# Water Heater

***Thermo Top E* Parking Heater** e1 00 0003

***Thermo Top C* Parking Heater** e1 00 0002

***Thermo Top P* Parking Heater** e1 00 0104

# Installation documentation

# VW Golf VI, Golf Plus, Golf Variant

1.2 and 1.4 TSI
from Model Year 2008
Left-hand drive vehicle

**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.

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

Ident. No.: 1314421C_EN Fee Euro 10.00

## Table of Contents



## Validity

| Manufacturer | Model | Type | EG-BE No./ABE |
|---|---|---|---|
| VW | Golf VI | 1K | e1 * 2001/116 * 0242 * ... |
| VW | Golf Plus | 1KP | e1 * 2001/116 * 0304 * ... |
| VW | Golf Variant | 1KM | e1 * 2001 / 116 * 0328 * ... |

| Engine type | Engine model | Output in kW | Displacement in cm³ |
|---|---|---|---|
| CBZA | Petrol/TSI | 63 | 1197 |
| CBZB | Petrol/TSI | 77 | 1197 |
| CAXA | Petrol/TSI | 90 | 1390 |
| CAVD | Petrol/TSI | 118 | 1390 |

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 *Thermo Top E / C / P* | See price list |
| 1 | Installation kit for VW Golf VI, Golf Plus, Golf Variant 1.2 and 1.4 TSI | 1314420B |
| 1 | Heater control | See Price list |

**Also required with Climatronic:**

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

**Heater recommended for the respective vehicle class:**

| Vehicle | Heater |
|---|---|
| Compact car | Thermo Top E |
| Mid-size car, station wagon | Thermo Top C |
| Full-size car, van, offroader | Thermo Top P |

The selection of the heater is based on the passenger compartment size of the vehicle and the level of comfort required by the customer.

## Foreword

This installation documentation applies to the vehicles VW Golf VI, Golf Plus, Golf Variant 1.2 and 1.4 TSI - for validity, see page 2 - from model year 2008 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/P/E* 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.

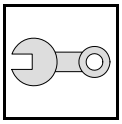
## Special Tools

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

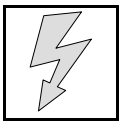
## Explanatory Notes on Document

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**

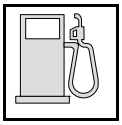


**Electrical system**



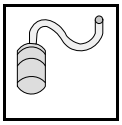
**Coolant circuit**

**Fuel**



**Exhaust gas**

**Combustion air**



**Special features are highlighted using the following symbols:**

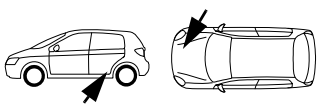
Specific risk of injury or fatal accidents.

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.

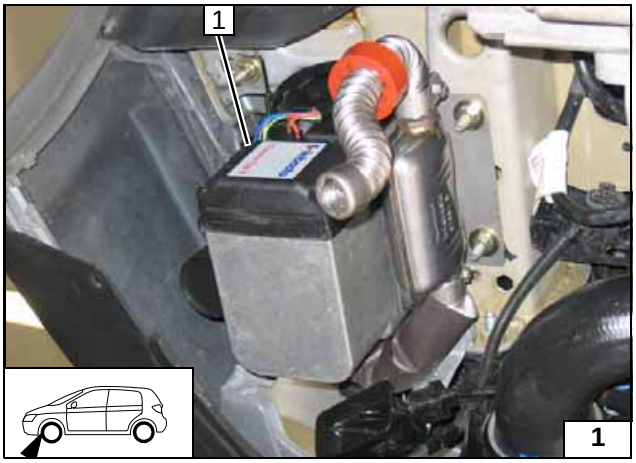
**All dimensions are in mm!**
**Tightening torque of hose clamps = 2.0 + 0.5 Nm!**
**Tightening torque of Ejot screws, Ejot studs = 10 Nm!**

## 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.
- Completely remove the battery with the battery carrier.
- Remove the engine cover.
- Detach the coolant reservoir cap.
- Remove the left front wheel.
- Remove the front section of the left front wheel well trim.
- Remove the left-hand front fog light or, on vehicles without front fog lights, the left-hand cover.
- Remove the underride protection
- Remove the right-hand underbody trim.
- Remove the rear bench 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

Remove page 38 "Operating Instructions for End Customer" and add to the vehicle operating instructions.




## Heater installation location

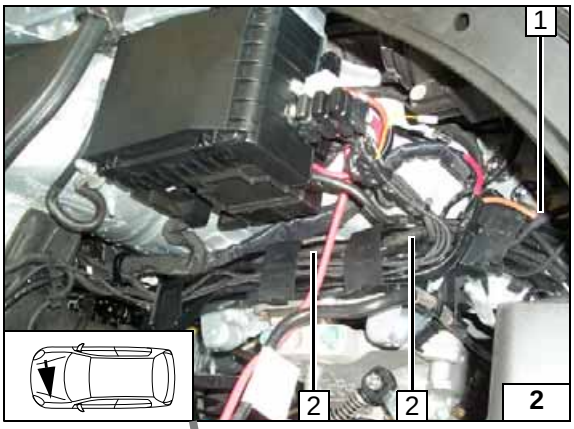
**1** Heater

**Installation location**

## Electrical system

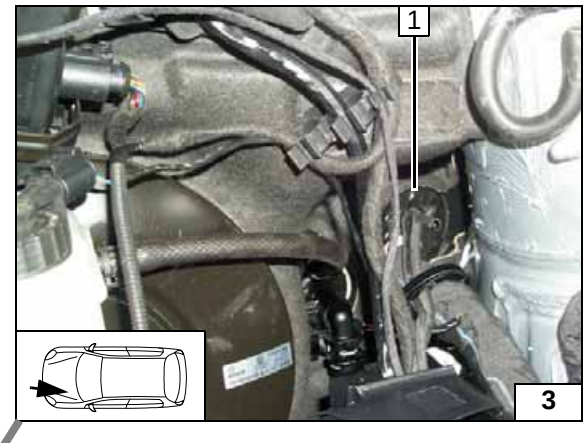
### Wiring harness routing

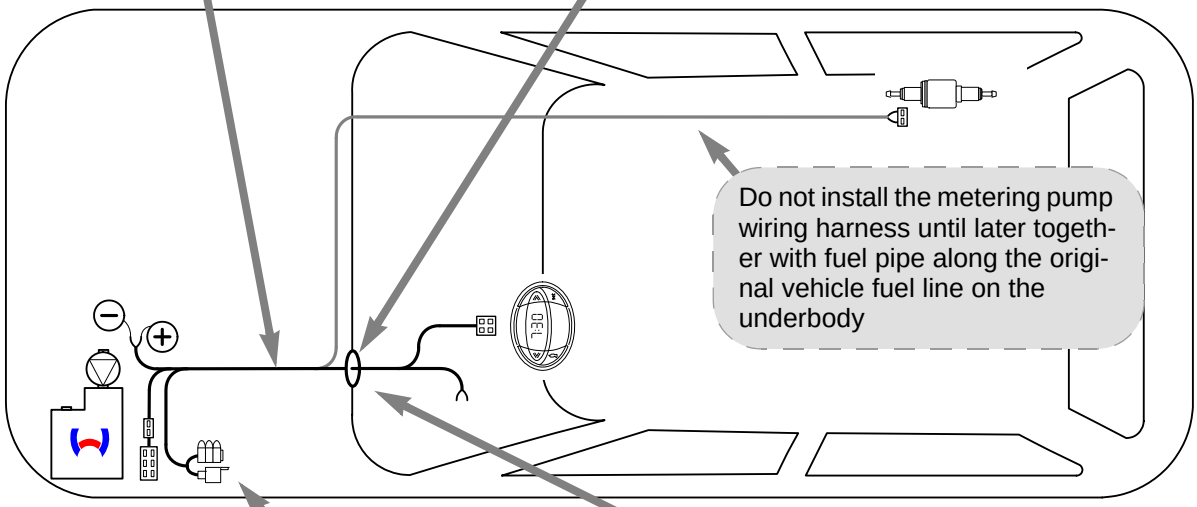
Route excess lengths from wiring harness **1** in cable duct **2** below battery and secure with cable ties.



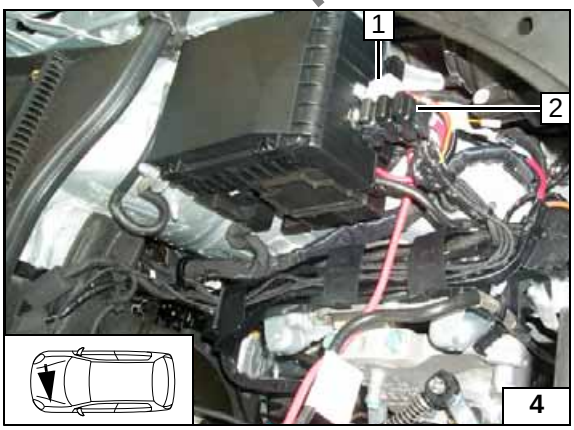

### Wiring harness pass through

**1** Original vehicle wiring harness pass through



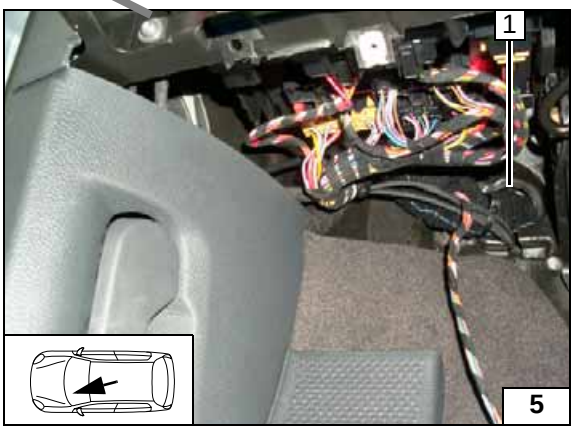




**Wiring harness routing diagram**




### Fuse holder, K3 relay

Description of installation for K3 relay **1** and fuse carrier **2** on Page 7



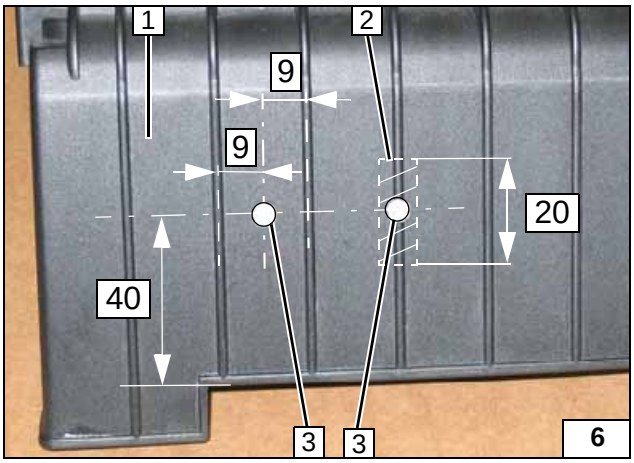

### Wiring harness pass through

**1** Original vehicle wiring harness pass through

## Fuse holder and K3 relay

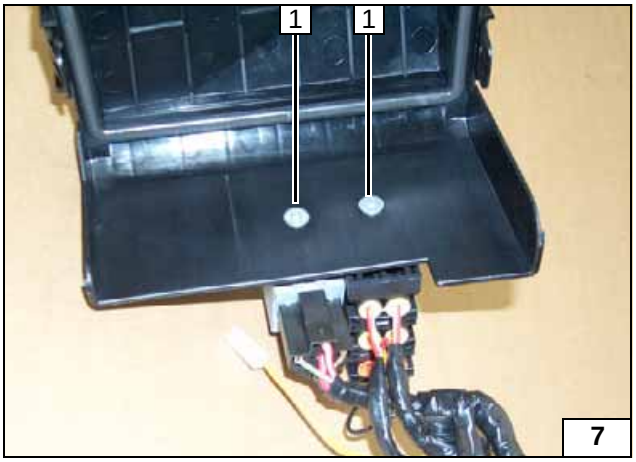
**Holes in cover**

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 mm dia. hole [2x]

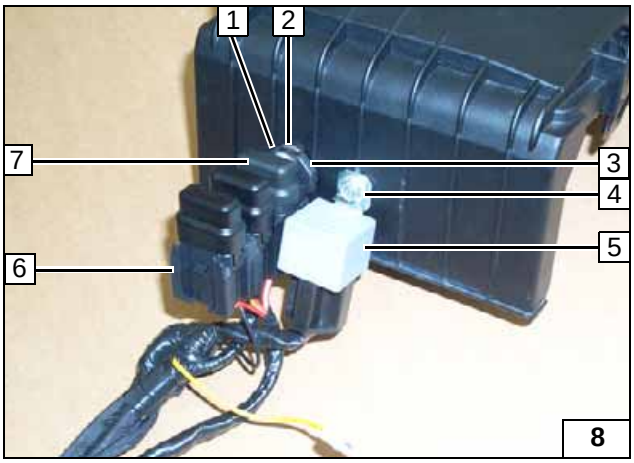
**Installing fuse holder and relay K3**




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

**Installing fuse holder and relay K3**

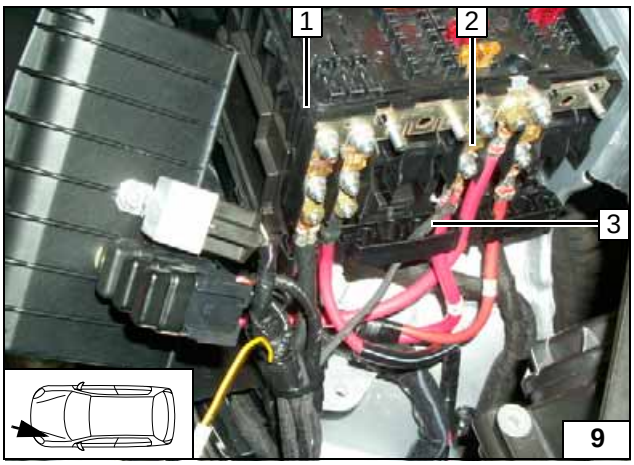
On vehicles with Climatronic, replace 25 A fuse F3 **7** with 3 A fuse provided.




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

**Connecting positive and earth wire**

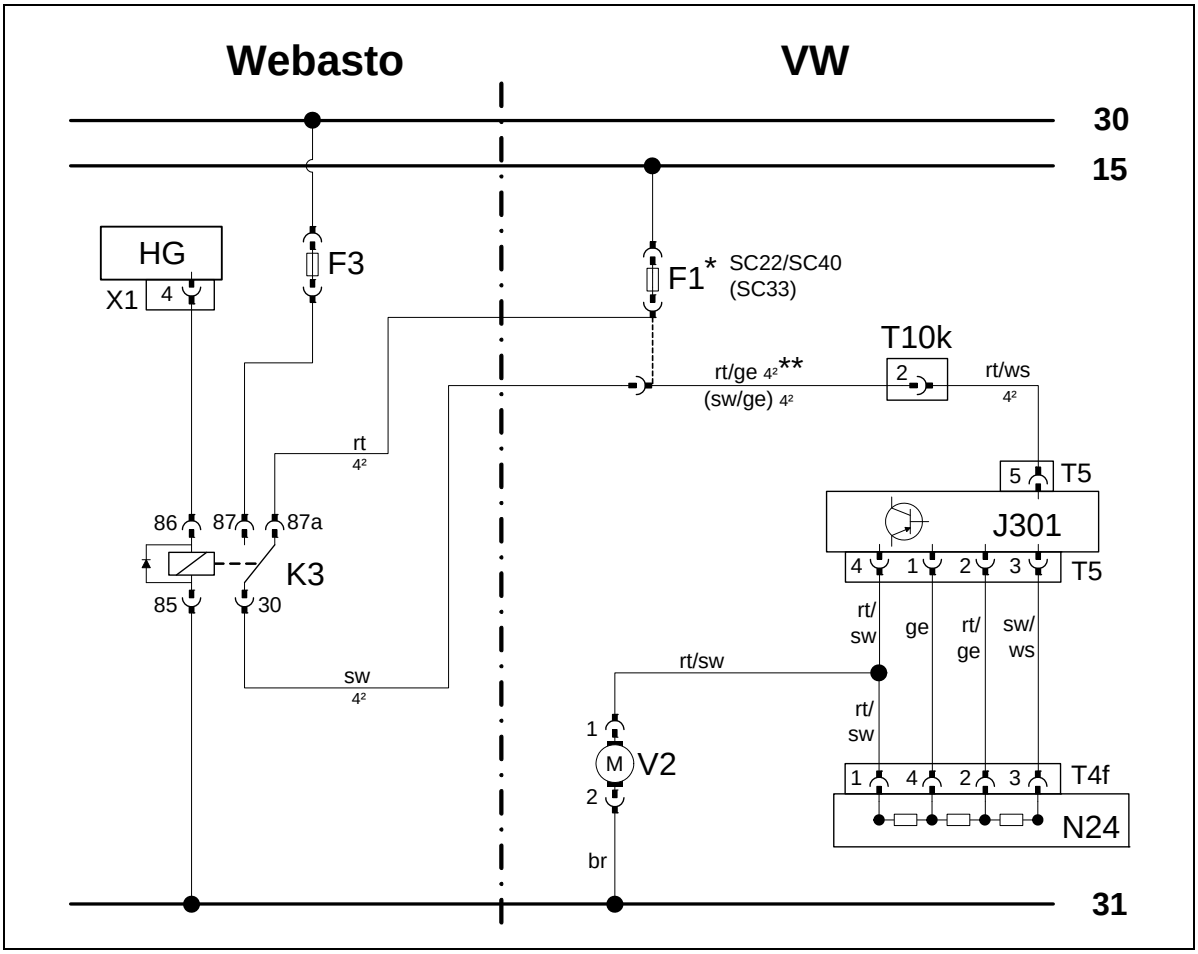
Route brown (br) earth wire to original vehicle earth support point below headlight and connect.




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

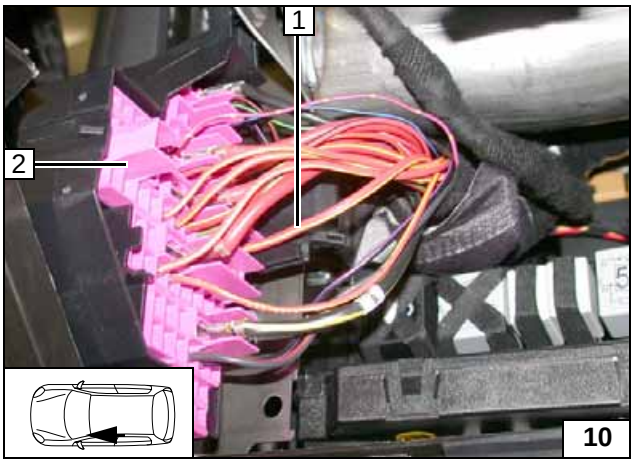
## Climatic fan control

Climatic wiring diagram




| Webasto components | | Vehicle components | | Colours and symbols | |
|---|---|---|---|---|---|
| HG | Heater TT-C/P/E | GM | Fan motor | rt | red |
| X1 | 6-pin heater connector | F1* | Fuse 40A (depending on respective fuse assignment)<br>Golf VI = SC22 or SC40<br>Golf Plus = SC33 | ge | yellow |
| F3 | 25 A fuse | | | sw | black |
| K3 | Fan relay | | | | |
| | | | | ** | Wire depends on the respective vehicle equipment<br>Golf VI = red/yellow (rt/ge)<br>Golf Plus = red yellow (rt/ge) or black/yellow (sw/ge) |
| | | J301 | Control unit of air conditioning | | |
| | | T5 | 5-pin connector J301 | | |
| | | N24 | Resistor group | | |
| | | T4f | 4-pin connector N24 | | |
| | | T10k | Connector | | |
| | | | | X | Cutting point |
| | | | | Wiring colours may vary. | |

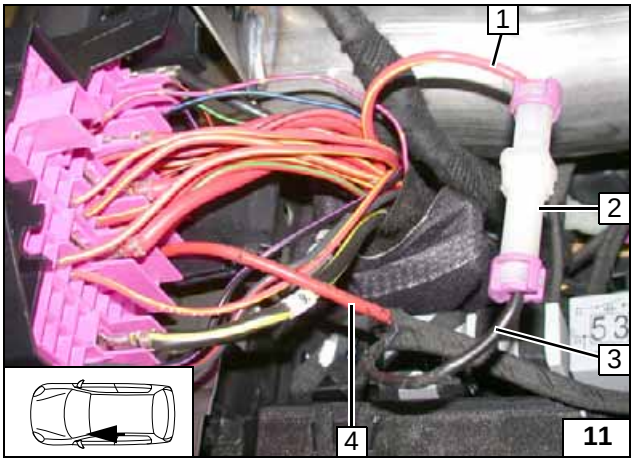
Legend




**Golf VI and Variant**

Connection on fuse carrier **2** (instrument panel at upper left). Remove red/yellow (rt/ge) 4² wire **1** on fuse output SC 22 or SC40 (depending on respective vehicle equipment).

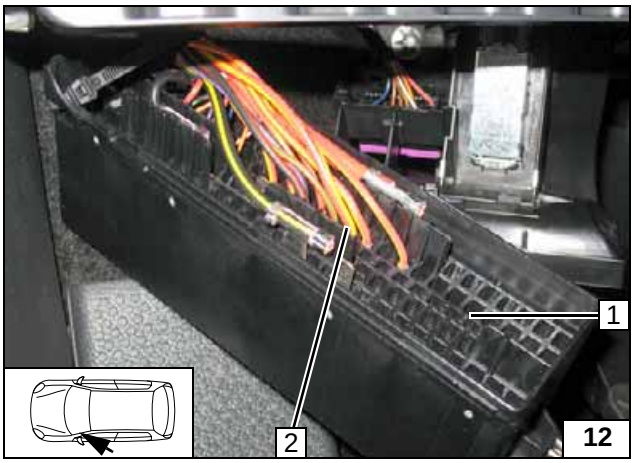
**Connection to fuse carrier**




Red (rt) wire **4** from K3/87a with crimped-on standard power timer interlocked in fuse output SC 22 or SC40.
Produce connections as shown in wiring diagram.

**1** Red/yellow (rt/ge) wire of fuse SC22 or SC40
**2** AMP housing
**3** Black (sw) wire to K3/30

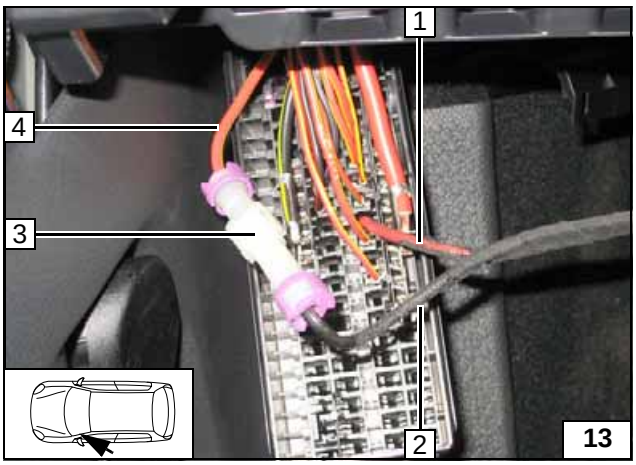
**Connecting wires**




**Golf Plus**

Connection on fuse carrier **1** (instrument panel at bottom left). Remove red/yellow (rt/ge) 4² wire **2** on fuse output SC33 (depending on respective vehicle equipment).

**Connection to fuse carrier**



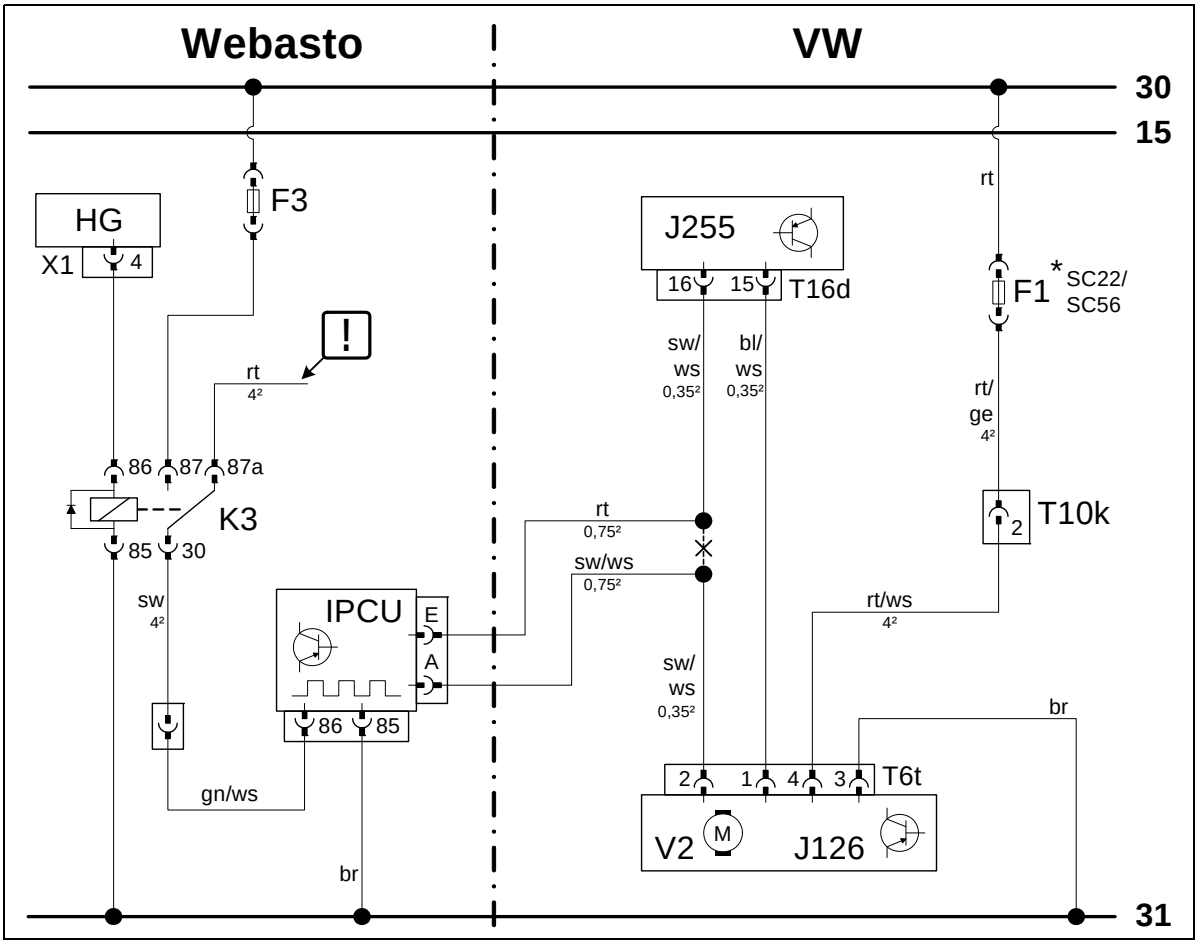

Red (rt) wire **1** from K3/87a with crimped-on standard power timer interlocked in fuse output SC33.
Produce connections as shown in wiring diagram.

**2** AMP connector
**3** Red/yellow (rt/ge) wire from fuse S33
**4** Black (sw) wire to K3/30

**Connecting wires**

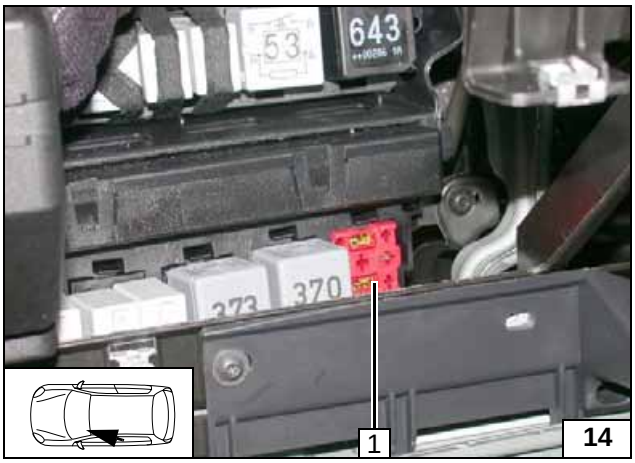
## Climatronic fan control

Climatronic wiring diagram




| Webasto components | | Vehicle components | | Colours and symbols | |
|---|---|---|---|---|---|
| HG | Heater TT-C/P/E | F1* | Fuse 40A (depending on respective fuse assignment) of SC22 or SC56 | rt | red |
| X1 | 6-pin heater connector | | | ws | white |
| K3 | Fan relay | | | sw | black |
| F3 | Replace 25 A fuse with 3 A fuse | T10k | Plug connections | br | brown |
| | | J255 | Climatronic control unit | gn | green |
| IPCU | Pulse width modulator | T16d | 16-pin connector J255 | ge | yellow |
| | | J126 | Fan controller | | |
| **IPCU adjustment values:** | | V2 | Fan motor | bl | blue |
| Duty cycle: | 30% | T6t | 6-pin connector J126 | ! | Insulate wire ends and tie back |
| Frequency: | 400Hz | | | | |
| Voltage: | 8V | | | X | Cutting point |
| Function: | High side | | | Wiring colours may vary. | |

Legend




**Golf VI and Variant**

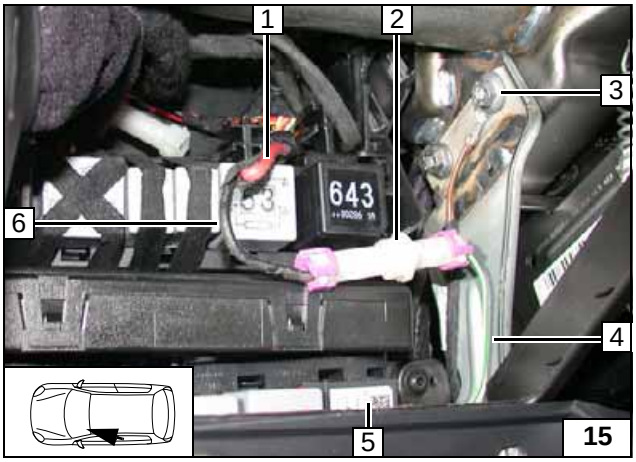
Produce connections as shown in wiring diagram.
Position of free sockets depends on respective vehicle equipment.

**Note:**

Attach IPCU socket **1** with cable ties for new shape of the fuse carrier.

**1** IPCU socket

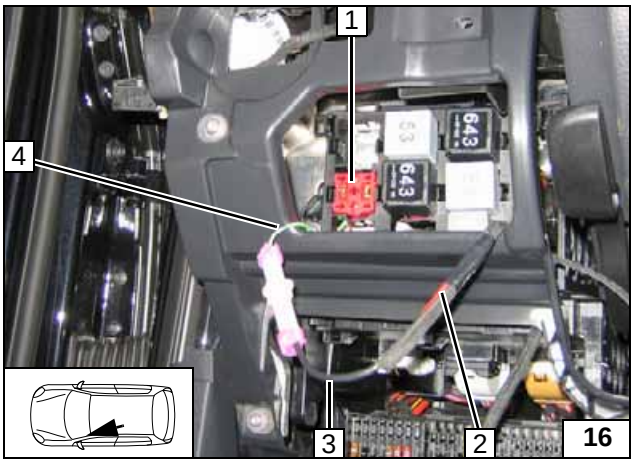
**Installing IPCU socket**




Insulate red (rt) wire K3/87a **1** and tie back.
Produce connections as shown in wiring diagram.

**2** AMP connector
**3** Brown (br) wire of IPCU/85, original vehicle earth support point
**4** Green/white (gn/ws) wire of IPCU/86
**5** IPCU mounted
**6** Black (sw) wire from K3/30

**Connecting IPCU**




**Golf Plus**

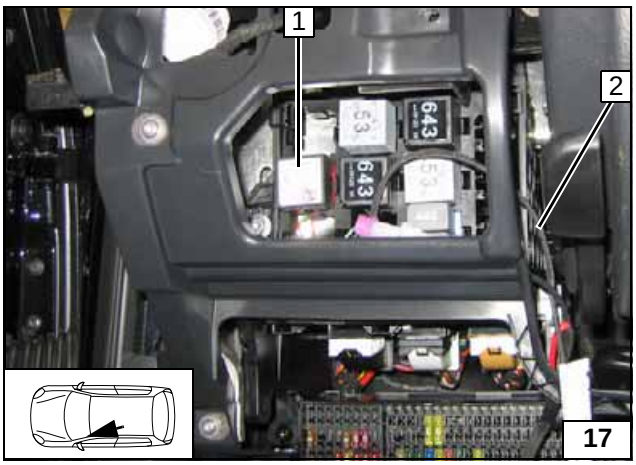
Insulate red (rt) wire K3/87a **2** and tie back.
Produce connections as shown in wiring diagram.
Position of free sockets depends on respective vehicle equipment.

**Note:**

Attach IPCU socket **1** with cable ties for new shape of the fuse carrier.

**1** IPCU socket
**3** Black (sw) wire from K3/30
**4** Green/white (gn/ws) IPCU/86

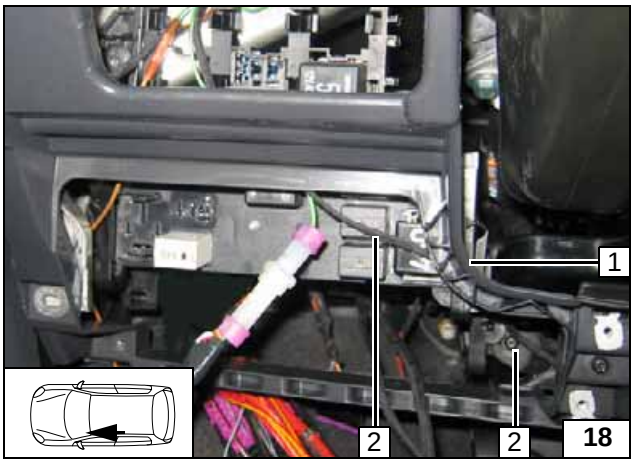
**Installing wiring harness of Climatronic**




Brown (br) wire from IPCU/85 to original vehicle earth point.

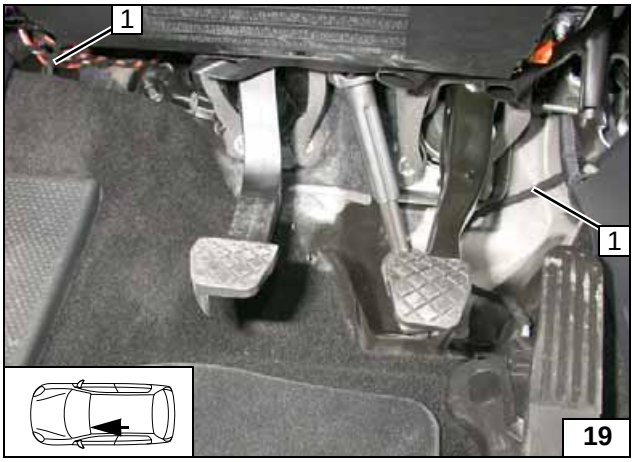
**1** IPCU mounted
**2** Wiring harness of IPCU

**Connecting wires**




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

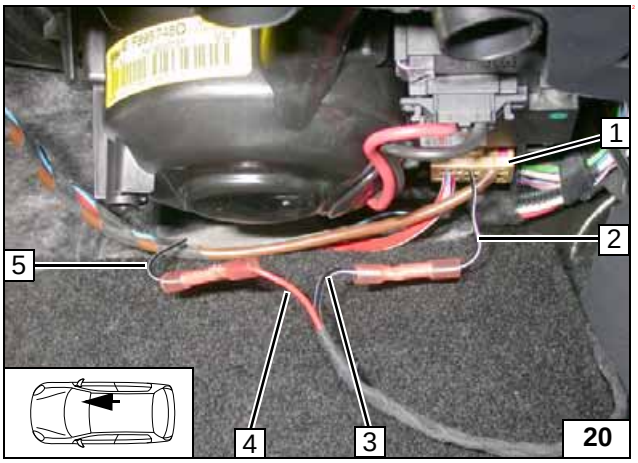
**Routing wiring harness from IPCU**




**All vehicles**

Route wiring harness of IPCU **1** to centre console.

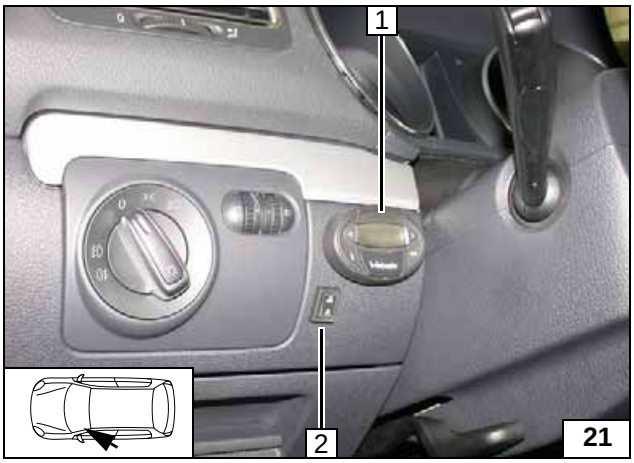
**Routing wiring harness from IPCU**




Route wiring harness of IPCU **1** to fan unit. Connection on connector of fan unit **1**.

**2** Black/white (sw/ws) wire of connector T6t/2
**3** Black/white (sw/ws) wire of IPCU/A
**4** Red (rt) wire of IPCU/E
**5** Black/white (sw/ws) wire of A/C control panel

**Connecting fan unit**

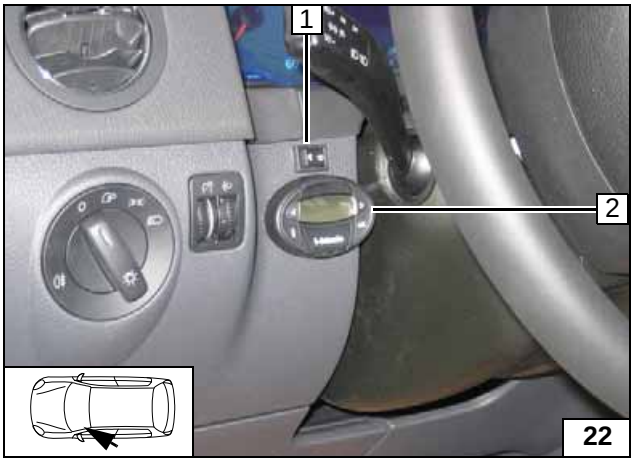



## Digital timer, summer/winter switch option

**Golf VI and Variant**

**1** Digital timer
**2** 12 mm dia. hole; summer/winter switch

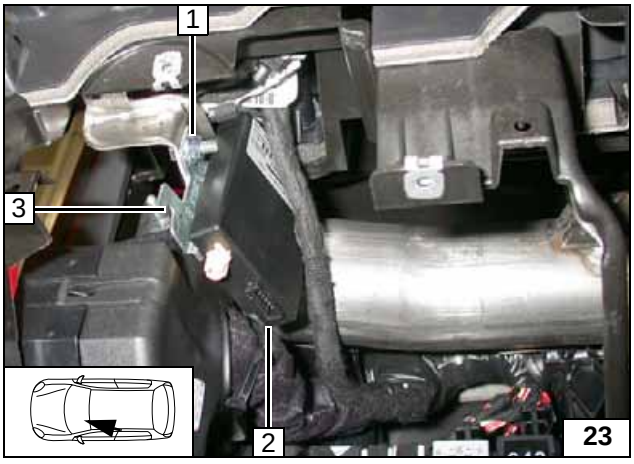
**Digital timer**




**Golf Plus**

**1** Digital timer
**2** 12 mm dia. hole; summer/winter switch

**Digital timer**



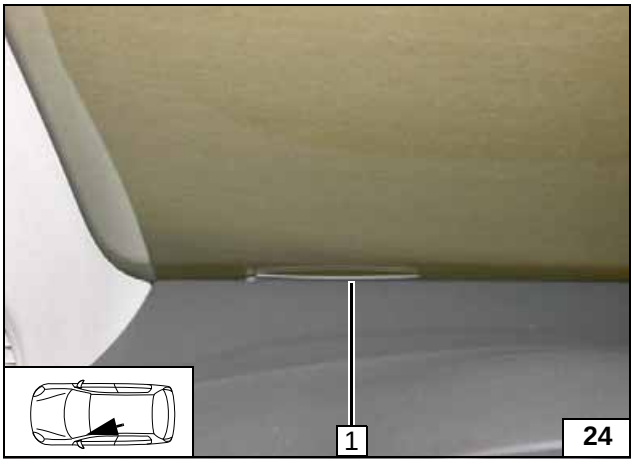

## Remote option (Telestart)

**Golf VI and Variant**

Drill out bracket **3** to 6.5 mm dia. at position **1**.

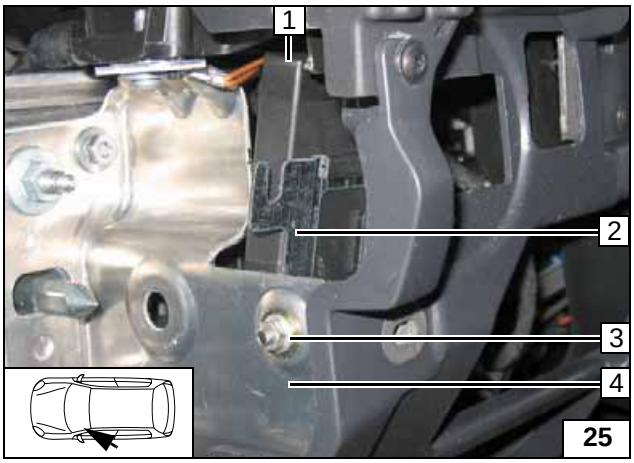
**1** Existing hole, M6x20 bolt, flanged nut
**2** Receiver

**Installing receiver**




**1** Antenna

**Installing antenna**

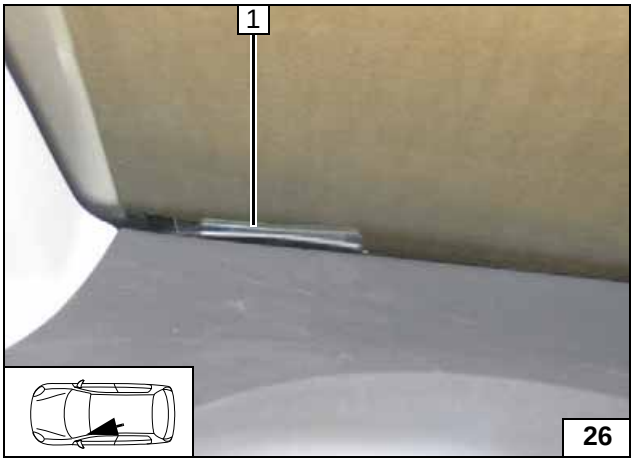



**Golf Plus**

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

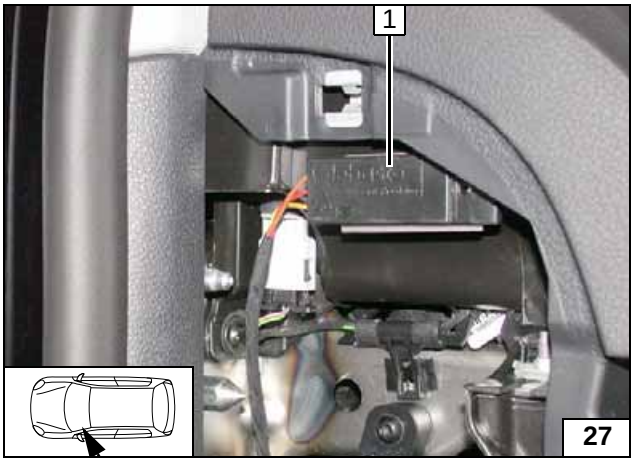
**1** Receiver
**2** Bracket
**3** M6 bolt, large diameter washer (between bracket instrument carrier), large diameter washer (from outside), flanged nut
**4** Instrument carrier, existing hole

**Installing receiver**




**1** Antenna

**Installing antenna**

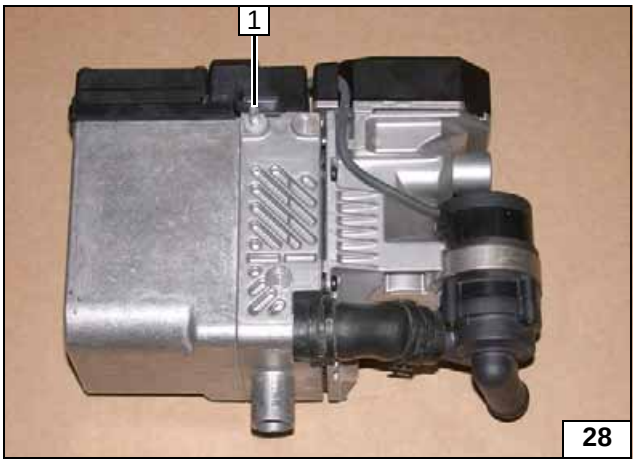



**Temperature sensor T100 HTM**

Figure shows Golf VI.
Fasten temperature sensor **1** with double-sided adhesive tape.

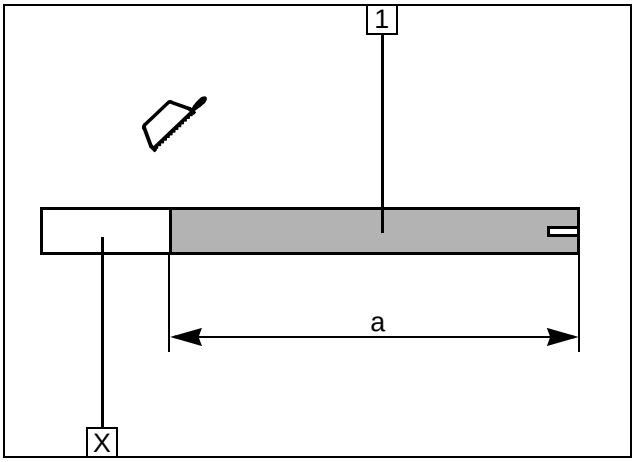
**Installing temperature sensor**

## Premounting heater




**1** Ejot stud

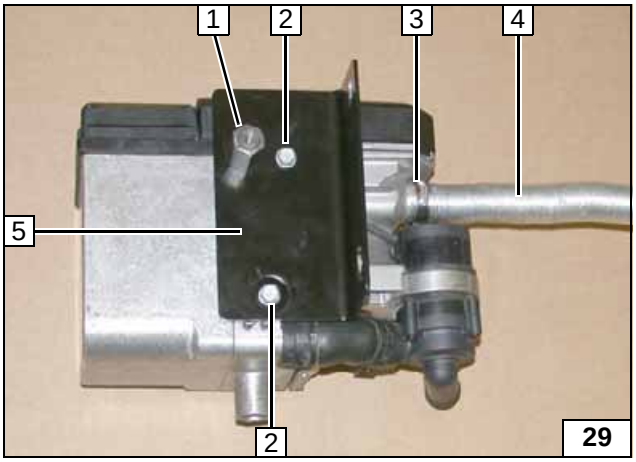
Premounting heater




**1** Combustion air pipe
a = 250

Discard section **X**

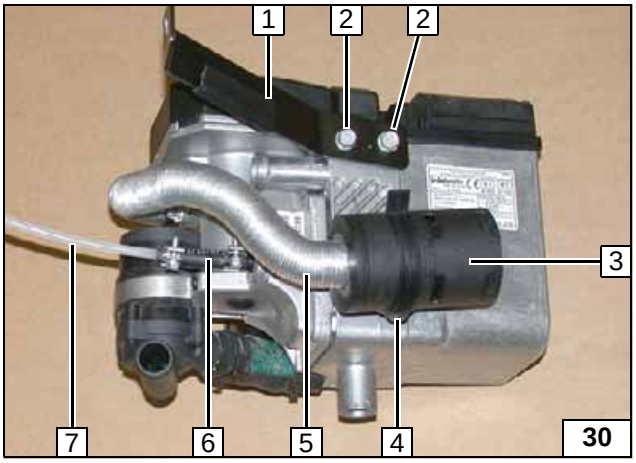
Cutting combustion air pipe to length




Insert one washer each between heater and bracket at positions **2**.

**1** M6x30 spacer nut
**2** Ejot screw, washer [2x each]
**3** 27 mm dia. hose clamp
**4** Combustion air pipe
**5** Bracket

Premounting heater

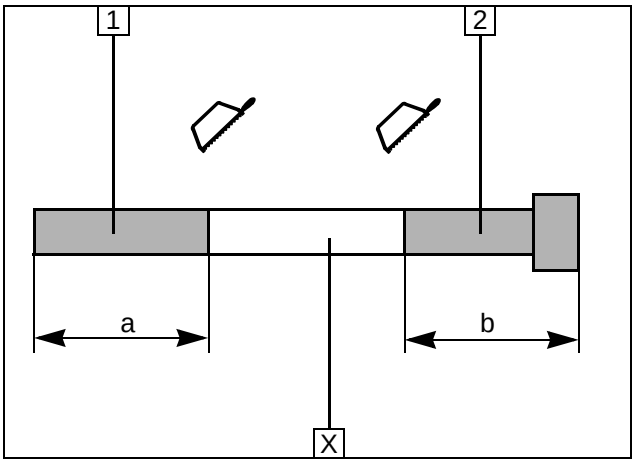



**1** Strut
**2** Ejot screw [2x]
**3** Silencer
**4** Retaining clip in hole
**5** Combustion air pipe
**6** Hose section, 10 mm dia. hose clamp [2x]
**7** Fuel line

Premounting heater

## Preparing exhaust system

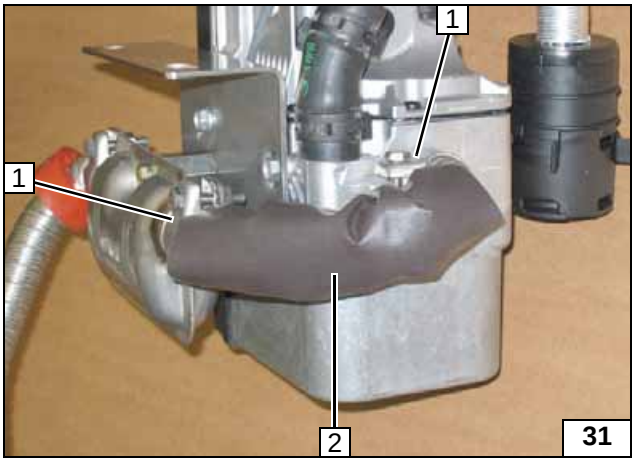
Cutting exhaust pipe to size




**1** Exhaust pipe
a = 190
**2** Exhaust end section
b = 240

Discard section **X**

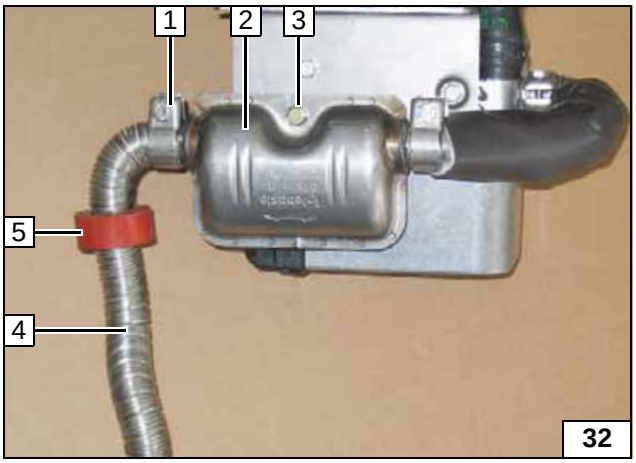
Premounting exhaust pipe




Slide insulation **2** onto exhaust pipe.

**1** Hose clamp [2x]

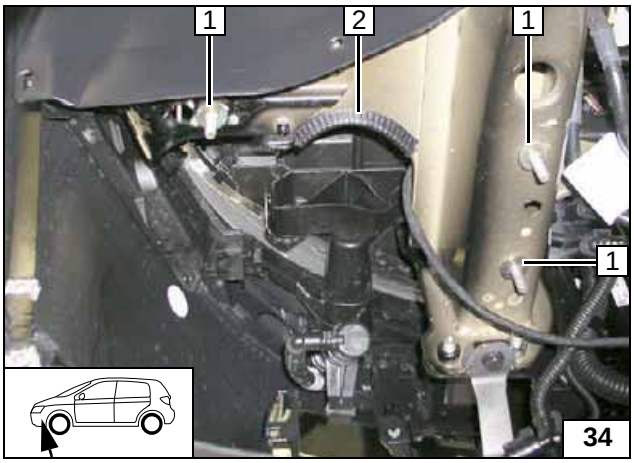
Premounting silencer and exhaust end section




**1** Hose clamp
**2** Silencer
**3** M6x16 bolt, spring lockwasher on spacer nut
**4** Exhaust end section
**5** Red (rt) protective rubber isolator

Aligning exhaust end section


**1** Exhaust end section

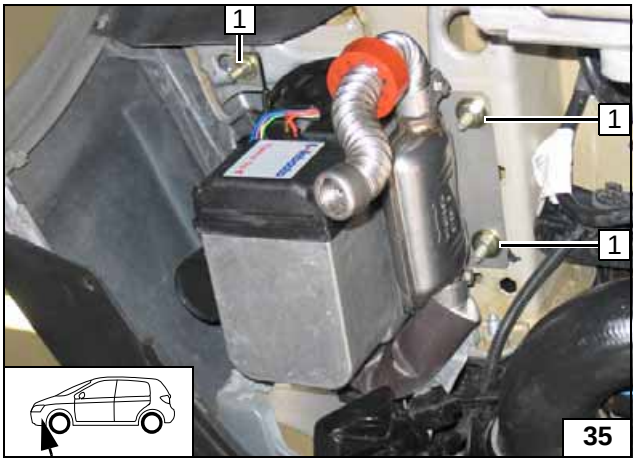



## Preparing installation location

Prevent large diameter washer from falling by securing with putty etc.

**1** Large diameter washer on original vehicle stud bolt [3x]
**2** 100 mm edge protection

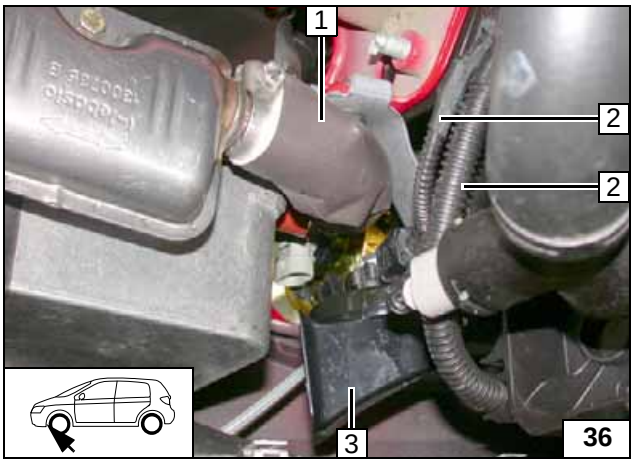
**Preparing installation location**




## Installing heater

**1** Large diameter washer, flanged nut M8 [3x]

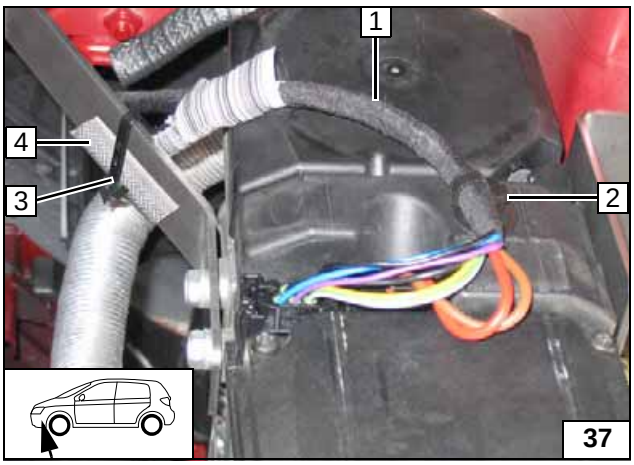
**Installing heater**




Ensure freedom of movement of exhaust system in relation to original vehicle components and lines.

**1** Exhaust pipe
**2** Original vehicle wiring harnesses (secured with cable ties)
**3** Horn

**Aligning exhaust system**




Punch through perforation of heater cover at position **2**. Mount clip cable tie **2** and fasten wiring harness of heater **1**.

**3** Cable tie
**4** 50 mm edge protection

**Connecting wiring harness**

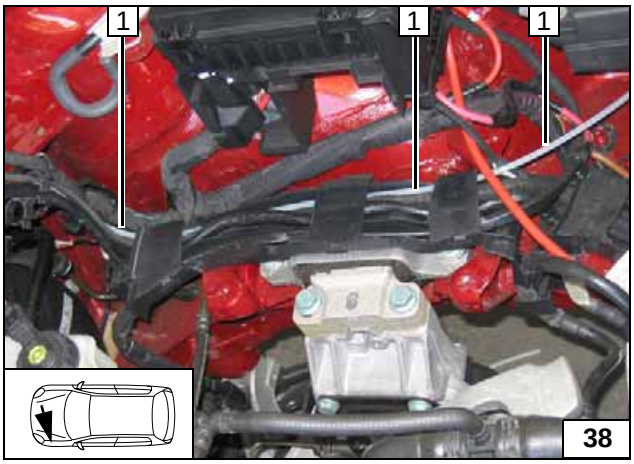
## Fuel

**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.

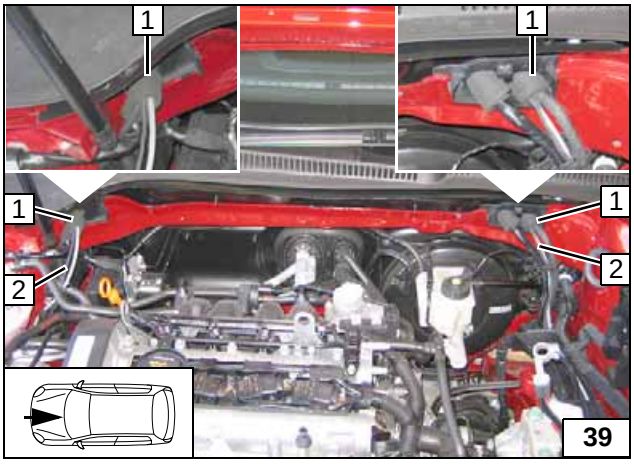
Install fuel line and metering pump wiring harness so that they are protected against stone impact. Unless specified otherwise, always fasten using cable ties.
Mount the fuel line and wiring harness with rub protection on sharp edges.

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




**1** Fuel line

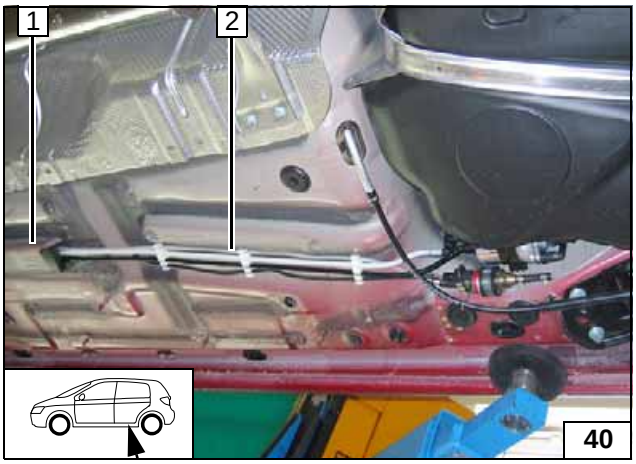
**Installing fuel line**




Route fuel line and wiring harness of metering pump **2** in coolant reservoir to right and fasten on original vehicle lines with cable ties. Pay particular attention to freedom of movement of wiper linkage.
Route fuel line and wiring harness of metering pump to underbody in wiring duct.

**2** Existing pass through [2x]

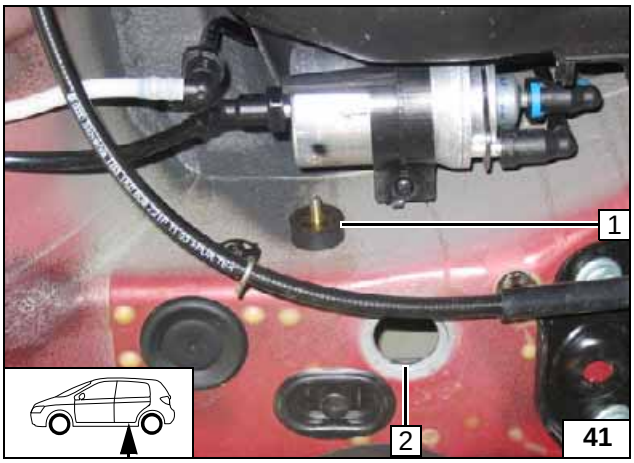
**Installing lines**




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

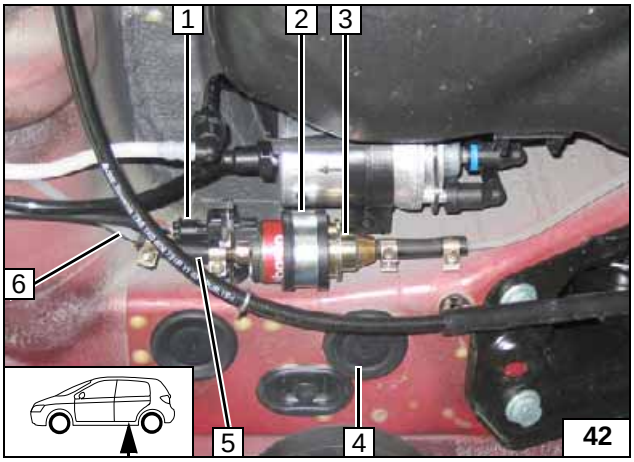
**1** Line duct

**Installing lines**



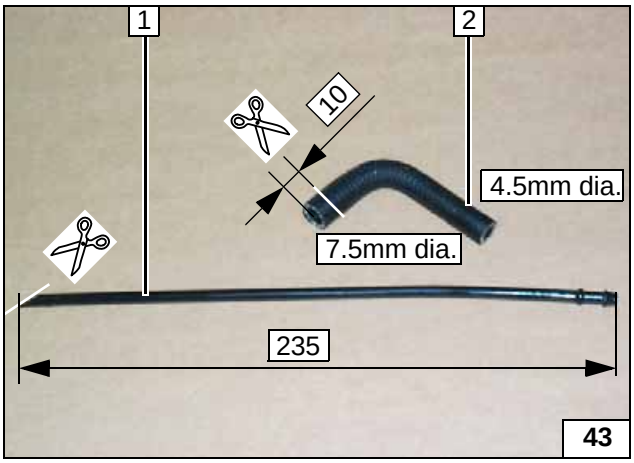

**1** Silent block, large diameter washer, M6 flanged nut
**2** Sealing plug removed

**Installing silent block**



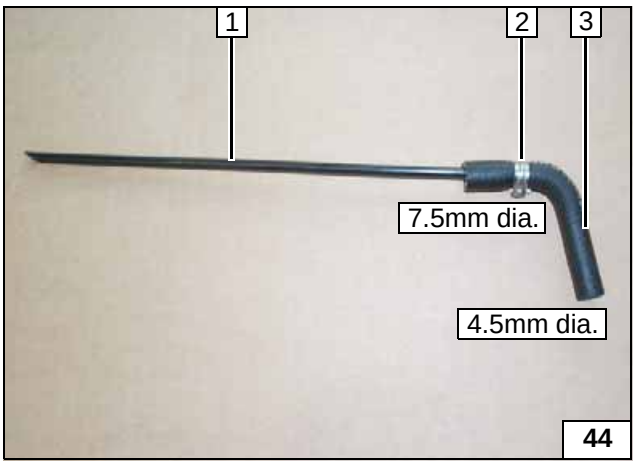

**1** Wiring harness of metering pump, connector mounted
**2** Secure rubber-coated p-clamp on silent block with flanged nut
**3** Metering pump
**4** Plug remounted
**5** Hose section, 10 mm dia. hose clamp [2x]
**6** Fuel line

**Installing metering pump**




**1** Standpipe
**2** Moulded hose

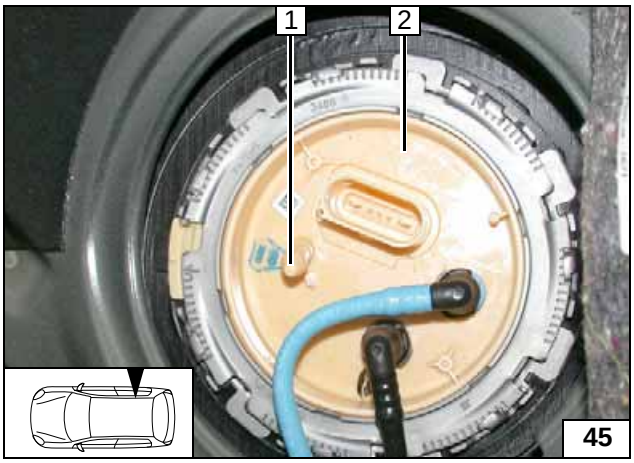
**Cutting standpipe and moulded hose to length**




10 mm dia. Caillau clamp **2** in centre between beads on end of standpipe.

**1** Standpipe
**3** Moulded hose

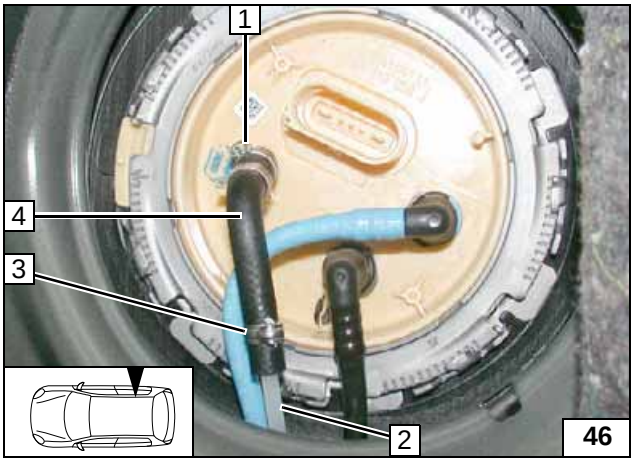
**Premounting standpipe and moulded hose**




Cut 3 mm off blind plug **1**.

**2** Fuel-tank sending unit

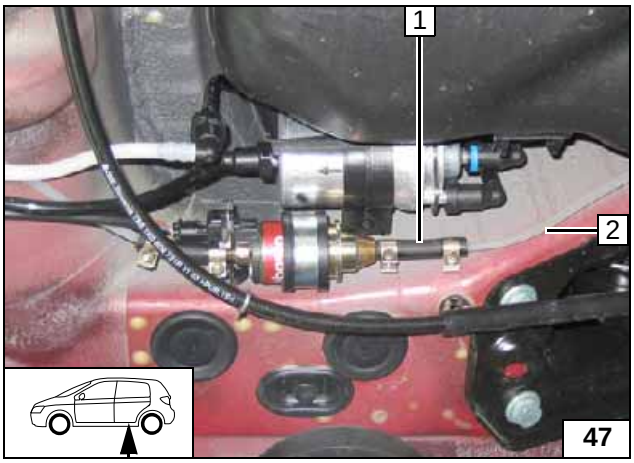
**Cutting off blind plug**




Ensure sufficient distance from adjacent components, especially from fuel gauge.

**1** 13.5mm dia. Caillau clamp
**2** Fuel line
**3** 10 mm dia. Caillau clamp
**4** Moulded hose with standpipe

**Connecting fuel-tank sending unit**



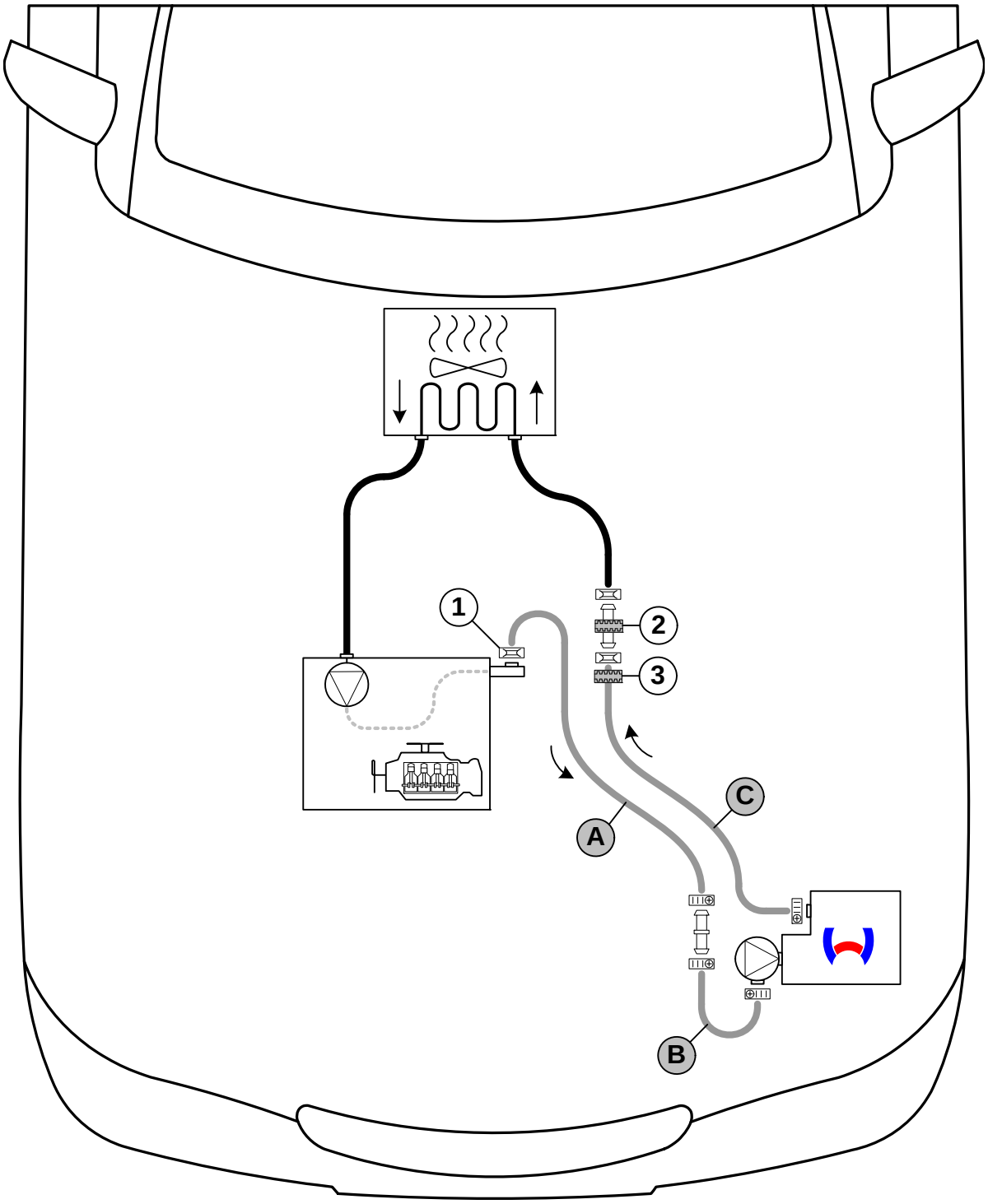

**1** Hose section, 10mm dia. hose clamp [2x]
**2** Fuel line

**Connecting metering pump**

## Coolant circuit

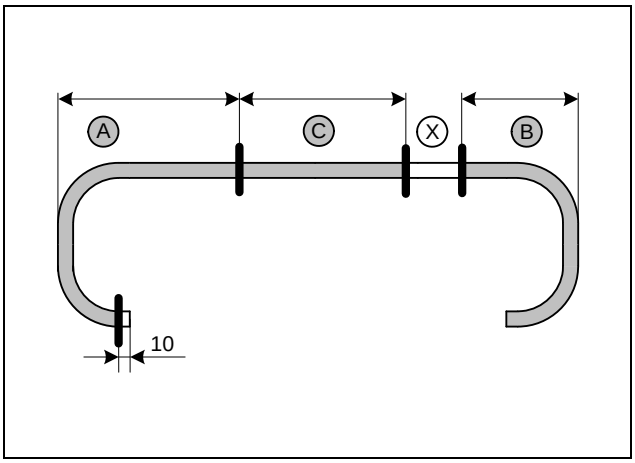
**WARNING!**
Any coolant running off should be collected in an appropriate container. Install hoses so that they are kink-free. Unless specified otherwise, always fasten using cable ties. Position clamps so that other hoses cannot be damaged. The heater must be filled with coolant when installing the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

**Hose installation diagram**




All spring clips without a specific designation = 27 mm dia. **1** = Original vehicle spring clip .
All hose clamps = 20-27 mm dia. All connecting pipes = 20x20 mm dia.
**2** = black (sw) protective rubber isolator (only for 1.2 and 1.4 90 kW DSG).
**3** = black (sw) protective rubber isolator (for 1.4 90 kW SG only).

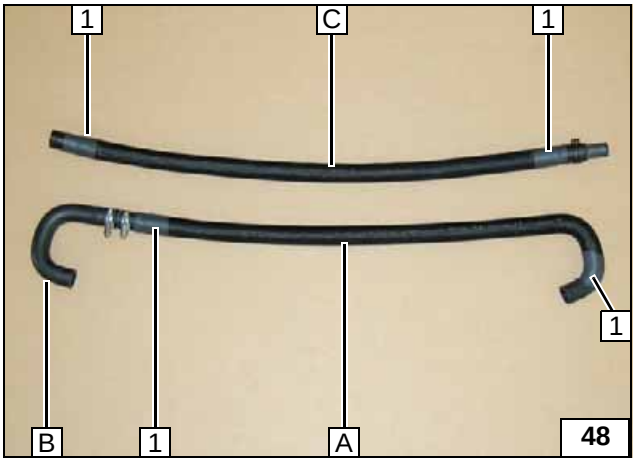
## 1.2 Manual transmission




Discard section **X**.

**A** = 750
**B** = 120
**C** = 900

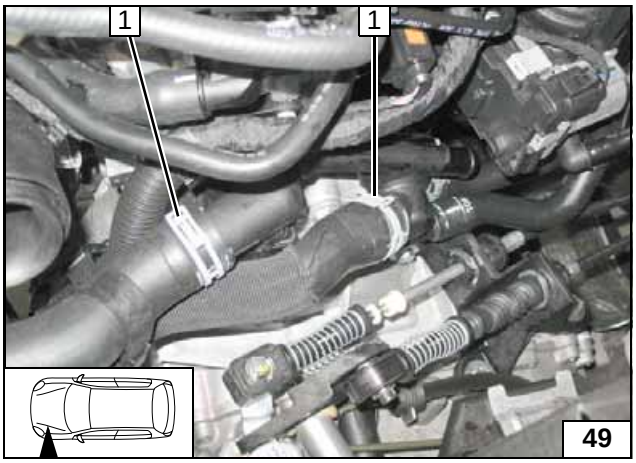
**Cutting hoses to length**




Push braided protection hoses onto hose **A** and **C**, cut to length and shrink.

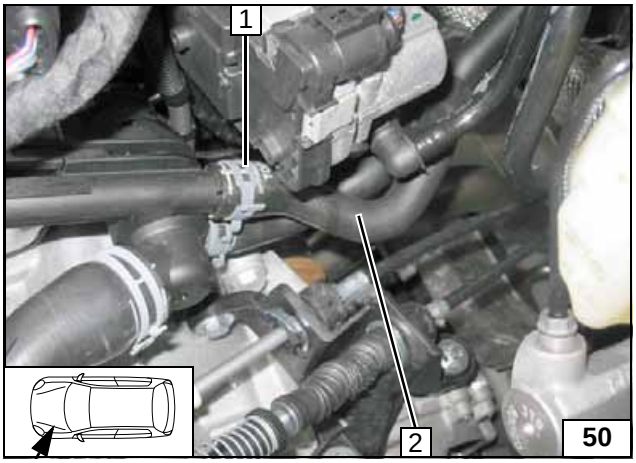
**1** Heat shrink plastic tubing [4x]

**Premounting hoses**



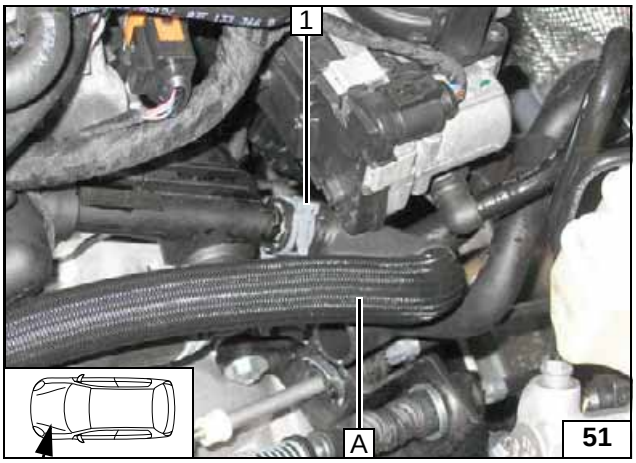

Turn clamp lock **1** [2x] toward the engine.

**Twisting clamps**




Pull off hose on engine outlet/heat exchanger inlet **2** on connection piece of engine outlet. Spring clip **1** will be reused.

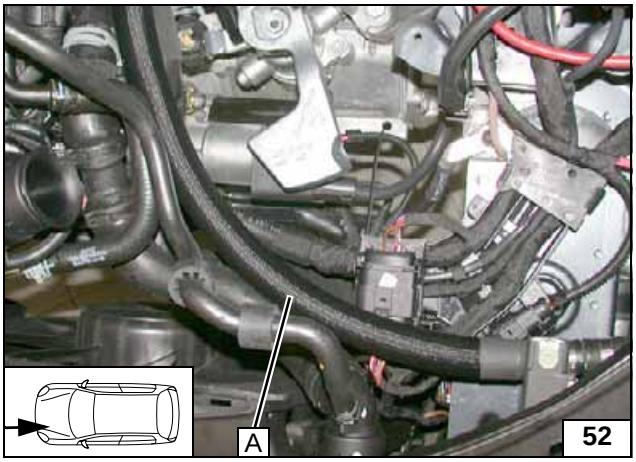
**Cutting point**



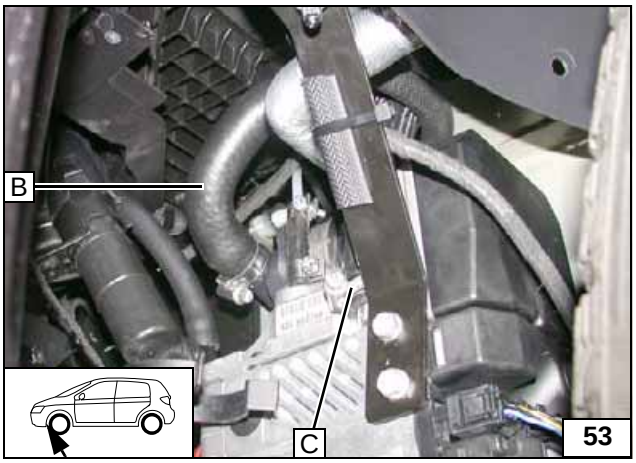

Install hose **A** with 180° elbow on connection piece of engine outlet.

**1** Original vehicle spring clip

**Connecting engine outlet**

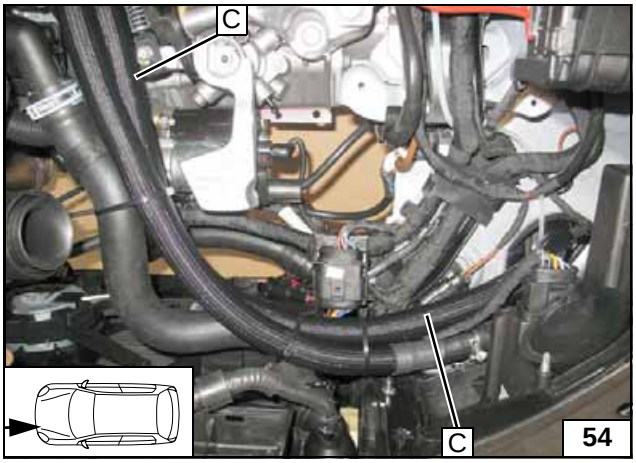



**Routing in engine compartment**

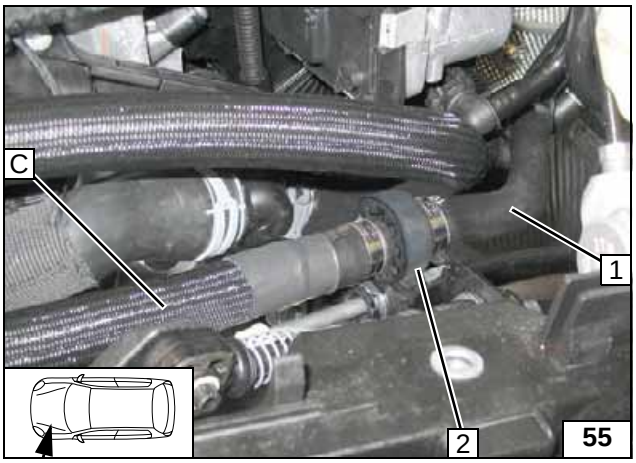



Combustion air silencer tied back for demonstration purposes.

**Connecting heater**



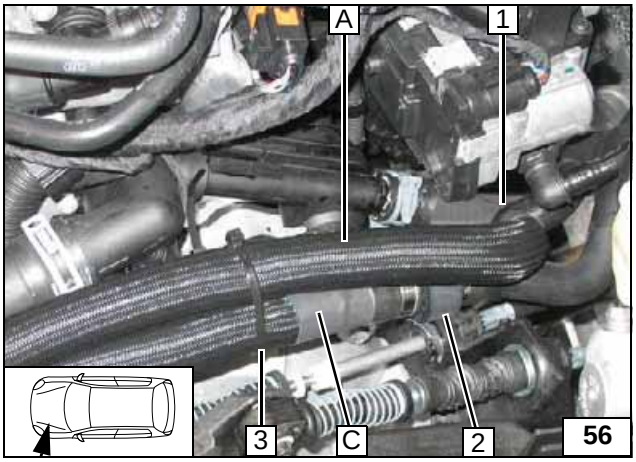

**Routing in engine compartment**




Insert black (sw) rubber isolator **2** in connecting point.

**1** Hose on heat exchanger inlet

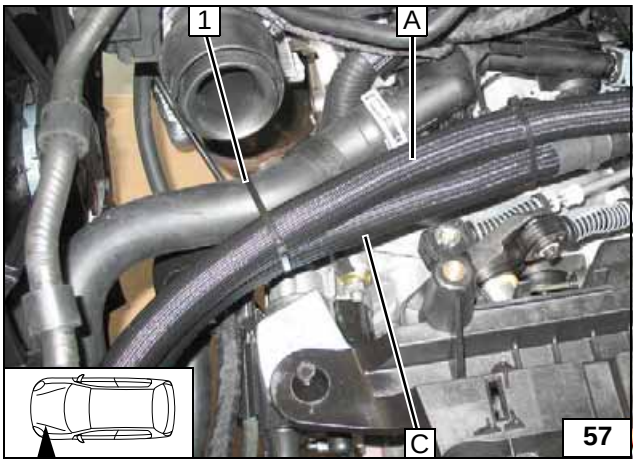
**Connecting heat exchanger inlet**




Align black (sw) rubber isolator **2** on bracket of manual gearshift. Align hoses and attach with cable tie **3** on original vehicle hose. Ensure sufficient distance from adjacent components, especially from the manual gearshift. Adjust if necessary.

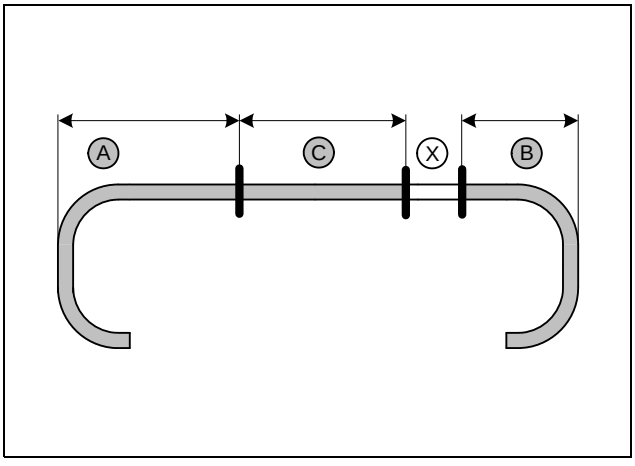
**1** Cable tie

**Fastening hoses**




Align hoses and attach with cable tie **1** on original vehicle hose.

**Fastening hoses**

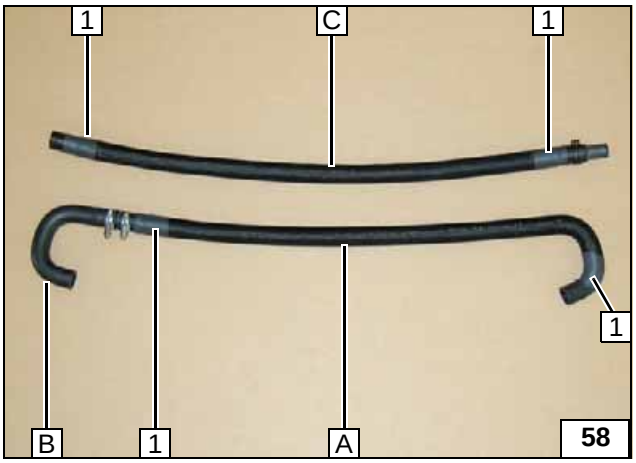



## 1.4 90kW manual transmission

Discard section **X**.

**A** = 780
**B** = 120
**C** = 1000

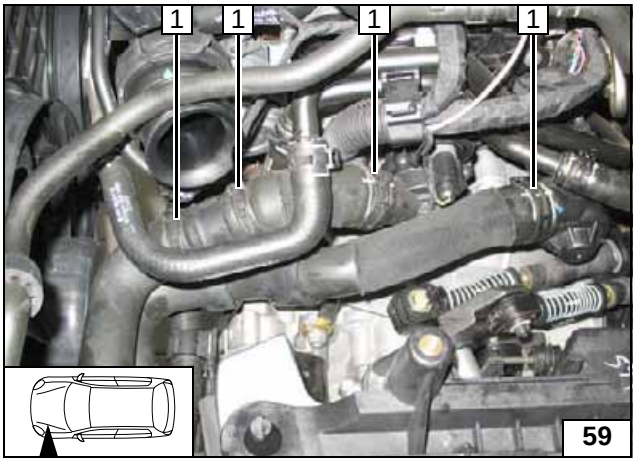
**Cutting hoses to length**




Push braided protection hoses onto hose **A** and **C**, cut to length and shrink.

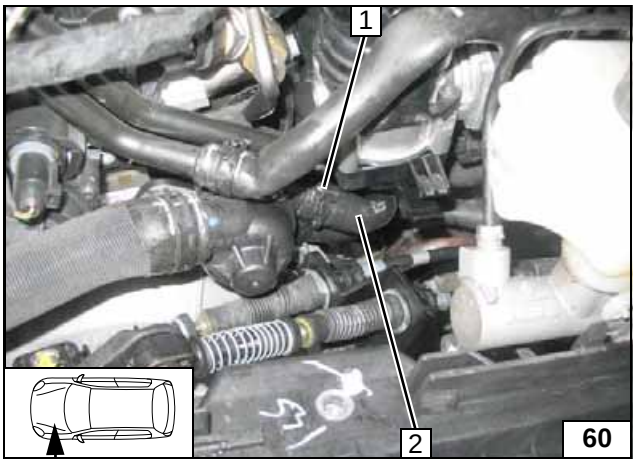
**1** Heat shrink plastic tubing [4x]

**Premounting hoses**



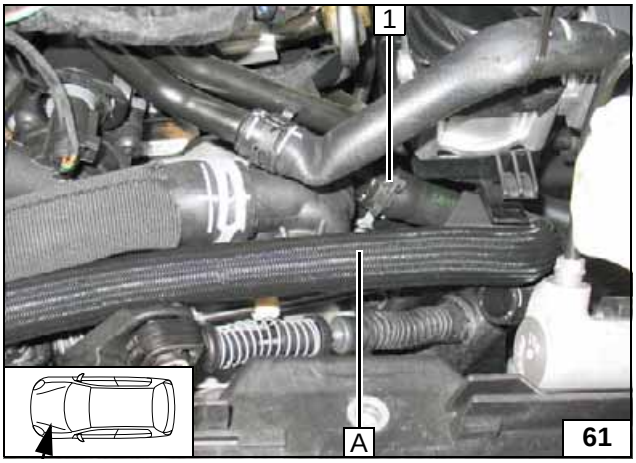

Turn clamp lock **1** [4x] toward the engine.

**Twisting clamps**




Pull off hose on engine outlet/heat exchanger inlet **2** on connection piece of engine outlet. Spring clip **1** will be reused.

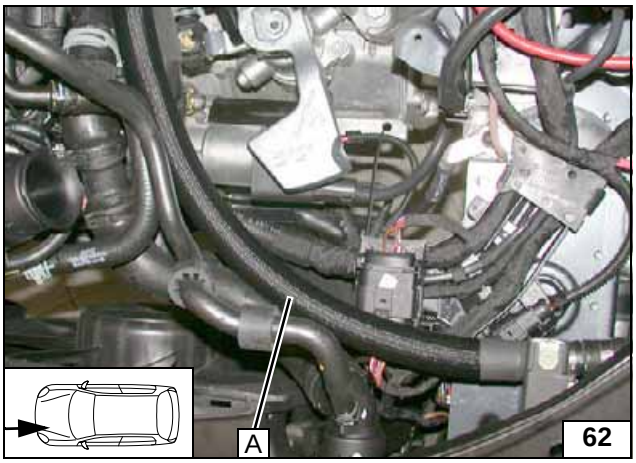
**Cutting point**



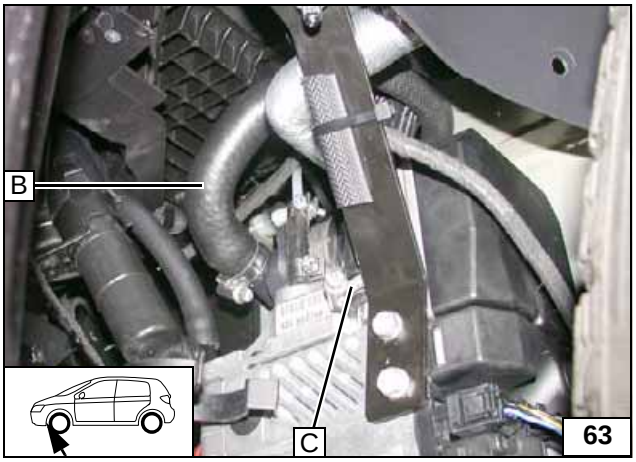

Install hose **A** with 180° elbow on connection piece of engine outlet.

**1** Original vehicle spring clip

**Connecting engine outlet**

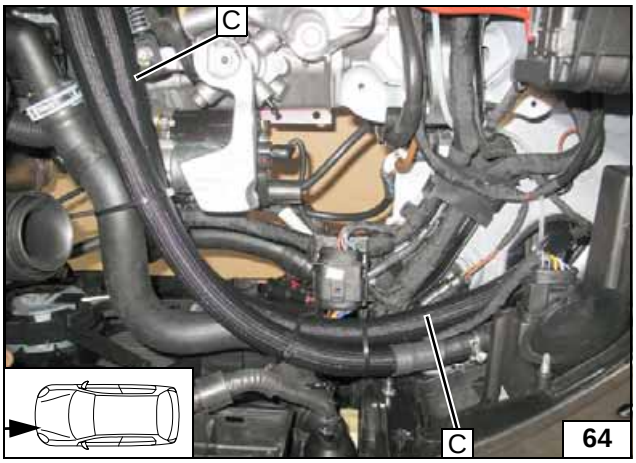



**Routing in engine compartment**

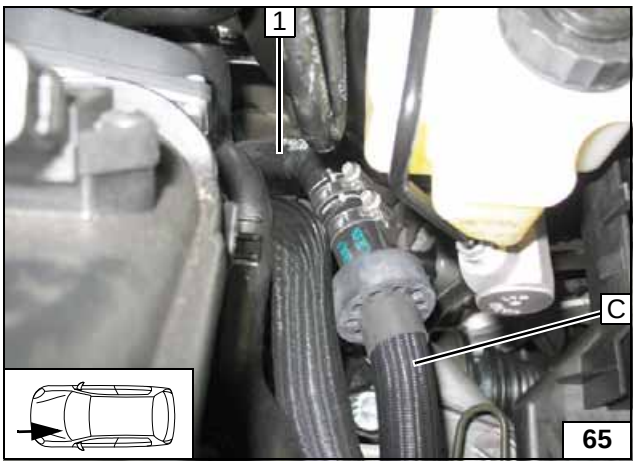



Combustion air silencer tied back for demonstration purposes.

**Connecting heater**

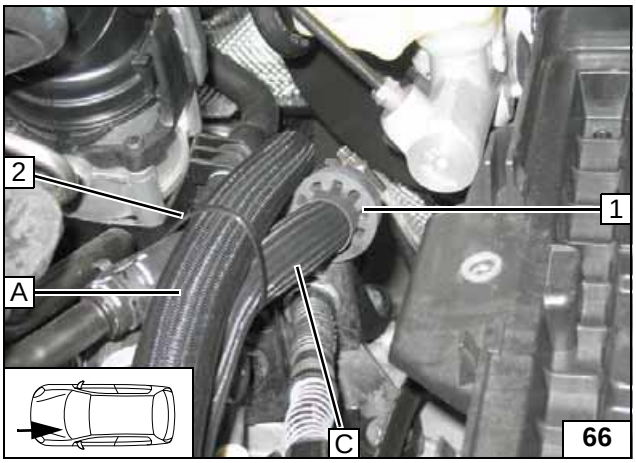



**Routing in engine compartment**



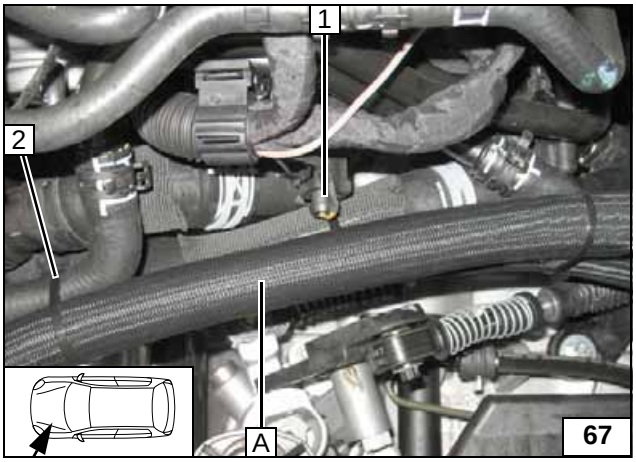

**1** Hose on heat exchanger inlet
**2** Original vehicle spring clip

**Connecting heat exchanger inlet**



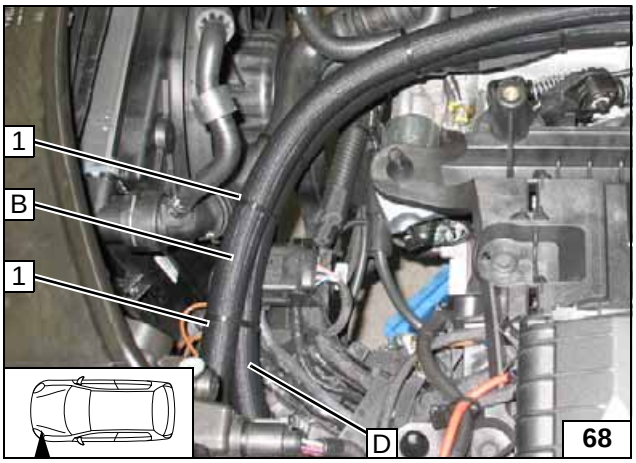

Align black (sw) rubber isolator **1** on bracket of manual gearshift. Fasten hose **A** and **C** with cable tie **2** to original vehicle hose.

**Routing in engine compartment**



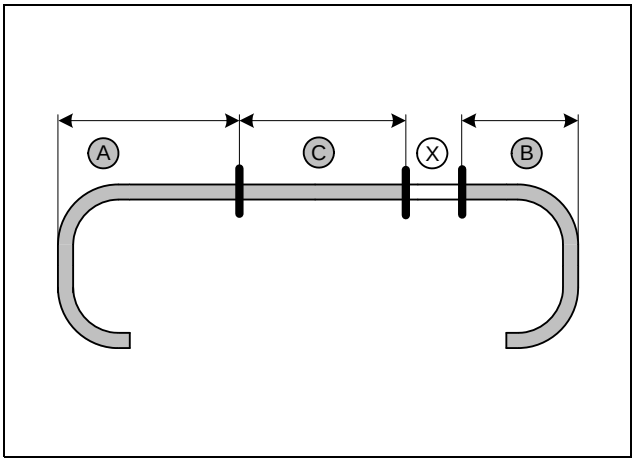

Align hoses and attach with cable tie **2** on original vehicle hose. Ensure sufficient distance from connector **1** , correct if necessary.

**Fastening hoses**




**1** Cable tie [2x]

**Fastening hoses**

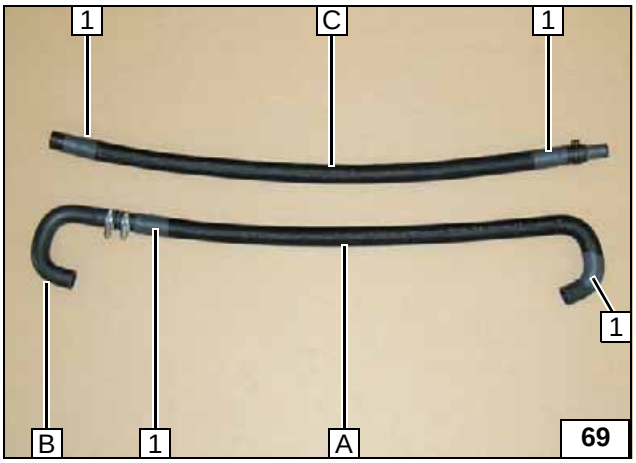



## 1.4 90kW DSG

Discard section **X**.

**A** = 670
**B** = 120
**C** = 700

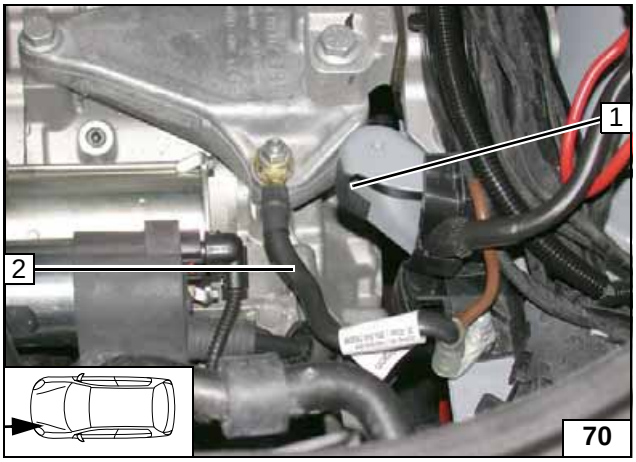
**Cutting hoses to length**




Push braided protection hoses onto hose **A** and **C**, cut to length and shrink.

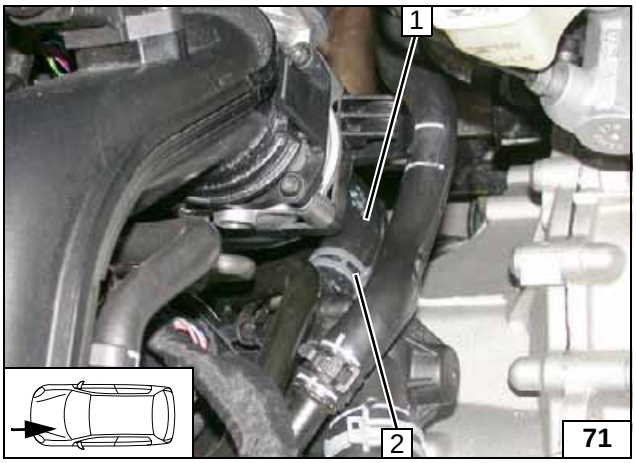
**1** Heat shrink plastic tubing [4x]

**Premounting hoses**



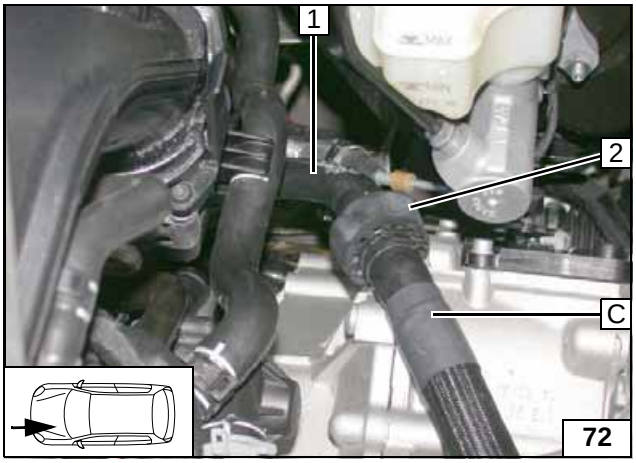

**1** 50 mm narrow edge protection
**2** Straighten earth cable

**Installing edge protection**



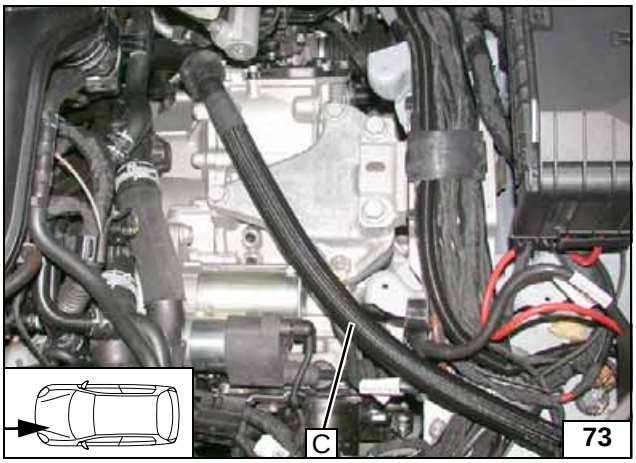

Pull off hose on engine outlet/heat exchanger inlet **1** on connection piece of engine outlet. Spring clip **2** will be reused.

**Cutting point**

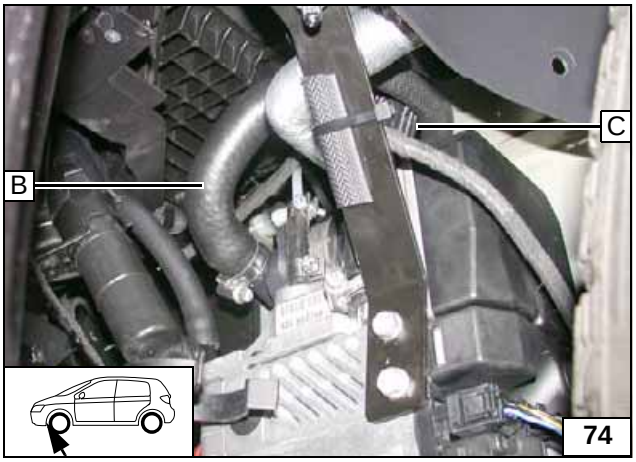



**1** Hose on heat exchanger inlet
**2** Black (sw) rubber isolator

**Connecting heat exchanger inlet**

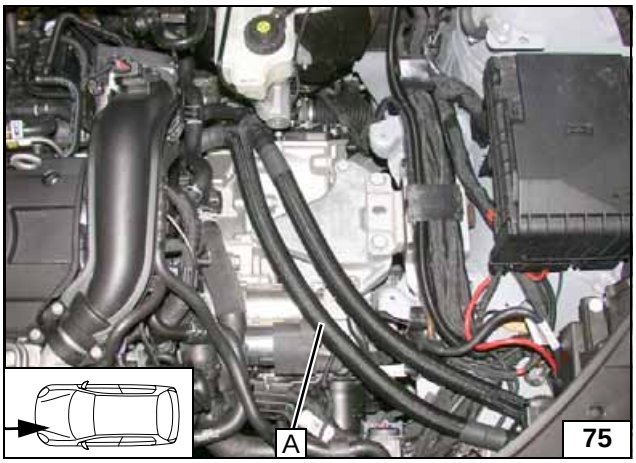



**Routing in engine compartment**

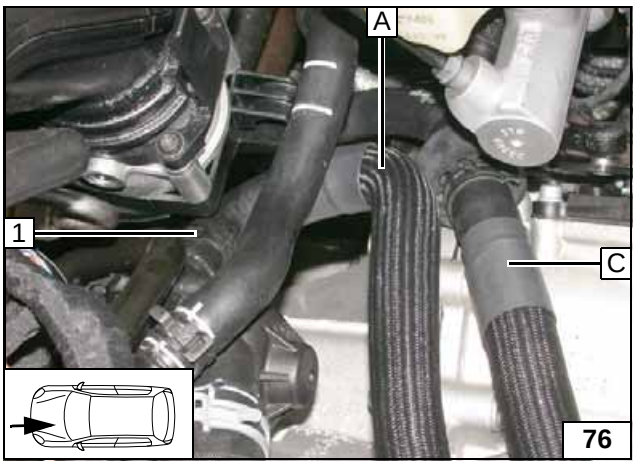



Combustion air silencer tied back for demonstration purposes.

**Connecting heater**



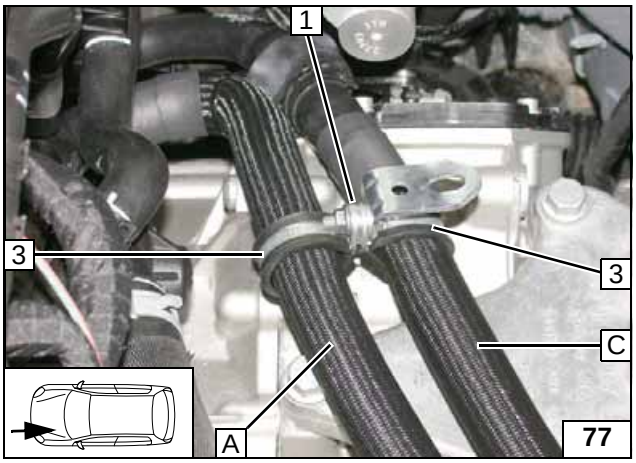

**Routing in engine compartment**




Install hose **A** with 180° elbow on connection piece of engine outlet.

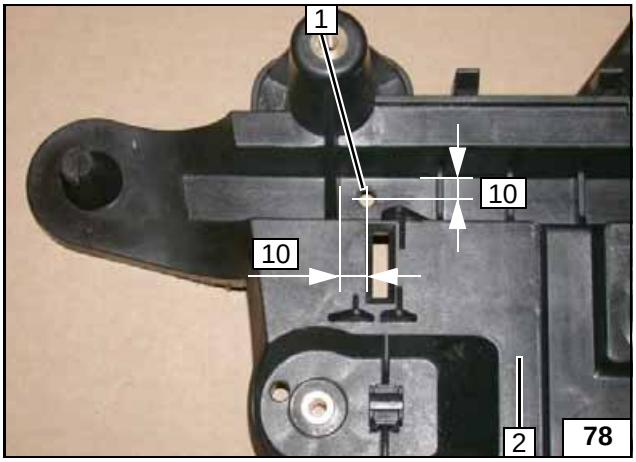
**1** Original vehicle spring clip

**Connecting engine outlet**



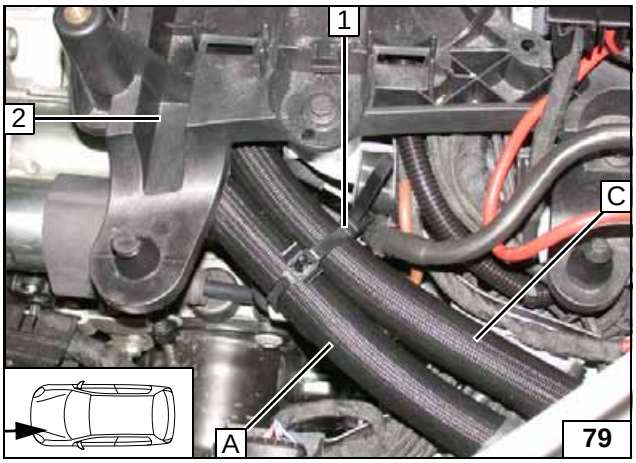

**1** M6x20 bolt, flanged nut
**2** Angle bracket
**3** 29 mm dia. rubber-coated p-clamp [2x]

**Fastening hoses**



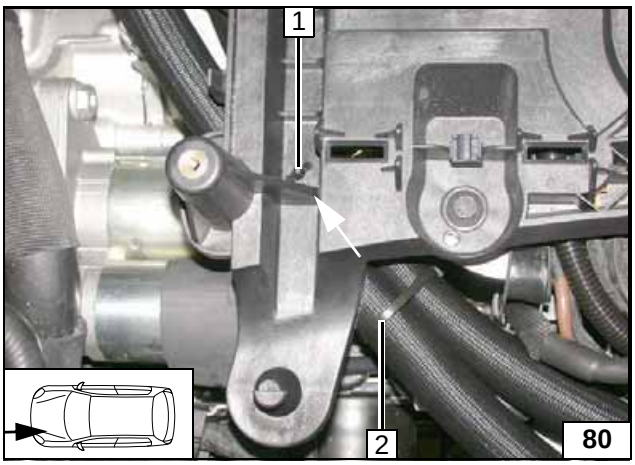

**1** 6 mm dia. hole
**2** Battery carrier

**Preparing battery carrier**




Install battery carrier **2**. Loosely assemble clip-type cable tie **1** around hose **A** and **C**!

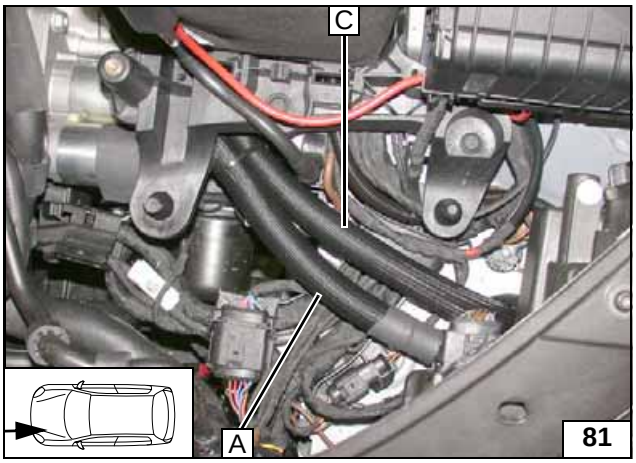
**Fastening hoses**



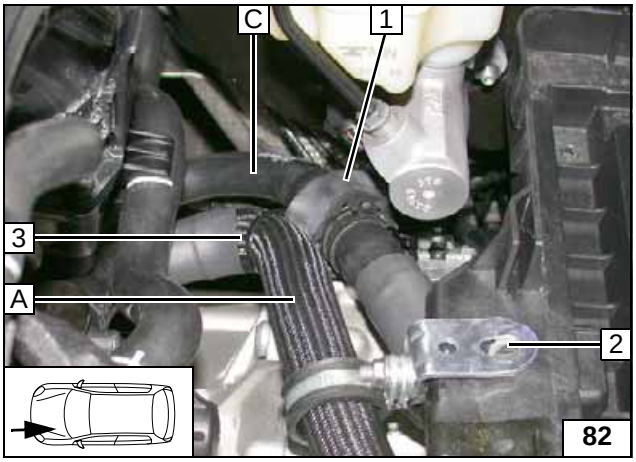

Shift clip-type cable tie under battery carrier, insert in hole on position **1** and tighten.

**2** Cable tie

**Fastening hoses**

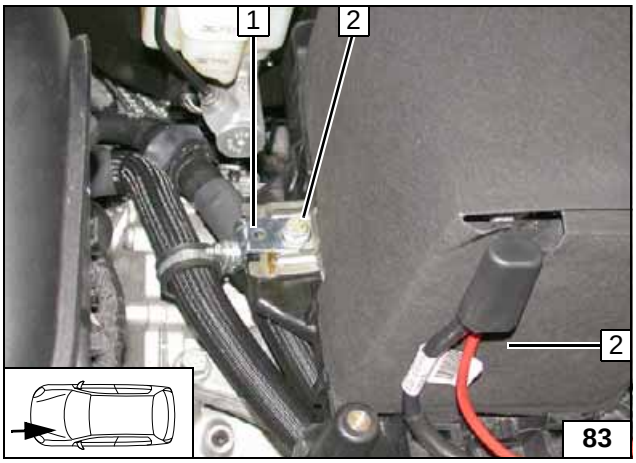



**Aligning hoses**




Fasten black (sw) rubber isolator **1** on with cable tie **3** on hose **A**. Align angle bracket on position **2** to the original vehicle hole.

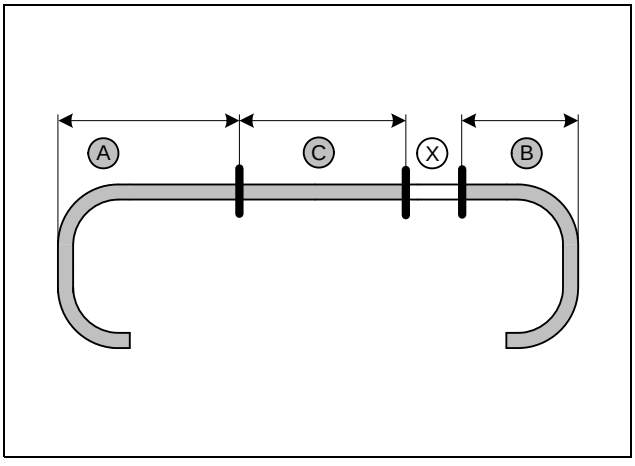
**Fastening hoses**




Install battery. Ensure sufficient distance from neighbouring components.

**1** Angle bracket
**2** Original vehicle bolt

**Fastening hoses**

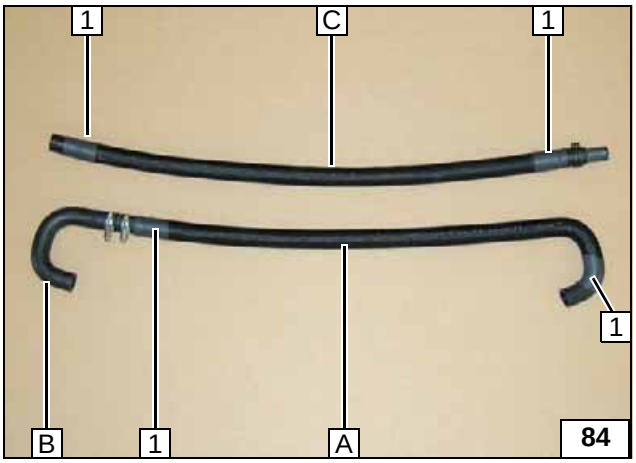



## 1.4 118 kW manual transmission

Discard section **X**.

**A** = 670
**B** = 120
**C** = 770

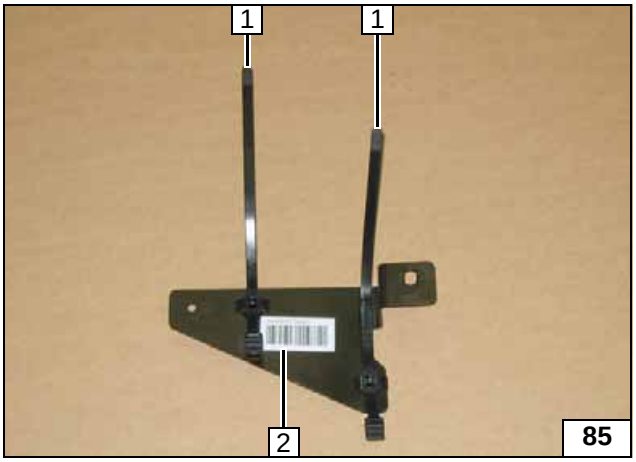
**Cutting hoses to length**




Push braided protection hoses onto hose **A** and **C**, cut to length and shrink.

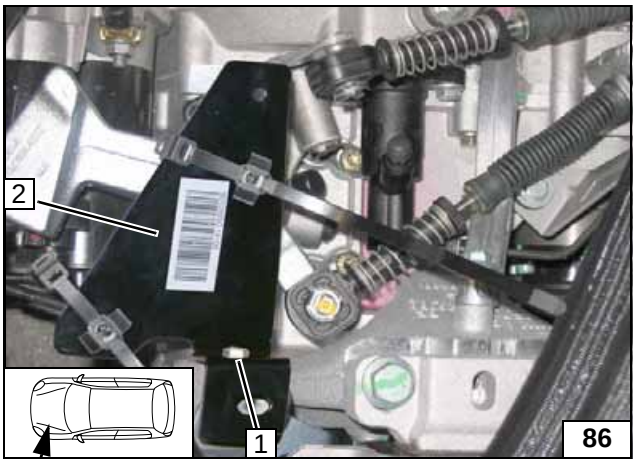
**1** Heat shrink plastic tubing [4x]

**Premounting hoses**



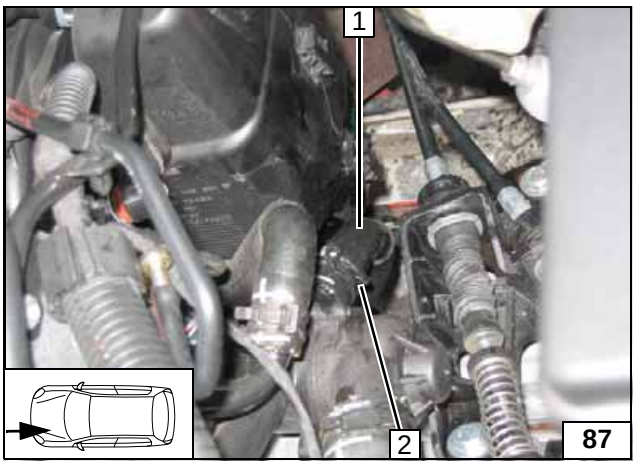

**1** Clip-type cable tie [2x]
**2** Bracket for coolant hoses

**Preparing bracket for coolant hoses**



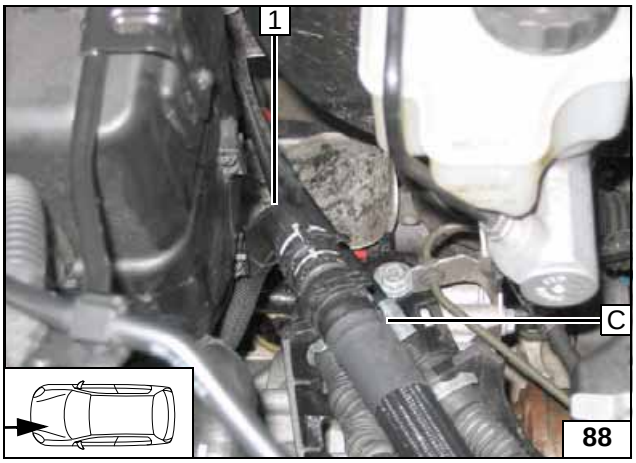

**1** M6x20 bolt, original vehicle hole, flanged nut
**2** Bracket for coolant hoses

**Installing bracket for coolant hoses**



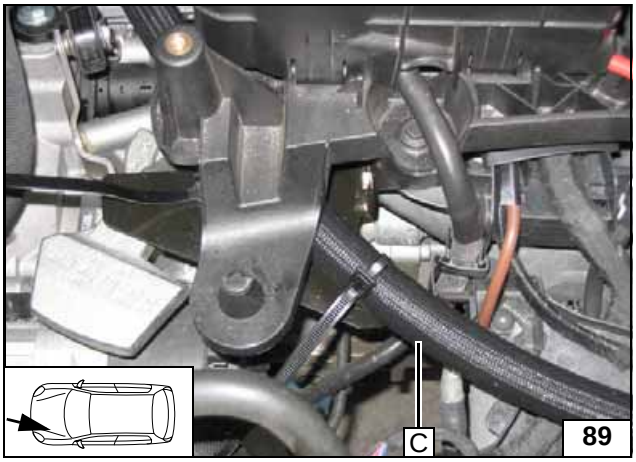

Pull off hose on engine outlet/heat exchanger inlet **1** on connection piece of engine outlet. Spring clip **2** will be reused.

**Cutting point**

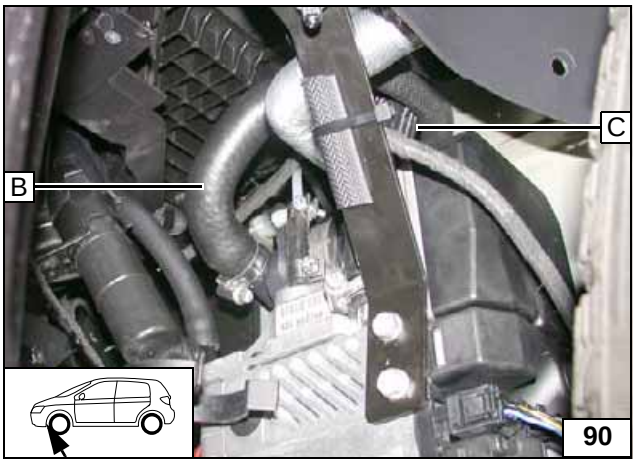



**1** Hose on heat exchanger inlet

**Connecting heat exchanger inlet**

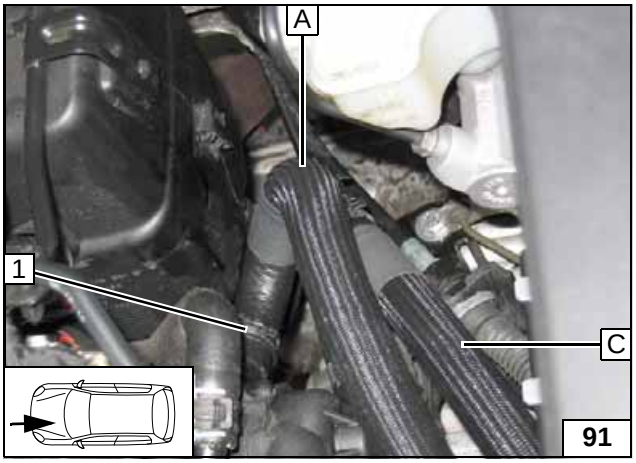



**Routing in engine compartment**




Combustion air silencer tied back for demonstration purposes.

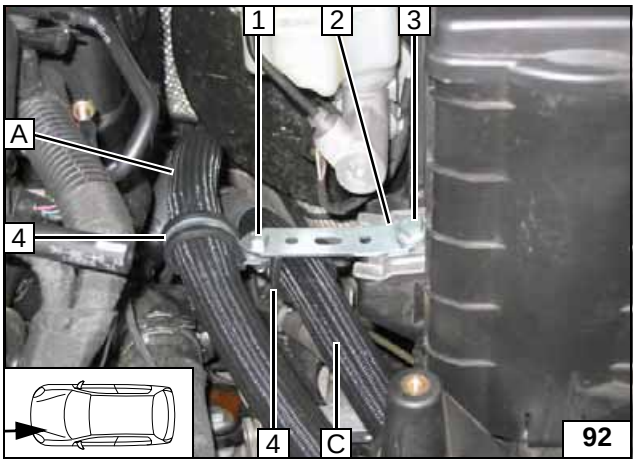
**Connecting heater**




Install hose **A** with 180° elbow on connection piece of engine outlet.

**1** Original vehicle spring clip

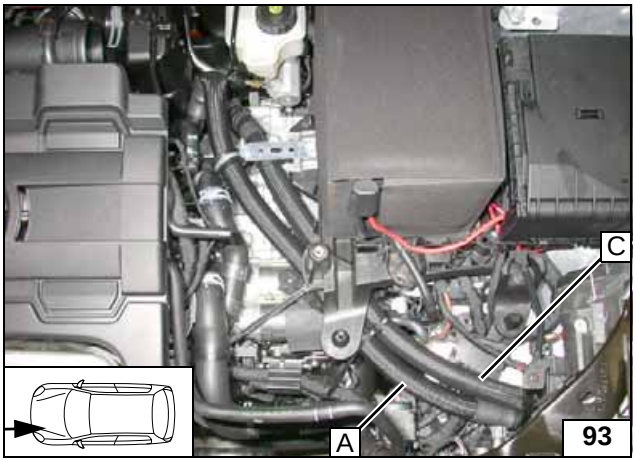
**Connecting engine outlet**




Drill out perforated bracket **2** to 8.5 mm dia. at position **3**.

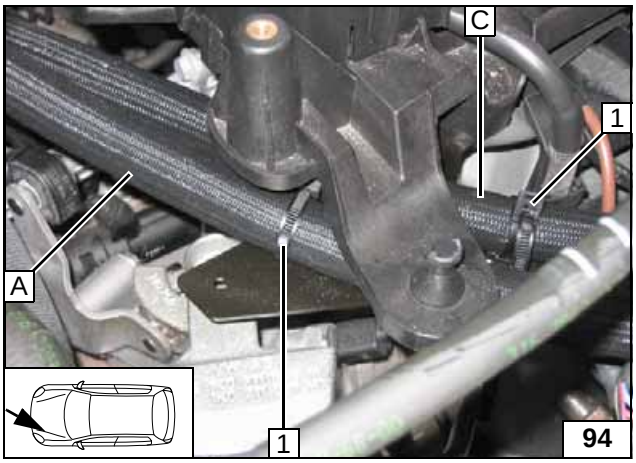
**1** M6x20 bolt, flanged nut
**3** Original vehicle bolt
**4** 29 mm dia. rubber-coated p-clamp [2x]

**Fastening hoses**



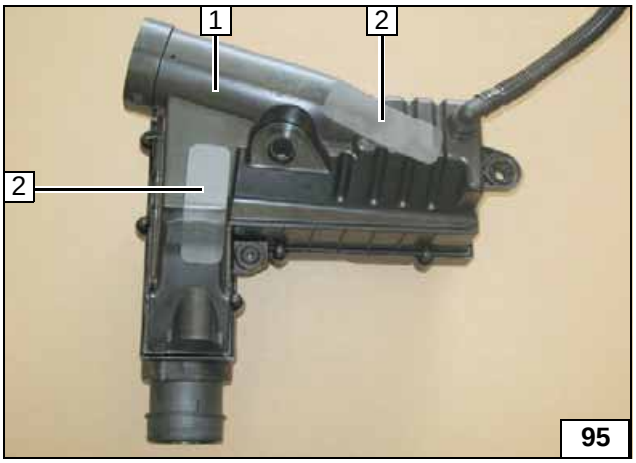

Ensure sufficient distance from neighbouring components.

**Aligning hoses**




Fix hose **A** and **C** with clip-type cable tie **1** [2x].

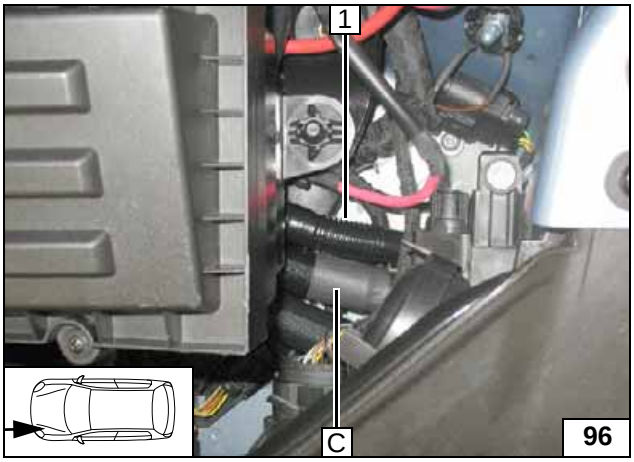
**Fastening hoses**




## All vehicles

Position of drain pipe may vary.
Glue rub protection **2** [2x] onto air filter box **1** as shown.

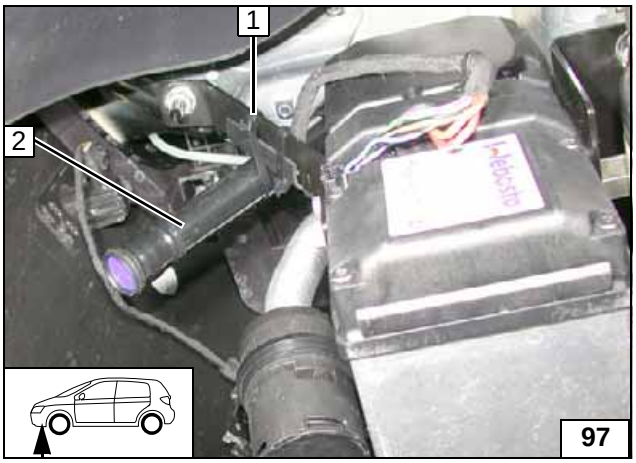
**Preparing air filter box**




**Version 1:**

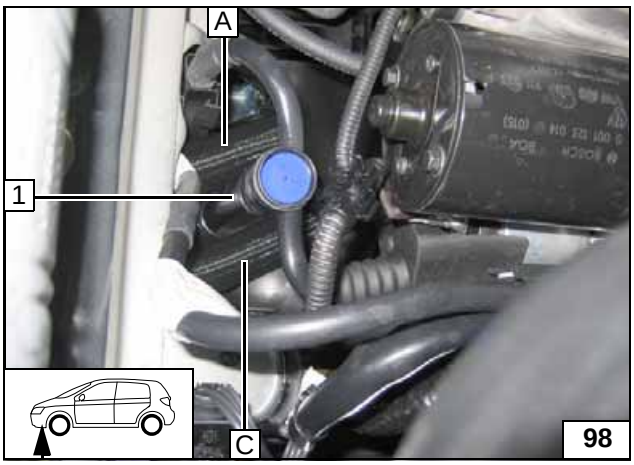
If drain pipe **1** present as shown, then route parallel to coolant hose **C**.

**Installing air cleaner housing**




If drain pipe **2** is present as shown, then fasten on strut with cable tie **1**.

**Fastening drain pipe on air filter box**

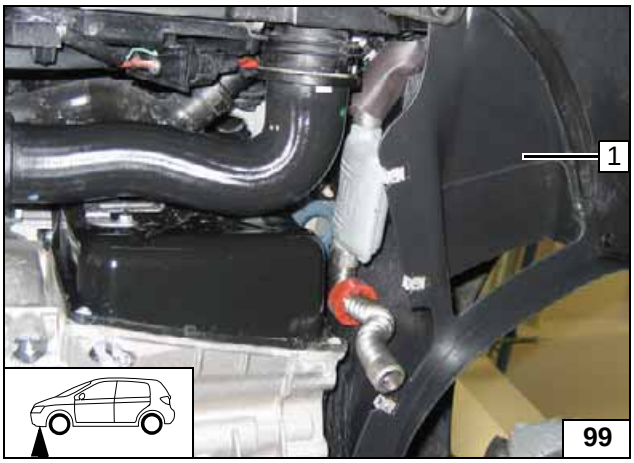



**Version 2:**

If drain pipe **1** is present as shown, then route between coolant hoses **A** and **C**.

**Installing air cleaner housing**

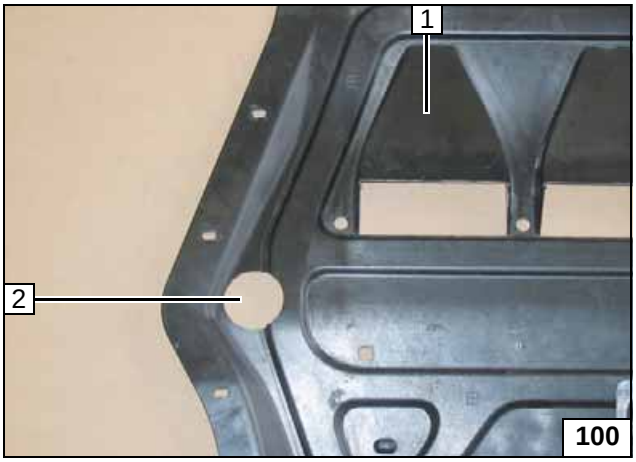
## Exhaust gas




Ensure sufficient space between exhaust end section and transmission and wheel well trim. (Figure shows vehicle with DSG)

**1** Wheel well trim

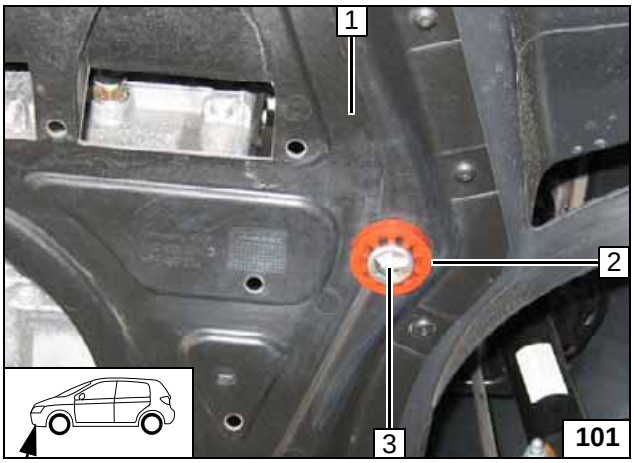
**Aligning exhaust end section**




Remove insulation at position **2** if present.

**1** Underride protection
**2** 42 mm dia. hole

**Hole in underride protection**




Align exhaust end section **3** flush on red rubber isolator **2**.

**1** Underride protection

**Inserting rubber isolator**

## Final Work

**WARNING!**
Mount removed parts in reverse order.
Check all hoses, spring and Caillau clamps, as well as all electrical connections for firm seating.
Secure all loose cables using cable ties.
Spray the heater components with anti-corrosion wax (Tectyl 100K, Order No. 111 329).

- Connect the battery
- Fill and bleed the coolant circuit according to the vehicle manufacturer's specifications.
- Set the digital timer, teach the Telestart
- Adjust vehicle heater in accordance with "Operating Instructions for End Customer".
- Check the proper functioning of the parking heater, see the operating instructions/installation instructions.
- File included vehicle-specific "Operating Instructions for End Customer" in vehicle logbook.
- Place the "Switch off parking heater before refuelling" sticker near the filler neck.

## Reduce sensitivity of passenger compartment monitoring

**WARNING!**
Observe the applicable repair manual of the respective vehicle.

- Connect the VAS tester 5051/52
- Call up the position "Adjustment - 10" in the central electrical box (BCM).
- Select channel 15
- Input the new value "100" (the value 100 corresponds to 50%)
- Save these settings

Webasto
Feel the drive

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## Operating Instructions for End Customer

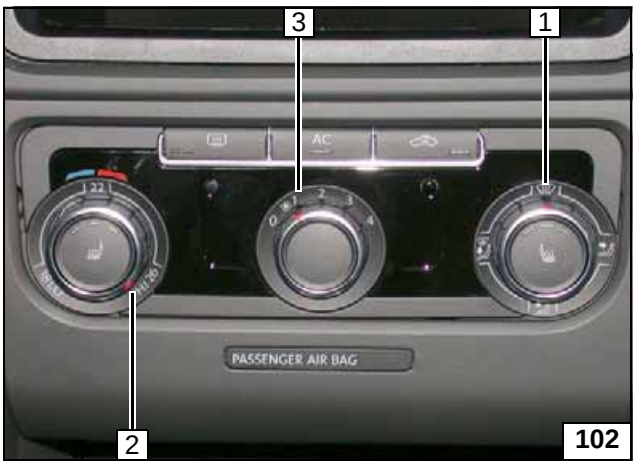
Please remove page and add to the vehicle operating instructions.

**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.

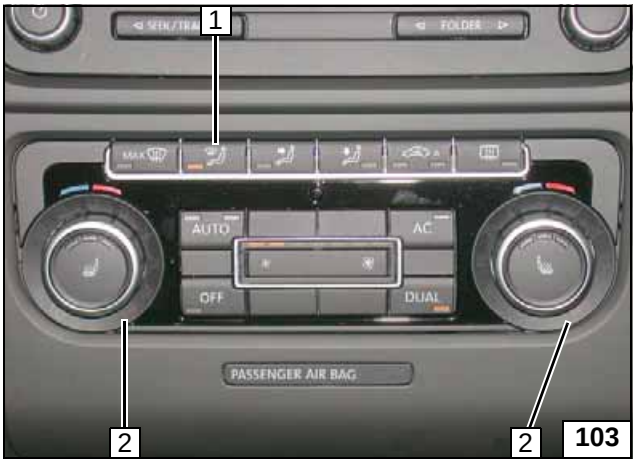
Before parking the vehicle, make the following settings:

**Climatic**




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

**Climatronic**




**1** Air outlet to windscreen
**2** Set temperature on both sides to "HI".