

V.A.G Service.

Workshop Manual LT.

Camping equipment.
Florida

May 1989 Edition.

V·A·G

Service Department.

www.westfaliaLT.info - a useful site for enthusiasts and owners of VW Westfalia LT campers

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This manual is divided into separate booklets which can be ordered individually and thus allocated to the shop floor as required.

This manual is valid for the Volkswagen LT with camping equipment from the start of production (January 1989). It describes all the operations which require special instructions to ensure satisfactory work.

Each booklet has the contents listed according to repair operations to make it easy to find the information required. The materials for general body repairs are followed by descriptions of the repair operations.

Workshop Bulletins

Workshop Bulletins will be allocated to the individual booklets and should be filed at the back of the booklet concerned. To remind you that bulletins have been published, the manual pages should be marked by hand with the bulletin number as given in the heading.

Fault finding

Instructions on fault finding are given in the relevant "Fault finding" file. Instructions on the elimination of current defects are given in the "Service Handbook".

Technical information should always be made available to all foremen and mechanics because careful and constant compliance with the instructions given is essential to ensure vehicle roadworthiness and safety. In addition, the normal safety precautions to be observed when working on motor vehicles are also applicable.

INDEX ACCORDING TO REPAIR GROUPS

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MATERIALS FOR GENERAL BODY REPAIRS

Adhesives	Part No.	Use	Designation Manufacturer
● Universal adhesive	D 001 200	For sticking insulating material, rubber parts, carpet, upholstery wadding, textiles. Not suitable for polyethylene foil (thin, transparent foil) for this use AKL 414 007 07.	
● Synthetic adhesive (Instant adhesive)	D 001 300	For sticking rubber, PU and EPDM to one another	
● Two-component adhesive	D 001 500	For sticking: <ul style="list-style-type: none"> ● The vehicle jack sockets: <ul style="list-style-type: none"> Audi 100 '83 ▶ Audi 200 '84 ▶ Audi 90 '85 ▶ Audi Coupé '85 ▶ 	
● Profile rubber adhesive	D 002 100	For sticking door/bonnet/boot and other rubber seals to metal	

00-1

Adhesives	Part No.	Use	Designation Manufacturer
● Glass-metal adhesive kit	D 000 703	For sticking rear view mirror brackets and vent wing attachments. The activator must also be used applied to the glass.	
● Adhesive kit (PUR)	D 004 300 03	For sticking flush bonded windcreens, side and rear windows	
● Activator	AMV 181 800 01	To activate pre-coated glass.	
● Adhesive sealing compound (PUR)	D 009 100 03 small 110 ml cartridge	For sticking flush bonded windcreens, side and rear windows (additionally for when the 300 ml cartridge supplied with adhesive kit D 004 300 03 is insufficient, or for resealing).	
● Primer applicator	D 009 500 25	For applying various primers.	

00-2

Adhesives	Part No.	Use	Designation Manufacturer
● Glass primer	D 009 200	Primer for window adhesion. Must be applied to the glass surface. (Is also included in repair kit D 004 300 03.)	
● Paint primer	D 009 300	Adhesion-promoting primer for painted surfaces before application of adhesive sealant (PUR). (Is also included in adhesive kit D 004 300 03.)	
● Synthetic materials primer	D 009 600	For all synthetic materials which are to be stuck with PUR-based adhesive sealant	
● Cleaning solution	D 009 400 01	For cleaning all surfaces which come into contact with primer or adhesive. (Is also included in adhesive kit D 004 300 03.)	
● Silicone rubber	AMV 176 000 05 (black) AMV 176 100 05 (white)	For sticking and sealing of reinforcements, stiffeners and rails on the body. For sticking non-welded-on parts. CANNOT BE PAINTED OVER.	

00-3

Adhesives	Part No.	Use	Designation Manufacturer
● Dispersion-based adhesive	AKL 407 000 05	Dispersion adhesive for sticking moulded headlining or thick-walled moulded parts to inside body surfaces.	
● Universal adhesive spray	D 006 000 04	For sticking insulation materials trim made of leatherette or vinyl, cardboard, foam, fabric, seat upholstery	
● 2K leatherette adhesive Hardener	D 000 801 D 000 802	For sticking lined plastics (including convertible top) and PVC materials. Mixing ratios: 10 Parts by weight Adhesive D 000 801 1 Part by weight Hardener D 000 802	
● Double-sided adhesive tape	AKL 434 019 25 (19 mm) or AKL 440 025 (25 mm)	For sticking protective foils (PVC and polyethylene) to door inner panels.	

00-4

Sealants	Part No.	Use	Designation Manufacturer
● Sealing cord 10 mm dia.	AKD 497 010 04 R 10	For sealing off all bolted-on body parts or tail light clusters	
● Butyl sealing cord 5 mm dia.	AKL 450 005 05	For sticking and sealing plastic parts to one another and onto painted metal surfaces, tail light clusters and openings in the bodywork.	
● Window sealing compound	D 001 007	For sealing off all leaking windows – also subsequent sealing of flush bonded windows.	
● Non-hardening sealing tape	D 001 900 05	For sealing off bolts, openings for cables and for bolted-on body parts.	
● Window sealant, LIGHT	—	For sealing off leaking windows in convertible vehicles with light-coloured convertible top.	Terodicht light, Article No. 128.44 V Messrs. Teroson GmbH 6900 Heidelberg 1

00-7

Sealants	Part No.	Use	Designation Manufacturer
● ACRYLIC sealant BLACK	—	For sealing off black convertible tops in the header area	Terostat 20, Article No. 128.06 V Messrs. Teroson GmbH 6900 Heidelberg 1
● ACRYLIC sealant WHITE	—	For sealing off light-coloured convertible tops in the header area	Terostat 20, Article No. 128.01 P Messrs. Teroson GmbH 6900 Heidelberg 1

Locking materials

● Locking fluid	D 000 600	For locking threaded fasteners from M8: e.g. for securing seat belt anchorages. Audi 80 1987 ▶ Audi 90 1987 ▶	
● Locking fluid	AMV 197 000 01	For locking threaded fasteners up to a max. M6, e.g. window crank, sliding/tilting roof etc. Easily dismantled.	

00-8

Surface protection materials	Part No.	Use	Designation Manufacturer
● Intermediate zinc layer (in rolls)	AKL 381 035 50	Zinc anode for mudwings or hinges of the front or rear flaps for PROTECTION AGAINST CORROSION during repairs	

Chemical materials

● Aerogel spray	L 016 504	Temporary paint softener when carrying out straightening operations to the body, on bolted-on parts and in hinge areas	
● Lubricant	G 000 400	For lubricating lock cylinders, door lock latches, door/cover hinges – water repellent	
● Lock lubricant spray	G 000 400 01	For lubricating lock cylinders in situ which are accessible from the exterior, as a preventive maintenance measure.	

00-9

Chemical materials	Part No.	Use	Designation Manufacturer
● Cleaning solution for surplus adhesives	D 002 000	For removing fresh adhesive from convertible top fabric, headlinings, trim panels and upholstery. Also suitable, for very short periods, for painted surfaces.	
● Special lubricant	G 000 450 02	Sliding/tilting roof ○ Passat 04.88 ▶ ○ Corrado 1989 ▶	
● Silicone lubricant	D 007 000 04	For lubricating for example, sliding roofs, seat rails, window lifters, head restraint rods and also as an aid when fitting hose connections. Protects door and flap seals against freezing. Also highly suitable as an anti-squeak agent for all plastic parts.	

Important!

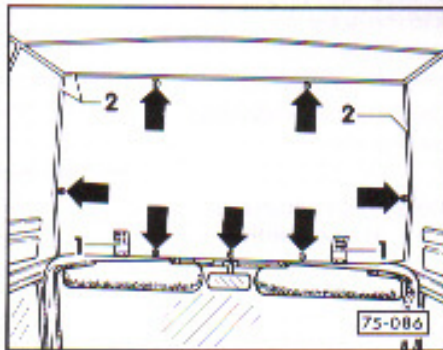
Do not use in the vicinity of paint shops.

00-10

Removing front roof trim panel

Note:

Before removing the front roof trim panel, first dismantle the centre right-hand roof cover – see Repair Group 77 – and the centre and front bed bases – see pages 77-17 and 75-19.



- ← – Unscrew and remove support brackets – 1 –.
- Lever off the four caps and unscrew the seven Phillips screws – arrows –.
- Remove front roof trim panel from retaining rails – 2 –.

75-1

Removing front right-hand side trim panel for roof

Note:

Before removing front right-hand side trim panels on roof, first dismantle centre right-hand cover – see Repair Group 77 – and the centre, rear and front bed bases – see pages 75-17, 75-18 and 75-19.

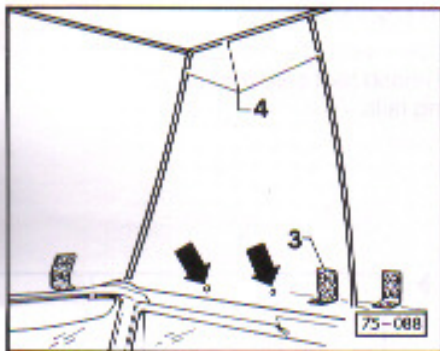


- ← – Lever off caps – 1 – and remove Phillips screws.
- Unscrew right-hand guide rail – 2 – (five Phillips screws – arrows –).

Note:

The thickness of the adjusting plates behind the guide rail differs. Always replace adjusting plates which have been removed in the same position.

75-2



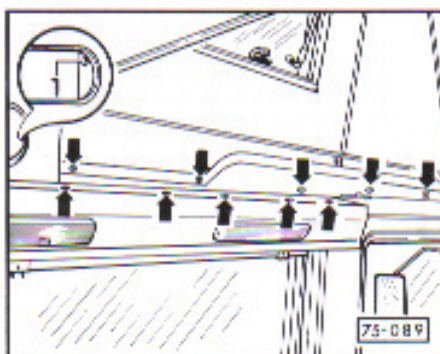
- ◀ – Unscrew support bracket – 3 –.
- Drill out two hollow rivets (3.2 mm dia.) – arrows – and remove front right-hand roof side trim panel from the retaining rails.

75-3

Removing front left-hand side trim panel for roof

Note:

Before removing front left-hand roof side trim panel, first dismantle centre left-hand cover – see Repair Group 77 – and the centre, rear and front bed bases – see pages 75-17, 75-18 and 75-19.

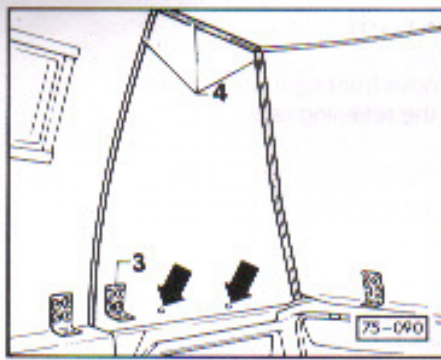


- ◀ – Lever off caps – 1 – and remove Phillips screws.
- Remove the ten Phillips screws – arrows – and remove left-hand guide rail.

Note:

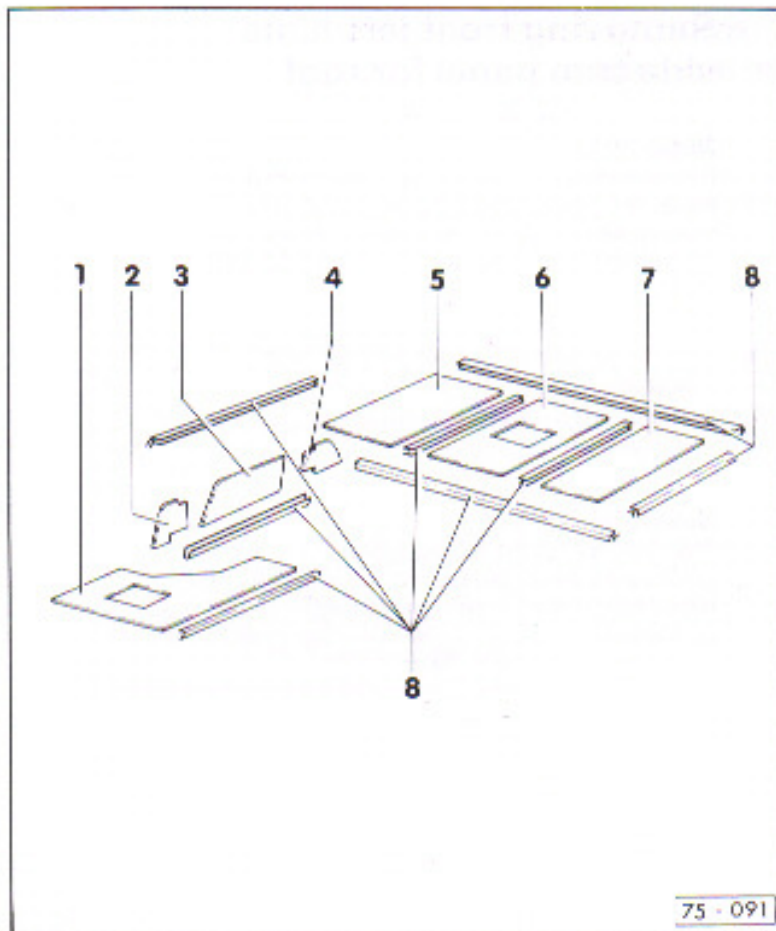
The thickness of the adjusting plates behind the guide rails differs. Always replace adjusting plates which have been removed in the same position.

75-4



- ◀ – Unscrew support bracket – 3 –
- Drill out two hollow rivets (3.2 mm dia.) and remove front left-hand roof side trim pane from the retaining rails – 4 –

75-5



Removing upper roof trim panels

- 1 – Upper roof trim panel "G"
● Removing, see page 75-11
- 2 – Upper roof trim panel "E"
● Removing, see page 75-10
- 3 – Upper roof trim panel "D"
● Removing, see page 75-10
- 4 – Upper roof trim panel "F"
● Removing, see page 75-11
- 5 – Upper roof trim panel "C"
● Removing, see page 75-9
- 6 – Upper roof trim panel "B"
● Removing, see page 75-8
- 7 – Upper roof trim panel "A"
● Removing, see page 75-7
- 8 – Retaining rails

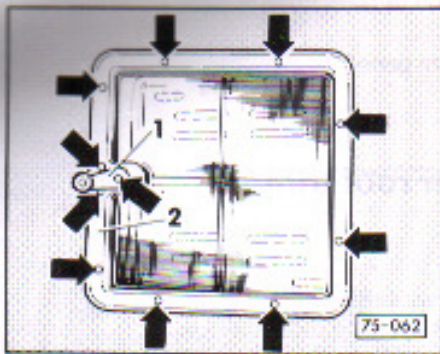
75-8

Removing and installing roof ventilator

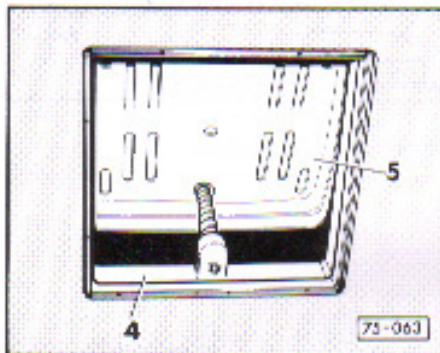
Removing

Note:

The upper frame is damaged when the roof ventilator is removed.



- ◀ – Lever off caps – arrows – and remove eleven Phillips screws
- Remove crank handle – 1 – and subframe – 2 –.



- ◀ – Firmly press out upper frame – 4 – and cover – 5 – upwards.

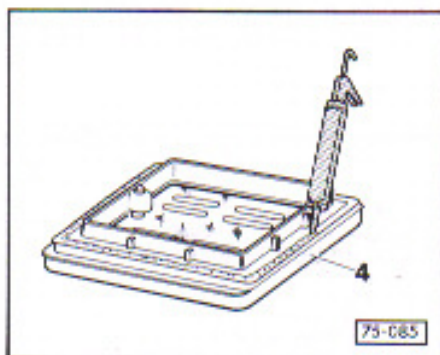
75-13

Installing

- Cut away remains of adhesive (down to approx. 1 mm) on roof outer panel where upper frame will make contact.

Note:

- If any adhesive is coming away, remove this completely and prime this area with synthetic primer D 009 600.
- Do not prime the adhesive remaining after cutting back.



- ◀ – Clean contact area of upper frame (new part) – 4 –.
- Coat area cleaned with synthetic primer D 009 600 and allow to flash off for at least 10 minutes.
- Then apply adhesive sealant AKD 476 KD5 05.
- Fit upper frame in roof aperture.
- Hold subframe under roof trim panel with holes fitting flushy into hollow frame and upper frame, and bolt all parts together.
- Fit crank handle and secure with screw.
- Fit caps and mosquito net.

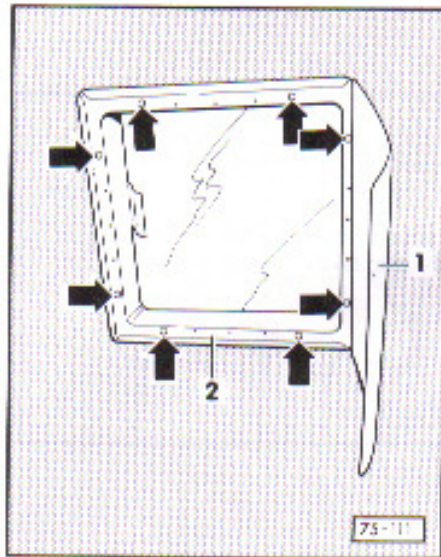
75-14

Removing and installing roof ventilator (washroom)

Removing

Note:

The upper frame is damaged when the roof ventilator is removed.



- ◀ – Fold down mosquito net – 1 –.
- Lever off caps – arrows – and remove eight Philips screws.
- Remove subframe – 2 – together with mosquito net – 1 –.
- Firmly press out upper frame together with cover upwards.

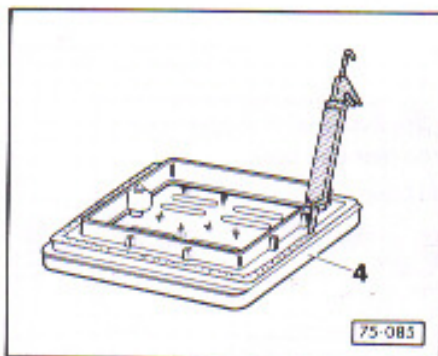
75-15

Installing

- Cut away remains of adhesive (down to approx. 1 mm) on roof outer panel where upper frame will make contact.

Note:

- If any adhesive is coming away, remove this completely and prime this area with synthetic primer D 009 600.
- Do not prime the adhesive remaining after cutting back.

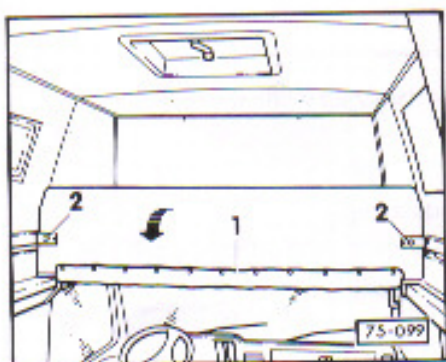


- ◀ – Clean contact area of upper frame (new part) – 4 –.
- Coat area cleaned with synthetic primer D 009 600 and allow to flash off for at least 10 minutes. Then apply adhesive sealant AKD 476 KD5 05.
- Fit upper frame into roof aperture.
- Bolt the subframe together with the mosquito net onto the upper frame and fit caps.

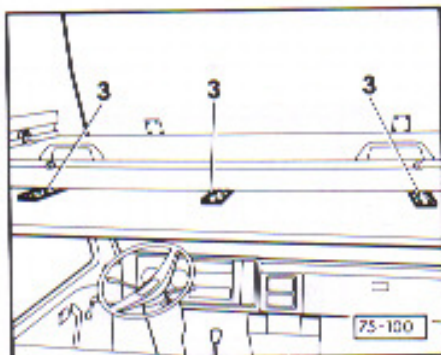
75-16

Removing bed bases

Removing centre bed base



- ◀ – Open press studs and take out bed top padding – 1 –
- Unlatch centre bed base on left and right – 2 – and fold down.



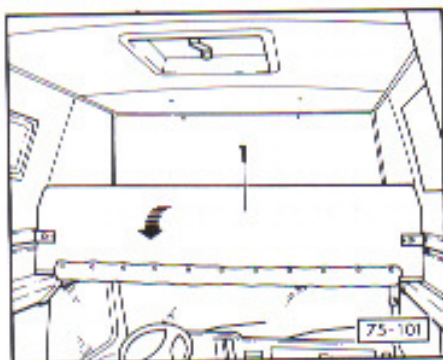
- ◀ – Remove four Phillips screws from each of the three hinges – 3 – and take out centre bed base

75-17

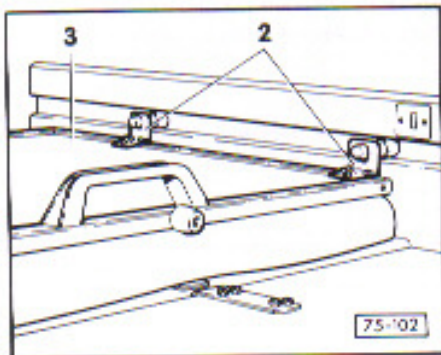
Removing rear bed base

Note:

Before removing the rear bed base, first dismantle the front right-hand cover – see Repair Group 77.



- ◀ – Unlatch centre bed base – 1 – and fold down
- Remove bed padding from centre and rear bed bases.



- ◀ – Unscrew four guide rollers with support brackets – 2 – from the rear bed base.
- Take out rear bed base – 3 –.

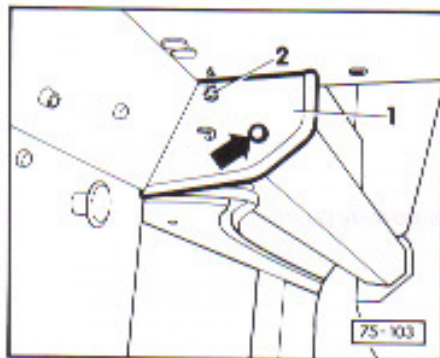
75-18

Removing front bed base

Note:

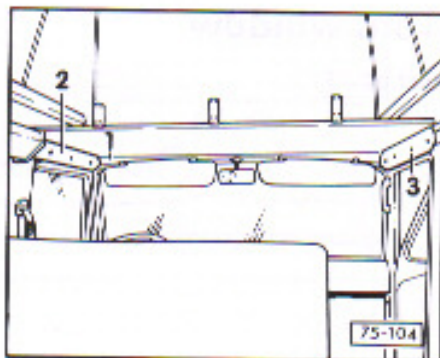
Before dismantling the front bed base, first remove the centre bed base – see page 75-17.

- Pull rear bed base back as far as it will go along the guide rails.
- Remove the bed top padding from front bed base.

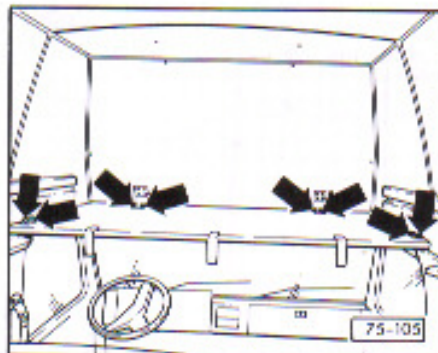


- Unbolt facing – 1 – left and right (Phillips screw with cover cap – arrow –).
- Remove Phillips screws – 2 – left and right.

75-19



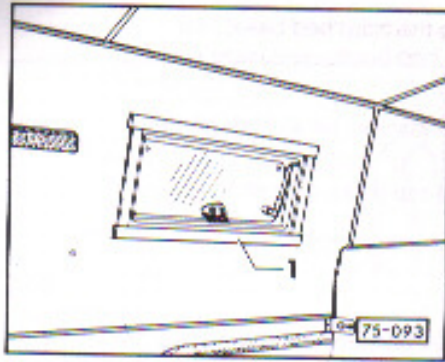
- Fold down sun visors.
- Unscrew the front – 1 –, left – 2 – and right – 3 – trim panels.



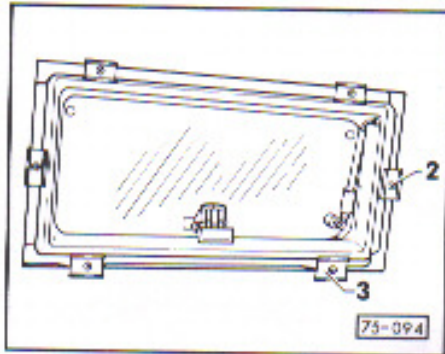
- While a second mechanic supports the front bed base from underneath, remove eight hexagonal screws – arrows –.
- Lower the front bed base and remove it by pulling backwards over seat backrests and out through the sliding door.

75-20

Removing roof window



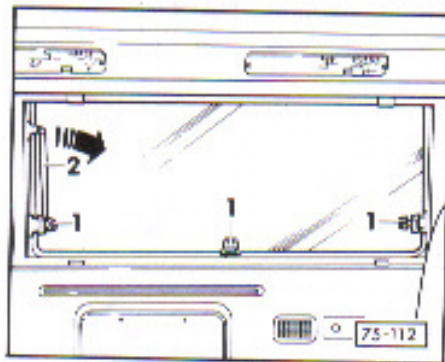
- ◀ – Unclip four cover strips – 1 –.



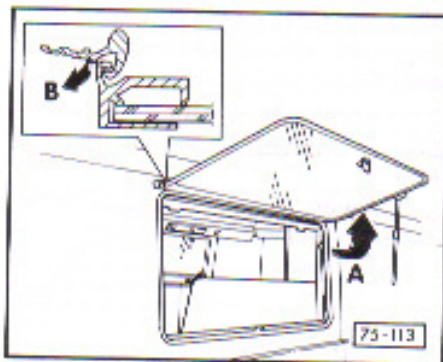
- ◀ – Remove six Phillips screws – 2 – and remove six clamping plates – 3 –.
- Remove roof window by pushing outwards.

75-21

Removing vent window



- ◀ – Open window catches – 1 –.
- Unclip supports – 2 –.



- ◀ – With both hands, tilt the glass upwards – arrow A – and take out of the rail – arrow B –.

75-22

Safety precautions

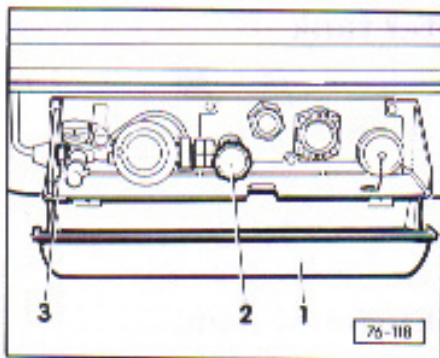
- The 110/220 V voltage supply must not be connected to the external socket for any repair work.
- Any repairs on the 110/220 V system must be performed or supervised by a qualified electrician.
- If the piping for the liquefied gas system is opened in the course of repair work, a leak test must be performed before the liquefied gas system is used again.

If the Federal Republic of Germany this leak test must be performed by a DVFG¹ expert as defined in the DVGW² Work Sheet G607.

- ¹ Deutscher Verband Flüssiggas e.V. (German Federation for Liquefied Gas)
² Deutscher Verein des Gas- und Wasserfaches e.V. (German Association of Gas and Water Specialists)

- Observe regulations applicable in the country concerned.

76-1



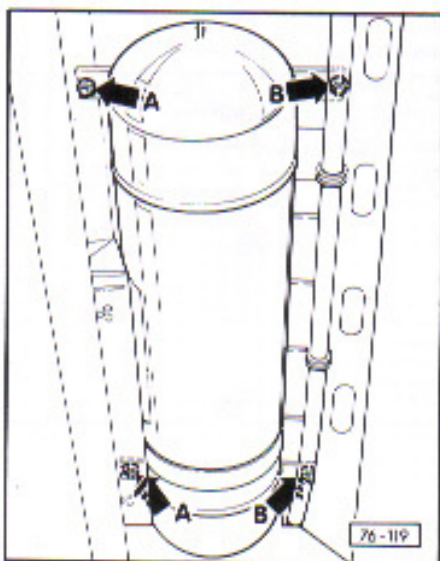
Removing and installing gas tank

Removing

Caution

Observe safety precautions – page 76-1.

- ◀ – Open cover – 1 – and lower.
- Close gas cylinder valve – 2 –.
- Undo threaded fitting – 3 –.
- ◀ – Unscrew two hexagonal nuts – arrows A – and slacken off two hexagonal nuts – arrow B – until the tank can be pulled out.
- Take out gas tank.



Installing

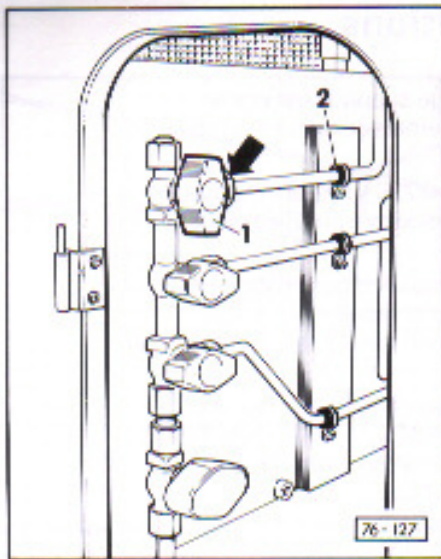
Caution

Observe safety precautions – page 76-1.

Note:

When installing the gas tank, renew all four self-locking nuts.

76-2



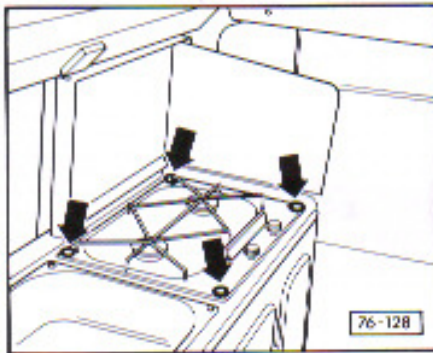
Removing and installing gas cooker

Removing

Caution

Observe safety precautions – page 76-1.

- ◀ – Open rear storage compartment door.
- Close quick-action stop valve – 1 – and unscrew the gas connection behind the quick-action stop valve – arrow –.
- Release clamp – 2 –.



- ◀ – Lever off caps – arrows – and remove four Philips screws.
- Lift gas cooker out of kitchen cupboard.

Installing

Caution

Observe safety precautions – page 76-1.

76-3

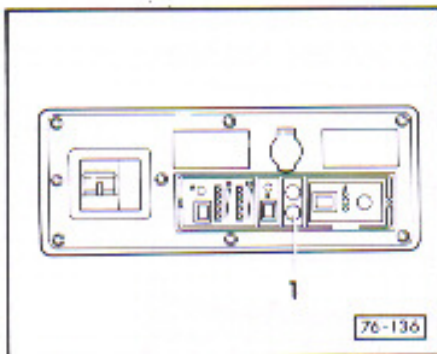
Removing water tank

Note:

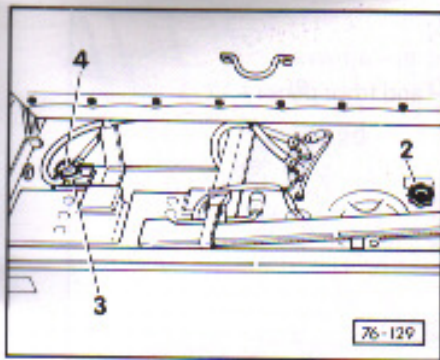
Before dismantling the water tank, first drain the fresh water system.

To drain the fresh water system:

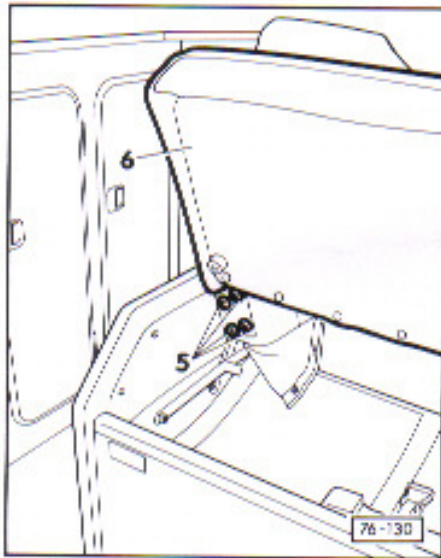
- ◀ – Remove fuse IS 61; – 1 – from the indicator panel over the rear door.
- Fully open all water taps and the breather valve under the wash basin in the washroom.
- Pull hand-held showerhead down through the opening in the wash basin and lay it on the floor of the washroom.



76-4

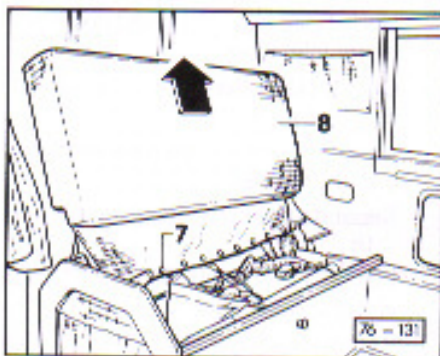


- ◀ - Fold up rear bench.
 - Open water drain valve - 2 -.
 - Open the safety valve - 3 -, twisting the red lever upwards at the same time - 4 -.
- The water thus drained off is piped under the floor of the vehicle.

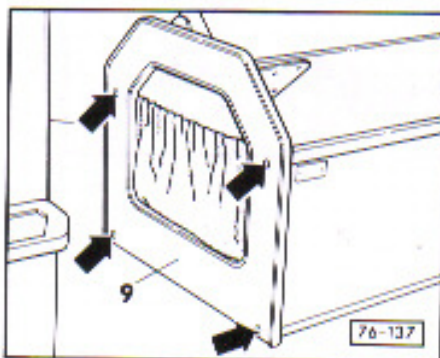


- ◀ - Undo two press studs on both the right- and left-hand sides of the seat-padding cover.
- Remove four Philips screws - 5 - from both the right- and left-hand sides and take out the seat padding - 6 -.

76-5

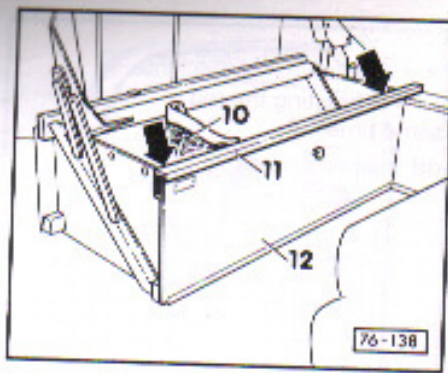


- ◀ - Undo press studs on armrest - 7 -.
- Pull armrest upwards off the padding board - 8 -.



- ◀ - Unscrews de facing - 8 - If four Philips screws with caps - arrows -.

76-6

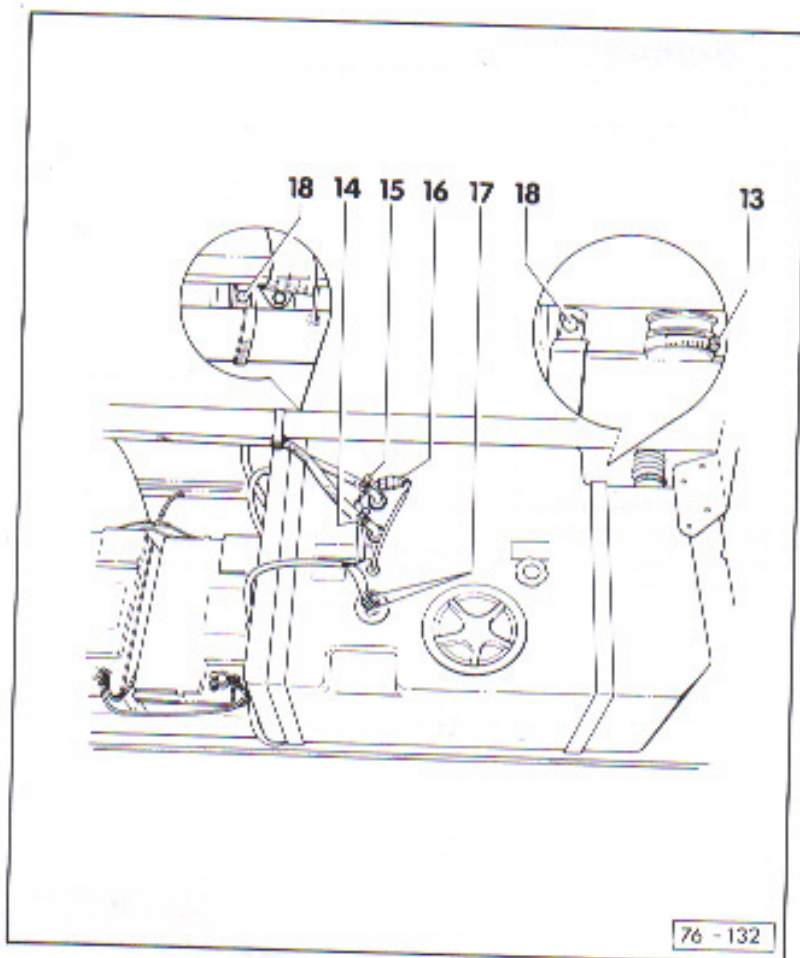


- ◀ – Unfasten netting screen – 10 –
- Remove hexagonal bolts – arrows –
- Take out fitting – 11 – and front panel – 12 –

installing

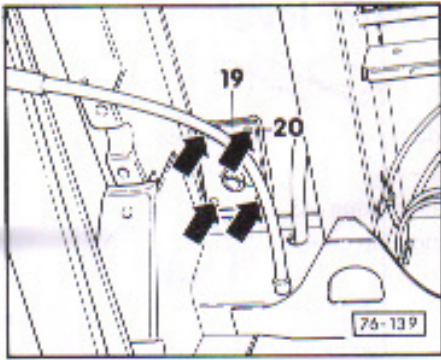
cutting

76-7



- Undo nose clip – 13 – and pull out water inlet hose.
- Cut off clamp-type clip – 14 – and remove hose.
- Undo screw clip – 15 – and pull out breather hose.
- Separate twin plug-type connector – 16 –
- Pull off 12 V connections – 17 – from water level sender.
- Remove hexagonal bolts – 18 – For this, a second mechanic must hold the nuts from underneath the vehicle floor to prevent them turning.

76-8



- ◀ – Drill out four hollow rivets (3.2 mm dia.)
– arrows – on the underside of the vehicle floor.

Caution

Hollow rivets must be drilled carefully, so that the water tank does not become damaged.

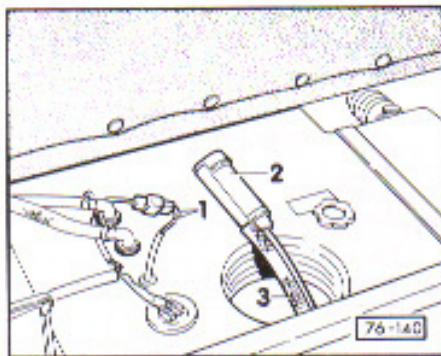
- Remove cover plate – 19 – and seal – 20 –.
- Lift the water tank out of the vehicle.

76-9

Removing the water pump

Fold up the rear seat padding.

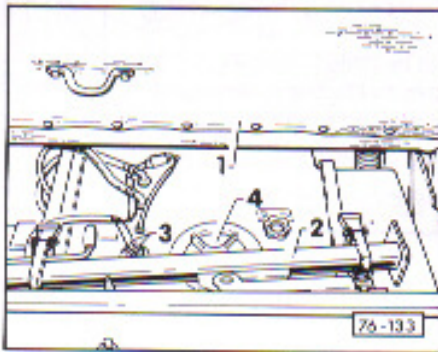
- Take out the jack.
- Unscrew cleaning hole cover.



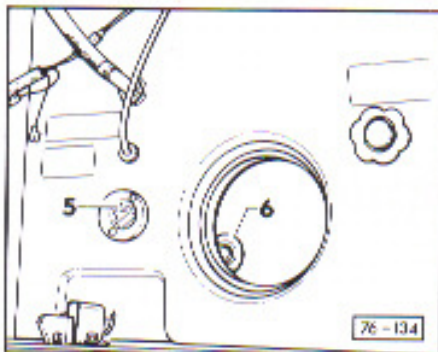
- ◀ – Separate 12 V connections – 1 – from the twin plug-type connector and pull into water tank.
- Take water pump (2) out of cleaning hole and pull off hose – 3 –.

76-10

Removing water level sender



- ◀ – Fold up seat padding – 1 – of the rear seat.
- Take out jack – 2 –.
- Pull out 12 V connections – 3 –.
- Unscrew cleaning hole cover.



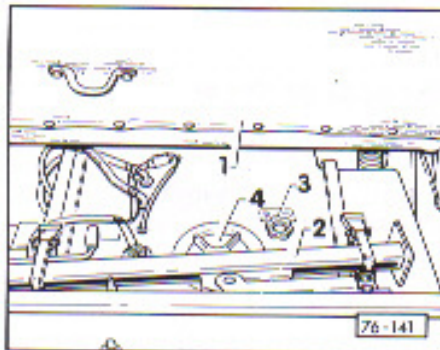
- ◀ – Unscrew water level sender – 5 – with a normal commercial scanner.
- Remove float – 6 – from water tank.

76-11

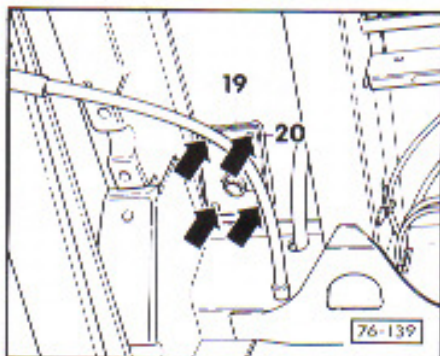
Removing the outlet valve

Note:

Empty water tank before dismantling outlet valve.



- ◀ – Fold up rear seat padding – 1 –.
- Take out jack – 2 –.
- Pull off hand wheel – 3 –.
- Unscrew cleaning hole cover – 4 –.



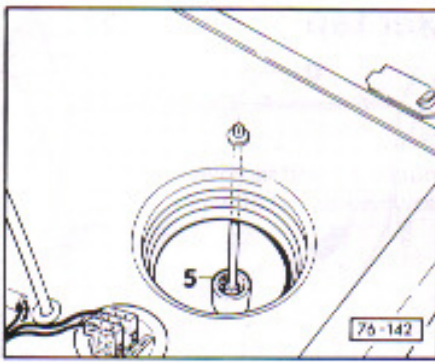
- ◀ – Drill four hollow rivets (3.2 mm dia) – arrows – in the underside of the vehicle floor.

Caution

Hollow rivets must be drilled carefully, so that the water tank does not become damaged.

- Take off cover plate – 19 – and seal – 20 –.
- Unscrew nut on outlet valve.

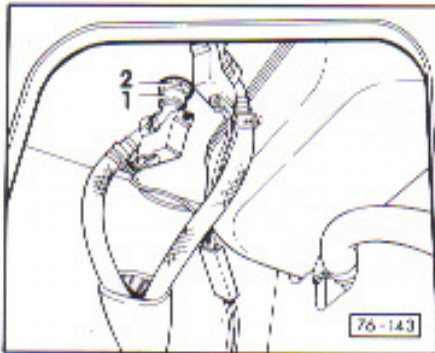
76-12



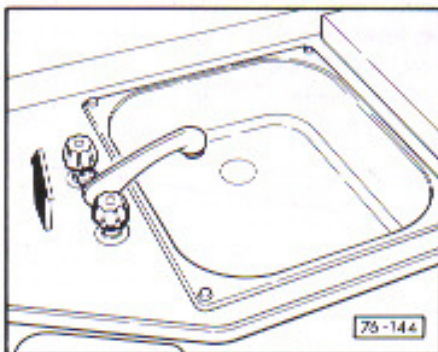
- ◀ - Pull outlet valve – 5 – into the water tank and take out through the cleaning hole.

76-13

Removing mixer tap (kitchen cupboard)



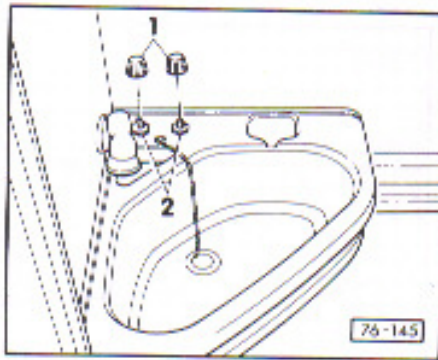
- ◀ - Unhinge the centre storage compartment door of kitchen cupboard.
- Unscrew threaded fittings – 1 –.
- Unscrew nuts – 2 –.



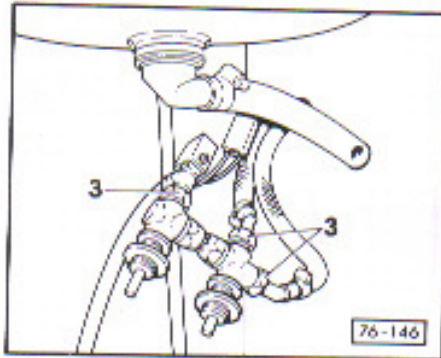
- ◀ - Remove mixer tap by lifting upwards out of kitchen sink surround.

76-14

Removing mixer tap (washroom)



- ◀ – Pull tops – 1 – off taps.
- Unscrew hexagonal nuts – 2 – and remove mixer tap by pulling downwards out of wash basin.



- ◀ – Unscrew threaded fittings – 3 – from mixer tap.

76-15

Removing and installing water heater

Removing

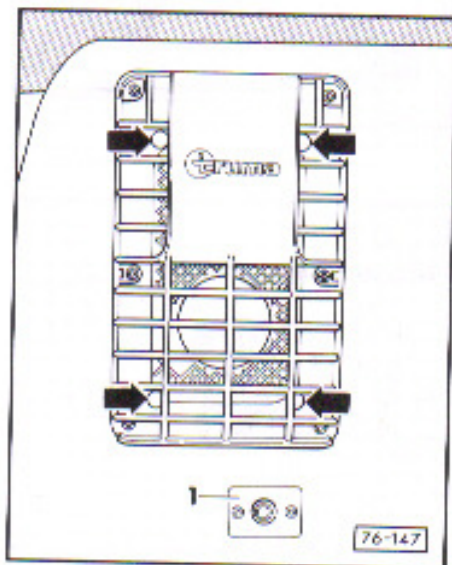
Caution

Observe safety precautions – see page 78-1.

Note:

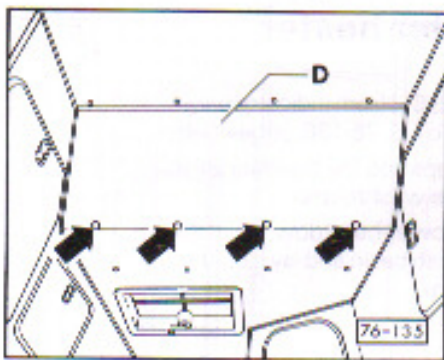
Before dismantling the water heater, it must be drained – see page 76-19.

- Close take-off valve on gas cylinder (see Fig. 76-118, page 76-21).

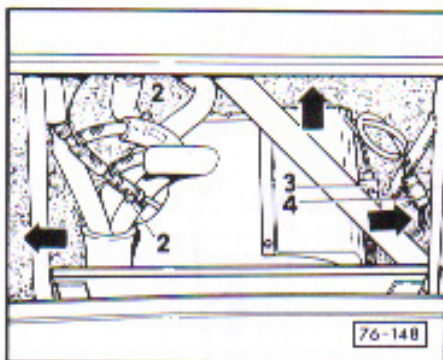


- ◀ – Remove bolts securing the wall flue outlet by reaching through the cover grille from the outside. At the same time, lever off plastic caps – arrows – and unscrew four hexagonal bolts.
- Undo two Phillips screws from the cover of the condensed water outlet pipe – 1 –.

78-16

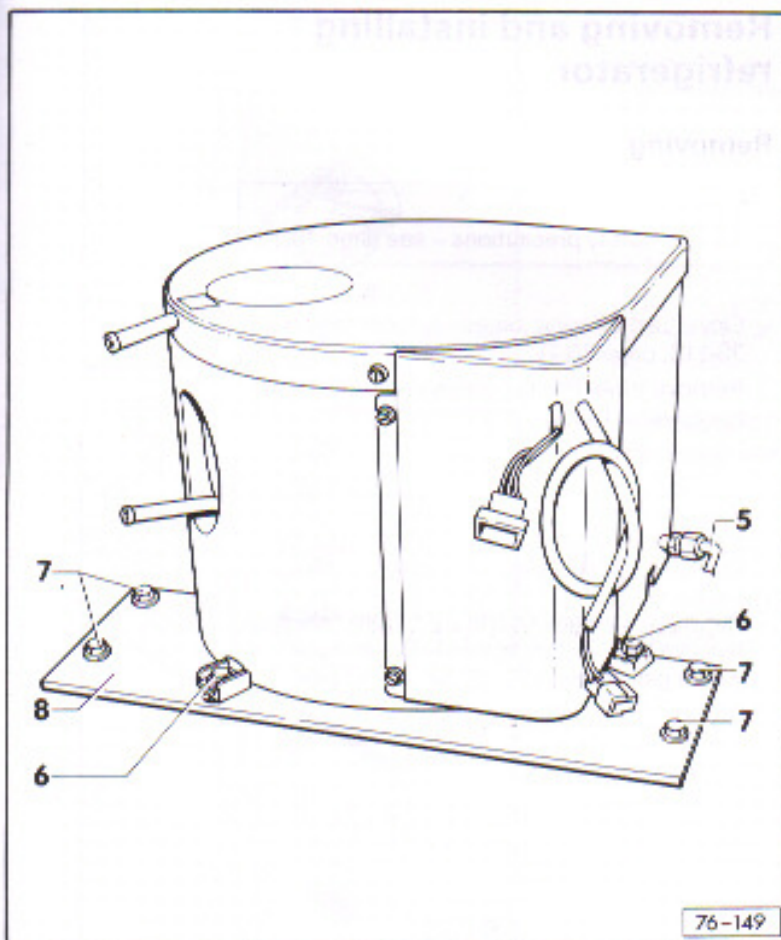


- ← Lever off caps – arrows –, remove four Phillips screws and take off upper roof trim panel "D".



- ← Remove insulation – arrows –,
- Undo screw clips – 2 – and pull hoses off water heater.
- Separate multi-pin connectors – 3 – and – 4 –.

76-17



- ← Disconnect gas supply – 5 –
- Unscrew hexagonal bolts – 6 – and – 7 –.
- Pull out carrier plate – 8 –.
- Take out water heater.

Note:

- Pay attention to sealing rings between water heater and wall flue.

Installing

Caution

Observe safety precautions see page 76-1.

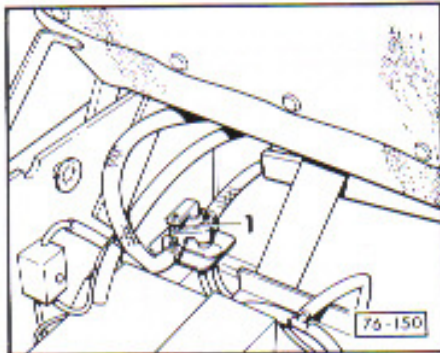
Note:

- Before installing the water heater, fully press out the cover of the condensed water pipe (see Fig. on page 76-16).
- Do not forget the sealing rings between water heater and wall flue.

76-18

Emptying water heater

- Remove power fuse (S 61) from indicator panel over the rear door (see Fig. 76-136, page 76-4).
- Fully open all water taps and the breather valve under the basin in the washroom.
- Pull the hand-held shower-head down through the opening in the wash basin and lay it on the floor of the washroom.



- ◀ - Open safety valve - 1 - (to do this, twist the red lever upwards).
- The water thus drained off is piped under the floor of the vehicle.

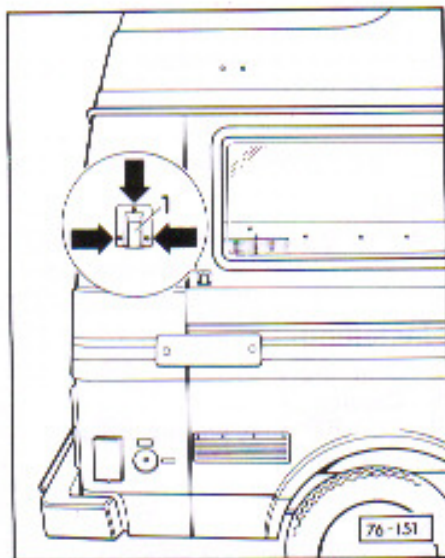
76-19

Removing and installing refrigerator

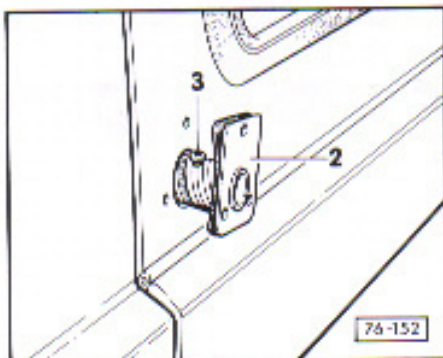
Removing

Caution

Observe safety precautions - see page 76-1.

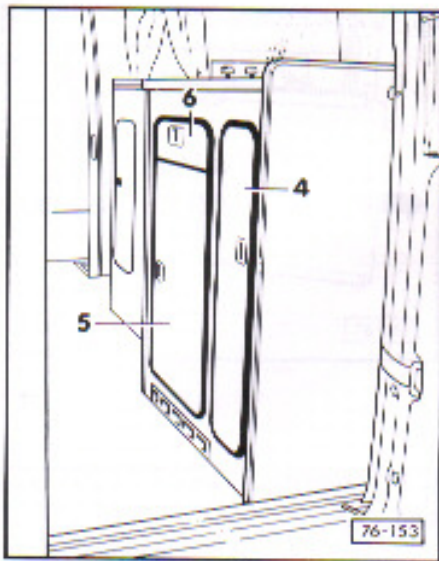


- Close take-off valve on gas cylinder (see Fig. 76-118, page 76-2).
- ◀ - Remove three Phillips screws - arrows - and the cover - 1 -.

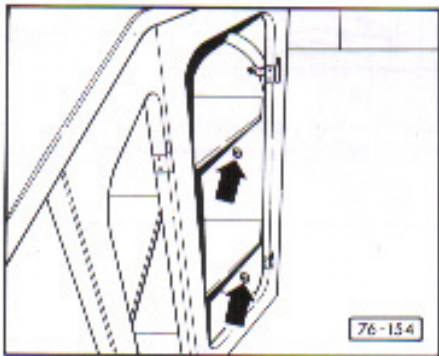


- ◀ - Pull out waste gas nozzle - 2 - from side wall, remove two Phillips screws - 3 - and pull waste gas nozzle - 2 - off gas outlet pipe.

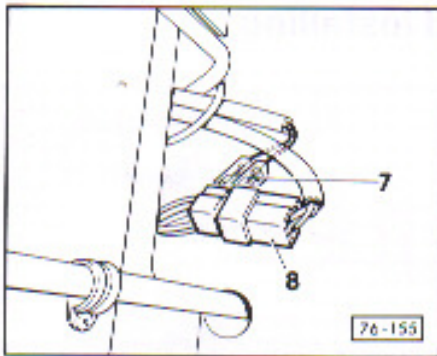
76-20



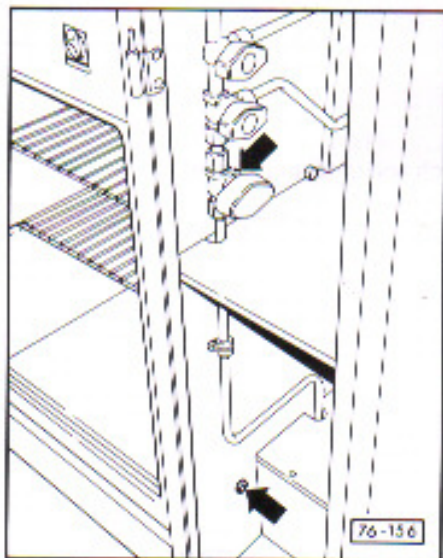
- ◀ – Unhinge rear storage cupboard door – 4 – and refrigerator door – 5 –.
- Pull out drawer – 6 –.



- ◀ – Open centre storage cupboard door and remove two Phillips screws – arrows –.



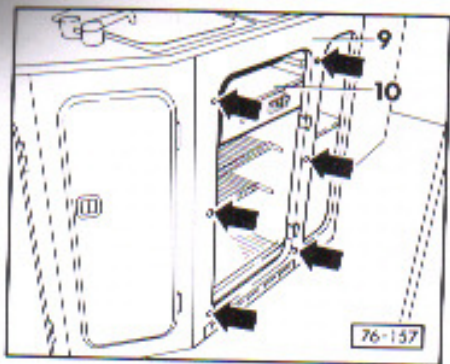
- ◀ – Disconnect the two-pin connector (12 V) – 7 – and the three-pin connector (12 V) – 8 – inside the rear storage cupboard.



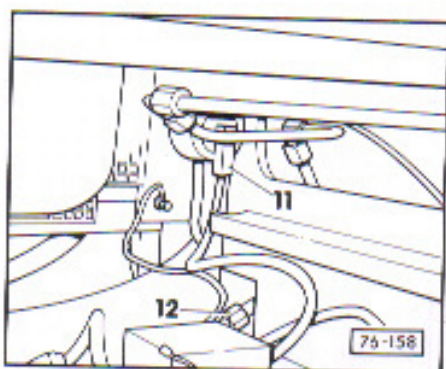
- ◀ – Remove two Phillips screws – arrows – from the refrigerator.

76-21

76-22



- ◀ – Lever off caps – arrows – and remove six Phillips screws.
- Take off facing – 9 –.
- Pull out cover – 10 –.



- ◀ – Remove plug (220 V) – 11 – from the socket.
- Unscrew gas connection – 12 –.
- Pull refrigerator out of kitchen cupboard.

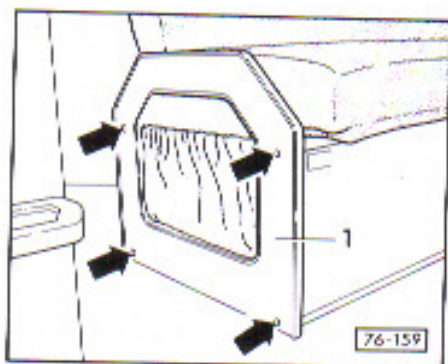
Installing

Caution

Observe safety precautions – see page 76-1.

76-23

Removing and installing charger

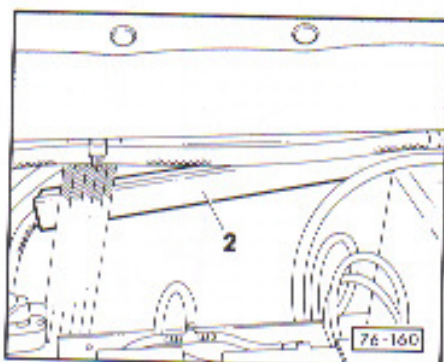


Removing

Caution

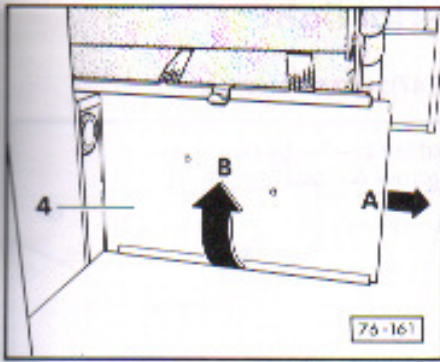
Observe safety precautions – see page 76-1.

- ◀ – Lever off caps – arrows –, remove four Phillips screws and take off side panel – 1 –.

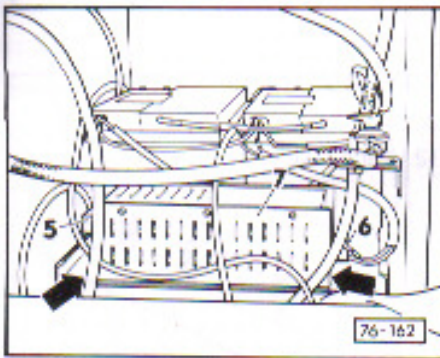


- ◀ – Fold up rear seat/bench and unfasten netting screen.
- Unclip cover – 2 –.

76-24



- ◀ - Pull rear wall panel – 4 – to the side
– arrow A – and pull out towards the rear –
arrow B –.



- ◀ - Pull off plug (220 V) – 5 – and plug (12 V) – 6 –
from the charger.
- Remove Phillips screws – arrows – and take
out charger – 7 –.

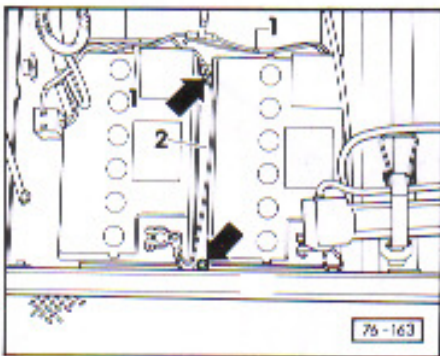
Installing

Caution

Observe safety precautions – see page 76-1.

76-25

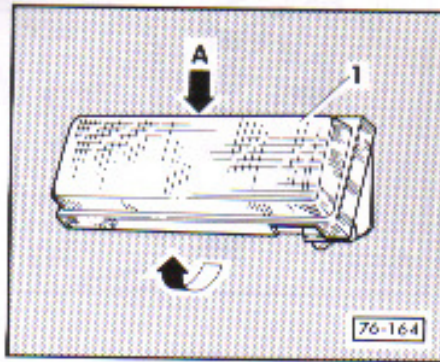
Removing booster batteries



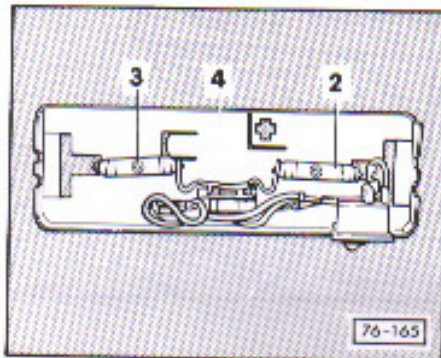
- ◀ - Fold up rear seat/bench and unfasten netting
screen.
- Detach connections from battery terminals
and insulate.
- Disconnect vent line – 1 – from the batteries.
- Remove two Phillips screws – arrows – and
take out clamping rail – 2 –.
- Lift out batteries.

76-26

Removing interior light



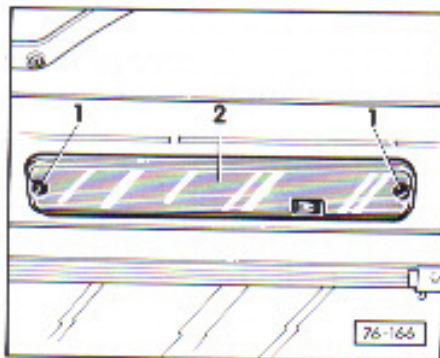
- ◀ – Remove upper fuse (S 47) from indicator panel over the rear door.
- Remove glass cover of lamp – 1 – by pushing downwards gently – arrow A – and unclipping at the base.



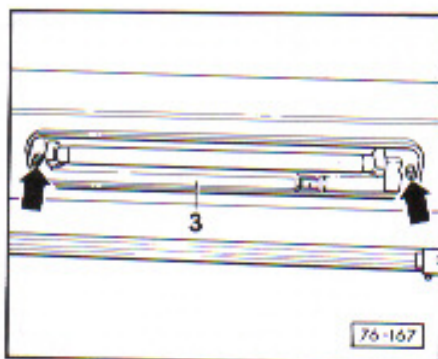
- ◀ – Take out both fluorescent tubes – 2 –.
- Remove two Philips screws – 3 –.
- Pull off connections (12 V) and take off lamp housing – 4 –.

76-27

Removing transistor light



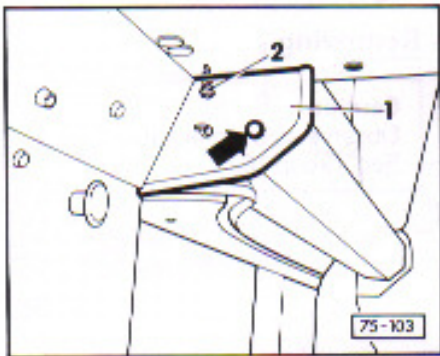
- ◀ – Undo plastic nuts – 1 –.
- Take off glass cover – 2 –.



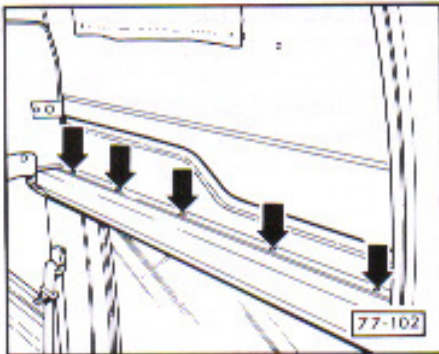
- ◀ – Remove Philips screws – arrows –.
- Take off lamp housing – 3 –.
- Separate 12 V connections from two-pin connector.

76-28

Removing centre right-hand cover

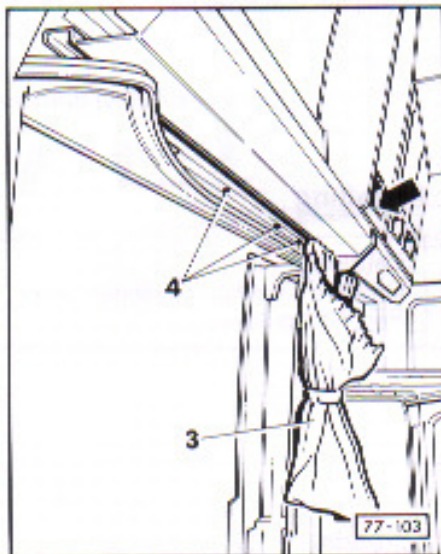


- ◀ – Lever off cap – arrow –, remove Phillips screw and take off facing – 1 –.
- Remove Phillips screw – 2 –.



- ◀ – Remove five Phillips screws – arrows –.

77-1



- ◀ – Remove two Phillips screws from front right-hand storage shelf – arrow –.
- Unscrew curtain and strap – 3 – from "C-Pillar".
- Lever off cover caps – 4 – and remove three Phillips screws.
- Carefully take off centre right-hand cover.

77-2

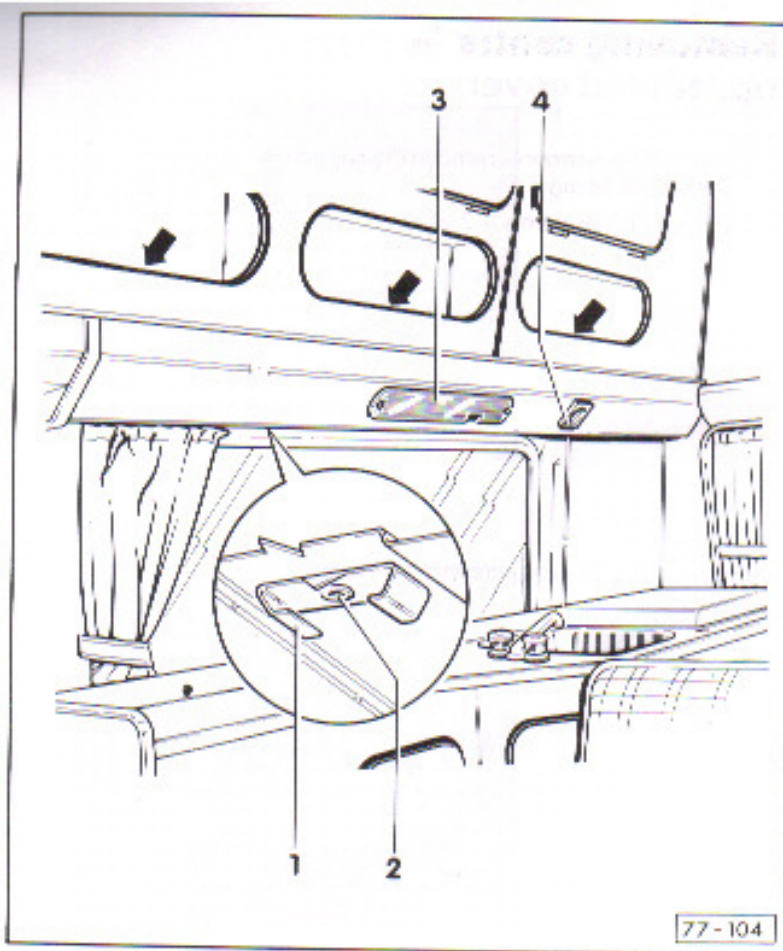
Removing and installing rear right-hand cover

Removing

Caution

Observe safety precautions – see Rep. Group 76.

- Remove upper fuse (S 47) from indicator panel over the rear door.
- Lift curtain rail out of retaining clips – 1 –.
- Drill out six hollow rivets (3.2 mm dia.) – 2 – and take off retaining clips – 1 –.
- Remove nine Philips screws – arrows – from the three storage shelves (for this, lever off five cast).
- Carefully pull out rear right-hand cover.



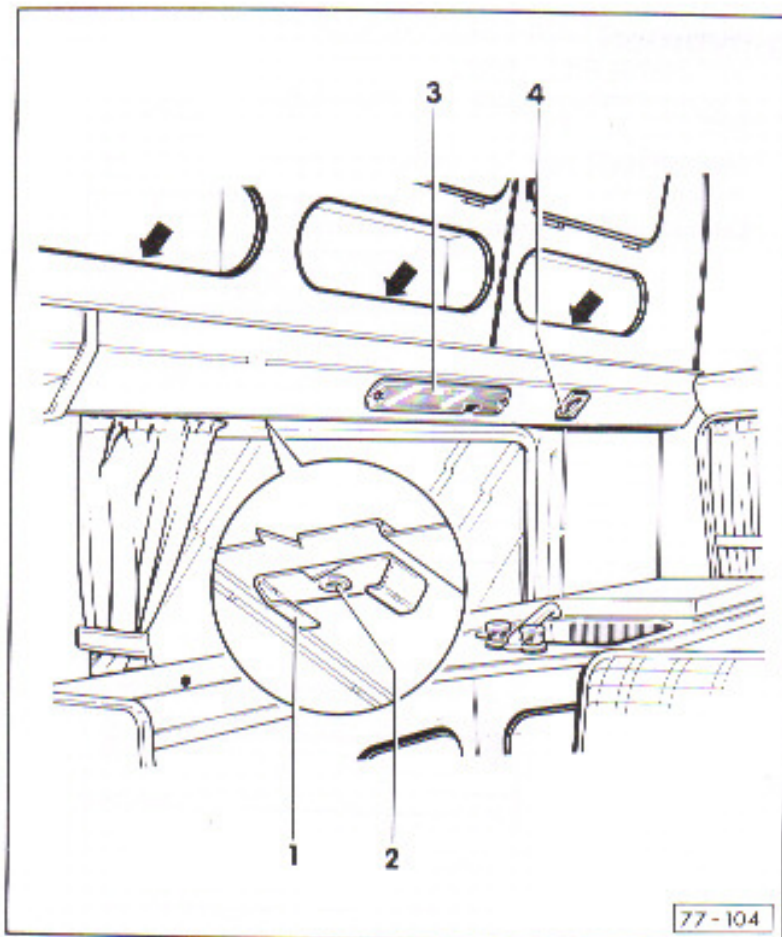
77-3

- Pull the transistor light connections (12 V) – 3 – out of the two-pin connector.
- Detach connections (220 V) from the socket – 4 –.

Installing

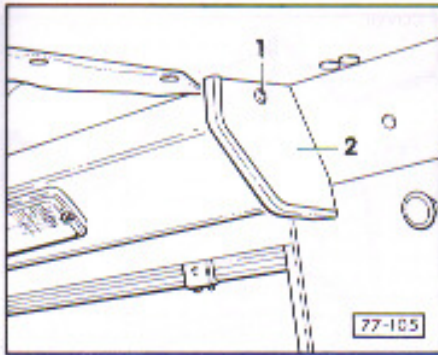
Caution

Observe safety precautions – see Rep. Group 76.

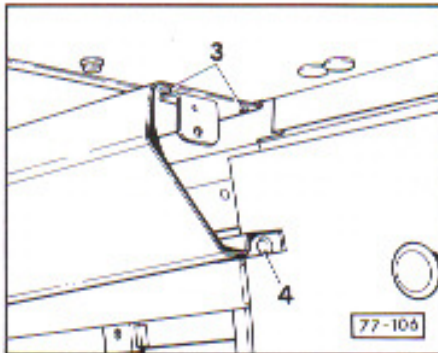


77-4

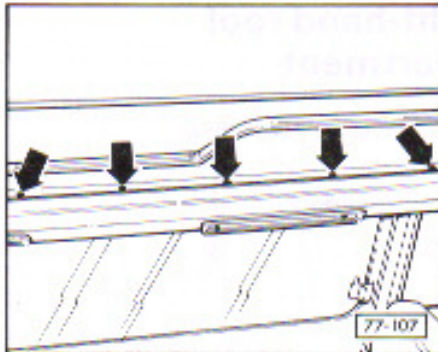
Removing centre left-hand cover



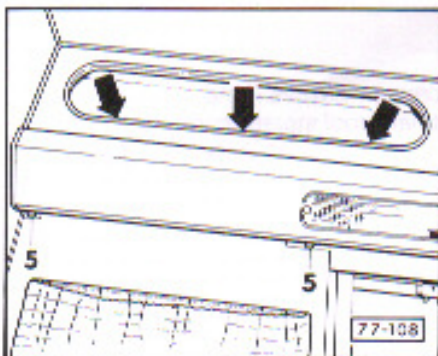
- Remove upper fuse (S 47) from indicator panel over the rear door.
- ◀ – Lever off cap – 1 –, remove Phillips screw and take off facing – 2 –.



- ◀ – Remove two Phillips screws – 3 –.
- Lever off cap – 4 – and remove Phillips screw.



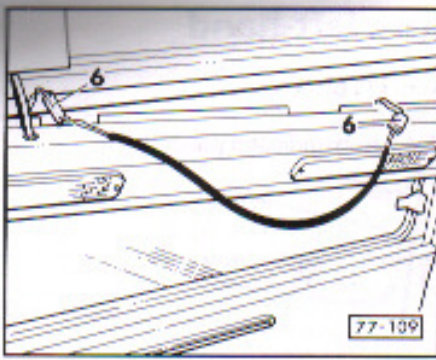
- ◀ – Remove five Phillips screws – arrows –.



- ◀ – Remove six Phillips screws from the storage shelf – arrows – (lever off three caps).
- Lever off cover caps – 5 – and remove two Phillips screws.

77-5

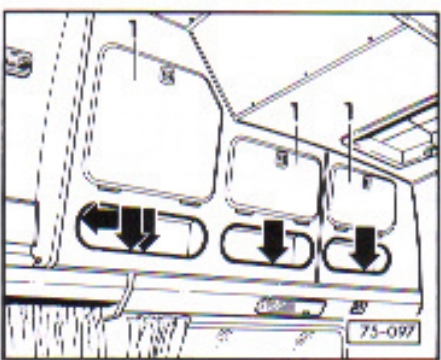
77-6



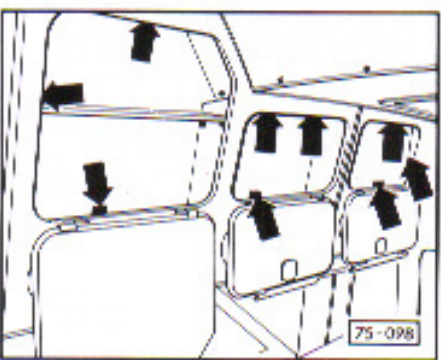
- ◀ – Carefully pull out centre left-hand cover.
- Separate connections 12 VI from both the two-air connectors – 6 –.
- Pull wire 12 VI out of cover.

77-7

Removing right-hand roof storage compartment



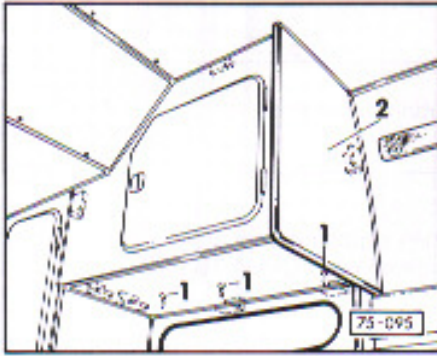
- ◀ – Remove five Phillips screws – arrows – from the storage shelves.
- Open storage compartment flaps – 1 –.



- ◀ – Remove 16 Phillips screws – arrows – and carefully take out right-hand roof storage compartment.

77-8

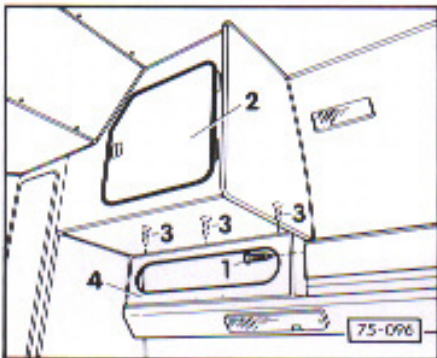
Removing left-hand roof storage compartment



- ◀ – Open and un hinge storage compartment flap.
- Remove three Phillips screws – 1 – from the floor of the left-hand roof storage compartment.
- Remove six Phillips screws from the wardrobe, six Phillips screws from the roof side trim panel and two Phillips screws from the upper roof trim panel.
- Carefully pull out left-hand roof storage compartment – 2 –.

77-9

Removing left-hand storage shelf



- ◀ – Remove three Phillips screws – arrows –.
- Remove Phillips screw – 1 – from the front end of the left-hand guide rail.
- Open storage compartment flap – 2 – and remove three Phillips screws – 3 – from the floor of the left-hand storage compartment.
- Carefully pull out left-hand storage shelf – 4 –.

77-10

Removing and installing kitchen cupboard

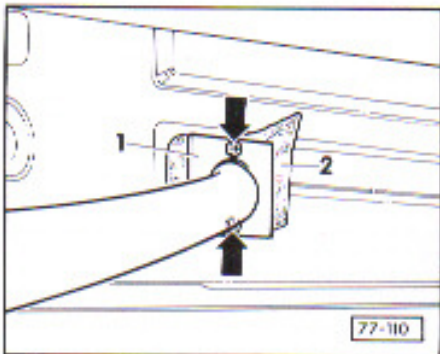
Removing

Caution

Observe safety precautions – see Rep. Group 76.

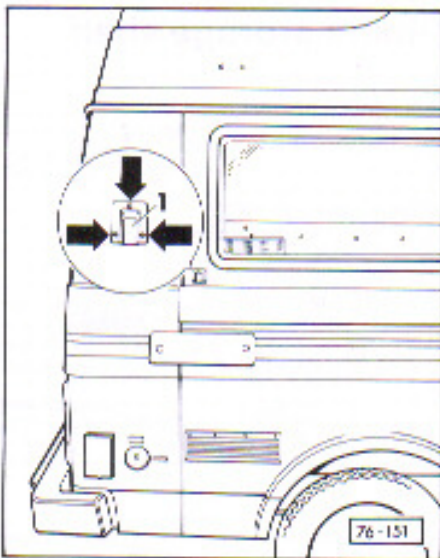
Note:

Before dismantling kitchen cupboard, first drain the fresh water system (see Repair Group 76 – “Removing water tank”).

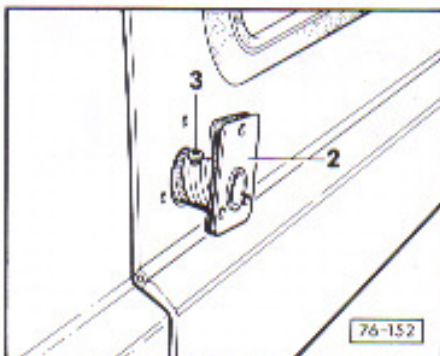


- Close take-off valve on gas cylinder (see Fig. 76-118, page 76-21).
- Remove two Phillips screws – arrows –, take off plate – 1 – and seal – 2 – from vehicle floor.

77-11

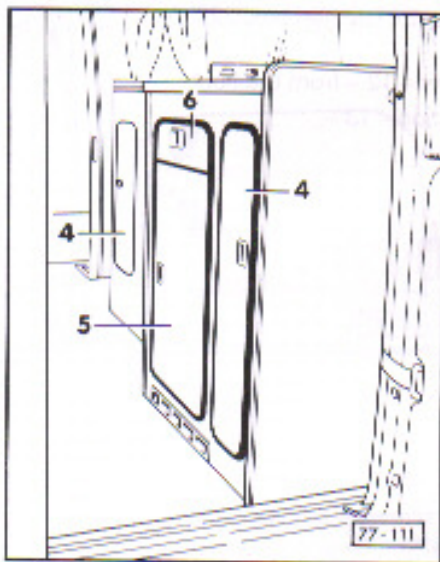


- Remove three Phillips screws – arrows – and take off cover – 1 –.

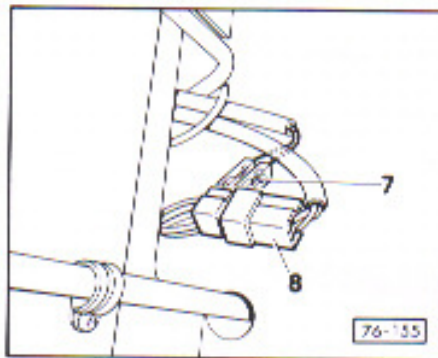


- Pull waste gas nozzle – 2 – out of side wall, remove Phillips screw – 3 – and pull waste gas nozzle – 2 – off gas outlet pipe.

77-12

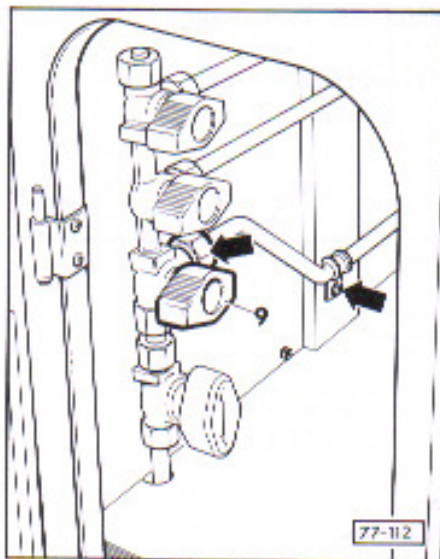


- ◀ - Remove Phillips screw – arrow –
- Unhinge kitchen cupboard doors – 4 – and refrigerator door – 5 –
- Pull drawer – 6 – out of kitchen cupboard.

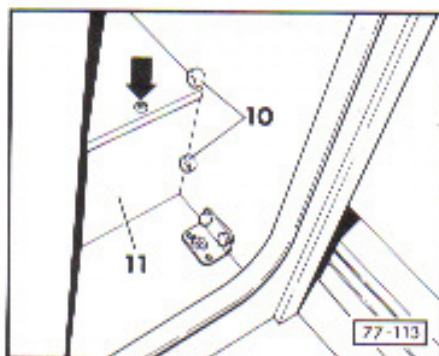


- ◀ - Disconnect the two-pin connector (12 V) – 7 – and the three-pin connector (12 V) – 8 – in the rear storage compartment.

77-13

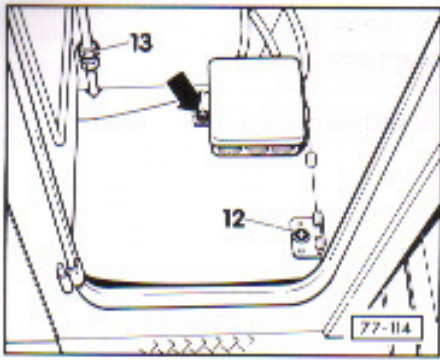


- ◀ - Close quick-action stop valve – 9 –
- Unscrew gas pipe connection to water heater – arrows –

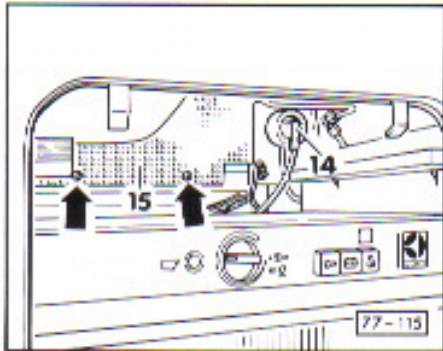


- ◀ - Pull out floor retainers – 10 –
- Remove two Phillips screws – arrow – and take off cover – 11 –

77-14

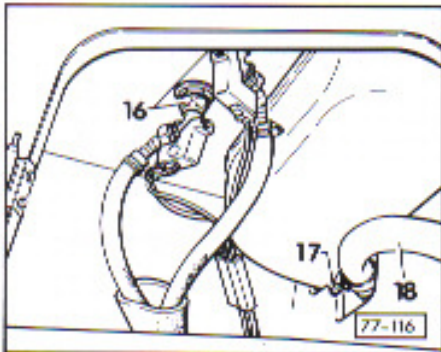


- ◀ – Undo mounting screw for junction box (220 V) – arrow –.
- Remove Phillips screw – 12 – from the floor.
- Unscrew gas connection – 13 –.

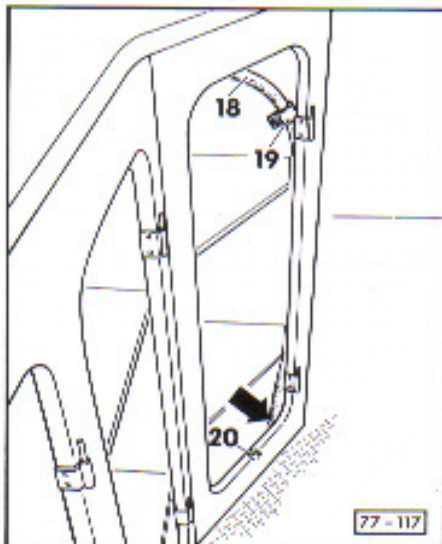


- ◀ – Pull plug (220 V) – 14 – out of socket.
- Remove two Phillips screws – arrows – and take out ventilation grille – 15 –.

77-15

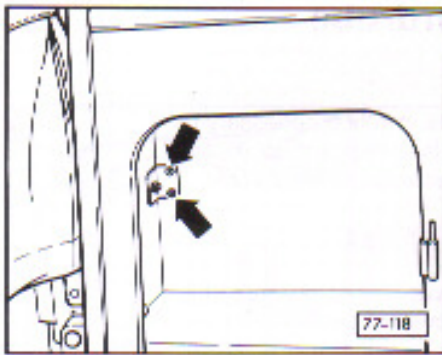


- ◀ – Unscrew threaded fittings – 16 – from mixer tap.
- Release screw clip – 17 – and pull off water outlet hose – 18 –.



- ◀ – Release clamp – 19 – and push water outlet hose – 18 – out through the holes – arrow – in the floor.
- Remove Phillips screw – 20 – from the floor of the centre storage compartment.

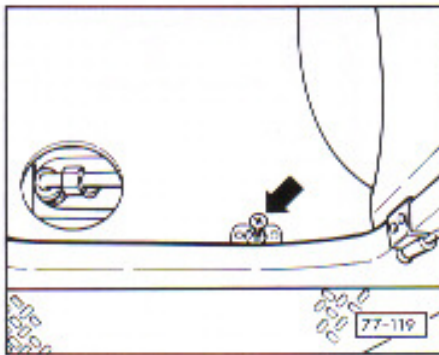
77-16



- ◀ – Unscrew two Phillips screws – arrows – from rear wall of front storage compartment.



77-17



- ◀ – Remove carpeting from floor of front storage compartment and unscrew Phillips screw – arrow –.
- Pull kitchen cupboard slightly forward (in driving direction), until trim strip or “D-pillar” is clear.
- Lift kitchen cupboard from side wall to centre of vehicle, at the same time guiding gas pipe and water hoses out of rear wall of kitchen cupboard.

Installing

Caution

Observe safety precautions – see Rep.-Group 76.

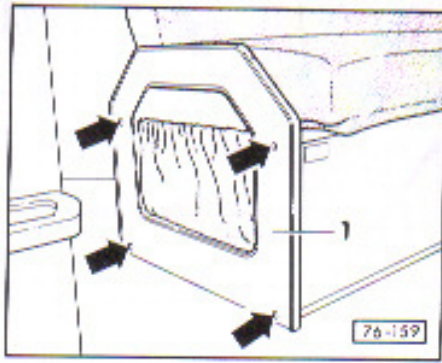


77-18

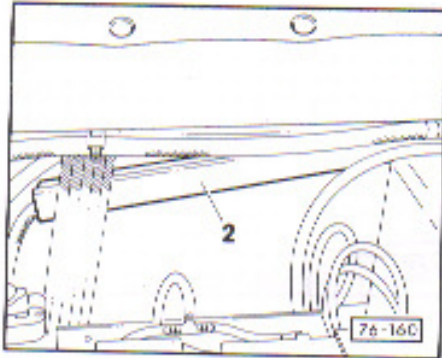
Removing wardrobe

Note:

To remove the wardrobe, it is first necessary to empty the water boiler (see Rep.-Group 76) and to remove the left roof storage compartment (see page 77-9).

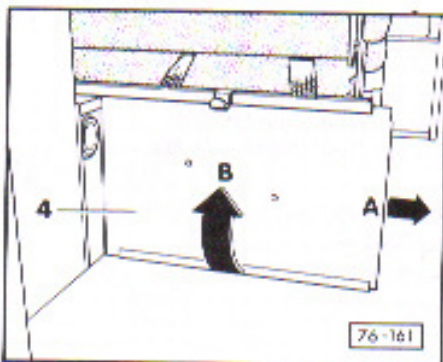


- ◀ – Lever off caps – arrows –, unscrew four Phillips screws and remove side wall – 1 –.

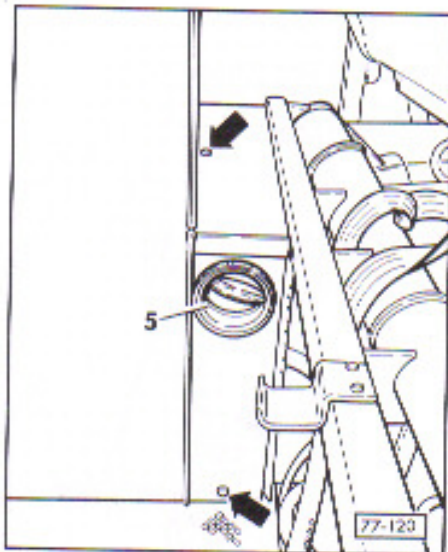


- ◀ – Fold up rear bench seat and unfasten netting screen.
- Unclip cover – 2 –.

77-19



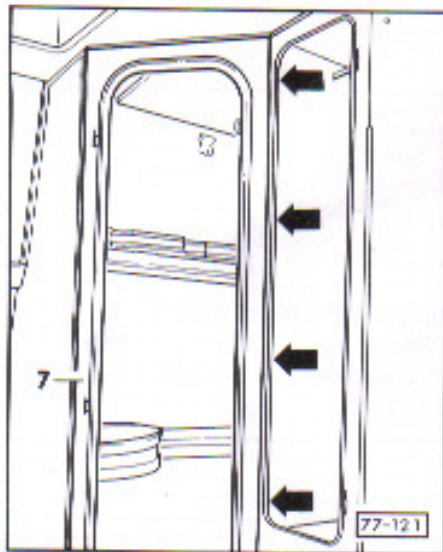
- ◀ – Pull rear wall – 4 – to side (arrow A) and away to rear (arrow B).



- ◀ – Unscrew cover – 5 –.
- Lever off caps – arrows –, unscrew two Phillips screws and remove cover between wardrobe and rear seat/bench.

77-20

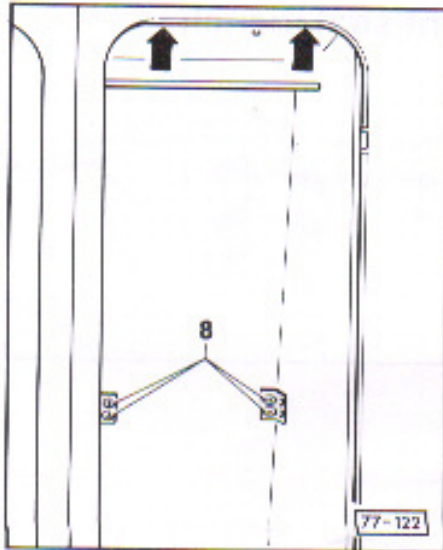
- Unhinge and remove wardrobe door and wash-room door.



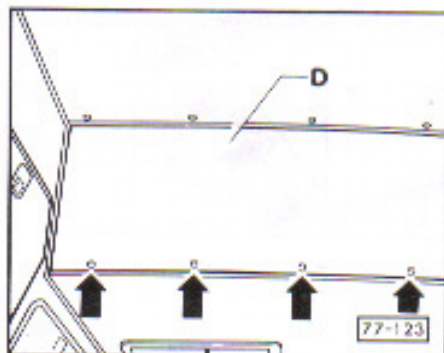
- ◀ - Unscrew four Phillips screws – arrows – from wardrobe.
- Unscrew twenty-six Phillips screws from door frame – 7 – (from inner side of washroom).
- Remove door frame – 7 –.



77-21

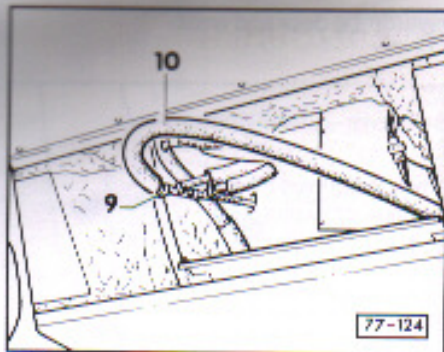


- ◀ - Unscrew four Phillips screws – 8 – from rear wall of wardrobe.
- Unscrew four Phillips screws – arrows – from upper roof trim panel "G".

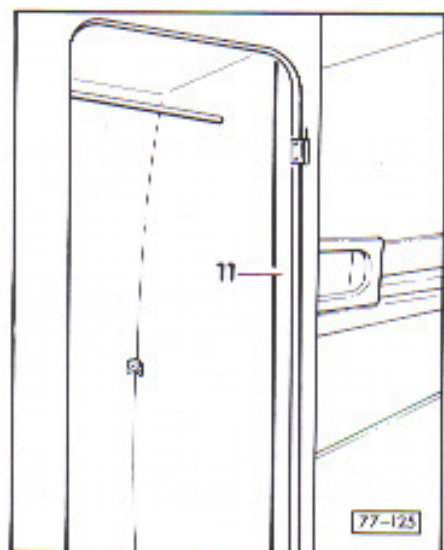


- ◀ - Unscrew upper roof trim panel "D" (four Phillips screws with caps – arrows –).

77-22



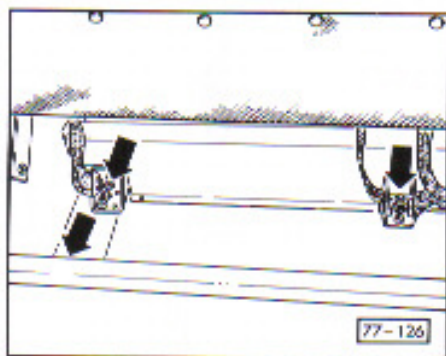
- ◀ – Press off clamp – 9 –, pull hose – 10 – off T-piece and pull down insulation from hose.



- ◀ – Unclip cover – 11 – and pull hose out of roof trim panel into wardrobe.
- Remove wardrobe while guiding hose through wardrobe floor.

77-23

Removing front seat/bench

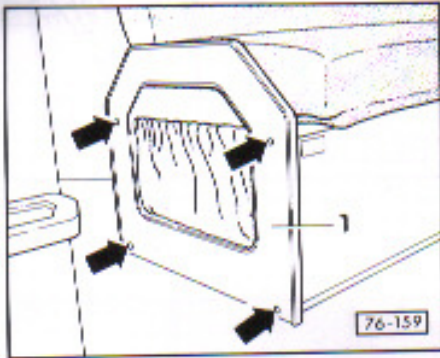


- ◀ – Fold up front seat cushion.
- Unscrew eleven hexagon nuts – arrows –.
- Lift out front seat/bench.

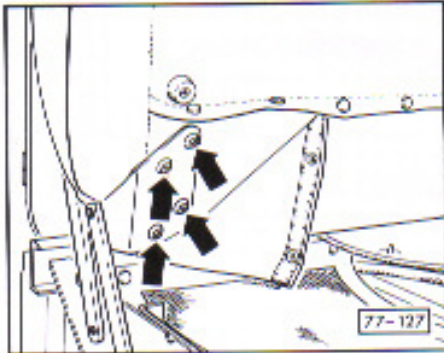
77-24

Removing rear seat/bench mounting brackets

Removing right-hand mounting bracket

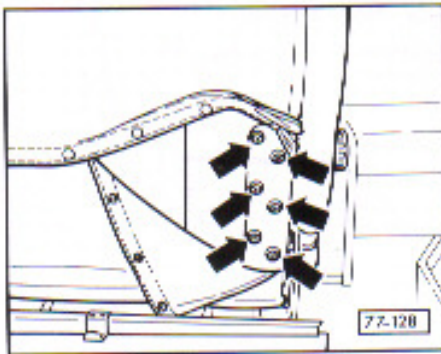


- ◀ – Pry off caps – arrows –, unscrew four Phillips screws and remove side wall – 1 –.

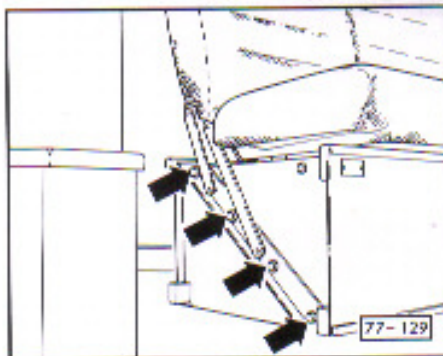


- ◀ – Fold up seat padding and remove upholstery cover on right side.
- Unscrew Phillips screws – arrows –.

77-25



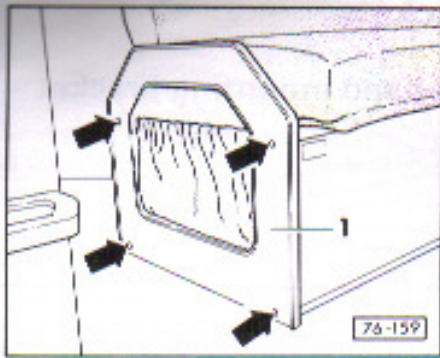
- ◀ – Remove backrest upholstery cover on right-hand side and unscrew six Phillips screws.



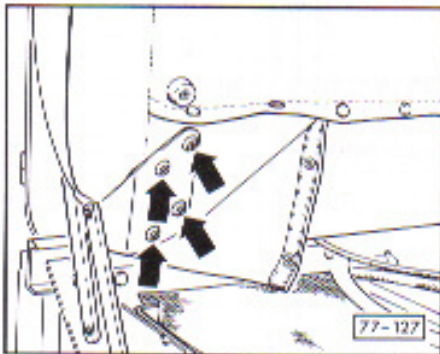
- ◀ – Unscrew hexagon bolts – arrows – and remove right-hand mounting bracket of rear seat/bench.

77-26

Removing left-hand mounting bracket

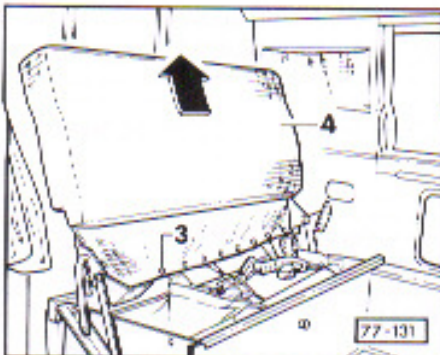


- ◀ – Lever off caps – arrows – , unscrew four Philips screws and remove side wall – 1 –

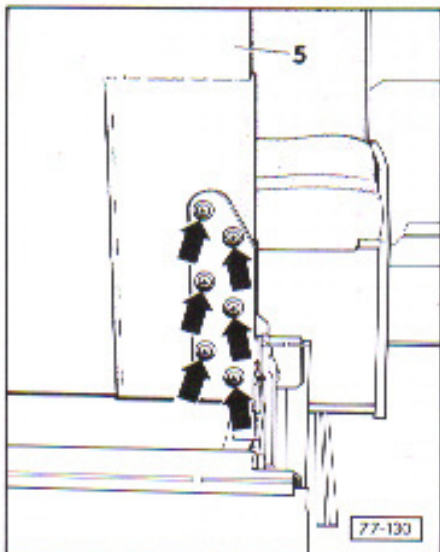


- ◀ – Fold up seat padding.
- Unsnap two press-studs each on right and left of upholstery cover.
- Unscrew four Philips screws each – arrows – on left and right and remove seat padding.

77-27

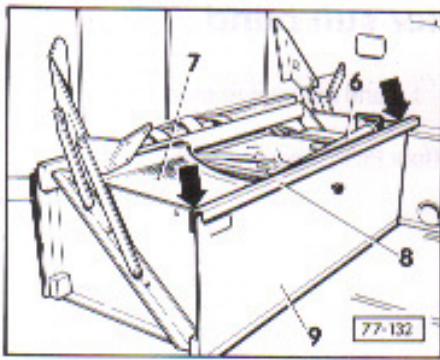


- ◀ – Unsnap press-studs – 3 – from backrest.
- Remove backrest padding – 4 – by pulling upward from padding board.

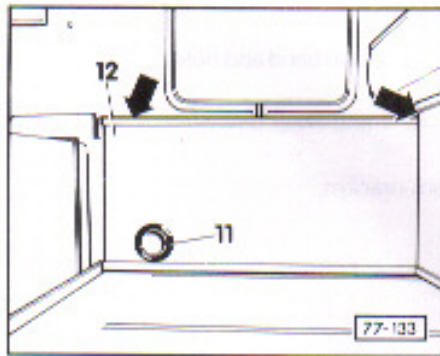


- ◀ – Unscrew six Philips screw each – arrows – on right and left.
- Remove padding board – 5 –

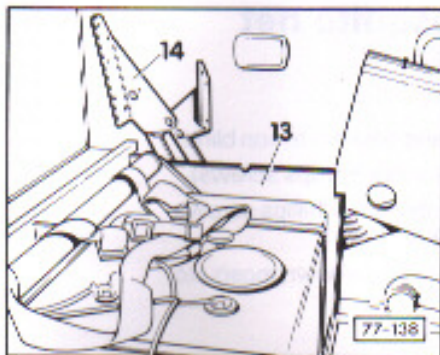
77-28



- ◀ - Remove vehicle jack – 6 –.
- Remove netting screen – 7 – from front panel.
- Unscrew s x hexagon bolts – arrows –.
- Remove cross fitting – 8 – and front panel – 9 –.



- ◀ - Unscrew cover – 11 –.
- Unscrew cover – 12 – (four Phillips screws with caps – arrows –) and pull up.

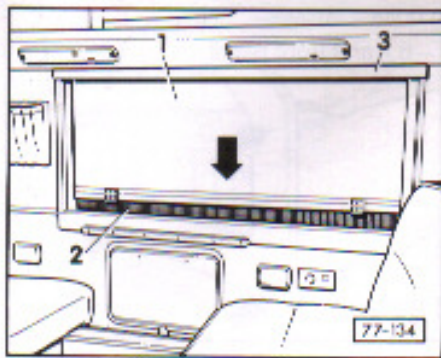


- ◀ - Unscrew four hexagon bolts from left sidewall of rear bench seat – 13 –.
- Remove left mounting bracket – 14 –.

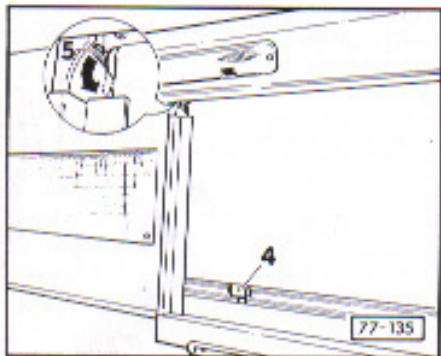
77-29

77-30

Removing roller sun blind



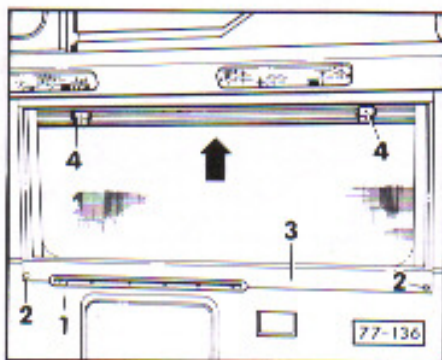
- ◀ – Pull down sun blind – 1 – and connect to mosquito net – 2 –.
- Unscrew cover – 3 – (four Phillips screws with caps) and remove.



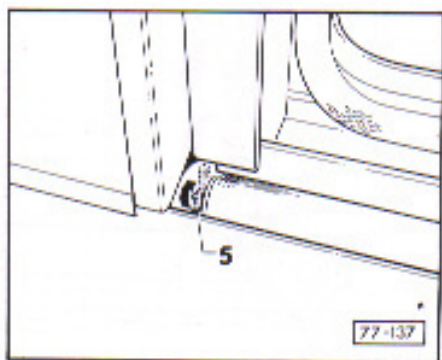
- ◀ – Open press-studs, guide up sun blind and hold in place.
- Release safety lever – 5 –, and twist downward 90°.
- Remove sun blind from bracket.

77-31

Removing mosquito net blind



- ◀ – Pull up mosquito net and connect to sun blind.
- Unscrew table rail – 1 – (six Phillips screws).
- Lever off caps – 2 –, unscrew Phillips screws and remove cover – 3 –.
- Open press-studs – 4 –, guide down mosquito net and hold in place.



- ◀ – Release safety lever and turn upward 90°.
- Remove mosquito net from bracket.

77-32