

# Water Heater



## Thermo Top C Parking Heater

  
00 0002

## Installation documentation

### Chrysler 300C

Diesel

from model year 2006

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.

**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	2	Preparing installation location	10
Heater / Installation Kit	3	Preparing coolant circuit	11
Foreword	3	Preparing heater	12
General Instructions	3	Combustion air	13
Special tools	3	Installing heater	14
Explanatory Notes on Document	4	Coolant circuit	15
Preliminary Work	5	Fuel	17
Heater installation location	5	Exhaust gas	20
Preparing electrical system	6	Final Work	21
Electrical system	7	Template for Fuel Standpipe	22
Fan control	8	Operating Instructions for End Customer	23
Remote option (Telestart)	9		

## Validity

Manufacturer	Model	Type	EG BE No. / ABE
Daimler Chrysler (USA)	300C	LE	e11 * 2001 / 116 * 0141 * ...

Engine type	Engine model	Output in kW	Displacement in cm <sup>3</sup>
642982 (EXL)	Diesel	155 / 160	2987

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

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

## Heater / Installation Kit

Quantity	Description	Order No.:
1	Retail accessories <i>Thermo Top C</i> Diesel	See price list
1	Installation kit Chrysler 300C Diesel	9014467B
1	Heater control	see price list

### Foreword

This installation documentation applies to Chrysler 300C Diesel vehicles - for validity, see page 2 - from model year 2006 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."

In each case however, the specifications of this "installation documentation"; the "operating instructions" and the "installation instructions" of *Thermo Top C* must be followed.

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. Insulate loose lines and tie back.

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). When installing an IPCU, the corresponding settings must be checked or adjusted before the installation.

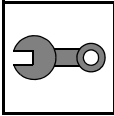
### Special tools

- Torque wrench for 2.0 - 10 Nm
- Hose clamping pliers
- Metric thread-setter kit
- Angle drill
- Chrysler tank fitting tool 9340

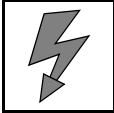
Explanatory Notes on Document

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**



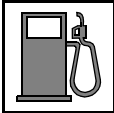
**Electrical system**



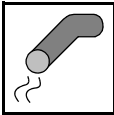
**Coolant circuit**



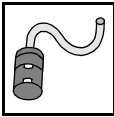
**Fuel**



**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.



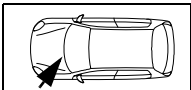
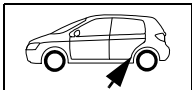
Specific risk of fire or explosion.



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



Reference to a special technical feature.



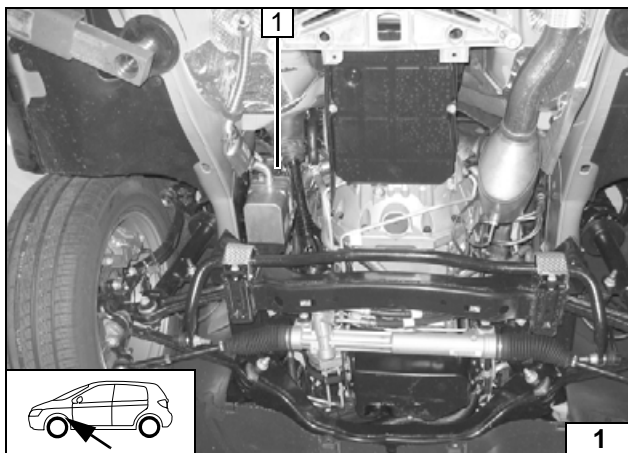
The arrow in the vehicle icon indicates the position on the vehicle and the viewing angle.

## Preliminary Work

### WARNING!

- Disconnect the battery "earth" or "ground" connection.
- 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.
- Remove the engine cover
- Open the fuel tank cap and vent the fuel tank.
- Close the fuel tank cap again.
- Detach the wheel well trim at the left
- Remove the underride protection
- Remove the rear bench seat
- Open the tank-fitting service lid at the left
- Remove the glove compartment
- Remove the footwell trim on the front passenger side.
- Detach the A/C control panel according to the manufacturer's instructions

Remove page 23 "Operating Instructions for End Customer" and add to the vehicle operating instructions.



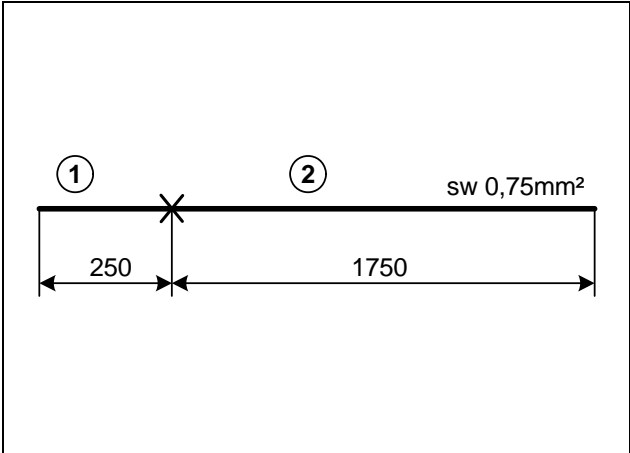
### Heater installation location

1 Heater

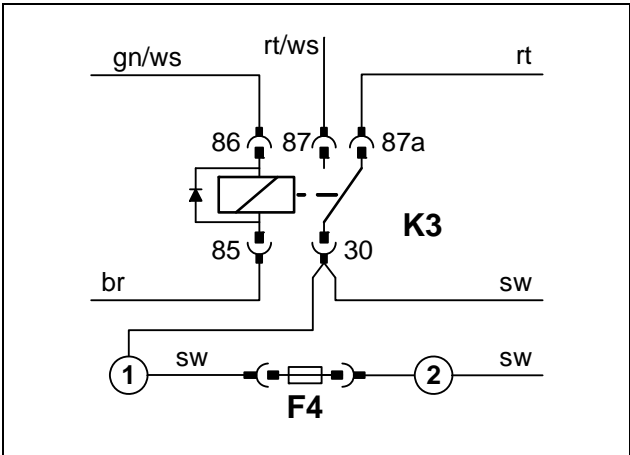
Installation location



Preparing electrical system



Cutting line to length



Produce connections as shown in wiring diagram. Draw wire section 2 into the attached protective sleeving.



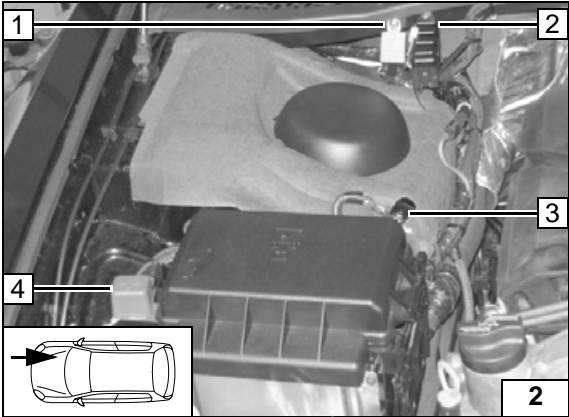
Preparing fuse F4



Electrical system

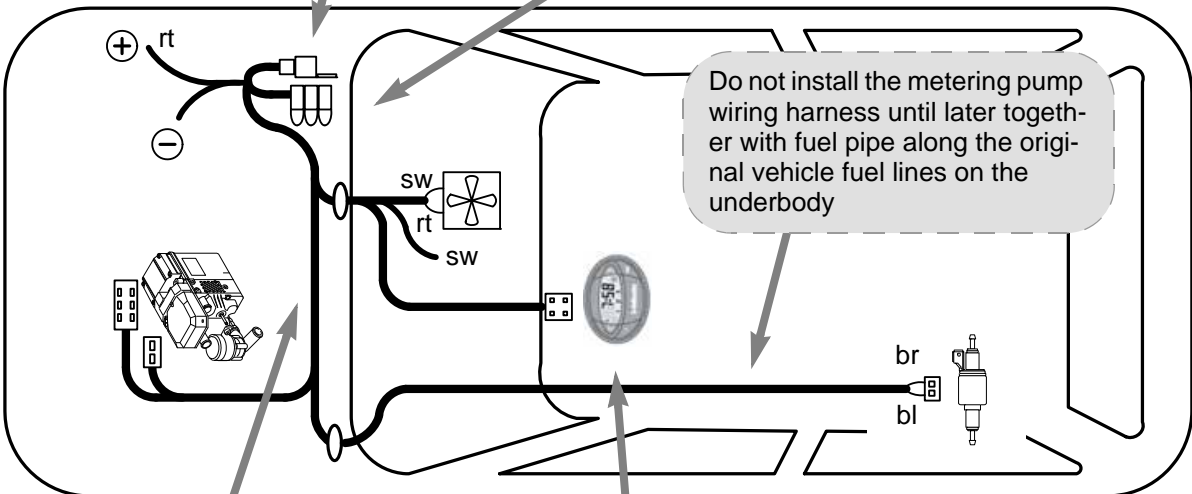
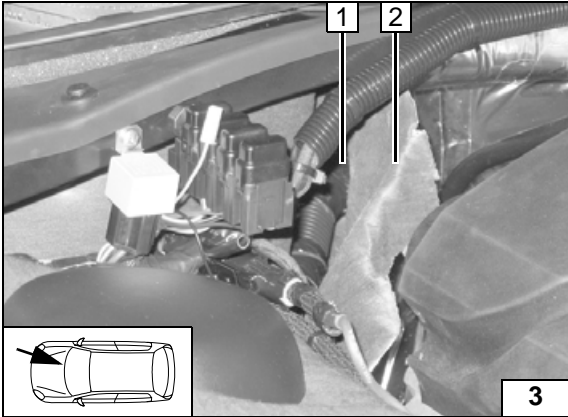
Fuse holder, K3 relay

- 1 K3 relay, 4mm dia. hole, 5.5x13 self-tapping screw
- 2 Fuse holder, retaining plate, 4mm dia. hole, 5.5x13 self-tapping screw
- 3 Brown (br) wire, earth support point
- 4 Red (rt) wire, positive support point

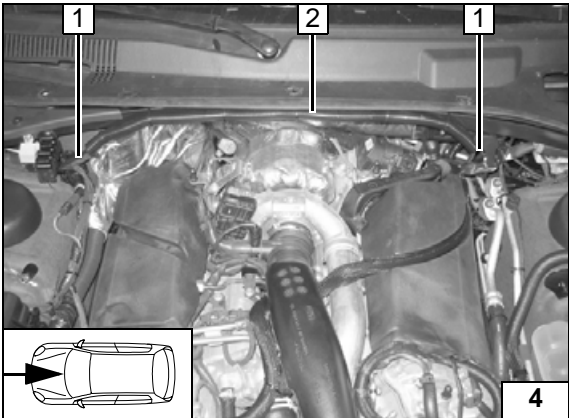


Wiring harness pass through

- 2 Insulation mat detached
- 1 Original vehicle wiring harness pass through, fan pass through, clock and line from F4

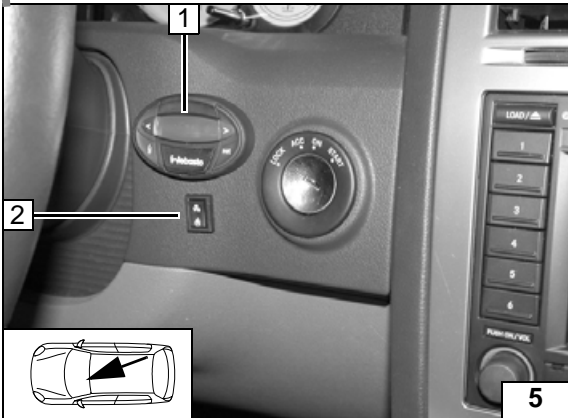


Wiring harness routing installation diagram



Wiring harness routing

- 2 Corrugated tube (cut open) fastened with cable tie to cross beam
- 1 Wiring harnesses of heater and metering pump

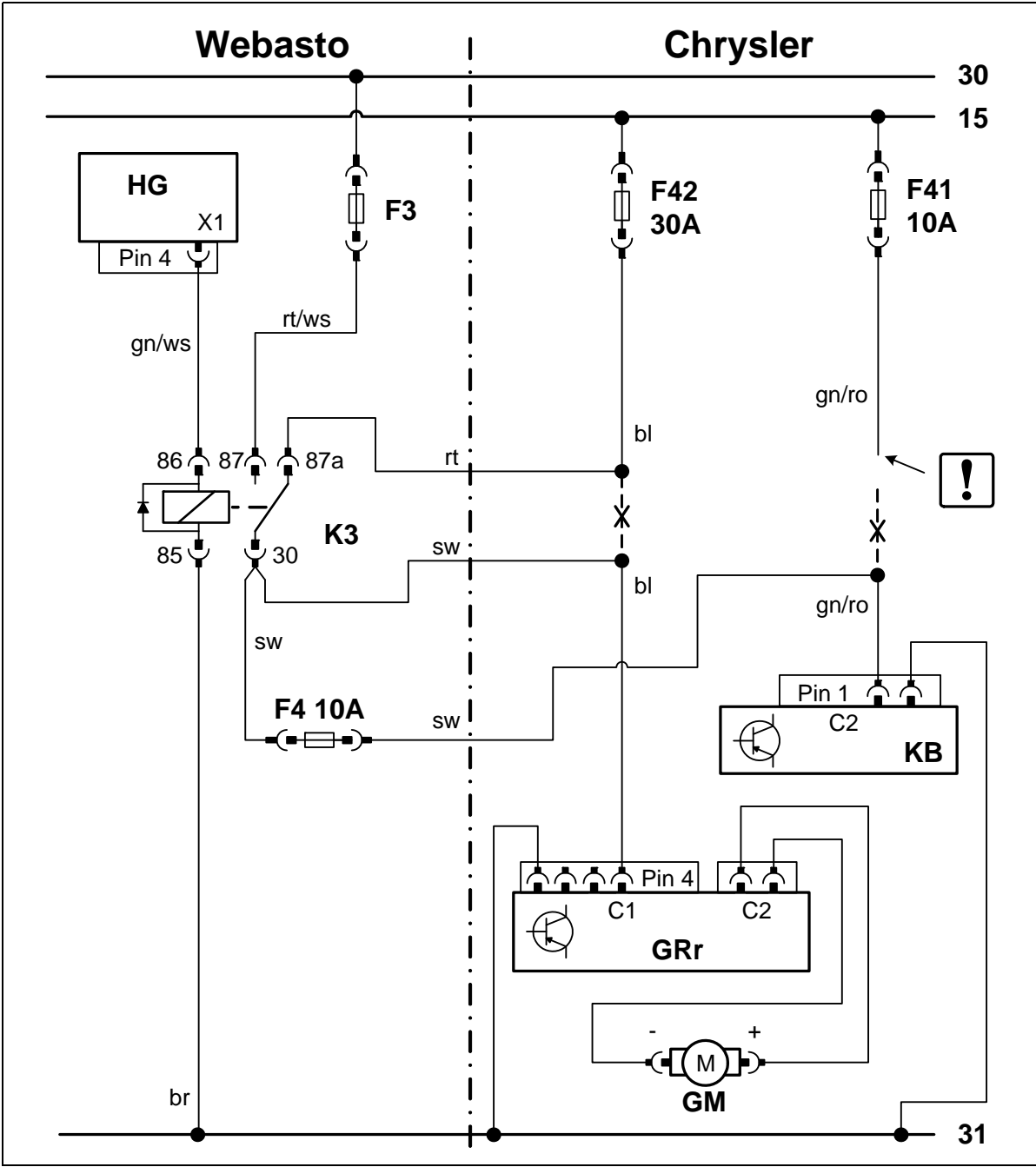


Digital timer, summer/winter switch option

- 1 Digital timer
- 2 Summer/winter switch, 12mm dia. drilled hole



Fan control

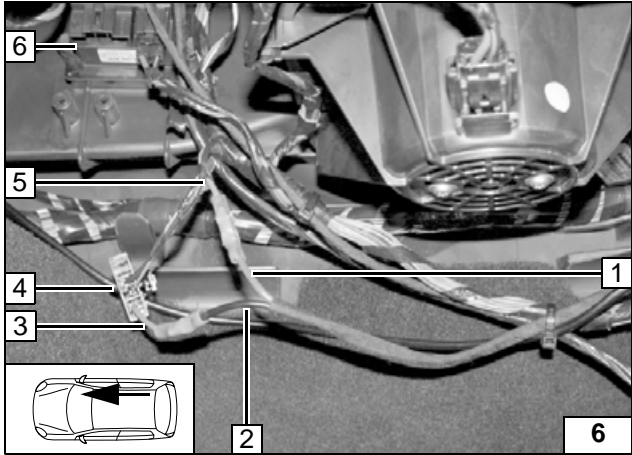


Wiring diagram

Webasto components		Chrysler components		Colours and symbols	
HG	Heater TT-C/E/P	F42	Fan fuse	rt	red
F3	Fan fuse	F41	A/C control panel fuse	ws	white
K3	Fan relay	GRr	Fan controller	sw	black
F4	Additional fuse	KB	A/C control panel	br	brown
		GM	Fan motor	gn	green
				ro	pink
				bl	blue
				!	Insulate wire ends and tie back
				X	Cutting point

Legend



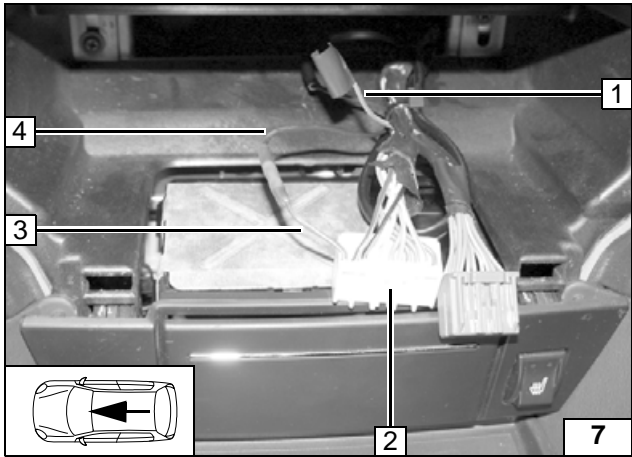


Connection to 4-pin connector C1 from fan controller Pin 4.  
Make connections according to wiring diagram with attached yellow joint connectors.

- 4 Connector C1, removed
- 6 Socket of connector C1
- 1 Red (rt) wire from K3/87a
- 5 Blue (bl) wire from original vehicle fuse F42
- 2 Black (sw) wire from K3/30
- 3 Blue (bl) wire to fan controller



**Connect-  
ing fan  
controller**



Connection to 22-pin white connector C2 from A/C control panel Pin 1.  
Make connections according to wiring diagram with attached red joint connector.

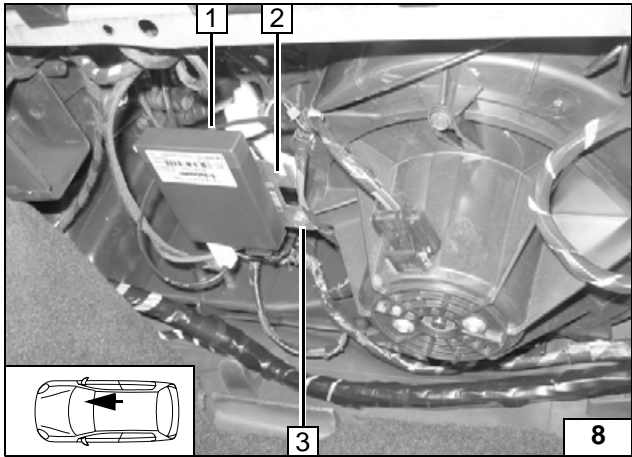
**Warning!**

Wiring colours may vary.

- 2 Connector C2, removed
- 3 Green/pink (gn/ro) wire to A/C control panel
- 4 Black (sw) wire from F4
- 1 Insulate and tie back green/pink (gn/ro) wire from original vehicle fuse F41



**Connect-  
ing A/C  
control  
panel**

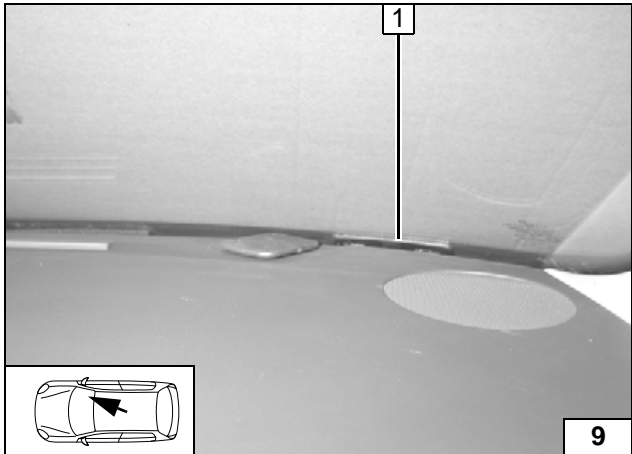


**Remote option (Telestart)**

- 1 Receiver
- 2 Bracket
- 3 Original vehicle bolt

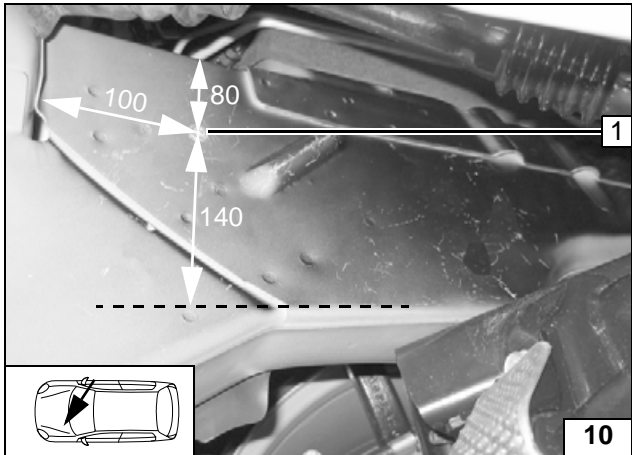


**Installing  
receiver**



- 1 Antenna

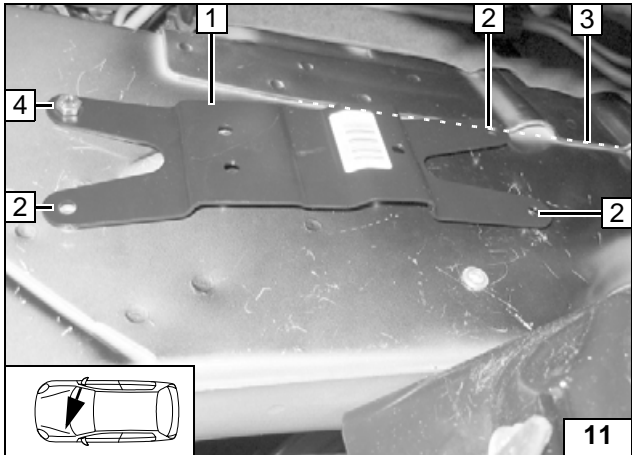
**Installing  
antenna**



**Preparing installation location**

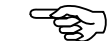
- 1 9mm dia. hole, M6 steel rivet nut

Mounting rivet nut

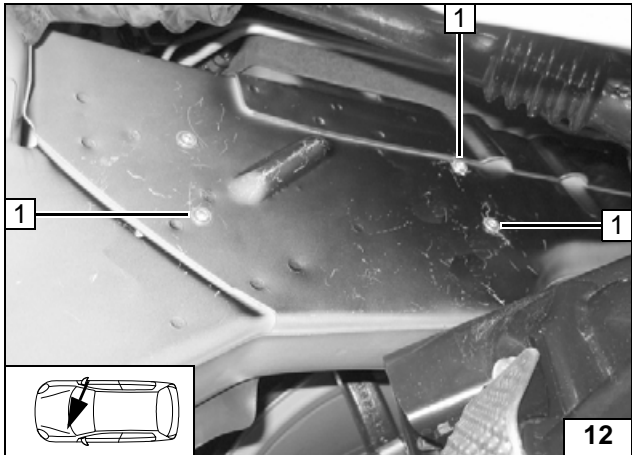


First fasten bracket 1 at position 4. Then place bracket 1 from below on edge 3.

- 1 Bracket
- 4 M6x20 bolt on rivet nut
- 3 Edge of the side member
- 2 Copy hole pattern [3x]



Copying hole pattern

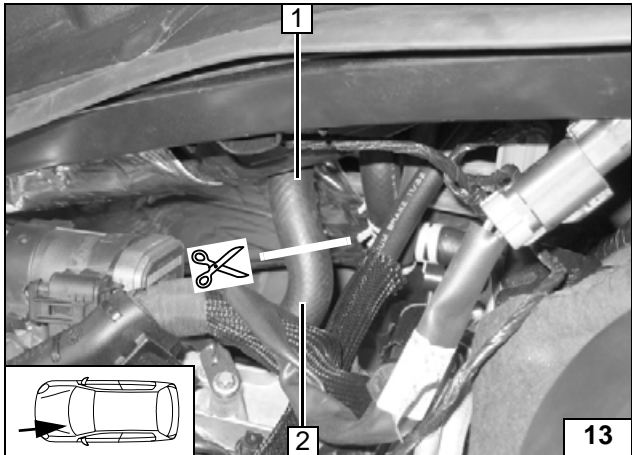


Remove bracket again.

- 1 9mm dia. hole, M6 steel rivet nut [3x]



Mounting rivet nuts



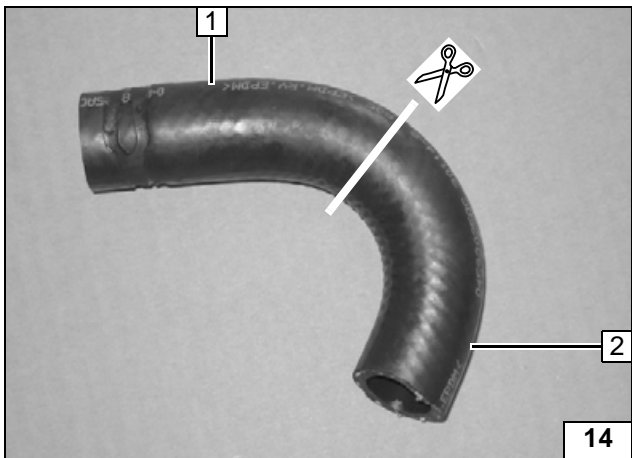
**Preparing coolant circuit**

Remove hose section 2.

- 1 Hose section of heat exchanger inlet
- 2 Engine outlet hose section

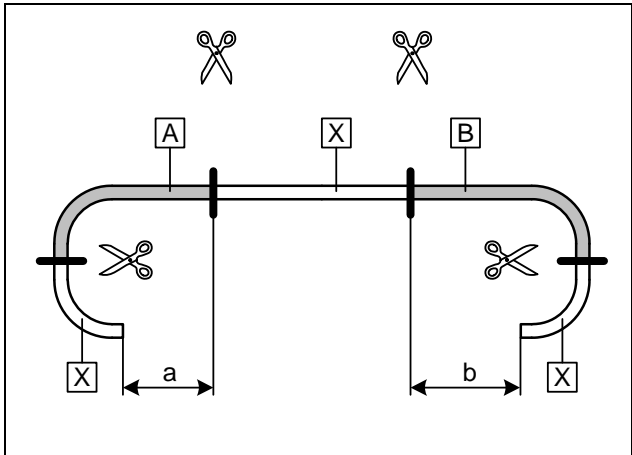
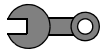


**Cutting point**



- 1 Engine outlet hose section
- 2 Discard hose section

**Cutting hose section to length**

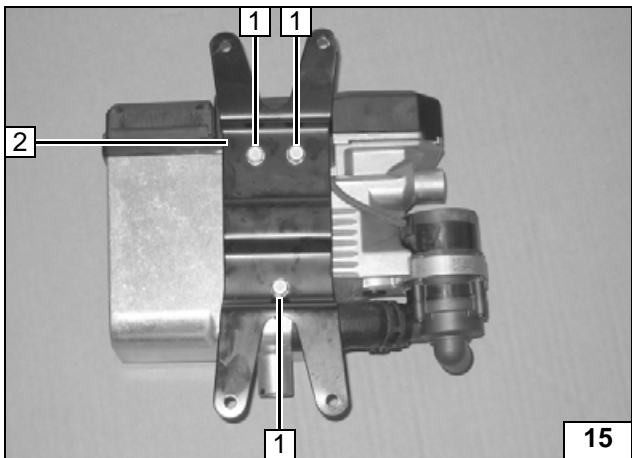


Preparing heater

A = 150mm  
B = 230mm



Cutting coolant hoses to length

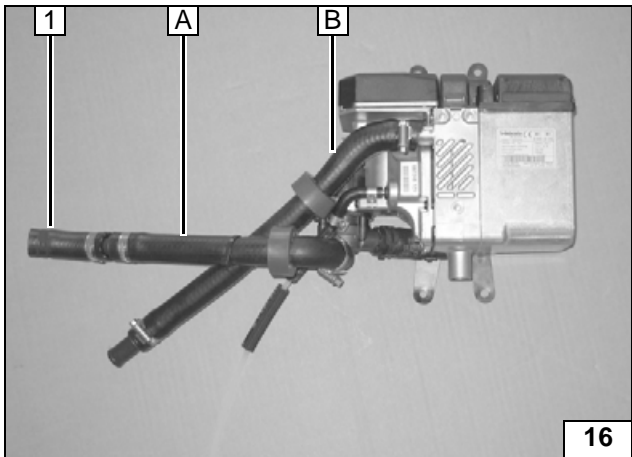


Eject screw, 10Nm tightening torque

- 2 Bracket
- 1 Eject screw [3x]

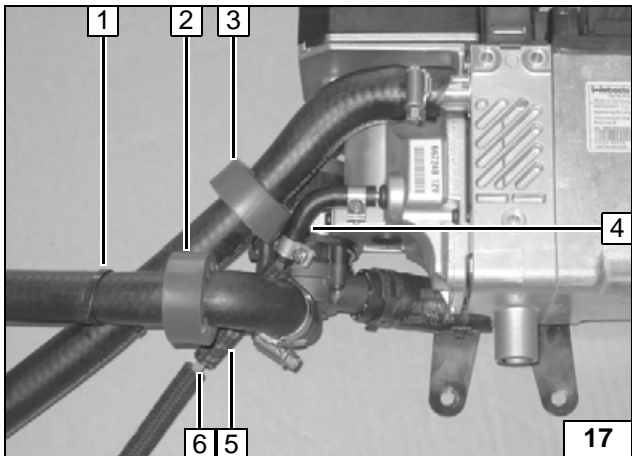


Premounting heater



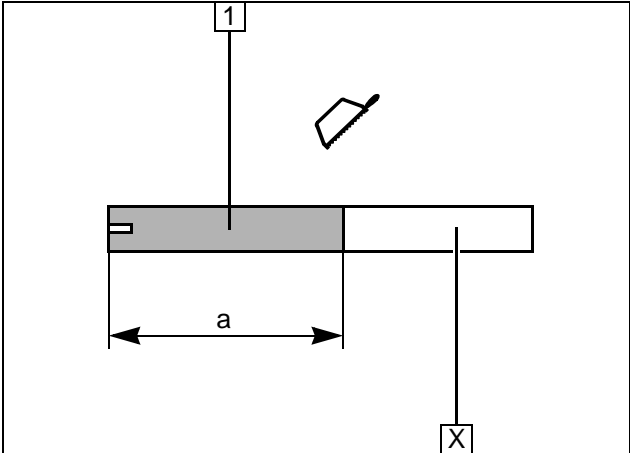
1 Hose section of engine outlet (bend faces upwards)

Premounting heater



- 2 Red rubber profile
- 3 Red rubber profile, fastened with cable tie and circulating pump
- 1 Hoses A and B connected with cable ties
- 4 10mm hose clamp [2x], 90° moulded hose
- 6 Mecanyl fuel line
- 5 Fabric hose section as protective hose [2x]

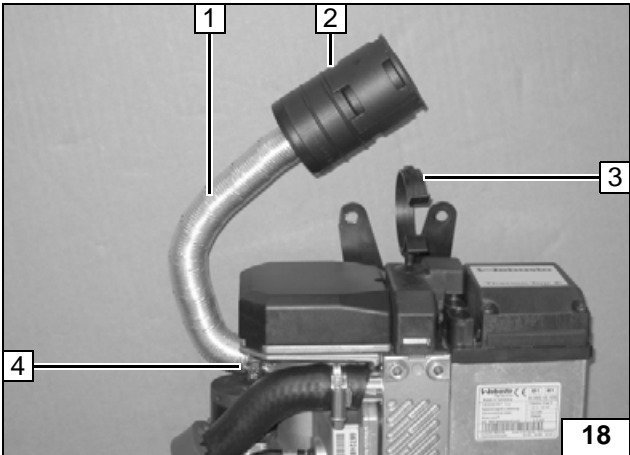
Premounting heater



**Combustion air**

- 1 Combustion air pipe  
a = 230mm

Discard section X



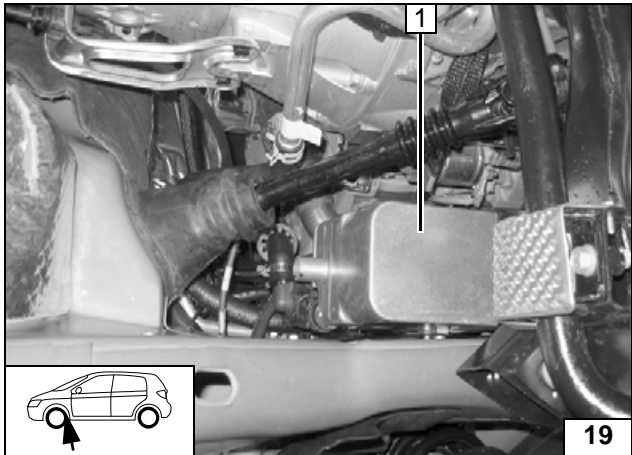
Mount slit side on heater  
Silencer is inserted into the retaining clip only  
after installing the heater.

- 1 Combustion air pipe
- 4 Hose clamp
- 2 Silencer
- 3 Retaining clip in pre-perforated hole of  
heater cover

**Cutting  
combustion  
air  
pipe to  
length**



**Installing  
combustion  
air  
pipe**



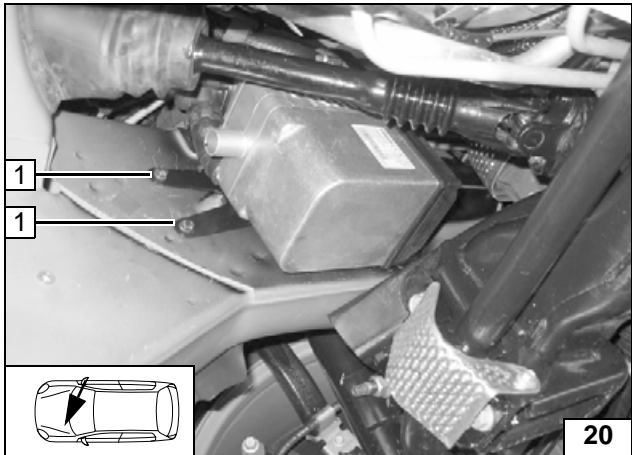
**Installing heater**

Ensure sufficient distance of heater from steering column.

- 1 Premounted heater

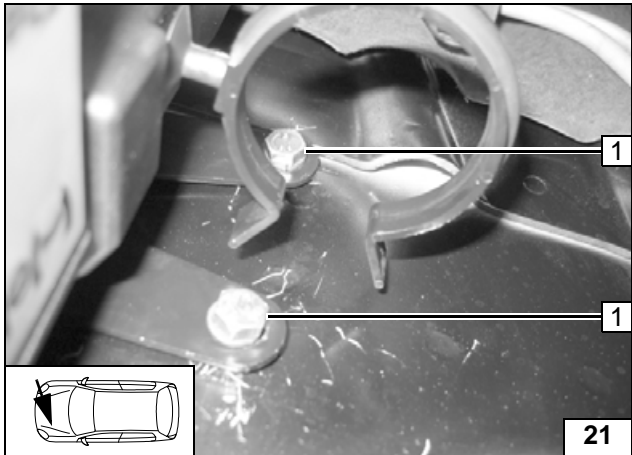


**Mounting heater**



- 1 M6x20 bolt, spring lockwasher [2x]

**Mounting heater**

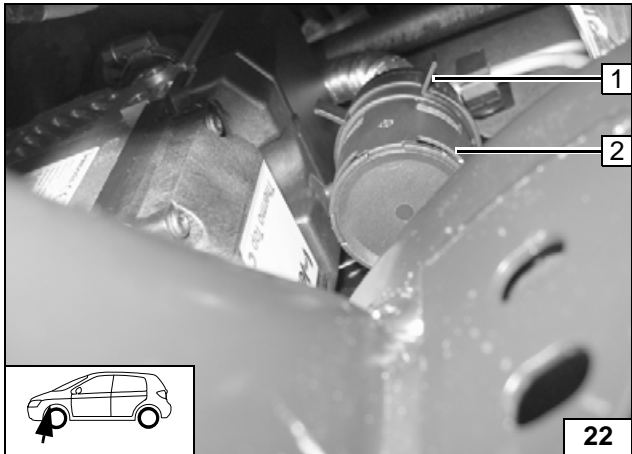


Mount wiring harness on heater. Fasten wiring harness to original vehicle lines with cable ties.

- 1 M6x20 bolt, spring lockwasher [2x]



**Mounting heater**



- 1 Retaining clip
- 2 Silencer

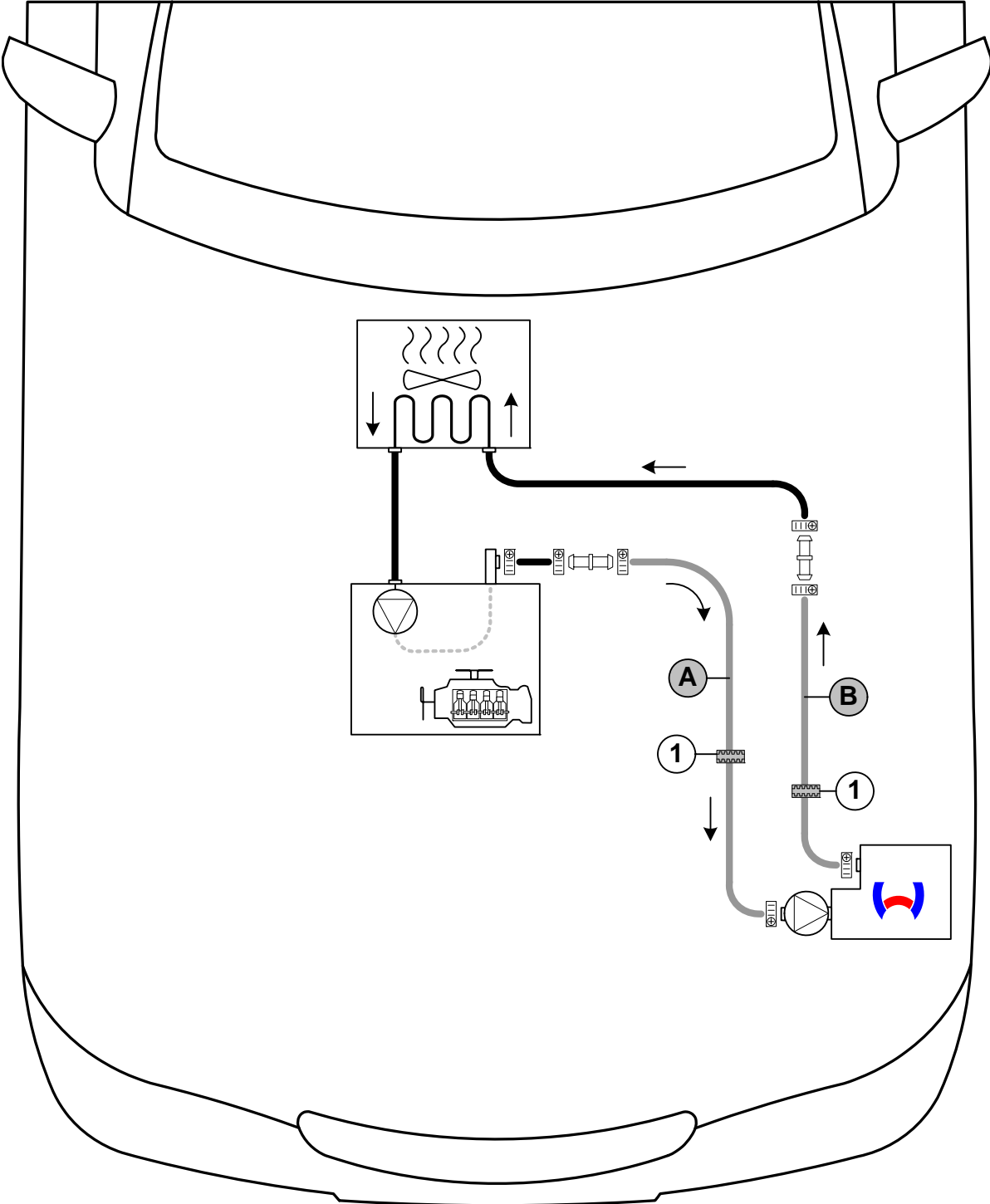
**Mounting combustion air silencer**






Coolant circuit

WARNING!

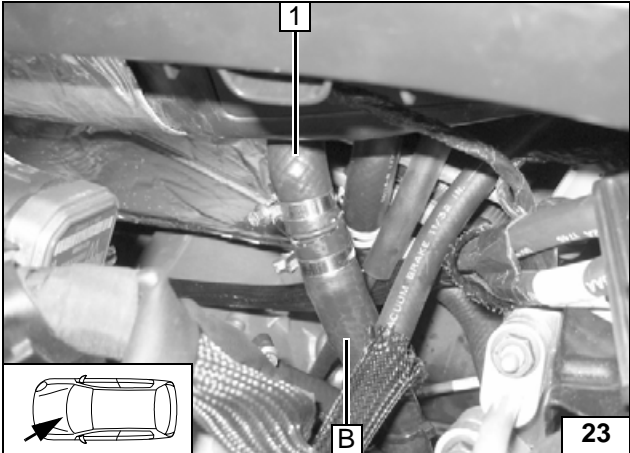
Any coolant running off should be collected using an appropriate container. Install hoses so that they are kink-free. Unless specified otherwise, always fasten using cable ties. Position clamps so that other hoses cannot be damaged. The heater must be filled with coolant when installing the hose. The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



Hose installation diagram

All hose clamps  = 20-27 mm dia. All connecting pipes  = 18x20 mm dia.  
1= Black (sw) rubber isolator 



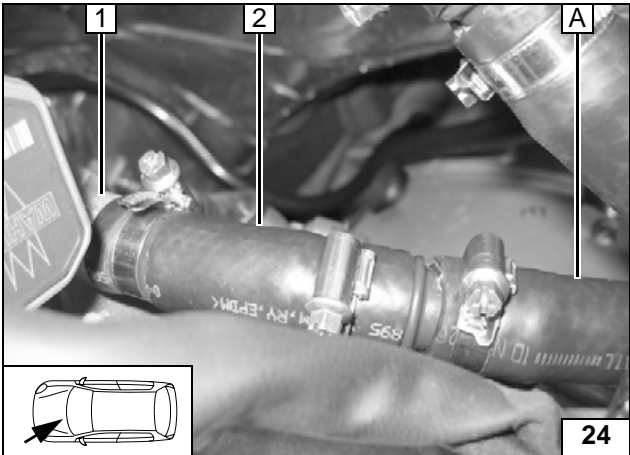


Fill coolant hoses with coolant before connecting them.

1 Hose section of heat exchanger inlet



Connecting heat exchanger inlet

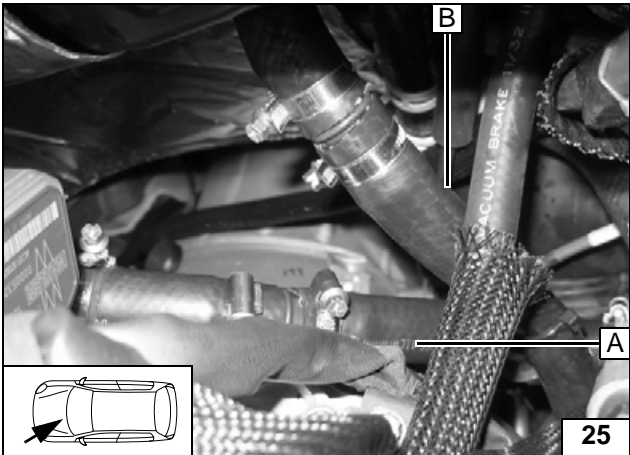


Fill coolant hoses with coolant before connecting them.

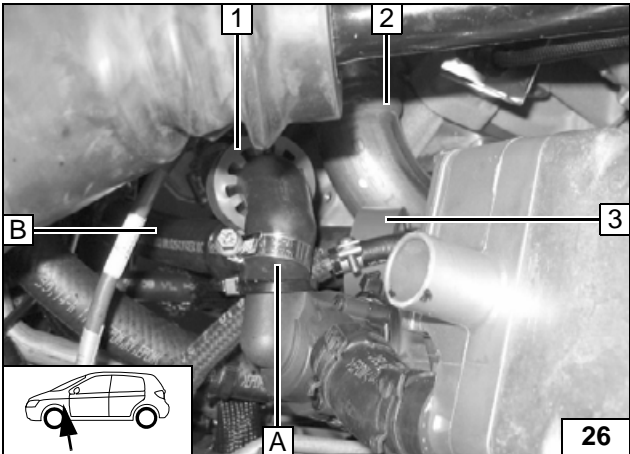
1 Engine outlet connection piece  
2 Engine outlet hose section



Connecting engine outlet



Aligning hoses



Check the position of the hoses **A**, **B** and rubber profiles **1**, **3** and correct if necessary. Ensure sufficient distance from steering column and original vehicle exhaust pipe **2**. Position rubber profile **1** in the area of the exhaust pipe **2**.

Fasten the hoses with cable ties.

1 Rubber profile  
2 Exhaust pipe  
3 Rubber profile



Aligning hoses and rubber profiles





Fuel

CAUTION!

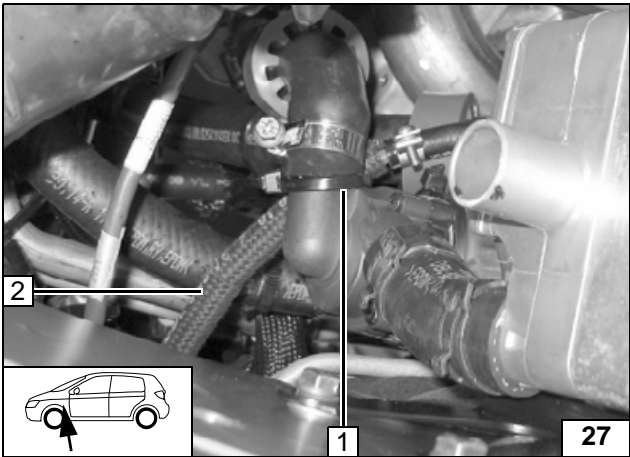
Open the vehicle's fuel tank cap, ventilate the tank and then re-close the tank lock.

Catch any fuel running off with 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.

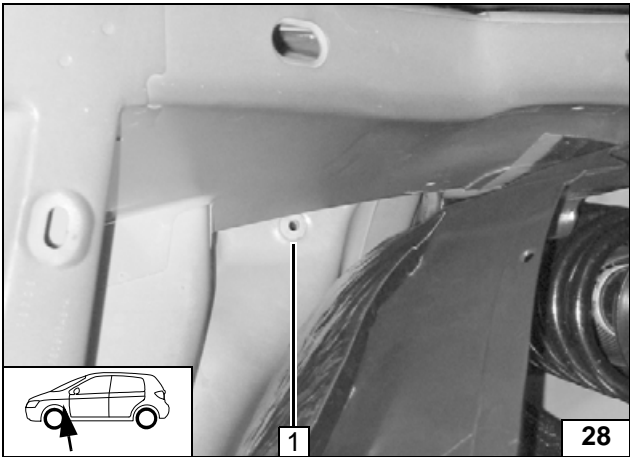
WARNING!

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



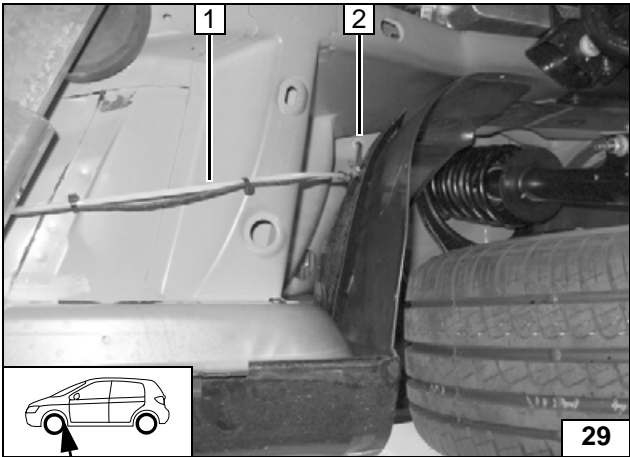
- 1 Fuel line fastened to the circulating pump with cable ties
- 2 Mecanyl fuel line in protective hose

Installing lines



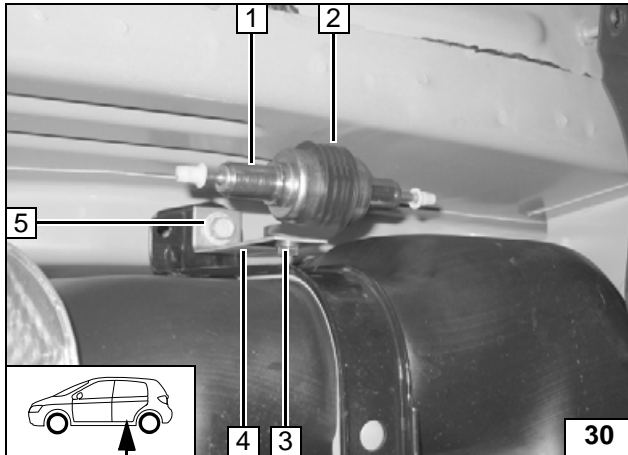
- 1 Protective rubber plug in existing hole

Mounting grommet



- 1 Wiring harness of metering pump and Mecanyl fuel line
- 2 Protective rubber plug

Installing lines

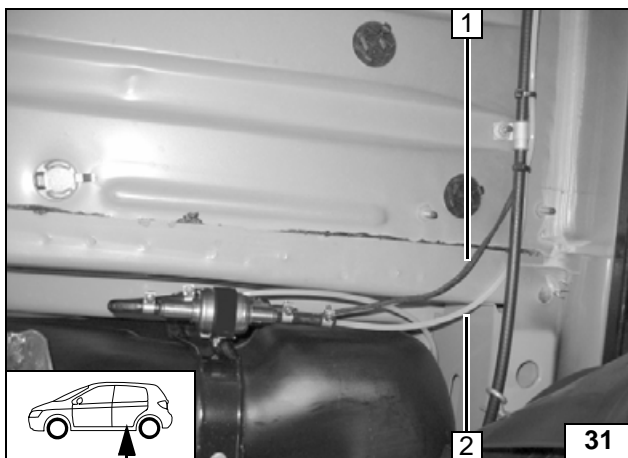


The installation location is at the left before the tank.  
The intake side of the metering pump [side without connector] faces vehicle centre.  
Watch installation position of the metering pump, see "installation instructions".

- 5 Original vehicle bolt
- 4 Angle bracket
- 1 Metering pump
- 2 Rubber holder
- 3 M6x20 bolt, flanged nut

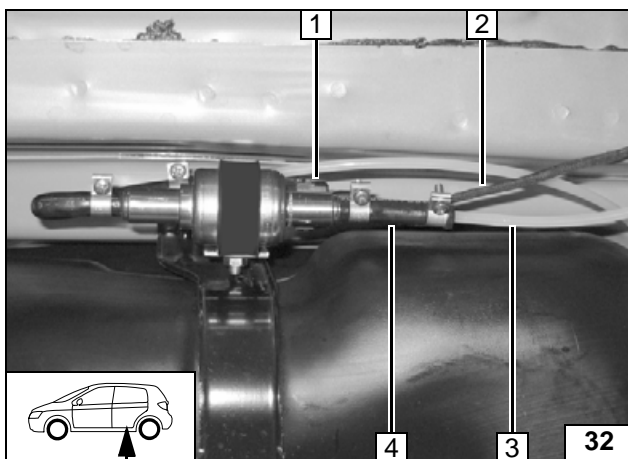


## Mounting metering pump



- 1 Wiring harness of metering pump
- 2 Fuel line from heater

## Wiring routing

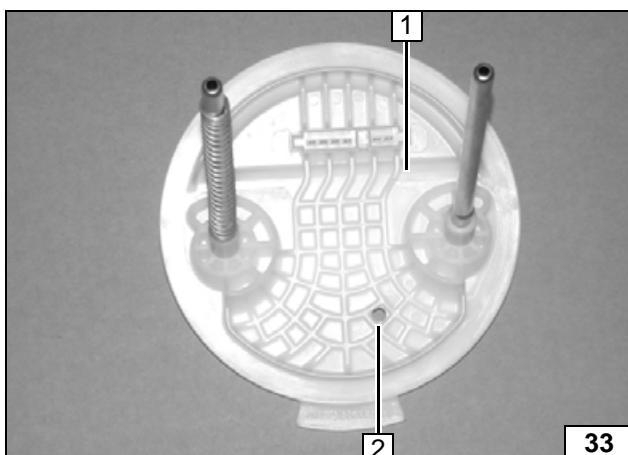


Fuel line from heater on pressure side of metering pump [side with connector].

- 2 Wiring harness of metering pump
- 1 Connector housing completed
- 3 Fuel line from heater
- 4 Hose section, 10mm dia. hose clamp [2x]



## Connection to metering pump

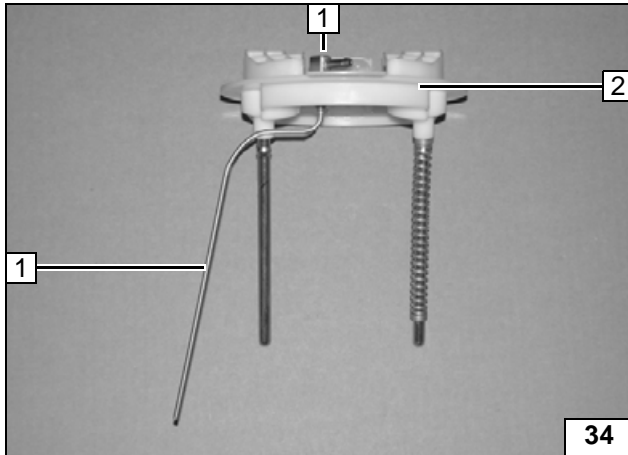


Remove and dismantle left fuel-tank sending unit with Chrysler special tool 9340.  
The tank should be filled max. up to half. If necessary, remove fuel in advance.  
Drill at the exact centre between the bars.

- 1 Fuel-tank sending unit
- 2 6mm dia. hole, at centre between the bars



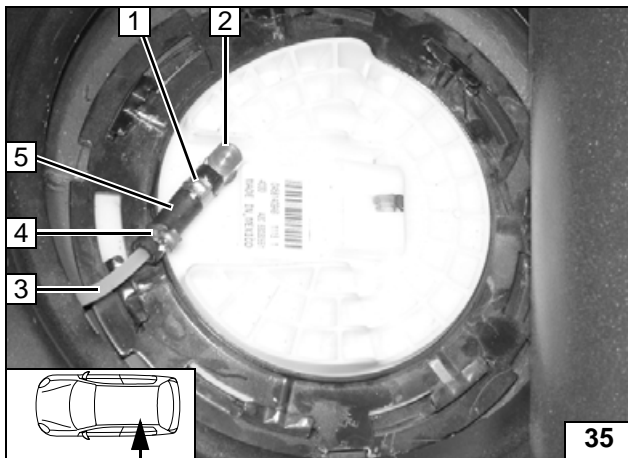
## Fuel extraction



Shape fuel standpipe according to template, cut to length and install, see "Installation instructions".

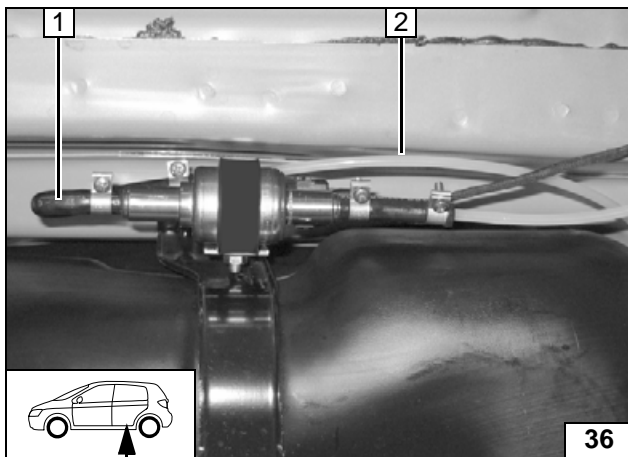
- 2 Fuel-tank sending unit
- 1 Fuel standpipe

Standpipe 1 is positioned outside the delivery vessel during installation of the fuel-tank sending unit.



Install fuel-tank sending unit in accordance with manufacturer's instructions. Position Caillau clamp 4 over edge of sealing ring.

- 2 Fuel standpipe
- 5 Hose section
- 1 10mm dia. Caillau clamp
- 4 10mm dia. Caillau clamp
- 3 Mecanyl fuel line



Fuel line from fuel standpipe to intake side of metering pump [side without connector].

- 2 Fuel line from fuel standpipe
- 1 180° moulded hose, 10mm dia. hose clamp [2x]

Check the position of the components; adjust if necessary. Check that they have freedom of movement.  
Check the positioning of the fuel lines and wiring harness along the entire length, correct if necessary.  
Fasten wiring harness and fuel lines with cable ties.



### Installing fuel standpipe

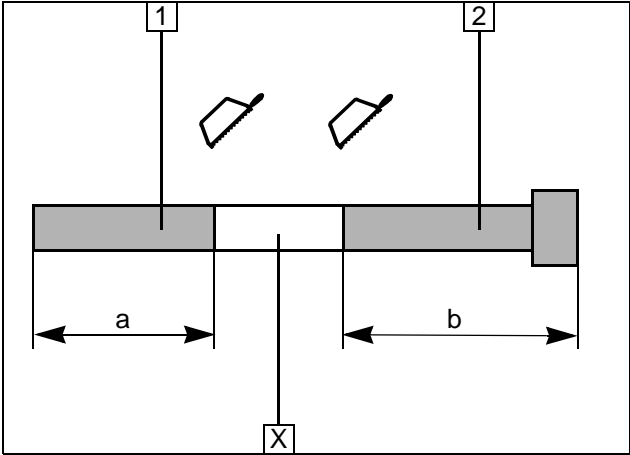


### Connecting fuel line



### Connection to metering pump



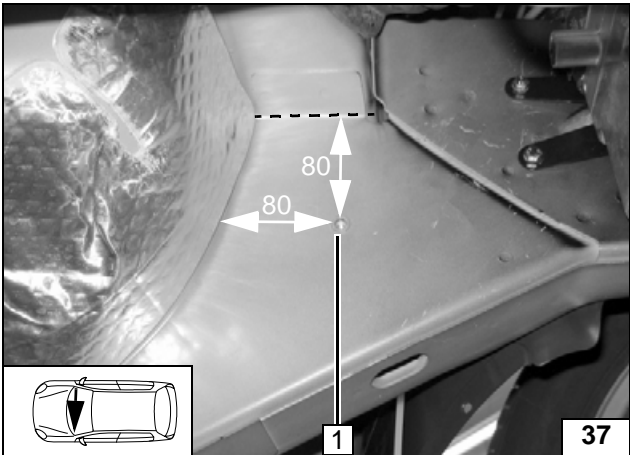


**Exhaust gas**

- 1 Exhaust pipe  
a = 130mm
- 2 Exhaust end section  
b = 390mm

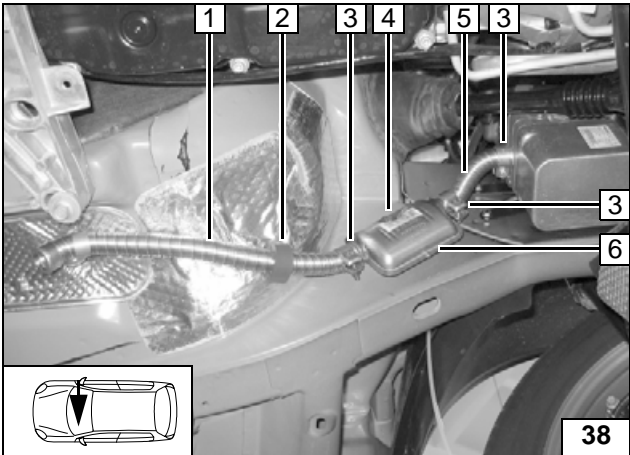
Discard section X

Preparing exhaust pipe



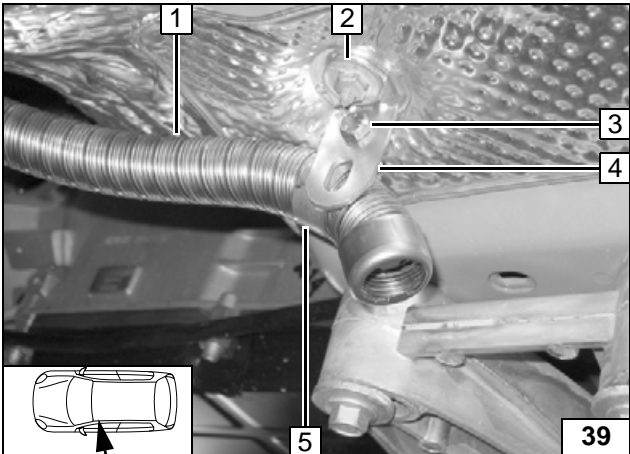
- 1 9mm dia. hole, M6 rivet nut (steel)

Mounting rivet nut



- 5 Exhaust pipe
- 3 Hose clamp [3x]
- 6 Exhaust silencer
- 4 M6x55 bolt; spring lockwasher; large diameter washer; 30mm spacer sleeve
- 2 Red (rt) rubber isolator
- 1 Exhaust end section

Mounting exhaust system



First insert bolt 3 into angle bracket 4, then fasten angle bracket with nut 2.

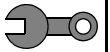
- 1 Exhaust end section
- 2 Original vehicle plate nut
- 3 M6x20 bolt, flanged nut
- 4 Angle bracket
- 5 P-clamp

Align exhaust system, as shown. Ensure freedom of movement of vehicle body and the trims to be reinstalled. Position rubber profile accordingly.



Mounting exhaust end section





## Final Work

### WARNING!

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

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

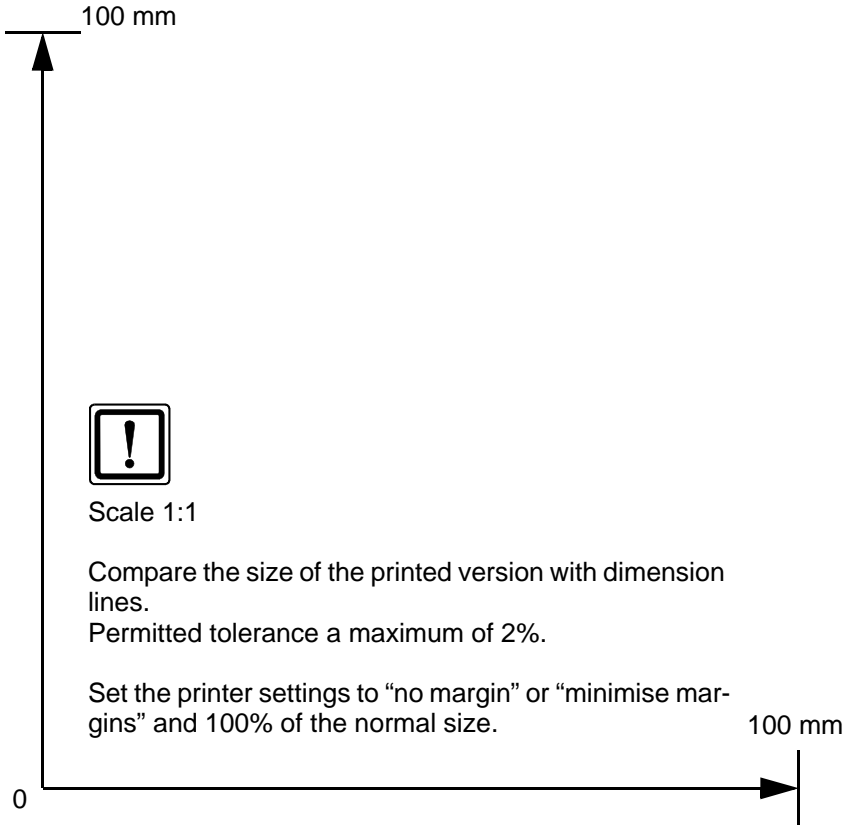
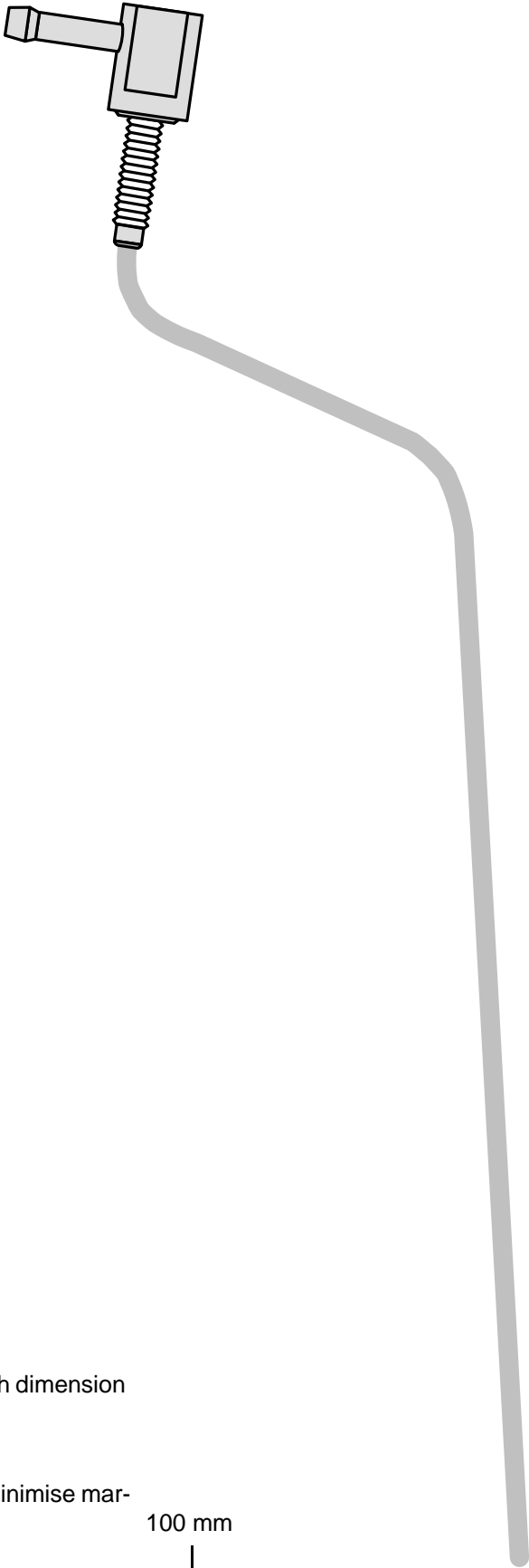
- **Connect the battery**
- **Fill and bleed the coolant circuit according to the vehicle manufacturer's specifications.**
- **Adjust digital timer, teach Telestart transmitter**
- **Make settings on A/C control panel according to the "Operating Instructions for End Customer".**
- **Place message signboard "Switch off parking heater before refilling" in the area of the filler neck.**
- **For start-up and function check, see Installation instructions**



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Template for Fuel Standpipe



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

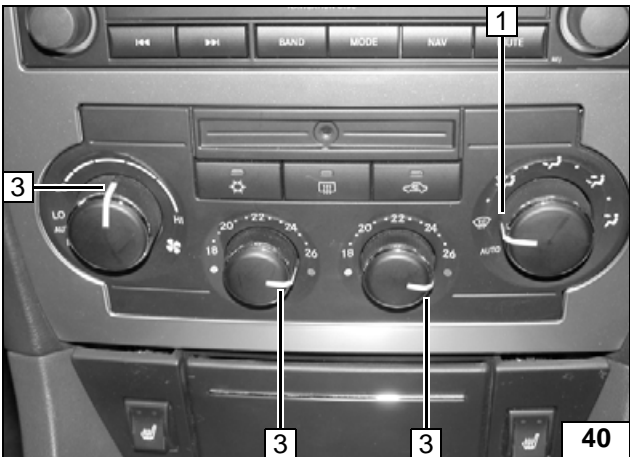
**Example:**  
For a driving time of approx. 20 min. (in one direction), we recommend not exceeding a switch-on time of 20 min.

If vehicles have passenger compartment monitoring , it must be deactivated in addition to the vehicle settings for the heating operation .  
Instructions about deactivation can be taken from the operating instructions of the vehicle.



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

Before parking the vehicle, make the following settings:



- 1 Direct air outlet toward windscreen
- 2 Set temperature to "max." [2x]
- 3 Set fan to level "3", or possibly "4"

Automatic air-conditioning