# Water Heater



# Thermo Top Evo Parking Heater



# Installation Documentation Skoda Citigo / VW up / Seat Mii

# Validity

Manufacturer	Мос	lel	Туре	EG-BE No./ ABE
Skoda	Citiç	jo	AA	e13 * 2001 / 46 * 1169 *
VW	up		AA	e13 * 2007 / 46 * 1167 *
Seat	Mii		AA	e13 * 2007 / 46 * 1168 *
Motorisation	Euol	Tranamiaai	on type Output in k	kW Displacement in Engine code

Motorisation	Fuel	Transmission type	Output in kW	Displacement in cm <sup>3</sup>	Engine code
1.0 MPI	Petrol	5-gear SG	44	999	CHYA
1.0 MPI	Petrol	5-gear SG	55	999	СНҮВ

SG = manual transmission

### From Model Year 2012 Left-hand drive vehicle

 Verified equipment variants: Manual air-conditioning

 Front fog light

 Not verified:
 Passenger compartment monitoring

Not vermeu.	r assenger compartment monitoring
	Automatic transmission
	Automatic air-conditioning
	Headlight washer system
	blue motion

Total installation time: approx. 7 hours

# Skoda Citigo / VW up / Seat Mii

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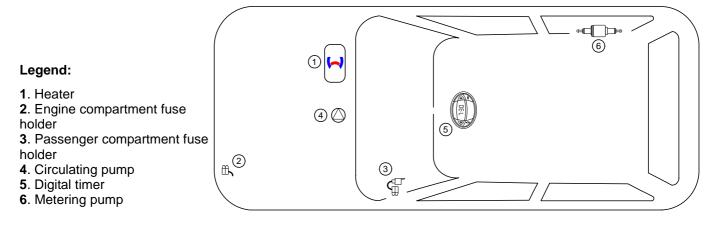
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### **Necessary Components**

- Basic delivery scope Thermo Top Evo in accordance with price list
- Installation kit for Skoda Citigo / VW up / Seat Mii 2012 Petrol: 1318215A
- Heater control in accordance with price list and upon consultation with end customer
- In case of Telestart, indicator lamp in accordance with price list and in consultation with end customer

### **Installation Overview**



# Information on Total Installation Time

The total installation time includes the time needed for mounting and demounting of the vehicle-specific components, the heater specific installation time and all other times required for the system integration and initial start-up of the heater.

The total installation time may vary for vehicle equipment other than provided.

## Information on Operating and Installation Instructions

#### 1 Important Information (not complete)

#### 1.1 Installation and Repair

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.

Installation and repair may ONLY be carried out by persons trained and certified in a Webasto training course. NEVER try to install or repair Webasto heating or cooling systems if you have not completed a Webasto training course, you do not have the necessary technical skills and you do not have the technical documentation, tools and equipment available to ensure that you can complete the installation and repair work properly.

Only use genuine Webasto parts. See the Webasto air and water heaters accessories catalogue for this purpose.

#### 1.2 Operation

To ensure safe operation, we recommend having the heater checked every two years by an authorised Webasto dealer, especially when used over a long period and/or under extreme environmental conditions.

Do not operate the heater in closed rooms due to the danger of poisoning and suffocation.

Always switch off the heater before refuelling

The heater may only be used with the prescribed fuel Diesel (DIN EN 590) or petrol (DIN EN 227).

The heater may not be cleaned with a high-pressure cleaner.

#### 1.3 Please note

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

To become familiar with and understand all functions and properties of the heater, the operating instructions must be read carefully and observed at all times.

For proper, safe installation and repair work, the installation instructions with all warnings and safety information must be carefully read and observed at all times. Please always contact a workshop authorised by Webasto for all installation and repair work.

#### IMPORTANT

Webasto shall assume no liability for defects, damage and injuries resulting from a failure to observe the installation, repair and operating instructions of the information contained in them.

This liability exclusion particularly applies to improper installations and repairs, installations and repairs by untrained persons or in the case of a failure to use genuine spare parts.

The liability due to culpable disregard to life, limb or health and due to damage or injuries caused by a wilful or reckless breach of duty remain unaffected, as does the obligatory product liability.

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 wire ends 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).

Observe the instructions and guidelines of the respective vehicle manufacturer for demounting and mounting vehicle specific components!

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

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

#### 2 Statutory regulations governing installation

Guidelines	Thermo Top Evo
Heating Directive ECE R122	E1 00 0258
EMC Directive ECE R10	E1 03 5627

#### NOTE

The regulations of these guidelines are binding in the scope of the Directive 70/156/EEC and/or 2007/46/EC (for new vehicle models from 29/04/2009) and should also be observed in countries in which there are no special regulations.

#### IMPORTANT

Failure to follow the installation instructions will result in the invalidation of the type approval for the heater and therefore invalidation of the general **homologation of the vehicle**.

#### NOTE

For vehicles with an EU permit, no entry in accordance with § 19 Sub-Section 4 of Annex VIII b to the Road Traffic Act is required.

# 2.1 Excerpt from the directive 2001/56/EC Appendix VII for the installation of the heater

Beginning of excerpt.

#### ANNEX VII

#### REQUIREMENTS FOR COMBUSTION HEATERS AND THEIR IN-STALLATION

#### 1. GENERAL REQUIREMENTS

1.7.1. A clearly visible tell-tale in the operator's field of view shall inform when the combustion heater is switched on or off.

#### VEHICLE INSTALLATION REQUIREMENTS

#### 2.1. Scope

2.

- 2.1.1. Subject to paragraph 2.1.2. combustion heaters shall be installed according to the requirements of this Annex.
- 2.1.2. Vehicles of category O having liquid fuel heaters are deemed to comply with the requirements of this Annex.

#### 2.2. Positioning of heater

- 2.2.1. Body sections and any other components in the vicinity of the heater must be protected from excessive heat and the possibility of fuel or oil contamination.
- 2.2.2. The combustion heater shall not constitute a risk of fire, even in the case of overheating. This requirement shall be deemed to be fulfilled if the installation ensures an adequate distance to all parts and suitable ventilation, by the use of fire resistant materials or by the use of heat shields.
- 2.2.3. In the case of M2 and M3 vehicles, the heater must not be positioned in the passenger compartment. However, an installation in an effectively sealed envelope which also complies with the conditions in paragraph 2.2.2 may be used.
- 2.2.4. The label referred to in paragraph 1.4 or a duplicate, must be positioned so that it can be easily read when the heater is installed in the vehicle.
- 2.2.5. Every reasonable precaution should be taken in positioning the heater to minimise the risk of injury and damage to personal property.

#### 2.3. Fuel supply

- 2.3.1. The fuel filler must not be situated in the passenger compartment and must be provided with an effective cap to prevent fuel spillage.
- 2.3.2. In the case of liquid fuel heaters, where a supply separate to that of the vehicle is provided, the type of fuel and its filler point must be clearly labelled.
- 2.3.3. A notice, indicating that the heater must be shut down before refuelling, must be affixed to the fuelling point. In addition a suitable instruction must be included in the manufacturer's operating manual.

#### 2.4. Exhaust system

2.4.1. The exhaust outlet must be located so as to prevent emissions from entering the vehicle through ventilators, heated air inlets or opening windows

#### 2.5. Combustion air inlet

- 2.5.1. The air for the combustion chamber of the heater must not be drawn from the passenger compartment of the vehicle.
- 2.5.2. The air inlet must be so positioned or guarded that blocking by rubbish or luggage is unlikely.

#### 2.6. Heating air inlet

- 2.6.1. The heating air supply may be fresh or recirculated air and must be drawn from a clean area not likely to be contaminated by exhaust fumes emitted either by the propulsion engine, the combustion heater or any other vehicle source.
- 2.6.2. The inlet duct must be protected by mesh or other suitable means.

#### 2.7. Heating air outlet

- 2.7.1. Any ducting used to route the hot air through the vehicle must be so positioned or protected that no injury or damage could be caused if it were to be touched.
- 2.7.2. The air outlet must be so positioned or guarded that blocking by rubbish or luggage is unlikely.

End of excerpt.

In multilingual versions the German language is binding.

# Skoda Citigo / VW up / Seat Mii

### Information on Validity

This installation documentation applies to Skoda Citigo / VW up / Seat Mii Petrol vehicles - for validity, see page 1 - from model year 2012 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.

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

### **Technical Information**

### **Special tools**

- · Hose clamp pliers for self-clamping hose clamps
- · Hose clamp pliers for Clic hose clamps of type W
- Automatic wire stripper 0.2 6mm<sup>2</sup>
- Crimping pliers for cable lug / tab connector 0.5 6mm<sup>2</sup>
- Torque wrench for 2.0 10 Nm
- Hose clamping pliers
- · Webasto Thermo Test Diagnosis with current software

### Dimensions

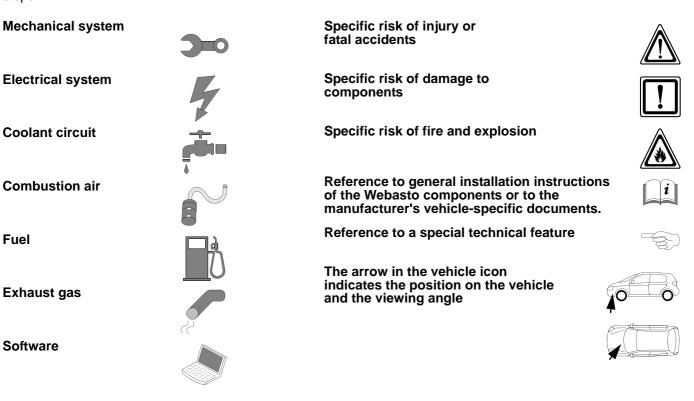
All dimensions are in mm

### **Tightening torque values**

- Tightening torque values of 5x13 heater bolts = 8Nm.
- Tightening torque values of 5x15 retaining plate of water connection piece bolts = 7Nm.
- Tighten other bolt connections in accordance with manufacturer's instructions or in accordance with state-of-theart-technology.

### **Explanatory Notes on Document**

You will find an identification mark on the outside top right corner of the page in question to provide you with a quick overview of the individual working steps. Special features are highlighted using the following symbols:



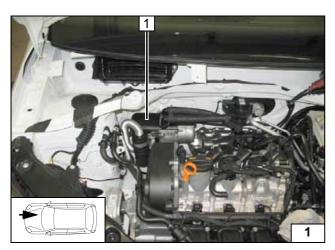
# **Preliminary Work**

### Vehicle

- Open the fuel tank cap.
- Ventilate the fuel tank.
- Close the fuel tank cap again.
- Depressurise the cooling system.
- Disconnect and completely remove the battery together with the carrier.
- Remove the air filter together with the intake hose.
- Remove the coolant reservoir cap.
- Remove the windscreen wiper.
- Remove the right-hand wheel well trim.
- Remove the rear bench seat.
- Open the right-hand tank-fitting service lid.
- Remove the fuel-tank sending unit in accordance with the manufacturer's instructions.
- Remove the instrument panel trim beneath the steering wheel.

### Heater

- Remove years that do not apply from the type and duplicate label.
- Attach the duplicate label (type label) in the appropriate place in the engine compartment.

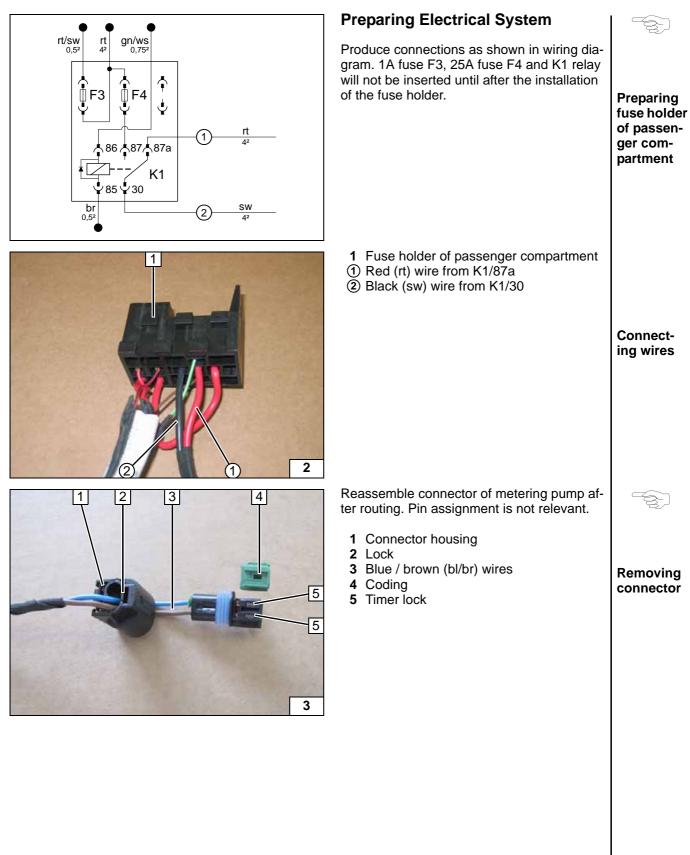


### Heater Installation Location

1 Heater

Installation location







# **Electrical System**

## Earth wire

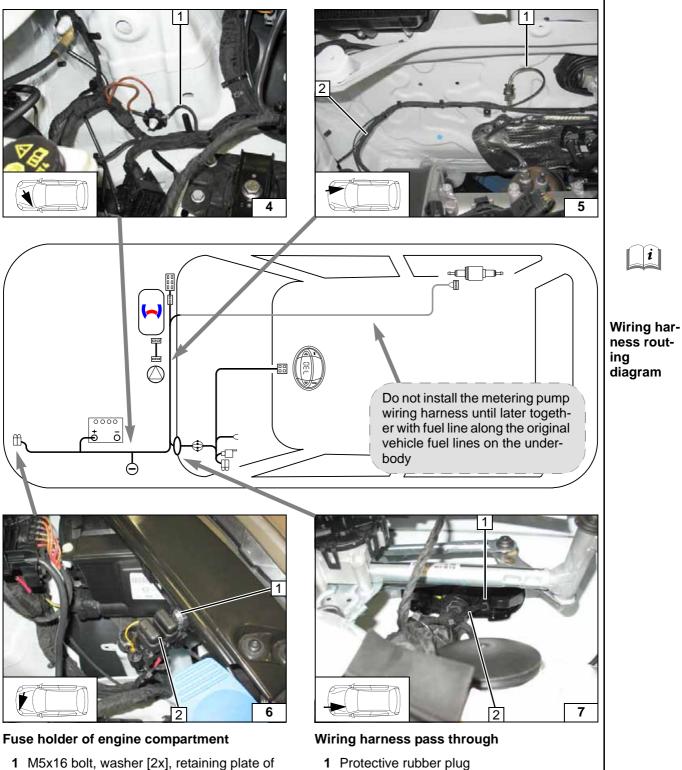
Positive wire will be installed to the battery positive distributor later.

1 Earth wire on original vehicle earth support point

### Wiring harness routing

Route wiring harnesses of heater and circulating pump **2** to the installation location of the heater along original vehicle brake lines.

1 Wiring harnesses of circulating pump



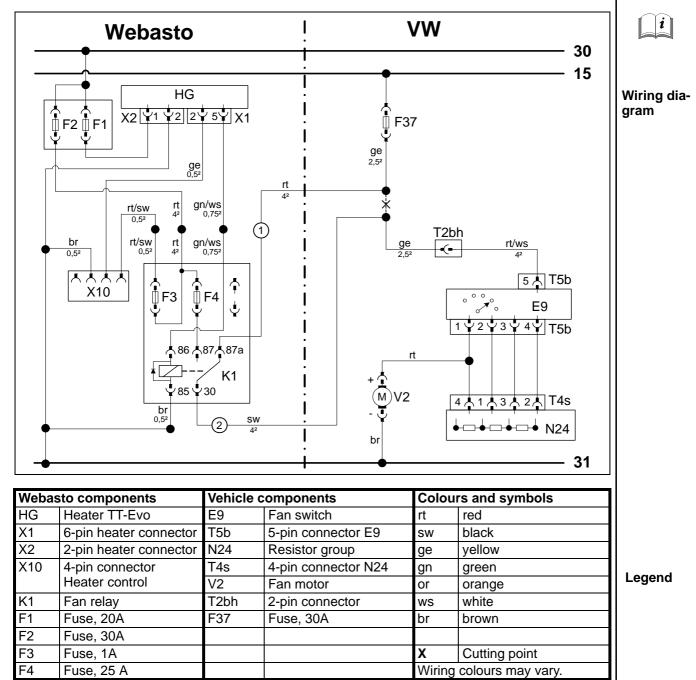
2 Wiring harnesses of heater, heater control

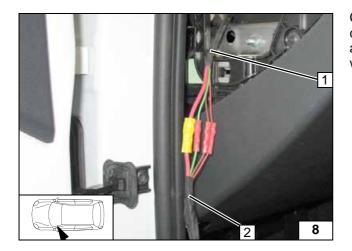
2 Fuses F1-2

fuse holder, nut, existing hole



# **Fan Controller**





Connect same colour wires of passenger compartment fuse holder wiring harness **2** and wiring harness of heater **1** according to wiring diagram.

-2)

Connecting the wiring harnesses



Installing fuse holder of passenger compartment

Completing fuse holder of passenger compartment

Fuse and relay carri-

Connec-

tion of fan switch

er

**1** Original vehicle bolt 2 Fuse holder of passenger compartment 9 1 K1 relay 2 1A fuse F3 3 25A fuse F4 10 Loosen fuse and relay carrier 1. 1 2 Socket of fuse F37 Connection to 30A fuse F37. Produce connections as shown in wiring diagram. 1 Yellow (ge) wire of fan switch E9 2 Yellow (ge) wire of fuse F37 1 Red (rt) wire from K1/87a 2 Black (sw) wire from K1/30 2

12



*i* ]

Installing digital tim-

i

Installing

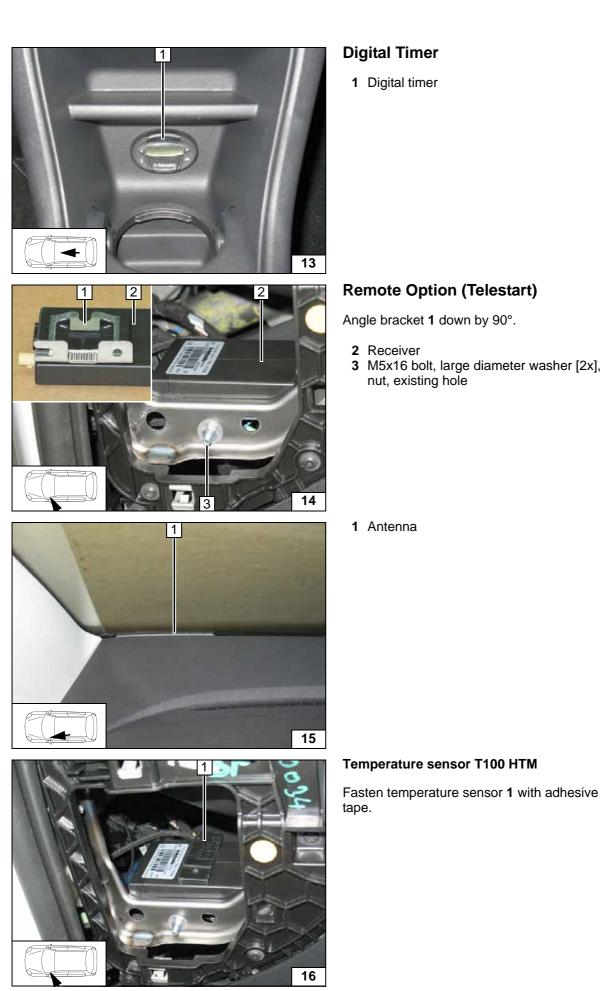
receiver

Installing antenna

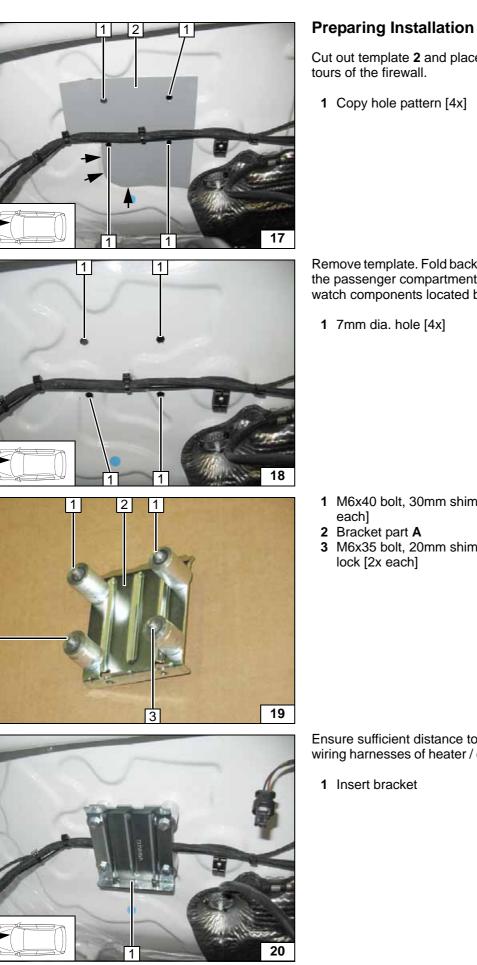
i

Installing temperature sensor

er







paring Installation Location	
ut template <b>2</b> and place it on the con- of the firewall.	
Copy hole pattern [4x]	Copying hole pat- tern
ove template. Fold back insulation mat in assenger compartment. When drilling, or components located behind!	
mm dia. hole [4x]	Holes in firewall
//6x40 bolt, 30mm shim, pin lock [2x ach] Bracket part <b>A</b> //6x35 bolt, 20mm shim, 5mm shim, pin bock [2x each]	Preparing bracket part A
re sufficient distance to brake line and g harnesses of heater / circulating pump. nsert bracket	
	Installing bracket part A

3



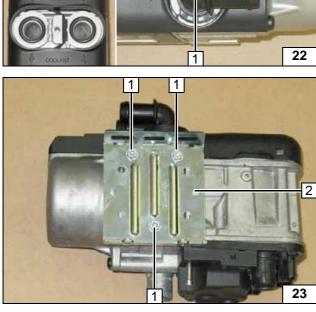
1 Flanged nut [4x]

each]

21

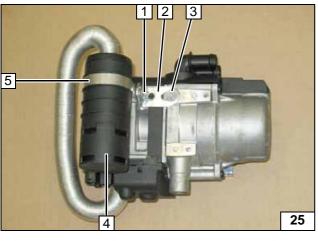
2

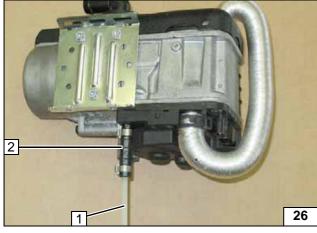
Installing bracket part A **Preparing Heater** i 1 Water connecting piece, sealing ring [2x 2 5x15mm self-tapping bolt, retaining plate of water connecting piece Installing water connecting piece 1 5x13 self-tapping bolt [3x] 2 Bracket part B Premounting bracket part B 1 Combustion air pipe i Installing combustion air pipe

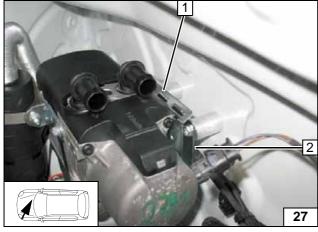


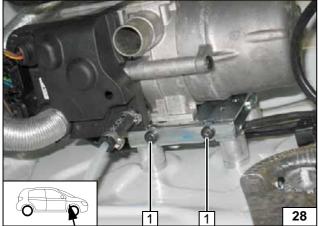
1









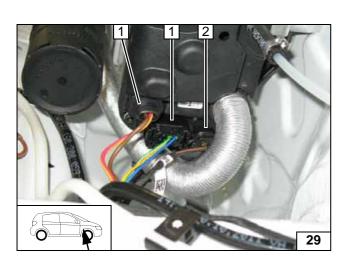


	<ol> <li>M5x16 bolt, flanged nut</li> <li>Angle bracket</li> <li>5x13 self-tapping bolt</li> <li>Silencer</li> <li>51mm dia. clamp</li> </ol>	Installing silencer
	<ol> <li>Fuel line</li> <li>Hose section, 10 mm dia. clamp [2x]</li> </ol>	Premount- ing fuel line
]	Installing Heater	
	Insert heater with bracket <b>B</b> into premounted bracket <b>A</b> .	
	<ol> <li>Bracket B</li> <li>Bracket A</li> </ol>	Installing heater
/	Bolt bracket <b>A</b> and bracket <b>B</b> together.	
	1 M5x12 Torx screw [2x]	
		Installing heater

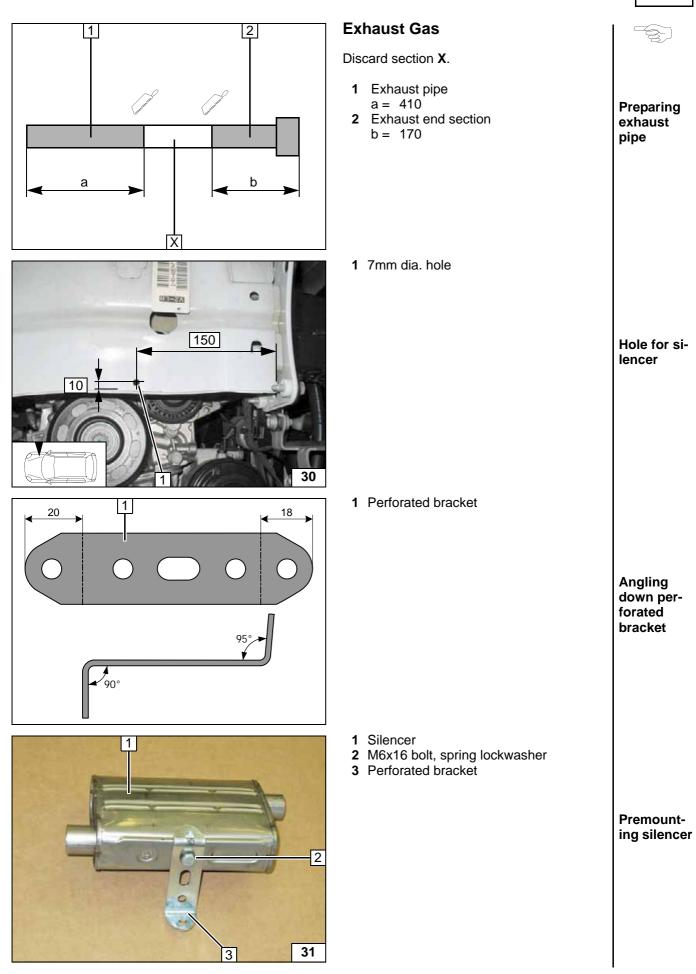


- Wiring harness of heater [2x]
   Wiring harness of circulating pump

Attaching wiring harnesses









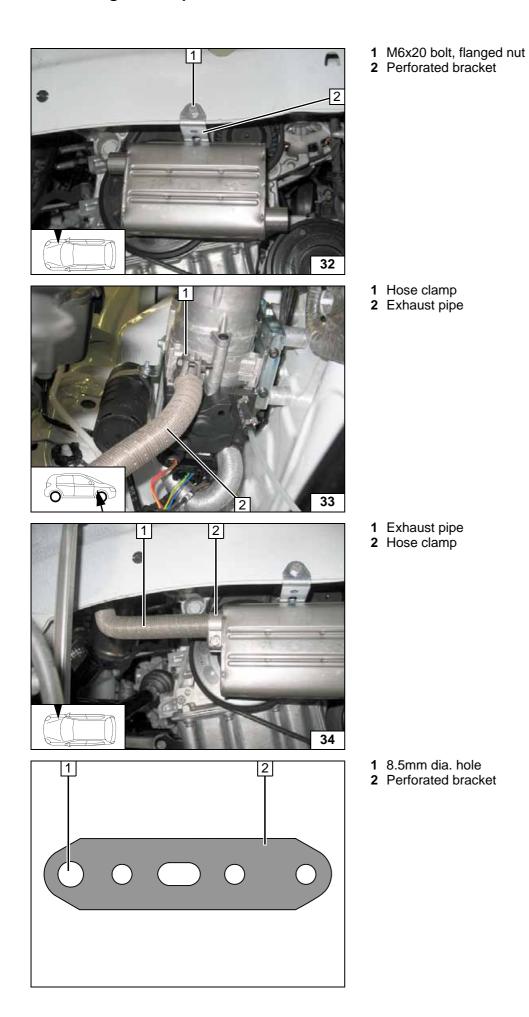
Installing silencer

Installing exhaust

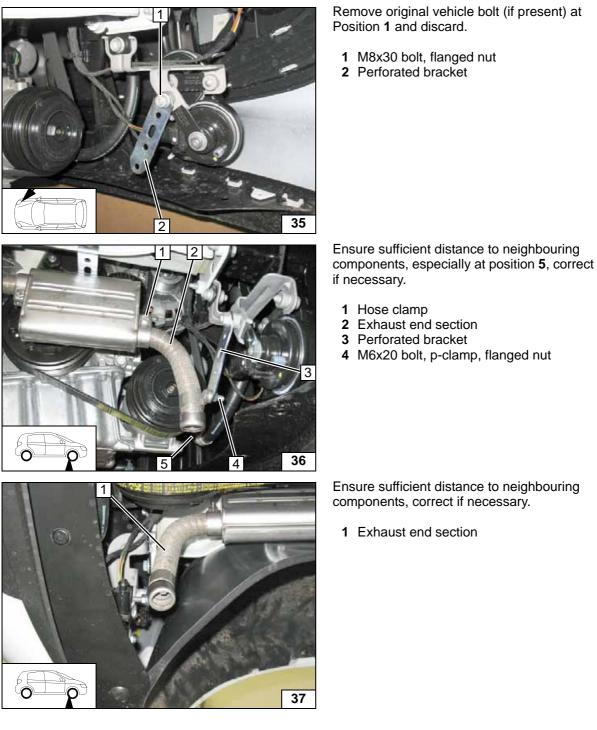
Installing exhaust pipe

Drilling out perforated bracket

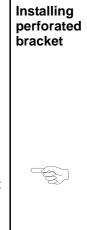
pipe



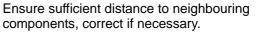




Remove original vehicle bolt (if present) at Position 1 and discard.



Installing exhaust end section



1 Exhaust end section



Aligning exhaust end section

### Fuel

### CAUTION!

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

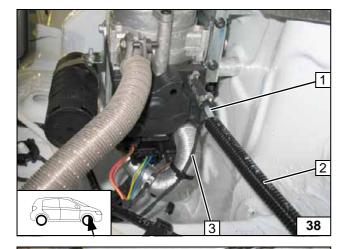
Catch any fuel running off with an appropriate container.

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 in as shown in the wiring harness routing diagram.

1

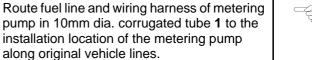


Route fuel line 1 and wiring harness of metering pump **3** to the underbody in 10mm dia. corrugated tube 2.





Routing lines

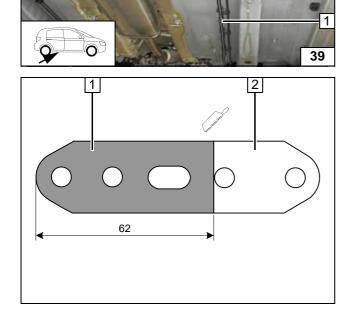




1 Perforated bracket

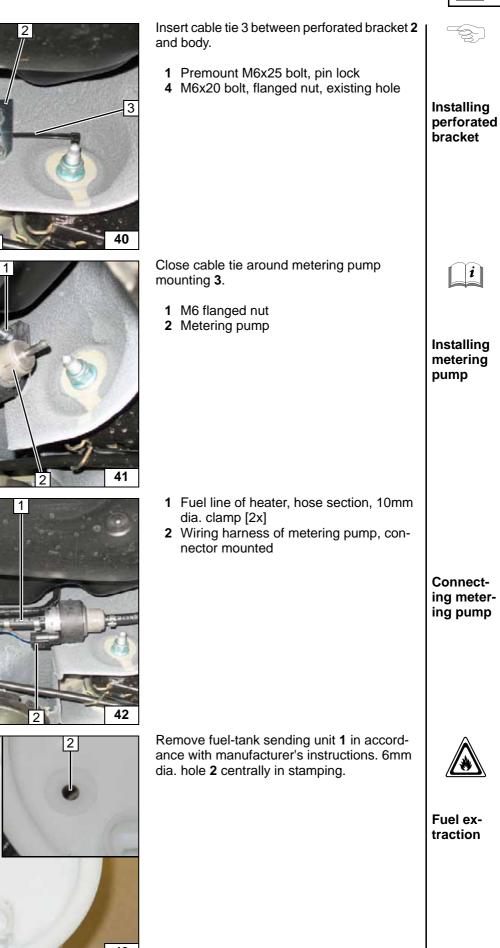
2 Discard section

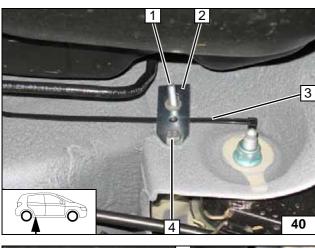
Cutting perforated bracket to length

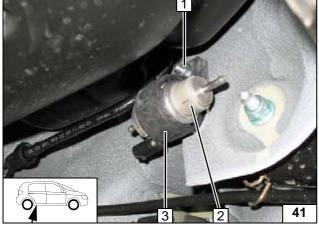


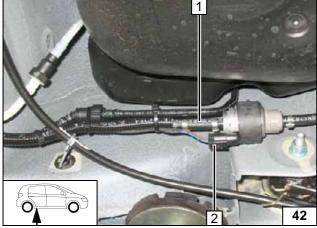


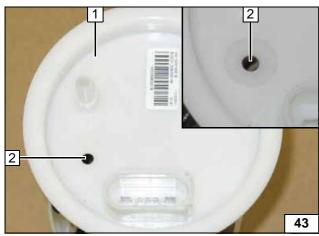










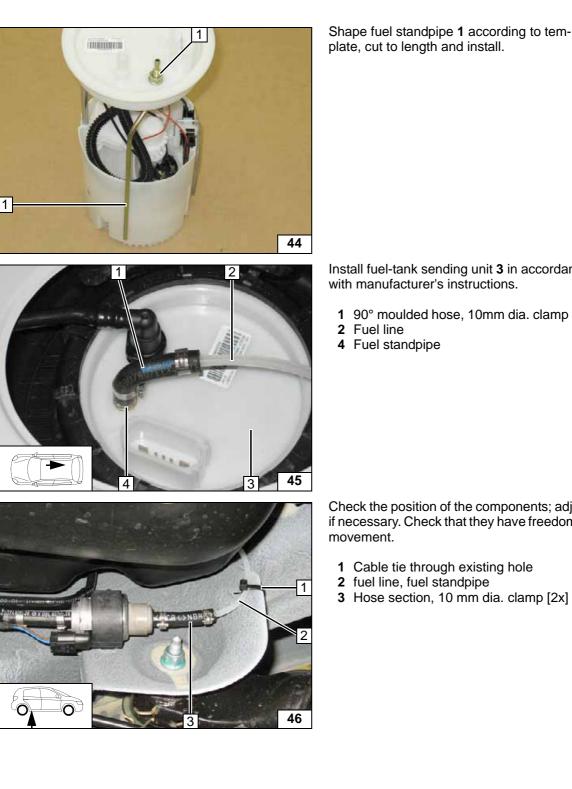




i

Installing fuel stand-

pipe



Install fuel-tank sending unit 3 in accordance with manufacturer's instructions.

1 90° moulded hose, 10mm dia. clamp [2x]

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

- 3 Hose section, 10 mm dia. clamp [2x]



**Connect**ing fuel line

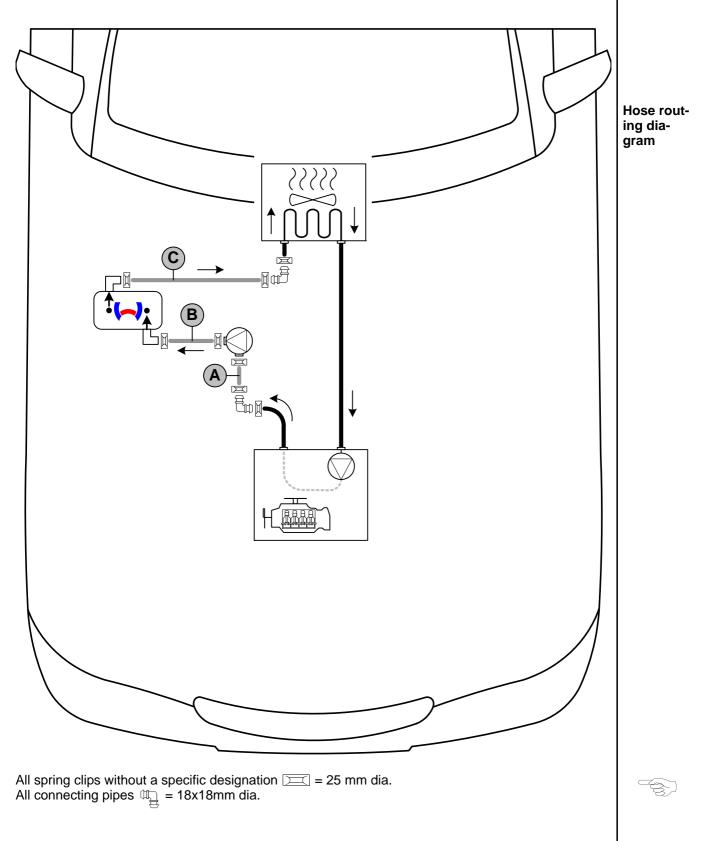
Connecting metering pump



# **Coolant Circuit**

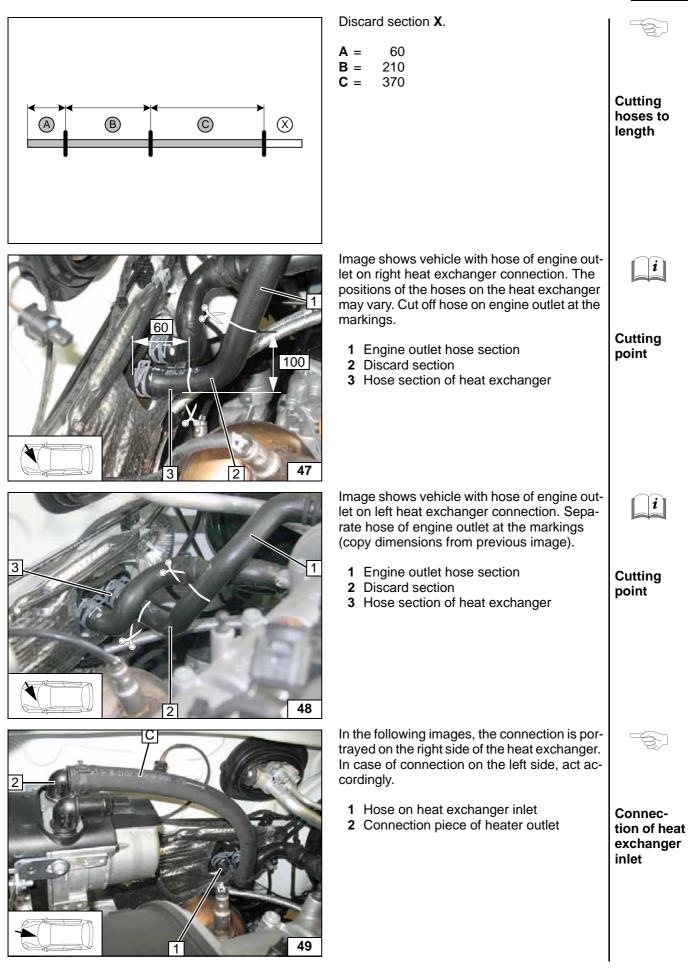
### WARNING!

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 no other hose can be damaged! When installing the hoses, the heater must be filled with coolant. The connection should be "inline" based on the following diagram:

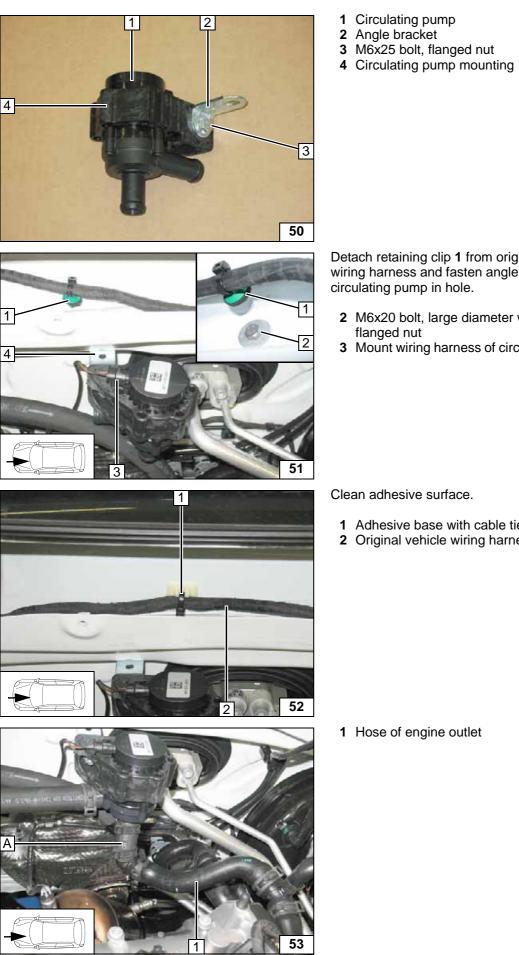






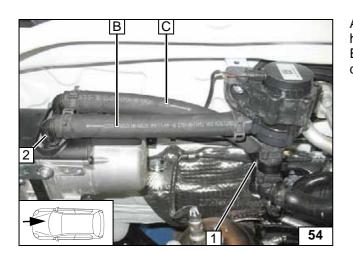






	Premount- ing circu- lating pump
<ul> <li>Detach retaining clip 1 from original vehicle wiring harness and fasten angle bracket 4 of circulating pump in hole.</li> <li>2 M6x20 bolt, large diameter washer [2x], flanged nut</li> <li>3 Mount wiring harness of circulating pump</li> </ul>	Installing circulating pump
Clean adhesive surface. 1 Adhesive base with cable tie 2 Original vehicle wiring harness	Fastening wiring har- ness
1 Hose of engine outlet	Connect- ing engine outlet





Align hoses. Insert spacer bracket 1 between hose  ${\bf A}$  and  ${\bf C}$ . Ensure sufficient distance to neighbouring components, correct if necessary.

- Spacer bracket
   Connection piece of heater inlet



**Connect**ing heater



### WARNING!

Reassemble the disassembled components 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 End Customer".
- Place the instruction signboard "Switch off parking heater before refuelling" in the area of the filler neck.
- For initial start-up and function test, refer to installation instructions.



Connect positive wire **1** to original vehicle positive distributor.

i

Connecting positive wire

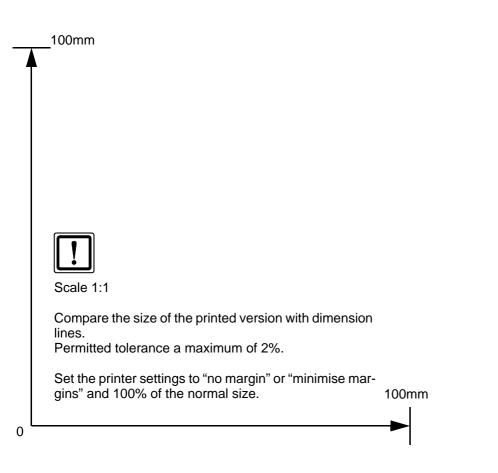
Webasto Thermo & Comfort SE Postfach 1410 82199 Gilching Germany Internet: www.webasto.com Technical Extranet: http://dealers.webasto.com



Skoda Citigo / VW up / Seat Mii

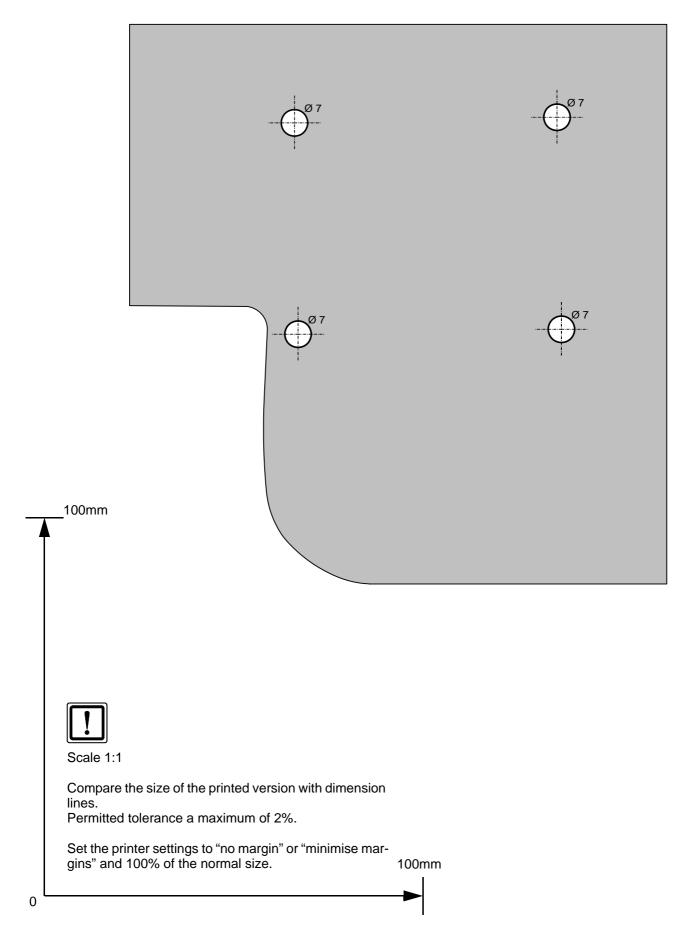
# **Template for Fuel Standpipe**







# **Drilling Template of Bracket**





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# **Operating Instructions for End Customer**

Please remove this page in case of manual air-conditioning and add it to the vehicle operating instructions.

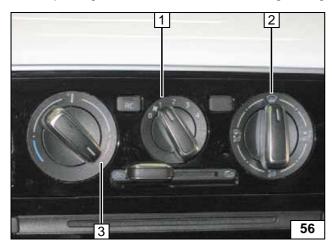
Note:

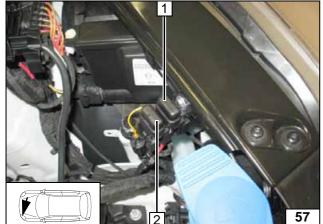
We recommend matching the heating time to the driving time. Heating time = driving time **Example:** For a driving time of approx. 20 min. (in one direction), we recommend not exceeding a switch-on time of 20 min.

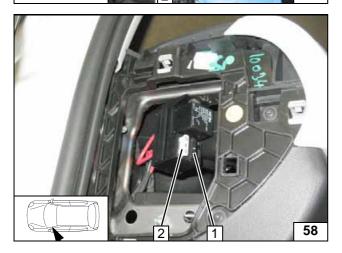
Passenger compartment monitoring, if installed, must be deactivated in addition to the vehicle settings for the heating operation.

For information on deactivation, please see the vehicle owner's manual.

Before parking the vehicle, make the following settings:







- 1 Set fan to level "1", max. "2"
- 2 Direct air outlet towards windscreen
- 3 Set temperature to "max."



- 1 30A main fuse F2 of passenger compartment
- 2 20A heater fuse F1

Fuses of engine compartment

- 1 1A fuse F3 of heater control
- 2 25A fan fuse F4

Fuses of passenger compartment