

Thermo Top C Parking Heater e1 00 0002

Installation documentation

VW Golf V Plus

1.6MPI and 2.0FSI

from Model Year 2004

For left-hand drive vehicles only



WARNING!

Hazard warning:

Incorrect installation or repair of Webasto heating systems may cause a fire or result in the emission of carbon monoxide, which can be fatal. Serious or fatal injuries can be caused as a result.



Specialist company training, technical documentation, specialised tools and equipment are required to install and repair Webasto heating and cooling systems. Only original Webasto parts must be used. For this, also see the catalog of air and water heater accessories from Webasto.

NEVER attempt to install or repair Webasto heating or cooling systems if you have not successfully completed the company training and thereby acquired the required technical skills, or if you do not have access to the required technical documentation, tools and equipment needed to carry out correct installation and repairs.

ALWAYS follow all Webasto installation and repair instructions and observe all warnings.

The initial startup is to be executed with the Webasto Thermo Test Diagnosis.

Webasto does not accept any liability for defects and damage that are attributable to installation by untrained staff.

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Validity

| Manufacturer | Model | Type | EG-BE No./ABE |
|--------------|-------------|------|----------------------------|
| Volkswagen | Golf V Plus | 1KP | e1 * 2001/116 * 0304 * ... |

| Engine type | Engine model | Output in kW | Displacement in cm ³ |
|-------------|--------------|--------------|---------------------------------|
| BGU | Petrol | 75 | 1595 |
| BSE | Petrol | 75 | 1595 |
| BLY | Petrol | 110 | 1984 |
| BLX | Petrol | 110 | 1984 |
| BLR | Petrol | 110 | 1984 |
| AXW | Petrol | 110 | 1984 |

Vehicle and engine types, equipment variants and national specifications not listed in this installation documentation have not been tested. However, installation according to this installation documentation may be possible.

The installation location of a digital timer and summer/winter switch should be confirmed with the end customer before installation.

Heater/Installation Kit

| Quantity | Description | Order No.: |
|----------|---|----------------|
| 1 | Retail accessories <i>Thermo Top C</i> | See price list |
| 1 | Installation Kit for VW Golf V / Plus / Eos 1.6MPI and 2.0FSI | 9013567A |
| 1 | Heater control | See Price list |

To be ordered separately:

| Quantity | Description | VW Order No.: |
|----------|---|---------------|
| 1 | Washer reservoir for vehicles with parking heater | 1K6 955 453H |
| 1 | Plug | 8E0 955 465A |
| 1 | Plug | 444 955 647 |
| 1 | Seal | 431 955 465A |

* The validity of the part number for the respective vehicle identification number must be checked in the spare parts catalog.



Also required with Climatronic

| Quantity | Description | Order No.: |
|----------|--------------------------|------------|
| 1 | IPCU Kit for Climatronic | 9013645A |

Foreword

This installation documentation applies to VW Golf V Plus vehicles with a 1.6MPI and 2.0FSI engine - for validity, see page 2 - from model year 2004 and later, assuming technical modifications to the vehicle do not affect installation, any liability claims excluded. Depending on the vehicle version and equipment, modifications may be necessary during installation with respect to this installation documentation.

However, the stipulations in the "installation documentation", the "operating instructions" and the "installation instructions" for the *Thermo Top C* must always be observed.

The corresponding rules of technology and any information from the vehicle manufacturer should be observed during the installation work.

General Instructions

Installation should be carried out according to the general, standard rules of technology. Unless specified otherwise, fasten hoses, lines and wiring harnesses to original vehicle lines and wiring harnesses using cable ties.

Sharp edges should be fitted with rub protection (split-open plastic hose).

Spray unfinished body areas, e.g. drilled holes, with anti-corrosion wax (Tectyl 100K, Order No. 111329).

When installing an IPCU, check or adjust the corresponding settings before installation.

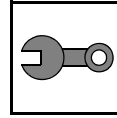
Special Tools

- Torque wrench for 2.0 - 10 Nm
- Hose clamping pliers
- Metric thread-setter kit

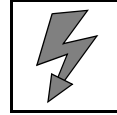
Explanatory Notes on Document

You will find an identification mark on the outside top right corner of the page in question to provide you with a quick overview of the individual working steps.

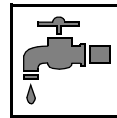
Mechanical system



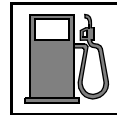
Electrical system



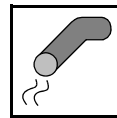
Coolant circuit



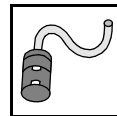
Fuel



Exhaust gas



Combustion air



Special features are highlighted using the following symbols:



Specific risk of injury or fatal accidents.



Specific risk of damage to components.



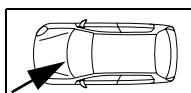
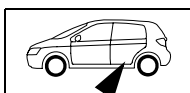
Specific risk of fire or explosion.



Reference to general installation instructions of Webasto components or to the manufacturer's vehicle-specific documents.



Reference to a special technical feature.

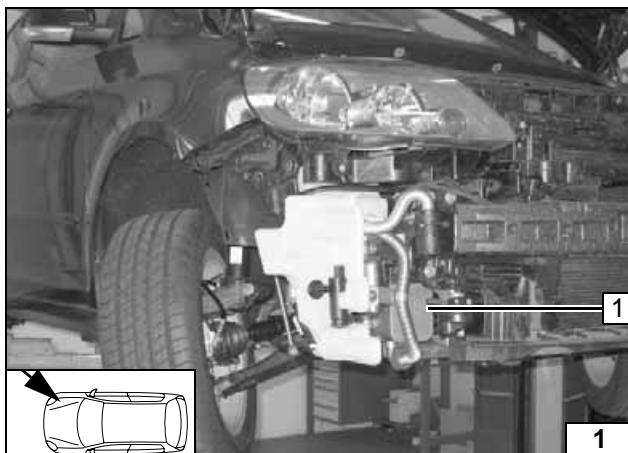


The arrow in the vehicle icon indicates the position on the vehicle and the viewing angle.

Preliminary Work

WARNING!

- Open the fuel tank cap, ventilate the tank.
- Close the fuel tank cap again.
- Depressurise the cooling system.
- Copy the factory number from the original type label to the duplicate type label.
- Remove years that do not apply from the duplicate label.
- Attach the duplicate label (type label) in the appropriate place.
- Disconnect the battery "earth" or "ground" connection.
- Only 2.0 FSI: Remove the air filter together with the intake hose.
- Remove battery.
- Remove the battery carrier.
- Remove the engine cover.
- Remove the right front wheel.
- Remove the front section of the right front wheel well trim.
- Remove the underride protection
- Remove the bumper.
- Remove the right-hand underbody trim.
- Remove the right rear seat
- Open the right-hand tank-fitting service lid.
- Remove the footwell trim on the driver's side
- Remove the lower instrument panel trim on the driver's side
- Only vehicles with Climatronic: Remove the footwell trim on the front passenger side



Heater installation location

1 Heater

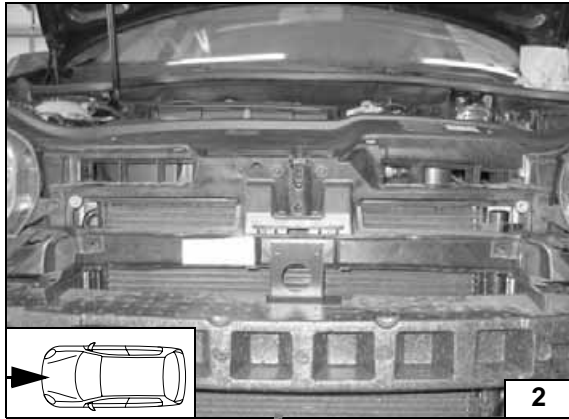
Installation location



Electrical system

Wiring harness of heater

Route wiring harness of heater along actuating cable to hood lock, then along original vehicle lines up to right-hand headlight.



Fuse holder

- 1 K3 relay
- 2 Fuse holder
- 3 Route wiring harness of heater control, fan control and metering pump in cable duct to firewall

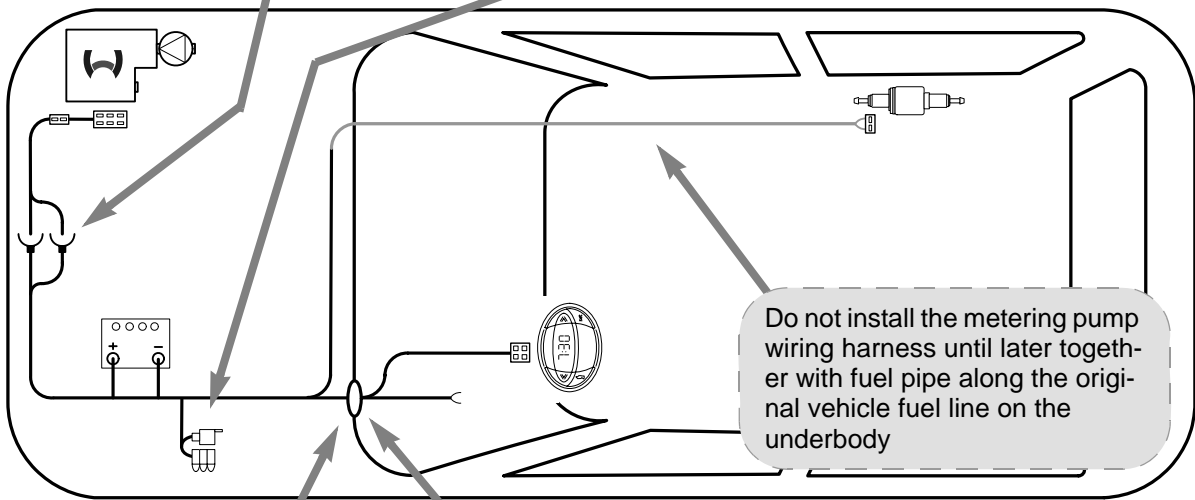
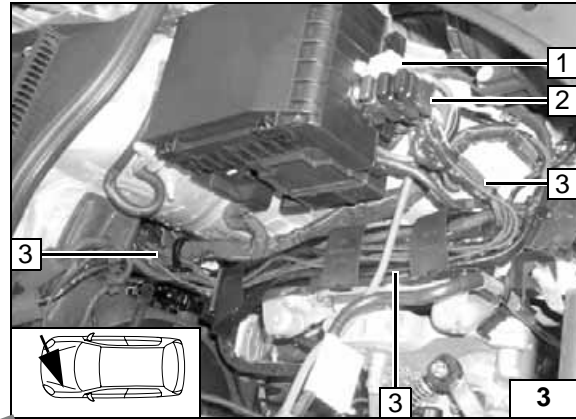
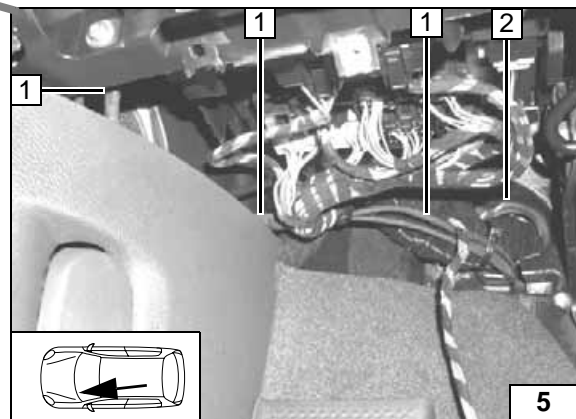
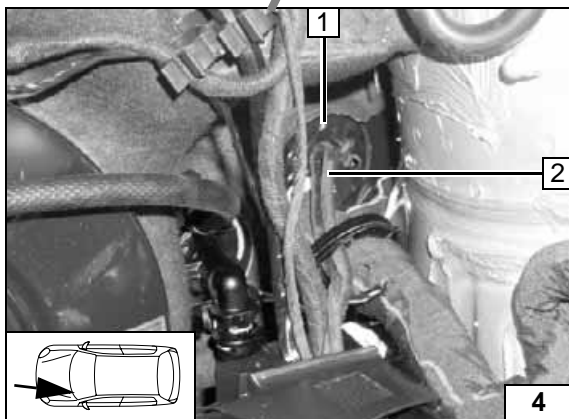


Diagram of wiring harness routing for all equipment

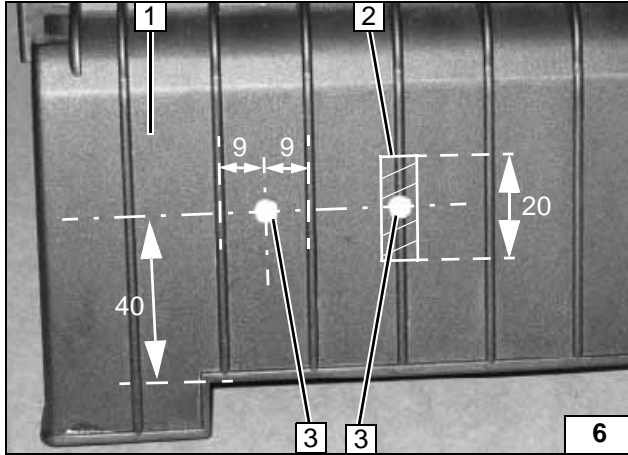


Wiring harness pass through

- 1 Original vehicle wiring harness pass through
- 2 Wiring harnesses for fan control and heater control

Wiring harness pass through

- 1 Original vehicle wiring harness pass through
- 2 Wiring harnesses for fan control and heater control



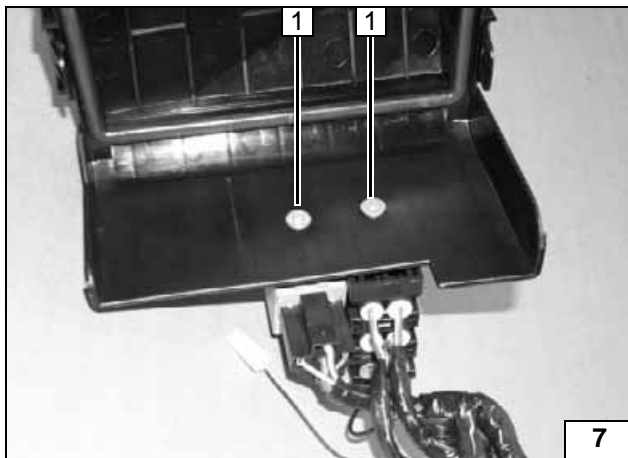
Fuse holder and K3 relay

Countersink holes **3** from behind for M5 countersunk head screws.

- 1** Cover of fuse/relay carrier in engine compartment
- 2** Cut away bar in shaded area
- 3** 5.0mm dia. hole [2x]

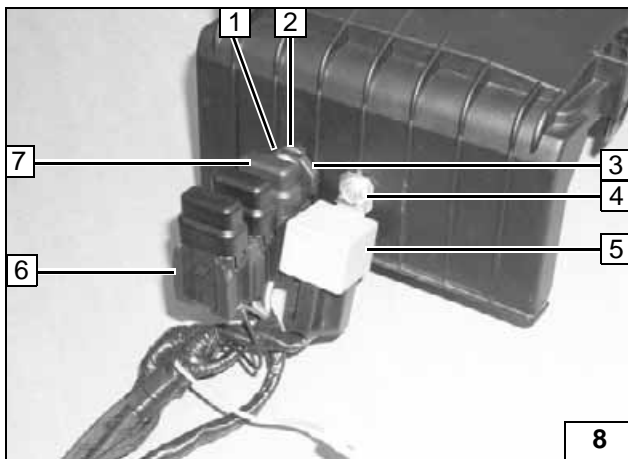


Holes for fuse holder and K3 relay



- 1** M5x12 countersunk head screw [2x]

Installing fuse holder and K3 relay

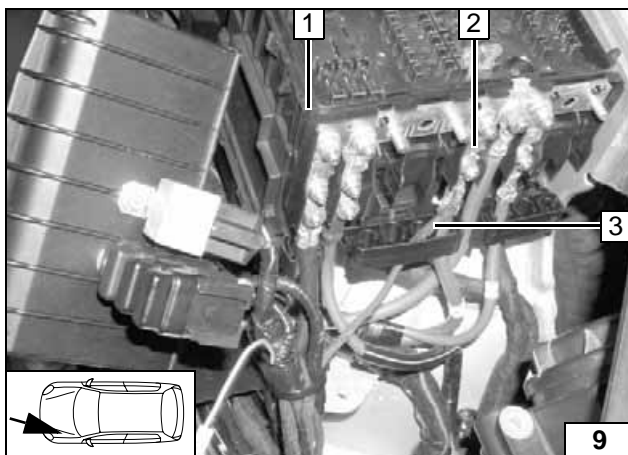


On vehicles with Climatronic, replace 25 A fuse F3 **7** with provided 3 A fuse.

- 2** Large diameter washer (between cover and retaining plate)
- 3** Retaining plate
- 1** M5 flanged nut
- 6** Fuse holder
- 7** F3 fuse
- 5** K3 relay
- 4** M5 flanged nut



Installing fuse holder and K3 relay

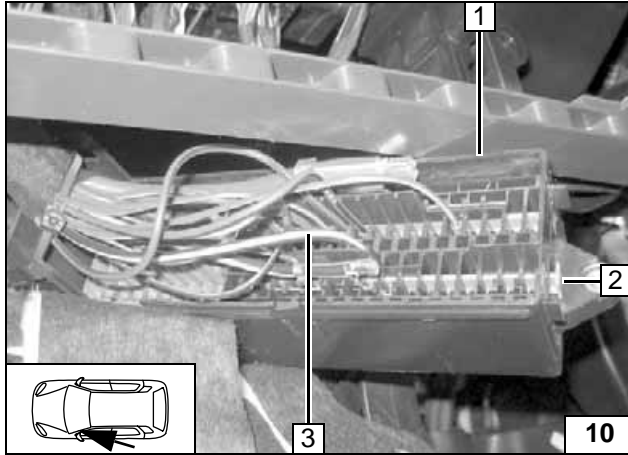


Route brown (br) earth wire to original vehicle earth support point below headlight and connect.

- 1** Fuse/relay carrier
- 3** Red (rt) positive wire
- 2** Original main vehicle fuse



Connecting positive and earth wire



Fan controller without Climatronic

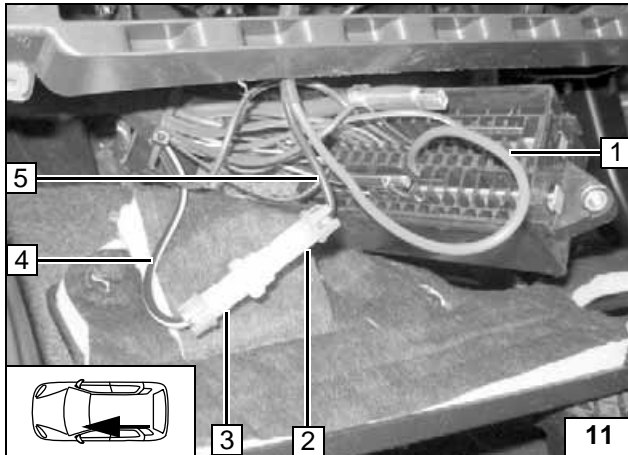
Fuse socket dependent on vehicle equipment SC33 or SC 35; wire colour black (sw) or black/yellow (sw/ge)

Detach original vehicle fuse carrier **1** (instrument panel at lower left) and unlock contact lock **2**.

Uncrimp black (sw) or black/yellow (sw/ge) 4 mm² wire **3** on fuse output SC33 or SC35



Uncrimping wire



Produce connections as shown in wiring diagram.

4 Black (sw) or black/yellow (sw/ge) wire with original standard power timer

3 AMP housing

5 Black (sw) wire K3/30 with crimped-on tab connector

2 AMP housing

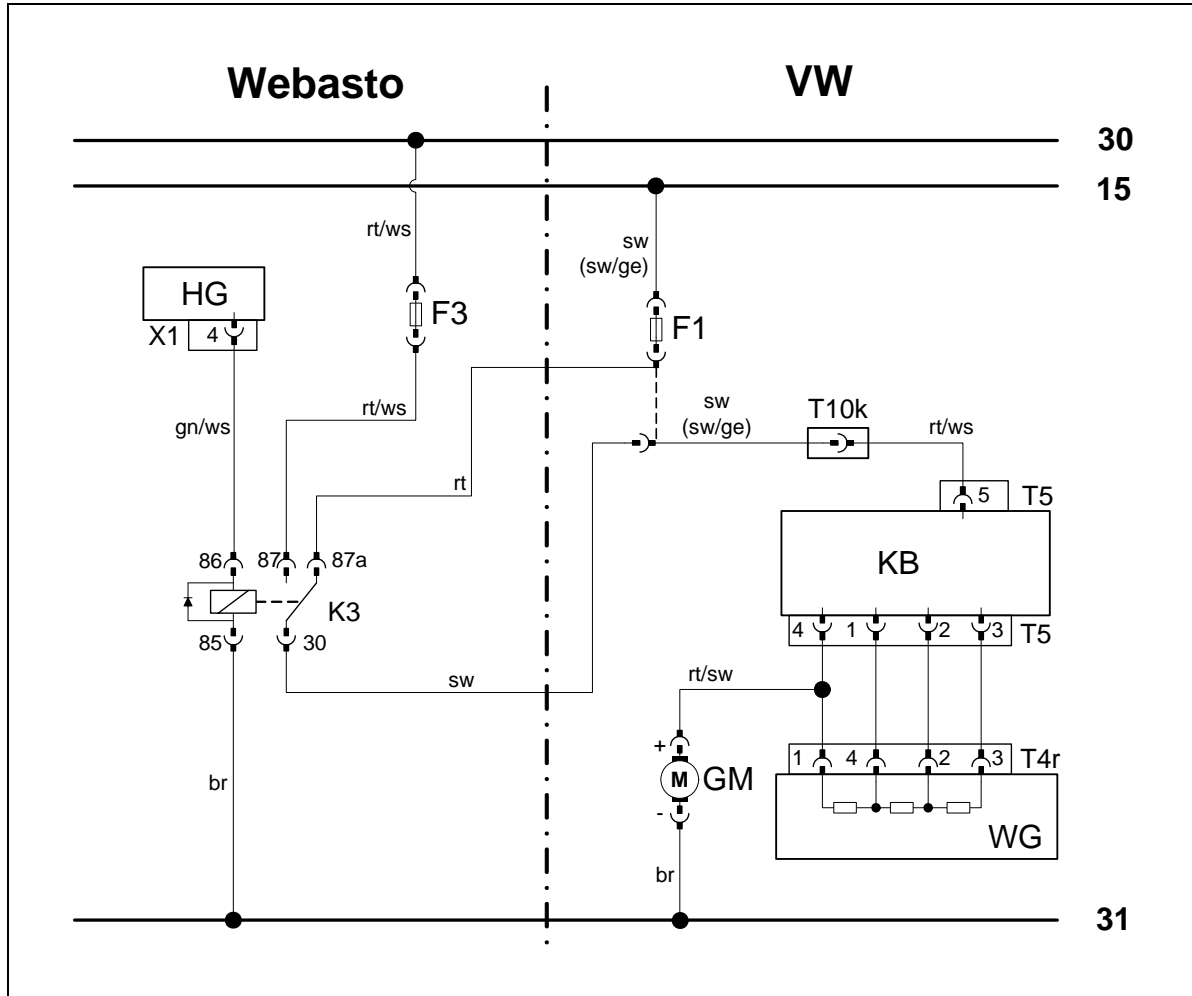
1 Red (rt) wire from K3/87a with crimped-on standard power timer engaged in fuse output SC33 or SC35



Connecting wires

Lock contact lock again.

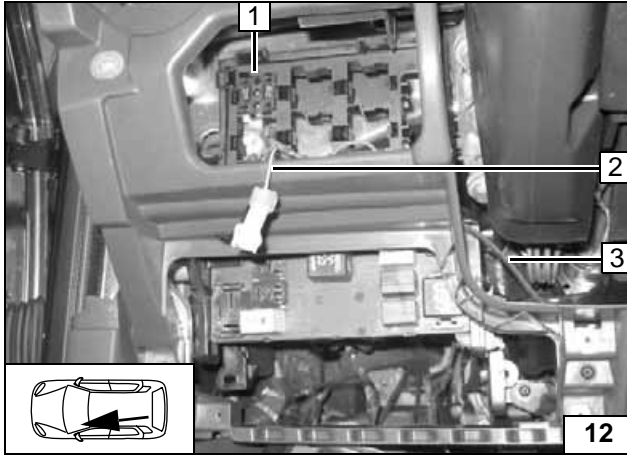




Wiring diagram without Climatronic

| Webasto components | | Vehicle components | | Colours and symbols | |
|--------------------|------------------------|--------------------|---|--------------------------|--------|
| HG | TT-C heater | F1 | Fuse SC33 or SC35 with 40 A | rt | red |
| X1 | 6-pin heater connector | KB | Air conditioning control unit J301 or heater switch E16 | ws | white |
| F3 | 25 A fuse | WG | Resistor group N24 | sw | black |
| K3 | Fan relay | GM | Fan motor V2 | br | brown |
| | | T... | Plug connections | gn | green |
| | | | | ge | yellow |
| | | | | Wiring colours may vary. | |

Legend



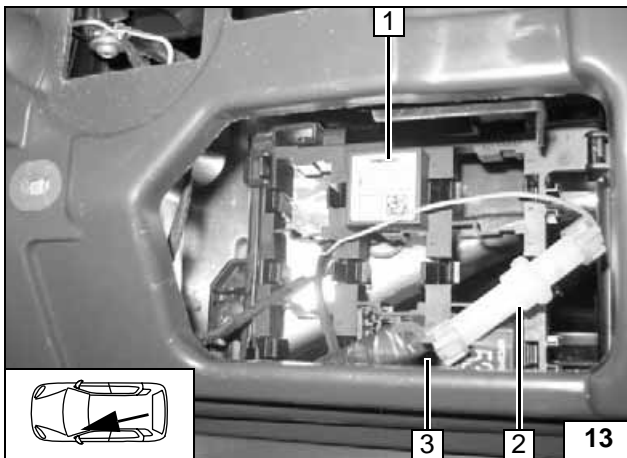
Fan controller with Climatronic

Produce connections as shown in wiring diagram.
Position of free sockets dependent on vehicle equipment.

- 1 IPCU socket
- 2 Green/white (gn/ws) wire of IPCU/86 with AMP connector
- 3 Red (rt) and black/white (sw/ws) wires from IPCU



Installing wiring harness of Climatronic

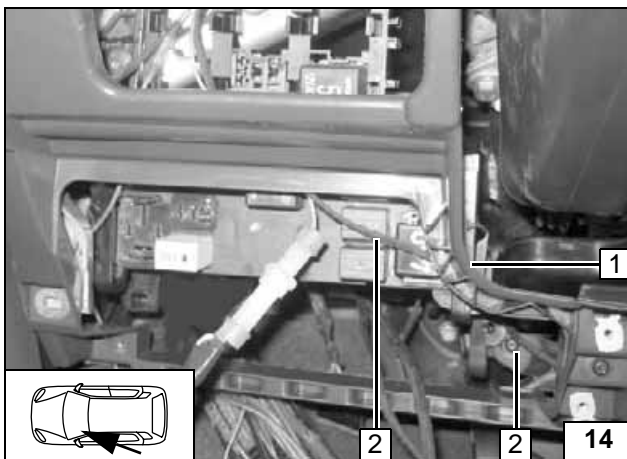


Brown (br) wire from IPCU/85 to original vehicle earth point.
Insulate and tie back red (rt) wire from K3/87a. Connect black (sw) wire from K3/30 3 to green/white (gn/ws) wire (AMP connector) 2.

- 1 IPCU



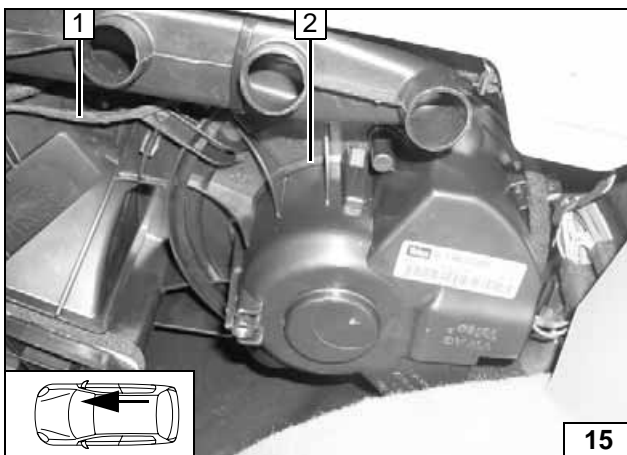
Connecting wires



Route wiring harness from IPCU 2 along cross member 1 to centre console.



Installing wiring harness of IPCU

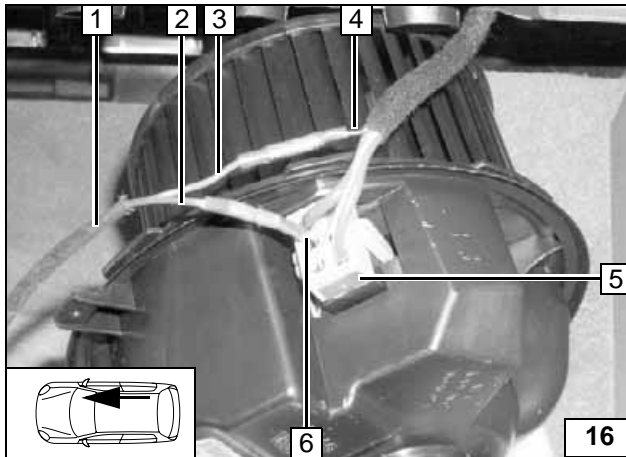


Route wiring harness from IPCU to original vehicle wires to fan unit

- 1 Wiring harness with red (rt) wire from IPCU/E and black/white (sw/ws) wire from IPCU/A
- 2 Fan unit



Installing wiring harness of IPCU



Position of connector T6t is dependent on vehicle. If necessary, disconnect fan unit in accordance with manufacturer's instructions. Produce connections as shown in wiring diagram.

- 1 Wiring harness from IPCU
- 2 Black/white (sw/ws) wire from IPCU/A
- 3 Red (rt) wire from IPCU/E
- 4 Black/white (sw/ws) wire from Climatronic control unit
- 5 Connector T6t
- 6 Black/white (sw/ws) wire to connector T6t/2



Connecting wires

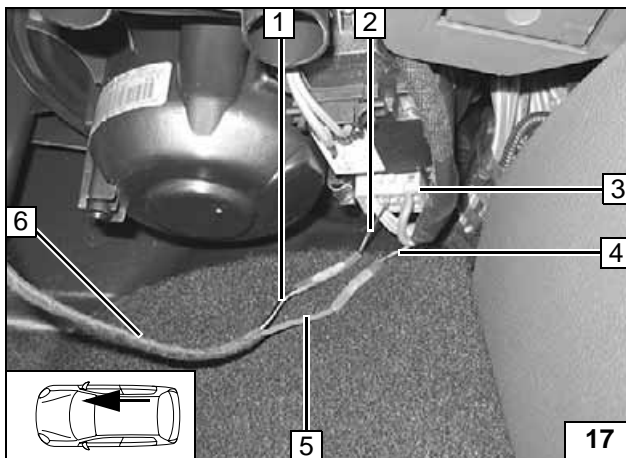
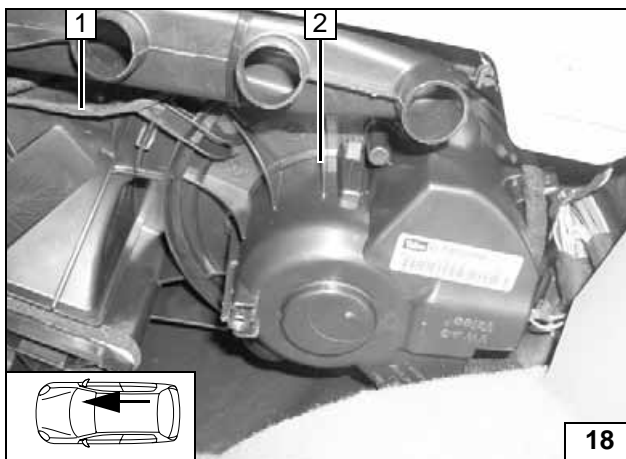


Figure shows version without having to disconnect fan unit.

- 1 Black/white (sw/ws) wire from IPCU/A
- 2 Black/white (sw/ws) wire to connector T6t/2
- 3 Connector T6t
- 4 Black/white (sw/ws) wire from Climatronic control unit
- 5 Red (rt) wire from IPCU/E
- 6 Wiring harness from IPCU



Connecting wires

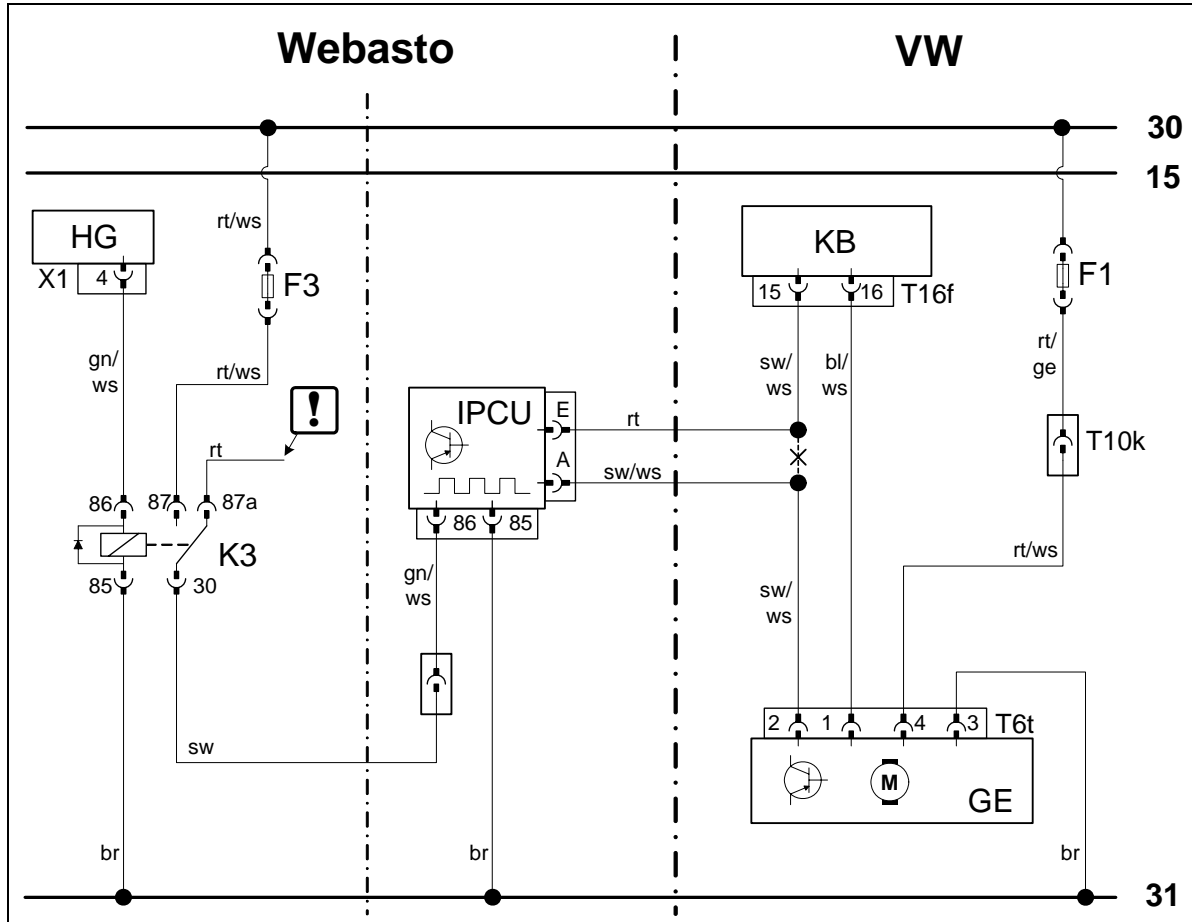


Reinstall fan unit if previously removed. Fasten wiring harness on original vehicle wires with cable ties.

- 1 Wiring harness from IPCU
- 2 Fan unit



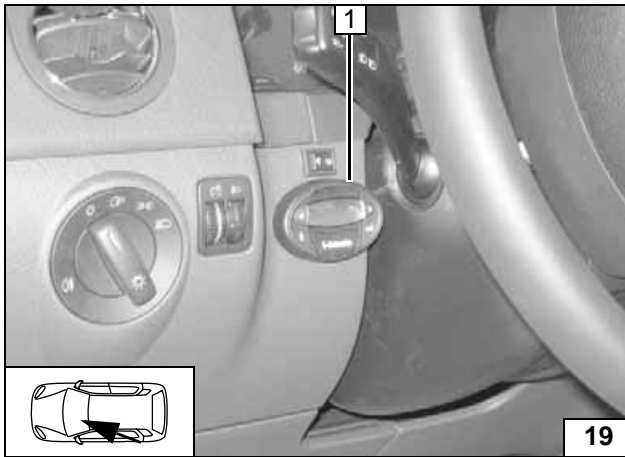
Installing fan unit



Wiring diagram with Climatronic

| Webasto components | | Vehicle components | | Colours and symbols | |
|-------------------------------|-------------------------------|--------------------|--|---------------------|--------------------------------|
| HG | TT-C heater | F1 | Fuse SC22 or SC56 with 40 A | rt | red |
| X1 | 6-pin heater connector | KB | Climatronic control unit J255 | ws | white |
| K3 | Fan relay | T... | Plug connections | sw | black |
| F3 | Fuse (25 A replaced with 3 A) | GE | Fan control unit J126 and fan motor V2 | br | brown |
| IPCU | Pulse width modulator | | | gn | green |
| | | | | ge | yellow |
| | | | | bl | blue |
| IPCU adjustment values | | | | ! | Insulate wire end and tie back |
| Voltage: 8 V | | | | X | Cutting point |
| Frequency: 400 Hz | | | | | Wiring colours may vary. |
| Duty cycle: 30 % | | | | | |
| Function: High-side | | | | | |

Legend



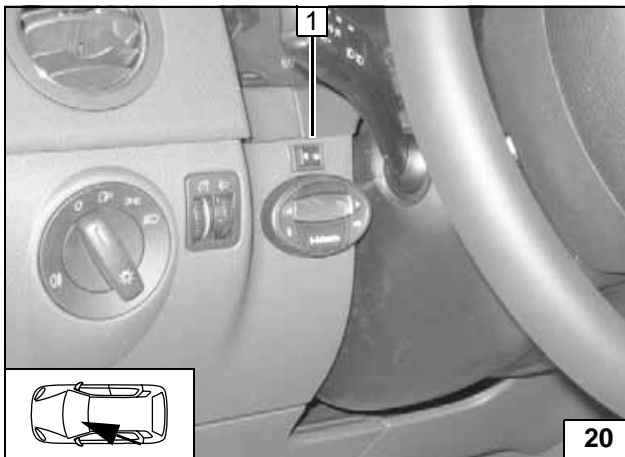
Digital timer option

Do not press on display.

- 1 Digital timer, drilling template



Digital timer

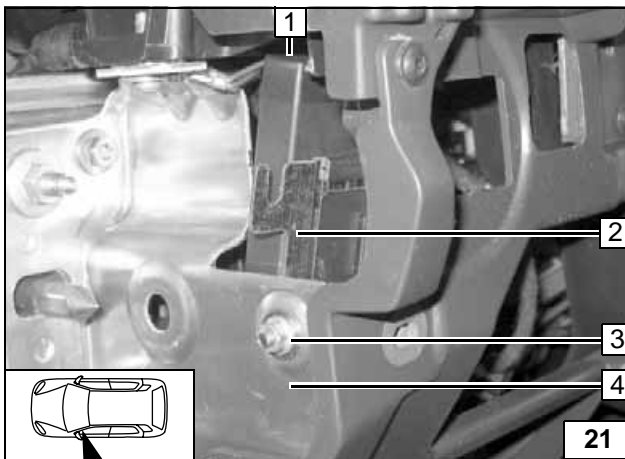


Summer/winter switch option

- 1 Summer/winter switch



Summer/winter switch



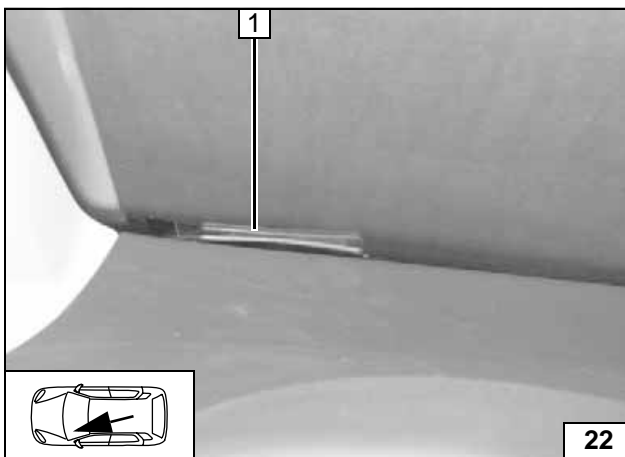
Remote option (Telestart)

Angle down lower tab of bracket by 90° and drill out hole to 6.5 mm dia. as shown.

- 2 Bracket
- 1 Receiver
- 3 M6 bolt, large diameter washer (between bracket instrument carrier), large diameter washer (from outside), flanged nut
- 4 Instrument carrier, existing hole



Option Telestart

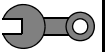


- 1 Antenna on windscreen at lower left

Gluing on antenna and connecting wires

Produce all connections in accordance with general installation instructions and fasten wires with cable ties.





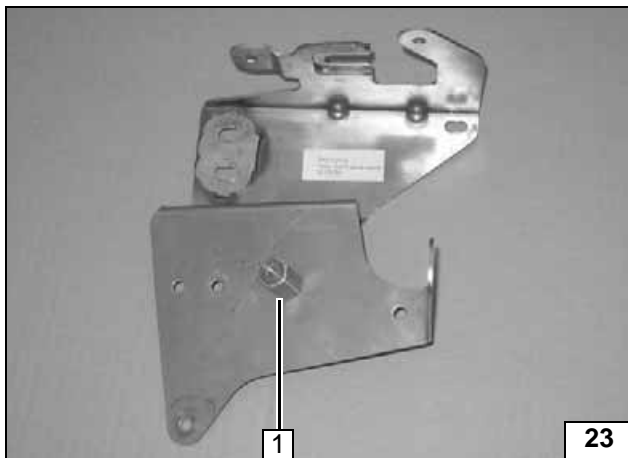
Premounting heater

Ejot stud, tightening torque 10 Nm.

- 1 Adapter wiring harness connected
- 2 Long Ejot stud
- 3 Short Ejot stud
- 4 Replace circulating pump cover with cover with straight inlet

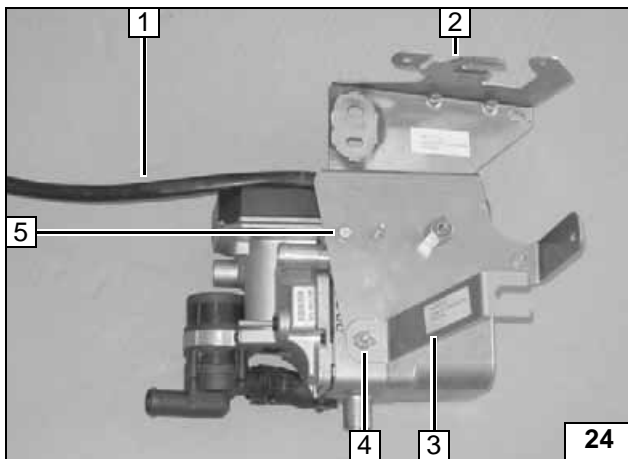


Premounting heater



- 1 M6x30 spacer nut, M6x16 bolt, spring lock-washer

Premounting bracket

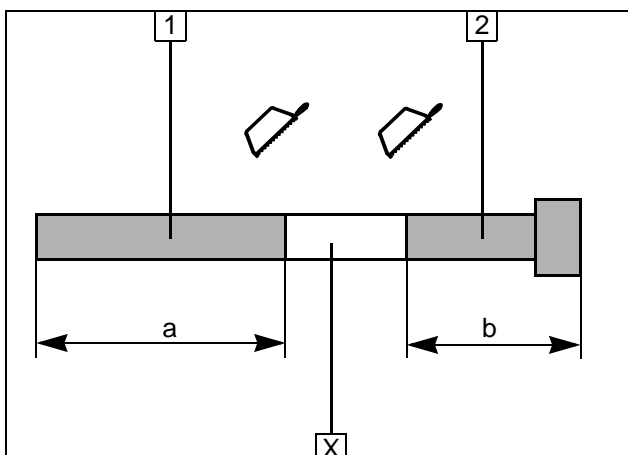


Ejot screw bolt, tightening torque 10 Nm. Insert a washer between heater and bracket at position (5). Only loosely mount flanged nut (4).

- 1 Adapter wiring harness
- 2 Bracket
- 5 Washer, Ejot screw
- 3 Strut
- 4 Flanged nut



Premounting heater



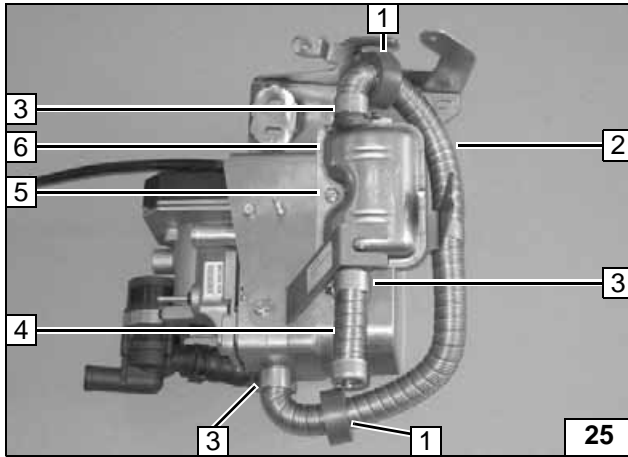
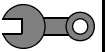
Premounting exhaust pipe

- 1 Exhaust pipe
a = 520 mm
- 2 Exhaust end section
b = 90 mm

Discard section X



Preparing exhaust pipe

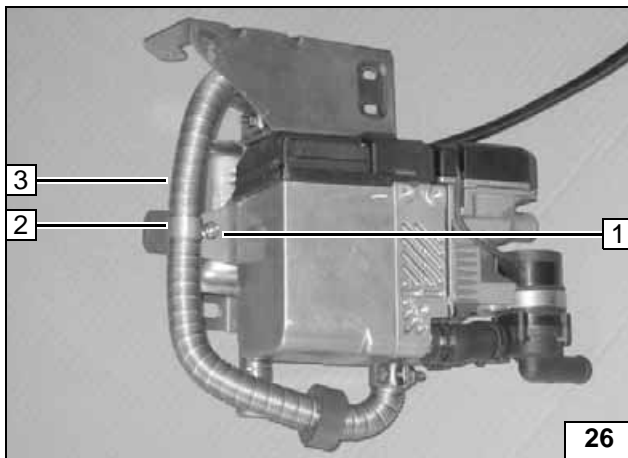


Mould exhaust pipe and slide on red (rt) rubber profile 1.

- 6 Silencer
- 5 M6x16 bolt, spring lockwasher on pre-mounted spacer nut
- 2 Exhaust pipe
- 1 Red (rt) rubber profile, without groove [2x]
- 3 Hose clamp [3x]
- 4 Exhaust end section

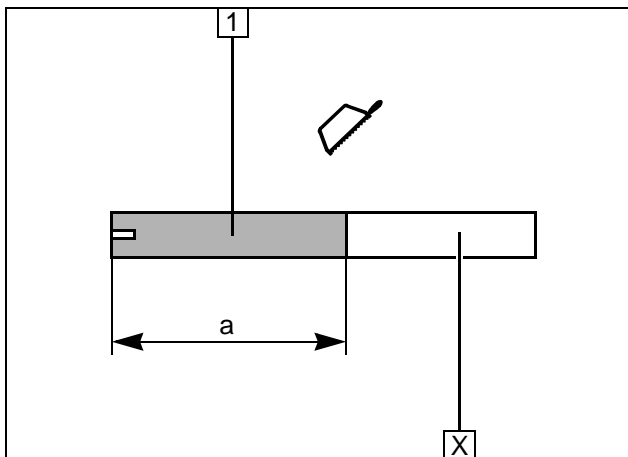


Premounting exhaust system



- 3 Exhaust pipe
- 2 Pipe clamp
- 1 M6x20 bolt, flanged nut

Premounting exhaust system

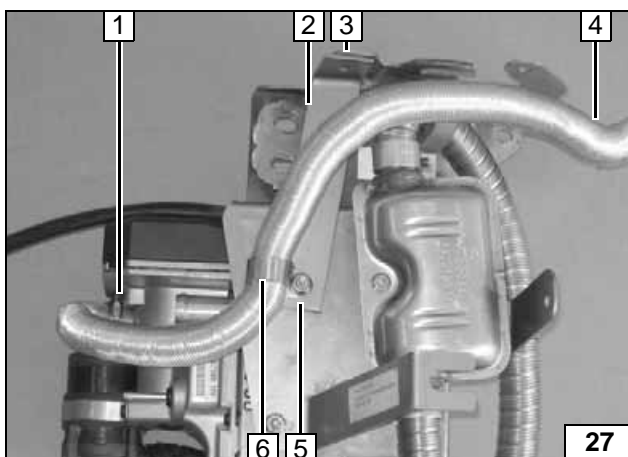


Premounting combustion air pipe

- 1 Combustion air pipe
a = 650 mm

Discard section X

Cutting combustion air pipe to length

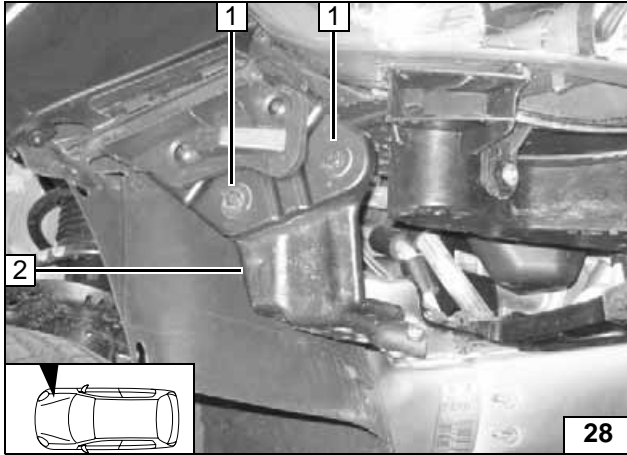
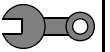


Mount slotted side on heater. Shape combustion air pipe as shown in figure. Align strut 2 so that hole patterns match at position 3.

- 1 Hose clamp
- 4 Combustion air pipe
- 2 Strut
- 6 Pipe clamp
- 5 Flanged nut



Premounting combustion air pipe and strut



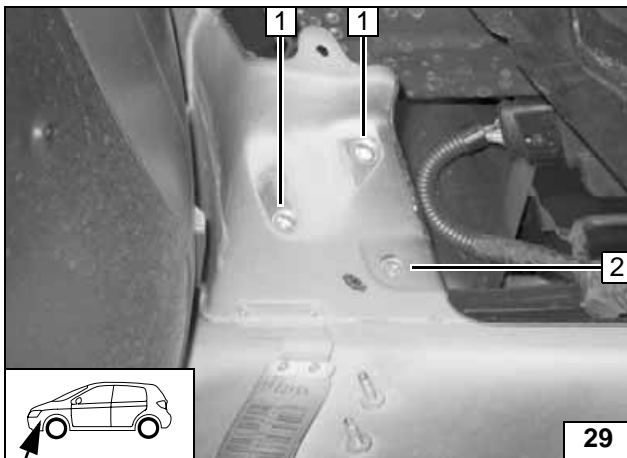
Preparing installation location



Remove washer reservoir; bolt and nuts will be reused.

Remove cross member **2**; bolts **1** will be reused.

Preparing installation location



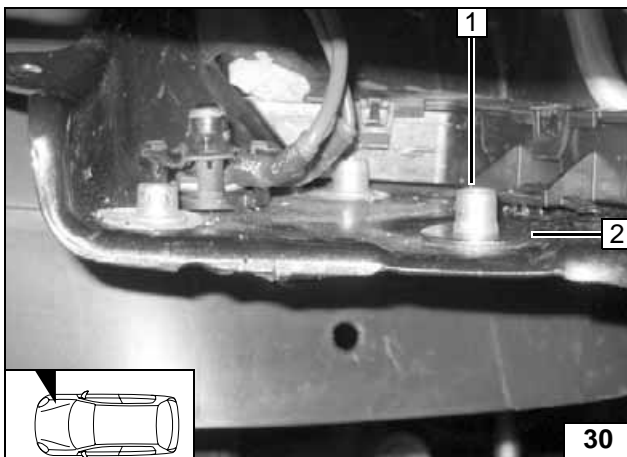
Insert rivet nut **2** only loosely, but do not rivet in.



1 Hole drilled out to 9 mm dia., M6 rivet nut mounted [2x]

2 M6 rivet nut centered in oblong hole

Installing rivet nuts



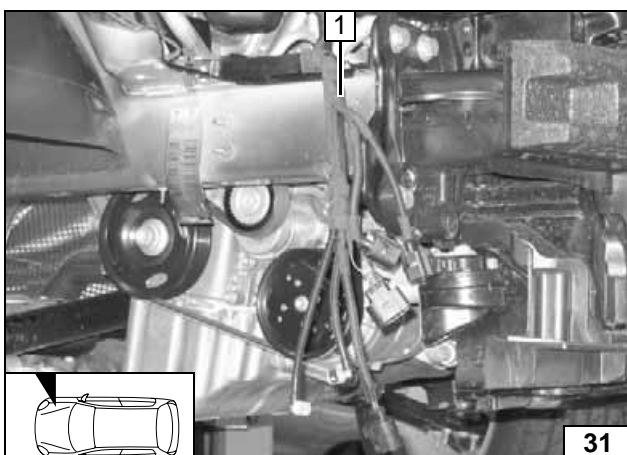
Drill out an included large diameter washer from inside 7 mm dia. to 9 mm.



2 Large diameter washer, drilled out

1 Rivet nut, riveted

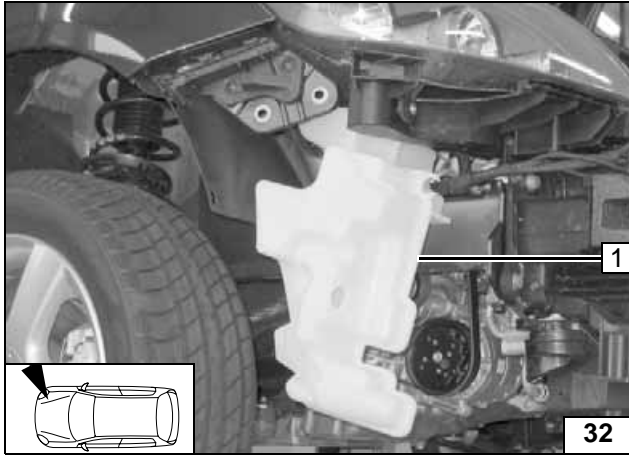
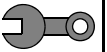
Installing rivet nut



Disconnect wiring harnesses **1** for washer reservoir, horn and front fog light and wrap individually with insulating tape.



Installing wiring harnesses



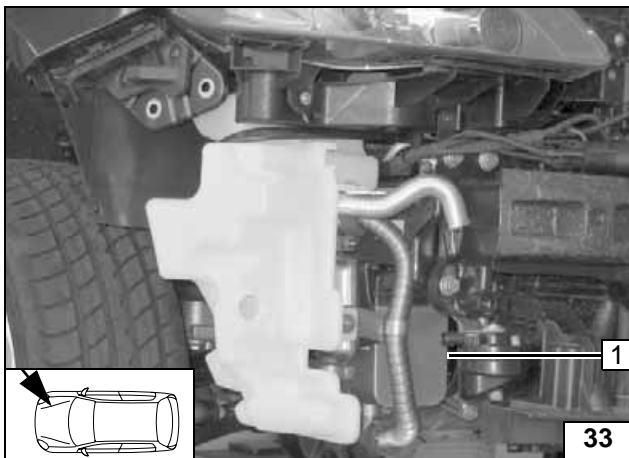
Installing heater

The validity of the part number for the respective vehicle identification number must be checked in the spare parts catalog.
Position washer reservoir 5M0 955 453 B (for vehicle with parking heater) as shown.

- 1 Washer reservoir

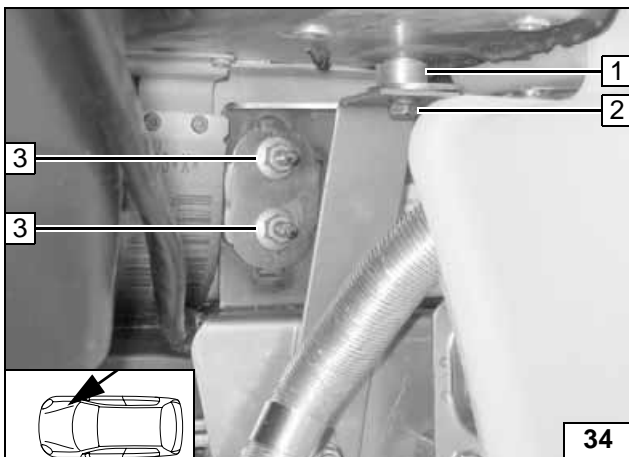


Installing washer reservoir



- 1 Premounted heater

Installing heater

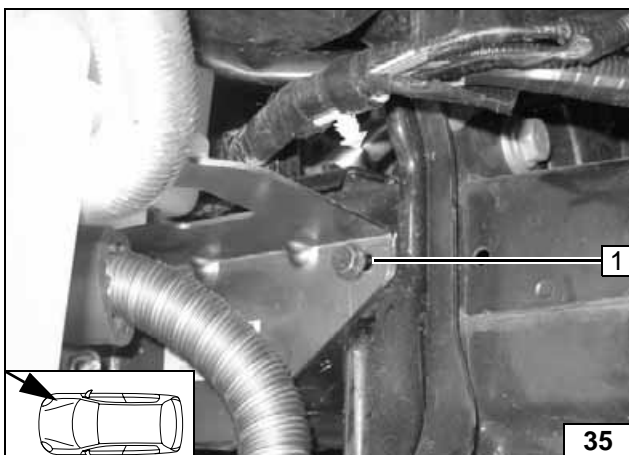


Mount bolt 2 and nuts 3 loosely.

- 3 Original vehicle nut [2x]
- 1 5 mm shim
- 2 M6x30 bolt, spring lockwasher on pre-mounted rivet nut



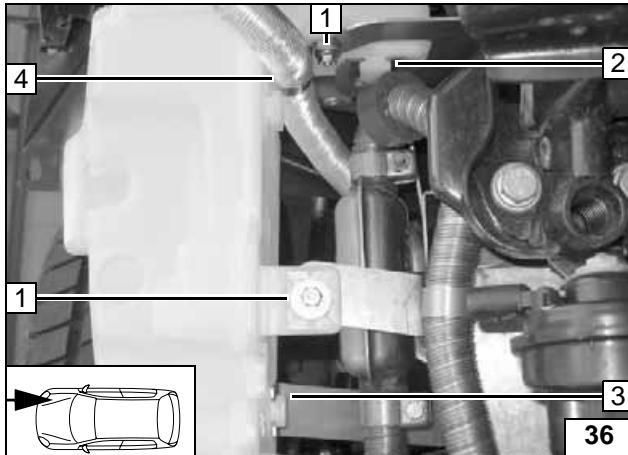
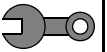
Installing heater



Mount original vehicle bolt 1 loosely.



Installing heater



Only loosely mount bolts at position 1.

- 2 Washer reservoir inserted in bracket
- 3 Washer reservoir inserted in strut
- 4 Combustion air pipe, p-clamp
- 1 M6x20 bolt, large diameter washer, flanged nut [2x each]

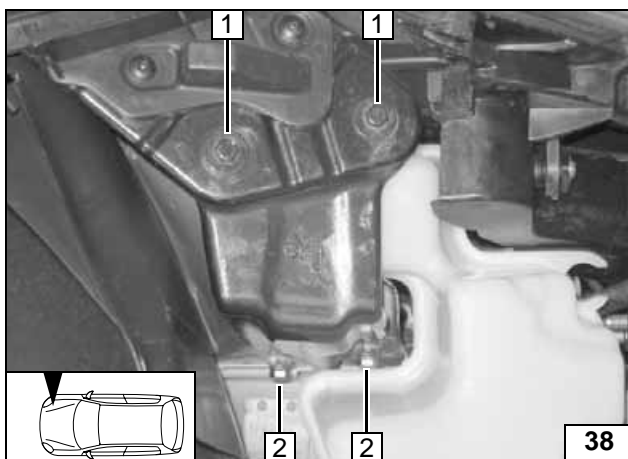


Installing washer reservoir



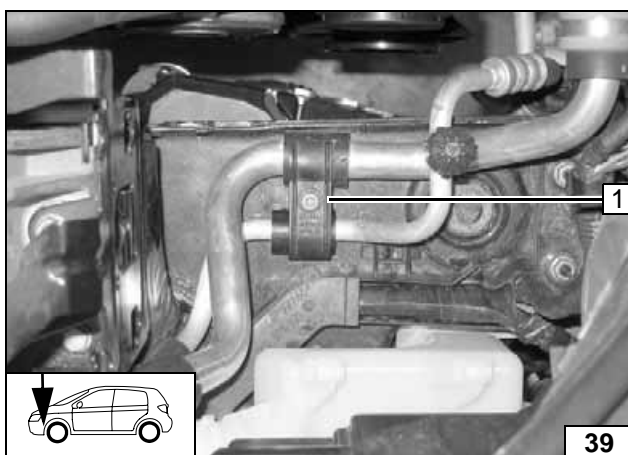
- 1 Holes drilled out to 7 mm dia. [2x]

Preparing cross member



- 1 Original vehicle bolts [2x]
- 2 Mount M6x20 bolt, spring lockwasher on pre-mounted rivet nut [2x]

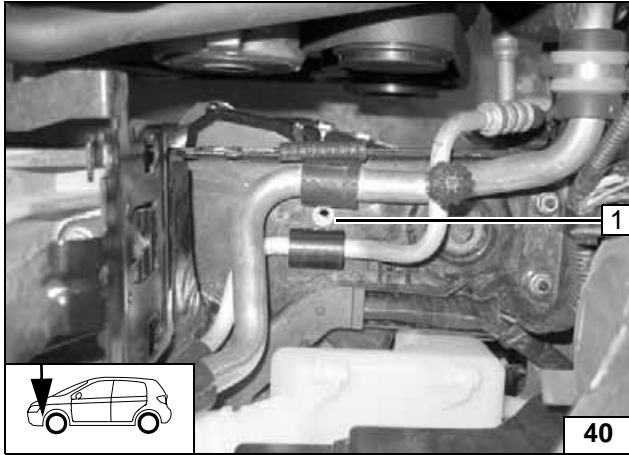
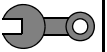
Installing cross member



Bracket will be reused.

- 1 Bracket for A/C lines

Removing bracket for A/C line

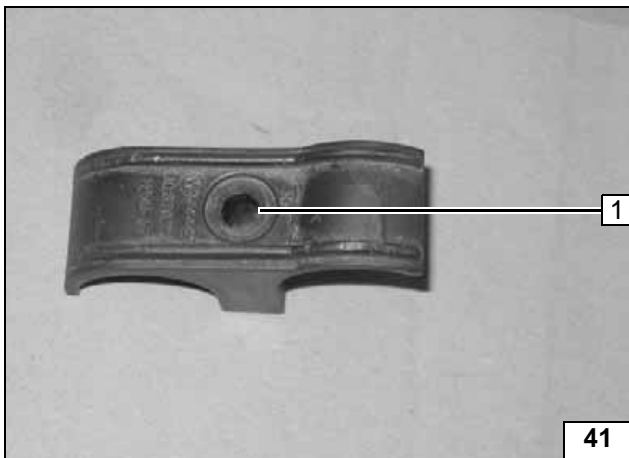


Be careful not to damage A/C lines when drilling.

- 1 Hole drilled out to 9 mm dia., M6 rivet nut

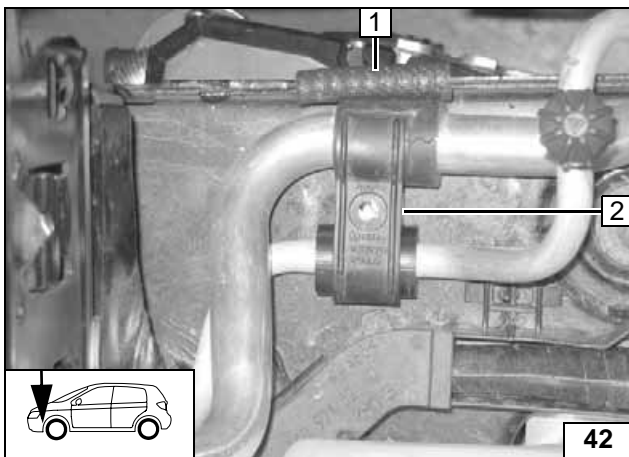


Installing rivet nut



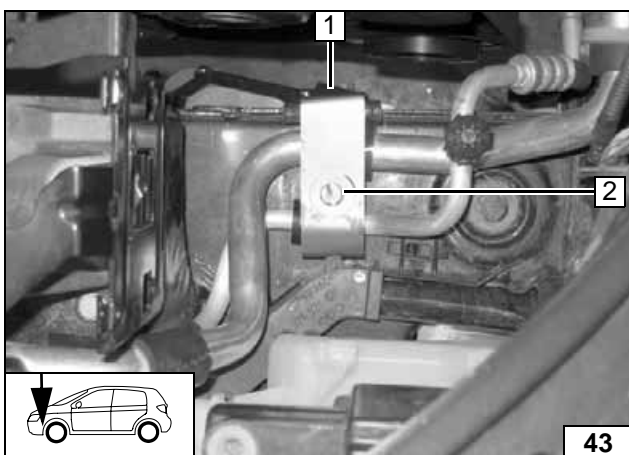
- 1 Hole drilled out to 6.5 mm dia.

Drilling out bracket



- 1 50 mm edge protection
- 2 Bracket laid on loosely

Installing bracket

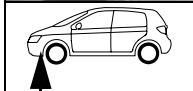
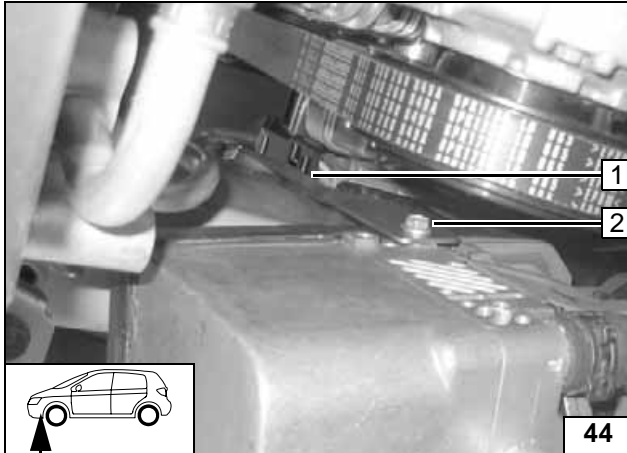
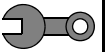


Mount bolt 2 loosely.

- 1 Strut
- 2 M6x50 bolt, spring lockwasher, large diameter washer



Installing strut



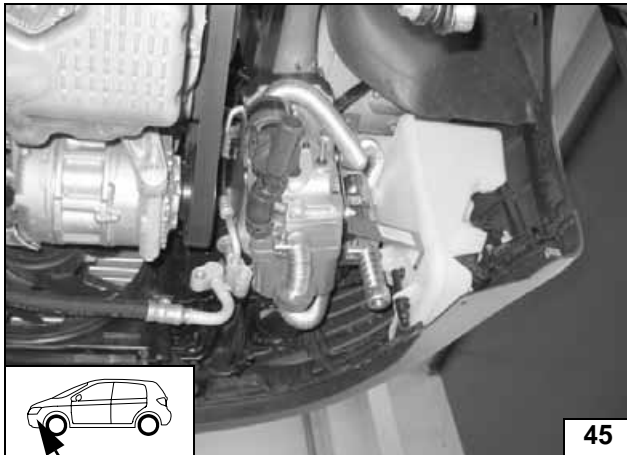
44

Mount E-jot screw **2** loosely.

- 1 Strut
- 2 E-jot screw



Installing strut



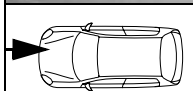
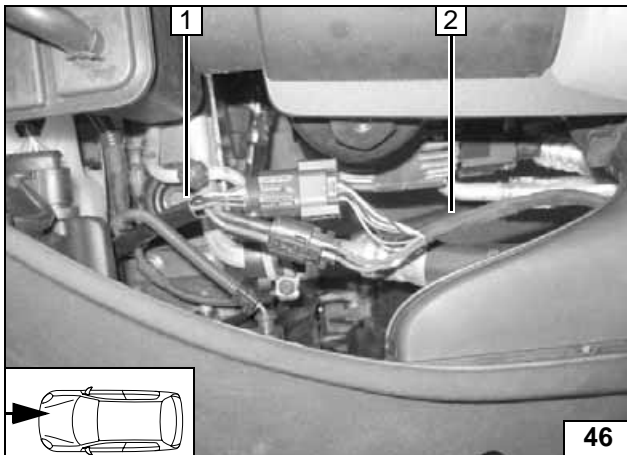
45

Test mounting of bumper. Check position of all components and adjust if necessary. Check that they have freedom of movement. Remove bumper.

Tighten all screw connections between bracket, struts, washer reservoir, heater and body.



Aligning and fastening component



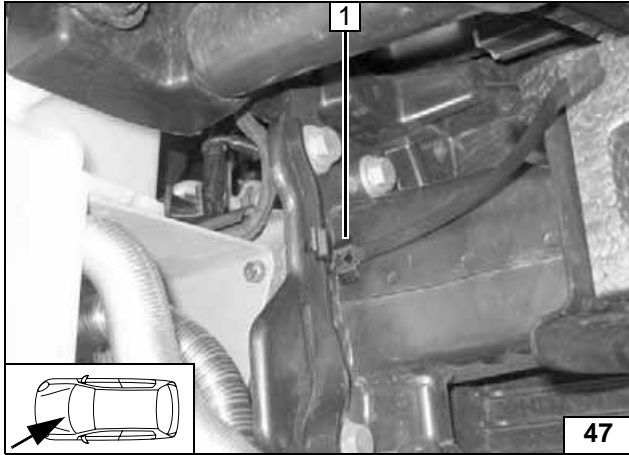
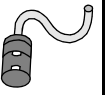
46

- 1 Adapter wiring harness to heater
- 2 Wiring harness of heater

Coil excess length of wiring harnesses into loops. Fasten wiring harnesses on original vehicle lines and Bowden cable for hood lock with cable ties.

Connecting wiring harnesses

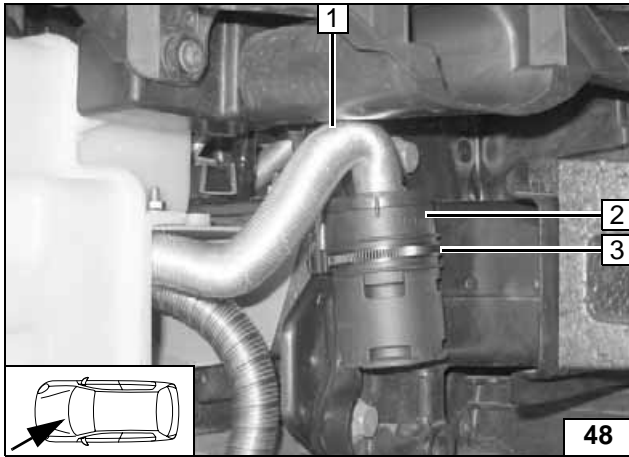




Combustion air

1 Clip-type cable tie in original vehicle hole

Installing clip-type cable tie



First close clip-type cable tie 3, then push in intake silencer.2

1 Combustion-air intake pipe



Installing combustion air pipe



Fuel

CAUTION!

Open the vehicle's fuel tank cap, ventilate the tank and then re-close the tank lock.

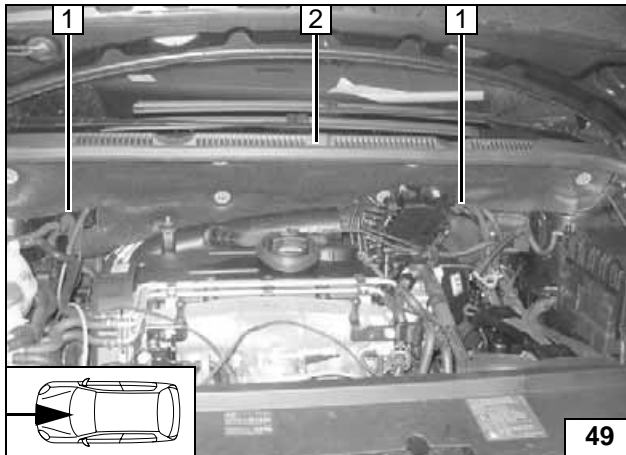
Catch any fuel running off in an appropriate container.

Install fuel line and metering pump wiring harness so that they are protected against stone impact. Unless specified otherwise, always fasten using cable ties.

Mount the fuel line and wiring harness with rub protection on sharp edges.

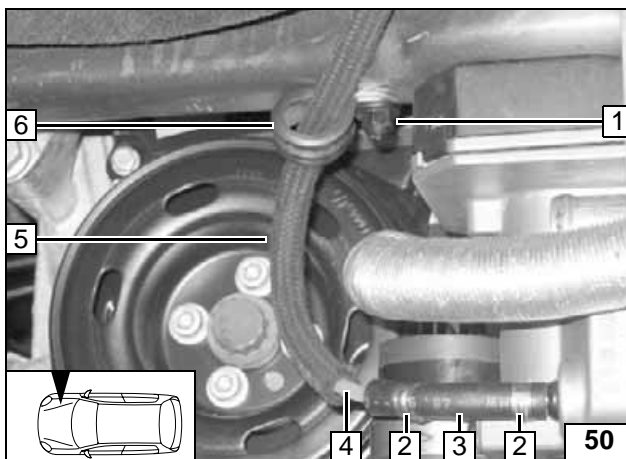
WARNING!

The fuel line and wiring harness are routed to the metering pump as shown in the wiring harness routing diagram.

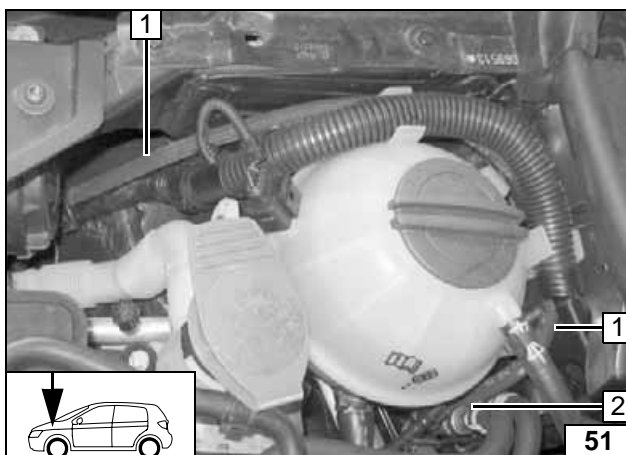


Route wiring harness of metering pump in coolant reservoir to right and secure on original vehicle lines with cable ties. Pay particular attention to freedom of movement of wiper linkage.

- 2 Remove coolant reservoir cap
- 1 Metering pump wiring harness



- 4 Mecanyl fuel line
- 5 Cloth-reinforced protective hose cut to a length of 1100 mm
- 3 Hose section
- 2 10mm dia. hose clamp [2x]
- 6 15 mm dia. rubber-coated p-clamp
- 1 Plastic nut on original vehicle stud bolt



Insert Mecanyl fuel line 1 and wiring harness of metering pump in original vehicle line duct 2, 52/1 and route to underbody.

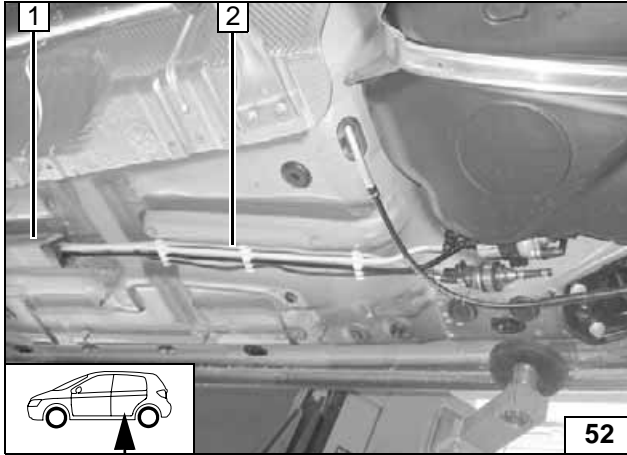
- 1 Mecanyl fuel line in protective hose
- 2 Original vehicle line duct



Installing wiring harness of metering pump

Installing lines

Installing lines

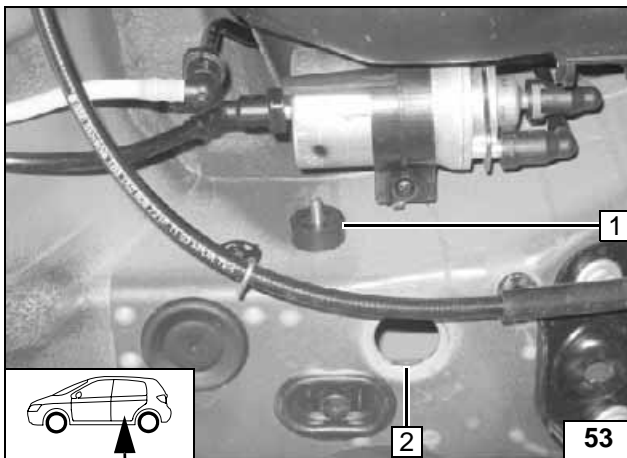


Route mecanyl line and wiring harness of metering pump along original vehicle fuel lines 2 to fuel tank.

1 Line duct

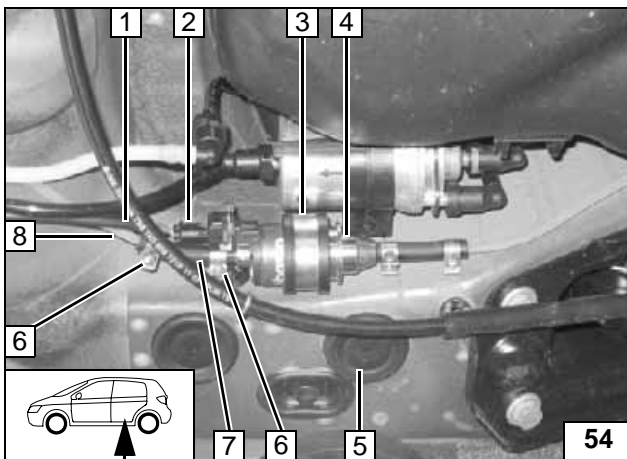


Routing mecanyl line and wiring harness of metering pump



2 Sealing plug removed
1 Silent block, large diameter washer, M6 flanged nut

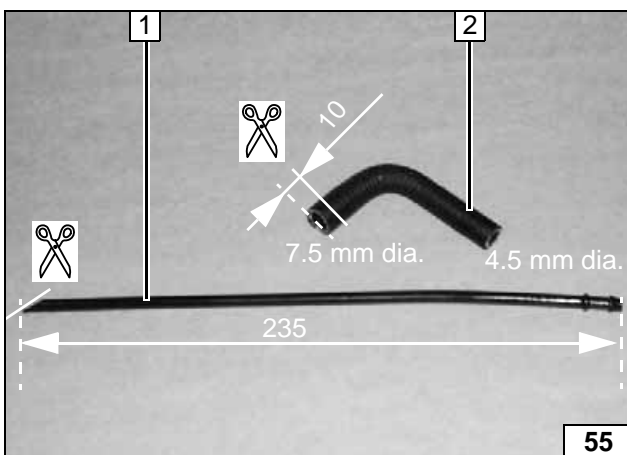
Installing silent block



4 Metering pump
3 Rubber-coated p-clamp secured on silent block with flanged nut
1 Metering pump wiring harness
2 Connector housing, single-wire seals, plug-in contacts
8 Mecanyl line
7 Hose section
6 10mm dia. hose clamp [2x]
5 Plug remounted



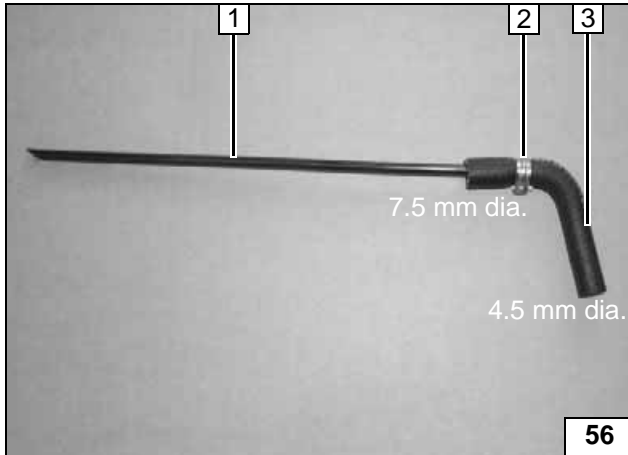
Installing metering pump and connecting pressure side



Removing fuel

1 Standpipe
2 Moulded hose

Cutting standpipe and moulded hose to length

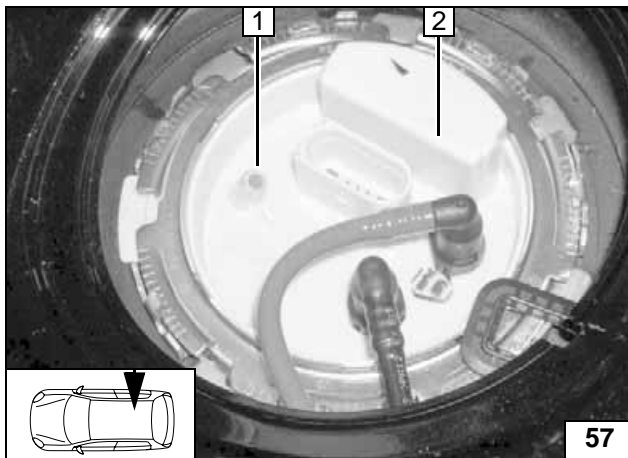


Caillau clamp (2) centered between beads at end of standpipe.

- 1 Standpipe
- 2 10mm dia. Caillau clamp
- 3 Moulded hose



Premounting standpipe and moulded hose

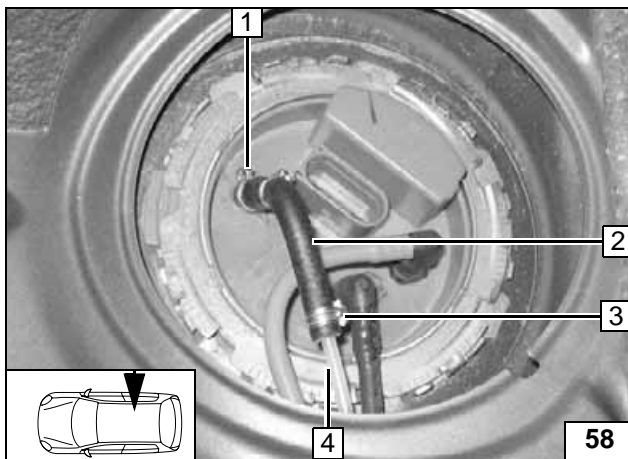


Cut 3 mm off blind plug.

- 1 Tip cut off blind plug
- 2 Fuel-tank sending unit



Cutting off blind plug

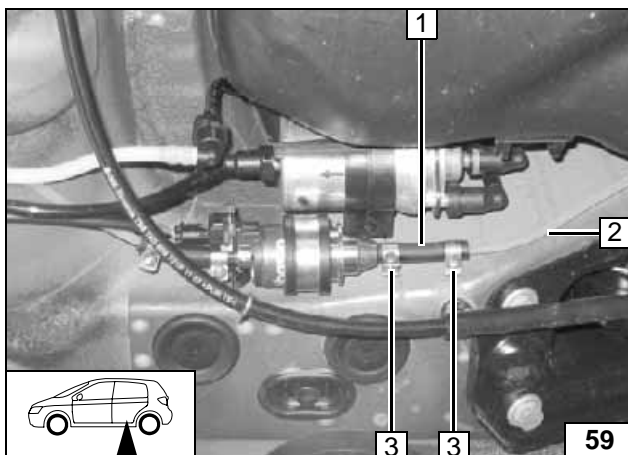


Should the standpipe be slightly curved on delivery, it must be re-aligned so that the end points toward the rear right. Otherwise there is a danger of the fuel gauge being impaired.

- 1 13.5mm dia. Caillau clamp
- 2 Premounted moulded hose with standpipe
- 3 10mm dia. Caillau clamp
- 4 Remaining piece of mecyanl line



Connection to fuel-tank sending unit



- 2 Mecanyl line from fuel-tank sending unit
- 1 Hose section
- 3 10mm dia. hose clamp [2x]



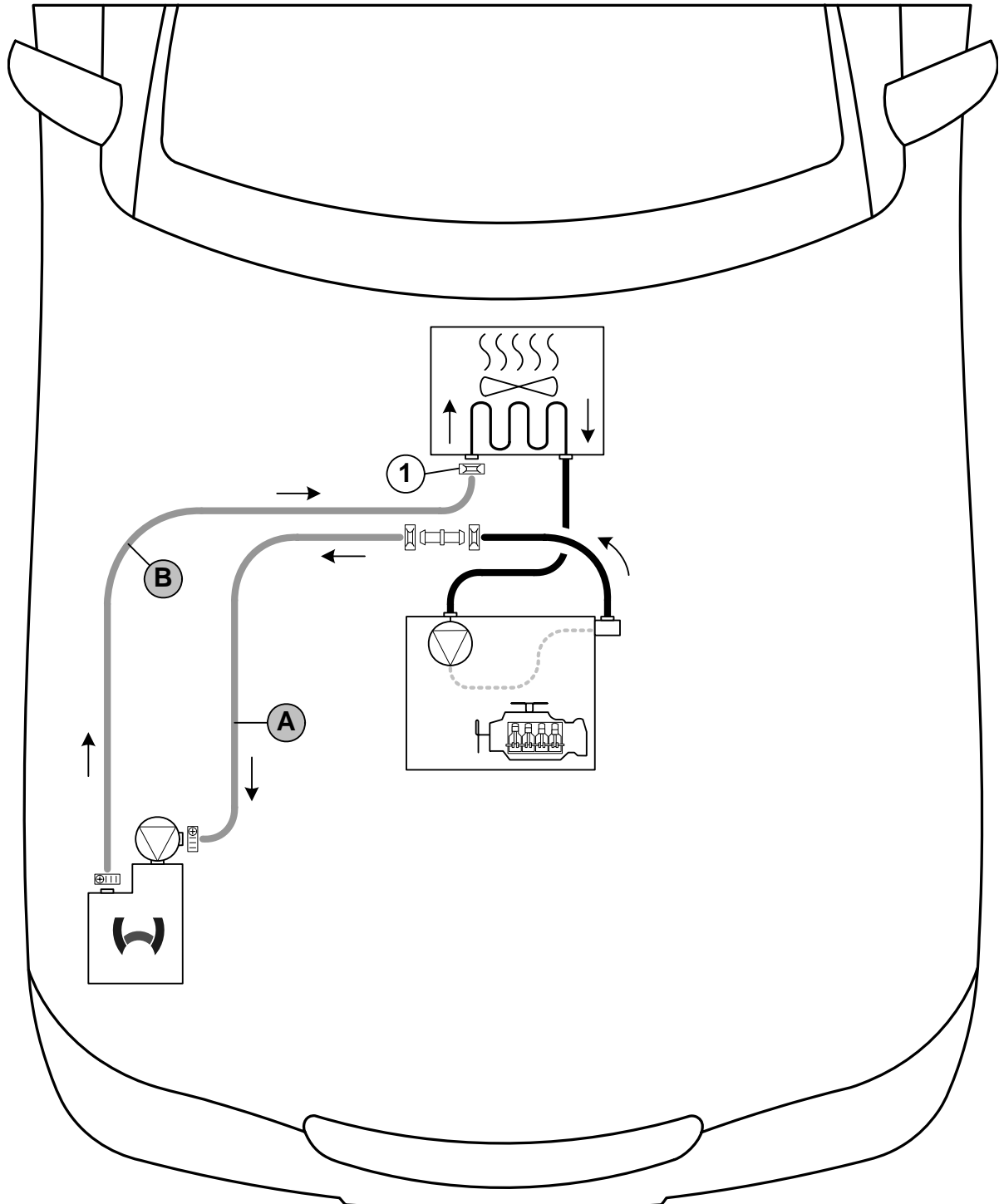
Connecting intake side of metering pump







Coolant circuit

WARNING!

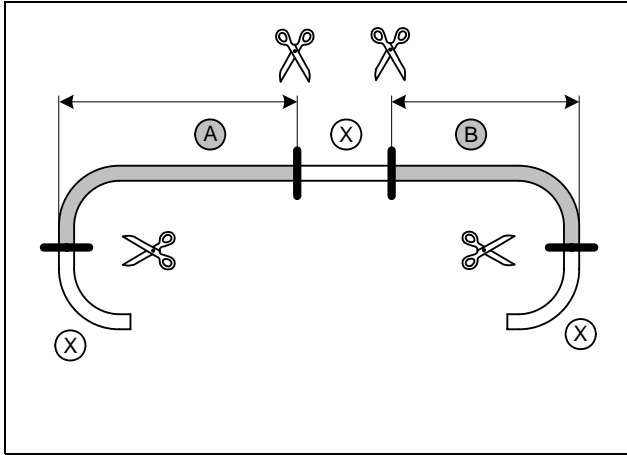
Any coolant running off should be collected in an appropriate container. Install hoses so that they are kink-free. Unless specified otherwise, always fasten using cable ties. Position clamps so that other hoses cannot be damaged. The heater must be filled with coolant when installing the hoses. The connection should be "inline" based on the following diagram:



Hose installation diagram

All spring clips  = 27 mm dia.. 1 = Original vehicle spring clip  .
 All hose clamps  = 20-27 mm dia.. Connecting pipe  = 20x20 dia.



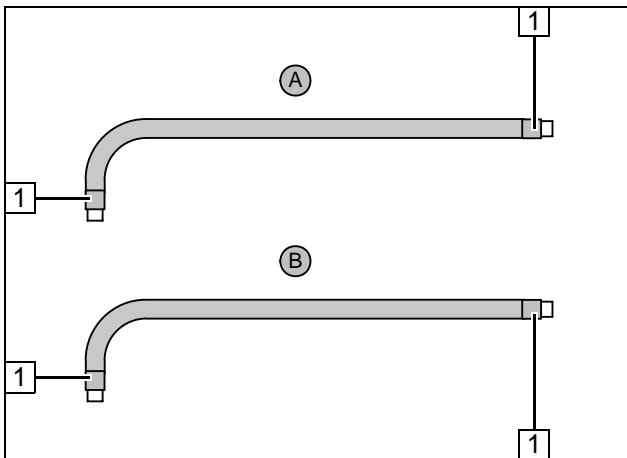


Discard sections **X**.

A = 970mm
B = 1020mm



Cutting hoses to length

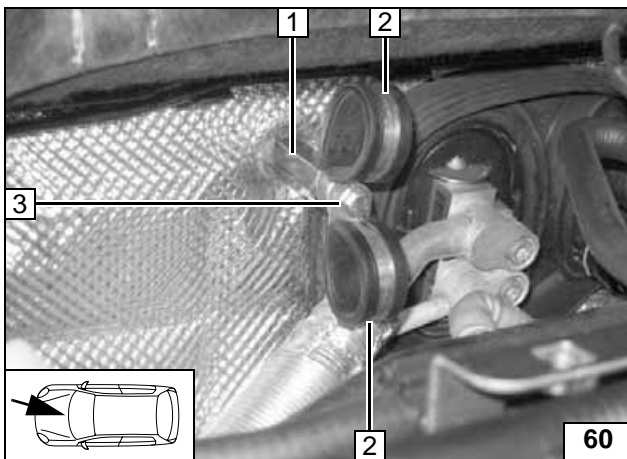


Push braided protection hoses onto hose **A** and **B**. Cut heat shrink plastic tubing to size.

1 50 mm long heat shrink plastic tubing [4x]



Preparing hoses



For a clearer layout, the entire documentation of the coolant connection was carried out on the 2.0FSI!

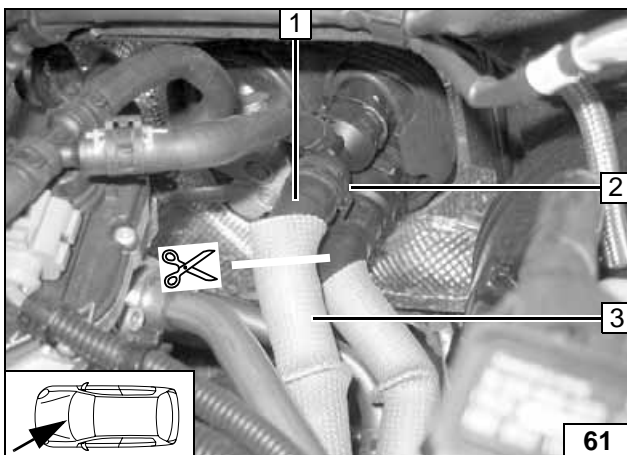
Technical design of coolant connection is identical on 1.6MPI.

Mount bolt **3** loosely.

- 1** Large diameter washer, 40 mm spacer nut on original vehicle stud bolt
- 2** 29 mm dia. rubber-coated p-clamp [2x]
- 3** M6x20 bolt, spring lockwasher



Premounting fastener

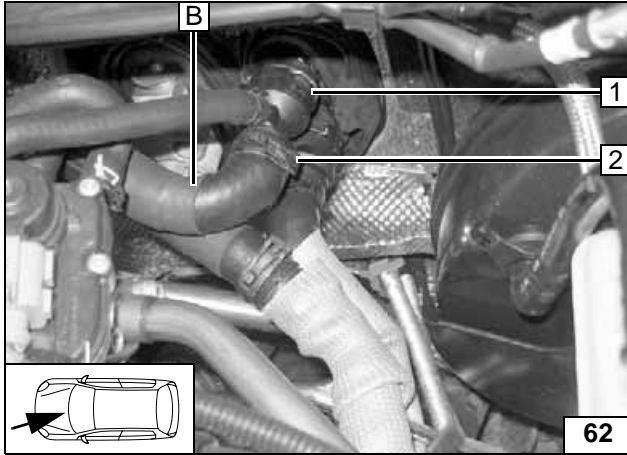


Pull off hose section **1** and discard. Spring clip **2** will be reused.

- 1** Original vehicle hose section to heat exchanger inlet
- 3** Original vehicle hose section from engine outlet

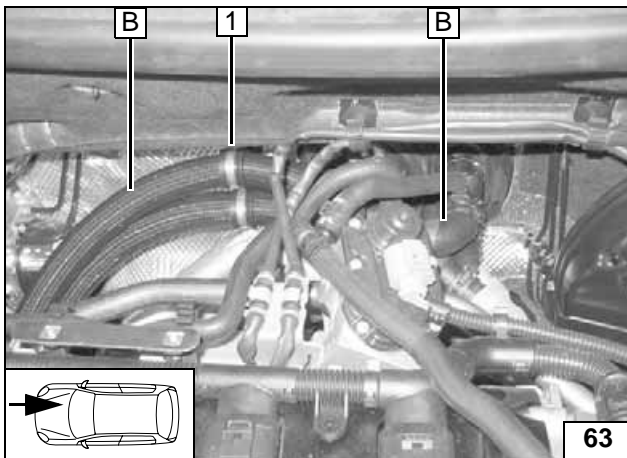


Cutting point



- 1 Heat exchanger inlet
- 2 Original vehicle spring clip

Conne-
ction to heat
exchanger
inlet

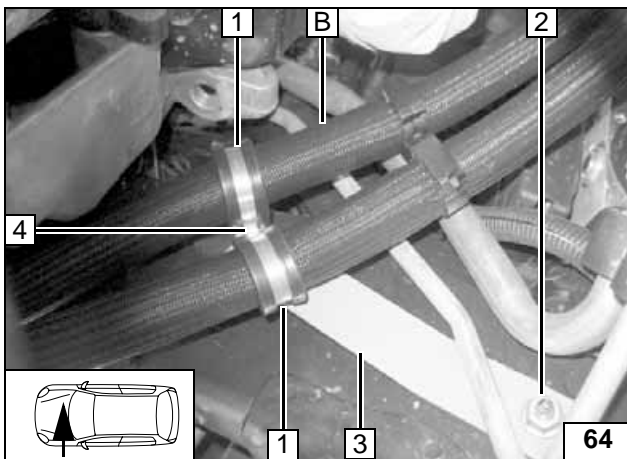


Route hose **B** through upper p-clamp.

- 1 29 mm dia. rubber-coated p-clamp (pre-mounted)



Hose rout-
ing

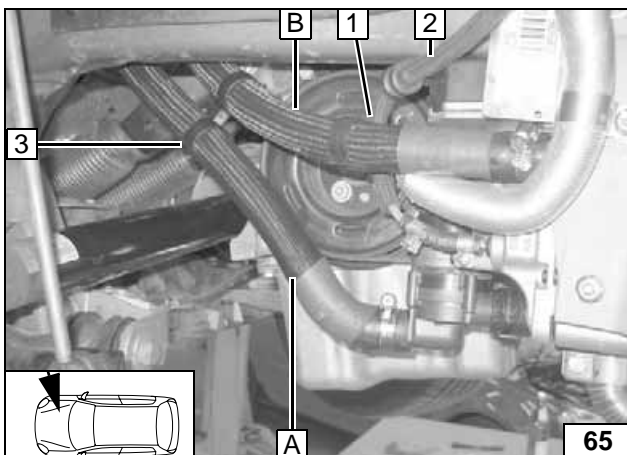


Ensure proper spacing between strut **3** and A/C line.
Mount bolt **4** loosely.
Route hose **B** through upper p-clamp.

- 3 Strut
- 2 Original vehicle M8 nut
- 1 29 mm dia. rubber-coated p-clamp [2x]
- 1 M6x20 bolt, flanged nut



Hose rout-
ing

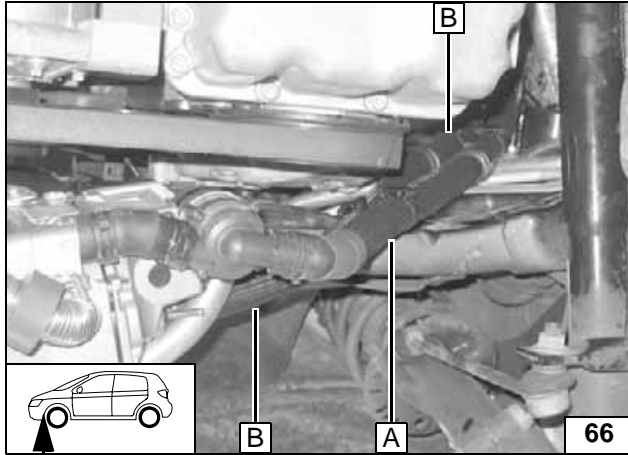


Connect fuel line **2** and hose **B** with cable tie at position **1**

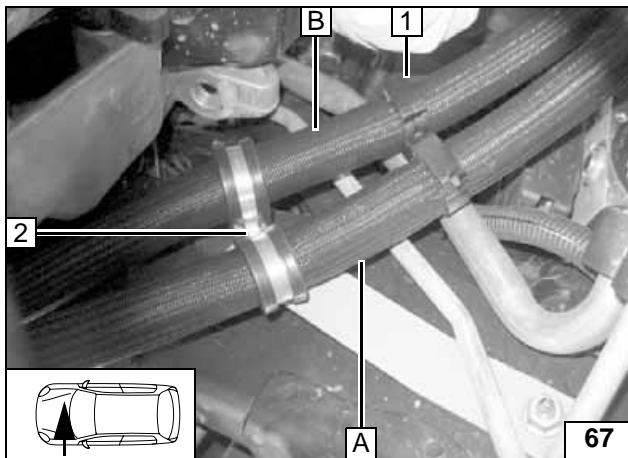
- 1 Cable tie
- 3 27x27 double clip, lockable



Connect-
ing heater

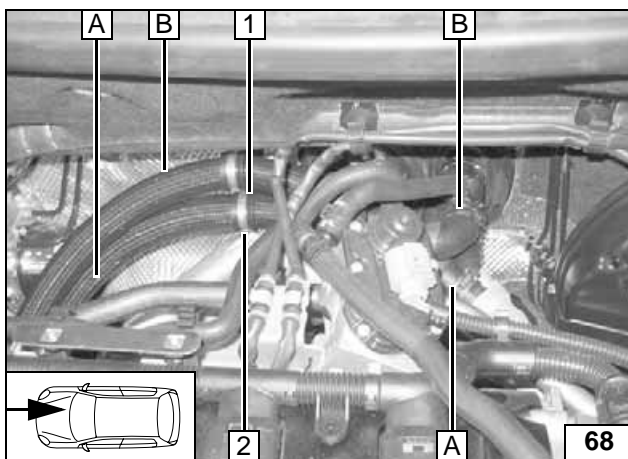


Hose routing



Route hose **A** through lower p-clamp.

- 1 27x27 double clip, lockable
- 2 Tighten M6x20 bolt, flanged nut

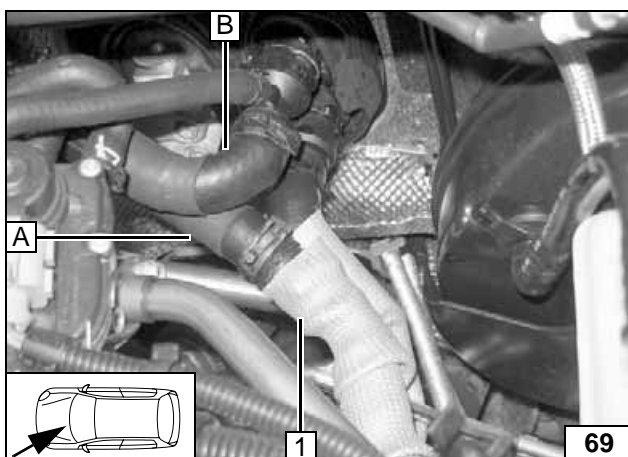


Route hose **A** through lower p-clamp.

- 2 29 mm dia. rubber-coated p-clamp (pre-mounted)
- 1 Tighten M6x20 bolt



Hose routing

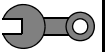


Before connecting, fill hoses with coolant. Check routing of hoses **A, B** along entire length and correct if necessary.

- 1 Original vehicle hose of engine outlet



Connection to engine outlet



Final Work

WARNING!

Mount removed parts in reverse order. Check all hoses, clamps and all electrical connections for firm seating. Insulate and tie back all loose lines.

Only use manufacturer-approved coolant. Spray the heater components with anti-corrosion wax (Tectyl 100K, Order No. 111329).

- Connect the battery
- Fill and bleed the coolant circuit according to the vehicle manufacturer's specifications.
- Set digital timer, teach telestart transmitter
- Make settings on A/C control panel according to the "Operating Instructions for End Customer".
- Place the "Switch off parking heater before refuelling" sticker near the filler neck.
- See installation instructions for initial start-up and function test

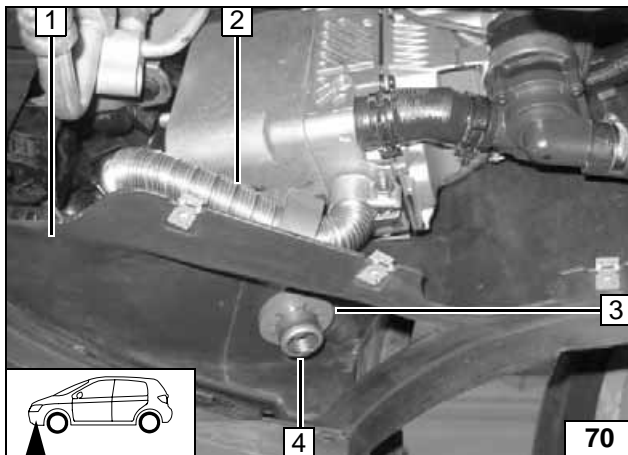


Adjust the sensitivity of the passenger compartment monitoring

WARNING!

The pass through can only be done at an authorised workshop. Observe the applicable repair manual of the respective vehicle.

- Connect the VAG tester
- Open Item 46 (Central Module of Comfort System)
- Go to Item 10 (Adjustment)
- Follow the request for the code entry and enter the code 15
- Reduce the sensitivity of the passenger compartment monitoring to 50 %
- Save this setting
- The adjustment of the sensitivity of the passenger compartment monitoring is completed.



Drill 42mm hole at position 4. Align exhaust end section 4 flush on red (rt) rubber isolator 3 as shown.

- 1 Wheel well trim
- 2 Exhaust pipe



Exhaust-gas pass through

Ensure sufficient distance of exhaust system from other components. Correct position if necessary.



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 http://www.webasto.com

Operating Instructions for End Customer

Please remove page and add to the vehicle operating instructions.



Note:

We recommend matching the heating time to the driving time.

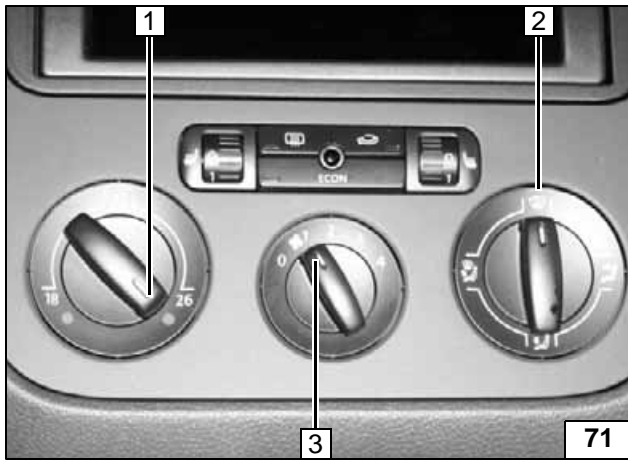
Heating time = driving time

Example:

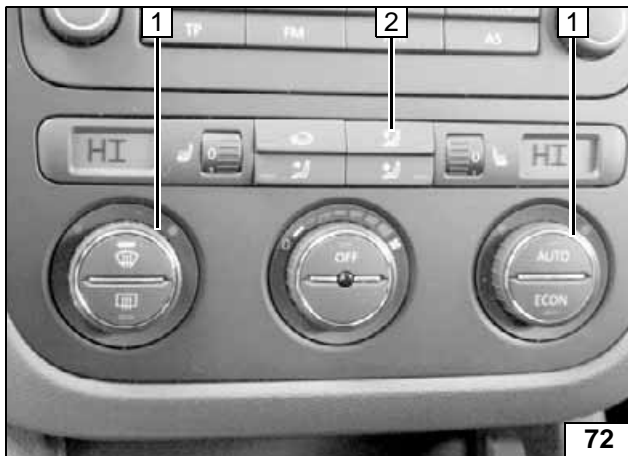
For a driving time of approx. 20 min. (in one direction), we recommend not exceeding a switch-on time of 20 min.

If the summer/winter switch option has been installed, this must be switched in accordance with the time of year. The heater will then heat in the position Winter  and in the position Summer  it will only switch on the vehicle fan to ventilate the vehicle interior.

Before parking the vehicle, make the following settings:



- 1 Set temperature to "max."
- 2 Air outlet to windscreen
- 3 Set fan to level "1", or possibly "2"



- 1 Set temperature to "HI" [2x]
- 2 Air outlet faces upward



Vehicles
without
Climatronic

Vehicles
with Cli-
matronic