Water Heater



Thermo Top Evo Parking Heater



Installation Documentation Peugeot 3008 / 5008

Validity

Manufacturer	Model	Туре	EG-BE No. / ABE
Peugeot	3008	0U	e1 * 2001 / 116 * 0377 *
Peugeot	5008	0	e2 * 2007 / 46 * 0004 *

Motorisation	Fuel	Transmission type	Output in kW	Displacement in cm ³	Engine code
1.6 HDI	Diesel	SG	82	1560	9HR

SG = Manual transmission

From Model Year 2011 Left-hand drive vehicle

Verified equipment variants: Automatic air-conditioning

Front fog light

Not verified: Passenger compartment monitoring

Total installation time: approx. 8 hours

Ident. No.: 1318133B_EN Status: 08.01.2013 © Webasto Thermo & Comfort SE

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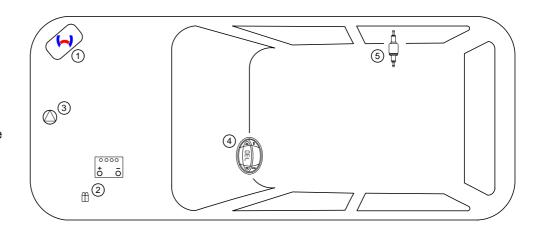
Necessary Components

- Basic delivery scope Thermo Top Evo in accordance with price list
- Installation kit for Peugeot 3008 / 5008 2011 1.6 Diesel: 1318132A
- 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

Legend:

- 1. Heater
- **2**. 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 sufficient

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

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Beginning of excerpt.

ANNEX VII

REQUIREMENTS FOR COMBUSTION HEATERS AND THEIR INSTALLATION

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.

2. VEHICLE INSTALLATION REQUIREMENTS

2.1. Scope

- 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 furnes 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

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In multilingual versions the German language is binding.

Information on Validity

This installation documentation applies to Peugeot 3008 / 5008 1.6 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
- · Metric thread-setter kit
- · Webasto Thermo Test Diagnosis with current software

Dimensions

· All dimensions are in mm.

Tightening torque values

- Tightening torque values of 5x13 heater bolts and 5x11 heater stud 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:

Mechanical system	>=∞
Electrical system	7
Coolant circuit	
Combustion air	
Fuel	
Exhaust gas	
Software	

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Specific risk of injury or fatal accidents

Specific risk of damage to components

Specific risk of fire and explosion

Reference to general installation instructions of the 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

Vehicle

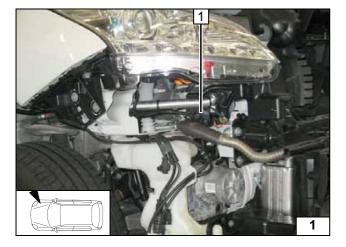
- · Open the fuel tank cap.
- Ventilate the fuel tank.
- Close the fuel tank cap again.
- Depressurise the cooling system.
- Disconnect the battery and remove it fully along with the carrier.
- Remove the underride protection (if available).
- Remove the right front wheel.
- Remove the front right and left wheel well trim.
- · Remove the bumper trim.
- · Remove the right headlight.
- · Remove the washer reservoir.
- · Remove the air cleaner housing.
- Detach the exhaust pipe from the DPF and take it out of the brackets.
- Use the cable grommet in the right wheel well (passenger compartment pass through).
- Remove the lower instrument panel on the driver's side, expose the BSI.
- Remove the cover of the upper footwell trim on the driver's and front passenger's side.
- Remove the lateral trim of the instrument panel on the driver's side (only for Telestart T100 HTM).

Execute the following jobs only when they are required by the process:

- Remove the right rear wheel.
- · Remove the right rear wheel well trim.
- Detach the lateral trims on the fuel tank.
- Detach the screw fitting of the filler neck on the fuel tank.
- Lower the fuel tank and support it with suitable means.

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

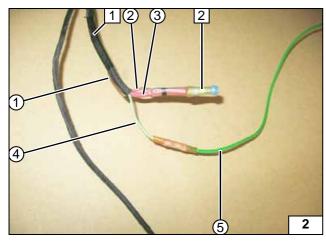
Figure shows Peugeot 3008.

1 Heater

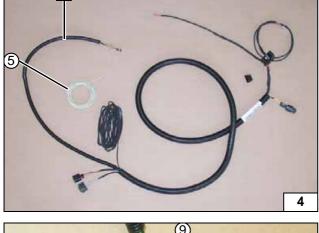


Installation location

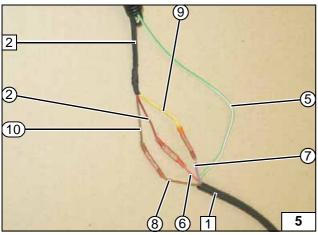




3



1



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Preparing Wiring Harnesses

Produce connections as shown in wiring diagram. Wire sections retain their numbering in the entire document.

Insulate brown (br) wire ① from wiring harness of passenger compartment 1 and tie back.

- 2 Connect red/black (rt/sw) wire with red (rt) wire (soldering connector)
- 2 Red/black (rt/sw) wire of heater control X10
- 3 Red (rt) wire for fuse F2
- 4 Green/white (gn/ws) wire of heater X1/5
- ⑤ Additional green/white (gn/ws) wire 3000mm long

Slide 17 mm dia., 1650 mm long corrugated tube 2 (slit longitudinally) on wiring harnesses of heater, passenger compartment, heater control and metering pump. Replace fuse 1 F2 30A with fuse 1A.



Preparing wiring harness



Preparing wiring harness



Slide 10mm dia., 1500 mm long corrugated tube 1 on wiring harness of heater control and green/white (gn/ws) wire ⑤.



Produce connections as shown in wiring diagram. Pull out connector from wiring harness of heater control 2. Disconnect coupling from wiring harness extension 1. Insert additional green/white (gn/ws) wire (5) also into wiring harness extension 1.

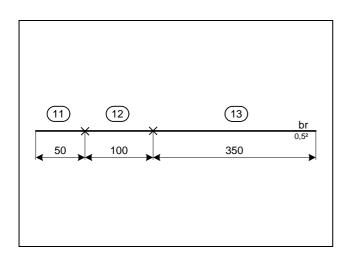


- ② Red/black (rt/sw) wire of heater control wiring harness
- 6 Red (rt) wire of wiring harness extension X10
- 7 Violet (vi) wire of wiring harness extension X10
- 8 Brown (br) wire of wiring harness extension X10
- (9) Yellow (ge) wire of heater control wiring harness
- 10 Brown (br) wire of heater control wiring harness

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Connecting wires

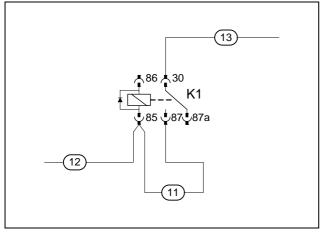




Produce connections as shown in wiring diagram.



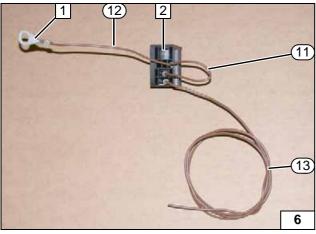
Cutting wires to length



Connect wires to relay socket according to wiring diagram. K1 relay is inserted only after installing the relay socket.



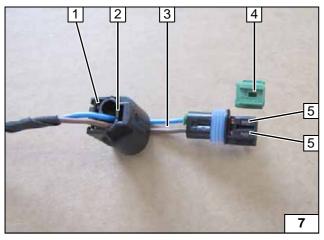
Preparing K1 relay



- 1 5 mm dia. cable lug
- 2 Relay socket K1
- 11 50 mm long brown (br) wire
- 12 100 mm long brown (br) wire
- 350 mm long brown (br) wire



Crimping cable lug



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Complete connector of metering pump after routing. Pin assignment is not relevant.



- 1 Connector housing
- 2 Lock

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- 3 Blue/brown (bl / br) wires
- 4 Coding
- 5 Timer lock

Dismantling connector



Electrical System

Positive wire

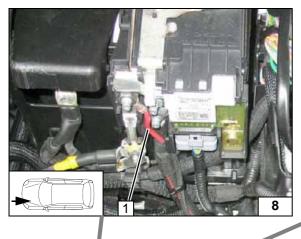
1 Positive wire on positive distributor of battery

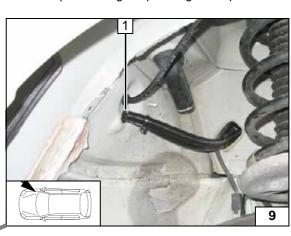
Wiring harness pass through

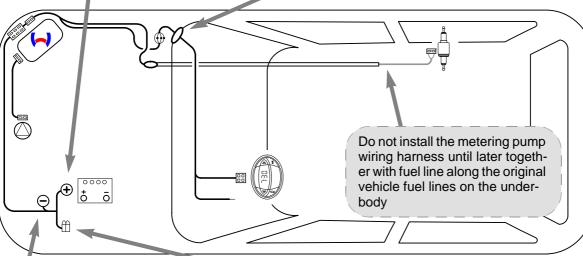
For wiring harness routing, please see following page.

1 Use existing protective rubber plug for wiring harness pass through of passenger compartment.



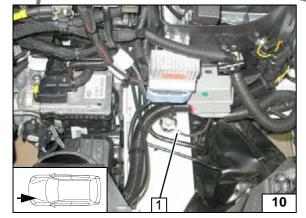






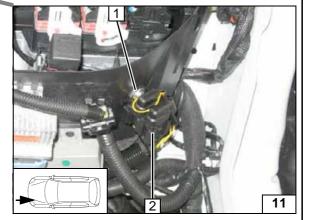


Wiring harness routing diagram



Earth wire

1 Earth wire on original vehicle earth support point

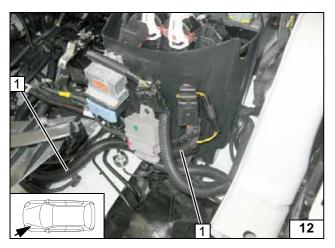


Fuse holder of engine compartment

- 1 5.5 mm dia. hole; M5x20 bolt, washer, retaining plate of fuse holder, washer, flanged nut
- 2 Fuses F1-2

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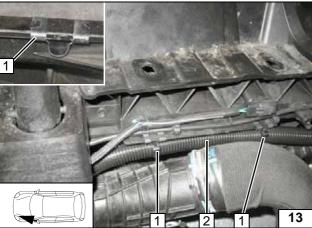


Wiring Harness Routing

1 Wiring harnesses in 17 mm dia. corrugated tube



Routing wiring harnesses



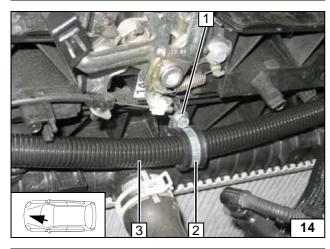
Peugeot 3008

Install retaining clamp 1 [2x] and fasten wiring harness with cable tie.

2 Wiring harnesses in 17 mm dia. corrugated tube



Routing wiring harnesses



- 1 5x13 self-tapping screw, existing hole
- 2 25 mm dia. rubber-coated p-clamp
- 3 Wiring harnesses in 17 mm dia. corrugated tube

Routing wiring harnesses



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Peugeot 5008

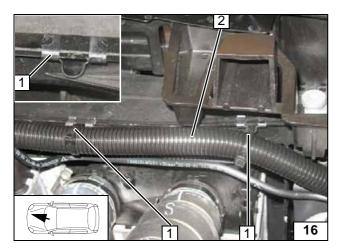
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Install retaining clamp 1 [2x] and fasten wiring harness with cable tie.

2 Wiring harnesses in 17 mm dia. corrugated tube

Routing wiring harnesses



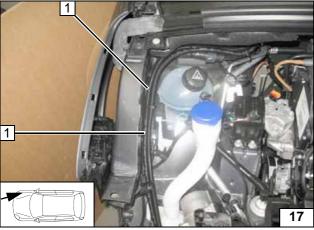


Install retaining clamp 1 [2x] and fasten wiring harness with cable tie.



2 Wiring harnesses in 17 mm dia. corrugat-

Routing wiring harnesses

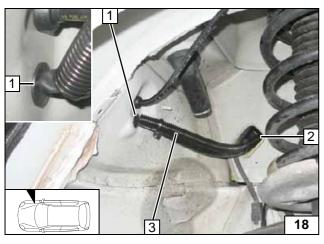


Washer reservoir will be installed later.



1 Wiring harness of heater control and green/white (gn/ws) wire in 10 mm dia. corrugated tube

> Routing wiring harnesses



Route wiring harness 3 through existing protective rubber plug 1 to the passenger compartment.

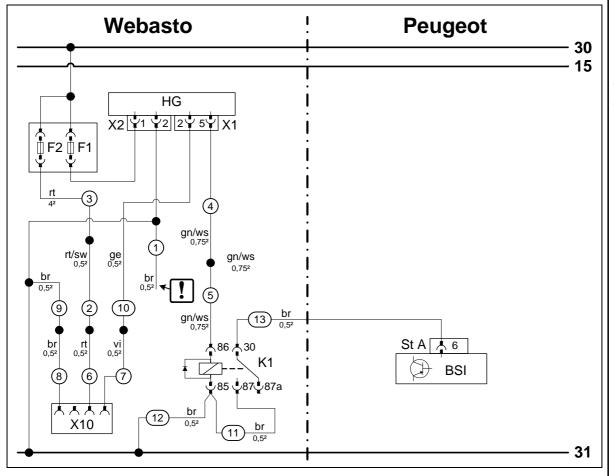


- 2 Original vehicle wiring harness pass through of engine compartment
- 3 Wiring harness of heater control and green/white (gn/ws) wire in 10 mm dia. corrugated tube

Routing wiring harnesses



Fan Controller

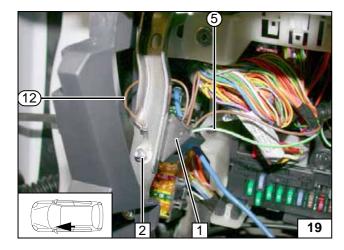




Wiring diagram

Webasto components		Vehicle components		Colou	Colours and symbols	
HG	Heater TT-Evo	St A	40-pin connector BSI	rt	red	
X1	6-pin heater connector	BSI	Central switching unit	sw	black	
X2	2-pin heater connector			ge	yellow	
X10	4-pin connector			gn	green	
	Heater control			ws	white	
F2	Replace fuse 30A with			br	brown	
	1A					
F1	20A fuse				Insulate wire ends and	
K1	Changeover relay			۳	tie back	
				Wiring colours may vary.		

Legend

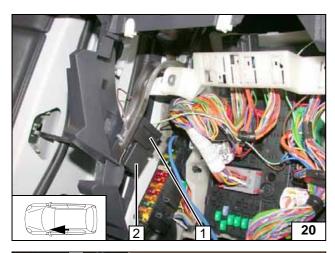


5.5 mm dia. hole at position **2**. Watch components behind. Insert additional green/white (gn/ws) wire (5) in relay socket K1/86. Make connection as shown in wiring diagram.

- 1 K1 relay socket
- 2 M5x16 bolt, flanged nut
- 12 Brown (br) wire of K1/85, cable lug

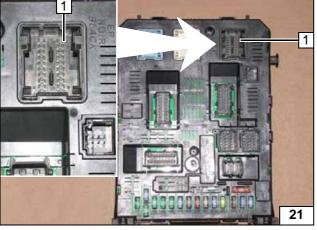
Mounting K1 relay socket and earth wire





- 1 Align K1 relay socket
- 2 Mount K1 relay

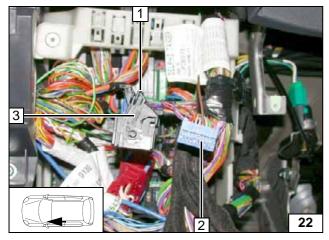
Mounting K1 relay



View of BSI.

1 Socket for 2-piece connector. 40-pin

Detaching **BSI** and routing downward

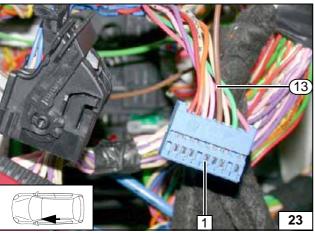


Press in locking lug 1 and fold down bar 3.

2 20-pin blue connector



Pulling connector off BSI and removing it



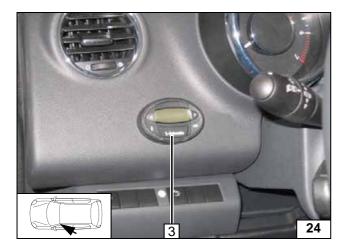
Connection to 20-pin blue (bl) connector 1 from BSI. Crimp microtimer on brown (br) wire 13 and insert in PIN 6. Complete BSI connector and mount.

13 Brown (br) wire of K1/30



Connection of BSI



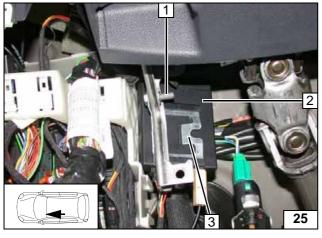


Digital Timer

1 Digital timer



Mounting digital timer



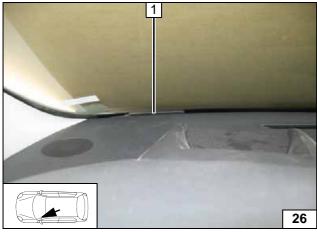
Remote Option (Telestart)

Bend bracket of receiver 3 as shown.

- 1 M5x20 bolt, washer, flanged nut, existing hole
- 2 Receiver mounted

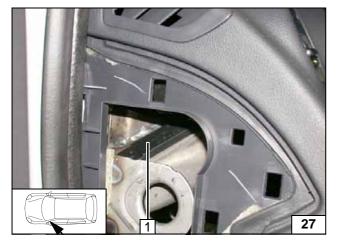


Mounting receiver



1 Antenna

Mounting antenna



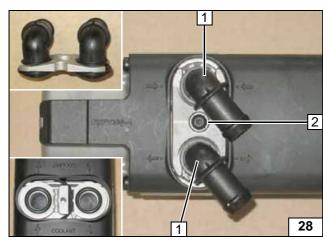
Temperature sensor T100 HTM

Fasten temperature sensor **1** with adhesive tape.



Installing tempera-ture sensor



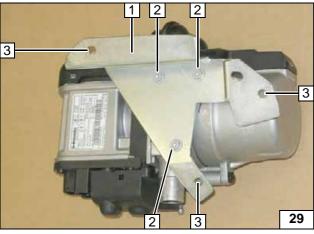


Preparing Heater

- 1 Water connection piece, sealing ring [2x each]
- 2 5x15 self-tapping bolt, retaining plate of water connection piece

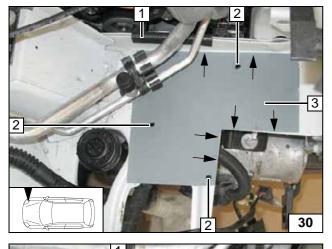


Mounting water connection piece



- 1 Bracket
- 2 5x13 self-tapping bolt [3x]
- 3 Holes for mounting heater [3x]

Mounting bracket



Preparing Installation Location



Cut out template ${\bf 3}$ and apply at the markings.

- 1 50mm edge protection
- 2 Copy hole pattern [3x]

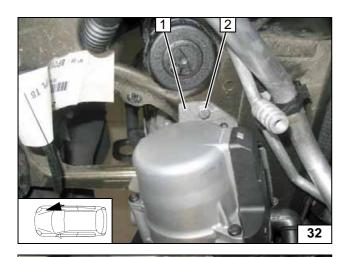
Copying hole pattern



- 1 7 mm dia. hole [2x]
- 2 Drill 9.1 mm dia. hole; rivet nut

Installing rivet nut

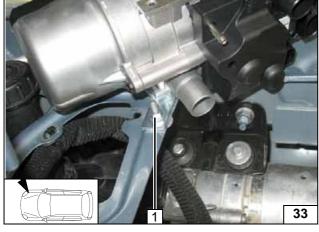




Installing Heater

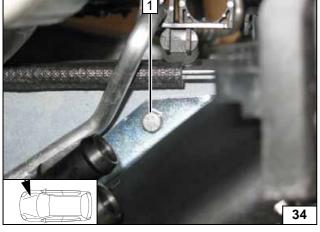
- 1 Bracket of heater
- 2 M6x20 bolt, flanged nut

Mounting heater



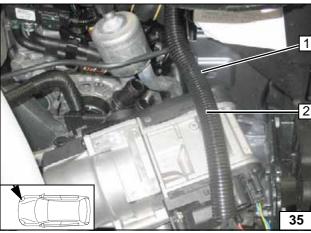
1 M6x20 bolt, large diameter washer, flanged nut

Mounting heater



1 M6x20 bolt, spring lockwasher

Mounting heater



All models

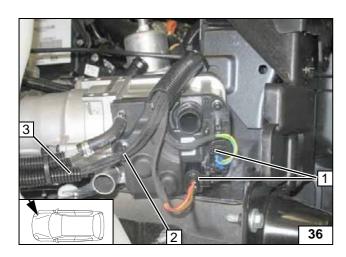
Fasten wiring harness with cable ties.

2 Wiring harnesses in 17 mm dia. corrugated tube



Routing wiring harnesses





- Wiring harness of heater [2x]
 Clip-type cable tie in existing hole
 Wiring harness of heater control and green/white (gn/ws) wire in 10 mm dia. corrugated tube

Routing/at-taching wiring harnesses

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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.

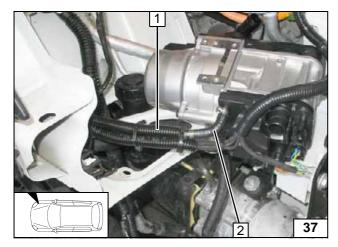
Install fuel line and metering pump wiring harness so that they are protected against stone impact. Unless specified otherwise, always fasten using cable ties.

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.

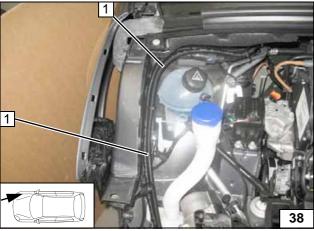


Route fuel line and wiring harness of metering pump in 10 mm dia., 1200 mm long corrugated tube 1 to firewall.

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



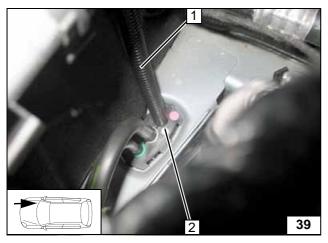
Connecting heater



Washer reservoir will be installed later. Route fuel line and wiring harness of metering pump in 10 mm dia. corrugated tube 1 to original vehicle pass through of underbody.



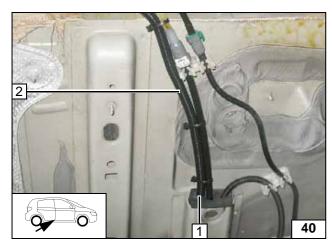
Routing lines



- 1 Fuel line and wiring harness of metering pump in 10 mm dia. corrugated tube
- 2 Original vehicle wiring harness pass through of underbody

Routing lines

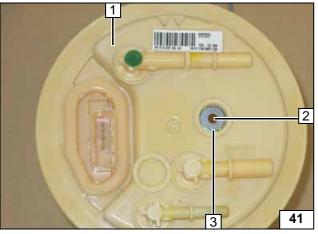




Guide wiring harness of metering pump and fuel line out of original vehicle line duct (existing pass through 1) and slide on 10 mm dia., 500 mm long corrugated tube 2.



Routing lines



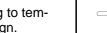
Version A

Lower and support fuel tank according to manufacturer's instructions. Remove fuel-tank sending unit 1 in accordance with manufacturer's instructions. Insert washer outer dia. = 18 mm 3 into recess.



Fuel extraction

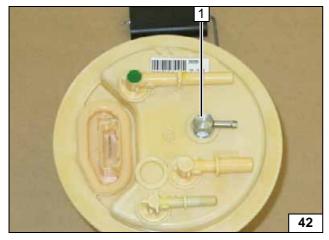
2 Copy hole pattern, 6 mm dia. hole





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

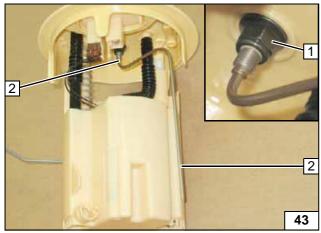




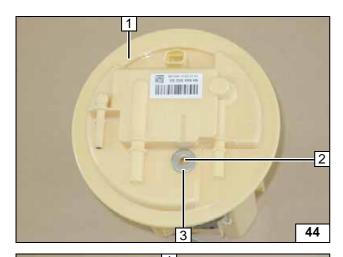
- 1 Flanged nut
- 2 Fuel standpipe



Mounting fuel standpipe







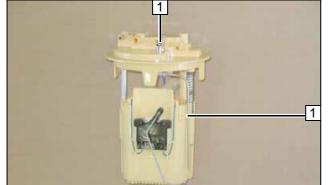
Version B

Lower and support fuel tank according to manufacturer's instructions. Remove fueltank sending unit 1 in accordance with manufacturer's instructions. Place washer outer dia. = 18mm 3 as shown.





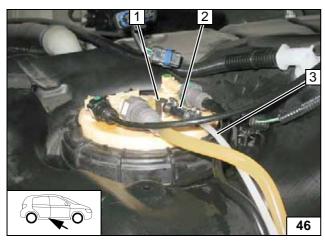
Fuel extraction



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



Installing fuel standpipe



All models

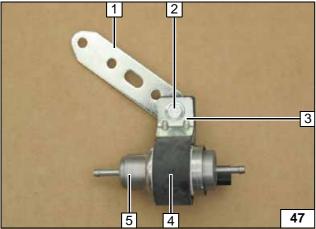
45

Install fuel-tank sending unit 3 in accordance with manufacturer's instructions and re-install the fuel tank.

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



Connecting fuel line



Ident. No.: 1318133B_EN

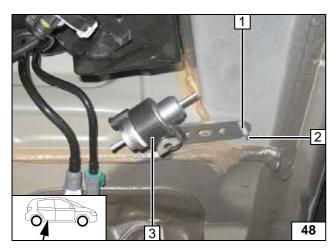
- 1 Perforated bracket
- 2 M6x25 bolt, flanged nut
- 3 Support angle
- 4 Mounting

Status: 08.01.2013

5 Metering pump

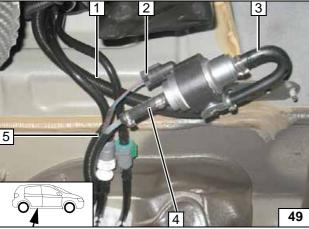
Premounting metering pump





- 1 Pin lock
- 2 Original vehicle stud bolt
- 3 Metering pump

Mounting metering pump

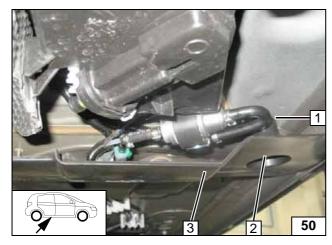


Slide 10 mm dia., 330mm long corrugated tube **1** onto fuel line of fuel standpipe.



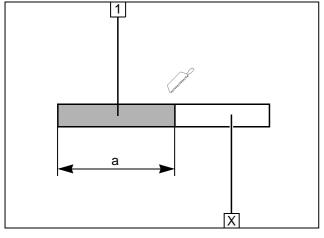
- 2 Wiring harness of metering pump, connector mounted
- 3 180° moulded hose, 10 mm dia. clamp, fuel line
- 4 Hose section, 10 mm dia. clamp, fuel line
- 5 10 mm dia. corrugated tube

Connecting metering pump



- 1 Original vehicle stud bolt
- 2 Original vehicle flanged nut
- 3 Underbody trim

Mounting underbody trim



Combustion Air

Discard section X.

1 Combustion air pipe a = 620



Cutting combustion air pipe to length



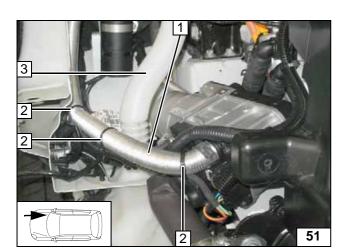


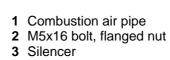


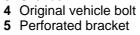
tion air pipe



Mounting silencer







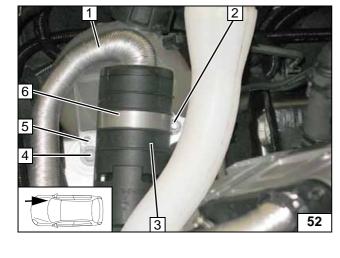
Reinstall washer reservoir 3.

1 Combustion air pipe2 Cable tie [3x]



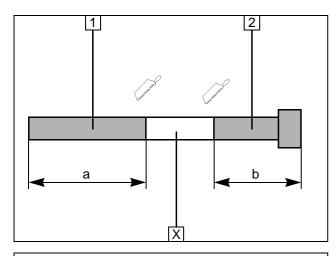


Status: 08.01.2013



Ident. No.: 1318133B_EN



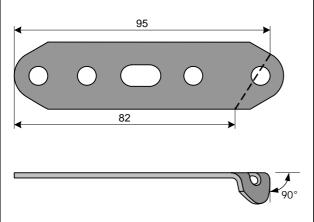


Exhaust Gas

Discard section X.

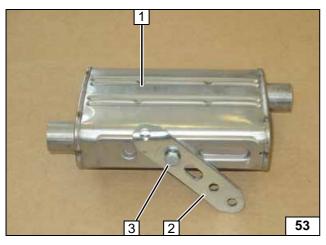
- 1 Exhaust pipe a = 395
- 2 Exhaust end section b = 95

Preparing exhaust pipe



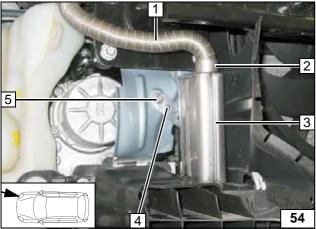
1 Perforated bracket

Angling down perforated bracket



- 1 Silencer
- 2 Perforated bracket
- 3 M6x16 bolt, spring lockwasher

Premounting silencer



Align silencer 3 vertically.

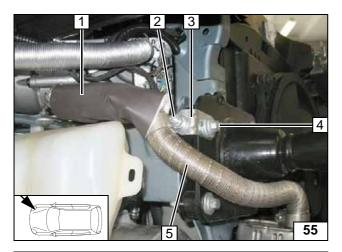
- 1 Exhaust pipe
- 2 Hose clamp

Status: 08.01.2013

- 4 Perforated bracket
- 5 M6x20 bolt, large diameter washer, flanged nut, existing hole

Mounting silencer



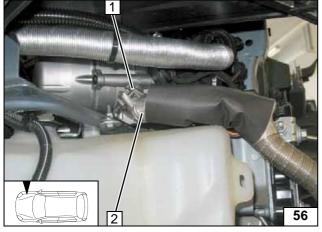


Slide exhaust-gas insulation 1 on to exhaust pipe 5.



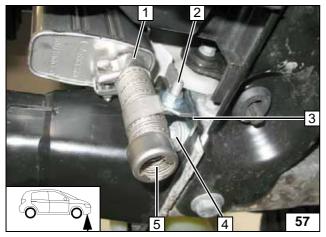
- 2 M6x20 bolt, p-clamp, flanged nut
- 3 Angle bracket
- 4 Original vehicle bolt

Mounting exhaust pipe



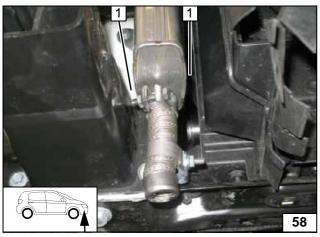
- 1 Hose clamp
- 2 Exhaust pipe

Mounting exhaust pipe



- 1 Hose clamp
- 2 M6x20 bolt, p-clamp, flanged nut
- 3 Angle bracket
- 4 Original vehicle bolt, large diameter washer
- 5 Exhaust end section

Mounting end section

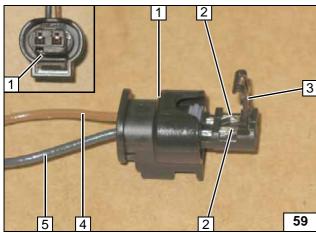


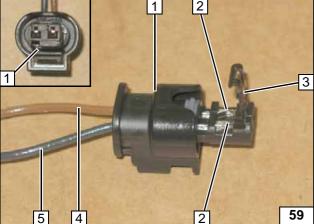
Ensure sufficient distance of exhaust silencer at position 1 from neighbouring components, correct if necessary.



Aligning silencer and end section







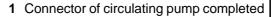
2 60

Preparing Wiring Harness of Circulating Pump

Dismantle connector of circulating pump. Connector of circulating pump is completed again after sliding 6 mm dia. corrugated tube.

- 1 Connector
- 2 Timer lock [2x]
- 3 Lock
- 4 Brown (br) wire
- 5 Black (sw) wire

Slide on 6 mm dia., 1150 mm long corrugated tube on wiring harness of circulating pump. Route excess wiring harness into corrugated tube.





Dismantling con-

nector



Pushing on corrugated tube



Coolant Circuit

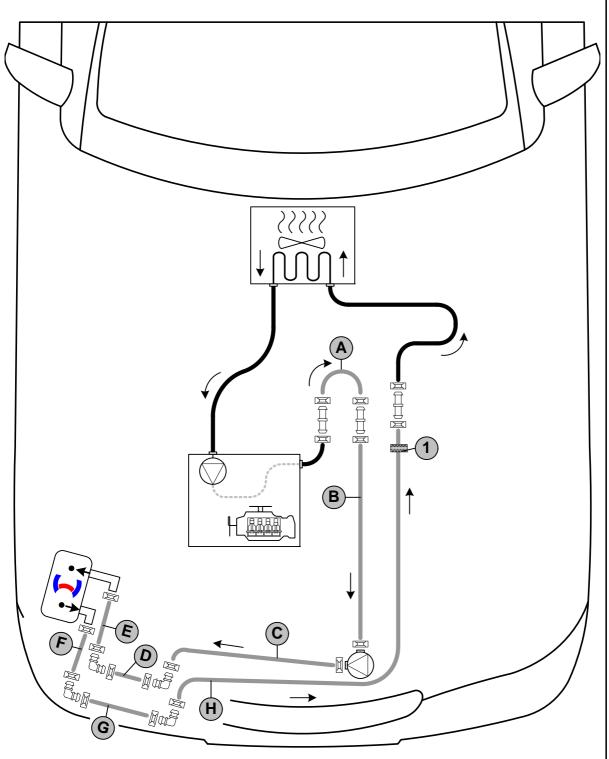
WARNING!

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:



Hose routing diagram



Status: 08.01.2013

All spring clips without a specific designation = 25 mm dia.

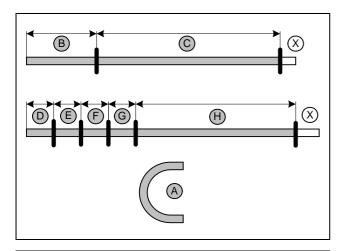
All connecting pipes \Box and \Box = 18x18 mm dia.

1 = Black (sw) rubber isolator

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Discard section X.

Hose **A** =180°, 18 mm dia. moulded hose

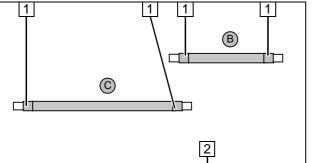
620 C =1340 60 **E** = 60 60

G =60

1900

Cutting hoses to

length



(H)

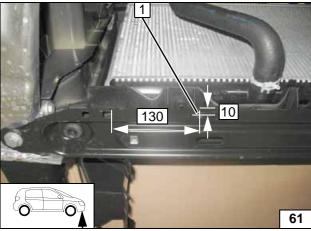
Push braided protection hoses onto hose B, C and H and cut to length.

Cut heat shrink plastic tubing to length.

- 1 50 mm long heat shrink plastic tubing [6x]
- 2 100 mm long heat shrink plastic tubing



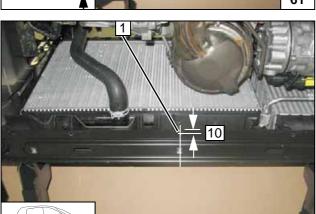
Preparing hoses



Copy hole pattern 1 for 7.0 mm dia. hole and drill hole.



Preparing hose routing



62

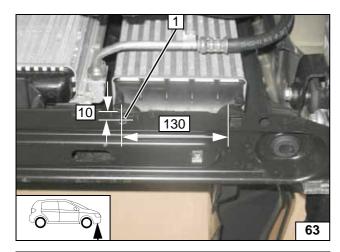
Status: 08.01.2013

Copy hole pattern ${\bf 1}$ for 7.0 mm dia. hole and drill hole.



Preparing hose routing

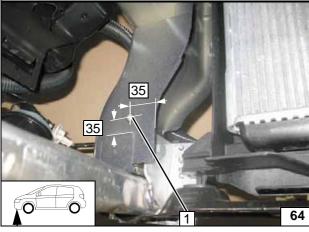




Copy hole pattern ${\bf 1}$ for 7.0 mm dia. hole and drill hole.



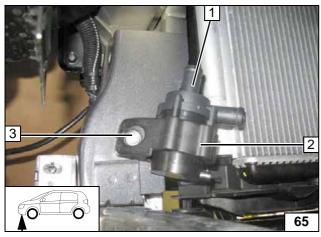
Preparing hose routing



Copy hole pattern 1 for 9.1 mm dia. hole, drill hole and install M6 rivet nut.

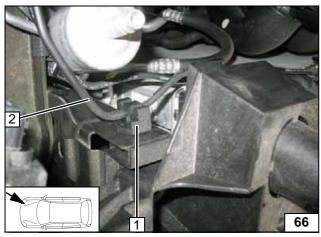


Preparing mounting of circulating pump



- 1 Circulating pump2 Mounting circulating pump
- 3 M6x25 bolt

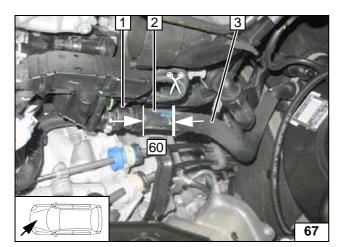
Mounting circulating pump



- 1 Remove retaining clip and discard.
- 2 Original vehicle wire

Removing retaining clip



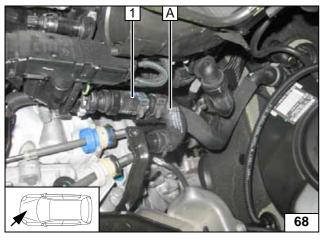


Cut off hose on engine outlet at marking.

- Hose coupling of engine outlet
 Engine outlet hose section
 Hose section of heat exchanger inlet

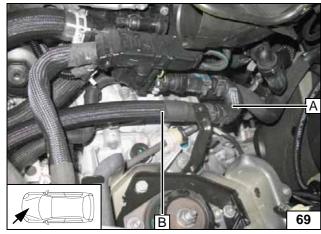


Cutting point



1 Engine outlet hose section

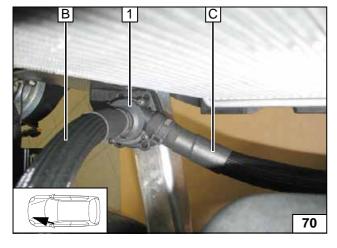
Mounting hose A



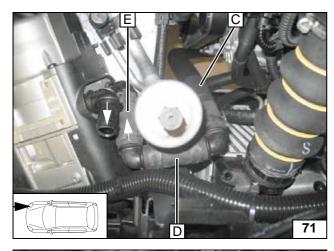
Connect-ing and routing hose B

1 Circulating pump





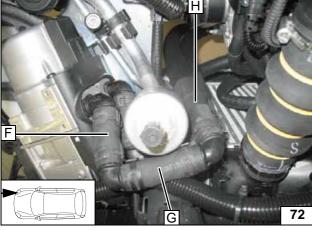




Align hoses. Ensure sufficient distance from neighbouring components.



Connecting heater



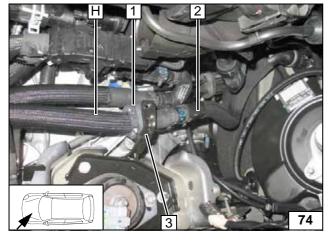
Align hoses. Ensure sufficient distance from neighbouring components.



Connecting heater



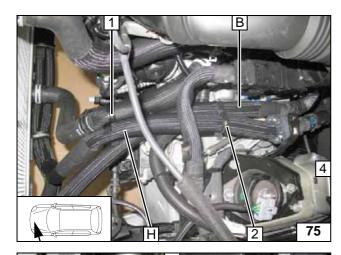
Hose routing



- 1 Rubber isolator
- 2 Hose section of heat exchanger inlet
- 3 Cable tie

Connection of heat exchanger inlet





Align hoses. Ensure sufficient distance from neighbouring components.

- 1 Hose bracket
- 2 Hose bracket



Hose routing



1 Wiring harness of circulating pump

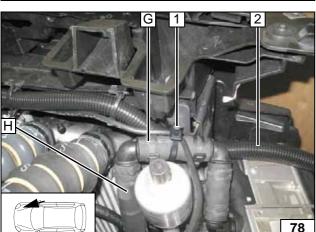


Mounting wiring harness

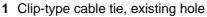


- 1 Wiring harness of circulating pump
- 2 Circulating pump

Mounting wiring harness



Align hoses. Ensure sufficient distance from neighbouring components.

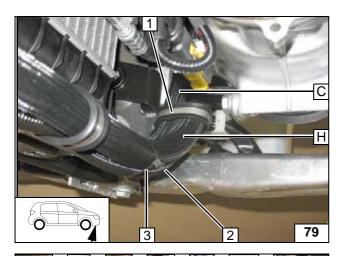


2 Wiring harness of heater in 10 mm dia. corrugated tube



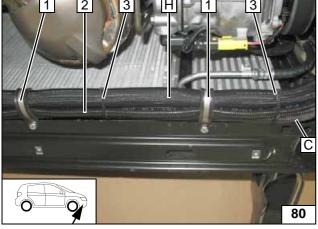
Hose routing





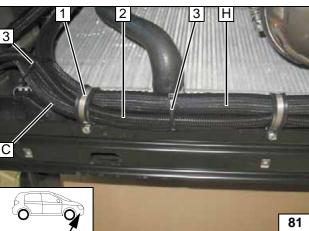
- 1 M6x20 bolt, original vehicle hole, flanged nut, 48mm dia. rubber-coated p-clamp
- 2 Wiring harness of circulating pump in 6mm dia. corrugated tube
- 3 Cable tie

Hose routing



- 1 M6x20 bolt, flanged nut, 48mm dia. rubber-coated p-clamp
- 2 Wiring harness of circulating pump in 6mm dia. corrugated tube
- 3 Cable tie [2x]

Hose routing



- 1 M6x20 bolt, flanged nut, 48mm dia. rubber-coated p-clamp
- Wiring harness of circulating pump in 6mm dia. corrugated tube
- 3 Cable tie [2x]

Hose routing



i

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 with diag. box or PP2000 on parking heater.

Note:

To check fan function, disconnect battery for 20 seconds. Wait 30 seconds after connecting the battery and activate the "Vent" function of the heater control. Requirement: Battery capacity >80%.

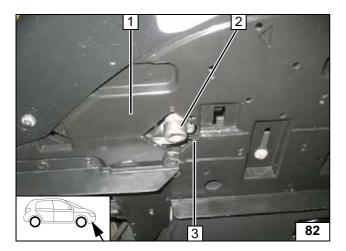
Connect the battery.

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• Fill and bleed the coolant circuit according to the vehicle manufacturer's specifications.

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- 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.



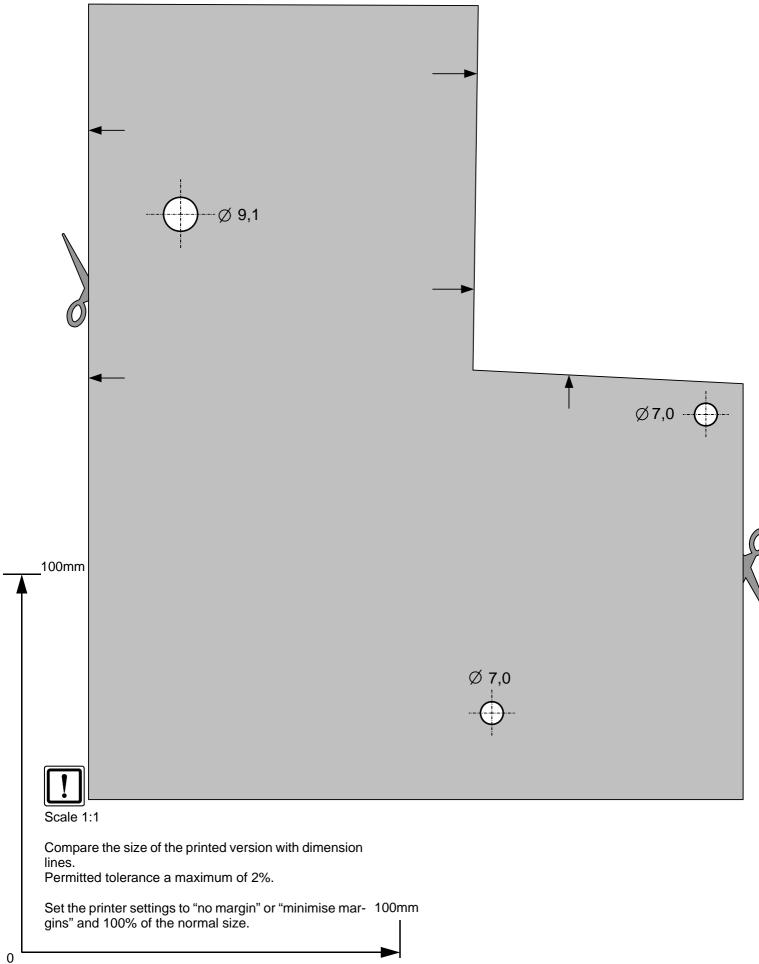
- 1 Underride protection
- 2 Exhaust end section
- 3 Cutout in underride protection

Mounting underride protection

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



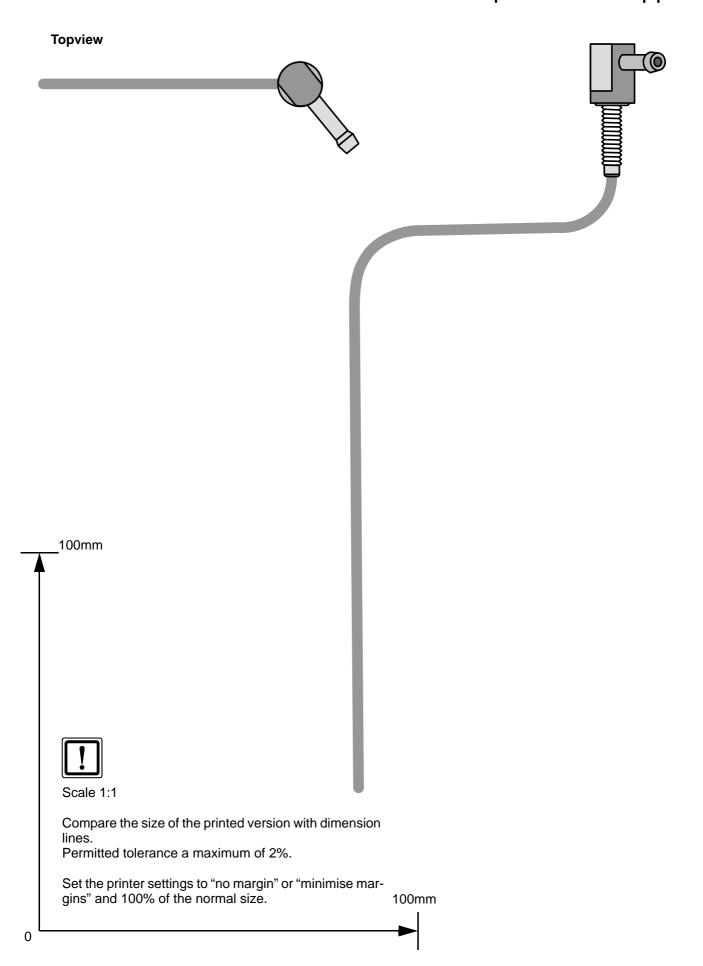
Template of Bracket Hole Pattern



Status: 08.01.2013



Template for Fuel Standpipe





Operating Instructions for Automatic Air-Conditioning

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:

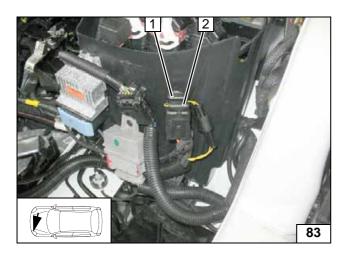
For a driving time of approx. 20 min. (in one direction), we recommend not exceeding a switch-on time of 20 min.



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