Water Heater



Thermo Top Evo Parking Heater



Installation Documentation Peugeot 508

Validity

Manufacturer	Model	Туре	EG-BE No. / ABE
Peugeot	508	8	e2 * 2007 / 46 * 0080 *
Peugeot	508 SW	8	e2 * 2007 / 46 * 0080 *

Motorisation	Fuel	Transmission type	Output in kW	Displacement in cm ³	Engine code
1.6 THP	Petrol	SG	115	1598	5FV
2.0 HDI FAP	Diesel	SG	103	1997	RHF
2.2 HDI FAP	Diesel	AT	150	2179	4HL

SG = Manual transmission

AT = Automatic transmission

From Model Year 2011 Left-hand drive vehicle

Verified equipment vari- ants:	Automatic air-conditioning
	Front fog light Bi Xenon / Headlight washer system
Not verified:	Passenger compartment monitoring Automatic transmission Manual air-conditioning
Total installation time:	approx. 7 hours

Peugeot 508

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Necessary Components

- Delivery scope of Peugeot 508 HDI Thermo Top Evo Diesel: 1317544B
- Delivery scope of Peugeot 508 HDI Thermo Top Evo Petrol: 1317545B
- Heater control in accordance with price list and upon consultation with end customer

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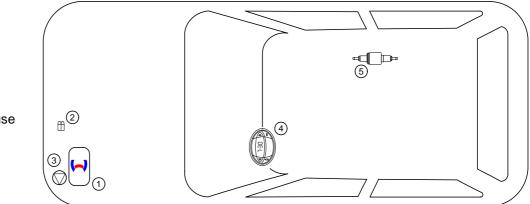
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• In case of Telestart, indicator lamp in accordance with price list and in consultation with end customer

Installation Overview

Legend:

- Heater
 Engine compartment fuse
- holder
- 3. Circulating pump
- 4. Digital timer
- 5. Metering pump



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.

Peugeot 508

Information on Validity

This installation documentation applies to Peugeot 508 Petrol and diesel vehicles - for validity, see page 1 - from model year 2011 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 6mm²
- Crimping pliers for cable lug / tab connector 0.5 6mm²
- Torque wrench for 2.0 10 Nm
- Hose clamping pliers
- · Webasto Thermo Test Diagnosis with current software

Dimensions

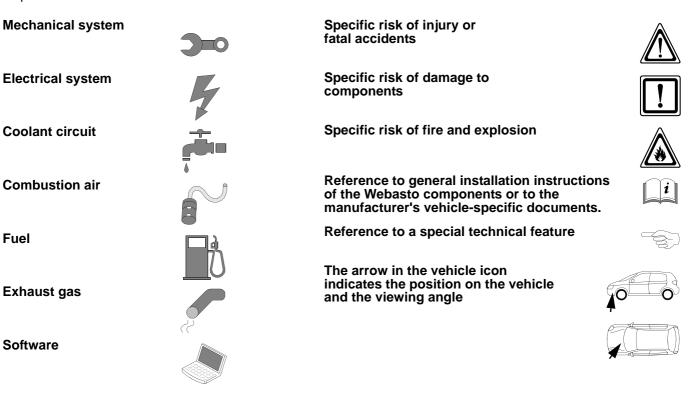
• All dimensions are in mm

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-the-art-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:



Peugeot 508

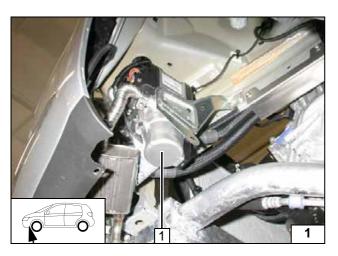
Preliminary Work

Vehicle

- Open the fuel tank cap.
- Ventilate the fuel tank.
- Close the fuel tank cap again.
- Depressurise the cooling system.
- Disconnect the battery and remove it fully along with the carrier.
- Remove the air filter together with the intake hose.
- Remove the left front wheel.
- Remove the left-hand wheel well trim.
- Remove the front underride protection.
- Remove the right-hand underbody trim.
- Remove the right rear underride protection.
- Remove the rear bench seat.
- Open the right-hand tank-fitting service lid.
- Remove the lower instrument panel trim on the driver's side.
- Remove the instrument panel trim on the driver's side (only with Telestart).
- Remove the footwell trim on the driver's side.
- Remove the driver's side storage compartment.

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

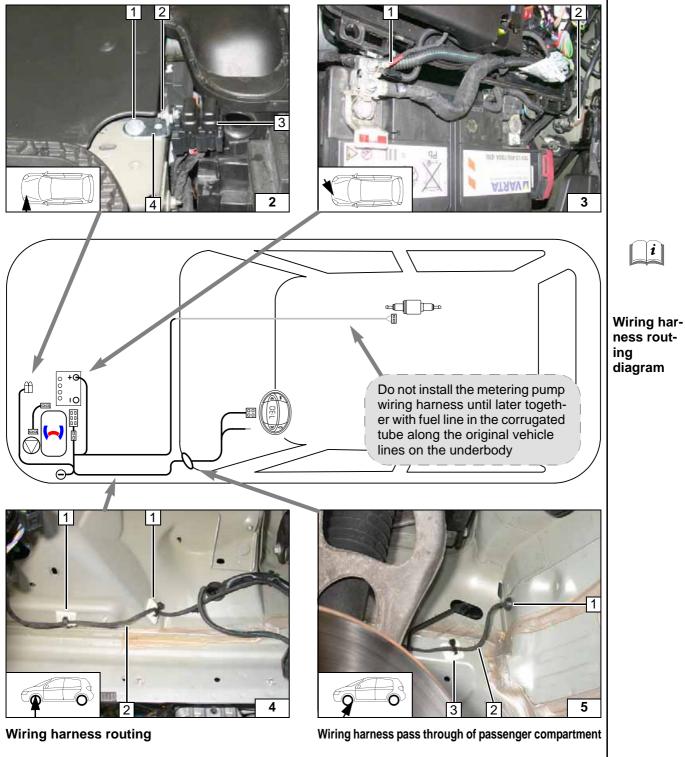
Electrical System

Fuse holder of engine compartment

- 1 Original vehicle bolt, large diameter washer
- **2** M5x16 bolt, large diameter washer [2x], retaining plate of fuse holder, nut
- 3 Fuses F1-2 attached (replace 30A F2 with 1A)
- 4 Angle bracket

Positive and earth wire

- 1 Positive wire
- 2 Earth wire on original vehicle earth support point



Fasten wiring harness of engine compartment fuse holder 2 with adhesive base 1 and cable tie [total 4x each] in the wheel well.

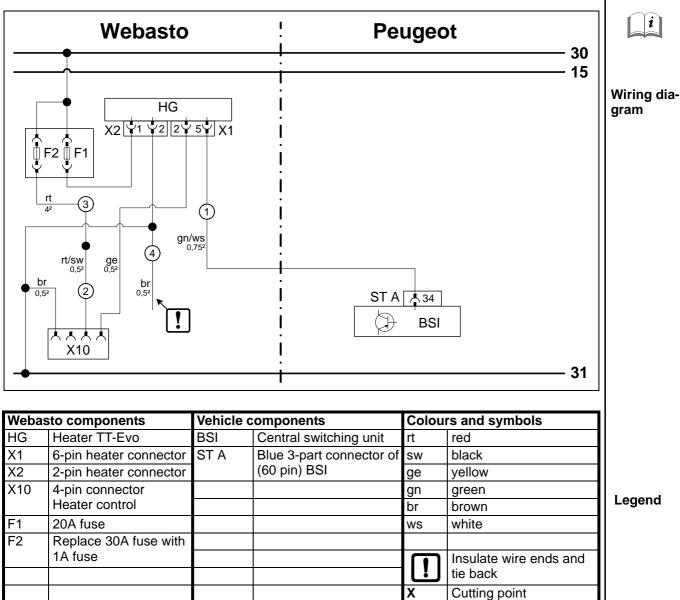
1 Insert protective rubber plug in hole

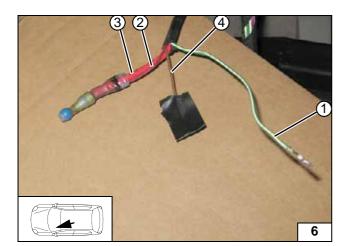
- 2 Wiring harness of engine compartment fuse holder
- 3 Adhesive base, cable tie





Fan Controller



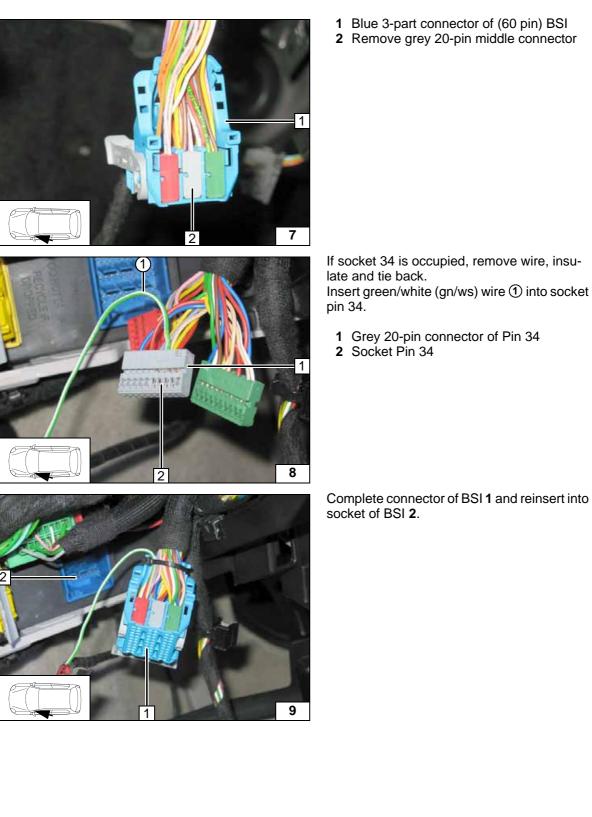


Insulate brown (br) wire ④ from fuse holder wiring harness of passenger compartment **1** and tie back. Connect red/black (rt/sw) wire ② and red (rt) wire ③ with solder wire terminator. Crimp green/white (gn/ws) wire ① on microtimer.

Wiring colours may vary.

Preparing wiring harness of heater





Pulling off and dismantling connector of BSI

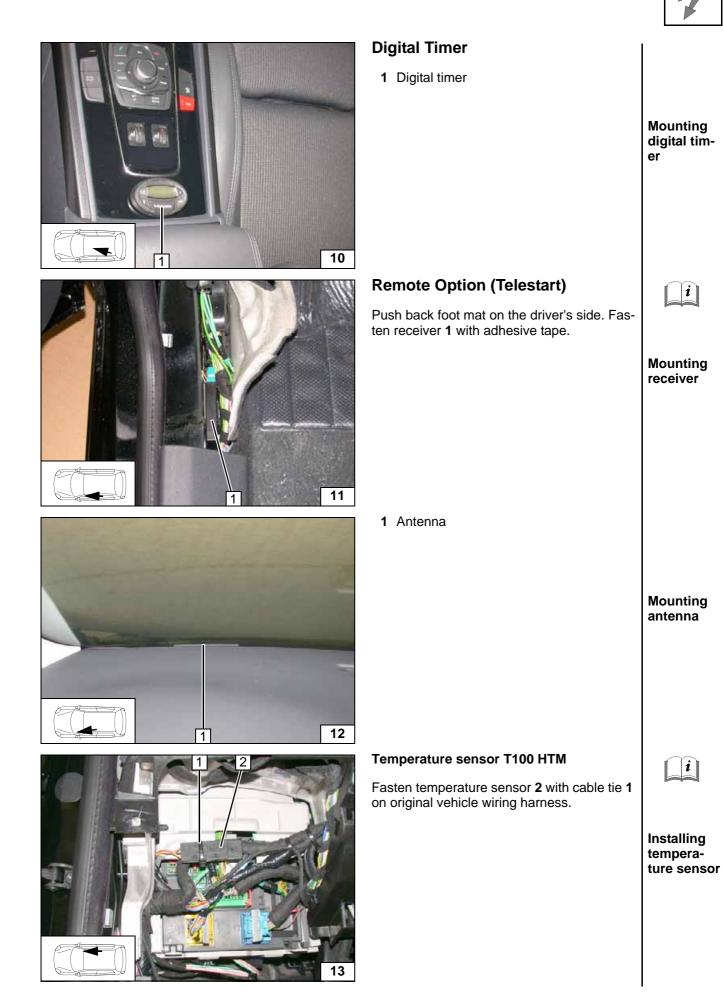
Connection of BSI connector

Connection of BSI connector

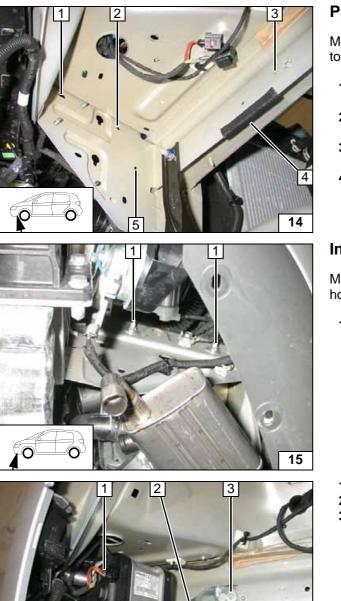


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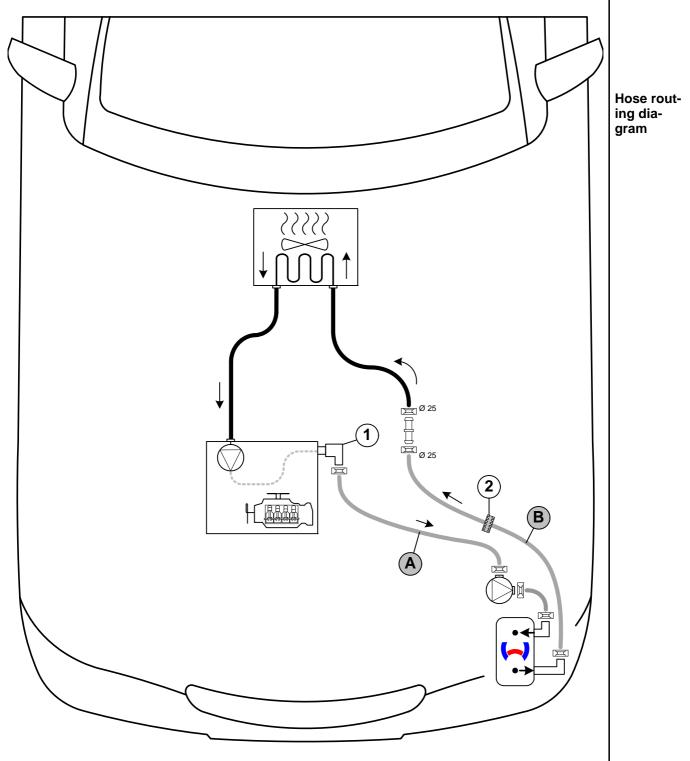
1	Preparing Installation Location	-ş-)
	Move connector from position 2 (if available) to position 5 .	
	 Fastening point for heater (existing holes) Fastening point for heater (existing holes) 	Copying hole pat- tern
4	 3 Fastening point for heater (existing threaded hole or stud bolt) 4 100 mm edge protection 	
	Installing Heater	
	Mount stud bolts from bracket in existing holes.	
and the second se	1 Large diameter washer, flanged nut [2x each], stud bolts	Mounting heater
	 Mount wiring harness of heater Bracket of heater M6x20 bolt, large diameter washer, threaded hole or flanged nut on original vehicle stud bolt 	Manuatina
· ·		Mounting bracket



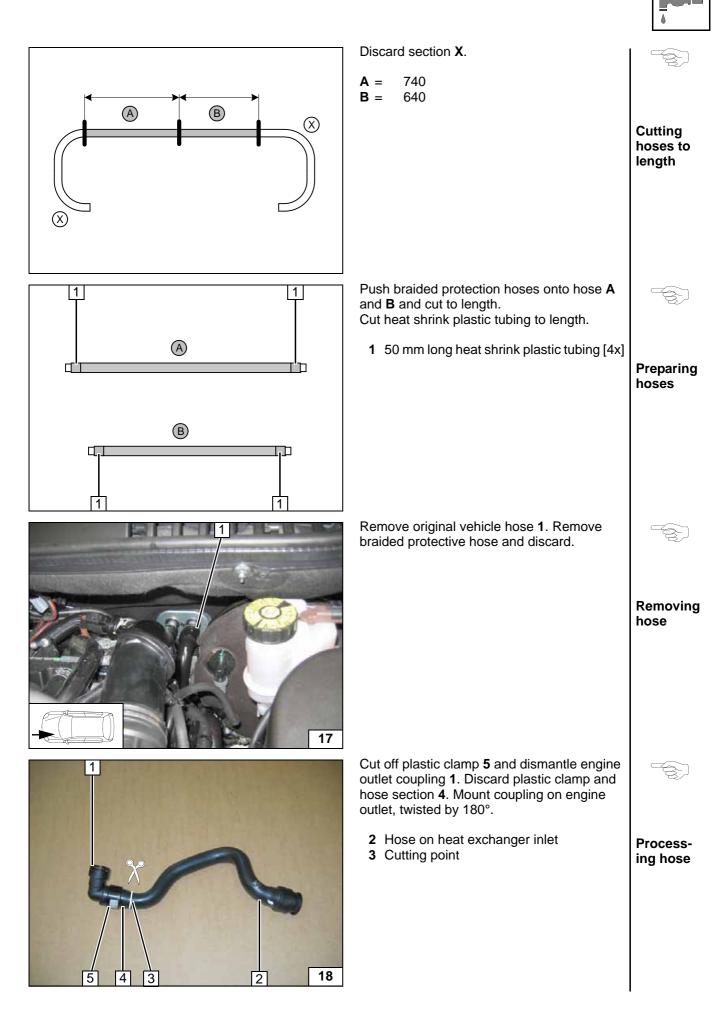
Coolant Circuit 2.0 D

WARNING!

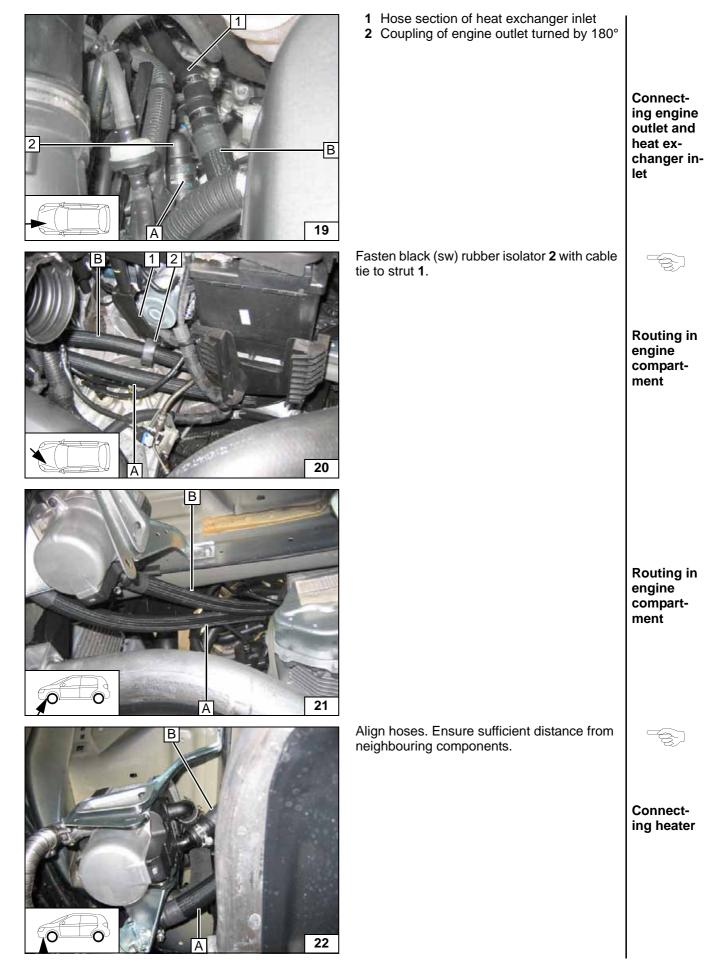
Any coolant running off should be collected in an appropriate container. Install hoses so that they are kink-free. Unless specified otherwise, always fasten using cable ties. Position clamps so that other hoses cannot be damaged. The heater must be filled with coolant when installing the hoses. The connection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



All spring clips without a specific designation $\square = 27$ mm dia. **1** = Original vehicle coupling. Connecting pipe $\square = 18x18$ dia. **2** = Black (sw) rubber isolator \blacksquare .





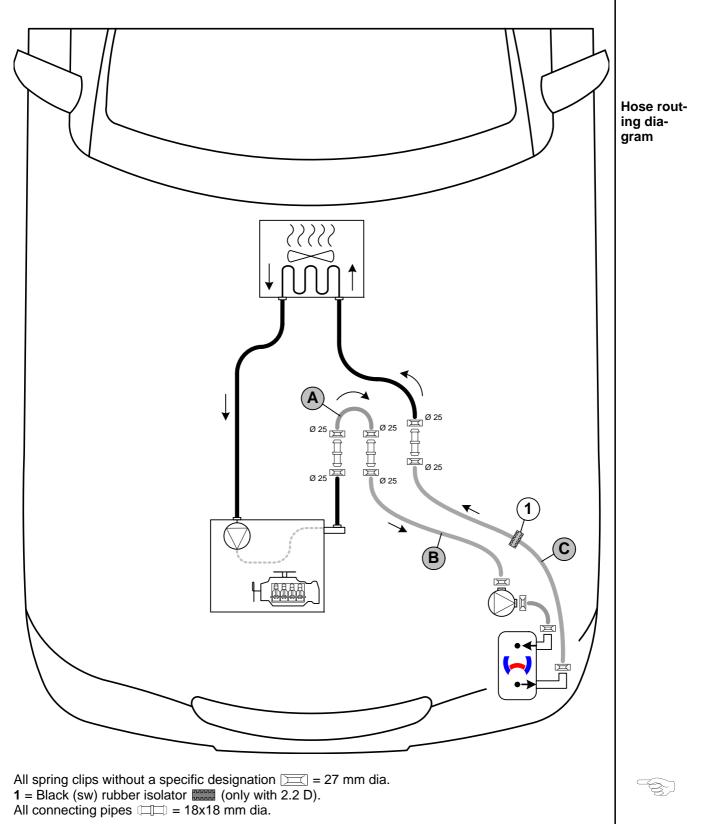




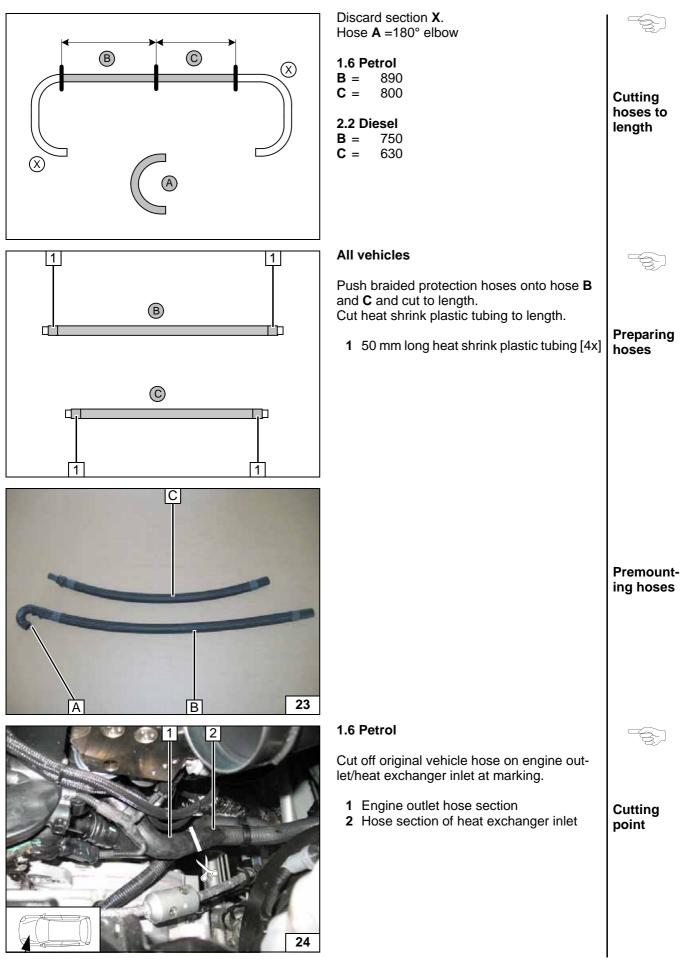
Coolant Circuit 1.6 B and 2.2 D

WARNING!

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









1 Hose on heat exchanger inlet

Connection of heat exchanger inlet

Connecting engine outlet

Fasten cable tie at position ${\bf 3}$ to bracket of actuating cable and hoses ${\bf B}$ and ${\bf C}$.

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Cable tie [2x]
 Bracket of actuating cable

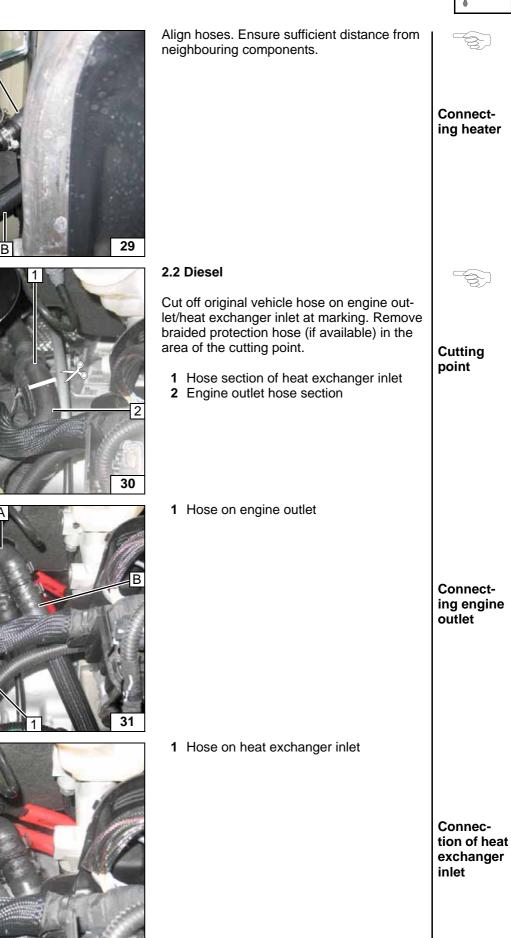
1 Hose on engine outlet

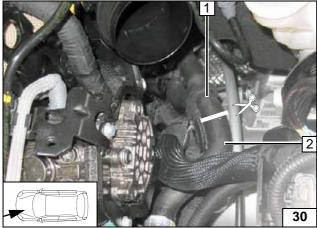
Routing in engine compartment

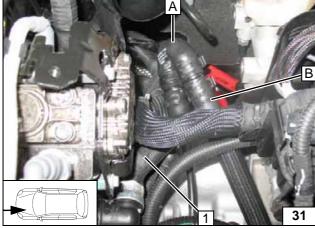
Routing in engine compartment



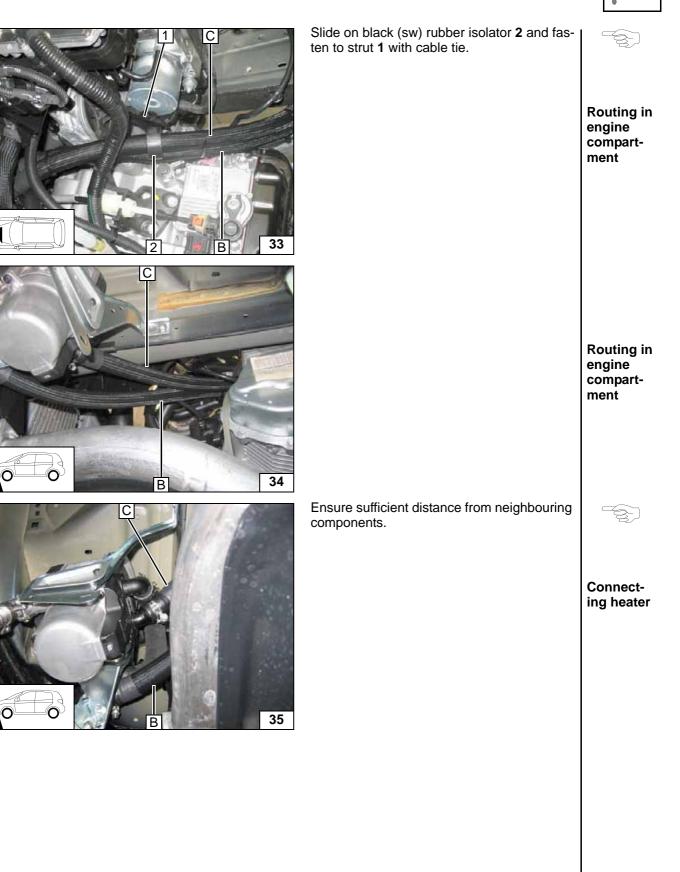












Fuel

CAUTION!

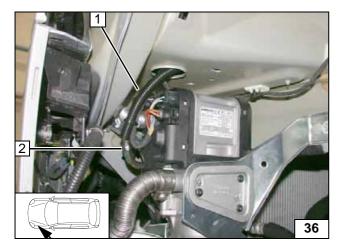
Open the vehicle's fuel tank cap, ventilate the tank and then re-close the tank lock.

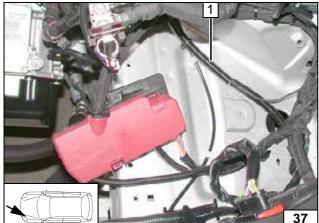
Catch any fuel running off in an appropriate container.

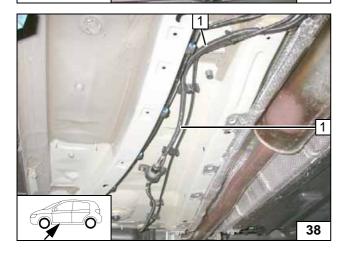
Install fuel line and metering pump wiring harness so that they are protected against stone impact. Unless specified otherwise, always fasten using cable ties. Mount the fuel line and wiring harness with rub protection on sharp edges.

WARNING!

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







- 1 Fuel line, wiring harness of metering pump in corrugated tube
- 2 10 mm dia. Caillau clamp, 90° moulded hose

- 1 Fuel line, wiring harness of metering pump in corrugated tube
- Routing

wire

Petrol

1 Fuel line, wiring harness of metering pump in corrugated tube

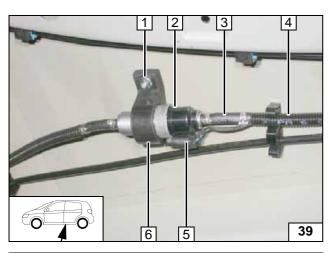
Routing wire

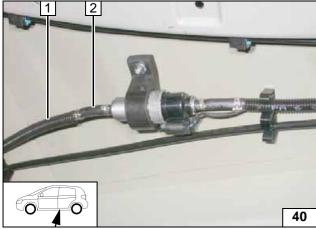






Connecting heater









- Flanged nut on original vehicle stud bolt *i*] Hose section, 10 mm dia. Caillau clamp
- Fuel line, wiring harness of metering Mounting 5 Wiring harness of metering pump, conmetering

pump

nector mounted 6 Bracket of metering pump

pump in corrugated tube

Metering pump

1

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3

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[2x]

- 1 Fuel line in corrugated tube
- 2 Hose section, 10 mm dia. Caillau clamp [2x]

Remove fuel-tank sending unit 1 in accordance with manufacturer's instructions.

- 2 Flanged nut
- 3 Copy hole pattern, 6 mm dia. hole

Cut fuel standpipe 1 to length according to template and install.



Connecting metering pump

Fuel extraction

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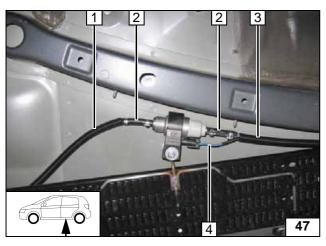
Installing fuel standpipe

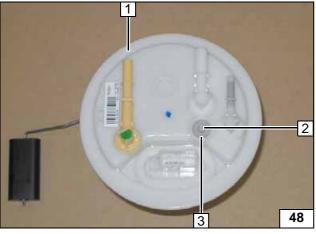




Check the position of the components; adjust if necessary. Check that they have freedom of movement. Install fuel-tank sending unit according to manufacturer's instructions.	
 Fuel line Hose section, 10 mm dia. Caillau clamp [2x] Fuel standpipe 	Connect- ing fuel line
Diesel	
1 Fuel line, wiring harness of metering pump in corrugated tube	Routing lines
Remove original vehicle nut at position 1 and discard.	
2 Large diameter washer, 30 mm spacer nut	Mounting metering pump
 Metering pump Bracket of metering pump M6x25 bolt, large diameter washer 	i
	Mounting metering pump







Remove fuel-tank sending unit **1** in accordance with manufacturer's instructions.

1 Fuel line in corrugated tube

pump in corrugated tube

clamp [4x]

nector mounted

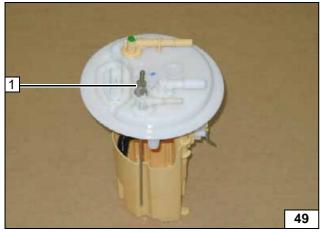
2 Hose section [2x], 10 mm dia. Caillau

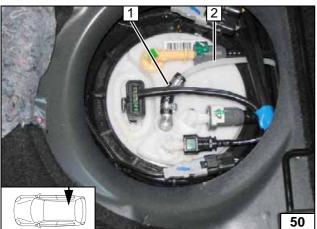
3 Fuel line, wiring harness of metering

4 Wiring harness of metering pump, con-

- 2 Copy hole pattern, 6 mm dia. hole
- **3** 5 mm dia. large diameter washer

Shape fuel standpipe **1** according to template, cut to length and install.





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

Install fuel-tank sending unit according to manufacturer's instructions.

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



Connect-

ing metering pump





Installing fuel standpipe



Connecting fuel line

Final Work

WARNING!

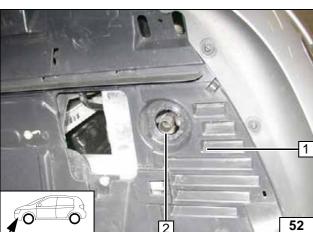
Mount removed parts in reverse order. Check all hoses, clamps and all electrical connections for firm seating. Insulate all loose wires and tie back.

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

Encode BSI according to manufacturer's instructions using diag. box on parking heater.

- Connect the battery.
- Fill and bleed the coolant circuit according to the vehicle manufacturer's specifications.
- Adjust digital timer, teach Telestart transmitter.
- Settings on the A/C control panel are not required.
- Place the "Switch off parking heater before refuelling" signboard near the filler neck.
- For the initial start-up and function check, see installation instructions.





1 Underride protection

2 Cut out exhaust outlet along perforation

Mount underride protection **1** (exhaust end section centred in recess).

2 Exhaust end section



Cutting out underride protection

Mounting underride protection

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

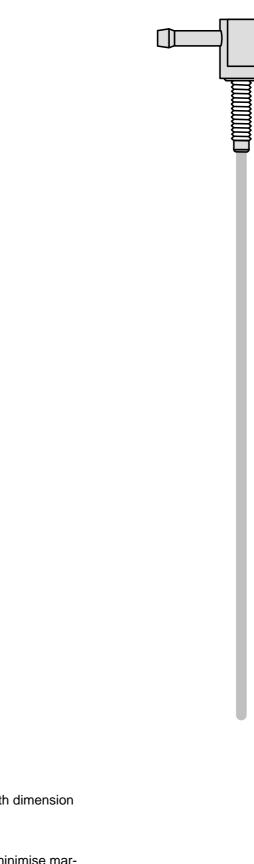






Template for Petrol Fuel Standpipe





100mm



100mm

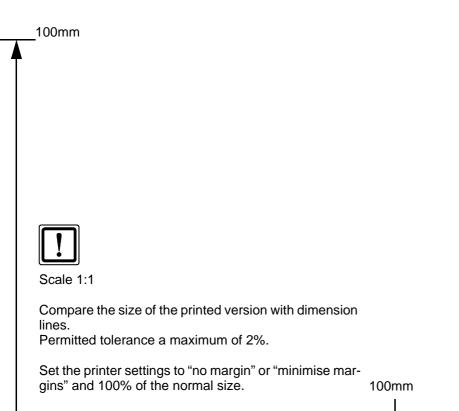
Compare the size of the printed version with dimension lines. Permitted tolerance a maximum of 2%.

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

Template for Diesel Fuel Standpipe









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Operating Instructions for End Customer

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

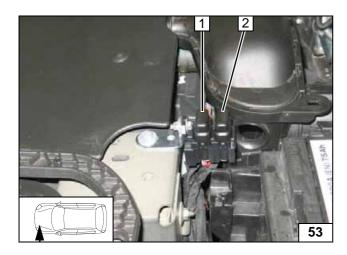
Note:

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.

No other settings are required on the A/C control panel.



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

Fuses of engine compartment