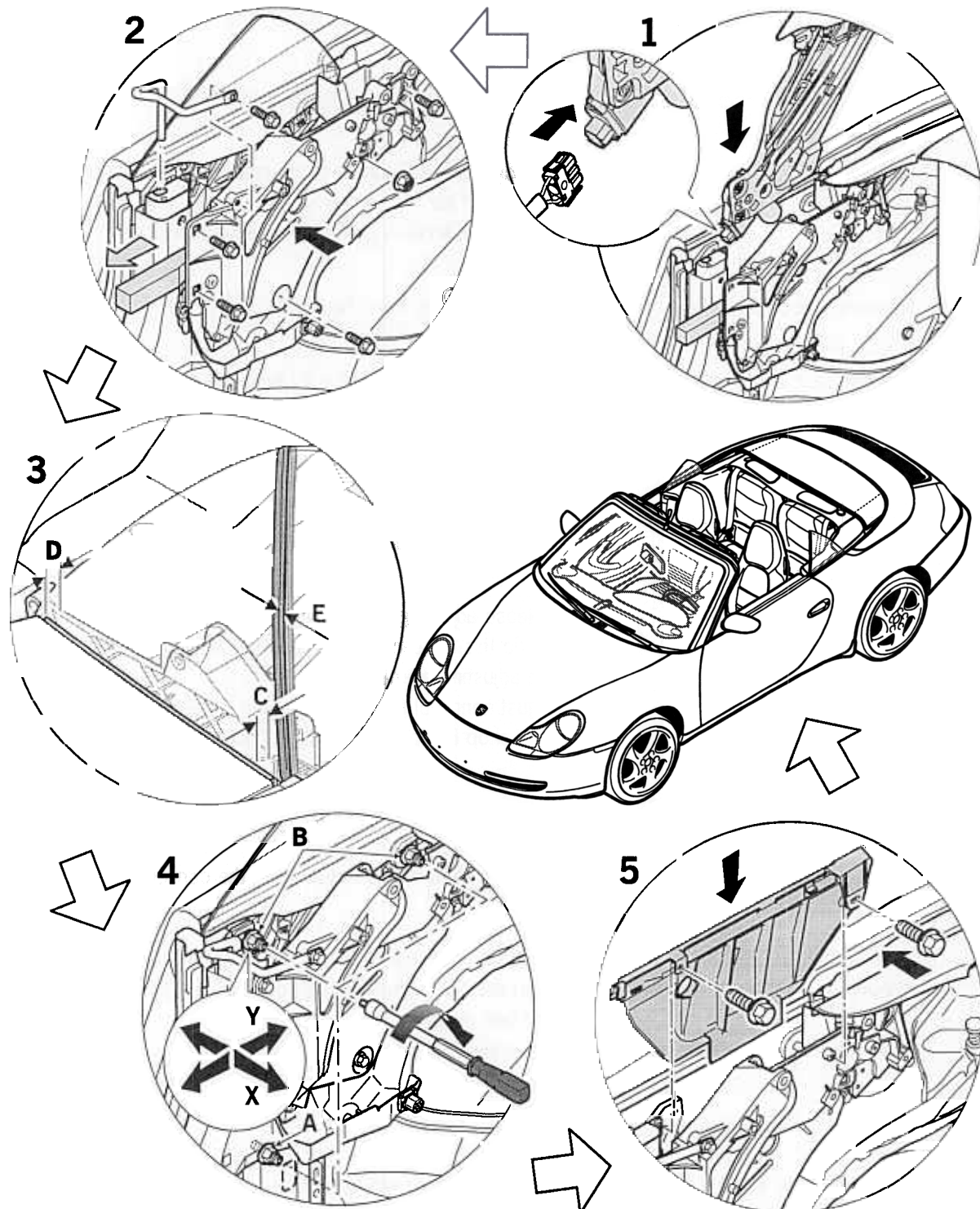


357.

Removing rear power windows (Cabriolet)

| No. | Procedure | Instructions |
|---|-------------------------------------|--|
| | Convertible top in service position | See procedure: Serv. No. 61 01 19 |
| | Note: | Removal and installation of the rear power window should be carried out with a rear window pane. Otherwise adjustment work is hindered during installation. |
| 1 | Remove side-panel lining | See procedure: Serv. No. 70 75 19 |
| 2 | Remove rear side window inner seal | Undo front and rear M6 x 20 hexagon nuts from the convertible-top support and the belt guide section, and pull rear side window inner seal up and out. |
| 3 | Close side window | Press the micro-switch in the windscreen frame and actuate the rocker switch at the same time. |
| 4 | Release power window | Release adjusting elements with the adjustment tool. To do this, loosen and unscrew the M8 nuts from the adjusting element. Adjustment tool for the rear power window. Refer to Workshop Equipment Manual, Chapter 2.4, No. 123-1 |
| <div style="display: flex; align-items: center;">  <div> <p>Warning:</p> <p>Damage to or destruction of the convertible top when the convertible-top support is removed!</p> <p>> The convertible top must no longer be electrically operated when the convertible-top support is detached.</p> </div> </div> | | |
| 5 | Detach convertible-top support | Undo M8 x 40 hexagon-head bolts and M8 hexagon nuts from the convertible-top support, pull the deflection fitting and belt guide section up and out. Pull convertible-top support inward and fix between B-pillar and the convertible-top support with a spacing block dimension A = 30 mm . |
| 6 | Remove power window | Push rear power window upward, push both locking tabs of the electrical connection outward and disconnect. |

Installing rear power windows (Cabriolet)



358_98

Installing rear power windows (Cabriolet)

| No. | Procedure | Instructions |
|-----|------------------------------------|---|
| | Insert power window | Connect electrical plug connections, insert power window into the window shaft from above and position in the mounts in the inner side section. |
| 2 | Screw down convertible-top support | Remove spacing block between B-pillar and convertible-top support. Position and fasten M8 x 40 hexagon-head bolts and M8 hexagon nuts in the convertible-top support. Tightening torque 23 Nm (17 ftlb.) Insert deflection fitting into the belt guide section. Insert and screw in M8 x 20 hexagon-head bolt. Tightening torque 50 Nm (37 ftlb.) |
| 3,4 | Adjust and screw down power window | By moving the power window with respect to the longitudinal axis of the vehicle, the power window can be adjusted by dimension Y = ± 10 mm . The contact pressure of the side window upper edge on the convertible-top is adjusted by screwing the adjusting element in or out by dimension X = ± 10 mm . The contact pressure on the rear window inner seal or the offset from the door window is adjusted by screwing both of the upper adjusting elements B in or out by dimension X = ± 5 mm . Adjustment tool for the rear power window, see Workshop Equipment Manual, Chapter 2.4 No. 123-1 Step 1: (Figure 3) Adjust the basic setting of the adjusting elements B from the top edge of the rear side section to the side window. Dimension C Front top edge of rear side section = 11 mm Dimension D Rear top edge of rear side section = 14 mm Step 2: (Figure 3) Push the power window backward or forward to adjust the gap between the side window and door window to E = 9 mm . Step 3: (Figure 4) Adjust the contour or the offset from the door window on adjusting element A . Screw down adjusting elements A , B . Tightening torque 23 Nm (17 ftlb.) |

| No. | Procedure | Instructions |
|-----|-------------------------------------|---|
| 4 | Install rear side window inner seal | Insert rear side window inner seal into rear side section slot and position on the convertible-top support or belt guide section. Insert and screw in using M8 x 20 hexagon-head bolt. |
| 5 | Install side-panel lining | See: Serv. No. 70 75 19 |

Additional instructions for adjusting or replacing the rear power window

The rear power windows can be operated if:

1. - the convertible-top is closed.
 - the ignition is switched on.
3. - after the ignition is switched off, if the ignition key is not removed from the steering lock.
4. - after the ignition is switched off until a door is opened for the first time.
5. - the door is open, USA vehicles do not have this function.

Blockage detection function

If the window drive encounters resistance when activated, the motor is switched off after a delay of 500 ms.

If the rocker switch is pressed again within 10 seconds, the side window closes the power window with all of its closing force.

The anti-crushing protection is deactivated.

Standardising the system

The system must be re-standardised after an interruption in the power supply to the power window electronics.

To do this the convertible top must be closed.

The position-controlled lowering function in the case of convertible top actuation, and enabling for "automatic start-up" of window closing and opening are redefined.

The standardisation process is initiated by continuous actuation of the operating button toward **"close window"**. **To do this the convertible top must be closed and the hardtop must be fitted.**

The button must be held until the window is closed and is switched off by the blockage detection function of the power window regulators.

64 75 19 Removing and installing side window (Cabriolet)

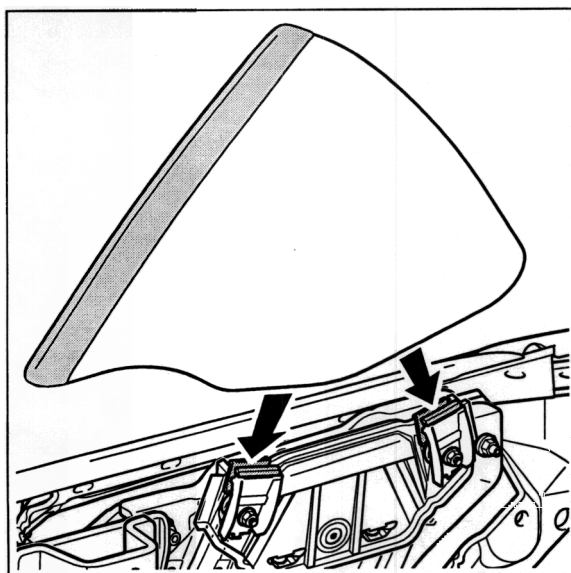
Removing the side window

Release the side window from the clamping jaws of the rear power window with the side-panel lining and rear side window inner seal removed and the side window extended. To do this press the micro-switch in the windscreen frame and actuate the rocker switch at the same time until the side window is completely extended.

See: Serv. No. 64 71 19

Lift the side window upward out of the rear side section slot.

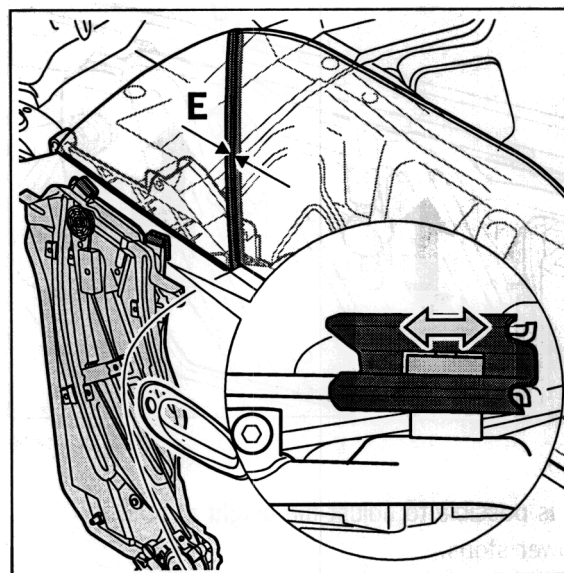
Installing the side window in the clamping jaws



408_98

The convertible top must be open to fit the side window. The power window must be in the upper position. Insert the side window through the side section slot into the clamping jaws of the front and rear drivers.

Adjusting the side window angle in the vehicle's longitudinal direction

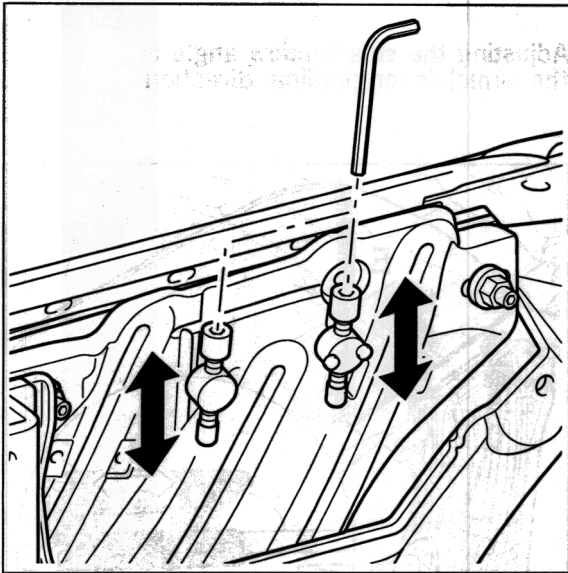


360_98

Moving the side window into the clamping jaws on the receiving rollers equalizes the angle of the side window to the door window. The window bottom edge must lie against the receiving rollers in the clamping jaws. Adjust the side window according to the contour of the door window and the **gap E = 9 mm**. Tighten the clamping jaws after completing the adjustment.

**Tightening torque: 8.5 ± 1.5 Nm
(6.5 ± 1 ftlb.)**

Adjusting the lower stop of the power window regulator



414_98

It is possible to adjust the height of both lower stops.

However, this should only be adjusted synchronously.

The adjustment is only possible when the side window is lowered.

64 76 19 Removing and installing side window seal (Cabriolet)**Removing side window seal**

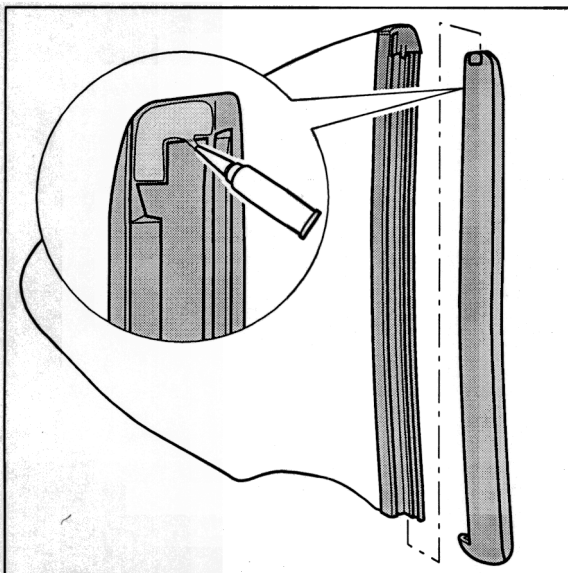
Remove the side window seal with the convertible top open and the side window extended. To do this press the micro-switch in the windscreen frame and actuate the rocker switch at the same time until the side window is completely extended.

See: Serv. No. 61 71 19

Pull side window seal down and out of the window profile.

Clean the upper seal end (free from grease and lubricant).

Coat the upper surface of the seal (see inset) with *Loctite 480* instant adhesive, and bond with the profile of the side window.

Installing side window seal

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Remove adhesive residues from above and below the window profile if present.

Pull the side window seal from below into the window profile. Pull it in using soapy water as a lubricant.

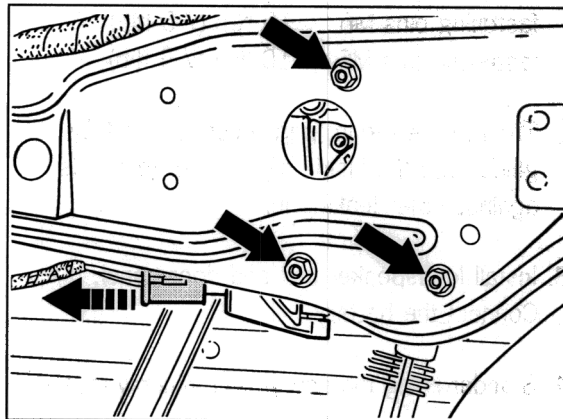
64 54 19 Removing and installing power window motor**Removal**

1. Close door window.

**Warning:**

Airbag could inflate. Danger of injury or damage during fitting

- > 1. Remove ignition key.
 - > 2. Disconnect and cover the negative terminal of the battery.
 - > 3. After the battery is disconnected, assembly work or work on the vehicle may be started after a waiting period of 1 minute.
2. Remove door panel and loudspeaker unit.
Carefully remove (do not crack) the front moulded foam part from the inside of the door near the power window motor and the loudspeaker cut-out. Disassembling and assembling door trim panel, see Serv. No. 70 59 37.
 3. Remove fastening nuts (3 M6 nuts) from the power window motor.
 4. Press the power window unit out of the inner door panel until the fastening pins are free.
 5. Unlock and remove the electrical plug connection on both sides.
 6. Unscrew fastening pins of power window motor. Remove power window unit from the tothing and take out through the loudspeaker cut-out.



056_99

Installation

1. Install power window motor and engage electrical plug connection.

Tightening torque of the

fastening pins M6 10 Nm (7.5 ftlb)

fastening nuts M6 10 Nm (7.5 ftlb)

2. The moulded foam part must be carefully glued onto the inside of the door (protects against water leaking in).
3. Install loudspeaker unit and door panel.
Connect the battery.
4. Standardising the new power window motor

Switch ignition on.

Open door window completely by continuously actuating the power window operating button, and then close window. Press button until the window is closed and is switched off by the blockage detection function of the power window motor. This completes standardisation.

- Perform a function test.

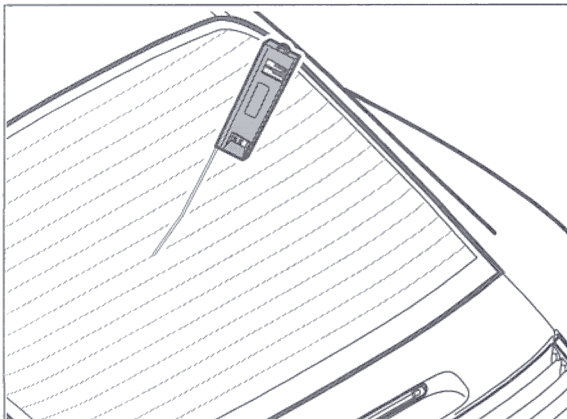
64 86 01 Checking function of heating for rear window**Note**

The function of the heating for the rear window can be checked with a temperature probe with digital display (see Workshop Equipment Manual). The indicator light in the rocker switch also lights up if a fault is present and the heating wires in the rear window do not warm up.

4. If no temperature increase is shown, the fault must be detected from the wiring diagram.

Check with the temperature probe

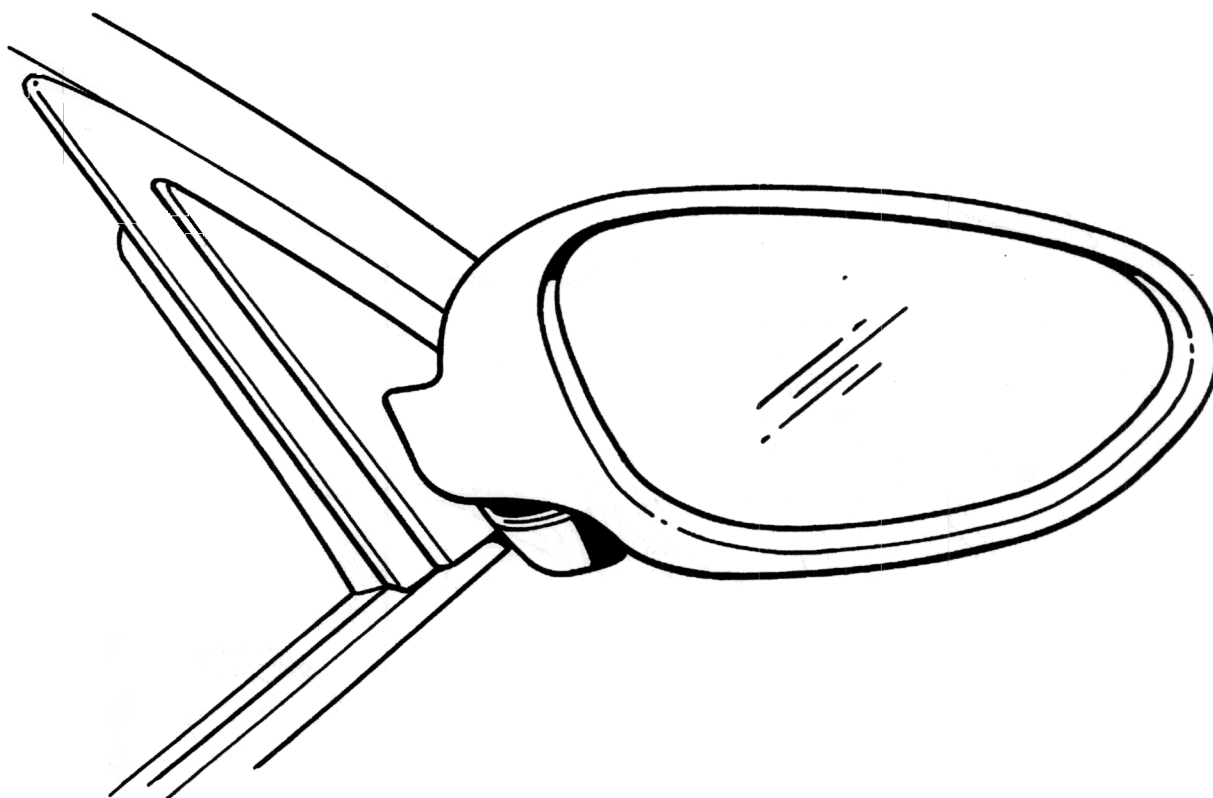
1. The tip of the sensor is used to measure from the outside on the centre of the rear window.
2. One of the heating wires on the rear window must run exactly under the tip of the sensor for this procedure.



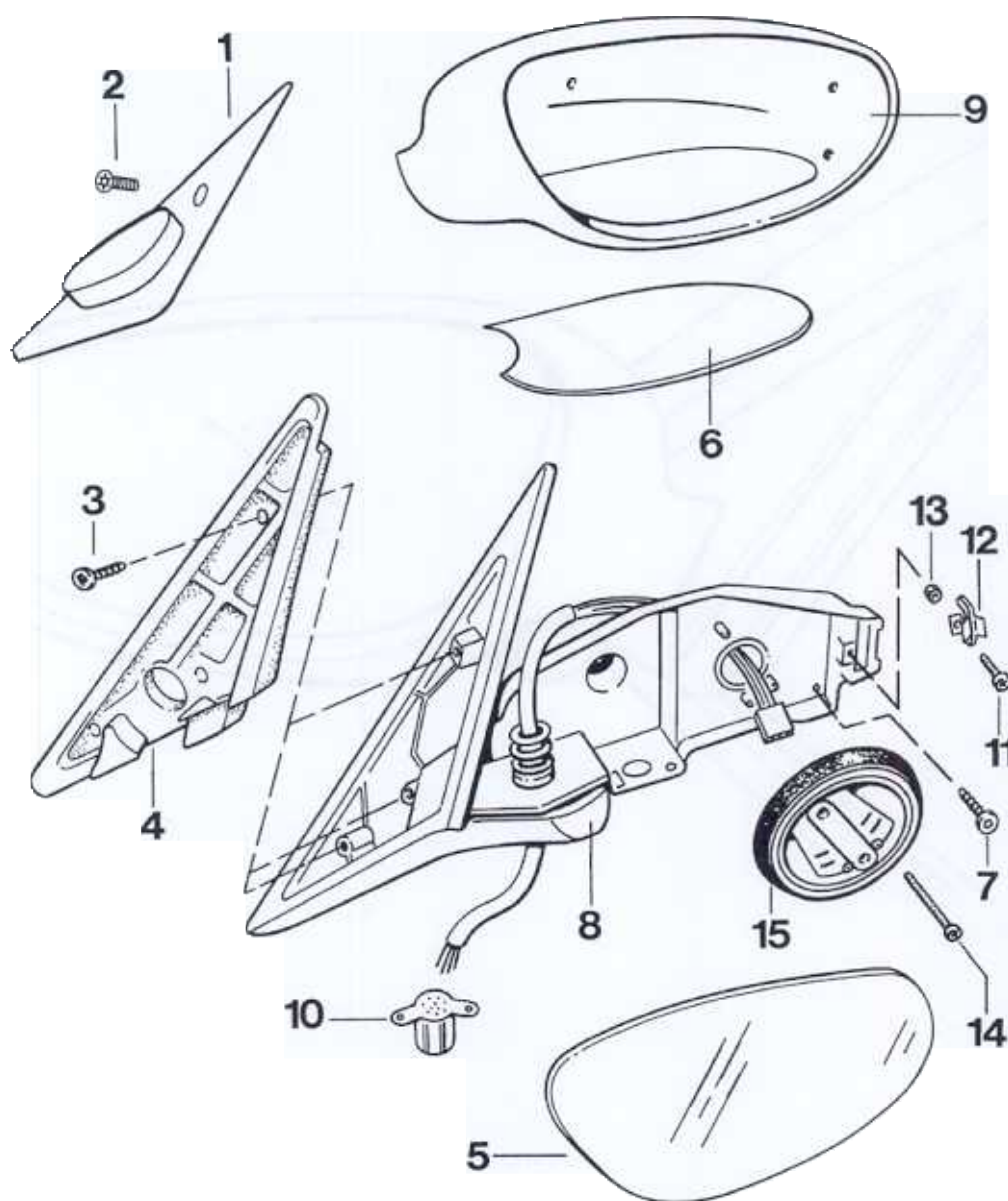
150_99

3. After switching on at room temperature and a period of **2 minutes**, the temperature must increase by approx. **2 degrees**.

66 89 37 Disassembling and assembling the rearview mirror



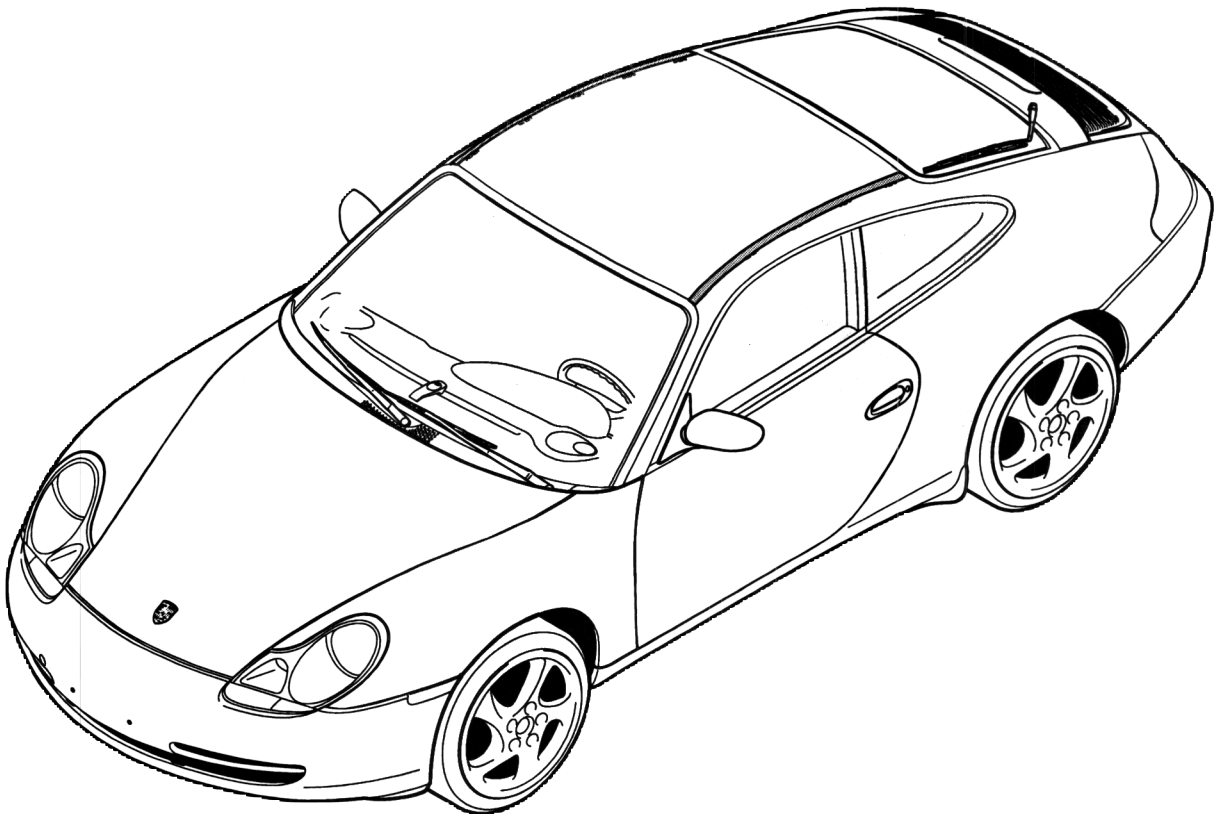
Disassembling and assembling the rearview mirror



Disassembling and assembling the rearview mirror

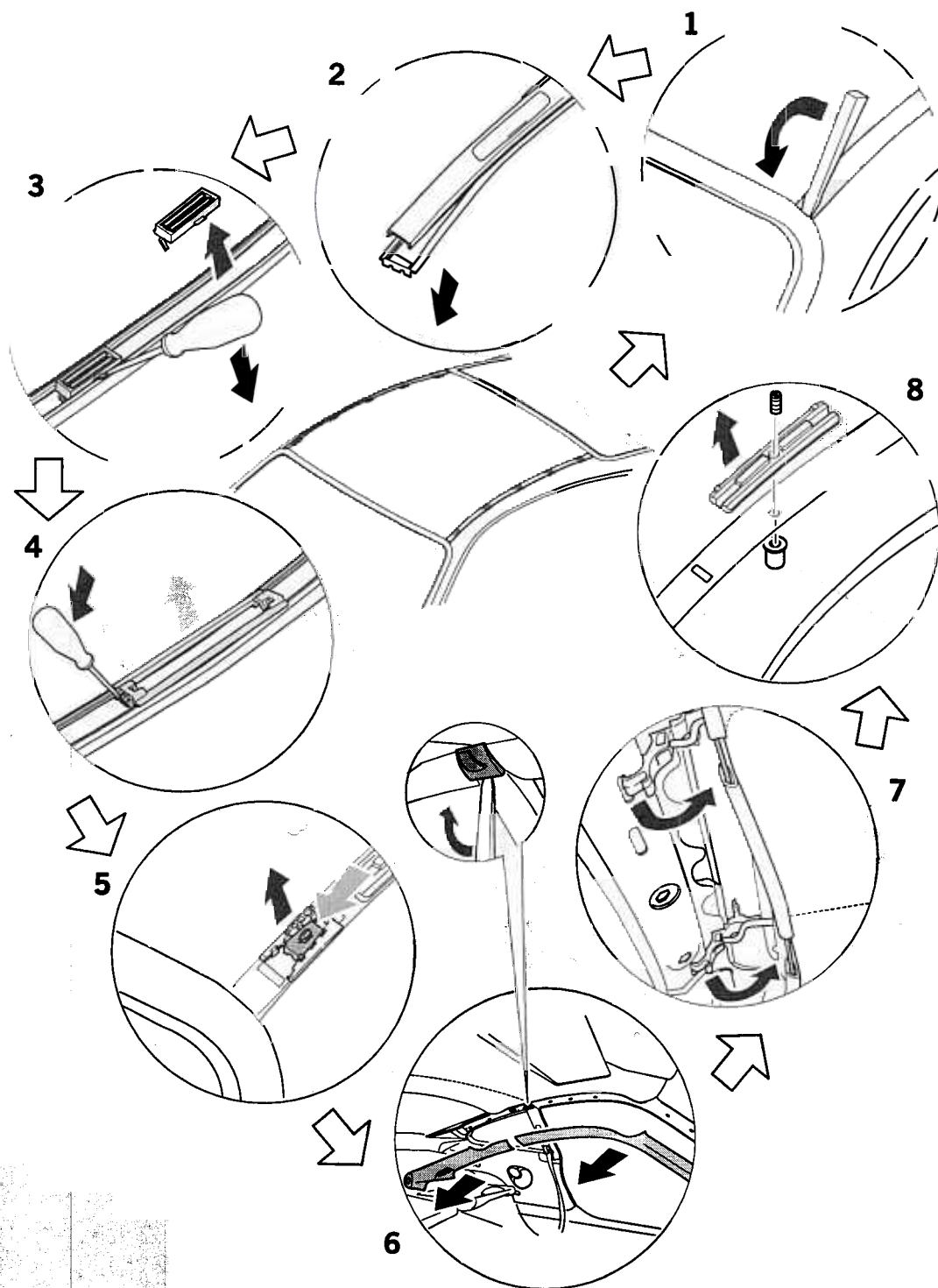
| No. | Designation | Qty. | Removal | Note: | |
|-----|--------------------------------|------|------------------------------------|--|--|
| | | | | Installation | |
| 1 | Cover | 1 | Unclip. | Clip in | |
| 2 | Oval head screw B3.5 | 1 | | | |
| 3 | Oval-head screw T10 M5 x 30 | 3 | | | |
| 4 | Filler piece | 1 | | | |
| 5 | Mirror glass | 1 | Unclip, pull off plug contacts. | Insert and clip in plug con- tacts | |
| 6 | Mirror shell bottom section | 1 | | | |
| 7 | Countersunk screw | 3 | | | |
| 8 | Mirror base | 1 | Undo countersunk screws | Securely tighten counter- sunk screws | |
| 9 | Mirror shell | 1 | | | |
| 10 | Plug | 1 | Disconnect plug connection. | Replace, make plug con- nection | |
| 11 | Oval-head screw M5 x 14 | 1 | | | |
| 12 | Spring clamp | 1 | Undo hexagon nut | Screw hexagon nut tight | |
| 13 | Hexagon nut M5 | 1 | | | |
| 14 | Oval-head screw M3 x 30 | 3 | | | |
| 15 | Positioning motor | 1 | Detach positioning motor | Securely screw positioning motor | |

66 36 19 Removing and installing roof joint strip



572_97

Removing roof joint strip

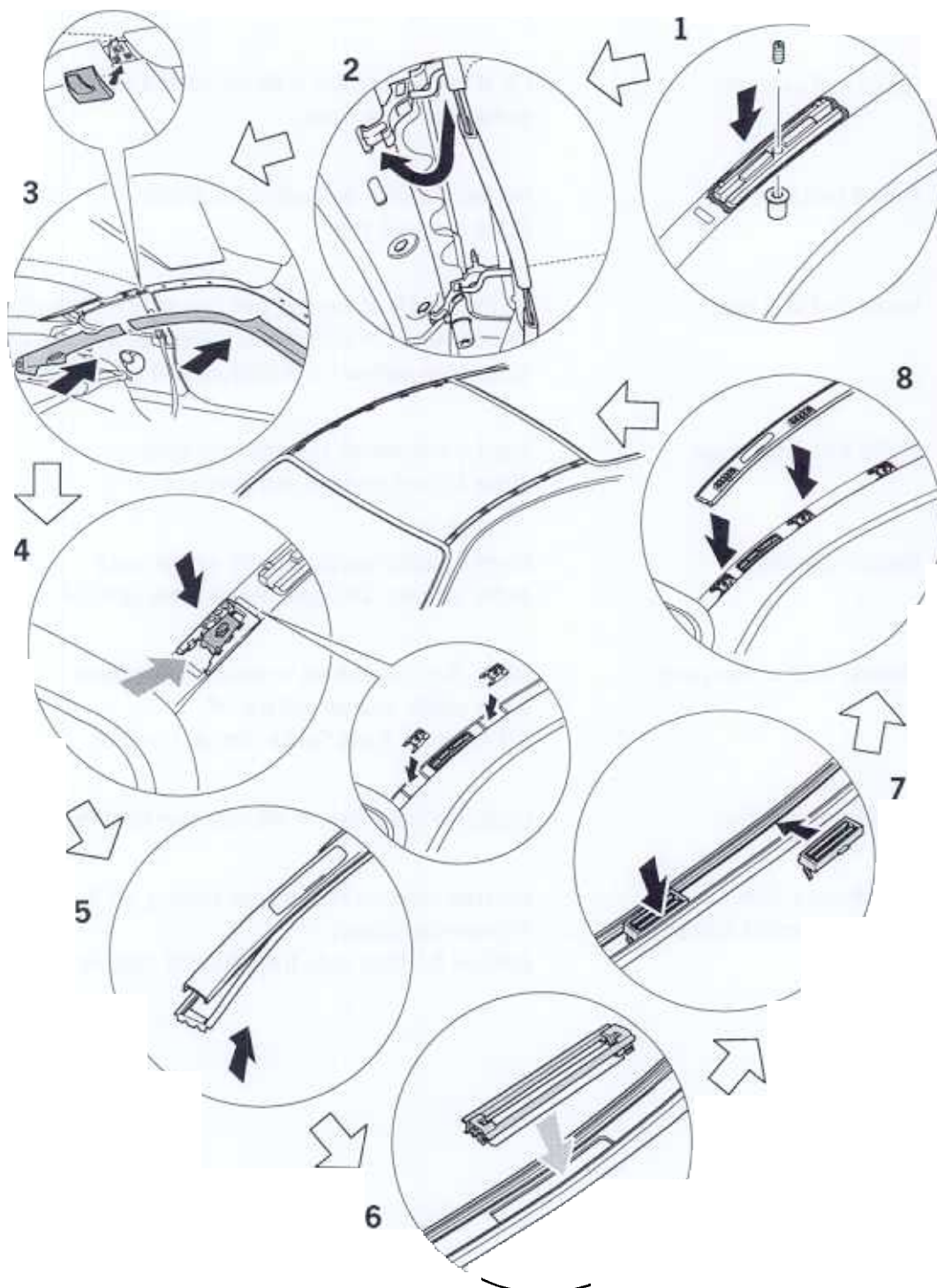


573_97

Removing roof joint strip

| No. | Procedure | Instructions |
|------------|---|---|
| 1 | Unclip roof joint strip | Lift at both ends using a plastic spatula and unclip all the way along. |
| 2 | Pull off roof joint seal | Pull the roof joint seal out of the groove of the roof joint strip. |
| 3 | Unclip roof joint clips | On the outside of the roof joint clip and roof joint strip, insert a narrow screwdriver in the center and press the screwdriver outward until the roof joint clip disengages. |
| 4 | Unclip fold-out element | Insert a screwdriver beneath both ends of the fold-out element, and lever out. |
| 5 | Detach spreader | Insert a plastic spatula into the wedge piece of the spreader and push. Remove the spreader. |
| 6 | Remove interior trim parts | Lift up the clothes hook bracket at the bottom with a plastic spatula and pull off. Pull away the A and C-pillar trim and remove. |
| 7 | Detach the roof liner | Unclip the metal strut of the roof liner from the plastic clips. |
| 8 | Detach base plate of Roof Transport System. | Unscrew hexagon socket head bushing a/f 8 (micro-encapsulated). Remove the base plate from the roof channel. |

Installing roof joint strip

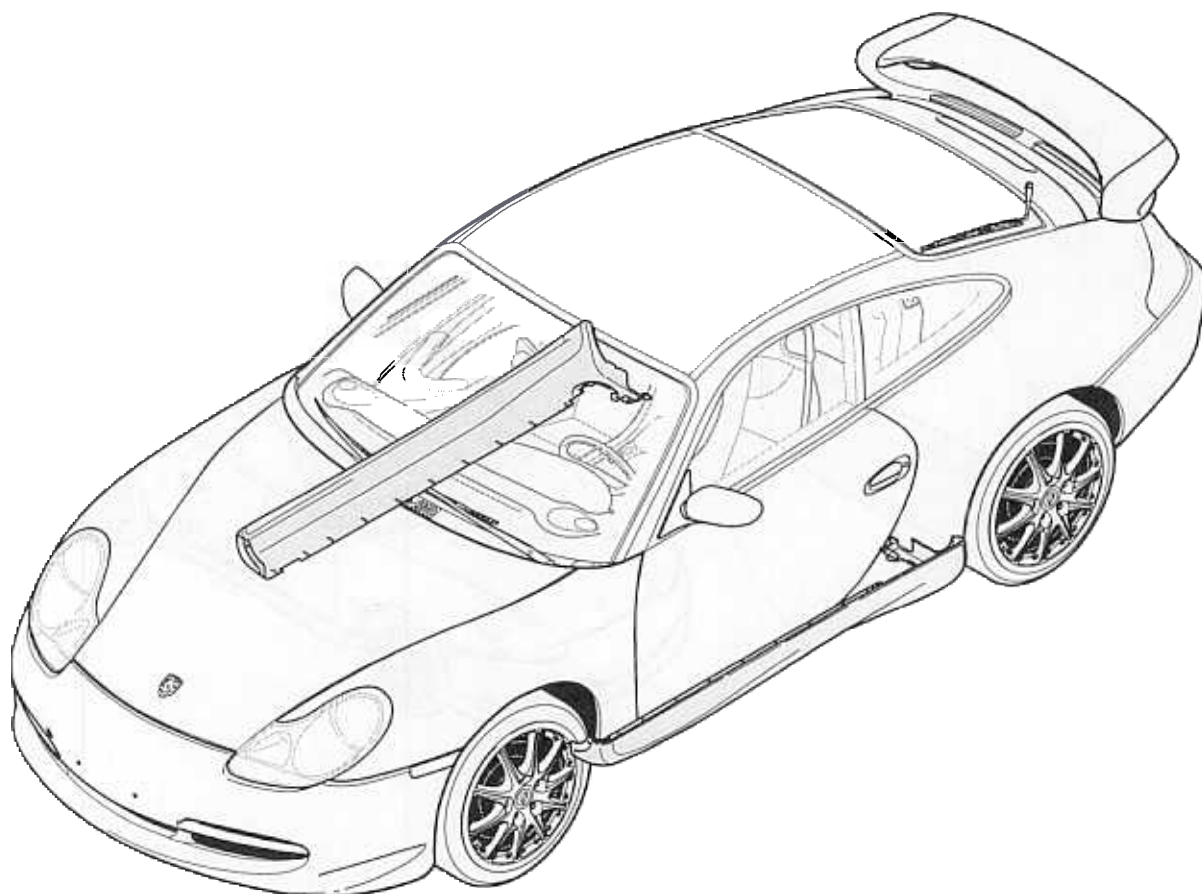


574_97

Installing roof joint strip

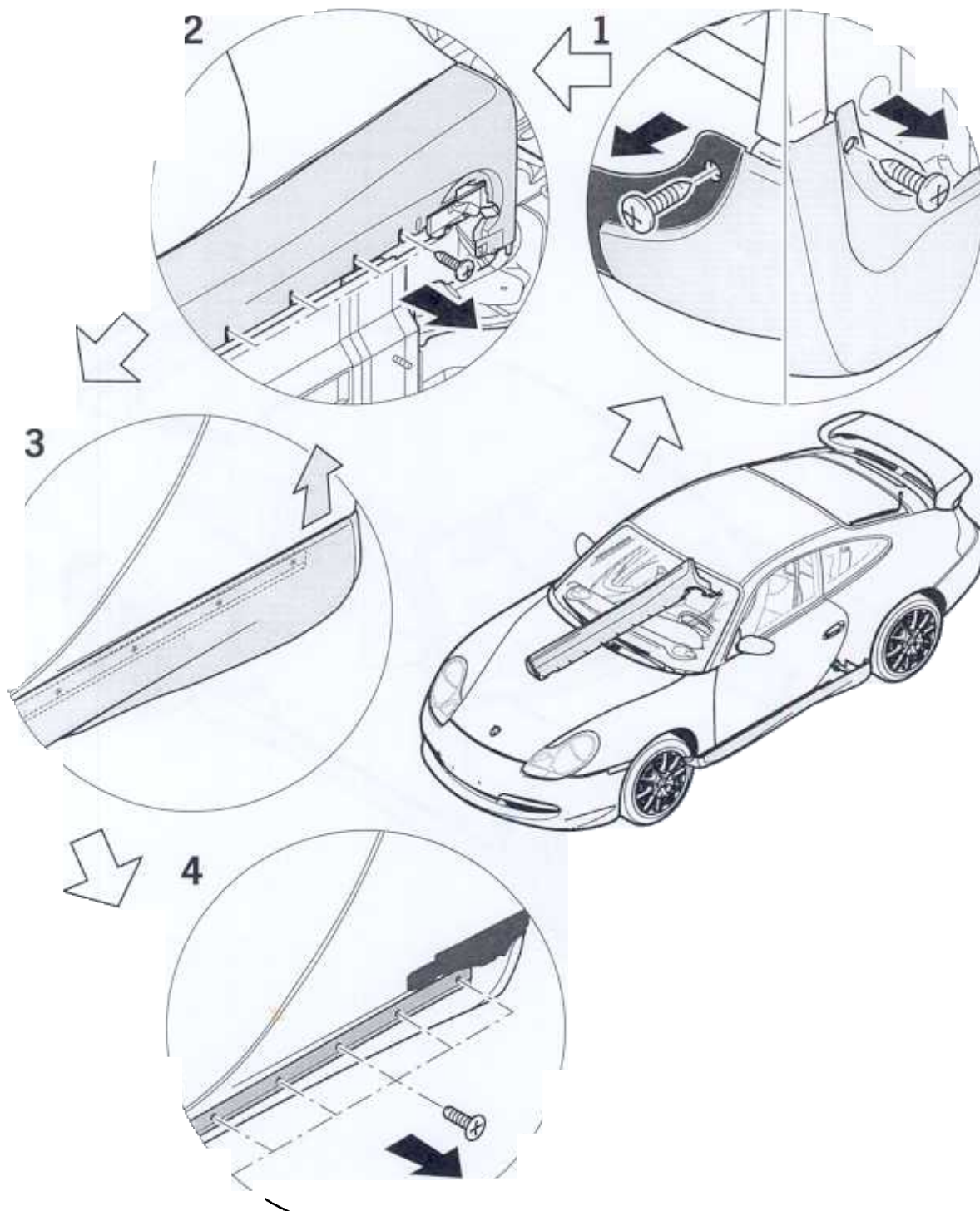
| No. | Procedure | Instructions |
|-----|---|--|
| 1 | Fit base plate of Roof Transport System | The contact surface of the base plate must be free from dirt and grease. Position the base plate of the Roof Transport System in the roof channel parallel to the roof channel. Insert the hexagon socket head bushing a/f 8 (micro-encapsulated) and tighten to a torque of 35 Nm (26 ftlb.) . Seal the base plate in the roof channel all the way round with sealant (Porsche part). |
| 2 | Attach roof liner | Push the metal strut of the roof liner into the plastic clips. |
| 3 | Fit interior trim parts | Position and clip in A and P-pillar trim. Fit the clothes hook bracket. |
| 4 | Fit spreaders | Position 5 spreaders per roof channel in the recesses, beginning at the front. Press the spreader right down into the roof channel, and push the wedge piece into the spreader until the latter is braced in the roof channel. |
| 5 | Fit roof joint seal | Push the roof joint seal onto the roof joint strip all the way round. |
| 6 | Clip in fold-out elements | Position the fold-out element in the cut-out of the roof joint strip, and press in the lugs at the ends until they lock into place. |
| 7 | Clip in roof joint clips | Insert the roof joint clips narrow side first and press in until the lug in the center locks into place. |
| 8 | Fit roof joint strip | Position the roof joint strip over the roof channel, and align the roof joint clips in the roof joint strip with the spreaders so that they lie directly above one another. Push on the roof joint strip. |

66 31 19 Removing and installing sill cover – GT3



43_99

Removing sill cover – GT3



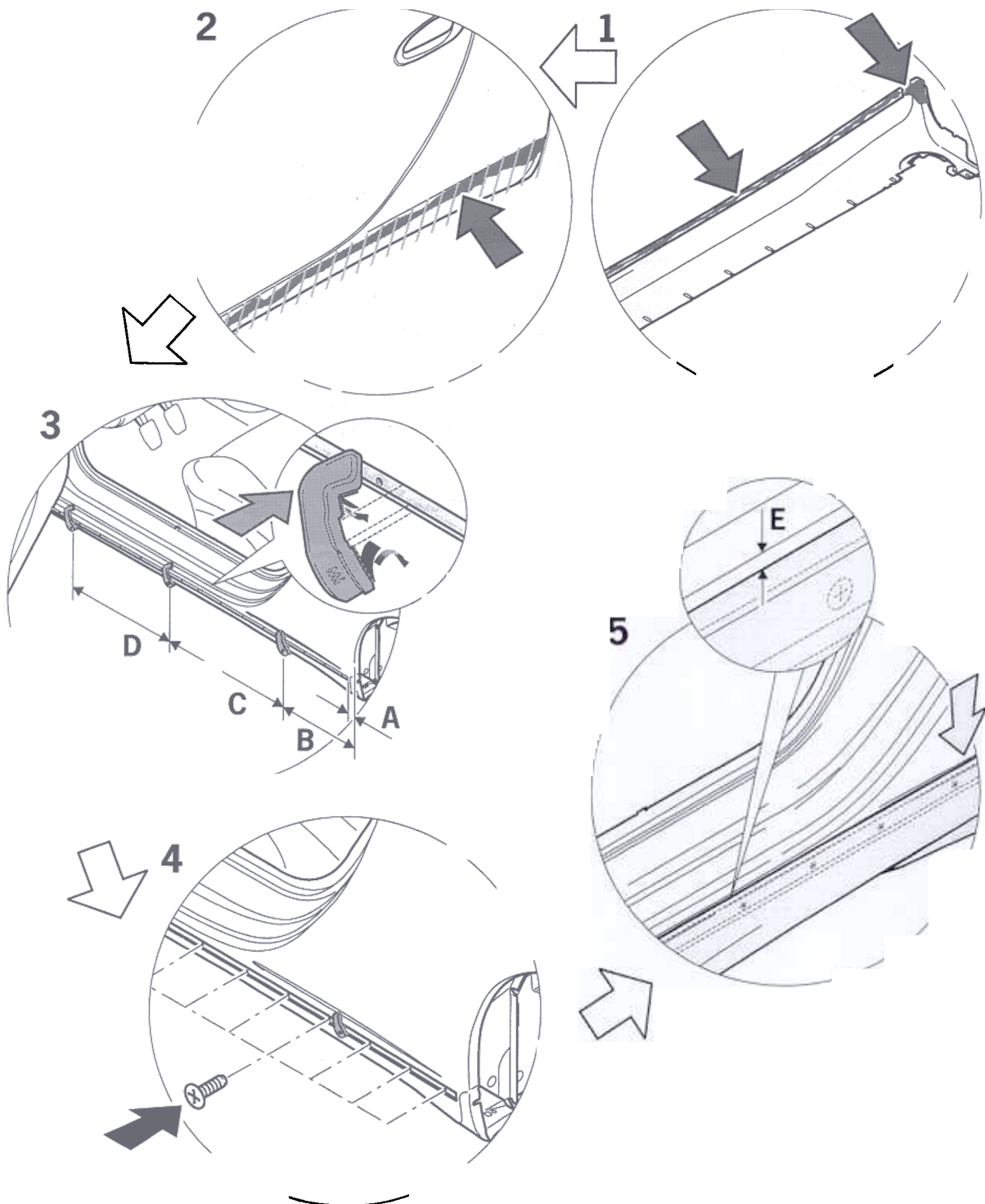
67_99

Removing sill cover – GT3

Remove the rear wheel housing liner accessories Serv. No. 53 69.

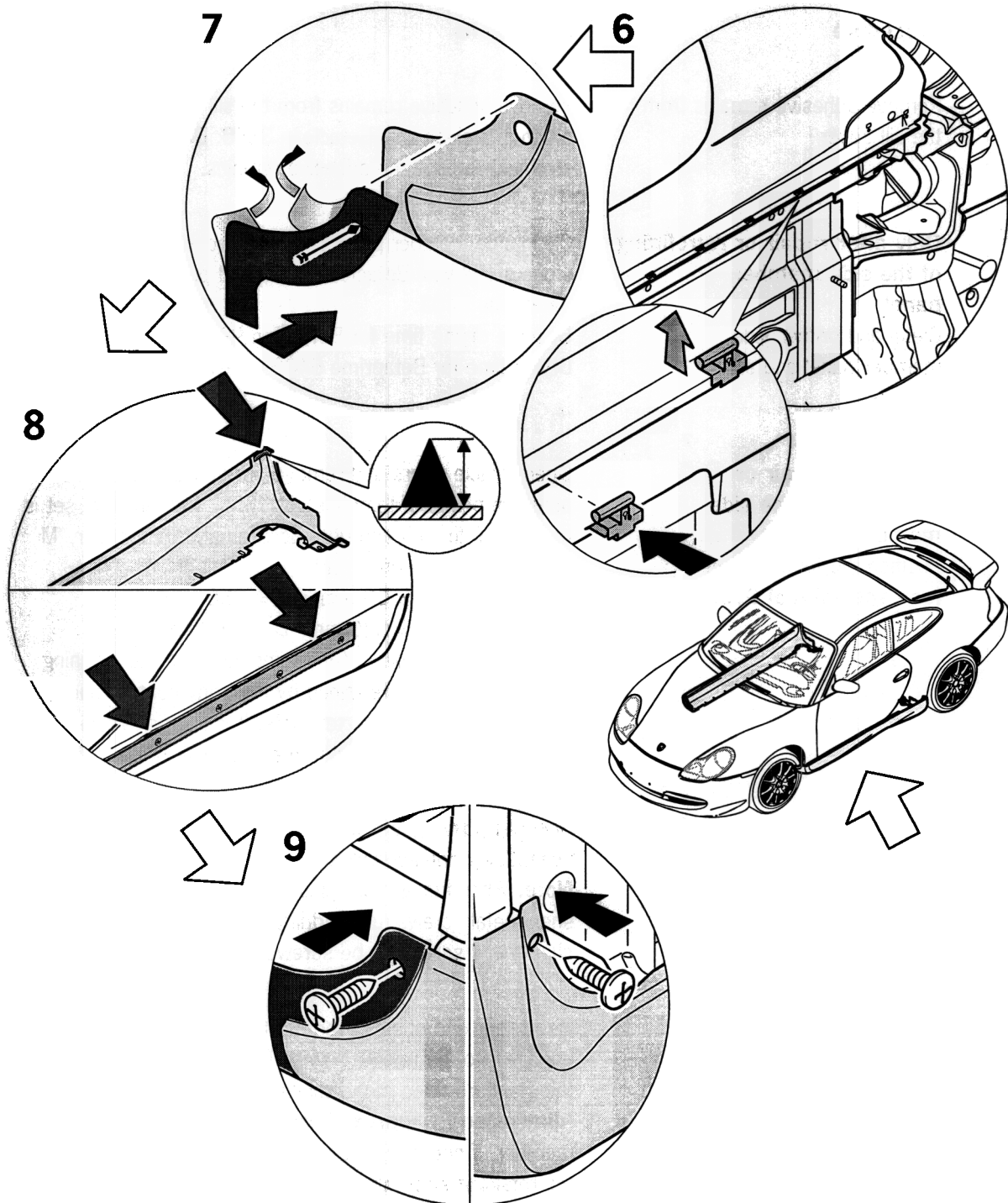
| No. | Procedure | Instructions |
|-----|---|---|
| 1 | Unscrew side member panel at the sides | Undo the sheetmetal screws 4.8 x 13 on the fastening points of the side member panel at the front and rear wheel housing. |
| 2 | Undo side member panel at vehicle floor | Undo the sheetmetal screws 4.8 x 13 on the fastening points of the side member panel on the vehicle floor. |
| 3 | Detach side member panel | Starting at the rear, pull the side member panel upward out of the retaining strip. |
| 4 | Detach retaining strip | Unscrew the countersunk cross-recess screws out of the retaining strip with a screwdriver. |

Installing sill cover – GT3



68_99

Installing sill cover – GT3

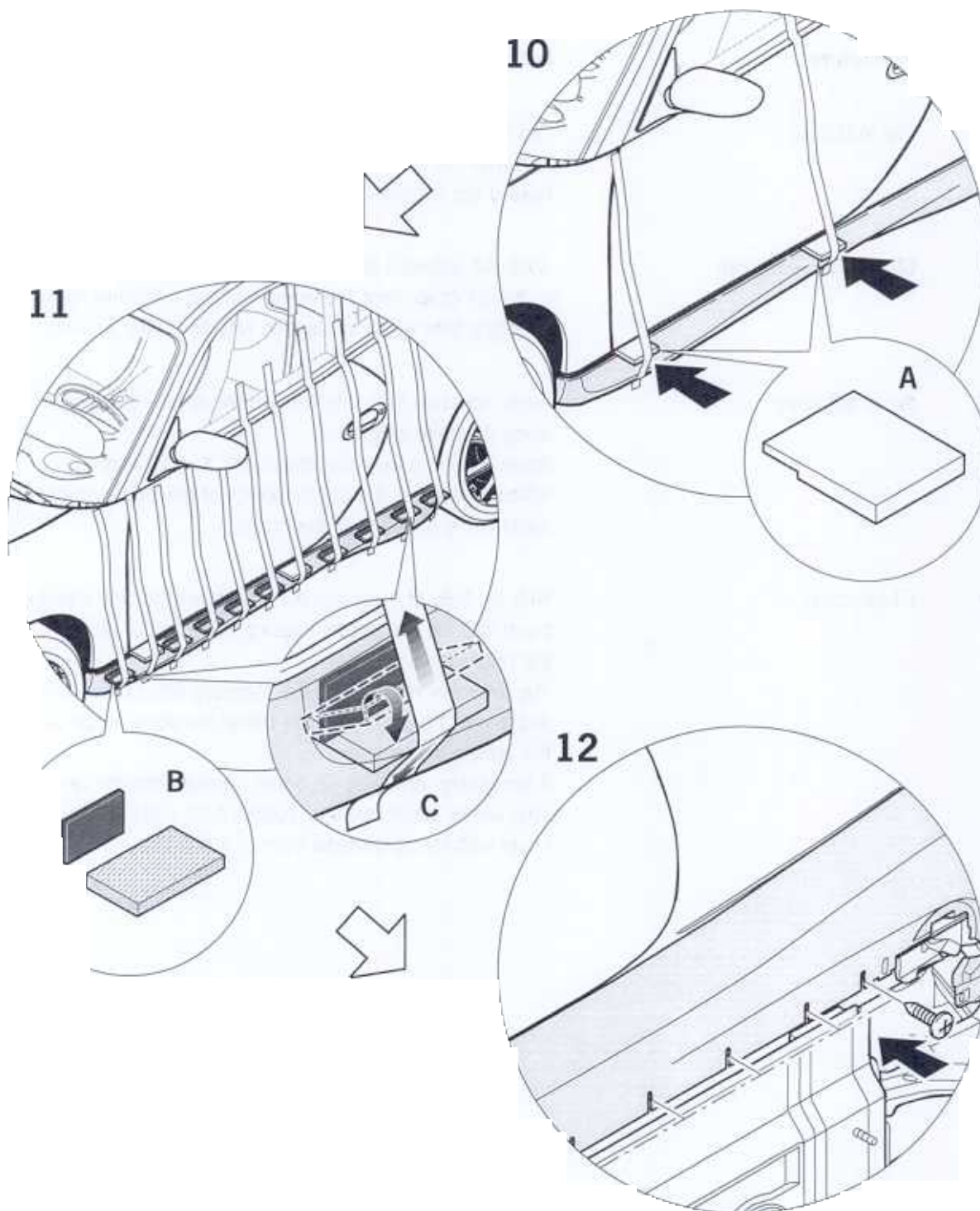


69_99

Installing sill cover – GT3

| No. | Procedure | Instructions |
|-----|-----------------------|---|
| 6 | Clip in U-clips | Clip in U-clips on the vehicle underside on the rim of the side member panel. The tab of the U-clips must point toward the outside of the vehicle. |
| 7 | Glue on adhesive film | Stick the adhesive film onto the fastening point at the front of the sill cover near the wheel housing. Puncture the fastening hole which is covered with film using an awl. |
| 8 | Apply adhesive | <p>Apply adhesive flush into the groove of the retaining strip along its entire length.</p> <p>Apply a 40 mm long and dimension X = 10 mm high adhesive bead to the corner points of the side member panel in the direction of the arrow.</p> |
| 9 | Fit sill cover | <p>With the help of a second person, insert the side member panel into the rear wheel housing and into the groove of the retaining strip.</p> <p>The sill cover must cover the standard fitted stone shield and should be seated 5 mm below the upper edge of the vehicle side member.</p> <p>If necessary, drive the sill cover carefully into the retaining strip with a plastic wedge. Tighten both ends of the sill cover with the sheetmetal screws 4.8 x 13.</p> |

Installing sill cover – GT3



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| No. | Procedure | Instructions |
|-----|--|---|
| 10 | Position assembly aids Use special tool no. 9655/1 | Stick suitable adhesive tape, e.g. white Tesa tape 4651, loosely onto the door and the sill cover. Insert the assembly aids vertically from above the adhesive tapes into the door gap. Tilt the assembly aids outward horizontally, thereby putting pressure on the adhesive tapes. |
| 11 | Position wooden spacer blocks Shop-made wooden spacer blocks 9 ea. 70 x 90 x 12 | Stick suitable adhesive tape, e.g. white Tesa tape 4651, loosely onto the door and the sill cover. Insert the wooden spacer blocks vertically from above between the adhesive tapes and the sill cover with the rubber base towards the paint side. Tilt the wooden spacer blocks outward horizontally, thereby putting pressure on the adhesive tapes. |
| 12 | Screw sill cover onto vehicle floor | Tighten the sheetmetal screws 4.8 x 13 on the fastening points of the sill cover on the vehicle floor. Note: When screwing in the lower sheetmetal screws, the sill cover must be pressed outwards to reduce the gap dimension with respect to the vehicle side member. |

The following materials are required for assembly work on a sill cover:

| Designation | Qty. | Size | Supplier |
|---------------------|-------|--|------------------------|
| Wooden spacer block | 9 ea. | Wood-core plywood 12 mm thick, 70 x 90 mm | Commercially available |
| Base | 9 ea. | Rubber base 2 mm thick, 40 x 100 mm | Commercially available |

Note:

The bonded joint does not have its final strength immediately. In order to ensure that the bonded joint is sufficiently strong, the following boundary conditions must be adhered to:

| | |
|--------------------------|---------------------------|
| Curing time | 2 hours |
| Temperature | at least +10° C to +35° C |
| Working time of adhesive | 17 minutes |
| Car wash operation | not until 48 hours later |

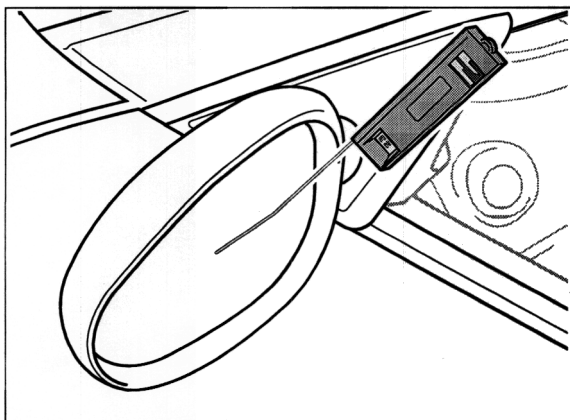
The vehicle must not be used until the curing time has elapsed.

66 78 01 Checking function of heating for mirror glass**Note**

The function of the heating for the mirror glass can be checked with a temperature probe with digital display (see Workshop Equipment Manual). The indicator light in the rocker switch also lights up if a fault is present and the heating wires in the mirror glass do not warm up.

Check with the temperature probe

1. The tip of the sensor is used to measure from the outside on the centre of the mirror glass.

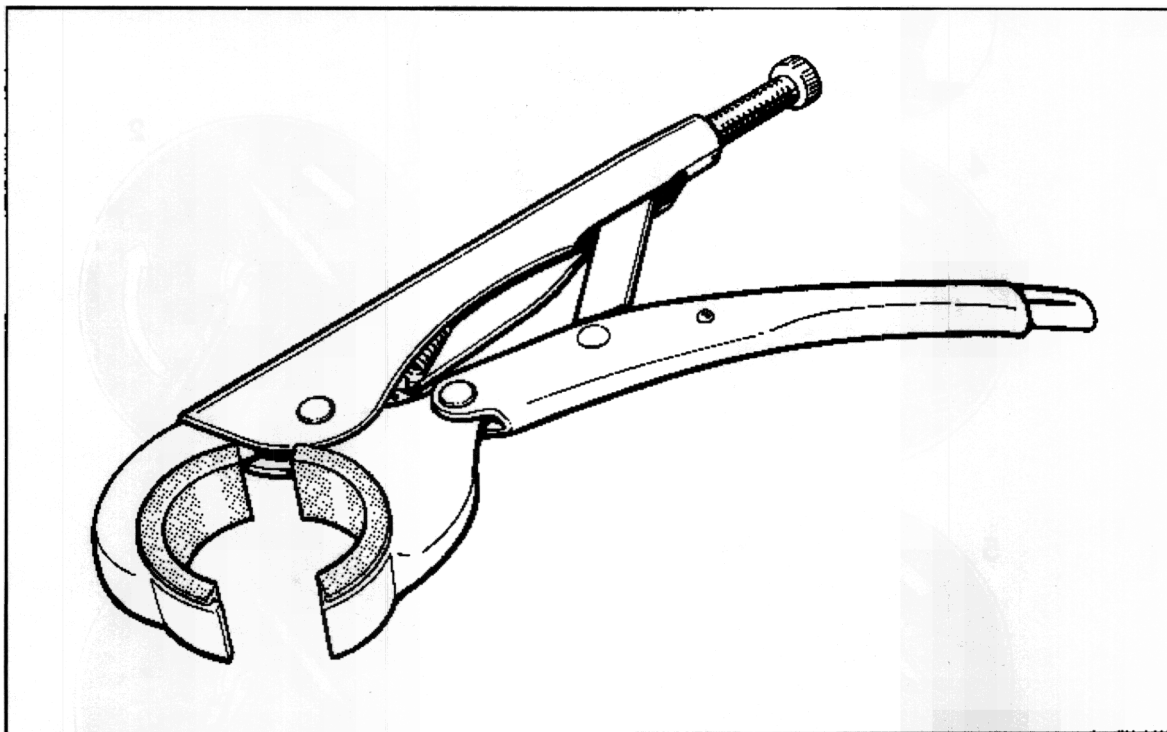


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2. After switching on at room temperature and a period of **1 minute**, the temperature must increase by approx. **2 degrees**.
3. If no temperature increase is shown, the fault must be detected on the basis of the wiring diagram.

68 27 19 Removing and installing the interior rearview mirror

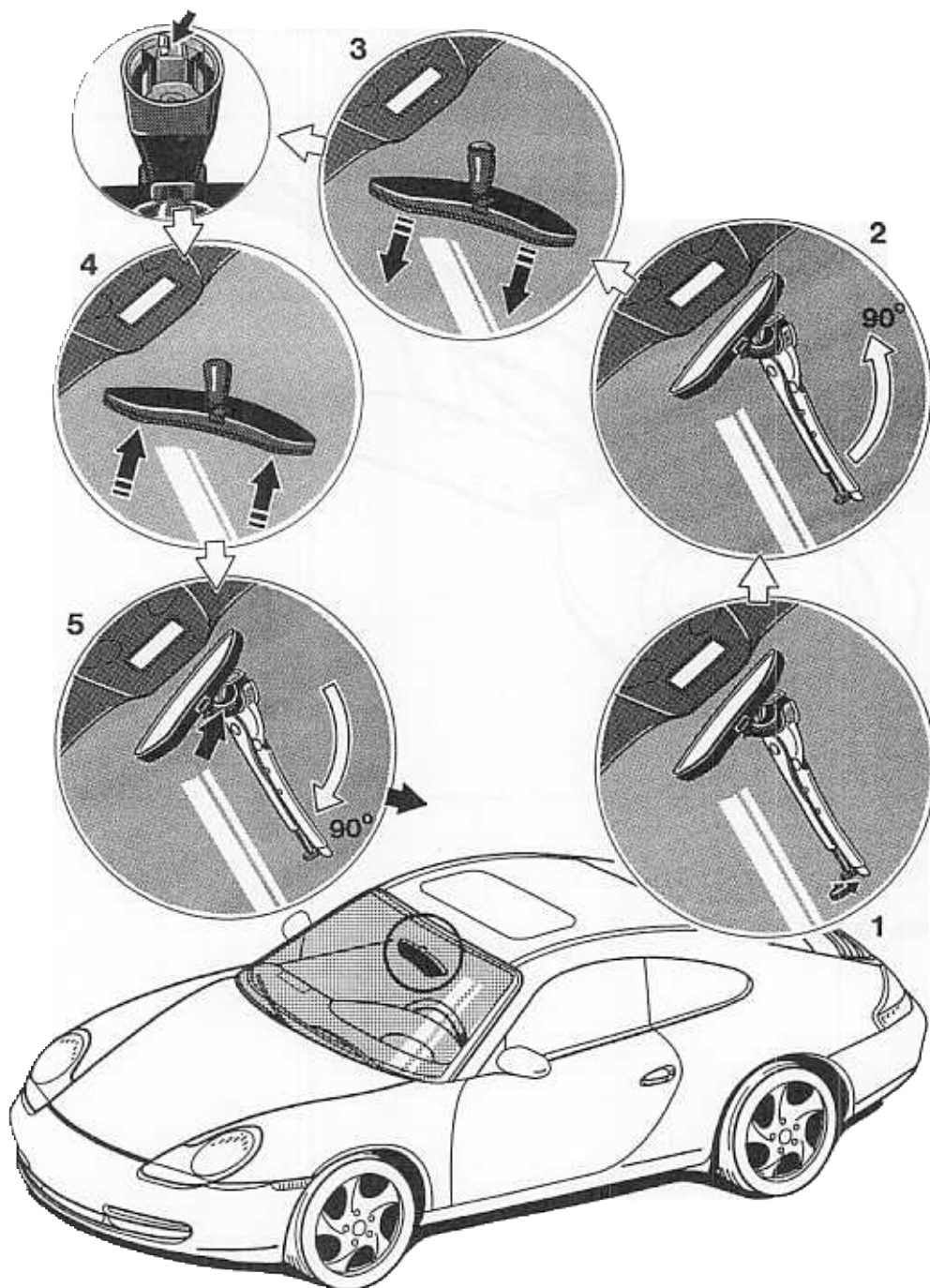
The following special tools are required to remove and install the interior rearview mirror:



2056-68

A = Pliers, special tool 9578

Removing and installing the interior rearview mirror



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Removing and installing the interior rearview mirror

Removing the interior rearview mirror

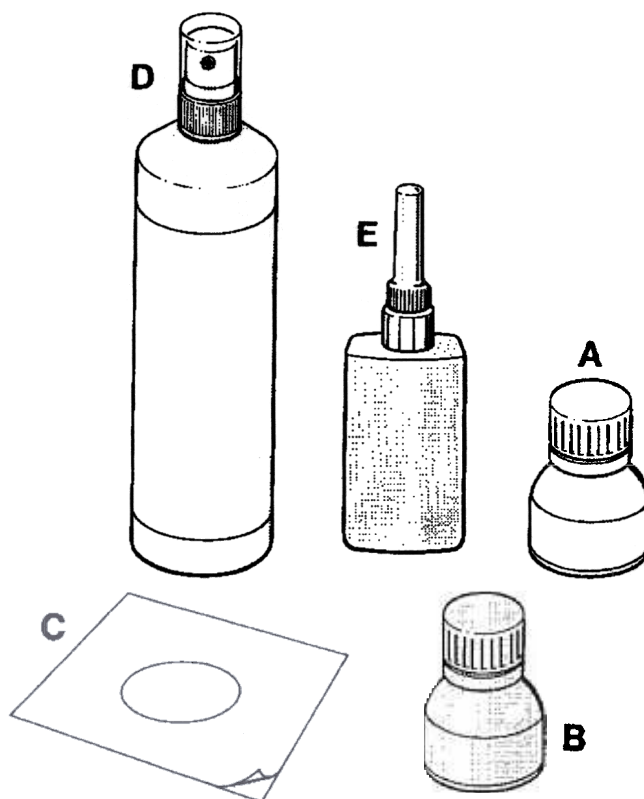
| No. | Procedure | Instructions |
|-----|-------------------|--|
| 1 | Secure the pliers | Set the pliers with the projecting plastic parts to the windscreen to the diameter of the mirror base and secure to the mirror base. |
| 2 | Detach the mirror | Turn the interior rearview mirror through 90° by the mirror base using the pliers (special tool 9578). Release the pliers from the mirror base. |
| 3 | Remove the mirror | Unclip the base of the interior rearview mirror from the retainer plate on the windscreen. The small aluminium chip in the locking area must be removed after the interior rearview mirror has been removed from its base, as it otherwise cannot be ensured that the mirror will be seated securely when fitted. If the mirror is being fitted for the second or third time, inspect locking area of the mirror base for signs of wear and replace the mirror if necessary. |

Removing the interior rearview mirror

| No. | Procedure | Instructions |
|-----|-------------------|---|
| 4 | Insert the mirror | Clip the base of the interior rearview mirror, rotated through 90°, into the retainer plate on the windscreen. |
| 5 | Secure the mirror | Secure the pliers special tool 9578 with the projecting plastic parts to the windscreen on the mirror base. Turn the mirror base through 90° while simultaneously pressing against the retainer plate with the pliers. The mirror must not be turned past the locking point. Release the pliers from the mirror base. |

68 27 13 Bonding on the interior rearview mirror

The following materials are required to bond on the complete interior mirror:



1981 - 68

- A = Cleaning solution (000.043.157.00)*
- B = Primer (000.043.158.00)*
- C = Cover film (000.043.177.01)*
- D = Activator (000.043.052.00)*
- E = Bonder (000.043.051.00)*

Porsche part number

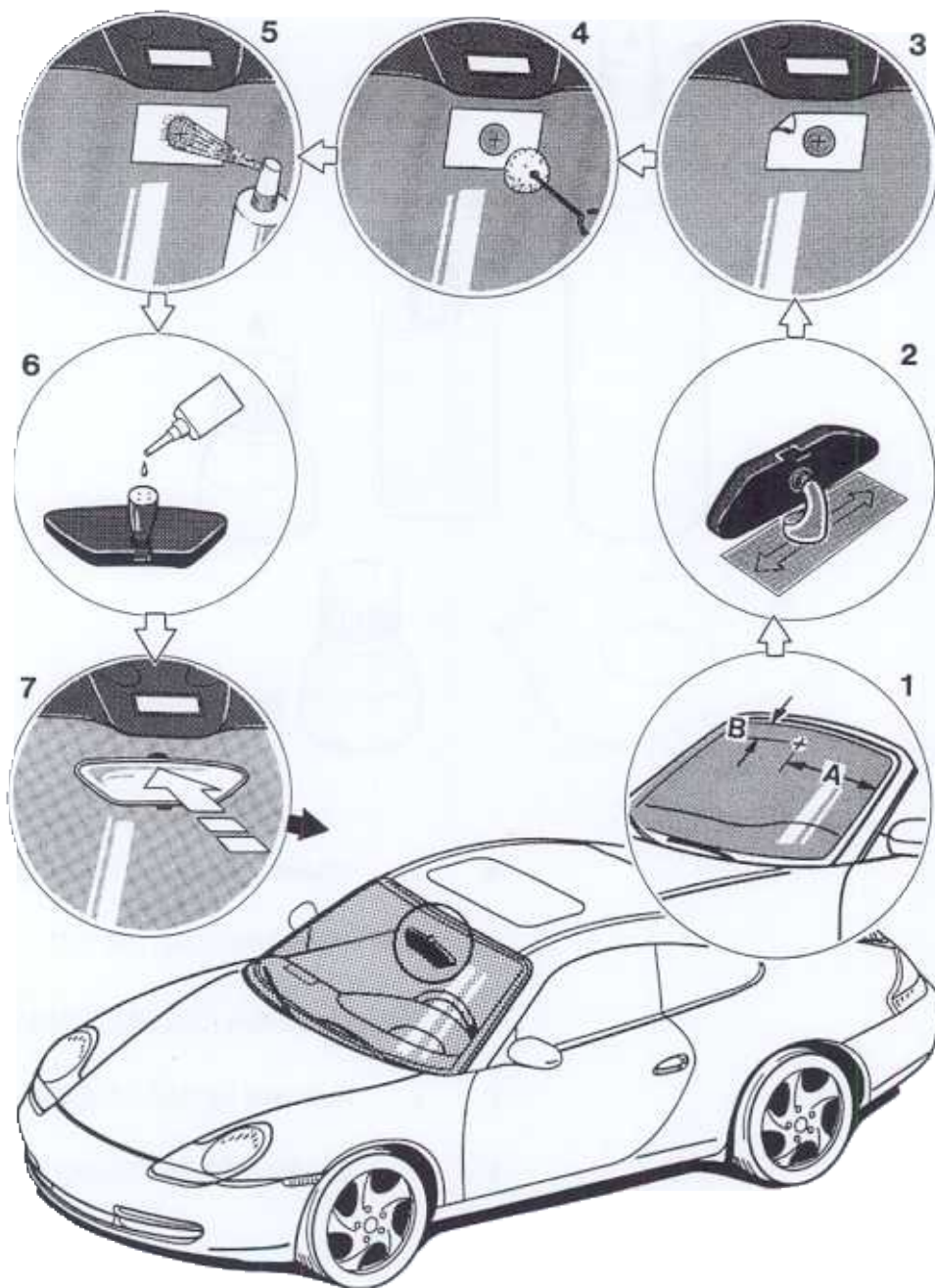
Bonding on the interior rearview mirror

Bonding the assembled interior mirror onto the windscreen

| No. | Procedure | Instructions |
|-----|--|---|
| | Mark the position of the interior mirror | Mark the position of the bonding plate on the outside of the windscreen. Dimension A = 633 mm Dimension B = 100 mm |
| | Remove adhesive residues | Remove adhesive residues from the windscreen mechanically using a scraper. Remove adhesive residues on the bonding plate of the interior mirror mechanically using a scraper. |
| 2 | Sand the bonding plate of the interior mirror flat | Sand the bonding plate of the interior mirror flat mechanically using 100 grain sandpaper. |
| | Clean the bonding plate of the interior mirror | Clean the bonding plate of the interior mirror with cleaning solution (A) . |
| | Clean the bonding area on the windscreen | Clean the bonding area on the windscreen with cleaning solution (A) . |
| 3 | Mask the bonding area on the windscreen | Mask the bonding area on the windscreen with primer template (cover film C). The marking for the position of the interior mirror must be visible in the center of the primer template. |
| 4 | Prime the bonding area on the windscreen | Prime the masked bonding area on the windscreen thinly and evenly using primer (B) . Note Observe a drying period of 15 - 20 minutes. |

Bonding on the interior rearview mirror

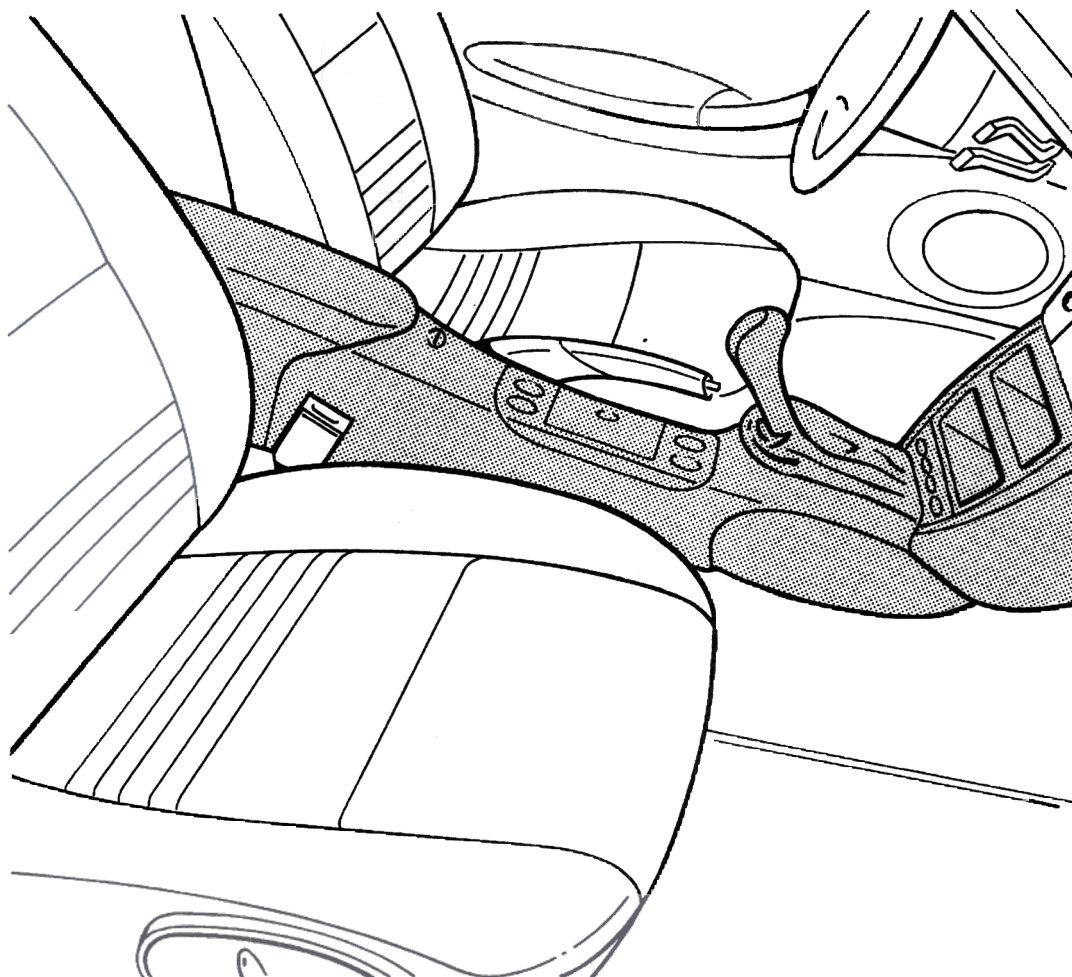
Bonding the assembled interior mirror onto the windscreen



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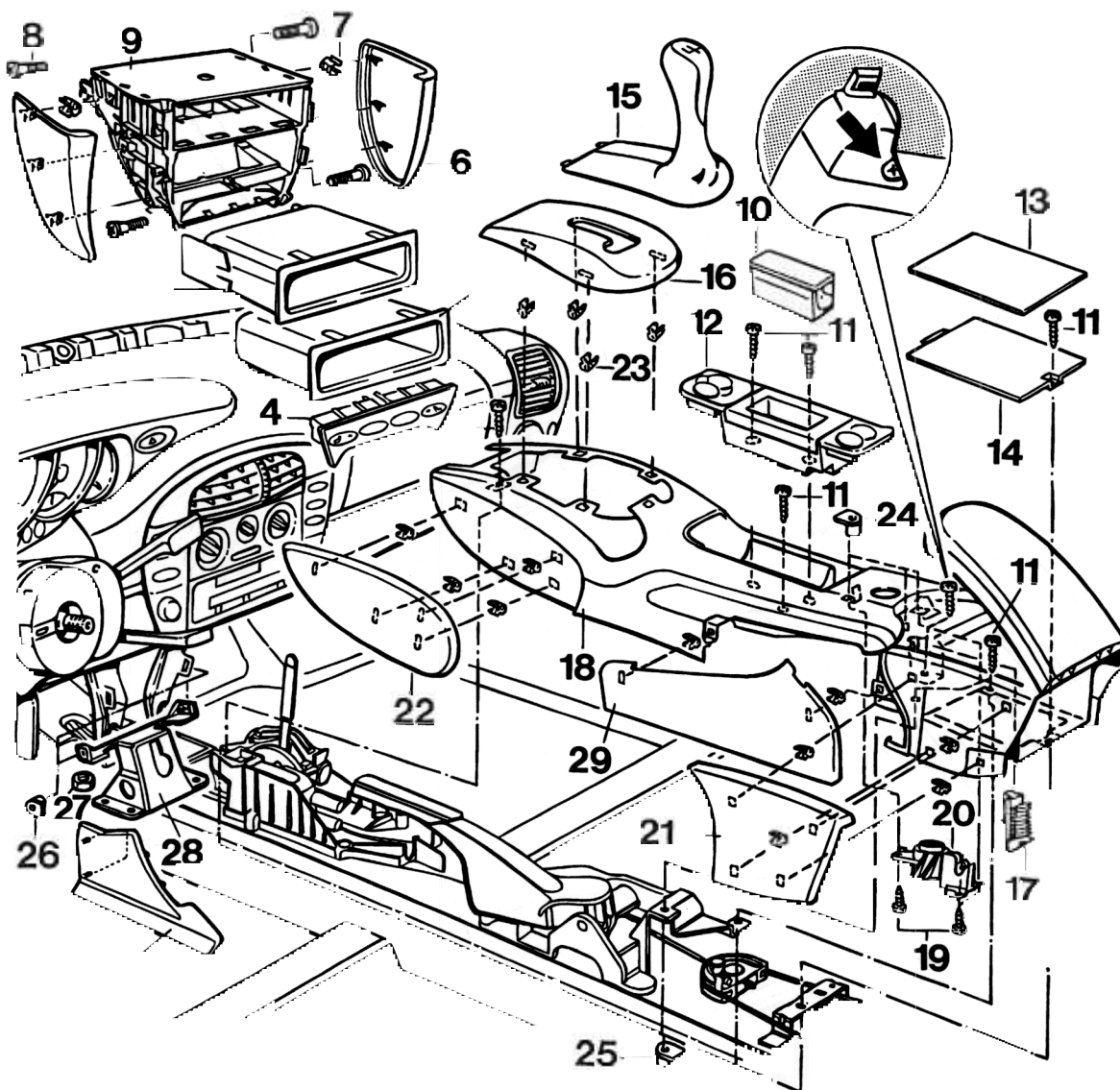
| No. | Procedure | Instructions |
|-----|---|---|
| 5 | Activate the bonding area on the windscreen | Spray activator (D) onto the bonding area of the windscreen. Note Observe a drying time of 2 minutes. Remove the primer template |
| 6 | Apply adhesive to the bonding plate | Apply a drop of adhesive (E) to the bonding plate of the interior mirror. |
| 7 | Stick on the interior mirror | Press the interior mirror with the bonding plate onto the primed and activated area of the windscreen. Note Press-on duration approx. 40 - 50 seconds. Note Bonding strength 60 % after 1 hour 100 % after 24 hours |

68 17 19 Removing and installing centre console



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Removing and installing centre console

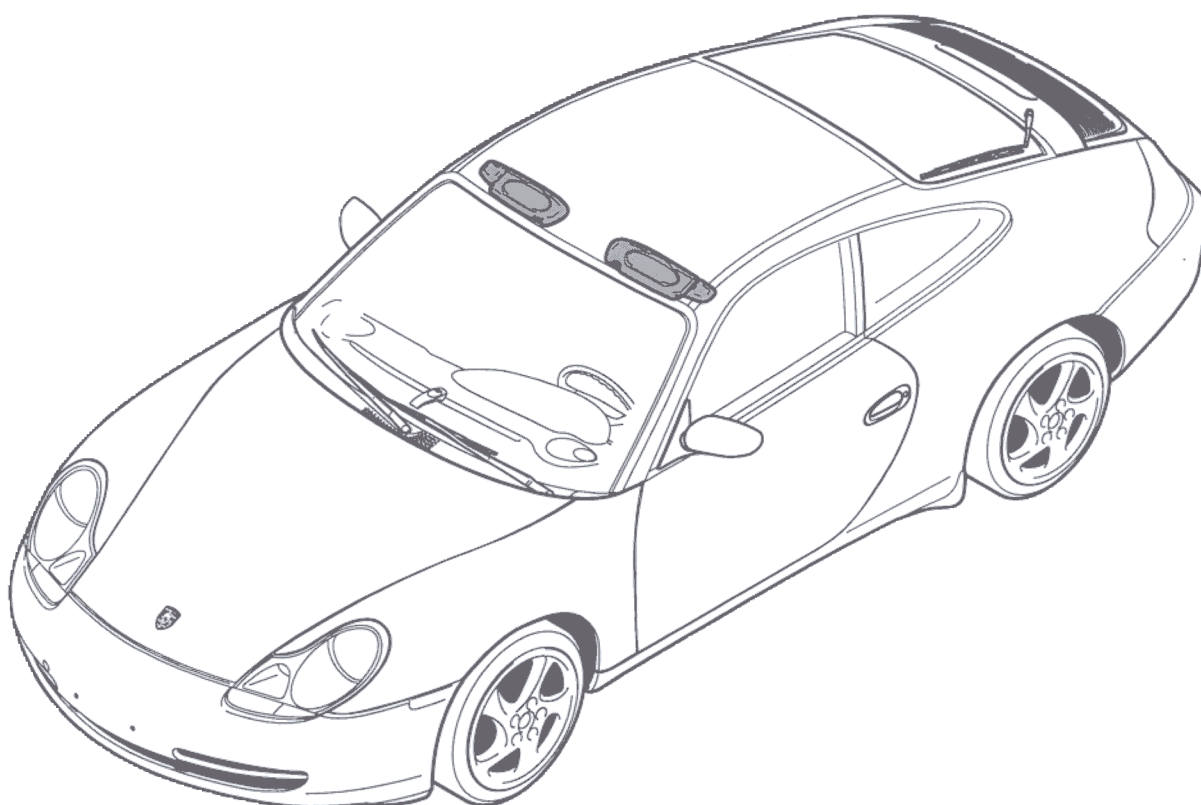


Removing and installing centre console

| No. | Designation | Qty. | Removal | Note: | Installation |
|-----|-----------------------|------|---|-------|--|
| | | | | | |
| 1 | Side cover | 1 | Unclip | | Clip in |
| 2 | Oddments tray | 1 | Pull out | | Insert |
| 3 | Oddments tray | 1 | Pull out | | Insert |
| 4 | Front trim | 1 | Insert a plastic spatula at the side and press out. | | Insert |
| 5 | Cover, front right | 1 | Unclip | | Clip in |
| 6 | Cover, front left | 1 | Unclip | | Clip in |
| 7 | Clip | 6 | | | Inspect and replace if necessary. |
| 8 | Torx screw | 4 | | | |
| 9 | Centre console, front | 1 | | | |
| 10 | Container insert | 1 | Pull off | | Press in |
| 11 | Torx screw 5.0x16 | 7 | Undo | | |
| 12 | Retaining bracket | 1 | Unclip and disconnect electrical plug connections | | Connect electrical plug connections at retaining bracket, fix into the centre console and fasten with Torx screws (Item 11). |
| 13 | Rubber insert | 1 | | | |
| 14 | Cover | 1 | | | Push in cover and fasten with Torx screw (Item 11) 5.0x16. |
| 15 | Shift lever knob | 1 | Pull off | | Push on |
| 16 | Cover | 1 | Unclip | | Fix and clip in |

| No. | Designation | Qty. | Removal | Note: | Installation |
|-----|------------------------|------|---|-------|--|
| | | | | | |
| 17 | Locking device | 1 | Unclip, and unscrew the Torx screw beneath it. | | |
| 18 | Centre console, centre | 1 | Undo Torx screws (Item 11) 5.0x16 and disconnect electrical plug connection from the lock barrel. | | Plug in the centre console, centre, electrical plug connection to the lock barrel, position the centre console and tighten Torx screws (Item 11) 5.0x16. |
| 19 | Torx screw 3.5x14 | 3 | Undo from the lock barrel (Item 20). | | Tighten Torx screws 3.5x14 with the lock barrel (Item 20). |
| 20 | Lock barrel | 1 | | | |
| 21 | Cover, rear left | 1 | Unclip | | Clip in |
| 22 | Cover, front left | 1 | Unclip | | Clip in |
| 23 | Clip | 26 | | | Inspect and replace if necessary. |
| 24 | Plug-in nut 3.5x2.5x5 | 5 | | | Inspect and replace if necessary. |
| 25 | Plug-in nut 5.0x3.5x8 | 4 | | | Inspect and replace if necessary. |
| 26 | Plug-in nut 3.5x2.5x5 | 4 | | | Inspect and replace if necessary. |
| 27 | Collar nut | 4 | | | |
| 28 | Holder | 1 | | | |
| 29 | Cover, centre left | 1 | Unclip | | Clip in |

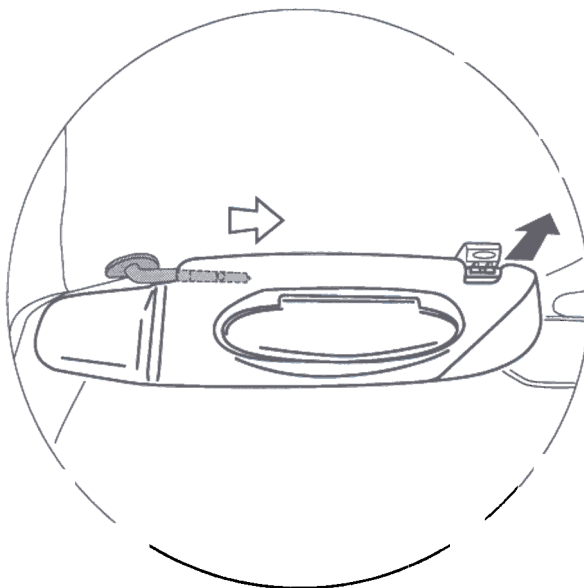
68 23 19 Removing and installing sun visors



638_97

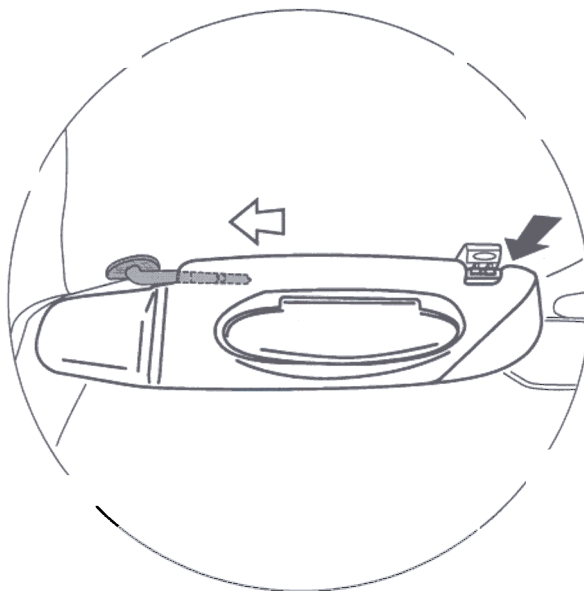
Removing and installing sun visors

Removing sun visors



639_97

Installing sun visors



643_97

Removing and installing sun visors

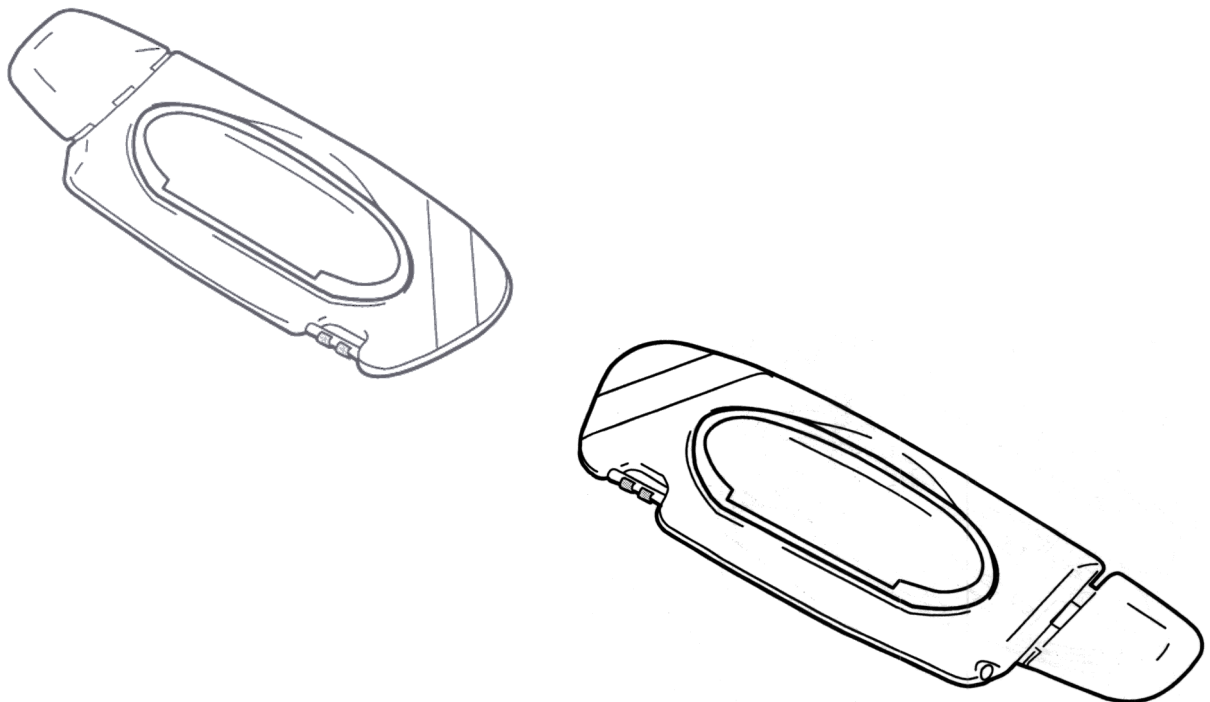
Removing sun visors

| No. | Procedure | Instructions |
|-----|-------------------|---|
| 1 | Detach sun visor. | Detach the sun visor from the thrust bearing and pull out of the mounting saddle towards the center of the car. |

Installing sun visors

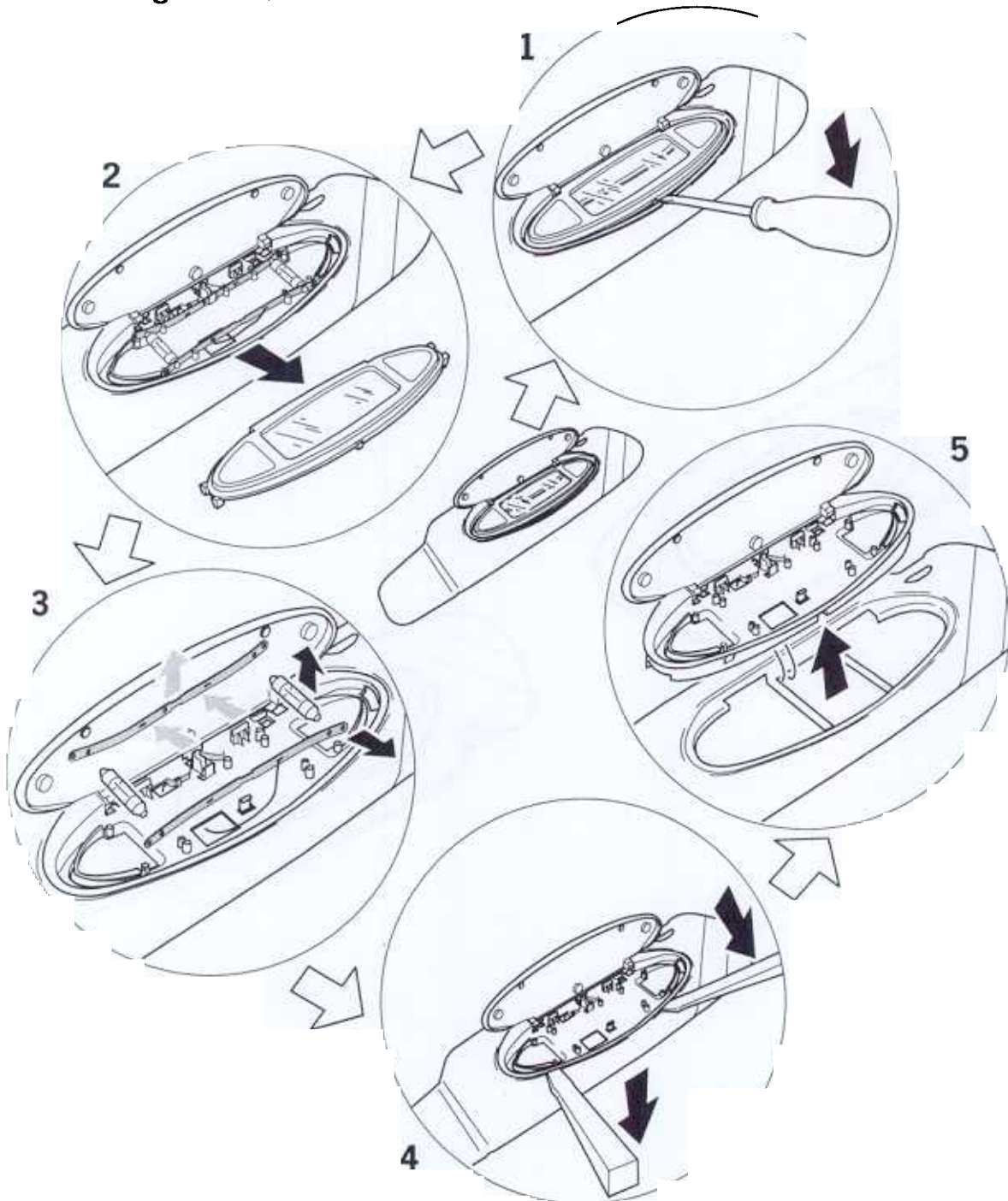
| No. | Procedure | Instructions |
|-----|----------------|---|
| 2 | Fit sun visor. | Insert the sun visor in the mounting saddle and push into the thrust bearing. |

68 23 37 Disassembling and assembling sun visor



640_97

Disassembling sun visor

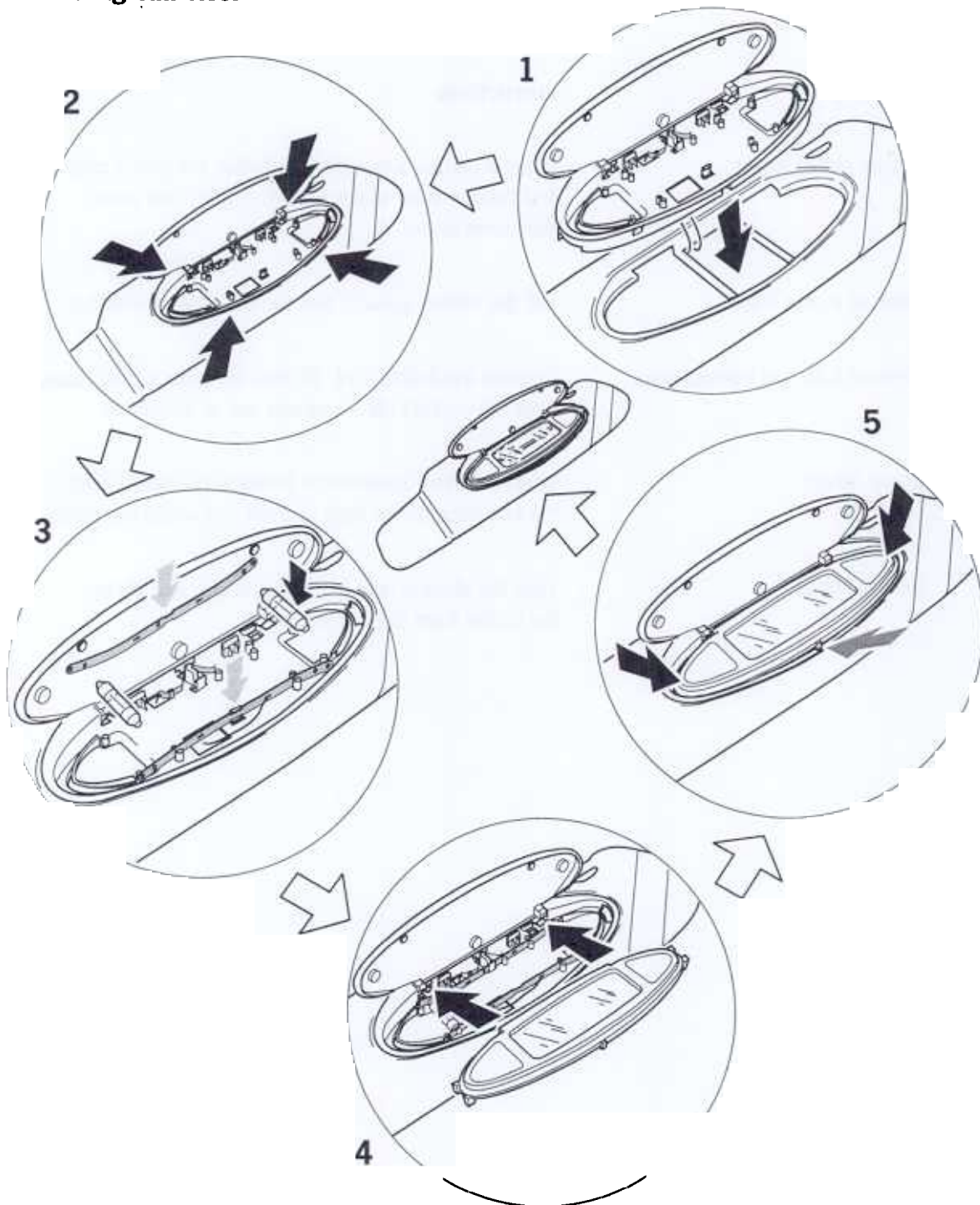


641_97

Disassembling sun visor

| No. | Procedure | Instructions |
|-----|-------------------------------|---|
| 1 | Unclip mirror insert | Insert a narrow screwdriver between the mirror insert and the sun visor at the bottom center, and unclip the mirror insert. |
| 2 | Remove mirror insert | Pull the mirror upwards and remove from the holder. |
| 3 | Remove bulb and contact clips | Remove the Sofitte 12V/3W bulb from the contact clips. Take the contact clips upwards out of the holder. |
| 4 | Unclip holder | Insert a narrow screwdriver between the holder and the sun visor on the right and left and unclip the holder. |
| 5 | Detach holder | Take the electric lead out of the holder and detach the holder from the sun visor. |

Assembling sun visor

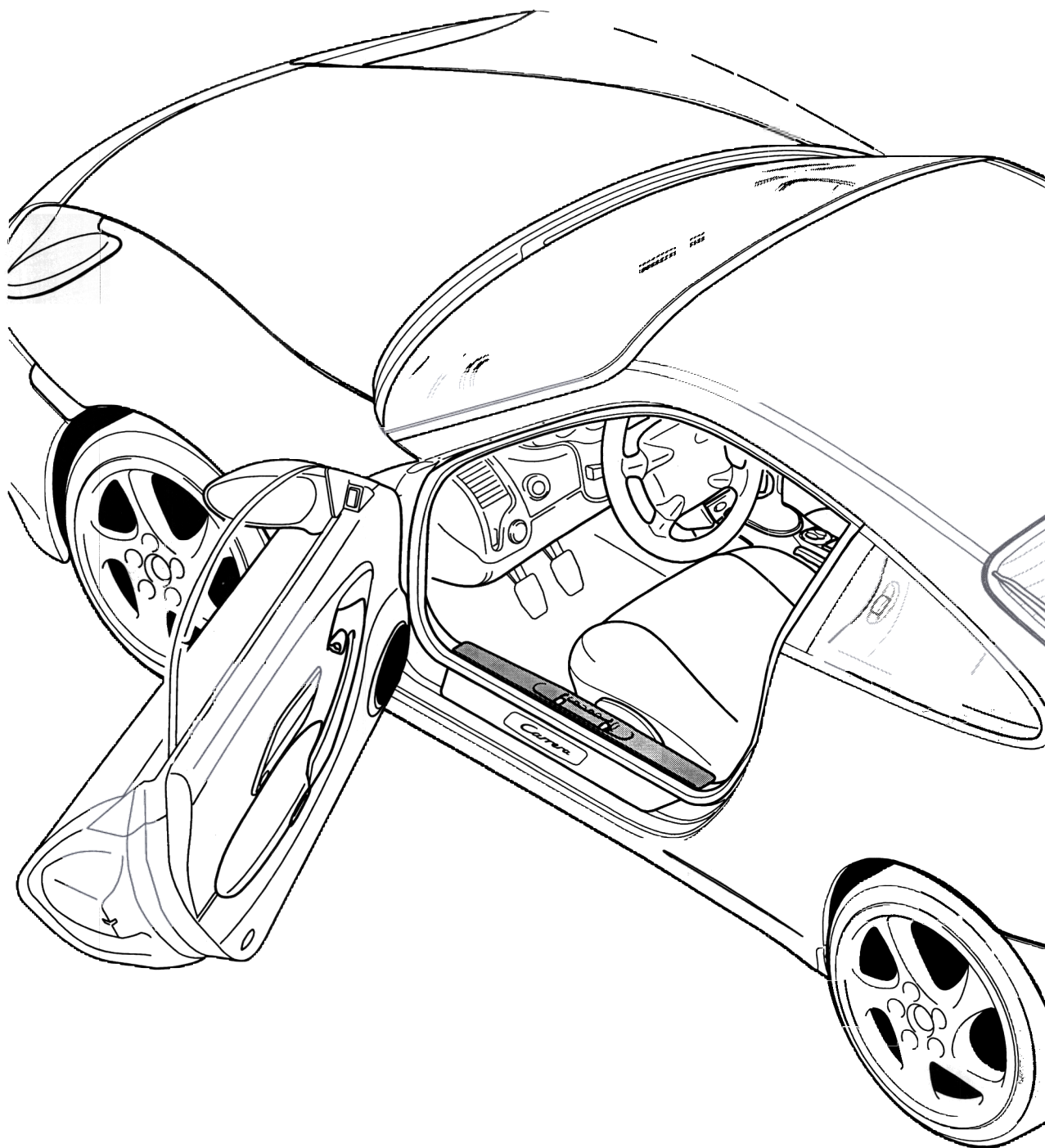


642_97

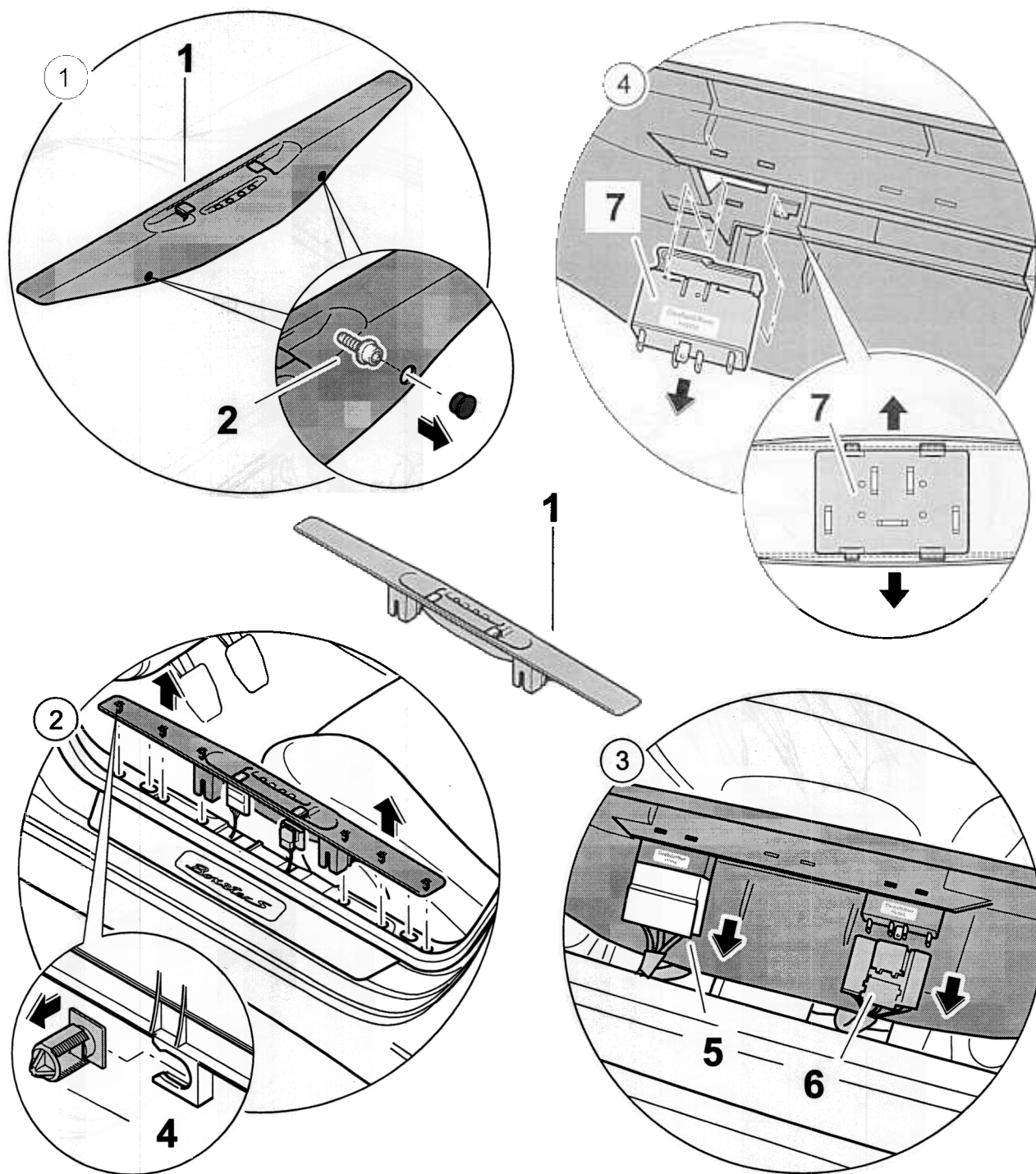
Assembling sun visor

| No. | Procedure | Instructions |
|-----|-------------------------------|---|
| | Insert holder | Insert the electric lead in the holder. Position the holder in the sun visor. |
| 2 | Press in holder | Press the holder at all four corners until it locks into place. |
| 3 | Insert contact clips and bulb | Position the contact clips in the holder and fit under the lug. Insert Soffitte 12V/3W bulb. |
| 4 | Position mirror insert | Position the lugs on the right and left of the mirror insert in the holder. |
| 5 | Clip in mirror insert | Clip the mirror insert into the holder on the left, right and in the middle. |

Removing and installing inner sill (driver's side) - as of model year 2001

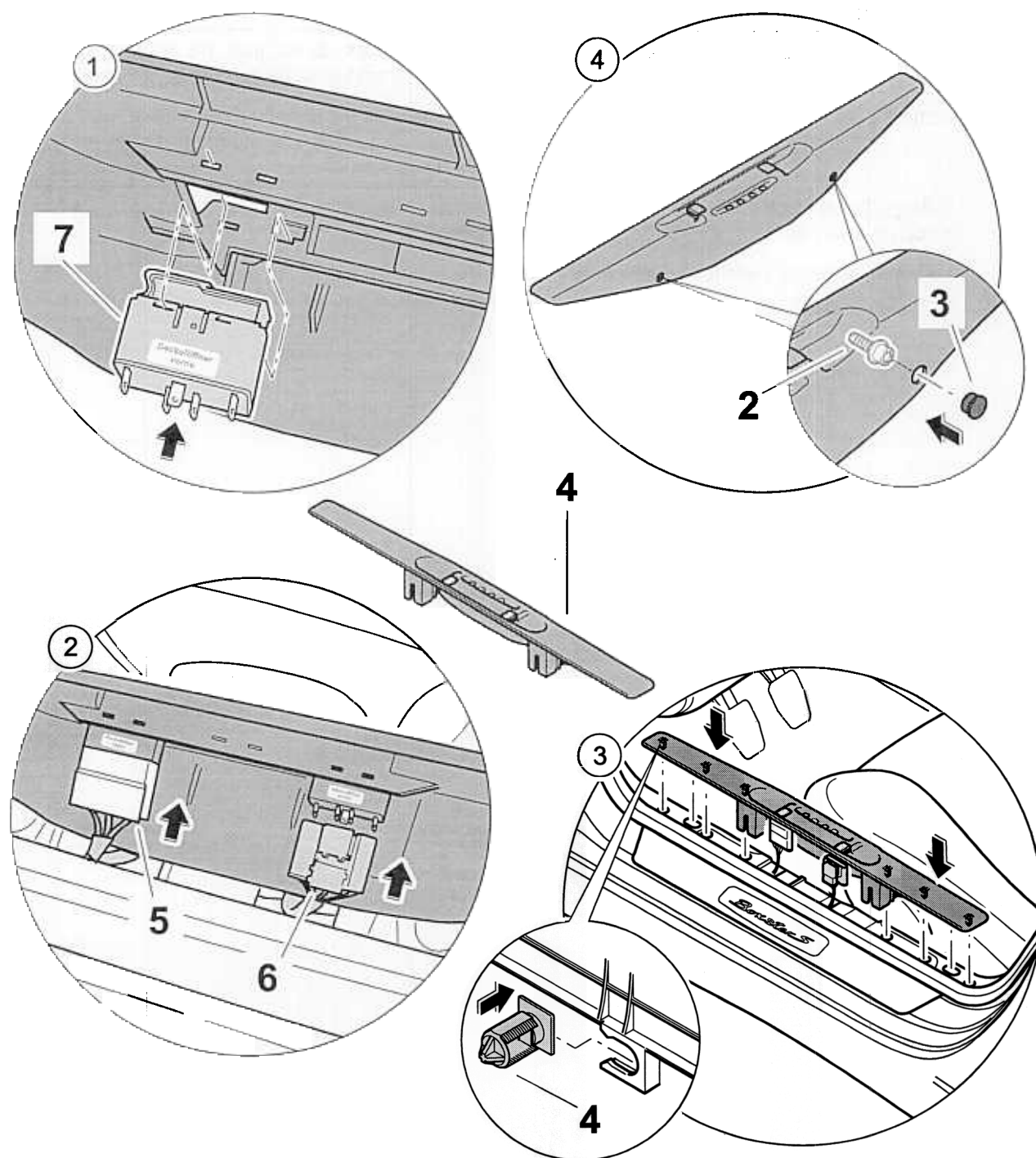


Disassembling release for front lid



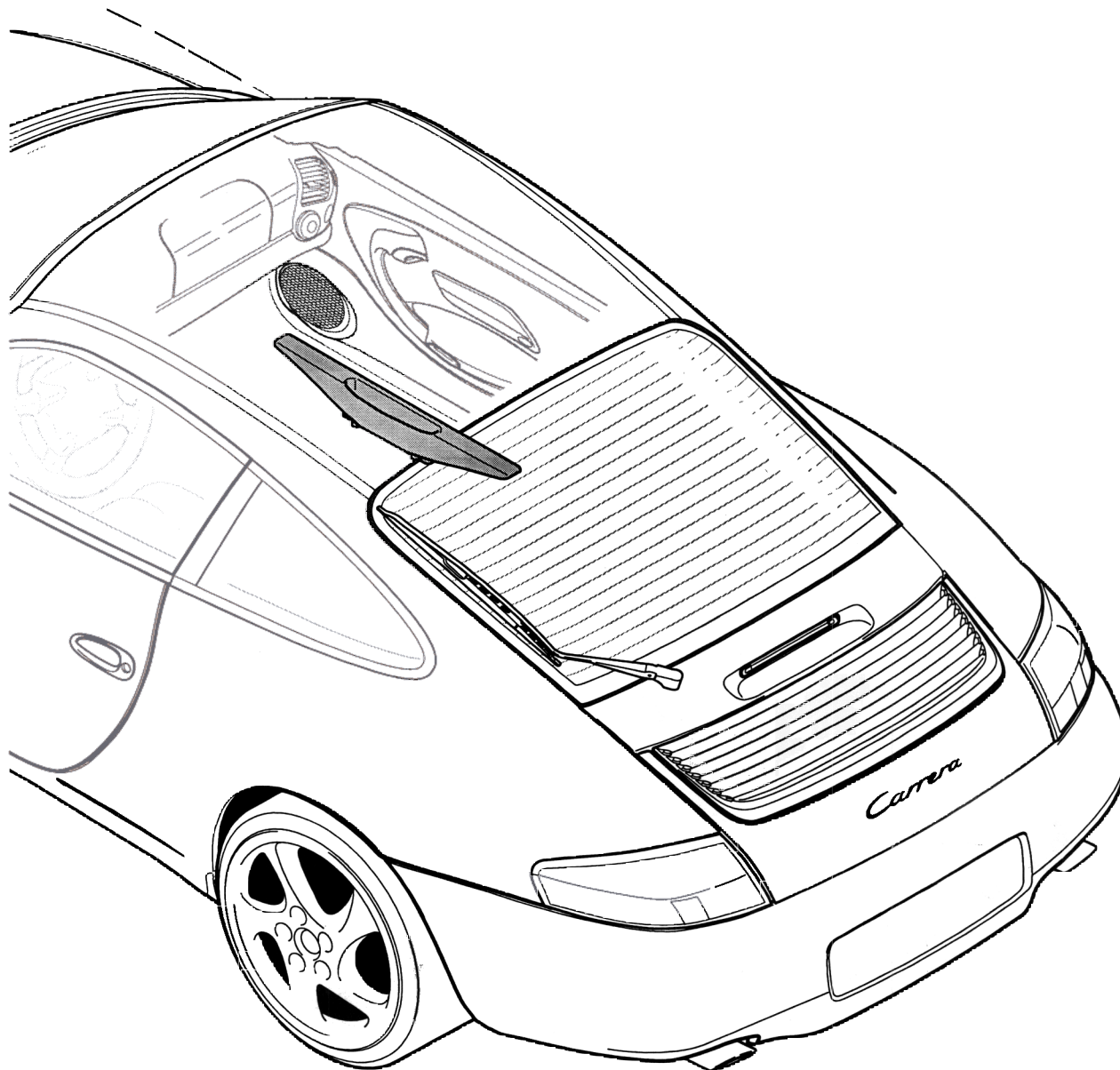
| No. | Procedure | Instructions |
|-----|--|---|
| | Undoing hexagon socket head bolts -2- | Remove plastic plugs -3- and undo the hexagon socket head bolts -2- from the sill by approx. 4 - 5 threads. |
| 2 | Removing sill -1- | Lift sill -1- upwards out of the bottom support with a plastic spatula and press out. Check fastening clips -4- , replace if necessary. |
| 3 | Pulling off plug connections -5, 6- of the actuating switches | Pull off plug connections -5, 6- on the actuating switches of the lids. |
| 4 | Removing actuating switches for front lid -7, 8- | Press the fastening ribs of the sill -arrows- outward with a screwdriver and unclip the actuating switch of the front lid -7- . |

Assembling release for front lid

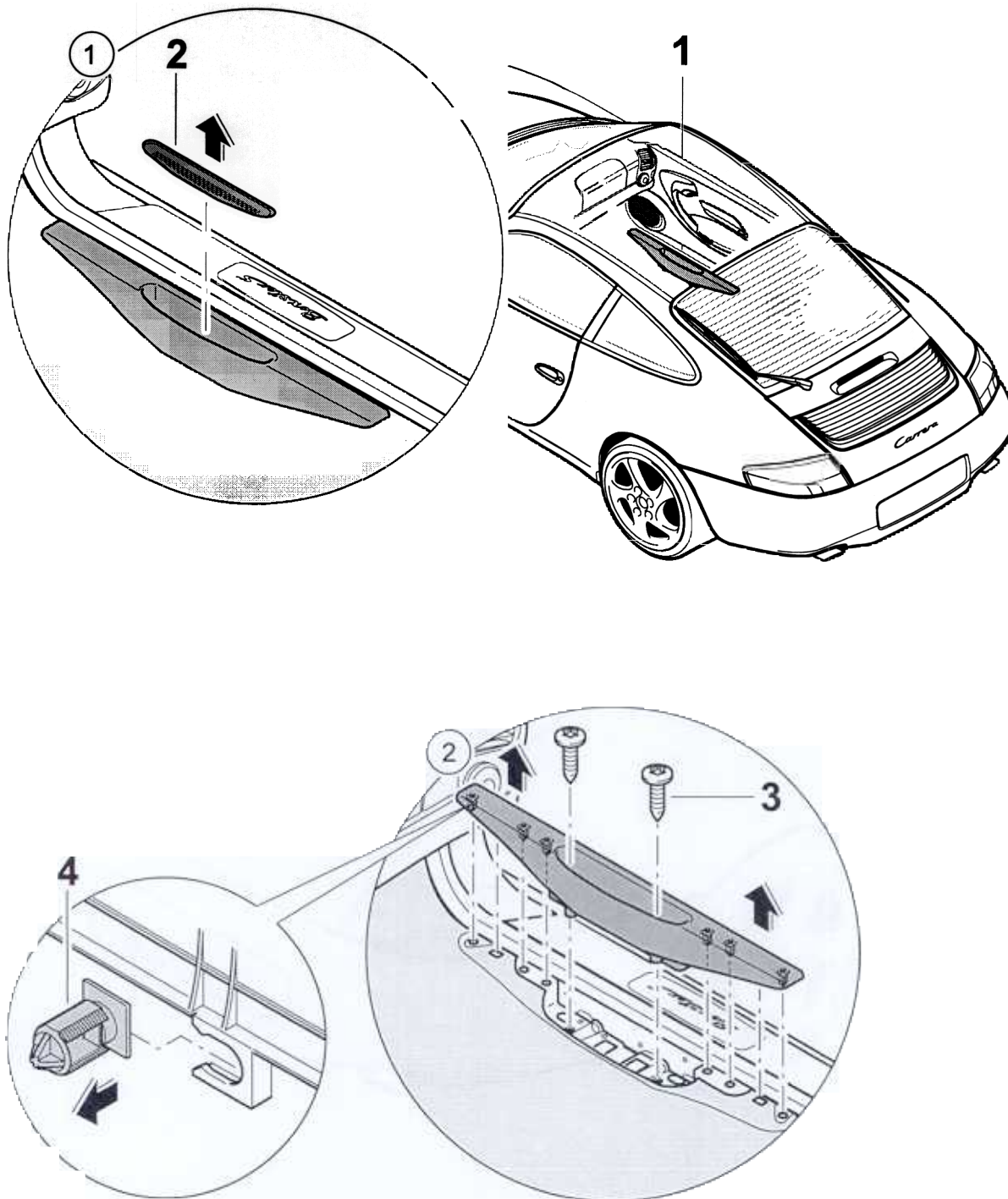


| No. | Procedure | Instructions |
|-----|--|--|
| | Installing actuating switch for front lid -7- | Clip locking tabs of the actuating switch for the front lid -7- into the fastening ribs of the sill. |
| 2 | Joining plug connections -5, 6- of the actuating switches | Push plug connections -5, 6- onto the actuating switches of the lids. |
| 3 | Attaching sill -1- | Clip in new fastening clips -4- if necessary. Insert sill -1- downward into the lower support and engage. |
| 4 | Tightening hexagon socket head bolts -2- | Screw in hexagon socket head bolts -2- of the sill by approx. 4 - 5 threads. Seal holes of the sill with plastic plugs -3- . |

Removing and installing inner sill (passenger's side)

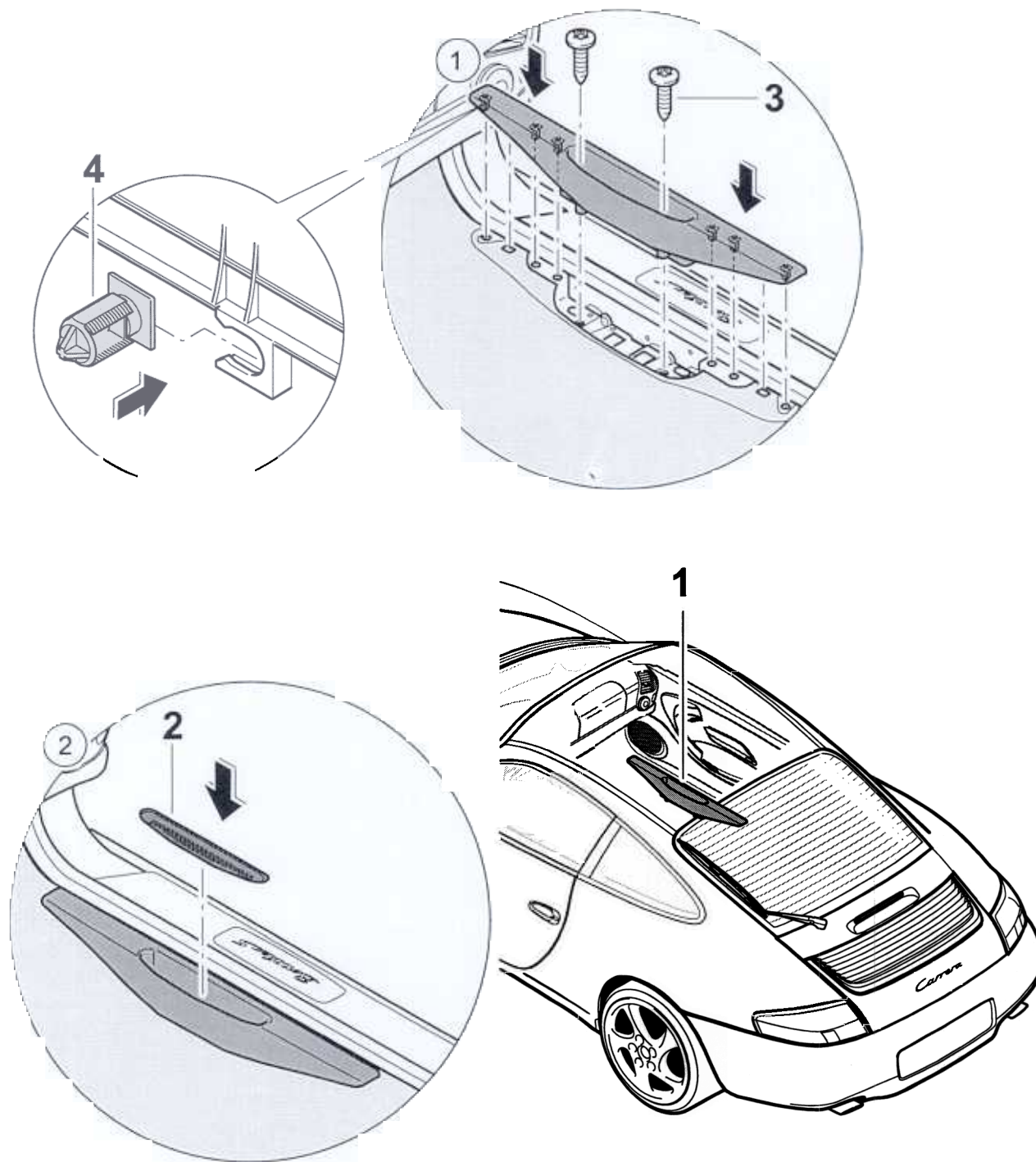


Removing inner sill



| No. | Procedure | Instructions |
|-----|------------------------------|--|
| | Undoing fastening screws -2- | Lift rubber mat -2- upward out of the oddments tray and unscrew the fastening screws -3- from the sill. |
| 2 | Removing sill -1- | Lift sill -1- upwards out of the bottom support with a plastic spatula and press out. Check fastening clips -4-, replace if necessary. |

Installing inner sill



| No. | Procedure | Instructions |
|-----|--------------------|--|
| 2 | Fastening sill -1- | <p>Clip in new fastening clips -4- if necessary. Insert sill -1- downward into the lower support and engage.</p> <p>Screw in fastening screws -3- and lay rubber mat -2- into the oddments tray.</p> |

69 Safety regulations for airbag vehicles

The airbag units are pyrotechnical items in hazard class T 1. Handling, transport and storage of these units must conform to the explosives legislation.

The listed statutory requirements refer to the Federal Republic of Germany. The relevant valid regulations must be observed in all other countries.

The commencement of work with pyrotechnical items must be reported 14 days in advance to the Trade Supervisory Office (responsible authority).

Dispatch

Airbag units may only be dispatched in transport packaging officially approved for that purpose. Airbag units may not be transported with other hazardous goods.

Internally, they must always be transported in the luggage compartment or cargo hold of a vehicle using the above-mentioned transport packaging. They must not be transported in the passenger's compartment.

Storage

Airbag units must be stored in accordance with the second ordinance of the explosives legislation. This ordinance stipulates that small quantities of materials and objects may be stored at certain locations without special storage approval.

According to the Explosives Storage Directive of August 1997, these quantities are max. 10 kg (net) in a work room and max. 100 kg (net) in a storage room in the case of Class T 1 pyrotechnical objects. Airbag units must be kept in a locked place.

When storing airbag units, ensure that the airbag opening faces upwards (risk of injury caused by inflation of the airbag units in the event of accidental ignition).

Airbag units must be stored in a dry place and must not be stored together with other hazardous goods (varnishes etc.).

Sale

Loose airbag units — referred to as airbag modules below — or airbag modules installed in a loose steering wheel must never become the actual (physical) property of the customer. The possession of loose airbag modules not installed in the vehicle is not permissible in the private sector.

Airbag modules may become the property of the customer only when installed in the vehicle.

Assembly and adjustment work

Inspection and assembly work may only be carried out by specialist staff.

Before working on the airbag system and also when working on neighboring parts where there is a risk because live parts are close to the airbag system, always implement the following safety measures:

1. Remove ignition key.
2. Disconnect and cover the negative terminal of the battery.

After the battery is disconnected, assembly work or work on the vehicle with a hammer or similar tools may not be started until after a waiting period of **1 minute**. This is necessary in order to interrupt the power supply to the airbag system and to ensure it is not triggered accidentally.

Airbag units must be fitted immediately after being removed from their storage location. On no account may they be left lying around unsupervised. If work is interrupted, airbag units must immediately be locked away again.

Airbag units must not come into contact with grease, oil, cleaning agents or similar substances.

Airbag units may not be exposed to temperatures above 90 °C – even for a short time.

Airbag units and control units which have fallen from a height of more than 0.5 m may no longer be installed.

No additional linings, stickers or similar may be attached to the steering wheel and in the vicinity of the passenger's airbag.

No changes may be made to the wiring and to the components of the airbag system.

The battery must always be disconnected before starting straightening and welding work with an electrical welding unit.

The battery must be removed in advance if you have to perform welding in the immediate vicinity of the control module.

Airbag components may not be repaired. They must always be replaced.

Note

Wash your hands after touching ignited airbag units.

General information

The airbag system is constantly monitored by a diagnosis unit in the triggering unit. Any fault is signalled by a warning light.

The warning light for the airbag system lights up in the event of a fault.

The airbag warning light lights for approx. 3 seconds after the ignition is switched on and goes out if no fault has been entered in the fault memory.

If it lights up again, this indicates a fault in the system. The fault can be read out with the Porsche System Tester 2.

Note

A period of 10 seconds is required to enable the triggering unit to identify all faults in the system. In order to guarantee that every possible fault source is checked during the vehicle test, the ignition must be switched on for at least 10 seconds.

The fault memory must be cleared following a fault in the airbag system and after it has been remedied.

The replacement of a component must be noted in the Guarantee and Maintenance booklet. To do this, attach the documentation number in a free panel intended for that purpose. The documentation number is attached to the replacement part as a tear-off sticker.

Exchanged airbag units or airbag modules must be taken into possession by the Porsche Centre or by dealers authorised by Porsche and must not be handed over to the customer (customer has no right to possess them). They must be destroyed, disposed of or returned to the manufacturer in accordance with the explosives ordinance and the hazardous materials ordinance.

When the steering wheel is exchanged, e.g. to install a steering wheel from the Tequipment product range, the airbag unit of the replaced steering wheel must be removed and destroyed, disposed of or returned to the manufacturer before the steering wheel is handed over to the customer.

Component exchange after airbag triggering

The following components must be removed and replaced after the airbag system is triggered:

After triggering of the airbag unit on the driver's side

- Contact unit

Airbag unit, driver's side

After triggering of the airbag unit on the passenger's side

- Airbag unit, passenger's side

Triggering unit after the **third** time the airbag is triggered

After triggering of the side airbag unit

- Side airbag unit

Sensor for the side airbag unit after the
third time the side airbag is triggered

69 59 Disposal of airbag units

Airbag units are pyrotechnical items and can pose an environmental hazard.

For this reason, non-ignited airbag units or entire vehicles must not be disposed of as normal scrap, refuse or in other final storage facilities.

The airbag units must first be rendered harmless by electrical ignition and while observing all precautionary measures, thereby preventing them being used incorrectly.

If the vehicle had suffered fire damage which caused the passenger's airbag to be ignited, additional ignition with the special tool 9257 must be carried out in order to ensure that only parts without pyrotechnical contents are scrapped.

In the case of airbag units which cannot be ignited or if the conditions for safe ignition are insufficient, always return the airbag units to Porsche or the respective importer in their original packaging.

Note

Country-specific statutory regulations and legislation based on them which go beyond these instructions must always be observed and take precedence over these instructions.

Safety measures when igniting airbag units

Ignition and preparations may only be carried out by skilled staff, supervised by a second responsible person.

Other normal accident prevention regulations must also be observed.

Fire airbag units only in their securely installed, original condition.

Carry out ignition only in suitable, free areas.

Use only the ignition tool intended for that purpose.

All loose objects must first be removed from the expansion area of the air bag.

Persons possibly affected must be informed of the resulting noise beforehand. Use ear protectors.

Maintain a safety distance by utilizing the entire cable length of the ignition tool.

Do not connect the voltage source until all other preparations are complete.

Choose a place in front of the vehicle. This also applies to persons not involved.

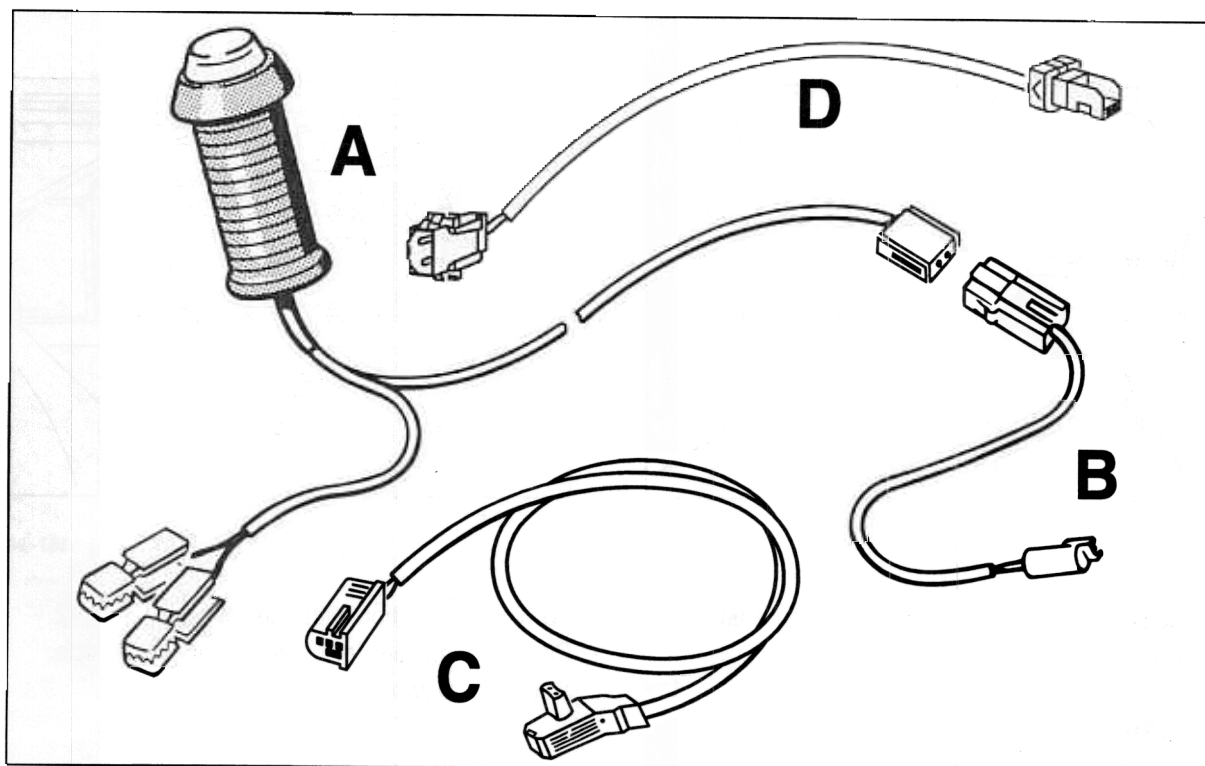
Perform ignition with the doors closed and the side windows open.

Do not approach the vehicle until after a waiting period (approx. 3 minutes) if ignition fails.

Allow airbag units to cool down under observation following ignition.

Avoid skin contact with ignited airbag units.

Tools



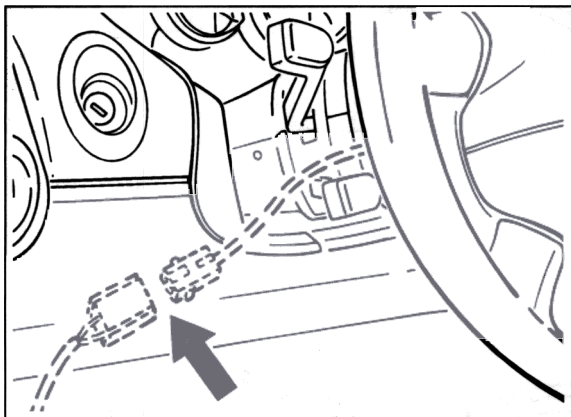
45_97

| No. | Designation | Special tool | Explanation |
|-----|-----------------|--------------|-------------|
| A | Ignition device | 9257* | |
| B | Ignition cable | 9567 | |
| C | Ignition cable | 9566 | |
| D | Ignition cable | 9257 / 2 | |

* Order if required

Connect ignition tool

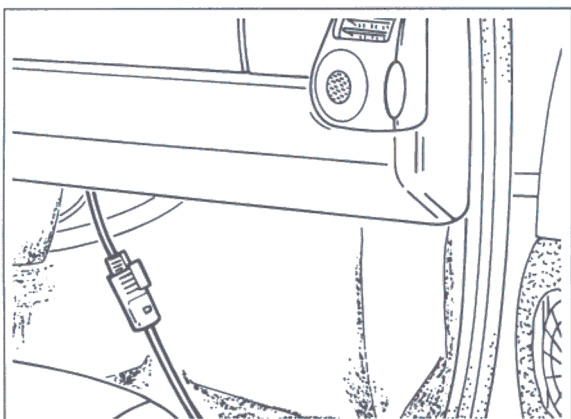
Driver's side



32 - 96

Directly to the 2-pole plug of the contact unit (below the steering column).

Passenger's side

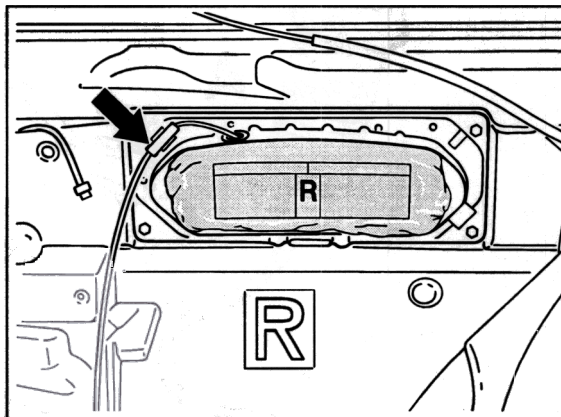


98 - 96

To plug connection with special tools 9567 and 9566.

Place the ignition device in front of the vehicle through the door gap.

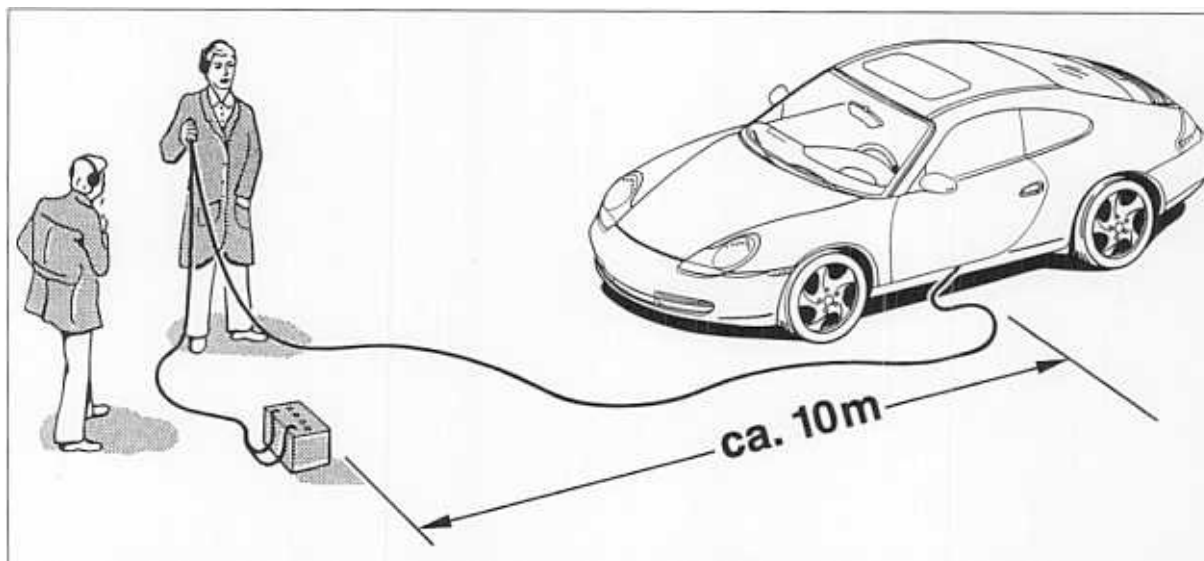
Side airbag



163 - 97

To plug connection with special tool 9257 / 2. Place the ignition device in front of the vehicle through the door gap.

Ignition



93 - 97

Attach the ignition device to a vehicle battery and press the button.

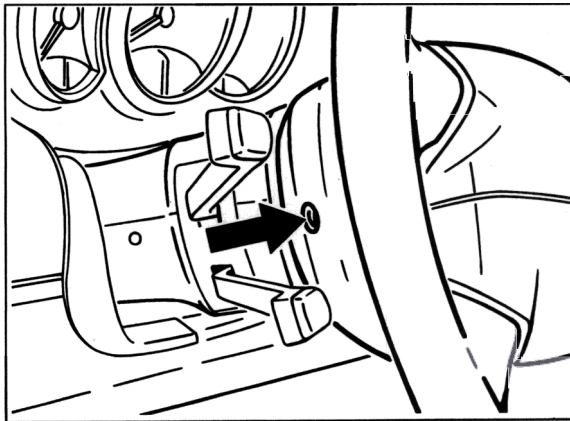
Note

The driver's and passenger's airbags and side airbags must be ignited separately.

69 58 19 Removing and installing the driver's airbag unit

Removal

1. Remove ignition key.
2. Disconnect the battery and cover the terminal or battery.
3. Undo the fastening screws (2 ea.) with a screwdriver for inside Torx T 30 (at least 50 mm long)

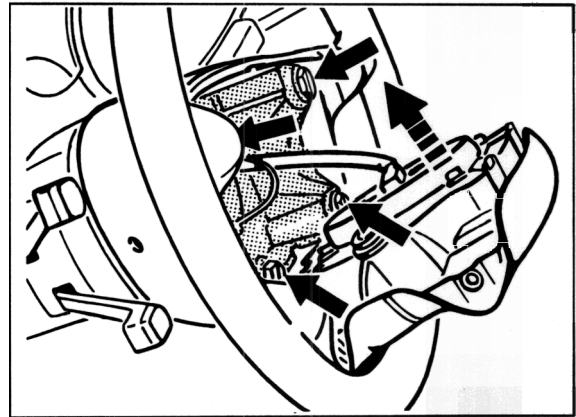


28 - 96

Note

The self-locking screws must be replaced after every time they are undone. To do this, undo the retaining bracket of the airbag unit (4 screws) in the steering wheel.

4. Disconnect the electrical plug connection.



29 - 96

Note

The airbag unit must always be deposited so that the airbag opening faces upwards.

If removed for an extended period, the airbag unit must be kept in a locked place. Observe the safety regulations.

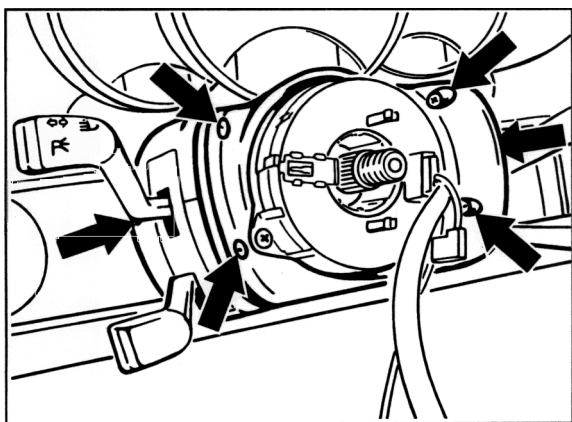
Installation

1. **Tightening torque** for fastening screws (2 screws M6 x 16): **10 Nm (7.5 ftlb)**
2. **Tightening torque** for retaining bracket (4 screws M5 x 20): **5 Nm (3.5 ftlb)**

69 54 19 Removing and installing the contact unit

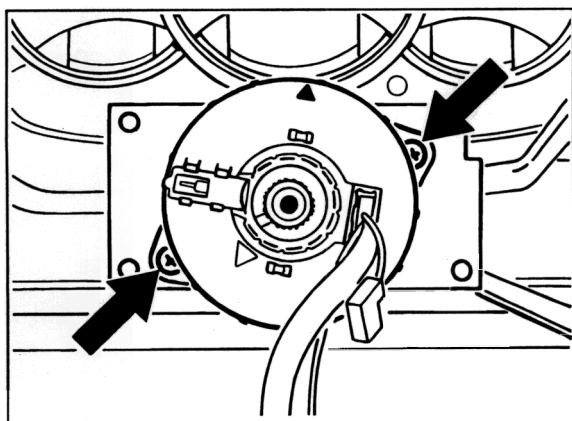
Removal

1. Remove the airbag steering wheel (see repair group 48).
2. Undo and remove the panel.



30 - 96

3. Undo the fastening screws of the contact unit.



31 - 96

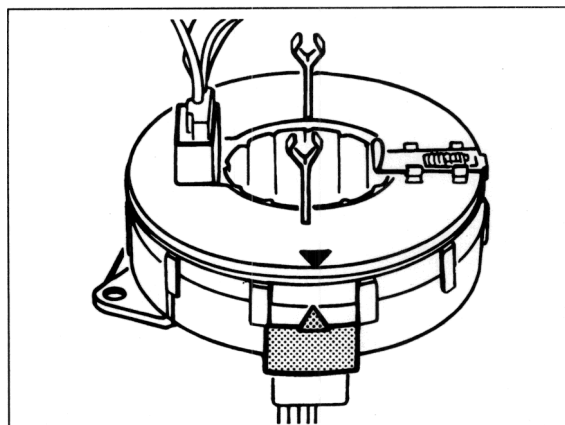
4. Pull forward and disconnect the electrical plug connections.
Remove the contact unit.

Note

To prevent unintended rotation of the contact unit (KE) when the steering wheel has been removed, the contact unit locks itself when the steering wheel is pulled back. Automatic unlocking of the contact unit also occurs when the steering wheel is placed in position.

Installation

1. With the front wheels still in straight-ahead position, remove the airbag steering wheel as described in point 1.
2. Ensure that the exact center position (arrows) of the contact unit is maintained.



1718 - 68

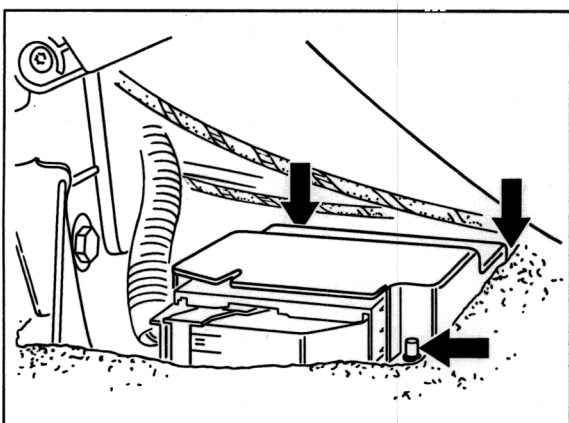
69 53 19 Removing and installing the triggering unit for the airbag

Removal

Note

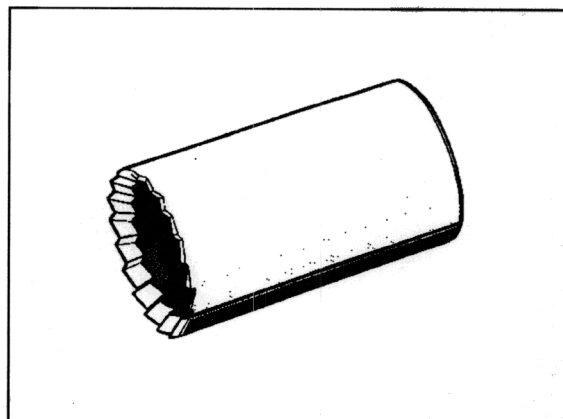
The airbag triggering unit **must not be removed with the plug plugged in**. Waiting time following ignition off (battery disconnection) and detachment of the plug connection during work on the airbag system at least **1 minute**. The triggering unit is located above the centre console.

1. Remove ignition key.
2. Disconnect the battery and cover terminal or battery.
3. Unclip front cover of the centre console on the left and right. Fold up the safety bracket from the driver's side. Disconnect the plug connection from the triggering unit.



91 - 97

4. Undo the shear-off nut with the special tool 9259.



281 - 68

5. From the passenger's side, undo the shear-off nuts and M6 hexagon nut and remove the triggering unit.

Installation

Note

The fastening points on the body must be metallically bright.

Use a 1/4 inch Allen key to tighten the shear-off nuts.

Tightening torque of the M6 hexagon nut:
10 Nm (7.5 ftlb.)

A new triggering unit must be locked after it has been installed.

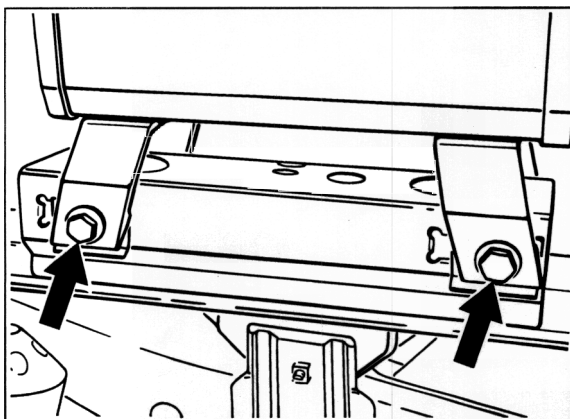
Refer to Boxster Technical Manual.

Volume 0 - Diagnosis, 6901 Diagnosis/trouble-shooting, airbag.

69 59 19 Removing and installing the passenger's airbag unit

Removal

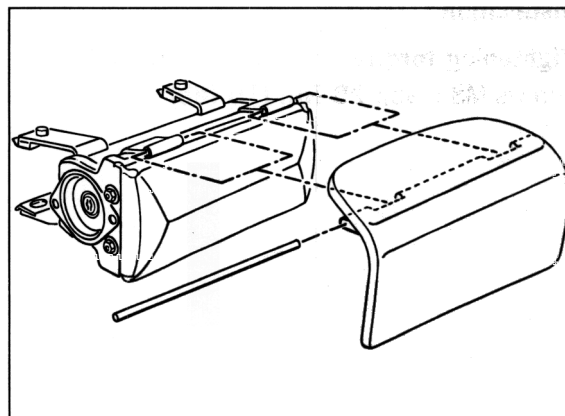
1. Remove ignition key.
2. Disconnect the battery and cover the terminal or battery.
3. Remove the air guide at the bottom right.
4. Undo the airbag unit from below and remove it rearward to the passenger's seat.



72 - 96

5. Disconnect the electrical plug connection.

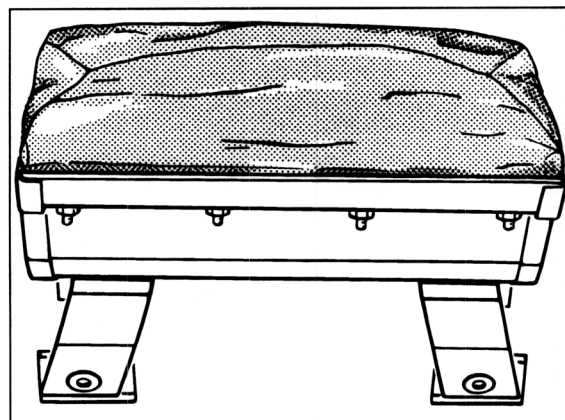
6. Pull out the hinge pin on the airbag unit and remove the panel.



73 - 96

Note

The airbag unit must always be deposited so that the airbag opening faces upwards.



74 - 96

If removed for an extended period, the airbag unit must be kept in a locked place. Observe the safety regulations.

Installation

Tightening torque for fastening screws (2 screws M8 x 95): **20 Nm (15 fdlb)**

69 63 19 Removing and installing the side airbag unit

Removal

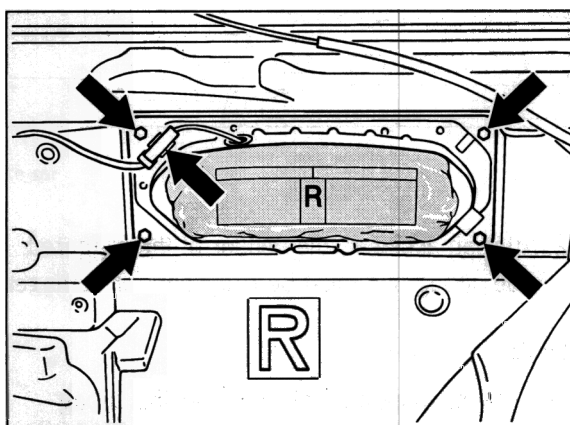
1. Remove ignition key.
2. Disconnect the battery and cover terminal or battery.
3. Remove door trim panel (see Page 70 - 17).

Note

Behind the "Airbag" inscription lies a screw M5 x 10 that is fastened on the fastening clip of the side airbag unit.

Remove cover with "Airbag" inscription and unscrew the screw.

4. Disconnect electrical plug connection and undo fastening screws. Carefully remove side airbag unit from the door.

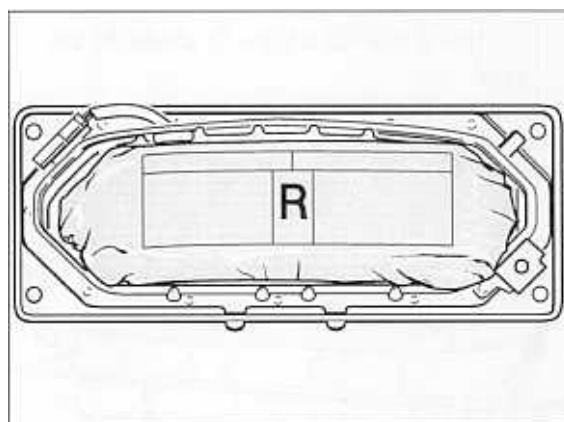


161_97

Note

Since 03.11.1999, the fastening screws are micro-encapsulated. The fastening screws must always be replaced after removal.

The airbag unit must always be deposited so that the airbag opening faces upwards.



049_97

The airbag unit should be placed in a package or packed in film and, if removed for an extended period, stored under dry conditions in a locked room. Observe the safety regulations.

Installation

Left/right identification of the side airbag unit

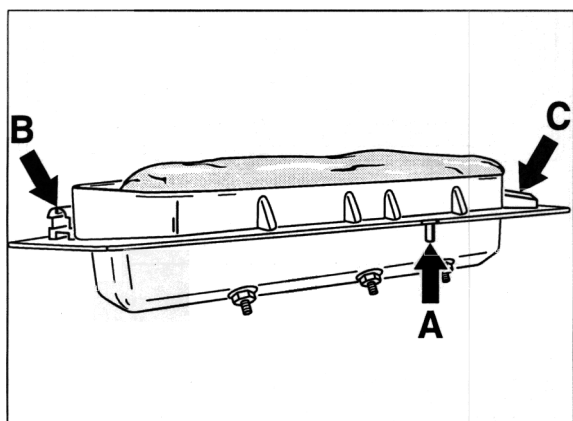
Inscription **R** = **R**ight door

Inscription **L** = **L**eft door

Locking pin (Figure A) must always point to the rear!

The wire connection point (Figure B) must always face the front!

Fastening clip M5 (Figure C) always to the rear!



050_97

1. The cover film behind the side airbag unit must not be damaged (protects against water leaking in).
2. Install airbag unit with the inscription "R" in the right-hand door and fasten. Engage electrical plug connection.
3. **Tightening torque** for fastening screws
(4 screws M6 x 16): **10 Nm (7.5 ftlb.)**
(1 screw M5 x 10) : **6 Nm (4.5 ftlb.)**
Reinstall door trim panel.

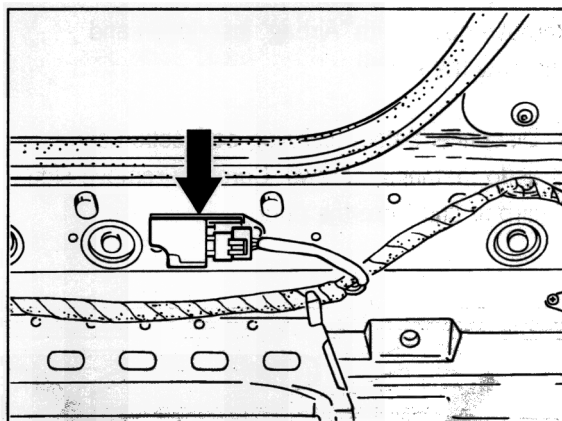
Sensor for side airbag unit

Note

Sensors for triggering the side airbag unit are fastened on the inner lower side member on the left and right-hand sides in the vehicle.

Removal

1. The cover strip and the support on the lower side member must be removed first.



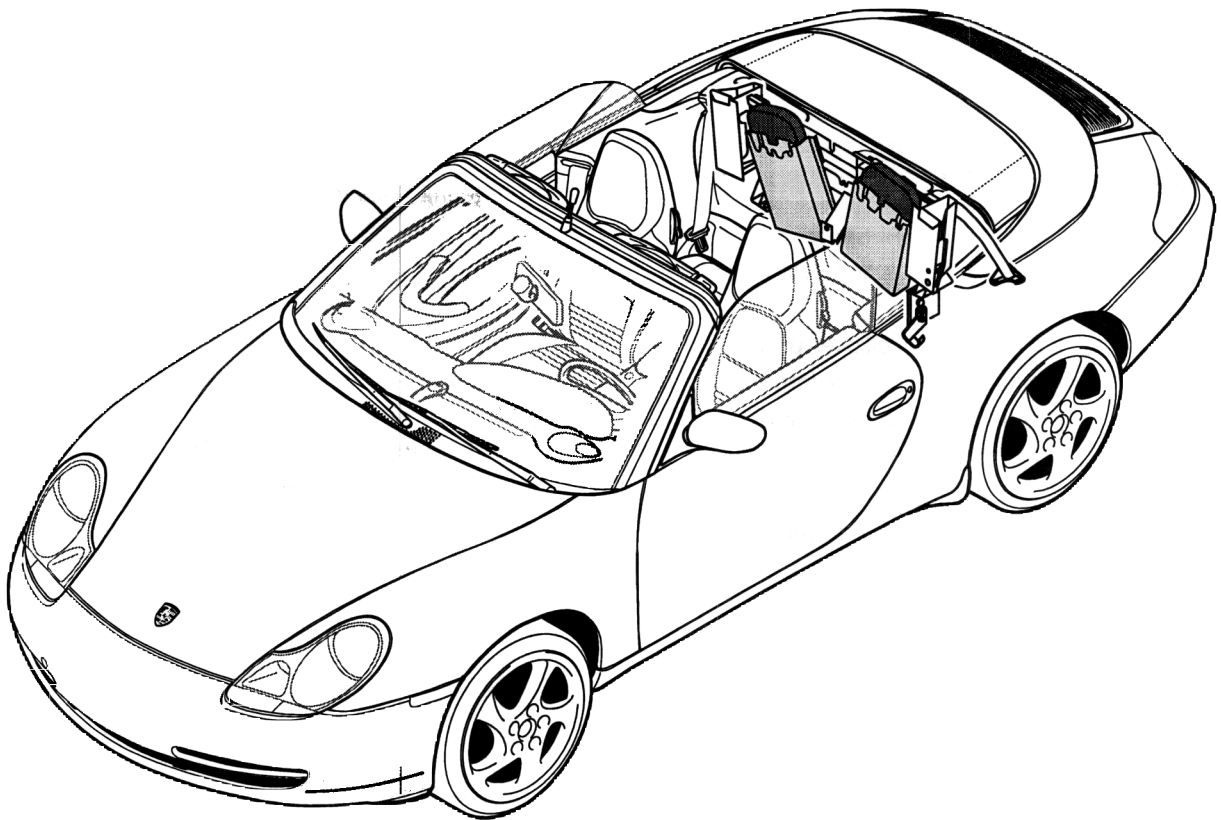
162_97

2. After an accident, the sensor of the triggered side airbag unit must be examined for damage.

Note

The sensor must be replaced after the airbag has been triggered for the third time.

69 72 19 Removing and installing roll-over bar



69_98

Removing and installing roll-over protection system

Safety instructions for work on the roll-over protection system

It is impermissible to perform repairs on the roll-over bar modules.

The roll-over bar modules must be replaced in the event of visible damage or pressure marks.



Warning:
Danger of injury during work on the roll-over protection system

- > The movement range of the roll-over protection system must be kept clear.
Work on the roll-over protection system must be performed only with the ignition key withdrawn.
Important: Do not begin assembly work until after a **waiting time of 1 minute** has elapsed.
Tools or other objects must not be placed in the extension area of the roll-over protection system.



Warning:
Danger of injury during work on the roll-over protection system

- > Remove the roll-over bar modules only after the roll-over bar has been extended (triggered).

After assembly work on the roll-over protection system – but at least **every 2 years** – the function of the roll-over protection system must be tested by triggering it via the diagnostic interface.

Perform the function test on the roll-over protection system only if:
the hardtop is removed
the convertible top is open
the caps are removed.

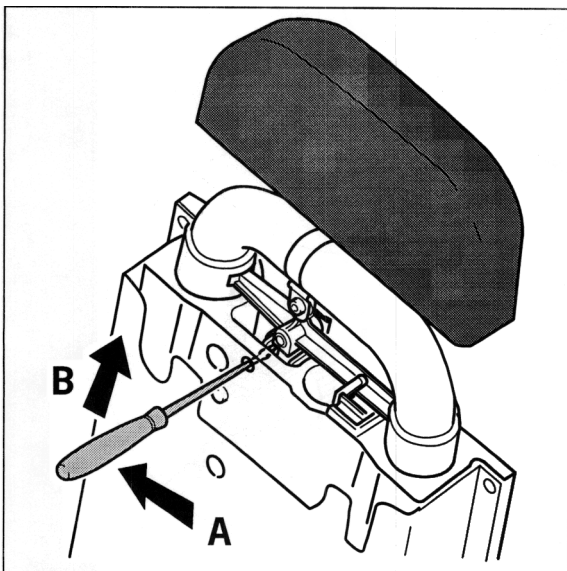
Mechanical emergency triggering of the roll-over protection system

If it the roll-over bar modules cannot be triggered via the diagnostic interface, mechanical emergency triggering is possible.

Warning:

Danger of injury during mechanical emergency actuation

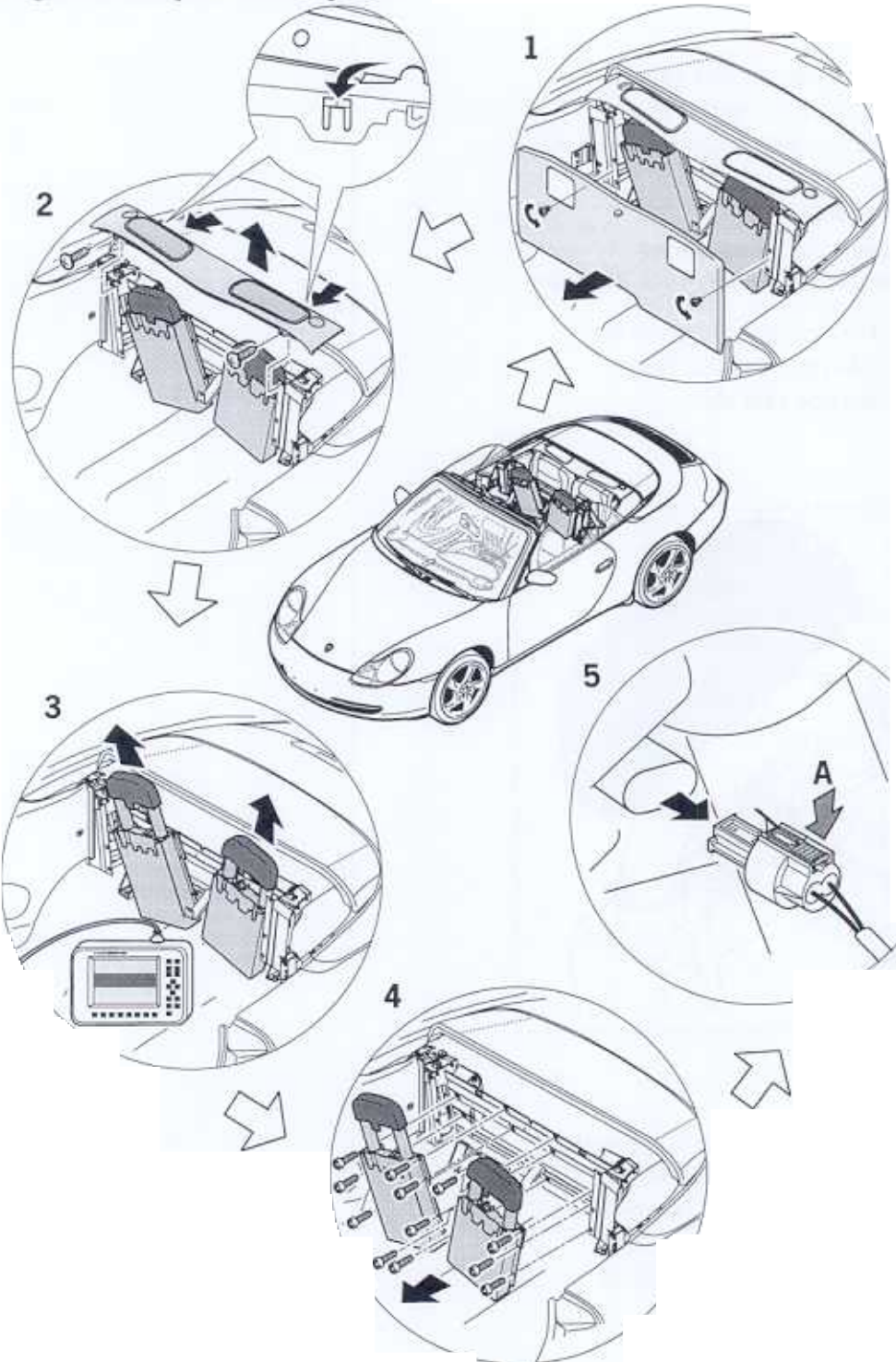
- > The movement range of the roll-over protection system must be kept clear.



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Insert a screwdriver into the hole in the module and press it against the top edge of the pawl. Press the screwdriver to the left (**arrow A**) and hold it while pressing up (**arrow B**). The roll-over protection system is released.

Removing roll-over protection system



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Removing roll-over protection system

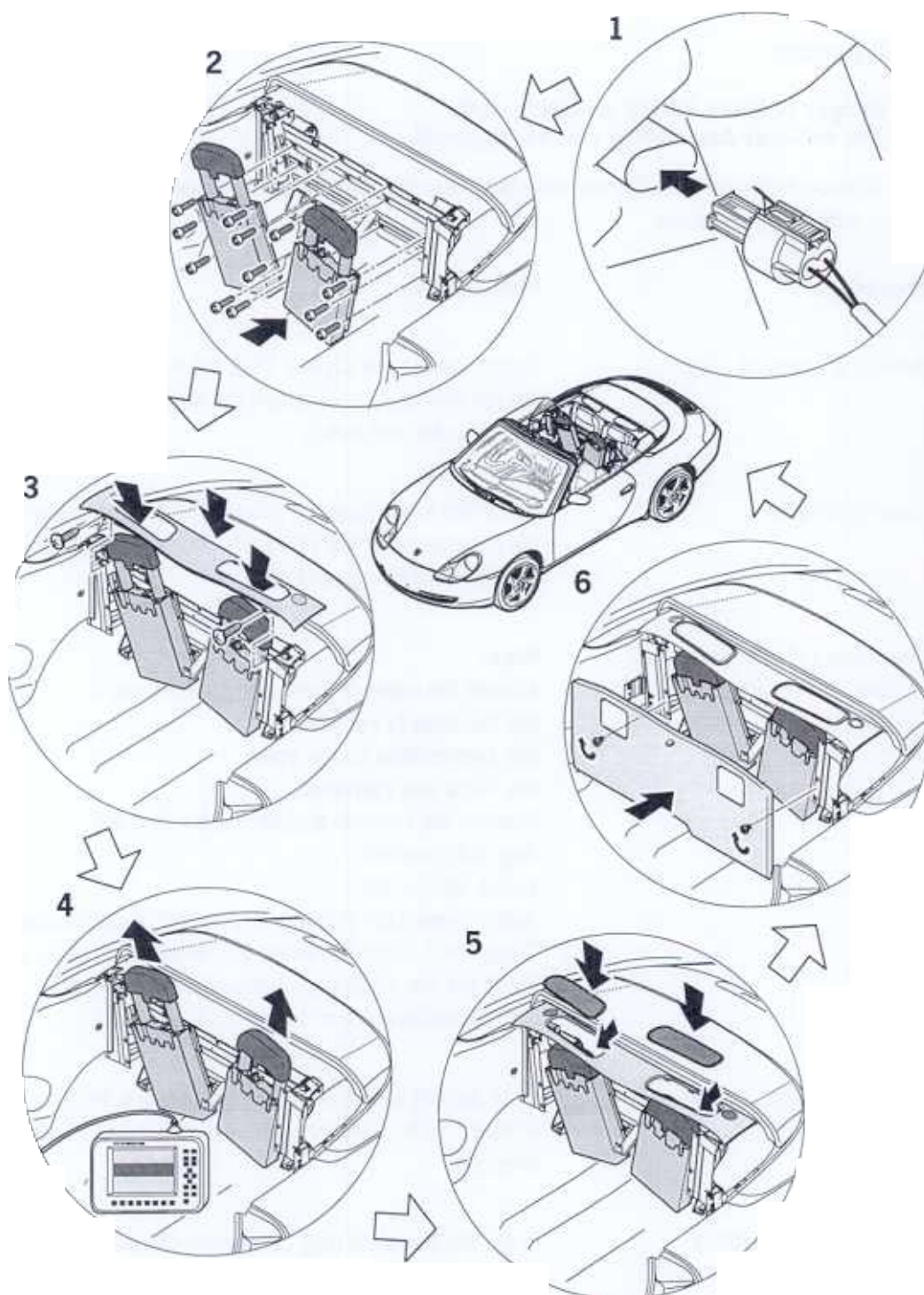
**Important:**

Danger of injury during assembly work!
The roll-over bar module can be triggered.

- > Remove the roll-over bar modules only after the roll-over bar has been extended (triggered).

| No. | Procedure | Instructions |
|-----|---|--|
| 1 | Removing rear wall lining | Remove oval-head screws from the rear wall lining on the left and right, and detach the auxiliary frame. Remove rear wall lining. |
| 2 | Removing cover | Unclip the cover over the roll-over protection system at the rear, unscrew the T20 x 35 Torx screws at the front, and lift the cover up and off. |
| 3 | Triggering roll-over protection system with the Porsche System Tester 2 | Note: Actuate the roll-over protection system only if: the hardtop is removed the convertible top is open the caps are removed. Connect the Porsche System Tester 2 to the diagnostic socket. Switch ignition on. Select menu item "Roll-over protection". Select menu item "Drive links" in the command line which then appears. Press the key combination described in the Tester; the roll-over protection system is triggered. |
| 4 | Undoing hexagon socket head bolts | Undo the M8 x 30 hexagon socket head bolts from the modules in the auxiliary frame and pull out in downward direction. |
| 5 | Disconnecting electrical plug connection | Press the electrical plug connection (arrow A) and pull apart. |

Installing roll-over protection system

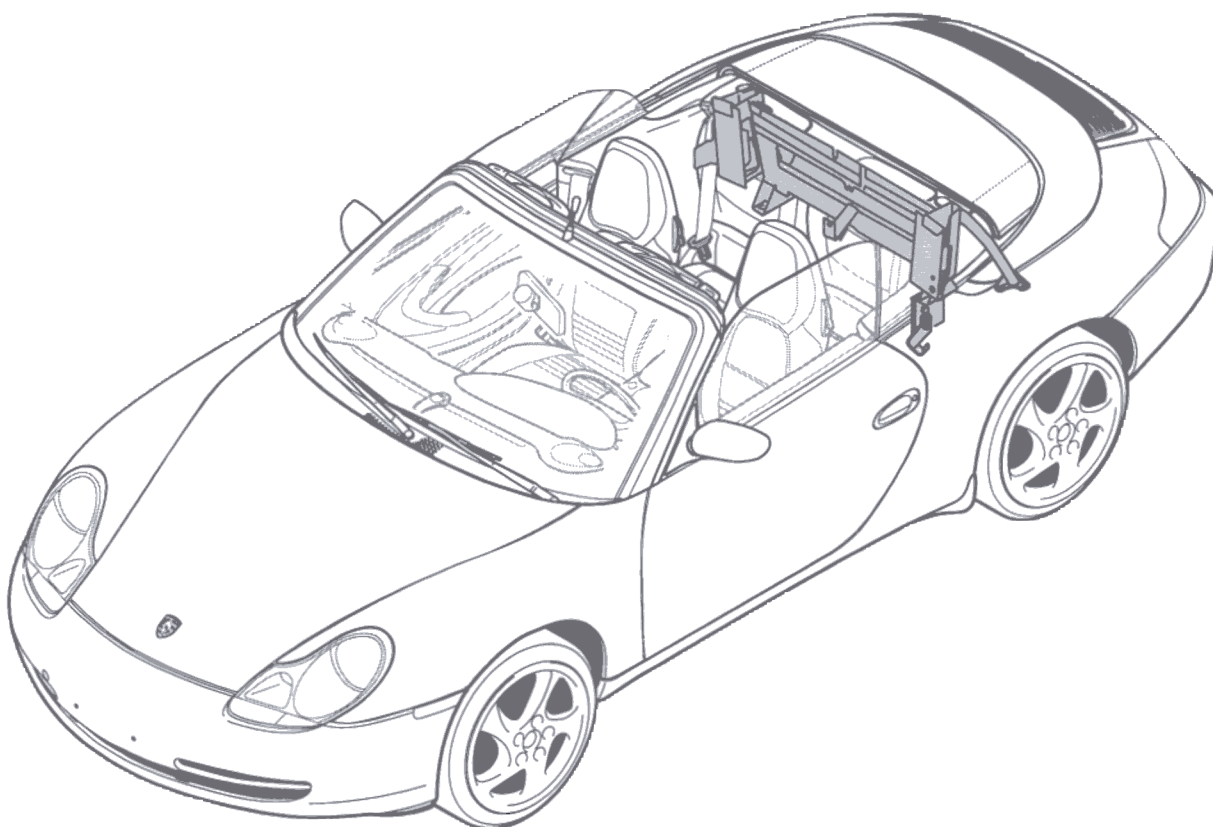


95_98

Installing roll-over protection system

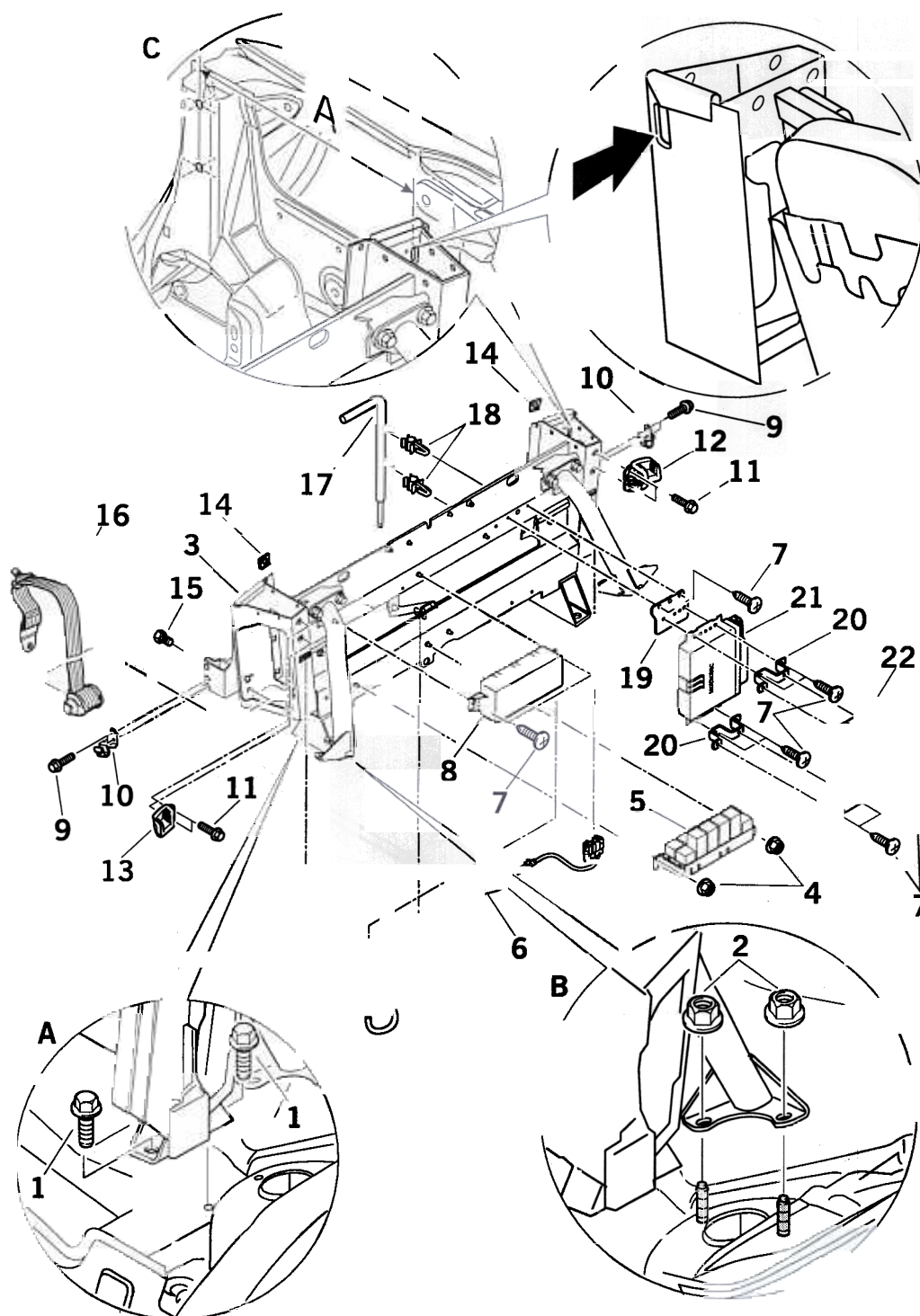
| No. | Procedure | Instructions |
|-----|---|---|
| 1 | Connecting electrical plug connection | Plug in electrical plug connection of the roll-over bar modules. |
| 2 | Fitting roll-over bar modules | Position the roll-over bar modules on the auxiliary frame and fasten them with the M8 x 30 hexagon socket head screws of strength class 10.9 . Tightening torque: 33 ± 3 Nm (24 ± 2.0 ftlb.) |
| 3 | Fitting cover | Position cover of the roll-over protection system over the auxiliary frame and fasten it with the B4.2 x 19 oval-head screws. Press locking levers of the roll-over bar modules outward, and press in the roll-over bar until it engages. |
| I 4 | Triggering roll-over protection system with the Porsche System Tester 2 | Test the roll-over protection system (function test). Select menu item "Roll-over protection". Select menu item "Drive links" in the command line which then appears. Press the key combination described in the Tester; the roll-over protection system is triggered. Note: Carry out the function test only with the cover caps removed . |
| I 5 | Pressing in the roll-over bar | Press locking levers outward and press in the roll-over bar until it can be felt to engage. Fit cover flaps on the left and right. |
| 6 | Fitting rear wall lining | Position rear wall lining on the auxiliary frame and fasten it on the left and right using the oval-head screws. |

69 77 19 Removing and installing frame for roll-over protection system



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Removing and installing frame for roll-over protection system



8_98

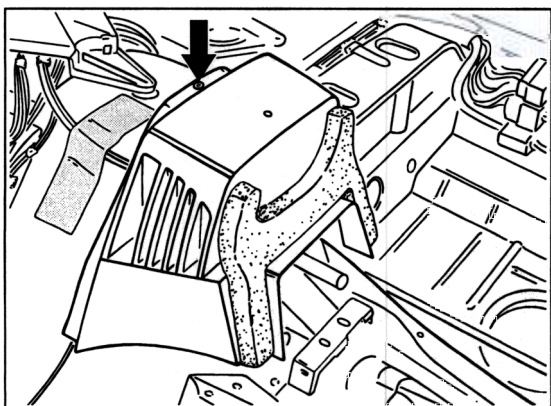
Removing and installing frame for roll-over protection system

| No. | Designation | Qty. | Removal | Note: | Installation |
|-----|-----------------------------------|------|--|-------|---|
| | | | | | |
| | Hexagon-head bolt M10 x 25 | 4 | Undo | | Tightening torque: 65 ± 6 Nm (48 ± 4.5 ftlb.) |
| 2 | Collar nut M10 | 4 | Undo | | Tightening torque: 48 Nm (36 ftlb.) |
| 3 | Frame | | Undo hexagon-head bolts (Item 1) and collar nuts (Item 2), and lift frame (Item 3) out of the vehicle | | Position frame in the vehicle. Dimension A: 491 ± 1 mm (Figure C) . Measure centre of screwed point (convertible-top support), side section on inside, to frame cutout on right and left. Tighten hexagon- head bolts (Item 1) and collar nuts (Item 2) |
| 4 | Collar nut M6 | 2 | | | |
| 5 | Relay box | 1 | | | |
| 6 | Wiring harness | | | | |
| 7 | Oval-head screw B4.2 x 12 | 10 | | | |
| 8 | Convertible-top control module | 1 | | | |
| 9 | Hexagon-head bolt M6 x 16 | 4 | | | Tightening torque: 9.7 Nm (7.0 ftlb.) |
| 10 | Holder | 2 | | | |
| 11 | Hexagon-head bolt M6 x 20 | 4 | | | Tightening torque: 9.7 Nm (7.0 ftlb.) |
| 12 | Right bracket | | | | |
| 13 | Left bracket | 1 | | | |
| 14 | Clip | 2 | | | Inspect and replace if necessary |

| No. | Designation | Qty. | Removal | Note: |
|-----|--------------------------|------|---------|--|
| | | | | Installation |
| 15 | Hexagon-head bolt | 1 | | Tightening torque: 50 Nm (37 ftlb.) |
| 16 | Belt reel, left | 1 | | |
| 17 | Assembly key | 1 | | Clip in |
| 18 | Clip | 2 | | Inspect and replace if necessary |
| 19 | Holder | | | |
| 20 | Motronic control module | 1 | | |
| 21 | Tiptronic control module | 1 | | |

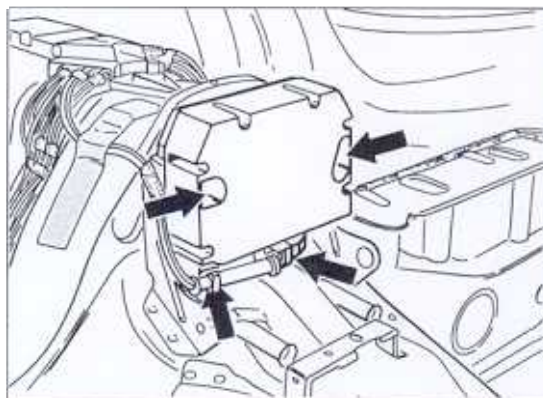
69 74 19 Removing and installing control module for roll-over protection system**Removal**

- Remove ignition key.
2. Disconnect the battery and cover terminal or battery.
 3. Slightly loosen centre console and push forwards a little (refer to Serv. No. 68 17 19).
 4. Remove the two rear belt buckles and take out the seat wells.
 5. Undo the trim of the seat wells from the carpeting and lift up in the middle.
 6. Using a support tool, support the trim and unscrew and remove the plastic screw (Torx T30) from the control module cover.



211_98

7. Disconnect the electrical plug connection. Undo the shear-off nuts using special tool 9259, and remove the roll-over protection control module.

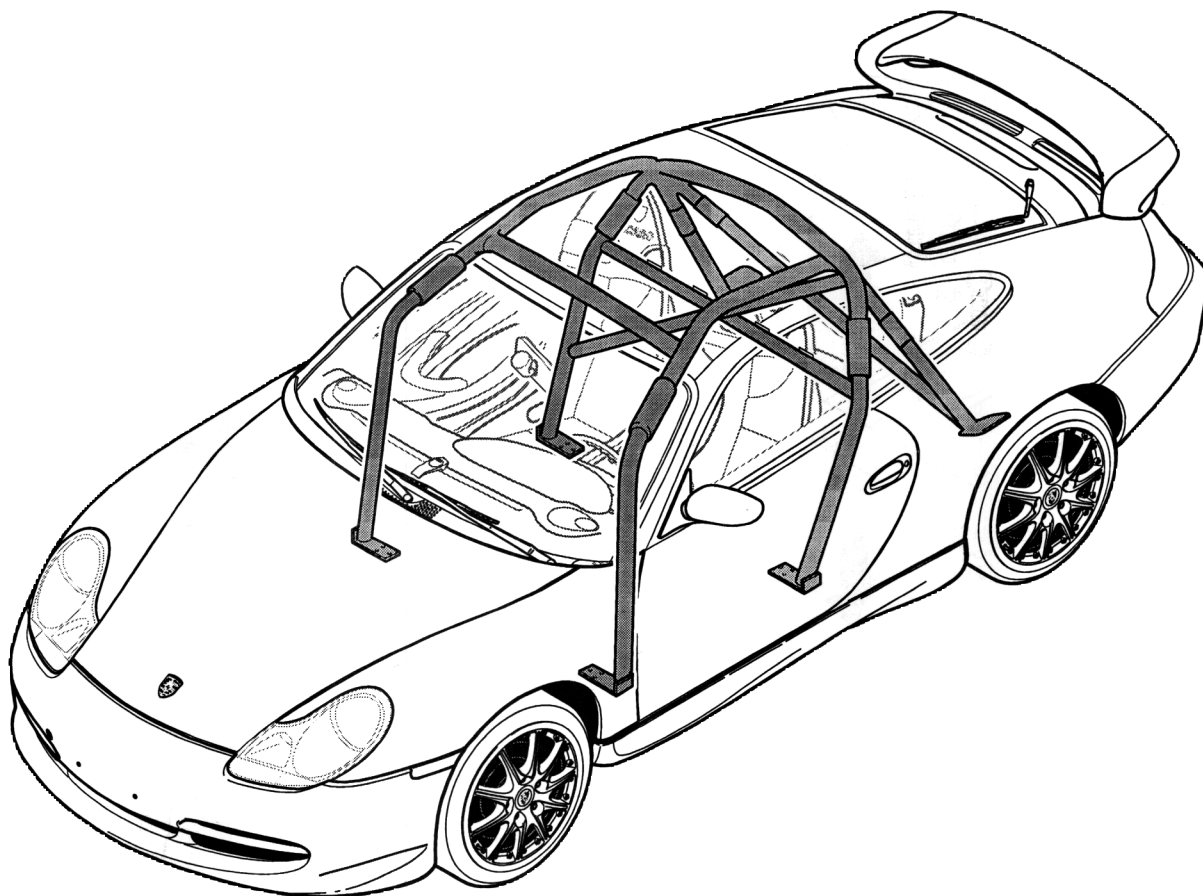


200_98

Installation

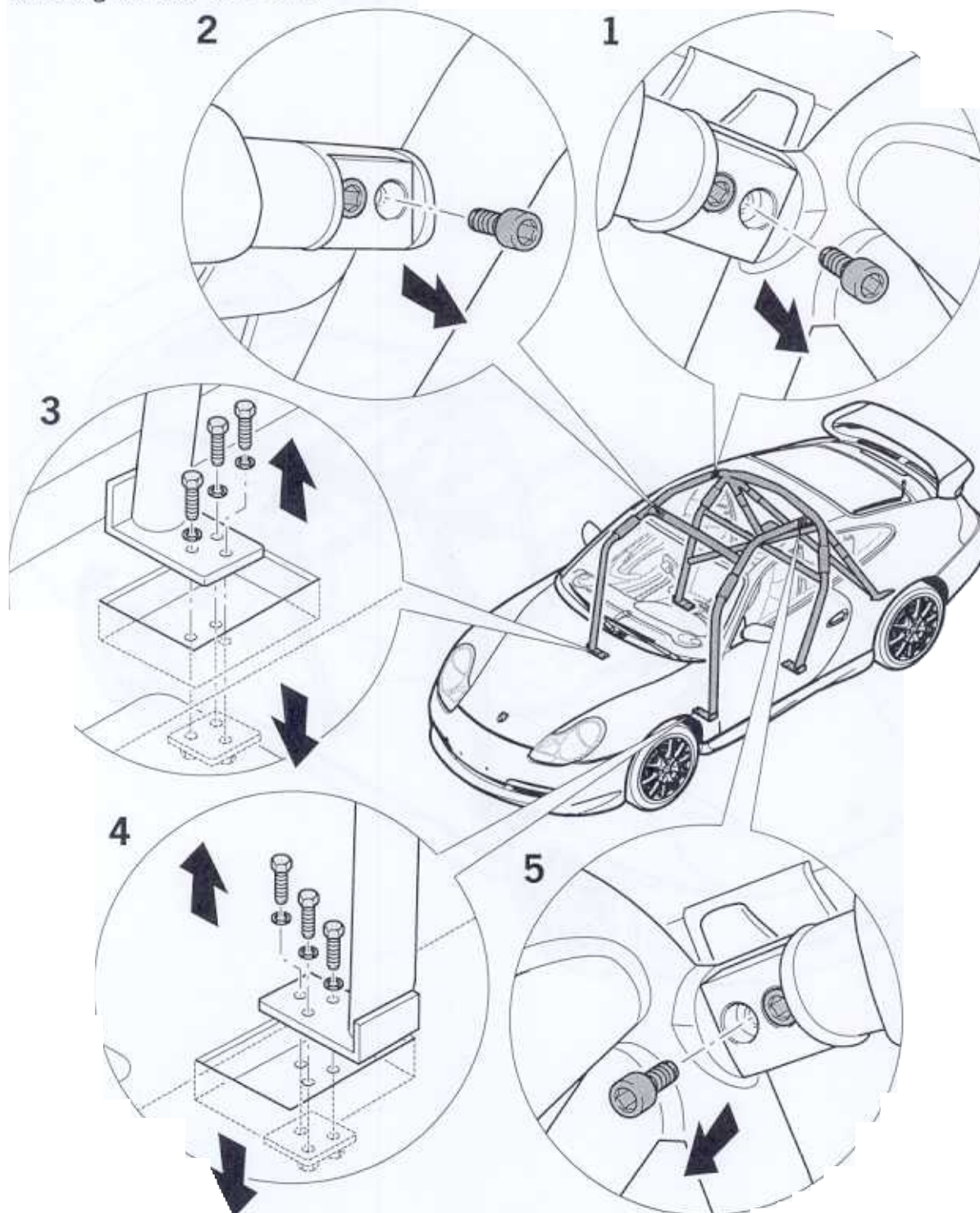
1. Install the roll-over protection control module in the centring holes with the fixing pins, and secure with shear-off nuts.
2. Use a 1/4 inch Allen key to tighten the shear-off nuts.
3. Engage electrical plug connection and route wire carefully. Install control module cover, seat wells, belt buckles and centre console.
4. Following the installation of a new control module for the roll-over protection system, the transport lock must be deactivated with the Porsche System Tester 2 (refer to Group 0, Entire vehicle – General, Sales check, Page 01 - 1).

69 72 19 Removing and installing roll-over bar – GT3



155_99

Removing roll-over bar – GT3



156_99

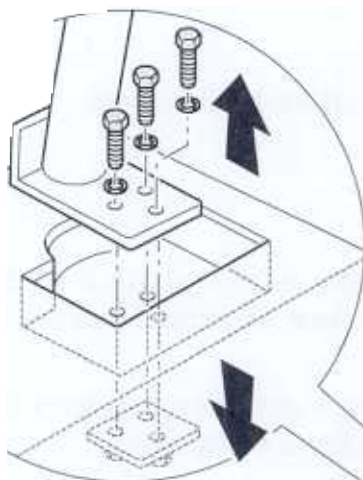
Removing roll-over bar – GT3

The bucket seats Serv. No. 72 01 must be removed before the roll-over bar is removed.

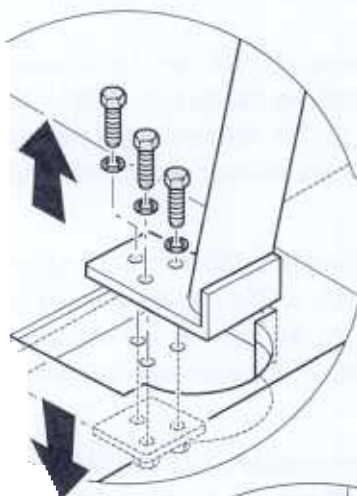
| No. | Procedure | Instructions |
|-----|--|---|
| 1. | Detach right section (A-pillar support) | Unscrew the hexagon socket head bolts M 8 x 25 out of the right section (A-pillar support) and undo the base cage. |
| 2. | Detach the transverse connection of both sections (A-pillar support) | Unscrew the hexagon socket head bolts M 8 x 25 in the transverse connection to the right section. |
| 3. | Detach right section on the underbody | Unscrew the fastening nuts M8 from the counterplate on the vehicle underbody on the outside. Remove hexagon head bolts M 8 x 25, 8.4 washers out of the section. Pull right section out of the passenger compartment. |
| 4. | Detach left section on the underbody | Unscrew the fastening nuts M8 from the counterplate on the vehicle underbody on the outside. Remove hexagon head bolts M 8 x 25, 8.4 washers out of the section. Pull right section out of the passenger compartment. |
| 5. | Detach left section (A-pillar support) | Unscrew the hexagon socket head bolts M 8 x 25 out of the left section (A-pillar support) and undo the base cage. |

Removing roll-over bar GT3

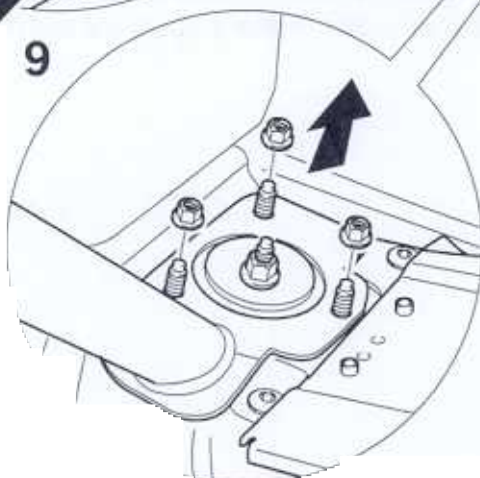
7



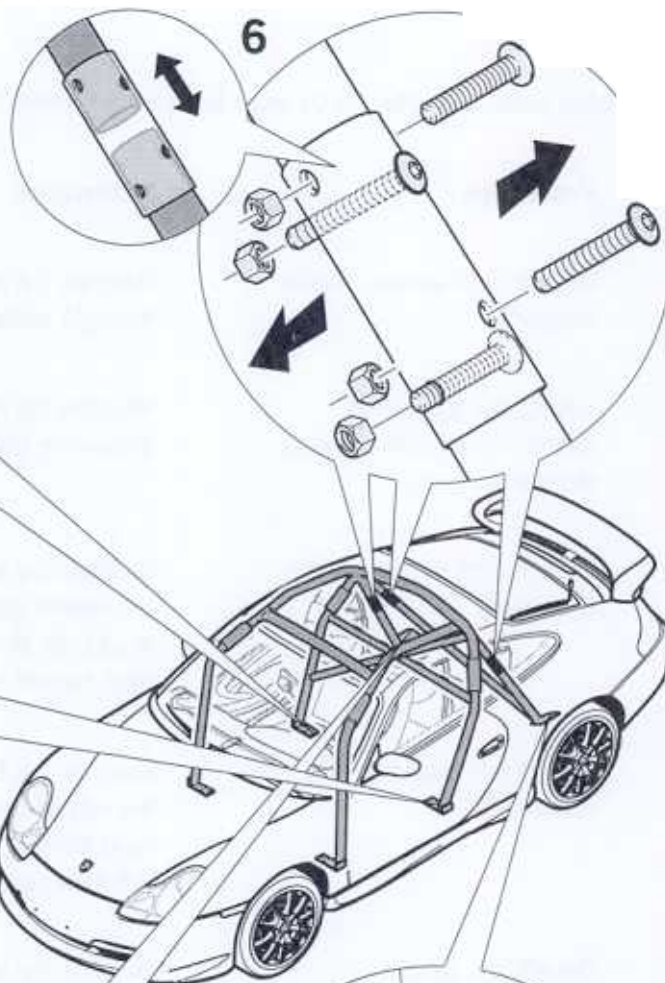
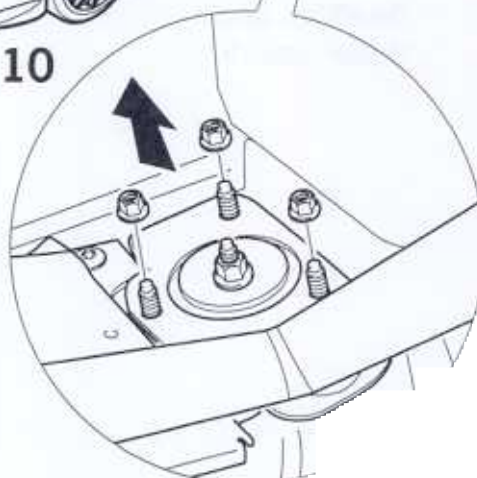
8



9



10

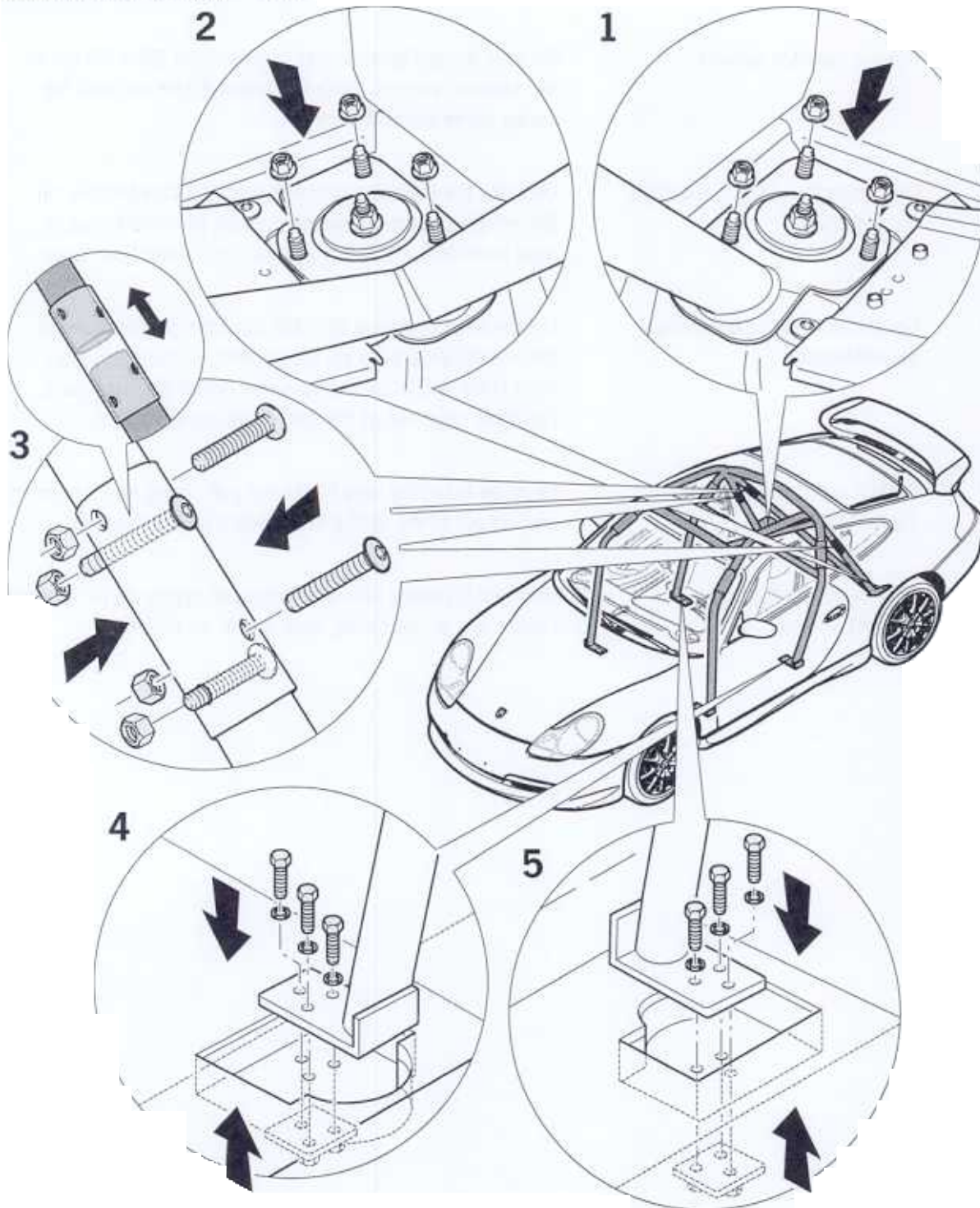


r_99

Removing roll-over bar – GT3

- | | | |
|----|---|---|
| 6 | Detach selector sleeves | Remove the hexagon socket head screws M8 x 55 out of the selector sleeves. Push the selector sleeves onto the spring dome support sections. |
| 7 | Detach right side of base cage on underbody | Unscrew the fastening nuts M8 from the counterplate on the vehicle underbody on the outside. Remove hexagon head bolts M 8 x 25, 8.4 washers out of the base cage. |
| 8. | Detach left side of base cage on underbody | Unscrew the fastening nuts M8 from the counterplate on the vehicle underbody on the outside. Remove hexagon head bolts M 8 x 25, 8.4 washers out of the base cage. Pull base cage out of the passenger compartment. |
| 9 | Detach right spring dome support section | Unscrew fastening nuts M 10 and pull spring dome support section out of the spring strut mount on the right. |
| 10 | Detach left spring dome support section | Unscrew fastening nuts M 10 and pull spring dome support section out of the spring strut mount on the left. |

Installing roll-over bar – GT3

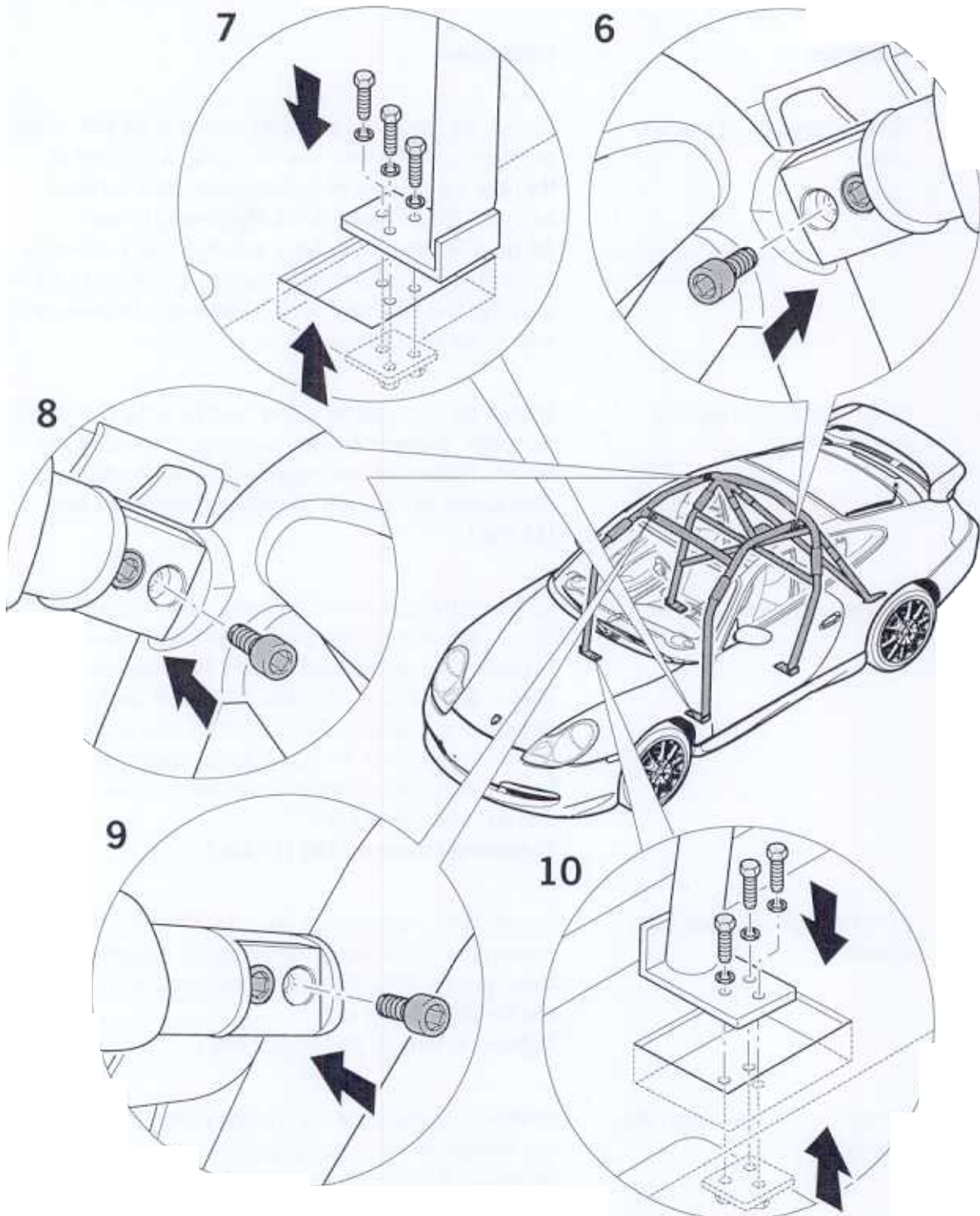


158_99

Installing roll-over bar – GT3

| No. | Procedure | Instructions |
|-----|--|---|
| 1 | Fit right spring dome support section | Position the spring dome support section in the rear of the passenger compartment onto the spring strut mount on the right. Tighten with the fastening nuts M10 (fastening nuts must always be replaced). Tightening torque 46 Nm (34 ftlb.) . Carry out a test drive after performing assembly work on the roll-over bar/spring support on the body and then retighten the M10 fastening nuts (three per side) to the same torque. |
| 2 | Fit left spring dome support section | Position the spring dome support section in the rear of the passenger compartment onto the spring strut mount on the left. Tighten with the fastening nuts M10 (fastening nut must always be replaced). Tightening torque 46 Nm (34 ftlb.) |
| 3 | Fit selector sleeves and base cage | Push selector sleeves onto the spring dome support sections on the left and right. Position the base cage onto the sections of the spring dome support. Push the selector sleeves upwards over the connector tube of the base cage. Turn the selector sleeves onto the hole pattern of the base cage and of the spring dome support sections. Fit the hexagon socket head screws M8 x 55 and tighten with the fastening nuts M8. Tightening torque 16 Nm (12 ftlb.) |
| 4 | Fit left side of base cage onto underbody | Position base cage onto the screwed points. Position the counterplate on the vehicle underbody on the outside and fasten with the M8 x 25 hexagon-head bolts, 8.4 washers and the M8 fastening nuts. Tightening torque: 23 Nm (17 ftlb.) |
| 5 | Fit right side of base cage onto underbody | Position base cage onto the screwed points. Position the counterplate on the vehicle underbody on the outside and fasten with the M8 x 25 hexagon-head bolts, 8.4 washers and the M8 fastening nuts. Tightening torque: 23 Nm (17 ftlb.) |

Installing roll-over bar – GT3

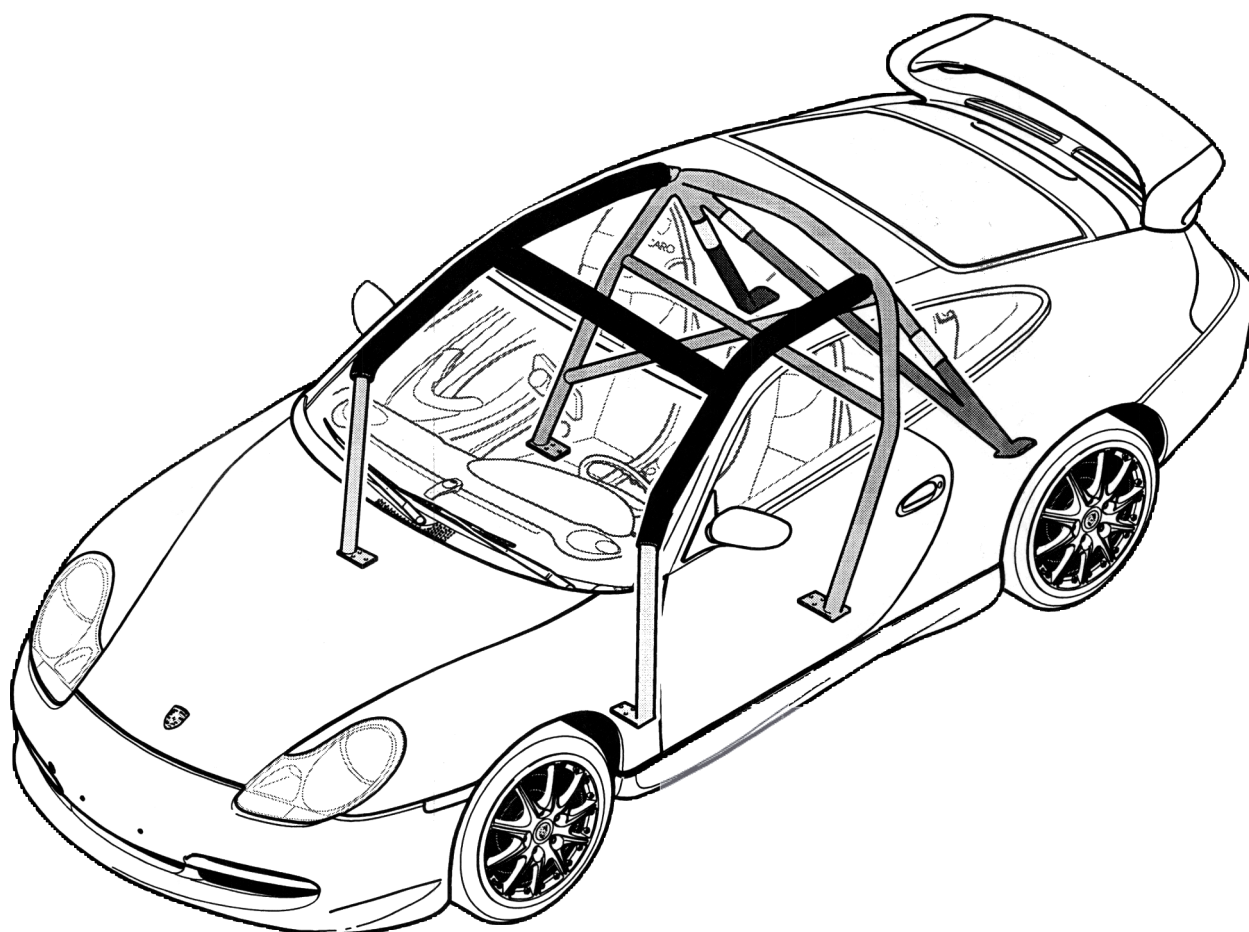


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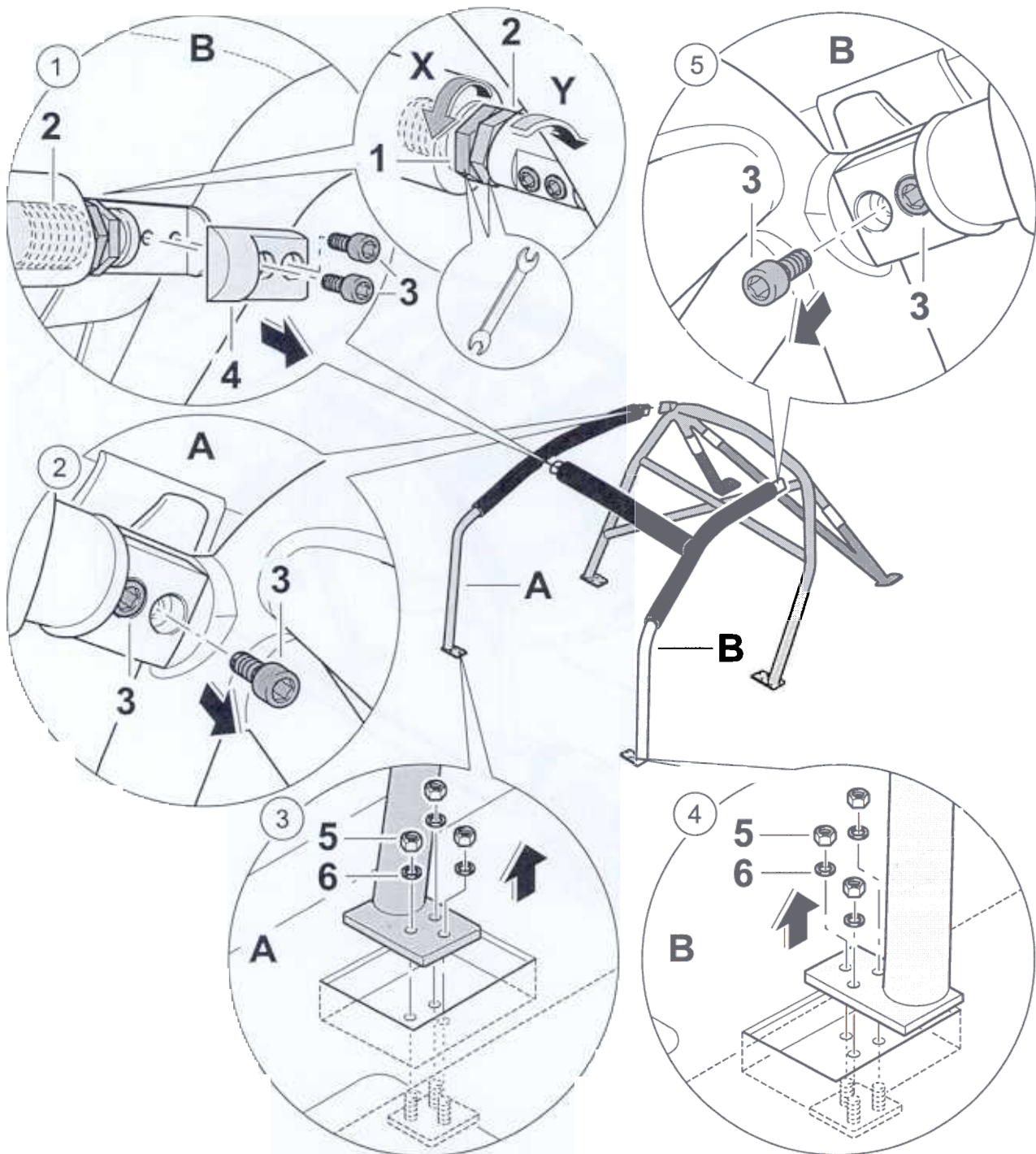
Installing roll-over bar – GT3

| No. | Procedure | Instructions |
|-----|---|---|
| 6. | Fit left section of roll-over bar | Insert the left section (A-pillar support) of the left door and screw onto the screwed points of the base cage at the rear with the hexagon head screws M 8 x 25. Tightening torque: 23 Nm (17 ftlb.) |
| 7. | Fit left section on the underbody | Position the section (A-pillar support) on the screwed points at the front. Position the counterplate on the vehicle underbody on the outside. Fasten with the M8 x 25 hexagon-head bolts, 8.4 washers and the M8 fastening nuts. Tightening torque: 23 Nm (17 ftlb.) |
| 8. | Fit right section of roll-over bar | Insert the right section (A-pillar support) of the right door and screw onto the screwed points of the base cage at the rear with the hexagon head screws M 8 x 25. Tightening torque: 23 Nm (17 ftlb.) |
| 9. | Fit transverse connection of both sections of the roll-over bar | Fasten the transverse connection between both sections with the M 8 x 12 hexagon socket head bolts. Tightening torque: 23 Nm (17 ftlb.) |
| 10. | Fit right section on the underbody | Position the section (A-pillar support) on the screwed points at the front. Position the counterplate on the vehicle underbody on the outside. Fasten with the M8 x 25 hexagon-head bolts, 8.4 washers and the M8 fastening nuts. Tightening torque: 23 Nm (17 ftlb.) |

Removing and installing roll-over bar - GT 3 - as of model year 2001

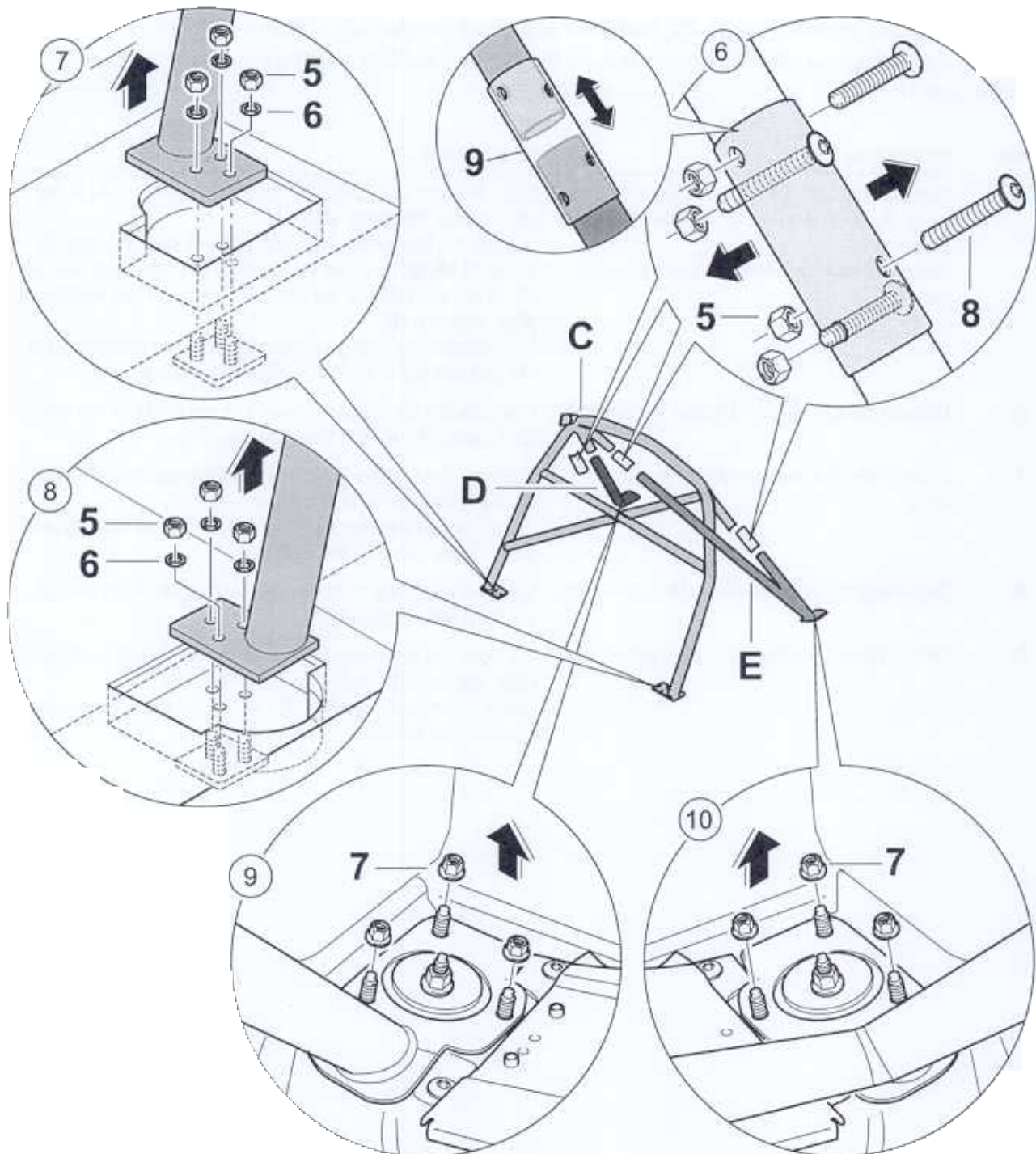


Removing roll-over bar



Before the removal of the base cage **-C-**, the bucket seats must be removed! ⇒ Rep. Gr. 707219; Removing and installing bucket seats. ⇒ "Assembly instructions for the rear trim, the floor covering and the closure caps" in **69-45** page 11

| No. | Procedure | Instructions |
|-----|--|---|
| | Moving right and left sections (A-pillar support) -A, B- to each other to relieve the tension and disconnecting the front transverse connection | Undo the lock nut -1- of the adjusting element -2- in the direction of the arrow -X- . Relieve the tension on the right and left sections (A-pillar support) -A, B- by screwing in above the adjusting element -2- in the direction of the arrow -Y- into the left section (A-pillar support) -B- . Unscrew the fastening screws -3- from the retainer plate -4- and the right section (A-pillar support) -A- . |
| 2 | Detaching right section (A-pillar support) -A- | Unscrew the fastening screws -3- from the right section (A-pillar support) -A- and the base cage -C- . |
| 3 | Detaching right section -A- on the underbody | Unscrew the fastening nuts -5- and the washer -6- from the right section (A-pillar support) -A- . Guide the section (A-pillar support) -A- out of the passenger compartment to the right. |
| 4 | Detaching left section -B- on the underbody | Unscrew fastening nuts -5- and washer -6- from the left section (A-pillar support) -B- . |
| 5 | Detaching left section (A-pillar support) -B- | Unscrew the fastening screws -3- from the left section (A-pillar support) -B- and from the base cage -C- . Guide the section (A-pillar) -B- out of the passenger compartment to the left. |



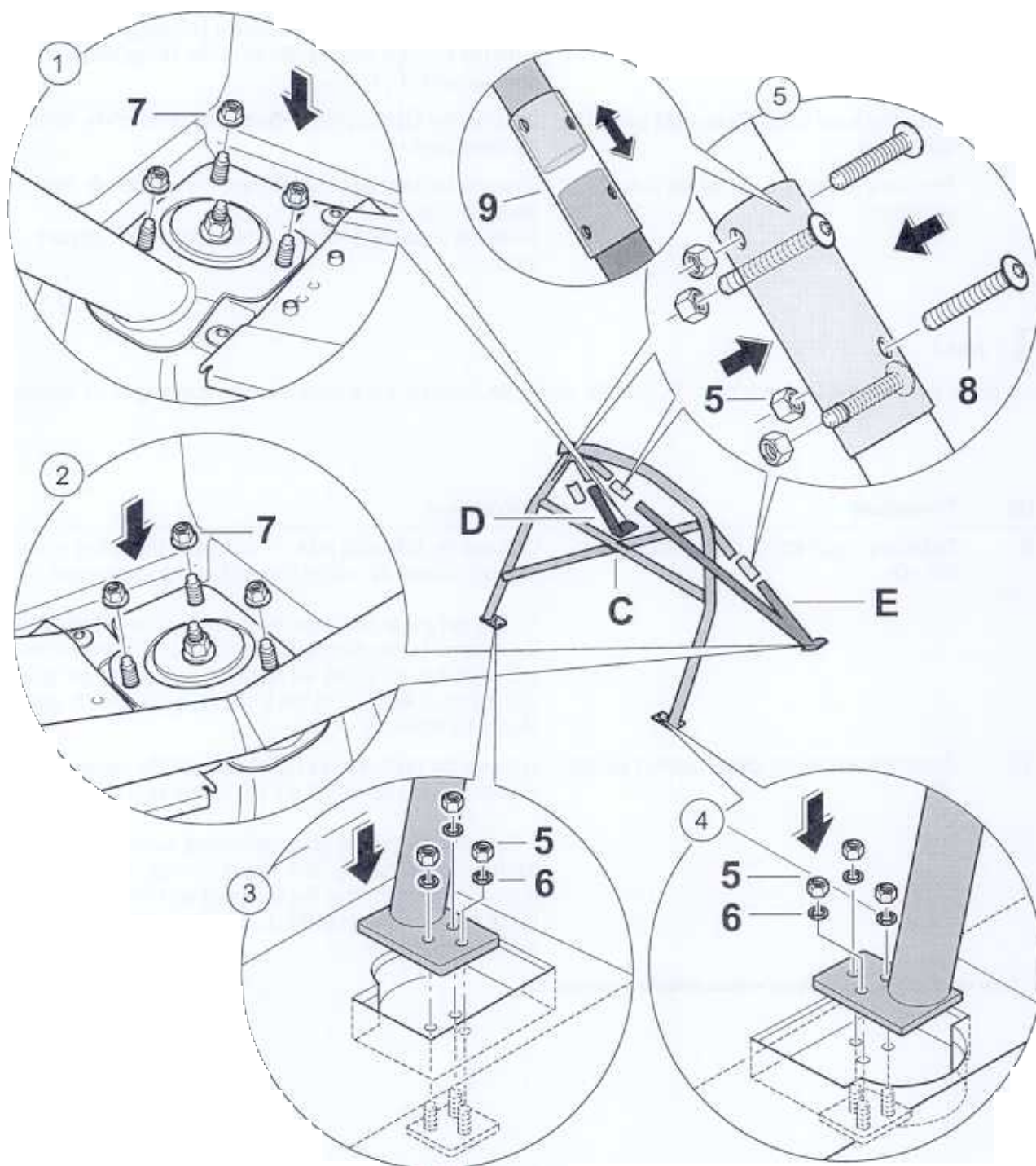
| No. | Procedure | Instructions |
|-----|--|--|
| | Removing selector sleeves -9- | Unscrew fastening nuts -5- from the fastening screws -8- . Push the selector sleeves -9- on to the spring dome support sections -C, D- . |
| 7 | Removing base cage -C- on right side of underbody | Unscrew the fastening nuts -5- and the washer -6- from the base cage -C - . |
| 8 | Removing base cage -C- on left side of underbody | Unscrew the fastening nuts -5- and the washer -6- from the base cage -C - . Guide the base cage -C- out of the passenger compartment. |

**Note!**

*In order to unscrew the fastening nuts **-7-** from the spring strut mount, the vehicle must be standing on its wheels.*

| No. | Procedure | Instructions |
|-----|--|---|
| | Detaching right spring dome support section -D- | Unscrew the fastening nuts -7- and guide the spring dome support section -D- out of the right spring strut mount. a) Carry out a test drive after performing assembly work on the roll-over bar/spring strut mount threaded parts on the body and then re-tighten the fastening nuts (three per side) to the torque: 46 Nm (34 ftlb.). The fastening nut -7- must always be replaced. |
| 10 | Detaching left spring dome support section -E- | Unscrew the fastening nuts -7- and guide the spring dome support section -E- out of the left spring strut mount. a) Carry out a test drive after performing assembly work on the roll-over bar/spring strut mount threaded parts on the body and then re-tighten the fastening nuts (three per side) to the torque: 46 Nm (34 ftlb.). The fastening nut -7- must always be replaced. |

a) Only when commissioning the vehicle without a roll-over bar



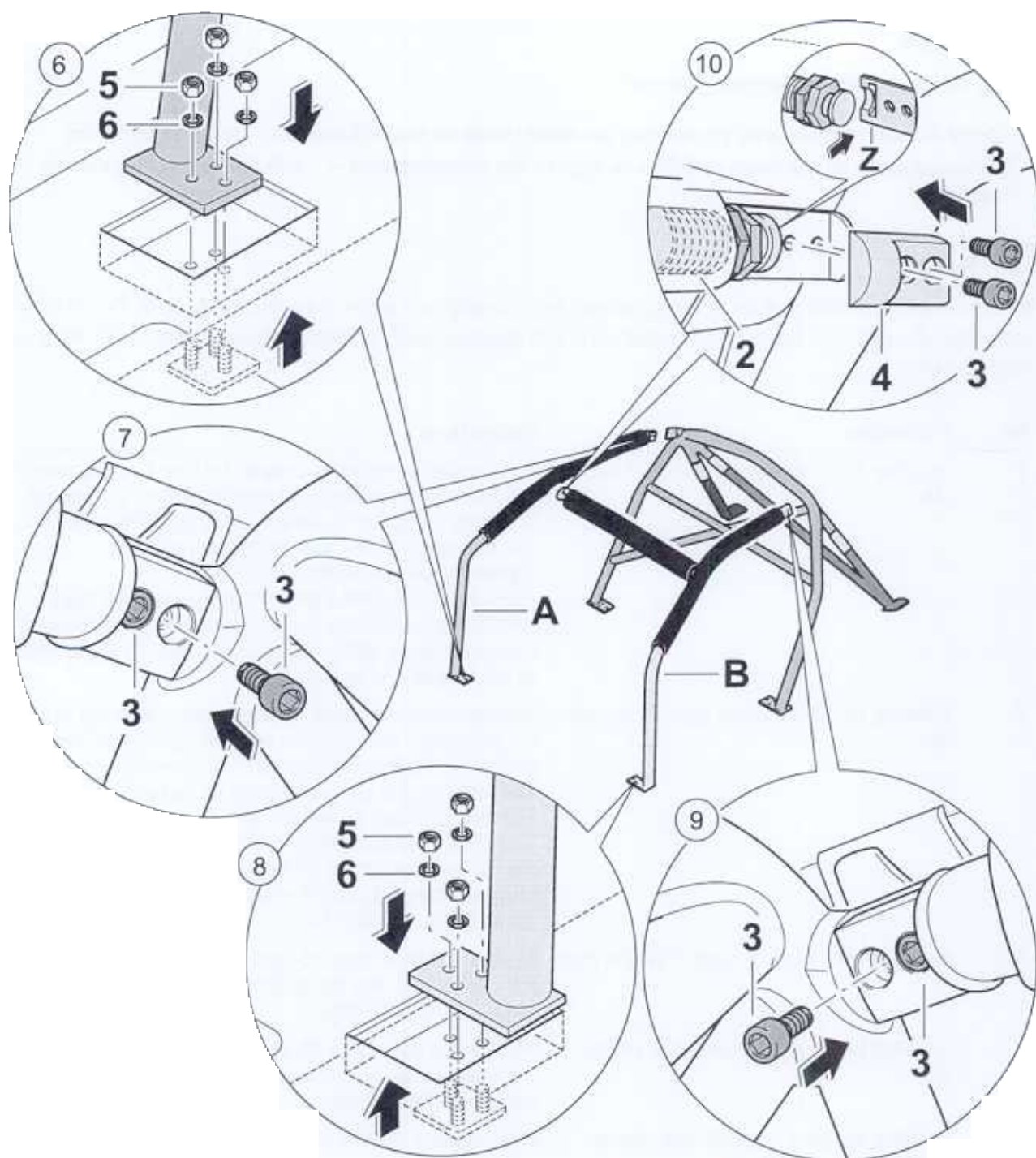
**Danger!****Re-tighten with correct tightening torque!**

- Carry out a test drive after performing assembly work on the roll-over bar/spring strut mount threaded parts on the body and then re-tighten the fastening nuts -7- with the correct tightening torque!

**Note!**

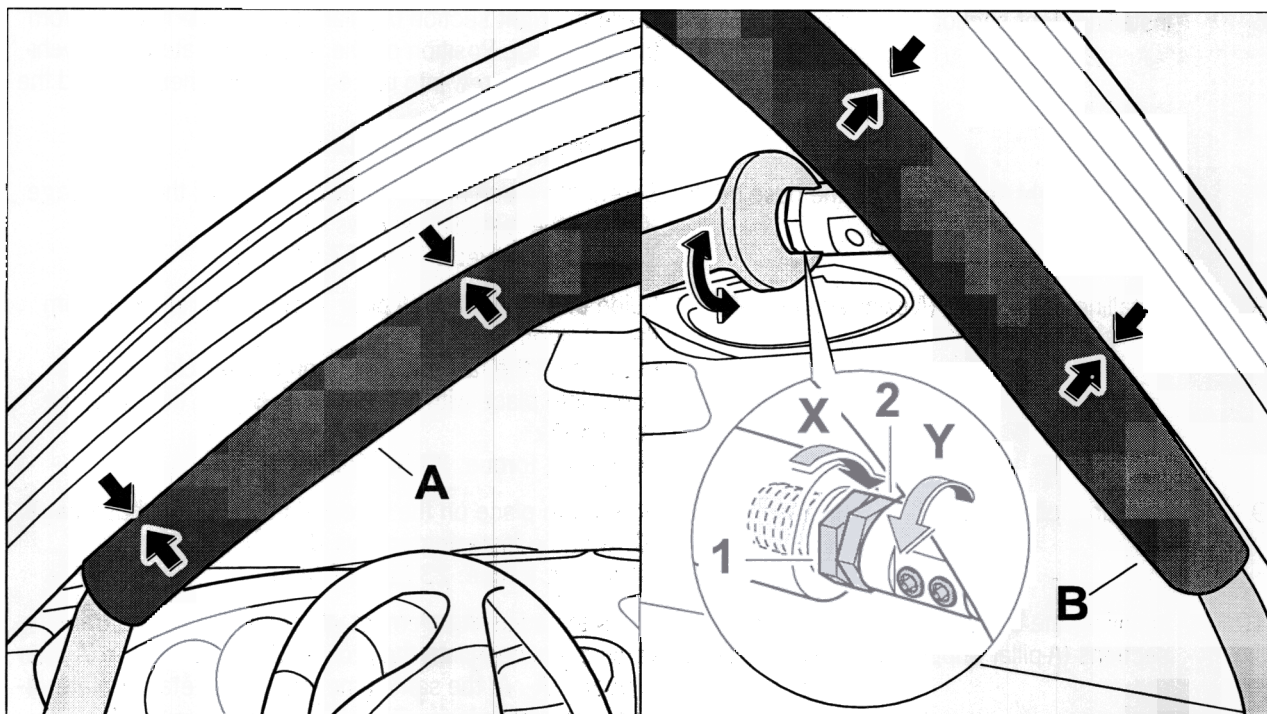
Initially screw in and centre all the fastening screws and fastening nuts only in the sections **-A, B, D, E-** and in the base cage **-C-**. Only then tighten the threaded parts with the prescribed tightening torques. Adjust the adjusting element **-2-** last.

| No. | Procedure | Instructions |
|-----|---|--|
| | Installing right spring dome support section -D- | Position the spring dome support section -D- in the rear of the passenger compartment onto the spring strut mount on the right. Tighten in place with the fastening nuts -7- . The fastening nut -7- must always be replaced. Tightening torque: 46 Nm (34 ftlb.) Carry out a test drive after performing assembly work on the roll-over bar/spring strut mount threaded parts on the body and then re-tighten the fastening nuts (three per side) to the torque: 46 Nm (34 ftlb.). |
| 2 | Installing left spring dome support section -E- | Position the spring dome support section -E- in the rear of the passenger compartment onto the spring strut mount on the left. Tighten in place with the fastening nuts -7- . The fastening nut -7- must always be replaced. Tightening torque: 46 Nm (34 ftlb.) Carry out a test drive after performing assembly work on the roll-over bar/spring strut mount threaded parts on the body and then re-tighten the fastening nuts (three per side) to the torque: 46 Nm (34 ftlb.). |
| 3 | Installing base cage on right of vehicle floor | Position the base cage -C- on the fastening plate. Install the washers -6- and the fastening nuts -5- . Tightening torque: 23 Nm (17 ftlb.) |
| 4 | Installing base cage -C- on left of vehicle floor | Position the base cage -C- on the fastening plate. Install the washers -6- and the fastening nuts -5- . Tightening torque: 23 Nm (17 ftlb.) |
| 5 | Installing the base cage -C- and selector sleeves -9- | Push selector sleeves -9- onto the spring dome support sections on the left and right -D, E- . Position the base cage -C- onto the sections of the spring dome support -A, B- . Push the selector sleeves upwards over the connector tube of the base cage. Screw the hole pattern of the selector sleeves on the hole pattern of the base cage -C- and of the spring dome support sections -D, E- . Install the fastening screws -8- and tighten with the fastening nuts -5- . Tightening torque: 16 Nm (12 ftlb.) |



| No. | Procedure | Instructions |
|-----|--|---|
| | Installing right section (A-pillar support) -A- | Guide the right section (A-pillar support) -A- inwards from the right door. Position on the fastening plate on the vehicle floor and screw into place with the washers -6- and the fastening screws -5- . Tightening torque: 23 Nm (17 ftlb.) |
| 7 | Installing right section -A- on the base cage -C- | Screw into place on the screwed points of the base cage -C- with the fastening screws -3- . Tightening torque: 23 Nm (17 ftlb.) |
| 8 | Installing left section (A-pillar support) -B- | Guide the left section (A-pillar support) -B- inwards from the left door. Position on the fastening plate on the vehicle floor and screw into place with the washers -6- and the fastening screws -5- . Tightening torque: 23 Nm (17 ftlb.) |
| 9 | Installing left section -B- on the base cage -C- | Screw into place on the screwed points of the base cage -C- with the fastening screws -3- . Tightening torque: 23 Nm (17 ftlb.) |
| 10 | Installing the transverse connection of the sections (A-pillar support) -A, B- at the front | Press the adjusting element -2- screwed into the transverse connection into the groove -Z- of the section (A-pillar support) -A- . At the same time, install the retainer plate -4- and screw into place with the fastening screws -3- . Tightening torque: 23 Nm (17 ftlb.) ⇒ "Adjusting the roll-over bar" in 69-45 page 10 |

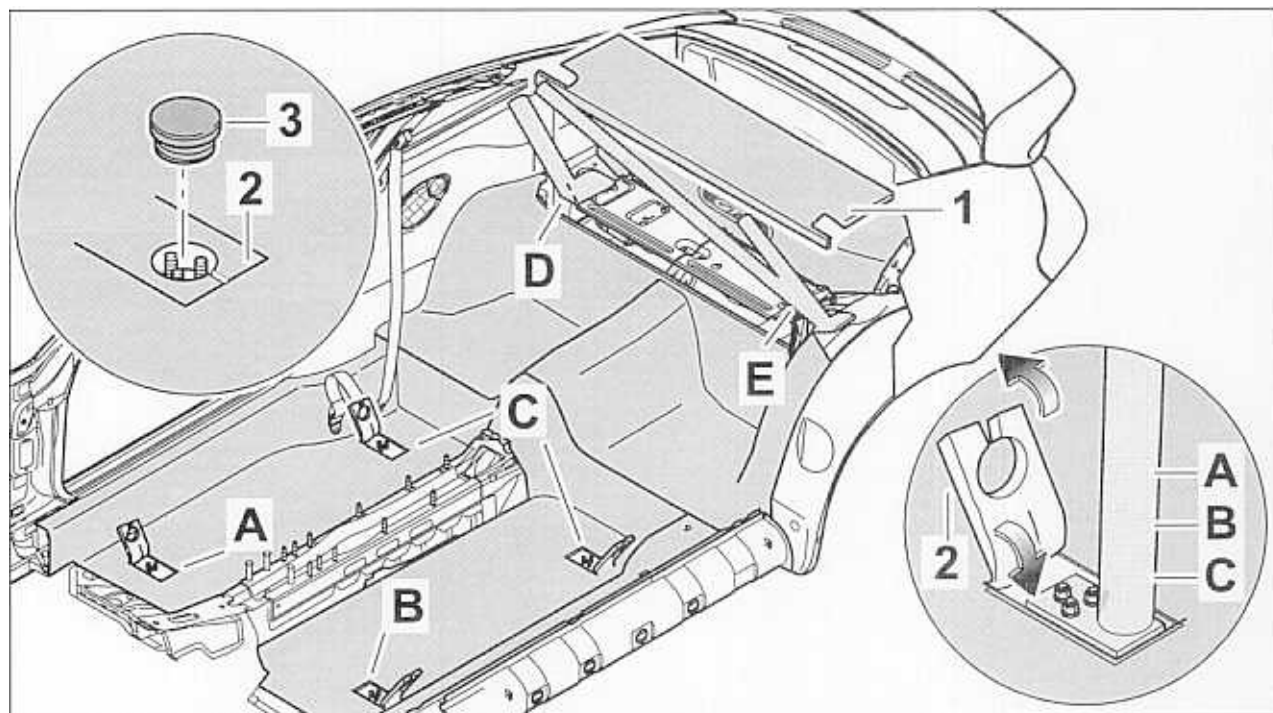
Adjusting the roll-over bar



The foam coating of the A-pillar support sections must be pressed against the cowl panel frame trim.

1. Unscrew the adjusting element -2- in the direction of the arrow -Y- until the foam coating -3- of the A-pillar support sections on the left and right -A, B- are pressed against the cowl panel frame trim.
2. Screw the lock nut -1- in the direction of the arrow -X- as far as it will go against the adjusting element -2- and lock it against the adjusting element -2-.

Assembly instructions for the rear trim, the floor covering and the closure caps

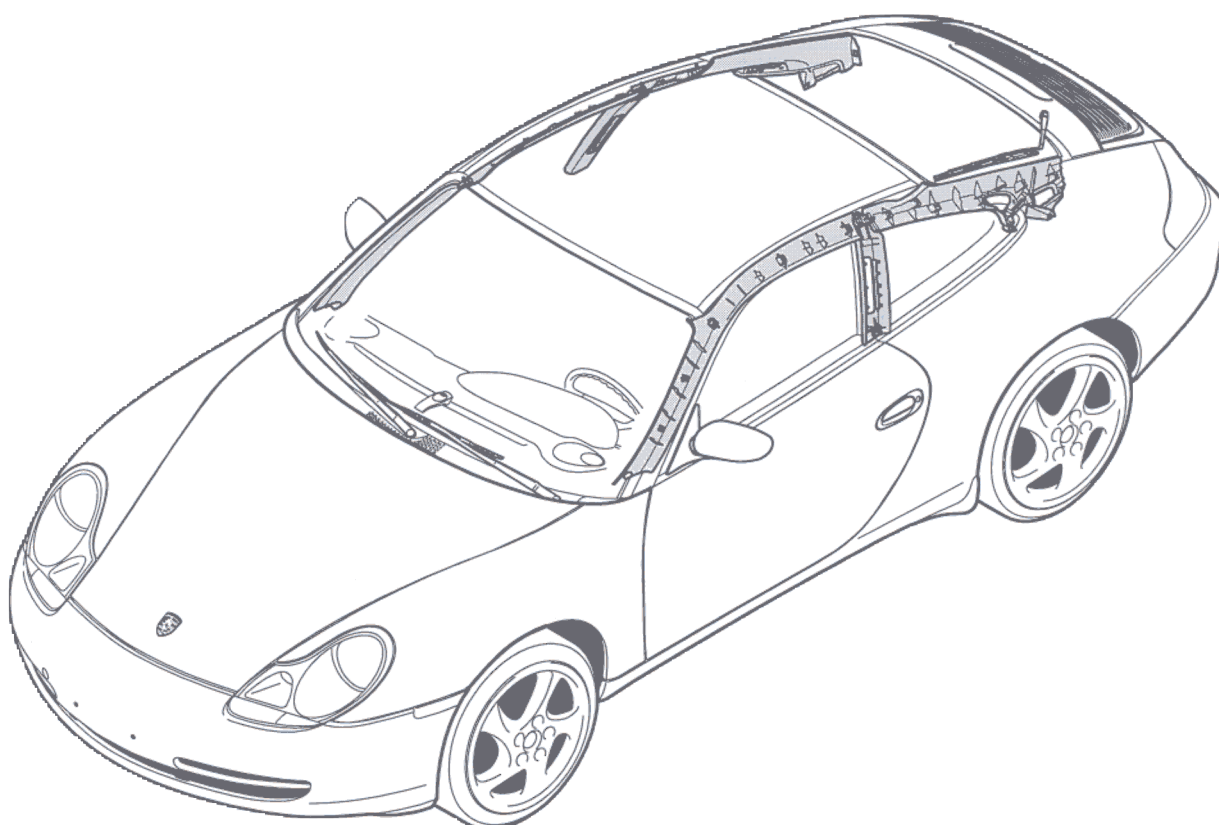


| No. | Designation | Qty. | Removal | Installation |
|-----|---------------------------------|------|---|---|
| 1 | Rear cover -1- | 1 | Lift the rear cover -1- up and out. | Press the rear cover -1- in between the side-panel lining and the roll-over bar -D, E-. ^{a)} In vehicles where the roll-over bar has been removed, the rear cover may be replaced if necessary (for reasons of appearance). ^{b)} |
| 2 | Flaps in the floor covering -2- | 4 | Pull out the flaps in the floor covering -2-. | Press in the flaps in the floor covering -2- around the roll-over bar -A, B, C-. |
| A | Closure caps -3- | 4 | In order to install the roll-over bar, the closure caps -3- should be removed from the floor covering, inset -2-. ^{a)} | After the roll-over bar has been removed, the flaps in the floor covering should be closed with the closure caps -3-. ^{b)} |

^{a)} Only during installation of the roll-over bar

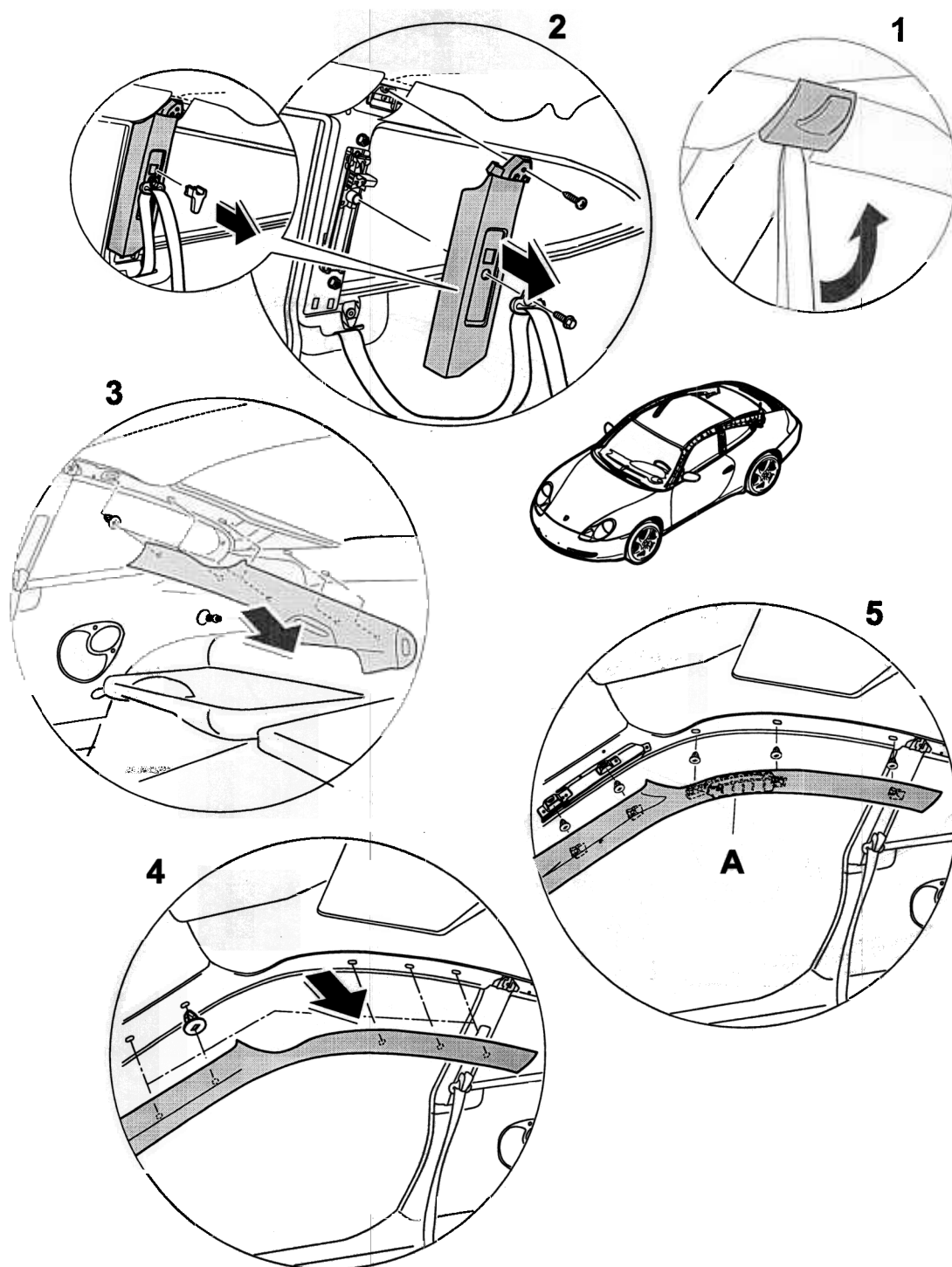
^{b)} Only after removal of the roll-over bar

70 57 19 Removing and installing trim of A, B and C-pillars



675_97

Removing and installing trim of A, B and C-pillars

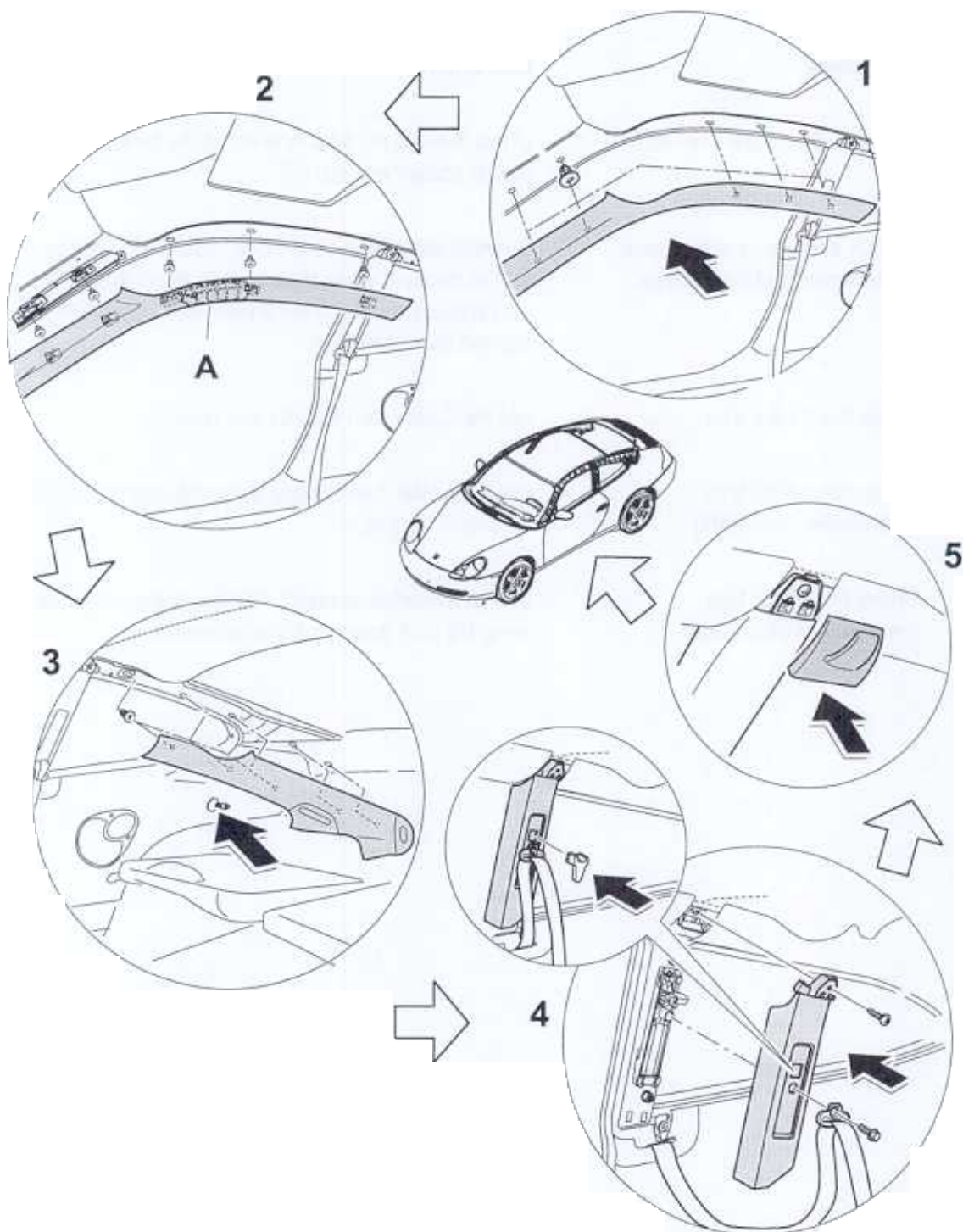


70570001

Removing and installing trim of A, B and C-pillars


| No. | Procedure | Instructions |
|-----|---|---|
| 1 | Unclip clothes hook bracket | Lift up the clothes hook bracket at the bottom with a plastic spatula and pull off. |
| 2 | Detach sash guide cover, sash guide mount and B-pillar trim | Carefully pull off the sash guide cover. Undo hexagon-head bolt of the sash guide mount. Undo the B 4.2 x 25 cross-recess screw on the B-pillar trim, unclip trim at top and pull up and out. |
| 3 | Unclip the C-pillar trim | Pull the C-pillar trim inwards and unclip. |
| 4 | Unclip the A-pillar trim (until model year 1999) | Pull the A-pillar trim inwards along the roof frame and windscreen frame. |
| 5 | Unclip the A-pillar trim (as of model year 2000) | (A = deformation element). Pull the A-pillar trim inwards along the roof frame and windscreen frame. |

Installing trim of A, B and C-pillars



70570002

Installing trim of A, B and C-pillars

| No. | Procedure | Instructions |
|--|---|--|
| 1 | Clip in A-pillar trim (until model year 1999) | Insert the A-pillar trim at the side of the windscreen frame (transition point to dashboard) and clip the trim into the sheetmetal clip along the roof frame. |
|  Note: > A deformation element is fitted at the roof area on the A-pillar trim as of model year 2000. | | |
| 2 | Clip in A-pillar trim (as of model year 2000) | (A = deformation element). Insert the A-pillar trim at the side of the windscreen frame (transition point to dashboard) and clip the trim into the sheetmetal clip along the roof frame. |
| 3 | Clip in C-pillar trim | Position the locking tabs of the C-pillar trim into the sheetmetal clips of the C-pillar and clip into place. |
| 4 | Fit sash guide mount and B-pillar trim | Insert the B-pillar trim at bottom, press in the two clips at the top and fasten with the B 4.2 x 25 cross-recess screw. |
| 4 | Fit the sash guide cover | Position the hexagon-head bolt of the sash guide mount and tighten. Tightening torque: 50 Nm (37 ftlb.) Fit the sash guide cover. |
| 5 | Fit the clothes hook bracket | Fit the clothes hook bracket. |