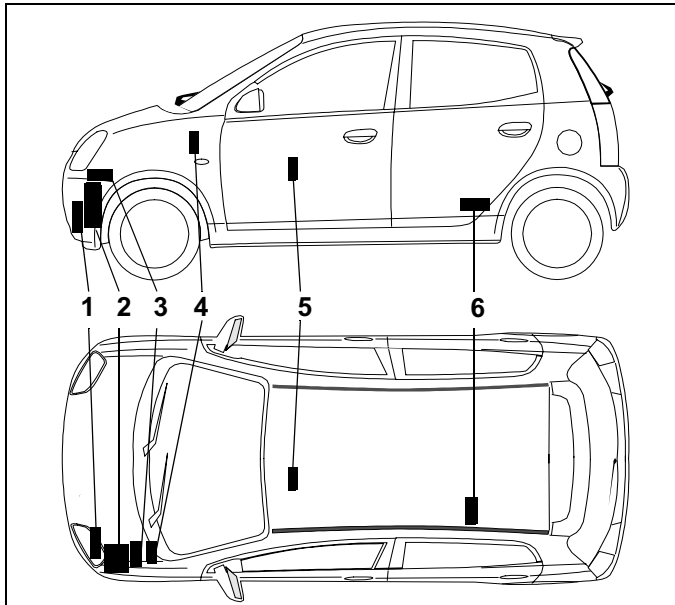


# Water heater



**Thermo Top C Auxiliary heating system** e1  
00 0002

**Thermo Top E Auxiliary heating system** e1  
00 0003



## Installation Instructions

### Suzuki Swift

1,3 Petrol

From model 2005

Left-hand drive models only

#### Legend for Figure 1:

- 1 Exhaust silencer
- 2 Thermo Top C/E heater
- 3 Combustion air intake silencer
- 4 Blade-type fuse holder
- 5 Digital timer
- 6 Metering pump



**Warning!**

**Danger warning:**

The incorrect installation or repair of Webasto heating systems may cause a fire or the escape or fatal carbon monoxide. This may result in serious or fatal injuries.

Special company training, technical documentation, special tools and special equipment are required for the installation and repair of Webasto heating and cooling systems.

**NEVER** attempt to install or repair Webasto heating or cooling systems unless you have completed the company training and thus acquired the required technical skills and unless you have the technical documentation, tools and equipment available to you that are required for completing proper installation and repair work.

**ALWAYS** follow all Webasto installation and repair manuals and observe all the warnings.

Webasto cannot accept any liability for defects and damage caused by the system being installed by untrained personnel.

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## Validity

Manufacturer	Trade name	Type	EC licence no. / General operating permit (homologation)
Suzuki	Swift	RS413	e4*2001/116*0090...

Engine type	Engine type	Output in kW	Swept volume in cm <sup>3</sup>
M13A	Petrol	68	1328

The vehicle types, engine types and equipment versions not listed in these installation instructions have not been tested.

It may nevertheless be possible to install the system using these installation instructions.

The installation site for the digital timer and summer / winter switch should be agreed with the end customer before installation.

**Heater / installation kit**

Quantity	Description	Order No.
1	Thermo Top <i>water heater C-B with LU</i> or	93001B
1	Thermo Top <i>water heater E-B with LU</i>	67958B

**Also required:**

1	installation kit <b>Suzuki Swift</b>	1303675A
---	--------------------------------------	----------

and

1	digital timer	9005753C
---	---------------	----------

and / or

1	Telestart T80	9007098A
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**Foreword**

These installation instructions apply to vehicles with Suzuki Swift with Petrol engines (see page 2 for validity) model year 2005 and later, unless technical modifications on the vehicle influence the installation, excluding all liability claims. Depending on the version and equipment in the vehicle, changes may be required to the installation work set out in these installation instructions.

In any event, however, the directives in the "installation instructions" and "operating and servicing instructions" for the *Thermo Top C/E* must be followed.

The appropriate engineering conventions and any instructions from the vehicle manufacturer must be observed for the installation work.

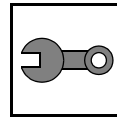
**Special tools**

- Torque wrench for 2.0 – 10 Nm
- Clamping claw

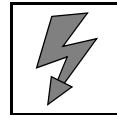
**Notes on document**

To give you a quick overview of the various procedures, you will find an identifier on the outside edge at the top right on the appropriate page.

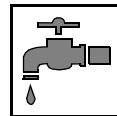
**Mechanical work**



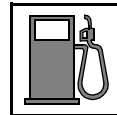
**Electrical integration**



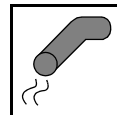
**Water connections**



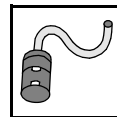
**Fuel connections**



**Exhaust system**



**Combustion air**



Special features are identified by the following symbols:



Specific danger of serious or fatal accidents



Specific danger of damaging components



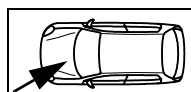
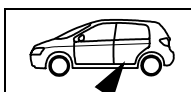
Specific fire and explosion hazard



Reference to general installation instructions for Webasto components and to documents specific to the vehicle supplied by the manufacturer



Note to a technical peculiarity



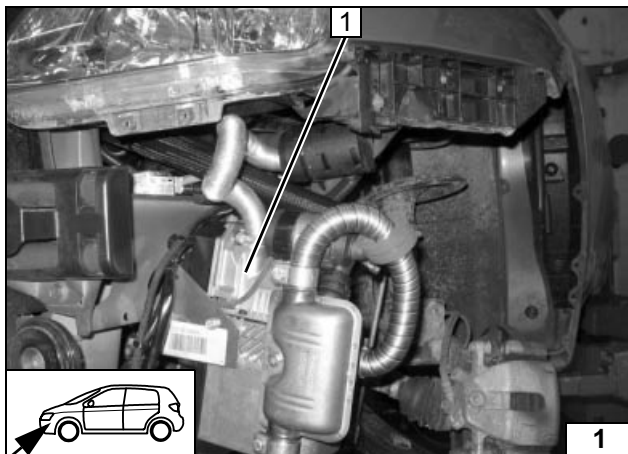
The arrow in the vehicle icon points to the position in the vehicle and indicates the viewing direction

## Warning!

- Disconnect the battery!
- Release the pressure from the cooling system!
- Transfer the factory number from the original rating plate to the duplicate rating plate
- Remove the inapplicable year number from the duplicate plate
- Fit the duplicate plate (model plate) in a suitable position where it is visible
- Completely remove the battery
- Remove the complete air filter and the intake hose
- Open the tank cover and vent the tank
- Close the tank cover again
- Release the wheel arch trim on the right and left
- Remove the bumper
- Remove the left wheel arch trim
- Remove the front and rear silencer
- Remove the fuel tank as instructed by the manufacturer
- Remove the tank fittings as instructed by the manufacturer
- Remove the glove compartment
- Remove the bottom trim of the centre console in the footwell on the passenger side (only with Telestart)
- Remove the A-pillar trim on the right (only with Telestart)



Prepa-  
rations



1 Heater

Installation  
site for the  
heater

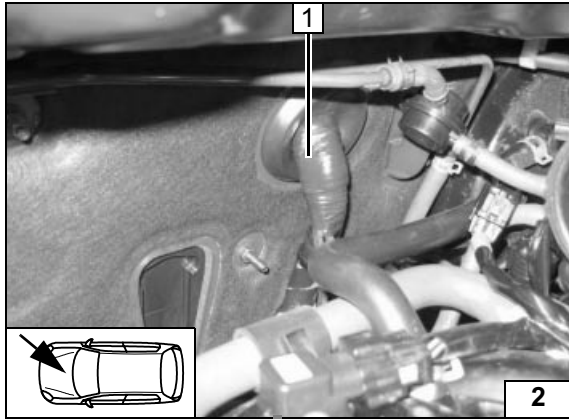


Route in accordance with general technical principles. Unless indicated otherwise in the description, secure onto the standard cables and wiring harnesses using cable ties. Fit a chafe guard over sharp edges!

**Wiring harness passage**

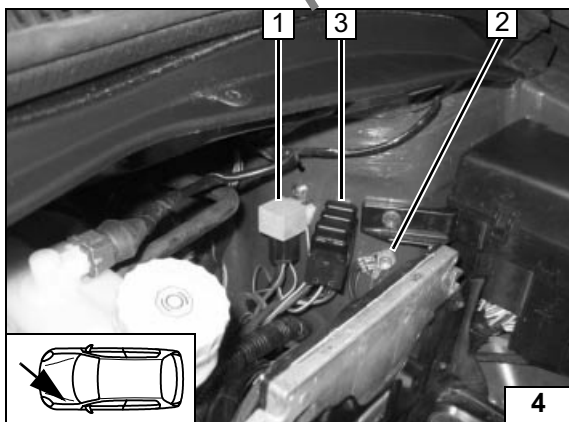
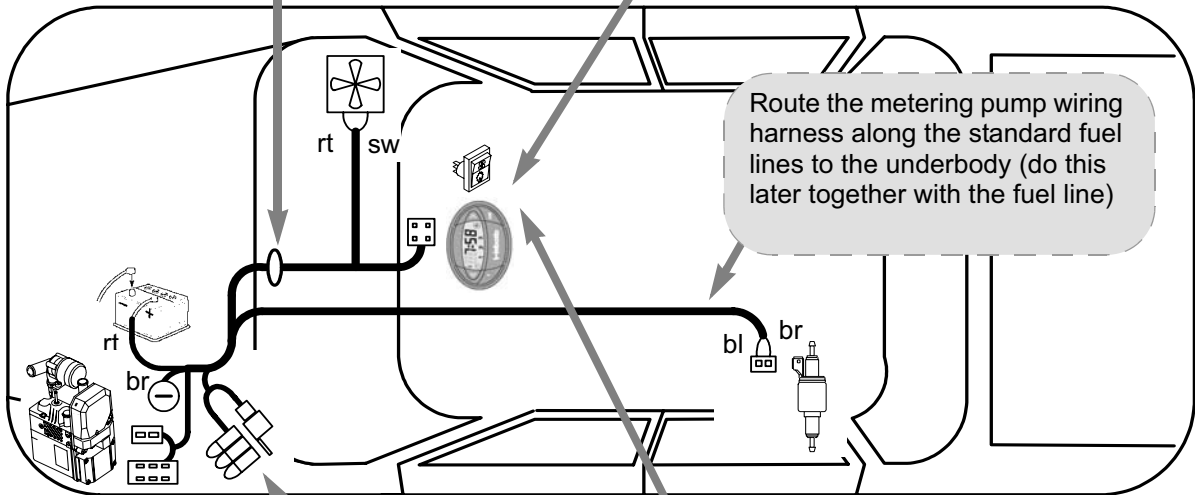
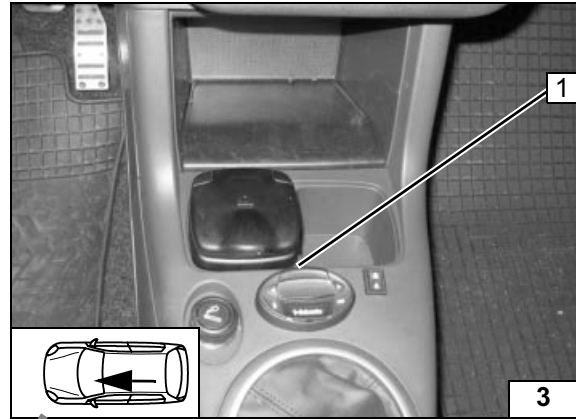
Strip the insulation off the cable passage, insert the cable and insulate the cable passage again!

**1 Cable passage**



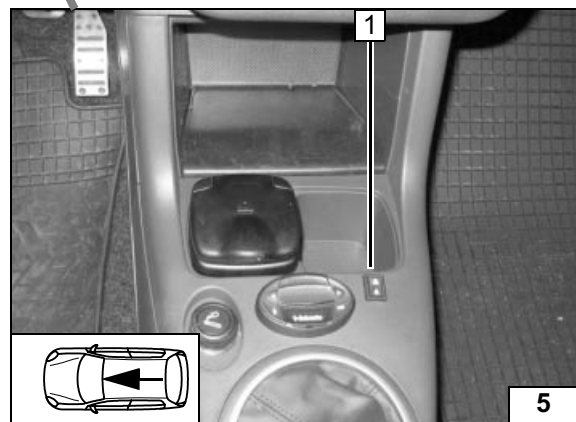
**Digital timer**

**1 Digital timer**



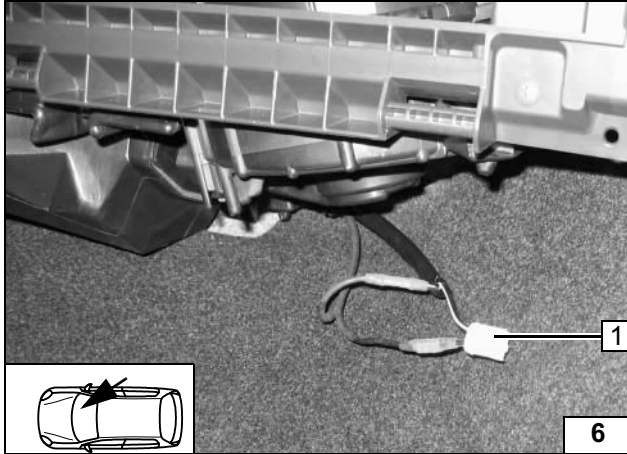
**Fuse holder, K3 relay**

- 1 K3 relay, self-tapping screw 5.5x13
- 2 Fuse holder, self-tapping screw 5.5x13
- 3 Earth cable to car's own earth post



**Optional summer/winter switch**

- 1 Summer/winter switch, hole diameter 12 mm



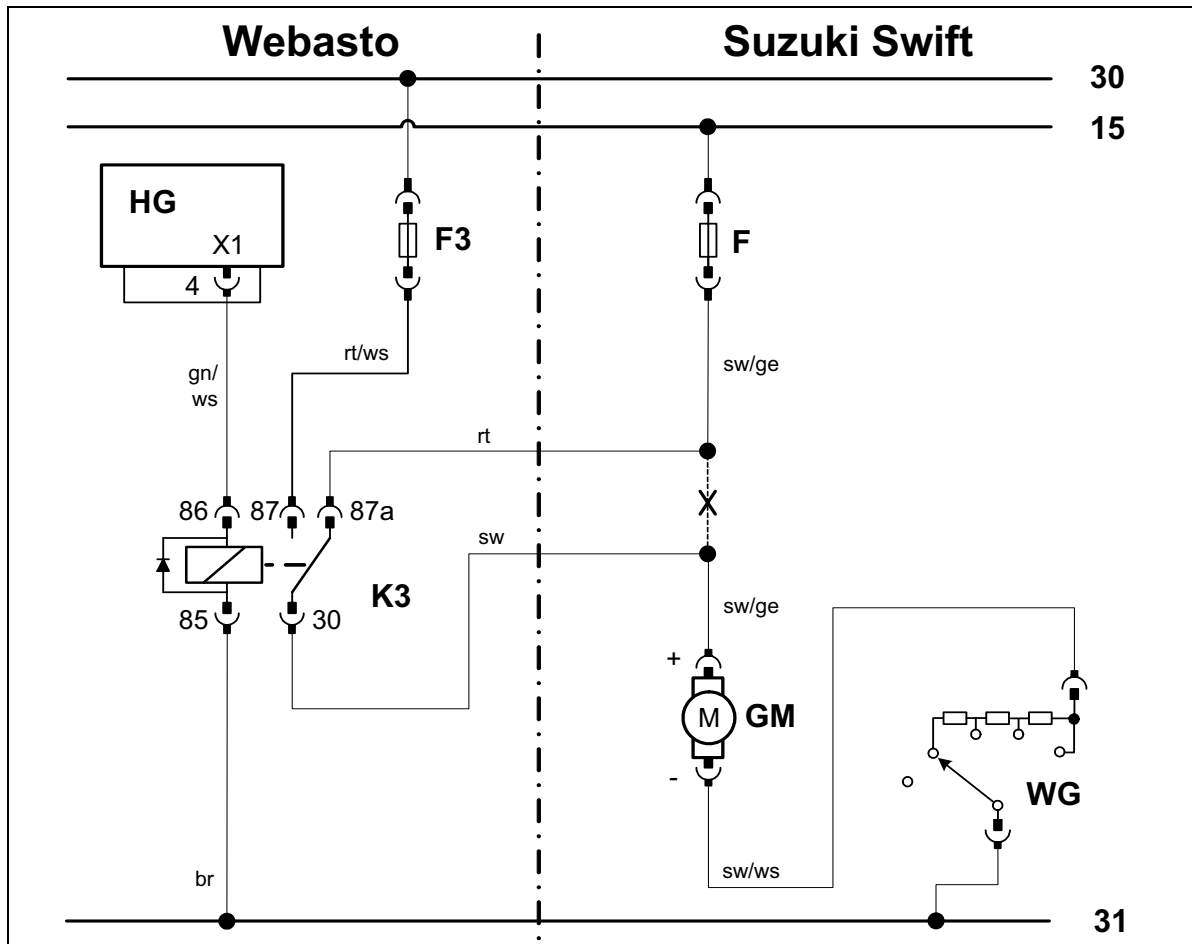
## Blower connection

Connection to the 2-pin plug of the blower motor.  
Make the connections using the supplied cable connectors as shown in the circuit diagram.

1 Plug 2-pin



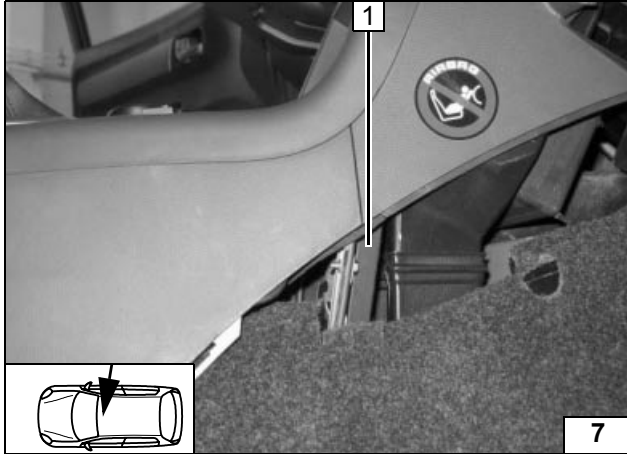
Connection to blower motor



Circuit diagram

Webasto components		Components Suzuki Swift		Colours and symbols	
HG	Heater TT-C/E	GM	Blower motor	rt	red
F3	Fuse	F	Fuse	ws	white
K3	Blower relay	WG	Resistor bank	sw	black
				br	brown
				gn	green
				ge	yellow
				X	Isolating point

Key

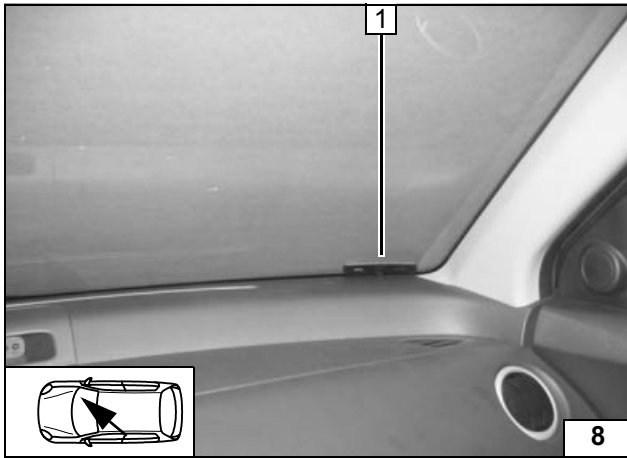


Optional Telestart

- 1 Receiver, screw M5x12, washer, collar nut M5



To install receiver

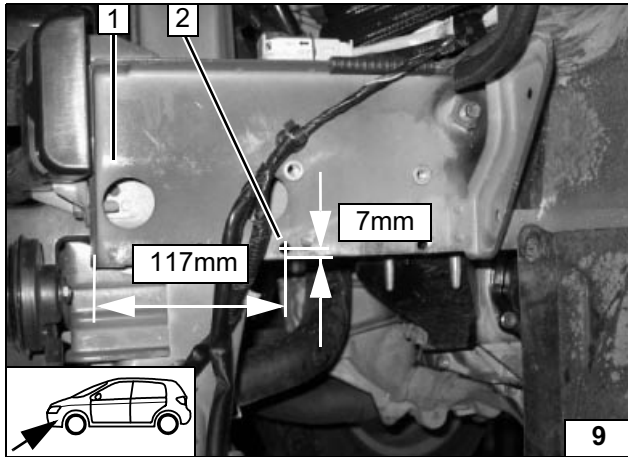
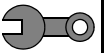


- 1 Aerial



To install the aerial

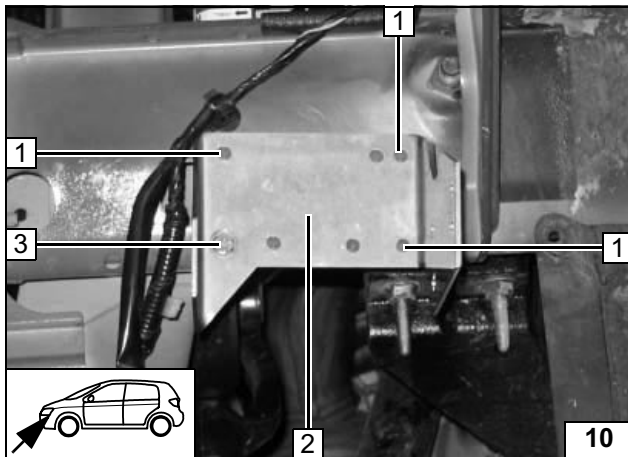




To prepare the installation site

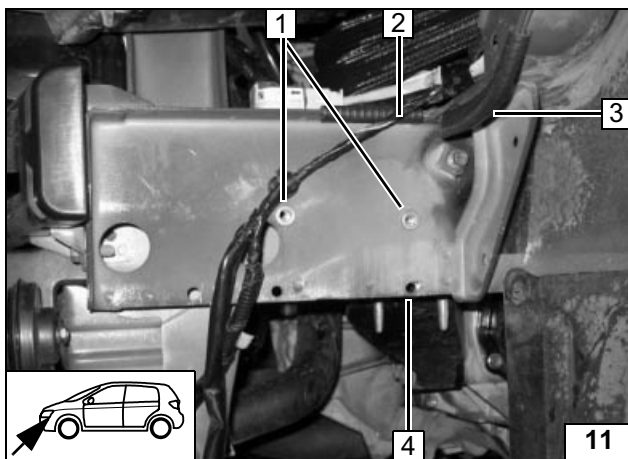
- 1 Standard frame side member
- 2 Hole diameter 7 mm

To transfer hole pattern



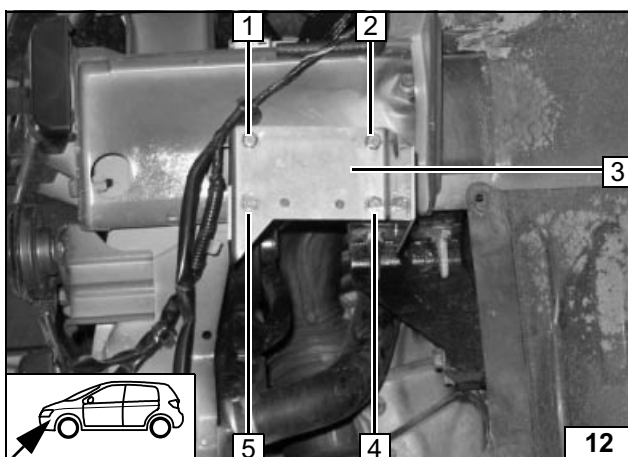
- 1 Transfer hole pattern
- 2 Align holder
- 3 Bolt M6x20, collar nut M6

To transfer hole pattern



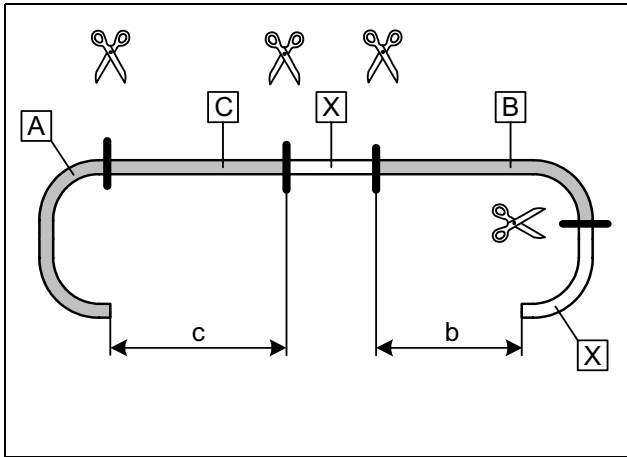
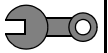
- 1 9.1 mm hole, pull in rivet nuts
- 2 Edge protector 50 mm
- 3 Edge protector 100 mm
- 4 Hole diameter 7 mm

To pull in rivet nuts, install edge protector section



- 1 Bolt M6x20, spring ring
- 2 Spacer disc 5 mm, bolt M6x25, spring ring
- 3 Holder
- 4 Spacer disc 5 mm, bolt Mx25, collar nut M6
- 5 Spacer disc 5 mm, body washer [2x], bolt M6x25, collar nut M6

To install holder



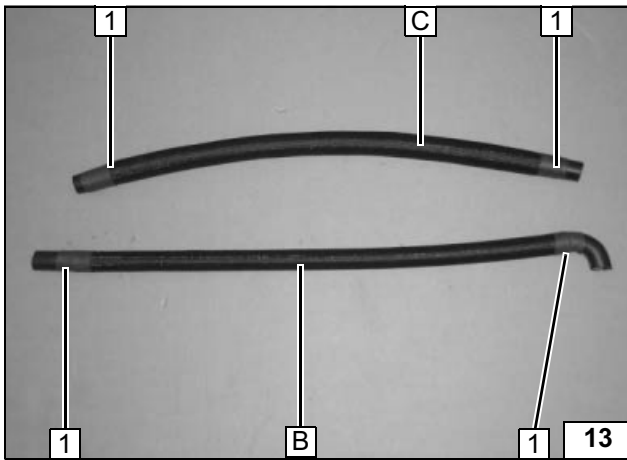
Prepare the water hoses!

Cut off hose **B** only just behind bend!

b = 680 mm  
c = 670 mm

Dispose of section **X**

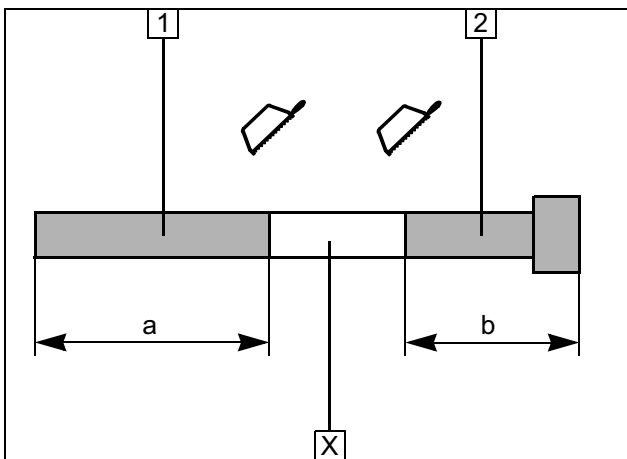
To cut water hoses to length



Cut woven protection hoses to length and push onto hose **B** and **C**!  
Cut shrink hoses in half!

1 Push on shrink hose, shrink fit [4x]

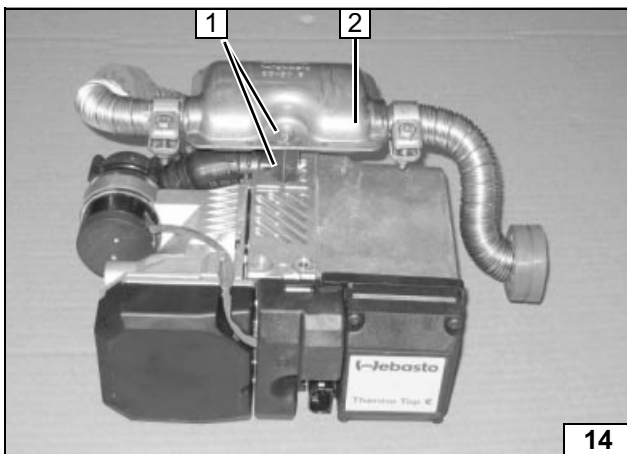
To prepare water hoses



1 Exhaust line  
a = 350 mm  
2 Exhaust end section  
b = 180 mm

Dispose of section **X**

To prepare exhaust line

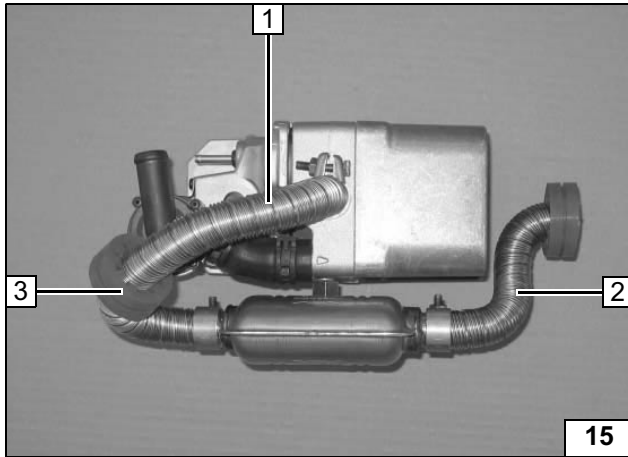
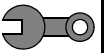


Ejot screws, tightening torque 10 Nm!

2 Exhaust silencer  
1 Ejot stud bolt, spacer nut M6x30, screw M6x12, spring ring

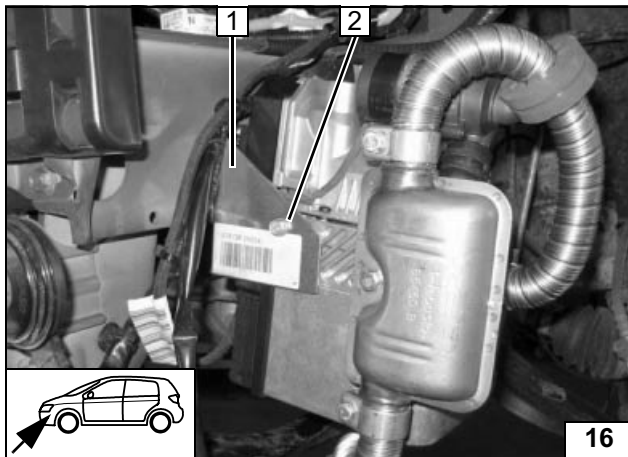
To prepare heater





- 1 Exhaust line, pipe clip [2x], rubber section
- 2 Exhaust line end section, pipe clip, rubber section
- 3 Align rubber section

To prepare heater

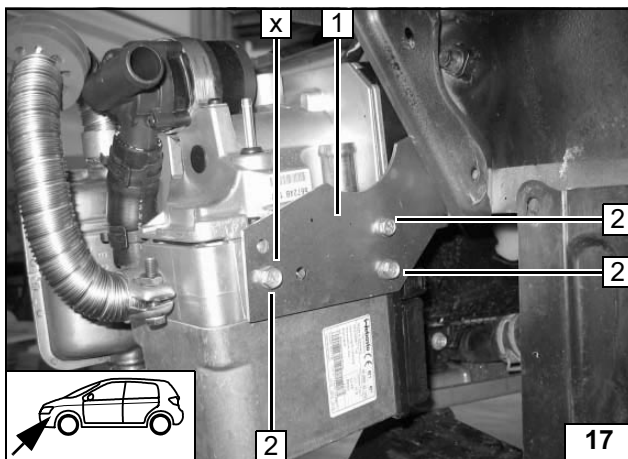


Ejot screws, tightening torque 10 Nm!

- 1 Holder
- 2 E-jot screw



To install heater



Ejot screws, tightening torque 10 Nm!  
Insert two washers at position x between the heater and holder!

- 1 Holder
- 2 E-jot screw [3x]



To install heater



Water connections

**IMPORTANT!**

Tighten all hose clips with a torque of 2.0 +0.5 Nm!

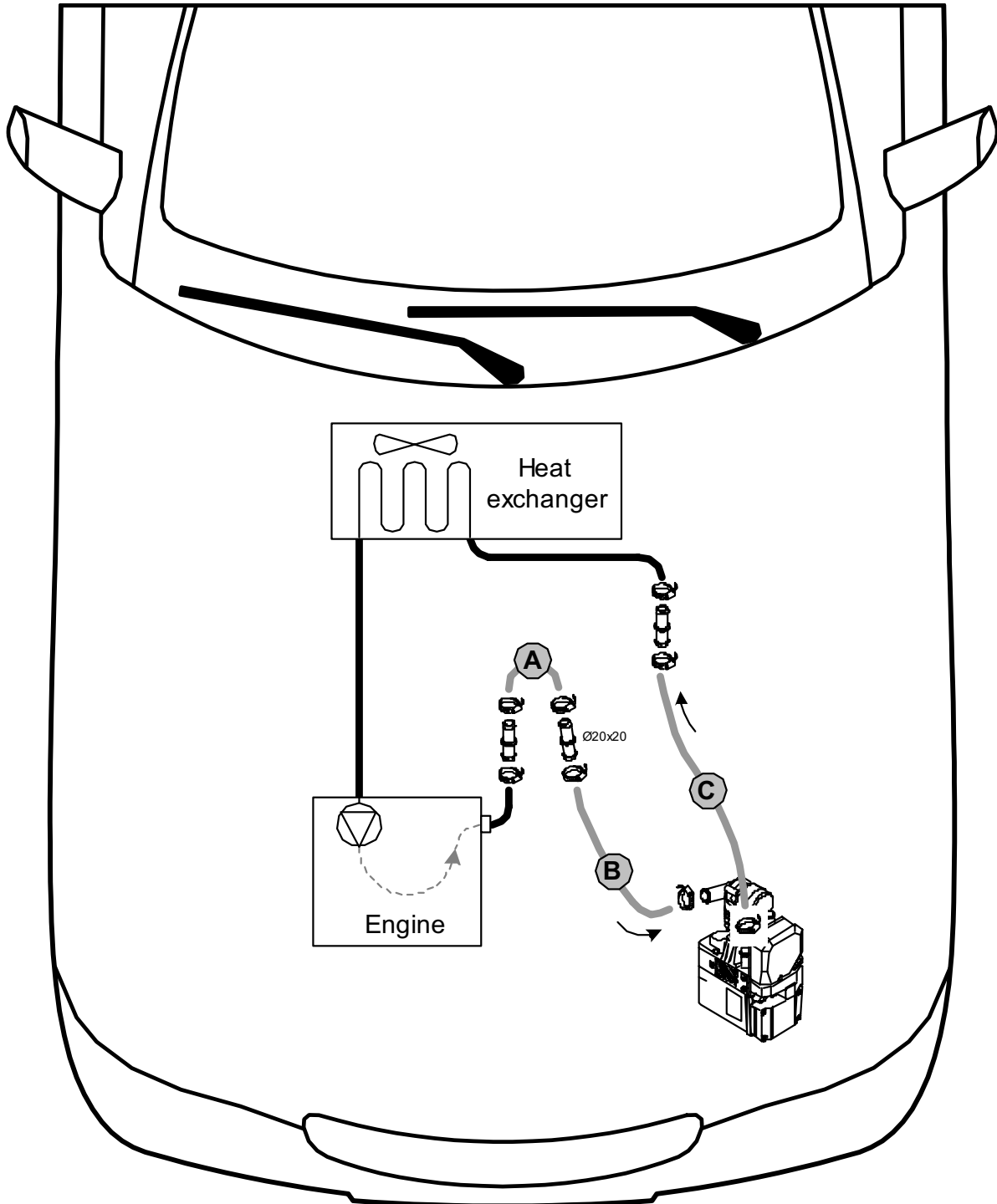
Catch escaping coolant water using a suitable container!

Install the water hoses with no kinks! Unless indicated otherwise in the description, secure using cable ties. Position hose clamps and spring strip clip so that no other hose can be damaged!

Carry out "inline" integration according to the following diagram:



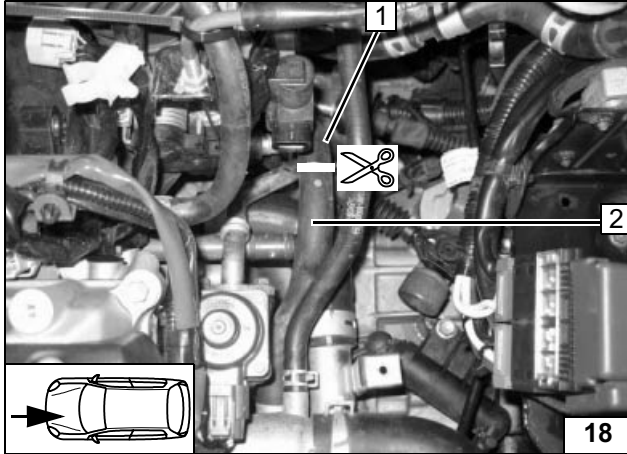
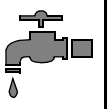
Only for 1.3 petrol



Water diagram

All clips are 16 – 27 mm diameter hose clips unless indicated otherwise!  
 All connection pipes are 15x20 diameter pipes unless indicated otherwise!



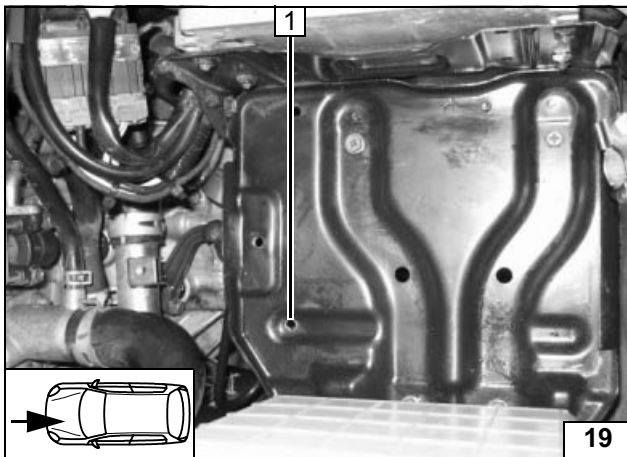


Only for 1.3 petrol models

- 1 Hose section heat exchanger input
- 2 Hose section engine output



Cut

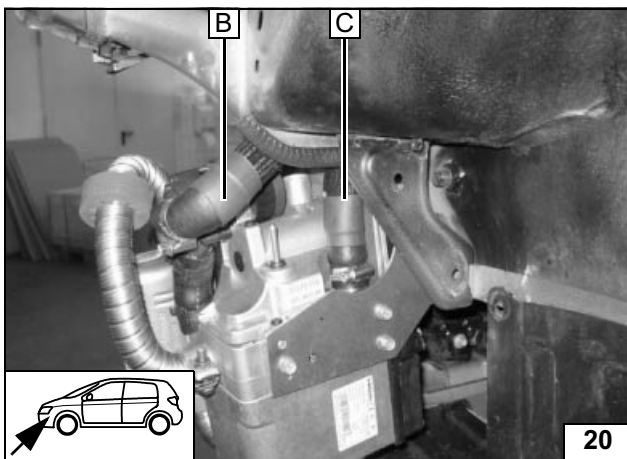


Only for 1.3 petrol models

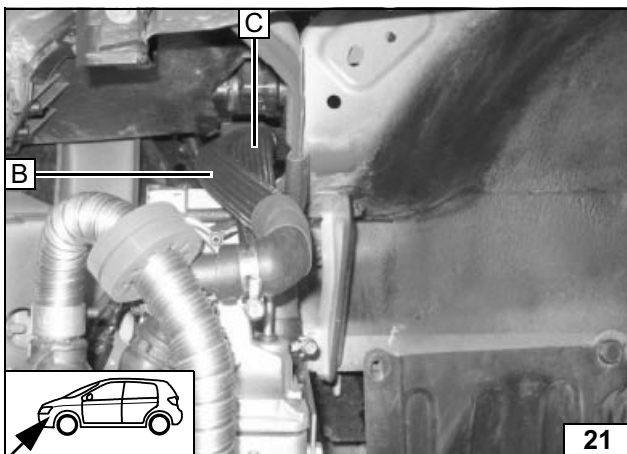
- 1 Hole diameter 7 mm



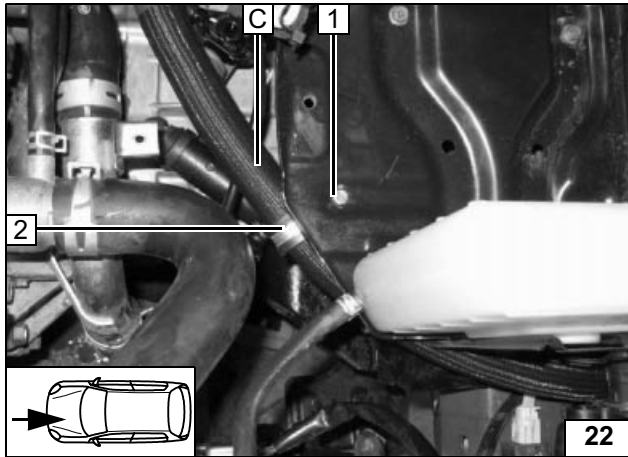
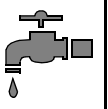
To prepare  
battery  
tray plate



Connection  
at heater



Positioning  
of water  
hoses

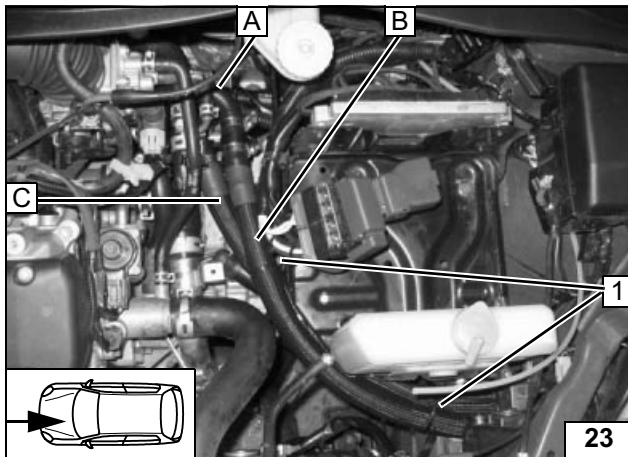


Ensure that you leave an adequate distance to adjacent components!

- 1 Screw M6x20, collar nut M6
- 2 Rubberised pipe clip Ø 29 mm



Positioning in engine compartment

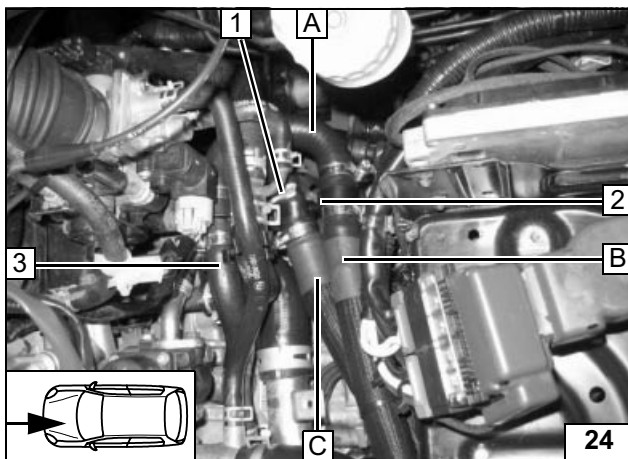


Ensure that you leave an adequate distance to adjacent components!

- 1 Cable ties [2x]



Positioning in engine compartment



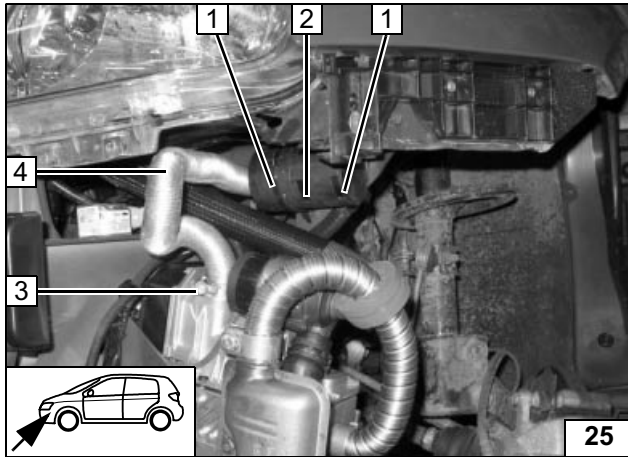
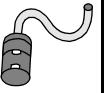
Fill the water hoses with cooling water before connecting!

Ensure that you leave an adequate distance to the gearshift linkage!

- 1 Hose heat exchanger input
- 3 Hose engine output
- 2 Spacer



Connection to heat exchanger input and engine output



## Combustion air integration

Check the installation position of the combustion air intake silencer, see "installation instructions"!

- 4 Combustion air intake line
- 3 Hose clip diameter 27 mm
- 2 Combustion air intake silencer
- 1 Cable ties [2x]



**To install combustion air intake silencer**



Integration in fuel system

**IMPORTANT !**

Take preparations into consideration! Fuel tank must be removed!

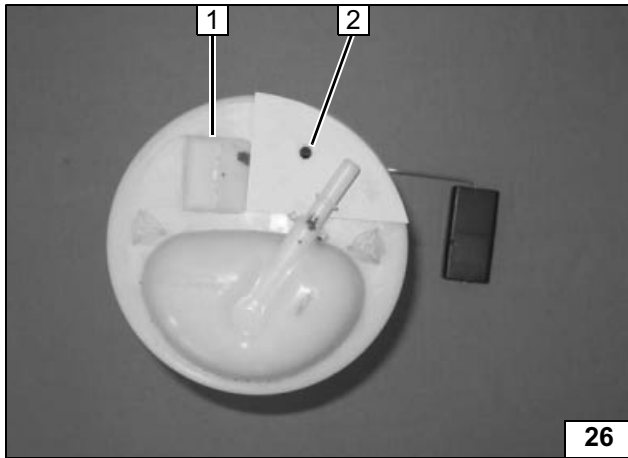
Catch escaping fuel using a suitable container!

Lay the fuel line and metering pump wiring harness so that they are protected from stones! Unless indicated otherwise in the description, secure using cable ties.

Fit a chafe guard on the fuel line and wiring harness around sharp edges!

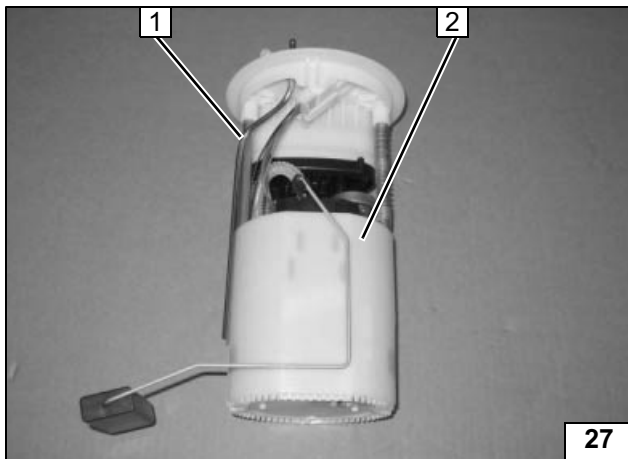
**IMPORTANT**

The fuel line and wiring harness for the metering pump are installed according to the electrical system diagram.



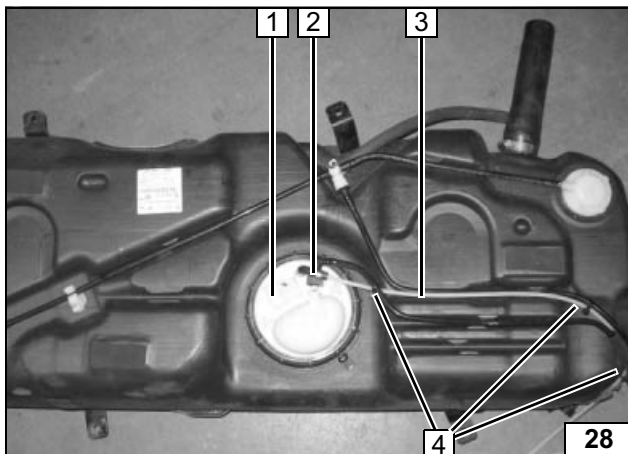
Remove the tank fittings as instructed by the manufacturer!

- 1 Tank fitting
- 2 Position template, transfer hole pattern, 6 mm hole



Shape and cut the tank connector to length in accordance with the template and insert it, see "installation instructions"!

- 2 Tank fitting
- 1 Tank connector



Install the tank fittings as instructed by the manufacturer! Shorten the 3.5 mm diameter shaped hose by 10 mm!

- 1 Tank fittings with tank connector
- 2 Shaped hose diameter 3.5 mm x 4.5 mm, Cailau clip diameter 8mm, Cailau clip diameter 10 mm
- 5 Fuel line
- 4 Cable ties [3x]

Install the fuel tank as instructed by the manufacturer!



Fuel extraction

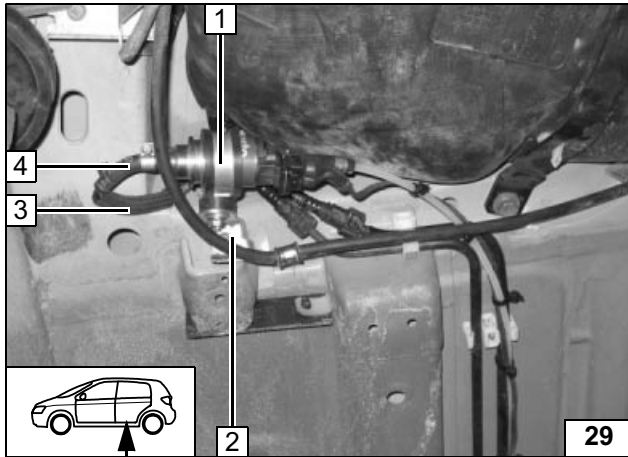


To insert tank connector



To connect fuel line





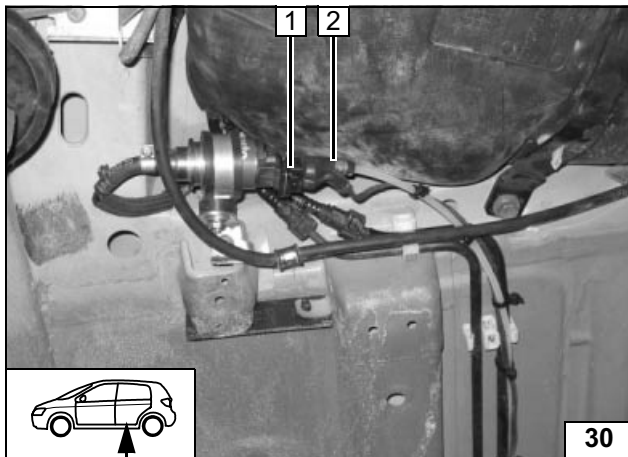
Check the installation position of the metering pump, see "installation instructions"!  
Cut fuel line to length!

Fuel line from the tank connector to the intake side of the metering pump (side without plug)

- 1 Metering pump, rubberised pipe clip, anti-vibration mount, collar nut M6 [2x]
- 2 Bracket, handbrake cable holder, standard screw
- 4 Hose section, hose clip diameter 10 mm [2x], fuel line
- 3 Chafe guard from hose 8x12 70 mm [2x]



**Installation location metering pump**



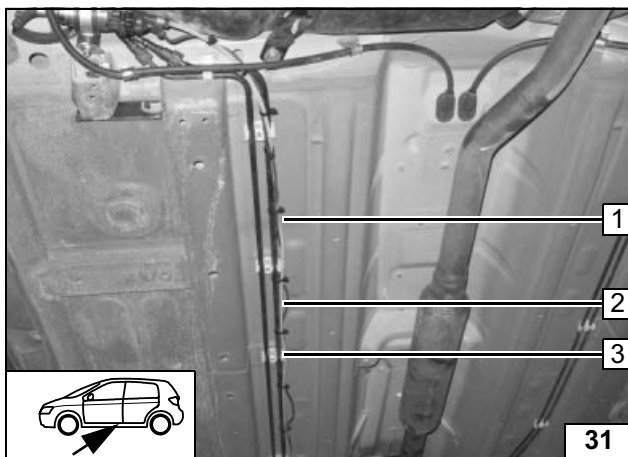
Check the installation position of the metering pump, see "installation instructions"!

Fuel line to the heater on the discharge side of the metering pump (side with plug).

- 1 Wiring harness metering pump, plug metering pump
- 2 Hose section, hose clip diameter 10 mm [2x], fuel line

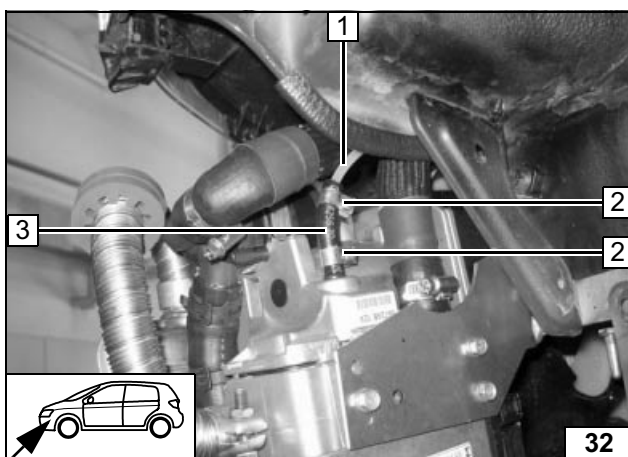


**Installation location metering pump**



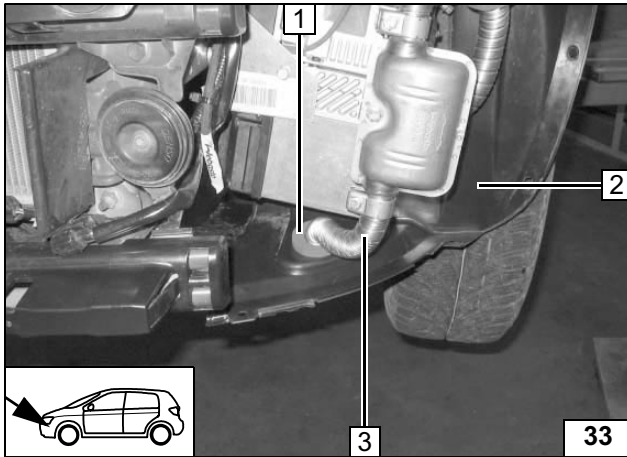
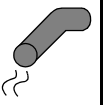
- 1 Mecanyl fuel line
- 2 Wiring harness metering pump
- 3 Standard fuel lines

**To route cables**



- 1 Mecanyl fuel line
- 2 Hose clip diameter 10 mm [2x]
- 3 Hose section

**Connection at heater**

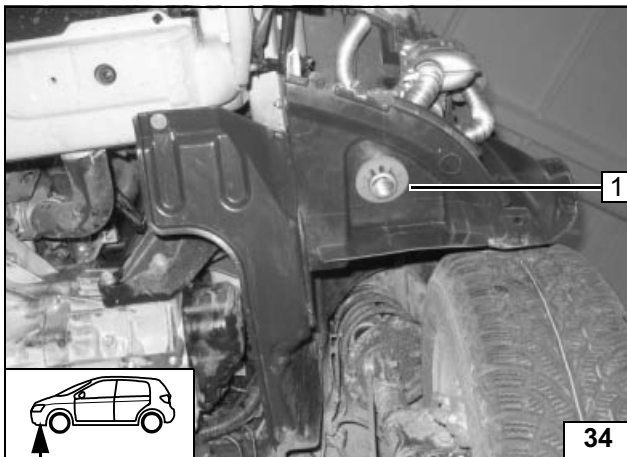


Refit the left wheel arch trim!

- 3 Exhaust pipe end section
- 2 Wheel arch trim
- 1 Hole diameter 42 mm, rubber section

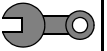


Prepare the wheel arch trim



- 1 Exhaust pipe end section, rubber section

To insert rubber section



## Concluding work

### IMPORTANT!

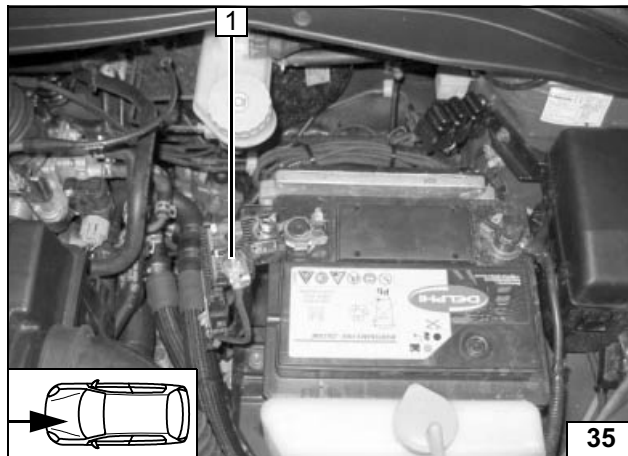
Install all the removed parts in reverse order.

Check that all hose lines, hose, spring strip and Cailau clips and all electrical connections are secure.

Secure all loose lines and cables with cable ties.

Spray the heater components with anti-corrosive wax (Tectyl 100K, order No. 111 329).

- Connect the battery
- Start the engine, bleed the water system as described in the vehicle manufacturer's instructions, top up the coolant
- Set the digital timer
- Set the vehicle heating as described in the "Operating instructions for the end customer", according to whether the vehicle has or does not have automatic air conditioning
- Check the function of the auxiliary heating system, see owner's manual / installation instructions
- Affix adhesive label "Standheizung vor dem Tanken abschalten" (Switch off auxiliary heating system before refuelling) to the B-pillar on the left



- 1 Connect the positive cable to the positive pole of the battery with a claw cable lug  $\varnothing$  8 mm (4-6<sup>2</sup>) to

To connect  
positive  
cable

**Webasto**  
*Feel the drive*

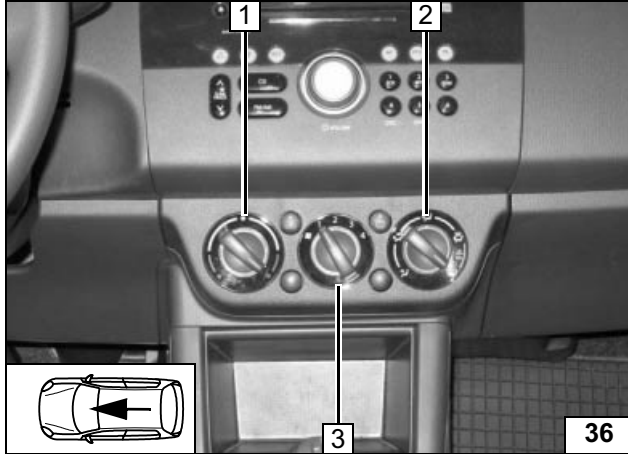
Webasto AG  
Postfach 80 - 82132 Stockdorf - Hotline 0 18 05 / 93 22 78  
Hotfax (0395) 55 92-353 - <http://www.webasto.de>

## Operating instructions for the end customer

Please remove this page and insert it into the owner's manual for the vehicle!



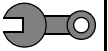
Make the following settings before you shut down the car:



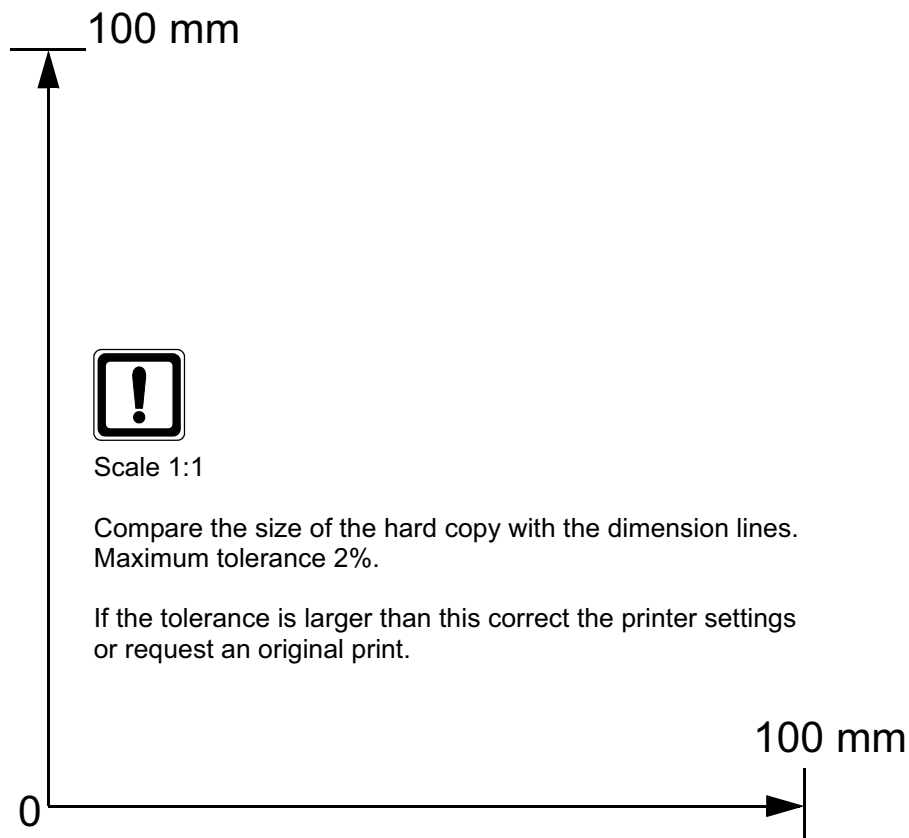
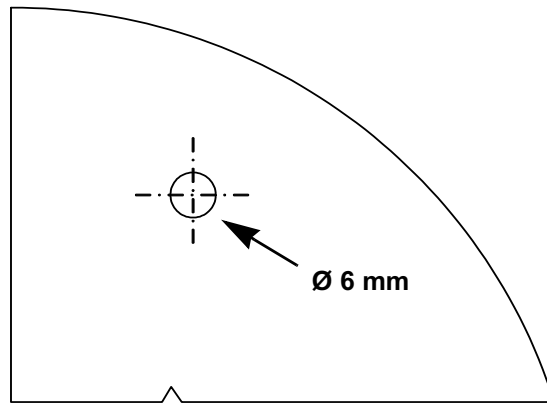
- 1 Temperature set to "max."
- 2 Air vent to windscreen
- 3 Blower speed to level "1", max. "2"

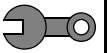
For cars without automatic airconditioning system



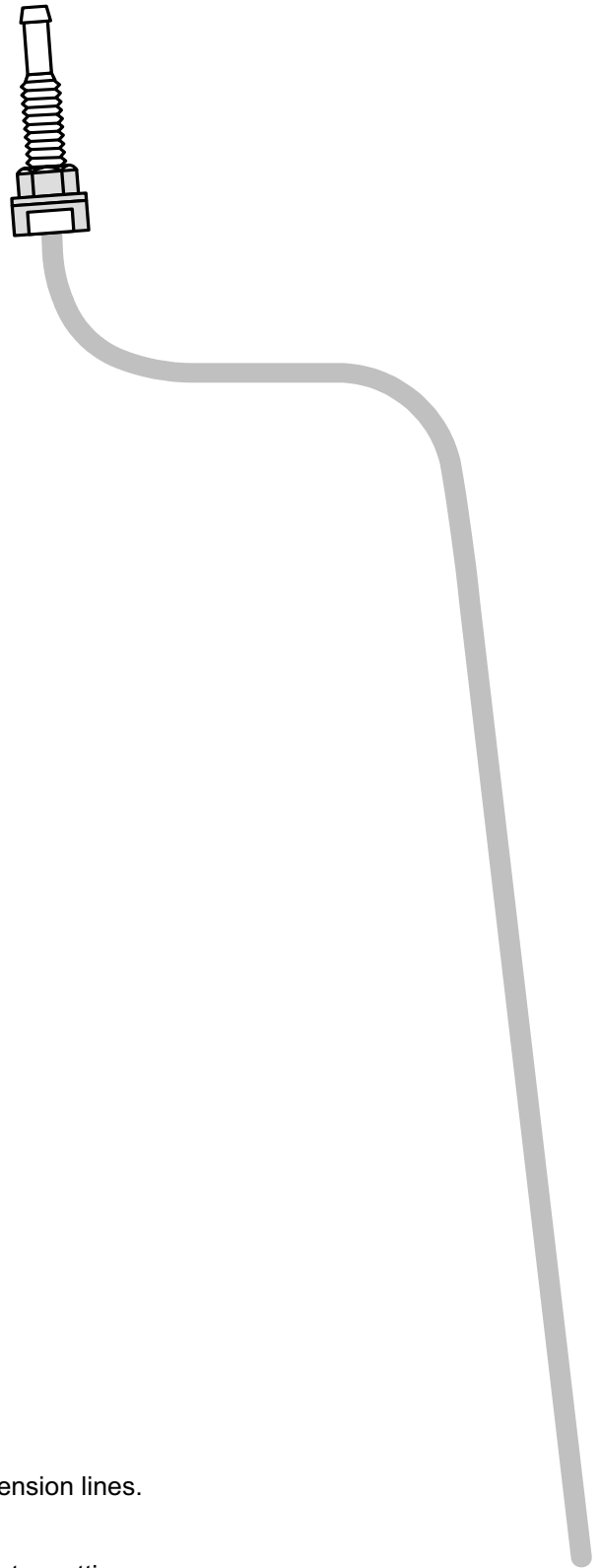


### Tank fitting template





Tank connector template



100 mm



Scale 1:1

Compare the size of the hard copy with the dimension lines.  
Maximum tolerance 2 %.

If the tolerance is larger than this correct the printer settings  
or request an original print.

100 mm

0

