# Water Heater

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

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

# Installation Documentation

# Fiat 500

Petrol and diesel
from model year 2007
Left-hand drive vehicle
Manual air-conditioning
Automatic air-conditioning model year 2007 - 2011
Not for headlight washer system!

**WARNING!**

Hazard warning:

The improper installation or repair of Webasto heating and cooling systems can cause fire or the leakage of deadly carbon monoxide, leading to serious injury or death.

To install and repair Webasto heating and cooling systems you need to have completed a special company training course and have the appropriate technical documentation, special tools and special equipment.
Only use genuine Webasto parts. See the Webasto air and water heaters accessories catalogue for this purpose.

**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.

## Table of Contents



## Validity

| Manufacturer | Model | Type | EG-BE No./ ABE |
|---|---|---|---|
| Fiat | 500 | 150 | e3 * 2001 / 116 * 0261 * ... |

| Engine type | Engine model | Output in kW | Displacement in cm³ |
|---|---|---|---|
| 312A2000 | Petrol | 63 | 875 |
| 169A4000 | Petrol | 51 | 1242 |
| 169A3000 | Petrol | 74 | 1368 |
| 169A1000 | Diesel | 55 | 1248 |

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.

**Note:**
When the vehicle is delivered, the fuel tank should only be half filled; drain off fuel if necessary.

## Heater / Installation Kit

| Quantity | Description | Order No.: |
|---|---|---|
| 1 | Retail accessories *Thermo Top E / C* | See price list |
| 1 | Installation kit for Fiat 500 Petrol and diesel | 1313387C |
| 1 | Heater control | See price list |

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

| Vehicle | Heater |
|---|---|
| Compact car | Thermo Top E |
| Mid-size car, estate car | Thermo Top C |

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 Fiat 500 Petrol and diesel vehicles - for validity, see page 2 - from model year 2007 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 E / 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 fuel hose).
Spray unfinished body areas, e.g. drilled holes, with anti-corrosion wax (Tectyl 100K, Order No. 111329).

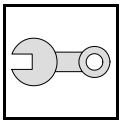
## Special Tools

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

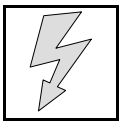
## Explanatory Notes on Document

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

**Mechanical system**

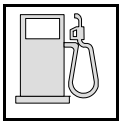


**Electrical system**



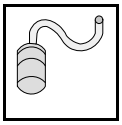
**Coolant circuit**

**Fuel**



**Exhaust gas**

**Combustion air**



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

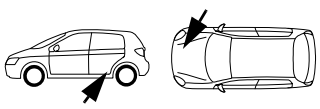
Specific risk of injury or fatal accidents.

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!**

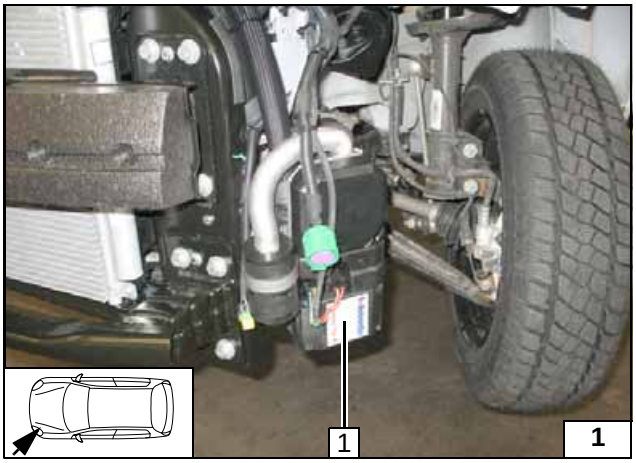
  

## Preliminary Work

WARNING!

- Open the fuel tank cap, ventilate the tank.
- Close the fuel tank cap again.
- Disconnect the battery "earth" connection.
- Depressurise the cooling system.
- Copy the factory number from the original type label to the duplicate type label.
- Remove the years that do not apply from the duplicate label.
- Attach the duplicate label (type label) in the appropriate place.
- Completely remove the battery together with the carrier.
- Remove the engine cover (plenum) with intake pipe (0.9 B only).
- Remove the air intake hose (1.4 litre only).
- Detach and remove the right and left-hand wheel well trim.
- Remove the bumper.
- Remove the horn on the left.
- Detach the central electrical box in the engine compartment on the left.
- Remove the underride protection of the engine compartment (if present).
- Remove the cover of the fuel line on the vehicle underbody.
- Detach the bracket of the fuel line/fuel tank ventilation on the right next to the fuel tank.
- Remove the storage compartment on the left next to the steering wheel.
- Remove the cover of the central electrical box in the footwell of the driver's side.

Remove page 36 "Operating Instructions for End Customer" and add to the vehicle operating instructions.




## Heater Installation Location

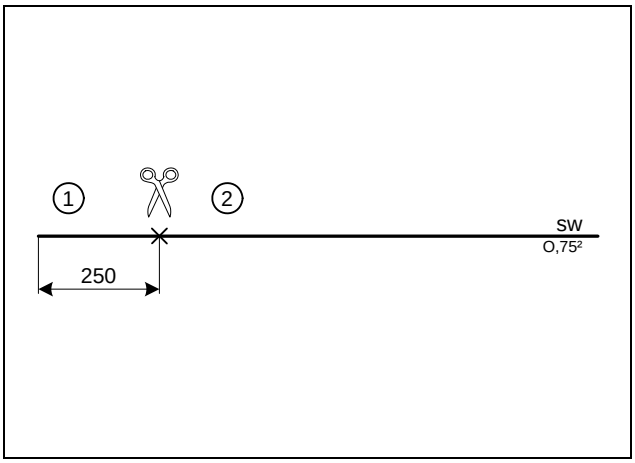
**1** Heater

**Installation location**

## Preparing Electrical System

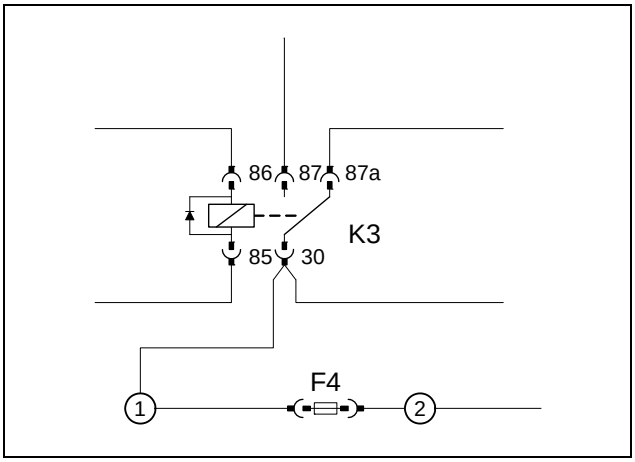
**Only with automatic air-conditioning**

**Cutting wires to length**




Produce connections as shown in wiring diagram. Install wire section **2** in the protective sleeving provided.

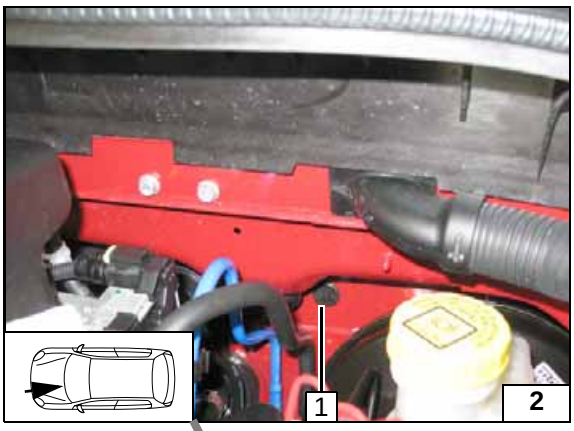
**Preparing fuse F4**



## Electrical System

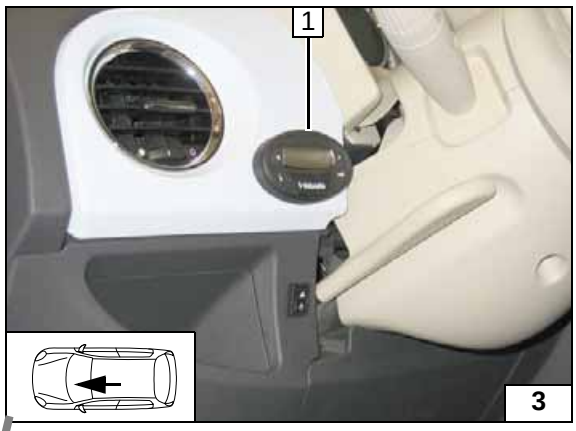
### Wiring harness pass through

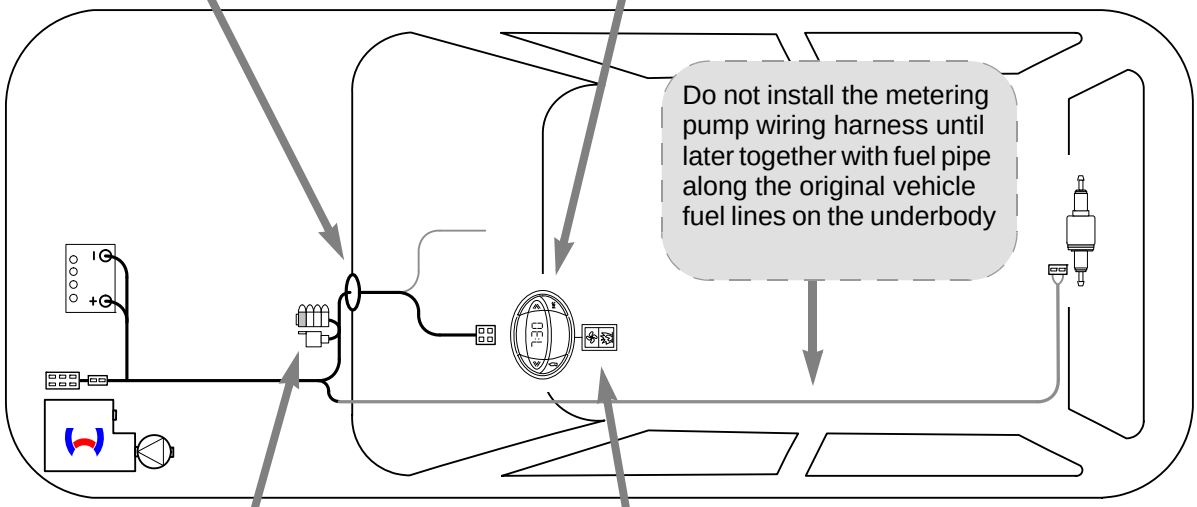
Route wiring harness of digital timer and black (sw) wire of fuse F4 with automatic air-conditioning through protective rubber plug **1** into passenger compartment.



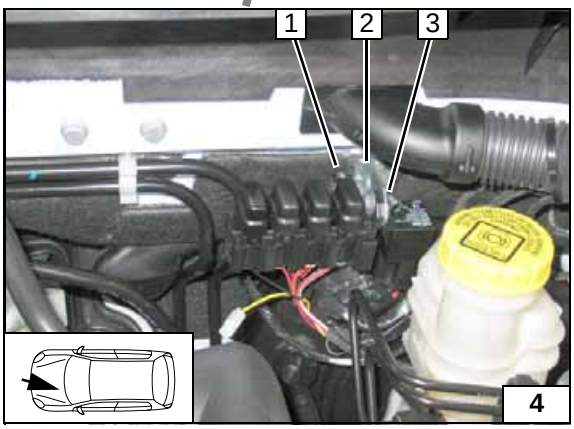

### Digital timer

**1** Digital timer



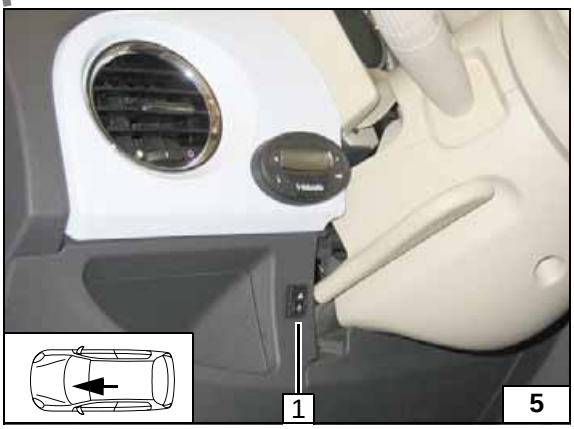

Wiring harness routing diagram




### Fuse holder, relay K3

Fuse F4 only with automatic air-conditioning

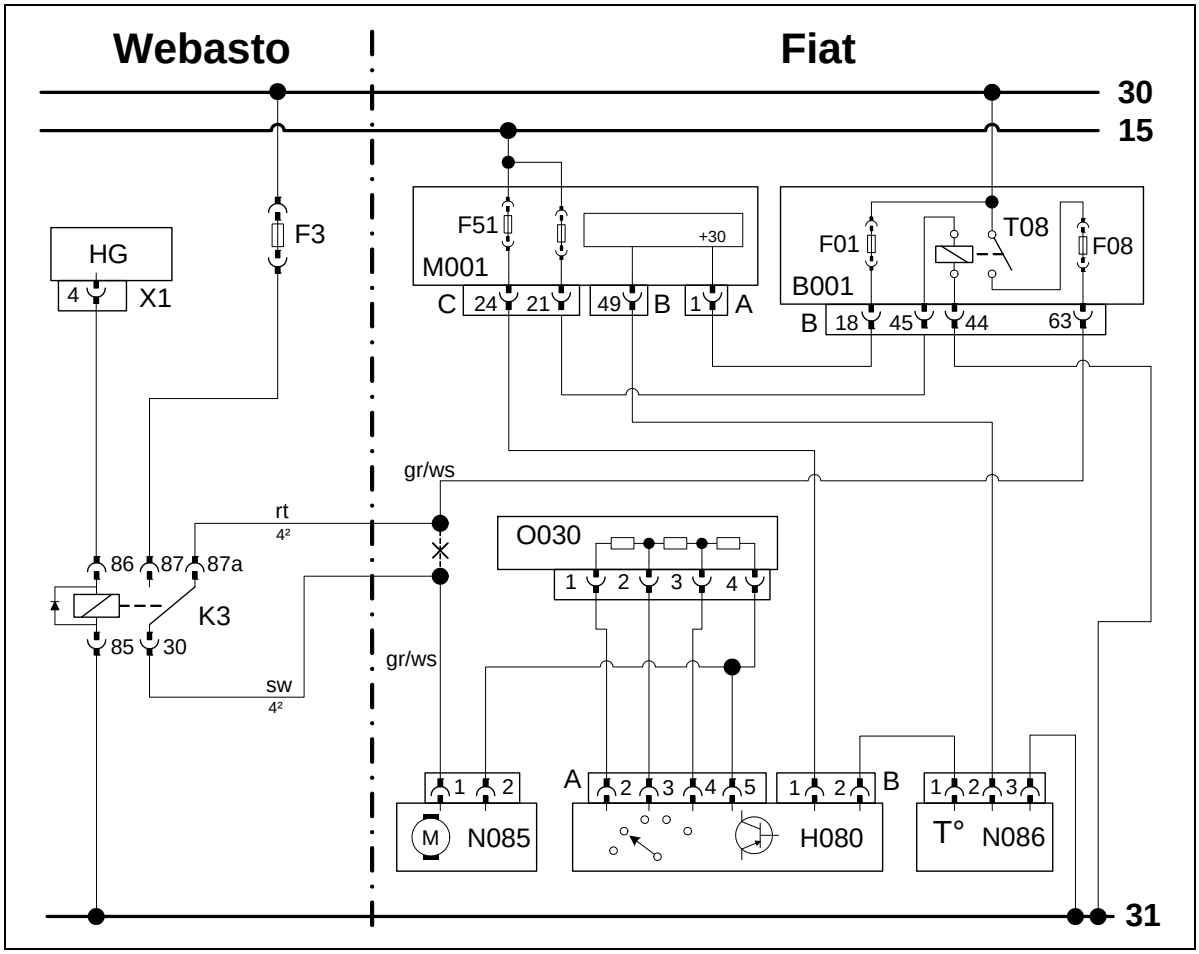
**1** Original vehicle stud bolt, plastic nut
**2** Angle bracket
**3** Retaining plate of fuse holder, M5x16 bolt, washers, angle bracket, K3 relay, M5 nut



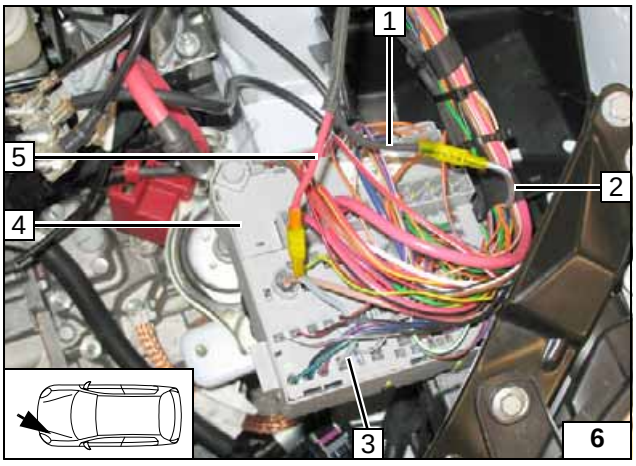

### Summer / winter switch option

**1** Summer/winter switch, drilled hole 12 mm dia.

## Fan Controller for Manual A/C




| Webasto components | | Vehicle components | | Colours and symbols | |
|---|---|---|---|---|---|
| HG | Heater TT-C/E | M001 | Body computer | rt | red |
| X1 | 6-pin heater connector | B001 | Central electrical box in engine compartment | ws | white |
| F3 | 25A fuse | O030 | Resistor group | sw | black |
| K3 | Fan relay | N085 | Fan motor | gr | grey |
| | | T08 | Fan relay | | |
| | | N086 | Electr. thermostat | | |
| | | F51 | 7.5A fuse | | |
| | | F01 | 60A fuse | | |
| | | F08 | 30A fuse | **X** | Cutting point |
| | | H080 | Switch/A/C control panel | Wiring colours may vary. | |




Connection on fan relay T08 of central electrical box in engine compartment **4**.
Produce connections as shown in wiring diagram.

**1** Black (sw) wire from K3/30
**2** Grey/white (gr/ws) wire of fan motor N085, Pin 1
**3** Grey/white (gr/ws) wire of connector B from B001, Pin 63
**5** Red (rt) wire from K3/87a

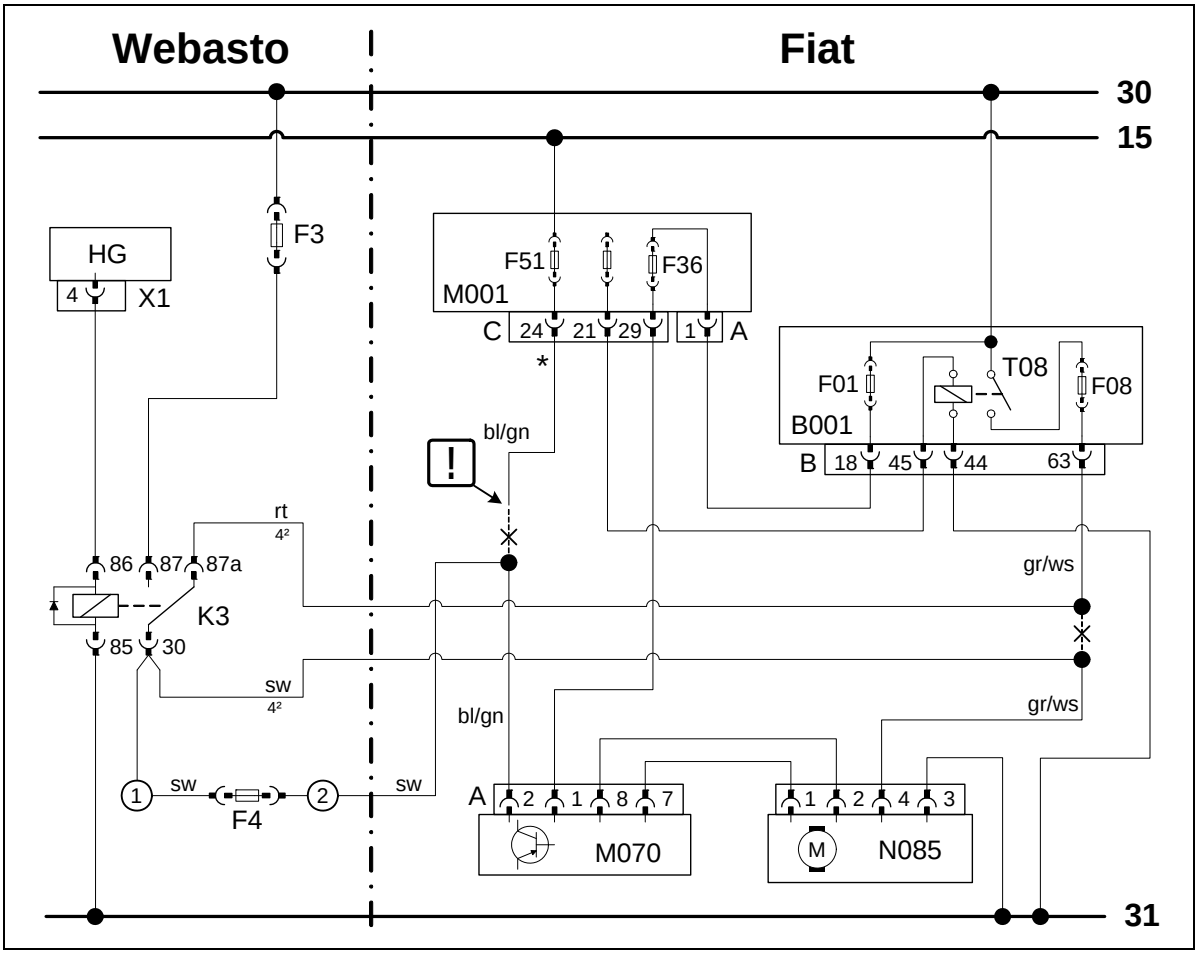
**Wiring diagram**

**Legend**

**Connection to fan relay**

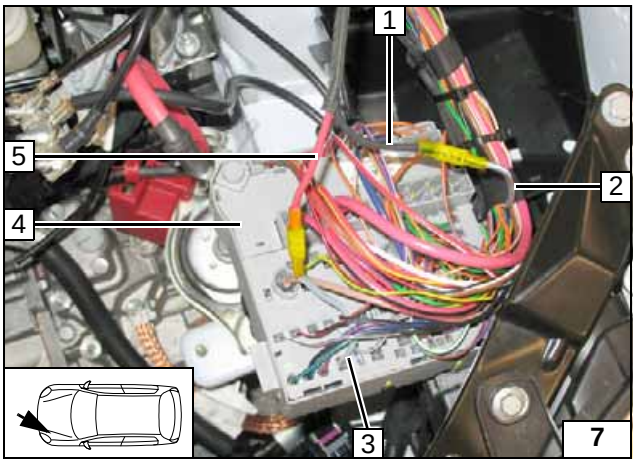
## Fan Controller for Automatic A/C up to 2011

Wiring diagram




Legend

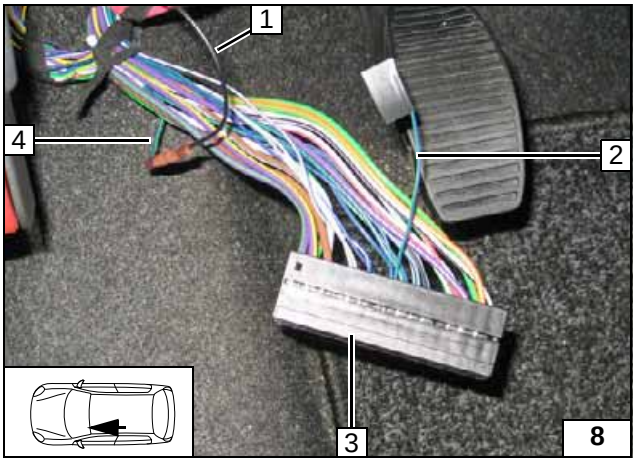
| Webasto components | | Vehicle components | | Colours and symbols | |
|---|---|---|---|---|---|
| HG | Heater TT-C/E | M001 | Body computer | rt | red |
| X1 | 6-pin heater connector | B001 | Central electrical box in engine compartment | ws | white |
| K3 | Fan relay | M070 | A/C control panel | sw | black |
| F3 | 25A fuse | N085 | Fan motor | gr | grey |
| F4 | 7.5A fuse | T08 | Fan relay | gn | green |
| | | F36 | 10A fuse | bl | blue |
| | | F51 | 7.5A fuse | * | Pin 24 can be connected to 2 wires (depending on equipment), determine wire to M070 A2. |
| | | F01 | 60A fuse | | |
| | | F08 | 30A fuse | | |
| | | | | | |
| | | | | ! | Insulate wire ends and tie back |
| | | | | | |
| | | | | X | Cutting point |
| | | | | Wiring colours may vary. | |




Connection on fan relay T08 of central electrical box in engine compartment **4**.
Produce connections as shown in wiring diagram.

**1** Black (sw) wire from K3/30
**2** Grey/white (gr/ws) wire of fan motor N085, Pin 4
**3** Grey/white (gr/ws) wire of connector B from B001, Pin 63
**5** Red (rt) wire from K3/87a

**Connection to fan relay**

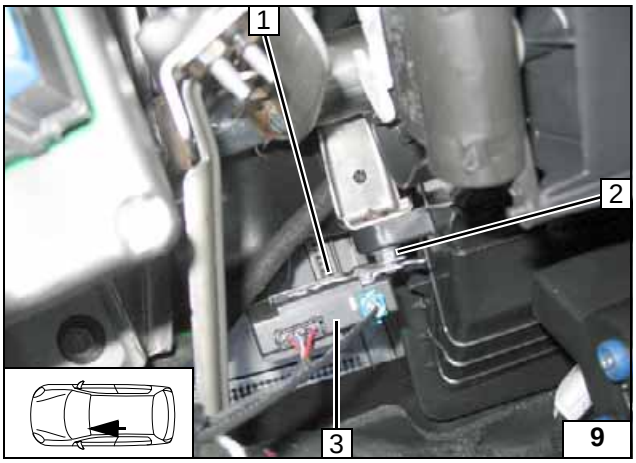



Connection on 32-pin of black (sw) connector C **3** from body computer M001.
Produce connections as shown in wiring diagram.

**1** Black (sw) wire from F4
**2** Insulate blue/green (bl/gn) wire of connector C, Pin 24 and tie back
**4** Blue/green (bl/gn) wire of A/C control panel M070 connector A, Pin 2

**Connecting A/C control panel**

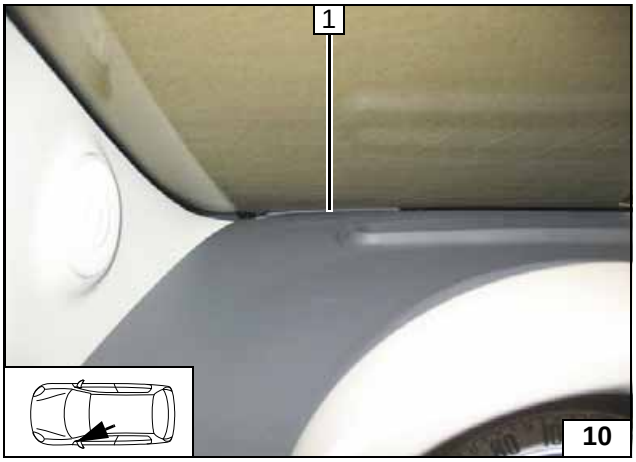



## Remote Option (Telestart)

Drill out bracket **1** to 6.5 mm dia. at position **2**.

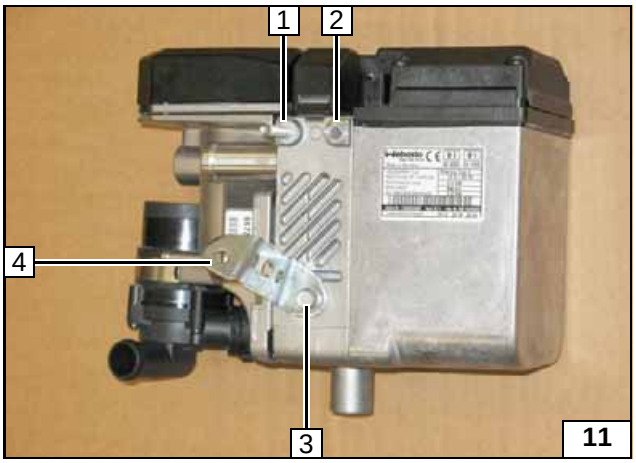
**2** M6 flanged nut on original vehicle stud bolt
**3** Receiver

**Installing receiver**




**1** Antenna

**Installing antenna**

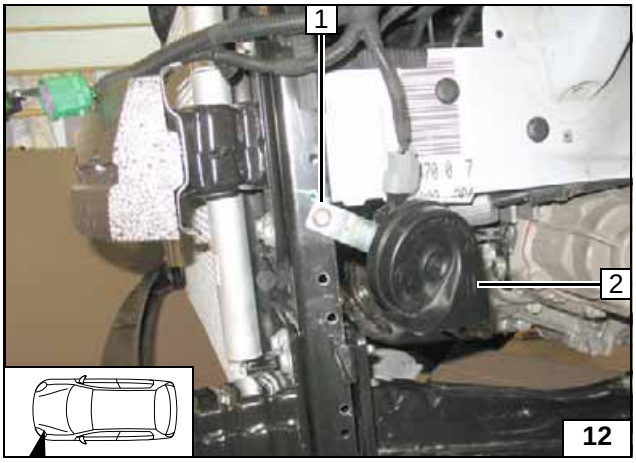



## Preparing Heater

Bend perforated bracket **C** according to template. Precut thread at position **2**.

**1** Ejot stud
**3** Ejot screw
**4** Perforated bracket **C**

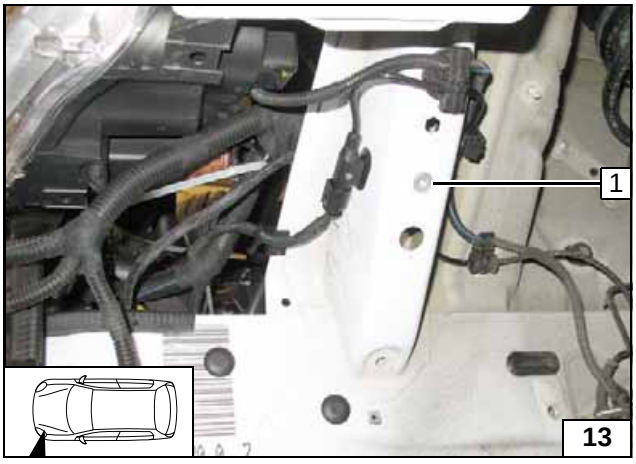
**Premounting heater**




## Preparing Installation Location

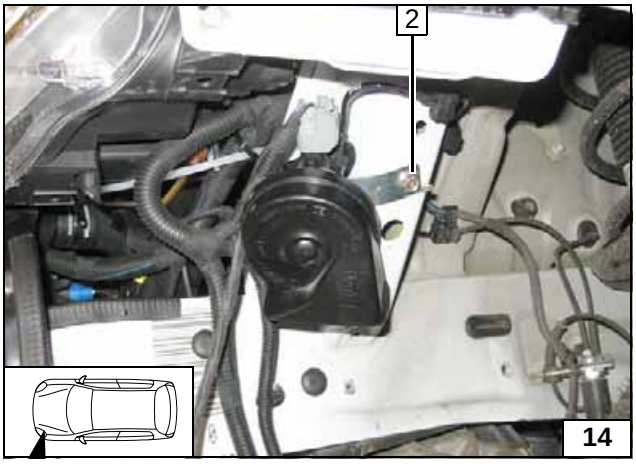
Remove horn **2** with bracket. Original vehicle bolt **1** will be reused.

**Removing horn**



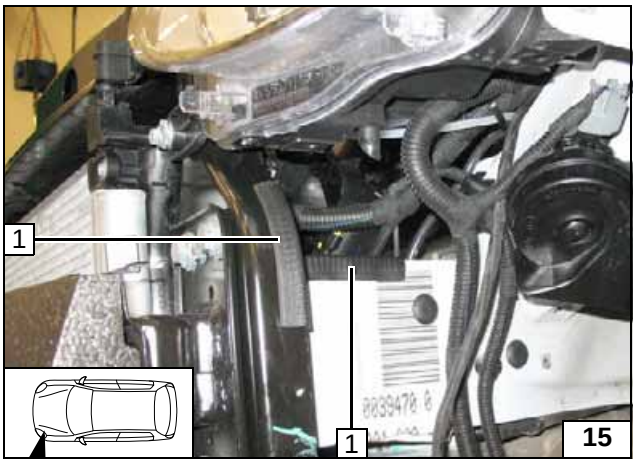

**1** Existing hole; mount rivet nut (aluminium)

**Installing rivet nut**




**1** Align horn
**2** Original vehicle bolt, spring lockwasher on rivet nut

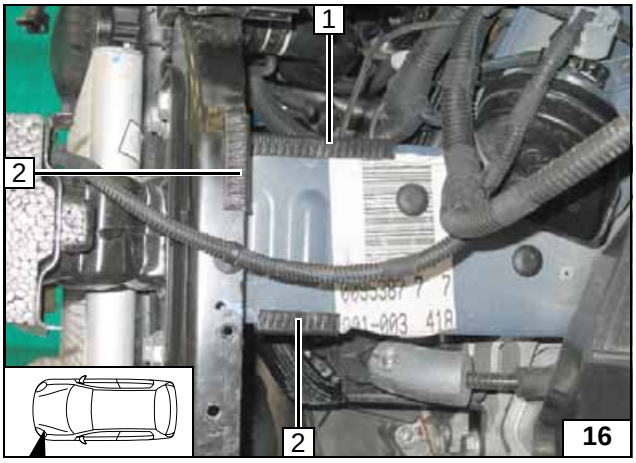
**Installing horn**




**Petrol**

**1** 100 mm edge protection [2x]

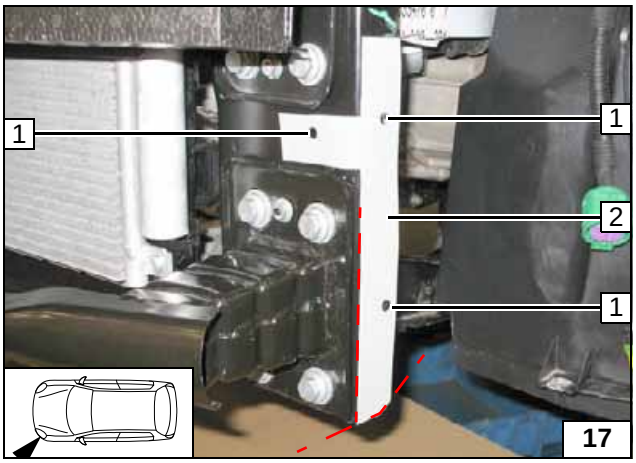
**Installing edge protection**




**Diesel**

**1** 100 mm edge protection
**2** 50 mm edge protection [2x]

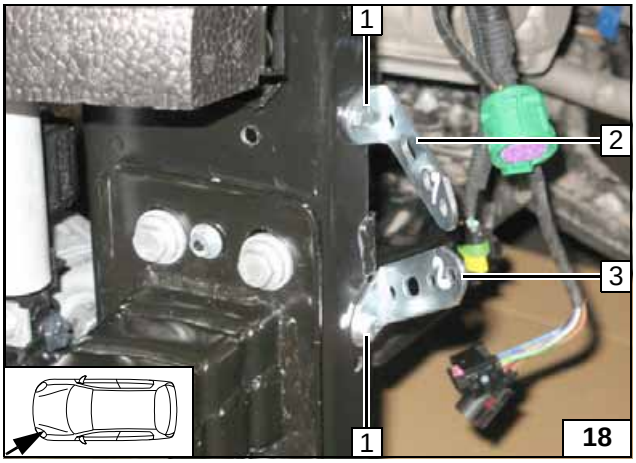
**Installing edge protection**




Cut out template **2** and lay on cross member (see marking).

**1** 7 mm dia. hole [3x]

**Holes in cross member**

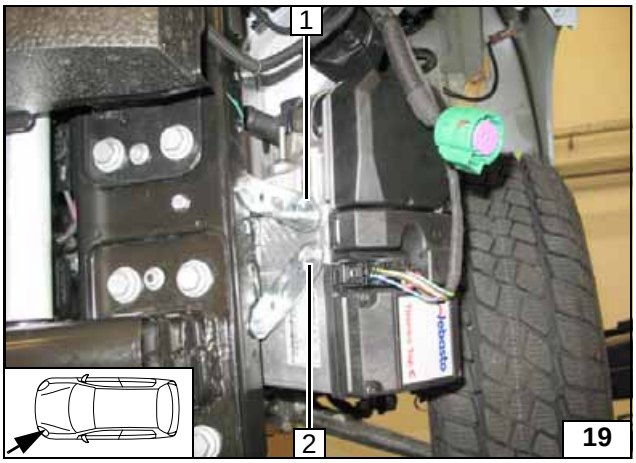



Bend perforated bracket **A** and **B** according to template.

**1** Loosely mount M6x20 bolt, flanged nut [2x each]
**2** Perforated bracket **A**
**3** Perforated bracket **B**

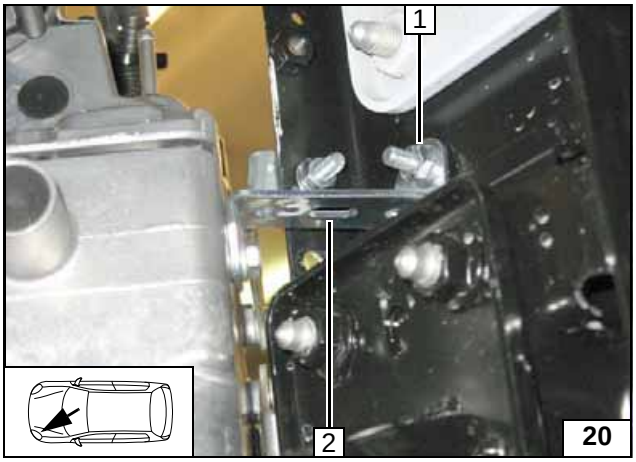
**Mounting perforated brackets loosely**

## Installing Heater



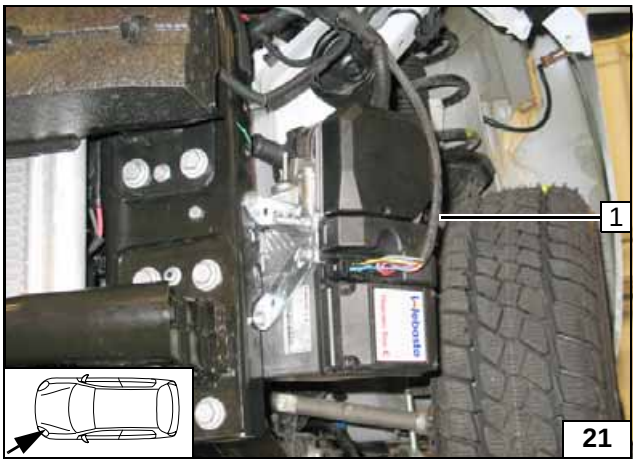

**1** Flanged nut on Ejot stud
**2** Ejot screw

**Installing heater**




**1** Loosely mount M6x20 bolt, flanged nut
**2** Perforated bracket **C**

**Installing heater**




Check position of all components and adjust if necessary. Check that they have freedom of movement.
Align heater and tighten all bolts. Connect wiring harness of heater **1**.

**Installing heater**

## Fuel

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

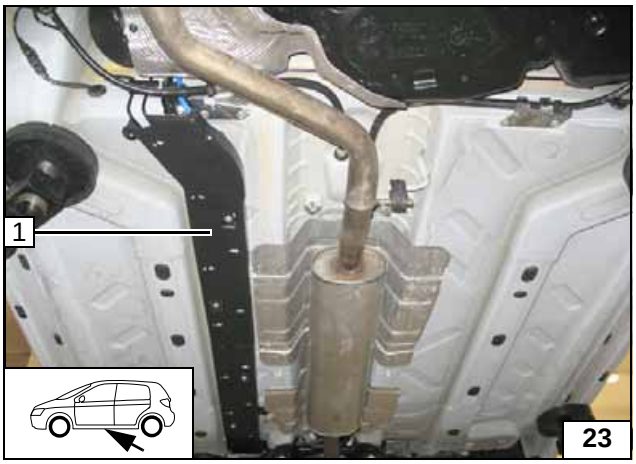
Catch any fuel running off in an appropriate container.

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.

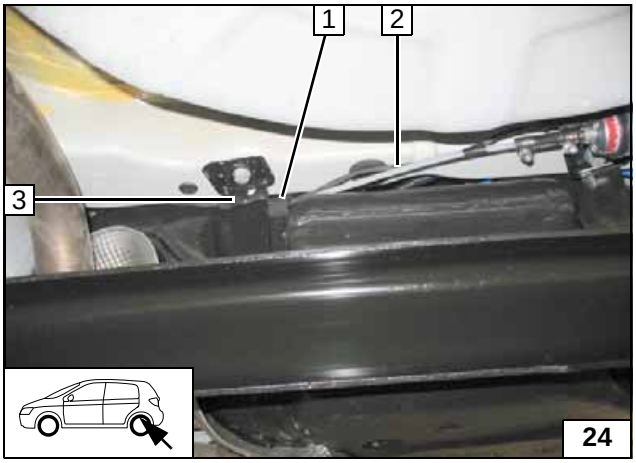

**1** Fuel line
**2** Hose section, 10 mm dia. clamp [2x]

**Connecting heater**



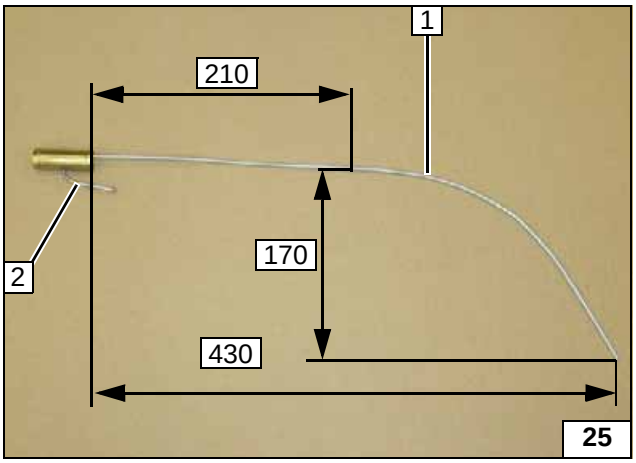

Route fuel line and wiring harness of metering pump behind cover **1** along original vehicle fuel lines to installation location of metering pump.

**Installing lines**



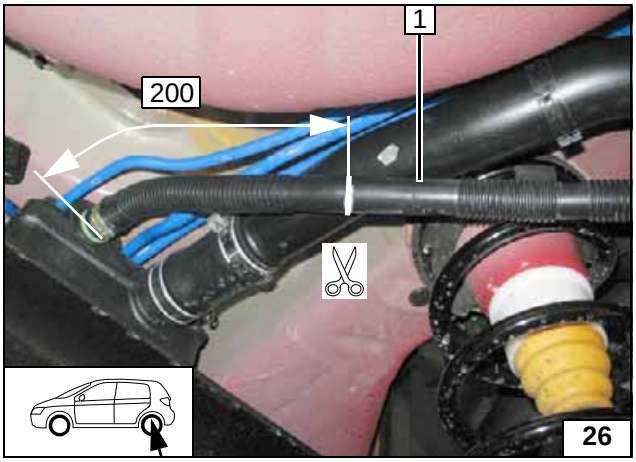

Cut open fuel hose **1** lengthwise, slide onto fuel line and wiring harness of metering pump **2** and secure on strut with cable tie **3**.

**Installing lines**



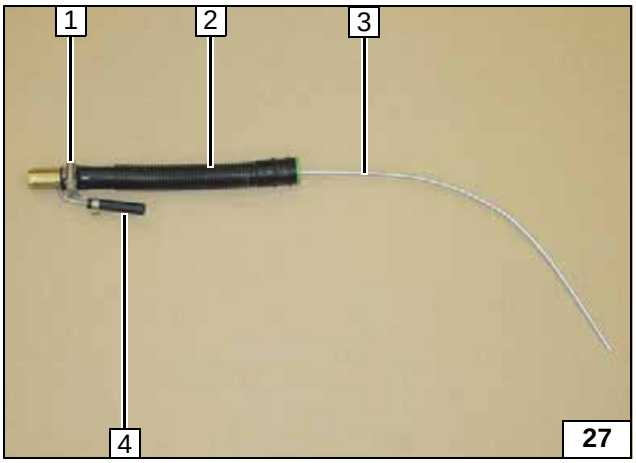

Shorten standpipe **1** by 210 mm and shape as shown. Bend connection piece **2** by 90°.

**Fuel extraction**



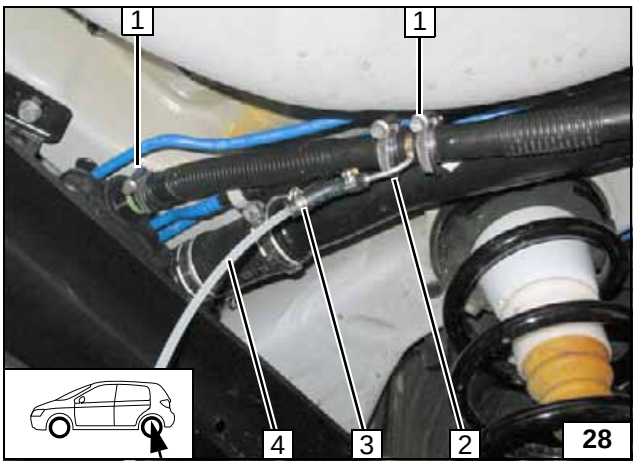

Remove fuel-tank vent line **1** from bracket and cut off approx. 200 mm before fuel tank connection piece. Remove section on connection piece.

**Cutting point**




**1** 16-24 mm dia. clamp
**2** Fuel-tank vent line
**3** Fuel standpipe
**4** Hose section, 10 mm dia. clamp

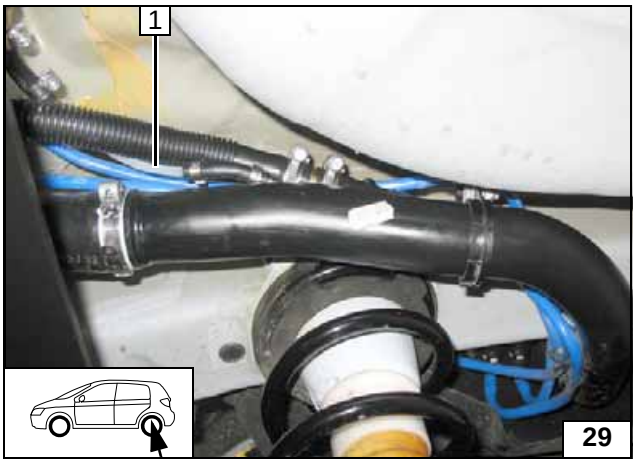
**Premounting fuel standpipe**




When installing, align standpipe of fuel standpipe **2** to fuel tank bottom.

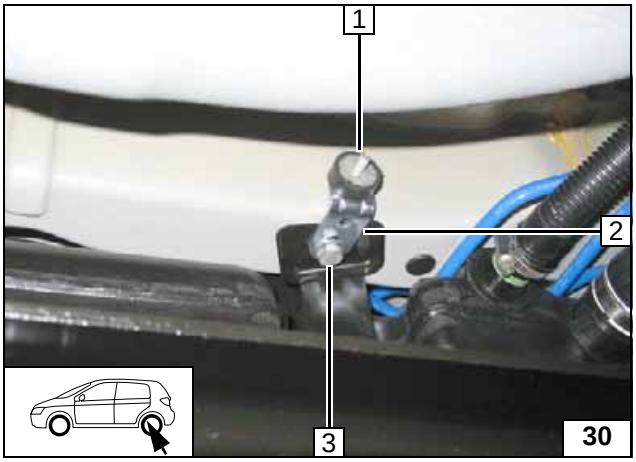
**1** 16-24 mm dia. clamp [2x]
**2** Fuel standpipe
**3** 10 mm dia. clamp
**4** Fuel line

**Installing fuel standpipe**



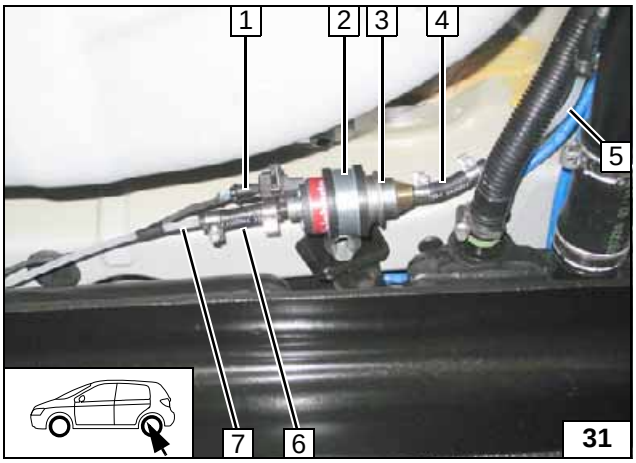

Insert fuel-tank vent line in bracket again. Route fuel line **1** to metering pump.

**Aligning fuel-tank vent line**




**1** Silent block, flanged nut
**2** Angle bracket
**3** Original vehicle bolt

**Installation location of metering pump**




Check the position of the components; adjust if necessary. Check that they have freedom of movement.

**1** Wiring harness of metering pump, connector mounted
**2** Rubber-coated p-clamp, flanged nut on silent block
**3** Metering pump
**4** Hose section, 10 mm dia. clamp [2x]
**5** Fuel line from fuel standpipe
**6** Hose section, 10 mm dia. clamp [2x]
**7** Fuel line from heater

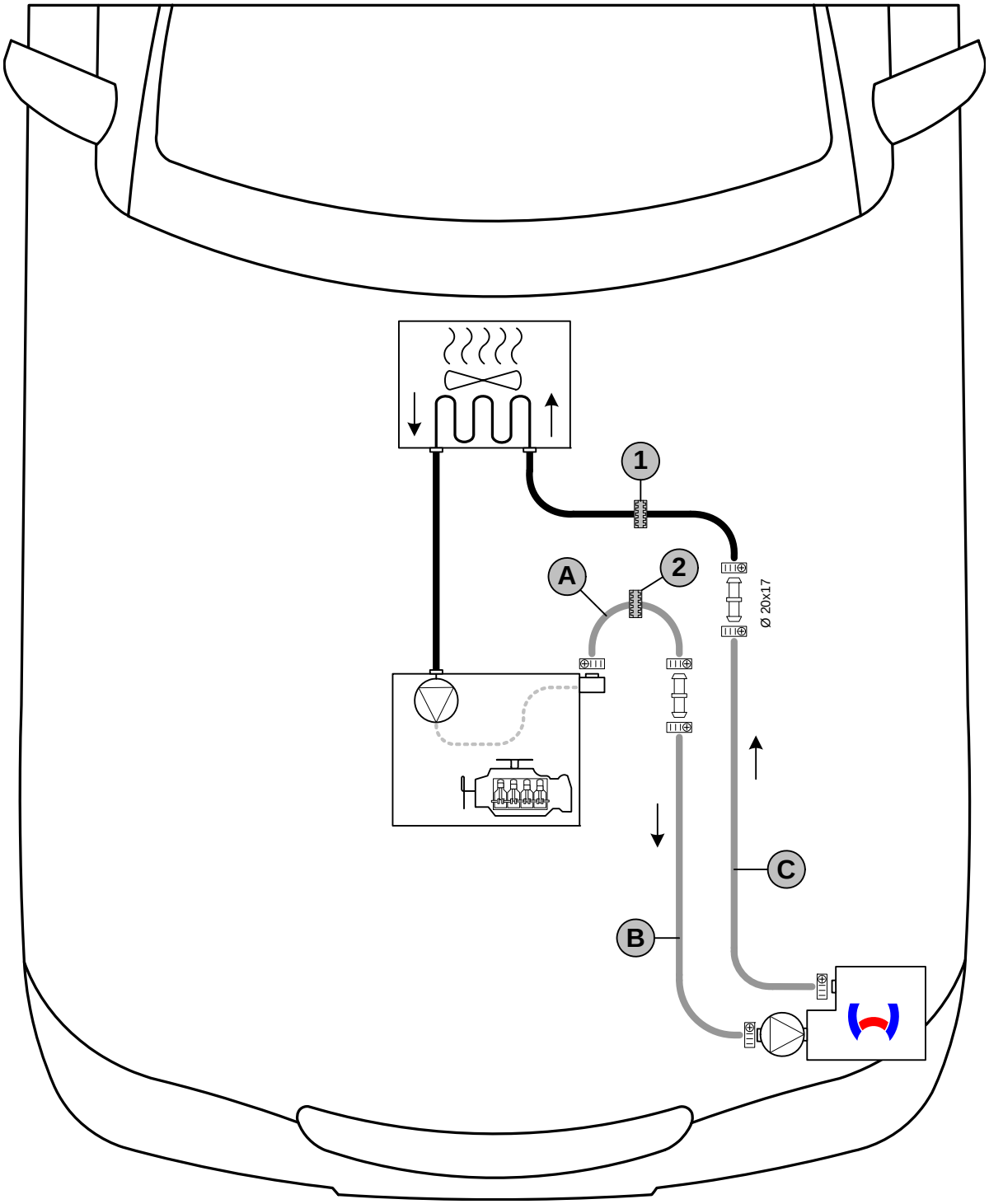
**Connecting metering pump**

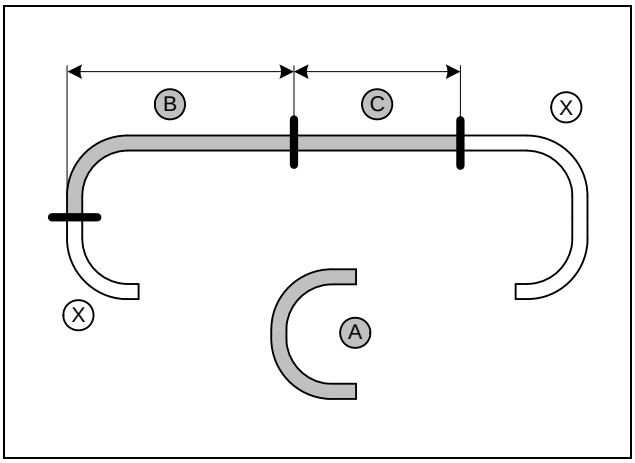
## Coolant Circuit for Petrol Vehicles

**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 hose cannot be damaged. When installing the hoses, the heater must be filled with coolant.
The connection should be "inline" based on the following diagram:

**Hose routing diagram**




All hose clamps = 20-27 mm dia.! All connecting pipes without a specific designation = dia. 20x20.
**1** = Black (sw) rubber isolator (with 1.2 liter engine).
**1** and **2** = Black (sw) rubber isolator (with 1.4l and 0.9l engine).

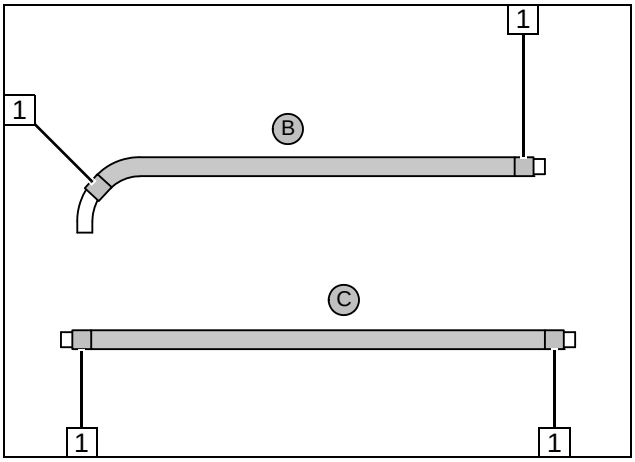



**1.2 B**

Hose **A** = 17x20mm 180° moulded hose
Discard section **X**.

**B** = 655
**C** = 720

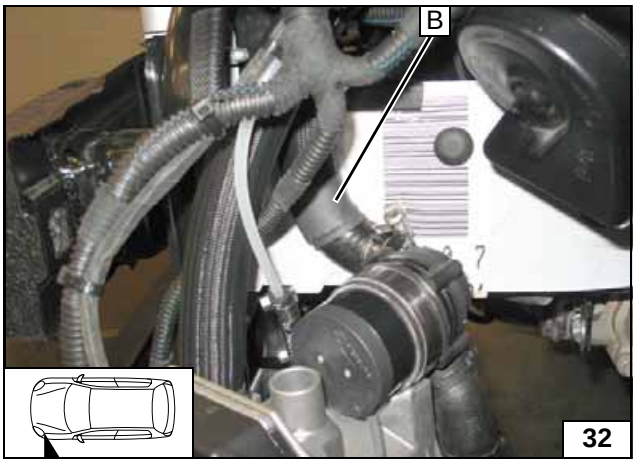
**Cutting hoses to length**



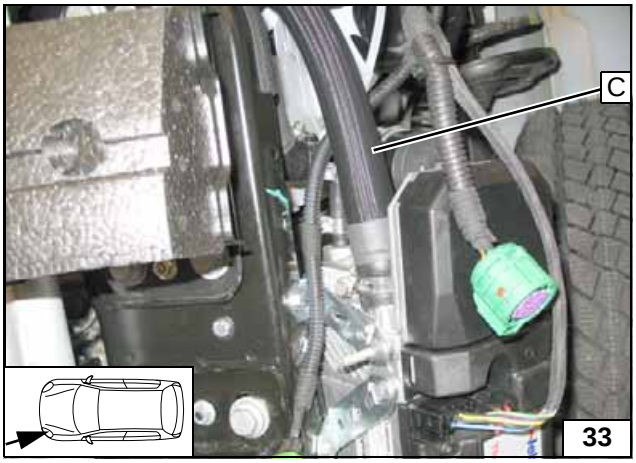

Push braided protection hoses onto hose **B** and **C** and cut to length.
Cut heat shrink plastic tubing to length.

**1** 25 mm long heat shrink plastic tubing [4x]

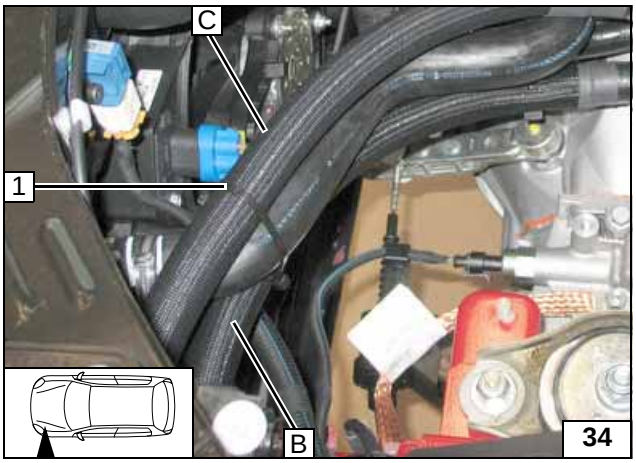
**Preparing hoses**




**Connecting heater inlet**

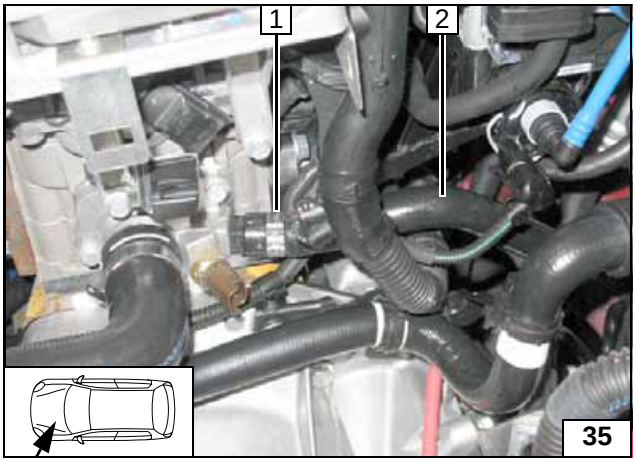



**Connecting heater outlet**



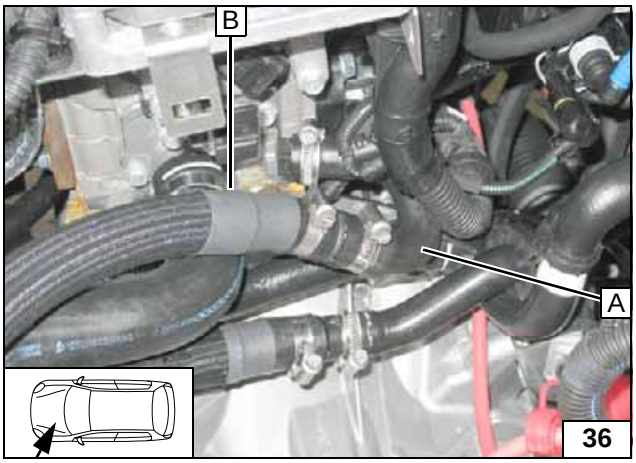

**1** Cable tie

**Routing in engine compartment**



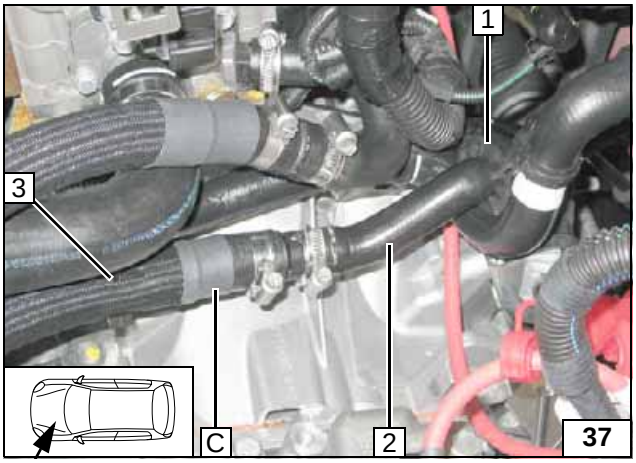

Disconnect hose to engine outlet/heat exchanger inlet **2** at connection piece of engine outlet. Discard clamp **1**

**Cutting point**




Fasten hose **A** with small diameter on connection piece on engine outlet.

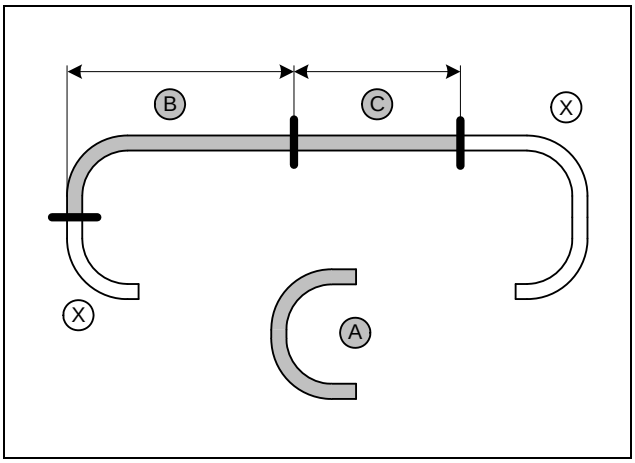
**Connecting engine outlet**




Ensure sufficient distance from neighbouring components.

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

**Connecting heat exchanger inlet**

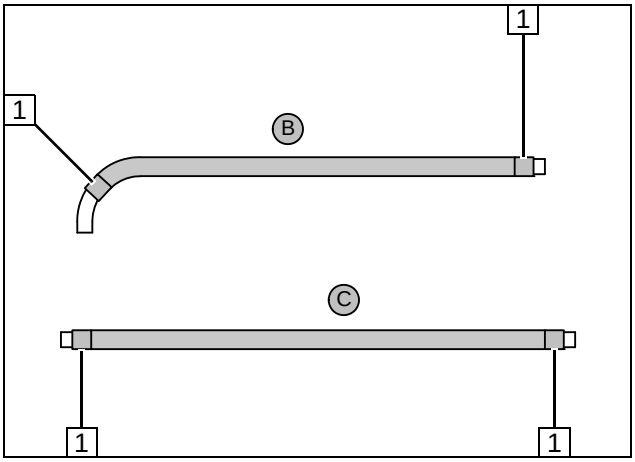



**1.4 B**

Hose **A** = 17x20mm 180° moulded hose
Discard section **X**.

**B** = 630
**C** = 720

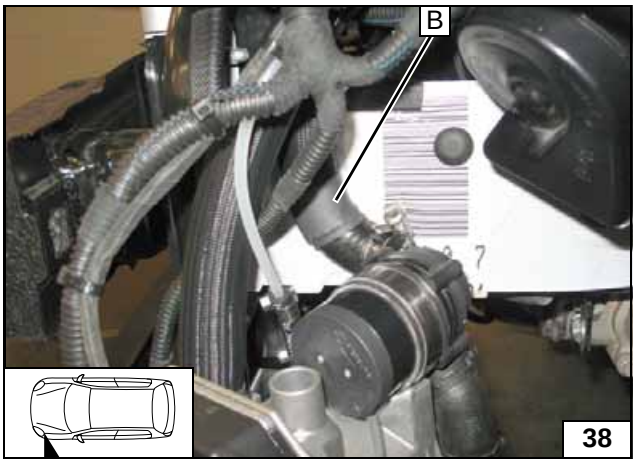
**Cutting hoses to length**



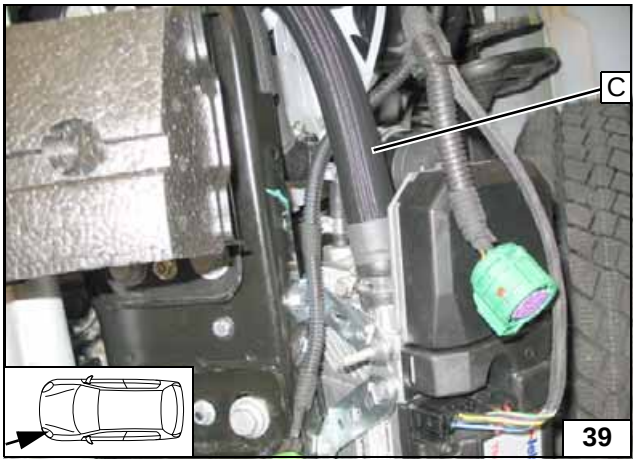

Push braided protection hoses onto hose **B** and **C** and cut to length.
Cut heat shrink plastic tubing to length.

**1** 25 mm long heat shrink plastic tubing [4x]

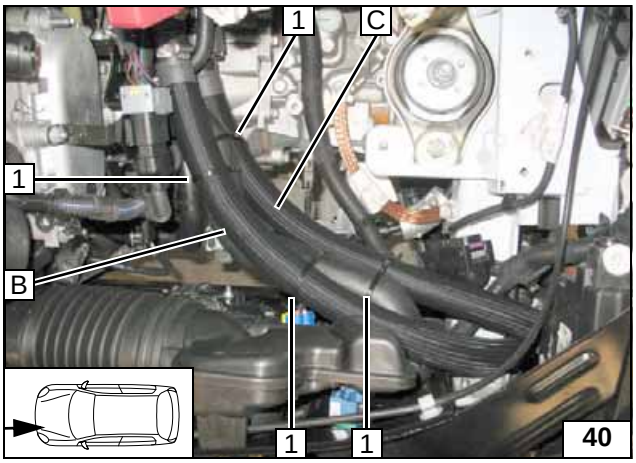
**Preparing hoses**




**Connecting heater inlet**

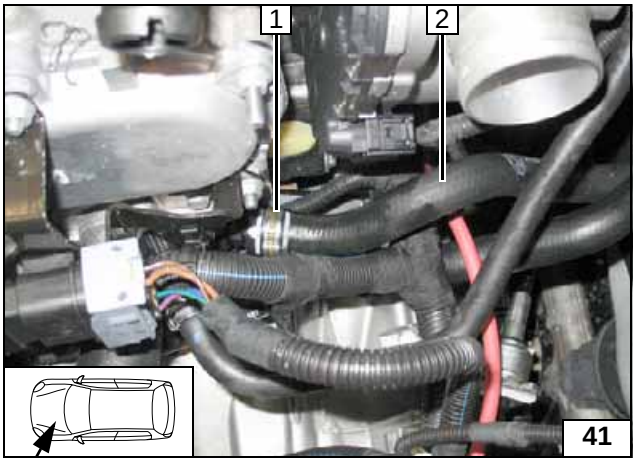



**Connecting heater outlet**



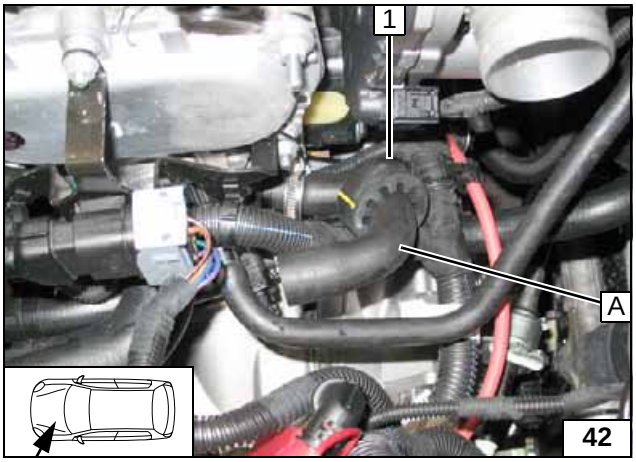

**1** Cable tie [4x]

**Routing in engine compartment**




Disconnect hose to engine outlet/heat exchanger inlet **2** at connection piece of engine outlet. Discard clamp **1**.

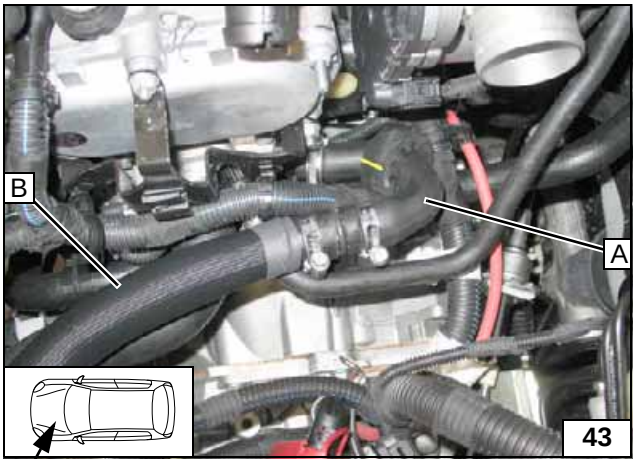
**Cutting point**



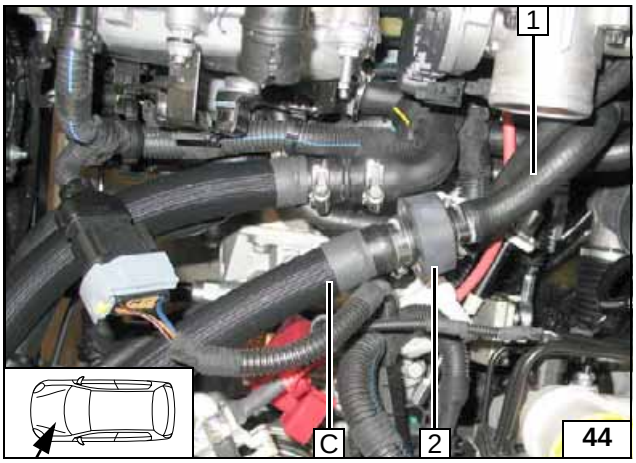

Fasten hose **A** with small diameter on connection piece on engine outlet.

**1** Black (sw) rubber isolator

**Connecting engine outlet**

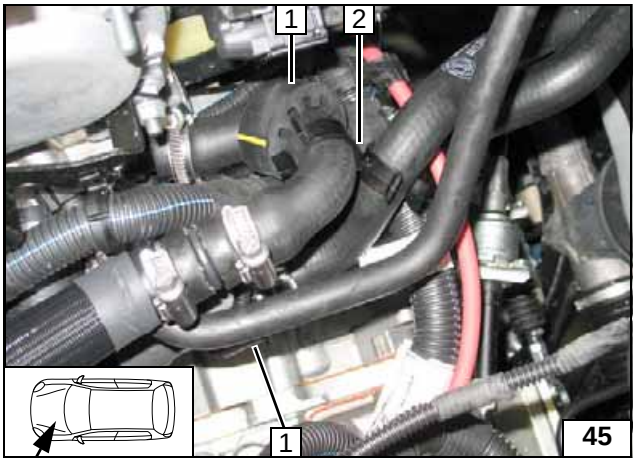



**Connecting engine outlet**




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

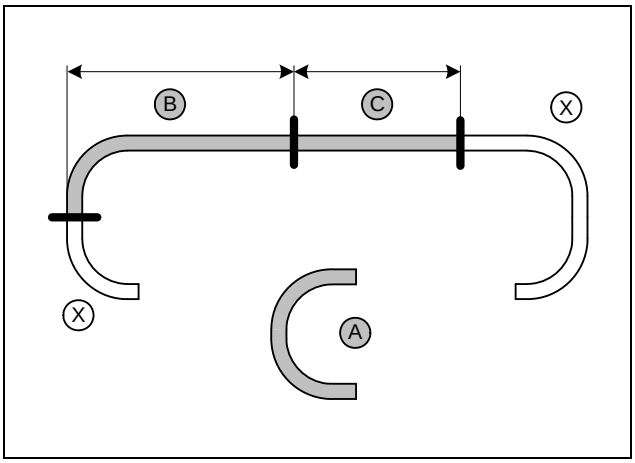
**Connecting heat exchanger inlet**




Align black (sw) rubber isolator **1** [2x].
Ensure sufficient distance from neighbouring components.

**2** Spacer bracket

**Aligning hoses**

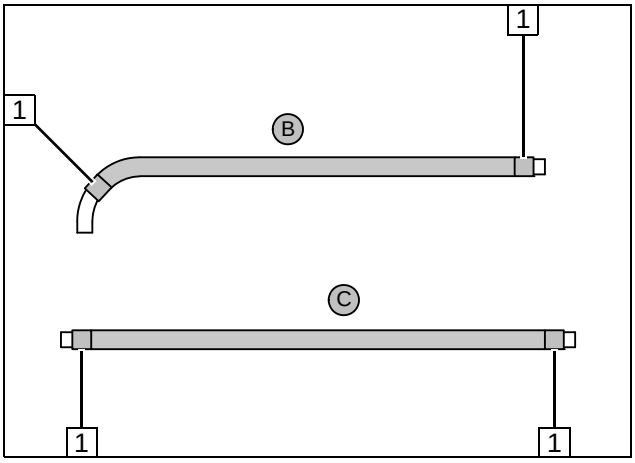



**0.9 B**

Hose **A** = 17x20mm 180° moulded hose
Discard section **X**.

**B** = 660
**C** = 710

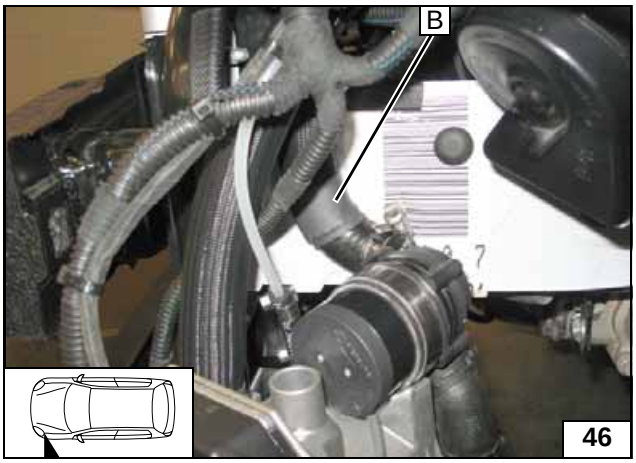
**Cutting hoses to length**



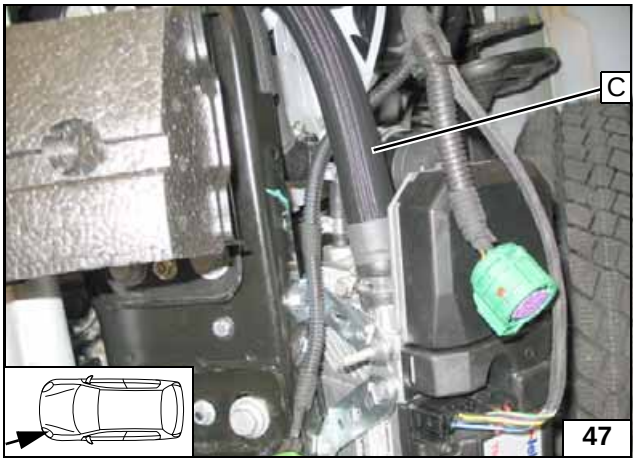

Push braided protection hoses onto hose **B** and **C** and cut to length.
Cut heat shrink plastic tubing to length.

**1** 25 mm long heat shrink plastic tubing [4x]

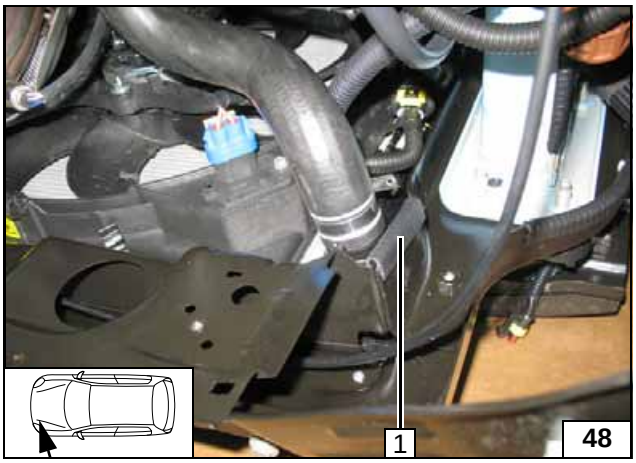
**Preparing hoses**




Connecting heater inlet

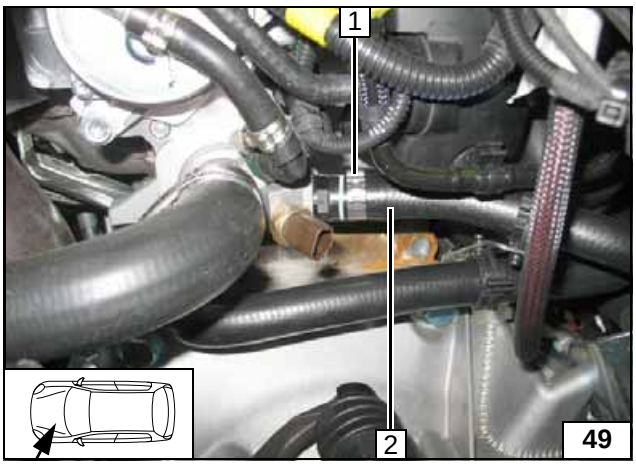



Connecting heater outlet




**1** 50 mm edge protection

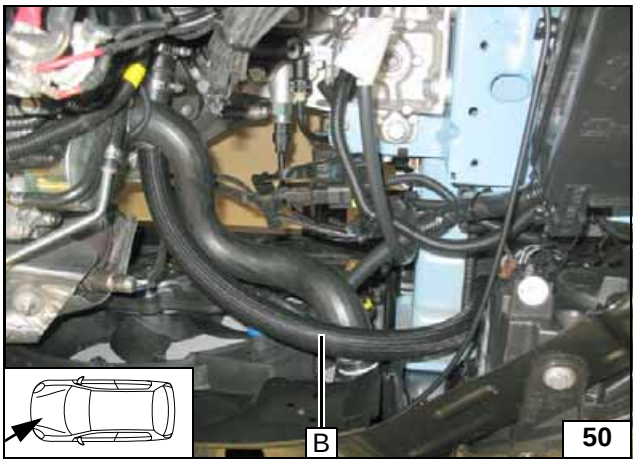
Installing edge protection



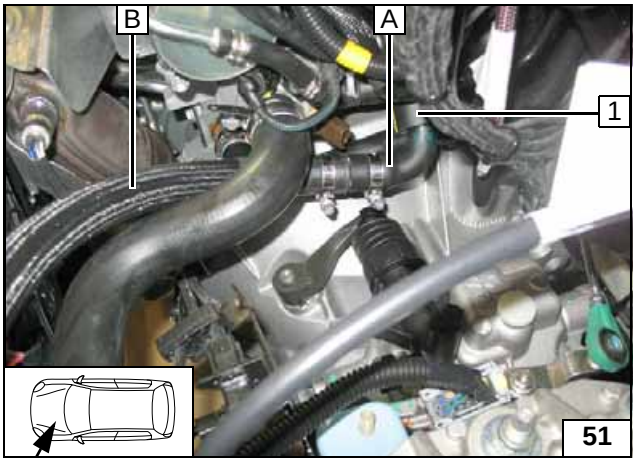

Disconnect hose to engine outlet/heat exchanger inlet **2** at connection piece of engine outlet. Discard clamp **1**

Cutting point



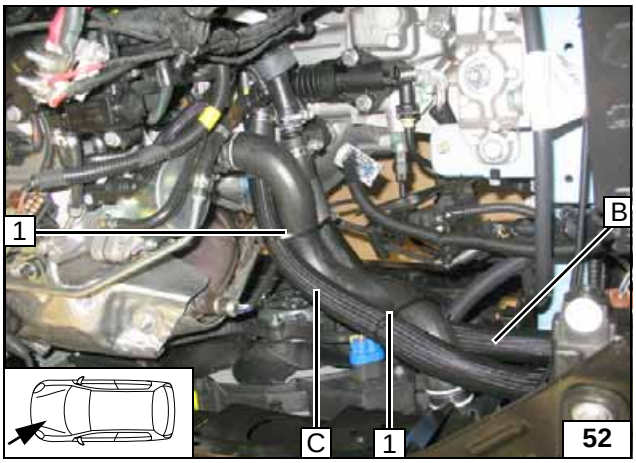

**Routing in engine compartment**



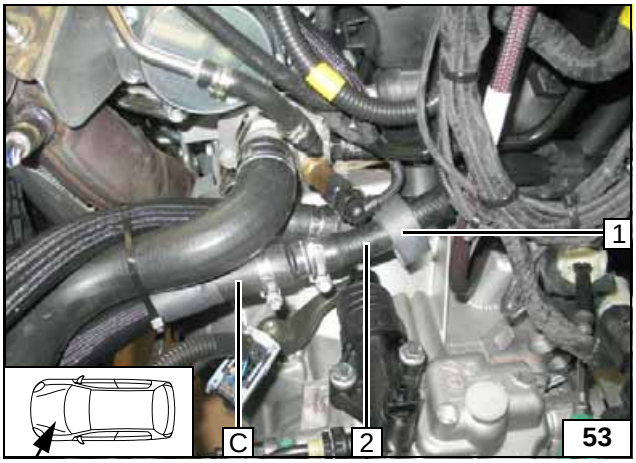

Fasten hose **A** with small diameter on connection piece on engine outlet.
Align black (sw) rubber isolator **1**.

**Connecting engine outlet**

**1** Cable tie




**Routing in engine compartment**




Align black (sw) rubber isolator **1**.

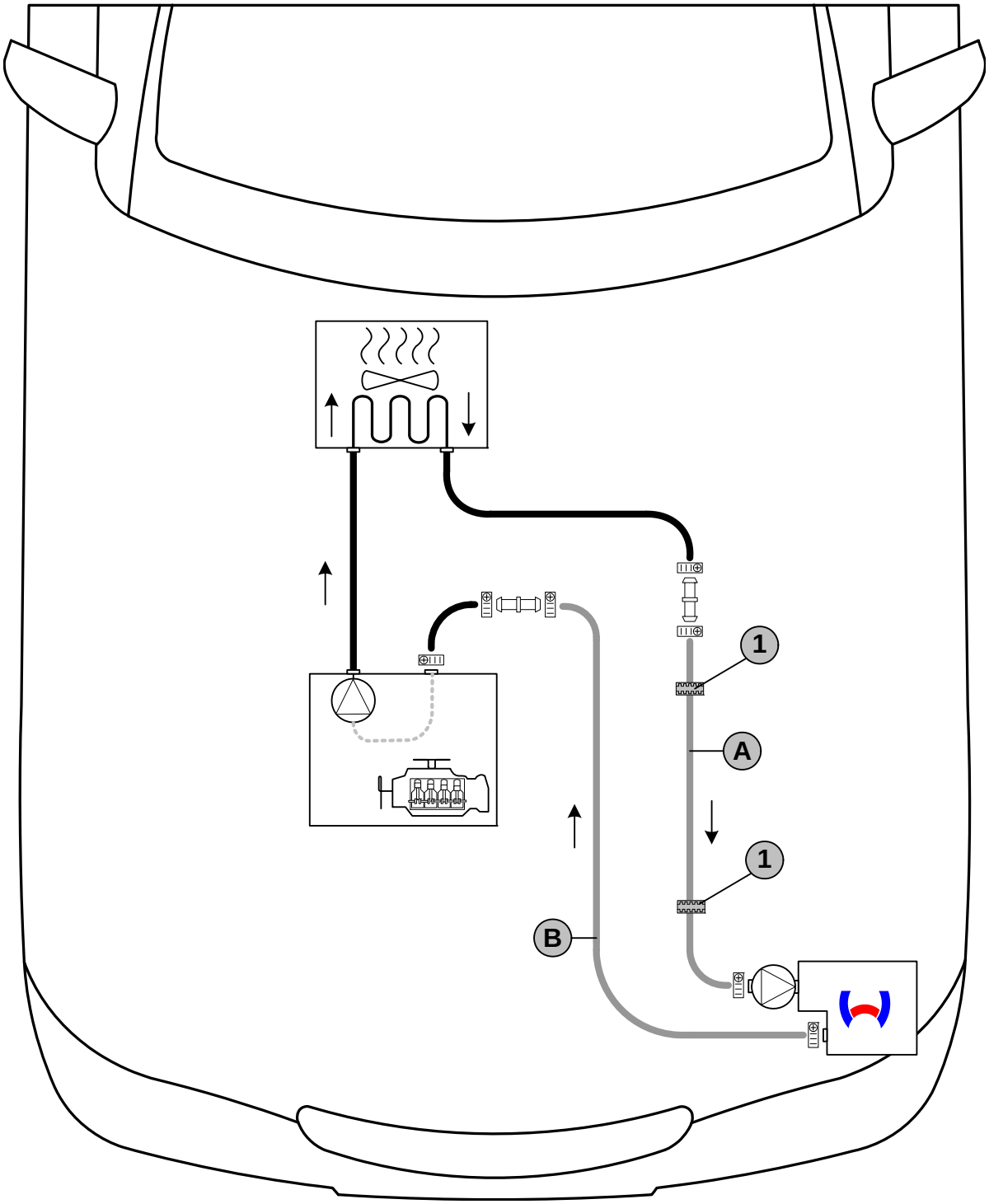
**2** Hose on heat exchanger inlet

**Connecting heat exchanger inlet**

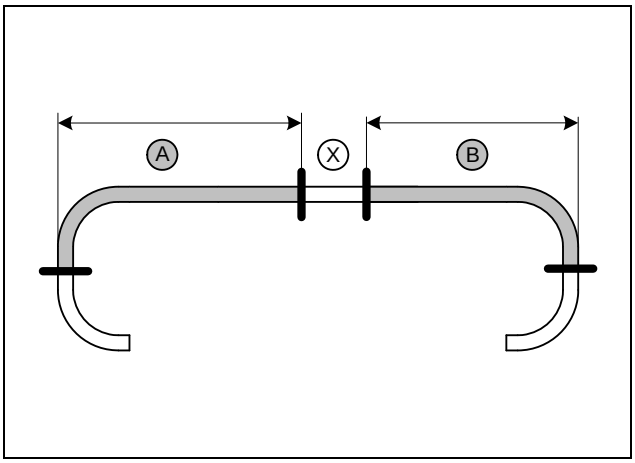
## Coolant Circuit for Diesel Vehicles

**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 hose cannot be damaged. When installing the hoses, the heater must be filled with coolant.
The connection should be "inline" based on the following diagram:

**Hose routing diagram**



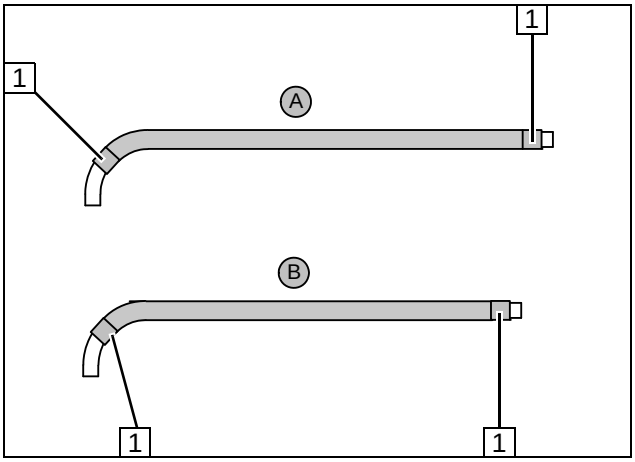

All hose clamps = 20-27 mm dia.! All connecting pipes without a specific designation = 17x20mm dia.
**1** = Black (sw) rubber isolator [2x]!




Discard section **X**.

**A** = 610
**B** = 580

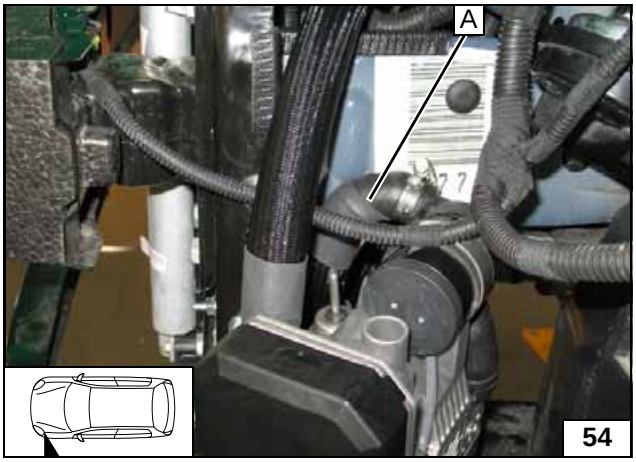
**Cutting hoses to length**



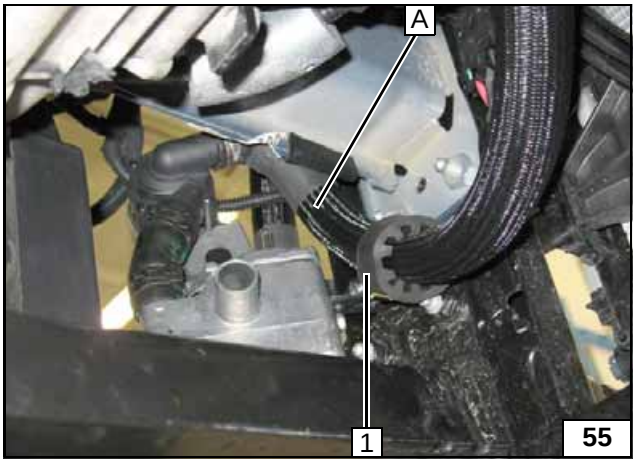

Push braided protection hoses onto hose **B** and **C** and cut to length.
Cut heat shrink plastic tubing to length.

**1** 25 mm long heat shrink plastic tubing [4x]

**Preparing hoses**



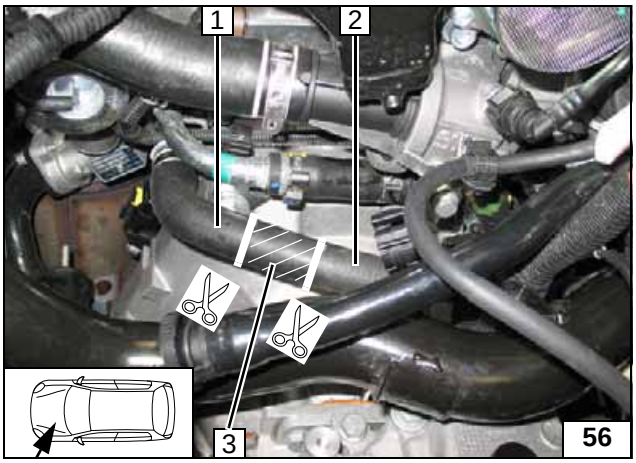

**Connecting heater inlet**




**1** Black (sw) rubber isolator

**Routing in engine compartment**

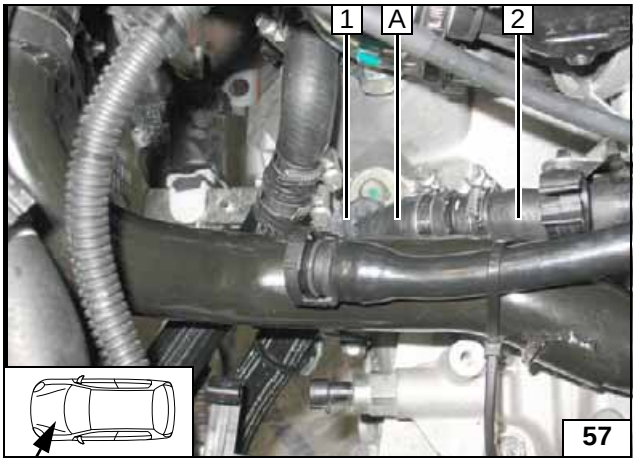
  




Cut out hose section **3** (40 mm).

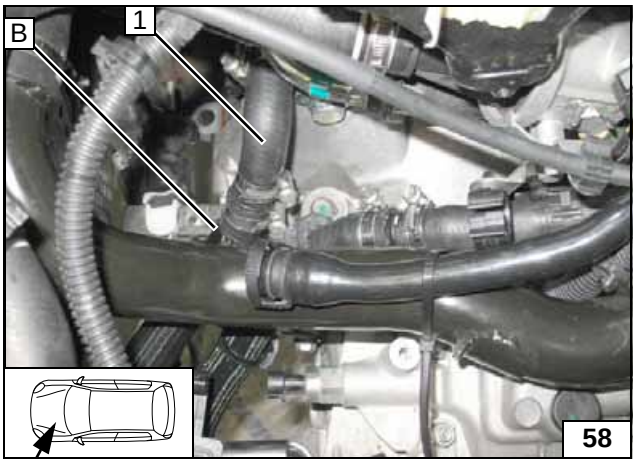
**1** Hose section on engine inlet
**2** Hose section on heat exchanger outlet

**Cutting point**



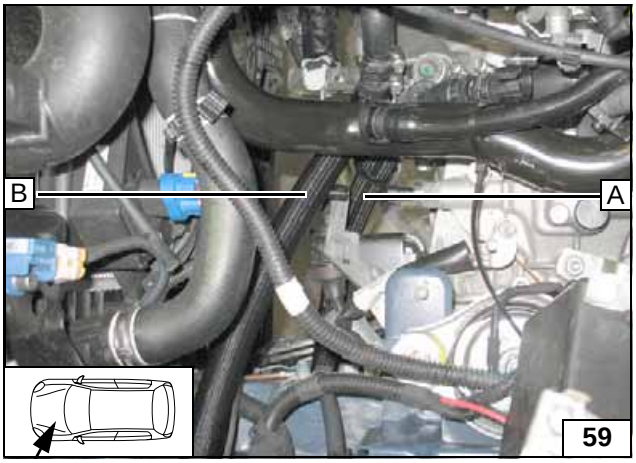

**1** Black (sw) rubber isolator
**2** Hose section on heat exchanger outlet

**Connection on heat exchanger outlet**

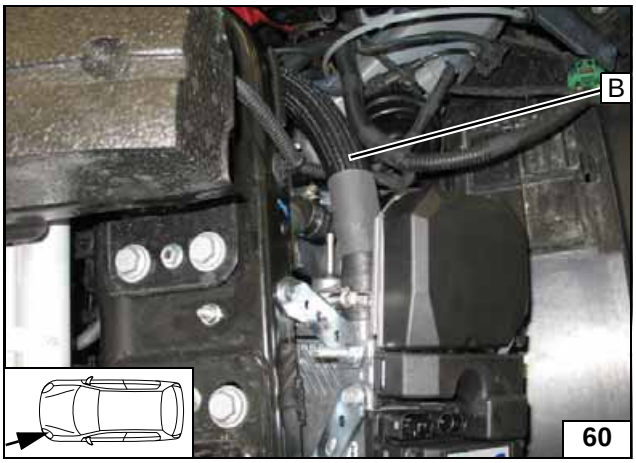



**1** Hose section on engine inlet, turned

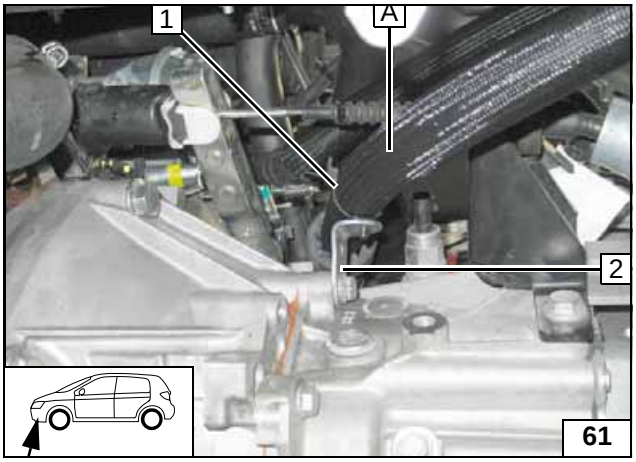
**Connection on engine inlet**




**Routing in engine compartment**




**Connecting heater outlet**



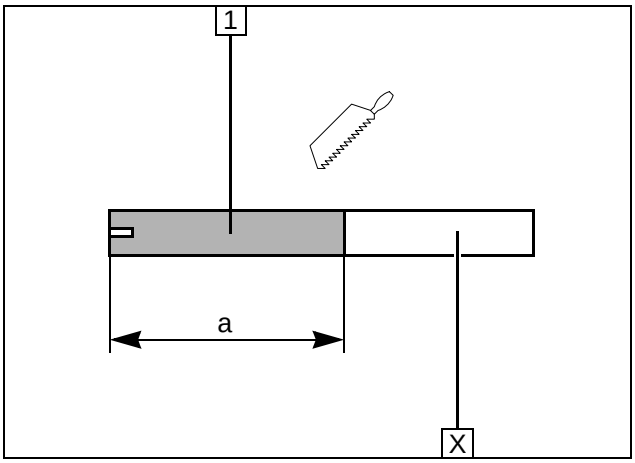

**1** Cable tie
**2** Angle bracket, original vehicle bolt

**Aligning hoses**

## Combustion Air

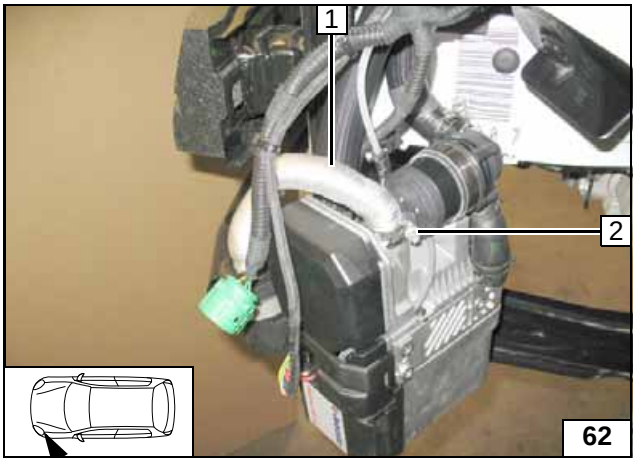
Cutting combustion air pipe to length



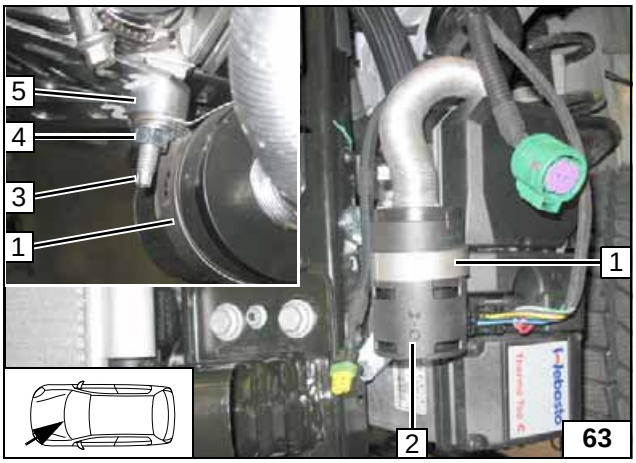

Discard section **X**.

**1** Combustion air pipe
a = 240

Installing combustion air pipe




**1** Combustion air pipe
**2** 27 mm dia. clamp




**1** 48 mm dia. clamp
**2** Silencer
**3** Ejot stud
**4** Flanged nut
**5** 10 mm shim

Installing silencer

## Exhaust Gas

Discard section **X**.

**1** Exhaust pipe
a = 270
**2** Exhaust end section
b = 95

**Preparing exhaust pipe**

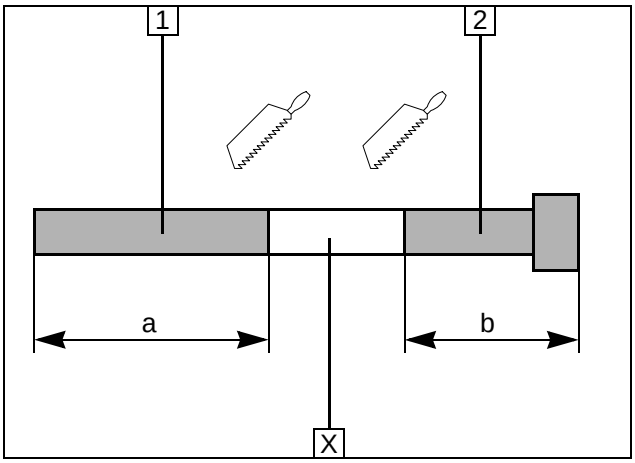
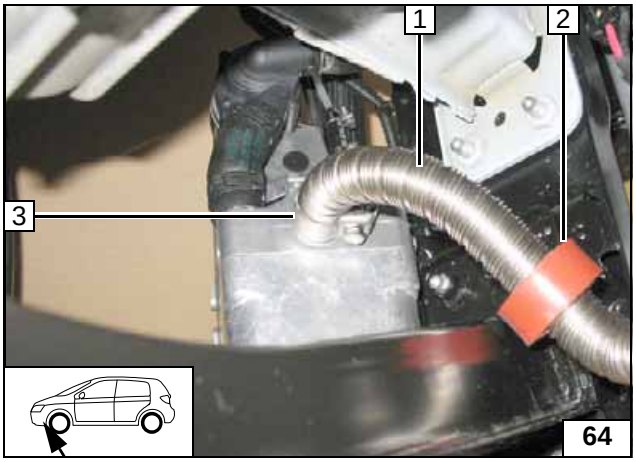



Figure shows petrol vehicle.

**1** Exhaust pipe
**2** Red (rt) rubber isolator
**3** Hose clamp

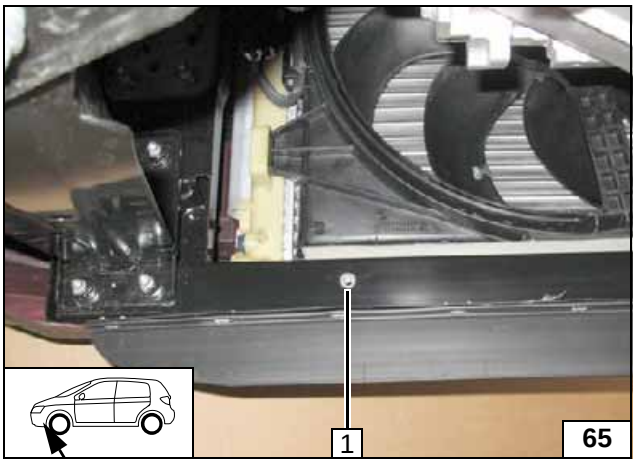
**Installing exhaust pipe**




**1.2 B and 1.3 JTD**

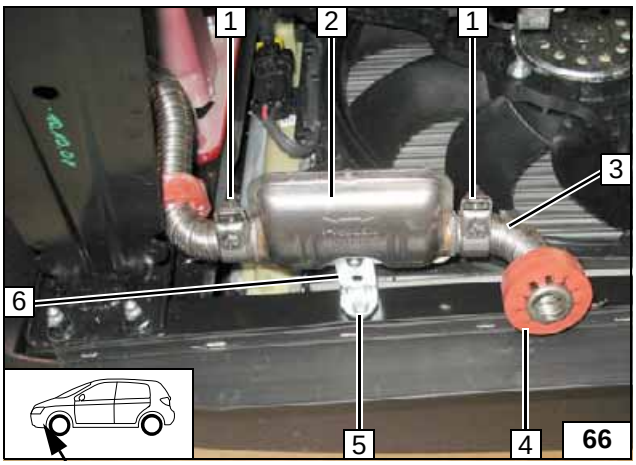
**1** Existing hole; mount rivet nut (steel)

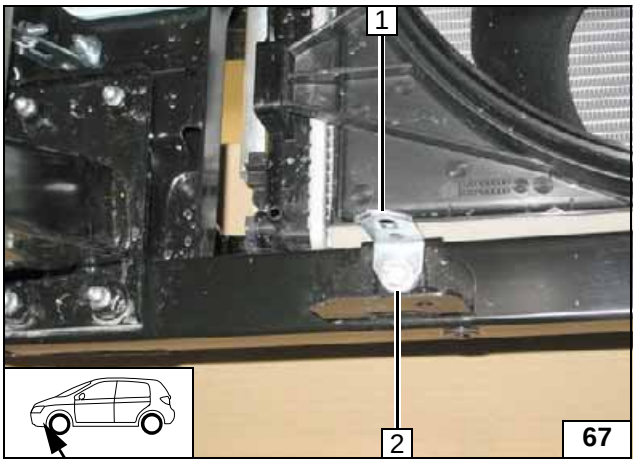
**Installing rivet nut**




**1** Hose clamp [2x]
**2** Silencer, M6x20 bolt, large diameter washer, flanged nut
**3** Exhaust end section
**4** Red (rt) rubber isolator with groove
**5** M6x20 bolt, spring lockwasher
**6** Angle bracket

**Installing silencer and end section**

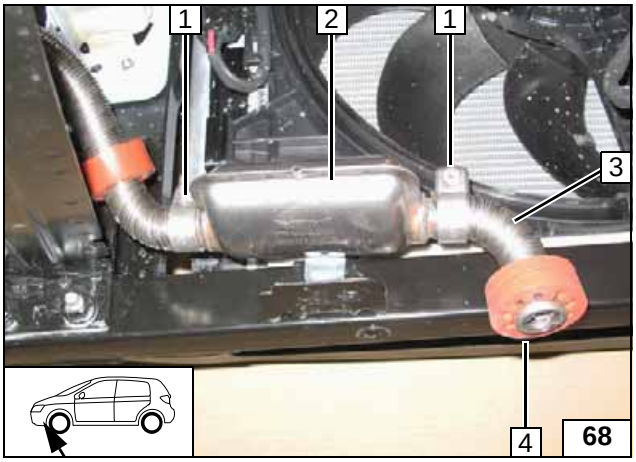





**1.4 B and 0.9 B**

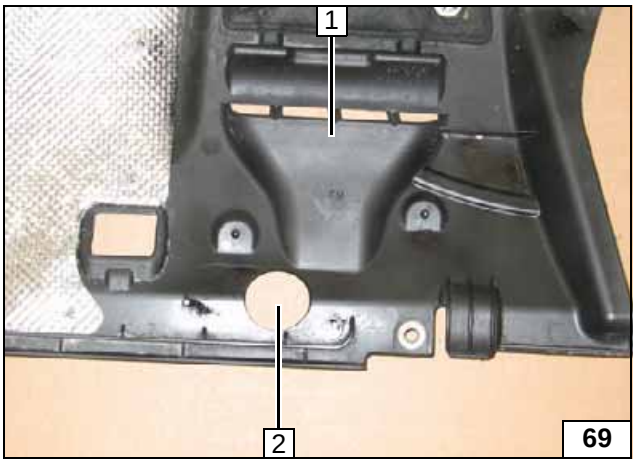
**1** Angle bracket
**2** Original vehicle bolt

**Installing angle bracket**




**1** Hose clamp [2x]
**2** Silencer, M6x20 bolt, large diameter washer, flanged nut
**3** Exhaust end section
**4** Red (rt) rubber isolator with groove

**Installing silencer and end section**

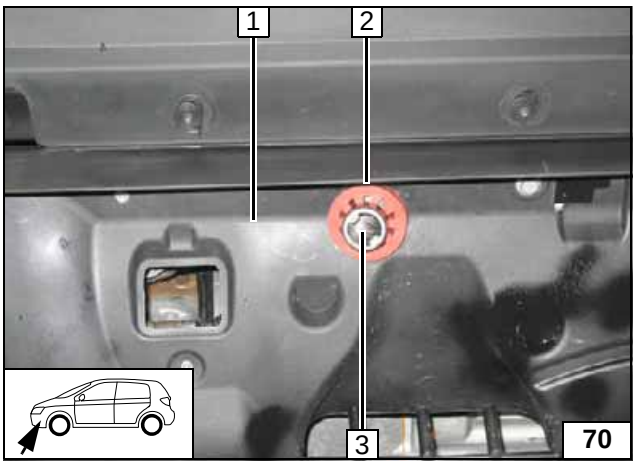



**Vehicles with underride protection**

Remove insulation mat.

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

**Cutting out underride protection**




Align exhaust end section **3** flush on red rubber isolator **2**.
Ensure sufficient distance from neighbouring components.

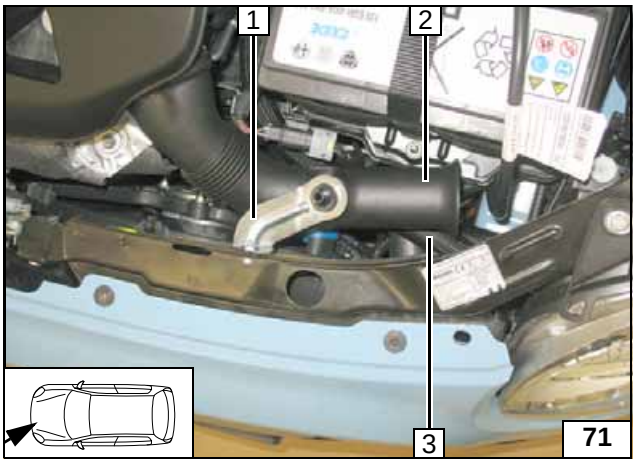
**1** Underride protection

**Positioning rubber isolator**

## Final Work

**WARNING!**
Mount removed parts in reverse order. Check all hoses, clamps and all electrical connections for firm seating. Insulate all loose wires and tie back.
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.**
- **Adjust digital timer, teach Telestart transmitter.**
- **Make settings on A/C control panel according to the "Operating Instructions for the End Customer".**
- **Place the "Switch the parking heater off before refueling" signboard in the area of the filler neck.**
- **For initial startup and function check, please see installation instructions.**

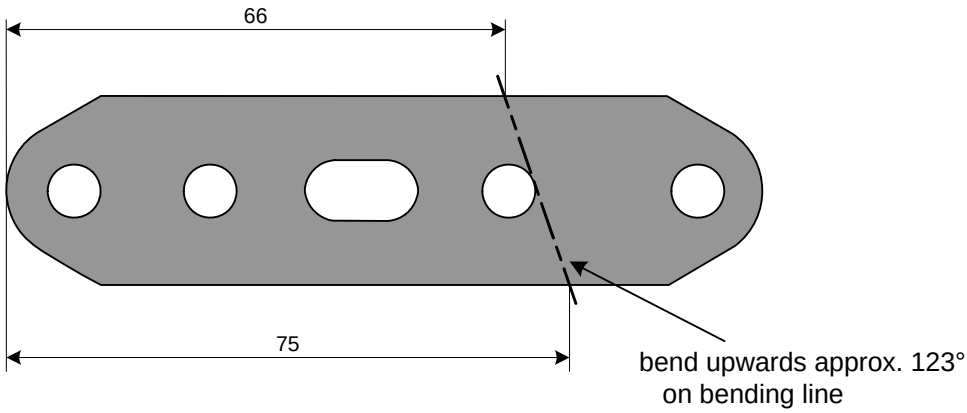



**0.9 B only**

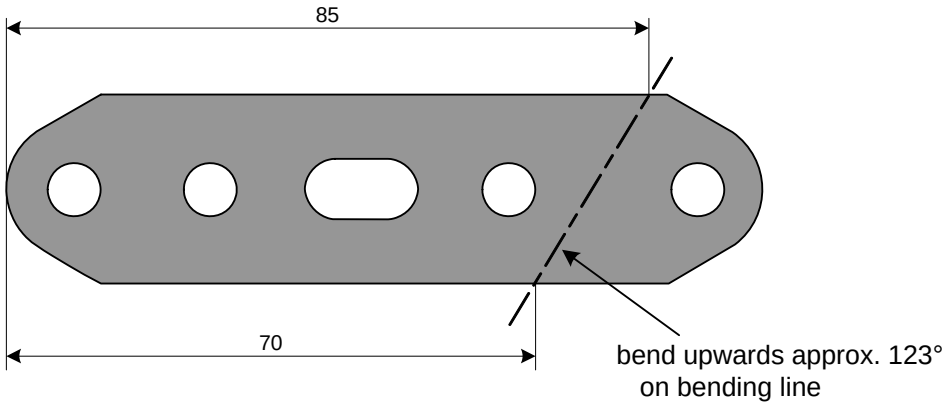
Align bracket **1** with intake pipe **2**, ensure sufficient distance from underlying water hoses **3**.

Webasto Thermo & Comfort SE
Postfach 1410
82199 Gilching
Germany
Internet: www.webasto.com
Technical Extranet:
http://dealers.webasto.com

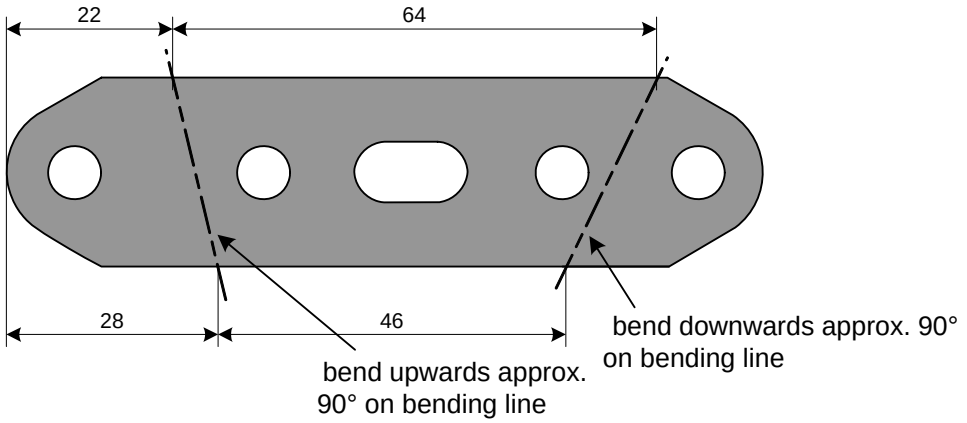
## Template for Perforated Bracket A

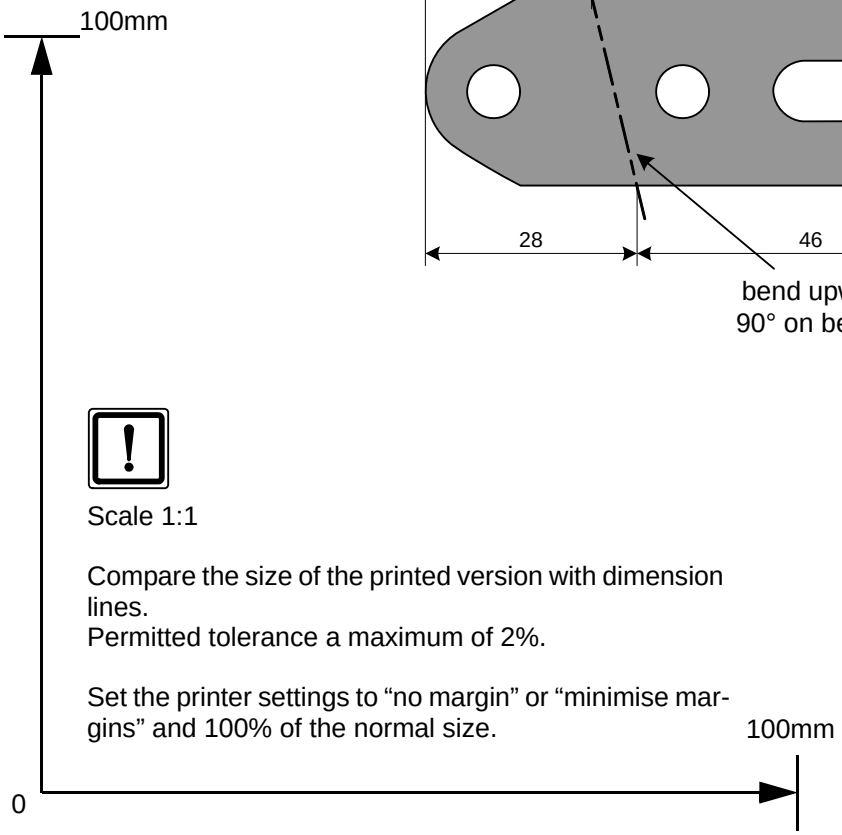



## Template for Perforated Bracket B




## Template for Perforated Bracket C



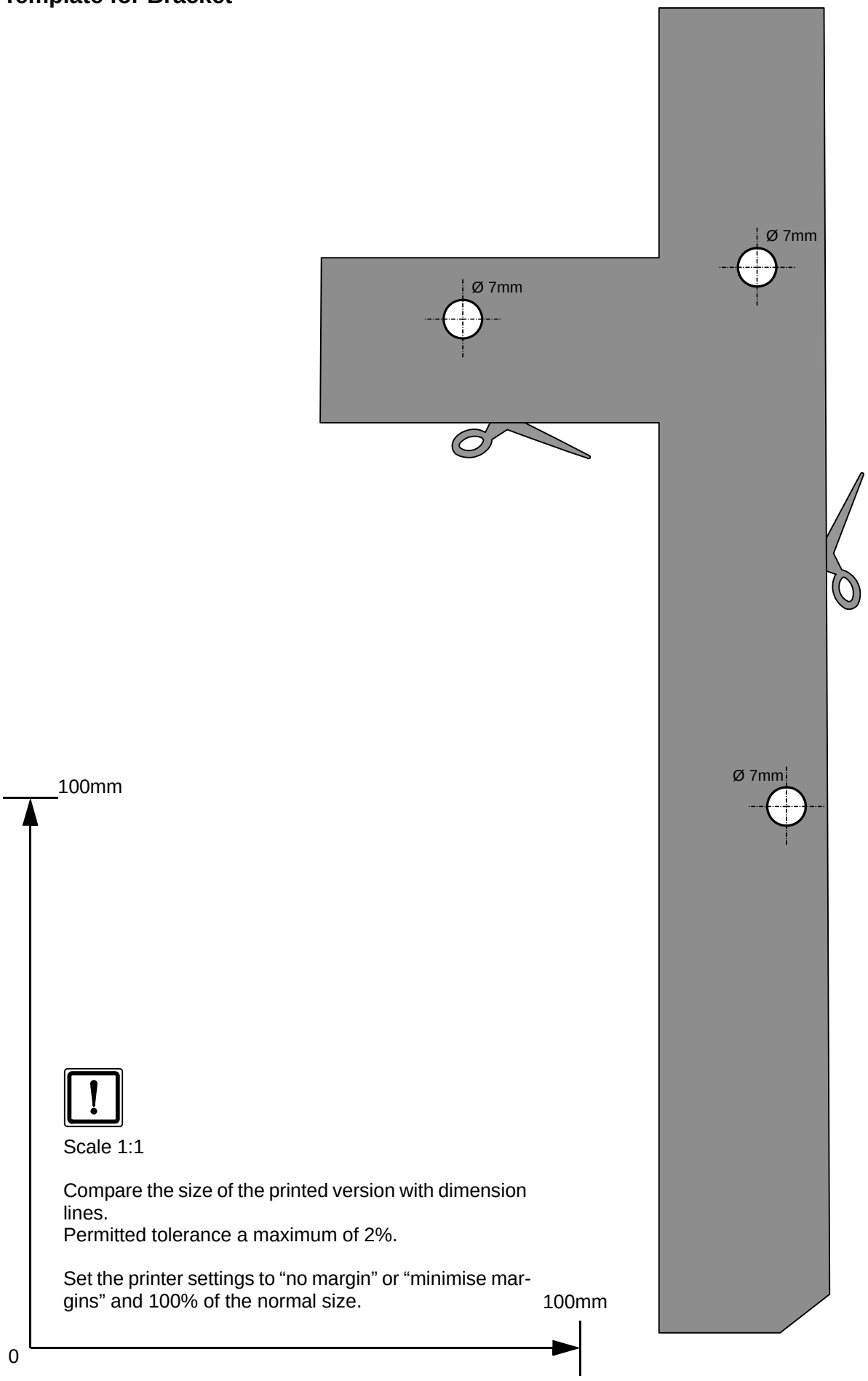




Scale 1:1

Compare the size of the printed version with dimension lines.
Permitted tolerance a maximum of 2%.

Set the printer settings to “no margin” or “minimise margins” and 100% of the normal size.

## Template for Bracket




Scale 1:1

Compare the size of the printed version with dimension lines.
Permitted tolerance a maximum of 2%.

Set the printer settings to “no margin” or “minimise margins” and 100% of the normal size.

## Operating Instructions for End Customer

Please remove page and add to the vehicle operating instructions.

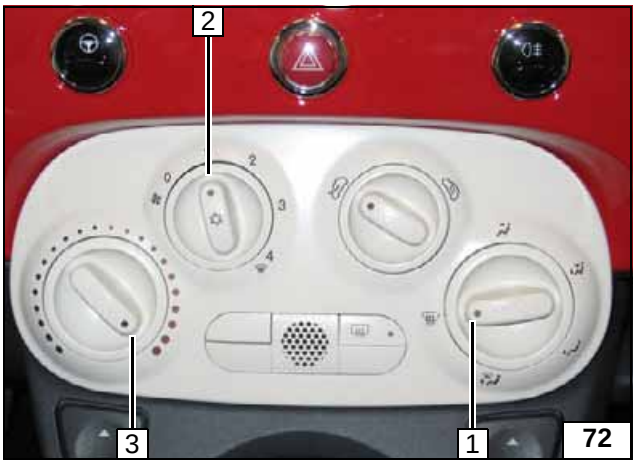
**Note:**
We recommend matching the heating time to the driving time.
Heating time = driving time
**Example:**
For a driving time of approx. 20 min. (in one direction), we recommend not exceeding a switch-on time of 20 min.

Passenger compartment monitoring, if installed, must be deactivated in addition to the vehicle settings for the heating operation.
For instructions on deactivation, please refer to the operating instructions of the vehicle.

If the summer/winter switch option has been installed on the heater, 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:

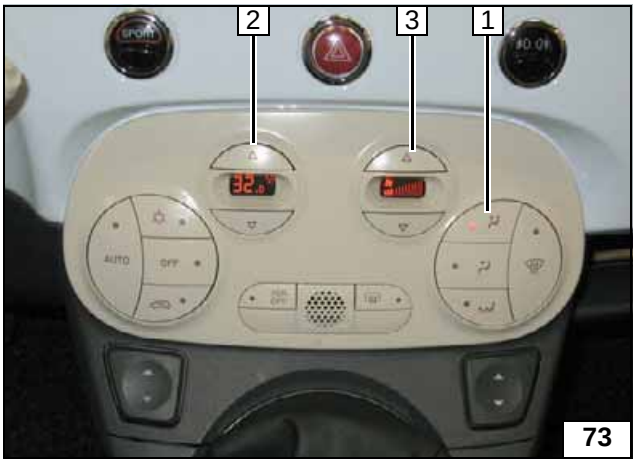
**Manual air-conditioning**



72

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

**Automatic air-conditioning**



73

**1** Air outlet faces "upward"
**2** Set temperature to "32°C"
**3** Set fan to level "2", or possibly "3"